

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED
COUNTY BRIDGE
PROJECT NO. CIRB-203D(034)RB
STATE JOB NO. 31169(04)
BRIDGE AND APPROACHES
ATOKA COUNTY
BRIDGE OVER UP RAILROAD
LATITUDE 34° 20' 20.57" N LONGITUDE -96° 09' 3.59" W
STRUCTURE NO. 03E1844N3855000
OLD NBI NO. 12807
NEW NBI NO. 31342

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
0001	TITLE SHEET
0002	TYPICAL SECTION
AB01	SUMMARY OF PAY QUANTITIES - BRIDGE
AR01	SUMMARY OF PAY QUANTITIES-ROADWAY
AL01	UPRR COMPANY NOTES
B001-B003	RETAINING WALL DETAILS
B004	GENERAL PLAN AND ELEVATION
B005	STAKING LAYOUT
B006	BORING LOGS
B007	APPROACH SLAB
RO01-RO02	PLAN AND PROFILE
RO03	TEMPORARY EROSION CONTROL
S001	SURVEY DATA
X001-X002	CROSS SECTIONS

SURVEY CONTROL DATA

1. HORIZONTAL CONTROL:

A. HORIZONTAL CONTROL FOR THIS SURVEY IS BASED ON THE NGS OKLAHOMA STATE PLANE COORDINATE SYSTEM, NAD83 (1993), LAMBERT PROJECTION (SOUTH ZONE), USING UNCONSTRAINED DIFFERENTIAL COORDINATES.

B. ACCURACY - THE PRIMARY CONTROL NETWORK, THE SECONDARY CONTROL NETWORK AND SECTION BOUNDARIES FOR THIS SURVEY ARE IN GENERAL COMPLIANCE WITH THE NGS SECOND ORDER, CLASS II STANDARDS FOR HORIZONTAL CONTROL (1:20,000).

2. BEARINGS:

THE BEARINGS SHOWN HEREIN OR HEREON ARE GRID BEARINGS DERIVED FROM THE NGS OKLAHOMA STATE PLANE COORDINATE SYSTEM AND ARE NOT ASTRONOMICAL.

3. VERTICAL CONTROLS:

A. LEVEL DATUM IS NAVD 88.

B. ACCURACY - VERTICAL CONTROL FOR THIS SURVEY IS WITHIN THE CLOSURE REQUIREMENT OF NOAA/NGS "CLASSIFICATION, STANDARDS OF ACCURACY, AND GENERAL SPECIFICATIONS OF GEODETIC CONTROL SURVEYS" (FEB. 1974, REPRINTED FEB. 1977) THIRD ORDER STANDARDS AS A MINIMUM.

THE FOLLOWING STANDARD DRAWINGS WILL BE PART OF THIS PROJECT:

2009 STANDARDS

ROADWAY	TRAFFIC	BRIDGE
ASCD-5-2	GET-2-00	CB26-C-SKO-ABUT-PC5-02E
LECS-4-1	GRH1-1-00	CB26-C-SKO-XSECT-PC5-01E
PUD-3-2	GRH3-1-00	CB26-C-SKO-LSECT-PCB-01E
SPB-1-4	TCSI-1-01	CB26-C-SKO-DKSLB-BLIST-01E
SPI-4-1	TCS2-1-00	CB26-C-SKO-DIA-END-PC5-01E
SSS-1-1	TCS4-1-01	CB26-C-SKO-SPR-QUAN-PCB-1-01E
TSC2-3-2	TCS5-1-00	CB26-C-SKO-SPR-QUAN-PCB-2-01E
TSD-2-0	TCS6-1-02	CB26-C-SKO..30-PCB-J-135-1-01E
	TCS7-1-02	CB26-C-SKO..30-PCB-J-135-2-01E
	TCS8-1-00	CB26-C-SKO..30-DIA-INT-PCB-01E
	TCS9-1-01	CB26-C-SKO..30-BRG-PC5-01E
	TCS14-1-00	CB26..32-C-SKO-WING-PC5-01E
	TCS16-1-00	CB26..32-C-SKO-ABUT-MISC-01E
	TCS19-1-01	CB26..32-C..I-SKO..30-GRAU-BC-00E
	TCS20-1-00	TR3-2-01E
	TCS21-1-02	

DESIGN DATA

ADT 2014	= 100
ADT 2034	= 149
V	= 40 mph
ESALS	< 0.3 M (20 YR.)

SCALES

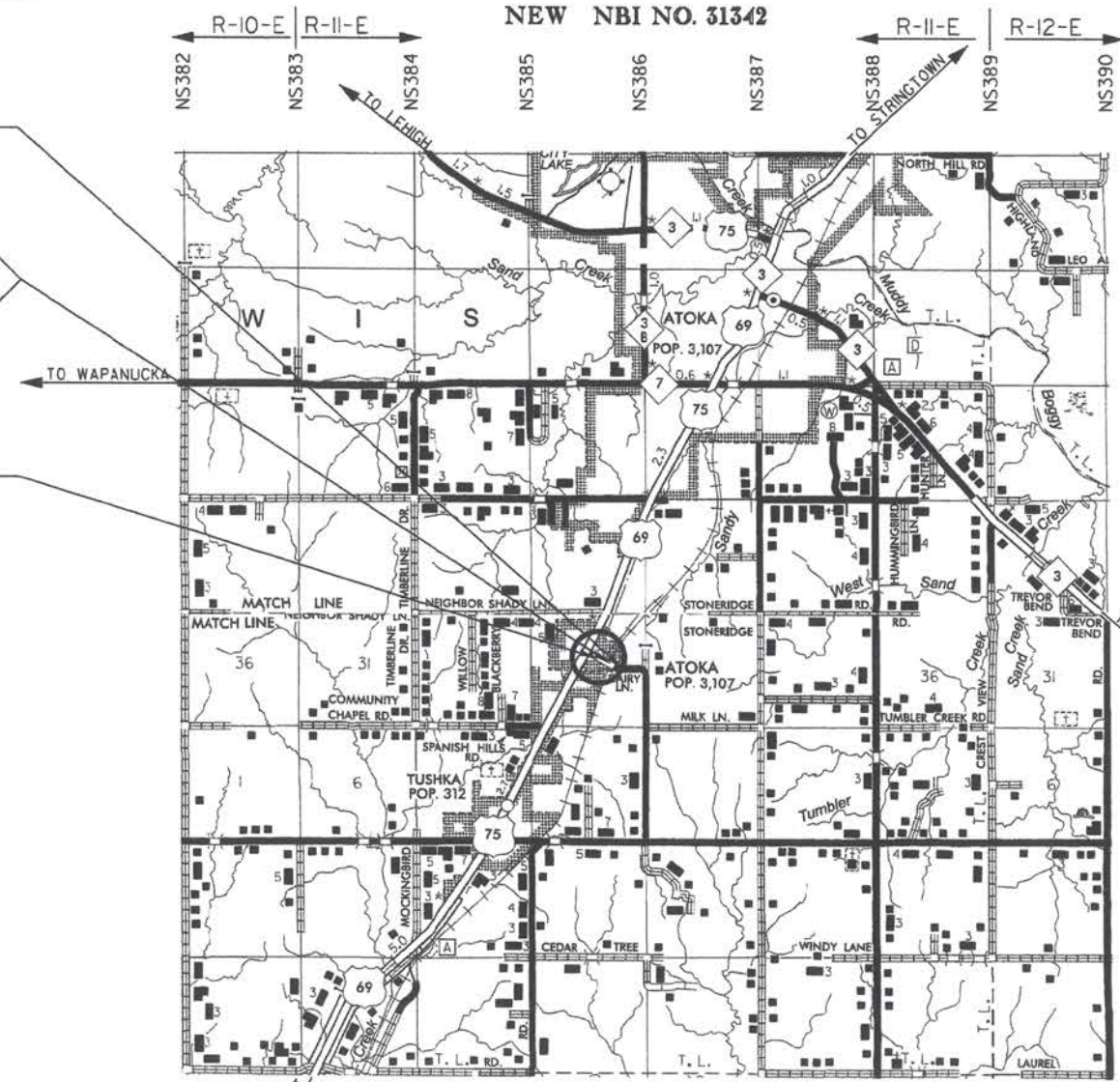
PLAN 1" = 100'

PROFILE HOR. 1" = 100'

VER. 1" = 10'

LAYOUT MAP 1" = 5280'

- CONVENTIONAL SYMBOLS
- PROPOSED ROAD
 - RAILROADS
 - RANGE & TOWNSHIP
 - SECTION LINES
 - QUARTER SECTION LINES
 - x- FENCES
 - GROUND LINE
 - EXISTING ROADS
 - BASE LINE
 - +2% -2% GRADE LINES
 - TELEPHONE & TELEGRAPH
 - POWER LINES
 - BUILDINGS
 - DRAINAGE STRUCTURES - IN PLACE
 - DRAINAGE STRUCTURES - NEW
 - PRES. R/W --- RIGHT-OF-WAY LINES - EXISTING
 - R/W --- RIGHT-OF-WAY LINES - NEW
 - x- RIGHT-OF-WAY FENCE



EW180

EW181

EW182

EW183

EW184

EW185

EW186

EW187

EW188



APPROVED: THIS 7th DAY OF August 20 17

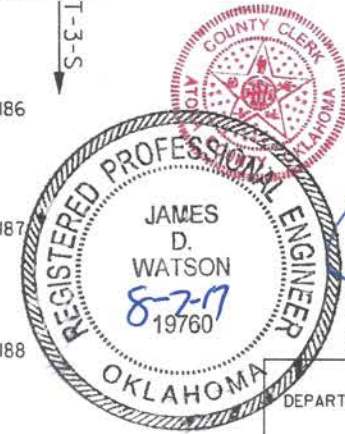
BOARD OF COUNTY COMMISSIONERS
ATOKA COUNTY, OKLAHOMA

Phillip Cullbert
CHAIRMAN

Man Dale
MEMBER

William Wilson
MEMBER

Christie Perry
ATTEST COUNTY CLERK

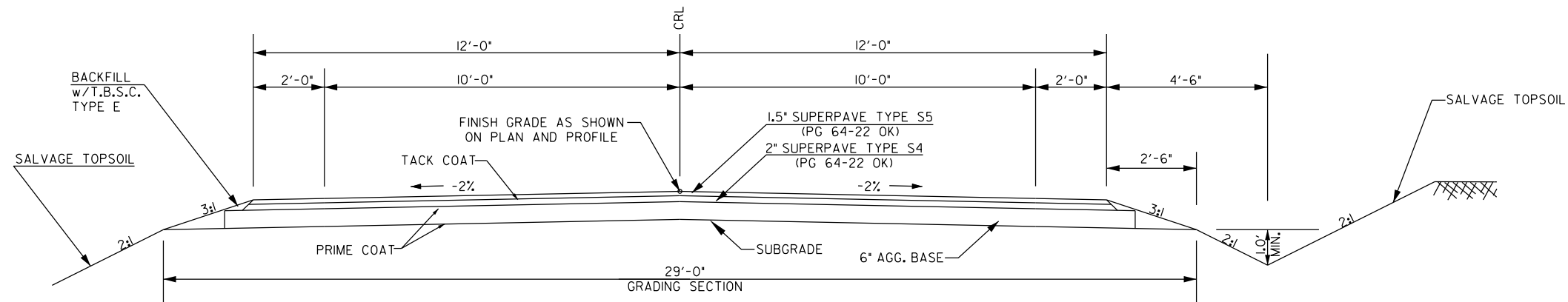


SUBMITTED BY: JAMES D. WATSON, P.E. 19760
SOUTHEAST CIRCUIT ENGR. #3
203 PEPSICOLA AVENUE
HUGO, OK 74743
PHONE: 580-323-9191

OKLAHOMA DEPARTMENT OF TRANSPORTATION	DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION
DATE APPROVED _____	DATE APPROVED _____
BY _____	BY _____
CHIEF ENGINEER	DIVISION ADMINISTRATOR
SWO	PROJECT NO. CIRB-203D(034)RB

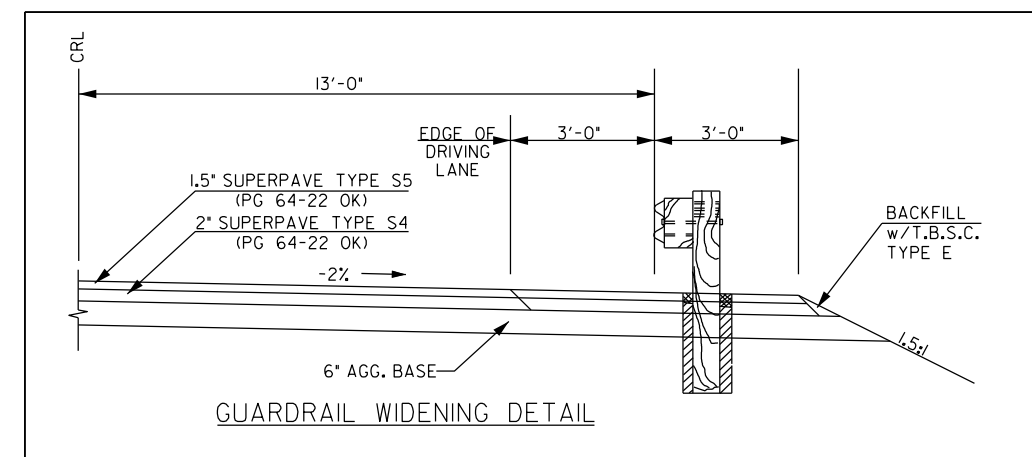
ROADWAY LENGTH704.85 FT0.133 MI
BRIDGE LENGTH138.17 FT0.026 MI
PROJECT LENGTH0.159 MI
EQUATIONS:NONE
EXCEPTIONS:NONE

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



NOT TO SCALE
TYPICAL SECTION NO.1

CRL STATION 1+01.47 - 9+44.49



GUARDRAIL WIDENING DETAIL

E-1844/DAIRY LANE ATOKA COUNTY

SOUTHEAST #3 CIRCUIT ENGINEERING DISTRICT

TYPICAL SECTIONS

STATE JOB NO. 31169(04) SHEET NO. 002

GENERAL BRIDGE NOTES:

COMPLY WITH THE REQUIREMENTS OF THE 2009 OKLAHOMA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EXCEPT AS MODIFIED BY THE PLANS OR SPECIAL PROVISIONS.

THE 6" PERFORATED AND NON-PERFORATED SHALL NOT BE INSTALLED AS SHOWN ON STANDARD CB26..32-C-SKO-ABUT-MISC-OIE

ABUTMENT PILING CAPACITY:

THE REQUIRED ULTIMATE PILE CAPACITY FOR HP 12X53 IS 73.7 TONS/PILE.
 THE REQUIRED ULTIMATE PILE CAPACITY FOR HP 10X42 IS 73.7 TONS/PILE.
 THE LENGTH OF STEEL PILING SHOWN ON THE PLANS IS FOR ESTIMATION PURPOSES ONLY.

ANCHOR BOLTS:

SIZING: THE MINIMUM REQUIREMENT FOR ANCHOR BOLT SIZE AND LENGTH (FIXED OR EXPANSION BEARING) IS 1/2" DIAMETER BOLT - SET 15" MINIMUM INTO CONCRETE.

BRIDGE PAY ITEM NOTES:

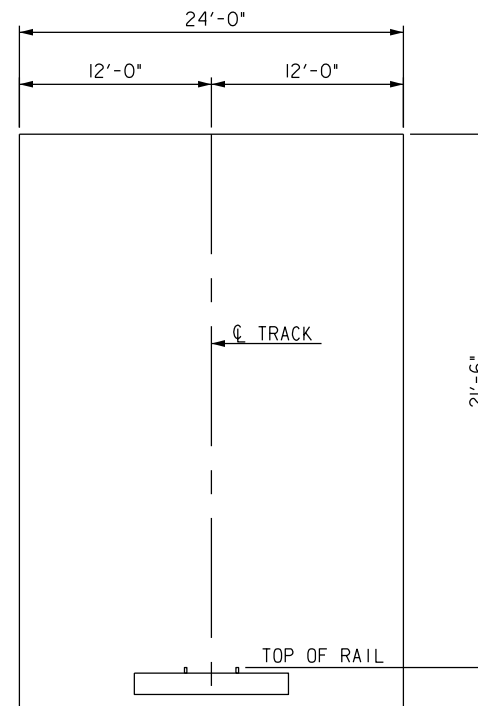
- (1) PAYMENT FOR PAY ITEMS WILL BE BASED ON PLAN QUANTITIES ACCORDING TO SECTION 109.01(b) OF THE STANDARD SPECIFICATIONS.
- (2) THE "REMOVAL OF EXISTING BRIDGE STRUCTURE" SHALL CONSIST OF THE REMOVAL AND DISPOSAL OF THE EXISTING 101.0'x13.0' WIDE PONY THRU TRUSS BRIDGE, BRIDGE AT APPROXIMATE CENTERLINE STA. 14+10.61 IN ACCORDANCE WITH SECTION 619.04(b)2 OF THE STANDARD SPECIFICATIONS AND IN A MANNER APPROVED BY THE ENGINEER. THE BRIDGE SHALL BE REMOVED IN SUCH A WAY THAT THE COUNTY CAN REASSEMBLE IT AT A DIFFERENT LOCATION. CONTRACTOR SHALL ASSIST IN LOADING THE EXISTING BRIDGE MATERIAL ON TRUCKS/TRAILERS PROVIDED BY THE COUNTY. THE EXISTING BRIDGE MATERIAL SHALL BECOME THE PROPERTY OF THE COUNTY.
- (3) ESTIMATED AT 120 LBS PER C.F.
- (4) THE CLSM SHALL ALSO BE PLACED A MINIMUM OF 1.0' THICK UNDER THE APPROACH SLABS.
- (5) A BOND BREAKER SHALL BE PLACED BETWEEN THE APPROACH SLAB AND THE CLSM.
- (6) PAY ITEM *(PL) PILOT HOLES* SHALL BE USED TO ADVANCE THE *HP 12X53 PILING* ON ABUTMENT NO. 2.
- (7) PRICE BID SHALL INCLUDE ALL COST ASSOCIATED WITH THE INSTALLATION OF THE RETAINING WALLS.
- (8) ALL COST OF CONCRETE WALL TREATMENT INCLUDING FINISHING, FORM LINERS, LABOR, MATERIALS, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK AS SPECIFIED SHALL BE INCLUDED IN THE PRICE BID FOR SQUARE YARD OF WALL.
- (9) INCLUDES COST OF EXCAVATION FOR THE INSTALLATION OF THE RETAINING WALL. ANY EXCESS MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND DISPOSED OF BY HIM/HER IN A MANNER APPROVED BY THE ENGINEER.
- (10) AFTER THE CONSTRUCTION OF THE RETAINING WALL SOME OR ALL OF THE EXCAVATED MATERIAL SHALL BE PLACED BACK AGAINST THE RETAINING WALL, ON THE RAILROAD TRACK SIDE OF THE WALL, TO BRING THE GRADE BACK TO WHERE IT WAS IN ORDER TO PREVENT ANY PONDING OF WATER. COST TO BE INCLUDED IN PRICE BID "RETAINING WALL".

DESCRIPTION	REVISIONS	DATE
△	REVISED PAY ITEMS	10/13/17
△	CORRECTED ITEM NUMBER	10/19/17

31169(04) SUMMARY OF PAY QUANTITIES				
0200 BRIDGE 135' P.C. BEAM SPAN TYPE J, 26'-0" CL RDWY, TR3-2				
ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANT.	
501(B)	1307 SUBSTRUCTURE EXCAVATION COMMON	(1) CY	210.00	
501(G)	6309 CLSM BACKFILL	(4) CY	120.00	
503(A)	△ 6290 PRESTRESSED CONCRETE BEAMS (TYPE J BT)	LF	404.00	
504(A)	1304 APPROACH SLAB	(5) SY	114.80	
504(B)	1305 SAW-CUT GROOVING	SY	423.26	
504(D)	6239 CONCRETE RAIL (TR3)	(1) LF	347.20	
506(A)	1322 STRUCTURAL STEEL	(1) LB.	970.00	
507(A)	6172 WEATHERING STEEL FIXED BEARING ASSEMBLY	(1) EA	3.00	
507(B)	6176 WEATHERING STEEL EXPANSION BEARING ASSEMBLY	(1) EA	3.00	
509(A)	1326 CLASS AA CONCRETE	(1) CY	117.20	
509(B)	1328 CLASS A CONCRETE	(1) CY	147.50	
510(A)	6334 RETAINING WALL	(7)(8)(9)(10) SY	187.10	
511(A)	1332 REINFORCING STEEL	(1) LB.	37,300.00	
511(B)	6010 EPOXY COATED REINFORCING STEEL	(1) LB.	9,860.00	
514(A)	6010 PILES, FURNISHED (HP 10X42)	LF	317.46	
514(A)	6011 PILES, FURNISHED (HP 12X53)	LF	1064.41	
514(B)	6292 PILES, DRIVEN (HP 10X42)	LF	317.46	
514(B)	6294 PILES, DRIVEN (HP 12X53)	LF	1064.41	
514(K)	6260 (PL)PILOT HOLES	(6) LF	526.91	
514(L)	6220 PILE SPLICE, H-PILE (NON-BIDDABLE)	EA	1.00	
516(A)	6094 DRILLED SHAFTS 48" DIAMETER	LF	176.00	
601(B)	1353 TYPE I-A PLAIN RIPRAP	(3) TON	473.67	
601(C)	△ 1355 TYPE I-A FILTER BLANKET	TON	157.89	
619(D)	1397 REMOVAL OF EXISTING BRIDGE STRUCTURE	(2) LSUM	1.00	
622(A)	△ 4445 2" PIPE RAILING	LF	96.00	

31169(04) SUMMARY OF PAY QUANTITIES				
0600 STAKING				
ITEM NO.	DESCRIPTION	UNIT	QUANT.	
642(B)	0096 CONSTRUCTION STAKING LEVEL II	LSUM	1.00	

SUMMARY OF GUARD RAIL							
LOCATION		Lane		Anchor Units		Total Panel Length Including Anchor Units	Total Rail Between Anchor Units
Station To Station	Lt.	Rt.	Type "D-BF"	GET EXTRUDER TERMINAL	Lin. Ft.	Lin. Ft.	
			Ea.	Ea.			
3+16.67 TO 4+16.67	X		1	1	100	25	
3+16.67 TO 4+16.67		X	1	1	100	25	
5+88.17 TO 6+88.17	X		1	1	100	25	
5+88.17 TO 6+88.17		X	1	1	100	25	
Totals			4	4	400	100	



UPRR FALSEWORK CLEARANCE DIAGRAM

CLEARANCE OF FALSEWORK REQUIRED BY R.R. FOR OPERATIONS DURING CONSTRUCTION.
 HORIZONTAL DIMENSIONS SHOWN ARE MEASURED AT RIGHT ANGLES TO CL OF R.R. TRACK.
 VERTICAL DIMENSIONS SHOWN IS PERPENDICULAR TO PLANE OF TOP OF RAILS.

E-1844/DAIRY LANE	ATOKA COUNTY
SOUTHEAST #3 CIRCUIT ENGINEERING DISTRICT	
SUMMARY OF QUANTITIES BRIDGE	
STATE JOB NO. 31169(04)	SHEET NO. ABO1

ROADWAY GENERAL CONSTRUCTION NOTES

EXISTING ROAD SHALL BE CLOSED TO THROUGH TRAFFIC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL BARRICADES, CONSTRUCTION SIGNS, LIGHTS, ETC. ALL CONSTRUCTION SIGNING WILL BE DONE ACCORDING TO THE STANDARDS SET FORTH IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" CURRENT EDITION, AND AS SHOWN ON TCS STANDARD DRAWINGS.

ALL DESIGNATED TREES (DEAD OR ALIVE), BRUSH, AND OTHER DEBRIS THAT MIGHT INTERFERE WITH THE FLOW OF WATER ARE TO BE CLEANED OUT TO THE RIGHT-OF-WAY LINES AT EACH STRUCTURE AND BRIDGE IN A MANNER APPROVED BY THE ENGINEER. ALL TREES THAT ARE TO BE REMOVED WILL BE CLEARLY MARKED BY THE ENGINEER. ALL COSTS ARE TO BE INCLUDED IN THE PRICE BID FOR "CLEARING AND GRUBBING".

RESPONSIBILITY OF THE COUNTY AND NOT A PART OF THIS CONTRACT:

1. FURNISH ALL RIGHT-OF-WAY
2. RELOCATE ALL UTILITIES
3. RELOCATING OR BUILDING ANY NEW FENCES

THE CONTRACTOR SHALL GIVE NOTICE TO THE COUNTY AND THE OKLAHOMA DEPARTMENT OF TRANSPORTATION (DIVISION 2) IN WRITING, FOURTEEN (14) CALENDAR DAYS BEFORE WORK BEGINS ON THE PROJECT.

CONTRACTOR SHALL CONFINE THE WORK TO WITHIN THE LIMITS OF RIGHT-OF-WAY. ANY DAMAGE CAUSED BY THE CONTRACTOR OUTSIDE THE LIMITS OF RIGHT-OF-WAY WILL BE REPAIRED OR RESTORED TO THE ORIGINAL CONDITION AT THE CONTRACTOR'S OWN EXPENSE TO THE SATISFACTION OF THE ENGINEER.

EROSION CONTROL NOTES:

AT THE BEGINNING OF THE TURFING OPERATIONS, ANY AREAS INCLUDED IN PLAN QUANTITIES THAT HAVE GROWN A SATISFACTORY VOLUNTEER TURF OR PERENNIAL GRASS, AS DETERMINED BY THE ENGINEER, SHALL NOT BE SEEDED, SODDED OR SPRIGGED.

GRADING ESTIMATE - C.Y.			
LOCATION	EXC.	EMB. +15%	BORROW
MAINLINE	171.96	3429.00	3257.04
TOTALS	171.96	3429.00	3257.04
NOTE: QUANTITIES BASED ON THEORETICAL DIMENSIONS.			

ROADWAY PAY QUANTITY NOTES

(R-32) ESTIMATED AT 112 LBS. PER SQ. YD. PER 1" THICK.

- (1) ITEM "EARTHWORK" SHALL CONSIST OF THE FOLLOWING:
 - a. SEE GRADING ESTIMATE, THIS SHEET , FOR EARTHWORK QUANTITIES.
 - b. 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 SECTION AND THE REMAINDER ON COMPLETED FILL SLOPES OR OTHER PRIORITY AREAS LOCATED BY THE ENGINEER. ALL ADDITIONAL COSTS ASSOCIATED WITH OPERATION SHALL BE INCLUDED IN THE PAY ITEM FOR EARTHWORK, LUMP SUM. PRICE BID TO INCLUDE COST OF 0-46-0 FERTILIZER ESTIMATED AT 150 LBS PER ACRE ON WHICH TOPSOIL IS REPLACED.
 - c. ALL EMBANKMENT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 202 OF THE STANDARD SPECIFICATIONS.
 - d. EXISTING SURFACING TO BE SCARIFIED AND INCORPORATED INTO THE SUBGRADE IN A MANNER APPROVED BY THE ENGINEER.
 - e. 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 TOPSOIL.
 - f. REMOVAL OF ANY EXISTING SIGNS WHICH ARE TO BE PLACED ON THE R/W IN AN USABLE MANNER AND TO BECOME THE PROPERTY OF THE COUNTY.
 - g. BRIDGE AND RETAINING WALLS EXCAVATION/EMBANKMENT.
- (2) ESTIMATED QUANTITY FOR TEMPORARY EROSION AND SEDIMENT CONTROL TO BE USED IN A MANNER APPROVED BY THE ENGINEER. PRICE BID TO INCLUDE COST OF SILT REMOVAL, NECESSARY MAINTENANCE, MAINTAINING IN AN UPRIGHT POSITION, AND REMOVAL.
- (3) PRICE BID TO INCLUDE THE COST OF WATERING AND (10-20-10) FERTILIZER. WATERING ESTIMATED AT 40 GAL. PER SQ. YARD FOR ESTIMATING PURPOSES ONLY. CONTRACTOR WILL PROVIDE SUFFICIENT WATER TO PRODUCE ADEQUATE GRASS GROWTH AS APPROVED BY THE ENGINEER. FERTILIZER (10-20-10) ESTIMATED AT 200 LBS PER 1000 SQ. YARDS OF SODDING.
- (4) APPLICATION RATE SHALL BE 0.21 GAL/SY.
- (5) PRICE BID FOR "CLEARING AND GRUBBING" SHALL INCLUDE THE REMOVAL OF ALL EXISTING FENCES DESIGNATED FOR REMOVAL BY THE ENGINEER. ALL PERMANENT FENCES SHALL REMAIN IN PLACE.
- (6) THIS ITEM SHALL INCLUDE ALL TRAFFIC CONTROL DEVICES NECESSARY TO REGULATE ALL TRAFFIC DURING CONSTRUCTION. THIS ITEM SHALL BE PAID FOR AS A LUMP SUM DUE TO THE MINOR EXTENT OF CONSTRUCTION FOR THIS PROJECT. TRAFFIC CONTROL SHALL BE IN ACCORDANCE TO STATE STANDARDS AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", CURRENT EDITION. ALL CONSTRUCTION SIGNS OVER 10 S.F. SHALL BE DOUBLE POSTED.
- (7) APPLICATION RATE SHALL BE 0.075 GAL/SY.
- (8) FENCE WITH BARRIER RAIL NOTES:
FENCE WITH BARRIER RAIL SHALL BE PROVIDED ON BOTH SIDES OF ALL OVERHEAD STRUCTURES CROSSING RAILROAD RIGHT-OF-WAY. IT SHALL BE DESIGNED TO PREVENT CLIMBING AND PROVIDE POSITIVE MEANS OF PROTECTING THE RAILROAD FACILITY AND THE SAFETY OF RAILROAD EMPLOYEES BELOW FROM OBJECTS BEING THROWN BY PEDESTRIANS OR PASSING MOTORISTS. THE LIMITS OF THE FENCE WITH BARRIER RAIL SHALL EXTEND TO THE LIMITS OF THE RAILROAD RIGHT-OF-WAY OR A MINIMUM OF 25 FEET BEYOND THE CENTERLINE OF THE OUTERMOST EXISTING TRACK, FUTURE TRACK OR ACCESS ROAD, WHICHEVER IS GREATER. ALL PARALLEL OVERHEAD STRUCTURES THAT HAVE A GAP OF 2 FEET OR MORE SHALL BE PROTECTED WITH FENCING. STRUCTURES WITH A GAP OF 2 FEET OR LESS SHALL EITHER HAVE THE GAP COVERED OR BE FENCED ON BOTH SIDES. THE MINIMUM COMBINED HEIGHT OF A BARRIER RAIL WITH CURVED FENCE SHALL BE 8 FEET OR WITH A STRAIGHT FENCE SHALL BE 10 FEET.
- (9) ESTIMATED AT 120 LBS PER C.F..
- (10) QUANTITY INCLUDES 100.0 TONS TO BE USED AS DIRECTED BY THE ENGINEER TO MAINTAIN ANY LOCAL TRAFFIC.

DESCRIPTION	REVISIONS	DATE
△	REVISED ITEM NUMBER	10/13/17

31169(04) SUMMARY OF PAY QUANTITIES				
0100 ROADWAY				
ITEM NO.		DESCRIPTION	UNIT	QUANT.
201(A)	0102	CLEARING AND GRUBBING	(5) LSUM	1.00
202(H)	0185	EARTHWORK	(1) LSUM	1.00
221(C)	2801	TEMPORARY SILT FENCE	(2) LF	1,040.00
221(F)	0100	TEMPORARY SILT DIKE	(2) LF	28.00
230(A)	2806	SOLID SLAB SODDING	(3) SY	723.00
303(A)	2100	AGGREGATE BASE TYPE A	() CY	395.00
402(E)	0225	TRAFFIC BOUND SURFACE COURSE TYPE E	(9)(10) TON	143.00
407(B)	0250	TACK COAT	(7) GAL	151.00
408	5774	PRIME COAT	(4) GAL	936.00
411(C)	5960	SUPERPAVE, TYPE S4(PG 64-22 OK)	(R-32) TON	449.00
411(D)	△ 5975	SUPERPAVE, TYPE S5(PG 64-22 OK)	(R-32) TON	337.00
623(A)	0932	BEAM GUARDRAIL W-BEAM SINGLE	LF	100.00
623(F)	5686	GUARDRAIL ANCHOR UNIT (TYPE D-BF)	EA	4.00
623(G)	8571	GUARDRAIL END TREATMENT (GET)	EA	4.00
624(E)	4294	FENCE-STYLE CLF (8'HIGH, CLASS A)	(8) LF	347.02

31169(04) SUMMARY OF PAY QUANTITIES				
0640 CONSTRUCTION				
ITEM NO.		DESCRIPTION	UNIT	QUANT.
641	1399	MOBILIZATION	LSUM	1.00

31169(04) SUMMARY OF PAY QUANTITIES				
0300 TRAFFIC CONTROL				
ITEM NO.		DESCRIPTION	UNIT	QUANT.
880(J)	8905	CONSTRUCTION TRAFFIC CONTROL	(6) LSUM	1.00
104	0955	(SP) RAILROAD FLAGGING(NON-BIDDABLE)	DAY	30.00



NOTIFICATION OF WORK:

THE CONTRACTOR IS REQUIRED TO GIVE THE UNION PACIFIC RAILROAD COMPANY AT LEAST 10 WORKING DAYS ADVANCE NOTICE, IN WRITING, BEFORE ANY WORK IS STARTED ON THE SITE. TO AVOID HAZARDS, THE UNION PACIFIC RAILROAD COMPANY MAY HAVE A REPRESENTATIVE PRESENT, IF DEEMED NECESSARY, FOR THE PURPOSE OF INSPECTION AND THE ISSUANCE OF ANY APPROPRIATE INSTRUCTIONS FOR RAILROAD OPERATIONS DURING THE DAIRY LANE BRIDGE DEMOLITION AND CONSTRUCTION IN ATOKA, ATOKA COUNTY AS IT RELATES TO THE UNION PACIFIC RAILROAD COMPANY'S PROPERTY.
(AARDOT 413 729W, MILEPOST 613.40, CHOCTAW SUBDIVISION)

THE CONTRACTOR SHALL NOTIFY:

Mr. Ryan McDermott
Manager of Track Maintenance
Union Pacific Railroad Company
2827 Ray Dr
Denison, TX 75020
Phone: 903-415-2485
jsmorgan@up.com

Mr. Clay A. McManaman
Manager Public Projects
Union Pacific Railroad Company
P.O. Box 1337
El Reno, Oklahoma 73036
Phone: 501-373-2927
camcmana@up.com

FLAGGING AND INSURANCE:

FLAGGING AND INSURANCE SHALL BE PROVIDED AS SPECIFIED IN SECTION 107 OF THE STANDARD SPECIFICATIONS AND IN THE SPECIAL PROVISIONS FOR RAILROAD FLAGGING (SEE PROPOSAL FOR SPECIAL PROVISIONS) AND WHAT IS STATED IN THE UNION PACIFIC RAILROAD COMPANY S RIGHT OF ENTRY AGREEMENT. UNION PACIFIC RAILROAD COMPANY, AT THEIR DISCRETION, SHALL PROVIDE FLAGGING FOR THE RAILROAD DURING THE BRIDGE DEMOLITION AND CONSTRUCTION OPERATIONS.

THE CONTRACTOR IS REQUIRED TO REIMBURSE UNION PACIFIC RAILROAD COMPANY FOR FLAGGING SERVICES PROVIDED.

THE CONTRACTOR SHALL ALSO FURNISH SATISFACTORY EVIDENCE TO THE STATE OF OKLAHOMA THAT THEY HAVE PROVIDED INSURANCE OF THE KINDS AND AMOUNTS AS SPECIFIED IN THE SPECIAL PROVISIONS FOR RAILROAD INSURANCE AND IN THE UNION PACIFIC COMPANY'S RIGHT OF ENTRY AGREEMENT.

THE CONTRACTOR WILL BE REQUIRED TO ENTER INTO A RIGHT OF ENTRY AGREEMENT WITH THE UNION PACIFIC RAILROAD COMPANY BEFORE THEY WILL BE ALLOWED ON THE RAILROAD S RIGHT-OF-WAY.

PREF-WORK MEETING:

PRIOR TO WORKING ON THE UNION PACIFIC RAILROAD COMPANY S RIGHT-OF-WAY OR IN THE VICINITY OF THEIR TRACKS, YOU **MUST** CONTACT THE LOCAL MANAGER OF TRACK MAINTENANCE FOR THE UNION PACIFIC RAILROAD COMPANY TO COORDINATE YOUR WORK. IT IS **VITAL** THAT YOU HAVE CONTACT WITH THE UNION PACIFIC RAILROAD COMPANY MANAGER OF TRACK MAINTENANCE PRIOR TO GETTING ON THE RAILROAD S PROPERTY.

COORDINATION WITH RAILROAD

THE CONTRACTOR SHALL CONDUCT CONSTRUCTION OPERATIONS IN A MANNER WHICH WILL NOT DELAY OR INTERFERE WITH TRAIN OPERATIONS. CONSTRUCTION ACTIVITY WITHIN 25 (TWENTY-FIVE) FEET OF ACTIVE TRACKS WILL REQUIRE A FLAGMAN TO BE PROVIDED BY THE UNION PACIFIC RAILROAD COMPANY AT THE CONTRACTOR S EXPENSE.

THE CONTRACTOR SHALL GIVE WRITTEN NOTICE TO THE UNION PACIFIC RAILROAD COMPANY MANAGER OF TRACK MAINTENANCE, A MINIMUM OF 30 (THIRTY) CALENDAR DAYS IN ADVANCE OF WHEN FLAGGING IS REQUIRED.

SPECIAL PERMISSION MUST BE OBTAINED FROM THE UNION PACIFIC RAILROAD COMPANY BEFORE MOVING ANY EQUIPMENT OR OTHER OBJECT WHICH COULD MAKE THE TRACK IMPASSABLE IF IT FELL WITHIN THE AREA SHOWN ON THE CONSTRUCTION CLEARANCE DIAGRAM.

RAILROAD FLAGGERS, PROTECTIVE SERVICES, AND PROTECTIVE DEVICES WILL BE REQUIRED, BUT NOT LIMITED TO, EVENTS WHEN:

°THE CONTRACTOR WORK ACTIVITIES ARE WITHIN 25 (TWENTY-FIVE) FEET OF THE TRACK, MEASURED FROM THE TRACK CENTERLINE.

°ACTIVITIES ARE OVER OR UNDER THE TRACK.

°CRANES OR SIMILAR EQUIPMENT WILL NOT BE POSITIONED WHERE THEY COULD FOUL THE TRACK IF THEY TIPPED OVER OR EXPERIENCED SOME OTHER CATASTROPHIC EVENT.

°IN THE OPINION OF THE UNION PACIFIC RAILROAD COMPANY REPRESENTATIVE:

°IT IS NECESSARY TO SAFEGUARD THE UNION PACIFIC RAILROAD COMPANY PROPERTY, EMPLOYEES, TRAINS, ENGINES, AND FACILITIES.

°WHEN ANY EXCAVATION IS PERFORMED BELOW THE BOTTOM OF THE ELEVATIONS AND TRACK OR OTHER UNION PACIFIC RAILROAD COMPANY FACILITIES MAY BE SUBJECT TO MOVEMENT OR SETTLEMENT.

°WHEN WORK IN ANY WAY INTERFERES WITH SAFE OPERATION OF TRAINS AND TIMETABLE SPEEDS.

°WHEN ANY HAZARD IS PRESENTED TO RAILROAD TRACK, SIGNALS, COMMUNICATIONS, ELECTRICAL, OR OTHER FACILITIES EITHER DUE TO PERSON, MATERIAL, EQUIPMENT, OR BLASTING IN THE AREA.

PROTECTION OF RAILROAD UNDER BRIDGE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THE RAILROAD TRACK BED DURING ALL CONSTRUCTION OPERATIONS. PRIOR TO ANY WORK BEING STARTED, A PROPOSED METHOD OF PREVENTING DEBRIS FROM FALLING ON THE RAILROAD TRACK BED SHALL BE SUBMITTED TO THE RAILROAD REPRESENTATIVE FOR HIS APPROVAL.

THE CONTRACTOR SHALL NOT BE PERMITTED TO LEAVE ANY WORKER SCAFFOLDING IN PLACE IN WORKING POSITION. AT THE END OF EACH WORKDAY, THE SCAFFOLDING SHALL BE REMOVED AND SET A SAFE DISTANCE FROM ANY OPERATING RAILROAD LINE. SCAFFOLDING SHALL AT ALL TIMES MAINTAIN THE MINIMUM CLEARANCE AS SHOWN ON THE FALSEWORK DIAGRAM ON THE PLANS (SHEET NO. 5).

DEMOLITION OF STRUCTURES OVER RAILROAD

ALL DEMOLITION PLANS FOR REMOVAL OF STRUCTURES OVER RAILROAD LINES SHALL BE REVIEWED AND APPROVED BY THE UNION PACIFIC RAILROAD COMPANY BEFORE ANY REMOVAL MAY BEGIN.

DEMOLITION OF STRUCTURES WILL BE PERFORMED IN ACCORDANCE WITH THE RAILROAD'S INSTRUCTIONS FOR PREPARATION OF DEMOLITION PLANS FOR STRUCTURES OVER THE UNION PACIFIC RAILROAD.

1) THE ELEVATION OF THE EXISTING TOP-OF RAIL SHALL NOT BE VERIFIED BEFORE BEGINNING CONSTRUCTION. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE RAILROAD PRIOR TO CONSTRUCTION.

2) ALL SHORTING SYSTEMS THAT IMPACT THE RAILROAD S OPERATIONS AND/OR SUPPORTS THE RAILROAD S EMBANKMENT SHALL BE DESIGNED AND CONSTRUCTED PER CURRENT RAILROAD GUIDELINES FOR TEMPORARY SHORING.

3) ALL DEMOLITIONS WITHIN THE RAILROAD S RIGHT-OF-WAY AND/OR DEMOLITION THAT MAY IMPACT THE RAILROAD S TRACKS OR OPERATIONS SHALL BE IN COMPLIANCE WITH THE RAILROAD S DEMOLITION GUIDELINES.

4) ERECTION OVER THE RAILROAD S RIGHT-OF-WAY SHALL BE DESIGNED TO CAUSE NO INTERRUPTION TO THE RAILROAD S OPERATION, ENABLING THE TRACK(S) TO REMAIN OPEN TO TRAFFIC PER THE RAILROAD S REQUIREMENTS.

5) RAILROAD REQUIREMENTS DO NOT ALLOW WORK WITHIN 50 FEET OF TRACK CENTERLINE WHEN A TRAIN PASSES THE WORK SITE AND ALL PERSONNEL MUST CLEAR THE AREA WITHIN 25 FEET OF THE TRACK CENTERLINE AND SECURE ALL EQUIPMENT.

6) ALL PERMANENT CLEARANCES SHALL BE VERIFIED BEFORE PROJECT CLOSING.

7) FALSEWORK CLEARANCES SHALL COMPLY WITH MINIMUM CONSTRUCTION CLEARANCES.

EROSION CONTROL AND DRAINAGE

THE CONTRACTOR MUST SUBMIT A PROPOSED METHOD OF EROSION AND SEDIMENT CONTROL AND HAVE THE METHOD APPROVED BY THE RAILROAD. THE CONTRACTOR WILL INSTALL, MAINTAIN, AND REMOVE ALL EROSION CONTROL MEASURES DEEMED NECESSARY WITHIN THE RAILROAD RIGHT OF WAY.

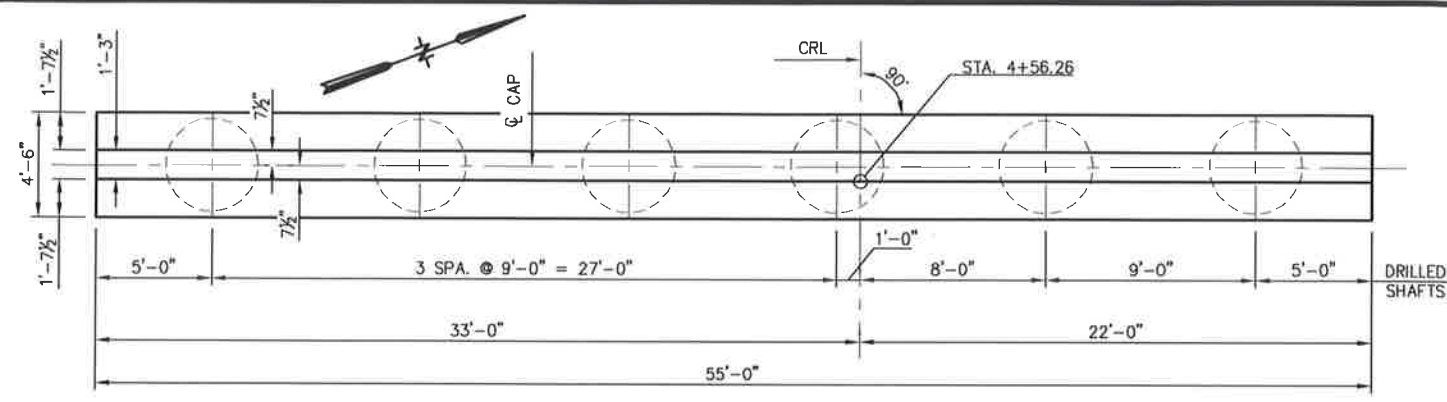
THE PROPOSED GRADE SEPARATION PROJECT SHALL NOT INCREASE THE QUANTITY AND/OR CHARACTERISTICS OF THE FLOW IN THE RAILROAD S DITCHES AND/OR DRAINAGE STRUCTURES. THE CONTRACTOR WILL MAINTAIN THE RAILROAD DRAINAGE AT ALL TIMES WHEN WORKING WITHIN THE RAILROAD RIGHT OF WAY.

RAIL TRAFFIC

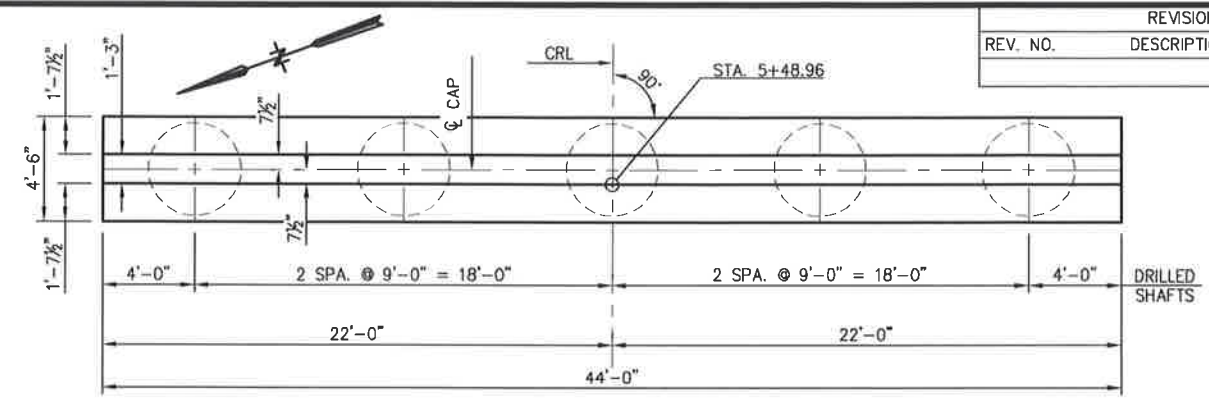
THE UNION PACIFIC RAILROAD COMPANY HAS TWENTY ONE (21) TRAINS PER DAY AT 60 MPH, ON THE CHOCTAW SUBDIVISION. RAIL TRAFFIC IS FOR INFORMATION PURPOSES ONLY. ACTUAL RAIL TRAFFIC MAY VARY.

N:\JOBS\CED3\Dairy Lane Over UPRR\DWG\Dairy Lane Retaining Wall.dwg, PLAN AND ELEVATION, 6/21/2017 9:23:20 AM

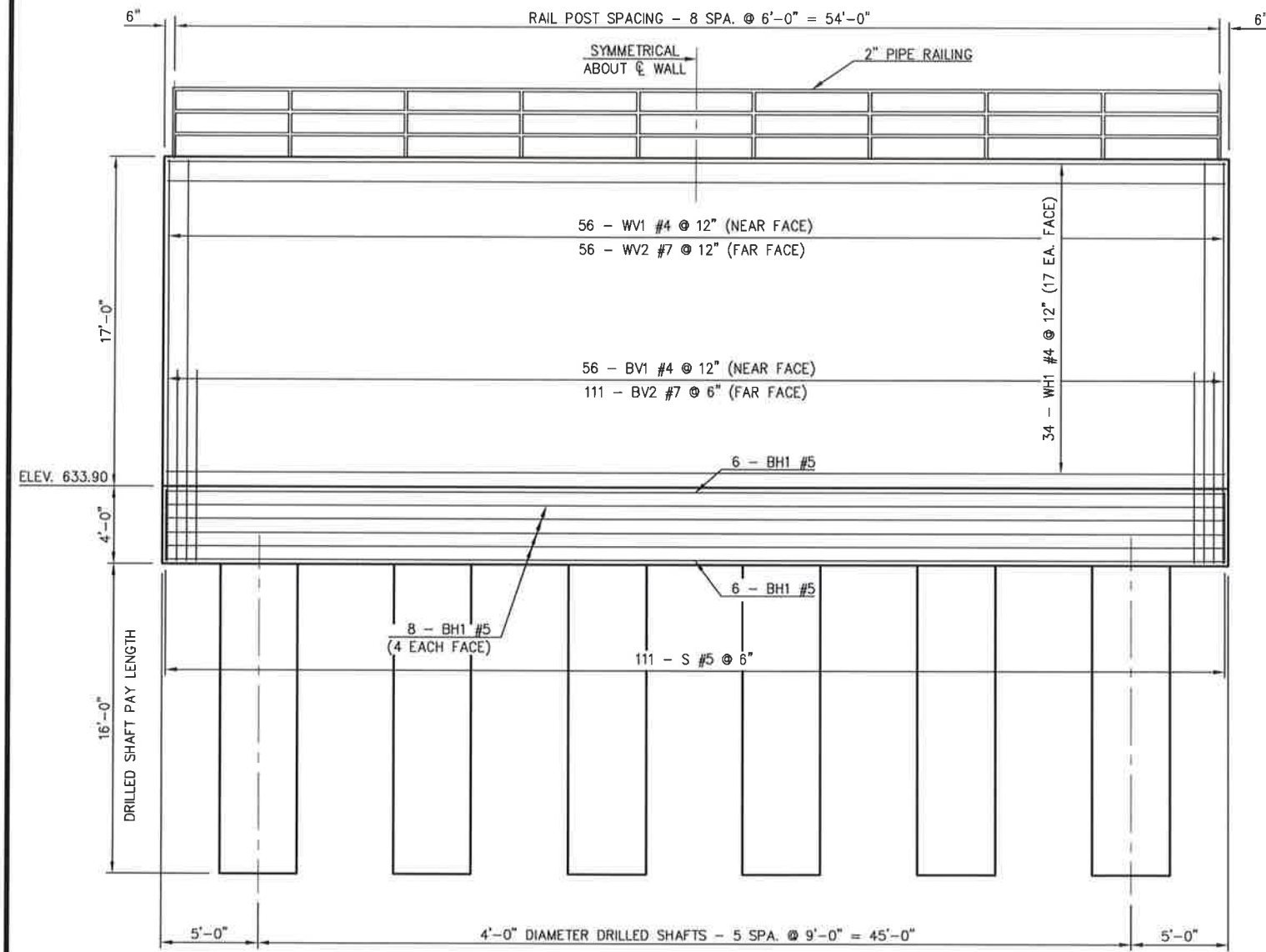
REV. NO.	DESCRIPTION	DATE



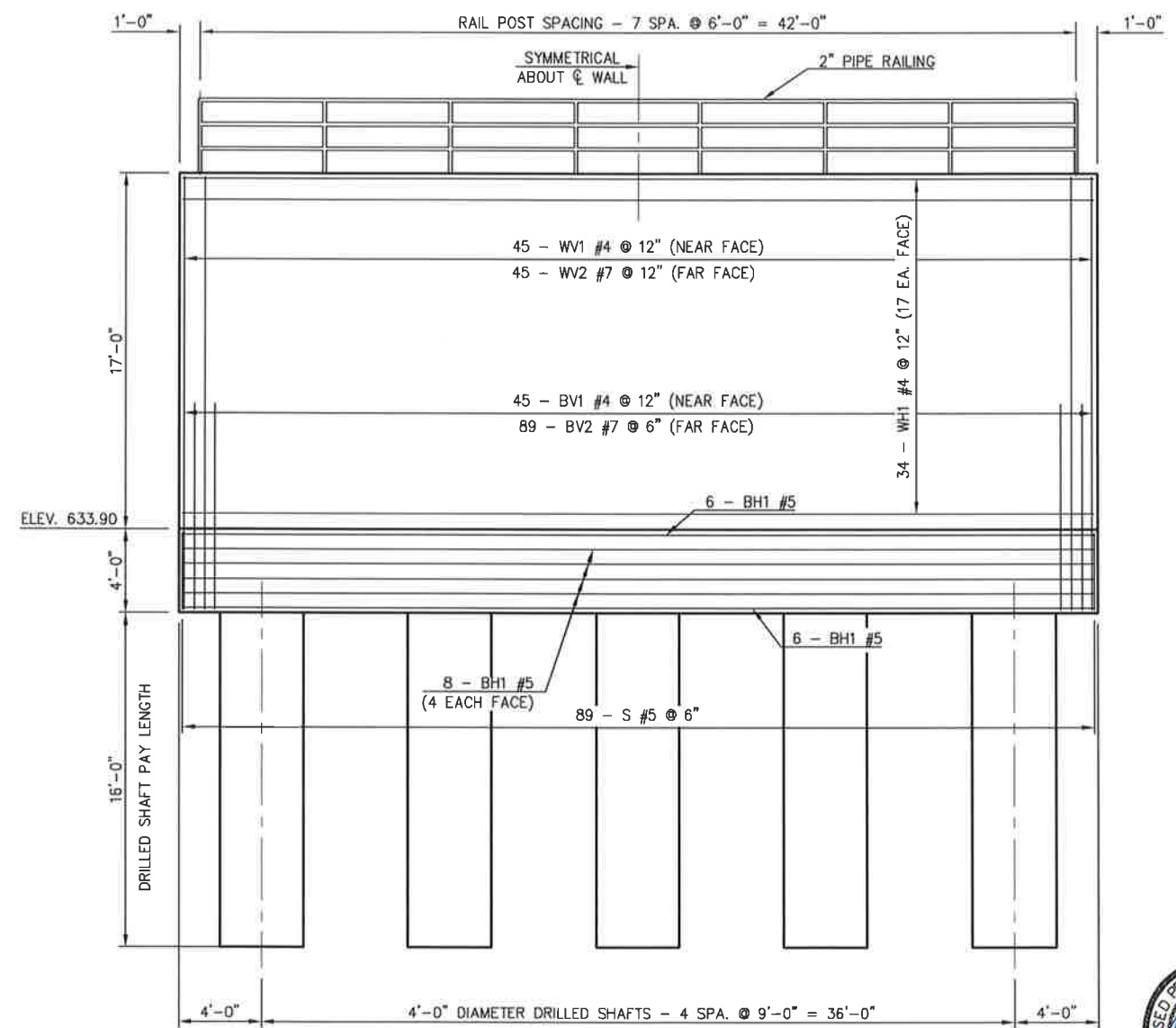
PLAN - WEST RETAINING WALL



PLAN - EAST RETAINING WALL



ELEVATION - WEST RETAINING WALL
(LOOKING BACK ON STATIONING)



ELEVATION - EAST RETAINING WALL
(LOOKING AHEAD ON STATIONING)



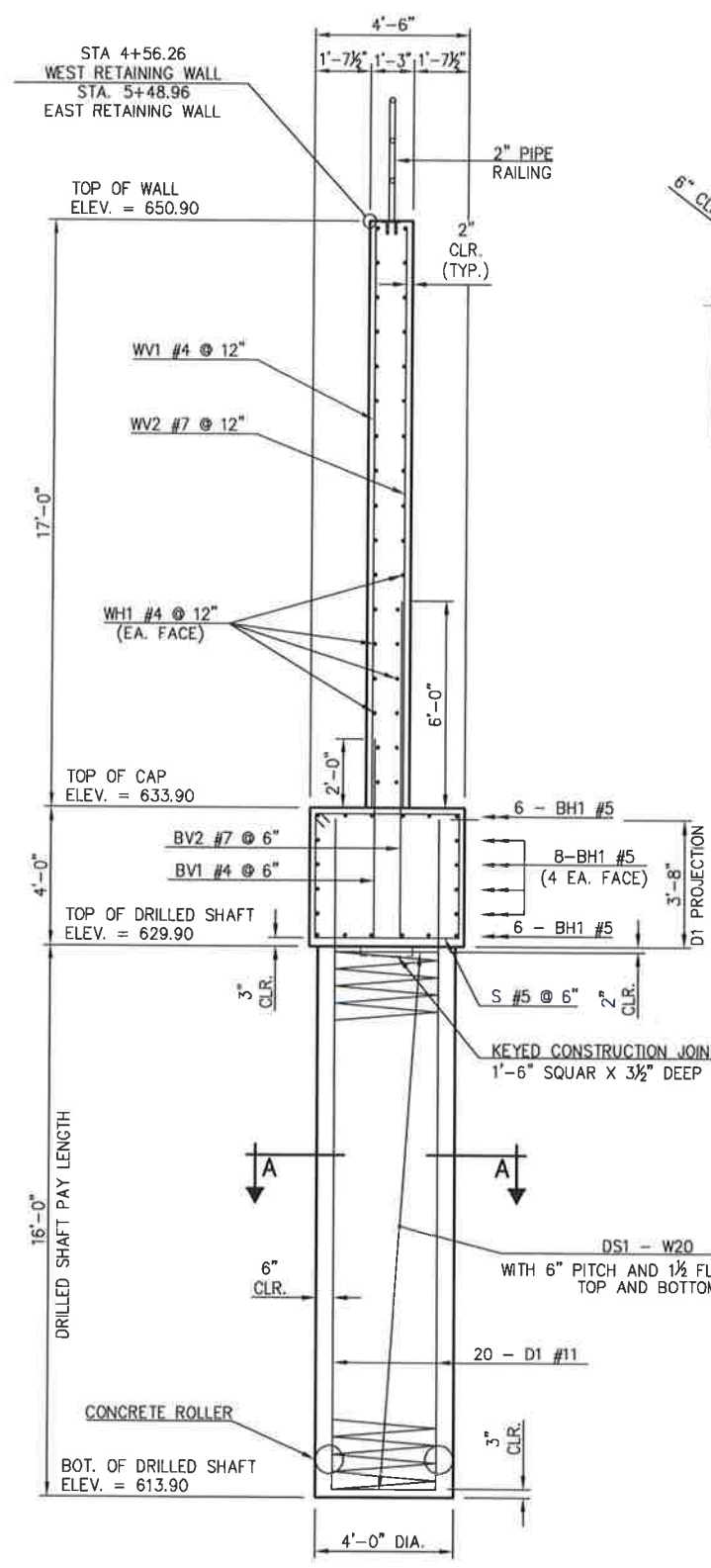
6-21-17

DESIGN		E-1844/DAIRY LANE OVER UPRR	ATOKA COUNTY
DETAIL		RETAINING WALL PLAN AND ELEVATION	
CHECK			
NEO DESIGN LLC		STATE JOB PIECE NO. 31169(04)	SHEET NO. 8001

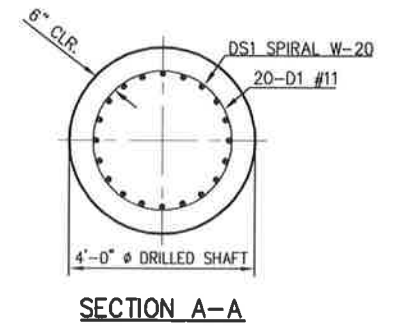
REVISIONS		
REV. NO.	DESCRIPTION	DATE

LOAD AND RESISTANCE FACTOR DESIGN DATA
 CLASS A CONCRETE $f'_c = 3,000$ p.s.i.
 REINFORCING STEEL (GRADE 60) $f_y = 60,000$ p.s.i.
 DESIGN: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 7TH EDITION

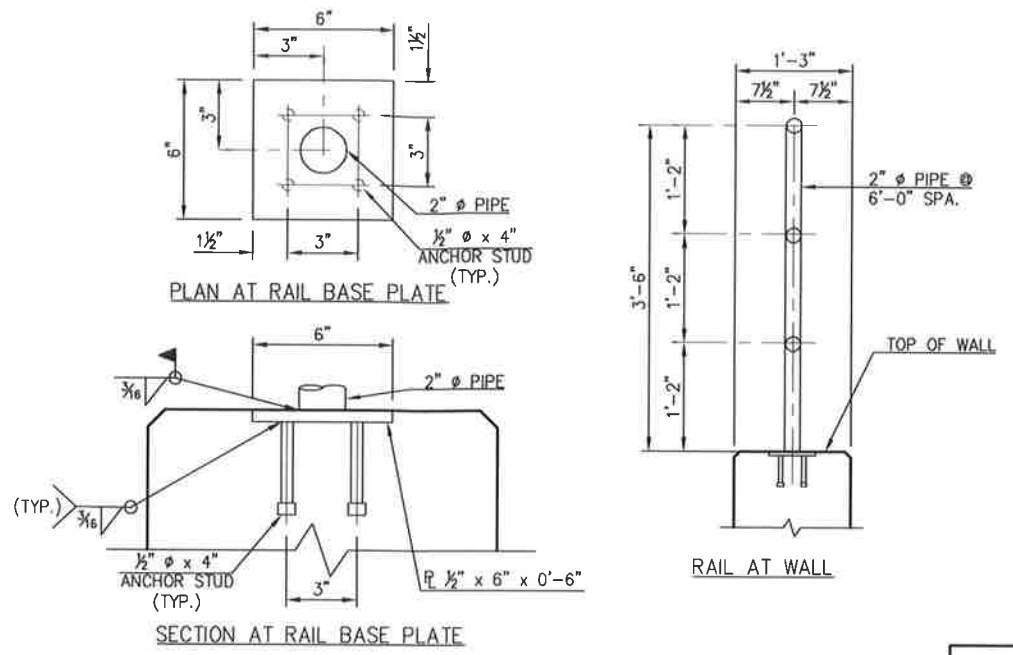
FOUNDATION DATA
PIER (48" DIAMETER DRILLED SHAFTS)
 FACTORED REACTION = 60 TONS/SHAFT
 NOMINAL UNIT BEARING RESISTANCE = 24.0 TSF
 BEARING RESISTANCE FACTOR = 0.50
 FACTORED BEARING RESISTANCE = 151 TONS/SHAFT
 NOMINAL UNIT FRICTION RESISTANCE = 2.00 TSF
 FRICTION RESISTANCE FACTOR = 0.45
 FACTORED FRICTION RESISTANCE = 181 TONS/SHAFT
 TOTAL FACTORED RESISTANCE = 332 TONS/SHAFT



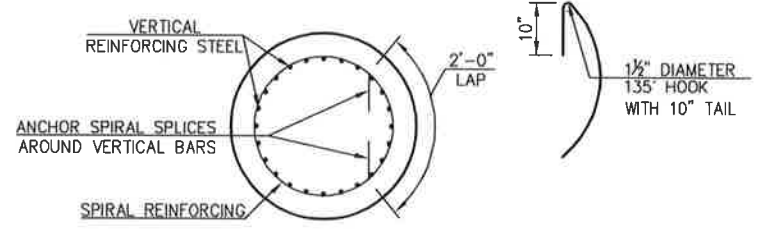
TYPICAL SECTION



SECTION A-A

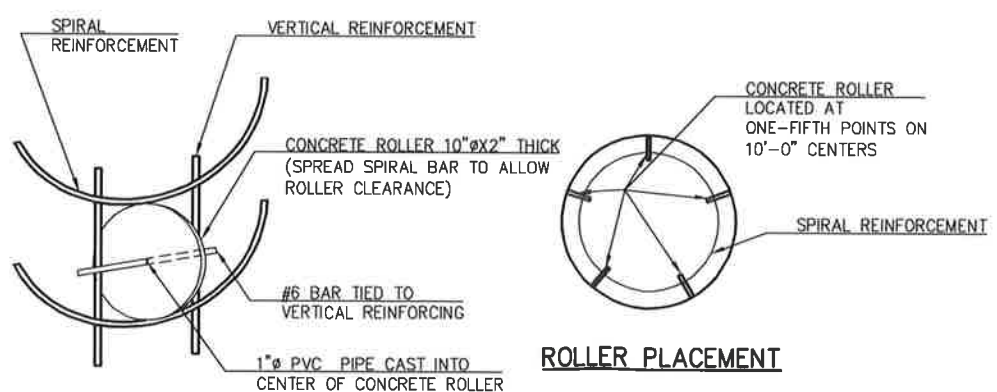


DETAILS OF 2" PIPE RAILING



DETAIL OF SPIRAL REINFORCING SPLICE

NOTE: SPIRAL BARS SHALL CONFORM TO AASHTO M-32. SPIRAL BAR LENGTH DOES NOT INCLUDE LAP. IF LAP IS REQUIRED, THE LENGTH OF THE LAP SHALL BE AS SHOWN.



ROLLER INSTALLATION

ROLLER PLACEMENT

DETAIL OF CONCRETE ROLLER

NOTE: CONCRETE USED IN THE CONCRETE ROLLERS SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4,000 P.S.I. SLAB BOLSTERS, HIGH CHAIRS AND PLASTIC ROLLERS SHALL NOT BE SUBSTITUTED FOR THE CONCRETE ROLLERS.

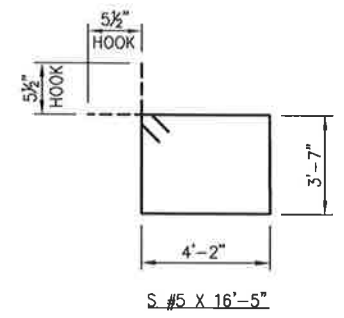
BAR LIST - WEST RETAINING WALL				
MARK	SIZE	NO.	FORM	LENGTH
REINFORCING STEEL				
BH1	#5	20	STR.	54'-8"
BV1	#4	56	STR.	5'-9"
BV2	#7	111	STR.	9'-9"
WH1	#4	34	STR.	54'-8"
WV1	#4	56	STR.	16'-10"
WV2	#7	56	STR.	16'-10"
S	#5	111	BNT.	16'-5"
DRILLED SHAFTS ②				
D1	#11	120	STR.	19'-5"
DS1	W20	6	SPIRAL	322'-6"

- ① INCLUDED IN PRICE BID PER SQUARE YARD OF RETAINING WALL
- ② INCLUDED IN PRICE BID PER LINEAR FOOT OF DRILLED SHAFT

BAR LIST - EAST RETAINING WALL				
MARK	SIZE	NO.	FORM	LENGTH
REINFORCING STEEL				
BH1	#5	20	STR.	43'-8"
BV1	#4	45	STR.	5'-9"
BV2	#7	89	STR.	9'-9"
WH1	#4	34	STR.	43'-8"
WV1	#4	45	STR.	16'-10"
WV2	#7	45	STR.	16'-10"
S	#5	89	BNT.	16'-5"
DRILLED SHAFTS ②				
D1	#11	100	STR.	19'-5"
DS1	W20	5	SPIRAL	322'-6"

- ① INCLUDED IN PRICE BID PER SQUARE YARD OF RETAINING WALL
- ② INCLUDED IN PRICE BID PER LINEAR FOOT OF DRILLED SHAFT

RETAINING WALL QUANTITIES				
ITEM	UNIT	WEST	EAST	TOTAL
RETAINING WALL	S.Y.	103.9	83.2	187.1
CLASS A CONCRETE	C.Y.	36.7	29.4	66.1
EPOXY COATED REINFORCING STEEL	LB.	5470	4390	9860
DRILLED SHAFTS 48" DIAMETER	L.F.	96	80	176
2" PIPE RAILING	L.F.	54	42	96

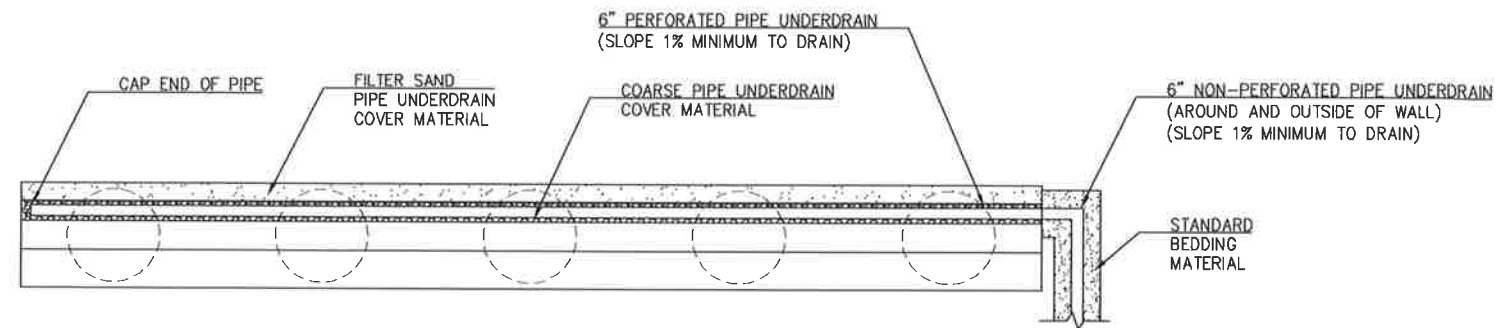


DESIGN	E-1844/DAIRY LANE OVER UPRR	ATOKA COUNTY
DETAIL	RETAINING WALL DETAILS	
CHECK		
NEO DESIGN LLC	STATE JOB PIECE NO. 31169(04)	SHEET NO. 8002



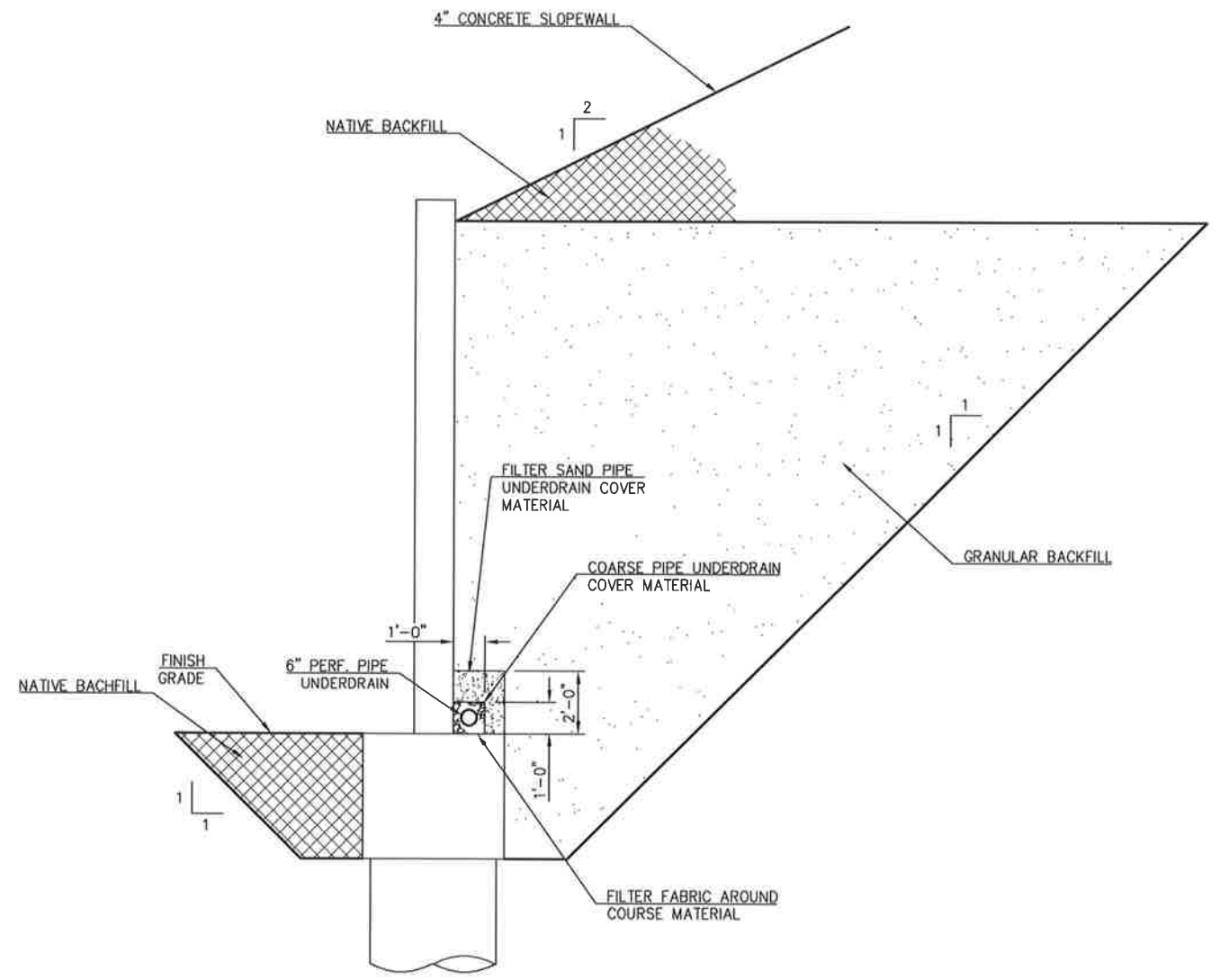
N:\JOBS\CED3\ Dairy Lane Over UPRR\DWG\ Dairy Lane Retaining Wall.dwg, DETAILS, 6/21/2017 9:25:13 AM

REVISIONS		
REV. NO.	DESCRIPTION	DATE

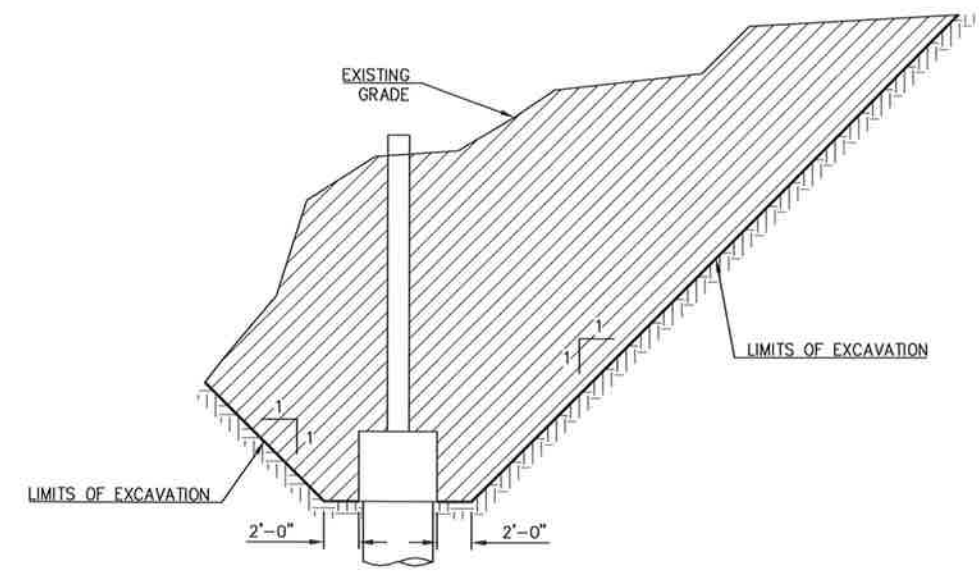


PIPE UNDERDRAIN PLAN

NOTE:
 THE ENGINEER MAY ADJUST THE EXTENT, LOCATION AND DEPTH OF 6" NON-PERFORATE PIPE UNDERDRAIN DURING CONSTRUCTION. INCLUDE THE COST OF PIPE UNDERDRAIN COVER MATERIAL (BOTH FINE SAND AND COARSE), FILTER FABRIC, TRENCH EXCAVATION, STANDARD BEDDING MATERIAL, AND EQUIPMENT AND LABOR FOR THEIR INSTALLATION IN THE CONTRACT UNIT PRICE OF "RETAINING WALL". INSTALL AS SHOWN ON THE PLANS AND ON STD. PUD-3.



BACKFILL AND PIPE UNDERDRAIN



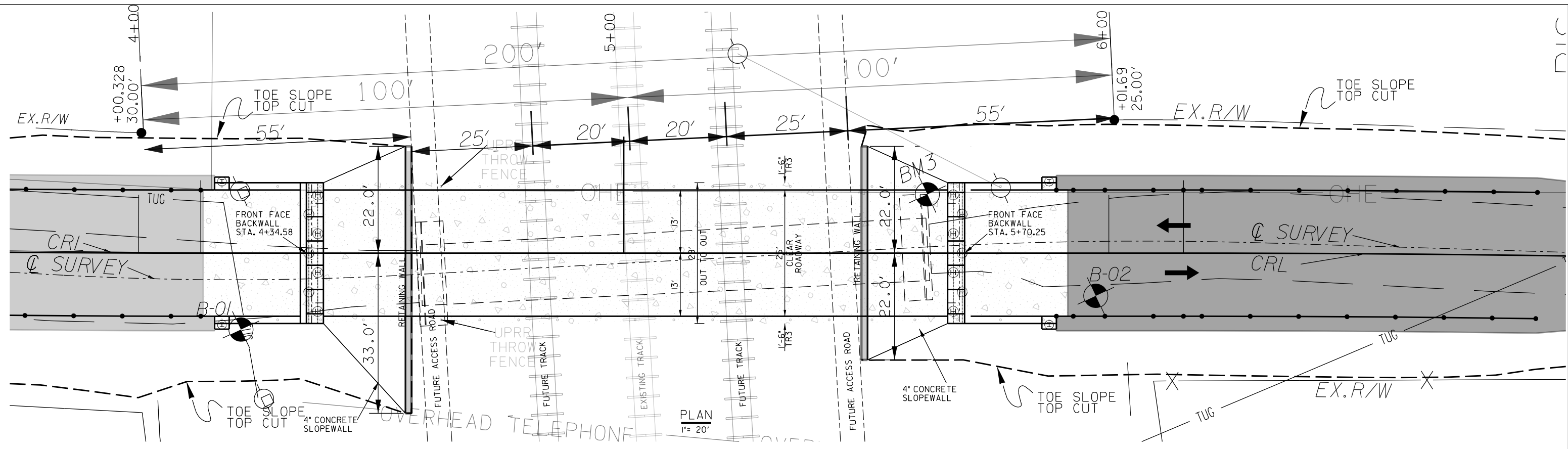
SUBSTRUCTURE EXCAVATION



6-21-17

DESIGN		E-1844/DAIRY LANE OVER UPRR	ATOKA COUNTY
DETAIL		RETAINING WALL EXCAVATION AND PIPE UNDERDRAIN DETAILS	
CHECK			
NEO DESIGN LLC		STATE JOB PIECE NO. 31169(04)	SHEET NO. 8003

N:\JOBS\CED3\ Dairy Lane Over UPRR\DWG\Dairy Lane Retaining Wall.dwg, EXCAVATION, 6/21/2017 9:26:08 AM



BM#1
I-CONTROL POINT
SET 1P, S-SIDE
TREE STUMP
X= 2525981.7259000
Y= 371519.6808000
ELEV.= 660.75

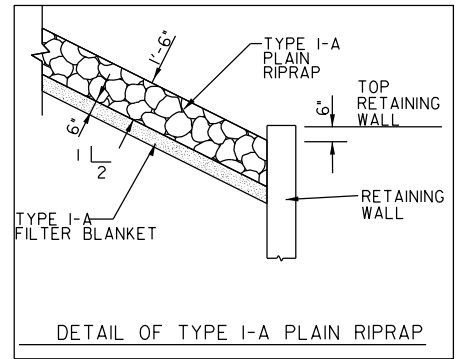
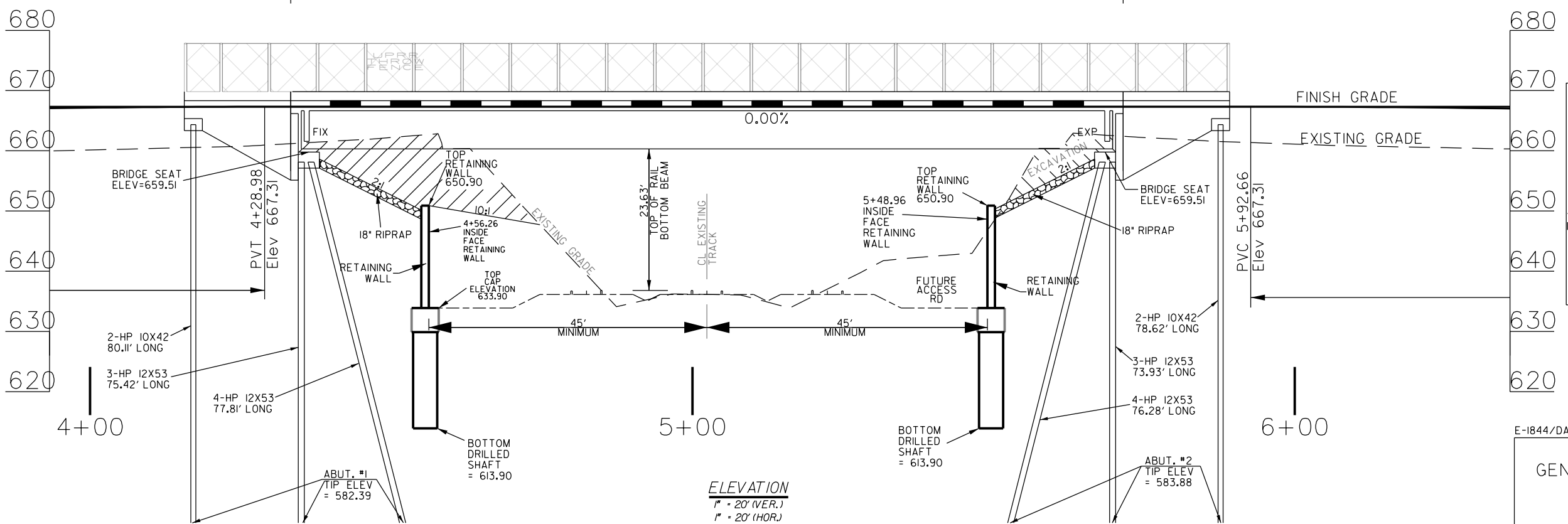
BEGIN BRIDGE
STA. 4+33.33
F.G.= 667.31

BRIDGE LENGTH
138'-2"

END BRIDGE
STA. 5+71.50
F.G.= 667.31

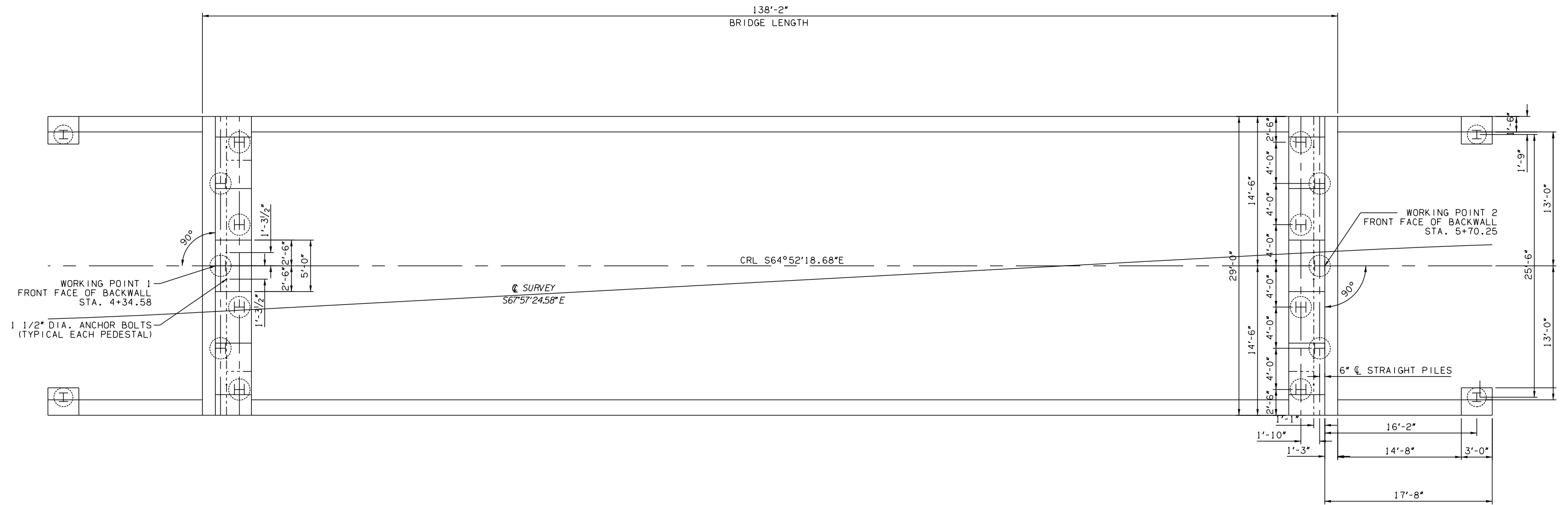
BM#3-14+63.00
NE CORNER
BRIDGE ABUTMENT
X= 2526687.6892000
Y= 371100.8801000
ELEV.= 661.38

BM#2-18+11.92
TOP CONC.
N-SIDE OF
BRACE POST
X= 2526994.0083000
Y= 370921.4694000
ELEV.= 658.27



ELEVATION
1" = 20' (VER.)
1" = 20' (HOR.)

E-1844/DAIRY LANE ATOKA COUNTY
SOUTHEAST #3 CIRCUIT ENGINEERING DISTRICT
GENERAL PLAN AND ELEVATION
135' PC BEAM TYPE J @ STA. 5+02.41
26'-0" CLR. RDWY W/ TR3-2 RAILING
STATE JOB NO. 31169(04) SHEET NO. B004

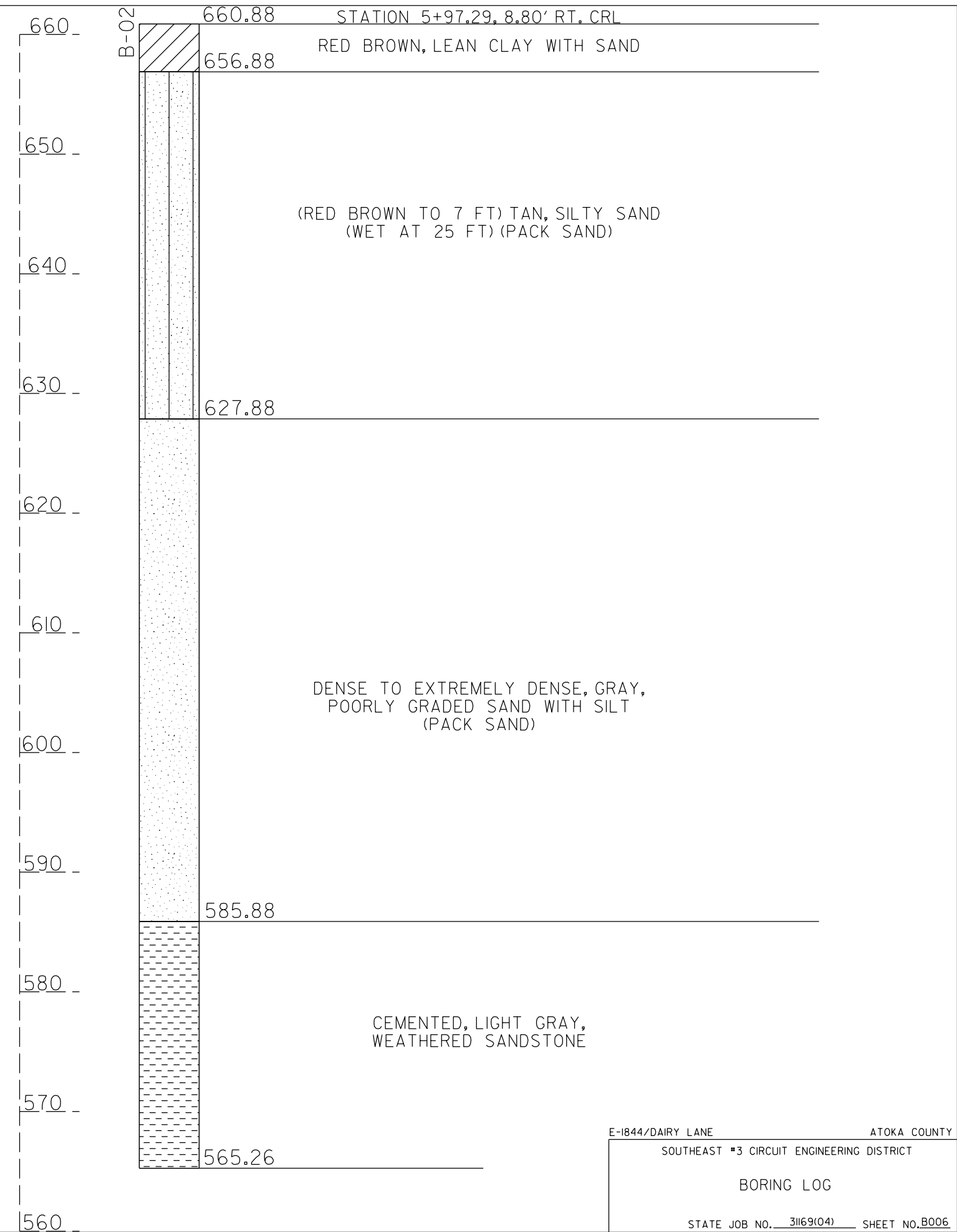
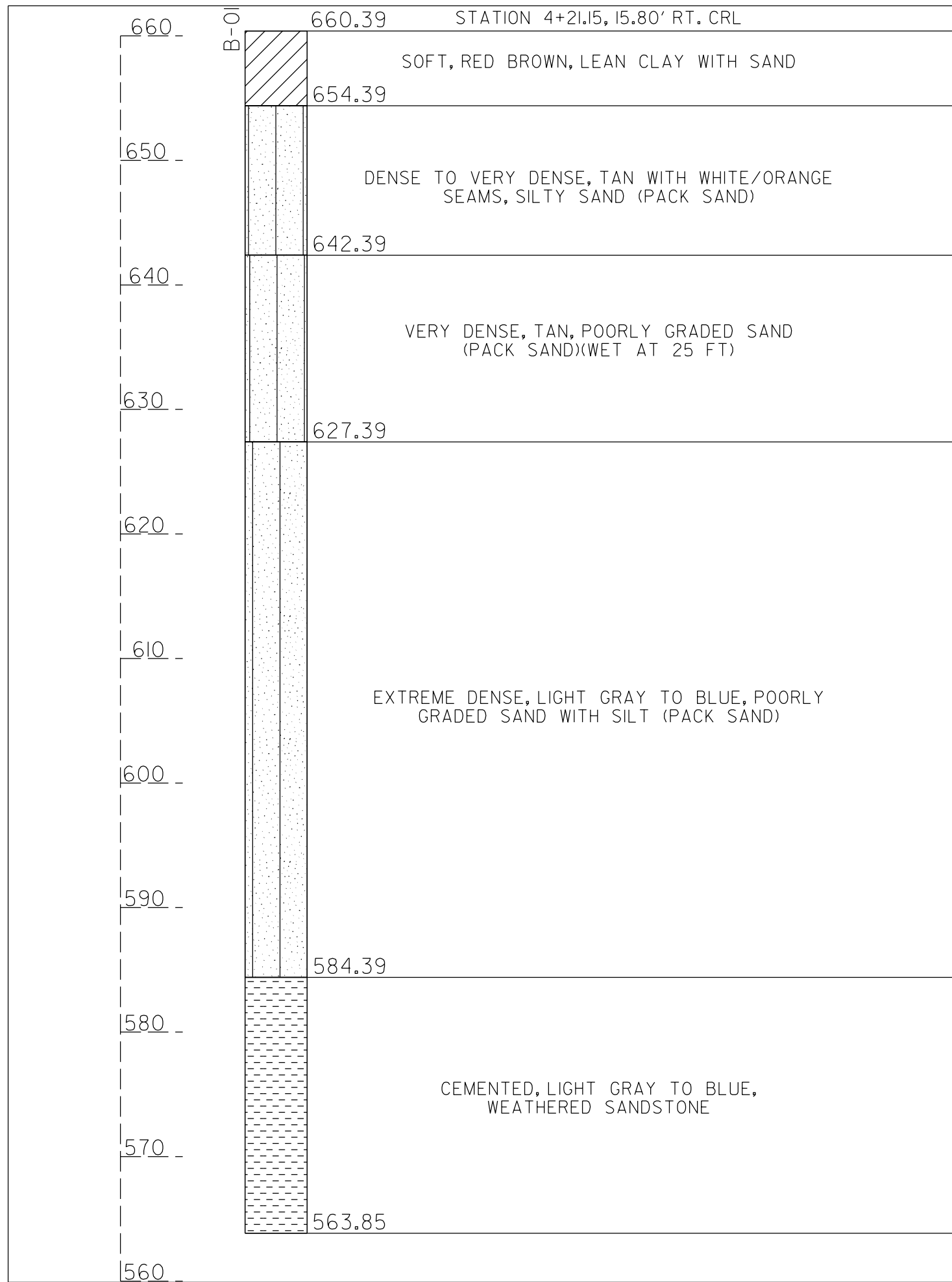


ABUT. 1

ABUT. 2

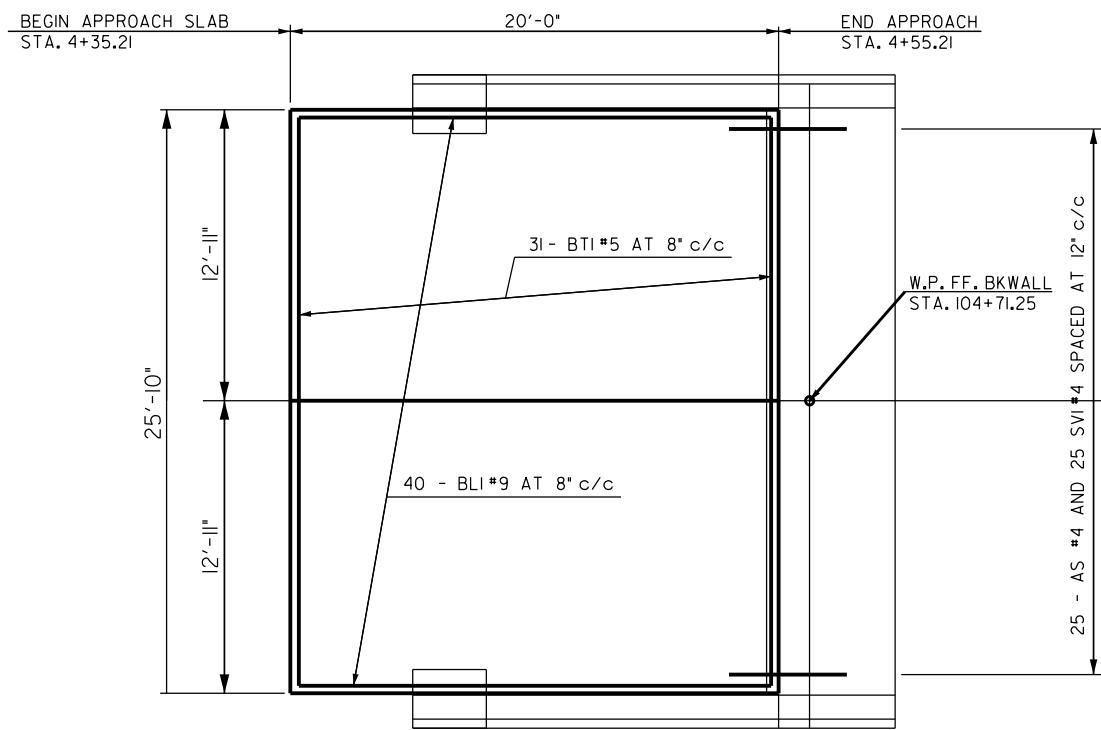
31169(04) SUMMARY OF PAY QUANTITIES										
0200 BRIDGE 135' P.C. BEAM SPAN TYPE J, 26'-0" CL RDWY, TR3-2										
ITEM NO.		DESCRIPTION	UNIT	ABUT 1	ABUT 2	RETAINING WALL #1	RETAINING WALL #2	SUPERSTR	WINGS	TOTAL
501(B)	1307	SUBSTRUCTURE EXCAVATION COMMON	CY	65.00	65.00				80.00	210.00
501(G)	6309	CLSM BACKFILL	CY	60.00	60.00					120.00
503(A)	6281	PRESTRESSED CONCRETE BEAMS (TYPE J BT)	LF					404.00		404.00
504(A)	1304	APPROACH SLAB	SY	57.40	57.40					114.80
504(B)	1305	SAW-CUT GROOVING	SY	43.98	43.98			335.30		423.26
504(D)	6239	CONCRETE RAIL (TR3)	LF					276.40	70.80	347.20
506(A)	1322	STRUCTURAL STEEL	LB.					970.00		970.00
507(A)	6172	WEATHERING STEEL FIXED BEARING ASSEMBLY	EA	3.00						3.00
507(B)	6176	WEATHERING STEEL EXPANSION BEARING ASSEMBLY	EA		3.00					3.00
509(A)	1326	CLASS AA CONCRETE	CY					117.20		117.20
509(B)	1328	CLASS A CONCRETE	CY	25.50	25.50	36.70	29.40		30.40	147.50
510(A)	6334	RETAINING WALL	SY			103.90	83.20			187.10
511(A)	1332	REINFORCING STEEL	LB	3,440.00	3,440.00			25,420.00	5,000.00	37,300.00
511(B)	6010	EPOXY COATED REINFORCING STEEL	LB			5,470.00	4,390.00			9860.00
514(A)	6010	PILES, FURNISHED (HP 10X42)	LF						317.46	317.46
514(A)	6011	PILES, FURNISHED (HP 12X53)	LF	537.50	526.91				0.00	1064.41
514(B)	6292	PILES, DRIVEN (HP 10X42)	LF						317.46	317.46
514(B)	6294	PILES, DRIVEN (HP 12X53)	LF	537.50	526.91					1064.41
514(K)	6260	(PL)PILOT HOLES	LF		526.91					526.91
514(L)	6220	PILE SPLICE, H-PILE (NON-BIDDABLE)	EA							1.00
516(A)	6094	DRILLED SHAFTS 48" DIAMETER	LF			96.00	80.00			176.00
601(B)	1353	TYPE I-A PLAIN RIPRAP	TON	251.46	222.21					473.67
601(I)	6312	FILTER BLANKET (RIPRAP)	SY	310.44	274.33					584.78
619(D)	1397	REMOVAL OF EXISTING BRIDGE STRUCTURE	LSUM							1.00
622(A)	4545	2" PIPE RAILING	LF			54.00	42.00			96.00

E-1844/DAIRY LANE ATOKA COUNTY
SOUTHEAST #3 CIRCUIT ENGINEERING DISTRICT
STAKING LAYOUT
STATE JOB NO. 31169(04) SHEET NO. B005

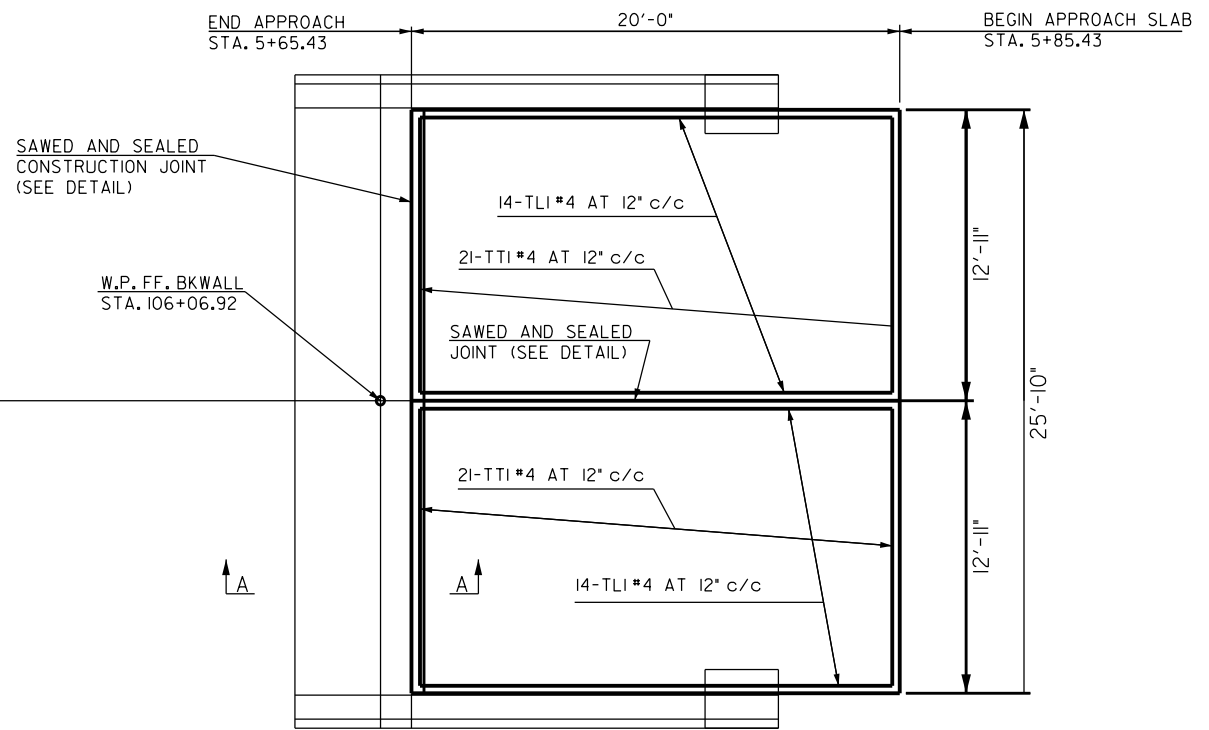


E-1844/DAIRY LANE ATOKA COUNTY
 SOUTHEAST #3 CIRCUIT ENGINEERING DISTRICT
 BORING LOG
 STATE JOB NO. 31169(04) SHEET NO. B006

DESCRIPTION	REVISIONS	DATE

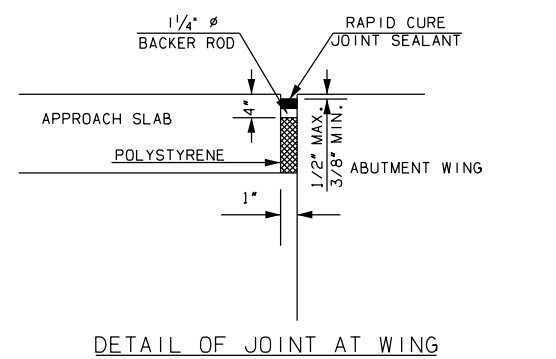


ABUT. NO. 1
(BOTTOM SLAB REINFORCING SHOWN)

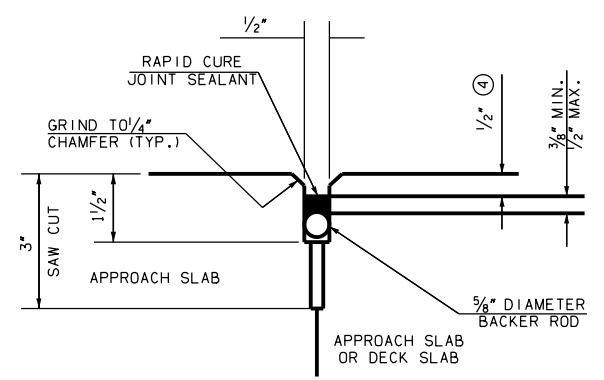


ABUT. NO. 2
(TOP SLAB REINFORCING SHOWN)

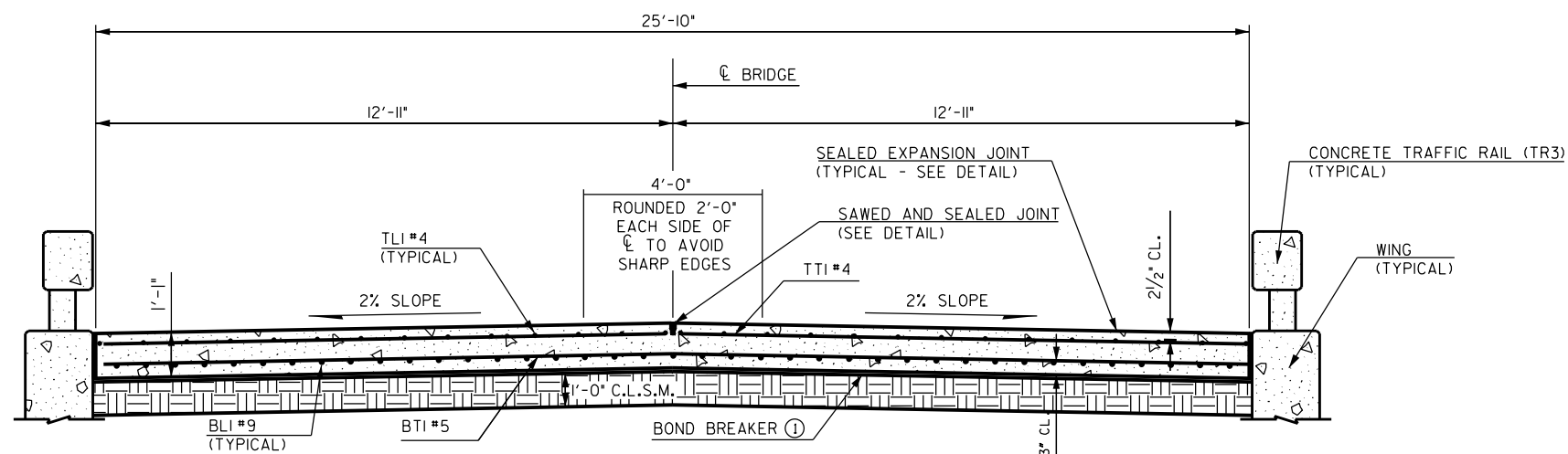
APPROACH SLAB LAYOUT



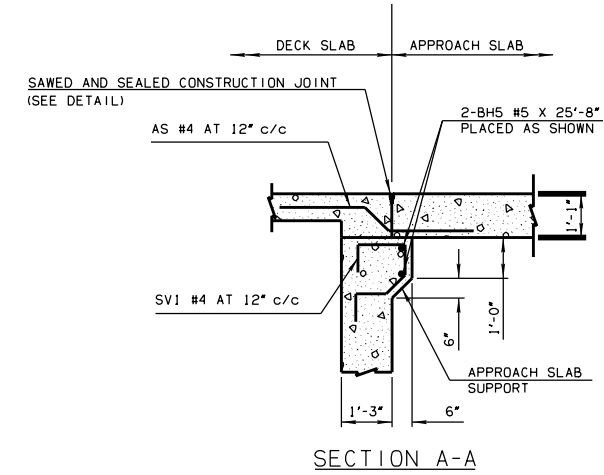
DETAIL OF JOINT AT WING



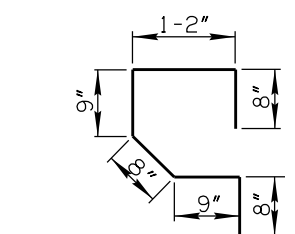
DETAIL OF SAWED AND SEALED JOINT



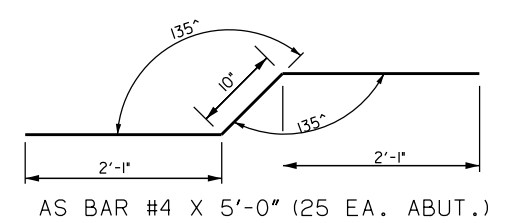
TYPICAL SECTION THRU APPROACH SLAB



SECTION A-A



SV1 #4 X 4'-8" (25 EA. ABUT.)



AS BAR #4 X 5'-0" (25 EA. ABUT.)

DETAILS OF BENT REINFORCING STEEL

NOTES:

- THE BOND BREAKER SHALL BE ONE 6 MIL. OR TWO 4 MIL. POLYETHYLENE SHEETS. THE BOND BREAKER SHALL EXTEND THE FULL WIDTH AND LENGTH OF THE APPROACH SLAB BUT SHALL NOT BE PLACED ABOVE THE APPROACH SLAB SUPPORT AS SHOWN IN SECTION A-A.
- AS BARS SHALL BE TIED TO THE TOP LAYER OF REINFORCING STEEL IN THE DECK SLAB AND TO THE BOTTOM LAYER OF REINFORCING STEEL IN THE APPROACH SLAB. AS BARS SHALL BE INSTALLED BEFORE PLACING DECK SLAB CONCRETE. AS BARS ARE INCLUDED IN THE SUPERSTRUCTURE REINFORCING STEEL QUANTITIES.
- THE APPROACH SLAB SUPPORT AT THE BACK FACE OF THE ABUTMENT BACKWALL SHALL BE CONSTRUCTED WITH THE ABUTMENT BACKWALL. SV1 AND BH5 BARS SHALL BE INSTALLED BEFORE PLACING THE ABUTMENT BACKWALL CONCRETE. SV1 AND BH5 BARS ARE INCLUDED IN THE ABUTMENT REINFORCING STEEL QUANTITIES. CONCRETE FOR THE APPROACH SLAB SUPPORT IS INCLUDED IN THE ABUTMENT CLASS A CONCRETE QUANTITIES.
- AT TRANSVERSE JOINTS ONLY, THIS DIMENSION SHALL TAPER FROM 1/2" AT THE EDGE OF DRIVING LANES TO 5/8" AT TRAFFIC RAILS.
- QUANTITIES FOR SAW-CUT GROOVING WILL BE IN ACCORDANCE WITH SECTION 504.04.01 OF THE STANDARD SPECIFICATIONS.
- THE UNIT PRICE BID PER SQUARE YARD OF "APPROACH SLAB" SHALL INCLUDE ALL COST TO CONSTRUCT THE APPROACH SLAB INCLUDING THE COST OF ALL CONCRETE, ALL REINFORCING STEEL, BACKER ROD, RAPID CURE JOINT SEALANT, POLYSTYRENE, PREFORMED EXPANSION MATERIAL, POLYETHYLENE SHEETING, SAWING, GRINDING, CONCRETE BLOCK EXCAVATION, BACKFILL, MATERIALS, LABOR, EQUIPMENT, AND INCIDENTALS.

MARK	NO.	SIZE	SHAPE	LENGTH
AS	25	#4	BNT.	5'-0"
BH5	2	#5	STR.	25' - 8"
BL1	40	#9	STR.	19' - 8"
BT1	31	#5	STR.	25' - 6"
SV1	27	#4	BNT.	4'-8"
TL1	28	#4	STR.	19' - 8"
TT1	42	#4	STR.	12' - 7"

NOTE: BAR LIST FOR INFORMATION ONLY. REINFORCING TO BE INCLUDED IN THE PRICE BID PER SQUARE YARD OF "APPROACH SLAB".

DESCRIPTION	UNITS	QUANTITY
APPROACH SLAB	SY	57.40
SAW-CUT GROOVING	SY	43.98

SOUTHEAST #3 CIRCUIT ENGINEERING DISTRICT
 ATOKA COUNTY
DETAILS OF APPROACH SLAB
 STATE JOB NO. 31169(04) SHEET NO. B007

00+00

PISTA 0+99.99
 STA. 10+00.00
 4' POB
 (SET PK&SHIMMER)
 X = 252668.5038000
 Y = 371295.9729000
 ELEV. = 660.54
 STA. 10+19.56
 POWER POLE 18.69' LT.

Sta. 10+27.4
 2" X 24" LONG CGMP SD
 X-ING @ 13.4 LT. 10.6 RT.

PCSTA 1+87.12

PISTA 2+99.99

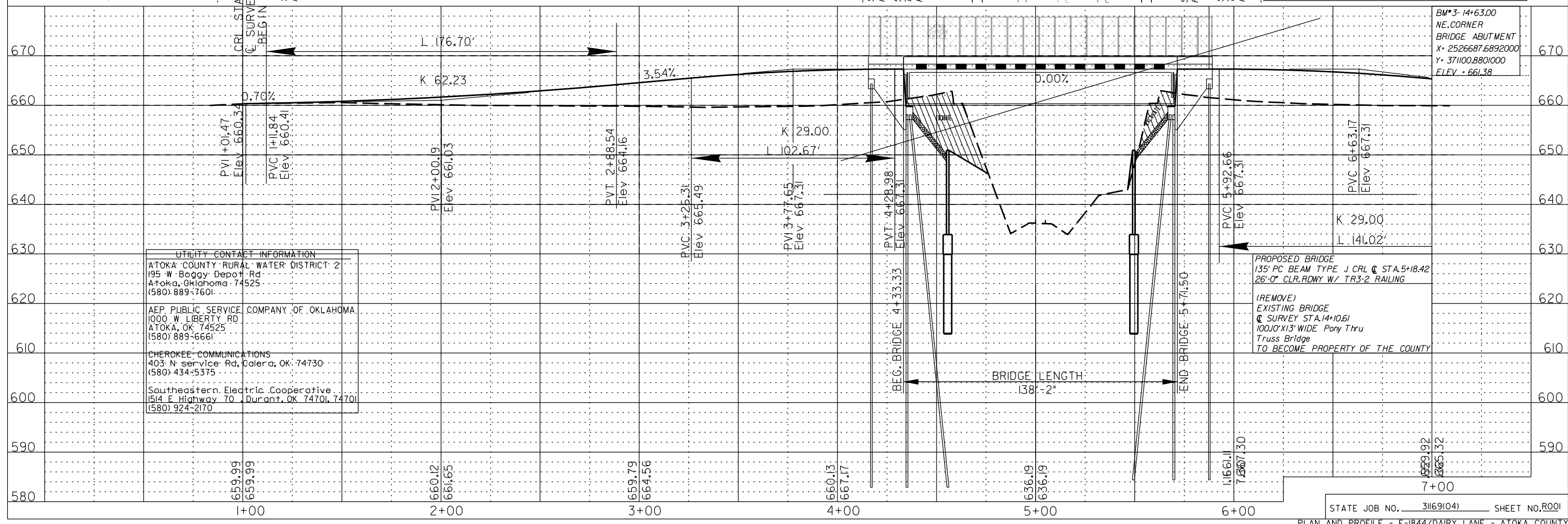
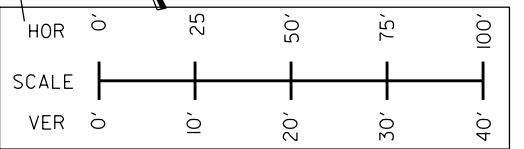
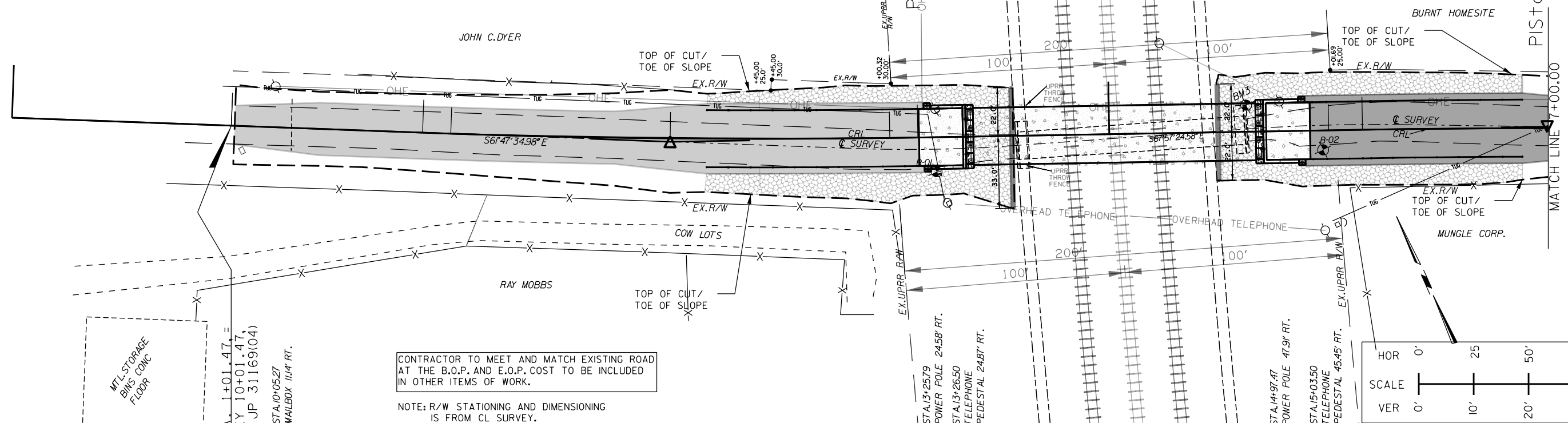
CRL CURVE NO.1
 STA. 2+99.99
 N = 371201.4414
 E = 252644.7530
 Dc = 12151.07'
 Delta = 304°43.70"
 R = 4200.00'
 T = 112.87'
 L = 225.69'
 E = 1.52'

PISTA 4+12.80
 STA. 13+216
 POWER POLE 18.24' LT.
 (RELOCATE)
 STA. 13+219
 TELEPHONE
 PEDESTAL 17.95' LT.
 (RELOCATE)

PCSTA 6+15.37

CRL CURVE NO.2
 STA. 6+99.56
 N = 371031.7412
 E = 252680.5612
 Dc = 103°32.66"
 Delta = 146°59.33"
 R = 5410.00'
 T = 84.19'
 L = 168.37'
 E = 0.66'

MIRIAM DAVIS



UTILITY CONTACT INFORMATION
 ATOKA COUNTY RURAL WATER DISTRICT 2
 195 W. Boggy Depot Rd.
 Atoka, Oklahoma 74525
 (580) 889-1601
 AEP PUBLIC SERVICE COMPANY OF OKLAHOMA
 1000 W. LIBERTY RD.
 ATOKA, OK 74525
 (580) 889-6661
 CHEROKEE COMMUNICATIONS
 403 N. service Rd, Calera, OK 74730
 (580) 434-5375
 Southeastern Electric Cooperative
 1514 E Highway 70 Durant, OK 74701, 74701
 (580) 924-2170

PROPOSED BRIDGE
 135' PC BEAM TYPE J CRL @ STA. 5+18.42
 26'-0" CLR. RDWY W/ TR3-2 RAILING
 (REMOVE)
 EXISTING BRIDGE
 @ SURVEY STA. 14+10.61
 100'10" X 13' WIDE Pony Thru
 Truss Bridge
 TO BECOME PROPERTY OF THE COUNTY

CRL
 CURVE NO.2
 STA. 6+99.56
 N = 371031.7412
 E = 2526806.5612
 Dc = 103°32.66"
 Delta = 146°59.33"
 R = 5410.00'
 T = 84.19'
 L = 168.37'
 E = 0.66'

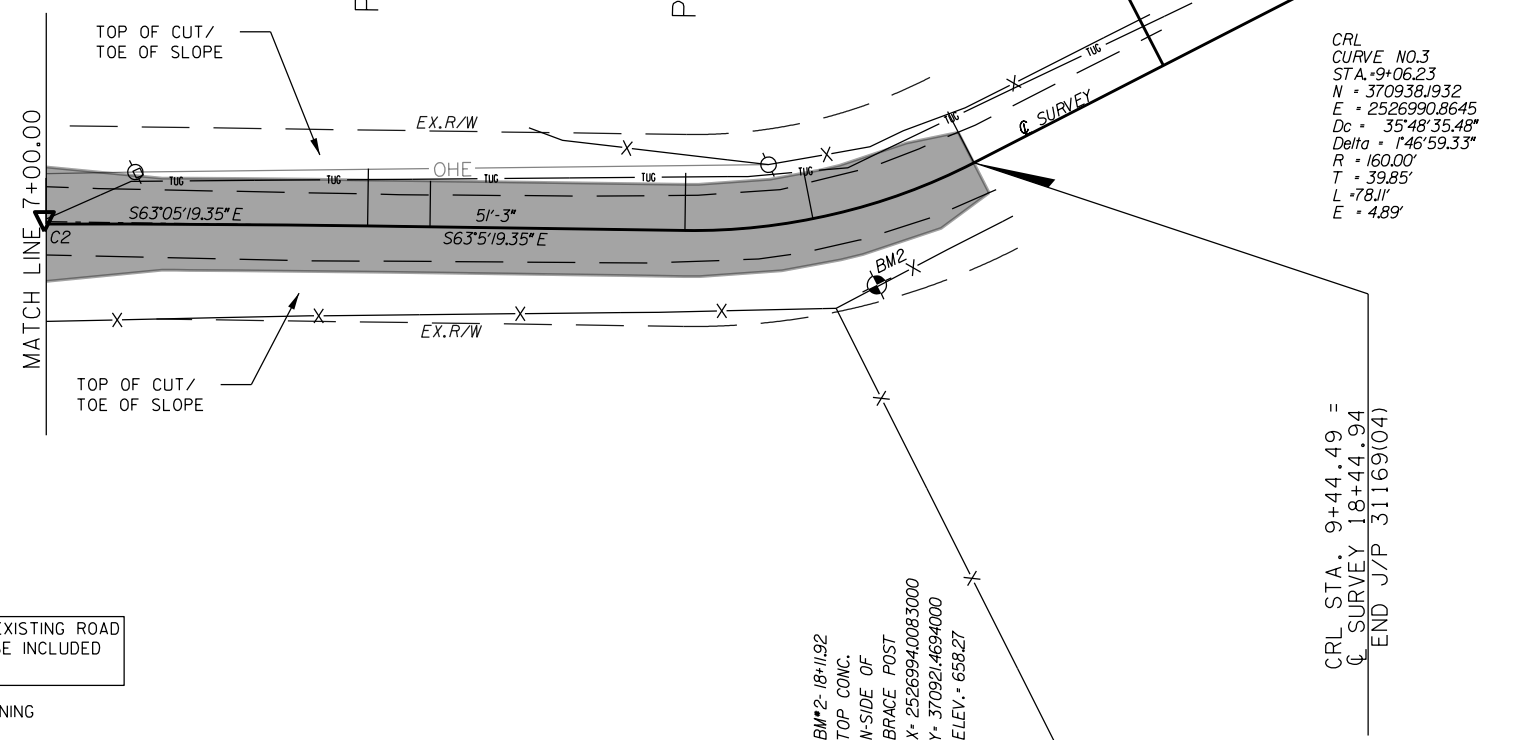
STA. 16+23.49
 POWER POLE
 (RELOCATE)
 STA. 16+24.24
 TELEPHONE
 PEDESTAL
 (RELOCATE)

PTSta 7+83.74

STA. 17+90.84
 POWER POLE
 (RELOCATE)
 STA. 18+44.95
 5- POT
 (SET P&SHINER)
 X = 2527031.5996000
 Y = 3709381.9454000
 ELEV. = 657.35

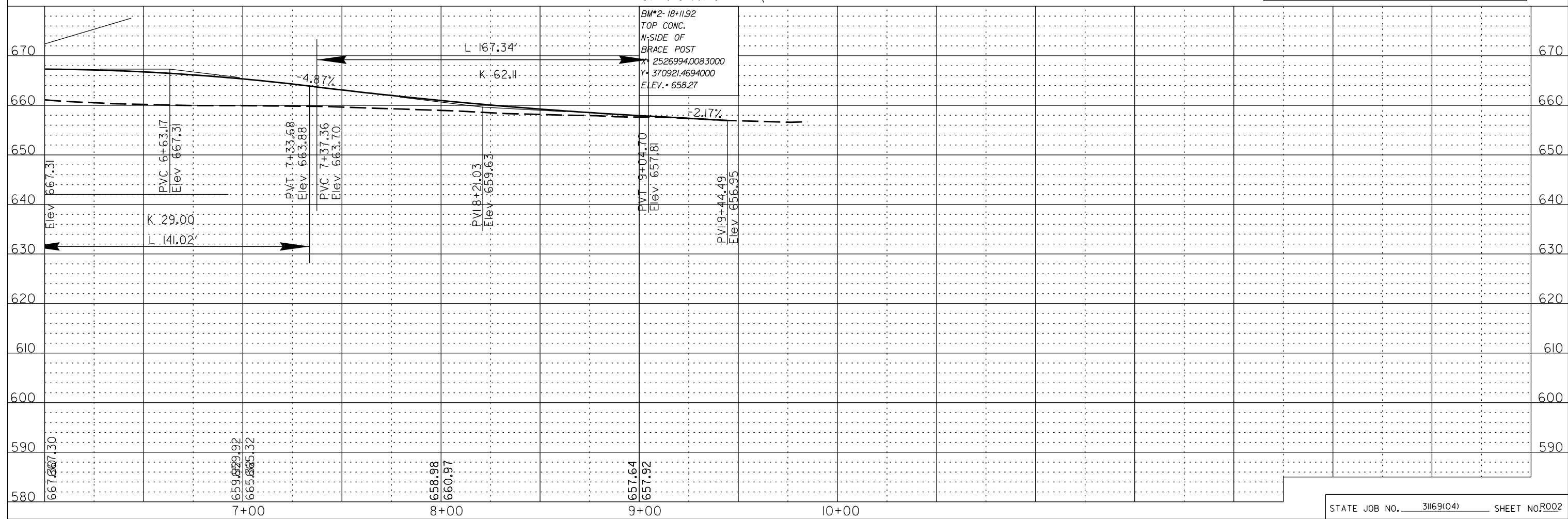
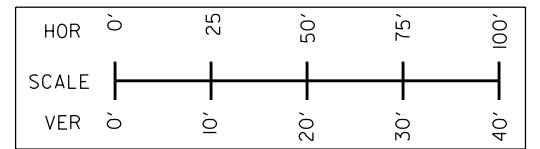
PCSta 8+66.38
 PISSta 9+06.23
 PISSta 9+44.50
 PISSta 9+44.50

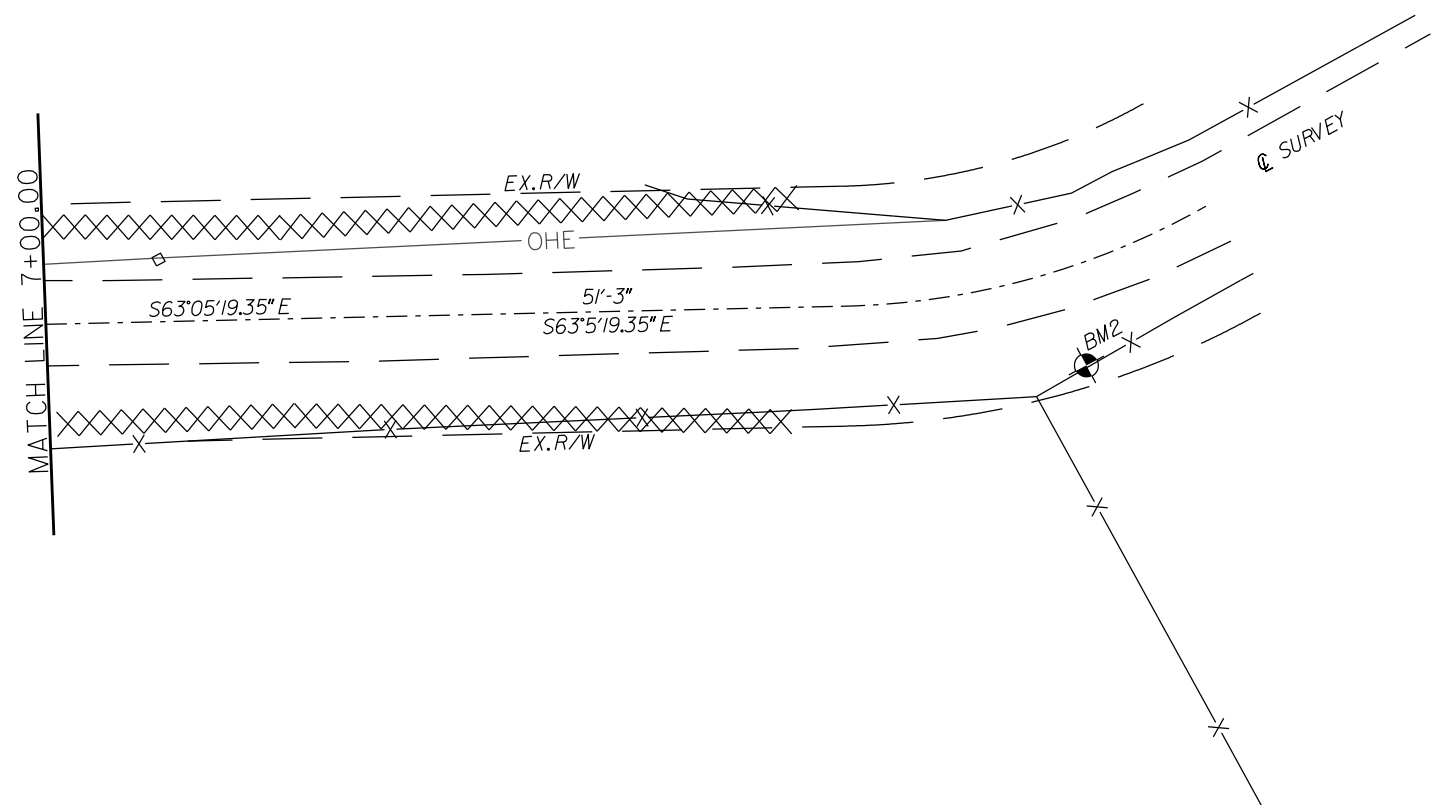
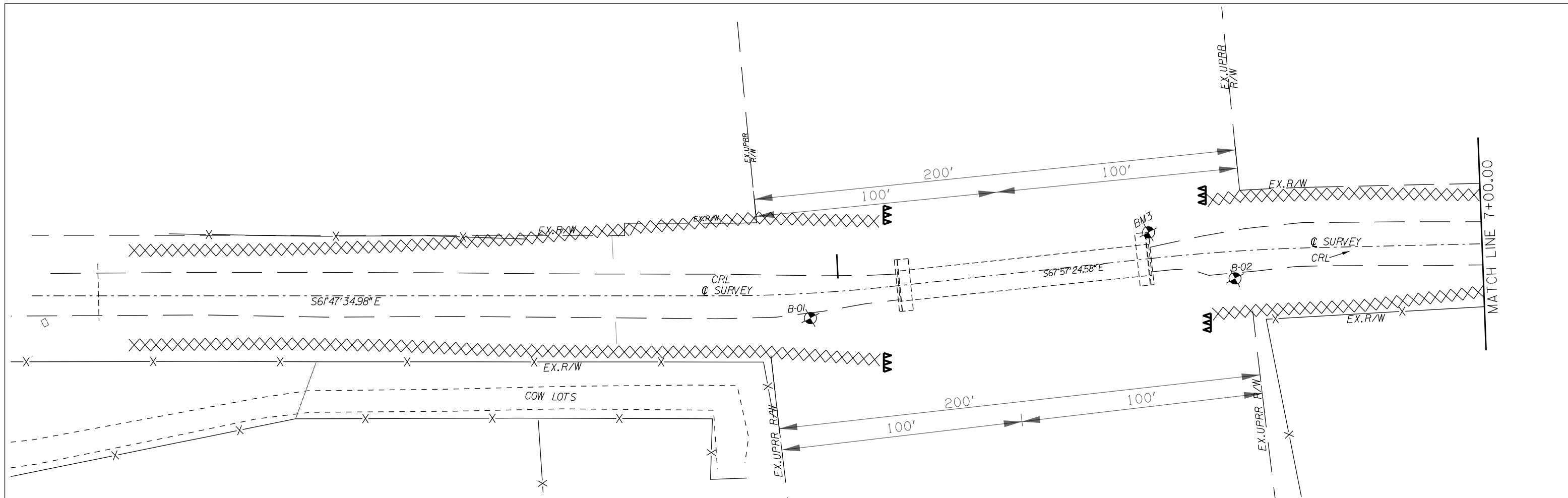
CRL
 CURVE NO.3
 STA. 9+06.23
 N = 3709381.932
 E = 2526990.8645
 Dc = 35°48'35.48"
 Delta = 146°59.33"
 R = 160.00'
 T = 39.85'
 L = 78.11'
 E = 4.89'



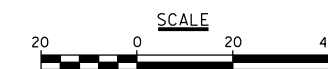
CONTRACTOR TO MEET AND MATCH EXISTING ROAD
 AT THE B.O.P. AND E.O.P. COST TO BE INCLUDED
 IN OTHER ITEMS OF WORK.

NOTE: R/W STATIONING AND DIMENSIONING
 IS FROM CL SURVEY.





LEGEND	
	SILT DIKE
	SILT FENCE



E-1844/DAIRY LANE ATOKA COUNTY
 SOUTHEAST #3 CIRCUIT ENGINEERING DISTRICT
 TEMPORARY EROSION CONTROL
 STATE JOB NO. 31169(04) SHEET NO. R003

1-CONTROL POINT
SET I.P. S-SIDE
TREE STUMP
X= 2525981.7259000
Y= 371519.6808000
ELEV.= 660.75

4 POB
(SET PK&SHINER)
X= 2526268.5038000
Y= 371295.9729000
ELEV.= 660.54

3-BM
NE CORNER
BRIDGE ABUTMENT
X= 2526687.6892000
Y= 371100.8801000
ELEV = 661.38

5- POT
(SET PK&SHINER)
X= 2527031.5996000
Y= 370938.9454000
ELEV.= 657.35

2-BM
TOP CONC.
N-SIDE OF
BRACE POST
X= 2526994.0083000
Y= 370921.4694000
ELEV.= 658.27

Project Name: RR OVERPASS
Description:
Horizontal Alignment Name: CENTERLINE
Description: DAIRY LANE
Style: Centerline
Input Factor: 1.0000000

Element: Linear
POB (4) 10+00.00 2526268.5038 371295.9729
PC (7) 12+84.71 2526519.4050 371161.4017
Tangent Direction: S 61°47'34.98" E
Tangent Length: 284.712

Element: Circular
PC (7) 12+84.71 2526519.4050 371161.4017
PI () 13+19.71 2526550.2457 371144.8602
CC (8) 2526826.6325 371734.2117
PT (9) 13+54.64 2526582.6841 371131.7258
Radius: 650.000
Delta: 6°09'49.60" Left
Degree of Curvature(Arc): 8°48'53.05"
Length: 69.926
Tangent: 34.997
Chord: 69.892
Middle Ordinate: 0.940
External: 0.941
Tangent Direction: S 61°47'34.98" E
Radial Direction: S 28°12'25.02" W
Chord Direction: S 64°52'29.78" E
Radial Direction: S 22°02'35.42" W
Tangent Direction: S 67°57'24.58" E

Element: Linear
PT (9) 13+54.64 2526582.6841 371131.7258
PC (14) 14+63.00 2526683.1265 371091.0564
Tangent Direction: S 67°57'24.58" E
Tangent Length: 108.364

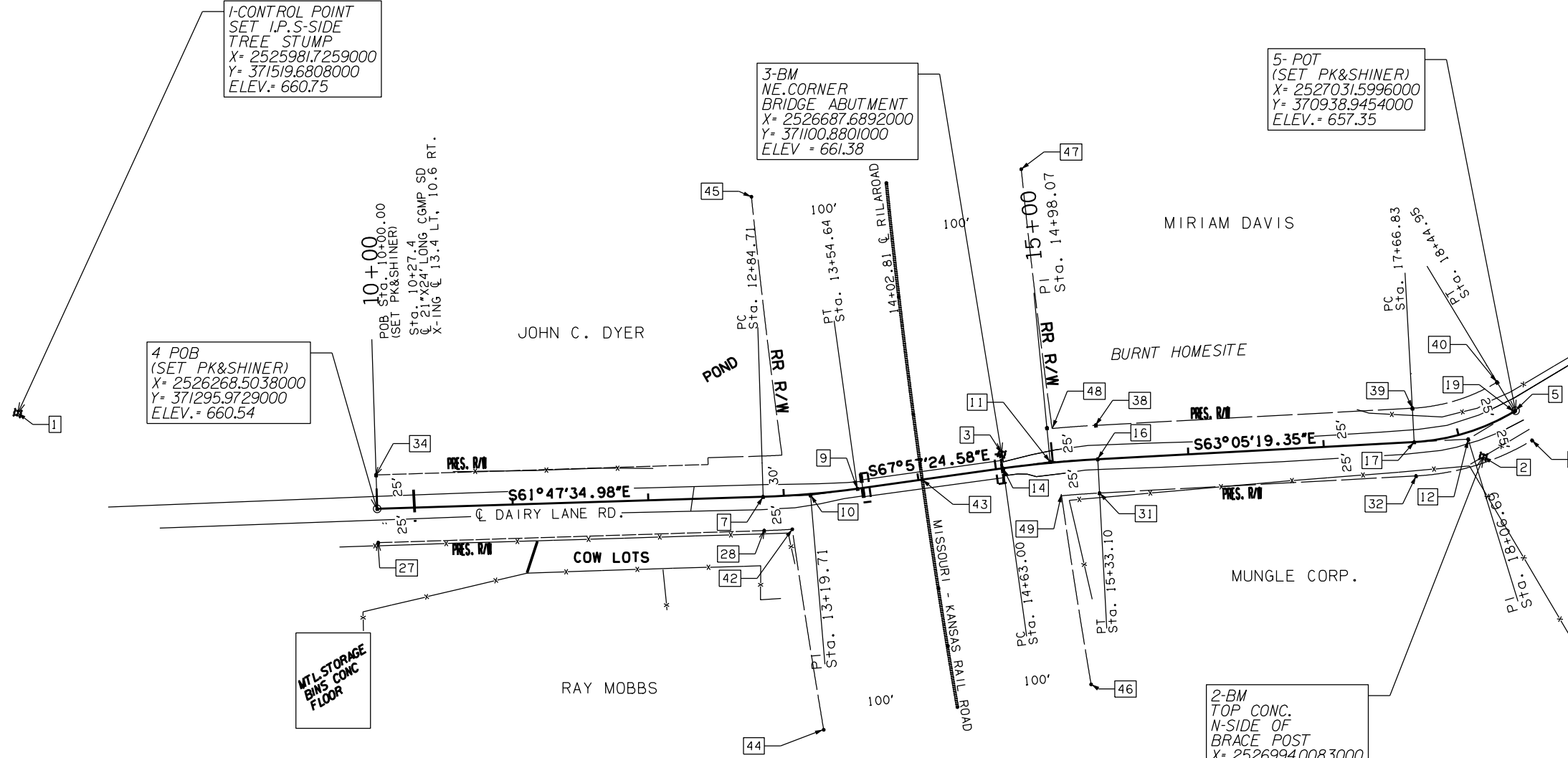
Element: Circular
PC (14) 14+63.00 2526683.1265 371091.0564
PI () 14+98.07 2526715.6320 371077.8948
CC (15) 2526373.4998 370326.3628
PT (16) 15+33.10 2526746.9034 371062.0222
Radius: 825.000
Delta: 4°52'05.23" Right
Degree of Curvature(Arc): 6°56'41.79"
Length: 70.096
Tangent: 35.069
Chord: 70.075
Middle Ordinate: 0.744
External: 0.745
Tangent Direction: S 67°57'24.58" E
Radial Direction: S 22°02'35.42" W
Chord Direction: S 65°31'21.97" E
Radial Direction: S 26°54'40.65" W
Tangent Direction: S 63°05'19.35" E

Element: Linear
PT (16) 15+33.10 2526746.9034 371062.0222
PC (17) 17+66.83 2526955.3287 370956.2303
Tangent Direction: S 63°05'19.35" E
Tangent Length: 233.737

Element: Circular
PC (17) 17+66.83 2526955.3287 370956.2303
PI () 18+06.69 2526990.8645 370938.1932
CC (18) 2527027.7464 371098.9037
PT (19) 18+44.95 2527030.7090 370938.9311
Radius: 160.000
Delta: 27°58'20.12" Left
Degree of Curvature(Arc): 35°48'35.50"
Length: 78.113
Tangent: 39.851
Chord: 77.340
Middle Ordinate: 4.743
External: 4.888
Tangent Direction: S 63°05'19.35" E
Radial Direction: S 26°54'40.65" W
Chord Direction: S 77°04'29.41" E
Radial Direction: S 1°03'39.47" E
Tangent Direction: N 88°56'20.53" E

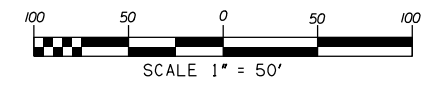
Elements are not collinear

Element: Linear
PT (19) 18+44.95 2527030.7090 370938.9311
POE (5) 18+45.84 2527031.5996 370938.9454
Tangent Direction: N 89°04'48.59" E
Tangent Length: 0.891



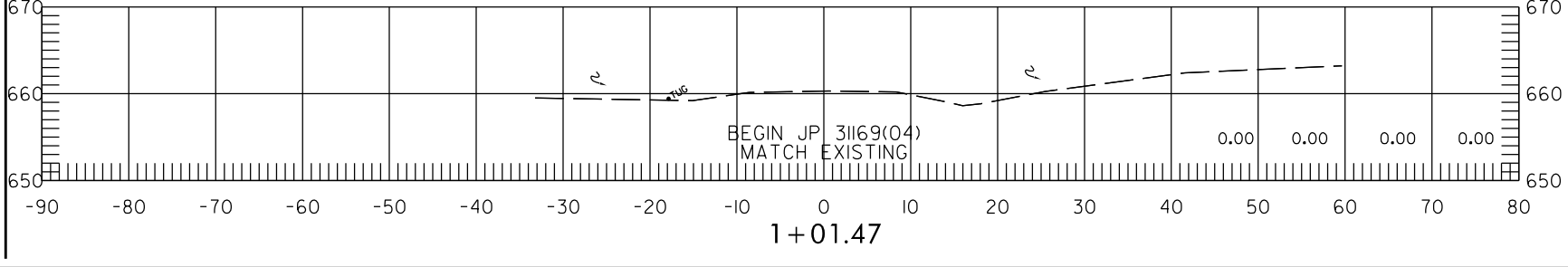
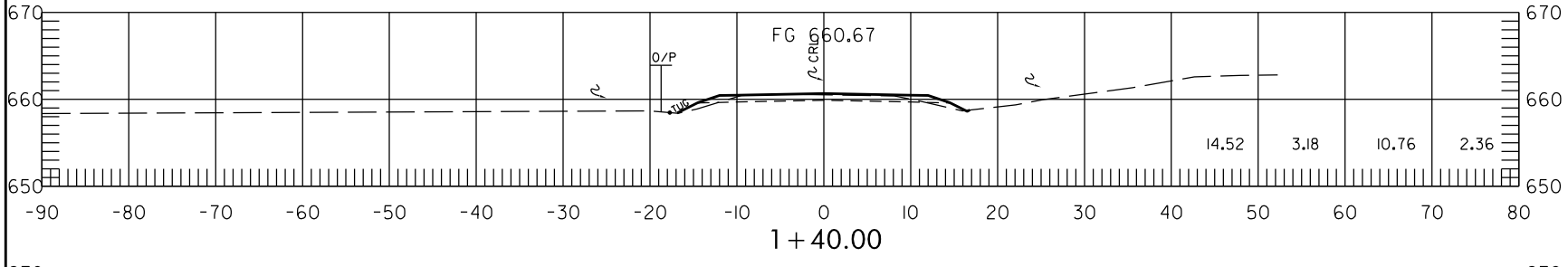
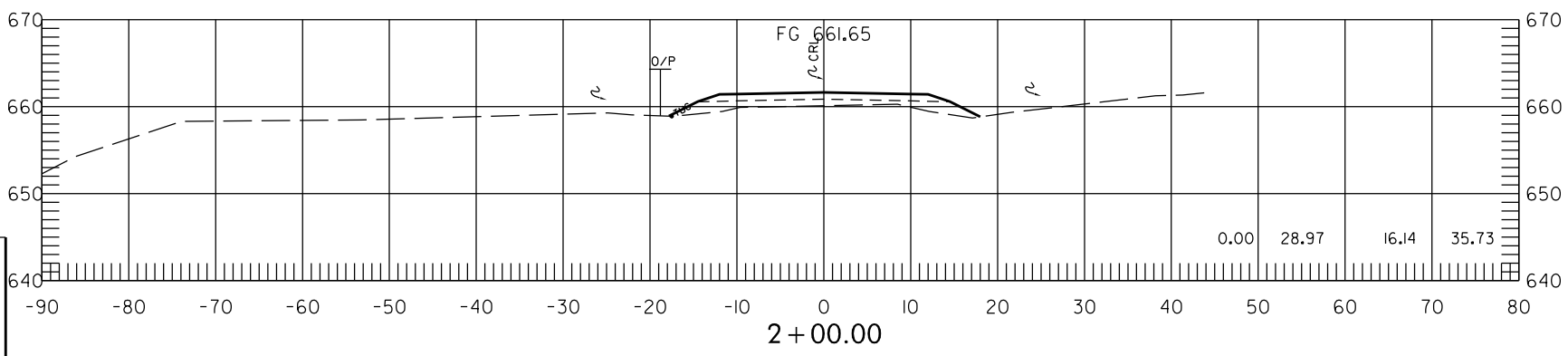
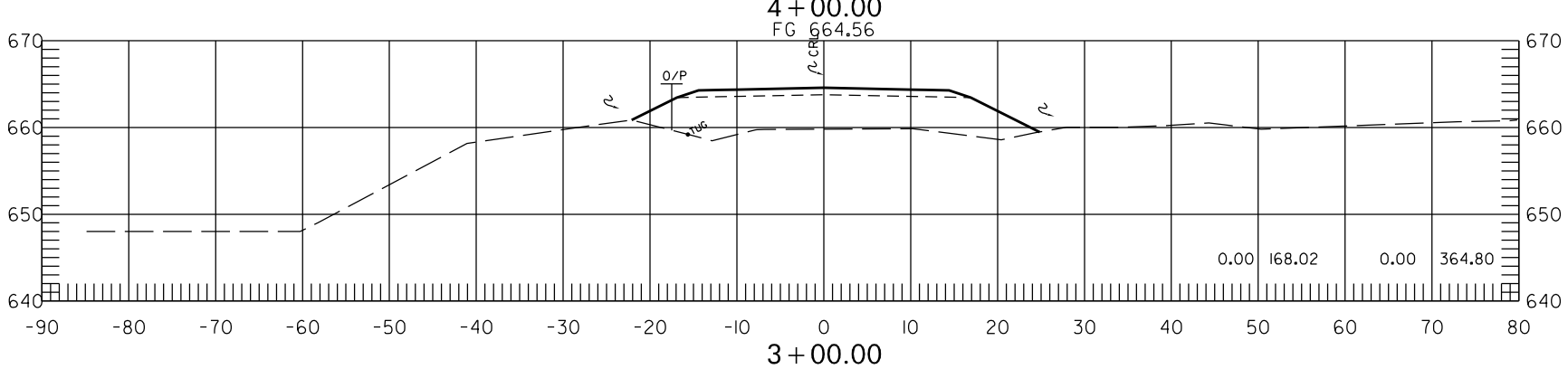
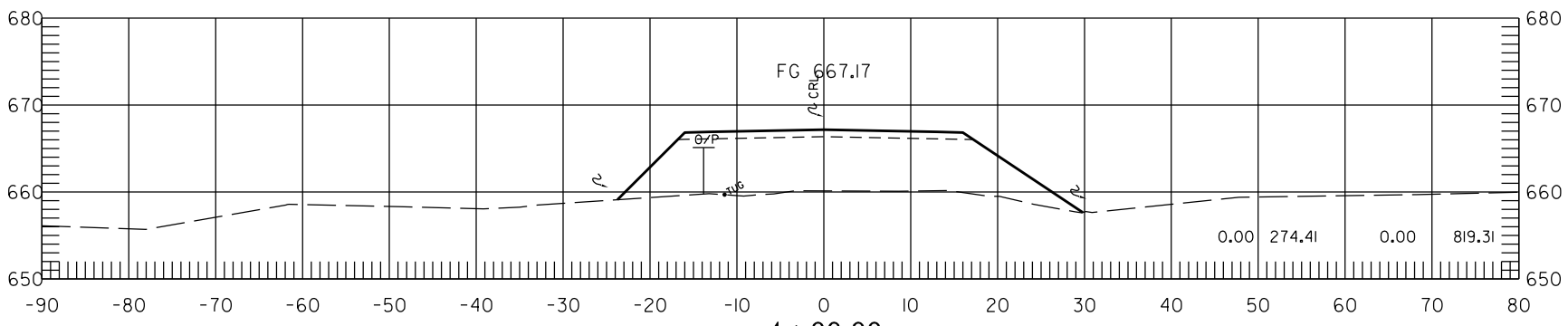
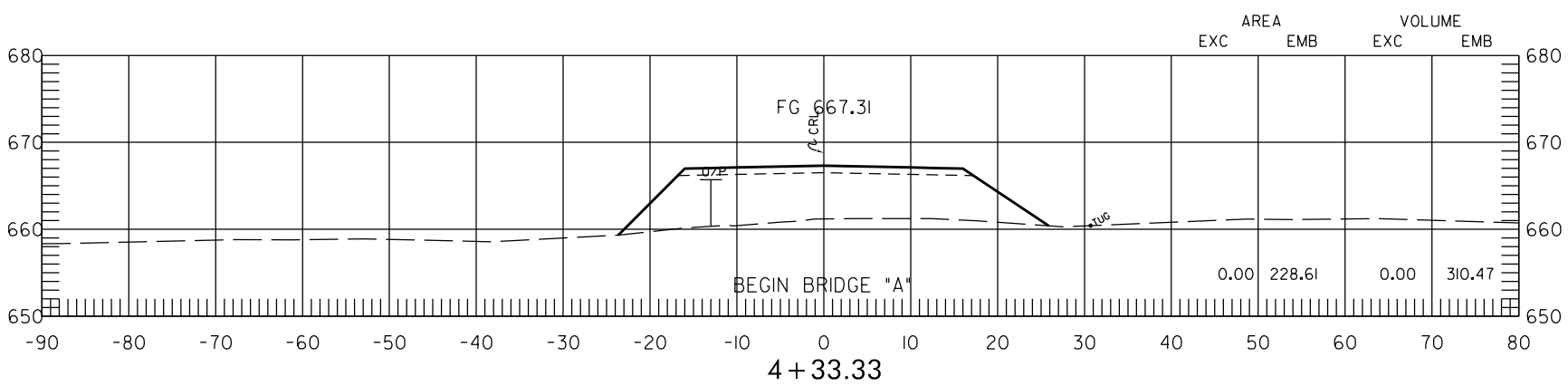
LIST COORDINATES Report Page 1 of 1
Project: RR OVERPASS

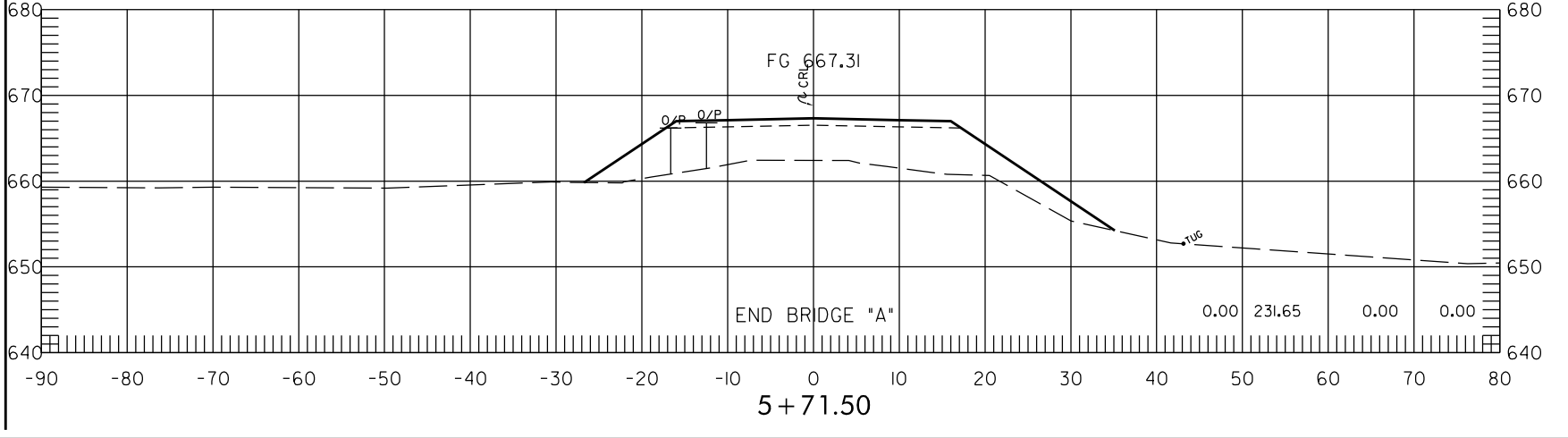
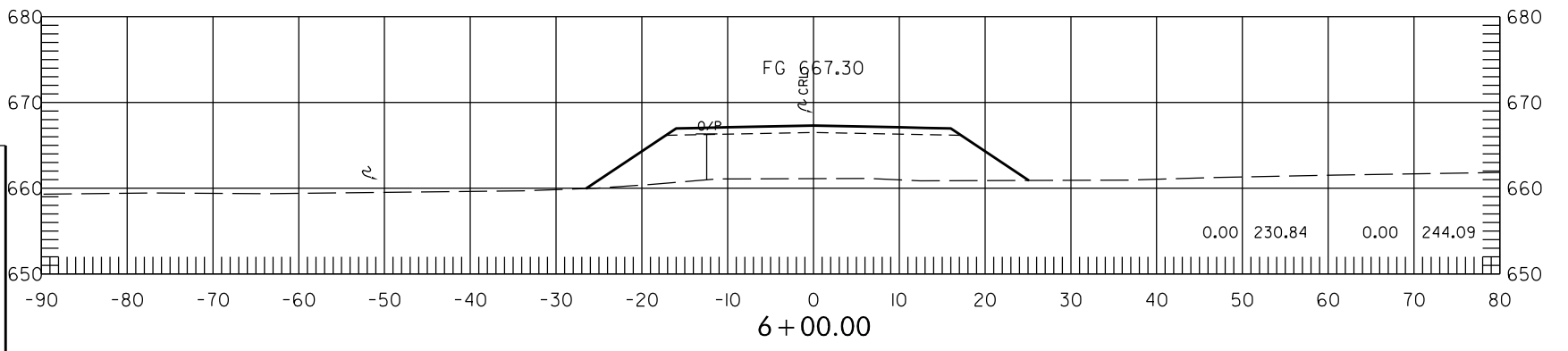
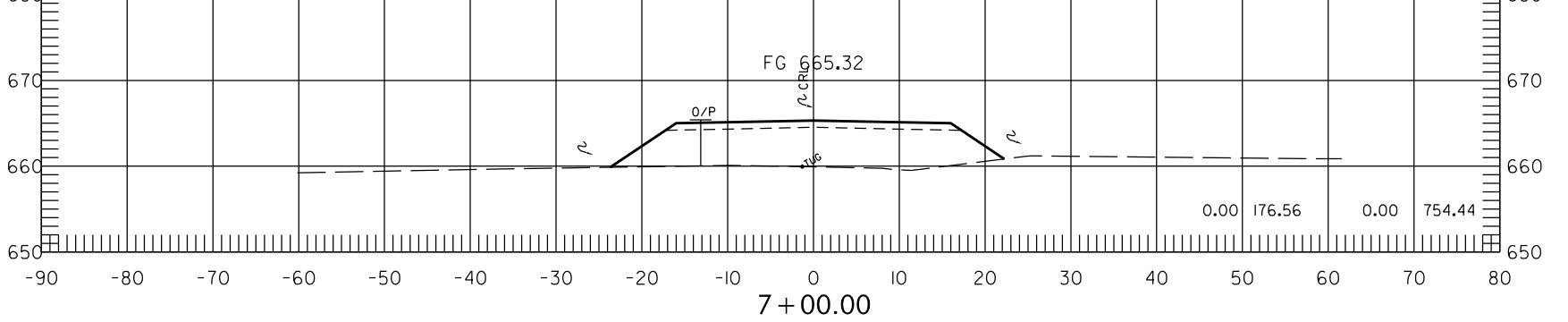
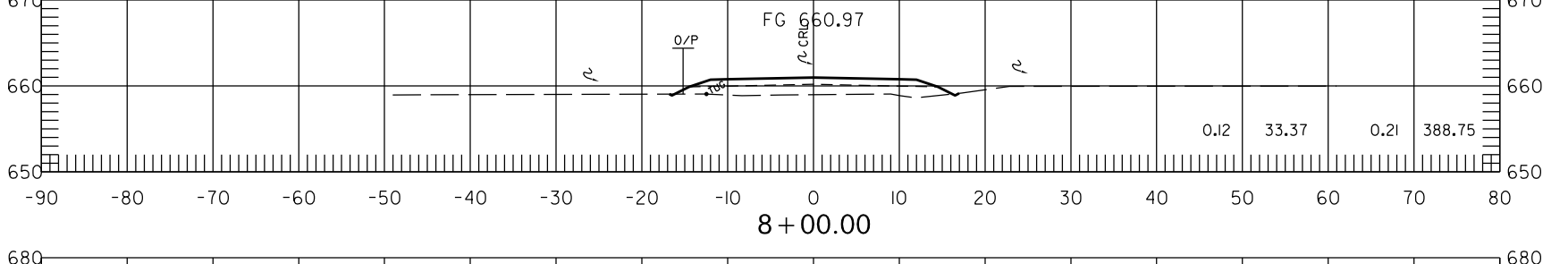
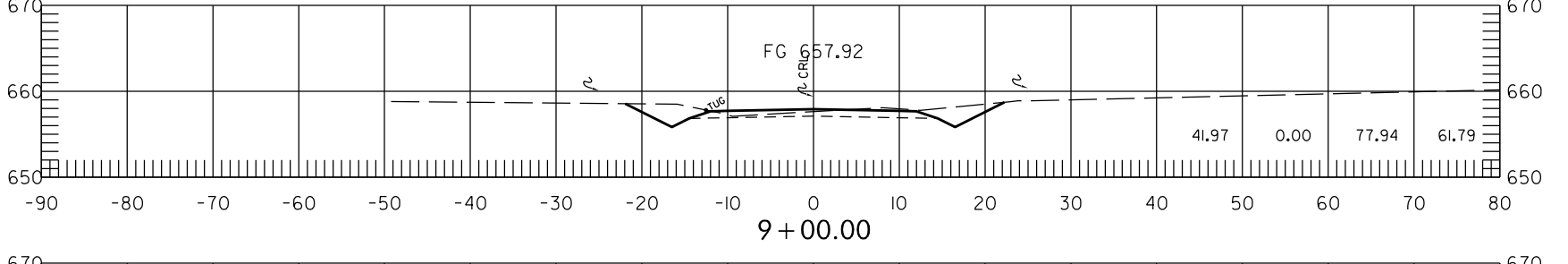
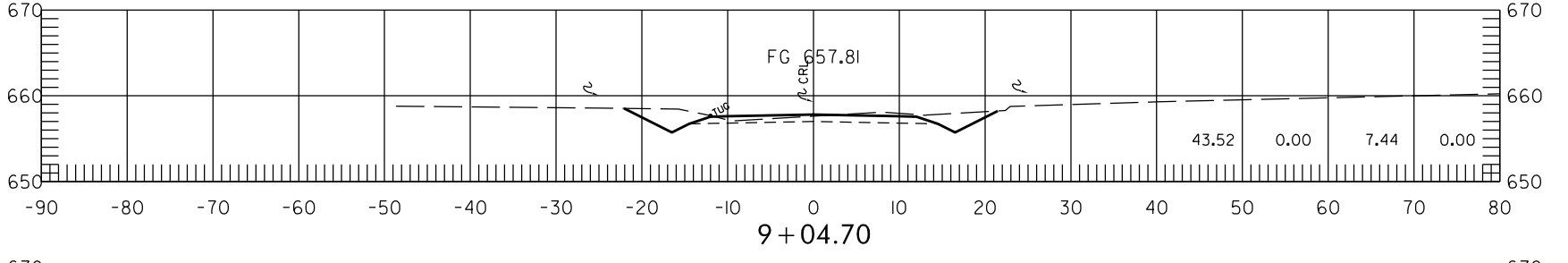
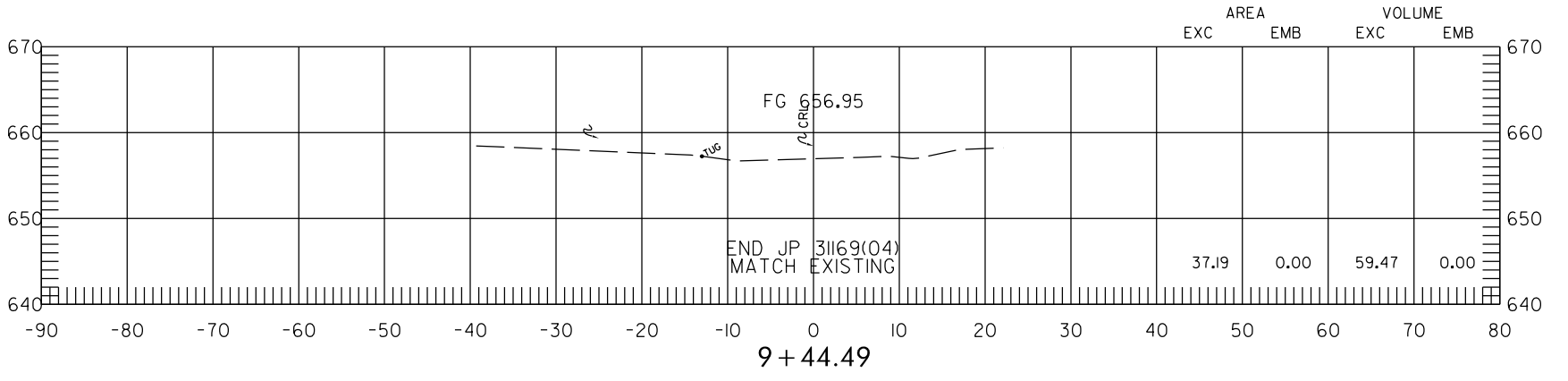
Alignment: NAME	NORTHING	EASTING	ELEVATION	PREFERENCE	des
1	371519.6808	2525981.7259	660.7462	default	BENCHMARK
2	370921.4694	2526994.0083	658.2741	default	BENCHMARK
3	371100.8801	2526687.6892	661.3815	default	BENCHMARK
4	371295.9729	2526268.5038	660.5356	default	SURVEY MONUMEN
5	370938.9454	2527031.5996	657.3452	default	SURVEY MONUMEN
6	362230.9061	2520939.8229	610.7900	Cogo Points	BENCHMARK
10	371144.8602	2526550.2457	660.3960	Cogo Points	
11	371077.8948	2526715.6320	660.3845	Cogo Points	PI
12	370938.1932	2526990.8645	657.2199	Cogo Points	PI
13	370962.8189	2528320.5881	661.3098	Cogo Points	PI
20	368905.3900	2532084.8674	0.0000	Cogo Points	
21	370955.4544	2526565.9604	636.5278	Cogo Points	RR
22	370997.8815	2526582.3636	636.4382	Cogo Points	RR
23	371038.1242	2526597.6522	636.3296	Cogo Points	RR
24	371158.6981	2526645.7773	636.0895	Cogo Points	RR
25	371238.9987	2526679.7139	635.8464	Cogo Points	RR
26	371316.2620	2526713.7600	635.5052	Cogo Points	RR
41	371176.3215	2526544.8816	13.8098	Cogo Points	RR
42	371129.8309	2526526.0515	13.8098	Cogo Points	RR
43	371113.6479	2526627.3317	0.0000	Cogo Points	RR
44	370990.2758	2526472.2189	0.0000	Cogo Points	RR
45	371357.2119	2526622.5289	0.0000	Cogo Points	RR
46	370920.6330	2526659.7019	0.0000	Cogo Points	RR
47	371275.3121	2526804.9911	0.0000	Cogo Points	RR
48	371098.4070	2526729.0947	0.0000	Cogo Points	RR
49	371051.9991	2526710.3261	13.8098	Cogo Points	RR



PLS	RES	SOUTHEAST 3 CIRCUIT ENGINEERING DIST. SURVEY DATA SHEET R.R. OVERPASS ON DAIRY LANE SHEET 1 OF 1 PROJECT: ATOKA CO. JP 31169(05) SHEET NO. S001
DRAWN	RES	
CHECKED		
APPROVED		
CREW		

ATOKA COUNTY
 SOUTHEAST #3 CIRCUIT ENGINEERING DISTRICT
 DAIRY LANE
CROSS SECTIONS
 PROJECT NO. 31169(04)
 SHEET NO. X001





ATOKA COUNTY
 SOUTH EAST #3 CIRCUIT ENGINEERING DISTRICT
 DAIRY LANE
 CROSS SECTIONS
 PROJECT NO. 31169(04)
 SHEET NO. X002