

PLAN OF PROPOSED
STATE HIGHWAY
FEDERAL AID PROJECT NO. XXXX-XXXX(XXX)
GRADE, DRAIN, SURFACE AND BRIDGES
US-270 OVER CARTER CREEK AND 8 UNNAMED CREEKS
SEMINOLE COUNTY

FOR SURVEY CONTROL DATA,
SEE SURVEY DATA SHEETS

CONTROL SECTION NO. 270-67-02
STATE JOB NO. 21006(04)

BRIDGE	EXIST. NBIS NO.	NEW NBI NO.
"A"	13079	31771
"B"	10053	31772
"C"	12977	REMOVED

DESIGN DATA

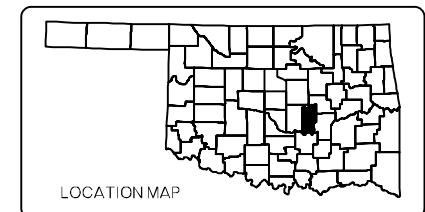
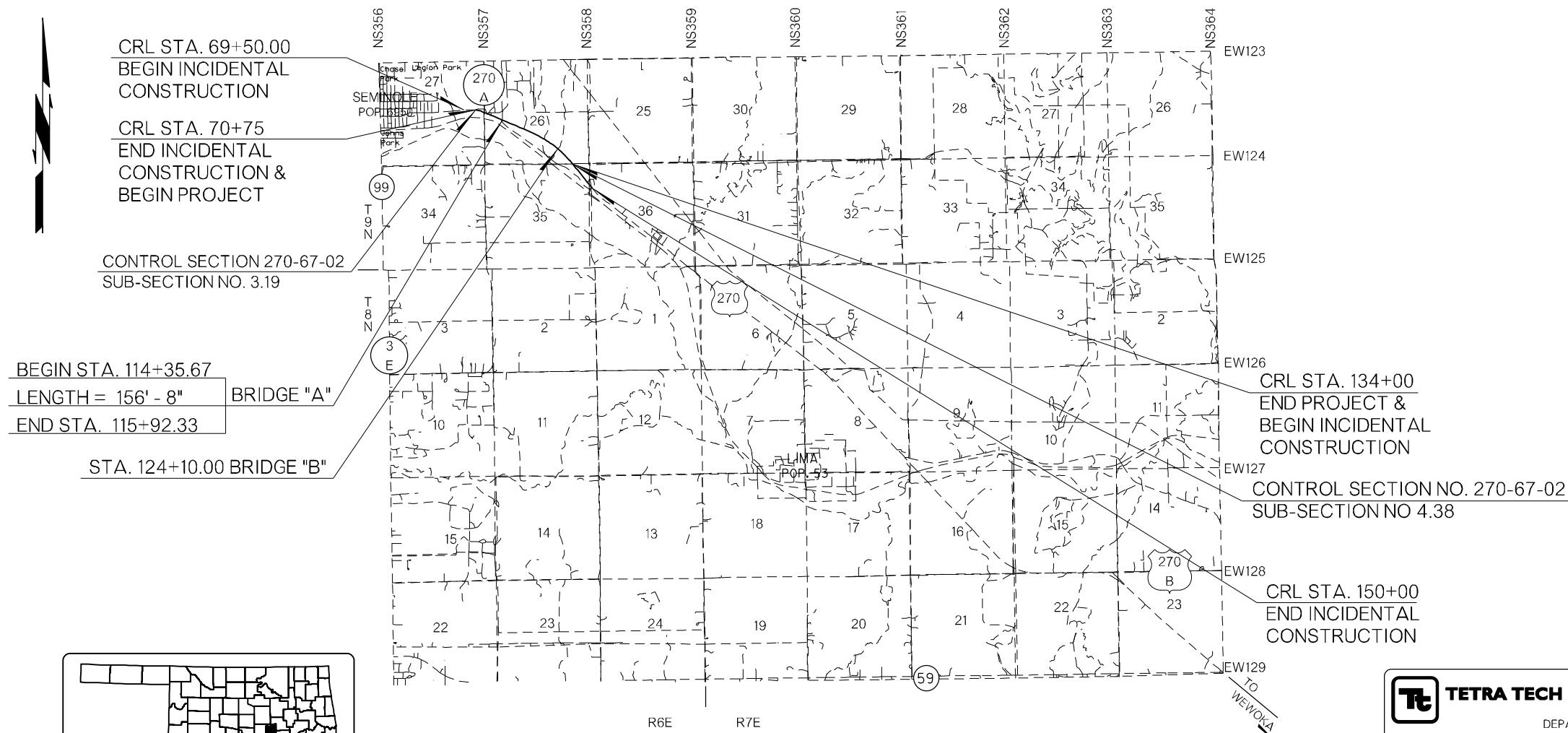
AADT 2018	= 7,765
AADT 2043	= 11,405
DHV (1-WAY)2043	= 630
K	= 10%
D	= 55%
T (AADT)	= 12%
T (DHV)	= 8%
T3	= 5%
V	= 40 TO 55 MPH
20YR FLEXESALS	= 4,468,390

SCALES

PLAN	1" = 100'
PROFILE HOR.	1" = 100'
VER.	1" = 10'
LAYOUT MAP	1" = 3,520'

CONVENTIONAL SYMBOLS

	PROPOSED ROAD
	RAILROADS
	RANGE & TOWNSHIP
	SECTION LINES
	QUARTER SECTION LINES
	FENCES
	GROUND LINE
	EXISTING ROADS
	BASE LINE
	GRADE LINES
	TELEPHONE & TELEGRAPH
	POWER LINES
	BUILDINGS
	OILWELL
	DRAINAGE STRUCTURES - IN PLACE
	DRAINAGE STRUCTURES - NEW
	RIGHT-OF-WAY LINES - EXISTING
	RIGHT-OF-WAY LINES - NEW
	CONTROLLED ACCESS
	RIGHT-OF-WAY FENCE



NOTE: PROJECT LENGTH BASED ON CRL STATIONING

ROADWAY LENGTH	6,168.34	FT.	1.168	MI.
BRIDGE LENGTH	156.66	FT.	0.030	MI.
PROJECT LENGTH	6,325.00	FT.	1.198	MI.

EQUATIONS : STA. 136+28.09 BK = STA. 135+97.74 AH
 STA. 211+23.40 BK = STA. 210+66.41 AH
 STA. 304+24.82 BK = STA. 304+28.25 AH
 STA. 357+00.06 BK = STA. 357+00.00 AH
 STA. 395+20.06 BK = STA. 395+20.00 AH
 STA. 452+96.29 BK = STA. 452+77.94 AH
 EXCEPTIONS : STA. 114+35.67 TO 115+92.33 BRIDGE "A"

	PREPARED BY: TETRA TECH FOR THE OKLAHOMA DEPARTMENT OF TRANSPORTATION		
	CA 2388 (EXP. 06-30-19)	DATE	MOHAMED NAZARI-ROBATI, P.E. OKLA. REG. NO. 17382
OKLAHOMA DEPARTMENT OF TRANSPORTATION	DATE APPROVED	DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	
BY	CHIEF ENGINEER	BY	DIVISION ADMINISTRATOR
SWO 4879(1)	PROJECT NO. 21006(04)	SHEET NO. 0001	

FINAL FIELD MEETING

11/7/2018

INDEX OF SHEETS

0001	TITLE SHEET
0002	INDEX OF SHEETS
0003-0005	TYPICAL SECTION
AR01-AR03	SUMMARY OF PAY QUANTITIES & NOTES (ROADWAY)
AB01-AB02	GENERAL NOTES AND SUMMARY OF PAY QUANTITIES (BRIDGES "A", "B", "C")
AT01-AT02	SUMMARY OF PAY QUANTITIES & NOTES (TRAFFIC)
AT03	SUMMARY OF PAY QUANTITIES & NOTES (TRAFFIC SIGNAL)
AX01-AX07	SUMMARY SHEETS (ROADWAY)

BRIDGE "A"

B001-B002	GENERAL PLAN AND ELEVATION (BRIDGE "A")
B003-B005	FOUNDATION REPORT (BRIDGE "A")
B006	SUBSTRUCTURE STAKING DIAGRAM (BRIDGE "A")
B007-B008	ABUTMENT NO. 1 DETAILS (BRIDGE "A")
B009-B010	ABUTMENT NO. 2 DETAILS (BRIDGE "A")
B011-B013	PIER DETAILS (BRIDGE "A")
B014	TYPICAL BRIDGE SECTION (BRIDGE "A")
B015	DECK SLAB REINFORCING DETAILS (BRIDGE "A")
B016-B017	DIAPHRAGM DETAILS (BRIDGE "A")
B018	LONGITUDINAL SECTION AND TRAFFIC RAIL ELEVATION (BRIDGE "A")
B019	FRAMING PLAN (BRIDGE "A")
B020-B022	BEAM DETAILS (BRIDGE "A")
B023	BEARING DETAILS (BRIDGE "A")
B024	APPROACH SLAB NO. 1 DETAILS (BRIDGE "A")
B025	APPROACH SLAB NO. 2 DETAILS (BRIDGE "A")
B026	DETAILS OF DRAIN AT END OF BRIDGE (BRIDGE "A")

BRIDGE "B"

B027	GENERAL PLAN AND ELEVATION (BRIDGE "B")
B028-B030	DETAILS OF R.C. BOX (BRIDGE "B")

ENVIRONMENTAL

E001	SECTION 404 PERMIT COMPLIANCE
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ROADWAY

R001-R002	DRAINAGE AREA MAP
R003	STORMWATER MANAGEMENT PLAN
R004-R011	GEOMETRIC DETAILS
R012	INTERSECTION DETAIL
R013-R015	EDGE DRAIN DETAILS
R016-R020	EROSION CONTROL
R021-R023	MASS DIAGRAM
R024-R030	PLAN AND PROFILE SHEETS
SD01-SD47	SURVEY DATA SHEETS

TRAFFIC

T001	SUMMARY SHEET (TRAFFIC CONTROL)
T002	TRAFFIC CONTROL ADVANCED WARNING
T003	TRAFFIC CONTROL PHASE 1 TYPICAL SECTIONS
T004	TRAFFIC CONTROL PHASE 1
T005-T006	TRAFFIC CONTROL PHASE 2 TYPICAL SECTIONS
T007-T013	TRAFFIC CONTROL PHASE 2
T014	TRAFFIC CONTROL PHASE 3 TYPICAL SECTIONS
T015-T017	TRAFFIC CONTROL PHASE 3
T018-T019	SUMMARY SHEET (SIGNING AND STRIPING)
T020-T021	SPECIAL SIGNS
T022-T025	SIGNING AND STRIPING
T026-T028	TRAFFIC SIGNAL

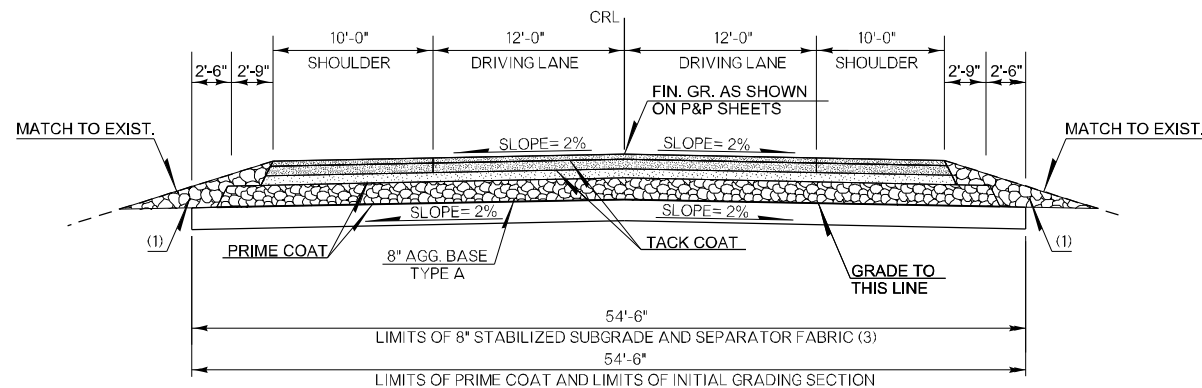
CROSS SECTIONS

X0	TITLE SHEET
X1-X309	US-270
X310-X316	HARVEY RD / SH-270 A
X317-X326	NS 3600 RD
X327-X329	LAKE RD
X330-X331	US-270 B

<u>ROADWAY</u>	<u>BRIDGE</u>	<u>TRAFFIC SIGNALS & LIGHTING</u>	<u>TRAFFIC CONTROL</u>	<u>TRAFFIC SIGNING</u>	<u>TRAFFIC SAFETY</u>
SSS-1-1	TR4-2-00E	PMAP-1-2-00	TCS1-1-01	PM1-1-02	THRI-1-02
TSC2-3-2	EJ-SQ-03E	SPBP1-1-00	TCS2-1-00	PM3-1-02	SKT-1-00
TSD-2-0	EJ-DTL-01E	SA1-1-02	TCS3-1-01	PM5-1-00	GHW1-1-00
TFL-1-1	HPI-2-00E	IDI-1-00	TCS4-1-01	PM6-1-00	GHW2-1-00
TRFD-1-2	B40-C-ABUT-MISC	SNS1-1-02	TCS5-1-00	PM8-1-00	RS1-2-00
ASCD-5-2	LECS-4-1	TSSS1-1-00	TCS6-1-02	DUI-1-00	RS2-2-00
PED-3-2	PUD-3-2	PWD1-2-00	TCS7-1-02	DU2-1-00	
PSE-1-0	SBI-4-2	CFD1-2-00	TCS8-1-00	RSD1-1-00	
CET4S-3-2	RCB-E3-H11-0-1-01E	CCI-1-00	TCS9-1-01	RSD2-1-00	
CET6S-3-2	RCB-E3-H11-0-2-01E	TSSP1-1-00	TCS10-1-00	WSD1-1-00	
CET4D-3-2	RCB-E3-H12-0-1-01E	MAD1-1-00	TCS11-1-01	WSD2-1-00	
CET6D-3-2	RCB-E3-H12-0-2-01E	RPMAD1-1-00	TCS12-1-00	WSD3-1-00	
PCES-4-1	RCB-CW3-D8-0-01E	MPMAD1-1-00	TCS13-1-00	SZSD1-1-00	
CDIP-1-1		MDL1-1-00	TCS14-1-00	MSD1-1-00	
SMD-3-1		MDL2-1-00	TCS15-1-00	MSD2-1-00	
GPI-4-0	RCB-C1-3&4&5(2-20)-01E	CCD1-1-00	TCS16-1-00	MSD3-1-01	
SSCD-3-1	RCB-C1-6(2-14)-01E	PBD1-1-00	TCS17-1-00	MSD4-1-00	
CI-1-2	RCB-C1-8(2-10)-01E	HLD1-2-00	TCS18-1-01	MSD5-1-00	
SSIF-4-0	RCB-E1-H3-0-1-01E	HLD2-2-00	TCS19-1-01	SBS1-1-00	
CIG-3-0	RCB-E1-H3-0-2-01E		TCS20-1-00	SBS2-1-00	
MFC-4-1	RCB-E1-H4-0-1-01E		TCS21-1-02	SBS3-1-00	
MJB-3-1	RCB-E1-H4-0-2-01E		TCS22-1-00	SBS4-1-00	
SPI-4-1	RCB-E1-H6-0-1-01E		TCS23-1-00	SBS5-1-00	
FPI-3-3	RCB-E1-H6-0-2-01E		TCS24-1-02	SBS6-1-00	
SPB-1-4	RCB-E1-H12-0-1-01E		TCS25-1-00	GMS1-1-00	
FHTMPP-1-0	RCB-E1-H12-0-2-01E			GMS2-1-00	
FHTCP-3-1	RCB-E1-H4-30-1-01E			SSP1-1-02	
SBI-4-2	RCB-E1-H4-30-2-01E			SSA1-1-00	
PUD-3-2	RCB-E1-H4-30-3-01E			SSA2-1-00	
MI-3-0	RCB-E1-H5-30-1-01E			FGS1-1-00	
RDI-3-1	RCB-E1-H5-30-2-01E			FGS2-1-01	
DC-3-2	RCB-E1-H5-30-3-01E			SPA1-1-00	
PDT-1-3	RCB-E1-H7-30-1-01E				
RWF1-2-2	RCB-E1-H7-30-2-01E				
RWF2-2-1	RCB-E1-H7-30-3-01E				
RWF3-2-2	RCB-E1-H8-30-1-01E				
SUEL1-3-2	RCB-E1-H8-30-2-01E				
SUEL2-3-2	RCB-E1-H8-30-3-01E				
SUEL3-3-2	RCB-CW1-D4-0-01E				
SUEL4-3-2	RCB-CW1-D4-30-01E				

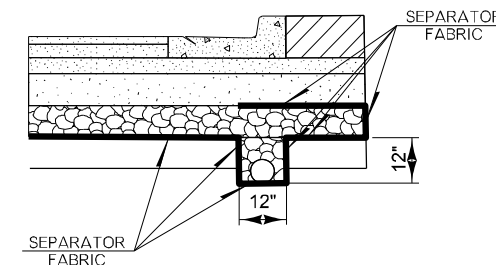
1999 STANDARDS
SPDI-2-00E

DESIGN			OKLAHOMA DEPARTMENT OF TRANSPORTATION INDEX OF SHEETS STATE JOB NO. 21006(04) SHEET NO. 0002
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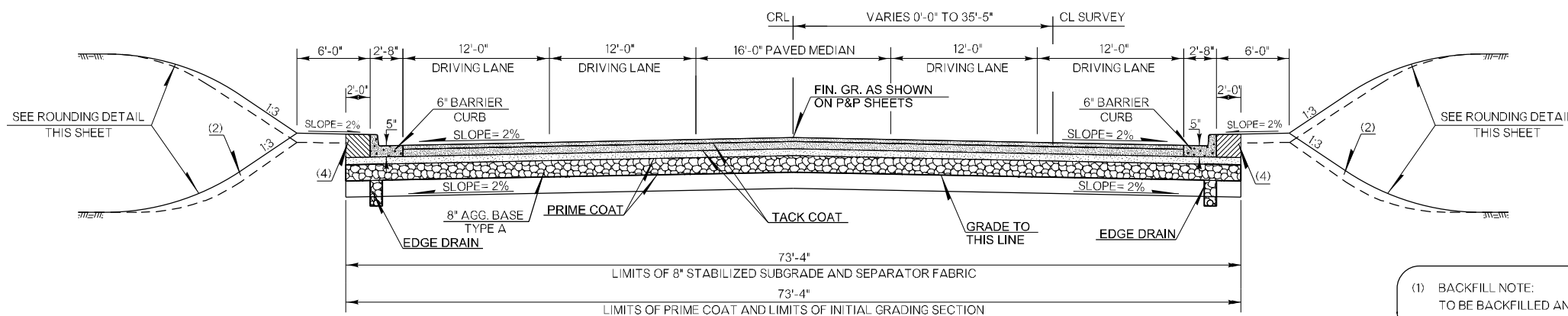


TYPICAL SECTION INCIDENTAL CONSTRUCTION
STA 69+50 TO STA 70+75

PAVEMENT REQUIREMENT		
PAVT. STRUCTURE	12' DRIVING LANES	10' PAVED SHOULDERS
SURFACE COURSE	2" SUPERPAVE TYPE S4 (PG 70-28 OK)	2" SUPERPAVE TYPE S4 (PG 64-22 OK)
INTERMEDIATE COURSE	3" SUPERPAVE TYPE S3 (PG 70-28 OK)	3" SUPERPAVE TYPE S3 (PG 64-22 OK)
BASE COURSE	4" SUPERPAVE TYPE S3 (PG 64-22 OK)	4" SUPERPAVE TYPE S3 (PG 64-22 OK)



EDGE DRAIN INSTALLATION -
CURB TYPICAL SECTION
SEE ODOT STD. PED-3
FOR ADDITIONAL DETAILS & NOTES



TYPICAL SECTION NO. 1 US-270
STA 76+75.00 RT & 77+78 LT TO STA 111+00.00

PAVT. STRUCTURE	12' DRIVING LANES
SURFACE COURSE	2" SUPERPAVE TYPE S4 (PG 70-28 OK)
INTERMEDIATE COURSE	3" SUPERPAVE TYPE S3 (PG 70-28 OK)
BASE COURSE	4" SUPERPAVE TYPE S3 (PG 64-22 OK)

(1) BACKFILL NOTE:
TO BE BACKFILLED AND COMPACTED AS PART OF THE FINISHING OPERATIONS. QUANTITY IS MEASURED IN TBSC TYPE E.

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

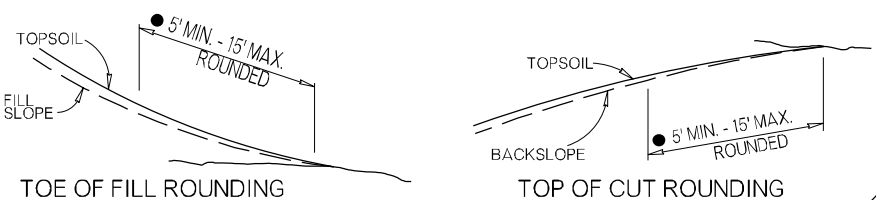
THE GRADING LINE AS SHOWN ON THE TYPICAL AND CROSS SECTIONS IS TO THE TOP OF THE TOPSOIL. EARTHWORK QUANTITIES WERE NOT ADJUSTED FOR SALVAGE AND THE TOPSOIL QUANTITY IS INCLUDED IN THE MASS LINE BALANCE.

(3) SEPARATOR FABRIC NOTE:
USE MIRAFI RS 380I OR APPROVED EQUAL.

(4) BACKFILL NOTE:
TO BE BACKFILLED AND COMPACTED AS PART OF THE FINISHING OPERATIONS. QUANTITY IS MEASURED IN UNCLASSIFIED BORROW.

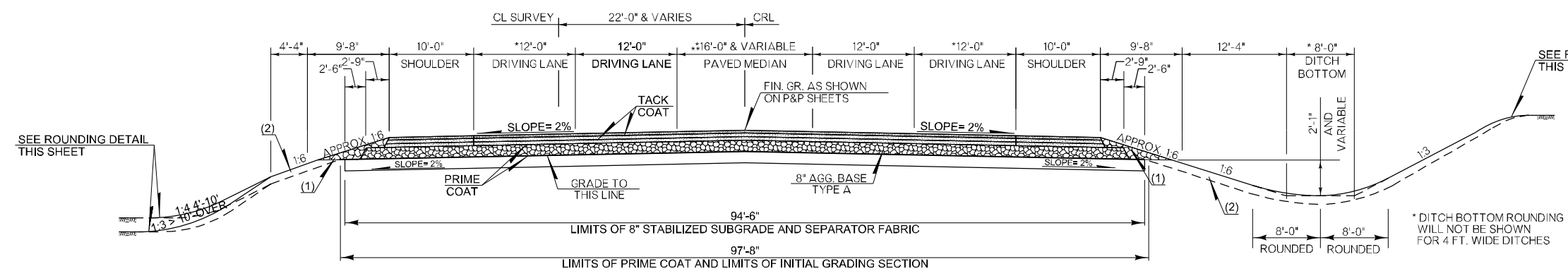
ROUNDING DETAIL

- INTERSECTION OF CUT AND/OR FILL SLOPES WITH GROUND LINE TO BE ROUNDED AS PART OF FINISHING OPERATIONS. ROUNDED 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 ROUNDED TO BE INCLUDED IN PRICE BID FOR OTHER ITEMS OF WORK.



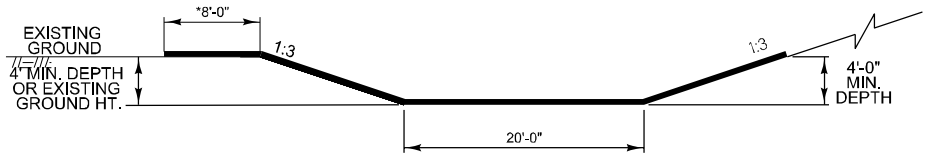
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TYPICAL SECTION



TYPICAL SECTION NO. 2 US-270
 STA. 70+75 TO STA. 76+75,
 (*TRANSITION FROM 0' - 0" AT STA 70+85 TO WIDTH SHOWN AT 76+75)
 STA. 111+00 TO STA. 134+00,
 (TRANSITION FROM LANE & SHOULDER WIDTHS SHOWN AT STA. 130+50
 TO MATCH EXISTING PAVEMENT WIDTH AT STA. 134+00. SEE PLAN & PROFILE SHEETS)

PAVEMENT REQUIREMENT		
9' PAVT. STRUCTURE	12'-0" DRIVING LANES	10'-0" PAVED SHOULDERS
SURFACE COURSE	2" SUPERPAVE TYPE S4 (PG 70-28 OK)	2" SUPERPAVE TYPE S4 (PG 64-22 OK)
BASE COURSE	3" SUPERPAVE TYPE S3 (PG 70-28 OK)	3" SUPERPAVE TYPE S3 (PG 64-22 OK)
	4" SUPERPAVE TYPE S3 (PG 64-22 OK)	4" SUPERPAVE TYPE S3 (PG 64-22 OK)

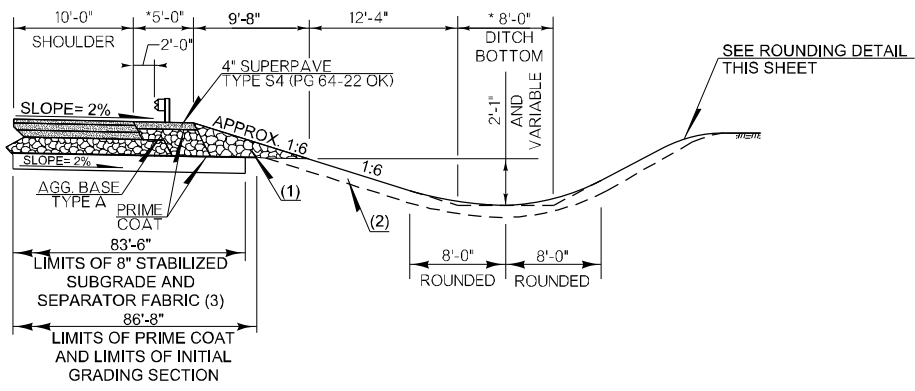


TURF REINFORCEMENT MAT TYPICAL SECTION THROUGH STA. 126+50 LT. TO STA. 127+30 LT.

* PLACE OVERLAP IF EXISTING GROUND HEIGHT IS LESS THAN MINIMUM DEPTH.



TURF REINFORCEMENT MAT INSTALLATION DETAILS



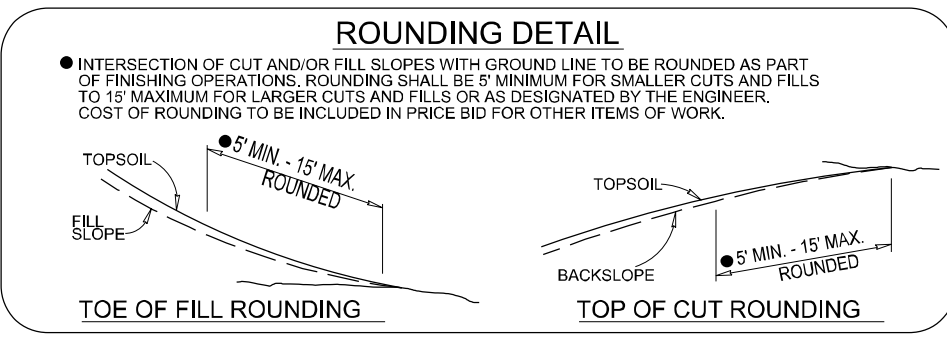
GUARDRAIL WIDENING
 STA 111+49.07 TO STA 114+04.09
 STA 116+23.91 TO STA 118+78.93
 (*TRANSITION FROM 0'-0" AT STA 111+49.07 TO WIDTH SHOWN AT STA 112+19.07 AND
 TRANSITION FROM WIDTH SHOWN AT STA 118+08.93 TO 0'-0" AT STA 118+78.93)

(1) BACKFILL NOTE:
 TO BE BACKFILLED AND COMPACTED AS PART OF THE FINISHING OPERATIONS. QUANTITY IS MEASURED IN TBSC TYPE E.

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

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

(1) SEPARATOR FABRIC NOTE:
 USE MIRAFI RS 380i OR APPROVED EQUAL.

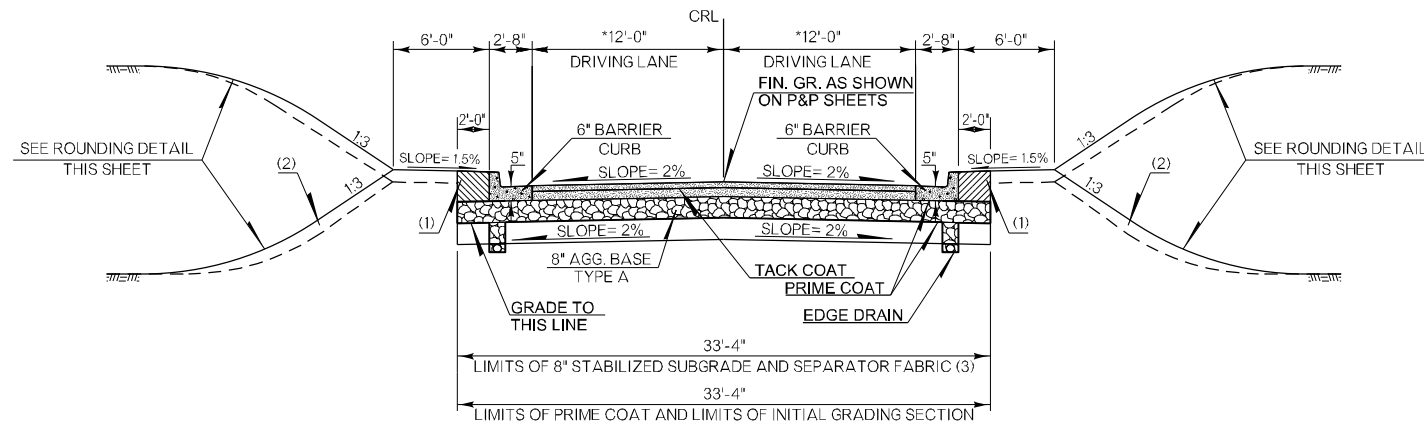


ROUNDING DETAIL

● INTERSECTION OF CUT AND/OR FILL SLOPES WITH GROUND LINE TO BE ROUNDED AS PART OF FINISHING OPERATIONS. ROUNDED 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 ROUNDED TO BE INCLUDED IN PRICE BID FOR OTHER ITEMS OF WORK.

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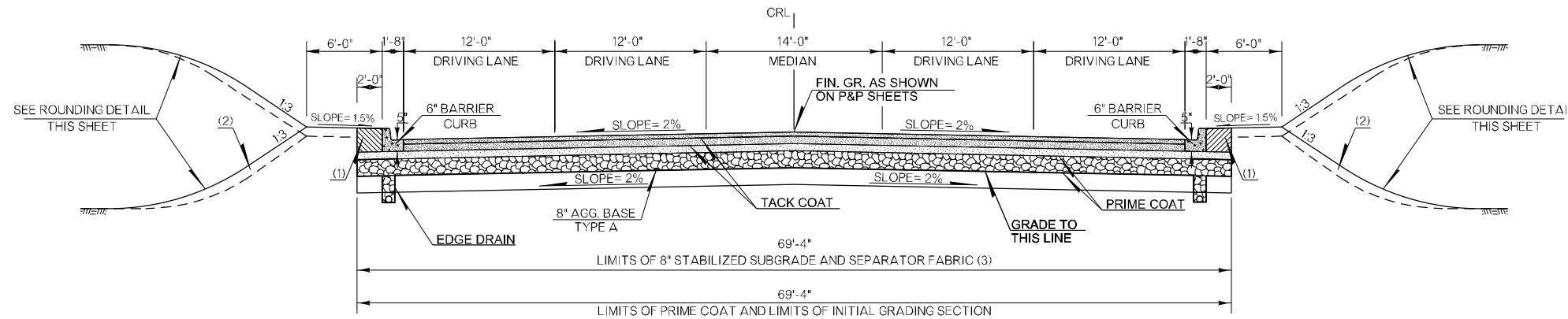
TYPICAL SECTION



TYPICAL SECTION NO. 3 HARVEY ROAD
STA 24+65.00 TO STA 26+43.76

*SEE INTERSECTION DETAILS & SIGNING AND STRIPING DETAILS FOR VARYING WIDTH WITHIN LIMITS OF CURB RETURNS

PAVT. STRUCTURE	12' & 14' DRIVING LANES
SURFACE COURSE	2" SUPERPAVE TYPE S4 (PG 64-22 OK)
BASE COURSE	4" SUPERPAVE TYPE S3 (PG 64-22 OK)



TYPICAL SECTION NO. 4 SH-270A
STA 28+35.07 TO STA 31+00.00

PAVT. STRUCTURE	12' DRIVING LANES & 14' MEDIAN
SURFACE COURSE	2" SUPERPAVE TYPE S4 (PG 70-28 OK)
INTERMEDIATE COURSE	3" SUPERPAVE TYPE S3 (PG 70-28 OK)
BASE COURSE	4" SUPERPAVE TYPE S3 (PG 64-22 OK)

(1) BACKFILL NOTE:
TO BE BACKFILLED AND COMPACTED AS PART OF THE FINISHING OPERATIONS. QUANTITY IS MEASURED IN UNCLASSIFIED BORROW.

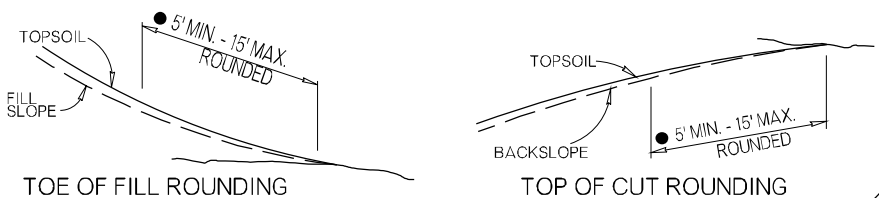
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THE CONTRACTOR SHALL STRIP ALL OF THE AVAILABLE TOPSOIL, STOCKPILE IT, AND PLACE IT BACK ON THE SECTION IN ACCORDANCE WITH SECTION 205 OF THE STANDARD SPECIFICATIONS. RESERVED TOPSOIL SHALL BE SPREAD FIRST ON THE COMPLETED SLOPES OF THE CUT SECTIONS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

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(3) SEPARATOR FABRIC NOTE:
USE MIRAFIR S 380I OR APPROVED EQUAL.

ROUNDING DETAIL

- INTERSECTION OF CUT AND/OR FILL SLOPES WITH GROUND LINE TO BE ROUNDED AS PART OF FINISHING OPERATIONS. ROUNDED 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 ROUNDED TO BE INCLUDED IN PRICE BID FOR OTHER ITEMS OF WORK.



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SQUAD	

TYPICAL SECTION

GENERAL NOTES (CONT'D)

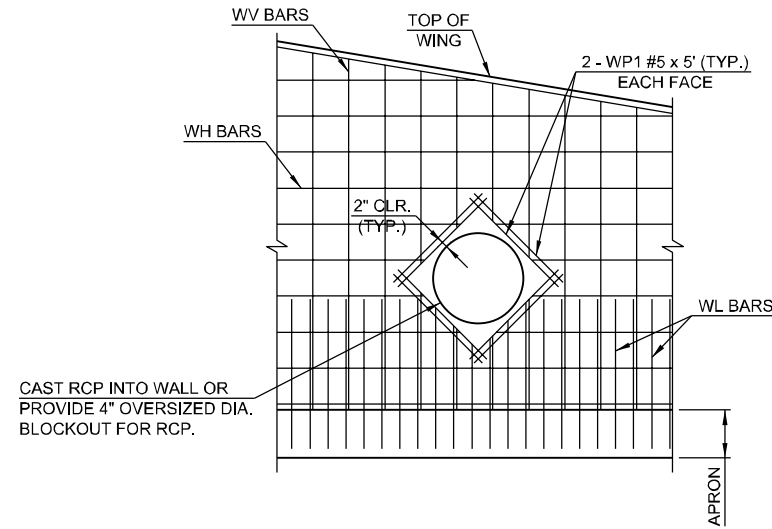
PIPE INLET AT R.C. BOX WINGS:

THE APPROXIMATE LOCATION AND FLOWLINE ELEVATION OF THE REINFORCED CONCRETE PIPES (RCP'S) IN THE WINGWALLS OF BRIDGE "B" AND ROADWAY BOXES SHALL BE AS SHOWN ON THE PLAN AND PROFILE SHEETS. THE FINAL LOCATION OF THE RCP OPENING IN THE WINGWALLS SHALL BE APPROVED BY THE ENGINEER.

EITHER OF THE FOLLOWING TWO METHODS CAN BE USED TO CONSTRUCT THE RCP'S THROUGH THE WINGS:

1. CAST RCP INTO WALL.
2. PROVIDE 4" OVERSIZED DIAMETER BLOCKOUT FOR RCP. CENTER PIPE IN OPENING AND FILL 2" ANNULUS WITH NON-SHRINK GROUT THRU THE THICKNESS OF THE WALL.

THE CONTRACTOR SHALL TRIM ALL HORIZONTAL AND VERTICAL WING REINFORCING IN THE FIELD TO ACCOMMODATE THE REQUIRED CLEARANCES AS SHOWN IN THE PIPE INLET DETAIL BELOW. ALL COSTS ASSOCIATED WITH CASTING RCP'S INTO WINGS OR PROVIDING BLOCKOUTS AND FILLING ANNULUS WITH NON-SHRINK GROUT INCLUDING LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN OTHER ITEMS OF WORK. COST OF WP1 BARS AS SHOWN IN THE PIPE INLET DETAIL SHALL BE INCLUDED IN THE PRICE BID PER POUND OF "REINFORCING STEEL" FOR BRIDGE "B". COST OF WP1 BARS FOR ROADWAY BOXES SHALL BE INCLUDED IN OTHER ITEMS OF WORK.



PIPE INLET DETAIL AT R.C. BOX WINGS

JP 21006(04)

0200 BRIDGE "A" 3 SPAN (50'-55'-50') PC BEAM BRIDGE, 84' CLR ROADWAY CL STA. 115+14.00

ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY
202(D) 1302	UNCLASSIFIED BORROW	(BR-1) CY	30.00
501(B) 1307	SUBSTRUCTURE EXCAVATION COMMON	(BR-1) CY	258.00
501(G) 6309	CLSM BACKFILL	(BR-1) CY	334.00
503(A) 1311	PRESTRESSED CONCRETE BEAMS (TYPE II)	(BR-1) LF	1,386.00
504(A) 1304	APPROACH SLAB	(BR-1) SY	604.80
504(B) 1305	SAW-CUT GROOVING	(BR-1) SY	2,051.90
504(C) 6250	SEALED EXPANSION JOINT	(BR-1) LF	172.92
504(D) 6245	CONCRETE RAIL (TR4)	(BR-1) LF	439.80
506(A) 1322	STRUCTURAL STEEL	(BR-1) LB	3,100.00
507(A) 6170	STAINLESS STEEL FIXED BEARING ASSEMBLY	(BR-1) EA	27.00
507(B) 6174	STAINLESS STEEL EXPANSION BEARING ASSEMBLY	(BR-1) EA	27.00
509 6152	SPECIAL CONCRETE FINISH	(BR-1,2) SY	250.00
509(A) 1326	CLASS AA CONCRETE	(BR-1) CY	371.00
509(B) 1328	CLASS A CONCRETE	(BR-1) CY	292.60
509(D) 1331	CLASS C CONCRETE	CY	5.00
511(B) 6010	EPOXY COATED REINFORCING STEEL	(BR-1) LB	147,840.00
514(A) 6010	PILES, FURNISHED (HP 10X42)	LF	291.00
514(A) 6011	PILES, FURNISHED (HP 12X53)	LF	1,839.50
514(B) 6292	PILES, DRIVEN (HP 10X42)	LF	291.00
514(B) 6294	PILES, DRIVEN (HP 12X53)	LF	1,839.50
514(L) 6220	PILE SPLICE, H-PILE (NON-BIDDABLE)	EA	1.00
515(A) 6013	WATER REPELLENT (VISUALLY INSPECTED)	(BR-1) SY	745.00
516(A) 6095	DRILLED SHAFTS 54" DIAMETER	LF	619.00
516(C) 6200	CROSSHOLE SONIC LOGGING	EA	8.00
601(B) 1353	TYPE 1-A PLAIN RIPRAP	TON	970.00
601(C) 1355	TYPE 1-A FILTER BLANKET	TON	235.00
613(H) 6204	6" PREFORATED PIPE UNDERDRAIN ROUND	(BR-1) LF	172.00
613(I) 6207	6" NON-PERF. PIPE UNDERDRAIN RND.	(BR-1) LF	80.00
619(D) 1397	REMOVAL OF EXISTING BRIDGE STRUCTURE	LSUM	1.00

JP 21006(04)

0201 BRIDGE "B" 3 CELL - 20'x11'x10' RCB & 20'x15'x125' RCB CL STA. 124+10.00

ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY
202(A) 1301	UNCLASSIFIED EXCAVATION	(BR-1) CY	7,120.00
303(A) 2100	AGGREGATE BASE TYPE A	(BR-1) CY	1,200.00
501(A) 1306	STRUCTURAL EXCAVATION UNCLASSIFIED	(BR-1) CY	1,690.00
509(A) 1326	CLASS AA CONCRETE	(BR-1) CY	1,700.00
511(A) 1332	REINFORCING STEEL	(BR-1) LB	309,270.00
619(D) 1397	REMOVAL OF EXISTING BRIDGE STRUCTURE	LSUM	1.00

JP 21006(04)

0202 BRIDGE "C" (REMOVE) REMOVE 3 CELL - 10'x8'x67' RCB CL STA. 127+64.00

ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY
619(D) 1397	REMOVAL OF EXISTING BRIDGE STRUCTURE	LSUM	1.00


(BR-1): PAYMENT FOR THIS ITEM SHALL BE BASED ON THE PLAN QUANTITIES ONLY. SEE SECTION 109.01(B) OF THE STANDARD SPECIFICATIONS.

(BR-2): SPECIAL CONCRETE FINISH SHALL BE CIM-1000, OR APPROVED EQUAL. THIS ITEM SHALL BE APPLIED TO ALL ABUTMENTS AND PIERS AS DIRECTED BY THE PLANS. EDGES OF THE SPECIAL CONCRETE FINISH SHALL BE MASKED WITH TAPE PRIOR TO APPLICATION TO ENSURE CLEAN STRAIGHT LINES ARE OBTAINED. ANY AREAS CONTAINING SPECIAL CONCRETE FINISH OUTSIDE OF THE AREAS AS INDICATED IN THE PLANS SHALL BE CLEANED TO THE SATISFACTION OF THE ENGINEER AT THE EXPENSE OF THE CONTRACTOR.


P:\11399\200-11399-14001\CAD\SheetFiles\21006 (04) Bridge\AB02-2100604-GN-Bridge.2.dgn

11/7/2018

PREPARED BY:



CA 2388
(EXP. 06-30-19)



LANCE W. NELSON
OKLA. REG. NO. 23407
DATE: 2/19/2018
RESPONSIBLE FOR SHEETS:
AB01-AB02, B001-B030

U.S. 270

DESIGN	LWN	3-15	OKLAHOMA DEPARTMENT OF TRANSPORTATION GENERAL NOTES AND SUMMARY OF PAY QUANTITIES - BRIDGES A, B & C (SHEET 2 OF 2) STATE JOB NO. 21006(04) SHEET NO. AB02 SEMINOLE CO. U.S. 270
DRAWN	MRM	3-15	
CHECKED	JSH	10-16	
APPROVED	-	-	
SQUAD	TT		

FINAL FIELD MEETING

11/7/2018

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/OR 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.

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.

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

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

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

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

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

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

PRIOR TO FINAL ACCEPTANCE, ALL EXPOSED CURB SURFACES SHALL BE CLEANED OF ALL DISCOLORATION SUCH AS ASPHALT STAIN, TIRE MARKS OR OTHER DISFIGUREMENT.

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.

PAY ITEM NOTES

- (R-1) PAYMENT FOR THIS ITEM WILL BE BASED ON PLAN QUANTITY ONLY. SEE SECTION 109.01B OF THE STANDARD SPECIFICATIONS.
- (R-4) INCLUDES 1000 CU. YDS. FOR DRIVEWAYS, RETURNS, DIKES, AND MISCELLANEOUS EARTHWORK.
- (R-5) AN ESTIMATED QUANTITY OF 84,643.58 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-7) FOR TYPE A SALVAGED TOPSOIL PRICE BID TO INCLUDE COST OF 0-46-0 FERTILIZER, ESTIMATED AT 150 POUNDS PER ACRE.
- (R-8) FOR SOLID SLAB SODDING PRICE BID TO INCLUDE COST OF WATERING, ESTIMATED AT 40 GALLONS PER SQ. YD.
- (R-11) THE QUANTITIES ESTIMATED FOR TEMPORARY EROSION AND SEDIMENT CONTROLS IS 16.42 ACRES.
- (R-13) ESTIMATED AT 200 POUNDS OF 10-20-10 FERTILIZER PER 1,000 SQ. YDS. OF SODDING AND/OR SPRIGGING.
- (R-16) QUANTITY BASED ON TWO APPLICATIONS.
- (R-25) ESTIMATED AT 160 LBS. PER CU. FT.
- (R-28) 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 DETERMINED BY THE CONTRACTOR, AND SHALL CONSIDER THE RESIDUE FROM DISTILLATION PERCENTAGE SHOWN IN SECTION 708.03 OF THE STANDARD SPECIFICATIONS.
- (R-32) ESTIMATED AT 112 LBS. PER SQ. YD. PER 1" THICK.
- (R-41) QUANTITY INCLUDES AN ESTIMATED 50 C.Y. TO BE USED AS DIRECTED BY THE ENGINEER.
- (R-44) PRICE BID TO INCLUDE COST OF 0 - 4" MOUNTABLE CURB HOODS, 0 - 6" MOUNTABLE CURB HOODS, 152 - 6" BARRIER CURB HOODS, 0 - 8" BARRIER CURB HOODS.
- (R-48) INCLUDES REMOVAL OF ALL EXISTING ROADWAY DRAINAGE STRUCTURES, HEADWALLS (UNLESS OTHERWISE SPECIFIED), INLETS, FENCES AND OTHER STRUCTURES WITHIN THE RIGHT OF WAY.
- (R-49) TO BECOME THE PROPERTY OF AND BE DISPOSED OF BY THE CONTRACTOR IN A MANNER APPROVED BY THE ENGINEER.
- (R-50) MATERIALS REMOVED SHALL NOT BE MEASURED FOR PAYMENT UNDER SECTION 202.06 UNCLASSIFIED EXCAVATION.
- (R-52) INCLUDES 2% FOR GROUND MEASUREMENT.
- (R-53) 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) 50% OF THE QUANTITIES OF SILT FENCE AND SILT DIKE HAVE BEEN REDUCED AND ADDED TO TEMPORARY FIBER LOG PAY ITEM.
 - (2) SOLID SLAB SODDING TO BE PLACED 1 MILE AT A TIME AS DIRECTED BY THE ENGINEER. THIS WILL REQUIRE MULTIPLE MOBILIZATIONS.
 - (3) FOR R.C. PIPE, PRICE BID TO INCLUDE COST OF STANDARD BEDDING MATERIAL AND TRENCH EXCAVATION. ESTIMATED QUANTITY WILL BE SHOWN ON THE SUMMARY OF DRAINAGE STRUCTURES - CROSS DRAINS FOR INFORMATION ONLY.
 - (4) QUANTITY INCLUDES THE FULL LENGTH OF THE PROJECT TO BE USED DURING CONSTRUCTION.
 - (5) THE CONTRACTOR SHALL PLACE A TURF REINFORCEMENT MAT AT APPROXIMATE STA. 126+50 TO 127+30 LT AND STA. 473+68 TO 475+84 RT. AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL SHAPE THE EMBANKMENT TO FILL ANY VOIDS PRIOR TO PLACING THE MATS. ALL PLACEMENT SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE TURF REINFORCEMENT MAT SHALL BE "SCOUR-STOP" OR AN APPROVED EQUAL.

THE CONTRACTOR SHALL USE ALL COMPONENTS OF THE EROSION SYSTEM AS SPECIFIED BY THE MANUFACTURER WHICH INCLUDES MATS, STRAPS AND ANCHORS. ALL COSTS NECESSARY TO COMPLETE THE WORK AS DESCRIBED INCLUDING MATERIAL, LABOR, EQUIPMENT, AND INCIDENTALS SHALL BE INCLUDED IN THE PRICE PER S.Y. OF "TURF REINFORCEMENT MAT".

- (6) REMOVAL OF STRUCTURES AND OBSTRUCTIONS SHALL INCLUDE COST OF ALL TEMPORARY AND PERMANENT SHORING AS APPLICABLE TO CONSTRUCT THE NEW RCBS FOR EMBANKMENTS GREATER THAN 5' AND AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL SUBMIT PLANS AND CALCULATIONS FOR THE SHORING AND SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF OKLAHOMA. SHORING SHALL NOT COMMENCE UNTIL SUBMITTED PLANS AND CALCULATIONS ARE APPROVED BY THE ENGINEER.

- (7) PIPE UNDERDRAIN COVER MATERIAL ITEM NO. 613(U), STANDARD BEDDING MATERIAL, CLASS C ITEM NO 613(T), AND TRENCH EXCAVATION ITEM NO. 613(V) SHALL BE INCLUDED IN PRICE BID FOR 8" ROUND PERF. PIPE UNDERDRAIN AND 8" ROUND NON-PERFORATED PIPE UNDERDRAIN. LOCATIONS TO BE DETERMINED BY THE ENGINEER.

ENVIRONMENTAL MITIGATION NOTES

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.

T8N R6E:
SECTION 35:
DERELICT RR R/W: NW 1/4 NE 1/4 NE 1/4
SW 1/4 NE 1/4 NE 1/4
SE 1/4 NE 1/4 NE 1/4
NE 1/4 NE 1/4 NW 1/4 NE 1/4

AMERICAN BURYING BEETLE NOTE:
THE AMERICAN BURYING BEETLE IS A LARGE CARRION BURYING BEETLE THAT OCCURS WITHIN THE ACTION AREA. NO ARTIFICIAL LIGHTING SHALL BE USED DURING CONSTRUCTION. CARCASSES AND ALL FOOD TRASH SHALL BE REMOVED FROM THE PERMANENT AND TEMPORARY ROW THROUGHOUT PROJECT ACTIVITIES. FOLLOWING CONSTRUCTION, TOPSOIL SHALL BE PLACED ON TOP OF ALL AREAS OF GROUND DISTURBANCE, PRIOR TO RE-VEGETATION.

MIGRATORY BIRDS ARE PROTECTED BY THE FEDERAL MIGRATORY BIRD TREATY ACT. THESE BIRDS COMMONLY USE BRIDGES AND CULVERTS FOR NESTING. THE NESTING SEASON FOR THE BIRDS RUNS FROM APRIL 1 TO AUGUST 31. ANY ACTIVITIES WHICH WOULD DESTROY ACTIVE NESTS OR HARM EGGS OR BIRDS WOULD VIOLATE THE MIGRATORY BIRD TREATY ACT. MIGRATORY BIRD USE OF BRIDGE NBI NOS. 10053, 12977, 12934, 12935, 12950, 01807, 13783, 13925, 13757 AND CULVERTS AT STA 132+77; STA 209+13; STA 240+87; STA 350+84; STA 383+72; STA 417+05; AND STA 495+43 INVOLVED WITH THIS PROJECT WAS OBSERVED. PAINTING, REPAIR, RETROFIT, REHABILITATION OR DEMOLITION OF THE EXISTING BRIDGE/STRUCTURES SHALL BE CONDUCTED BETWEEN SEPTEMBER 1, AND MARCH 31, WHEN MIGRATORY BIRD NESTS ARE NOT OCCUPIED. IF PAINTING, REPAIR, RETROFIT, REHABILITATION OR DEMOLITION CANNOT BE COMPLETED BETWEEN SEPTEMBER 1 AND MARCH 31, THE BRIDGE SHALL BE PROTECTED FROM NEW NEST ESTABLISHMENT PRIOR TO APRIL 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 APRIL 1. METHODS OTHER THAN NETTING MUST BE PRE-APPROVED BY THE ODOT BIOLOGIST".

"STATION OCC FAC./CASE NO. FACILITY
APP. 104+75 TO 107+50 RT 25 FT. 6702166/064-0191 DOWELL SCHLUMBERGER
APP. 107+00 TO 109+00 LT 50 FT. 6719421/064-2803 SEMINOLE BATCH PLANT
APP. 213+50 TO 216+50 RT 25 FT. 6702350/064-B1 HALLIBURTON SERVICES

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

"AN OIL/GAS WELL WAS OBSERVED DURING SITE RECONNAISSANCE LOCATED WITHIN THE PROPOSED RIGHT-OF-WAY APPROXIMATELY AT STATION 122+00 RT 10 FT. AS A RESULT, THERE IS A POTENTIAL TO ENCOUNTER CRUDE OIL PRODUCTS AND RELATED WASTES. IF SUCH MATERIALS ARE FOUND, THE RESIDENT ENGINEER SHOULD BE NOTIFIED IMMEDIATELY.

IN ADDITION, ANY OIL/ GAS WELLS ENCOUNTERED DURING CONSTRUCTION ACTIVITIES MUST BE PLUGGED BY PROPERLY LICENSED PERSONNEL, IN ACCORDANCE WITH ALL APPLICABLE OKLAHOMA CORPORATION COMMISSION RULES AND REGULATIONS."

"AN ILLICIT DUMP SITE EXISTS AT THE PROPERTY LOCATED APPROXIMATELY AT STATION 289+50 RT TO 296+25 RT. THIS SITE IS THE SUBJECT OF AN ACTIVE ODEQ INVESTIGATION (ODEQ CASE NUMBER 15-021). AS SUCH, THE EXTENT OF GROUND DISTURBANCE NEEDED FOR THE PROJECT HAS BEEN MINIMIZED, BUT NOT ELIMINATED. IF EVIDENCE OF DUMPED WASTE IS ENCOUNTERED, THE CONTRACTOR SHALL IMMEDIATELY CEASE WORK IN THE AREA AND NOTIFY THE RESIDENT ENGINEER, WHO MAY THEN CONTACT THE ENVIRONMENTAL PROGRAMS DIVISION AT (405) 521-3050 FOR ASSISTANCE.

THE CONTRACTOR'S OPERATION MUST PROCEED ON ITEMS OF WORK NOT RELATED TO, OR IN THE VICINITY OF THE POTENTIALLY HAZARDOUS OR CONTAMINATED MATERIALS. THE CONTRACTOR'S OPERATIONS IN THE VICINITY OF THE POTENTIALLY HAZARDOUS OR CONTAMINATED MATERIALS MUST NOT RESUME UNTIL SO DIRECTED BY ODOT."

P:\11399\200-11399-14001\CAD\SheetFiles\JP_21006 (04) Roadway AR01-21006-4-SUMMARY OF PAY QUANTITIES AND NOTES (ROADWAY) _1.dgn

11/7/2018

DESIGN			OKLAHOMA DEPARTMENT OF TRANSPORTATION SUMMARY OF PAY QUANTITIES AND NOTES (ROADWAY) STATE JOB NO. 21006(04) SHEET NO. AR01
DRAWN			
CHECKED			
APPROVED			
CREW			

0100					
ROADWAY					
PAY QUANTITIES					
ITEM NO.	CODE NO.	DESCRIPTION		UNITS	QUANTITY
201(A)	0102	CLEARING AND GRUBBING		LSUM	1
202(A)	0183	UNCLASSIFIED EXCAVATION		CY	34,243
202(D)	0184	UNCLASSIFIED BORROW	(R-4)	CY	46,294
205(A)	4229	TYPE A-SALVAGED TOPSOIL	(R-7)(R-5)	LSUM	1
221(C)	2801	TEMPORARY SILT FENCE	(1)	LF	5,000
221(D)	2803	TEMPORARY SEDIMENT FILTER		EA	9
221(F)	0100	TEMPORARY SILT DIKE	(1)	LF	315
221(G)	0150	TEMPORARY ROCK FILTER DAM TYPE 1		CY	36
221(G)	0152	TEMPORARY ROCK FILTER DAM TYPE 3		CY	16
221(H)	0450	(PL)TEMPORARY INLET SEDIMENT FILTER		EA	21
221(K)	0600	TEMPORARY FIBER LOG	(1)	LF	5,315
227	0300	(SP)TURF REINFORCEMENT MAT	(5)	SY	430
230(A)	2806	SOLID SLAB SODDING	(R-8)(R-13)(2)	SY	61,707
233(A)	2817	VEGETATIVE MULCHING	(R-11)	AC	16
234(A)	2824	FERTILIZING (10-20-10)	(R-13)	TON	6
241	2832	MOWING	(R-16)	AC	252
242	0400	(PL)STABILIZED CONSTRUCTION EXIT	(R-16)	EA	2
303(A)	2100	AGGREGATE BASE TYPE A		CY	14,681
307(K)	4300	STABILIZED SUBGRADE		SY	61,772
325	5271	SEPARATOR FABRIC		SY	60,560
402(E)	0225	TRAFFIC BOUND SURFACE COURSE TYPE E	(R-25)(7)	TON	3,939
407(B)	0250	TACK COAT		GAL	8,499
408	5774	PRIME COAT	(R-28)	GAL	37,169
411(B)	5940	SUPERPAVE, TYPE S3(PG 70-28 OK)	(R-32)	TON	7,553
411(B)	5945	SUPERPAVE, TYPE S3(PG 64-22 OK)	(R-32)	TON	15,761
411(C)	5955	SUPERPAVE, TYPE S4(PG 70-28 OK)	(R-32)	TON	5,036
411(C)	5960	SUPERPAVE, TYPE S4(PG 64-22 OK)	(R-32)	TON	1,465
413(A)	4870	RUMBLE STRIP-CENTERLINE HMA-CON	(R-32)	LF	3,535
413(B)	4863	RUMBLE STRIP-METHOD HMA-CYC	(R-32)	LF	3,628
501(A)	0313	STRUCTURAL EXCAVATION UNCLASSIFIED	(R-1)(R-32)	CY	135
501(G)	6315	CLSM BACKFILL		CY	23
509(A)	0319	CLASS AA CONCRETE	(R-1)	CY	176
509(D)	0325	CLASS C CONCRETE	(R-41)	CY	629
511(A)	0332	REINFORCING STEEL	(R-1)	LB	24,736
601(A)	1351	TYPE I PLAIN RIPRAP		TON	178
601(I)	6312	FILTER FABRIC (RIPRAP)		SY	202
609(B)	1513	1'-8" COMB. CURB & GUTTER (6" BARRIER)		LF	858
609(B)	1525	2'-8" COMB. CURB & GUTTER (6" BARRIER)		LF	7,092
610(B)	0604	6" CONCRETE DRIVEWAY		SY	789
611(A)	2657	MANHOLE (4' DIAMETER)		EA	1
611(G)	5112	INLET CI DES. 2 (STD)	(R-44)	EA	3
611(G)	5115	INLET CI DES. 2 (D)	(R-44)	EA	9
611(G)	5117	INLET CI DES. 2 (2B)	(R-44)	EA	2
611(G)	5120	INLET CI DES. 3 (STD)	(R-44)	EA	2
611(G)	5122	INLET CI DES. 3 (D)	(R-44)	EA	9
611(G)	5327	INLET GPI TYPE 1 (DES. 1)	(R-44)	EA	2
611(G)	5338	INLET GPI TYPE 2 (DES. 12)	(R-44)	EA	3
611(G)	6002	INLET (SMD-TYPE 2)	(R-44)	EA	2
611(H)	5325	ADD'L DEPTH IN INLET CI DES. 2		VF	47
611(H)	5330	ADD'L DEPTH IN INLET CI DES. 3		VF	20
611(H)	5374	ADD'L DEPTH IN INLET GPI TYPE 1		VF	4
611(H)	5375	ADD'L DEPTH IN INLET GPI TYPE 2		VF	7
611(K)	4479	REPLACEMENT OF DROP INLET GRATE (24" SPDI)		EA	2
613(A)	0491	18" R.C.P.I.P.E CLASS III	(3)	LF	1,092
613(A)	0492	24" R.C.P.I.P.E CLASS III	(3)	LF	823

0100					
ROADWAY					
PAY QUANTITIES					
ITEM NO.	CODE NO.	DESCRIPTION		UNITS	QUANTITY
613(A)	0494	36" R.C.P.I.P.E CLASS III	(3)	LF	230
613(A)	0495	42" R.C.P.I.P.E CLASS III	(3)	LF	206
613(B)	0689	18" CORR. GALV. STEEL PIPE		LF	343
613(B)	0690	24" CORR. GALV. STEEL PIPE		LF	8
613(B)	0692	36" CORR. GALV. STEEL PIPE		LF	108
613(B)	4527	21" X 15" CORR. GALV. STEEL PIPE ARCH		LF	108
613(B)	4528	28" X 20" CORR. GALV. STEEL PIPE ARCH		LF	392
613(B)	4529	35" X 24" CORR. GALV. STEEL PIPE ARCH		LF	76
613(H)	0500	8" PERFORATED PIPE UNDERDRAIN ROUND	(7)	LF	952
613(I)	1097	8" NON-PERF.P.I.P.E UNDERDRAIN RND.	(7)	LF	320
613(J)	5915	EDGE DRAIN CONDUIT-PERFORATED		LF	6,975
613(K)	5916	EDGE DRAIN OUTLET LATERAL-NONPERFORATED		LF	902
613(Q)	5946	OUTLET LATERAL HEADWALL		EA	37
613(L)	5726	18" PREFAB. CULVERT END SECTION, ROUND		EA	9
613(L)	5730	24" PREFAB. CULVERT END SECTION, ROUND		EA	1
613(L)	5734	36" PREFAB. CULVERT END SECTION, ROUND		EA	4
613(L)	5736	42" PREFAB. CULVERT END SECTION, ROUND		EA	2
613(M)	7186	TYPE A4 CULVERT END TREATMENT		EA	2
613(M)	7196	TYPE A6 CULVERT END TREATMENT		EA	2
613(M)	7197	TYPE B6 CULVERT END TREATMENT		EA	8
613(M)	7199	TYPE D6 CULVERT END TREATMENT		EA	2
619(A)	0920	REMOVAL OF STRUCTURES & OBSTRUCTIONS	(R-48)(R-49)(6)	LSUM	1
619(B)	0291	REMOVAL OF HEADWALL	(R-49)	EA	4
619(B)	4725	REMOVAL OF FENCE	(R-49)	LF	1,515
619(B)	4726	REMOVAL OF CURB AND GUTTER	(R-49)(R-50)	LF	500
619(B)	4728	REMOVAL OF ASPHALT PAVEMENT	(R-49)(R-50)	SY	26,618
619(B)	4763	REMOVAL OF CONCRETE PAVEMENT W/ASPHALT OVERLAY	(R-49)(R-50)	SY	8,873
619(B)	4766	REMOVAL OF CONCRETE DRIVEWAY	(R-49)(R-50)	SY	270
619(C)	0924	SAWING PAVEMENT	(4)	LF	40,011
623(A)	0932	BEAM GUARDRAIL W-BEAM SINGLE		LF	200
623(G)	8590	GUARDRAIL END TREATMENT (31")		EA	2
623(I)	8700	GUARDRAIL BRIDGE CONN-THRIE BEAM (31")		EA	2
624(C)	4459	FENCE-STYLE SWF (5 BARBED WIRE)	(R-52)(R-53)	LF	1,987
629(A)	4958	MAILBOX INSTALLATION-SINGLE		EA	6
629(C)	4960	MAILBOX		EA	6
629(D)	4961	REMOVAL OF MAILBOX INSTALLATION		EA	8
853	9066	GUARDRAIL DELINEATORS(TYPE 1, CODE 1)		EA	10

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DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION SUMMARY OF PAY QUANTITIES AND NOTES (ROADWAY) STATE JOB NO. 21006(04) SHEET NO. AR02
DRAWN		
CHECKED		
APPROVED		
CREW		

0303				
PAY QUANTITIES				
CABLE BARRIER				
ITEM NO.	CODE NO.	DESCRIPTION	UNIT	QUANT.
509(A)	0319	CLASS AA CONCRETE (SP-3)(TP-73,74)	CY	0.00
509(D)	0325	CLASS C CONCRETE (SP-1,2)	CY	0.00
619(B)	5190	REMOVAL OF CABLE BARRIER (TP-46,60,68,69)	LF	0.00
628(B)	5125	HIGH-TENSION CABLE BARRIER(TL-4) 46,47,48,57,58,59,67)	LF	0.00
628(C)	5110	END ANCHORS (TP-44,45,67)	EA	0.00

0600				
PAY QUANTITIES				
STAKING				
ITEM NO.	CODE NO.	DESCRIPTION	UNIT	QUANT.
642(B)	0096	CONSTRUCTION STAKING LEVEL II	LSUM	1

0640				
PAY QUANTITIES				
CONSTRUCTION				
ITEM NO.	CODE NO.	DESCRIPTION	UNIT	QUANT.
220	2800	SWPPP DOCUMENTATION AND MANAGEMENT	LSUM	1
640(A)	1398	FIELD OFFICE	EA	1
641	1552	MOBILIZATION	LSUM	1

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DESIGN			OKLAHOMA DEPARTMENT OF TRANSPORTATION SUMMARY OF PAY QUANTITIES AND NOTES (ROADWAY) STATE JOB NO. 21006(04) SHEET NO. AR03
DRAWN			
CHECKED			
APPROVED			
CREW			

FINAL FIELD MEETING

11/7/2018

TRAFFIC OPERATIONS GENERAL CONSTRUCTION NOTES

- (C-1) 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.
- (C-2) EXISTING ROADWAY SHALL REMAIN OPEN DURING CONSTRUCTION. 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.
- (C-6) THE STRUCTURAL DESIGN OF ALL POLES, MAST ARMS, HIGH-MAST POLES, AND OTHER SUPPORTS FOR SIGNS, LUMINAIRES AND SIGNALS AS WELL AS THEIR CONNECTIONS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS. THE MANUFACTURER SHALL ENSURE THE FOLLOWING ARE APPLIED TO THE DESIGN:

THE MINIMUM DESIGN WIND SPEED AND DESIGN LIFE AS REQUIRED IN THE AASHTO SPECIFICATIONS;

THE CALCULATED STRESSES AND FORCES FROM THE DESIGN LOADINGS DO NOT EXCEED THOSE REQUIRED IN THE AASHTO SPECIFICATIONS;

A CATEGORY I FATIGUE IMPORTANCE FACTOR (I_f) FOR ALL STRUCTURES; NO VIBRATORY MITIGATION SHALL BE ALLOWED. TRUCK-INDUCED GUSTS SHALL BE APPLIED TO ALL OVERHEAD TRAFFIC SIGNAL SUPPORTS.

ALL MEMBERS ARE AT LEAST THE MINIMUM THICKNESS AS REQUIRED IN THE AASHTO SPECIFICATIONS;

LUMINAIRE MAST ARMS SHALL BE DESIGNED TO SUPPORT AT LEAST A 50 LB. (22.7 KG) LUMINAIRE WITH AN EFFECTIVE PROJECTED AREA OF 2.5 FT² (0.23 M²);

THE ANCHOR BOLT DESIGN AND AMOUNT OF ANCHOR BOLTS TO BE USED SHALL BE AS REQUIRED IN THE AASHTO SPECIFICATIONS.

SIGNAL MAST ARMS AND POLES SHALL BE DESIGNED FOR SPECIFIC SIGNAL HEAD AND SIGN PLACEMENT.

UNLESS SITE SPECIFIC GEOTECHNICAL DATA IS AVAILABLE, FOUNDATIONS SHALL BE DESIGNED UTILIZING THESE PARAMETERS; SHEAR STRENGTH OF COHESIVE SOIL (C_o OF 500 PSF, ANGLE OF INTERNAL FRICTION OF 22 DEGREES, AND EFFECTIVE UNIT WEIGHT OF SOIL OF 120 PCF.

MINIMUM HAND HOLE SIZE OF 3 INCH WIDTH BY 5 INCH HEIGHT.

TRAFFIC SIGNAL GENERAL CONSTRUCTION NOTES

- (C-52) THIS PROJECT SHALL BE CONSTRUCTED WITHOUT CLOSING THE EXISTING ROAD TO LOCAL AND THROUGH TRAFFIC. SEE ODOT STANDARDS AND DETAIL DRAWINGS FOR MAINTENANCE OF LOCAL AND THROUGH TRAFFIC.
- (C-53) ANY DAMAGE CAUSED BY THE CONTRACTOR TO ANY STRUCTURES, ROADWAY SURFACES, STRIPING, RAISED PAVEMENT MARKERS, GUARDRAIL, SLOPES, AND SIGNS SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE ENGINEER.
- (C-56) 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 REQUIREMENT OF ASTM D4956-(LATEST REVISION) REQUIREMENTS FOR TYPE VIII SHEETING.
- ALL GREEN AND BLUE SIGNS ON CONVENTIONAL HIGHWAYS SHALL HAVE HIGH INTENSITY SHEETING. THE HIGH INTENSITY SHEETING SHALL MEET THE REQUIREMENTS OF ASTM D4956-(LATEST REVISION) FOR TYPE III SHEETING.
- ALL PANEL AND OVERHEAD SIGNS SHALL HAVE TYPE III HIGH INTENSITY BACKGROUND WITH TYPE VIII LEGENDS AND BORDERS. THE TYPE III BACKGROUND AND THE TYPE VIII LEGENDS AND BORDERS SHALL MEET THE REQUIREMENTS OF ASTM D4956-(LATEST REVISION).
- THE MANUFACTURER SHALL FURNISH A TYPE 'A' CERTIFICATION IN ACCORDANCE WITH ODOT STANDARD SPECIFICATIONS, LATEST EDITION, AND SUBSECTION 106.04. THE CERTIFICATION SHALL INCLUDE TEST RESULTS ON THE MATERIAL SUBMITTED FOR APPROVAL.
- (C-57) ALL BROKEN CONCRETE INCLUDING OLD SIGN FOOTINGS WITH STUBS, WASTER MATERIAL AND DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE LIMITS OF THE PROJECT AND DISPOSED OF IN AN AREA APPROVED BY THE ENGINEER. NO PAYMENT SHALL BE MADE FOR THE DISPOSAL OF THIS MATERIAL. ANY PIPE POST OR WIDE FLANGE POST ABOVE THE OLD SIGN FOOTINGS SHALL BE CUT AND HANDLED AS PROPERTY OF THE STATE AND SHALL BE NEATLY STACKED ON THE JOB SITE, AS DESIGNATED BY THE ENGINEER UNTIL SUCH TIME AS DIVISION PERSONNEL CAN REMOVE THE MATERIAL FROM THE JOB SITE.
- (C-58) NO SPLICES SHALL BE PERMITTED IN ANY PIPE OR WIDE FLANGE SIGN POSTS.
- (C-59) ALL ANCHOR BOLTS SHALL BE GRADE A-36 STEEL.
- (C-60) THE STATIONS AND LOCATIONS OF THE SIGN PLACEMENT, AS SHOWN ON THE PLAN SHEETS, ARE APPROXIMATE. EXACT STATIONS AND LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR SO THAT THE SIGN IS INSTALLED IN ACCORDANCE WITH DEPARTMENT STANDARDS AND THE MUTCD IN ORDER TO PROVIDE OPTIMUM VISIBILITY TO THE ONCOMING/APPROACHING MOTORIST. IF A PROPOSED LOCATION CONFLICTS WITH OTHER SIGNS, UTILITIES OR OTHER ROADWAY FEATURES, THE ENGINEER SHALL BE NOTIFIED.
- (C-61) POST LENGTHS SHOWN ON SIGN SUMMARY ARE APPROXIMATE. EXACT LENGTH SHALL BE DETERMINED BY FIELD SURVEY BY THE CONTRACTOR.
- (C-62) THE COST OF REPLACEMENT OF MISSING OR DAMAGED EDGE STRIP ON EXISTING SIGNS SHALL BE INCLUDED IN OTHER ITEMS OF WORK.

TRAFFIC SIGNING GENERAL CONSTRUCTION NOTES CONT.

- (C-63) ALL EXISTING AND NEW BREAKAWAY SIGN POSTS, PIPES AND WIDE FLANGE BEAMS SHALL HAVE SHEET METAL BOLT RETAINER PLATES AS SPECIFIED IN ODOT STD. FGS11-1-(LATEST REVISION). REPLACEMENT COST OF MISSING OR DAMAGED BOLT RETAINER PLATES AND ALL ASSOCIATED HARDWARE AND LABOR SHALL BE INCLUDED IN OTHER ITEMS OF WORK.
- (C-65) ALL REMOVED SIGNS, SIGN POSTS, BOLTS, MISCELLANEOOUS 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.
- (C-66) 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.
- (C-67) THE REMOVAL OF SIGN FOOTINGS IN CONCRETE ISLANDS SHALL BE REMOVED IN A MANNER APPROVED BY THE ENGINEER. AFTER REMOVAL, THE HOLES SHALL BE PATCHED WITH CONCRETE. THE NEW LOCATION OF SIGN FOOTINGS IN CONCRETE ISLANDS SHALL BE SAWED IN A MANNER APPROVED BY THE ENGINEER. CONCRETE PATCHING, SAWING, LABOR, AND ALL OTHER ASSOCIATED COSTS SHALL BE INCLUDED IN OTHER ITEMS OF WORK.
- (C-68) AFTER REMOVAL OF ANY SIGN FOOTINGS, THE HOLES SHALL BE FILLED WITH SOIL AND TAMPED AND SHAPED IN A MANNER APPROVED BY THE ENGINEER.
- (C-69) 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.

TRAFFIC CONSTRUCTION PAY QUANTITY NOTES

- (TC-1) THE CONTRACTOR SHALL FURNISH AND INSTALL SUCH LIGHTS, SIGNS, BARRICADES, AND PROVIDE FLAGGERS NECESSARY FOR THE CONTROL, SAFETY AND MAINTENANCE OF TRAFFIC WHEN INSTALLING, RELOCATING OR DELIVERING PORTABLE LONGITUDINAL BARRIER.
- (TC-2) QUANTITY INCLUDES SUFFICIENT LENGTH OF MEDIAN BARRIER TO PROVIDE FOR THE LONGEST SECTION SHOWN ON THE PLANS. THIS SAME BARRIER WILL BE USED ON OTHER DETOUR PHASES.
- (TC-14) SEE STANDARD DRAWING PM1-1, PM2-1, PM3-1, PM4-1, PM5-1, PM6-1, PM7-1, PM8-1 (LATEST REVISION). A PART, OR ALL, OF THE QUANTITY SHOWN IS TO USED AS FINAL PAVEMENT MARKING.
- (TC-16) PAINT SHALL CONFORM TO SECTION 711 "TRAFFIC STRIPE", OF THE ODOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION).
- IF CONSTRUCTION TRAFFIC STRIPE PAINT IS INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND FAILS DURING THE FIRST SIX MONTHS OF SERVICE, REPLACEMENT WILL BE MADE AT THE CONTRACTOR'S EXPENSE AND SHALL BE ACCOMPLISHED IN A TIMELY MANNER UPON NOTIFICATION BY THE ENGINEER OF SUCH FAILURE.
- (TC-17) INCLUDES AN ESTIMATED 179,489 L.F. (PAINT)(4" WIDE) WHITE AND 179,890 L.F. (PAINT)(4" WIDE) YELLOW STRIPE.
- (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-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) 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 APPLICABLE ODOT 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, BARRICADES, AND CHANNELIZING DEVICES WHICH ARE SHOWN WITH EITHER TYPE 'A' OR TYPE 'C' LIGHTS IN THE STANDARD DRAWINGS SHALL HAVE THE CORRESPONDING LIGHT ATTACHED DURING NON-DAYLIGHT HOURS.
- (TC-33) ALL CONSTRUCTION WORK ZONE SIGNS SHALL HAVE FLUORESCENT SHEETING. THE FLUORESCENT SHEETING SHALL MEET THE REQUIREMENTS OF ASTM D4956 (LATEST REVISION).
- THE MANUFACTURER SHALL FURNISH A TYPE 'D' CERTIFICATION IN ACCORDANCE WITH ODOT STANDARD SPECIFICATION (CURRENT EDITION) SUBSECTION 106.04. THE CERTIFICATION SHALL INCLUDE TEST RESULTS ON MATERIAL SUBMITTED FOR APPROVAL.
- (TC-52) ANY USED CONSTRUCTION ZONE IMPACT ATTENUATOR AND CHANGEABLE MESSAGE SIGN TO BE PLACED ON THIS PROJECT SHALL BE SUBJECT TO INSPECTION AND APPROVAL, BY THE OKLAHOMA DEPARTMENT OF TRANSPORTATION, TO ASSURE THAT THEY ARE IN GOOD WORKING CONDITION, PRIOR TO PLACEMENT ON THE PROJECT.
- (TC-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-80) INCLUDED IN THIS ITEM SHALL BE ONE (1) ADDITIONAL UNIT TO BE USED AS A STAND-BY OR REPLACEMENT. THIS STAND-BY UNIT SHALL BE IMMEDIATELY ACCESSIBLE TO REPLACE A DAMAGED, STOLEN OR MALFUNCTIONING UNIT. THE AMOUNT OF TIME BETWEEN THE REMOVAL OF THE DAMAGED UNIT AND THE INSTALLATION OF THE STAND-BY UNIT SHALL BE NO MORE THAN TWENTY-FOUR (24) HOURS.

TRAFFIC CONSTRUCTION PAY QUANTITY NOTES CONT.

- (TC-84) 660 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 WEBSITE AT: HTTP://WWW.OKLADOT.STATE.OK.US/TRAFFIC/QPL/INDEX.PHP
- (TP-75) TRAFFIC SAFETY ITEMS WILL BE ACCEPTED FOR INSTALLATION IF THEY HAVE MET, AND PROVIDE PROOF OF MEETING, EITHER NCHRP 350 OR MASH TESTING REQUIREMENTS OF THEIR SPECIFIED TEST LEVEL.
- (1) TOTAL CONSTRUCTION CALENDAR DAYS WERE CALCULATED USING THE FOLLOWING NUMBER OF DAYS FOR EACH PHASE:
- | | |
|----------|----------|
| PHASE 1A | 30 DAYS |
| PHASE 1B | 30 DAYS |
| PHASE 1C | 60 DAYS |
| PHASE 2 | 210 DAYS |
| PHASE 2B | 60 DAYS |
| PHASE 2C | 30 DAYS |
| PHASE 3 | 210 DAYS |
| PHASE 4 | 30 DAYS |
- (2) THE ESTIMATED QUANTITY FOR DRUMS SHOWN IN THE TRAFFIC CONTROL SUMMARY PLAN SHEETS IS PAID FOR AS FOLLOWS: 75% OF SUMMARY QUANTITY IS ESTIMATED AS DRUMS AND 25% OF THE SUMMARY QUANTITY IS ESTIMATED AS CHANNELIZER CONES.
- (3) INCLUDED IN THIS PAY ITEM IS THE TEMPORARY COVERING OR REMOVAL OF EXISTING SIGNS THAT CONFLICT WITH THE TEMPORARY TRAFFIC CONTROL SIGNING. THESE EXISTING SIGNS ARE TO BE RETURNED TO THEIR PREVIOUS UNCOVERED CONDITION OR LOCATION ONCE THE TEMPORARY TRAFFIC CONTROL SIGNING IS NO LONGER NEEDED AND HAS BEEN REMOVED.
- (4) PORTABLE CHANGEABLE MESSAGE SIGNS TO BE PLACED AS DIRECTED BY THE ENGINEER. INCLUDES 4 LOCATIONS.

TRAFFIC SIGNING PAY QUANTITY NOTES

- (TS-19) QUANTITY SHOWN INCLUDES 99,851 L.F. TRAFFIC STRIPE (PLASTIC)(WHITE) AND 102,375 L.F. TRAFFIC STRIPE (PLASTIC)(YELLOW) AND WILL BE MEASURED BY THE LINEAR FOOT OF FOUR INCH (4") WIDE TRAFFIC STRIPE.
- (TS-21) QUANTITY SHOWN INCLUDES 796 L.F. TRAFFIC STRIPE (PLASTIC)(WHITE) AND 674 L.F. TRAFFIC STRIPE (PLASTIC)(YELLOW) AND WILL BE MEASURED BY THE LINEAR FOOT OF EIGHT INCH (8") WIDE TRAFFIC STRIPE.
- (TS-22) QUANTITY SHOWN INCLUDES 0 L.F. TRAFFIC STRIPE (PLASTIC)(WHITE) AND 2,373 L.F. TRAFFIC STRIPE (PLASTIC)(YELLOW) AND WILL BE MEASURED BY THE LINEAR FOOT OF TWELVE INCH (12") WIDE TRAFFIC STRIPE.
- (TS-23) QUANTITY SHOWN INCLUDES 485 L.F. TRAFFIC STRIPE (MULTI-POLYMER)(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 ODOT 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 THE 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.

DESIGN		
DRAWN		
CHECKED		
APPROVED		
CREW		

OKLAHOMA DEPARTMENT OF TRANSPORTATION

SUMMARY OF PAY QUANTITIES AND NOTES (TRAFFIC)

STATE JOB NO. 21006(04) SHEET NO. AT01

SEMINOLE CO. US-270

PAY QUANTITIES				
0301 - TRAFFIC SIGNING AND STRIPING				
ITEM NO.	CODE NO.	DESCRIPTION	UNITS	QUANTITY
804(A)	2915	STRUCTURAL CONCRETE	CY	6.00
804(B)	2916	REINFORCING STEEL	LB	910.00
805(A)	8724	(PL)REMOVAL OF EXISTING SIGNS (TS-41)	EA	56.00
805(D)	8756	(PL)REMOVE & RESET EXISTING SIGNS SPECIAL NOTES	EA	2.00
850(A)	8110	SHEET ALUMINUM SIGNS (TS-34)	SF	598.00
850(B)	8112	EXTRUDED ALUMINUM PANEL SIGNS	SF	175.00
851(A)	3206	4" @13 GALV.STL.WD.FLANGE BM.POST	LF	#REF!
851(B)	3218	3" @7.58 GALV.STL.PIPE POST	LF	56.00
851(B)	3219	3 1/2" @9.11 GALV.STL.PIPE POST	LF	180.00
851(C)	8324	2" SQUARE TUBE POST (TS-33)	LF	426.00
853	9033	DELINEATORS (TYPE 2, CODE 1)	EA	6.00
855(A)	8812	TRAFFIC STRIPE(PLASTIC)(4" WIDE) (TC-14)(TS-19)	LF	43,275.00
855(A)	8814	TRAFFIC STRIPE(PLASTIC)(8" WIDE) (TC-14)(TS-21)	LF	674.00
855(A)	8818	TRAFFIC STRIPE(PLASTIC)(12" WIDE) (TC-14)(TS-22)	LF	1,250.00
855(A)	8825	TRAFFIC STRIPE(PLASTIC)(24" WIDE) (TC-14)(TS-23)	LF	287.00
855(B)	3300	TRAF.STR(PLAST)(SYMBOLS, WORDS, ETC) (TC-14)	EA	38.00
880(C)	8850	PERMANENT BARRICADE UNIT (TC-14)	EA	0.00

PAY QUANTITIES				
0300 - TRAFFIC CONTROL				
ITEM NO.	CODE NO.	DESCRIPTION	UNITS	QUANTITY
857(A)	8839	CONSTRUCTION TRAFF.STR.(PAINT)(4" WIDE) (TC-16, 17, 20, 75)	LF	76,410.00
857(F)	8006	PAVEMENT MRKNG.REMOVAL(TRAF.STRP) (TC-22, 70, 75)	LF	29,454.00
857(F)	8009	PAVEMENT MARKING REMOVAL(SYMBOLS) (TC-22, 70, 75)	EA	11.00
871(B)	8705	(SP)CONST.ZONE IMPACT ATTEN. (TC-52, 80, 84)(TP-75)(1)	SD	1,320.00
877(B)	8484	DELIVER PORTABLE LONGITUDINAL BARRIER (TC-1.2)(TP-75)	LF	265.00
877(C)	8486	RELOCATE PORTABLE LONGITUDINAL BARRIER (TC-1)(TP-75)	LF	685.00
880(A)	8806	ARROW DISPLAY(TYPE B) (TC-26,84)(TP-75)(1)	SD	240.00
880(B)	8818	CONSTRUCTION SIGNS 0 TO 6.25 SF (TC-26,33,84)(TP-75)(1)(3)	SD	21,600.00
880(B)	8821	CONSTRUCTION SIGNS 6.26 SF TO 15.99 SF (TC-26,33,84)(TP-75)(1)(3)	SD	7,920.00
880(B)	8824	CONSTRUCTION SIGNS 16.0 SF TO 32.99 SF (TC-26,30,33,84)(TP-75)(1)(3)	SD	14,910.00
880(C)	8842	CONSTRUCTION BARRICADES(TYPE III) (TC-26,84)(TP-75)(1)	SD	5,040.00
880(C)	8848	WING BARRICADES (TC-26,84)(TP-75)(1)	SD	5,280.00
880(E)	8860	WARNING LIGHTS(TYPE A) (TC-26,84)(TP-75)(1)	SD	24,840.00
880(F)	8878	DRUMS (TC-26,84)(TP-75)(1)(2)	SD	44,234.00
880(G)	8890	CHANNELIZER CONES (TC-26,84)(TP-75)(1)(2)	SD	14,745.00
882(A)	8306	PORT.CHANGEABLE MESSAGE SIGN (TC-52,85)(TP-75)(1)(4)	SD	2,640.00

P:\11399\200-11399-14001\CAD\SheetFiles\JP_21006 (04) Roadway\A102-21006-SUMMARY OF PAY QUANTITIES AND NOTES (TRAFFIC) _2.dgn

DESIGN			<p align="center">OKLAHOMA DEPARTMENT OF TRANSPORTATION</p> <p align="center">SUMMARY OF PAY QUANTITIES AND NOTES (TRAFFIC)</p> <p align="center">STATE JOB NO. 21006(04) SHEET NO. AT02</p>
DRAWN			
CHECKED			
APPROVED			
CREW			

SUMMARY OF GUARDRAIL AND CONCRETE BARRIER

P&P SHEET NO.	STATION TO STATION				303(A)	307(K)	325	408	411(C)	623(A)	623(G)	623(i)	853
					AGGREGATE BASE TYPE A	STABILIZED SUBGRADE	SEPARATOR FABRIC	PRIME COAT	SUPERPAVE, TYPE S4(PG 64-22 OK)	BEAM GUARDRAIL W-BEAM SINGLE	GUARDRAIL END TREATMENT (31")	GUARDRAIL BRIDGE CONN-THRIE BEAM (31")	GUARDRAIL DELINEATORS(TYPE 1, CODE 1)
					CY	SY	SY	GAL	TON	LF	EA	EA	EA
R027	111+49.07 RT	TO	114+04.09 RT	788.41	122.23	122.23	73.34	27.38	100	1	1	5	
R027	116+23.91 LT	TO	118+78.93 LT	788.41	122.23	122.23	73.34	27.38	100	1	1	5	
TOTAL				1,576.81	244.47	244.47	146.68	54.76	200	2	2	10	

SUMMARY OF EARTHWORK

STATION TO STATION	LOCATION	202(A)	EMBANKMENT +15%	202(D)	EXCESS EXCAVATION
		UNCLASSIFIED EXCAVATION		UNCLASSIFIED BORROW	
		CY		CY	
PHASE 1					
68+50.00	78+50.00	US-270	88	3,371	3,283
PHASE 2					
70+75.00	146+15.00	US-270	20,969	54,807	33,838
24+65.00	31+00.00	HARVEY RD	1,889	384	1,505
PHASE 2B					
125+00.00	134+00.00	US-270	2,904	17,157	14,253
PHASE 2C					
27+13.59	31+00.00	HARVEY RD	897	11	886
PHASE 3					
70+75.00	134+00.00	US-270	7,340	14,836	7,496
TOTAL			34,087.00		44,617.00

SUMMARY OF FENCE

P & P SHEET NO.	STATION	TO	STATION	LT.	RT.	624(C)
						FENCE-STYLE SWF (5 BARBED WIRE)
						LF
R027	110+61	to	114+70	X		425
R027	115+55	to	118+15	X		271
R028	122+00	to	132+27		X	1,014
R028	125+50	to	127+70	X		238
TOTAL						1,948

NOTES:
ALL CLF & WWF EXCLUDE GATE WIDTH
STATIONS ARE BASED ON THE CL SURVEY

SUMMARY OF EDGE DRAIN QUANTITIES

SHEET NO.	TYP. SEC. NO.	STATION TO STATION		613(J)	613(K)	613(Q)	DESCRIPTION	
				6"	6"	6"		
				EDGE DRAIN CONDUIT-PERFORATED	EDGE DRAIN OUTLET LATERAL-NONPERFORATED	OUTLET LATERAL HEADWALL		
				LF	LF	EA		
270 CRL								
R024	1	76+81.00 RT	TO	81+76.45 RT	495			CONNECT TO STR. 301, 302, 303, & 304
R025	1	83+43.93 RT	TO	110+90.00 RT	2,746			CONNECT TO STR. 306, 309, 312, 314, 316, 318, 320, & 323
R025	1	84+00.00 LT	TO	110+90.00 LT	2,690			CONNECT TO STR. 307, 310, 313, 315, 317, 319, 321, & 324
R025	1	87+00.00 RT				90	1	DOUBLE OUTLET
R025	1	89+75.00 RT				90	1	DOUBLE OUTLET
R025	1	91+25.00 LT				14	1	SINGLE OUTLET
R025	1	91+25.00 RT				14	1	SINGLE OUTLET
R025	1	92+50.00 LT				14	1	SINGLE OUTLET
R025	1	92+50.00 RT				14	1	SINGLE OUTLET
R026	1	97+00.00 LT				14	1	SINGLE OUTLET
R026	1	97+00.00 RT				14	1	SINGLE OUTLET
R026	1	99+80.00 RT				90	1	DOUBLE OUTLET
R026	1	101+10.00 RT				90	1	DOUBLE OUTLET
R026	1	102+40.00 RT				90	1	DOUBLE OUTLET
R026	1	105+25.00 RT				90	1	DOUBLE OUTLET
R026	1	106+75.00 RT				90	1	DOUBLE OUTLET
R026	1	107+75.00 RT				90	1	DOUBLE OUTLET
R027	1	110+25.00 LT				14	1	SINGLE OUTLET
R027	1	110+25.00 RT				14	1	SINGLE OUTLET
N HARVEY RD								
R030	3	24+60.00 LT	TO	26+59.47 LT	199			CONNECT TO STR. 355 & 352
R030	3	24+60.00 RT	TO	26+03.55 RT	144			CONNECT TO STR. 356 & 351
R030	3	24+60.00 LT				14	1	SINGLE OUTLET
R030	3	24+60.00 RT				14	1	SINGLE OUTLET
R030	3	26+00.00 RT				14	1	SINGLE OUTLET
R030	4	27+50.00 LT	TO	31+00.00 LT	350			
R030	4	27+50.00 RT	TO	31+00.00 RT	350			
R030	4	27+50.00 LT				14	1	SINGLE OUTLET
R030	4	27+50.00 RT				14	1	SINGLE OUTLET
* DAYLIGHT ALL OUTLET LATERAL HEADWALLS								
TOTAL				6,975	902	21		

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DESIGN			OKLAHOMA DEPARTMENT OF TRANSPORTATION SUMMARY SHEET (ROADWAY) STATE JOB NO. 21006(04) SHEET NO. AX02 SEMINOLE CO. US-270
DRAWN			
CHECKED			
APPROVED			
CREW			

SUMMARY OF DITCH TREATMENT												
P&P SHEET NO.	LOCATION				DESCRIPTION	CONCRETE LINER					509(D)	227
						DESIGN NO.	LENGTH	BOTTOM WIDTH	CURTAIN WALLS	CLASS C CONCRETE	(SP)TURF REINFORCEMENT MAT	
	STATION	TO	STATION	LT		RT	L.F.	FT.	EA.	CY	SY	
US-270												
R024	74+00.00		81+00.00		X	DC-3	2A	428	8	11	78	
R024	75+05.00		75+05.00		X	DC-3, BACKSLOPE FLUME	2A	5	8	11	3	
R025	83+25.00		84+15.00		X	DC-3	2A	90	8	2	16	
R025	85+90.00		86+30.00		X	DC-3	2A	40	8	2	8	
R025	86+80.00		87+10.00		X	DC-3	2A	30	8	2	6	
R025	90+85.00		91+45.00		X	DC-3	2A	60	8	2	11	
R026	94+55.00		94+80.00		X	DC-3	2A	25	8	2	5	
R026	95+65.00		100+00.00		X	DC-3	2A	435	8	6	78	
R027	110+00.00		111+10.00		X	DC-3	2A	110	8	3	20	
R027	110+55.00		110+55.00		X	DC-3, BACKSLOPE FLUME	2A	10	8	2	2	
R028	124+60.00		126+50.00		X	DC-3	2A	190	20	3	63	
R028	126+50.00		127+30.00		X	TURF REINFORCEMENT MAT						430
R028	132+45.00		134+50.00		X	DC-3	2A	205	8	4	37	
R024	73+00.00		74+50.00		X	DC-3	2A	150	8	3	27	
R024	76+65.00		77+50.00		X	DC-3	2A	85	8	2	15	
R025	83+25.00		84+00.00		X	DC-3	2A	75	8	2	14	
R026	93+50.00		95+70.00		X	DC-3	2A	220	8	4	40	
R026	97+75.00		98+00.00		X	DC-3	2A	25	8	2	5	
R028	128+50.00		133+00.00		X	DC-3	2A	450	8	6	81	
R028	135+00.00		135+75.00		X	DC-3	2A	75	8	2	14	
HARVEY RD./SH-270A												
R030	27+20.00		30+40.00		X	DC-3	2A	320	4	5	42	
R030	27+60.00		28+10.00		X	DC-3	2A	50	8	2	9	
TOTAL											574	430

SUMMARY OF EROSION CONTROL				
SHEET NO.	STATION	DESCRIPTION	WORK AREA	230(A)
				SOLID SLAB SODDING
SY				
NB CRL				
R016	64+00 TO 93+00	LEFT ROADWAY	2	10.896
R016	64+00 TO 93+00	RIGHT ROADWAY	2	437
R016	64+00 TO 93+00	RIGHT ROADWAY	3	7.505
R017	93+00 TO 122+00	LEFT ROADWAY	2	11.264
R017	93+00 TO 122+00	RIGHT ROADWAY	2	4.812
R017	93+00 TO 122+00	RIGHT ROADWAY	3	4.616
R018	122+00 TO 150+00	LEFT ROADWAY	2	9.652
R018	122+00 TO 150+00	RIGHT ROADWAY	2	12.526
TOTAL				61,707.28

REMOVAL OF STRUCTURES AND OBSTRUCTIONS		
P&P SHEET NO.	CL SURVEY STATION	DESCRIPTION
R024	74+82.81	36" RCP 44.5' LT & 37.1' RT
R024	75+40	24" RCP S.D. 50.4' LT
R024	75+99.56	18" RCP S.D. 48.3' LT
R024	77+07.18	24" RCP S.D. 46.4' LT
R025	78+02.35	18" RCP S.D. 36.2' LT
R025	84+03.21	36" RCP 46.2' LT & 55.9' RT
R025	88+39.11	24" RCP S.D. 33.6' LT
R025	92+43.17	24" RCP S.D. 41.1' LT
R026	96+14.64	18"x12" CMP S.D. 36.8' LT
R026	97+85.22	36" RCP 31.3' LT & 37.8' RT
R027	109+31.31	12" CMP S.D. 42.8' RT
R027	112+75 TO 117+75	610 LF GUARDRAIL
R027	114+55.48	(6) 25' CONC. SLABS (BRIDGE)
R028	122+00 TO 125+00	600 LF GUARDRAIL
R028	123+83	(3) 10'x11' RCB 23.7' LT & 22.8' RT
R028	127+63.96	(3) 10'x8' RCB 25.4' LT & 22' RT

SUMMARY OF MAILBOXES							
P&P SHEET NO.	STATION		629(A)	629(B)	629(C)	629(D)	629(E)
			MAILBOX INSTALLATION SINGLE	MAILBOX INSTALLATION MULTIPLE	MAILBOX	REMOVAL OF MAILBOX INSTALLATION	REMOVE AND RESET MAILBOX
US-270	LT.	RT.	EA	EA	EA	EA	EA
R024	72+79.00	X	1		1	1	
R024	76+20.00	X	1		1	1	
R024	77+18.00	X	1		1	1	
R025	81+15.00			X		1	
R026	103+10.00	X				1	
R026	104+39.00, 70' RT		X	1	1	1	
R027	109+22.00, 65' LT	X	2		2	2	
TOTAL			6	0	6	8	0

NOTE: MAILBOXES TO BE PLACED ON SAME SIDE OF ROAD AS DRIVEWAY SERVICED.

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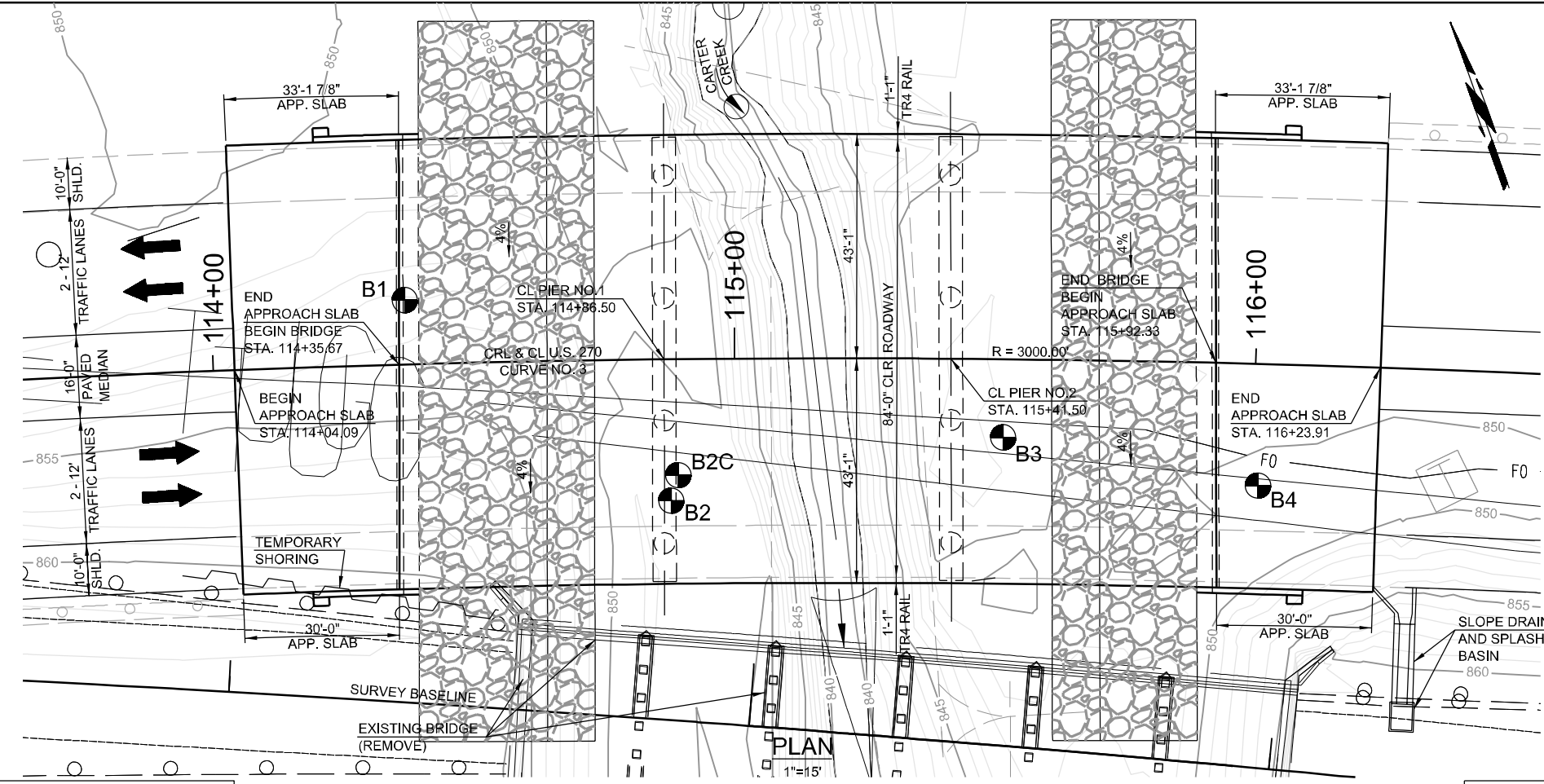
FINAL FIELD MEETING
11/7/2018

SUMMARY OF DRAINAGE STRUCTURES							INLETS AND CURB OPENINGS			CONDUITS						
STR. NO.	P & P SHEET NO.	ALIGN.	STATION	SIDE	DESCRIPTION	DESIGN	501(G)	611(G)	611(K)	613(B)	613(B)	613(B)	613(B)	613(B)	613(B)	
							CLSM BACKFILL	INLET (SMD-TYPE 2)	REPLACEMENT OF DROP INLET GATE (24" BR)	18" CORR. GALV. STEEL PIPE	24" CORR. GALV. STEEL PIPE	30" CORR. GALV. STEEL PIPE	36" CORR. GALV. STEEL PIPE	21" X 15" CORR. GALV. STEEL PIPE ANCH	42" X 24" CORR. GALV. STEEL PIPE ANCH	
TEMP. STRUCTURES							CY	EA	EA	LF	LF	LF	LF	LF	LF	
T1	R025	US-270	78+25	RT	CONST. 21" X 15" X 58' CGSPA WITH DROP INLET	SPDI-2, FPI-3-3, FHTMPP-1-0	8		1	58	3				58	
T2	R026	US-270	94+67.90	RT	CONST. DROP INLET STUBBED INTO EXISTING STRUCTURE	SPDI-2	1		1		5					
T3	R027	US-270	113+50	RT	CONST. 18" X 12" CGSP WITH DROP INLET	SMD-3-1, FPI-3-3, FHTMPP-1-0	7	1		112						
T4	R028	US-270	125+50.00	RT	CONST. 18" X 11" CGSP WITH DROP INLET	SMD-3-1, FPI-3-3, FHTMPP-1-0	7	1		111						
NOTE: TEMPORARY PIPES TO BE REMOVED OR FILLED WITH CLSM BACKFILL ONCE ASSOCIATED CONSTRUCTION PHASING IS COMPLETED.																
TOTAL							23	2	2	281	8					58

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DESIGN			<p>OKLAHOMA DEPARTMENT OF TRANSPORTATION</p> <p>SUMMARY SHEET (ROADWAY)</p> <p>STATE JOB NO. 21006(04) SHEET NO. AX07</p>
DRAWN			
CHECKED			
APPROVED			
CREW			

CURVE DATA
 CRL CURVE #3
 PI STA. 121+10.09
 $\Delta = 28^{\circ}33'58.31''$ RT.
 $D = 1^{\circ}54'35.49''$
 $R = 3000.00'$
 $T = 763.75'$
 $L = 1495.72'$
 $E = 95.69'$
 $e \text{ SUPER} = 0.040'/'$



EXISTING BRIDGE
 6 SPAN STRUCTURE CONSISTING OF 6-25' CONCRETE SLAB SPANS HAVING A CLEAR ROADWAY WIDTH OF 28'-0"

PROPOSED BRIDGE DESCRIPTION
 CONSTRUCT 3 SPAN (50'-55'-50') CONCRETE BRIDGE HAVING 84'-0" CLEAR ROADWAY WITH TYPE II PC BEAMS AND TR4 TRAFFIC RAILS OVER CARTER CREEK

INDEX OF SHEETS

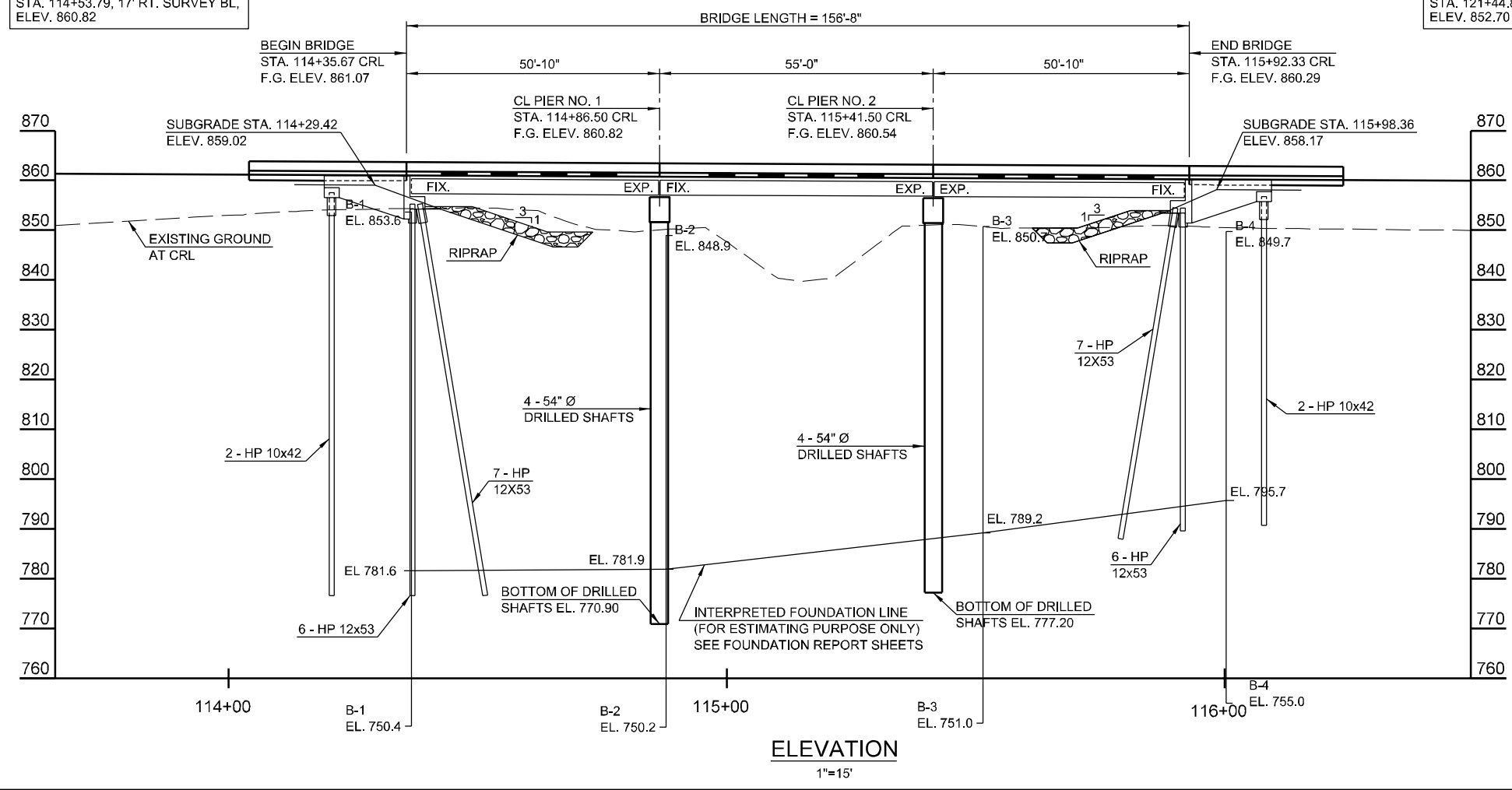
AB01-AB02	GENERAL NOTES AND SUMMARY OF PAY QUANTITIES - BRIDGES A, B & C
B001-B002	GENERAL PLAN AND ELEVATION
B003-B005	FOUNDATION REPORT
B006	SUBSTRUCTURE STAKING DIAGRAM
B007-B008	ABUTMENT NO. 1 DETAILS
B009-B010	ABUTMENT NO. 2 DETAILS
B011-B013	PIER DETAILS
B014	TYPICAL BRIDGE SECTION
B015	DECK SLAB REINFORCING DETAILS
B016-B017	DIAPHRAGM DETAILS
B018	LONGITUDINAL SECTION AND TRAFFIC RAIL ELEVATION
B019	FRAMING PLAN
B020-B022	BEAM DETAILS
B023	BEARING DETAILS
B024	APPROACH SLAB NO. 1 DETAILS
B025	APPROACH SLAB NO. 2 DETAILS
B026	DETAILS OF DRAIN AT END OF BRIDGE

THE FOLLOWING STANDARDS WILL BE REQUIRED

- TR4-2-00E
- EJ-SQ-03E
- EJ-DTL-01E
- HP1-2-00E
- B40-C-ABUT-MISC
- LECS-4-1
- PUD-3-2

BENCH MARK
 CUT "x" SW WINGWALL
 STA. 114+53.79, 17' RT. SURVEY BL.
 ELEV. 860.82

BENCH MARK
 #6 BAR 30" LONG SET FLUSH
 STA. 121+44.89, 63' RT. SURVEY BL.
 ELEV. 852.70



DESIGN DATA

LOADING:
 HL-93 OR OKLAHOMA OVERLOAD TRUCK
 20 P.S.F. FUTURE WEARING SURFACE
 5 P.S.F. STAY IN PLACE FORM

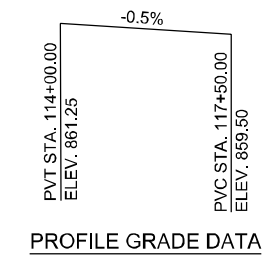
DESIGN:
 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 7th EDITION WITH INTERIMS THROUGH 2016.
 ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE
 ANSI/AWS D1.6 STRUCTURAL WELDING CODE - STAINLESS STEEL.

MATERIAL:

CLASS AA CONCRETE	$F_c = 4,000$ P.S.I.
CLASS A CONCRETE	$F_c = 3,000$ P.S.I.
REINFORCING STEEL	$F_y = 60,000$ P.S.I.
STRUCTURAL STEEL M270 (GRADE 50W)	$F_y = 50,000$ P.S.I.
STAINLESS STEEL A240 (TYPE 316)	$F_y = 30,000$ P.S.I.

NOTES:
 FOR TOP OF DRILLED SHAFT ELEVATIONS, SEE SHEETS B011 AND B012. FOR TOP OF ABUTMENT PILE ELEVATIONS AND ESTIMATED PILE LENGTHS, SEE SHEET B006.

DRAIN OPENINGS IN POSTS OF TR4 RAILS AS SHOWN IN ELEVATION SHALL BE LOCATED ON SOUTH SIDE OF BRIDGE ONLY. TR4 RAIL ON NORTH SIDE OF BRIDGE SHALL CONTAIN NO DRAIN OPENINGS.



BRIDGE "A" U.S. 270 OVER CARTER CREEK

DESIGN	LWN	3-15	OKLAHOMA DEPARTMENT OF TRANSPORTATION GENERAL PLAN AND ELEVATION 3 SPAN (50'-55'-50') TYPE II PC BEAMS CL. STA. 115+14.00. (SHEET 1 OF 2) STATE JOB NO. 21006(04) SHEET NO. B001 SEMINOLE CO. U.S. 270
DRAWN	MRM	3-15	
CHECKED	JSH	10-16	
APPROVED	-	-	
SQUAD	TT	-	

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 11/7/2018

FOUNDATION DATA

ABUTMENTS (HP 12x53 PILING)
FACTORED PILE REACTION = 77.6 TONS/PILE

ALL ABUTMENT PILING SHALL BE DRIVEN THROUGH THE COMPACTED FILL. PILING SHALL BE DRIVEN TO POINT BEARING ON SOLID FOUNDATION MATERIAL AT THE APPROXIMATE ELEVATION SHOWN ON THE PLANS. IF THE AXIAL LOAD RESISTANCE IS NOT OBTAINED AT THE ELEVATION, DRIVING SHALL CONTINUE UNTIL THE AXIAL LOAD RESISTANCE IS OBTAINED. THE LENGTH OF STEEL PILING SHOWN ON THE PLANS IS FOR ESTIMATING PURPOSES ONLY.

PIERS (54" DIAMETER DRILLED SHAFT)		PIER 1	PIER 2
FACTORED REACTION	TONS/ SHAFT	483.1	473.5
NOMINAL UNIT BEARING RESISTANCE	TSF	36.7	30.5
BEARING RESISTANCE FACTOR		0.7	0.7
FACTORED BEARING RESISTANCE	TONS/SHAFT	408.4	340.0
NOMINAL UNIT FRICTION RESISTANCE	TSF	3.7	5.2
FRICTION RESISTANCE FACTOR		0.45	0.45
FACTORED FRICTION RESISTANCE	TONS/ SHAFT	151.8	216.1
DEPTH OF ROCK NEGLECTED FOR FRICTION	FEET	4.5	5.5
TOTAL FACTORED RESISTANCE	TONS/SHAFT	560	556

HYDRAULIC DATA

TOTAL DA 15.01 SQ. MILES
CONTROLLED DA 5.25 SQ. MILES
EFFECTIVE DA 9.76 SQ. MILES

Q2 287.33 CFS
V2 1.62 FPS
C.H.W. 2 846.97 FT

Q5 298.13 CFS
V5 1.18 FPS
C.H.W. 5 848.92 FT

Q10 879.26 CFS
V10 2.61 FPS
C.H.W. 10 850.01 FT

Q25 1,603.23 CFS
V25 3.58 FPS
C.H.W. 25 851.30 FT

Q50 1,983.04 CFS
V50 4.21 FPS
C.H.W. 50 852.37 FT

Q100 2,607.15 CFS
V100 5.25 FPS
C.H.W. 100 852.28 FT

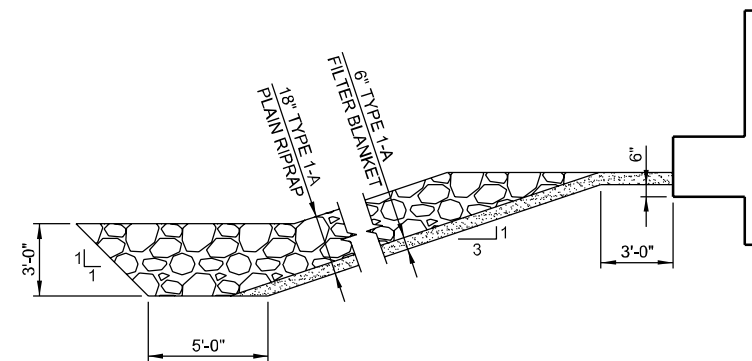
Q 500 4,142.22 CFS
V 500 7.39 FPS
C.H.W. 500 853.96 FT

Q OT > Q500.

LOW CHORD 854.93 FT
ROADWAY LOW POINT 858.35 FT.

MAX. CALCULATED SCOUR (100) 7.47 FT.
CONTRACTION SCOUR (100) 1.97 FT.
PIER SCOUR (100) 7.08 FT.
MAX. CALCULATED SCOUR (OT) 8.08 FT.
CONTRACTION SCOUR (OT) 7.64 FT.
PIER SCOUR (OT) 7.04 FT.

ITEMIZED QUANTITIES						
DESCRIPTION	UNIT	ABUTMENT	PIER	SUPER-STRUCTURE	APPROACH SLAB	TOTAL
UNCLASSIFIED BORROW	CY	30.00				30.00
SUBSTRUCTURE EXCAVATION COMMON	CY	258.00				258.00
CLSM BACKFILL	CY	334.00				334.00
PRESTRESSED CONCRETE BEAMS (TYPE II)	LF			1,386.00		1,386.00
APPROACH SLAB	SY				604.80	604.80
SAW-CUT GROOVING	SY			1,462.30	589.60	2,051.90
SEALED EXPANSION JOINT	LF			172.92		172.92
CONCRETE RAIL (TR4)	LF			313.40	126.40	439.80
STRUCTURAL STEEL	LB			3,100.00		3,100.00
STAINLESS STEEL FIXED BEARING ASSEMBLY	EA			27.00		27.00
STAINLESS STEEL EXPANSION BEARING ASSEMBLY	EA			27.00		27.00
SPECIAL CONCRETE FINISH	SY	106.00	144.00			250.00
CLASS AA CONCRETE	CY			371.10		371.10
CLASS A CONCRETE	CY	131.60	161.00			292.60
EPOXY COATED REINFORCING STEEL	LB	16,940.00	17,700.00	113,200.00		147,840.00
PILES, FURNISHED (HP 10X42)	LF	291.00				291.00
PILES, FURNISHED (HP 12X53)	LF	1,839.50				1,839.50
PILES, DRIVEN (HP 10X42)	LF	291.00				291.00
PILES, DRIVEN (HP 12X53)	LF	1,839.50				1,839.50
WATER REPELLENT (VISUALLY INSPECTED)	SY	69.00	200.00	418.00	58.00	745.00
DRILLED SHAFTS 54" DIAMETER	LF		619.00			619.00
CROSSHOLE SONIC LOGGING	EA		8.00			8.00
TYPE 1-A PLAIN RIPRAP	TON	970.00				970.00
TYPE 1-A FILTER BLANKET	TON	235.00				235.00
6" PREFORATED PIPE UNDERDRAIN ROUND	LF	172.00				172.00
6" NON-PERF. PIPE UNDERDRAIN RND.	LF	80.00				80.00



SECTION THRU RIPRAP AT BRIDGE SEAT

BRIDGE "A" U.S. 270 OVER CARTER CREEK

DESIGN	LWN	3-15	OKLAHOMA DEPARTMENT OF TRANSPORTATION GENERAL PLAN AND ELEVATION 3 SPAN (50'-55'-50') TYPE II PC BEAMS CL STA. 115+14.00. (SHEET 2 OF 2) STATE JOB NO. 21006(04) SHEET NO. B002
DRAWN	MRM	3-15	
CHECKED	JSH	10-16	
APPROVED	-	-	
SQUAD	TT		

BORING NO. B-1

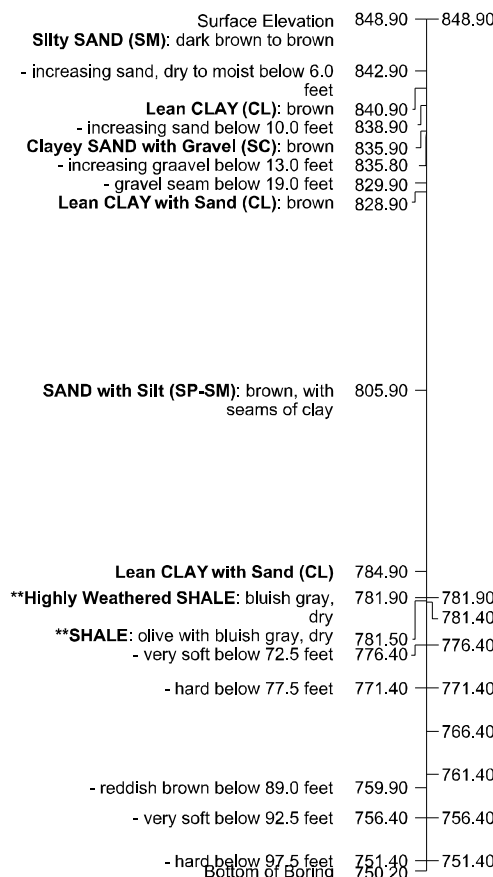
Sta. 114+29 Offset 77' Lt. of Survey Line
(Drilled August 11, 2015)

BORING NO. B-2

Sta. 114+82 Offset 42' Lt. of Survey Line
(Drilled August 11, 2015)



SS: N= 3, 3, 5; MC= 14.3%;
LL= 17 PI= 4; #200= 58%; RECOVERY= 18"
SS: N= WOH, 1, 1; MC= 24.9%;
LL= 29 PI= 12; #200= 71%; RECOVERY= 18"
SS: N= WOH, 2, 2; MC= 28.1%;
LL= 38 PI= 23; #200= 67%; RECOVERY= 18"
SS: N= 3, 3, 6; MC= 19.5%;
LL= NP PI= NP; #200= 38%; RECOVERY= 16"
SS: N= WOH, 2, 3; MC= 23.1%;
LL= 32 PI= 18; #200= 84%; RECOVERY= 18"
SS: N= 1, 1, 3; MC= 21.3%;
LL= 26 PI= 13; #200= 66%; RECOVERY= 18"
SS: N= WOH, 1, 2; MC= 23.0%;
LL= 32 PI= 18; #200= 91%; RECOVERY= 18"
SS: N= WOH, 2, 3; MC= 21.1%;
LL= 25 PI= 11; #200= 81%; RECOVERY= 18"
SS: N= WOH, 1, 1; MC= 26.0%;
LL= 25 PI= 11; #200= 76%; RECOVERY= 12"
SS: N= WOH, WOH, 1; MC= 23.2%;
LL= NP PI= NP; #200= 52%; RECOVERY= 18"
SS: N= 2, 4, 5; MC= 21.3%;
LL= NP PI= NP; #200= 40%; RECOVERY= 18"
SS: N= WOH, WOH, WOH; MC= 22.4%;
LL= 24 PI= 8; #200= 62%; RECOVERY= 18"
SS: N= 4, 4, 7; MC= 21.1%;
LL= NP PI= NP; #200= 18%; RECOVERY= 14"
SS: N= 9, 16, 27; RECOVERY= 16"
SS: N= 12, 25, 50/6; RECOVERY= 10"
TCP= 50/3.5, 50/4.88
TCP= 50/3, 50/2.13
TCP= 50/2.25, 50/2.0
TCP: TCP= 50/2, 50/1.5
TCP= 50/1.25, 50/1
TCP= 50/1.3, 50/0.88
TCP= 50/1.43, 50/0.75



SS: N= 50/5; RECOVERY= 5"
TCP: TCP= 50/1.5, 50/2.5
TCP: TCP= 50/4.13, 50/4.5
TCP: TCP= 50/2, 50/1.38
TCP: TCP= 50/2, 50/1.88
TCP: TCP= 50/1.38, 50/1.38
TCP: TCP= 50/5.88, 50/4.5
TCP: TCP= 50/1.38, 50/1.44

SITE GEOLOGY

ACCORDING TO THE "ENGINEERING CLASSIFICATION OF GEOLOGIC MATERIALS - DIVISION THREE" FROM THE OKLAHOMA HIGHWAY DEPARTMENT, 1968, THE BRIDGE LOCATION APPEARS TO BE LOCATED WITHIN THE ALLUVIUM (QAS) AND VAMOOSA UNIT (IPVM). THE FOLLOWING IS A SUMMARY OF THE INFORMATION PROVIDED IN THE REFERENCED DOCUMENT.

ALLUVIUM (QAS): THESE ARE DEPOSITS OF SAND, SILT, CLAY, GRAVEL, AND/OR COMBINATIONS OF MATERIALS. ALLUVIUM IS FOUND ALONG THE FLOOD PLAINS (BOTTOM LAND) OF STREAMS AND IS NORMALLY PRESENT AT PLACES ALONG ALL STREAMS. THE GEOLOGIC UNIT MAPS OUTLINE MANY DEPOSITS, BUT ALL OF THESE DEPOSITS ARE NOT SHOWN.

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THE TOTAL THICKNESS OF THE UNIT THINS SOUTHWARD FROM A MAXIMUM OF 690 FEET IN OKFUSKEE COUNTY TO 550 FEET AT THE NORTH CANADIAN RIVER, TO 125 FEET IN OKFUSKEE COUNTY TO ABOUT 30 FEET NEAR BYNG, PONTOTOC COUNTY, WHERE THE UNIT WEDGES OUT. THE LOSS OF THICKNESS SOUTHWARD OCCURS DUE TO PROGRESSIVE LOSS OF EXPOSED STRATA FROM THE UPPER PORTIONS OF THE UNIT BY EROSION. THE 30-FOOT THICKNESS OF THE UNIT NEAR BYNG CONSISTS ENTIRELY OF THE BASAL CONGLOMERATE MEMBER.

THE VAMOOSA UNIT OUTCROPS IN A NORTH-SOUTH BAND FROM A FAULT NEAR BYNG, PONTOTOC COUNTY, NORTHWARD ACROSS SEMINOLE AND OKFUSKEE COUNTIES. THE OUTCROPS PATTERN WIDENS NORTHWARD FROM ABOUT ONE-QUARTER OF A MILE AT BYNG, TO TWO MILES AT THE CANADIAN RIVER TO SEVEN MILES IN OKFUSKEE AND NORTHERN SEMINOLE COUNTIES.

TOPOGRAPHICALLY, THE HILLS CAPPED BY THE CONGLOMERATES ARE RUGGED AND COVERED WITH OAKS. THE MAJORITY OF THE UNIT IS ROLLING, WITH HILLS CAPPED BY SANDSTONES AND THE VALLEYS UNDERLAIN BY SHALE.

LEGEND

- SS = SPLIT SPOON SAMPLER
- N = NUMBER OF BLOWS PER 12 INCHES
- MC = MOISTURE CONTENT
- LL = LIQUID LIMIT (NW=NO VALUE)
- PI = PLASTICITY INDEX (NP=NO PLASTICITY)
- #200 = PERCENT PASSING #200 SIEVE
- UCS = UNCONFINED COMPRESSIVE STRENGTH
- TCP = TEXAS CONE PENETROMETER
- WCI = WET CAVE IN
- ☉ = WATER LEVEL WHILE DRILLING OR SAMPLING
- ☽ = WATER LEVEL AFTER DRILLING
- ☿ = WATER LEVEL 24 HOURS AFTER DRILLING

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

NOTE: SS DENOTES STANDARD PENETRATION TEST, AASHTO D1586-84 TCP DENOTES TEXAS CONE PENETRATION TEST.

TO OBTAIN THE COMPLETE GEOTECHNICAL REPORT CONTACT THE BRIDGE DIVISION OF THE OKLAHOMA DEPARTMENT OF TRANSPORTATION AT (405) 521-2606

NOTE:

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BRIDGE "A" U.S. 270 OVER CARTER CREEK

DESIGN	-	-	OKLAHOMA DEPARTMENT OF TRANSPORTATION FOUNDATION REPORT (SHEET 1 OF 3) STATE JOB NO. 21006(04) SHEET NO. B003
DRAWN	-	-	
CHECKED	-	-	
APPROVED	-	-	
SQUAD	TT		

FINAL FIELD MEETING
11/7/2018

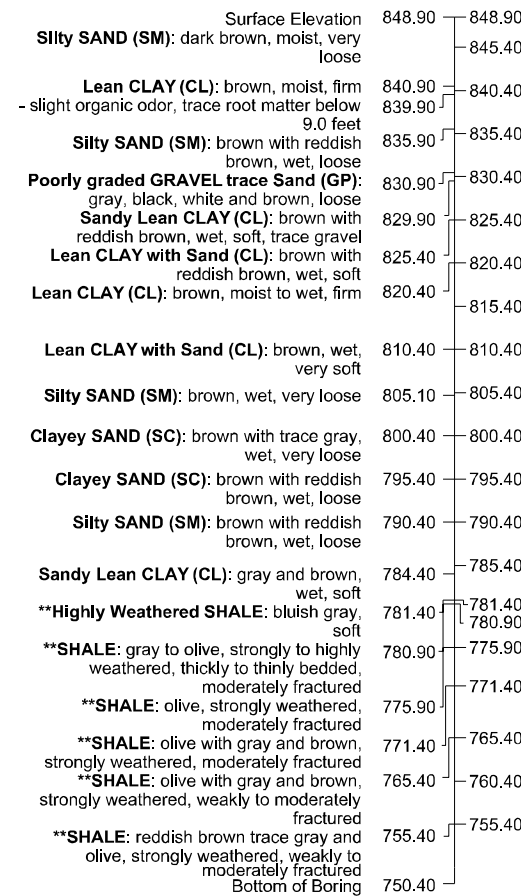
BORING NO. B-2C

Sta. 114+83 Offset 47' Lt. of Survey Line
(Drilled August 11, 2015)

BORING NO. B-3

Sta. 115+44 Offset 59' Lt. of Survey Line
(Drilled August 12, 2015)

860
855
850
845
840
835
830
825
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815
810
805
800
795
790
785
780
775
770
765
760
755
750
745
740



SS: N= 3, 2, 1; MC= 11.7%; LL= NP PI= NP; #200= 42%; RECOVERY= 14"
 SS: N= 3, 4, 6; MC= 17.7%; LL= 33 PI= 20; #200= 72%; RECOVERY= 18"
 SS: N= 5, 2, 4; MC= 20.0%; LL= NP PI= NP; #200= 38%; RECOVERY= 12"
 SS: N= 3, 3, 3; MC= 17.7%; LL= 26 PI= 14; #200= 53%; RECOVERY= 18"
 SS: N= 2, 3, 3; MC= 22.8%; LL= 24 PI= 12; #200= 75%; RECOVERY= 18"
 SS: N= 3, 4, 6; MC= 22.3%; LL= 45 PI= 28; #200= 98%; RECOVERY= 18"
 SS: N= 2, 3, 4; MC= 20.6%; LL= 31 PI= 17; #200= 84%; RECOVERY= 18"
 SS: N= WOH, 1, 1; MC= 21.1%; LL= 26 PI= 14; #200= 72%; RECOVERY= 12"
 SS: N= 2, 2, 2; MC= 21.3%; LL= NP PI= NP; #200= 30%; RECOVERY= 12"
 SS: N= WOH, 3, 2; RECOVERY= 12"
 SS: N= 2, 4, 5; MC= 21.7%; LL= 23 PI= 10; #200= 49%; RECOVERY= 16"
 SS: N= 6, 5, 8; MC= 20.5%; LL= NP PI= NP; #200= 38%; RECOVERY= 14"
 SS: N= 3, 3, 3; MC= 23.1%; LL= 25 PI= 9; #200= 56%; RECOVERY= 18"
 SS: N= 50/2.25; RECOVERY= 4"
 CORE-NX; RECOVERY= 61"; RQD=74%
 CORE-NX; UCS=45.9 psi; RECOVERY= 54"; RQD=56%
 CORE-NX; UCS=39.5 psi; RECOVERY= 68"; RQD=90%
 CORE-NX; RECOVERY= 60"; RQD=74%
 CORE-NX; UCS=109.6 psi; RECOVERY= 62"; RQD=100%
 CORE-NX; RECOVERY= 62"; RQD=92%

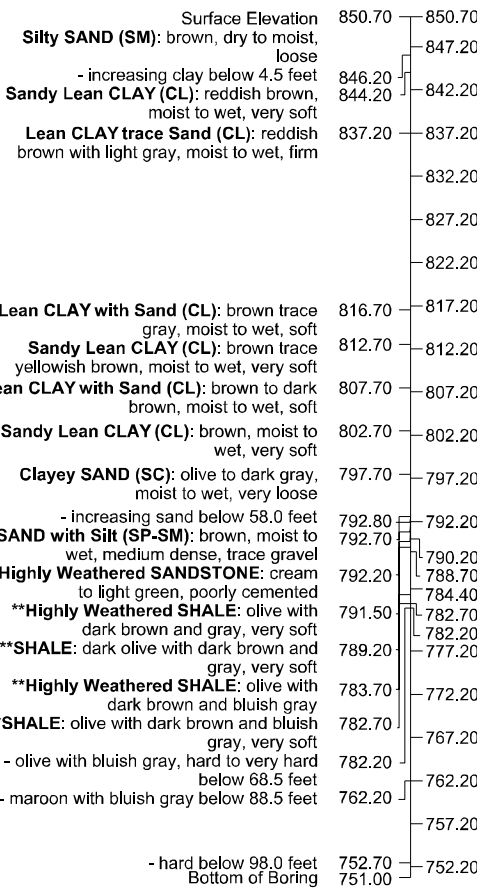
LEGEND

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- N = NUMBER OF BLOWS PER 12 INCHES
- MC = MOISTURE CONTENT
- LL = LIQUID LIMIT (NW=NO VALUE)
- PI = PLASTICITY INDEX (NP=NO PLASTICITY)
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- UCS = UNCONFINED COMPRESSIVE STRENGTH
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- ☌ = WATER LEVEL AFTER DRILLING
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NOTE: WATER LEVEL ELEVATIONS SHOWN WERE OBTAINED AT TIME OF THE BORINGS WERE DRILLED AND MAY FLUCTUATE THROUGHOUT THE YEAR.

NOTE: SS DENOTES STANDARD PENETRATION TEST, AASHTO D1586-84 TCP DENOTES TEXAS CONE PENETRATION TEST.

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SS: N= 3, 2, 4; MC= 13.9%; LL= NP PI= NP; #200= 47%; RECOVERY= 14"
 SS: N= 2, 2, 2; MC= 16.7%; LL= 21 PI= 8; #200= 55%; RECOVERY= 18"
 SS: N= 1, 2, 3; MC= 18.7%; LL= 27 PI= 13; #200= 68%; RECOVERY= 18"
 SS: N= 2, 4, 6; MC= 18.7%; LL= 37 PI= 22; #200= 89%; RECOVERY= 18"
 SS: N= 3, 4, 5; MC= 22.7%; LL= 31 PI= 16; #200= 95%; RECOVERY= 18"
 SS: N= 3, 5, 5; MC= 20.6%; LL= 40 PI= 23; #200= 98%; RECOVERY= 18"
 SS: N= WOH, 2, 3; MC= 20.6%; LL= 29 PI= 15; #200= 83%; RECOVERY= 18"
 SS: N= 1, 1, 3; MC= 20.6%; LL= 24 PI= 11; #200= 58%; RECOVERY= 18"
 SS: N= 2, 4, 4; MC= 20.0%; LL= 30 PI= 16; #200= 83%; RECOVERY= 18"
 SS: N= 1, 1, 1; MC= 21.7%; LL= 22 PI= 9; #200= 64%; RECOVERY= 18"
 SS: N= WOH, WOH, WOH; MC= 19.6%; LL= 22 PI= 8; #200= 42%; RECOVERY= 18"
 SS: N= 7, 9, 11; MC= 24.5%; LL= 21 PI= 10; #200= 67%; RECOVERY= 14"
 SS: N= 17, 34, 50/4.75; RECOVERY= 12"
 TCP= 50/2.75, 50/2
 TCP=
 SS: N= 50/5.5; RECOVERY= 6"
 TCP= 50/1.56, 50/0.88
 TCP= 50/2.13, 50/1.93
 TCP= 50/2, 50/1.56
 TCP= 50/2.19, 50/1.81
 TCP= 50/1.06, 50/0.81
 TCP= 50/1.13, 50/0.81
 TCP= 50/1.69, 50/2.5

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745
740

SITE GEOLOGY

ACCORDING TO THE "ENGINEERING CLASSIFICATION OF GEOLOGIC MATERIALS - DIVISION THREE" FROM THE OKLAHOMA HIGHWAY DEPARTMENT, 1968, THE BRIDGE LOCATION APPEARS TO BE LOCATED WITHIN THE ALLUVIUM (QAS) AND VAMOOSA UNIT (IPVM). THE FOLLOWING IS A SUMMARY OF THE INFORMATION PROVIDED IN THE REFERENCED DOCUMENT.

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THE TOTAL THICKNESS OF THE UNIT THINS SOUTHWARD FROM A MAXIMUM OF 690 FEET IN OKFUSKEE COUNTY TO 550 FEET AT THE NORTH CANADIAN RIVER, TO 125 FEET IN OKFUSKEE COUNTY TO ABOUT 30 FEET NEAR BYNG, PONTOTOC COUNTY, WHERE THE UNIT WEDGES OUT. THE LOSS OF THICKNESS SOUTHWARD OCCURS DUE TO PROGRESSIVE LOSS OF EXPOSED STRATA FROM THE UPPER PORTIONS OF THE UNIT BY EROSION. THE 30-FOOT THICKNESS OF THE UNIT NEAR BYNG CONSISTS ENTIRELY OF THE BASAL CONGLOMERATE MEMBER.

THE VAMOOSA UNIT OUTCROPS IN A NORTH-SOUTH BAND FROM A FAULT NEAR BYNG, PONTOTOC COUNTY, NORTHWARD ACROSS SEMINOLE AND OKFUSKEE COUNTIES. THE OUTCROPS PATTERN WIDENS NORTHWARD FROM ABOUT ONE-QUARTER OF A MILE AT BYNG, TO TWO MILES AT THE CANADIAN RIVER TO SEVEN MILES IN OKFUSKEE AND NORTHERN SEMINOLE COUNTIES.

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BRIDGE "A" U.S. 270 OVER CARTER CREEK

DESIGN	-	-	OKLAHOMA DEPARTMENT OF TRANSPORTATION FOUNDATION REPORT (SHEET 2 OF 3) STATE JOB NO. 21006(04) SHEET NO. B004
DRAWN	-	-	
CHECKED	-	-	
APPROVED	-	-	
SQUAD	TT		

BORING NO. B-4
Sta. 115+93 Offset 54' Lt. of Survey Line
(Drilled August 10, 2015)



SITE GEOLOGY

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LEGEND

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- N = NUMBER OF BLOWS PER 12 INCHES
- MC = MOISTURE CONTENT
- LL = LIQUID LIMIT (NW=NO VALUE)
- PI = PLASTICITY INDEX (NP=NO PLASTICITY)
- #200 = PERCENT PASSING #200 SIEVE
- UCS = UNCONFINED COMPRESSIVE STRENGTH
- TCP = TEXAS CONE PENETROMETER
- WCI = WET CAVE IN
- ☉ = WATER LEVEL WHILE DRILLING OR SAMPLING
- ☽ = WATER LEVEL AFTER DRILLING
- ☿ = WATER LEVEL 24 HOURS AFTER DRILLING

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

NOTE: SS DENOTES STANDARD PENETRATION TEST, AASHTO D1586-84 TCP DENOTES TEXAS CONE PENETRATION TEST.

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BRIDGE "A" U.S. 270 OVER CARTER CREEK

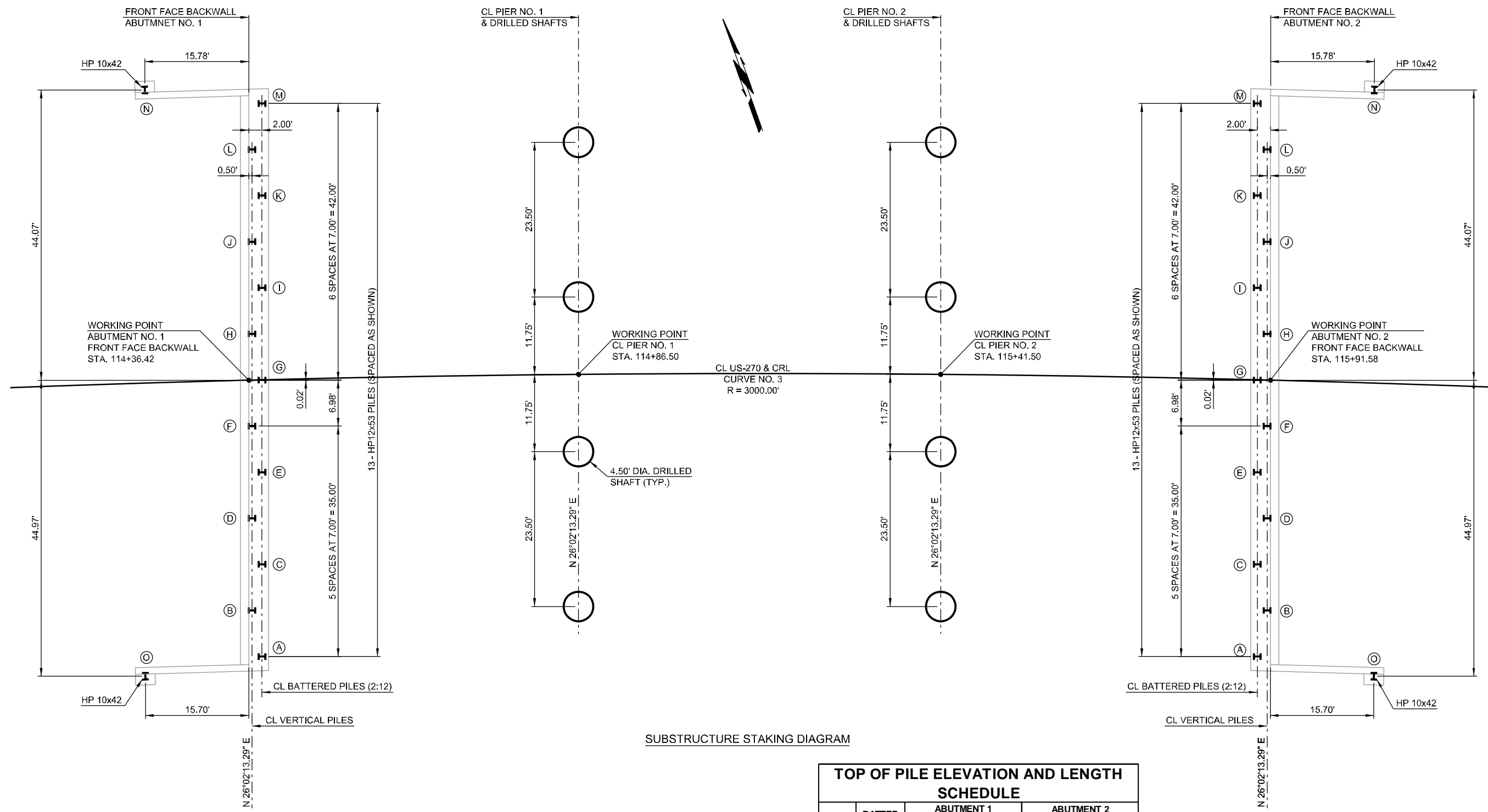
DESIGN	-	-
DRAWN	-	-
CHECKED	-	-
APPROVED	-	-
SQUAD	TT	

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FOUNDATION REPORT
(SHEET 3 OF 3)

STATE JOB NO. 21006(04) SHEET NO. B005

SEMINOLE CO. U.S. 270



SUBSTRUCTURE STAKING DIAGRAM

TOP OF PILE ELEVATION AND LENGTH SCHEDULE

PILE	BATTER 2:12	ABUTMENT 1		ABUTMENT 2	
		TOP PILE ELEVATION	ESTIMATED LENGTH	TOP PILE ELEVATION	ESTIMATED LENGTH
A	YES	853.50	77.0'	852.72	62.0'
B	NO	853.78	76.5'	853.01	61.5'
C	YES	854.06	77.5'	853.29	62.5'
D	NO	854.34	77.0'	853.57	62.0'
E	YES	854.62	78.0'	853.84	63.0'
F	NO	854.90	77.5'	854.13	62.5'
G	YES	855.18	78.5'	854.41	63.5'
H	NO	855.46	78.0'	854.69	63.0'
I	YES	855.74	79.0'	854.97	64.0'
J	NO	856.02	78.5'	855.26	63.5'
K	YES	856.30	80.0'	855.54	65.0'
L	NO	856.58	79.0'	855.82	64.5'
M	YES	856.86	80.5'	856.10	65.5'
N	NO	859.28	82.0'	858.52	67.0'
O	NO	855.75	78.5'	854.97	63.5'

BRIDGE 'A' U.S. 270 OVER CARTER CREEK

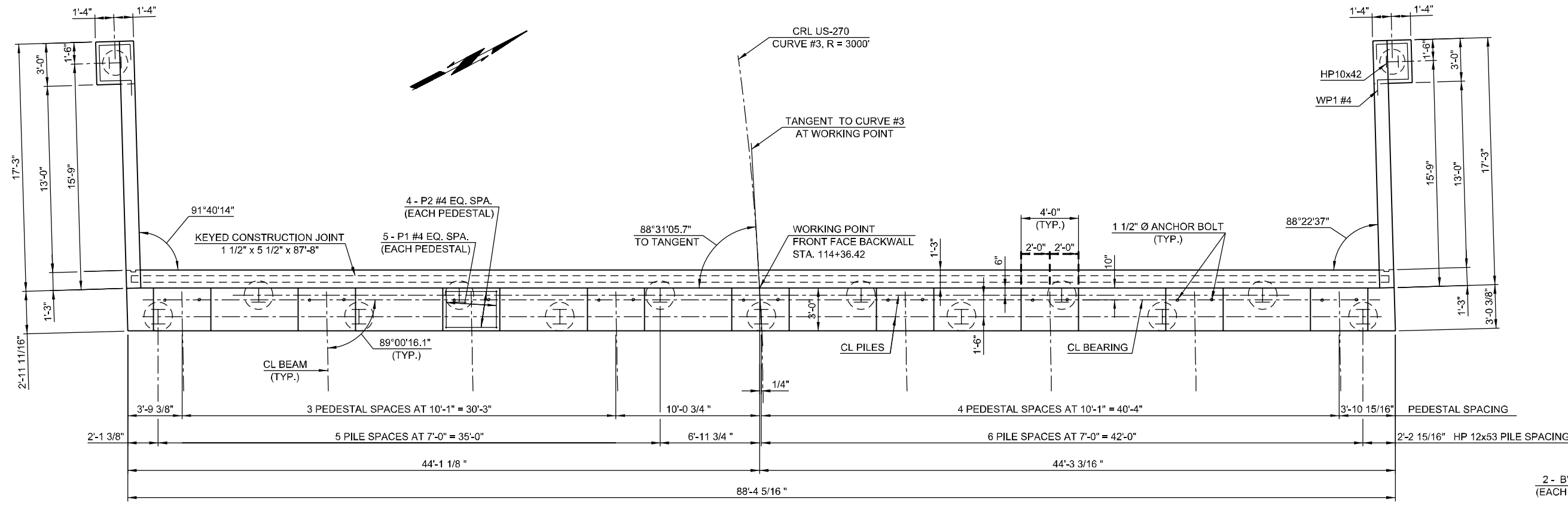
DESIGN	LWN	10-16
DRAWN	MRM	10-16
CHECKED	JSH	11-16
APPROVED	-	-
SQUAD	TT	-

OKLAHOMA DEPARTMENT OF TRANSPORTATION

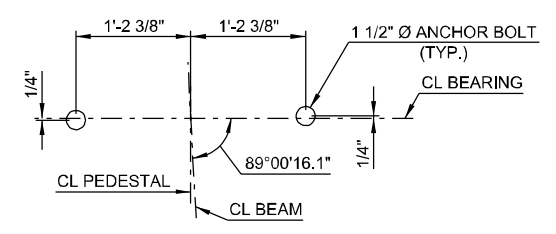
SUBSTRUCTURE STAKING DIAGRAM

STATE JOB NO. 21006(04) SHEET NO. B006

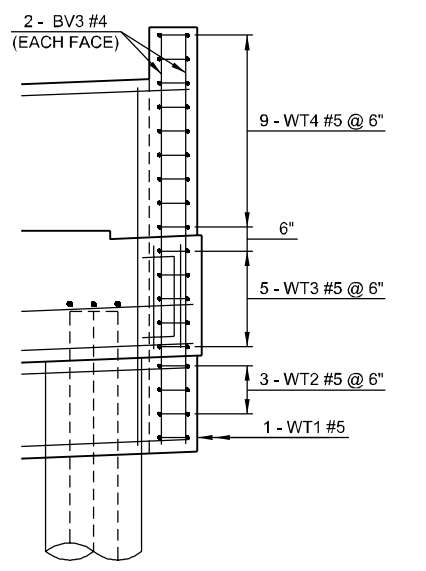
SEMINOLE CO. U.S. 270



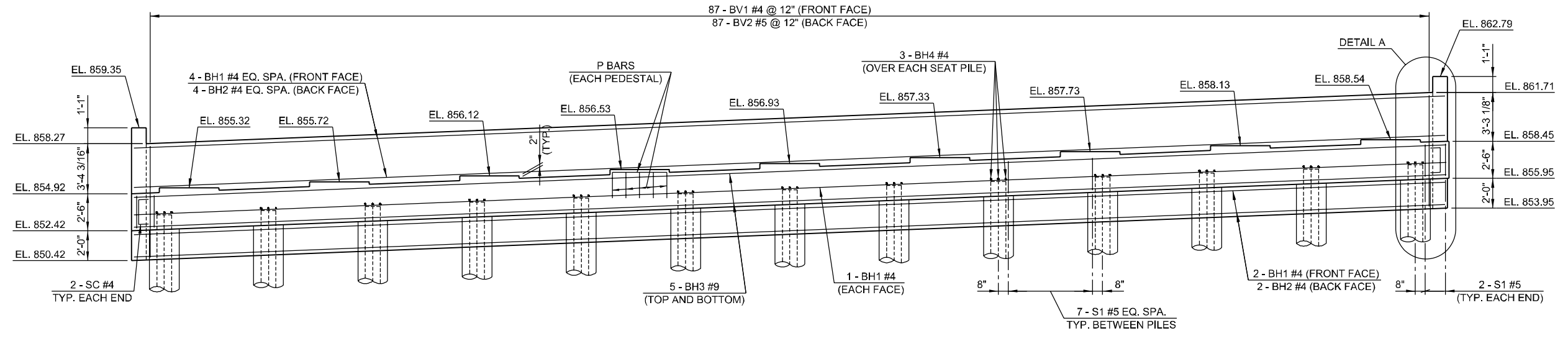
ABUTMENT NO. 1 PLAN



ANCHOR BOLT LAYOUT



DETAIL A



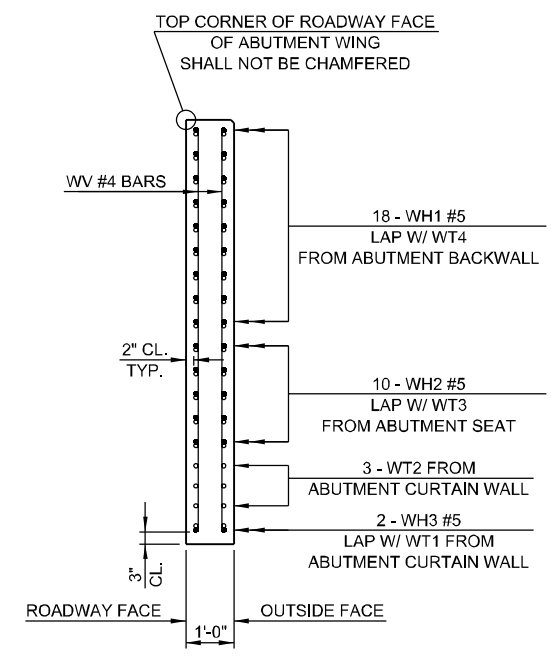
ABUTMENT NO. 1 ELEVATION

BRIDGE "A" U.S. 270 OVER CARTER CREEK

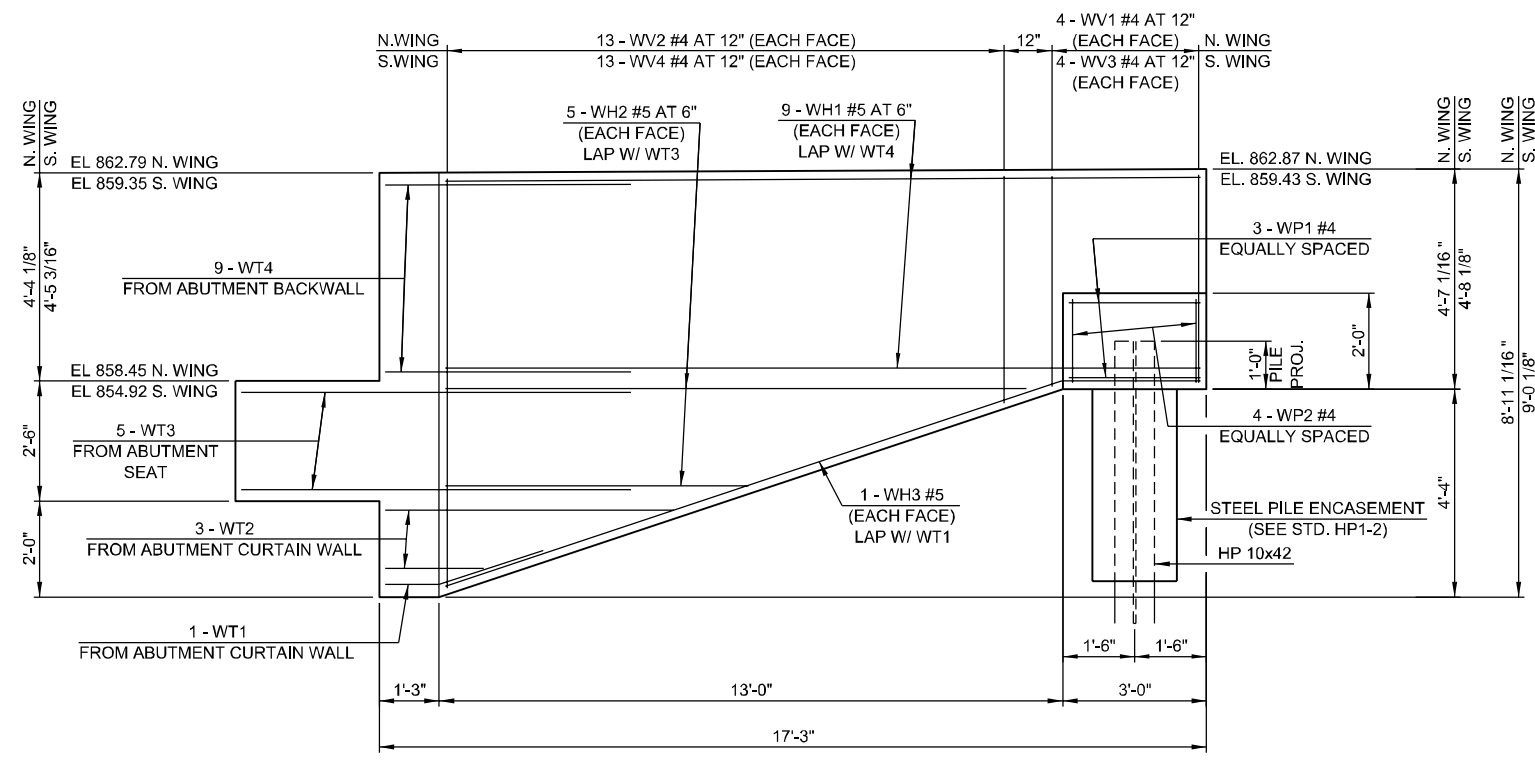
DESIGN	JSH	10-15
DRAWN	MRM	10-15
CHECKED	LWN	7-16
APPROVED	-	-
SQUAD	TT	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
 ABUTMENT NO. 1 DETAILS
 (SHEET 1 OF 2)
 STATE JOB NO. 21006(04) SHEET NO. B007
 SEMINOLE CO. U.S. 270

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 11/7/2018



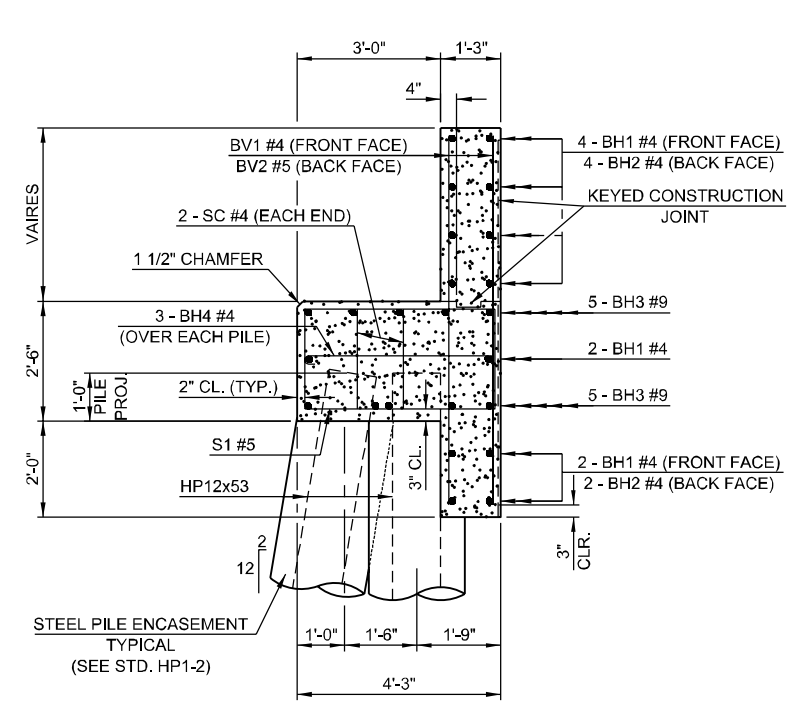
SECTION THRU WING AT BACK FACE OF ABUTMENT SEAT



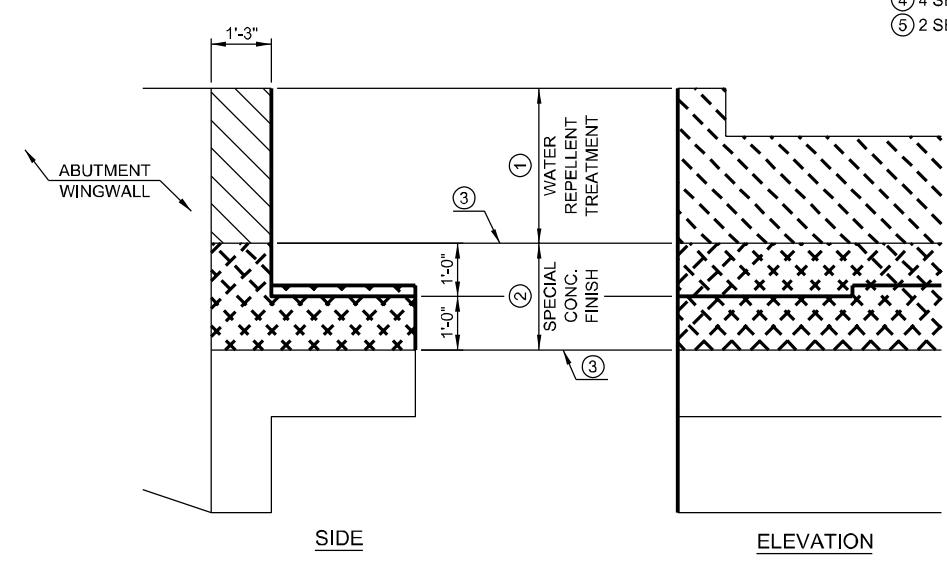
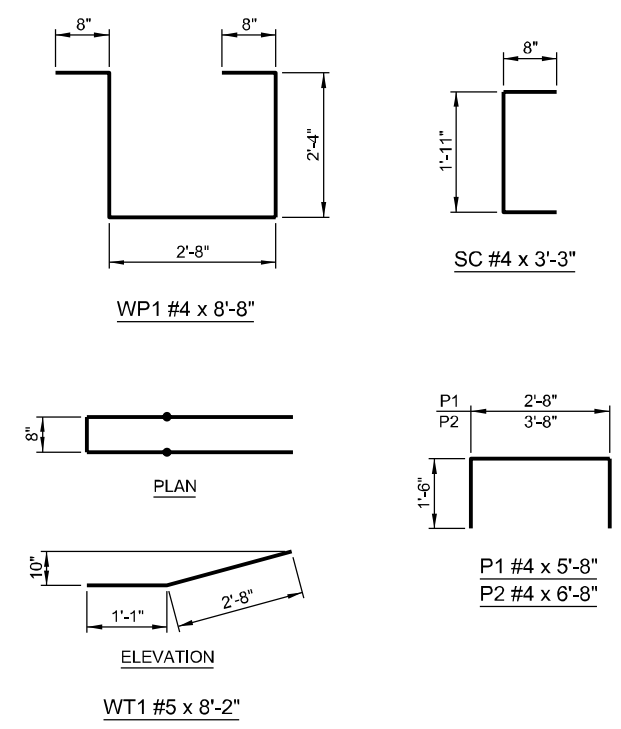
WING ELEVATION

ABUTMENT NO. 1 BAR LIST						
MARK	SIZE	NO.	FORM	LENGTH	LENGTH VARIES	
EPOXY COATED REINFORCING BARS						
①	BH1	#4	8	STR	89'-8"	
	BH2	#4	6	BNT	91'-0"	
②	BH3	#9	10	STR	95'-2"	
	BH4	#4	39	BNT	5'-1"	
	BV1	#4	87	STR	7'-4"	
	BV2	#5	87	STR	7'-4"	
	BV3	#4	8	STR	8'-5"	
	S1	#5	88	BNT	12'-11"	
	SC	#4	4	BNT	3'-3"	
	P1	#4	45	BNT	5'-8"	
	P2	#4	36	BNT	6'-8"	
	WT1	#5	2	BNT	8'-2"	
③	WT2	#5	6	BNT	8'-8" AVG.	5'-8" TO 11'-8"
	WT3	#5	10	BNT	16'-8"	
	WT4	#5	18	BNT	10'-8"	
	WH1	#5	36	STR	15'-8"	
④	WH2	#5	20	STR	8'-9" AVG.	5'-9" TO 11'-9"
	WH3	#5	4	BNT	16'-4"	
	WV1	#4	8	STR	4'-2"	
⑤	WV2	#4	26	STR	6'-4" AVG.	4'-4" TO 8'-4"
	WV3	#4	8	STR	4'-3"	
	WV4	#4	26	STR	6'-5" AVG.	4'-5" TO 8'-5"
⑤	WP1	#4	6	BNT	8'-8"	
	WP2	#4	8	STR	1'-7"	

- ① INCLUDES ONE LAP LENGTH OF 1'-8"
- ② INCLUDES ONE LAP LENGTH OF 7'-2"
- ③ 2 SETS OF 3
- ④ 4 SETS OF 5
- ⑤ 2 SETS OF 13

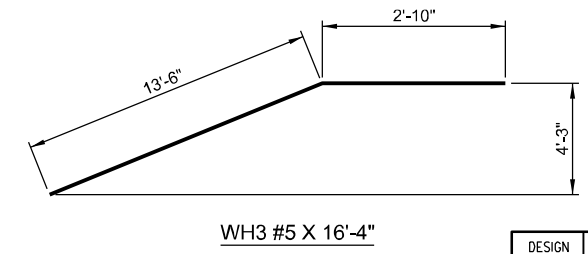
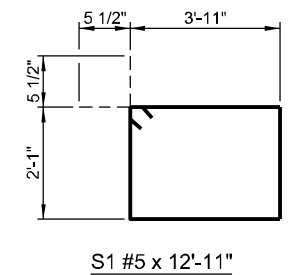
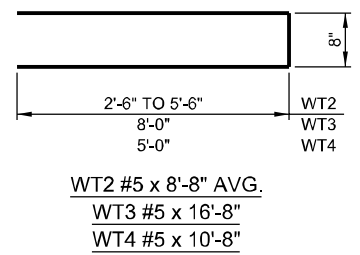
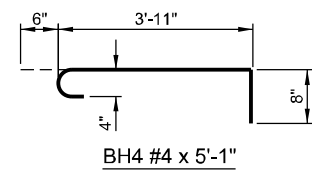
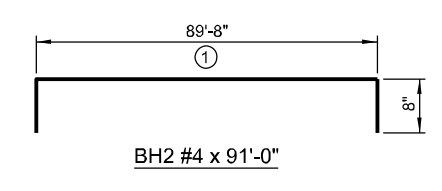


TYPICAL ABUTMENT SECTION THRU SEAT



WATER REPELLENT TREATMENT AND SPECIAL CONCRETE FINISH DETAILS

- ① TREAT ABUTMENT BACKWALL WITH A PENETRATING WATER REPELLENT SURFACE TREATMENT.
- ② APPLY CIM 1000 "SPECIAL CONCRETE FINISH" TO SURFACES INDICATED, INCLUDING TOP OF SEAT, ALL SURFACES OF THE PEDESTALS AND EXTEND 12" BEYOND THE EDGE OF THE SEAT ON THE FACE OF THE SEAT AND BACKWALL.
- ③ MASK ALONG THIS LINE TO PROVIDE A CLEAN STRAIGHT FINISH AT THE EDGE OF CIM 1000 APPLICATION.

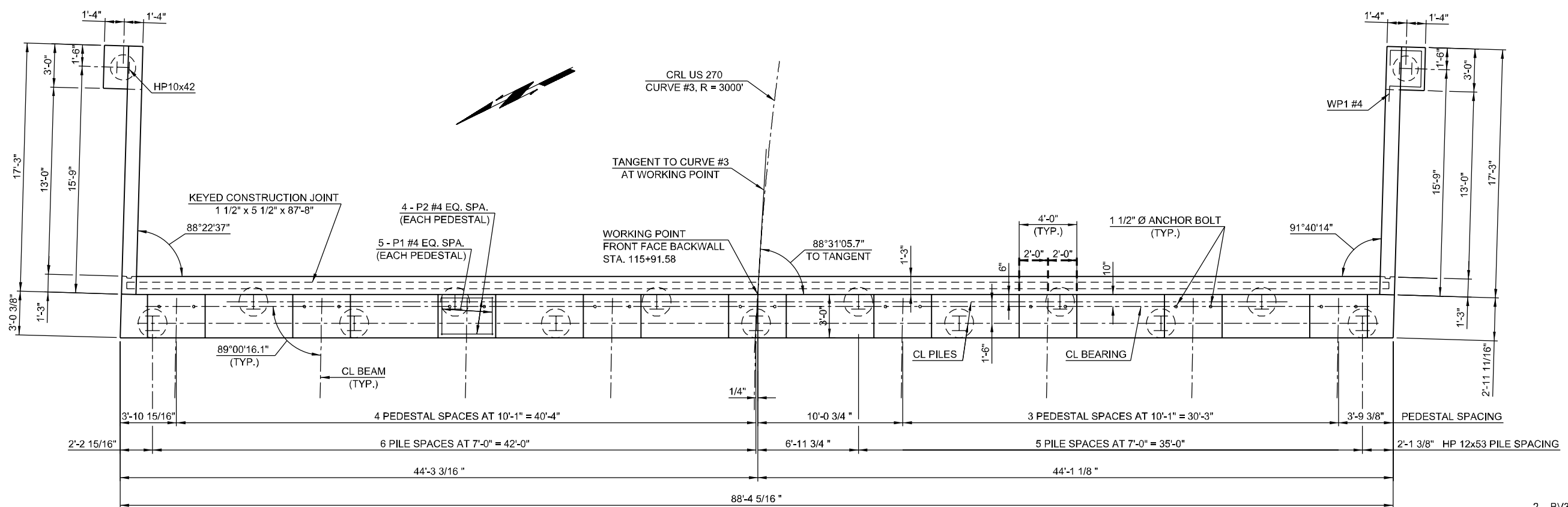


ABUTMENT NO. 1 QUANTITIES		
DESCRIPTION	UNIT	TOTAL
UNCLASSIFIED BORROW	CY	15.00
SUBSTRUCTURE EXCAVATION COMMON	CY	129.00
CLSM BACKFILL	CY	167.00
SPECIAL CONCRETE FINISH	SY	53.00
CLASS A CONCRETE	CY	65.90
EPOXY COATED REINFORCING STEEL	LB	8470.00
PILES, FURNISHED (HP 10x42)	LF	160.50
PILES, FURNISHED (HP 12x53)	LF	1017.00
PILES, DRIVEN (HP 10x42)	LF	160.50
PILES, DRIVEN (HP 12x53)	LF	1017.00
WATER REPELLENT (VISUALLY INSPECTED)	SY	35.00
TYPE 1-A PLAIN RIPRAP	TON	530.00
TYPE 1-A FILTER BLANKET	TON	130.00
6" PERFORATED PIPE UNDERDRAIN ROUND	LF	86.00
6" NON-PERF. PIPE UNDERDRAIN RND.	LF	40.00

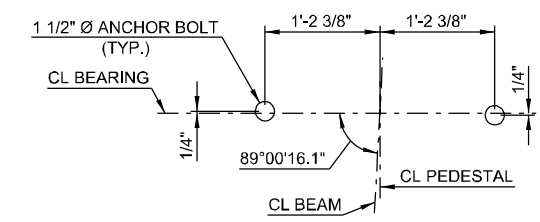
BRIDGE "A" U.S. 270 OVER CARTER CREEK

DESIGN	JSH	10-15
DRAWN	MRM	10-15
CHECKED	LWN	7-16
APPROVED	-	-
SQUAD	TT	

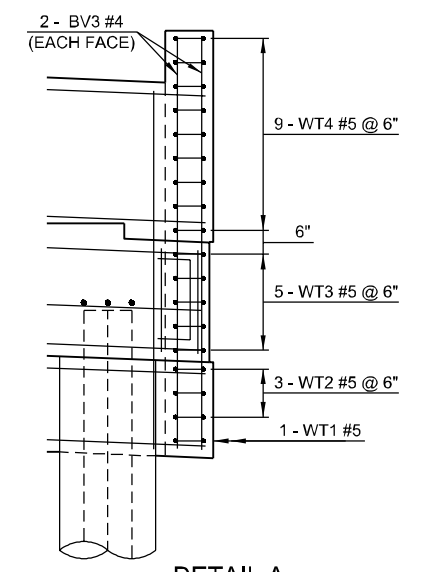
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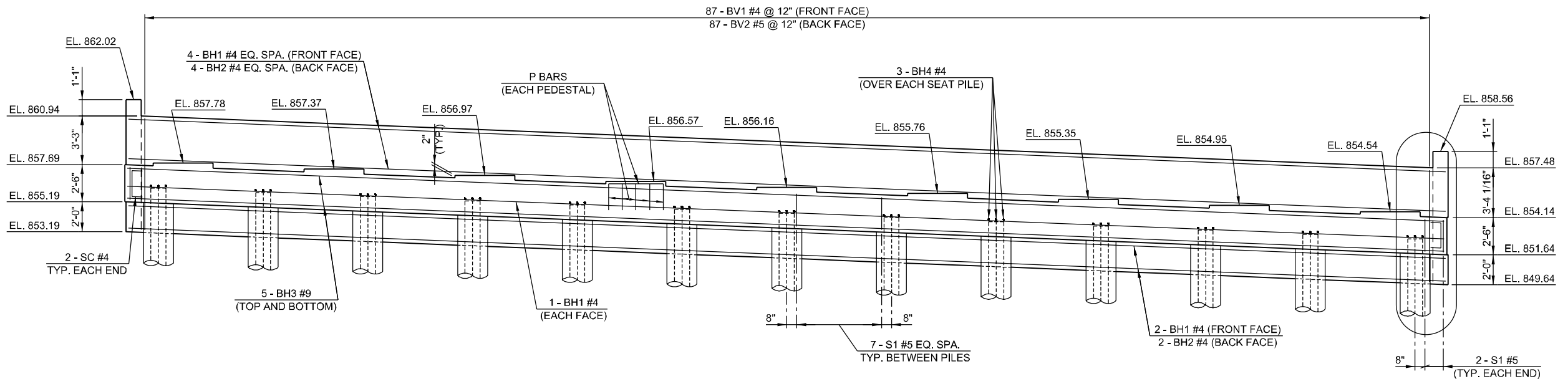
ABUTMENT NO. 2 PLAN



ANCHOR BOLT LAYOUT



DETAIL A



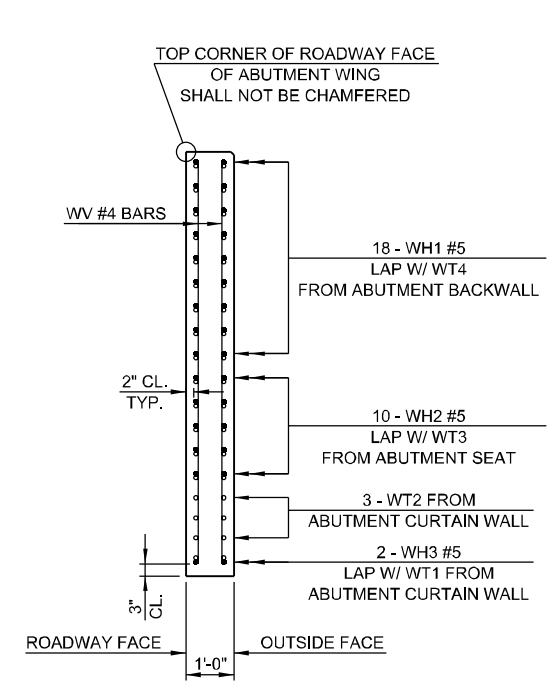
ABUTMENT NO. 2 ELEVATION

BRIDGE "A" U.S. 270 OVER CARTER CREEK

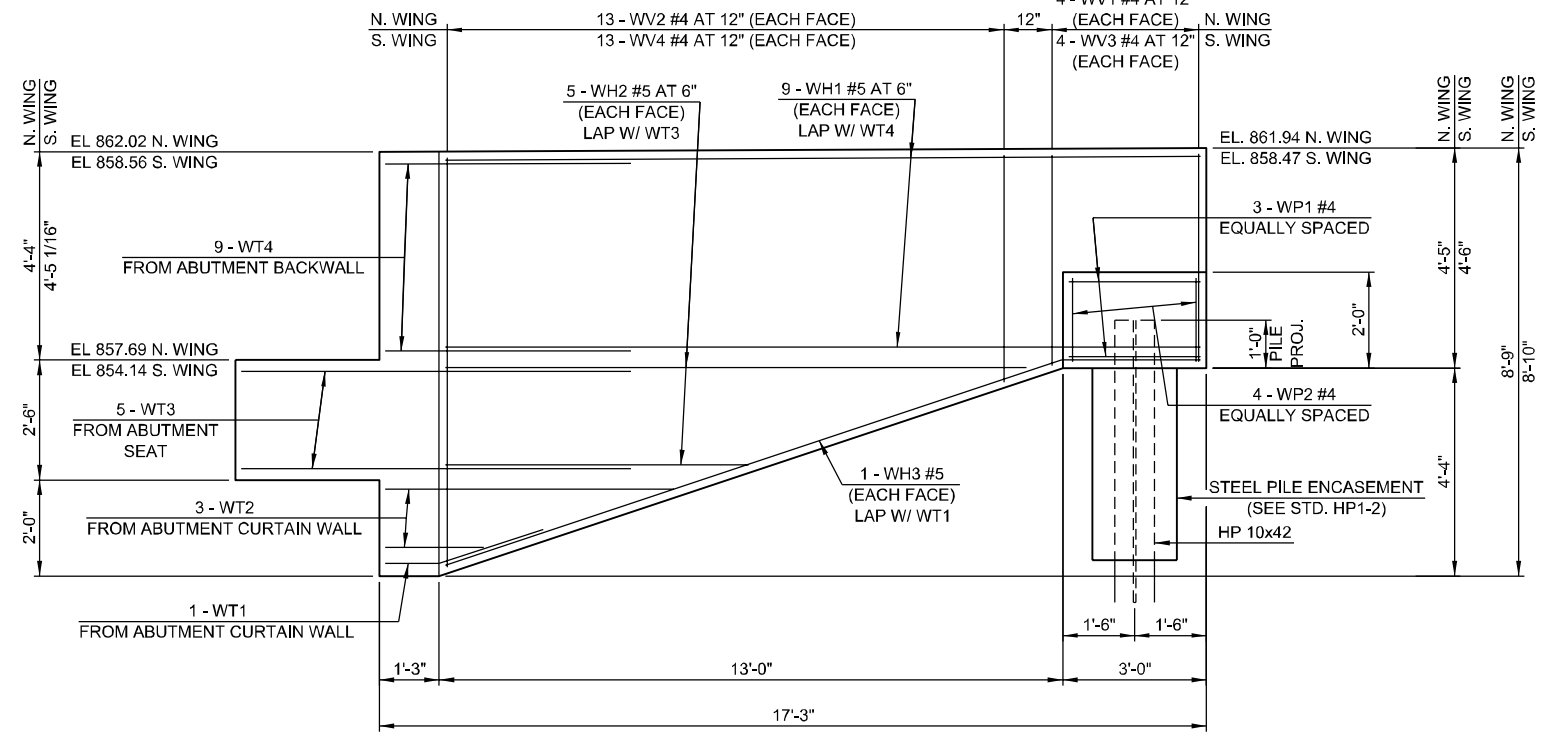
DESIGN	JSH	10-15
DRAWN	MRM	10-15
CHECKED	LWN	7-16
APPROVED	-	-
SQUAD	TT	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
 ABUTMENT NO. 2 DETAILS
 (SHEET 1 OF 2)
 STATE JOB NO. 21006(04) SHEET NO. B009
 SEMINOLE CO. U.S. 270

11/7/2018 P:\11399\200-11399-14001\CAD\SheetFiles\21006 (04) Bridge\B009-2100604-BR-A-Abut.2.1.dgn



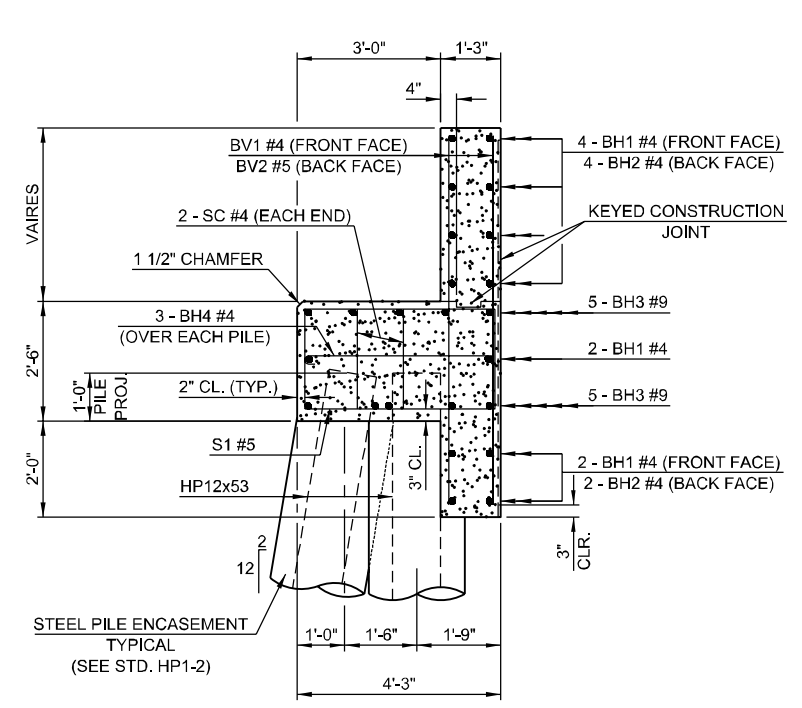
SECTION THRU WING AT BACK FACE OF ABUTMENT SEAT



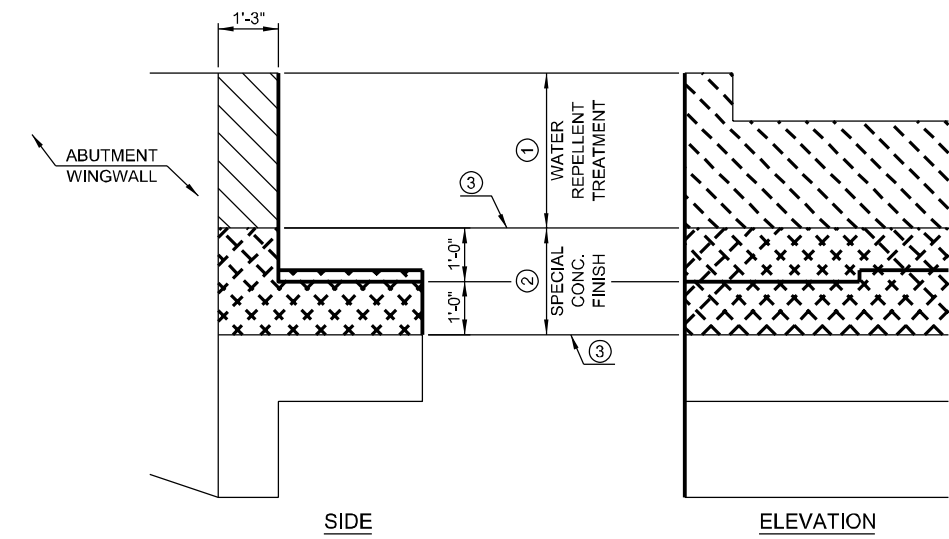
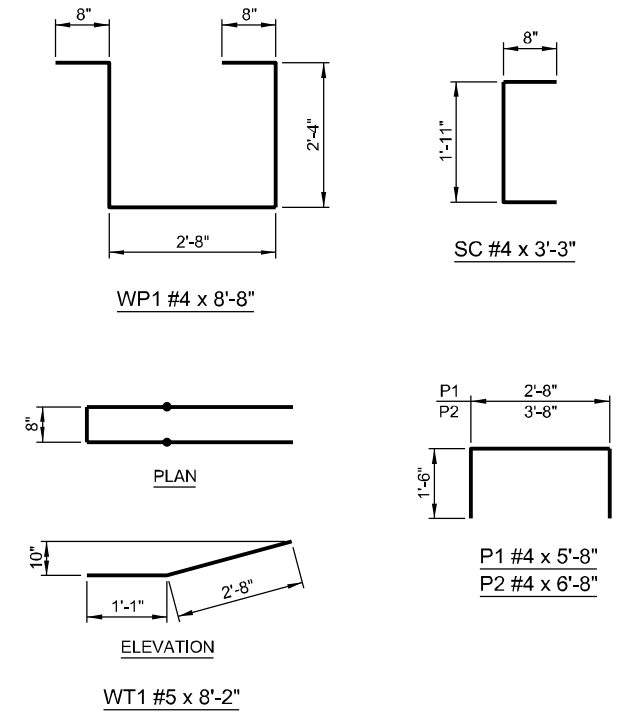
WING ELEVATION

ABUTMENT NO. 2 BAR LIST						
MARK	SIZE	NO.	FORM	LENGTH	LENGTH VARIES	
EPOXY COATED REINFORCING BARS						
①	BH1	#4	8	STR	89'-8"	
①	BH2	#4	6	BNT	91'-0"	
②	BH3	#9	10	STR	95'-2"	
	BH4	#4	39	BNT	5'-1"	
	BV1	#4	87	STR	7'-4"	
	BV2	#5	87	STR	7'-4"	
	BV3	#4	8	STR	8'-5"	
	S1	#5	88	BNT	12'-11"	
	SC	#4	4	BNT	3'-3"	
	P1	#4	45	BNT	5'-8"	
	P2	#4	36	BNT	6'-8"	
	WT1	#5	2	BNT	8'-2"	
③	WT2	#5	6	BNT	8'-8" AVG.	5'-8" TO 11'-8"
	WT3	#5	10	BNT	16'-8"	
	WT4	#5	18	BNT	10'-8"	
	WH1	#5	36	STR	15'-8"	
④	WH2	#5	20	STR	8'-9" AVG.	5'-9" TO 11'-9"
	WH3	#5	4	BNT	16'-4"	
	WV1	#4	8	STR	4'-0"	
⑤	WV2	#4	26	STR	6'-4" AVG.	4'-4" TO 8'-4"
	WV3	#4	8	STR	4'-1"	
⑤	WV4	#4	26	STR	6'-5" AVG.	4'-5" TO 8'-5"
	WP1	#4	6	BNT	8'-8"	
	WP2	#4	8	STR	1'-7"	

- ① INCLUDES ONE LAP LENGTH OF 1'-8"
- ② INCLUDES ONE LAP LENGTH OF 7'-2"
- ③ 2 SETS OF 3
- ④ 4 SETS OF 5
- ⑤ 2 SETS OF 13



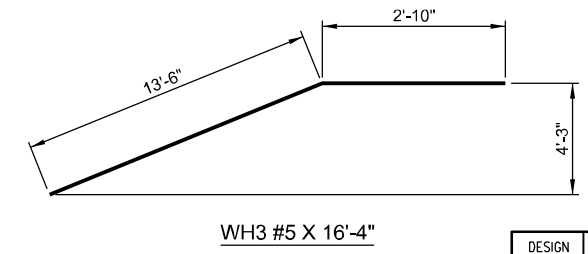
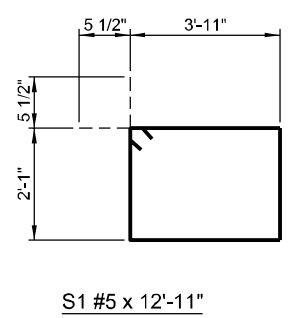
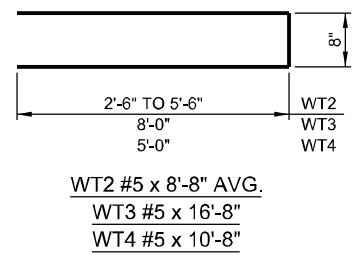
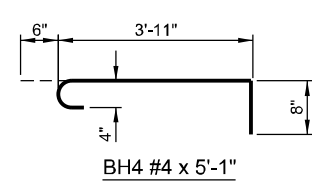
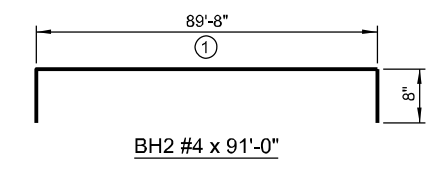
TYPICAL SECTION THRU SEAT



SIDE AND ELEVATION WATER REPELLENT TREATMENT AND SPECIAL CONCRETE FINISH DETAILS

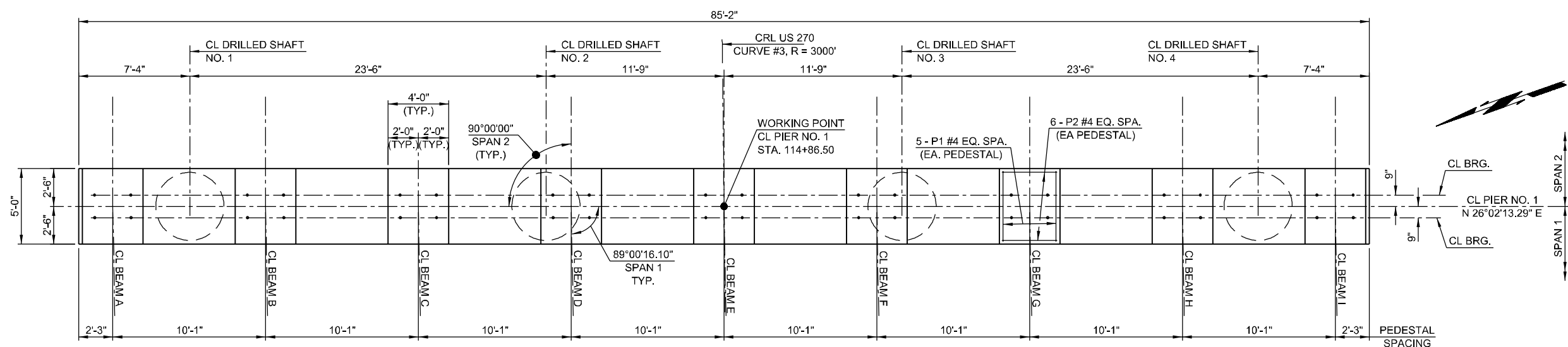
- ① TREAT ABUTMENT BACKWALL WITH A PENETRATING WATER REPELLENT SURFACE TREATMENT.
- ② APPLY CIM 1000 "SPECIAL CONCRETE FINISH" TO SURFACES INDICATED, INCLUDING TOP OF SEAT, ALL SURFACES OF THE PEDESTALS AND EXTEND 12" BEYOND THE EDGE OF THE SEAT ON THE FACE OF THE SEAT AND BACKWALL.
- ③ MASK ALONG THIS LINE TO PROVIDE A CLEAN STRAIGHT FINISH AT THE EDGE OF CIM 1000 APPLICATION.

ABUTMENT NO. 2 QUANTITIES		
DESCRIPTION	UNIT	TOTAL
UNCLASSIFIED BORROW	CY	15.00
SUBSTRUCTURE EXCAVATION COMMON	CY	129.00
CLSM BACKFILL	CY	167.00
SPECIAL CONCRETE FINISH	SY	53.00
CLASS A CONCRETE	CY	65.70
EPOXY COATED REINFORCING STEEL	LB	8470.00
PILES, FURNISHED (HP 10x42)	LF	130.50
PILES, FURNISHED (HP 12x53)	LF	822.50
PILES, DRIVEN (HP 10x42)	LF	130.50
PILES, DRIVEN (HP 12x53)	LF	822.50
WATER REPELLENT (VISUALLY INSPECTED)	SY	34.00
TYPE 1-A PLAIN RIPRAP	TON	440.00
TYPE 1-A FILTER BLANKET	TON	105.00
6" PERFORATED PIPE UNDERDRAIN ROUND	LF	86.00
6" NON-PERF. PIPE UNDERDRAIN RND.	LF	40.00

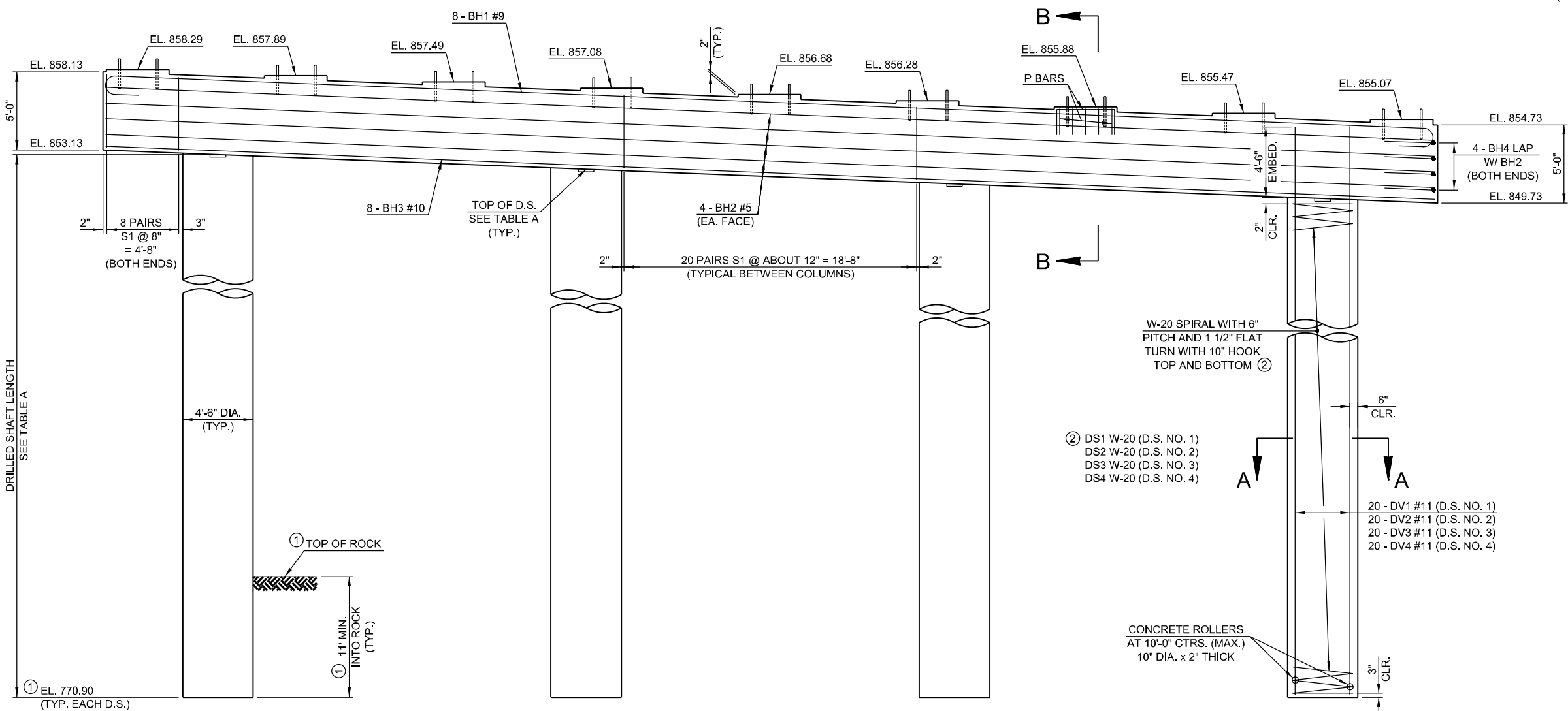


DESIGN	JSH	10-15
DRAWN	MRM	10-15
CHECKED	LWN	7-16
APPROVED	-	-
SQUAD	TT	

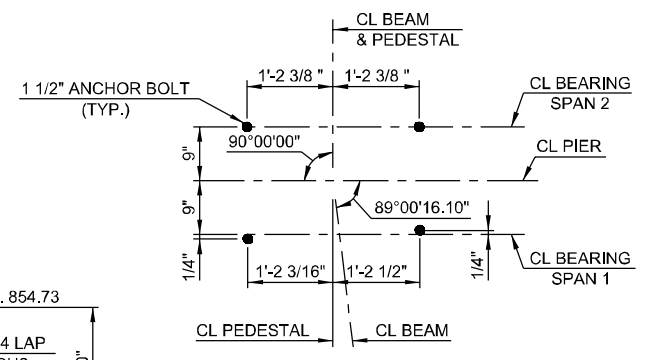
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 11/7/2018



PIER NO. 1 PLAN



PIER NO. 1 ELEVATION



TYPICAL ANCHOR BOLT LAYOUT

① TOP OF ROCK IS INTERPRETED FROM THE BORING INFORMATION INCLUDED IN THE PLANS. EACH DRILLED SHAFT SHALL BE INSTALLED THE SPECIFIED MINIMUM DISTANCE INTO ROCK AND IN NO CASE SHALL BE HIGHER THAN THE BOTTOM OF THE DRILLED SHAFT ELEVATION SHOWN ON THE PLANS.

PIER NOTES

- ALL EXPOSED PIER CAP EDGES SHALL HAVE 1 1/2" CHAMFER AND ALL PEDESTAL EXPOSED EDGES SHALL HAVE 3/4" CHAMFER UNLESS OTHERWISE SHOWN OR NOTED.
- ANY VARIATION IN THE BOTTOM OF THE SHAFT ELEVATION GREATER THAN ONE FOOT SHALL BE APPROVED BY THE ENGINEER PRIOR TO POURING THE DRILLED SHAFT.
- EXTEND DRILLED SHAFT A MINIMUM OF 11'-0" INTO ROCK.
- PENETRATING WATER REPELLENT SURFACE TREATMENT SHALL BE APPLIED TO THE VERTICAL FACES OF THE PIER CAP. SPECIAL CONCRETE FINISH SHALL BE APPLIED TO THE TOP OF PIER CAP, INCLUDING ALL FACES OF PEDESTALS, AND TOP 1'-0" OF ALL VERTICAL FACES OF THE PIER CAP AS DETAILED ON SHEET B013. (APPLY WATER REPELLENT PRIOR TO SPECIAL CONCRETE FINISH).
- FIVE CSL ACCESS TUBES SHALL BE INSTALLED IN EACH DRILLED SHAFT AND SHALL EXTEND THE FULL DEPTH OF THE DRILLED SHAFT UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

DRILLED SHAFT	TOP OF D.S. ELEVATION	BOTTOM OF D.S. ELEVATION	DRILLED SHAFT LENGTH
1	852.84	770.90	81'-11 1/4"
2	851.90	770.90	81'-0"
3	850.96	770.90	80'-0 3/4"
4	850.02	770.90	79'-1 1/2"

DESIGN	JSH	10-15
DRAWN	MRM	10-15
CHECKED	LWN	7-16
APPROVED	-	-
SQUAD	TT	

BRIDGE "A" U.S. 270 OVER CARTER CREEK

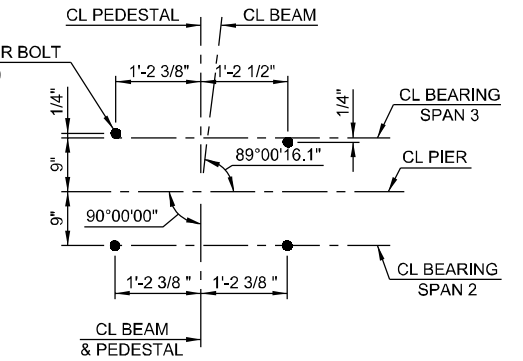
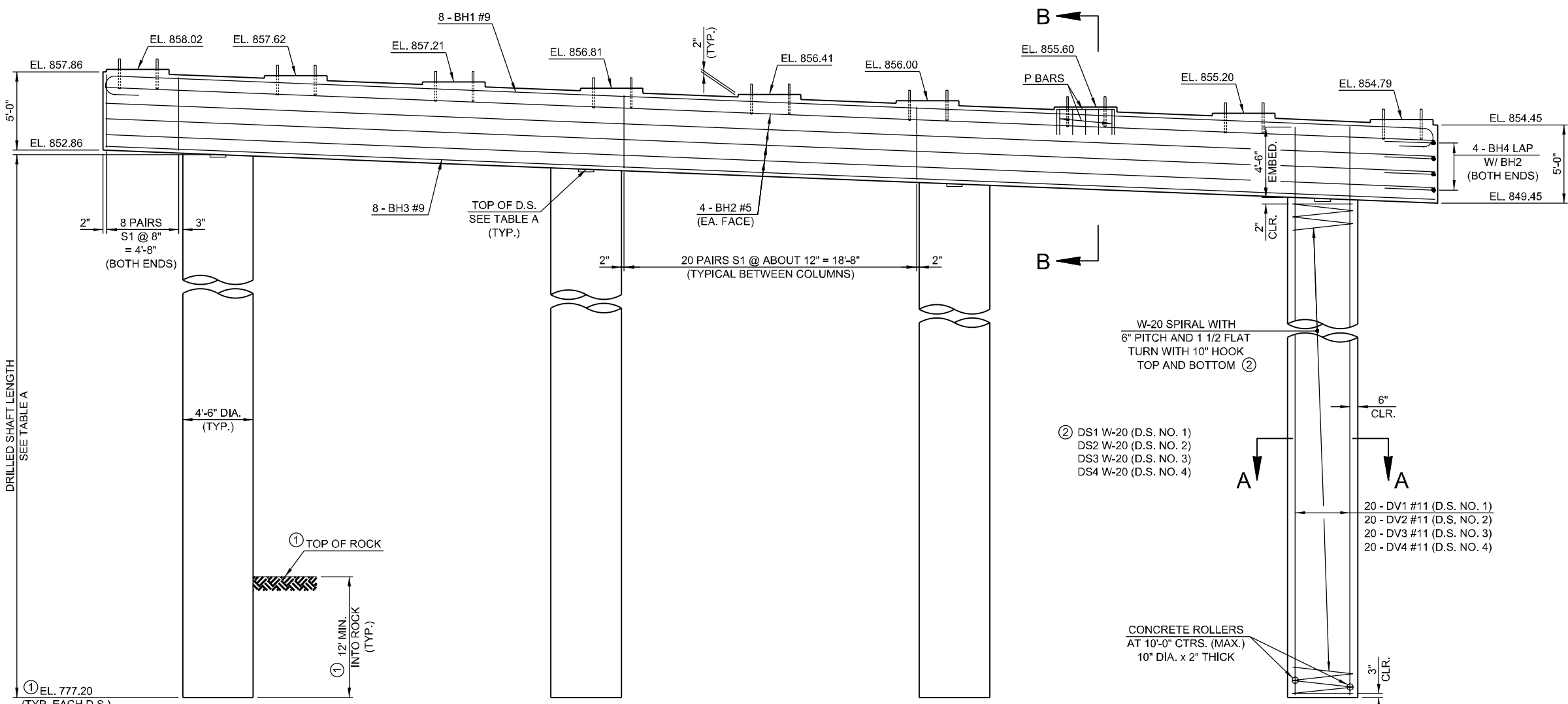
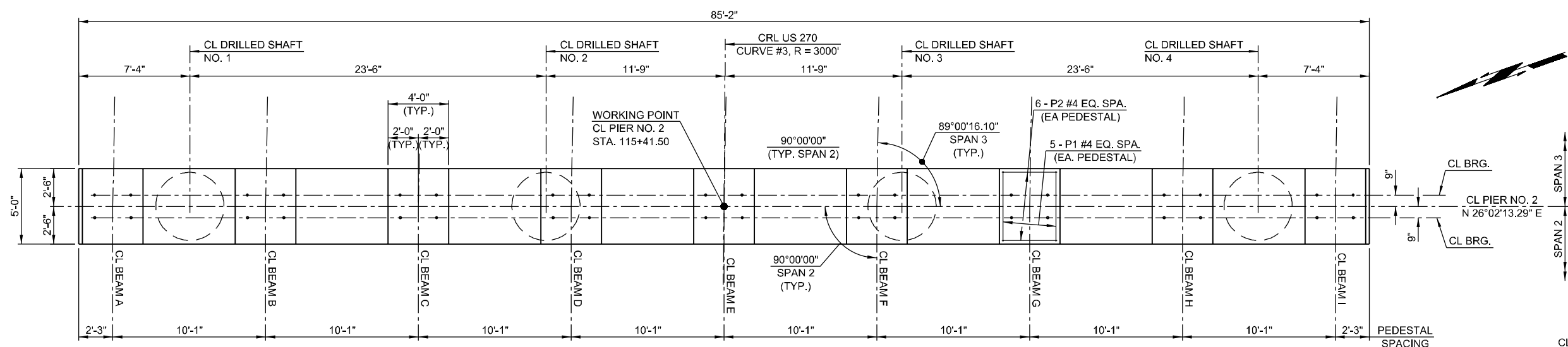
OKLAHOMA DEPARTMENT OF TRANSPORTATION

PIER DETAILS (SHEET 1 OF 3)

STATE JOB NO. 21006(04) SHEET NO. B011

SEMINOLE CO. U.S. 270

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① TOP OF ROCK IS INTERPRETED FROM THE BORING INFORMATION INCLUDED IN THE PLANS. EACH DRILLED SHAFT SHALL BE INSTALLED THE SPECIFIED MINIMUM DISTANCE INTO ROCK AND IN NO CASE SHALL BE HIGHER THAN THE BOTTOM OF THE DRILLED SHAFT ELEVATION SHOWN ON THE PLANS.

PIER NOTES

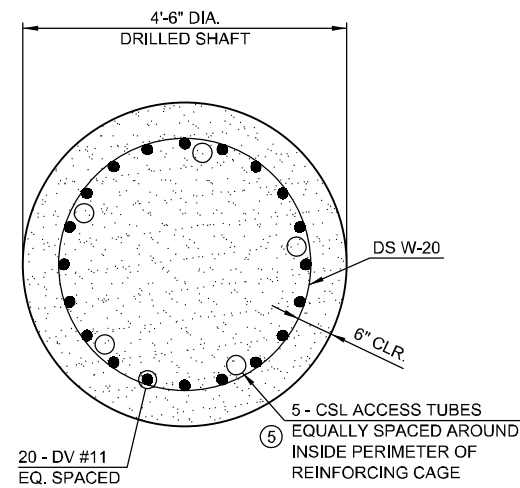
- ALL EXPOSED PIER CAP EDGES SHALL HAVE 1 1/2" CHAMFER AND ALL PEDESTAL EXPOSED EDGES SHALL HAVE 3/4" CHAMFER UNLESS OTHERWISE SHOWN OR NOTED.
- ANY VARIATION IN THE BOTTOM OF THE SHAFT ELEVATION GREATER THAN ONE FOOT SHALL BE APPROVED BY THE ENGINEER PRIOR TO POURING THE DRILLED SHAFT.
- EXTEND DRILLED SHAFT A MINIMUM OF 12'-0" INTO ROCK.
- PENETRATING WATER REPELLENT SURFACE TREATMENT SHALL BE APPLIED TO THE VERTICAL FACES OF THE PIER CAP. SPECIAL CONCRETE FINISH SHALL BE APPLIED TO THE TOP OF PIER CAP, INCLUDING ALL FACES OF PEDESTALS, AND TOP 1'-0" OF ALL VERTICAL FACES OF THE PIER CAP AS DETAILED ON SHEET B013. (APPLY WATER REPELLENT PRIOR TO SPECIAL CONCRETE FINISH).
- FIVE CSL ACCESS TUBES SHALL BE INSTALLED IN EACH DRILLED SHAFT AND SHALL EXTEND THE FULL DEPTH OF THE DRILLED SHAFT UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

TABLE A

DRILLED SHAFT	TOP OF D.S. ELEVATION	BOTTOM OF D.S. ELEVATION	DRILLED SHAFT LENGTH
1	852.57	777.20	75'-4 1/2"
2	851.63	777.20	74'-5 1/8"
3	850.69	777.20	73'-5 7/8"
4	849.75	777.20	72'-6 5/8"

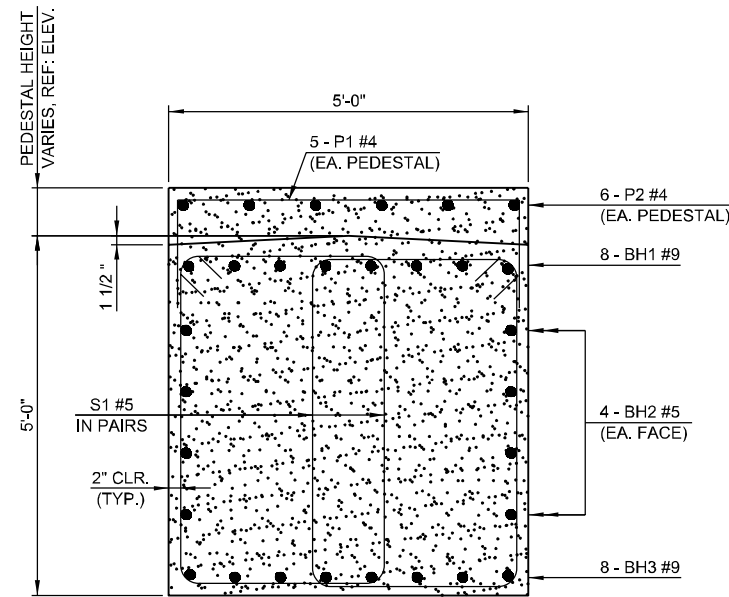
DESIGN	JSH	10-15
DRAWN	MRM	10-15
CHECKED	JSH	7-16
APPROVED	-	-
SQUAD	TT	-

11/7/2018 P:\11399\200-11399-14001\CAD\SheetFiles\21006 (04) Bridge\B012-2100604-BR-A-Pier.2.dgn

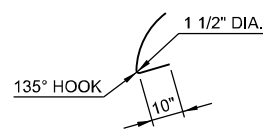
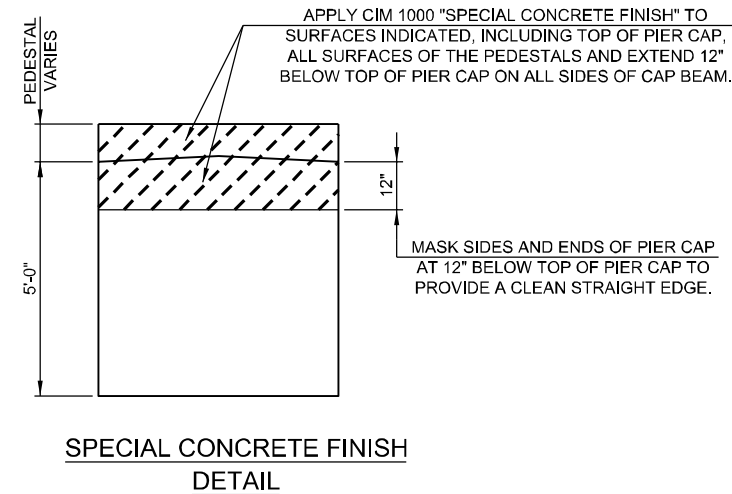
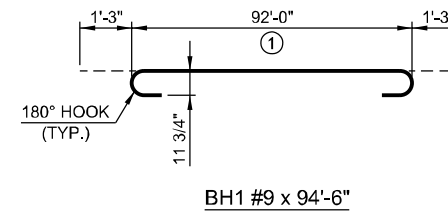
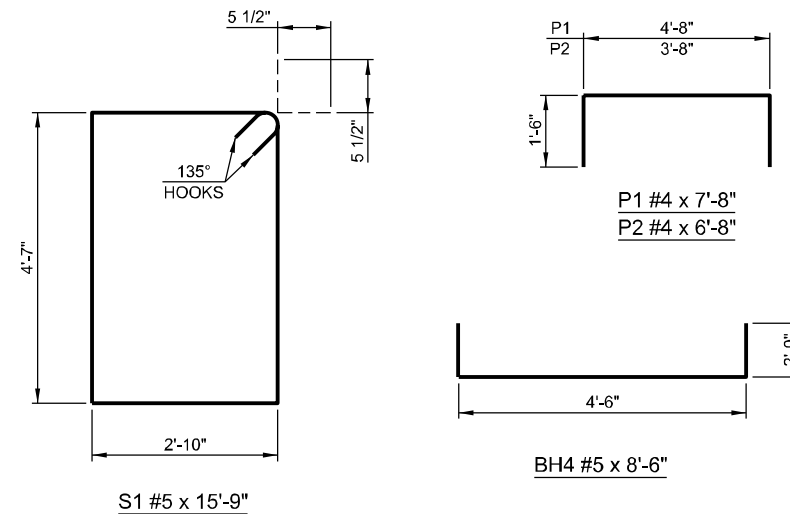


SECTION A-A

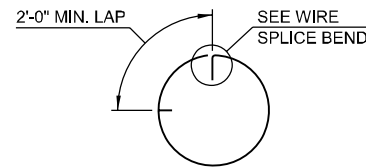
⑤ CSL ACCESS TUBES TO BE INSTALLED IN EACH DRILLED SHAFT.



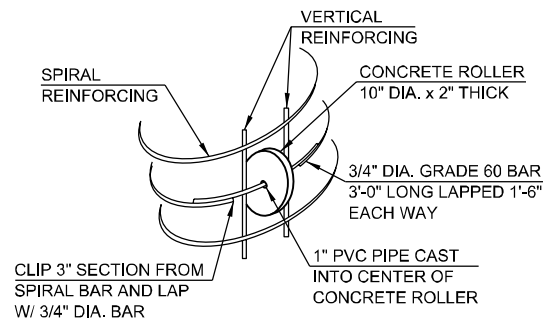
SECTION B-B



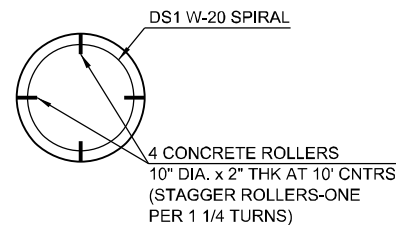
WIRE SPLICE BEND



WIRE SPLICE WHEN REQ'D



ROLLER INSTALLATION DETAIL



ROLLER PLACEMENT DETAIL

PIER NO. 1 BAR LIST				
MARK	SIZE	NO.	FORM	LENGTH
EPOXY COATED REINFORCING BARS				
① BH1	#9	8	BNT	94'-6"
② BH2	#5	8	STR	87'-4"
① BH3	#9	8	STR	92'-0"
BH4	#5	8	BNT	8'-6"
S1	#5	152	BNT	15'-9"
P1	#4	45	BNT	7'-8"
P2	#4	54	BNT	6'-8"
DRILLED SHAFT BAR LIST				
*(FOR INFORMATION ONLY)				
③ DV1	#11	20	STR	95'-2"
③ DV2	#11	20	STR	94'-3"
③ DV3	#11	20	STR	93'-3"
③ DV4	#11	20	STR	92'-4"
④ DS1	W-20	1	SPIRAL	1829'-3"
④ DS2	W-20	1	SPIRAL	1808'-7"
④ DS3	W-20	1	SPIRAL	1788'-0"
④ DS4	W-20	1	SPIRAL	1767'-4"

PIER NO. 2 BAR LIST				
MARK	SIZE	NO.	FORM	LENGTH
EPOXY COATED REINFORCING BARS				
① BH1	#9	8	BNT	94'-6"
② BH2	#5	8	STR	87'-4"
① BH3	#9	8	STR	92'-0"
BH4	#5	8	BNT	8'-6"
S1	#5	152	BNT	15'-9"
P1	#4	45	BNT	7'-8"
P2	#4	54	BNT	6'-8"
DRILLED SHAFT BAR LIST				
*(FOR INFORMATION ONLY)				
③ DV1	#11	20	STR	88'-7"
③ DV2	#11	20	STR	87'-8"
③ DV3	#11	20	STR	86'-8"
③ DV4	#11	20	STR	85'-9"
④ DS1	W-20	1	SPIRAL	1684'-9"
④ DS2	W-20	1	SPIRAL	1663'-11"
④ DS3	W-20	1	SPIRAL	1643'-3"
④ DS4	W-20	1	SPIRAL	1622'-7"

- ① INCLUDES 1 LAP LENGTH OF 7'-2"
- ② INCLUDES 1 LAP LENGTH OF 2'-6"
- ③ DV BARS SHALL BE EPOXY COATED. INCLUDES 1 LAP LENGTH OF 9'-0"
- ④ DS SPIRAL SHALL BE PLAIN REINFORCING. SPIRAL LAP LENGTHS, IF REQUIRED, ARE NOT INCLUDED IN THE SPIRAL LENGTHS SHOWN.

* REINFORCING SHOWN FOR DRILLED SHAFTS IS FOR INFORMATION ONLY AND SHALL BE INCLUDED IN THE COSTS PER LINEAR FOOT OF DRILLED SHAFTS.

SUMMARY QUANTITIES				
DESCRIPTION	UNIT	PIER 1	PIER 2	TOTAL
SPECIAL CONCRETE FINISH	SY	72.00	72.00	144.00
CLASS A CONCRETE	CY	80.50	80.50	161.00
EPOXY COATED REINFORCING STEEL	LBS	8,850.00	8,850.00	17,700.00
WATER REPELLENT (VISUALLY INSPECTED)	SY	100.00	100.00	200.00
DRILLED SHAFT 54" DIA.	LF	323.00	296.00	619.00
CROSSHOLE SONIC LOGGING	EA	4.00	4.00	8.00

BRIDGE "A" U.S. 270 OVER CARTER CREEK

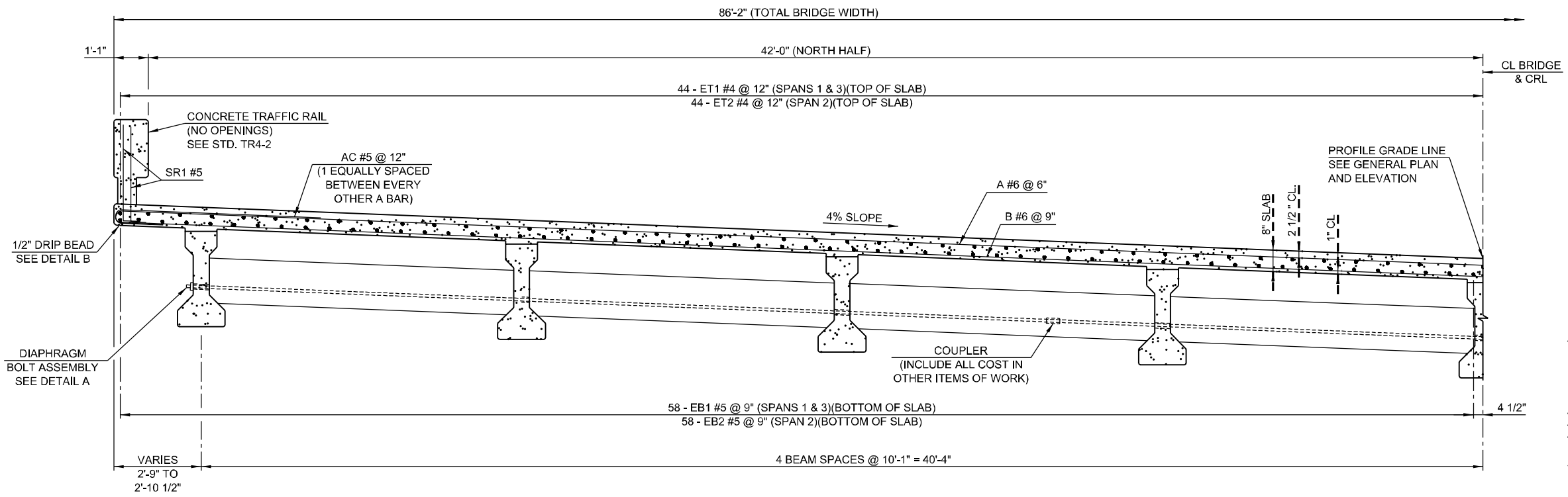
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DRAWN	MRM	10-15
CHECKED	LWN	7-16
APPROVED	-	-
SQUAD	TT	

OKLAHOMA DEPARTMENT OF TRANSPORTATION

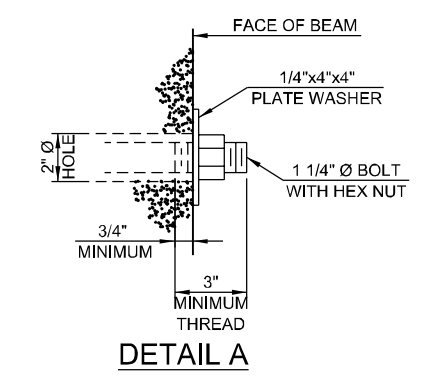
PIER DETAILS
(SHEET 3 OF 3)

STATE JOB NO. 21006(04) SHEET NO. B013

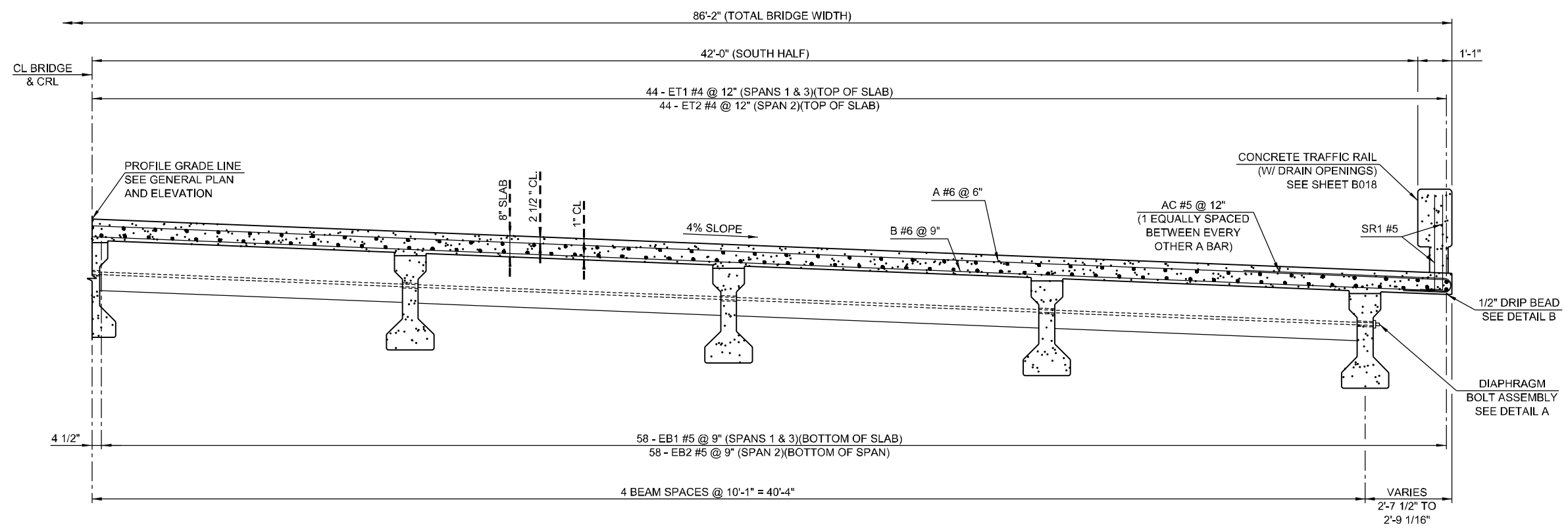
SEMINOLE CO. U.S. 270



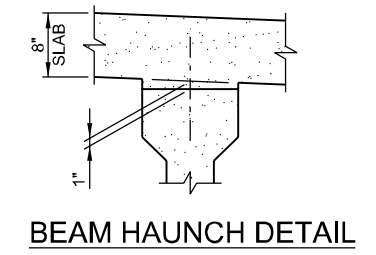
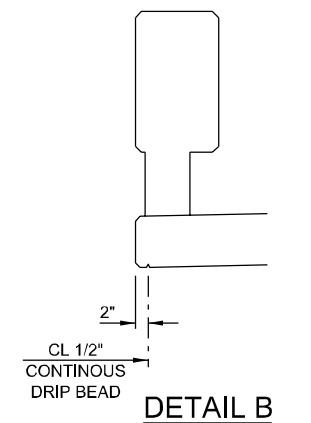
HALF SECTION AT INTERMEDIATE DIAPHRAGM
 (NORTH HALF SECTION)



DIAPHRAGM BOLT NOTES
 PROVIDE STRUCTURAL STEEL FOR DIAPHRAGM BOLTS AND PLATE WASHERS IN ACCORDANCE WITH AASHTO M270 (ASTM A709), GRADE 50W (WEATHERING STEEL, CHARPY V-NOTCH TESTING NOT REQUIRED). THE CONTRACTOR MAY SUBSTITUTE A #10 REINFORCING BAR IN ACCORDANCE WITH AASHTO M31, GRADE 60, AND THREADED AT THE ENDS AS SHOWN FOR THE DIAPHRAGM BOLT AT NO ADDITIONAL COST TO THE DEPARTMENT. PROVIDE HEX NUTS IN ACCORDANCE WITH AASHTO M291 (ASTM A563).
 PAINT EXPOSED DIAPHRAGM BOLT, PLATE WASHER AND HEX NUT WITH TWO (2) COATS OF ZINC-RICH PAINT (6 MIL MINIMUM THICKNESS) AFTER ASSEMBLY. INCLUDE ALL COST OF DIAPHRAGM BOLT, PLATE WASHER AND HEX NUT IN THE CONTRACT UNIT PRICE FOR "STRUCTURAL STEEL".



HALF SECTION AT END DIAPHRAGM
 (SOUTH HALF SECTION)



NOTE:
 PLAN QUANTITIES FOR CLASS AA CONCRETE INCLUDE BEAM HAUNCHES. THE HAUNCH HEIGHT SHOWN IS THE THEORETICAL HAUNCH HEIGHT AT THE CENTERLINE BEARING ONLY, MEASURED FROM THE BOTTOM OF THE DECK SLAB TO THE TOP OF THE BEAM, AND VARIES ACROSS THE SPAN. DETERMINE THE ACTUAL HAUNCH HEIGHT (ACCOUNTING FOR BEAM CAMBER, DEAD LOAD DEFLECTION AND ROADWAY GRADE) AFTER ERECTION OF THE BEAMS AND SUBMIT TO THE ENGINEER FOR APPROVAL. THE ENGINEER WILL NOT MEASURE DIFFERENCES BETWEEN THE THEORETICAL AND THE ACTUAL HAUNCH HEIGHTS FOR PAYMENTS.

NOTE:
 SEE SHEET B018 FOR WATER REPELLENT TREATMENT DETAILS.

TYPICAL BRIDGE SECTION

BRIDGE "A" U.S. 270 OVER CARTER CREEK

DESIGN	JSH	3-15
DRAWN	MRM	3-15
CHECKED	LWN	9-16
APPROVED	-	-
SQUAD	TT	

OKLAHOMA DEPARTMENT OF TRANSPORTATION

TYPICAL BRIDGE SECTION

STATE JOB NO. 21006(04) SHEET NO. B014

SEMINOLE CO. U.S. 270

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 11/7/2018

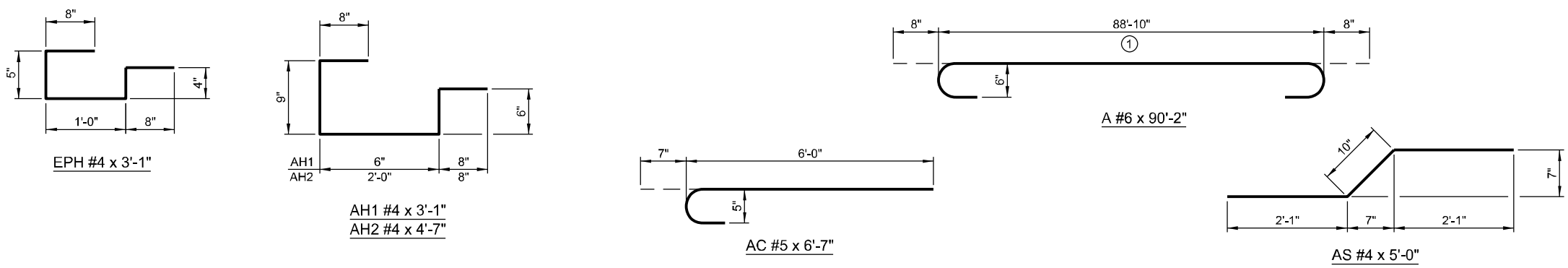


SLAB REINFORCING PLAN

SUPERSTRUCTURE BAR LIST					
MARK	SIZE	NO.	FORM	LENGTH	
EPOXY COATED REINFORCING BARS					
①	A	#6	315	BNT	90'-2"
	AC	#5	314	BNT	6'-7"
④	AH1	#4	30	BNT	3'-1"
④	AH2	#4	160	BNT	4'-7"
④	AS	#4	174	BNT	5'-0"
②	AT	#4	4	STR	87'-6"
④	B	#6	220	STR	88'-10"
①	EB1	#5	232	STR	50'-7"
	EB2	#5	116	STR	54'-8"
	ET1	#4	174	STR	50'-7"
	ET2	#4	87	STR	54'-8"
④	EPH	#4	348	BNT	3'-1"
②	EPT	#4	4	STR	87'-6"
③	SR1	#5	801	BNT	4'-1"

- ① INCLUDES 1 LAP OF 3'-0"
- ② INCLUDES 1 LAP OF 1'-8"
- ③ FOR BAR BEND, SEE STD. TR4-2
- ④ SEE SHEET B016 FOR BAR LOCATIONS

SUPERSTRUCTURE QUANTITIES		
DESCRIPTION	UNIT	TOTAL
PRESTRESSED CONCRETE BEAMS (TYPE II)	LF	1,386.00
SAW-CUT GROOVING	SY	1,462.30
SEALED EXPANSION JOINT	LF	172.92
CONCRETE RAIL (TR4)	LF	313.40
STRUCTURAL STEEL	LB	3,100.00
CLASS AA CONCRETE	CY	371.10
EPOXY COATED REINFORCING STEEL (GRADE 60)	LB	113,200.00
WATER REPELLENT (VISUALLY INSPECTED)	SY	418.00
FIXED BEARING ASSEMBLIES	EA	27.00
EXPANSION BEARING ASSEMBLIES	EA	27.00



BRIDGE 'A' U.S. 270 OVER CARTER CREEK

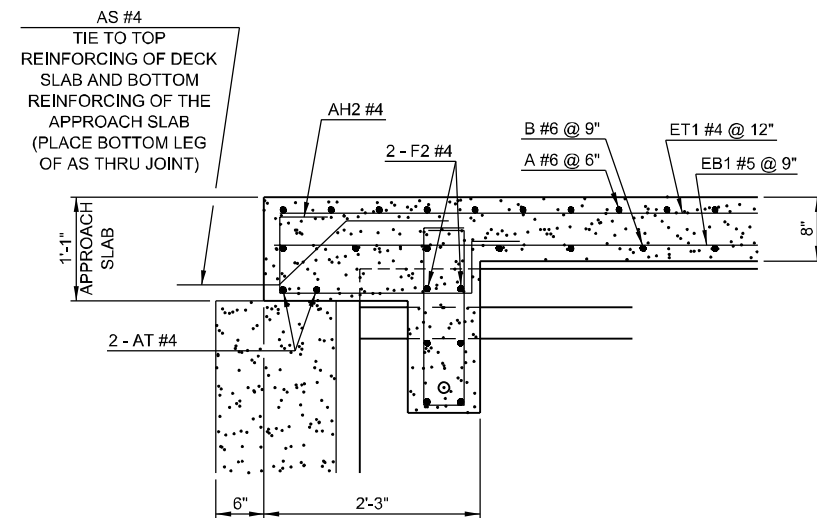
DESIGN	JSH	7-15
DRAWN	MRM	7-15
CHECKED	LWN	9-16
APPROVED	-	-
SQUAD	TT	

OKLAHOMA DEPARTMENT OF TRANSPORTATION

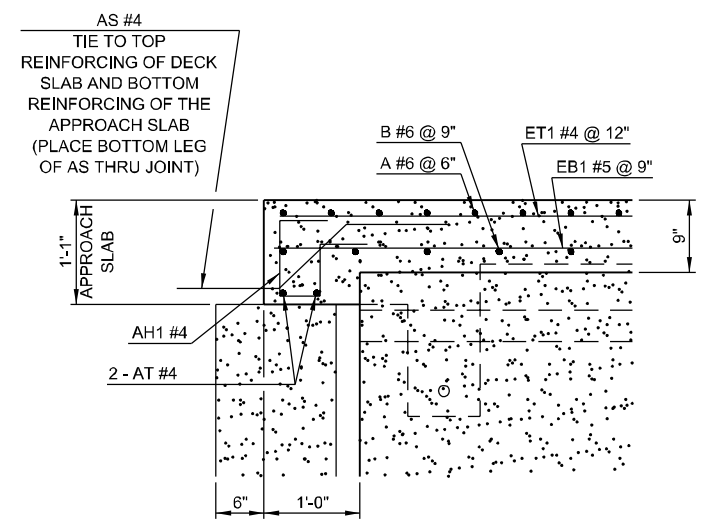
DECK SLAB REINFORCING DETAILS

STATE JOB NO. 21006(04) SHEET NO. B015
 SEMINOLE CO. U.S. 270

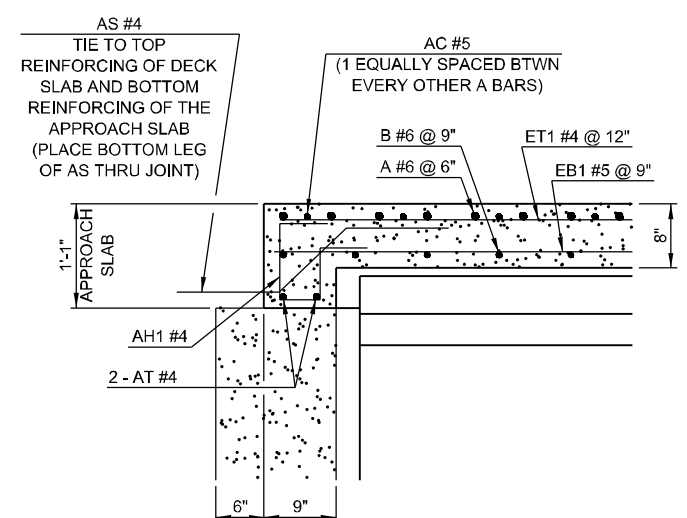
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 11/7/2018



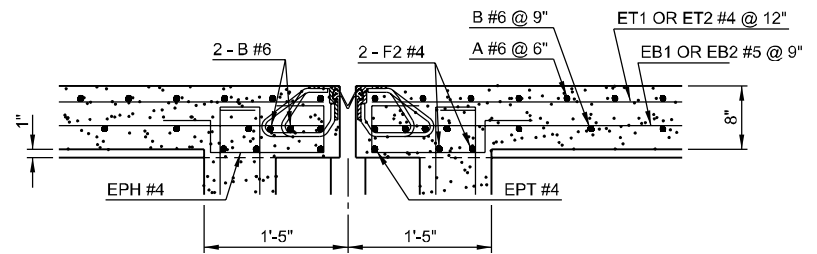
SECTION C



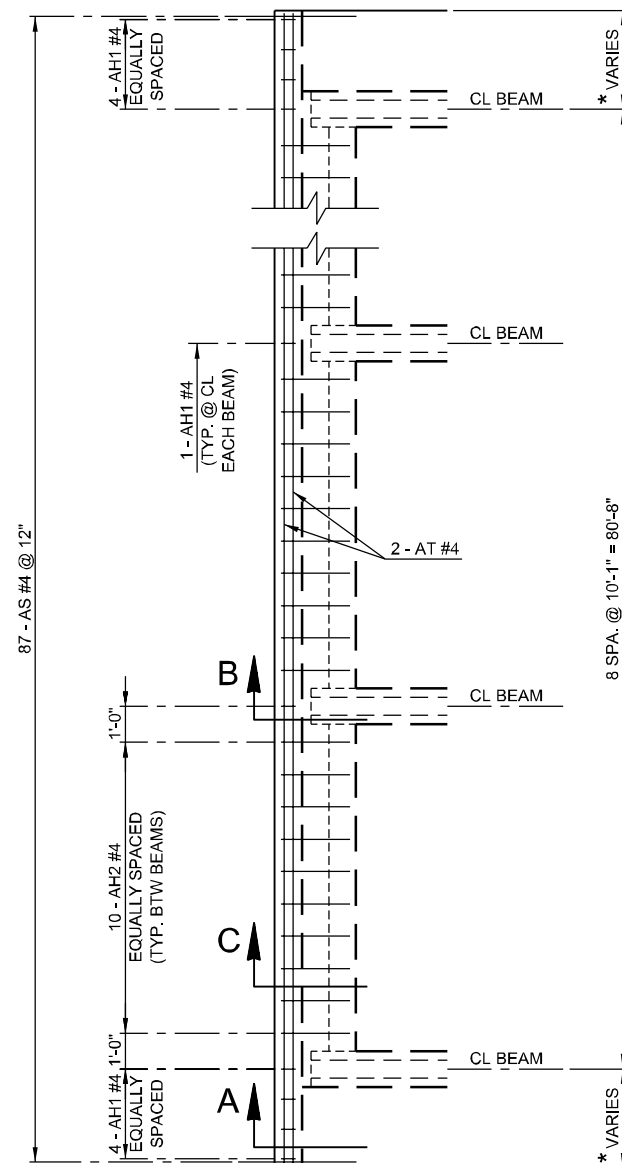
SECTION B



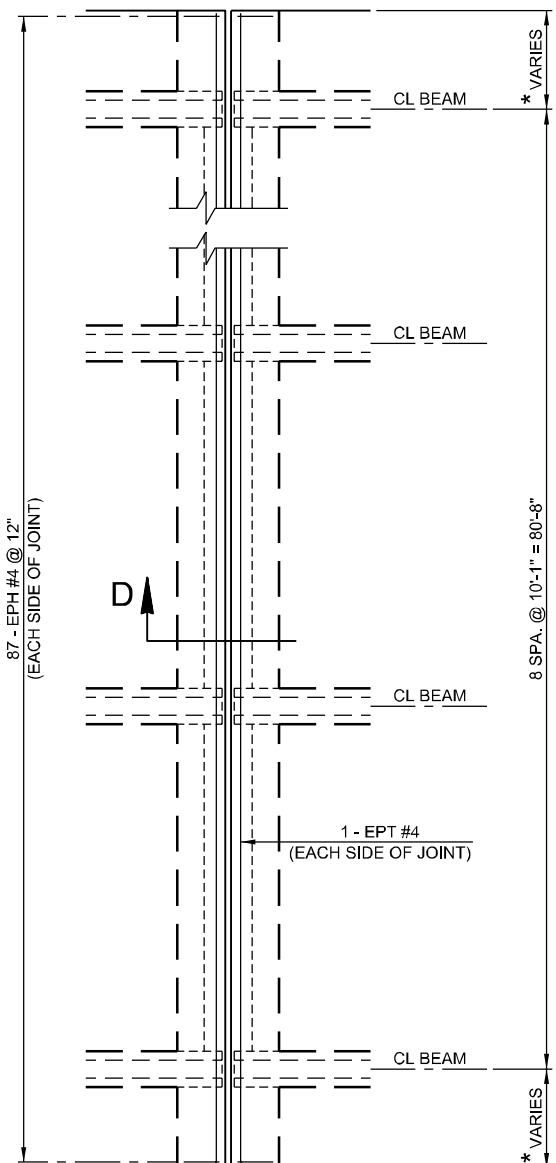
SECTION A



SECTION D



ABUTMENTS



PIERS

ADDITIONAL SLAB REINFORCING AT DIAPHRAGM PLANS

NOTE:
DECK SLAB REINFORCING
NOT SHOWN FOR CLARITY.

*SEE SHEET B019 FOR MEASUREMENT

BRIDGE "A" U.S. 270 OVER CARTER CREEK

DESIGN	JSH	10-15
DRAWN	MRM	10-15
CHECKED	LWN	9-16
APPROVED	-	-
SQUAD	TT	

OKLAHOMA DEPARTMENT OF TRANSPORTATION

DIAPHRAGM DETAILS
(SHEET 1 OF 2)

STATE JOB NO. 21006(04) SHEET NO. B016

SEMINOLE CO. U.S. 270

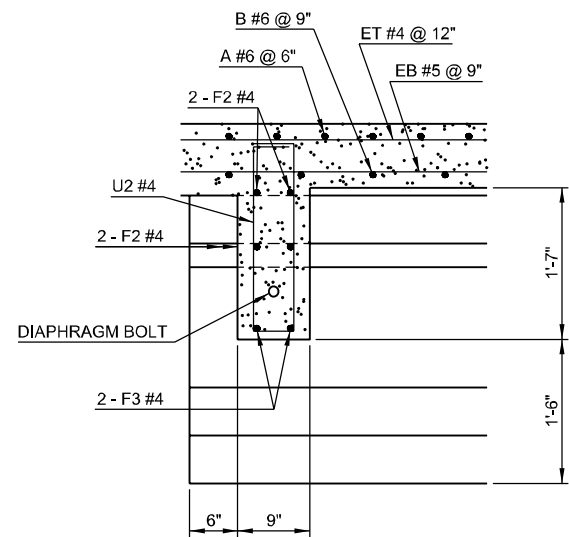
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END DIAPHRAGM BAR LIST
(ONE SHOWN, 48 REQUIRED)

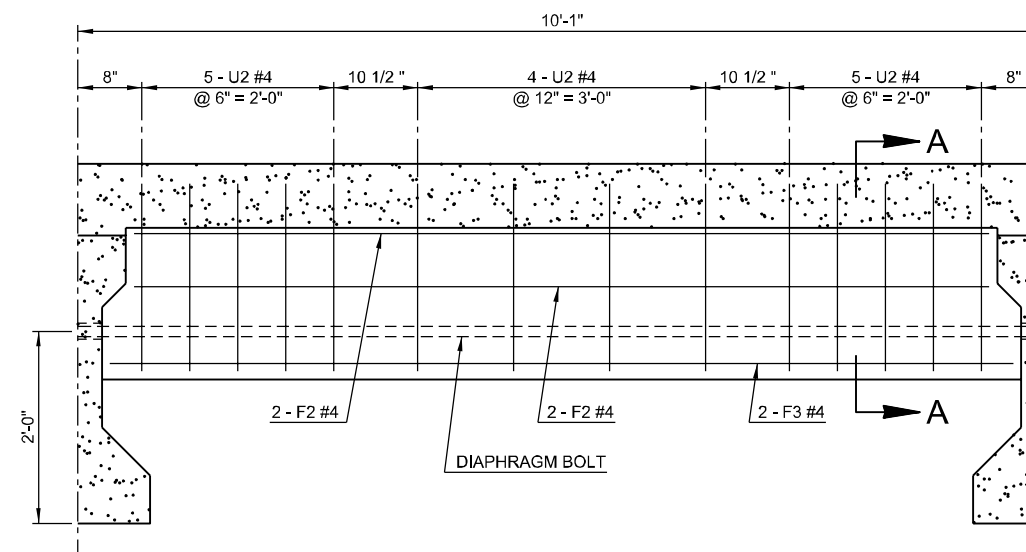
MARK	SIZE	NO.	FORM	LENGTH
EPOXY COATED REINFORCING BARS				
U2	#4	14	BNT	4'-11"
F2	#4	4	STR	8'-11"
F3	#4	2	STR	9'-3"

INTERMEDIATE DIAPHRAGM BAR LIST
(ONE SHOWN, 24 REQUIRED)

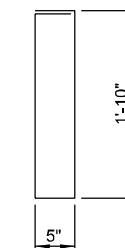
MARK	SIZE	NO.	FORM	LENGTH
EPOXY COATED REINFORCING BARS				
U1	#4	10	BNT	3'-5"
F1	#4	6	STR	9'-3"



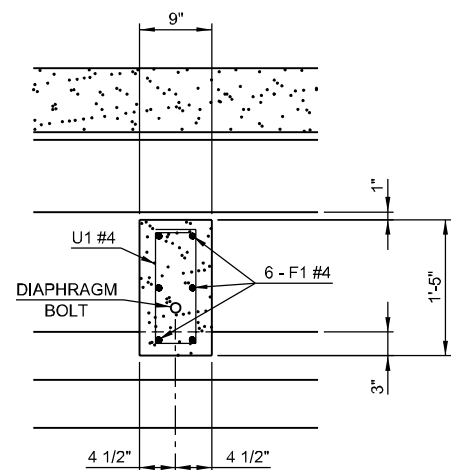
SECTION A-A



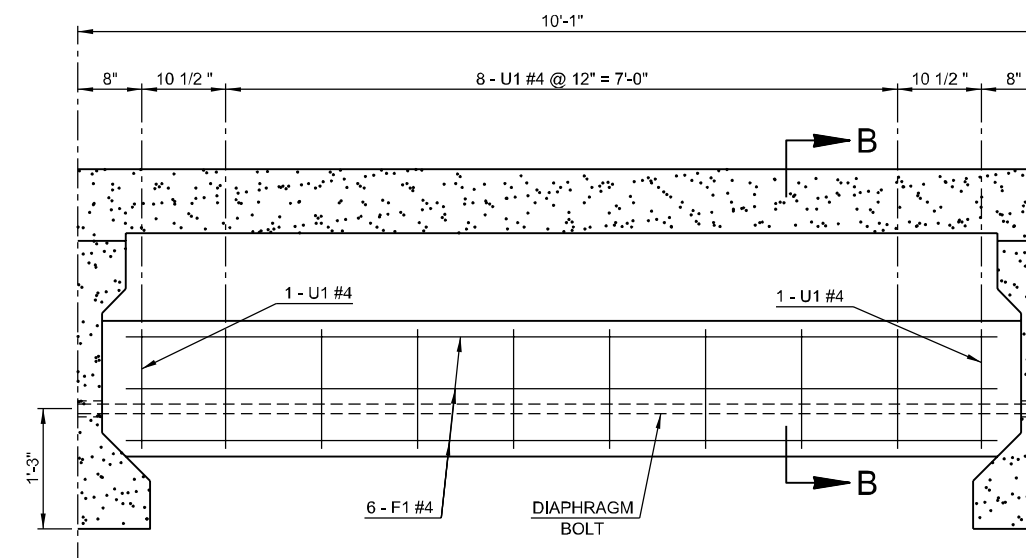
END DIAPHRAGM ELEVATION



U2 #4 x 4'-11"



SECTION B-B



INTERMEDIATE DIAPHRAGM ELEVATION



U1 #4 x 3'-5"

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11/7/2018

BRIDGE "A" U.S. 270 OVER CARTER CREEK

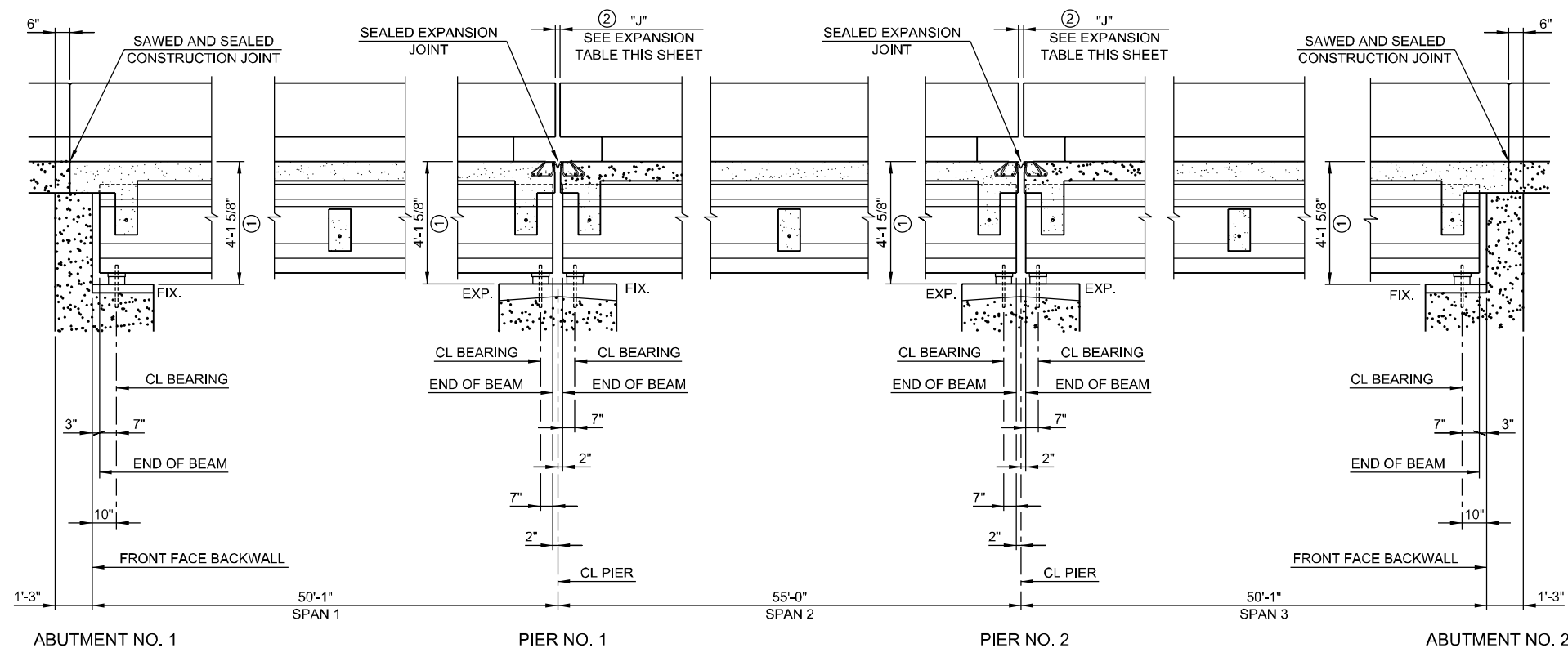
DESIGN	JSH	10-15
DRAWN	MRM	10-15
CHECKED	LWN	10-16
APPROVED	-	-
SQUAD	TT	

OKLAHOMA DEPARTMENT OF TRANSPORTATION

DIAPHRAGM DETAILS
(SHEET 2 OF 2)

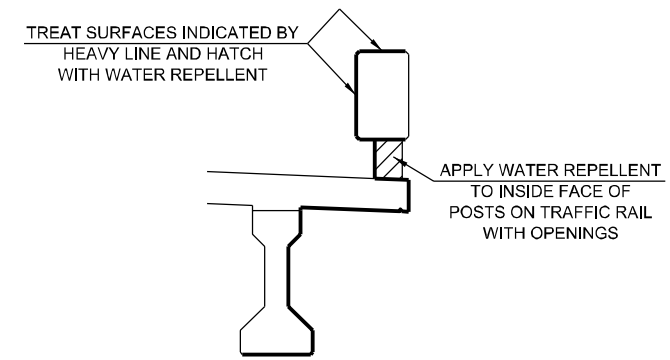
STATE JOB NO. 21006(04) SHEET NO. B017

SEMINOLE CO. U.S. 270



- ① DIMENSION IS FROM TOP OF DECK SLAB TO BOTTOM OF BEARING ASSEMBLY AT CL BEARING
- ② TRAFFIC RAIL OPENING SHALL BE THE SAME AS DECK OPENING AT EXPANSION JOINT.

EXPANSION TABLE		
TEMPERATURE		
PIER NO. 1	PIER NO. 2	OPENING
-	10°F	2.250"
9°F	27°F	2.125"
43°F	43°F	2.000"
77°F	59°F	1.875"
111°F	76°F	1.750"
-	92°F	1.625"
-	109°F	1.500"

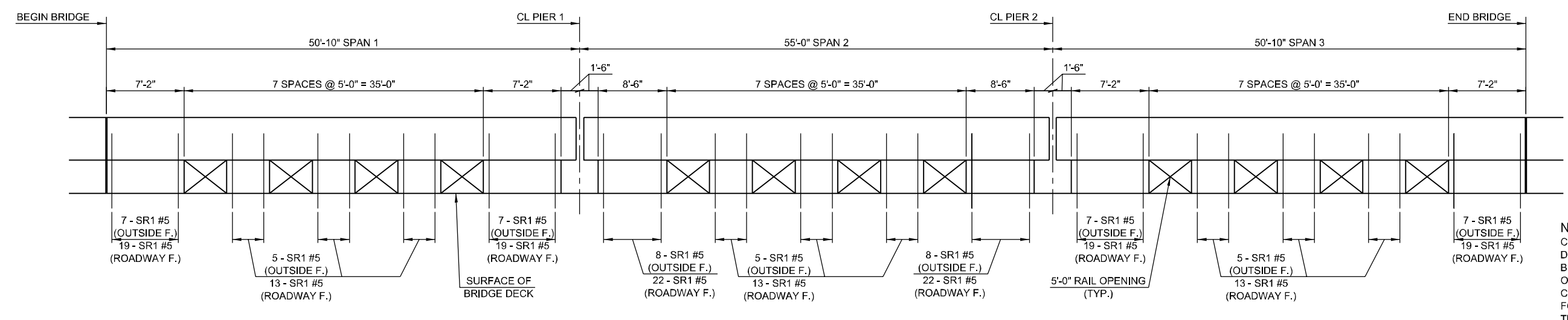


NOTE:
ALL DIMENSIONS ARE ALONG CL OF BEAMS.

LONGITUDINAL SECTION

NOTE:
TR4 RAIL DRAIN OPENINGS SHOWN AT EXPANSION JOINTS SHALL BE LOCATED AT LOW SIDE (SOUTH SIDE) OF BRIDGE ONLY. TR4 RAIL ON HIGH SIDE (NORTH SIDE) SHALL HAVE NO DRAIN OPENINGS, BUT SHALL MAINTAIN SAME EXPANSION JOINT OPENING AS THE DECK SLAB AT THE PIERS.

WATER REPELLENT TREATMENT DETAILS



NOTE:
CONCRETE TRAFFIC RAIL SHOWN WITH DRAIN OPENINGS IS FOR SOUTH SIDE OF BRIDGE ONLY. CONCRETE TRAFFIC RAIL ON NORTH SIDE OF BRIDGE SHALL BE CONSTRUCTED WITH NO DRAIN OPENINGS. FOR ADDITIONAL DETAIL OF CONCRETE TRAFFIC RAIL, SEE STD. TR4-2.

CONCRETE TRAFFIC RAIL ELEVATION (SOUTH SIDE ONLY)

BRIDGE "A" U.S. 270 OVER CARTER CREEK

DESIGN	JSH	3-15
DRAWN	MRM	3-15
CHECKED	LWN	10-16
APPROVED	-	-
SQUAD	TT	

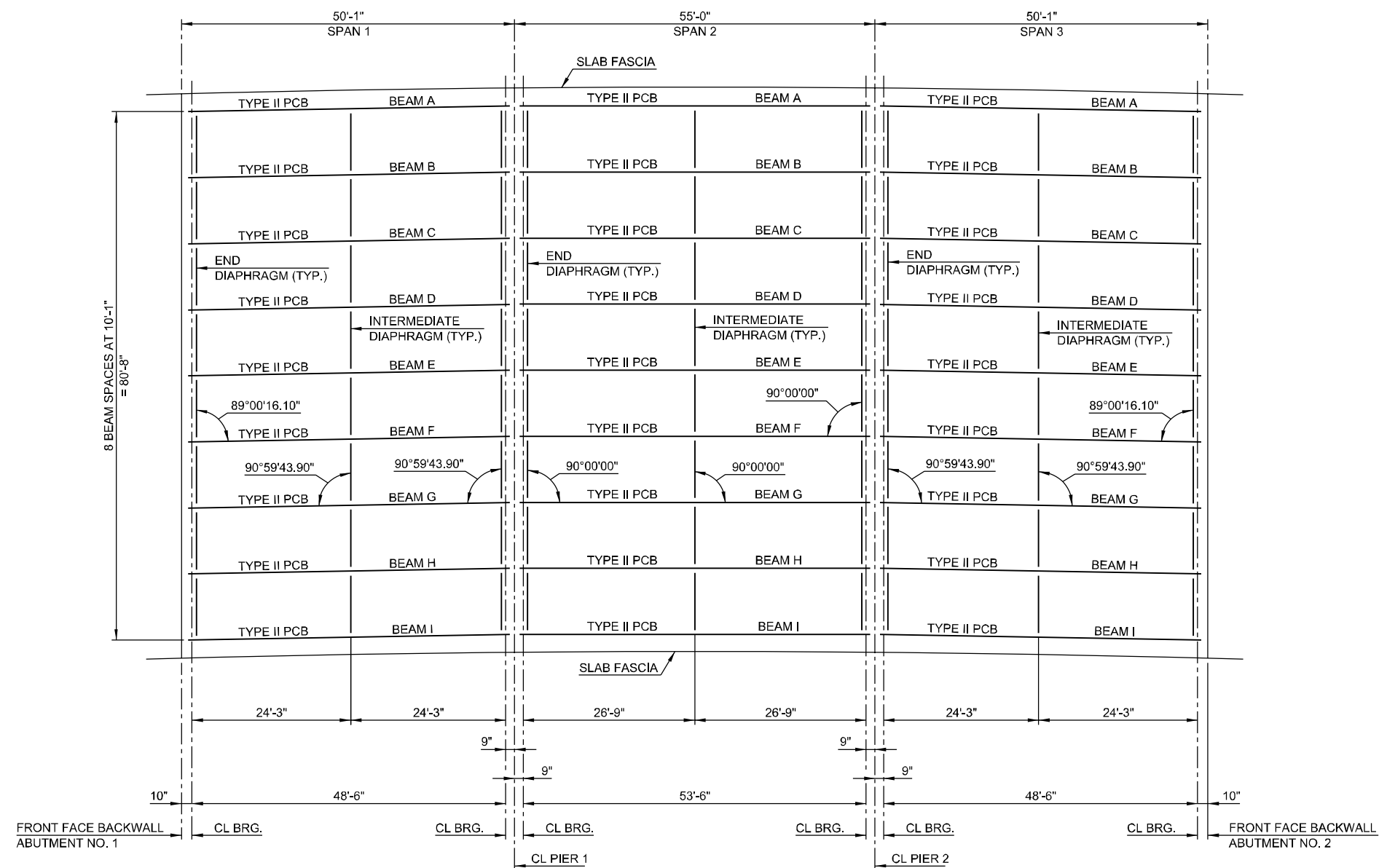
OKLAHOMA DEPARTMENT OF TRANSPORTATION

LONGITUDINAL SECTION AND TRAFFIC RAIL ELEVATION

STATE JOB NO. 21006(04) SHEET NO. B018

SEMINOLE CO. U.S. 270

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FRAMING PLAN

EXTERIOR BEAM QUARTER POINT OFFSETS TO SLAB FASCIA

SPAN	FASCIA	CL BRG.	1/4	1/2	3/4	CL BRG.
1	NORTH	2'-9 1/16"	2'-9 15/16"	2'-10 3/16"	2'-9 15/16"	2'-9"
	SOUTH	2'-9 1/16"	2'-8 1/8"	2'-7 13/16"	2'-8 1/16"	2'-8 7/8"
2	NORTH	2'-9 1/8"	2'-10 3/16"	2'-10 1/2"	2'-10 3/16"	2'-9 1/8"
	SOUTH	2'-8 15/16"	2'-7 7/8"	2'-7 1/2"	2'-7 7/8"	2'-8 15/16"
3	NORTH	2'-9"	2'-9 15/16"	2'-10 3/16"	2'-9 15/16"	2'-9 1/16"
	SOUTH	2'-8 7/8"	2'-8 1/16"	2'-7 13/16"	2'-8 1/8"	2'-9 1/16"

BRIDGE "A" U.S. 270 OVER CARTER CREEK

DESIGN	JSH	7-15
DRAWN	MRM	7-15
CHECKED	LWN	10-16
APPROVED	-	-
SQUAD	TT	

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FRAMING PLAN

STATE JOB NO. 21006(04) SHEET NO. B019

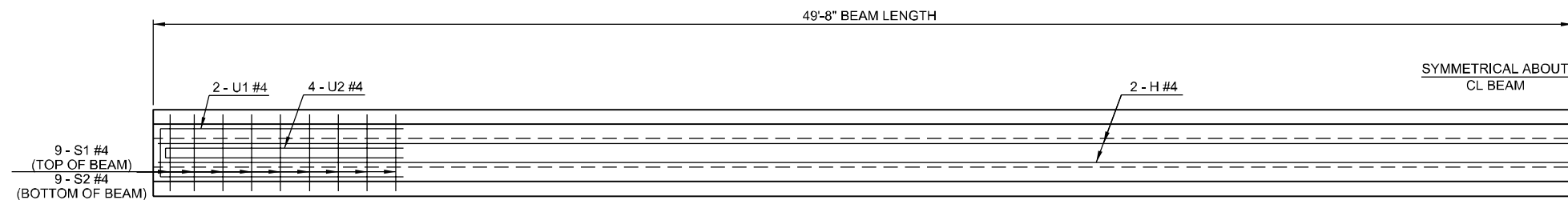
SEMINOLE CO. U.S. 270

PRESTRESSED CONCRETE BEAM NOTES

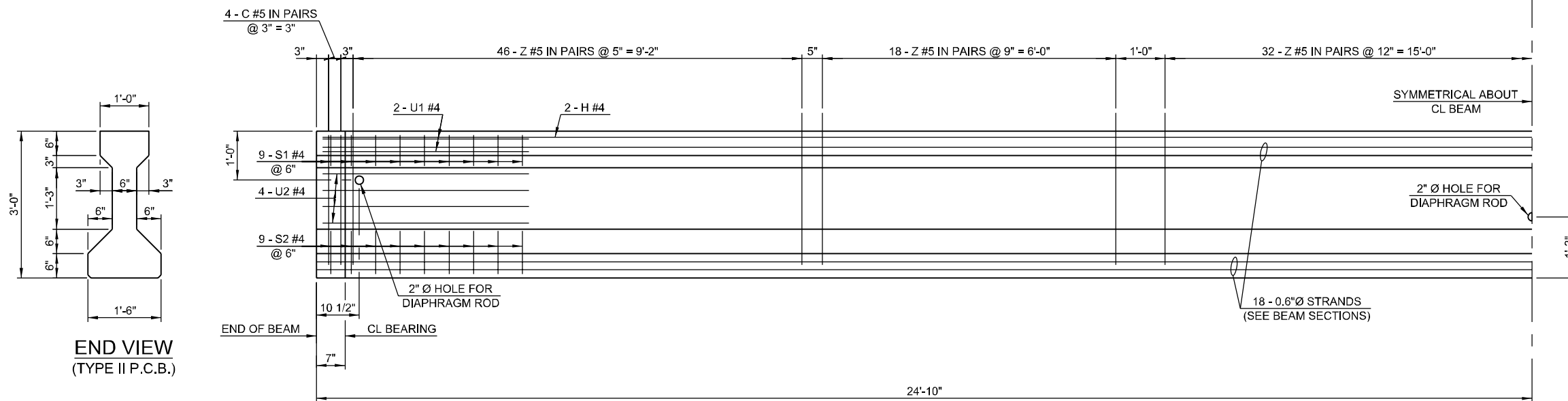
COMPRESSIVE STRENGTH
 PROVIDE CONCRETE WITH A COMPRESSIVE STRENGTH OF 6,000 P.S.I. AT TRANSFER OF PRESTRESS AND 8,000 P.S.I. AT 28 DAYS.

STRAND TYPE
 PROVIDE LOW-RELAXATION STRANDS HAVING A NOMINAL DIAMETER OF 0.6" WITH ULTIMATE TENSILE STRENGTH OF 270 K.S.I.

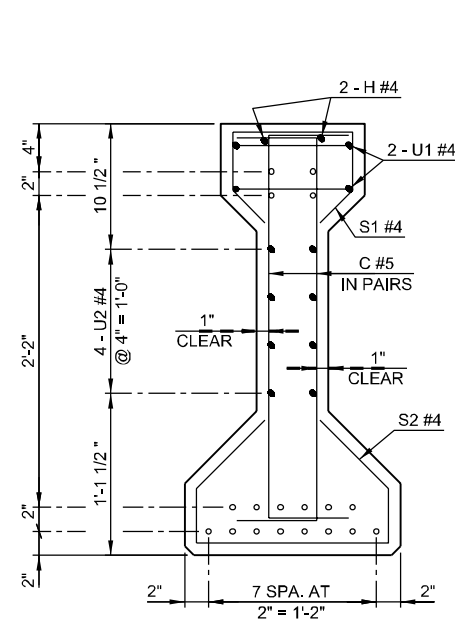
LFD OPERATING RATING - HS 38.2
 THE OPERATING RATING SHOWN IS BASED ON A NOMINAL STRENGTH USING ONLY STRANDS THAT ARE BONDED FOR THE FULL LENGTH OF THE BEAM. ALL PARTIALLY BONDED STRANDS ARE NEGLECTED IN STRENGTH COMPUTATIONS.



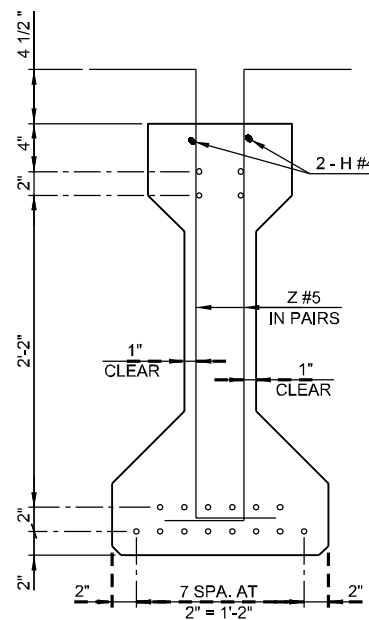
PLAN



ELEVATION
 SPANS 1 AND 3

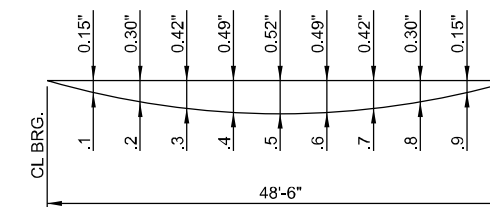


END SECTION



CL SECTION

BEAM SECTIONS
 SPANS 1 AND 3
 (18 - 0.6Ø STRANDS)



DEAD LOAD DEFLECTION DIAGRAM

NOTE:
 THE DEAD LOAD DEFLECTION SHOWN ABOVE AT THE TENTH POINTS ARE THE INITIAL DEFLECTIONS DUE TO DECK SLAB + DIAPHRAGMS + HAUNCH + S.I.P. STEEL DECK FORM ALLOWANCE + CONCRETE TRAFFIC RAIL. IT DOES NOT INCLUDE THE BEAM WEIGHT OR FUTURE WEARING SURFACE.

BRIDGE "A" U.S. 270 OVER CARTER CREEK

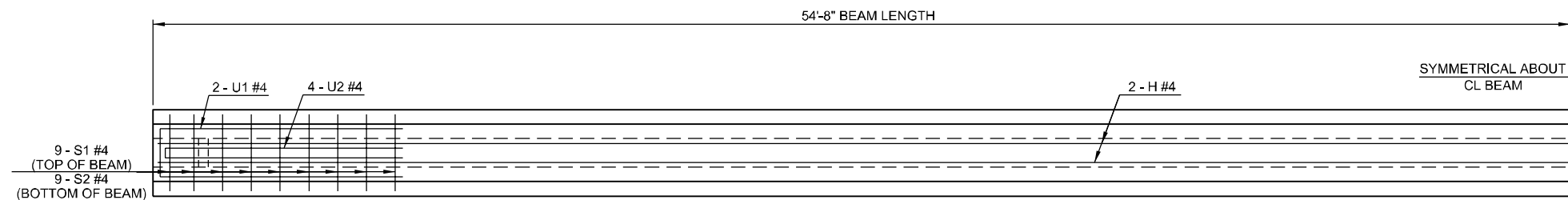
DESIGN	JSH	10-15	OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN	MRM	10-15	
CHECKED	LWN	10-16	
APPROVED	-	-	
SQUAD	TT	-	
BEAM DETAILS (SHEET 1 OF 3)			
STATE JOB NO. 21006(04) SHEET NO. B020			

PRESTRESSED CONCRETE BEAM NOTES

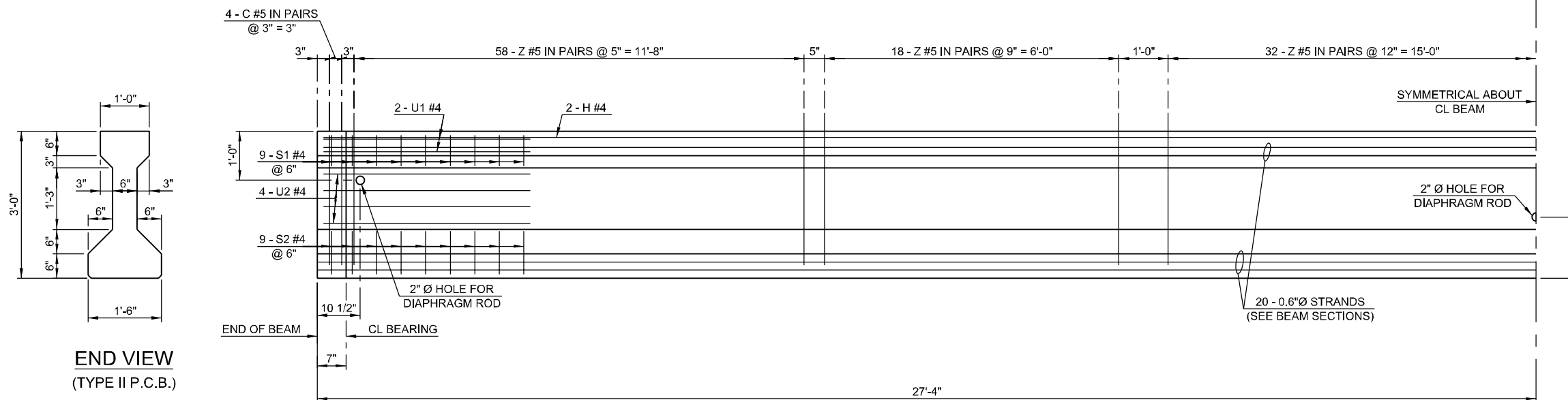
COMPRESSIVE STRENGTH
 PROVIDE CONCRETE WITH A COMPRESSIVE STRENGTH OF 6,000 P.S.I. AT TRANSFER OF PRESTRESS AND 8,000 P.S.I. AT 28 DAYS.

STRAND TYPE
 PROVIDE LOW-RELAXATION STRANDS HAVING A NOMINAL DIAMETER OF 0.6" WITH ULTIMATE TENSILE STRENGTH OF 270 K.S.I.

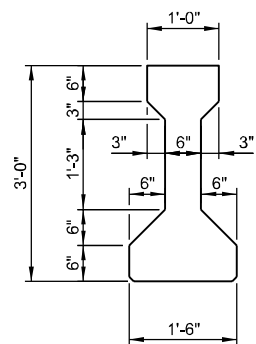
LFD OPERATING RATING - HS 34.1
 THE OPERATING RATING SHOWN IS BASED ON A NOMINAL STRENGTH USING ONLY STRANDS THAT ARE BONDED FOR THE FULL LENGTH OF THE BEAM. ALL PARTIALLY BONDED STRANDS ARE NEGLECTED IN STRENGTH COMPUTATIONS.



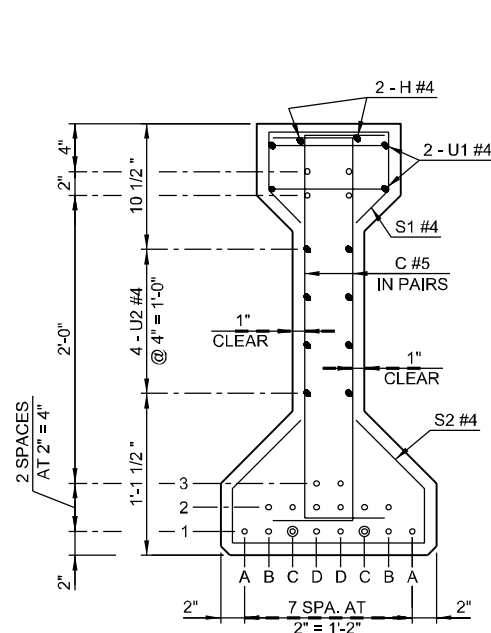
PLAN



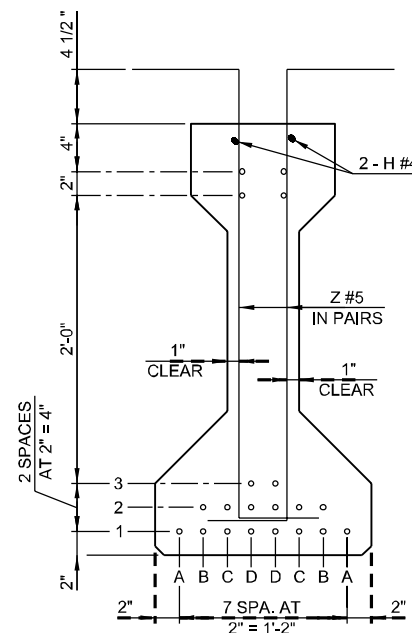
ELEVATION
SPAN 2



END VIEW
(TYPE II P.C.B.)



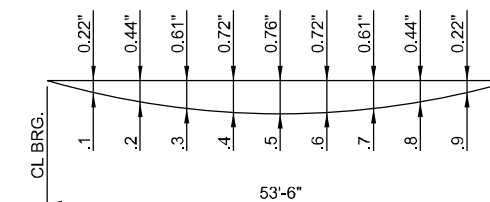
END SECTION



CL SECTION

BEAM SECTIONS
SPAN 2
(20 - 0.6Ø STRANDS)

DEBOND SCHEDULE	
DEBOND PAIR	DEBOND LENGTH FROM END OF BEAM
C1	12'-0"



DEAD LOAD DEFLECTION DIAGRAM

NOTE:
 THE DEAD LOAD DEFLECTION SHOWN ABOVE AT THE TENTH POINTS ARE THE INITIAL DEFLECTIONS DUE TO DECK SLAB + DIAPHRAGMS + HAUNCH + S.I.P. STEEL DECK FORM ALLOWANCE + CONCRETE TRAFFIC RAIL. IT DOES NOT INCLUDE THE BEAM WEIGHT OR FUTURE WEARING SURFACE.

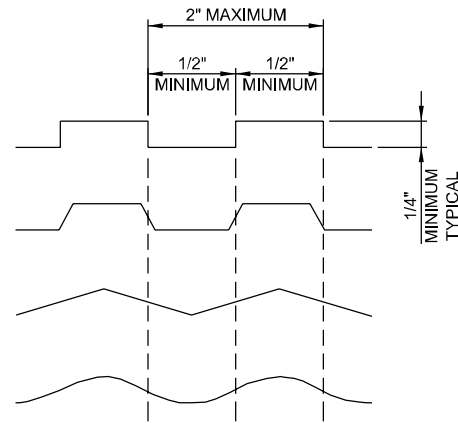
BRIDGE "A" U.S. 270 OVER CARTER CREEK

DESIGN	JSH	10-15	OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN	MRM	10-15	
CHECKED	LWN	10-16	
APPROVED	-	-	
SQUAD	TT	-	

BEAM DETAILS
(SHEET 2 OF 3)

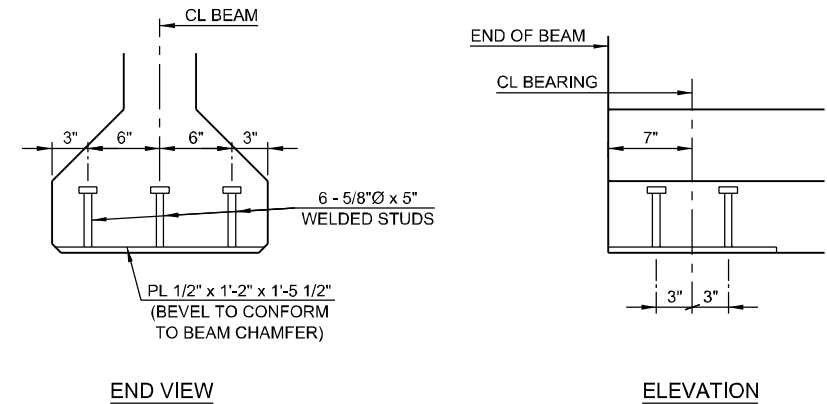
STATE JOB NO. 21006(04) SHEET NO. B021

SEMINOLE CO. U.S. 270



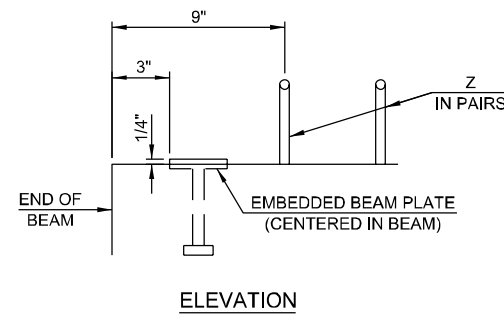
INTENTIONALLY ROUGHENED SURFACE DETAILS

INTENTIONALLY ROUGHEN THE ENTIRE TOP SURFACE OF P.C. BEAM TO A MINIMUM HEIGHT OF 1/4" OVER A MAXIMUM PITCH OF 2" MEASURED LONGITUDINALLY ALONG THE LENGTH OF THE BEAM. PROVIDE A CREST AND TROUGH ASSOCIATED WITH THE HEIGHT OF NOT LESS THAN 1/2". PRODUCE THE ROUGHENED SURFACE BY USING A SPECIAL TROWEL TO FORM ONE OF THE SURFACES SHOWN IN THE DETAILS, BY CLEANING THE CONCRETE SURFACE WITH A STIFF WIRE BRUSH (OR BLASTING) TO EXPOSE THE AGGREGATE TO A HEIGHT OF 1/4", OR BY USING ANOTHER APPROVED METHOD. SUBMIT THE METHOD TO BE USED FOR APPROVAL BY THE ENGINEER. REPAIR ANY DAMAGE TO REINFORCEMENT'S EPOXY COATING BEFORE PLACEMENT OF DECK CONCRETE.

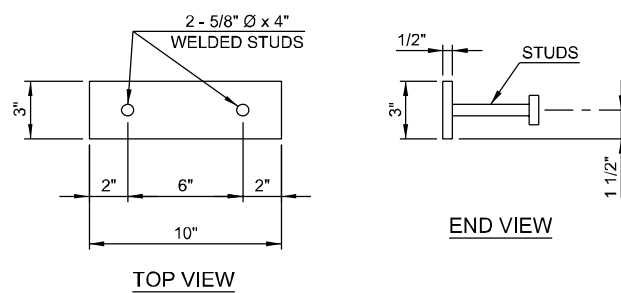


EMBEDDED SOLE PLATE DETAILS

NOTE: PROVIDE AN EMBEDDED SOLE PLATE AT EACH END OF THE BEAM.



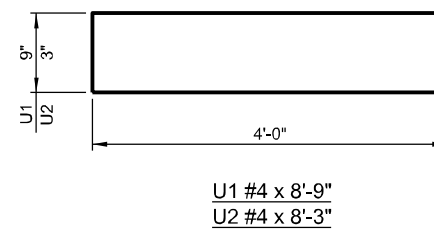
ELEVATION



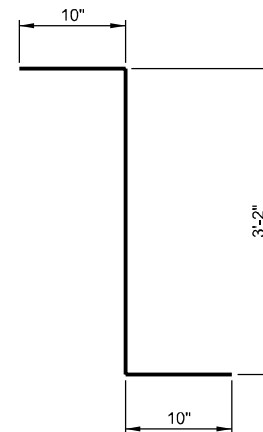
TOP VIEW

EMBEDDED BEAM PLATE DETAILS

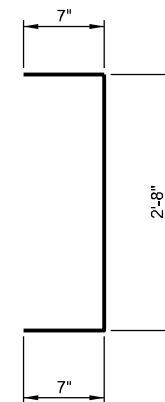
NOTE: PROVIDE AN EMBEDDED BEAM PLATE AT EXPANSION ENDS ONLY.



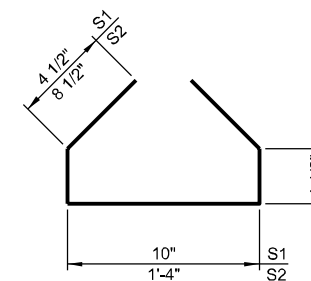
U1 #4 x 8'-9"
U2 #4 x 8'-3"



Z #5 x 4'-10"
(EPOXY COATED)



C #5 x 3'-10"



S1 #4 x 2'-4"
S2 #4 x 3'-6"

BRIDGE "A" U.S. 270 OVER CARTER CREEK

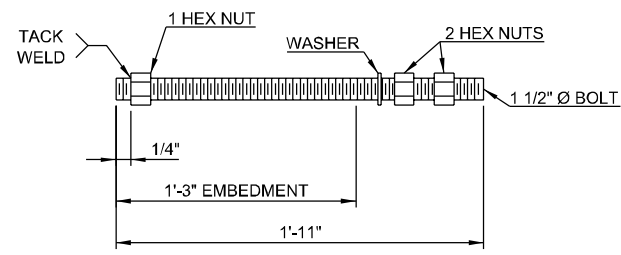
DESIGN	JSH	10-15
DRAWN	MRM	10-15
CHECKED	LWN	10-16
APPROVED	-	-
SQUAD	TT	

OKLAHOMA DEPARTMENT OF TRANSPORTATION

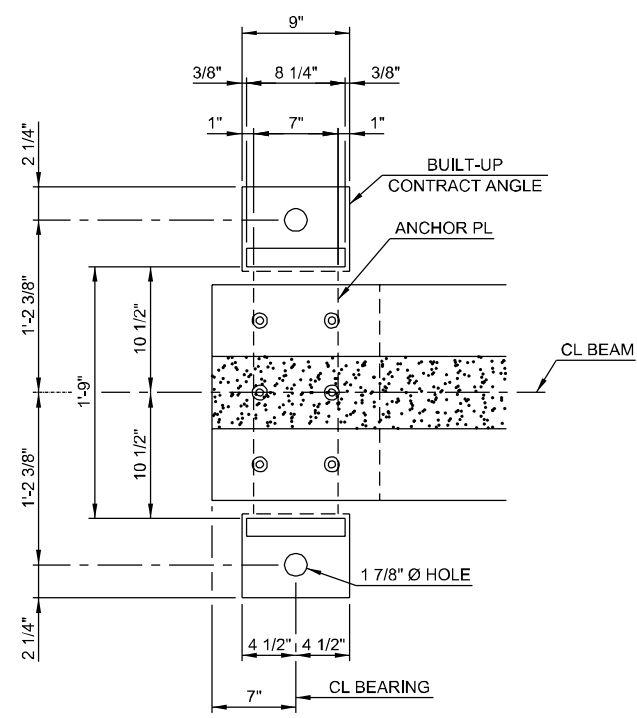
BEAM DETAILS
(SHEET 3 OF 3)

STATE JOB NO. 21006(04) SHEET NO. B022

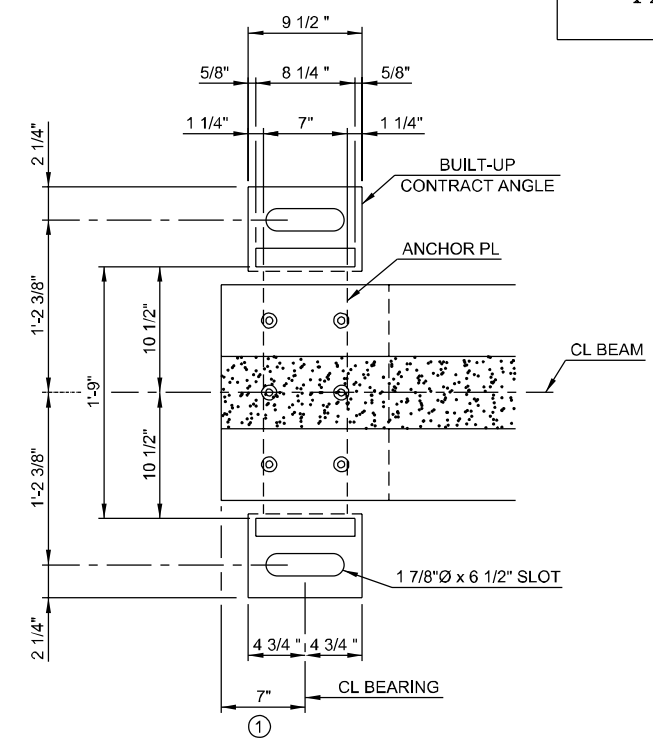
SEMINOLE CO. U.S. 270



ANCHOR BOLT DETAIL

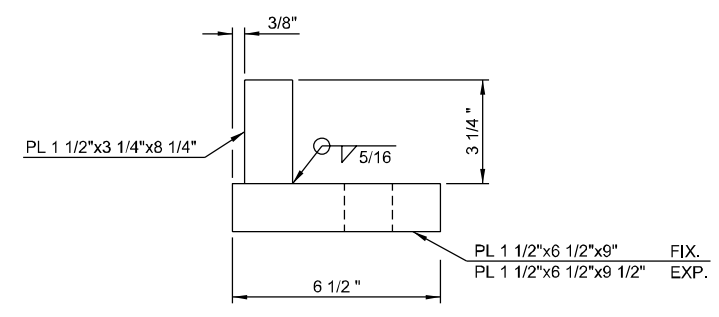


FIXED BEARING PLAN

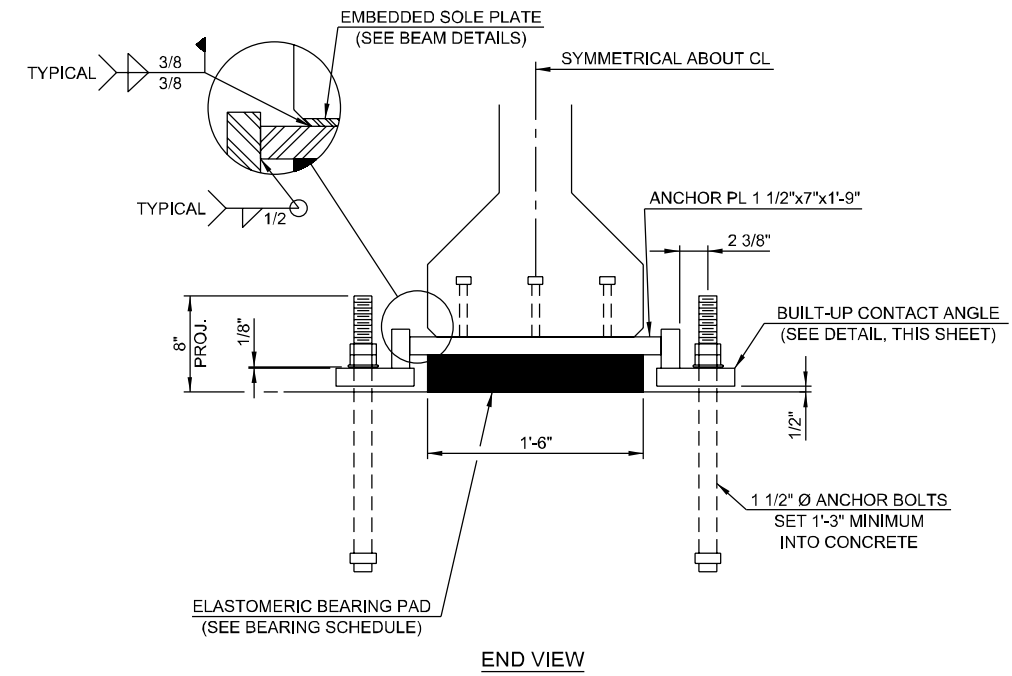


EXPANSION BEARING PLAN

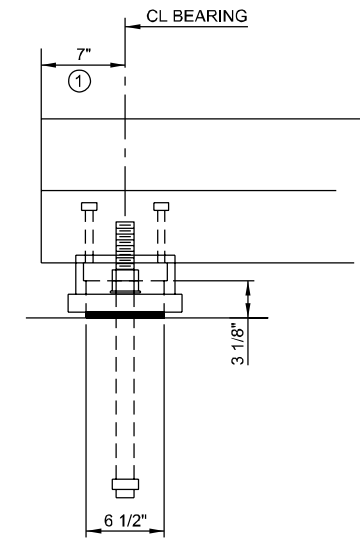
① CENTER ANCHOR BOLTS IN SLOTS DURING SETTING OF BEAMS. DIMENSION MAY VARY DEPENDING ON TEMPERATURE AT THE TIME OF BEAM SETTING.



BUILT-UP CONTACT ANGLE DETAIL



END VIEW



SIDE VIEW

BEARING DETAILS

BEARING ASSEMBLY NOTES:
 PROVIDE STRUCTURAL STEEL FOR ANCHOR PLATES AND BUILT-UP CONTACT ANGLES IN ACCORDANCE WITH ASTM A240 (AUSTENITIC STAINLESS STEEL, TYPE 316, CHARPY V-NOTCH TESTING NOT REQUIRED). FOR ANCHOR BOLTS, PROVIDE CONTINUOUSLY THREADED BARS IN ACCORDANCE WITH ASTM A320, CLASS 2, GRADE B8M (AUSTENITIC STAINLESS STEEL, TYPE 316, CHARPY V-NOTCH TESTING NOT REQUIRED). USE AUSTENITIC STAINLESS STEEL NUTS AND WASHERS CONFORMING TO ASTM A194, GRADE 8M AND ASTM A320, RESPECTIVELY. PERFORM ALL WELDING CONSISTENT WITH PROCEDURES FOR STAINLESS STEEL.

BEARING SCHEDULE			
60 DUROMETER ELASTOMERIC BEARING PAD			
SIZE (TxLxW)	COVER LAYER	INNER LAYER	LAMINATE LAYER
3 1/8"x6 1/2"x1'-6"	2 - 1/4"	5 - 3/8"	6 - 1/8"

BRIDGE "A" U.S. 270 OVER CARTER CREEK

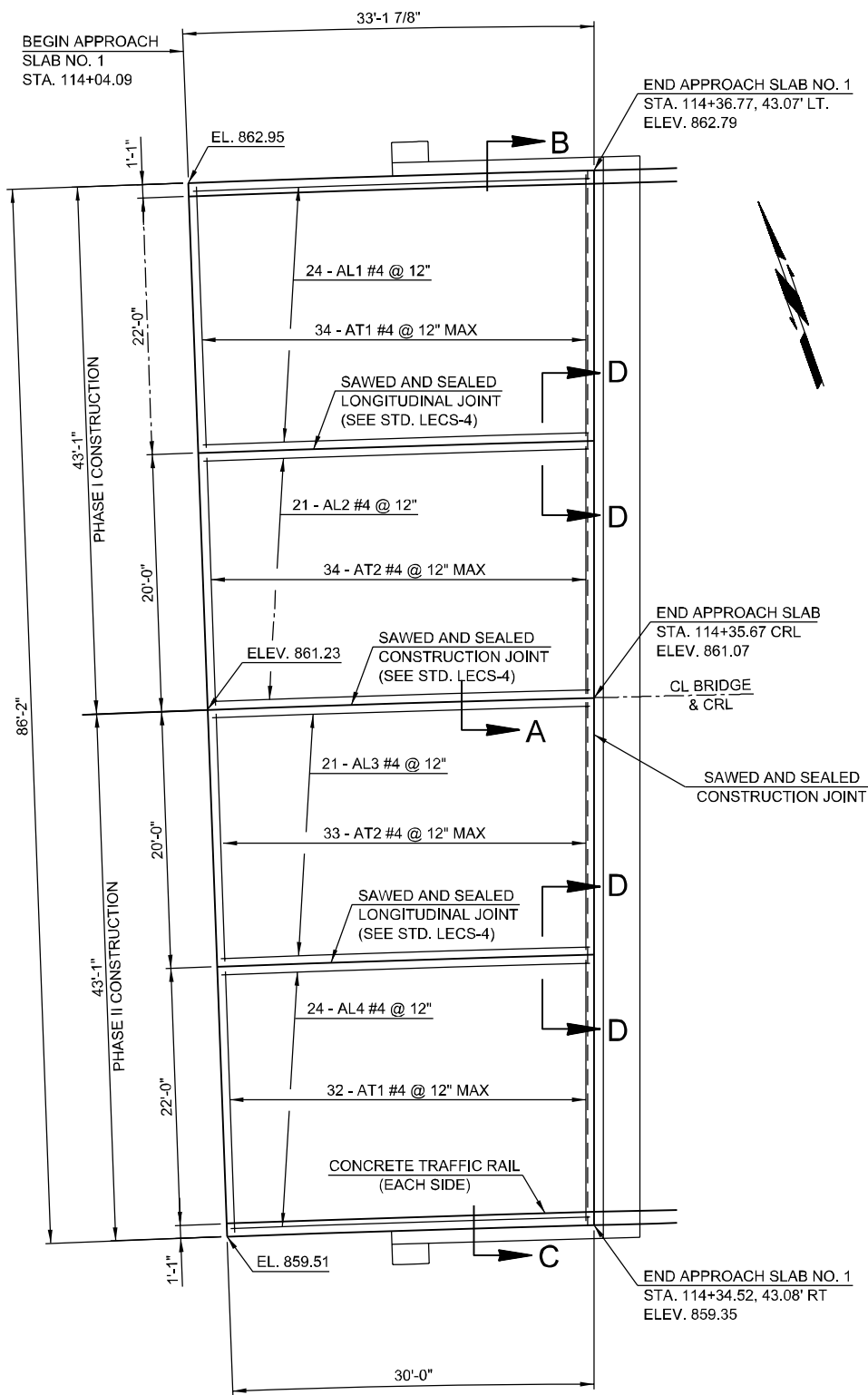
DESIGN	JSH	7-15
DRAWN	MRM	7-15
CHECKED	LWN	9-16
APPROVED	-	-
SQUAD	TT	

OKLAHOMA DEPARTMENT OF TRANSPORTATION

BEARING DETAILS

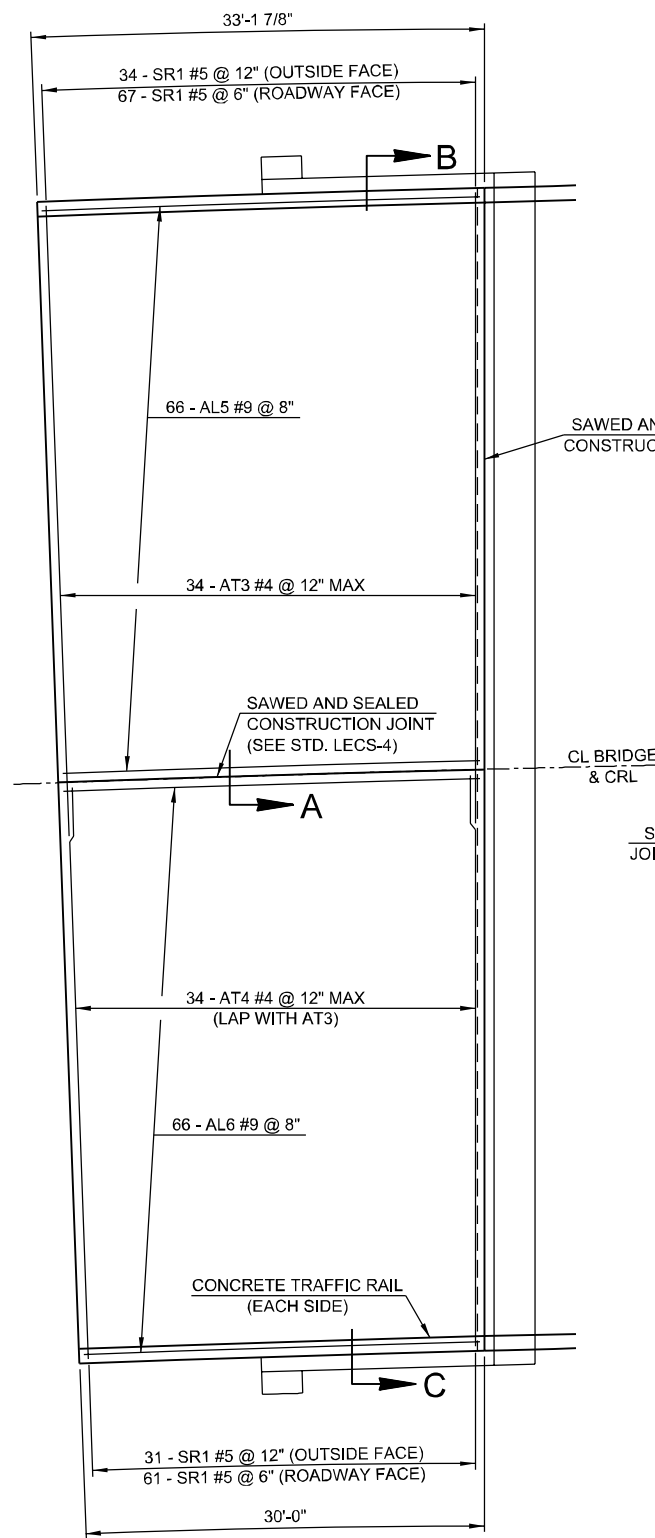
STATE JOB NO. 21006(04) SHEET NO. B023
 SEMINOLE CO. U.S. 270

11/7/2018 P:\11399\200-11399-14001\CAD\SheetFiles\21006 (04) Bridge\B023-2100604-BR-A-Bearing.dgn



TOP REINFORCING MAT DETAIL

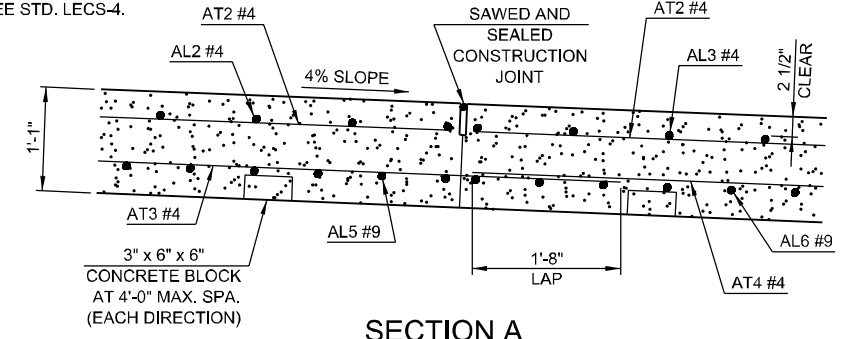
APPROACH SLAB NO. 1



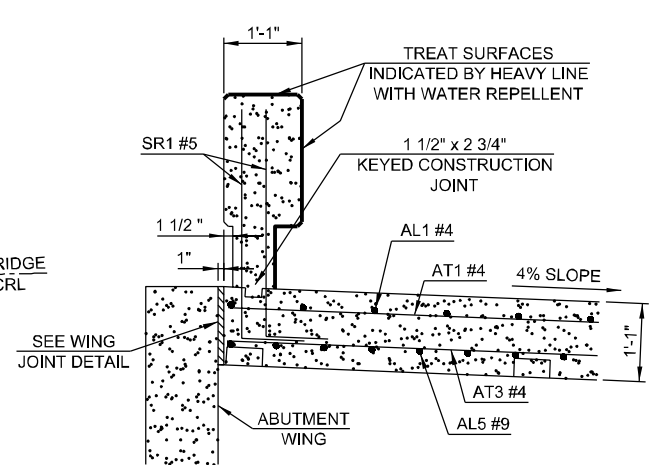
BOTTOM REINFORCING MAT DETAIL

NOTE:
FOR ADDITIONAL DETAIL OF APPROACH SLAB AT ABUTMENT, SEE LONGITUDINAL SECTION AND DIAPHRAGM DETAILS.
FOR ADDITIONAL DETAIL OF CONCRETE TRAFFIC RAIL SEE STD. TR4-2.

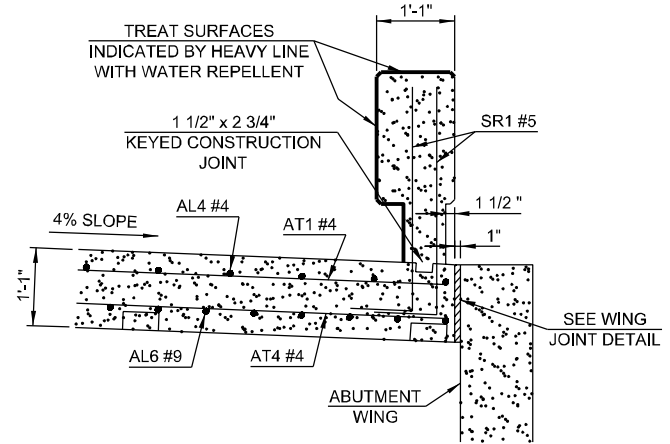
NOTE:
PLACE REINFORCING IN THE TOP OF THE APPROACH SLAB 2" FROM EITHER SIDE OF THE SAWED AND SEALED LONGITUDINAL AND CONSTRUCTION JOINTS. FOR ADDITIONAL DETAILS OF JOINTS, SEE STD. LECS-4.



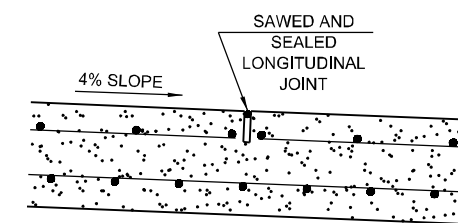
SECTION A



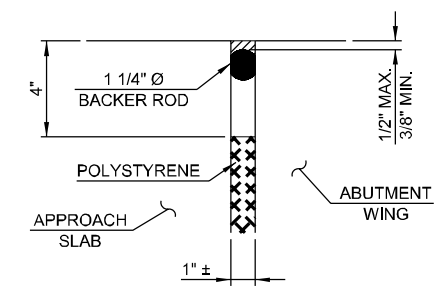
SECTION B



SECTION C



SECTION D



WING JOINT DETAIL

APPROACH SLAB NO. 1 BAR LIST						
MARK	SIZE	NO.	FORM	LENGTH	LENGTH VARIES	
EPOXY COATED REINFORCING BARS						
AT1	#4	66	STR	22'-9"		
AT2	#4	67	STR	19'-8"		
AT3	#4	34	STR	44'-9"		
AT4	#4	34	STR	42'-9"		
AL1	#4	24	STR	32'-4" AVG.	31'-11" TO 32'-9"	
AL2	#4	21	STR	30'-7" AVG.	31'-3" TO 31'-11"	
AL3	#4	21	STR	30'-10" AVG.	30'-6" TO 31'-2"	
AL4	#4	24	STR	30'-1" AVG.	29'-8" TO 30'-6"	
AL5	#9	66	STR	32'-0" AVG.	31'-3" TO 32'-9"	
AL6	#9	66	STR	30'-5" AVG.	29'-8" TO 31'-2"	
SR1	#5	193	BNT	4'-1"		

① FOR BAR BEND, SEE STD. TR4-2

APPROACH SLAB NO. 1 QUANTITIES		
DESCRIPTION	UNIT	TOTAL
APPROACH SLAB	SY	302.40
SAW-CUT GROOVING	SY	294.80
CONCRETE RAIL (TR4)	LF	63.20
WATER REPELLENT (VISUALLY INSPECTED)	SY	29.00

② THE DEPARTMENT CONSIDERS THE COSTS OF CONCRETE, REINFORCING STEEL (INCLUDING SR1 BARS), BACKER ROD, RAPID CURE JOINT SEALANT, POLYSTYRENE AND POLYETHYLENE SHEETING TO BE INCLUDED IN THE CONTRACT UNIT PRICE OF APPROACH SLAB. THERE IS AN ESTIMATED 109.2 C.Y. OF CLASS AA CONCRETE AND AN ESTIMATED 20,560 LB. OF EPOXY COATED REINFORCING STEEL IN APPROACH SLAB NO. 1.

BRIDGE "A" U.S. 270 OVER CARTER CREEK

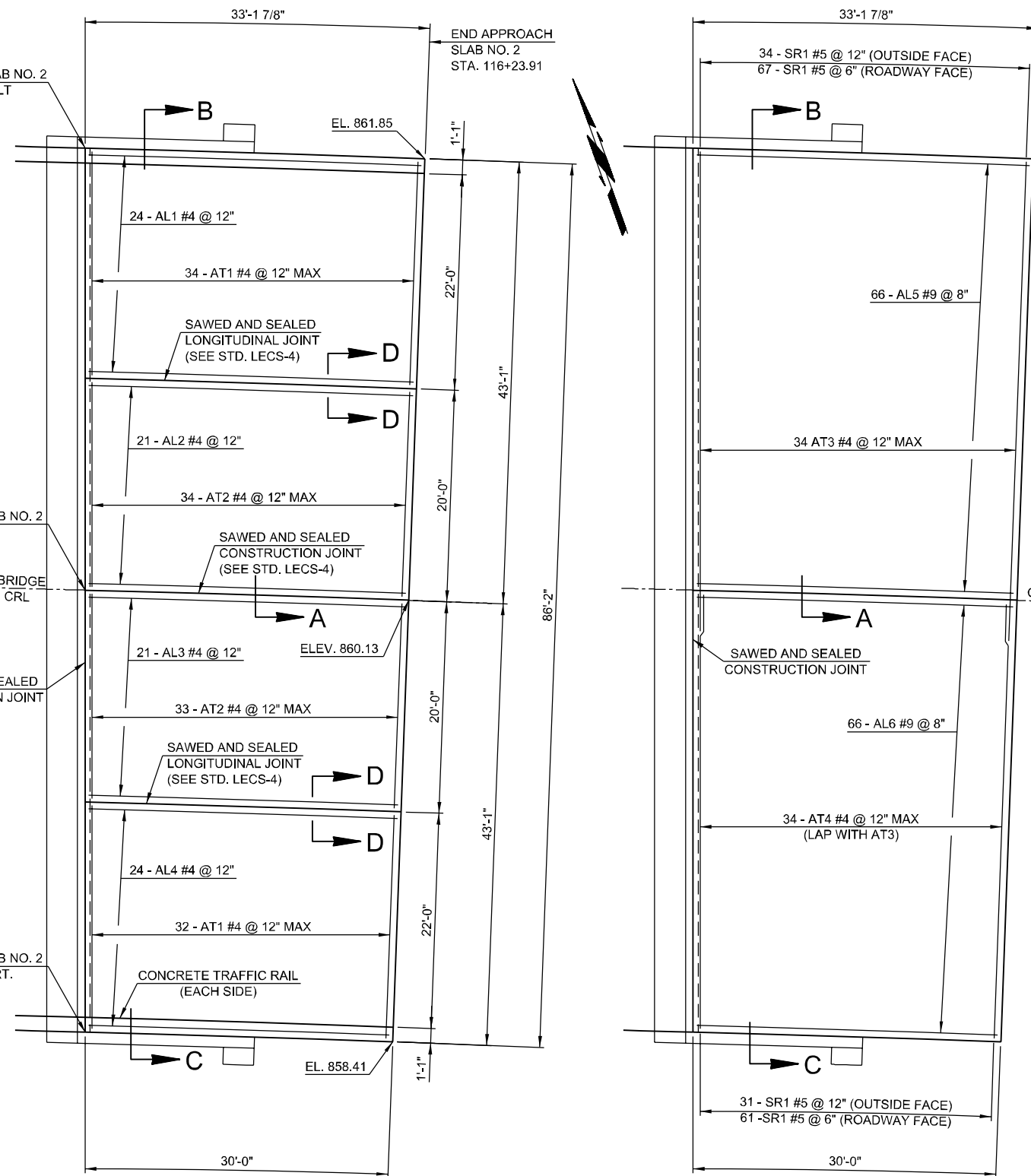
DESIGN	JSH	7-15	OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN	MRM	7-15	
CHECKED	LWN	10/16	
APPROVED	-	-	
SQUAD	TT	-	
			APPROACH SLAB NO. 1 DETAILS
			STATE JOB NO. 21006(04) SHEET NO. B024
			SEMINOLE CO. U.S. 270

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BEGIN APPROACH SLAB NO. 2
STA. 115+91.23, 43.07' LT
ELEV. 862.02

BEGIN APPROACH SLAB NO. 2
STA. 115+92.33 CRL
ELEV. 860.29

BEGIN APPROACH SLAB NO. 2
STA. 115+93.48, 43.08' RT.
ELEV. 858.56

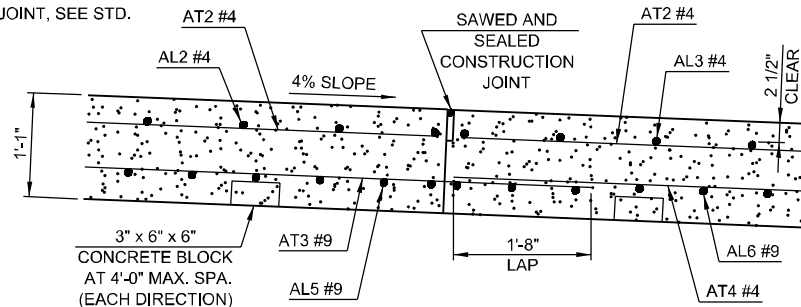


TOP REINFORCING MAT DETAIL

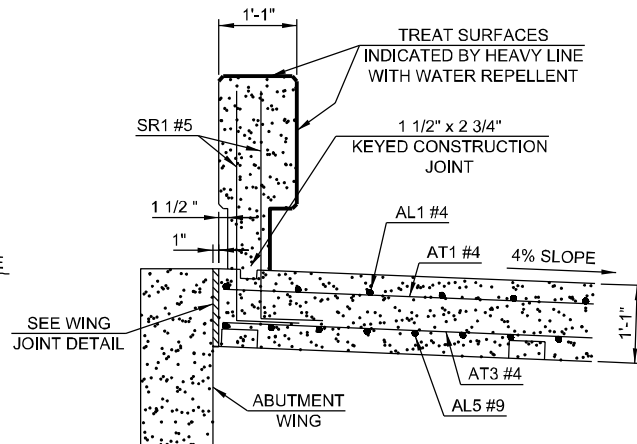
BOTTOM REINFORCING MAT DETAIL

APPROACH SLAB NO. 2

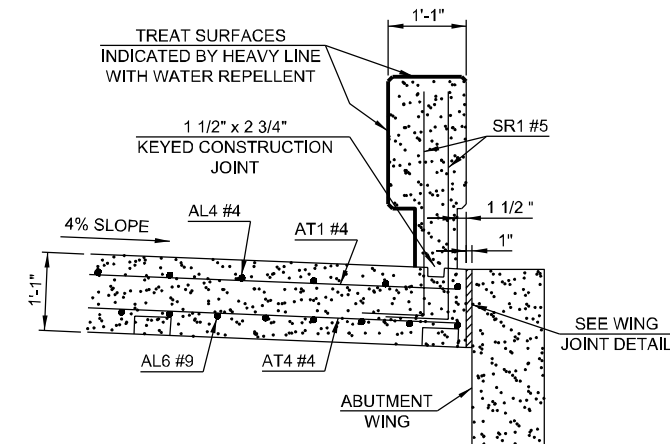
NOTE:
PLACE REINFORCING IN THE TOP OF THE APPROACH SLAB 2" FROM EITHER SIDE OF THE SAWED AND SEALED LONGITUDINAL AND CONSTRUCTION JOINT. FOR ADDITIONAL DETAILS OF LONGITUDINAL JOINT, SEE STD. LECS-4.



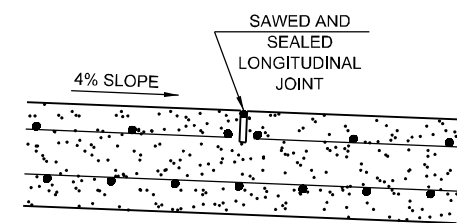
SECTION A



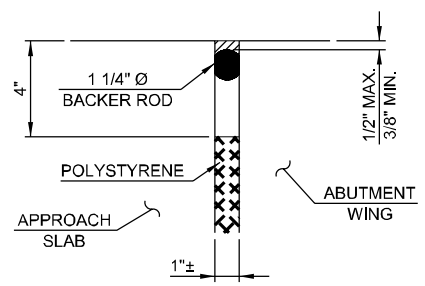
SECTION B



SECTION C



SECTION D



WING JOINT DETAIL

NOTE:
FOR ADDITIONAL DETAIL OF APPROACH SLAB AT ABUTMENT, SEE LONGITUDINAL SECTION AND DIAPHRAGM DETAILS.
FOR ADDITIONAL DETAIL OF CONCRETE TRAFFIC RAIL SEE STD. TR4-2.

APPROACH SLAB NO. 2 BAR LIST

MARK	SIZE	NO.	FORM	LENGTH	LENGTH VARIES
EPOXY COATED REINFORCING BARS					
AT1	#4	66	STR	22'-9"	
AT2	#4	67	STR	19'-8"	
AT3	#4	34	STR	44'-9"	
AT4	#4	34	STR	42'-9"	
AL1	#4	24	STR	32'-4" AVG.	31'-11" TO 32'-9"
AL2	#4	21	STR	30'-7" AVG.	31'-3" TO 31'-11"
AL3	#4	21	STR	30'-10" AVG.	30'-6" TO 31'-2"
AL4	#4	24	STR	30'-1" AVG.	29'-8" TO 30'-6"
AL5	#9	66	STR	32'-0" AVG.	31'-3" TO 32'-9"
AL6	#9	66	STR	30'-5" AVG.	29'-8" TO 31'-2"
SR1	#5	193	BNT	4'-1"	

① FOR BAR BEND, SEE STD. TR4-2

APPROACH SLAB NO. 2 QUANTITIES

DESCRIPTION	UNIT	TOTAL
APPROACH SLAB	SY	302.40
SAW-CUT GROOVING	SY	294.80
CONCRETE RAIL (TR4)	LF	63.20
WATER REPELLENT (VISUALLY INSPECTED)	SY	29.00

② THE DEPARTMENT CONSIDERS THE COSTS OF CONCRETE, REINFORCING STEEL (INCLUDING SR1 BARS), BACKER ROD, RAPID CURE JOINT SEALANT, POLYSTYRENE AND POLYETHYLENE SHEETING TO BE INCLUDED IN THE CONTRACT UNIT PRICE OF APPROACH SLAB. THERE IS AN ESTIMATED 109.2 C.Y. OF CLASS AA CONCRETE AND AN ESTIMATED 20,560 LB. OF EPOXY COATED REINFORCING STEEL IN APPROACH SLAB NO. 2.

BRIDGE "A" U.S. 270 OVER CARTER CREEK

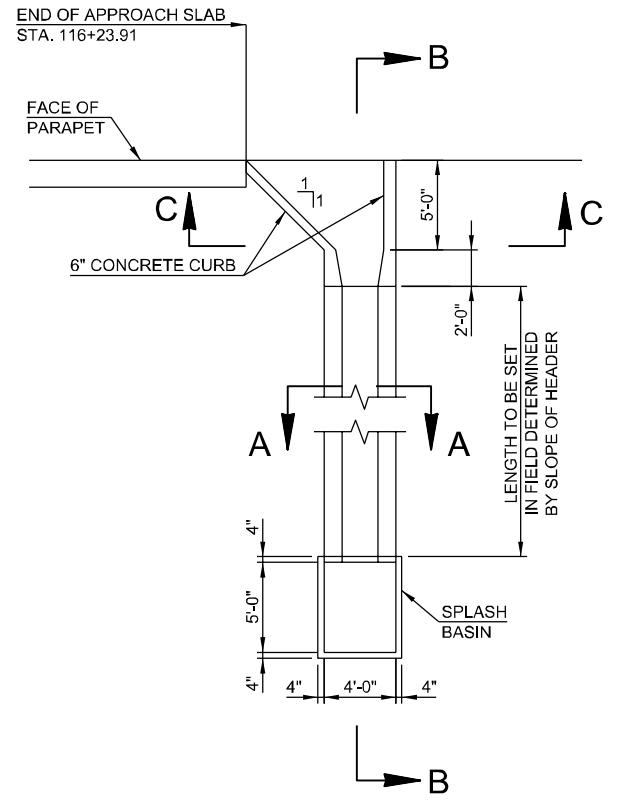
DESIGN	JSH	7-15
DRAWN	MRM	7-15
CHECKED	LWN	10-16
APPROVED	-	-
SQUAD	TT	

OKLAHOMA DEPARTMENT OF TRANSPORTATION

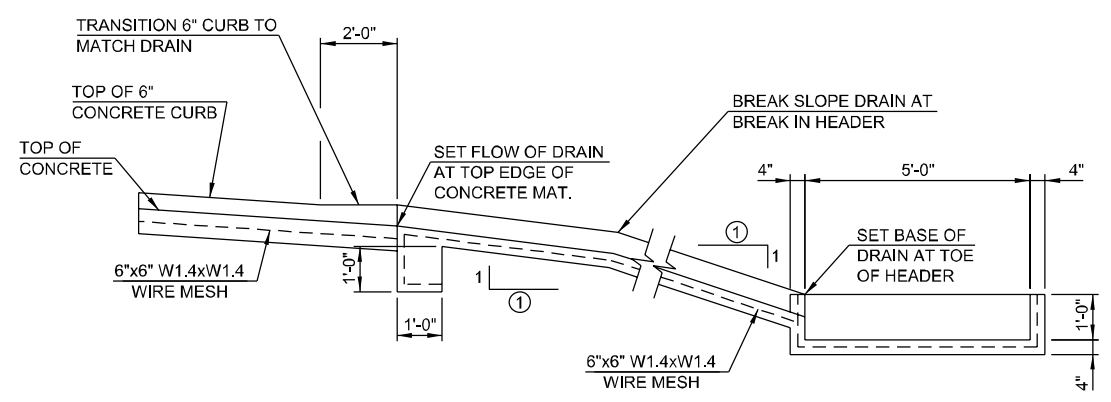
APPROACH SLAB NO. 2 DETAILS

STATE JOB NO. 21006(04) SHEET NO. B025

SEMINOLE CO. U.S. 270

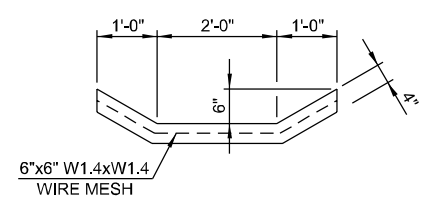


PLAN
SOUTHEAST SIDE

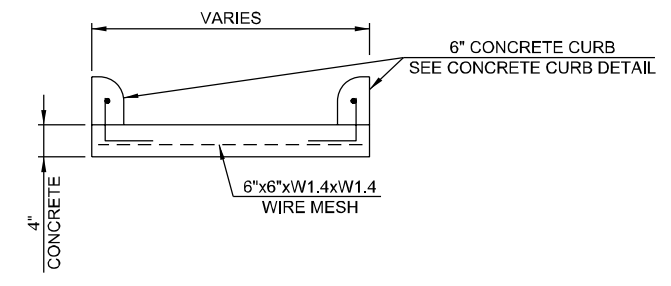


SECTION B-B

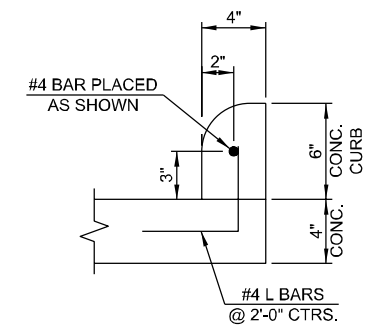
① SLOPE TO MATCH SLOPE OF HEADER



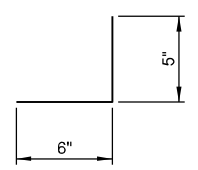
SECTION A-A



SECTION C-C



DETAIL OF CONCRETE CURB



L BAR #4 x 11"

NOTE:
 SLOPE DRAIN, SPLASH BASIN AND CONCRETE CURB SHALL BE CONSTRUCTED USING CLASS "C" CONCRETE AS SHOWN ON THIS SHEET. ALL COSTS OF THE SLOPE DRAIN, SPLASH BASIN AND CURB INCLUDING EXCAVATION, WIRE MESH AND REINFORCING STEEL SHALL BE INCLUDED IN PAY ITEM "CLASS "C" CONCRETE".

BRIDGE "A" U.S. 270 OVER CARTER CREEK

DESIGN	LWN	11-16
DRAWN	MRM	11-16
CHECKED	JSH	1-17
APPROVED	-	-
SQUAD	TT	

OKLAHOMA DEPARTMENT OF TRANSPORTATION

DETAILS OF DRAIN AT END OF BRIDGE

STATE JOB NO. 21006(04) SHEET NO. B026

SEMINOLE CO. U.S. 270

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 11/7/2018

FINAL FIELD MEETING

11/7/2018

CURVE DATA

CRL CURVE #3
 P.I. STA. 121+10.09
 $\Delta = 28^{\circ}33'58.31''$ RT.
 $D = 1^{\circ}15'00.00''$
 $T = 4574.3195'$
 $L = 7190.6462'$
 $R = 3000.00'$
 $E = 95.69'$
 e Super = 0.0401'

INDEX OF SHEETS - BRIDGE "B"

AB01-AB02 GENERAL NOTES AND SUMMARY OF PAY
 QUANTITIES - BRIDGES A, B & C
 B027 GENERAL PLAN AND ELEVATION
 B028-B030 DETAILS OF R.C. BOX

THE FOLLOWING STANDARDS WILL BE REQUIRED:

SB1-4-2
 RCB-E3-H11-0-1-01E
 RCB-E3-H11-0-2-01E
 RCB-E3-H12-0-1-01E
 RCB-E3-H12-0-2-01E
 RCB-CW3-D8-0-01E

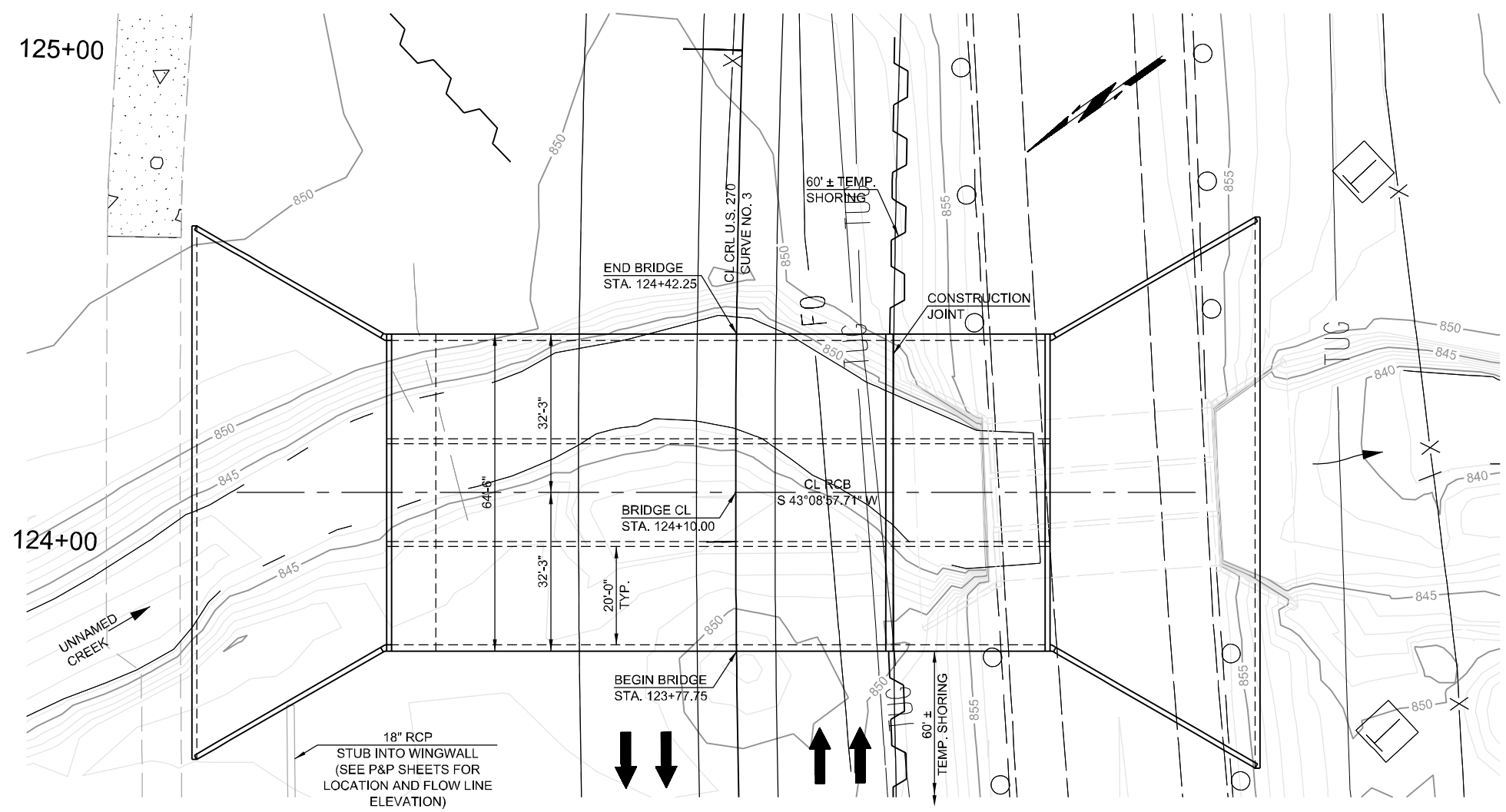
DESIGN DATA

- AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 7TH EDITION WITH INTERIMS THROUGH 2016.
- DESIGNED FOR HL-93 LOADING AND ODOT OVERLOAD TRUCK.
- MATERIALS:
 CONCRETE (CLASS AA) $f_c = 4$ KSI
 REINFORCING STEEL $f_y = 60$ KSI

HYDRAULIC DATA

TOTAL DRAINAGE AREA 15.01 SQ. MILES
 CONTROLLED DRAINAGE AREA 5.25 SQ. MILES
 EFFECTIVE DRAINAGE AREA 9.76 SQ. MILES
 RDWY. OT ELEV. 858.35 FT

Q2	668.67 CFS
V2	1.48 FPS
C.H.W. 2	846.97 FT
Q5	1593.88 CFS
V5	2.84 FPS
C.H.W. 5	848.92 FT
Q10	1905.74 CFS
V10	3.06 FPS
C.H.W. 10	850.01 FT
Q25	2652.77 CFS
V25	3.84 FPS
C.H.W. 25	851.30 FT
Q50	3354.96 CFS
V50	4.75 FPS
C.H.W. 50	852.37 FT
Q100	3964.85 CFS
V100	5.51 FPS
C.H.W. 100	852.28 FT
Q500	5903.79 CFS
V500	8.20 FPS
CHW500	853.96 FT
Q OT > Q500	

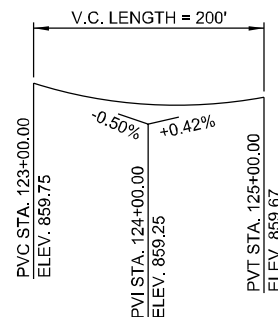


18" RCP
 STUB INTO WINGWALL
 (SEE P&P SHEETS FOR
 LOCATION AND FLOW LINE
 ELEVATION)

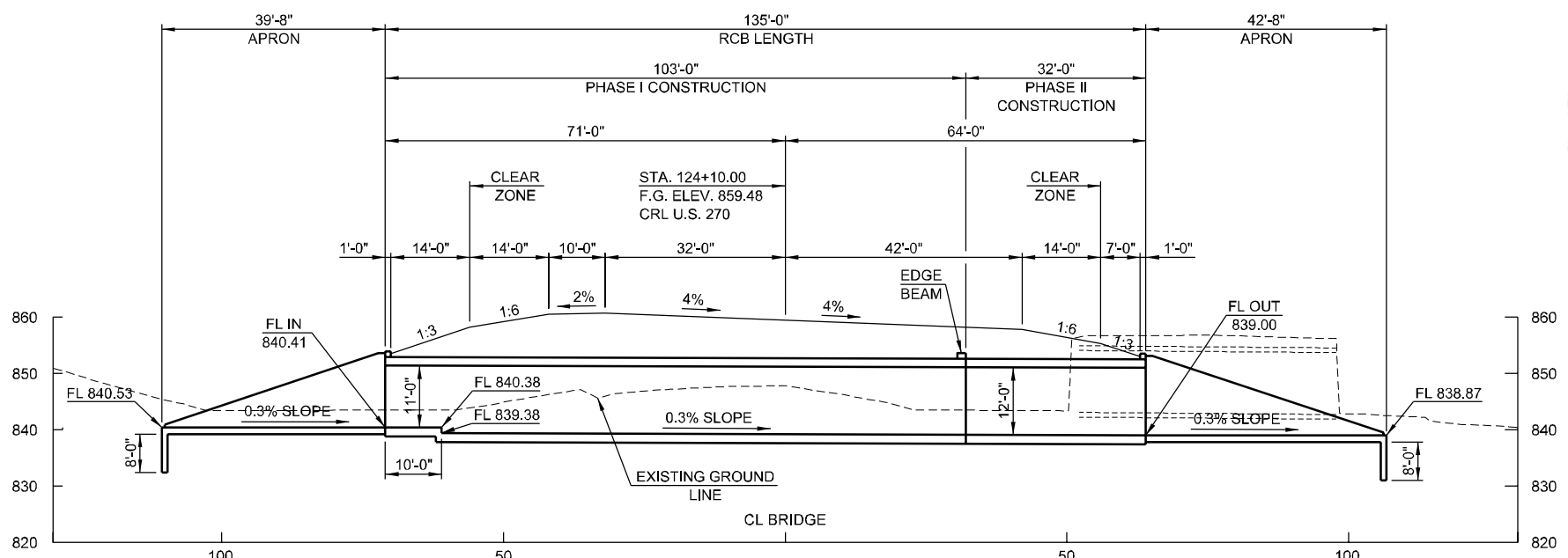
BM 10: #6 BAR 30" LONG
 SET FLUSH, 63' RT
 STA. 121+44.89, EL. 852.70

PLAN
 1"=15'

BM 11: CUT "X" WINGWALL
 OF BOX, 26' RT
 STA. 127+62.91, EL. 856.51



PROFILE GRADE DATA



ELEVATION
 1"=15'

QUANTITIES - BRIDGE "B"

ITEM	UNIT	① BARREL	② END SECTIONS	TOTAL
UNCLASSIFIED EXCAVATION	CY	3,670.00	3,450.00	7,120.00
AGGREGATE BASE TYPE A	CY	1,200.00		1,200.00
STRUCTURAL EXCAVATION UNCLASSIFIED	CY	1,290.00	400.00	1,690.00
CLASS AA CONCRETE	CY	1,270.00	430.00	1,700.00
REINFORCING STEEL	LB	253,410.00	55,860.00	309,270.00
REMOVAL OF EXISTING BRIDGE STRUCTURE	LSUM			1.00

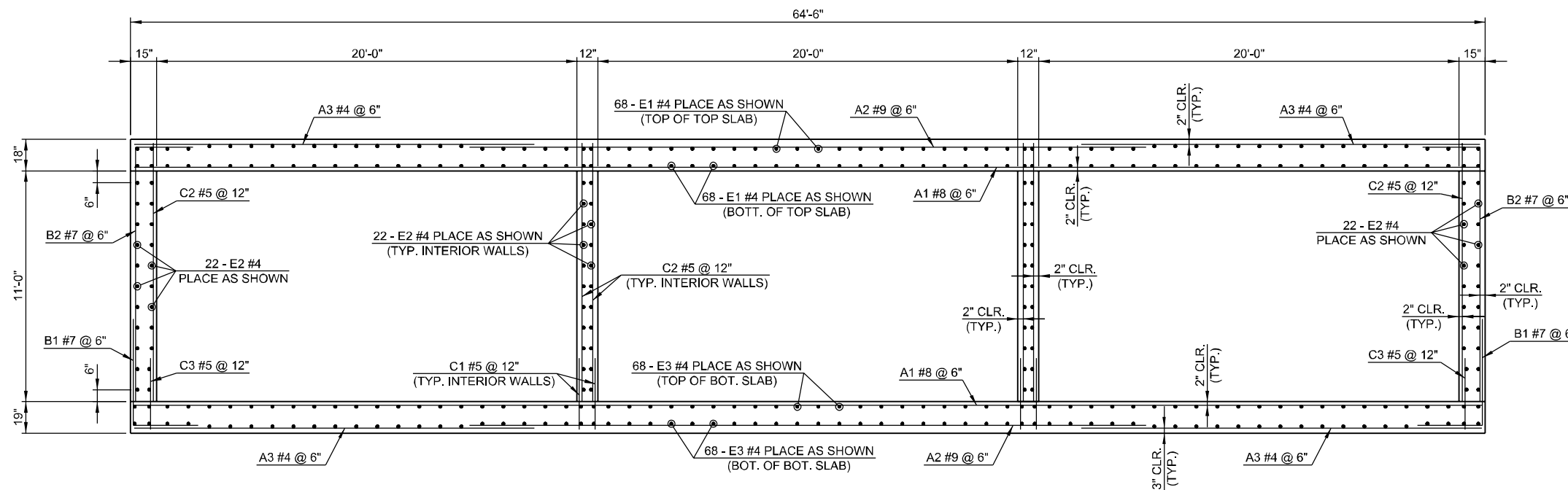
- ① INCLUDES 11' AND 12' TALL BARRELS, DROP INLET, AND TEMPORARY HEADWALL.
 ② INCLUDES APRON, WINGWALLS, CURTAIN WALLS, AND FINAL HEADWALLS.

BRIDGE "B" U.S. 270 OVER UNNAMED CREEK

DESIGN	LWN	3-15
DRAWN	MRM	3-15
CHECKED	JSH	1-17
APPROVED	-	-
SQUAD	TT	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
 GENERAL PLAN AND ELEVATION
 3 CELL - 20'x11'x10' RCB & 20'x12'x12.5' RCB,
 SKEW 0 DEGREES CL STA. 124+10.00
 STATE JOB NO. 21006(04) SHEET NO. B027

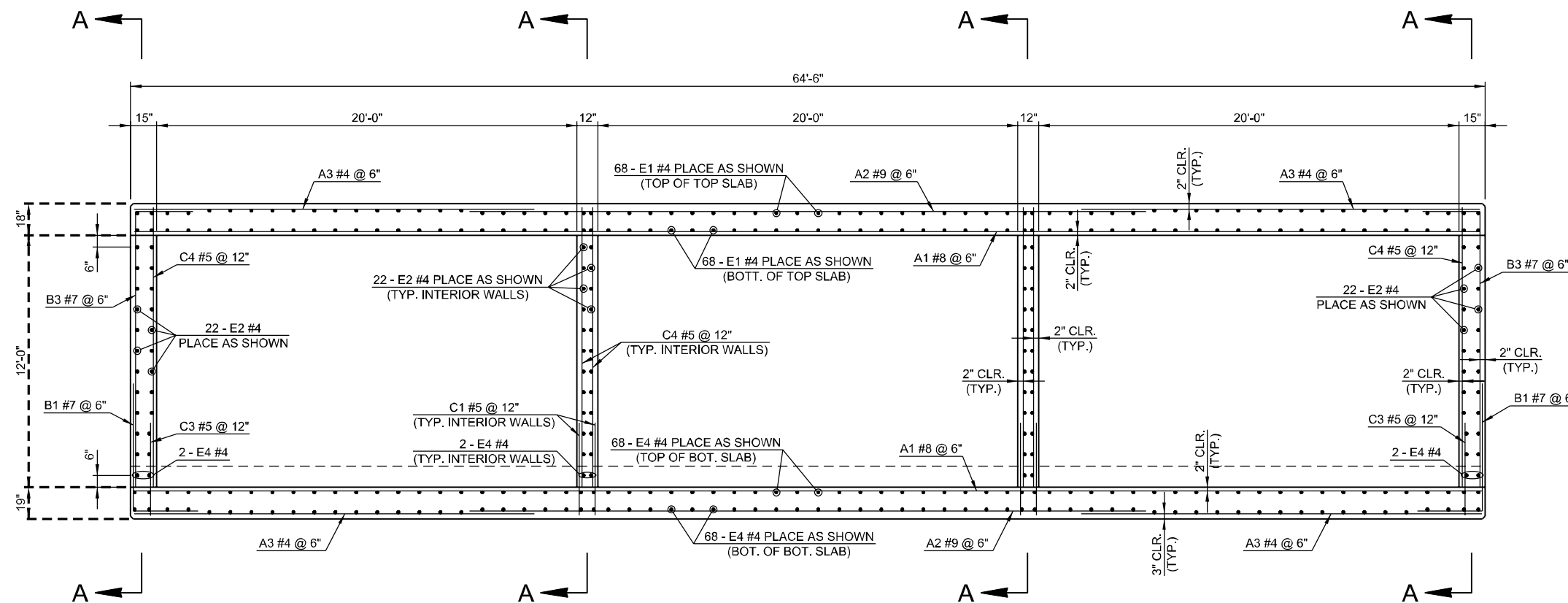
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SECTION
AT 11' TALL BARREL

NOTES:

1. ALL CONSTRUCTION AND MATERIAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE 2009 OKLAHOMA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
2. ALL CONCRETE EDGES SHALL HAVE A 1 1/2" CHAMFER UNLESS OTHERWISE SHOWN OR NOTED. ALL CHAMFER STRIPS SHALL BE SIZED LUMBER.
3. ALL REINFORCING STEEL SHALL HAVE A 2" MINIMUM CLEAR COVER UNLESS OTHERWISE SHOWN.
4. REINFORCING STEEL SHALL BE CONTINUOUS THROUGH THE TRANSVERSE CONSTRUCTION JOINT AND EXTEND A MIN. OF 24" INTO ADJACENT SECTION.



SECTION
AT 12' TALL BARREL

NOTE:

FOR SECTION A-A AND DETAILS OF DROP INLET SEE SHEET B029.

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BRIDGE "B" U.S. 270 OVER UNNAMED CREEK

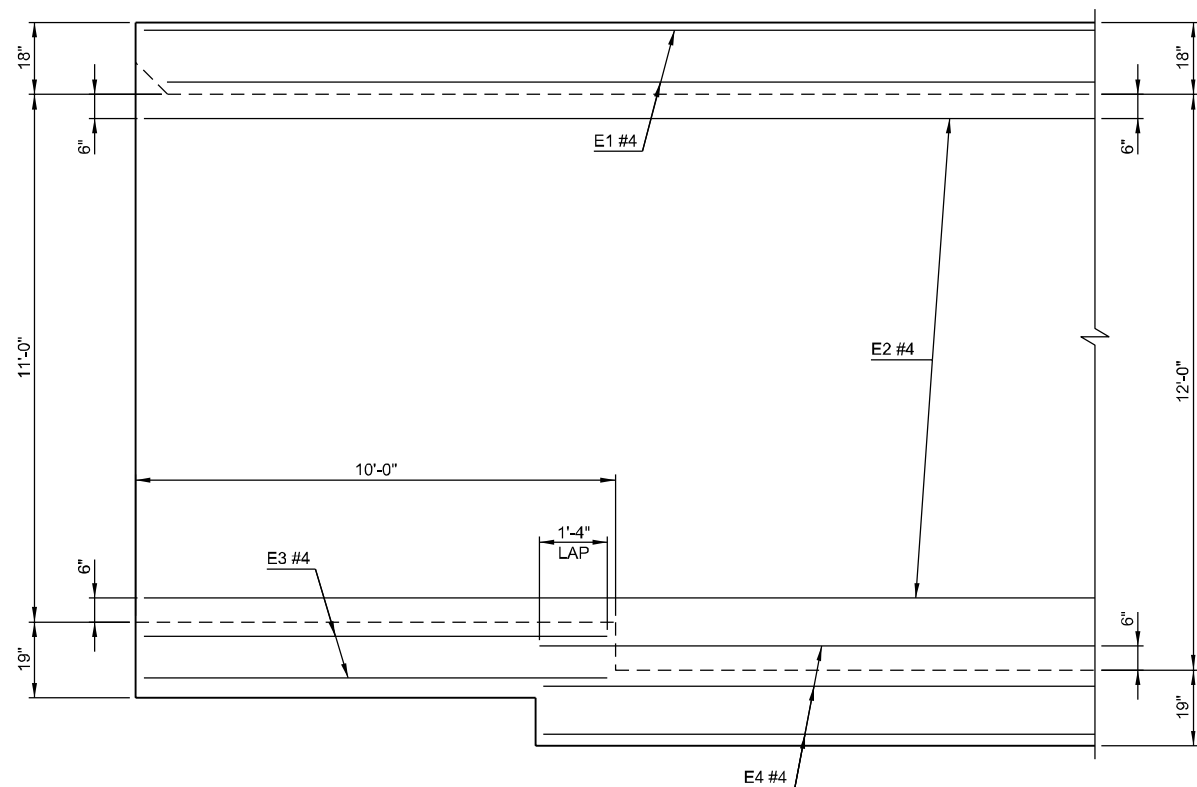
DESIGN	LWN	12-16
DRAWN	MRM	12-16
CHECKED	JSH	1-17
APPROVED	-	-
SQUAD	TT	

OKLAHOMA DEPARTMENT OF TRANSPORTATION

DETAILS OF R.C. BOX
(SHEET 1 OF 3)

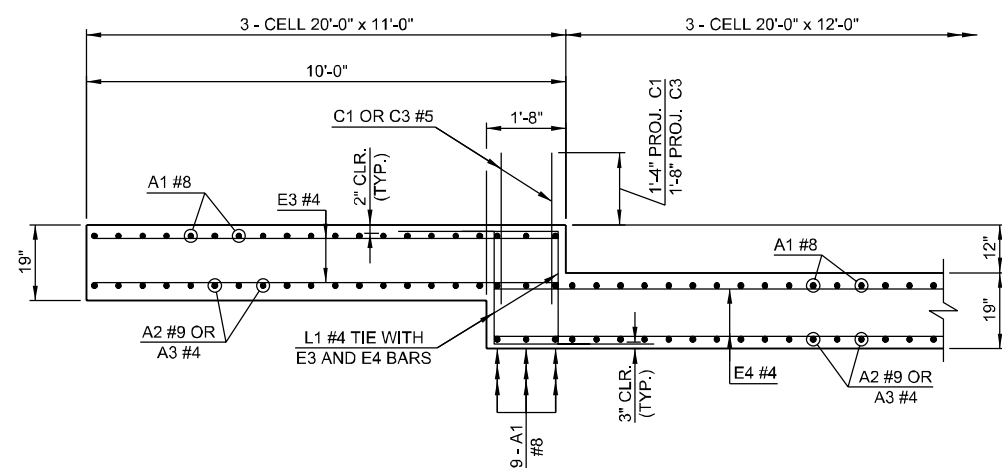
STATE JOB NO. 21006(04) SHEET NO. B028

SEMINOLE CO. U.S. 270

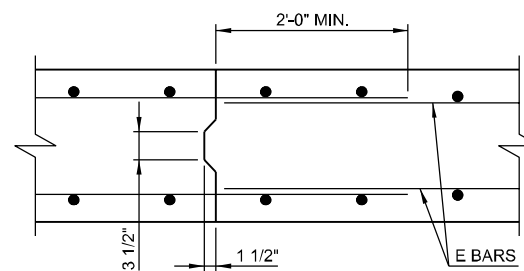


SECTION A-A

NOTE:
VERTICAL REINFORCING OMITTED FOR CLARITY.



DETAILS OF DROP INLET



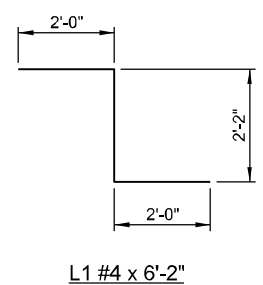
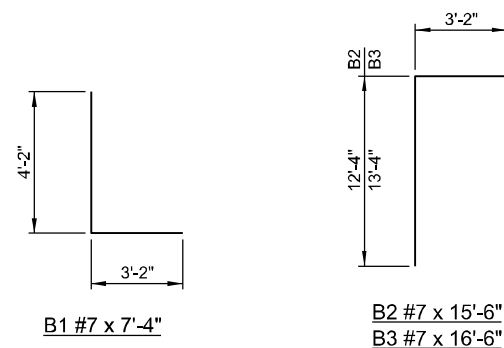
TRANSVERSE CONSTRUCTION JOINT

BARREL BAR LIST - PHASE I

MARK	SIZE	NO.	FORM	LENGTH
① A1	#8	419	STR	70'-11"
A2	#9	409	STR	33'-5"
A3	#4	818	STR	18'-4"
B1	#7	418	BNT	7'-4"
B2	#7	38	BNT	15'-6"
B3	#7	380	BNT	16'-6"
C1	#5	420	STR	2'-8"
C2	#5	68	STR	12'-4"
C3	#5	212	STR	3'-0"
C4	#5	564	STR	13'-4"
② E1	#4	136	STR	106'-10"
② E2	#4	88	STR	106'-10"
② E3	#4	136	STR	9'-8"
② E4	#4	144	STR	98'-6"
L1	#4	136	BNT	6'-2"
③ ④ CH	#4	4	STR	66'-8"
③ ⑤ CL1	#4	68	BNT	4'-4"
③ ⑤ CL2	#4	68	BNT	4'-3"
⑥ WP1	#5	16	STR	5'-0"

BARREL BAR LIST - PHASE II

MARK	SIZE	NO.	FORM	LENGTH
① A1	#8	128	STR	70'-11"
A2	#9	127	STR	33'-5"
A3	#4	254	STR	18'-4"
B1	#7	128	BNT	7'-4"
B3	#7	128	BNT	16'-6"
C1	#5	132	STR	2'-8"
C3	#5	68	STR	3'-0"
C4	#5	200	STR	13'-4"
E1	#4	136	STR	31'-10"
E2	#4	88	STR	31'-10"
E4	#4	144	STR	31'-10"



- ① INCLUDES 1 (ONE) 6'-9" LAP. LAP MUST BE LOCATED WITHIN CENTER CELL.
- ② INCLUDES 1 (ONE) 2'-0" LAP AND 2'-0" EXTENSION AT CONSTRUCTION JOINT.
- ③ QUANTITY SHOWN IS FOR TEMPORARY HEADWALL.
- ④ INCLUDES 1 (ONE) 2'-6" LAP
- ⑤ SEE STD. RCB-E3-H12-0-2 FOR BAR BEND.
- ⑥ QUANTITY SHOWN IS FOR PIPE INLET IN NORTHWEST WING WALL AS SHOWN ON SHEET AB02

BRIDGE "B" U.S. 270 OVER UNNAMED CREEK

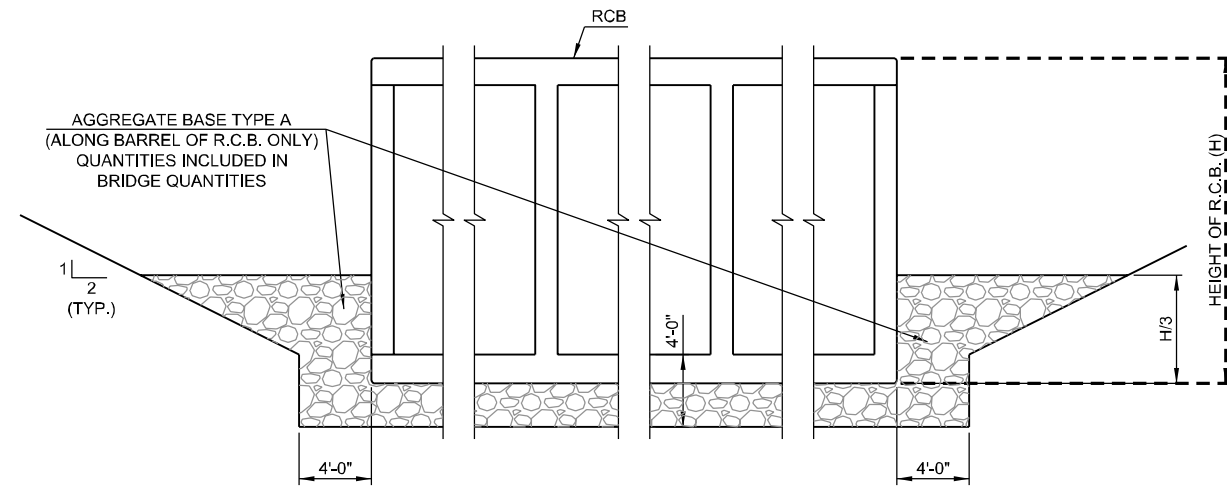
DESIGN	LWN	12-16
DRAWN	MRM	12-16
CHECKED	JSH	1-17
APPROVED	-	-
SQUAD	TT	

OKLAHOMA DEPARTMENT OF TRANSPORTATION

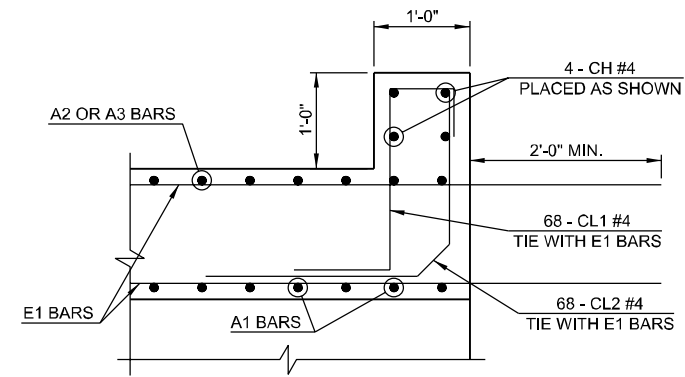
DETAILS OF R.C. BOX
(SHEET 2 OF 3)

STATE JOB NO. 21006(04) SHEET NO. B029

SEMINOLE CO. U.S. 270



AGGREGATE BASE BACKFILL DETAIL



EDGE BEAM DETAIL

NOTES:
 CH, CL1 AND CL2 BARS USED IN EDGE BEAM ARE INCLUDED IN BARREL BAR LIST - PHASE I.

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 11/7/2018

BRIDGE "B" U.S. 270 OVER UNNAMED CREEK

DESIGN	LWN	12-16
DRAWN	MRM	11-16
CHECKED	JSH	1-17
APPROVED	-	-
SQUAD	TT	

OKLAHOMA DEPARTMENT OF TRANSPORTATION

DETAILS OF R.C. BOX
 (SHEET 3 OF 3)

STATE JOB NO. 21006(04) SHEET NO. B030

SEMINOLE CO. U.S. 270

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

OKLAHOMA DEPARTMENT OF TRANSPORTATION		
DESCRIPTION	REVISIONS	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. _____

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.

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

SPECIAL CONDITIONS

NAVIGABLE WATER OF THE U.S.

ON-SITE MITIGATION

ENDANGERED SPECIES PRESENT

HISTORIC PROPERTIES PRESENT

DESIGNATED CRITICAL RESOURCE WATERS

401 CERTIFICATION CONDITIONS

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

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

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

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

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

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

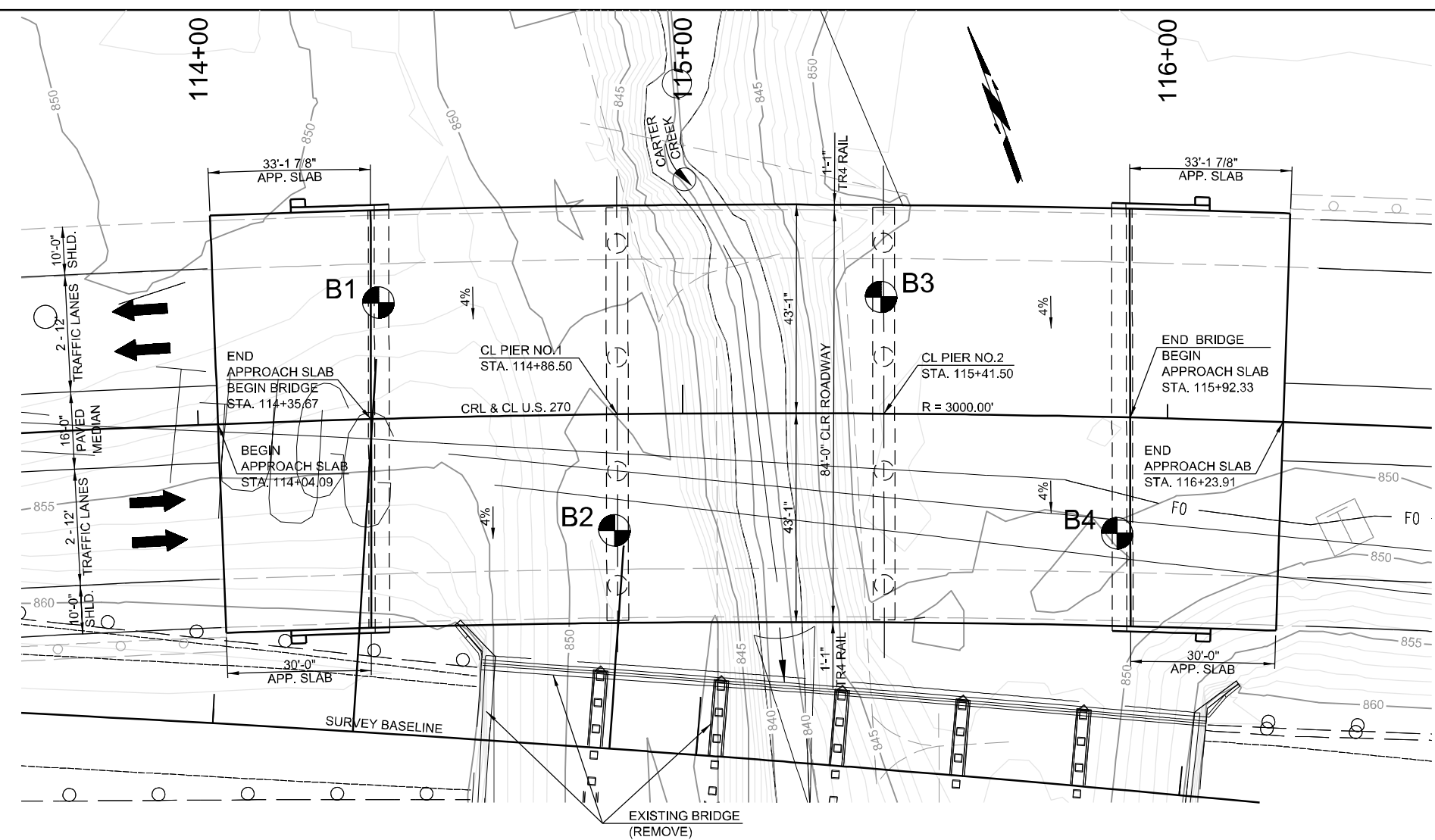
FOR ANY PROJECT THAT INVOLVES BANK STABILIZATION, THE PERMITTEE SHALL CONSIDER INSTALLING BIOENGINEERING PRACTICES IN PLACE OF STRUCTURAL PRACTICES (RIPRAP) TO MINIMIZE IMPACTS TO AQUATIC RESOURCES

DESIGN			OKLAHOMA DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION
DRAWN			
CHECKED			
APPROVED			
SQUAD			
<p>SECTION 404 PERMIT COMPLIANCE</p> <p>COUNTY SEMINOLE HIGHWAY US-270 STATE JOB NO. 21006(04) SHEET NO. E001</p>			

SHEET NUMBERS: _____

11/7/2018 P:\11399\200-11399-14001\CAD\SheetFiles\JP_21006(04)_Roadway\E001-21006(04)-SECTION 404 PERMIT COMPLIANCE.dgn

CURVE DATA
 CRL CURVE #3
 PI STA. 121+10.09
 $\Delta = 28^{\circ}33'58.31''$ RT.
 $D = 1^{\circ}54'35.49''$
 $R = 3000.00'$
 $T = 763.75'$
 $L = 1495.72'$
 $E = 95.69'$
 $e \text{ SUPER} = 0.0400'$



BORING LOCATION
(LOCATED FROM SURVEY BASELINE)

BORING LOCATION	STA.	OFFSET	NORTHING	EASTING
B1	114+29.2	88.7' LT	689846.05	2373660.82
B2	114+80.5	45.0' LT	689782.24	2373683.98
B3	115+31.0	97.2' LT	689801.22	2373754.48
B4	115+83.2	52.7' LT	689735.90	2373776.90

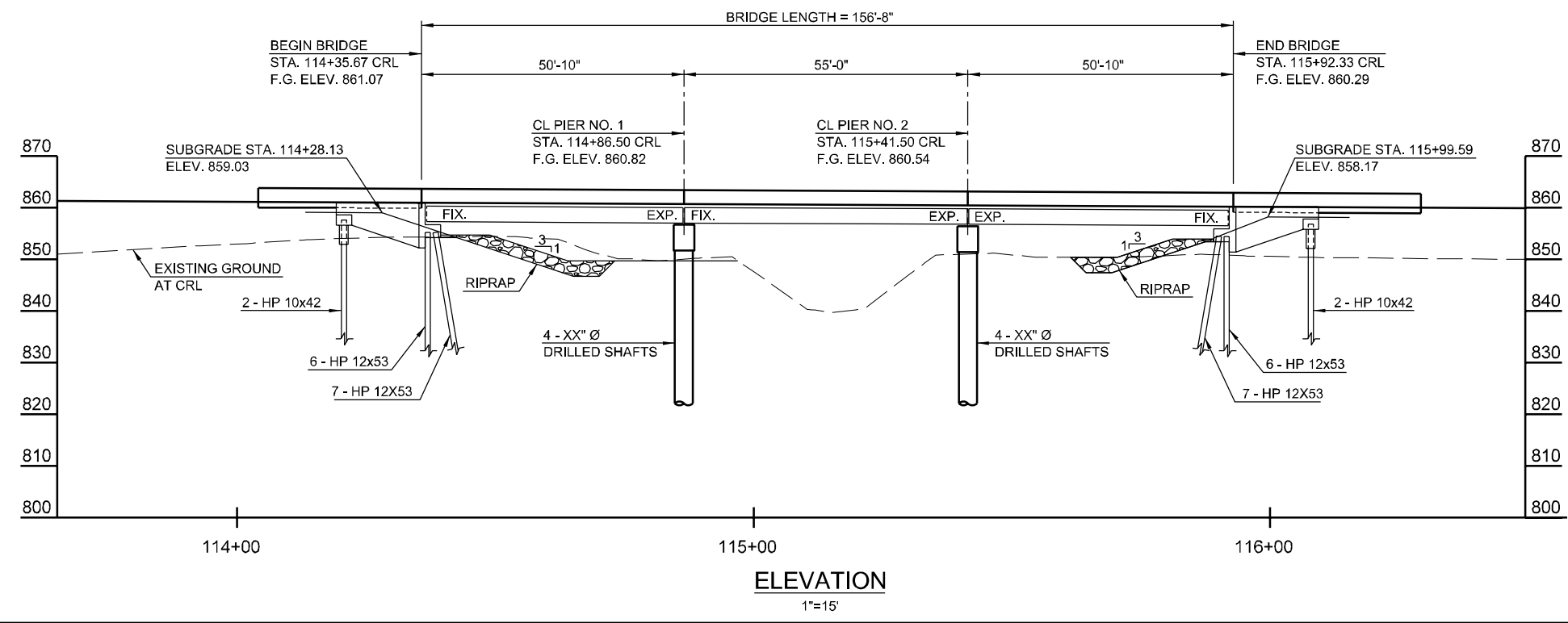
LEGEND



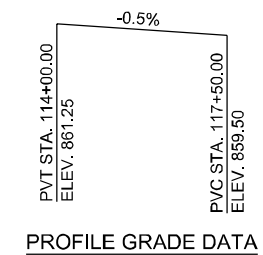
EXISTING BRIDGE
 6 SPAN STRUCTURE CONSISTING OF 6 - 25' CONCRETE SLAB SPANS HAVING A CLEAR ROADWAY WIDTH OF 28'-0"

PLAN
 1"=15'

PROPOSED BRIDGE DESCRIPTION
 CONSTRUCT 3 SPAN (50'-55'-50') CONCRETE BRIDGE HAVING 84'-0" CLEAR ROADWAY WITH TYPE II PC BEAMS AND TR4 TRAFFIC RAILS OVER CARTER CREEK



ELEVATION
 1"=15'



BRIDGE 'A' U.S. 270 OVER CARTER CREEK

DESIGN	LWN	3-15
DRAWN	MRM	3-15
CHECKED	-	-
APPROVED	-	-
SQUAD	TT	

OKLAHOMA DEPARTMENT OF TRANSPORTATION

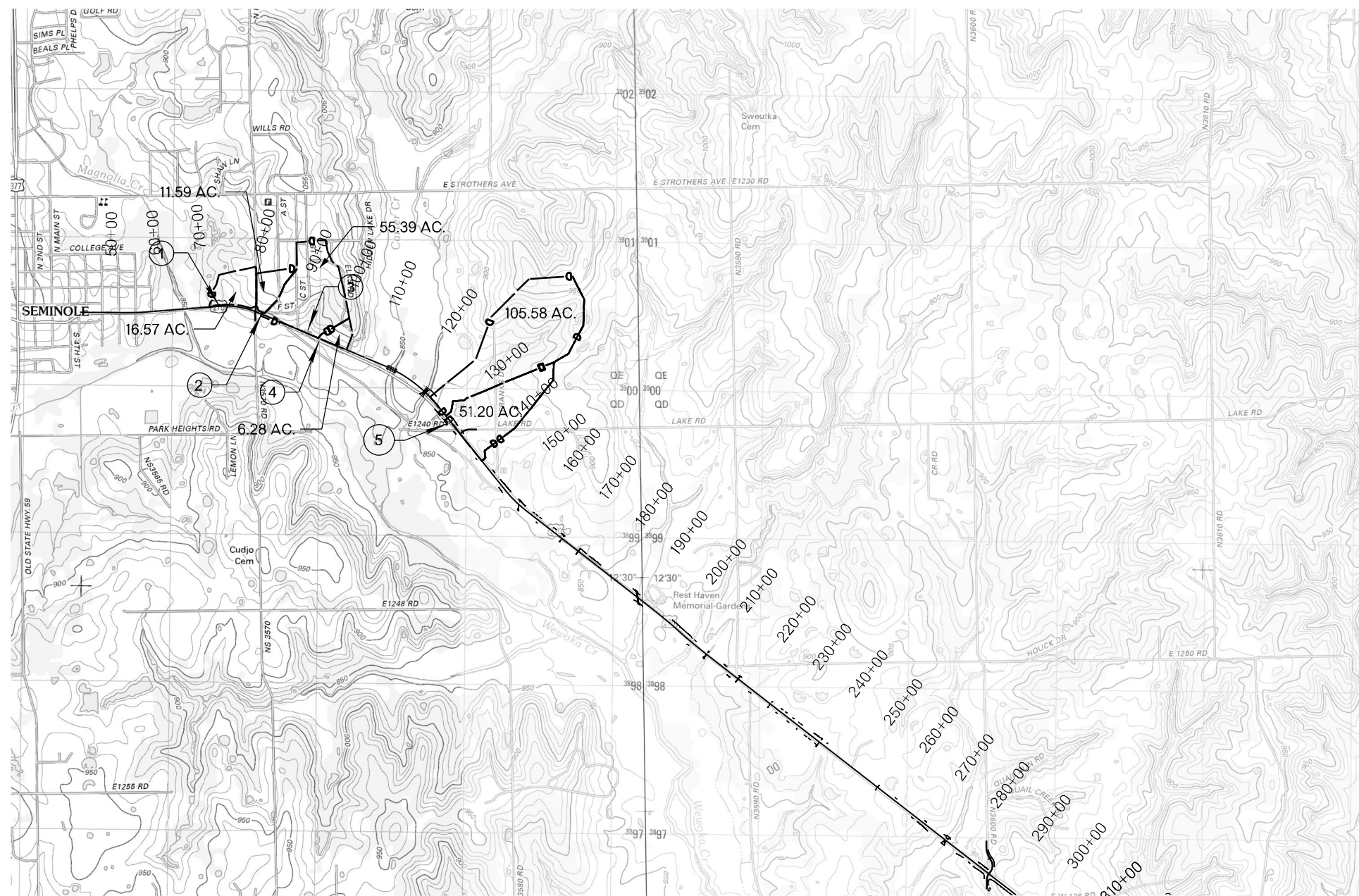
BORING LOCATION PLAN

STATE JOB NO. 21006(11) SHEET NO. 41

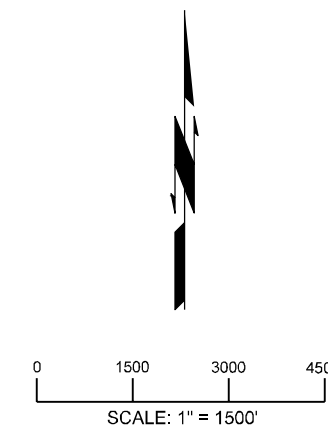
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 11/7/2018

DRAINAGE STRUCTURE DESIGN RECORD

P&P SHT NO.	STR. NO.	ALIGN CRL	LOCATION	STRUCTURE SIZE AND TYPE	DESIGN YEAR	DRAINAGE AREA	ANTICIPATED LAND USE	WEIGHTED RUNOFF COEFFICIENT "C"	LENGTH OF OVERLAND FLOW	SLOPE OF OVERLAND FLOW	LENGTH OF CHANNEL FLOW	SLOPE OF CHANNEL FLOW	TIME OF CONC. (Tc)	INTENSITY OF DESIGN YEAR RAINFALL	DESIGN YEAR DISCHARGE	DESIGN TAIL WATER *	INLET FLOW LINE #	OUTLET FLOW LINE #	CULVERT SLOPE	MAX. ALLOWABLE HEADWATER #	V 50		REMARKS
																					FT.	(%)	
1	US-270	74+00.00		CONST. 42' X 205.27' LG. RDY. RCP SKEW 45 DEG. LT. FWD. 103.60' LG. LT. & 101.67' LG RT.	50	16.57	RES./INDUSTRIAL	0.65	297	2.69	837	4.37	12.17	5.84	99.43	1.88	853.42	852.08	0.65	861.66	11.14	859.96	rdwy ahw = 862.96, bldg lfe = 862.66
2	US-270	83+80.00		CONST. 36' X 127.21' LG. RDY. RCP 64.71' LG. LT. & 62.50' LG RT.	50	11.59	RES./INDUSTRIAL	0.75	133	6.77	1090	6.36	9.08	8.47	88.40	2.75	866.70	865.87	0.65	875.25	12.79	874.92	dike = 876.25
3	US-270	94+67.90		EXT. EXIST. 5' X 4' X 62.8' LG. RDY. RCP 32.00' LG. LT. & 8.74' LG RT.	50	55.39	RESIDENTIAL/WOODLAND	0.40	300	3.33	1355	5.17	15.07	7.10	188.65	1.39	854.98	852.48	2.43	861.99	16.50	861.04	rdy ahw = 862.99
4	US-270	97+85.97		CONST. 36' X 101.88' LG. RDY. RCP 49.99' LG. LT. & 51.89' LG RT.	50	6.28	WOODLAND/PASTURE	0.40	300	3.33	455	9.41	17.66	6.64	20.02	0.74	860.19	859.56	0.62	864.22	6.89	862.28	rdy ahw = 865.22
5	US-270	132+71.08		EXT. EXIST. 6' X 6' X 127.13' LG. RDY RCP 23.17' LG. LT. & 45.16' LG RT.	50	51.20	WOODLAND/PASTURE	0.35	300	1.67	2205	2.35	27.04	5.43	116.68	0.71	848.14	846.54	1.26	856.20	12.17	851.61	dike = 857.20



RECEIVING WATERS ARE: WEWOKA CREEK, CARTER CREEK, CHEYARHA CREEK & UNNAMED TRIBUTARIES.



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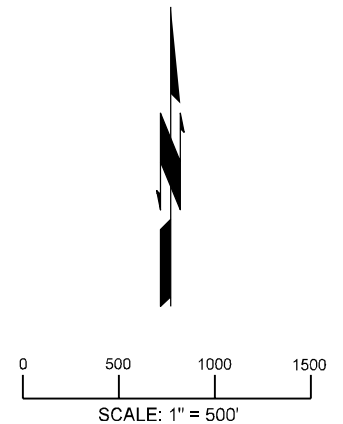
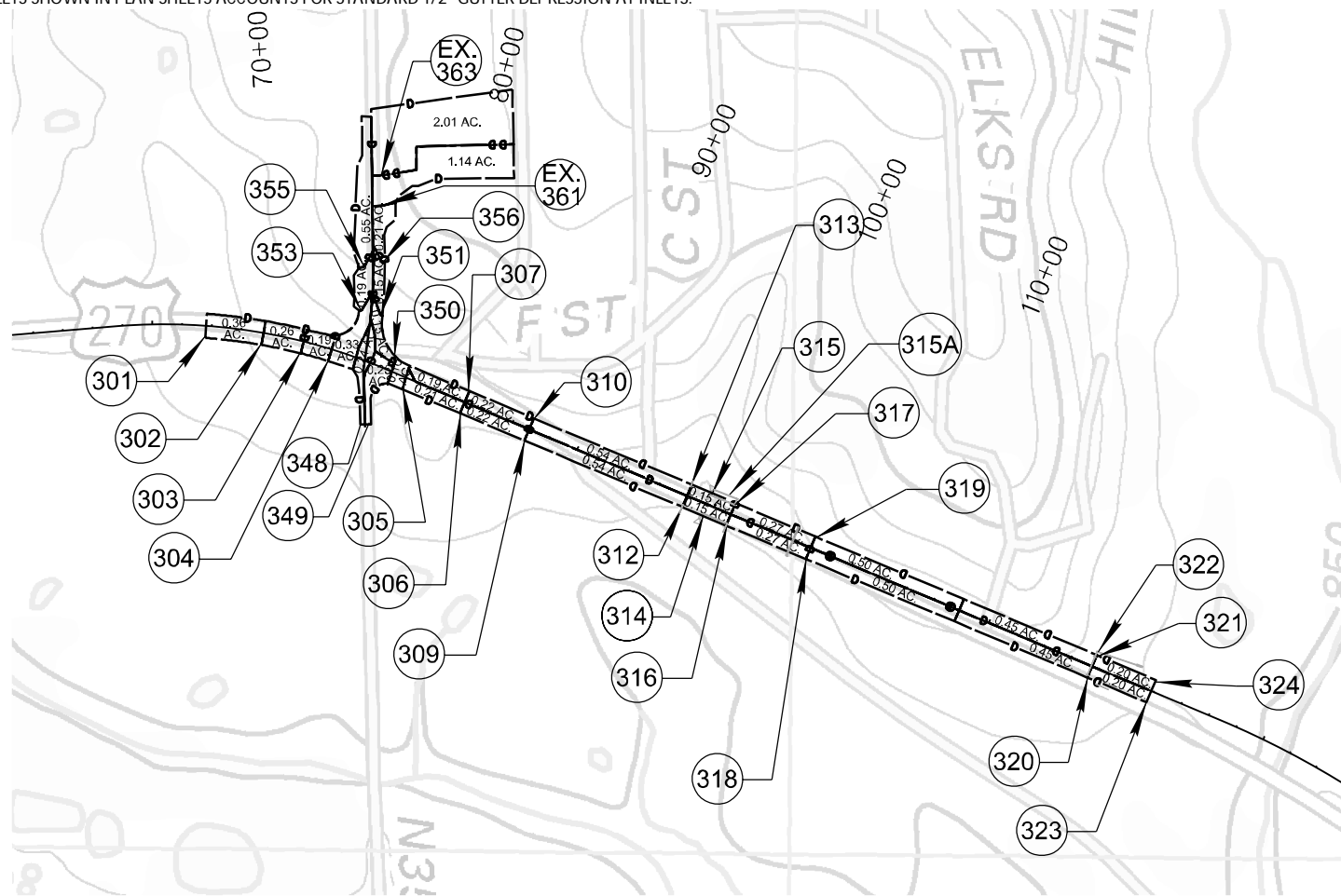
11/7/2018

DESIGN			<p align="center">OKLAHOMA DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION</p> <p align="center">DRAINAGE AREA MAP</p> <p align="center">STATE JOB NO. 21006(04) SHEET NO. R001</p>
DRAWN			
CHECKED			
APPROVED			
CREW			

Table with columns: Location (INLET ID, STA., SIDE, TYPE), Gutter Discharge Design Frequency (10 YR ON-GRADE, 50 YR SUMP), Gutter Discharge Allowable Spread = 12 ft Outside Lane + 2 ft Gutter = 14 ft., and Inlet Discharge (Inlet Type, Interceptor, Bypass Flow, Remarks).

NOTE: RIM ELEVATION FOR CURB INLETS SHOWN IN PLAN SHEETS ACCOUNTS FOR STANDARD 1/2" GUTTER DEPRESSION AT INLETS.

RECEIVING WATERS ARE: WEWOKA CREEK, CARTER CREEK, CHEYARHA CREEK & UNNAMED TRIBUTARIES.



P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway R002-2100604-DRAINAGE AREA MAP_2.dgn

Approval table with columns: DESIGN, DRAWN, CHECKED, APPROVED, CREW. Includes Oklahoma Department of Transportation Roadway Design Division logo and State Job No. 21006(04) SHEET NO. R002.

STORM WATER MANAGEMENT PLAN

OKLAHOMA DEPARTMENT OF TRANSPORTATION		
DESCRIPTION	REVISIONS	DATE

SITE DESCRIPTION

PROJECT LIMITS: BEGIN US-270 APPROXIMATELY 0.25 MILES WEST OF JUNCTION SH-270A IN SEMINOLE, OK AND EXTEND EAST TO 1.00 MILES EAST OF JUNCTION SH-270A IN SEMINOLE, OK.

PROJECT DESCRIPTION: GRADE, DRAIN, SURFACE AND BRIDGES.

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: FAT CLAY, SANDY LEAN CLAY, FAT CLAY WITH SAND, SANDY LEAN CLAY, LEAN CLAY WITH SAND, SANDY LEAN CLAY SILTY CLAYS, SANDY CLAYS, FROM A GRAVELLY SANDY CLAY TO A GRAVELLY CLAYEY SAND

TOTAL AREA OF THE CONSTRUCTION SITE: 47.32 ACRES

ESTIMATED AREA TO BE DISTURBED: 24.47 ACRES

OFFSITE AREA TO BE DISTURBED: _____
(FOR CONTRACTOR USE)

TOTAL IMPERVIOUS AREA PRE-CONSTRUCTION: 10.73 ACRES

TOTAL IMPERVIOUS AREA POST-CONSTRUCTION: 14.34 ACRES

POST-CONSTRUCTION RUNOFF COEFFICIENT OF THE SITE: 0.69

LATITUDE & LONGITUDE OF CENTER OF PROJECT: 35° 13' 21" N 96° 38' 50" W

PROJECT WILL DISCHARGE TO:

NAME OF RECEIVING WATERS: WEWOKA CREEK, CARTER CREEK, CHEYARHA CREEK & UNNAMED TRIBUTARIES

SENSITIVE WATERS OR WATERSHEDS: YES NO

303(d) IMPAIRED WATERS: YES NO

IF YES, LIST IMPAIRMENT: CARTER CREEK CHLORIDE 5B, TDS 5B, WEWOKA CREEK CADMIUM 5A

LOCATED IN A TMDL: YES NO

LAKE THUNDERBIRD TMDL: YES NO

MS4 ENTITY YES NO

IF YES, LOCATION: _____

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

EROSION AND SEDIMENT CONTROLS

SOIL STABILIZATION PRACTICES:

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

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

STRUCTURAL PRACTICES:

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

OFFSITE VEHICLE TRACKING:

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

NOTES:

THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE FOLLOWING:

MAINTENANCE AND INSPECTION:

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

WASTE MATERIALS:

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

HAZARDOUS MATERIALS:

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

GENERAL NOTES:

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

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

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

IN ADDITION:

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

DESIGN			OKLAHOMA DEPARTMENT OF TRANSPORTATION STORMWATER MANAGEMENT PLAN STATE JOB NO. <u>21006(04)</u> SHEET NO. <u>R003</u>
DRAWN			
CHECKED			
APPROVED			
CREW			

SH-270A/HARVEY ROAD CRL
 PI Sta= 29+05.63
 X= 2370721.8749
 Y= 691294.8956
 Δ = 08°14'38.75" LT
 D= 4°00'00.00"
 T= 103.23'
 L= 206.10'
 R= 1432.39'
 E= 3.71'
 V= 45 mph

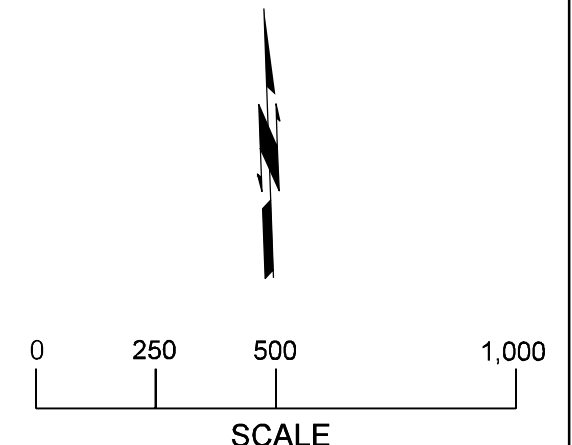
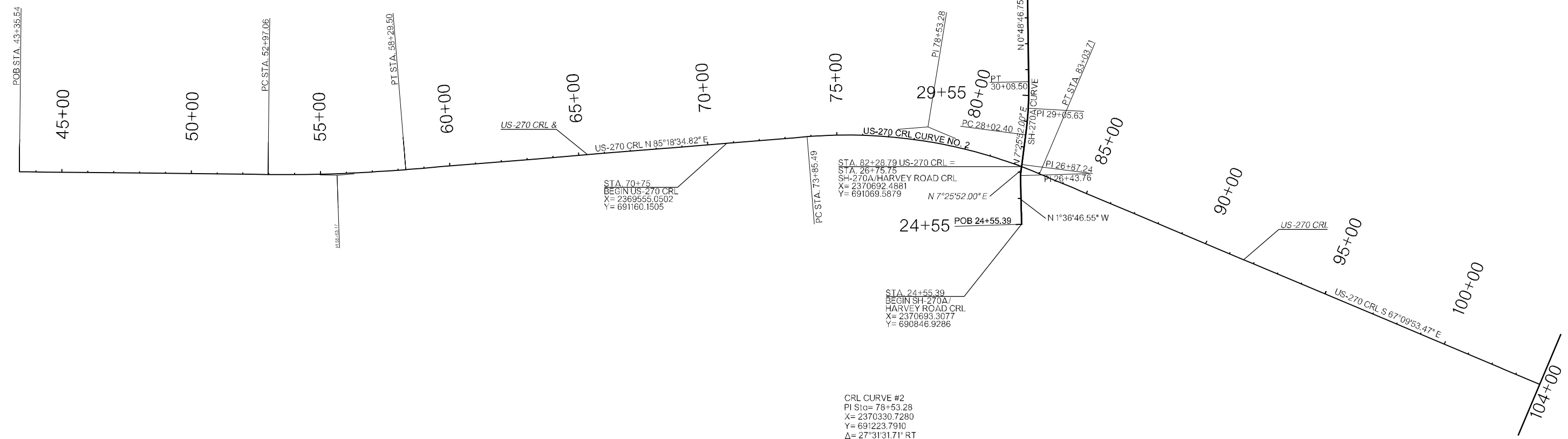
STA 35+00.00
 END SH-270A/
 HARVEY ROAD CRL
 X= 2370713.4365
 Y= 691889.5626

STA 82+28.79 US-270 CRL =
 STA 26+75.75
 SH-270A/HARVEY ROAD CRL
 X= 2370692.4881
 Y= 691069.5879

STA 70+75
 BEGIN US-270 CRL
 X= 2369555.0502
 Y= 691160.1505

STA 24+55.39
 BEGIN SH-270A/
 HARVEY ROAD CRL
 X= 2370693.3077
 Y= 690846.9286

CRL CURVE #2
 PI Sta= 78+53.28
 X= 2370330.7280
 Y= 691223.7910
 Δ = 27°31'31.71" RT
 D= 3°00'00.00"
 T= 467.79'
 L= 917.52'
 R= 1909.86'
 E= 56.45'
 ed Super=0.036'/'
 V= 40 mph
 Emax=0.06'/'

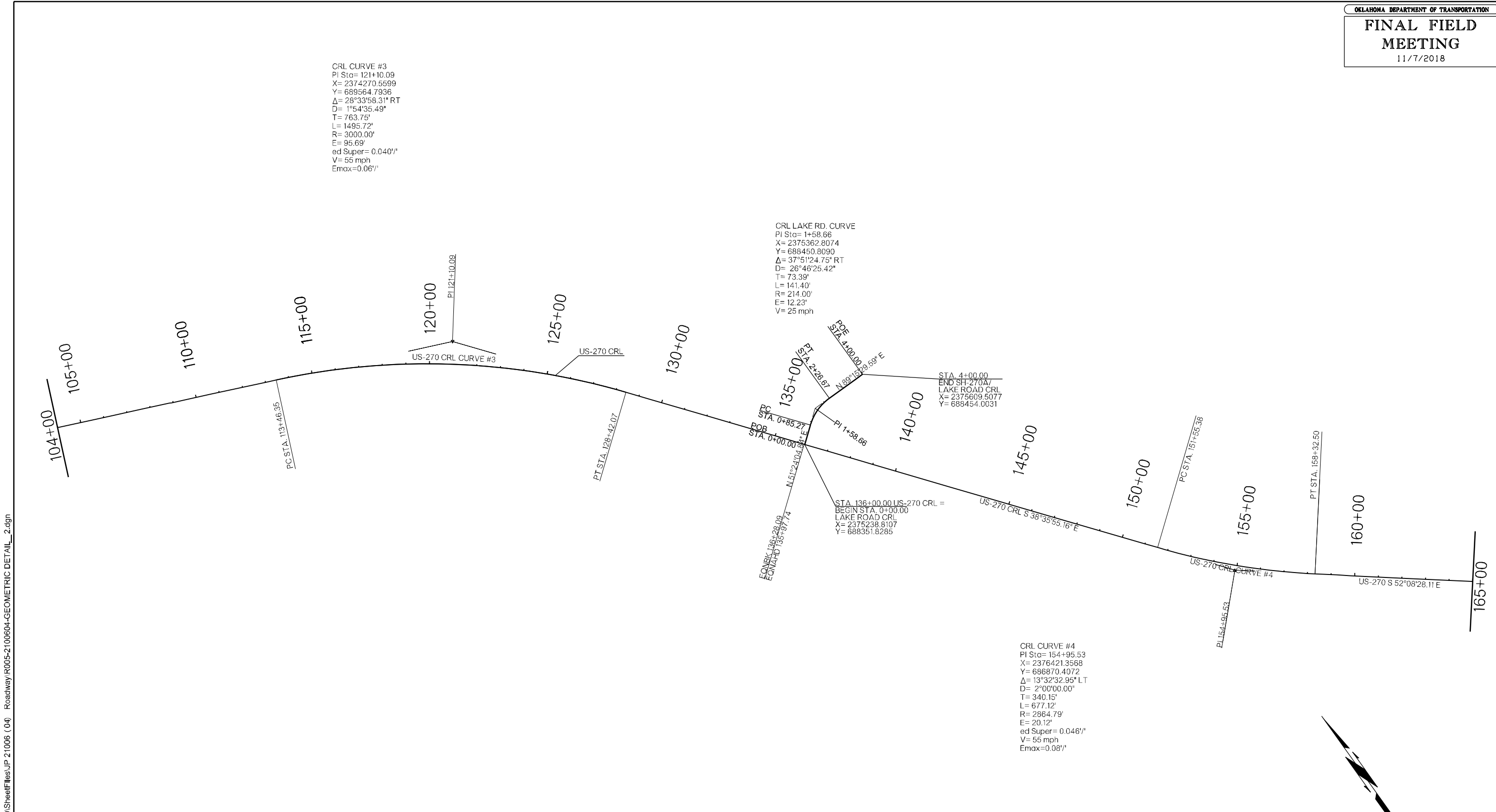


DESIGN			OKLAHOMA DEPARTMENT OF TRANSPORTATION GEOMETRIC DETAIL STATE JOB NO. 21006(04) SHEET NO. R004
DRAWN			
CHECKED			
APPROVED			
CREW			

CRL CURVE #3
 PI Sta= 121+10.09
 X= 2374270.5599
 Y= 689564.7936
 Δ = 28°33'58.31" RT
 D= 1°54'35.49"
 T= 763.75'
 L= 1495.72'
 R= 3000.00'
 E= 95.69'
 ed Super= 0.040'/'
 V= 55 mph
 Emax=0.06'/'

CRL LAKE RD. CURVE
 PI Sta= 1+58.66
 X= 2375362.8074
 Y= 688450.8090
 Δ = 37°51'24.75" RT
 D= 26°46'25.42"
 T= 73.39'
 L= 141.40'
 R= 214.00'
 E= 12.23'
 V= 25 mph

CRL CURVE #4
 PI Sta= 154+95.53
 X= 2376421.3568
 Y= 686870.4072
 Δ = 13°32'32.95" LT
 D= 2°00'00.00"
 T= 340.15'
 L= 677.12'
 R= 2864.79'
 E= 20.12'
 ed Super= 0.046'/'
 V= 55 mph
 Emax=0.08'/'

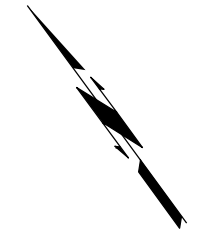
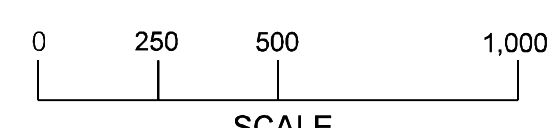
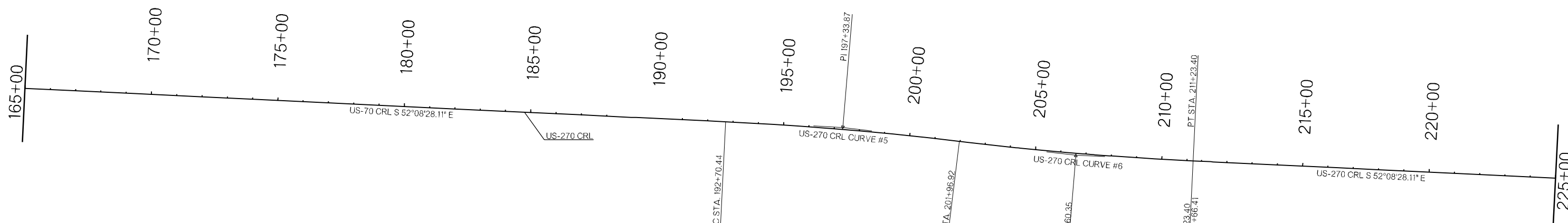


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DESIGN			OKLAHOMA DEPARTMENT OF TRANSPORTATION GEOMETRIC DETAIL STATE JOB NO. 21006(04) SHEET NO. R005 SEMINOLE CO. US-270
DRAWN			
CHECKED			
APPROVED			
CREW			

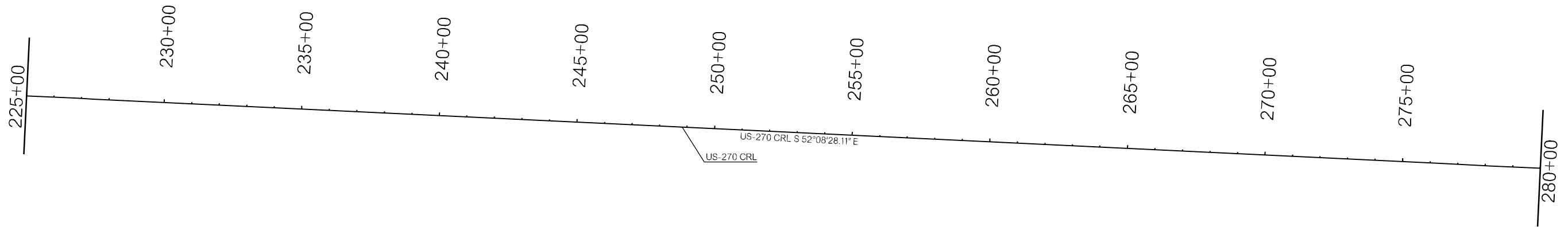
CRL CURVE #5
 PI Sta= 197+33.87
 X= 2379770.1408
 Y= 684267.3097
 Δ = 4°05'00.00" RT
 D= 0°26'26.65"
 T= 463.44'
 L= 926.48'
 R= 13000.00'
 E= 8.26'
 ed Super= "NC"
 V= 55 mph
 Emax=0.08'/

CRL CURVE #6
 PI Sta= 206+60.35
 X= 2380459.5658
 Y= 683647.8071
 Δ = 4°05'00.00" LT
 D= 0°26'26.65"
 T= 463.44'
 L= 926.48'
 R= 13000.00'
 E= 8.26'
 ed Super= "NC"
 V= 55 mph
 Emax=0.08'/



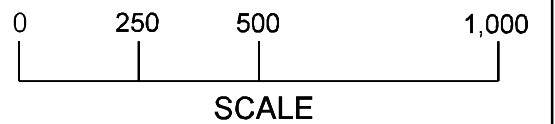
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DRAWN			
CHECKED			
APPROVED			
CREW			



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11/7/2018



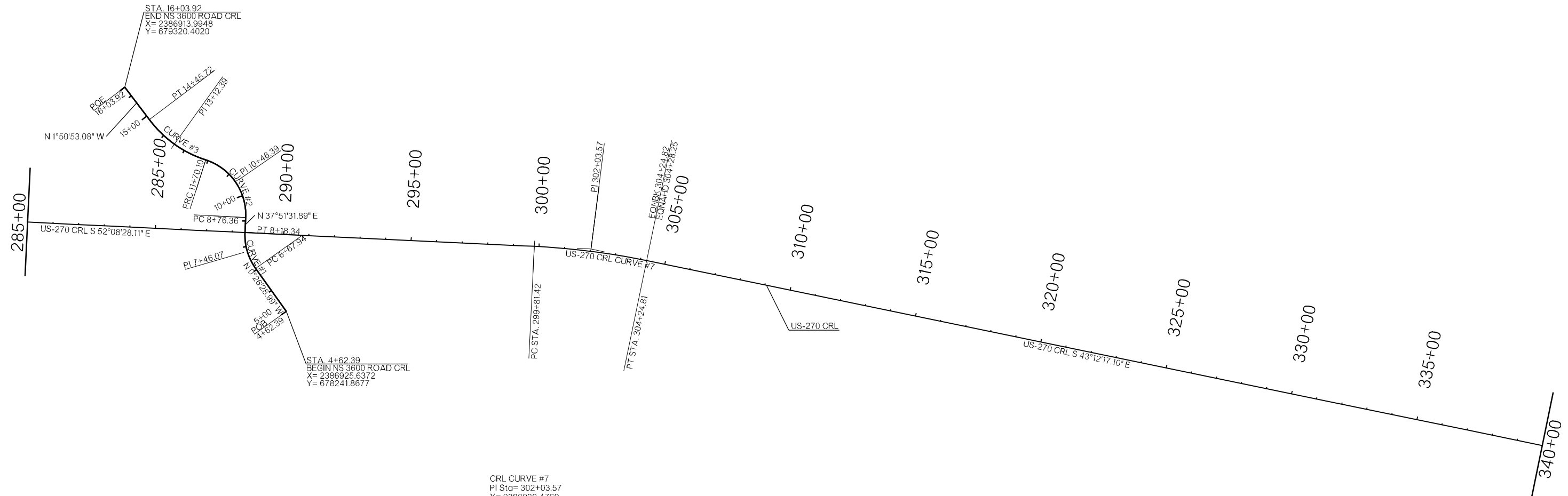
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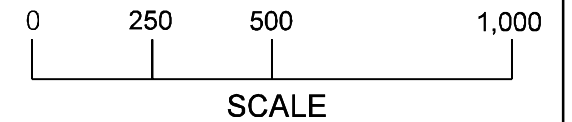
DESIGN			OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN			
CHECKED			
APPROVED			
CREW			
			STATE JOB NO. 21006(04) SHEET NO. R007

GEOMETRIC DETAIL

CRL NS 3600 CURVE 1 PI Sta= 7+46.07 X= 2386923.4518 Y= 678525.5410 Δ= 38°18'00.87" RT D= 25°27'53.25" T= 78.13' L= 150.40' R= 225.00' E= 13.18' V= 25 mph	CRL NS 3600 CURVE 2 PI Sta= 10+48.39 X= 2387112.5855 Y= 678768.8541 Δ= 74°48'00.16" LT D= 25°27'53.25" T= 172.03' L= 293.74' R= 225.00' E= 58.23' V= 25 mph	CRL NS 3600 CURVE 3 PI Sta= 13+12.39 X= 2386923.6854 Y= 679020.0690 Δ= 35°05'35.19" LT D= 12°43'56.62" T= 142.29' L= 275.62' R= 450.00' E= 21.96' V= 30 mph
---	---	---



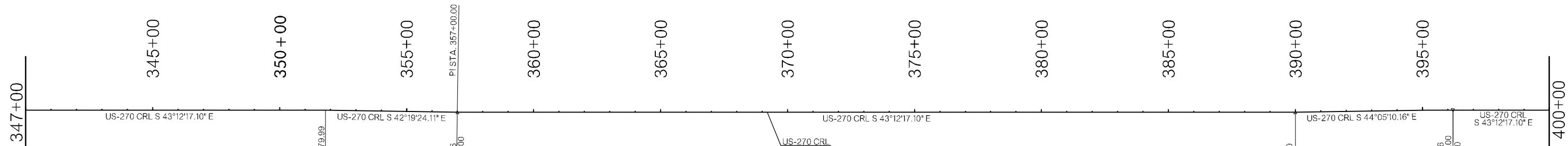
CRL CURVE #7
PI Sta= 302+03.57
X= 2388039.4769
Y= 677755.7437
Δ= 8°56'11.01" RT
D= 2°00'55.72"
T= 222.14'
L= 443.39'
R= 2842.79'
E= 8.67'
ed Super= 0.06'/'
V= 65 mph
Emax=0.08'/'



DESIGN			OKLAHOMA DEPARTMENT OF TRANSPORTATION GEOMETRIC DETAIL STATE JOB NO. 21006(04) SHEET NO. R008
DRAWN			
CHECKED			
APPROVED			
CREW			

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11/7/2018



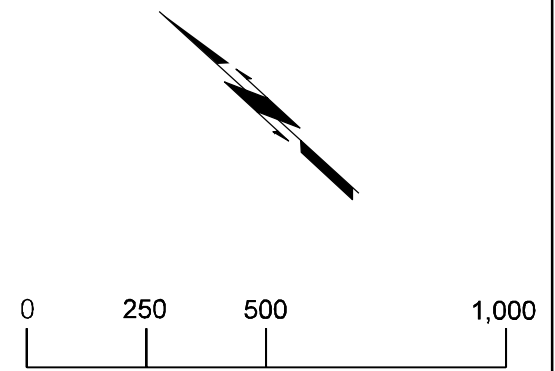
US-270 CRL
 PI Sta= 351+79.99
 X= 2391444.6413
 Y= 674130.2144
 Δ= 0°52'52.99\"/>

EQNBK 357+00.06
 EONAHD 357+00.00
 PI STA. 357+00.00

US-270 CRL
 PI Sta= 390+00.00
 X= 2394054.0176
 Y= 671340.2869
 Δ= 0°53'53.06\"/>

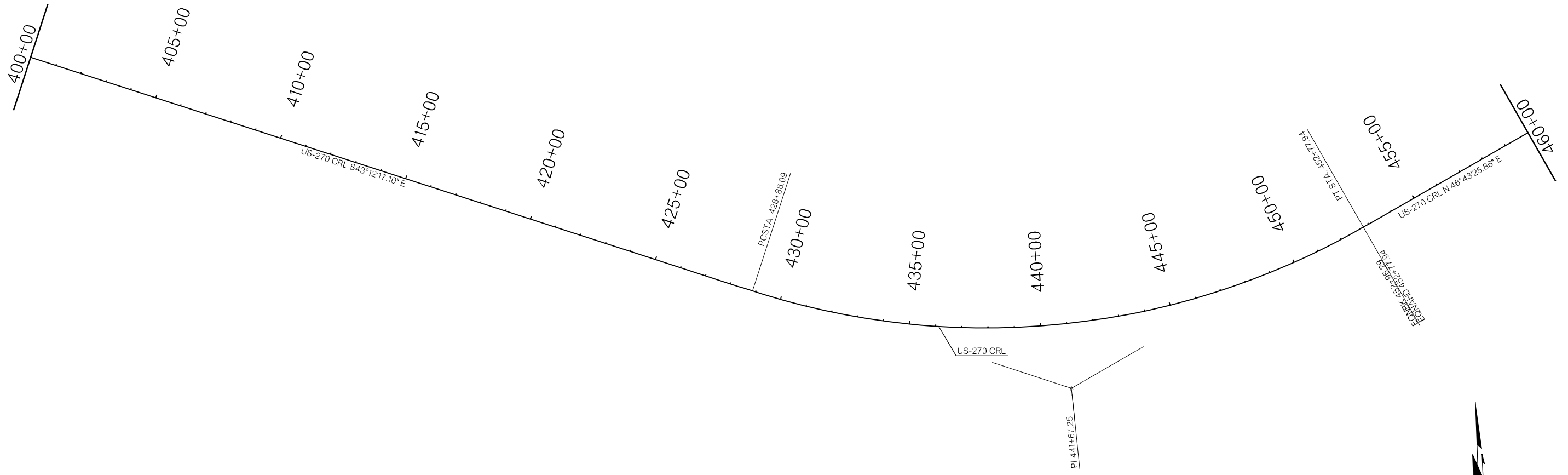
EQNBK 395+20.06
 EONAHD 395+20.00
 PI STA. 395+20.00

US-270 CRL
 PI Sta= 395+20.00
 X= 2394415.8448
 Y= 670966.7296
 Δ= 0°53'53.06\"/>



DESIGN			OKLAHOMA DEPARTMENT OF TRANSPORTATION GEOMETRIC DETAIL STATE JOB NO. 21006(04) SHEET NO. R009
DRAWN			
CHECKED			
APPROVED			
CREW			

CRL CURVE #8
 PI Sta= 441+67.25
 X= 2397597.3846
 Y= 667579.2967
 Δ = 47°47'49.04" LT
 D= 1°59'05.13"
 T= 1279.16'
 L= 2408.20'
 R= 2886.79'
 E= 270.71'
 ed Super= 0.058'/'
 V= 65 mph
 Emax=0.08'/'



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11/7/2018

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APPROVED	
CREW	

OKLAHOMA DEPARTMENT OF TRANSPORTATION

GEOMETRIC DETAIL

STATE JOB NO. 21006(04) SHEET NO. R010

SEMINOLE CO. US-270

CRL US-270B CURVE
 PI Sta= 491+03.06
 X= 2402657.0625
 Y= 667689.7677
 Δ = 65°42'55.36" RT
 D= 19°05'54.94"
 T= 193.76'
 L= 344.08'
 R= 300.00'
 E= 57.13'
 V= 25 mph

STA 492+53.38
 END US-270B CRL
 X= 2402850.7975
 Y= 667693.1552

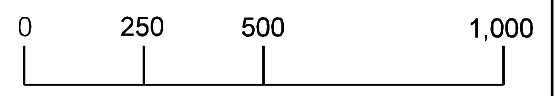
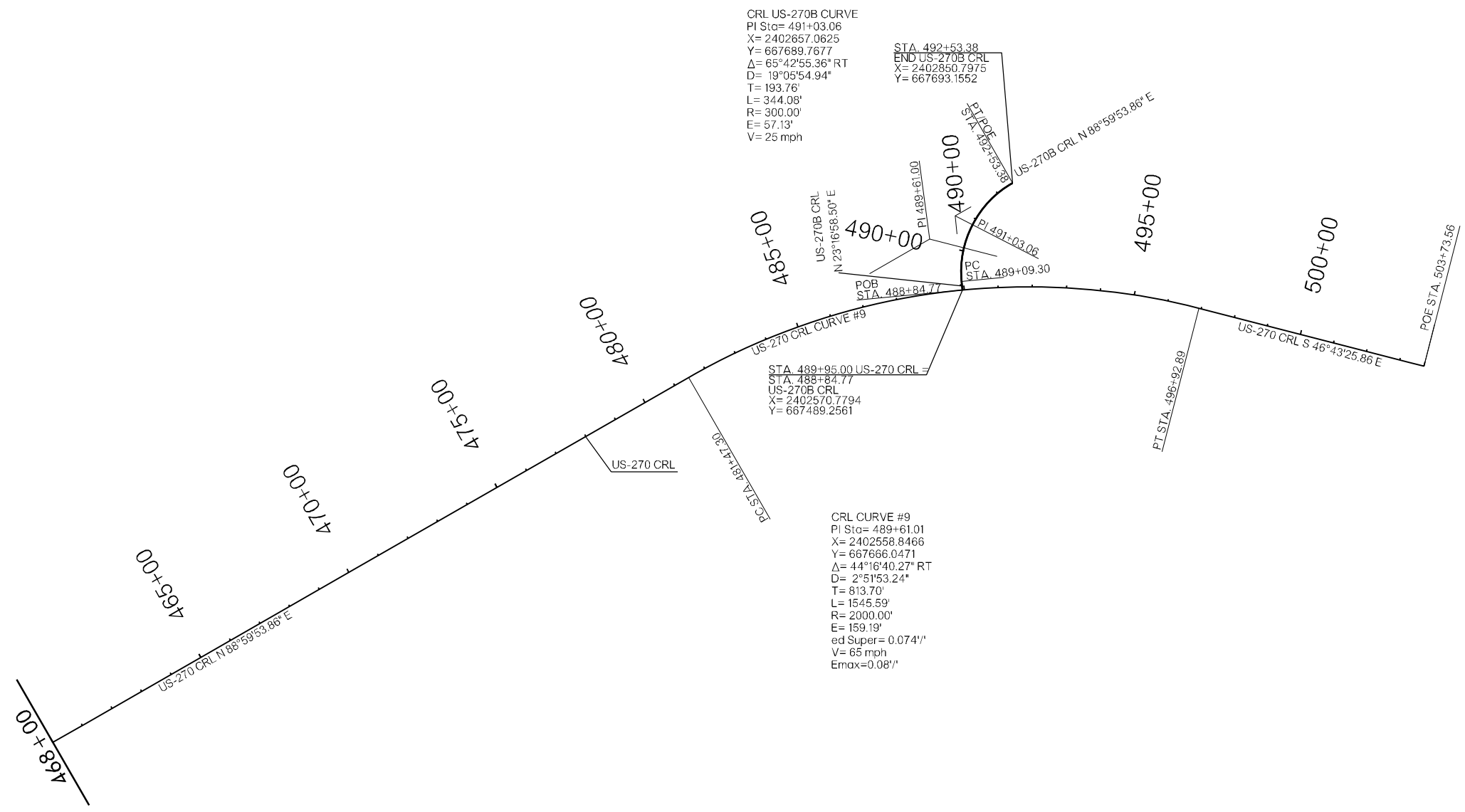
US-270B CRL
 N 23°16'58.50" E
 PI STA 489+61.00

POB STA 488+84.77

PC STA 489+09.30

US-270B CRL
 STA 489+95.00
 STA 488+84.77
 X= 2402570.7794
 Y= 667489.2561

CRL CURVE #9
 PI Sta= 489+61.01
 X= 2402558.8466
 Y= 667666.0471
 Δ = 44°16'40.27" RT
 D= 2°51'53.24"
 T= 813.70'
 L= 1545.59'
 R= 2000.00'
 E= 159.19'
 ed Super= 0.074'/'
 V= 65 mph
 Emax=0.08'/'



SCALE

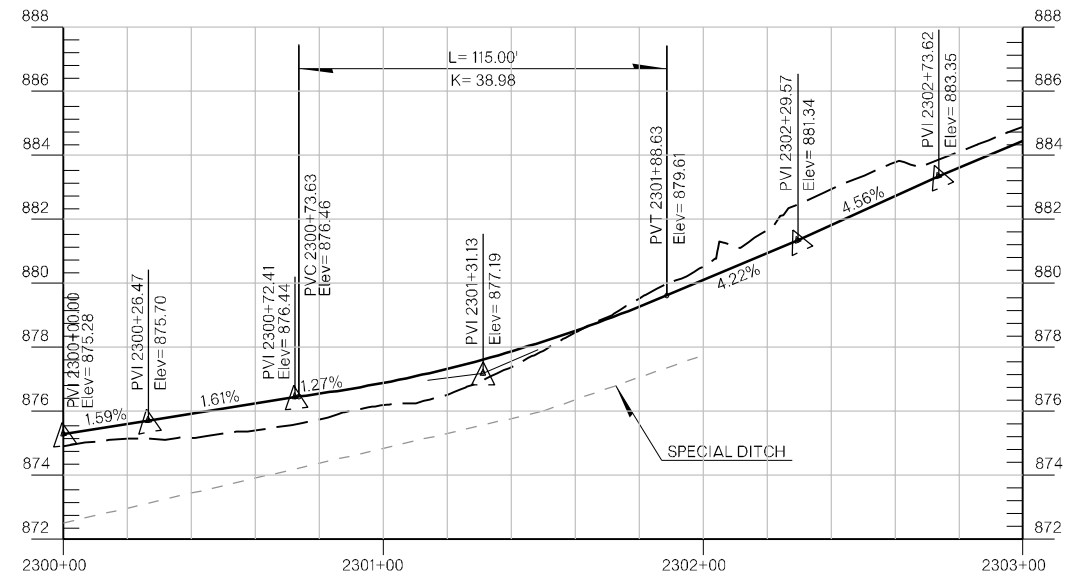


DESIGN	
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APPROVED	
CREW	

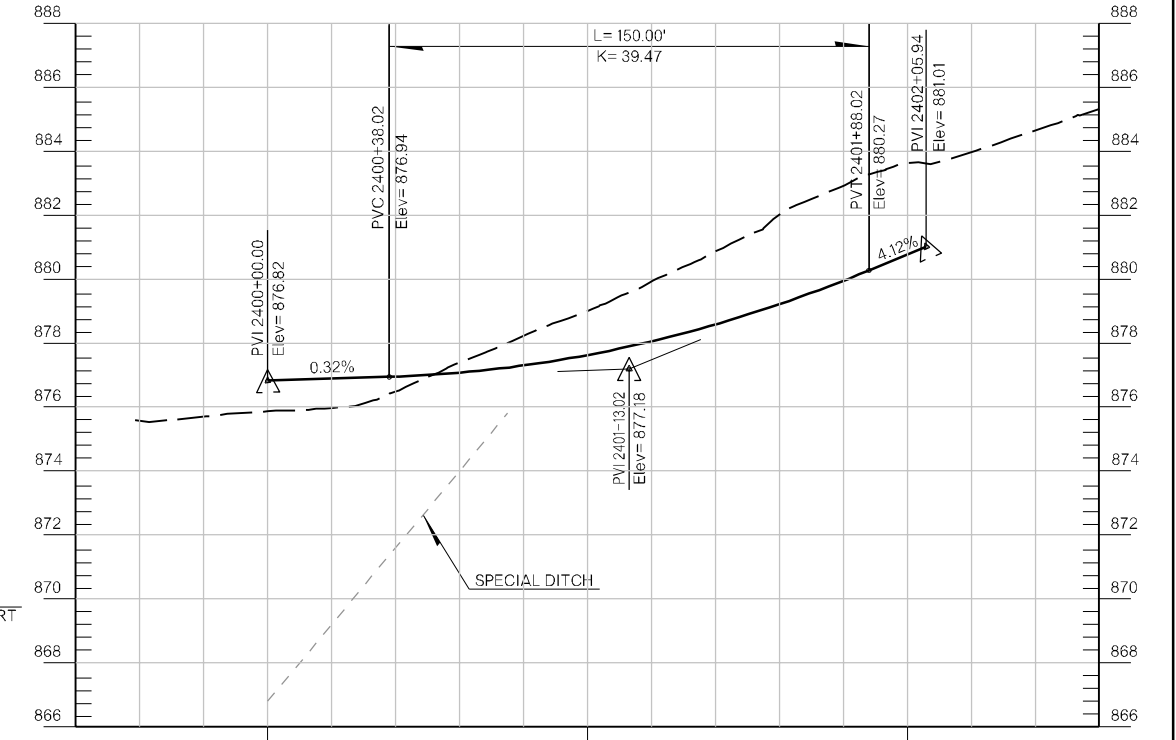
OKLAHOMA DEPARTMENT OF TRANSPORTATION

GEOMETRIC DETAIL

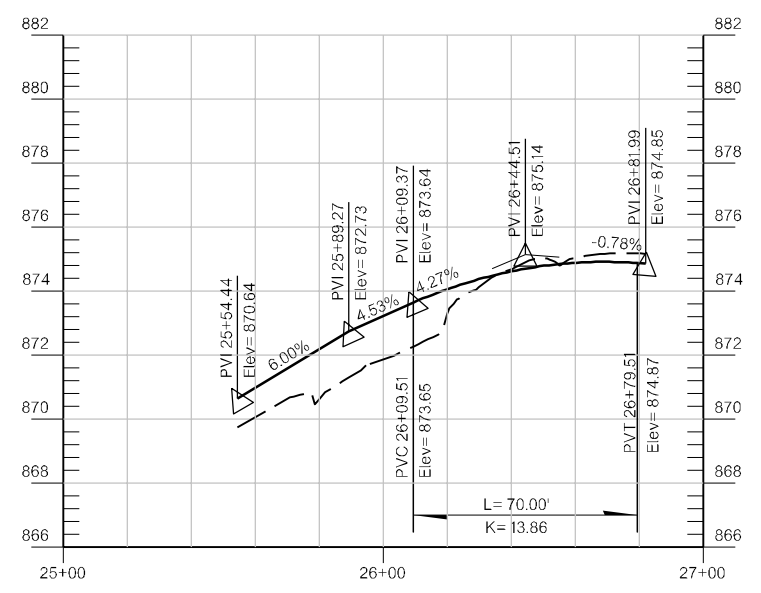
STATE JOB NO. 21006(04) SHEET NO. R011



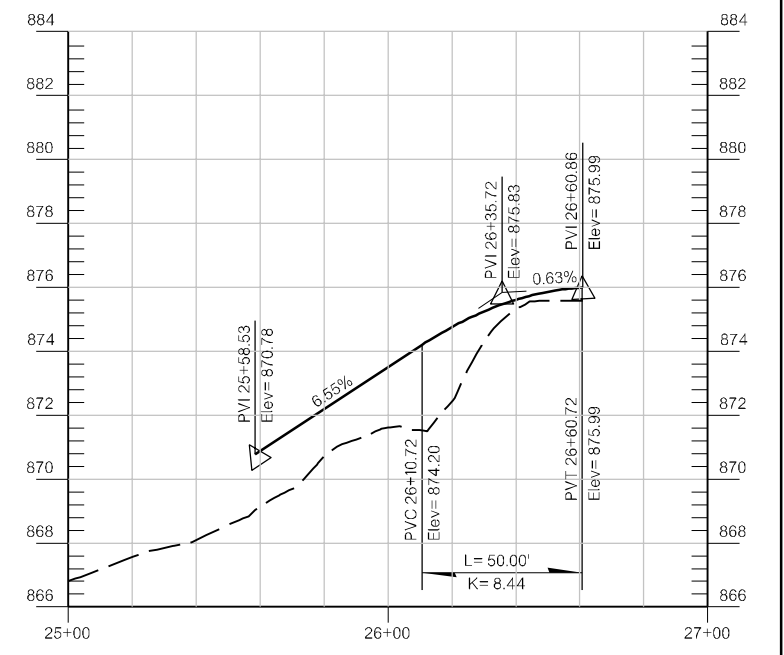
NW CURB RETURN PROFILE



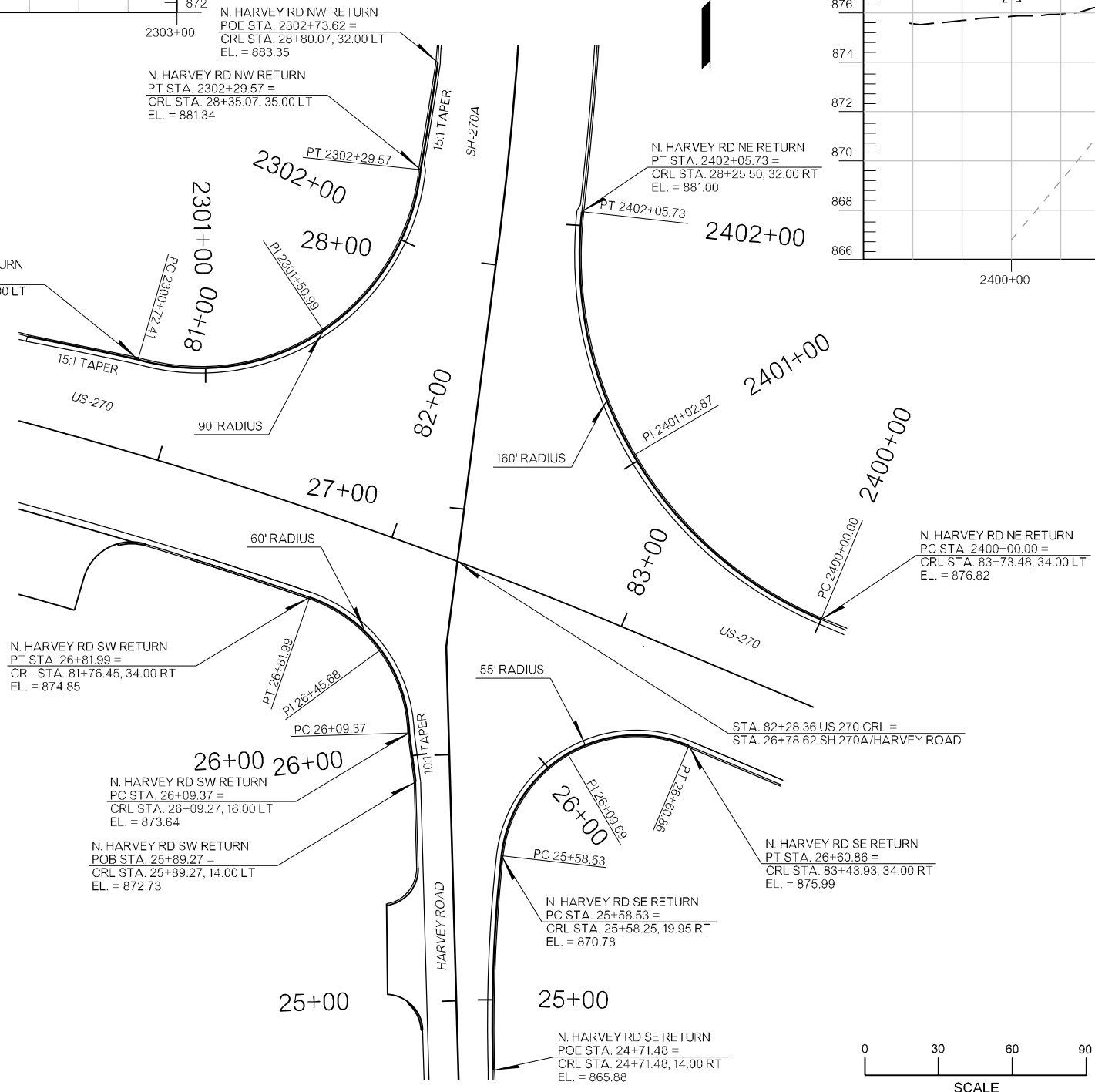
NE CURB RETURN PROFILE



SW CURB RETURN PROFILE



SE CURB RETURN PROFILE



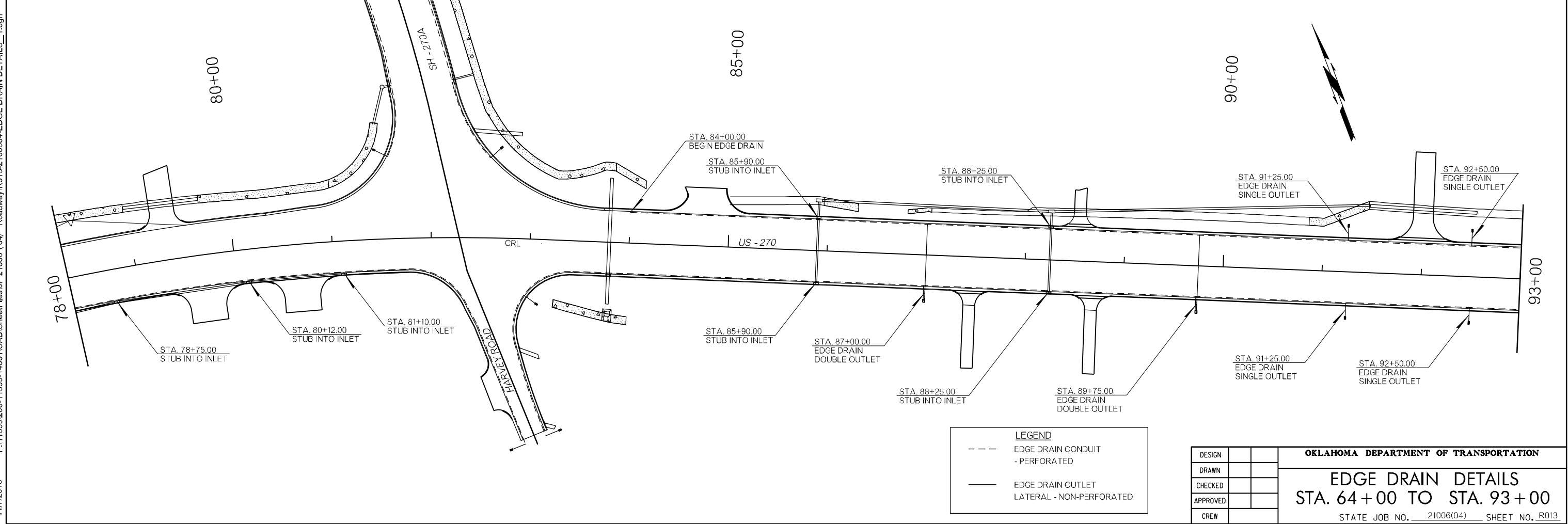
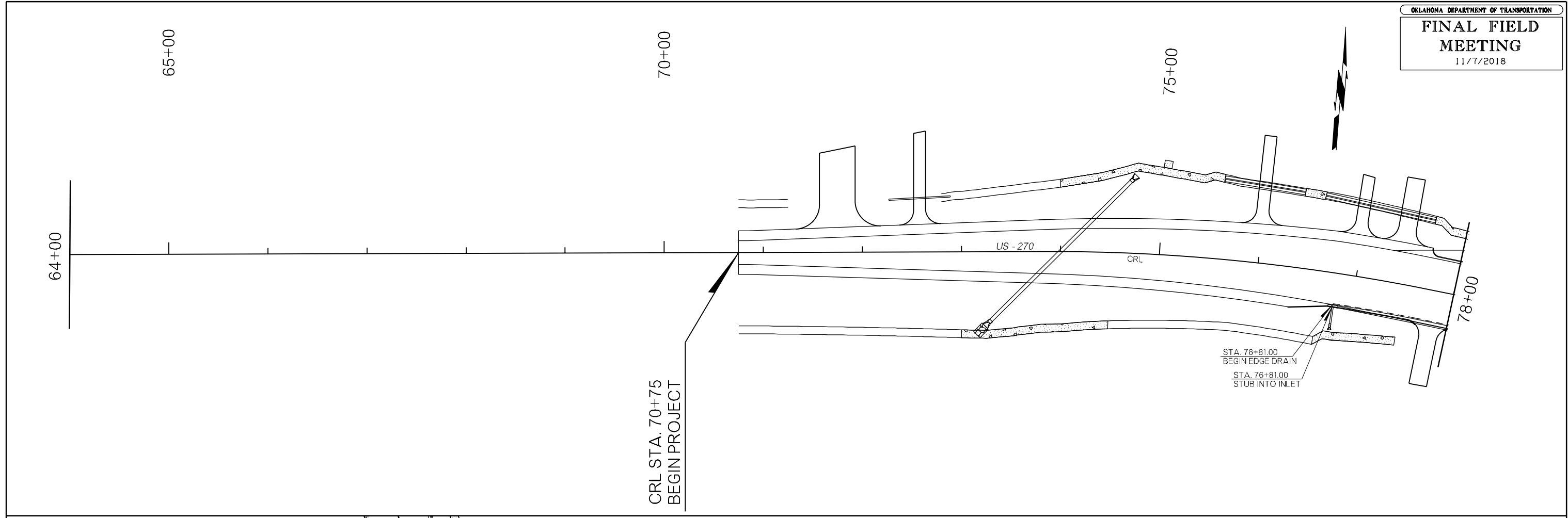
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APPROVED	
CREW	

OKLAHOMA DEPARTMENT OF TRANSPORTATION

INTERSECTION DETAIL SHEET

STATE JOB NO. 21006(04) SHEET NO. R012

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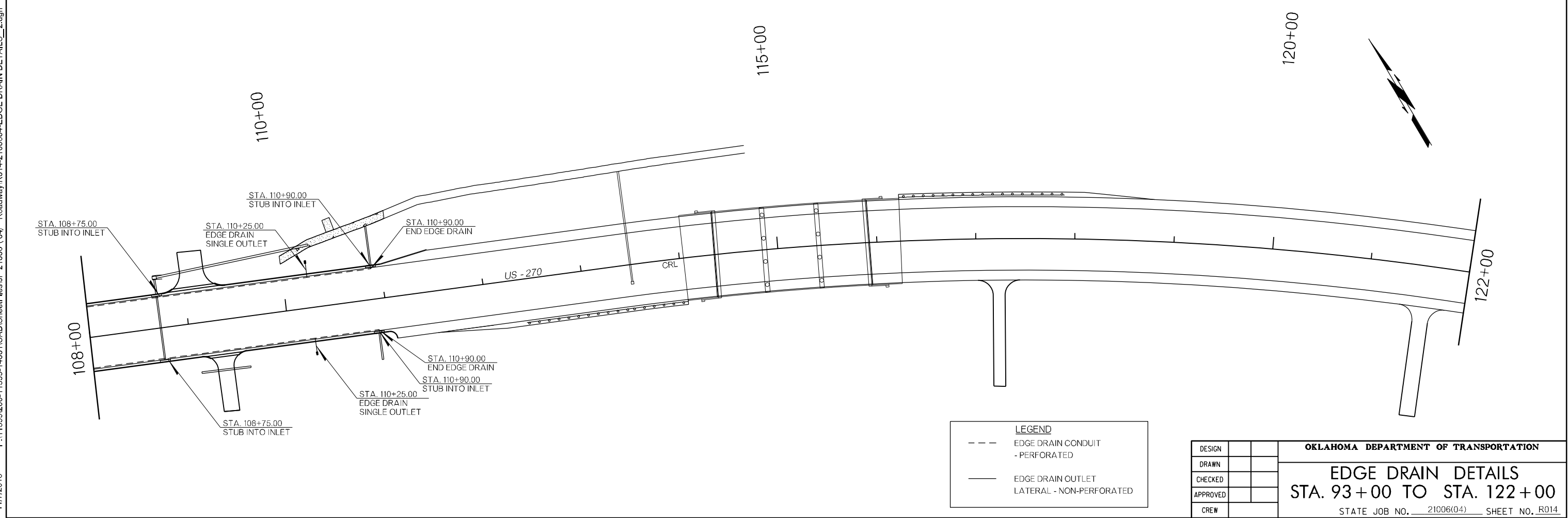
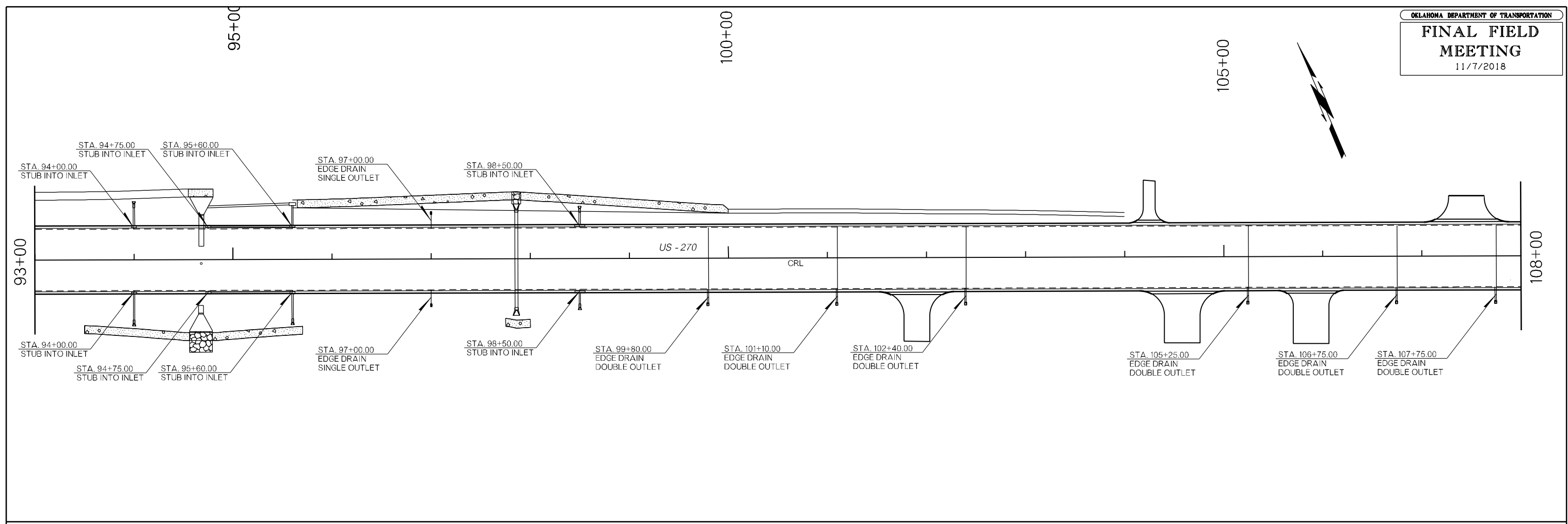
LEGEND

---	EDGE DRAIN CONDUIT - PERFORATED
—	EDGE DRAIN OUTLET LATERAL - NON-PERFORATED

DESIGN	
DRAWN	
CHECKED	
APPROVED	
CREW	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
EDGE DRAIN DETAILS
 STA. 64+00 TO STA. 93+00
 STATE JOB NO. 21006(04) SHEET NO. R013

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LEGEND	
---	EDGE DRAIN CONDUIT - PERFORATED
—	EDGE DRAIN OUTLET LATERAL - NON-PERFORATED

DESIGN	
DRAWN	
CHECKED	
APPROVED	
CREW	

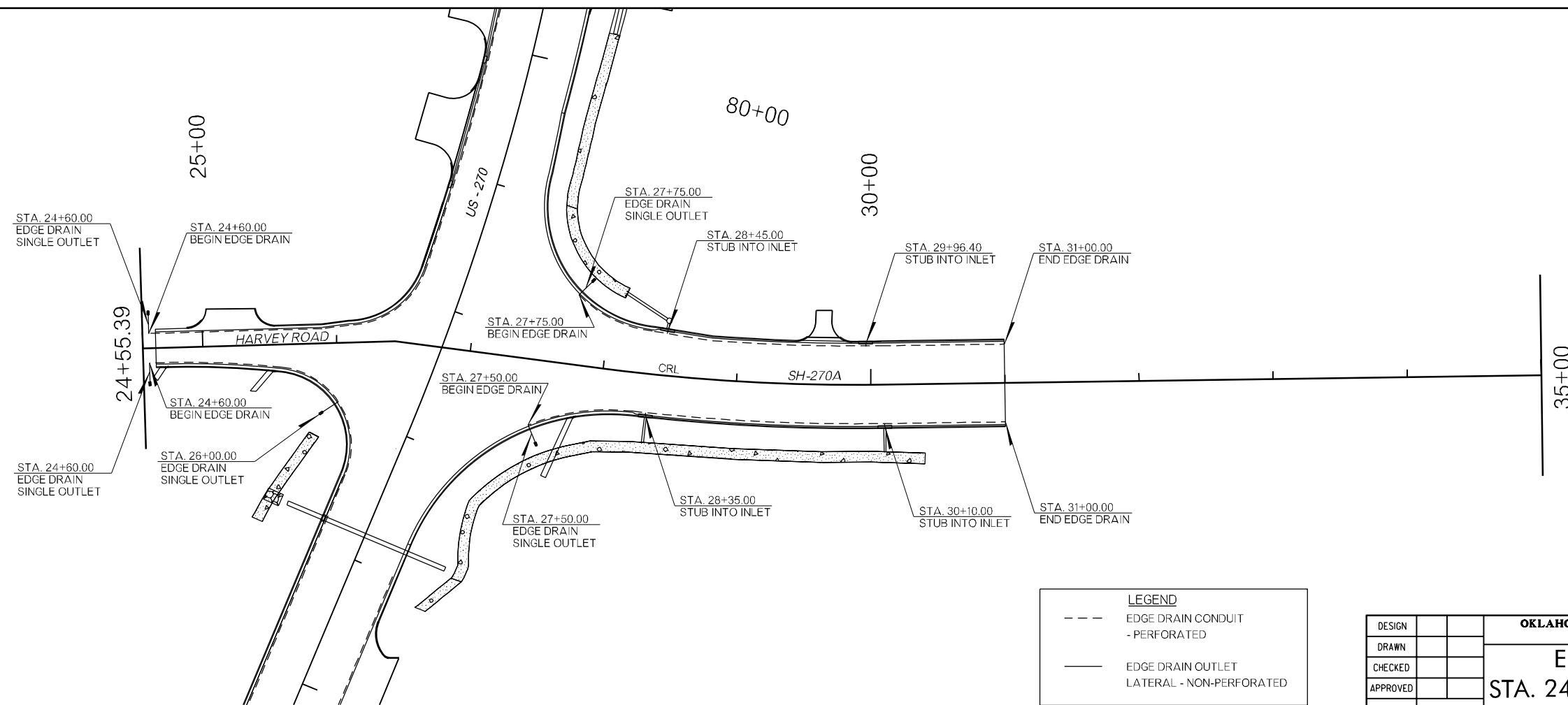
OKLAHOMA DEPARTMENT OF TRANSPORTATION

EDGE DRAIN DETAILS
 STA. 93+00 TO STA. 122+00

STATE JOB NO. 21006(04) SHEET NO. R014

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 11/7/2018

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LEGEND	
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—	EDGE DRAIN OUTLET LATERAL - NON-PERFORATED

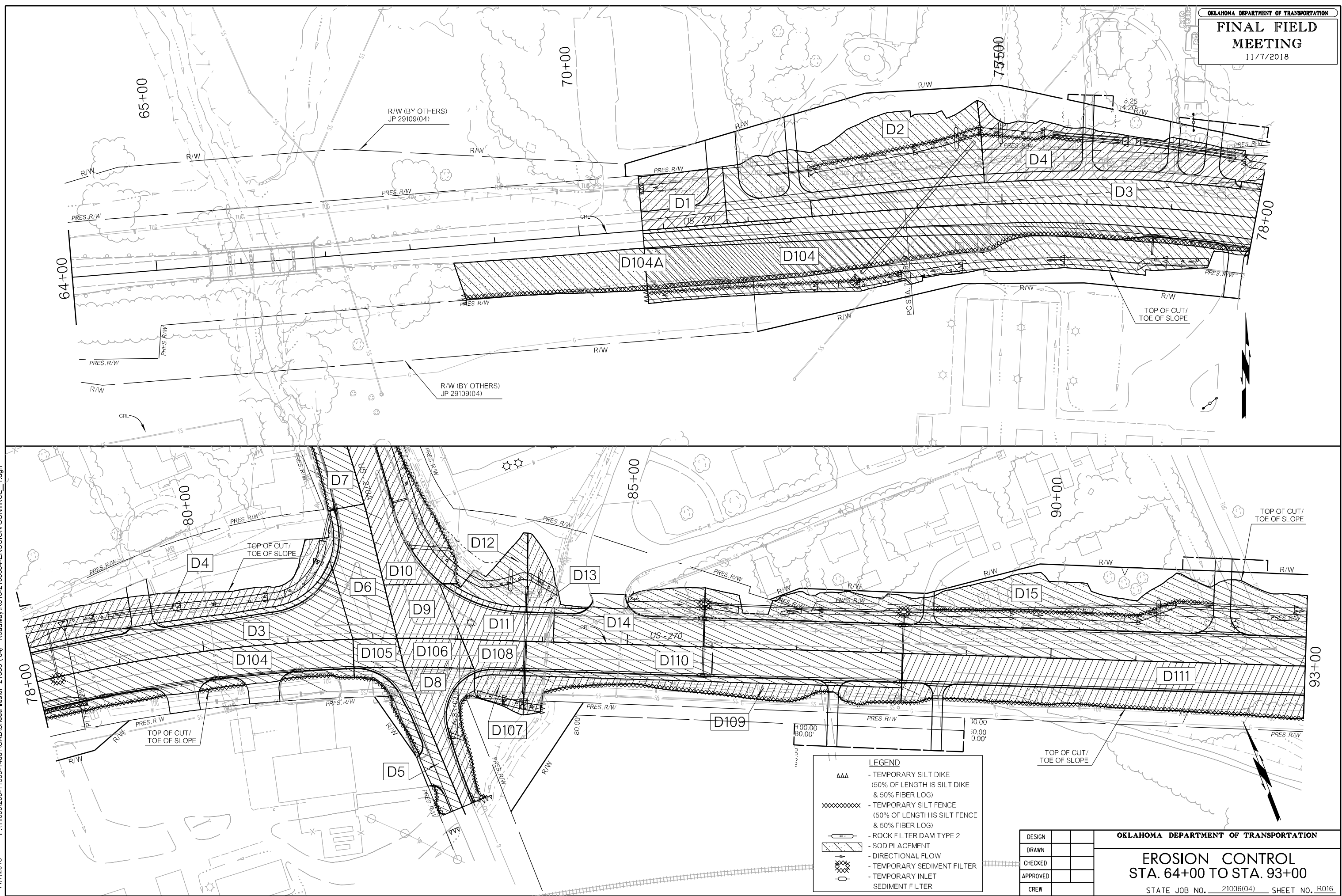
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CHECKED	
APPROVED	
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OKLAHOMA DEPARTMENT OF TRANSPORTATION

EDGE DRAIN DETAILS

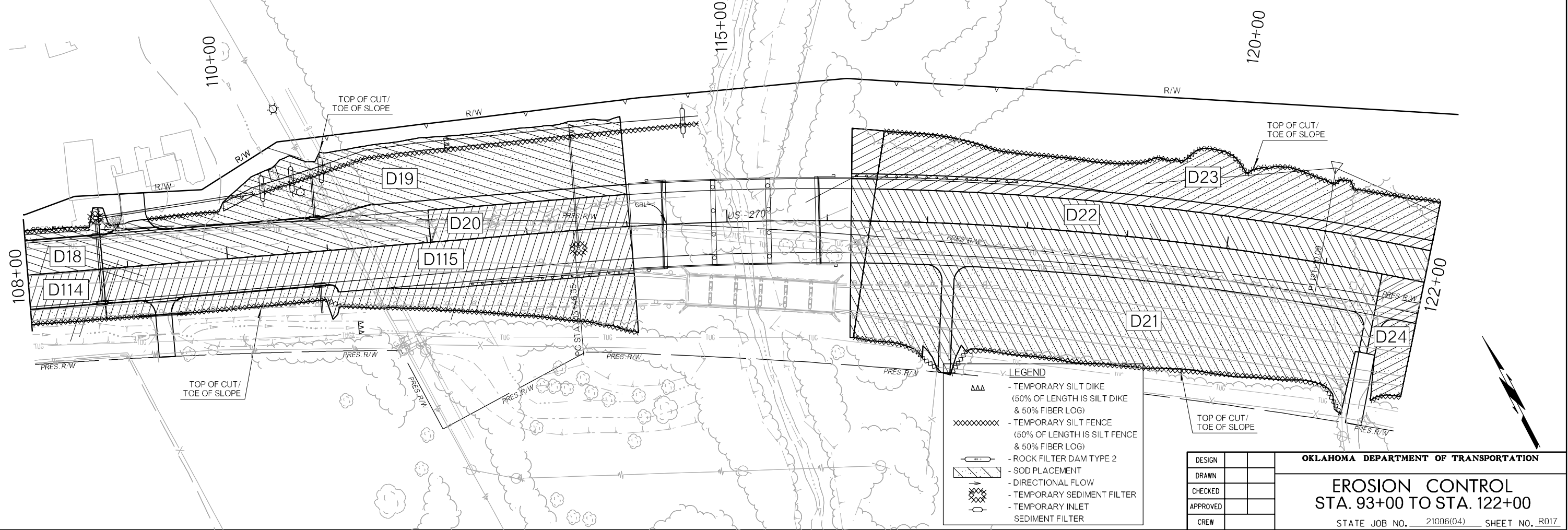
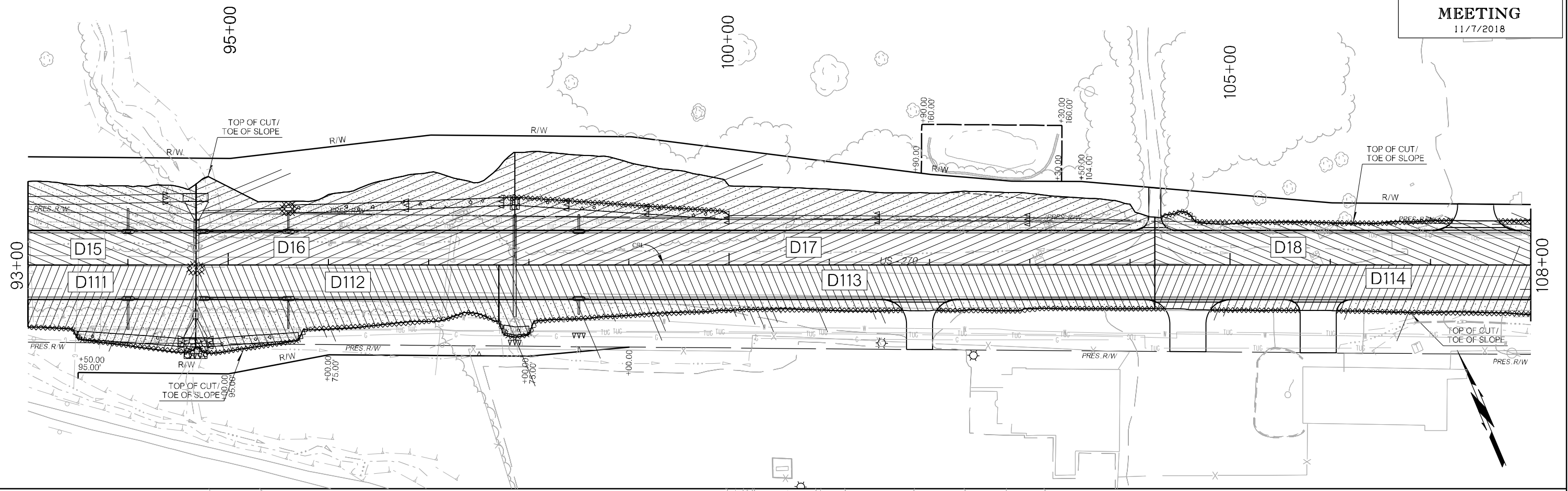
STA. 24+55.39 TO STA. 35+00

STATE JOB NO. 21006(04) SHEET NO. R015



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 11/7/2018

DESIGN				OKLAHOMA DEPARTMENT OF TRANSPORTATION EROSION CONTROL STA. 64+00 TO STA. 93+00 STATE JOB NO. 21006(04) SHEET NO. R016 SEMINOLE CO. US-270
DRAWN				
CHECKED				
APPROVED				
CREW				

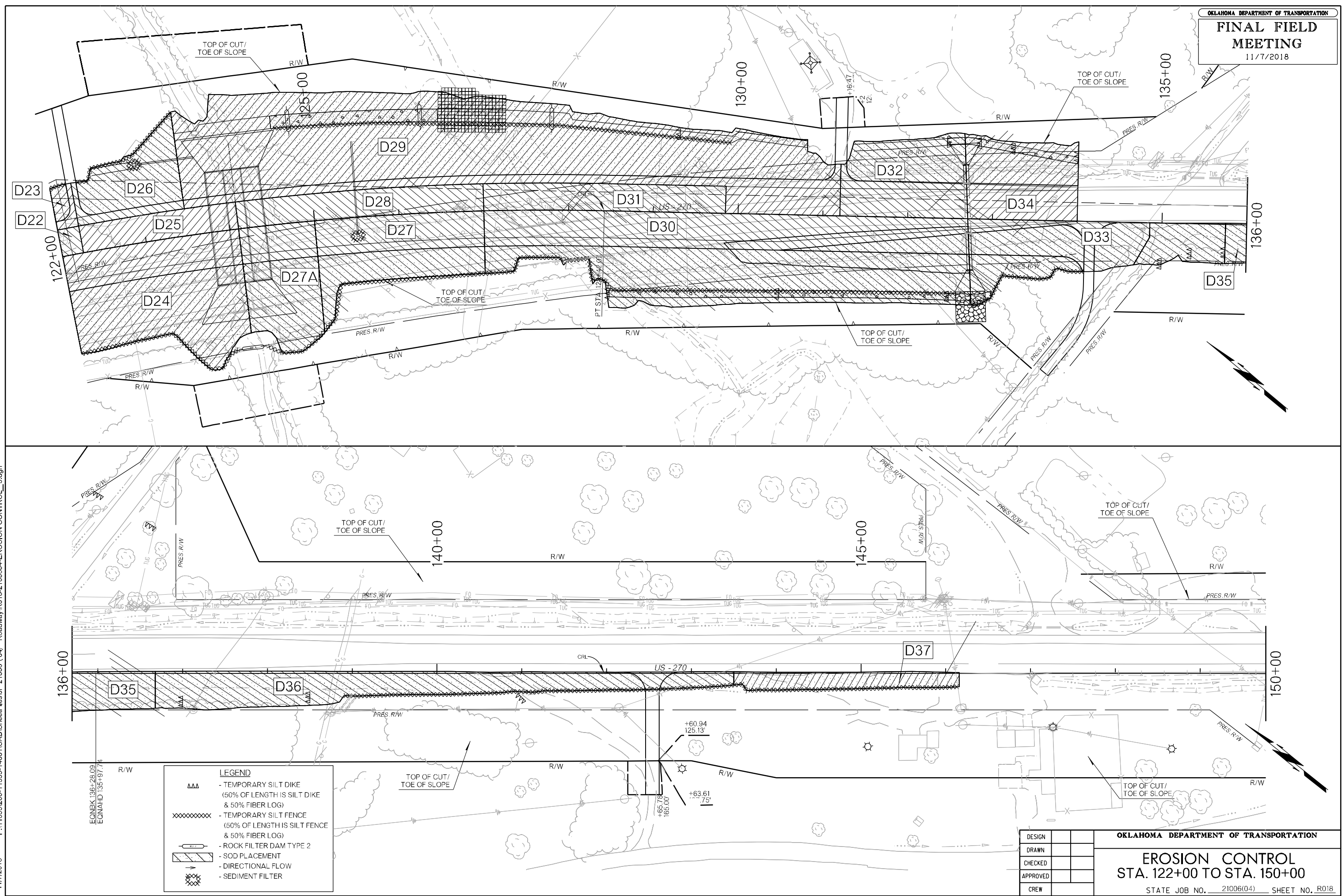


- LEGEND**
- ▲▲▲ - TEMPORARY SILT DIKE (50% OF LENGTH IS SILT DIKE & 50% FIBER LOG)
 - XXXXXXXXXX - TEMPORARY SILT FENCE (50% OF LENGTH IS SILT FENCE & 50% FIBER LOG)
 - - ROCK FILTER DAM TYPE 2
 - ▨ - SOD PLACEMENT
 - - DIRECTIONAL FLOW
 - ⊗ - TEMPORARY SEDIMENT FILTER
 - - TEMPORARY INLET SEDIMENT FILTER

DESIGN	
DRAWN	
CHECKED	
APPROVED	
CREW	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
EROSION CONTROL
 STA. 93+00 TO STA. 122+00
 STATE JOB NO. 21006(04) SHEET NO. R017

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 11/7/2018

LEGEND	
▲▲▲	- TEMPORARY SILT DIKE (50% OF LENGTH IS SILT DIKE & 50% FIBER LOG)
XXXXXXXXXX	- TEMPORARY SILT FENCE (50% OF LENGTH IS SILT FENCE & 50% FIBER LOG)
▨	- ROCK FILTER DAM TYPE 2
▨	- SOD PLACEMENT
→	- DIRECTIONAL FLOW
XXXX	- SEDIMENT FILTER

DESIGN	
DRAWN	
CHECKED	
APPROVED	
CREW	

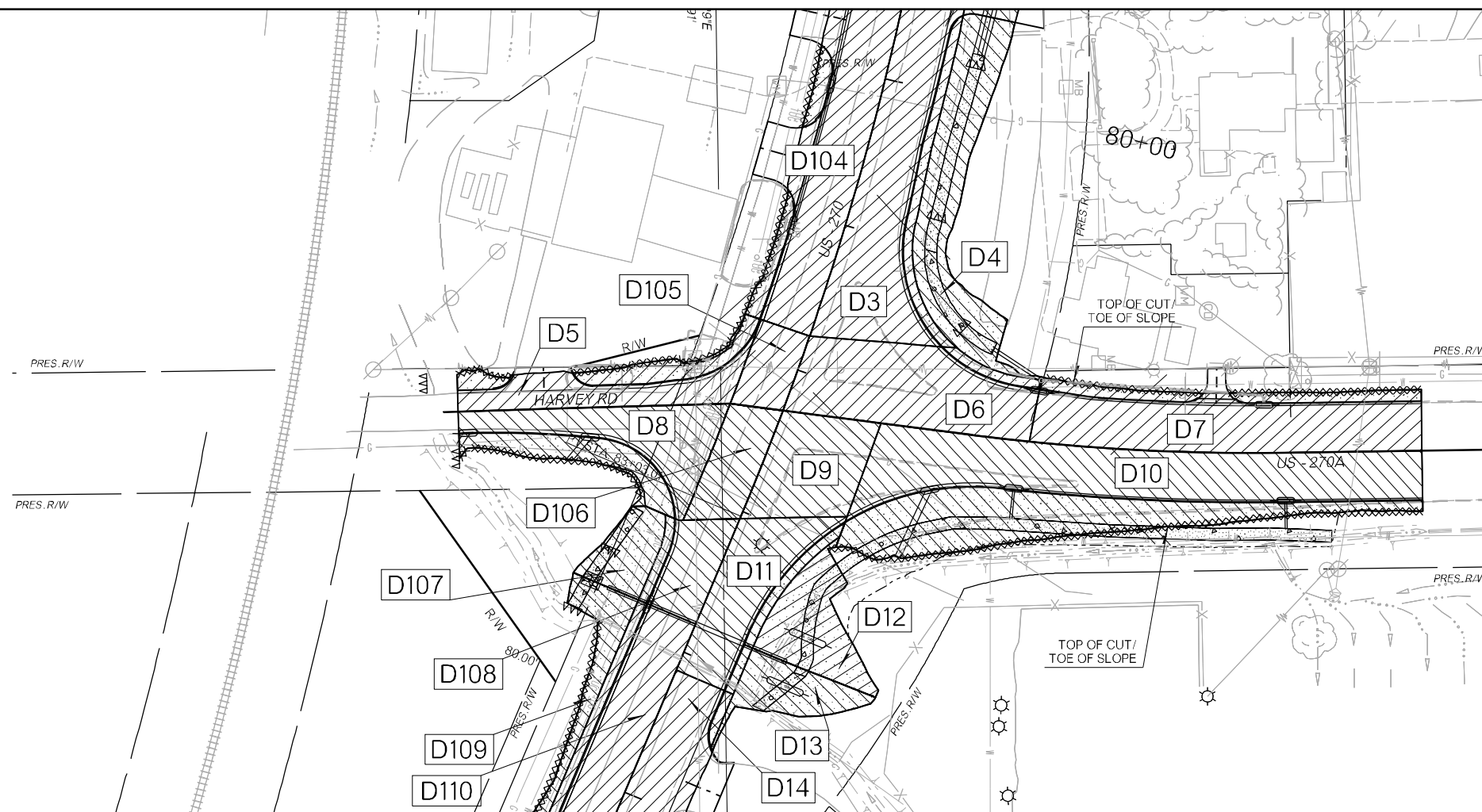
OKLAHOMA DEPARTMENT OF TRANSPORTATION

EROSION CONTROL
 STA. 122+00 TO STA. 150+00

STATE JOB NO. 21006(04) SHEET NO. R018

PRES. R/W

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LEGEND

- ▲▲▲ - TEMPORARY SILT DIKE
(50% OF LENGTH IS SILT DIKE & 50% FIBER LOG)
- XXXXXXXX - TEMPORARY SILT FENCE
(50% OF LENGTH IS SILT FENCE & 50% FIBER LOG)
- - ROCK FILTER DAM TYPE 2
- ▨ - SOD PLACEMENT
- - DIRECTIONAL FLOW
- ⊗ - SEDIMENT FILTER

DESIGN	
DRAWN	
CHECKED	
APPROVED	
CREW	

OKLAHOMA DEPARTMENT OF TRANSPORTATION

EROSION CONTROL
US-270B AND HARVEY RD./SH-270A

STATE JOB NO. 21006(04) SHEET NO. R019

SUMMARY OF DISTURBED AREA PHASE 1							
DRAINAGE AREA NO.	DRAINAGE AREA LOCATION			AREA	TOTAL AT OUTFALL	OUTFALL STATION	OUTFALL TREATMENT
AC							
D104A	68+50.00	TO	78+52.84 RT	0.79	0.79	68+50.00 RT	SILT DIKE, SILT FENCE, VEGETATIVE MULCHING, SOLID SLAB SODDING

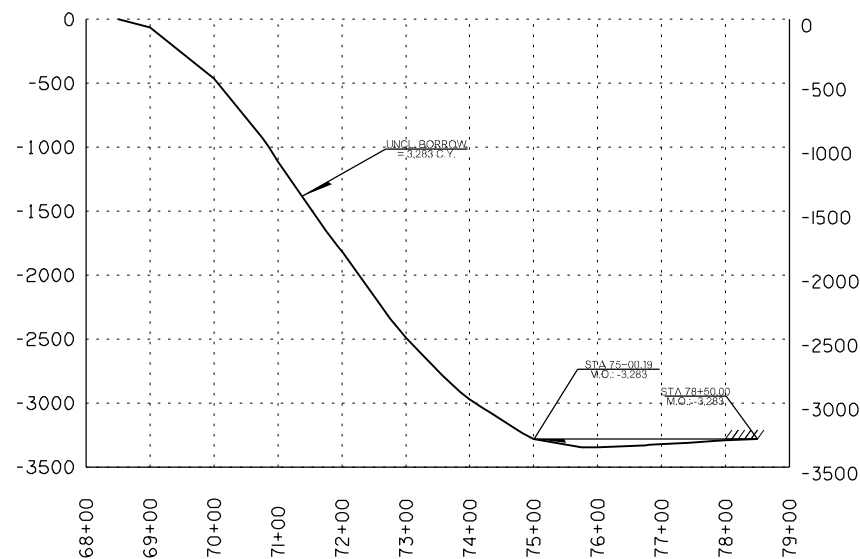
SUMMARY OF DISTURBED AREA PHASE 2							
DRAINAGE AREA NO.	DRAINAGE AREA LOCATION			AREA	TOTAL AT OUTFALL	OUTFALL STATION	OUTFALL TREATMENT
AC							
D1	70+75.00	TO	71+75.00 LT	0.15	0.15	70+75.00 LT	SILT DIKE, VEGETATIVE MULCHING, SOLID SLAB SODDING
D3	72+75.60	TO	81+76.45 LT	0.72	0.72	70+75.00 RT	VEGETATIVE MULCHING, SOLID SLAB SODDING
D2	71+75.00	TO	74+79.90 LT	0.56	1.50	74+75.00 LT	SILT DIKE, SILT FENCE, SEDIMENT FILTER, ROCK FILTER DAM, VEGETATIVE MULCHING, SOLID SLAB SODDING
D4	74+79.90	TO	81+58.90 LT	0.71			
D7	28+41.96	TO	31+00.00 LT	0.23			
D11	83+05.01	TO	84+12.90 LT	0.13			
D10	27+43.67	TO	31+00.00 RT	0.49	0.64	83+80.00 LT	VEGETATIVE MULCHING, SOLID SLAB SODDING
D12	82+90.96	TO	83+80.00 LT	0.09			
D13	83+80.00	TO	84+53.05 LT	0.06			
D14	84+12.90	TO	85+90.00 LT	0.22	3.59	94+68.05 LT	SILT DIKE, SILT FENCE, SEDIMENT FILTER, ROCK FILTER DAM, VEGETATIVE MULCHING, SOLID SLAB SODDING
D15	85+90.00	TO	94+67.77 LT	1.59			
D16	94+67.77	TO	97+85.97 LT	0.58			
D17	97+85.97	TO	104+25.00 LT	1.20			
D18	104+25.00	TO	108+75.00 LT	0.45	1.36	114+00.00 LT	SILT DIKE, SILT FENCE, SEDIMENT FILTER, ROCK FILTER DAM, VEGETATIVE MULCHING, SOLID SLAB SODDING
D19	108+75.00	TO	114+02.80 LT	0.91			
D20	112+03.29	TO	114+02.80 LT	0.15	0.15	114+00.00 RT	SILT FENCE, VEGETATIVE MULCHING, SOLID SLAB SODDING
D21	116+23.91	TO	121+57.00 RT	1.50	1.95	116+27.50 RT	
D22	116+23.91	TO	122+25.00 LT	0.45			
D23	116+23.91	TO	122+25.00 LT	0.69	0.69	116+55.00 LT	SILT FENCE, VEGETATIVE MULCHING, SOLID SLAB SODDING
D26	122+25.00	TO	123+50.00 LT	0.22	1.98	123+50.00 LT	SILT DIKE, SILT FENCE, SEDIMENT FILTER, ROCK FILTER DAM, VEGETATIVE MULCHING, SOLID SLAB SODDING
D29	123+50.00	TO	131+20.00 LT	1.76			
D24	121+57.00	TO	124+10.00 RT	0.70	1.54	124+10.00 RT	SILT DIKE, SILT FENCE, ROCK FILTER DAM, VEGETATIVE MULCHING, SOLID SLAB SODDING
D25	122+25.00	TO	124+10.00 LT	0.14			
D27A	124+10.00	TO	125+00.00 RT	0.28			
D28	124+10.00	TO	127+00.00 LT	0.21			
D31	127+00.00	TO	129+85.12 LT	0.21	0.21	128+85.00 RT	SILT DIKE, VEGETATIVE MULCHING, SOLID SLAB SODDING
D32	131+20.00	TO	132+71.05 LT	0.31	0.59	132+66.11 LT	
D34	132+71.05	TO	134+00.00 LT	0.28			
D30	127+00.00	TO	132+71.05 RT	1.25	1.57	128+85.00 RT	SILT DIKE, SILT FENCE, VEGETATIVE MULCHING, SOLID SLAB SODDING
D33	132+71.05	TO	134+85.00 RT	0.32			
D35	134+85.00	TO	136+67.50 RT	0.10	0.56	132+75.90 RT	SILT DIKE, SILT FENCE, VEGETATIVE MULCHING, SOLID SLAB SODDING
D36	136+67.50	TO	144+50.00 RT	0.46			
D37	144+50.00	TO	146+15.83 RT	0.12	0.12	OVERLAND FLOW	SILT FENCE, VEGETATIVE MULCHING, SOLID SLAB SODDING
HARVEY RD./SH-270A							
D5	24+64.98	TO	26+43.71 LT	0.12	0.30	24+64.98 LT	SILT DIKE, SILT FENCE, VEGETATIVE MULCHING, SOLID SLAB SODDING
D6	26+78.65	TO	28+41.96 LT	0.18			
D8	24+65.00	TO	26+43.71 RT	0.16	0.26	24+65.00 RT	SILT DIKE, SILT FENCE, SEDIMENT FILTER, VEGETATIVE MULCHING, SOLID SLAB SODDING
D9	26+78.67	TO	27+43.67 RT	0.10			

SUMMARY OF DISTURBED AREA PHASE 3							
DRAINAGE AREA NO.	DRAINAGE AREA LOCATION			AREA	TOTAL AT OUTFALL	OUTFALL STATION	OUTFALL TREATMENT
AC							
D104	70+75.00	TO	81+76.45 RT	1.67	1.71	70+75.00 RT	SILT DIKE, SILT FENCE, VEGETATIVE MULCHING, SOLID SLAB SODDING
D105	81+76.45	TO	82+36.48 RT	0.04			
D106	82+36.48	TO	83+20.18 RT	0.06	0.17	83+80.00 RT	SILT DIKE, VEGETATIVE MULCHING, SOLID SLAB SODDING
D107	82+20.18	TO	83+80.00 RT	0.05			
D108	82+20.18	TO	83+80.00 RT	0.06			
D110	82+80.00	TO	88+25.00 RT	0.42	0.42	94+68.05 LT	VEGETATIVE MULCHING, SOLID SLAB SODDING
D109	82+80.00	TO	88+25.00 RT	0.15			
D111	88+25.00	TO	94+67.77 RT	0.90	2.23	94+67.51 RT	SILT DIKE, SILT FENCE, VEGETATIVE MULCHING, SOLID SLAB SODDING
D112	94+67.77	TO	97+70.00 RT	0.46			
D113	97+70.00	TO	104+25.00 RT	0.72	1.27	114+00.00 RT	SILT DIKE, SILT FENCE, VEGETATIVE MULCHING, SOLID SLAB SODDING
D114	104+25.00	TO	108+75.00 RT	0.48			
D115	108+75.00	TO	114+02.80 RT	0.79			
D27	125+00.00	TO	127+00.00 RT	0.36	0.36	124+10.00 RT	SILT FENCE, VEGETATIVE MULCHING, SOLID SLAB SODDING
D30	127+00.00	TO	132+71.05 RT	1.25	183.25	128+85.00 RT	SILT DIKE, SILT FENCE, VEGETATIVE MULCHING, SOLID SLAB SODDING
D33	132+71.05	TO	134+85.00 RT	0.32			

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DESIGN			OKLAHOMA DEPARTMENT OF TRANSPORTATION EROSION CONTROL DETAIL SHEETS STATE JOB NO. 21006(04) SHEET NO. R020
DRAWN			
CHECKED			
APPROVED			
CREW			

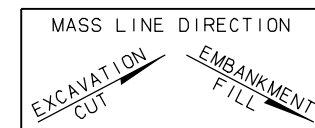
PHASE 1: US-270 STA 68+50 TO STA 78+50
SHEET ESTIMATE 1



SHEET ESTIMATE #1
STA 68+50 TO STA 78+50
UNCL. EXCAV. = 88 C.Y.
EMB. +15% = 3,371 C.Y.
UNCL. BORROW = 3,283 C.Y.

11/7/2018 P:\11399\200-11399-14001\CAD\SheetFiles\JP_21006 (04) Roadway\R021-2100604-MASS DIAGRAM PHASE 1.dgn

MASS DIAGRAM PROVIDED FOR BIDDING PURPOSES ONLY. ACTUAL BALANCE POINTS TO BE DETERMINED BY CHARACTER 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.



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APPROVED	
SQUAD	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION

MASS DIAGRAM PHASE 1

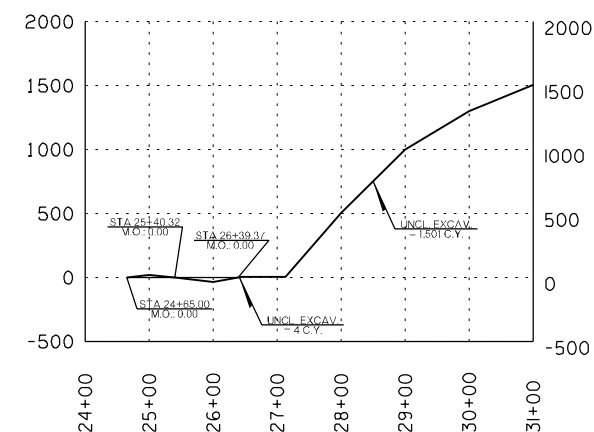
STATE JOB NO. 21006(04) SHEET NO. R021

PHASE 2: US-270 STA 70+75 TO STA 146+15
SHEET ESTIMATE 2



SHEET ESTIMATE #2
STA 70+75 TO STA 146+15
UNCL. EXCAV. = 20,969 C.Y.
EMB. +15% = 54,807 C.Y.
UNCL. BORROW = 33,838 C.Y.

PHASE 2: HARVEY RD STA 24+65 TO STA 31+00
SHEET ESTIMATE 3



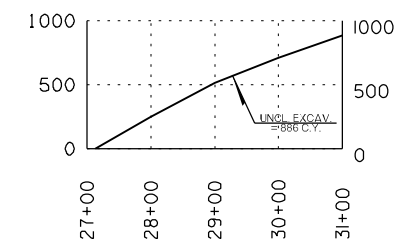
SHEET ESTIMATE #3
STA 24+65 TO STA 31+00
UNCL. EXCAV. = 1,889 C.Y.
EMB. +15% = 384 C.Y.
EXCESS EXCAV. = 1,505 C.Y.

PHASE 2B: US-270 STA 125+00 TO STA 134+00
SHEET ESTIMATE 4



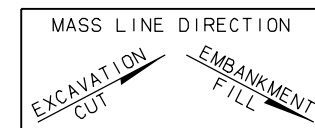
SHEET ESTIMATE #4
STA 125+00 TO STA 134+00
UNCL. EXCAV. = 2,904 C.Y.
EMB. +15% = 17,157 C.Y.
EXCESS EXCAV. = 14,253 C.Y.

PHASE 2C: HARVEY RD STA 27+13.59 TO STA 31+00.00
SHEET ESTIMATE 5



SHEET ESTIMATE #5
STA 27+13.59 TO STA 31+00.00
UNCL. EXCAV. = 897 C.Y.
EMB. +15% = 11 C.Y.
EXCESS EXCAV. = 886 C.Y.

MASS DIAGRAM PROVIDED FOR BIDDING PURPOSES ONLY. ACTUAL BALANCE POINTS TO BE DETERMINED BY CHARACTER 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.



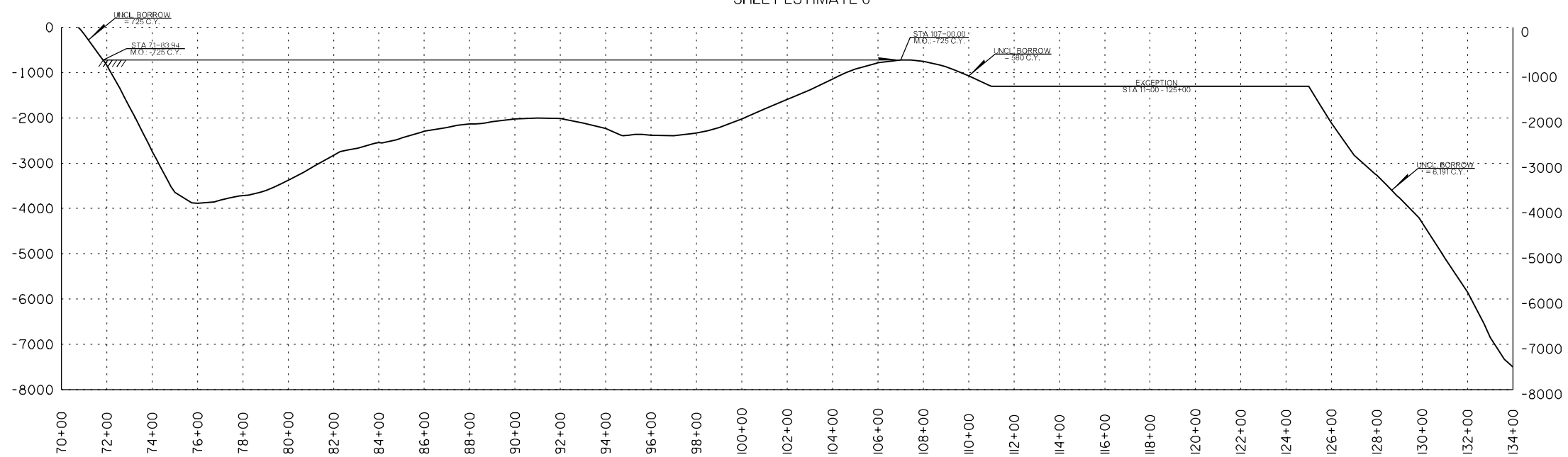
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APPROVED	
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OKLAHOMA DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION

MASS DIAGRAM PHASE 2

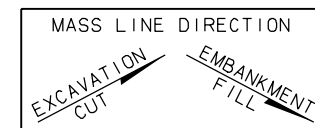
STATE JOB NO. 21006(04) SHEET NO. R022

PHASE 3: US-270 STA 70+75 TO STA 134+00
SHEET ESTIMATE 6



SHEET ESTIMATE #6
STA 70+75 TO STA 134+00
UNCL. EXCAV. = 7,340 C.Y.
EMB. +15% = 14,836 C.Y.
UNCL. BORROW = 7,496 C.Y.

MASS DIAGRAM PROVIDED FOR BIDDING PURPOSES ONLY. ACTUAL BALANCE POINTS TO BE DETERMINED BY CHARACTER 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.

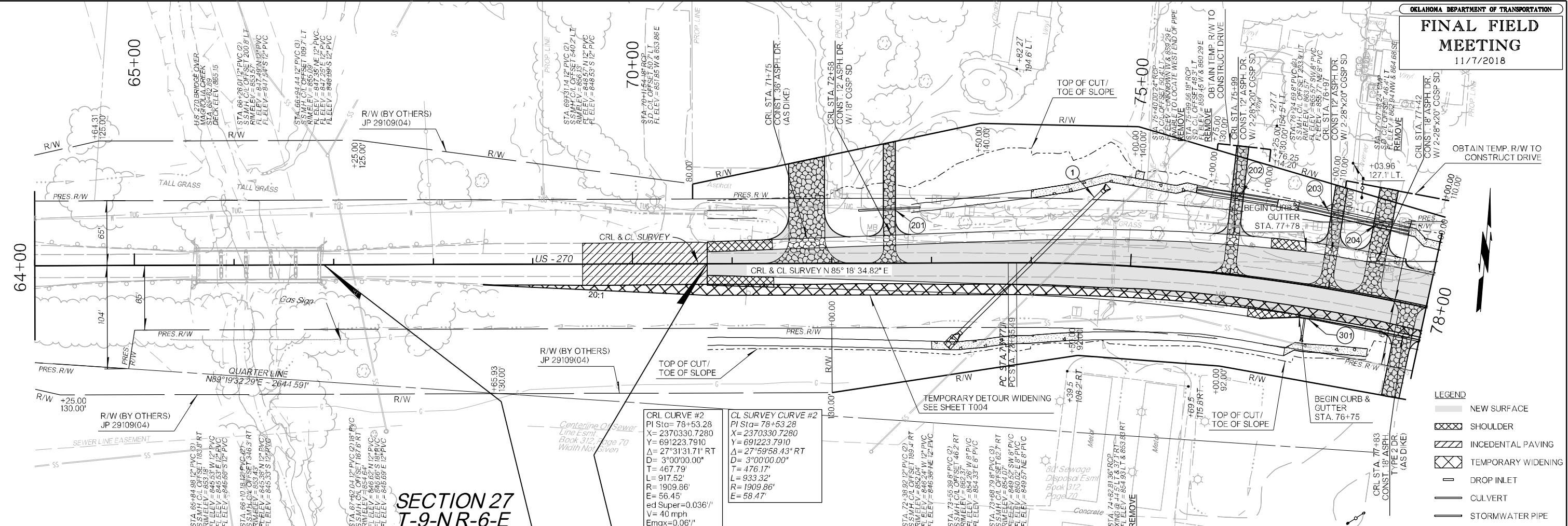


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OKLAHOMA DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION

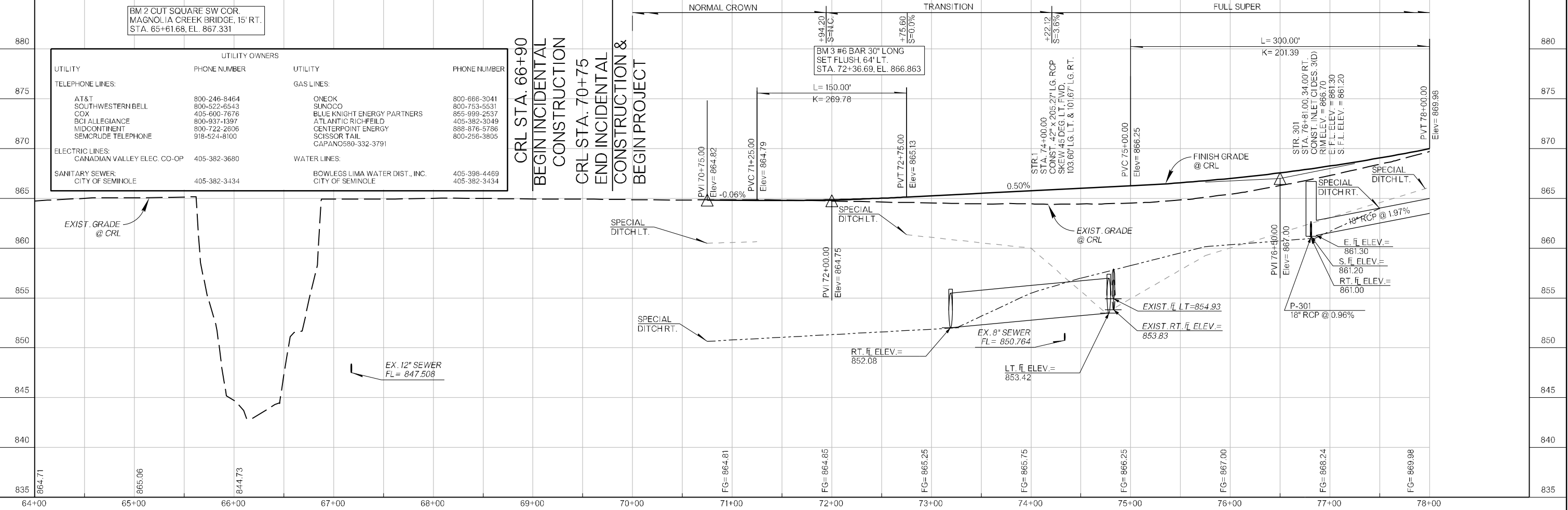
**MASS DIAGRAM
PHASE 3**

STATE JOB NO. 21006(04) SHEET NO. R023



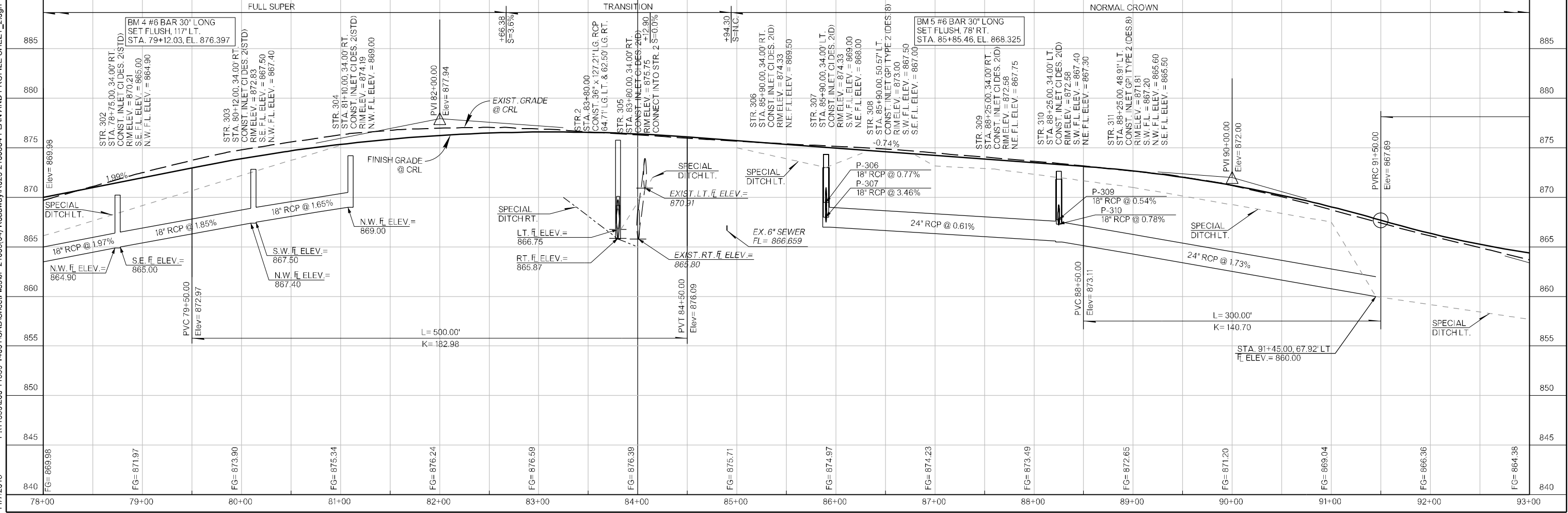
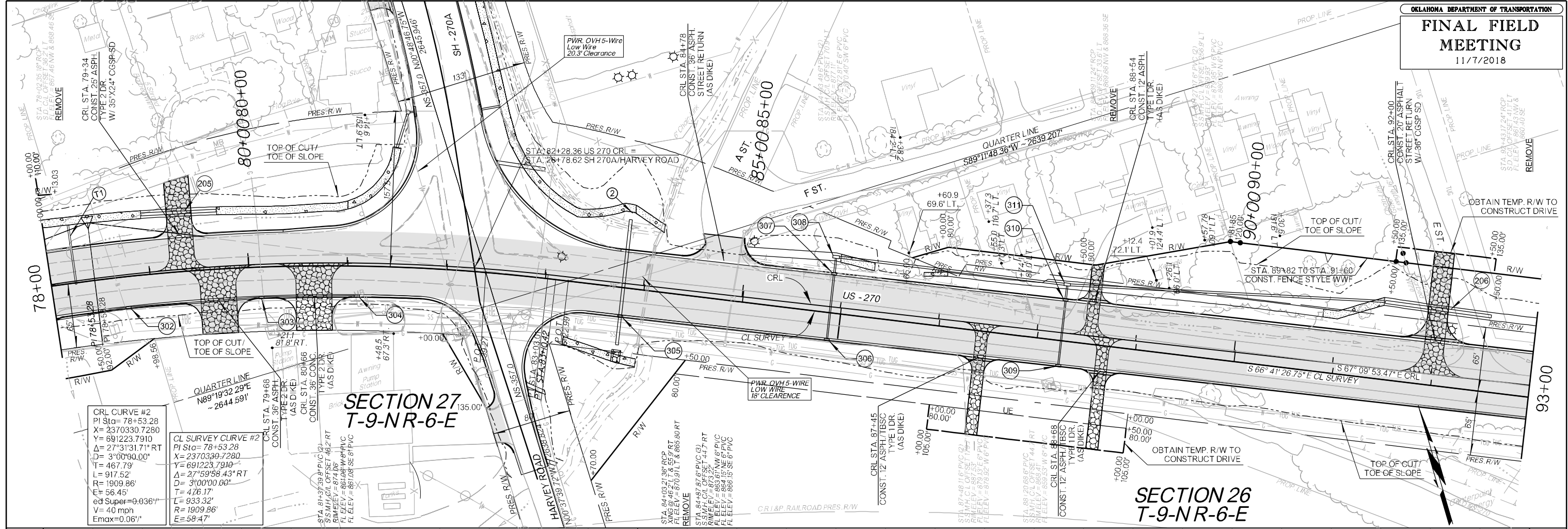
CRL CURVE #2
 PI Sta= 78+53.28
 X= 2370330.7280
 Y= 691223.7910
 Δ= 27°31'31.71" RT
 D= 3°00'00.00"
 T= 467.79'
 L= 917.52'
 R= 1909.86'
 E= 56.45'
 ed Super=0.036"/
 V= 40 mph
 Emax=0.06"/

CL SURVEY CURVE #2
 PI Sta= 78+53.28
 X= 2370330.7280
 Y= 691223.7910
 Δ= 27°59'58.43" RT
 D= 3°00'00.00"
 T= 476.17'
 L= 933.32'
 R= 1909.86'
 E= 58.47'

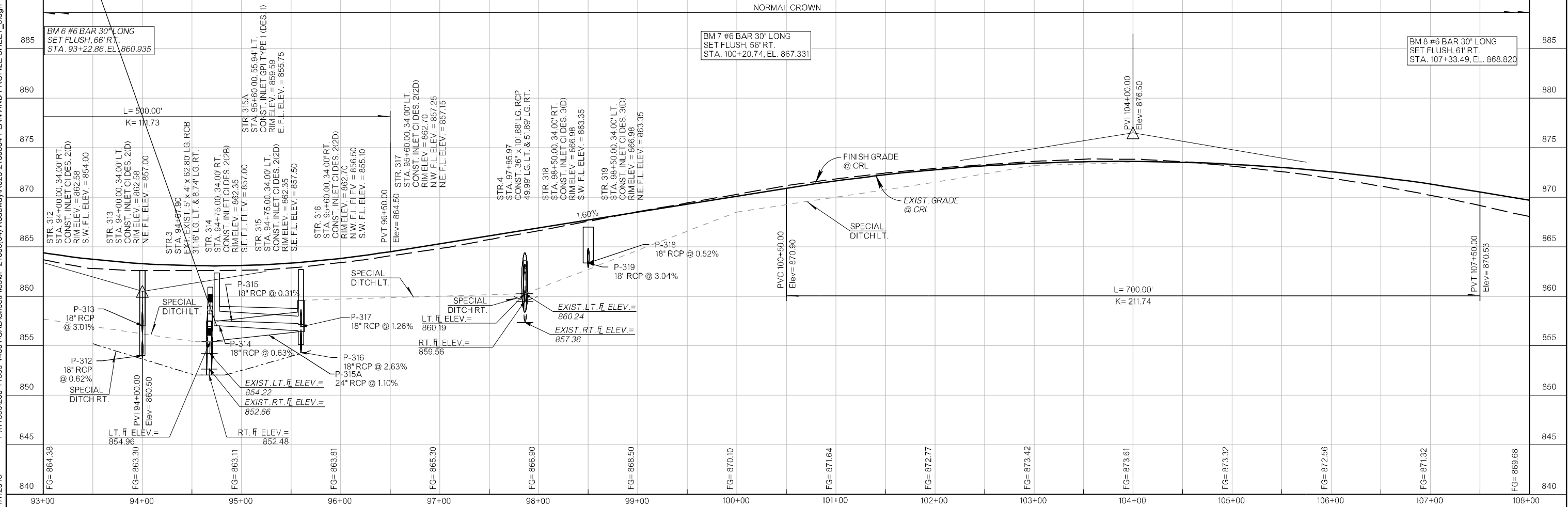
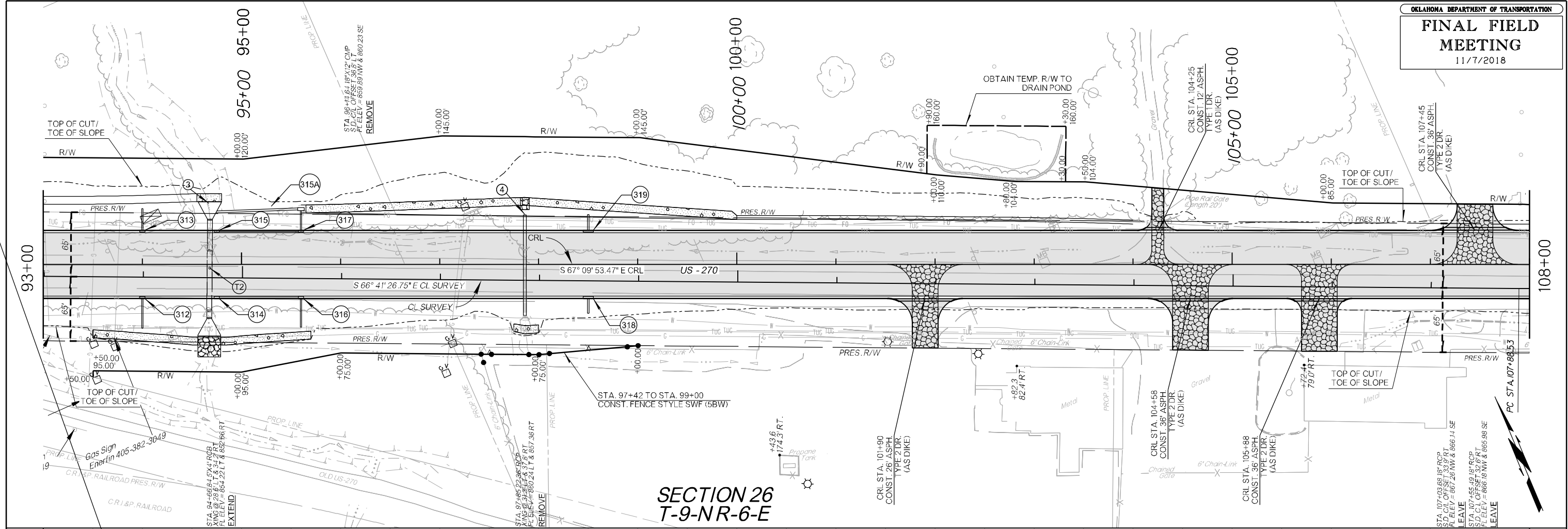


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11/7/2018



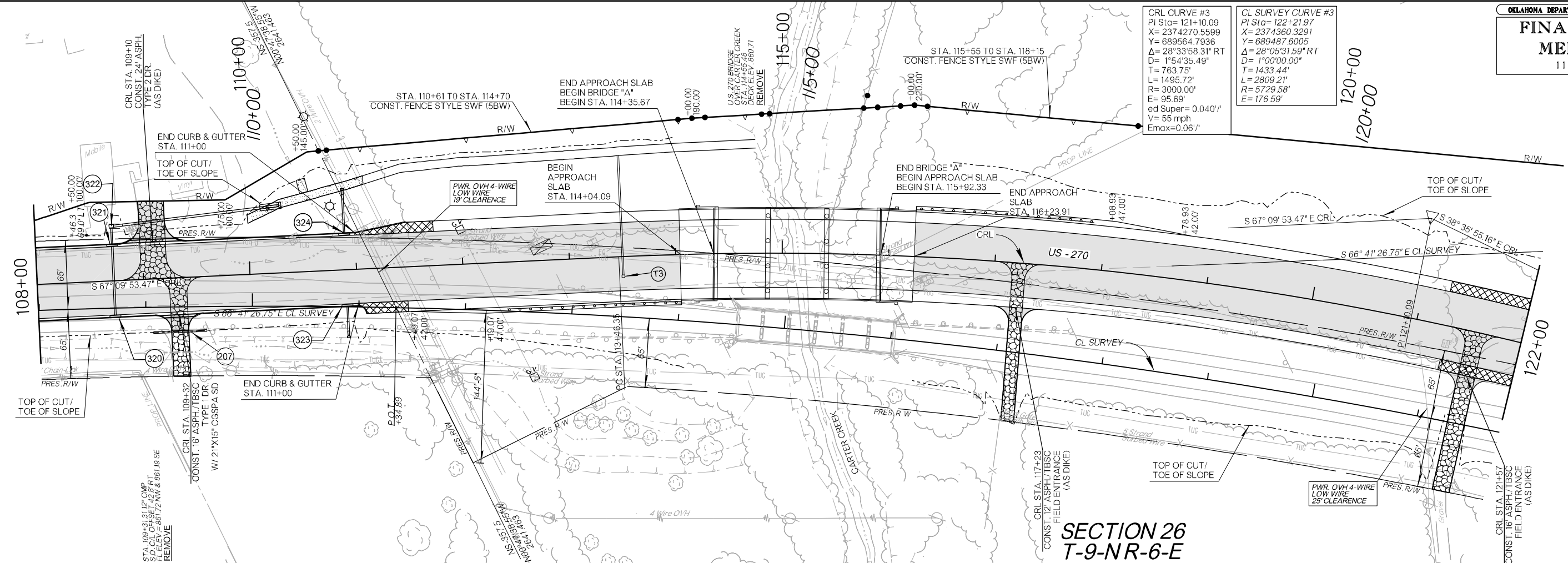
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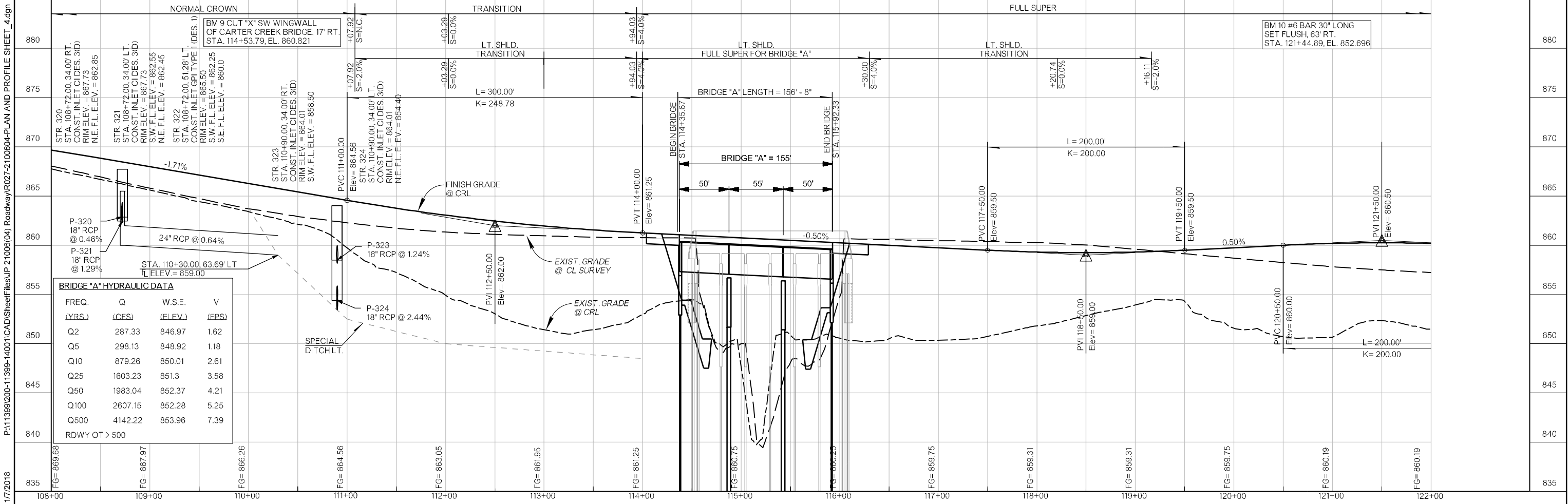
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 11/7/2018

CRL CURVE #3
 PI Sta= 121+10.09
 X= 2374270.5599
 Y= 689564.7936
 Δ = 28°33'58.31" RT
 D= 1°54'35.49"
 T= 763.75'
 L= 1495.72'
 R= 3000.00'
 E= 95.69'
 ed Super= 0.040'/'
 V= 55 mph
 Emox=0.06'/'

CL SURVEY CURVE #3
 Pj Sta= 122+21.97
 X= 2374360.3291
 Y= 689487.6005
 Δ = 28°05'31.59" RT
 D= 1°00'00.00"
 T= 1433.44'
 L= 2809.21'
 R= 5729.58'
 E= 176.59'



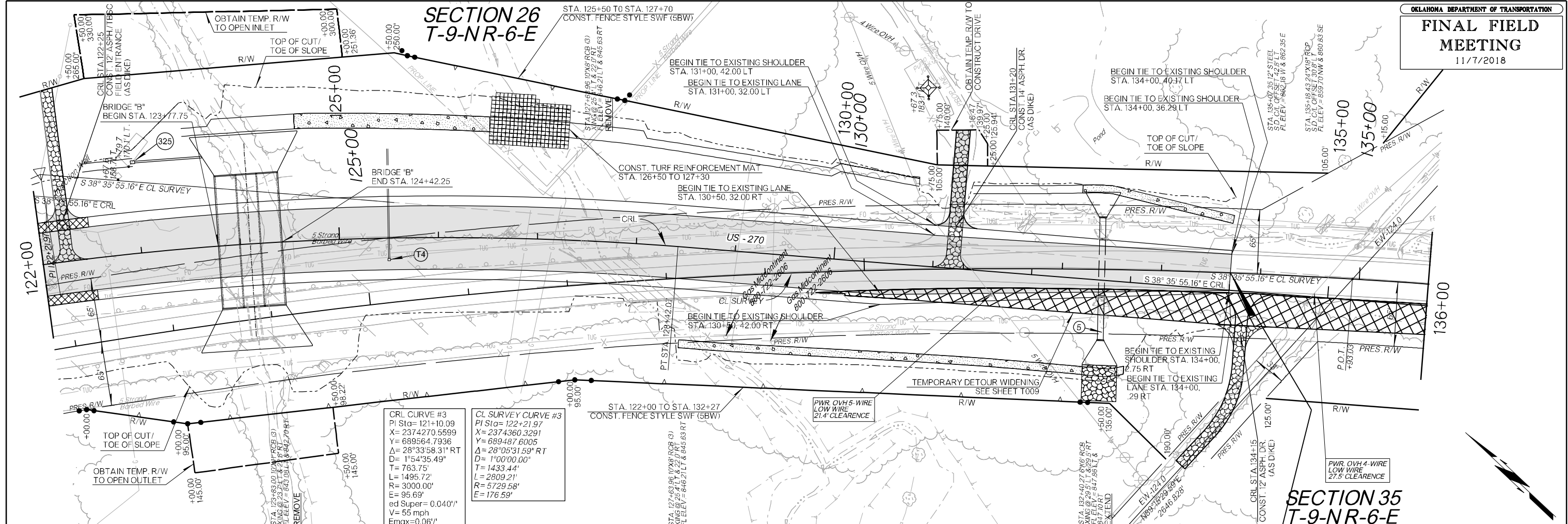
SECTION 26
T-9-NR-6-E



BRIDGE "A" HYDRAULIC DATA

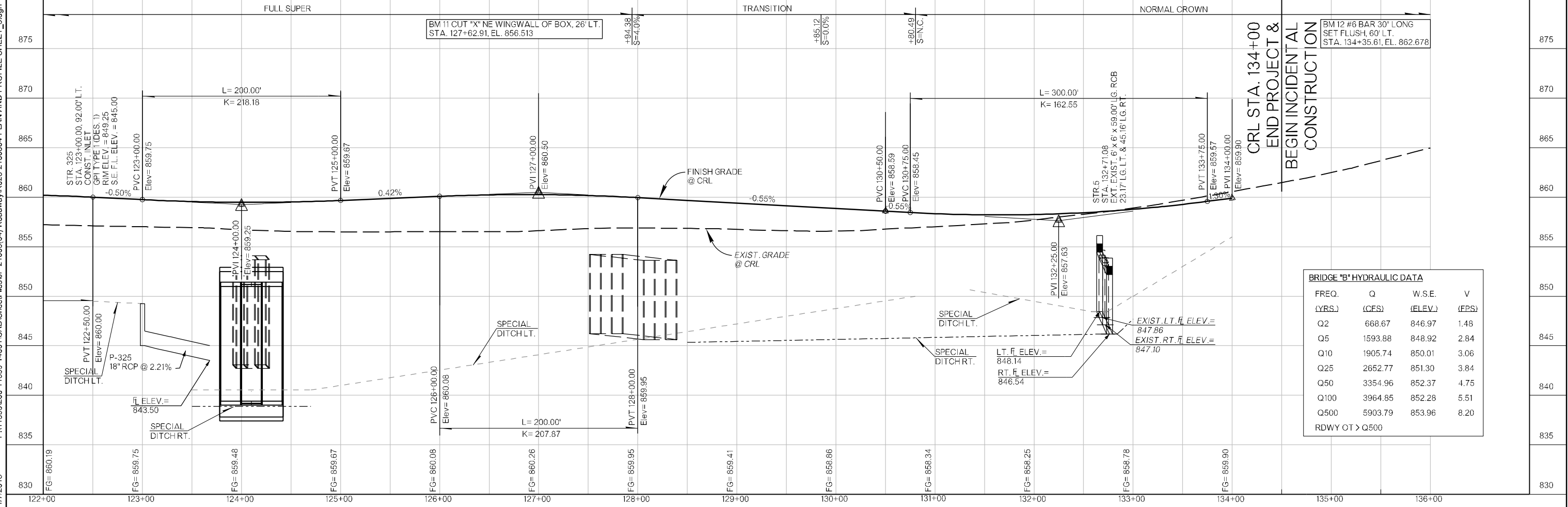
FREQ. (YRS.)	Q (CFS)	W.S.E. (ELEV.)	V (FPS)
Q2	287.33	846.97	1.62
Q5	298.13	848.92	1.18
Q10	879.26	850.01	2.61
Q25	1603.23	851.3	3.58
Q50	1983.04	852.37	4.21
Q100	2607.15	852.28	5.25
Q500	4142.22	853.96	7.39

RDWY OT > 500



CRL CURVE #3
 PI Sta = 121+10.09
 X = 2374270.5599
 Y = 689564.7936
 Δ = 28°33'58.31" RT
 D = 1°54'35.49"
 T = 763.75'
 L = 1495.72'
 R = 3000.00'
 E = 95.69'
 e_d Super = 0.040'
 V = 65 mph
 E_{max} = -0.061'

CL SURVEY CURVE #3
 PI Sta = 122+21.97
 X = 2374360.3291
 Y = 689487.6005
 Δ = 28°05'31.59" RT
 D = 1°00'00.00"
 T = 1433.44'
 L = 2809.21'
 R = 5729.58'
 E = 176.59'



BRIDGE "B" HYDRAULIC DATA

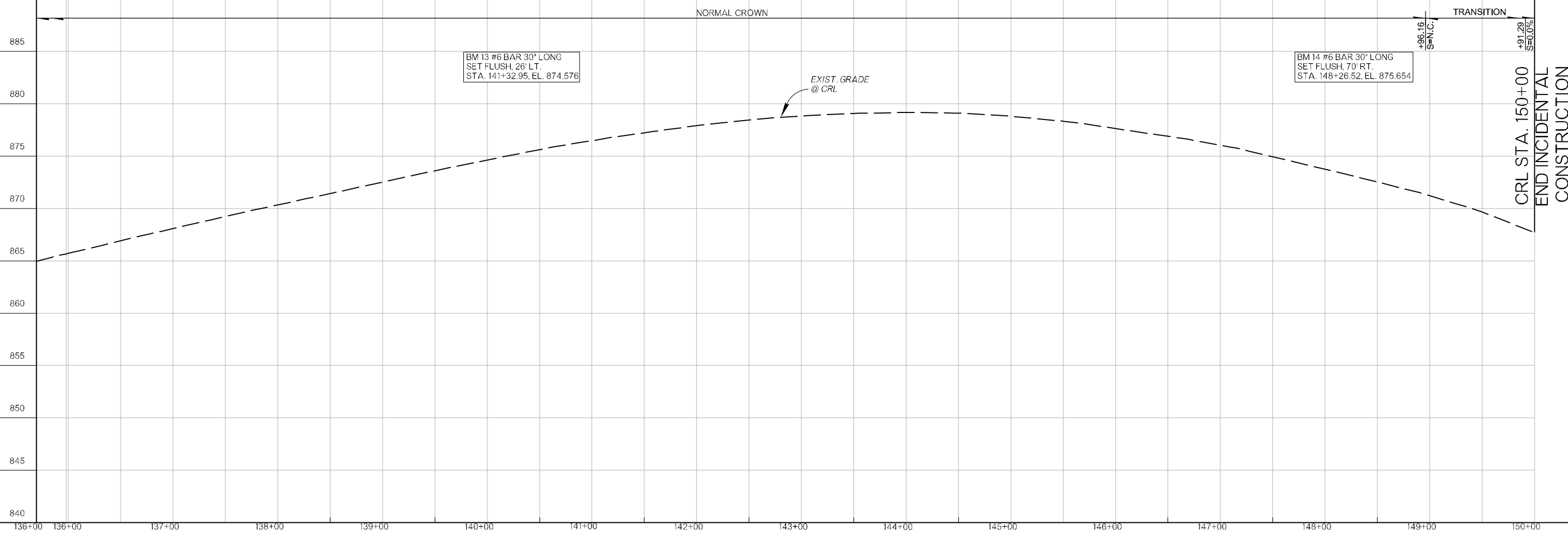
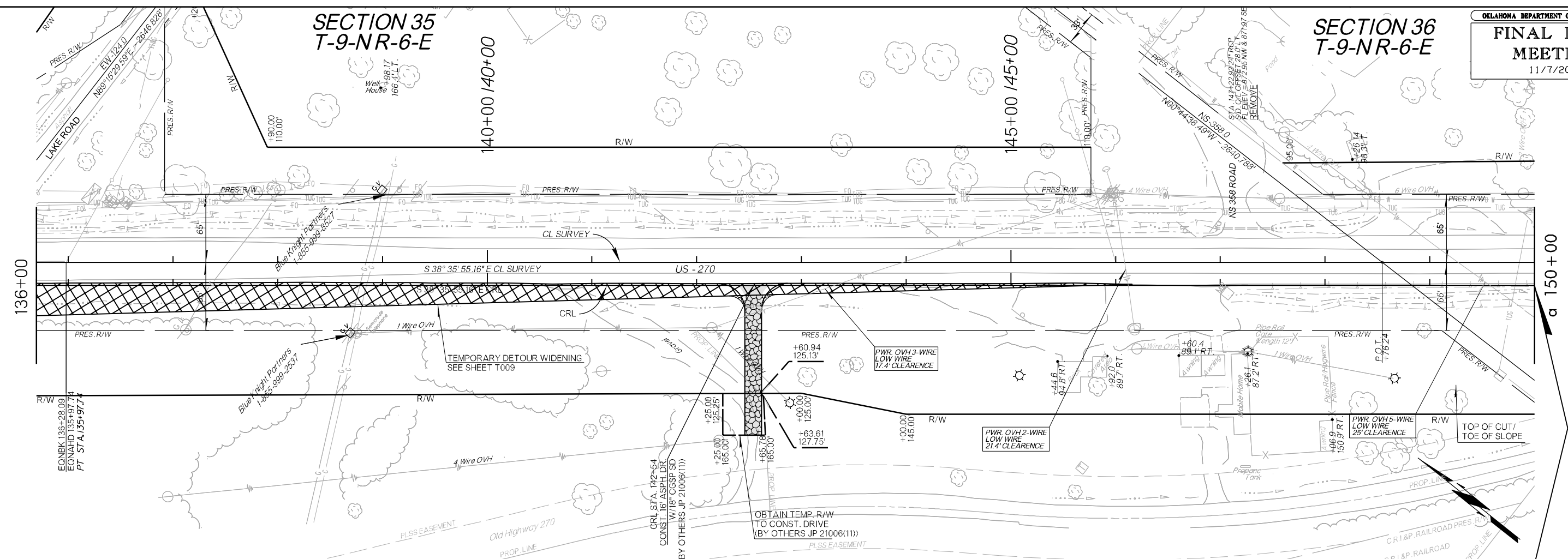
FREQ. (YRS.)	Q (CFS)	W.S.E. (ELEV.)	V (FPS)
Q2	668.67	846.97	1.48
Q5	1593.88	848.92	2.84
Q10	1905.74	850.01	3.06
Q25	2652.77	851.30	3.84
Q50	3354.96	852.37	4.75
Q100	3964.85	852.28	5.51
Q500	5903.79	853.96	8.20

RDWY OT > Q500

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SECTION 35
T-9-NR-6-E

SECTION 36
T-9-NR-6-E

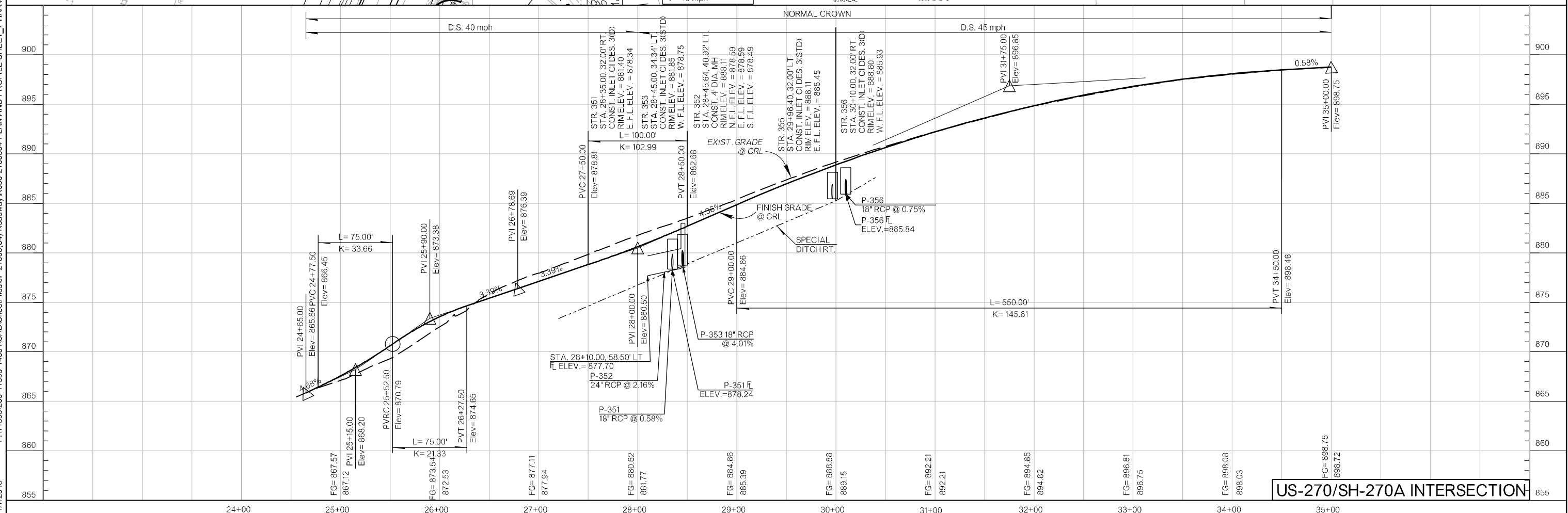
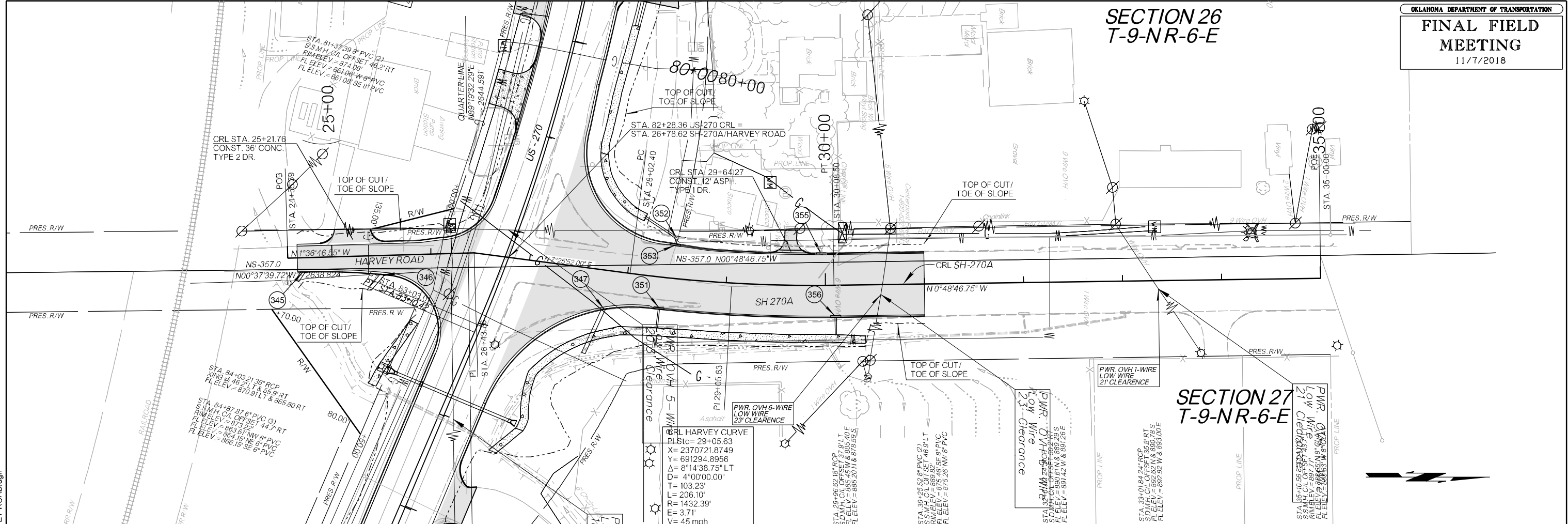


CRL STA. 150+00
 END INCIDENTAL
 CONSTRUCTION

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 11/7/2018

SECTION 26
T-9-NR-6-E

SECTION 27
T-9-NR-6-E



US-270/SH-270A INTERSECTION

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

DESCRIPTION	REVISIONS	DATE

Oklahoma Department of Transportation
Survey Division

(405) 521-2621

March 31, 2015

To: Mr. W. (Leroy) Tackett, PLS, Chief of Surveys

From: Shawn Smith, Professional Land Surveyor

Subject: SWO 4879(1), J/P 21006(11), U.S. 270. From 0.5 Mile East of S.H. 99, East to U.S. 270-B, Seminole County

I. GENERAL:

Survey Began: February 27, 2014
Survey Completed: March 31, 2015

The measurement unit for this project was the U.S. Survey Foot.

II. SURVEY ASSIGNMENT:

This survey was assigned to Lenke Land Surveying, Inc. (LLS) under Engineering Contract Number 1468-A.

III. PURPOSE OF SURVEY:

The purpose of this survey was to furnish sufficient data to develop plans to add capacity to present U.S. 270 southeast of Seminole.

IV. SURVEY LIMITS:

U.S. 270: Survey began at P.C. Sta. 52+97.057, as established under SWO 1739(1) survey & shown on FAP No. F-222(7) plans, and extended southeasterly to P.O.T. Sta. 500+00.000, as established under SWO 2219(1) survey & shown on FAP No. 222(15) plans.

S.H. 270-A: Survey began at P.O.T. Sta. 26+87.240 (C.R.L.) and extended north to Sta. 35+00.000 as shown on FAP No. DBS-67B(229) plans.

U.S. 270-B: Survey began at Sta. 482+00.000 (U.S. 270 Main Line Survey) and extended east to P.O.T. Sta. 500+00.000 as established under SWO 1739(1) survey and shown on FAP No. F-222(9) plans.

NS-363 Section Line: Survey began at P.O.T. Sta. 17+00.000 and extended north to P.O.T. Sta. 31+00.000 as established under SWO 2219(1) survey and shown on FAP No. F-222(15) plans.

V. ALIGNMENT:

U.S. 270: The centerline referenced under SWO 1739(1) survey & SWO 2219(1) survey and shown on FAP No. F-222(7) plans, FAP No. F-222(8) plans, FAP No. F-222(9) plans and FAP No. F-222(15) plans was re-established using monuments and references found from said previous ODOT surveys and verified with existing bridges, paving and right-of-way occupation. This alignment was approved by Mr. Larry Williams and Mr. Leroy Tackett in a meeting at the ODOT main building on July 17, 2014.

S.H. 270-A: The centerline of survey, construction reference line (C.R.L.), shown on FAP No. DBS-67B(229) plans was re-established using monuments found and tied to U.S. 270 centerline.

U.S. 270-B: The centerline referenced under SWO 1739(1) and shown on FAP No. F-222(9) plans was re-established using monuments found and tied to U.S. 270 centerline.

NS-363 Section Line: The centerline referenced under SWO 2219(1) survey and shown on FAP No. F-222(15) plans was re-established using existing monuments which fit well with ties shown on said survey and plans.

VI. STATIONING:

U.S. 270: As directed by the Special Provisions, the stationing was taken from SWO 1739(1) survey & SWO 2219(1) survey and FAP No. F-222(7) plans, FAP No. F-222(8) plans, FAP No. F-222(9) plans and FAP No. F-222(15) plans. The PI at station 78+53.28 was found and held. Stations were then calculated back and ahead from PI.

S.H. 270-A: As directed by the Special Provisions, the stationing was taken from FAP No. DBS-67B(229) plans. A station of 26+40.000 was held at the ¼ section corner as per said plans.

U.S. 270-B: As directed by the Special Provisions, the stationing was taken from SWO 1739(1) survey and FAP No. F-222(9) plans. Stationing was a continuation of the stationing for U.S. 270 centerline.

NS-363 Section Line: As directed by the Special Provisions, the stationing was taken from SWO 2219(1) survey and FAP No. F-222(15) plans. A station value of 31+00.000 was held where NS-363 intersected U.S. 270-B and stationing was calculated back south per survey and plans.

VII. HORIZONTAL CONTROL:

Horizontal control for this survey was established by static GPS observations using multiple sessions. The primary control stations used in the static network were OKAR, OKMU, OKPR, K 149, and SEMINOLE. Coordinates shown on this survey are NGS Oklahoma State Plane Coordinate System NAD83(2011) Lambert Projection South Zone. The distances and coordinates shown on this survey are in U.S. Survey Feet. All angles and bearings are shown in degrees, minutes, and seconds. Primary control for this survey was established following ODOT Survey Division Standards.

Secondary control points were established by multiple observations using RTK and by Robotic Total Stations.

VIII. VERTICAL CONTROL:

- A Vertical control for this survey is NAVD88.
- B Benchmarks held for this survey are, NGS G-149, NGS U-149, NGS T-149 and BM X on headwall from FAP No. F-222(15) plans. Differential leveling techniques were used to establish elevations for the survey vertical control.
- C A benchmark list depicting newly established benchmarks as well as the results of the leveling has been placed on the Survey Data Sheets.

IX. PHOTO CONTROLS:

Aerial control targets were established by static GPS observations utilizing the primary control points. Differential leveling runs were used to establish vertical control for the targets.

X. TOPOGRAPHY AND DTM:

Topographic data was collected by aerial film photographs, which were scanned to digital aerial imagery (Provided by Aerial Mapping Technologies) and supplemented by conventional field methods.

DTM data was collected as follows:

U.S. 270: 200' right and left of centerline of survey from the beginning of survey to Sta. 61+00, 500' right and left of centerline of survey from Sta. 61+00 to Sta. 71+00, 200' right and left of centerline of survey from Sta. 71+00 to Sta. 82+00, 250' right and left of centerline of survey from Sta. 82+00 to Sta. 110+00, 500' right and left of centerline of survey from Sta. 110+00 to Sta. 133+00, 250' right and left of centerline of survey from Sta. 133+00 to Sta. 184+00, 500' right and left of centerline of survey from Sta. 184+00 to Sta. 194+00, 250' right and left of centerline of survey from Sta. 194+00 to Sta. 200+00, 500' right and left of centerline of survey from Sta. 200+00 to Sta. 210+00, 250' right and left of centerline of survey from Sta. 210+00 to Sta. 271+00, 500' right and left of centerline of survey from Sta. 271+00 to Sta. 281+00, 250' right and left of centerline of survey from Sta. 281+00 to Sta. 339+00, 500' right and left of centerline of survey from Sta. 339+00 to Sta. 349+00, 250' right and left of centerline of survey from Sta. 349+00 to Sta. 365+00, 500' right and left of centerline of survey from Sta. 365+00 to Sta. 382+00, 250' right and left of centerline of survey from Sta. 382+00 to Sta. 470+00, 500' right and left of centerline of survey from Sta. 470+00 to Sta. 484+00, and 250' right and left of centerline of survey from Sta. 484+00 to the end of survey.

S.H. 270-A: 150' right and left of centerline of survey from the beginning of survey to the end of survey.

U.S. 270-B: 150' right and left of centerline of survey from the beginning of survey to the end of survey.

NS-363 Section Line: 100' right and left of centerline of survey from the beginning of survey to the end of survey.

XI. LAND TIES:

- A Complete land tie information was obtained by conventional field methods as per the Survey Special Provisions within the following sections or partial sections:
 - In T-8-N, R-6-E, I.M., Section 1.
 - In T-8-N, R-7-E, I.M., Sections 5, 6, 8, 9, 14, 15, 16, 17, 21, 22 and 23.
 - In T-9-N, R-6-E, I.M., Sections 26, 27, 35 and 36.
 - In T-9-N, R-7-E, I.M., Section 31

The following is a detailed explanation of how each corner was re-established:

NW Corner of Section 27, T-9-N, R-6-E, I.M., Found and accepted ODOT brass monument as shown on corner record filed by Jerry G. Anderson, PLS 1080.

N/4 Corner of Section 27, T-9-N, R-6-E, I.M., Found and accepted PK nail as shown on corner record filed by Timothy G. Pollard, PLS 1474. This monument appears to be in the same location as shown on corner record filed by Jerry G. Anderson, PLS 1080.

NE Corner of Section 27, T-9-N, R-6-E, I.M., Found and accepted cut 'X' in concrete as shown on corner record filed by Robby L. Johnson, PLS 1539 and by Bruce Ira Williams, PLS 1280. This monument appears to be in the same location as shown on corner record filed by Jerry G. Anderson, PLS 1080.

W/4 Corner of Section 27, T-9-N, R-6-E, I.M., Found and accepted #5 rebar shown as found on corner record filed by Jerry G. Anderson, PLS 1080.

PLS	SS		OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION
DRAWN	SK		
CHECKED	SS		
APPROVED	SS		
CREW	JH, JA, LB, RT BS, PT, BB		
			SURVEY DATA SHEET
			SWO 4879 (1) PROJECT NO. 21006(11) SHEET NO. _____

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E/4 Corner of Section 27, T-9-N, R-6-E, I.M.,
Found and accepted PK nail. This monument appears to be in the same location as shown on corner record filed by Jerry G. Anderson, PLS 1080.

SW Corner of Section 27, T-9-N, R-6-E, I.M.,
Found and accepted railroad spike. This monument appears to be in the same location as shown on corner record filed by Jerry G. Anderson, PLS 1080.

S/4 Corner of Section 27, T-9-N, R-6-E, I.M.,
Found and accepted railroad spike. This monument appears to be in the same location as shown on corner record filed by Jerry G. Anderson, PLS 1080 and by Rodger Whited, PLS 1298.

SE Corner of Section 27, T-9-N, R-6-E, I.M.,
Found and accepted #5 rebar as shown on corner record filed by Jerry G. Anderson, PLS 1080.

N/4 Corner of Section 26, T-9-N, R-6-E, I.M.,
Found and accepted #5 rebar as shown on corner record filed by Jerry G. Anderson, PLS 1080 and by Bruce Ira Williams, PLS 1280. This monument appears to be in the same location as shown on corner record filed by James B. Marshall, PLS 113.

NE Corner of Section 26, T-9-N, R-6-E, I.M.,
Found and accepted #5 rebar as shown on corner record filed by James B. Marshall, PLS 113, Jerry G. Anderson, PLS 1080 and Bruce Ira Williams, PLS 1280.

E/4 Corner of Section 26, T-9-N, R-6-E, I.M.,
Found and accepted #5 rebar as shown on corner record filed by Jerry G. Anderson, PLS 1080. Monument shown on corner record filed by James B. Marshall, PLS 113 was not found.

S/4 Corner of Section 26, T-9-N, R-6-E, I.M.,
Found and accepted #5 rebar as shown on corner record filed by Jerry G. Anderson, PLS 1080.

SE Corner of Section 26, T-9-N, R-6-E, I.M.,
Found damaged nail at the location shown on corner record filed by Robby L. Johnson, PLS 1539. Replaced damaged nail with #4 rebar with cap stamped CA 6975. This monument matches the location shown on corner record filed by Jerry G. Anderson, PLS 1080 and by James B. Marshall, PLS 113.

W/4 Corner of Section 35, T-9-N, R-6-E, I.M.,
Found and accepted railroad spike as shown on corner record filed by Billy Jack Willingham, PLS 754.

E/4 Corner of Section 35, T-9-N, R-6-E, I.M.,
Found and accepted #4 rebar as shown on corner record filed by Rodger Whited, PLS 1298.

SW Corner of Section 35, T-9-N, R-6-E, I.M.,
Found and accepted #3 rebar as shown on corner record filed by Billy Jack Willingham, PLS 754.

S/4 Corner of Section 35, T-9-N, R-6-E, I.M.,
Set #4 rebar with cap stamped CA 6975. This monument was re-established using proportionate measurement. There was no corner record on file.

SE Corner of Section 35, T-9-N, R-6-E, I.M.,
Set #4 rebar with cap stamped CA 6975. This monument was re-established using surrounding monuments and checks well with GLO distances. There was no corner record on file.

N/4 Corner of Section 36, T-9-N, R-6-E, I.M.,
Set mag nail with washer stamped CA 6975. This monument was re-established at the location shown on corner record filed by Robby L. Johnson, PLS 1539 using existing references and section data.

NE Corner of Section 36, T-9-N, R-6-E, I.M.,
Found and accepted 80d nail. This monument appears to be in the same location as shown on corner record filed by Rodger Whited, PLS 1298.

E/4 Corner of Section 36, T-9-N, R-6-E, I.M.,
Found and accepted #4 rebar. This monument fits well with surrounding occupation lines and GLO distances. There was no corner record on file.

S/4 Corner of Section 36, T-9-N, R-6-E, I.M.,
Set #4 rebar with cap stamped CA 6975. This monument was re-established using proportionate measurement. There was no corner record on file.

SE Corner of Section 36, T-9-N, R-6-E, I.M.,
Found and accepted #3 rebar as shown on corner record filed by James B. Marshall, PLS 113.

N/4 Corner of Section 31, T-9-N, R-7-E, I.M.,
Set #4 rebar with cap stamped CA 6975. This monument was re-established using proportional measurement. There was no corner record on file.

NE Corner of Section 31, T-9-N, R-7-E, I.M.,
Found and accepted PK nail as shown on corner record filed by Johnny Lee Pack, PLS 1252. This monument appears to be in the same location as shown on corner record filed by Bobby L. Goforth, PLS 340 and by James B. Marshall, PLS 113.

E/4 Corner of Section 31, T-9-N, R-7-E, I.M.,
Found and accepted PK nail as shown on corner record filed by Johnny Lee Pack, PLS 1252.

S/4 Corner of Section 31, T-9-N, R-7-E, I.M.,
Found and accepted #3 rebar as shown on corner record filed by Billy Jack Willingham, PLS 754 and by Dan W. Rogers, PLS 1200.

SE Corner of Section 31, T-9-N, R-7-E, I.M.,
Found and accepted #4 rebar as shown on corner record filed by Rodger Whited, PLS 1298 and by Johnny Lee Pack, PLS 1252. Also found 1-1/2" pipe 4.7' south and 6.9' east of corner.

NW Corner of Section 1, T-8-N, R-6-E, I.M.,
Found BLM brass monument as closing corner as shown on the 2007 dependent resurvey. There was no corner record on file.

N/4 Corner of Section 1, T-8-N, R-6-E, I.M.,
Found BLM brass monument as shown on the 2007 dependent resurvey. This monument is 0.5' north of the calculated position for corner. There was no corner record on file.

NE Corner of Section 1, T-8-N, R-6-E, I.M.,
Found BLM brass monument as closing corner as shown on the 2007 dependent resurvey. This monument is 1.3' north of the calculated position for corner. There was no corner record on file.

W/4 Corner of Section 1, T-8-N, R-6-E, I.M.,
Found and accepted BLM brass monument as shown on the 2007 dependent resurvey. This monument was set at the location shown on corner record filed by Rodger Whited, PLS 1298.

E/4 Corner of Section 1, T-8-N, R-6-E, I.M.,
Set #4 rebar with cap stamped CA 6975. This monument was re-established at the location shown on the 2007 dependent resurvey. There was no corner record on file.

SW Corner of Section 1, T-8-N, R-6-E, I.M.,
Found and accepted BLM brass monument as shown on the 2007 dependent resurvey. This monument was set at the location shown on corner record filed by Jerry G. Anderson, PLS 1080.

S/4 Corner of Section 1, T-8-N, R-6-E, I.M.,
Found and accepted BLM brass monument as shown on the 2007 dependent resurvey. Monuments shown on corner record filed by Jerry G. Anderson, PLS 1080 and by David F. Heavner, PLS 964 were not found.

SE Corner of Section 1, T-8-N, R-6-E, I.M.,
Found and accepted BLM brass monument as shown on the dependent resurvey. This monument was set at the location shown on corner record filed by David F. Heavner, PLS 964.

N/4 Corner of Section 6, T-8-N, R-7-E, I.M.,
Found and accepted #3 rebar as shown on corner record filed by Dan W. Rogers, PLS 1200. Also found 1-1/2" pipe 2.1' south and 4.0' west of corner.

NE Corner of Section 6, T-8-N, R-7-E, I.M.,
Found and accepted #6 rebar. This monument matches the location shown on corner record filed by Johnny Lee Pack, PLS 1252.

E/4 Corner of Section 6, T-8-N, R-7-E, I.M.,
Found and accepted #4 rebar as shown on corner record filed by Frank Magner, PLS 1564. Also found mag nail 0.3' north and 8.7' east of corner.

S/4 Corner of Section 6, T-8-N, R-7-E, I.M.,
Set #4 rebar with cap stamped CA 6975. This corner was re-established using proportionate measurement. There was no corner record on file.

SE Corner of Section 6, T-8-N, R-7-E, I.M.,
Found and accepted railroad spike as shown on corner record filed by Frank Magner, PLS 1564.

N/4 Corner of Section 5, T-8-N, R-7-E, I.M.,
Set #4 rebar with cap stamped CA 6975. This monument was re-established using proportionate measurement. There was no corner record on file.

NE Corner of Section 5, T-8-N, R-7-E, I.M.,
Found and accepted #3 rebar as shown on corner record filed by Johnny Lee Pack, PLS 1252.

E/4 Corner of Section 5, T-8-N, R-7-E, I.M.,
Found and accepted #3 rebar as shown on corner record filed by Johnny Lee Pack, PLS 1252.

S/4 Corner of Section 5, T-8-N, R-7-E, I.M.,
Found and accepted #3 rebar. This monument fits well with existing occupation evidence. There was no corner record on file.

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APPROVED	SS		
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			SURVEY DATA SHEET
		SWO 4879 (1)	PROJECT NO. 21006(11)
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SE Corner of Section 5, T-8-N, R-7-E, I.M.,
Found and accepted 16p nail inside 2-1/2" iron pipe as shown on corner record filed by Johnny Lee Pack, PLS 1252.

W/4 Corner of Section 8, T-8-N, R-7-E, I.M.,
Set mag nail with washer stamped CA 6975. This monument was re-established using proportionate measurement. There was no corner record on file.

E/4 Corner of Section 8, T-8-N, R-7-E, I.M.,
Set #4 rebar with cap stamped CA 6975. This monument was re-established using section information provided by Marshall Surveying at the location shown on corner record filed by David F. Heavner, PLS 964.

SW Corner of Section 8, T-8-N, R-7-E, I.M.,
Found and accepted BLM brass monument as shown on the 2005 dependent resurvey. This monument was set at the point shown on corner record filed by Terry M. Marshall, PLS 1322.

S/4 Corner of Section 8, T-8-N, R-7-E, I.M.,
Set mag nail with washer stamped CA 6975. This monument was re-established using proportional measurement and fits existing occupation evidence. There was no corner record on file.

SE Corner of Section 8, T-8-N, R-7-E, I.M.,
Found and accepted #3 rebar as shown on corner record filed by Rodger Whited, PLS 1298 and by Kelly K. Schmidt, PLS 1507.

N/4 Corner of Section 9, T-8-N, R-7-E, I.M.,
Found and accepted #3 rebar as shown on corner record filed by Johnny Lee Pack, PLS 1252.

NE Corner of Section 9, T-8-N, R-7-E, I.M.,
Found and accepted #3 rebar as shown on corner record filed by Johnny Lee Pack, PLS 1252.

E/4 Corner of Section 9, T-8-N, R-7-E, I.M.,
Found and accepted railroad spike as shown on corner record filed by David F. Heavner, PLS 964.

S/4 Corner of Section 9, T-8-N, R-7-E, I.M.,
Set #4 rebar with cap stamped CA 6975. This monument was re-established using proportional measurement. There was no corner record on file.

SE Corner of Section 9, T-8-N, R-7-E, I.M.,
Found and accepted bull prick as shown on corner record filed by Kelly K. Schmidt, PLS 1507.

W/4 Corner of Section 17, T-8-N, R-7-E, I.M.,
Set #4 rebar with cap stamped CA 6975. This monument was re-established using proportional measurement. There was no corner record on file.

E/4 Corner of Section 17, T-8-N, R-7-E, I.M.,
Found and accepted railroad spike as shown on corner record filed by Jesse L. Carroll, PLS 1071.

SW Corner of Section 17, T-8-N, R-7-E, I.M.,
Found and accepted BLM brass monument as shown on the 2005 dependent resurvey. Also found #3 rebar 17.1' south and 7.6' east of corner as shown on corner record filed by Johnny Lee Pack, PLS 1252.

S/4 Corner of Section 17, T-8-N, R-7-E, I.M.,
Found and accepted BLM brass monument as shown on the 2005 dependent resurvey. There was no corner record on file.

SE Corner of Section 17, T-8-N, R-7-E, I.M.,
Found and accepted BLM brass monument as shown on the 2005 dependent resurvey. This monument was set at the location shown on corner record filed by Johnny Lee Pack, PLS 1252 and by Rodger Whited, PLS 1298.

E/4 Corner of Section 16, T-8-N, R-7-E, I.M.,
Found and accepted original stone. There was no corner record on file.

S/4 Corner of Section 16, T-8-N, R-7-E, I.M.,
Set #4 rebar with cap stamped CA 6975. This monument was set using surrounding monuments and checks with GLO distances and existing occupation lines.

SE Corner of Section 16, T-8-N, R-7-E, I.M.,
Set #4 rebar with cap stamped CA 6975. This monument was re-established from SWO 1739(1) survey. After discussion with Bearing Tree Land Surveying, it was determined that the distance to corner from highway PI was misread. Therefore the previous corner was pulled and new location accepted.

N/4 Corner of Section 15, T-8-N, R-7-E, I.M.,
Set #4 rebar with cap stamped CA 6975. This monument was re-established online between section corners, using existing occupation evidence. There was no corner record on file.

NE Corner of Section 15, T-8-N, R-7-E, I.M.,
Found and accepted broke off mag nail for witness corner as shown on corner record filed by Kelly K. Schmidt, PLS 1507. Witness monuments set by Fred R. Smith, Jr., PLS 917 and by Virgil C. Vaughn, PLS 405 were not found.

E/4 Corner of Section 15, T-8-N, R-7-E, I.M.,
Found and accepted mag nail as shown on corner record filed by Virgil C. Vaughn, PLS 405, by Kelly K. Schmidt, PLS 1507 and by Jacob Royce Carroll, PLS 1522. This monument appears to be at the same location as shown on corner record filed by Fred R. Smith, Jr., PLS 917.

S/4 Corner of Section 15, T-8-N, R-7-E, I.M.,
Found and accepted mag nail. This monument appears to be in the same location as shown on corner record filed by Jacob Royce Carroll, PLS 1522.

SE Corner of Section 15, T-8-N, R-7-E, I.M.,
Found and accepted mag nail as shown on corner record filed by Jacob Royce Carroll, PLS 1522. This monument matches the location shown on corner record filed by Virgil C. Vaughn, PLS 405 and by Kelly K. Schmidt, PLS 1507.

N/4 Corner of Section 14, T-8-N, R-7-E, I.M.,
Found and accepted #3 rebar as shown on corner record filed by Fred R. Smith, Jr., PLS 917, by Kelly K. Schmidt, PLS 1507 and by Jacob Royce Carroll, PLS 1522.

NE Corner of Section 14, T-8-N, R-7-E, I.M.,
Found and accepted #4 rebar as shown on corner record filed by Timothy G. Pollard, PLS 1474.

E/4 Corner of Section 14, T-8-N, R-7-E, I.M.,
Found and accepted 2" pipe. This monument fits well with existing occupation evidence and GLO distances. There was no corner record on file.

S/4 Corner of Section 14, T-8-N, R-7-E, I.M.,
Found and accepted #4 rebar as shown on corner record filed by Jacob Royce Carroll, PLS 1522. Also found #4 rebar 0.4' south and 4.2' east of corner.

SE Corner of Section 14, T-8-N, R-7-E, I.M.,
Found hole in pavement at the location shown on corner record filed by Jacob Royce Carroll, PLS 1522. Set mag nail with washer stamped CA 6975 in hole. The monument shown on corner record filed by Fred R. Smith, Jr., PLS 917 was not found.

W/4 Corner of Section 21, T-8-N, R-7-E, I.M.,
Found and accepted BLM brass monument as shown on the 2005 dependent resurvey. There was no corner record on file.

E/4 Corner of Section 21, T-8-N, R-7-E, I.M.,
Set #4 rebar with cap stamped CA 6975. This monument was re-established using proportionate measurement. There was no corner record on file.

SW Corner of Section 21, T-8-N, R-7-E, I.M.,
Found and accepted BLM brass cap as shown on the 2005 dependent resurvey. This monument matches the location shown on corner record filed by Jacob Royce Carroll, PLS 1522 and by Johnny Lee Pack, PLS 1252.

S/4 Corner of Section 21, T-8-N, R-7-E, I.M.,
Found and accepted #4 rebar as shown on corner record filed by Johnny Lee Pack, PLS 1252 and by Jacob Royce Carroll, PLS 1522. Also found #4 rebar 7.7' south and 0.8' west of corner.

SE Corner of Section 21, T-8-N, R-7-E, I.M.,
Found and accepted #4 rebar as shown on corner record filed by Johnny Lee Pack, PLS 1252 and by Jacob Royce Carroll, PLS 1522. Also found #4 rebar 12.4' north and 7.7' east of corner.

E/4 Corner of Section 22, T-8-N, R-7-E, I.M.,
Found and accepted #4 rebar. This monument matches the location shown on corner record filed by Jacob Royce Carroll, PLS 1522.

S/4 Corner of Section 22, T-8-N, R-7-E, I.M.,
Found and accepted #4 rebar as shown on corner record filed by Jacob Royce Carroll, PLS 1522.

SE Corner of Section 22, T-8-N, R-7-E, I.M.,
Found and accepted #4 rebar as shown on corner record filed by David F. Heavner, PLS 964. The monument on corner record filed by Bobby L. Goforth, PLS 340 was not found.

E/4 Corner of Section 23, T-8-N, R-7-E, I.M.,
Found and accepted #3 rebar. This monument fits existing occupation evidence. There was no corner record on file.

S/4 Corner of Section 23, T-8-N, R-7-E, I.M.,
Found and accepted #4 rebar. This monument fits existing occupation evidence. There was no corner record on file.

SE Corner of Section 23, T-8-N, R-7-E, I.M.,
Found and accepted #5 rebar as shown on corner record filed by David F. Heavner, PLS 964. Also found #6 rebar 12.1' north and 8.2' west of corner.

B All property divisions, including existing right-of-way lines, adjacent to and/or crossing the Survey Centerline throughout the project limits were computed mathematically based upon the best available information.

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			SURVEY DATA SHEET
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XII. EXISTING RIGHT OF WAY:

The right of way along U.S. 270, S.H. 270-A, U.S. 270-B and NS-363 section line was established from the existing plans, right of way documents, and right of way occupation.

XIII. UTILITIES:

CALL OKIE was contacted on June 2, 3, 4 and 5, 2014 with ticket numbers 14060216533090, 14060216573120, 14060217213206, 14060217293216, 14060218013244, 14060219043291, 14060309330792, 14060316112801, 14060316532984, 14060412061621 and 14060505040016. A follow up request was made June 26, 2014 with ticket numbers 14062609090635 and 14062609120646. Utilities notified according to the CALL OKIE ticket are Enerfin Resources Seminole, Sunoco PL/Midcont Fuel, City of Seminole, BCI Allegiance Engineering, USIC OG&E Shawnee, USIC AT&T, Centerpoint Energy OK, Sudgenlink Seminole, Blueknigh Energy Partners, Scissortail Capano Ada, ONEOK Gas Shawnee, Bowlegs-Lima Water District, ONEOK NGL Pipeline and Seminole County Conservation District. All utilities marked, along with any overhead lines, are depicted in the submitted digital file.

There are several pipeline blanket easements located throughout the project. There are also several easements that do not provide enough information to be accurately plotted.

XIV. ENVIRONMENTAL CONCERNS:

There are several areas throughout the project that are potential environmental concern areas. These areas are flagged on the submitted .dgn file.

XV. DRAINAGE:

Drainage areas for all drains crossing the Survey Centerline were taken from USGS quad maps that have been scanned into a Microstation Design File.

High water information was observed on three structures within the limits of the project. The high water data is reported within the SWO4879_1_V1_DRA drawing.

XVI. SURVEY DATA SHEETS:

Survey Data Sheets were submitted in the form of a Microstation Design File as per ODOT Survey Division Standards. These were incorporated into a set of design drawings and are in substantial conformity with the ODOT Survey Division Standards for Survey Data Sheets.

XVII. DATA SUBMITTED:

A Reports

- 1 Historical Letter & Written Report
- 2 Form SD-1, Transmittal Letter
- 3 Form SD-7, Public and Privately Owned Utilities List
- 4 Form SD-11, Position and Description of Survey Monuments
- 5 Form SD-20, Survey Control Data Statement
- 6 Form SD-41, Surveyor's Certification
- 7 Cogo Point List
- 8 Alignment Report
- 9 Benchmark & Check Levels List
- 10 Oklahoma Certified Corner Record Forms

B Computer Files

- 1 Digital files submitted on compact disk

XVIII. PERSONNEL:

Shawn Smith, PLS	Professional Land Surveyor
Clark Fisher, PLS	Professional Land Surveyor
Jason Harvey, PLS	Professional Land Surveyor
Jeremy Bone	Survey Technician
Shawn Kocner, CST I	Survey Technician
Andrew Mayhuc	Title Researcher
Jacob Andrews, CST I	Survey Technician
Pierce Tramm	Survey Technician
Bob Bletsche, LSIT	Survey Technician
Luke Braungard	Survey Technician
Randall Tellison	Survey Technician
Brandon Sechrist	Survey Technician



 Shawn Smith, PLS
 Professional Land Surveyor

Alignment Report

Project Name: SWO4879_1_V1
 Description: U.S. 270
 Horizontal Alignment Name: A001
 Description: Centerline of Survey U.S. 270
 Style: Centerline

	STATION	EASTING	NORTHING
Element: Curve			
POB (301)	52+97.057	2367781.80740	691039.46903
PI (302)	55+63.467	2368048.20100	691036.52100
PT (305)	58+29.493	2368313.71876	691058.30541
Curve Length	532.436		
Radius	5729.578		
Delta	5°19'27.71"		
Tangent Direction:	S 89°21'57.48" E		
Tangent Length:	266.410		
Element: Linear			
PT (305)	58+29.493	2368313.71876	691058.30541
PC (307)	73+77.106	2369856.14899	691184.85415
Tangent Direction:	N 85°18'34.82" E		
Tangent Length:	1547.613		
Element: Curve			
PC (307)	73+77.106	2369856.14899	691184.85415
PI (308)	78+53.280	2370330.72800	691223.79100
PT (309)	83+10.425	2370768.03757	691035.37217
Curve Length	933.319		
Radius	1909.859		
Delta	27°59'58.43"		
Tangent Direction:	N 85°18'34.82" E		
Tangent Length:	476.174		
Element: Linear			
PT (309)	83+10.425	2370768.03757	691035.37217
PC (313)	107+88.529	2373043.84700	690054.78500
Tangent Direction:	S 66°41'26.75" E		
Tangent Length:	2478.104		
Element: Curve			
PC (313)	107+88.529	2373043.84700	690054.78500
PI (316)	122+21.966	2374360.32913	689487.60051
PT (319)	135+97.740	2375254.59491	688367.31920
Curve Length	2809.211		
Radius	5729.578		
Delta	28°05'31.59"		
Tangent Direction:	S 66°41'26.75" E		
Tangent Length:	1433.437		

Element: Linear				
PT (319)	135+97.740	2375254.59491	688367.31920	
PC (322)	151+52.958	2376224.83544	687151.86140	
Tangent Direction:	S 38°35'55.16" E			
Tangent Length:	1555.218			
Element: Curve				
PC (322)	151+52.958	2376224.83544	687151.86140	
PI (323)	154+93.215	2376437.10890	686885.93823	
PT (324)	158+30.300 Back	2376705.76653	686677.13633	
	157+72.600 Forward			
Curve Length	677.342			
Radius	2864.789			
Delta	13°32'48.61"			
Tangent Direction:	S 38°35'55.16" E			
Tangent Length:	340.257			
Element: Linear				
PT (324)	157+72.600	2376705.76653	686677.13633	
PC (331)	195+89.954	2379719.84200	684334.56890	
Tangent Direction:	S 52°08'43.77" E			
Tangent Length:	3817.354			
Element: Curve				
PC (331)	195+89.954	2379719.84200	684334.56890	
PI (332)	198+00.895	2379886.39395	684205.13871	
PT (333)	200+11.646	2380042.97763	684063.79629	
Curve Length	421.692			
Radius	5729.578			
Delta	4°13'00.90"			
Tangent Direction:	S 52°08'43.77" E			
Tangent Length:	210.941			
Element: Linear				
PT (333)	200+11.646	2380042.97763	684063.79629	
PC (334)	204+92.022	2380399.56565	683741.91718	
Tangent Direction:	S 47°55'42.87" E			
Tangent Length:	480.376			
Element: Curve				
PC (334)	204+92.022	2380399.56565	683741.91718	
PI (335)	207+02.745	2380555.98766	683600.72068	
PT (336)	209+13.279 Back	2380722.35894	683471.39593	
	209+18.721 Forward			
Curve Length	421.257			
Radius	5729.578			
Delta	4°12'45.24"			
Tangent Direction:	S 47°55'42.87" E			
Tangent Length:	210.723			

Element: Linear				
PT (336)	209+18.721	2380722.35894	683471.39593	
PC (353)	299+81.424	2387877.58997	677909.44751	
Tangent Direction:	S 52°08'28.11" E			
Tangent Length:	9062.704			
Element: Curve				
PC (353)	299+81.424	2387877.58997	677909.44751	
PI (354)	302+05.288	2388054.33601	677772.05818	
PT (355)	304+28.244	2388207.59484	677608.88122	
Curve Length	446.820			
Radius	2864.789			
Delta	8°56'11.01"			
Tangent Direction:	S 52°08'28.11" E			
Tangent Length:	223.864			
Element: Linear				
PT (355)	304+28.244	2388207.59484	677608.88122	
PC (372)	428+88.091	2396737.70015	668526.75083	
Tangent Direction:	S 43°12'17.10" E			
Tangent Length:	12459.847			
Element: Curve				
PC (372)	428+88.091	2396737.70015	668526.75083	
PI (373)	441+57.500	2397606.74690	667601.46380	
PT (375)	452+77.939	2398875.96156	667623.65581	
Curve Length	2389.848			
Radius	2864.789			
Delta	47°47'49.04"			
Tangent Direction:	S 43°12'17.10" E			
Tangent Length:	1269.409			
Element: Linear				
PT (375)	452+77.939	2398875.96156	667623.65581	
POT	481+83.701 Back	2401781.27898	667674.43723	
PC (405)	476+55.690 Forward	2401781.48865	667662.45664	
	12' Right			
Tangent Direction:	N 88°59'53.86" E			
Tangent Length:	2905.761			
Element: Curve				
PC (405)	476+55.690	2401781.48865	667662.45664	
PI (406)	479+34.328	2402060.08407	667667.32791	
PCC (407)	482+06.092	2402320.19002	667567.40779	
Curve Length	550.402			
Radius	1432.395			
Delta	22°00'57.89"			
Tangent Direction:	N 88°59'53.86" E			
Tangent Length:	278.638			

Element: Curve			
PCC (407)	482+06.092	2402320.19002	667567.40779
PI (408)	487+32.970	2402812.02567	667378.46833
PT (413)	492+48.203 Back	2403204.45366	667026.89942
POT	492+47.888 Forward		
	12.504 Left	2403195.90019	667017.78373
Curve Length	1042.110		
Radius	2864.789		
Delta	20°50'31.95"		
Tangent Direction:	S 48°08'36.35" E		
Tangent Length:	526.878		
Element: Linear			
POT	492+47.888	2403195.90019	667017.78373
POE (414)	500+00.000	2403744.62430	666502.99484
Tangent Direction:	S 46°49'39.39" E		
Tangent Length:	752.400		
Project Name: SWO4879_1_V1 Description: U.S. 270 A Horizontal Alignment Name: A002 Description: Construction Reference Line U.S. 270 A Style: Centerline			
Element: Linear	STATION	EASTING	NORTHING
POB (390)	26+87.240	2370693.62973	691078.34042
PC (392)	28+02.400	2370708.52384	691192.53320
Tangent Direction:	N 07°25'52.00" E		
Tangent Length:	115.160		
Element: Curve			
PC (392)	28+02.400	2370708.52384	691192.53320
PI (393)	29+05.629	2370721.87491	691294.89556
PT (394)	30+08.502	2370720.41021	691398.11455
Curve Length	206.103		
Radius	1432.395		
Delta	8°14'38.75"		
Tangent Direction:	N 07°25'52.00" E		
Tangent Length:	103.229		
Element: Linear			
PT (394)	30+08.502	2370720.41021	691398.11455
POE (398)	35+00.000	2370713.43645	691889.56264
Tangent Direction:	N 00°48'46.75" W		
Tangent Length:	491.498		

Project Name: SWO4879_1_V1 Description: U.S. 270 B Horizontal Alignment Name: A003 Description: Centerline of Survey U.S. 270 B Style: Centerline			
Element: Linear	STATION	EASTING	NORTHING
POB (419)	482+00.000	2401797.57677	667674.73977
POE (385)	500+00.000	2403597.30116	667706.20766
Tangent Direction:	N 88°59'53.86" E		
Tangent Length:	1800.000		
Project Name: SWO4879_1_V1 Description: NS-363 Section Line Horizontal Alignment Name: A004 Description: Centerline of Survey NS-363 Section Line Style: Centerline			
Element: Linear	STATION	EASTING	NORTHING
POB (416)	17+00.000	2402902.20390	666293.84952
POE (383)	31+00.000	2402882.80400	667693.71510
Tangent Direction:	N 00°47'38.32" W		
Tangent Length:	1400.000		

CHECK LEVELS					BENCHMARK LIST		
BM NO.	RUN 1	RUN 2	DIFF.	MEAN DIFF.	ADJ. ELEV.	PUBLISHED ELEV.	BM DESCRIPTION
SWO 4879(1)					NAVD 88 DATUM		
NGS G-149					870.540	870.540	870.540 PER NGS DATASHEET STANDARD BRASS CAP AT CHICAGO/ROCK ISLAND & PACIFIC RAILWAY STATION
TO	-4.941	-4.929	-0.012	-4.935			
BM1					865.603		CUT "X" ON CARWASH PAD - 44' RT. STA 58+20.86
TO	1.720	1.739	-0.019	1.730			
BM 2					867.331		CUT SQUARE SW COR. MAGNOLIA CREEK BRIDGE - 15' RT. STA 65+61.86
TO	-0.460	-0.472	0.012	-0.466			
BM 3					866.863		#6 BAR 30" LONG SET FLUSH - 64' LT. STA 72+36.69
TO	9.539	9.533	0.006	9.536			
BM 4					876.397		#6 BAR 30" LONG SET FLUSH - 117' LT. STA 79+12.03
TO	4.647	4.651	0.004	4.649			
7400					881.048		#4 BAR W/ ALUM CAP "LEMKE LAND SURVEYING" - 96' LT. STA 80+94.60
TO	12.721	12.720	0.001	-12.720			
BM 5					868.325		#6 BAR 30" LONG SET FLUSH - 78' RT. STA 85+85.46
TO	-7.393	-7.383	-0.010	-7.388			
BM 6					860.935		#6 BAR 30" LONG SET FLUSH - 66' RT. STA 93+22.86
TO	6.397	6.399	-0.002	6.398			
BM 7					867.331		#6 BAR 30" LONG SET FLUSH - 56' RT. STA 100+20.74
TO	1.492	1.490	0.002	1.491			

BM 17					848.991		CUT "X" CENTER OF HDWL - 31' LT. STA 167+95.81
TO	1.704	1.709	-0.005	1.706			
BM 18					850.696		#6 BAR 30" LONG SET FLUSH - 64' LT. STA 174+39.67
TO	-5.928	-5.933	0.005	-5.930			
BM 19					844.763		CUT "X" CENTER OF HDWL - 39' LT. STA 181+02.57
TO	-4.570	-4.568	-0.002	-4.569			
BM 20					840.192		#6 BAR 30" LONG SET FLUSH - 110' RT. STA 188+23.52
TO	3.110	3.108	0.002	3.109			
BM 21					843.303		#6 BAR 30" LONG SET FLUSH - 92' RT. STA 195+15.74
TO	-2.374	-2.378	0.004	-2.376			
BM 22					840.927		#6 BAR 30" LONG SET FLUSH - 65' LT. STA 201+18.26
TO	4.474	4.471	0.001	4.473			
BM 23					845.398		CUT "X" CENTER OF HDWL - 30' RT. STA 209+18.88
TO	5.847	5.838	0.009	5.842			
BM 24					851.238		CUT "X" ON CURB - 74' RT. STA 216+35.12
TO	15.717	15.733	-0.016	15.725			
BM 25					866.962		#6 BAR 30" LONG SET FLUSH - 64' RT. STA 223+69.91
TO	4.636	4.643	-0.007	4.639			
BM 26					871.599		#6 BAR 30" LONG SET FLUSH - 63' LT. STA 230+74.87
TO	4.949	4.953	-0.004	4.951			

BM 8					868.820		#6 BAR 30" LONG SET FLUSH - 61' RT. STA 107+33.49
TO	-8.000	-7.994	-0.006	-7.997			
BM 9					860.821		CUT "X" SW WINGWALL OF CARTER CREEK BRIDGE - 17' RT. STA 114+53.79
TO	-8.123	-8.124	0.001	-8.123			
BM 10					852.696		#6 BAR 30" LONG SET FLUSH - 63' RT. STA 121+44.89
TO	3.822	3.816	0.006	3.819			
BM 11					856.513		CUT "X" NE WINGWALL OF BOX - 26' LT. STA 127+62.91
TO	6.163	6.170	-0.007	6.167			
BM 12					862.678		#6 BAR 30" LONG SET FLUSH - 60' LT. STA 134+35.61
TO	11.905	11.895	0.010	11.900			
BM 13					874.576		#6 BAR 30" LONG SET FLUSH - 26' LT. STA 141+32.95
TO	1.078	1.082	-0.004	1.080			
BM 14					875.654		#6 BAR 30" LONG SET FLUSH - 70' RT. STA 148+26.52
TO	-25.797	-25.804	0.007	-25.800			
BM 15					849.851		#6 BAR 30" LONG SET FLUSH - 66' LT. STA 155+33.64
TO	3.917	3.935	-0.018	3.926			
BM 16					853.775		#6 BAR 30" LONG SET FLUSH - 99' RT. STA 161+45.46
TO	0.728	0.729	0.001	0.728			
7405					853.047		#4 BAR W/ ALUM CAP "LEMKE LAND SURVEYING" - 42' RT. STA 162+16.34
TO	-4.055	-4.057	0.002	-4.056			

BM 27					876.548		#6 BAR 30" LONG SET FLUSH - 65' LT. STA 237+67.75
TO	-0.368	-0.367	-0.001	-0.368			
BM 28					876.179		#6 BAR 30" LONG SET FLUSH - 65' LT. STA 244+79.59
TO	7.218	7.230	0.012	7.224			
7401					883.403		#4 BAR W/ ALUM CAP "LEMKE LAND SURVEYING" - 55' RT. STA 249+16.21
TO	1.168	1.168	0.000	-1.168			
BM 29					882.235		#6 BAR 30" LONG SET FLUSH - 66' LT. STA 251+70.50
TO	-1.367	-1.373	0.006	-1.370			
BM 30					880.863		#6 BAR 30" LONG SET FLUSH - 62' RT. STA 259+07.21
TO	2.666	2.705	-0.039	2.685			
BM 31					883.547		#6 BAR 30" LONG SET FLUSH - 65' LT. STA 266+00.63
TO	-25.840	-25.830	-0.010	-25.835			
BM 32					857.710		#6 BAR 30" LONG SET FLUSH - 62' LT. STA 272+74.31
TO	-7.959	-7.969	0.010	-7.964			
BM 33					849.744		#6 BAR 30" LONG SET FLUSH - 63' LT. STA 279+69.98
TO	31.423	31.411	0.012	31.417			
BM 34					881.159		#6 BAR 30" LONG SET FLUSH - 64' LT. STA 286+69.68
TO	22.190	22.180	0.010	22.185			
BM 35					903.342		#6 BAR 30" LONG SET FLUSH - 63' RT. STA 294+03.11
TO	3.286	3.278	0.008	3.282			

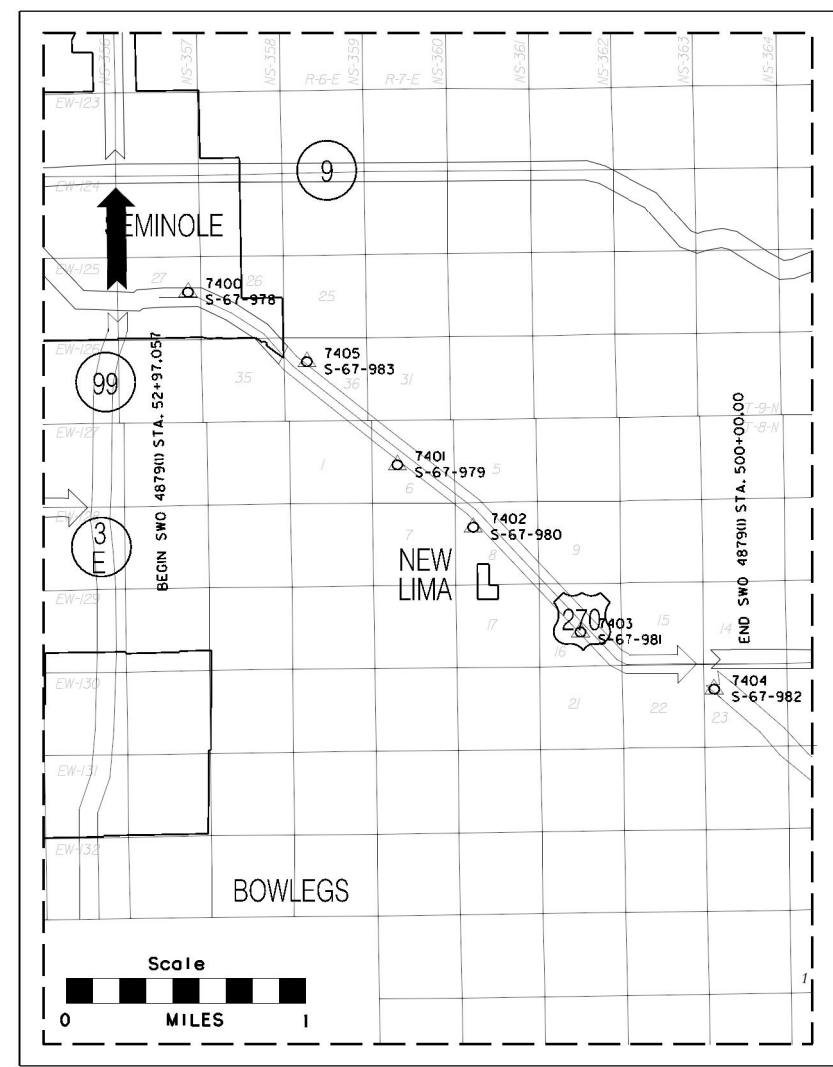
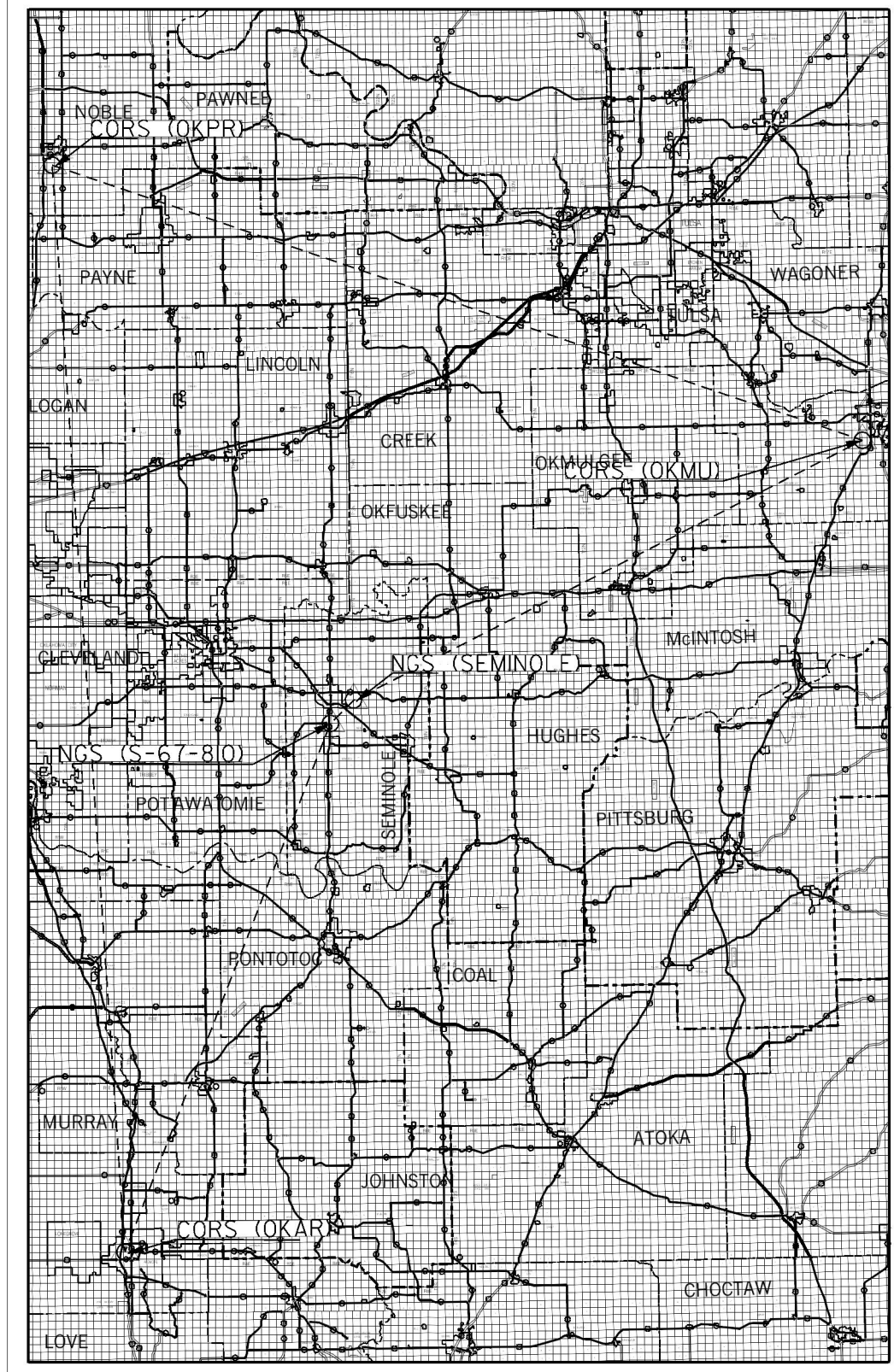
BM 36				906.622	CUT "X" ON HDWL- 46' LT. STA 301+70.12
TO	9.302	9.289	0.013	9.296	
BM 37				915.915	#6 BAR 30" LONG SET FLUSH - 62' RT. STA 309+41.15
TO	-3.690	-3.672	0.018	3.681	
7402				912.237	#4 BAR W/ ALUM CAP "LEMKE LAND SURVEYING" - 66' LT. STA 310+65.94
TO	-23.616	-23.615	0.001	-23.616	
BM 38				888.619	CUT "X" ON HDWL- 28' RT. STA 316+64.78
TO	-32.595	-32.592	-0.003	-32.594	
BM 39				856.024	CUT "X" ON HDWL- 29' RT. STA 324+22.00
TO	-0.595	-0.597	0.002	-0.596	
BM 40				855.426	#6 BAR 30" LONG SET FLUSH - 69' LT. STA 331+31.57
TO	-11.817	-11.811	-0.006	-11.814	
BM 41				843.610	CUT "X" ON HDWL- 34' LT. STA 338+74.51
TO	-14.006	-14.009	0.003	-14.008	
BM 42				829.601	#6 BAR 30" LONG SET FLUSH - 60' RT. STA 346+06.39
TO	1.403	1.406	-0.003	1.404	
BM 43				831.003	#6 BAR 30" LONG SET FLUSH - 67' LT. STA 352+67.33
TO	-2.526	-2.538	0.012	-2.532	
BM 44				828.469	CUT "X" ON HDWL- 35' LT. STA 359+85.51
TO	18.363	18.352	0.011	18.358	

BM 53				909.343	#6 BAR 30" LONG SET FLUSH - 62' RT. STA 431+18.66
TO	3.839	3.844	-0.005	3.842	
BM 54				913.182	#6 BAR 30" LONG SET FLUSH - 43' RT. STA 439+68.68
TO	2.520	2.518	0.002	2.519	
BM 55				915.699	#6 BAR 30" LONG SET FLUSH - 131' RT. STA 446+84.22
TO	-25.031	-25.025	-0.006	-25.028	
BM 56				890.669	60D NAIL IN POST- 100' RT. STA 453+50.42
TO	-33.911	-33.914	0.003	-33.913	
BM 57				856.755	#6 BAR 30" LONG SET FLUSH - 83' LT. STA 460+31.38
TO	-18.840	-18.844	0.004	-18.842	
BM 58				837.911	#6 BAR 30" LONG SET FLUSH - 71' RT. STA 466+88.17
TO	-10.312	-10.306	-0.006	-10.309	
BM 59				827.600	CUT "X" ON HDWL- 31' LT. STA 473+81.70
TO	-5.562	-5.576	0.014	-5.569	
BM 60				822.029	#6 BAR 30" LONG SET FLUSH - 77' LT. STA 480+65.47
TO	0.582	0.576	0.006	0.579	
BM 61				822.606	822.818 CUT "X" ON HDWL- 23' RT. STA 482+03.75
TO	7.859	7.850	0.009	7.855	
BM 62				830.459	CUT "X" ON HDWL- 21' RT. STA 489+16.93
TO	-39.743	-39.750	0.007	-39.746	

BM 45				846.825	CUT "X" ON WINGWALL- 16' RT. STA 369+28.29
TO	-5.396	-5.407	0.011	-5.401	
BM 46				841.421	CUT "X" ON WINGWALL- 16' RT. STA 375+18.34
TO	-11.748	-11.743	-0.005	-11.746	
BM 47				829.674	CUT "X" ON ROCK OUTCROP- 104' RT. STA 381+83.04
TO	19.405	19.400	0.005	19.403	
BM 48				849.074	CUT "X" ON ROCK OUTCROP- 108' RT. STA 388+56.90
TO	33.029	33.019	0.010	33.024	
BM 49				882.096	CUT "X" ON HDWL- 23' RT. STA 395+97.18
TO	20.822	20.808	0.014	20.815	
BM 49A				902.910	#6 BAR 30" LONG SET FLUSH - 93' RT. STA 402+93.77
TO	2.089	2.101	0.012	2.095	
7403				905.006	#4 BAR W/ ALUM CAP "LEMKE LAND SURVEYING" - 46' LT. STA 403+35.88
TO	-0.436	-0.420	0.016	-0.428	
BM 50				904.576	#6 BAR 30" LONG SET FLUSH - 65' RT. STA 410+33.78
TO	-1.060	-1.055	-0.005	-1.058	
BM 51				903.516	CUT "X" ON HDWL- 23' RT. STA 417+04.57
TO	17.132	17.121	0.011	17.127	
BM 52				920.641	#6 BAR 30" LONG SET FLUSH - 69' LT. STA 424+13.51
TO	-11.297	-11.295	-0.002	-11.296	

NGS U149				790.716	790.680	790.68 PER NGS DATASHEET STANDARD BRASS CAP AT FILTER WORKS PLANT IN NW COR OF WATER TANK BASE
TO	22.698	22.694	0.004	22.696		
NGS T149				813.410	813.410	813.41 PER NGS DATASHEET STANDARD BRASS CAP IN THE FACE OF THE WEST WALL OF COURTHOUSE
BM 62				830.459		CUT "X" ON HDWL- 21' RT. STA 489+16.93
TO	7.741	7.729	0.012	-7.735		
7404				838.194		#4 BAR W/ ALUM CAP "LEMKE LAND SURVEYING" - 86' RT. STA 490+10.89
TO	-1.345	-1.334	0.011	1.339		
BM 63				836.855		#6 BAR 30" LONG SET FLUSH - 93' RT. STA 496+32.30
TO	13.579	13.587	0.008	13.583		
BM 64				850.438		#6 BAR 30" LONG SET FLUSH - OFF ALIGNMENT

March 31st, 2015



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Project Information Name: H:\4018\LLS-Data\Final\Control\140428 Precise Tph Network.vce Size: 1 MB Modified: 4/28/2014 9:38:48 AM (UTC-5) Time zone: Central Standard Time Reference number: Description:	Coordinate System Name: US State Plane 1983 (2011) Datum: NAD 1983 (2011) Zone: Oklahoma South 3502 Spheroid: GEOD12A (Conus) Vertical datum:
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Network Adjustment Report

Adjustment Settings

Set-Up Errors
 GNSS:
 Error in Height of Antenna: 0.005 ft
 Centering Error: 0.005 ft

GNSS Weighting
 Fixed Standard Errors
 Horizontal: 0.008 ft + 0.200 ppm
 Vertical: 0.016 ft + 1.000 ppm

Covariance Display
 Horizontal:
 Propagated Linear Error (E): U.S.
 Constant Term (C): 0.000 ft
 Scale on Linear Error (S): 1.960
 Three-Dimensional
 Propagated Linear Error (E): U.S.
 Constant Term (C): 0.000 ft
 Scale on Linear Error (S): 1.960

Adjustment Statistics

Number of Iterations for Successful Adjustment: 2
 Network Reference Factor: 0.99
 Chi Square Test (95%): Passed
 Precision Confidence Level: 95%
 Degrees of Freedom: 164

Post Processed Vector Statistics
 Reference Factor: 0.99
 Redundancy Number: 164.00
 A Priori Scale: 1.00

Control Coordinate Comparisons

Values shown are control coordinates minus adjusted coordinates.

Point ID	ΔNorthing (US survey feet)	ΔEasting (US survey feet)	ΔElevation (US survey feet)	ΔHeight (US survey feet)
100	1.496	1.132		9.456
101	-2.880	0.509		-2.032
102	7.860	0.488		4.520
103	2.769	0.342		2.224
E. 149	-0.143	-0.189	0.471	2.085
100/101/102	4.385	4.064		-1.327

Control Point Constraints

4/28/2014

March 31st, 2015

SDS 14 OF 47

PLS	SS	OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION
DRAWN	SK	
CHECKED	SS	
APPROVED	SS	
CREW	JH, JA, LB, RT BS, PT, BB	
		SURVEY DATA SHEET
		SWO 4879 (1) PROJECT NO. 21006(11) SHEET NO. _____

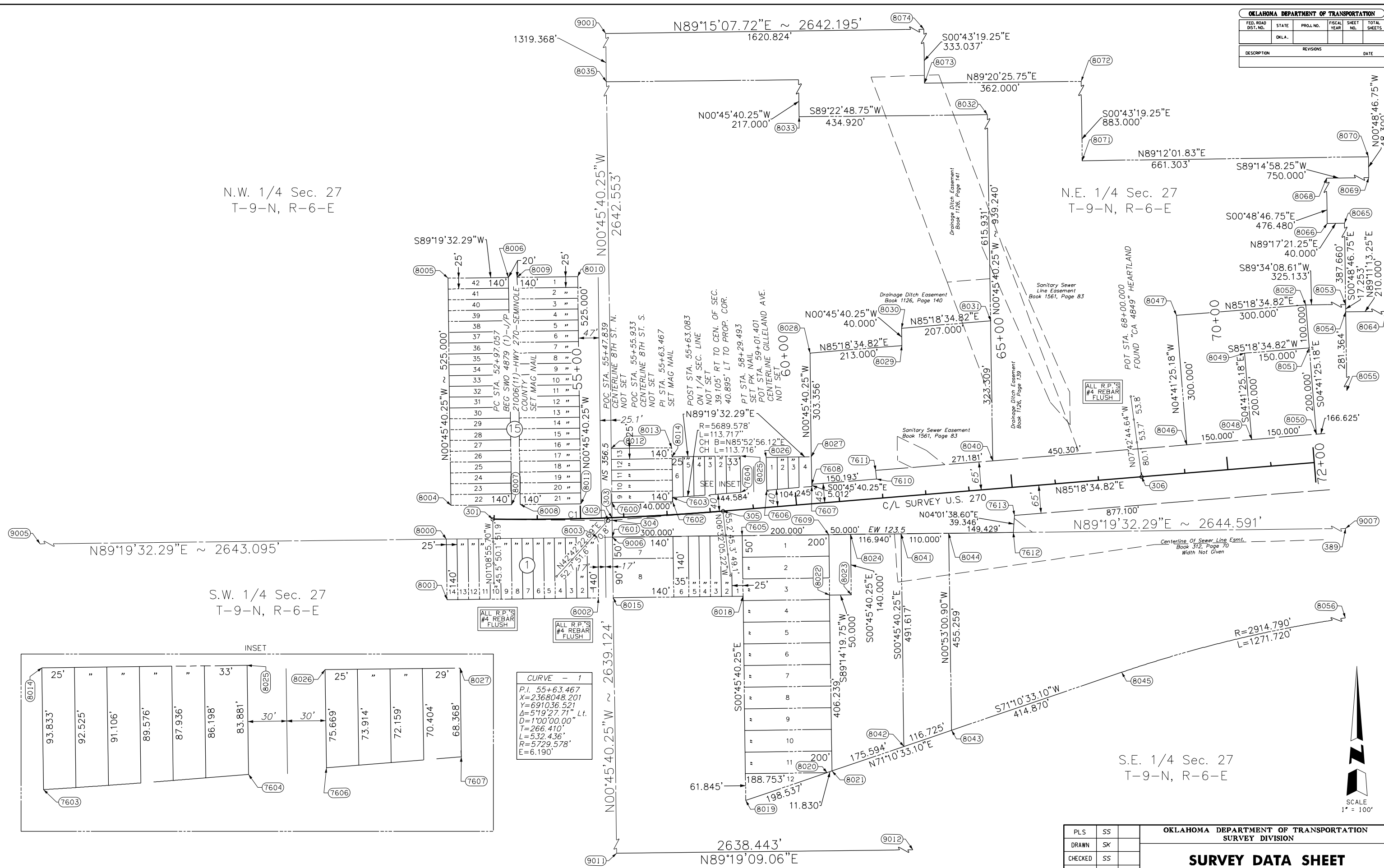
OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				
DESCRIPTION		REVISIONS		DATE	

N.W. 1/4 Sec. 27
T-9-N, R-6-E

N.E. 1/4 Sec. 27
T-9-N, R-6-E

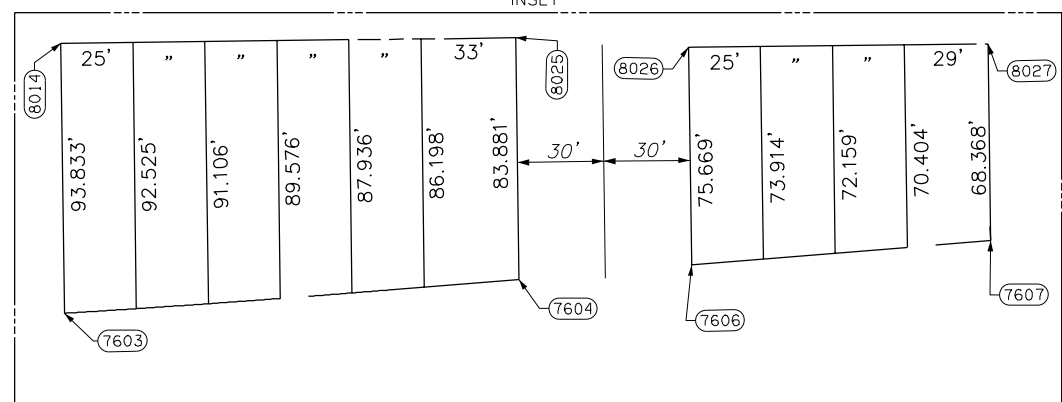
S.W. 1/4 Sec. 27
T-9-N, R-6-E

S.E. 1/4 Sec. 27
T-9-N, R-6-E

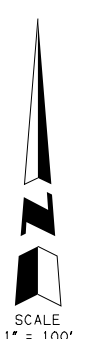


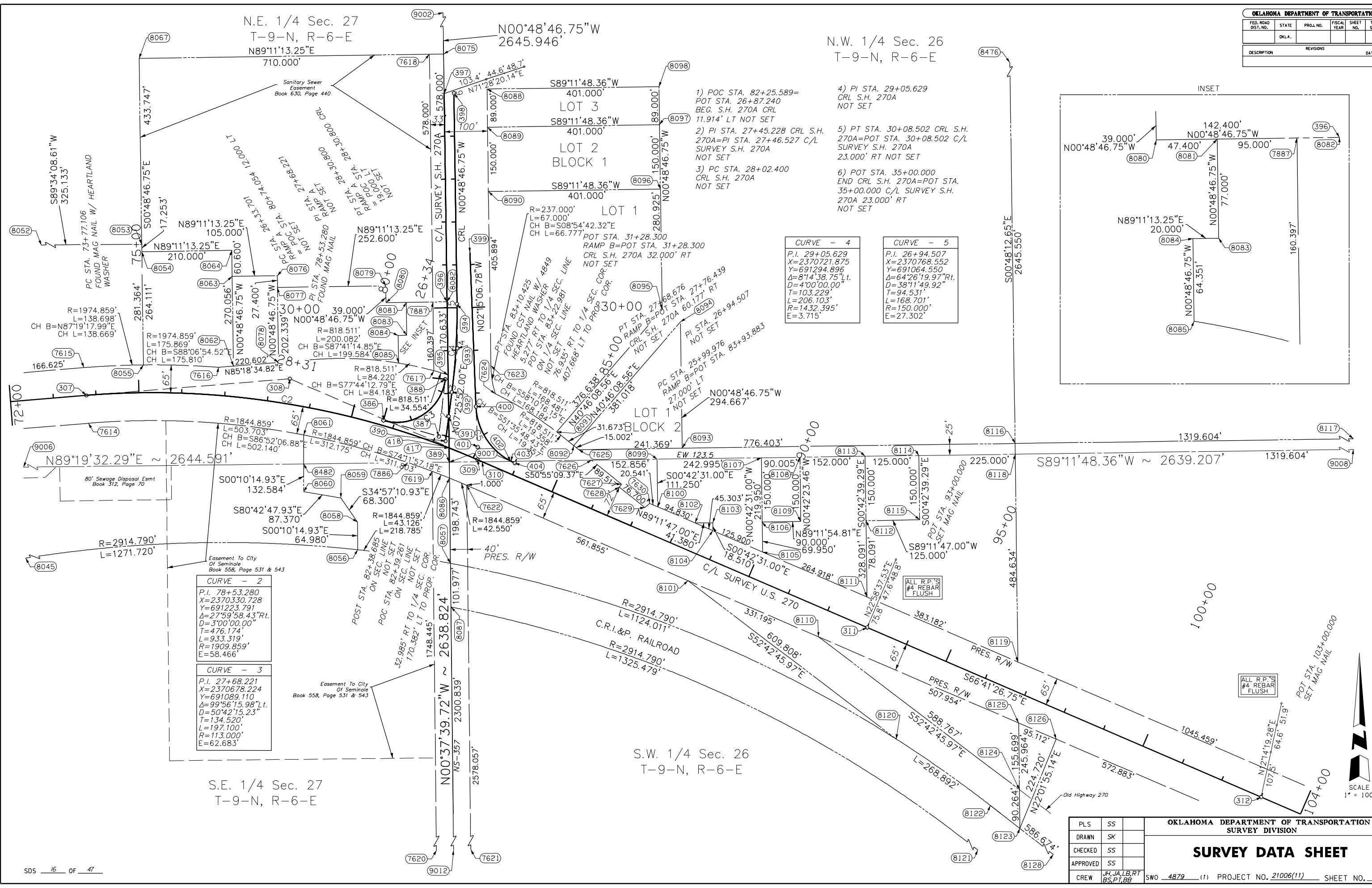
CURVE - 1

P.I.	55+63.467
X	=236.8048, 201
Y	=6910.36, 521
Δ	=519°27.71' Lt.
D	=1'00'00.00"
T	=266.410'
L	=532.436'
R	=5729.578'
E	=6.190'



OKLAHOMA DEPARTMENT OF TRANSPORTATION		SURVEY DIVISION	
PLS	SS		
DRAWN	SK		
CHECKED	SS		
APPROVED	SS		
CREW	JH, JA, LB, RT BS, PT, BB	SWO 4879 (1) PROJECT NO. 21006(11) SHEET NO. _____	

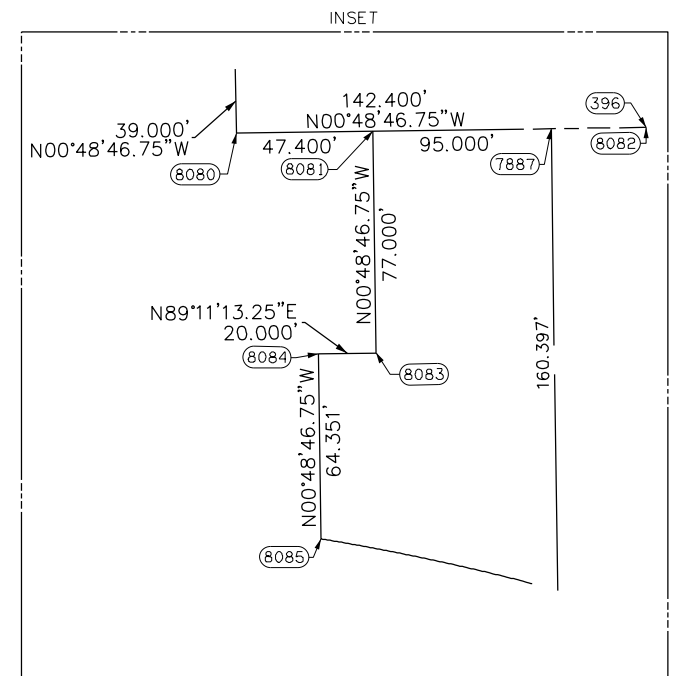




- 1) POC STA. 82+25.589=
POT STA. 26+87.240
BEG. S.H. 270A CRL
11.914' LT NOT SET
- 2) PI STA. 27+45.228 CRL S.H.
270A=PI STA. 27+46.527 C/L
SURVEY S.H. 270A
NOT SET
- 3) PC STA. 28+02.400
CRL S.H. 270A
NOT SET
- 4) PI STA. 29+05.629
CRL S.H. 270A
NOT SET
- 5) PT STA. 30+08.502 CRL S.H.
270A=POT STA. 30+08.502 C/L
SURVEY S.H. 270A
23.000' RT NOT SET
- 6) POT STA. 35+00.000
END CRL S.H. 270A=POT STA.
35+00.000 C/L SURVEY S.H.
270A 23.000' RT
NOT SET

CURVE - 4	
P.I.	29+05.629
X	2370721.875
Y	691294.896
Δ	81°43'38.75" Lt.
D	400'00.00"
T	103.229'
L	206.103'
R	1432.395'
E	3.715'

CURVE - 5	
P.I.	26+94.507
X	2370768.552
Y	691064.550
Δ	64°26'19.97" Rt.
D	38'11'49.92"
T	94.531'
L	168.701'
R	150.000'
E	27.302'



CURVE - 2	
P.I.	78+53.280
X	2370330.728
Y	691223.791
Δ	27°59'58.43" Rt.
D	300'00.00"
T	476.174'
L	933.319'
R	1909.859'
E	58.466'

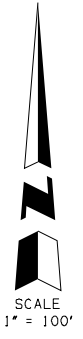
CURVE - 3	
P.I.	27+68.221
X	2370678.224
Y	691089.110
Δ	99°56'15.98" Lt.
D	50'42'15.23"
T	134.520'
L	197.100'
R	113.000'
E	62.683'

OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION	
PLS	SS
DRAWN	SK
CHECKED	SS
APPROVED	SS
CREW	JH, JA, LB, RT, BS, PT, BB

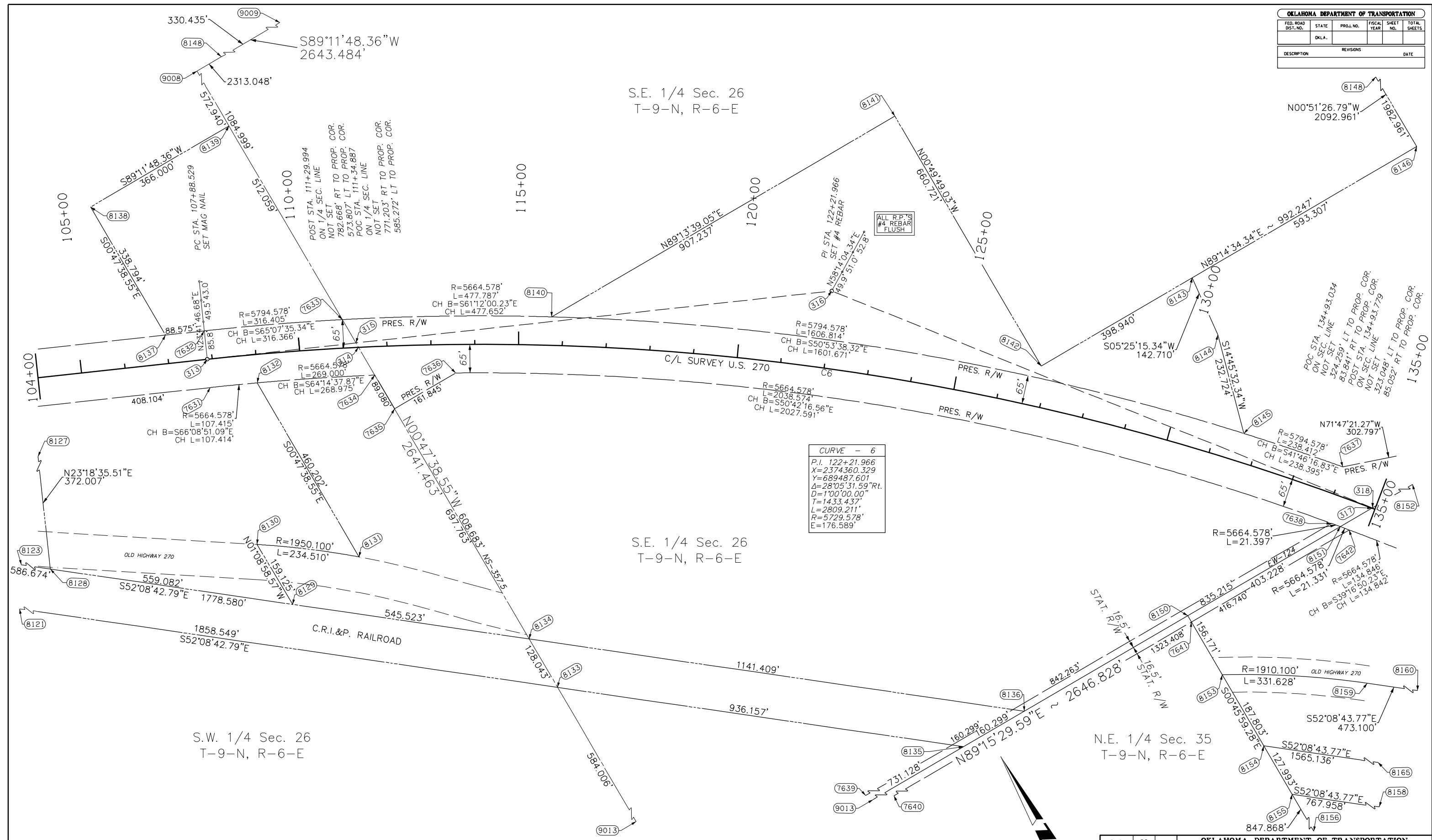
SURVEY DATA SHEET

SWO 4879 (1) PROJECT NO. 21006(11) SHEET NO. _____

March 31st, 2015



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



OKLAHOMA DEPARTMENT OF TRANSPORTATION					
SURVEY DIVISION					
SURVEY DATA SHEET					
PLS	SS				
DRAWN	SK				
CHECKED	SS				
APPROVED	SS				
CREW	JH, JA, LB, RT BS, PT, BB	SWO 4879	(1)	PROJECT NO. 21006(11)	SHEET NO. _____

SCALE
1" = 100'

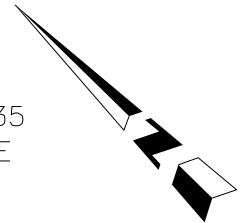
OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				
DESCRIPTION			REVISIONS	DATE	

N.W. 1/4 Sec. 36
T-9-N, R-6-E

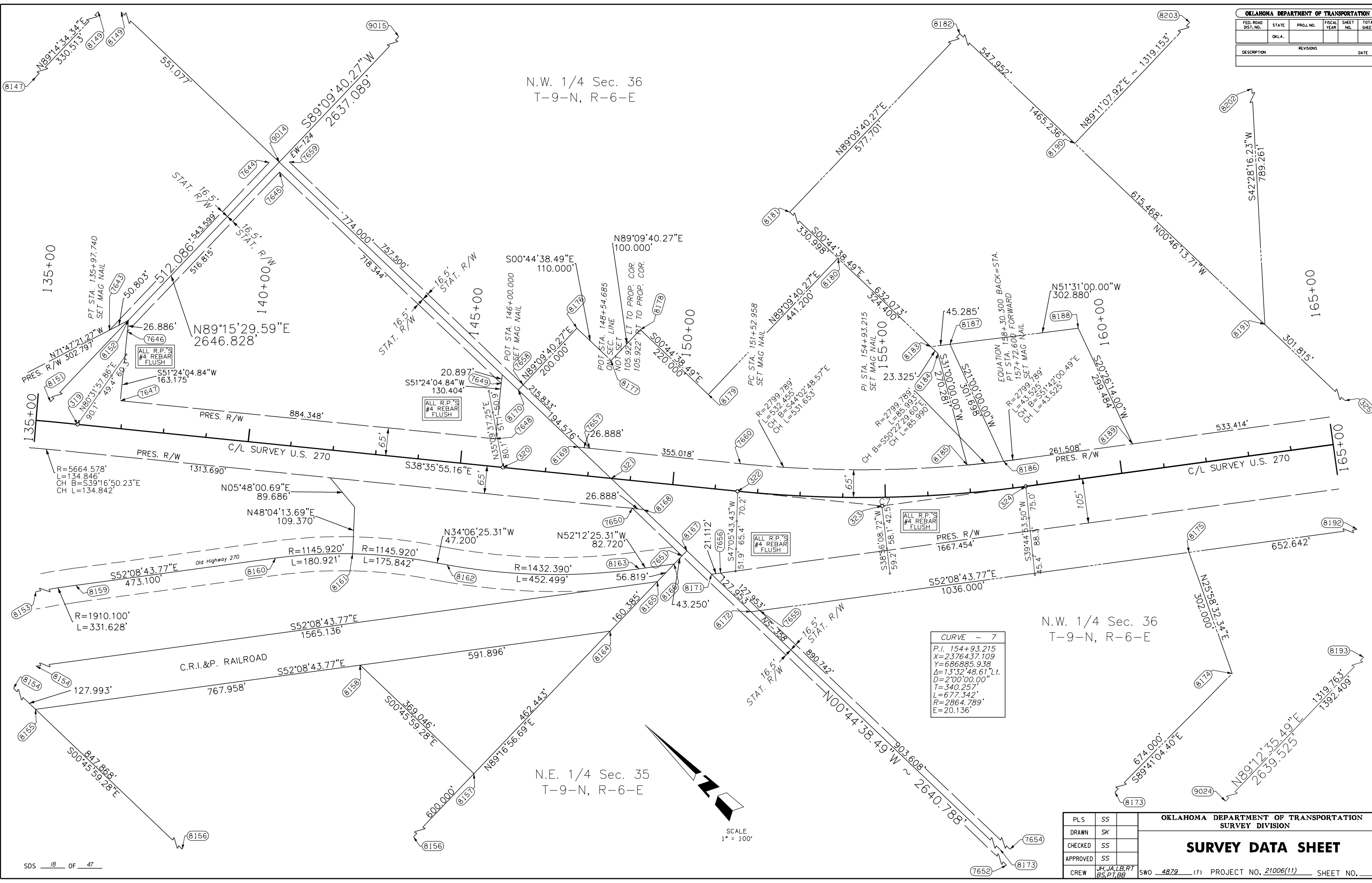
N.E. 1/4 Sec. 35
T-9-N, R-6-E

N.W. 1/4 Sec. 36
T-9-N, R-6-E

CURVE - 7
P.I. 154+93.215
X=2376437.109
Y=686885.938
Δ=13°32'48.61" Lt.
T=340.257'
L=677.342'
R=2864.789'
E=20.136'



OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION					
SURVEY DATA SHEET					
PLS	SS				
DRAWN	SK				
CHECKED	SS				
APPROVED	SS				
CREW	JH, JA, LB, RT BS, PT, BB	SWO 4879	(1)	PROJECT NO. 21006(11)	SHEET NO. _____



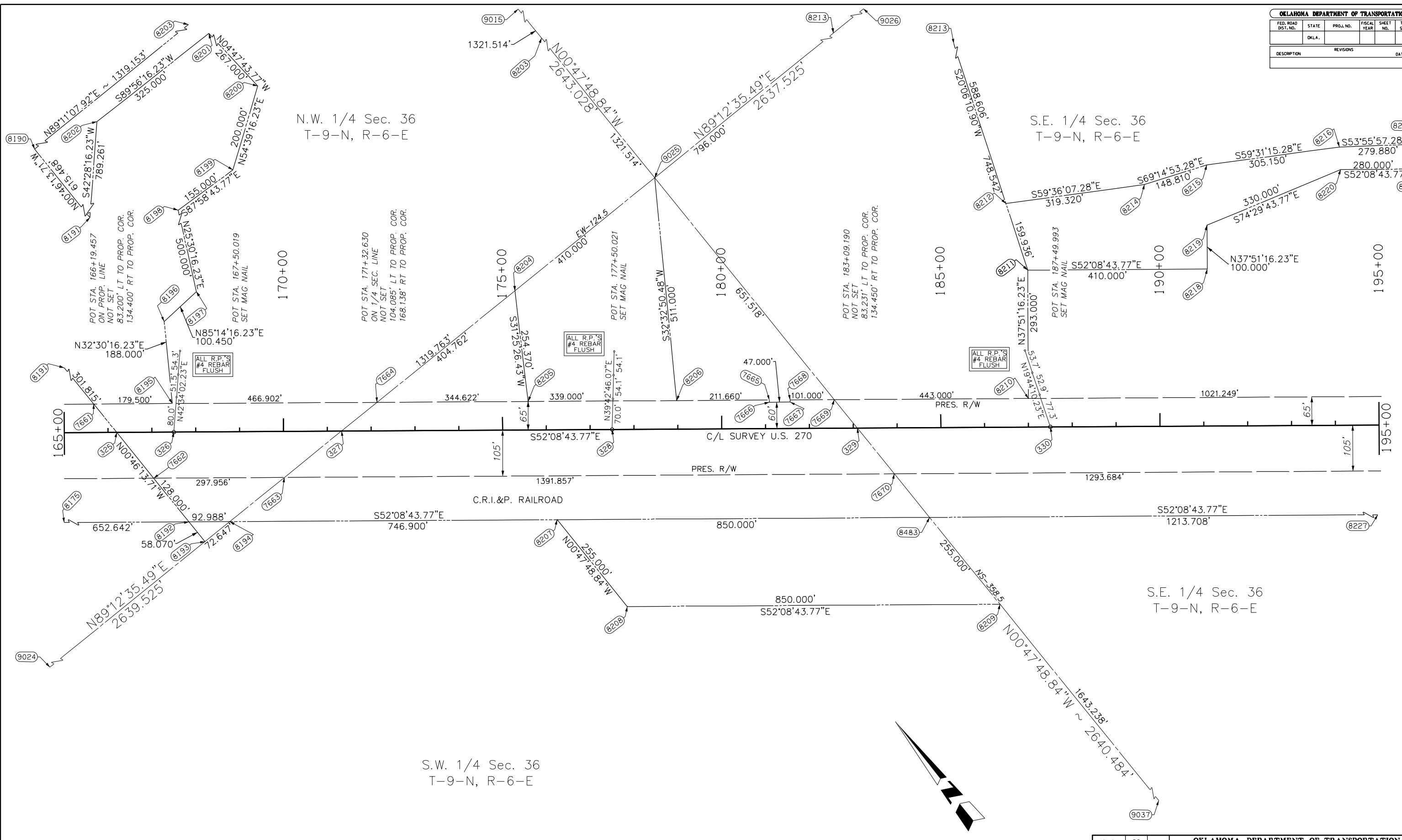
OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				
DESCRIPTION			REVISIONS	DATE	

N.W. 1/4 Sec. 36
T-9-N, R-6-E

S.E. 1/4 Sec. 36
T-9-N, R-6-E

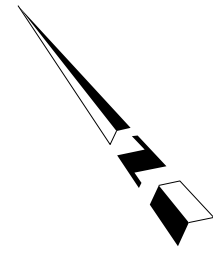
S.E. 1/4 Sec. 36
T-9-N, R-6-E

S.W. 1/4 Sec. 36
T-9-N, R-6-E



ALL R.P.'S
#4 REBAR
FLUSH

ALL R.P.'S
#4 REBAR
FLUSH

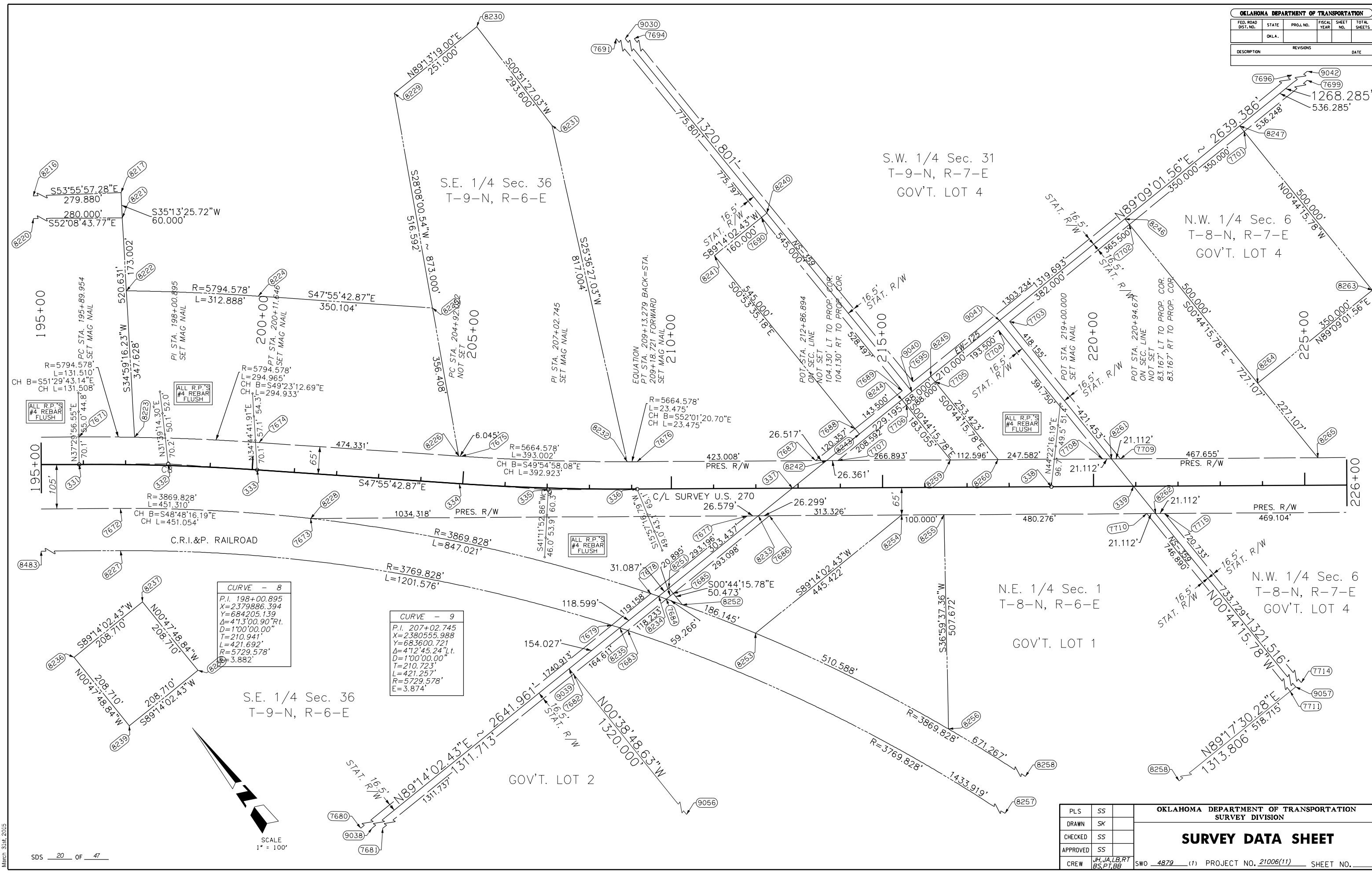


March 31st, 2015

SDS 19 OF 47

OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION					
SURVEY DATA SHEET					
PLS	SS				
DRAWN	SK				
CHECKED	SS				
APPROVED	SS				
CREW	JH, JA, LB, RT BS, PT, BB	SWO 4879	(1)	PROJECT NO. 21006(11)	SHEET NO. _____

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



March 31st, 2015

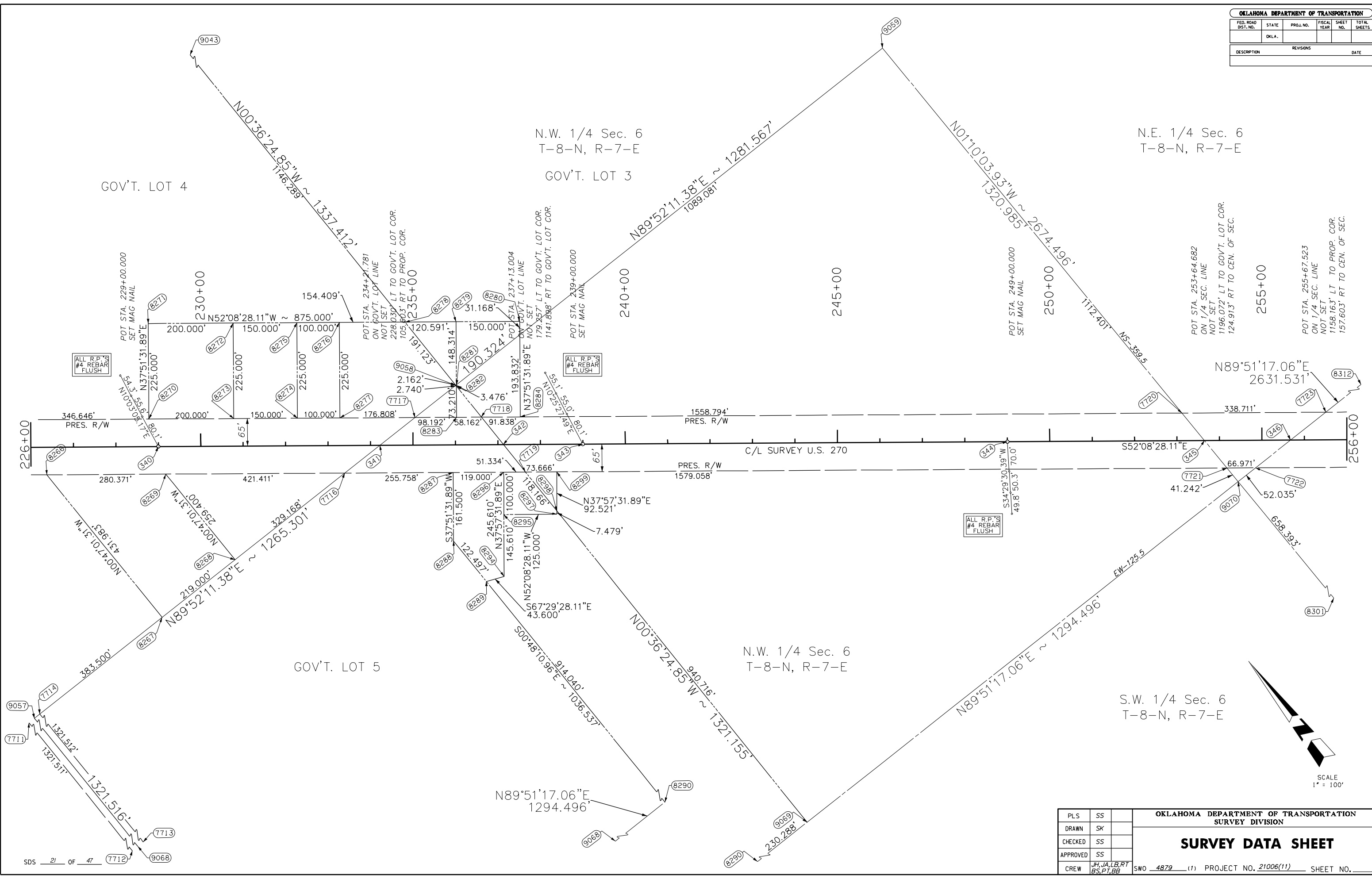
SDS 20 OF 47

SCALE
1" = 100'

OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION	
SURVEY DATA SHEET	
PLS	SS
DRAWN	SK
CHECKED	SS
APPROVED	SS
CREW	JH, JA, LB, RT BS, PT, BB

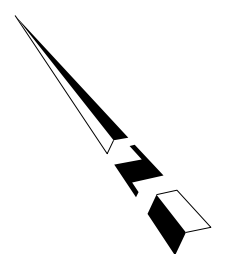
SWO 4879 (1) PROJECT NO. 21006(11) SHEET NO. _____

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



March 31st, 2015

SDS 21 OF 47



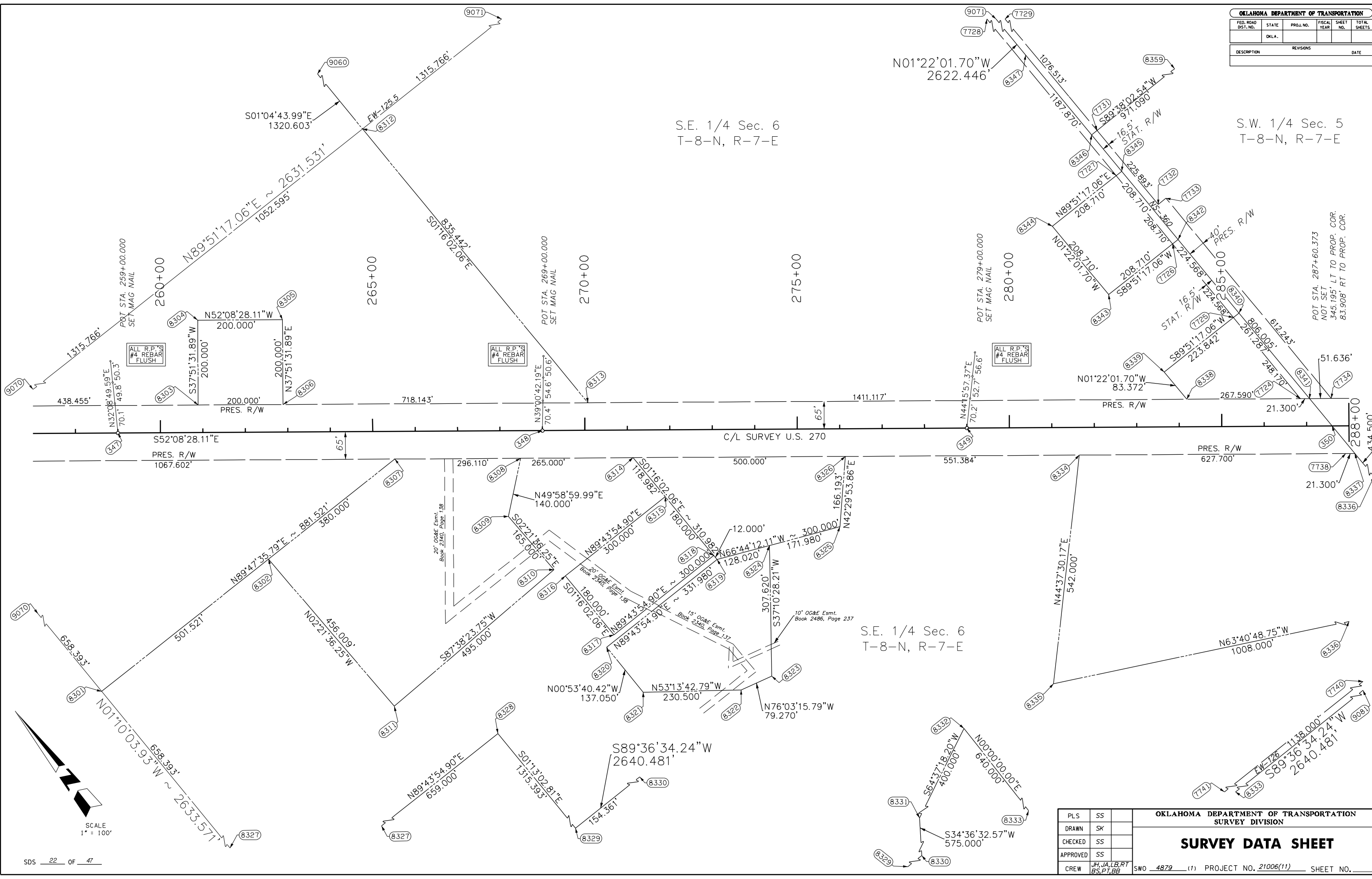
SCALE
1" = 100'

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
SURVEY DIVISION					
SURVEY DATA SHEET					
PLS	SS				
DRAWN	SK				
CHECKED	SS				
APPROVED	SS				
CREW	JH, JA, LB, RT BS, PT, BB	SWO 4879	(1)	PROJECT NO. 21006(11)	SHEET NO. _____

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

S.E. 1/4 Sec. 6
T-8-N, R-7-E

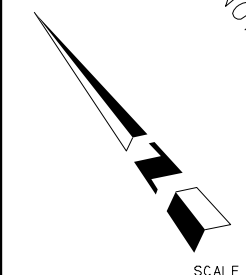
S.W. 1/4 Sec. 5
T-8-N, R-7-E



ALL R.P.'S
#4 REBAR
FLUSH

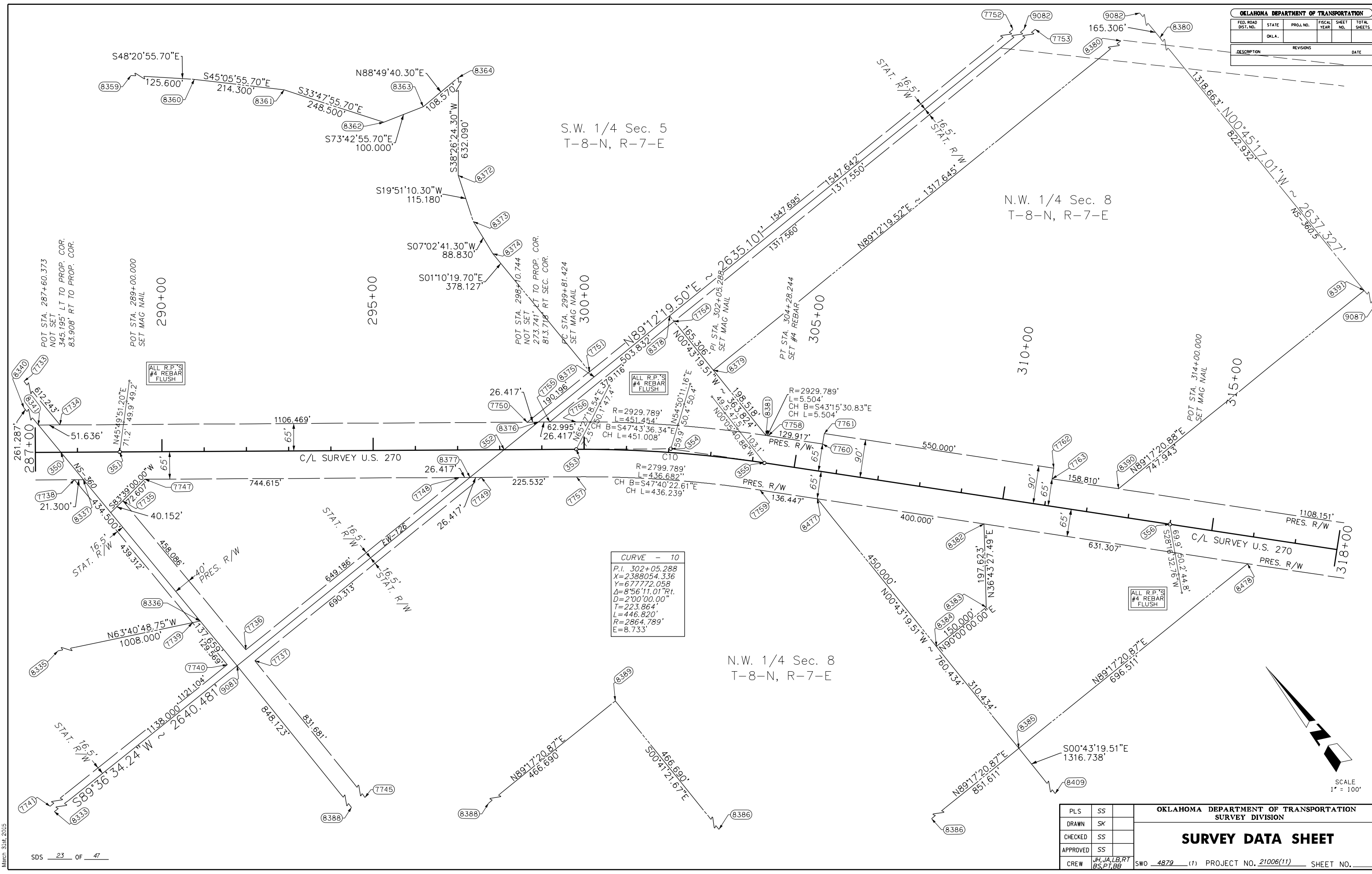
ALL R.P.'S
#4 REBAR
FLUSH

ALL R.P.'S
#4 REBAR
FLUSH

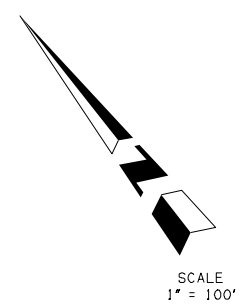


OKLAHOMA DEPARTMENT OF TRANSPORTATION					
SURVEY DIVISION					
SURVEY DATA SHEET					
PLS	SS				
DRAWN	SK				
CHECKED	SS				
APPROVED	SS				
CREW	JH, JA, LB, RT BS, PT, BB	SWO 4879	(1)	PROJECT NO. 21006(11)	SHEET NO. _____

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



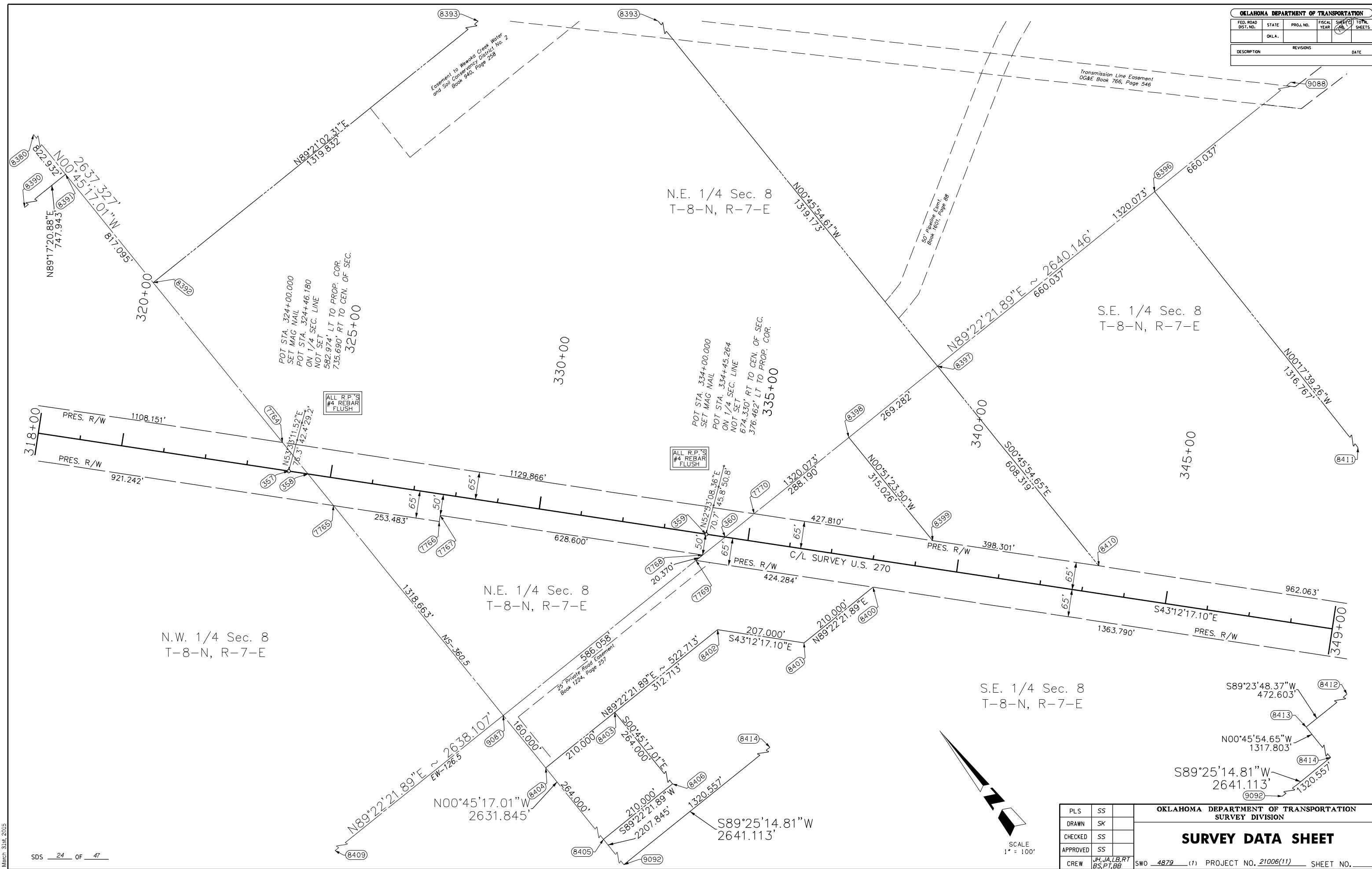
March 31st, 2015
SDS 23 OF 47



SCALE
1" = 100'

OKLAHOMA DEPARTMENT OF TRANSPORTATION			
SURVEY DIVISION			
SURVEY DATA SHEET			
PLS	SS		
DRAWN	SK		
CHECKED	SS		
APPROVED	SS		
CREW	JH, JA, LB, RT, BS, PT, BB	SWO 4879 (1)	PROJECT NO. 21006(11) SHEET NO. _____

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.			24	47
DESCRIPTION			REVISIONS		DATE



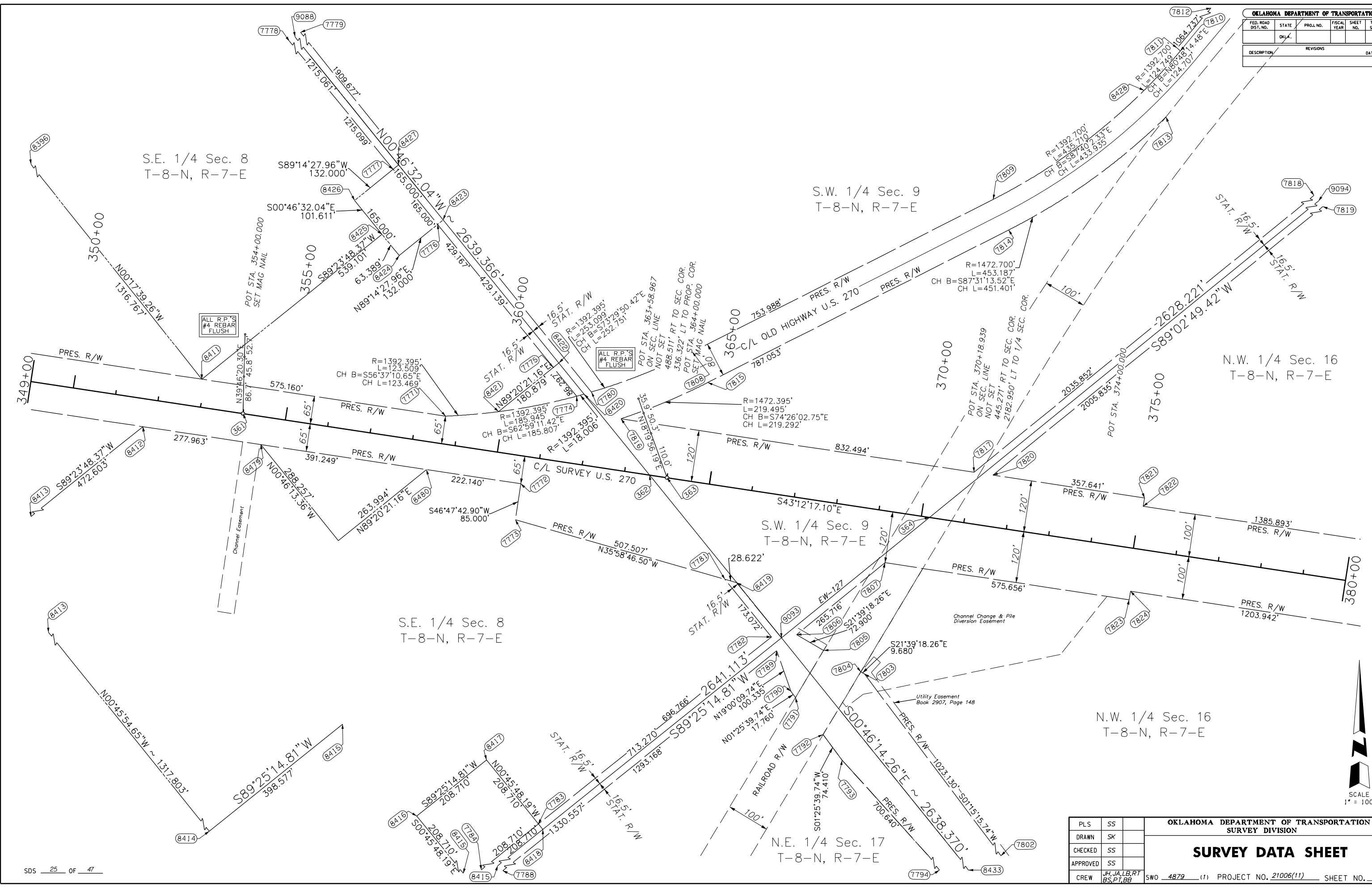
March 31st, 2015

SDS 24 OF 47

SCALE 1" = 100'

OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION					
SURVEY DATA SHEET					
PLS	SS				
DRAWN	SK				
CHECKED	SS				
APPROVED	SS				
CREW	JH, JA, LB, RT BS, PT, BB	SWO 4879	(1)	PROJECT NO. 21006(11)	SHEET NO. _____

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



N.W. 1/4 Sec. 16
T-8-N, R-7-E

S.W. 1/4 Sec. 9
T-8-N, R-7-E

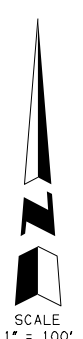
S.E. 1/4 Sec. 8
T-8-N, R-7-E

S.E. 1/4 Sec. 8
T-8-N, R-7-E

S.W. 1/4 Sec. 9
T-8-N, R-7-E

N.W. 1/4 Sec. 16
T-8-N, R-7-E

N.E. 1/4 Sec. 17
T-8-N, R-7-E



OKLAHOMA DEPARTMENT OF TRANSPORTATION					
SURVEY DIVISION					
SURVEY DATA SHEET					
PLS	SS				
DRAWN	SK				
CHECKED	SS				
APPROVED	SS				
CREW	JH, JA, LB, RT BS, PT, BB	SWO 4879	(1)	PROJECT NO. 21006(11)	SHEET NO. _____

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

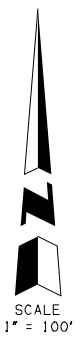
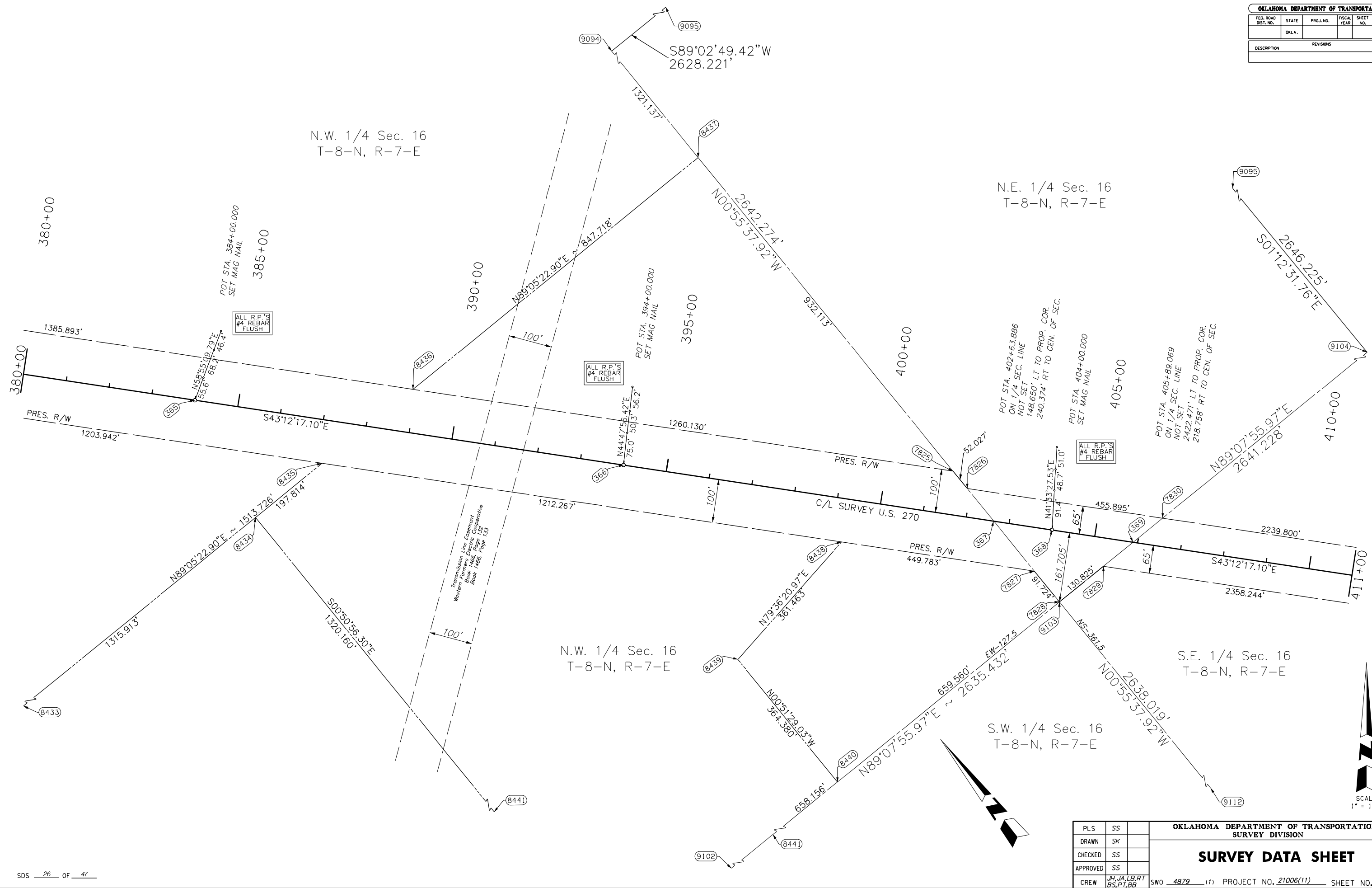
N.W. 1/4 Sec. 16
T-8-N, R-7-E

N.E. 1/4 Sec. 16
T-8-N, R-7-E

N.W. 1/4 Sec. 16
T-8-N, R-7-E

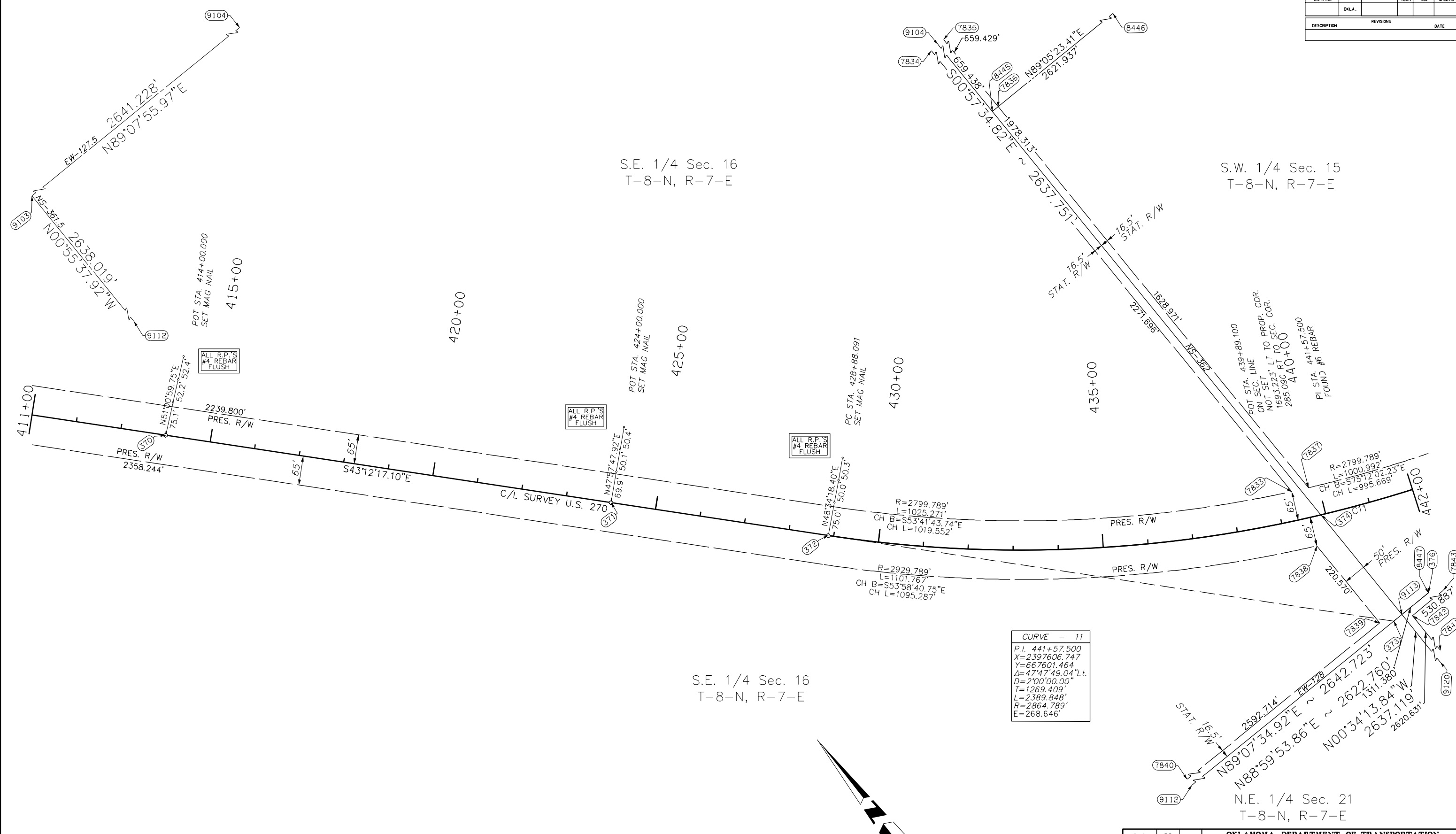
S.E. 1/4 Sec. 16
T-8-N, R-7-E

S.W. 1/4 Sec. 16
T-8-N, R-7-E

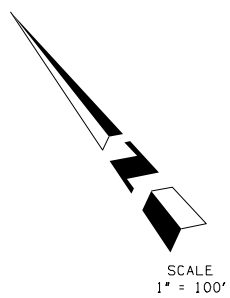


OKLAHOMA DEPARTMENT OF TRANSPORTATION			
SURVEY DIVISION			
SURVEY DATA SHEET			
PLS	SS		
DRAWN	SK		
CHECKED	SS		
APPROVED	SS		
CREW	JH, JA, LB, RT BS, PT, BB	SWO 4879 (1)	PROJECT NO. 21006(11) SHEET NO. _____

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

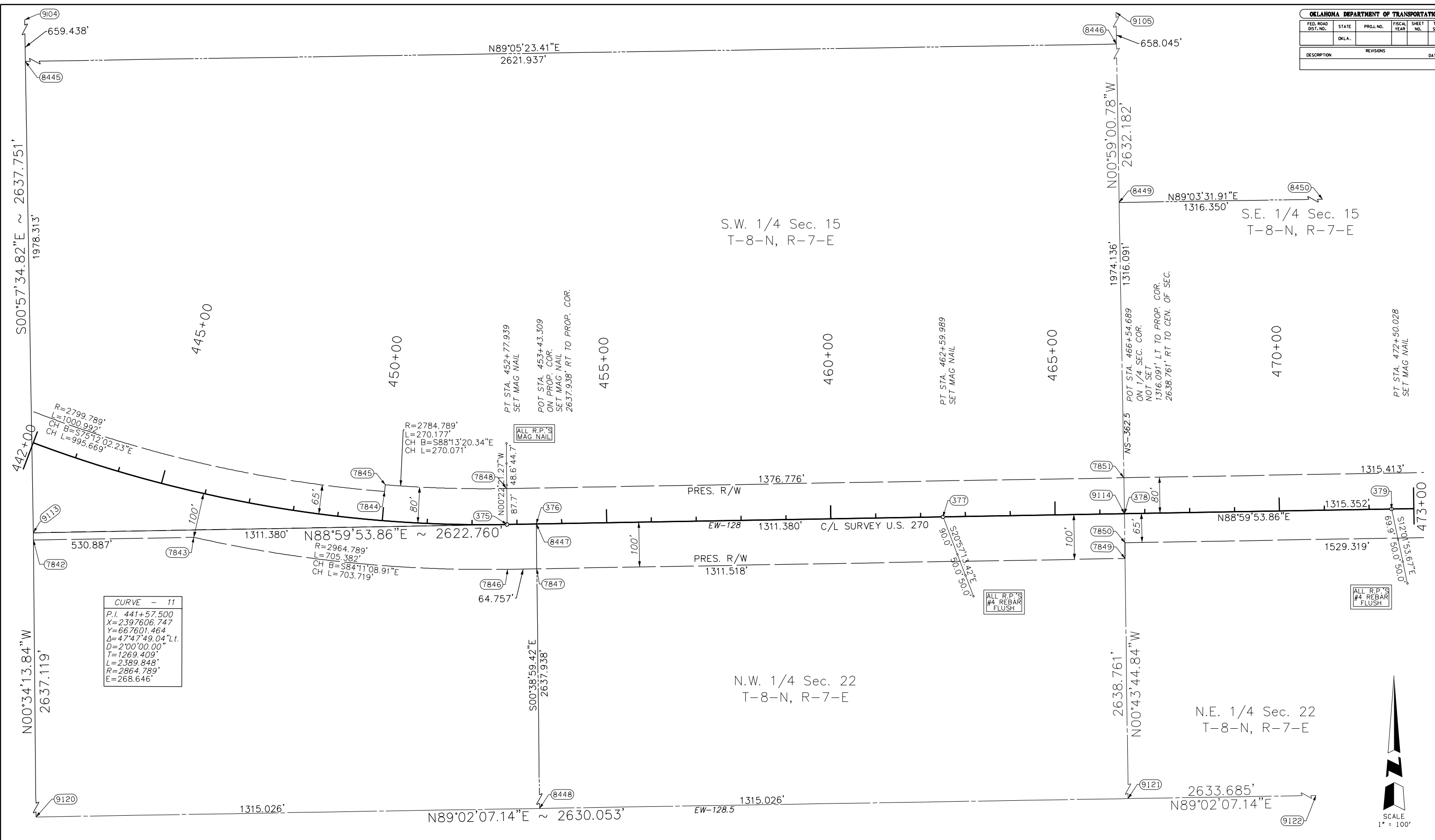


CURVE - 11	
P.I.	441+57.500
X	2397606.747
Y	667601.464
Δ	47°47'49.04" Lt.
D	2'00"00.00"
T	1269.409'
L	2389.848'
R	2864.789'
E	268.646'

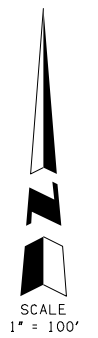


OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION			
SURVEY DATA SHEET			
PLS	SS		
DRAWN	SK		
CHECKED	SS		
APPROVED	SS		
CREW	JH, JA, LB, RT BS, PT, BB	SWO 4879 (1)	PROJECT NO. 21006(11) SHEET NO. _____

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

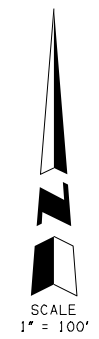
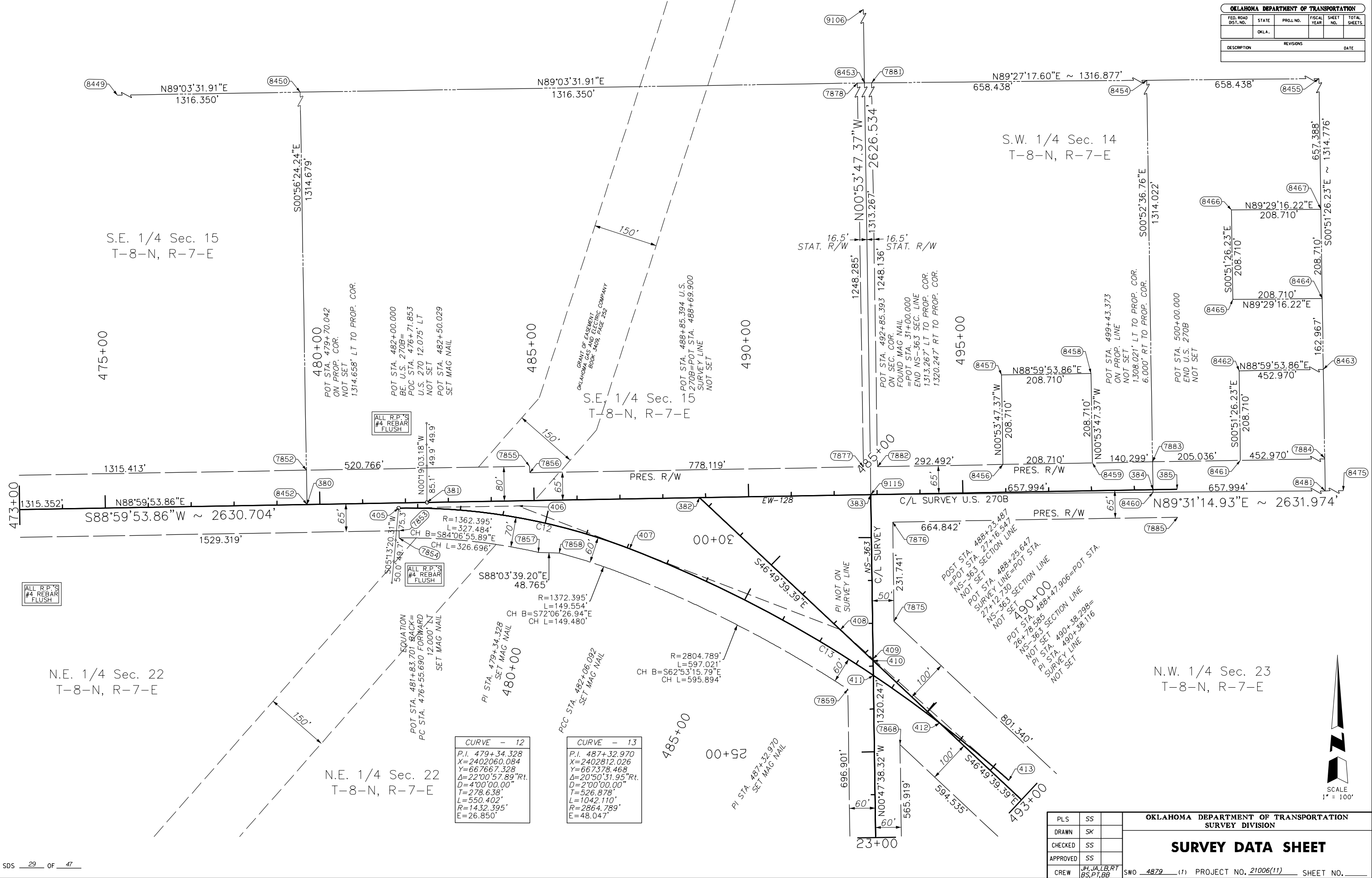


CURVE - 11	
P.I.	441+57.500
X	2397606.747
Y	667601.464
Δ	47°47'49.04" Lt.
D	2°00'00.00"
T	1269.409'
L	2389.848'
R	2864.789'
E	268.646'



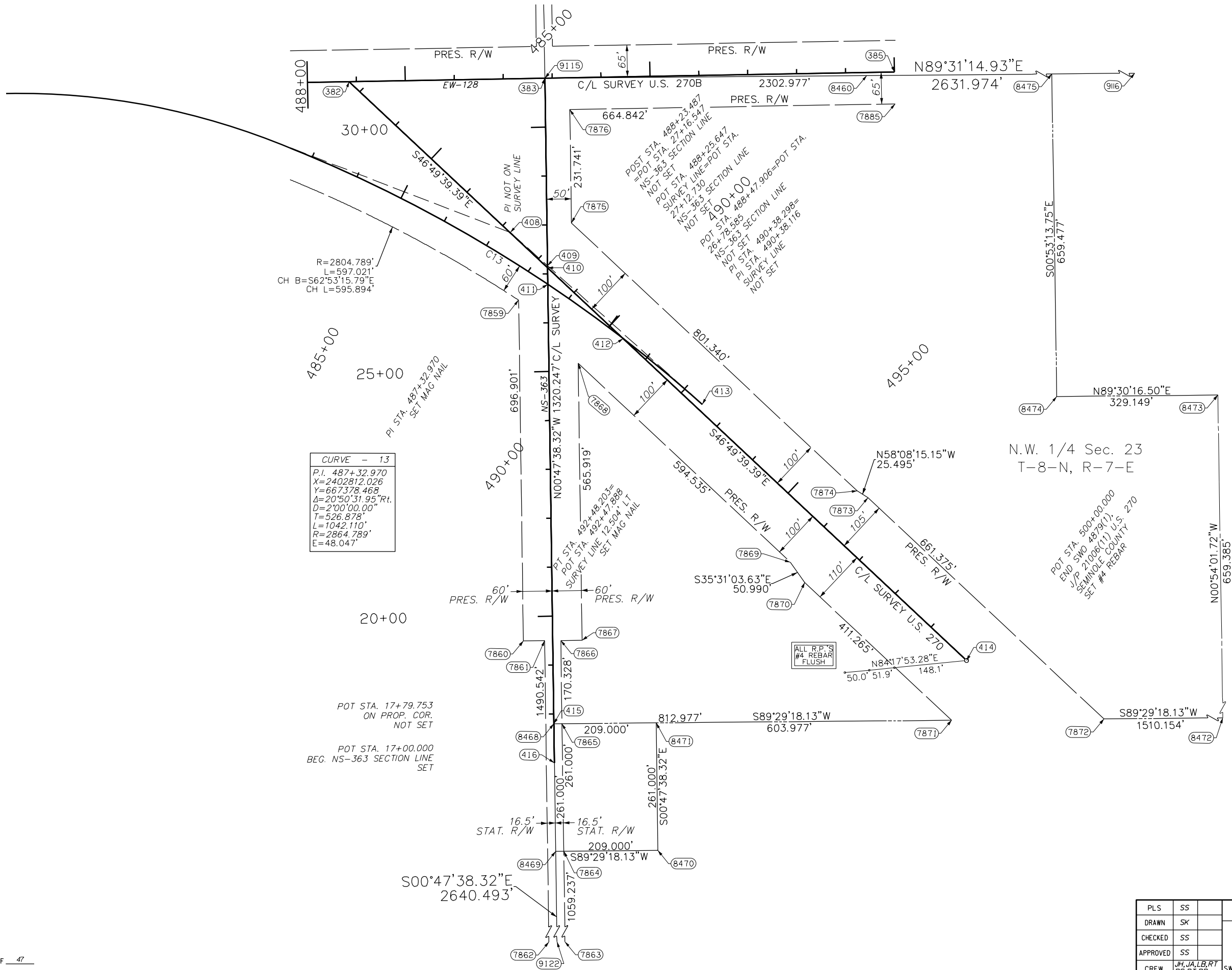
OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION			
SURVEY DATA SHEET			
PLS	SS		
DRAWN	SK		
CHECKED	SS		
APPROVED	SS		
CREW	JH, JA, LB, RT BS, PT, BB	SWO 4879 (1)	PROJECT NO. 21006(11) SHEET NO. _____

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



OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION			
SURVEY DATA SHEET			
PLS	SS		
DRAWN	SK		
CHECKED	SS		
APPROVED	SS		
CREW	JH, JA, LB, RT BS, PT, BB	SWO 4879 (1)	PROJECT NO. 21006(11) SHEET NO. _____

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

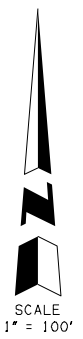


CURVE - 13	
P.I.	487+32.970
X	=2402812.026
Y	=667378.468
A	=20°50'31.95" Rt.
D	=2'00'00.00"
T	=526.878'
L	=1042.110'
R	=2864.789'
E	=48.047'

N.W. 1/4 Sec. 23
T-8-N, R-7-E

POT STA. 500+00.000
END SWO 4879(1)
J/P 21006(11) U.S. 270
SEMINOLE COUNTY
SET #4 REBAR

ALL R.P.'S
#4 REBAR
FLUSH



March 31st, 2015

SDS 30 OF 47

OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION					
SURVEY DATA SHEET					
PLS	SS				
DRAWN	SK				
CHECKED	SS				
APPROVED	SS				
CREW	JH, JA, LB, RT BS, PT, BB	SWO 4879 (1)	PROJECT NO. 21006(11)	SHEET NO.	

SECTION CORNER - O.D.O.T. S-67-209
 FOUND AND ACCEPTED ODOT BRASS MONUMENT AS SHOWN ON CORNER RECORD FILED BY JERRY G. ANDERSON, PLS 1080.

SECTION CORNER - O.D.O.T. S-67-513
 FOUND AND ACCEPTED PK NAIL AS SHOWN ON CORNER RECORD FILED BY TIMOTHY G. POLLARD, PLS 1474. THIS MONUMENT APPEARS TO BE IN THE SAME LOCATION AS SHOWN ON CORNER RECORD FILED BY JERRY G. ANDERSON, PLS 1080.

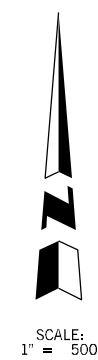
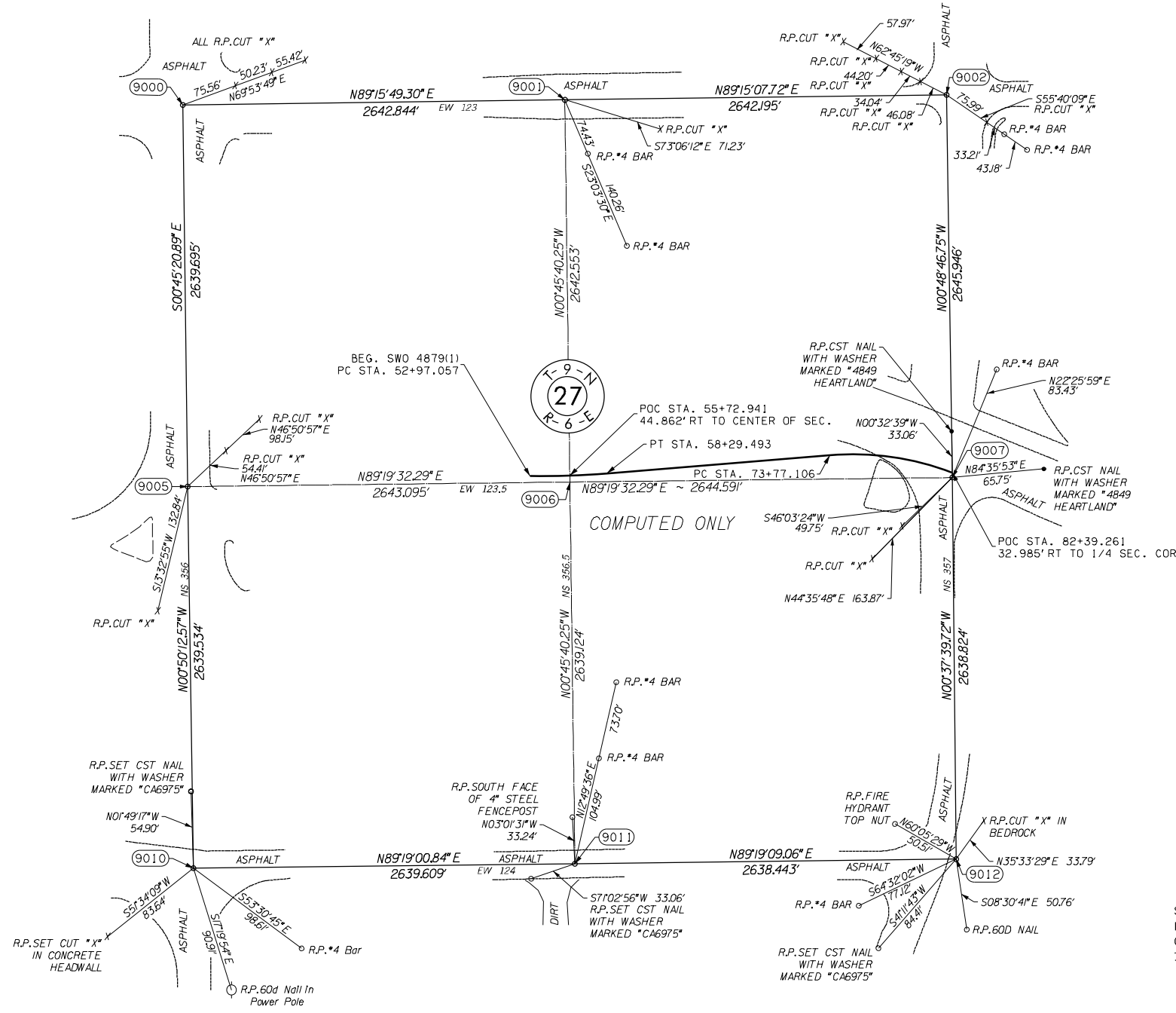
SECTION CORNER - O.D.O.T. S-67-515
 FOUND AND ACCEPTED CUT "X" IN CONCRETE AS SHOWN ON CORNER RECORD FILED BY ROBBY L. JOHNSON, PLS 1539 AND BY BRUCE IRA WILLIAMS, PLS 1280. THIS MONUMENT APPEARS TO BE IN THE SAME LOCATION AS SHOWN ON CORNER RECORD FILED BY JERRY G. ANDERSON, PLS 1080.

SECTION CORNER - O.D.O.T. S-67-499
 FOUND AND ACCEPTED #5 REBAR SHOWN AS FOUND ON CORNER RECORD FILED BY JERRY G. ANDERSON, PLS 1080.

SECTION CORNER - O.D.O.T. S-67-503
 FOUND AND ACCEPTED PK NAIL. THIS MONUMENT APPEARS TO BE IN THE SAME LOCATION AS SHOWN ON CORNER RECORD FILED BY JERRY G. ANDERSON, PLS 1080.

SECTION CORNER - O.D.O.T. S-67-500
 FOUND AND ACCEPTED RAILROAD SPIKE. THIS MONUMENT APPEARS TO BE IN THE SAME LOCATION AS SHOWN ON CORNER RECORD FILED BY JERRY G. ANDERSON, PLS 1080.

SECTION CORNER - O.D.O.T. S-67-501
 FOUND AND ACCEPTED RAILROAD SPIKE. THIS MONUMENT APPEARS TO BE IN THE SAME LOCATION AS SHOWN ON CORNER RECORD FILED BY JERRY G. ANDERSON, PLS 1080 AND BY RODGER WHITED, PLS 1298.



NOTE: REFERENCES SHOWN ARE NOT TO SCALE.

PLS		SS		OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION	
DRAWN	SK			SURVEY DATA SHEET	
CHECKED	SS				
APPROVED	SS				
CREW	JH,JA,LB,RT BS,PT,BB				
		SWO 4879 (1)		PROJECT NO. 21006(11) SHEET NO. _____	

SECTION CORNER - O.D.O.T. S-67-515
 FOUND AND ACCEPTED CUT "X" IN CONCRETE AS SHOWN ON CORNER RECORD FILED BY ROBBY L. JOHNSON, PLS 1539 AND BY BRUCE IRA WILLIAMS, PLS 1280. THIS MONUMENT APPEARS TO BE IN THE SAME LOCATION AS SHOWN ON CORNER RECORD FILED BY JERRY G. ANDERSON, PLS 1080.

SECTION CORNER - O.D.O.T. S-67-509
 FOUND AND ACCEPTED #5 REBAR AS SHOWN ON CORNER RECORD FILED BY JERRY G. ANDERSON, PLS 1080 AND BY BRUCE IRA WILLIAMS, PLS 1280. THIS MONUMENT APPEARS TO BE IN THE SAME LOCATION AS SHOWN ON CORNER RECORD FILED BY JAMES B. MARSHALL, PLS 113.

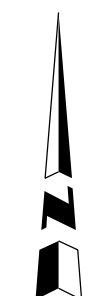
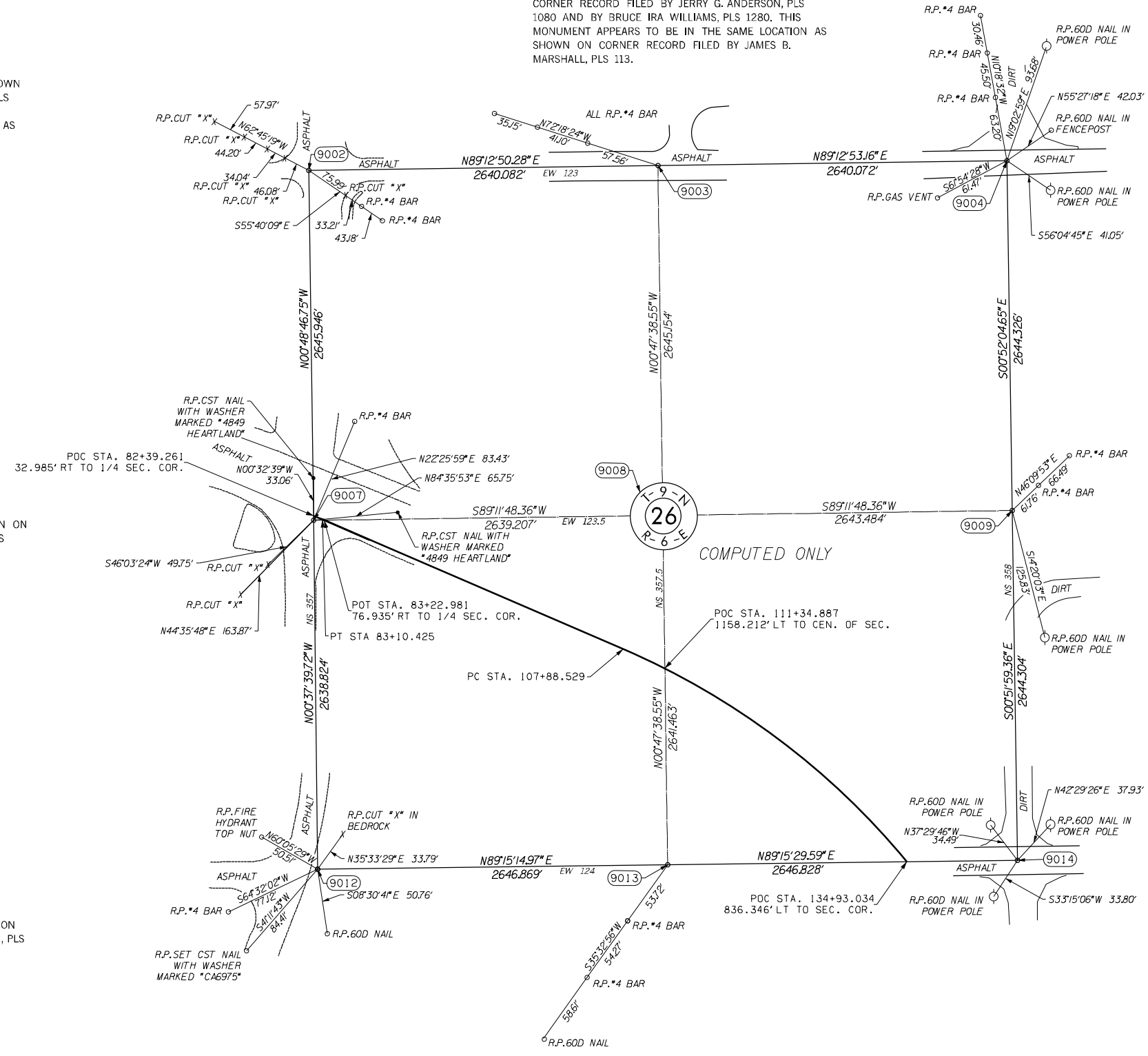
SECTION CORNER - O.D.O.T. S-67-508
 FOUND AND ACCEPTED #5 REBAR AS SHOWN ON CORNER RECORD FILED BY JAMES B. MARSHALL, PLS 113, JERRY G. ANDERSON, PLS 1080 AND BRUCE IRA WILLIAMS, PLS 1280.

SECTION CORNER - O.D.O.T. S-67-503
 FOUND AND ACCEPTED PK NAIL. THIS MONUMENT APPEARS TO BE IN THE SAME LOCATION AS SHOWN ON CORNER RECORD FILED BY JERRY G. ANDERSON, PLS 1080.

SECTION CORNER - O.D.O.T. S-67-507
 FOUND AND ACCEPTED #5 REBAR AS SHOWN ON CORNER RECORD FILED BY JERRY G. ANDERSON, PLS 1080. MONUMENT SHOWN ON CORNER RECORD FILED BY JAMES B. MARSHALL, PLS 113 WAS NOT FOUND.

SECTION CORNER - O.D.O.T. S-67-502
 FOUND AND ACCEPTED #5 REBAR AS SHOWN ON CORNER RECORD FILED BY JERRY G. ANDERSON, PLS 1080.

SECTION CORNER - O.D.O.T. S-67-505
 FOUND AND ACCEPTED #5 REBAR AS SHOWN ON CORNER RECORD FILED BY JERRY G. ANDERSON, PLS 1080.



SCALE:
1" = 500'

NOTE: REFERENCES SHOWN ARE NOT TO SCALE.

OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION			
SURVEY DATA SHEET			
PLS	SS		
DRAWN	SK		
CHECKED	SS		
APPROVED	SS		
CREW	JH,JA,LB,RT BS,PT,BB	SWO 4879 (1)	PROJECT NO. 21006(11) SHEET NO. _____

SECTION CORNER - O.D.O.T. S-67-505
 FOUND AND ACCEPTED #5 REBAR AS SHOWN ON
 CORNER RECORD FILED BY JERRY G. ANDERSON, PLS
 1080.

SECTION CORNER - O.D.O.T. S-67-502
 FOUND AND ACCEPTED #5 REBAR AS SHOWN ON
 CORNER RECORD FILED BY JERRY G. ANDERSON, PLS
 1080.

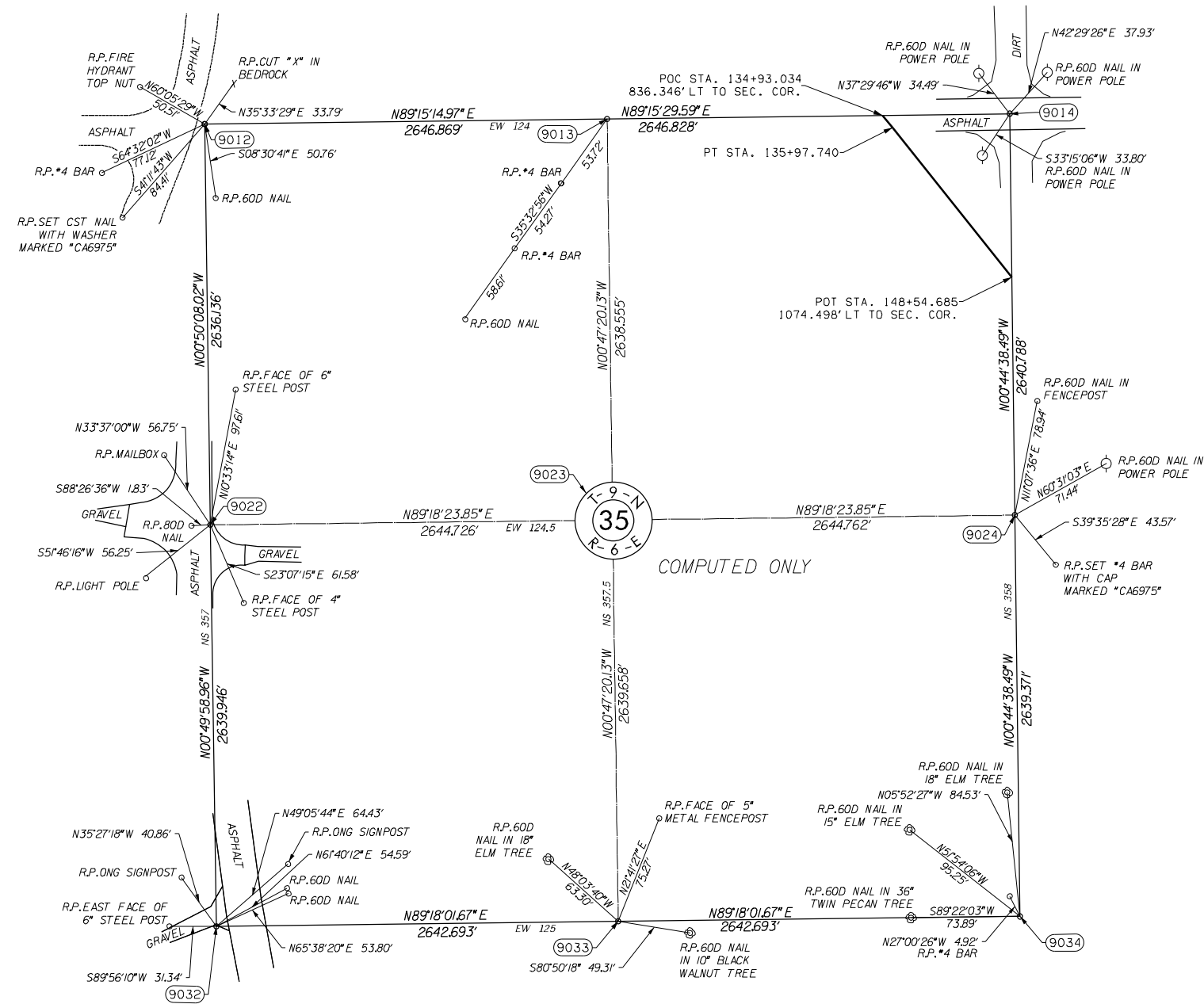
SECTION CORNER - O.D.O.T. S-67-506
 FOUND DAMAGED NAIL AT THE LOCATION SHOWN ON
 CORNER RECORD FILED BY ROBBY L. JOHNSON, PLS 1539.
 REPLACED DAMAGED NAIL WITH #4 REBAR WITH CAP
 STAMPED CA 6975. THIS MONUMENT MATCHES THE
 LOCATION SHOWN ON CORNER RECORD FILED BY JERRY
 G. ANDERSON, PLS 1080 AND BY JAMES B. MARSHALL, PLS
 113.

SECTION CORNER - O.D.O.T. S-67-910
 FOUND AND ACCEPTED RAILROAD SPIKE AS SHOWN ON
 CORNER RECORD FILED BY BILLY JACK WILLINGHAM, PLS
 754.

SECTION CORNER - O.D.O.T. S-67-911
 FOUND AND ACCEPTED #4 REBAR AS SHOWN ON
 CORNER RECORD FILED BY RODGER WHITED, PLS 1298.

SECTION CORNER - O.D.O.T. S-67-914
 FOUND AND ACCEPTED #3 REBAR AS SHOWN ON
 CORNER RECORD FILED BY BILLY JACK WILLINGHAM, PLS
 754.

SECTION CORNER - O.D.O.T. S-67-915
 SET #4 REBAR WITH CAP STAMPED CA 6975. THIS
 MONUMENT WAS RE-ESTABLISHED USING PROPORTIONATE
 MEASUREMENT. THERE WAS NO CORNER RECORD ON
 FILE.



SCALE:
 1" = 500'

NOTE: REFERENCES SHOWN ARE NOT TO SCALE.

PLS		SS		OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION	
DRAWN	SK			SURVEY DATA SHEET	
CHECKED	SS				
APPROVED	SS				
CREW	JH,JA,LB,RT BS,PT,BB				
		SWO 4879 (1)		PROJECT NO. 21006(11) SHEET NO. _____	

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

DESCRIPTION	REVISIONS	DATE

SECTION CORNER - O.D.O.T. S-67-506
 FOUND DAMAGED NAIL AT THE LOCATION SHOWN ON CORNER RECORD FILED BY ROBBY L. JOHNSON, PLS 1539. REPLACED DAMAGED NAIL WITH #4 REBAR WITH CAP STAMPED CA 6975. THIS MONUMENT MATCHES THE LOCATION SHOWN ON CORNER RECORD FILED BY JERRY G. ANDERSON, PLS 1080 AND BY JAMES B. MARSHALL, PLS 113.

SECTION CORNER - O.D.O.T. S-67-911
 FOUND AND ACCEPTED #4 REBAR AS SHOWN ON CORNER RECORD FILED BY RODGER WHITED, PLS 1298.

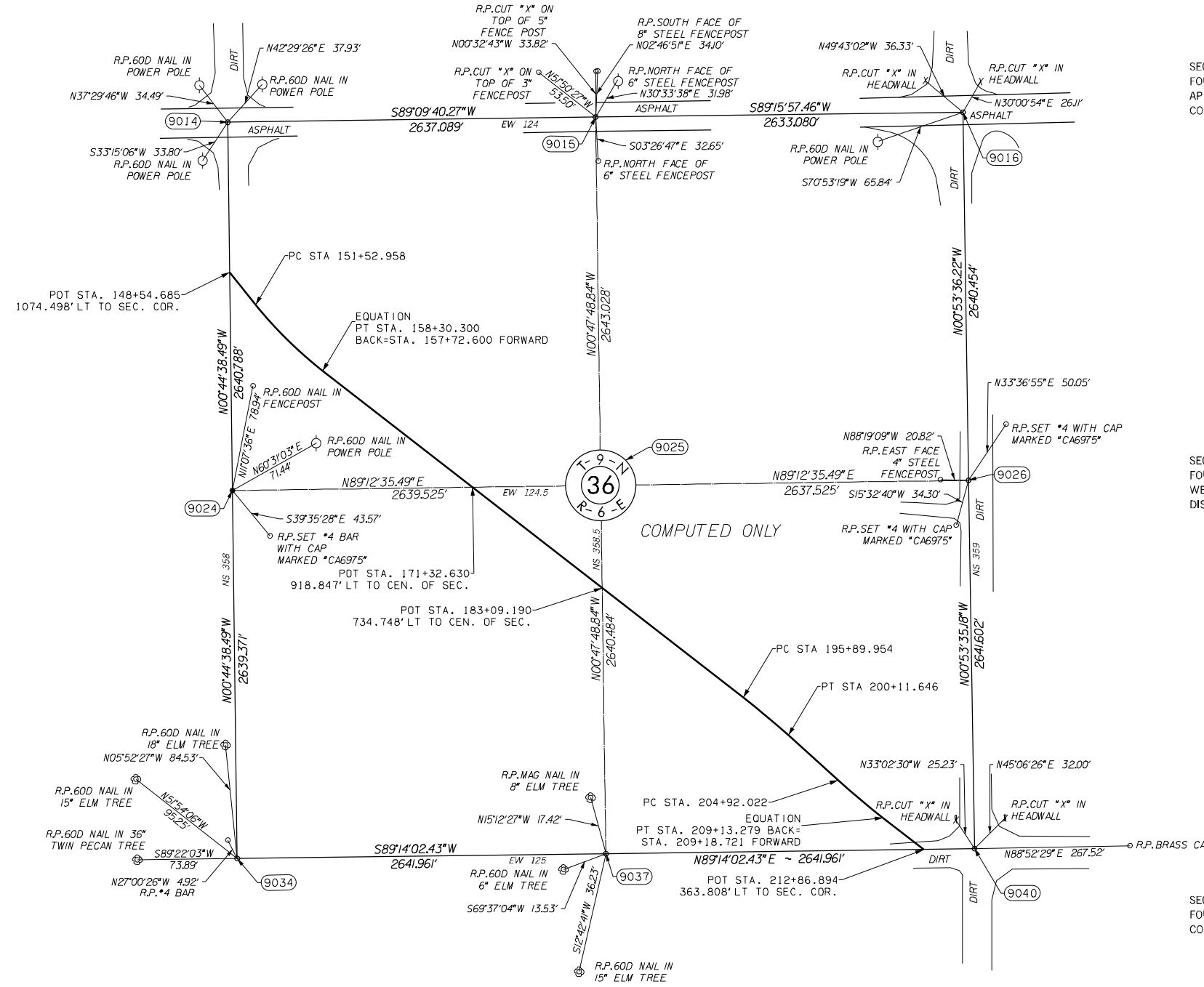
SECTION CORNER - O.D.O.T. S-67-916
 SET #4 REBAR WITH CAP STAMPED CA 6975. THIS MONUMENT WAS RE-ESTABLISHED USING SURROUNDING MONUMENTS AND CHECKS WELL WITH GLO DISTANCES. THERE WAS NO CORNER RECORD ON FILE.

SECTION CORNER - O.D.O.T. S-67-906
 SET MAG NAIL WITH WASHER STAMPED CA 6975. THIS MONUMENT WAS RE-ESTABLISHED AT THE LOCATION SHOWN ON CORNER RECORD FILED BY ROBBY L. JOHNSON, PLS 1539 USING EXISTING REFERENCES AND SECTION DATA.

SECTION CORNER - O.D.O.T. S-67-907
 FOUND AND ACCEPTED 80D NAIL. THIS MONUMENT APPEARS TO BE IN THE SAME LOCATION AS SHOWN ON CORNER RECORD FILED BY RODGER WHITED, PLS 1298.

SECTION CORNER - O.D.O.T. S-67-912
 FOUND AND ACCEPTED #4 REBAR. THIS MONUMENT FITS WELL WITH SURROUNDING OCCUPATION LINES AND GLO DISTANCES. THERE WAS NO CORNER RECORD ON FILE.

SECTION CORNER - O.D.O.T. S-67-920
 FOUND AND ACCEPTED #3 REBAR AS SHOWN ON CORNER RECORD FILED BY JAMES B. MARSHALL, PLS 113.



SCALE:
 1" = 500'

NOTE: REFERENCES SHOWN ARE NOT TO SCALE.

SECTION CORNER - O.D.O.T. S-67-918
 SET #4 REBAR WITH CAP STAMPED CA 6975. THIS MONUMENT WAS RE-ESTABLISHED USING PROPORTIONATE MEASUREMENT. THERE WAS NO CORNER RECORD ON FILE.

OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION	
SURVEY DATA SHEET	
PLS	SS
DRAWN	SK
CHECKED	SS
APPROVED	SS
CREW	JH,JA,LB,RT BS,PT,BB

SWO 4879 (1) PROJECT NO. 21006(11) SHEET NO. _____

SECTION CORNER - O.D.O.T. S-67-919
 FOUND BLM BRASS MONUMENT AS SHOWN ON THE 2007 DEPENDENT RESURVEY. THIS MONUMENT IS 0.5' NORTH OF THE CALCULATED POSITION FOR CORNER. THERE WAS NO CORNER RECORD ON FILE.

SECTION CORNER - O.D.O.T. S-67-917
 FOUND BLM BRASS MONUMENT AS CLOSING CORNER AS SHOWN ON THE 2007 DEPENDENT RESURVEY. THERE WAS NO CORNER RECORD ON FILE.

SECTION CORNER - O.D.O.T. S-67-921
 FOUND BLM BRASS MONUMENT AS CLOSING CORNER AS SHOWN ON THE 2007 DEPENDENT RESURVEY. THIS MONUMENT IS 1.3' NORTH OF THE CALCULATED POSITION FOR CORNER. THERE WAS NO CORNER RECORD ON FILE.

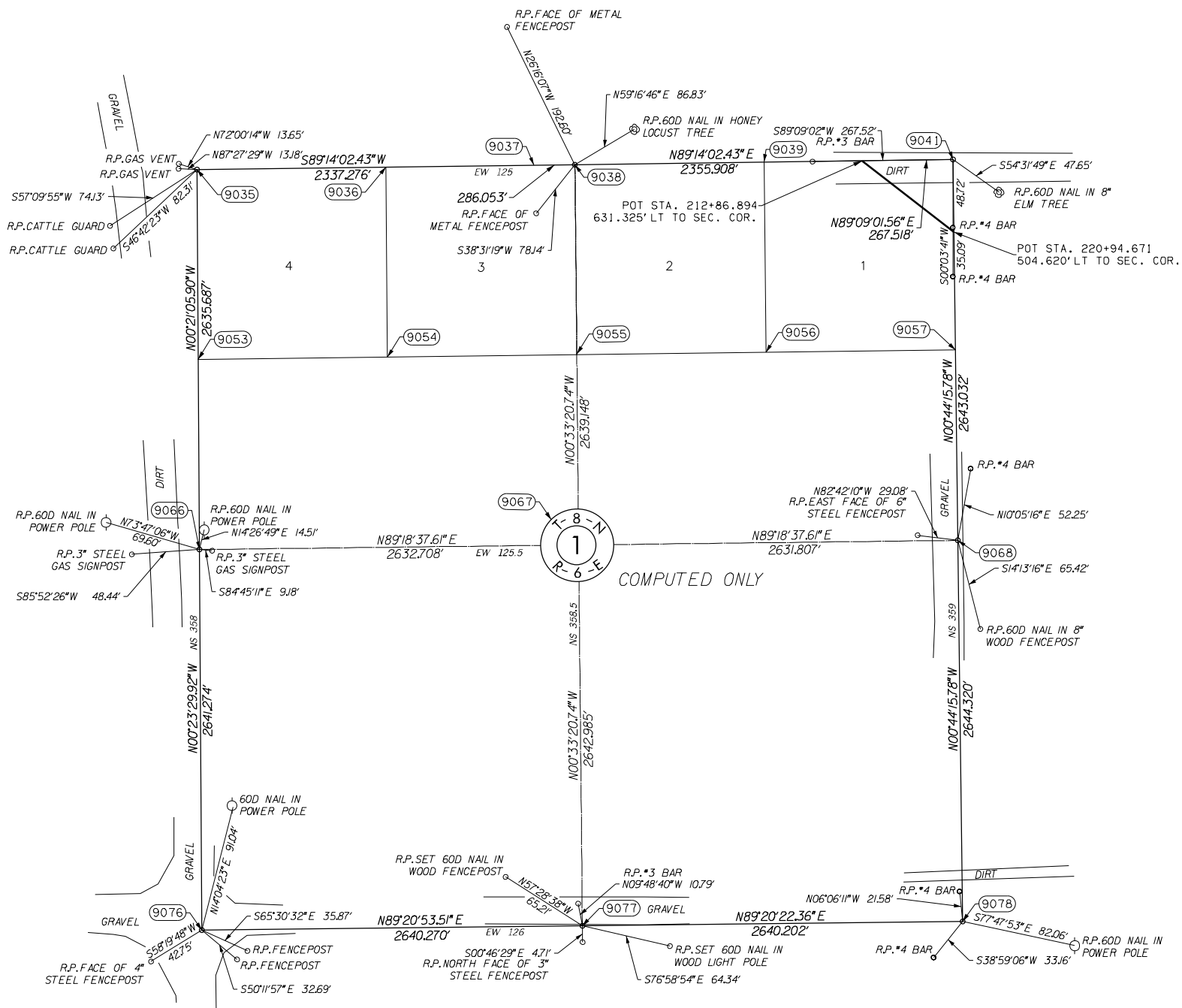
SECTION CORNER - O.D.O.T. S-67-928
 FOUND AND ACCEPTED BLM BRASS MONUMENT AS SHOWN ON THE 2007 DEPENDENT RESURVEY. THIS MONUMENT WAS SET AT THE LOCATION SHOWN ON CORNER RECORD FILED BY RODGER WHITED, PLS 1298.

SECTION CORNER - O.D.O.T. S-67-929
 SET #4 REBAR WITH CAP STAMPED CA 6975. THIS MONUMENT WAS RE-ESTABLISHED AT THE LOCATION SHOWN ON THE 2007 DEPENDENT RESURVEY. THERE WAS NO CORNER RECORD ON FILE.

SECTION CORNER - O.D.O.T. S-67-932
 FOUND AND ACCEPTED BLM BRASS MONUMENT AS SHOWN ON THE 2007 DEPENDENT RESURVEY. THIS MONUMENT WAS SET AT THE LOCATION SHOWN ON CORNER RECORD FILED BY JERRY G. ANDERSON, PLS 1080.

SECTION CORNER - O.D.O.T. S-67-934
 FOUND AND ACCEPTED BLM BRASS MONUMENT AS SHOWN ON THE DEPENDENT RESURVEY. THIS MONUMENT WAS SET AT THE LOCATION SHOWN ON CORNER RECORD FILED BY DAVID F. HEAVNER, PLS 964.

SECTION CORNER - O.D.O.T. S-67-933
 FOUND AND ACCEPTED BLM BRASS MONUMENT AS SHOWN ON THE 2007 DEPENDENT RESURVEY. MONUMENTS SHOWN ON CORNER RECORD FILED BY JERRY G. ANDERSON, PLS 1080 AND BY DAVID F. HEAVNER, PLS, 964 WERE NOT FOUND.



SCALE:
 1" = 500'

NOTE: REFERENCES SHOWN ARE NOT TO SCALE.

OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION	
SURVEY DATA SHEET	
PLS	SS
DRAWN	SK
CHECKED	SS
APPROVED	SS
CREW	JH,JA,LB,RT BS,PT,BB

SWO 4879 (1) PROJECT NO. 21006(11) SHEET NO. _____

SECTION CORNER - O.D.O.T. S-67-907
 FOUND AND ACCEPTED 80D NAIL. THIS MONUMENT APPEARS TO BE IN THE SAME LOCATION AS SHOWN ON CORNER RECORD FILED BY RODGER WHITED, PLS 1298.

SECTION CORNER - O.D.O.T. S-67-908
 SET #4 REBAR WITH CAP STAMPED CA 6975. THIS MONUMENT WAS RE-ESTABLISHED USING PROPORTIONAL MEASUREMENT. THERE WAS NO CORNER RECORD ON FILE.

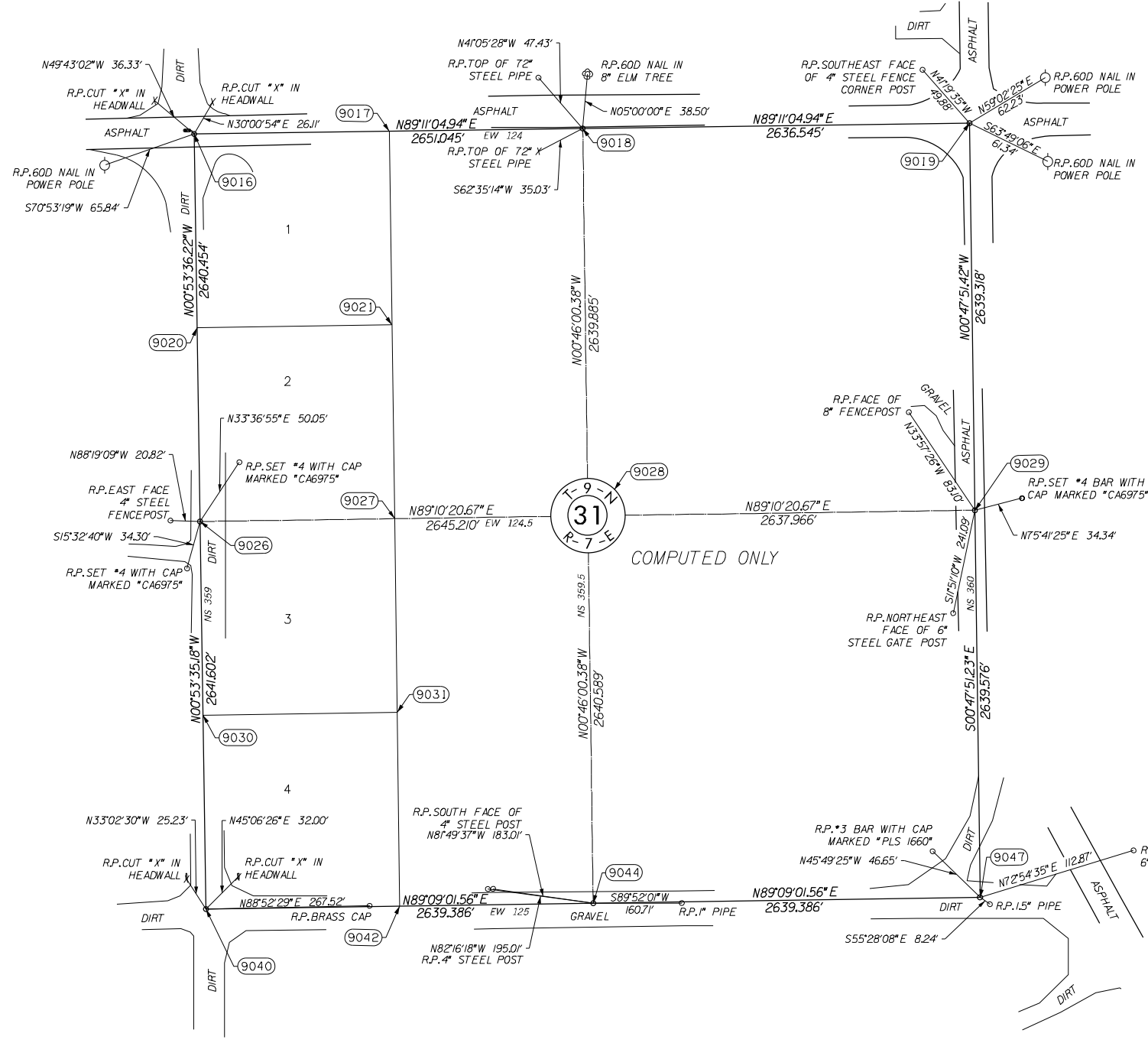
SECTION CORNER - O.D.O.T. S-67-909
 FOUND AND ACCEPTED PK NAIL AS SHOWN ON CORNER RECORD FILED BY JOHNNY LEE PACK, PLS 1252. THIS MONUMENT APPEARS TO BE IN THE SAME LOCATION AS SHOWN ON CORNER RECORD FILED BY BOBBY L. GOFORTH, PLS 340 AND BY JAMES B. MARSHALL, PLS 113.

SECTION CORNER - O.D.O.T. S-67-912
 FOUND AND ACCEPTED #4 REBAR. THIS MONUMENT FITS WELL WITH SURROUNDING OCCUPATION LINES AND GLO DISTANCES. THERE WAS NO CORNER RECORD ON FILE.

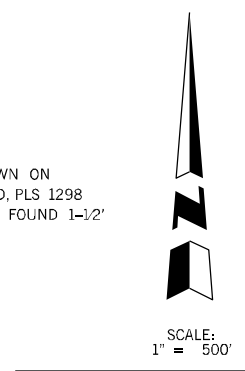
SECTION CORNER - O.D.O.T. S-67-913
 FOUND AND ACCEPTED PK NAIL AS SHOWN ON CORNER RECORD FILED BY JOHNNY LEE PACK, PLS 1252.

SECTION CORNER - O.D.O.T. S-67-920
 FOUND AND ACCEPTED #3 REBAR AS SHOWN ON CORNER RECORD FILED BY JAMES B. MARSHALL, PLS 113.

SECTION CORNER - O.D.O.T. S-67-924
 FOUND AND ACCEPTED #4 REBAR AS SHOWN ON CORNER RECORD FILED BY RODGER WHITED, PLS 1298 AND BY JOHNNY LEE PACK, PLS 1252. ALSO FOUND 1-1/2' PIPE 4.7' SOUTH AND 6.9' EAST OF CORNER.



SECTION CORNER - O.D.O.T. S-67-922
 FOUND AND ACCEPTED #3 REBAR AS SHOWN ON CORNER RECORD FILED BY BILLY JACK WILLINGHAM, PLS 754 AND BY DAN W. ROGERS, PLS 1200.



NOTE: REFERENCES SHOWN ARE NOT TO SCALE.

OKLAHOMA DEPARTMENT OF TRANSPORTATION		SURVEY DIVISION	
PLS	SS	SURVEY DATA SHEET	
DRAWN	SK		
CHECKED	SS		
APPROVED	SS		
CREW	JH,JA,LB,RT BS,PT,BB		
SWO 4879 (1) PROJECT NO. 21006(11) SHEET NO. _____			

SECTION CORNER - O.D.O.T. S-67-921
 FOUND BLM BRASS MONUMENT AS CLOSING CORNER AS SHOWN ON THE 2007 DEPENDENT RESURVEY. THIS MONUMENT IS 1.3' NORTH OF THE CALCULATED POSITION FOR CORNER. THERE WAS NO CORNER RECORD ON FILE.

SECTION CORNER - O.D.O.T. S-67-923
 FOUND AND ACCEPTED #3 REBAR AS SHOWN ON CORNER RECORD FILED BY DAN W. ROGERS, PLS 1200. ALSO FOUND 1-1/2' PIPE 2.1' SOUTH AND 4.0' WEST OF CORNER.

SECTION CORNER - O.D.O.T. S-67-925
 FOUND AND ACCEPTED #6 REBAR. THIS MONUMENT MATCHES THE LOCATION SHOWN ON CORNER RECORD FILED BY JOHNNY LEE PACK, PLS 1252.

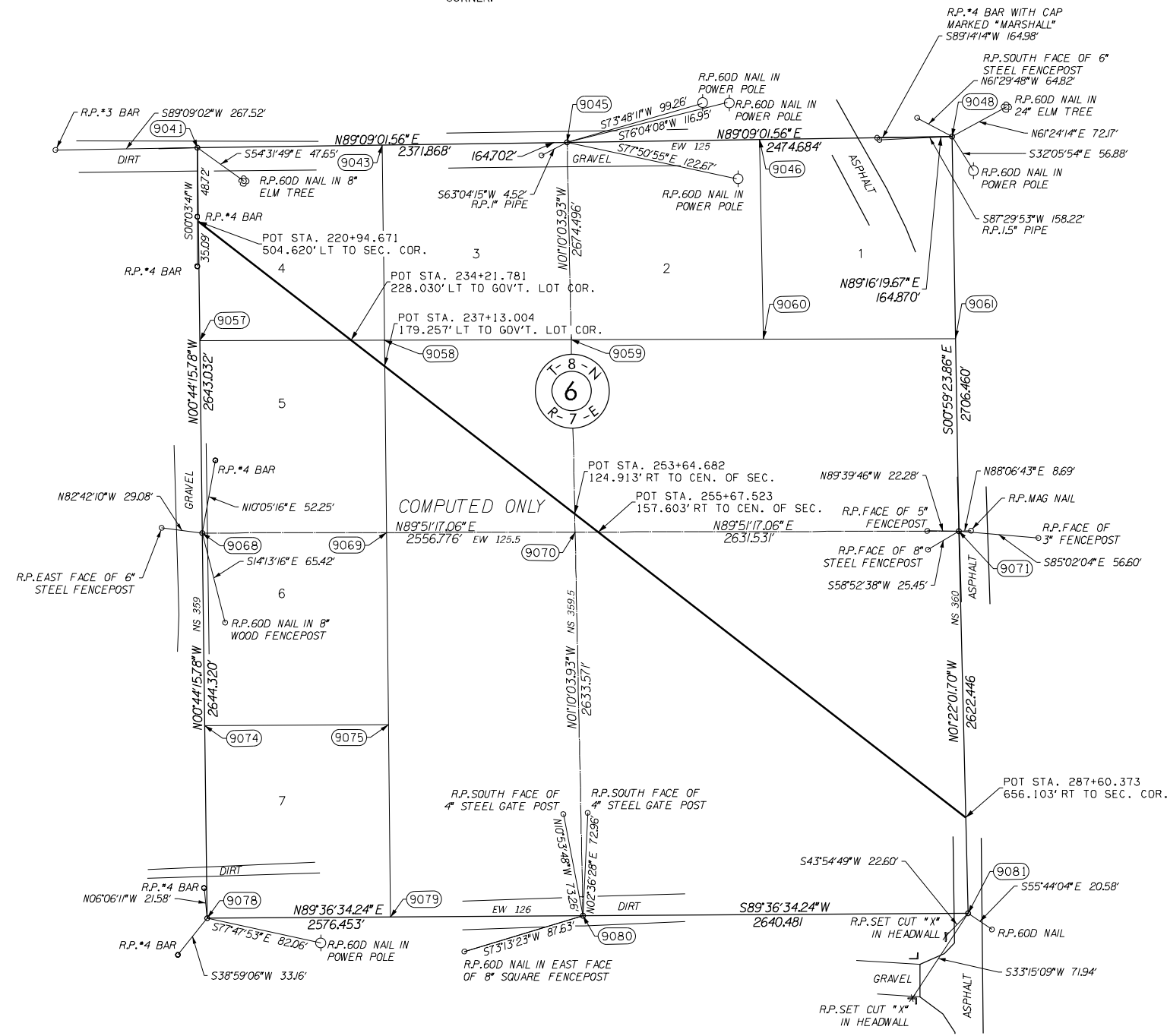
SECTION CORNER - O.D.O.T. S-67-929
 SET #4 REBAR WITH CAP STAMPED CA 6975. THIS MONUMENT WAS RE-ESTABLISHED AT THE LOCATION SHOWN ON THE 2007 DEPENDENT RESURVEY. THERE WAS NO CORNER RECORD ON FILE.

SECTION CORNER - O.D.O.T. S-67-934
 FOUND AND ACCEPTED BLM BRASS MONUMENT AS SHOWN ON THE DEPENDENT RESURVEY. THIS MONUMENT WAS SET AT THE LOCATION SHOWN ON CORNER RECORD FILED BY DAVID F. HEAVNER, PLS 964.

SECTION CORNER - O.D.O.T. S-67-935
 SET #4 REBAR WITH CAP STAMPED CA 6975. THIS CORNER WAS RE-ESTABLISHED USING PROPORTIONATE MEASUREMENT. THERE WAS NO CORNER RECORD ON FILE.

SECTION CORNER - O.D.O.T. S-67-930
 FOUND AND ACCEPTED #4 REBAR AS SHOWN ON CORNER RECORD FILED BY FRANK MAGNER, PLS 1564. ALSO FOUND MAG NAIL 0.3' NORTH AND 8.7' EAST OF CORNER.

SECTION CORNER - O.D.O.T. S-67-936
 FOUND AND ACCEPTED RAILROAD SPIKE AS SHOWN ON CORNER RECORD FILED BY FRANK MAGNER, PLS 1564.



SCALE:
1" = 500'

NOTE: REFERENCES SHOWN ARE NOT TO SCALE.

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
SURVEY DIVISION					
SURVEY DATA SHEET					
PLS	SS				
DRAWN	SK				
CHECKED	SS				
APPROVED	SS				
CREW	JH,JA,LB,RT BS,PT,BB	SWO 4879 (1)	PROJECT NO. 21006(11)	SHEET NO.	

SECTION CORNER - O.D.O.T. S-67-926
 SET #4 REBAR WITH CAP STAMPED CA 6975. THIS MONUMENT WAS RE-ESTABLISHED USING PROPORTIONATE MEASUREMENT. THERE WAS NO CORNER RECORD ON FILE.

SECTION CORNER - O.D.O.T. S-67-925
 FOUND AND ACCEPTED #6 REBAR. THIS MONUMENTS MATCHES THE LOCATION SHOWN ON CORNER RECORD FILED BY JOHNNY LEE PACK, PLS 1252.

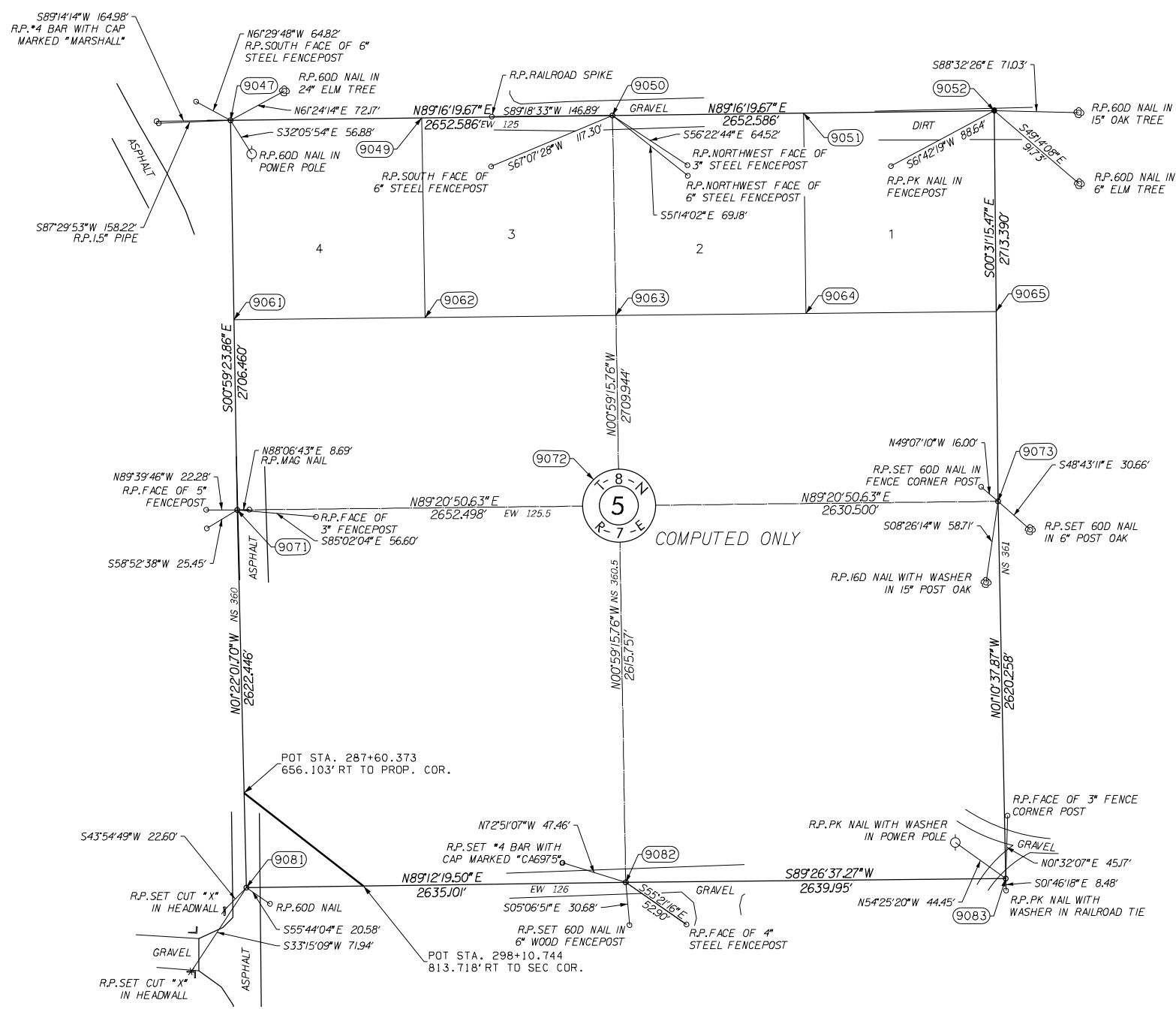
SECTION CORNER - O.D.O.T. S-67-927
 FOUND AND ACCEPTED #3 REBAR AS SHOWN ON CORNER RECORD FILED BY JOHNNY LEE PACK, PLS 1252.

SECTION CORNER - O.D.O.T. S-67-930
 FOUND AND ACCEPTED #4 REBAR AS SHOWN ON CORNER RECORD FILED BY FRANK MAGNER, PLS 1564. ALSO FOUND MAG NAIL 0.3' NORTH AND 8.7' EAST OF CORNER.

SECTION CORNER - O.D.O.T. S-67-931
 FOUND AND ACCEPTED #3 REBAR AS SHOWN ON CORNER RECORD FILED BY JOHNNY LEE PACK, PLS 1252.

SECTION CORNER - O.D.O.T. S-67-936
 FOUND AND ACCEPTED RAILROAD SPIKE AS SHOWN ON CORNER RECORD FILED BY FRANK MAGNER, PLS 1564.

SECTION CORNER - O.D.O.T. S-67-938
 FOUND AND ACCEPTED 16P NAIL INSIDE 2-1/2" IRON PIPE AS SHOWN ON CORNER RECORD FILED BY JOHNNY LEE PACK, PLS 1252.



SECTION CORNER - O.D.O.T. S-67-937
 FOUND AND ACCEPTED #3 REBAR. THIS MONUMENT FITS WELL WITH EXISTING OCCUPATION EVIDENCE. THERE WAS NO CORNER RECORD ON FILE.



NOTE: REFERENCES SHOWN ARE NOT TO SCALE.

OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION	
SURVEY DATA SHEET	
PLS	SS
DRAWN	SK
CHECKED	SS
APPROVED	SS
CREW	JH,JA,LB,RT BS,PT,BB

SWO 4879 (1) PROJECT NO. 21006(11) SHEET NO. _____

SECTION CORNER - O.D.O.T. S-67-937
 FOUND AND ACCEPTED #3 REBAR. THIS MONUMENT FITS WELL WITH EXISTING OCCUPATION EVIDENCE. THERE WAS NO CORNER RECORD ON FILE.

SECTION CORNER - O.D.O.T. S-67-936
 FOUND AND ACCEPTED RAILROAD SPIKE AS SHOWN ON CORNER RECORD FILED BY FRANK MAGNER, PLS 1564.

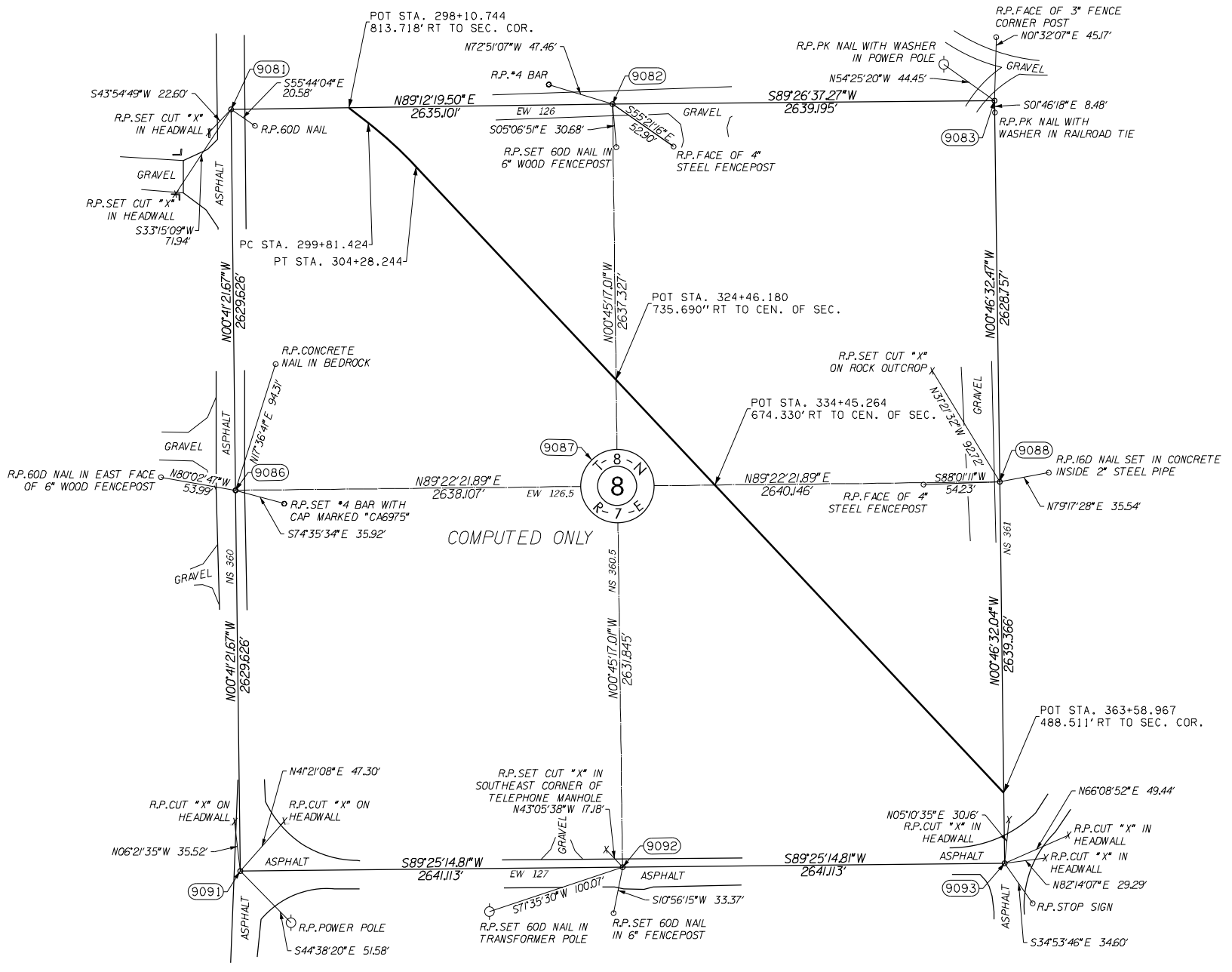
SECTION CORNER - O.D.O.T. S-67-938
 FOUND AND ACCEPTED 16P NAIL INSIDE 2-1/2" IRON PIPE AS SHOWN ON CORNER RECORD FILED BY JOHNNY LEE PACK, PLS 1252.

SECTION CORNER - O.D.O.T. S-67-941
 SET MAG NAIL WITH WASHER STAMPED CA 6975. THIS MONUMENT WAS RE-ESTABLISHED USING PROPORTIONATE MEASUREMENT. THERE WAS NO CORNER RECORD ON FILE.

SECTION CORNER - O.D.O.T. S-67-942
 SET #4 REBAR WITH CAP STAMPED CA 6975. THIS MONUMENT WAS RE-ESTABLISHED USING SECTION INFORMATION PROVIDED BY MARSHALL SURVEYING AT THE LOCATION SHOWN ON CORNER RECORD FILED BY DAVID F. HEAVNER, PLS 964.

SECTION CORNER - O.D.O.T. S-67-944
 FOUND AND ACCEPTED BLM BRASS MONUMENT AS SHOWN ON THE 2005 DEPENDENT RESURVEY. THIS MONUMENT WAS SET AT THE POINT SHOWN ON CORNER RECORD FILED BY TERRY M. MARSHALL, PLS 1322.

SECTION CORNER - O.D.O.T. S-67-946
 FOUND AND ACCEPTED #3 REBAR AS SHOWN ON CORNER RECORD FILED BY RODGER WHITED, PLS 1298 AND BY KELLY K. SCHMIDT, PLS 1507.



SECTION CORNER - O.D.O.T. S-67-945
 SET MAG NAIL WITH WASHER STAMPED CA 6975. THIS MONUMENT WAS RE-ESTABLISHED USING PROPORTIONAL MEASUREMENT AND FITS EXISTING OCCUPATION EVIDENCE. THERE WAS NO CORNER RECORD ON FILE.



SCALE:
 1" = 500'

NOTE: REFERENCES SHOWN ARE NOT TO SCALE.

PLS		SS		OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION	
DRAWN	SK			SURVEY DATA SHEET	
CHECKED	SS				
APPROVED	SS				
CREW	JH,JA,LB,RT BS,PT,BB				
SDS		39 OF 47		SWO 4879 (1) PROJECT NO. 21006(11) SHEET NO. _____	

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

SECTION CORNER - O.D.O.T. S-67-939
 FOUND AND ACCEPTED #3 REBAR AS SHOWN ON
 CORNER RECORD FILED BY JOHNNY LEE PACK, PLS 1252.

SECTION CORNER - O.D.O.T. S-67-938
 FOUND AND ACCEPTED 16P NAIL INSIDE 2-1/2" IRON
 PIPE AS SHOWN ON CORNER RECORD FILED BY JOHNNY
 LEE PACK, PLS 1252.

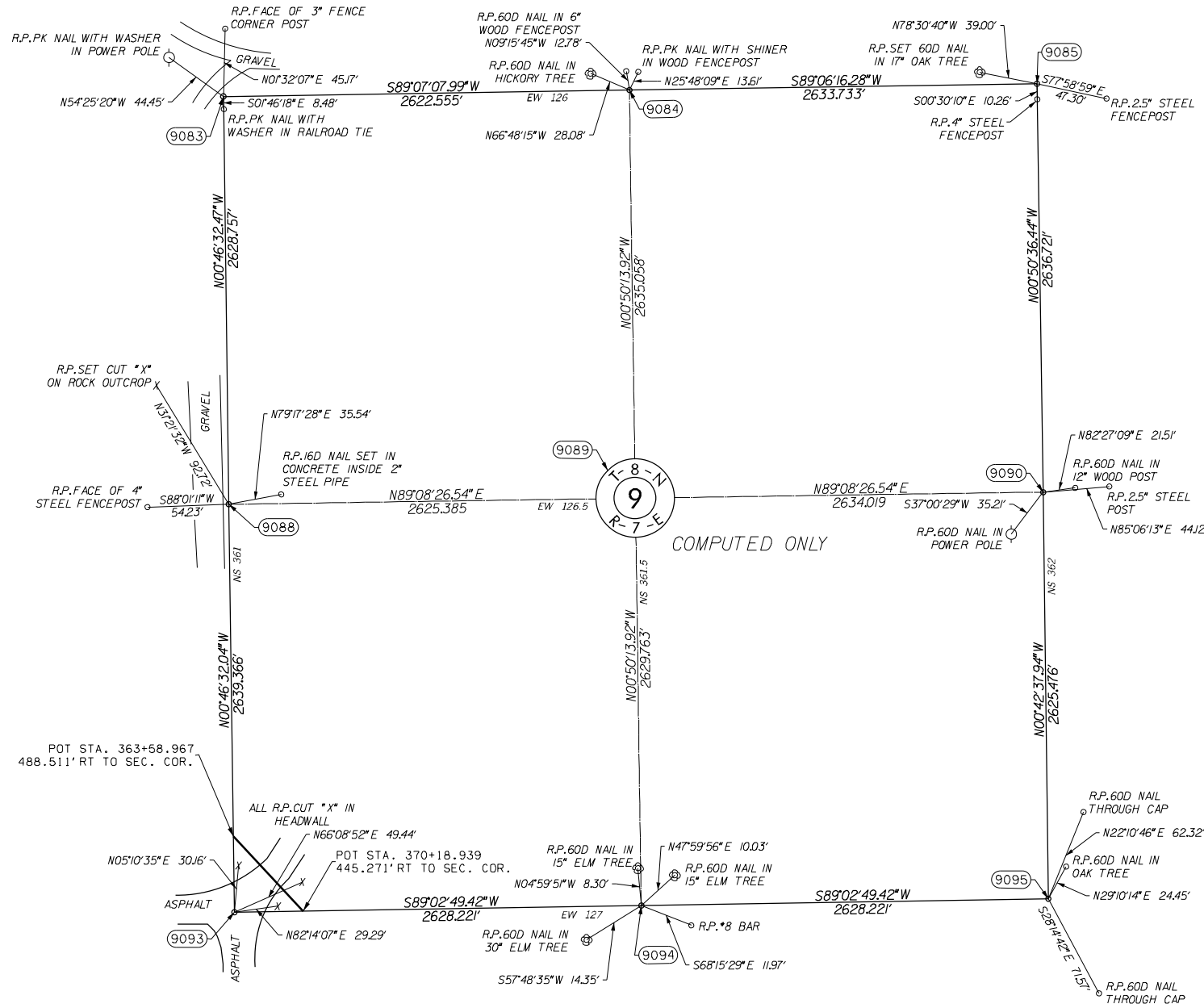
SECTION CORNER - O.D.O.T. S-67-940
 FOUND AND ACCEPTED #3 REBAR AS SHOWN ON
 CORNER RECORD FILED BY JOHNNY LEE PACK, PLS 1252.

SECTION CORNER - O.D.O.T. S-67-942
 SET #4 REBAR WITH CAP STAMPED CA 6975. THIS
 MONUMENT WAS RE-ESTABLISHED USING SECTION
 INFORMATION PROVIDED BY MARSHALL SURVEYING AT
 THE LOCATION SHOWN ON CORNER RECORD FILED BY
 DAVID F. HEAVNER, PLS 964.

SECTION CORNER - O.D.O.T. S-67-943
 FOUND AND ACCEPTED RAILROAD SPIKE AS SHOWN ON
 CORNER RECORD FILED BY DAVID F. HEAVNER, PLS 964.

SECTION CORNER - O.D.O.T. S-67-946
 FOUND AND ACCEPTED #3 REBAR AS SHOWN ON
 CORNER RECORD FILED BY RODGER WHITED, PLS 1298
 AND BY KELLY K. SCHMIDT, PLS 1507.

SECTION CORNER - O.D.O.T. S-67-948
 FOUND AND ACCEPTED BULL PRICK AS SHOWN ON
 CORNER RECORD FILED BY KELLY K. SCHMIDT, PLS 1507.



SECTION CORNER - O.D.O.T. S-67-947
 SET #4 REBAR WITH CAP STAMPED CA 6975. THIS
 MONUMENT WAS RE-ESTABLISHED USING PROPORTIONAL
 MEASUREMENT. THERE WAS NO CORNER RECORD ON
 FILE.



SCALE:
 1" = 500'

NOTE: REFERENCES SHOWN ARE NOT TO SCALE.

OKLAHOMA DEPARTMENT OF TRANSPORTATION			
SURVEY DIVISION			
SURVEY DATA SHEET			
PLS	SS		
DRAWN	SK		
CHECKED	SS		
APPROVED	SS		
CREW	JH,JA,LB,RT BS,PT,BB	SWO 4879 (1)	PROJECT NO. 21006(11) SHEET NO. _____

SECTION CORNER - O.D.O.T. S-67-945
 SET MAG NAIL WITH WASHER STAMPED CA 6975. THIS MONUMENT WAS RE-ESTABLISHED USING PROPORTIONAL MEASUREMENT AND FITS EXISTING OCCUPATION EVIDENCE. THERE WAS NO CORNER RECORD ON FILE.

SECTION CORNER - O.D.O.T. S-67-944
 FOUND AND ACCEPTED BLM BRASS MONUMENT AS SHOWN ON THE 2005 DEPENDENT RESURVEY. THIS MONUMENT WAS SET AT THE POINT SHOWN ON CORNER RECORD FILED BY TERRY M. MARSHALL, PLS 1322.

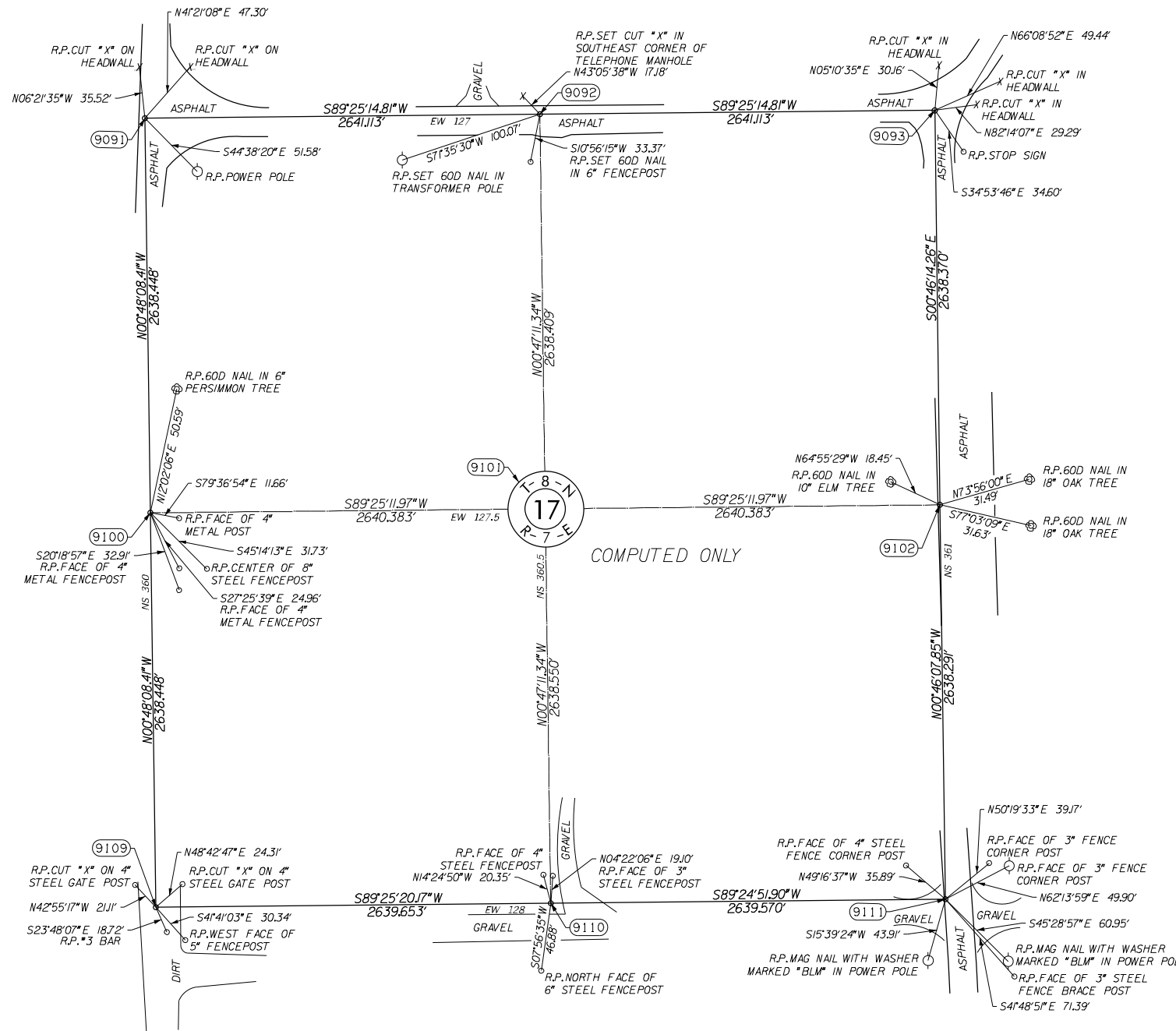
SECTION CORNER - O.D.O.T. S-67-946
 FOUND AND ACCEPTED #3 REBAR AS SHOWN ON CORNER RECORD FILED BY RODGER WHITED, PLS 1298 AND BY KELLY K. SCHMIDT, PLS 1507.

SECTION CORNER - O.D.O.T. S-67-953
 SET #4 REBAR WITH CAP STAMPED CA 6975. THIS MONUMENT WAS RE-ESTABLISHED USING PROPORTIONAL MEASUREMENT. THERE WAS NO CORNER RECORD ON FILE.

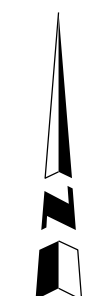
SECTION CORNER - O.D.O.T. S-67-954
 FOUND AND ACCEPTED RAILROAD SPIKE AS SHOWN ON CORNER RECORD FILED BY JESSE L. CARROLL, PLS 1071.

SECTION CORNER - O.D.O.T. S-67-958
 FOUND AND ACCEPTED BLM BRASS MONUMENT AS SHOWN ON THE 2005 DEPENDENT RESURVEY. ALSO FOUND #3 REBAR 17.1' SOUTH AND 7.6' EAST OF CORNER AS SHOWN ON CORNER RECORD FILED BY JOHNNY LEE PACK, PLS 1252.

SECTION CORNER - O.D.O.T. S-67-960
 FOUND AND ACCEPTED BLM BRASS MONUMENT AS SHOWN ON THE 2005 DEPENDENT RESURVEY. THIS MONUMENT WAS SET AT THE LOCATION SHOWN ON CORNER RECORD FILED BY JOHNNY LEE PACK, PLS 1252 AND BY RODGER WHITED, PLS 1298.



SECTION CORNER - O.D.O.T. S-67-959
 FOUND AND ACCEPTED BLM BRASS MONUMENT AS SHOWN ON THE 2005 DEPENDENT RESURVEY. THERE WAS NO CORNER RECORD ON FILE.



SCALE:
 1" = 500'

NOTE: REFERENCES SHOWN ARE NOT TO SCALE.

PLS		SS		OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION	
DRAWN	SK	SURVEY DATA SHEET			
CHECKED	SS				
APPROVED	SS				
CREW	JH,JA,LB,RT BS,PT,BB				
SWO 4879 (1)		PROJECT NO. 21006(11)		SHEET NO. _____	

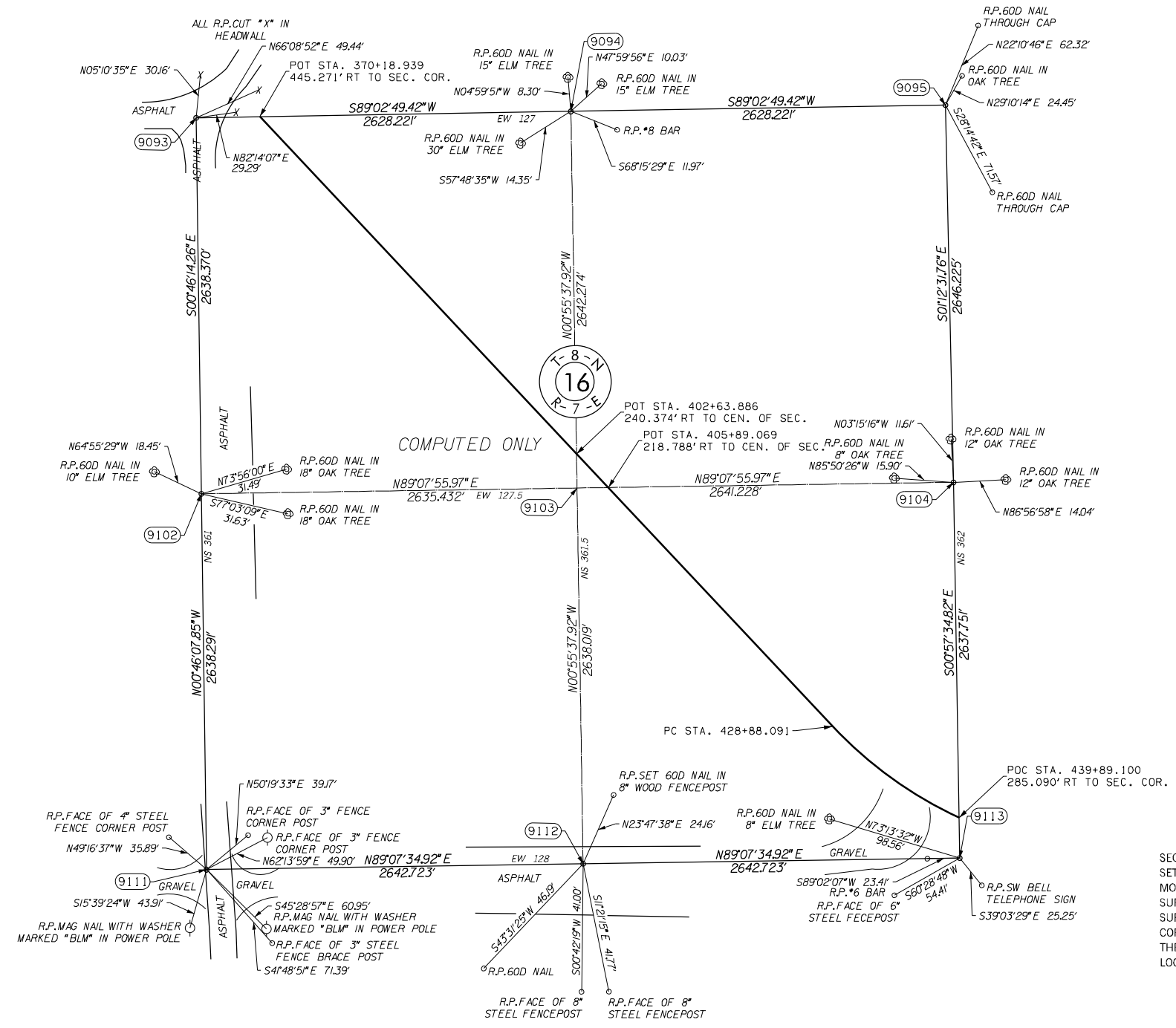
SECTION CORNER - O.D.O.T. S-67-947
 SET #4 REBAR WITH CAP STAMPED CA 6975. THIS MONUMENT WAS RE-ESTABLISHED USING PROPORTIONAL MEASUREMENT. THERE WAS NO CORNER RECORD ON FILE.

SECTION CORNER - O.D.O.T. S-67-946
 FOUND AND ACCEPTED #3 REBAR AS SHOWN ON CORNER RECORD FILED BY RODGER WHITED, PLS 1298 AND BY KELLY K. SCHMIDT, PLS 1507.

SECTION CORNER - O.D.O.T. S-67-948
 FOUND AND ACCEPTED BULL PRICK AS SHOWN ON CORNER RECORD FILED BY KELLY K. SCHMIDT, PLS 1507.

SECTION CORNER - O.D.O.T. S-67-954
 FOUND AND ACCEPTED RAILROAD SPIKE AS SHOWN ON CORNER RECORD FILED BY JESSE L. CARROLL, PLS 1071.

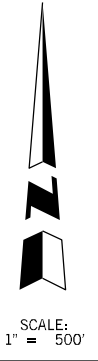
SECTION CORNER - O.D.O.T. S-67-955
 FOUND AND ACCEPTED ORIGINAL STONE. THERE WAS NO CORNER RECORD ON FILE.



SECTION CORNER - O.D.O.T. S-67-960
 FOUND AND ACCEPTED BLM BRASS MONUMENT AS SHOWN ON THE 2005 DEPENDENT RESURVEY. THIS MONUMENT WAS SET AT THE LOCATION SHOWN ON CORNER RECORD FILED BY JOHNNY LEE PACK, PLS 1252 AND BY RODGER WHITED, PLS 1298.

SECTION CORNER - O.D.O.T. S-67-962
 SET #4 REBAR WITH CAP STAMPED CA 6975. THIS MONUMENT WAS RE-ESTABLISHED FROM SWO 1739(1) SURVEY. AFTER DISCUSSION WITH BEARING TREE LAND SURVEYING, IT WAS DETERMINED THAT THE DISTANCE TO CORNER FROM HIGHWAY P1 WAS MISREAD. THEREFORE THE PREVIOUS CORNER WAS PULLED AND NEW LOCATION ACCEPTED.

SECTION CORNER - O.D.O.T. S-67-961
 SET #4 REBAR WITH CAP STAMPED CA 6975. THIS MONUMENT WAS SET USING SURROUNDING MONUMENTS AND CHECKS WITH GLO DISTANCES AND EXISTING OCCUPATION LINES.



NOTE: REFERENCES SHOWN ARE NOT TO SCALE.

PLS		SS		OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION	
DRAWN	SK			SURVEY DATA SHEET	
CHECKED	SS				
APPROVED	SS				
CREW	JH,JA,LB,RT BS,PT,BB				
				SWO 4879 (1) PROJECT NO. 21006(11) SHEET NO. _____	

SECTION CORNER - O.D.O.T. S-67-948
 FOUND AND ACCEPTED BULL PRICK AS SHOWN ON
 CORNER RECORD FILED BY KELLY K. SCHMIDT, PLS 1507.

SECTION CORNER - O.D.O.T. S-67-955
 FOUND AND ACCEPTED ORIGINAL STONE. THERE WAS NO
 CORNER RECORD ON FILE.

SECTION CORNER - O.D.O.T. S-67-962
 SET #4 REBAR WITH CAP STAMPED CA 6975. THIS
 MONUMENT WAS RE-ESTABLISHED FROM SWO 1739(1)
 SURVEY. AFTER DISCUSSION WITH BEARING TREE LAND
 SURVEYING, IT WAS DETERMINED THAT THE DISTANCE TO
 CORNER FROM HIGHWAY PI WAS MISREAD. THEREFORE
 THE PREVIOUS CORNER WAS PULLED AND NEW
 LOCATION ACCEPTED.

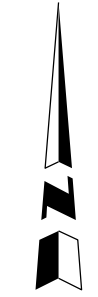
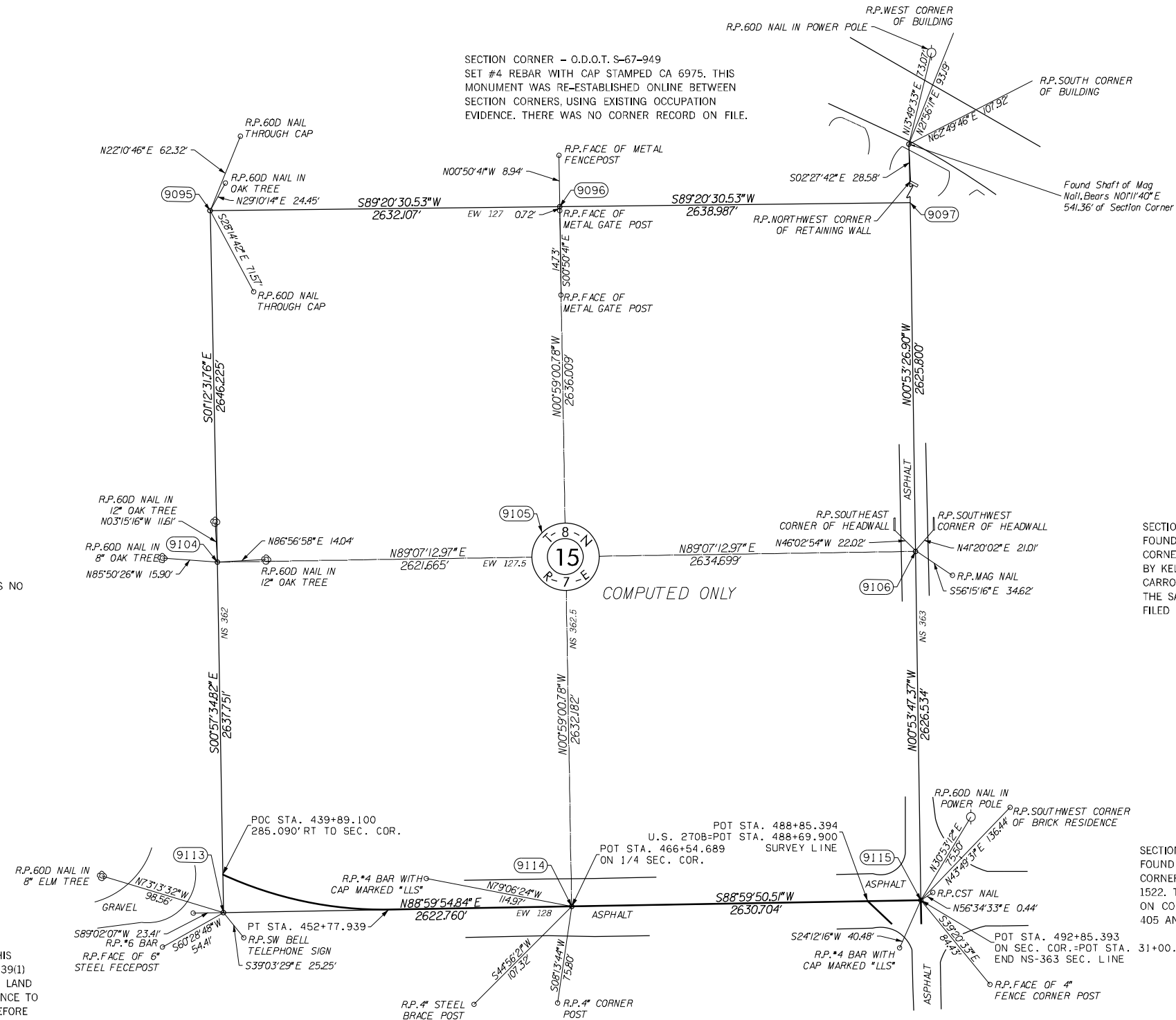
SECTION CORNER - O.D.O.T. S-67-949
 SET #4 REBAR WITH CAP STAMPED CA 6975. THIS
 MONUMENT WAS RE-ESTABLISHED ONLINE BETWEEN
 SECTION CORNERS, USING EXISTING OCCUPATION
 EVIDENCE. THERE WAS NO CORNER RECORD ON FILE.

SECTION CORNER - O.D.O.T. S-67-950
 FOUND AND ACCEPTED BROKE OFF MAG NAIL FOR
 WITNESS CORNER AS SHOWN ON CORNER RECORD
 FILED BY KELLY K. SCHMIDT, PLS 1507. WITNESS
 MONUMENTS SET BY FRED R. SMITH, JR., PLS 917 AND
 BY VIRGIL C. VAUGHN, PLS 405 WERE NOT FOUND.

SECTION CORNER - O.D.O.T. S-67-956
 FOUND AND ACCEPTED MAG NAIL AS SHOWN ON
 CORNER RECORD FILED BY VIRGIL C. VAUGHN, PLS 405,
 BY KELLY K. SCHMIDT, PLS 1507 AND BY JACOB ROYCE
 CARROLL, PLS 1522. THIS MONUMENT APPEARS TO BE AT
 THE SAME LOCATION AS SHOWN ON CORNER RECORD
 FILED BY FRED R. SMITH, JR., PLS 917.

SECTION CORNER - O.D.O.T. S-67-964
 FOUND AND ACCEPTED MAG NAIL AS SHOWN ON
 CORNER RECORD FILED BY JACOB ROYCE CARROLL, PLS
 1522. THIS MONUMENT MATCHES THE LOCATION SHOWN
 ON CORNER RECORD FILED BY VIRGIL C. VAUGHN, PLS
 405 AND BY KELLY K. SCHMIDT, PLS 1507.

SECTION CORNER - O.D.O.T. S-67-963
 FOUND AND ACCEPTED MAG NAIL. THIS MONUMENT
 APPEARS TO BE IN THE SAME LOCATION AS SHOWN ON
 CORNER RECORD FILED BY JACOB ROYCE CARROLL, PLS
 1522.

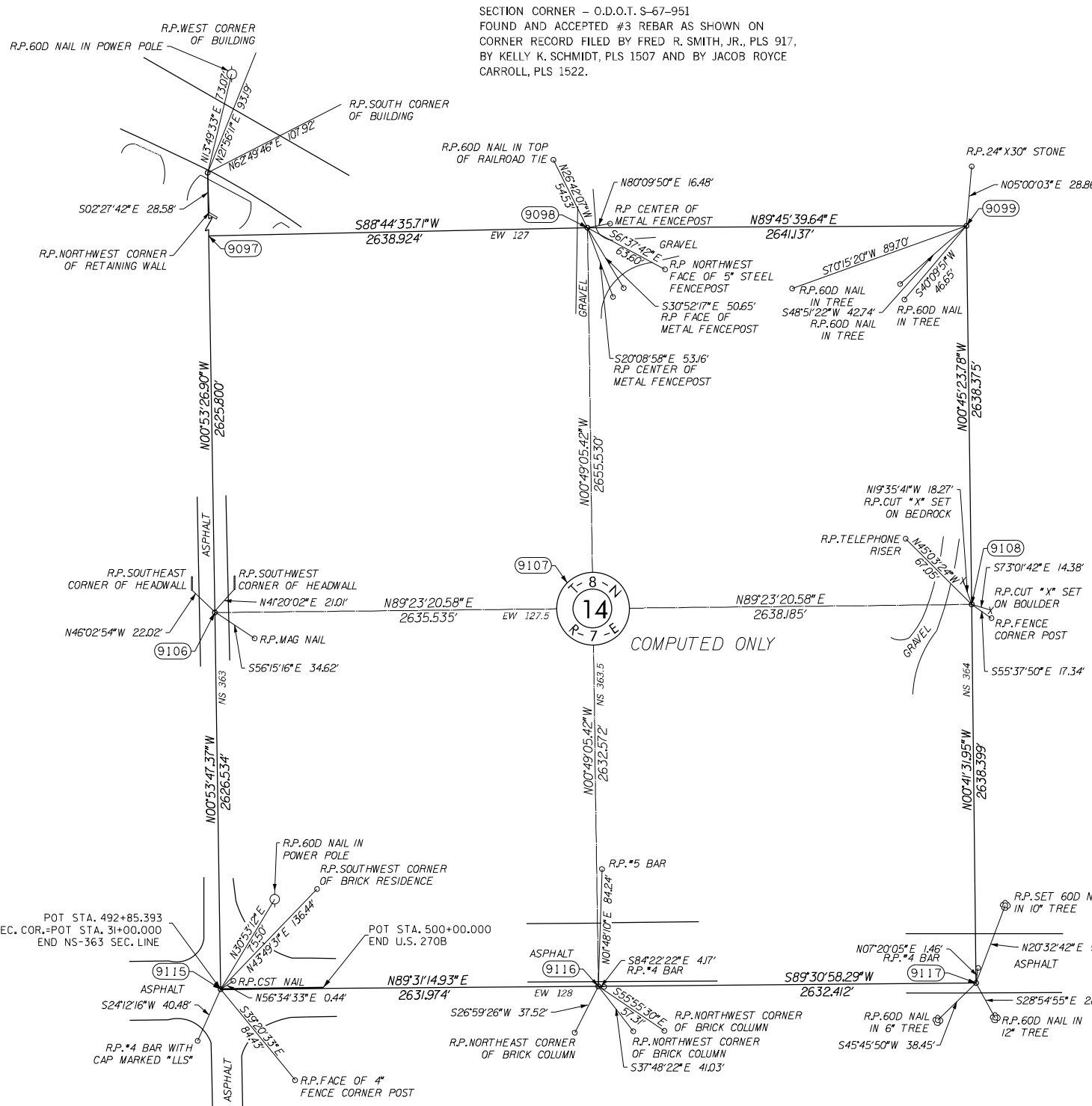


SCALE:
 1" = 500'

NOTE: REFERENCES SHOWN ARE NOT TO SCALE.

PLS		SS		OKLAHOMA DEPARTMENT OF TRANSPORTATION	
DRAWN		SK		SURVEY DIVISION	
CHECKED	SS			SURVEY DATA SHEET	
APPROVED	SS				
CREW	JH, JA, LB, RT, BS, PT, BB				
				SWO 4879(1) PROJECT NO. 21006(11) SHEET NO. _____	

SECTION CORNER - O.D.O.T. S-67-950
 FOUND AND ACCEPTED BROKE OFF MAG NAIL FOR WITNESS CORNER AS SHOWN ON CORNER RECORD FILED BY KELLY K. SCHMIDT, PLS 1507. WITNESS MONUMENTS SET BY FRED R. SMITH, JR., PLS 917 AND BY VIRGIL C. VAUGHN, PLS 405 WERE NOT FOUND.



SECTION CORNER - O.D.O.T. S-67-952
 FOUND AND ACCEPTED #4 REBAR AS SHOWN ON CORNER RECORD FILED BY TIMOTHY G. POLLARD, PLS 1474.

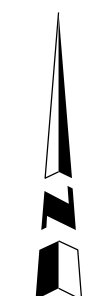
SECTION CORNER - O.D.O.T. S-67-956
 FOUND AND ACCEPTED MAG NAIL AS SHOWN ON CORNER RECORD FILED BY VIRGIL C. VAUGHN, PLS 405, BY KELLY K. SCHMIDT, PLS 1507 AND BY JACOB ROYCE CARROLL, PLS 1522. THIS MONUMENT APPEARS TO BE AT THE SAME LOCATION AS SHOWN ON CORNER RECORD FILED BY FRED R. SMITH, JR., PLS 917.

SECTION CORNER - O.D.O.T. S-67-957
 FOUND AND ACCEPTED 2\"/>

SECTION CORNER - O.D.O.T. S-67-964
 FOUND AND ACCEPTED MAG NAIL AS SHOWN ON CORNER RECORD FILED BY JACOB ROYCE CARROLL, PLS 1522. THIS MONUMENT MATCHES THE LOCATION SHOWN ON CORNER RECORD FILED BY VIRGIL C. VAUGHN, PLS 405 AND BY KELLY K. SCHMIDT, PLS 1507.

SECTION CORNER - O.D.O.T. S-67-966
 FOUND HOLE IN PAVEMENT AT THE LOCATION SHOWN ON CORNER RECORD FILED BY JACOB ROYCE CARROLL, PLS 1522. SET MAG NAIL WITH WASHER STAMPED CA 6975 IN HOLE. THE MONUMENT SHOWN ON CORNER RECORD FILED BY FRED R. SMITH, JR., PLS 917 WAS NOT FOUND.

SECTION CORNER - O.D.O.T. S-67-965
 FOUND AND ACCEPTED #4 REBAR AS SHOWN ON CORNER RECORD FILED BY JACOB ROYCE CARROLL, PLS 1522. ALSO FOUND #4 REBAR 0.4' SOUTH AND 4.2' EAST OF CORNER. ALSO FOUND #4 REBAR 0.4' SOUTH AND 4.2' EAST OF CORNER.



SCALE:
 1" = 500'

NOTE: REFERENCES SHOWN ARE NOT TO SCALE.

OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION			
SURVEY DATA SHEET			
PLS	SS		
DRAWN	SK		
CHECKED	SS		
APPROVED	SS		
CREW	JH,JA,LB,RT BS,PT,BB	SWO 4879 (1)	PROJECT NO. 21006(11) SHEET NO. _____

SECTION CORNER - O.D.O.T. S-67-961
 SET #4 REBAR WITH CAP STAMPED CA 6975. THIS MONUMENT WAS SET USING SURROUNDING MONUMENTS AND CHECKS WITH GLO DISTANCES AND EXISTING OCCUPATION LINES.

SECTION CORNER - O.D.O.T. S-67-960
 FOUND AND ACCEPTED BLM BRASS MONUMENT AS SHOWN ON THE 2005 DEPENDENT RESURVEY. THIS MONUMENT WAS SET AT THE LOCATION SHOWN ON CORNER RECORD FILED BY JOHNNY LEE PACK, PLS 1252 AND BY RODGER WHITED, PLS 1298.

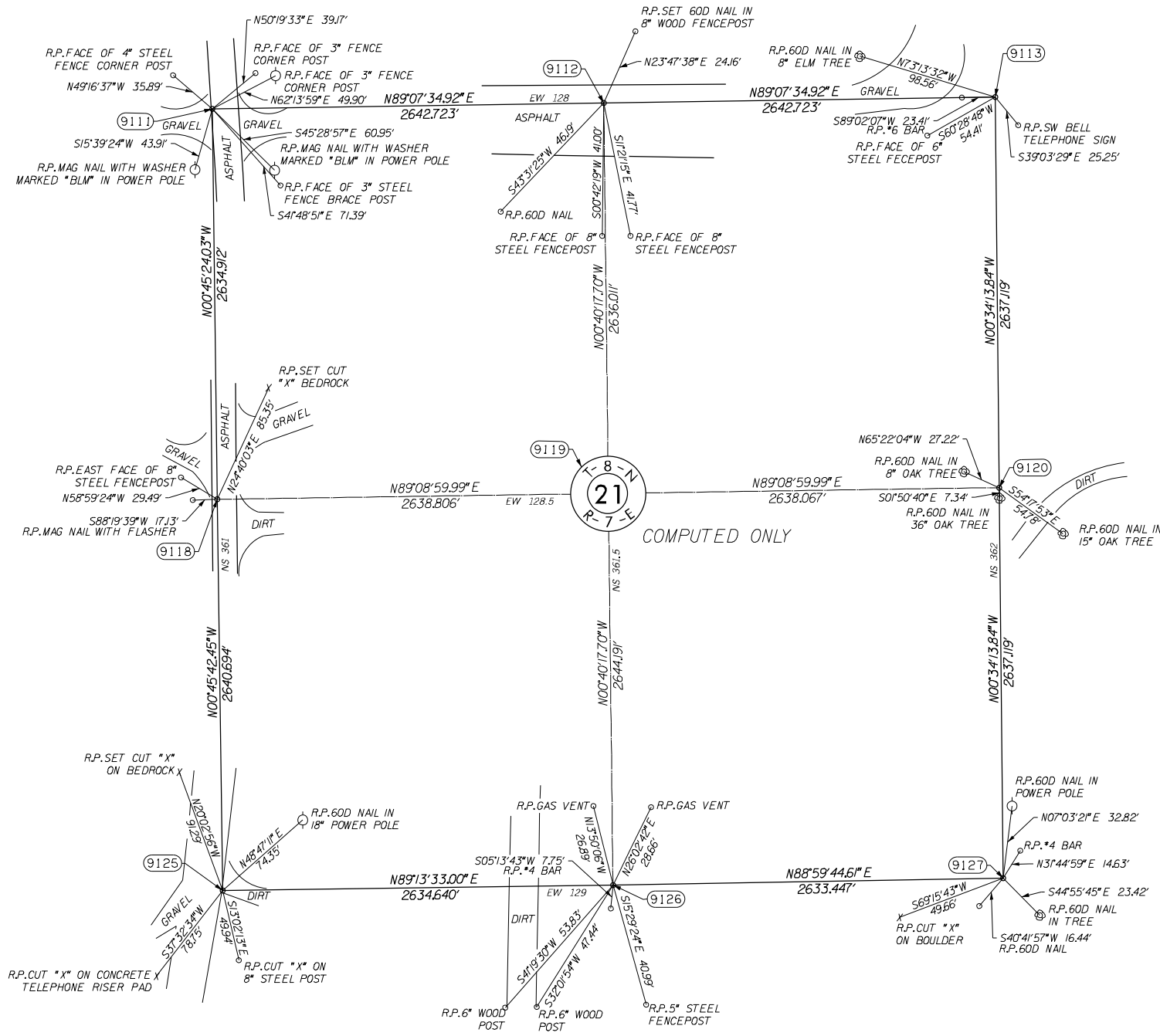
SECTION CORNER - O.D.O.T. S-67-962
 SET #4 REBAR WITH CAP STAMPED CA 6975. THIS MONUMENT WAS RE-ESTABLISHED FROM SWO 1739(1) SURVEY. AFTER DISCUSSION WITH BEARING TREE LAND SURVEYING, IT WAS DETERMINED THAT THE DISTANCE TO CORNER FROM HIGHWAY PI WAS MISREAD. THEREFORE THE PREVIOUS CORNER WAS PULLED AND NEW LOCATION ACCEPTED.

SECTION CORNER - O.D.O.T. S-67-967
 FOUND AND ACCEPTED BLM BRASS MONUMENT AS SHOWN ON THE 2005 DEPENDENT RESURVEY. THERE WAS NO CORNER RECORD ON FILE.

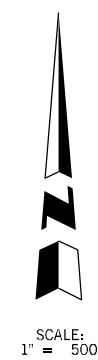
SECTION CORNER - O.D.O.T. S-67-968
 SET #4 REBAR WITH CAP STAMPED CA 6975. THIS MONUMENT WAS RE-ESTABLISHED USING PROPORTIONATE MEASUREMENT. THERE WAS NO CORNER RECORD ON FILE.

SECTION CORNER - O.D.O.T. S-67-971
 FOUND AND ACCEPTED BLM BRASS CAP AS SHOWN ON THE 2005 DEPENDENT RESURVEY. THIS MONUMENT MATCHES THE LOCATION SHOWN ON CORNER RECORD FILED BY JACOB ROYCE CARROLL, PLS 1522 AND BY JOHNNY LEE PACK, PLS 1252.

SECTION CORNER - O.D.O.T. S-67-973
 FOUND AND ACCEPTED #4 REBAR AS SHOWN ON CORNER RECORD FILED BY JOHNNY LEE PACK, PLS 1252 AND BY JACOB ROYCE CARROLL, PLS 1522. ALSO FOUND #4 REBAR 12.4' NORTH AND 7.7' EAST OF CORNER.



SECTION CORNER - O.D.O.T. S-67-972
 FOUND AND ACCEPTED #4 REBAR AS SHOWN ON CORNER RECORD FILED BY JOHNNY LEE PACK, PLS 1252 AND BY JACOB ROYCE CARROLL, PLS 1522. ALSO FOUND #4 REBAR 7.7' SOUTH AND 0.8' WEST OF CORNER.



NOTE: REFERENCES SHOWN ARE NOT TO SCALE.

PLS		SS		OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION	
DRAWN	SK			SURVEY DATA SHEET	
CHECKED	SS				
APPROVED	SS				
CREW	JH,JA,LB,RT BS,PT,BB				
				SWO 4879 (1) PROJECT NO. 21006(11) SHEET NO. _____	

SECTION CORNER - O.D.O.T. S-67-963
 FOUND AND ACCEPTED MAG NAIL, THIS MONUMENT APPEARS TO BE IN THE SAME LOCATION AS SHOWN ON CORNER RECORD FILED BY JACOB ROYCE CARROLL, PLS 1522.

SECTION CORNER - O.D.O.T. S-67-962
 SET #4 REBAR WITH CAP STAMPED CA 6975. THIS MONUMENT WAS RE-ESTABLISHED FROM SWO 1739(1) SURVEY. AFTER DISCUSSION WITH BEARING TREE LAND SURVEYING, IT WAS DETERMINED THAT THE DISTANCE TO CORNER FROM HIGHWAY PI WAS MISREAD. THEREFORE THE PREVIOUS CORNER WAS PULLED AND NEW LOCATION ACCEPTED.

SECTION CORNER - O.D.O.T. S-67-964
 FOUND AND ACCEPTED MAG NAIL AS SHOWN ON CORNER RECORD FILED BY JACOB ROYCE CARROLL, PLS 1522. THIS MONUMENT MATCHES THE LOCATION SHOWN ON CORNER RECORD FILED BY VIRGIL C. VAUGHN, PLS 405 AND BY KELLY K. SCHMIDT, PLS 1507.

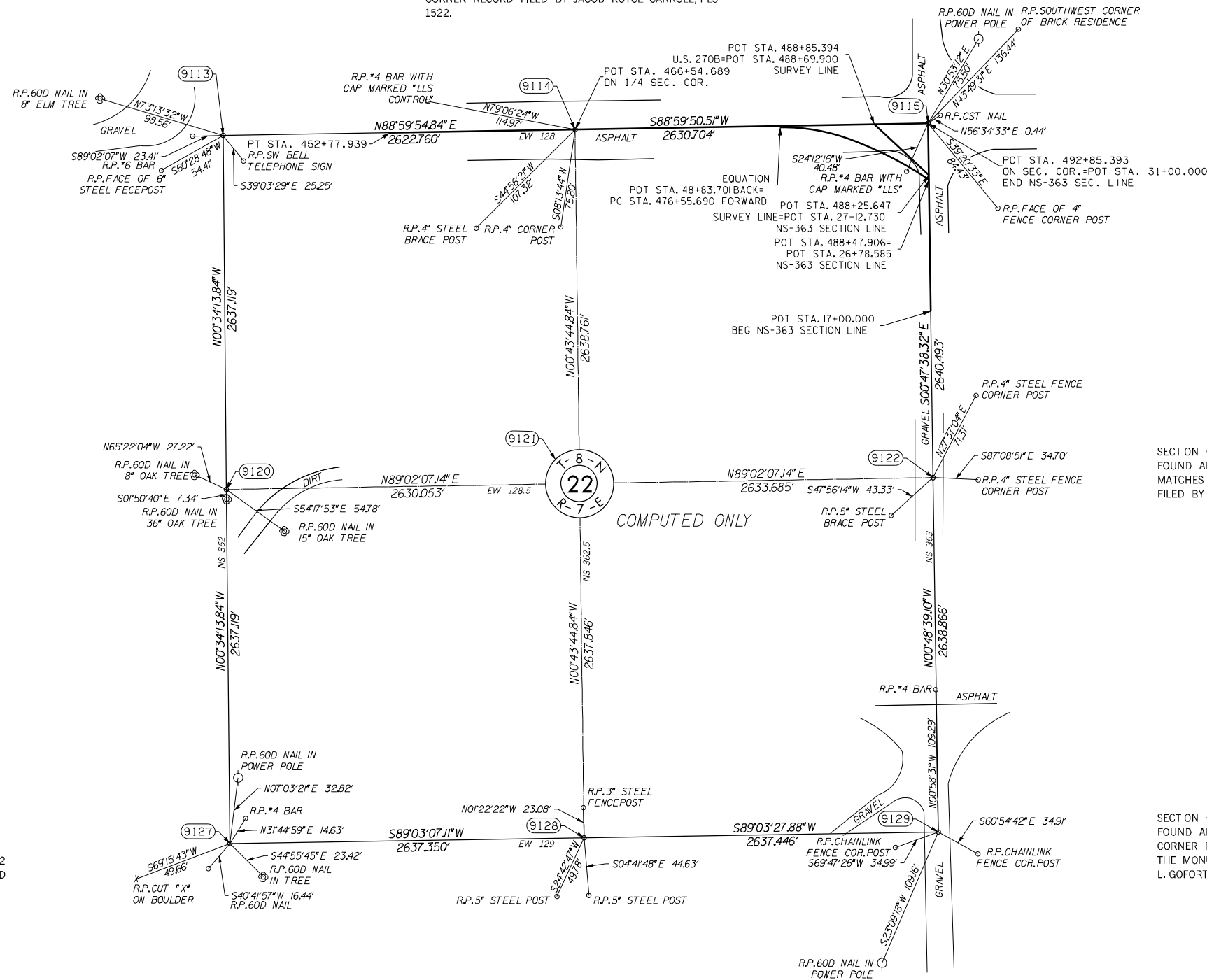
SECTION CORNER - O.D.O.T. S-67-968
 SET #4 REBAR WITH CAP STAMPED CA 6975. THIS MONUMENT WAS RE-ESTABLISHED USING PROPORTIONATE MEASUREMENT. THERE WAS NO CORNER RECORD ON FILE.

SECTION CORNER - O.D.O.T. S-67-969
 FOUND AND ACCEPTED #4 REBAR. THIS MONUMENT MATCHES THE LOCATION SHOWN ON CORNER RECORD FILED BY JACOB ROYCE CARROLL, PLS 1522.

SECTION CORNER - O.D.O.T. S-67-973
 FOUND AND ACCEPTED #4 REBAR AS SHOWN ON CORNER RECORD FILED BY JOHNNY LEE PACK, PLS 1252 AND BY JACOB ROYCE CARROLL, PLS 1522. ALSO FOUND #4 REBAR 12.4' NORTH AND 7.7' EAST OF CORNER.

SECTION CORNER - O.D.O.T. S-67-975
 FOUND AND ACCEPTED #4 REBAR AS SHOWN ON CORNER RECORD FILED BY DAVID F. HEAVNER, PLS 964. THE MONUMENT ON CORNER RECORD FILED BY BOBBY L. GOFORTH, PLS 340 WAS NOT FOUND.

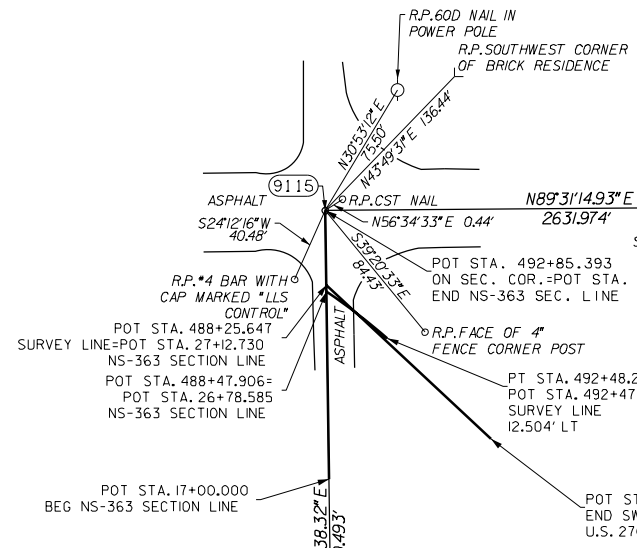
SECTION CORNER - O.D.O.T. S-67-974
 FOUND AND ACCEPTED #4 REBAR AS SHOWN ON CORNER RECORD FILED BY JACOB ROYCE CARROLL, PLS 1522.



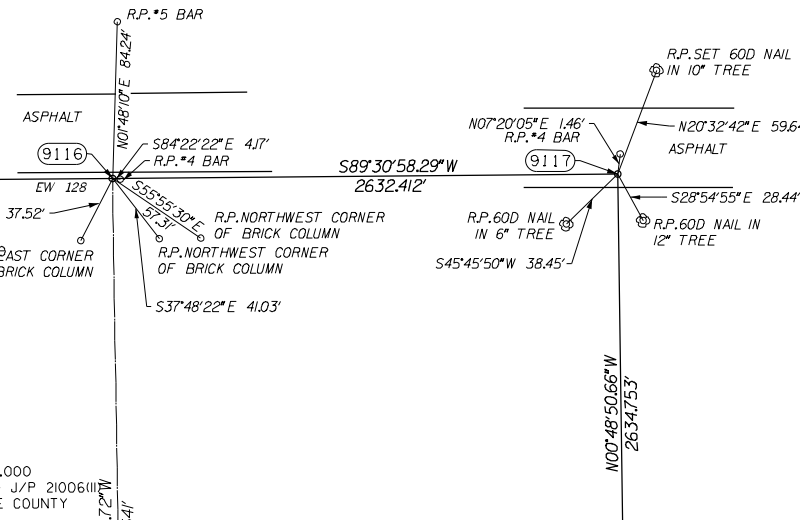
NOTE: REFERENCES SHOWN ARE NOT TO SCALE.

PLS		SS		OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION	
DRAWN	SK			SURVEY DATA SHEET	
CHECKED	SS				
APPROVED	SS				
CREW	JH,JA,LB,RT BS,PT,BB				
				SWO 4879 (1) PROJECT NO. 21006(11) SHEET NO. _____	

SECTION CORNER - O.D.O.T. S-67-964
 FOUND AND ACCEPTED MAG NAIL AS SHOWN ON
 CORNER RECORD FILED BY JACOB ROYCE CARROLL, PLS
 1522. THIS MONUMENT MATCHES THE LOCATION SHOWN
 ON CORNER RECORD FILED BY VIRGIL C. VAUGHN, PLS
 405 AND BY KELLY K. SCHMIDT, PLS 1507.

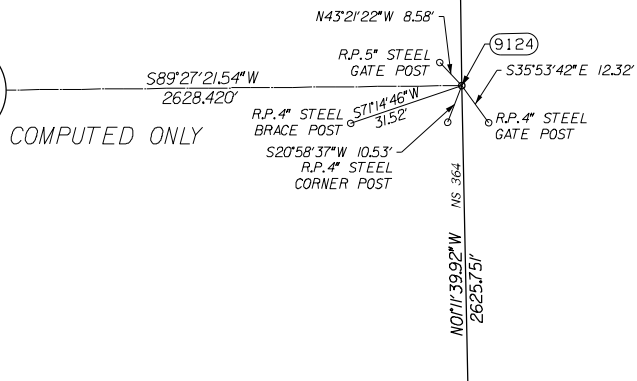
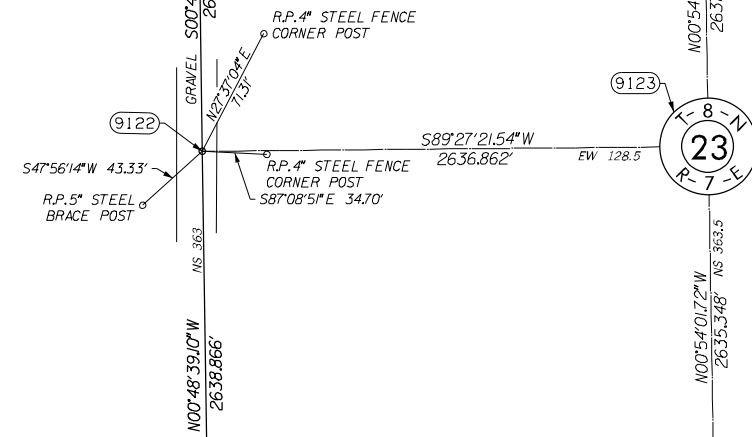


SECTION CORNER - O.D.O.T. S-67-965
 FOUND AND ACCEPTED #4 REBAR AS SHOWN ON
 CORNER RECORD FILED BY JACOB ROYCE CARROLL, PLS
 1522. ALSO FOUND #4 REBAR 0.4' SOUTH AND 4.2' EAST
 OF CORNER.



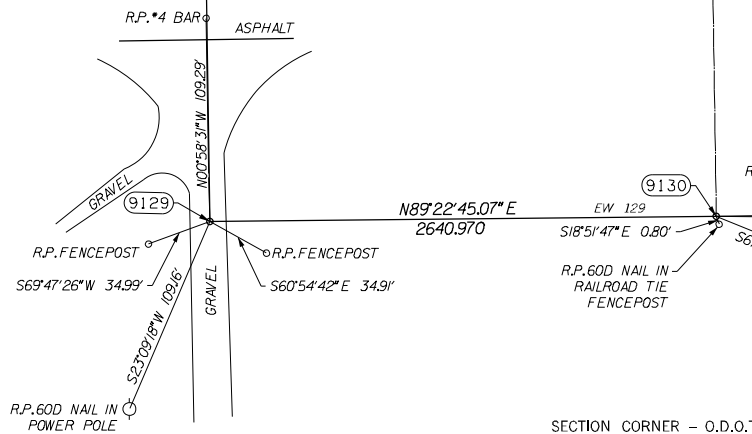
SECTION CORNER - O.D.O.T. S-67-966
 FOUND HOLE IN PAVEMENT AT THE LOCATION SHOWN
 ON CORNER RECORD FILED BY JACOB ROYCE CARROLL,
 PLS 1522. SET MAG NAIL WITH WASHER STAMPED CA
 6975 IN HOLE. THE MONUMENT SHOWN ON CORNER
 RECORD FILED BY FRED R. SMITH, JR., PLS 917 WAS NOT
 FOUND.

SECTION CORNER - O.D.O.T. S-67-969
 FOUND AND ACCEPTED #4 REBAR. THIS MONUMENT
 MATCHES THE LOCATION SHOWN ON CORNER RECORD
 FILED BY JACOB ROYCE CARROLL, PLS 1522.

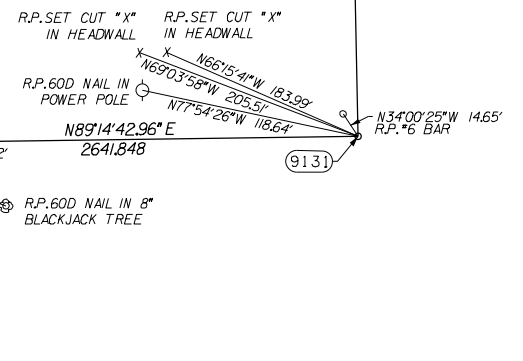


SECTION CORNER - O.D.O.T. S-67-970
 FOUND AND ACCEPTED #3 REBAR. THIS MONUMENT
 FITS EXISTING OCCUPATION EVIDENCE. THERE WAS NO
 CORNER RECORD ON FILE.

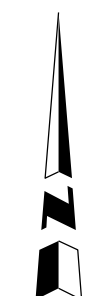
SECTION CORNER - O.D.O.T. S-67-975
 FOUND AND ACCEPTED #4 REBAR AS SHOWN ON
 CORNER RECORD FILED BY DAVID F. HEAVNER, PLS 964.
 THE MONUMENT ON CORNER RECORD FILED BY BOBBY
 L. GOFORTH, PLS 340 WAS NOT FOUND.



SECTION CORNER - O.D.O.T. S-67-976
 FOUND AND ACCEPTED #4 REBAR. THIS MONUMENT FITS
 EXISTING OCCUPATION EVIDENCE. THERE WAS NO
 CORNER RECORD ON FILE.



SECTION CORNER - O.D.O.T. S-67-977
 FOUND AND ACCEPTED #5 REBAR AS SHOWN ON
 CORNER RECORD FILED BY DAVID F. HEAVNER, PLS 964.
 ALSO FOUND #6 REBAR 12.1' NORTH AND 8.2' WEST OF
 CORNER.



SCALE:
 1" = 500'

NOTE: REFERENCES SHOWN ARE NOT TO SCALE.

PLS		SS		OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION	
DRAWN	SK			SURVEY DATA SHEET	
CHECKED	SS				
APPROVED	SS				
CREW	JH,JA,LB,RT BS,PT,BB				
				SWO 4879 (1) PROJECT NO. 21006(11) SHEET NO. _____	

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

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SWO 4879(1) J/P 21006(11) ; CO. Seminole

HORIZONTAL CONTROL:
 Oklahoma Coordinate System of 1927 Zone.
 Oklahoma Coordinate System of 1983(2011) South Zone.
 Oklahoma Dept. of Transportation Plane Coordinate System of 1927 Zone.
 Oklahoma Dept. of Transportation Plane Coordinate System of 1983 Zone.
 Arbitrary Coordinate System

HORIZONTAL PLANE DATUM DEFINITION:
 The horizontal control for this survey is the NGS Oklahoma State Plane Coordinate System, NAD83(2011), Lambert Projection (South Zone). The combined scale factor for conversion to geocentric distances is 1.00000766.

- Primary Control adjusted to NGS (2nd) Order
 Stations OKAR, OKMU, OKPR, K 149 and SEMINOLE
 A) Closure before adjustment X ; Y Angles
 Trav. Length No. Angles Accuracy 1:20,000
 B) ; Is Order before adjustment
 C) Method of Distance Measurement:
 Electronic GPS Triangulation Chained
 D) Instrument used for angles Trimble R6
- Secondary Control adjusted to Primary Control Order
 Stations S-67-978, S-67-979, S-67-980, S-67-981, S-67-982 & S-67-983
 A) Closure before adjustment X ; Y Angles
 B) ; Is Order; Tied to
 C) Method of Distance Measurement:
 Electronic GPS Triangulation Chained
 D) Instrument used for angles Trimble R6, Trimble S6

VERTICAL CONTROL IS (3rd) order. Level Line taken from NGS G-149 through one BM from FAP No. F-222(15) plans, NGS U-149 and project BMs, to NGS T-149
 NGVD 29 datum
 NAVD 83 datum

ACCURACY DEFINITION:
 (1) HORIZONTAL: (2nd Order = Class II = 1 : 20,000')
 (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

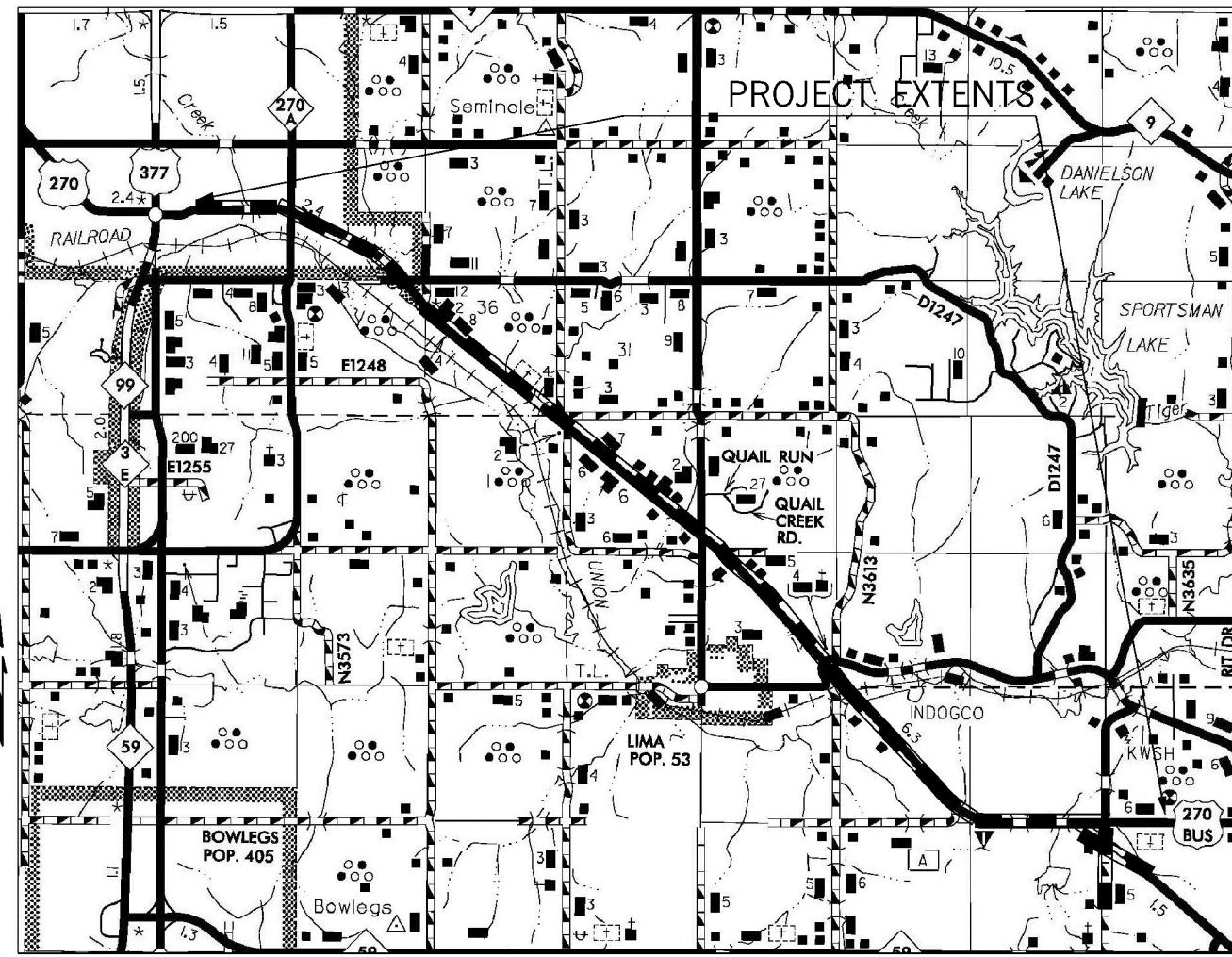


(FORM SD #20)
Rev. 11/03

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION

SURVEY OF
U.S. 270
SWO 4879(1)
J/P NO. 21006(11)
SEMINOLE
U.S. 270, FROM 0.5 MILES EAST OF S.H. 99,
EAST TO U.S. 270-B

R-6-E R-7-E



PROJECT LENGTH 44702.943 Ft. 8.47 MI.

BEGINNING STATION : 52+97.057
ENDING STATION : 500+00.000

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INDEX OF SHEETS

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14	HORIZONTAL CONTROL DIAGRAM & STATIC DATA
15-17	SURVEY DATA SHEETS

SURVEY BEGAN: 2/27/2014
SURVEY COMPLETED: 3/31/2015

PERSONNEL:	TITLE:
SHAWN SMITH, PLS	PROF. LAND SURVEYOR
CLARK FISHER, PLS	PROF. LAND SURVEYOR
MASON HARVEY, PLS	PROF. LAND SURVEYOR
JEREMY BONE	SURVEY TECH
SHAUN KOONCE, CST I	SURVEY TECH
ANDREW MAYHUE	TITLE RESEARCHER
JACOB ANDREWS, CST I	SURVEY TECH
PIERCE TRANUM	SURVEY TECH
BOB BLEDSOE, LSIT	SURVEY TECH
LUKE BRUNGARDY	SURVEY TECH
RANDALL TOLLISON	SURVEY TECH
BRANDON SECHRIST	SURVEY TECH

EQUIPMENT:
 TRIMBLE R6 BASE & ROVER GPS
 TRIMBLE S6 ROBOTIC TOTAL STATION
 SOKKIA 50L-30 DIGITAL LEVEL

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION

SWO 4879(1) Job/Piece 21006(11) Engr. Contract No. 1468 A

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 instructions contained in the U.S. Government Bureau of Land Management publication "Manual of Survey Instruction".
- Its supplement, "Restoration of Lost or Obliterated Corners and Sub-division of Sections".
- "Oklahoma Minimum Standards for the Practice of Land Surveying" as adopted by the State Board of Licensure for Professional Engineers and Land Surveyors, and
- Sound land surveying practices, including a thorough search, study, analysis and consideration of all existing records and field evidence.

I further certify that all survey monuments depicted exist and that all land survey work was done by me or under my direct supervision.

Dated this 31st day of March, 2015.



Land Surveyor
Signature
Shawn Smith

Oklahoma Licensed Land Surveyor No. 1663

Certificate of Authorization No. 6975

Utilities

Utility	Phone Number	Utility	Phone Number
Telephone Lines:		Gas Lines:	
AT&T	800-246-8464	OneOK	800-666-3041
Southwestern Bell	800-522-6543	Sunoco	800-753-5531
Cox	405-600-7676	Blue Knight Energy Partners	855-999-2537
BCI Allegiance	800-937-1397	Atlantic Richfield	405-382-3049
Midcontinent	800-722-2606	Enerfin Resources	405-382-3049
Semcrude Telephone	918-524-8100	Centerpoint Energy	888-876-5786
Electric Lines:		Scissor Tail	800-256-3805
Canadian Valley Elec. Co-op	405-382-3680	COPANO	580-332-3791
Sanitary Sewer		Water Lines:	
City of Seminole	405-382-3434	Bowlegs Lima Water Dist., Inc.	405-398-4469
		City of Seminole	405-382-3434

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 MAY 1, 1999 GOVERN.

SOS 1 OF 47



PLS	SS	OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION
DRAWN	SK	
CHECKED	SS	
APPROVED	SS	
CREW	JH, JA, LB, RT BS, PT, BB	
SWO 4879 (1) PROJECT NO. 21006(11) SHEET NO.		

FINAL FIELD MEETING

11/7/2018

TRAFFIC CONTROL SUMMARY

PHASE	DESCRIPTION	857(A)	857(C)		857(F)	857(F)	871(B)	877(B)	877(C)	880(A)	880(B)	880(B)	880(B)	880(C)	880(C)	880(E)	880(F)
		CONSTRUCTION TRAFF. STR.(PAINT)(4" WIDE) LF	REMOVABLE PAVEMENT MARKING TAPE(4" WIDE) YELLOW WHITE		PAVEMENT MRKNG.REMOVAL(TRAF.STRP) LF	PAVEMENT MARKING REMOVAL(SYMBOLS) EA	(SF)CONST.ZONE IMPACT ATTEN. SD	DELIVER PORTABLE LONGITUDINAL BARRIER LF	RELOCATE PORTABLE LONGITUDINAL BARRIER LF	ARROW DISPLAY(TYPE B) SD	CONSTRUCTION SIGNS 0 TO 6.25 SF SD	CONSTRUCTION SIGNS 6.26 SF TO 15.99 SF SD	CONSTRUCTION SIGNS 16.0 SF TO 32.99 SF SD	CONSTRUCTION BARRICADES(TYPE III) SD	WING BARRICADES SD	WARNING LIGHTS(TYPE A) SD	DRUMS SD
INIT.	INITIAL PROJECT SIGNING										15,840	7,920	10,560		5,280	10,560	
1	PHASE 1 Traffic Control_1										60		120			120	498
1	TOTAL PHASE 1										60		120			120	498
2	PHASE 2 Traffic Control_1	10,820	5,410	5,410	4,635	660	265	360			2,520	0	1,260	630		2,310	14,154
2	PHASE 2 Traffic Control_2	12,000	6,000	6,000	3,735						840	0	210	420		1,050	8,306
2	PHASE 2 Traffic Control_3	9,080	4,540	4,540	2,140						840	0	840	840		2,520	9,940
2	PHASE 2 Traffic Control_4	4,470	3,320	1,150	1,764	11			210		210	0	840	1,680		4,200	2,092
2	TOTAL PHASE 2	36,370	19,270	17,100	12,274	11	660	265	360	210	4,410	0	3,150	3,570		10,080	34,491
2B	TOTAL PHASE 2B	10,400	5,200	5,200	5,000								180	360		960	3,560
2C	TOTAL PHASE 2C								30		30		60	60		180	353
3	Phase 3 Traffic Control_1	10,840	5,420	5,420	1,185				325		1,260		630	210		1,050	8,400
3	Phase 3 Traffic Control_2	12,000	6,000	6,000	4,195						0		210	420		1,050	8,526
3	Phase 3 Traffic Control_3	6,800	3,400	3,400	6,800						0		0	420		840	3,150
3	TOTAL PHASE 3	29,640	14,820	14,820	12,180	0	0	0	325	0	1,260	0	840	1,050	0	2,940	20,076
	TOTAL	76,410	39,290	37,120	29,454	11	660	265	685	240	21,600	7,920	14,910	5,040	5,280	24,840	58,978

* NOTE: THE ESTIMATED QUANTITY FOR DRUMS SHOWN IN THE TRAFFIC CONTROL SUMMARY IS PAID FOR AS FOLLOWS: 75% OF SUMMARY QUANTITY IS ESTIMATED AS DRUMS AND 25% OF THE SUMMARY QUANTITY IS ESTIMATED AS CHANNELIZER CONES.

P:\11399\200-11399-14001\CAD\SheetFiles\JP_21006 (04) Roadway\T001-2100604-SUMMARY SHEET (TRAFFIC CONTROL) .dgn

DESIGN			OKLAHOMA DEPARTMENT OF TRANSPORTATION SUMMARY SHEET (TRAFFIC CONTROL) STATE JOB NO. 21006(04) SHEET NO. T001
DRAWN			
CHECKED			
APPROVED			
CREW			

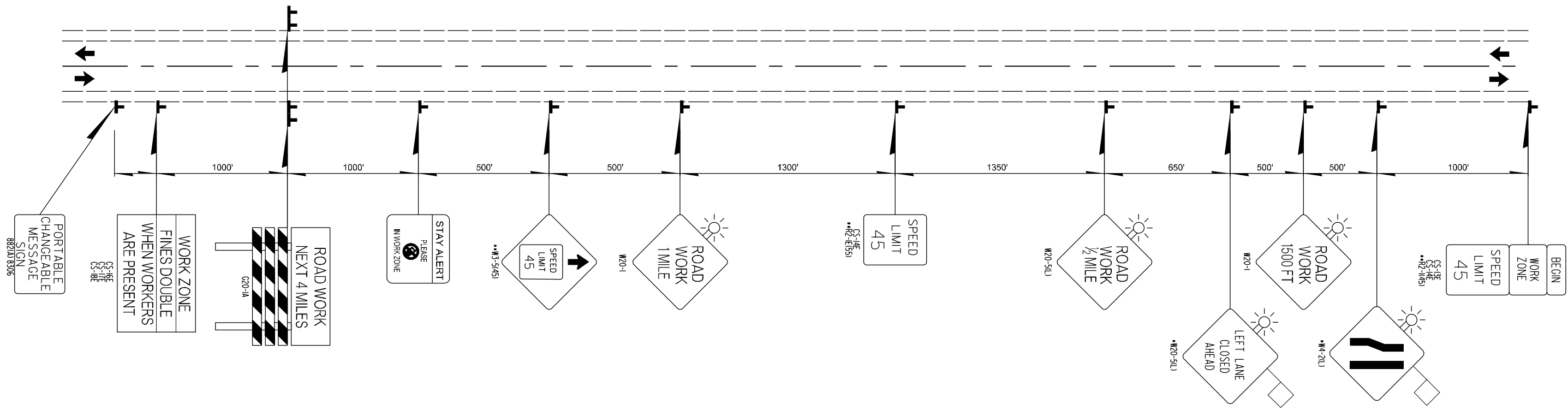
NOTES:

EXISTING SIGNS THAT CONFLICT WITH THE TEMPORARY TRAFFIC CONTROL SIGNING SHALL BE TEMPORARILY COVERED OR REMOVED. THESE EXISTING SIGNS ARE TO BE RETURNED TO THEIR PREVIOUS UNCOVERED CONDITION OR LOCATION ONCE THE TEMPORARY TRAFFIC CONTROL SIGNING IS NO LONGER NEEDED AND HAS BEEN REMOVED.

EXISTING ROUTE MARKERS TO BE TEMPORARILY RELOCATED AS NEEDED.

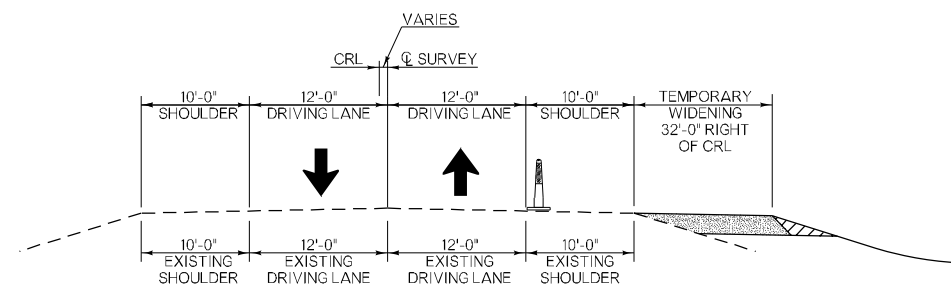
TRAFFIC CONTROL SHALL BE INSTALLED AT THE BEGINNING AND END OF THE PROJECT, NORTH OF THE SH-270A CONSTRUCTION ZONE AND EAST OF THE US-270B CONSTRUCTION ZONE.

* PLACE LANE REDUCTION SIGNAGE AS NEEDED
 ** DO NOT USE SPEED HIGHER THAN EXISTING SIGNAGE.
 SHIFT TEMPORARY TRAFFIC CONTROL SPEED LIMIT SIGNS TO MAINTAIN EXISTING SPEEDS LOWER THAN 45 MPH.



P:\11399\200-11399-14001\CAD\SheetFiles\JP_21006 (04) Roadway\T002-2100604-TRAFFIC CONTROL ADVANCED WARNING.dgn
 11/7/2018

DESIGN				OKLAHOMA DEPARTMENT OF TRANSPORTATION TRAFFIC CONTROL ADVANCED WARNING STATE JOB NO. 21006(04) SHEET NO. T002 SEMINOLE CO. US-270
DRAWN				
CHECKED				
APPROVED				
SQUAD				

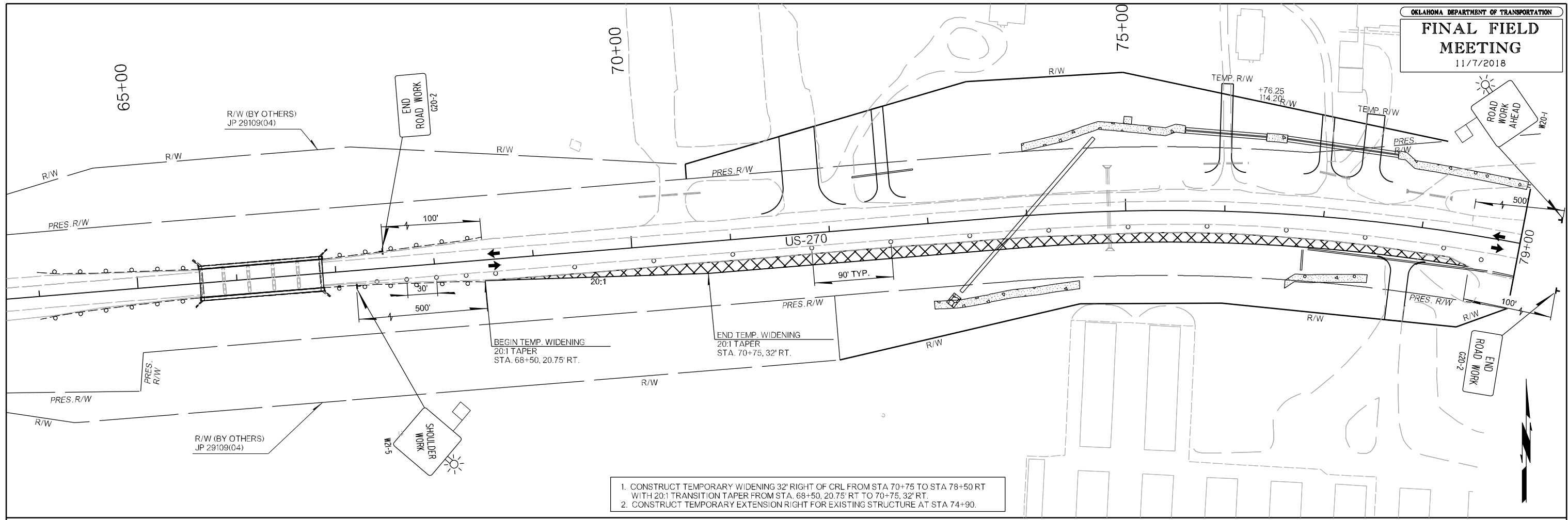


PHASE 1 TRAFFIC CONTROL
TEMPORARY WIDENING BETWEEN STA 68+50 TO STA 78+50

NOTES:
 - USE ODOT STD. PDT-1 WHERE NEEDED.
 - CHANNELIZING DEVICES ON THIS PROJECT ARE SHOWN GRAPHICALLY AS CHANNELIZER CONES IN THE TYPICAL SECTIONS AND AS DRUMS IN THE PLANS. THEY ARE QUANTIFIED AS 75% DRUMS AND 25% CHANNELIZER CONES IN THE QUANTITIES. USE APPROPRIATE DEVICE AS DIRECTED BY THE ENGINEER.

DESIGN		
DRAWN		
CHECKED		
APPROVED		
SQUAD		

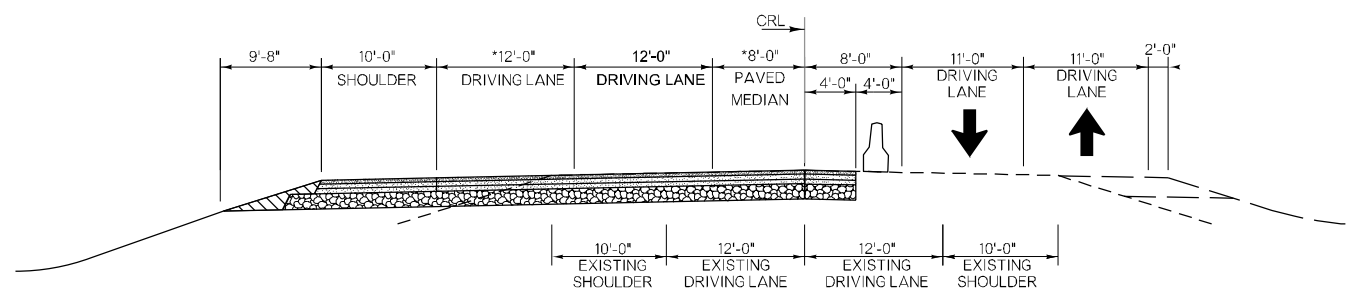
OKLAHOMA DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL
PHASE 1 TYPICAL SECTIONS
 STATE JOB NO. 21006(04) SHEET NO. T003



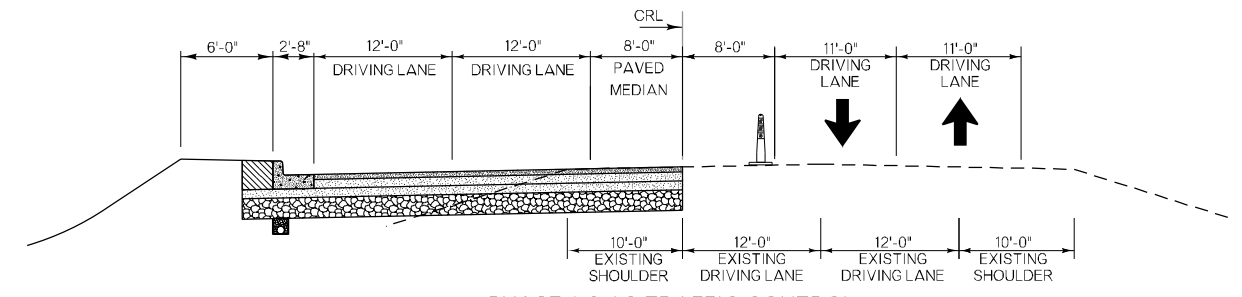
1. CONSTRUCT TEMPORARY WIDENING 32' RIGHT OF CRL FROM STA 70+75 TO STA 78+50 RT WITH 20:1 TRANSITION TAPER FROM STA. 68+50, 20.75' RT TO 70+75, 32' RT.
2. CONSTRUCT TEMPORARY EXTENSION RIGHT FOR EXISTING STRUCTURE AT STA 74+90.

P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\T004-2100604-TRAFFIC CONTROL PHASE 1.dgn

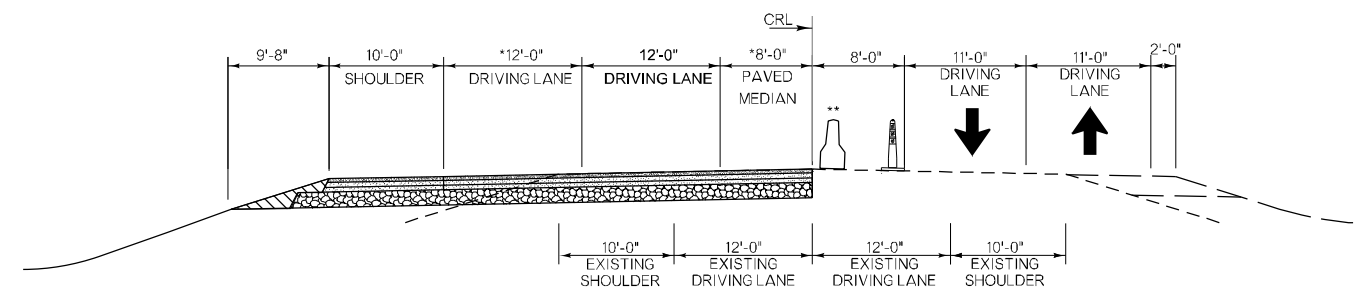
DESIGN			OKLAHOMA DEPARTMENT OF TRANSPORTATION TRAFFIC CONTROL PHASE 1 STATE JOB NO. 21006(04) SHEET NO. T004
DRAWN			
CHECKED			
APPROVED			
CREW			



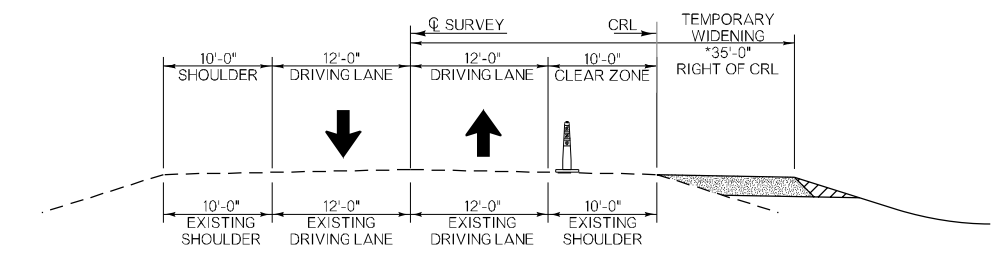
PHASE 2 TRAFFIC CONTROL
 STA 70+75 TO STA 72+50
 (*TRANSITION FROM 0' - 0" AT 70+85 TO WIDTH SHOWN AT 76+75)



PHASE 2 & 2C TRAFFIC CONTROL
 STA 77+78.00 TO STA 111+00.00



PHASE 2 TRAFFIC CONTROL
 STA 72+50 TO STA 77+78
 (*TRANSITION FROM 0' - 0" AT 70+85 TO WIDTH SHOWN AT 76+75)
 (** SEE PLANS FOR PORTABLE LONGITUDINAL BARRIER STATION LIMITS)
 STA 111+00 TO STA 114+35



PHASE 2 TRAFFIC CONTROL
 TEMPORARY WIDENING BETWEEN STA 130+00 TO STA 146+15
 (*TRANSITION FROM WIDTH SHOWN AT STA 134+00 TO 0'-0" AT STA 146+15)

NOTES:
 - USE ODOT STD. PDT-1 WHERE NEEDED.
 - CHANNELIZING DEVICES ON THIS PROJECT ARE SHOWN GRAPHICALLY AS CHANNELIZER CONES IN THE TYPICAL SECTIONS AND AS DRUMS IN THE PLANS. THEY ARE QUANTIFIED AS 75% DRUMS AND 25% CHANNELIZER CONES IN THE QUANTITIES. USE APPROPRIATE DEVICE AS DIRECTED BY THE ENGINEER.

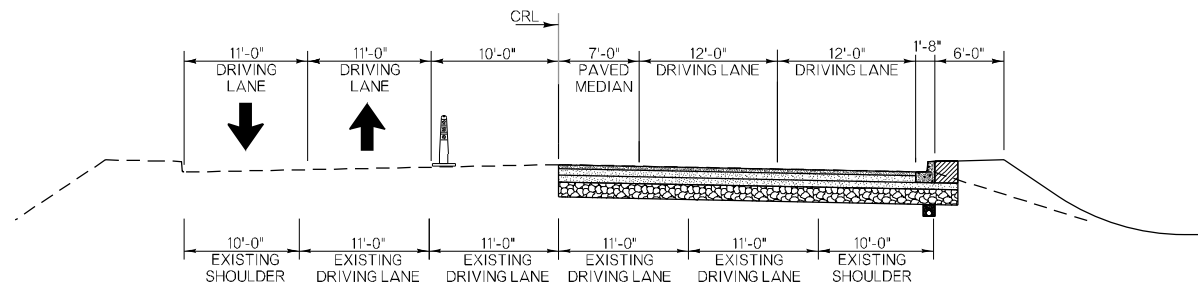
DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	

OKLAHOMA DEPARTMENT OF TRANSPORTATION

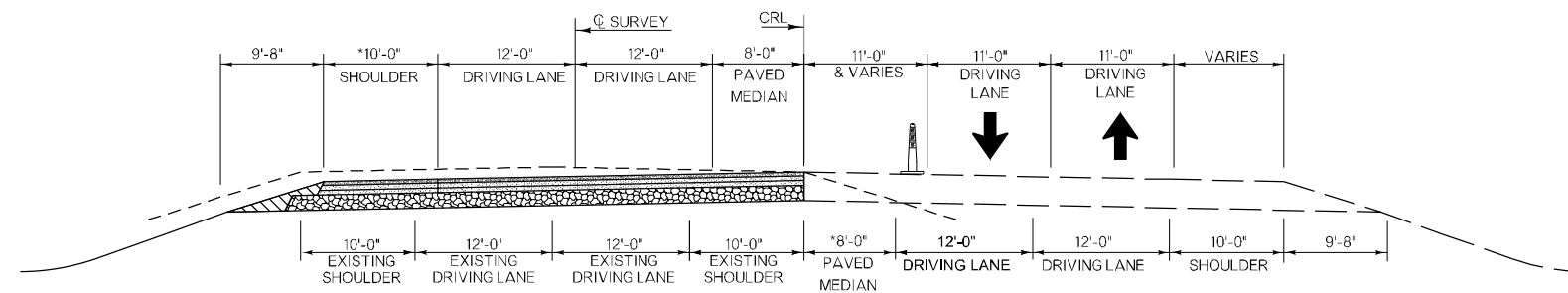
TRAFFIC CONTROL
PHASE 2 TYPICAL SECTIONS

STATE JOB NO. 21006(04) SHEET NO. T005

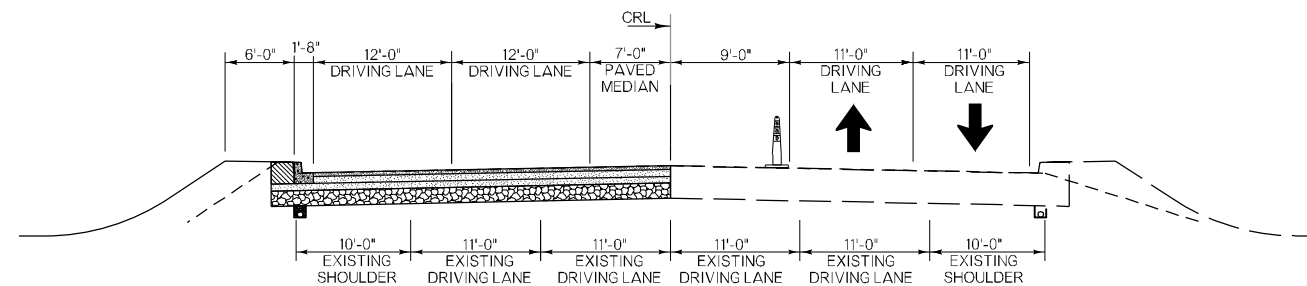
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 11/7/2018



PHASE 2 TRAFFIC CONTROL
US-270A
STA 26+70 TO STA 31+00



PHASE 2B TRAFFIC CONTROL
STA 125+00.00 TO STA 134+00
(*TRANSITION FROM WIDTH SHOWN AT STA 130+50 TO 8'-0" AT STA 134+00)



PHASE 2C TRAFFIC CONTROL
US-270A
STA 26+70 TO STA 31+00

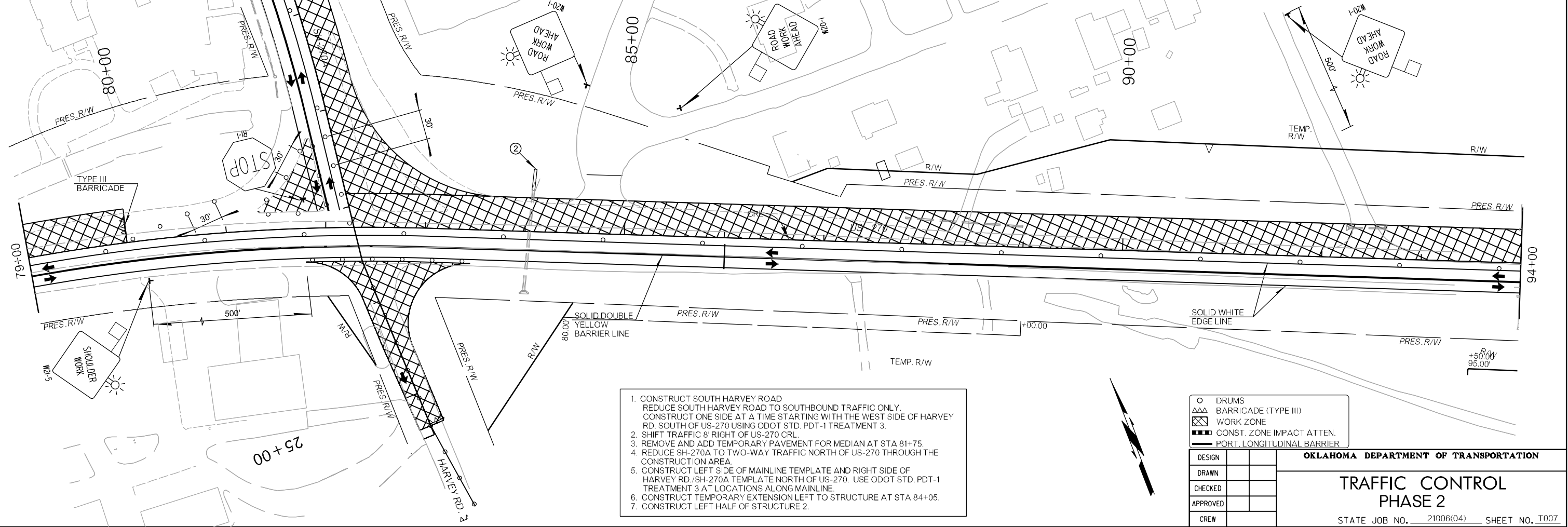
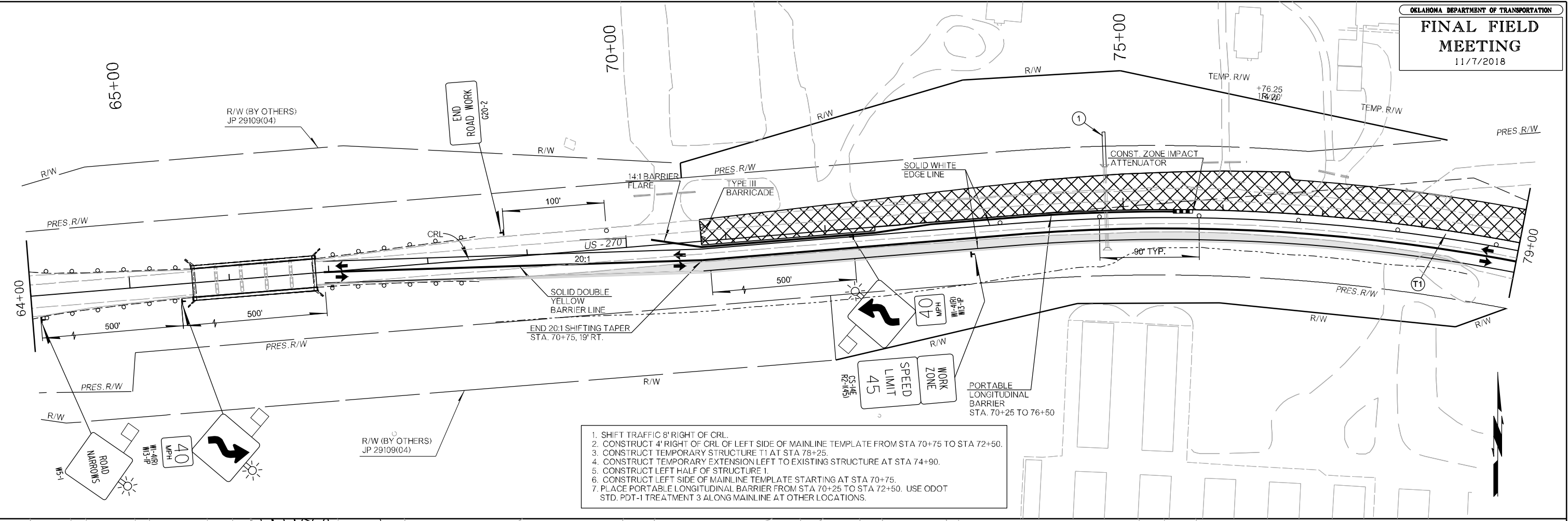
P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\T006-2100604-TRAFFIC CONTROL PHASE 2 TYPICAL SECTIONS_2.dgn 11/7/2018

DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	

OKLAHOMA DEPARTMENT OF TRANSPORTATION

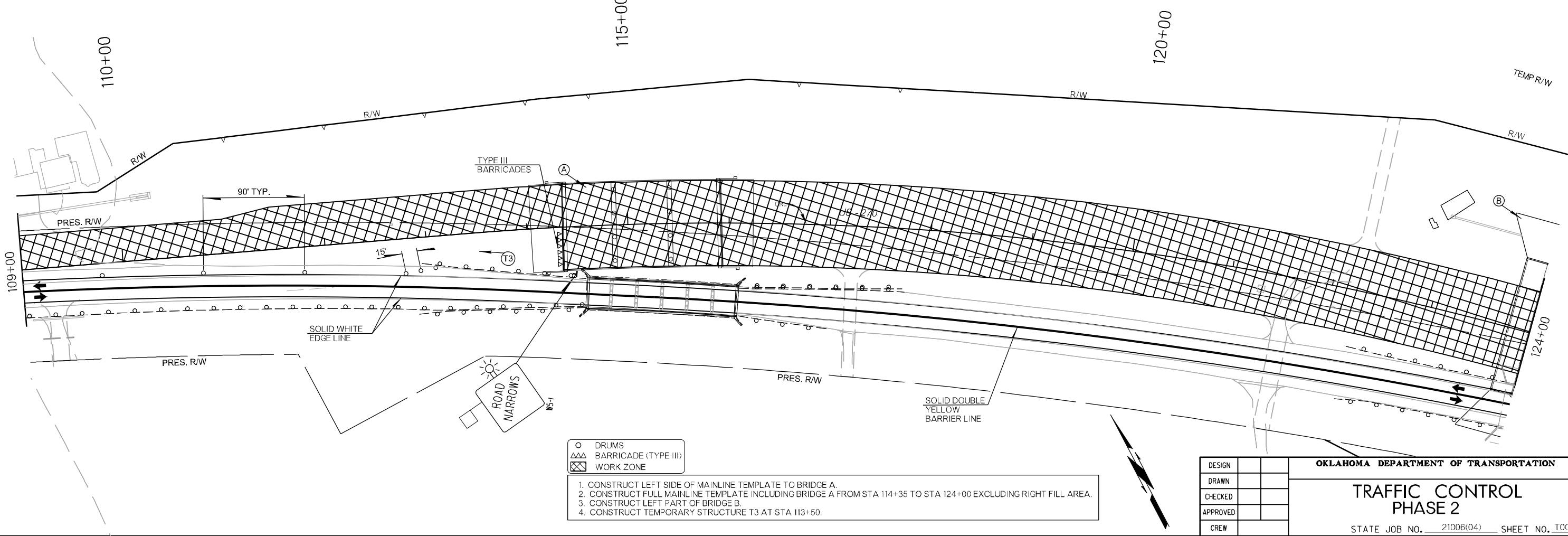
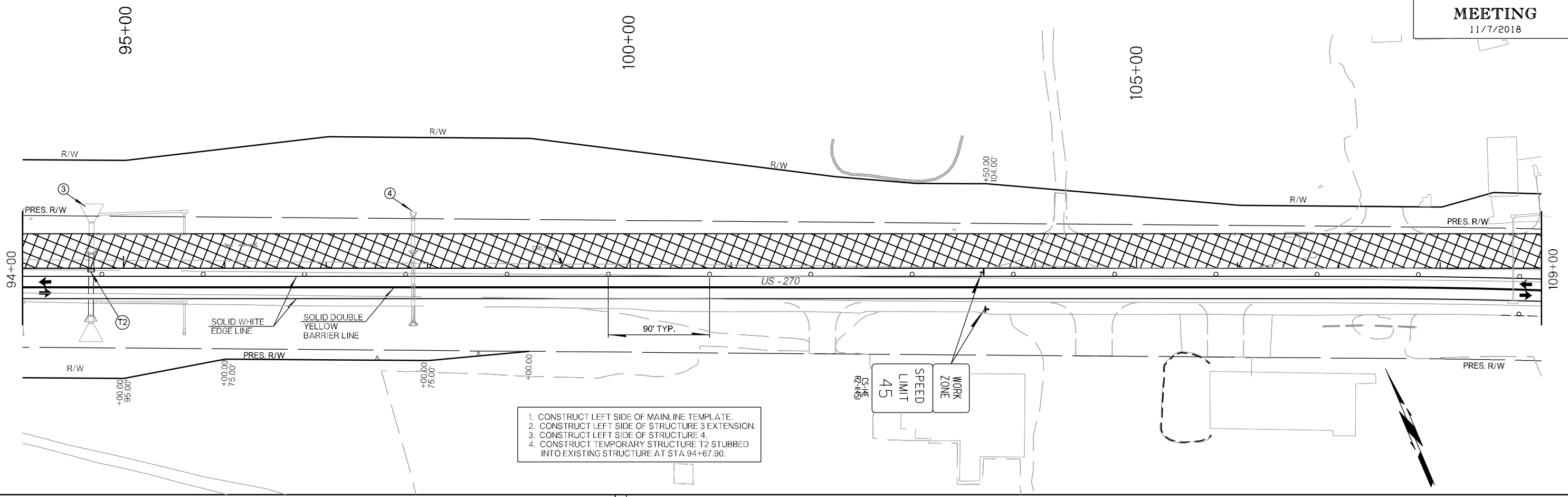
TRAFFIC CONTROL
PHASE 2 TYPICAL SECTIONS

STATE JOB NO. 21006(04) SHEET NO. T006



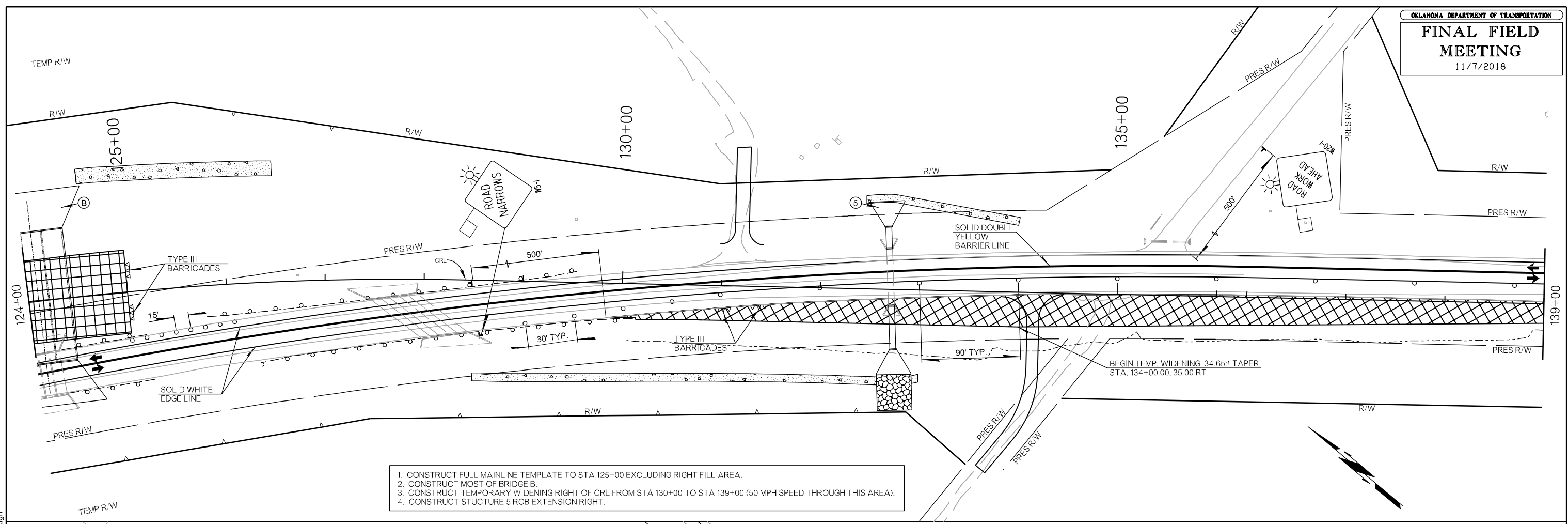
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DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION	
DRAWN		TRAFFIC CONTROL PHASE 2 STATE JOB NO. 21006(04) SHEET NO. T007 SEMINOLE CO. US-270	
CHECKED			
APPROVED			
CREW			

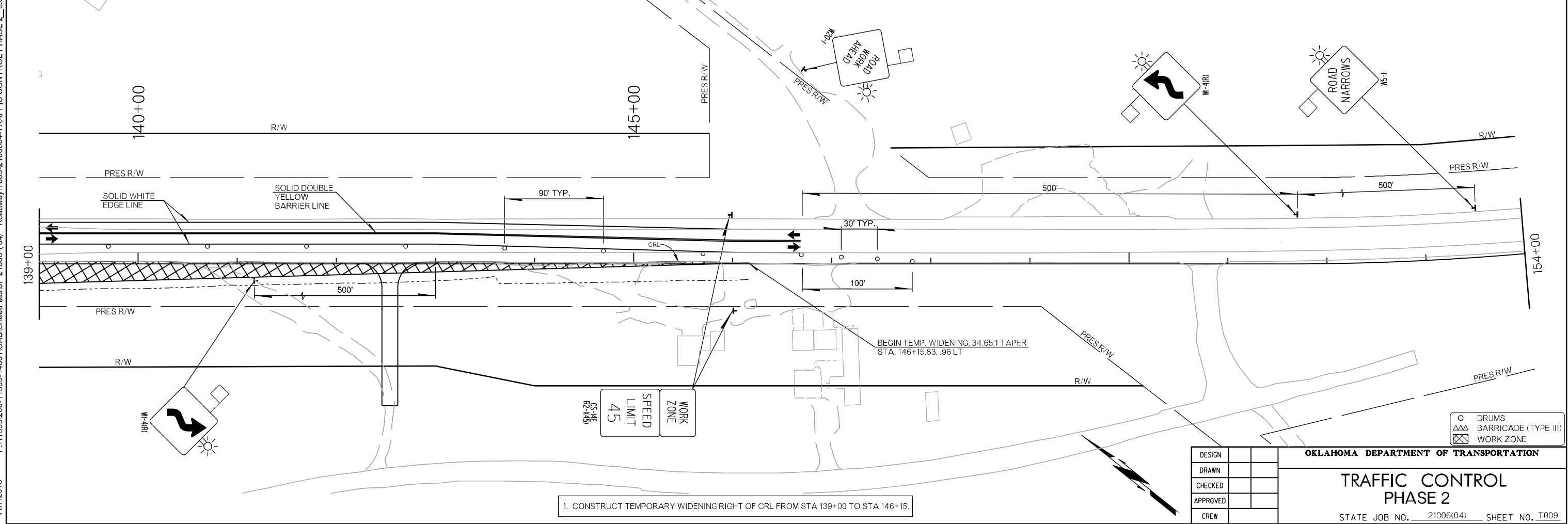


DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION	
DRAWN		TRAFFIC CONTROL PHASE 2	
CHECKED			
APPROVED			
CREW			
		STATE JOB NO. 21006(04)	SHEET NO. T008

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1. CONSTRUCT FULL MAINLINE TEMPLATE TO STA 125+00 EXCLUDING RIGHT FILL AREA.
2. CONSTRUCT MOST OF BRIDGE B.
3. CONSTRUCT TEMPORARY WIDENING RIGHT OF CRL FROM STA 130+00 TO STA 139+00 (50 MPH SPEED THROUGH THIS AREA).
4. CONSTRUCT STRUCTURE 5 RCB EXTENSION RIGHT.



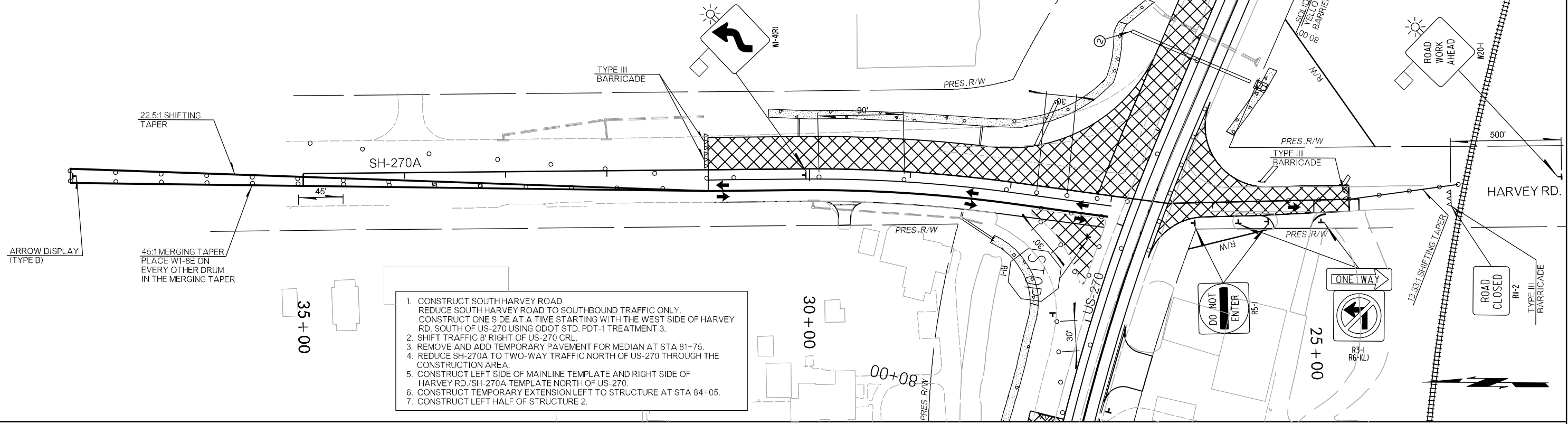
1. CONSTRUCT TEMPORARY WIDENING RIGHT OF CRL FROM STA 139+00 TO STA 146+15.

○ DRUMS
 △△△ BARRICADE (TYPE III)
 ▨ WORK ZONE

DESIGN	
DRAWN	
CHECKED	
APPROVED	
CREW	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL PHASE 2
 STATE JOB NO. 21006(04) SHEET NO. T009

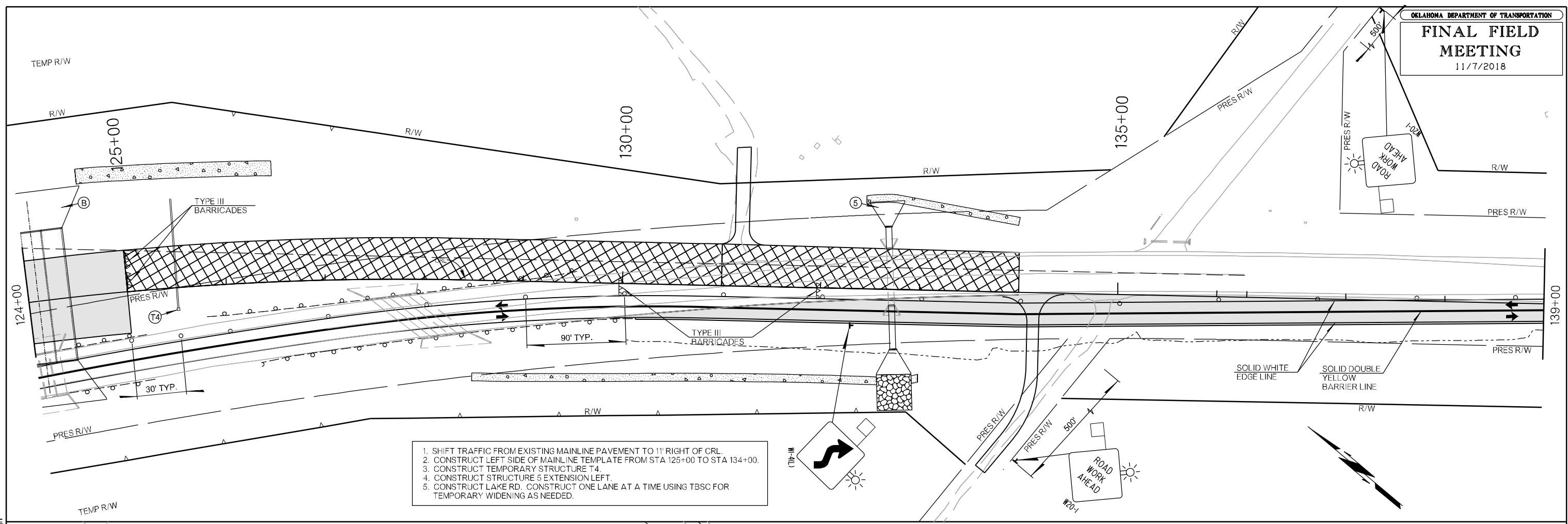
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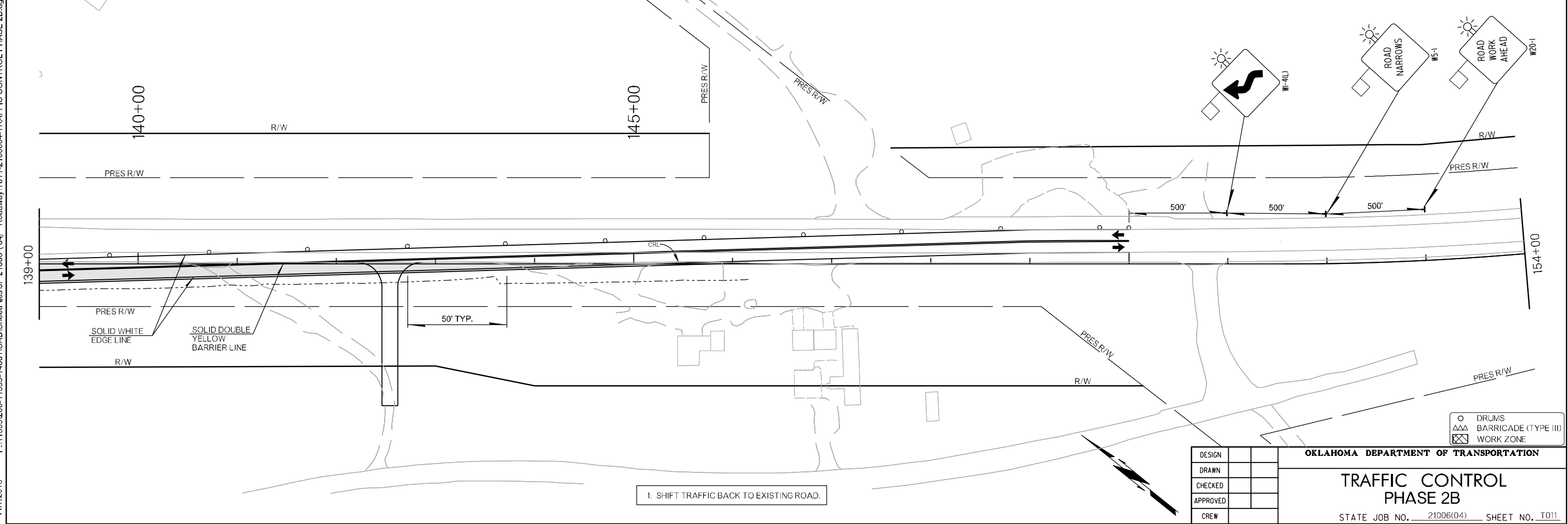
1. CONSTRUCT SOUTH HARVEY ROAD
 REDUCE SOUTH HARVEY ROAD TO SOUTHBOUND TRAFFIC ONLY.
 CONSTRUCT ONE SIDE AT A TIME STARTING WITH THE WEST SIDE OF HARVEY RD. SOUTH OF US-270 USING ODOT STD. PDT-1 TREATMENT 3.
2. SHIFT TRAFFIC 8' RIGHT OF US-270 CRL.
3. REMOVE AND ADD TEMPORARY PAVEMENT FOR MEDIAN AT STA 81+75.
4. REDUCE SH-270A TO TWO-WAY TRAFFIC NORTH OF US-270 THROUGH THE CONSTRUCTION AREA.
5. CONSTRUCT LEFT SIDE OF MAINLINE TEMPLATE AND RIGHT SIDE OF HARVEY RD./SH-270A TEMPLATE NORTH OF US-270.
6. CONSTRUCT TEMPORARY EXTENSION LEFT TO STRUCTURE AT STA 84+05.
7. CONSTRUCT LEFT HALF OF STRUCTURE 2.

P:\11399\200-11399-14001\CAD\SheetFiles\JP_21006 (04) Roadway\T010-2100604-TRAFFIC CONTROL PHASE 2_4.dgn
 11/7/2018

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION TRAFFIC CONTROL PHASE 2 STATE JOB NO. 21006(04) SHEET NO. T010 SEMINOLE CO. US-270
DRAWN		
CHECKED		
APPROVED		
CREW		



1. SHIFT TRAFFIC FROM EXISTING MAINLINE PAVEMENT TO 11' RIGHT OF CRL.
2. CONSTRUCT LEFT SIDE OF MAINLINE TEMPLATE FROM STA 125+00 TO STA 134+00.
3. CONSTRUCT TEMPORARY STRUCTURE T4.
4. CONSTRUCT STRUCTURE 5 EXTENSION LEFT.
5. CONSTRUCT LAKE RD. CONSTRUCT ONE LANE AT A TIME USING TBSC FOR TEMPORARY WIDENING AS NEEDED.



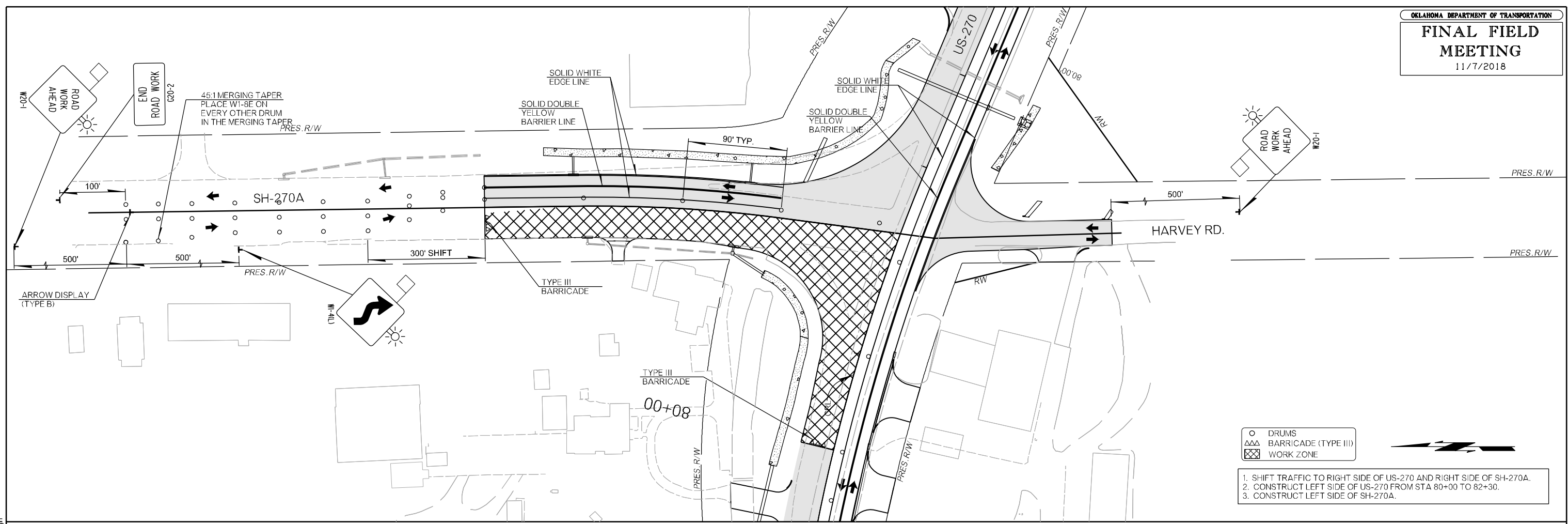
1. SHIFT TRAFFIC BACK TO EXISTING ROAD.

- DRUMS
- △△△ BARRICADE (TYPE III)
- ▨ WORK ZONE

DESIGN	
DRAWN	
CHECKED	
APPROVED	
CREW	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL PHASE 2B
 STATE JOB NO. 21006(04) SHEET NO. T011

11/7/2018 P:\11399\200-11399-14001\CAD\SheetFiles\JP_21006 (04) Roadway\T011-2100604-TRAFFIC CONTROL PHASE 2B.dgn

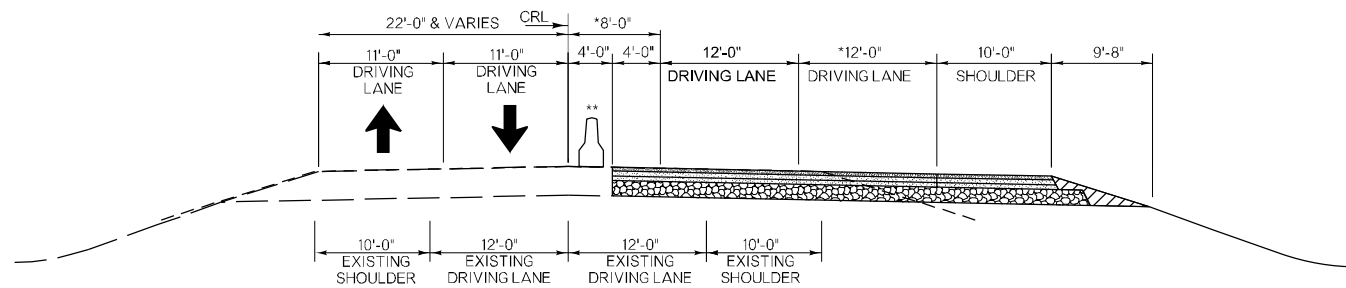


- DRUMS
- ▲▲▲ BARRICADE (TYPE III)
- ▣ WORK ZONE

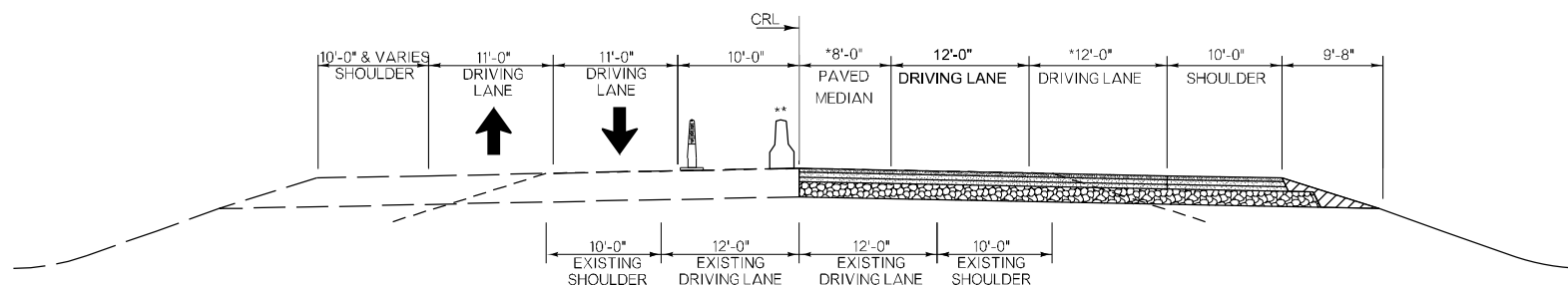
1. SHIFT TRAFFIC TO RIGHT SIDE OF US-270 AND RIGHT SIDE OF SH-270A.
2. CONSTRUCT LEFT SIDE OF US-270 FROM STA 80+00 TO 82+30.
3. CONSTRUCT LEFT SIDE OF SH-270A.

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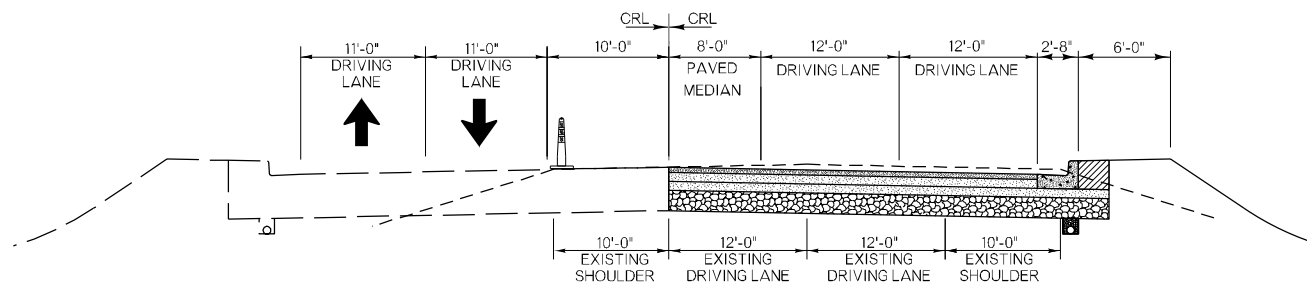
DESIGN			OKLAHOMA DEPARTMENT OF TRANSPORTATION TRAFFIC CONTROL PHASE 2C STATE JOB NO. 21006(04) SHEET NO. T012
DRAWN			
CHECKED			
APPROVED			
CREW			



PHASE 3 TRAFFIC CONTROL
 STA 70+75 TO STA 72+50
 (*TRANSITION FROM 0' - 0" AT 70+85 TO WIDTH SHOWN AT 76+50)
 (** SEE PLANS FOR PORTABLE LONGITUDINAL BARRIER STATION LIMITS)



PHASE 3 TRAFFIC CONTROL
 STA 72+50 TO STA 76+75
 (*TRANSITION FROM 0' - 0" AT 70+85 TO WIDTH SHOWN AT 76+50)
 (**PLACE BARRIER BETWEEN 72+50 TO 74+00)
 STA 111+00 TO STA 114+35



PHASE 3 TRAFFIC CONTROL
 STA 76+75.00 TO STA 111+00.00

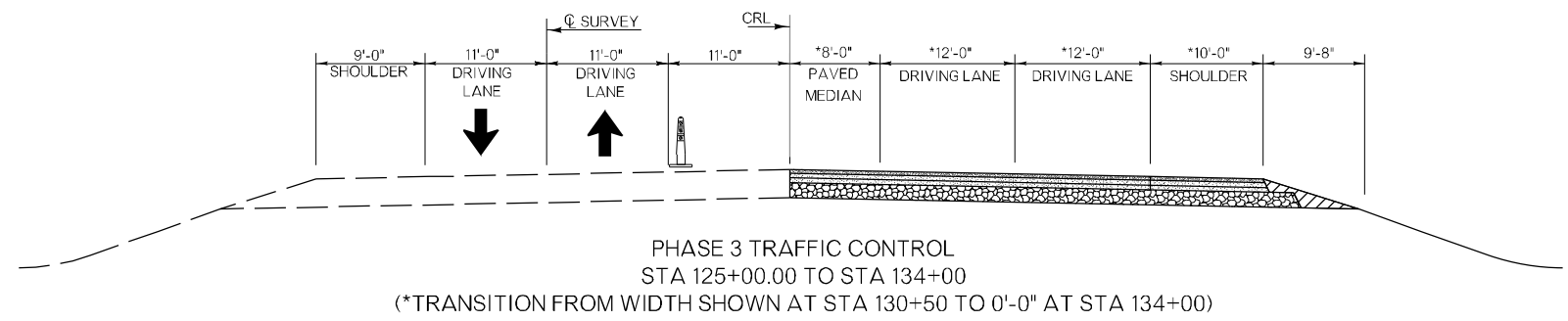
NOTES:
 - USE ODOT STD. PDT-1 WHERE NEEDED.
 - CHANNELIZING DEVICES ON THIS PROJECT ARE SHOWN GRAPHICALLY AS CHANNELIZER CONES IN THE TYPICAL SECTIONS AND AS DRUMS IN THE PLANS. THEY ARE QUANTIFIED AS 75% DRUMS AND 25% CHANNELIZER CONES IN THE QUANTITIES. USE APPROPRIATE DEVICE AS DIRECTED BY THE ENGINEER.

DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	

OKLAHOMA DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL
 PHASE 3 TYPICAL SECTIONS**

STATE JOB NO. 21006(04) SHEET NO. 1013



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11/7/2018

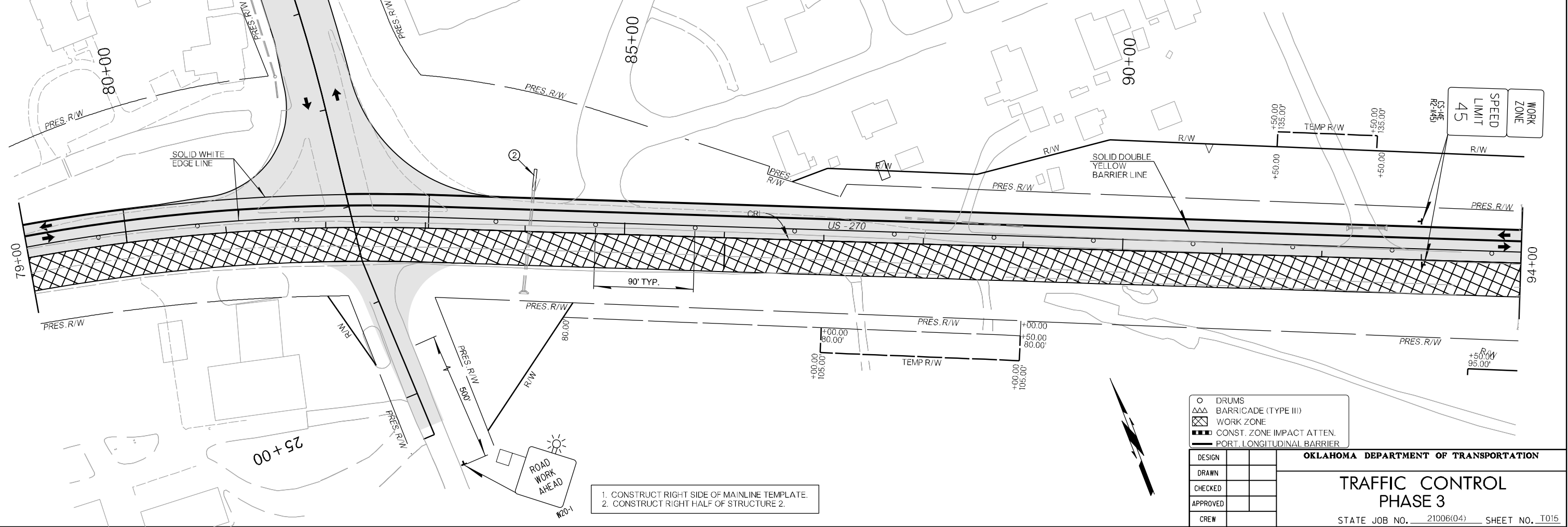
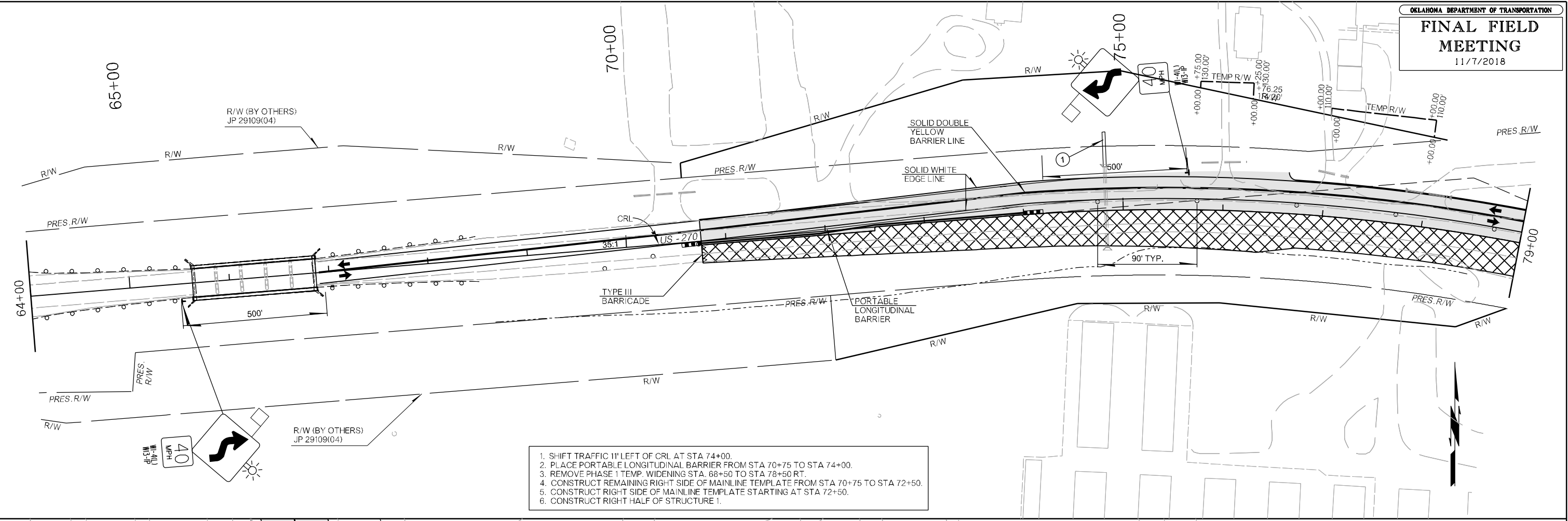
NOTES:
- USE ODOT STD. PDT-1 WHERE NEEDED.
- CHANNELIZING DEVICES ON THIS PROJECT ARE SHOWN GRAPHICALLY AS CHANNELIZER CONES IN THE TYPICAL SECTIONS AND AS DRUMS IN THE PLANS. THEY ARE QUANTIFIED AS 75% DRUMS AND 25% CHANNELIZER CONES IN THE QUANTITIES. USE APPROPRIATE DEVICE AS DIRECTED BY THE ENGINEER.

DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	

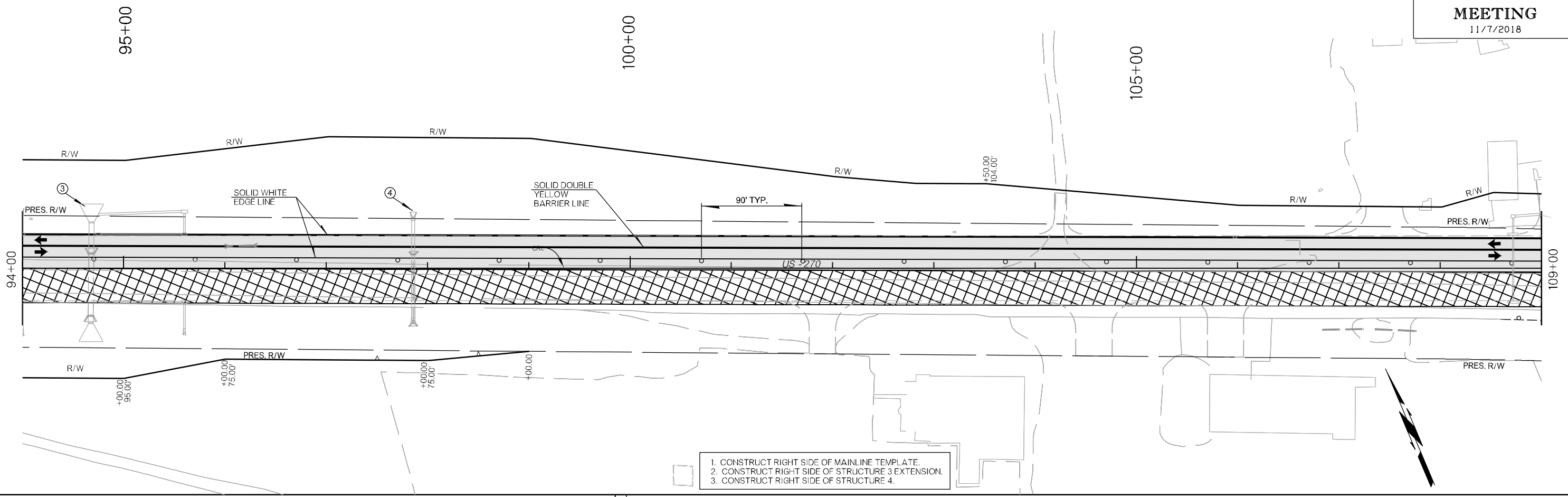
OKLAHOMA DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL
PHASE 3 TYPICAL SECTIONS**

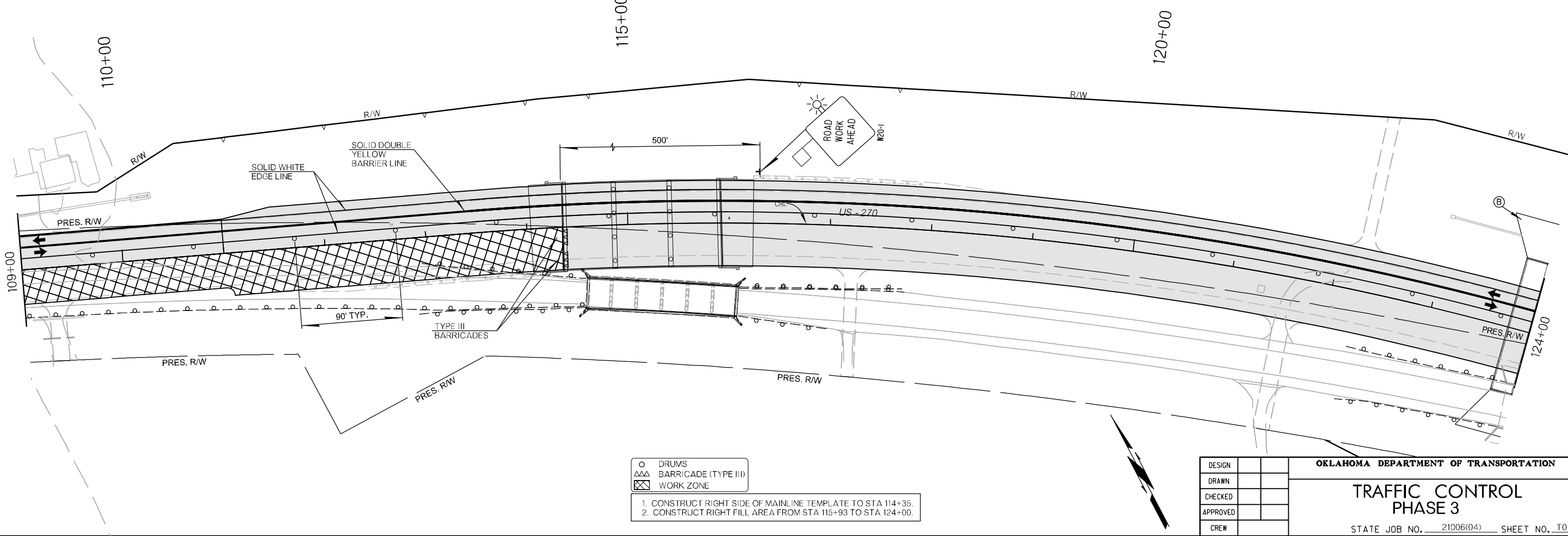
STATE JOB NO. 21006(04) SHEET NO. T014



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1. CONSTRUCT RIGHT SIDE OF MAINLINE TEMPLATE.
2. CONSTRUCT RIGHT SIDE OF STRUCTURE 3 EXTENSION.
3. CONSTRUCT RIGHT SIDE OF STRUCTURE 4.



- DRUMS
- ▲▲ BARRICADE (TYPE III)
- ▨ WORK ZONE

1. CONSTRUCT RIGHT SIDE OF MAINLINE TEMPLATE TO STA 114+35.
2. CONSTRUCT RIGHT FILL AREA FROM STA 115+93 TO STA 124+00.

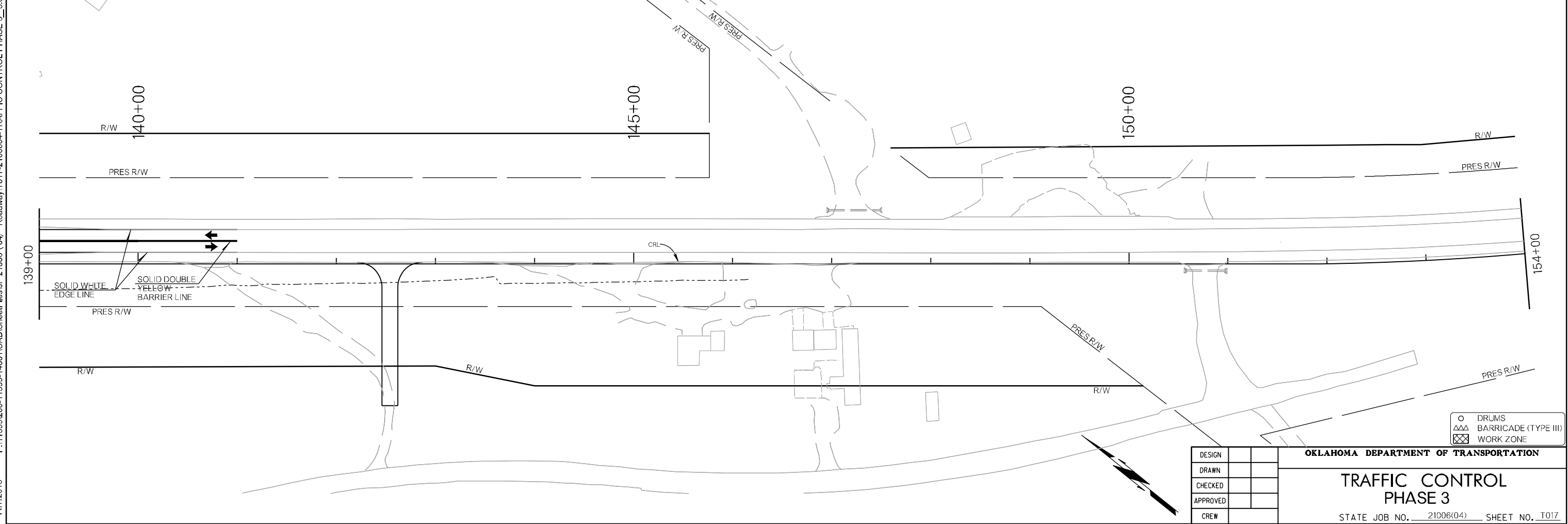
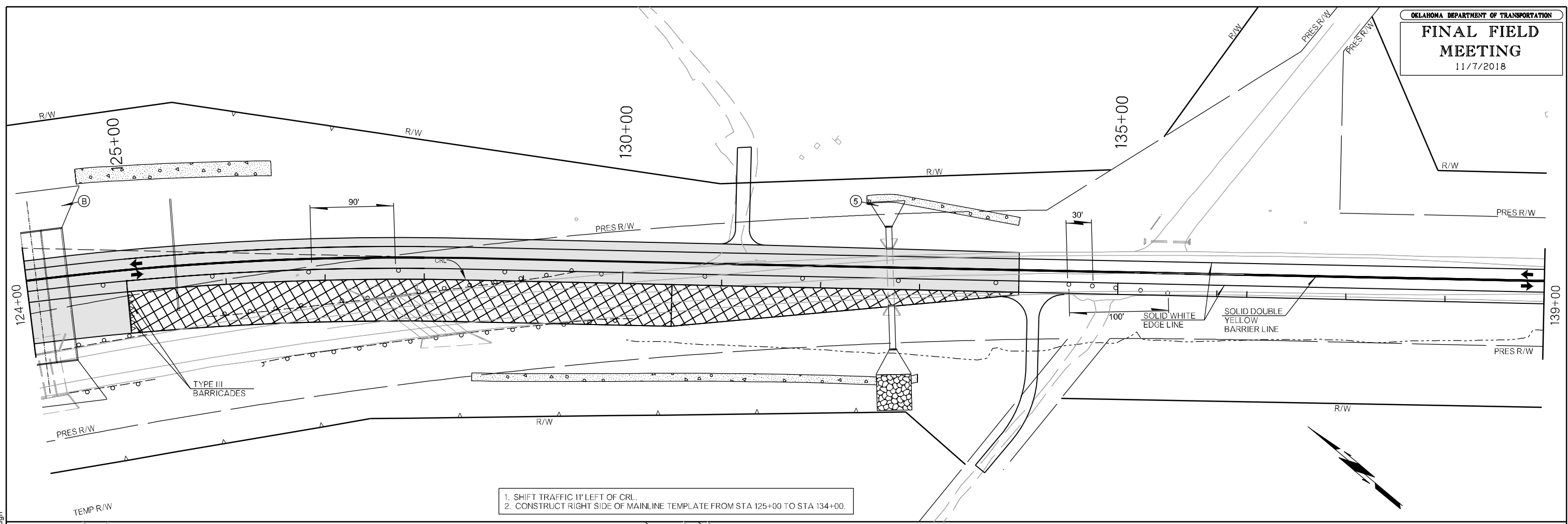
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OKLAHOMA DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PHASE 3

STATE JOB NO. 21006(04) SHEET NO. T016

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DESIGN	
DRAWN	
CHECKED	
APPROVED	
CREW	

OKLAHOMA DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PHASE 3

STATE JOB NO. 21006(04) SHEET NO. T017

FINAL FIELD MEETING

11/7/2018

SIGNING SUMMARY

SHT. NO.	SIGN NO.	APPROXIMATE STATION	TYPE OF SIGNS	805(A)	805(D)	850(A)	851(B)		851(C)		853	880(C)	REMARKS	
				(PL)REMOVAL OF EXISTING SIGNS	(PL)REMOVE & RESET EXISTING SIGNS	SHEET ALUMINUM SIGNS	3" @ 7.58 GALV. STL. PIPE POST	3 1/2" @ 9.11 GALV. STL. PIPE POST	2" SQUARE TUBE POST		DELINEATORS (TYPE 2, CODE 1)	PERMANENT BARRICADE UNIT		
				EA	EA	SF	LF	LF	LF	LF	EA	EA		
US-270														
T023	1	70+85 LT.	R2-1E(40)	1		12.00				11			REMOVE EXIST. & INSTALL NEW SIGN & POST	
T023	2	70+85 RT.	R2-1E(40)			12.00				11			INSTALL NEW SIGN & POST	
T023	3	71+16 RT.	R2-1E(50)	1									REMOVE EXIST. SIGN	
T023	4	71+25 LT.	DELINEATOR TYPE 2, CODE 1								1		INSTALL POST	
T023	5	72+75 LT.	DELINEATOR TYPE 2, CODE 1								1		INSTALL POST	
T023	6	72+75 LT.	W8-13	1									REMOVE EXIST. SIGN	
T023	7	73+00 RT.	M2-1E, M1-6E(3)	1		15.63		12					REMOVE EXIST. & INSTALL NEW SIGN & POST	
T023	8	73+75 LT.	DELINEATOR TYPE 2, CODE 1								1		INSTALL POST	
T023	9	74+75 LT.	DELINEATOR TYPE 2, CODE 1								1		INSTALL POST	
T023	10	75+00 RT.	W3-3E			16.00				12	12		INSTALL NEW SIGN & POST	
T023	11	75+25 LT.	D9-2, M6-3	1		8.44				11			REMOVE EXIST. & INSTALL NEW SIGN & POST	
T023	12	75+75 LT.	DELINEATOR TYPE 2, CODE 1								1		INSTALL POST	
T023	13	76+75 LT.	DELINEATOR TYPE 2, CODE 1								1		INSTALL POST	
T023	14	77+25 RT.	M1-6E(3), M1-4E(3), M5-1(L), M6-3			26.88		12	14				INSTALL NEW SIGN & POST	
T023	15	77+46 RT.	SH 9 JUNCTION	1									REMOVE EXIST. SIGN	
T023	16	77+85 LT.	R1-1	1									REMOVE EXIST. SIGN	
T023	17	78+25 LT.	M3-4E, M1-4E(3)	1		15.75		13					REMOVE EXIST. & INSTALL NEW SIGN & POST	
T023	18	79+07 LT.	R1-1			5.18				10			INSTALL NEW SIGN & POST	
T023	19	80+25 LT.	W4-2E(R)			16.00				12	12		INSTALL NEW SIGN & POST	
T023	20	81+14 LT.	R1-2	1									REMOVE EXIST. SIGN	
T023	21	81+75 RT.	M1-6E(3), M1-4E(3), M6-1E(L), M6-3E	2		31.26		12	14				REMOVE EXIST. & INSTALL NEW SIGN & POST	
T023	22	81+91 LT.	R1-1	1									REMOVE EXIST. SIGN	
T023	23	82+74 RT.	R1-1	1									REMOVE EXIST. SIGN	
T023	24	83+70 LT.	M1-4E(3), M1-6E(3), M6-3E, M6-1E(R)			31.26		12	14				INSTALL NEW SIGN & POST	
T023	25	84+00 RT.	M3-2E, M1-4E(3)	1		15.75		12					REMOVE EXIST. & INSTALL NEW SIGN & POST	
T023	26	84+43 LT.	R1-1	1		5.18				10			REMOVE EXIST. & INSTALL NEW SIGN & POST	
T023	27	85+25 LT.	R3-7E(R), W16-2PE			12.75				13			INSTALL NEW SIGN & POST	
T023	28	87+25 LT.	R3-7E(R), W16-2PE			12.75				13			INSTALL NEW SIGN & POST	
T023	29	87+46 RT.	WEWOKA/MCALESTER	1									REMOVE EXIST. SIGN	
T023	30	87+88 LT.	M1-4E(3)	1									REMOVE EXIST. SIGN	
T023	31	87+88 LT.	M1-6E(3)	1									REMOVE EXIST. SIGN	
T023	32	88+25 RT.	R3-9B(E)			12.00				12			INSTALL NEW SIGN & POST	
T023	33	88+25 LT.	R3-9B(E), M4-6E			16.50	14						INSTALL NEW SIGN & POST	
T023	34	89+25 RT.	M1-4E(3), M1-6E(3), M6-3, M5-1(R)			26.88		12	14				INSTALL NEW SIGN & POST	
T023	35	90+25 LT.	W3-3E			16.00				12	13		INSTALL NEW SIGN & POST	
T023	36	91+73 LT.	R1-1	1		5.18				10			REMOVE EXIST. & INSTALL NEW SIGN & POST	
T023	37	92+50 RT.	R2-1E(45)			12.00				12			INSTALL NEW SIGN & POST	
T023	38	92+50 LT.	R2-1E(40)			12.00				12			INSTALL NEW SIGN & POST	
T024	39	93+44 RT.	R2-1E(50)	1									REMOVE EXIST. SIGN	
T024	40	93+64 LT.	R2-1E(50)	1									REMOVE EXIST. SIGN	
T024	41	96+50 LT.	M2-1E, M1-6E(3)	1		15.63		13					REMOVE EXIST. & INSTALL NEW SIGN & POST	
T024	42	99+50 RT.	OK WORK FORCE		1								REMOVE & RESET	
T024	43	102+39 LT.	R2-1E(50)	1									REMOVE EXIST. SIGN	
T024	44	102+40 RT.	R2-1E(50)	1									REMOVE EXIST. SIGN	
T024	44A	103+00 RT.	W4-2E(R)			16.00				12	12		INSTALL NEW SIGN & POST	
T024	45	109+75 RT.	W8-13E	1		9.00				12			REMOVE EXIST. & INSTALL NEW SIGN & POST	
T024	46	111+50 RT.	R2-1E(55)			12.00				11			INSTALL NEW SIGN & POST	
T024	47	111+50 LT.	R2-1E(45)			12.00				11			INSTALL NEW SIGN & POST	
T024	48	111+70 RT.	R2-1E(65)	1									REMOVE EXIST. SIGN	
T024	49	111+71 LT.	R2-1E(45)	1									REMOVE EXIST. SIGN	
T024	50	114+04 LT.	OM-3L			3.00				10			INSTALL NEW SIGN & POST	
T024	51	114+05 RT.	OM-3R			3.00				10			INSTALL NEW SIGN & POST	
T024	52	114+47 RT.	OM-3L	1									REMOVE EXIST. SIGN	
T024	53	114+52 RT.	CARTER CREEK SIGN	1									REMOVE EXIST. SIGN	
T024	54	114+57 RT.	OM-3R	1									REMOVE EXIST. SIGN	
T024	55	116+11 RT.	OM-3R	1									REMOVE EXIST. SIGN	
T024	56	116+11 RT.	OM-3L	1									REMOVE EXIST. SIGN	
T024	57	116+15 RT.	CARTER CREEK SIGN	1									REMOVE EXIST. SIGN	
T024	58	116+23 RT.	OM-3L			3.00				10			INSTALL NEW SIGN & POST	
T024	59	116+23 LT.	OM-3R			3.00				10			INSTALL NEW SIGN & POST	
T024	60	117+02 RT.	R1-2	1									REMOVE EXIST. SIGN	
T024	61	117+77 RT.	W3-5(55)	1									REMOVE EXIST. SIGN	
T024	62	119+85 RT.	R2-5C	1									REMOVE EXIST. SIGN	
T024	63A	120+00 LT.	R3-9B(E)			12.00				12			INSTALL NEW SIGN & POST	
T024	63B	120+00 RT.	R3-9B(E), M4-6E			16.50	14						INSTALL NEW SIGN & POST	
T025	63	122+00 LT.	W3-5(45)			16.00				12	12		INSTALL NEW SIGN & POST	
T025	64	122+25 RT.	OM1-1	2									REMOVE EXIST. SIGNS	
T025	65												OMITTED	
T025	66												OMITTED	
T025	67	123+92 RT.	OM-3L	1									REMOVE EXIST. SIGN	
T025	68	123+98 RT.	OM-3R	1									REMOVE EXIST. SIGN	
T025	69	124+26 RT.	OM-3R	1									REMOVE EXIST. SIGN	
T025	70	124+29 RT.	OM-3L	1									REMOVE EXIST. SIGN	
SUBTOTAL				42	1	458.52	28	98	56	271	61	6	0	

11/7/2018

DESIGN	
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CHECKED	
APPROVED	
CREW	

OKLAHOMA DEPARTMENT OF TRANSPORTATION

SUMMARY SHEET (SIGNING & STRIPING)

STATE JOB NO. 21006(04) SHEET NO. T018

SEMINOLE CO. US-270

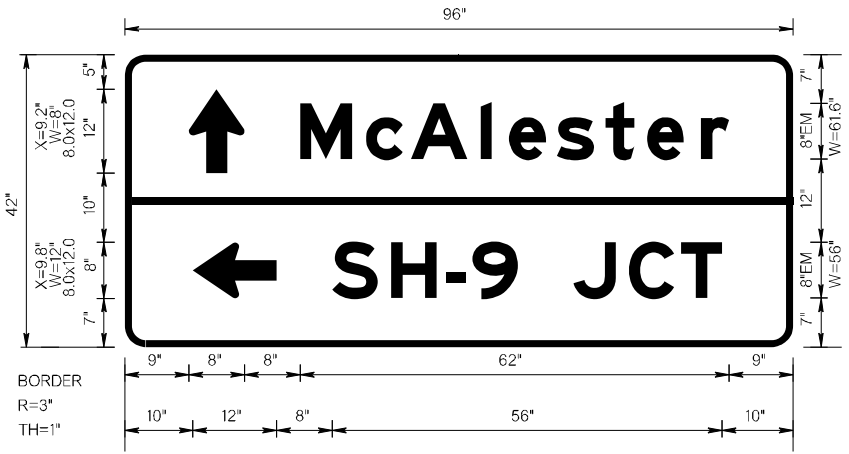
SIGNING SUMMARY													
SHT. NO.	SIGN NO.	APPROXIMATE STATION	TYPE OF SIGNS	805(A)	805(D)	850(A)	851(B)		851(C)		853	REMARKS	
				(PL)REMOVAL OF EXISTING SIGNS	(PL)REMOVE & RESET EXISTING SIGNS	SHEET ALUMINUM SIGNS	3"@7.58 GALV.STL.P IPE POST	3 1/2"@9.11 GALV.STL.PIPE POST	2" SQUARE TUBE POST	DELINEATORS (TYPE 2, CODE 1)			
				EA	EA	SF	A	B	A	B	EA		
T025	71	124+45 LT.					LF					OMITTED	
T025	72	124+46 RT.										OMITTED	
T025	73	125+25 RT.	OM1-1	2								REMOVE EXIST. SIGNS	
T025	74	125+52 RT.	W8-9	1		9.00				12		REMOVE EXIST. & INSTALL NEW SIGN & POST	
T025	75	126+31 RT.	OM1-1	2								REMOVE EXIST. SIGNS	
T025	76	127+43 RT.	OM-3L	1								REMOVE EXIST. SIGN	
T025	77	127+97 RT.	OM-3L	1								REMOVE EXIST. SIGN	
T025	78	128+12 RT.	OM-3R	1								REMOVE EXIST. SIGN	
T025	79	128+49 RT.	OM-3R	1								REMOVE EXIST. SIGN	
T025	80	129+00 LT.	W8-13E			9.00				12		INSTALL NEW SIGN & POST	
T025	81	132+03 LT.	W8-13E	1								REMOVE EXIST. SIGN	
T025	81A	135+00 LT.	R2-1E(55)									INSTALL NEW SIGN & POST	
T025	81B	135+50 RT.	R2-1E(65)									INSTALL NEW SIGN & POST	
T025	81C	145+00 LT.	WE-5E(55)									INSTALL NEW SIGN & POST	
HARVEY ROAD/SH-270A													
T026	166	19+30 RT.	W3-3			6.25				12		INSTALL NEW SIGN & POST	
T026	167	25+71 LT.	W10-1	1								REMOVE EXIST. SIGN	
T026	168	26+00 LT.	W10-1, NO TRUCKS		1	7.07	14					RESET & INSTALL NEW SIGN & POST	
T026	169	28+00 LT.	M1-4E(3), M1-4E(3), M3-2E, M3-4E, M6-1E(R), M6-1E(L)			40.26		12	14			INSTALL NEW SIGN & POST	
T026	170	29+00 LT.	R3-7(R)E			9.00				11		INSTALL NEW SIGN & POST	
T026	171	29+41 LT.	270 E, 270 W	2								REMOVE EXIST. SIGN	
T026	172	31+00 RT.	R3-9B(E)			12				12		INSTALL NEW SIGN & POST	
T026	173	31+00 LT.	R3-9B(E), M4-6E			16.5	14					INSTALL NEW SIGN & POST	
T026	174	33+50 LT.	R2-1E(40)			12				11		INSTALL NEW SIGN & POST	
T026	175	34+50 LT.	M5-1R			2.19						REPLACE SIGN	
T026	176	35+50 LT.	W3-3E			16.00				12	12	INSTALL NEW SIGN & POST	
SUBTOTAL				13	1	139	28	12	14	82	12	0	0
TOTAL				55	2	598	56	180	426	6	0		

STRIPING SUMMARY									
SHEET NO	STATION TO STATION	855(A)	855(A)	855(A)	855(A)	856(A)	855(A)	855(B)	TRAF. STR(PLAST)(SYMBOLS, WORDS, ETC)
		TRAFFIC STRIPE(PLASTIC)(4" WIDE)	TRAFFIC STRIPE(PLASTIC)(4" WIDE)	TRAFFIC STRIPE(PLASTIC)(8" WIDE)	TRAFFIC STRIPE(PLASTIC)(8" WIDE)	TRAFFIC STRIPE(PLASTIC)(12" WIDE)	TRAFFIC STRIPE(PLASTIC)(24" WIDE)	TRAF. STR(PLAST)(SYMBOLS, WORDS, ETC)	
		WHITE	YELLOW	SOLID WHITE	SOLID YELLOW	SOLID YELLOW	SOLID WHITE	WHITE	
		LF	LF	LF	LF	LF	LF	EA	
US 270									
T023	64+00 TO 93+00	4,307	8,531		582	607	130	17	
T024	93+00 TO 122+00	3,920	7,640			176		4	
T025	122+00 TO 150+00	5,702	7,662			417		3	
HARVEY ROAD/SH-270A									
T026	24+55 TO 37+30	2,398	3,116		92	50	157	14	
SUB-TOTAL		16,327	26,948	0	674	1,250	287	38	
TOTAL		43,275		674		1,250	287	38	

SPECIAL SIGNS SUMMARY											
SHT. NO.	ITEM NO.	APPROXIMATE STATION	TYPE OF SIGNS	804(A)	804(B)	805(A)	850(B)	851(A)		REMARKS	
				STRUCTURAL CONCRETE	REINFORCING STEEL	(PL)REMOVAL OF EXISTING SIGNS	EXTRUDED ALUMINUM PANEL SIGNS	4"@13 GALV.STL.WD.FL ANGE BM.POST			
				CY	LB	EA	SF	A	B		
US 270											
T023	A	79+25 RT.	SPECIAL SIGN NO. 1, FOOTING DESIGN KC-0	0.72	130		28.00	15	16	INSTALL NEW SIGN & POST	
T023	B	86+25 LT.	SPECIAL SIGN NO. 2, FOOTING DESIGN KC-0	0.72	130		28.00	15	15	INSTALL NEW SIGN & POST	
T023	C	90+50 RT.	SPECIAL SIGN NO. 3, FOOTING DESIGN KC-0	0.72	130		27.00	14	16	INSTALL NEW SIGN & POST	
T024	D	113+89 RT.	SPECIAL SIGN NO. 4, FOOTING DESIGN KC-0	0.72	130		15.00	14	15	REMOVE EXIST. & INSTALL NEW SIGN & POST	
T024	E	116+23 LT.	SPECIAL SIGN NO. 5, FOOTING DESIGN KC-0	0.72	130		15.00	14	15	INSTALL NEW SIGN & POST	
T025	F	129+85 RT.	SPECIAL SIGN NO. 6, FOOTING DESIGN KC-0	0.72	130	1	33.80	15	16	INSTALL NEW SIGN & POST	
SH 270A											
T026	L	30+00 LT.	SPECIAL SIGN NO. 13, FOOTING DESIGN KC-0	0.72	130		28.00	15	16	INSTALL NEW SIGN & POST	
TOTAL				6	910	1	174.80	420			

DESIGN		<p align="center">OKLAHOMA DEPARTMENT OF TRANSPORTATION</p> <p align="center">SUMMARY SHEET (SIGNING & STRIPING)</p> <p align="center">STATE JOB NO. 21006(04) SHEET NO. T019</p>
DRAWN		
CHECKED		
APPROVED		
CREW		

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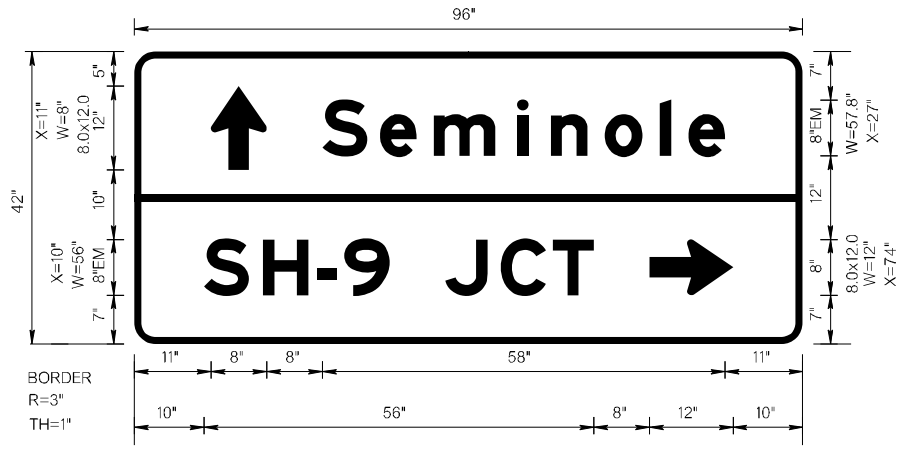


SIGN NUMBER	SP-1
WIDTH x HIGHT.	8'-0" x 3'-6"
BORDER WIDTH	1"
CORNER RADIUS	3"
MOUNTING	GROUND
SIGN AREA	28.0 Sq.Ft.
BACKGROUND	TYPE: REFLECTIVE COLOR: GREEN
LEGEND/BORDER	TYPE: REFLECTIVE COLOR: WHITE

SYMBOL	X	Y	WID	HT
AR_Type D	9.2	25	8	12
AR_Type D	9.8	7	8	12

Panel Style: ODOT-Destination.ssi
M.U.T.C.D.: 2009 Edition
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)													LENGTH SERIES/SIZE				
M	c	A	l	e	s	t	e	r									EM 2000
25.2	34.6	41.1	51.1	55.2	62.1	69	75	82.8								61.6	
S	H	-	9		J	C	T										EM 2000
29.8	38.3	46.1	50	56.4	64.4	72.4	79.9									56	

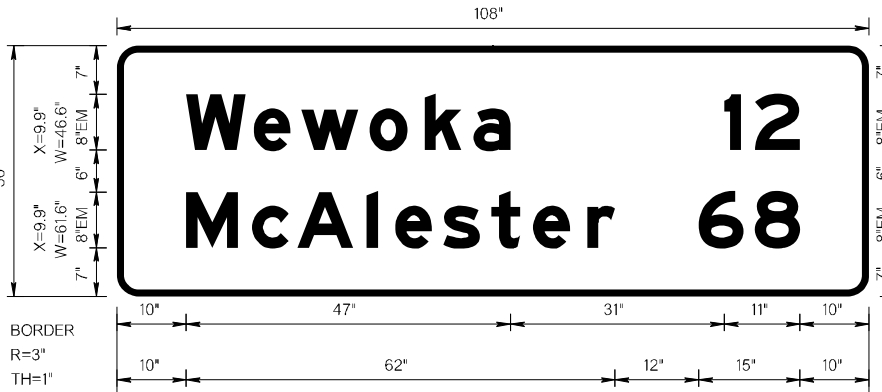


SIGN NUMBER	SP-2
WIDTH x HIGHT.	8'-0" x 3'-6"
BORDER WIDTH	1"
CORNER RADIUS	3"
MOUNTING	GROUND
SIGN AREA	28.0 SQ.FT.
BACKGROUND	TYPE: REFLECTIVE COLOR: GREEN
LEGEND/BORDER	TYPE: REFLECTIVE COLOR: WHITE

SYMBOL	X	Y	WID	HT
AR_Type D	11	25	8	12
AR_Type D	74	7	8	12

Panel Style: ODOT-Destination.ssi
M.U.T.C.D.: 2009 Edition
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)													LENGTH SERIES/SIZE				
S	e	m	i	n	o	l	e										EM 2000
27	35.2	43	55	59.8	67.6	75.5	79.6									57.8	
S	H	-	9		J	C	T										EM 2000
10	18.5	26.3	30.2	36.6	44.6	52.6	60.1									56	

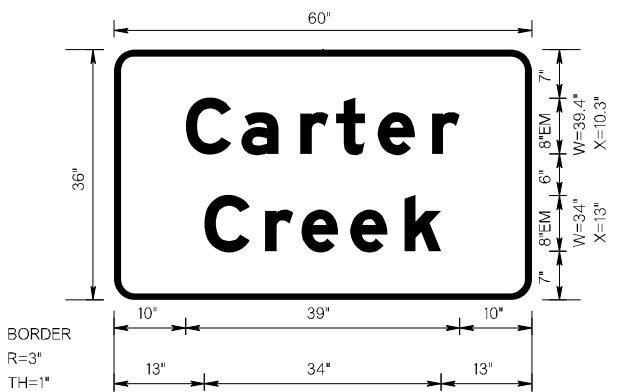


SIGN NUMBER	SP-3
WIDTH x HIGHT.	9'-0" x 3'-0"
BORDER WIDTH	1"
CORNER RADIUS	3"
MOUNTING	GROUND
SIGN AREA	27.0 SQ.FT.
BACKGROUND	TYPE: REFLECTIVE COLOR: GREEN
LEGEND/BORDER	TYPE: REFLECTIVE COLOR: WHITE

SYMBOL	X	Y	WID	HT

Panel Style: ODOT Distance Border.ssi
M.U.T.C.D.: 2009 Edition
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)													LENGTH SERIES/SIZE				
W	e	w	o	k	a												EM 2000
9.9	19.6	26.5	36.2	44.2	51.2											46.6	
1	2																EM 2000
87.2	91.6															10.9	
M	c	A	l	e	s	t	e	r									EM 2000
9.9	19.4	25.8	35.8	39.9	46.8	53.8	59.8	67.5								61.6	
6	8																EM 2000
83.5	91.6															14.6	



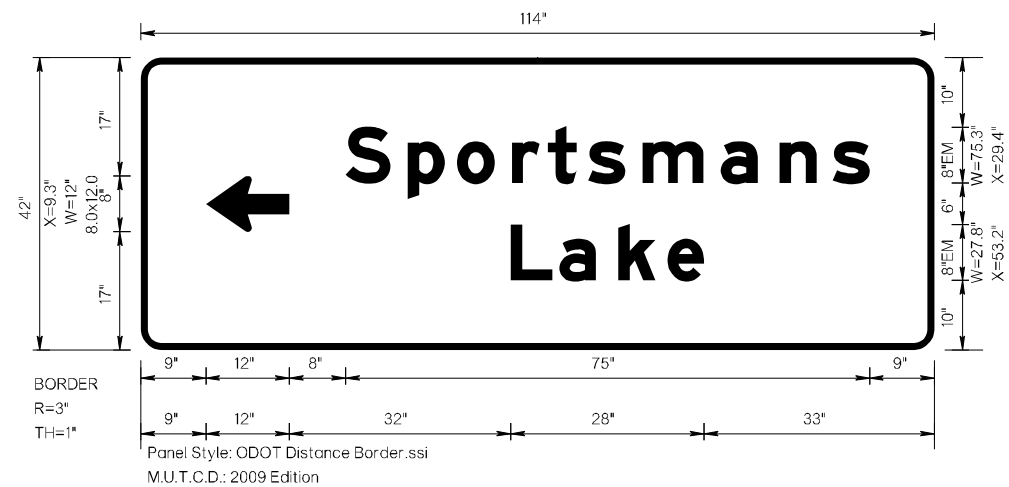
SIGN NUMBER	SP-4 & SP-5
WIDTH x HIGHT.	5'-0" x 3'-0"
BORDER WIDTH	1"
CORNER RADIUS	3"
MOUNTING	GROUND
SIGN AREA	15.0 SQ.FT.
BACKGROUND	TYPE: REFLECTIVE COLOR: GREEN
LEGEND/BORDER	TYPE: REFLECTIVE COLOR: WHITE

SYMBOL	X	Y	WID	HT

Panel Style: OKDOT DESTINATION.ssi
M.U.T.C.D.: 2009 Edition
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)													LENGTH SERIES/SIZE				
C	a	r	t	e	r												EM 2000
10.3	18.3	26.8	31.9	37.9	45.7											39.4	
C	r	e	e	k													EM 2000
13	21.7	26.9	34	41.7												34	

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION SPECIAL SIGNS STATE JOB NO. 21006(04) SHEET NO. T021
DRAWN		
CHECKED		
APPROVED		
CREW		



SIGN NUMBER	SP-6
WIDTH x HGHT.	9'-6" x 3'-6"
BORDER WIDTH	1"
CORNER RADIUS	3"
MOUNTING	GROUND
SIGN AREA	33.3 Sq.Ft.
BACKGROUND	TYPE: REFLECTIVE COLOR: GREEN
LEGEND/BORDER	TYPE: REFLECTIVE COLOR: WHITE

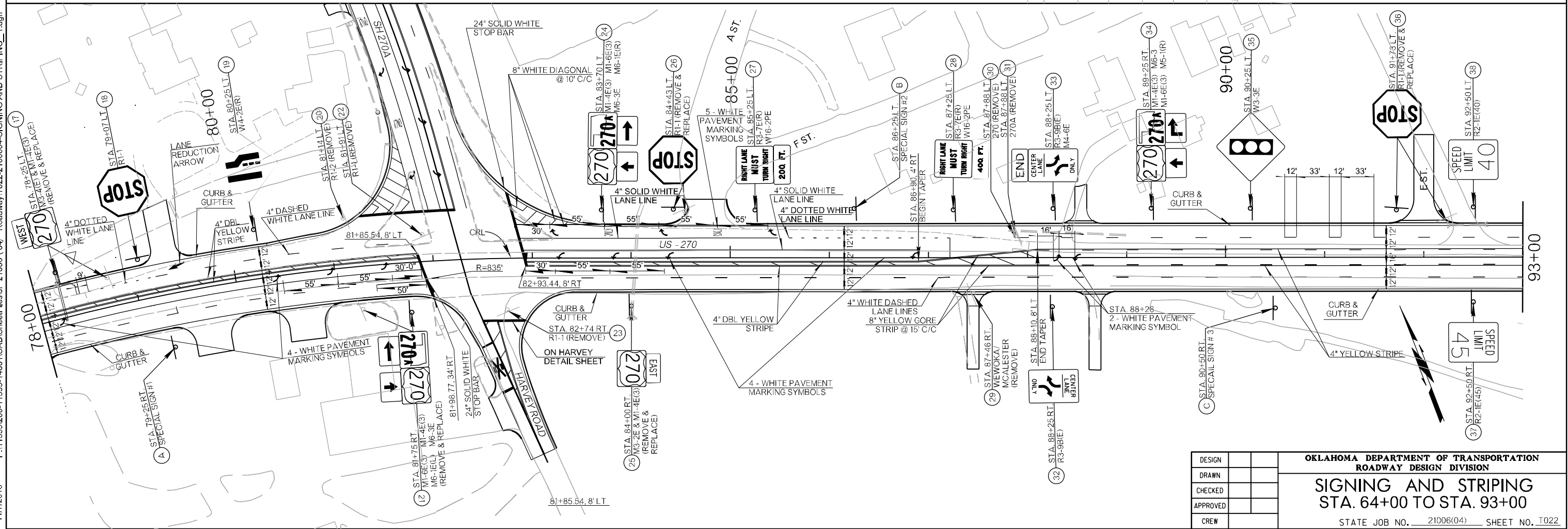
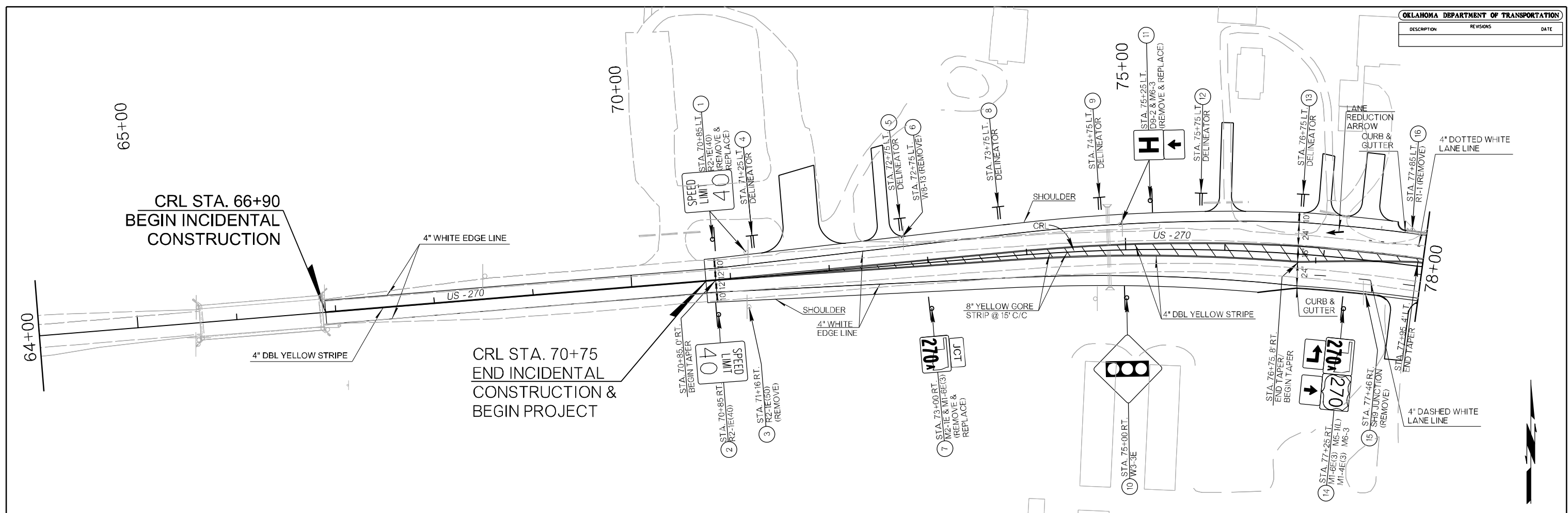
SYMBOL	X	Y	WID	HT
AR_Type D	9.3	17	8	12

Dimensions are in. Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)													LENGTH		SERIES/SIZE							
S	p	o	r	t	s	m	a	n	s												EM 2000	
29.4	38.4	45.4	53.3	58.4	64.3	72	83.3	91.8	99.4												75.3	
L	a	k	e																			EM 2000
53.2	60.1	68.6	75.6																			27.8

11/7/2018 P:\11399\200-11399-14001\CAD\SheetFiles\JP_21006 (04) Roadway\T021-2100611-SPECIAL SIGN_2.dgn

DESIGN			OKLAHOMA DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION SPECIAL SIGNS STATE JOB NO. 21006(04) SHEET NO. T021
DRAWN			
CHECKED			
APPROVED			
CREW			

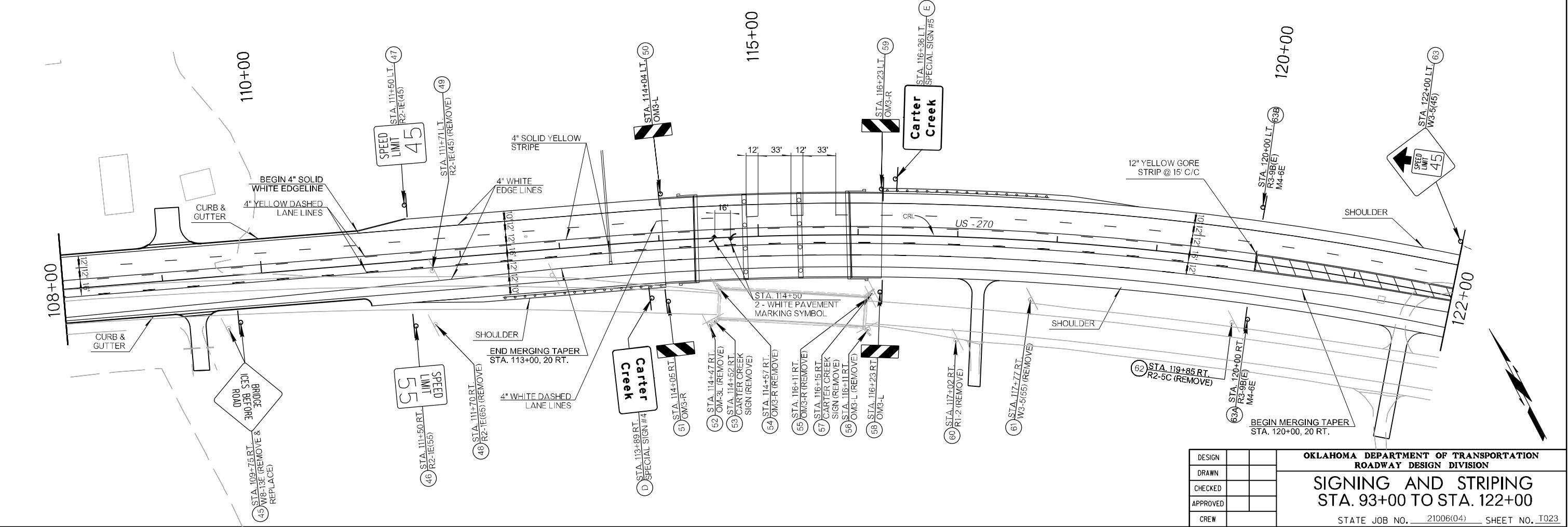
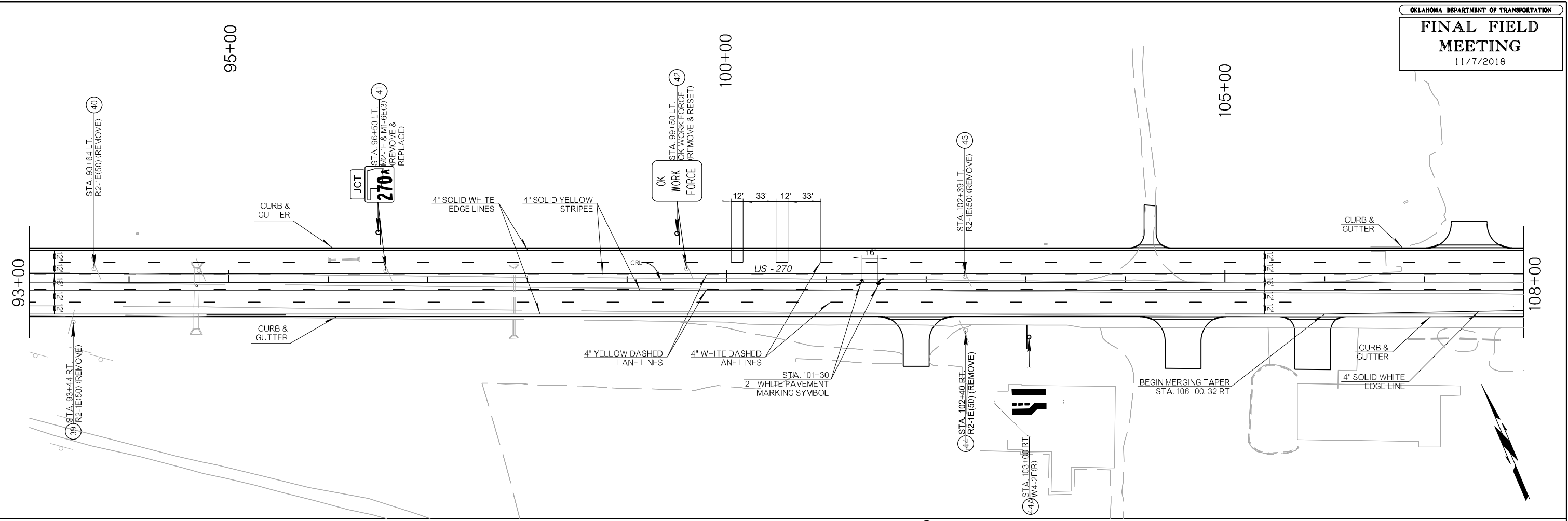


DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION	
DRAWN		SIGNING AND STRIPING STA. 64+00 TO STA. 93+00 STATE JOB NO. 21006(04) SHEET NO. T022	
CHECKED			
APPROVED			
CREW			

SEMINOLE CO. US-270

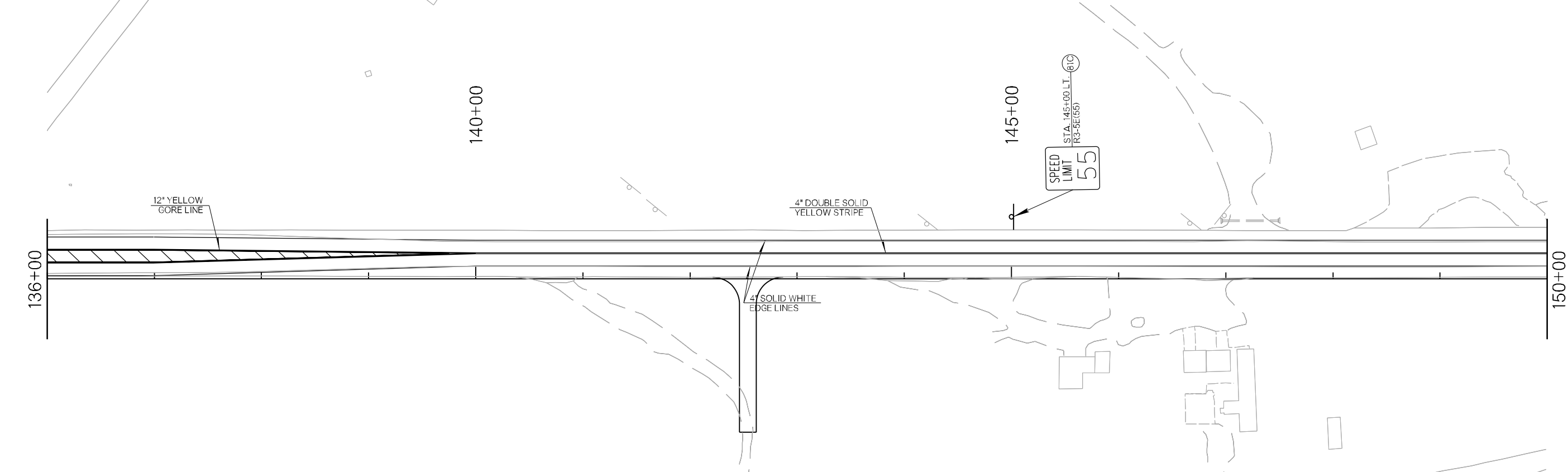
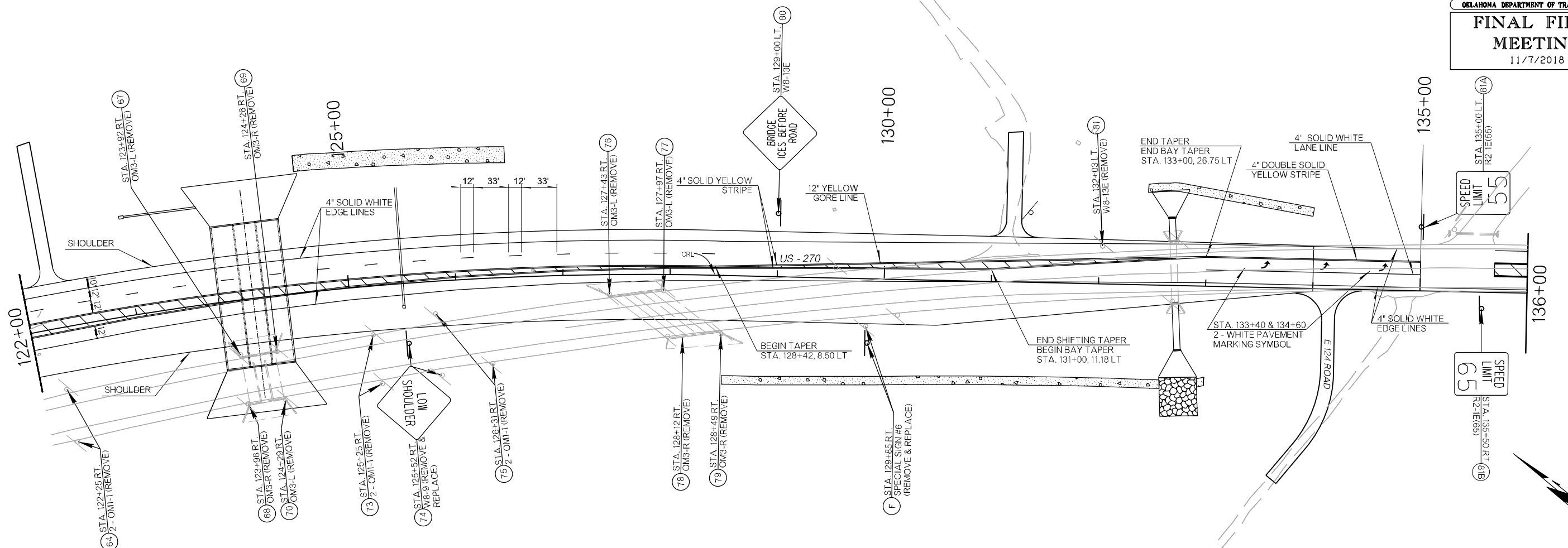
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11/7/2018 P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\T023-210604-SIGNING AND STRIPING_2.dgn



DESIGN	
DRAWN	
CHECKED	
APPROVED	
CREW	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
 ROADWAY DESIGN DIVISION
SIGNING AND STRIPING
 STA. 93+00 TO STA. 122+00
 STATE JOB NO. 21006(04) SHEET NO. T023

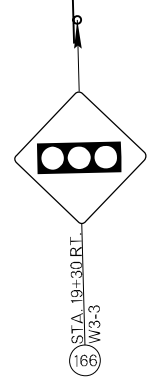
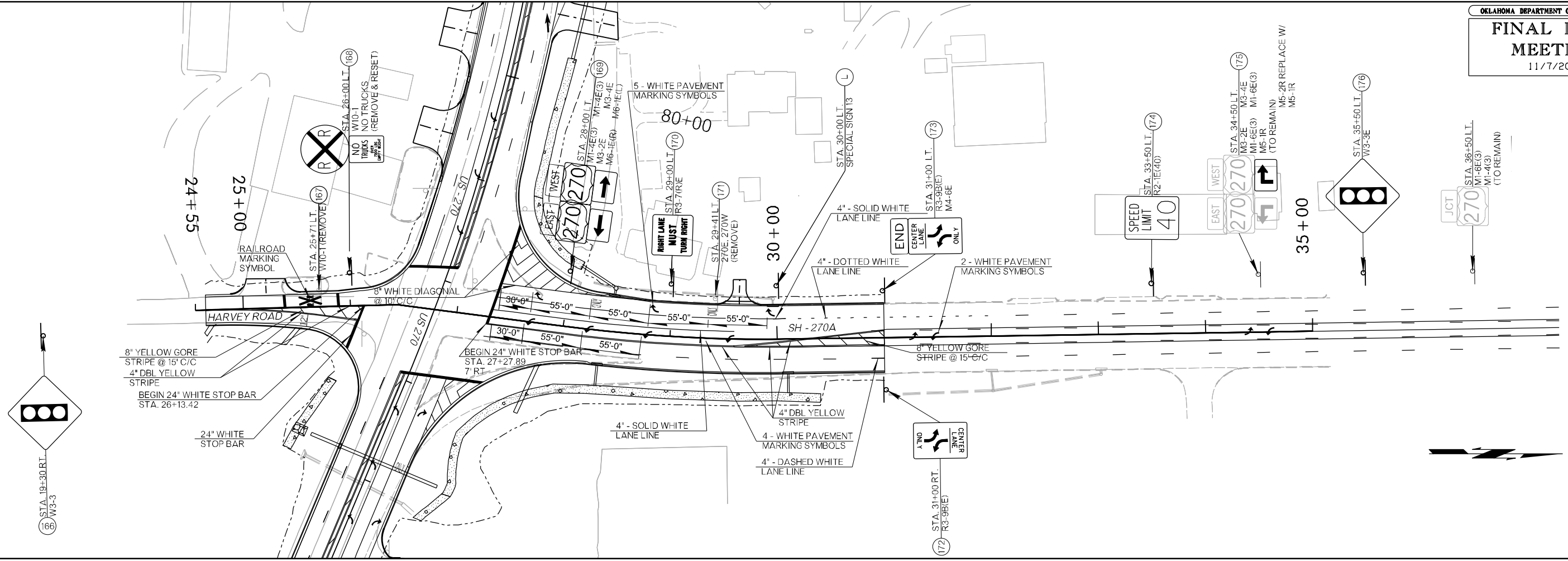


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11/7/2018

DESIGN	
DRAWN	
CHECKED	
APPROVED	
CREW	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
 ROADWAY DESIGN DIVISION
SIGNING AND STRIPING
 STA. 122+00 TO STA. 136+00
 STATE JOB NO. 21006(04) SHEET NO. T024



11/7/2018 P:\11399\200-11399-14001\CAD\SheetFiles\JP_21006 (04) Roadway\T025-2100604-SIGNING AND STRIPING_4.dgn

DESIGN			OKLAHOMA DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION SIGNING AND STRIPING HARVEY ROAD STATE JOB NO. 21006(04) SHEET NO. T025 SEMINOLE CO. US-270
DRAWN			
CHECKED			
APPROVED			
CREW			

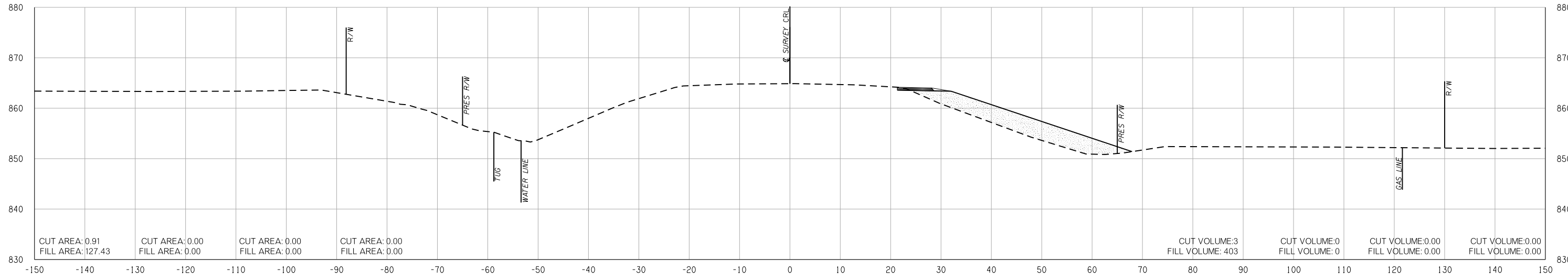
- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

END AREAS (SF)

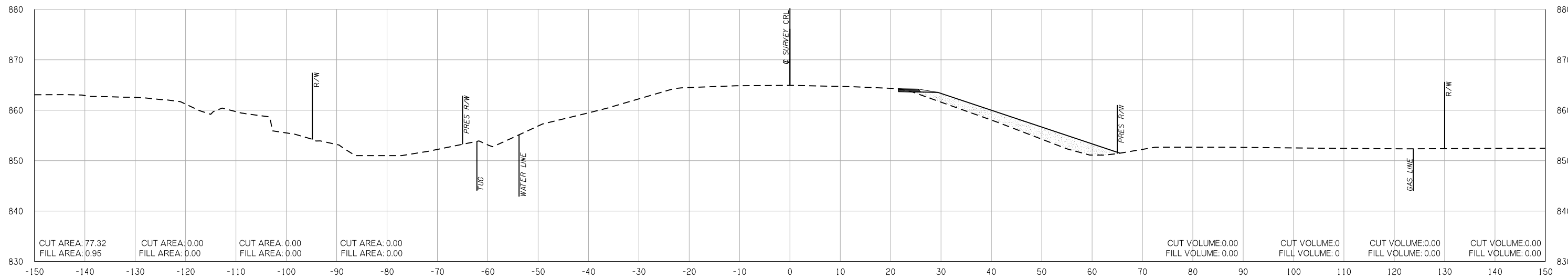
PHASE_1 PHASE_2 PHASE_3 PHASE_4

PHASE_1 PHASE_2 PHASE_3 PHASE_4

P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn 11/7/2018



70 + 00.00



BEGIN INCIDENTAL STA 69 + 50.00
69 + 50.00

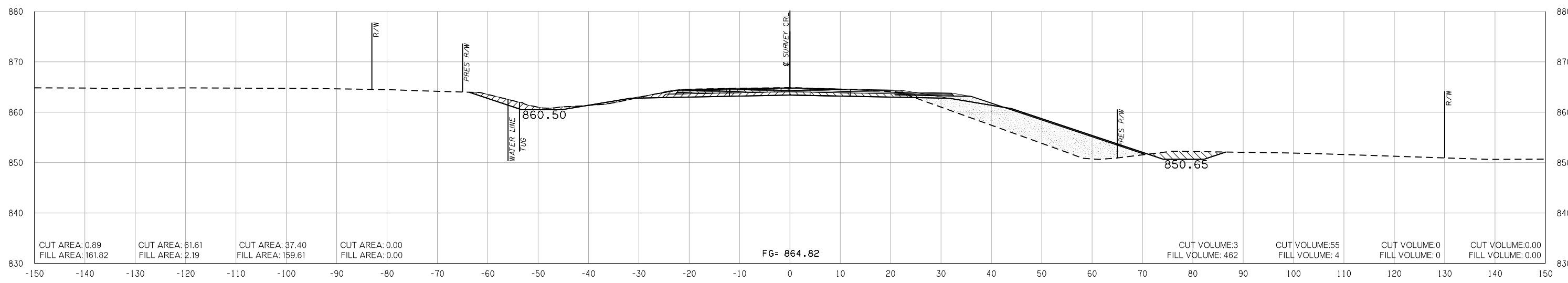
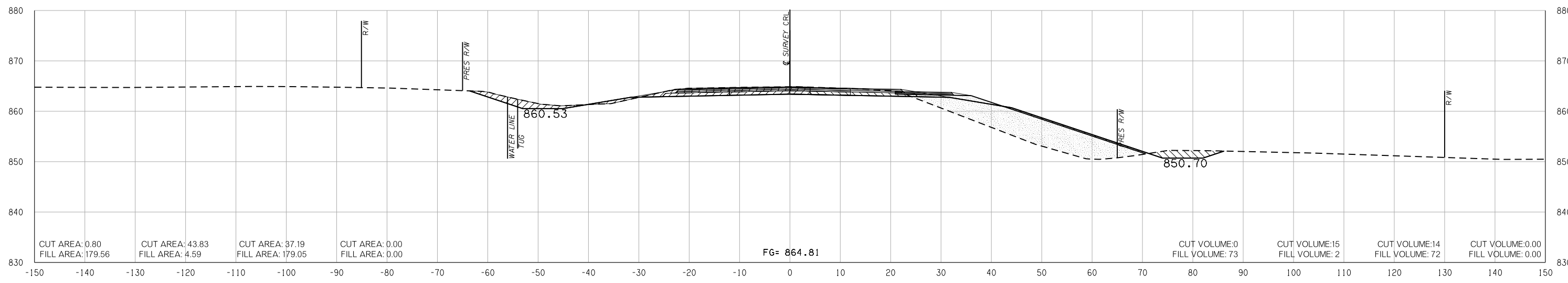
- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

END AREAS (SF)

PHASE_1 PHASE_2 PHASE_3 PHASE_4

PHASE_1 PHASE_2 PHASE_3 PHASE_4

11/7/2018 P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn



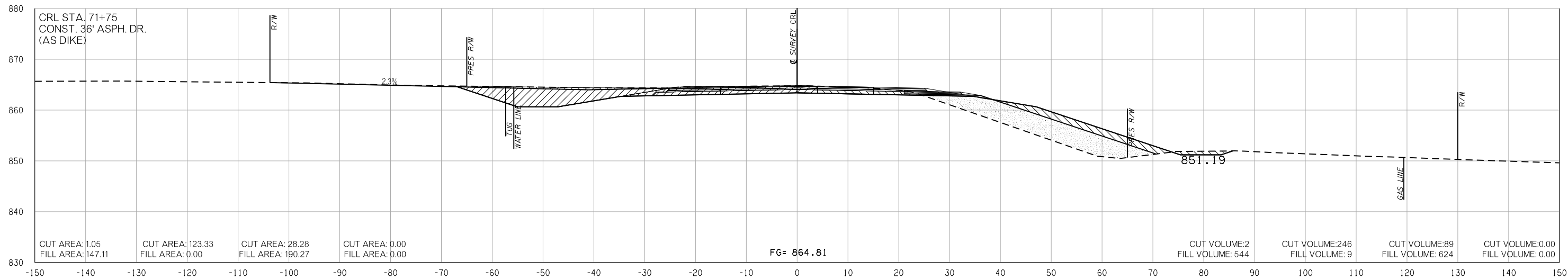
BEGIN PROJECT STA 70 + 75.00
70 + 75.00

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

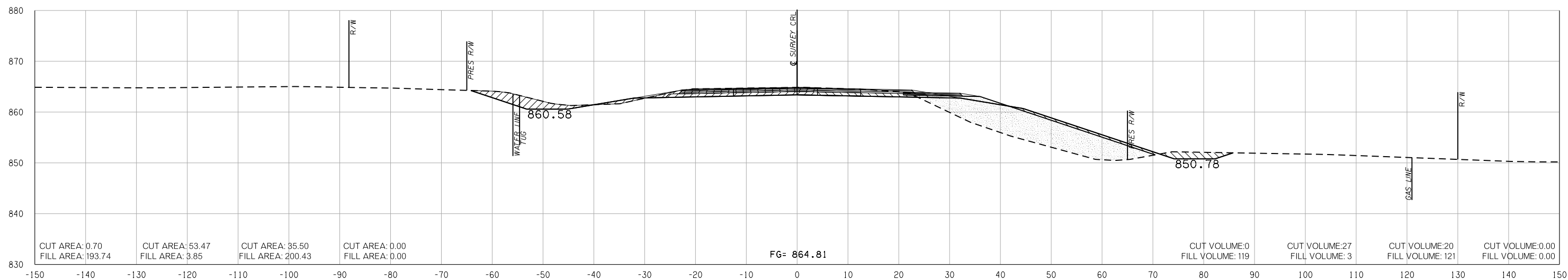
END AREAS (SF)

PHASE_1 PHASE_2 PHASE_3 PHASE_4

PHASE_1 PHASE_2 PHASE_3 PHASE_4



71+75.00

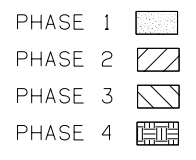


71+00.00

11/7/2018 P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn

END AREAS (SF)

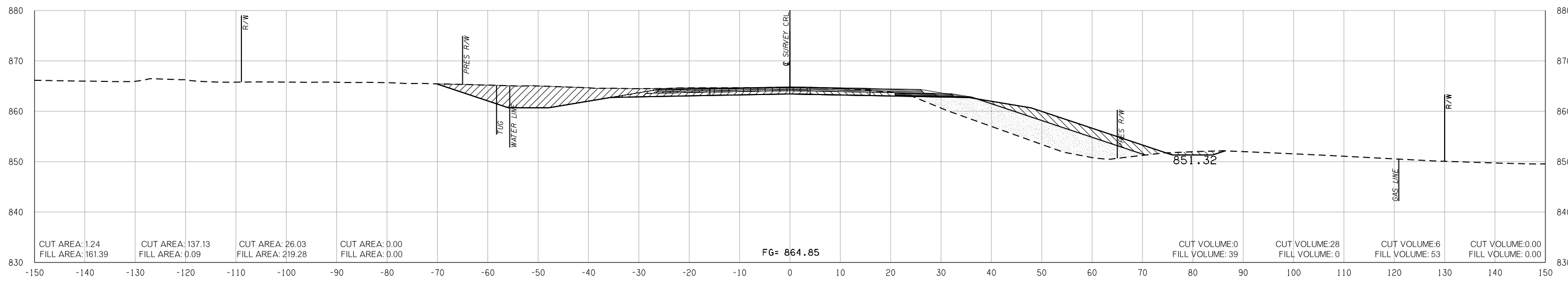
PHASE 1 PHASE 2 PHASE 3 PHASE 4



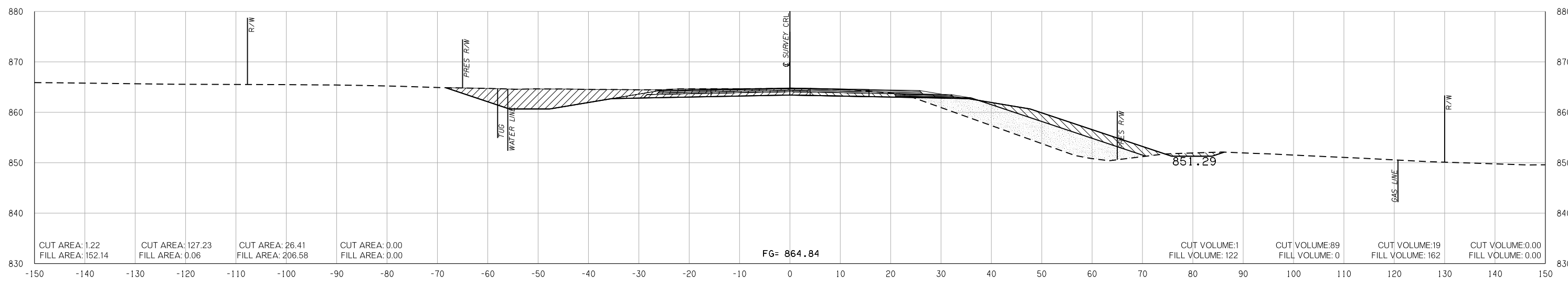
VOLUMES (CY)

PHASE 1 PHASE 2 PHASE 3 PHASE 4

11/7/2018 P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn



72 + 00.00



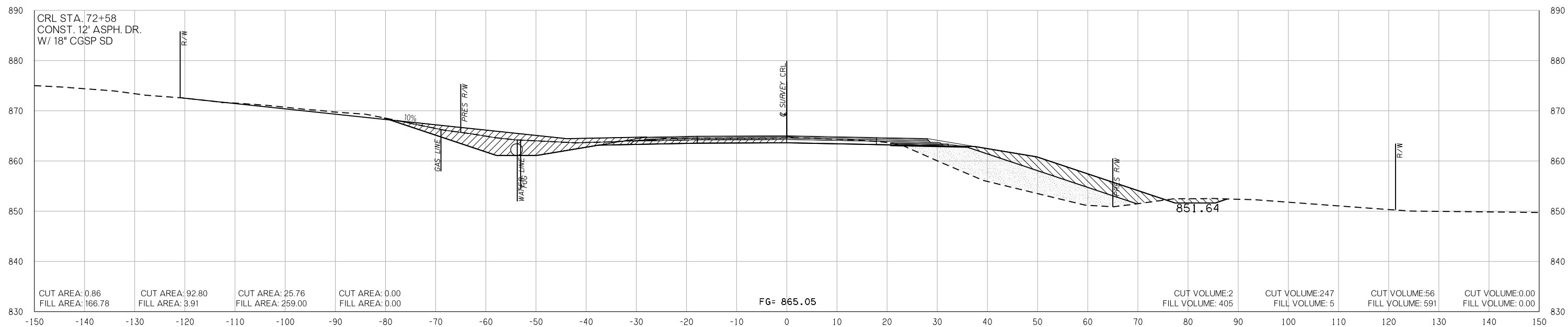
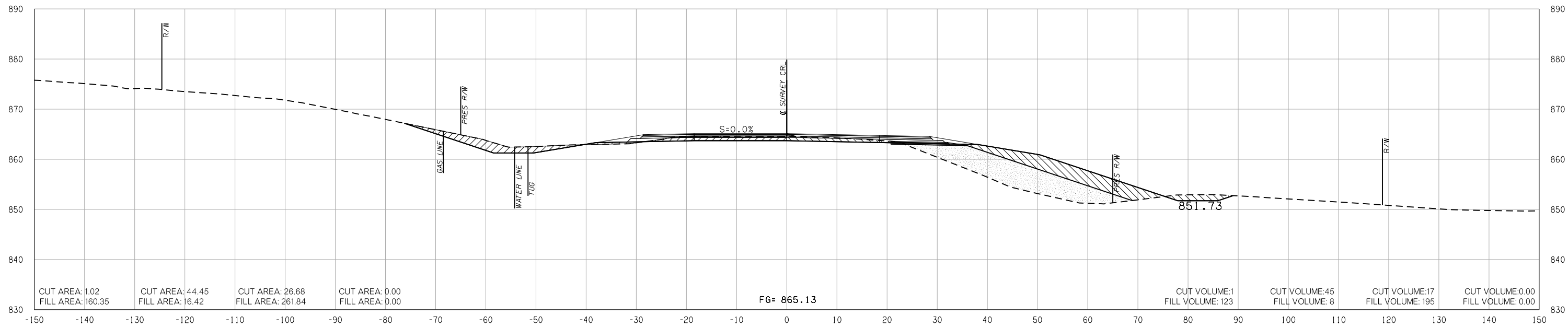
71 + 94.20

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

END AREAS (SF)

PHASE_1 PHASE_2 PHASE_3 PHASE_4

PHASE_1 PHASE_2 PHASE_3 PHASE_4



P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn 11/7/2018

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

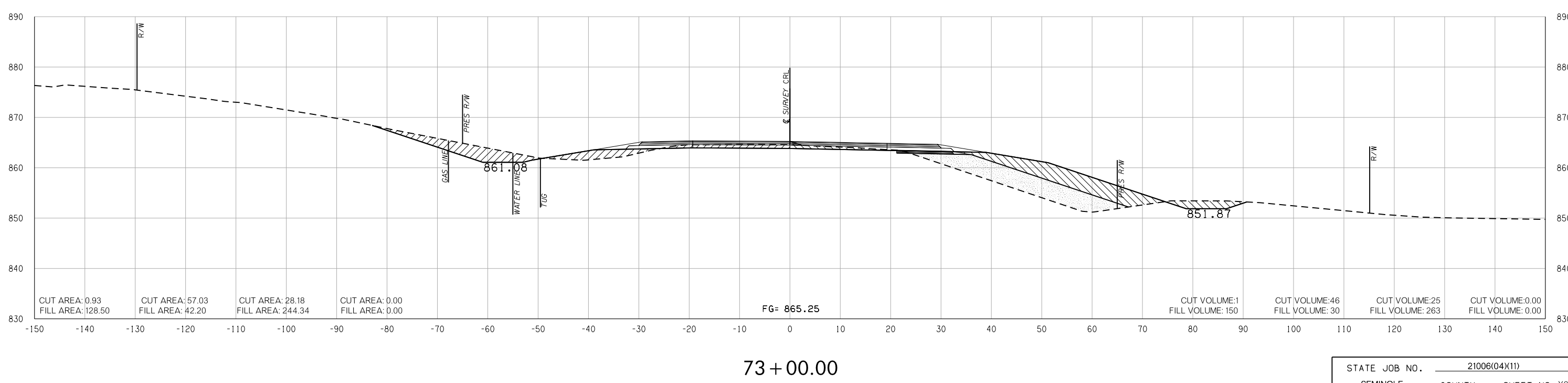
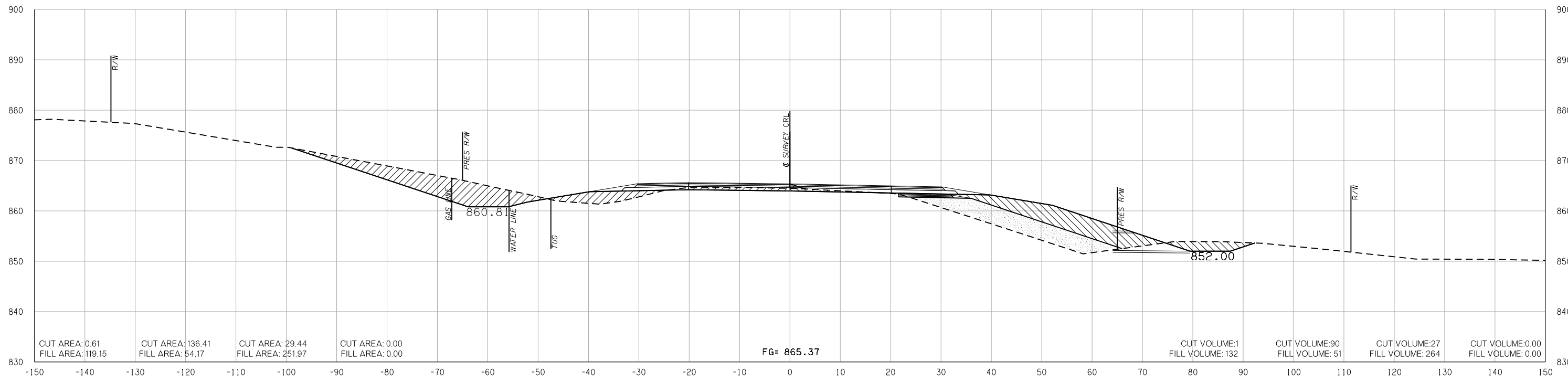
END AREAS (SF)

PHASE_1 PHASE_2 PHASE_3 PHASE_4

VOLUMES (CY)

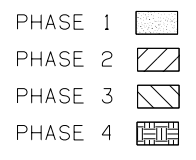
PHASE_1 PHASE_2 PHASE_3 PHASE_4

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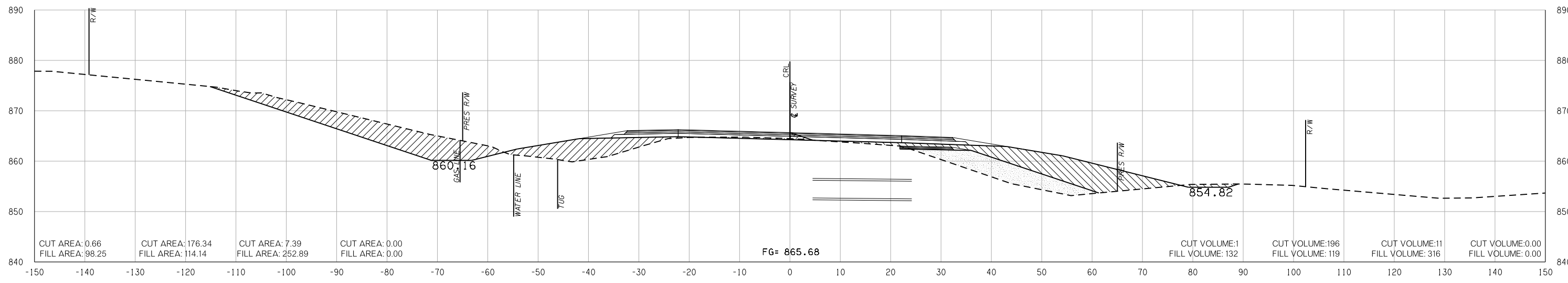
END AREAS (SF)

PHASE 1 PHASE 2 PHASE 3 PHASE 4

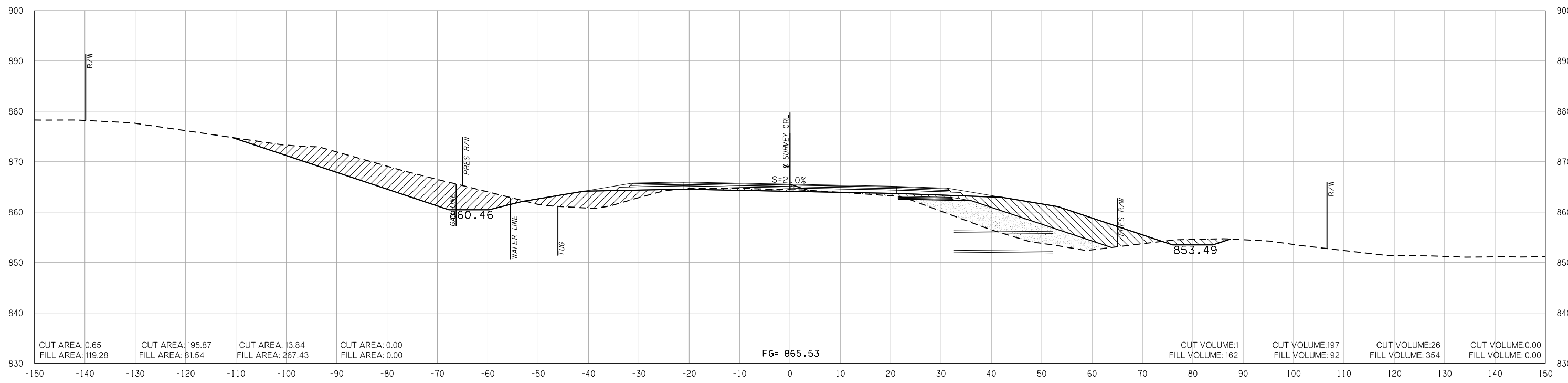


VOLUMES (CY)

PHASE 1 PHASE 2 PHASE 3 PHASE 4



73 + 85.49



73 + 57.00

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 11/7/2018

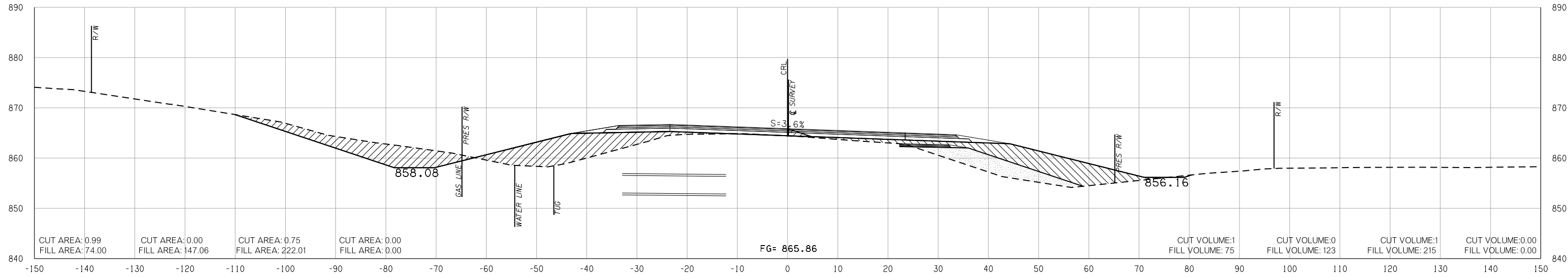
END AREAS (SF)

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

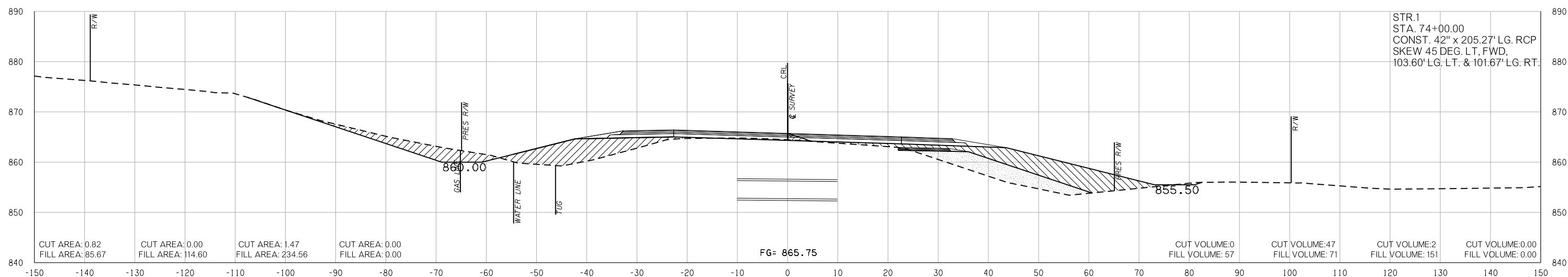
PHASE_1 PHASE_2 PHASE_3 PHASE_4

PHASE_1 PHASE_2 PHASE_3 PHASE_4

P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn



74 + 22.12



74 + 00.00

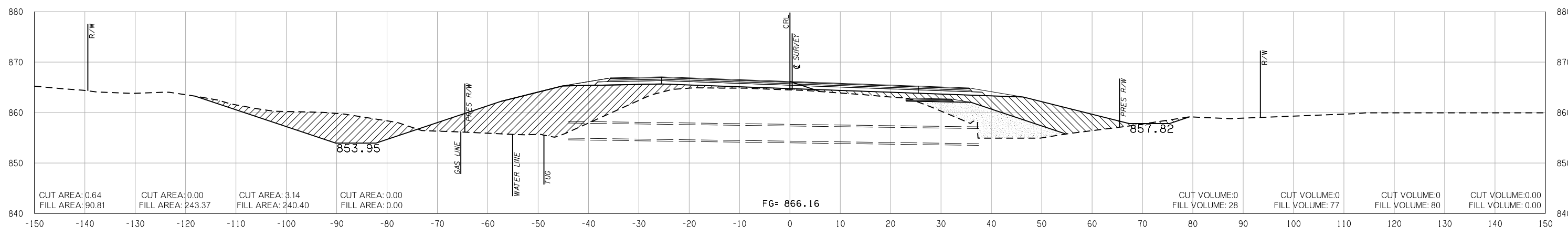
STR.1
STA. 74+00.00
CONST. 42" x 205.27' LG. RCP
SKEW 45 DEG. LT, FWD,
103.60' LG. LT. & 101.67' LG. RT.

END AREAS (SF)

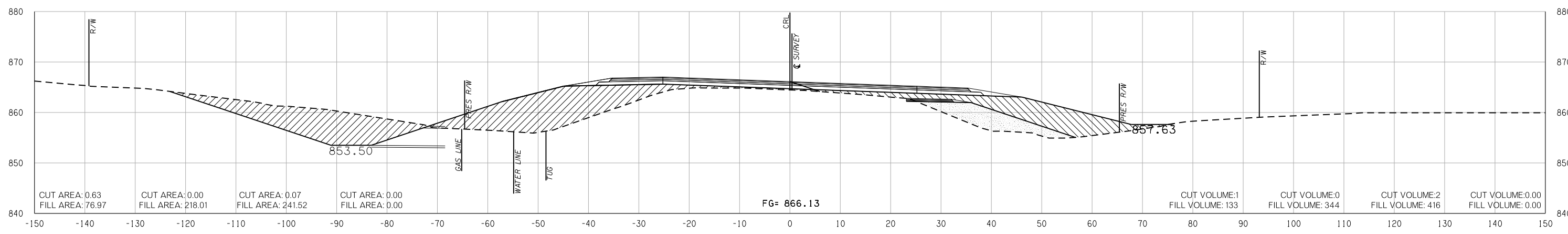
VOLUMES (CY)

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

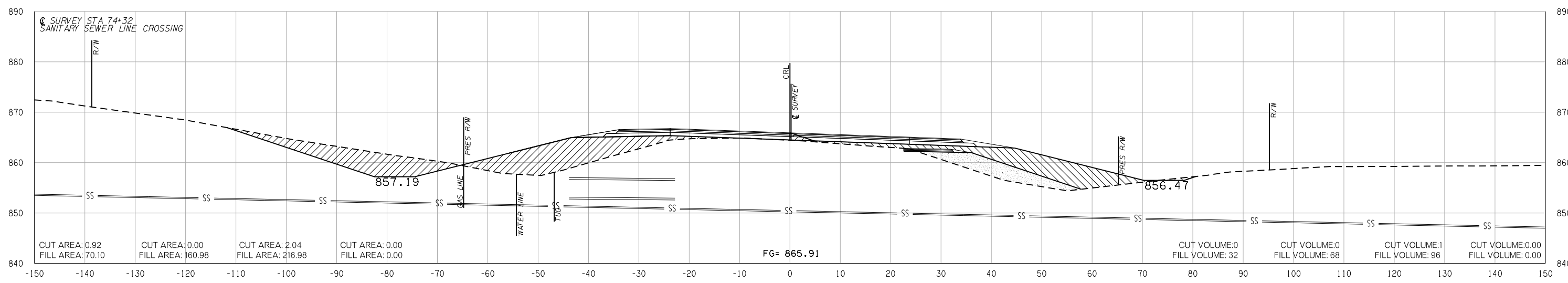
PHASE 1 PHASE 2 PHASE 3 PHASE 4 PHASE 1 PHASE 2 PHASE 3 PHASE 4



74 + 82.81



74 + 75.00



74 + 32.42

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FINAL FIELD MEETING

11/7/2018

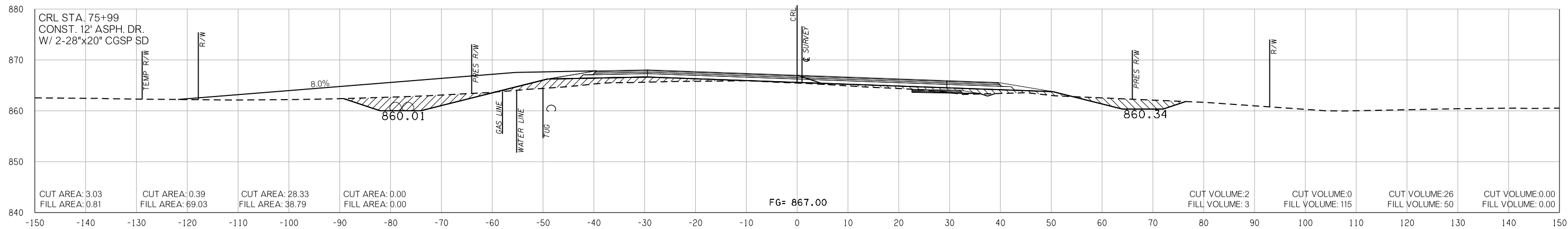
VOLUMES (CY)

END AREAS (SF)

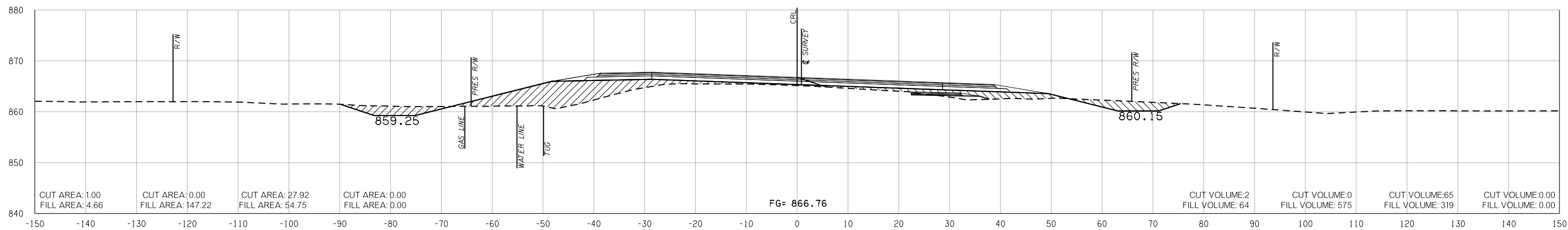
- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

PHASE 1 PHASE 2 PHASE 3 PHASE 4

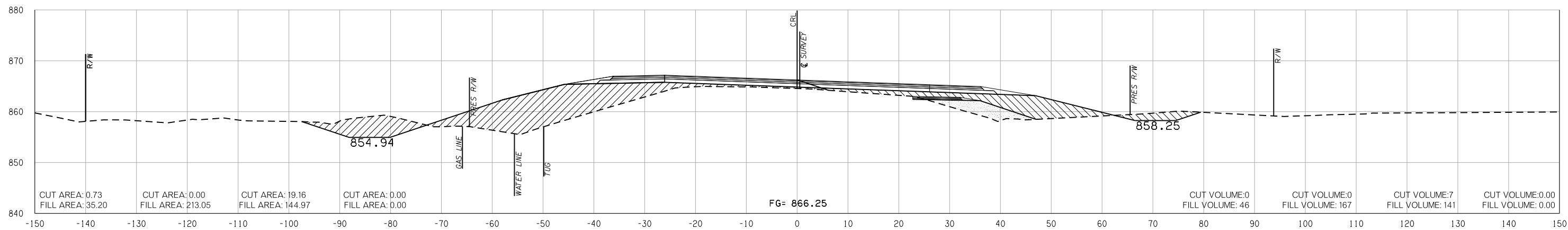
PHASE 1 PHASE 2 PHASE 3 PHASE 4



76 + 00.00



75 + 75.00



75 + 00.00

P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn 11/7/2018

END AREAS (SF)

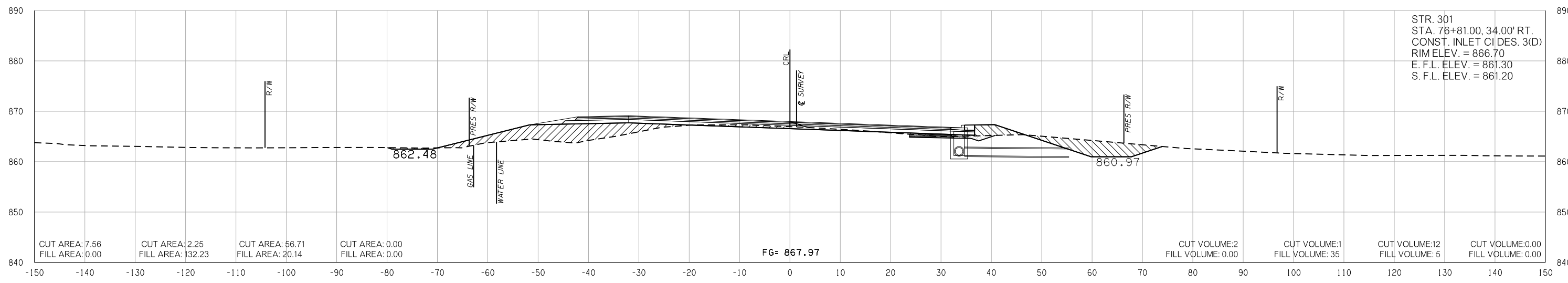
PHASE 1 PHASE 2 PHASE 3 PHASE 4

VOLUMES (CY)

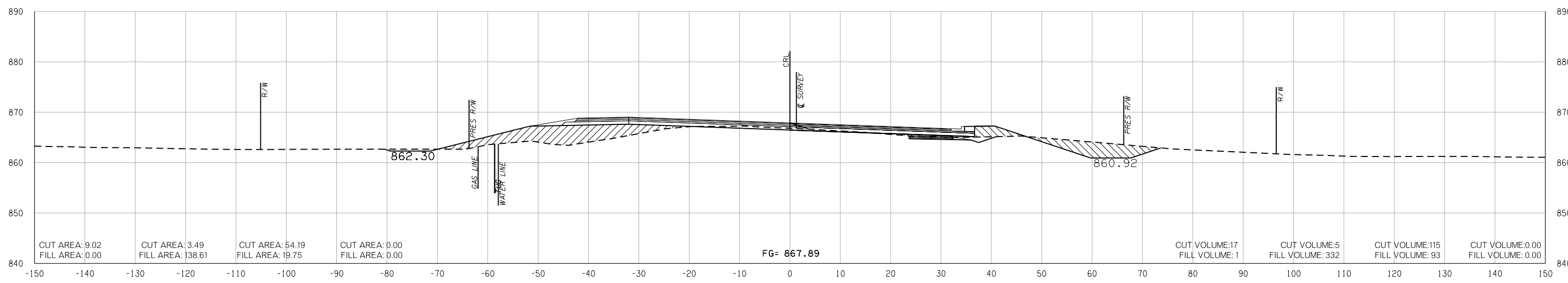
PHASE 1 PHASE 2 PHASE 3 PHASE 4

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn 11/7/2018



76 + 81.00

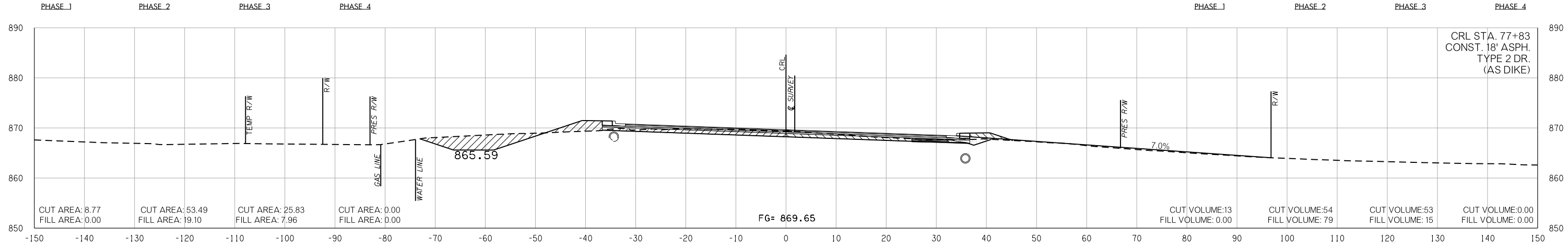


76 + 75.00

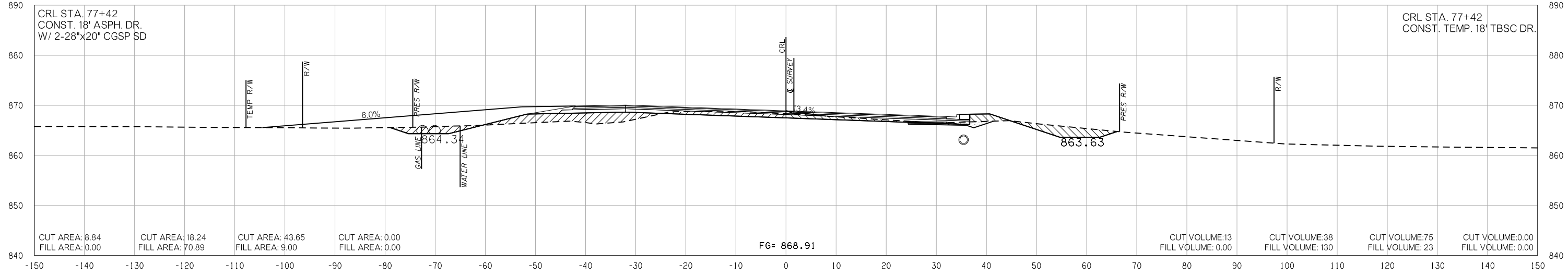
- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

END AREAS (SF)

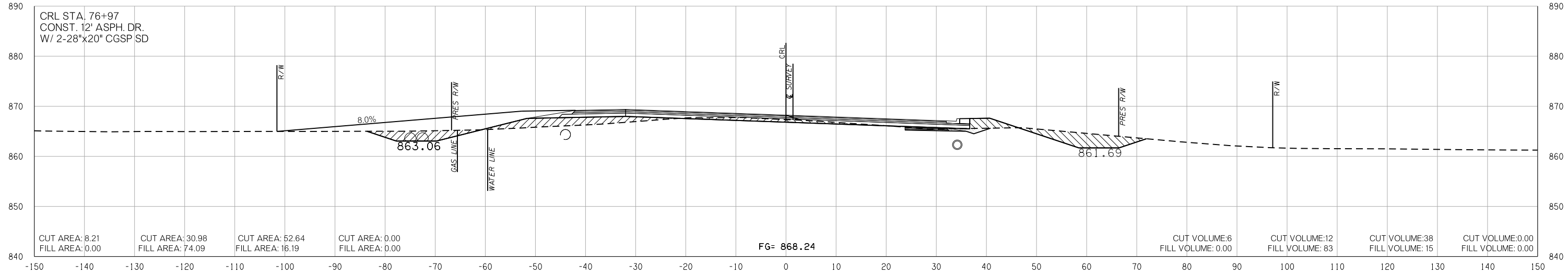
VOLUMES (CY)



77 + 83.00



77 + 42.00



77 + 00.00

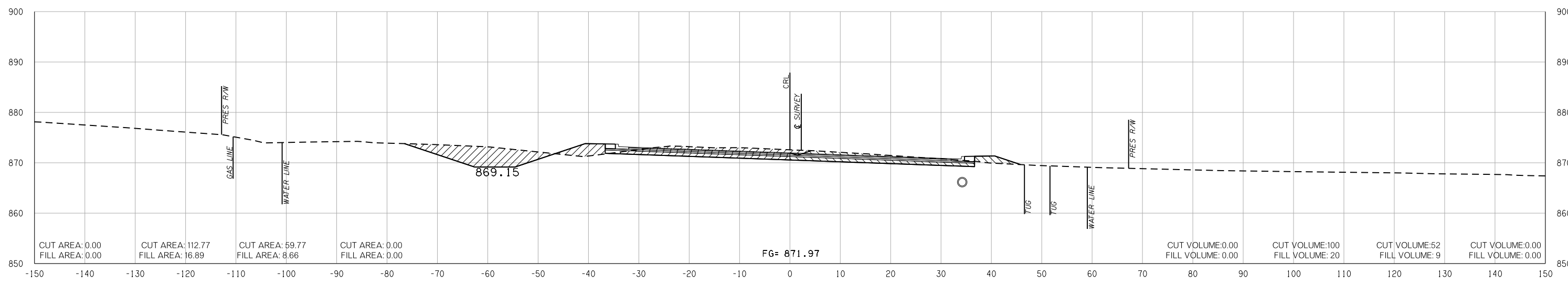
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11/7/2018

END AREAS (SF)

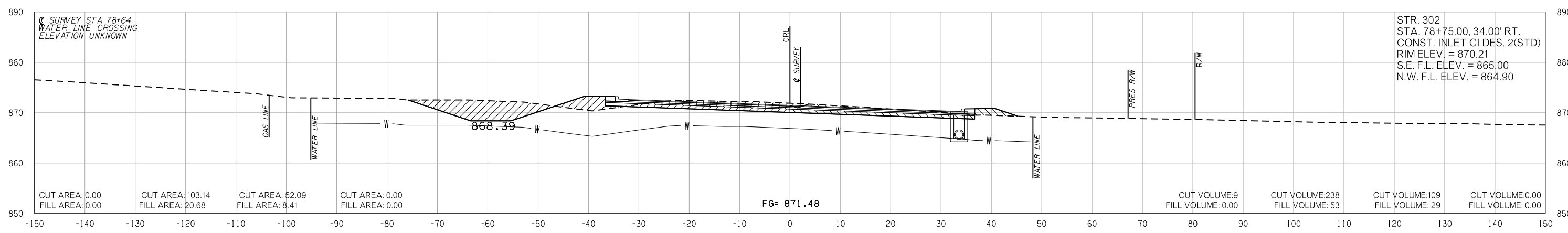
VOLUMES (CY)

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

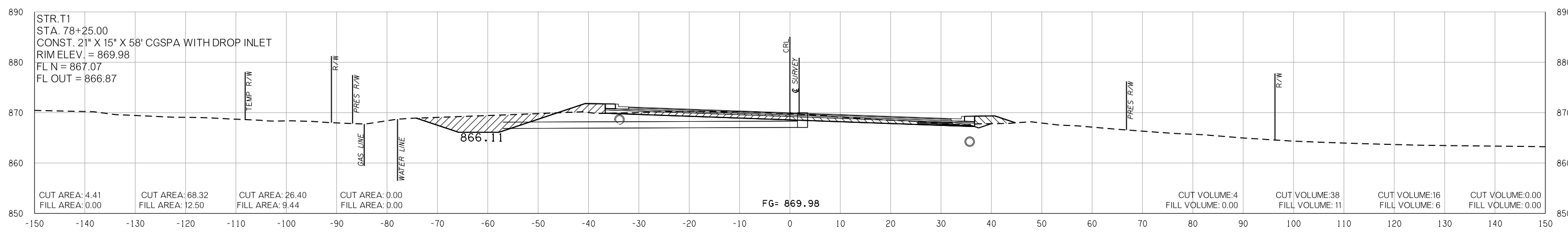
PHASE 1 PHASE 2 PHASE 3 PHASE 4 PHASE 1 PHASE 2 PHASE 3 PHASE 4



79 + 00.00



78 + 75.00



78 + 00.00

P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn
 11/7/2018

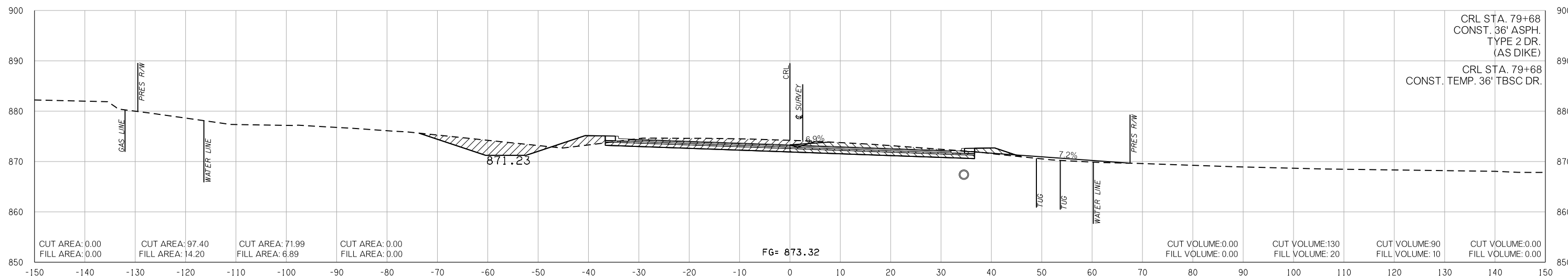
- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

END AREAS (SF)

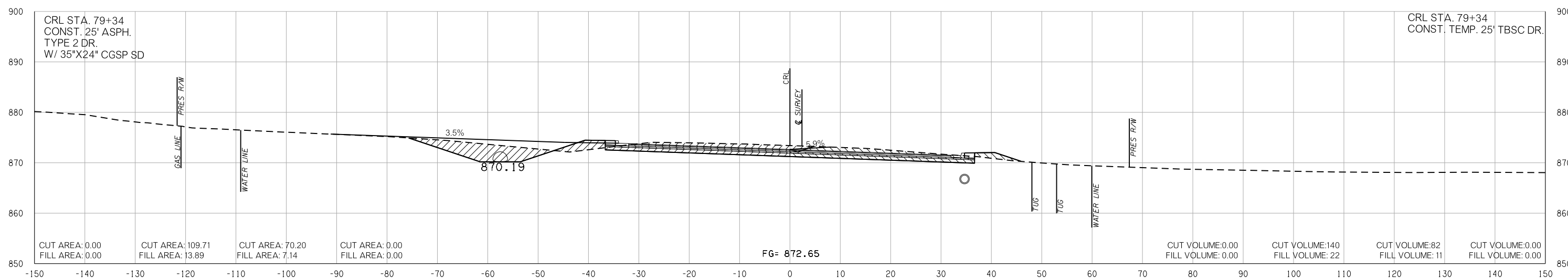
PHASE_1 PHASE_2 PHASE_3 PHASE_4

PHASE_1 PHASE_2 PHASE_3 PHASE_4

P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn



79 + 68.00



79 + 34.00

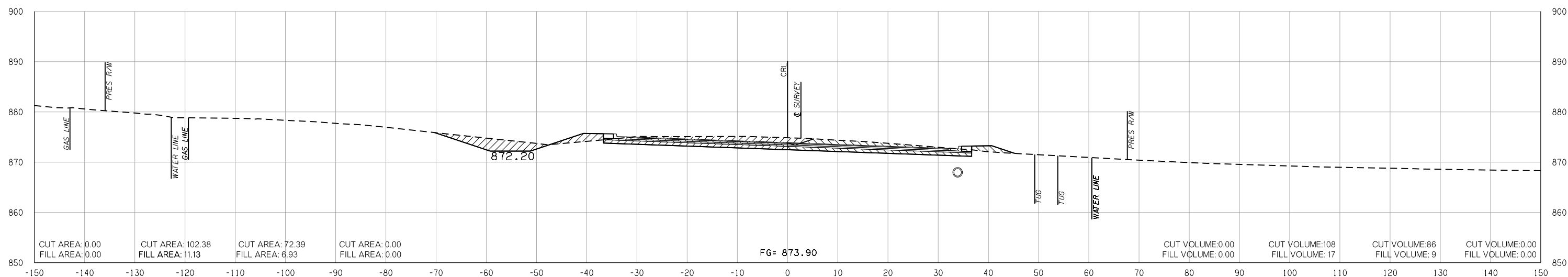
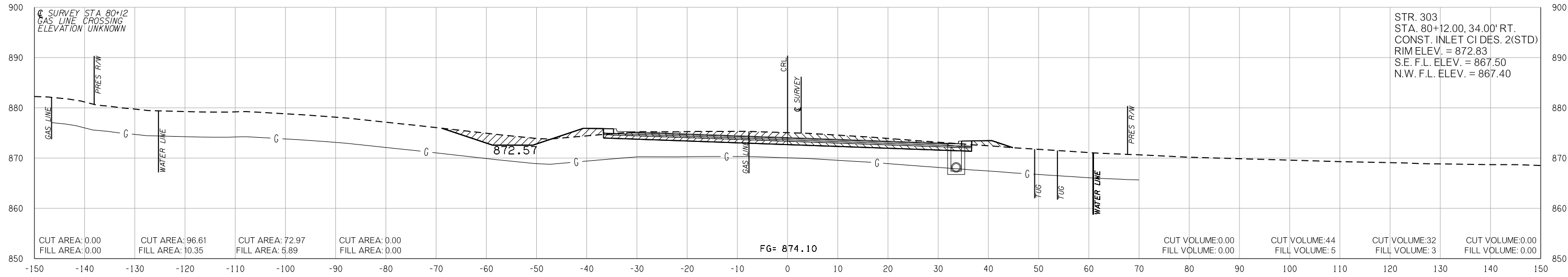
- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

END AREAS (SF)

PHASE_1 PHASE_2 PHASE_3 PHASE_4

PHASE_1 PHASE_2 PHASE_3 PHASE_4

P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn



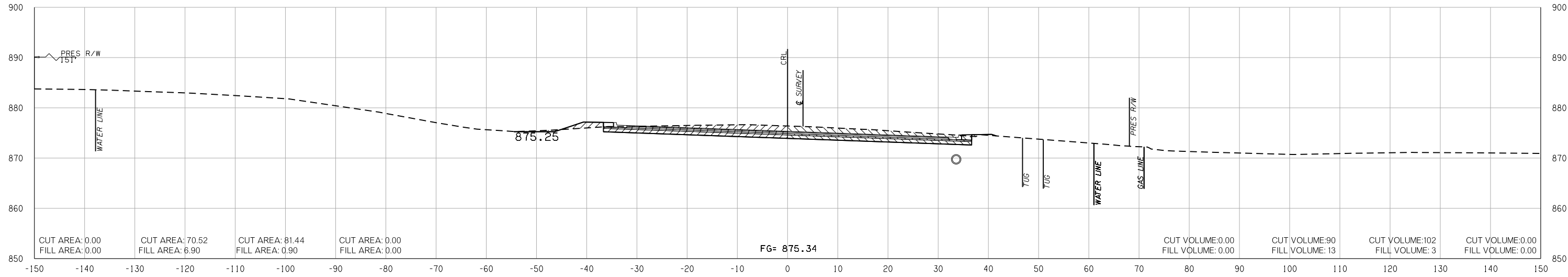
- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

END AREAS (SF)

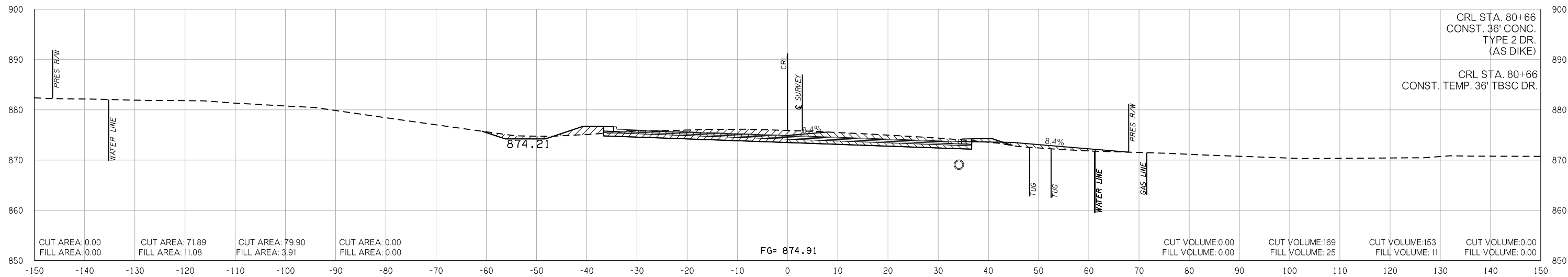
PHASE_1 PHASE_2 PHASE_3 PHASE_4

PHASE_1 PHASE_2 PHASE_3 PHASE_4

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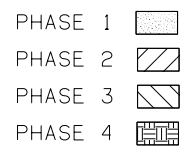
81 + 00.00



80 + 66.00

END AREAS (SF)

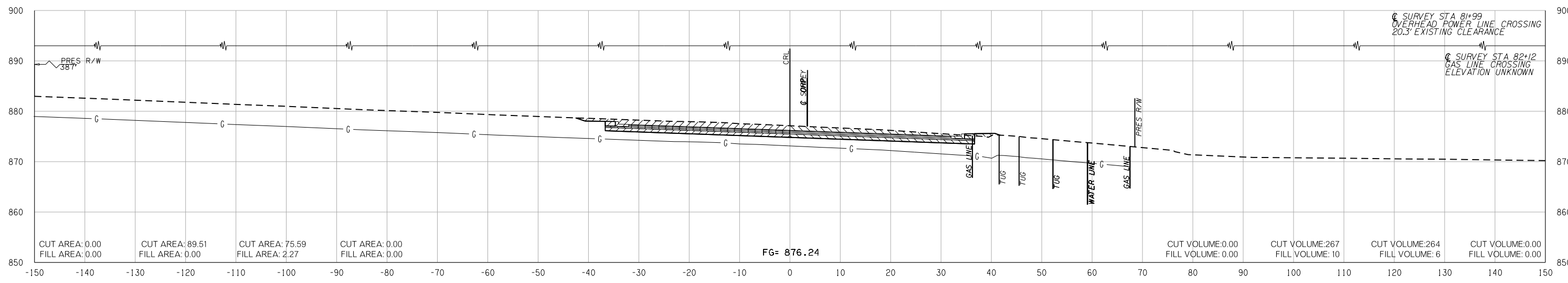
PHASE 1 PHASE 2 PHASE 3 PHASE 4



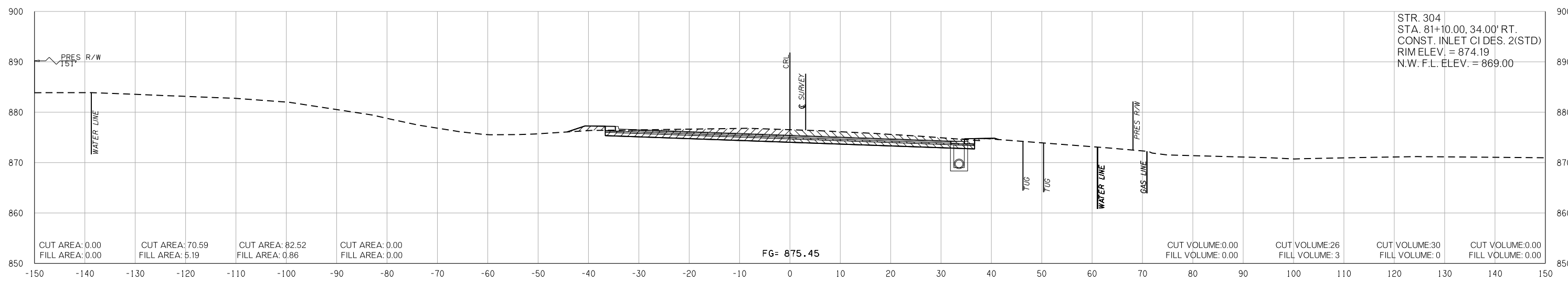
VOLUMES (CY)

PHASE 1 PHASE 2 PHASE 3 PHASE 4

P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn 11/7/2018



82 + 00.00



81 + 10.00

FINAL FIELD MEETING
11/7/2018

VOLUMES (CY)

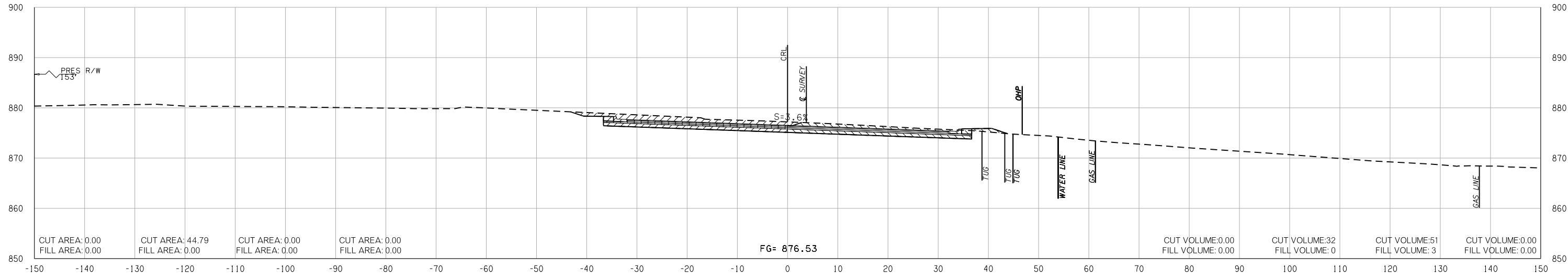
- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

END AREAS (SF)

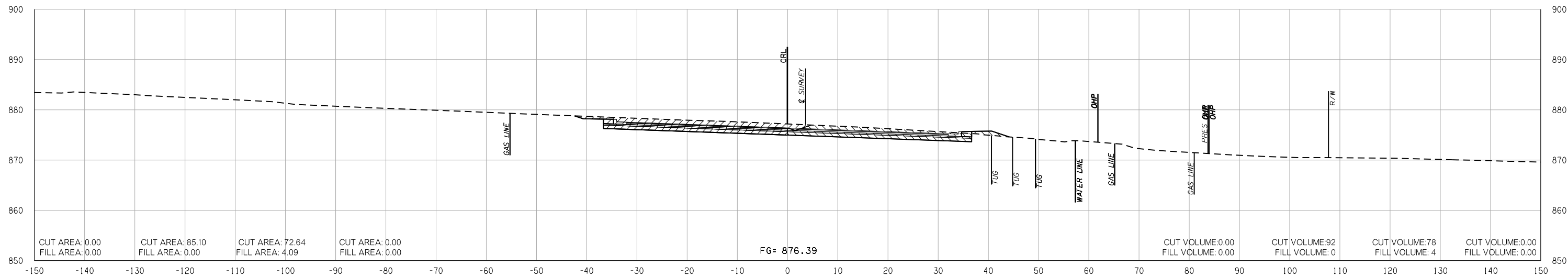
PHASE_1 PHASE_2 PHASE_3 PHASE_4

PHASE_1 PHASE_2 PHASE_3 PHASE_4





P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn 11/7/2018



82 + 66.38



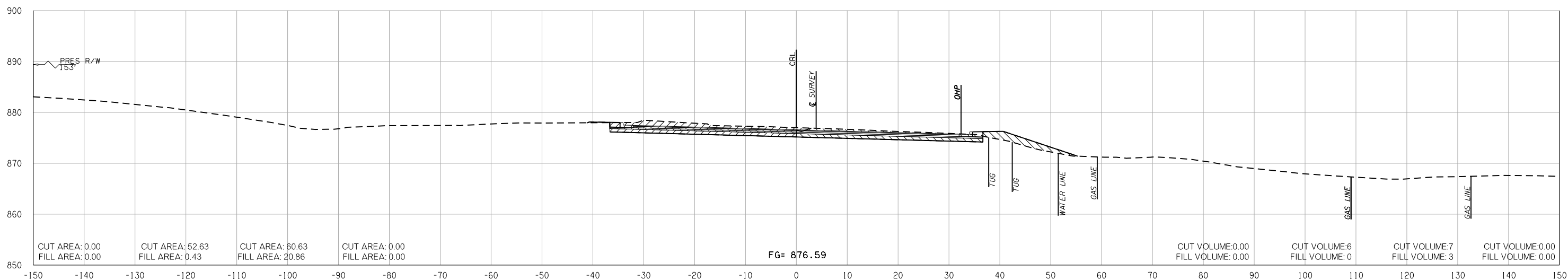
82 + 28.36

- PHASE 1 
- PHASE 2 
- PHASE 3 
- PHASE 4 

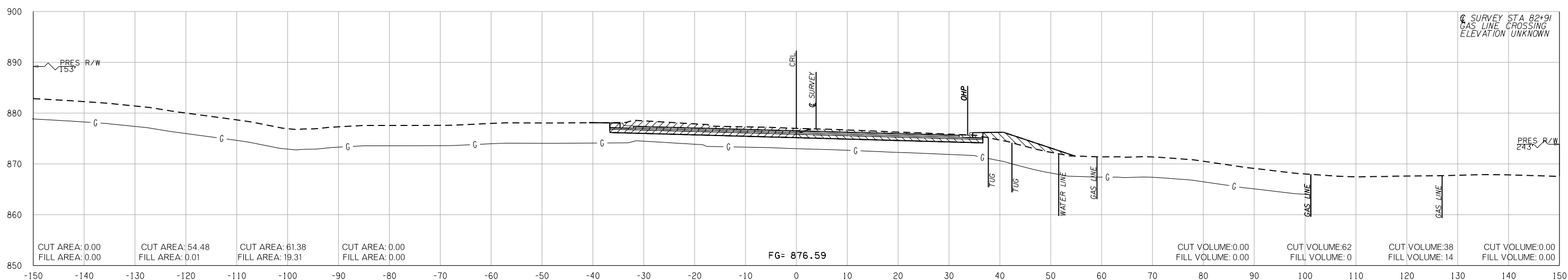
END AREAS (SF)

PHASE_1 PHASE_2 PHASE_3 PHASE_4

PHASE_1 PHASE_2 PHASE_3 PHASE_4



83 + 03.01



83 + 00.00

P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn 11/7/2018

END AREAS (SF)

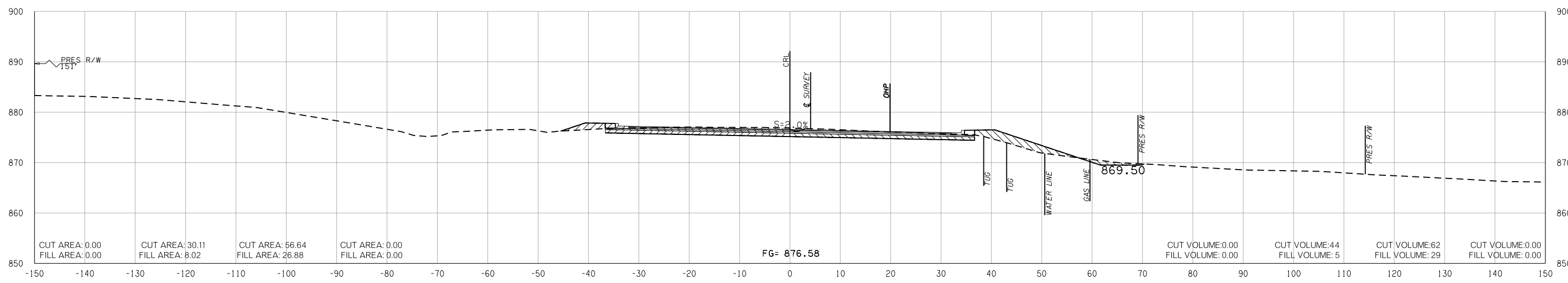
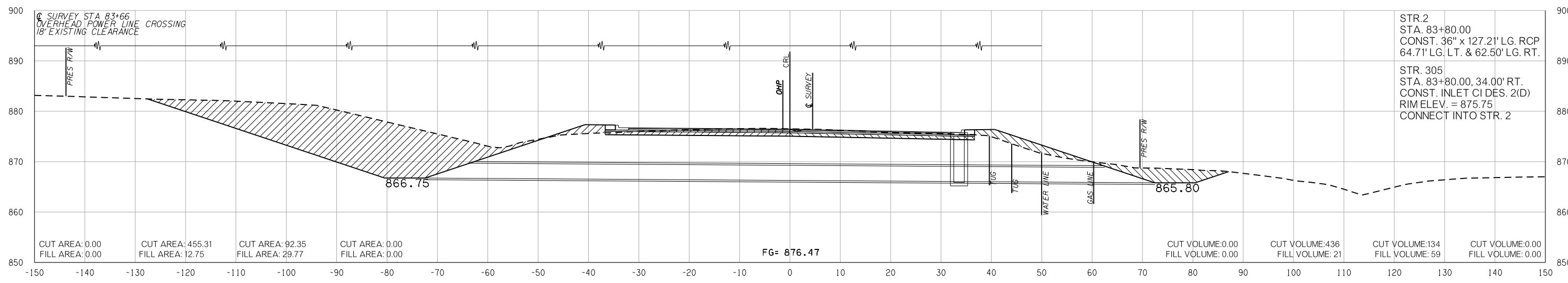
PHASE 1 PHASE 2 PHASE 3 PHASE 4

VOLUMES (CY)

PHASE 1 PHASE 2 PHASE 3 PHASE 4

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn 11/7/2018



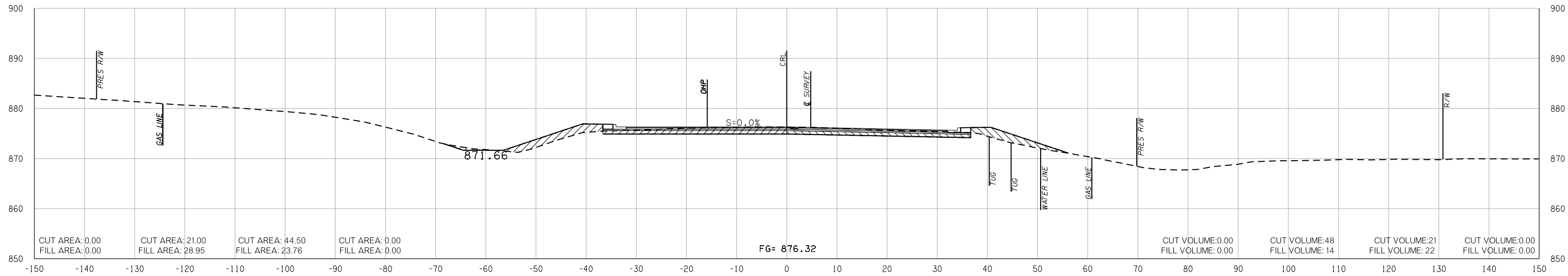
- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

END AREAS (SF)

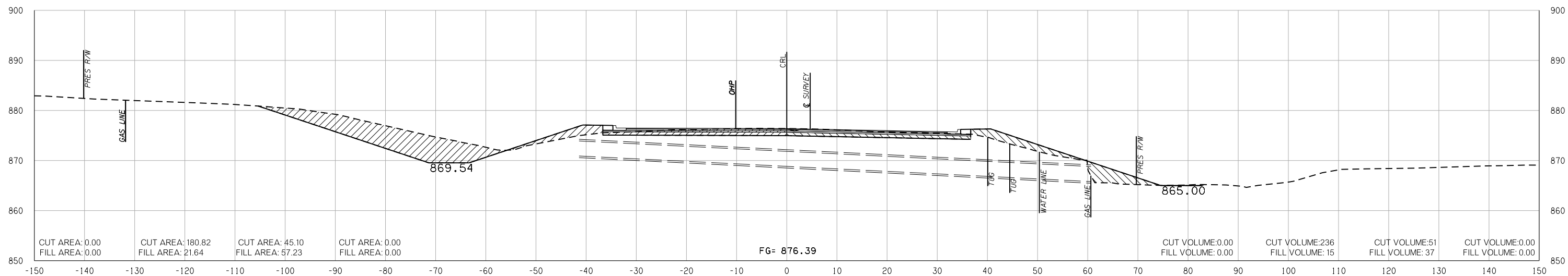
PHASE_1 PHASE_2 PHASE_3 PHASE_4

PHASE_1 PHASE_2 PHASE_3 PHASE_4

P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn
11/7/2018



84 + 12.90



84 + 00.00

END AREAS (SF)

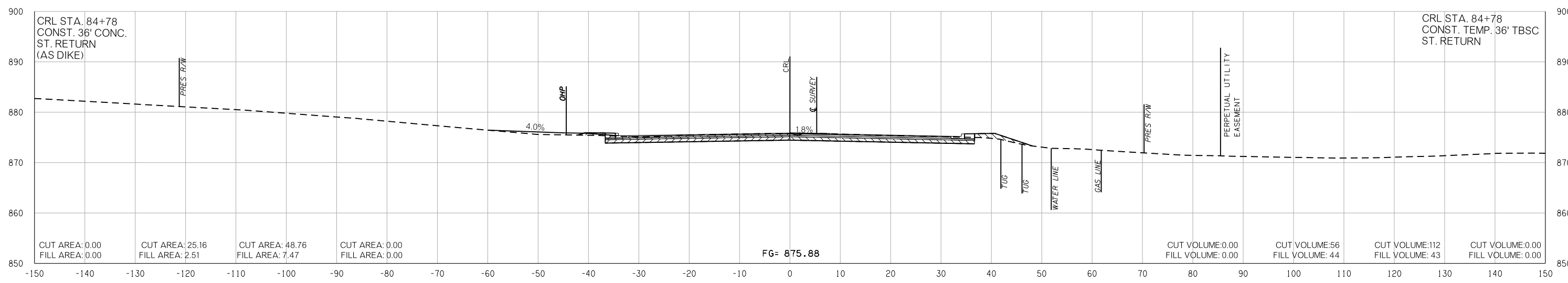
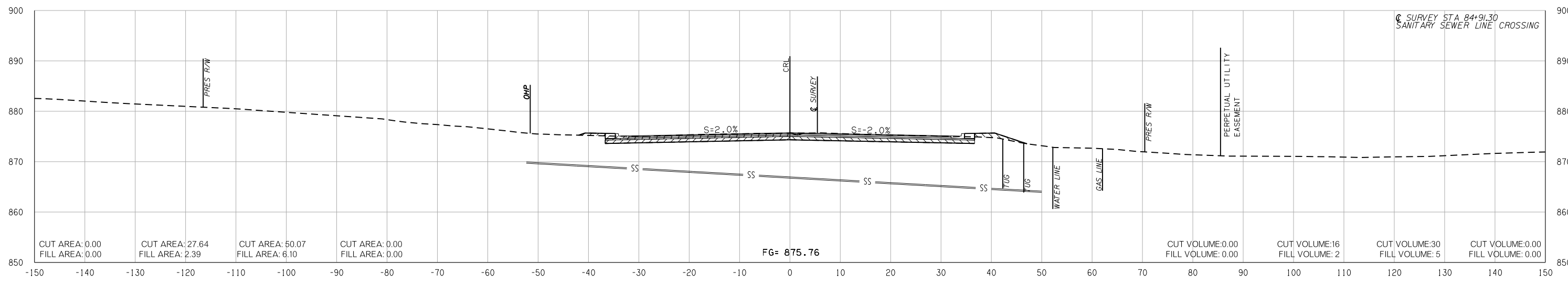
PHASE 1 PHASE 2 PHASE 3 PHASE 4

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

VOLUMES (CY)

PHASE 1 PHASE 2 PHASE 3 PHASE 4

P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn 11/7/2018



END AREAS (SF)

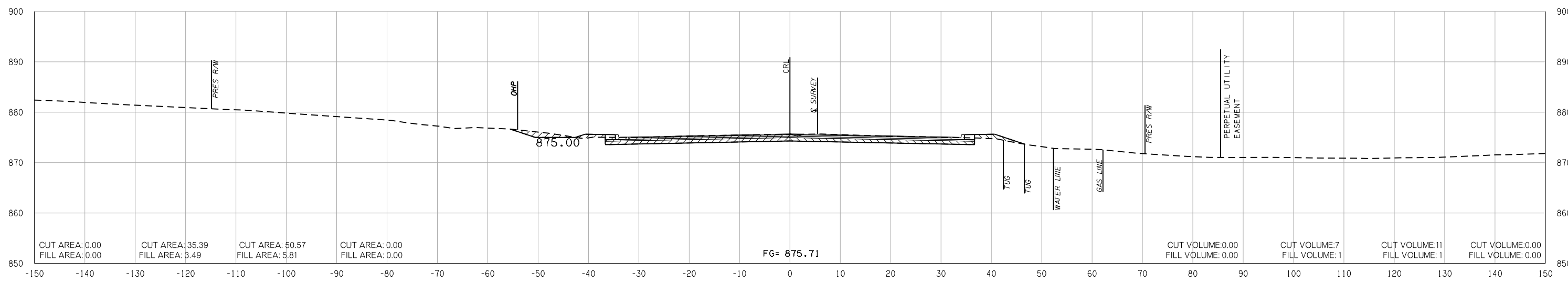
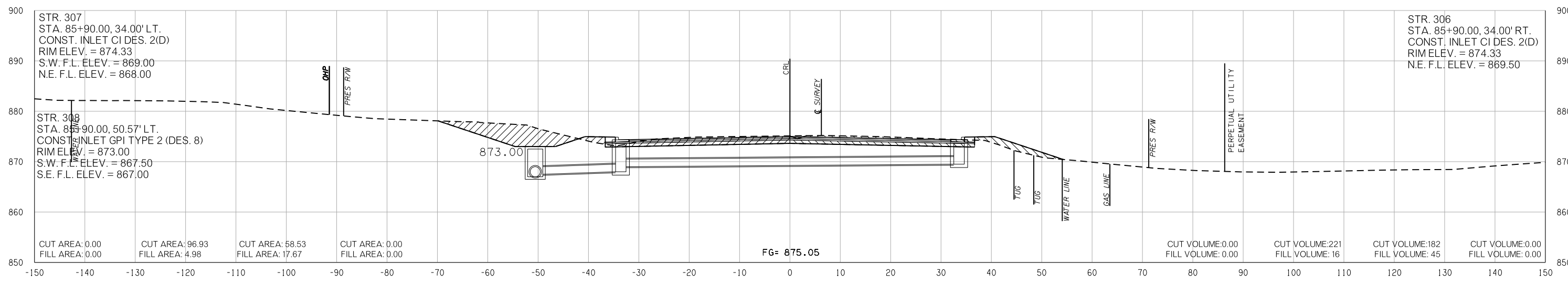
PHASE 1 PHASE 2 PHASE 3 PHASE 4

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

VOLUMES (CY)

PHASE 1 PHASE 2 PHASE 3 PHASE 4

P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn 11/7/2018



END AREAS (SF)

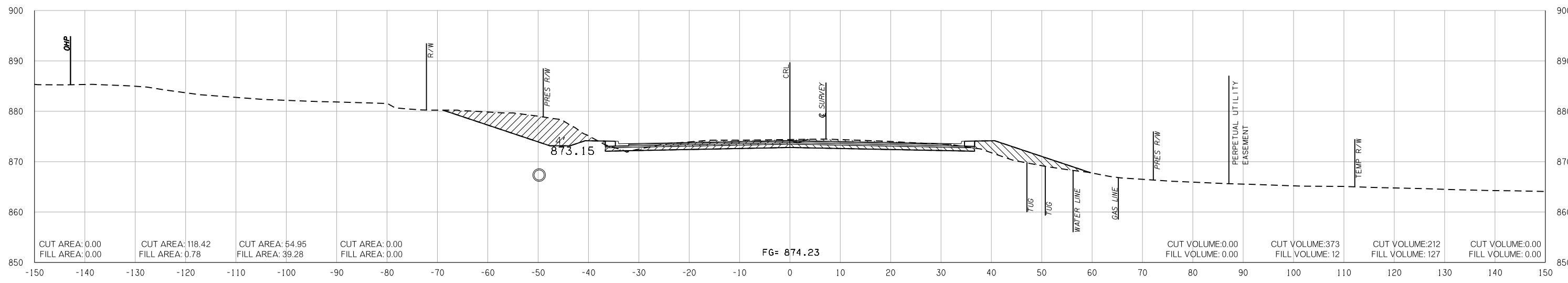
PHASE 1 PHASE 2 PHASE 3 PHASE 4

VOLUMES (CY)

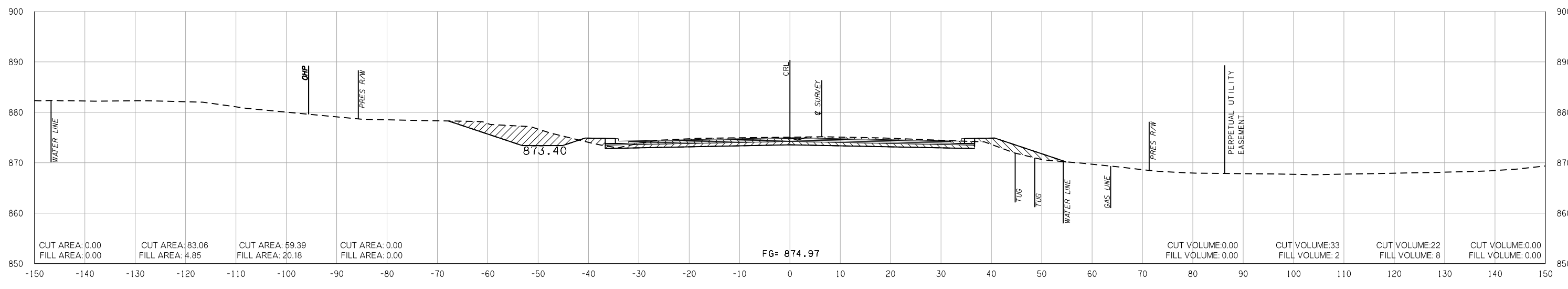
PHASE 1 PHASE 2 PHASE 3 PHASE 4

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn 11/7/2018



87 + 00.00



86 + 00.00

END AREAS (SF)

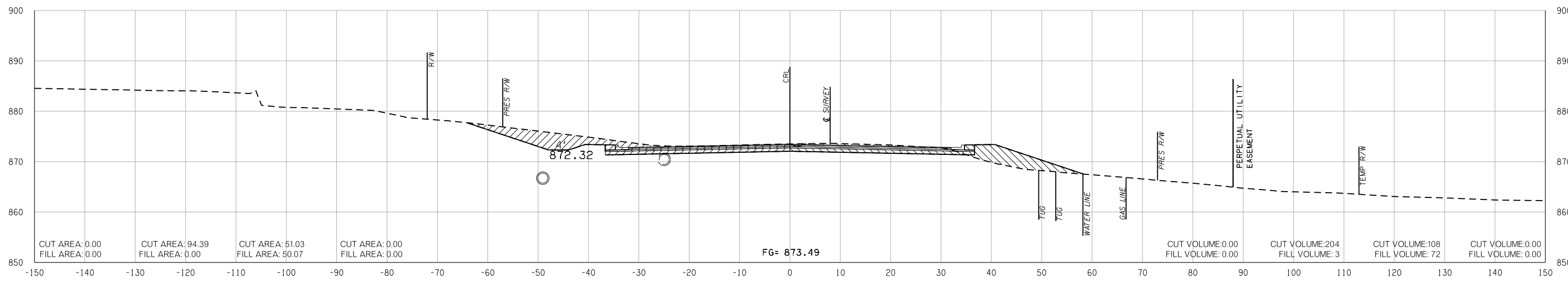
PHASE 1 PHASE 2 PHASE 3 PHASE 4

VOLUMES (CY)

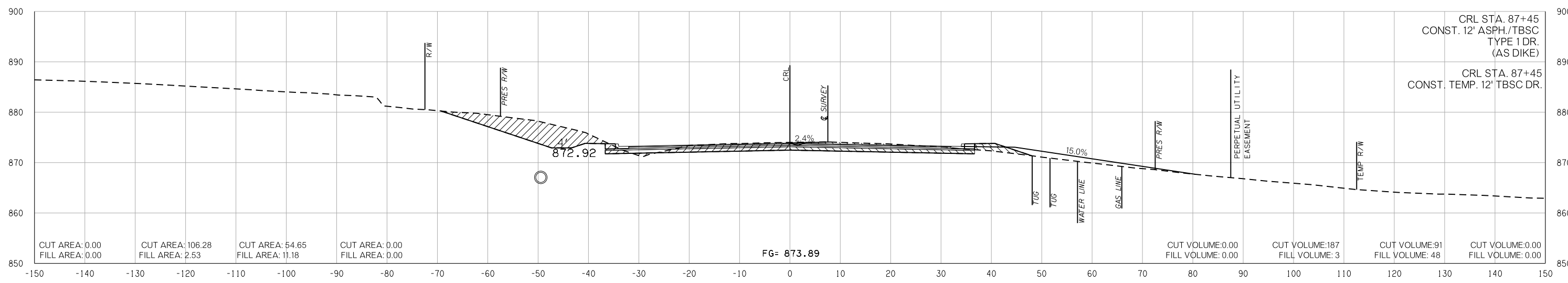
PHASE 1 PHASE 2 PHASE 3 PHASE 4

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4





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88 + 00.00



87 + 45.00

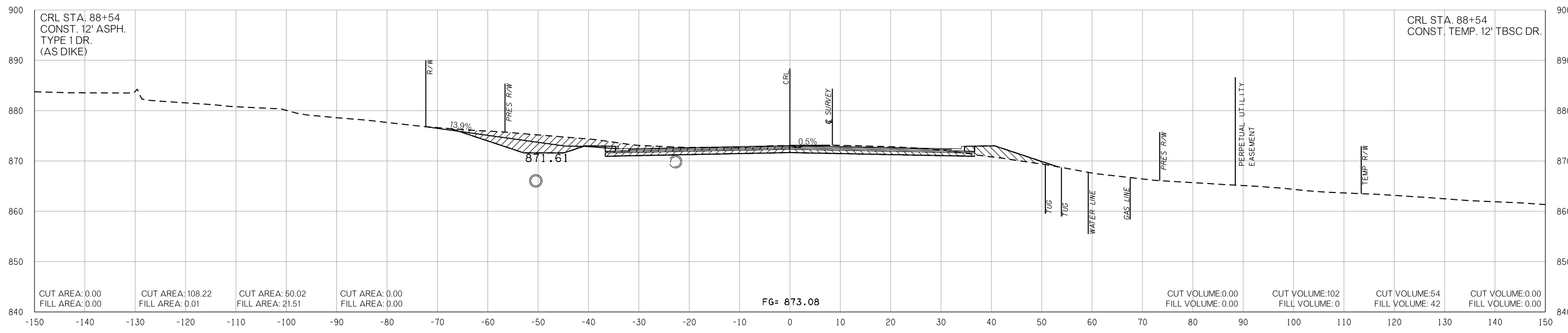
- PHASE 1 
- PHASE 2 
- PHASE 3 
- PHASE 4 

END AREAS (SF)

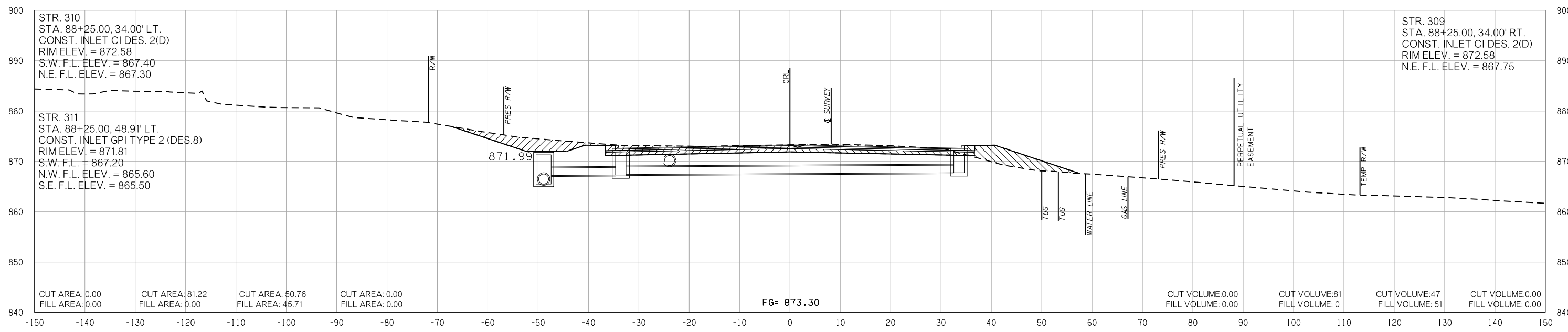
PHASE_1 PHASE_2 PHASE_3 PHASE_4

VOLUMES (CY)

PHASE_1 PHASE_2 PHASE_3 PHASE_4



88 + 54.00



88 + 25.00

P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn
 11/7/2018

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

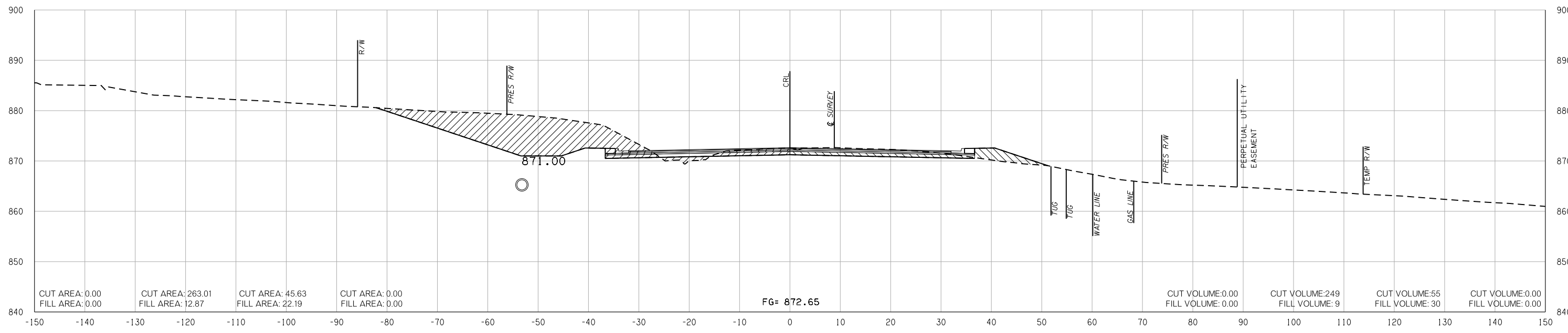
END AREAS (SF)

PHASE 1 PHASE 2 PHASE 3 PHASE 4

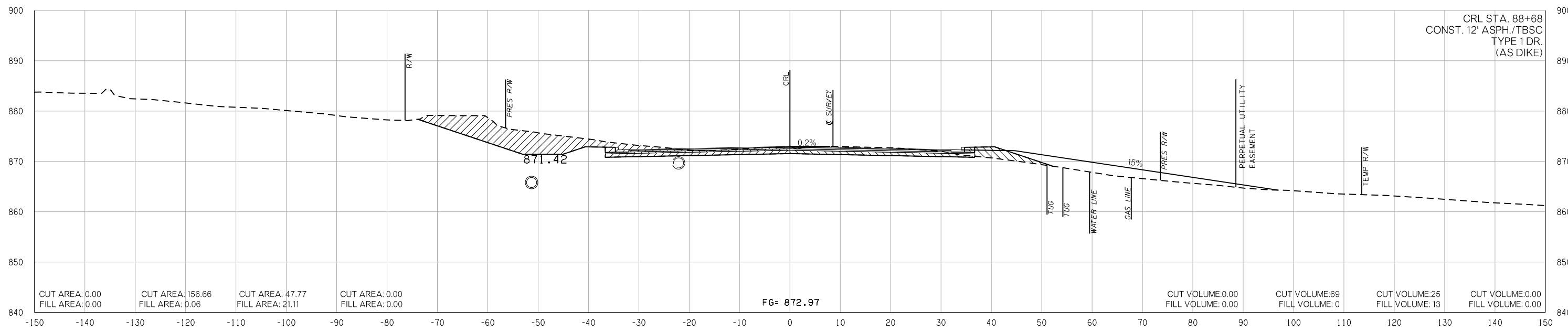
VOLUMES (CY)

PHASE 1 PHASE 2 PHASE 3 PHASE 4

P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn



89 + 00.00



88 + 68.00

CRL STA. 88+68
 CONST. 12" ASPH./TBSC
 TYPE 1 DR.
 (AS DIKE)

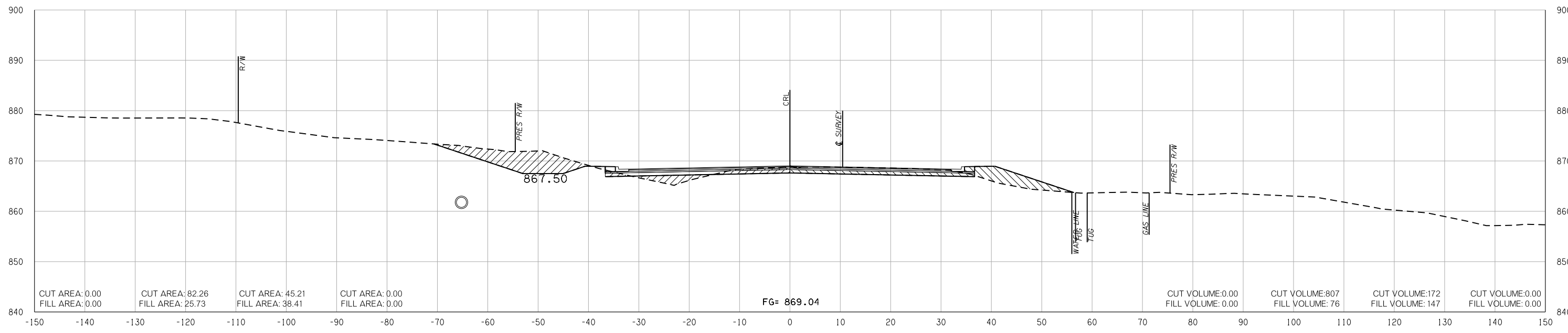
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PHASE 1 PHASE 2 PHASE 3 PHASE 4

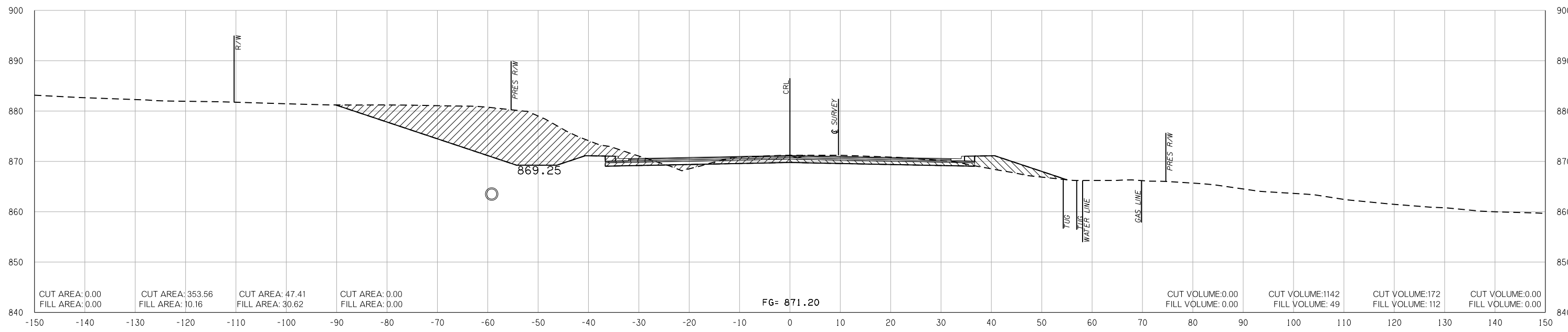
- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

VOLUMES (CY)

PHASE 1 PHASE 2 PHASE 3 PHASE 4



91 + 00.00



90 + 00.00

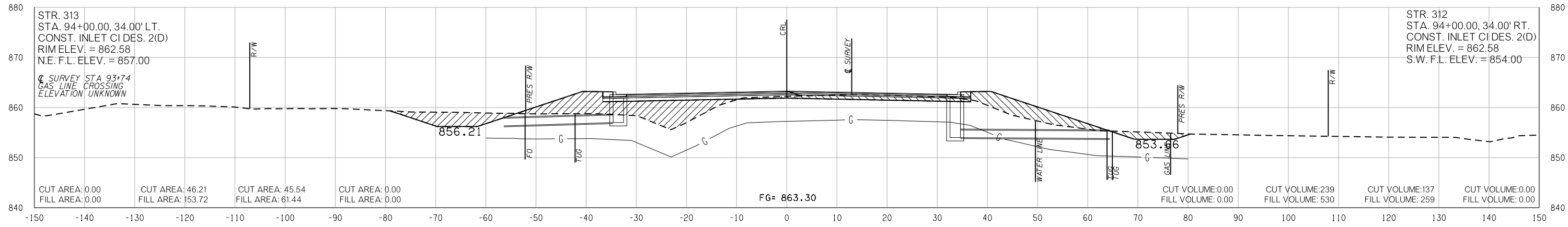
P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn
 11/7/2018

- PHASE 1 [diagonal lines top-left to bottom-right]
- PHASE 2 [diagonal lines top-right to bottom-left]
- PHASE 3 [cross-hatch]
- PHASE 4 [grid]

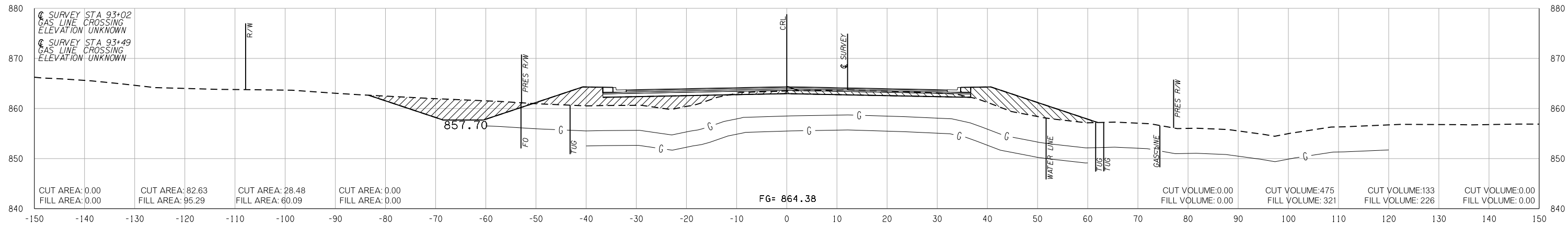
END AREAS (SF)

PHASE 1 PHASE 2 PHASE 3 PHASE 4

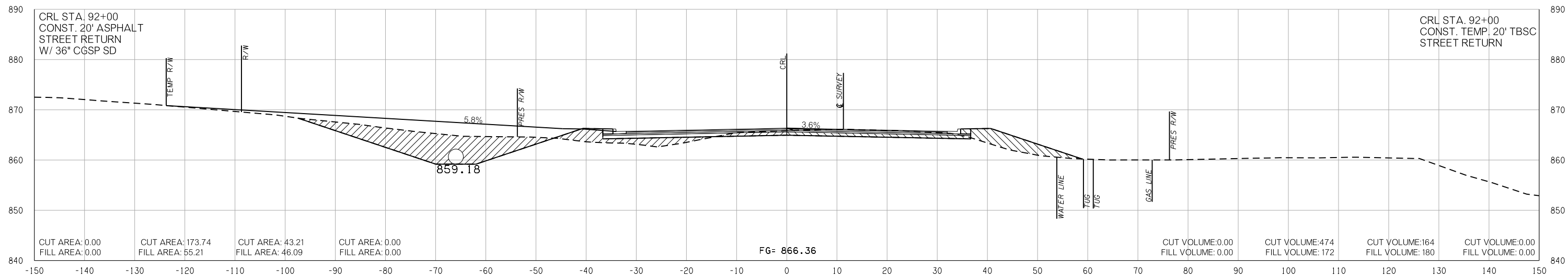
PHASE 1 PHASE 2 PHASE 3 PHASE 4



94 + 00.00



93 + 00.00



92 + 00.00

P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn

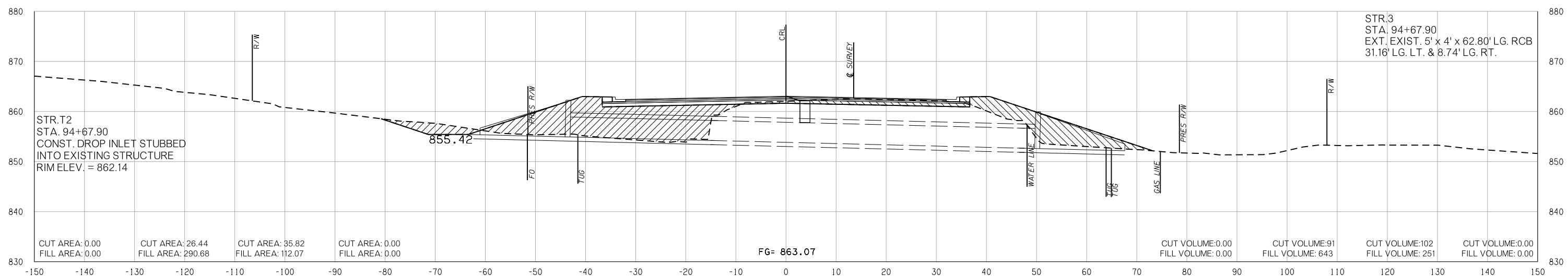
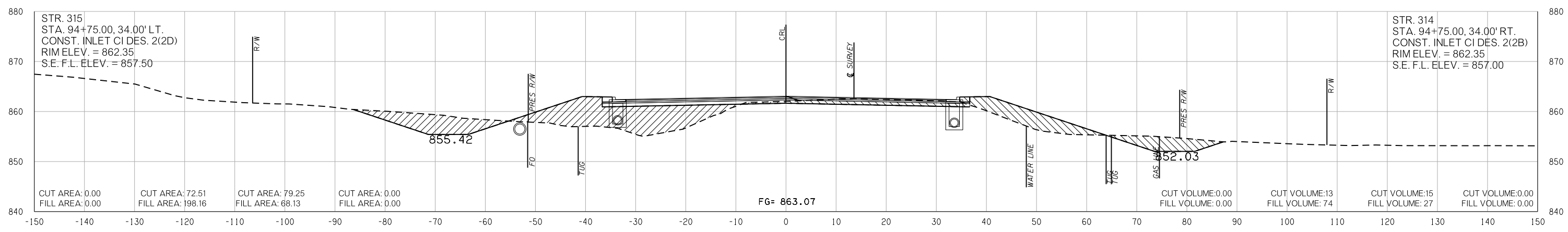
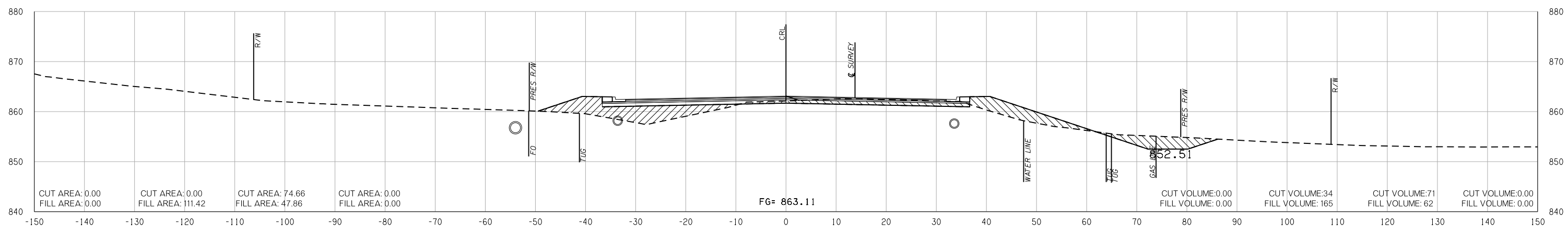
11/7/2018

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

END AREAS (SF)

VOLUMES (CY)

PHASE 1 PHASE 2 PHASE 3 PHASE 4 PHASE 1 PHASE 2 PHASE 3 PHASE 4



P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn
 11/7/2018

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

END AREAS (SF)

PHASE_1

PHASE_2

PHASE_3

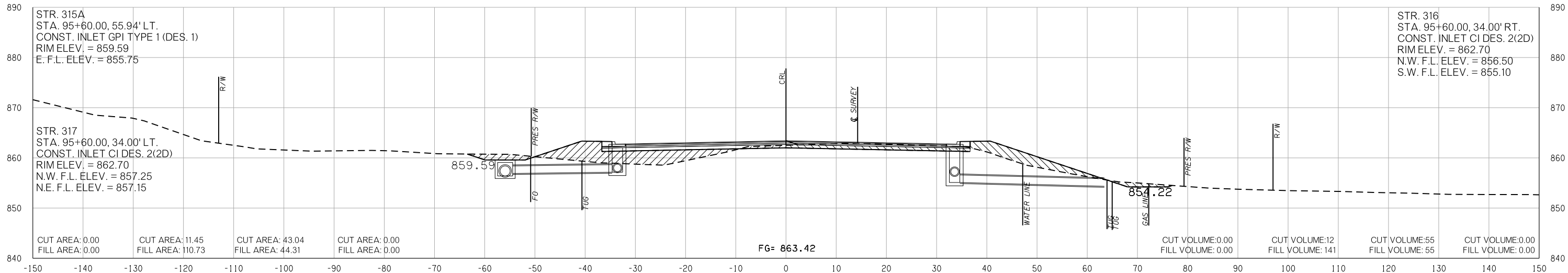
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PHASE_1

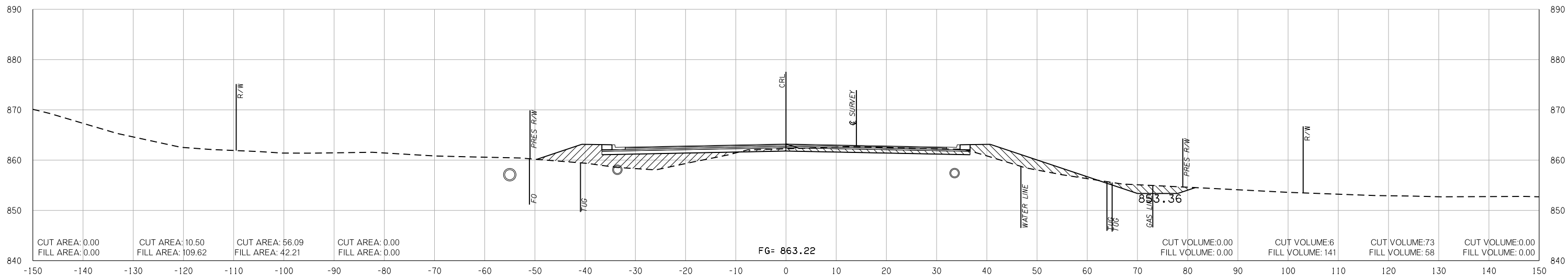
PHASE_2

PHASE_3

PHASE_4



95 + 60.00



95 + 30.00

END AREAS (SF)

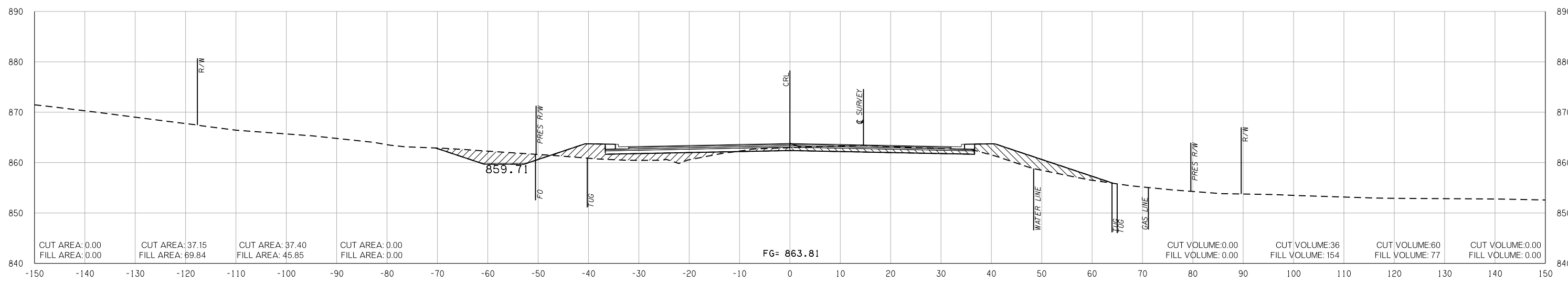
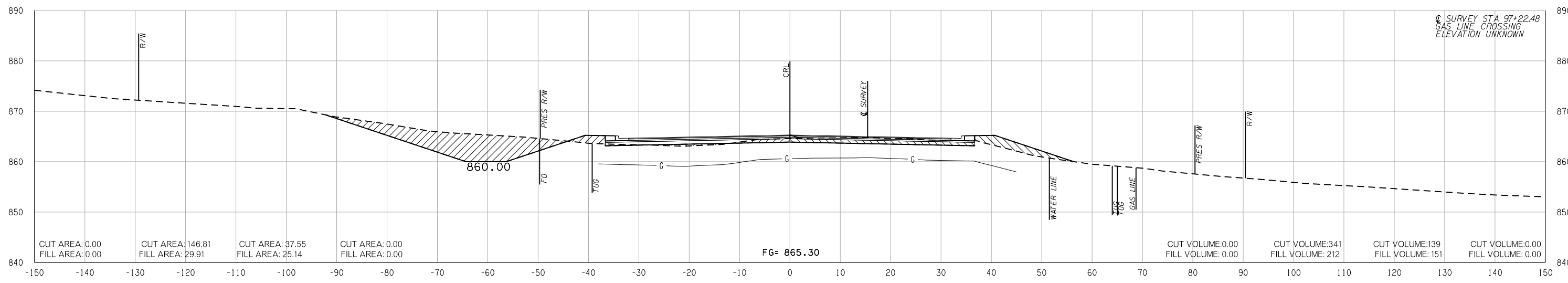
PHASE 1 PHASE 2 PHASE 3 PHASE 4

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

VOLUMES (CY)

PHASE 1 PHASE 2 PHASE 3 PHASE 4

P:\11399-200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn 11/7/2018

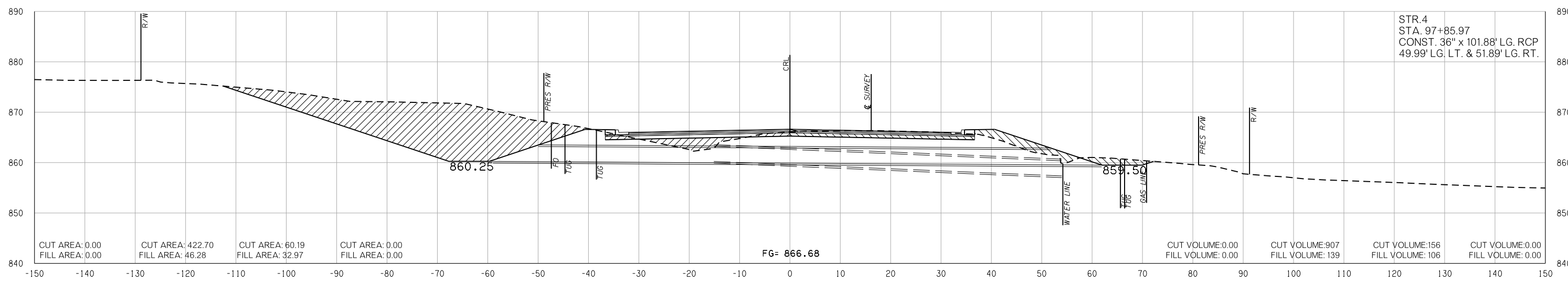
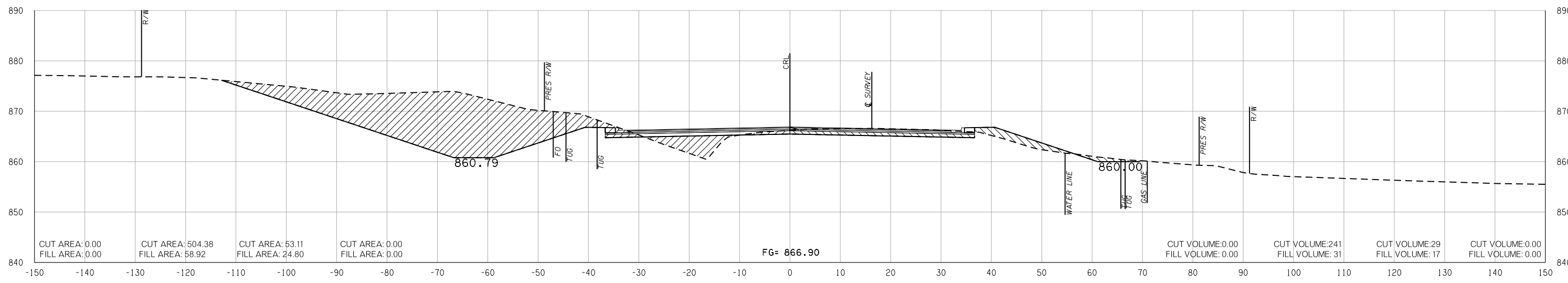


- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

PHASE_1 PHASE_2 PHASE_3 PHASE_4

PHASE_1 PHASE_2 PHASE_3 PHASE_4

P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn 11/7/2018

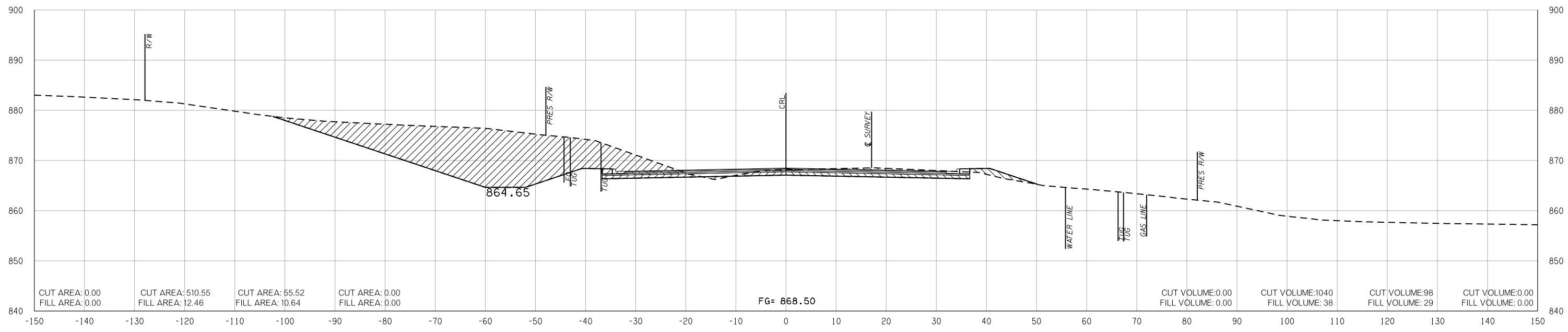


- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

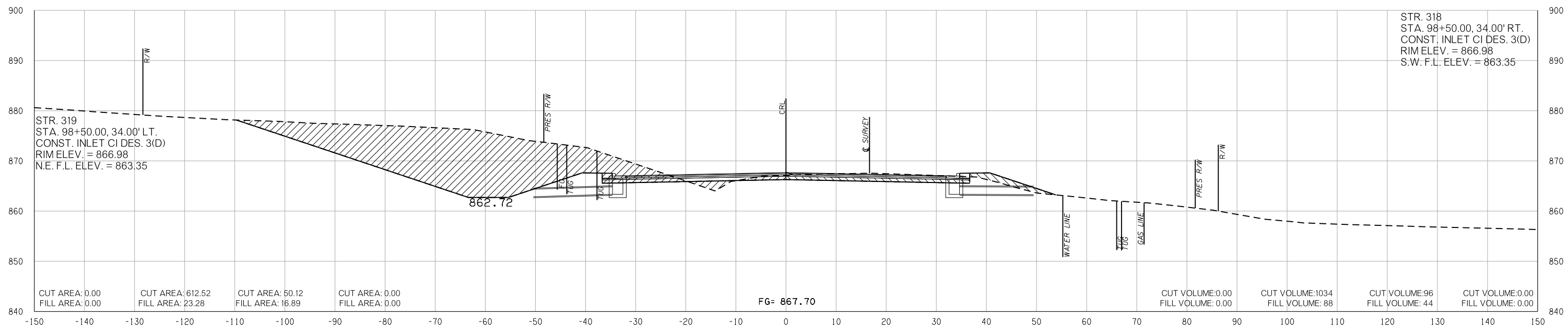
END AREAS (SF)

PHASE_1 PHASE_2 PHASE_3 PHASE_4

PHASE_1 PHASE_2 PHASE_3 PHASE_4



99 + 00.00



98 + 50.00

STR. 318
 STA. 98+50.00, 34.00' RT.
 CONST. INLET CI DES. 3(D)
 RIM ELEV. = 866.98
 S.W.F.L. ELEV. = 863.35

STR. 319
 STA. 98+50.00, 34.00' LT.
 CONST. INLET CI DES. 3(D)
 RIM ELEV. = 866.98
 N.E.F.L. ELEV. = 863.35

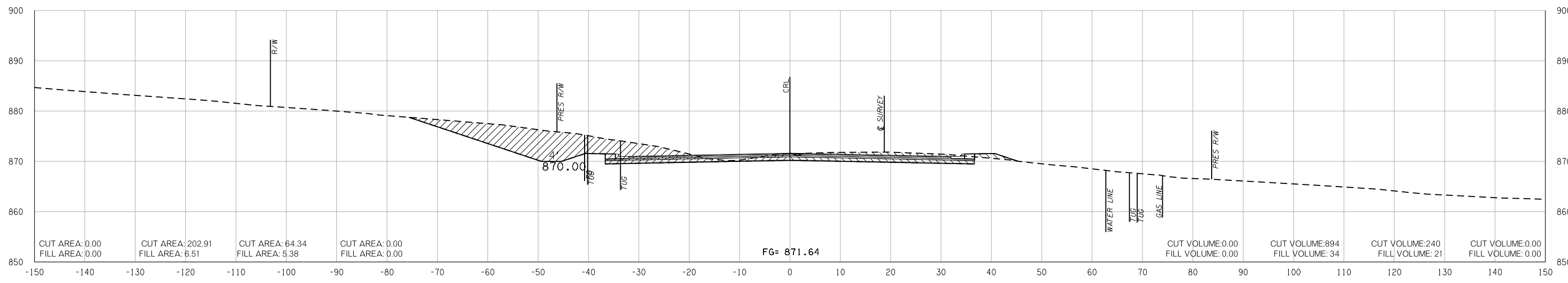
P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn
 11/7/2018

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

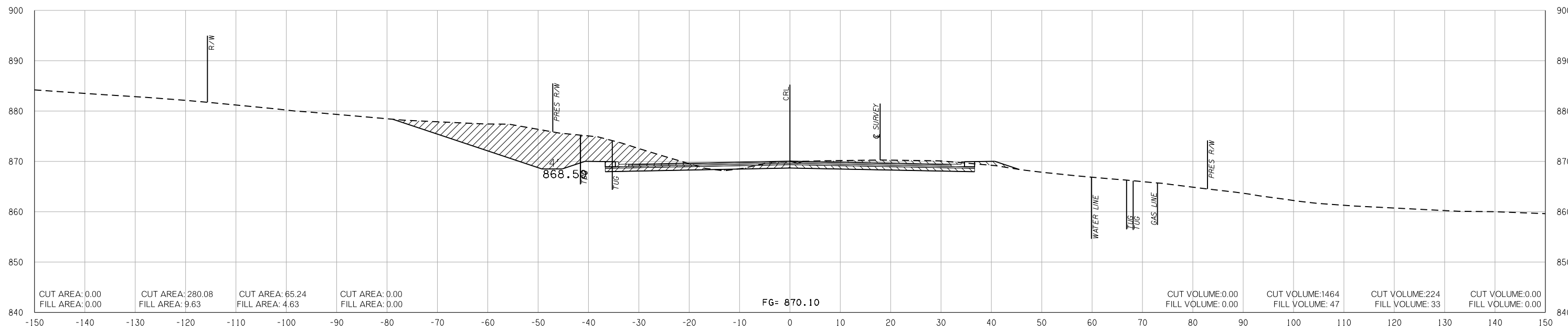
END AREAS (SF)

PHASE_1 PHASE_2 PHASE_3 PHASE_4

PHASE_1 PHASE_2 PHASE_3 PHASE_4



101 + 00.00



100 + 00.00

P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn
11/7/2018

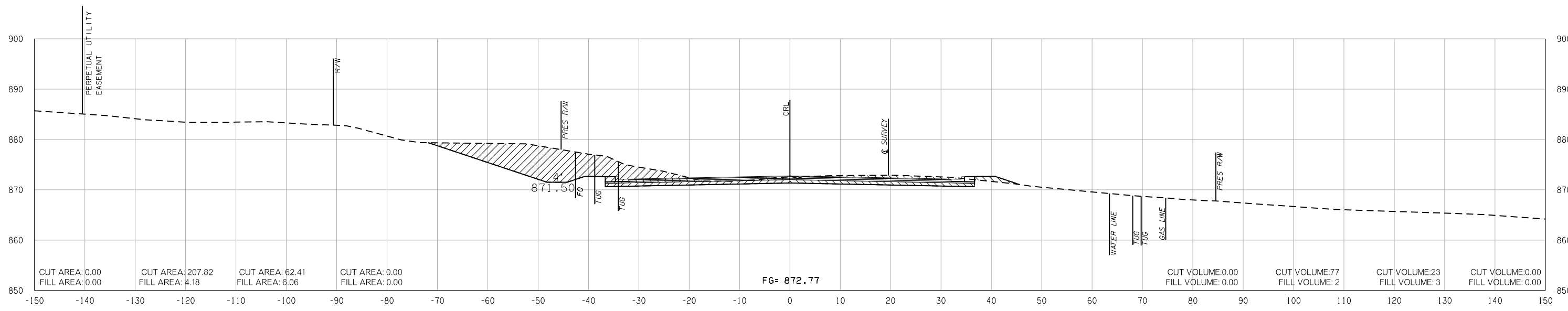
- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

END AREAS (SF)

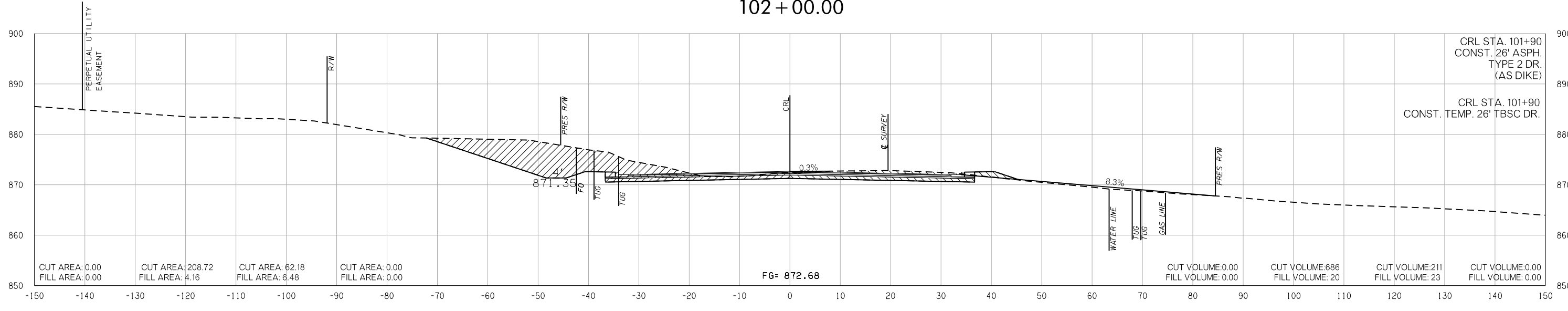
PHASE 1 PHASE 2 PHASE 3 PHASE 4

PHASE 1 PHASE 2 PHASE 3 PHASE 4

P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn 11/7/2018



102 + 00.00



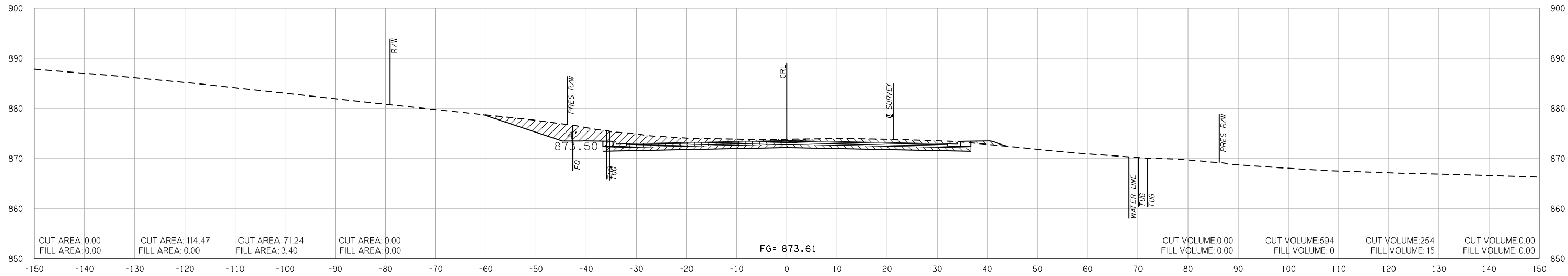
101 + 90.00

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

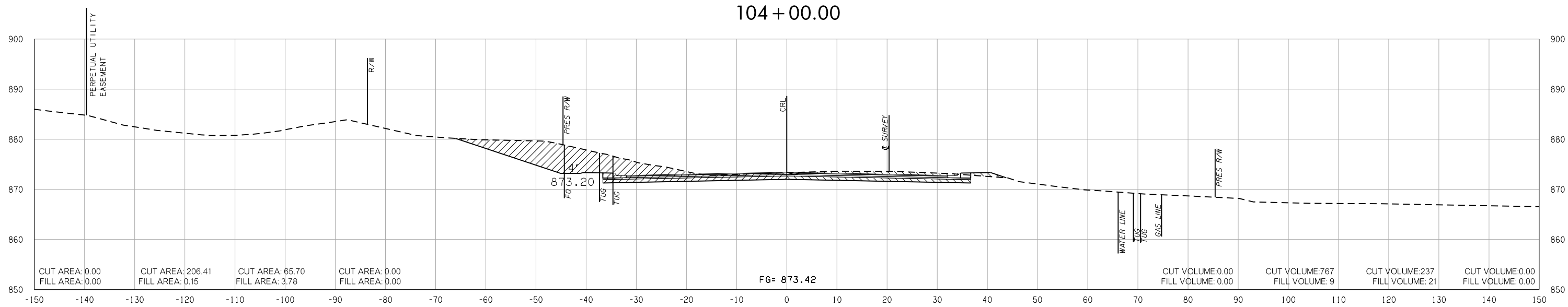
END AREAS (SF)

PHASE_1 PHASE_2 PHASE_3 PHASE_4

PHASE_1 PHASE_2 PHASE_3 PHASE_4



104 + 00.00



103 + 00.00

11/7/2018 P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn

END AREAS (SF)

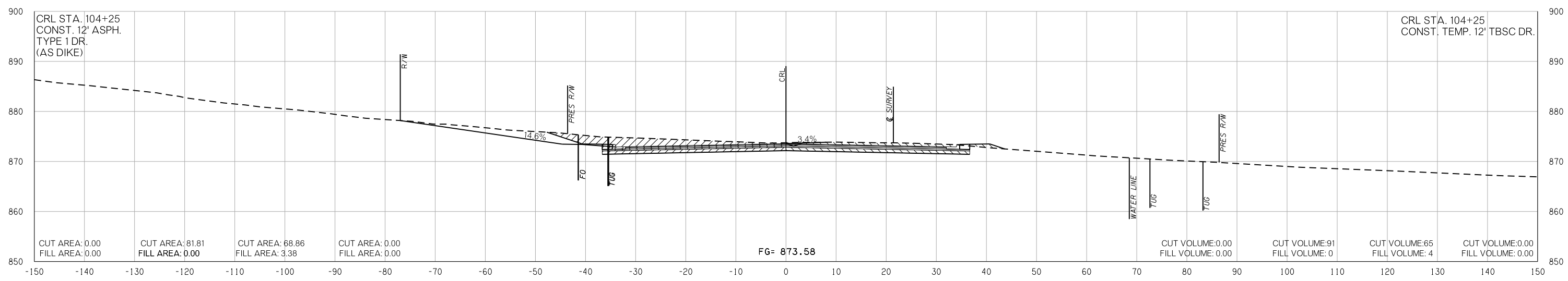
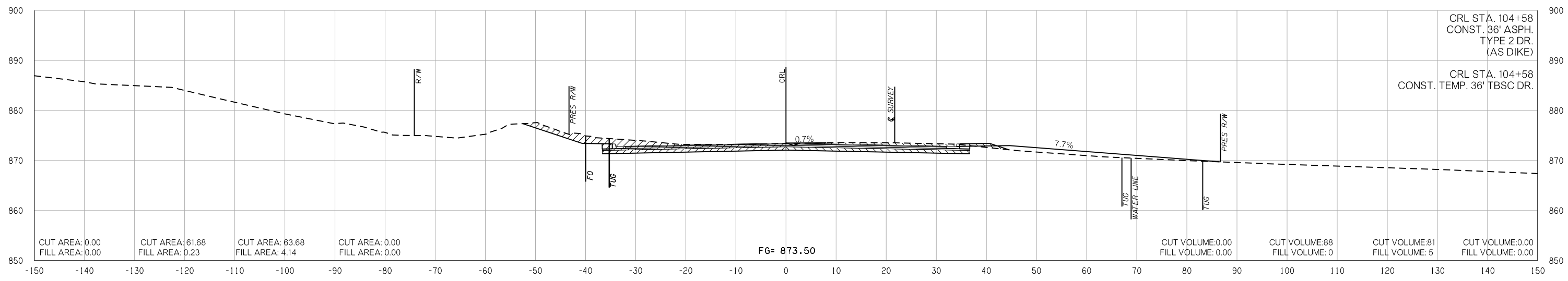
PHASE 1 PHASE 2 PHASE 3 PHASE 4

VOLUMES (CY)

PHASE 1 PHASE 2 PHASE 3 PHASE 4

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn 11/7/2018



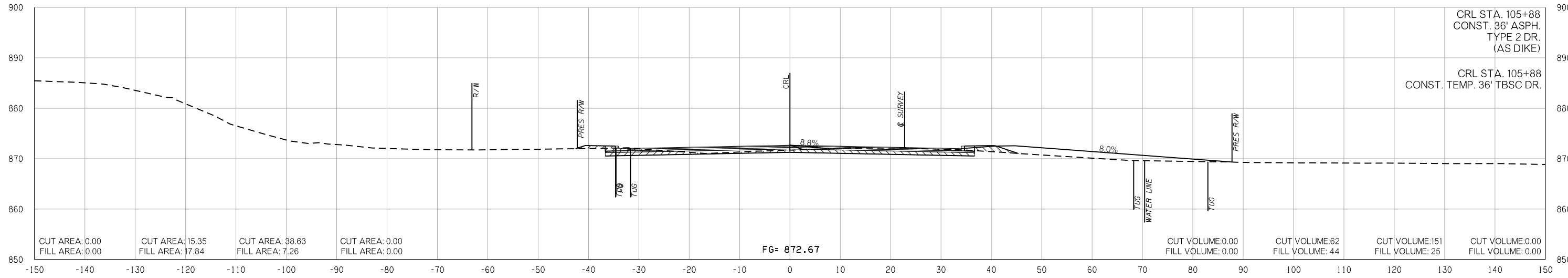
- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

END AREAS (SF)

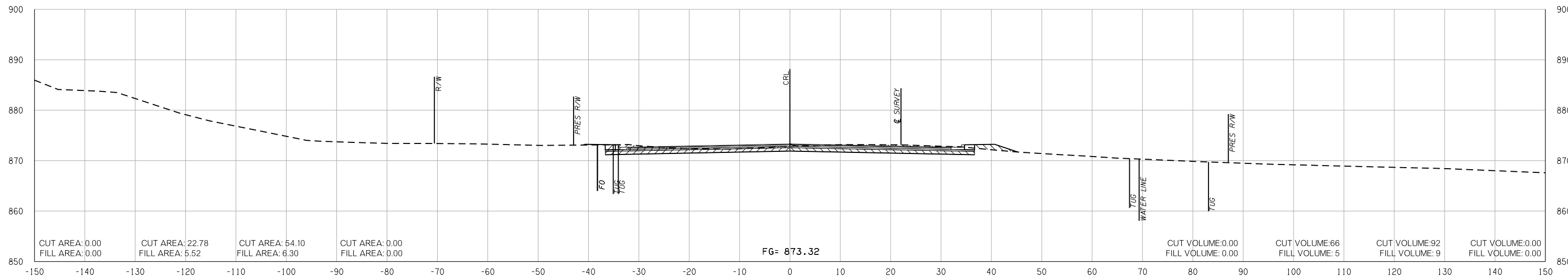
PHASE_1 PHASE_2 PHASE_3 PHASE_4

PHASE_1 PHASE_2 PHASE_3 PHASE_4

11/7/2018 P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn



105 + 88.00



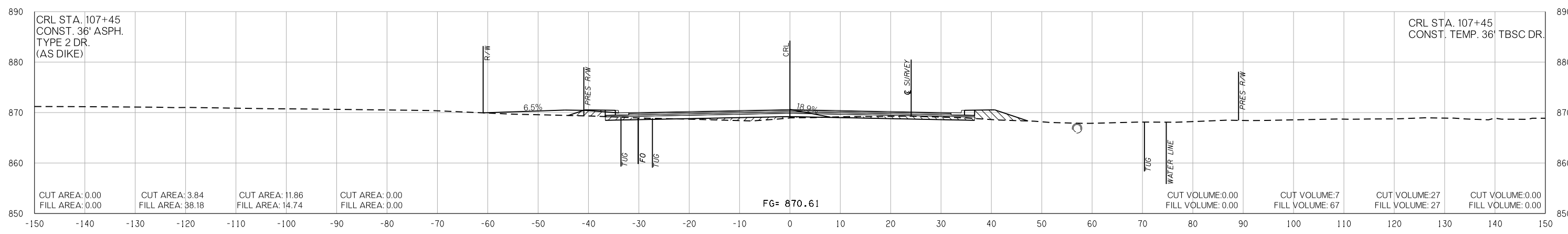
105 + 00.00

END AREAS (SF)

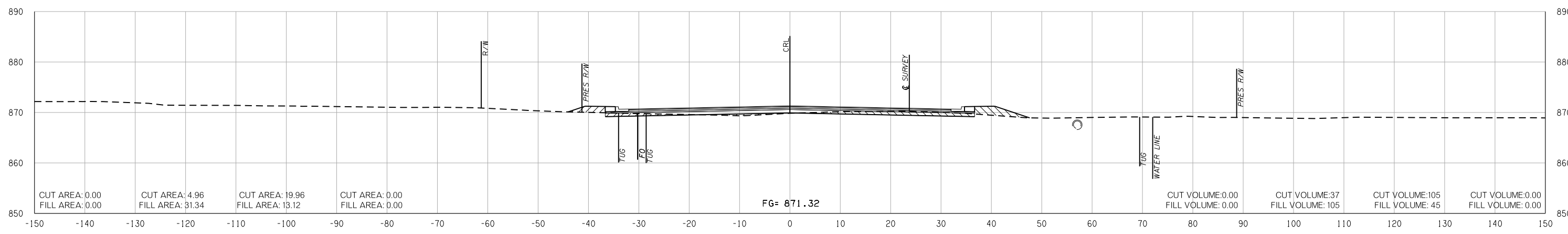
VOLUMES (CY)

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

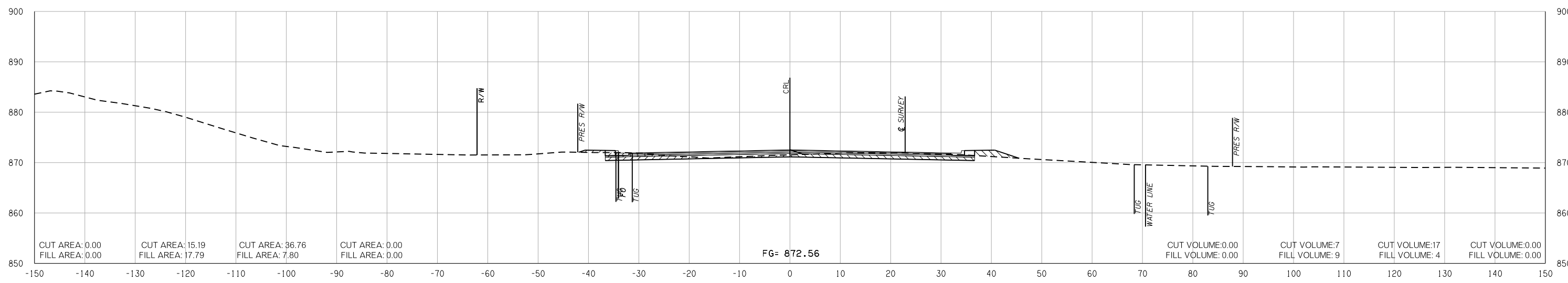
PHASE 1 PHASE 2 PHASE 3 PHASE 4 PHASE 1 PHASE 2 PHASE 3 PHASE 4



107 + 45.00



107 + 00.00



106 + 00.00

P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn
 11/7/2018

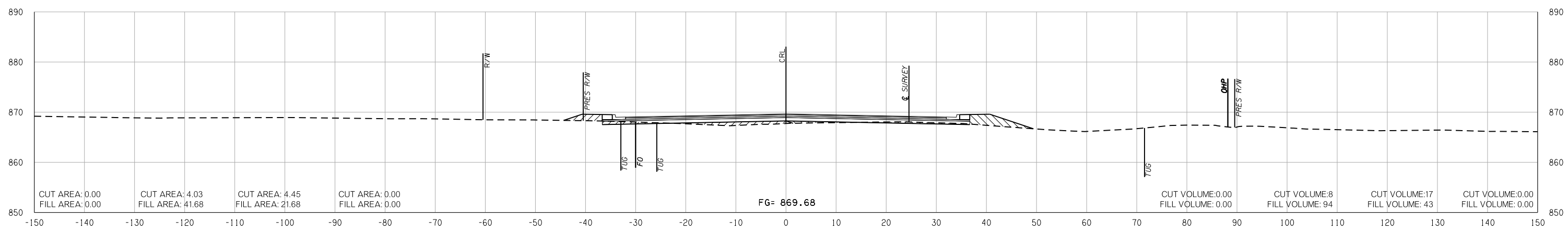
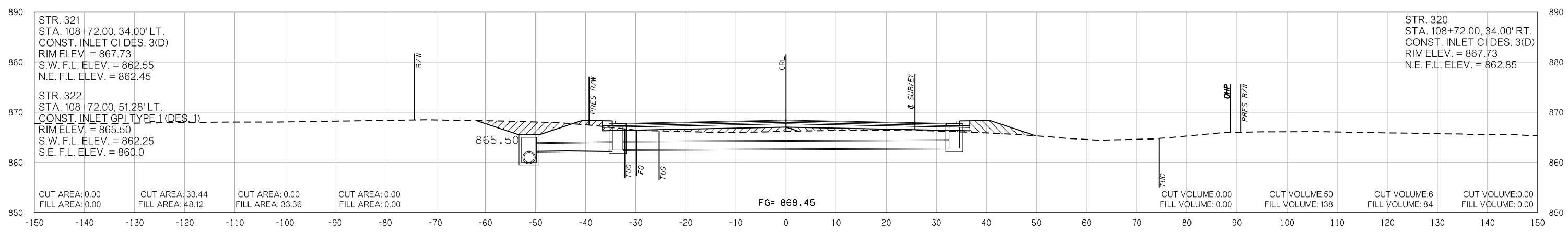
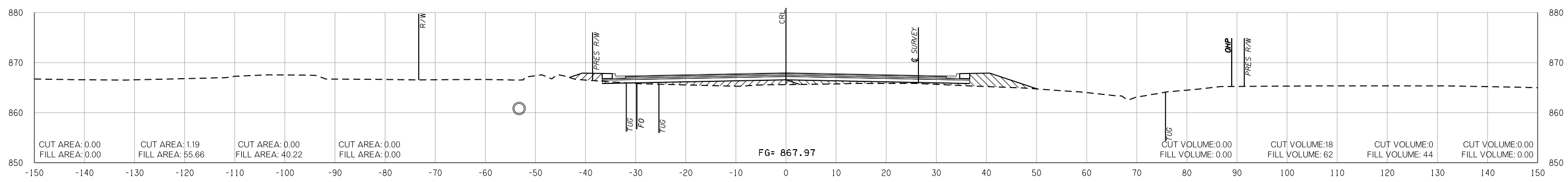
- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

END AREAS (SF)

PHASE 1 PHASE 2 PHASE 3 PHASE 4

VOLUMES (CY)

PHASE 1 PHASE 2 PHASE 3 PHASE 4



P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn
 11/7/2018

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

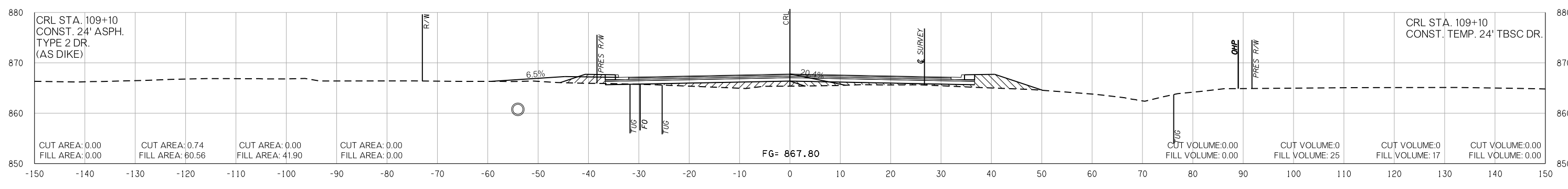
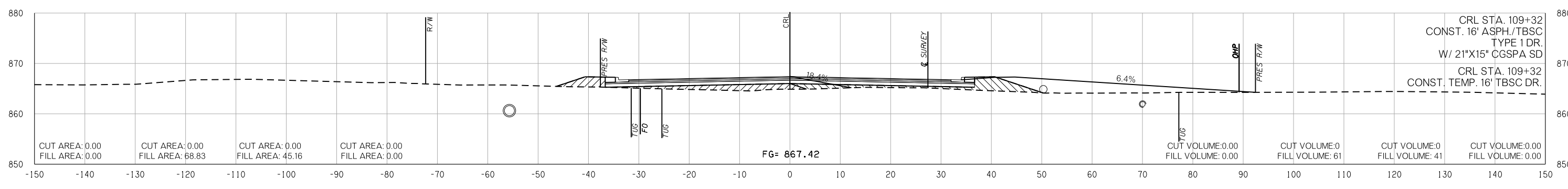
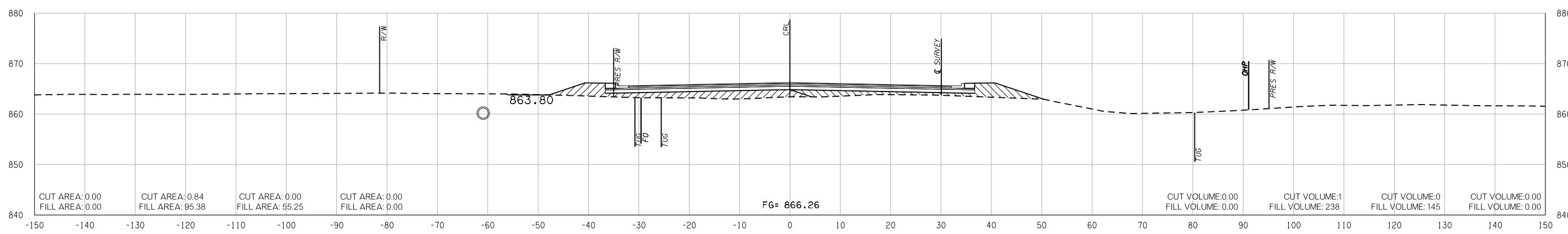
END AREAS (SF)

PHASE_1 PHASE_2 PHASE_3 PHASE_4

VOLUMES (CY)

PHASE_1 PHASE_2 PHASE_3 PHASE_4

11/7/2018 P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn

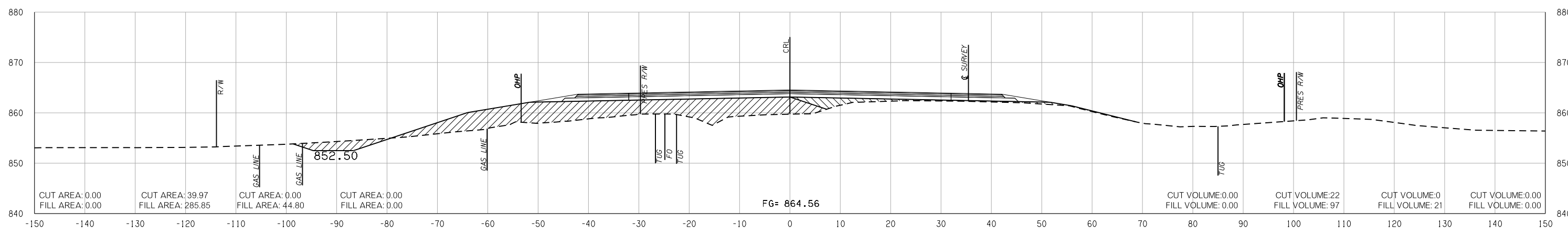


END AREAS (SF)

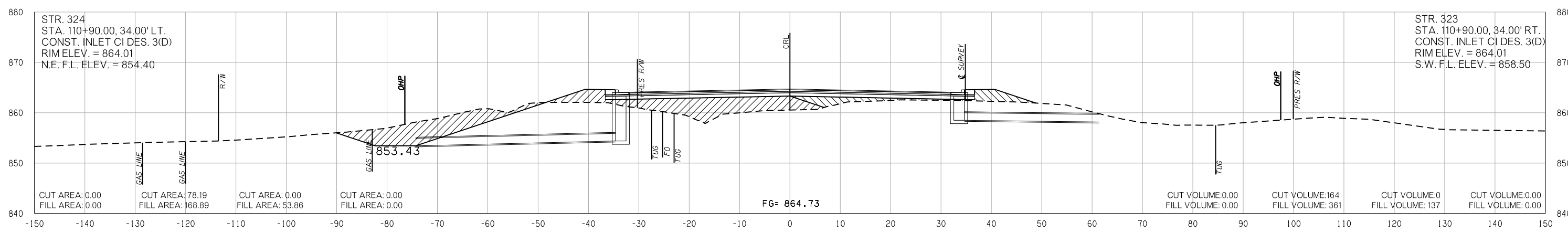
VOLUMES (CY)

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

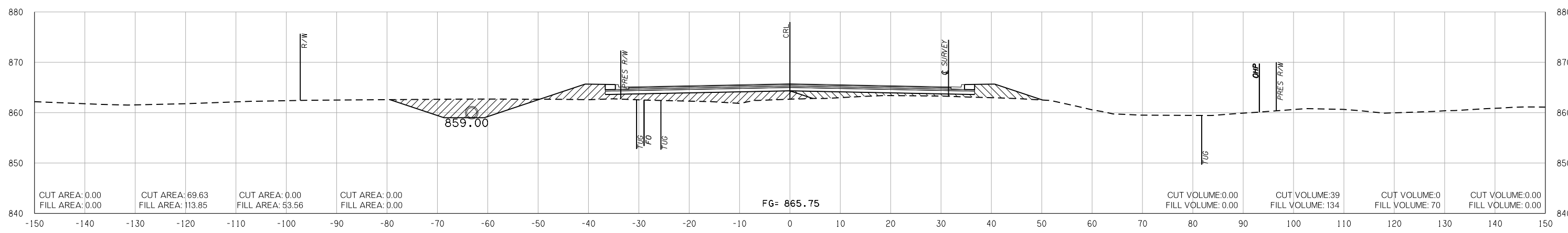
PHASE 1 PHASE 2 PHASE 3 PHASE 4 PHASE 1 PHASE 2 PHASE 3 PHASE 4



111+00.00



110+90.00

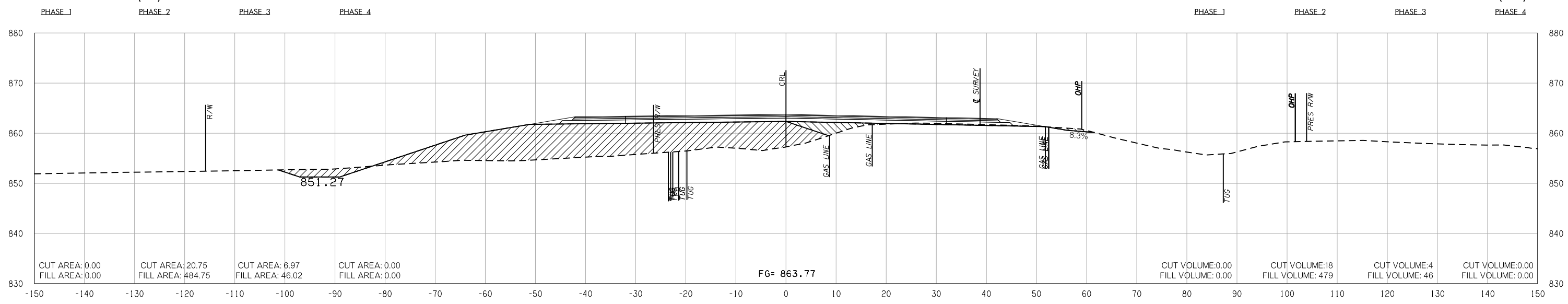


110+30.00

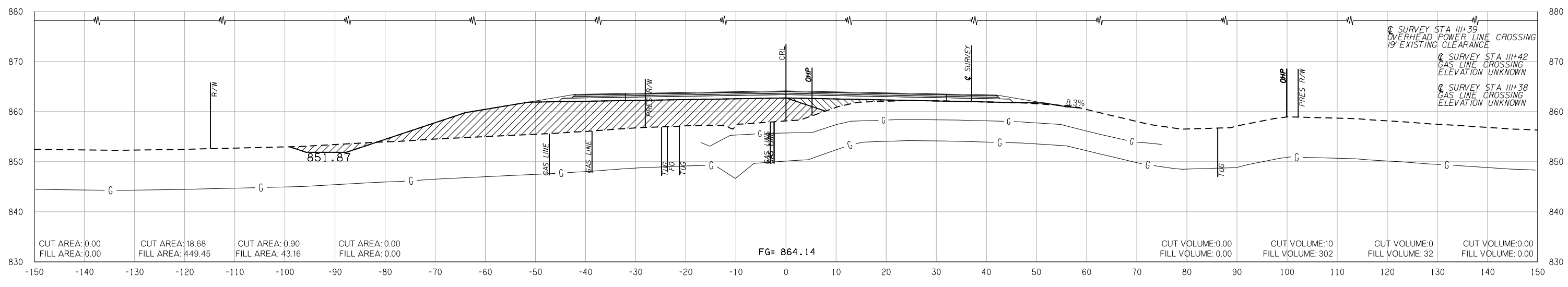
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- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

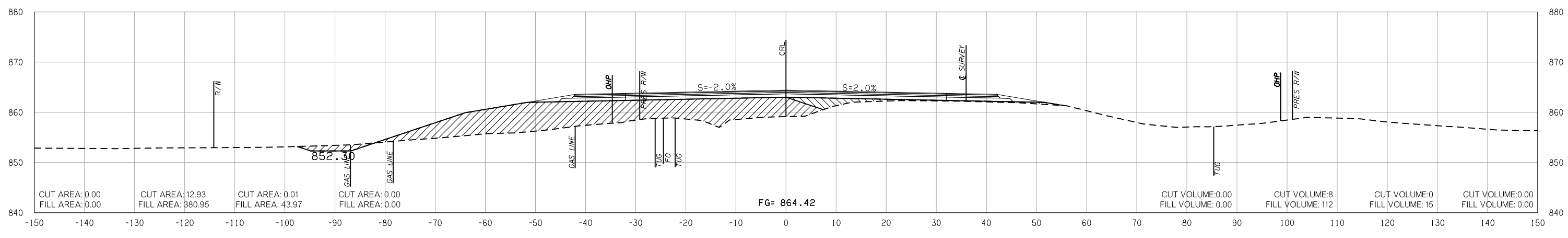
END AREAS (SF)



111+49.07



111+25.00



111+07.92

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11/7/2018

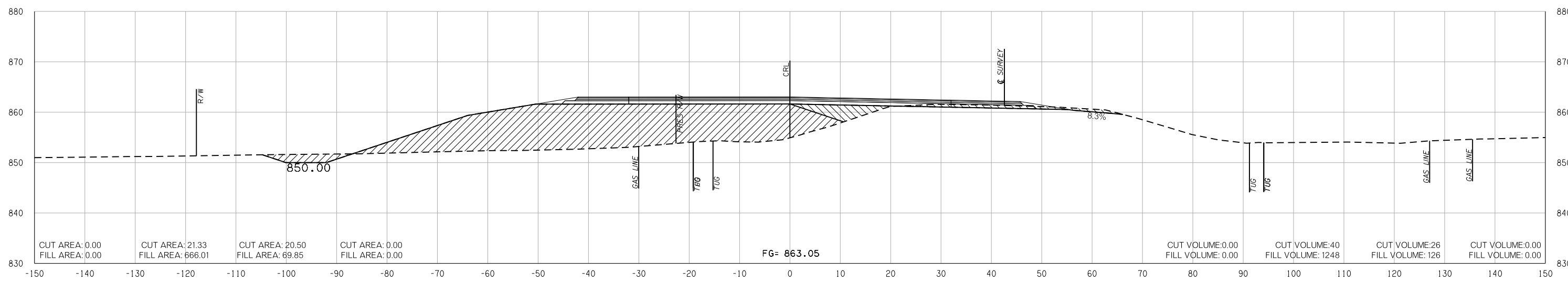
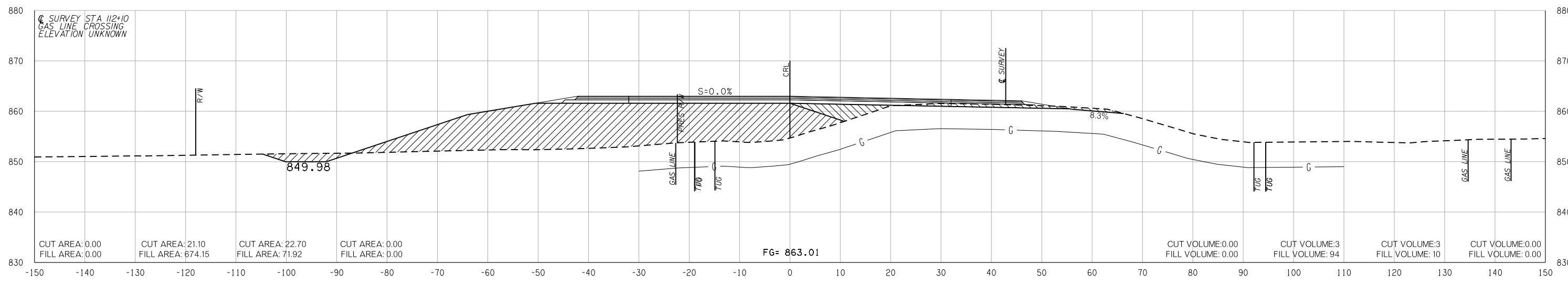
END AREAS (SF)

PHASE 1 PHASE 2 PHASE 3 PHASE 4

VOLUMES (CY)

PHASE 1 PHASE 2 PHASE 3 PHASE 4

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4



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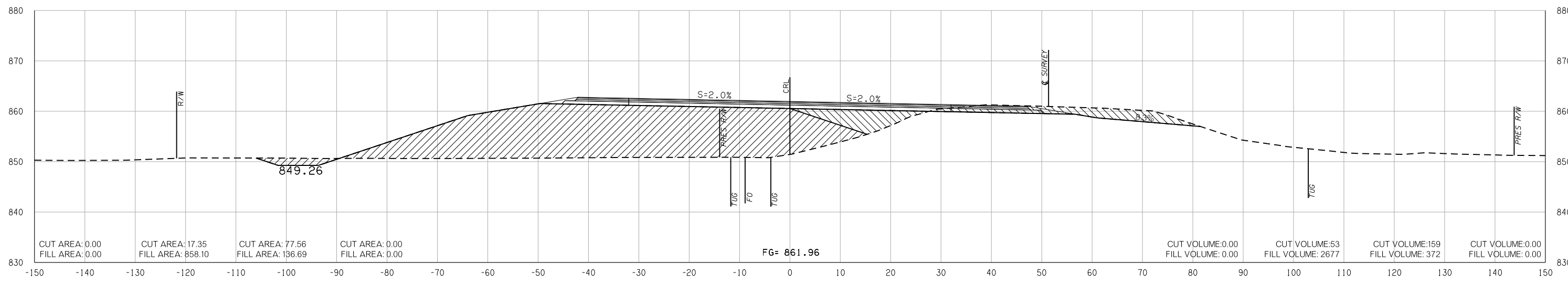
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- PHASE 3
- PHASE 4

END AREAS (SF)

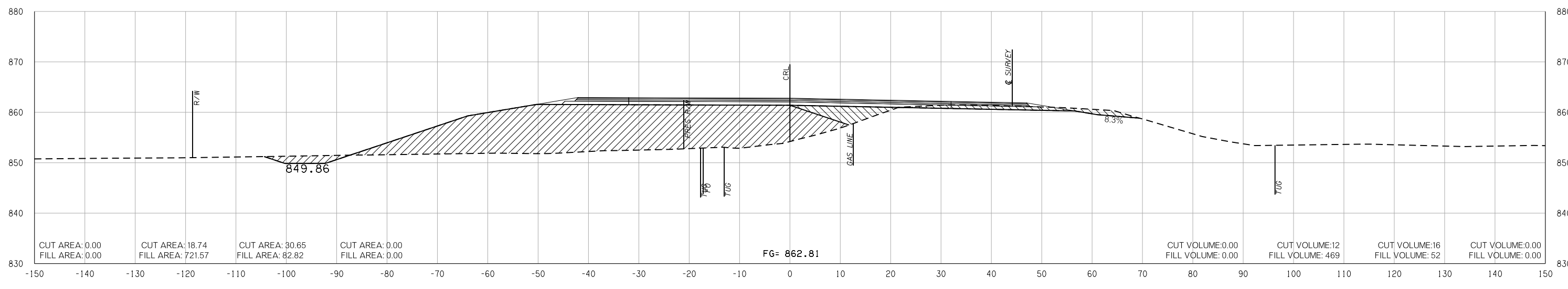
PHASE_1 PHASE_2 PHASE_3 PHASE_4

PHASE_1 PHASE_2 PHASE_3 PHASE_4

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11/7/2018



112+98.66



112+19.07

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

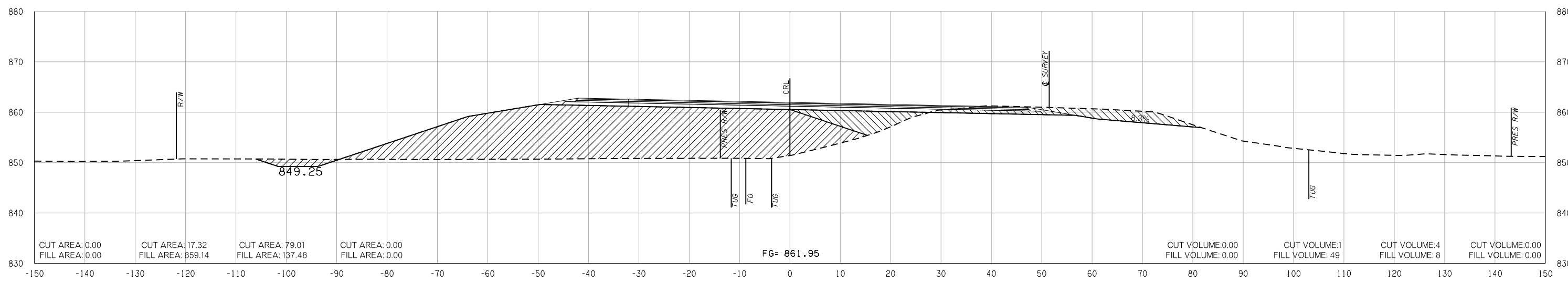
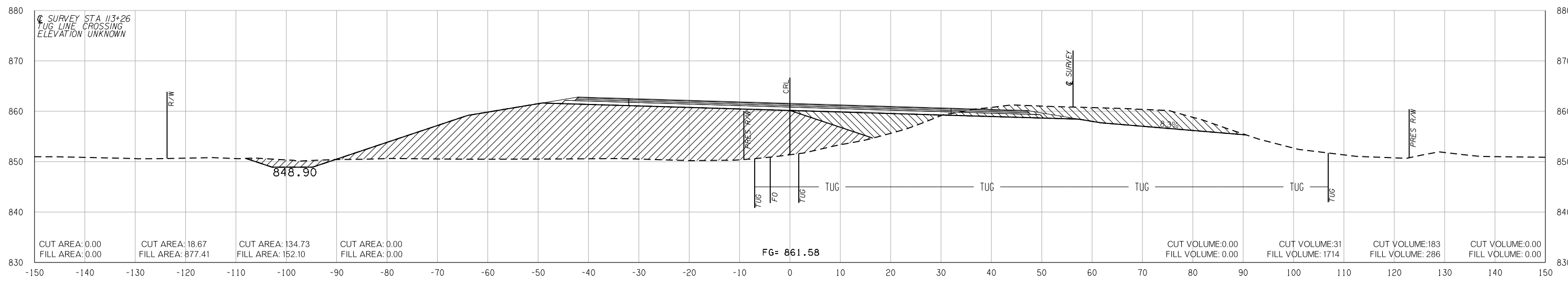
END AREAS (SF)

PHASE_1 PHASE_2 PHASE_3 PHASE_4

VOLUMES (CY)

PHASE_1 PHASE_2 PHASE_3 PHASE_4

P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn 11/7/2018



END AREAS (SF)

PHASE 1 PHASE 2 PHASE 3 PHASE 4

PHASE 1

PHASE 2

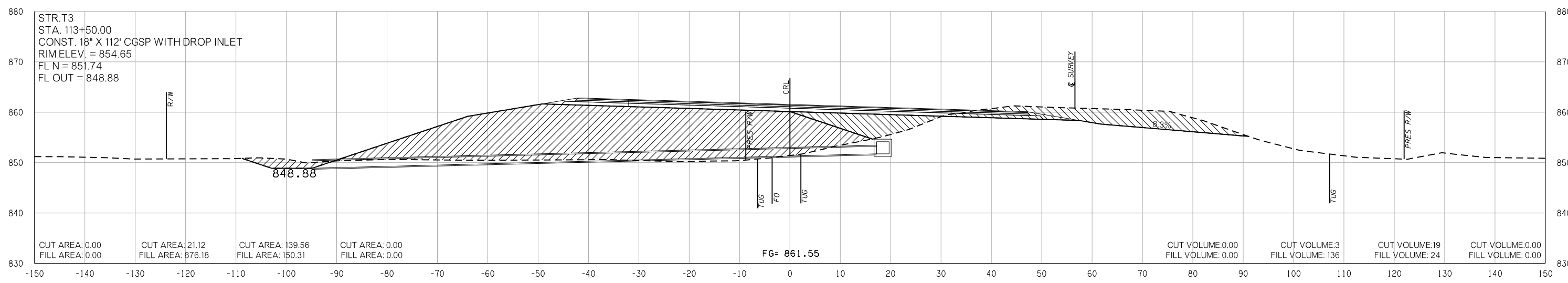
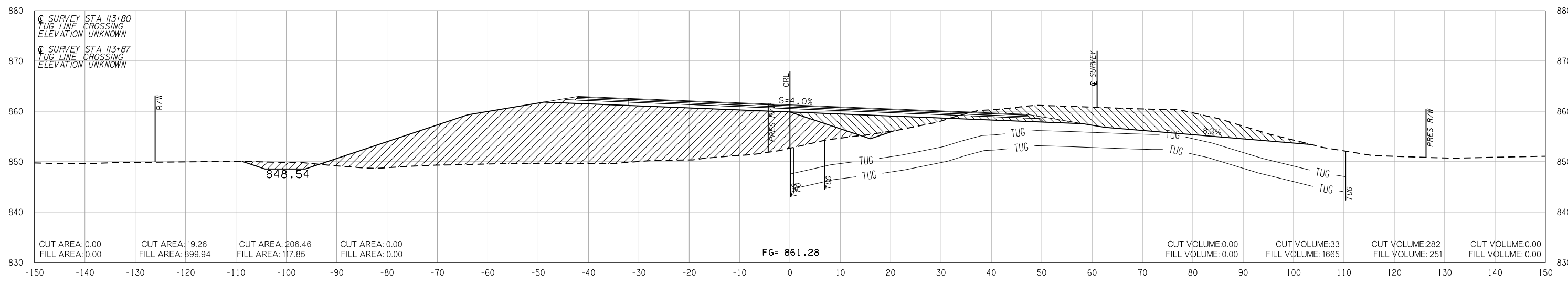
PHASE 3

PHASE 4

VOLUMES (CY)

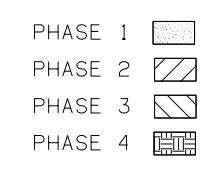
PHASE 1 PHASE 2 PHASE 3 PHASE 4

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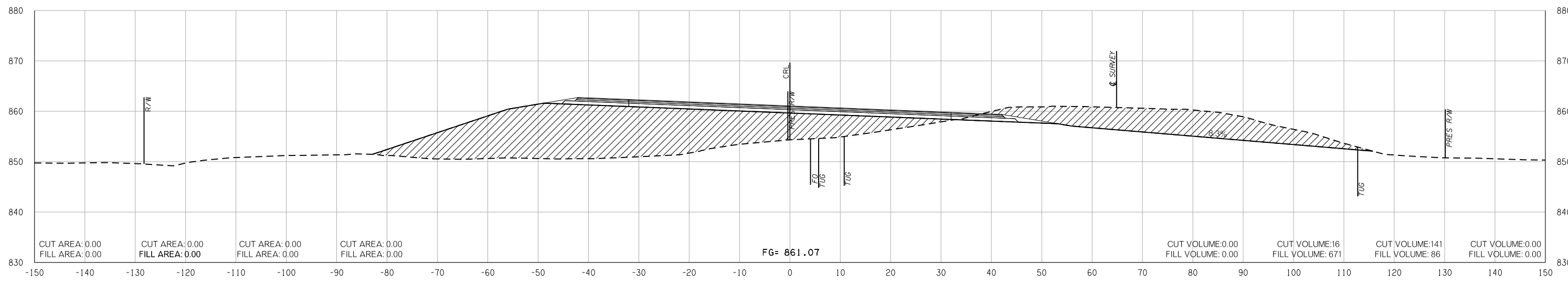
PHASE 1 PHASE 2 PHASE 3 PHASE 4



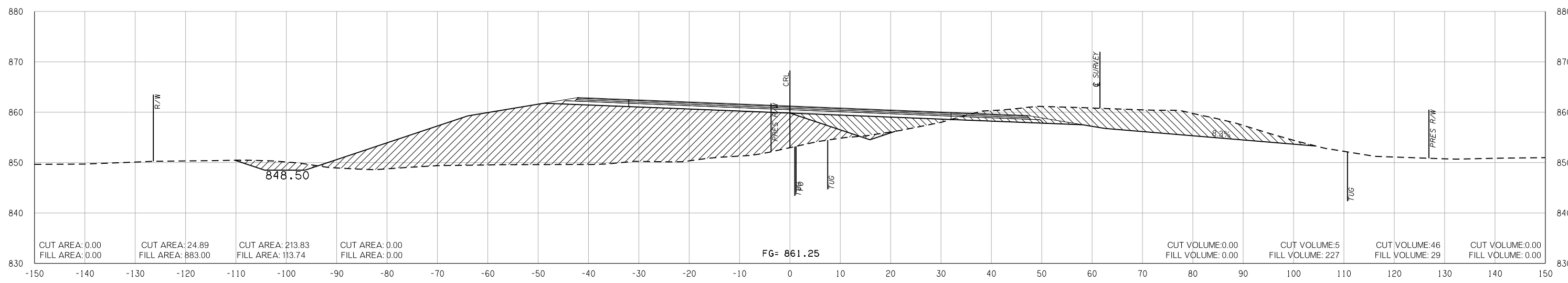
VOLUMES (CY)

PHASE 1 PHASE 2 PHASE 3 PHASE 4

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BEGIN APPROACH SLAB
 114 + 35.67



114 + 00.00

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

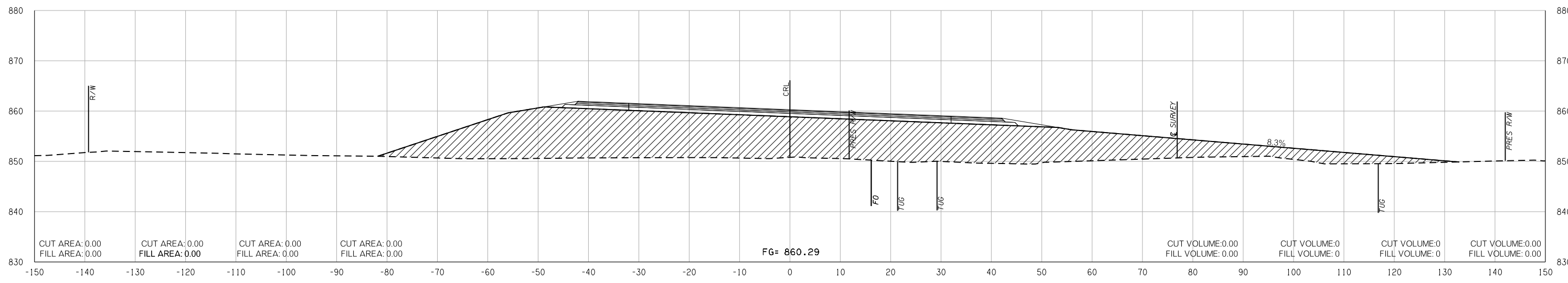
END AREAS (SF)

PHASE_1 PHASE_2 PHASE_3 PHASE_4

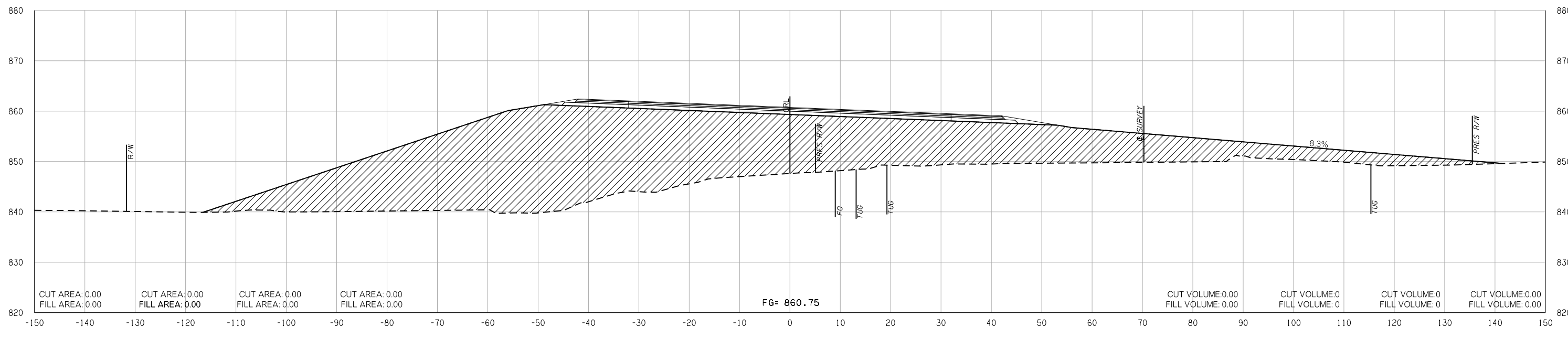
VOLUMES (CY)

PHASE_1 PHASE_2 PHASE_3 PHASE_4

P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn 11/7/2018



**END APPROACH SLAB
 115+92.33**



115+00.00

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

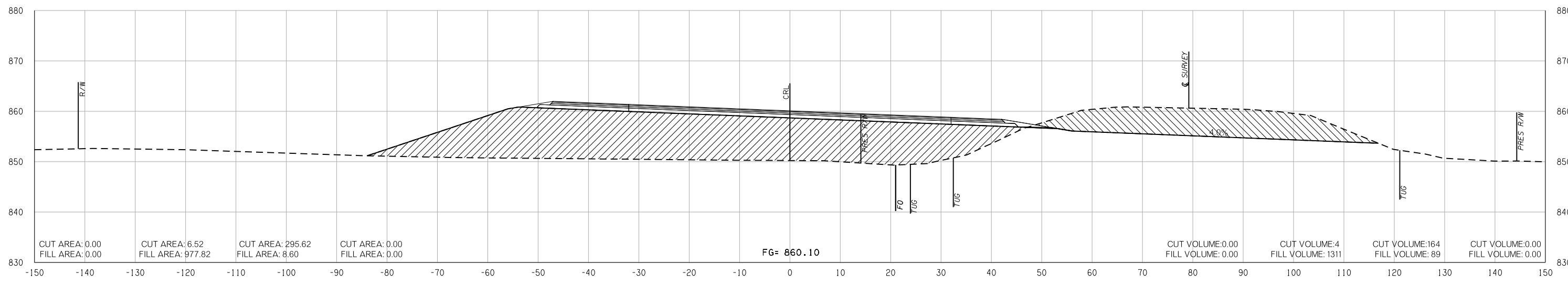
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PHASE_1 PHASE_2 PHASE_3 PHASE_4

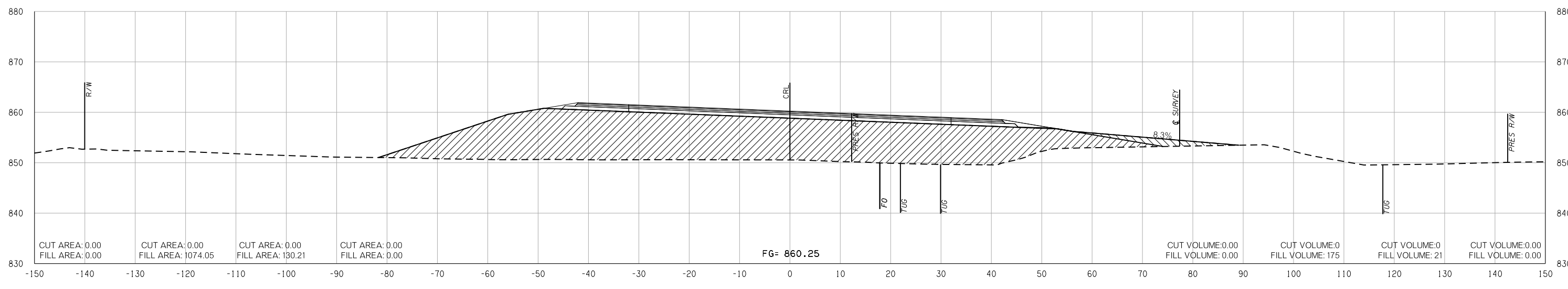
VOLUMES (CY)

PHASE_1 PHASE_2 PHASE_3 PHASE_4

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116+30.00



116+00.00

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

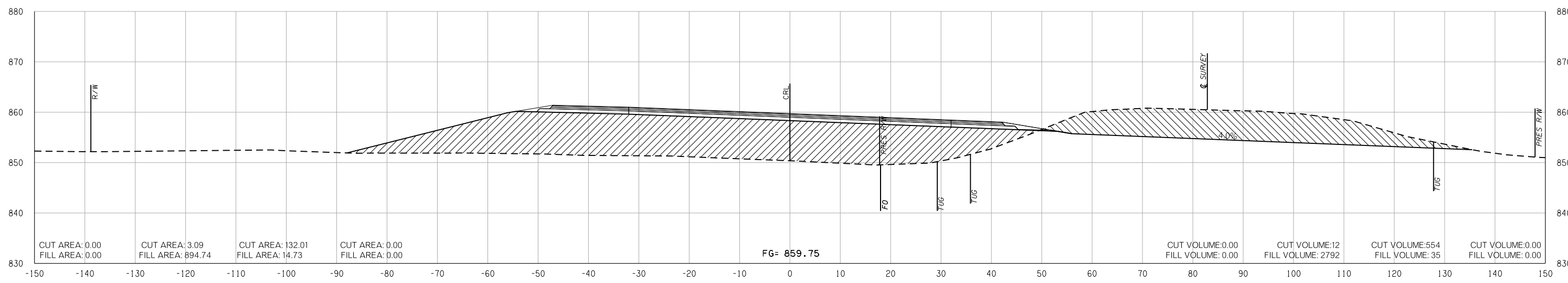
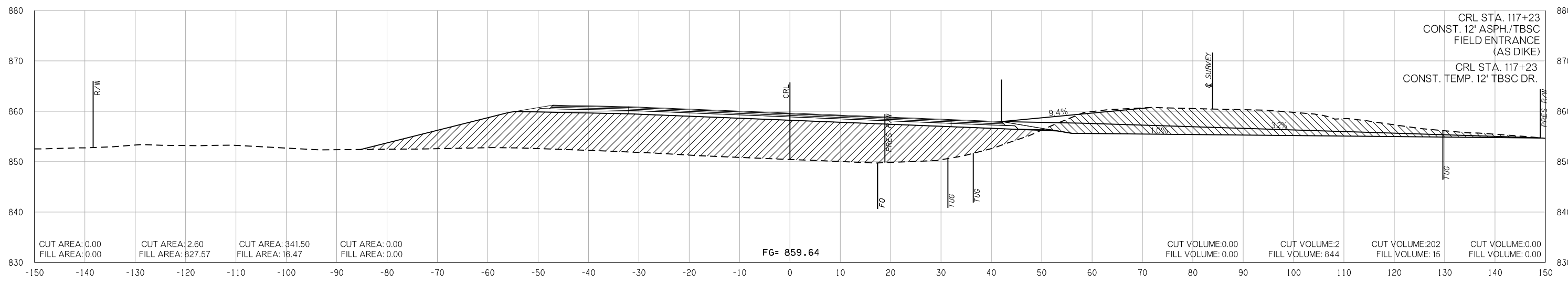
END AREAS (SF)

PHASE_1 PHASE_2 PHASE_3 PHASE_4

VOLUMES (CY)

PHASE_1 PHASE_2 PHASE_3 PHASE_4

P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn 11/7/2018



- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

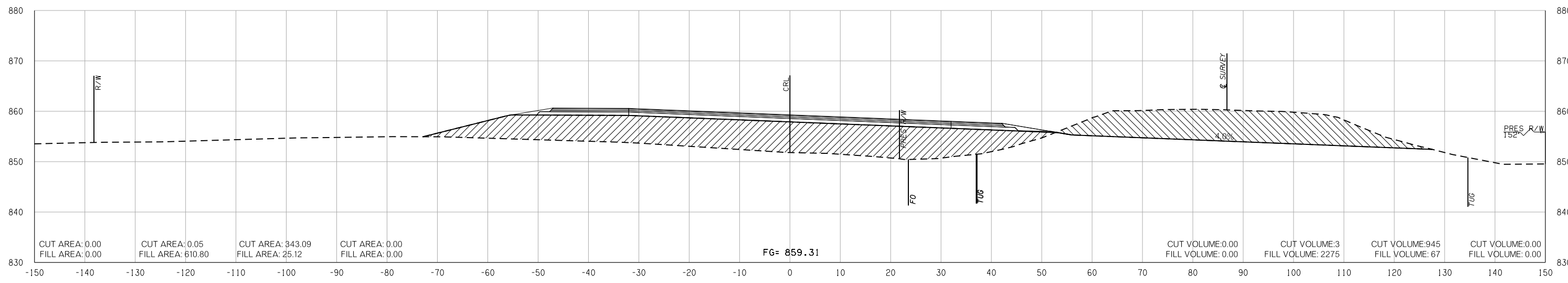
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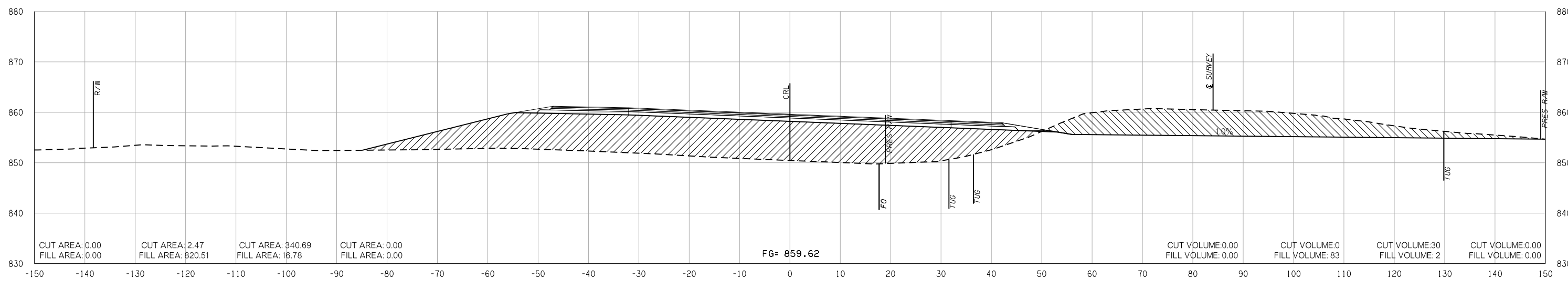
VOLUMES (CY)

PHASE_1 PHASE_2 PHASE_3 PHASE_4

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118+00.00



117+25.37

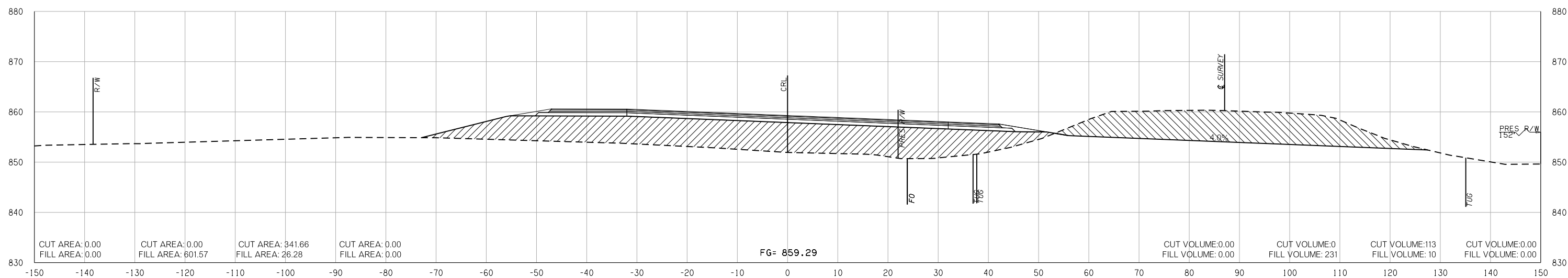
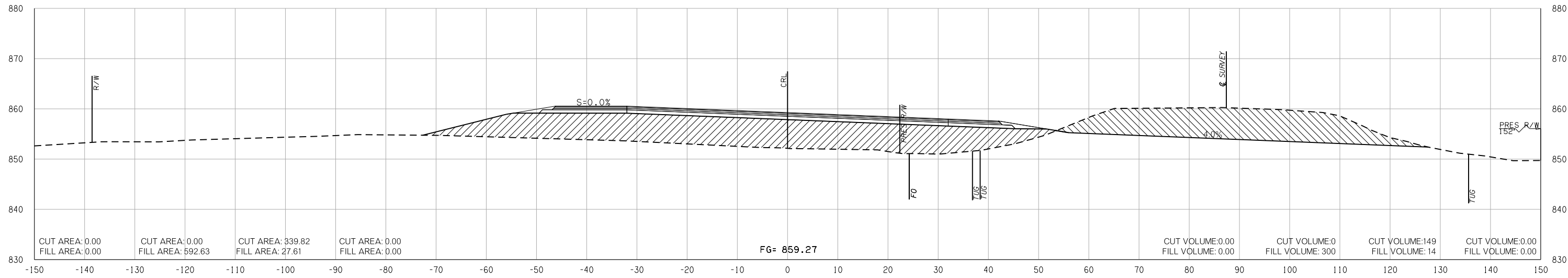
- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

END AREAS (SF)

PHASE_1 PHASE_2 PHASE_3 PHASE_4

PHASE_1 PHASE_2 PHASE_3 PHASE_4

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END AREAS (SF)

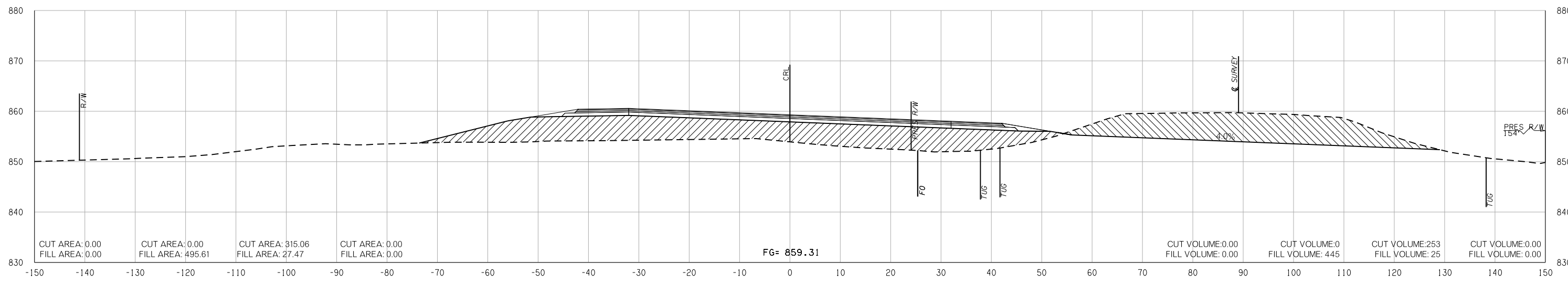
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VOLUMES (CY)

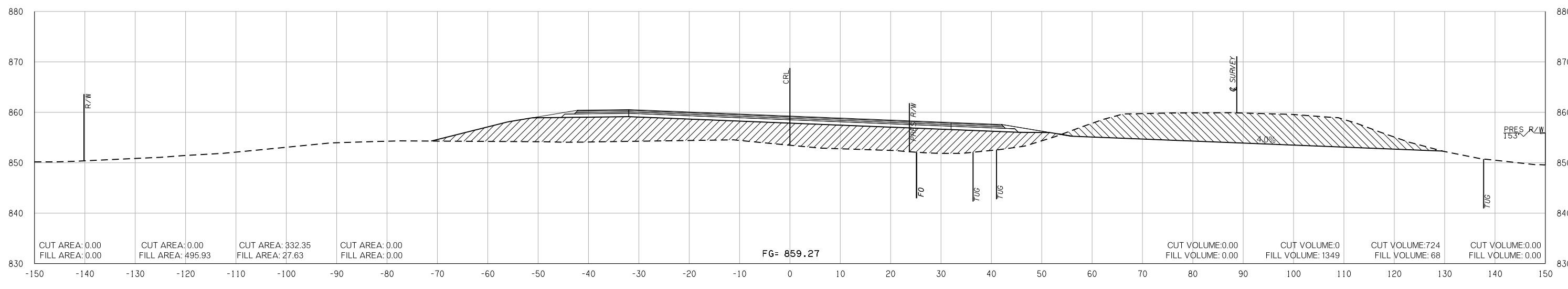
PHASE_1 PHASE_2 PHASE_3 PHASE_4

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

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119+00.00



118+78.93

END AREAS (SF)

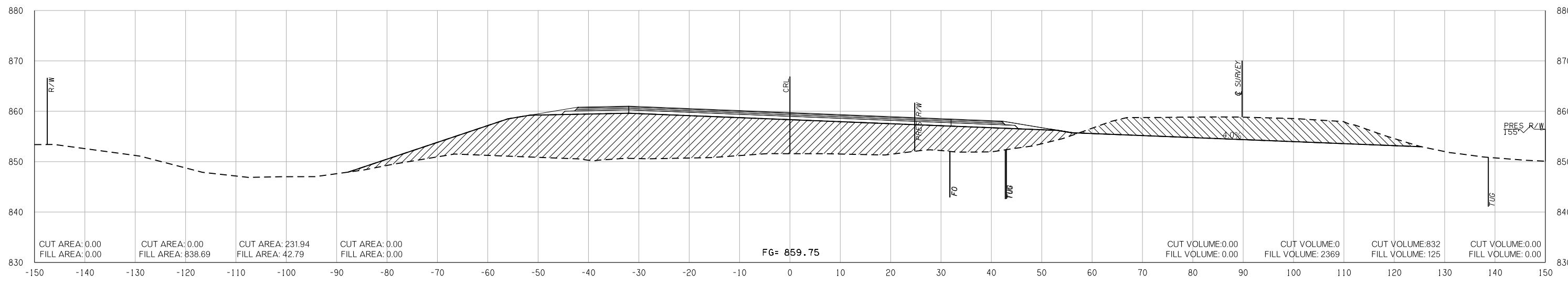
PHASE 1 PHASE 2 PHASE 3 PHASE 4

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

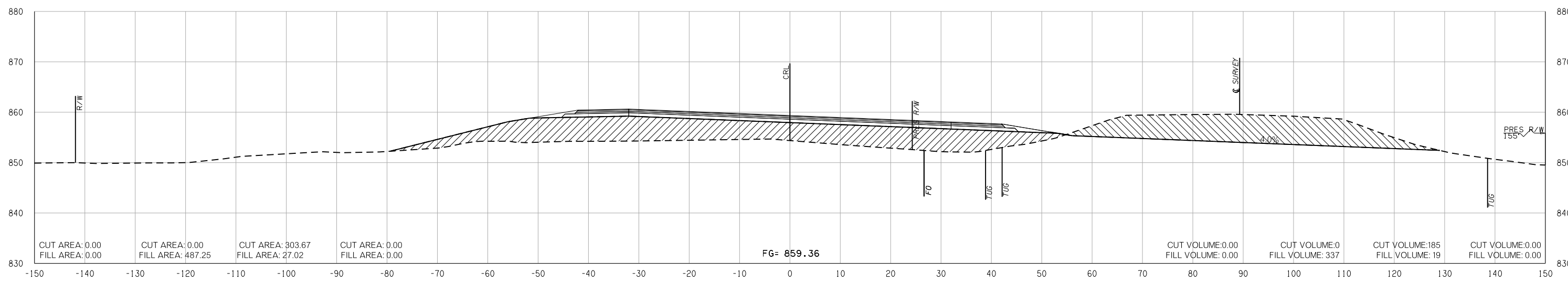
VOLUMES (CY)

PHASE 1 PHASE 2 PHASE 3 PHASE 4

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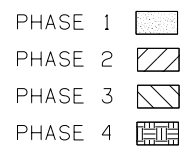
120+00.00



119+16.11

END AREAS (SF)

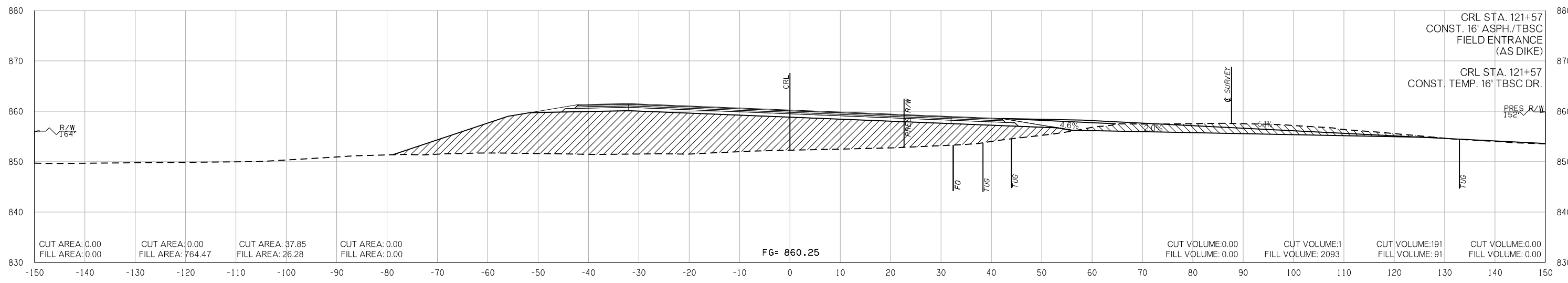
PHASE 1 PHASE 2 PHASE 3 PHASE 4



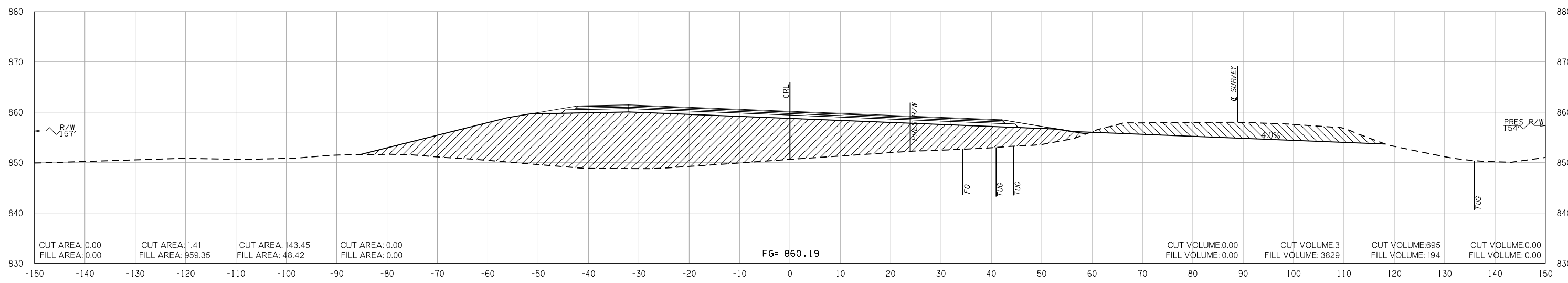
VOLUMES (CY)

PHASE 1 PHASE 2 PHASE 3 PHASE 4

P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn 11/7/2018



121+57.00



121+00.00

END AREAS (SF)

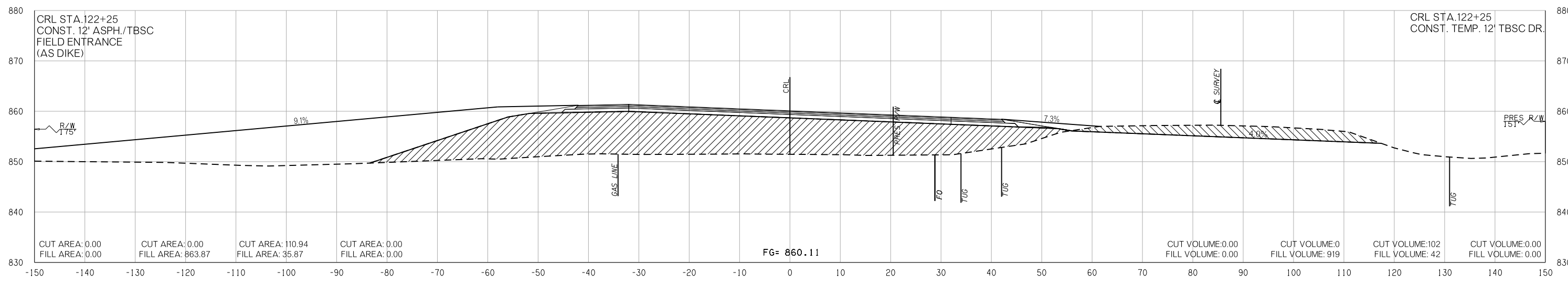
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VOLUMES (CY)

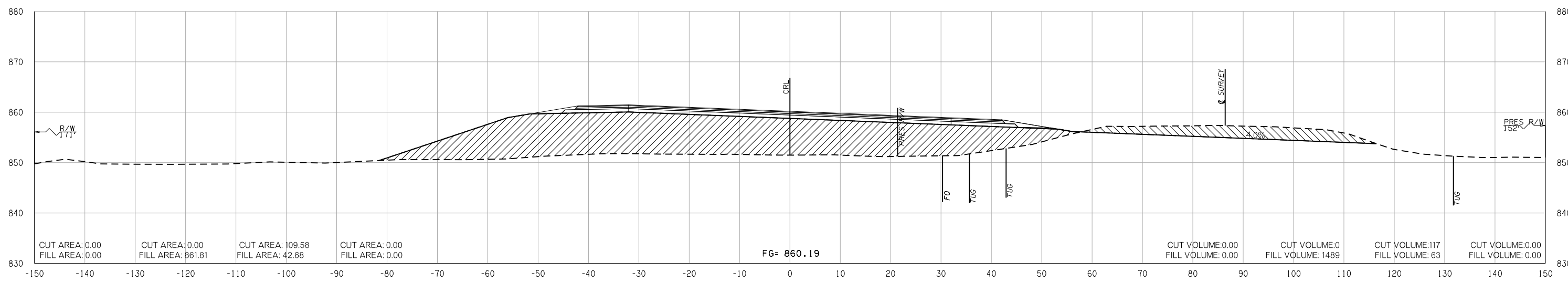
PHASE 1 PHASE 2 PHASE 3 PHASE 4

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

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122 + 25.00



122 + 00.00

FINAL FIELD MEETING

11/7/2018

VOLUMES (CY)

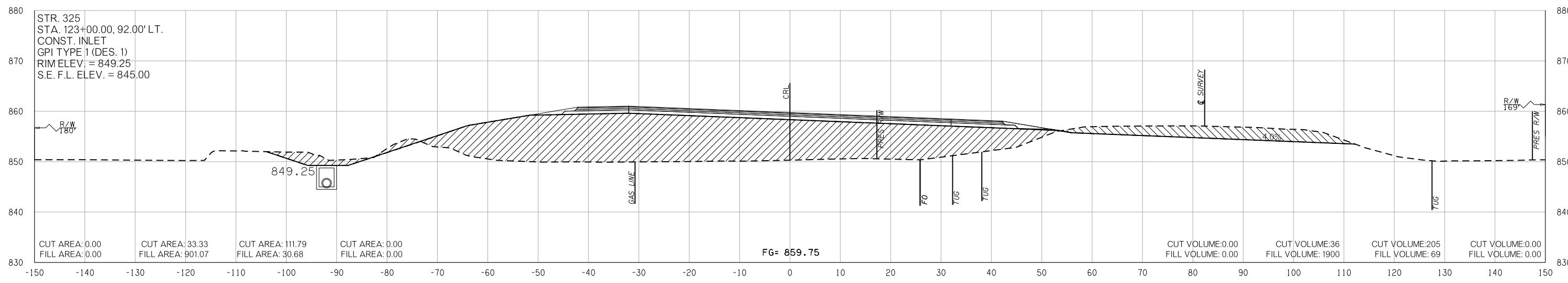
- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

END AREAS (SF)

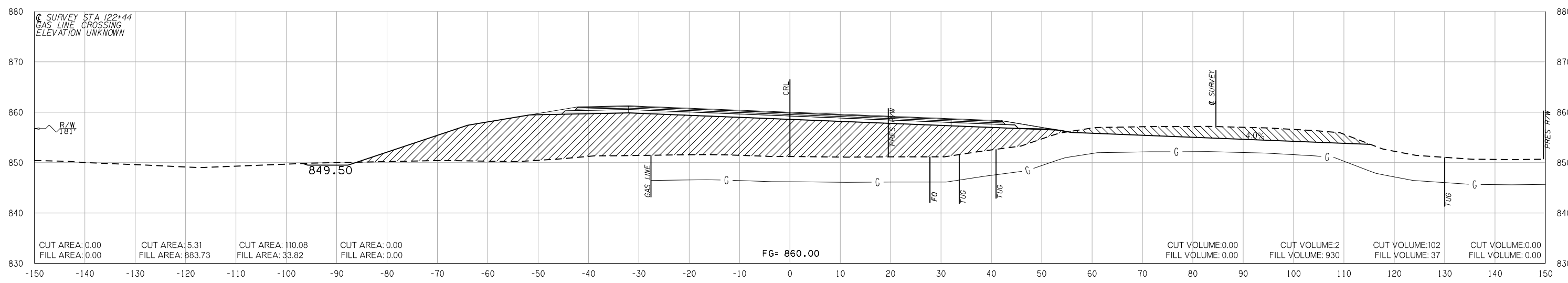
PHASE_1 PHASE_2 PHASE_3 PHASE_4

PHASE_1 PHASE_2 PHASE_3 PHASE_4

P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn 11/7/2018



123 + 00.00



122 + 50.00

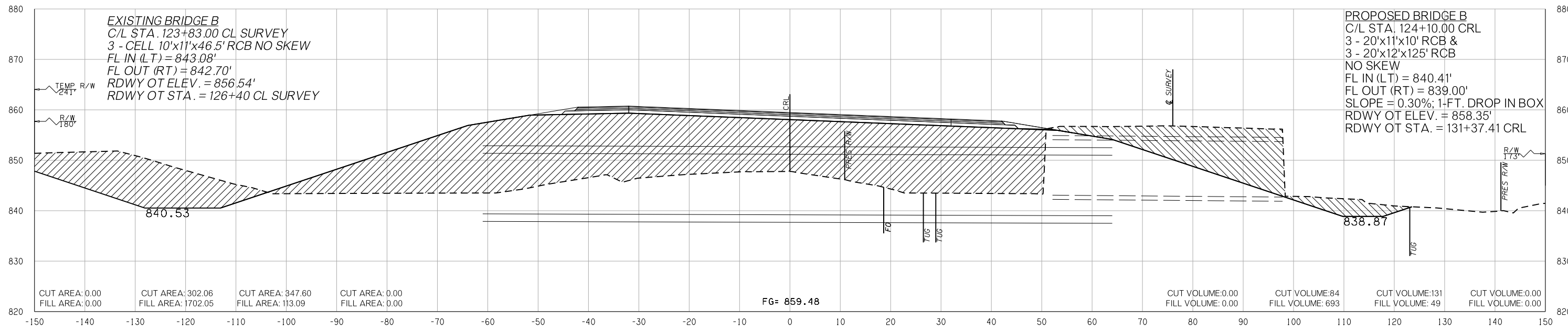
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- PHASE 3
- PHASE 4

END AREAS (SF)

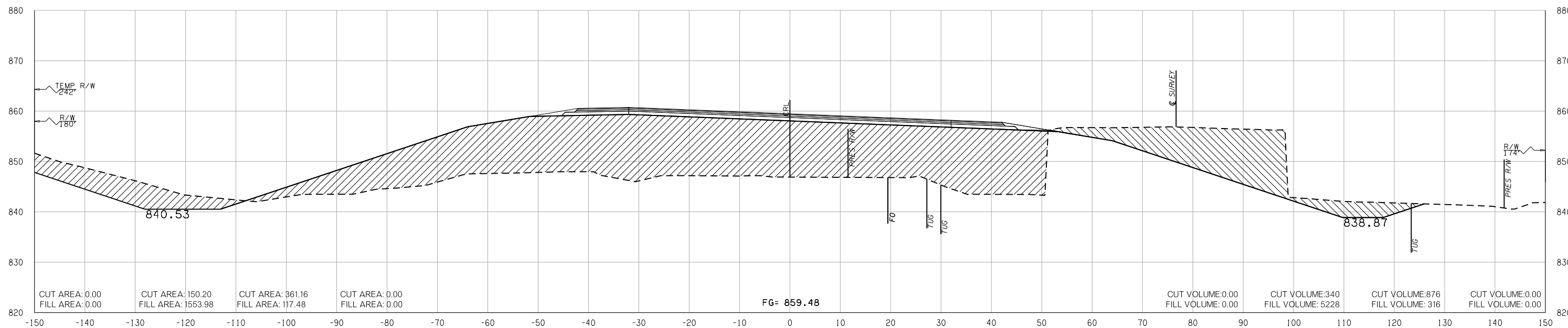
PHASE 1 PHASE 2 PHASE 3 PHASE 4

PHASE 1 PHASE 2 PHASE 3 PHASE 4

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124 + 10.00



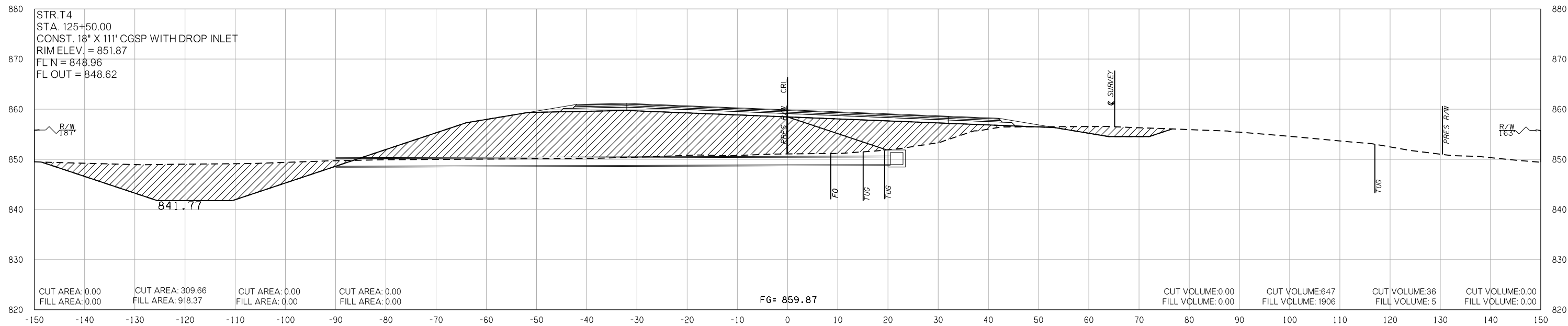
124 + 00.00

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

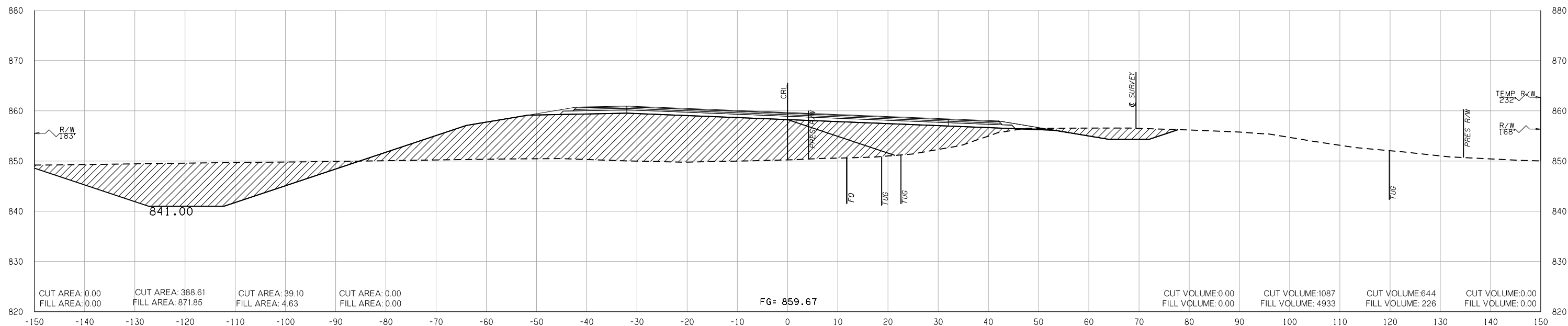
END AREAS (SF)

PHASE_1 PHASE_2 PHASE_3 PHASE_4

PHASE_1 PHASE_2 PHASE_3 PHASE_4



125 + 50.00



125 + 00.00

11/7/2018 P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn

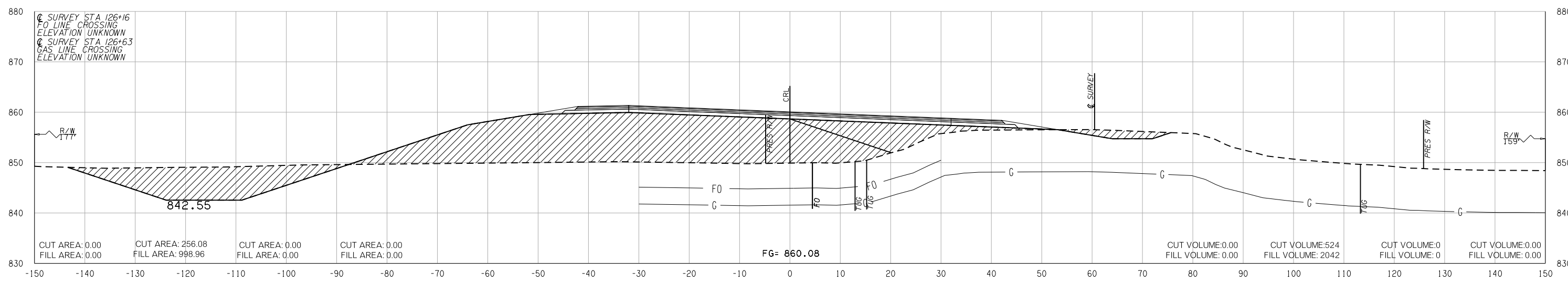
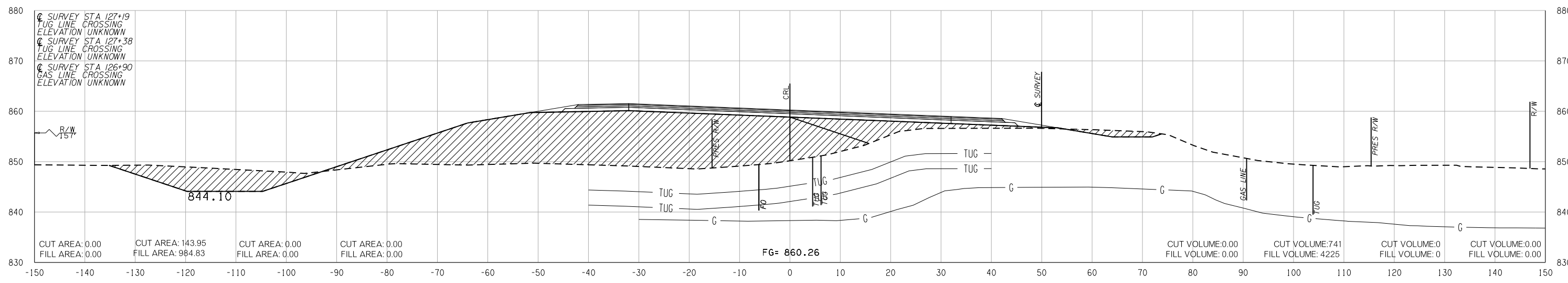
- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

END AREAS (SF)

PHASE_1 PHASE_2 PHASE_3 PHASE_4

PHASE_1 PHASE_2 PHASE_3 PHASE_4

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END AREAS (SF)

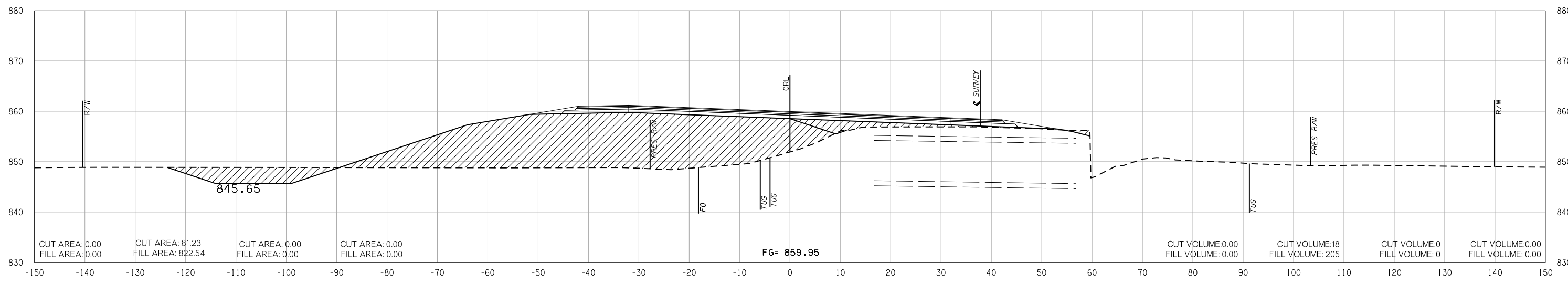
PHASE_1 PHASE_2 PHASE_3 PHASE_4

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

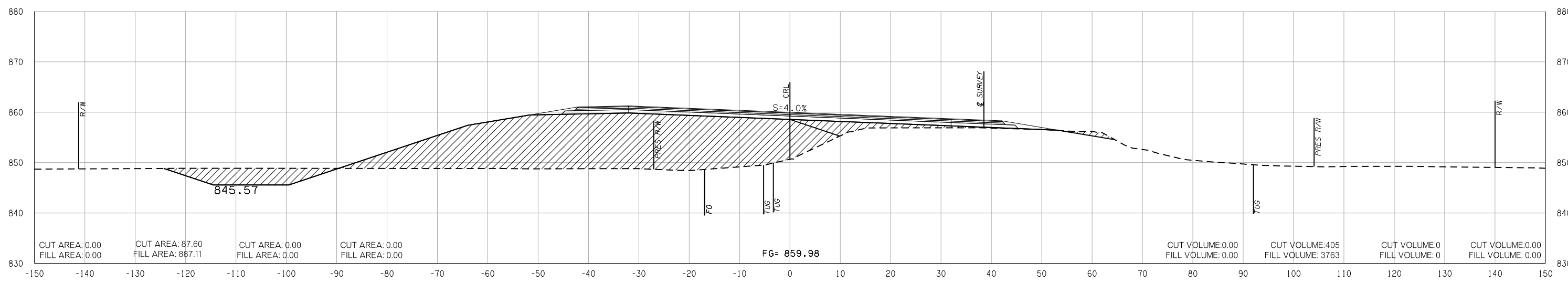
VOLUMES (CY)

PHASE_1 PHASE_2 PHASE_3 PHASE_4

P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn 11/7/2018



128 + 00.00



127 + 94.38

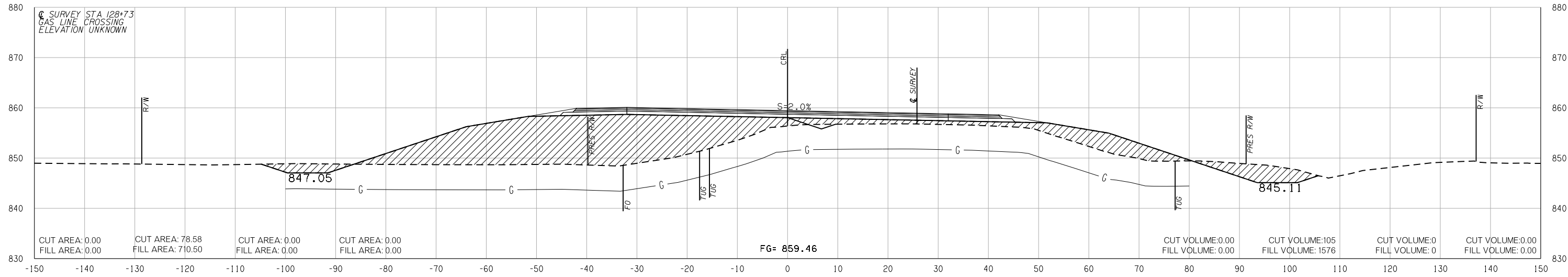
- PHASE 1
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- PHASE 3
- PHASE 4

END AREAS (SF)

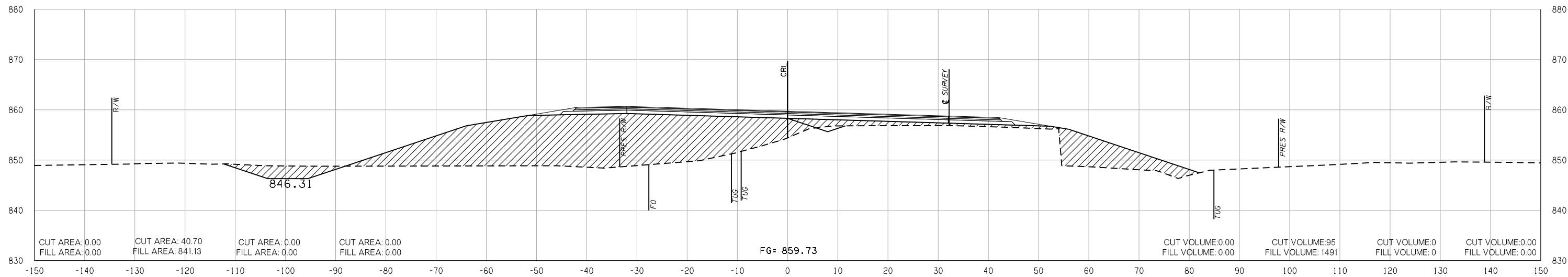
PHASE 1 PHASE 2 PHASE 3 PHASE 4

PHASE 1 PHASE 2 PHASE 3 PHASE 4

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128+89.75



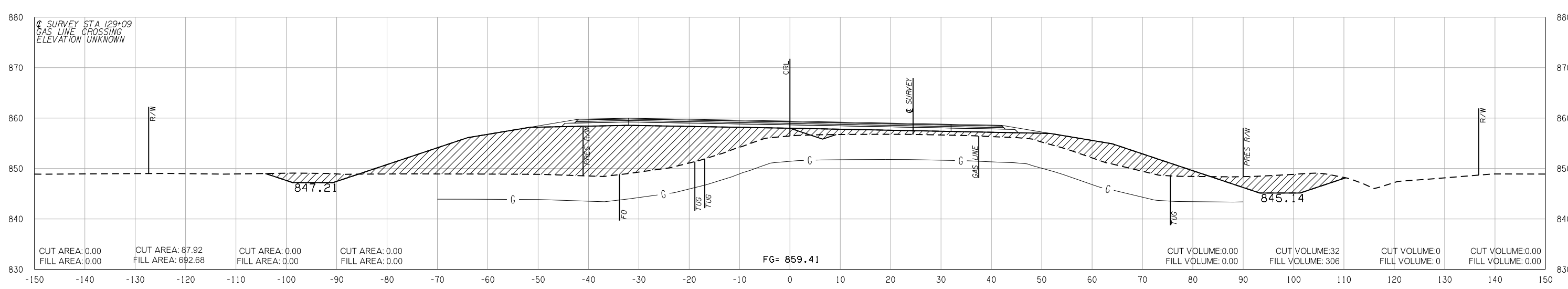
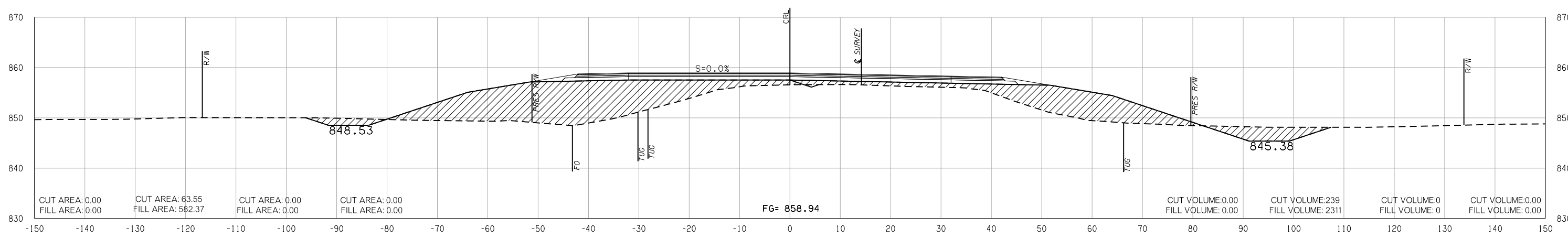
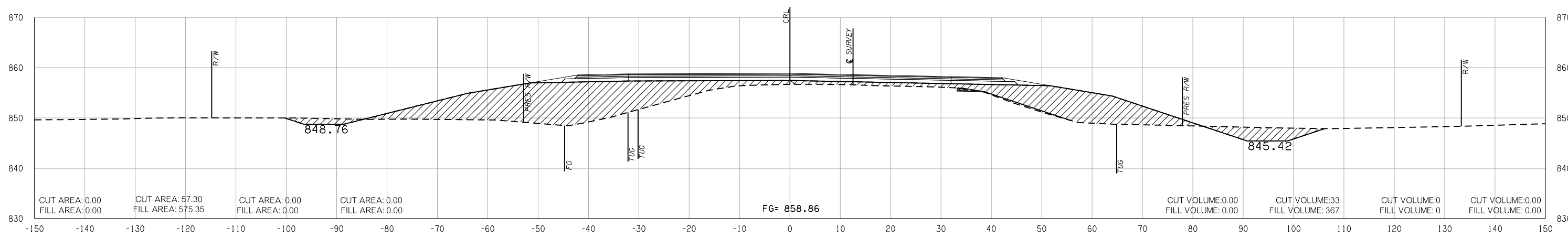
128+42.07

END AREAS (SF)

VOLUMES (CY)

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

PHASE 1 PHASE 2 PHASE 3 PHASE 4 PHASE 1 PHASE 2 PHASE 3 PHASE 4



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 11/7/2018

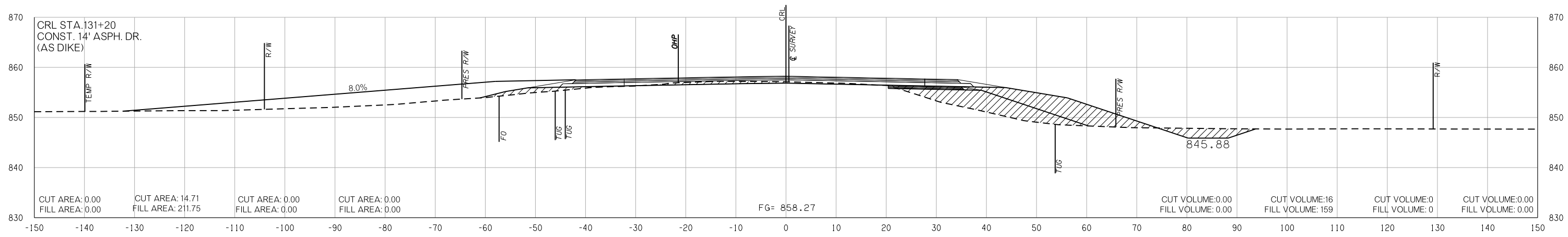
END AREAS (SF)

PHASE 1 PHASE 2 PHASE 3 PHASE 4

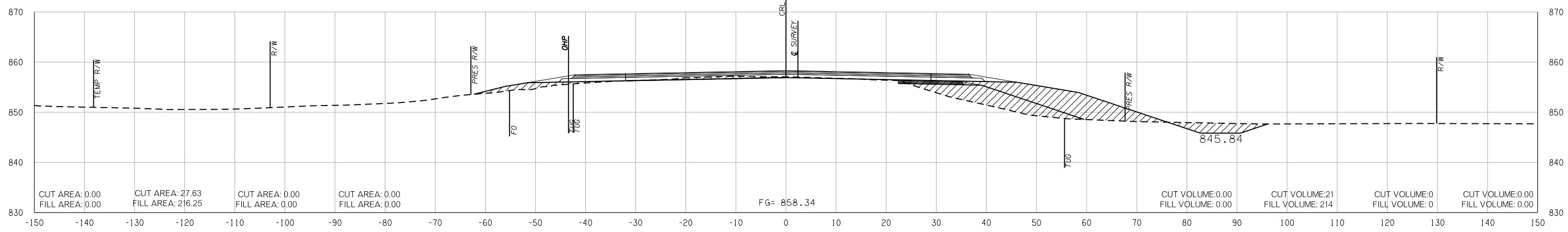
VOLUMES (CY)

PHASE 1 PHASE 2 PHASE 3 PHASE 4

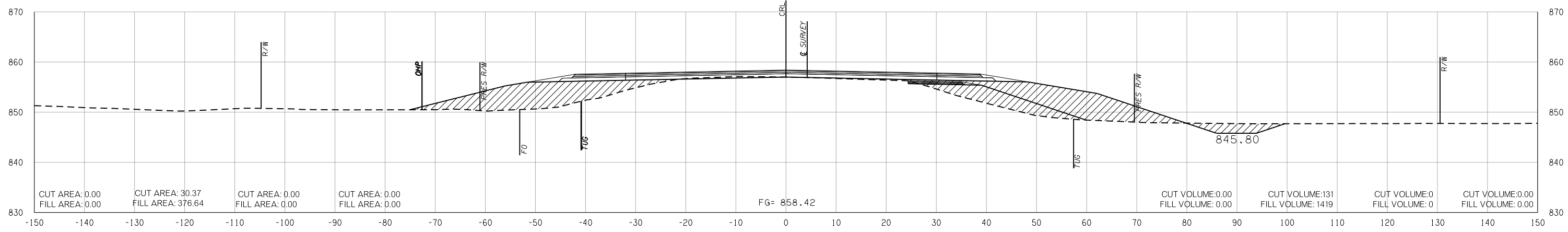
- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4



131 + 20.00



131 + 00.00







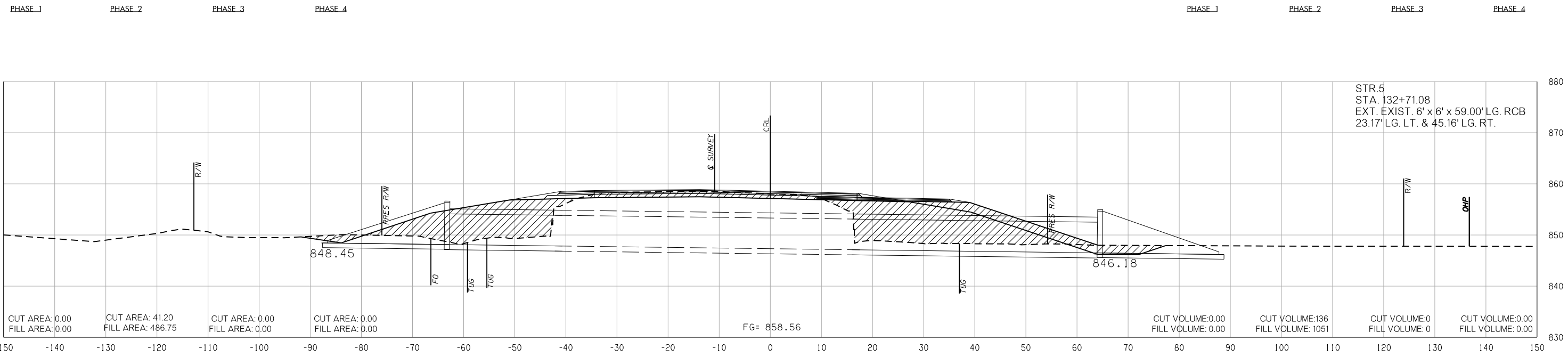
130 + 80.49

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 11/7/2018

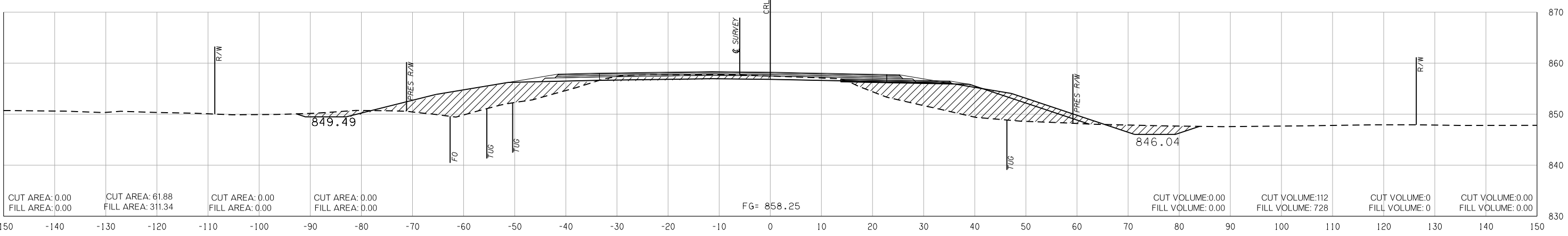
END AREAS (SF)

VOLUMES (CY)

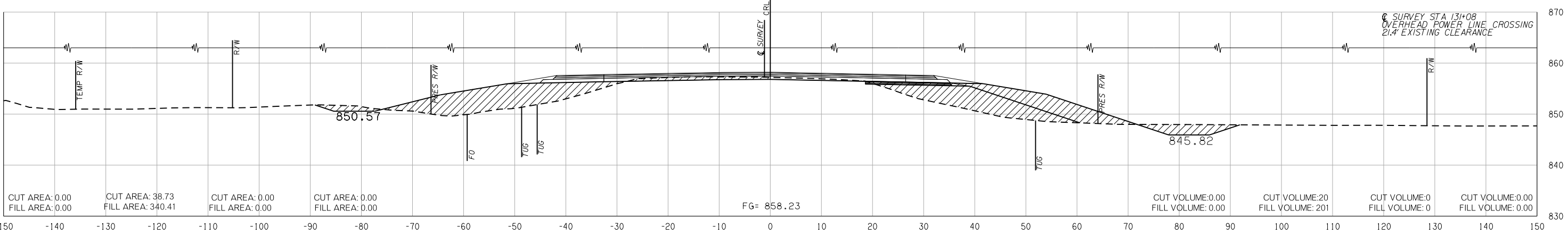
PHASE 1 
 PHASE 2 
 PHASE 3 
 PHASE 4 



132 + 71.08



132 + 00.00



131 + 39.65

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 11/7/2018

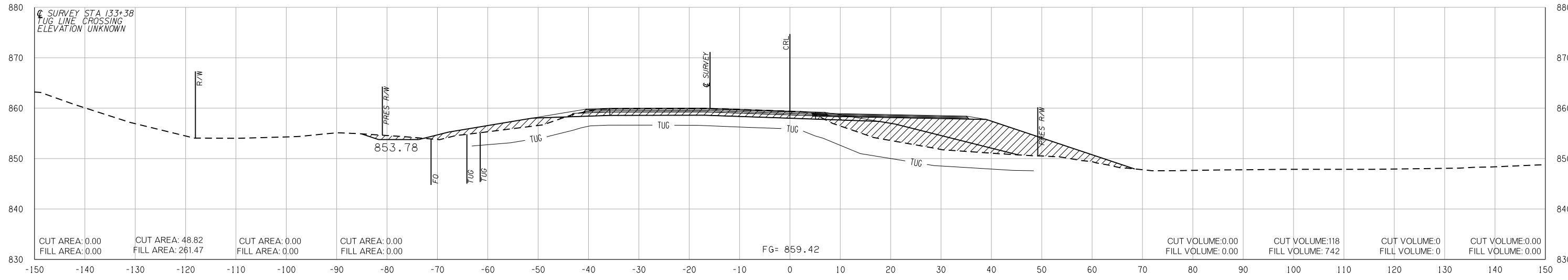
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- PHASE 2 [Pattern Box]
- PHASE 3 [Pattern Box]
- PHASE 4 [Pattern Box]

END AREAS (SF)

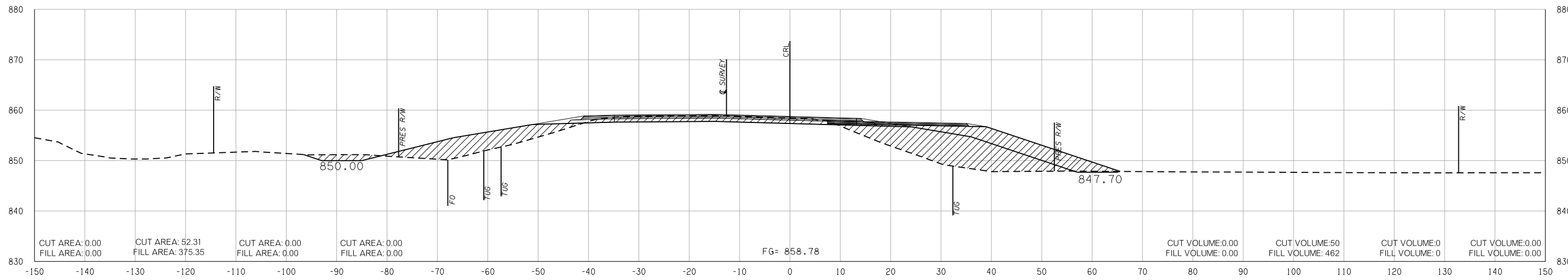
PHASE_1 PHASE_2 PHASE_3 PHASE_4

PHASE_1 PHASE_2 PHASE_3 PHASE_4

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133+62.95



133+00.00

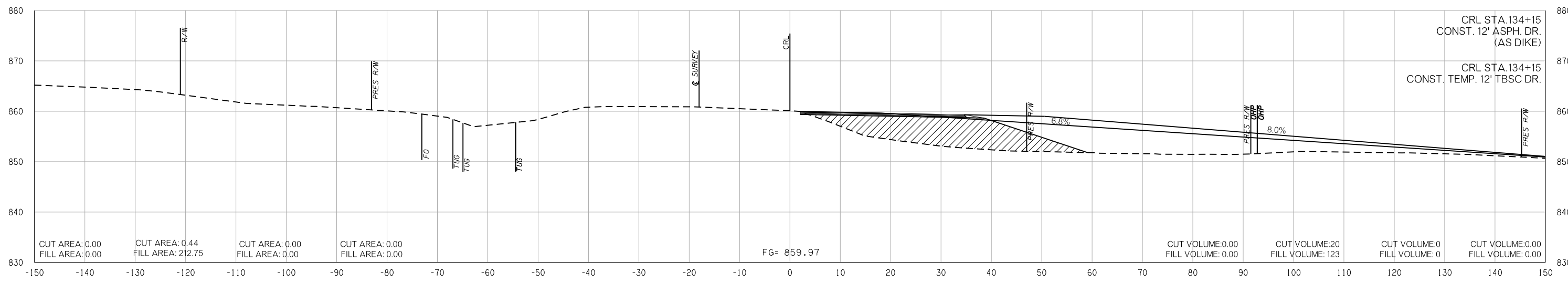
END AREAS (SF)

PHASE 1 PHASE 2 PHASE 3 PHASE 4

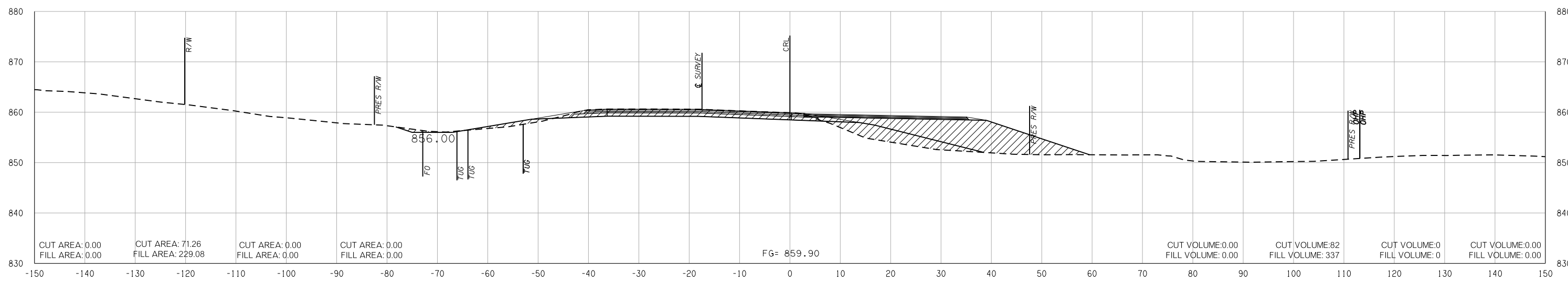
- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

VOLUMES (CY)

PHASE 1 PHASE 2 PHASE 3 PHASE 4



134 + 15.00



END PROJECT STA 134 + 00.00
 134 + 00.00

P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn
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- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

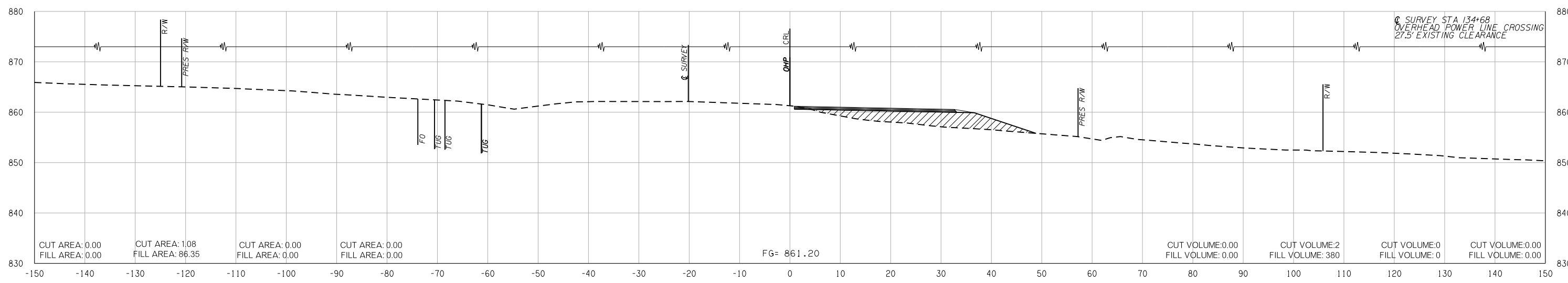
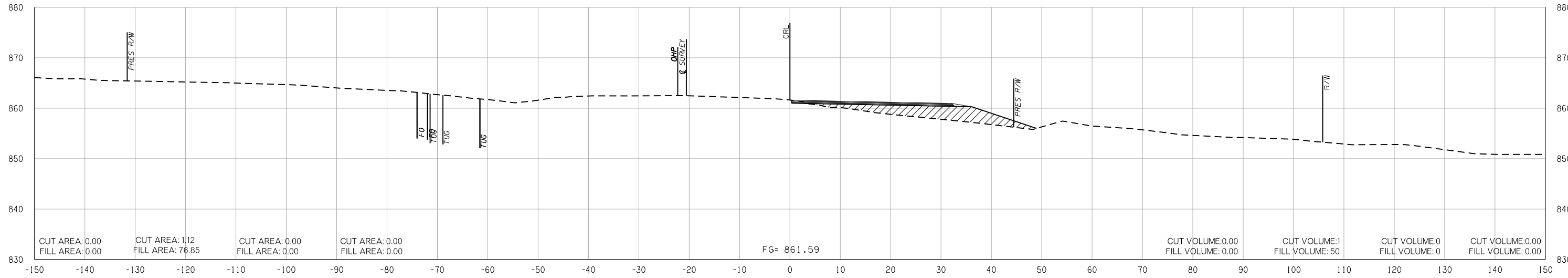
END AREAS (SF)

PHASE_1 PHASE_2 PHASE_3 PHASE_4

PHASE_1 PHASE_2 PHASE_3 PHASE_4

F0
TUG
TUG
F0

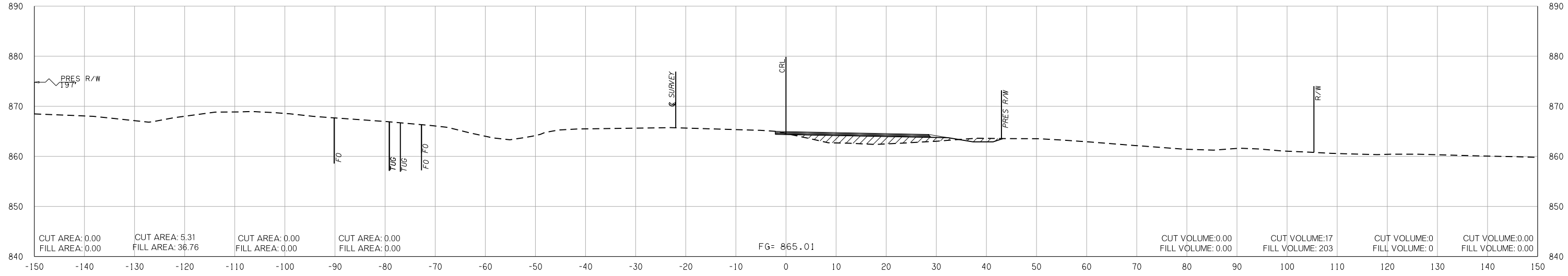
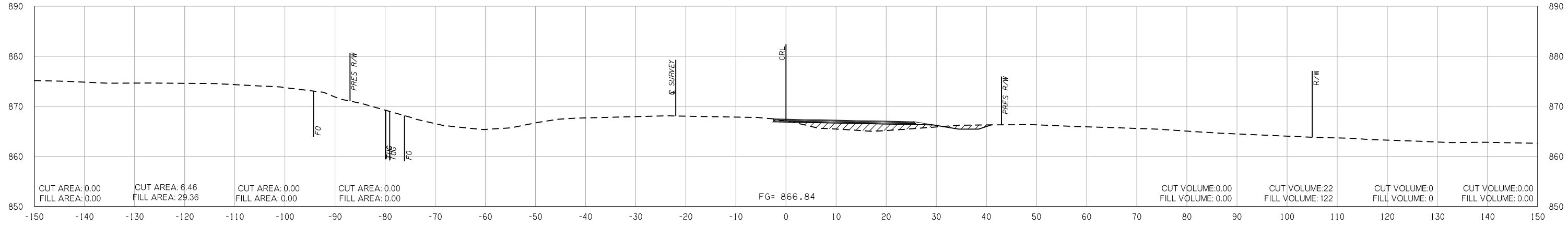
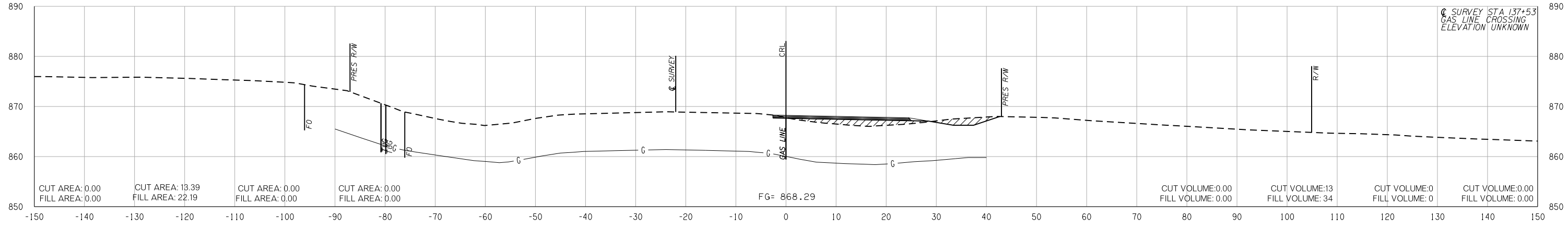
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- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

END AREAS (SF)

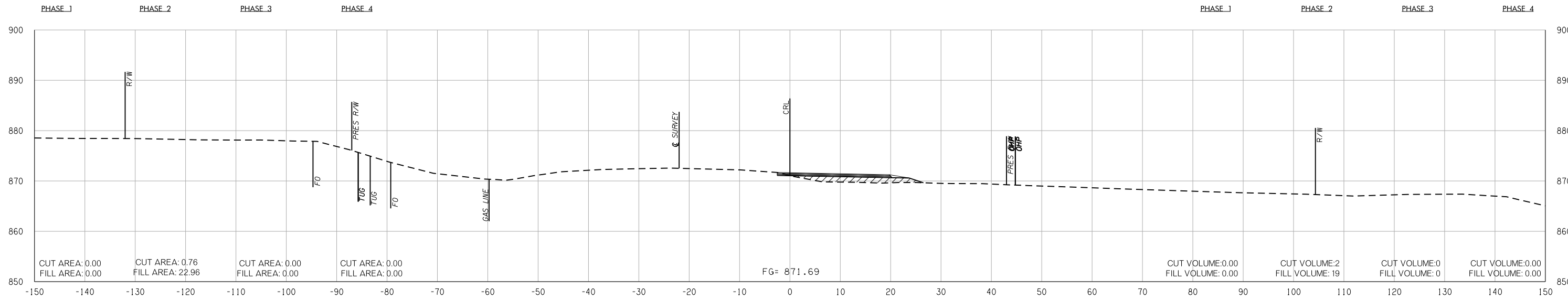
PHASE 1 PHASE 2 PHASE 3 PHASE 4 PHASE 1 PHASE 2 PHASE 3 PHASE 4



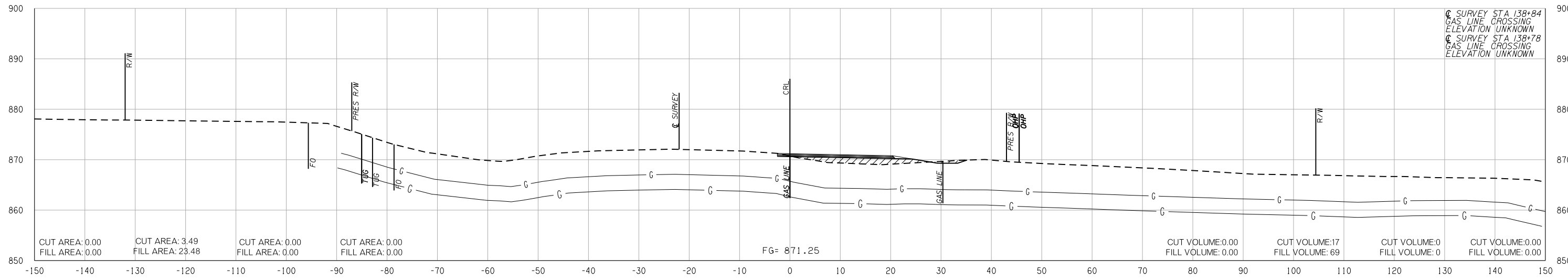
11/7/2018 P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

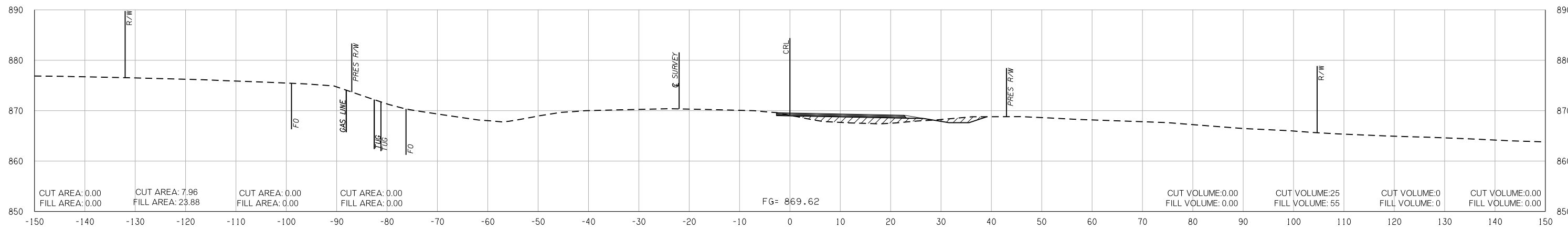
END AREAS (SF)



139 + 00.00



138 + 78.39



138 + 00.00

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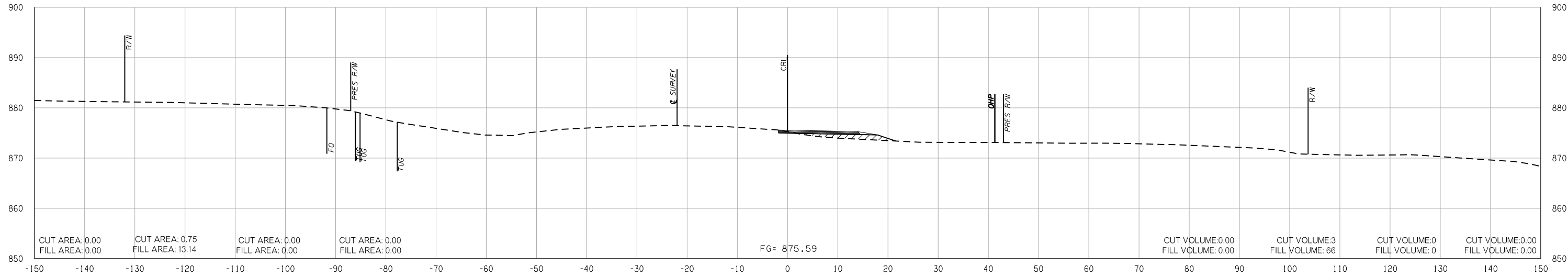
- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

END AREAS (SF)

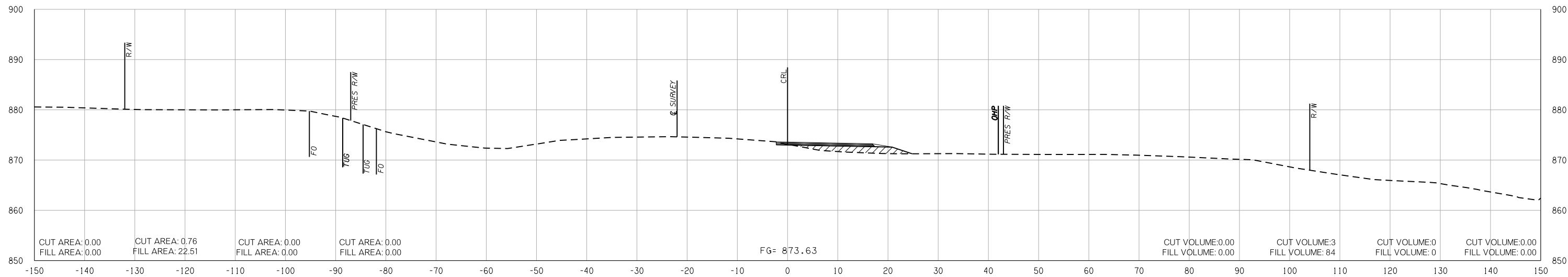
PHASE 1 PHASE 2 PHASE 3 PHASE 4

PHASE 1 PHASE 2 PHASE 3 PHASE 4

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141+00.00



140+00.00

END AREAS (SF)

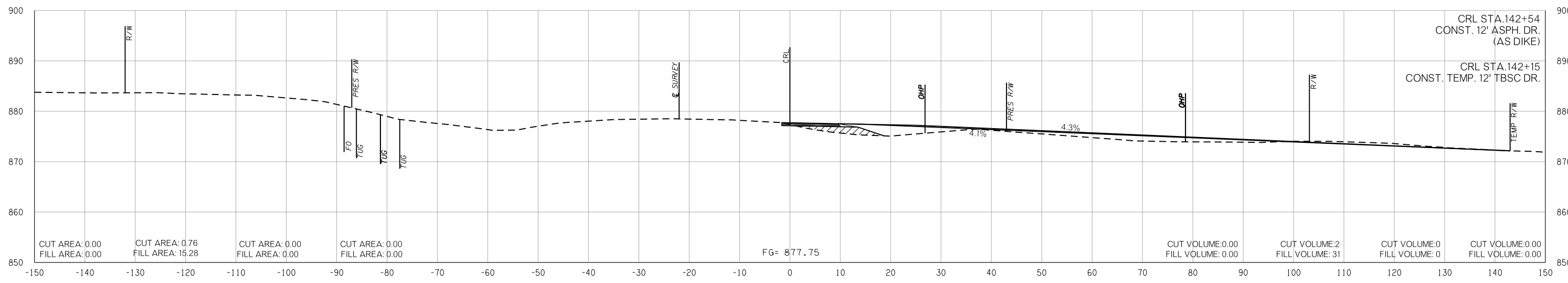
PHASE 1 PHASE 2 PHASE 3 PHASE 4

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

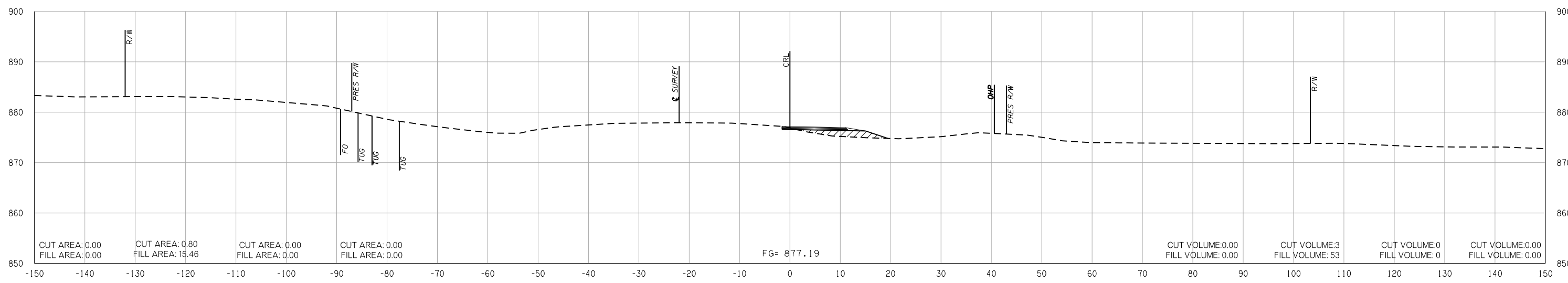
VOLUMES (CY)

PHASE 1 PHASE 2 PHASE 3 PHASE 4

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142 + 54.00



142 + 00.00

END AREAS (SF)

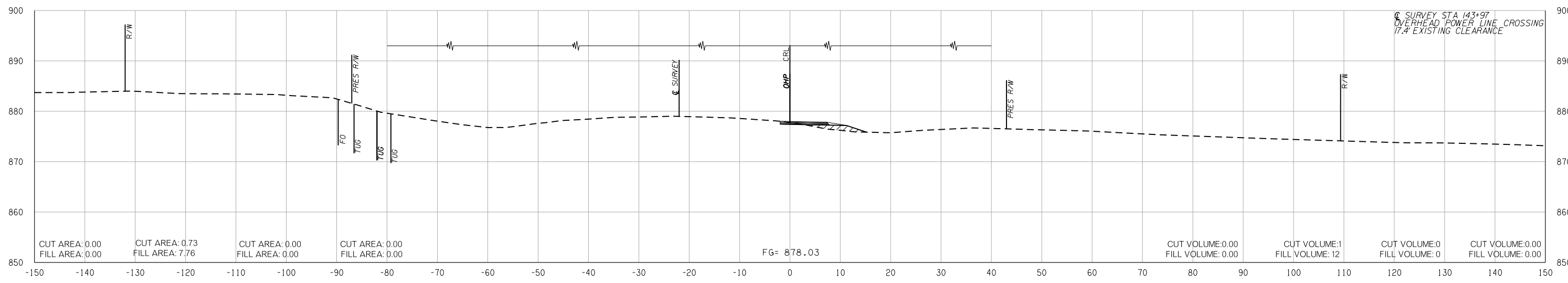
PHASE 1 PHASE 2 PHASE 3 PHASE 4

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

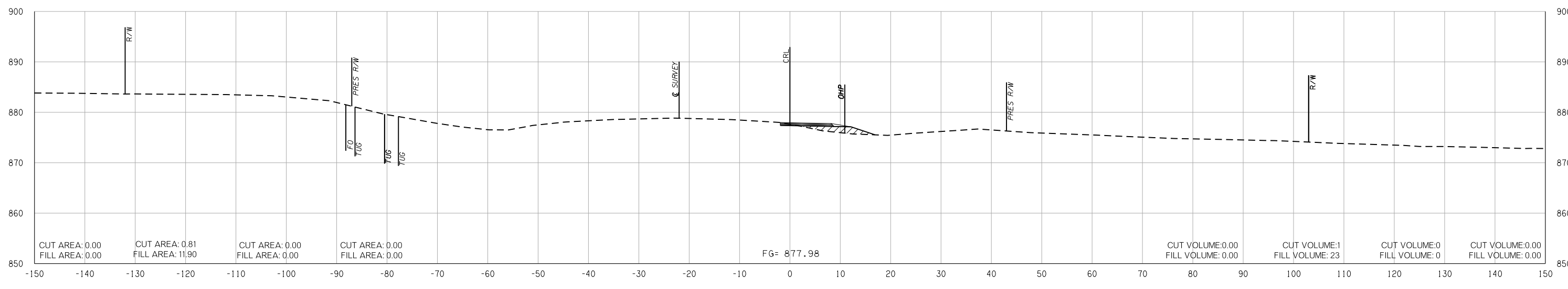
VOLUMES (CY)

PHASE 1 PHASE 2 PHASE 3 PHASE 4

P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn 11/7/2018



143+31.70



143+00.00

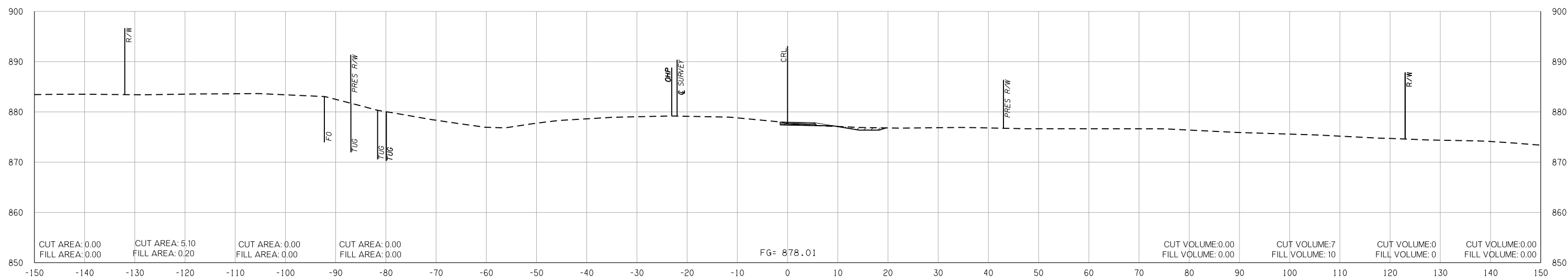
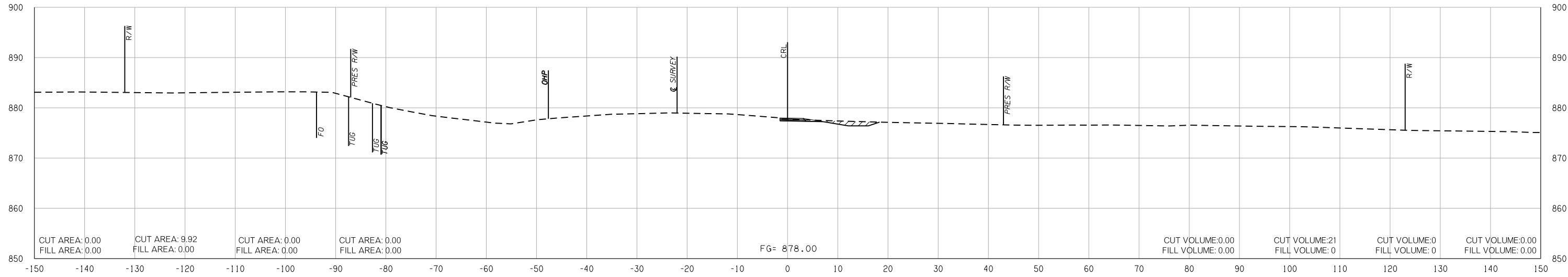
- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

END AREAS (SF)

PHASE_1 PHASE_2 PHASE_3 PHASE_4

PHASE_1 PHASE_2 PHASE_3 PHASE_4

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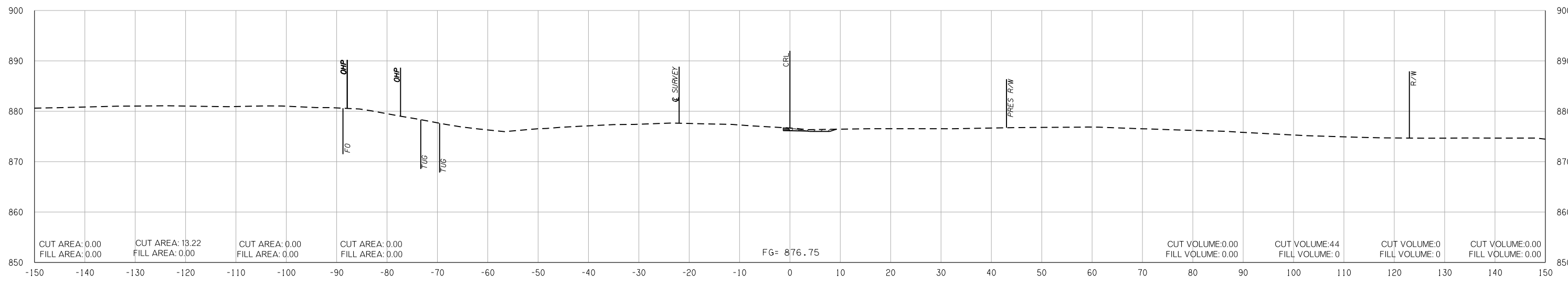
END AREAS (SF)

PHASE 1 PHASE 2 PHASE 3 PHASE 4

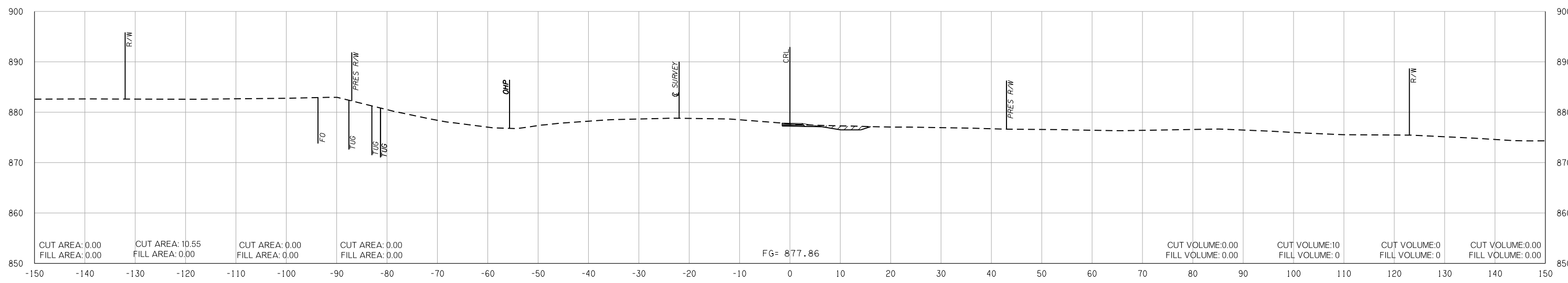
VOLUMES (CY)

PHASE 1 PHASE 2 PHASE 3 PHASE 4

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4



146 + 00.00



145 + 00.00

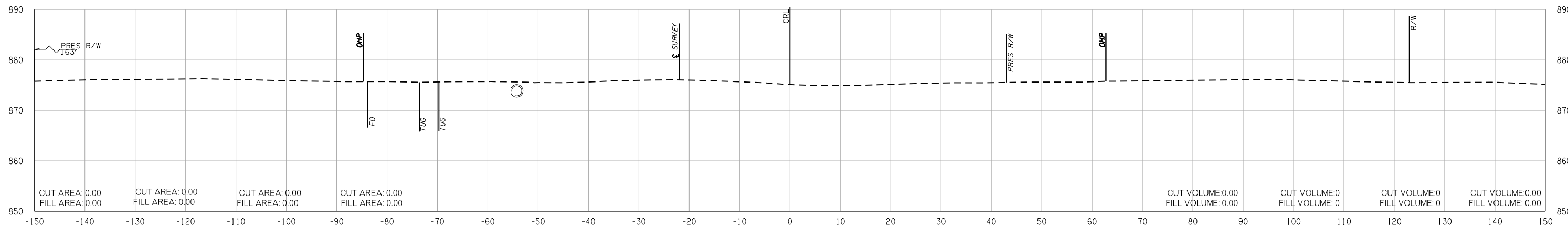
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 11/7/2018

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

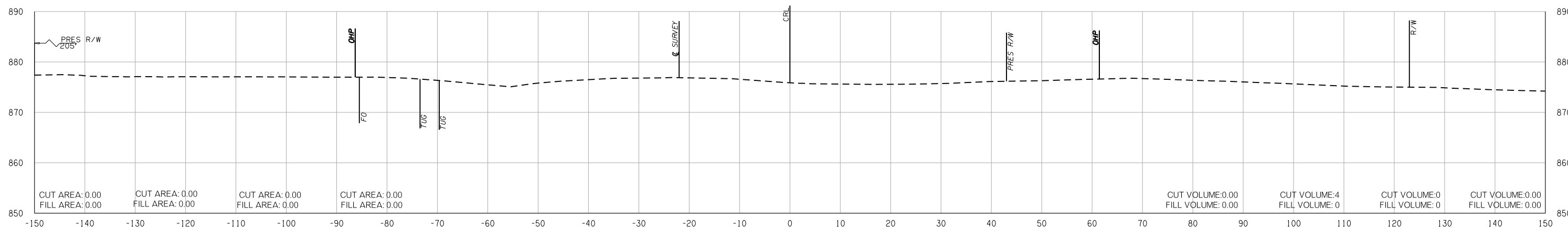
END AREAS (SF)

PHASE_1 PHASE_2 PHASE_3 PHASE_4

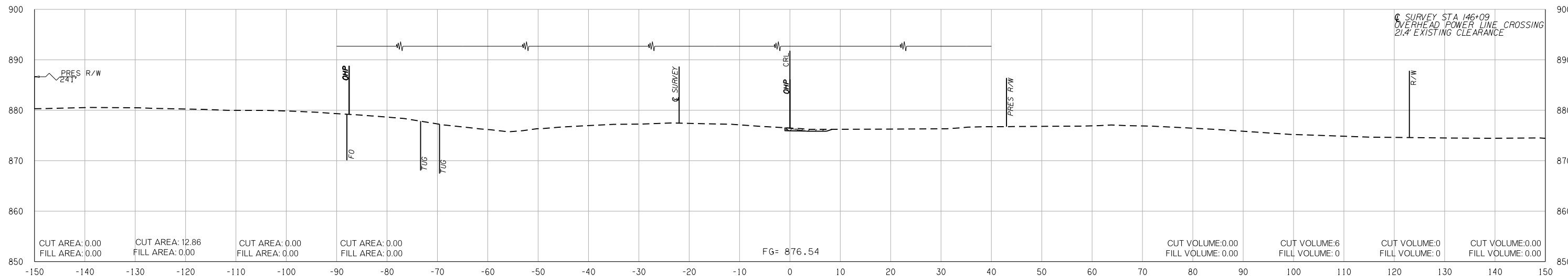
PHASE_1 PHASE_2 PHASE_3 PHASE_4



END INCIDENTAL STA 150+00.00
147+00.00







146+50.00



146+12.01

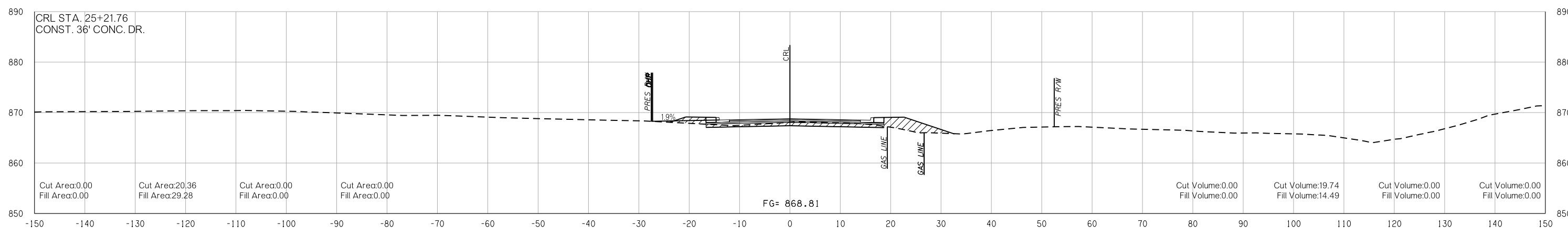
11/7/2018 P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X001-X078-2100604-CROSS SECTIONS.dgn

- PHASE 1 
- PHASE 2 
- PHASE 3 
- PHASE 4 

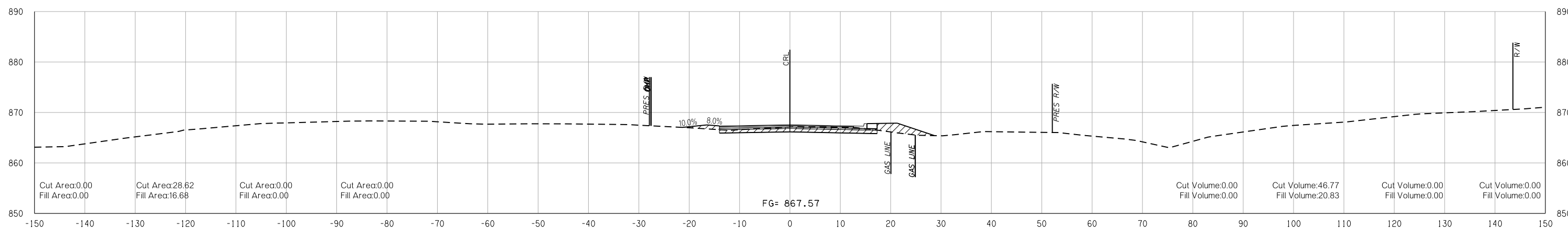
END AREAS (SF)

PHASE 1 PHASE 2 PHASE 3 PHASE 4

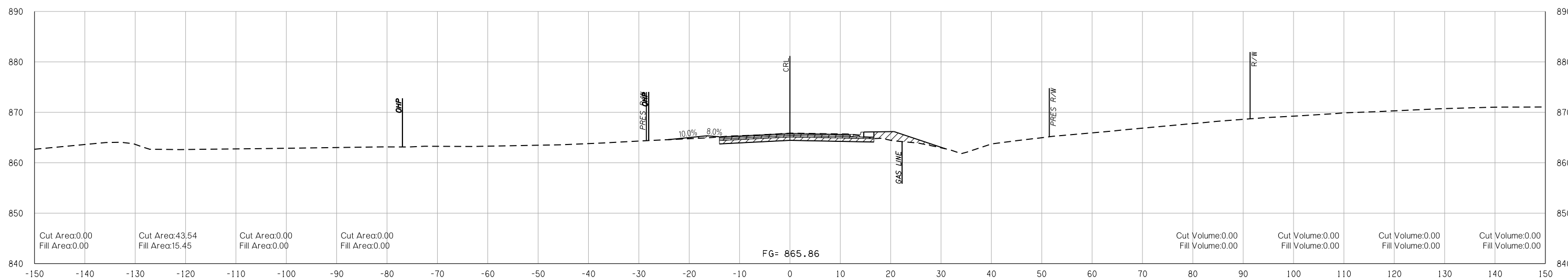
PHASE 1 PHASE 2 PHASE 3 PHASE 4



25 + 21.76







25 + 00.00



BEGIN CONSTRUCTION STA 24 + 65.00
24 + 65.00

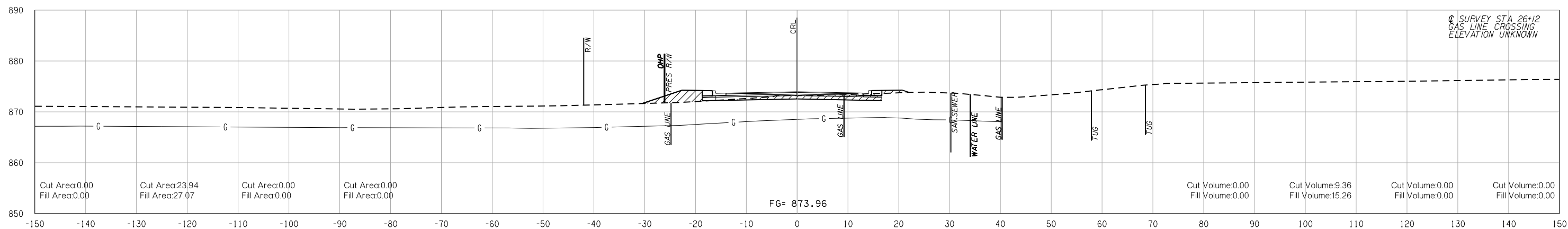
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END AREAS (SF)

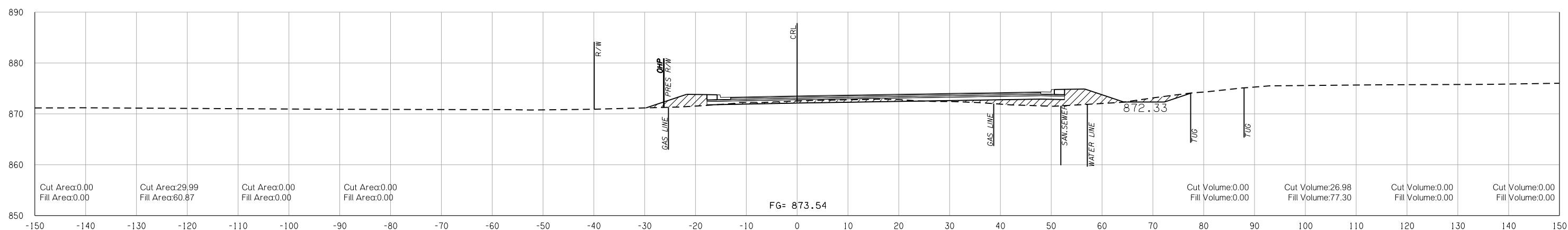
- PHASE 1 
- PHASE 2 
- PHASE 3 
- PHASE 4 

PHASE_1 PHASE_2 PHASE_3 PHASE_4

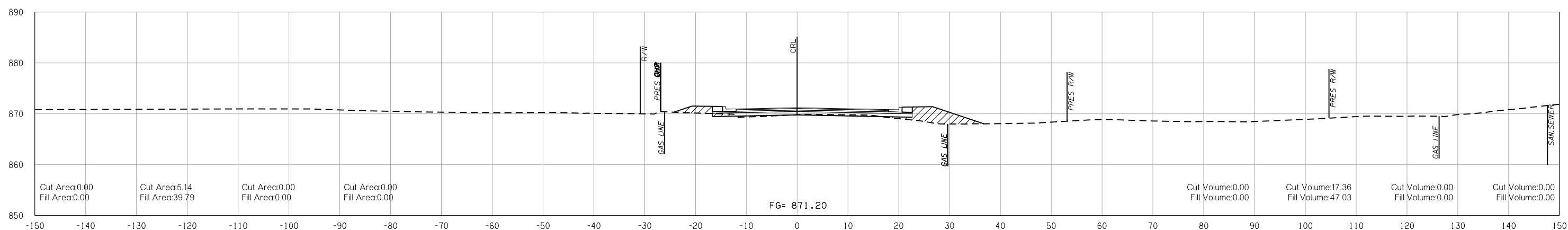
PHASE_1 PHASE_2 PHASE_3 PHASE_4



26 + 09.37



26 + 00.00



25 + 58.53

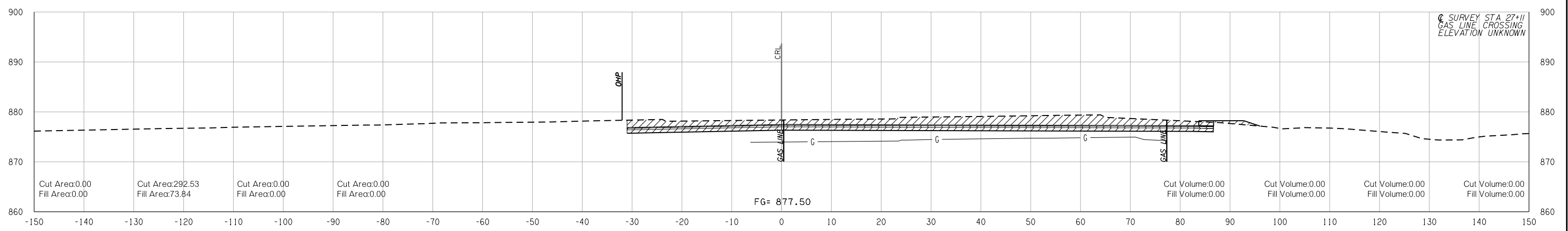
11/7/2018 P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X079-X085-2100604-CROSS SECTIONS SIDE ROADS.dgn

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

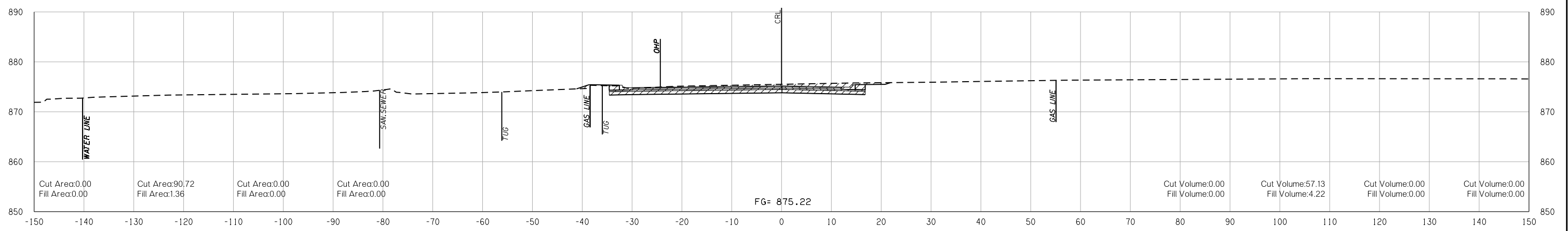
END AREAS (SF)

PHASE 1 PHASE 2 PHASE 3 PHASE 4

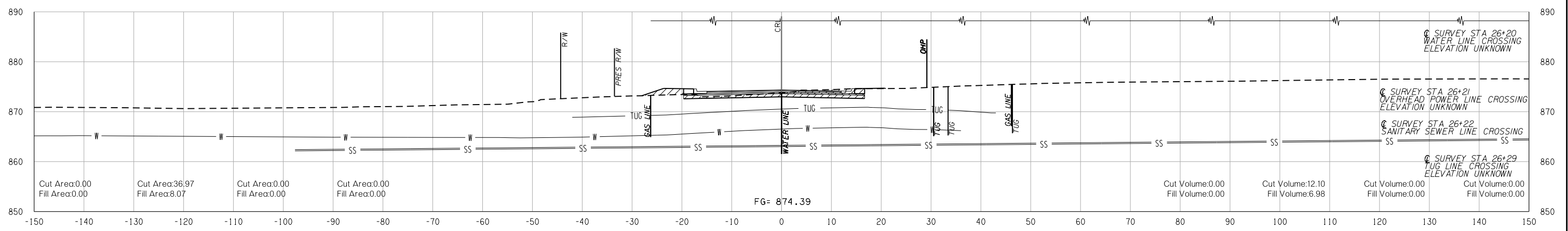
PHASE 1 PHASE 2 PHASE 3 PHASE 4



27 + 11.54



26 + 44.26







26 + 20.10

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11/7/2018

FINAL FIELD MEETING

11/7/2018

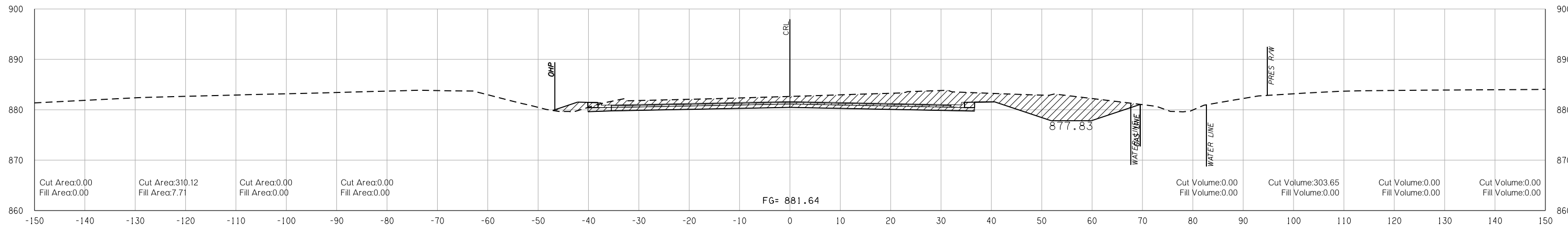
VOLUMES (CY)

- PHASE 1 
- PHASE 2 
- PHASE 3 
- PHASE 4 

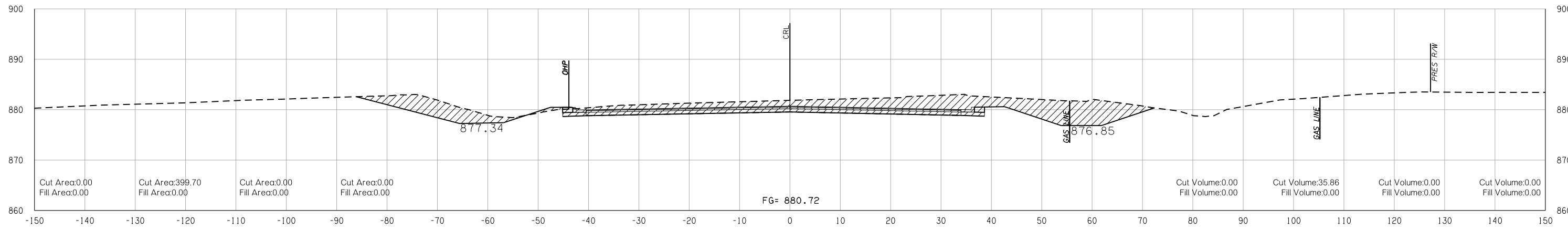
END AREAS (SF)

PHASE 1 PHASE 2 PHASE 3 PHASE 4

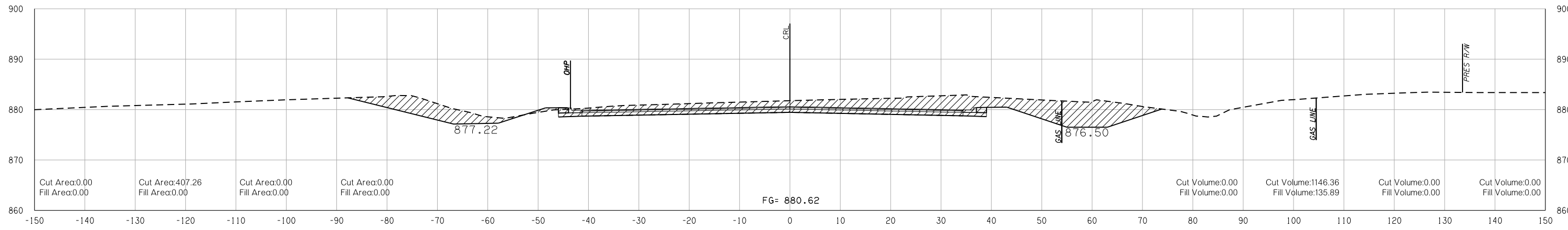
PHASE 1 PHASE 2 PHASE 3 PHASE 4



28 + 25.50



28 + 02.40



28 + 00.00

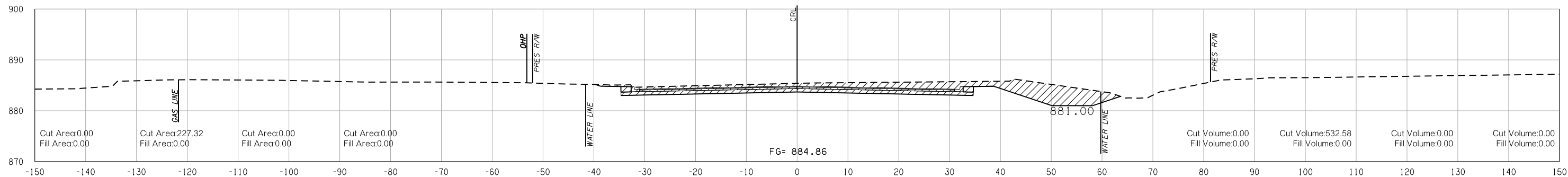
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- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

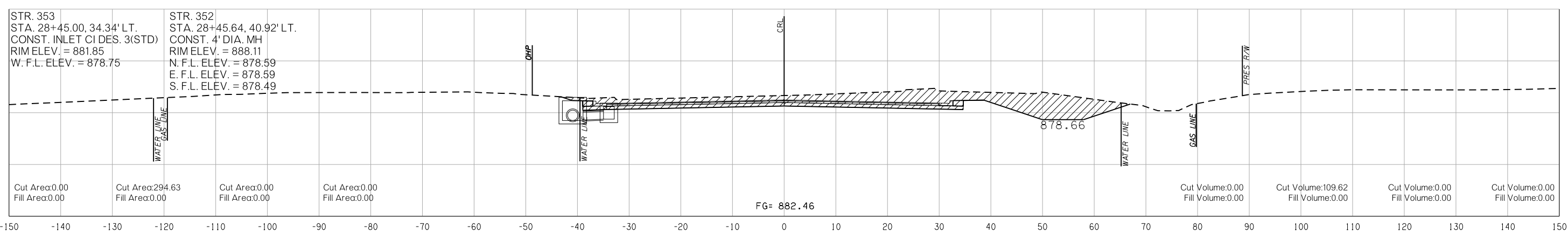
END AREAS (SF)

PHASE 1 PHASE 2 PHASE 3 PHASE 4

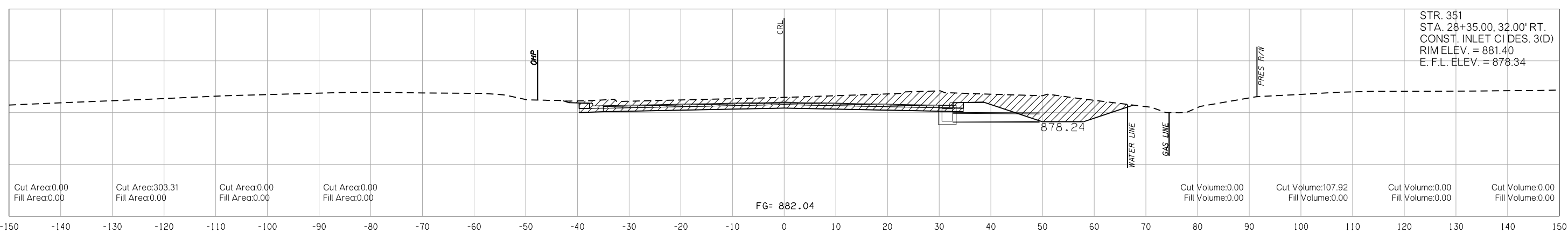
PHASE 1 PHASE 2 PHASE 3 PHASE 4



29 + 00.00



28 + 44.90



28 + 35.00

STR. 353
 STA. 28+45.00, 34.34' LT.
 CONST. INLET CI DES. 3(STD)
 RIM ELEV. = 881.85
 W. F.L. ELEV. = 878.75

STR. 352
 STA. 28+45.64, 40.92' LT.
 CONST. 4' DIA. MH
 RIM ELEV. = 888.11
 N. F.L. ELEV. = 878.59
 E. F.L. ELEV. = 878.59
 S. F.L. ELEV. = 878.49

STR. 351
 STA. 28+35.00, 32.00' RT.
 CONST. INLET CI DES. 3(D)
 RIM ELEV. = 881.40
 E. F.L. ELEV. = 878.34

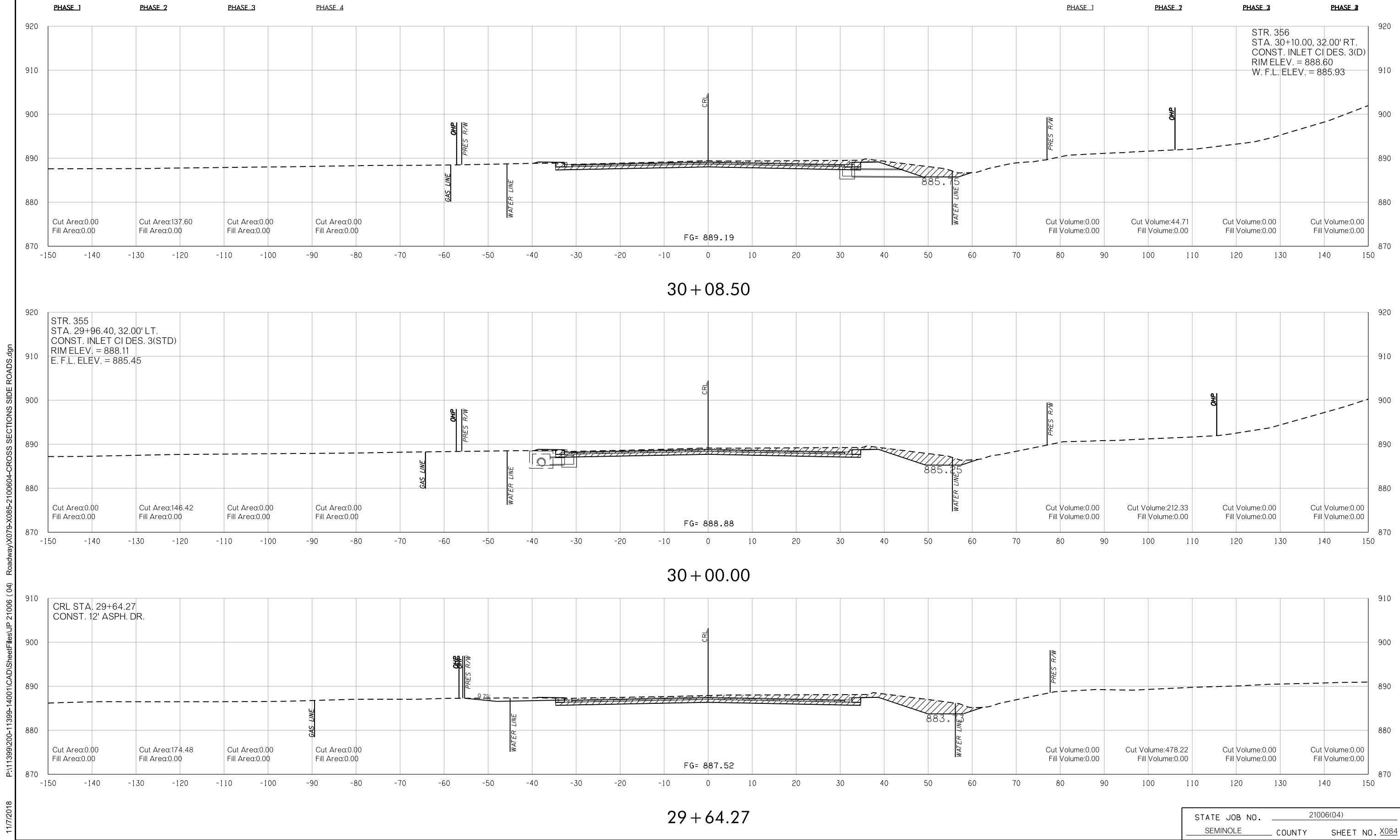
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FINAL FIELD MEETING
11/7/2018





VOLUMES (CY)

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

END AREAS (SF)



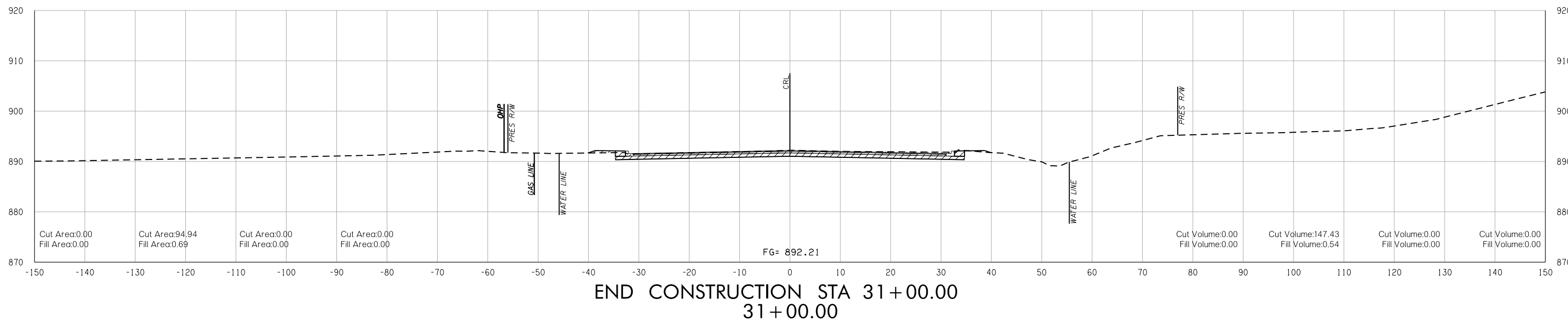
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- PHASE 1 
- PHASE 2 
- PHASE 3 
- PHASE 4 

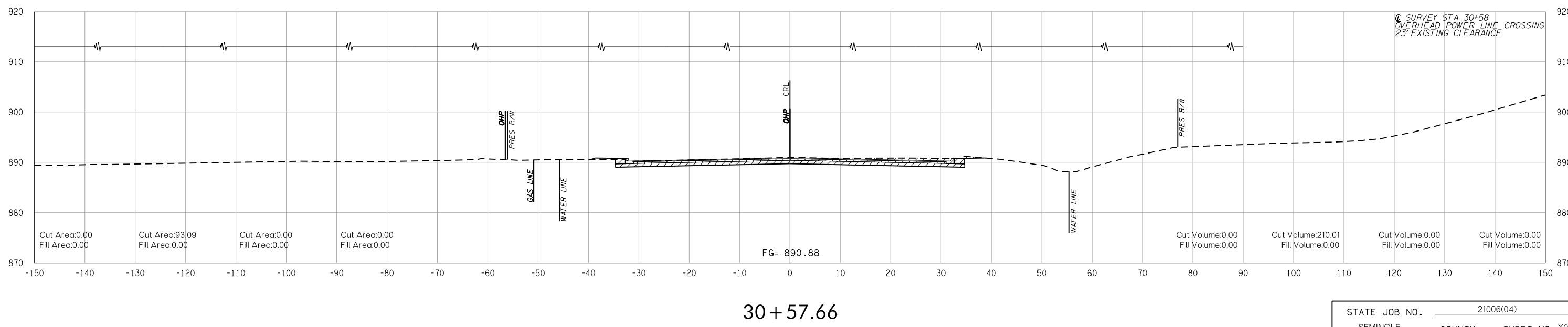
END AREAS (SF)

PHASE_1 PHASE_2 PHASE_3 PHASE_4

PHASE_1 PHASE_2 PHASE_3 PHASE_4



END CONSTRUCTION STA 31+00.00
31+00.00



30+57.66

11/7/2018 P:\11399\200-11399-14001\CAD\SheetFiles\JP 21006 (04) Roadway\X079-X085-2100604-CROSS SECTIONS SIDE ROADS.dgn