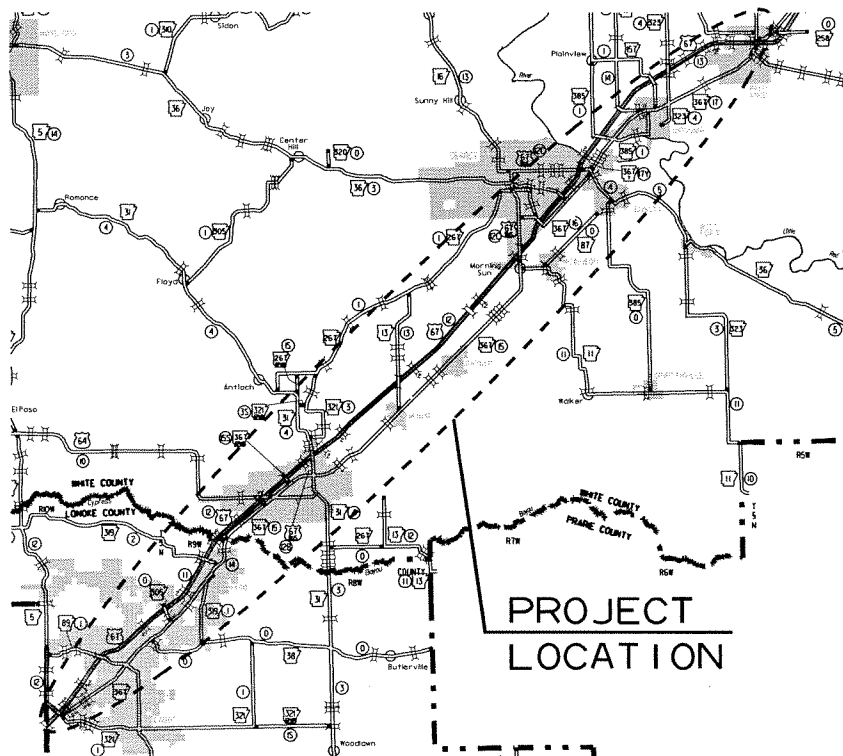




VICINITY MAP

STA. 564+60.00
END SECTION 11
LOG MILE 10.12
BEGIN SECTION 12
LOG MILE 0.00

EQUATIONS TO JOB 012179

STA. 101+19.20(BK.)	- STA. 102+04.60(AHD.)	= -85.4'
STA. 235+92.40(BK.)	- STA. 235+60.70(AHD.)	= +31.7'
STA. 355+71.20(BK.)	- STA. 354+62.90(AHD.)	= +108.3'
STA. 579+37.00(BK.)	- STA. 579+43.20(AHD.)	= -6.2'
STA. 943+23.00(BK.)	- STA. 957+00.80(AHD.)	= -1377.8'
STA. 1657+04.50(BK.)	- STA. 1658+14.40(AHD.)	= -109.9'
STA. 1885+28.70(BK.)	- STA. 1876+94.80(AHD.)	= +833.9'
EQUATION TOTAL =		-605.4

STA. 68+46.40
BEGIN JOB 012179
SECTION 11
LOG MILE 0.71

EXCEPTIONS TO JOB 012179

STA. 145+52	- STA. 146+42	= 90'
STA. 326+78	- STA. 328+01	= 123'
STA. 440+99	- STA. 442+24	= 125'
STA. 557+90	- STA. 559+10	= 120'
STA. 563+46	- STA. 566+43	= 297'
STA. 575+90	- STA. 577+11	= 121'
STA. 859+96	- STA. 863+46	= 350'
STA. 911+36	- STA. 912+96	= 160'
STA. 1125+64	- STA. 1127+14	= 150'
STA. 1320+39	- STA. 1324+45	= 406'
STA. 1632+30	- STA. 1635+15	= 285'
STA. 1670+36	- STA. 1672+10	= 174'
STA. 1702+70	- STA. 1707+62	= 492'
TOTAL EXCEPTIONS =		2893'

BEGINNING OF PROJECT	MID-POINT OF PROJECT	END OF PROJECT
LAT. = N 34°56' 55.4"	LAT. = N 35°06' 58.4"	LAT. = N 35°17' 42.5"
LONG. = W 92°03' 50.6"	LONG. = N 91°50' 41.2"	LONG. = W 91°38' 46.1"

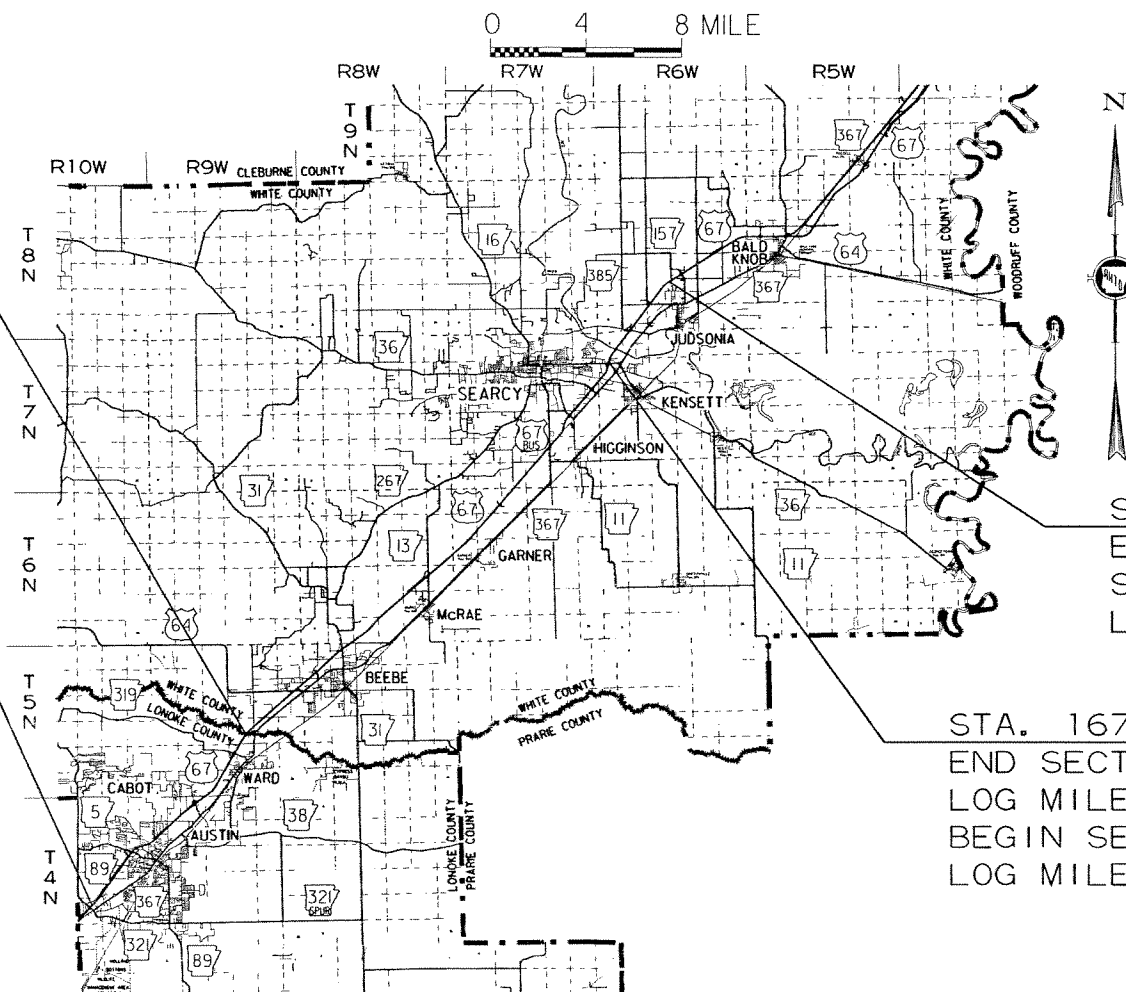
"A FULLY CONTROLLED ACCESS FACILITY"
ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
CONSTRUCTION PLANS FOR STATE HIGHWAY

CABOT-BALD KNOB (SEL. SECS.) (CABLE MEDIAN BARRIER) (S)

LONOKE & WHITE COUNTIES
ROUTE 67 SECTIONS 11, 12 & 13

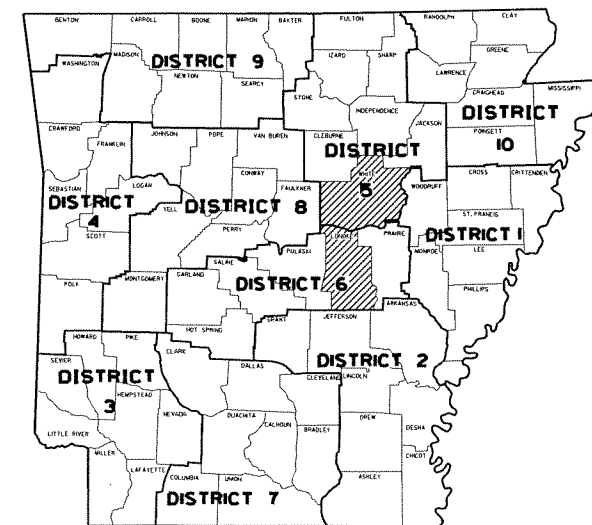
JOB 012179

FED. AID PROJ. ACHSIP-4373(1)



GROSS LENGTH OF PROJECT	180258.40	FEET	OR	34.140	MILES
NET " " ROADWAY	177365.40	"	"	33.592	"
NET " " BRIDGES	0.00	"	"	0.000	"
NET " " PROJECT	177365.40	"	"	33.592	"

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.		012179	I	84
CABOT-BALD KNOB (SEL. SECS.) (CABLE MEDIAN BARRIER) (S)								



ARK. HWY. DIST. NO. 5 & 6

DESIGN TRAFFIC DATA

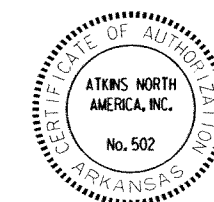
DESIGN YEAR	2033
2013 ADT	27,000
2033 ADT	38,000
2033 DHV	4,180
TRUCKS	14%
DESIGN SPEED	70 MPH

LOG MILES

SECTION 11 0.71 TO 10.12 IN LONOKE COUNTY
SECTION 12 0.00 TO 20.69 IN WHITE COUNTY
SECTION 13 0.00 TO 4.04 IN WHITE COUNTY

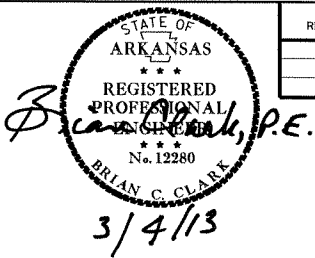
STA. 1877+10.20
END JOB 012179
SECTION 13
LOG MILE 4.04

STA. 1672+00.00
END SECTION 12
LOG MILE 20.69
BEGIN SECTION 13
LOG MILE 0.00



3/8/13

P.E. 012179
NON-PART.



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.		012179	2	84
				INDEX, GOV. SPECS. AND GENERAL NOTES				

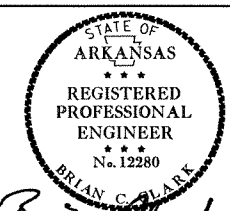
INDEX OF SHEETS			
SHEET NO.	TITLE	DRWG. NO.	DATE
1	TITLE SHEET		
2	INDEX OF SHEETS, GOVERNING SPECIFICATIONS AND GENERAL NOTES		
3	TYPICAL SECTIONS OF IMPROVEMENT		
4 - 5	SPECIAL DETAILS		
6 - 36	TEMPORARY EROSION CONTROL DETAILS		
37 - 39	MAINTENANCE OF TRAFFIC		
40 - 43	QUANTITY SHEETS		
44	SUMMARY OF QUANTITIES AND REVISIONS		
45 - 75	PLAN SHEETS		
76	CONCRETE DITCH PAVING	CDP-1	11-17-10
77	GUARD RAIL DETAILS	GR-8	7-14-10
78	GUARD RAIL DETAILS	GR-9A	4-17-08
79	GUARD RAIL DETAILS	GRT-1	7-14-10
80	CONCRETE PIPE CULVERT FILL HEIGHTS & BEDDING	PCC-1	12-15-11
81	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	TC-1	12-15-11
82	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	TC-2	3-11-10
83	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	TC-3	10-15-09
84	TEMPORARY EROSION CONTROL DEVICES	TEC-1	12-15-11

GOVERNING SPECIFICATIONS

ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 2003, AND THE FOLLOWING SPECIAL PROVISIONS AND SUPPLEMENTAL SPECIFICATIONS:

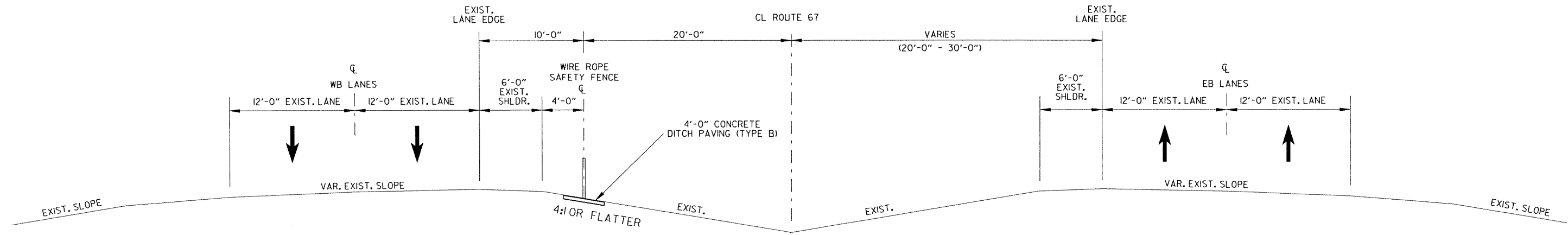
NUMBER	TITLE
ERRATA	ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS
FHWA-1273	REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS
FHWA-1273	SUPPLEMENT-EQUAL EMPLOYMENT OPPORTUNITY-NOTICE TO CONTRACTORS
FHWA-1273	SUPPLEMENT-SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES (23 U.S.C. 140)
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
100-2	MANUAL FOR ASSESSING SAFETY HARDWARE (MASH)
102-1	BIDDING REQUIREMENTS AND CONDITIONS
103-1	DETERMINATION OF DBE PARTICIPATION
105-1	CONSTRUCTION CONTROL MARKINGS
105-2	EQUIPMENT AND MATERIAL STORAGE ON BRIDGE STRUCTURES
105-3	CONTROL OF WORK
107-1	WORKER VISIBILITY
108-1	LIQUIDATED DAMAGES
110-1	PROTECTION OF WATER QUALITY AND WETLANDS
303-1	AGGREGATE BASE COURSE
404-1	PRODUCTION VERIFICATION OF ASPHALT CONCRETE HOT MIX
404-2	DESIGN AND QUALITY CONTROL OF ASPHALT MIXTURES
409-1	MINERAL AGGREGATES
410-3	DENSITY TESTING FOR ACHM LEVELING COURSES AND BOND BREAKERS
600-1	WATER FOR VEGETATION
603-1	MAINTENANCE OF TRAFFIC
604-1	RETROREFLECTIVE SHEETING FOR TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
604-2	INSPECTION OF TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
606-1	PIPE CULVERTS FOR SIDE DRAINS
JOB 012179	BROADBAND INTERNET SERVICE FOR ASPHALT CONCRETE PLANT
JOB 012179	CONCRETE DITCH PAVING
JOB 012179	COORDINATION OF WORK
JOB 012179	GOALS FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION
JOB 012179	INTERNET BIDDING
JOB 012179	MAINTENANCE OF TRAFFIC
JOB 012179	PLASTIC PIPE
JOB 012179	REMOVAL AND DISPOSAL OF GUARDRAIL
JOB 012179	REMOVAL AND DISPOSAL OF IMPACT ATTENUATION BARRIERS
JOB 012179	SEQUENCE OF CONSTRUCTION
JOB 012179	SITE USE (A+C METHOD)
JOB 012179	STORM WATER POLLUTION PREVENTION PLAN
JOB 012179	SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS
JOB 012179	TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
JOB 012179	UTILITY ADJUSTMENTS
JOB 012179	WARM MIX ASPHALT
JOB 012179	WIRE ROPE SAFETY FENCE MAINTENANCE MATERIALS
JOB 012179	WIRE ROPE SAFETY FENCE (WRSF) SPECIFICATIONS
JOB 012179	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.
 - ANY REQUIRED EROSION CONTROL MEASURES FROM WASTING MATERIAL SHALL BE AT THE CONTRACTOR'S EXPENSE.

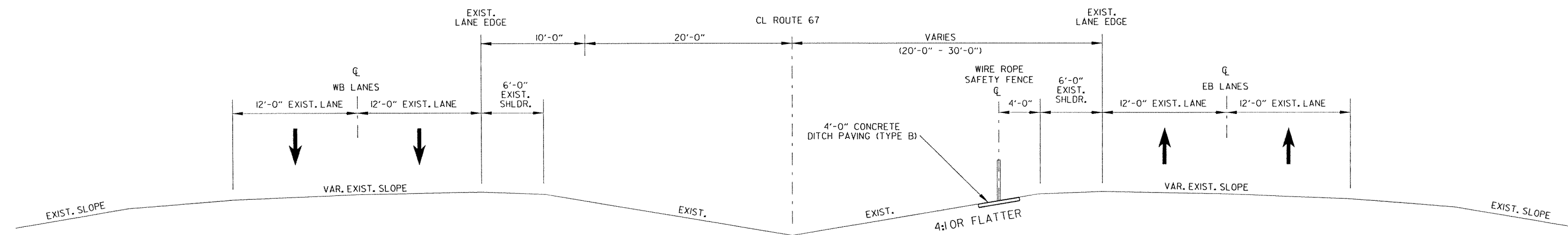


Brian C. Clark, P.E.
2/22/13

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.	012179	3	84	
TYPICAL SECTIONS OF IMPROVEMENT								



TYPICAL SECTION OF IMPROVEMENT
WIRE ROPE SAFETY FENCE ON WESTBOUND LANES FORESLOPE

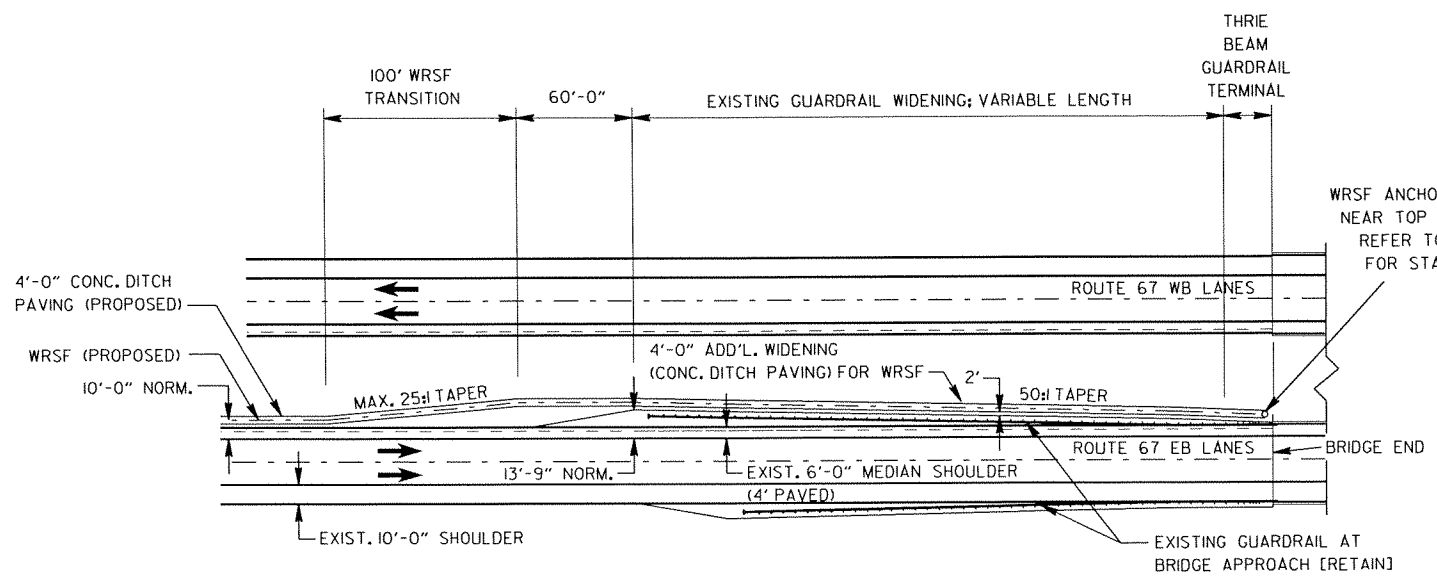


TYPICAL SECTION OF IMPROVEMENT
WIRE ROPE SAFETY FENCE ON EASTBOUND LANES FORESLOPE

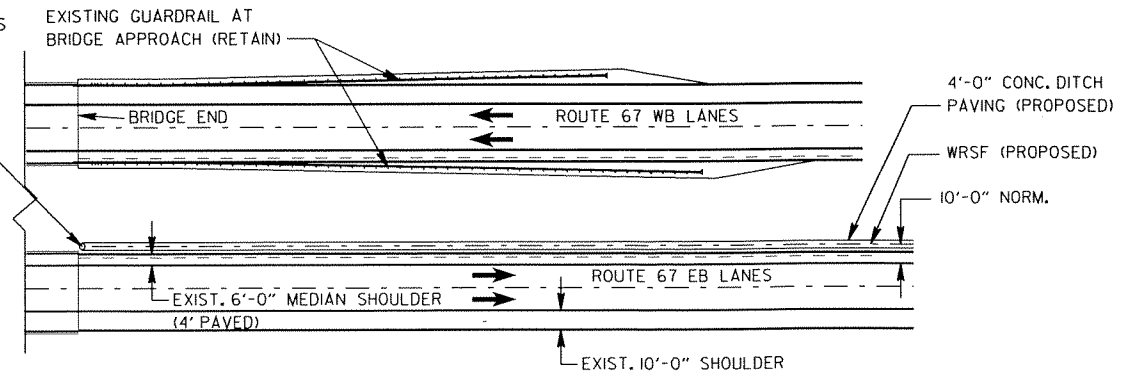


Brian Clark, P.E.
2/22/13

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.	012179		5	84
SPECIAL DETAILS								

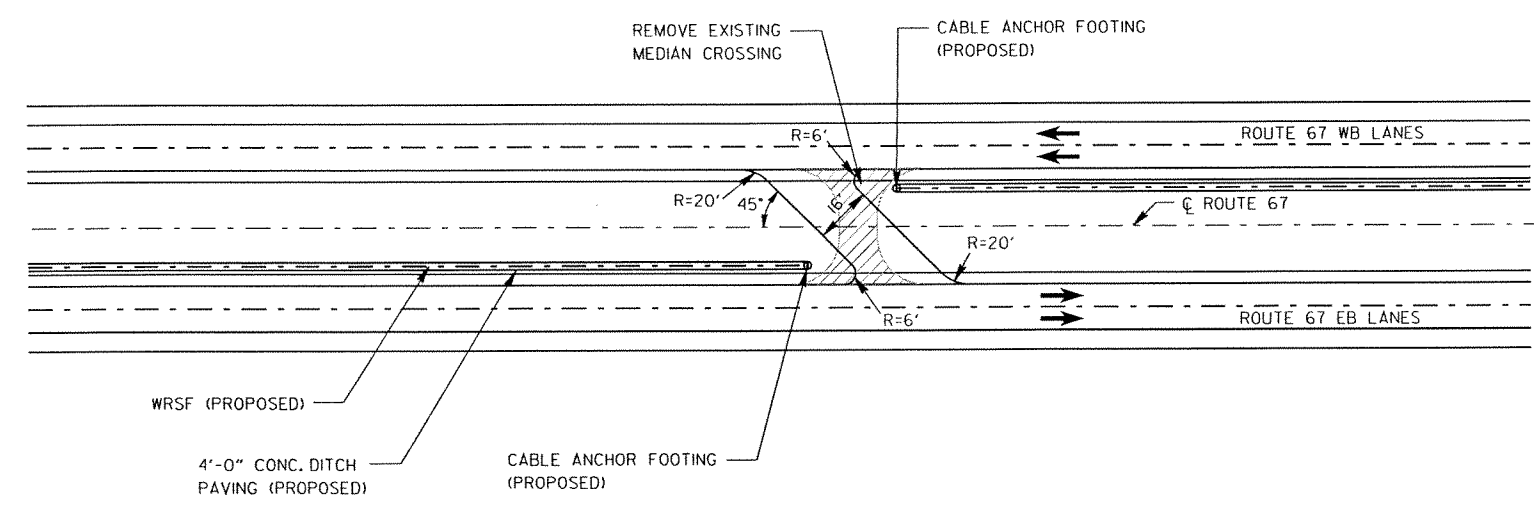


WRSF AND EXIST. GUARDRAIL
ON SAME SIDE OF MEDIAN



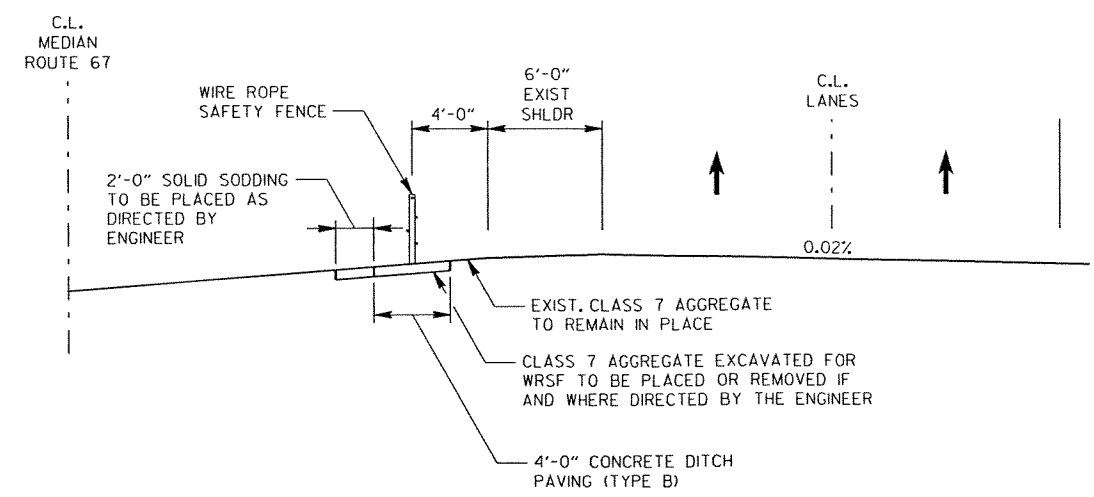
WRSF AND EXIST. GUARDRAIL
ON OPPOSITE SIDES OF MEDIAN

DETAIL OF WIRE ROPE SAFETY FENCE AT EXISTING BRIDGE ENDS

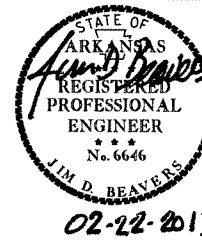


DETAIL AT MEDIAN CROSSING

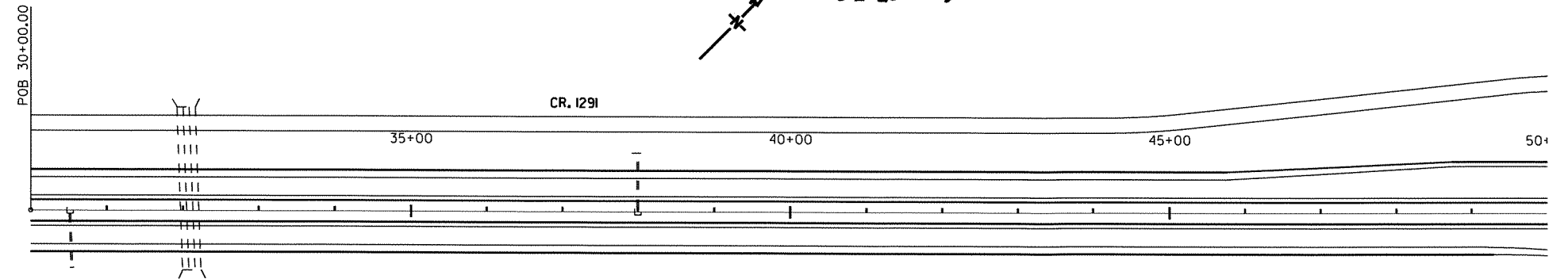
NOTE:
MEDIAN CROSSING TO BE CONSTRUCTED OF AGGREGATE
BASE COURSE (CLASS 7) - 7" COMPACTED DEPTH &
ACHM SURFACE COURSE (2") - 220 LBS. PER SQ. YD.



SOLID SODDING DETAIL



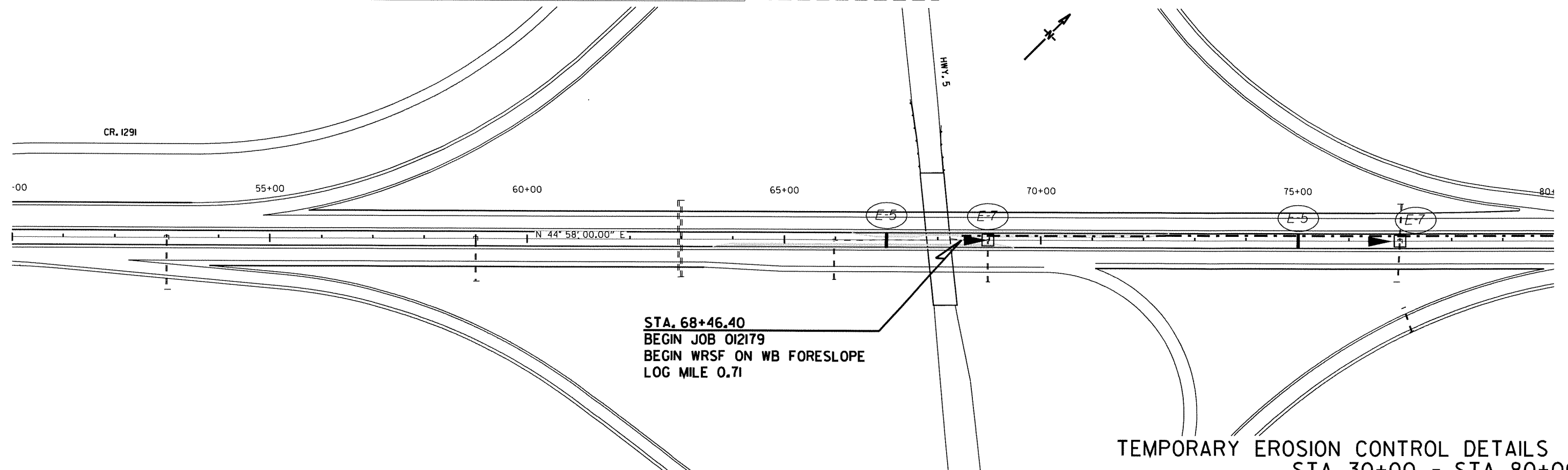
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		012179	6	84
TEMPORARY EROSION CONTROL DETAILS								



SAND BAG DITCH CHECK	DROP INLET SILT FENCE	DATE OF REVISION	REVISION
E-5	E-7		

LEGEND

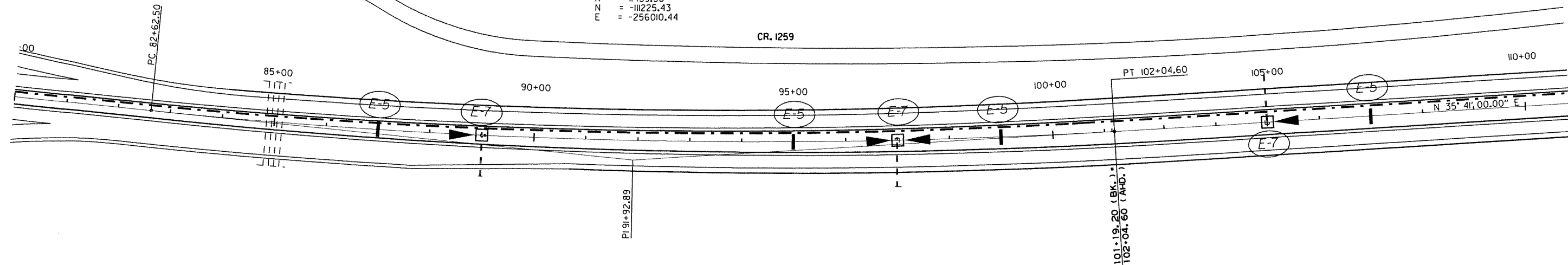
INDICATES DIRECTION OF MEDIAN DRAINAGE



STATE OF
ARKANSAS
JIM D. BEAVERS
PROFESSIONAL
ENGINEER
No. 6646
02-22-2013

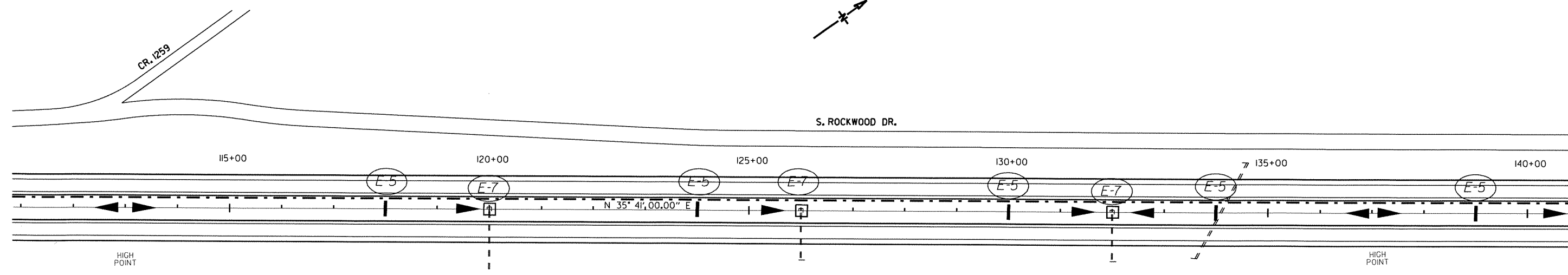
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				6	ARK.			
				JOB NO.		012179	7	84
TEMPORARY EROSION CONTROL DETAILS								

P.I. = 91+92.89
Δ = 9°17'00.00" LT.
D = 0°29'59.97"
T = 930.39'
L = 1856.70'
R = 11459.36
N = -111225.43
E = -256010.44



SAND BAG DITCH CHECK	DROP INLET SILT FENCE	DATE OF REVISION	REVISION
E-5	E-7		
I	□		
LEGEND			

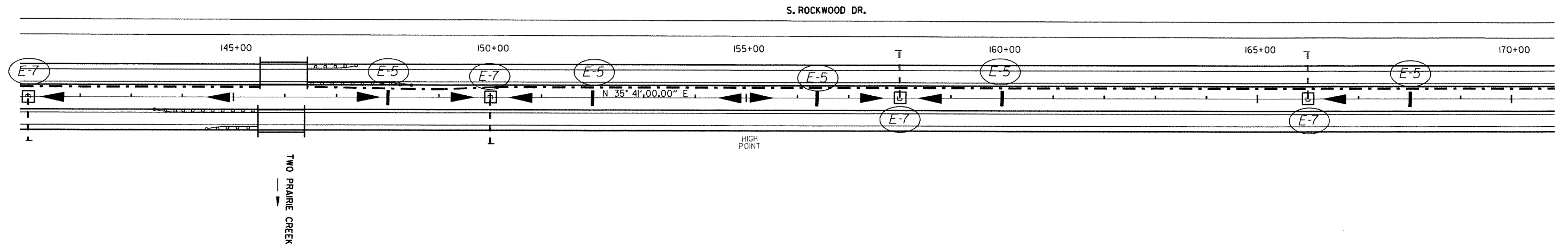
INDICATES DIRECTION
OF MEDIAN DRAINAGE



TEMPORARY EROSION CONTROL DETAILS
STA. 80+00 - STA. 141+00



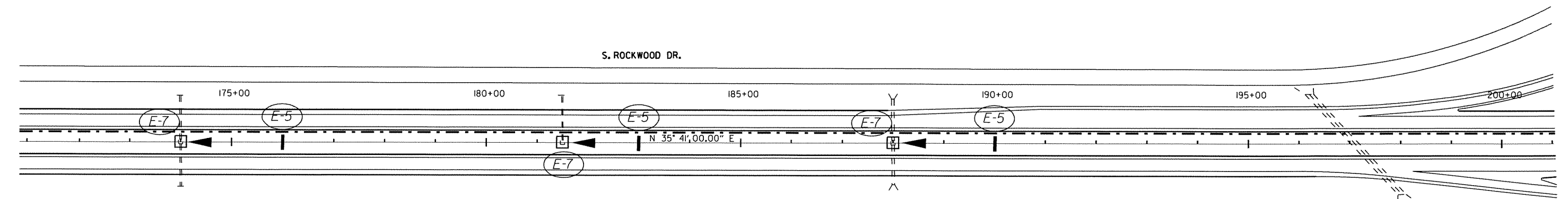
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				6	ARK.			
				JOB NO.	012179	8	84	
TEMPORARY EROSION CONTROL DETAILS								



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

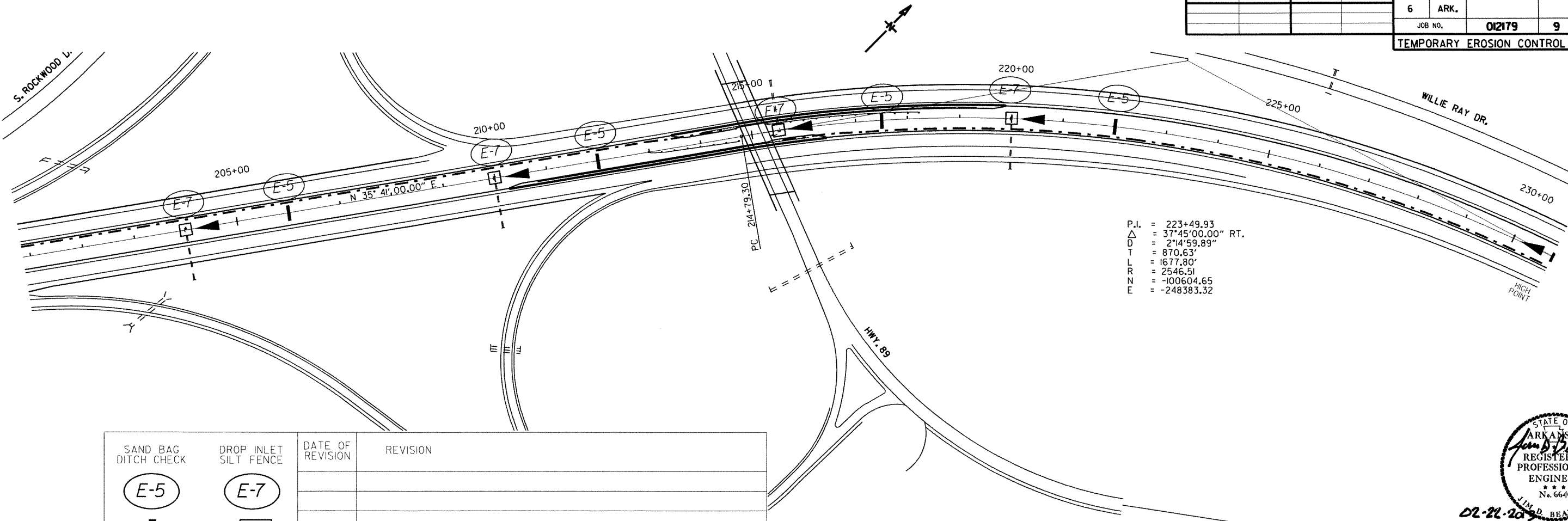
LEGEND

INDICATES DIRECTION OF MEDIAN DRAINAGE



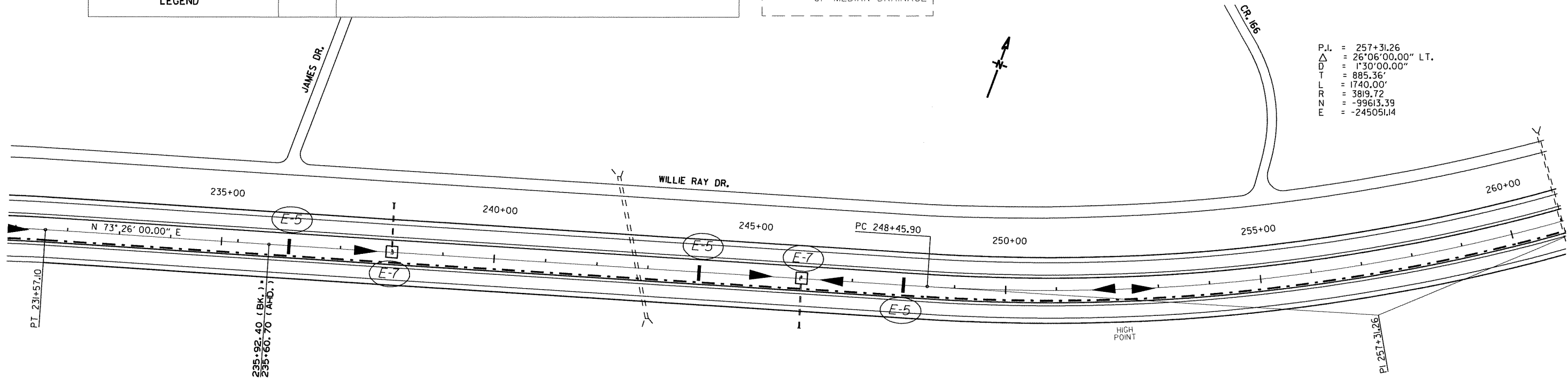
TEMPORARY EROSION CONTROL DETAILS
STA. 141+00 - STA. 201+00

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.	012179	9	84	
TEMPORARY EROSION CONTROL DETAILS								

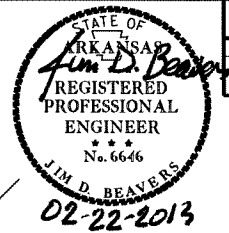


SAND BAG DITCH CHECK	DROP INLET SILT FENCE	DATE OF REVISION	REVISION
E-5	E-7		
I	□		
LEGEND			

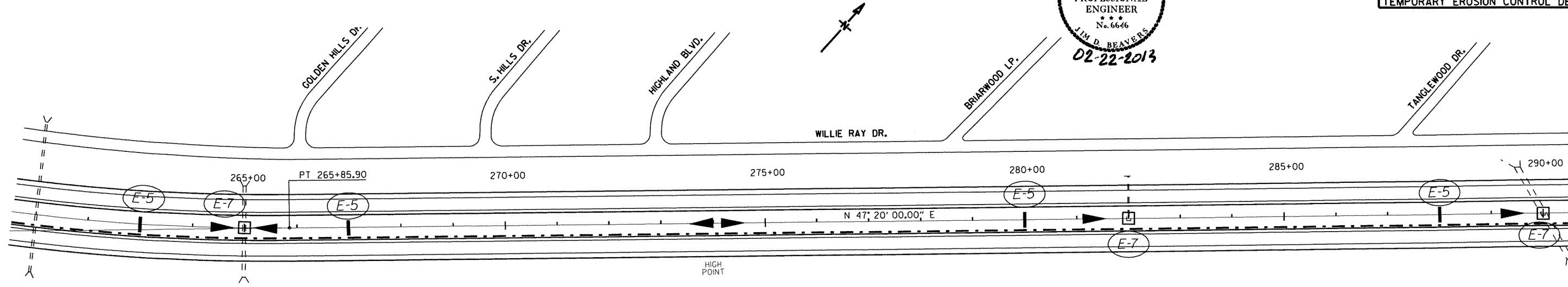
INDICATES DIRECTION
OF MEDIAN DRAINAGE



TEMPORARY EROSION CONTROL DETAILS
STA. 201+00 - STA. 261+00



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.	012179	10	84	
TEMPORARY EROSION CONTROL DETAILS								



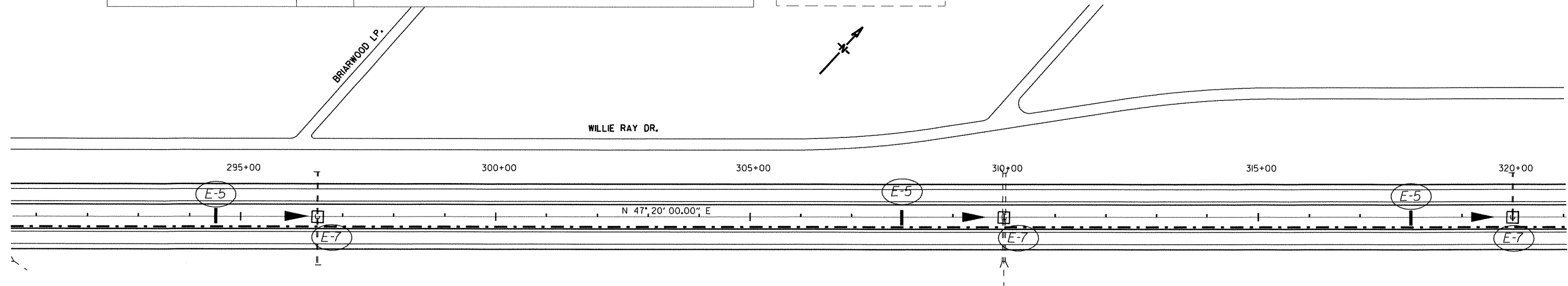
DATE OF REVISION	REVISION

SAND BAG DITCH CHECK
E-5
I

DROP INLET SILT FENCE
E-7
□

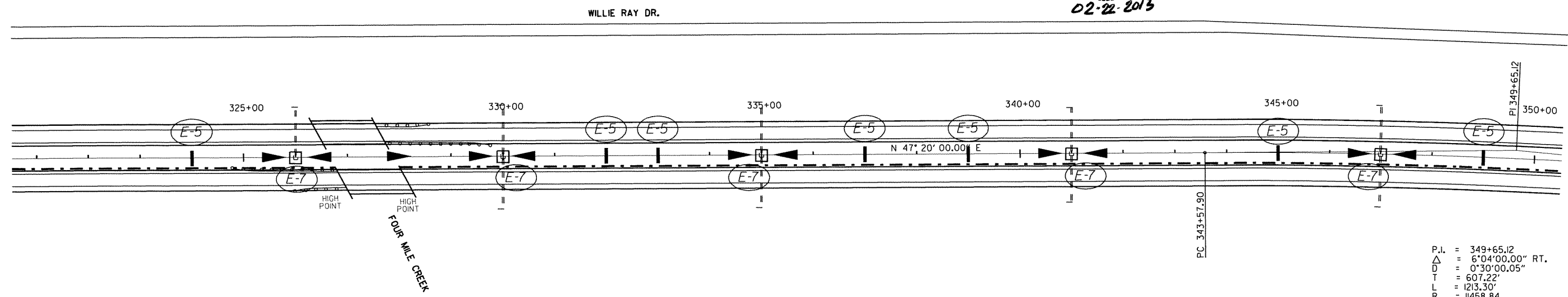
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INDICATES DIRECTION OF MEDIAN DRAINAGE





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.		012179	■	84
TEMPORARY EROSION CONTROL DETAILS								



P.I. = 349+65.12
Δ = 6°04'00.00" RT.
D = 0°30'00.05"
T = 607.22'
L = 1213.30'
R = 11458.84
N = -93334.49
E = -238238.81

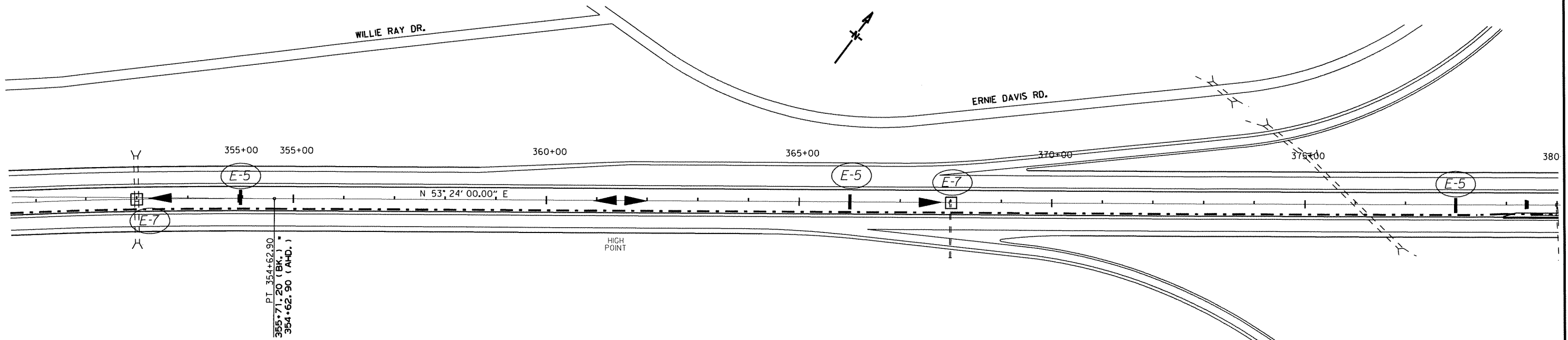
DATE OF REVISION	REVISION

SAND BAG DITCH CHECK
E-5
I

DROP INLET SILT FENCE
E-7
□

LEGEND

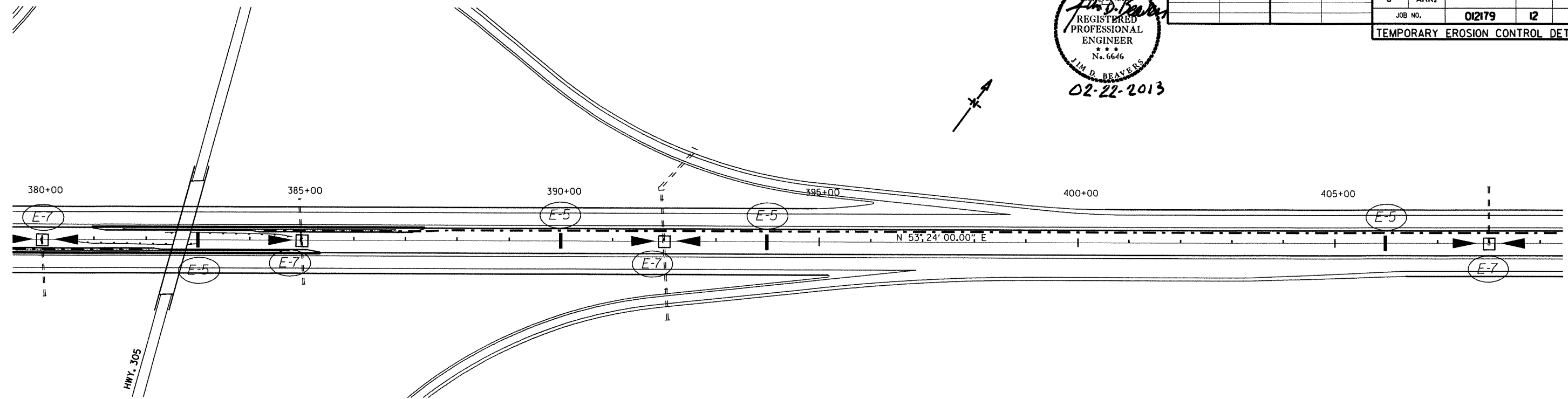
INDICATES DIRECTION OF MEDIAN DRAINAGE



TEMPORARY EROSION CONTROL DETAILS
STA. 321+00 - STA. 380+00

STATE OF ARKANSAS
JIM D. BEAVERS
REGISTERED PROFESSIONAL ENGINEER
No. 6646
02-22-2013

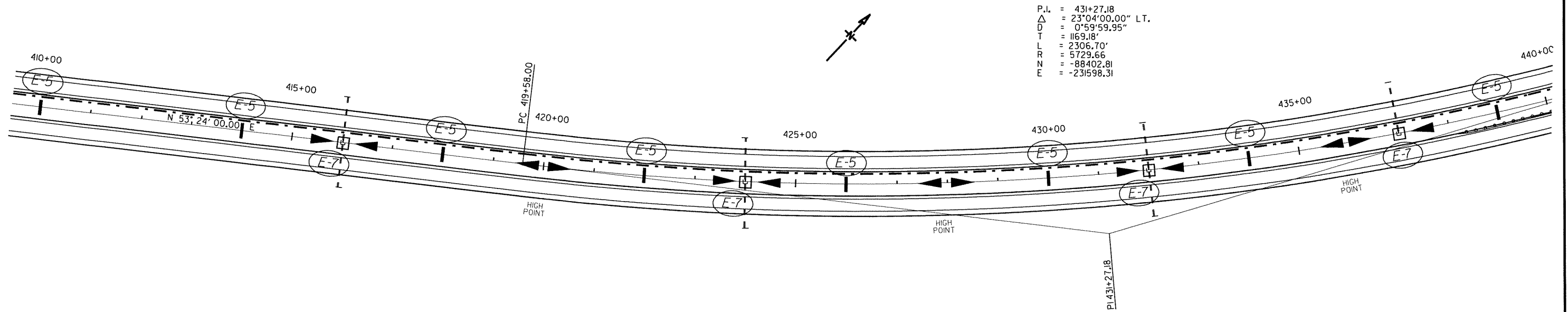
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				6	ARK.			
				JOB NO.		012179	12	84
TEMPORARY EROSION CONTROL DETAILS								



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

LEGEND

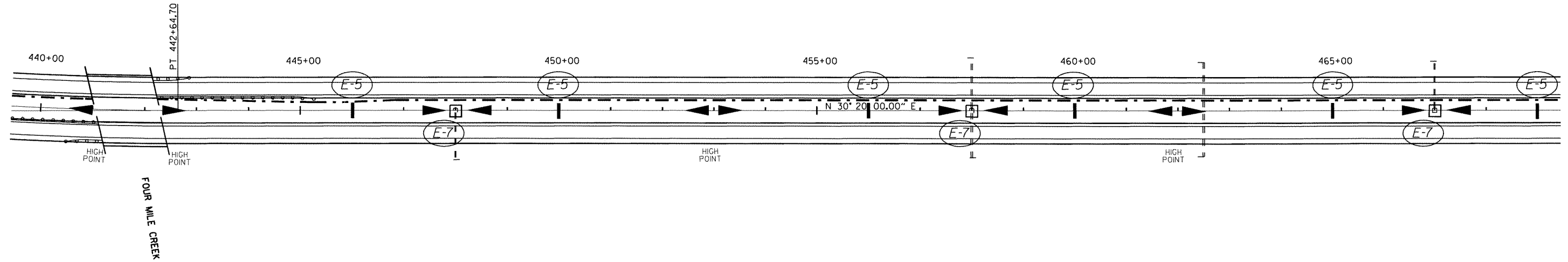
INDICATES DIRECTION OF MEDIAN DRAINAGE



TEMPORARY EROSION CONTROL DETAILS
STA. 380+00 - STA. 440+00

STATE OF
ARKANSAS
JIM D. BEAVERS
REGISTERED
PROFESSIONAL
ENGINEER
No. 6646
02-22-2013

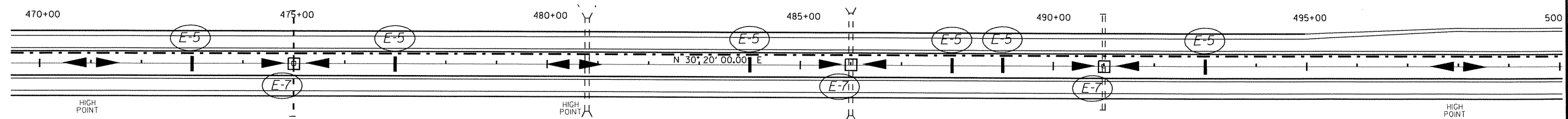
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				6	ARK.			
				JOB NO.		012179	13	84
TEMPORARY EROSION CONTROL DETAILS								



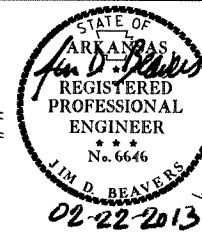
SAND BAG DITCH CHECK	DROP INLET SILT FENCE	DATE OF REVISION	REVISION

LEGEND

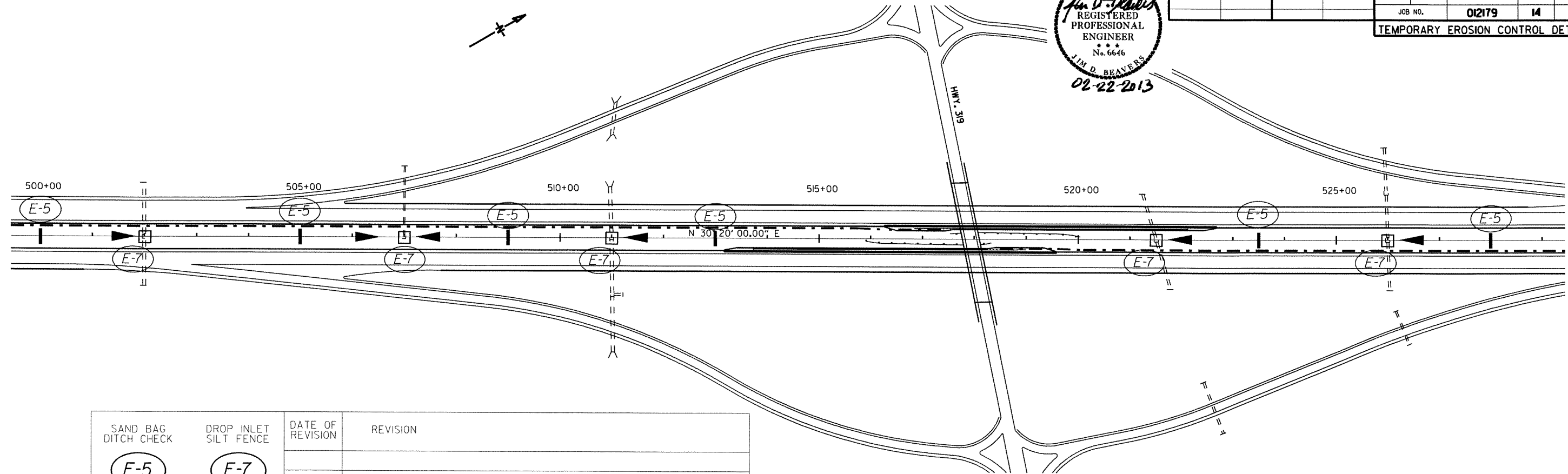
INDICATES DIRECTION
OF MEDIAN DRAINAGE

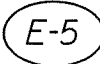


TEMPORARY EROSION CONTROL DETAILS
STA. 440+00 - STA. 500+00

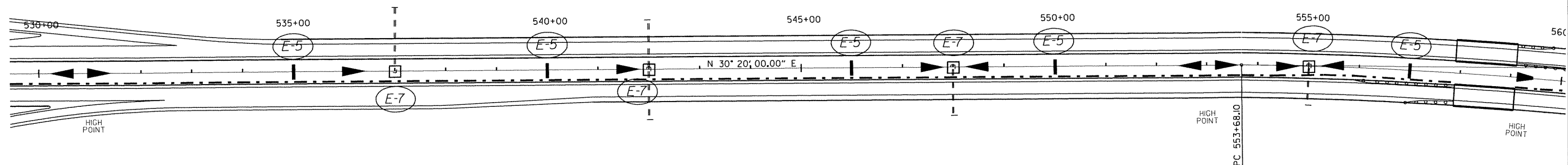


DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	012179	14	84	
TEMPORARY EROSION CONTROL DETAILS								



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

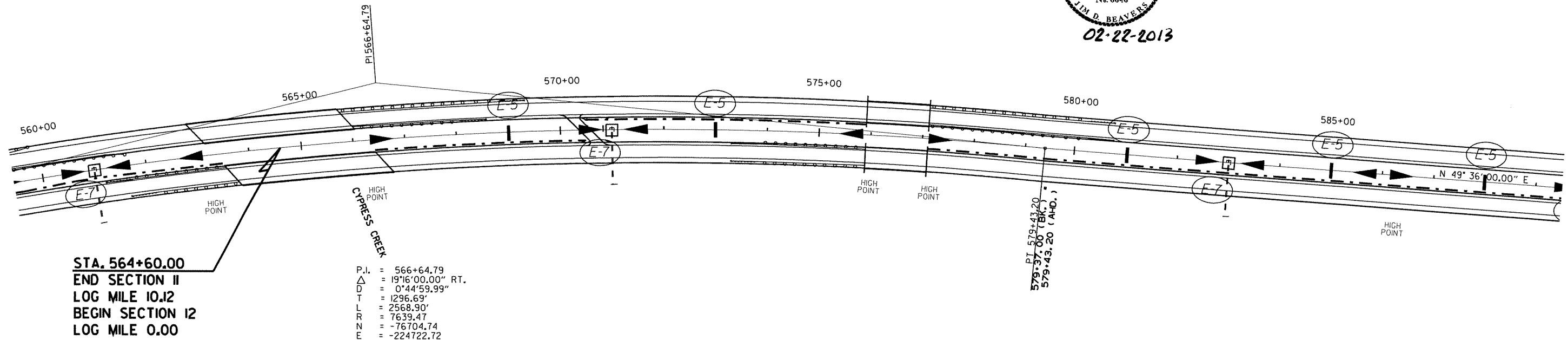
INDICATES DIRECTION OF MEDIAN DRAINAGE



TEMPORARY EROSION CONTROL DETAILS
STA. 500+00 - STA. 560+00

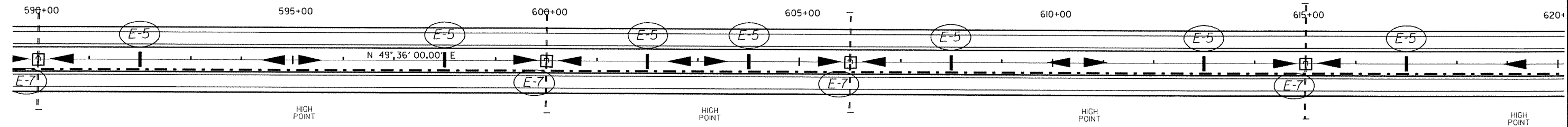
STATE OF ARKANSAS
Jim D. Beavers
REGISTERED PROFESSIONAL ENGINEER
No. 6646
02-22-2013

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.	012179	15	84	
TEMPORARY EROSION CONTROL DETAILS								



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

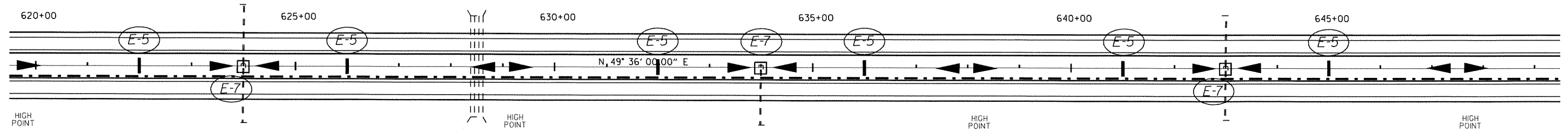
INDICATES DIRECTION OF MEDIAN DRAINAGE



TEMPORARY EROSION CONTROL DETAILS
STA. 560+00 - STA. 620+00

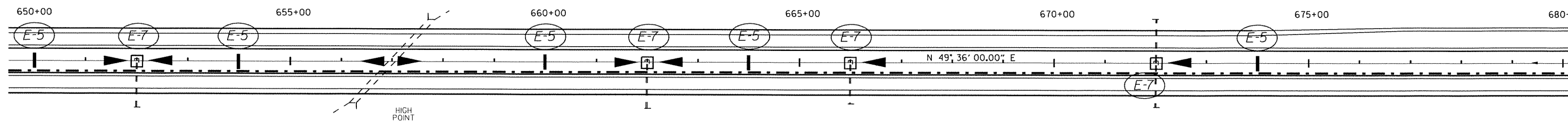
STATE OF
ARKANSAS
REGISTERED
PROFESSIONAL
ENGINEER
No. 6646
JIM D. BEAVERS
02-22-2013

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.		012179	16	84
TEMPORARY EROSION CONTROL DETAILS								

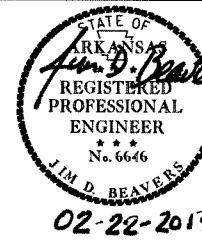


SAND BAG DITCH CHECK	DROP INLET SILT FENCE	DATE OF REVISION	REVISION
E-5	E-7		
I	□		
LEGEND			

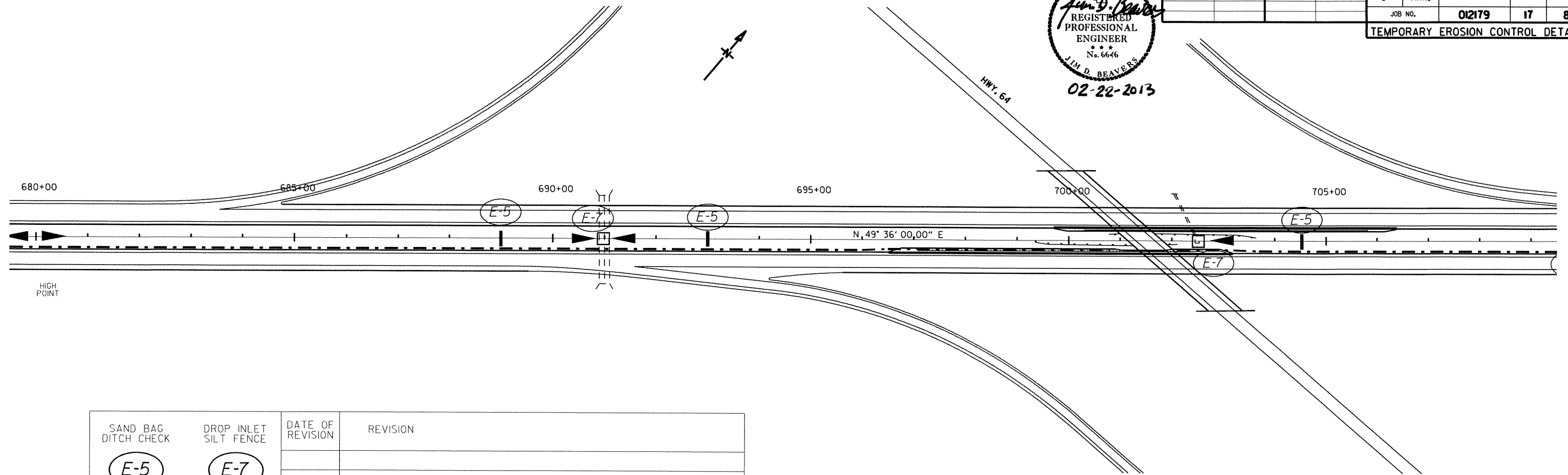
INDICATES DIRECTION
OF MEDIAN DRAINAGE



TEMPORARY EROSION CONTROL DETAILS
STA. 620+00 - STA. 680+00



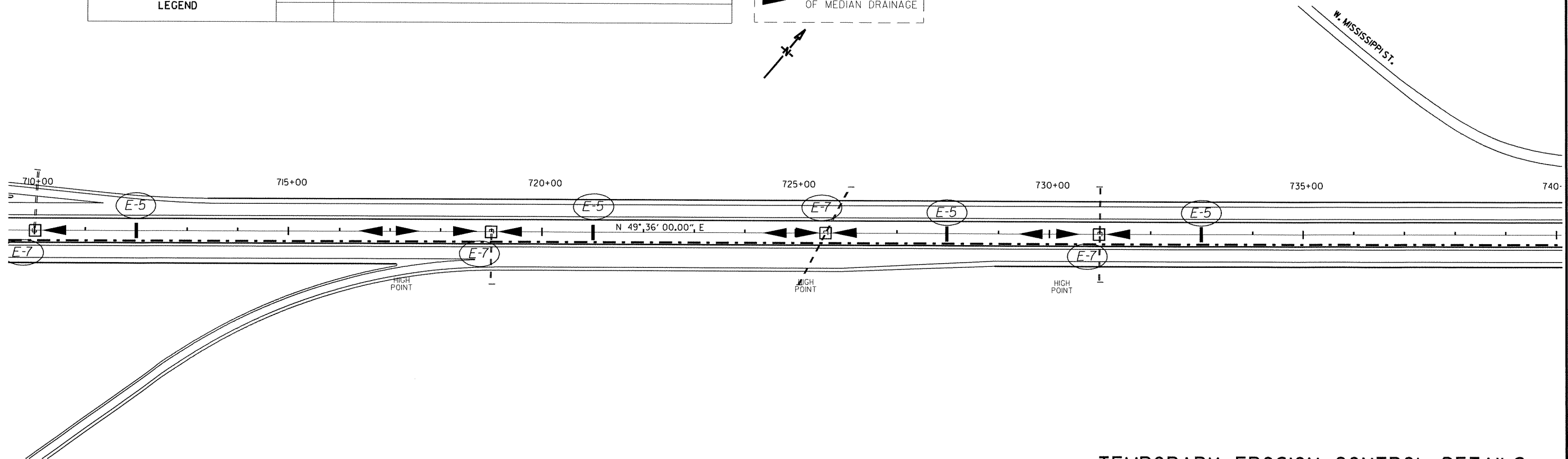
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	012179		17	84
TEMPORARY EROSION CONTROL DETAILS								



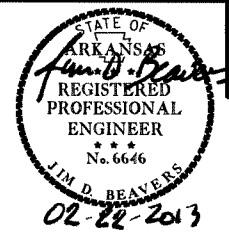
SAND BAG DITCH CHECK	DROP INLET SILT FENCE	DATE OF REVISION	REVISION

LEGEND

INDICATES DIRECTION OF MEDIAN DRAINAGE

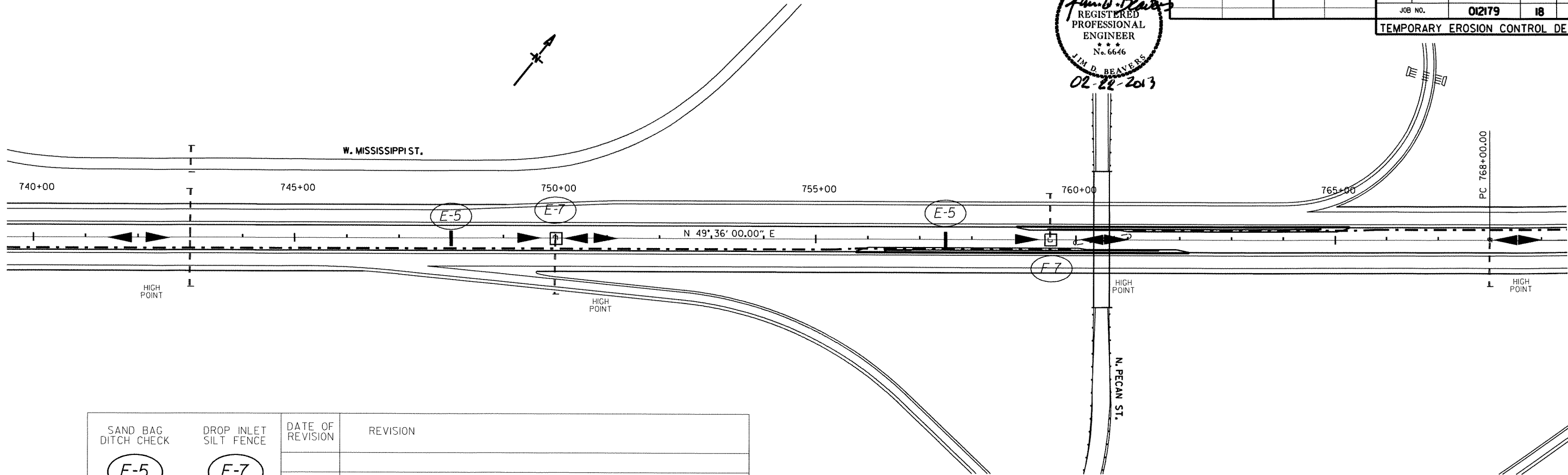


TEMPORARY EROSION CONTROL DETAILS
STA. 680+00 - STA. 740+00



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.		012179	18	84

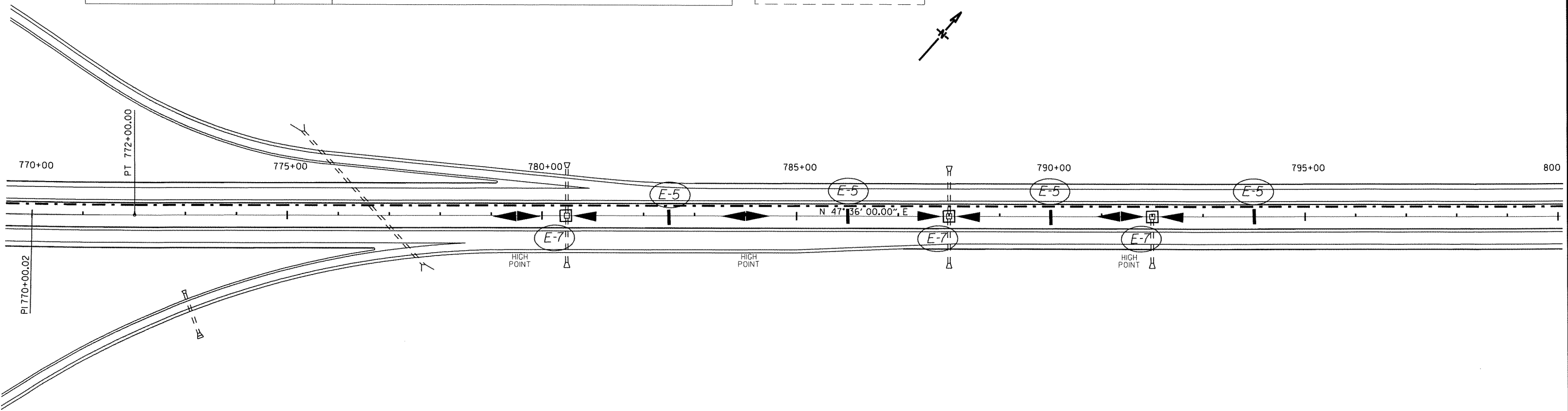
TEMPORARY EROSION CONTROL DETAILS



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

LEGEND

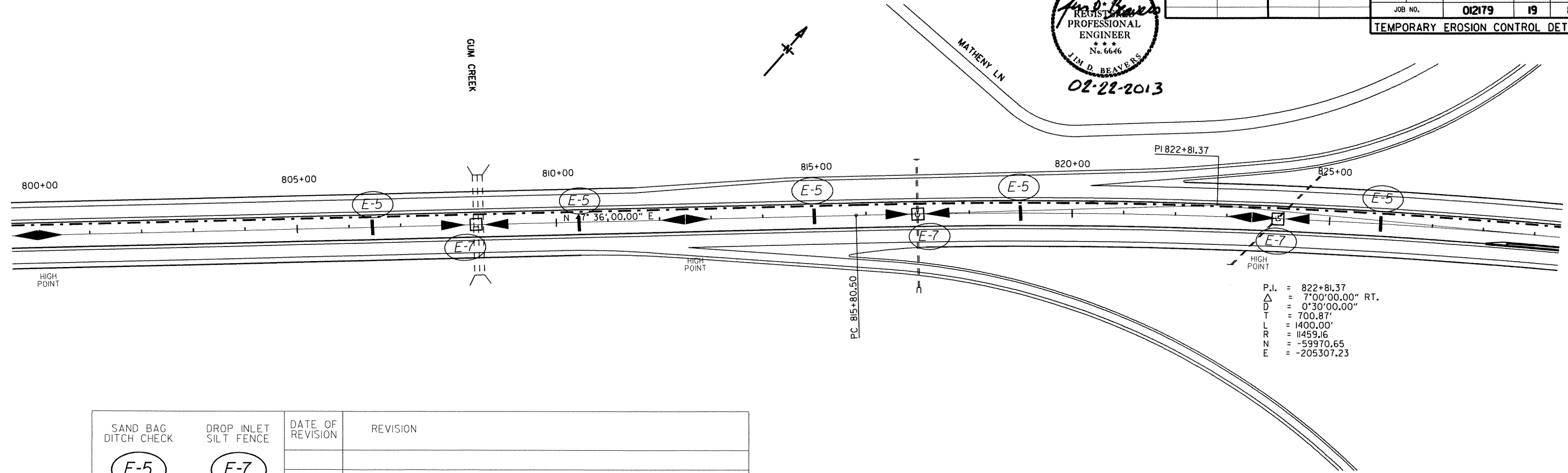
INDICATES DIRECTION OF MEDIAN DRAINAGE



TEMPORARY EROSION CONTROL DETAILS
STA. 740+00 - STA. 800+00

STATE OF
ARKANSAS
REGISTERED
PROFESSIONAL
ENGINEER
No. 6646
JIM D. BEAVERS
02-22-2013

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.		012179	19	84
TEMPORARY EROSION CONTROL DETAILS								



P.I. = 822+81.37
Δ = 7°00'00.00" RT.
D = 0°30'00.00"
T = 700.87'
L = 1400.00'
R = 11459.16
N = -59970.65
E = -205307.23

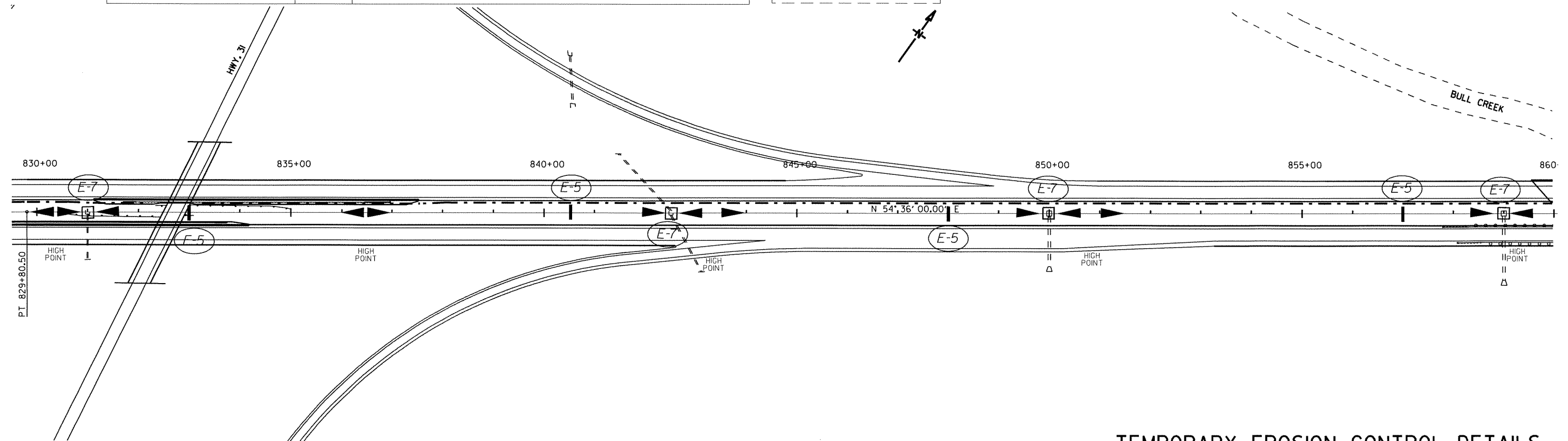
DATE OF REVISION	REVISION

SAND BAG DITCH CHECK
E-5
I

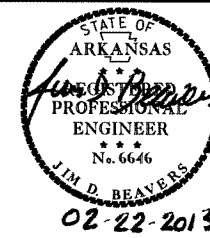
DROP INLET SILT FENCE
E-7
□

LEGEND

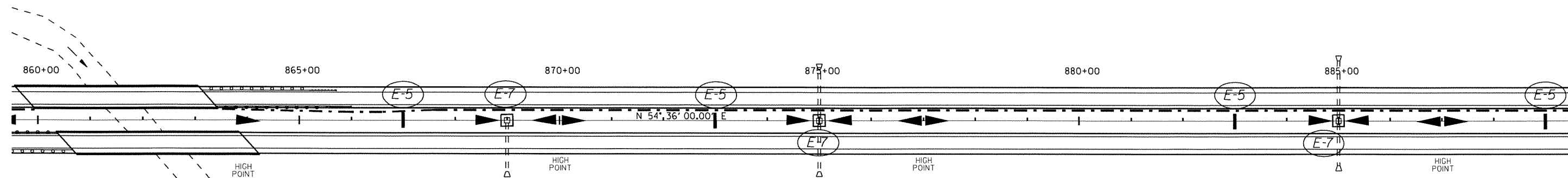
INDICATES DIRECTION OF MEDIAN DRAINAGE



TEMPORARY EROSION CONTROL DETAILS
STA. 800+00 - STA. 860+00

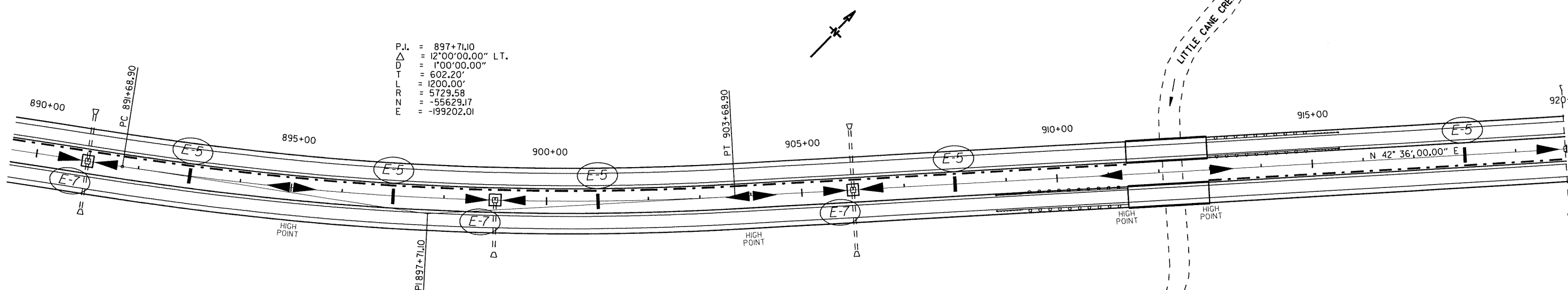


DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	012179	20	84	
TEMPORARY EROSION CONTROL DETAILS								



SAND BAG DITCH CHECK	DROP INLET SILT FENCE	DATE OF REVISION	REVISION
E-5	E-7		
I	□		
LEGEND			

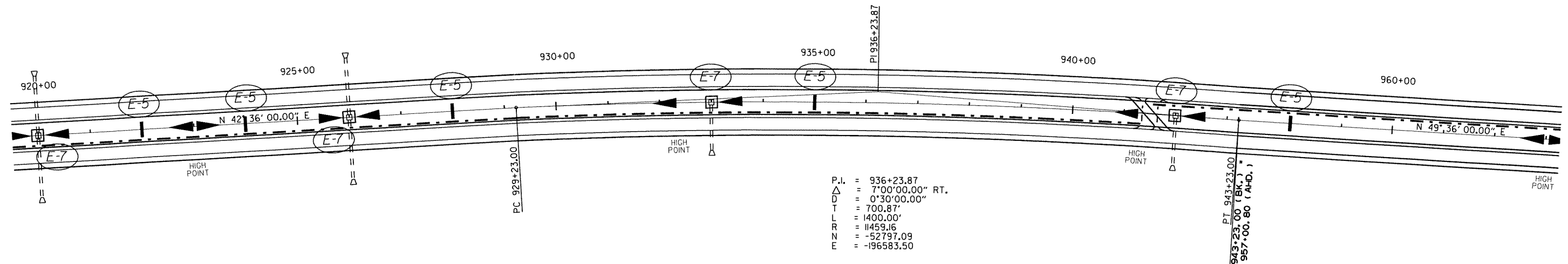
INDICATES DIRECTION OF MEDIAN DRAINAGE



TEMPORARY EROSION CONTROL DETAILS
STA. 860+00 - STA. 920+00

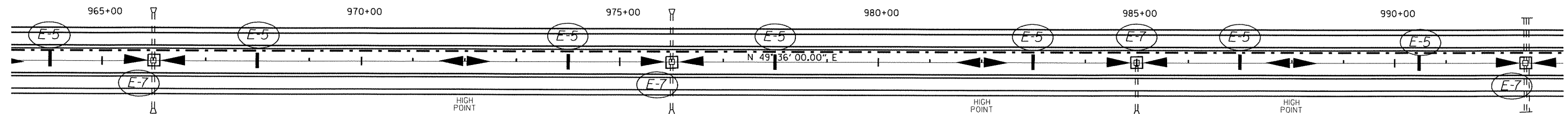
STATE OF
ARKANSAS
JIM D. BEAVERS
PROFESSIONAL
ENGINEER
No. 6646
02-22-2013

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.		012179	21	84
TEMPORARY EROSION CONTROL DETAILS								



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

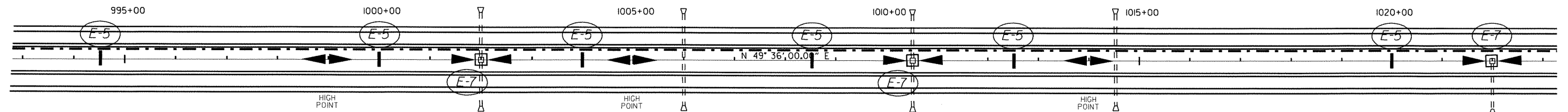
INDICATES DIRECTION
OF MEDIAN DRAINAGE

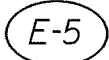


TEMPORARY EROSION CONTROL DETAILS
STA. 920+00 - STA. 993+00

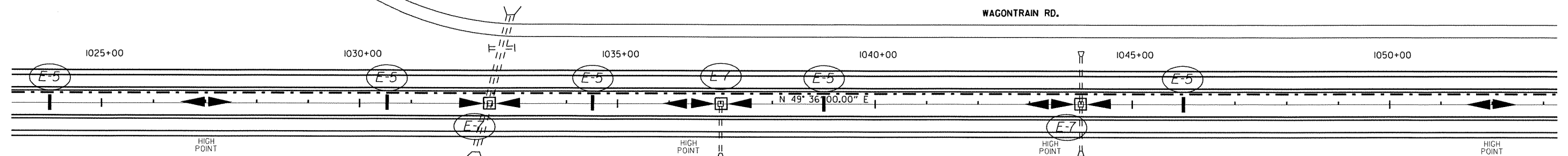
STATE OF
ARKANSAS
REGISTERED
PROFESSIONAL
ENGINEER
No. 6646
JIM D. BEAVERS
02-22-2013

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.	012179	22	84	
TEMPORARY EROSION CONTROL DETAILS								



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

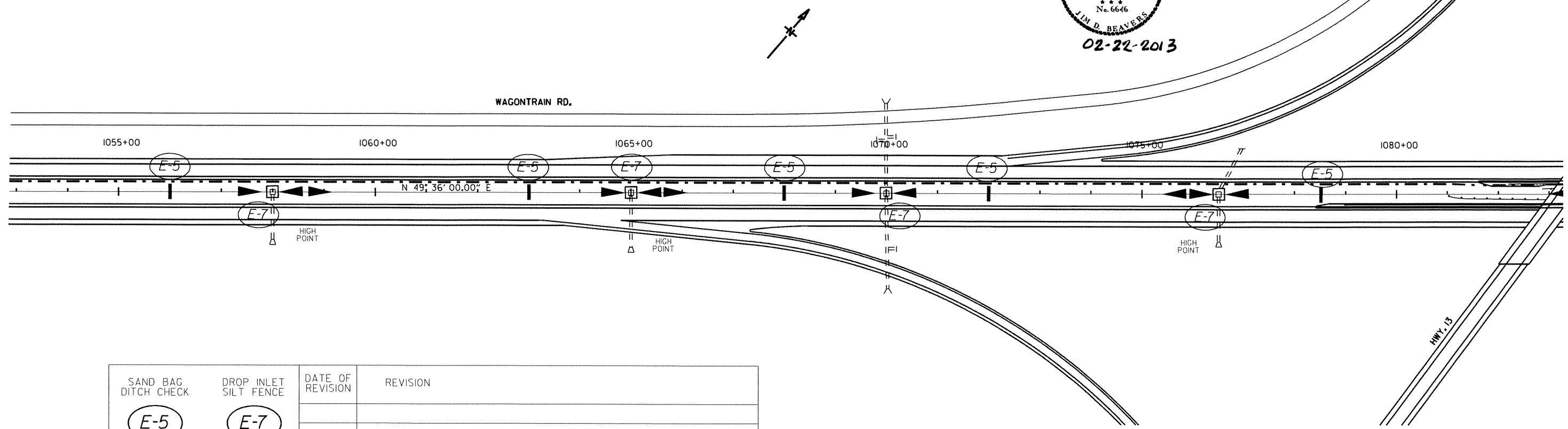
INDICATES DIRECTION OF MEDIAN DRAINAGE



TEMPORARY EROSION CONTROL DETAILS
STA. 993+00 - STA. 1053+00

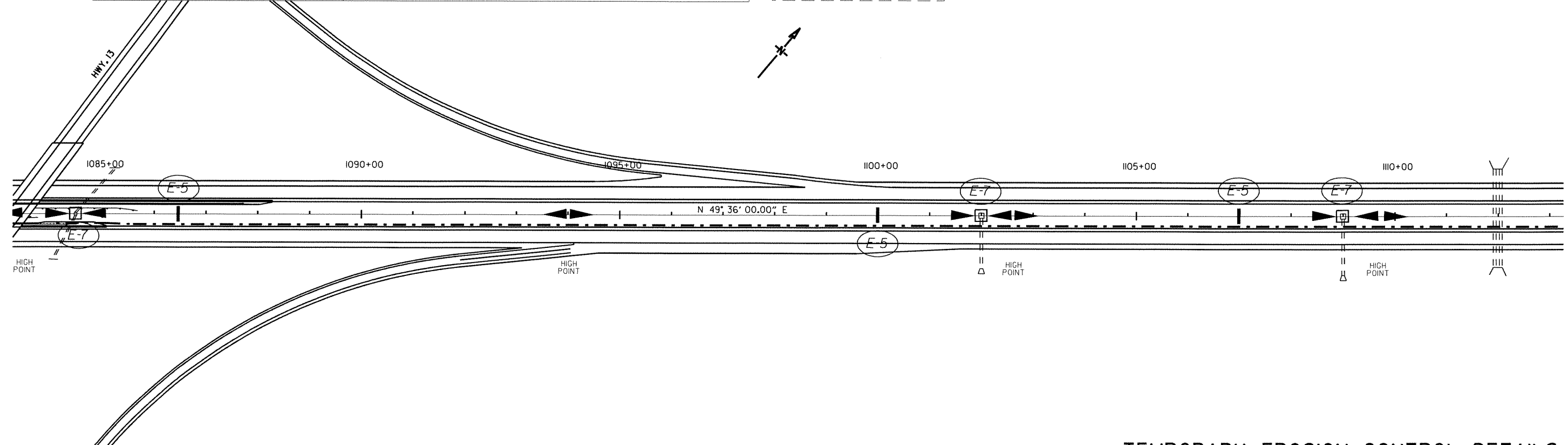
STATE OF ARKANSAS
JIM D. BEAVERS
REGISTERED PROFESSIONAL ENGINEER
No. 6646
02-22-2013

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.	012179	23	84	
TEMPORARY EROSION CONTROL DETAILS								



SAND BAG DITCH CHECK	DROP INLET SILT FENCE	DATE OF REVISION	REVISION
E-5	E-7		
I	□		
LEGEND			

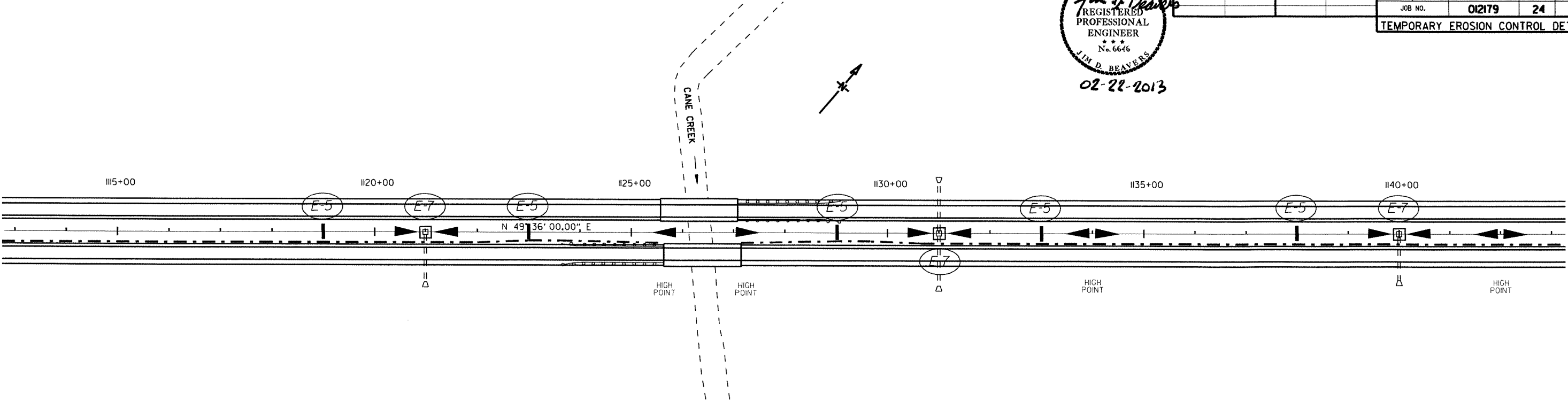
INDICATES DIRECTION OF MEDIAN DRAINAGE



TEMPORARY EROSION CONTROL DETAILS
STA. 1053+00 - STA. 1113+00

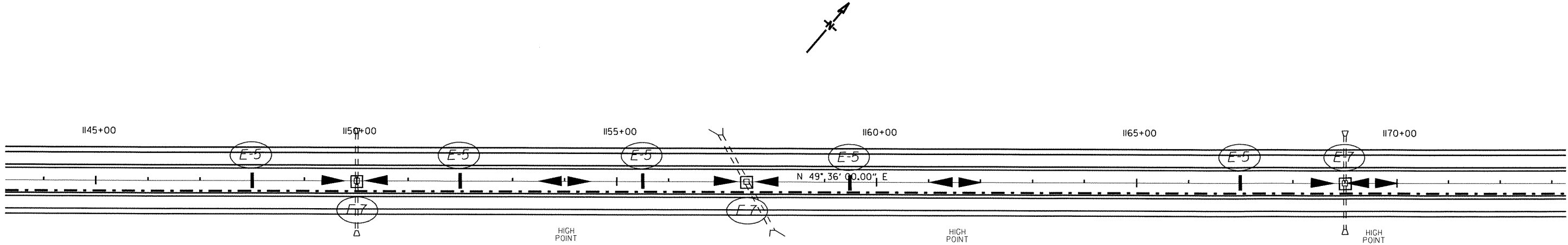
STATE OF
ARKANSAS
Jim D. Beavers
REGISTERED
PROFESSIONAL
ENGINEER
No. 6646
JIM D. BEAVERS
02-22-2013

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.	012179	24	84	
TEMPORARY EROSION CONTROL DETAILS								



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

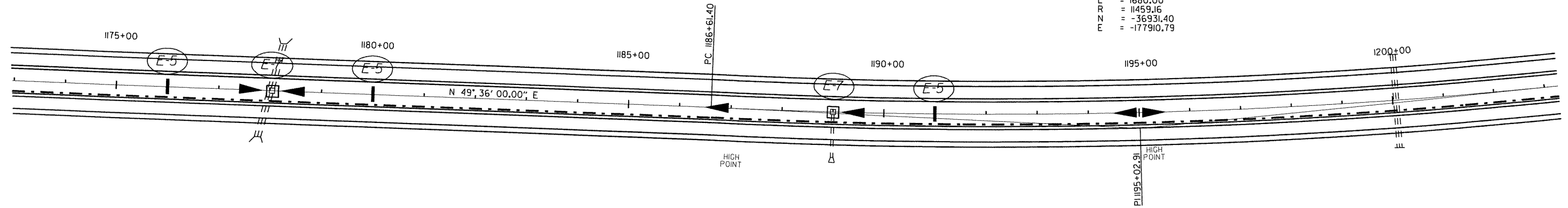
 INDICATES DIRECTION OF MEDIAN DRAINAGE



STATE OF
ARKANSAS
JIM D. BEAVERS
PROFESSIONAL
ENGINEER
No. 6646
02-22-2013

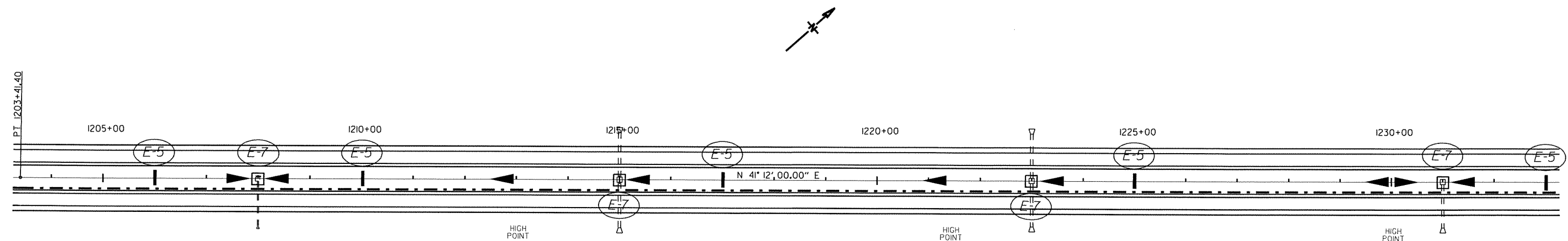
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		012179	25	84
TEMPORARY EROSION CONTROL DETAILS								

P.I. = 1195+02.91
Δ = 8°24'00.00" LT.
D = 0°30'00.00"
T = 841.51'
L = 1680.00'
R = 11459.16'
N = -36931.40
E = -177910.79



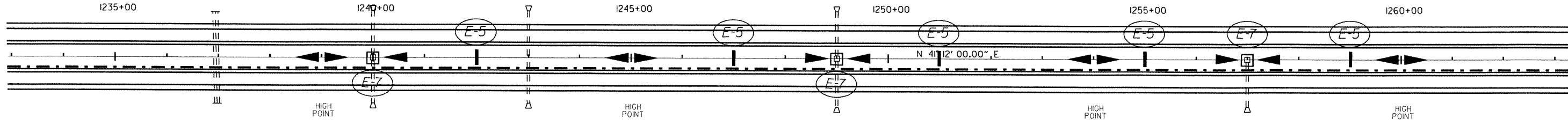
SAND BAG DITCH CHECK	DROP INLET SILT FENCE	DATE OF REVISION	REVISION
LEGEND			

INDICATES DIRECTION
OF MEDIAN DRAINAGE



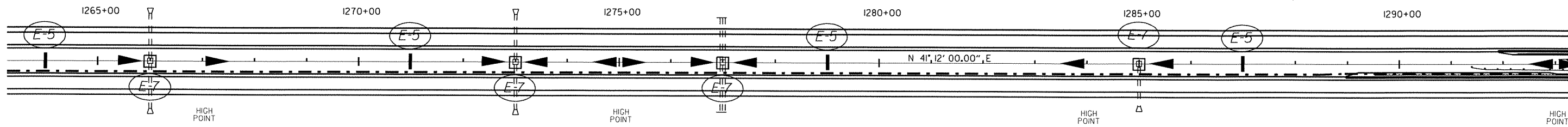
STATE OF
ARKANSAS
REGISTERED
PROFESSIONAL
ENGINEER
No. 6646
JIM D. BEAVERS
02-22-2013

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.		012179	26	84
TEMPORARY EROSION CONTROL DETAILS								



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

INDICATES DIRECTION
OF MEDIAN DRAINAGE

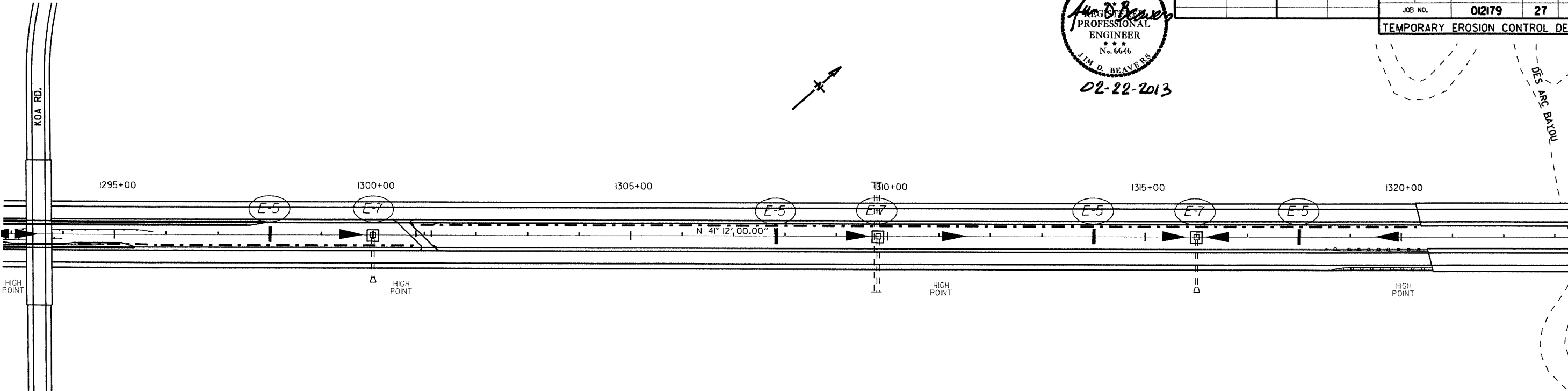


TEMPORARY EROSION CONTROL DETAILS
STA. 1233+00 - STA. 1293+00

STATE OF ARKANSAS
JIM D. BEAVERS
PROFESSIONAL ENGINEER
No. 6646
02-22-2013

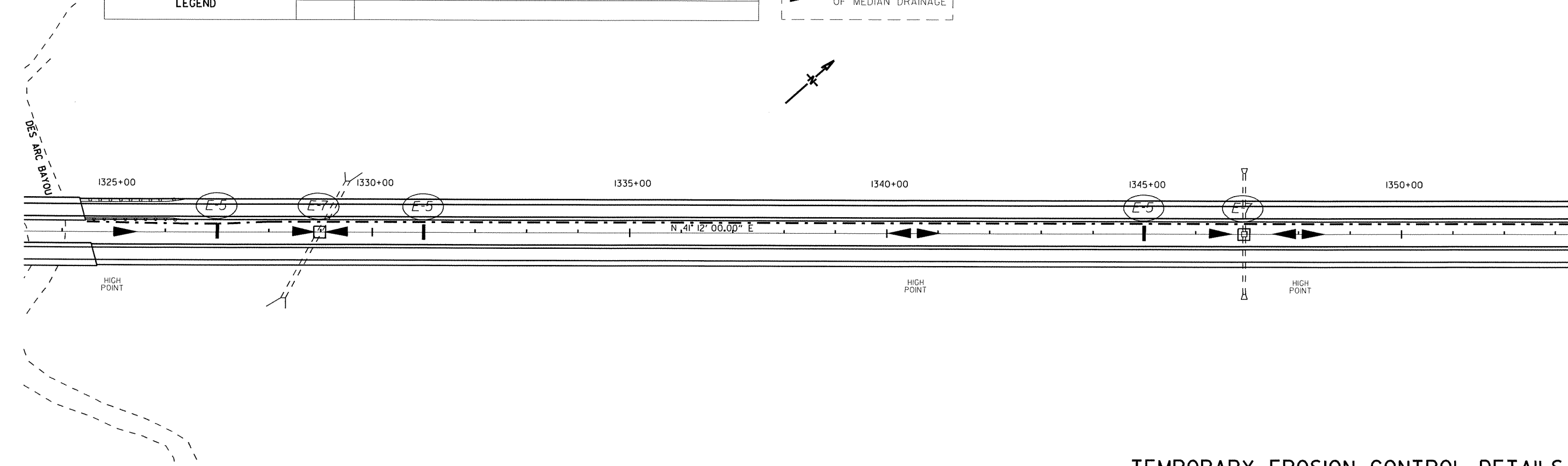
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	012179		27	84

TEMPORARY EROSION CONTROL DETAILS



SAND BAG DITCH CHECK	DROP INLET SILT FENCE	DATE OF REVISION	REVISION
E-5	E-7		
I	□		
LEGEND			

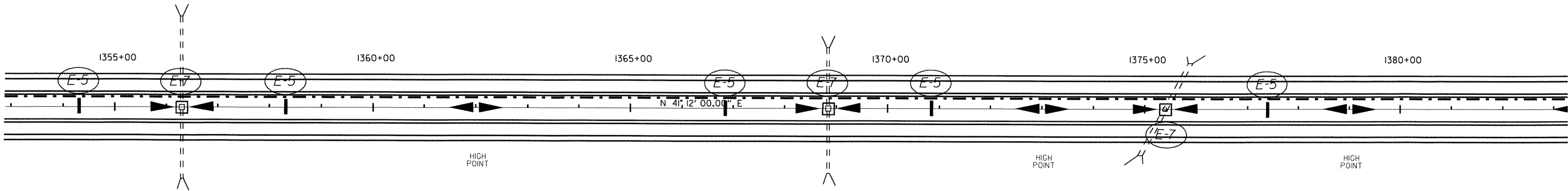
INDICATES DIRECTION OF MEDIAN DRAINAGE



TEMPORARY EROSION CONTROL DETAILS
STA. 1293+00 - STA. 1353+00

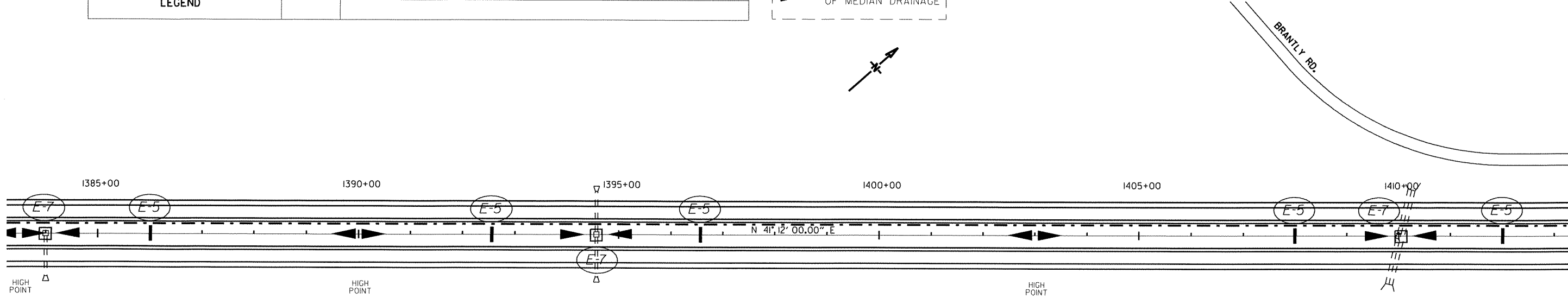
STATE OF
ARKANSAS
JIM D. BEAVERS
PROFESSIONAL
ENGINEER
No. 6646
02-22-2013

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.	012179	28	84	
TEMPORARY EROSION CONTROL DETAILS								

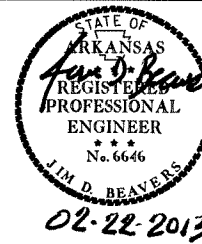


SAND BAG DITCH CHECK	DROP INLET SILT FENCE	DATE OF REVISION	REVISION
			
			

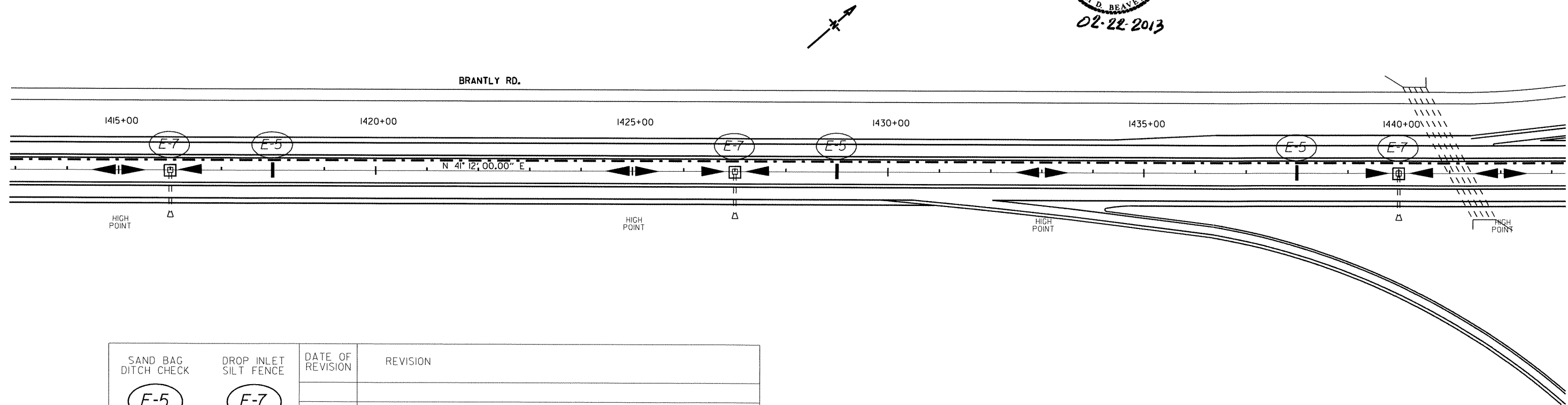
INDICATES DIRECTION
OF MEDIAN DRAINAGE



TEMPORARY EROSION CONTROL DETAILS
STA. 1353+00 - STA. 1413+00



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.		012179	29	84
TEMPORARY EROSION CONTROL DETAILS								



DATE OF REVISION	REVISION

SAND BAG DITCH CHECK

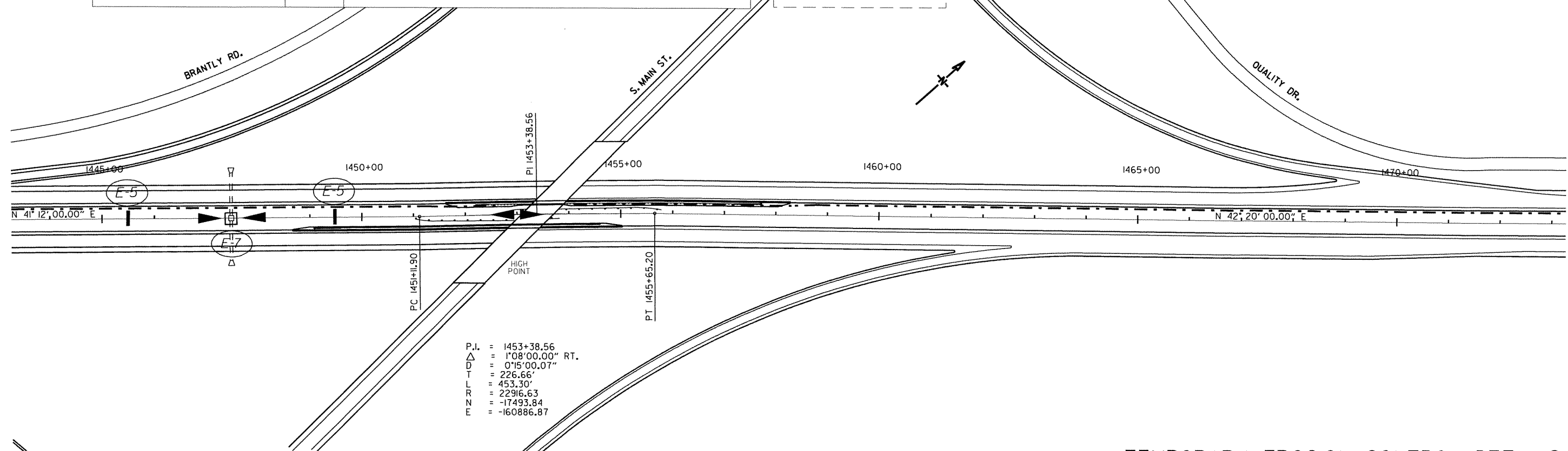
E-5

DROP INLET SILT FENCE

E-7

LEGEND

INDICATES DIRECTION OF MEDIAN DRAINAGE



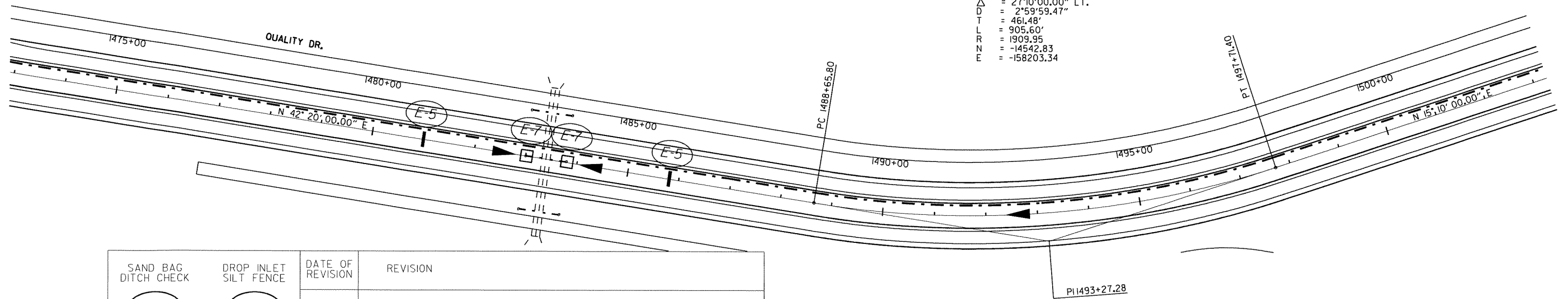
P.I. = 1453+38.56
Δ = 1°08'00.00" RT.
D = 0°15'00.07"
T = 226.66'
L = 453.30'
R = 22916.63
N = -17493.84
E = -160886.87

TEMPORARY EROSION CONTROL DETAILS
STA. 1413+00 - STA. 1473+00



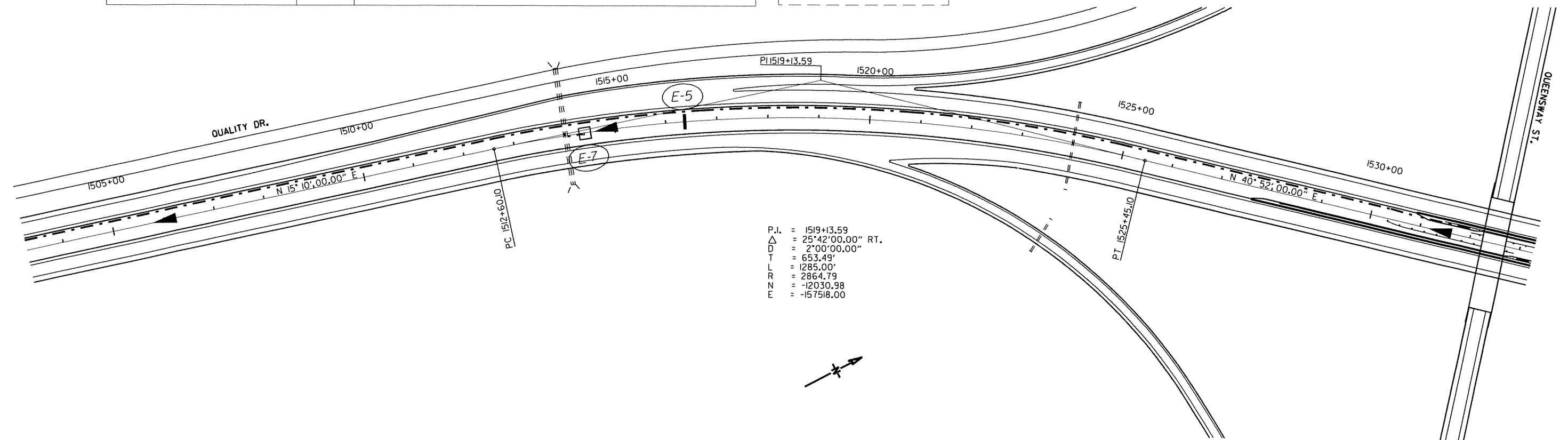
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	012179	30	84	
TEMPORARY EROSION CONTROL DETAILS								

P.I. = 1493+27.28
Δ = 27°10'00.00" LT.
D = 2°59'59.47"
T = 461.48'
L = 905.60'
R = 1909.95'
N = -14542.83
E = -158203.34



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

INDICATES DIRECTION OF MEDIAN DRAINAGE

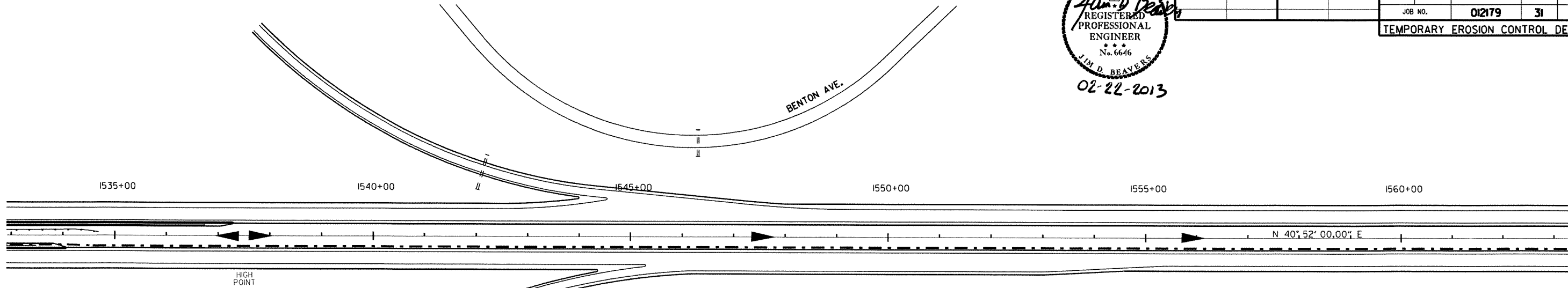


P.I. = 1519+13.59
Δ = 25°42'00.00" RT.
D = 2°00'00.00"
T = 653.49'
L = 1285.00'
R = 2864.79'
N = -12030.98
E = -157518.00

TEMPORARY EROSION CONTROL DETAILS
STA. 1473+00 - STA. 1533+00

STATE OF ARKANSAS
JIM D. BEAVERS
REGISTERED PROFESSIONAL ENGINEER
No. 6646
02-22-2013

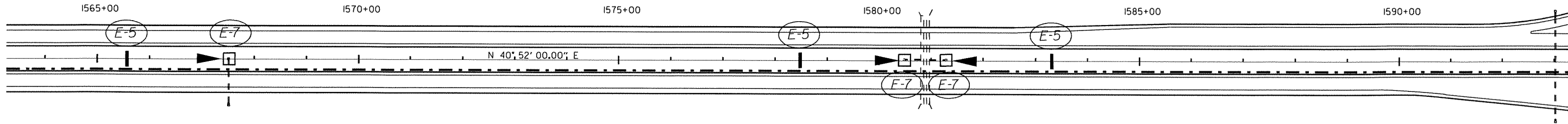
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	012179		31	84
TEMPORARY EROSION CONTROL DETAILS								



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

LEGEND

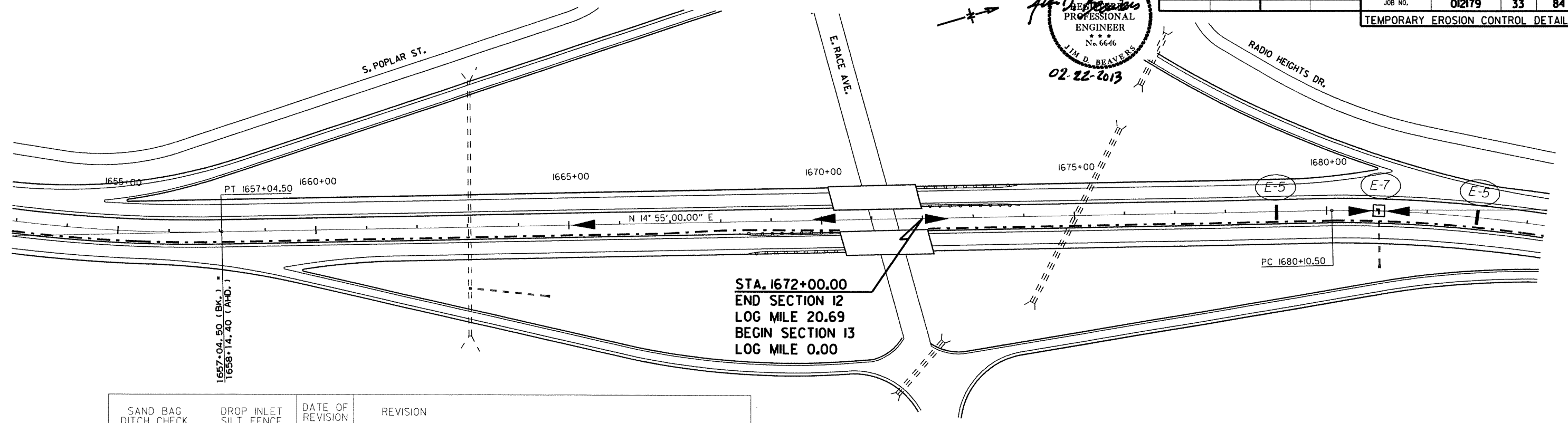
INDICATES DIRECTION OF MEDIAN DRAINAGE



TEMPORARY EROSION CONTROL DETAILS
STA. 1533+00 - STA. 1593+00

STATE OF ARKANSAS
 JIM D. BEAVERS
 PROFESSIONAL ENGINEER
 No. 6646
 02-22-2013

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.		012179	33	84
TEMPORARY EROSION CONTROL DETAILS								



STA. 1672+00.00
 END SECTION 12
 LOG MILE 20.69
 BEGIN SECTION 13
 LOG MILE 0.00

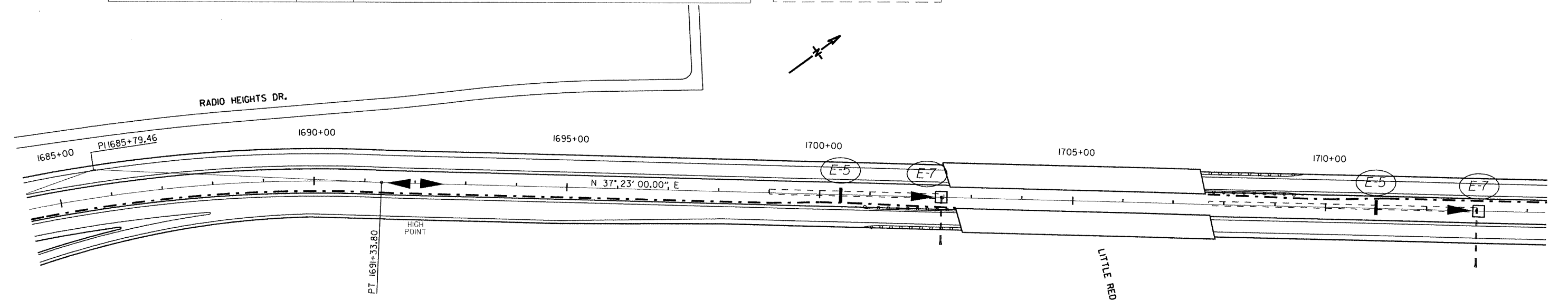
	DATE OF REVISION	REVISION
SAND BAG DITCH CHECK		
DROP INLET SILT FENCE		

E-5
 I

E-7
 □

LEGEND

INDICATES DIRECTION OF MEDIAN DRAINAGE

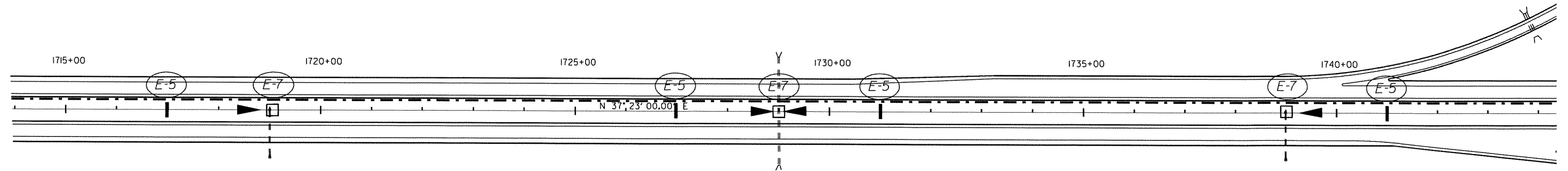


P.I. = 1685+79.46
 Δ = 22° 28' 00.00" RT.
 D = 2° 00' 00.21"
 T = 568.96'
 L = 1123.30'
 R = 2864.70
 N = 1236.91
 E = -148002.47

TEMPORARY EROSION CONTROL DETAILS
 STA. 1653+00 - STA. 1714+00

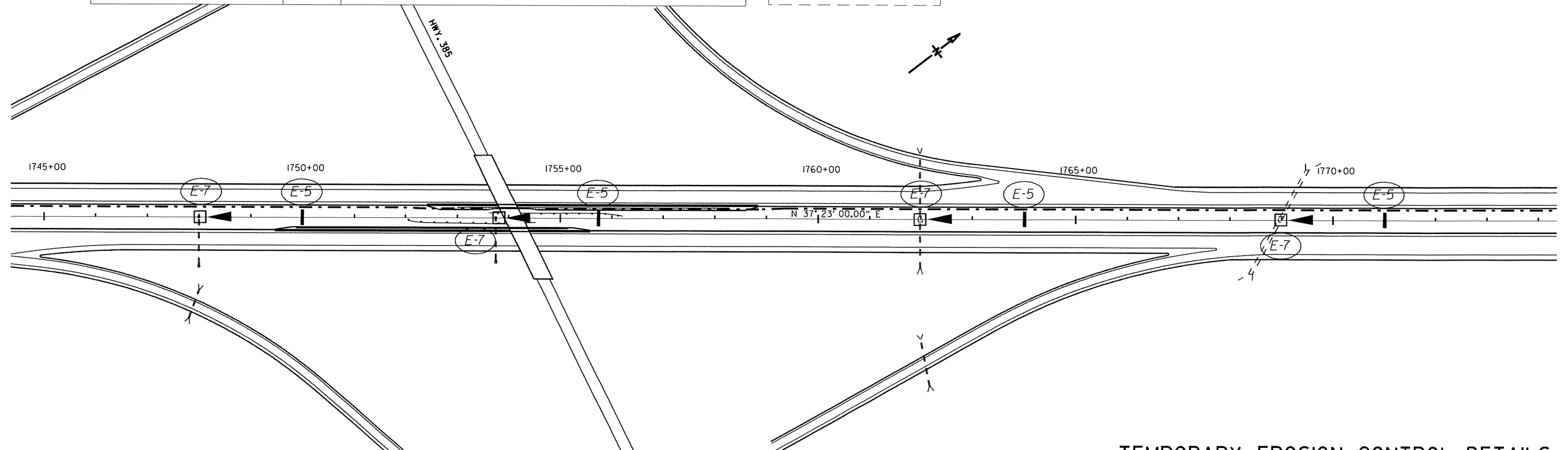
STATE OF
ARKANSAS
JIM D. BEAVERS
PROFESSIONAL
ENGINEER
No. 6646
02-22-2013

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.		012179	34	84
TEMPORARY EROSION CONTROL DETAILS								



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

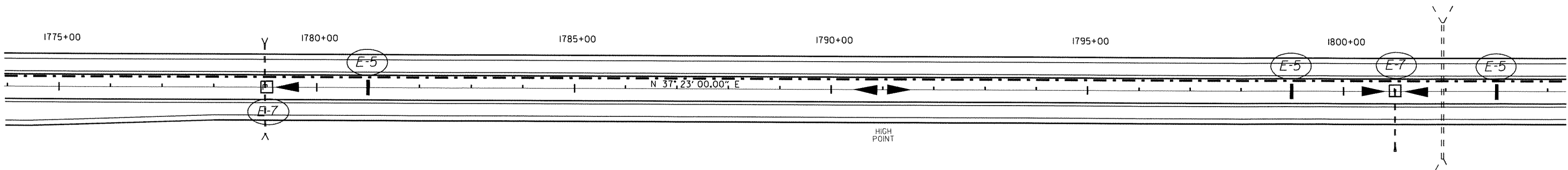
INDICATES DIRECTION
OF MEDIAN DRAINAGE



TEMPORARY EROSION CONTROL DETAILS
STA. 1714+00 - STA. 1774+00

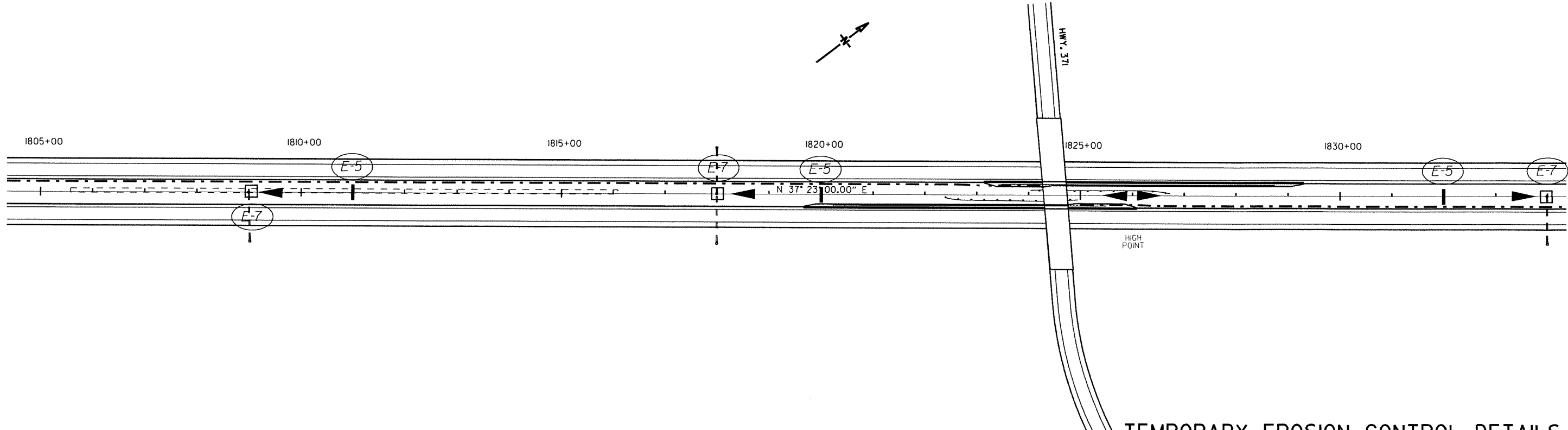
STATE OF
ARKANSAS
REGISTERED
PROFESSIONAL
ENGINEER
No. 6646
JIM D. BEAVERS
02-22-2013

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.		012179	35	84
TEMPORARY EROSION CONTROL DETAILS								



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

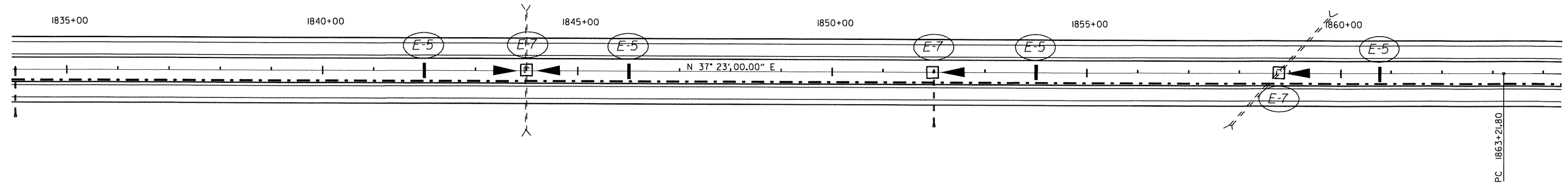
INDICATES DIRECTION
OF MEDIAN DRAINAGE

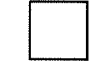


TEMPORARY EROSION CONTROL DETAILS
STA. 1774+00 - STA. 1834+00

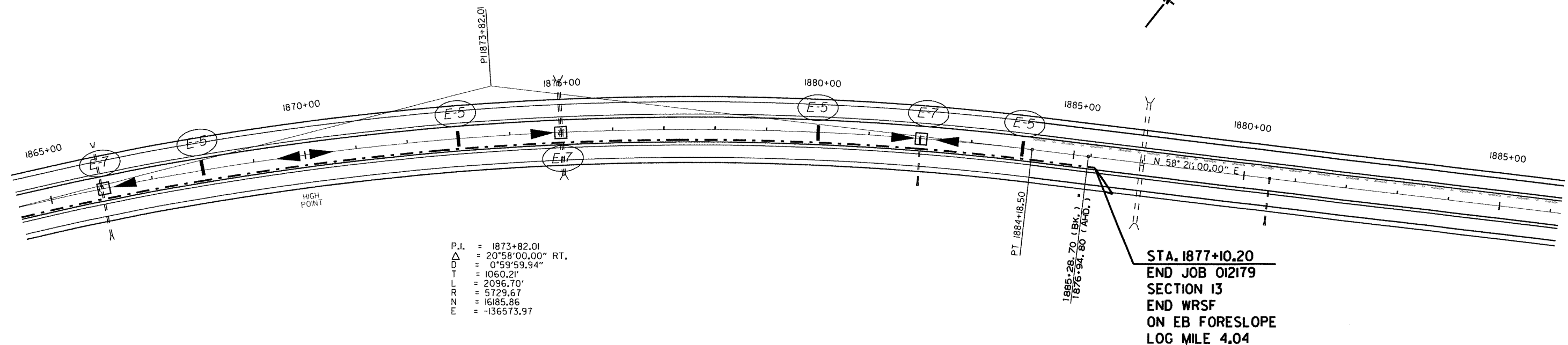


DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	012179		36	84
TEMPORARY EROSION CONTROL DETAILS								



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

 INDICATES DIRECTION OF MEDIAN DRAINAGE



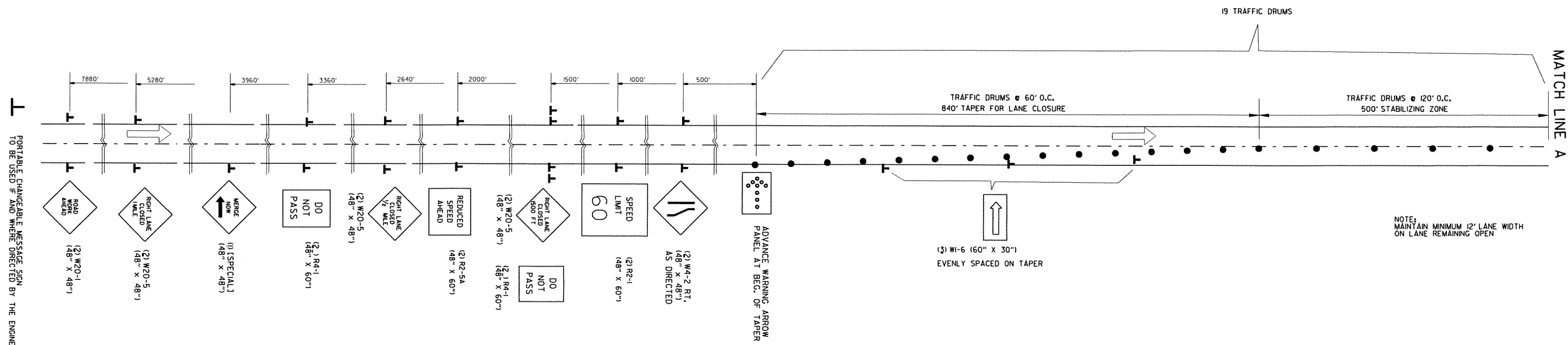
TEMPORARY EROSION CONTROL DETAILS
STA. 1834+00 - STA. 1886+00

STA. 1877+10.20
END WORK AREA
JOB 012179



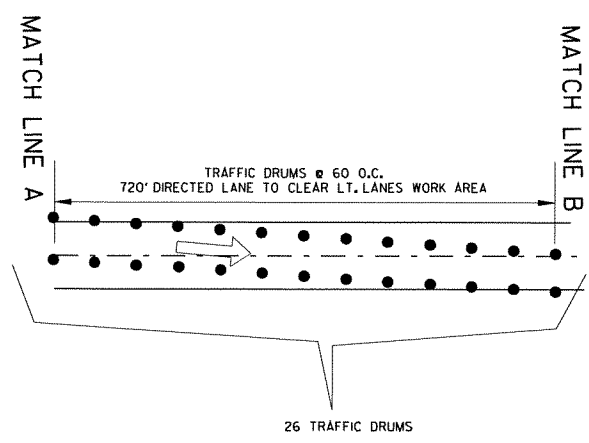
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 6646
JIM D. BEAVERS
02-22-2013

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.	012179	38	84	
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.



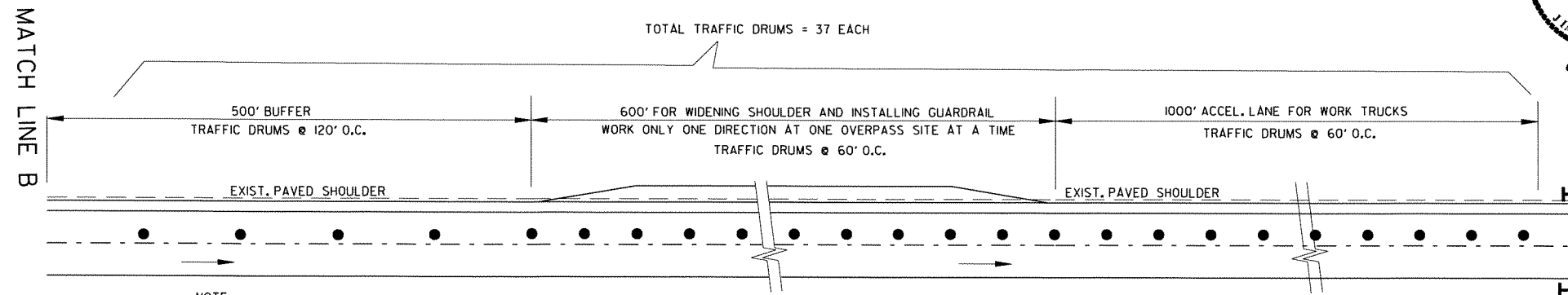
DIVERSION FOR LT. LANE WORK ZONE

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.

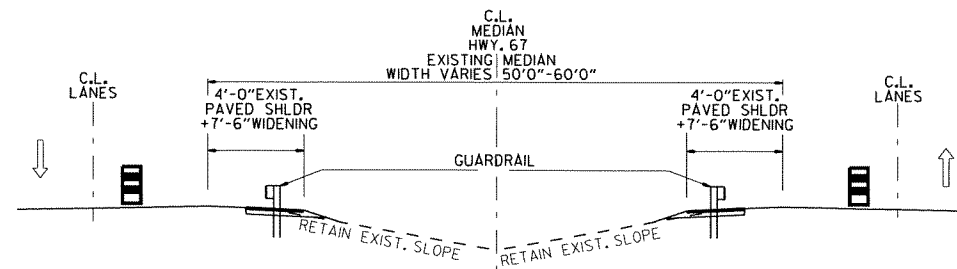


02-22-2013

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.	012179		39	84
MAINTENANCE OF TRAFFIC								



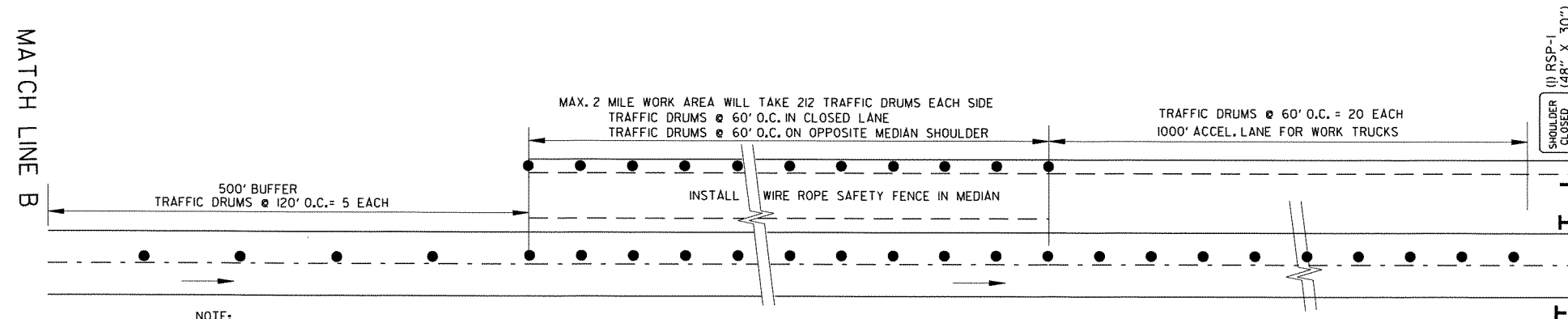
NOTE:
MAINTAIN MINIMUM 12' LANE WIDTH
ON LANE REMAINING OPEN



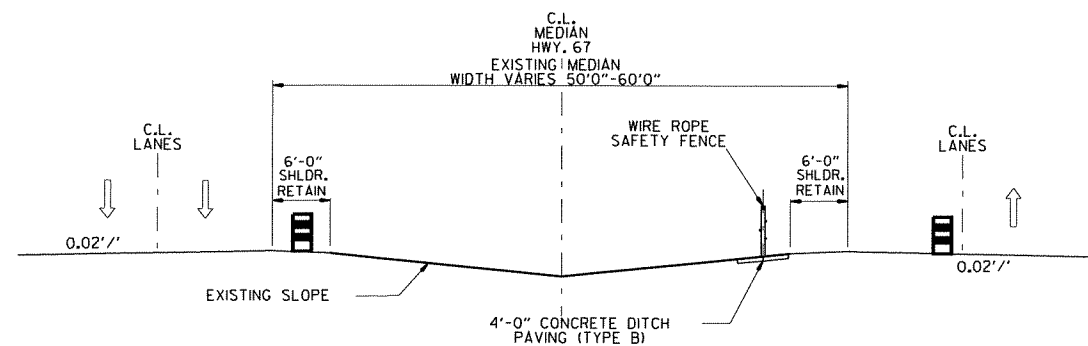
SPEED
LIMIT
60

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

MOVABLE WORK ZONE FOR GUARDRAIL INSTALLATION



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



SPEED
LIMIT
60

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

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.

MOVABLE WORK ZONE FOR WRSF INSTALLATION

MAINTENANCE OF TRAFFIC
WORK AREAS

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	1.38	1.38	28.2	5000	5430	462	1.38	3	1.38	1.38	140.8
ENTIRE PROJECT IF AND WHERE DIRECTED BY THE ENGINEER				1000							
TOTALS:	1.38	1.38	28.2	6000	5430	462	1.38	3	1.38	1.38	140.8

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

STRUCTURES

STATION	DESCRIPTION	SIDE DRAIN
		18" LF
570+48	AT MEDIAN CROSSING	34
TOTAL:		34

NOTES: FOR R.C. PIPE CULVERT INSTALLATIONS USE TYPE 3 BEDDING UNLESS OTHERWISE NOTED.
FOR C.M. PIPE CULVERT INSTALLATIONS USE TYPE 2 BEDDING UNLESS OTHERWISE NOTED.

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"	4	4	64			
W20-1	ROAD WORK 1/2 MILE	48"X48"	4	4	64			
W20-1	ROAD WORK 1500 FT.	48"X48"	4	4	64			
W20-1	ROAD WORK AHEAD	48"X48"	28	28	448			
G20-1	ROAD WORK NEXT xx MILES	60"X24"	2	2	20			
G20-2	END ROAD WORK	48"X24"	4	4	32			
SPECIAL 1	MERGE NOW + ARROW	48"X48"	1	1	16			
W20-5	RIGHT LANE CLOSED 1 MILE	48"X48"	2	2	32			
W20-5	RIGHT LANE CLOSED 1/2 MILE	48"X48"	2	2	32			
W20-5	RIGHT LANE CLOSED 1500 FT.	48"X48"	2	2	32			
W4-2R	RIGHT LANE CLOSING GRAPHIC	48"X48"	2	2	32			
W1-6	LARGER ARROW	60"X30"	3	3	36			
R4-1	DO NOT PASS	48"X60"	4	4	80			
R55-1	FINES DOUBLE IN WORK ZONES	36"X60"	4	4	60			
R2-5A	REDUCED SPEED AHEAD	48"X60"	2	2	40			
R2-1	SPEED LIMIT 60 MPH	48"X60"	6	6	120			
RSP-1	SHOULDER CLOSED	48"X30"	3	3	30			
	TRAFFIC DRUMS		494			494		
	ADVANCE WARNING ARROW PANEL		1				130	
	PORTABLE CHANGEABLE MESSAGE SIGN		2					84
TOTALS:					1204	494	130	84

NOTE: THIS IS A HIGH VOLUME ROAD AS DEFINED IN SECTION 604.03 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 2003.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 6646
JIM D. BEAVERS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 12280
BRIAN C. CLARK

02-25-2013
RESPONSIBLE FOR QUANTITIES
IN EROSION CONTROL AND
ADVANCED WARNING SIGNS
AND DEVICES TABLES

2/28/13
RESPONSIBLE FOR ALL
OTHER 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.		002179	40	84
QUANTITIES								

GUARDRAIL

STATION	STATION	LOCATION	GUARDRAIL	TERMINAL ANCHOR POST	GUARDRAIL TERMINAL
			(TYPE A) LIN.FT.	(TYPE 1) EACH	(TYPE 2)
210+82.00	215+82.00	RT. SHLDR. AT HWY. 89 OVERPASS	450	1	1
214+30.00	219+30.00	LT. SHLDR. AT HWY. 89 OVERPASS	450	1	1
379+52.00	384+52.00	RT. SHLDR. AT HWY. 305 OVERPASS	450	1	1
381+80.00	386+80.00	LT. SHLDR. AT HWY. 305 OVERPASS	450	1	1
513+75.00	518+75.00	RT. SHLDR. AT HWY. 319 OVERPASS	450	1	1
517+10.00	522+10.00	LT. SHLDR. AT HWY. 319 OVERPASS	450	1	1
697+10.00	702+35.00	RT. SHLDR. AT HWY. 64 OVERPASS	475	1	1
700+55.00	705+80.00	LT. SHLDR. AT HWY. 64 OVERPASS	475	1	1
758+35.00	761+35.00	RT. SHLDR. AT PECAN ST. OVERPASS	450	1	1
759+70.00	764+70.00	LT. SHLDR. AT PECAN ST. OVERPASS	450	1	1
828+50.00	833+50.00	RT. SHLDR. AT HWY. 31 OVERPASS	450	1	1
831+95.00	836+95.00	LT. SHLDR. AT HWY. 31 OVERPASS	450	1	1
1079+00.00	1084+25.00	RT. SHLDR. AT HWY. 13 OVERPASS	475	1	1
1082+45.00	1087+70.00	LT. SHLDR. AT HWY. 13 OVERPASS	475	1	1
1289+55.00	1294+55.00	RT. SHLDR. AT KOA RD. OVERPASS	450	1	1
1292+53.00	1297+53.00	LT. SHLDR. AT KOA RD. OVERPASS	450	1	1
1449+10.00	1454+35.00	RT. SHLDR. AT S MAIN ST. OVERPASS	475	1	1
1452+45.00	1457+70.00	LT. SHLDR. AT S MAIN ST. OVERPASS	475	1	1
1528+23.00	1533+23.00	RT. SHLDR. AT QUEENSWAY ST. OVERPASS	450	1	1
1531+71.00	1536+71.00	LT. SHLDR. AT QUEENSWAY ST. OVERPASS	450	1	1
1599+85.00	1605+10.00	RT. SHLDR. AT E BEEBE CAPPS EXPY. OVERPASS	475	1	1
1603+15.00	1608+40.00	LT. SHLDR. AT E BEEBE CAPPS EXPY. OVERPASS	475	1	1
1749+90.00	1754+90.00	RT. SHLDR. AT HWY. 385 OVERPASS	450	1	1
1753+25.00	1758+25.00	LT. SHLDR. AT HWY. 385 OVERPASS	450	1	1
1820+25.00	1825+25.00	RT. SHLDR. AT HWY. 371 OVERPASS	450	1	1
1823+72.00	1828+72.00	LT. SHLDR. AT HWY. 371 OVERPASS	450	1	1
TOTALS:			11900	26	26

REMOVAL AND DISPOSAL ITEMS

STATION	DESCRIPTION	IMPACT ATTENUATION BARRIER	GUARDRAIL	PIPE CULVERTS
		EACH	LF	EA
212+97	RT. OF ROUTE 67 CL AT HWY. 89 OVERPASS		252	
214+62	LT. OF ROUTE 67 CL AT HWY. 89 OVERPASS		361	
380+63	RT. OF ROUTE 67 CL AT HWY. 305 OVERPASS		240	
382+38	LT. OF ROUTE 67 CL AT HWY. 305 OVERPASS		246	
515+91	RT. OF ROUTE 67 CL AT HWY. 319 OVERPASS		242	
517+53	LT. OF ROUTE 67 CL AT HWY. 319 OVERPASS		251	
570+48	18" X 24" CMP IN MEDIAN			1
570+83	MEDIAN CROSSOVER			
699+34	RT. OF ROUTE 67 CL AT HWY. 64 OVERPASS		277	
700+77	LT. OF ROUTE 67 CL AT HWY. 64 OVERPASS		287	
760+51	ON CENTERLINE OF MEDIAN	2		
957+16	MEDIAN CROSSOVER			
1604+13	ON CENTERLINE OF MEDIAN	2		
830+49	RT. OF ROUTE 67 CL AT HWY. 31 OVERPASS		260	
832+33	LT. OF ROUTE 67 CL AT HWY. 31 OVERPASS		267	
1081+02	RT. OF ROUTE 67 CL AT HWY. 13 OVERPASS		274	
1082+88	LT. OF ROUTE 67 CL AT HWY. 13 OVERPASS		282	
1291+38	RT. OF ROUTE 67 CL AT KOA RD. OVERPASS		280	
1283+06	LT. OF ROUTE 67 CL AT KOA RD. OVERPASS		270	
1300+84	MEDIAN CROSSOVER			
1451+04	RT. OF ROUTE 67 CL AT S MAIN ST. OVERPASS		278	
1452+94	LT. OF ROUTE 67 CL AT S MAIN ST. OVERPASS		284	
1530+34	RT. OF ROUTE 67 CL AT QUEENSWAY ST. OVERPASS		256	
1532+00	LT. OF ROUTE 67 CL AT QUEENSWAY ST. OVERPASS		269	
1752+05	RT. OF ROUTE 67 CL AT HWY. 385 OVERPASS		247	
1753+82	LT. OF ROUTE 67 CL AT HWY. 385 OVERPASS		259	
1822+38	RT. OF ROUTE 67 CL AT HWY. 371 OVERPASS		257	
1824+03	LT. OF ROUTE 67 CL AT HWY. 371 OVERPASS		269	
TOTALS:		4	5888	1

QUANTITIES

STATE OF
ARKANSAS
REGISTERED
PROFESSIONAL
ENGINEER
No. 12280
BRIAN O'ELAND

Brian Clark, P.E.
2/25/13

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. PROJ. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		012179	41	84
				QUANTITIES				

CONCRETE DITCH PAVING

STATION	STATION	STATION EQUATION	LOCATION	LENGTH	WIDTH	CONC. DITCH PAVING (TYPE B)	SOLID SODDING	WATER
				FEET	FEET			
						SQ. YD.		M. GAL.
68+46.40	101+19.20	BK.	LT OF CL HWY. 67	3273	4	1455	727	9.2
102+04.60	145+52.00	AHD.	LT OF CL HWY. 67	4347	4	1932	966	12.2
146+42.00	213+88.00		LT OF CL HWY. 67	6746	4	2998	1499	18.9
216+00.00	235+92.40	BK.	RT OF CL HWY. 67	1992	4	885	443	5.6
235+60.70	326+78.00	AHD.	RT OF CL HWY. 67	9117	4	4052	2026	25.5
328+01.00	355+71.20	BK.	RT OF CL HWY. 67	2770	4	1231	616	7.8
354+62.90	379+35.00	AHD.	RT OF CL HWY. 67	2472	4	1099	549	6.9
386+97.00	440+99.00		LT OF CL HWY. 67	5402	4	2401	1200	15.1
442+24.00	516+68.00		LT OF CL HWY. 67	7444	4	3308	1654	20.8
519+17.00	557+90.00		RT OF CL HWY. 67	3873	4	1721	861	10.8
559+10.00	563+46.00		RT OF CL HWY. 67	436	4	194	97	1.2
566+43.00	570+48.00		RT OF CL HWY. 67	405	4	180	90	1.1
570+50.00	575+90.00		LT OF CL HWY. 67	540	4	240	120	1.5
577+11.00	579+37.00	BK.	RT OF CL HWY. 67	226	4	100	50	0.6
579+43.20	696+93.00	AHD.	RT OF CL HWY. 67	11750	4	5222	2611	32.9
702+77.00	756+18.00		RT OF CL HWY. 67	5341	4	2374	1187	15.0
764+87.00	831+53.00		LT OF CL HWY. 67	6666	4	2963	1481	18.7
837+12.00	859+96.00		LT OF CL HWY. 67	2284	4	1015	508	6.4
863+46.00	911+36.00		LT OF CL HWY. 67	4790	4	2129	1064	13.4
912+96.00	941+45.00		RT OF CL HWY. 67	2849	4	1266	633	8.0
941+55.00	943+23.00	BK.	LT OF CL HWY. 67	168	4	75	37	0.5
957+00.80	1082+03.00	AHD.	LT OF CL HWY. 67	12502	4	5556	2778	35.0
1084+67.00	1125+64.00		RT OF CL HWY. 67	4097	4	1821	910	11.5
1127+14.00	1289+13.00		RT OF CL HWY. 67	16199	4	7200	3600	45.4
1294+97.00	1300+77.00		RT OF CL HWY. 67	580	4	258	129	1.6
1300+93.00	1320+39.00		LT OF CL HWY. 67	1946	4	865	432	5.4
1324+45.00	1452+03.00		LT OF CL HWY. 67	12758	4	5670	2835	35.7
1457+67.00	1531+29.00		LT OF CL HWY. 67	7342	4	3263	1632	20.6
1533+65.00	1599+68.00		RT OF CL HWY. 67	6603	4	2935	1467	18.5
1605+52.00	1632+30.00		RT OF CL HWY. 67	2678	4	1190	595	7.5
1635+15.00	1657+04.50	BK.	RT OF CL HWY. 67	2190	4	973	487	6.1
1658+14.40	1670+36.00	AHD.	RT OF CL HWY. 67	1222	4	543	272	3.4
1672+10.00	1702+70.00		RT OF CL HWY. 67	3060	4	1360	680	8.6
1707+62.00	1752+83.00		LT OF CL HWY. 67	4521	4	2009	1005	12.7
1758+66.00	1823+55.00		LT OF CL HWY. 67	6489	4	2884	1442	18.2
1825+67.00	1885+28.70	BK.	RT OF CL HWY. 67	5962	4	2650	1325	16.7
1876+94.80	1877+10.20	AHD.	RT OF CL HWY. 67	15	4	7	3	0.0
TOTALS:						76024	38011	479.0

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
				LIN. FT.	EACH	LUMP SUM
68+46.40	101+19.20	BK.	LT OF CL HWY. 67	3273	1	
102+04.60	145+52.00	AHD.	LT OF CL HWY. 67	4347	1	
146+42.00	214+55.00		LT OF CL HWY. 67	6813	2	
215+57.00	235+92.40	BK.	RT OF CL HWY. 67	2035	1	
235+60.70	326+78.00	AHD.	RT OF CL HWY. 67	9117	1	
328+01.00	355+71.20	BK.	RT OF CL HWY. 67	2770	1	
354+62.90	382+05.00	AHD.	RT OF CL HWY. 67	2742	1	
384+27.00	440+99.00		LT OF CL HWY. 67	5672	2	
442+24.00	517+35.00		LT OF CL HWY. 67	7511	2	
518+50.00	557+90.00		RT OF CL HWY. 67	3940	2	
559+10.00	563+46.00		RT OF CL HWY. 67	436	2	
566+43.00	570+48.00		RT OF CL HWY. 67	405	2	
570+50.00	575+90.00		LT OF CL HWY. 67	540	2	
577+11.00	579+37.00	BK.	RT OF CL HWY. 67	226	1	
579+43.20	700+80.00	AHD.	RT OF CL HWY. 67	12137	1	
702+10.00	759+95.00		RT OF CL HWY. 67	5785	2	
761+10.00	832+20.00		LT OF CL HWY. 67	7110	2	
833+25.00	859+96.00		LT OF CL HWY. 67	2671	2	
863+46.00	911+36.00		LT OF CL HWY. 67	4790	2	
912+96.00	941+45.00		RT OF CL HWY. 67	2849	2	
941+55.00	943+23.00	BK.	LT OF CL HWY. 67	168	1	
957+00.80	1082+70.00	AHD.	LT OF CL HWY. 67	12569	1	
1084+00.00	1125+64.00		RT OF CL HWY. 67	4164	2	
1127+14.00	1292+78.00		RT OF CL HWY. 67	16564	2	
1294+30.00	1300+77.00		RT OF CL HWY. 67	647	2	
1300+93.00	1320+39.00		LT OF CL HWY. 67	1946	2	
1324+45.00	1452+70.00		LT OF CL HWY. 67	12825	2	
1454+10.00	1531+96.00		LT OF CL HWY. 67	7786	2	
1532+98.00	1603+40.00		RT OF CL HWY. 67	7042	2	
1604+85.00	1632+30.00		RT OF CL HWY. 67	2745	2	
1635+15.00	1657+04.50	BK.	RT OF CL HWY. 67	2190	1	
1658+14.40	1670+36.00	AHD.	RT OF CL HWY. 67	1222	1	
1672+10.00	1702+70.00		RT OF CL HWY. 67	3060	2	
1707+62.00	1753+50.00		LT OF CL HWY. 67	4588	2	
1754+65.00	1824+22.00		LT OF CL HWY. 67	6957	2	
1825+00.00	1885+28.70	BK.	RT OF CL HWY. 67	6029	1	
1876+94.80	1877+10.20	AHD.	RT OF CL HWY. 67	15	1	
ENTIRE PROJECT						1.00
TOTALS:				175686	60	1.00

THIS ITEM SHOWN FOR INFORMATION ONLY

QUANTITIES



Brian Clark, P.E.
2/25/13

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.		012179	42	84
				QUANTITIES				

BASE AND SURFACING

STATION	STATION	LOCATION	LENGTH	AGGREGATE BASE COURSE (CLASS 7)		ACHM SURFACE COURSE (1/2")(PG 64-22)			
			FEET	TON / STATION	TON	AVG. WID. FEET	SQ. YD.	POUND / SQ. YD.	TON
210+24	216+41	RT. SHLDR. AT HWY. 89 OVERPASS	617.0	44.75	276	7.7	527	220.0	58
213+47	219+88	LT. SHLDR. AT HWY. 89 OVERPASS	641.0	35.00	224	7.8	557	220.0	61
378+94	385+35	RT. SHLDR. AT HWY. 305 OVERPASS	641.0	44.75	287	8.6	610	220.0	67
380+97	387+38	LT. SHLDR. AT HWY. 305 OVERPASS	641.0	35.00	224	8.6	610	220.0	67
513+17	519+58	RT. SHLDR. AT HWY. 319 OVERPASS	641.0	44.75	287	7.8	554	220.0	61
516+27	522+68	LT. SHLDR. AT HWY. 319 OVERPASS	641.0	35.00	224	7.8	554	220.0	61
570+52	570+74	MEDIAN CROSSING	22.0	29.30	6	66.3	162	220.0	18
696+52	703+18	RT. SHLDR. AT HWY. 64 OVERPASS	666.0	44.75	298	9.4	695	220.0	76
699+72	706+38	LT. SHLDR. AT HWY. 64 OVERPASS	666.0	35.00	233	7.3	543	220.0	60
755+77	762+18	RT. SHLDR. AT N. PECAN ST. OVERPASS	641.0	44.75	287	9.0	639	220.0	70
758+87	765+28	LT. SHLDR. AT N. PECAN ST. OVERPASS	641.0	44.75	287	9.0	640	220.0	70
828+07	834+18	RT. SHLDR. AT HWY. 31 OVERPASS	611.0	35.00	214	7.2	492	220.0	54
831+12	837+53	LT. SHLDR. AT HWY. 31 OVERPASS	641.0	44.75	287	9.5	674	220.0	74
941+39	941+61	MEDIAN CROSSING	22.0	29.30	6	66.7	163	220.0	18
1078+42	1085+08	RT. SHLDR. AT HWY. 13 OVERPASS	666.0	35.00	233	7.8	574	220.0	63
1081+62	1088+28	LT. SHLDR. AT HWY. 13 OVERPASS	666.0	44.75	298	7.8	575	220.0	63
1288+72	1295+38	RT. SHLDR. AT KOA RD. OVERPASS	666.0	44.75	298	9.3	689	220.0	76
1291+91	1298+15	LT. SHLDR. AT KOA RD. OVERPASS	624.0	35.00	218	7.3	507	220.0	56
1300+73	1300+96	MEDIAN CROSSING	23.0	29.30	7	64.6	165	220.0	18
1448+67	1455+03	RT. SHLDR. AT S. MAIN ST. OVERPASS	636.0	35.00	223	7.3	513	220.0	56
1451+62	1458+28	LT. SHLDR. AT S. MAIN ST. OVERPASS	666.0	44.75	298	9.4	694	220.0	76
1527+65	1534+06	RT. SHLDR. AT QUEENSWAY ST. OVERPASS	641.0	35.00	224	7.8	554	220.0	61
1530+88	1537+29	LT. SHLDR. AT QUEENSWAY ST. OVERPASS	641.0	44.75	287	7.8	554	220.0	61
1599+27	1605+93	RT. SHLDR. AT E. BEEBE CAPPS EXPY. OVERPASS	666.0	44.75	298	9.3	691	220.0	76
1602+47	1608+83	LT. SHLDR. AT E. BEEBE CAPPS EXPY. OVERPASS	636.0	35.00	223	7.3	514	220.0	57
1749+47	1755+58	RT. SHLDR. AT HWY. 385 OVERPASS	611.0	35.00	214	7.3	493	220.0	54
1752+42	1758+83	LT. SHLDR. AT HWY. 385 OVERPASS	641.0	44.75	287	9.4	671	220.0	74
1819+67	1826+08	RT. SHLDR. AT HWY. 371 OVERPASS	641.0	35.00	224	7.8	554	220.0	61
1823+14	1829+30	LT. SHLDR. AT HWY. 371 OVERPASS	616.0	44.75	276	7.8	533	220.0	59
TOTALS:					6748		15701		1726

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

STATE OF
ARKANSAS

REGISTERED
PROFESSIONAL
ENGINEER

No. 12280
BRIAN M. CLARK

Brian Clark, P.E.
2/25/13

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.		012179	43	84
				QUANTITIES				

EARTHWORK

STATION	STATION	LOCATION	UNCLASSIFIED EXCAVATION	COMPACTED EMBANKMENT
			CU. YD.	
210+24	216+41	RT. SHLDR. AT HWY. 89 OVERPASS	80	61
213+47	219+88	LT. SHLDR. AT HWY. 89 OVERPASS	83	63
378+94	385+35	RT. SHLDR. AT HWY. 305 OVERPASS	83	63
380+97	387+38	LT. SHLDR. AT HWY. 305 OVERPASS	83	63
513+17	519+58	RT. SHLDR. AT HWY. 319 OVERPASS	83	63
516+27	522+68	LT. SHLDR. AT HWY. 319 OVERPASS	83	63
570+52	570+74	MEDIAN CROSSING	45	61
696+52	703+18	RT. SHLDR. AT HWY. 64 OVERPASS	86	66
699+72	706+38	LT. SHLDR. AT HWY. 64 OVERPASS	86	66
755+77	762+18	RT. SHLDR. AT N. PECAN ST. OVERPASS	83	63
758+87	765+28	LT. SHLDR. AT N. PECAN ST. OVERPASS	83	63
828+07	834+18	RT. SHLDR. AT HWY. 310 OVERPASS	79	60
831+12	837+53	LT. SHLDR. AT HWY. 310 OVERPASS	83	63
941+39	941+61	MEDIAN CROSSING	55	37
1078+42	1085+08	RT. SHLDR. AT HWY. 13 OVERPASS	86	66
1081+62	1088+28	LT. SHLDR. AT HWY. 13 OVERPASS	86	66
1288+72	1295+38	RT. SHLDR. AT KOA RD. OVERPASS	86	66
1291+91	1298+15	LT. SHLDR. AT KOA RD. OVERPASS	81	62
1300+73	1300+96	MEDIAN CROSSING	45	51
1448+67	1455+03	RT. SHLDR. AT S. MAIN ST. OVERPASS	82	63
1451+62	1458+28	LT. SHLDR. AT S. MAIN ST. OVERPASS	86	66
1527+65	1534+06	RT. SHLDR. AT QUEENSWAY ST. OVERPASS	83	63
1530+88	1537+29	LT. SHLDR. AT QUEENSWAY ST. OVERPASS	83	63
1599+27	1605+93	RT. SHLDR. AT E. BEEBE CAPPS EXPY. OVERPASS	86	66
1602+47	1608+83	LT. SHLDR. AT E. BEEBE CAPPS EXPY. OVERPASS	82	63
1749+47	1755+58	RT. SHLDR. AT HWY. 385 OVERPASS	79	60
1752+42	1758+83	LT. SHLDR. AT HWY. 385 OVERPASS	83	63
1819+67	1826+08	RT. SHLDR. AT HWY. 371 OVERPASS	83	63
1823+14	1829+30	LT. SHLDR. AT HWY. 371 OVERPASS	80	61
TOTALS:			2306	1797

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

QUANTITIES ARE ESTIMATED FOR SLOPE MODIFICATION AND
MEDIAN TURNAROUNDS REMOVAL AND CONSTRUCTION. SEE SECTION 104.03 OF THE STANDARD SPECIFICATIONS.

QUANTITIES

STATE OF
ARKANSAS
REGISTERED
PROFESSIONAL
ENGINEER
No. 6646
JIM D. BEAVERS

02-28-2013
RESPONSIBLE FOR QUANTITIES
IN EROSION CONTROL AND
ADVANCED WARNING SIGNS
AND DEVICES TABLES

STATE OF
ARKANSAS
REGISTERED
PROFESSIONAL
ENGINEER
No. 12280
BRIAN C. CLARK

2/28/13
RESPONSIBLE FOR ALL
OTHER 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.		012179	44	84

SUMMARY OF QUANTITIES AND REVISIONS

SUMMARY OF QUANTITIES

ITEM NUMBER	ITEM	QUANTITY	UNIT
SP	REMOVAL AND DISPOSAL OF IMPACT ATTENUATION BARRIER	4	EACH
SP & 202	REMOVAL AND DISPOSAL OF GUARDRAIL	5888	LIN.FT.
202	REMOVAL AND DISPOSAL OF PIPE CULVERTS	1	EACH
210	UNCLASSIFIED EXCAVATION	2306	CU.YD.
210	COMPACTED EMBANKMENT	1797	CU.YD.
SS & 303	AGGREGATE BASE COURSE (CLASS 7)	6748	TON
SP, SS & 407	MINERAL AGGREGATE IN ACHM SURFACE COURSE (1/2")	1635	TON
SP, SS & 407	ASPHALT BINDER (PG 64-22) IN ACHM SURFACE COURSE (1/2")	91	TON
601	MOBILIZATION	1.00	LUMP SUM
SP, SS & 603	MAINTENANCE OF TRAFFIC	1.00	LUMP SUM
SS & 604	SIGNS	1204	SQ.FT.
SS & 604	TRAFFIC DRUMS	494	EACH
SS & 604	ADVANCE WARNING ARROW PANEL	130	DAY
SP, SS & 604	PORTABLE CHANGEABLE MESSAGE SIGN	84	WEEK
SP & 605	CONCRETE DITCH PAVING (TYPE B)	76024	SQ.YD.
SP, SS & 606	18" SIDE DRAIN	34	LIN.FT.
SS & 617	GUARDRAIL (TYPE A)	11900	LIN.FT.
SS & 617	TERMINAL ANCHOR POSTS (TYPE 1)	26	EACH
SS & 617	GUARDRAIL TERMINAL (TYPE 2)	26	EACH
620	SEEDING	1.38	ACRE
620	LIME	3	TON
620	MULCH COVER	2.76	ACRE
SS & 620	WATER	648.0	M.GAL.
621	TEMPORARY SEEDING	1.38	ACRE
621	SAND BAG DITCH CHECKS	6000	BAG
621	DROP INLET SILT FENCE	5430	LIN.FT.
621	SEDIMENT REMOVAL AND DISPOSAL	462	CU.YD.
623	SECOND SEEDING APPLICATION	1.38	ACRE
624	SOLID SODDING	38011	SQ.YD.
635	ROADWAY CONSTRUCTION CONTROL	1.00	LUMP SUM
SP	WIRE ROPE SAFETY FENCE	175666	LIN.FT.
SP	WIRE ROPE SAFETY FENCE MAINTENANCE MATERIALS	1.00	LUMP SUM

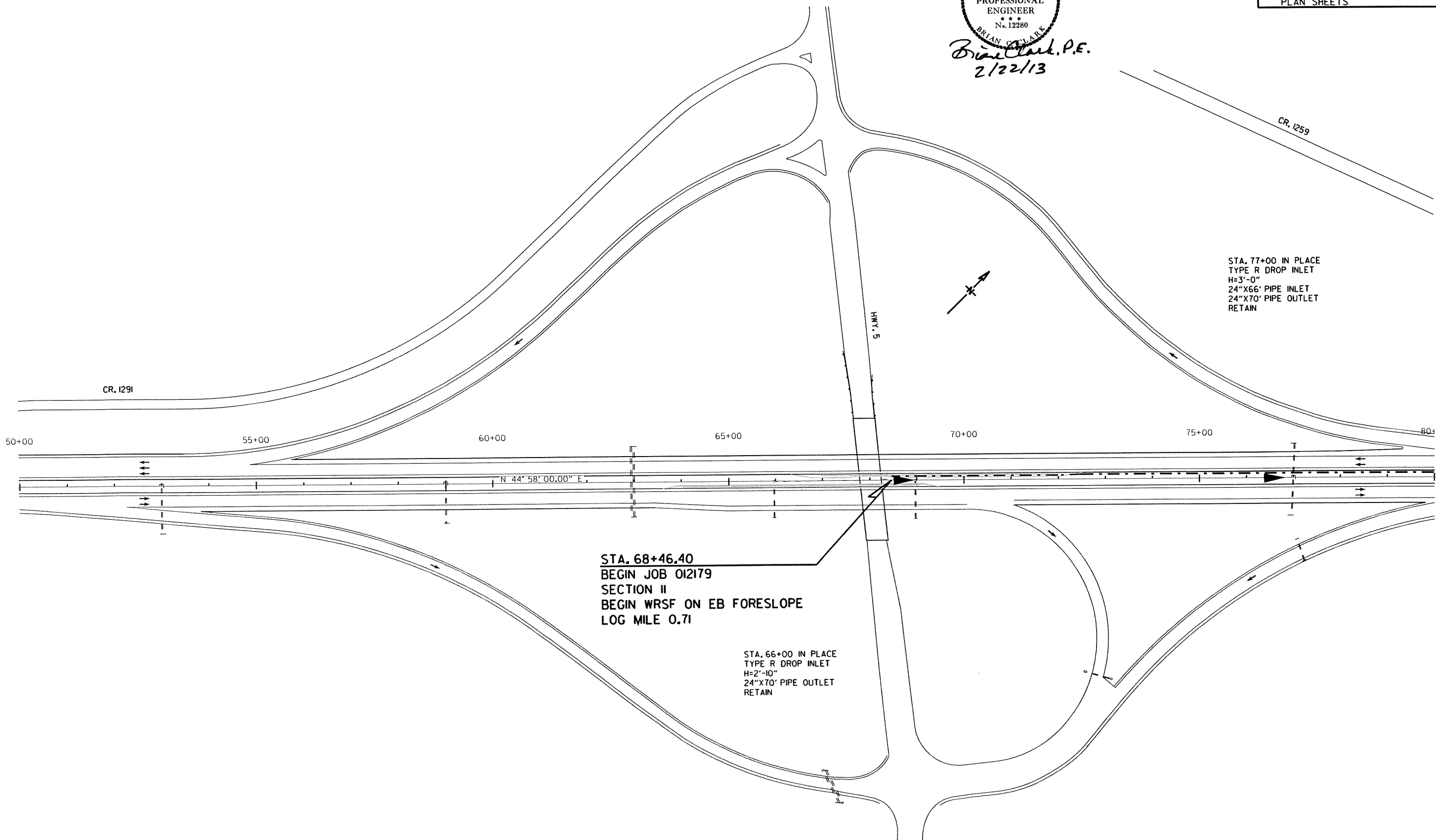
REVISIONS

DATE	REVISION	SHEET NUMBER



Brian Clark, P.E.
2/22/13

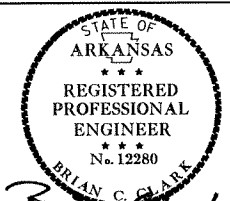
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. AID PROJ. NO.	STATE	SHEET NO.	TOTAL SHEETS
				012179	ARK.	45	84
PLAN SHEETS							



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

PLAN SHEETS
STA. 50+00 - STA. 80+00

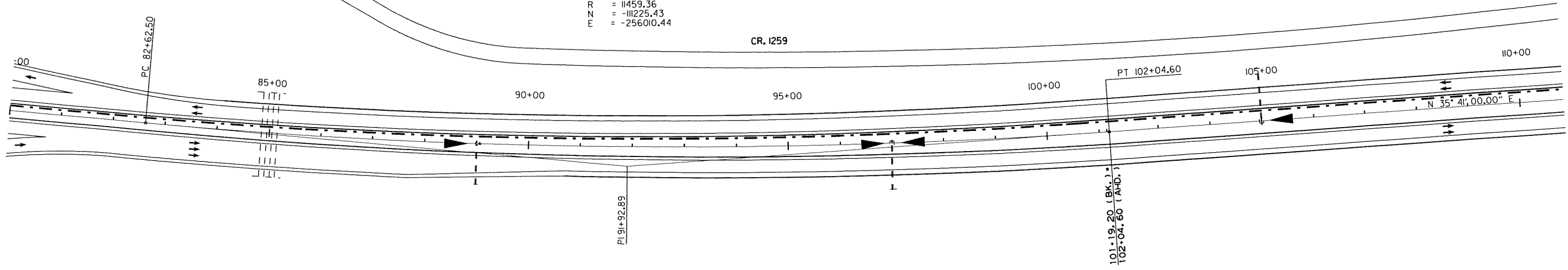
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Brian C. Clark, P.E.
2/22/13

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.		012179	46	84
PLAN SHEETS								

P.I. = 91+92.89
Δ = 9°17'00.00" LT.
D = 0°29'59.97"
T = 930.39'
L = 1856.70'
R = 11459.36
N = -111225.43
E = -256010.44

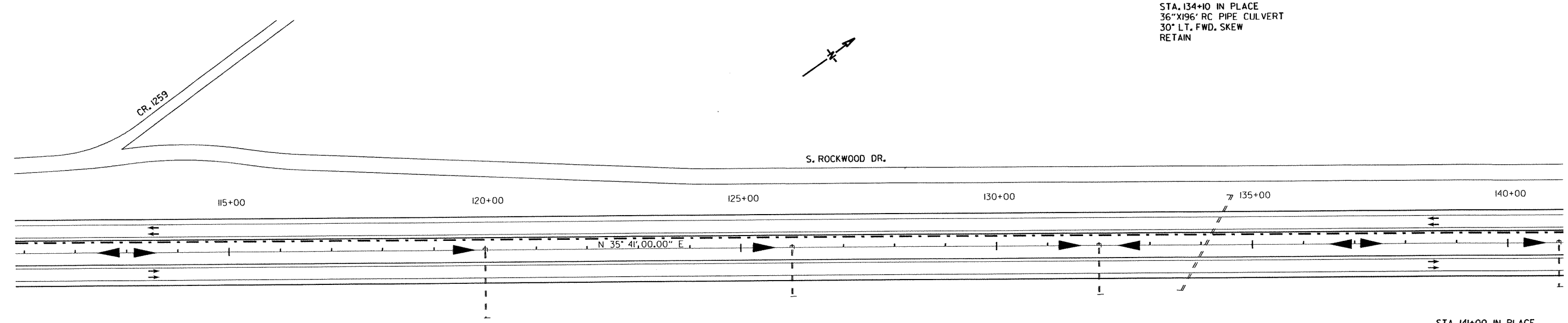


STA. 85+00 IN PLACE
TRIPLE 10'X5'X156' RC BOX CULVERT
WITH TYPE T DROP INLET IN MED.
H=0'-11"
RETAIN

STA. 89+00 IN PLACE
TYPE R DROP INLET IN MED.
H=3'-0"
24"X80' PIPE OUTLET
RETAIN

STA. 97+00 IN PLACE
TYPE R DROP INLET IN MED.
H=2'-10"
24"X86' PIPE OUTLET
RETAIN

STA. 105+00 IN PLACE
TYPE R DROP INLET IN MED.
H=4'-9"
24"X88' PIPE OUTLET
RETAIN



STA. 134+10 IN PLACE
36"X196' RC PIPE CULVERT
30' LT. FWD. SKEW
RETAIN

STA. 120+00 IN PLACE
TYPE S DROP INLET IN MED.
H=11'-6"
24"X124' PIPE OUTLET
RETAIN

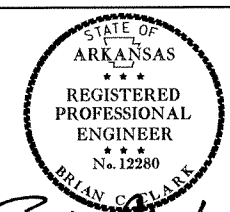
STA. 126+00 IN PLACE
TYPE R DROP INLET IN MED.
H=2'-10"
24"X84' PIPE OUTLET
RETAIN

STA. 132+00 IN PLACE
TYPE R DROP INLET IN MED.
H=2'-10"
24"X82' PIPE OUTLET
RETAIN

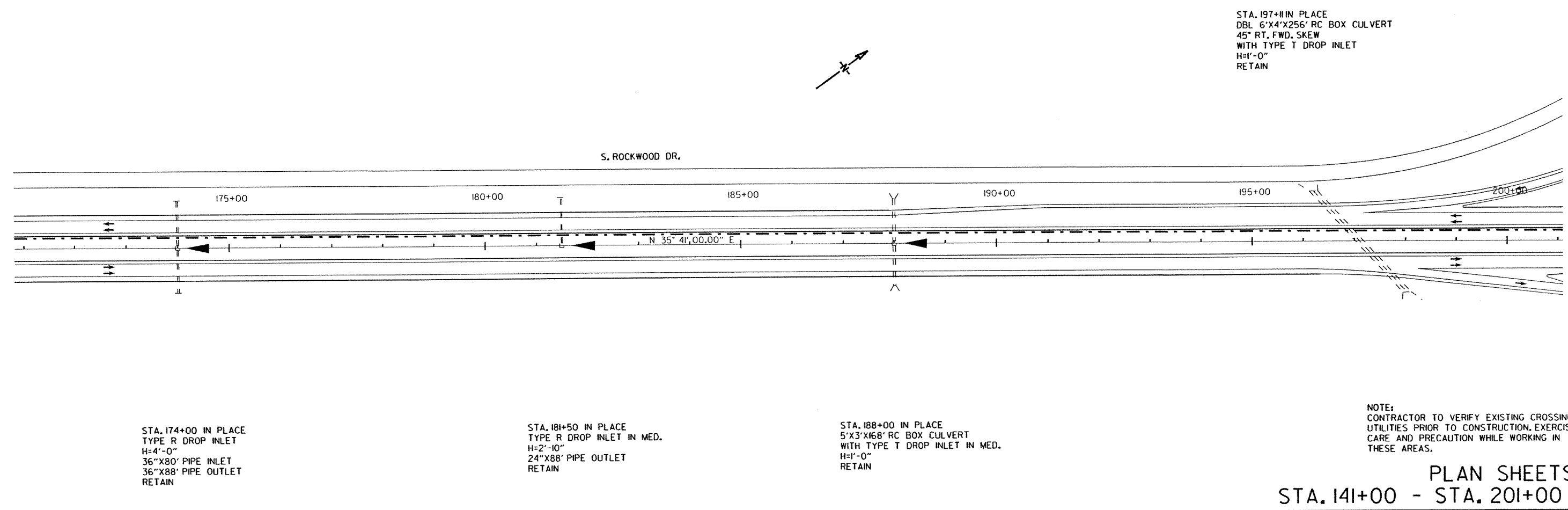
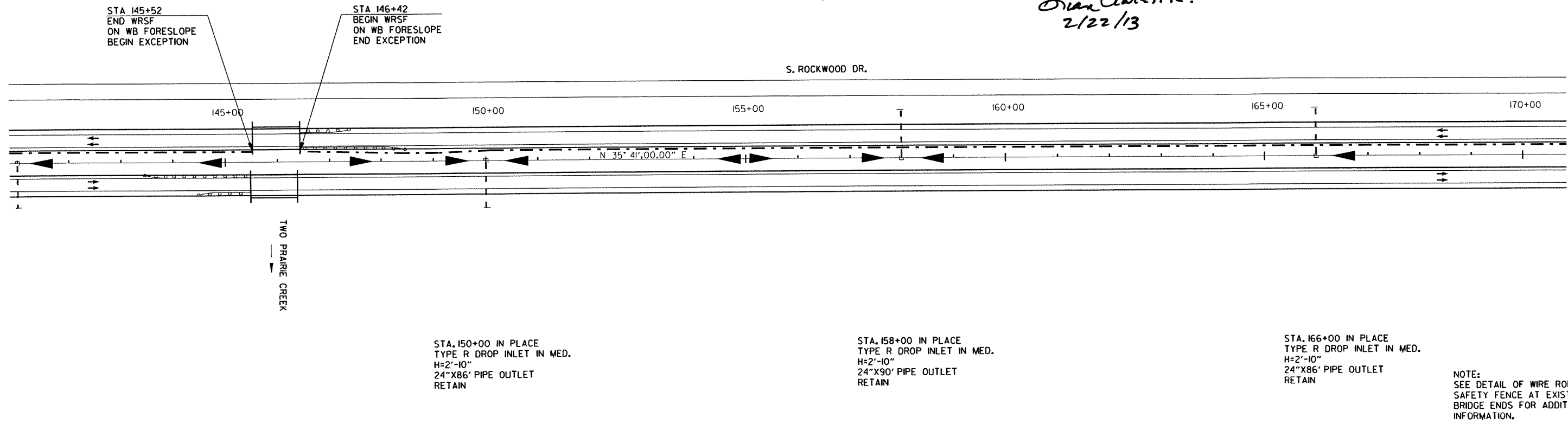
STA. 141+00 IN PLACE
TYPE R DROP INLET IN MED.
H=2'-10"
24"X82' PIPE OUTLET
RETAIN

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

PLAN SHEETS
STA. 80+00 - STA. 141+00

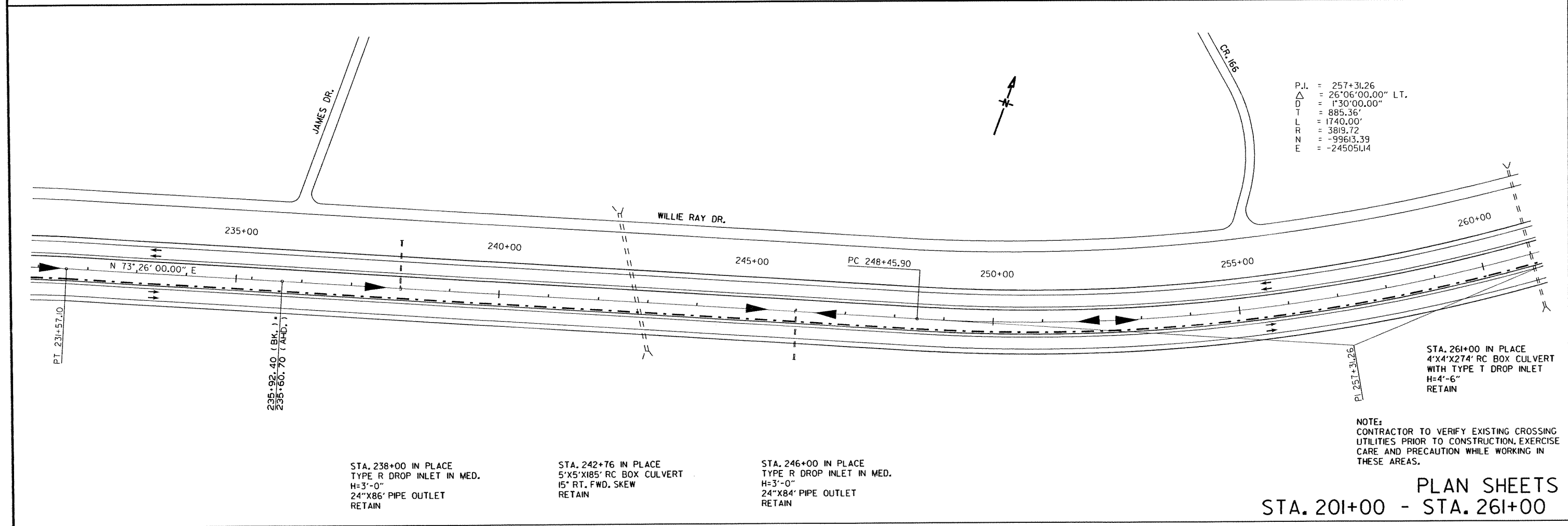
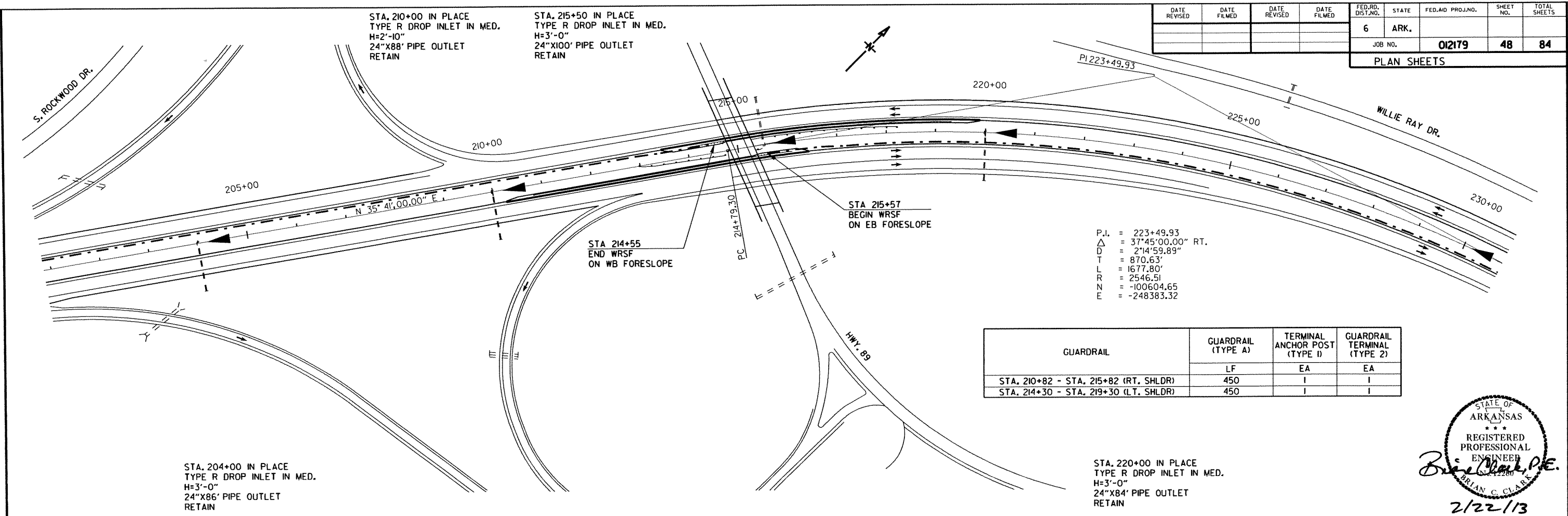


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				6	ARK.			
				JOB NO.		02179	47	84
PLAN SHEETS								



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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.		012179	48	84
PLAN SHEETS								

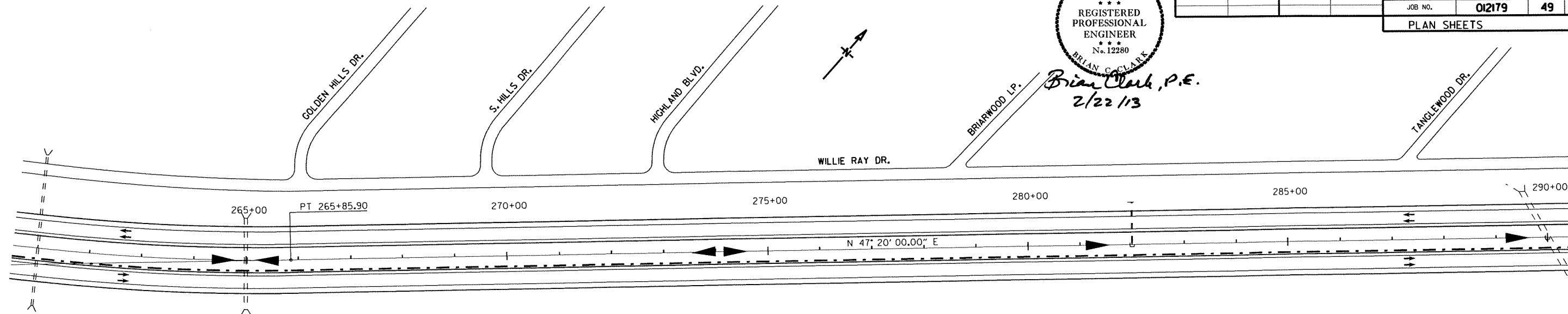


PLAN SHEETS
STA. 201+00 - STA. 261+00



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2/22/13

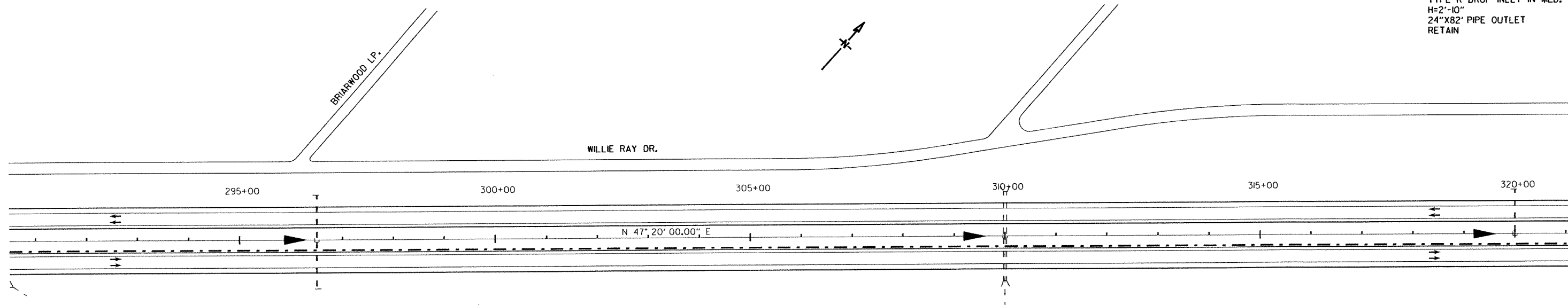
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				6	ARK.			
				JOB NO.		012179	49	84
				PLAN SHEETS				



STA. 265+00 IN PLACE
6'X5'X162' RC BOX CULVERT
WITH TYPE T DROP INLET
H=0'-6"
RETAIN

STA. 282+00 IN PLACE
TYPE R DROP INLET IN MED.
H=2'-10"
24"X88' PIPE OUTLET
RETAIN

STA. 290+00 IN PLACE
10'X5'X187' RC BOX CULVERT
30° RT. FWD. SKEW
WITH TYPE T DROP INLET
H=0'-6"
RETAIN



STA. 320+00 IN PLACE
TYPE R DROP INLET IN MED.
H=2'-10"
24"X82' PIPE OUTLET
RETAIN

STA. 296+50 IN PLACE
TYPE R DROP INLET IN MED.
H=2'-10"
24"X78' PIPE INLET
24"X86' PIPE OUTLET
RETAIN

STA. 310+00 IN PLACE
6'X3'X164' RC BOX CULVERT
WITH TYPE T DROP INLET
H=0'-6"
RETAIN

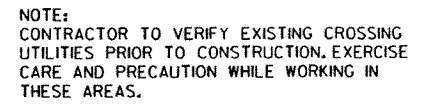
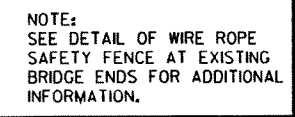
NOTE:
CONTRACTOR TO VERIFY EXISTING CROSSING
UTILITIES PRIOR TO CONSTRUCTION. EXERCISE
CARE AND PRECAUTION WHILE WORKING IN
THESE AREAS.

PLAN SHEETS
STA. 261+00 - STA. 321+00

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STATE OF
ARKANSAS
REGISTERED
PROFESSIONAL
ENGINEER
BRIAN C. CLARK
2/22/13

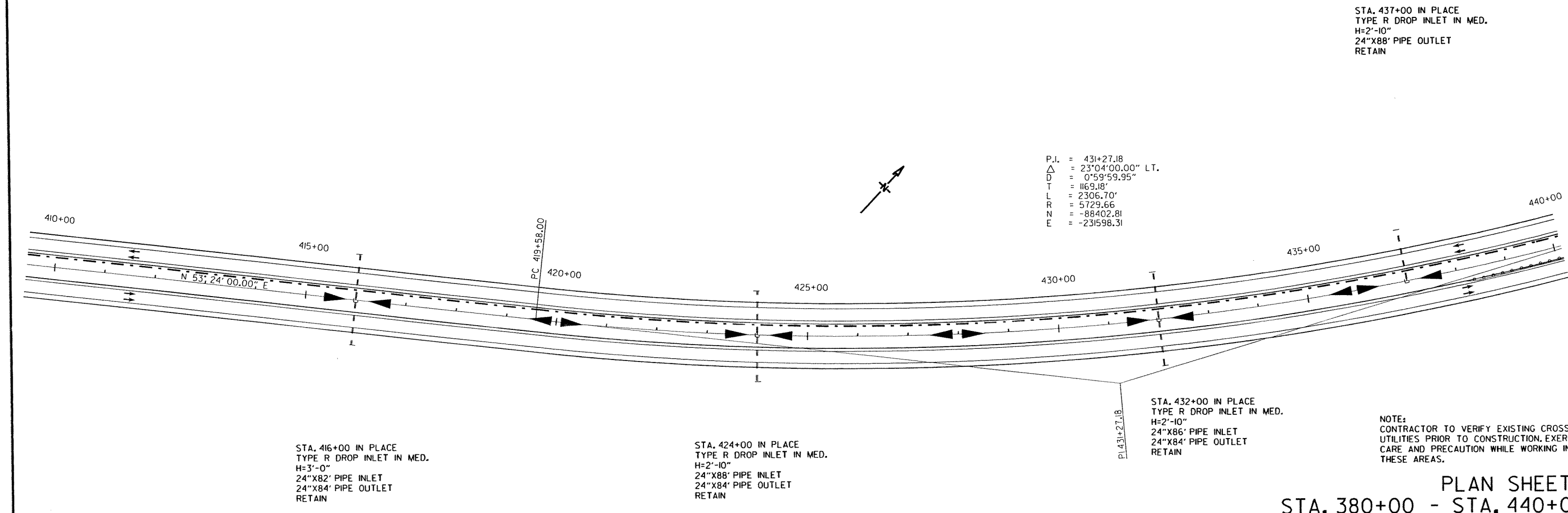
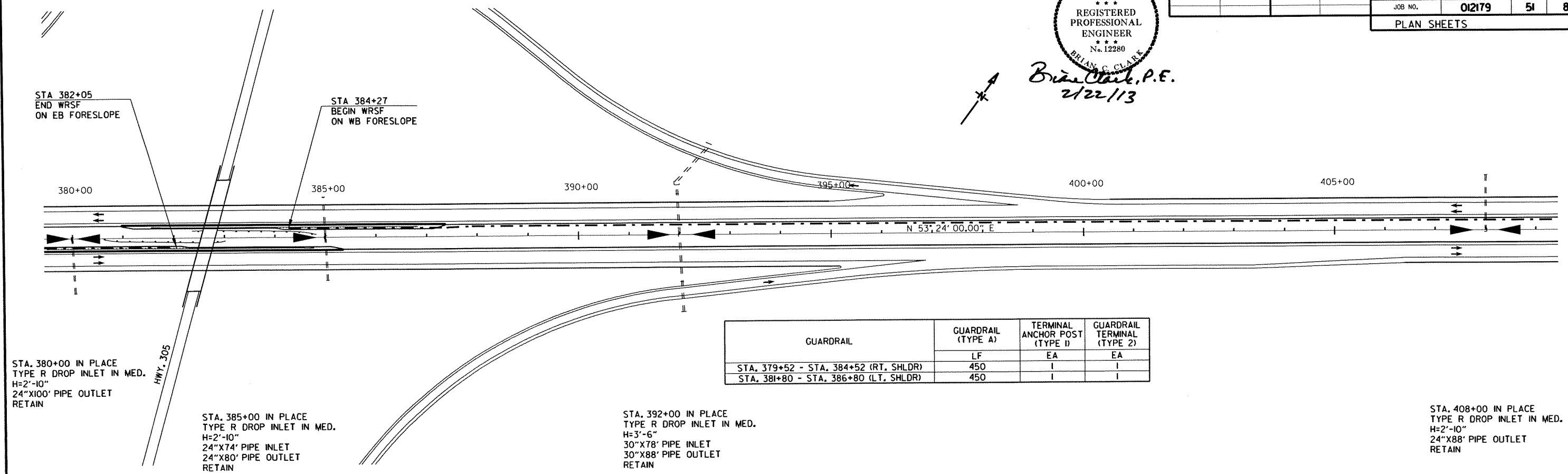


PLAN SHEETS
STA. 321+00 - STA. 380+00

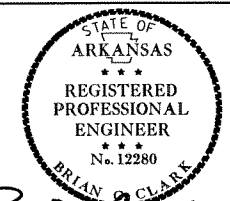


Brian C. Clark, P.E.
2/22/13

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.		012179	51	84
PLAN SHEETS								

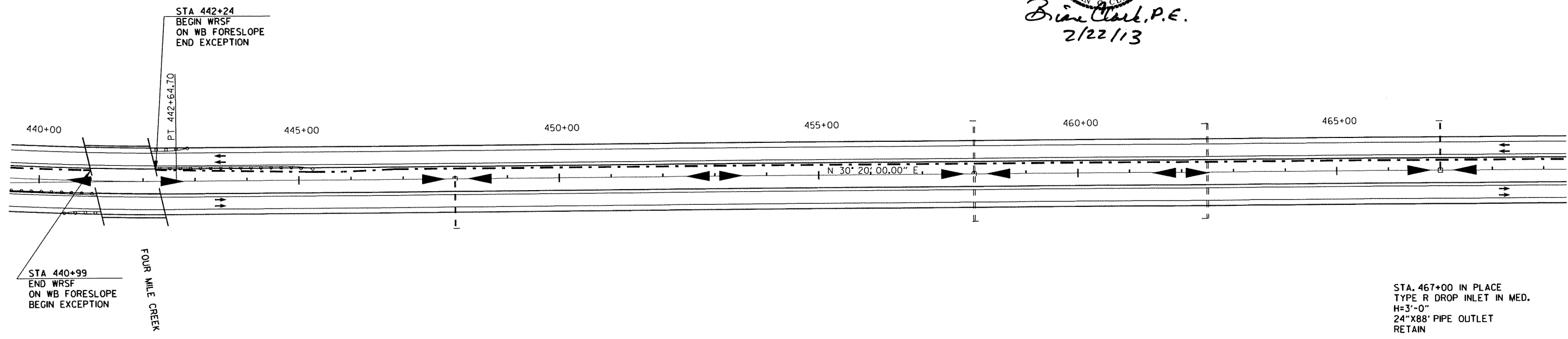


NOTE:
CONTRACTOR TO VERIFY EXISTING CROSSING UTILITIES PRIOR TO CONSTRUCTION. EXERCISE CARE AND PRECAUTION WHILE WORKING IN THESE AREAS.

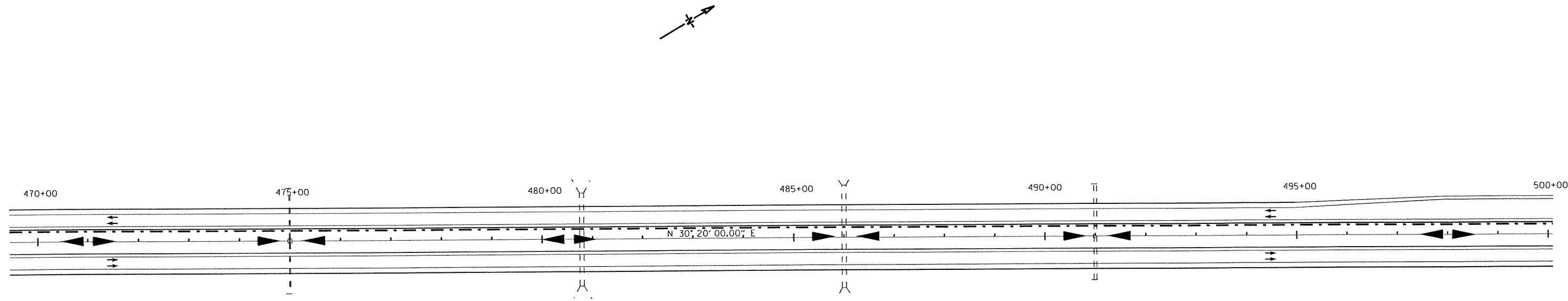


Brian Clark, P.E.
2/22/13

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.		012179	52	84
PLAN SHEETS								



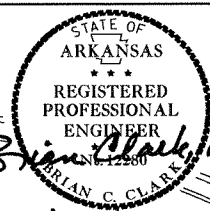
NOTE:
SEE DETAIL OF WIRE ROPE
SAFETY FENCE AT EXISTING
BRIDGE ENDS FOR ADDITIONAL
INFORMATION.



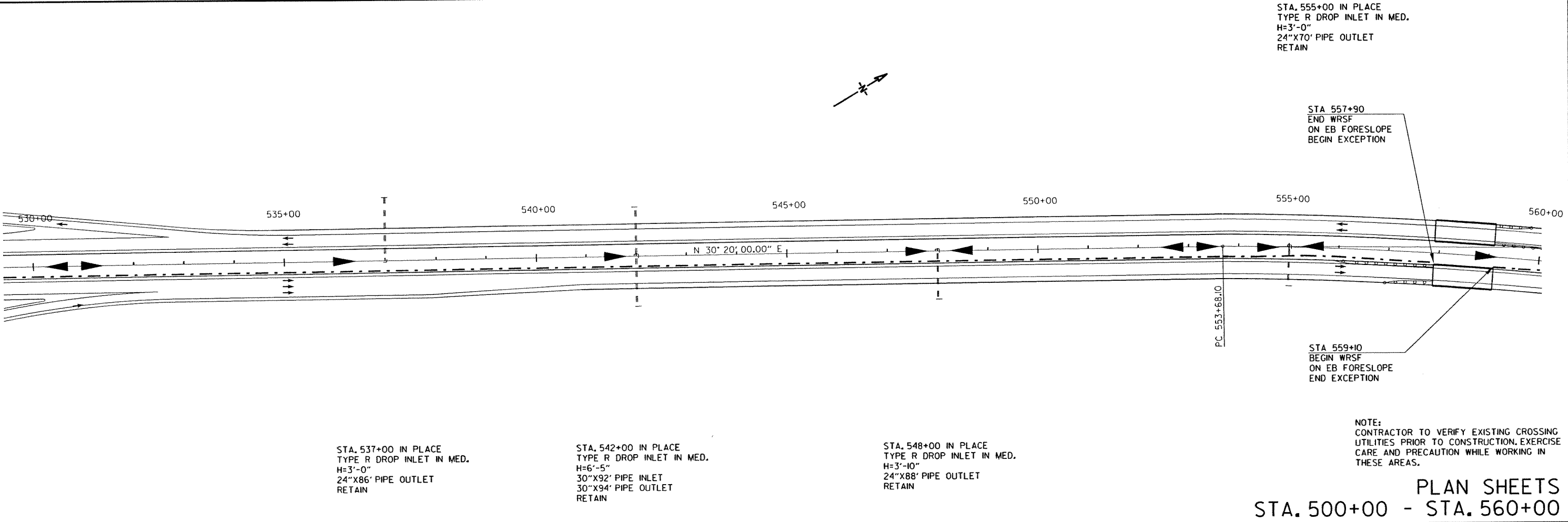
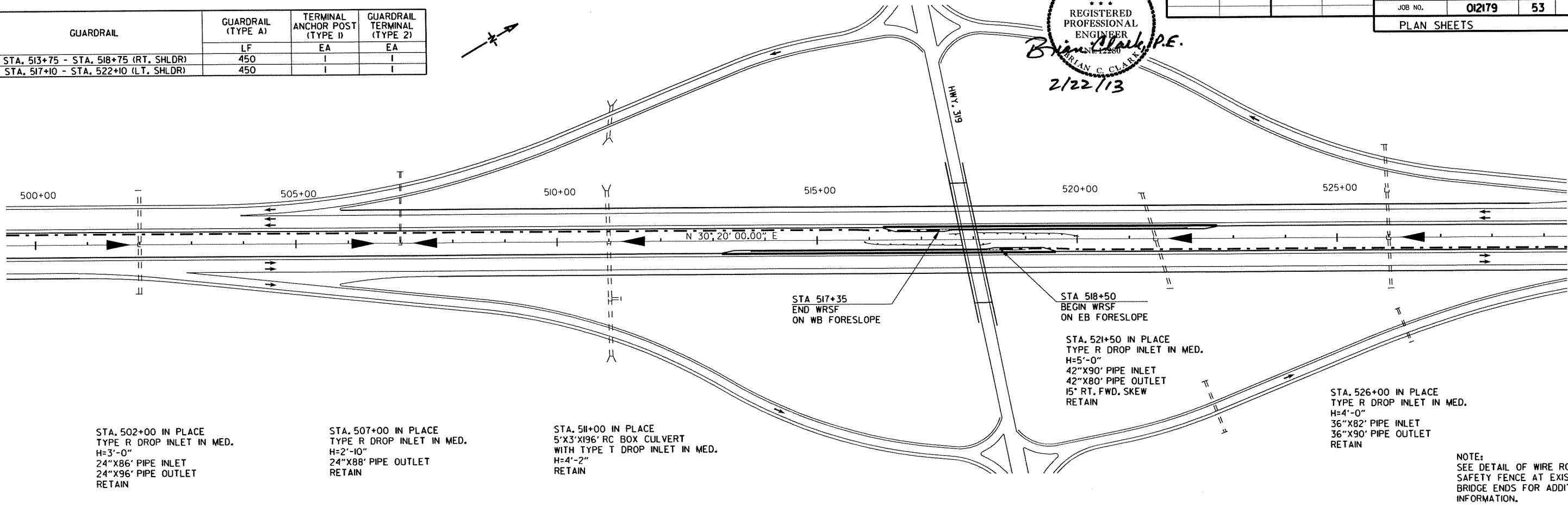
NOTE:
CONTRACTOR TO VERIFY EXISTING CROSSING
UTILITIES PRIOR TO CONSTRUCTION. EXERCISE
CARE AND PRECAUTION WHILE WORKING IN
THESE AREAS.

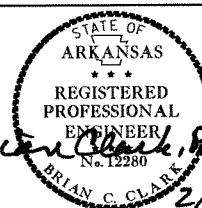
PLAN SHEETS
STA. 440+00 - STA. 500+00

GUARDRAIL	GUARDRAIL (TYPE A)	TERMINAL ANCHOR POST (TYPE 1)	GUARDRAIL TERMINAL (TYPE 2)
STA. 513+75 - STA. 518+75 (RT. SHLDR)	LF	EA	EA
STA. 517+10 - STA. 522+10 (LT. SHLDR)	450	I	I
	450	I	I



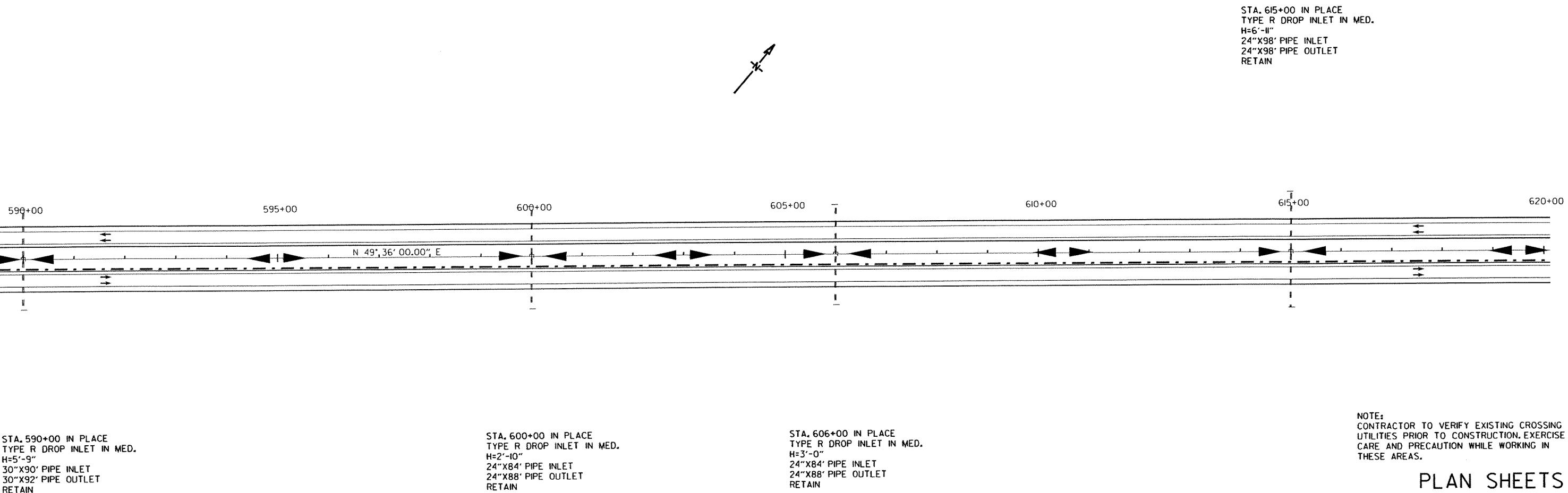
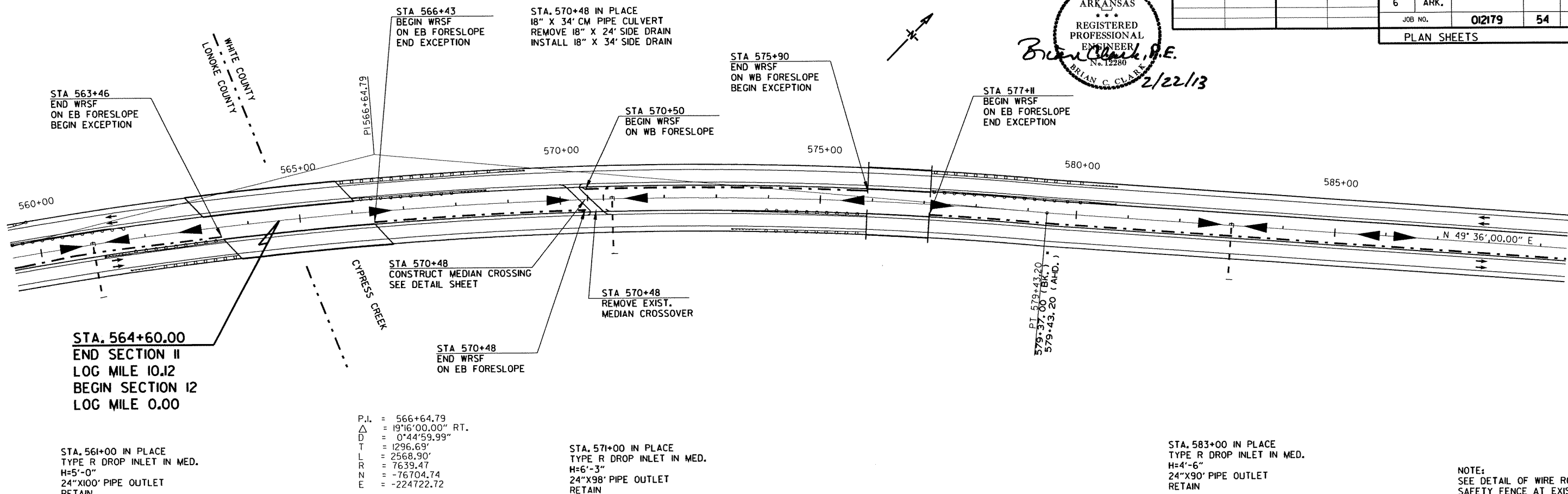
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				6	ARK.	012179	53	84
				JOB NO.		PLAN SHEETS		





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.		012179	54	84
PLAN SHEETS				

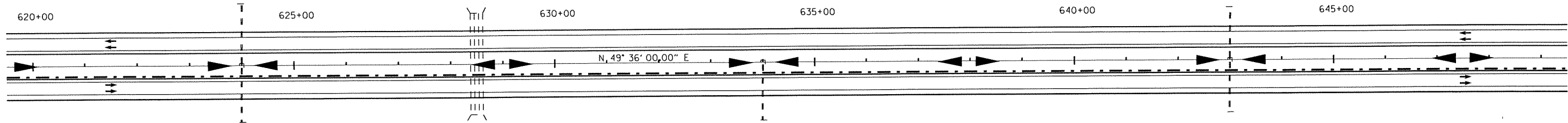


PLAN SHEETS
STA. 560+00 - STA. 620+00



Brian C. Clark, P.E.
2/22/13

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.		012179	55	84
				PLAN SHEETS				

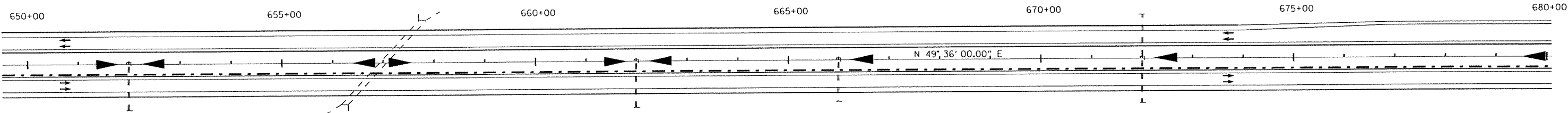


STA. 624+00 IN PLACE
TYPE R DROP INLET IN MED.
H=7'-2"
24\"/>

STA. 628+50 IN PLACE
TRIPLE 8'X5'X182' RC BOX CULVERT
RETAIN

STA. 634+00 IN PLACE
TYPE R DROP INLET IN MED.
H=4'-6"
24\"/>

STA. 643+00 IN PLACE
TYPE R DROP INLET IN MED.
H=3'-3"
24\"/>



STA. 652+00 IN PLACE
TYPE R DROP INLET IN MED.
H=2'-10"
24\"/>

STA. 657+00 IN PLACE
10'X5'X222' RC BOX CULVERT
45° LT. FWD. SKEW
RETAIN

STA. 662+00 IN PLACE
TYPE R DROP INLET IN MED.
H=3'-0"
24\"/>

STA. 666+00 IN PLACE
TYPE R DROP INLET IN MED.
H=3'-0"
24\"/>

STA. 672+00 IN PLACE
TYPE R DROP INLET IN MED.
H=2'-10"
24\"/>

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

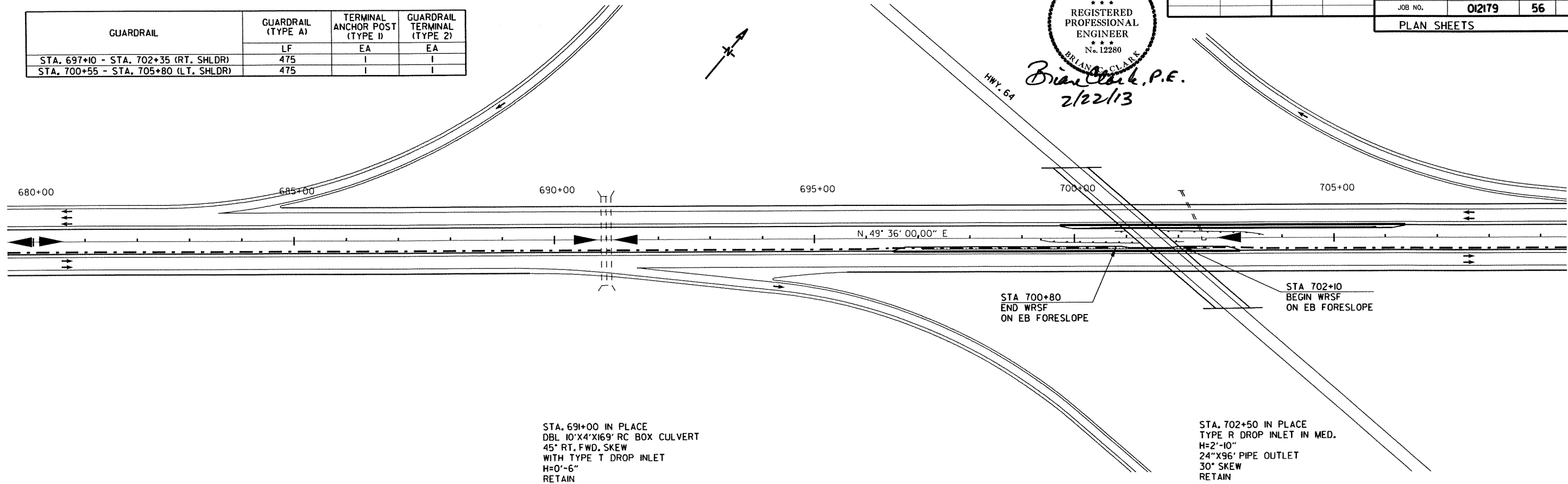
PLAN SHEETS
STA. 620+00 - STA. 680+00

GUARDRAIL	GUARDRAIL (TYPE A)	TERMINAL ANCHOR POST (TYPE D)	GUARDRAIL TERMINAL (TYPE 2)
STA. 697+10 - STA. 702+35 (RT. SHLDR)	LF	EA	EA
STA. 700+55 - STA. 705+80 (LT. SHLDR)	475	I	I
	475	I	I

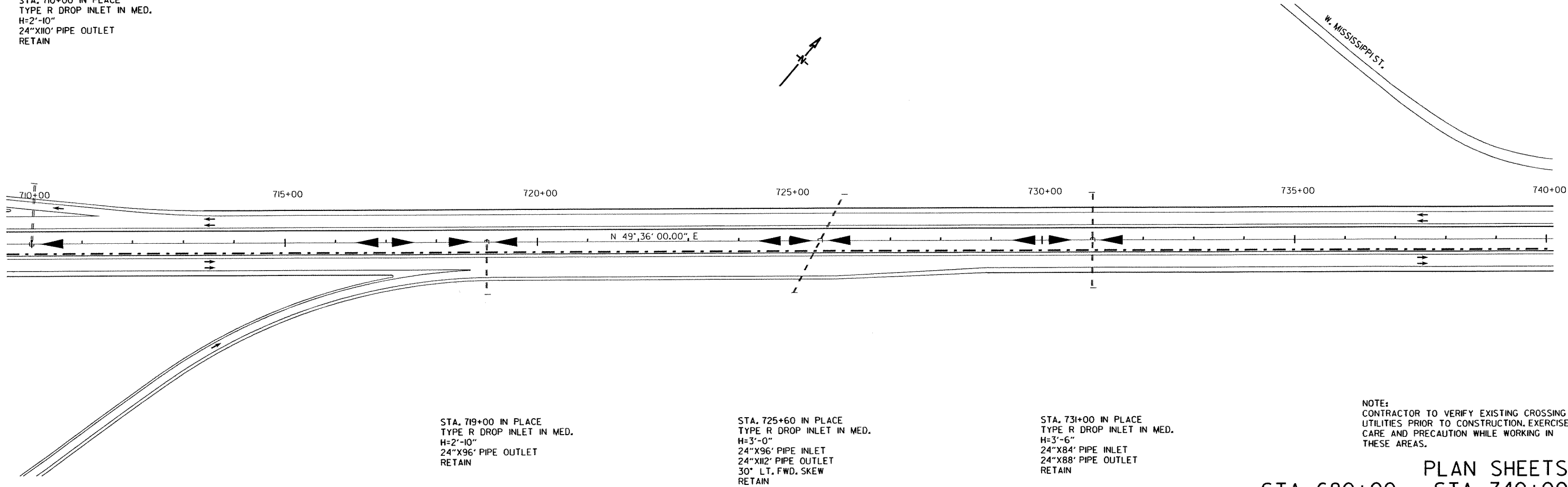


Brian Clark, P.E.
2/22/13

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.		012179	56	84
PLAN SHEETS								

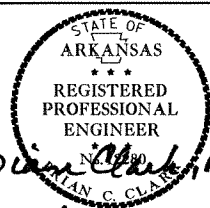


STA. 710+00 IN PLACE
TYPE R DROP INLET IN MED.
H=2'-10"
24"x110' PIPE OUTLET
RETAIN

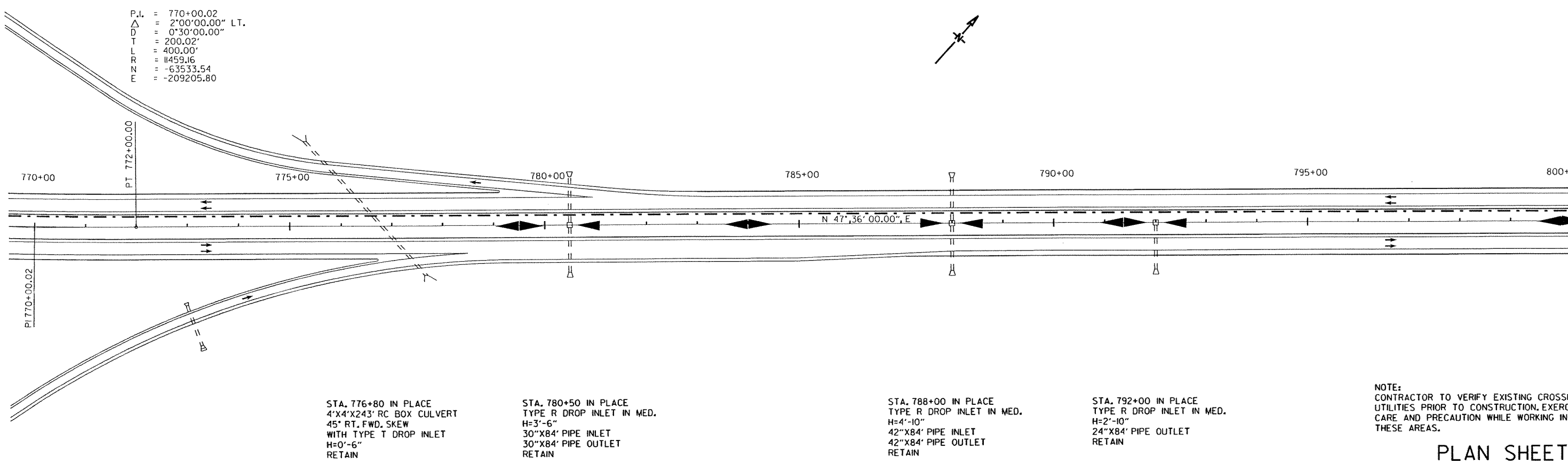
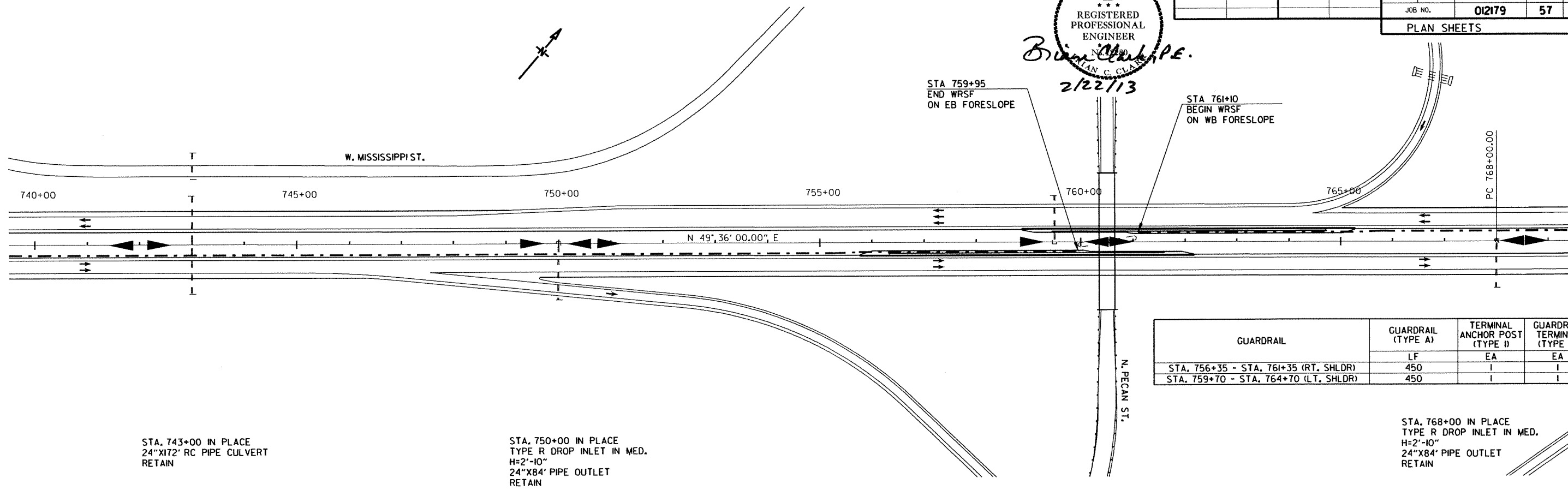


NOTE:
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UTILITIES PRIOR TO CONSTRUCTION, EXERCISE
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THESE AREAS.

PLAN SHEETS
STA. 680+00 - STA. 740+00



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.		012179	57	84
				PLAN SHEETS				

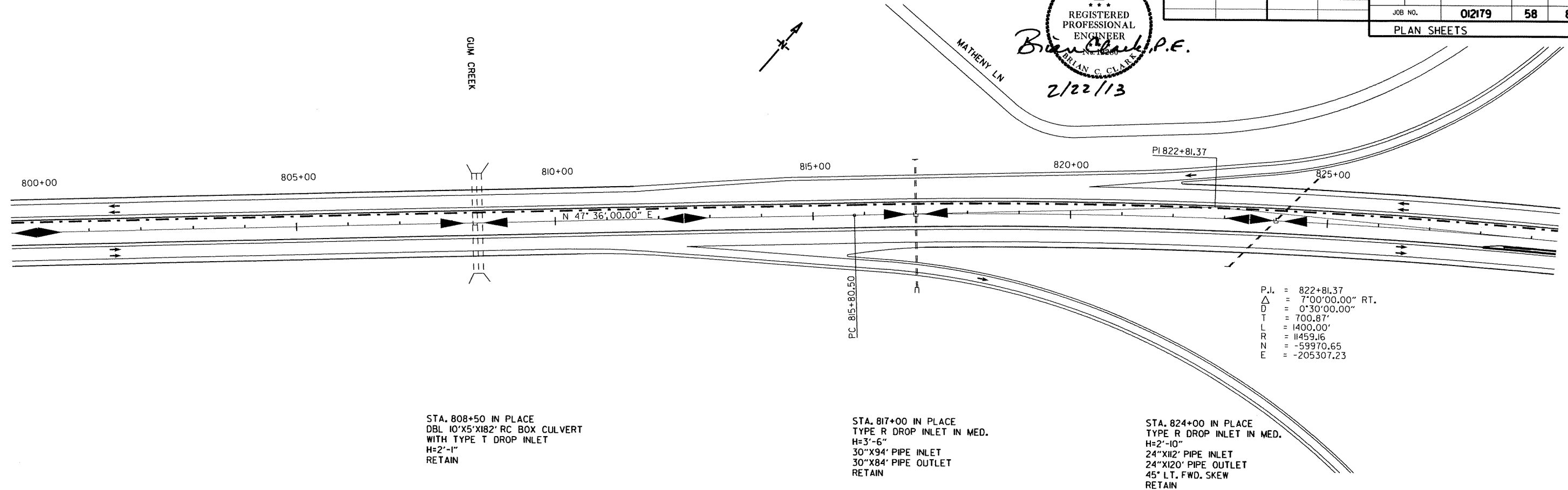


NOTE:
CONTRACTOR TO VERIFY EXISTING CROSSING UTILITIES PRIOR TO CONSTRUCTION. EXERCISE CARE AND PRECAUTION WHILE WORKING IN THESE AREAS.

PLAN SHEETS
STA. 740+00 - STA. 800+00

STATE OF ARKANSAS
 REGISTERED PROFESSIONAL ENGINEER
 BRIAN C. CLARK
 2/22/13

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.	012179	58	84	
PLAN SHEETS								

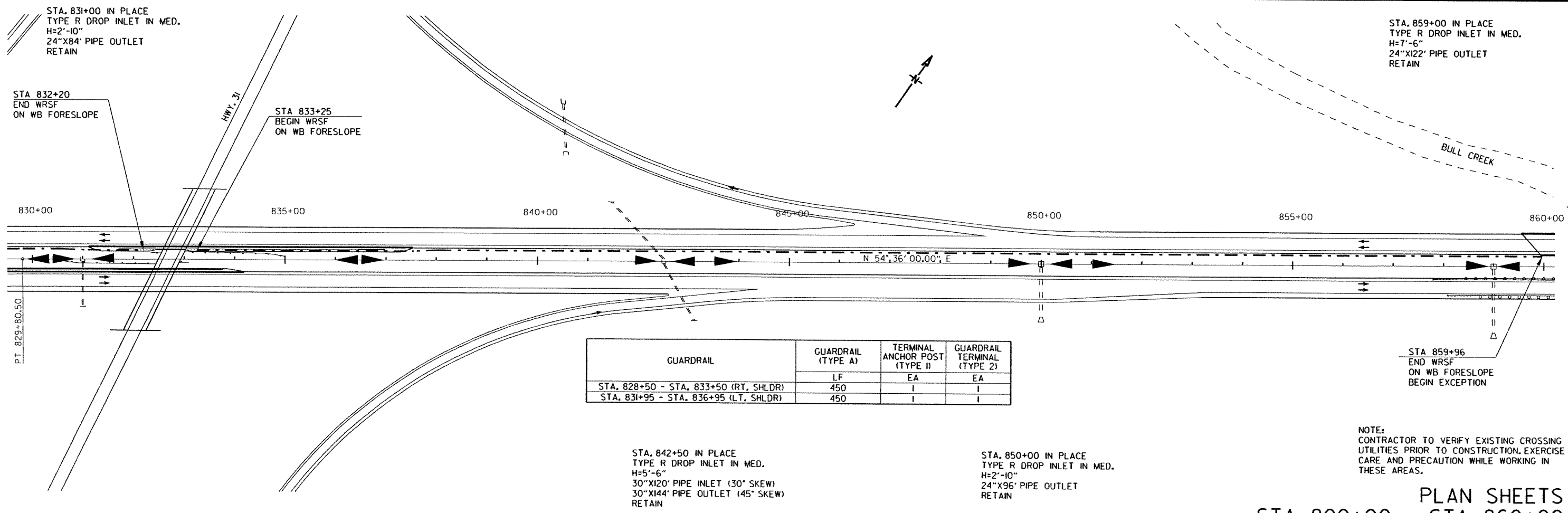


P.I. = 822+81.37
 Δ = 7°00'00.00\" RT.
 D = 0°30'00.00\"
 T = 700.87'
 L = 1400.00'
 R = 11459.16
 N = -59970.65
 E = -205307.23

STA. 808+50 IN PLACE
 DBL 10'X5'X182' RC BOX CULVERT
 WITH TYPE T DROP INLET
 H=2'-1\"
 RETAIN

STA. 817+00 IN PLACE
 TYPE R DROP INLET IN MED.
 H=3'-6\"
 30\"X94' PIPE INLET
 30\"X84' PIPE OUTLET
 RETAIN

STA. 824+00 IN PLACE
 TYPE R DROP INLET IN MED.
 H=2'-10\"
 24\"X12' PIPE INLET
 24\"X120' PIPE OUTLET
 45° LT. FWD. SKEW
 RETAIN



STA. 831+00 IN PLACE
 TYPE R DROP INLET IN MED.
 H=2'-10\"
 24\"X84' PIPE OUTLET
 RETAIN

STA 832+20
 END WRSF
 ON WB FORESLOPE

STA 833+25
 BEGIN WRSF
 ON WB FORESLOPE

STA. 859+00 IN PLACE
 TYPE R DROP INLET IN MED.
 H=7'-6\"
 24\"X122' PIPE OUTLET
 RETAIN

STA 859+96
 END WRSF
 ON WB FORESLOPE
 BEGIN EXCEPTION

GUARDRAIL	GUARDRAIL (TYPE A)	TERMINAL ANCHOR POST (TYPE I)	GUARDRAIL TERMINAL (TYPE 2)
STA. 828+50 - STA. 833+50 (RT. SHLDR)	LF	EA	EA
STA. 831+95 - STA. 836+95 (LT. SHLDR)	450	I	I
	450	I	I

STA. 842+50 IN PLACE
 TYPE R DROP INLET IN MED.
 H=5'-6\"
 30\"X120' PIPE INLET (30° SKEW)
 30\"X144' PIPE OUTLET (45° SKEW)
 RETAIN

STA. 850+00 IN PLACE
 TYPE R DROP INLET IN MED.
 H=2'-10\"
 24\"X96' PIPE OUTLET
 RETAIN

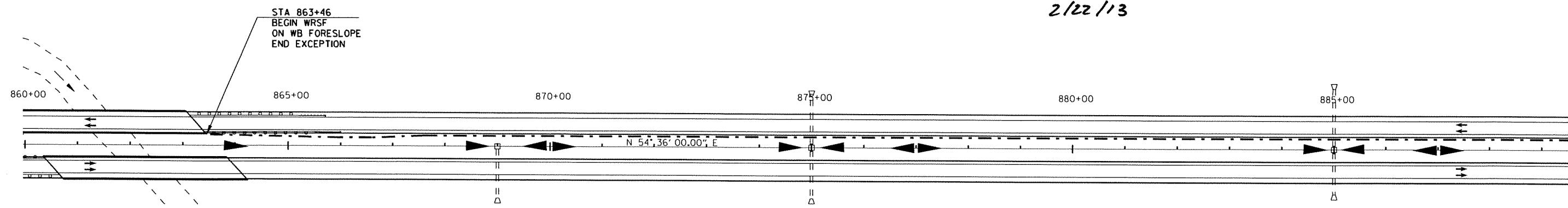
NOTE:
 CONTRACTOR TO VERIFY EXISTING CROSSING UTILITIES PRIOR TO CONSTRUCTION. EXERCISE CARE AND PRECAUTION WHILE WORKING IN THESE AREAS.

PLAN SHEETS
 STA. 800+00 - STA. 860+00



Brian A. Clark, P.E.
2/22/13

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.		012179	59	84
PLAN SHEETS								

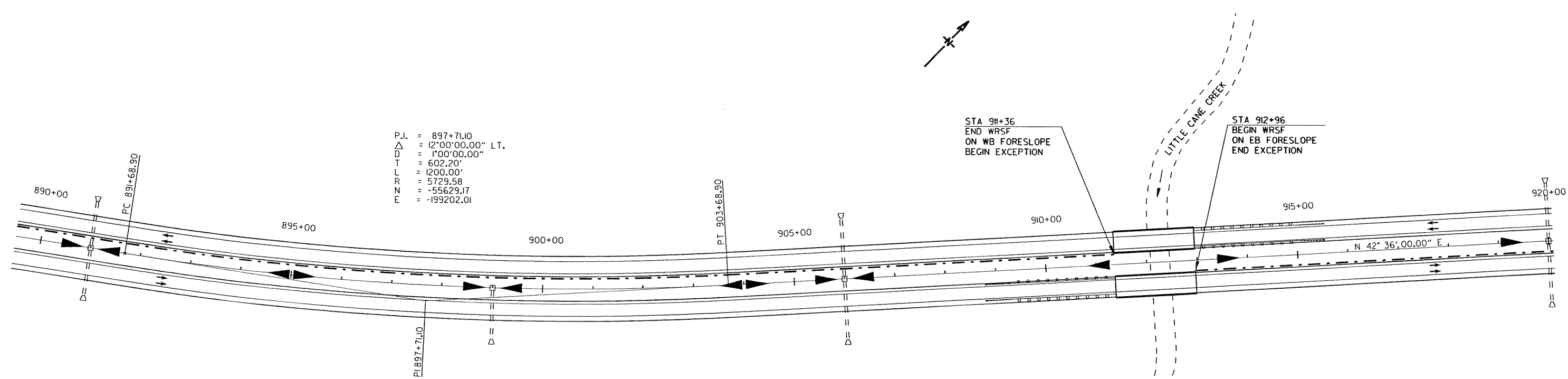


STA. 869+00 IN PLACE
TYPE R DROP INLET IN MED.
H=4'-0"
24\"X92' PIPE OUTLET
RETAIN

STA. 875+00 IN PLACE
TYPE R DROP INLET IN MED.
H=5'-8"
30\"X92' PIPE INLET
30\"X96' PIPE OUTLET
RETAIN

STA. 885+00 IN PLACE
TYPE R DROP INLET IN MED.
H=5'-0"
24\"X92' PIPE INLET
24\"X92' PIPE OUTLET
RETAIN

NOTE:
SEE DETAIL OF WIRE ROPE
SAFETY FENCE AT EXISTING
BRIDGE ENDS FOR ADDITIONAL
INFORMATION.



STA. 891+00 IN PLACE
TYPE R DROP INLET IN MED.
H=5'-0"
24\"X94' PIPE INLET
24\"X92' PIPE OUTLET
RETAIN

STA. 899+00 IN PLACE
TYPE R DROP INLET IN MED.
H=4'-0"
24\"X96' PIPE OUTLET
RETAIN

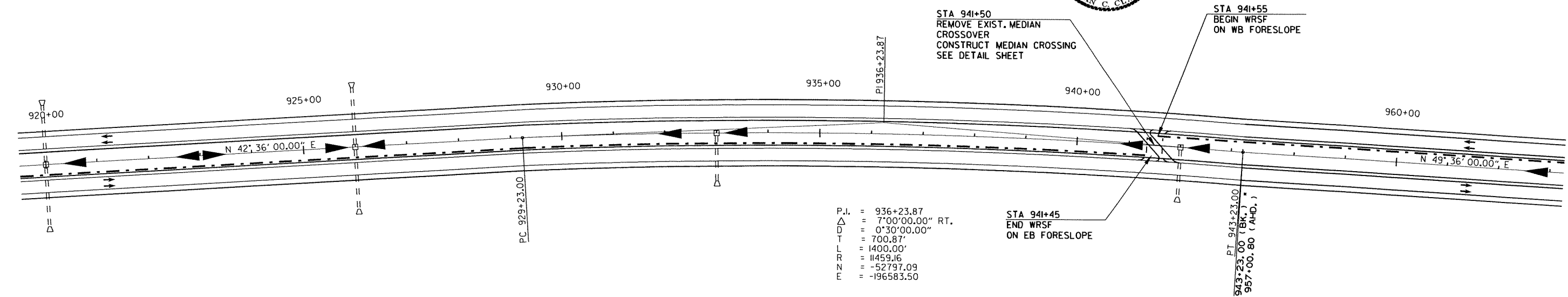
STA. 906+00 IN PLACE
TYPE R DROP INLET IN MED.
H=7'-6"
24\"X108' PIPE INLET
24\"X10' PIPE OUTLET
RETAIN

NOTE:
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PLAN SHEETS
STA. 860+00 - STA. 920+00

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
BRIAN C. CLARK
No. 12280
2/22/13

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.		02179	60	84
				PLAN SHEETS				

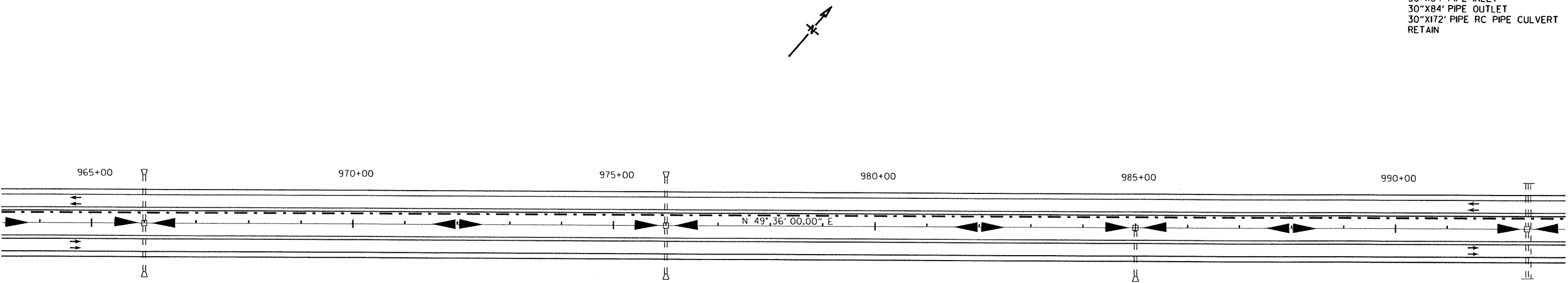


STA. 920+00 IN PLACE
TYPE R DROP INLET IN MED.
H=7'-6"
24"X12' PIPE INLET
24"X12' PIPE OUTLET
RETAIN

STA. 926+00 IN PLACE
TYPE R DROP INLET IN MED.
H=7'-0"
24"X108' PIPE INLET
24"X108' PIPE OUTLET
RETAIN

STA. 933+00 IN PLACE
TYPE R DROP INLET IN MED.
H=2'-10"
24"X84' PIPE OUTLET
RETAIN

STA. 942+00 IN PLACE
TYPE R DROP INLET IN MED.
H=2'-10"
24"X84' PIPE OUTLET
RETAIN



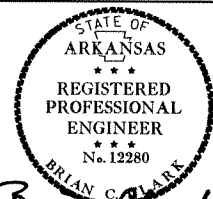
STA. 966+00 IN PLACE
TYPE R DROP INLET IN MED.
H=2'-10"
24"X84' PIPE INLET
24"X84' PIPE OUTLET
RETAIN

STA. 976+00 IN PLACE
TYPE R DROP INLET IN MED.
H=2'-10"
24"X84' PIPE INLET
24"X84' PIPE OUTLET
RETAIN

STA. 985+00 IN PLACE
TYPE R DROP INLET IN MED.
H=2'-10"
24"X84' PIPE OUTLET
RETAIN

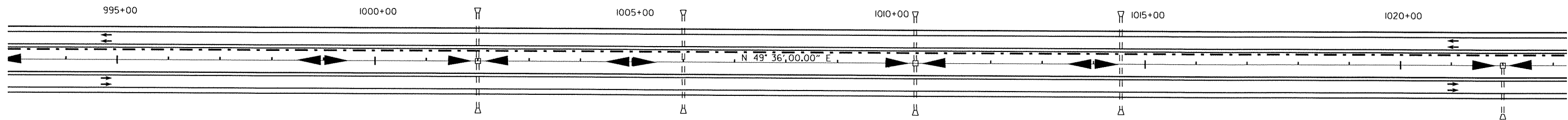
NOTE:
CONTRACTOR TO VERIFY EXISTING CROSSING UTILITIES PRIOR TO CONSTRUCTION. EXERCISE CARE AND PRECAUTION WHILE WORKING IN THESE AREAS.

PLAN SHEETS
STA. 920+00 - STA. 993+00



Brian C. Clark, P.E.
2/22/13

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.		012179	61	84
PLAN SHEETS								



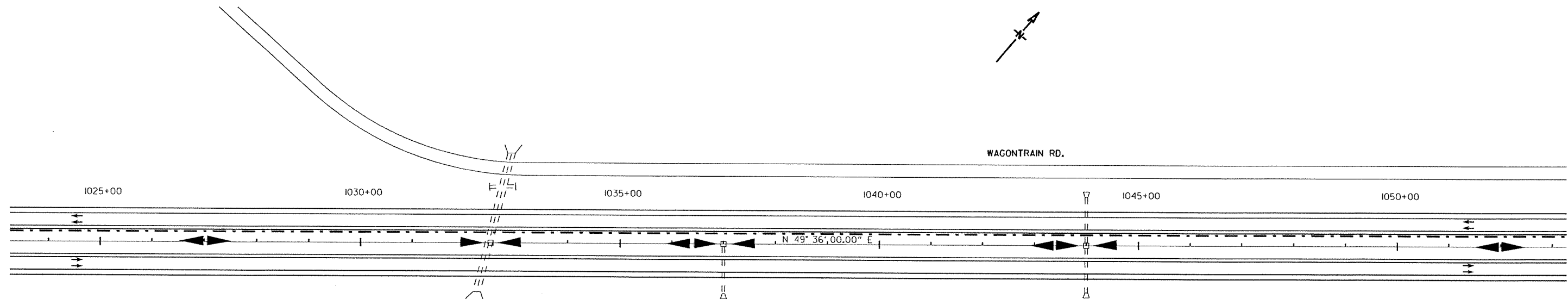
STA. 1002+00 IN PLACE
24\"/>

STA. 1006+00 IN PLACE
24\"/>

STA. 1010+50 IN PLACE
24\"/>

STA. 1014+50 IN PLACE
24\"/>

STA. 1022+00 IN PLACE
24\"/>



STA. 1032+50 IN PLACE
DBL. 7'x4'x255' RC BOX CULVERT
15' LT. FWD. SKEW
TYPE T DROP INLET IN MED.
H=0'-6\"/>

STA. 1037+00 IN PLACE
24\"/>

STA. 1044+00 IN PLACE
24\"/>

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

PLAN SHEETS
STA. 993+00 - STA. 1053+00

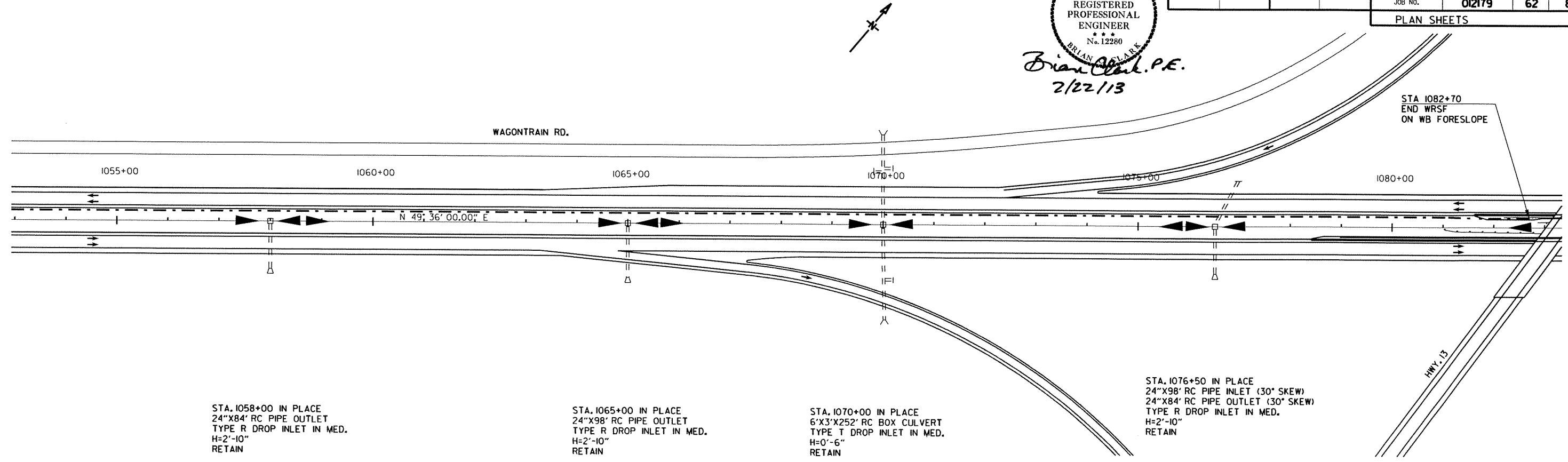
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Brian Clark, P.E.
2/22/13

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.	002179	62	84	
PLAN SHEETS								



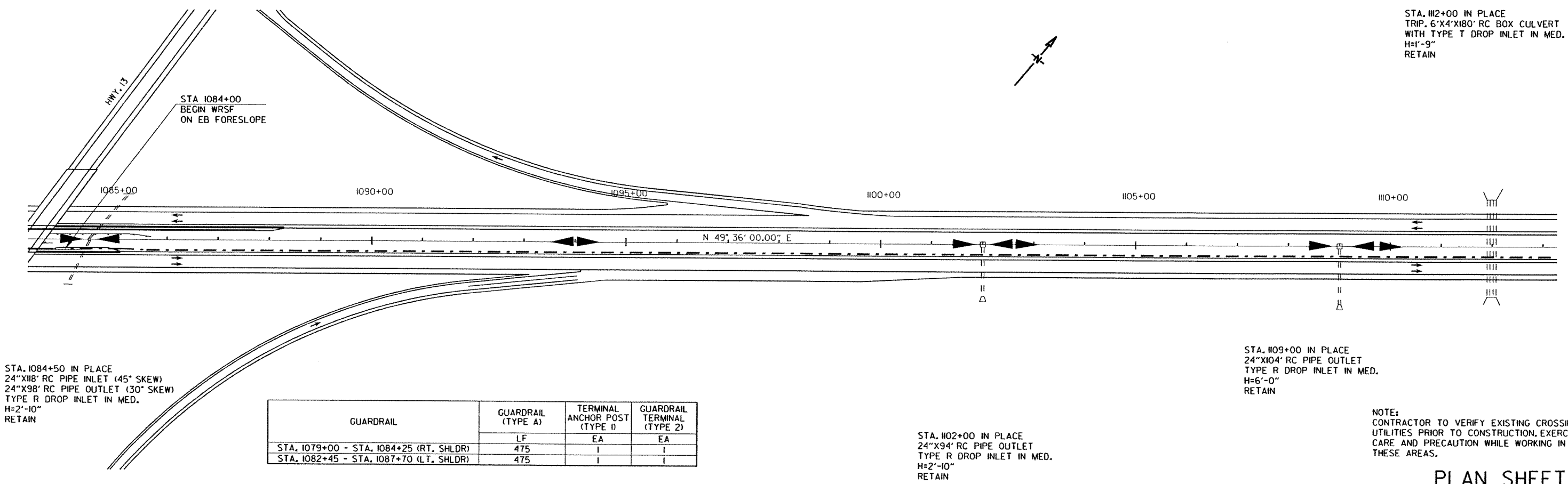
STA. 1058+00 IN PLACE
24"X84' RC PIPE OUTLET
TYPE R DROP INLET IN MED.
H=2'-10"
RETAIN

STA. 1065+00 IN PLACE
24"X98' RC PIPE OUTLET
TYPE R DROP INLET IN MED.
H=2'-10"
RETAIN

STA. 1070+00 IN PLACE
6'X3'X252' RC BOX CULVERT
TYPE T DROP INLET IN MED.
H=0'-6"
RETAIN

STA. 1076+50 IN PLACE
24"X98' RC PIPE INLET (30° SKEW)
24"X84' RC PIPE OUTLET (30° SKEW)
TYPE R DROP INLET IN MED.
H=2'-10"
RETAIN

STA. 1082+70
END WRSF
ON WB FORESLOPE



STA. 1084+00
BEGIN WRSF
ON EB FORESLOPE

STA. 1084+50 IN PLACE
24"X118' RC PIPE INLET (45° SKEW)
24"X98' RC PIPE OUTLET (30° SKEW)
TYPE R DROP INLET IN MED.
H=2'-10"
RETAIN

GUARDRAIL	GUARDRAIL (TYPE A)	TERMINAL ANCHOR POST (TYPE 1)	GUARDRAIL TERMINAL (TYPE 2)
STA. 1079+00 - STA. 1084+25 (RT. SHLDR)	LF	EA	EA
STA. 1082+45 - STA. 1087+70 (LT. SHLDR)	475	I	I
	475	I	I

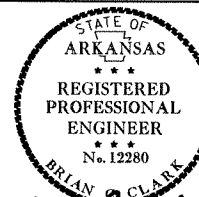
STA. 1102+00 IN PLACE
24"X94' RC PIPE OUTLET
TYPE R DROP INLET IN MED.
H=2'-10"
RETAIN

STA. 1109+00 IN PLACE
24"X104' RC PIPE OUTLET
TYPE R DROP INLET IN MED.
H=6'-0"
RETAIN

STA. 1112+00 IN PLACE
TRIP. 6'X4'X180' RC BOX CULVERT
WITH TYPE T DROP INLET IN MED.
H=1'-9"
RETAIN

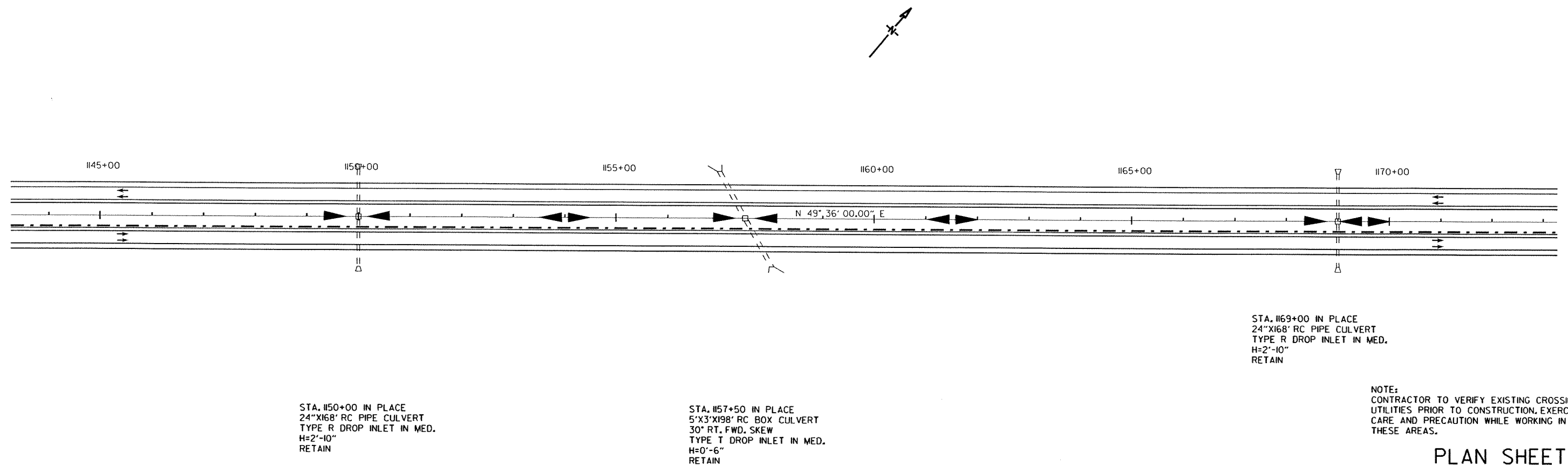
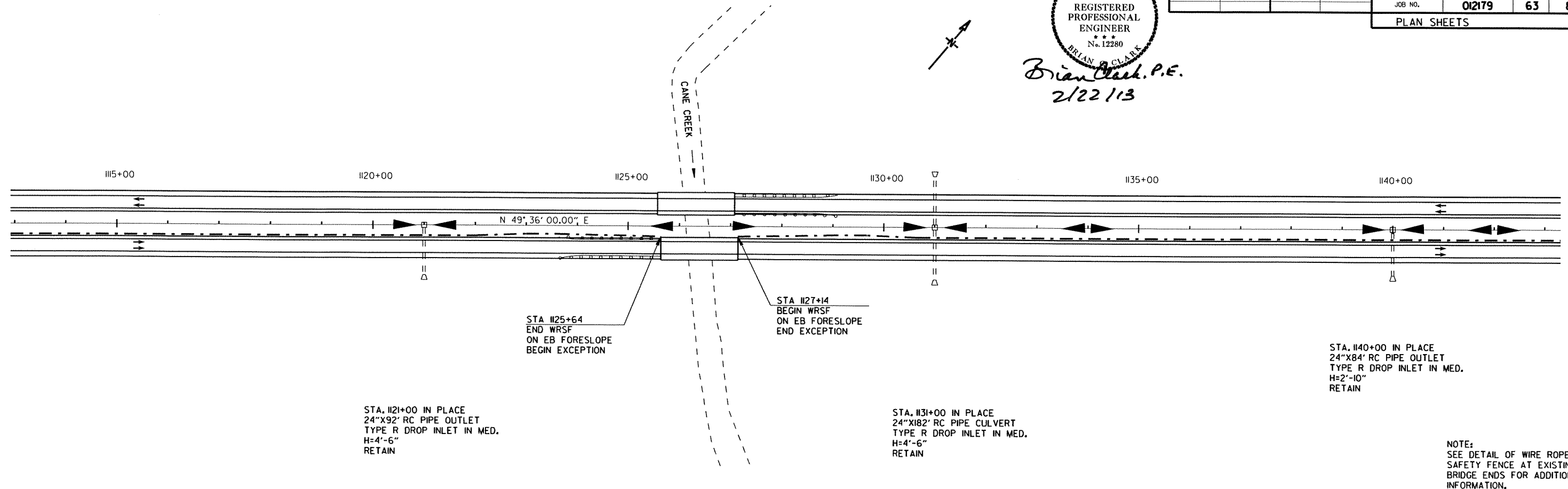
NOTE:
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PLAN SHEETS
STA. 1053+00 - STA. 1113+00



Brian Clark, P.E.
2/22/13

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				6	ARK.			
				JOB NO.		012179	63	84
PLAN SHEETS								

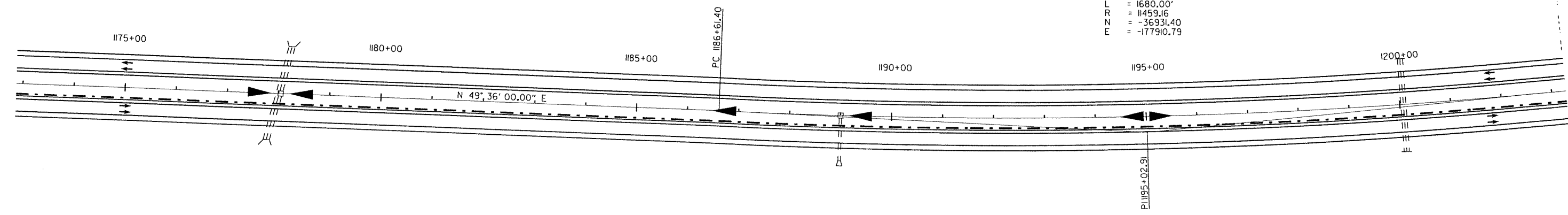


PLAN SHEETS
STA. 1113+00 - STA. 1173+00

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
BRIAN C. CLARK, P.E.
2/22/13

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.		012179	64	84
PLAN SHEETS								

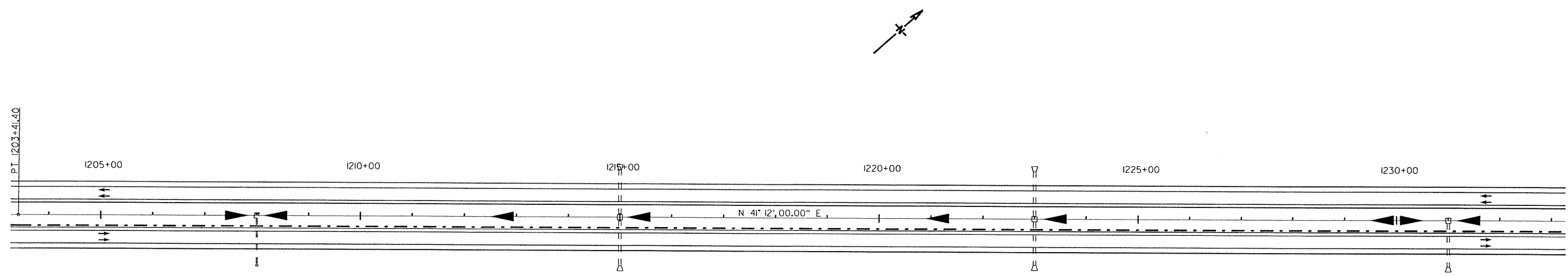
P.I. = 1195+02.91
Δ = 8°24'00.00" LT.
D = 0°30'00.00"
T = 841.51'
L = 1680.00'
R = 11459.16
N = -36931.40
E = -177910.79



STA. 1178+00 IN PLACE
DBL. 6'X3'X176' RC BOX CULVERT
15° LT. FWD. SKEW
TYPE T DROP INLET IN MED.
H=0'-6"
RETAIN

STA. 1189+00 IN PLACE
24"X84' RC PIPE OUTLET
TYPE R DROP INLET IN MED.
H=2'-10"
RETAIN

STA. 1200+00 IN PLACE
DBL. 30"X168' RC PIPE CULVERT
TYPE R DROP INLET IN MED.
H=3'-6"
RETAIN



STA. 1208+00 IN PLACE
24"X84' RC PIPE OUTLET
TYPE R DROP INLET IN MED.
H=2'-10"
RETAIN

STA. 1215+00 IN PLACE
24"X168' RC PIPE CULVERT
TYPE R DROP INLET IN MED.
H=2'-10"
RETAIN

STA. 1223+00 IN PLACE
24"X168' RC PIPE CULVERT
TYPE R DROP INLET IN MED.
H=2'-10"
RETAIN

STA. 1231+00 IN PLACE
24"X84' RC PIPE OUTLET
TYPE R DROP INLET IN MED.
H=2'-10"
RETAIN

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

PLAN SHEETS
STA. 1173+00 - STA. 1233+00

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Brian Clark, P.E.
2/22/13

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			

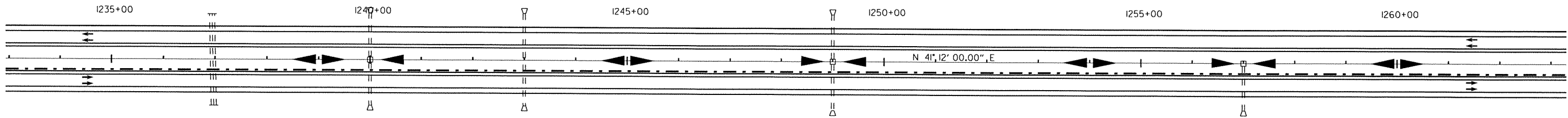
JOB NO.

012179

65

84

PLAN SHEETS



STA. 1237+00 IN PLACE
DBL. 24"X172' RC PIPE CULVERT
RETAIN

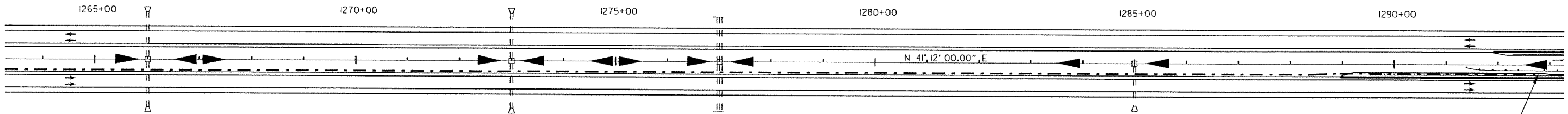
STA. 1240+00 IN PLACE
24"X172' RC PIPE CULVERT
TYPE R DROP INLET IN MED.
H=2'-10"
RETAIN

STA. 1243+00 IN PLACE
24"X172' RC PIPE CULVERT
RETAIN

STA. 1249+00 IN PLACE
24"X168' RC PIPE CULVERT
TYPE R DROP INLET IN MED.
H=2'-10"
RETAIN

STA. 1257+00 IN PLACE
24"X84' RC PIPE OUTLET
TYPE R DROP INLET IN MED.
H=2'-10"
RETAIN

GUARDRAIL	GUARDRAIL (TYPE A)	TERMINAL ANCHOR POST (TYPE 1)	GUARDRAIL TERMINAL (TYPE 2)
	LF	EA	EA
STA. 1289+55 - STA. 1294+55 (RT. SHLDR)	450	1	1
STA. 1292+53 - STA. 1297+53 (LT. SHLDR)	450	1	1



STA. 1266+00 IN PLACE
24"X168' RC PIPE CULVERT
TYPE R DROP INLET IN MED.
H=2'-10"
RETAIN

STA. 1273+00 IN PLACE
24"X168' RC PIPE CULVERT
TYPE R DROP INLET IN MED.
H=2'-10"
RETAIN

STA. 1277+00 IN PLACE
DBL. 24"X172' RC PIPE CULVERT
TYPE R DROP INLET IN MED.
H=2'-10"
RETAIN

STA. 1285+00 IN PLACE
24"X84' RC PIPE OUTLET
TYPE R DROP INLET IN MED.
H=2'-10"
RETAIN

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

PLAN SHEETS

STA. 1233+00 - STA. 1293+00

2/22/2013

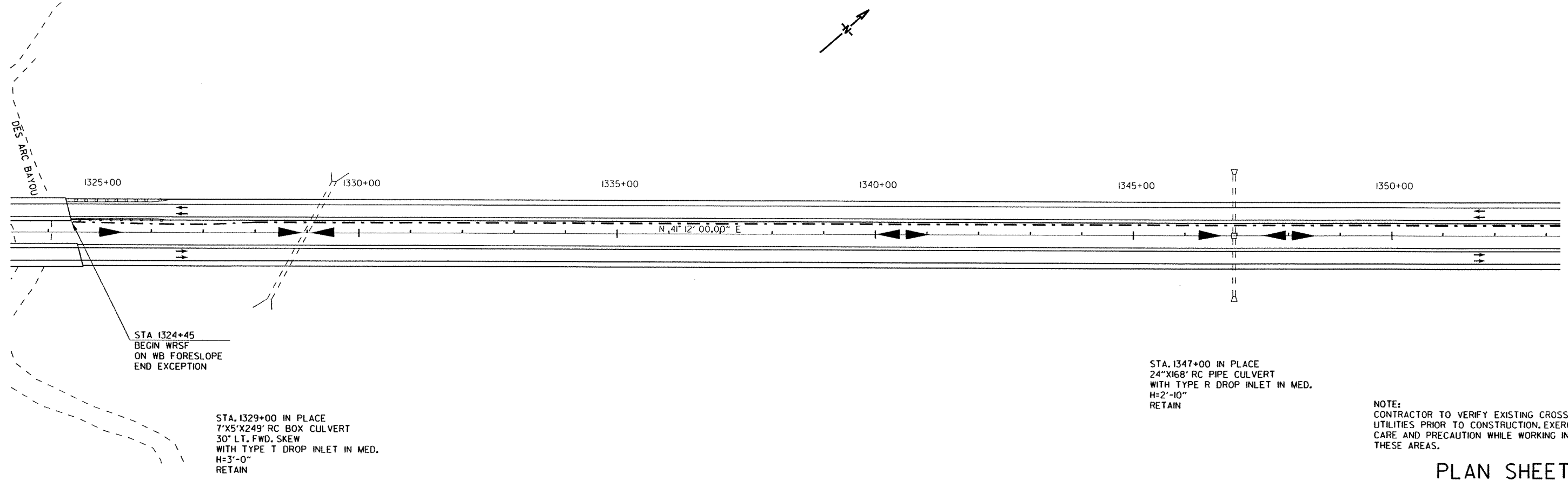
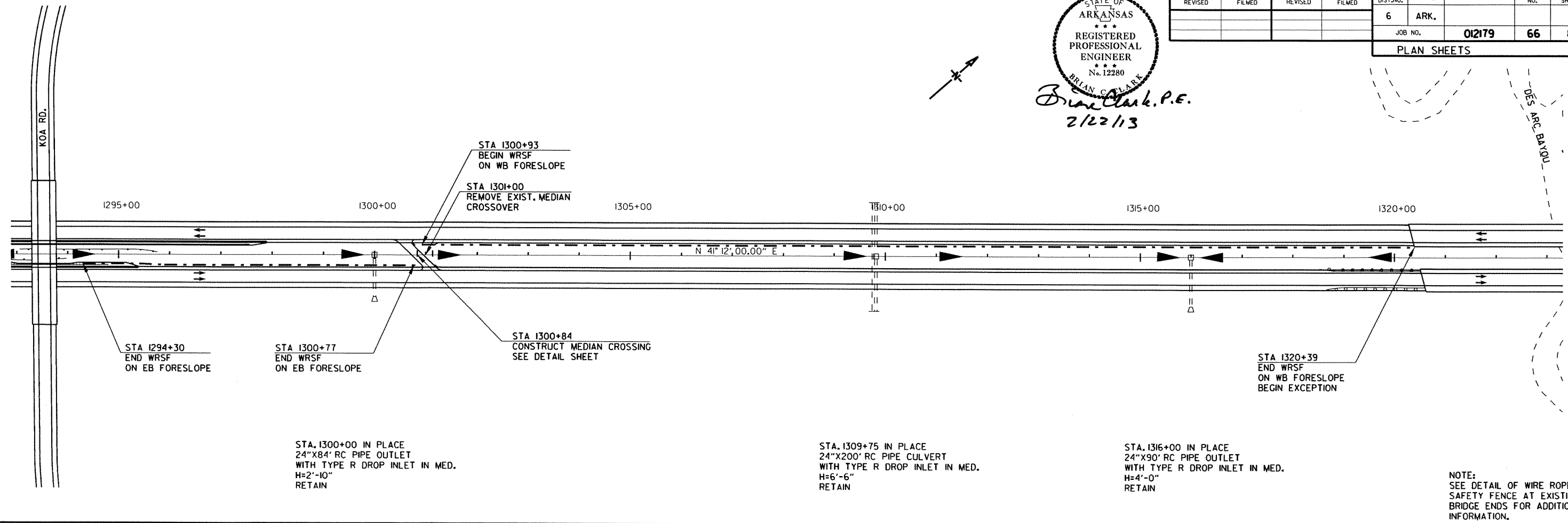
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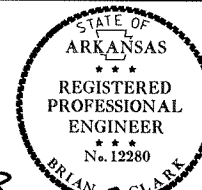


Brian C. Clark, P.E.
2/22/13

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.		012179	66	84
PLAN SHEETS								

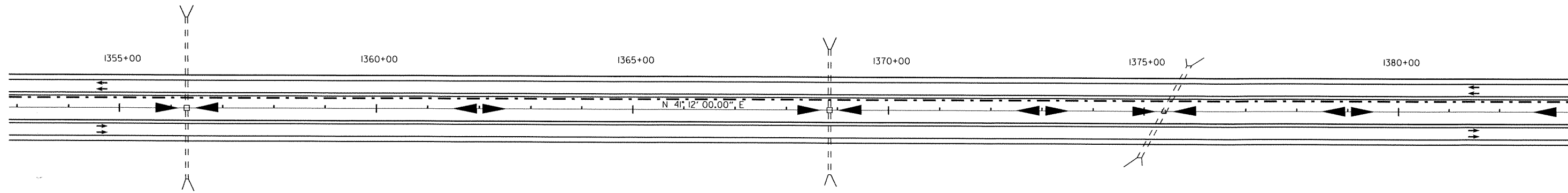


PLAN SHEETS
STA. 1293+00 - STA. 1353+00



Brian A. Clark, P.E.
2/22/13

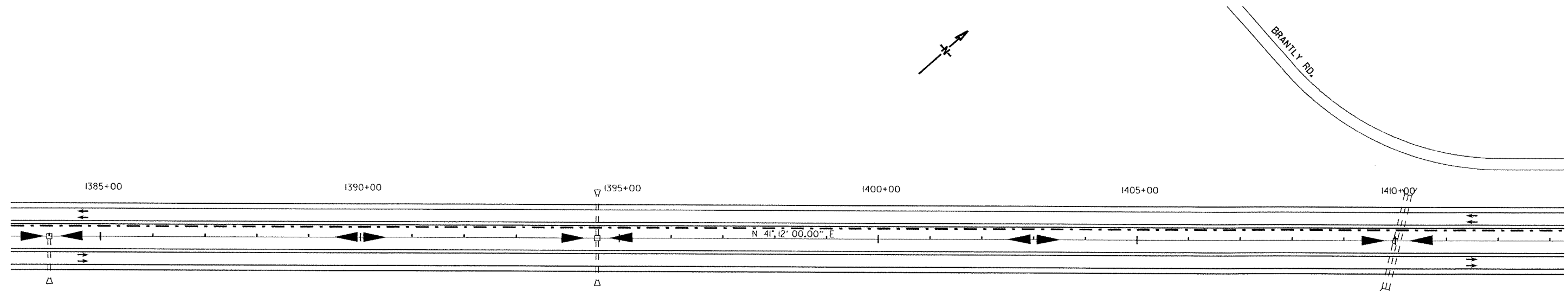
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		012179	67	84
PLAN SHEETS								



STA. 1356+30 IN PLACE
6'X4'X226' RC BOX CULVERT
WITH TYPE T DROP INLET IN MED.
H=1'-10"
RETAIN

STA. 1368+85 IN PLACE
4'X4'X176' RC BOX CULVERT
30° LT. FWD SKEW
WITH TYPE T DROP INLET IN MED.
H=1'-5"
RETAIN

STA. 1375+40 IN PLACE
4'X3'X198' RC BOX CULVERT
30° LT. FWD SKEW
WITH TYPE T DROP INLET IN MED.
H=0'-6"
RETAIN



STA. 1384+ IN PLACE
24\"X84' RC PIPE CULVERT
TYPE R DROP INLET IN MED.
H=2'-10"
RETAIN

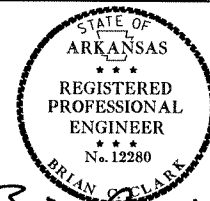
STA. 1394+55 IN PLACE
36\"X168' RC PIPE CULVERT
TYPE R DROP INLET IN MED.
H=4'-0"
RETAIN

STA. 1410+00 IN PLACE
DBL. 4'X3'X178' RC BOX CULVERT
15° LT. FWD. SKEW
WITH TYPE T DROP INLET IN MED.
H=1'-0"
RETAIN

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

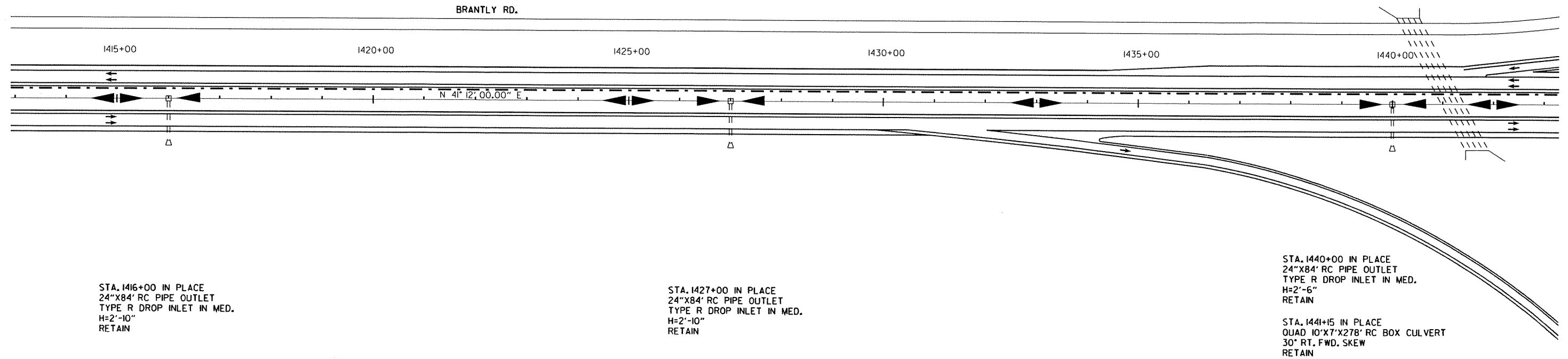
PLAN SHEETS
STA. 1353+00 - STA. 1413+00

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Brian Clark, P.E.
2/22/13

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.	012179		68	84
PLAN SHEETS								

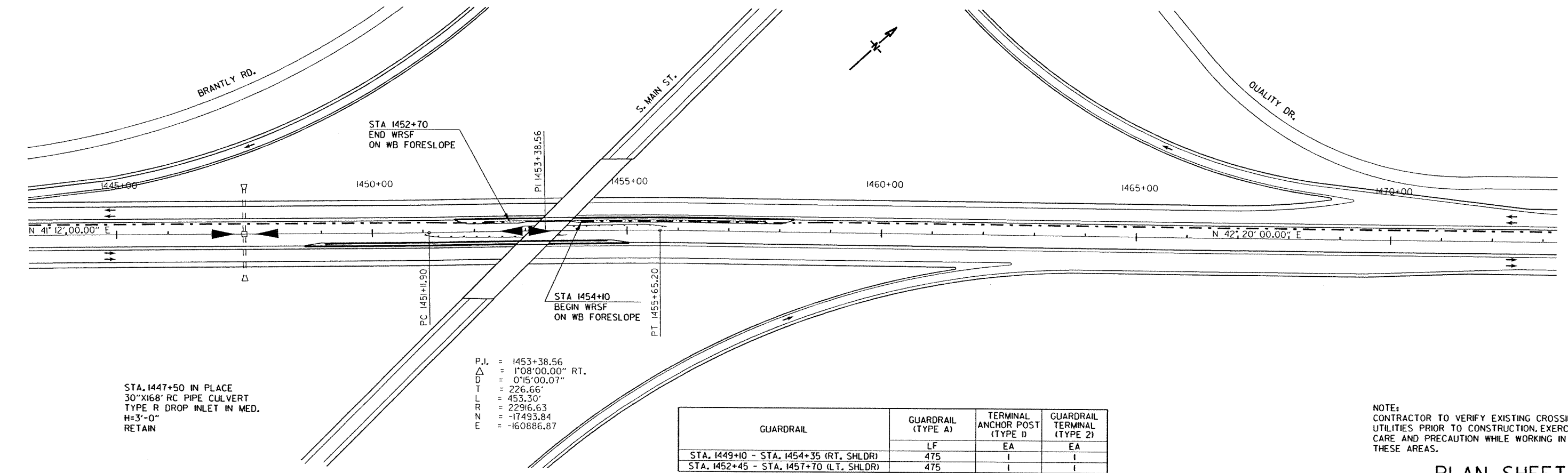


STA. 1416+00 IN PLACE
24"x84' RC PIPE OUTLET
TYPE R DROP INLET IN MED.
H=2'-10"
RETAIN

STA. 1427+00 IN PLACE
24"x84' RC PIPE OUTLET
TYPE R DROP INLET IN MED.
H=2'-10"
RETAIN

STA. 1440+00 IN PLACE
24"x84' RC PIPE OUTLET
TYPE R DROP INLET IN MED.
H=2'-6"
RETAIN

STA. 1441+15 IN PLACE
QUAD 10'X7'X278' RC BOX CULVERT
30° RT. FWD. SKEW
RETAIN



STA. 1447+50 IN PLACE
30"x168' RC PIPE CULVERT
TYPE R DROP INLET IN MED.
H=3'-0"
RETAIN

P.I. = 1453+38.56
Δ = 1°08'00.00" RT.
D = 0°15'00.07"
T = 226.66'
L = 453.30'
R = 22916.63
N = -17493.84
E = -160886.87

GUARDRAIL	GUARDRAIL (TYPE A)	TERMINAL ANCHOR POST (TYPE D)	GUARDRAIL TERMINAL (TYPE 2)
STA. 1449+10 - STA. 1454+35 (RT. SHLDR)	LF	EA	EA
STA. 1452+45 - STA. 1457+70 (LT. SHLDR)	475	I	I
	475	I	I

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

PLAN SHEETS
STA. 1413+00 - STA. 1473+00

STA. 1483+41 IN PLACE
DBL. 8'X5'X288' RC BOX CULVERT
RETAIN

STA. 1483+00 IN PLACE
TYPE R DROP INLET IN MED.
H=2'-6"
WITH 18"X30' RC PIPE CULVERT
CONNECTION TO BOX CULVERT
RETAIN

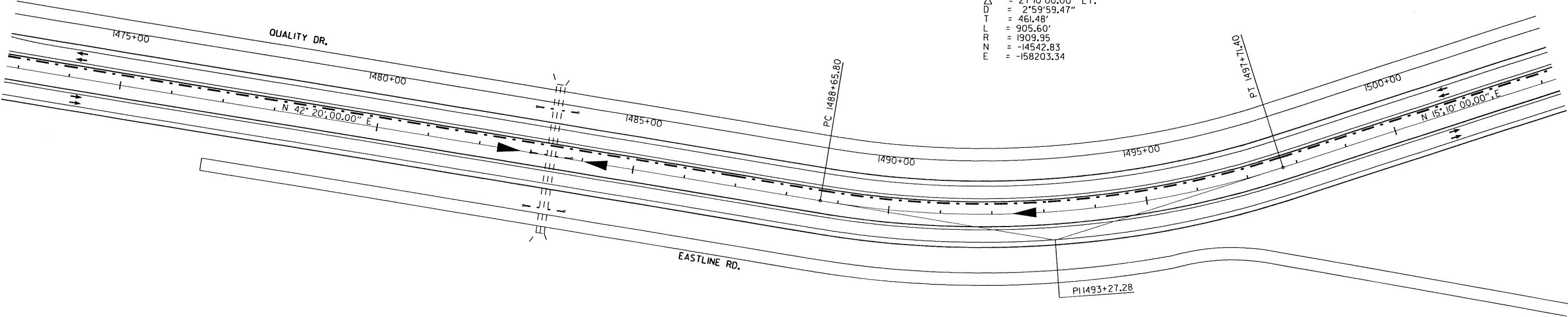
STA. 1483+82 IN PLACE
TYPE R DROP INLET IN MED.
H=2'-6"
WITH 18"X30' RC PIPE CULVERT
CONNECTION TO BOX CULVERT
RETAIN



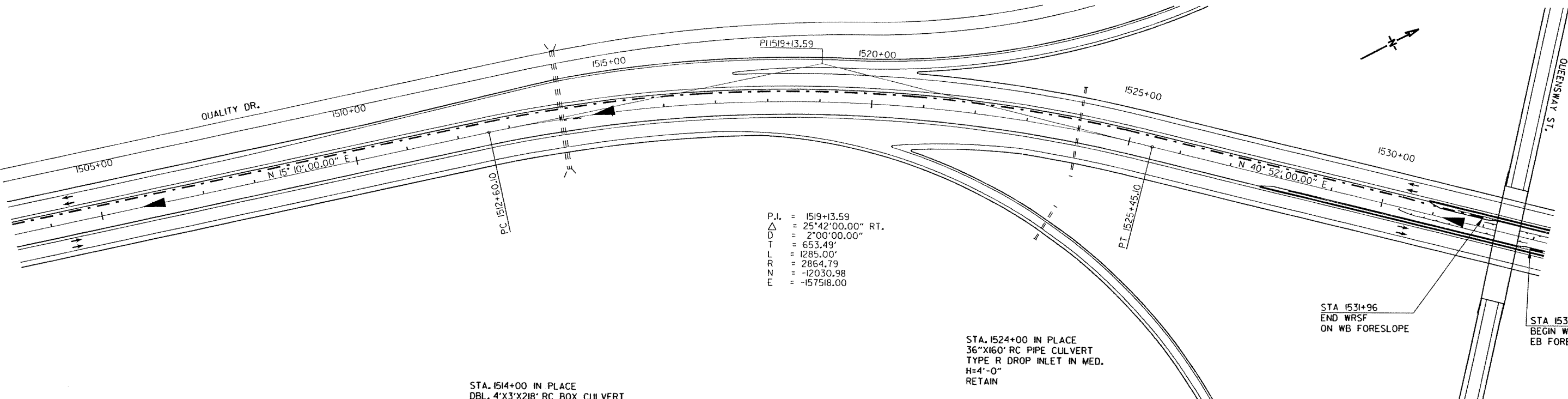
Brian C. Clark, P.E.
2/22/13

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.	012179	69	84	
PLAN SHEETS								

P.I. = 1493+27.28
Δ = 27°10'00.00" LT.
D = 2°59'59.47"
T = 461.48'
L = 905.60'
R = 1909.95
N = -14542.83
E = -158203.34



P.I. = 1519+13.59
Δ = 25°42'00.00" RT.
D = 2°00'00.00"
T = 653.49'
L = 1285.00'
R = 2864.79
N = -12030.98
E = -157518.00



STA. 1514+00 IN PLACE
DBL. 4'X3'X218' RC BOX CULVERT
WITH TYPE T DROP INLET ON RT.
RETAIN

STA. 1514+35 IN PLACE
TYPE R DROP INLET IN MED.
WITH 18"X30' RC PIPE CULVERT
CONNECTION TO BOX CULVERT
RETAIN

STA. 1524+00 IN PLACE
36"X160' RC PIPE CULVERT
TYPE R DROP INLET IN MED.
H=4'-0"
RETAIN

STA. 1531+96
END WRSF
ON WB FORESLOPE

STA. 1532+98
BEGIN WRSF ON
EB FORESLOPE

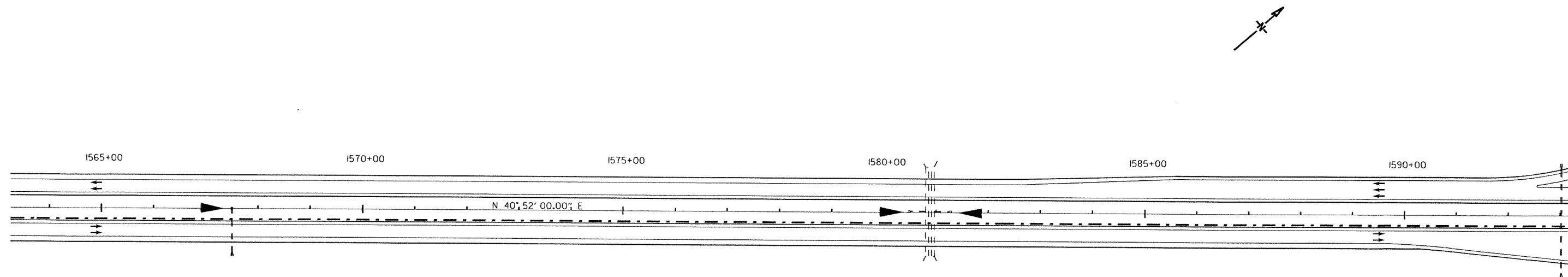
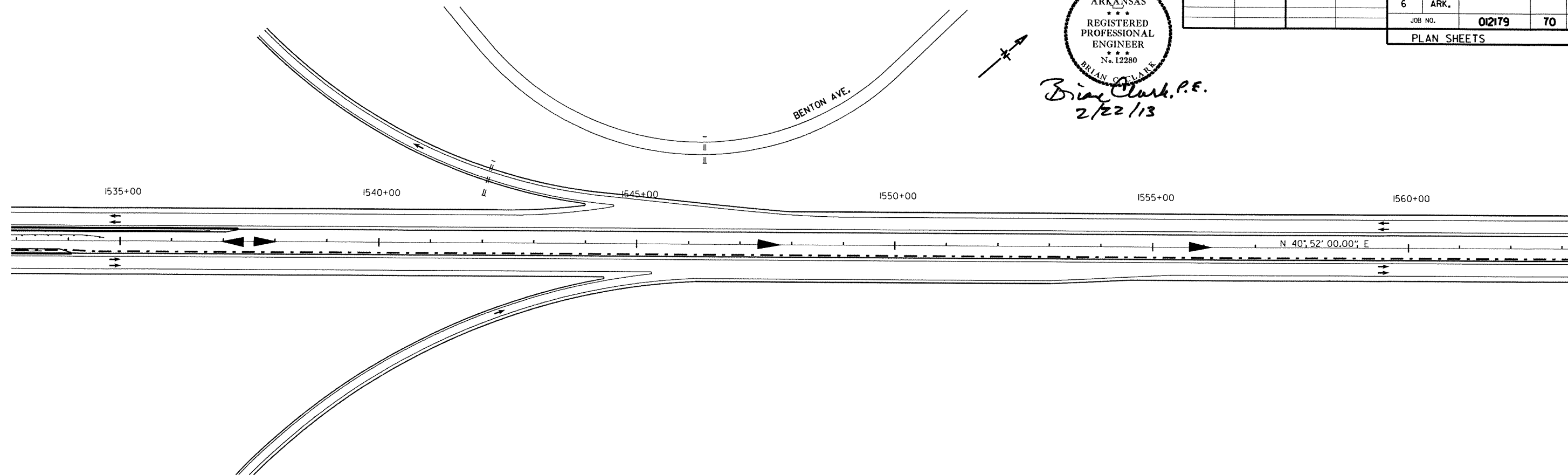
GUARDRAIL	GUARDRAIL (TYPE A)	TERMINAL ANCHOR POST (TYPE I)	GUARDRAIL TERMINAL (TYPE 2)
STA. 1528+23 - STA. 1533+23 (RT. SHLDR)	LF	EA	EA
STA. 1531+71 - STA. 1536+71 (LT. SHLDR)	450	I	I

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



Brian Clark, P.E.
2/22/13

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.		012179	70	84
				PLAN SHEETS				



STA. 1567+50 IN PLACE
24"x82' RC PIPE CULVERT
TYPE R DROP INLET IN MED.
H=3'-0"
RETAIN

STA. 1580+47 IN PLACE
TYPE R DROP INLET IN MED.
H=2'-6"
WITH 18"x30' RC PIPE CULVERT
CONNECTION TO BOX CULVERT
RETAIN

STA. 1580+85 IN PLACE
TRIP, 5'x3'x170' RC BOX CULVERT
RETAIN

STA. 1581+23 IN PLACE
TYPE R DROP INLET IN MED.
H=2'-6"
WITH 18"x30' RC PIPE CULVERT
CONNECTION TO BOX CULVERT
RETAIN

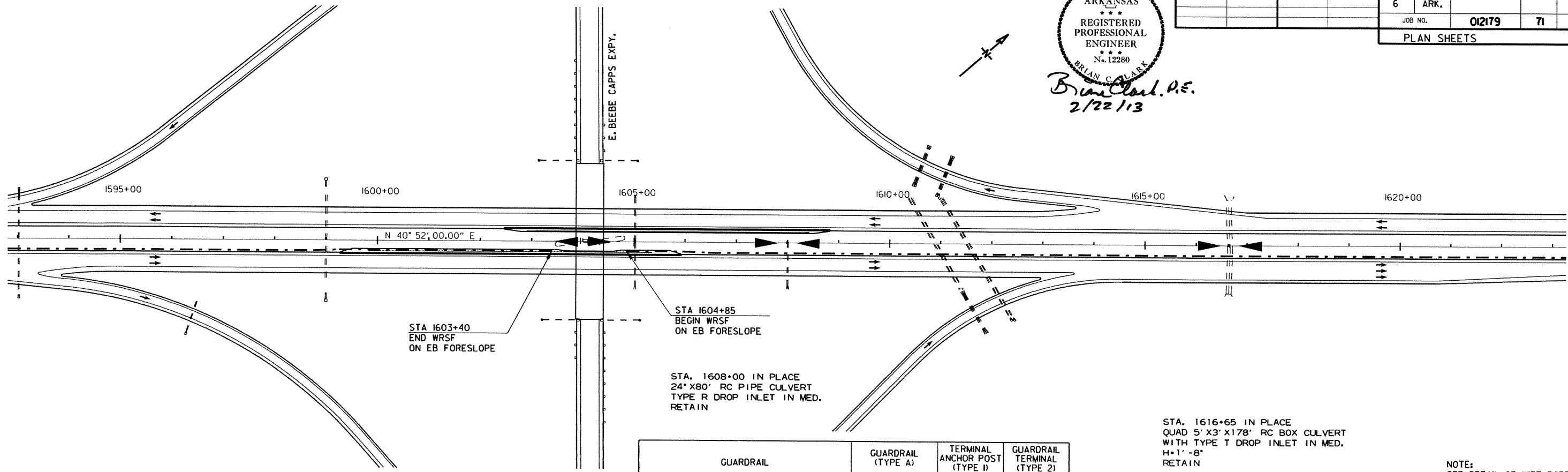
NOTE:
CONTRACTOR TO VERIFY EXISTING CROSSING
UTILITIES PRIOR TO CONSTRUCTION. EXERCISE
CARE AND PRECAUTION WHILE WORKING IN
THESE AREAS.

PLAN SHEETS
STA. 1533+00 - STA. 1593+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.	02179	71	84	
PLAN SHEETS								

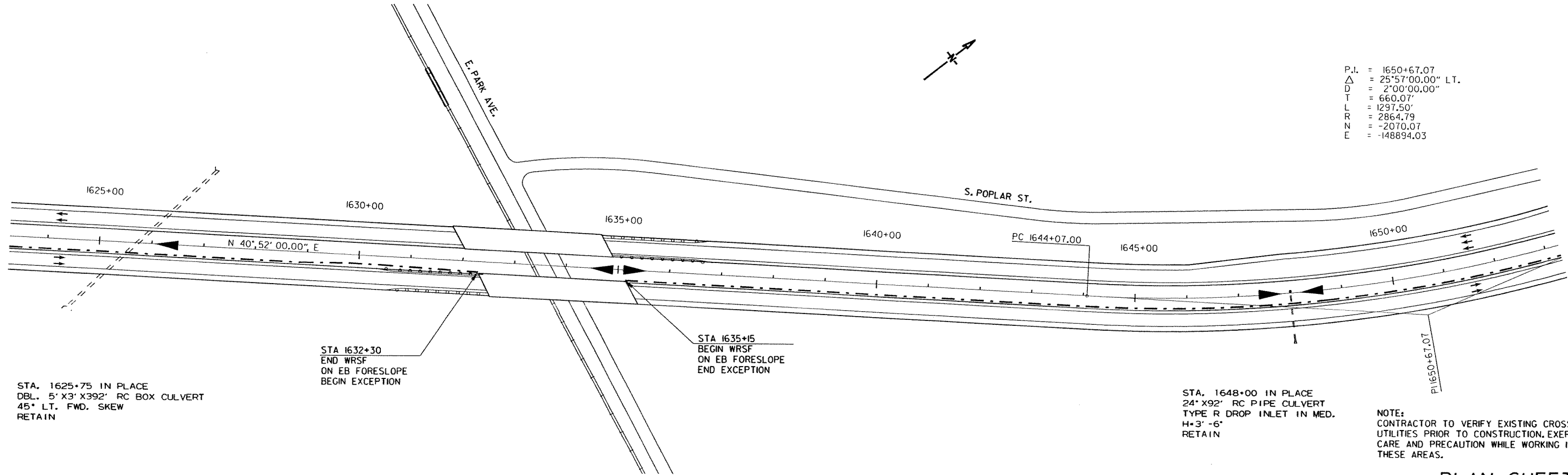


GUARDRAIL	GUARDRAIL (TYPE A)	TERMINAL ANCHOR POST (TYPE I)	GUARDRAIL TERMINAL (TYPE 2)
STA. 1599+85 - STA. 1605+10 (RT. SHLDR)	LF	EA	EA
STA. 1603+15 - STA. 1608+40 (LT. SHLDR)	475	I	I
	475	I	I

STA. 1616+65 IN PLACE
QUAD 5' X 3' X 178' RC BOX CULVERT
WITH TYPE T DROP INLET IN MED.
H=1' -8"
RETAIN

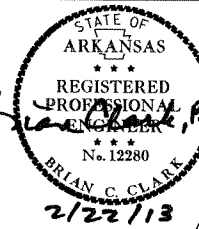
NOTE:
SEE DETAIL OF WIRE ROPE
SAFETY FENCE AT EXISTING
BRIDGE ENDS FOR ADDITIONAL
INFORMATION.

P.I. = 1650+67.07
Δ = 25°57'00.00" LT.
D = 2°00'00.00"
T = 660.07'
L = 1297.50'
R = 2864.79'
N = -2070.07'
E = -148894.03'

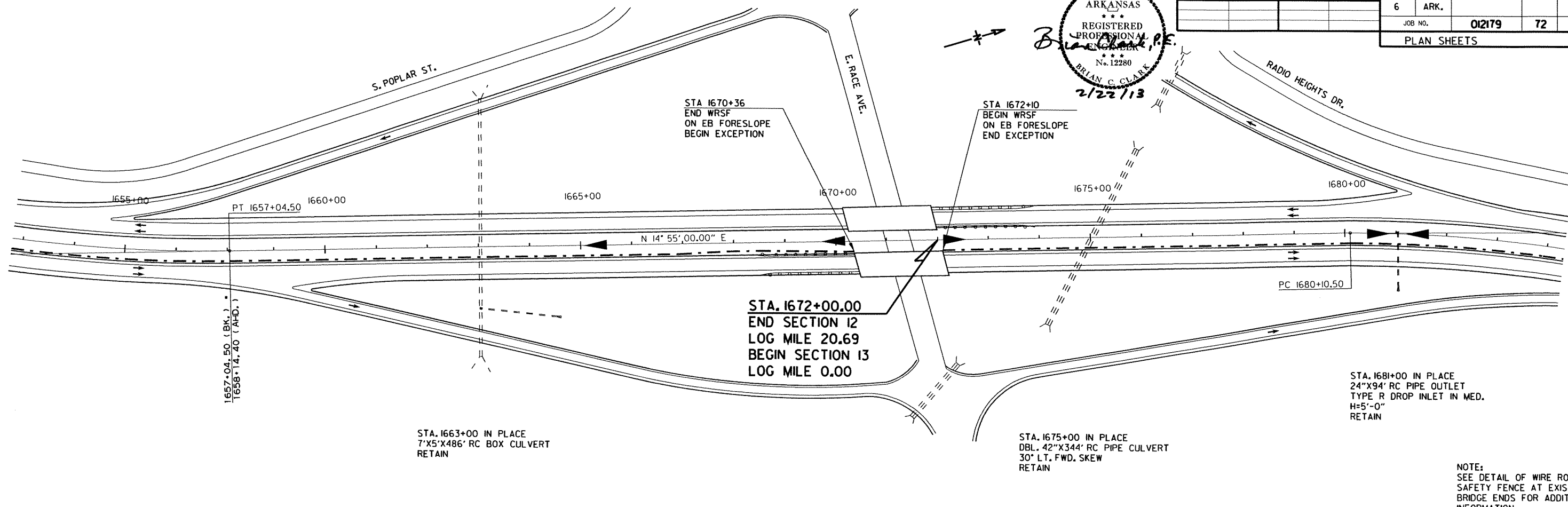


NOTE:
CONTRACTOR TO VERIFY EXISTING CROSSING
UTILITIES PRIOR TO CONSTRUCTION. EXERCISE
CARE AND PRECAUTION WHILE WORKING IN
THESE AREAS.

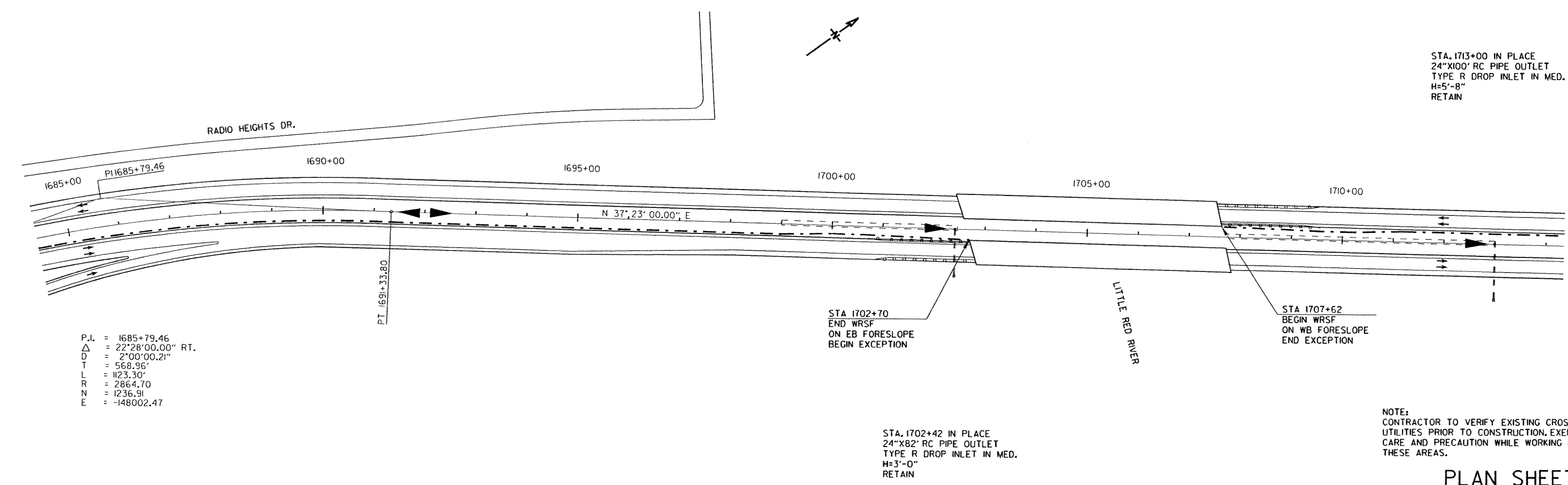
PLAN SHEETS
STA. 1593+00 - STA. 1653+00



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.		012179	72	84
				PLAN SHEETS				



NOTE:
SEE DETAIL OF WIRE ROPE
SAFETY FENCE AT EXISTING
BRIDGE ENDS FOR ADDITIONAL
INFORMATION.



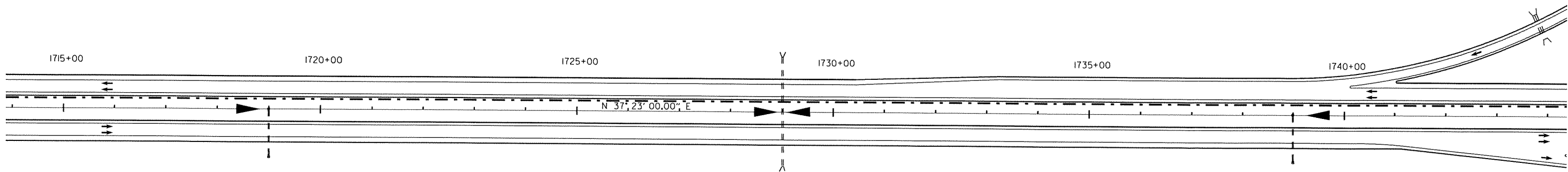
NOTE:
CONTRACTOR TO VERIFY EXISTING CROSSING
UTILITIES PRIOR TO CONSTRUCTION. EXERCISE
CARE AND PRECAUTION WHILE WORKING IN
THESE AREAS.

P.I. = 1685+79.46
Δ = 22°28'00.00" RT.
D = 2°00'00.21"
T = 568.96'
L = 1123.30'
R = 2864.70'
N = 1236.91'
E = -148002.47'



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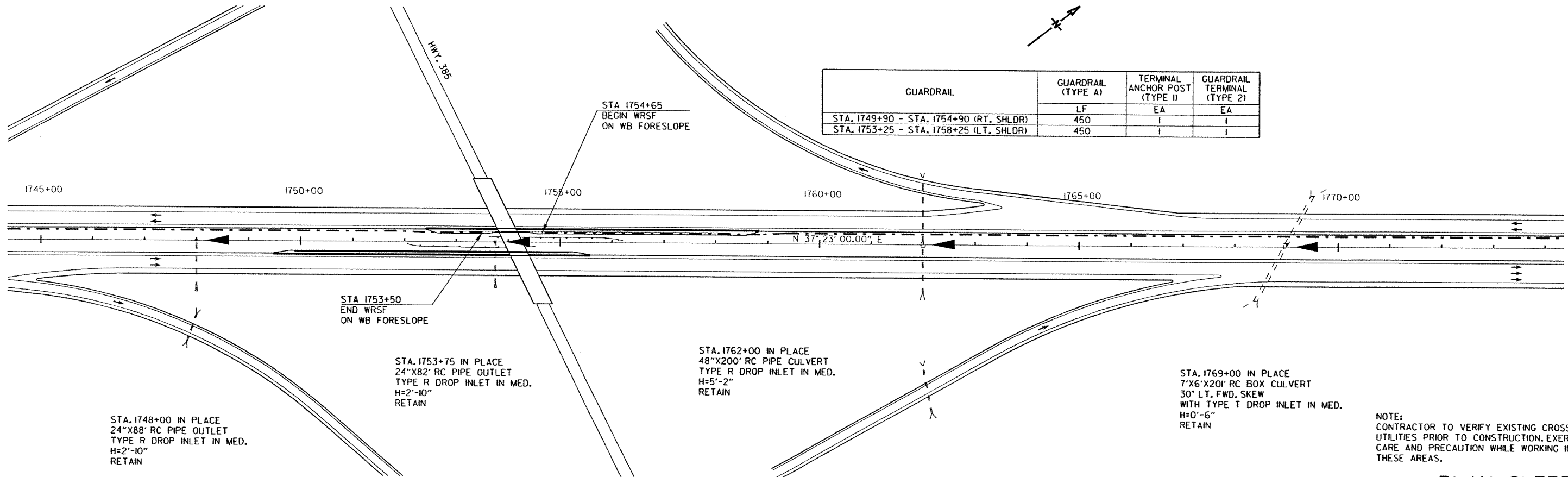
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	012179		73	84
PLAN SHEETS								



STA. 1719+00 IN PLACE
24"X84' RC PIPE OUTLET
TYPE R DROP INLET IN MED.
H=2'-10"
RETAIN

STA. 1729+00 IN PLACE
24"X200' RC PIPE CULVERT
TYPE R DROP INLET IN MED.
H=6'-4"
RETAIN

STA. 1739+00 IN PLACE
24"X84' RC PIPE OUTLET
TYPE R DROP INLET IN MED.
H=2'-10"
RETAIN



GUARDRAIL	GUARDRAIL (TYPE A)	TERMINAL ANCHOR POST (TYPE II)	GUARDRAIL TERMINAL (TYPE 2)
STA. 1749+90 - STA. 1754+90 (RT. SHLDR)	LF	EA	EA
STA. 1753+25 - STA. 1758+25 (LT. SHLDR)	450	I	I
	450	I	I

STA. 1748+00 IN PLACE
24"X88' RC PIPE OUTLET
TYPE R DROP INLET IN MED.
H=2'-10"
RETAIN

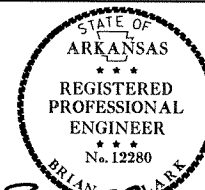
STA. 1753+75 IN PLACE
24"X82' RC PIPE OUTLET
TYPE R DROP INLET IN MED.
H=2'-10"
RETAIN

STA. 1762+00 IN PLACE
48"X200' RC PIPE CULVERT
TYPE R DROP INLET IN MED.
H=5'-2"
RETAIN

STA. 1769+00 IN PLACE
7'X6'X200' RC BOX CULVERT
30' LT. FWD. SKEW
WITH TYPE T DROP INLET IN MED.
H=0'-6"
RETAIN

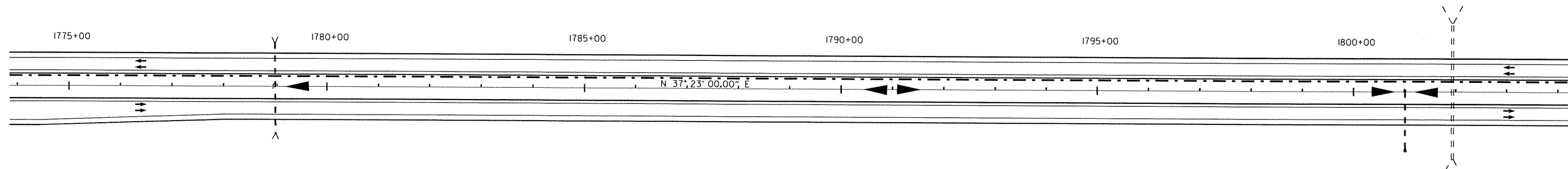
NOTE:
CONTRACTOR TO VERIFY EXISTING CROSSING UTILITIES PRIOR TO CONSTRUCTION. EXERCISE CARE AND PRECAUTION WHILE WORKING IN THESE AREAS.

PLAN SHEETS
STA. 1714+00 - STA. 1774+00



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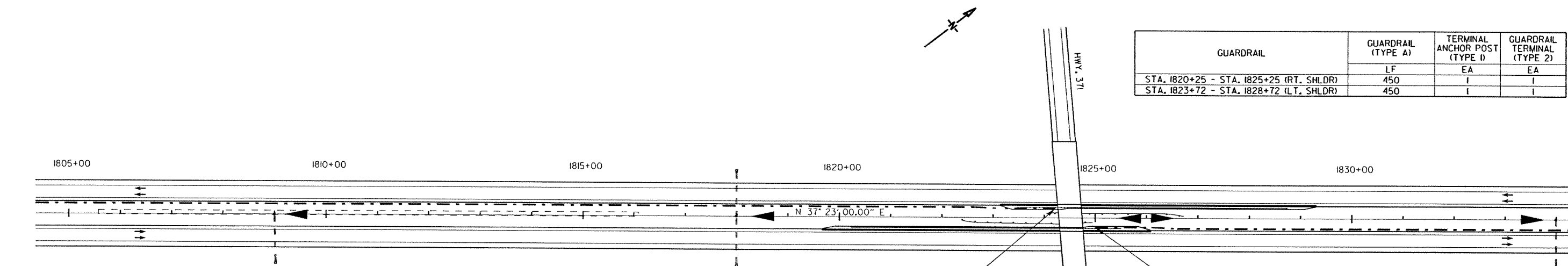
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		012179	74	84
				PLAN SHEETS				



STA. 1779+00 IN PLACE
24\"/>

STA. 1801+90 IN PLACE
9\"/>

STA. 1801+00 IN PLACE
24\"/>



GUARDRAIL	GUARDRAIL (TYPE A)	TERMINAL ANCHOR POST (TYPE D)	GUARDRAIL TERMINAL (TYPE 2)
	LF	EA	EA
STA. 1820+25 - STA. 1825+25 (RT. SHLDR)	450	I	I
STA. 1823+72 - STA. 1828+72 (LT. SHLDR)	450	I	I

STA. 1824+22
END WRSF
ON WB FORESLOPE

STA. 1825+00
BEGIN WRSF
ON EB FORESLOPE

STA. 1834+00 IN PLACE
24\"/>

STA. 1809+00 IN PLACE
24\"/>

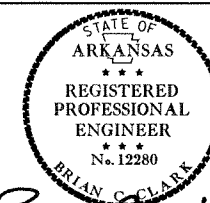
STA. 1818+00 IN PLACE
24\"/>

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

PLAN SHEETS
STA. 1774+00 - STA. 1834+00

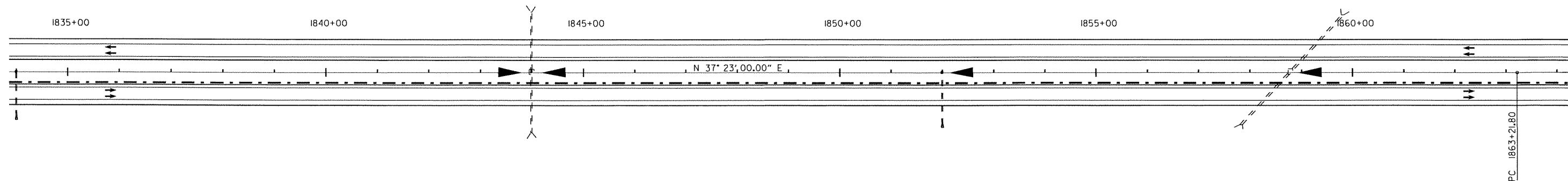
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2/22/13

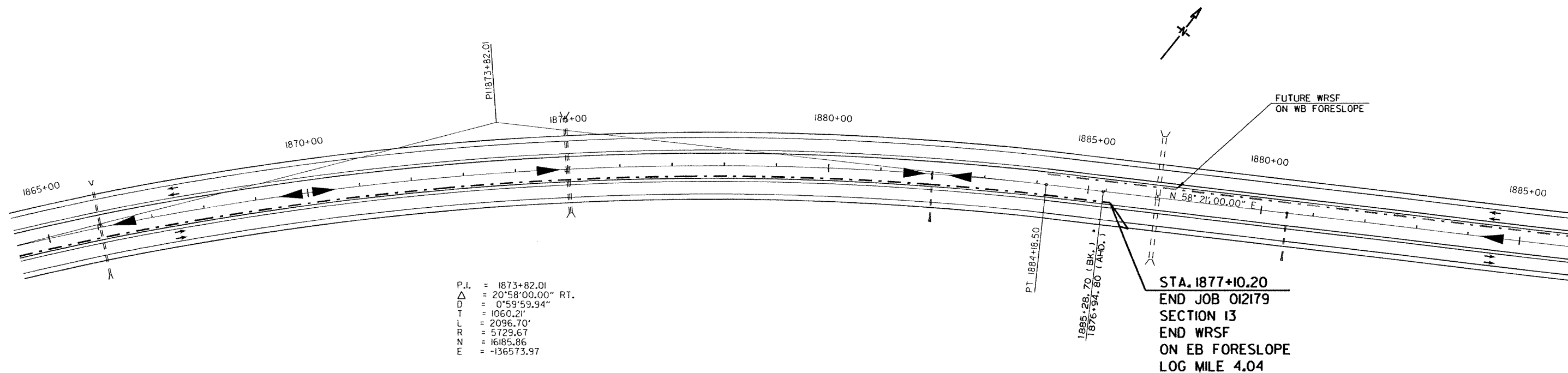
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		012179	75	84
				PLAN SHEETS				



STA. 1844+00 IN PLACE
5'X5'X232' RC BOX CULVERT
WITH TYPE T DROP INLET IN MED.
H=11'-0\"/>

STA. 1852+00 IN PLACE
24\"/>

STA. 1858+82 IN PLACE
5'X5'X279' RC BOX CULVERT
15' LT. FWD. SKEW
WITH TYPE T DROP INLET IN MED.
H=3'-0\"/>



STA. 1866+00 IN PLACE
24\"/>

STA. 1875+00 IN PLACE
DBL. 36\"/>

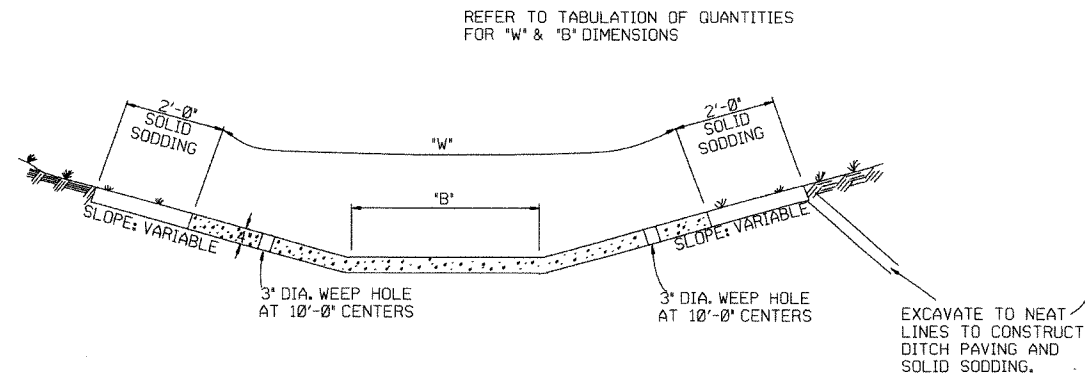
STA. 1882+00 IN PLACE
24\"/>

STA. 1878+00 IN PLACE
7'X6'X236' RC BOX CULVERT
WITH BEVELED INLET
RETAIN

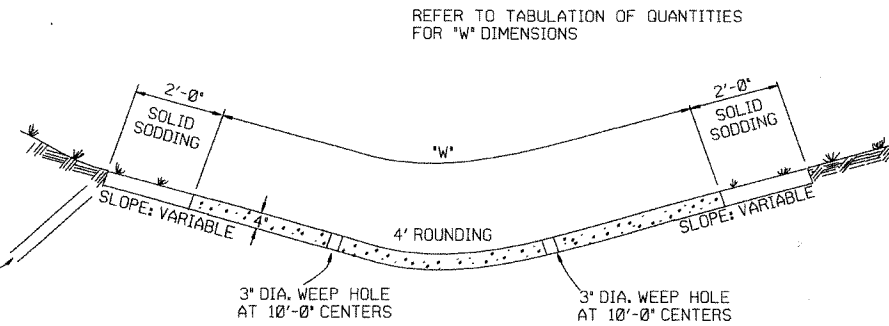
STA. 1880+50 IN PLACE
24\"/>

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

PLAN SHEETS
STA. 1834+00 - STA. 1886+00

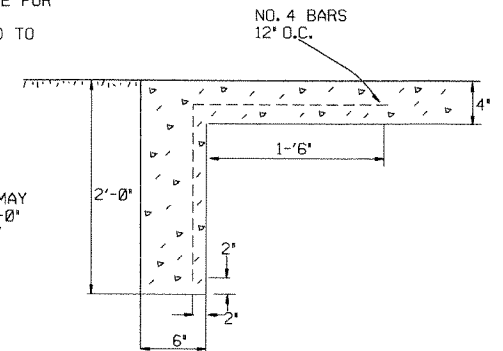


TYPE A



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."



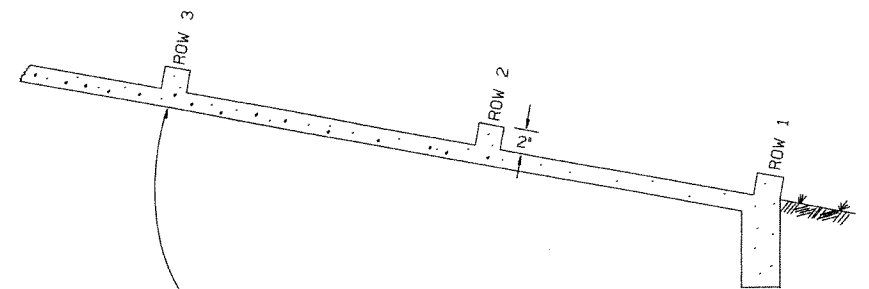
GENERAL NOTES:

THE FULL WIDTH OF EACH SECTION SHALL BE POURED MONOLITHICALLY.

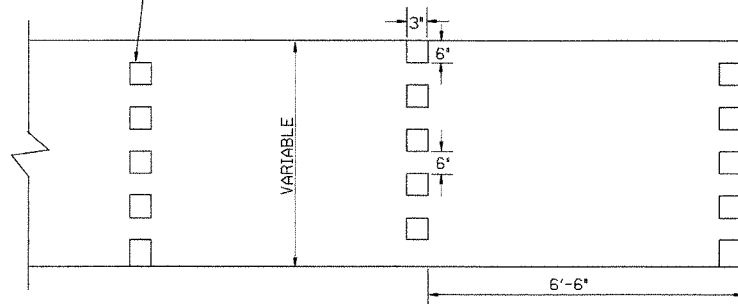
TOE WALLS TO BE CONSTRUCTED FULL WIDTH AT EACH END OF DITCH PAVING, AND POURED MONOLITHICALLY.

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.



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.



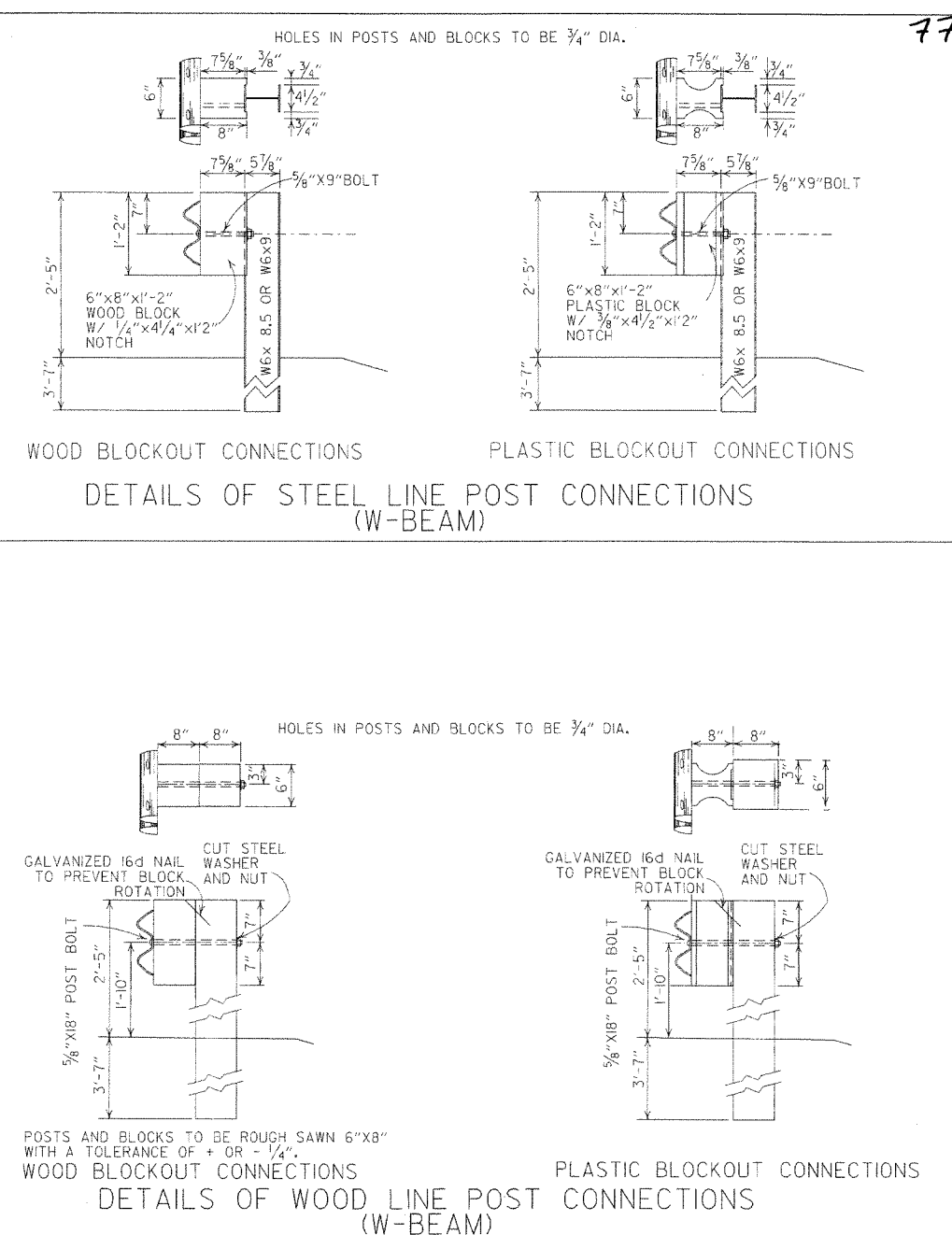
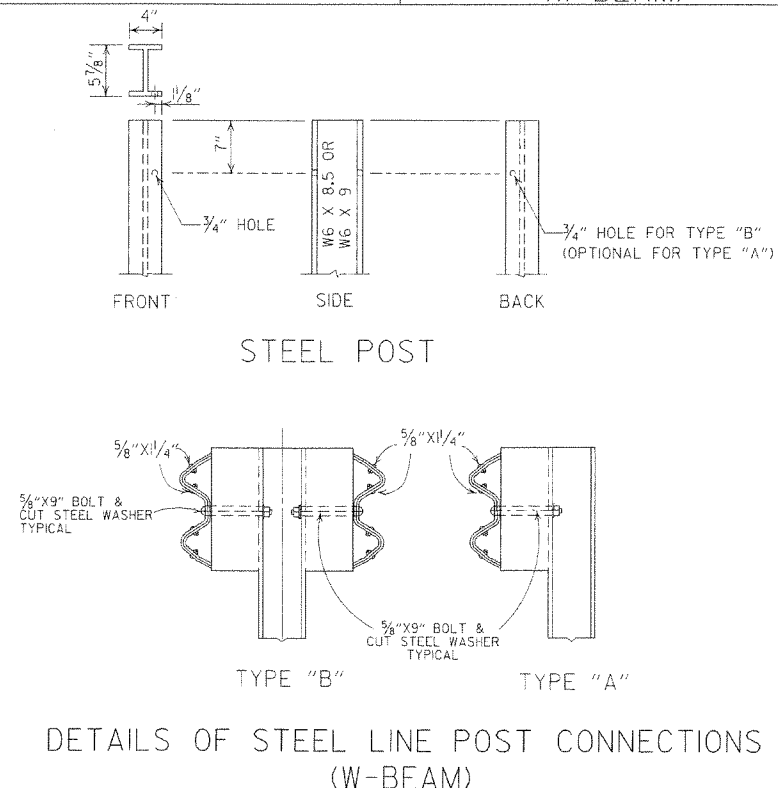
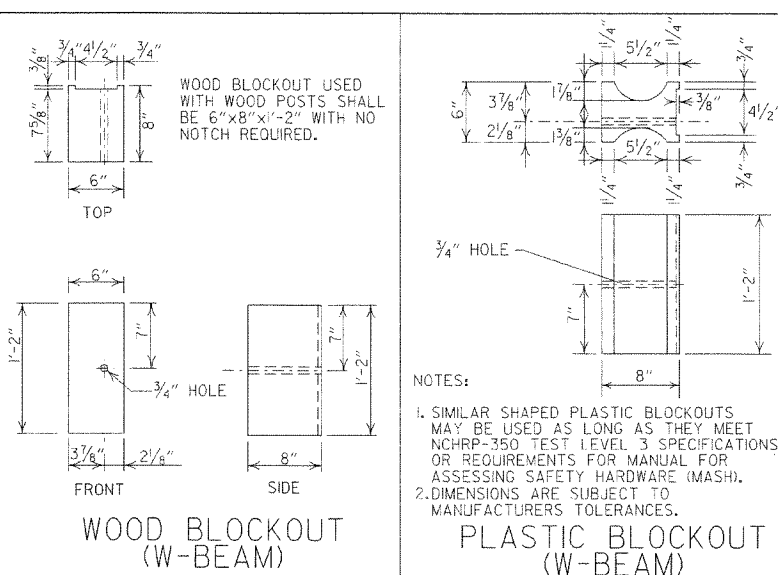
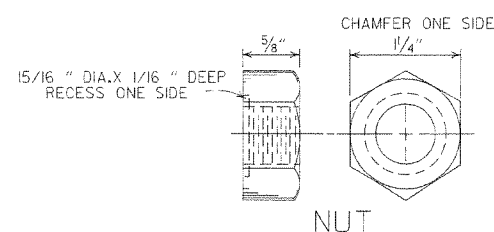
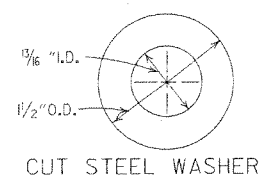
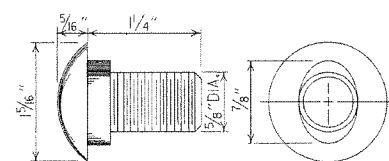
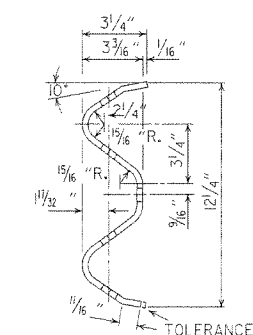
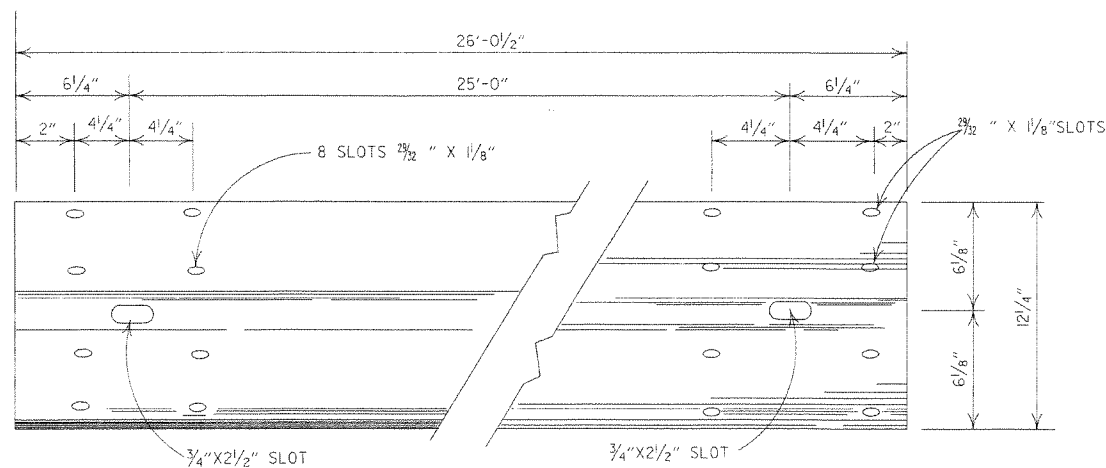
ENERGY DISSIPATORS
(NO SCALE)

DATE	REVISION	DATE FILM'D
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	
11-1-84	EXCAVATION DETAILS ADDED	
10-2-72	TYPED A & B	
10-2-72	REVISED AND REDRAWN	508-10-2-72

ARKANSAS STATE HIGHWAY COMMISSION

CONCRETE DITCH PAVING

STANDARD DRAWING CDP-1



-GENERAL NOTES-

ALL BOLTS SHALL BE SUFFICIENT LENGTH TO EXTEND THROUGH THE FULL THICKNESS OF THE NUT AND NO MORE THAN ¾" 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 (400 f) OR NO.1,350 f SOUTHERN PINE.

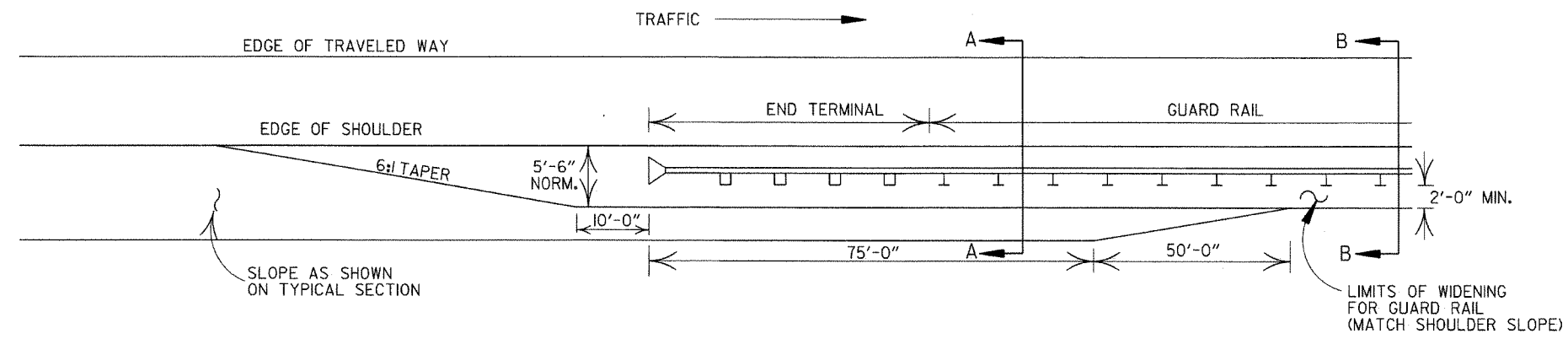
CONTRACTOR SHALL HAVE THE OPTION OF USING WOOD BLOCKOUTS FOR W-BEAM GUARD RAIL OR PLASTIC BLOCKOUTS, AS LONG AS BLOCKOUT USED MEETS NCHRP-350 TEST LEVEL 3 SPECIFICATIONS OR REQUIREMENTS FOR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) FOR W-BEAM GUARD RAIL.

7-4-90	RAISED HEIGHT OF GUARD RAIL 1"	
0-15-09	ADDED REFERENCE TO MASH	
4-10-03	REVISED GENERAL NOTES	
8-22-02	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	
11-2-00	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 PLATE, IN SOLID ROCK & ADDED DETAILS OF STEEL LINE POST CONN. REMOVED BACK-UP PLATE, REVISED HOLES IN STEEL POLES	
4-3-97	REMOVED "L.A. IN DIRECTION OF TRAFFIC" NOTE & PLACED ARROWS ON WASHERS	
10-18-96	REVISED WOOD POST NOTE	
6-2-94	ADDED ALT. 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	8-5-91
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 FILED

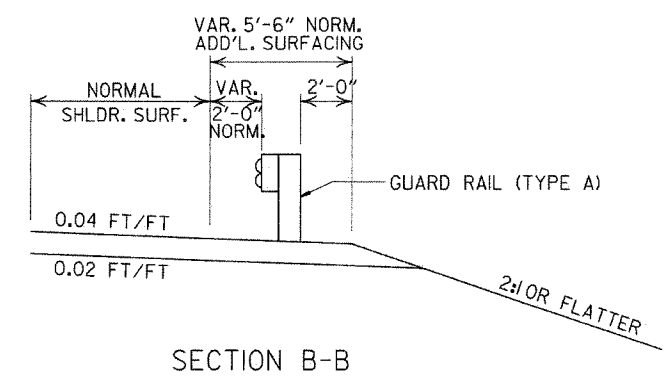
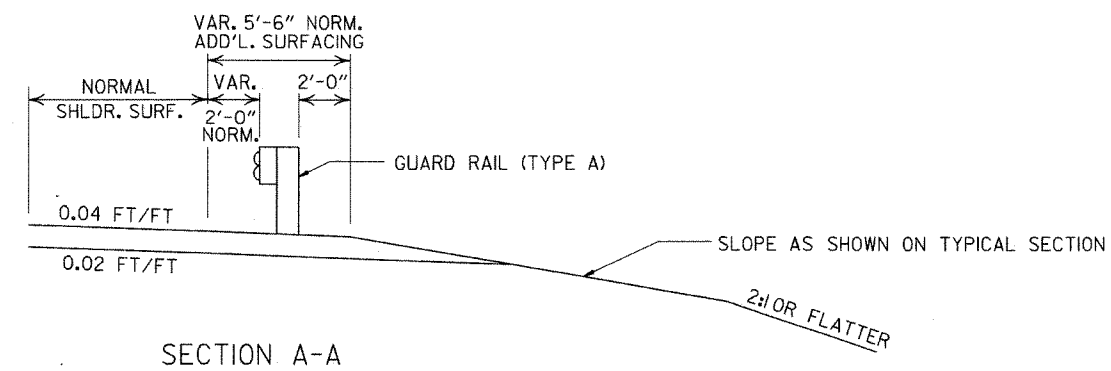
ARKANSAS STATE HIGHWAY COMMISSION

GUARD RAIL DETAILS

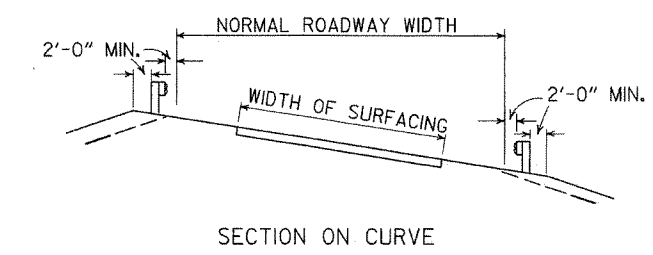
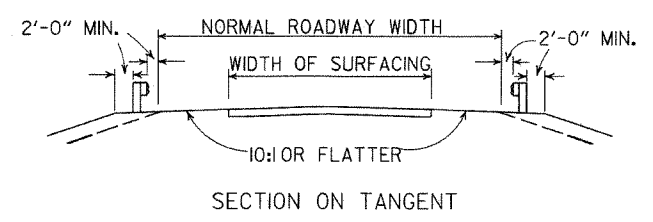
STANDARD DRAWING GR-8



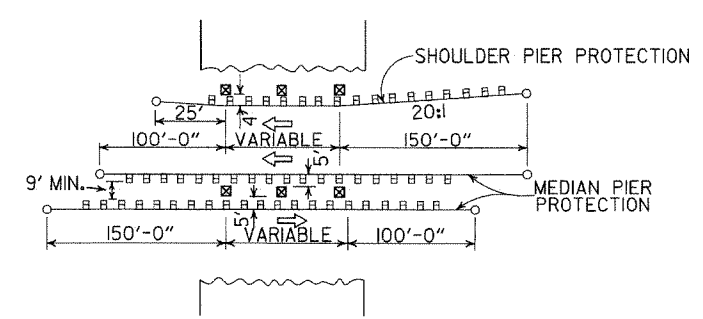
NOTE: NORMAL SECTION TO BE WIDENED APPROX. 5'-6" EACH SIDE TO SUPPORT GUARD RAIL.



DETAILS OF WIDENING FOR GUARD RAIL

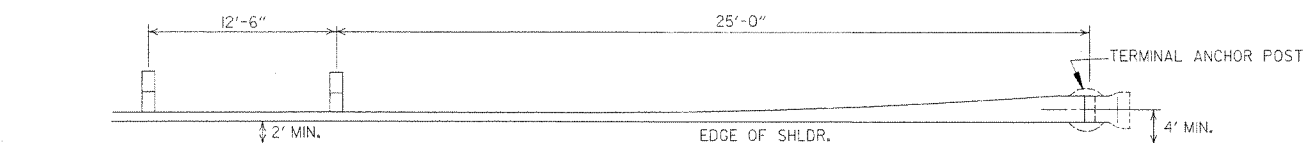


DETAILS SHOWING POSITION OF GUARD RAIL ON HIGHWAY

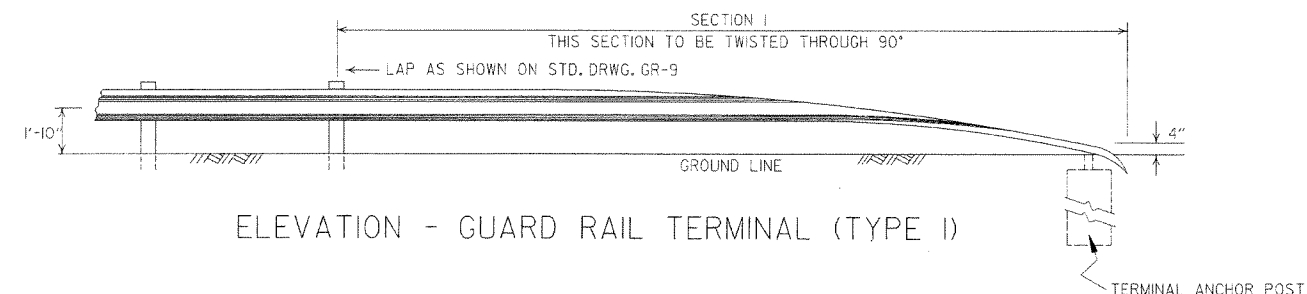


METHOD OF INSTALLATION OF GUARD RAIL AT FIXED OBSTACLE

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

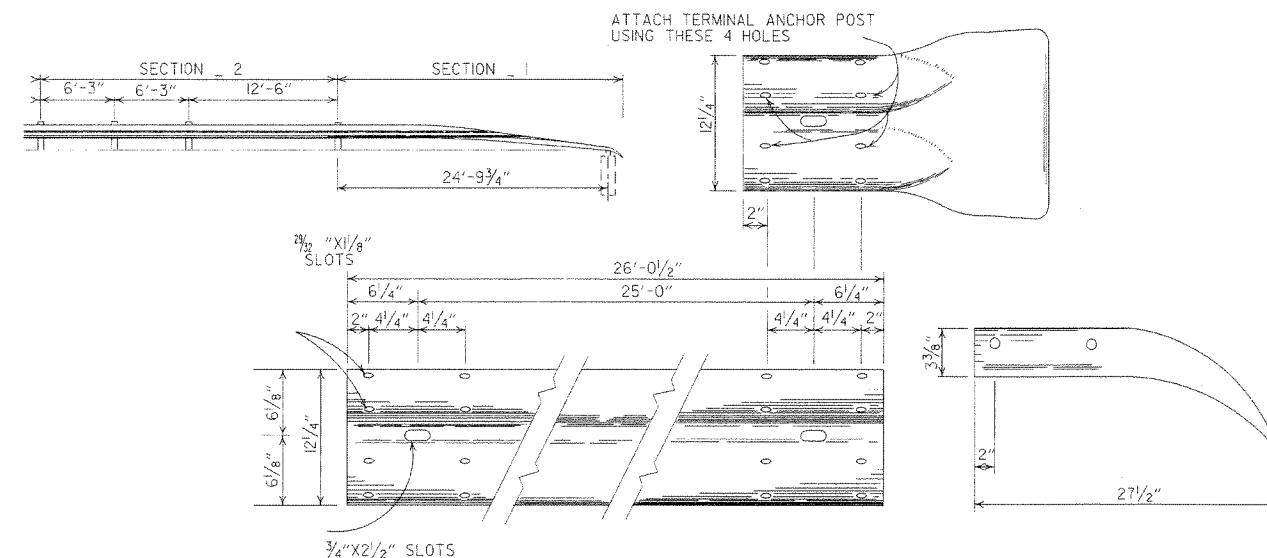


PLAN - GUARD RAIL TERMINAL (TYPE I)



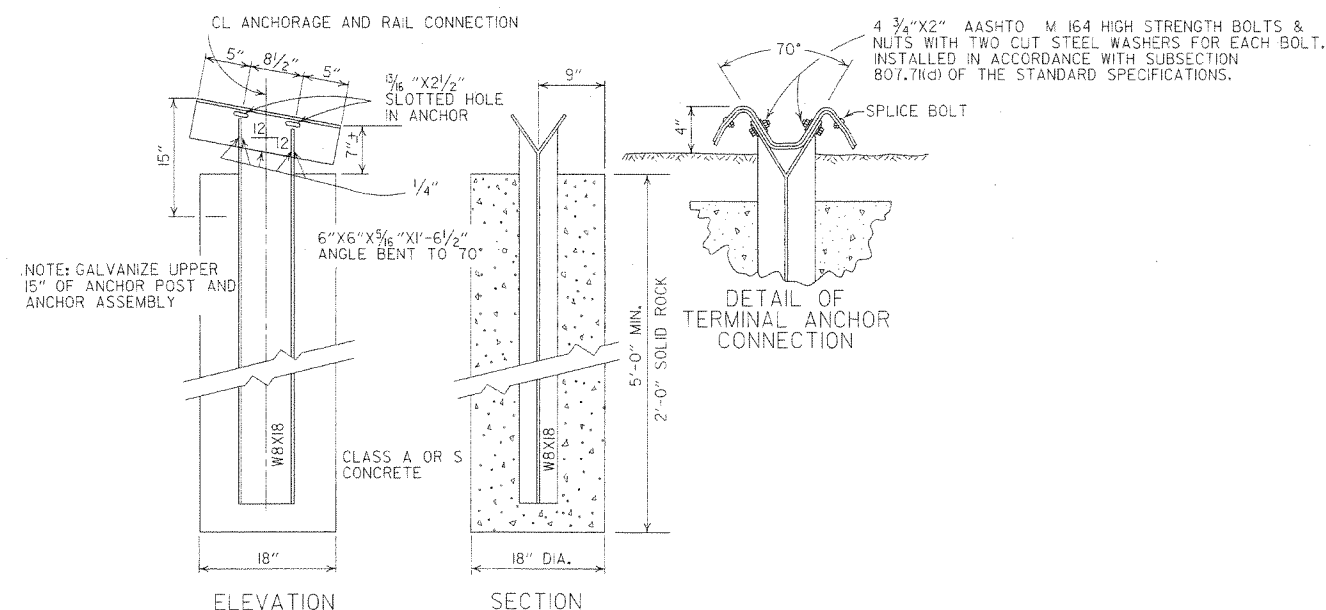
ELEVATION - GUARD RAIL TERMINAL (TYPE I)

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



DETAIL OF TERMINAL ANCHOR POST (TYPE I)

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 W/ 17 POST IF CONTRACTOR SO DESIRES.

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 FILED

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.

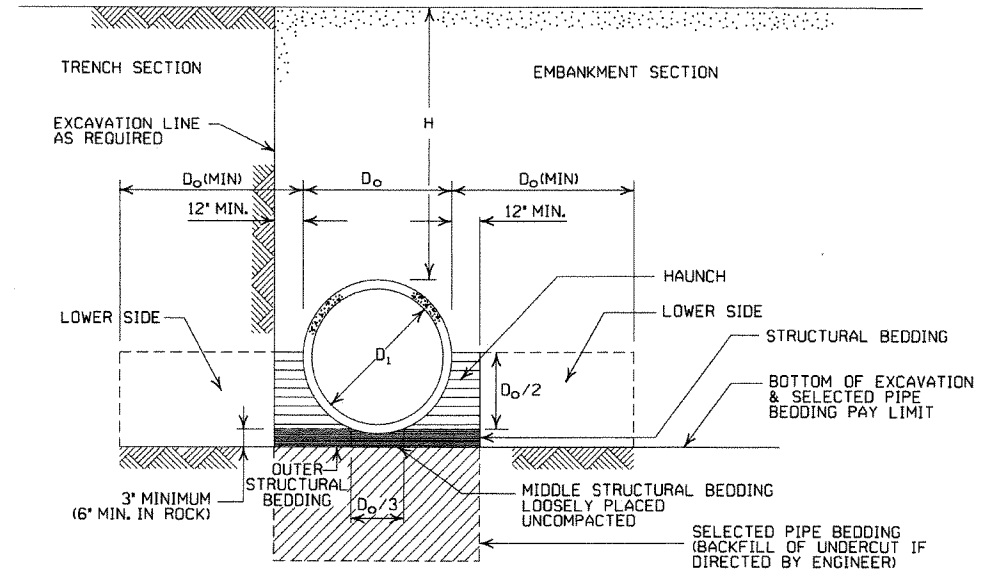
- LEGEND -

D_1 = NORMAL INSIDE DIAMETER OF PIPE
 D_o = 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 (2003 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
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.

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 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.

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.

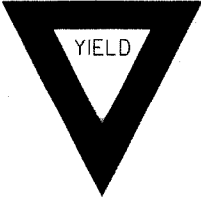
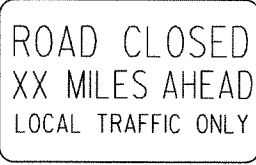
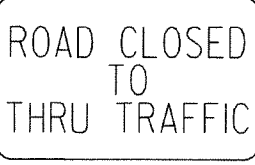
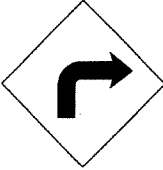
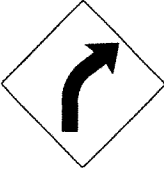
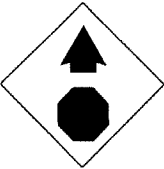
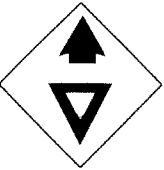
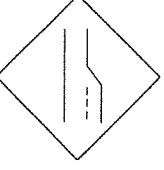
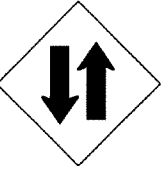
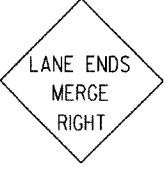
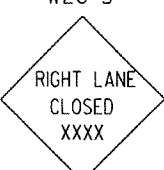
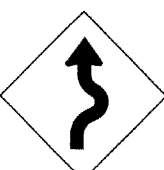
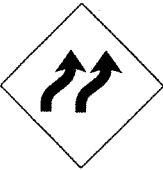
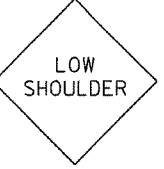
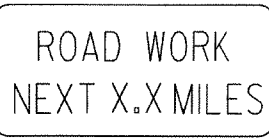
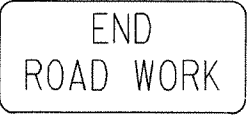
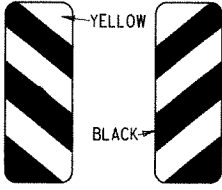
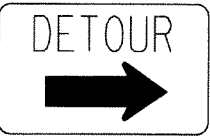
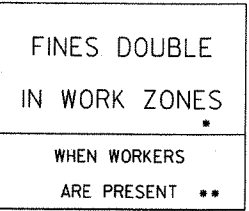
12-15-II	REVISED FOR LRFD DESIGN SPECIFICATIONS	
5-18-00	REVISED TYPE 3 BEDDING & ADDED NOTE	
3-30-00	REVISED INSTALLATIONS	
11-06-97	ISSUED	
DATE	REVISION	DATE FILMED

ARKANSAS STATE HIGHWAY COMMISSION

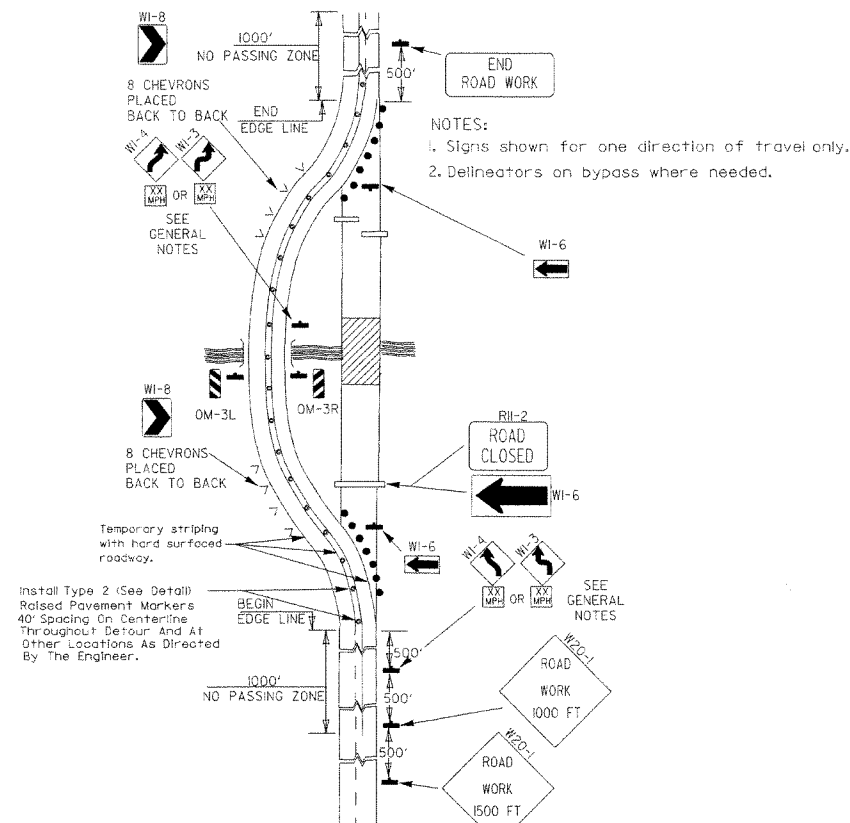
CONCRETE PIPE CULVERT
FILL HEIGHTS & BEDDING

STANDARD DRAWING PCC-1

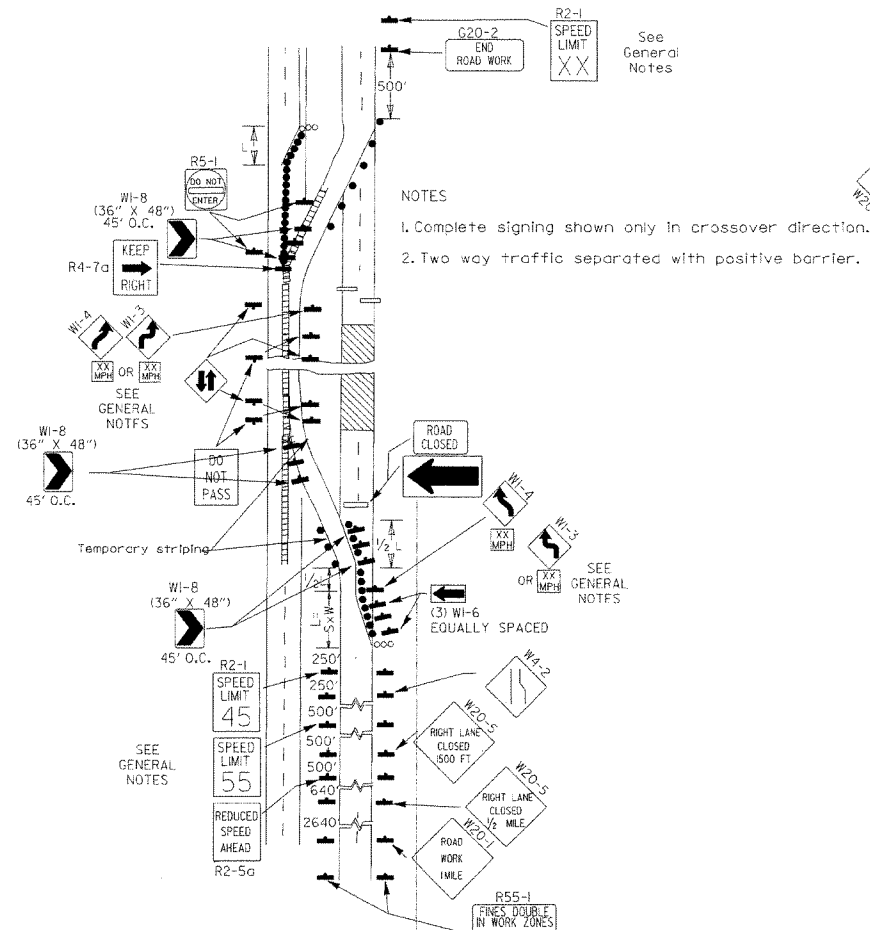


RI-1  STANDARD 30"x30" EXPRESSWAY 36"x36" SPECIAL 48"x48"	RI-2  STD. 36"x36"x36" EXPWY. 48"x48"x48" FWY. 60"x60"x60"	R2-1  STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"	R2-5A  STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"	R2-5C  STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"	R4-1  STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"	R4-2  STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"	ADVANCE DISTANCES (XXX) 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 SO. 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.
R5-1  STD. 30"x30" EXPWY. 36"x36" SPECIAL 48"x48"	R11-2  48"x30"	R11-3A  60"x30"	R11-4  60"x30"	RSP-1  48"x30"	W1-1  STD. 36"x36" FWY. 48"x48"	W1-2  STD. 36"x36" FWY. 48"x48"	W20-3  STD. 48"x48"
W1-3  STD. 48"x48"	W1-4  STD. 48"x48"	W1-6  STD. 48"x24" SPECIAL 60"x30"	W1-8  STD. 18"x24" SPECIAL 24"x30" EXPWY. 30"x36" FWY. 36"x48"	W3-1  STD. 36"x36" SPECIAL 48"x48"	W3-2  STD. 36"x36" SPECIAL 48"x48"	W4-2  STD. 36"x36" FWY. 48"x48"	
W5-1  STD. 36"x36" SPECIAL 48"x48"	W6-3  EXPWY. 36"x36" SPECIAL 48"x48"	W8-7  EXPWY. 36"x36" FWY. 48"x48"	W9-2  STD. 36"x36" FWY. 48"x48"	W13-1  STD. 24"x24"	W20-1  STD. 48"x48"	W20-2  STD. 48"x48"	
W20-4  STD. 48"x48"	W20-5  STD. 48"x48"	W20-7a  18" 500 FEET 24" W16-2 STD. 36"x36" FWY. 48"x48"	W21-2  STD. 30"x30" SPECIAL 36"x36"	W21-5  STD. 30"x30" SPECIAL 36"x36"	W24-1  STD. 36"x36"	W1-4b  STD. 48"x48"	
W8-11  STD. 36"x36" FWY. 48"x48"	W8-9  STD. 36"x36" FWY. 48"x48"	G20-1  60"x24"	G20-2  48"x24"	OM-3L OM-3R  12"x36"	M4-9  STD. 30"x24" SPECIAL 48"x36" SPECIAL 60"x48"	M4-10  48"x18"	R55-1  36"x60" * USE 6" C LETTERS ** USE 4" D LETTERS

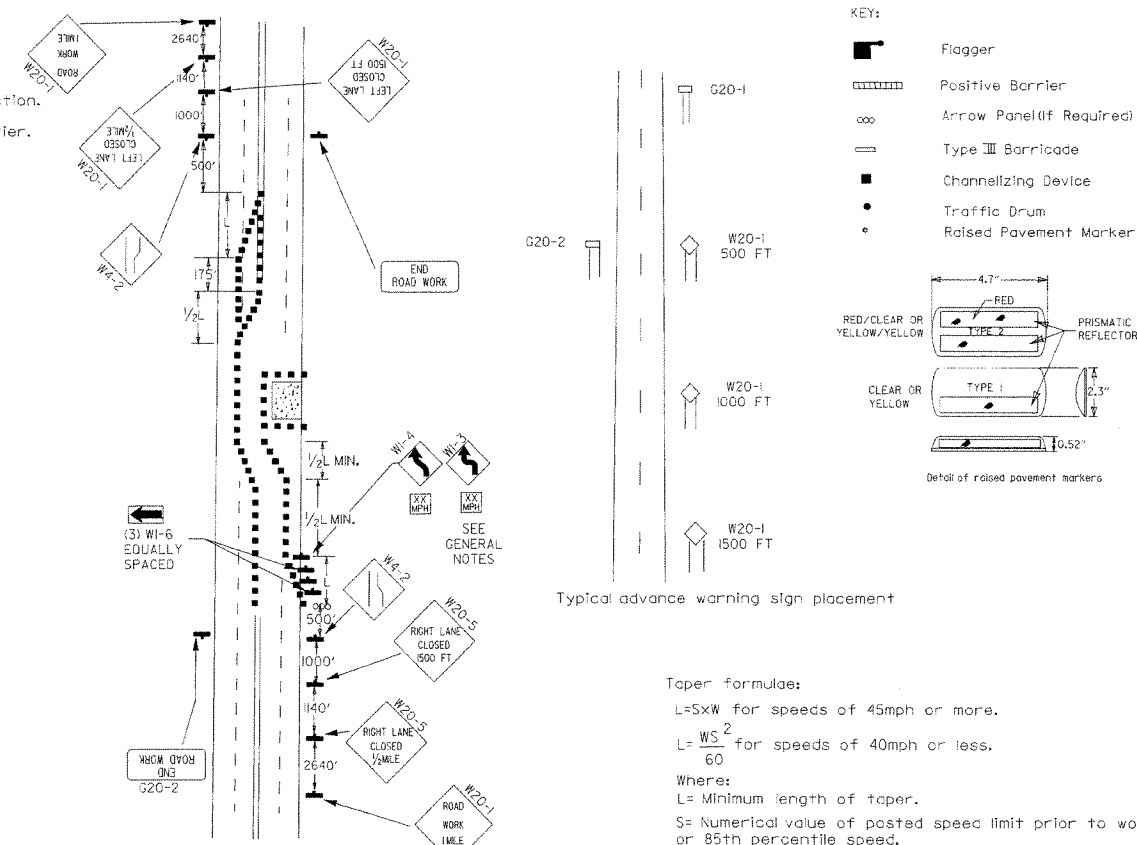
12-15-11	REVISED W24-1	
11-17-10	DELETED W8-9a & ADDED W8-9	
10-15-09	ADDED REFERENCE TO MASH & ADDED SIGN W24-1	
4-17-08	REVISED SIGN DESIGNATIONS	
11-18-04	REVISED NOTES	
10-9-03	REVISED NOTE 1	
11-16-01	REVISED NOTE 7	
9-28-00	REVISED NOTE	
11-18-98	ADDED NOTE	
6-26-97	REVISED NOTE 5	
4-03-97	REVISED 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



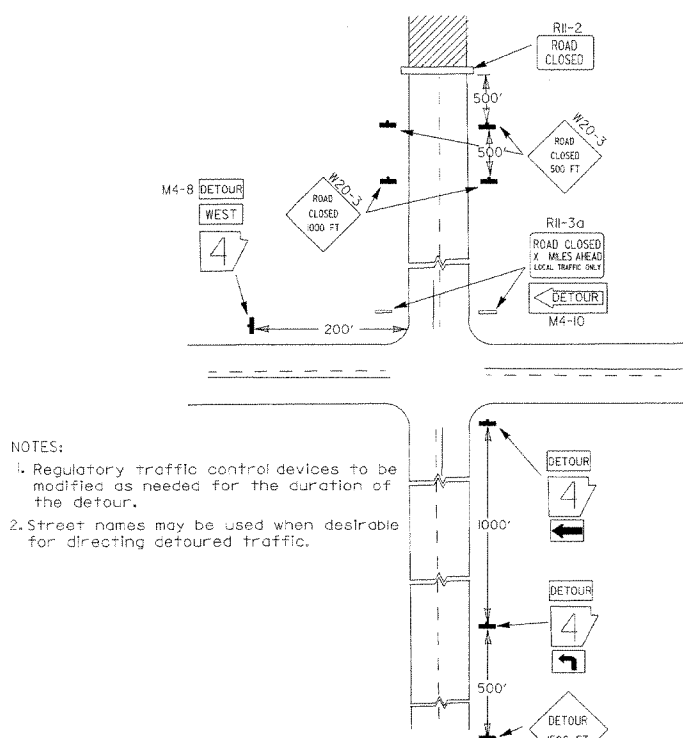
(A) Typical application of traffic control devices on a 2-lane highway where the entire roadway is closed and a bypass detour is provided.



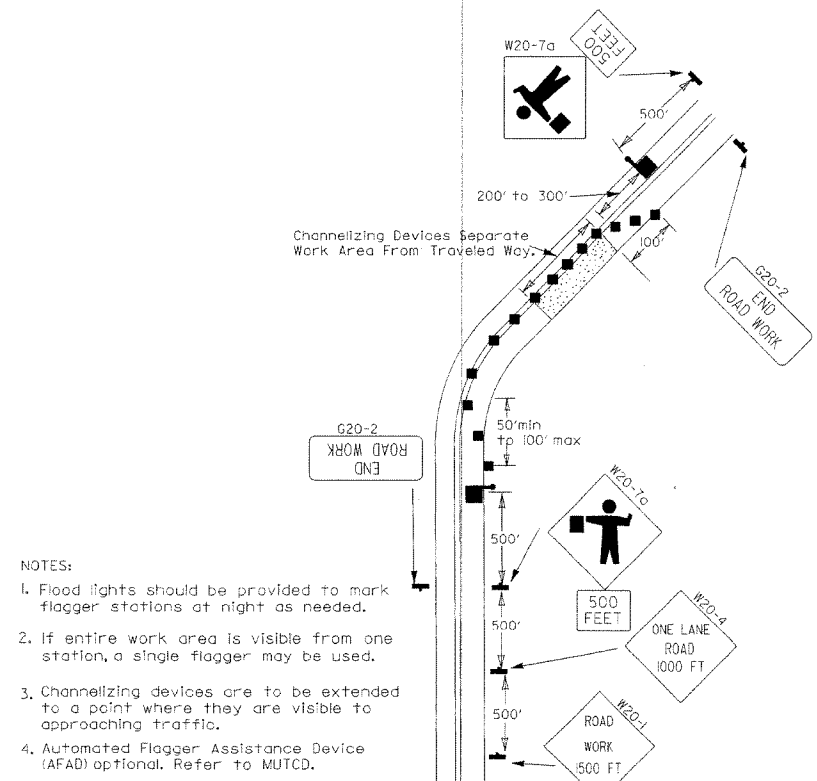
(B) Typical application - 4-lane divided roadway where one roadway is closed.



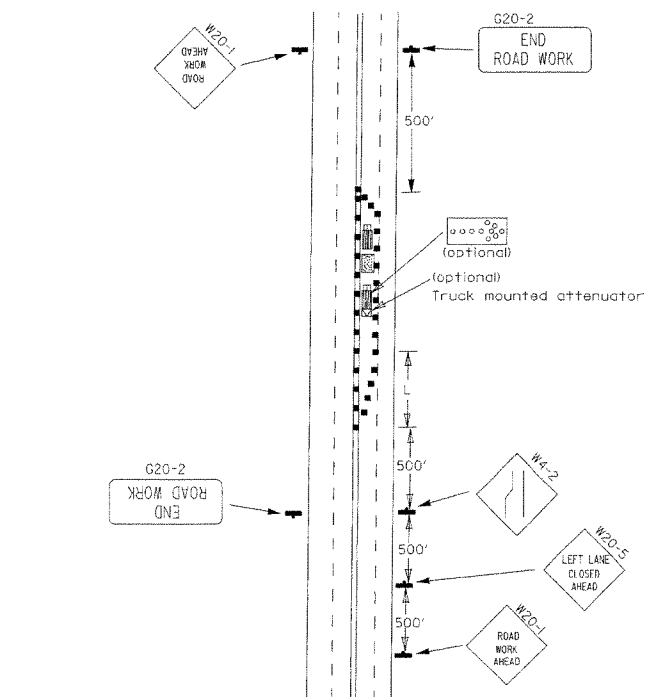
(C) Typical application - 4-lane undivided roadway where half of the roadway is closed.



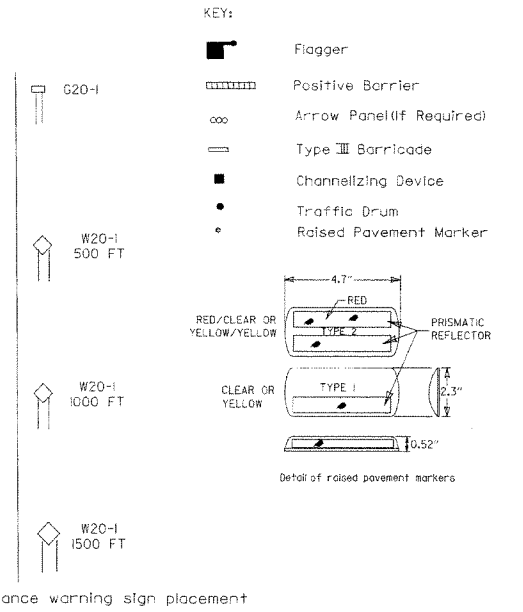
(D) Typical application - roadway closed beyond detour point.



(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.

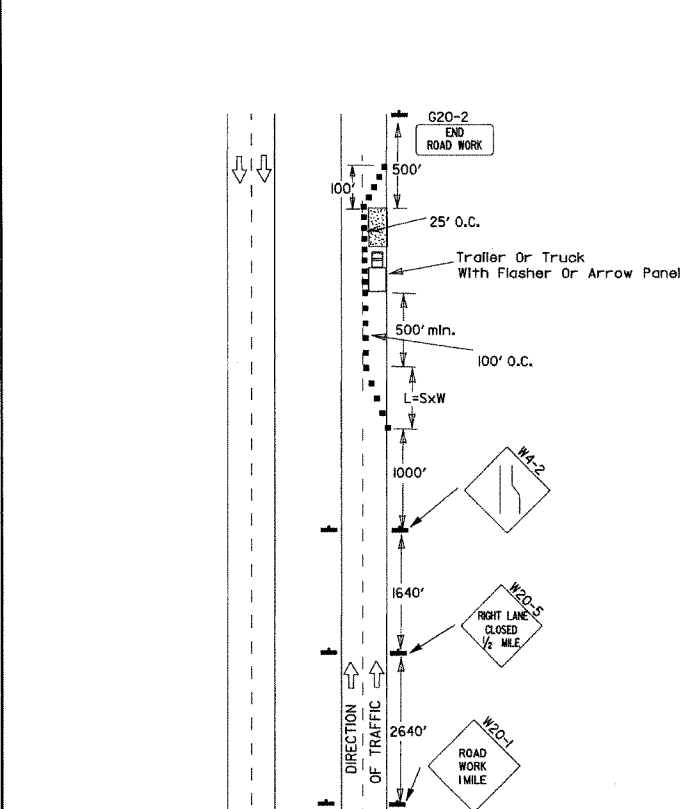


Taper formulae:
 $L = S \times W$ for speeds of 45mph or more.
 $L = \frac{WS^2}{60}$ for speeds of 40mph or less.
Where:
L = Minimum length of taper.
S = Numerical value of posted speed limit prior to work or 85th percentile speed.
W = Width of offset.

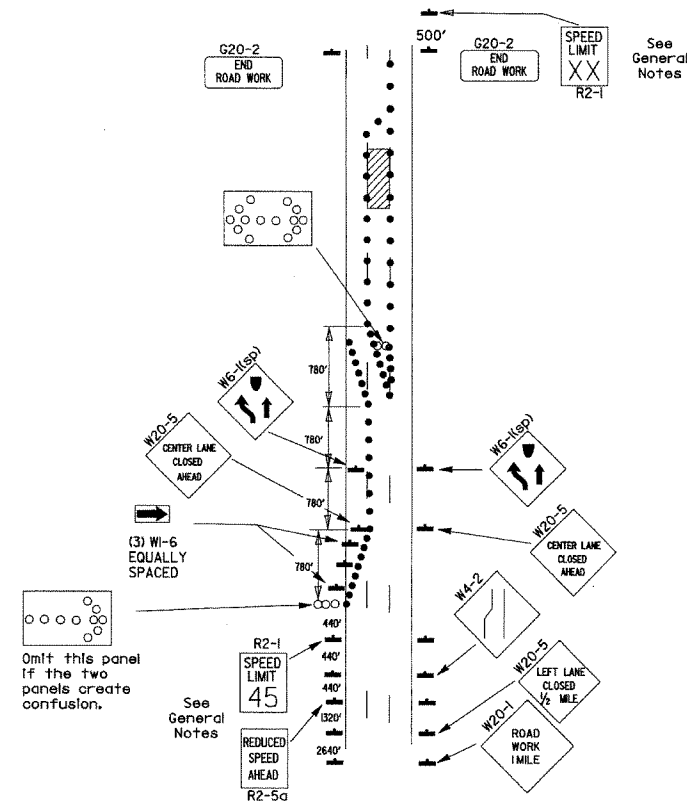
GENERAL NOTES:
1. Advisory speed posted on W1-3 or W1-4 curve warning signs to be determined at site. Use W1-4 when speed is greater than 30mph and W1-3 when 30mph or less.
2. When the existing speed limit is 55mph and the plans require a speed limit of 45mph, the R2-1(55) shall be omitted and the R2-5A shall be installed at that location. Additional R2-1(45) speed limit signs shall be installed at a maximum of 1 mile intervals. At the end of the work area a R2-1(55) 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 R2-1(65) shall be omitted. Additional R2-1(55) speed limit signs shall be installed at a maximum of 1 mile intervals. At the end of the work area a R2-1(65) 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.

3-11-10	ADDED (AFAD)	
11-20-05	REVISED SIGN DESIGNATIONS	
11-18-04	ADDED GENERAL NOTE	
10-18-96	ADDED R55-1	
4-26-96	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	
8-5-91	DRAWN AND PLACED IN USE	
DATE	REVISION	FILMED

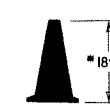
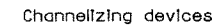
ARKANSAS STATE HIGHWAY COMMISSION
STANDARD TRAFFIC CONTROLS
FOR HIGHWAY CONSTRUCTION
STANDARD DRAWING TC-2



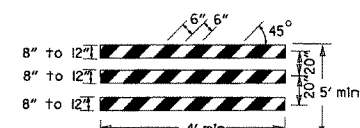
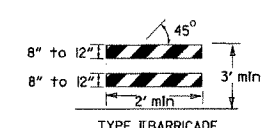
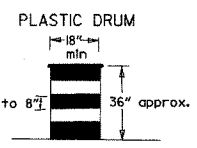
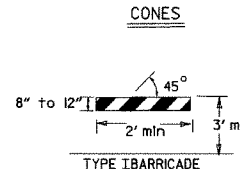
(A) Typical application - daytime maintenance operations of short duration on a 4-lane divided roadway where half of the roadway is closed.



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

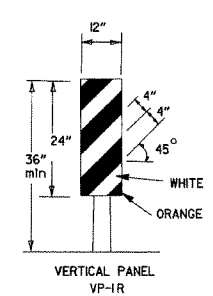


* When cones are used on freeways and multi-lane highways, they shall be 28" min. During hours of darkness, 28" cones shall be used on all roadways, and shall be reflectorized in accordance with the M.U.T.C.D.

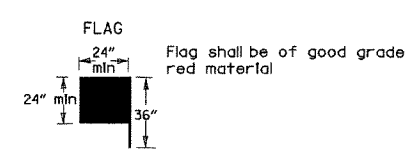
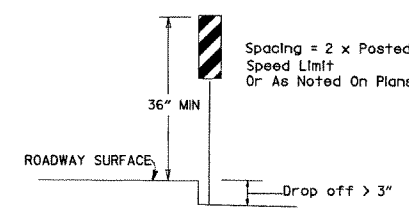


NOTE: TYPE III BARRICADE

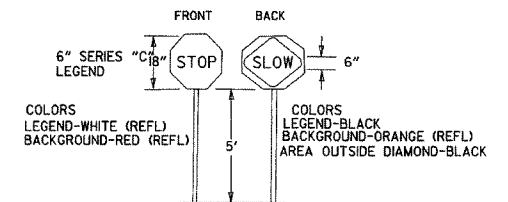
For all road closures, the Type III barricades shall be of sufficient length to extend across entire roadway.



VERTICAL PANEL PLACEMENT

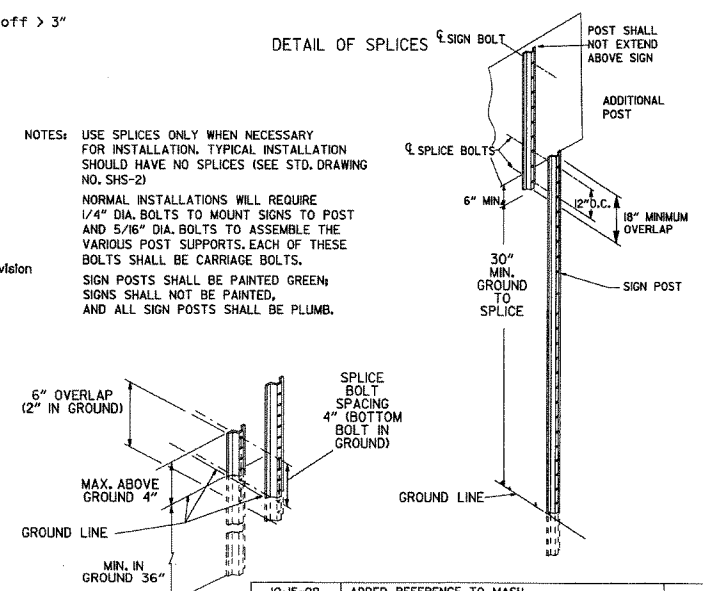


STOP SLOW PADDLE



DETAIL OF SPLICES $\frac{1}{2}$ " SIGN BOLT

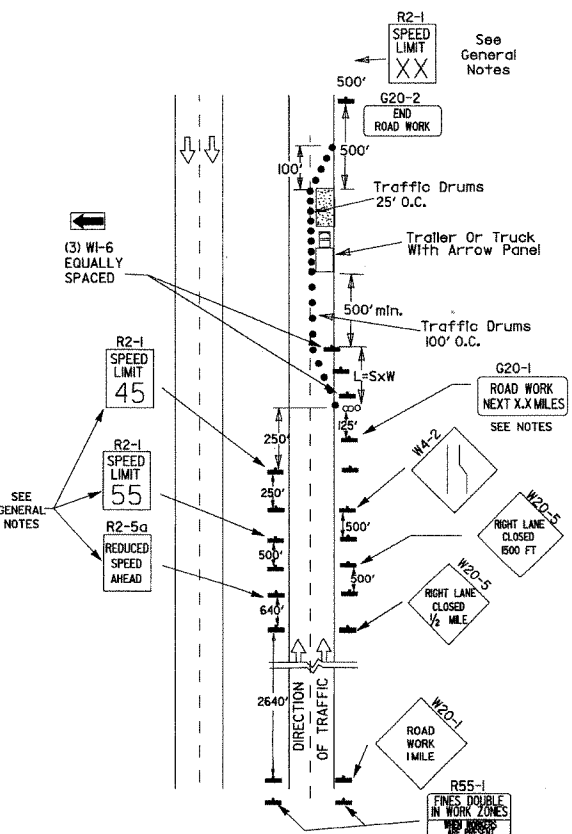
POST SHALL NOT EXTEND ABOVE SIGN



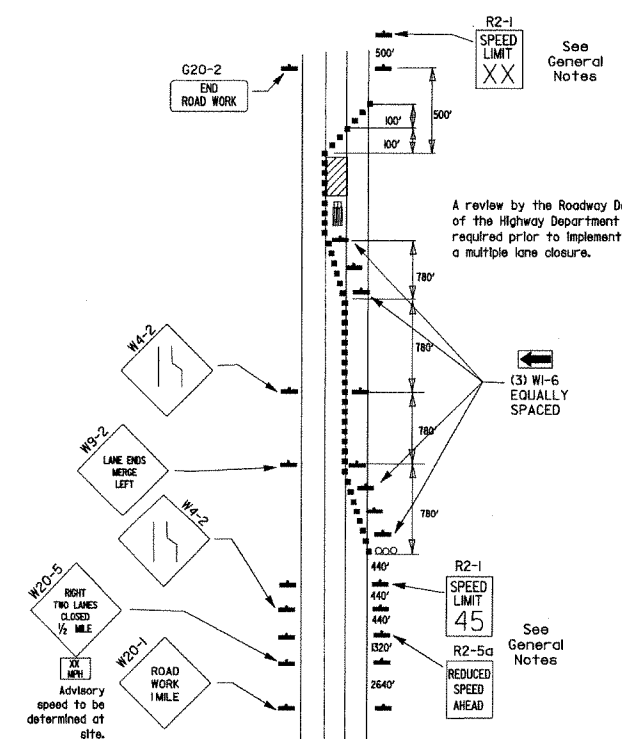
NOTES: USE SPLICES ONLY WHEN NECESSARY
FOR INSTALLATION. IF TYPICAL INSTALLATION
SHOULD HAVE NO SPLICES (SEE STD. DRAWING
NO. SHS-2)

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;
SIGN SHALL NOT BE PAINTED,
AND ALL SIGN POSTS SHALL BE PLUMB.



(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.

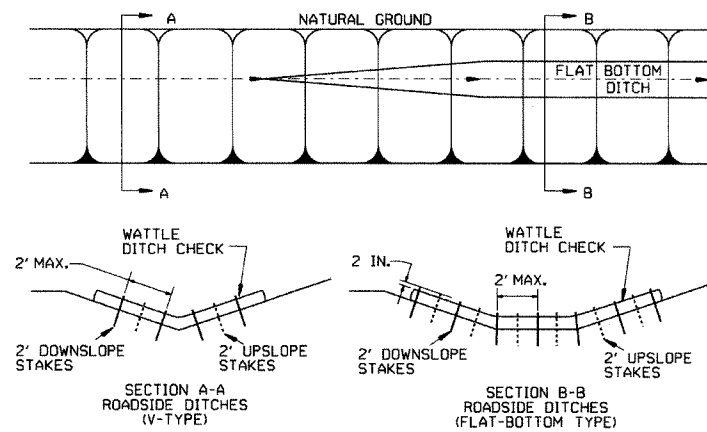
- KEY:
- ◻ Arrow Panel (If Required)
 - Channelizing Device
 - Traffic drum

GENERAL NOTES:

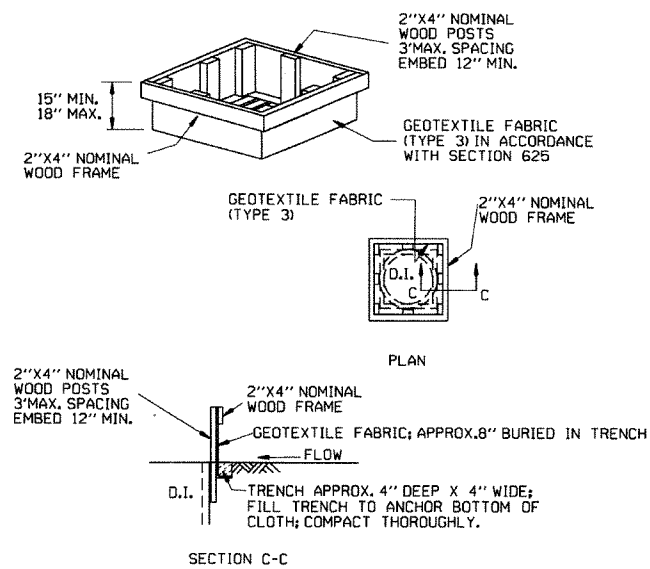
1. A speed limit reduction may be Implemented ONLY when designated in the plan or when recommended by the Roadway Design Division.
2. When the existing speed limit is 55mph and the plans require a speed limit of 45mph, the R2-(45) shall be omitted and the R2-5A shall be installed at that location. Additional R2-45mph speed limit signs shall be installed at a maximum of 1 mile intervals. At the end of the work area a R2-(XX) 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-(45) shall be omitted. Additional R2-45mph speed limit signs shall be installed at a maximum of 1 mile intervals. At the end of the work area a R2-(XX) 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. The G20-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-sign shall be erected 125' in advance of the job limit. Additional W20-1 (1 MILE) signs are not required in advance of lane closures that begin inside the project limits.
8. Flaggers shall use STOP/SLOW paddles for controlling traffic through work zones. Flags may be used only for emergency situations.
9. All plastic drums and cones shall meet the requirements of NCHRP-350 or Manual For Assessing Safety Hardware (MASH).
10. 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.

GENERAL NOTES

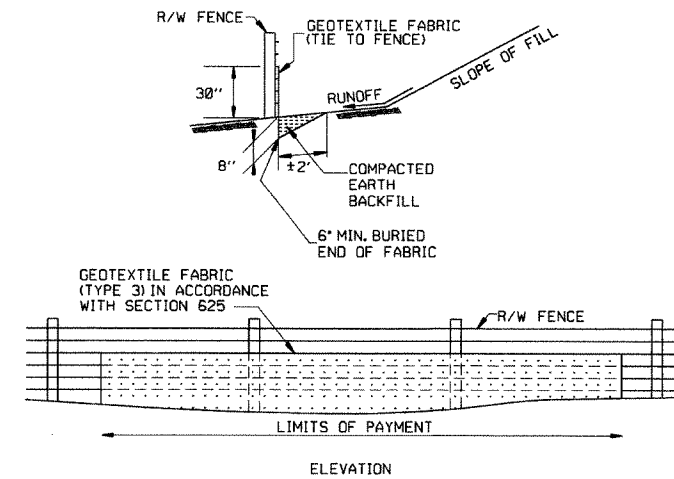
INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES
AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.



WATTLE DITCH CHECK (E-1)



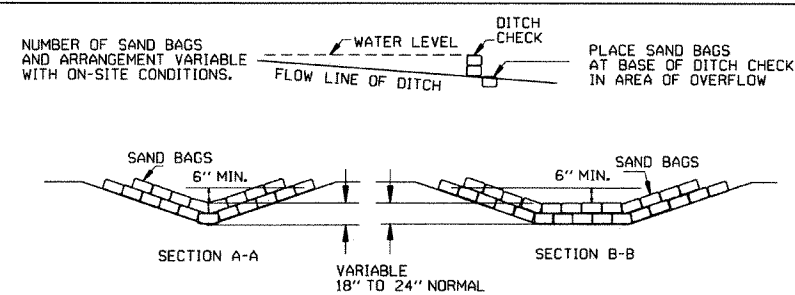
DROP INLET SILT FENCE (E-7)



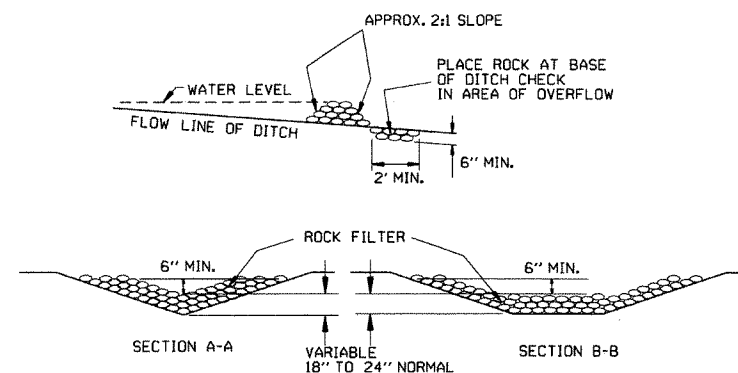
SILT FENCE ON R/W FENCE (E-4)

GENERAL NOTES

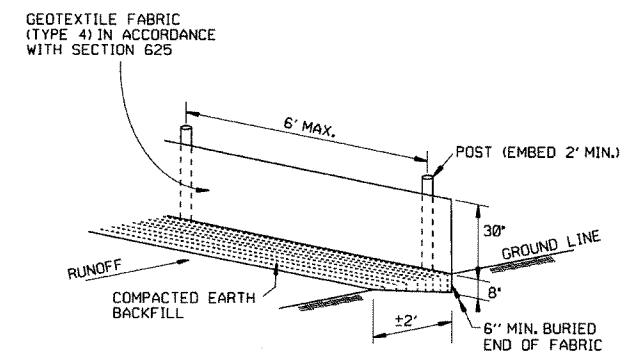
GEOTEXTILE FABRIC SHALL BE SPICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST, OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.



SAND BAG DITCH CHECK (E-5)



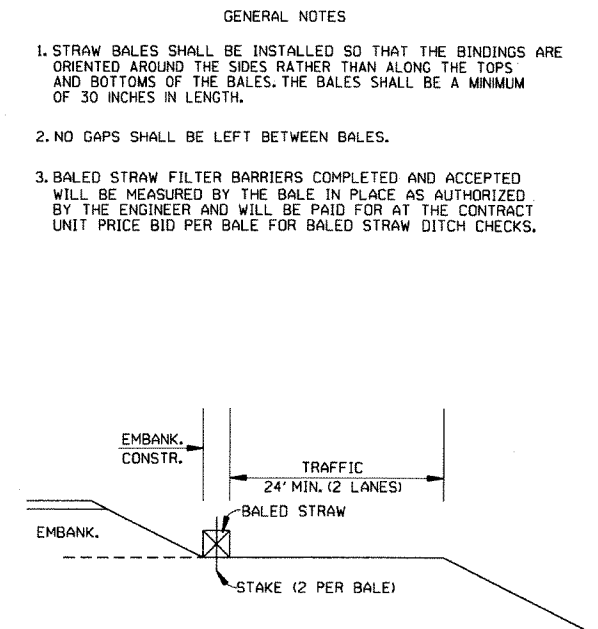
ROCK DITCH CHECK (E-6)



SILT FENCE (E-11)

GENERAL NOTES

GEOTEXTILE FABRIC SHALL BE SPICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.



BALED STRAW
FILTER BARRIER
(E-2)

12-15-11	DELETED BALED STRAW DITCH CHECK & ADDED WATTLE DITCH CHECK		ARKANSAS STATE HIGHWAY COMMISSION TEMPORARY EROSION CONTROL DEVICES STANDARD DRAWING TEC-1
11-18-98	ADDED NOTES		
7-02-98	ADDED BALED STRAW FILTER BARRIER (E-2)		
7-26-95	REVISED SILT FENCE, E-4 AND E-11	7-20-95	
7-26-95	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	
DATE	REVISION	F.I. MFO	