

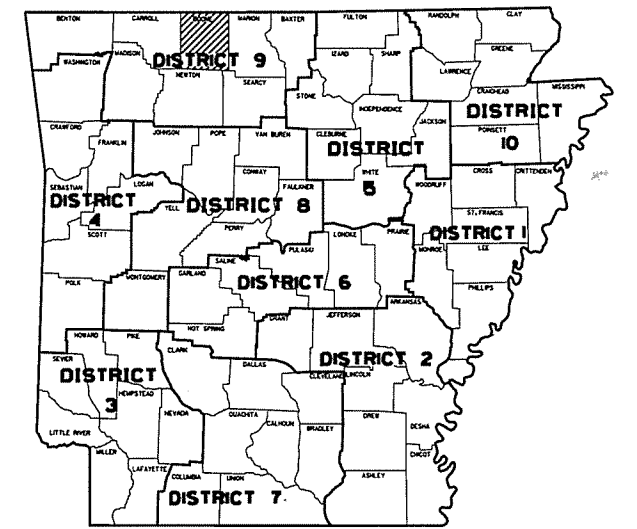
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO.						090379	1	50
MO. ST. LINE - HWY. 62 (CABLE MEDIAN BARRIER) (S)								

"A PARTIALLY CONTROLLED ACCESS FACILITY"  
 ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT  
 CONSTRUCTION PLANS FOR STATE HIGHWAY

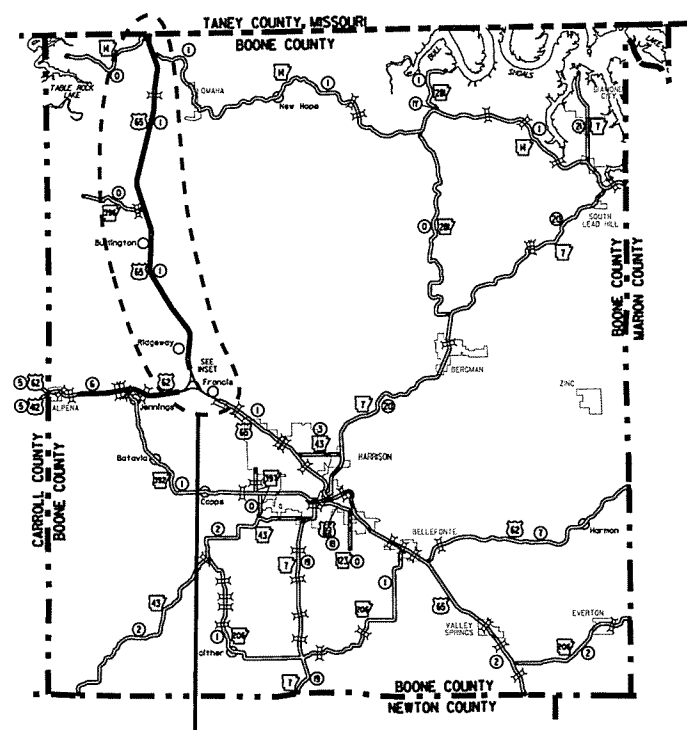
**MO. ST. LINE - HWY. 62**  
**((CABLE MEDIAN BARRIER)) (S)**

BOONE COUNTY  
 ROUTE 65 SECTION 1  
**JOB 090379**

FED. AID PROJ. PEN-0005(40)



ARK. HWY. DIST. NO. 9



**PROJECT LOCATION**

VICINITY MAP

STA. 877+18.07  
 END JOB 090379  
 BEGIN SECTION 1  
 LOG MILE 0.00

EQUATIONS TO JOB 090379

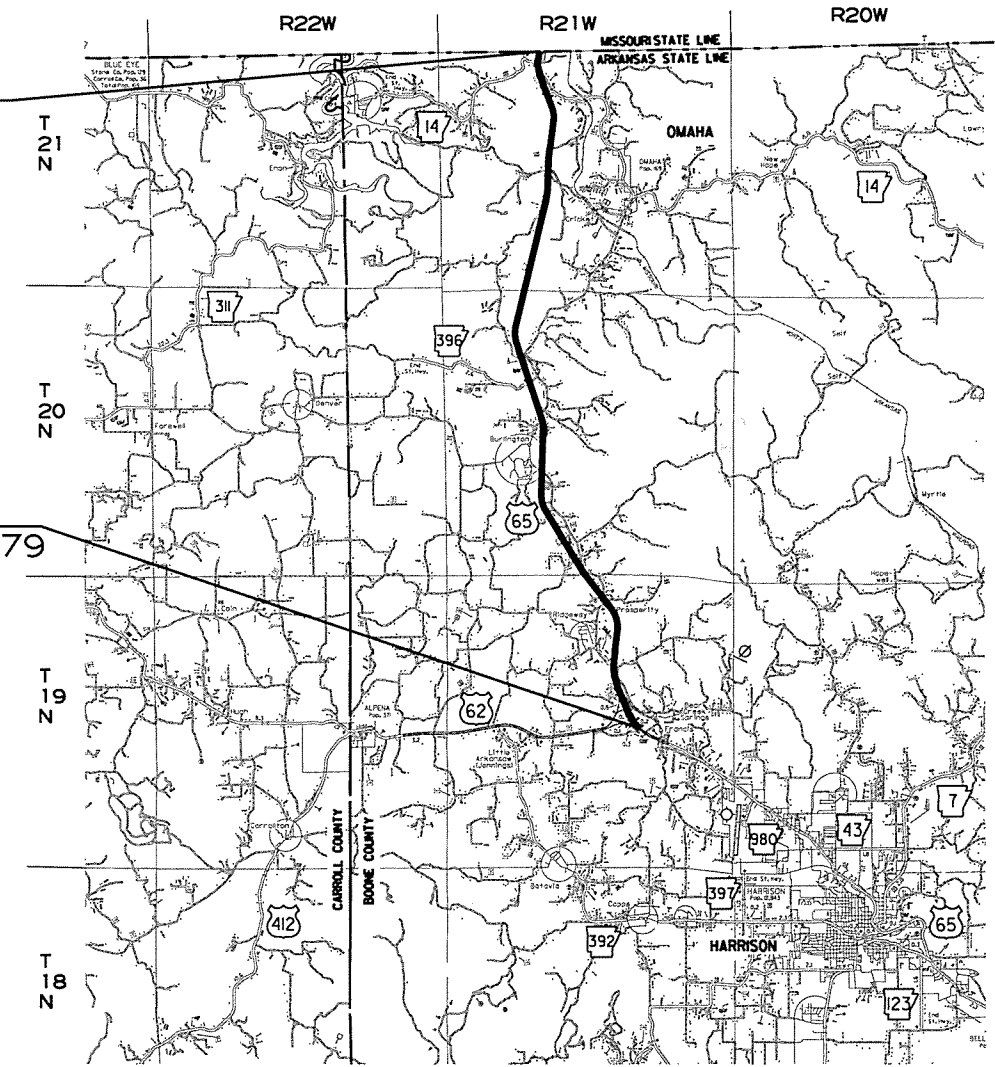
STA. 231+15.60(BK.) - STA. 231+48.43(AHD.)  
 STA. 709+97.77(BK.) - STA. 711+87.60(AHD.)

EXCEPTIONS TO JOB 090379

STA. 96+74	- STA. 97+54	=	80'
STA. 160+54	- STA. 161+52	=	98'
STA. 241+98	- STA. 242+95	=	97'
STA. 294+42	- STA. 295+42	=	100'
STA. 350+01	- STA. 351+00	=	99'
STA. 400+40	- STA. 401+39	=	99'
STA. 452+58	- STA. 453+52	=	94'
STA. 467+50	- STA. 468+49	=	99'
STA. 499+51	- STA. 500+55	=	104'
STA. 530+84	- STA. 532+18	=	134'
STA. 610+53	- STA. 611+52	=	99'
STA. 686+80	- STA. 687+79	=	99'
STA. 734+82	- STA. 755+37	=	2055'
STA. 768+51	- STA. 769+50	=	99'
STA. 829+98	- STA. 830+97	=	99'
STA. 864+68	- STA. 865+71	=	103'

TOTAL EXCEPTIONS = 3558'

STA. 84+10.00  
 BEGIN JOB 090379  
 SECTION 1  
 LOG MILE 14.97



DESIGN TRAFFIC DATA

DESIGN YEAR	-----	2034
2014 ADT	-----	9,600
2034 ADT	-----	11,500
2034 DHV	-----	1,265
TRUCKS	-----	15%
DESIGN SPEED	-----	65 MPH

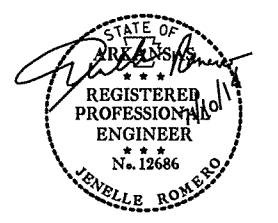
LOG MILES

SECTION 1 0.00 TO 14.97 IN BOONE COUNTY

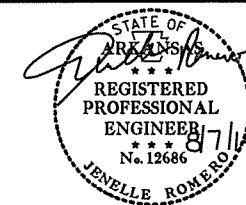
BEGINNING OF PROJECT LAT. = N 36°17' 33.9" LONG. = W 93°11' 19.5"	MID-POINT OF PROJECT LAT. = N 36°23' 16.0" LONG. = W 93°13' 25.9"	END OF PROJECT LAT. = N 36°29' 53.2" LONG. = W 93°13' 19.0"
---	---	---

GROSS LENGTH OF PROJECT	79085.41	FEET	OR	14.978	MILES
NET " " ROADWAY	75527.41	"	"	14.304	"
NET " " BRIDGES	0.00	"	"	0.000	"
NET " " PROJECT	75527.41	"	"	14.304	"

P.E. 090379  
NON-PART.



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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		090379	2	50

INDEX, GOV. SPECS., AND GENERAL NOTES

SHEET NO.	INDEX OF SHEETS TITLE	DRWG. NO.	DATE
1	TITLE SHEET		
2	INDEX OF SHEETS, GOVERNING SPECIFICATIONS, AND GENERAL NOTES		
3	TYPICAL SECTIONS OF IMPROVEMENT		
4 - 5	SPECIAL DETAILS		
6 - 19	TEMPORARY EROSION CONTROL DETAILS		
20 - 22	MAINTENANCE OF TRAFFIC		
23 - 26	QUANTITIES		
27	SUMMARY OF QUANTITIES AND REVISIONS		
28 - 41	PLAN SHEETS		
42	CONCRETE DITCH PAVING	CDP-1	11-17-10
43	GUARD RAIL DETAILS	GR-8	7-14-10
44	GUARD RAIL DETAILS	GR-9A	4-17-08
45	GUARD RAIL DETAILS	GRT-1	7-14-10
46	CONCRETE PIPE CULVERT FILL HEIGHTS & BEDDING	PCC-1	2-27-14
47	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	TC-1	12-15-11
48	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	TC-2	9-12-13
49	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	TC-3	10-15-09
50	TEMPORARY EROSION CONTROL DEVICES	TEC-1	12-15-11

GOVERNING SPECIFICATIONS

ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 2014, AND THE FOLLOWING SPECIAL PROVISIONS AND SUPPLEMENTAL SPECIFICATIONS:

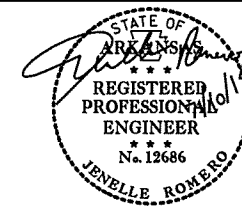
NUMBER	TITLE
ERRATA	ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS
FHWA-1273	REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS
FHWA-1273	SUPPLEMENT-EQUAL EMPLOYMENT OPPORTUNITY-NOTICE TO CONTRACTORS
FHWA-1273	SUPPLEMENT-SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES (23 U.S.C. 140)
FHWA-1273	SUPPLEMENT-EQUAL EMPLOYMENT OPPORTUNITY-GOALS AND TIMETABLES
FHWA-1273	SUPPLEMENT-EQUAL EMPLOYMENT OPPORTUNITY-FEDERAL STANDARDS
FHWA-1273	SUPPLEMENT-POSTERS AND NOTICES REQUIRED FOR FEDERAL AID PROJECTS
FHWA-1273	SUPPLEMENT-WAGE RATE DETERMINATION
108-1	LIQUIDATED DAMAGES
410-1	CONSTRUCTION REQUIREMENTS AND ACCEPTANCE OF ASPHALT CONCRETE PLANT MIX COURSES
620-1	MULCH COVER
JOB 090379	BROADBAND INTERNET SERVICE FOR ASPHALT CONCRETE PLANT
JOB 090379	CONCRETE DITCH PAVING
JOB 090379	DOCUMENTATION OF PAYMENTS MADE TO DISADVANTAGED BUSINESS ENTERPRISES
JOB 090379	FLEXIBLE BEGINNING OF WORK
JOB 090379	MAINTENANCE OF TRAFFIC
JOB 090379	MANDATORY USE OF INTERNET BIDDING
JOB 090379	PARTNERING REQUIREMENTS
JOB 090379	REMOVAL AND DISPOSAL OF IMPACT ATTENUATION BARRIERS
JOB 090379	SEQUENCE OF CONSTRUCTION
JOB 090379	SITE USE (A+C METHOD)
JOB 090379	STORM WATER POLLUTION PREVENTION PLAN
JOB 090379	SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS
JOB 090379	TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
JOB 090379	UTILITY ADJUSTMENTS
JOB 090379	VALUE ENGINEERING
JOB 090379	WARM MIX ASPHALT
JOB 090379	WIRE ROPE SAFETY FENCE MAINTENANCE MATERIALS
JOB 090379	WIRE ROPE SAFETY FENCE (WRSF) SPECIFICATIONS
JOB 090379	WIRE ROPE SAFETY FENCE (POST REPAIR)
JOB 090379	WRSF TRAINING WORKSHOP

GENERAL NOTES

- ALL PIPE LINES, POWER, TELEPHONE, AND TELEGRAPH LINES TO BE MOVED OR LOWERED BY THE RESPECTIVE OWNERS AS PER AGREEMENT WITH SUCH OWNERS.
- ANY EQUIPMENT OR APPURTENANCE THAT INTERFERES WITH THE PROPOSED CONSTRUCTION AND WHICH MAY BE THE PROPERTY OF UTILITY SERVICE ORGANIZATIONS SHALL BE MOVED BY THE OWNERS UNLESS OTHERWISE PROVIDED.
- ALL LAND MONUMENTS LOCATED WITHIN THE CONSTRUCTION AREA SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 107.12 OF THE STANDARD SPECIFICATIONS.
- ALL FLEXIBLE BASE AND ASPHALTIC PAVEMENTS REMOVED SHALL BE PAID FOR UNDER THE ITEM NO.210 - UNCLASSIFIED EXCAVATION.
- THE EXISTING ASPHALT PAVEMENT TO BE REMOVED FROM THE REMAINING PAVEMENT SHALL BE SEPARATED BY SAWING ALONG A NEAT LINE. AFTER SAWING, THE PAVEMENT TO BE REMOVED SHALL BE CAREFULLY REMOVED IN A MANNER THAT WILL NOT DAMAGE THE PAVEMENT THAT IS TO REMAIN. ANY DAMAGE OF THE ASPHALT PAVEMENT THAT IS TO REMAIN IN PLACE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- WASTE MATERIAL SHALL BE DISPOSED OF AS APPROVED BY THE ENGINEER. ANY REQUIRED EROSION CONTROL MEASURES FROM WASTING MATERIAL SHALL BE AS APPROVED BY THE ENGINEER.
- CONTRACTOR TO ADJUST POSTS IN THE FIELD SO THAT EXISTING DRAINAGE STRUCTURES ARE AVOIDED.

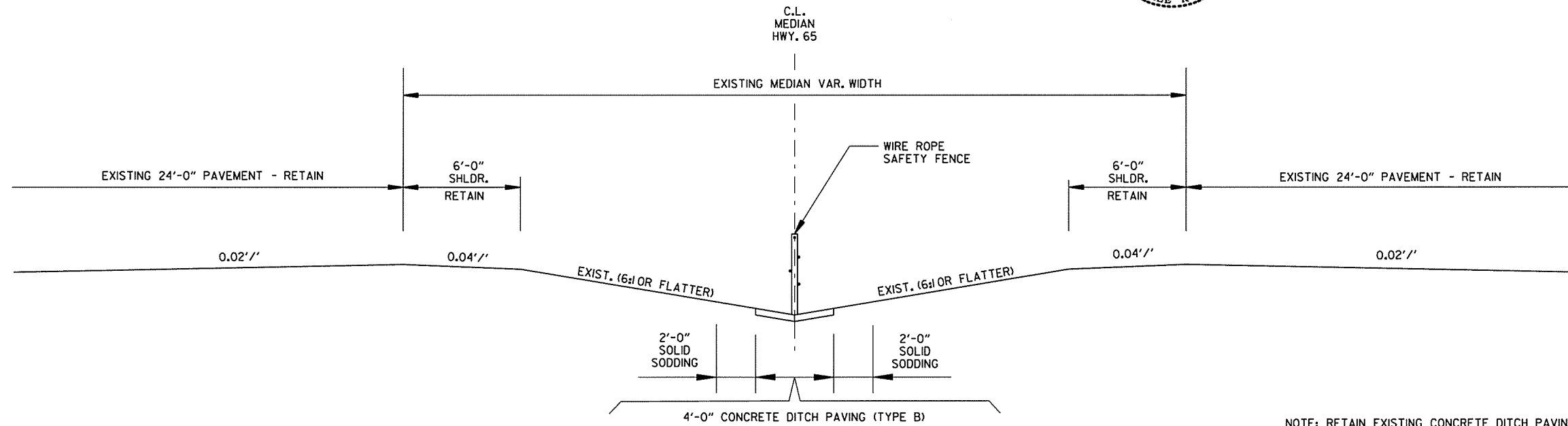
INDEX OF SHEETS, GOVERNING SPECIFICATIONS, AND GENERAL NOTES

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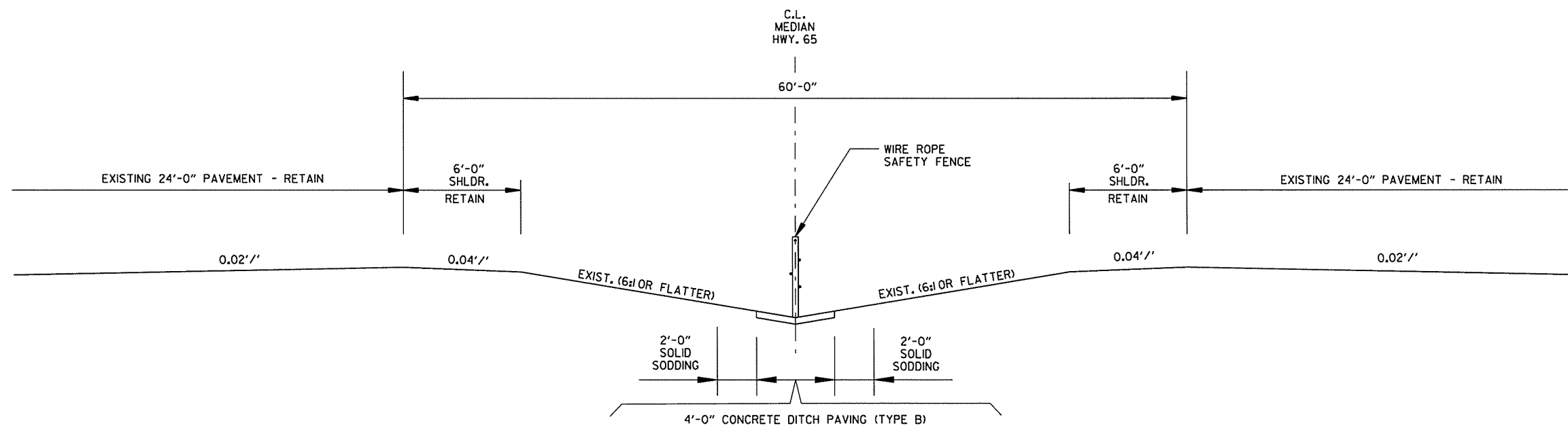
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		090379	3	50

TYPICAL SECTIONS OF IMPROVEMENT



**PROPOSED TYPICAL SECTION  
WRSF IN BOTTOM OF DITCH  
STA. 84+10.00 TO STA. 114+13.00**

NOTE: RETAIN EXISTING CONCRETE DITCH PAVING IN MEDIAN. CORE EXISTING CONCRETE DITCH PAVING AS REQUIRED FOR LINE POST PLACEMENT. REMOVE EXISTING CONCRETE DITCH PAVING FOR WRSF ANCHOR CONSTRUCTION AND AS DIRECTED BY THE ENGINEER.



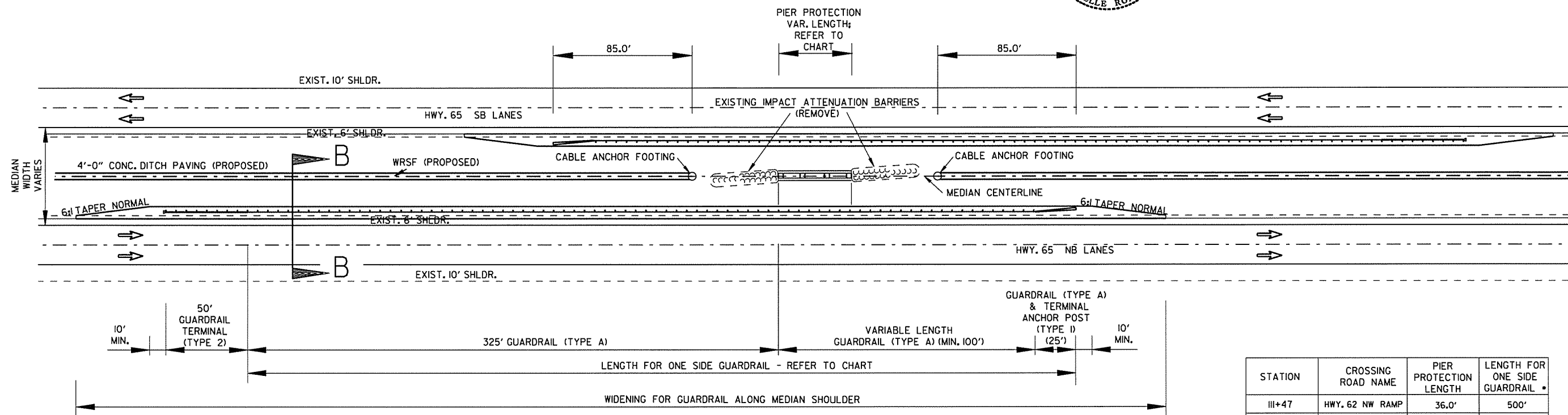
**PROPOSED TYPICAL SECTION  
WRSF IN BOTTOM OF DITCH  
STA. 114+13.00 TO STA. 877+18.07**

TYPICAL SECTIONS OF IMPROVEMENT

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		4	50
JOB NO.						090379		
SPECIAL DETAILS								

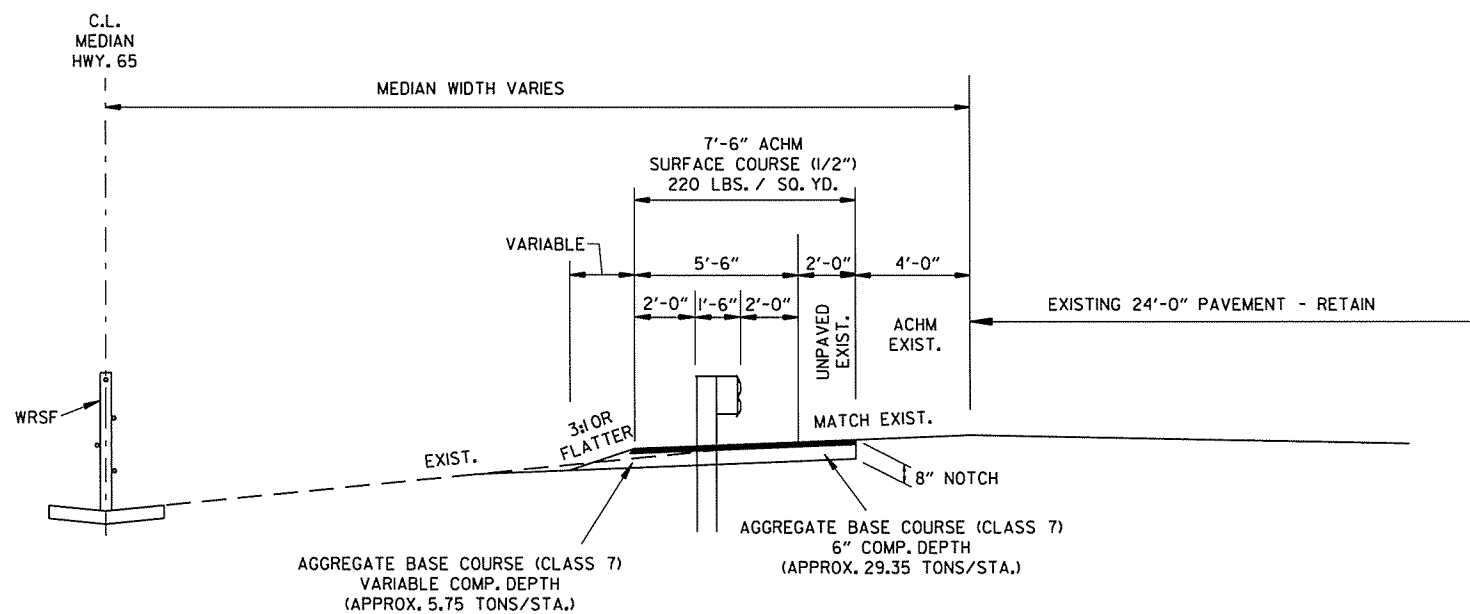


STATION	CROSSING ROAD NAME	PIER PROTECTION LENGTH	LENGTH FOR ONE SIDE GUARDRAIL
III+47	HWY. 62 NW RAMP	36.0'	500'

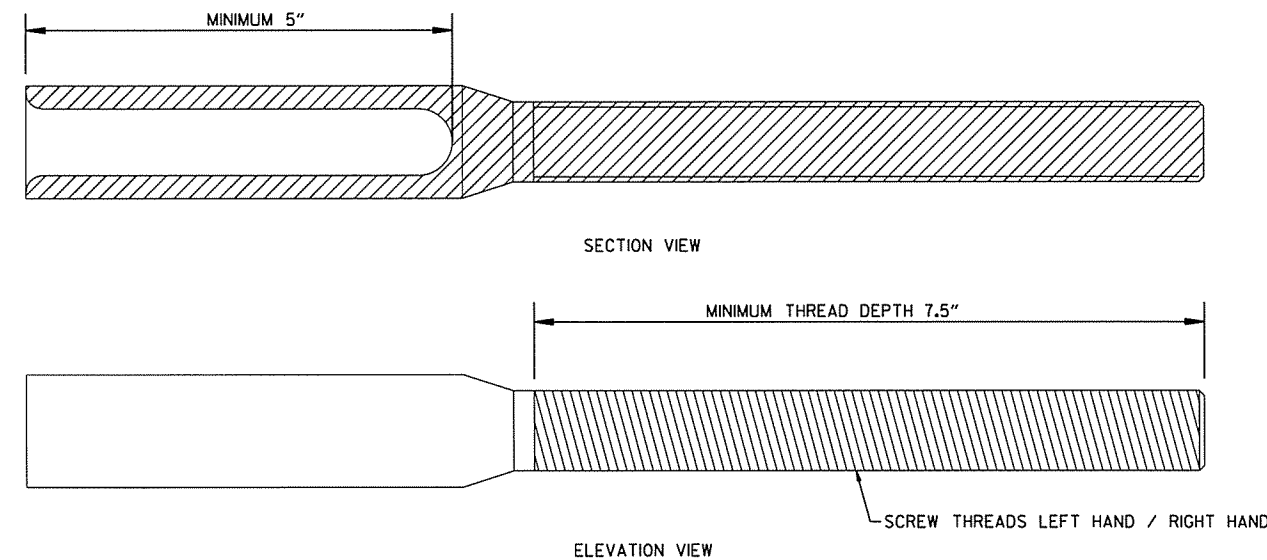
• GUARDRAIL LENGTH IS ROUNDED UP BASED ON GUARDRAIL STOCK LENGTH OF 25.0'.

## DETAIL AT OVERPASSES

DIMENSIONS ARE TYPICAL BOTH DIRECTIONS



SECTION B-B

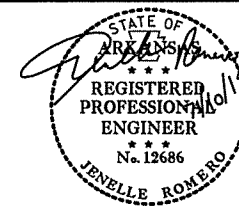


NOTE:  
REFER TO "WIRE ROPE SAFETY FENCE (WRSF) SPECIFICATIONS" SPECIAL PROVISION FOR ADDITIONAL REQUIREMENTS.

## THREADED TERMINAL DETAIL

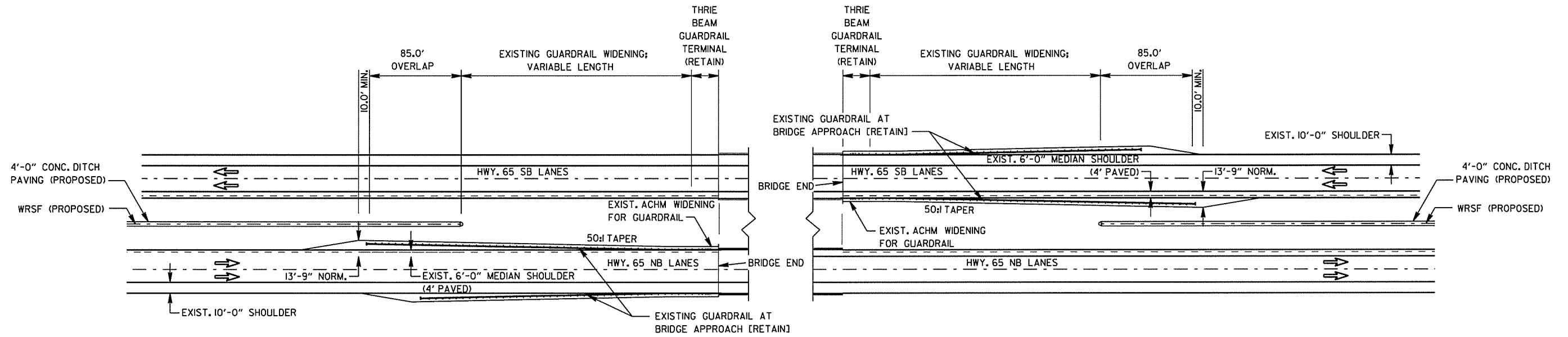
SPECIAL DETAILS

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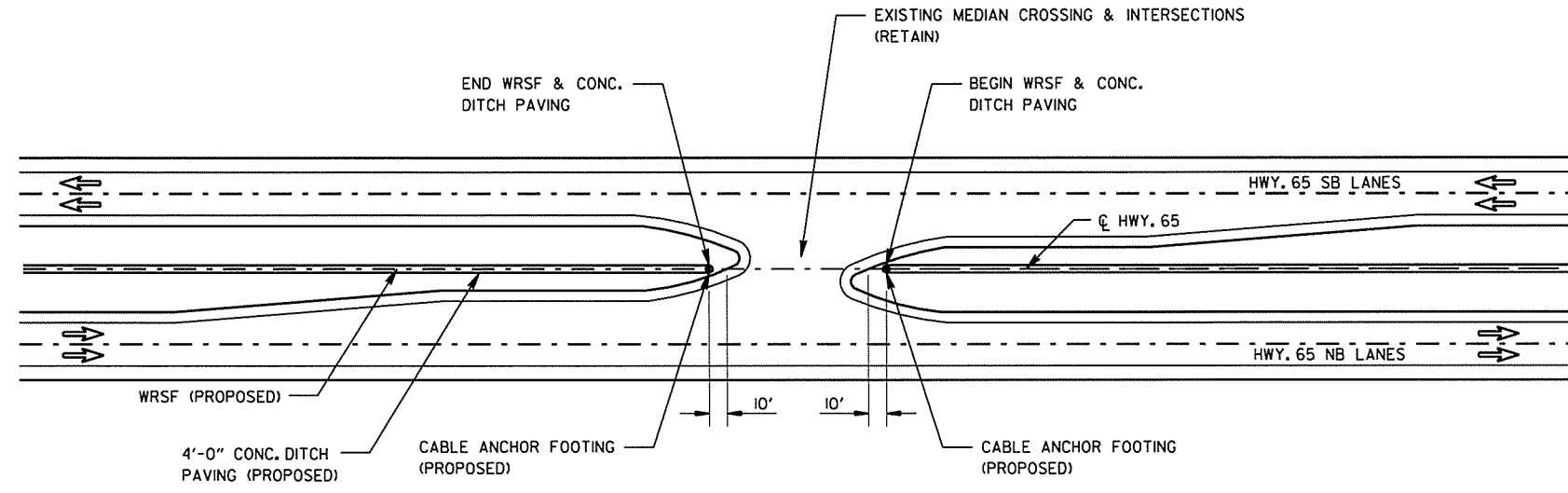


DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		090379	5	50

SPECIAL DETAILS



DETAIL OF WIRE ROPE SAFETY FENCE AT EXISTING BRIDGE ENDS



DETAIL AT INTERSECTIONS AND MEDIAN CROSSING

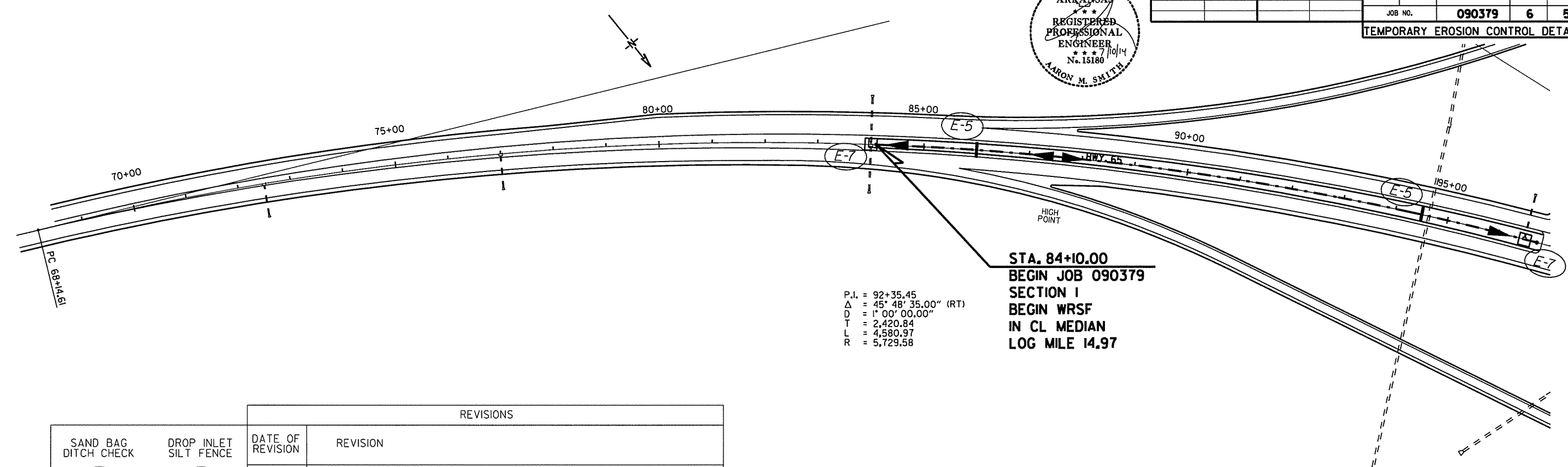
SPECIAL DETAILS

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		6	50
JOB NO.						090379		

TEMPORARY EROSION CONTROL DETAILS

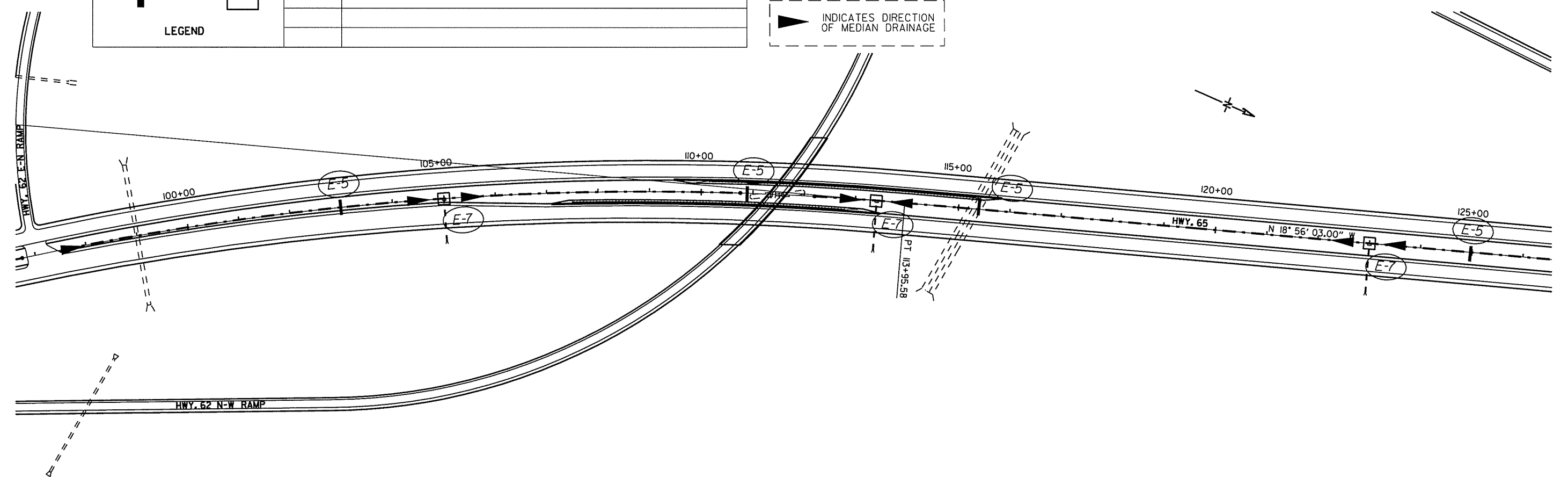


STA. 84+10.00  
 BEGIN JOB 090379  
 SECTION I  
 BEGIN WRSF  
 IN CL MEDIAN  
 LOG MILE 14.97

P.I. = 92+35.45  
 Δ = 45° 48' 35.00" (RT)  
 D = 1° 00' 00.00"  
 T = 2,420.84  
 L = 4,580.97  
 R = 5,729.58

		REVISIONS	
SAND BAG DITCH CHECK	DROP INLET SILT FENCE	DATE OF REVISION	REVISION
(E-5)	(E-7)		
█	□		
LEGEND			

▶ INDICATES DIRECTION OF MEDIAN DRAINAGE



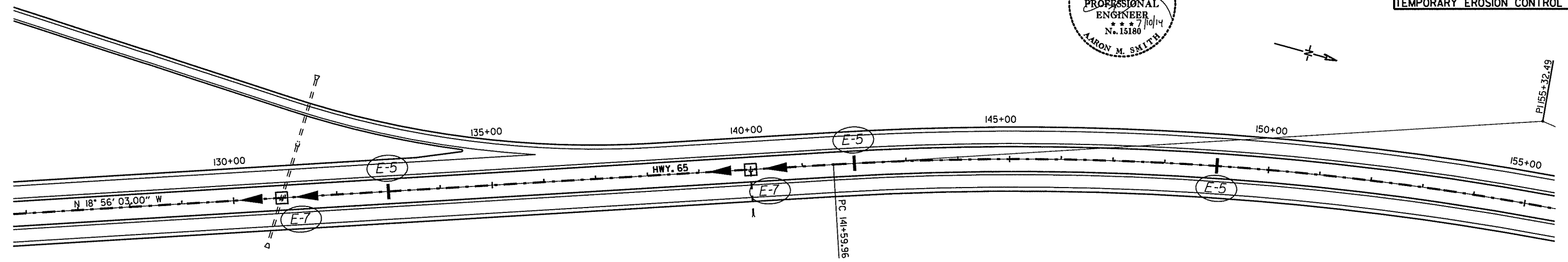
TEMPORARY EROSION CONTROL DETAILS  
 STA. 69+00 - STA. 126+00

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		7	50
				JOB NO.		090379		

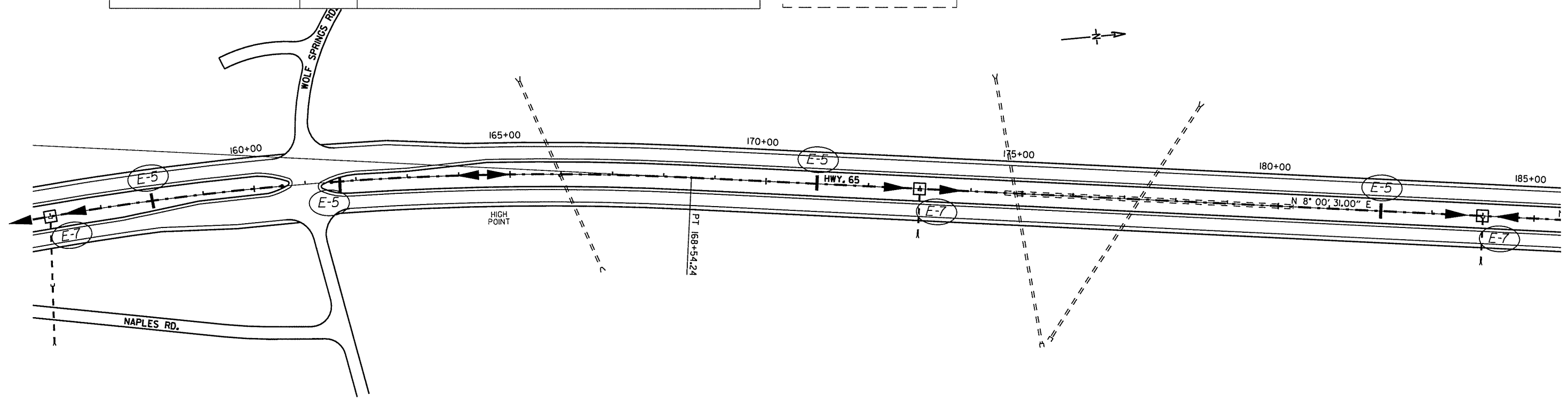
TEMPORARY EROSION CONTROL DETAILS



P.I. = 155+32.49  
 $\Delta$  = 26° 56' 34.00" (RT)  
D = 1° 00' 00.00"  
T = 1,372.53  
L = 2,694.28  
R = 5,729.58

LEGEND		REVISIONS	
SAND BAG DITCH CHECK <b>E-5</b> 	DROP INLET SILT FENCE <b>E-7</b> □	DATE OF REVISION	REVISION

INDICATES DIRECTION OF MEDIAN DRAINAGE



TEMPORARY EROSION CONTROL DETAILS  
STA. 126+00 - STA. 185+00

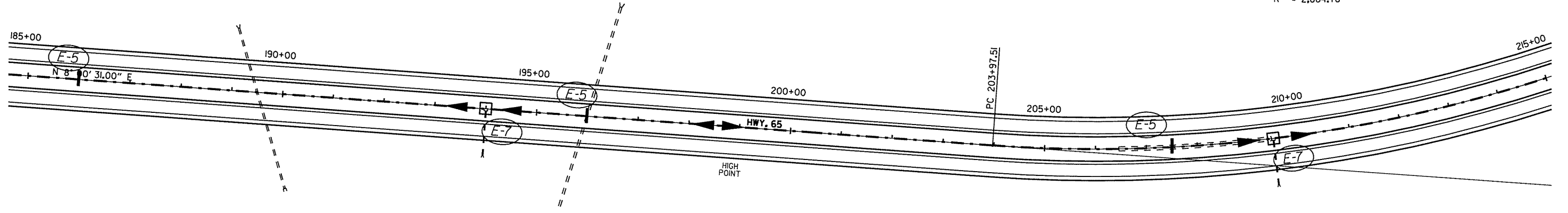
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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		8	50
				JOB NO.		090379		

TEMPORARY EROSION CONTROL DETAILS

P.I. = 215+48.82  
 $\Delta$  = 43° 47' 20.00" (LT)  
 D = 2° 00' 00.01"  
 T = 1,151.31  
 L = 2,189.44  
 R = 2,864.78



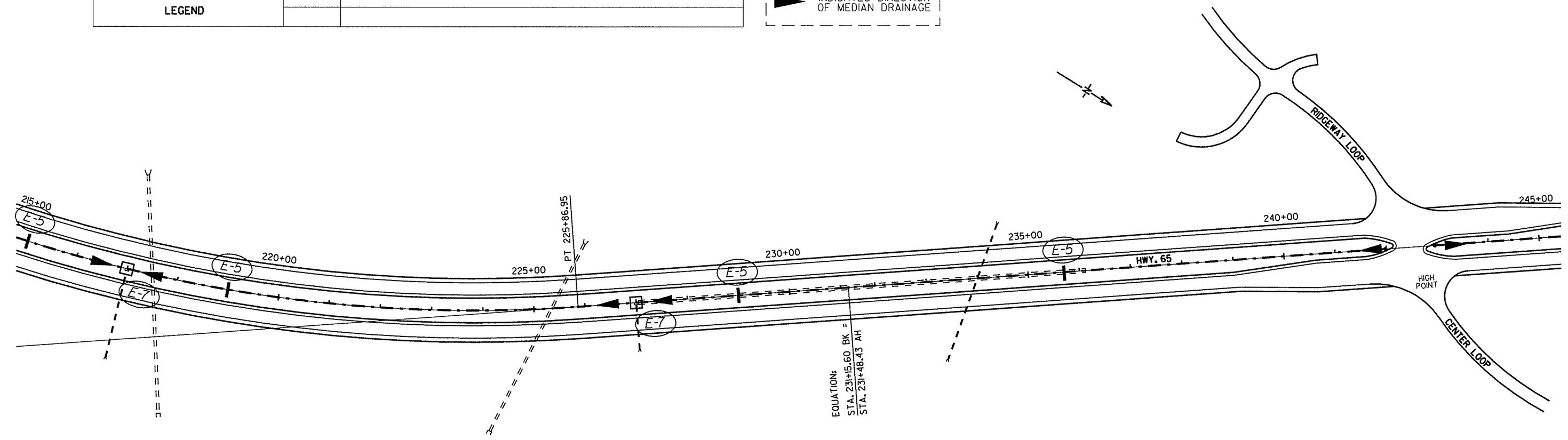
REVISIONS		DATE OF REVISION	REVISION

**LEGEND**

SAND BAG DITCH CHECK: E-5

DROP INLET SILT FENCE: E-7

INDICATES DIRECTION OF MEDIAN DRAINAGE



TEMPORARY EROSION CONTROL DETAILS  
 STA. 185+00 - STA. 245+00

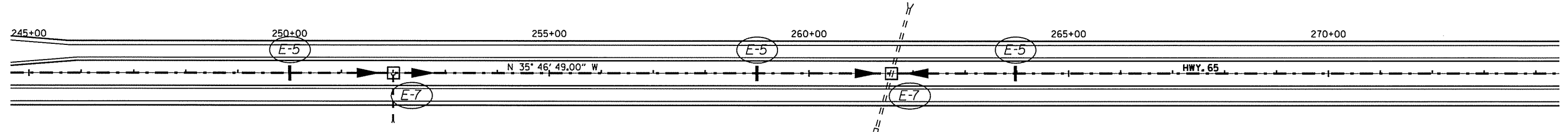
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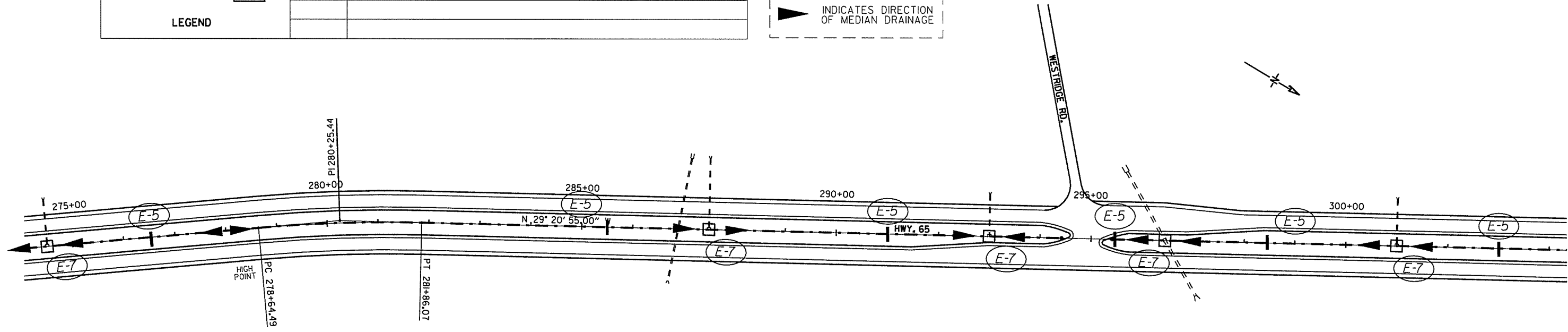
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				6	ARK.			
JOB NO. 090379							9	50

TEMPORARY EROSION CONTROL DETAILS



REVISIONS		DATE OF REVISION	REVISION

INDICATES DIRECTION OF MEDIAN DRAINAGE



P.I. = 280+25.45  
 $\Delta$  = 6° 25' 54.00" (RT)  
 D = 59' 59.99"  
 T = 160.96  
 L = 321.58  
 R = 2,864.79

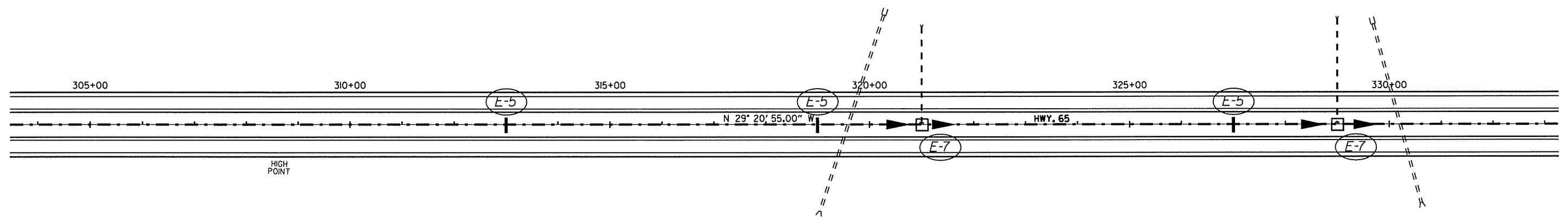
TEMPORARY EROSION CONTROL DETAILS  
 STA. 245+00 - STA. 304+00

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	090379	10	50	

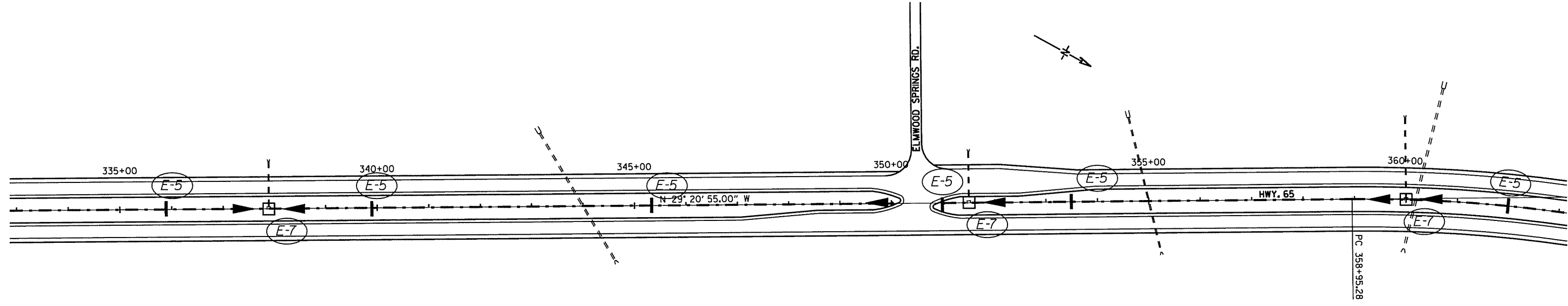
TEMPORARY EROSION CONTROL DETAILS



		REVISIONS	
SAND BAG DITCH CHECK	DROP INLET SILT FENCE	DATE OF REVISION	REVISION

LEGEND

INDICATES DIRECTION OF MEDIAN DRAINAGE



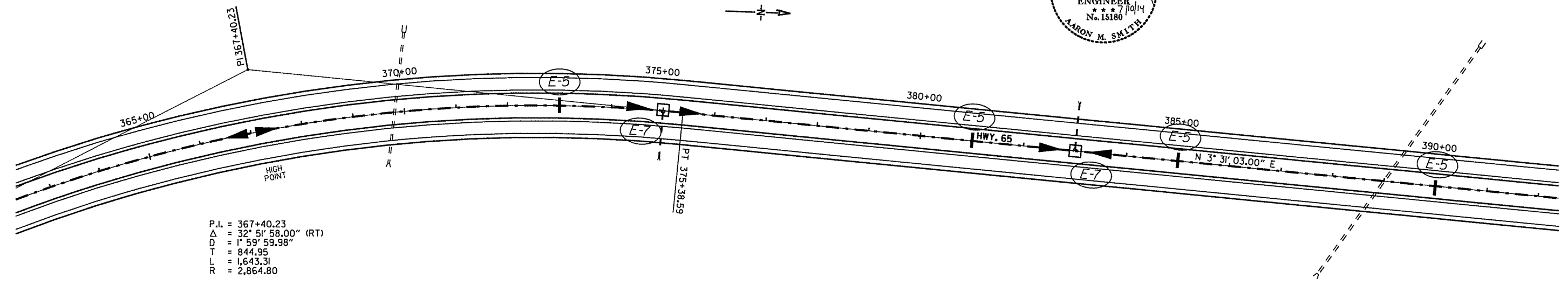
TEMPORARY EROSION CONTROL DETAILS  
STA. 304+00 - STA. 363+00

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
							JOB NO. 090379	50

TEMPORARY EROSION CONTROL DETAILS

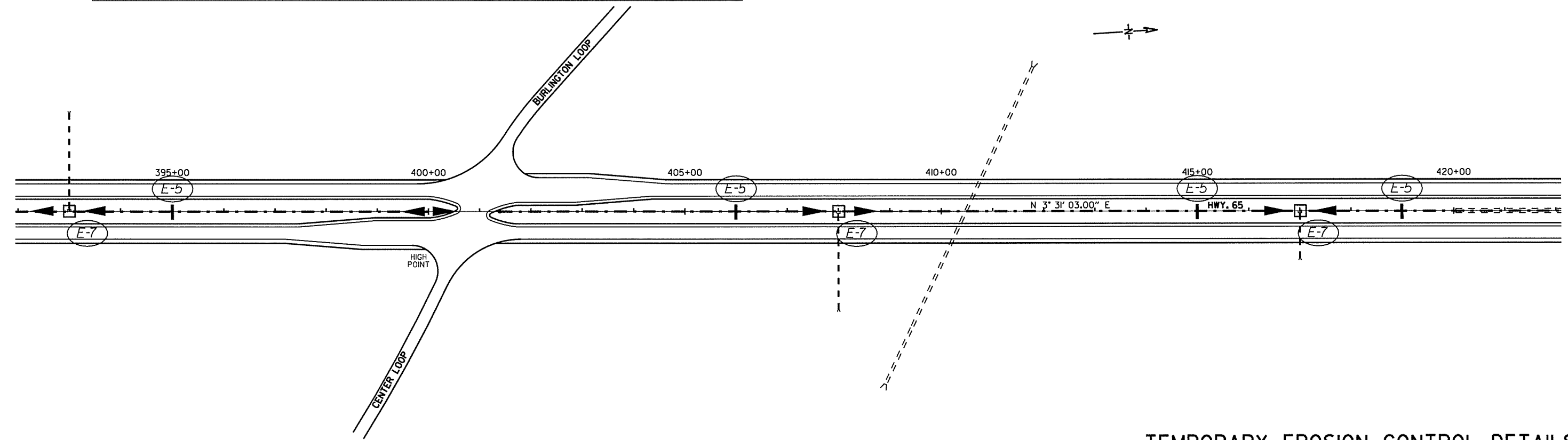


P.I. = 367+40.23  
 $\Delta$  = 32° 51' 58.00" (RT)  
 D = 1° 59' 59.98"  
 T = 844.95  
 L = 1,643.31  
 R = 2,864.80

		REVISIONS	
SAND BAG DITCH CHECK	DROP INLET SILT FENCE	DATE OF REVISION	REVISION

LEGEND

INDICATES DIRECTION OF MEDIAN DRAINAGE



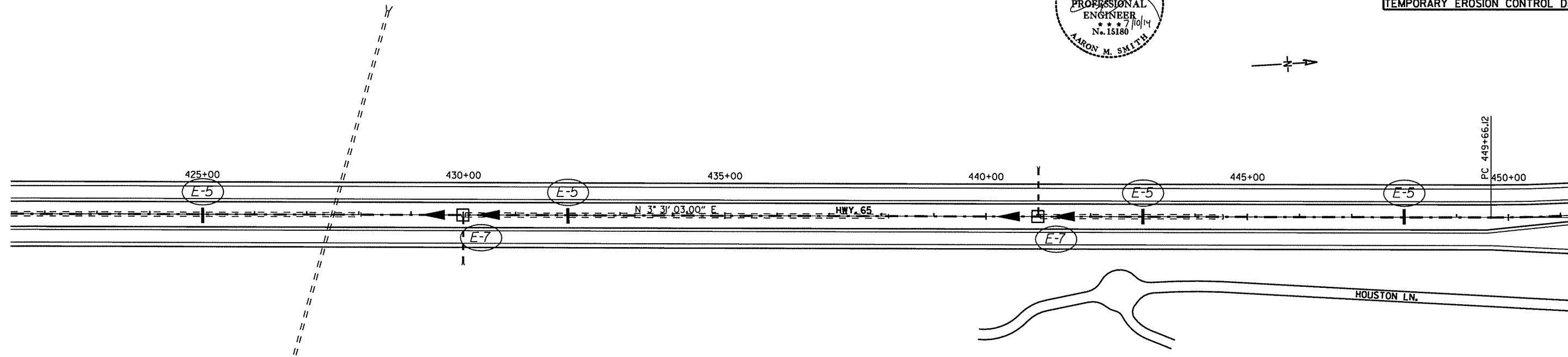
TEMPORARY EROSION CONTROL DETAILS  
 STA. 363+00 - STA. 422+00

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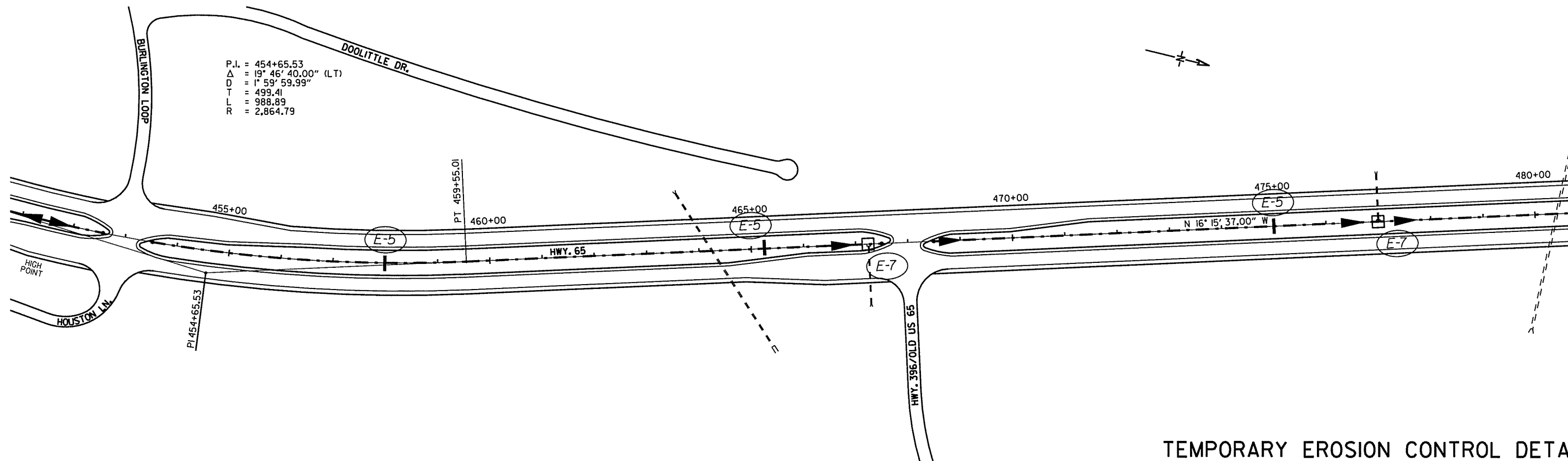
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 090379							12	50

TEMPORARY EROSION CONTROL DETAILS



LEGEND		REVISIONS	
SAND BAG DITCH CHECK <b>(E-5)</b> 	DROP INLET SILT FENCE <b>(E-7)</b> □	DATE OF REVISION	REVISION

▲ INDICATES DIRECTION OF MEDIAN DRAINAGE

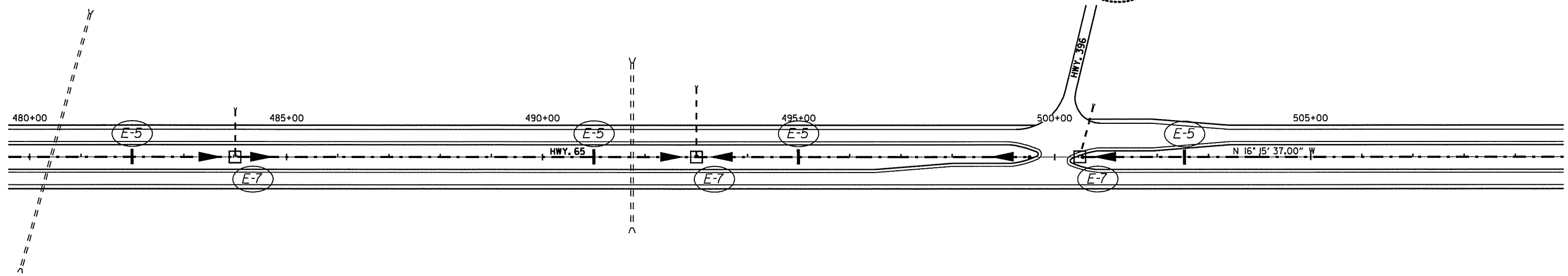
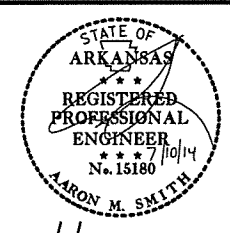


P.I. = 454+65.53  
 $\Delta$  = 19° 46' 40.00" (LT)  
 D = 1' 59' 59.99"  
 T = 499.41  
 L = 988.89  
 R = 2,864.79

TEMPORARY EROSION CONTROL DETAILS  
 STA. 422+00 - STA. 480+00

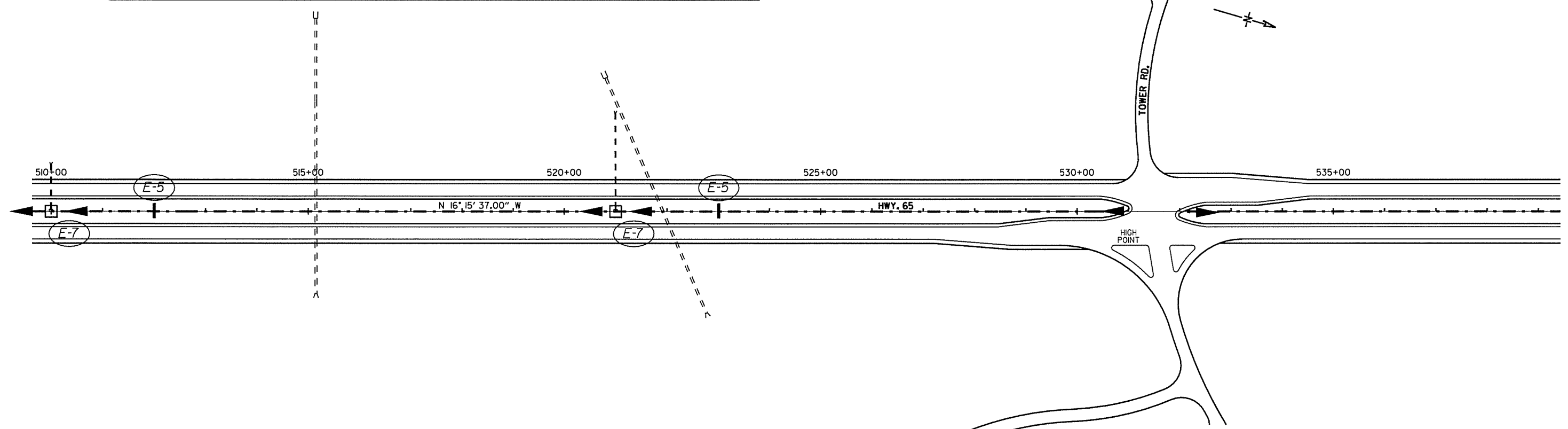
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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	090379	13	50
				JOB NO. 090379 13 50				
TEMPORARY EROSION CONTROL DETAILS								



		REVISIONS	
SAND BAG DITCH CHECK	DROP INLET SILT FENCE	DATE OF REVISION	REVISION

INDICATES DIRECTION OF MEDIAN DRAINAGE



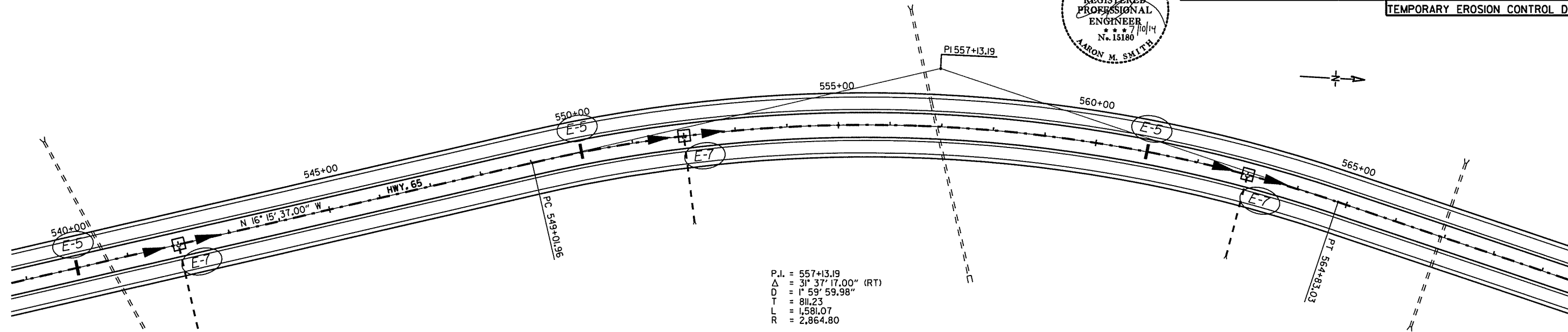
TEMPORARY EROSION CONTROL DETAILS  
STA. 480+00 - STA. 539+00

7/9/2014 1:43:17 PM P:\100039443\CADD\CET SHEETS\HWY65-8.dgn



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		14	50
				JOB NO.		090379		

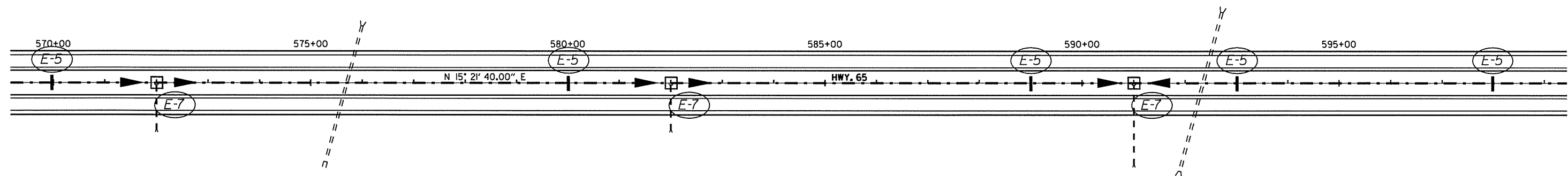
TEMPORARY EROSION CONTROL DETAILS



P.I. = 557+13.19  
 $\Delta$  = 31° 37' 17.00" (RT)  
D = 1° 59' 59.98"  
T = 811.23  
L = 1,581.07  
R = 2,864.80

		REVISIONS	
SAND BAG DITCH CHECK	DROP INLET SILT FENCE	DATE OF REVISION	REVISION
LEGEND			

INDICATES DIRECTION OF MEDIAN DRAINAGE



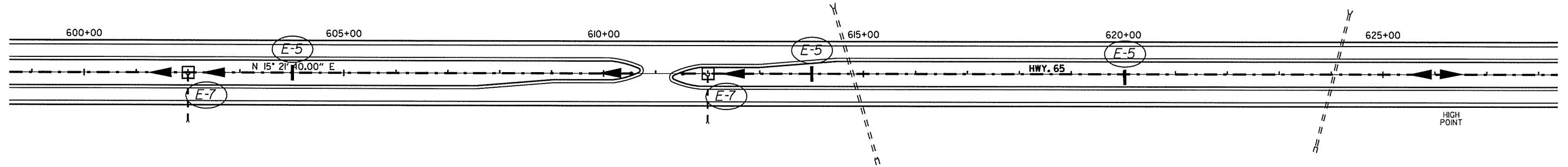
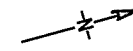
TEMPORARY EROSION CONTROL DETAILS  
 STA. 539+00 - STA. 599+00

7/9/2014 1:43:17 PM P:\N0003943\CADD\CEI\SHEETS\HWY65-9.dgn



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS	
				6	ARK.				
JOB NO.							090379	15	50

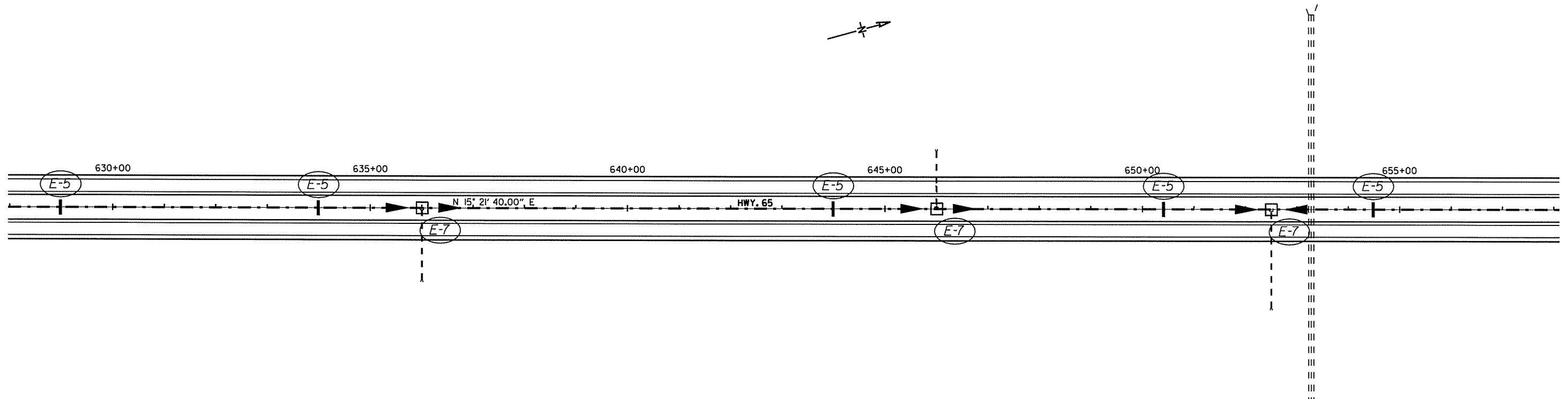
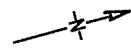
TEMPORARY EROSION CONTROL DETAILS



		REVISIONS	
SAND BAG DITCH CHECK	DROP INLET SILT FENCE	DATE OF REVISION	REVISION

LEGEND

INDICATES DIRECTION OF MEDIAN DRAINAGE



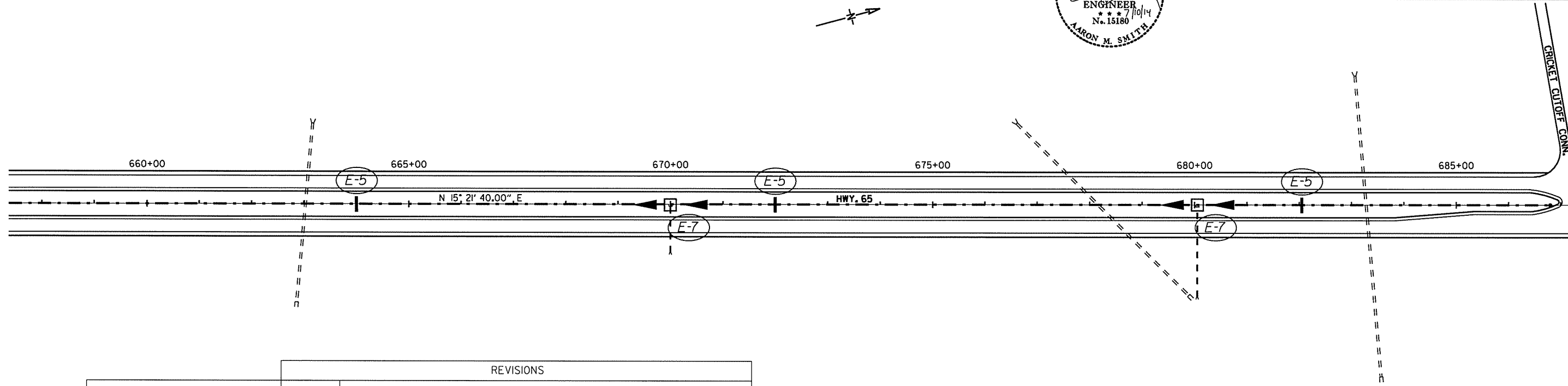
TEMPORARY EROSION CONTROL DETAILS  
STA. 599+00 - STA. 658+00

7/9/2014 1:43:18 PM P:\100039443\CADD\SET SHEETS\HWY65-10.dgn



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		090379	16	50

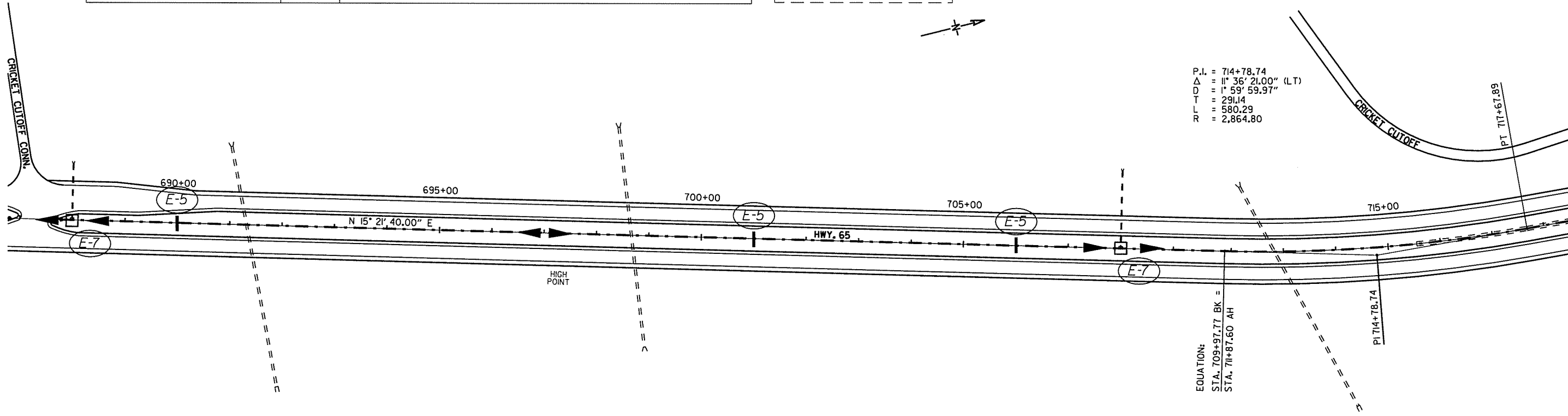
TEMPORARY EROSION CONTROL DETAILS



REVISIONS		DATE OF REVISION	REVISION
SAND BAG DITCH CHECK	DROP INLET SILT FENCE		
(E-5)	(E-7)		
█	□		

LEGEND

INDICATES DIRECTION OF MEDIAN DRAINAGE



P.I. = 714+78.74  
 $\Delta$  = 11° 36' 21.00" (LT)  
 D = 1° 59' 59.97"  
 T = 291.14  
 R = 580.29  
 L = 2,864.80

EQUATION:  
 STA. 709+97.77 BK =  
 STA. 711+87.60 AH

TEMPORARY EROSION CONTROL DETAILS  
 STA. 658+00 - STA. 718+00

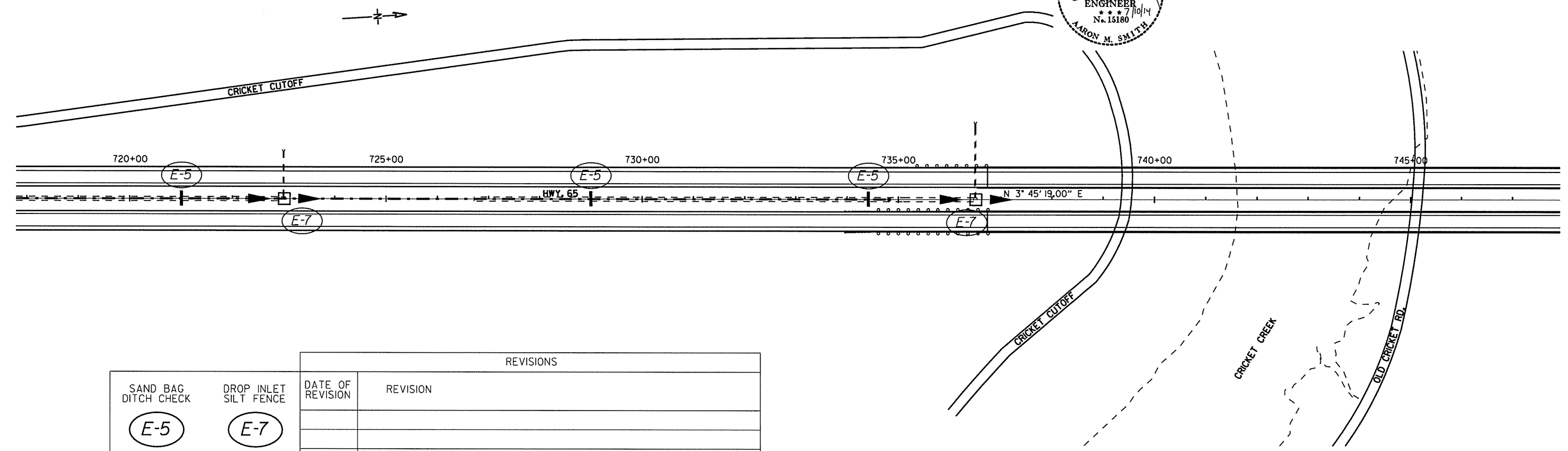
7/9/2014 1:43:18 PM P:\00039443\CADD\VEI SHEETS HWY65-11.dgn



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		17	50
				JOB NO.		090379		

STATE OF ARKANSAS  
 REGISTERED PROFESSIONAL ENGINEER  
 No. 15180  
 AARON M. SMITH

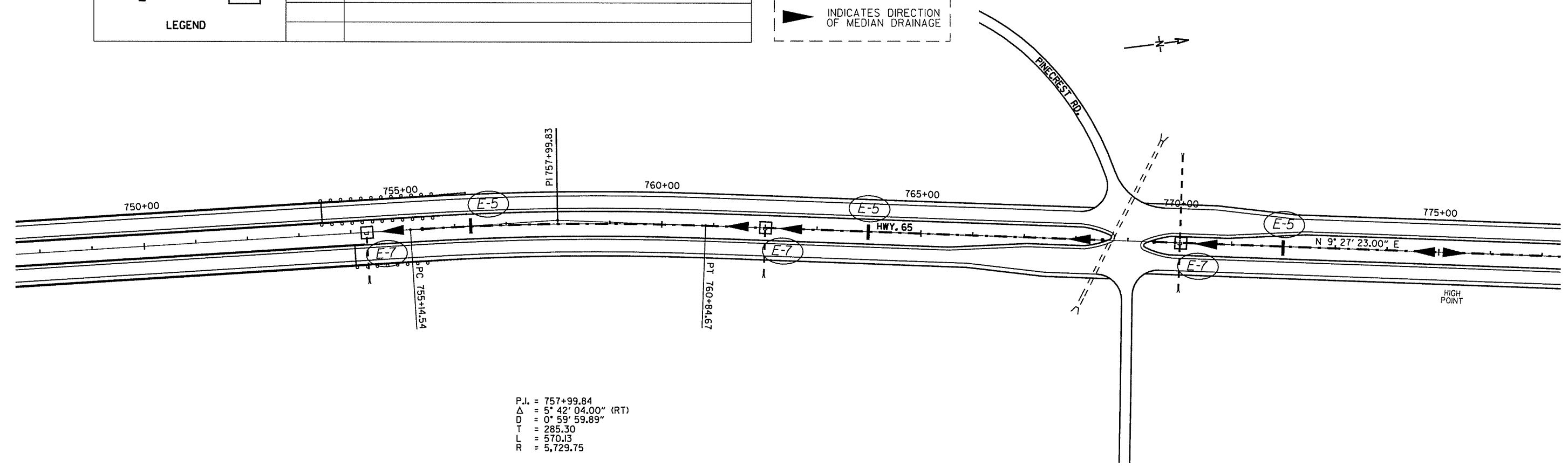
TEMPORARY EROSION CONTROL DETAILS



		REVISIONS	
SAND BAG DITCH CHECK	DROP INLET SILT FENCE	DATE OF REVISION	REVISION
(E-5)	(E-7)		
█	□		

LEGEND

INDICATES DIRECTION OF MEDIAN DRAINAGE



P.I. = 757+99.84  
 $\Delta$  = 5° 42' 04.00" (RT)  
 $D$  = 0° 59' 59.89"  
 $T$  = 285.30  
 $L$  = 570.13  
 $R$  = 5,729.75

TEMPORARY EROSION CONTROL DETAILS  
 STA. 718+00 - STA. 777+00

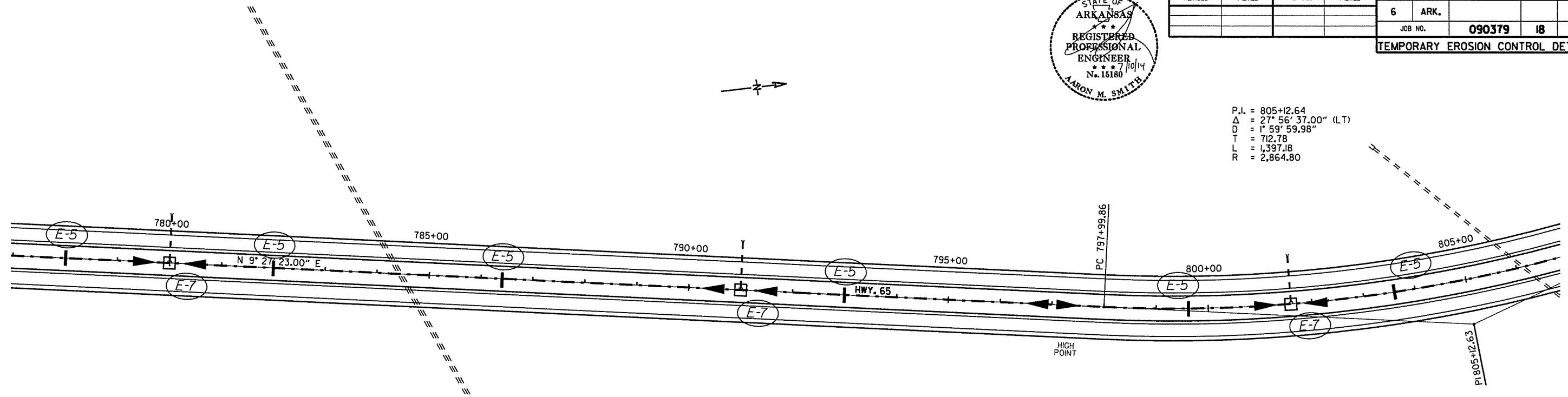
7/9/2014 1:43:18 PM P:\00039443\CADD\CEI\SHEET\5\HWY65-12.dgn



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	090379	18	50	

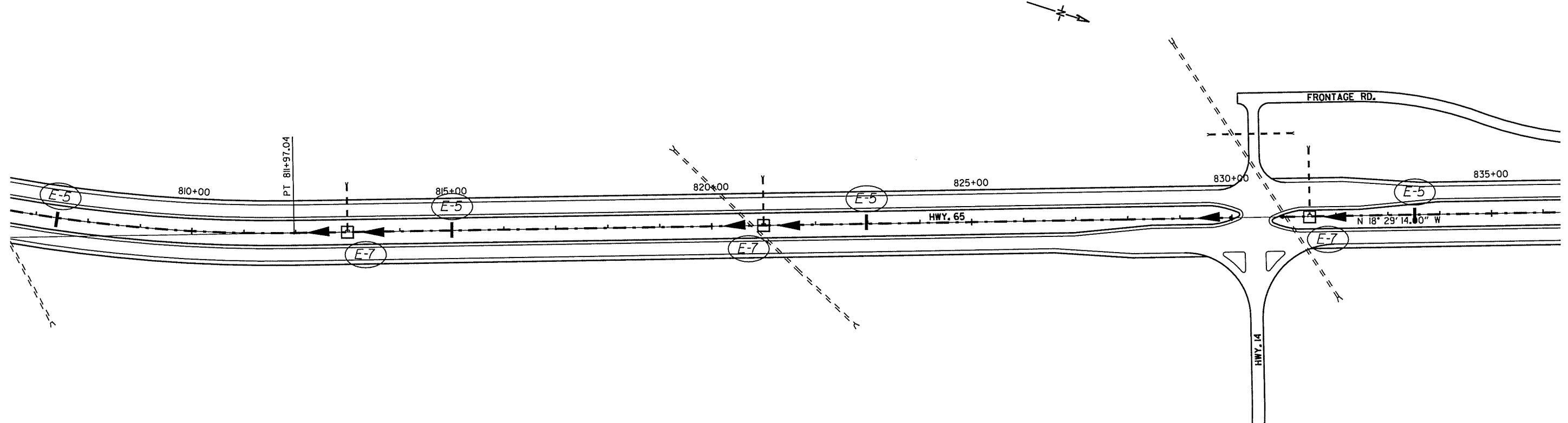
TEMPORARY EROSION CONTROL DETAILS

P.I. = 805+12.64  
 $\Delta$  = 27° 56' 37.00" (LT)  
 D = 1' 59' 59.98"  
 T = 712.78  
 L = 1,397.18  
 R = 2,864.80



		REVISIONS	
SAND BAG DITCH CHECK	DROP INLET SILT FENCE	DATE OF REVISION	REVISION
(E-5)	(E-7)		
█	□		
LEGEND			

INDICATES DIRECTION OF MEDIAN DRAINAGE



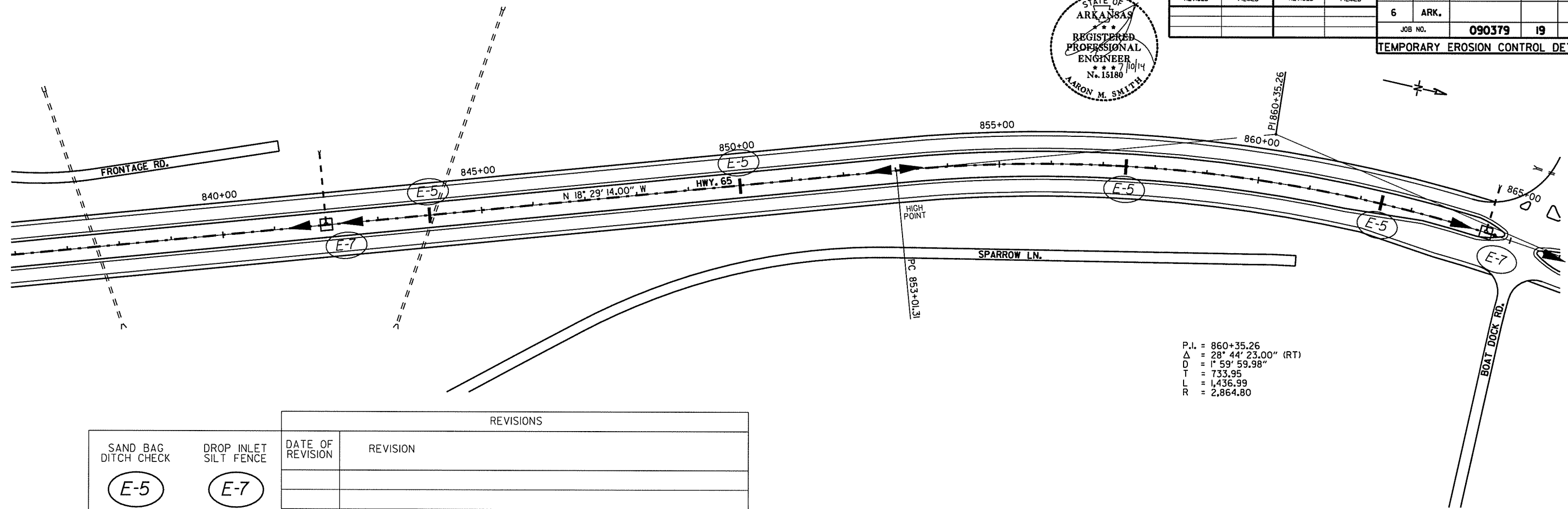
TEMPORARY EROSION CONTROL DETAILS  
 STA. 777+00 - STA. 836+00

7/9/2014 14:38:58 PM P:\00039443\CADD\GEI\SHEET5-HWY65-13.dgn



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		090379	19	50

TEMPORARY EROSION CONTROL DETAILS

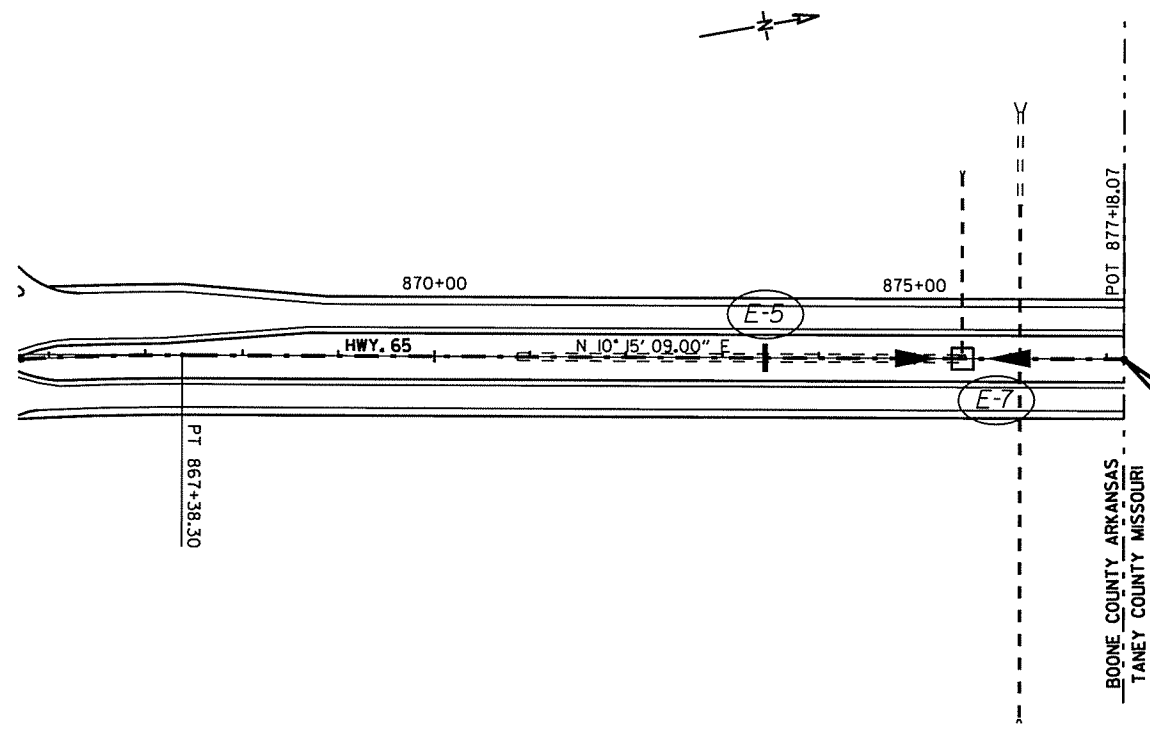


P.I. = 860+35.26  
 $\Delta$  = 28° 44' 23.00" (RT)  
D = 1' 59' 59.98"  
T = 733.95  
L = 1,436.99  
R = 2,864.80

REVISIONS		DATE OF REVISION	REVISION
SAND BAG DITCH CHECK	DROP INLET SILT FENCE		

LEGEND

INDICATES DIRECTION OF MEDIAN DRAINAGE



STA. 877+18.07  
END JOB 090379  
SECTION I  
END WRSF  
IN CL MEDIAN  
LOG MILE 0.00

TEMPORARY EROSION CONTROL DETAILS  
STA. 836+00 - STA. 877+18.07

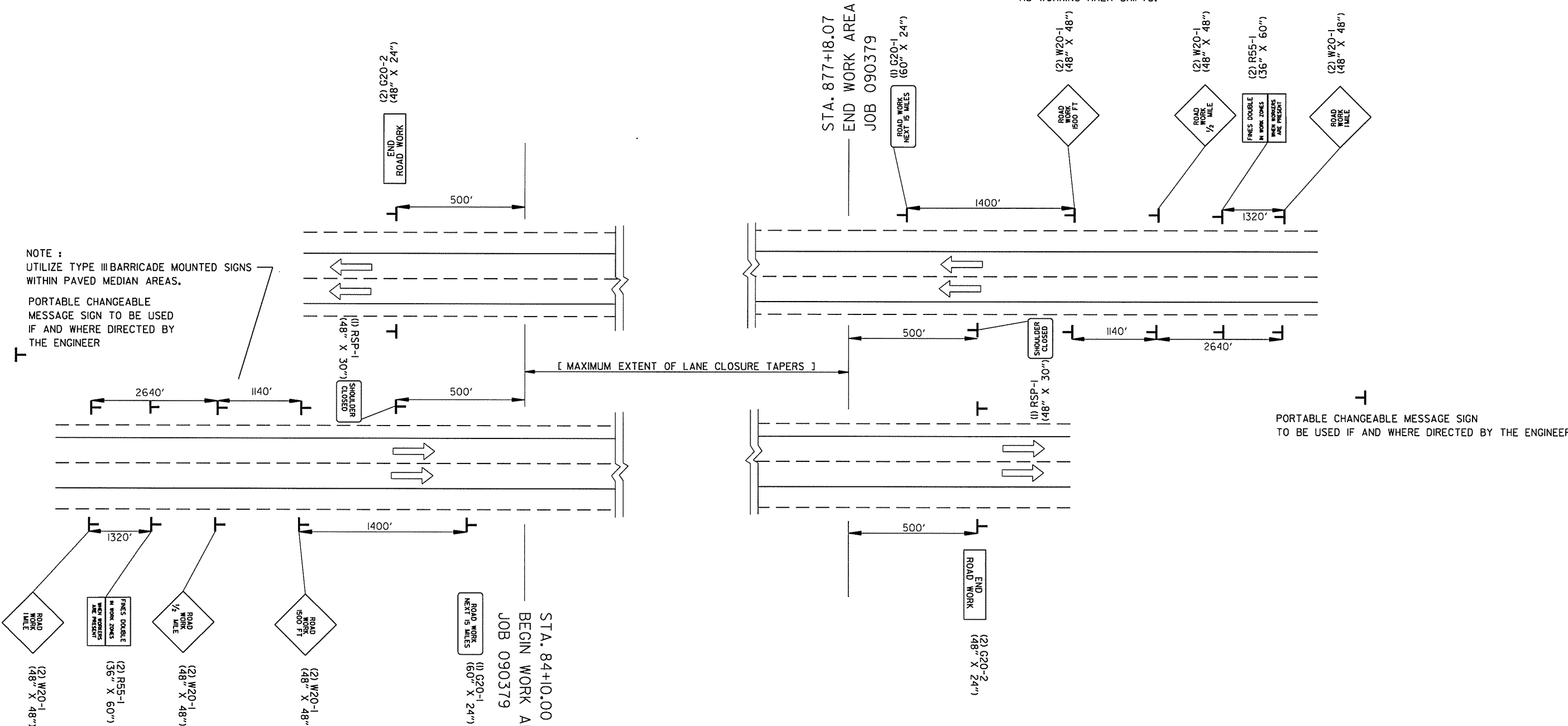
P:\00039443\CADD\GEI SHEETS\HWY65-14.dgn 1/9/2014 4:31:19 PM



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO.						090379	20	50

MAINTENANCE OF TRAFFIC

NOTE :  
W20-1 (VARIOUS DISTANCE) ADVANCE SIGNS  
TO BE REPLACED AS NEEDED BY EQUIVALENT W20-5 SIGNS  
AS WORKING AREA SHIFTS.



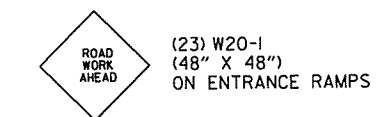
NOTE :  
UTILIZE TYPE III BARRICADE MOUNTED SIGNS  
WITHIN PAVED MEDIAN AREAS.  
PORTABLE CHANGEABLE  
MESSAGE SIGN TO BE USED  
IF AND WHERE DIRECTED BY  
THE ENGINEER

PORTABLE CHANGEABLE MESSAGE SIGN  
TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

NOTE :  
W20-1 (VARIOUS DISTANCE) ADVANCE SIGNS  
TO BE REPLACED AS NEEDED BY EQUIVALENT  
W20-5 SIGNS AS WORKING AREA SHIFTS.

### ADVANCE SIGNS AT BEGINNING AND END OF JOB ALL STAGES

CONSTRUCTION SIGNS FOR SIDE ROADS/ENTRANCE RAMP	
ROAD WORK AHEAD (W20-1)	23

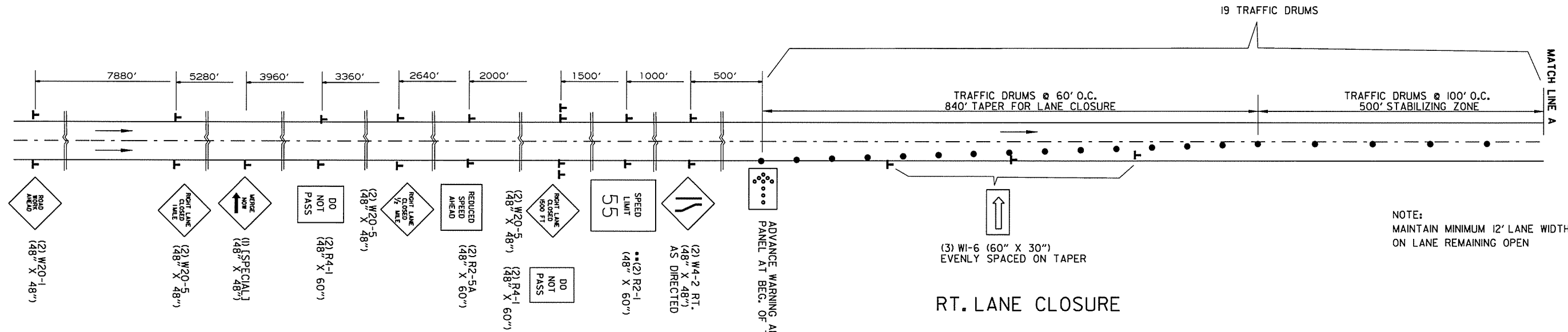


### MAINTENANCE OF TRAFFIC ADVANCE SIGNS AT JOB ENDS



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 090379							21	50

MAINTENANCE OF TRAFFIC

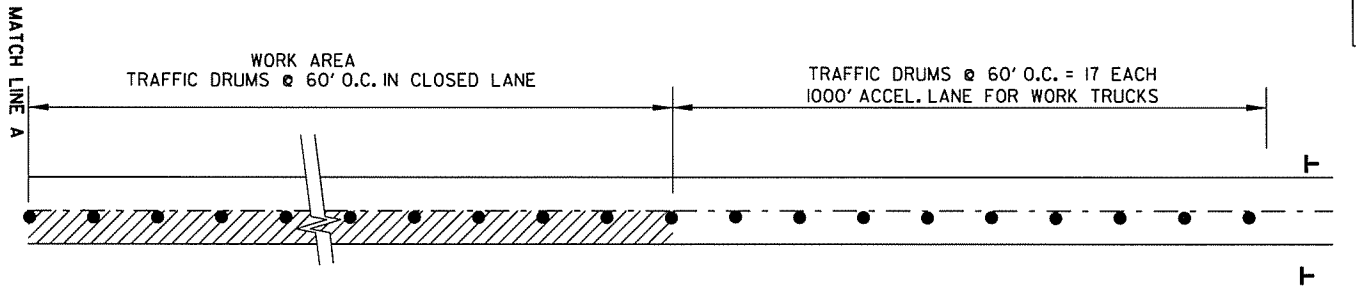


RT. LANE CLOSURE

NOTE: ANY WORK DONE OUTSIDE THE LIMITS OF THE LANE CLOSURE AREA MUST HAVE PRIOR WRITTEN APPROVAL OF THE ENGINEER, AND ANY ADDITIONAL TRAFFIC CONTROL DEVICES REQUIRED SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE DEPARTMENT.

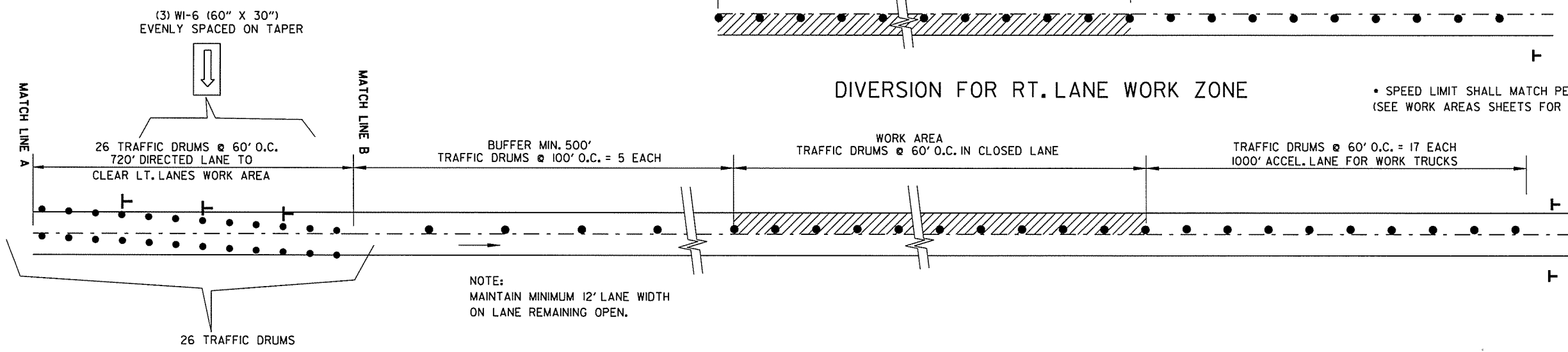
••SPEED LIMIT SIGNS SHALL BE 10 MPH BELOW THE PERMANENT SPEED LIMIT.

SPEED LIMIT SIGNS ARE ALSO PROVIDED FOR PLACEMENT PAST ENTRANCE RAMP WITHIN THE WORK ZONE.



DIVERSION FOR RT. LANE WORK ZONE

• SPEED LIMIT SHALL MATCH PERMANENT SPEED LIMIT. (SEE WORK AREAS SHEETS FOR FURTHER INFORMATION)



DIVERSION FOR LT. LANE WORK ZONE

NOTE: REFER TO SP-MAINTENANCE OF TRAFFIC FOR LANE CLOSURE LIMITATIONS AND RESTRICTIONS. QUANTITY OF TRAFFIC DRUMS PROVIDED IN THE CONTRACT IS THE MAXIMUM NUMBER REQUIRED FOR ONE LANE CLOSURE.

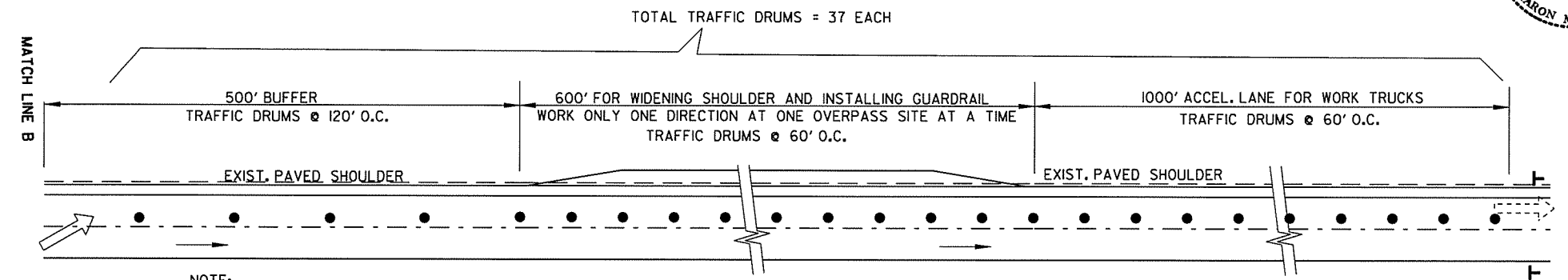
PORTABLE CHANGEABLE MESSAGE SIGN TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

MAINTENANCE OF TRAFFIC LANE CLOSURES

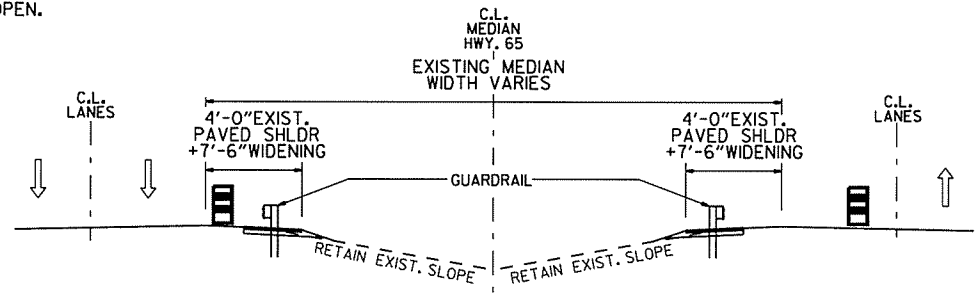


DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	090379		22	50

MAINTENANCE OF TRAFFIC



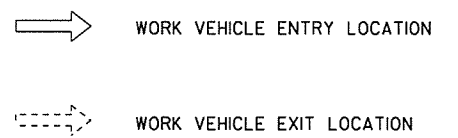
NOTE:  
MAINTAIN MINIMUM 12' LANE WIDTH  
ON LANE REMAINING OPEN.



SPEED  
LIMIT  
65

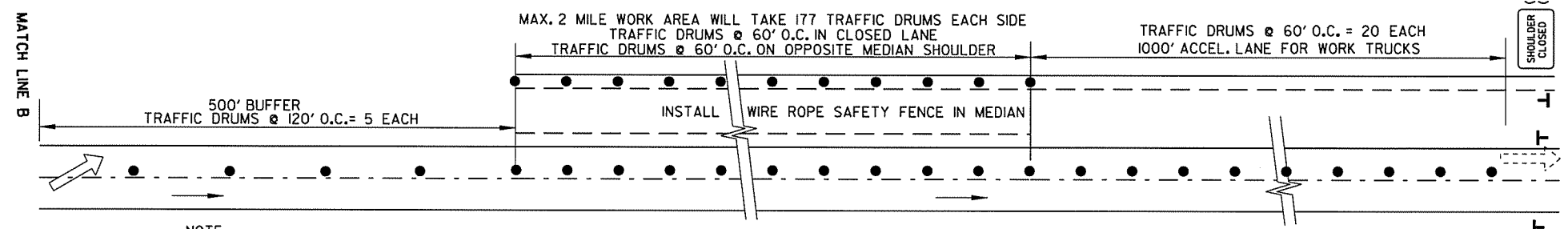
(2) R2-1  
(48" X 60")

MOVABLE WORK ZONE FOR GUARDRAIL INSTALLATION

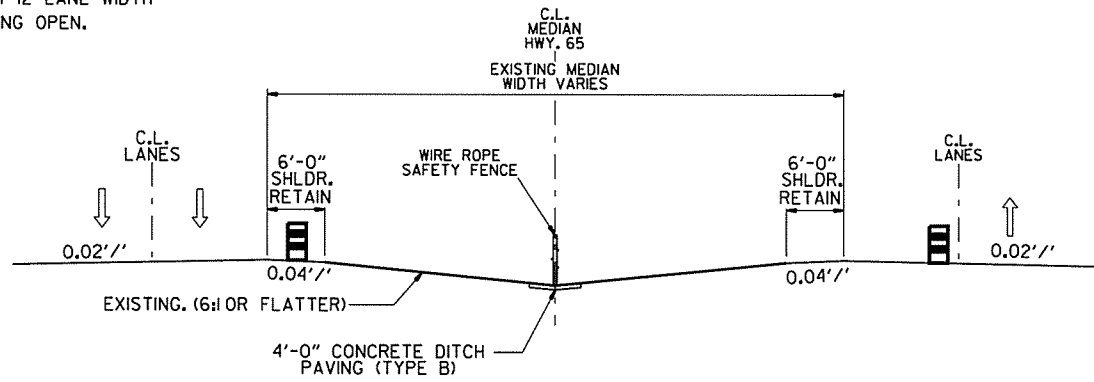


NOTE: REFER TO SP-MAINTENANCE OF TRAFFIC FOR LANE CLOSURE LIMITATIONS AND RESTRICTIONS. QUANTITY OF TRAFFIC DRUMS PROVIDED IN THE CONTRACT IS THE MAXIMUM NUMBER REQUIRED FOR ONE LANE CLOSURE.

•SPEED LIMIT SHALL MATCH PERMANENT SPEED LIMIT.



NOTE:  
MAINTAIN MINIMUM 12' LANE WIDTH  
ON LANE REMAINING OPEN.



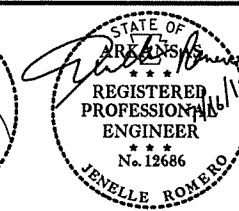
SPEED  
LIMIT  
65

(2) R2-1  
(48" X 60")

MOVABLE WORK ZONE FOR WRSF INSTALLATION

NOTE: CONTRACTOR MUST UTILIZE ENTRY/EXIT LOCATION AS SHOWN ON THE PLANS.

MAINTENANCE OF TRAFFIC  
WORK AREAS



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		23	50
				JOB NO.		090379		

**QUANTITIES**

RESPONSIBLE FOR QUANTITIES  
IN EROSION CONTROL AND  
ADVANCE WARNING SIGNS  
AND DEVICES TABLES

RESPONSIBLE FOR ALL  
OTHER QUANTITIES

**EROSION CONTROL**

LOCATION	TEMPORARY EROSION CONTROL						PERMANENT EROSION CONTROL				
	TEMPORARY SEEDING	MULCH COVER	WATER	SAND BAG DITCH CHECKS (E-5)	DROP INLET SILT FENCE (E-7)	SEDIMENT REMOVAL AND DISPOSAL	SEEDING	LIME	MULCH COVER	SECOND SEEDING APPLICATION	WATER
	ACRE	ACRE	M.GAL.	BAG	LIN.FT.	C.Y.	ACRE	TON	ACRE	ACRE	M.GAL.
ENTIRE JOB	24.54	24.54	500.6	2040	2070	180	24.54	49.08	24.54	24.54	2503.1
* ENTIRE PROJECT IF AND WHERE DIRECTED BY THE ENGINEER				40	30						
<b>TOTALS:</b>	<b>24.54</b>	<b>24.54</b>	<b>500.6</b>	<b>2080</b>	<b>2100</b>	<b>180</b>	<b>24.54</b>	<b>49.08</b>	<b>24.54</b>	<b>24.54</b>	<b>2503.1</b>

BASIS OF ESTIMATE:  
LIME.....2 TONS/ACRE OF SEEDING  
WATER.....102.0 M.G./ACRE OF SEEDING  
WATER.....20.4 M.G./ACRE OF TEMPORARY SEEDING  
DROP INLET SILT FENCES.....30 LIN.FT./LOCATION  
SAND BAG DITCH CHECKS.....20 BAGS/LOCATION

NOTE: THE TEMPORARY EROSION CONTROL DEVICES SHOWN ABOVE AND ON THE PLANS SHALL BE INSTALLED IN SUCH A SEQUENCE AS TO DETER EROSION AND SEDIMENTATION OF U.S. WATERWAYS AS EXPLAINED BY THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT.

\* QUANTITY IS ESTIMATED.  
SEE SECTION 104.03 OF THE STANDARD SPECIFICATIONS.

**GUARDRAIL**

STATION	STATION	LOCATION	GUARDRAIL (TYPE A) LIN.FT.	TERMINAL ANCHOR POST (TYPE 1) EACH	GUARDRAIL TERMINAL (TYPE 2) EACH
107+53.00	113+03.00	RT. SHLDR. AT HWY. 62 N-W RAMP OVERPASS	500	1	1
109+90.00	115+40.00	LT. SHLDR. AT HWY. 62 N-W RAMP OVERPASS	500	1	1
<b>TOTALS:</b>			<b>1000</b>	<b>2</b>	<b>2</b>

**ADVANCE WARNING SIGNS AND DEVICES**

SIGN NUMBER	DESCRIPTION	SIGN SIZE	MAXIMUM NUMBER REQUIRED	TOTAL SIGNS REQUIRED		TRAFFIC DRUMS	ADVANCE WARNING ARROW PANEL	PORTABLE CHANGEABLE MESSAGE SIGN
			SQ.FT-LIN.FT.-EA	NO.	SQ. FT.			
W20-1	ROAD WORK 1 MILE	48"X48"	16	4	64			
W20-1	ROAD WORK 1/2 MILE	48"X48"	16	4	64			
W20-1	ROAD WORK 1500 FT.	48"X48"	16	4	64			
W20-1	ROAD WORK AHEAD	48"X48"	16	25	400			
G20-1	ROAD WORK NEXT xx MILES	60"X24"	6	2	12			
G20-2	END ROAD WORK	48"X24"	8	4	32			
SPECIAL 1	MERGE NOW + ARROW	48"X48"	16	1	16			
W20-5	RIGHT LANE CLOSED 1 MILE	48"X48"	16	2	32			
W20-5	RIGHT LANE CLOSED 1/2 MILE	48"X48"	16	2	32			
W20-5	RIGHT LANE CLOSED 1500 FT.	48"X48"	16	2	32			
W4-2R	RIGHT LANE CLOSING GRAPHIC	48"X48"	16	2	32			
W1-6	LARGER ARROW	60"X30"	12.5	6	75			
R4-1	DO NOT PASS	48"X60"	20	4	80			
R55-1	FINES DOUBLE IN WORK ZONES	36"X60"	15	4	60			
R2-5A	REDUCED SPEED AHEAD	48"X60"	20	2	40			
R2-1	SPEED LIMIT 55 MPH	48"X60"	20	2	40			
R2-1	SPEED LIMIT 65 MPH	48"X60"	20	2	40			
RSP-1	SHOULDER CLOSED	48"X30"	10	2	20			
TRAFFIC DRUMS			421			421		
ADVANCE WARNING ARROW PANEL			1			70		
PORTABLE CHANGEABLE MESSAGE SIGN			2				64	
<b>TOTALS:</b>					<b>1135</b>	<b>421</b>	<b>70</b>	<b>64</b>

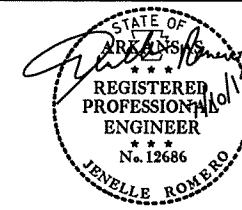
NOTE: THIS IS A HIGH VOLUME ROAD AS DEFINED IN SECTION 604.03 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 2014.

**REMOVAL AND DISPOSAL ITEMS**

STATION	DESCRIPTION	IMPACT ATTENUATION BARRIER	CONCRETE DITCH PAVING
		EACH	SQ. YD.
111+48	ON CENTERLINE OF MEDIAN	2	
* ENTIRE PROJECT - AS DIRECTED BY THE ENGINEER			225
<b>TOTALS:</b>		<b>2</b>	<b>225</b>

\* QUANTITY IS ESTIMATED.  
SEE SECTION 104.03 OF THE STANDARD SPECIFICATIONS.

**QUANTITIES**



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		090379	24	50
<b>QUANTITIES</b>								

**CONCRETE DITCH PAVING**

STATION	STATION	STATION EQUATION	LOCATION	LENGTH	WIDTH	CONC. DITCH PAVING (TYPE B)	SOLID SODDING	WATER
				FEET	FEET	SQ. YD.	M. GAL.	
84+10.00	96+74.00		CL MEDIAN OF HWY. 65	1264	4	562	562	7.1
97+54.00	110+75.00		CL MEDIAN OF HWY. 65	1321	4	587	587	7.4
112+20.00	160+54.00		CL MEDIAN OF HWY. 65	4834	4	2148	2148	27.1
161+52.00	174+86.00		CL MEDIAN OF HWY. 65	1314	4	584	584	7.4
180+29.00	206+46.00		CL MEDIAN OF HWY. 65	2617	4	1163	1163	14.7
209+46.00	227+04.00		CL MEDIAN OF HWY. 65	1758	4	781	781	9.8
236+12.00	241+98.00		CL MEDIAN OF HWY. 65	586	4	260	260	3.3
242+95.00	294+42.00		CL MEDIAN OF HWY. 65	5147	4	2288	2288	28.8
295+42.00	350+01.00		CL MEDIAN OF HWY. 65	5459	4	2426	2426	30.6
351+00.00	400+40.00		CL MEDIAN OF HWY. 65	4940	4	2196	2196	27.7
401+39.00	420+04.00		CL MEDIAN OF HWY. 65	1865	4	829	829	10.4
428+04.00	430+04.00		CL MEDIAN OF HWY. 65	200	4	89	89	1.1
438+14.00	441+04.00		CL MEDIAN OF HWY. 65	290	4	129	129	1.6
444+54.00	452+58.00		CL MEDIAN OF HWY. 65	804	4	357	357	4.5
453+52.00	467+50.00		CL MEDIAN OF HWY. 65	1398	4	621	621	7.8
468+49.00	499+51.00		CL MEDIAN OF HWY. 65	3102	4	1379	1379	17.4
500+55.00	530+84.00		CL MEDIAN OF HWY. 65	3029	4	1346	1346	17.0
532+18.00	610+53.00		CL MEDIAN OF HWY. 65	7835	4	3482	3482	43.9
611+52.00	686+80.00		CL MEDIAN OF HWY. 65	7528	4	3346	3346	42.2
687+79.00	709+97.77	BK.	CL MEDIAN OF HWY. 65	2219	4	986	986	12.4
711+87.60	715+55.00	AHD.	CL MEDIAN OF HWY. 65	367	4	163	163	2.1
722+97.00	726+72.00		CL MEDIAN OF HWY. 65	375	4	167	167	2.1
755+37.00	768+51.00		CL MEDIAN OF HWY. 65	1314	4	584	584	7.4
769+50.00	829+98.00		CL MEDIAN OF HWY. 65	6048	4	2688	2688	33.9
830+97.00	864+68.00		CL MEDIAN OF HWY. 65	3371	4	1498	1498	18.9
865+71.00	870+87.00		CL MEDIAN OF HWY. 65	516	4	229	229	2.9
875+47.00	877+18.07		CL MEDIAN OF HWY. 65	171	4	76	76	1.0
TOTALS:						30964	30964	390.5

BASIS OF ESTIMATE:  
 WATER.....12.6 GAL. / SQ. YD. OF SOLID SODDING.

**WIRE ROPE SAFETY FENCE**

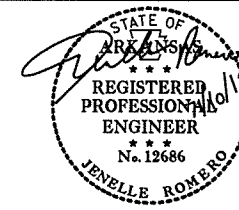
STATION	STATION	STATION EQUATION	LOCATION	WIRE ROPE SAFETY FENCE	WRSF ANCHOR	WRSF MAINTENANCE MATERIALS	WRSF POST REPAIR
				LIN. FT.	EACH	LUMP SUM	EACH
84+10.00	96+74.00		CL MEDIAN OF HWY. 65	1264	2		
97+54.00	110+75.00		CL MEDIAN OF HWY. 65	1321	2		
112+20.00	160+54.00		CL MEDIAN OF HWY. 65	4834	2		
161+52.00	231+15.60	BK.	CL MEDIAN OF HWY. 65	6964	1		
231+48.43	241+98.00	AHD.	CL MEDIAN OF HWY. 65	1050	1		
242+95.00	294+42.00		CL MEDIAN OF HWY. 65	5147	2		
295+42.00	350+01.00		CL MEDIAN OF HWY. 65	5459	2		
351+00.00	400+40.00		CL MEDIAN OF HWY. 65	4940	2		
401+39.00	452+58.00		CL MEDIAN OF HWY. 65	5119	2		
453+52.00	467+50.00		CL MEDIAN OF HWY. 65	1398	2		
468+49.00	499+51.00		CL MEDIAN OF HWY. 65	3102	2		
500+55.00	530+84.00		CL MEDIAN OF HWY. 65	3029	2		
532+18.00	610+53.00		CL MEDIAN OF HWY. 65	7835	2		
611+52.00	686+80.00		CL MEDIAN OF HWY. 65	7528	2		
687+79.00	709+97.77	BK.	CL MEDIAN OF HWY. 65	2219	1		
711+87.60	734+82.00	AHD.	CL MEDIAN OF HWY. 65	2294	1		
755+37.00	768+51.00		CL MEDIAN OF HWY. 65	1314	2		
769+50.00	829+98.00		CL MEDIAN OF HWY. 65	6048	2		
830+97.00	864+68.00		CL MEDIAN OF HWY. 65	3371	2		
865+71.00	877+18.07		CL MEDIAN OF HWY. 65	1147	2		
* ENTIRE PROJECT							50
ENTIRE PROJECT						1.00	
TOTALS:				75383	36	1.00	50

◇ THIS ITEM SHOWN FOR INFORMATION ONLY.  
 \* QUANTITY IS ESTIMATED.  
 SEE SECTION 104.03 OF THE STANDARD SPECIFICATIONS.

**QUANTITIES**

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		090379	25	50

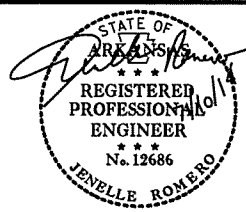
**QUANTITIES**

**BASE AND SURFACING**

STATION	STATION	LOCATION	LENGTH FEET	AGGREGATE BASE COURSE (CLASS 7)		ACHM SURFACE COURSE (1/2")(PG 64-22)			
				TON / STATION	TON	AVG. WD. FEET	SQ. YD.	POUND / SQ. YD.	TON
107+10.00	113+48.00	RT. SHLDR. AT HWY. 62 N-W RAMP OVERPASS	638.00	35.10	223.94	7.19	509.70	220.00	56.07
109+48.00	115+82.00	LT. SHLDR. AT HWY. 62 N-W RAMP OVERPASS	634.00	35.10	222.53	7.24	509.90	220.00	56.09
<b>TOTALS:</b>						446.47		1019.60	112.16

BASIS OF ESTIMATE:  
 110 LBS. PER SQ. YD. PER INCH DEPTH  
 ACHM SURFACE COURSE (1/2").....94.7% MIN. AGGR.....5.3% ASPHALT BINDER  
 MAXIMUM NUMBER OF GYRATIONS = 115

**QUANTITIES**



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		090379	26	50

**QUANTITIES**

**EARTHWORK**

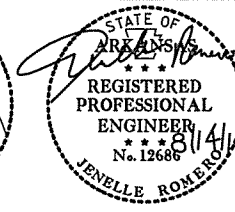
STATION	STATION	LOCATION	UNCLASSIFIED EXCAVATION	COMPACTED EMBANKMENT
			CU. YD.	
107+10	113+48	RT. SHLDR. AT HWY. 62 N-W RAMP OVERPASS	83	17
109+48	115+82	LT. SHLDR. AT HWY. 62 N-W RAMP OVERPASS	82	17
* ENTIRE PROJECT - AS DIRECTED BY THE ENGINEER			500	500
TOTALS:			665	534

NOTE: EARTHWORK QUANTITIES SHOWN ABOVE SHALL BE PAID FOR AS PLAN QUANTITY.

\* QUANTITIES ARE ESTIMATED FOR SLOPE MODIFICATION. SEE SECTION 104.03 OF THE STANDARD SPECIFICATIONS.

**QUANTITIES**

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO. 090379		27	50	

**SUMMARY OF QUANTITIES AND REVISIONS**

**SUMMARY OF QUANTITIES**

ITEM NUMBER	ITEM	QUANTITY	UNIT
SP	REMOVAL AND DISPOSAL OF IMPACT ATTENUATION BARRIER	2	EACH
202	REMOVAL AND DISPOSAL OF CONCRETE DITCH PAVING	225	SQ.YD.
210	UNCLASSIFIED EXCAVATION	665	CU.YD.
210	COMPACTED EMBANKMENT	534	CU. YD.
303	AGGREGATE BASE COURSE (CLASS 7)	446	TON
SP, SS & 407	MINERAL AGGREGATE IN ACHM SURFACE COURSE (1/2")	106	TON
SP, SS & 407	ASPHALT BINDER (PG 64-22) IN ACHM SURFACE COURSE (1/2")	6	TON
601	MOBILIZATION	1.00	LUMP SUM
SP & 603	MAINTENANCE OF TRAFFIC	1.00	LUMP SUM
603	TRAFFIC CONTROL SUPERVISOR	1.00	LUMP SUM
604	SIGNS	1135	SQ.FT.
604	TRAFFIC DRUMS	421	EACH
604	ADVANCE WARNING ARROW PANEL	70	DAY
SP & 604	PORTABLE CHANGEABLE MESSAGE SIGN	64	WEEK
SP & 605	CONCRETE DITCH PAVING (TYPE B)	30964	SQ.YD.
617	GUARDRAIL (TYPE A)	1000	LIN.FT.
617	TERMINAL ANCHOR POSTS (TYPE 1)	2	EACH
617	GUARDRAIL TERMINAL (TYPE 2)	2	EACH
620	SEEDING	24.54	ACRE
620	LIME	49	TON
SS & 620	MULCH COVER	49.08	ACRE
620	WATER	3394.2	M.GAL.
621	TEMPORARY SEEDING	24.54	ACRE
621	SAND BAG DITCH CHECKS	2080	BAG
621	DROP INLET SILT FENCE	2100	LIN.FT.
621	SEDIMENT REMOVAL AND DISPOSAL	180	CU. YD.
623	SECOND SEEDING APPLICATION	24.54	ACRE
624	SOLID SODDING	30964	SQ.YD.
635	ROADWAY CONSTRUCTION CONTROL	1.00	LUMP SUM
SP	WIRE ROPE SAFETY FENCE	75383	LIN.FT.
SP	WIRE ROPE SAFETY FENCE MAINTENANCE MATERIALS	1.00	LUMP SUM
SP	WIRE ROPE SAFETY FENCE (POST REPAIR)	50	EACH

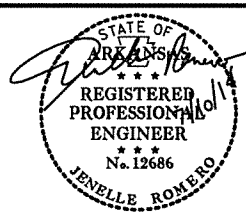
RESPONSIBLE FOR QUANTITIES  
IN EROSION CONTROL AND  
ADVANCE WARNING SIGNS  
AND DEVICES TABLES

RESPONSIBLE FOR ALL  
OTHER QUANTITIES

**REVISIONS**

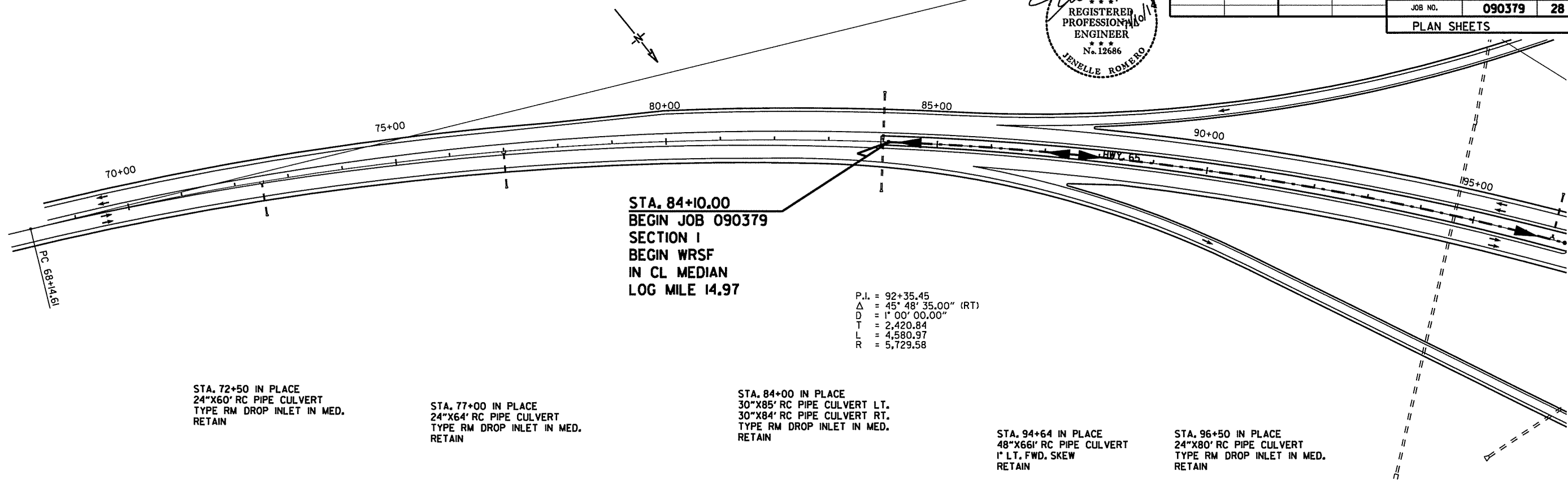
DATE	REVISION	SHEET NUMBER

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 090379							28	50

PLAN SHEETS



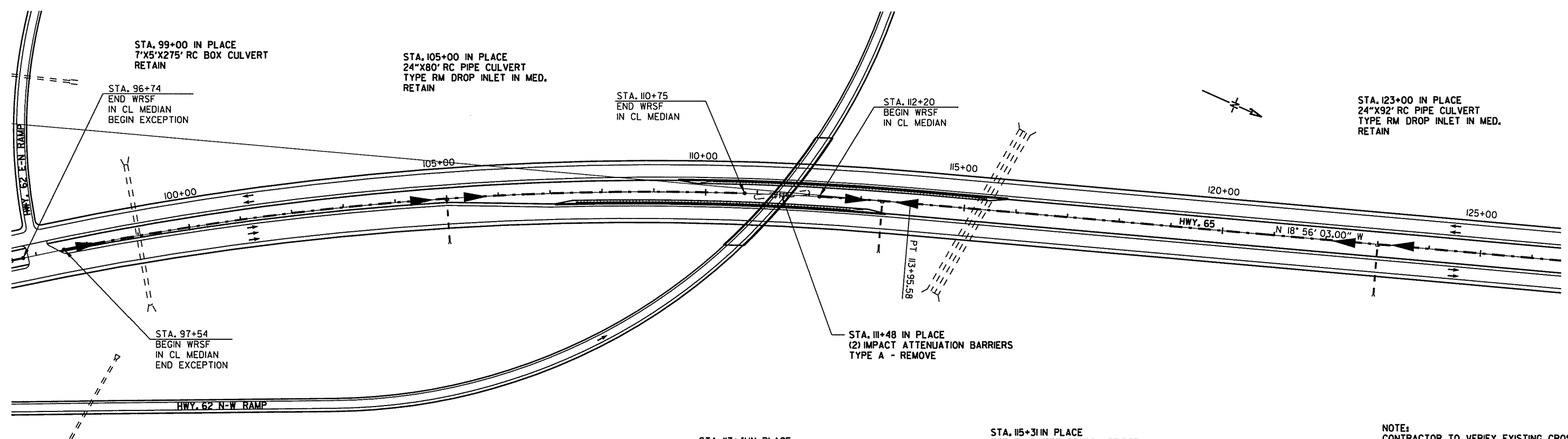
STA. 72+50 IN PLACE  
 24"X60' RC PIPE CULVERT  
 TYPE RM DROP INLET IN MED.  
 RETAIN

STA. 77+00 IN PLACE  
 24"X64' RC PIPE CULVERT  
 TYPE RM DROP INLET IN MED.  
 RETAIN

STA. 84+00 IN PLACE  
 30"X85' RC PIPE CULVERT LT.  
 30"X84' RC PIPE CULVERT RT.  
 TYPE RM DROP INLET IN MED.  
 RETAIN

STA. 94+64 IN PLACE  
 48"X661' RC PIPE CULVERT  
 1' LT. FWD. SKEW  
 RETAIN

STA. 96+50 IN PLACE  
 24"X80' RC PIPE CULVERT  
 TYPE RM DROP INLET IN MED.  
 RETAIN



STA. 99+00 IN PLACE  
 7'X5'X275' RC BOX CULVERT  
 RETAIN

STA. 105+00 IN PLACE  
 24"X80' RC PIPE CULVERT  
 TYPE RM DROP INLET IN MED.  
 RETAIN

STA. 110+75  
 END WRSF  
 IN CL MEDIAN

STA. 112+20  
 BEGIN WRSF  
 IN CL MEDIAN

STA. 123+00 IN PLACE  
 24"X92' RC PIPE CULVERT  
 TYPE RM DROP INLET IN MED.  
 RETAIN

STA. 96+74  
 END WRSF  
 IN CL MEDIAN  
 BEGIN EXCEPTION

STA. 97+54  
 BEGIN WRSF  
 IN CL MEDIAN  
 END EXCEPTION

STA. 113+48 IN PLACE  
 (2) IMPACT ATTENUATION BARRIERS  
 TYPE A - REMOVE

STA. 113+41 IN PLACE  
 24"X92' RC PIPE CULVERT  
 TYPE RM DROP INLET IN MED.  
 RETAIN

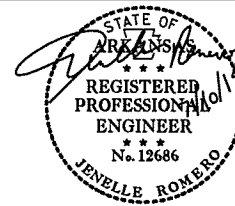
STA. 115+31 IN PLACE  
 TRP. 8'X8'X357' RC BOX BRIDGE  
 25° LT. FWD. SKEW  
 RETAIN

GUARDRAIL	GUARDRAIL (TYPE A)	TERMINAL ANCHOR POST (TYPE 1)	GUARDRAIL TERMINAL (TYPE 2)
	LF	EA	EA
STA. 107+53 - STA. 113+03 (RT. SHLDR.)	500		
STA. 109+90 - STA. 115+40 (LT. SHLDR.)	500		

NOTE:  
 CONTRACTOR TO VERIFY EXISTING CROSSING UTILITIES PRIOR TO CONSTRUCTION. EXERCISE CARE AND PRECAUTION WHILE WORKING IN THESE AREAS.

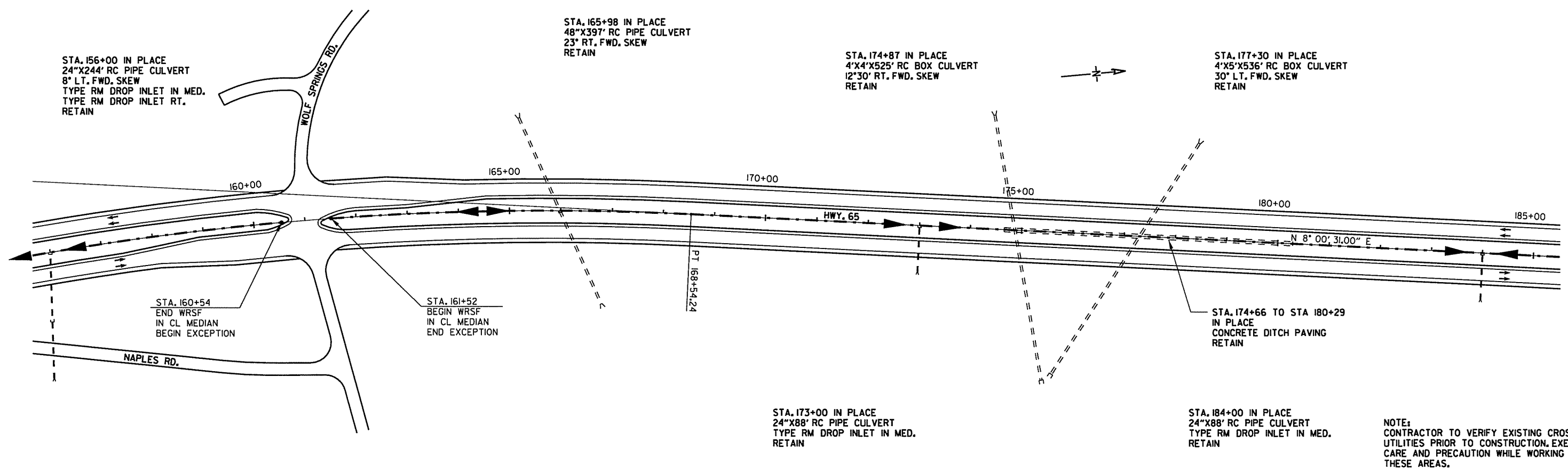
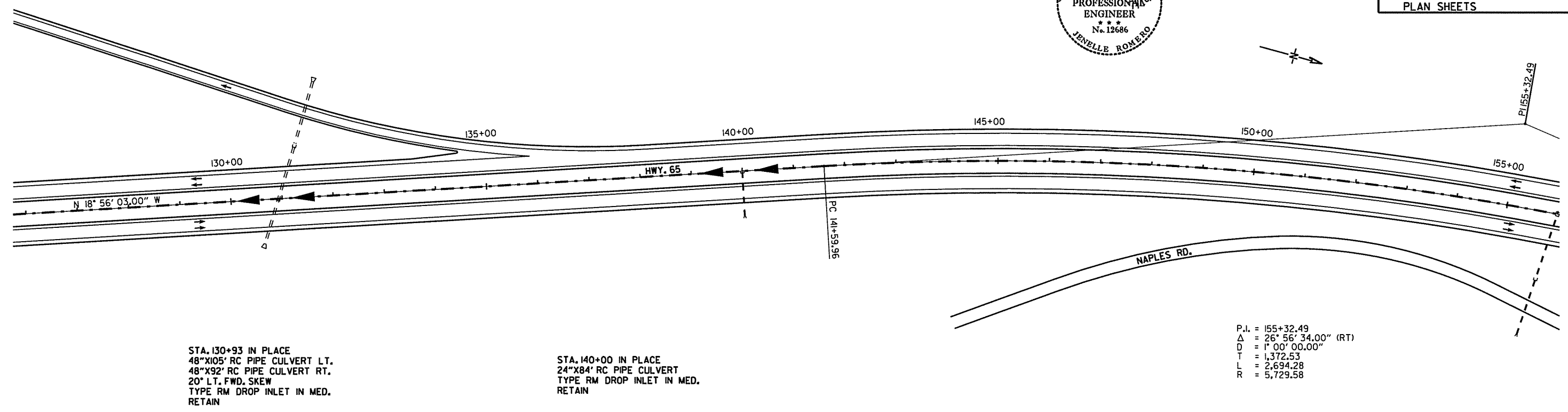
PLAN SHEETS  
 STA. 69+00 - STA. 126+00

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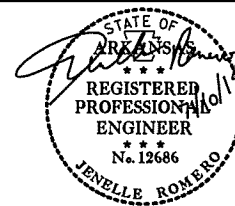
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS	
				6	ARK.	090379	29	50	
JOB NO.							090379	29	50

PLAN SHEETS



PLAN SHEETS  
STA. 126+00 - STA. 185+00

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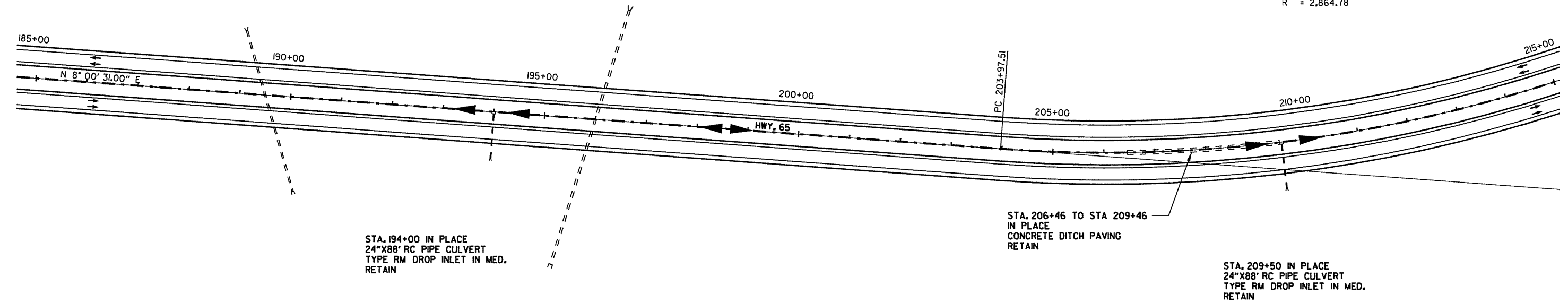
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 090379							30	50

PLAN SHEETS

STA. 189+50 IN PLACE  
36"x328' RC PIPE CULVERT  
20° RT. FWD. SKEW  
RETAIN

STA. 196+00 IN PLACE  
4'x4'x522' RC BOX CULVERT  
13° LT. FWD. SKEW  
RETAIN

P.I. = 215+48.82  
Δ = 43° 47' 20.00" (LT)  
D = 2° 00' 00.01"  
T = 1,151.31  
L = 2,189.44  
R = 2,864.78

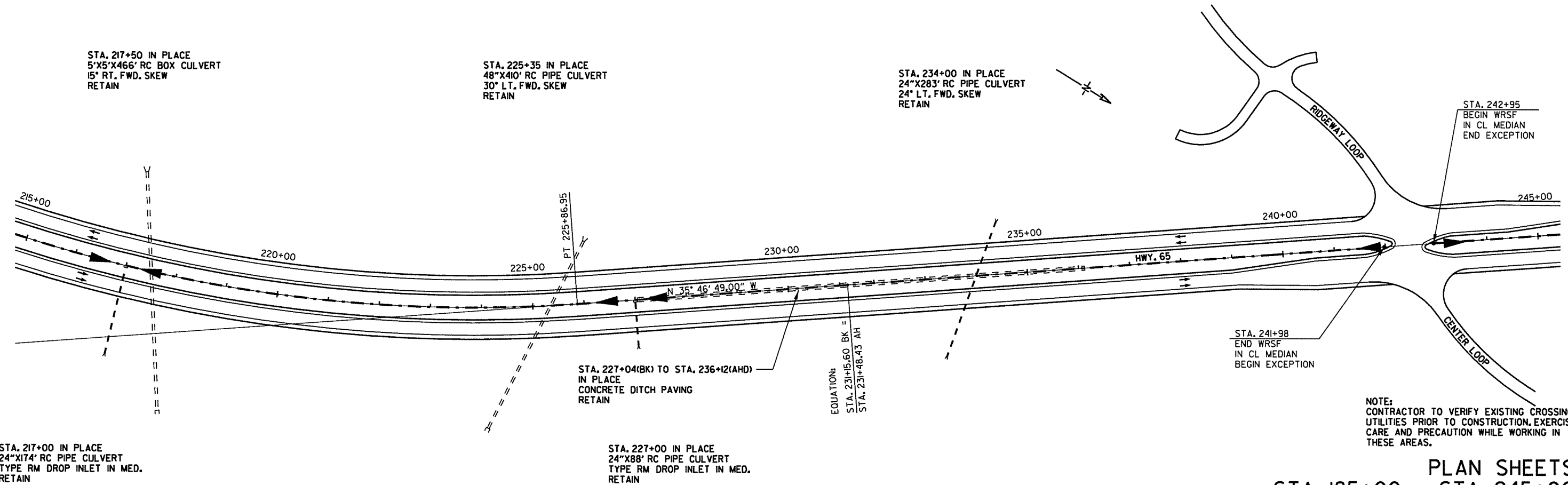


STA. 217+50 IN PLACE  
5'x5'x466' RC BOX CULVERT  
15° RT. FWD. SKEW  
RETAIN

STA. 225+35 IN PLACE  
48"x410' RC PIPE CULVERT  
30° LT. FWD. SKEW  
RETAIN

STA. 234+00 IN PLACE  
24"x283' RC PIPE CULVERT  
24° LT. FWD. SKEW  
RETAIN

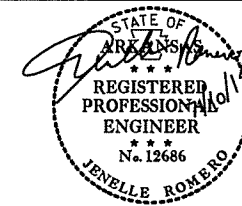
STA. 242+95  
BEGIN WRSF  
IN CL MEDIAN  
END EXCEPTION



NOTE:  
CONTRACTOR TO VERIFY EXISTING CROSSING  
UTILITIES PRIOR TO CONSTRUCTION. EXERCISE  
CARE AND PRECAUTION WHILE WORKING IN  
THESE AREAS.

PLAN SHEETS  
STA. 185+00 - STA. 245+00

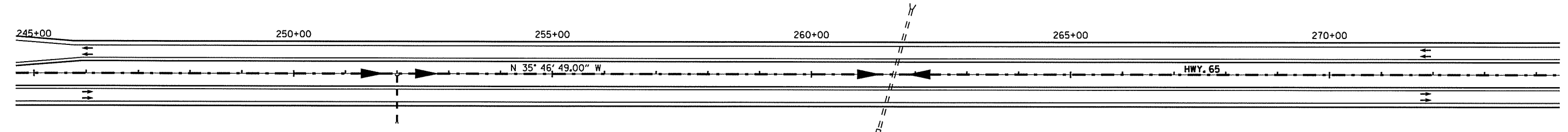
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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS	
				6	ARK.	090379	31	50	
JOB NO.							090379	31	50

PLAN SHEETS

STA. 261+59 IN PLACE  
5'X5'X240' RC BOX CULVERT  
15° LT. FWD. SKEW  
RETAIN



STA. 252+00 IN PLACE  
24\"X88' RC PIPE CULVERT  
TYPE RM DROP INLET IN MED.  
RETAIN

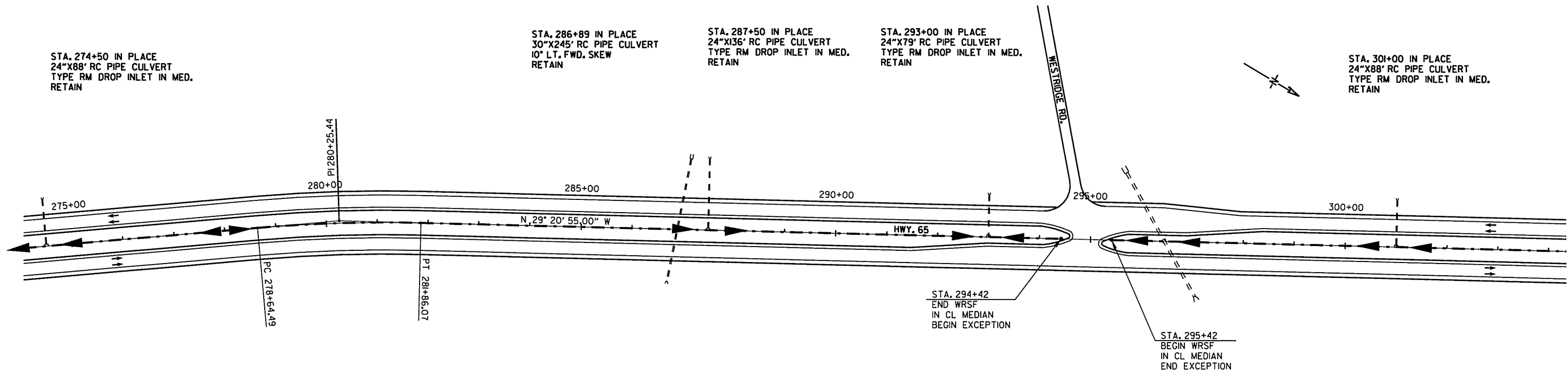
STA. 274+50 IN PLACE  
24\"X88' RC PIPE CULVERT  
TYPE RM DROP INLET IN MED.  
RETAIN

STA. 286+89 IN PLACE  
30\"X245' RC PIPE CULVERT  
10° LT. FWD. SKEW  
RETAIN

STA. 287+50 IN PLACE  
24\"X136' RC PIPE CULVERT  
TYPE RM DROP INLET IN MED.  
RETAIN

STA. 293+00 IN PLACE  
24\"X79' RC PIPE CULVERT  
TYPE RM DROP INLET IN MED.  
RETAIN

STA. 301+00 IN PLACE  
24\"X88' RC PIPE CULVERT  
TYPE RM DROP INLET IN MED.  
RETAIN



P.I. = 280+25.45  
Δ = 6° 25' 54.00" (RT)  
D = 1° 59' 59.99"  
L = 160.96  
T = 321.58  
R = 2,864.79

STA. 294+42  
END WRSF  
IN CL MEDIAN  
BEGIN EXCEPTION

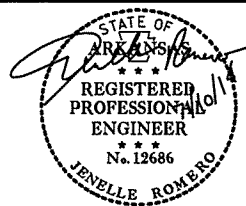
STA. 295+42  
BEGIN WRSF  
IN CL MEDIAN  
END EXCEPTION

STA. 296+45 IN PLACE  
54\"X277' RC PIPE CULVERT  
30° RT. FWD. SKEW  
TYPE RM DROP INLET IN MED.  
RETAIN

NOTE:  
CONTRACTOR TO VERIFY EXISTING CROSSING UTILITIES PRIOR TO CONSTRUCTION, EXERCISE CARE AND PRECAUTION WHILE WORKING IN THESE AREAS.

PLAN SHEETS  
STA. 245+00 - STA. 304+00

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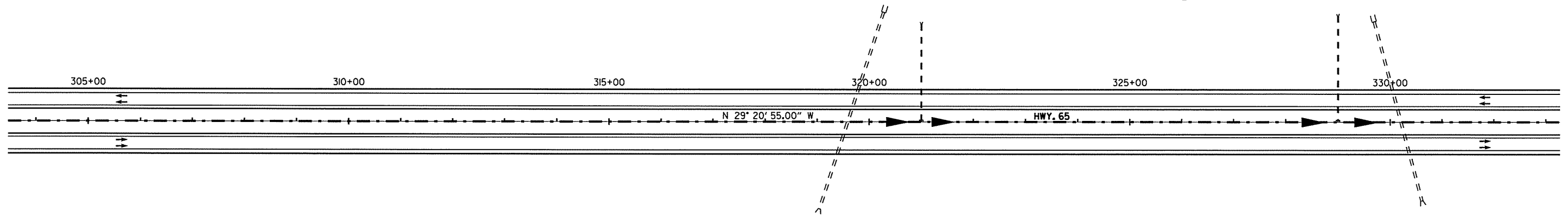


DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 090379							32	50

PLAN SHEETS

STA. 321+00 IN PLACE  
24"x184' RC PIPE CULVERT  
TYPE RM DROP INLET IN MED.  
RETAIN

STA. 329+00 IN PLACE  
24"x200' RC PIPE CULVERT  
TYPE RM DROP INLET IN MED.  
RETAIN



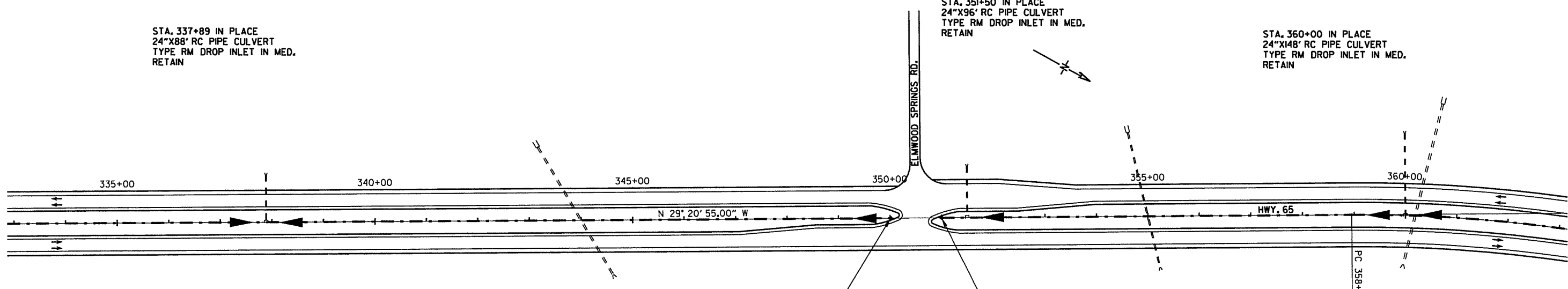
STA. 319+59 IN PLACE  
54"x397' RC PIPE CULVERT  
18° LT. FWD. SKEW  
RETAIN

STA. 330+21 IN PLACE  
54"x356' RC PIPE CULVERT  
15° RT. FWD. SKEW  
RETAIN

STA. 337+89 IN PLACE  
24"x88' RC PIPE CULVERT  
TYPE RM DROP INLET IN MED.  
RETAIN

STA. 351+50 IN PLACE  
24"x96' RC PIPE CULVERT  
TYPE RM DROP INLET IN MED.  
RETAIN

STA. 360+00 IN PLACE  
24"x148' RC PIPE CULVERT  
TYPE RM DROP INLET IN MED.  
RETAIN



STA. 350+01  
END WRSF  
IN CL MEDIAN  
BEGIN EXCEPTION

STA. 351+00  
BEGIN WRSF  
IN CL MEDIAN  
END EXCEPTION

STA. 344+00 IN PLACE  
36"x288' RC PIPE CULVERT  
30° RT. FWD. SKEW  
RETAIN

STA. 355+00 IN PLACE  
30"x270' RC PIPE CULVERT  
13° RT. FWD. SKEW  
RETAIN

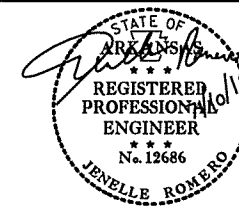
STA. 360+19 IN PLACE  
42"x322' RC PIPE CULVERT  
12° LT. FWD. SKEW  
RETAIN

NOTE:  
CONTRACTOR TO VERIFY EXISTING CROSSING  
UTILITIES PRIOR TO CONSTRUCTION, EXERCISE  
CARE AND PRECAUTION WHILE WORKING IN  
THESE AREAS.

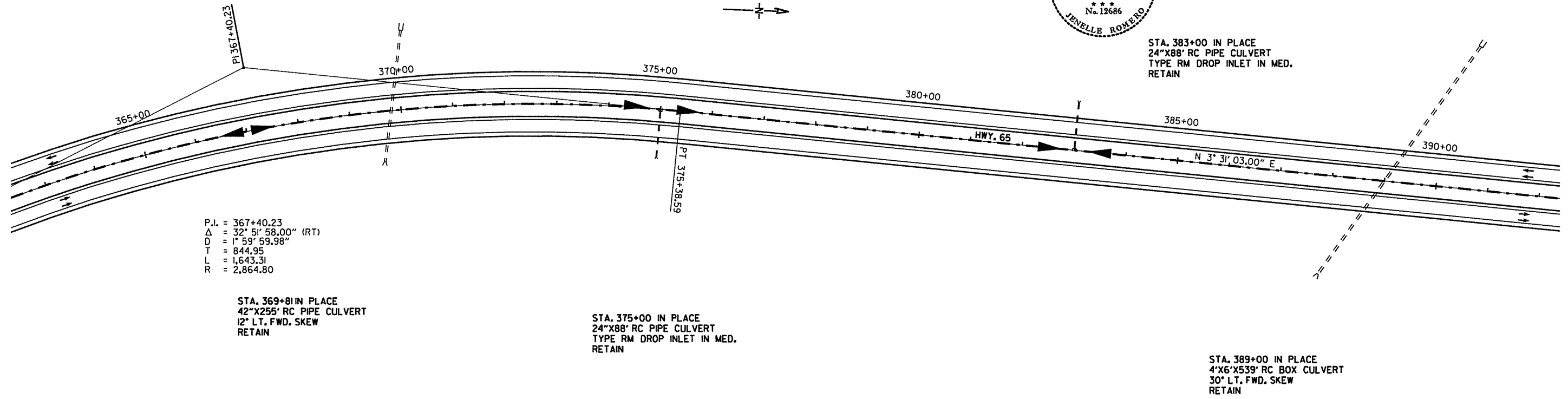
PLAN SHEETS  
STA. 304+00 - STA. 363+00

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	090379	33	50
JOB NO.							PLAN SHEETS	



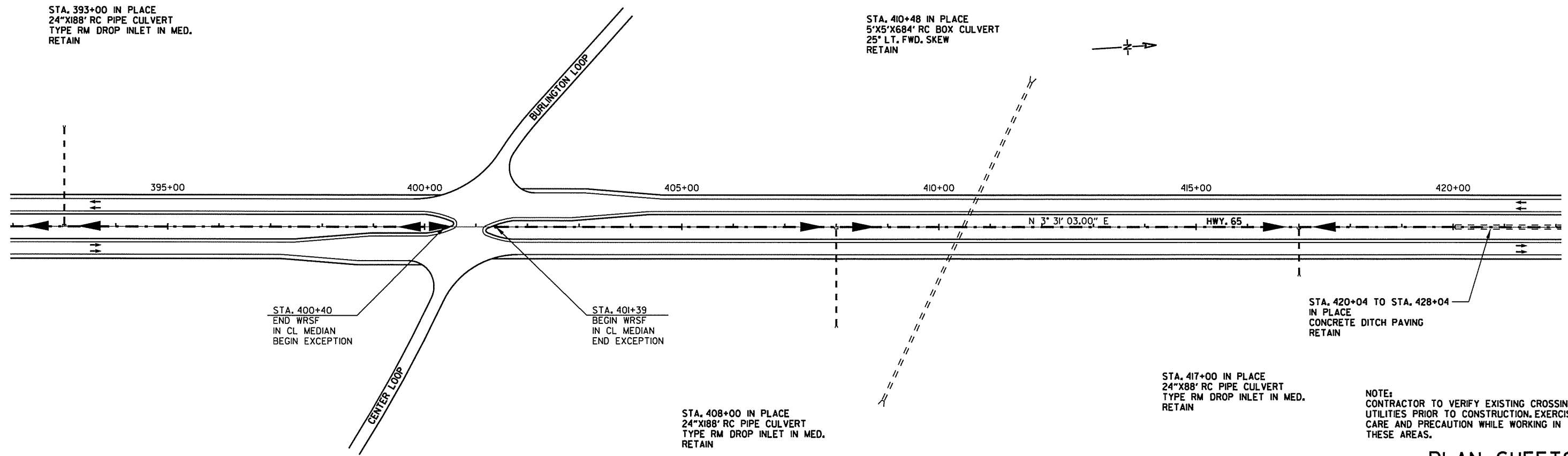
P.I. = 367+40.23  
 $\Delta$  = 32° 51' 58.00" (RT)  
 D = 1° 59' 59.98"  
 T = 844.95  
 L = 1,643.31  
 R = 2,864.80

STA. 369+81 IN PLACE  
 42"X255' RC PIPE CULVERT  
 12° LT. FWD. SKEW  
 RETAIN

STA. 375+00 IN PLACE  
 24"X88' RC PIPE CULVERT  
 TYPE RM DROP INLET IN MED.  
 RETAIN

STA. 383+00 IN PLACE  
 24"X88' RC PIPE CULVERT  
 TYPE RM DROP INLET IN MED.  
 RETAIN

STA. 389+00 IN PLACE  
 4'X6'X539' RC BOX CULVERT  
 30° LT. FWD. SKEW  
 RETAIN



STA. 393+00 IN PLACE  
 24"X188' RC PIPE CULVERT  
 TYPE RM DROP INLET IN MED.  
 RETAIN

STA. 410+48 IN PLACE  
 5'X5'X684' RC BOX CULVERT  
 25° LT. FWD. SKEW  
 RETAIN

STA. 400+40  
 END WRSF  
 IN CL MEDIAN  
 BEGIN EXCEPTION

STA. 401+39  
 BEGIN WRSF  
 IN CL MEDIAN  
 END EXCEPTION

STA. 408+00 IN PLACE  
 24"X188' RC PIPE CULVERT  
 TYPE RM DROP INLET IN MED.  
 RETAIN

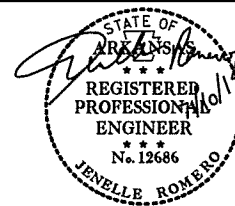
STA. 417+00 IN PLACE  
 24"X88' RC PIPE CULVERT  
 TYPE RM DROP INLET IN MED.  
 RETAIN

STA. 420+04 TO STA. 428+04  
 IN PLACE  
 CONCRETE DITCH PAVING  
 RETAIN

NOTE:  
 CONTRACTOR TO VERIFY EXISTING CROSSING  
 UTILITIES PRIOR TO CONSTRUCTION. EXERCISE  
 CARE AND PRECAUTION WHILE WORKING IN  
 THESE AREAS.

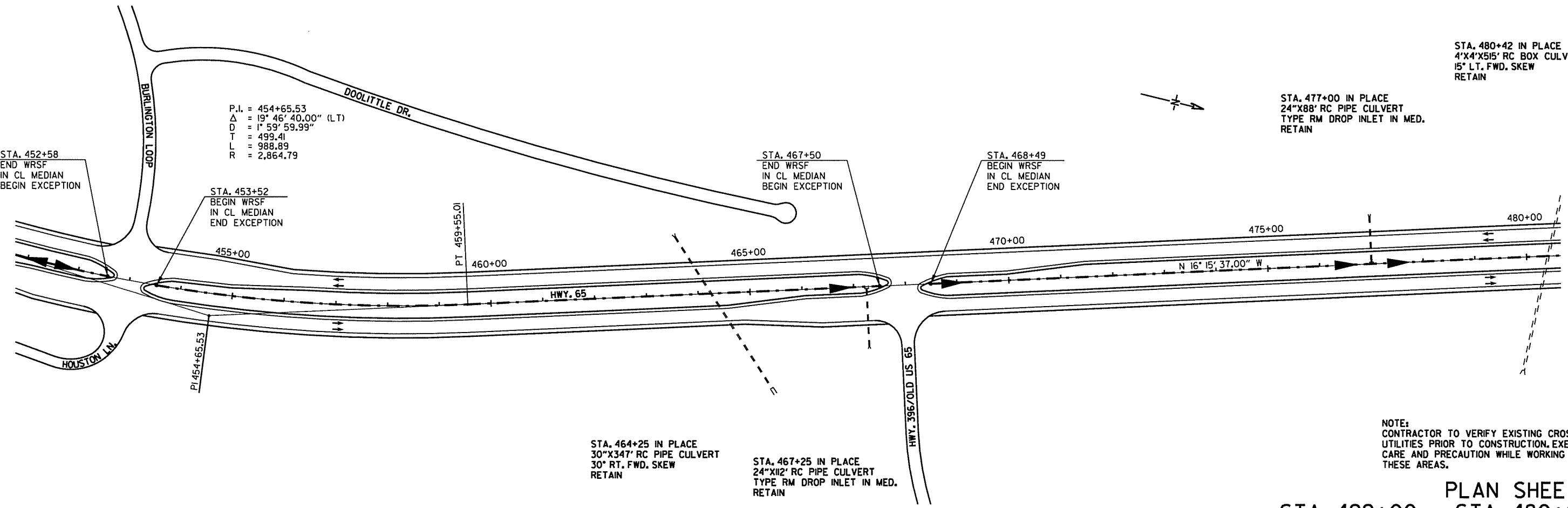
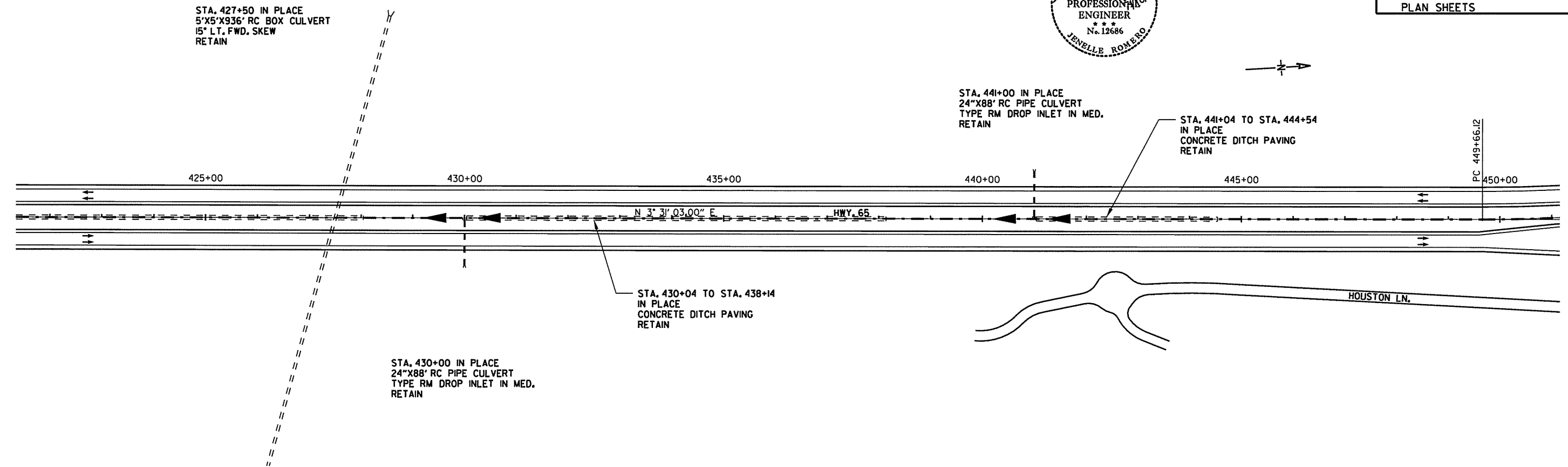
PLAN SHEETS  
 STA. 363+00 - STA. 422+00

7/9/2014 14:34:41 PM P:\00039443\CADD\PAV\HWY65-6.dgn



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 090379							34	50

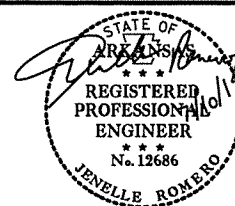
PLAN SHEETS



NOTE:  
CONTRACTOR TO VERIFY EXISTING CROSSING UTILITIES PRIOR TO CONSTRUCTION. EXERCISE CARE AND PRECAUTION WHILE WORKING IN THESE AREAS.

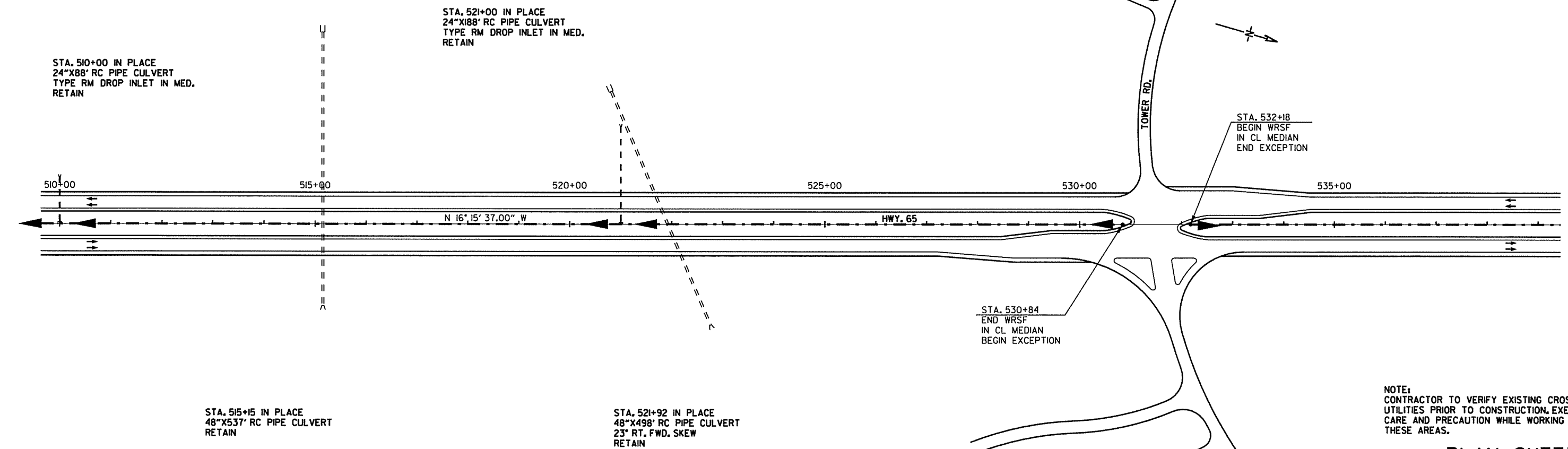
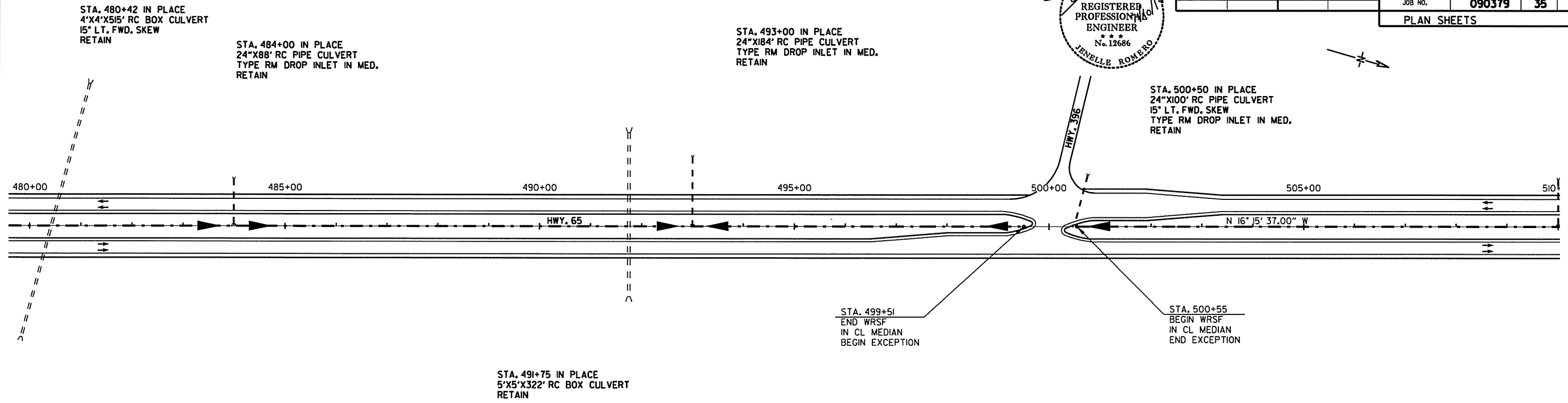
PLAN SHEETS  
STA. 422+00 - STA. 480+00

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO.						090379	35	50

PLAN SHEETS

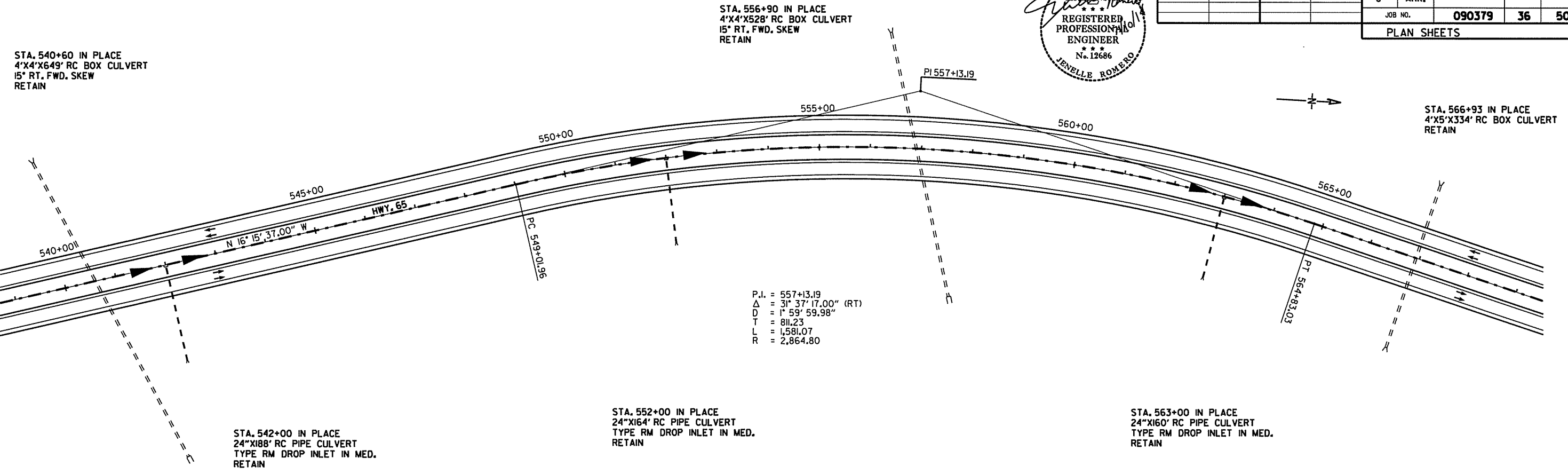
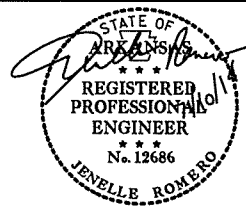


NOTE:  
CONTRACTOR TO VERIFY EXISTING CROSSING UTILITIES PRIOR TO CONSTRUCTION. EXERCISE CARE AND PRECAUTION WHILE WORKING IN THESE AREAS.

PLAN SHEETS  
STA. 480+00 - STA. 539+00

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 090379							36	50



P.I. = 557+13.19  
 $\Delta$  = 31° 37' 17.00" (RT)  
D = 1° 59' 59.98"  
T = 811.23  
L = 1,581.07  
R = 2,864.80

STA. 540+60 IN PLACE  
4'X4'X649' RC BOX CULVERT  
15° RT. FWD. SKEW  
RETAIN

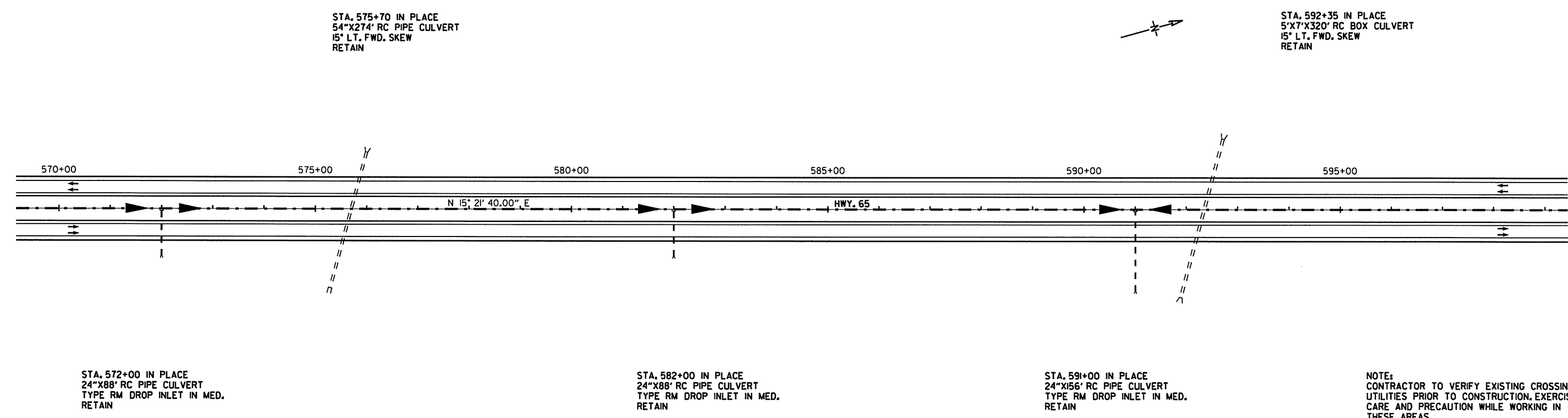
STA. 556+90 IN PLACE  
4'X4'X528' RC BOX CULVERT  
15° RT. FWD. SKEW  
RETAIN

STA. 566+93 IN PLACE  
4'X5'X334' RC BOX CULVERT  
RETAIN

STA. 542+00 IN PLACE  
24"X188' RC PIPE CULVERT  
TYPE RM DROP INLET IN MED.  
RETAIN

STA. 552+00 IN PLACE  
24"X164' RC PIPE CULVERT  
TYPE RM DROP INLET IN MED.  
RETAIN

STA. 563+00 IN PLACE  
24"X160' RC PIPE CULVERT  
TYPE RM DROP INLET IN MED.  
RETAIN



STA. 575+70 IN PLACE  
54"X274' RC PIPE CULVERT  
15° LT. FWD. SKEW  
RETAIN

STA. 592+35 IN PLACE  
5'X7'X320' RC BOX CULVERT  
15° LT. FWD. SKEW  
RETAIN

STA. 572+00 IN PLACE  
24"X88' RC PIPE CULVERT  
TYPE RM DROP INLET IN MED.  
RETAIN

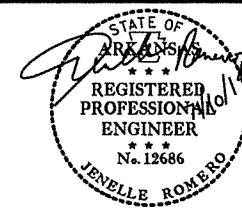
STA. 582+00 IN PLACE  
24"X88' RC PIPE CULVERT  
TYPE RM DROP INLET IN MED.  
RETAIN

STA. 591+00 IN PLACE  
24"X156' RC PIPE CULVERT  
TYPE RM DROP INLET IN MED.  
RETAIN

NOTE:  
CONTRACTOR TO VERIFY EXISTING CROSSING UTILITIES PRIOR TO CONSTRUCTION. EXERCISE CARE AND PRECAUTION WHILE WORKING IN THESE AREAS.

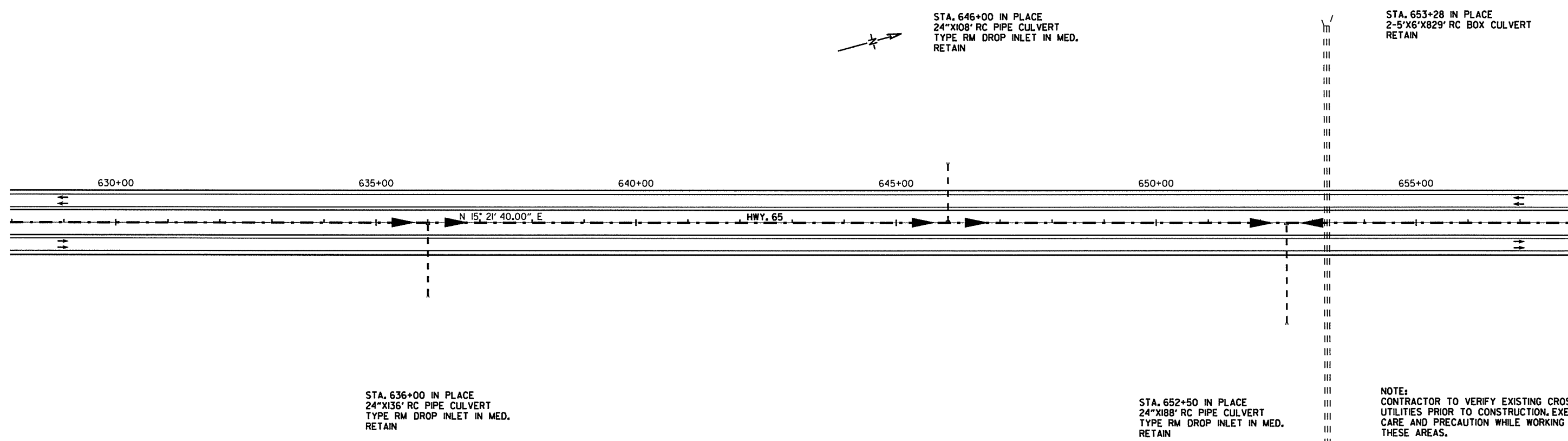
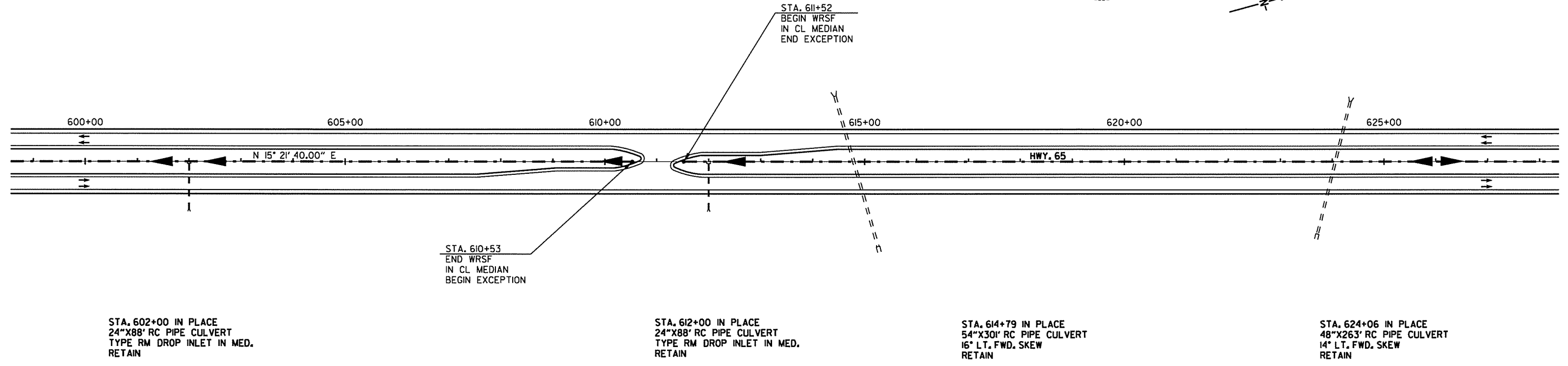
PLAN SHEETS  
STA. 539+00 - STA. 599+00

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 090379							37	50

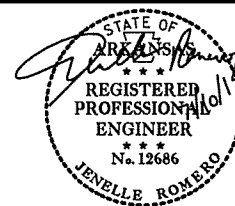
PLAN SHEETS



NOTE:  
CONTRACTOR TO VERIFY EXISTING CROSSING UTILITIES PRIOR TO CONSTRUCTION, EXERCISE CARE AND PRECAUTION WHILE WORKING IN THESE AREAS.

PLAN SHEETS  
STA. 599+00 - STA. 658+00

1/9/2014 14:34:42 PM P:\00039443\CAADD\PA\XHWY65-10.dgn

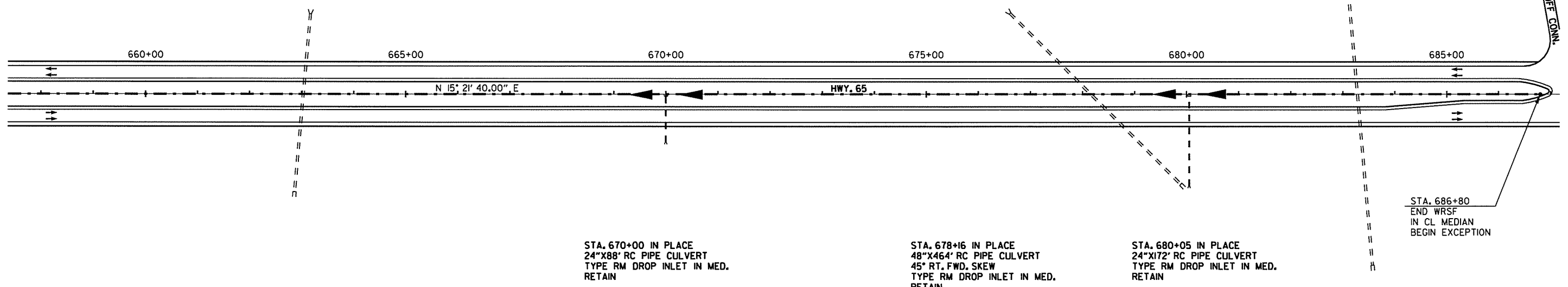


DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 090379							38	50

PLAN SHEETS

STA. 663+03 IN PLACE  
48"x343' RC PIPE CULVERT  
5° LT. FWD. SKEW  
RETAIN

STA. 683+28 IN PLACE  
4'x4'x577' RC BOX CULVERT  
5° RT. FWD. SKEW  
RETAIN



STA. 670+00 IN PLACE  
24"x88' RC PIPE CULVERT  
TYPE RM DROP INLET IN MED.  
RETAIN

STA. 678+16 IN PLACE  
48"x464' RC PIPE CULVERT  
45° RT. FWD. SKEW  
TYPE RM DROP INLET IN MED.  
RETAIN

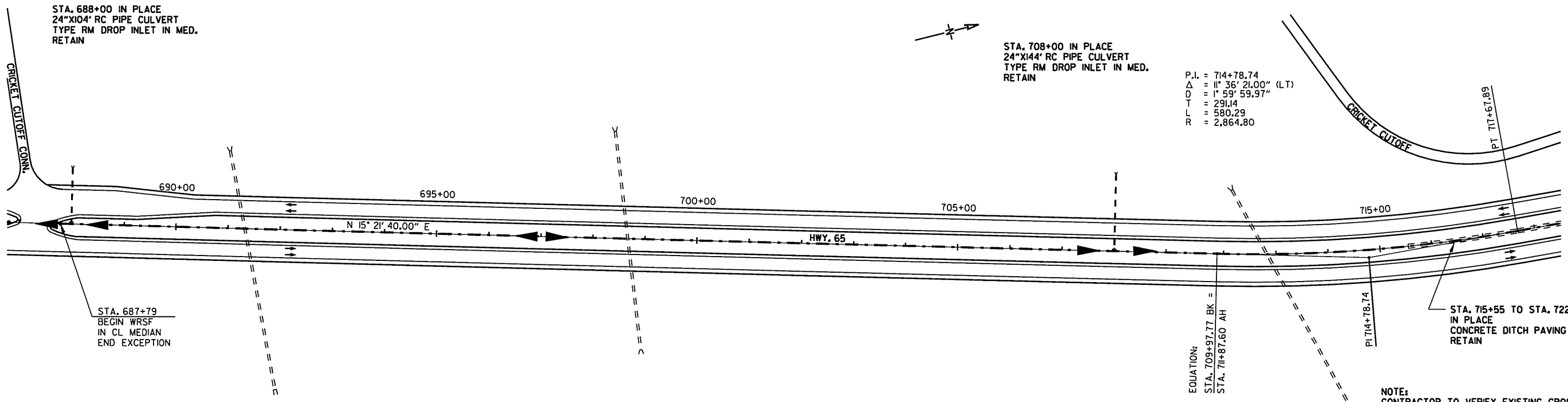
STA. 680+05 IN PLACE  
24"x172' RC PIPE CULVERT  
TYPE RM DROP INLET IN MED.  
RETAIN

STA. 686+80  
END WRSF  
IN CL MEDIAN  
BEGIN EXCEPTION

STA. 688+00 IN PLACE  
24"x104' RC PIPE CULVERT  
TYPE RM DROP INLET IN MED.  
RETAIN

STA. 708+00 IN PLACE  
24"x144' RC PIPE CULVERT  
TYPE RM DROP INLET IN MED.  
RETAIN

P.I. = 714+78.74  
Δ = 11° 36' 21.00" (LT)  
D = 1' 59' 59.97"  
T = 291.14  
L = 580.29  
R = 2,864.80



STA. 687+79  
BEGIN WRSF  
IN CL MEDIAN  
END EXCEPTION

STA. 691+32 IN PLACE  
48"x466' RC PIPE CULVERT  
12° RT. FWD. SKEW  
RETAIN

STA. 698+67 IN PLACE  
48"x422' RC PIPE CULVERT  
8° RT. FWD. SKEW  
RETAIN

STA. 712+83 IN PLACE  
48"x475' RC PIPE CULVERT  
28° RT. FWD. SKEW  
RETAIN

NOTE:  
CONTRACTOR TO VERIFY EXISTING CROSSING  
UTILITIES PRIOR TO CONSTRUCTION, EXERCISE  
CARE AND PRECAUTION WHILE WORKING IN  
THESE AREAS.

PLAN SHEETS  
STA. 658+00 - STA. 718+00

1/9/2014 14:34:43 PM P:\00039443\CADD\PA\NH\765-11.dgn

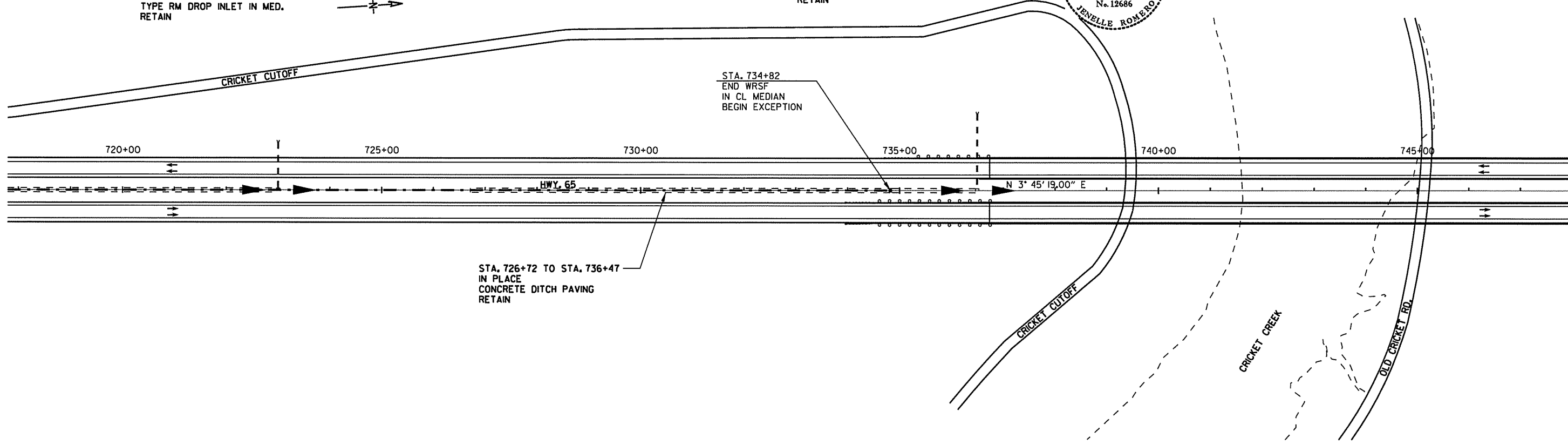
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 090379							39	50

STATE OF ARKANSAS  
 REGISTERED PROFESSIONAL ENGINEER  
 JENELLE ROMERO  
 No. 12686

PLAN SHEETS

STA. 723+00 IN PLACE  
 24"x88' RC PIPE CULVERT  
 TYPE RM DROP INLET IN MED.  
 RETAIN

STA. 736+50 IN PLACE  
 24"x144' RC PIPE CULVERT  
 TYPE RM DROP INLET IN MED.  
 RETAIN



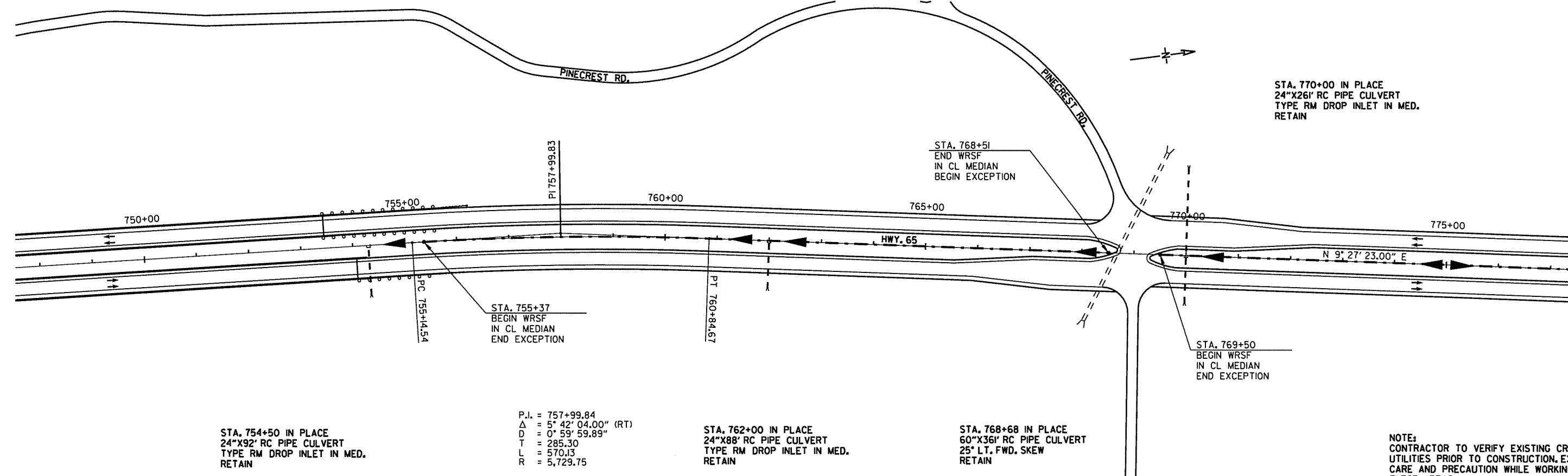
STA. 754+50 IN PLACE  
 24"x92' RC PIPE CULVERT  
 TYPE RM DROP INLET IN MED.  
 RETAIN

P.I. = 757+99.84  
 $\Delta$  = 5° 42' 04.00" (RT)  
 $D$  = 0° 59' 59.89"  
 $L$  = 285.30  
 $T$  = 570.13  
 $R$  = 5,729.75

STA. 762+00 IN PLACE  
 24"x88' RC PIPE CULVERT  
 TYPE RM DROP INLET IN MED.  
 RETAIN

STA. 768+68 IN PLACE  
 60"x36' RC PIPE CULVERT  
 25° LT. FWD. SKEW  
 RETAIN

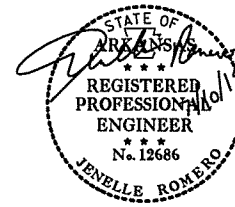
STA. 770+00 IN PLACE  
 24"x26' RC PIPE CULVERT  
 TYPE RM DROP INLET IN MED.  
 RETAIN



NOTE:  
 CONTRACTOR TO VERIFY EXISTING CROSSING UTILITIES PRIOR TO CONSTRUCTION, EXERCISE CARE AND PRECAUTION WHILE WORKING IN THESE AREAS.

PLAN SHEETS  
 STA. 718+00 - STA. 777+00

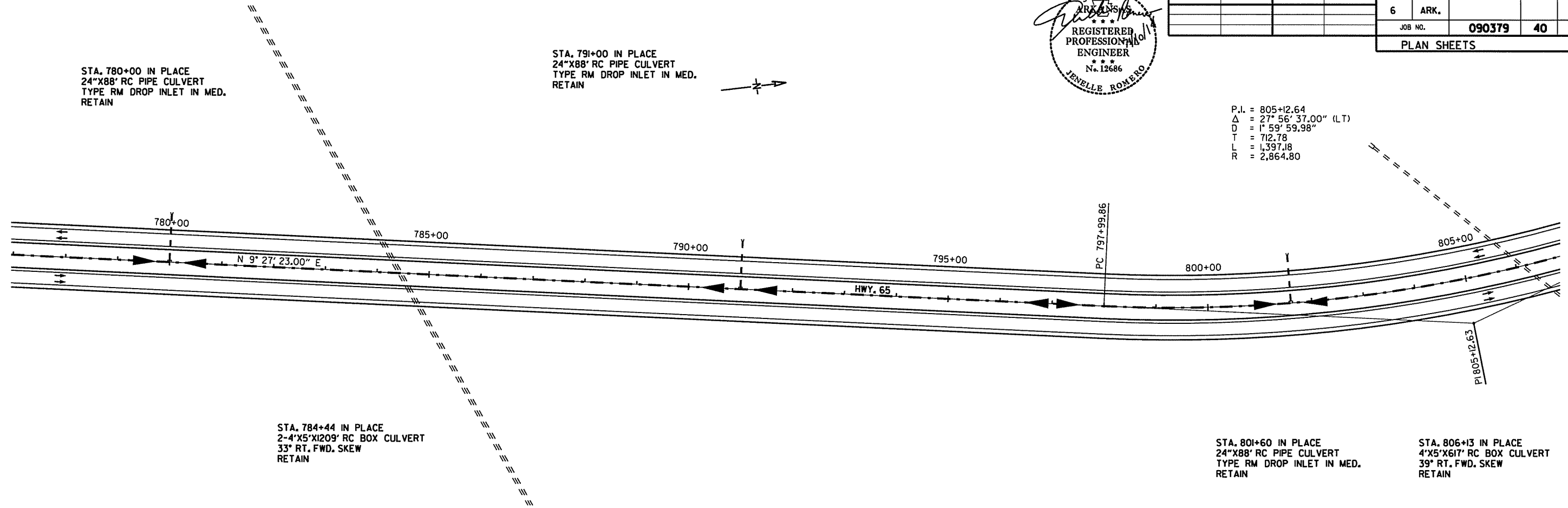
7/9/2014 14:33:43 PM P:\10003943\CAADD\PAV\HWY\65-12.dgn



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		40	50
JOB NO. 090379								

PLAN SHEETS

P.I. = 805+12.64  
 $\Delta$  = 27° 56' 37.00" (LT)  
 $D$  = 1' 59' 59.98"  
 $T$  = 712.78  
 $L$  = 1,397.18  
 $R$  = 2,864.80



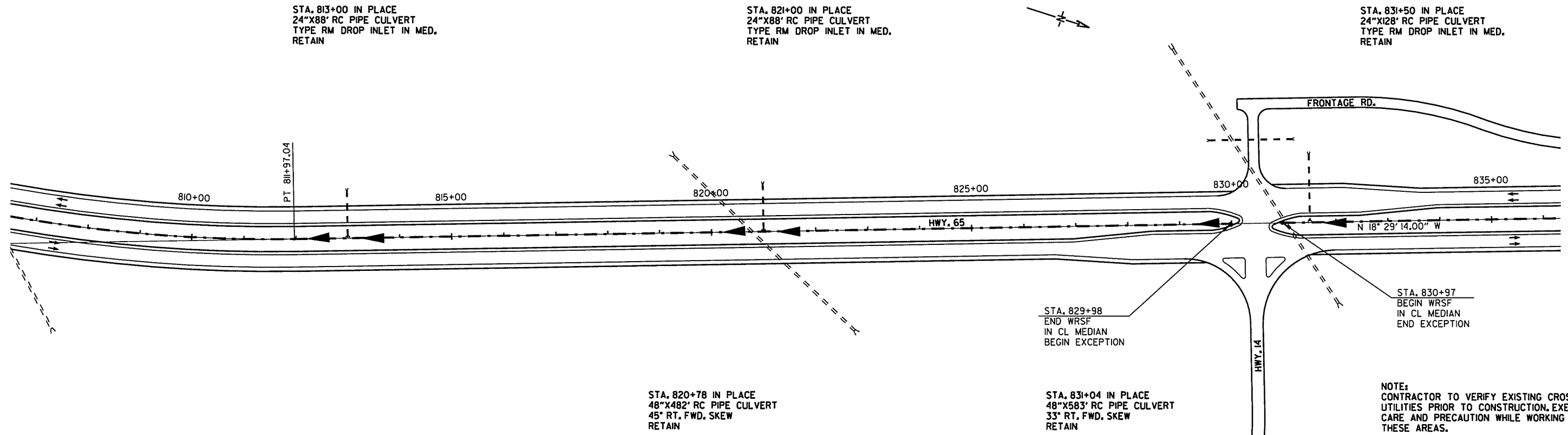
STA. 780+00 IN PLACE  
 24"X88' RC PIPE CULVERT  
 TYPE RM DROP INLET IN MED.  
 RETAIN

STA. 791+00 IN PLACE  
 24"X88' RC PIPE CULVERT  
 TYPE RM DROP INLET IN MED.  
 RETAIN

STA. 784+44 IN PLACE  
 2-4'X5'X1209' RC BOX CULVERT  
 33° RT. FWD. SKEW  
 RETAIN

STA. 801+60 IN PLACE  
 24"X88' RC PIPE CULVERT  
 TYPE RM DROP INLET IN MED.  
 RETAIN

STA. 806+13 IN PLACE  
 4'X5'X617' RC BOX CULVERT  
 39° RT. FWD. SKEW  
 RETAIN



STA. 813+00 IN PLACE  
 24"X88' RC PIPE CULVERT  
 TYPE RM DROP INLET IN MED.  
 RETAIN

STA. 821+00 IN PLACE  
 24"X88' RC PIPE CULVERT  
 TYPE RM DROP INLET IN MED.  
 RETAIN

STA. 831+50 IN PLACE  
 24"X128' RC PIPE CULVERT  
 TYPE RM DROP INLET IN MED.  
 RETAIN

STA. 820+78 IN PLACE  
 48"X482' RC PIPE CULVERT  
 45° RT. FWD. SKEW  
 RETAIN

STA. 829+98  
 END WRSF  
 IN CL MEDIAN  
 BEGIN EXCEPTION

STA. 831+04 IN PLACE  
 48"X583' RC PIPE CULVERT  
 33° RT. FWD. SKEW  
 RETAIN

STA. 830+97  
 BEGIN WRSF  
 IN CL MEDIAN  
 END EXCEPTION

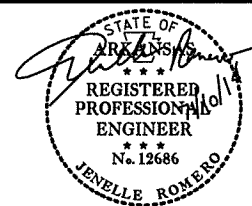
NOTE:  
 CONTRACTOR TO VERIFY EXISTING CROSSING UTILITIES PRIOR TO CONSTRUCTION. EXERCISE CARE AND PRECAUTION WHILE WORKING IN THESE AREAS.

PLAN SHEETS  
 STA. 777+00 - STA. 836+00

7/19/2014 14:43:43 PM

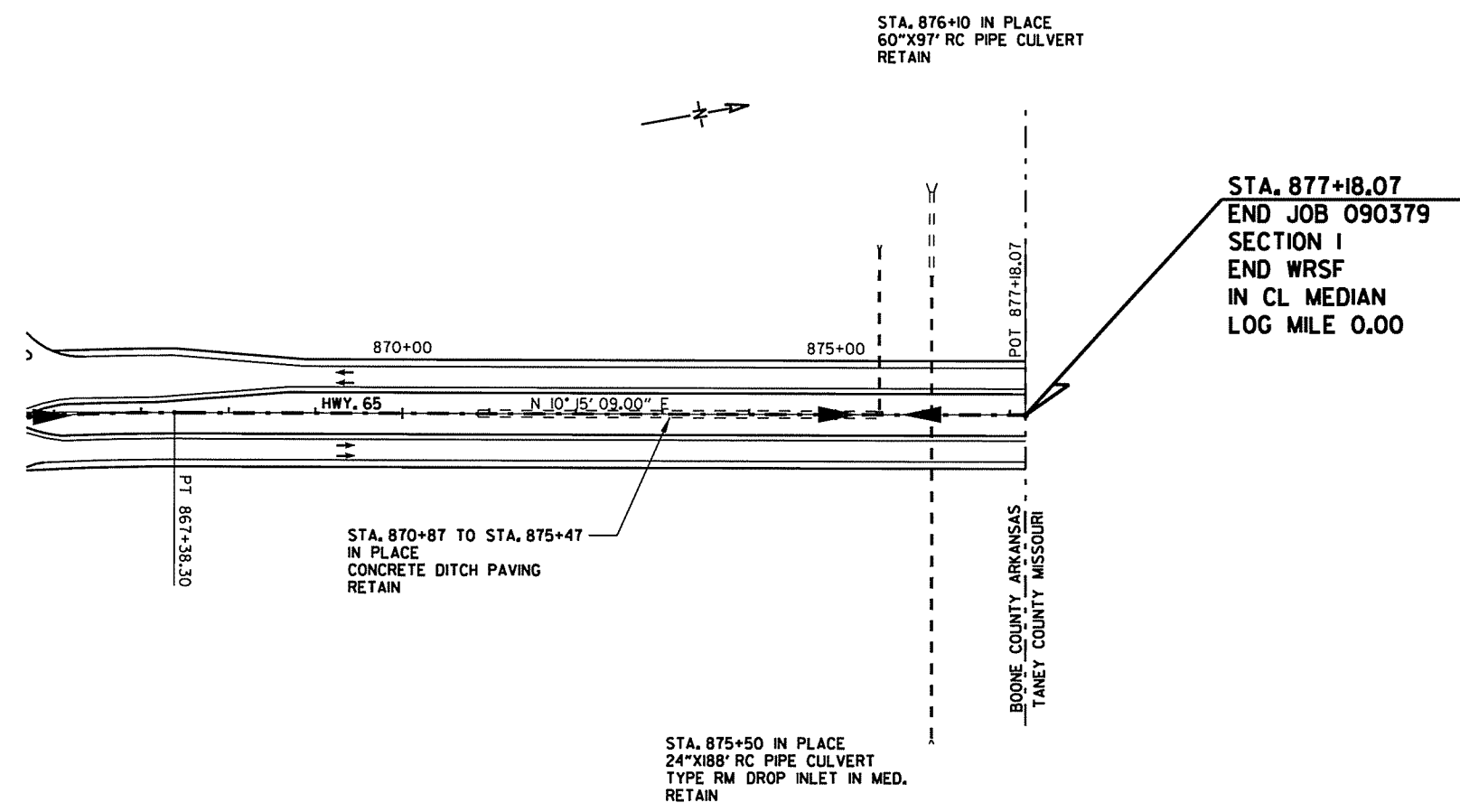
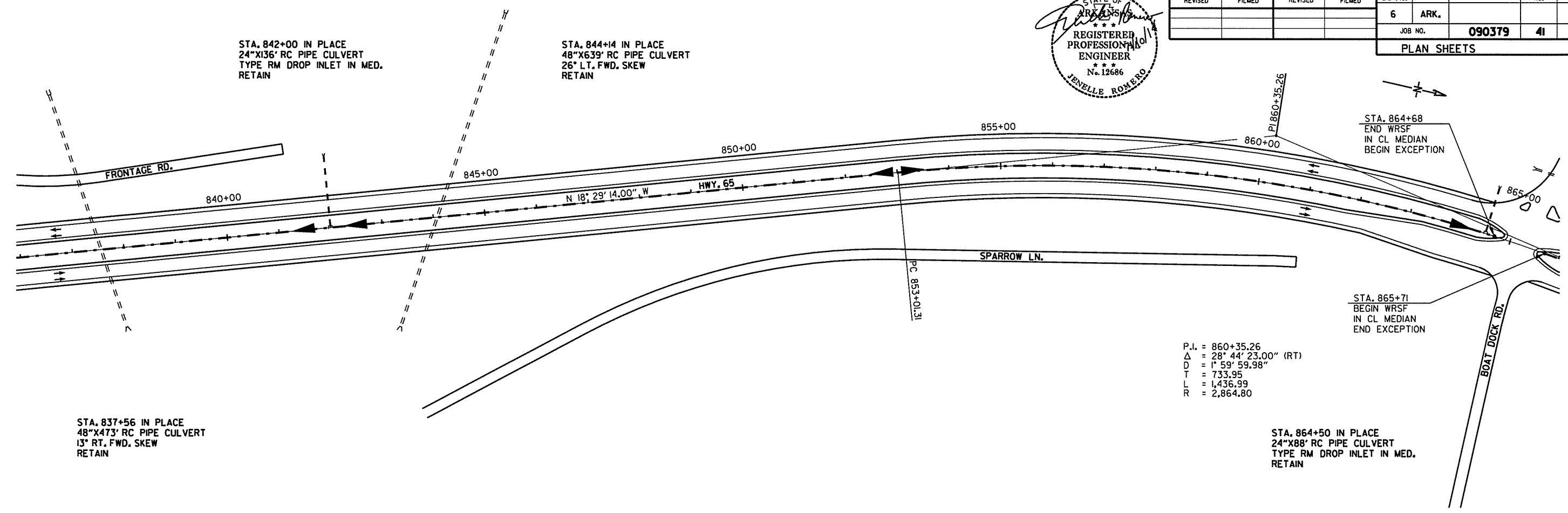
P:\0003943\CADD\PAV\HWY65-13.dwg





DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 090379							41	50

PLAN SHEETS

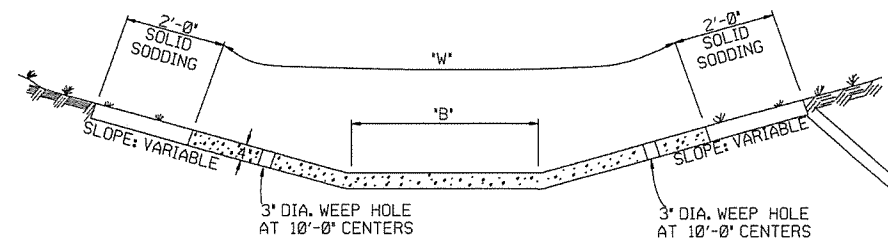


NOTE:  
CONTRACTOR TO VERIFY EXISTING CROSSING UTILITIES PRIOR TO CONSTRUCTION, EXERCISE CARE AND PRECAUTION WHILE WORKING IN THESE AREAS.

PLAN SHEETS  
STA. 836+00 - STA. 877+18.07

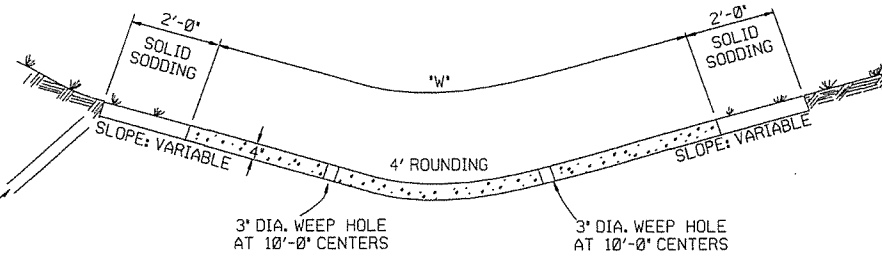
1/9/2014 14:33:44 PM P:\10003943\CADD\PA\1\HWY65-14.dgn

REFER TO TABULATION OF QUANTITIES FOR 'W' & 'B' DIMENSIONS



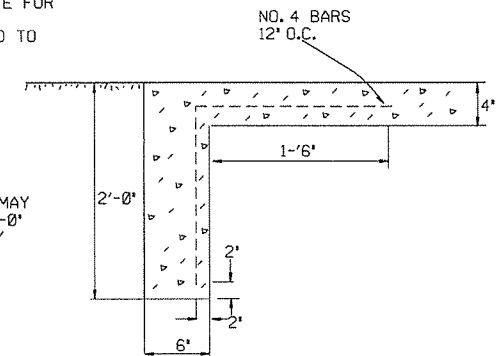
TYPE A

REFER TO TABULATION OF QUANTITIES FOR 'W' DIMENSIONS

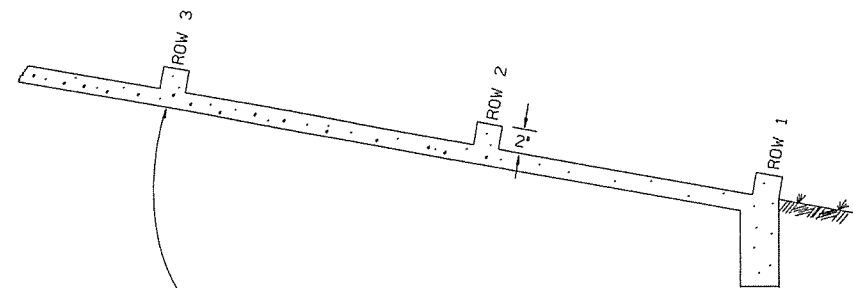


TYPE B

THE STEEL AND ADDITIONAL CONCRETE FOR THE WALLS SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID FOR 'CONCRETE DITCH PAVING.'

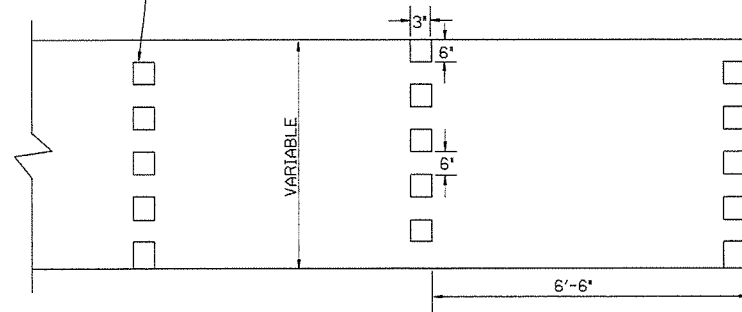


TOE WALL DETAIL FOR CONCRETE DITCH PAVING



NUMBER OF ELEMENTS PER ROW VARIES WITH WIDTH OF PAVING SPECIFIED

ENERGY DISSIPATORS TO BE USED FOR THE ENTIRE LENGTH OF DITCH WHEN SLOPE OF DITCH PAVING EXCEEDS 7%. THE DISSIPATORS WILL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID FOR CONCRETE DITCH PAVING.



ENERGY DISSIPATORS  
(NO SCALE)

GENERAL NOTES:

THE FULL WIDTH OF EACH SECTION SHALL BE POURED MONOLITHICALLY.

TOE WALLS TO BE CONSTRUCTED FULL WIDTH AT EACH END OF DITCH PAVING, AND POURED MONOLITHICALLY.

SOLID SOD ALONG DITCH PAVING TO BE PLACED WITHIN 14 DAYS OF DITCH PAVING CONSTRUCTION.

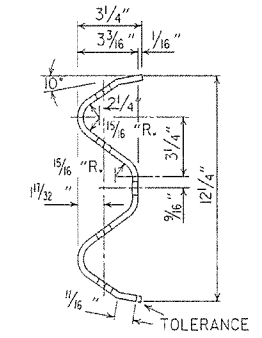
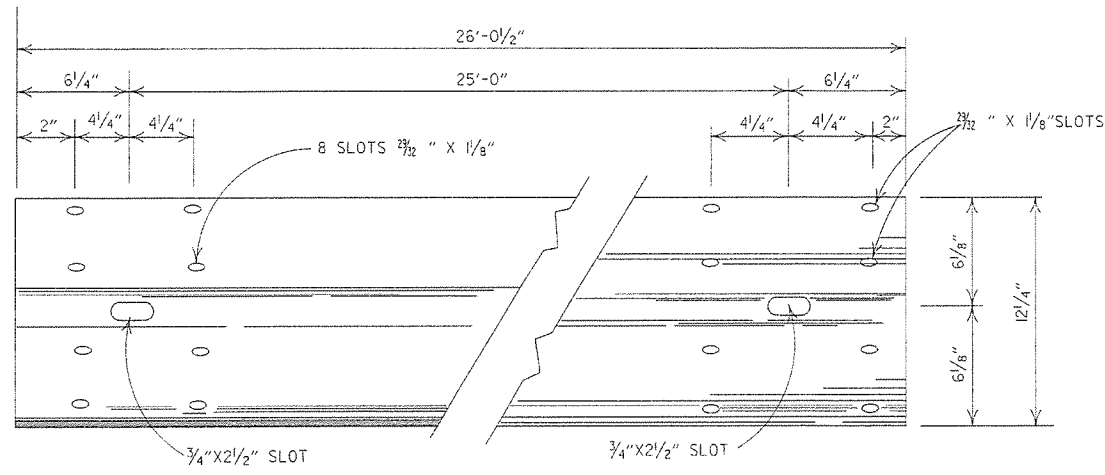
1" WIDE TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE DITCH PAVING AT 45' INTERVALS. THE SPACE SHALL BE FILLED WITH APPROVED JOINT FILLER COMPLYING WITH AASHTO M213.

11-17-10	ADDED GENERAL NOTE	
6-2-94	ADDED GENERAL NOTE ABOUT SOLID SODDING	
11-30-8	ELIMINATED MIN. ROWS OF ELEMENTS	111-30-89
7-15-88	REVISED DISSIPATOR NOTE	653-7-15-88
4-3-87	REVISED ENERGY DISSIPATOR	671-4-3-87
1-9-87	MODIFIED NOTE ON ENERGY DISS.	532-1-9-87
11-3-86	ADDED NOTE TO ENERGY DISS.	599-12-1-86
11-1-84	ENERGY DISSIPATOR DETAILS	508-11-1-84
11-1-84	ADDED EXCAVATION DETAILS	
10-2-72	TYPED A & B	
10-2-72	REVISED AND REDRAWN	508-10-2-72
DATE	REVISION	DATE FILM'D

ARKANSAS STATE HIGHWAY COMMISSION

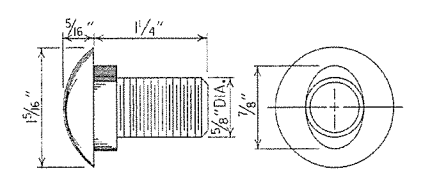
CONCRETE DITCH PAVING

STANDARD DRAWING CDP-1

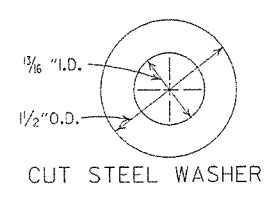


DETAILS OF W-BEAM GUARD RAIL

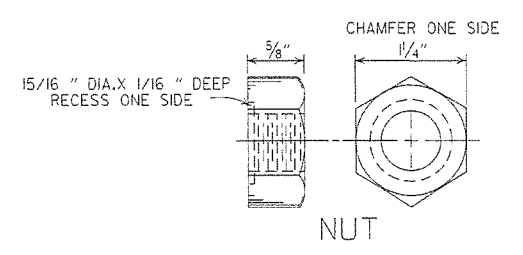
RAIL SECTION OF CLOSELY SIMILAR DIMENSIONS AND COMPARABLE STRENGTH MAY BE SUBSTITUTED IF APPROVED BY THE ENGINEER.



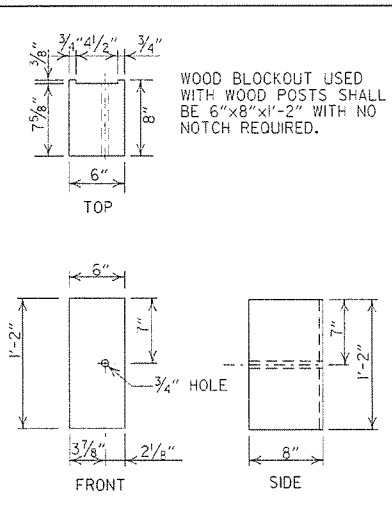
SPLICE BOLT  
POST BOLT - SAME EXCEPT LENGTH



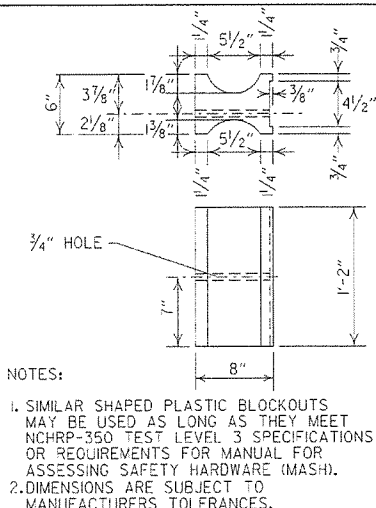
CUT STEEL WASHER



NUT

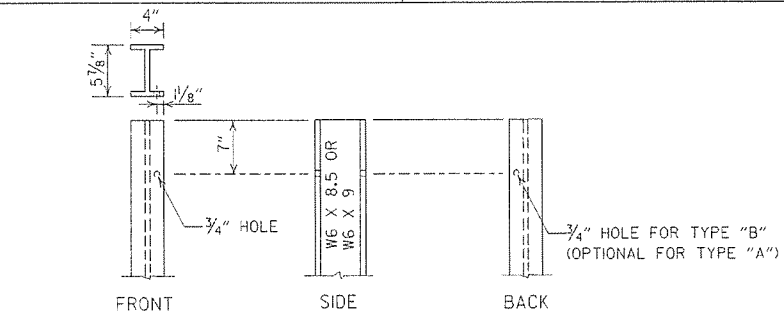


WOOD BLOCKOUT (W-BEAM)

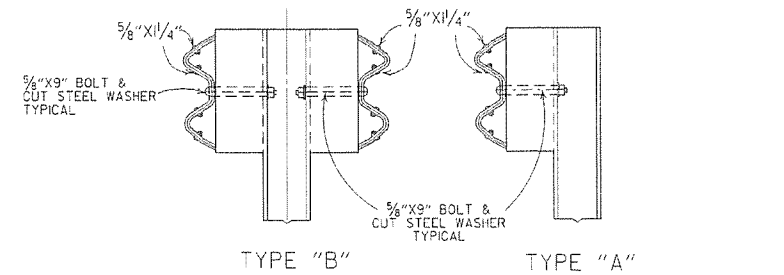


PLASTIC BLOCKOUT (W-BEAM)

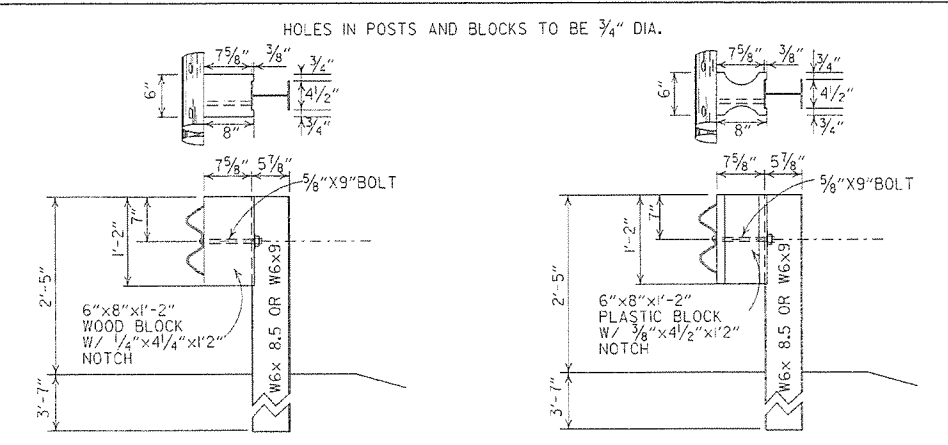
NOTES:  
1. SIMILAR SHAPED PLASTIC BLOCKOUTS MAY BE USED AS LONG AS THEY MEET NCHRP-350 TEST LEVEL 3 SPECIFICATIONS OR REQUIREMENTS FOR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).  
2. DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCES.



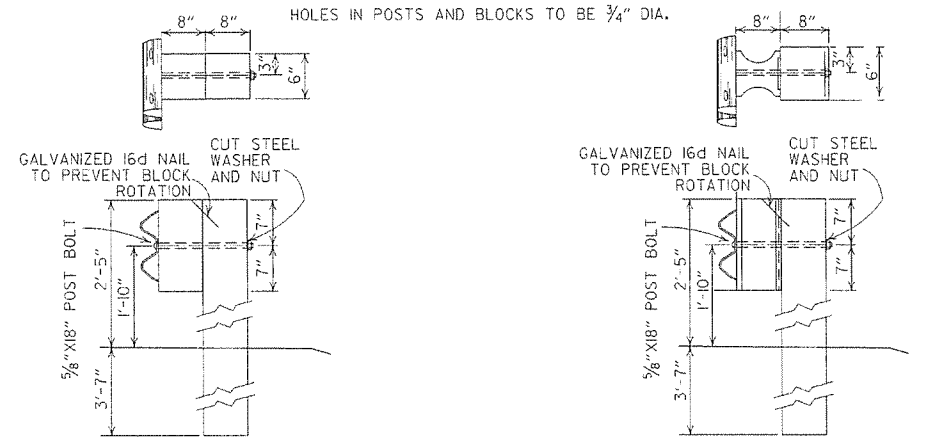
STEEL POST



DETAILS OF STEEL LINE POST CONNECTIONS (W-BEAM)



WOOD BLOCKOUT CONNECTIONS  
PLASTIC BLOCKOUT CONNECTIONS  
DETAILS OF STEEL LINE POST CONNECTIONS (W-BEAM)



WOOD BLOCKOUT CONNECTIONS  
PLASTIC BLOCKOUT CONNECTIONS  
DETAILS OF WOOD LINE POST CONNECTIONS (W-BEAM)

-GENERAL NOTES-

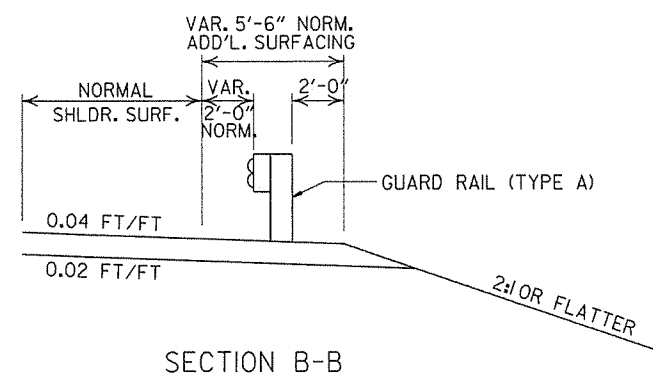
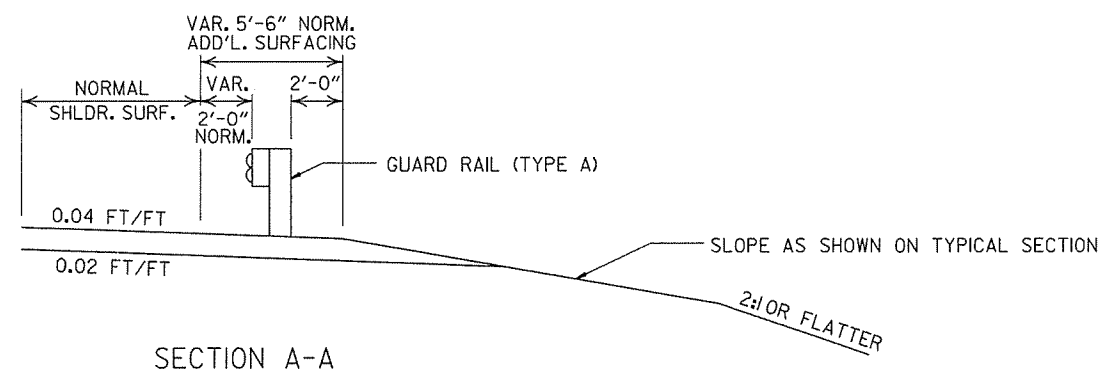
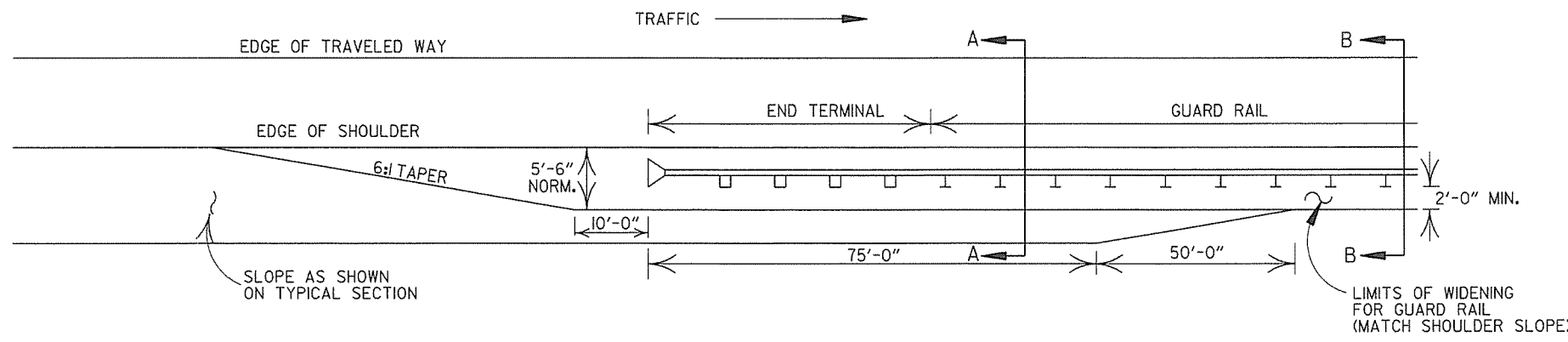
ALL BOLTS SHALL BE SUFFICIENT LENGTH TO EXTEND THROUGH THE FULL THICKNESS OF THE NUT AND NO MORE THAN 3/4" BEYOND IT.  
WHERE W-BEAM GUARD RAIL CONTINUES, THE INTERMEDIATE SECTIONS SHALL HAVE A POST SPACING OF 6'-3" UNLESS OTHERWISE NOTED.  
W-BEAM GUARD RAIL REPRESENTING INTERMEDIATE SECTIONS WILL BE MEASURED ALONG THE ROADWAY FACE FROM CENTERLINE OF POST TO CENTERLINE OF POST.  
USE W-BEAM GUARD RAIL COMPONENTS OF SAME MATERIAL FOR ENTIRE JOB. FOR EXTENSIONS OR MODIFICATION OF EXISTING GUARD RAIL, W-BEAM GUARD RAIL COMPONENTS OF THE SAME TYPE AS THOSE EXISTING SHALL BE USED.  
ANY BACKFILLING UNDER OR AROUND POST SHALL BE DAMP SAND THOROUGHLY TAMPED IN PLACE.  
WOOD POSTS & WOOD BLOCKS SHALL BE EITHER DENSE NO. 1 STRUCTURAL OR BETTER 9.7f (1400 f) OR NO. 1350 f SOUTHERN PINE.  
CONTRACTOR SHALL HAVE THE OPTION OF USING WOOD BLOCKOUTS FOR W-BEAM GUARD RAIL OR PLASTIC BLOCKOUTS, AS LONG AS BLOCKOUT USED MEETS NCHRP-350 TEST LEVEL 3 SPECIFICATIONS OR REQUIREMENTS FOR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) FOR W-BEAM GUARD RAIL.

7-14-10	RAISED HEIGHT OF GUARD RAIL 1"	
10-15-09	ADDED REFERENCE TO MASH	
4-10-03	REVISED GENERAL NOTES	
9-22-02	REVISED DIMENSION ON WOOD & PLASTIC BLOCKOUT CONNECTIONS & ON STEEL POST	
11-16-01	REVISED WOOD BLOCKOUT & DETAILS OF WOOD LINE POST CONNECTIONS	
3-30-00	REMOVED GUARD RAIL AT BRIDGE ENDS	
1-12-00	ADDED PLASTIC BLOCKOUT	
8-12-98	REV. BLOCKOUTS TO WOOD, DELETED CONC. POST & REV. GENERAL NOTE, DELETED DET. OF GUARD RAIL REPLACE BEHIND CURB & DET. OF POST PLACE IN SOLID ROCK, & ADDED DETAILS OF STEEL LINE POST CONN. REMOVED BACK-UP PLATE, REVISED HOLES IN STEEL POLES	
4-3-97	REMOVED "LAP IN DIRECTION OF TRAFFIC" NOTE & PLACED ARROWS ON WASHERS	
10-18-96	REVISED WOOD POST NOTE	
6-2-94	ADDED AT STEEL POST SIZE	
8-5-93	REVISED STEEL POST SIZE	8-5-93
10-1-92	REDRAWN & REVISED	10-1-92
8-15-91	REVISED WASHER NOTE	8-15-91
8-2-90	REV. GEN. NOTE & DEPTH OF ANC. POST IN ROCK	8-2-90
7-15-88	REVISED SECTION 3 & GENERAL NOTES	
3-4-88	REV. ANCHOR POST, ELEV. NOTES & POST IN ROCK	780-3-4-88
10-30-87	REVISED WOOD LINE POST DETAIL	546-10-30-87
10-9-87	REDRAWN & REVISED	802-10-9-87
DATE	REVISION	DATE FILM

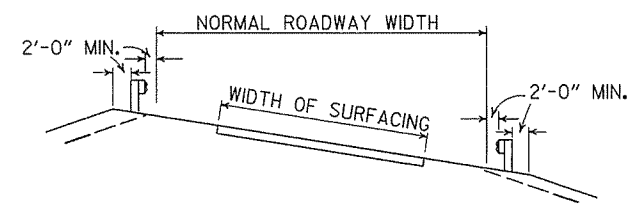
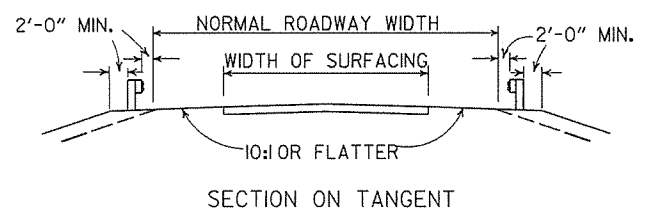
ARKANSAS STATE HIGHWAY COMMISSION

GUARD RAIL DETAILS

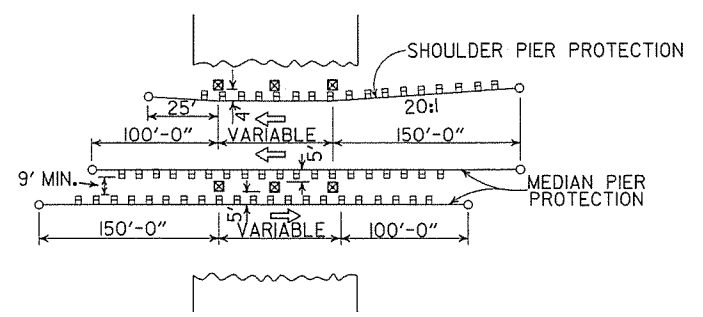
STANDARD DRAWING GR-8



DETAILS OF WIDENING FOR GUARD RAIL

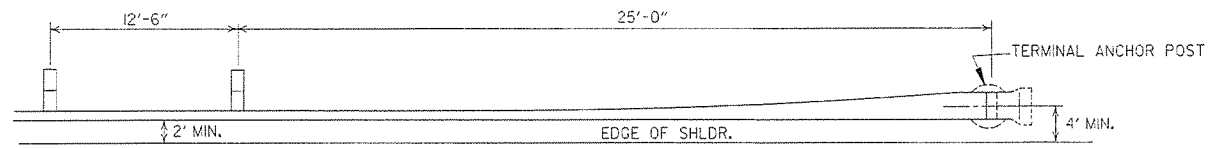


DETAILS SHOWING POSITION OF GUARD RAIL ON HIGHWAY

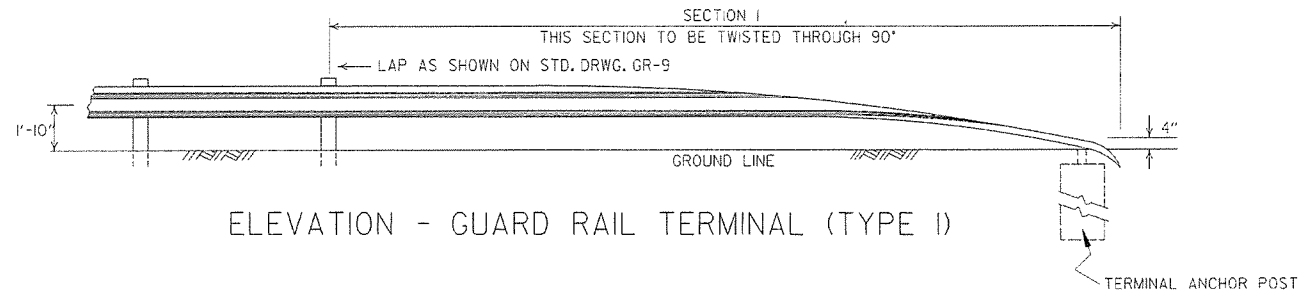


METHOD OF INSTALLATION OF GUARD RAIL AT FIXED OBSTACLE

ARKANSAS STATE HIGHWAY COMMISSION			
GUARD RAIL DETAILS			
STANDARD DRAWING GR-9A			
4-17-08	MINOR REVISION		
11-10-05	DRAWN		
DATE	REVISION	DATE	FILM

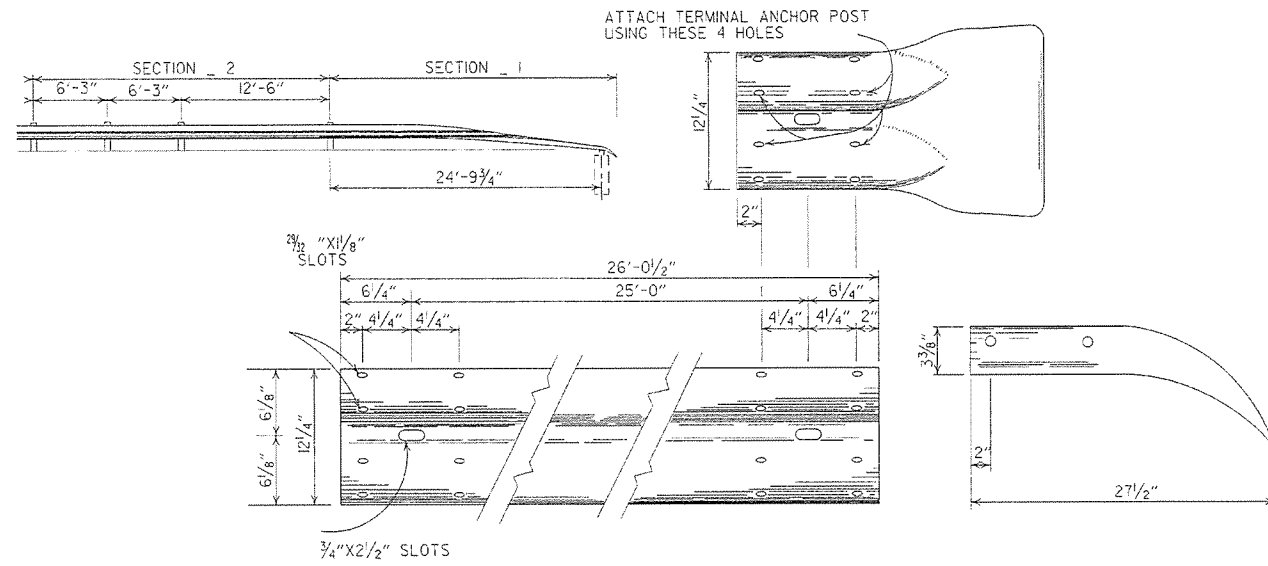


PLAN - GUARD RAIL TERMINAL (TYPE I)



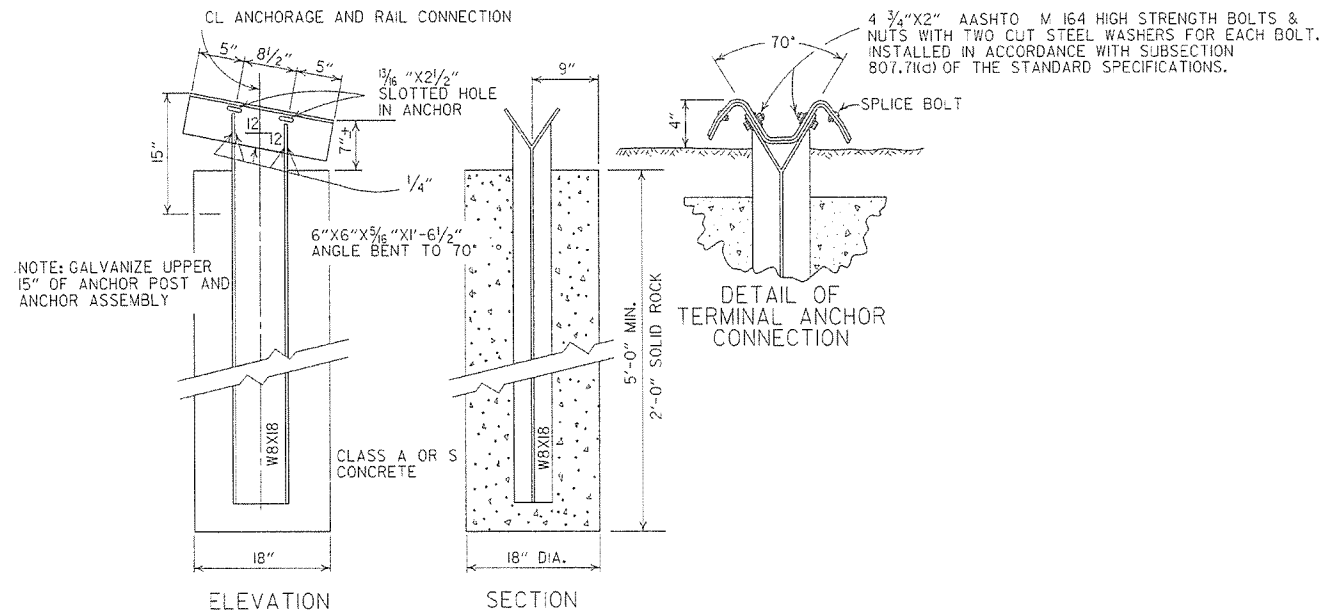
ELEVATION - GUARD RAIL TERMINAL (TYPE I)

NOTE:  
SECTIONS 1 AND 2 OF GUARD RAIL TERMINAL SHALL BE PAID FOR AT THE PRICE BID PER LINEAR FOOT OF THE TYPE OF GUARD RAIL SPECIFIED.



SECTION 1

TERMINAL SECTION



ELEVATION SECTION

DETAIL OF TERMINAL ANCHOR CONNECTION

NOTE: GALVANIZE UPPER 15" OF ANCHOR POST AND ANCHOR ASSEMBLY

NOTE: RAIL MEMBERS MAY BE BOLTED TO ANGLE AT TERMINAL ANCHOR AND THE TWO ASSEMBLIES POSITIONED TO PROPER ALIGNMENT PRIOR TO PLACING CONCRETE AROUND 8 WF 17 POST IF CONTRACTOR SO DESIRES.

DETAIL OF TERMINAL ANCHOR POST (TYPE I)

			ARKANSAS STATE HIGHWAY COMMISSION
			GUARD RAIL DETAILS
			STANDARD DRAWING GRT-I
7-14-10	RAISED HEIGHT OF GUARD RAIL 1"		
6-26-97	REVISED LAP NOTE		
10-18-96	REVISED ASTM REF. TO AASHTO		
11-3-94	DIMENSION TERMINAL DETAIL		
11-11-92	ADDED NOTE FOR PAYMENT	11-11-92	
10-1-92	DRAWN & ISSUED	10-1-92	
DATE	REVISION	DATE	FILM

REINFORCED CONCRETE ARCH PIPE DIMENSIONS

EQUIV. DIA.	SPAN		RISE	
	AASHTO M 206	AHTD NOMINAL	AASHTO M 206	AHTD NOMINAL
INCHES	INCHES			
15	18	18	11	11
18	22	22	13½	14
21	26	26	15½	16
24	28½	29	18	18
30	36¼	36	22½	23
36	43¾	44	26¾	27
42	51½	51	31¾	31
48	58½	59	36	36
54	65	65	40	40
60	73	73	45	45
72	88	88	54	54
84	102	102	62	62
90	115	115	72	72
96	122	122	77½	77
108	138	138	87½	87
120	154	154	96¾	97
132	168¾	169	106½	107

THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN ± 2 PERCENT FROM THE VALUES SPECIFIED BY AASHTO M206.

REINFORCED CONCRETE HORIZONTAL ELLIPTICAL PIPE DIMENSIONS

EQUIV. DIA.	AASHTO M 207	
	SPAN	RISE
INCHES	INCHES	
18	23	14
24	30	19
27	34	22
30	38	24
33	42	27
36	45	29
39	49	32
42	53	34
48	60	38
54	68	43
60	76	48
66	83	53
72	91	58
78	98	63
84	106	68

THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN ± 2 PERCENT FROM THE VALUES SPECIFIED BY AASHTO M207.

CONSTRUCTION SEQUENCE

1. PLACE STRUCTURAL BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
2. INSTALL PIPE TO GRADE.
3. COMPACT STRUCTURAL BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
4. PLACE AND COMPACT THE HAUNCH AREA UP TO THE MIDDLE OF THE PIPE.
5. COMPLETE BACKFILL ACCORDING TO SUBSECTION 606.03.(F)(I).

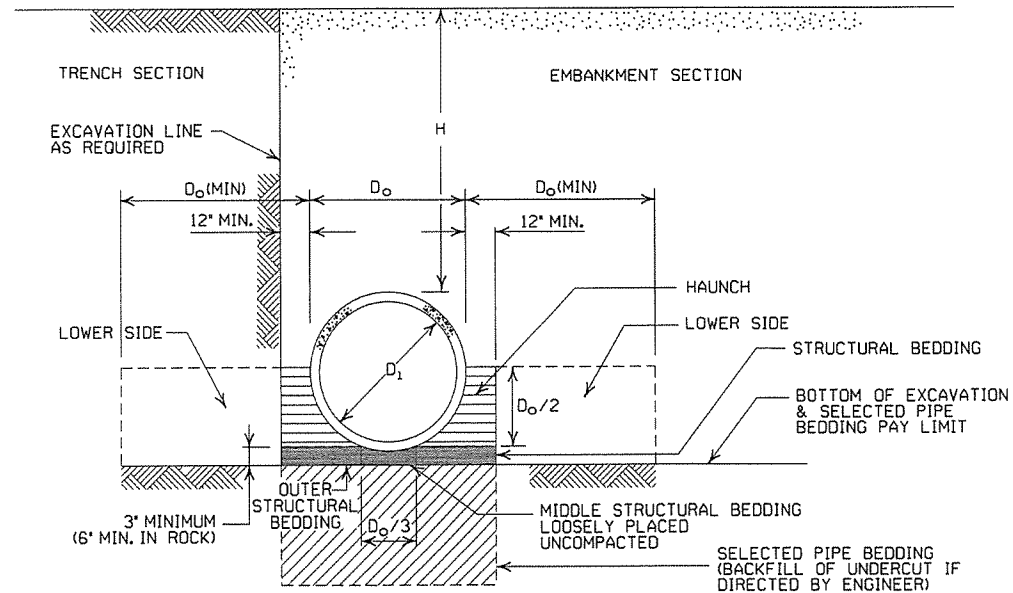
NOTE: HAUNCH AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF CONCRETE PIPE.

- LEGEND -

- D<sub>i</sub> = NORMAL INSIDE DIAMETER OF PIPE
- D<sub>o</sub> = OUTSIDE DIAMETER OF PIPE
- H = FILL COVER HEIGHT OVER PIPE (FEET)
- MIN. = MINIMUM
- UNDISTURBED SOIL

INSTALLATION TYPE	MATERIAL REQUIREMENTS FOR HAUNCH AND STRUCTURAL BEDDING
TYPE 1	AGGREGATE BASE COURSE (CLASS 5 OR CLASS 7)
TYPE 2	SELECTED MATERIALS (CLASS SM-1, SM-2, OR SM-4) OR TYPE 1 INSTALLATION MATERIAL*
TYPE 3**	AASHTO CLASSIFICATION A-1 THRU A-6 SOIL OR TYPE 1 OR 2 INSTALLATION MATERIAL

\* SM-3 WILL NOT BE ALLOWED.  
\*\* MATERIALS SHALL NOT INCLUDE ORGANIC MATERIALS OR STONES LARGER THAN 3 INCHES.



EMBANKMENT AND TRENCH INSTALLATIONS

1. MATERIAL IN THE HAUNCH AND OUTER STRUCTURAL BEDDING SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.
2. FOR TRENCHES WITH WALLS OF NATURAL SOIL, THE DENSITY OF THE SOIL IN THE LOWER SIDE ZONE SHALL BE AS FIRM AS THE 95% DENSITY REQUIRED FOR THE HAUNCH. IF THE EXISTING SOIL DOES NOT MEET THIS CRITERIA, IT SHALL BE REMOVED AND RECOMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OF MATERIAL USED.
3. FOR EMBANKMENTS, THE MATERIAL IN THE LOWER SIDE ZONE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.

GENERAL NOTES

1. CONCRETE PIPE CULVERT CONSTRUCTION SHALL CONFORM TO ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION), WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS, UNLESS OTHERWISE NOTED IN THE PLANS, SECTION AND SUBSECTION REFER TO THE STANDARD CONSTRUCTION SPECIFICATIONS.
2. CONCRETE PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
3. ALL PIPE SHALL CONFORM TO SECTION 606. CIRCULAR R.C. PIPE CULVERTS SHALL CONFORM TO AASHTO M170, R.C. ARCH PIPE CULVERTS SHALL CONFORM TO AASHTO M206 AND HORIZONTAL ELLIPTICAL PIPE CULVERTS SHALL CONFORM TO AASHTO M207.
4. ALL PIPE SHALL BE PROTECTED DURING CONSTRUCTION BY A COVER SUFFICIENT TO PREVENT DAMAGE FROM PASSAGE OF EQUIPMENT.
5. THE MINIMUM TRENCH WIDTH SHALL BE THE OUTSIDE DIAMETER OF THE PIPE PLUS 24 INCHES. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PRACTICABLE FOR WORKING CONDITIONS.
6. MULTIPLE PIPE CULVERTS SHALL BE INSTALLED WITH A MINIMUM CLEARANCE OF 24 INCHES BETWEEN STRINGS OF PIPE. REFER TO STD. DWG. FES-2 FOR MINIMUM CLEARANCE WHERE FLARED END SECTIONS ARE USED.
7. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
8. NOT MORE THAN ONE LIFTING HOLE MAY BE PROVIDED IN CONCRETE PIPE TO FACILITATE HANDLING. HOLE MAY BE CAST IN PLACE, CUT INTO THE FRESH CONCRETE AFTER FORMS ARE REMOVED, OR DRILLED. THE HOLE SHALL NOT BE MORE THAN TWO INCHES IN DIAMETER OR TWO INCHES SQUARE. CUTTING OR DISPLACEMENT OF REINFORCEMENT WILL NOT BE PERMITTED. SPALLED AREAS AROUND THE HOLE SHALL BE REPAIRED IN A WORKMANLIKE MANNER. LIFTING HOLE SHALL BE FILLED WITH MORTAR, CONCRETE, OR OTHER METHOD AS APPROVED BY THE ENGINEER.
9. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS "STRUCTURAL BEDDING" ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE QUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS "SELECTED PIPE BEDDING."
10. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED ABOVE AS THE HAUNCH), BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE. IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF "SELECTED PIPE BACKFILL."

MINIMUM HEIGHT OF FILL "H" OVER CIRCULAR R.C. PIPE CULVERTS

INSTALLATION TYPE	CLASS OF PIPE			
	CLASS III		CLASS IV	CLASS V
PIPE ID (IN.)	TYPE 1 OR 2	TYPE 3	ALL	ALL
	FEET			
12-15	2	2.5	2	1
18-24	2.5	3	2	1
27-33	3	4	2	1
36-42	3.5	5	2	1
48	4.5	5.5	2	1
54-60	5	7	2	1
66-78	6	8	2	1
84-108	7.5	8	2	1

NOTE: FOR MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM OF 12" OF PAVEMENT AND/OR BASE.

MAXIMUM HEIGHT OF FILL "H" OVER CIRCULAR R.C. PIPE CULVERTS

INSTALLATION TYPE	CLASS OF PIPE		
	CLASS III	CLASS IV	CLASS V
	FEET		
TYPE 1	21	32	50
TYPE 2	16	25	39
TYPE 3	12	20	30

NOTE: IF FILL HEIGHT EXCEEDS 50 FEET, A SPECIAL DESIGN CONCRETE PIPE WILL BE REQUIRED USING TYPE 1 INSTALLATION.

MINIMUM HEIGHT OF FILL "H" OVER R.C. ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS

INSTALLATION TYPE	CLASS OF PIPE	
	CLASS III	CLASS IV
	FEET	
TYPE 2 OR TYPE 3	2.5	1.5

NOTE: TYPE 1 INSTALLATION WILL NOT BE ALLOWED FOR ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS.

NOTE: FOR MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM OF 12" OF PAVEMENT AND/OR BASE.

MAXIMUM HEIGHT OF FILL "H" OVER R.C. ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS

INSTALLATION TYPE	CLASS OF PIPE	
	CLASS III	CLASS IV
	FEET	
TYPE 2	13	21
TYPE 3	10	16

NOTE: TYPE 1 INSTALLATION WILL NOT BE ALLOWED FOR ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS.

DATE	ISSUED	REVISION	DATE FILMED
2-27-14	REVISED GENERAL NOTE 1.		
12-15-11	REVISED FOR LRFD DESIGN SPECIFICATIONS		
5-18-00	REVISED TYPE 3 BEDDING & ADDED NOTE		
3-30-00	REVISED INSTALLATIONS		
11-06-97	ISSUED		

ARKANSAS STATE HIGHWAY COMMISSION

CONCRETE PIPE CULVERT  
FILL HEIGHTS & BEDDING

STANDARD DRAWING PCC-1



ADVANCE DISTANCES (XXXX)

500 FT	1/2 MILE
1000 FT	3/4 MILE
1500 FT	1 MILE AHEAD

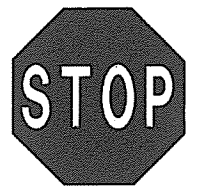
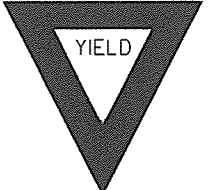
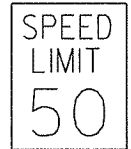
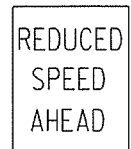



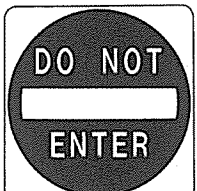

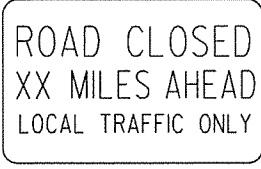
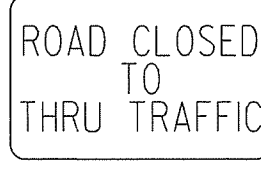

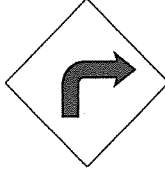
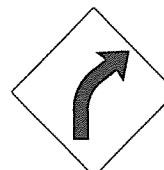
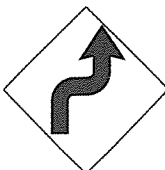
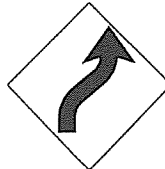
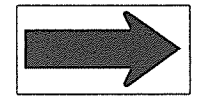
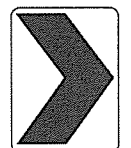
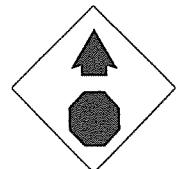
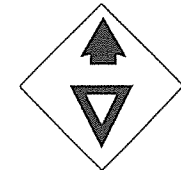
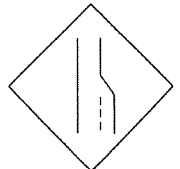

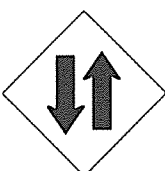
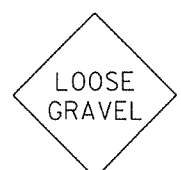
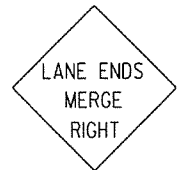
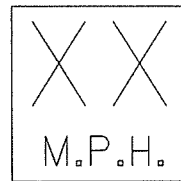





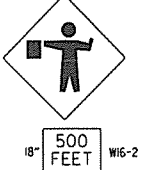


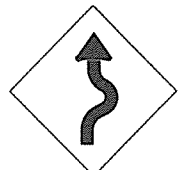



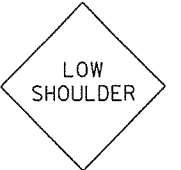
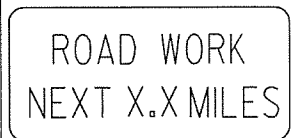
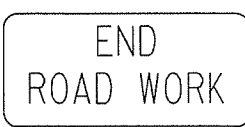
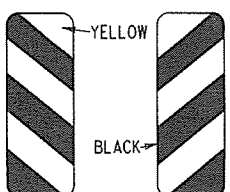
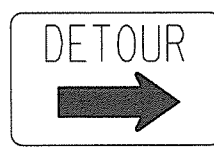

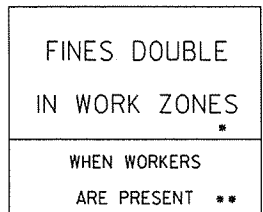
GENERAL NOTES:

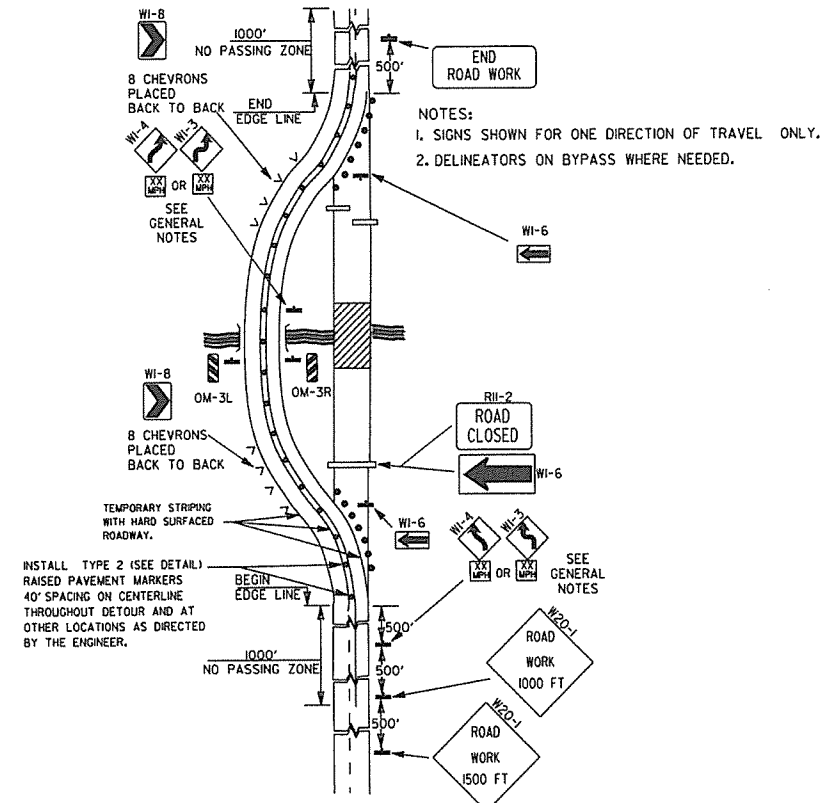
1. ALL TRAFFIC CONTROL DEVICES USED ON ROAD CONSTRUCTION SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION, AND TO THE STANDARD HIGHWAY SIGNS, LATEST EDITION, OR AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION.
2. TRAFFIC CONTROL DEVICES SHALL BE SET UP JUST BEFORE THE START OF CONSTRUCTION OPERATIONS AND SHALL BE PROPERLY MAINTAINED DURING THE TIME SUCH CONDITIONS EXIST. THEY SHALL REMAIN IN PLACE ONLY AS LONG AS NEEDED AND REMOVED THEREAFTER.
3. EXISTING SIGNS AND CONSTRUCTION SIGNS SHALL BE KEPT IN PROPER POSITION, AND BE CLEAN AND LEGIBLE AT ALL TIMES. SIGNS THAT DO NOT APPLY TO EXISTING CONDITIONS SHALL BE REMOVED. SIGNS THAT ARE DAMAGED, DEFACED, OR THAT ACCUMULATE DIRT DURING CONSTRUCTION SHALL BE CLEANED, REPAIRED, OR REPLACED.
4. SIGNS ARE USUALLY MOUNTED ON A SINGLE POST, ALTHOUGH THOSE WIDER THAN 36" OR LARGER THAN 10 SQ. FT. SHALL BE MOUNTED ON TWO POSTS OR ABOVE A TYPE III BARRICADE.
5. SIGN POSTS DIRECT BURIED IN SOIL SHALL BE 2 LB. MINIMUM CHANNEL POST OR 4"x4" WOOD POSTS. CHANNEL POSTS SHALL BE PAINTED GREEN. WOOD POSTS SHALL BE PAINTED WHITE. ALL POSTS SHALL BE NEATLY CONSTRUCTED, AND SHALL BE REPLUMBED, CLEANED, OR REPAIRED AS NEEDED FOR THE DURATION OF THE JOB. THERE SHALL NOT BE MORE THAN 2 POSTS IN A 7' PATH FOR WOOD OR CHANNEL POSTS. ANY CHANNEL POST SPLICE SHALL BE IN ACCORDANCE WITH STANDARD DRAWING TC-3.
6. POST MOUNTED SIGNS IN RURAL AREAS SHALL BE CONSTRUCTED WITH THE NEAR EDGE OF THE SIGN FROM 6 TO 12 FEET FROM THE PAVEMENT EDGE. SIGNS IN URBAN AREAS AND BARRICADE MOUNTED SIGNS SHALL BE MOUNTED A MINIMUM OF 2 FEET FROM THE PAVEMENT EDGE.
7. ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN URBAN AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE. ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN RURAL AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE, EXCEPT A MINIMUM OF 6' SHALL BE USED WHEN MOUNTING AN ADVISORY SIGN BELOW A WARNING SIGN. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR INTERMEDIATE TERM STATIONARY WORK CONDITIONS. THE SIGNS MINIMUM MOUNTING HEIGHT SHALL BE 5'. RETROREFLECTIVE DEVICES SHALL BE USED. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR SHORT-TERM, SHORT DURATION, AND MOBILE CONDITIONS. THEY SHALL BE NO LESS THAN ONE (1) FOOT ABOVE THE TRAVELED WAY. LONG-TERM STATIONARY SIGNS SHALL BE DIRECT BURIED IN SOIL, UNLESS CONDITIONS NECESSITATE THE USE OF PORTABLE SIGNS, OR AS APPROVED BY THE ENGINEER. CONCRETE PADS, CONCRETE OR ROCK BALLAST, OR OTHER SOLID MATERIALS SHALL NOT BE UTILIZED WITH PORTABLE SIGN SUPPORTS.

8. FLAGGERS SHALL USE REFLECTORIZED STOP-SLOW PADDLES. FLAGS MAY BE USED ONLY FOR EMERGENCY SITUATIONS.
9. MOST OF THE SIGNS SHOWN ARE ORIENTED TO THE RIGHT. HOWEVER, THIS DOES NOT PRECLUDE THE USE OF MIRROR IMAGES OF THESE SIGNS WHERE THE REVERSE ORIENTATION MIGHT BETTER CONVEY TO MOTORISTS THE PROPER DIRECTION OF MOVEMENT.
10. R55-1 SIGNS SHALL BE PLACED AT LEAST 1500' BUT NOT MORE THAN 1 MILE IN ADVANCE OF THE WORK ZONE. IF A SPEED LIMIT REDUCTION IS IN EFFECT, THE SIGN SHALL BE PLACED A MINIMUM OF 500' IN ADVANCE OF THE "REDUCED SPEED AHEAD" SIGN.

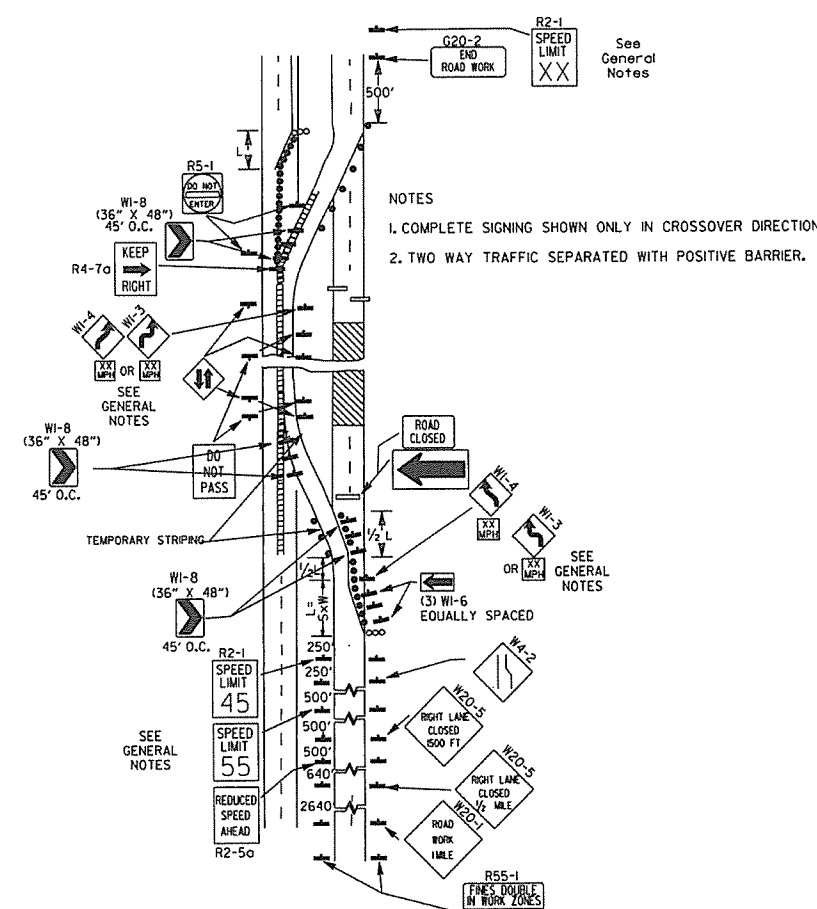
NOTE: SUPPORTS FOR SIGNS, BARRICADES, AND VERTICAL PANELS THAT ARE DIFFERENT FROM THE REQUIREMENTS SHOWN IN NOTES 4 & 5, BUT MEET THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH), WILL BE ACCEPTED. COMPLIANCE WITH THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) IS REQUIRED FOR ALL PROJECTS.

12-15-11	REVISED W24-1	
11-17-10	DELETED W8-9a & ADDED W8-9	
10-15-09	ADDED REFERENCE TO MASH & ADDED SIGN W24-1	
4-17-08	REVISED SIGN DESIGNATIONS	
11-18-04	REVISED NOTES	
10-9-03	REVISED NOTE 1	
11-16-01	REVISED NOTE 7	
9-28-00	REVISED NOTE	
11-18-98	ADDED NOTE	
6-26-97	REVISED NOTE 5	
4-03-97	REVISED NOTE 5	
10-18-96	ADDED CONTROLLED ACCESS HWY. SIGN & TO NOTE 7	
10-12-95	ADDED R55-1	
6-8-95	REVISED TO CORRECT SIGN ILLUSTRATIONS	6-8-95
2-2-95	REVISED PER PART VI, MUTCD SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	
DATE	REVISION	FILMED

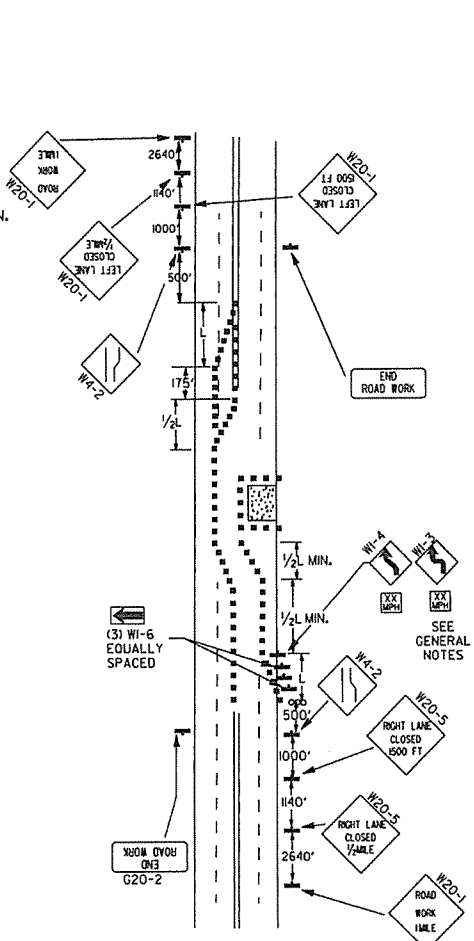
<p>RI-1</p>  <p>STANDARD 30"x30" EXPRESSWAY 36"x36" SPECIAL 48"x48"</p>	<p>RI-2</p>  <p>STD. 36"x36"x36" EXPWY. 48"x48"x48" FWY. 60"x60"x60"</p>	<p>R2-1</p>  <p>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</p>	<p>R2-5A</p>  <p>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</p>	<p>R2-5C</p>  <p>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</p>	<p>R4-1</p>  <p>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</p>	<p>R4-2</p>  <p>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</p>
<p>R5-1</p>  <p>STD. 30"x30" EXPWY. 36"x36" SPECIAL 48"x48"</p>	<p>R11-2</p>  <p>48"x30"</p>	<p>R11-3A</p>  <p>60"x30"</p>	<p>R11-4</p>  <p>60"x30"</p>	<p>RSP-1</p>  <p>48"x30"</p>	<p>WI-1</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	<p>WI-2</p>  <p>STD. 36"x36" FWY. 48"x48"</p>
<p>WI-3</p>  <p>STD. 48"x48"</p>	<p>WI-4</p>  <p>STD. 48"x48"</p>	<p>WI-6</p>  <p>STD. 48"x24" SPECIAL 60"x30"</p>	<p>WI-8</p>  <p>STD. 18"x24" SPECIAL 24"x30" EXPWY. 30"x36" FWY. 36"x48"</p>	<p>W3-1</p>  <p>STD. 36"x36" SPECIAL 48"x48"</p>	<p>W3-2</p>  <p>STD. 36"x36" SPECIAL 48"x48"</p>	<p>W4-2</p>  <p>STD. 36"x36" FWY. 48"x48"</p>
<p>W5-1</p>  <p>STD. 36"x36" SPECIAL 48"x48"</p>	<p>W6-3</p>  <p>EXPWY. 36"x36" SPECIAL 48"x48"</p>	<p>W8-7</p>  <p>EXPWY. 36"x36" FWY. 48"x48"</p>	<p>W9-2</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	<p>W13-1</p>  <p>STD. 24"x24"</p>	<p>W20-1</p>  <p>STD. 48"x48"</p>	<p>W20-2</p>  <p>STD. 48"x48"</p>
<p>W20-3</p>  <p>STD. 48"x48"</p>	<p>W20-4</p>  <p>STD. 48"x48"</p>	<p>W20-5</p>  <p>STD. 48"x48"</p>	<p>W20-7a</p>  <p>18" 500 FEET W16-2 24"</p> <p>STD. 36"x36" FWY. 48"x48"</p>	<p>W21-2</p>  <p>STD. 30"x30" SPECIAL 36"x36"</p>	<p>W21-5</p>  <p>STD. 30"x30" SPECIAL 36"x36"</p>	<p>W24-1</p>  <p>STD. 36"x36"</p>
<p>WI-4b</p>  <p>STD. 48"x48"</p>	<p>R56-1</p>  <p>STD. 18"x18"</p>	<p>W8-11</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	<p>W8-9</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	<p>G20-1</p>  <p>60"x24"</p>	<p>G20-2</p>  <p>48"x24"</p>	<p>OM-3L OM-3R</p>  <p>12"x36"</p>
<p>M4-9</p>  <p>STD. 30"x24" SPECIAL 48"x36" SPECIAL 60"x48"</p>	<p>M4-10</p>  <p>48"x18"</p>	<p>R55-1</p>  <p>36"x60" * USE 6" C LETTERS</p>				



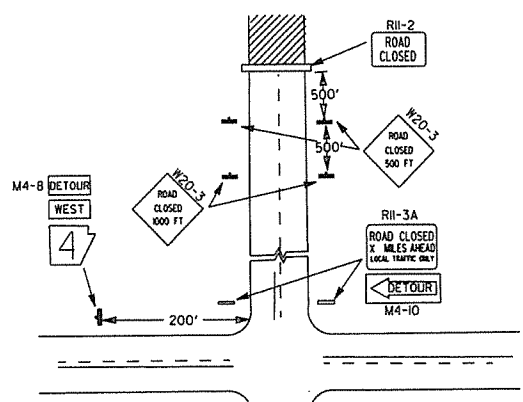
(A) TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES ON A 2-LANE HIGHWAY WHERE THE ENTIRE ROADWAY IS CLOSED AND A BYPASS DETOUR IS PROVIDED.



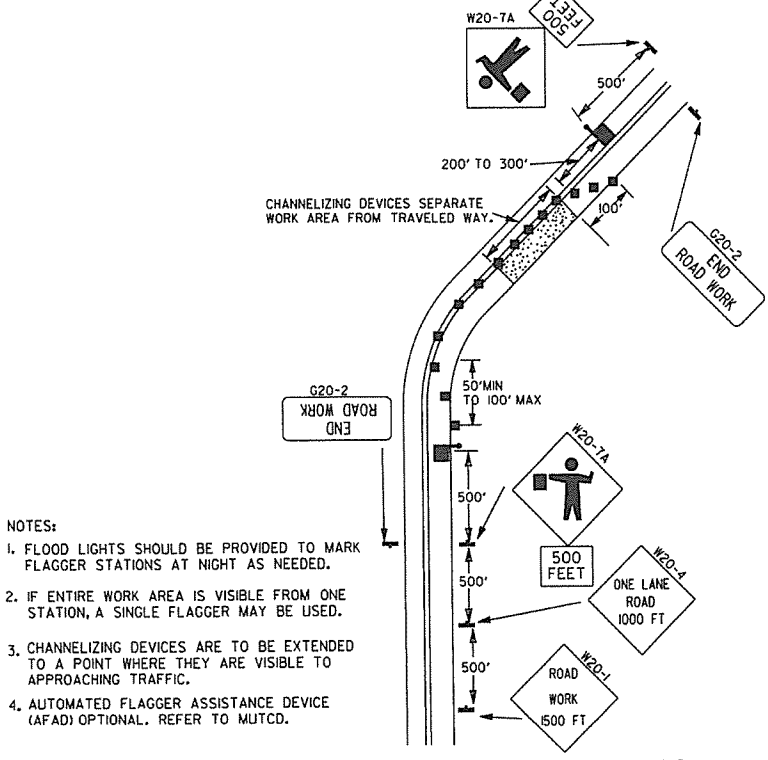
(B) TYPICAL APPLICATION - 4-LANE DIVIDED ROADWAY WHERE ONE ROADWAY IS CLOSED.



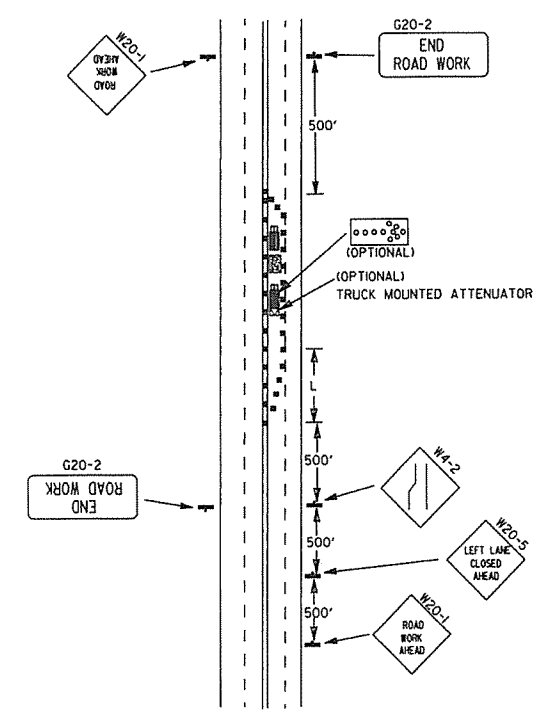
(C) TYPICAL APPLICATION - 4-LANE UNDIVIDED ROADWAY WHERE HALF OF THE ROADWAY IS CLOSED.



(D) TYPICAL APPLICATION - ROADWAY CLOSED BEYOND DETOUR POINT.

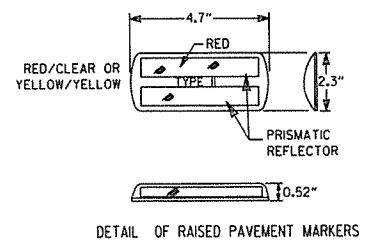


(E) TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES ON 2-LANE HIGHWAY WHERE ONE LANE IS CLOSED AND FLAGGING IS PROVIDED.



(F) TYPICAL APPLICATION - 4-LANE UNDIVIDED ROADWAY WITH INSIDE LANE CLOSED.

- KEY:
- FLAGGER
  - POSITIVE BARRIER
  - ARROW PANEL (IF REQUIRED)
  - TYPE III BARRICADE
  - CHANNELIZING DEVICE
  - TRAFFIC DRUM
  - RAISED PAVEMENT MARKER



TYPICAL ADVANCE WARNING SIGN PLACEMENT

TAPER FORMULAE:

$L = SXW$  FOR SPEEDS OF 45MPH OR MORE.  
 $L = \frac{WS^2}{60}$  FOR SPEEDS OF 40MPH OR LESS.

WHERE:  
 L = MINIMUM LENGTH OF TAPER.  
 S = NUMERICAL VALUE OF POSTED SPEED LIMIT PRIOR TO WORK OR 85TH PERCENTILE SPEED.  
 W = WIDTH OF OFFSET.

GENERAL NOTES:

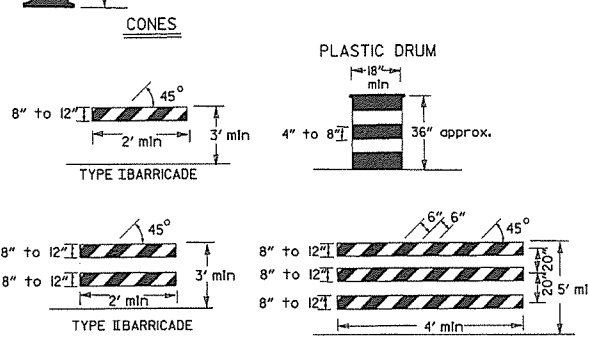
1. ADVISORY SPEED POSTED ON W1-3 OR W1-4 CURVE WARNING SIGNS TO BE DETERMINED AT SITE. USE W1-4 WHEN SPEED IS GREATER THAN 30MPH AND W1-3 WHEN 30MPH OR LESS.
2. WHEN THE EXISTING SPEED LIMIT IS 55MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 45MPH, THE R2-(145) SHALL BE OMITTED AND THE R2-5A SHALL BE INSTALLED AT THAT LOCATION. ADDITIONAL R2-145MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-(1XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
3. WHEN THE EXISTING SPEED LIMIT IS 65MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 55MPH, THE R2-(145) SHALL BE OMITTED. ADDITIONAL R2-155MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-(1XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
4. THE MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES IN A TAPER SHOULD BE APPROXIMATELY EQUAL IN FEET TO THE SPEED LIMIT. BEYOND THE TAPER, MAXIMUM SPACING SHALL BE TWO TIMES THE SPEED LIMIT, OR AS DIRECTED BY THE ENGINEER.
5. WARNING LIGHTS AND/OR FLAGS MAY BE MOUNTED TO SIGNS OR CHANNELIZING DEVICES AT NIGHT AS NEEDED.
6. PAVEMENT MARKINGS NO LONGER APPLICABLE WHICH MIGHT CREATE CONFUSION IN THE MINDS OF VEHICLE OPERATORS SHALL BE REMOVED OR OBLITERATED AS SOON AS PRACTICABLE.
7. TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE DELINEATED BY AFFIXING CONSPICUITY MATERIAL IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER. WHEN PLACED ON OR ADJACENT TO THE SHOULDER AND NOT BEHIND A POSITIVE BARRIER, THESE DEVICES SHALL BE DELINEATED BY PLACING FIVE (5) TRAFFIC DRUMS, EQUALLY SPACED ALONG THE TRAFFIC SIDE OF THE DEVICE.

DATE	REVISION	FILMED
9-12-13	REVISED DETAIL OF RAISED PAVEMENT MARKERS	
3-1-10	ADDED (AFAD)	
11-20-08	REVISED SIGN DESIGNATIONS	
11-18-04	ADDED GENERAL NOTE	
10-18-96	ADDED R55-1	
4-26-95	CORRECTED (a) BEHIND G20-2	
6-8-95	CORRECTED SIGN IDENT. ON W1-4A	6-8-95
2-2-95	REVISED PER PART VI, MUTCD, SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	



Channelizing devices

When cones are used on freeways and multi-lane highways, they shall be 28" min. During hours of darkness, 28" cones shall be used on all roadways, and shall be reflectorized in accordance with the M.U.T.C.D.

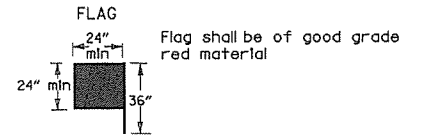


NOTE: For all road closures, the Type III barricades shall be of sufficient length to extend across entire roadway.

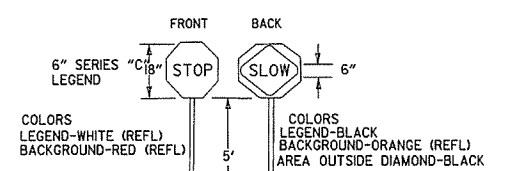
TRAFFIC CONTROL DEVICES FOR VERTICAL PAVEMENT DIFFERENTIALS

VERTICAL DIFFERENTIAL	LOCATIONS	TRAFFIC CONTROL
1" to 3"	Centerline, lane lines	W8-11
1" to 3"	Edge of shoulder	W8-9
Greater than 3"	Lane lines	Standard lane closure required
Greater than 3"	Edge of traveled lane	*RSP-1 and vertical panels, drums or concrete barrier
Greater than 3"	Edge of shoulder	*Vertical panels, drums or concrete barrier

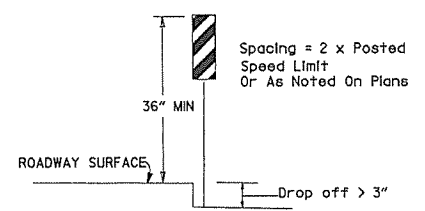
When the shoulder area is used as part of the traveled lane and there is insufficient width to place drums on the remaining shoulder width, then vertical panels shall be used.



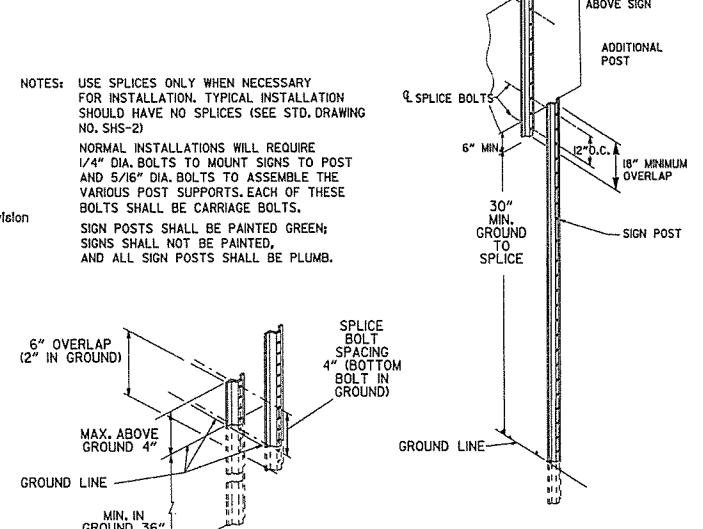
STOP SLOW PADDLE



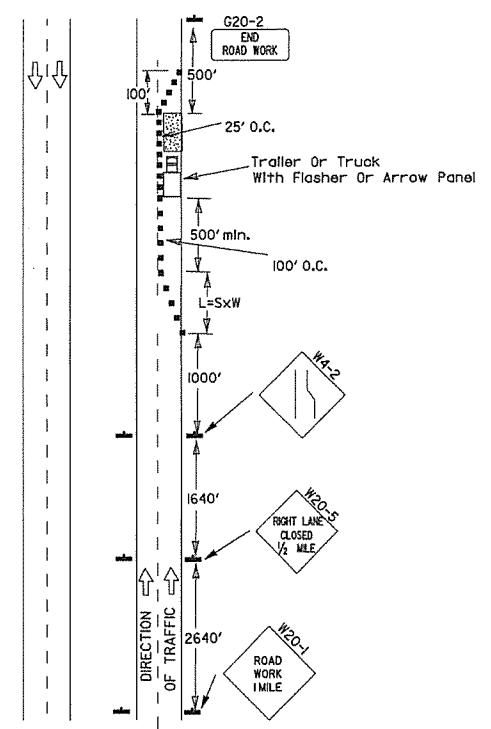
VERTICAL PANEL PLACEMENT



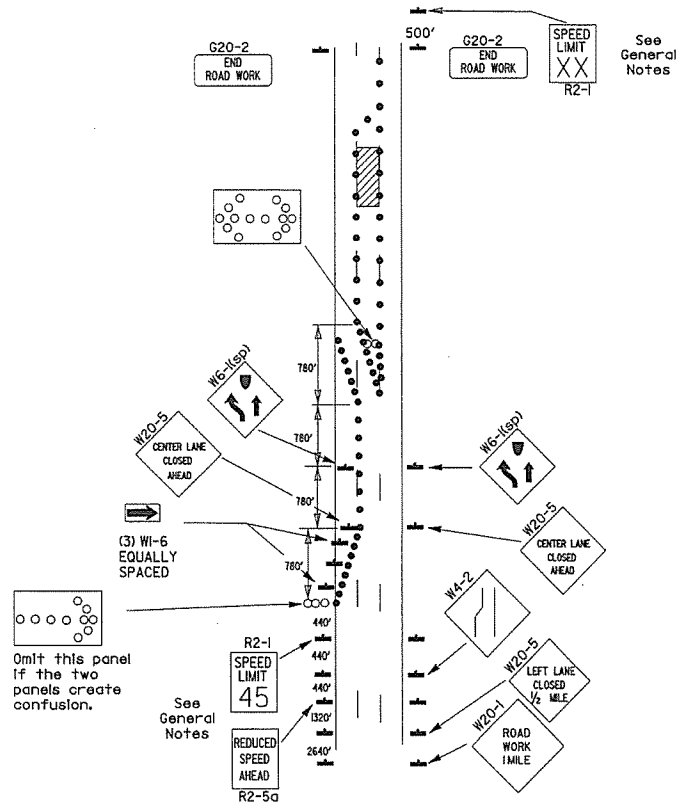
DETAIL OF SPLICES



NOTES: USE SPLICES ONLY WHEN NECESSARY FOR INSTALLATION. TYPICAL INSTALLATION SHOULD HAVE NO SPLICES (SEE STD. DRAWING NO. SHS-2). NORMAL INSTALLATIONS WILL REQUIRE 1/4" DIA. BOLTS TO MOUNT SIGNS TO POST AND 5/16" DIA. BOLTS TO ASSEMBLE THE VARIOUS POST SUPPORTS. EACH OF THESE BOLTS SHALL BE CARRIAGE BOLTS. SIGN POSTS SHALL BE PAINTED GREEN; SIGNS SHALL NOT BE PAINTED, AND ALL SIGN POSTS SHALL BE PLUMB.



(A) Typical application - daytime maintenance operations of short duration on a 4-lane divided roadway where half of the roadway is closed.

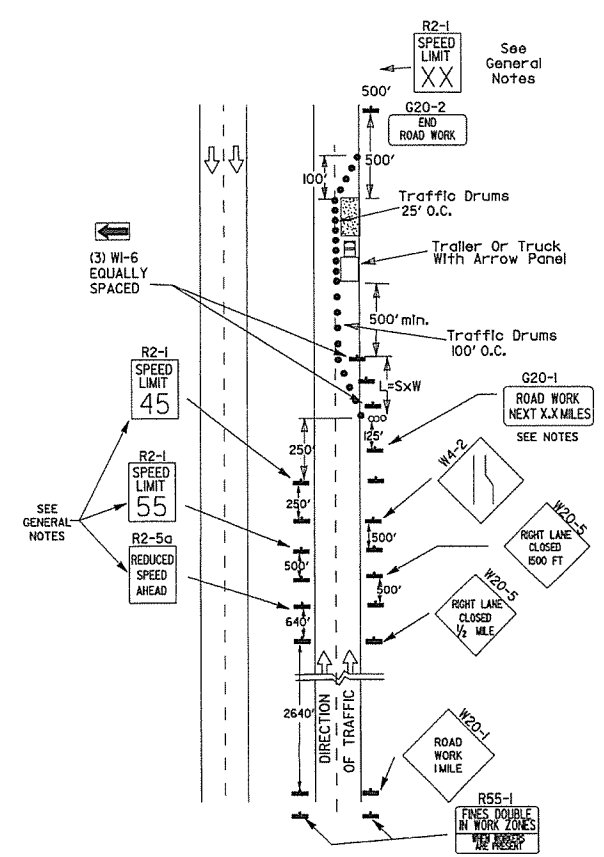


(B) Typical application - 3-lane oneway roadway where center lane is closed.

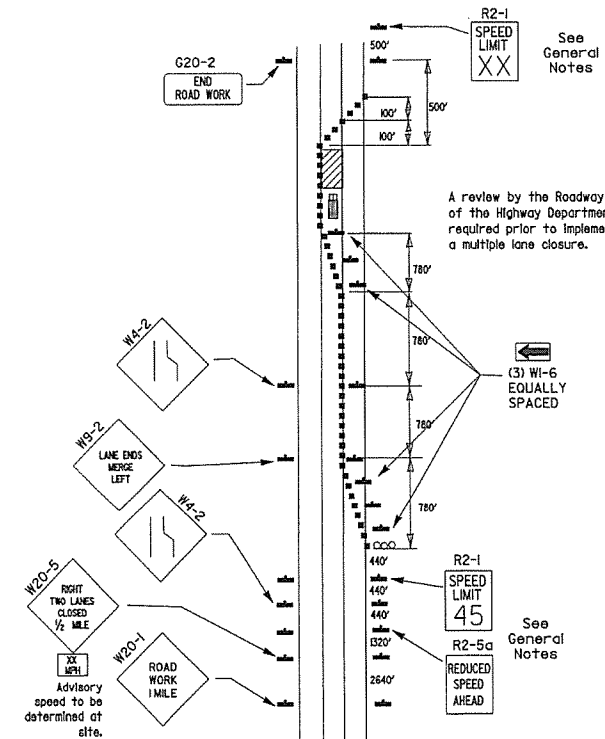
- KEY:
- Arrow Panel (if Required)
  - Channelizing Device
  - Traffic drum

GENERAL NOTES:

- A speed limit reduction may be implemented ONLY when designated in the plan or when recommended by the Roadway Design Division.
- When the existing speed limit is 55mph and the plans require a speed limit of 45mph, the R2-1(55) shall be omitted and the R2-5A shall be installed at that location. Additional R2-145mph speed limit signs shall be installed at a maximum of 1/2 mile intervals. At the end of the work area a R2-1(XX) shall be installed to match original speed limit.
- When the existing speed limit is 65mph and the plans require a speed limit of 55mph, the R2-1(65) shall be omitted. Additional R2-155mph speed limit signs shall be installed at a maximum of 1/2 mile intervals. At the end of the work area a R2-1(XX) shall be installed to match original speed limit.
- The maximum spacing between channelizing devices in a taper should be approximately equal in feet to the speed limit. Beyond the taper, maximum spacing shall be two times the speed limit or as directed by the Engineer.
- Warning lights and/or flags may be mounted to signs or channelizing devices at night as needed.
- Pavement markings no longer applicable which might create confusion in the minds of vehicle operators shall be removed or obliterated as soon as practicable.
- The G20-1 sign will be required on jobs of over two miles in length. When the lane closure is not at the beginning of the project, the G20-1 sign shall be erected 125' in advance of the job limit. Additional W20-1(1/2 MILE) signs are not required in advance of lane closures that begin inside the project limits.
- Flaggers shall use STOP/SLOW paddles for controlling traffic through work zones. Flags may be used only for emergency situations.
- All plastic drums and cones shall meet the requirements of NCHRP-350 or Manual For Assessing Safety Hardware (MASH).
- Trailer mounted devices such as arrow panels and portable changeable message signs shall be delineated by affixing conspicuity material in a continuous line on the face of the trailer. When placed on or adjacent to the shoulder and not behind a positive barrier, these devices shall be delineated by placing five (5) traffic drums, equally spaced along the traffic side of the device.

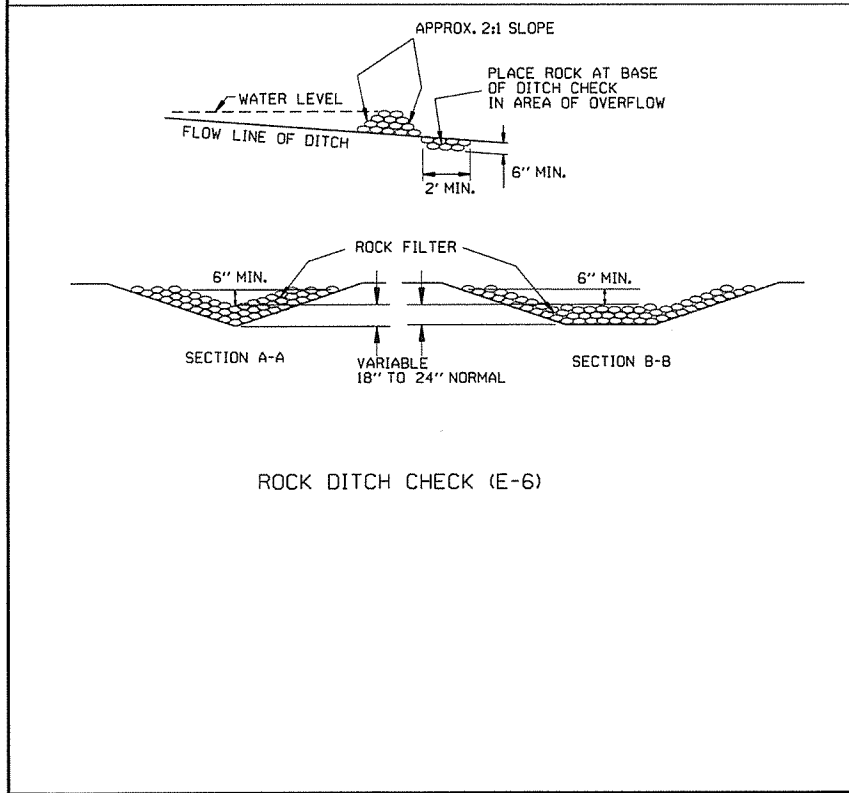
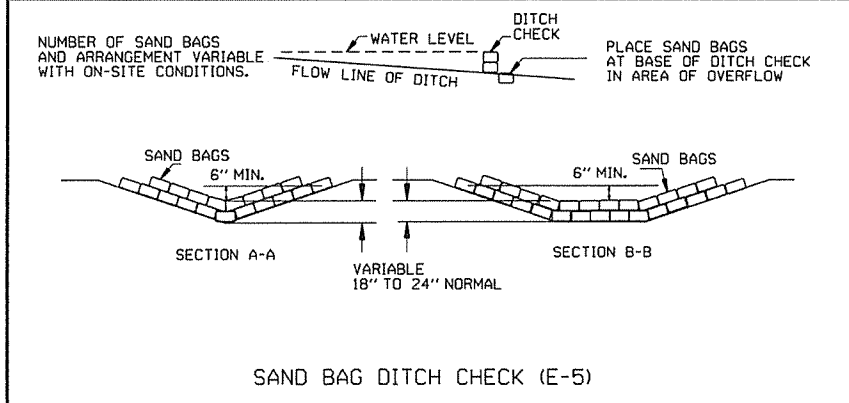
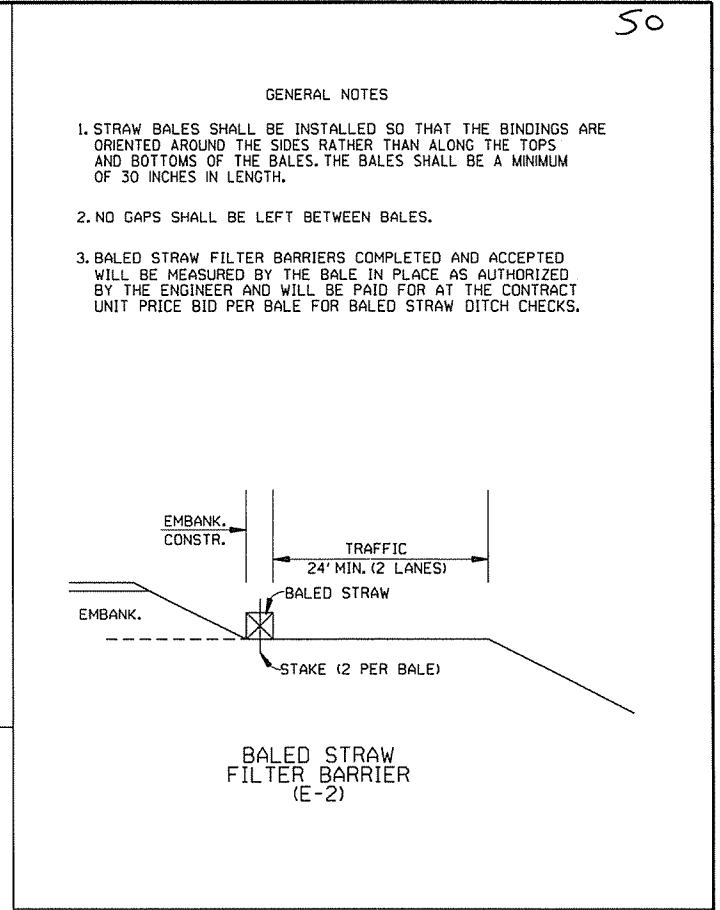
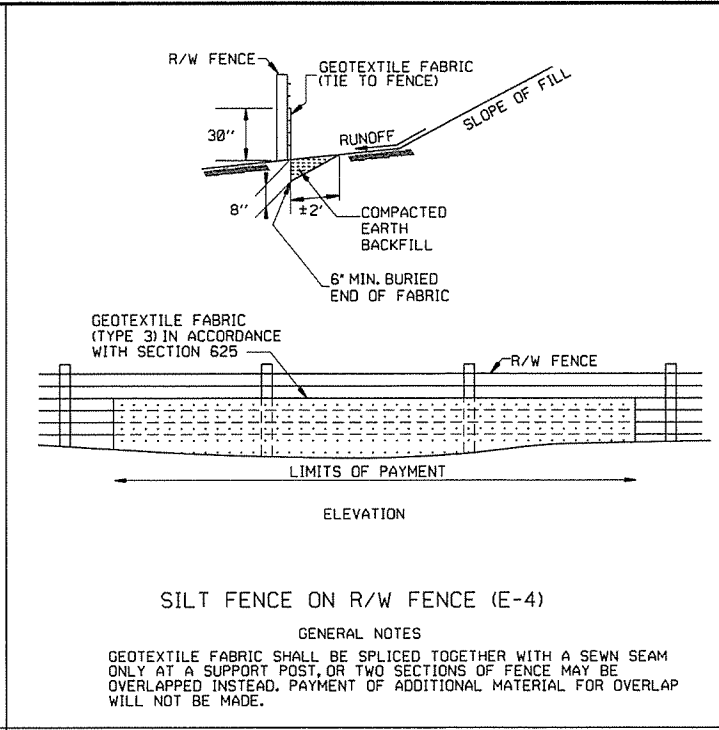
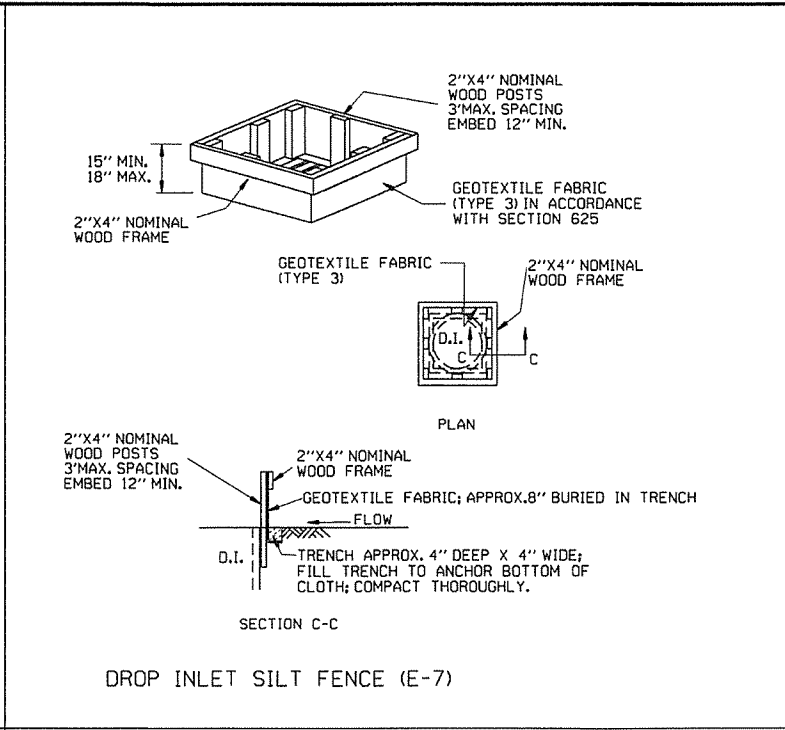
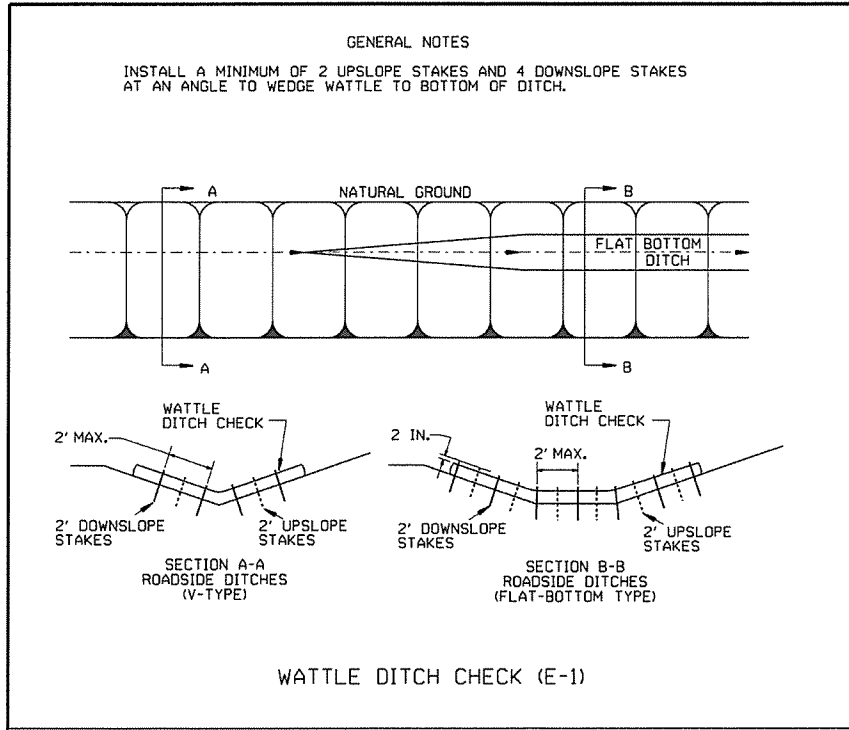


(C) Typical application - construction operations of intermediate to long term duration on a 4-lane divided roadway where half of the roadway is closed.



(D) Typical application - closing multiple lanes of a multilane highway.

DATE	REVISION	FILED
10-15-09	ADDED REFERENCE TO MASH	
11-20-08	REVISED SIGN DESIGNATIONS	
11-18-04	ADDED NOTE	
10-1-98	ADDED NOTE	
4-03-97	ADDED (SP) TO W6-1 & REVISED TRAFFIC CONTROL DEVICES NOTE	
10-18-96	ADDED R55-1	
10-12-95	MOVED UPPER SPLICE	
6-8-95	REVISED SPLICE DETAIL, TEXT	6-8-95
2-2-95	REVISED PER PART VI, MUTCD, SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	



DATE	REVISION	FILED
12-15-11	DELETED BALED STRAW DITCH CHECK & ADDED WATTLE DITCH CHECK	
11-18-98	ADDED NOTES	
7-02-98	ADDED BALED STRAW FILTER BARRIER (E-2)	
7-20-95	REVISED SILT FENCE E-4 AND E-11	7-20-95
7-15-94	REV. E-4 & E-11 MIN. 13" BURIED END OF FABRIC	
6-2-94	REVISED E-1, 4.7 & 11; DELETED E-2 & 3	6-2-94
4-1-93	REDRAWN	
10-1-92	REDRAWN	
8-2-76	ISSUED R.D.M.	298-7-28-76
		FILMED

ARKANSAS STATE HIGHWAY COMMISSION

TEMPORARY EROSION CONTROL DEVICES

STANDARD DRAWING TEC-1