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.		070368	1	335
				(2)	HWY. 82 - HWY. 7 (REHAB.) (S)			

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
CONSTRUCTION PLANS FOR STATE HIGHWAY

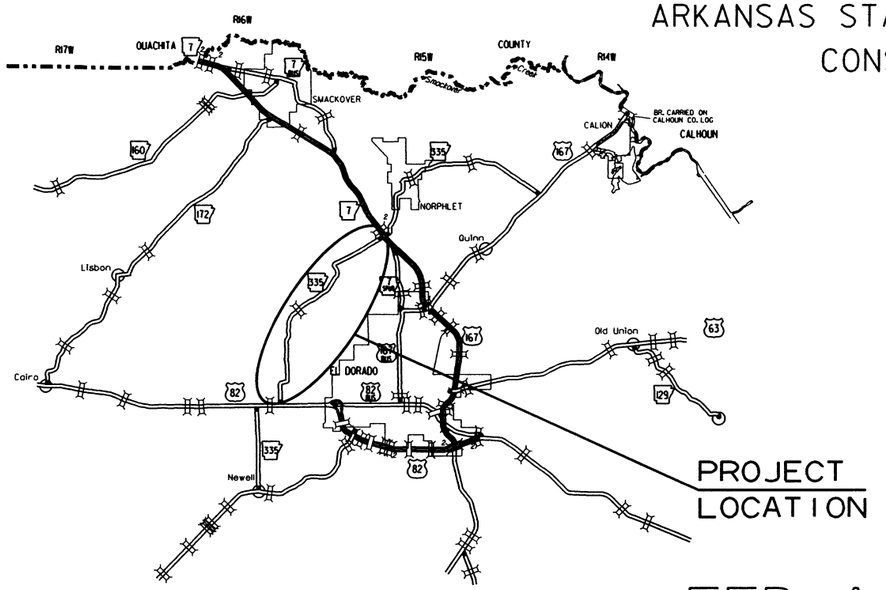
HWY. 82 - HWY. 7
(REHAB.) (S)

UNION COUNTY

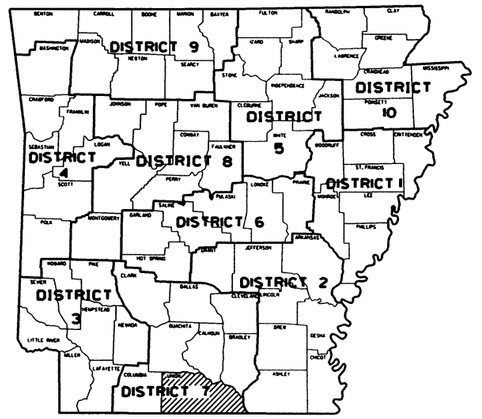
ROUTE 335 SECTION 1

JOB 070368

FED. AID PROJ. HRRR-0070(34)



VICINITY MAP

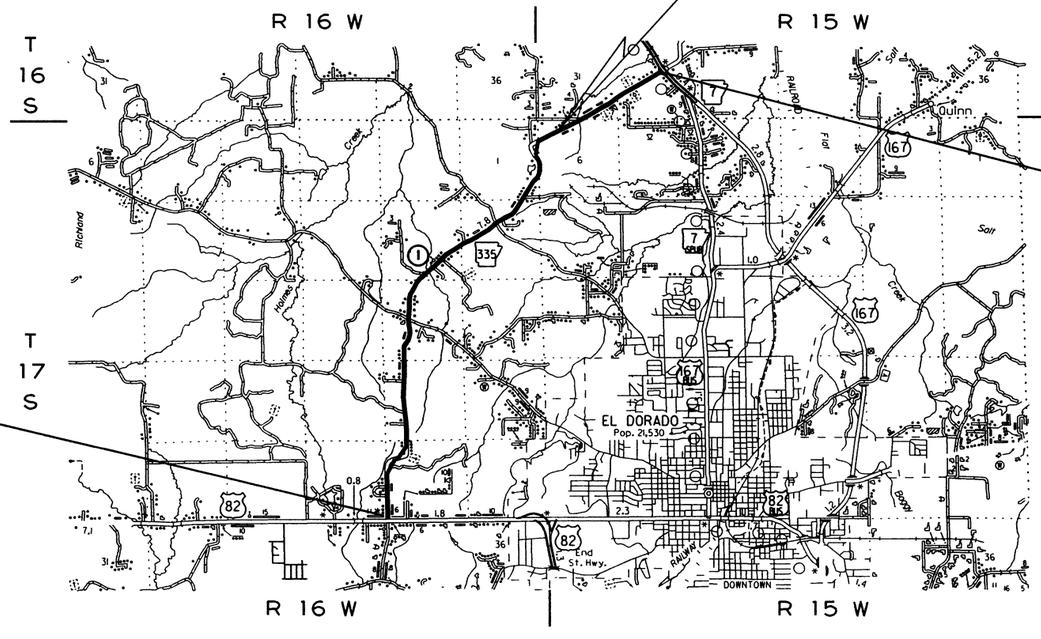


ARK. HWY. DIST. NO. 7

STRUCTURES OVER 20'-0" SPAN
(1) STA. 876+79 CONSTRUCT
TRI. 10' X 5' X 64' R.C. BOX CULVERT
W/3sl WINGS LT. & RT.
D.A. = 1.6 SQ. MI., 025 = 620 C.F.S.
SPAN = 32.33'

NOT TO SCALE

EQUATION
STA. 1014+95.60 BK. =
STA. 1015+00.26 AHD.



STA. 1088+55.03
END JOB 070368

STA. 700+21.07
BEGIN JOB 070368
LOG MILE 0.00

BEGINNING:	
LAT: N	33°12'30"
LONG: W	92°44'05"
MID POINT:	
LAT: N	33°15'23"
LONG: W	92°43'15"
ENDING:	
LAT: N	33°17'17"
LONG: W	92°40'30"

• DESIGN TRAFFIC DATA •

DESIGN YEAR	2036
2016 ADT	1500
2036 ADT	1900
2036 DHV	209
DIRECTIONAL DISTRIBUTION	60%
TRUCKS	11%
AVERAGE RUNNING SPEED	
STA. 700+21.07 - STA. 840+55.00	45 MPH
STA. 840+55.00 - STA. 1088+55.03	50 MPH

GROSS LENGTH OF PROJECT		38829.30	FEET	OR	7.354	MILES
NET	" " ROADWAY	38796.97	"	"	0.006	"
NET	" " BRIDGES	32.33	"	"	7.348	"
NET	" " PROJECT	38829.30	"	"	7.354	"

P.E. JOB 070368

APPROVED

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7636
M.E. BANKS

10-3-16

DEPUTY DIRECTOR AND CHIEF ENGINEER

9/2/2016

R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	2	335

(2) INDEX OF SHEETS, GOV. SPECS., AND GEN. NOTES

INDEX OF SHEETS

SHEET NO.	TITLE	DRWG.NO.	DATE
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2	INDEX OF SHEETS, GOVERNING SPECIFICATIONS, AND GENERAL NOTES		
3 - 8	TYPICAL SECTIONS OF IMPROVEMENT		
9 - 16	SPECIAL DETAILS		
17 - 59	TEMPORARY EROSION CONTROL DETAILS		
60 - 75	MAINTENANCE OF TRAFFIC DETAILS		
76 - 78	PERMANENT PAVEMENT MARKING DETAILS		
79 - 86	QUANTITIES		
87	SUMMARY OF QUANTITIES AND REVISIONS		
88 - 104	SURVEY CONTROL DETAILS		
105 - 131	PLAN AND PROFILE SHEETS		
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133	FLARED END SECTION	FES-2	10-18-96
134	MAILBOX DETAILS	MB-1	11-18-04
135	PRECAST CONCRETE BOX CULVERTS	PBC-1	1-28-15
136	CONCRETE PIPE CULVERT FILL HEIGHTS & BEDDING	PCC-1	2-27-14
137	METAL PIPE CULVERT FILL HEIGHTS & BEDDING	PCM-1	2-27-14
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139	PLASTIC PIPE CULVERT (PVC F949)	PCP-2	2-27-14
140	PAVEMENT MARKING DETAILS	PM-1	5-12-16
141	DETAILS OF PIPE UNDERDRAIN	PU-1	4-10-03
142	REINFORCED CONCRETE BOX CULVERT DETAILS	RCB-1	7-26-12
143	EXCAVATION PAY LIMITS, BACKFILL, AND SOLID SODDING FOR BOX CULVERTS	RCB-2	11-20-03
144	TABLES AND METHOD OF SUPERELEVATION FOR TWO-WAY TRAFFIC	SE-2	10-18-96
145	DETAILS OF SPECIAL ITEMS	SI-1	9-12-13
146	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	TC-1	9-02-15
147	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	TC-2	9-02-15
148	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	TC-3	9-02-15
149	TEMPORARY EROSION CONTROL DEVICES	TEC-1	12-15-11
150	TEMPORARY EROSION CONTROL DEVICES	TEC-2	6-02-94
151	TEMPORARY EROSION CONTROL DEVICES	TEC-3	11-03-94
152	WIRE FENCE WATER GAPS	WF-2	4-20-79
153	CHAIN LINK FENCE	WF-3	11-17-10
154	WIRE FENCE TYPE C AND D	WF-4	8-22-02
155 - 335	CROSS SECTIONS		

NOTE: CROSS SECTIONS NOT NORMALLY INCLUDED IN PLANS SOLD TO PROSPECTIVE BIDDERS, BUT MAY BE HAD UPON REQUEST.

GOVERNING SPECIFICATIONS

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

NUMBER	TITLE
ERRATA	ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS
FHWA-1273	REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS
FHWA-1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - NOTICE TO CONTRACTORS
FHWA-1273	SUPPLEMENT - SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES (23 U.S.C. 140)
FHWA-1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - GOALS AND TIMETABLES
FHWA-1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - FEDERAL STANDARDS
FHWA-1273	SUPPLEMENT - TRAINING PROGRAM - JOB 070368
FHWA-1273	SUPPLEMENT - POSTERS AND NOTICES REQUIRED FOR FEDERAL-AID PROJECTS
FHWA-1273	SUPPLEMENT - WAGE RATE DETERMINATION
100-3	CONTRACTOR'S LICENSE
102-2	ISSUANCE OF PROPOSALS
108-1	LIQUIDATED DAMAGES
108-2	WORK ALLOWED PRIOR TO ISSUANCE OF WORK ORDER
303-1	AGGREGATE BASE COURSE
400-1	TACK COATS
410-1	CONSTRUCTION REQUIREMENTS AND ACCEPTANCE OF ASPHALT CONCRETE PLANT MIX COURSES
604-1	RETROREFLECTIVE SHEETING FOR TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
606-1	PIPE CULVERTS FOR SIDE DRAINS
620-1	MULCH COVER
JOB 070368	AIRPORT CLEARANCE REQUIREMENTS
JOB 070368	ARCHEOLOGICAL MONITORING
JOB 070368	BIDDING REQUIREMENTS AND CONDITIONS
JOB 070368	BROADBAND INTERNET SERVICE FOR ASPHALT CONCRETE PLANT
JOB 070368	BROADBAND INTERNET SERVICE FOR FIELD OFFICE
JOB 070368	CARGO PREFERENCE ACT REQUIREMENTS
JOB 070368	CONSTRUCTION IN SPECIAL FLOOD HAZARD AREAS
JOB 070368	CULVERT CLEAN OUT
JOB 070368	DELAY IN RIGHT OF WAY OCCUPANCY
JOB 070368	DISADVANTAGED BUSINESS ENTERPRISE BIDDER'S RESPONSIBILITIES
JOB 070368	EXTENSION FOR PIPE CULVERTS
JOB 070368	FLEXIBLE BEGINNING OF WORK
JOB 070368	GOALS FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION
JOB 070368	MANDATORY ELECTRONIC CONTRACT
JOB 070368	MANDATORY ELECTRONIC DOCUMENT SUBMITTAL
JOB 070368	NESTING SITES OF MIGRATORY BIRDS
JOB 070368	PARTNERING REQUIREMENTS
JOB 070368	PLASTIC PIPE
JOB 070368	SHORING FOR CULVERTS
JOB 070368	SOIL STABILIZATION
JOB 070368	STORM WATER POLLUTION PREVENTION PLAN
JOB 070368	SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS
JOB 070368	UTILITY ADJUSTMENTS
JOB 070368	VALUE ENGINEERING
JOB 070368	WARM MIX ASPHALT
JOB 070368	WELLHEAD PROTECTION

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

GENERAL NOTES

1. GRADE LINE DENOTES FINISHED GRADE WHERE SHOWN ON PLANS.
2. ALL PIPE LINES, POWER, TELEPHONE, AND TELEGRAPH LINES TO BE MOVED OR LOWERED BY THE RESPECTIVE OWNERS AS PER AGREEMENT WITH SUCH OWNERS.
3. 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.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING U. S. MAILBOXES WITHIN THE PROJECT LIMITS IN SUCH A MANNER THAT THE PUBLIC MAY RECEIVE CONTINUED MAIL SERVICE. PAYMENT WILL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS BID ITEMS.
5. ALL LAND MONUMENTS LOCATED WITHIN THE CONSTRUCTION AREA SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 107.12 OF THE STANDARD SPECIFICATIONS.
6. ALL TREES THAT DO NOT DIRECTLY INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE SPARED AS DIRECTED BY THE ENGINEER. CARE AND DISCRETION SHALL BE USED TO INSURE THAT ALL TREES NOT TO BE REMOVED SHALL BE HARMED AS LITTLE AS POSSIBLE DURING THE CONSTRUCTION OPERATIONS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A FENCE TO CONTROL LIVESTOCK IN AREAS WHERE PASTURES ARE SEVERED. WIRE FENCE MAY BE CONSTRUCTED INITIALLY, OR IN LIEU THEREOF, THE CONTRACTOR AT HIS OWN EXPENSE, MAY ELECT TO PROVIDE TEMPORARY FENCING SUITABLE TO CONTAIN LIVESTOCK.
8. THIS PROJECT IS COVERED UNDER A SECTION 404 NATIONWIDE 14 PERMIT. REFER TO SECTION 110 OF THE STANDARD SPECIFICATIONS, EDITION OF 2014, FOR PERMIT REQUIREMENTS.
9. ALL FLEXIBLE BASE AND ASPHALTIC PAVEMENTS REMOVED SHALL BE PAID FOR UNDER THE ITEM NO. 210 - UNCLASSIFIED EXCAVATION.
10. 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.

9/2/2016

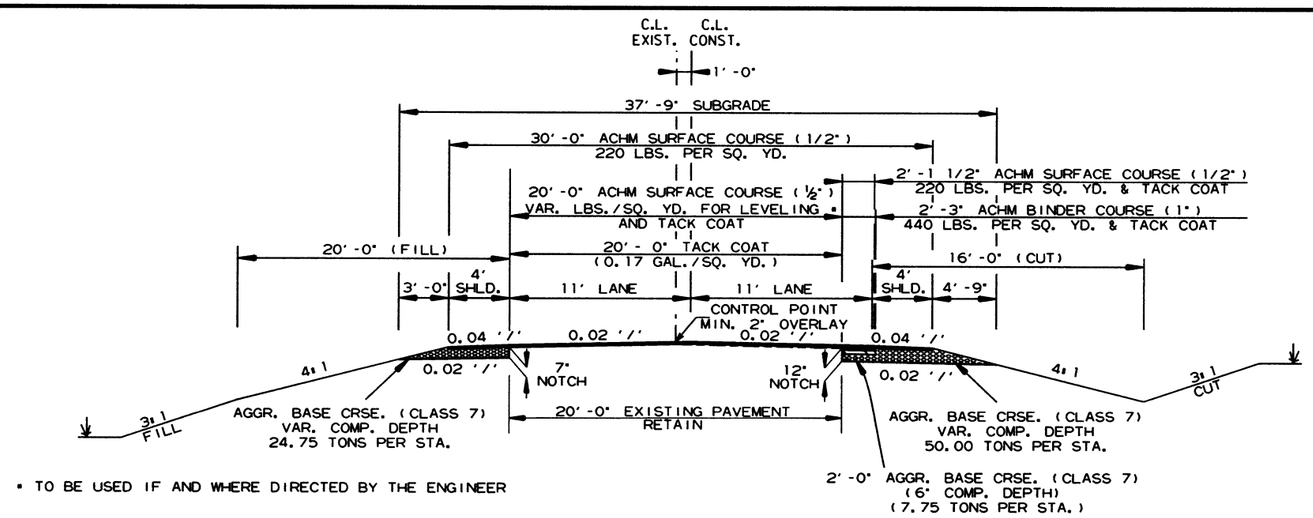
R070368.DGN

INDEX OF SHEETS, GOVERNING SPECIFICATIONS, AND GENERAL NOTES

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				6	ARK.			
				JOB NO.		070368	3	335

(2) TYPICAL SECTIONS OF IMPROVEMENT

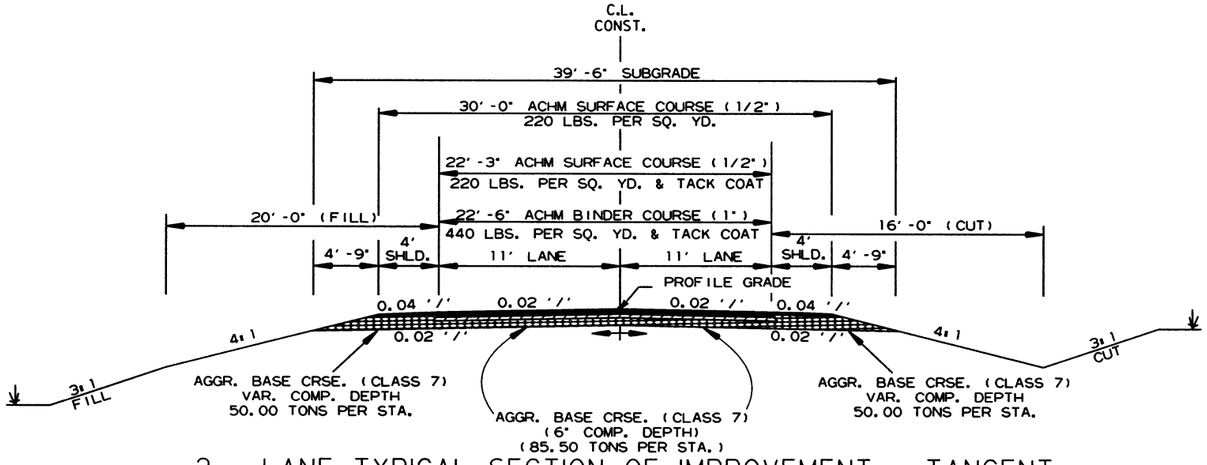
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



* TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

2 - LANE TYPICAL SECTION OF IMPROVEMENT - TANGENT NOTCH, WIDEN, & OVERLAY

STA.	702+68.00	TO STA.	733+00.00	
STA.	743+40.00	TO STA.	746+00.00	
STA.	753+50.00	TO STA.	770+57.00	
STA.	770+57.00	TO STA.	775+97.00	- TRANSITION FROM 2-LANE TO 3-LANE
STA.	777+90.00	TO STA.	783+30.00	- TRANSITION FROM 3-LANE TO 2-LANE
STA.	783+30.00	TO STA.	876+50.00	
STA.	877+00.00	TO STA.	911+50.00	
STA.	913+50.00	TO STA.	989+00.00	
STA.	999+98.23	TO STA.	1063+00.00	
STA.	1063+00.00	TO STA.	1063+50.00	- 50' TRANSITION TO EXISTING OVERLAY
STA.	1071.80.00	TO STA.	1072+30.00	- 50' TRANSITION FROM EXISTING OVERLAY
STA.	1072+30.00	TO STA.	1088+55.03	



2 - LANE TYPICAL SECTION OF IMPROVEMENT - TANGENT FULL DEPTH

STA.	700+21.07	TO STA.	702+65.00	
STA.	733+00.00	TO STA.	733+11.00	
STA.	733+11.00	TO STA.	735+81.00	- TRANSITION FROM 2-LANE TO 3-LANE
STA.	737+73.00	TO STA.	740+43.00	- TRANSITION FROM 3-LANE TO 2-LANE
STA.	740+43.00	TO STA.	743+00.00	
STA.	746+00.00	TO STA.	753+50.00	
STA.	876+50.00	TO STA.	877+00.00	
STA.	911+50.00	TO STA.	913+50.00	
STA.	989+00.00	TO STA.	999+98.23	

NOTES:
REFER TO CROSS SECTIONS FOR DEVIATION FROM THE NORMAL SLOPES. NO CHANGES SHALL BE MADE FROM THE PLANNED SLOPES WITHOUT THE APPROVAL OF THE ENGINEER.

THE THICKNESS OF AGGREGATE BASE COURSE SHALL BE WITHIN PLUS OR MINUS ONE INCH OF THE PLAN THICKNESS SHOWN. THE CONTRACTOR WILL CORRECT ANY DEFICIENT THICKNESS THAT DOES NOT MEET TOLERANCE INDICATED. PAYMENT WILL NOT BE MADE FOR MATERIAL PLACED IN EXCESS OF THE TOLERANCE INDICATED.

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9/27/2016

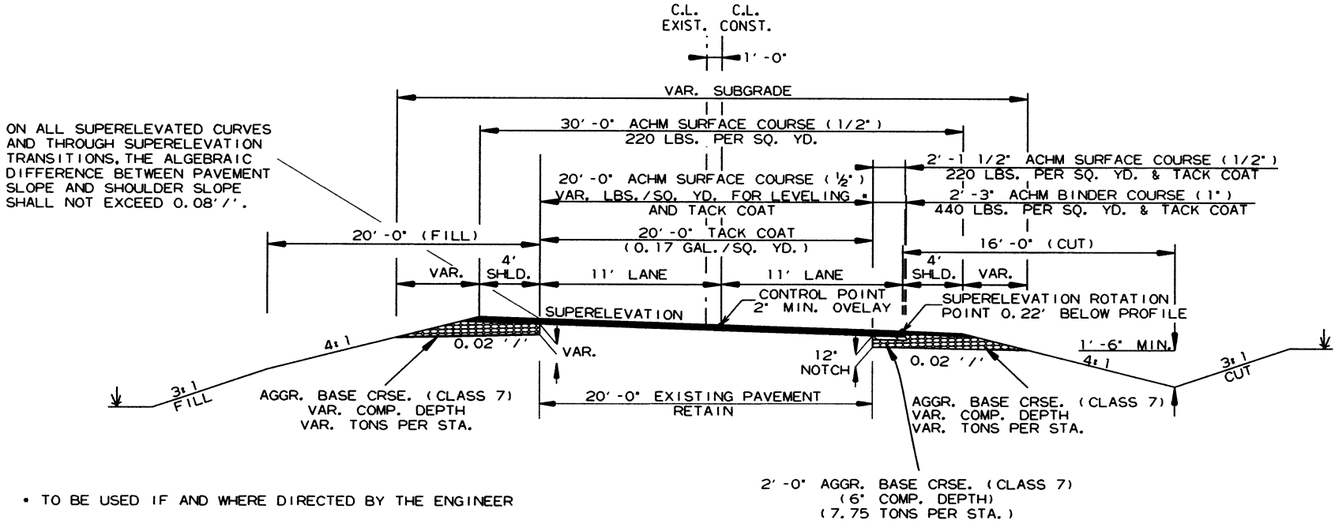
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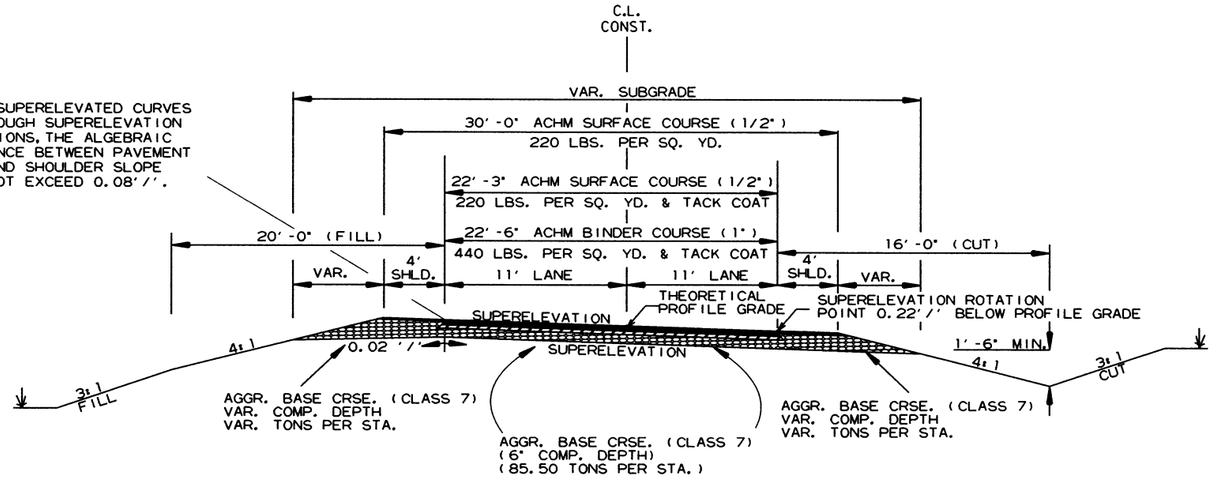
(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



* TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

2 - LANE TYPICAL SECTION OF IMPROVEMENT - SUPERELEVATION NOTCH, WIDEN, & OVERLAY



2 - LANE TYPICAL SECTION OF IMPROVEMENT - SUPERELEVATION FULL DEPTH

NOTES:
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9/27/2016

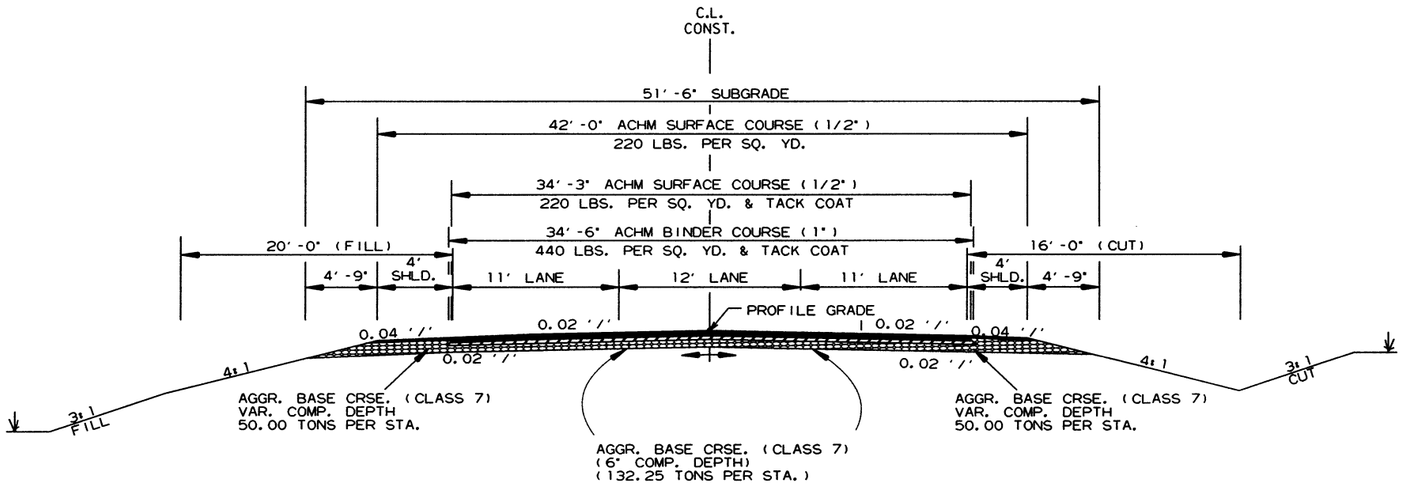
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(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



3 - LANE TYPICAL SECTION OF IMPROVEMENT - TANGENT
FULL DEPTH

STA. 735+81.00 TO STA. 737+73.00

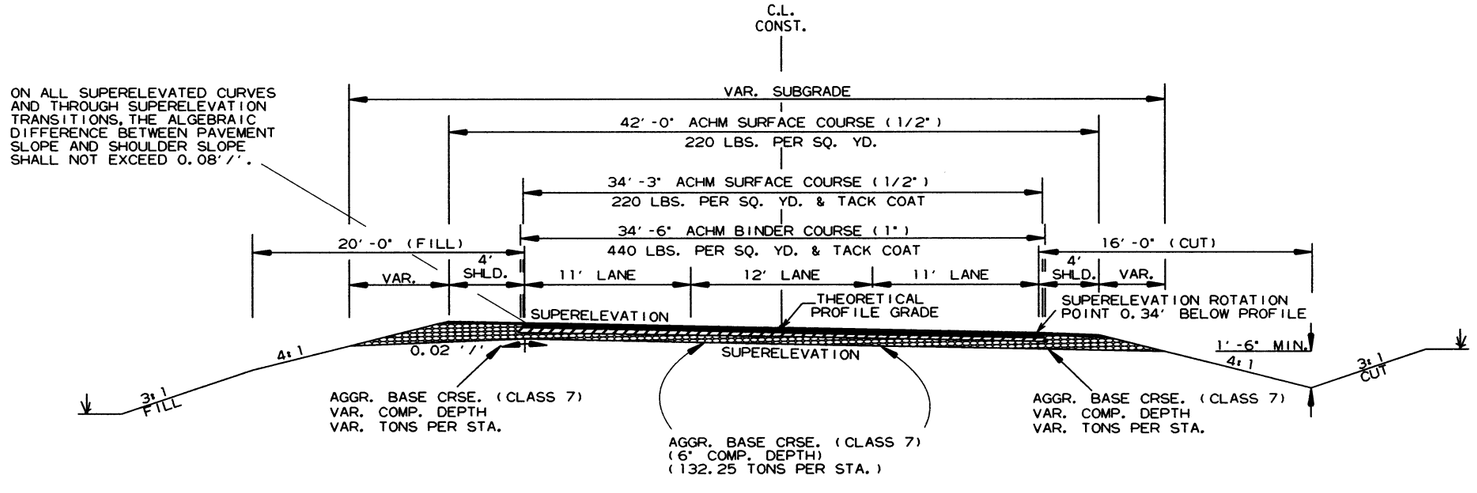
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3 - LANE TYPICAL SECTION OF IMPROVEMENT - SUPERELEVATION
FULL DEPTH

9/27/2016

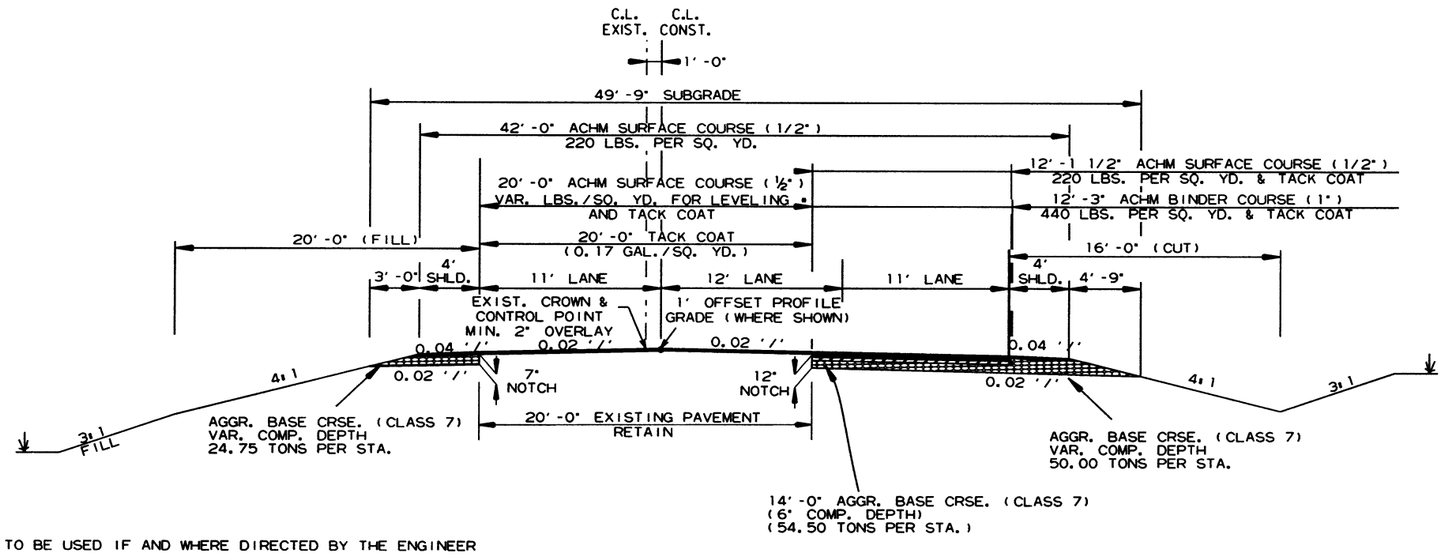
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(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



* TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

3 - LANE TYPICAL SECTION OF IMPROVEMENT - TANGENT NOTCH, WIDEN, & OVERLAY

NOTES:
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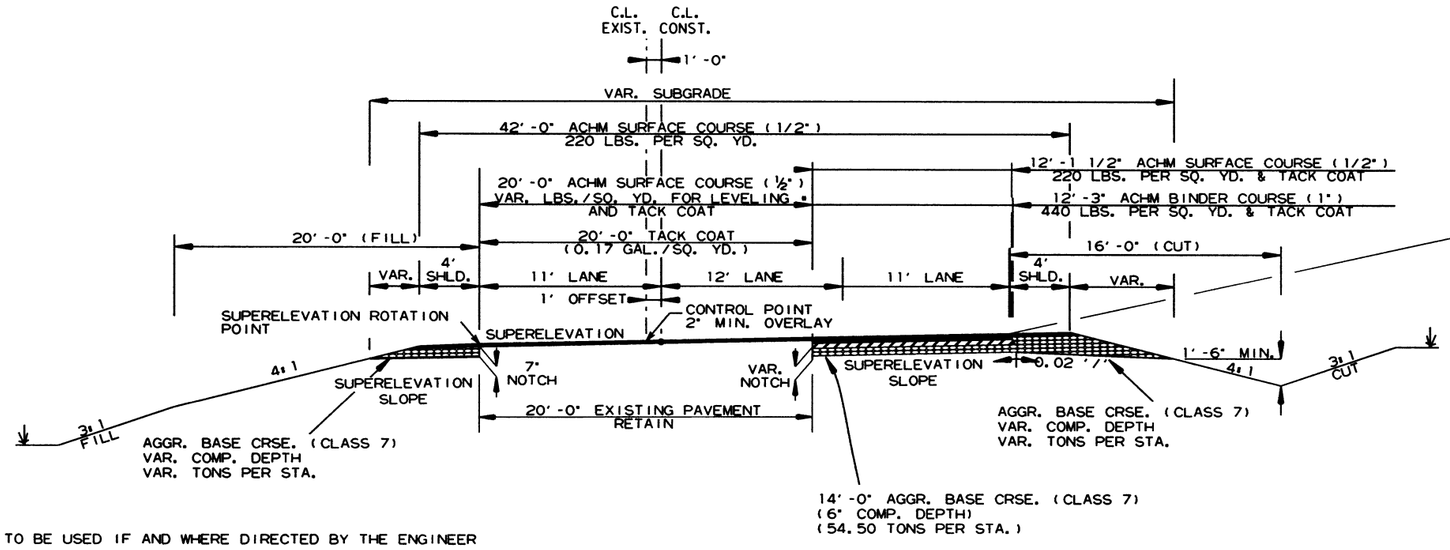
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THE FINAL 2" OF SURFACE COURSE IS TO BE PLACED AFTER ALL OTHER COURSES HAVE BEEN LAID. LONGITUDINAL JOINTS SHALL BE AT LANE LINES.

AFTER PLACING FINAL 2" OF SURFACE COURSE, THE EXISTING SLOPE SHALL BE REDRESSED AS DIRECTED BY THE ENGINEER PRIOR TO SEEDING IN ORDER TO MAINTAIN A UNIFORM SLOPE. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS CONTRACT ITEMS.

THE CONTRACTOR WILL BE ALLOWED TO SUBSTITUTE ACHM SURFACE COURSE (1/2") IN LIEU OF AGGREGATE BASE COURSE UNDER THE PROPOSED SHOULDER AT NO ADDITIONAL COST TO THE DEPARTMENT. MEASUREMENT WILL BE BASED UPON CALCULATIONS FROM THE PLAN DIMENSIONS.



ON ALL SUPERELEVATED CURVES AND THROUGH SUPERELEVATION TRANSITIONS, THE ALGEBRAIC DIFFERENCE BETWEEN PAVEMENT SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 0.08'/'.

* TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

3 - LANE TYPICAL SECTION OF IMPROVEMENT - SUPERELEVATION NOTCH, WIDEN, & OVERLAY

STA. 775+97.00 TO STA. 777+90.00

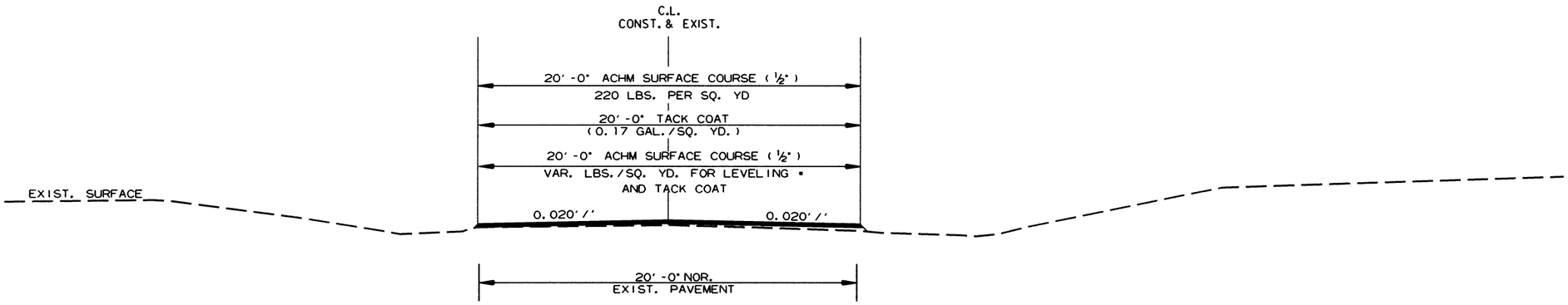
9/27/2016

R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	7	335

(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



2 - LANE TYPICAL SECTION OF IMPROVEMENT OVERLAY

* TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

STA. 1063+50.00 TO STA. 1071+80.00

THE FINAL 2" OF SURFACE COURSE IS TO BE PLACED AFTER ALL OTHER COURSES HAVE BEEN LAID. LONGITUDINAL JOINTS SHALL BE AT LANE LINES.

AFTER PLACING FINAL 2" OF SURFACE COURSE, THE EXISTING SLOPE SHALL BE REDRESSED AS DIRECTED BY THE ENGINEER PRIOR TO SEEDING IN ORDER TO MAINTAIN A UNIFORM SLOPE. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS CONTRACT ITEMS.

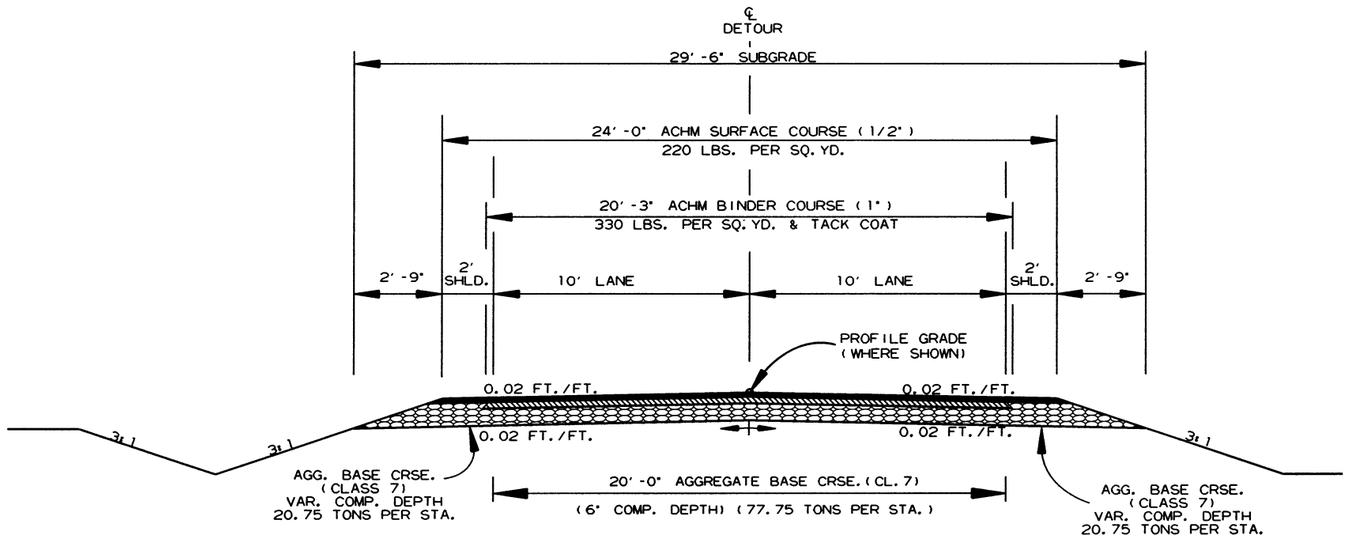
ASPHALT FOR LEVELING OF EXISTING PAVEMENT SHALL BE PLACED ONLY IF AND WHERE DIRECTED BY THE ENGINEER. CALCULATIONS FOR THE AMOUNT OF LEVELING AND/OR LEVELING OPERATIONS SHALL BE PERFORMED BEFORE CONSTRUCTING NOTCH AND WIDENING. CALCULATIONS WILL NOT BE PAID FOR DIRECTLY BUT WILL BE CONSIDERED TO BE INCLUDED IN THE VARIOUS PAY ITEMS.

R070368.DGN 9/27/2016

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				6	ARK.			
				JOB NO.		070368	8	335

(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



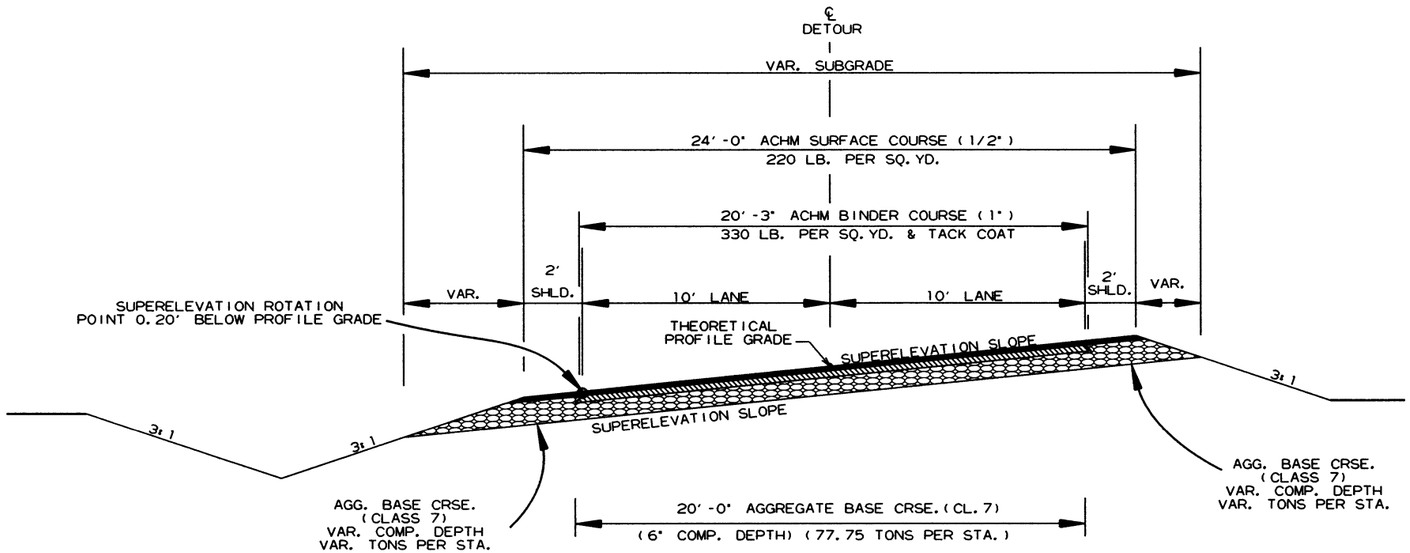
TYPICAL SECTIONS OF IMPROVEMENT
DETOUR ROAD - NORMAL CROWN

STA. 0+37.09 TO STA. 11+63.68 DETOUR =
STA. 872+00.00 TO STA. 881+02.12 MAIN LANES

NOTES:
REFER TO CROSS SECTIONS FOR DEVIATION FROM THE NORMAL SLOPES. NO CHANGES SHALL BE MADE FROM THE PLANNED SLOPES WITHOUT THE APPROVAL OF THE ENGINEER.

THE FINAL 2" OF SURFACE COURSE IS TO BE PLACED AFTER ALL OTHER COURSES HAVE BEEN LAID. LONGITUDINAL JOINTS SHALL BE AT LANE LINES.

THE THICKNESS OF AGGREGATE BASE COURSE SHALL BE WITHIN PLUS OR MINUS ONE INCH OF THE PLAN THICKNESS SHOWN. THE CONTRACTOR WILL CORRECT ANY DEFICIENT THICKNESS THAT DOES NOT MEET TOLERANCE INDICATED. PAYMENT WILL NOT BE MADE FOR MATERIAL PLACED IN EXCESS OF THE TOLERANCE INDICATED.



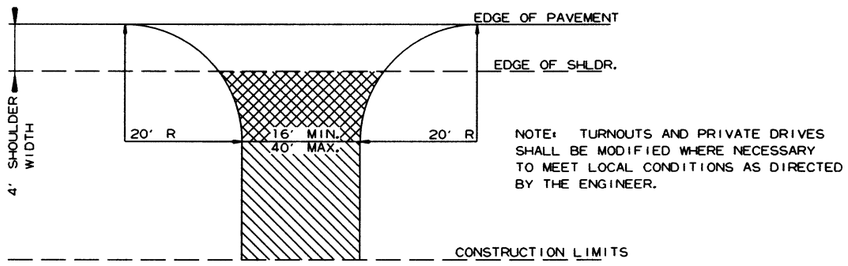
TYPICAL SECTIONS OF IMPROVEMENT
DETOUR ROAD - SUPERELEVATION

9/27/2016

R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	9	335

(2) SPECIAL DETAILS

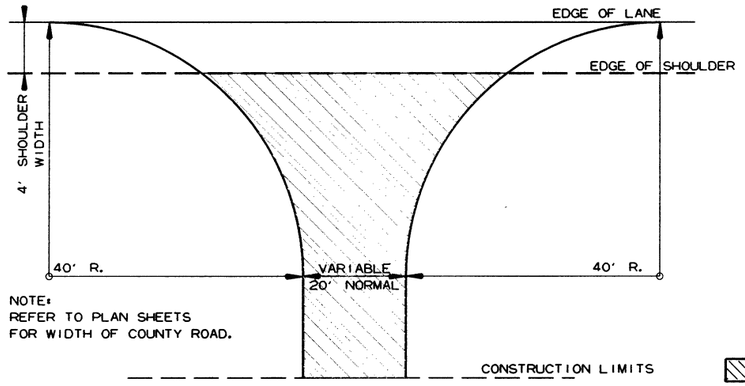


NOTE: TURNOUTS AND PRIVATE DRIVES SHALL BE MODIFIED WHERE NECESSARY TO MEET LOCAL CONDITIONS AS DIRECTED BY THE ENGINEER.

ASPHALT CONCRETE HOT MIX SURFACE COURSE (220 LBS. PER SQ. YD.)
AGGREGATE BASE COURSE (CLASS 7)
7" COMP. DEPTH IF ASPHALT DRIVE EXIST OR
6" CONCRETE IF CONCRETE DRIVE EXIST.

AGGREGATE BASE COURSE (CLASS 7)
9" COMP. DEPTH OR CONFORM TO EXISTING DRIVEWAY

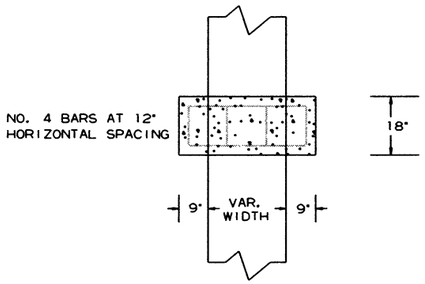
DETAIL FOR DRIVEWAY TURNOUTS



NOTE:
REFER TO PLAN SHEETS FOR WIDTH OF COUNTY ROAD.

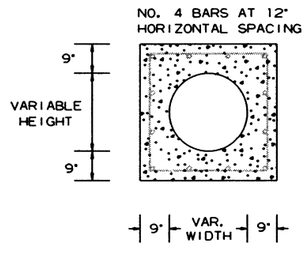
ACHM SURFACE COURSE (1/2") (220 LBS. PER SQ. YD.) AND AGGREGATE BASE COURSE (CLASS 7) 7" COMP. DEPTH.

DETAIL FOR COUNTY ROAD TURNOUTS

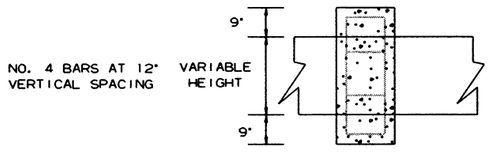


TOP VIEW

MIN 3" COVER

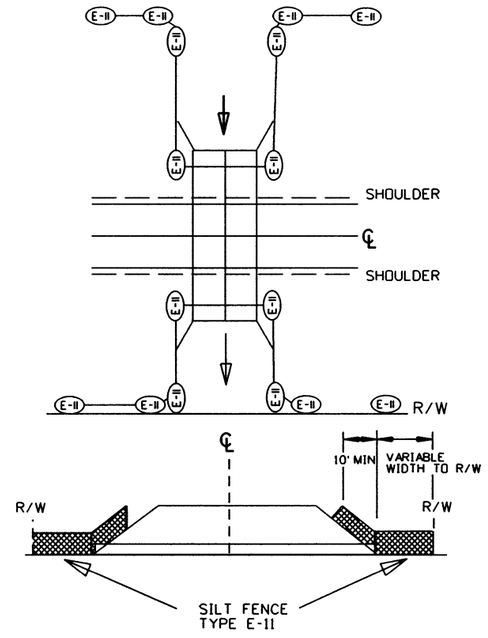


FRONT VIEW



SIDE VIEW

PIPE EXTENSION REINFORCED CONCRETE COLLAR DETAIL



DETAILS OF SILT FENCE AT BOX CULVERTS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

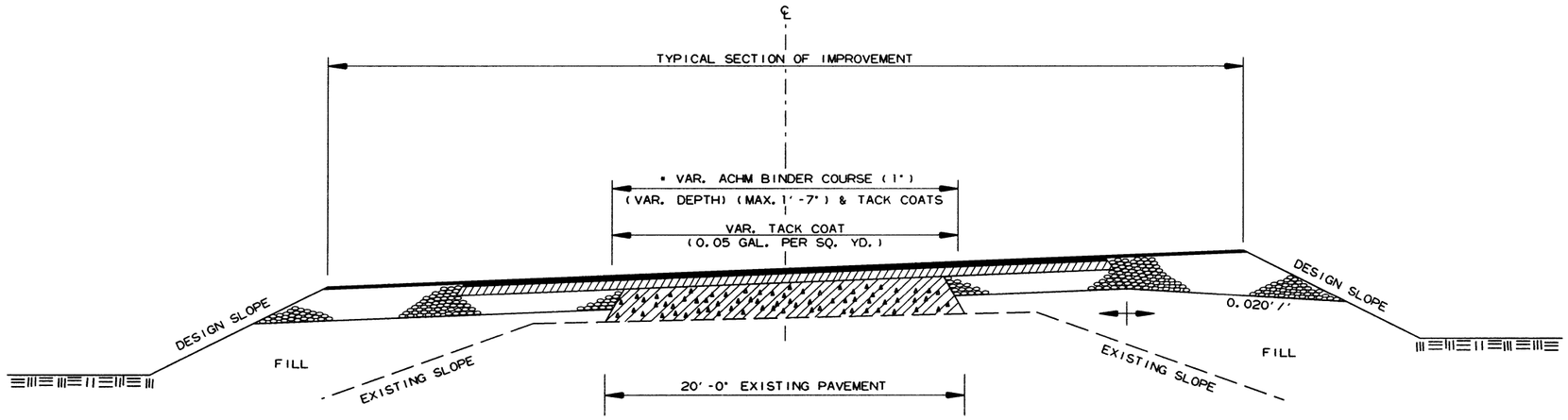
9/26/2016

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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.		070368	10	335

(2) SPECIAL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



* 6" AGGREGATE BASE COURSE (CLASS 7)
TO BE REPLACED WITH ACHM BINDER COURSE (1")

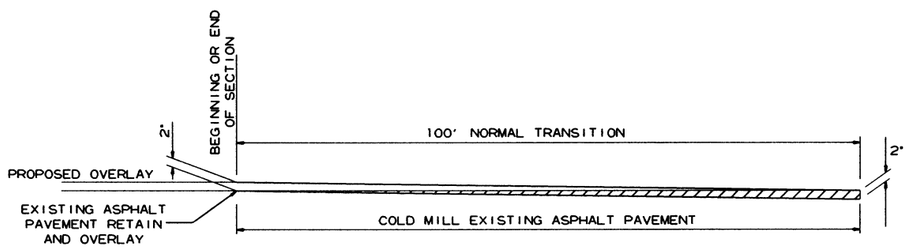
METHOD OF RAISING GRADE

NOTES:

(1) THIS DETAIL TO BE USED ONLY WHERE DIRECTED BY THE ENGINEER.

(2) QUANTITIES FOR METHOD OF GRADE RAISE USING ASPHALT WERE CALCULATED ON THIS PROJECT AT LOCATIONS WHERE THE DISTANCE BETWEEN THE EXISTING ASPHALT ROADWAY AND THE PROPOSED SUBGRADE WAS ONE FOOT OR LESS.

(3) IN LOCATIONS WHERE THE DISTANCE BETWEEN THE PROPOSED SUBGRADE AND THE EXISTING ASPHALT ROADWAY IS MORE THAN ONE FOOT, SCARIFICATION OF THE EXISTING ASPHALT ROADWAY WILL BE REQUIRED AS STATED IN SECTION 210, SUBSECTION 210.09, OF THE STANDARD SPECIFICATIONS.



DETAIL FOR TRANSITIONS

9/26/2016

R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	11	335

① SPECIAL DETAILS

STATE OF ARKANSAS
CHARLES R. ELLIS
REGISTERED PROFESSIONAL ENGINEER
No. 9235
8-11-16

TABULAR DATA BY: EOR DATE: 07/12/2016
CHECKED BY: NSA DATE: 07/12/2016

INLET WINGWALL TABLE

OVER ALL WIDTH	CLEAR HEIGHT	FOOTING THK.	WING WALL THK.	BOX SKEW (DEG.)	SLOPE	HDWL LENGTH	HEEL	WALL HEIGHT AT HDWL	WALL HEIGHT AT WING END	WINGWALL ANGLE (DEGREE) WING A	WINGWALL ANGLE (DEGREE) WING B	FOOTING WIDTH AT WALL END	WIDTH OF WING FOOTINGS AT HDWL WING A	WIDTH OF WING FOOTINGS AT HDWL WING B	FOOTING DIMENSION PARALLEL WITH HDWL WING A	FOOTING DIMENSION PARALLEL WITH HDWL WING B	LENGTH OF WINGWALLS WING A	LENGTH OF WINGWALLS WING B	LENGTH OF FOOTING HEEL WING A	LENGTH OF FOOTING HEEL WING B
OW	H	WB	CW	SK	SL	K	HL	WH1	WH2	AF1	AF2	WE	WF1	WF2	G1	G2	W1	W2	W3	W4
32'-4"	5'-0"	0'-9"	0'-8"	0	3:1	31'-4"	1'-0"	5'-10"	1'-8"	30	30	2'-2"	2'-11 3/4"	2'-11 3/4"	0'-11 1/4"	0'-11 1/4"	14'-0"	14'-0"	15'-10 5/8"	15'-10 5/8"

CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if required)
INLET	INLET
CU.YD	LBS.
7.24	596

WING	F1 BAR SIZE	F1 MAX. SPACING	F1 NO. REQ'D	F1 LENGTHS VARY	F1 LENGTHS	F2 BAR SIZE	F2 SPACING	F2 NO. REQ'D	F2 LENGTHS	F3 BAR SIZE	F3 SPACING	F3 NO. REQ'D	F3 LENGTHS	F4 BAR SIZE	F4 SPACING	F4 NO. REQ'D	F4 LENGTHS VARY	F5 BAR SIZE	F5 SPACING	F5 NO. REQ'D	F5 LENGTHS	F6 BAR SIZE	F6 SPACING	F6 NO. REQ'D	F6 LENGTHS VARY	F6 LENGTHS	F7 BAR SIZE	F7 NO. REQ'D	F7 LENGTHS	F8 BAR SIZE	F8 SPACING	F8 NO. REQ'D	F8 LENGTHS VARY	F8 LENGTHS	F9 BAR SIZE	F9 SPACING	F9 NO. REQ'D	F9 LENGTHS	F10 BAR SIZE	F10 NO. REQ'D	F10 LENGTHS	F11 BAR SIZE	F11 NO. REQ'D	F11 LENGTHS	F12 BAR SIZE	F12 SPACING	F12 NO. REQ'D	F12 LENGTHS	REINF. STEEL QTY. PER WING (LBS)
WING A	4	12	14	L Min	2'-10"				L -				L -				Min								L Min	3'-3"								Min																
				L Max	7'-6"																				Max	7'-3"								-																
				X Min	0'-9"				X -				X -				2'-1"								X Min	1'-4"								1'-8"																
				X Max	1'-7"	-	-	-		-	-	-		4	18	6		4	18	2	13'-8"	4	18	10	Max	1'-4"	4	6	16'-9"	4	18	10	Max	-	-	-	-	Max	4	2	14'-2"	4	2	15'-8"	6	12	5	L 3'-4"	298
				Y Min	2'-2"				Y -				Y -				Max								Y Min	2'-0"								-														X 1'-8"	
				Y Max	6'-0"												12'-2"								Max	6'-0"								2'-6"														
WING B	4	12	14	L Min	2'-10"				L -				L -				Min								L Min	3'-3"								Min																
				L Max	7'-6"																				Max	7'-3"								-																
				X Min	0'-9"				X -				X -				2'-1"								X Min	1'-4"								1'-8"																
				X Max	1'-7"	-	-	-		-	-	-		4	18	6		4	18	2	13'-8"	4	18	10	Max	1'-4"	4	6	16'-9"	4	18	10	Max	-	-	-	-	Max	4	2	14'-2"	4	2	15'-8"	6	12	5	L 3'-4"	298
				Y Min	2'-2"				Y -				Y -				Max								Y Min	2'-0"								-														X 1'-8"	
				Y Max	6'-0"												12'-2"								Max	6'-0"								2'-6"														

MID-SECTION BAR LAP TABLE

# of Long. Laps Req'd.	SL = Section Length
0	< 40.0 ft
1	>40.0 ft - 78.0 ft
2	>78.0 ft - 116.0 ft
3	>116.0 ft - 154.0 ft
4	>154.0 ft - 192.0 ft
5	>192.0 ft - 230.0 ft
6	>230.0 ft - 268.0 ft
7	>268.0 ft - 306.0 ft
8	>306.0 ft -344.0 ft

Min. Bar Lap Length	
#4	1'-9"
#5	2'-2"
#6	2'-7"
#7	3'-6"
#8	4'-7"

Bar Pin Dia. Table	
#4	3"
#5	3 3/4"
#6	4 1/2"
#7	5 1/4"
#8	6"

This drawing to be used in conjunction with
SHEET 1 OF 4, "GENERAL DETAILS OF R.C. BOX CULVERT", 'GENERAL NOTES & LONGITUDINAL SECTION LENGTH SCHEDULE',
SHEET 3 OF 4, "GENERAL DETAILS OF R.C. BOX CULVERT", 'DETAILS OF MULTI-BARREL R.C. BOX CULVERT',
SHEET 4 OF 4, "GENERAL DETAILS OF R.C. BOX CULVERT", 'DETAILS OF WINGWALLS', and
STANDARD DRAWING RCB-2.

For additional information and outlet sections, see Sheet 2 of 2.

① Any Bar Lap Required for the Skewed End Section shall be considered subsidiary to the item "Reinforcing Steel - Roadway (Gr. 60)."

INLET SKEWED END SECTION

SKEW (DEGREE)	SLOPE	DESIGN FILL DEPTH (FT.)	CLEAR SPAN (FT.)	CLEAR HEIGHT (FT.)	SECTION LENGTH	TOP SLAB THK.	HDWL DEPTH	BOTTOM SLAB THK.	SIDE WALL THK.	INTERIOR WALL THK.	OVER ALL WIDTH	OVER ALL HEIGHT
SK	SL	D	S	H	LL	T	HD	B	C	W	OW	OH

TOP SLAB REINFORCING STEEL "a" SIZE	"a" SPACING	"a" LENGTHS VARY	"a" NO. REQ'D	TOP SLAB REINFORCING STEEL "c" SIZE	"c" SPACING	"c" LENGTHS VARY	"c" NO. REQ'D
		Max / Min				Max / Min	

BOTTOM SLAB REINFORCING STEEL "d" SIZE	"d" SPACING	"d" LENGTHS VARY	"d" NO. REQ'D	BOTTOM SLAB REINFORCING STEEL "f" SIZE	"f" SPACING	"f" LENGTHS VARY	"f" NO. REQ'D
		Max / Min				Max / Min	

SIDE WALL REINFORCING STEEL "f0" SIZE	"f0" SPACING	"f0" NO. REQ'D	"f0" LENGTH

INTERIOR WALL REINFORCING STEEL "f1" SIZE	"f1" SPACING	"f1" NO. REQ'D	"f1" LENGTH

TOP SLAB DISTRIBUTION REINFORCING STEEL "g" SIZE	"g" SPACING	"g" NO. REQ'D	"g" LENGTHS VARY
			Max / Min

BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e" SIZE	"e" SPACING	"e" NO. REQ'D	"e" LENGTHS VARY
			Max / Min

SIDE WALL DISTRIBUTION REINFORCING STEEL "d1" SIZE	"d1" SPACING	"d1" NO. REQ'D	"d1" LENGTH
			LONG / SHORT

INTERIOR WALL DISTRIBUTION REINFORCING STEEL "d2" SIZE	"d2" SPACING	"d2" NO. REQ'D	"d2" LENGTH
			LONG / SHORT

"k1" HDWL BARS SIZE	"k1" HDWL BARS LENGTH	"k1" HDWL BARS NO. REQ'D	"k2" HDWL BARS SIZE	"k2" HDWL BARS LENGTH	"k2" HDWL BARS NO. REQ'D	"h" HDWL BARS SIZE	"h" HDWL BARS LENGTH	"h" HDWL BARS Y	"h" HDWL BARS NO. REQ'D

CLASS "S" CONCRETE (Includes HDWL) CU. YDS.	① REINFORCING STEEL (GR 60) (Includes HDWL) LBS.

INLET SLOPE SECTION(S)

R.C. BOX SECTION	DESIGN FILL DEPTH (FT.) D	CLEAR SPAN (FT.) S	CLEAR HEIGHT (FT.) H	TOP SLAB THK. T	BOTTOM SLAB THK. B	SIDE WALL THK. C	INTERIOR WALL THK. W	OVER ALL WIDTH OW	OVER ALL HEIGHT OH	SECTION LENGTH (FT.) SL

LENGTH = OW - 4" + BENDS "a" SIZE	"a" L	Bent "b" SIZE	Bent "b" L	"c" SIZE	"c" L	"c" SPACING	"c" NO. REQ'D

BOTTOM SLAB REINFORCING STEEL LENGTH = OW - 4" + BENDS "d" SIZE	"d" L	Bent "b1" SIZE	Bent "b1" L	"f" SIZE	"f" L	"f" SPACING	"f" NO. REQ'D

SIDE WALL REINFORCING STEEL "f0" LENGTH = OH - 4" SIZE	SPACING	NO. REQ'D	LENGTH

INTERIOR WALL REINFORCING STEEL "f1" LENGTH = OH - 4" SIZE	SPACING	NO. REQ'D	LENGTH

TOP SLAB DISTRIBUTION REINFORCING STEEL "g" LENGTH = SL SIZE	SPACING	NO. REQ'D

BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e" LENGTH = SL SIZE	SPACING	NO. REQ'D

SIDE WALL DISTRIBUTION REINFORCING STEEL "d1" LENGTH = SL SIZE	SPACING	NO. REQ'D

INTERIOR WALL DISTRIBUTION REINFORCING STEEL "d2" LENGTH = SL SIZE	SPACING	NO. REQ'D

HDWL DEPTH HD	ADDITIONAL REINF. FOR HDWL LBS.	"h" HDWL BARS SIZE	"h" HDWL BARS Y	"h" HDWL BARS LENGTH	"h" HDWL BARS NO. REQ'D
3"	43	4	0'-7"	1'-7"	34

CLASS "S" CONCRETE CU. YDS.	REINFORCING STEEL (GR. 60) LBS.
0.30	79
TOTAL	
0.30	79

Design Fill Depth	Range of Actual Fill Depth
2	0.0 ft - 2.0 ft
5	>2.0 ft - 5.0 ft
10	>5.0 ft - 10.0 ft
15	>10.0 ft - 15.0 ft
20	>15.0 ft - 20.0 ft
25	>20.0 ft - 25.0 ft
30	>25.0 ft - 30.0 ft
35	>30.0 ft - 35.0 ft
40	>35.0 ft - 40.0 ft

Data shown for Mid-Section, Slope Section(s), and Skewed End Section is based on the design fill depth shown in the table, see PLAN AND PROFILE SHEETS for actual fill depth.

MID-SECTION

R.C. BOX SECTION	DESIGN FILL DEPTH (FT.) D	CLEAR SPAN (FT.) S	CLEAR HEIGHT (FT.) H	TOP SLAB THK. T	BOTTOM SLAB THK. B	SIDE WALL THK. C	INTERIOR WALL THK. W	OVER ALL WIDTH OW	OVER ALL HEIGHT OH	SECTION LENGTH (FT.) SL
A	5	10	5	10	10	6	8	32'-4"	6'-8"	64

TOP SLAB REINFORCING STEEL LENGTH = OW - 4" + BENDS "a" SIZE	"a" L	Bent "b" SIZE	Bent "b" L	"c" SIZE	"c" L	"c" SPACING	"c" NO. REQ'D
	4 32'-0"	8	32'-6"	6	32'-0"	13	59

BOTTOM SLAB REINFORCING STEEL LENGTH = OW - 4" + BENDS "d" SIZE	"d" L	Bent "b1" SIZE	Bent "b1" L	"f" SIZE	"f" L	"f" SPACING	"f" NO. REQ'D
	4 32'-0"	5	32'-5"	4	32'-0"	13	59

SIDE WALL REINFORCING STEEL "f0" LENGTH = OH - 4" SIZE	SPACING	NO. REQ'D	LENGTH
	4 6	256	6'-4"

INTERIOR WALL REINFORCING STEEL "f1" LENGTH = OH - 4" SIZE	SPACING	NO. REQ'D	LENGTH
	4 12	256	6'-4"

TOP SLAB DISTRIBUTION REINF. STEEL "g" LENGTH = SL SIZE	SPACING	NO. REQ'D
	4 11	71

BOTTOM SLAB DISTRIBUTION REINF. STEEL "e" LENGTH = SL SIZE	SPACING	NO. REQ'D
	4 11	71

SIDE WALL DISTRIBUTION REINF. STEEL "d1" LENGTH = SL SIZE	SPACING	NO. REQ'D
	4 12	10

INTERIOR WALL DISTRIBUTION REINF. STEEL "d2" LENGTH = SL SIZE	SPACING	NO. REQ'D
	4 12	20

CLASS "S" CONCRETE CU. YDS.	REINFORCING STEEL (GR. 60) LBS.
155.39	23472

SHEET 1 OF 2
DETAILS OF R.C. BOX CULVERT
TRIPLE BARREL BOX CULVERT
Sta. 876+79

SPECIAL DETAILS

Ver. LJ14 b070368_cl.dgn

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	12	335

① SPECIAL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-11-16
CHARLES R. ELLIS

TABULAR DATA BY: EOR DATE: 07/12/2016
CHECKED BY: NSA DATE: 7/19/2016

OUTLET WINGWALL TABLE

OVER ALL WIDTH	CLEAR HEIGHT	FOOTING THK.	WING WALL THK.	BOX SKEW (DEG.)	SLOPE	HDWL LENGTH	HEEL	WALL HEIGHT AT HDWL	WALL HEIGHT AT WING END	WINGWALL ANGLE (DEGREE) WING A	WINGWALL ANGLE (DEGREE) WING B	FOOTING WIDTH AT WALL END	WIDTH OF WING FOOTINGS AT HDWL WING A	WIDTH OF WING FOOTINGS AT HDWL WING B	FOOTING DIMENSION PARALLEL WITH HDWL WING A	FOOTING DIMENSION PARALLEL WITH HDWL WING B	LENGTH OF WINGWALLS WING A	LENGTH OF WINGWALLS WING B	LENGTH OF FOOTING HEEL WING A	LENGTH OF FOOTING HEEL WING B
OW	H	WB	CW	SK	SL	K	HL	WH1	WH2	AF1	AF2	WE	WF1	WF2	G1	G2	W1	W2	W3	W4
32'-4"	5'-0"	0'-9"	0'-8"	0	3:1	31'-4"	1'-0"	5'-10"	1'-8"	30	30	2'-2"	2'-11 3/4"	2'-11 3/4"	0'-11 1/4"	0'-11 1/4"	14'-0"	14'-0"	15'-10 5/8"	15'-10 5/8"

CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if required)
OUTLET	OUTLET
CU.YD	LBS.
8.30	596

WING	F1 BAR SIZE	F1 MAX. SPACING	F1 NO. REQ'D	F1 LENGTHS VARY			F2 BAR SIZE	F2 SPACING	F2 NO. REQ'D	F2 LENGTHS			F3 BAR SIZE	F3 SPACING	F3 NO. REQ'D	F3 LENGTHS			F4 BAR SIZE	F4 SPACING	F4 NO. REQ'D	F4 LENGTHS VARY
WING A	4	12	14	L	Min	2'-10"	-	-	-	L	-		-	-	-	L	-		4	18	6	Min
					Max	7'-6"																2'-1"
				X	Min	0'-9"				X	-					X	-					Max
					Max	1'-7"																12'-2"
				Y	Min	2'-2"				Y	-					Y	-					
					Max	6'-0"																
WING B	4	12	14	L	Min	2'-10"	-	-	-	L	-		-	-	-	L	-		4	18	6	Min
					Max	7'-6"																2'-1"
				X	Min	0'-9"				X	-					X	-					Max
					Max	1'-7"																12'-2"
				Y	Min	2'-2"				Y	-					Y	-					
					Max	6'-0"																

WING	F5 BAR SIZE	F5 SPACING	F5 NO. REQ'D	F5 LENGTHS	F6 BAR SIZE	F6 SPACING	F6 NO. REQ'D	F6 LENGTHS VARY			F7 BAR SIZE	F7 NO. REQ'D	F7 LENGTHS	F8 BAR SIZE	F8 SPACING	F8 NO. REQ'D	F8 LENGTHS VARY		F9 BAR SIZE	F9 SPACING	F9 NO. REQ'D	F9 LENGTHS			F10 BAR SIZE	F10 NO. REQ'D	F10 LENGTHS
WING A	4	18	2	13'-8"	4	18	10	L	Min	3'-3"	4	6	16'-9"	4	18	10	Min		-	-	-	Min			4	2	14'-2"
									Max	7'-3"							1'-8"					-					
								X	Min	1'-4"																	
									Max	1'-4"							Max					Max					
								Y	Min	2'-0"							2'-6"					-					
									Max	6'-0"																	
WING B	4	18	2	13'-8"	4	18	10	L	Min	3'-3"	4	6	16'-9"	4	18	10	Min		-	-	-	Min			4	2	14'-2"
									Max	7'-3"							1'-8"					-					
								X	Min	1'-4"																	
									Max	1'-4"							Max					Max					
								Y	Min	2'-0"							2'-6"					-					
									Max	6'-0"																	

WING	F11 BAR SIZE	F11 NO. REQ'D	F11 LENGTHS	F12 BAR SIZE	F12 SPACING	F12 NO. REQ'D	F12 LENGTHS		REINF. STEEL QTY. PER WING (LBS)
WING A	4	2	15'-8"	6	12	5	L	3'-4"	298
							X	1'-8"	
WING B	4	2	15'-8"	6	12	5	L	3'-4"	298
							X	1'-8"	

Min. Bar Lap Length	
#4	1'-9"
#5	2'-2"
#6	2'-7"
#7	3'-6"
#8	4'-7"

Bar Pin Dia. Table	
#4	3"
#5	3 3/4"
#6	4 1/2"
#7	5 1/4"
#8	6"

① Any Bar Lap Required for the Skewed End Section shall be considered subsidiary to the item "Reinforcing Steel - Roadway (Gr. 60)."

OUTLET SKEWED END SECTION

SKEW (DEGREE)	SLOPE	DESIGN FILL DEPTH (FT.)	CLEAR SPAN (FT.)	CLEAR HEIGHT (FT.)	SECTION LENGTH	TOP SLAB THK.	HDWL DEPTH	BOTTOM SLAB THK.	SIDE WALL THK.	INTERIOR WALL THK.	OVER ALL WIDTH	OVER ALL HEIGHT	TOP SLAB REINFORCING STEEL "a" SIZE	"a" SPACING	"a" LENGTHS VARY	"a" NO. REQ'D	TOP SLAB REINFORCING STEEL "c" SIZE	"c" SPACING	"c" LENGTHS VARY	"c" NO. REQ'D	BOTTOM SLAB REINFORCING STEEL "d" SIZE	"d" SPACING	"d" LENGTHS VARY	"d" NO. REQ'D	BOTTOM SLAB REINFORCING STEEL "f" SIZE	"f" SPACING	"f" LENGTHS VARY	"f" NO. REQ'D
SK	SL	D	S	H	LL	T	HD	B	C	W	OW	OH																
															Max				Max				Max				Max	
															Min				Min				Min				Min	

SIDE WALL REINFORCING STEEL "f0" SIZE	SPACING	NO. REQ'D	LENGTH	INTERIOR WALL REINFORCING STEEL "f1" SIZE	SPACING	NO. REQ'D	LENGTH	TOP SLAB DISTRIBUTION REINFORCING STEEL "g" SIZE	SPACING	NO. REQ'D	LENGTHS VARY	BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e" SIZE	SPACING	NO. REQ'D	LENGTHS VARY	SIDE WALL DISTRIBUTION REINFORCING STEEL "d1" SIZE	SPACING	NO. REQ'D	LENGTH	INTERIOR WALL DISTRIBUTION REINFORCING STEEL "d2" SIZE	SPACING	NO. REQ'D	LENGTH
											Max				Max				LONG				LONG
											Min				Min				SHORT				SHORT

CLASS "S" CONCRETE (Includes HDWL)	① REINFORCING STEEL (GR 60) (Includes HDWL)
CU. YDS.	LBS.

"k1" HDWL BARS SIZE	"k1" HDWL BARS LENGTH	"k1" HDWL BARS NO. REQ'D	"k2" HDWL BARS SIZE	"k2" HDWL BARS LENGTH	"k2" HDWL BARS NO. REQ'D	"h" HDWL BARS SIZE	"h" HDWL BARS LENGTH	"h" HDWL BARS Y	"h" HDWL BARS NO. REQ'D

OUTLET SLOPE SECTION(S)

R.C. BOX SECTION	DESIGN FILL DEPTH (FT.)	CLEAR SPAN (FT.)	CLEAR HEIGHT (FT.)	TOP SLAB THK.	BOTTOM SLAB THK.	SIDE WALL THK.	INTERIOR WALL THK.	OVER ALL WIDTH	OVER ALL HEIGHT	SECTION LENGTH (FT.)	LENGTH = OW - 4" + BENDS "a" SIZE	"a" L	Bent "b" SIZE	Bent "b" L	"c" SIZE	"c" L	"c" SPACING	"c" NO. REQ'D	BOTTOM SLAB REINFORCING STEEL LENGTH = OW - 4" + BENDS "d" SIZE	"d" L	Bent "b1" SIZE	Bent "b1" L	"f" SIZE	"f" L	"f" SPACING	"f" NO. REQ'D
	D	S	H	T	B	C	W	OW	OH	SL																

SIDE WALL REINFORCING STEEL "f0" SIZE	SPACING	NO. REQ'D	LENGTH	INTERIOR WALL REINFORCING STEEL "f1" SIZE	SPACING	NO. REQ'D	LENGTH	TOP SLAB DISTRIBUTION REINFORCING STEEL "g" SIZE	SPACING	NO. REQ'D	BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e" SIZE	SPACING	NO. REQ'D	SIDE WALL DISTRIBUTION REINFORCING STEEL "d1" SIZE	SPACING	NO. REQ'D	INTERIOR WALL DISTRIBUTION REINFORCING STEEL "d2" SIZE	SPACING	NO. REQ'D

CLASS "S" CONCRETE	REINFORCING STEEL (GR. 60)
CU. YDS.	LBS.
TOTAL	
0.30	79

HDWL DEPTH	ADDITIONAL REINF. FOR HDWL	"h" HDWL BARS SIZE	"h" HDWL BARS Y	"h" HDWL BARS LENGTH	"h" HDWL BARS NO. REQ'D
HD	LBS.				
3"	43	4	0'-7"	1'-7"	34

The required number of bars and lengths shown are for estimating purpose only. The actual number and length required shall be determined in field.

Unless otherwise noted, all dimensions are in inches.

SHEET 2 OF 2
DETAILS OF R.C. BOX CULVERT

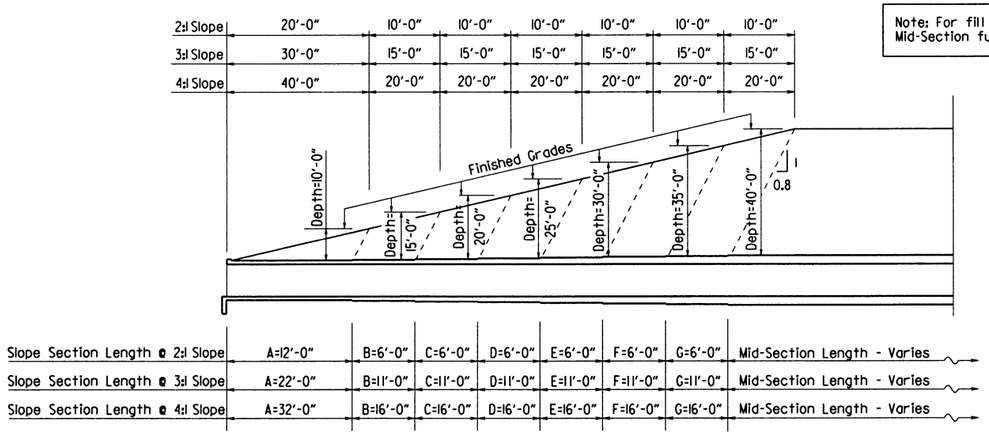
TRIPLE BARREL BOX CULVERT
Sta. 876+79

SPECIAL DETAILS

Ver. LI14 b070368_cl.dgn

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	13	335

① SPECIAL DETAILS

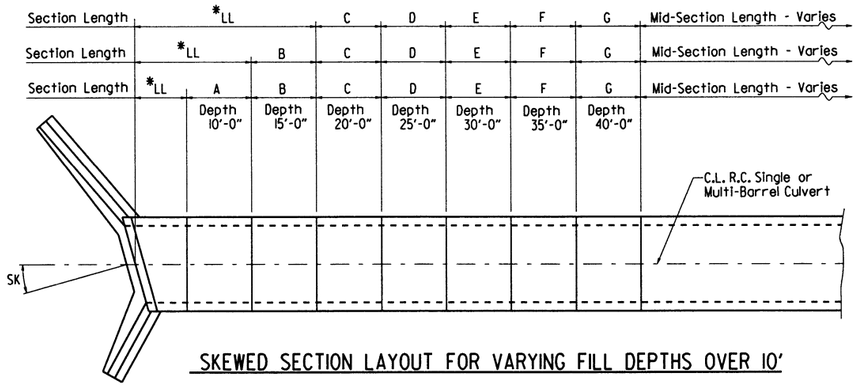


Note: For fill depths 10' and under, use Mid-Section full length of box culvert.

LONGITUDINAL SECTION LENGTH SCHEDULE FOR VARYING FILL DEPTHS OVER 10'

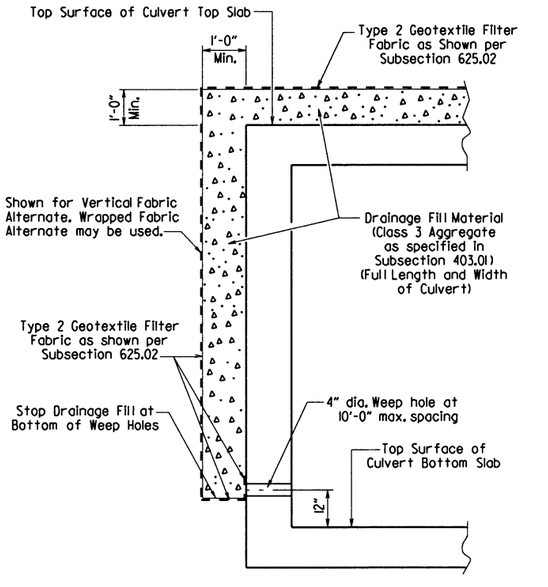
Lengths for Non-Skewed Boxes

*LL = Skewed End Section Length - See "Skewed End Section Details" Length LL varies with skew angle, overall box width and fill depth and may eliminate the need for some slope section lengths as shown.



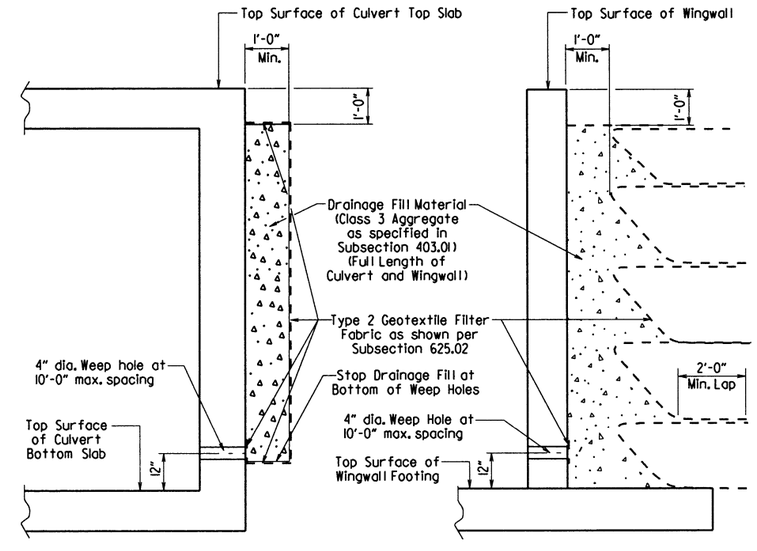
SKEWED SECTION LAYOUT FOR VARYING FILL DEPTHS OVER 10'





CULVERT DRAINAGE DETAIL FOR ROCK FILL

This detail shall be used when rock fill is specified for embankment construction.



VERTICAL FABRIC ALTERNATE
(Shown for Culvert, Similar for Wingwall)

WRAPPED FABRIC ALTERNATE
(Shown for Wingwall, Similar for Culvert)

For Details of Excavation and Pay Limits, see Standard Drawing RCB-2.

WINGWALL & CULVERT DRAINAGE DETAIL

GENERAL NOTES:

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (2014 edition) with applicable Supplemental Specifications and Special Provisions. Section and Subsection refer to the Standard Construction Specifications unless otherwise noted in the Plans.

DESIGN SPECIFICATIONS: AASHTO LRFD Bridge Design Specifications, Fifth Edition (2010) with 2010 interim revisions.

LIVE LOADING: HL-93

All concrete shall be Class S with a minimum 28-day compressive strength of 3,500 psi and shall be poured in the dry. All exposed corners to have ¾" chamfers.

Reinforcing Steel shall be Grade 60 (yield strength = 60,000 psi) conforming to AASHTO M31 or M322, Type A, with mill test reports.

Reinforcing Steel Tolerances: The tolerances for reinforcing steel shall meet those listed in 'Manual of Standard Practice' published by Concrete Reinforcing Steel Institute (CRSI) except that the tolerance for truss bars such as Figure 3 on page 7-4 of the CRSI Manual shall be minus zero to plus 1/2 inch.

Excavation and backfilling shall be in accordance with the requirements of Section 801.

Membrane Waterproofing shall conform to the requirements of Section 815. Membrane Waterproofing shall be Type C and as directed by the Engineer applied to all construction joints in the top slab and the sidewalls of R.C. Box culverts and to the construction joint between wingwalls and R.C. Box culvert walls.

Weep Holes in box culvert walls shall have a maximum horizontal spacing of 10'-0" and shall be spaced to clear all reinforcing steel. The drain opening shall be 4" diameter and shall be placed 12" above the top of the bottom slab.

Weep Holes in wingwalls shall have a maximum horizontal spacing of 10'-0" and shall be spaced to clear all reinforcing steel. There shall be a minimum of two (2) weep holes in each wingwall. The drain opening shall be 4" diameter and shall be placed 12" above the top of the wingwall footing.

The barrel components of the culvert may be constructed using continuous pours. For longer culvert construction, the Contractor may use multiple pours with transverse construction joints spaced a minimum of 50 feet apart unless superseded by stage construction or site constraints as approved by the Engineer. Construction joints between footings and walls shall be made only where shown in the Plans. Joints shall be normal to the centerline of barrel and shall be keyed. Longitudinal reinforcing shall be continuous through joints unless shown otherwise. All longitudinal construction joints shall be submitted to the Engineer for approval.

Membrane Waterproofing, Weep Holes, Geotextile Filter Fabric, and Drainage Fill Material will not be paid for directly but shall be considered subsidiary to Class S Concrete.

When the top slab of the box culvert serves as finished roadway surface, curing and finishing shall be in accordance with subsections 802.17 and 802.20 for bridge roadway surface and a tine finish shall be applied in accordance with subsection 802.19 for Class 5 Tined Bridge Roadway Surface Finish. Curing and finishing shall not be paid for directly, but shall be considered incidental to the item "Class S Concrete-Roadway". Class 1 Protective Surface Treatment shall be applied to the roadway surface and this work shall be paid for under the unit price bid for "Class 1 Protective Surface Treatment".

When precast reinforced concrete box culverts are substituted for cast in place box culverts, they shall be manufactured according to ASTM C 1577 and meet the requirements of Section 607. When the top slab of the box culvert serves as the finished roadway surface, a precast reinforced concrete box culvert substitution is not allowed.

SHEET 1 OF 4

GENERAL DETAILS OF R.C. BOX CULVERT

GENERAL NOTES &
LONGITUDINAL SECTION LENGTH SCHEDULE

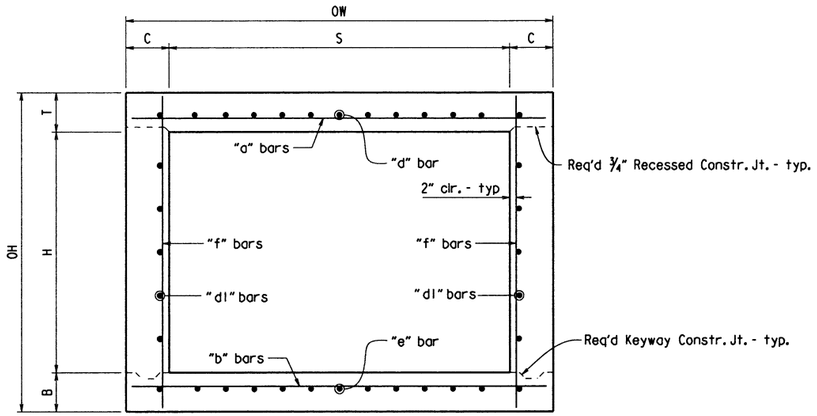
SPECIAL DETAILS

V 1.1.4 Culvert-General.dgn

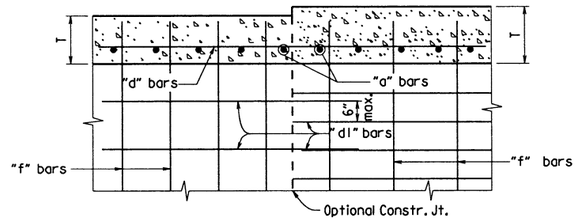
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	14	335

① SPECIAL DETAILS

Note: When top slab of culvert serves as finished roadway surface, see General Notes on Sheet 1 of 4.



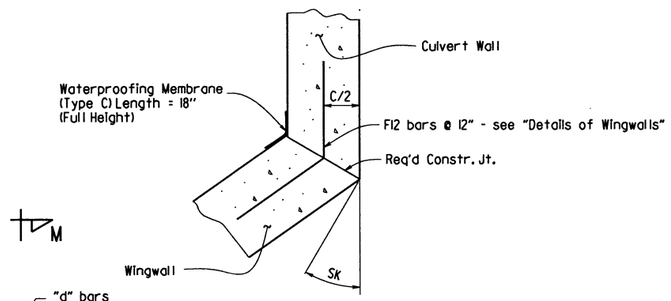
TYPICAL SECTION M-M



Longitudinal Bar Spacing at individual sections shall be maintained, which may result in noncontact bar laps.

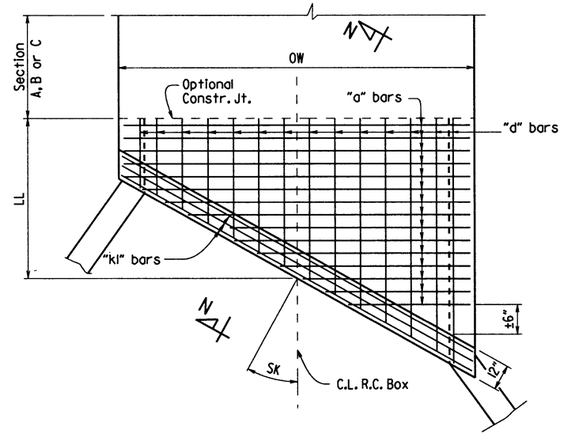
LONGITUDINAL LAP DETAIL AT CHANGE IN SECTIONS

TOP SLAB SHOWN, BOTTOM SLAB SIMILAR

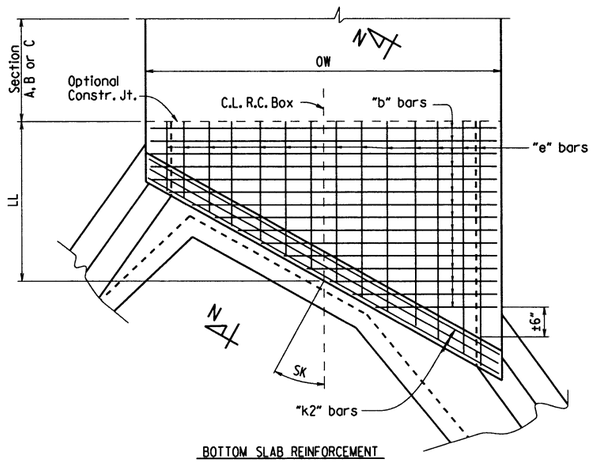


WINGWALL ATTACHMENT

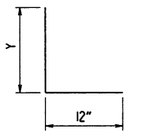
See "Details of Wingwalls" for additional information and wingwall details.



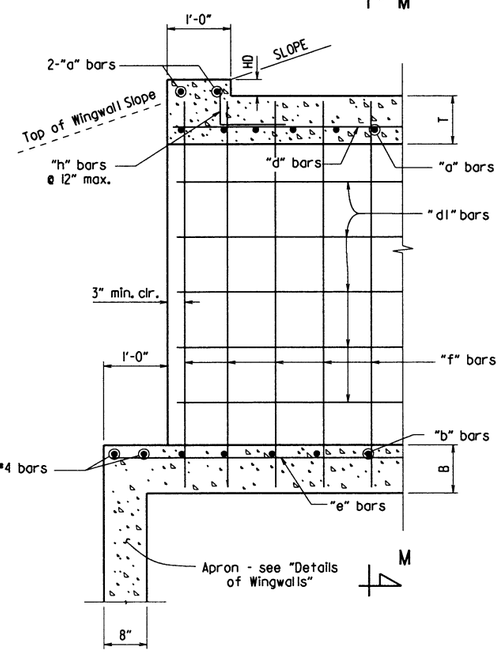
TOP SLAB REINFORCEMENT



BOTTOM SLAB REINFORCEMENT

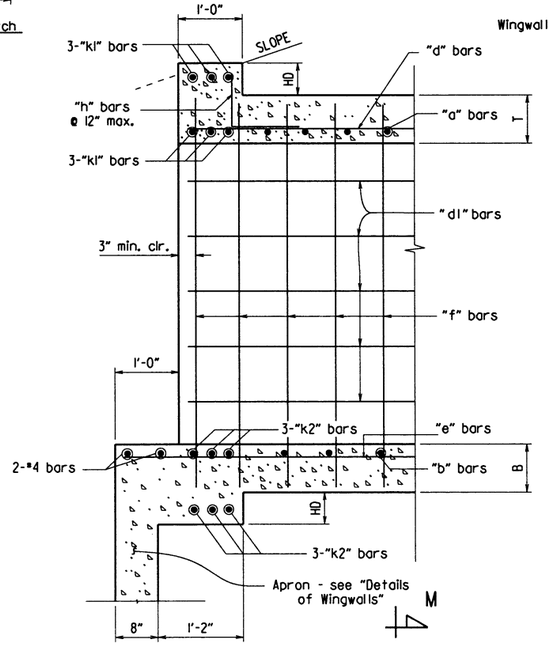


"h" bars sketch



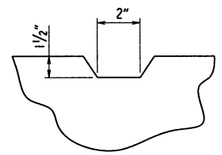
PART LONGITUDINAL SECTION

(Non-Skewed Ends)



PART LONGITUDINAL SECTION N-N

(Skewed Ends)



TYPICAL KEYWAY DETAIL

(All Construction Joints)

SKEWED END SECTION DETAILS

SHEET 2 OF 4

GENERAL DETAILS OF R.C. BOX CULVERT

DETAILS OF SINGLE BARREL
R.C. BOX CULVERT

SPECIAL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9235
8-11-16
CHARLES R. ELLIS

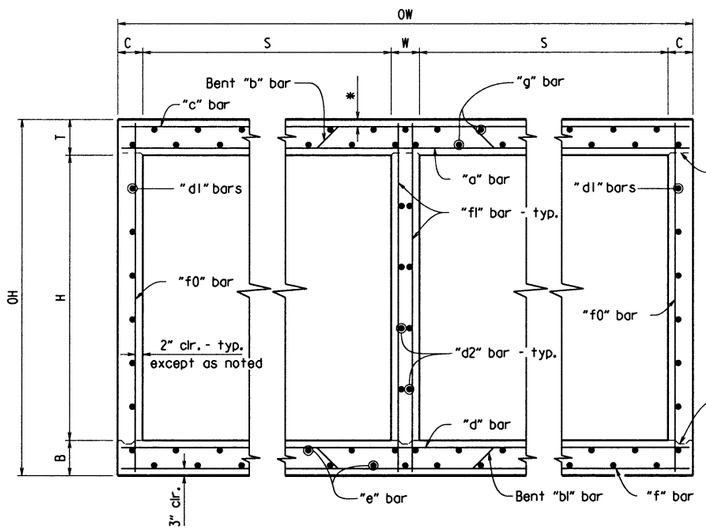
Culvert-General.dgn

DATE REVISED	DATE FILMED	REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	15	335

① SPECIAL DETAILS

*2" clr. for fill depth (D) greater than 2 ft.
2½" clr. for fill depth (D) equal to or less than 2 ft.

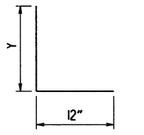
Note: When top slab of culvert serves as finished roadway surface, see General Notes on Sheet 1 of 4.



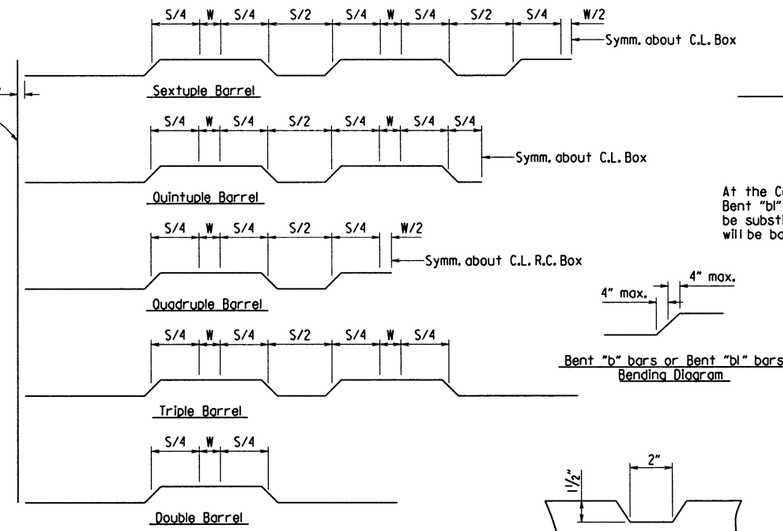
TYPICAL SECTION M-M

Top Slab
Straight "c" bars shall alternate with Bent "b" bars in top.
Straight "a" bars shall alternate with Bent "b" bars in bottom.

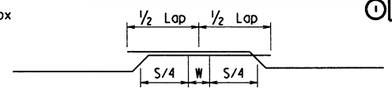
Bottom Slab
Straight "d" bars shall alternate with Bent "b1" bars in top.
Straight "f" bars shall alternate with Bent "b1" bars in bottom.



"h" bars sketch



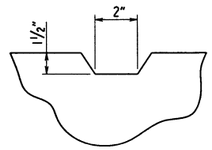
Bent "b" bars or Bent "b1" bars sketch



Lap Detail
For Bent "b" bars and Bent "b1" bars

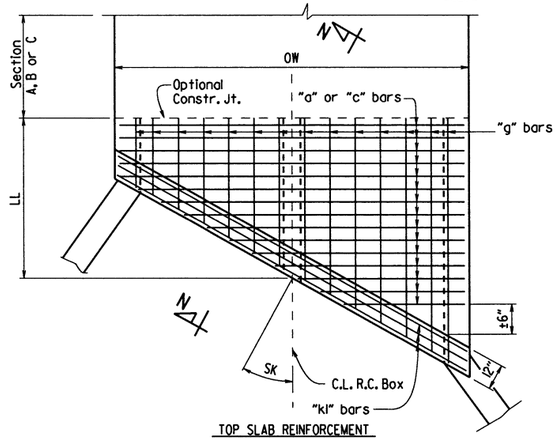
At the Contractor's option in lieu of providing Bent "b" or Bent "b1" bars, one bar top and bottom of equivalent size may be substituted for each bent bar. Payment for the reinforcing will be based on the weight of the "b" or "b1" bar.

Bent "b" bars or Bent "b1" bars Bending Diagram

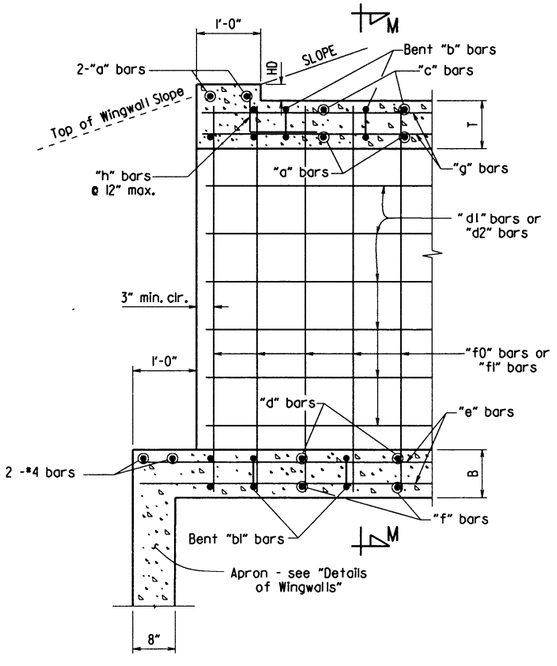


TYPICAL KEYWAY DETAIL

(All Construction Joints)

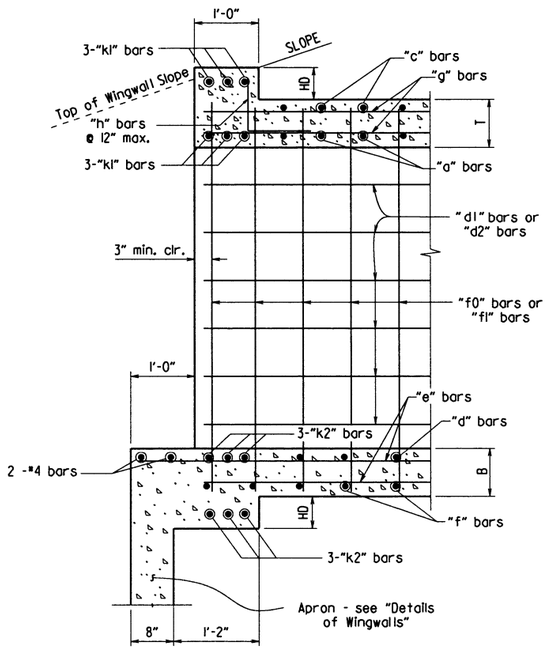


TOP SLAB REINFORCEMENT
Straight "c" bars in top.
Straight "a" bars in bottom.



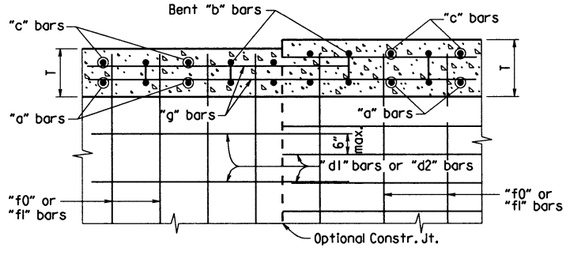
PART LONGITUDINAL SECTION

(Non-Skewed Ends)



PART LONGITUDINAL SECTION N-N

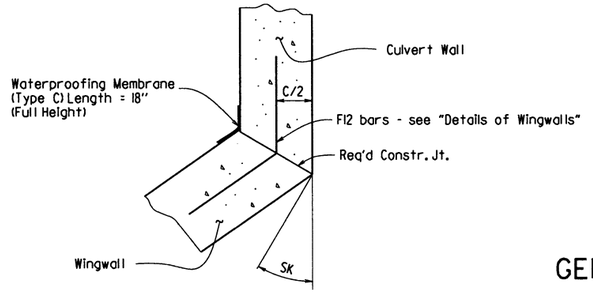
(Skewed Ends)



Longitudinal Bar Spacing at individual sections shall be maintained, which may result in noncontact bar laps.

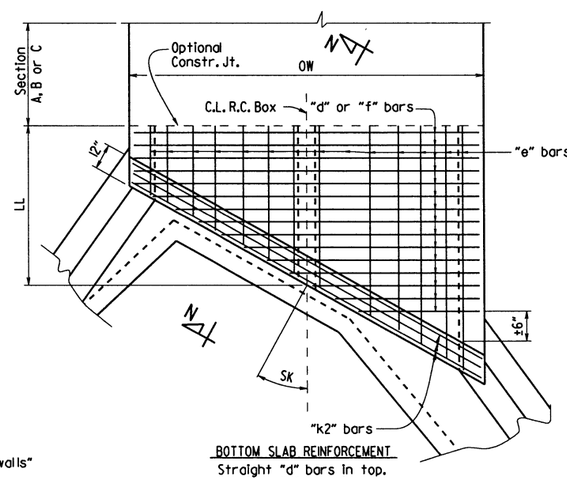
LONGITUDINAL LAP DETAIL AT CHANGE IN SECTIONS

TOP SLAB SHOWN, BOTTOM SLAB SIMILAR



WINGWALL ATTACHMENT

See "Details of Wingwalls" for additional information and wingwall details.



BOTTOM SLAB REINFORCEMENT
Straight "d" bars in top.
Straight "f" bars in bottom.

SKEWED END SECTION DETAILS

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
8-11-16
CHARLES R. ELLIS

SHEET 3 OF 4
GENERAL DETAILS OF R.C. BOX CULVERT

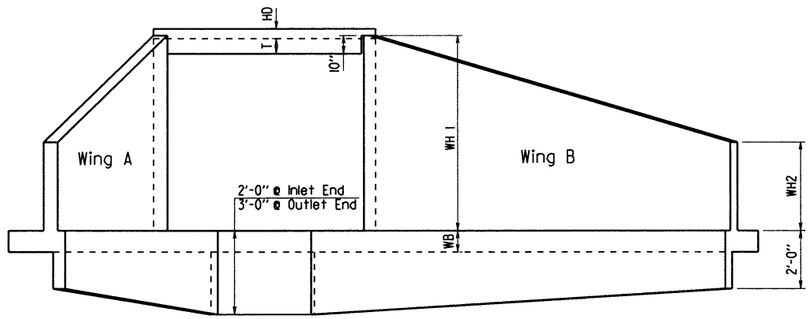
DETAILS OF MULTI-BARREL R.C. BOX CULVERT

SPECIAL DETAILS

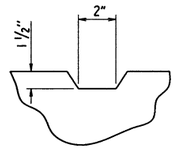
Culvert-General.dgn

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	16	335

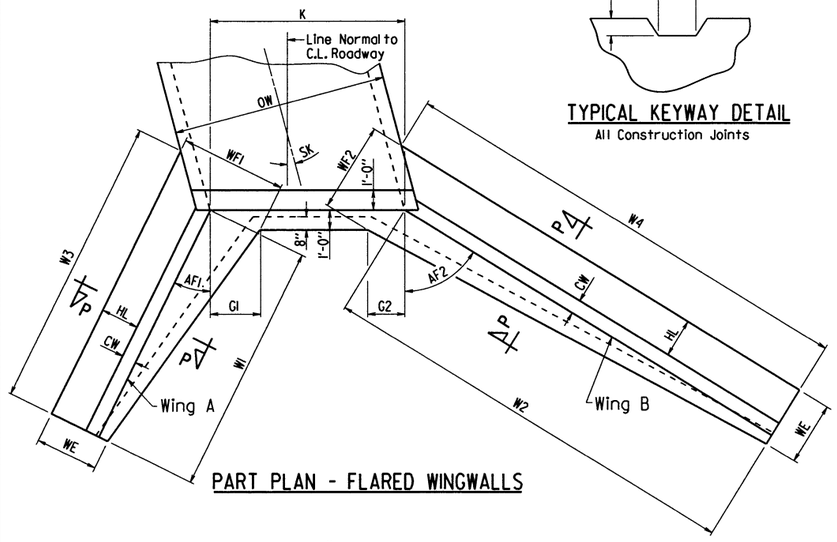
1 SPECIAL DETAILS



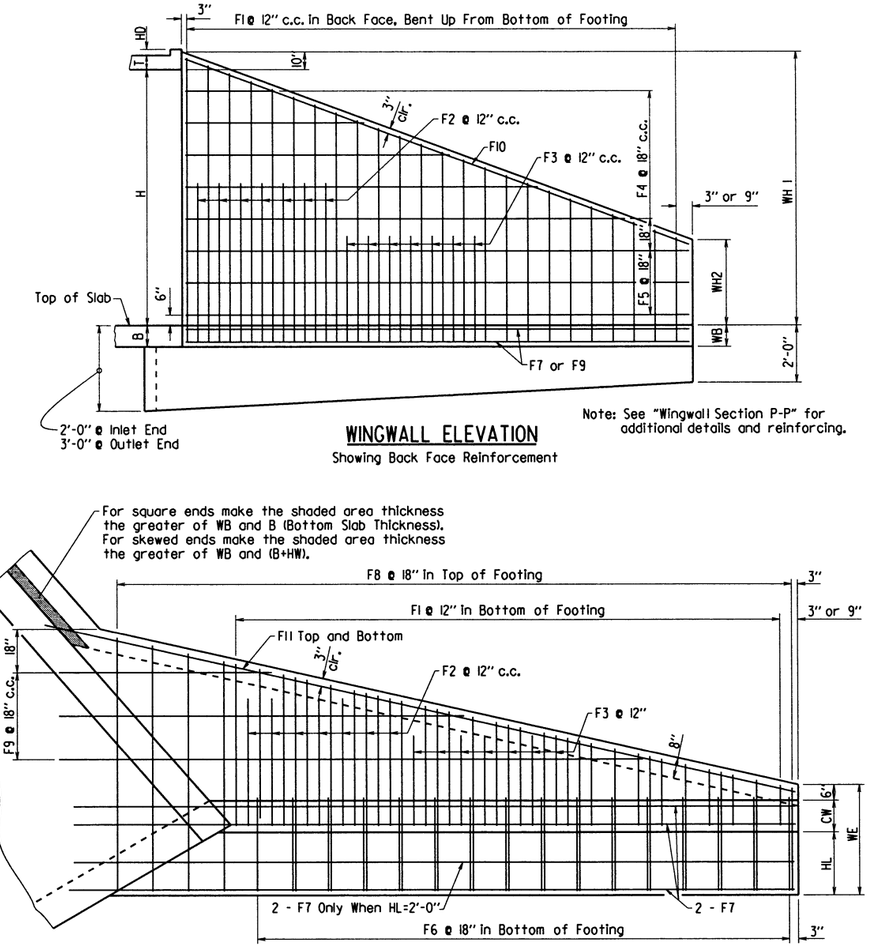
END ELEVATION
Flared Wingwalls Shown



TYPICAL KEYWAY DETAIL
All Construction Joints



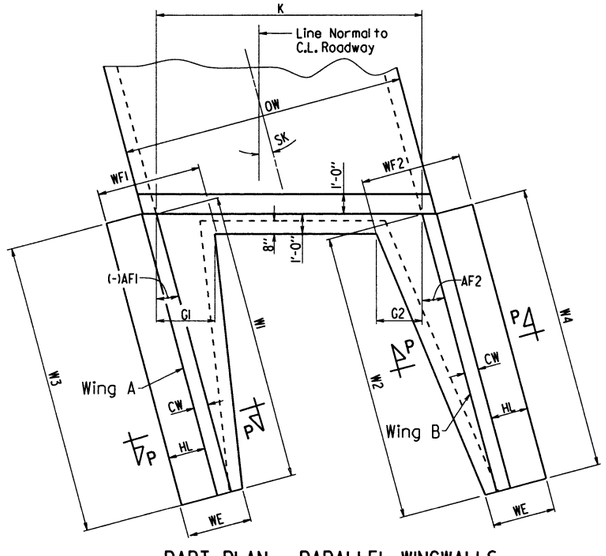
PART PLAN - FLARED WINGWALLS



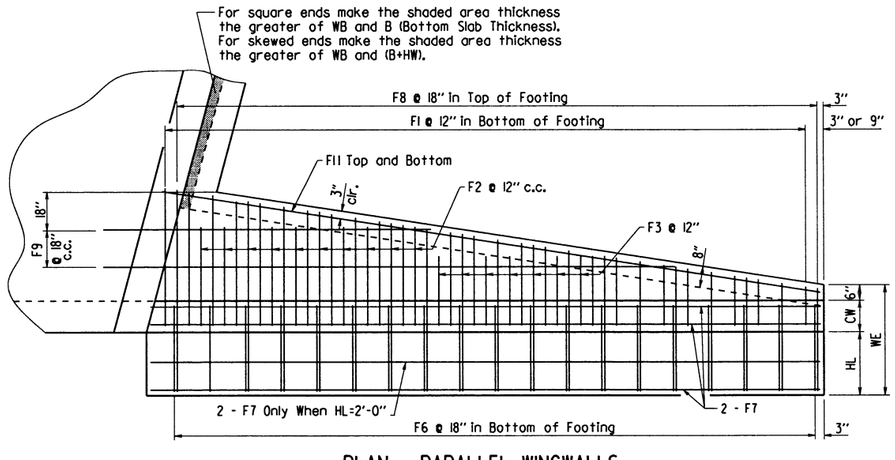
WINGWALL ELEVATION
Showing Back Face Reinforcement

Note: See "Wingwall Section P-P" for additional details and reinforcing.

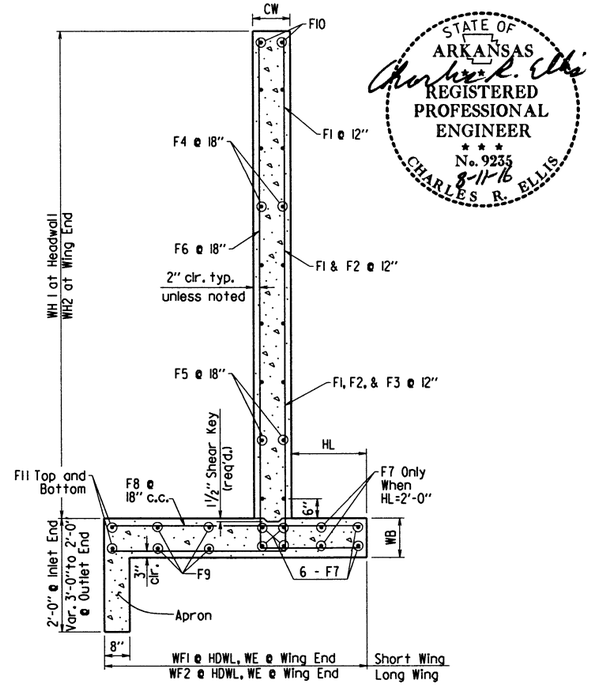
PLAN - FLARED WINGWALLS
Showing Footing Reinforcement



PART PLAN - PARALLEL WINGWALLS

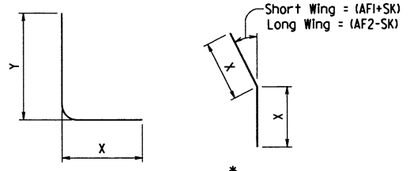


PLAN - PARALLEL WINGWALLS
Showing Footing Reinforcement



STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9235
8-17-16
CHARLES R. ELLIS

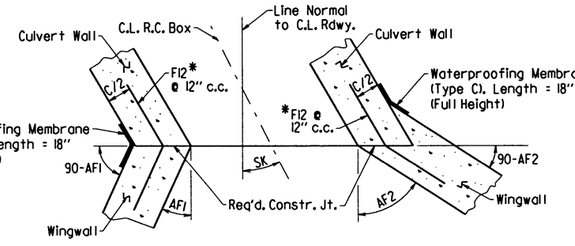
WINGWALL SECTION P-P



F1, F2, F3, & F6 BARS

*F12 BAR

*F12 is a straight bar for parallel wingwalls



CONSTRUCTION JOINTS
Flared Wingwalls Shown

SHEET 4 OF 4
GENERAL DETAILS OF R.C. BOX CULVERT
DETAILS OF WINGWALLS
SPECIAL DETAILS

Culvert-General.dgn

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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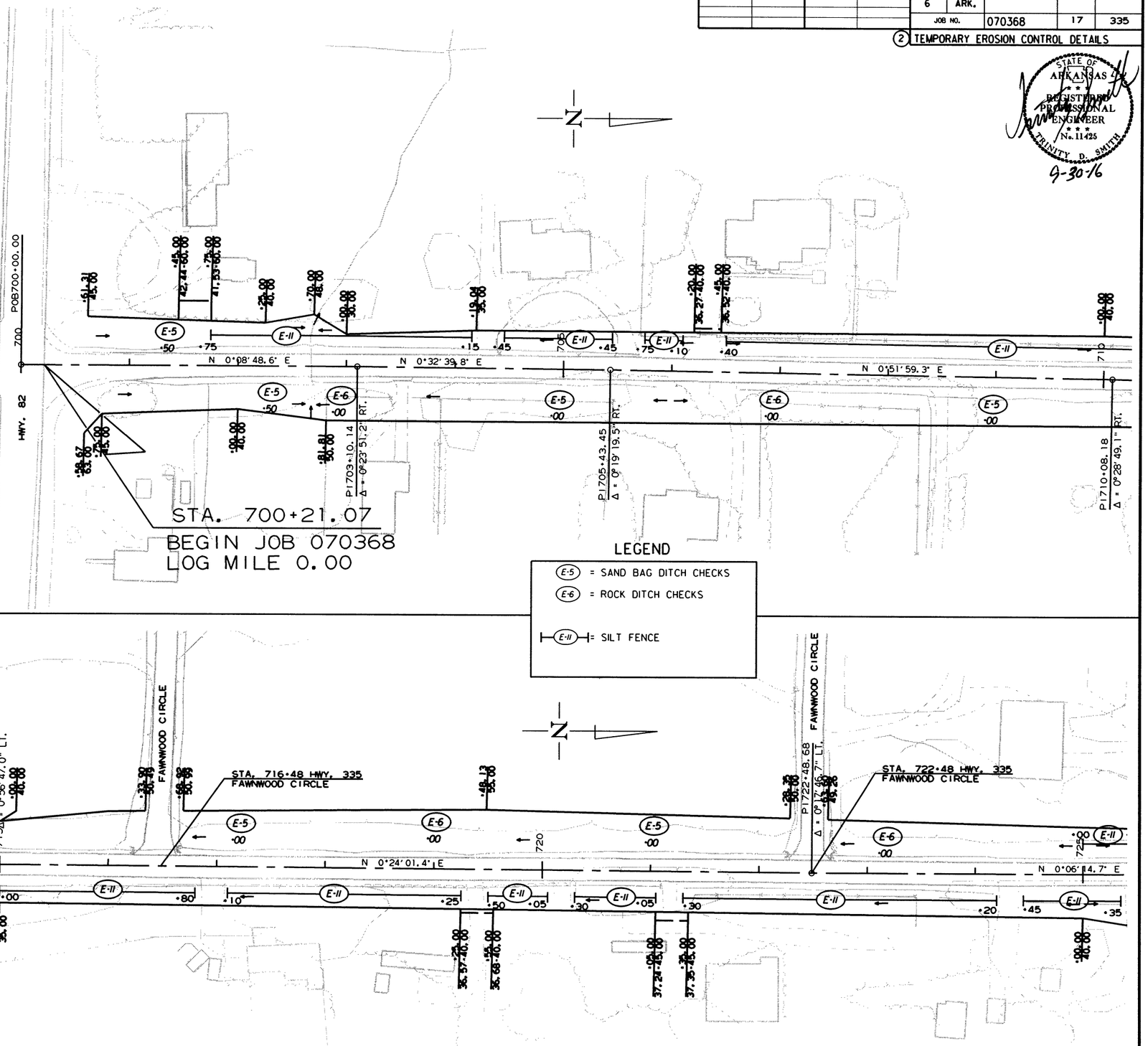
(2) TEMPORARY EROSION CONTROL DETAILS

QUANTITIES
CLEARING AND GRUBBING STAGE
SAND BAG DITCH CHECKS (E-5) = 2464 BAGS
ROCK DITCH CHECKS (E-6) = 339 CU. YDS.
SILT FENCE (E-11) = 34227 LIN. FT.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
4-30-16

REVISIONS

DATE OF REVISION	REVISION



TEMPORARY EROSION CONTROL DETAILS
CLEARING AND GRUBBING STAGE

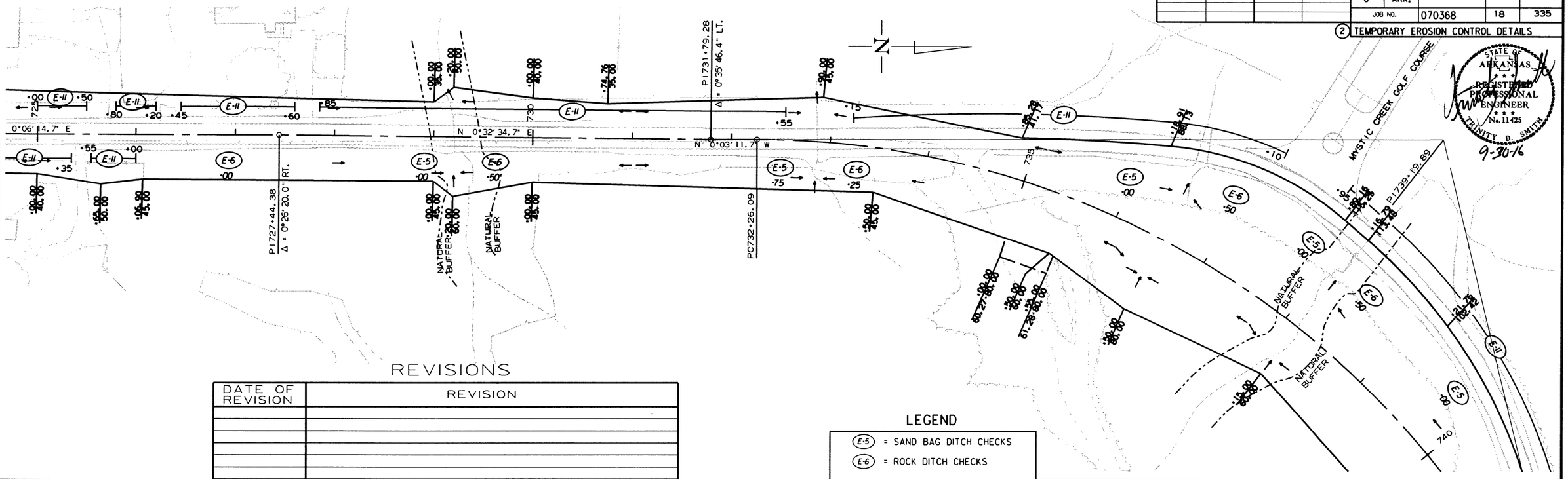
9/2/2016

R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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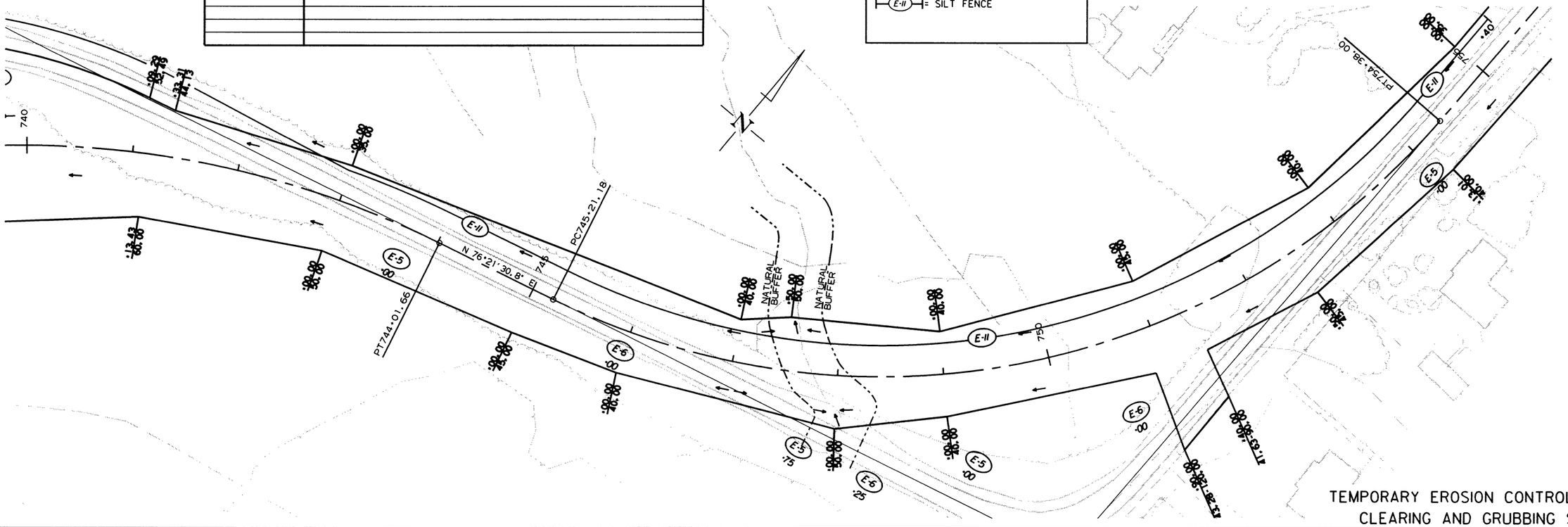
(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



REVISIONS

DATE OF REVISION	REVISION



9/2/2016

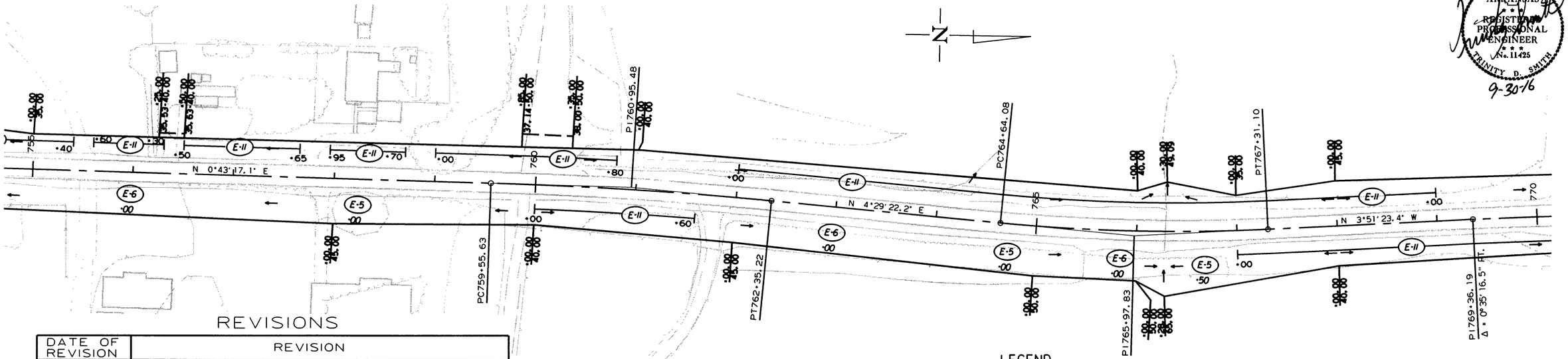
R070368.DGN

TEMPORARY EROSION CONTROL DETAILS
CLEARING AND GRUBBING STAGE

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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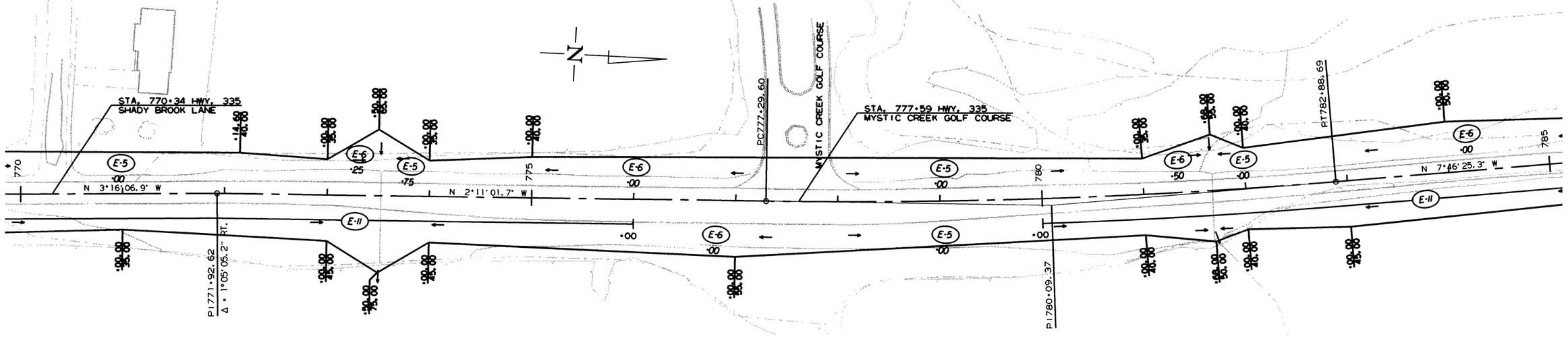
(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



REVISIONS

DATE OF REVISION	REVISION



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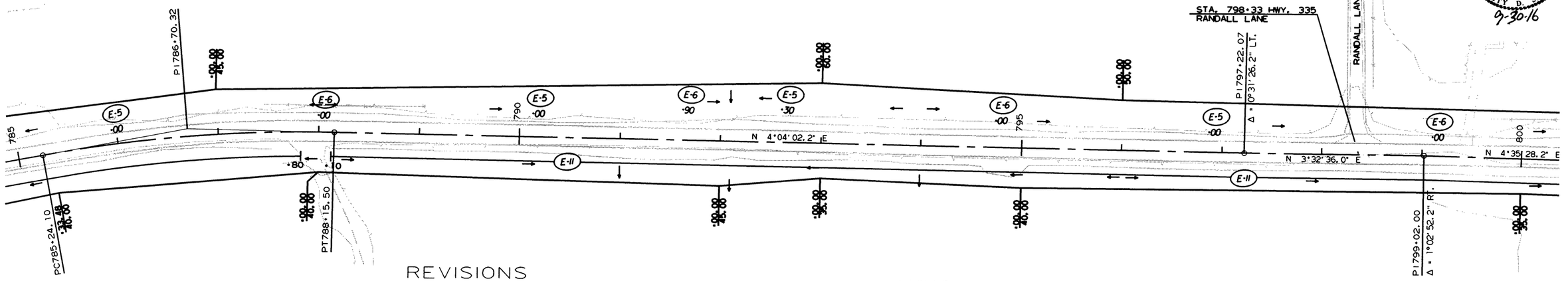
TEMPORARY EROSION CONTROL DETAILS
CLEARING AND GRUBBING STAGE

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.		070368	20	335

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

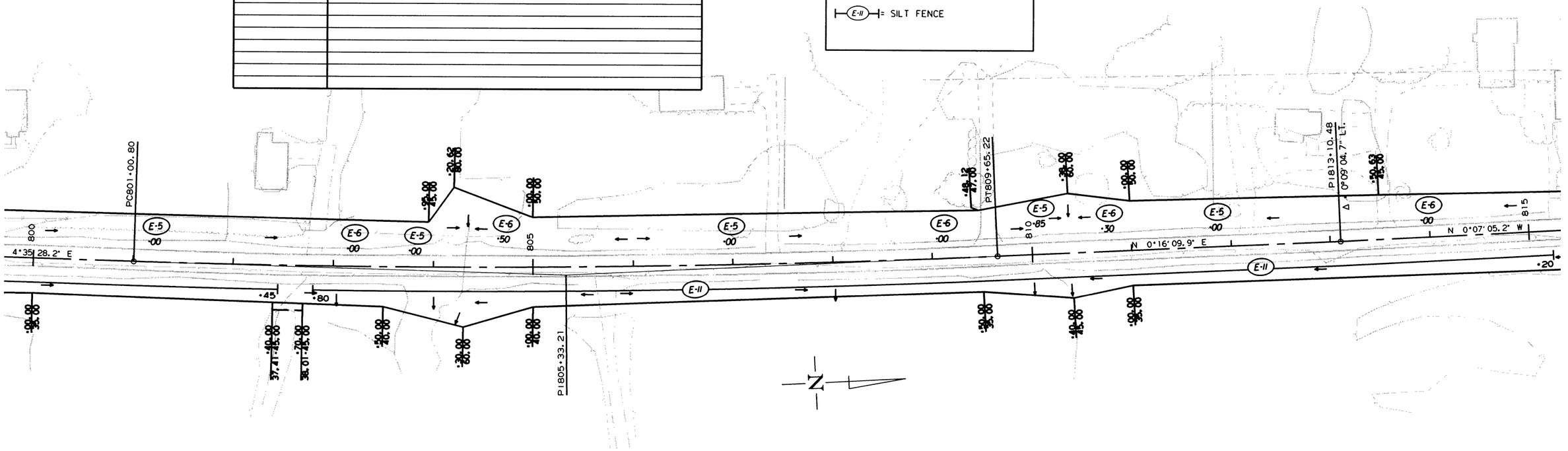


REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE



9/2/2016

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TEMPORARY EROSION CONTROL DETAILS
CLEARING AND GRUBBING STAGE

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		070368	21	335

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE

P1821+75.21

N 0°38'35.2" E

P1817+14.32
Δ = 0°31'30.0" RT.

PC819+71.09

PT823+68.15

N 33°24'04.8" E

P1824+75.56
Δ = 0°18'07.4" RT.

N 33°42'12.2" E

PC826+41.62

STA. 836+58 HWY. 335
MOODY LANE

MOODY LANE

P1837+82.57

PT834+62.48

N 15°29'49.1" W

PC836+31.93

N 3°40'02.4" E

PT839+30.39

PC840+07.54

STA. 840+56 HWY. 335
MOUNT HOLLY ROAD

P1842+41.43

N 7°58'46.0" E

PT842+75.18

STA. 840+55 HWY. 335
MOUNT HOLLY ROAD

9/2/2016

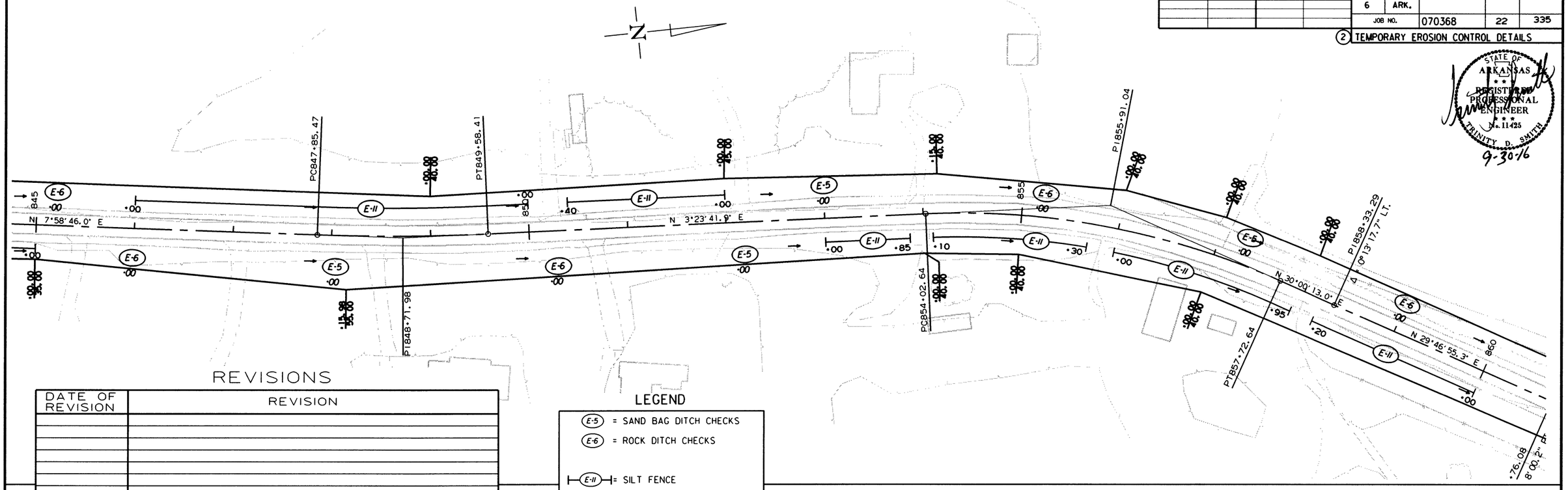
R070368.DGN

TEMPORARY EROSION CONTROL DETAILS
CLEARING AND GRUBBING STAGE

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		070368	22	335

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



REVISIONS

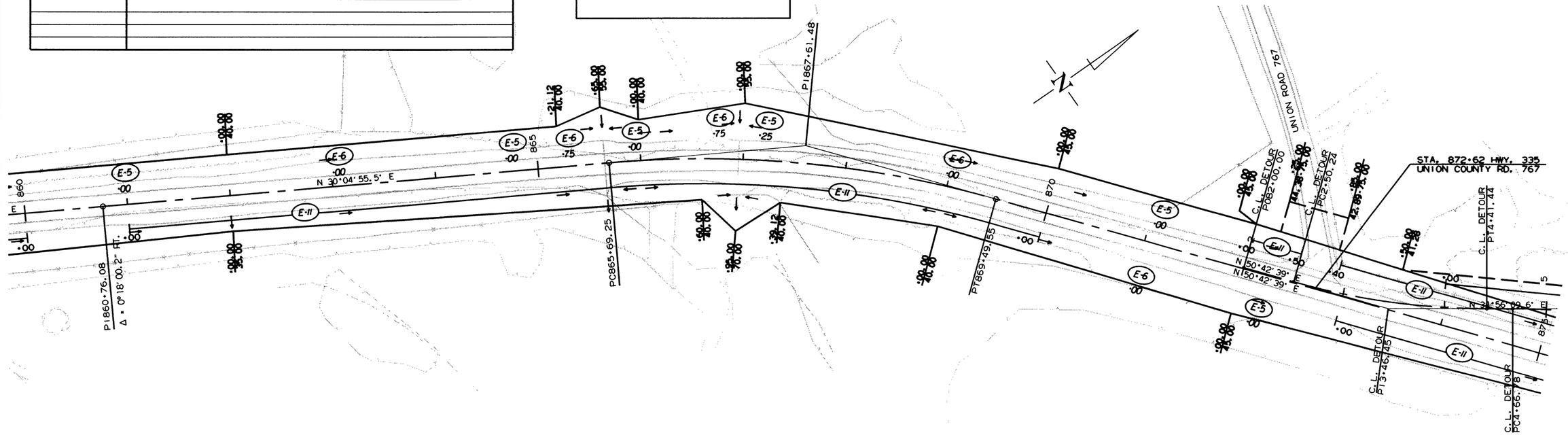
DATE OF REVISION	REVISION

LEGEND

E-5 = SAND BAG DITCH CHECKS

E-6 = ROCK DITCH CHECKS

E-11 = SILT FENCE



TEMPORARY EROSION CONTROL DETAILS
CLEARING AND GRUBBING STAGE

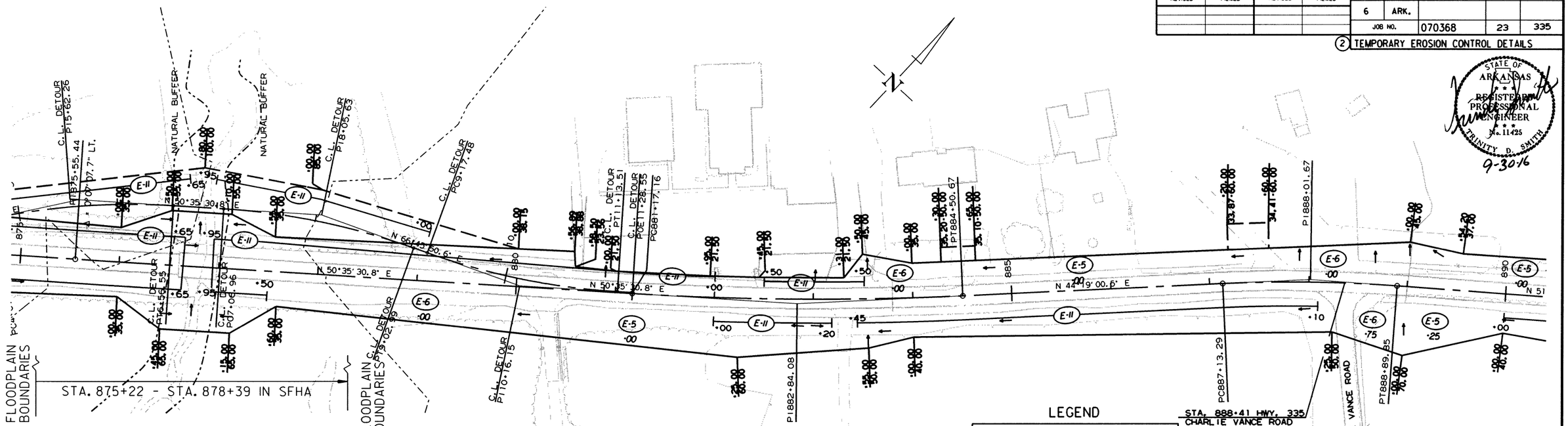
9/2/2016

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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.		070368	23	335

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

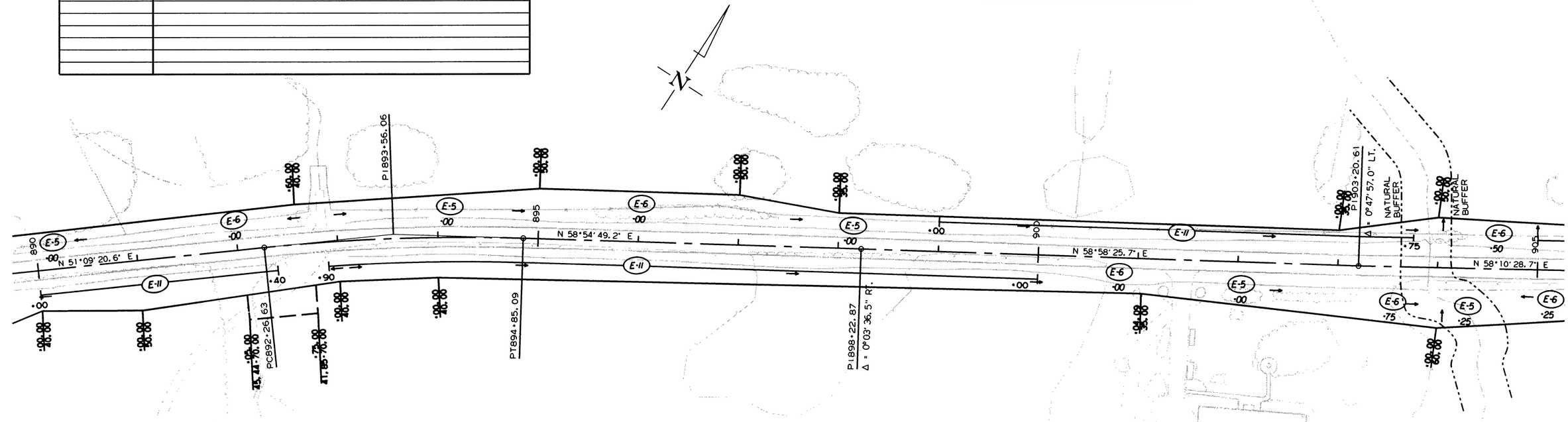


REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
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TEMPORARY EROSION CONTROL DETAILS
CLEARING AND GRUBBING STAGE

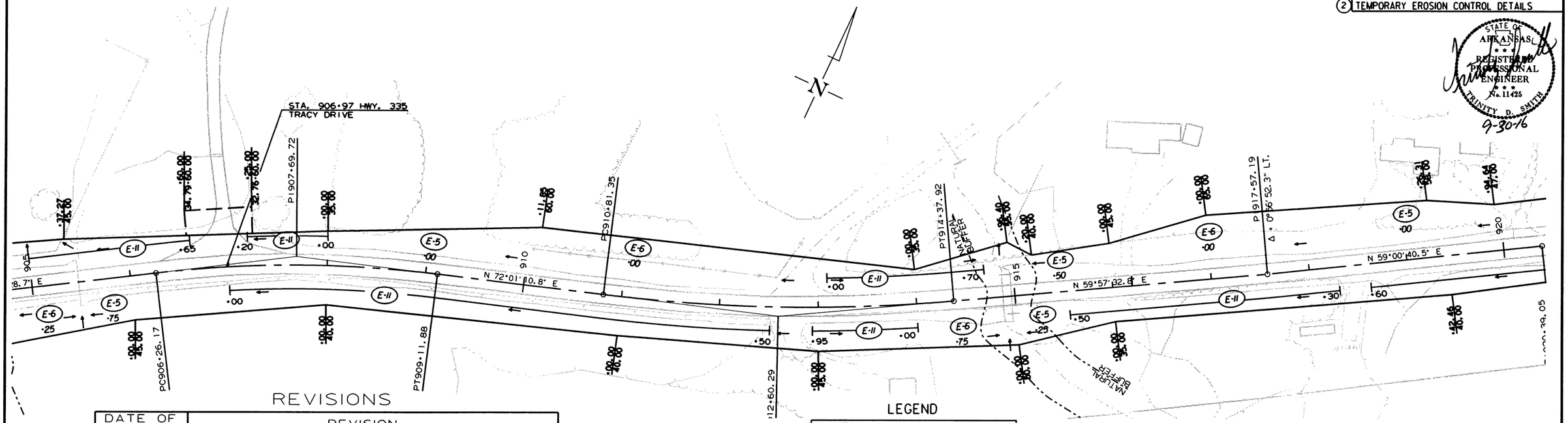
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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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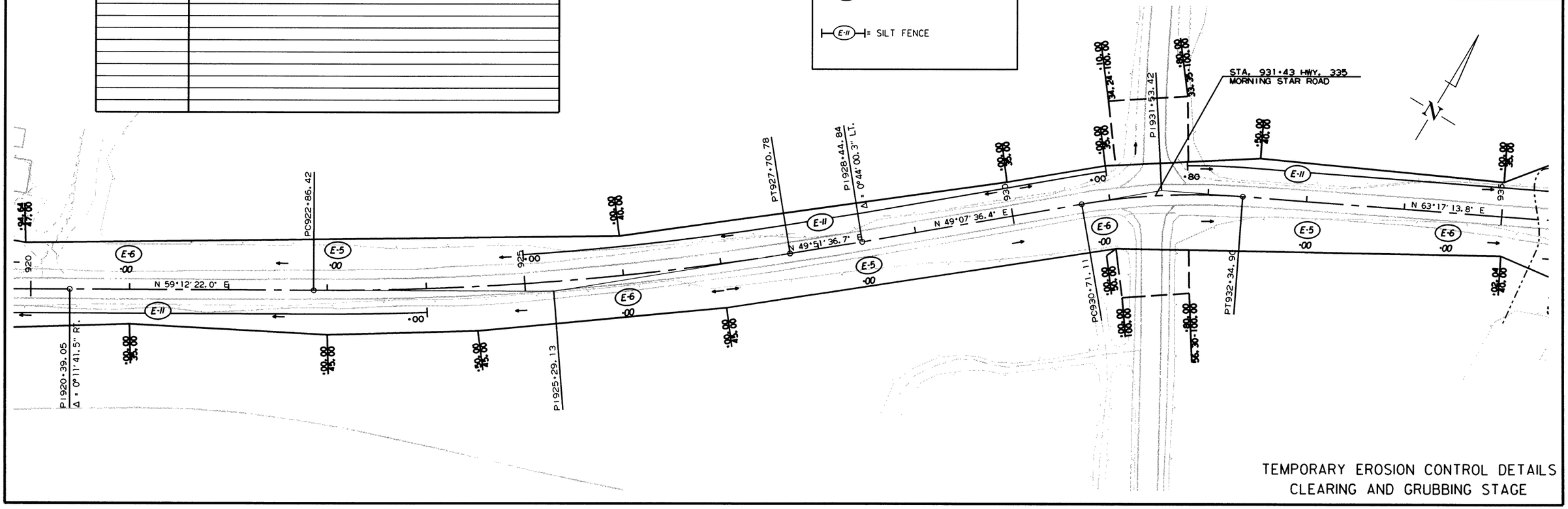
(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



REVISIONS

DATE OF REVISION	REVISION



TEMPORARY EROSION CONTROL DETAILS
CLEARING AND GRUBBING STAGE

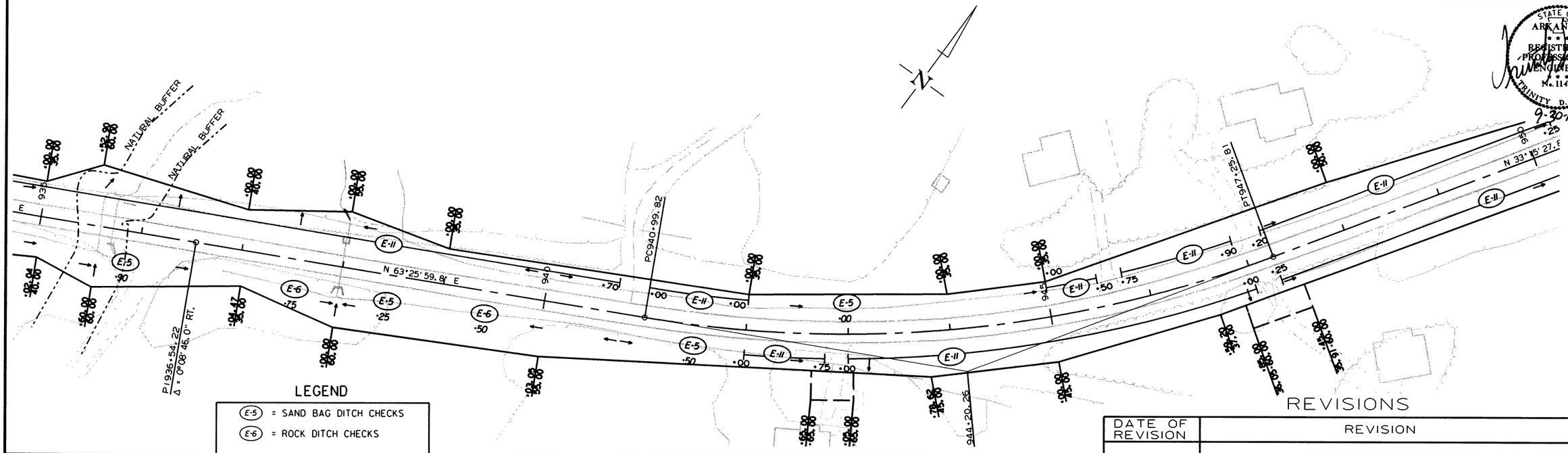
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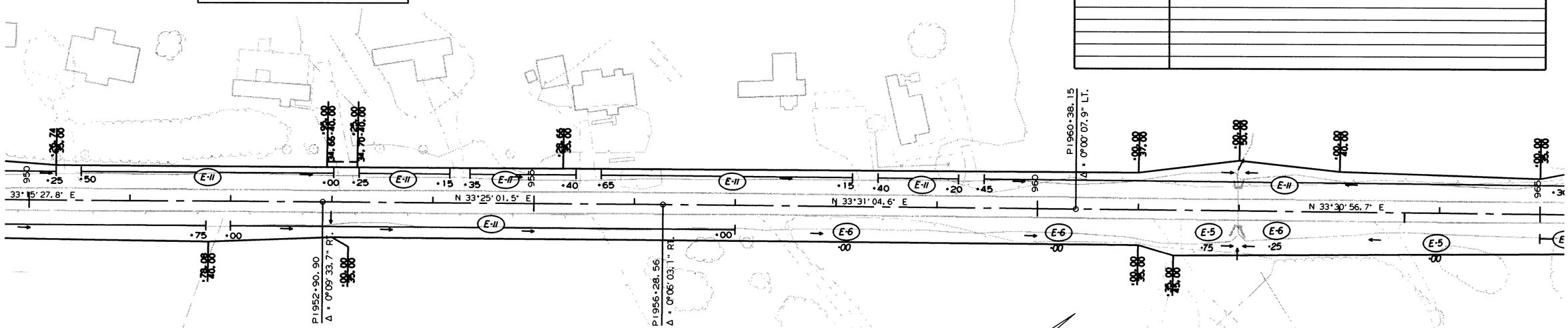
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(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16





REVISIONS

DATE OF REVISION	REVISION

9/2/2016

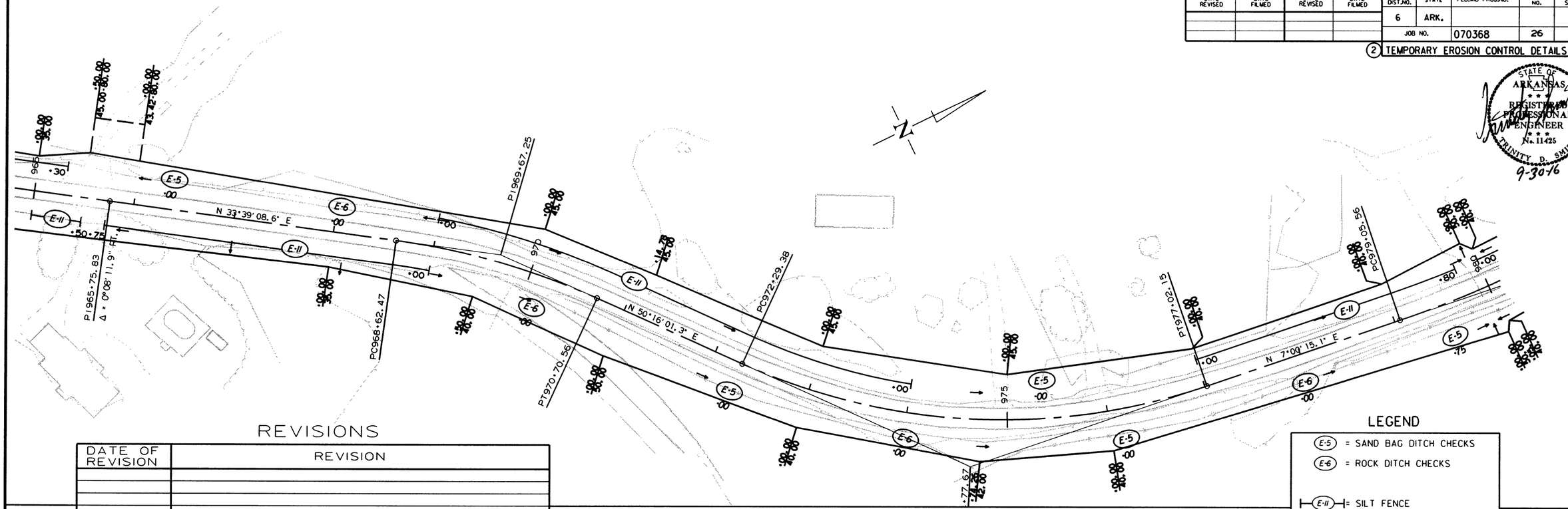
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TEMPORARY EROSION CONTROL DETAILS
CLEARING AND GRUBBING STAGE

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				JOB NO.		070368	26	335

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5 = SAND BAG DITCH CHECKS

E-6 = ROCK DITCH CHECKS

E-11 = SILT FENCE

9/2/2016

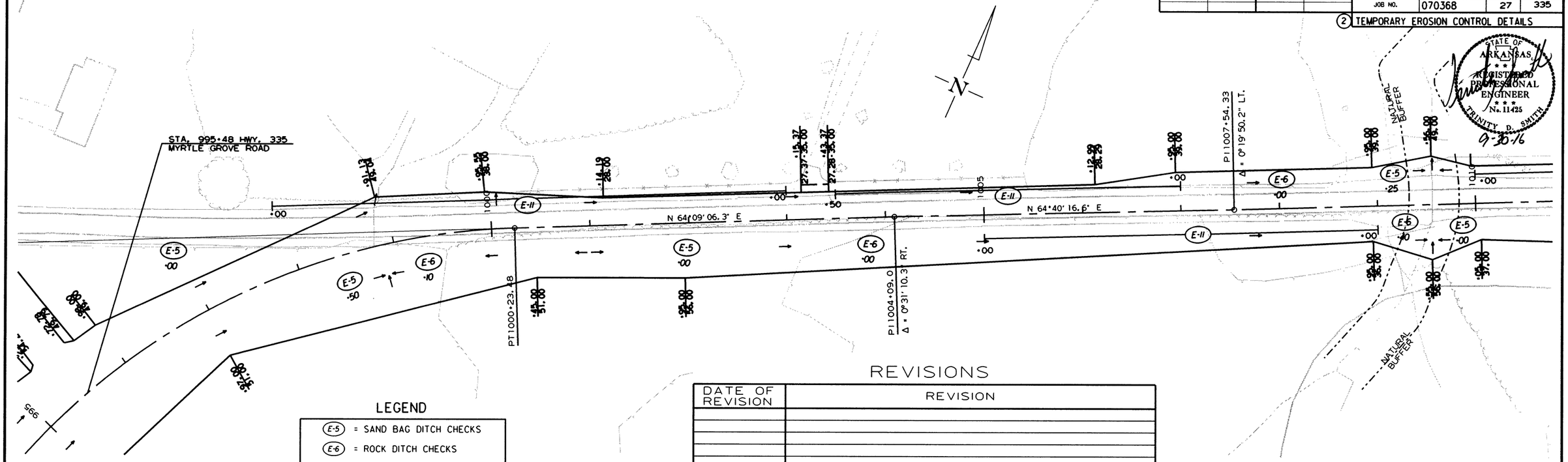
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TEMPORARY EROSION CONTROL DETAILS
CLEARING AND GRUBBING STAGE

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(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE

REVISIONS

DATE OF REVISION	REVISION

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

STA. 1030+65 HWY. 335
MYRTLE GROVE ROAD

MYRTLE GROVE ROAD

NATURAL BUFFER

NATURAL BUFFER

P.I. 1025+78.67
Δ = 0°25'08.2" LT.

P.I. 1029+54.68
Δ = 0°06'50.9" RT.

P.I. 1035+57.71
Δ = 1°24'51.1" LT.

PC 1038+34.84

N 64°24'27.8" E

N 64°31'18.7" E

N 63°06'27.6" E

LEGEND

(E-5) = SAND BAG DITCH CHECKS

(E-6) = ROCK DITCH CHECKS

(E-11) = SILT FENCE

REVISIONS

DATE OF REVISION	REVISION

P.I. 1040+83.90

PT 1043+32.87

PC 1050+32.31

P.I. 1053+03.86

N 60°30'45.3" E

9/2/2016

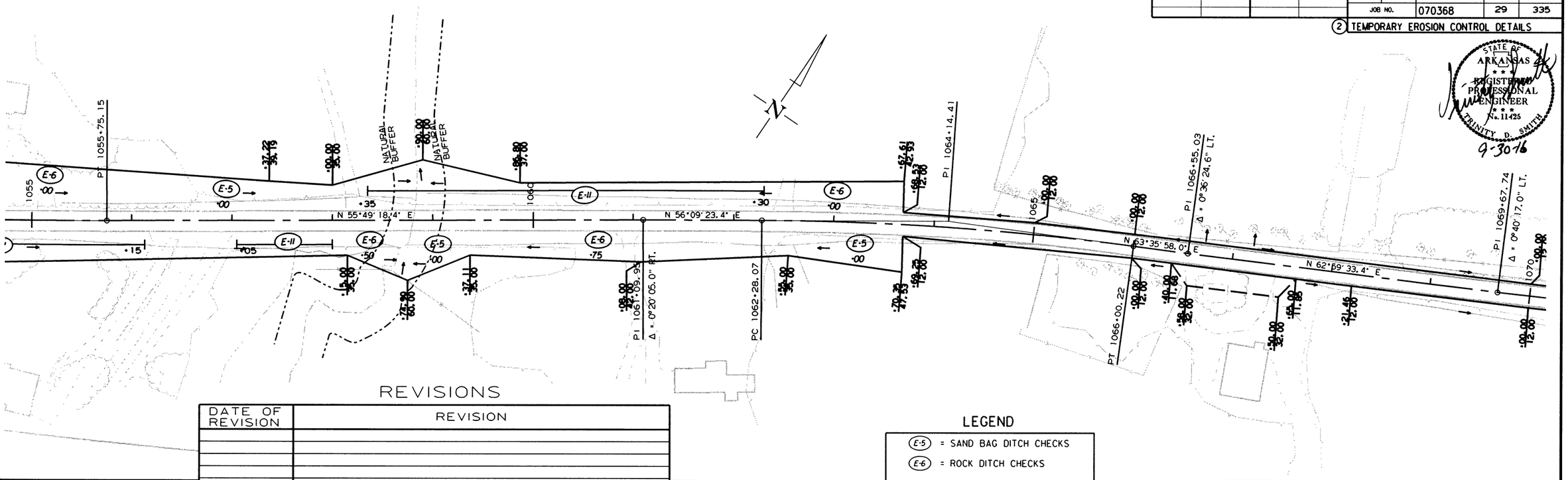
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TEMPORARY EROSION CONTROL DETAILS
CLEARING AND GRUBBING STAGE

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



REVISIONS

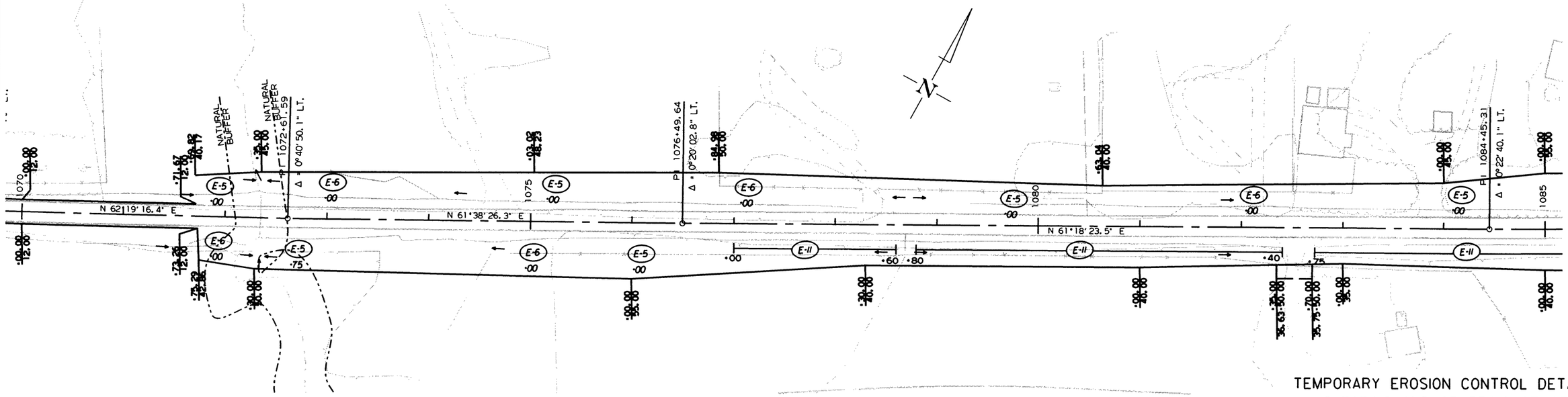
DATE OF REVISION	REVISION

LEGEND

E-5 = SAND BAG DITCH CHECKS

E-6 = ROCK DITCH CHECKS

E-11 = SILT FENCE



9/2/2016

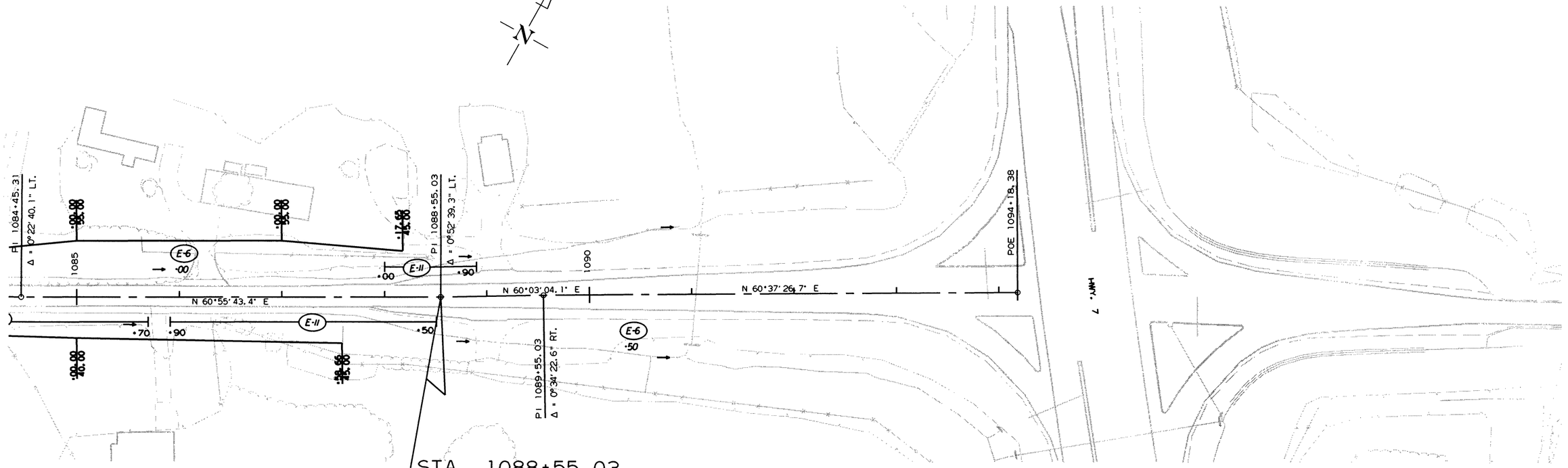
R070368.DGN

TEMPORARY EROSION CONTROL DETAILS
CLEARING AND GRUBBING STAGE

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.		070368	30	335

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



STA. 1088+55.03
END JOB 070368

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5 = SAND BAG DITCH CHECKS
E-6 = ROCK DITCH CHECKS
E-11 = SILT FENCE

9/2/2016

R070368.DGN

TEMPORARY EROSION CONTROL DETAILS
CLEARING AND GRUBBING STAGE

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.		070368	31	335

(2) TEMPORARY EROSION CONTROL DETAILS

QUANTITIES
STAGE 1
SAND BAG DITCH CHECKS (E-5) = 814 BAGS
ROCK DITCH CHECKS (E-6) = 111 CU. YDS.
SEDIMENT BASINS (E-14) = 3347 CU. YDS.

STATE OF ARKANSAS
TIMOTHY D. SMITH
REGISTERED PROFESSIONAL ENGINEER
No. 11425
9-30-16

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-14) XX CU FT = SEDIMENT BASIN

STA. 700+21.07
BEGIN JOB 070368
LOG MILE 0.00

HWY. 82

N 0°08' 48.6" E

N 0°32' 39.8" E

N 0°51' 59.3" E

P.I. 703+10.14
Δ = 0°23' 51.2" RT.

P.I. 705+43.45
Δ = 0°19' 19.5" RT.

P.I. 710+08.18
Δ = 0°28' 49.1" RT.

49 CY.

39 CY.

FAWNWOOD CIRCLE

P.I. 714+94.17
Δ = 0°56' 47.0" LT.

STA. 716+48 HWY. 335
FAWNWOOD CIRCLE

N 1°20' 48.4" E

N 0°24' 01.4" E

N 0°06' 14.7" E

P.I. 722+48.68
Δ = 0°17' 36.7" LT.

STA. 722+48 HWY. 335
FAWNWOOD CIRCLE

50 CY.

50 CY.

SEDIMENT BASIN

SEDIMENT BASIN

TEMPORARY EROSION CONTROL DETAILS
STAGE 1

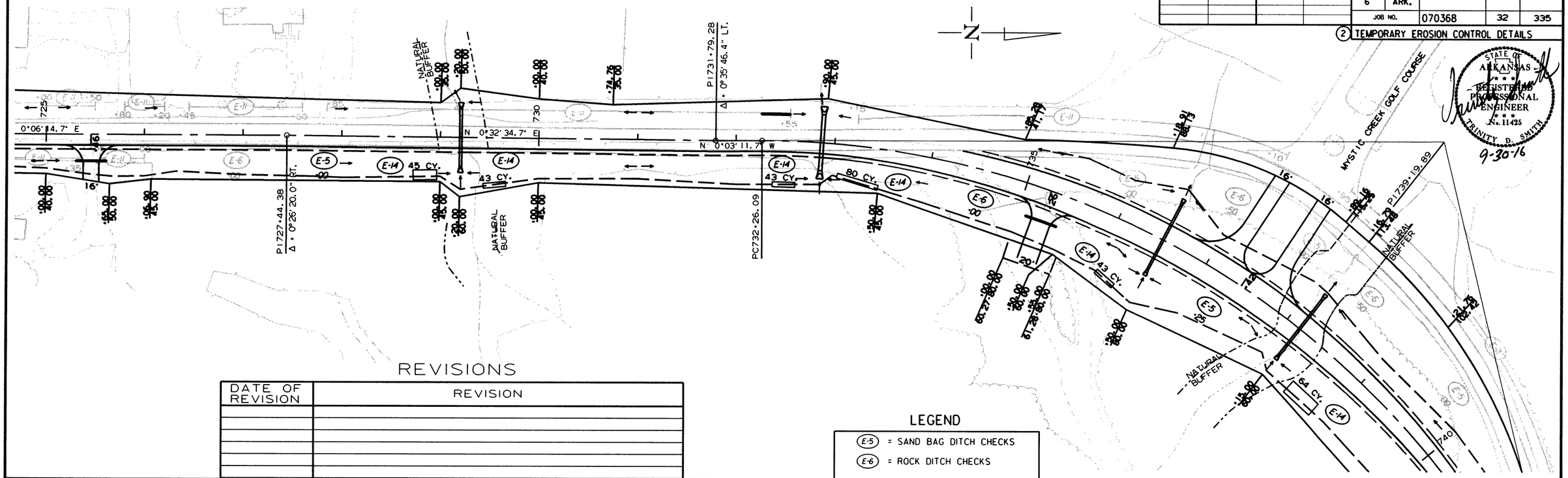
9/2/2016

R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	32	335

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN
  XX CU FT

TEMPORARY EROSION CONTROL DETAILS
STAGE I

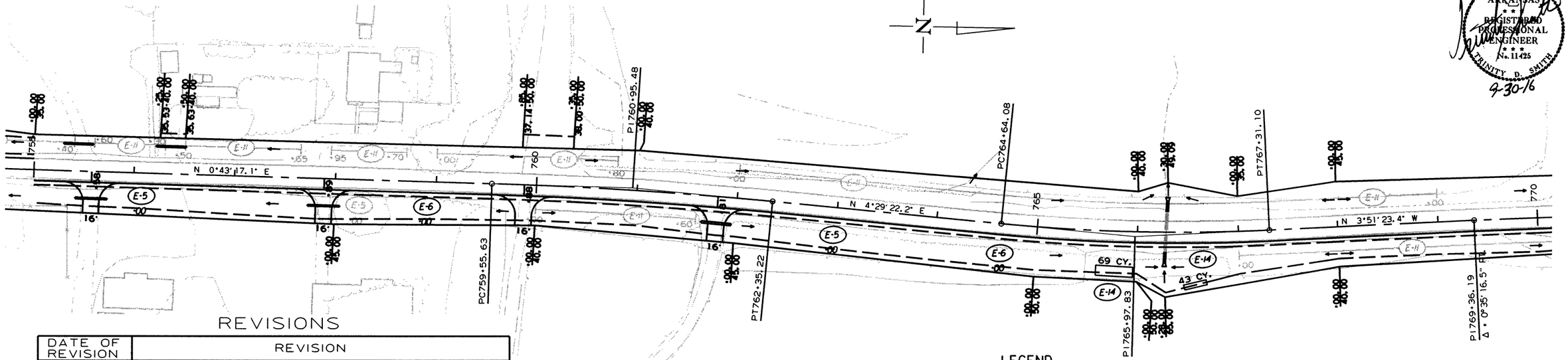
9/2/2016

R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	33	335

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
4-30-16

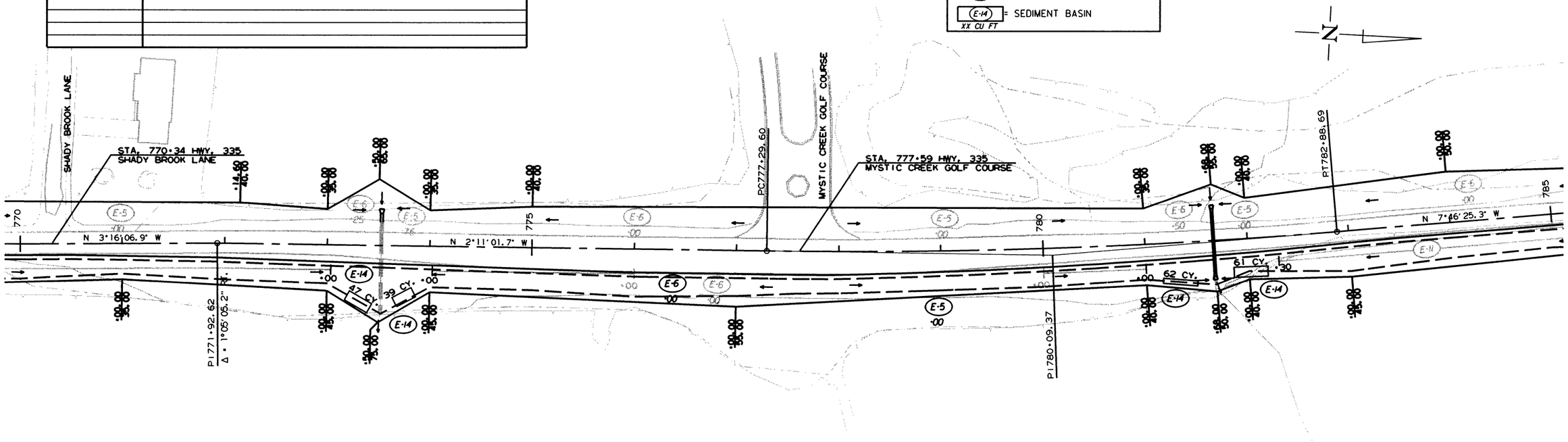


REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-14) XX CU FT = SEDIMENT BASIN



TEMPORARY EROSION CONTROL DETAILS
STAGE I

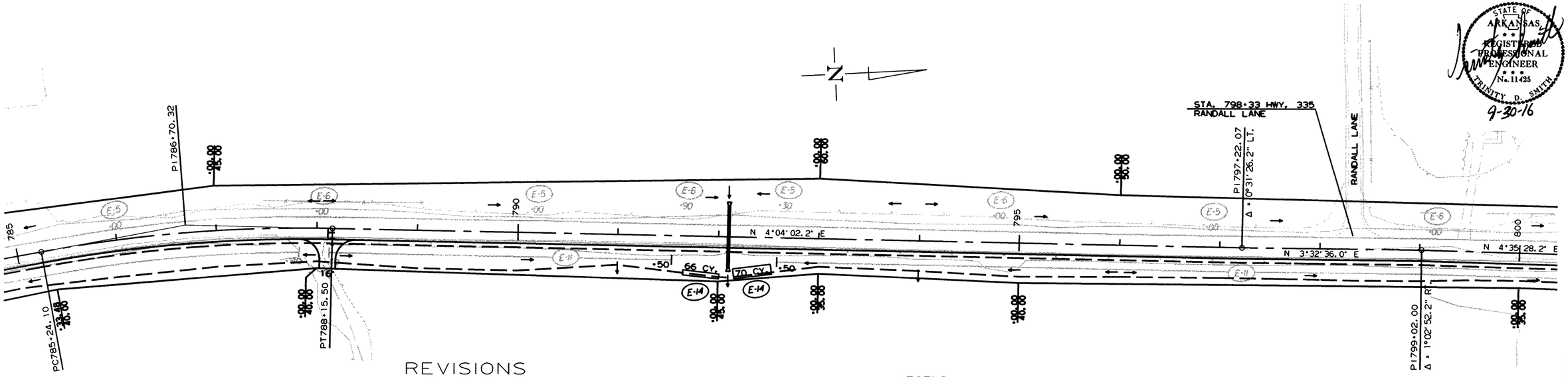
9/2/2016

R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	34	335

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

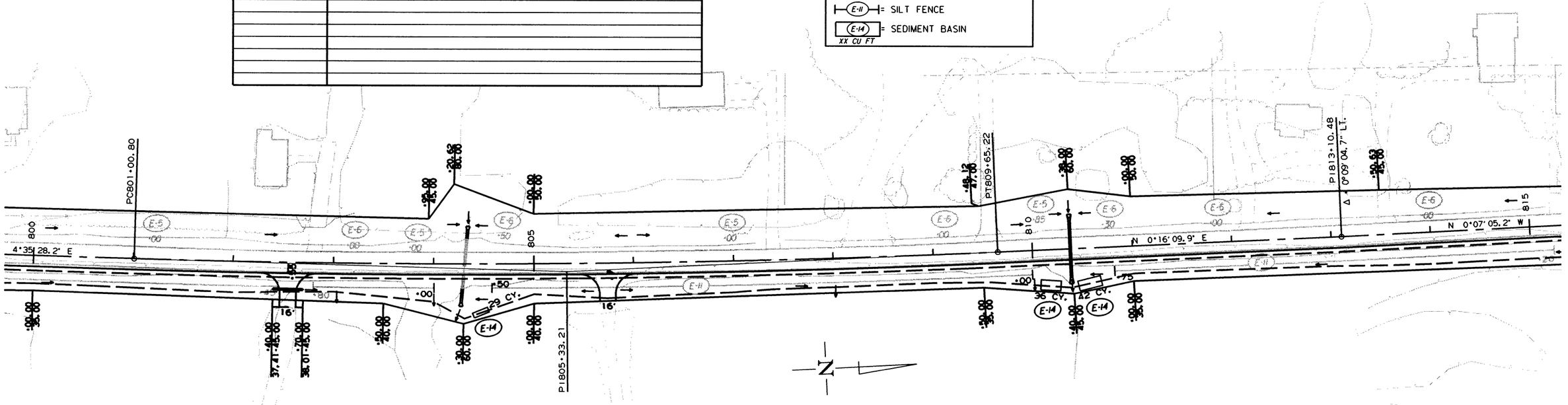


REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-14) XX CU FT = SEDIMENT BASIN



9/2/2016

R070368.DGN

TEMPORARY EROSION CONTROL DETAILS
STAGE I

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.		070368	35	335

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN
  XX CU FT

P1821+75.21
N 0°38'35.2" E
820
815
59 CY.
27 CY.
E-14
P1817+14.32
Δ = 0°31'30.0"
PCB19+71.09
PT823+68.15
N 33°24'04.8" E
P1824+75.56
Δ = 0°18'07.4" RT.
N 33°42'12.2" E
825
PCB26+41.62
830
STA. 840+56 HWY. 335
MOUNT HOLLY ROAD
P1837+82.57
PT834+62.48
835
N 15°29'49.1" W
37 CY.
66 CY.
PCB36+11.93
840
N 3°40'02.4" E
PT839+30.39
PCB40+02.54
MT. HOLLY ROAD
29 CY.
PT842+75.18
845
N 7°58'46.0" E
STA. 840+55 HWY. 335
MOUNT HOLLY ROAD

9/2/2016

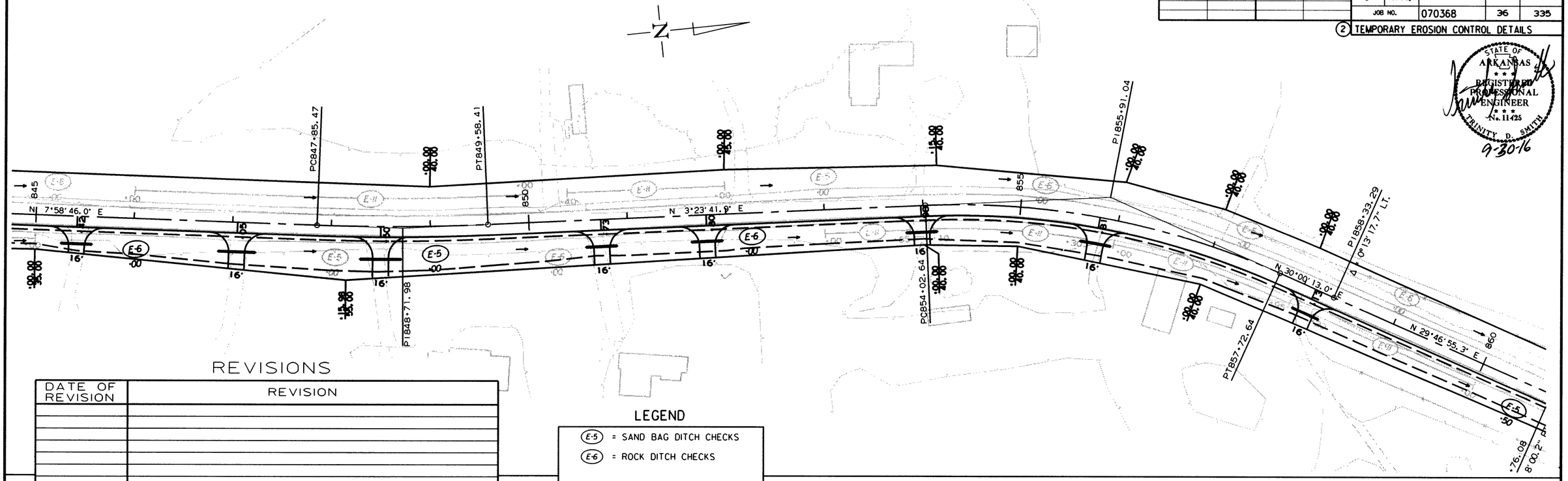
R070368.DGN

TEMPORARY EROSION CONTROL DETAILS
STAGE I

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.		070368	36	335

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

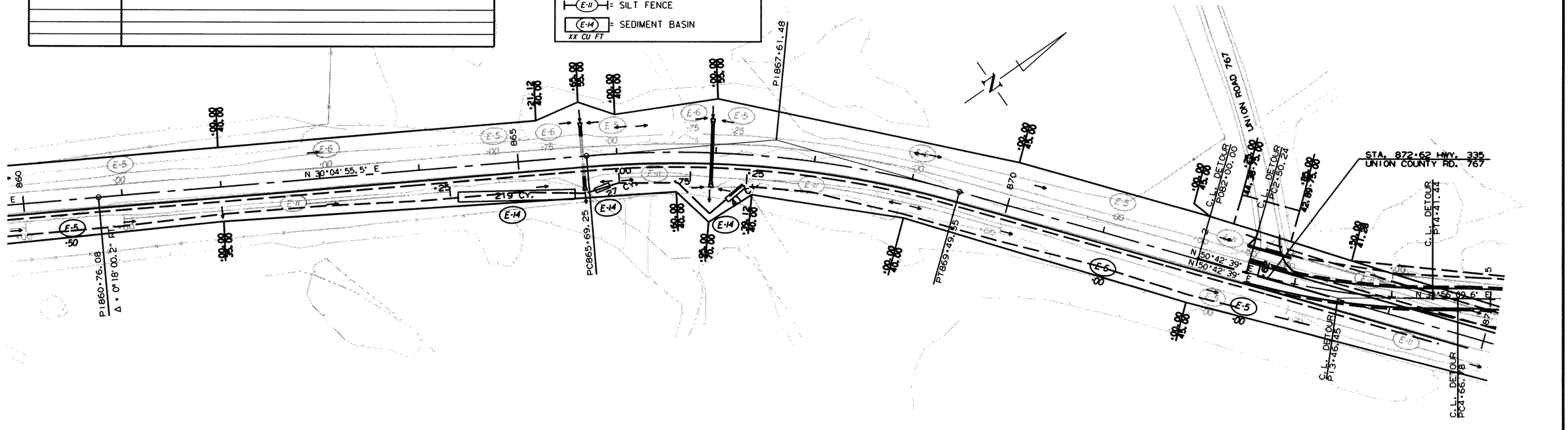


REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-14) XX CU FT = SEDIMENT BASIN



TEMPORARY EROSION CONTROL DETAILS
STAGE I

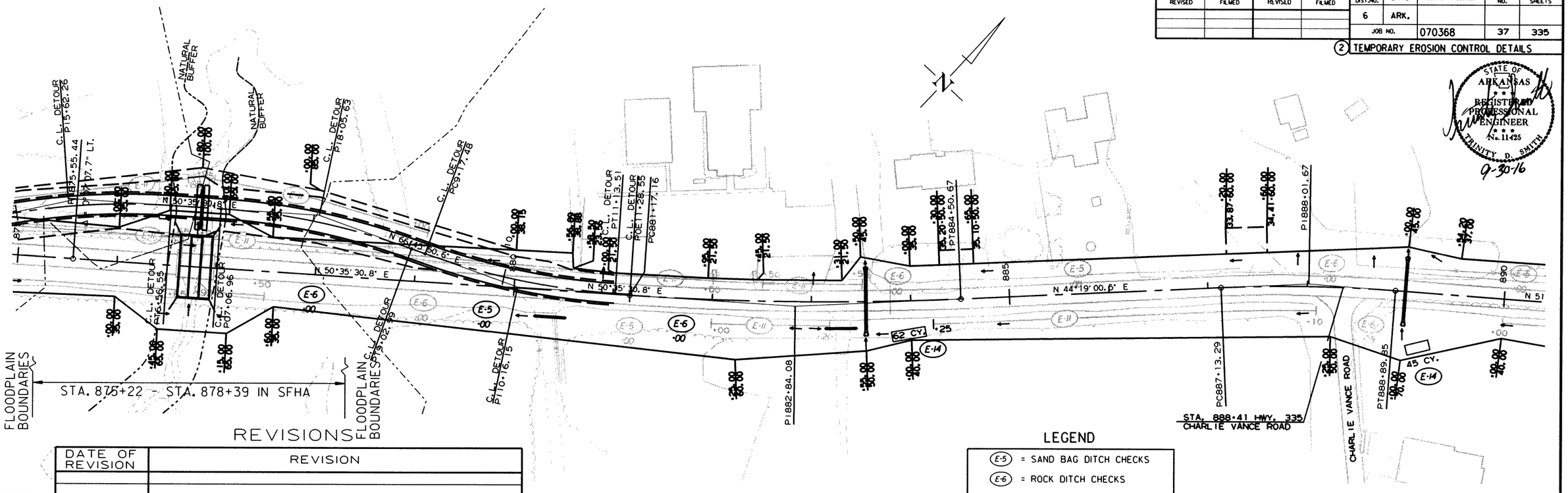
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R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	37	335

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

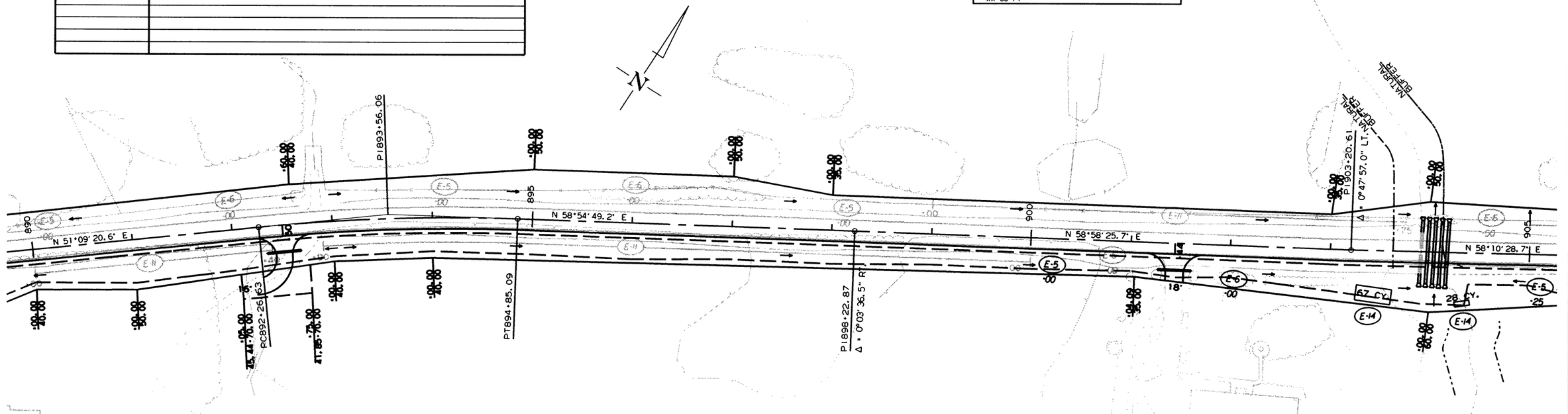


REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN, XX CU FT



TEMPORARY EROSION CONTROL DETAILS
STAGE I

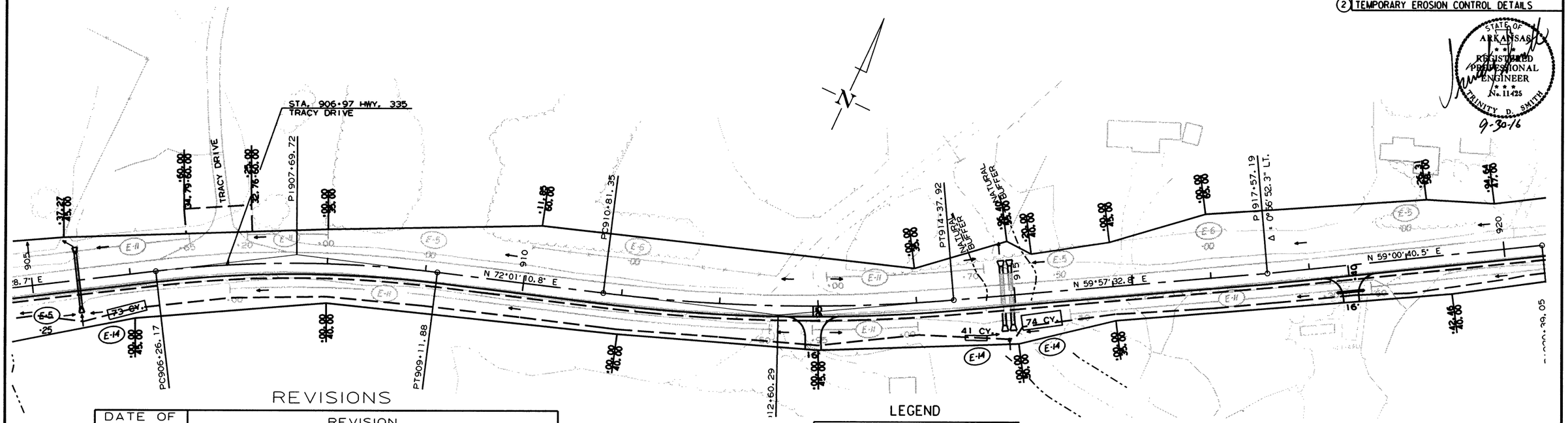
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R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	38	335

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

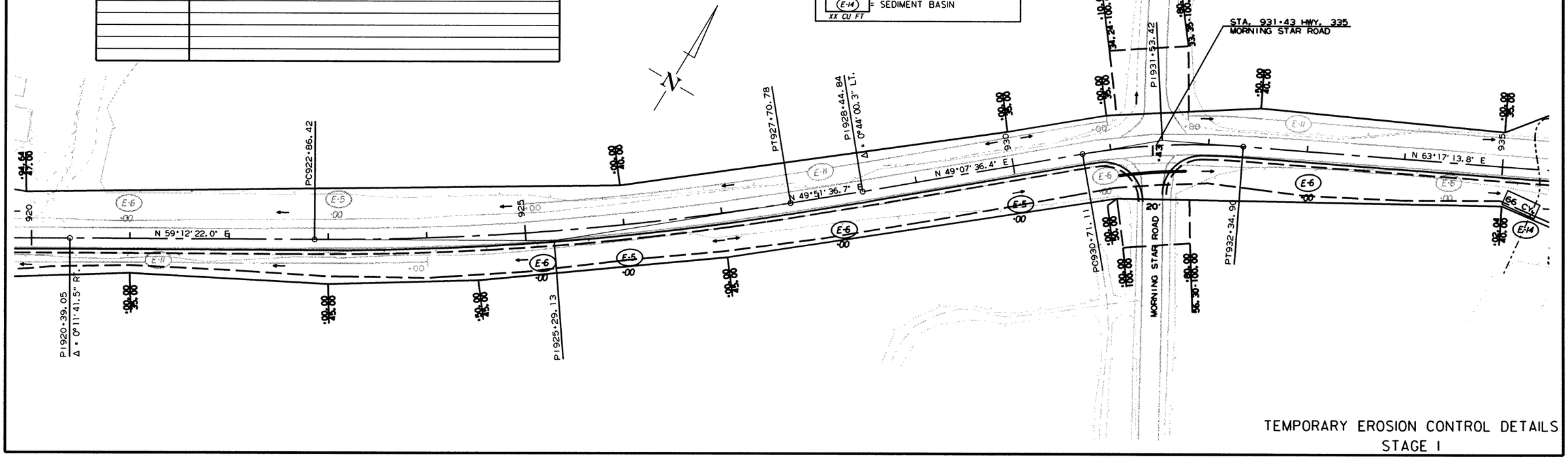


REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-14) XX CU FT = SEDIMENT BASIN



TEMPORARY EROSION CONTROL DETAILS
STAGE I

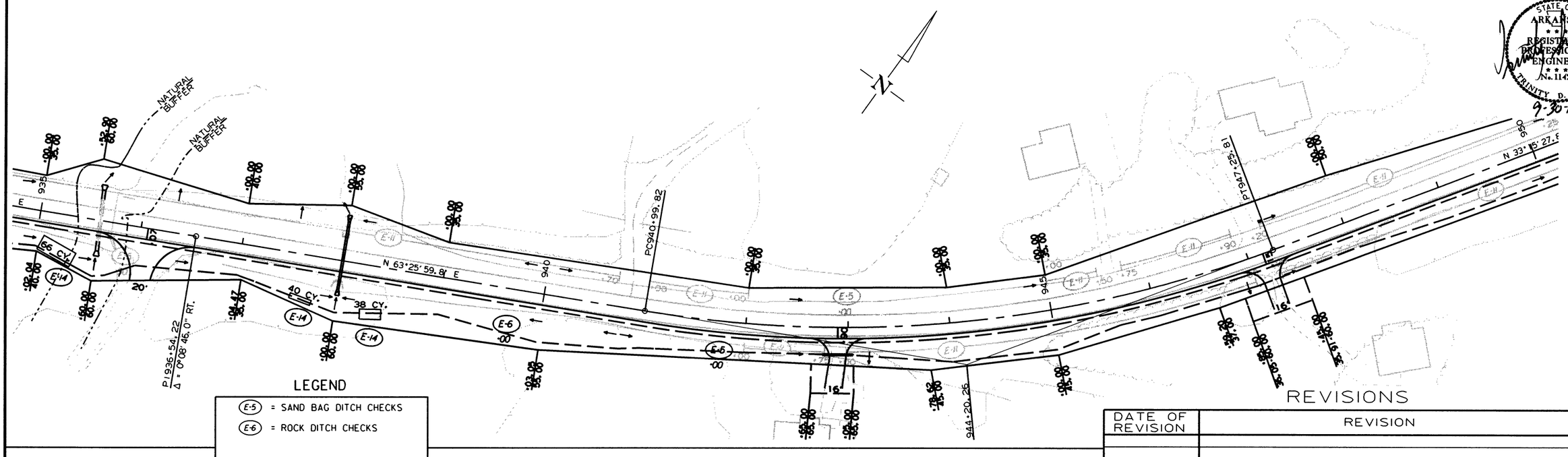
9/2/2016

R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	39	335

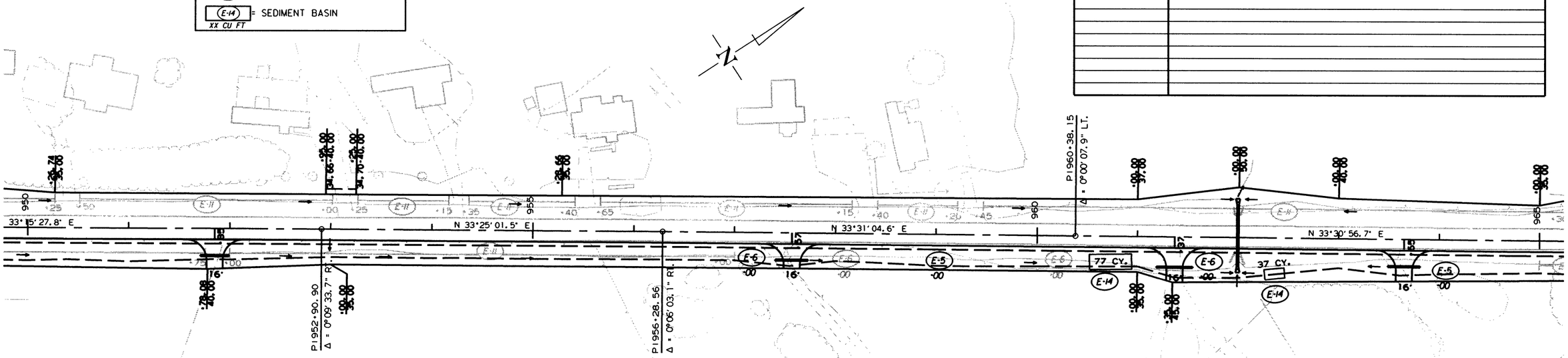
(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN, XX CU FT



REVISIONS

DATE OF REVISION	REVISION

TEMPORARY EROSION CONTROL DETAILS
STAGE I

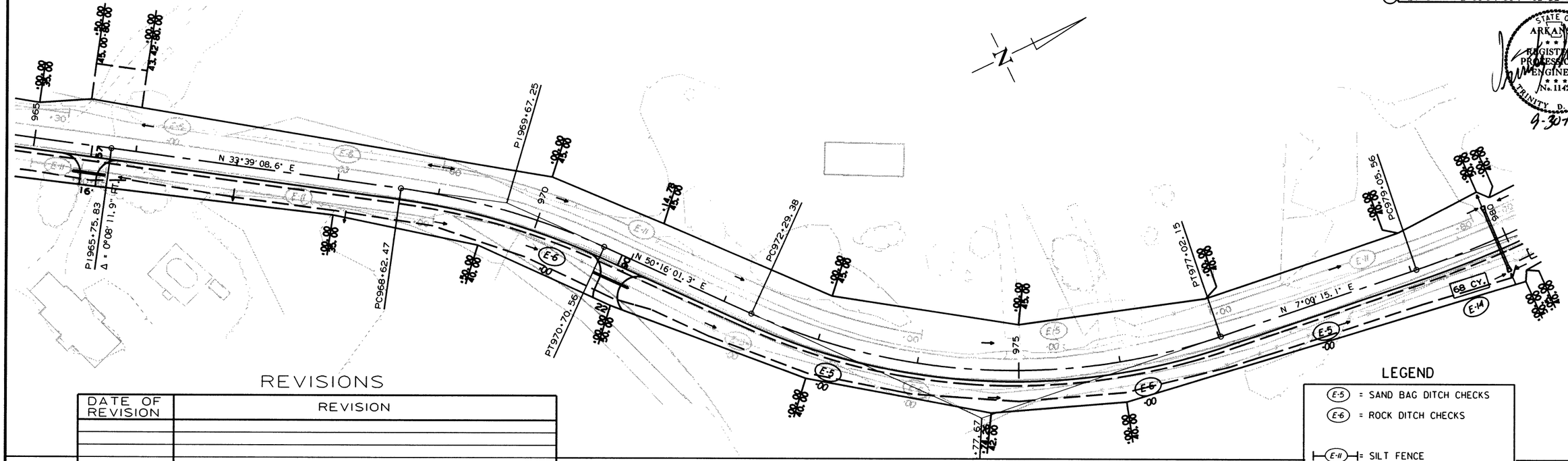
9/2/2016

R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	40	335

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-14) XX CU FT = SEDIMENT BASIN

9/2/2016

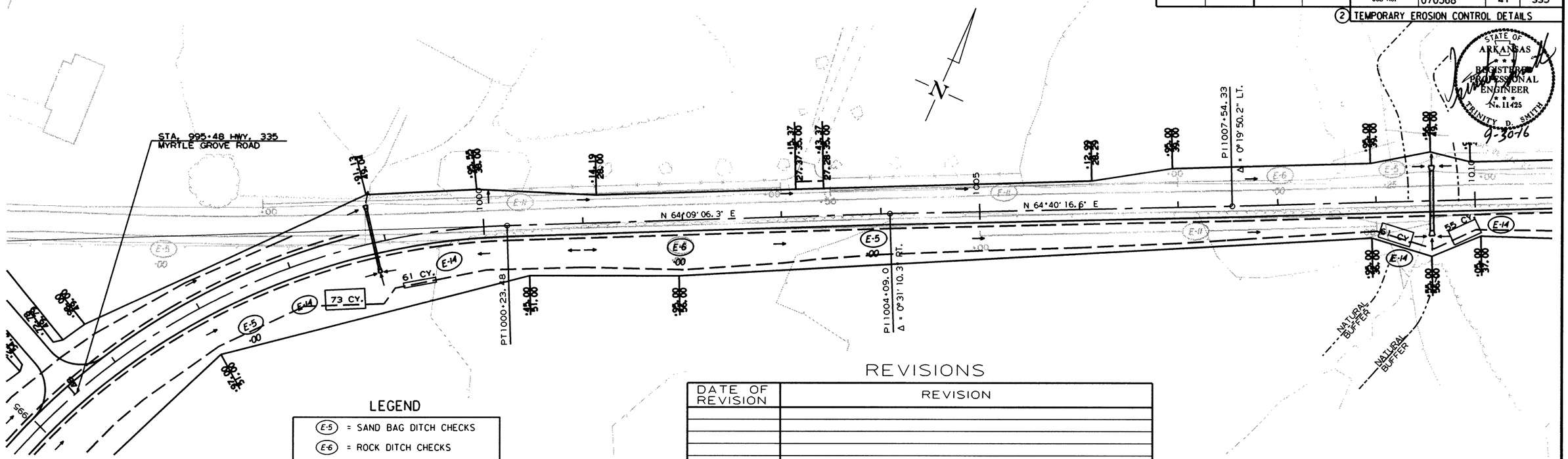
R070368.DGN

TEMPORARY EROSION CONTROL DETAILS
STAGE I

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.		070368	41	335

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

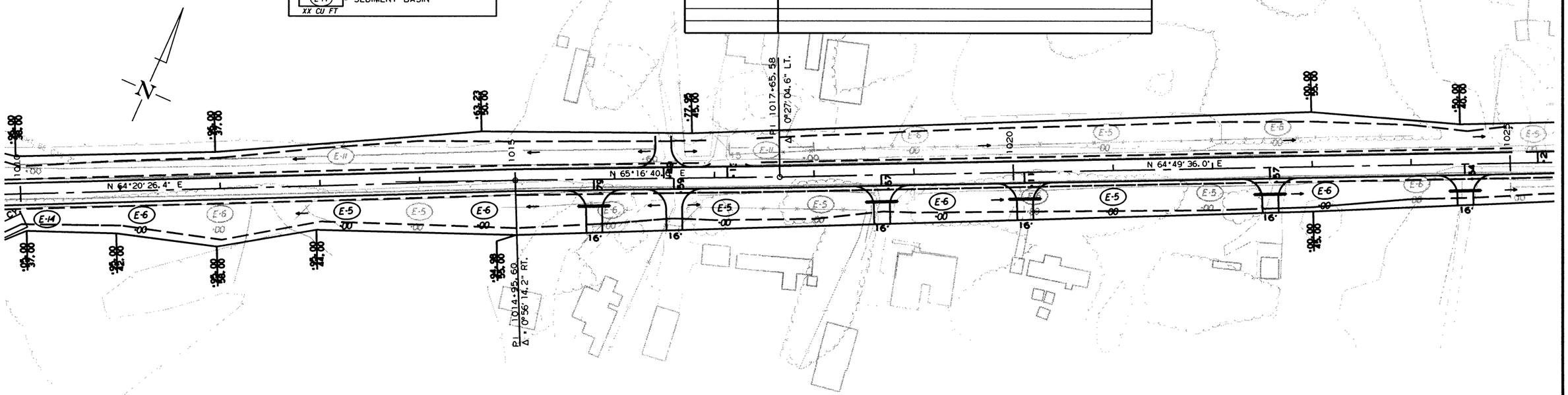


LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN, XX CU FT

REVISIONS

DATE OF REVISION	REVISION



9/2/2016

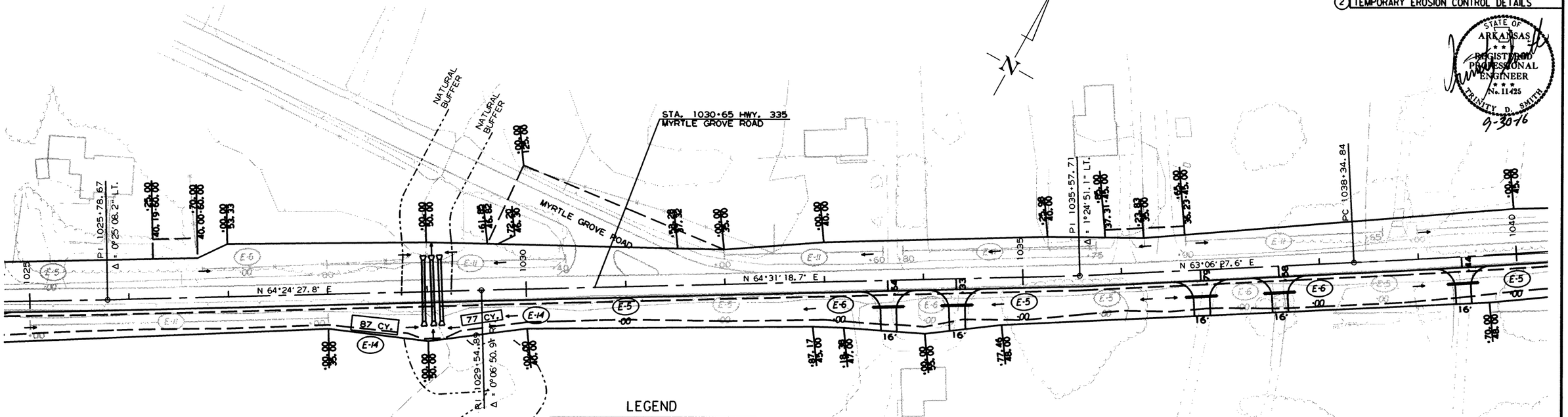
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TEMPORARY EROSION CONTROL DETAILS
STAGE I

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.		070368	42	335

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

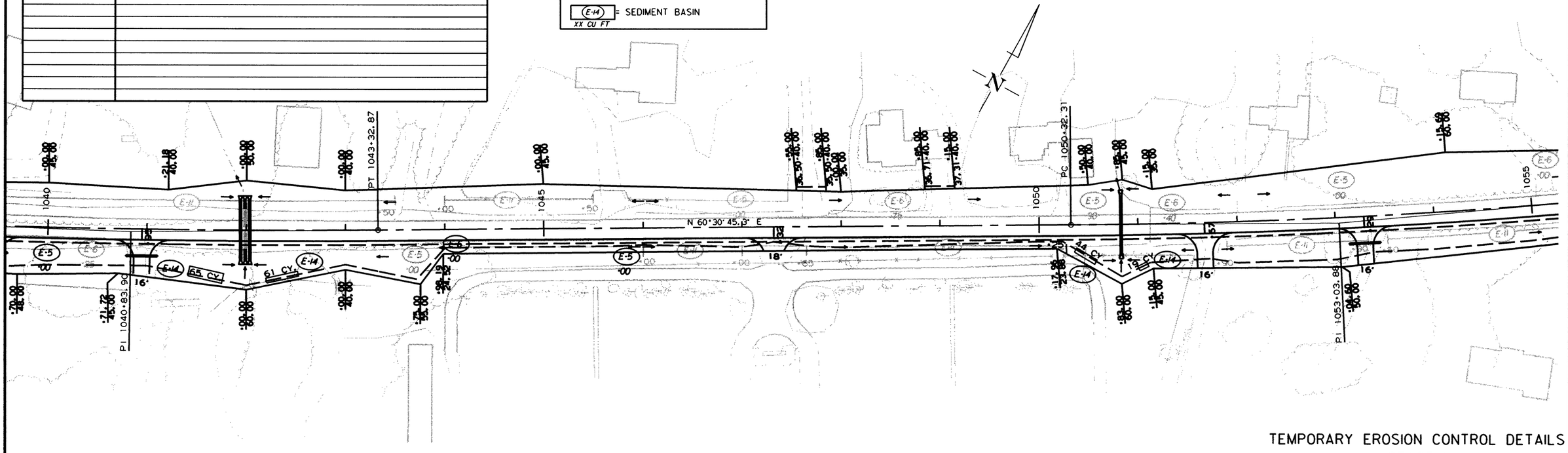


LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-14) XX CU FT = SEDIMENT BASIN

REVISIONS

DATE OF REVISION	REVISION



9/2/2016

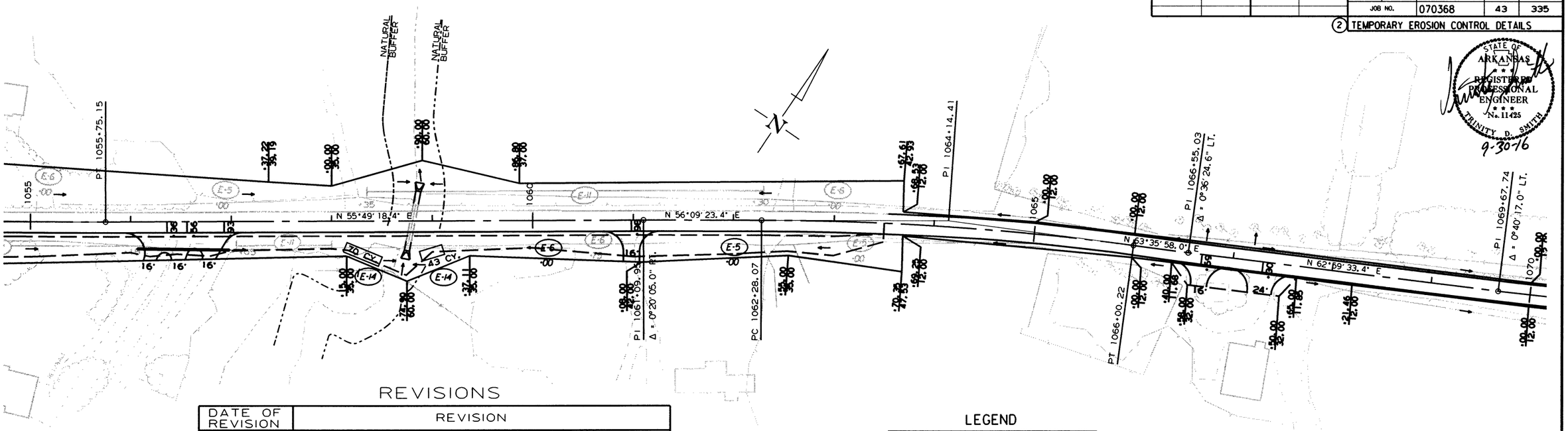
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TEMPORARY EROSION CONTROL DETAILS
STAGE I

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.		070368	43	335

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

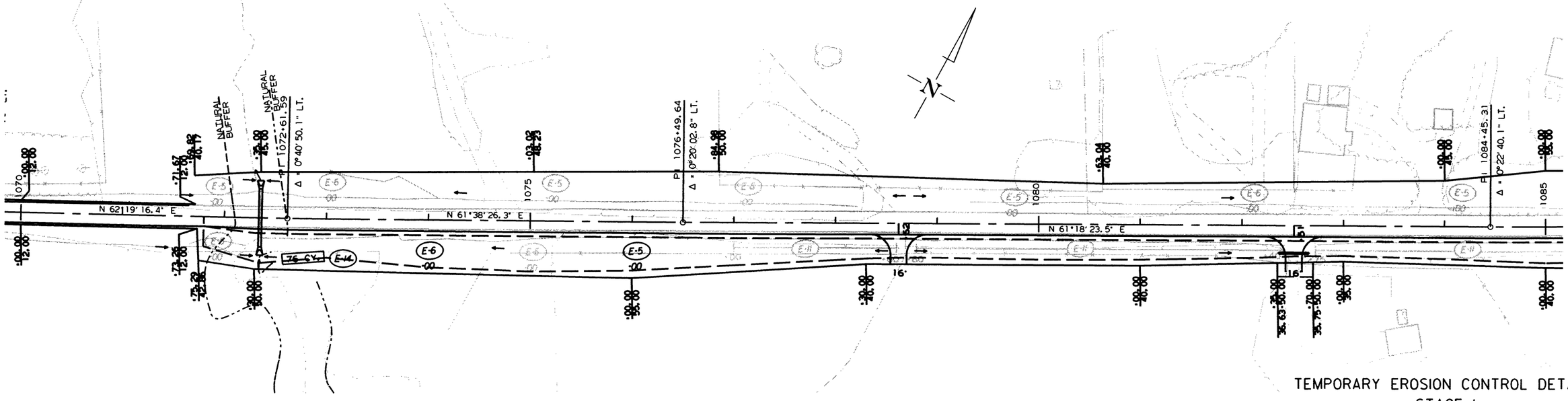


REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN, XX CU FT



9/2/2016

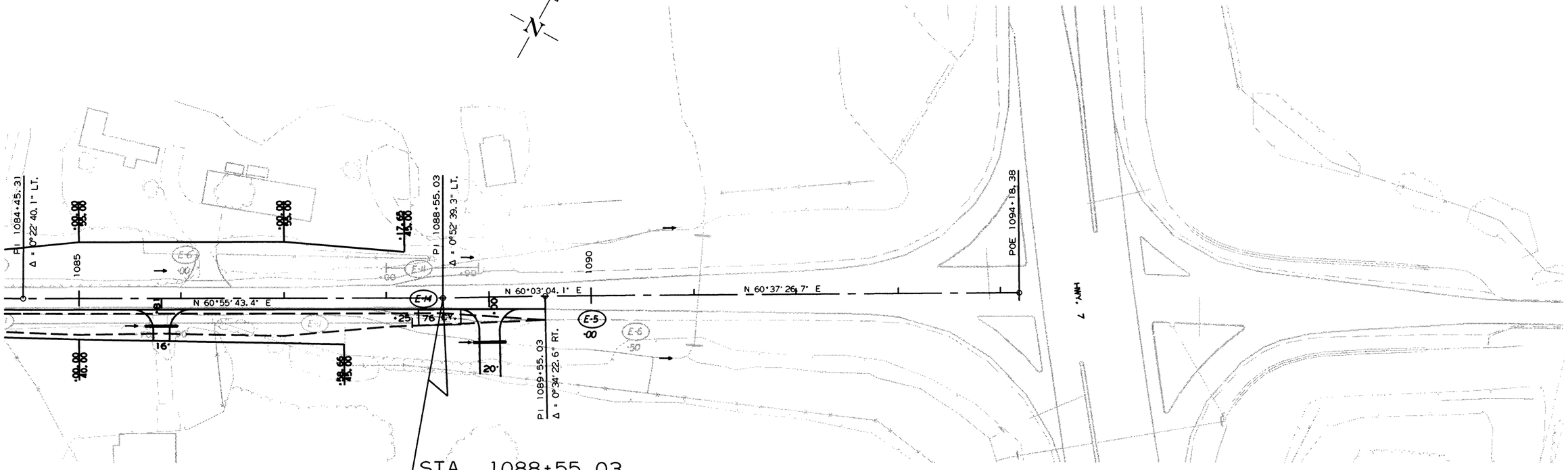
R070368.DGN

TEMPORARY EROSION CONTROL DETAILS
STAGE I

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.		070368	44	335

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN, XX CU FT

9/2/2016

R070368.DGN

TEMPORARY EROSION CONTROL DETAILS
STAGE I

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.		070368	45	335

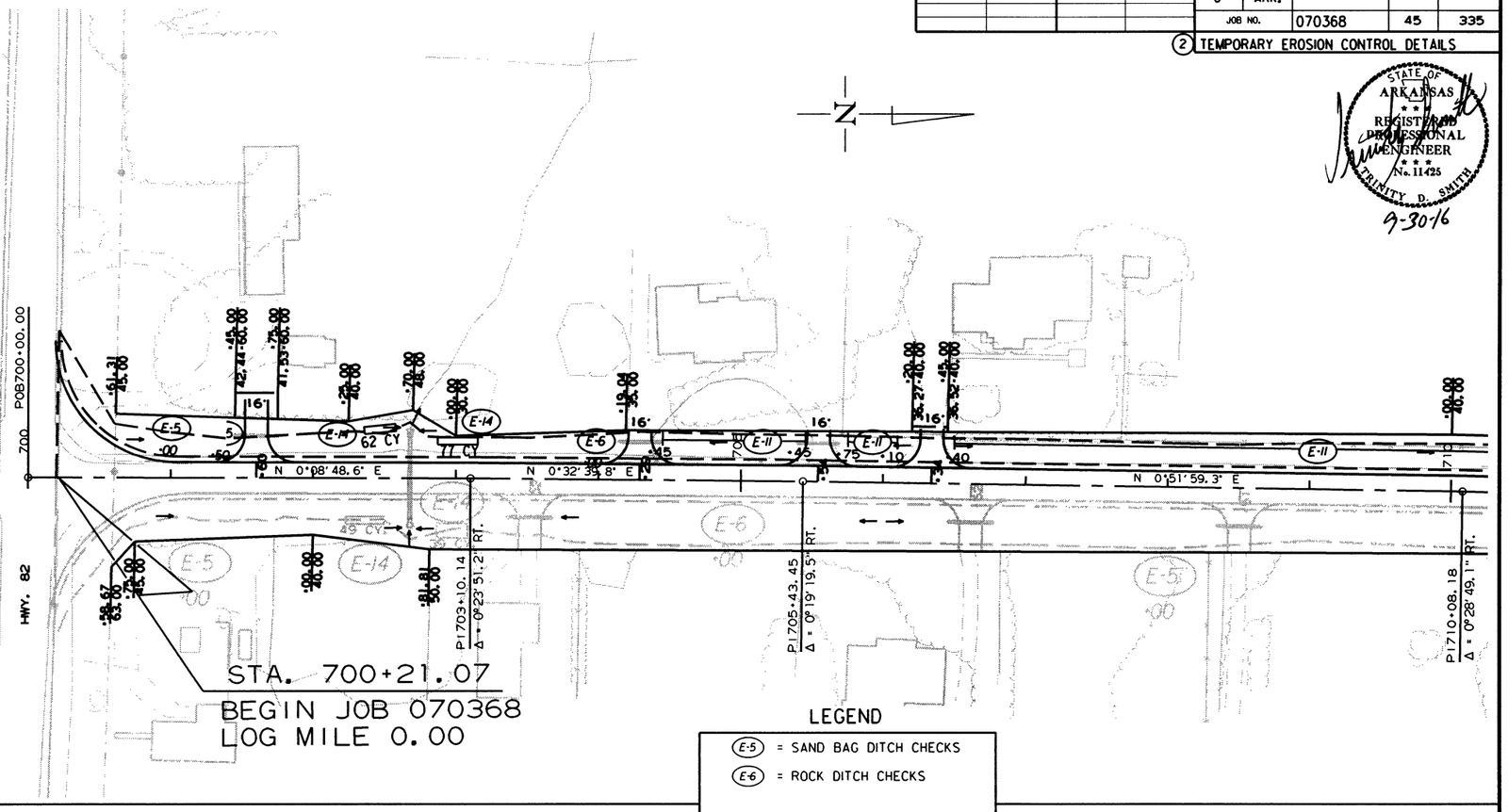
(2) TEMPORARY EROSION CONTROL DETAILS

QUANTITIES
STAGE 2
SAND BAG DITCH CHECKS (E-5) = 748 BAGS
ROCK DITCH CHECKS (E-6) = 105 CU. YDS.
SEDIMENT BASINS (E-14) = 4841 CU. YDS.

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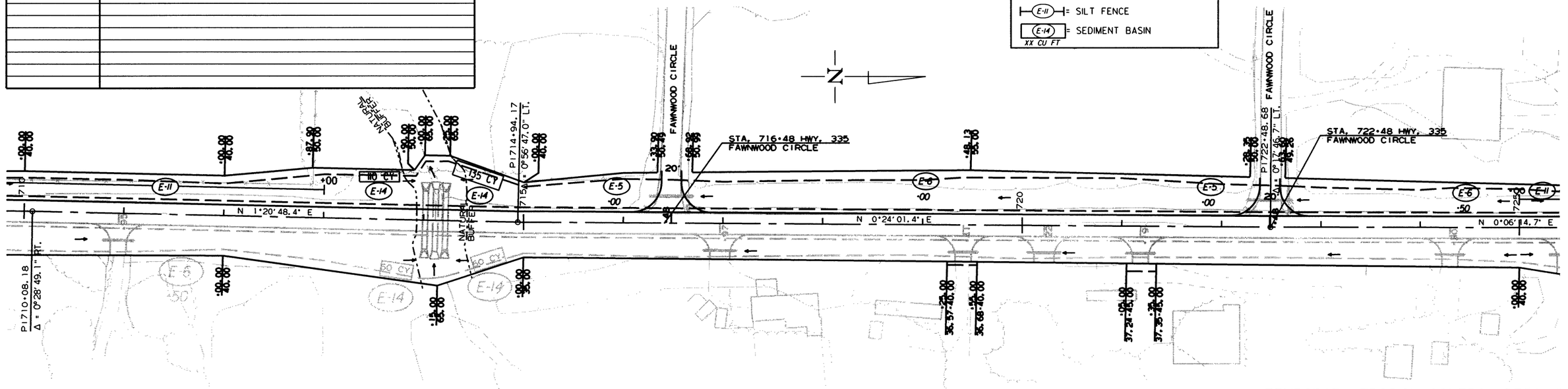
REVISIONS

DATE OF REVISION	REVISION



LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-14) XX CU FT = SEDIMENT BASIN



TEMPORARY EROSION CONTROL DETAILS
STAGE 2

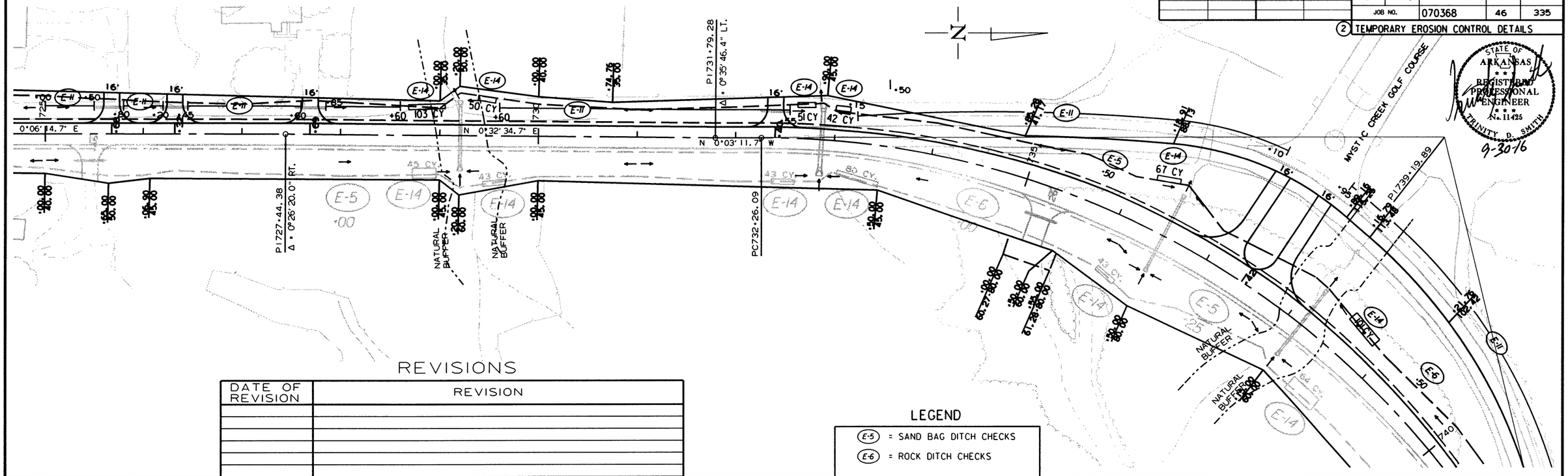
9/2/2016

R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	46	335

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

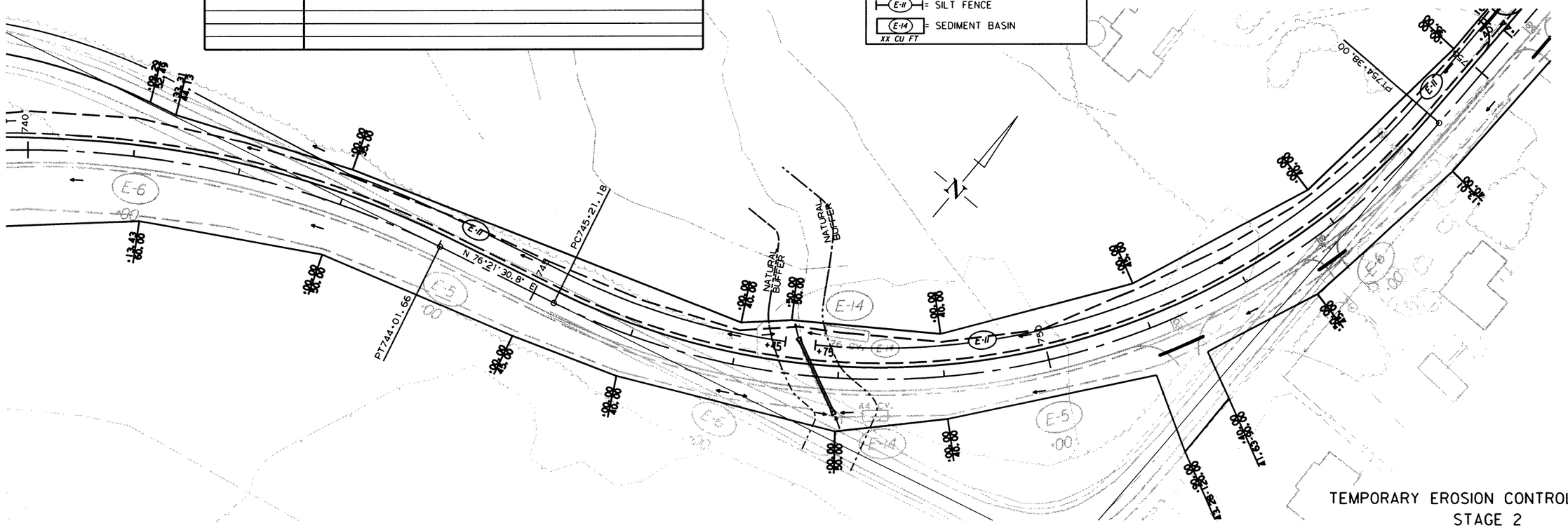


REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN
  XX CU FT



TEMPORARY EROSION CONTROL DETAILS
STAGE 2

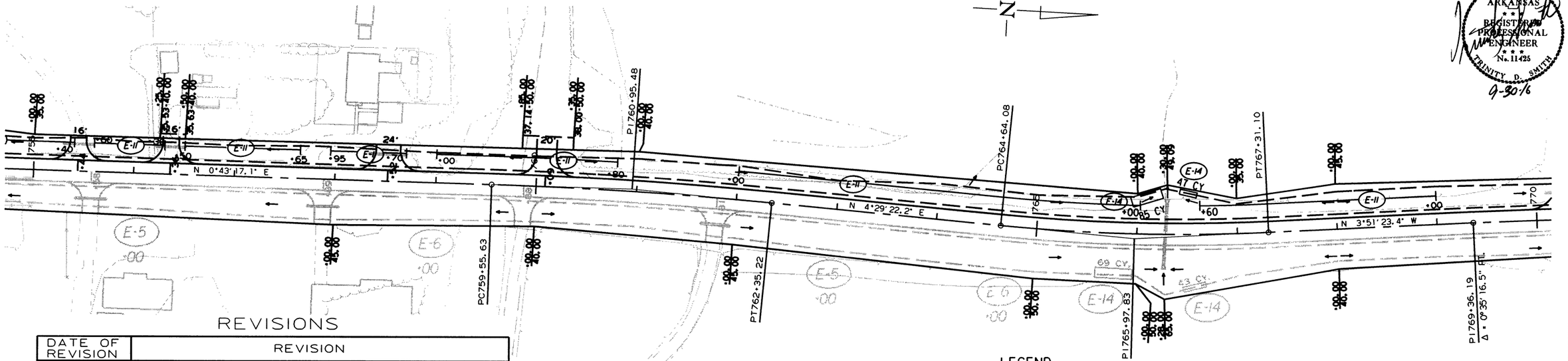
9/2/2016

R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	47	335

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

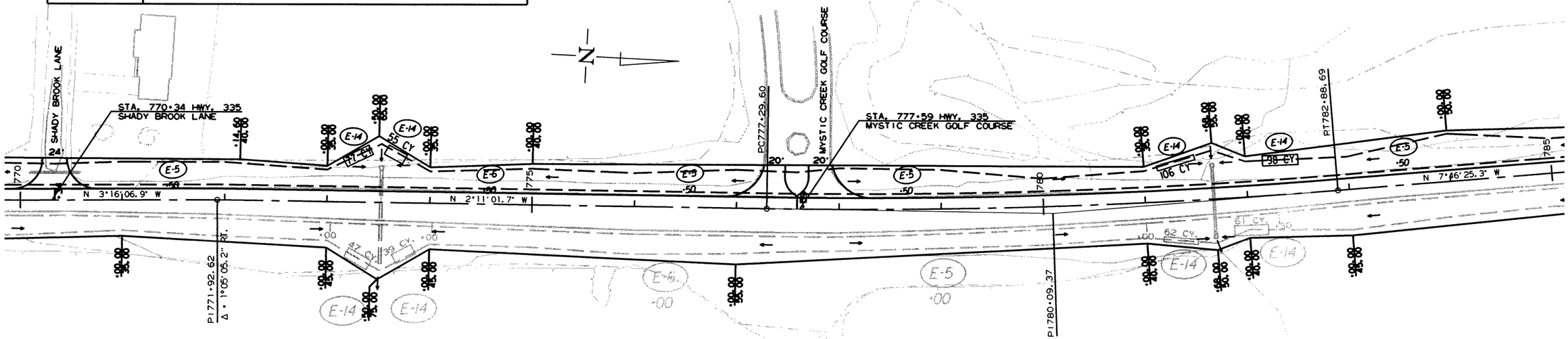


REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN, XX CU FT



TEMPORARY EROSION CONTROL DETAILS
STAGE 2

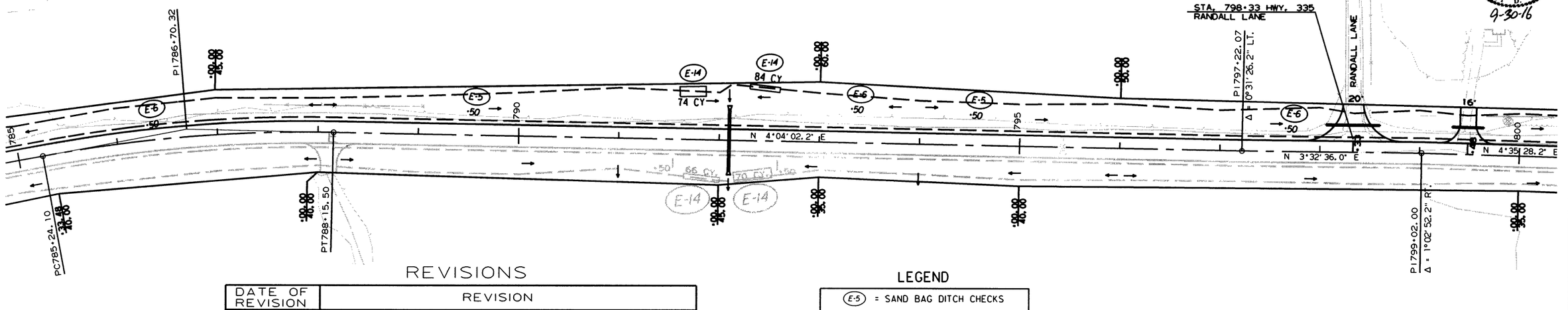
9/2/2016

R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	48	335

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

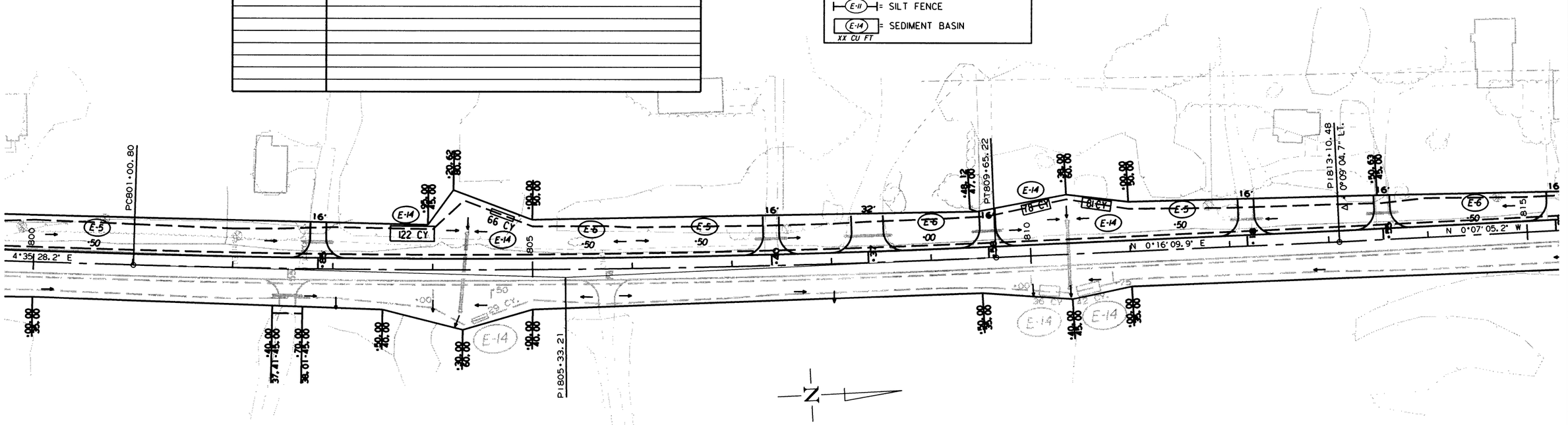


REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-14) XX CU FT = SEDIMENT BASIN



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TEMPORARY EROSION CONTROL DETAILS
STAGE 2

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.		070368	49	335

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN
  XX CU FT

P1821+75.21
N 0°38'35.2" E
P1817+14.32
Δ = 0°31'30.0" Rt.
PC819+71.09
PT823+68.15
N 33°24'04.8" E
P1824+75.56
Δ = 0°18'07.4" Rt.
N 33°42'12.2" E
PC826+41.62
STA. 840+56 HWY. 335
MOUNT HOLLY ROAD
P1837+82.57
P1834+62.48
N 15°29'49.1" W
PC836+31.93
N 3°40'02.4" E
PT839+30.39
MT. HOLLY ROAD
PC840+07.54
P1841+41.43
PT842+75.18
N 7°58'46.0" E
STA. 840+55 HWY. 335
MOUNT HOLLY ROAD

TEMPORARY EROSION CONTROL DETAILS
STAGE 2

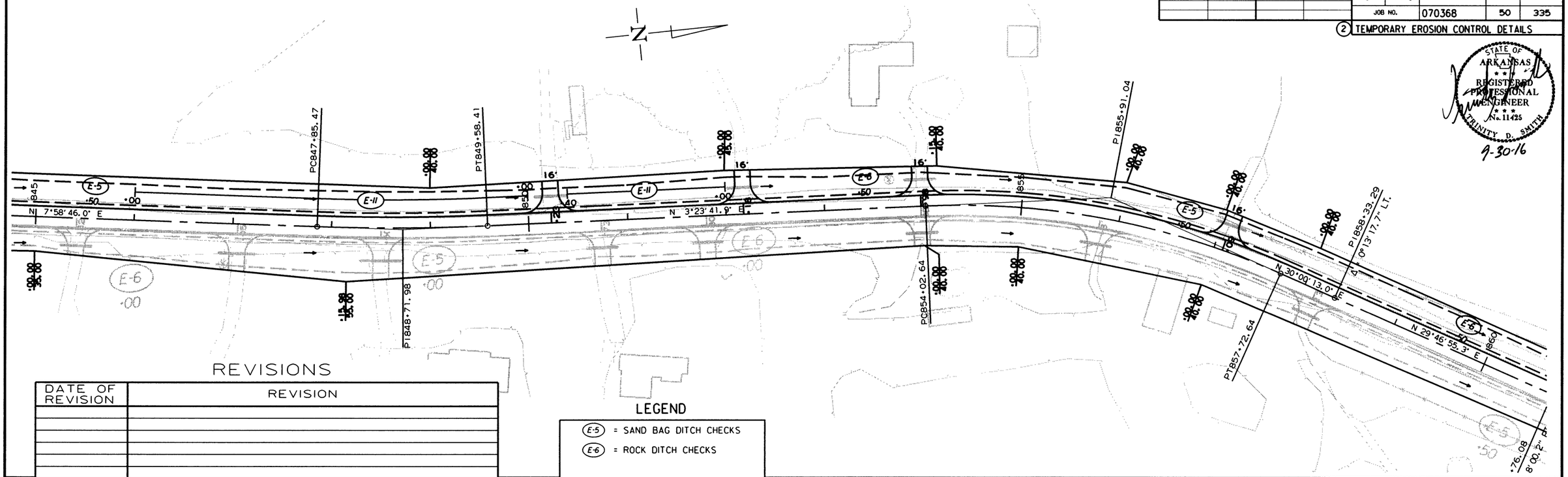
9/2/2016

R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	50	335

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

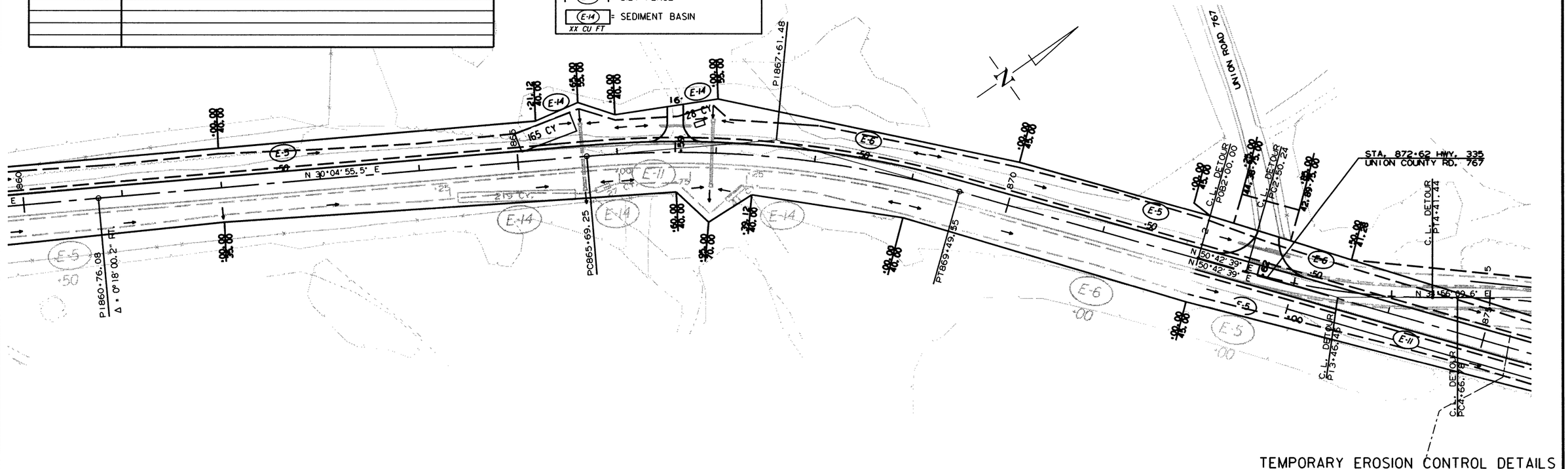


REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN
  XX CU FT



TEMPORARY EROSION CONTROL DETAILS
STAGE 2

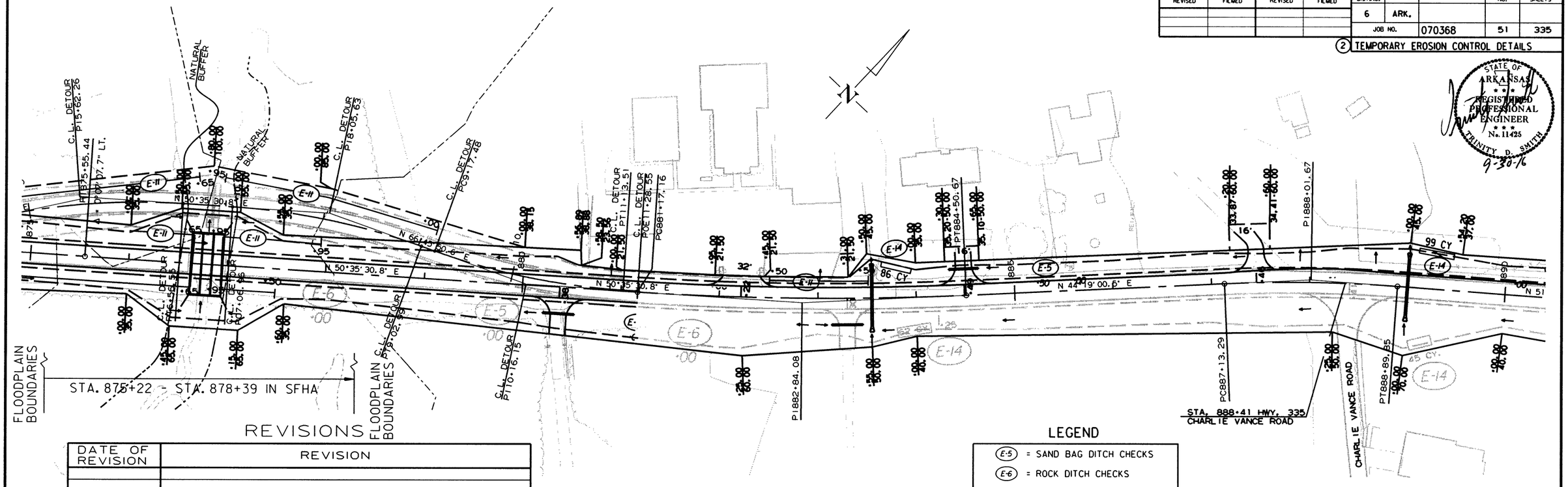
9/2/2016

R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	51	335

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

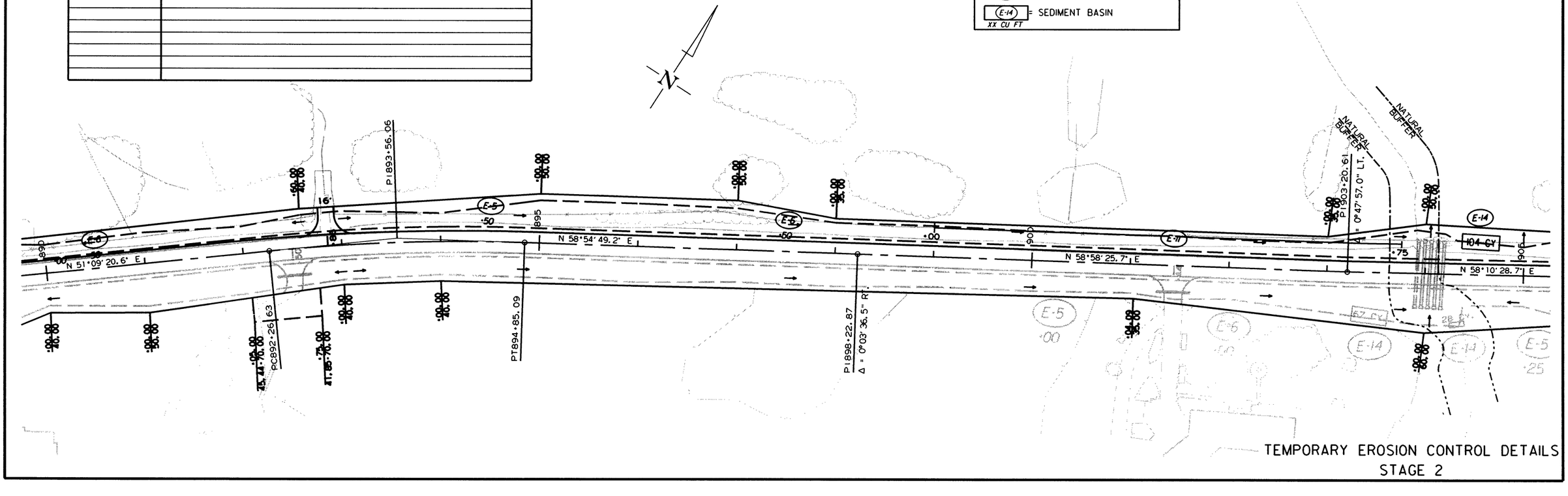


REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN, XX CU FT



TEMPORARY EROSION CONTROL DETAILS
STAGE 2

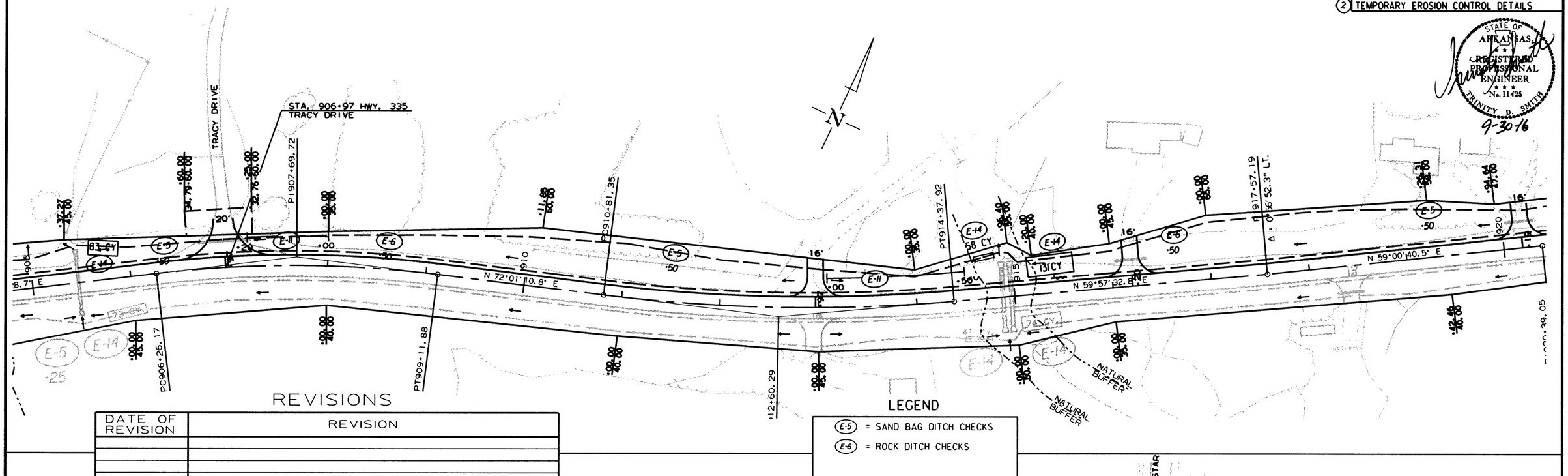
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R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	52	335

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

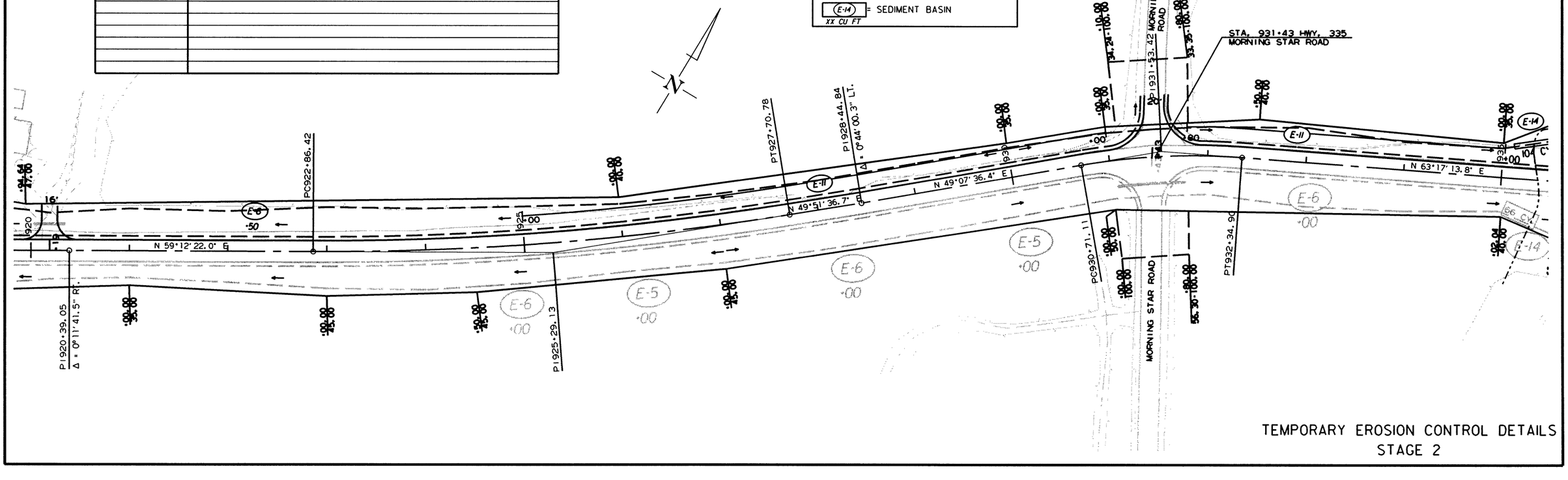


REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN
  XX CU FT



TEMPORARY EROSION CONTROL DETAILS
STAGE 2

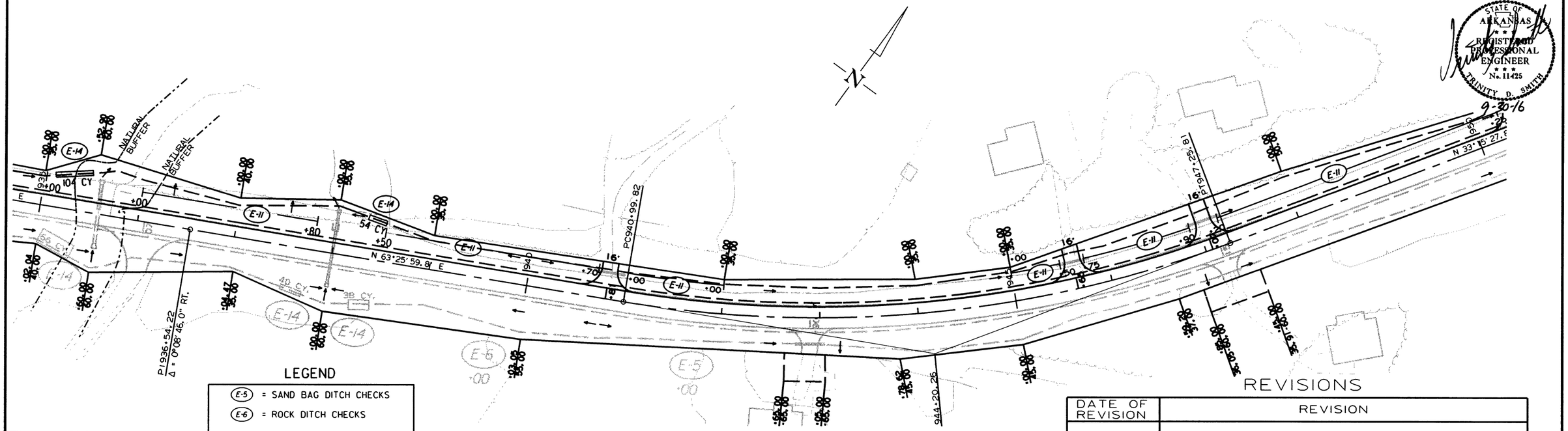
9/2/2016

R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	53	335

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

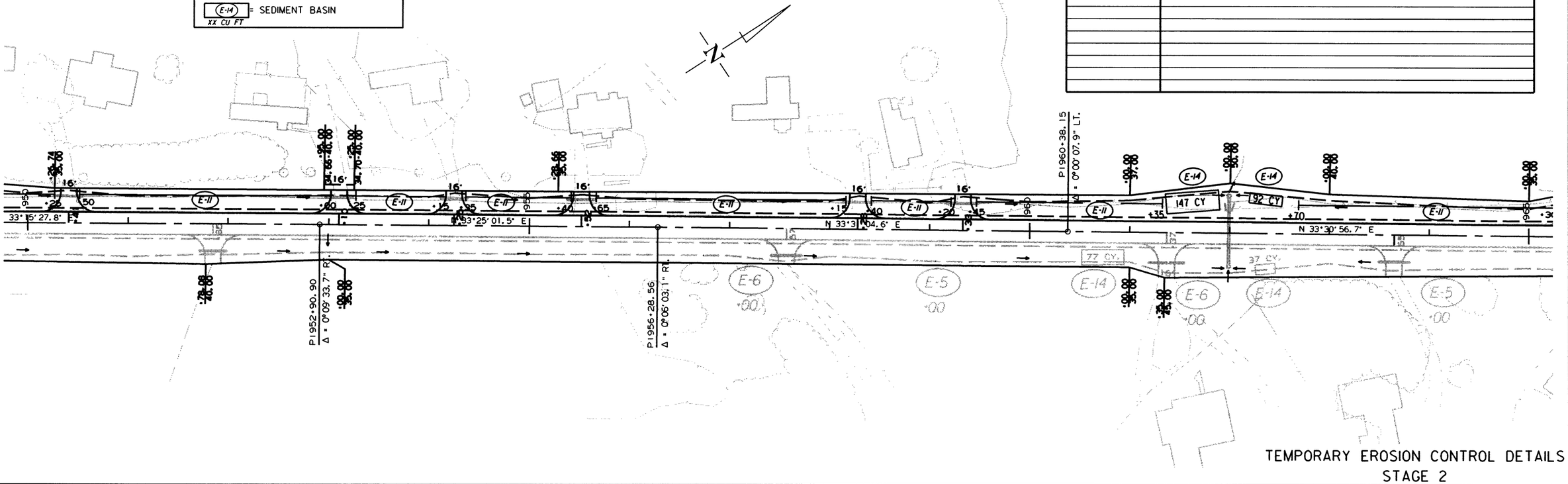


LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN, XX CU FT

REVISIONS

DATE OF REVISION	REVISION



TEMPORARY EROSION CONTROL DETAILS
STAGE 2

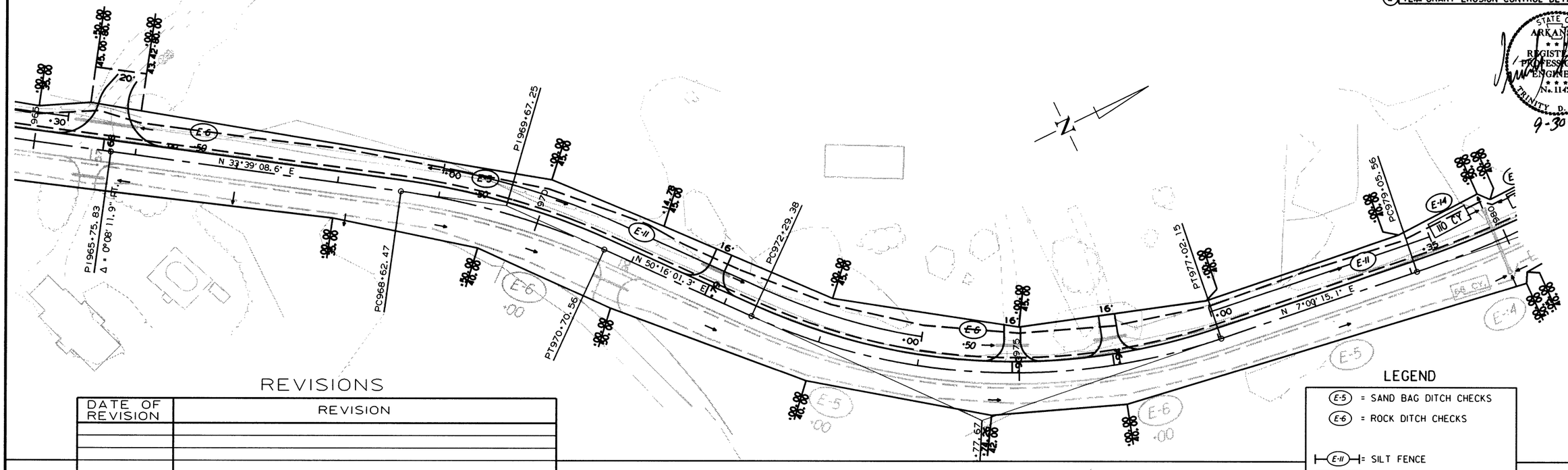
9/2/2016

R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	54	335

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



REVISIONS

DATE OF REVISION	REVISION

LEGEND

- E-5 = SAND BAG DITCH CHECKS
- E-6 = ROCK DITCH CHECKS
- E-11 = SILT FENCE
- E-14 = SEDIMENT BASIN (XX CU FT)

TEMPORARY EROSION CONTROL DETAILS
STAGE 2

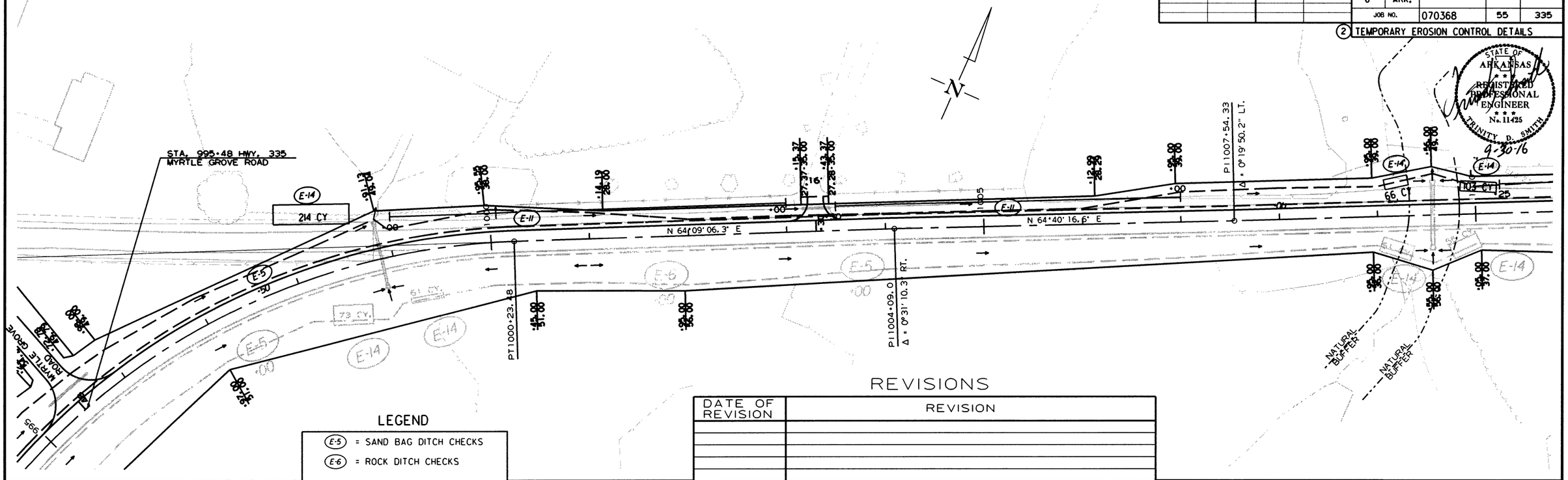
9/2/2016

R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	55	335

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN
  XX CU FT

REVISIONS

DATE OF REVISION	REVISION

9/2/2016

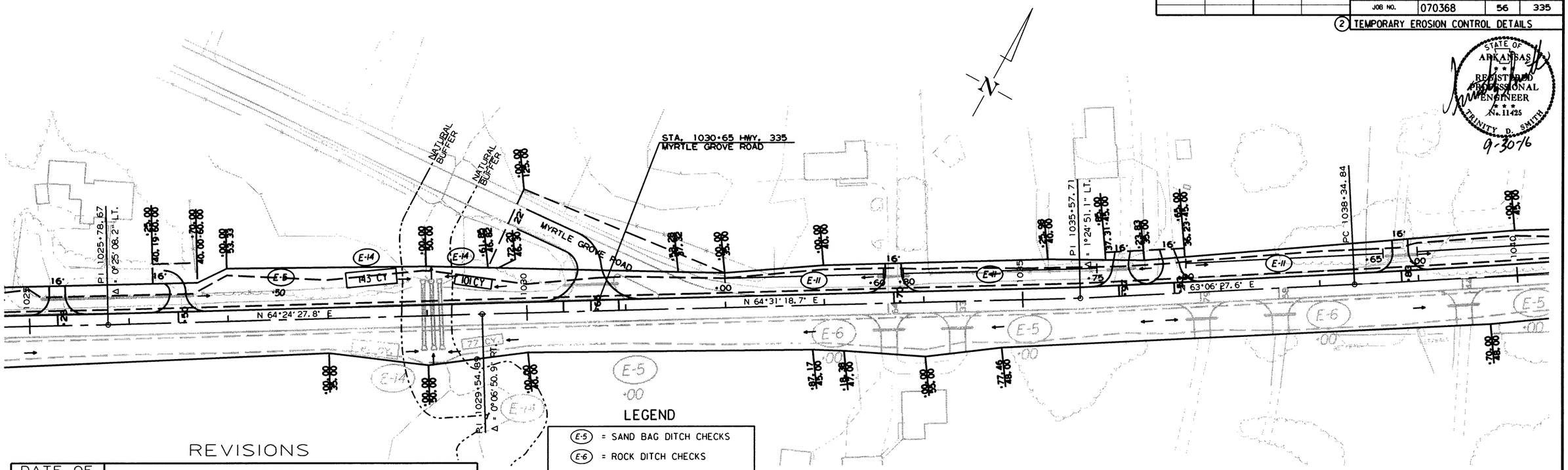
R070368.DGN

TEMPORARY EROSION CONTROL DETAILS
STAGE 2

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.		070368	56	335

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

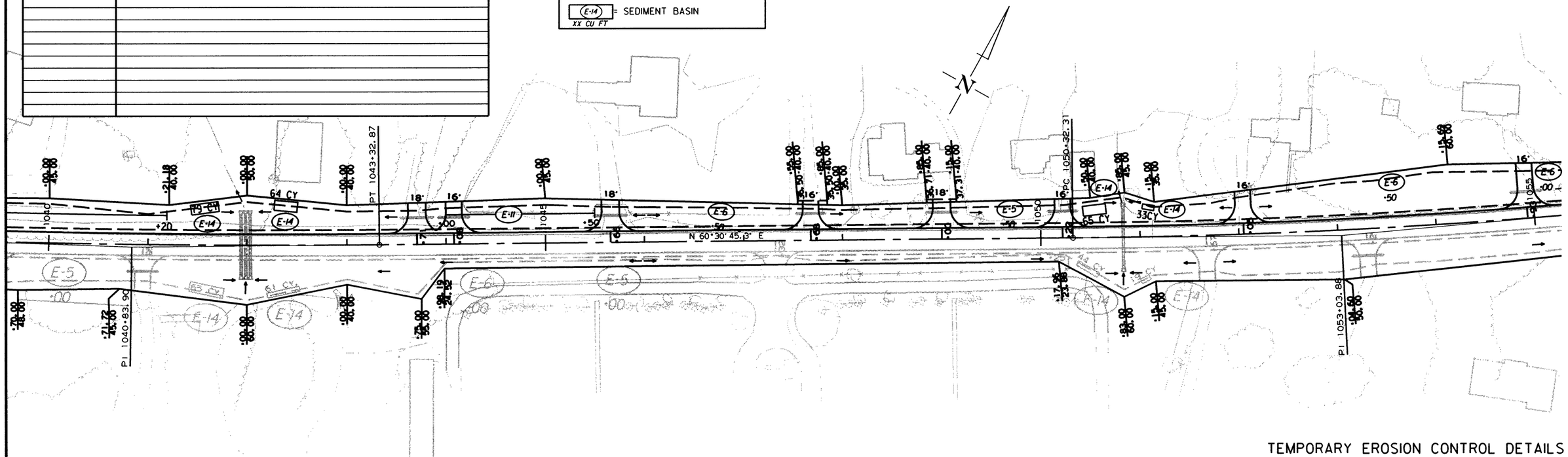


REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN, XX CU FT



9/2/2016

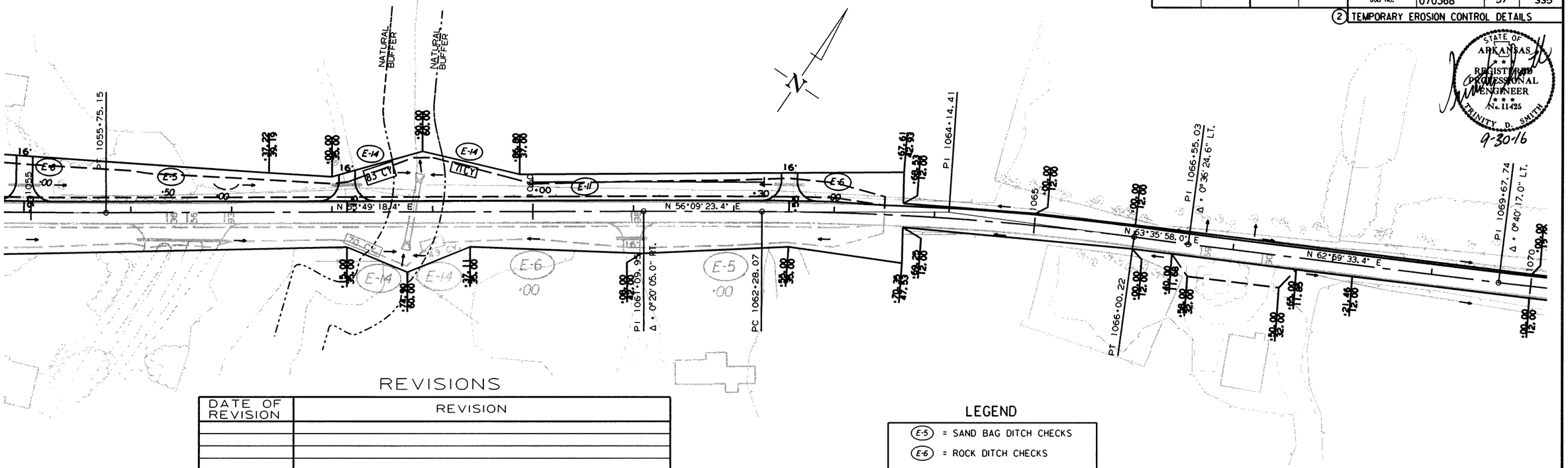
R070368.DGN

TEMPORARY EROSION CONTROL DETAILS
STAGE 2

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.		070368	57	335

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

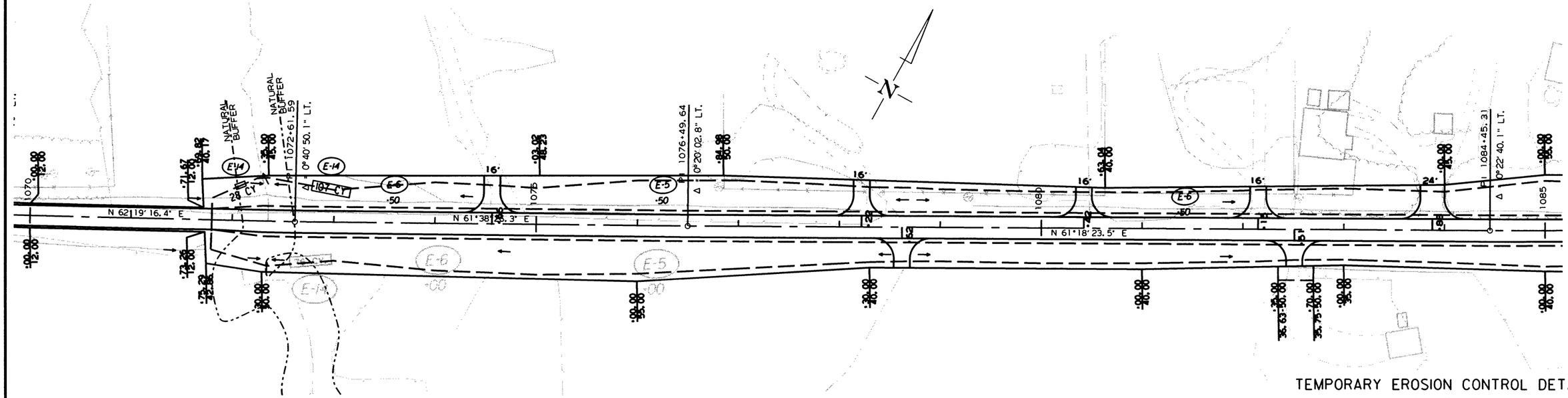


REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-14) XX CU FT = SEDIMENT BASIN



TEMPORARY EROSION CONTROL DETAILS
STAGE 2

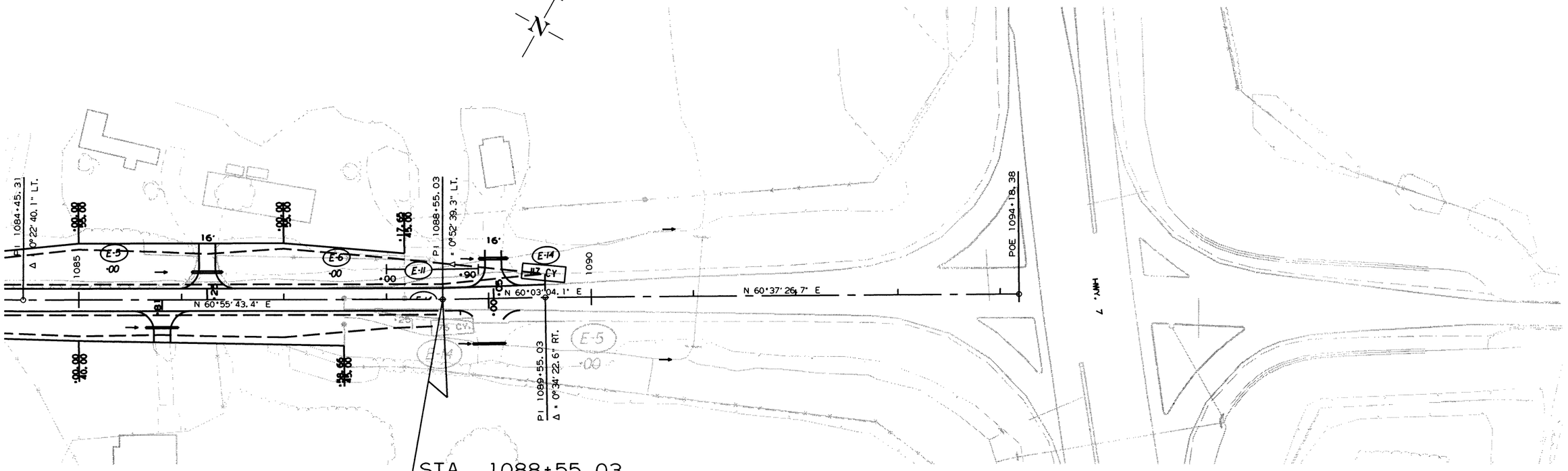
9/2/2016

R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	58	335

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
4-30-16



STA. 1088+55.03
END JOB 070368

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-14) XX CU FT = SEDIMENT BASIN

9/2/2016

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TEMPORARY EROSION CONTROL DETAILS
STAGE 2

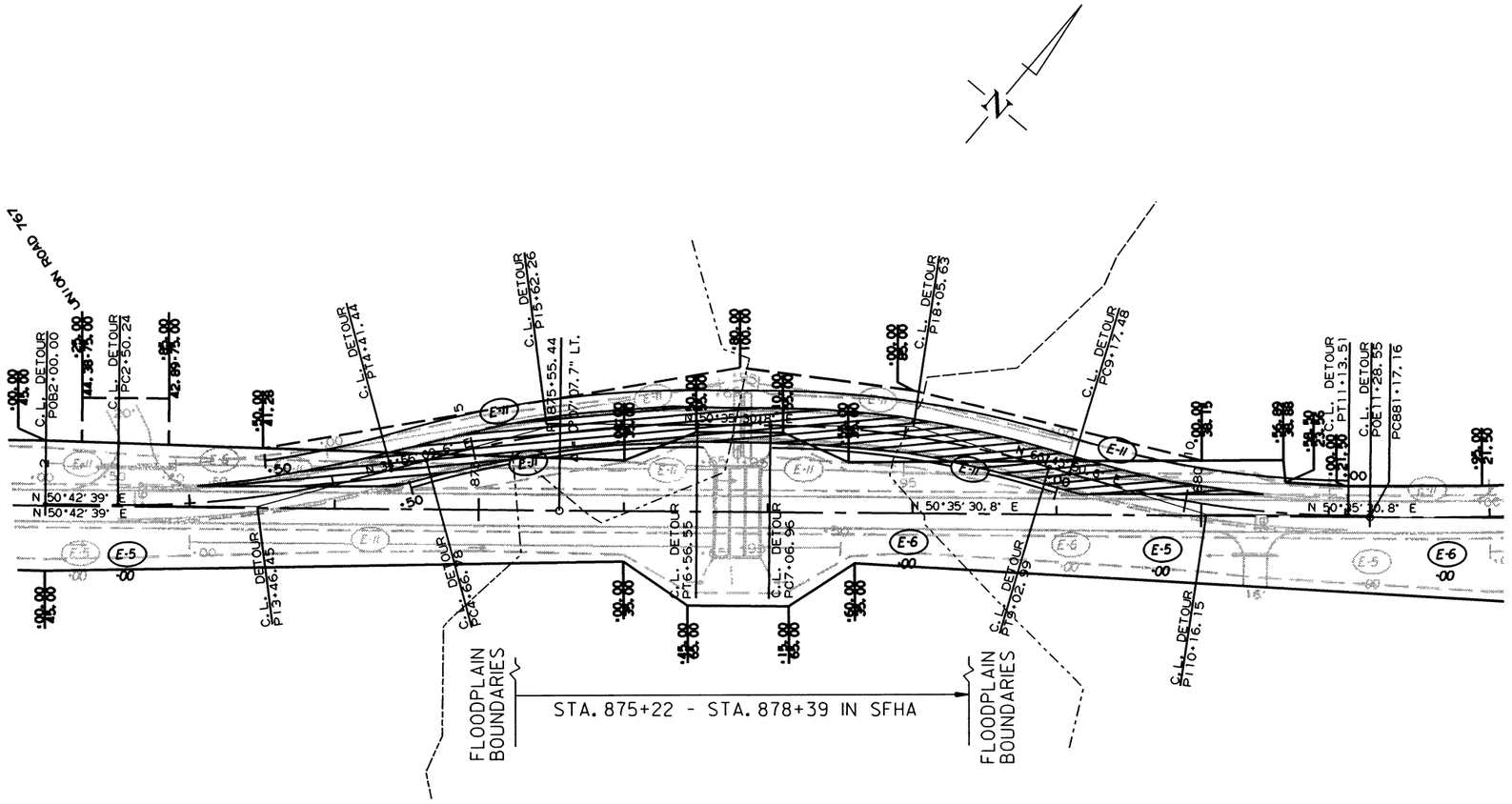
QUANTITIES
STAGE 3
SILT FENCE (E-11) = 1170 LIN. FT.

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.		070368	59	335

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

OBLITERATION OF DETOUR



REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-14) XX CU FT = SEDIMENT BASIN

TEMPORARY EROSION CONTROL DETAILS
STAGE 3

9/2/2016
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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.		070368	60	335

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

DO NOT PASS (30) R4-1 (24" X 30")

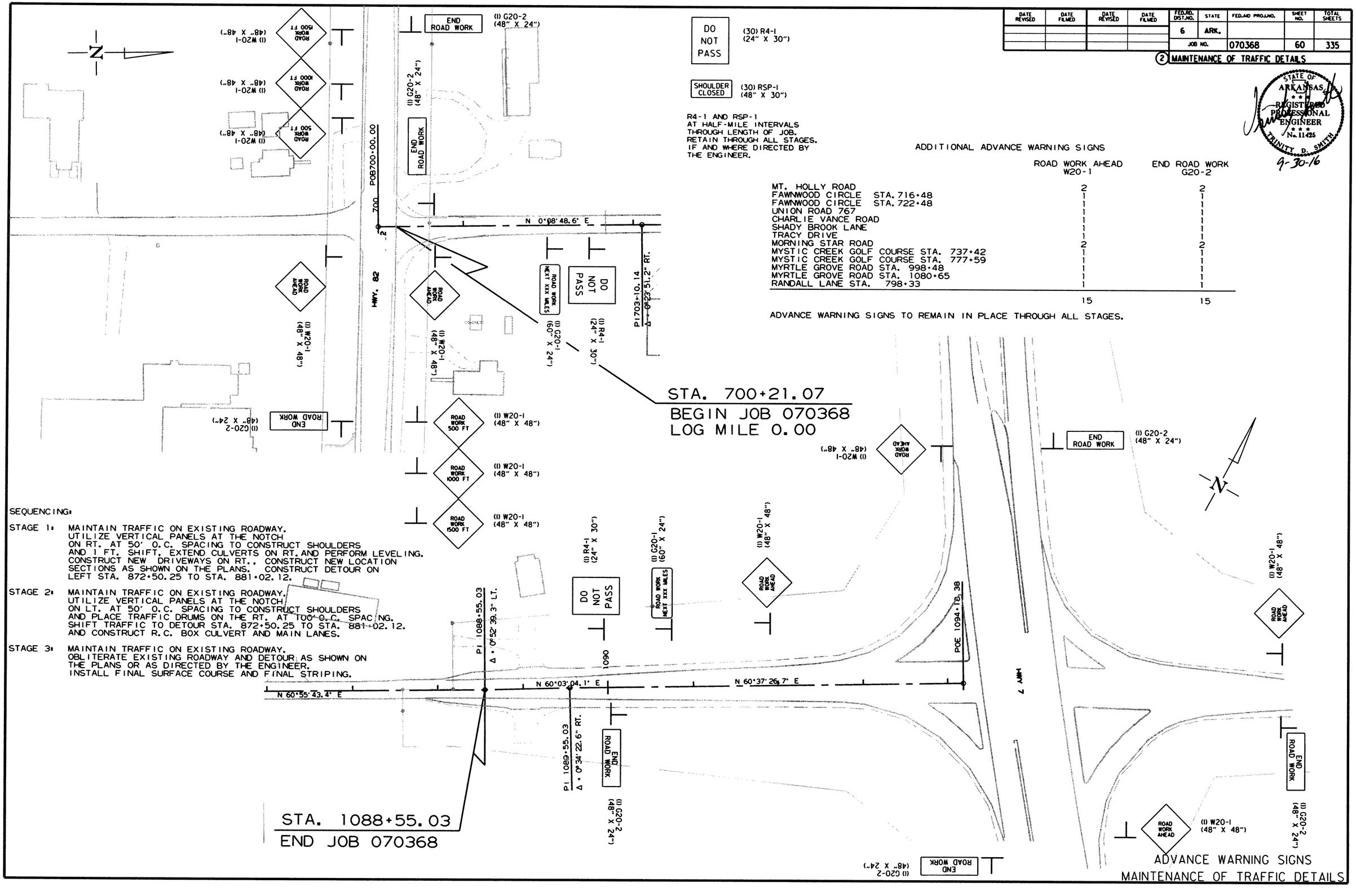
SHOULDER CLOSED (30) RSP-1 (48" X 30")

R4-1 AND RSP-1 AT HALF-MILE INTERVALS THROUGH LENGTH OF JOB. RETAIN THROUGH ALL STAGES. IF AND WHERE DIRECTED BY THE ENGINEER.

ADDITIONAL ADVANCE WARNING SIGNS

	ROAD WORK AHEAD W20-1	END ROAD WORK G20-2
MT. HOLLY ROAD	2	2
FAWNWOOD CIRCLE STA. 716+48	1	1
FAWNWOOD CIRCLE STA. 722+48	1	1
UNION ROAD 767	1	1
CHARLIE VANCE ROAD	1	1
SHADY BROOK LANE	1	1
TRACY DRIVE	1	1
MORNING STAR ROAD	2	2
MYSTIC CREEK GOLF COURSE STA. 737+42	1	1
MYSTIC CREEK GOLF COURSE STA. 777+59	1	1
MYRTLE GROVE ROAD STA. 998+48	1	1
MYRTLE GROVE ROAD STA. 1080+65	1	1
RANDALL LANE STA. 798+33	1	1
	15	15

ADVANCE WARNING SIGNS TO REMAIN IN PLACE THROUGH ALL STAGES.



SEQUENCING:

STAGE 1: MAINTAIN TRAFFIC ON EXISTING ROADWAY. UTILIZE VERTICAL PANELS AT THE NOTCH ON RT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS AND 1 FT. SHIFT. EXTEND CULVERTS ON RT. AND PERFORM LEVELING. CONSTRUCT NEW DRIVEWAYS ON RT.. CONSTRUCT NEW LOCATION SECTIONS AS SHOWN ON THE PLANS. CONSTRUCT DETOUR ON LEFT STA. 872+50.25 TO STA. 881+02.12.

STAGE 2: MAINTAIN TRAFFIC ON EXISTING ROADWAY. UTILIZE VERTICAL PANELS AT THE NOTCH ON LT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS AND PLACE TRAFFIC DRUMS ON THE RT. AT 100' O.C. SPACING. SHIFT TRAFFIC TO DETOUR STA. 872+50.25 TO STA. 881+02.12. AND CONSTRUCT R.C. BOX CULVERT AND MAIN LANES.

STAGE 3: MAINTAIN TRAFFIC ON EXISTING ROADWAY. OBLITERATE EXISTING ROADWAY AND DETOUR AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. INSTALL FINAL SURFACE COURSE AND FINAL STRIPING.

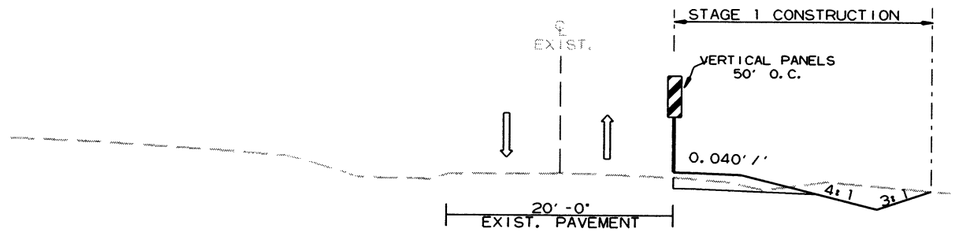
ADVANCE WARNING SIGNS
MAINTENANCE OF TRAFFIC DETAILS

9/28/2016

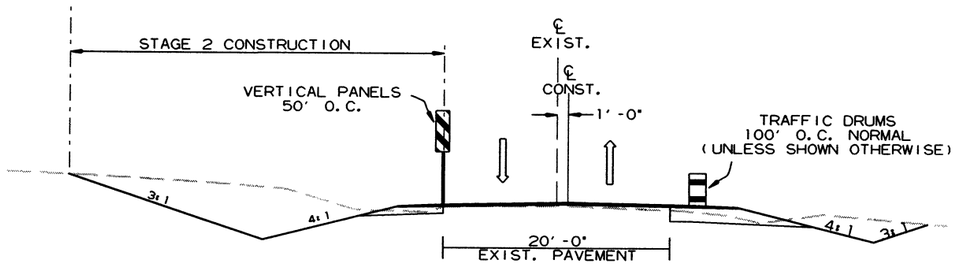
R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	61	335

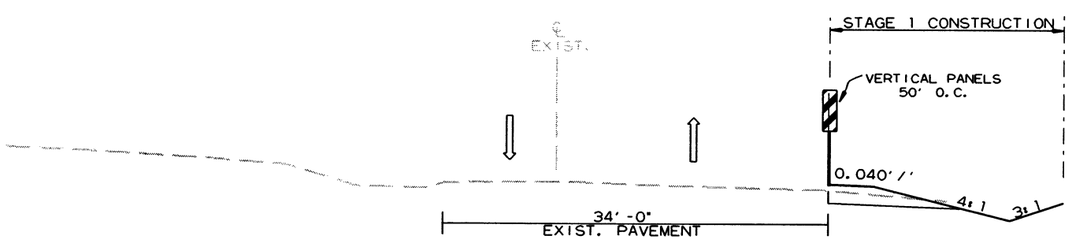
(2) MAINTENANCE OF TRAFFIC DETAILS



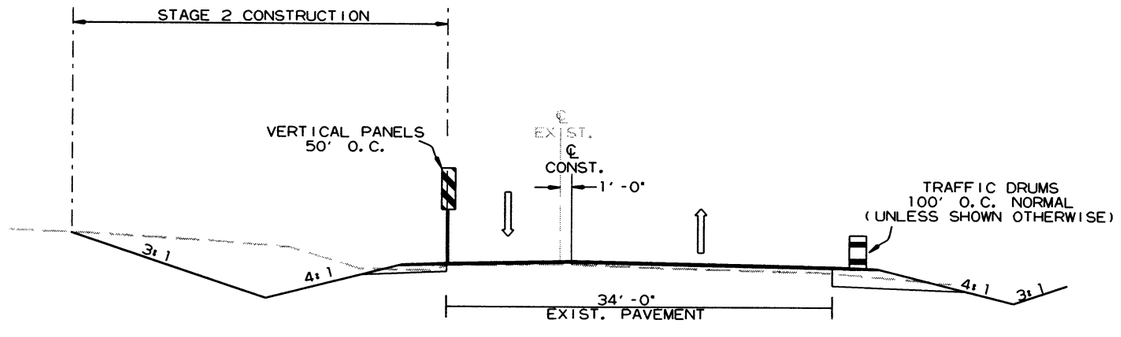
STAGE 1
TYPICAL PLACEMENT OF VERTICAL PANELS



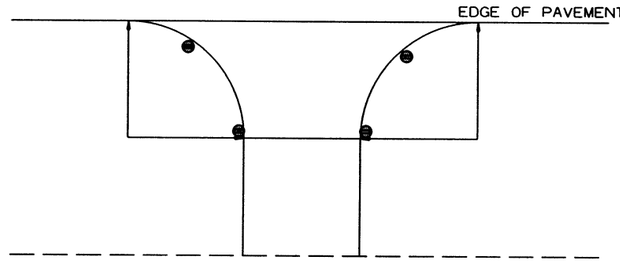
STAGE 2
TYPICAL PLACEMENT OF VERTICAL PANELS & TRAFFIC DRUMS



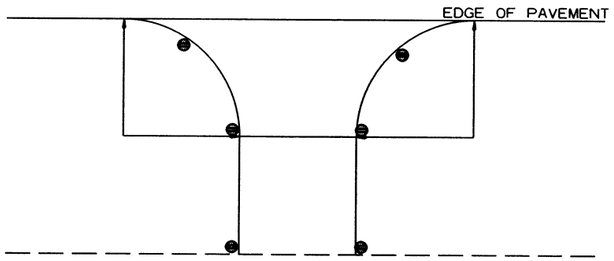
STAGE 1
TYPICAL PLACEMENT OF VERTICAL PANELS
STA. 775+97.00 TO STA. 777+90.00



STAGE 2
TYPICAL PLACEMENT OF VERTICAL PANELS & TRAFFIC DRUMS
STA. 775+97.00 TO STA. 777+90.00



TYPICAL PLACEMENT OF TRAFFIC DRUMS FOR STANDARD PRIVATE DRIVES.
TRAFFIC DRUMS TO BE PLACED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. TOTAL TRAFFIC DRUMS = 4 PER DRIVEWAY.



TYPICAL PLACEMENT OF TRAFFIC DRUMS FOR STANDARD COUNTY ROAD/STREET TURNOUTS. TRAFFIC DRUMS TO BE PLACED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. TOTAL TRAFFIC DRUMS = 6 PER TURNOUT.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

SEQUENCING:

STAGE 1: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
UTILIZE VERTICAL PANELS AT THE NOTCH ON RT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS AND 1 FT. SHIFT, EXTEND CULVERTS ON RT. AND PERFORM LEVELING. CONSTRUCT NEW DRIVEWAYS ON RT., CONSTRUCT NEW LOCATION SECTIONS AS SHOWN ON THE PLANS. CONSTRUCT DETOUR ON LEFT STA. 872+50.25 TO STA. 881+02.12.

STAGE 2: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
UTILIZE VERTICAL PANELS AT THE NOTCH ON LT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS AND PLACE TRAFFIC DRUMS ON THE RT. AT 100' O.C. SPACING, SHIFT TRAFFIC TO DETOUR STA. 872+50.25 TO STA. 881+02.12. AND CONSTRUCT R.C. BOX CULVERT AND MAIN LANES.

STAGE 3: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
OBLITERATE EXISTING ROADWAY AND DETOUR AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
INSTALL FINAL SURFACE COURSE AND FINAL STRIPING.

NOTE:
THE QUANTITY OF VERTICAL PANELS PROVIDED IN THE CONTRACT IS FOR ONE SIDE OF THE ROADWAY FOR 2 MILES. THIS IS THE MAXIMUM QUANTITY REQUIRED TO ALLOW THE CONTRACTOR TO NOTCH ONE MILE, BACKFILL TO A POINT WHERE THE VERTICAL DIFFERENTIAL IS 4" OR LESS, AND THEN NOTCH ANOTHER ONE-MILE SECTION. THIS IS THE MAXIMUM NUMBER OF VERTICAL PANELS THAT WILL BE PAID FOR. REFER TO SECTION 603.02 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION REQUIREMENTS.

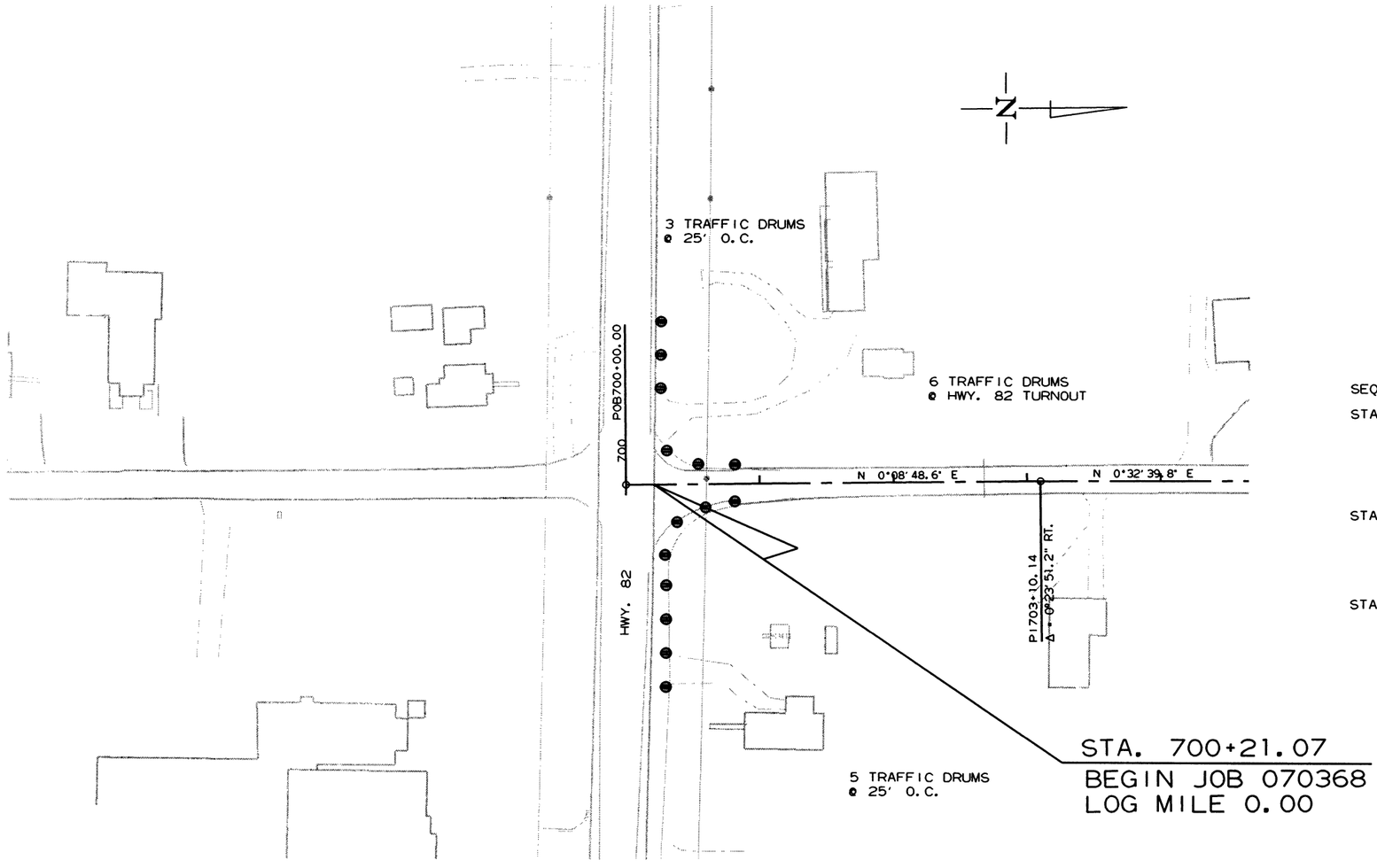
9/26/2016

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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.		070368	62	335

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



SEQUENCING:

STAGE 1: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
UTILIZE VERTICAL PANELS AT THE NOTCH
ON RT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS
AND 1 FT. SHIFT, EXTEND CULVERTS ON RT. AND PERFORM LEVELING.
CONSTRUCT NEW DRIVEWAYS ON RT., CONSTRUCT NEW LOCATION
SECTIONS AS SHOWN ON THE PLANS. CONSTRUCT DETOUR ON
LEFT STA. 872+50.25 TO STA. 881+02.12.

STAGE 2: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
UTILIZE VERTICAL PANELS AT THE NOTCH
ON LT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS
AND PLACE TRAFFIC DRUMS ON THE RT. AT 100' O.C. SPACING.
SHIFT TRAFFIC TO DETOUR STA. 872+50.25 TO STA. 881+02.12.
AND CONSTRUCT R.C. BOX CULVERT AND MAIN LANES.

STAGE 3: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
OBLITERATE EXISTING ROADWAY AND DETOUR AS SHOWN ON
THE PLANS OR AS DIRECTED BY THE ENGINEER.
INSTALL FINAL SURFACE COURSE AND FINAL STRIPING.

ALL STAGES TRAFFIC DRUMS = 14 EACH

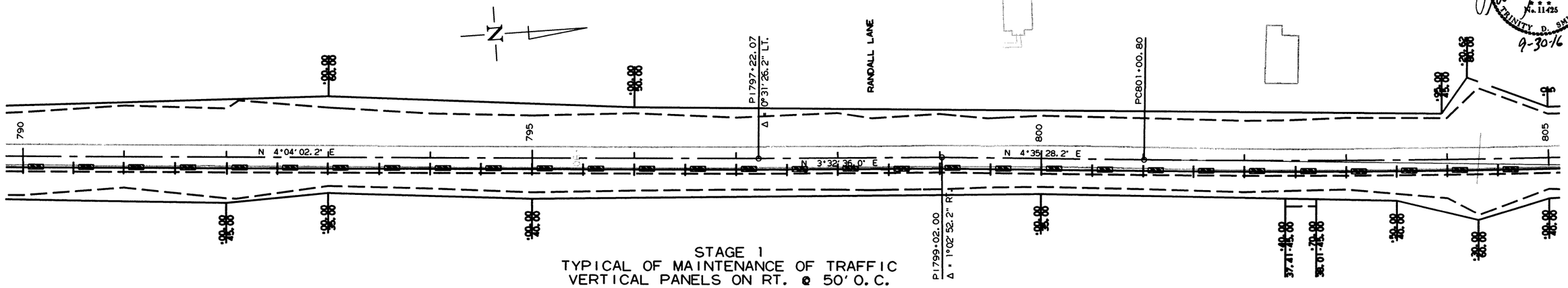
9/26/2016

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				JOB NO.		070368	63	335

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



STAGE 1
TYPICAL OF MAINTENANCE OF TRAFFIC
VERTICAL PANELS ON RT. @ 50' O.C.

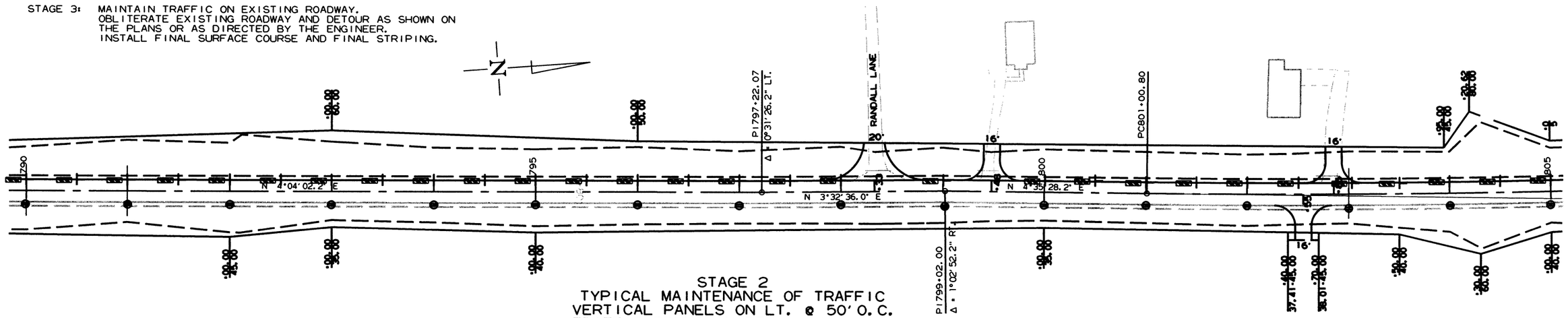
STA. 700+21.07 TO STA. 732+00.00
STA. 744+00.00 TO STA. 745+00.00
STA. 755+00.00 TO STA. 872+00.00
STA. 881+17.16 TO STA. 988+00.00
STA. 1001+00.00 TO STA. 1088+55.03

SEQUENCING:

STAGE 1: MAINTAIN TRAFFIC ON EXISTING ROADWAY. UTILIZE VERTICAL PANELS AT THE NOTCH ON RT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS AND 1 FT. SHIFT, EXTEND CULVERTS ON RT. AND PERFORM LEVELING. CONSTRUCT NEW DRIVEWAYS ON RT., CONSTRUCT NEW LOCATION SECTIONS AS SHOWN ON THE PLANS. CONSTRUCT DETOUR ON LEFT STA. 872+50.25 TO STA. 881+02.12.

STAGE 2: MAINTAIN TRAFFIC ON EXISTING ROADWAY. UTILIZE VERTICAL PANELS AT THE NOTCH ON LT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS AND PLACE TRAFFIC DRUMS ON THE RT. AT 100' O.C. SPACING. SHIFT TRAFFIC TO DETOUR STA. 872+50.25 TO STA. 881+02.12. AND CONSTRUCT R.C. BOX CULVERT AND MAIN LANES.

STAGE 3: MAINTAIN TRAFFIC ON EXISTING ROADWAY. OBLITERATE EXISTING ROADWAY AND DETOUR AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. INSTALL FINAL SURFACE COURSE AND FINAL STRIPING.



STAGE 2
TYPICAL MAINTENANCE OF TRAFFIC
VERTICAL PANELS ON LT. @ 50' O.C.
TRAFFIC DRUMS ON RT. @ 100' O.C.

STA. 700+21.07 TO STA. 732+00.00
STA. 744+00.00 TO STA. 745+00.00
STA. 755+00.00 TO STA. 872+00.00
STA. 881+17.16 TO STA. 988+00.00
STA. 1001+00.00 TO STA. 1088+55.03

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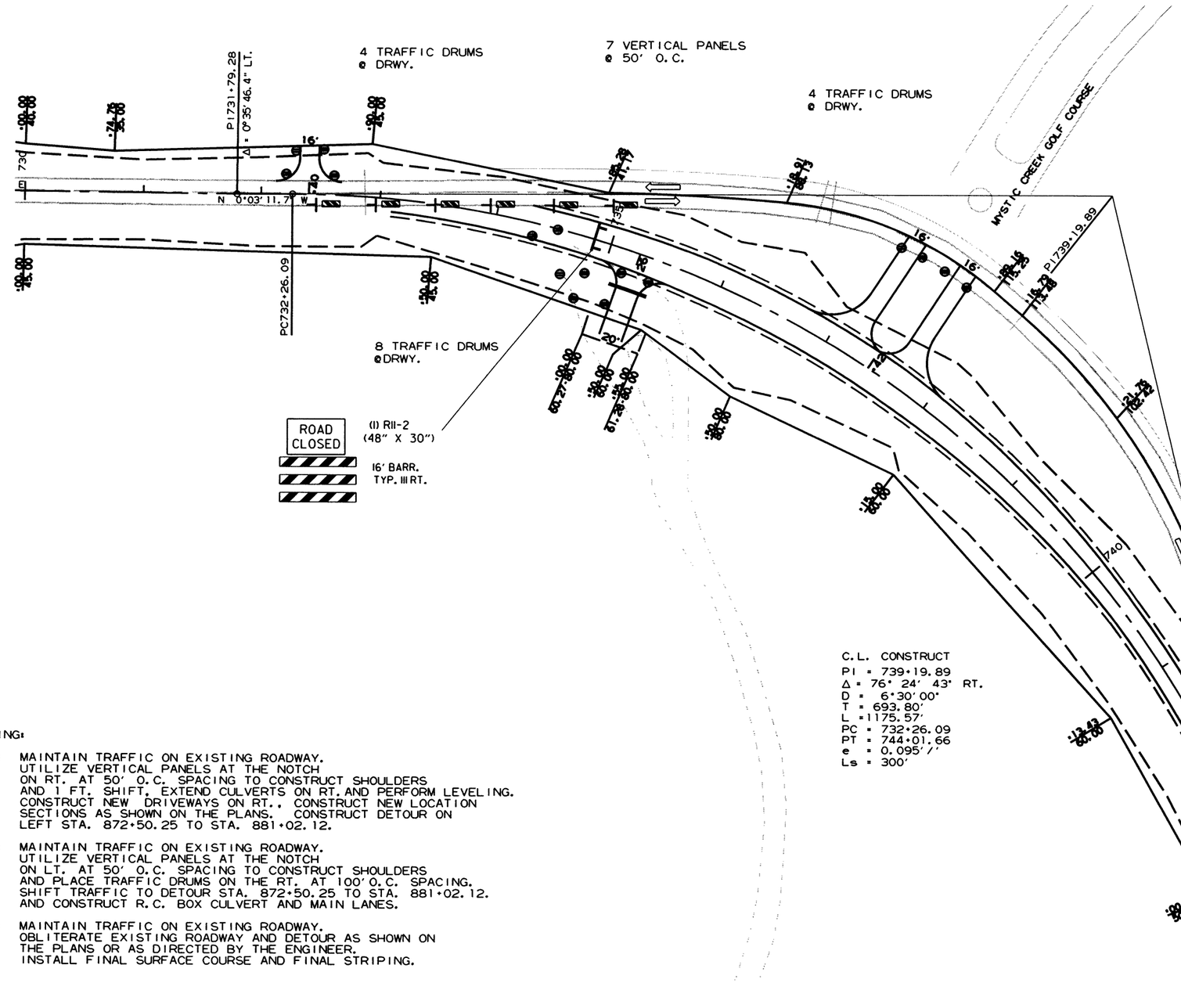
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MAINTENANCE OF TRAFFIC DETAILS

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.		070368	64	335

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



SEQUENCING:

STAGE 1: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
UTILIZE VERTICAL PANELS AT THE NOTCH ON RT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS AND 1 FT. SHIFT, EXTEND CULVERTS ON RT. AND PERFORM LEVELING. CONSTRUCT NEW DRIVEWAYS ON RT., CONSTRUCT NEW LOCATION SECTIONS AS SHOWN ON THE PLANS. CONSTRUCT DETOUR ON LEFT STA. 872+50.25 TO STA. 881+02.12.

STAGE 2: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
UTILIZE VERTICAL PANELS AT THE NOTCH ON LT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS AND PLACE TRAFFIC DRUMS ON THE RT. AT 100' O.C. SPACING. SHIFT TRAFFIC TO DETOUR STA. 872+50.25 TO STA. 881+02.12. AND CONSTRUCT R.C. BOX CULVERT AND MAIN LANES.

STAGE 3: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
OBLITERATE EXISTING ROADWAY AND DETOUR AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
INSTALL FINAL SURFACE COURSE AND FINAL STRIPING.

STAGE I
STA. 732+00 TO STA. 744+00
MAINTENANCE OF TRAFFIC DETAILS

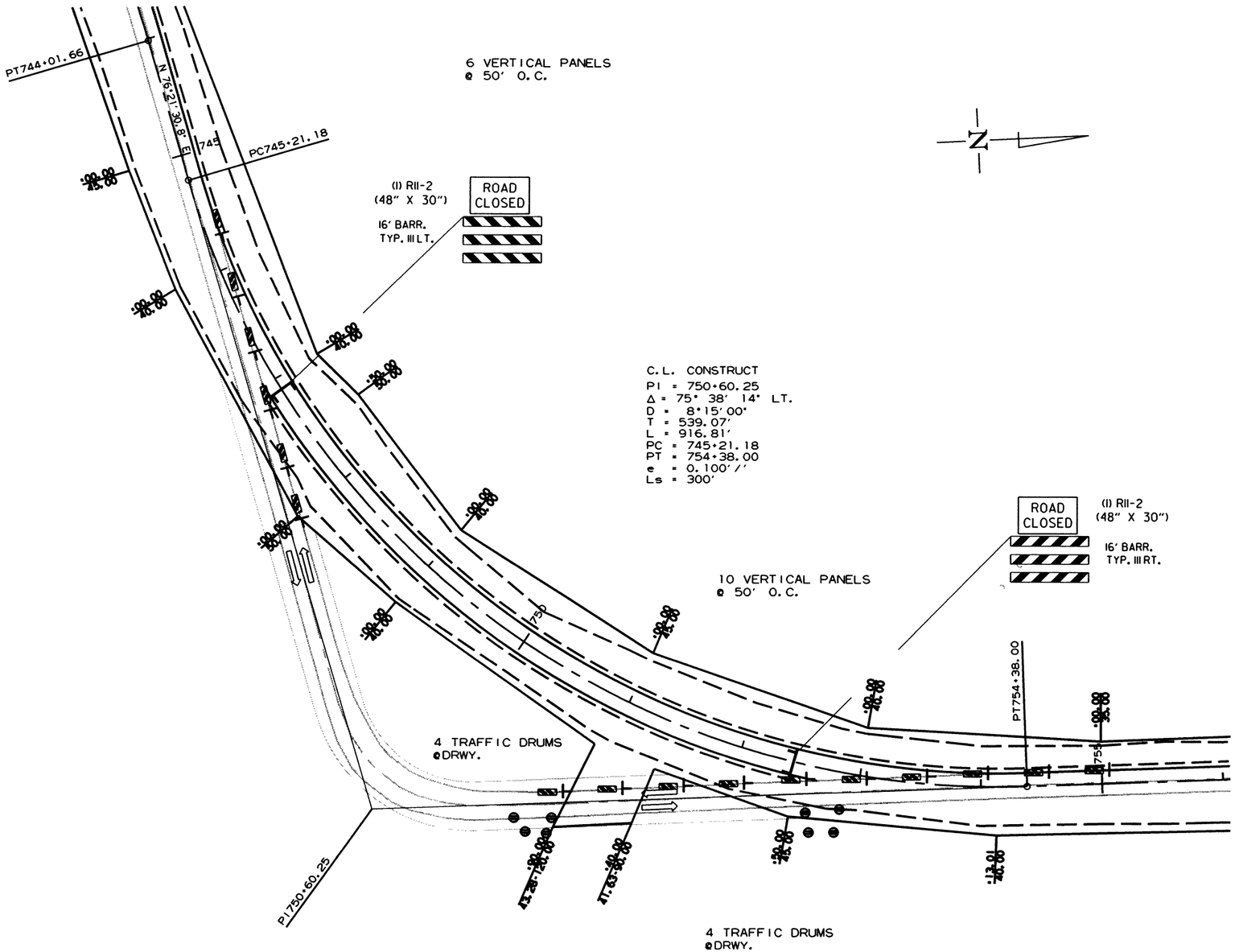
9/26/2016

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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.		070368	65	335

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



C.L. CONSTRUCT
PI = 750+60.25
Δ = 75° 38' 14" LT.
D = 8°15'00"
T = 539.07'
L = 916.81'
PC = 745+21.18
PT = 754+38.00
e = 0.100'/'
Ls = 300'

SEQUENCING:

STAGE 1: MAINTAIN TRAFFIC ON EXISTING ROADWAY. UTILIZE VERTICAL PANELS AT THE NOTCH ON RT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS AND 1 FT. SHIFT. EXTEND CULVERTS ON RT. AND PERFORM LEVELING. CONSTRUCT NEW DRIVEWAYS ON RT., CONSTRUCT NEW LOCATION SECTIONS AS SHOWN ON THE PLANS. CONSTRUCT DETOUR ON LEFT STA. 872+50.25 TO STA. 881+02.12.

STAGE 2: MAINTAIN TRAFFIC ON EXISTING ROADWAY. UTILIZE VERTICAL PANELS AT THE NOTCH ON LT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS AND PLACE TRAFFIC DRUMS ON THE RT. AT 100' O.C. SPACING. SHIFT TRAFFIC TO DETOUR STA. 872+50.25 TO STA. 881+02.12. AND CONSTRUCT R.C. BOX CULVERT AND MAIN LANES.

STAGE 3: MAINTAIN TRAFFIC ON EXISTING ROADWAY. OBLITERATE EXISTING ROADWAY AND DETOUR AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. INSTALL FINAL SURFACE COURSE AND FINAL STRIPING.

TRAFFIC DRUMS = 8 EACH
VERTICAL PANELS = 16 EACH

STAGE 1
STA. 745+00 TO STA. 755+00
MAINTENANCE OF TRAFFIC DETAILS

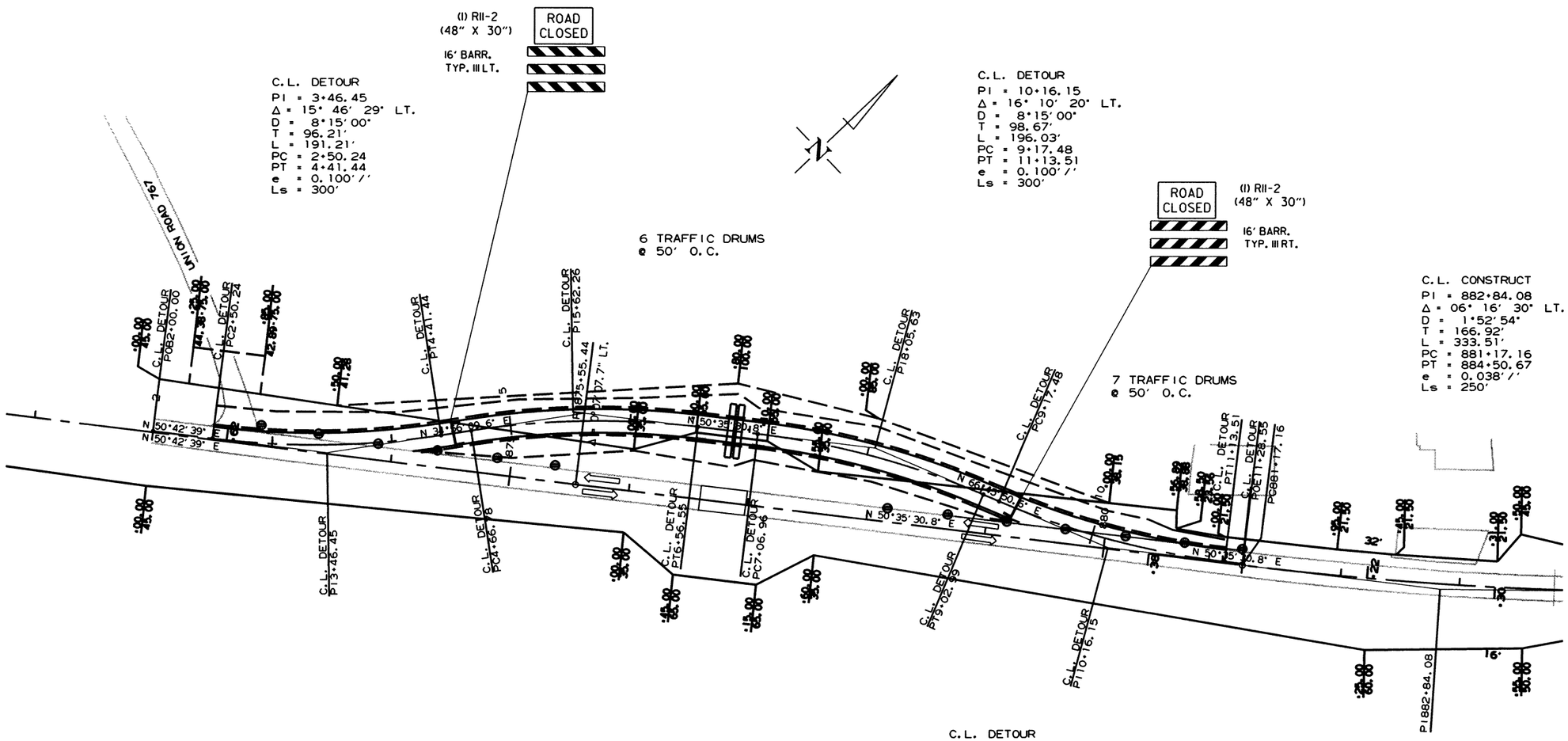
9/26/2016

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				6	ARK.			
				JOB NO.		070368	66	335

(2) MAINTENANCE OF TRAFFIC DETAILS

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REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



C.L. DETOUR
PI = 5+62.26
Δ = 15° 39' 21" RT.
D = 8°15' 00"
T = 95.48'
L = 189.77'
PC = 4+66.78
PT = 6+56.55
e = 0.100'/'
Ls = 300'

C.L. DETOUR
PI = 8+05.63
Δ = 16° 10' 20" RT.
D = 8°15' 00"
T = 98.67'
L = 196.03'
PC = 7+06.96
PT = 9+02.99
e = 0.100'/'
Ls = 300'

SEQUENCING:

STAGE 1: MAINTAIN TRAFFIC ON EXISTING ROADWAY. UTILIZE VERTICAL PANELS AT THE NOTCH ON RT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS AND 1 FT. SHIFT, EXTEND CULVERTS ON RT. AND PERFORM LEVELING. CONSTRUCT NEW DRIVEWAYS ON RT., CONSTRUCT NEW LOCATION SECTIONS AS SHOWN ON THE PLANS. CONSTRUCT DETOUR ON LEFT STA. 872+50.25 TO STA. 881+02.12.

STAGE 2: MAINTAIN TRAFFIC ON EXISTING ROADWAY. UTILIZE VERTICAL PANELS AT THE NOTCH ON LT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS AND PLACE TRAFFIC DRUMS ON THE RT. AT 100' O.C. SPACING. SHIFT TRAFFIC TO DETOUR STA. 872+50.25 TO STA. 881+02.12. AND CONSTRUCT R.C. BOX CULVERT AND MAIN LANES.

STAGE 3: MAINTAIN TRAFFIC ON EXISTING ROADWAY. OBLITERATE EXISTING ROADWAY AND DETOUR AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. INSTALL FINAL SURFACE COURSE AND FINAL STRIPING.

TRAFFIC DRUMS = 13 EACH

DETOUR - STAGE I
STA. 2+00.00 TO STA. 11+28.55
MAINTENANCE OF TRAFFIC DETAILS

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				6	ARK.			
				JOB NO.		070368	67	335

(2) MAINTENANCE OF TRAFFIC DETAILS

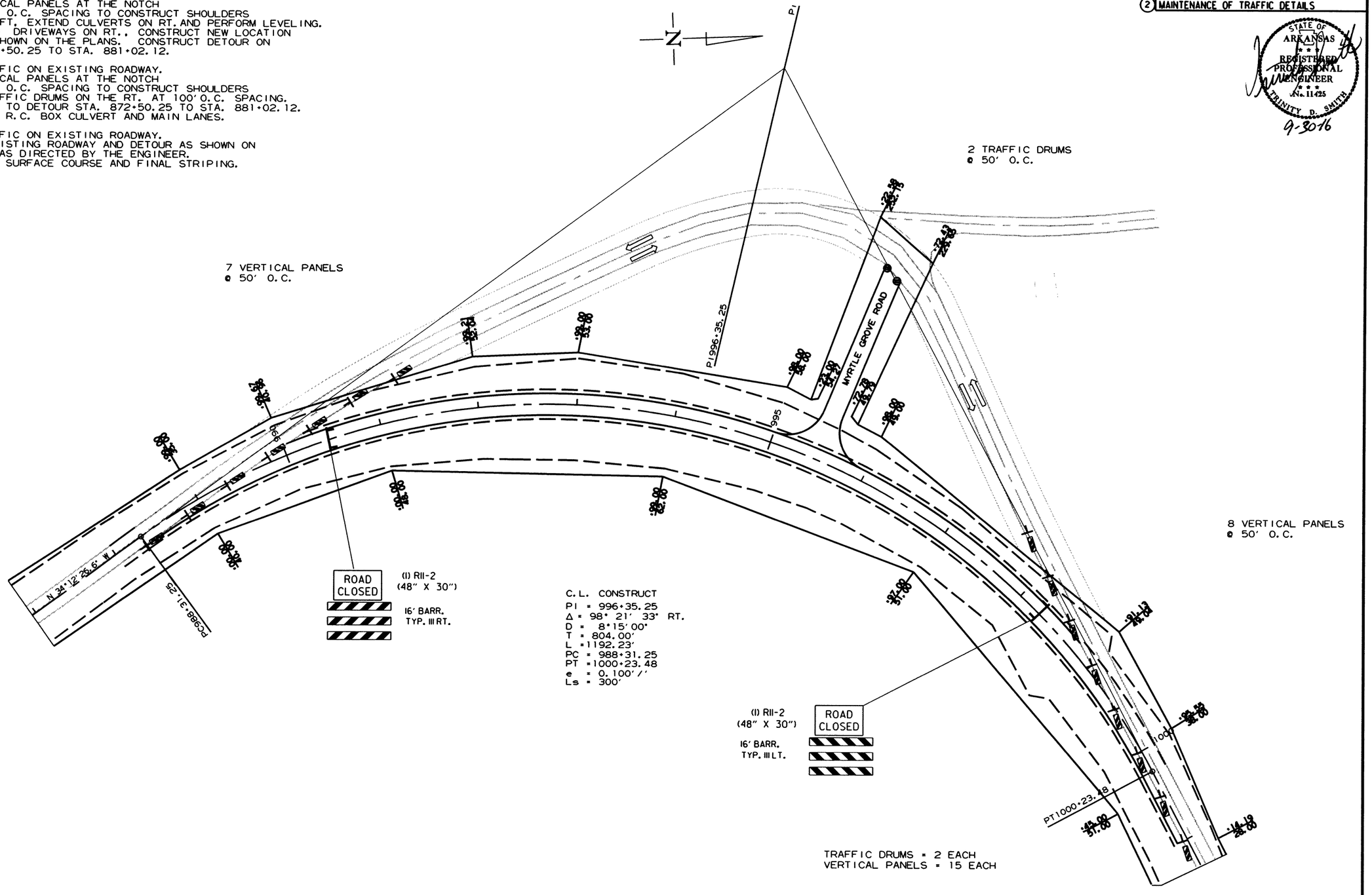
SEQUENCING:

STAGE 1: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
UTILIZE VERTICAL PANELS AT THE NOTCH ON RT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS AND 1 FT. SHIFT. EXTEND CULVERTS ON RT. AND PERFORM LEVELING. CONSTRUCT NEW DRIVEWAYS ON RT., CONSTRUCT NEW LOCATION SECTIONS AS SHOWN ON THE PLANS. CONSTRUCT DETOUR ON LEFT STA. 872+50.25 TO STA. 881+02.12.

STAGE 2: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
UTILIZE VERTICAL PANELS AT THE NOTCH ON LT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS AND PLACE TRAFFIC DRUMS ON THE RT. AT 100' O.C. SPACING. SHIFT TRAFFIC TO DETOUR STA. 872+50.25 TO STA. 881+02.12. AND CONSTRUCT R.C. BOX CULVERT AND MAIN LANES.

STAGE 3: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
OBLITERATE EXISTING ROADWAY AND DETOUR AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
INSTALL FINAL SURFACE COURSE AND FINAL STRIPING.

STATE OF ARKANSAS
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TRAFFIC DRUMS = 2 EACH
VERTICAL PANELS = 15 EACH

STAGE I
STA. 988+00 TO STA. 1001+00
MAINTENANCE OF TRAFFIC DETAILS

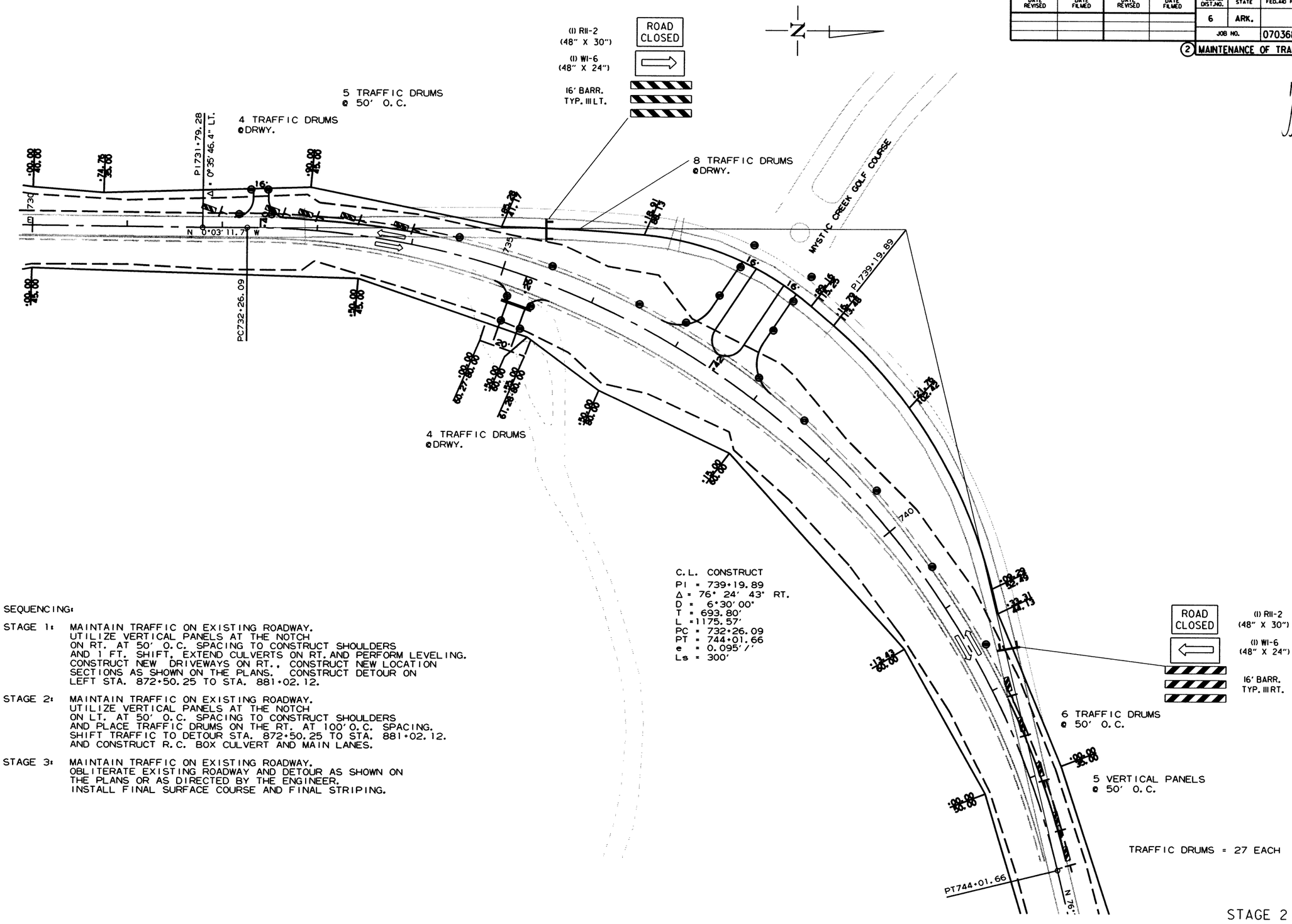
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				6	ARK.			
				JOB NO.		070368	68	335

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



SEQUENCING:

STAGE 1: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
UTILIZE VERTICAL PANELS AT THE NOTCH ON RT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS AND 1 FT. SHIFT, EXTEND CULVERTS ON RT. AND PERFORM LEVELING. CONSTRUCT NEW DRIVEWAYS ON RT., CONSTRUCT NEW LOCATION SECTIONS AS SHOWN ON THE PLANS. CONSTRUCT DETOUR ON LEFT STA. 872+50.25 TO STA. 881+02.12.

STAGE 2: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
UTILIZE VERTICAL PANELS AT THE NOTCH ON LT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS AND PLACE TRAFFIC DRUMS ON THE RT. AT 100' O.C. SPACING. SHIFT TRAFFIC TO DETOUR STA. 872+50.25 TO STA. 881+02.12. AND CONSTRUCT R.C. BOX CULVERT AND MAIN LANES.

STAGE 3: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
OBLITERATE EXISTING ROADWAY AND DETOUR AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
INSTALL FINAL SURFACE COURSE AND FINAL STRIPING.

STAGE 2
STA. 732+00 TO STA. 744+00
MAINTENANCE OF TRAFFIC DETAILS

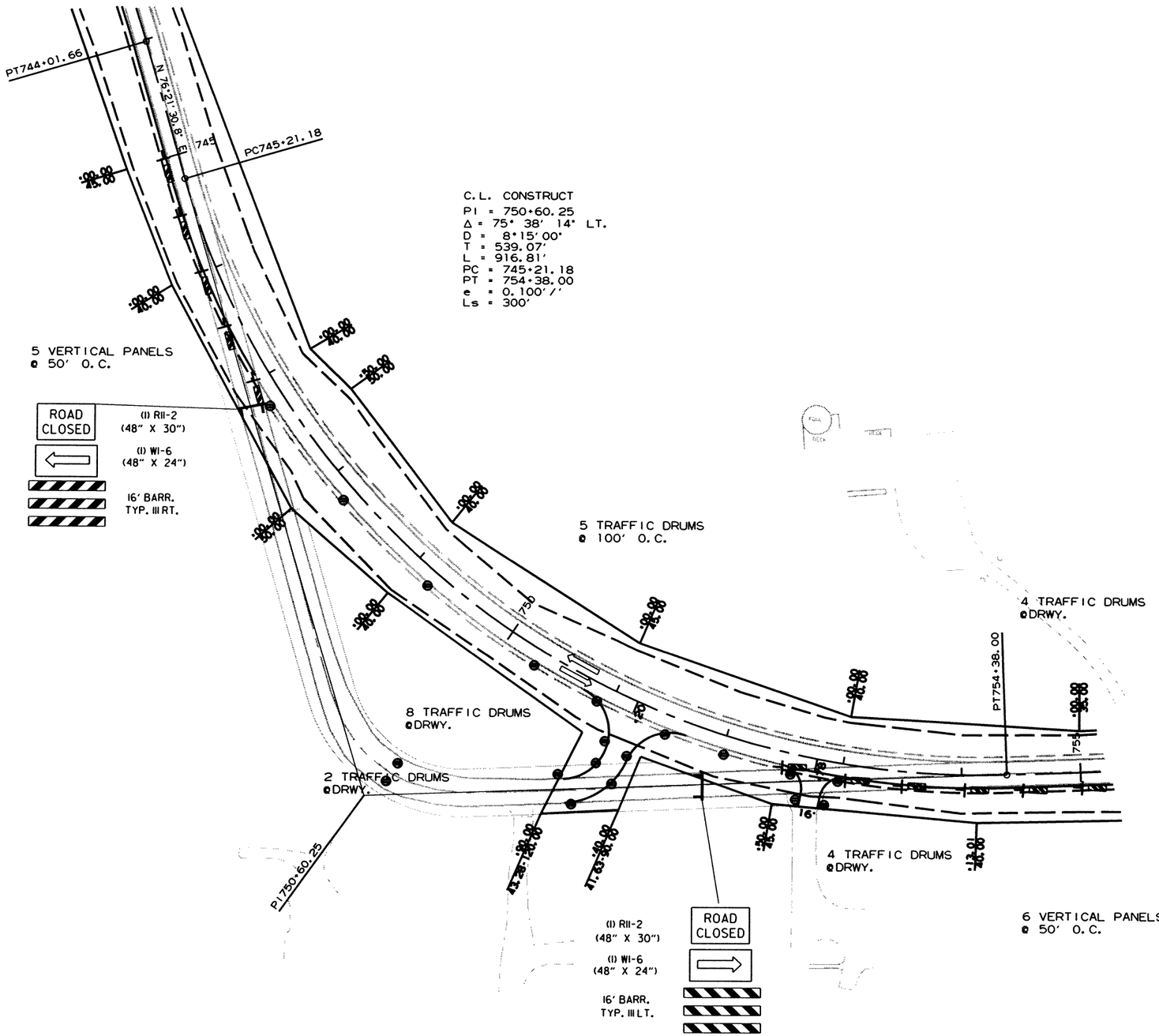
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(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



SEQUENCING:

STAGE 1: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
UTILIZE VERTICAL PANELS AT THE NOTCH ON RT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS AND 1 FT. SHIFT. EXTEND CULVERTS ON RT. AND PERFORM LEVELING. CONSTRUCT NEW DRIVEWAYS ON RT., CONSTRUCT NEW LOCATION SECTIONS AS SHOWN ON THE PLANS. CONSTRUCT DETOUR ON LEFT STA. 872+50.25 TO STA. 881+02.12.

STAGE 2: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
UTILIZE VERTICAL PANELS AT THE NOTCH ON LT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS AND PLACE TRAFFIC DRUMS ON THE RT. AT 100' O.C. SPACING. SHIFT TRAFFIC TO DETOUR STA. 872+50.25 TO STA. 881+02.12. AND CONSTRUCT R.C. BOX CULVERT AND MAIN LANES.

STAGE 3: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
OBLITERATE EXISTING ROADWAY AND DETOUR AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
INSTALL FINAL SURFACE COURSE AND FINAL STRIPING.

TRAFFIC DRUMS = 19 EACH
VERTICAL PANELS = 13 EACH

STAGE 2
STA. 745+00 TO STA. 755+00
MAINTENANCE OF TRAFFIC DETAILS

9/26/2016

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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
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				JOB NO.		070368	70	335

(2) MAINTENANCE OF TRAFFIC DETAILS

SEQUENCING:

STAGE 1: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
UTILIZE VERTICAL PANELS AT THE NOTCH ON RT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS AND 1 FT. SHIFT, EXTEND CULVERTS ON RT. AND PERFORM LEVELING. CONSTRUCT NEW DRIVEWAYS ON RT., CONSTRUCT NEW LOCATION SECTIONS AS SHOWN ON THE PLANS. CONSTRUCT DETOUR ON LEFT STA. 872+50.25 TO STA. 881+02.12.

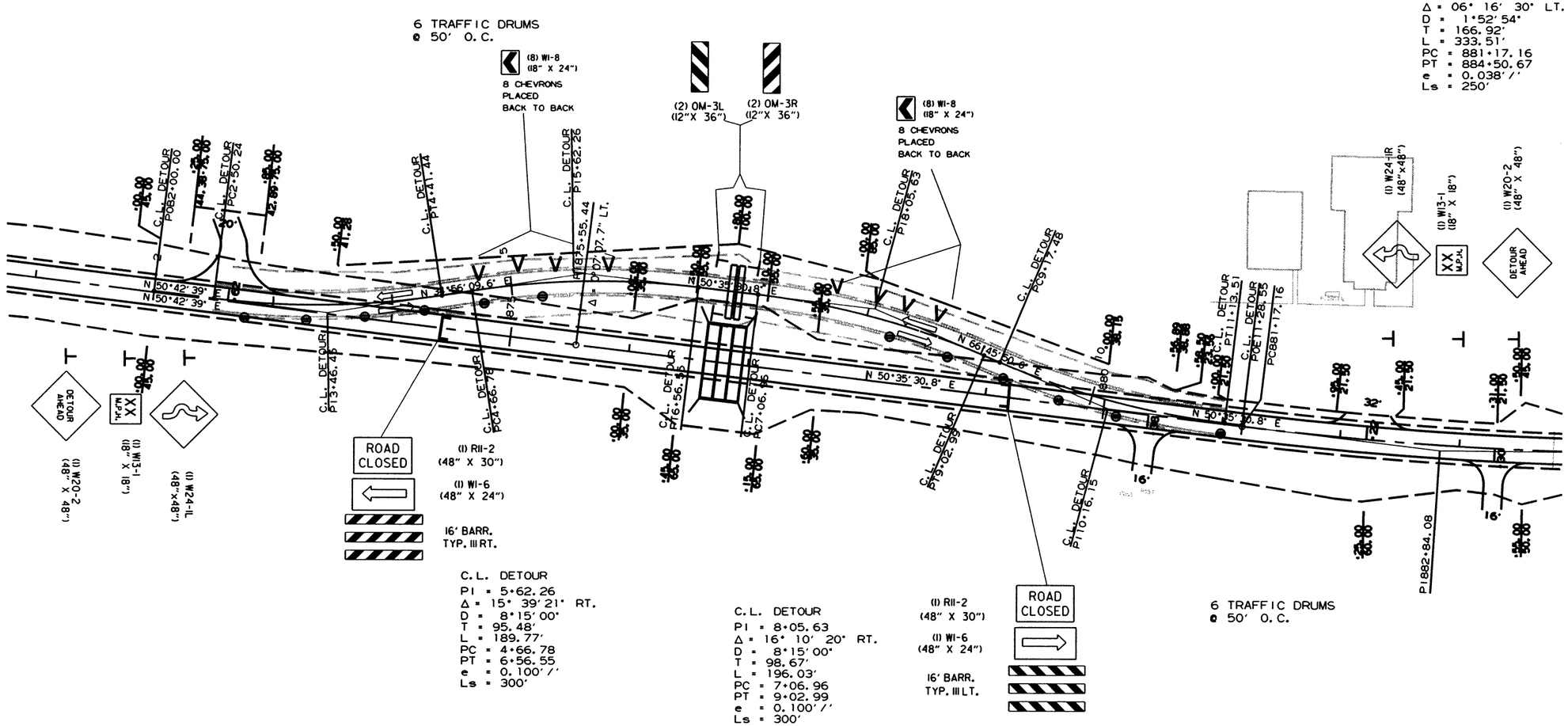
STAGE 2: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
UTILIZE VERTICAL PANELS AT THE NOTCH ON LT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS AND PLACE TRAFFIC DRUMS ON THE RT. AT 100' O.C. SPACING. SHIFT TRAFFIC TO DETOUR STA. 872+50.25 TO STA. 881+02.12. AND CONSTRUCT R.C. BOX CULVERT AND MAIN LANES.

STAGE 3: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
OBLITERATE EXISTING ROADWAY AND DETOUR AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
INSTALL FINAL SURFACE COURSE AND FINAL STRIPING.

C.L. DETOUR
PI = 3+46.45
Δ = 15° 46' 29" LT.
D = 8°15'00"
T = 96.21'
L = 191.21'
PC = 2+50.24
PT = 4+41.44
e = 0.100'/'
Ls = 300'

C.L. DETOUR
PI = 10+16.15
Δ = 16° 10' 20" LT.
D = 8°15'00"
T = 98.67'
L = 196.03'
PC = 9+17.48
PT = 11+13.51
e = 0.100'/'
Ls = 300'

C.L. CONSTRUCT
PI = 882+84.08
Δ = 06° 16' 30" LT.
D = 1°52'54"
T = 166.92'
L = 333.51'
PC = 881+17.16
PT = 884+50.67
e = 0.038'/'
Ls = 250'



TRAFFIC DRUMS = 12 EACH
RAISED PAVEMENT MARKERS TY. II YEL/YEL = 22 EACH

DETOUR - STAGE 2
STA. 2+00.00 TO STA. 11+28.55
MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-26-16

9/26/2016

R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	71	335

(2) MAINTENANCE OF TRAFFIC DETAILS

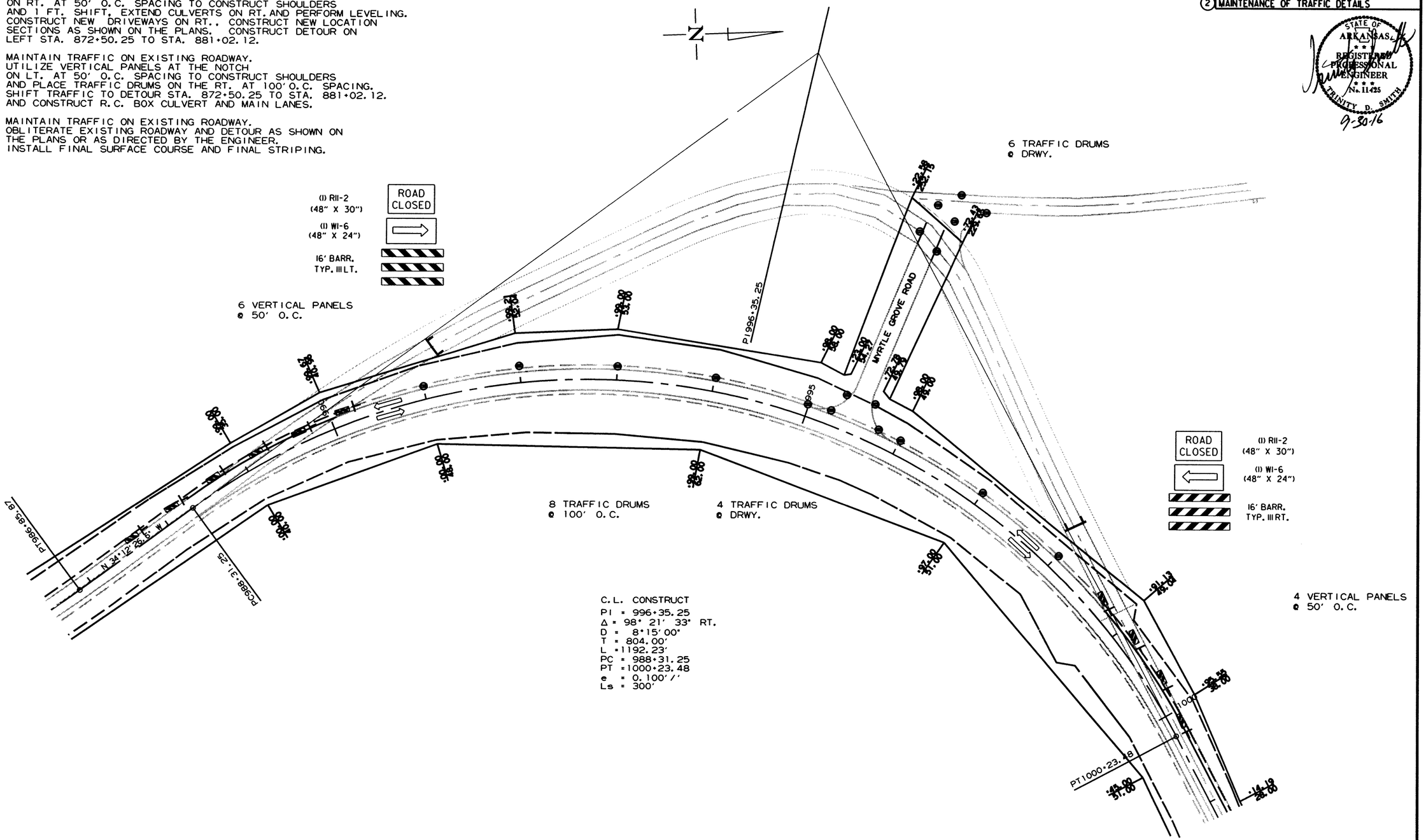
SEQUENCING:

STAGE 1: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
UTILIZE VERTICAL PANELS AT THE NOTCH
ON RT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS
AND 1 FT. SHIFT, EXTEND CULVERTS ON RT. AND PERFORM LEVELING.
CONSTRUCT NEW DRIVEWAYS ON RT., CONSTRUCT NEW LOCATION
SECTIONS AS SHOWN ON THE PLANS. CONSTRUCT DETOUR ON
LEFT STA. 872+50.25 TO STA. 881+02.12.

STAGE 2: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
UTILIZE VERTICAL PANELS AT THE NOTCH
ON LT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS
AND PLACE TRAFFIC DRUMS ON THE RT. AT 100' O.C. SPACING.
SHIFT TRAFFIC TO DETOUR STA. 872+50.25 TO STA. 881+02.12.
AND CONSTRUCT R.C. BOX CULVERT AND MAIN LANES.

STAGE 3: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
OBLITERATE EXISTING ROADWAY AND DETOUR AS SHOWN ON
THE PLANS OR AS DIRECTED BY THE ENGINEER.
INSTALL FINAL SURFACE COURSE AND FINAL STRIPING.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



C.L. CONSTRUCT
PI = 996+35.25
Δ = 98° 21' 33" RT.
D = 8°15'00"
T = 804.00'
L = 1192.23'
PC = 988+31.25
PT = 1000+23.48
e = 0.100'/'
Ls = 300'

TRAFFIC DRUMS = 18 EACH
VERTICAL PANELS = 10 EACH

STAGE 2
STA. 988+00 TO STA. 1001+00
MAINTENANCE OF TRAFFIC DETAILS

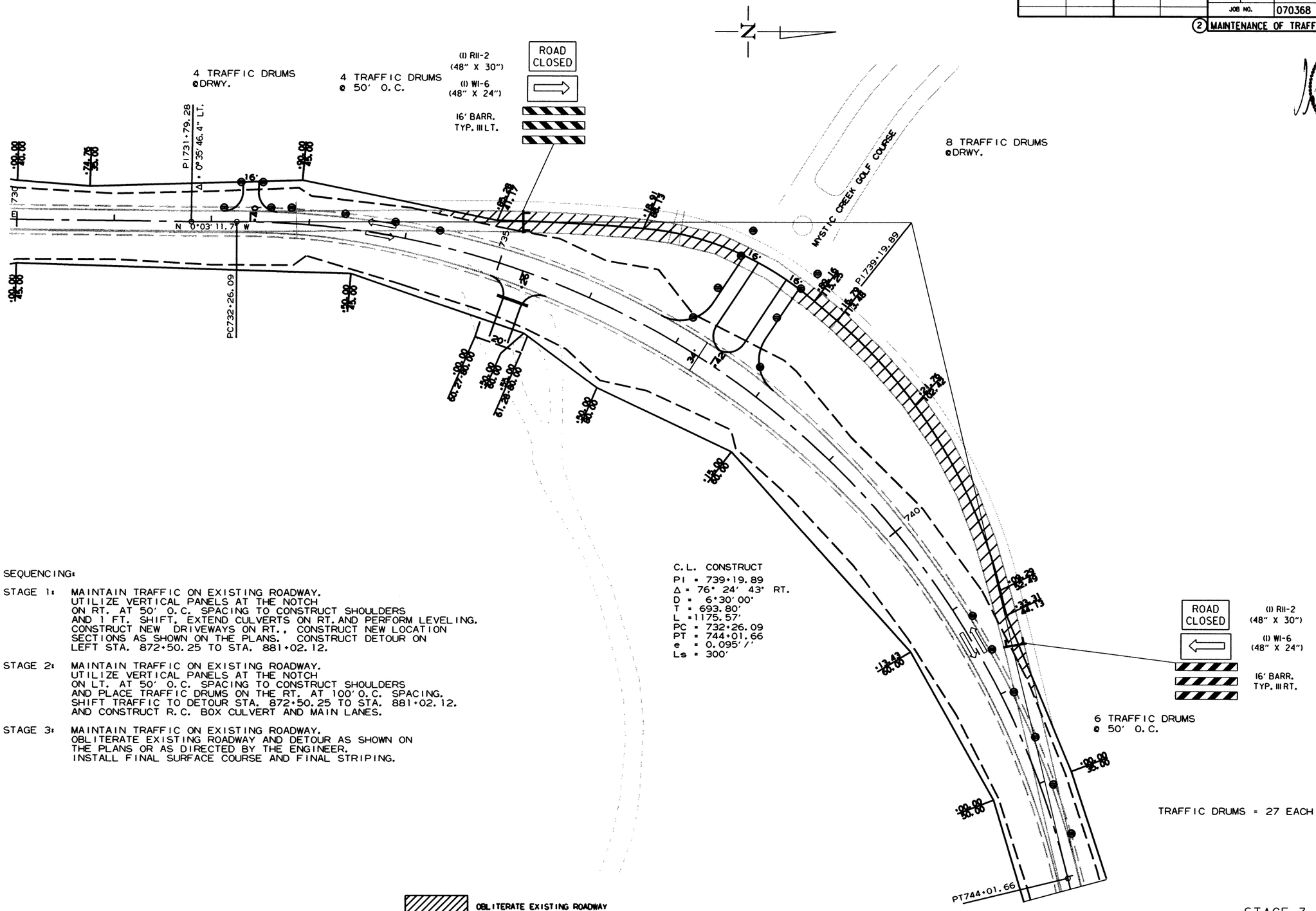
9/26/2016

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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.		070368	72	335

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



SEQUENCING:

STAGE 1: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
UTILIZE VERTICAL PANELS AT THE NOTCH ON RT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS AND 1 FT. SHIFT, EXTEND CULVERTS ON RT. AND PERFORM LEVELING. CONSTRUCT NEW DRIVEWAYS ON RT., CONSTRUCT NEW LOCATION SECTIONS AS SHOWN ON THE PLANS. CONSTRUCT DETOUR ON LEFT STA. 872+50.25 TO STA. 881+02.12.

STAGE 2: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
UTILIZE VERTICAL PANELS AT THE NOTCH ON LT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS AND PLACE TRAFFIC DRUMS ON THE RT. AT 100' O.C. SPACING. SHIFT TRAFFIC TO DETOUR STA. 872+50.25 TO STA. 881+02.12. AND CONSTRUCT R.C. BOX CULVERT AND MAIN LANES.

STAGE 3: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
OBLITERATE EXISTING ROADWAY AND DETOUR AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
INSTALL FINAL SURFACE COURSE AND FINAL STRIPING.

OBLITERATE EXISTING ROADWAY

STAGE 3
STA. 732+00 TO STA. 744+00
MAINTENANCE OF TRAFFIC DETAILS

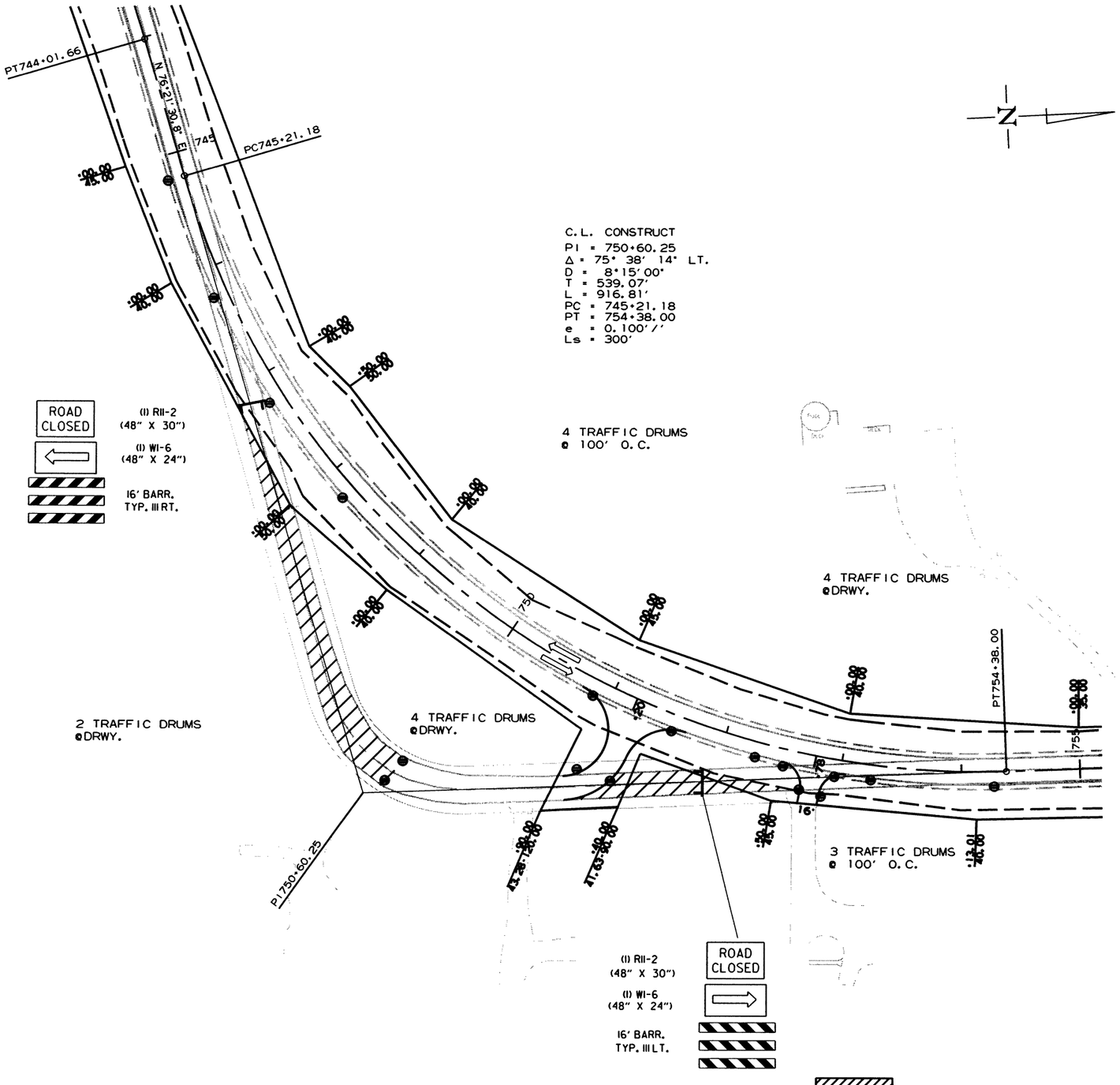
9/26/2016

R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	73	335

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



C.L. CONSTRUCT
PI = 750+60.25
Δ = 75° 38' 14" LT.
D = 8°15'00"
T = 539.07'
L = 916.81'
PC = 745+21.18
PT = 754+38.00
e = 0.100'/'
Ls = 300'

SEQUENCING:

STAGE 1: MAINTAIN TRAFFIC ON EXISTING ROADWAY. UTILIZE VERTICAL PANELS AT THE NOTCH ON RT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS AND 1 FT. SHIFT, EXTEND CULVERTS ON RT. AND PERFORM LEVELING. CONSTRUCT NEW DRIVEWAYS ON RT., CONSTRUCT NEW LOCATION SECTIONS AS SHOWN ON THE PLANS. CONSTRUCT DETOUR ON LEFT STA. 872+50.25 TO STA. 881+02.12.

STAGE 2: MAINTAIN TRAFFIC ON EXISTING ROADWAY. UTILIZE VERTICAL PANELS AT THE NOTCH ON LT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS AND PLACE TRAFFIC DRUMS ON THE RT. AT 100' O.C. SPACING. SHIFT TRAFFIC TO DETOUR STA. 872+50.25 TO STA. 881+02.12. AND CONSTRUCT R.C. BOX CULVERT AND MAIN LANES.

STAGE 3: MAINTAIN TRAFFIC ON EXISTING ROADWAY. OBLITERATE EXISTING ROADWAY AND DETOUR AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. INSTALL FINAL SURFACE COURSE AND FINAL STRIPING.

TRAFFIC DRUMS = 17 EACH

STAGE 3
STA. 745+00 TO STA. 755+00
MAINTENANCE OF TRAFFIC DETAILS

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	74	335

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

OBLITERATE DETOUR

C.L. DETOUR
PI = 3+46.45
Δ = 15° 46' 29" LT.
D = 8°15'00"
T = 96.21'
L = 191.21'
PC = 2+50.24
PT = 4+41.44
e = 0.100'/'
Ls = 300'

C.L. DETOUR
PI = 10+16.15
Δ = 16° 10' 20" LT.
D = 8°15'00"
T = 98.67'
L = 196.03'
PC = 9+17.48
PT = 11+13.51
e = 0.100'/'
Ls = 300'

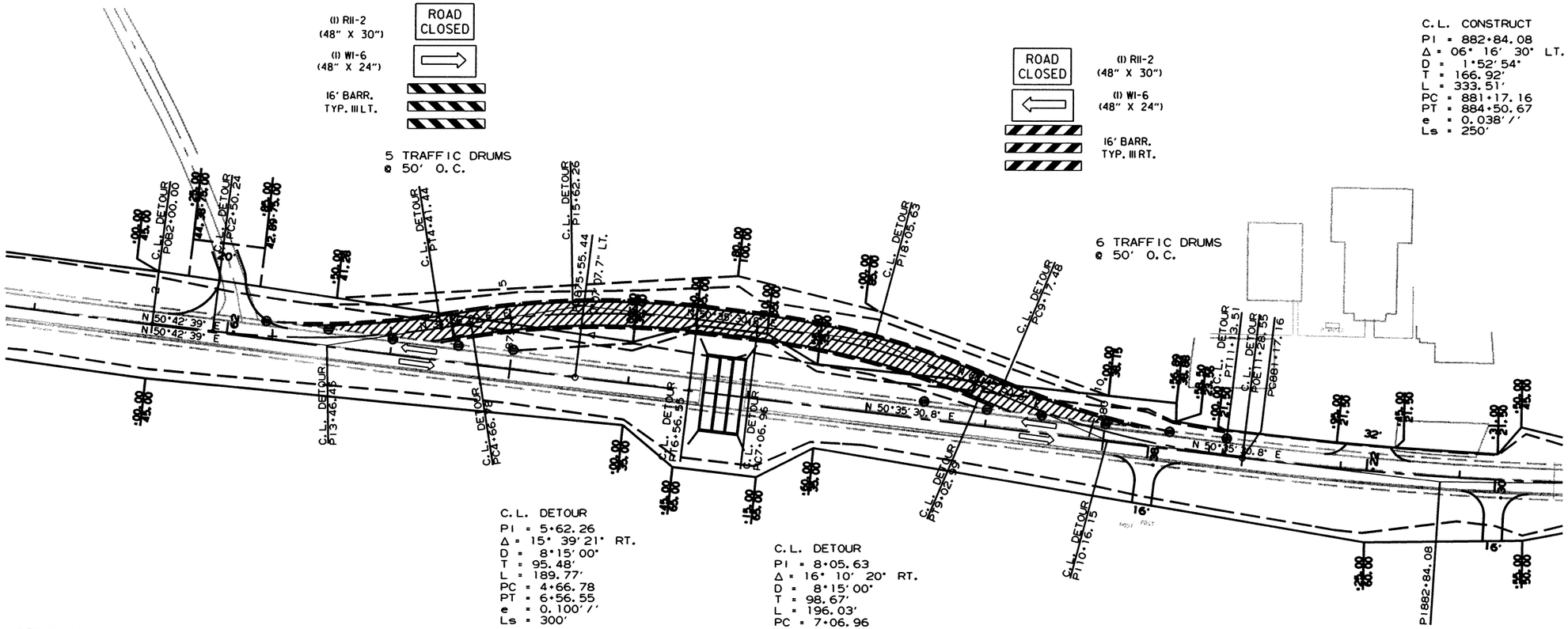
C.L. CONSTRUCT
PI = 882+84.08
Δ = 06° 16' 30" LT.
D = 1°52'54"
T = 166.92'
L = 333.51'
PC = 881+17.16
PT = 884+50.67
e = 0.038'/'
Ls = 250'

(1) RII-2 (48" X 30")
(1) WI-6 (48" X 24")
ROAD CLOSED
16' BARR. TYP. III LT.

5 TRAFFIC DRUMS @ 50' O.C.

(1) RII-2 (48" X 30")
(1) WI-6 (48" X 24")
ROAD CLOSED
16' BARR. TYP. III RT.

6 TRAFFIC DRUMS @ 50' O.C.



C.L. DETOUR
PI = 5+62.26
Δ = 15° 39' 21" RT.
D = 8°15'00"
T = 95.48'
L = 189.77'
PC = 4+66.78
PT = 6+56.55
e = 0.100'/'
Ls = 300'

C.L. DETOUR
PI = 8+05.63
Δ = 16° 10' 20" RT.
D = 8°15'00"
T = 98.67'
L = 196.03'
PC = 7+06.96
PT = 9+02.99
e = 0.100'/'
Ls = 300'

SEQUENCING:

STAGE 1: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
UTILIZE VERTICAL PANELS AT THE NOTCH ON RT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS AND 1 FT. SHIFT. EXTEND CULVERTS ON RT. AND PERFORM LEVELING. CONSTRUCT NEW DRIVEWAYS ON RT., CONSTRUCT NEW LOCATION SECTIONS AS SHOWN ON THE PLANS. CONSTRUCT DETOUR ON LEFT STA. 872+50.25 TO STA. 881+02.12.

STAGE 2: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
UTILIZE VERTICAL PANELS AT THE NOTCH ON LT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS AND PLACE TRAFFIC DRUMS ON THE RT. AT 100' O.C. SPACING. SHIFT TRAFFIC TO DETOUR STA. 872+50.25 TO STA. 881+02.12. AND CONSTRUCT R.C. BOX CULVERT AND MAIN LANES.

STAGE 3: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
OBLITERATE EXISTING ROADWAY AND DETOUR AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
INSTALL FINAL SURFACE COURSE AND FINAL STRIPING.

TRAFFIC DRUMS = 11 EACH

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DETOUR - STAGE 3
STA. 2+00.00 TO STA. 11+28.55
MAINTENANCE OF TRAFFIC DETAILS

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.		070368	75	335

(2) MAINTENANCE OF TRAFFIC DETAILS

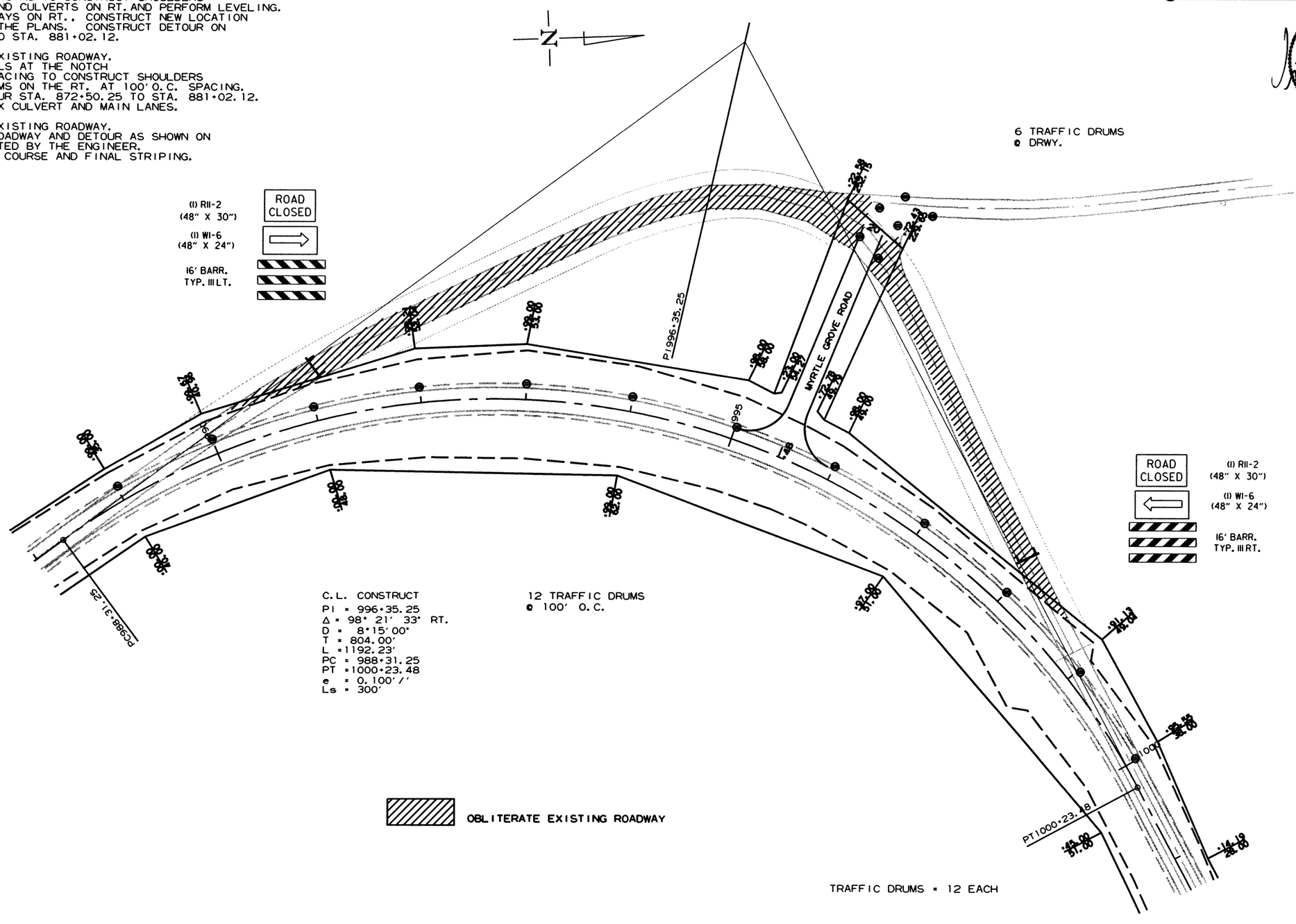
SEQUENCING:

STAGE 1: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
UTILIZE VERTICAL PANELS AT THE NOTCH ON RT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS AND 1 FT. SHIFT. EXTEND CULVERTS ON RT. AND PERFORM LEVELING. CONSTRUCT NEW DRIVEWAYS ON RT., CONSTRUCT NEW LOCATION SECTIONS AS SHOWN ON THE PLANS. CONSTRUCT DETOUR ON LEFT STA. 872+50.25 TO STA. 881+02.12.

STAGE 2: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
UTILIZE VERTICAL PANELS AT THE NOTCH ON LT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS AND PLACE TRAFFIC DRUMS ON THE RT. AT 100' O.C. SPACING. SHIFT TRAFFIC TO DETOUR STA. 872+50.25 TO STA. 881+02.12. AND CONSTRUCT R.C. BOX CULVERT AND MAIN LANES.

STAGE 3: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
OBLITERATE EXISTING ROADWAY AND DETOUR AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
INSTALL FINAL SURFACE COURSE AND FINAL STRIPING.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



STAGE 3
STA. 988+00 TO STA. 1001+00
MAINTENANCE OF TRAFFIC DETAILS

9/26/2016

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				6	ARK.			
				JOB NO.		070368	76	335

(2) PERMANENT PAVEMENT MARKING DETAILS

FINAL STRIPING:
REFLECTORIZED PAINT PAVEMENT MARKING (4"):
RT. AND LT. EDGE LINES = 76,558 LIN. FT. WHITE
DBL. CENTERLINE = 73,864 LIN. FT. YELLOW

RAISED PAVEMENT MARKERS (TYPE II) YELLOW/YELLOW = 923 EACH

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REGISTERED PROFESSIONAL ENGINEER
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9-30-16

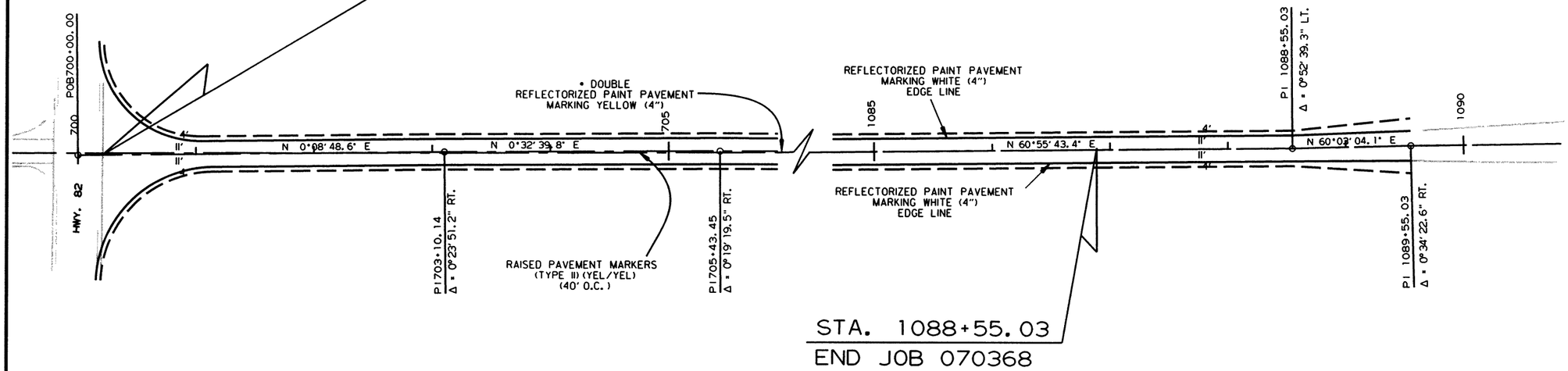
SEQUENCING:

STAGE 1: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
UTILIZE VERTICAL PANELS AT THE NOTCH
ON RT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS
AND 1 FT. SHIFT, EXTEND CULVERTS ON RT. AND PERFORM LEVELING.
CONSTRUCT NEW DRIVEWAYS ON RT., CONSTRUCT NEW LOCATION
SECTIONS AS SHOWN ON THE PLANS. CONSTRUCT DETOUR ON
LEFT STA. 872+50.25 TO STA. 881+02.12.

STAGE 2: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
UTILIZE VERTICAL PANELS AT THE NOTCH
ON LT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS
AND PLACE TRAFFIC DRUMS ON THE RT. AT 100' O.C. SPACING.
SHIFT TRAFFIC TO DETOUR STA. 872+50.25 TO STA. 881+02.12.
AND CONSTRUCT R.C. BOX CULVERT AND MAIN LANES.

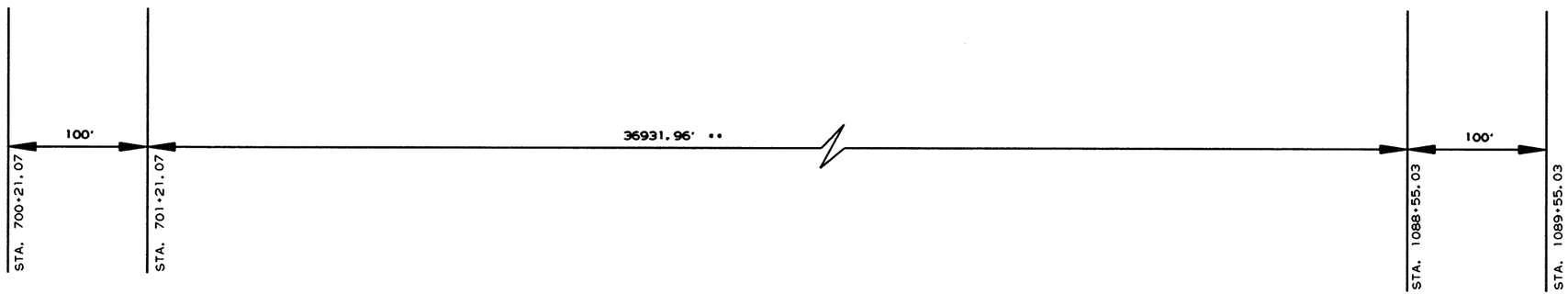
STAGE 3: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
OBLITERATE EXISTING ROADWAY AND DETOUR AS SHOWN ON
THE PLANS OR AS DIRECTED BY THE ENGINEER.
INSTALL FINAL SURFACE COURSE AND FINAL STRIPING.

STA. 700+21.07
BEGIN JOB 070368
LOG MILE 0.00



STA. 1088+55.03
END JOB 070368

FINAL STRIPING DETAIL



* THE 4" YELLOW STRIPING QUANTITY HAS BEEN ESTIMATED BASED ON A DOUBLE YELLOW CENTERLINE STRIPE FOR THE ENTIRE PROJECT.
THE PROJECT MUST BE MARKED FOR PASSING/NO PASSING ZONES PRIOR TO THE PLACEMENT OF ANY FINAL STRIPING.
CONTACT MAINTENANCE DIVISION AFTER THE FINAL LIFT OF SURFACE COURSE HAS BEEN PLACED TO SCHEDULE THE ZONING OF THE PROJECT.

** LENGTH FOR LEFT TURN LANE SECTIONS HAVE BEEN SUBTRACTED FROM TOTAL.

9/27/2016

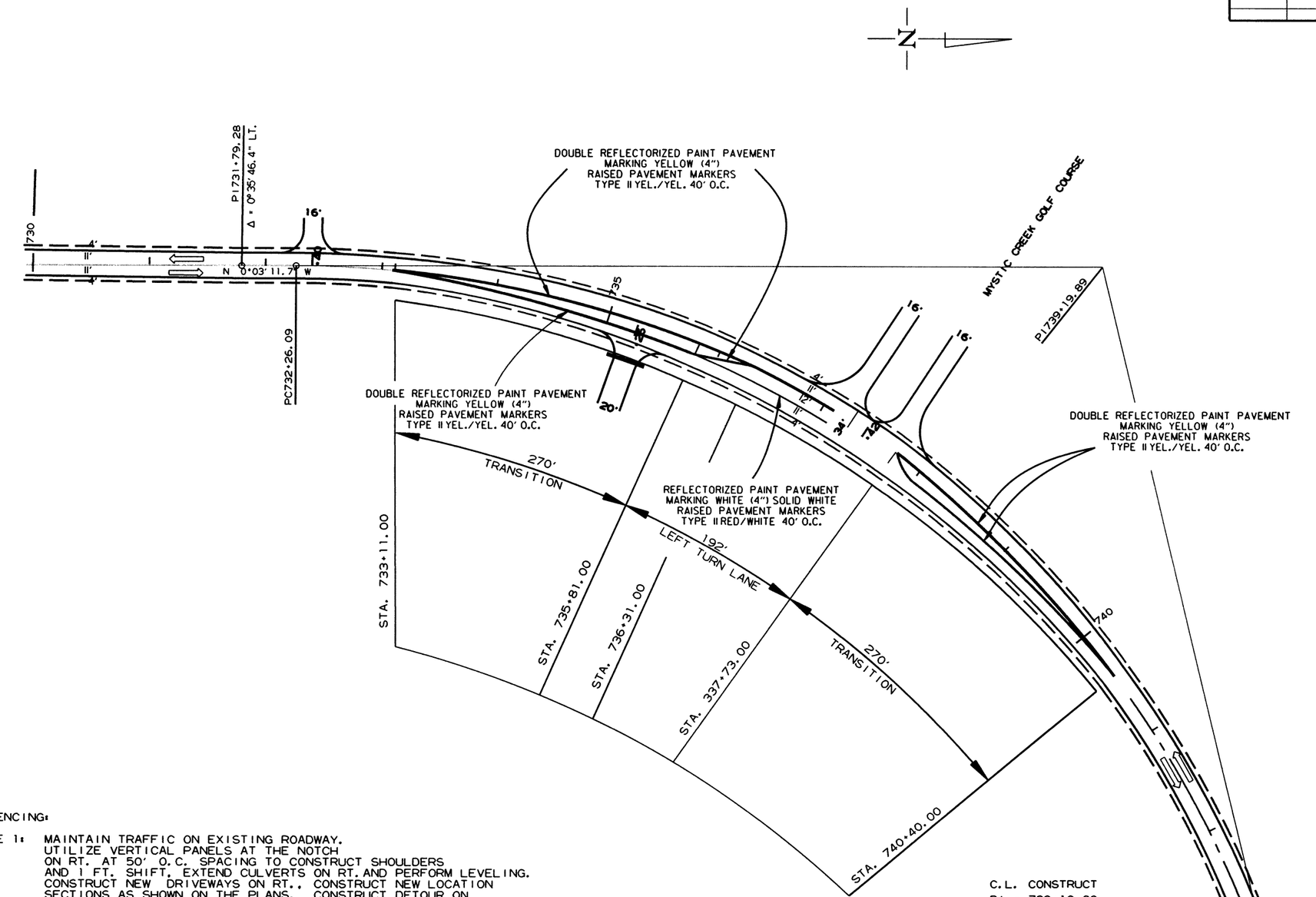
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PERMANENT PAVEMENT MARKINGS DETAILS

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.		070368	77	335

(2) PERMANENT PAVEMENT MARKING DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



SEQUENCING:

STAGE 1: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
UTILIZE VERTICAL PANELS AT THE NOTCH ON RT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS AND 1 FT. SHIFT. EXTEND CULVERTS ON RT. AND PERFORM LEVELING. CONSTRUCT NEW DRIVEWAYS ON RT., CONSTRUCT NEW LOCATION SECTIONS AS SHOWN ON THE PLANS. CONSTRUCT DETOUR ON LEFT STA. 872+50.25 TO STA. 881+02.12.

STAGE 2: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
UTILIZE VERTICAL PANELS AT THE NOTCH ON LT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS AND PLACE TRAFFIC DRUMS ON THE RT. AT 100' O.C. SPACING. SHIFT TRAFFIC TO DETOUR STA. 872+50.25 TO STA. 881+02.12. AND CONSTRUCT R.C. BOX CULVERT AND MAIN LANES.

STAGE 3: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
OBLITERATE EXISTING ROADWAY AND DETOUR AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
INSTALL FINAL SURFACE COURSE AND FINAL STRIPING.

C.L. CONSTRUCT
PI = 739+19.89
Δ = 76° 24' 43" RT.
D = 6°30'00"
T = 693.80'
L = 1175.57'
PC = 732+26.09
PT = 744+01.66
e = 0.095'/'
Ls = 300'

FINAL STRIPING:
REFLECTORIZED PAINT PAVEMENT MARKING (4"):
SOLID WHITE TURN LANE = 126 LIN. FT. WHITE
DBL. CENTERLINE = 2518 LIN. FT. YELLOW
RT. AND LT. EDGE LINES = 1338 LIN. FT. WHITE

RAISED PAVEMENT MARKERS (TYPE II) (YELLOW/YELLOW) = 31 EACH
RAISED PAVEMENT MARKERS (TYPE II) (RED/WHITE) = 3 EACH

LEFT TURN LANE
STA. 733+11 TO STA. 740+43
PERMANENT PAVEMENT MARKING DETAILS

9/27/2016

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				6	ARK.			
				JOB NO.		070368	78	335

(2) PERMANENT PAVEMENT MARKING DETAILS

SEQUENCING:

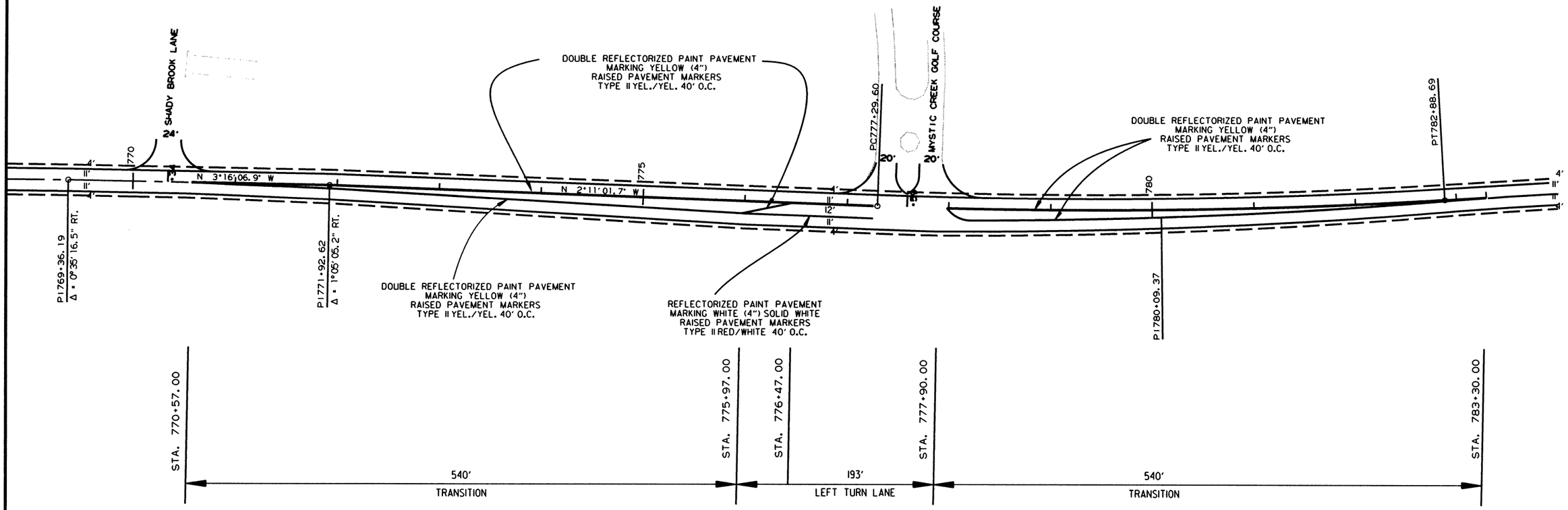
STAGE 1: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
UTILIZE VERTICAL PANELS AT THE NOTCH
ON RT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS
AND 1 FT. SHIFT, EXTEND CULVERTS ON RT. AND PERFORM LEVELING.
CONSTRUCT NEW DRIVEWAYS ON RT., CONSTRUCT NEW LOCATION
SECTIONS AS SHOWN ON THE PLANS. CONSTRUCT DETOUR ON
LEFT STA. 872+50.25 TO STA. 881+02.12.

STAGE 2: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
UTILIZE VERTICAL PANELS AT THE NOTCH
ON LT. AT 50' O.C. SPACING TO CONSTRUCT SHOULDERS
AND PLACE TRAFFIC DRUMS ON THE RT. AT 100' O.C. SPACING.
SHIFT TRAFFIC TO DETOUR STA. 872+50.25 TO STA. 881+02.12.
AND CONSTRUCT R.C. BOX CULVERT AND MAIN LANES.

STAGE 3: MAINTAIN TRAFFIC ON EXISTING ROADWAY.
OBLITERATE EXISTING ROADWAY AND DETOUR AS SHOWN ON
THE PLANS OR AS DIRECTED BY THE ENGINEER.
INSTALL FINAL SURFACE COURSE AND FINAL STRIPING.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

C.L. CONSTRUCT
PI = 780+09.37
Δ = 05°35'23.6" LT.
D = 0°59'59"
T = 279.77'
L = 559.09'
PC = 777+29.60
PT = 782+88.69
e = 0.021'/'
Ls = 250'



FINAL STRIPING:
REFLECTORIZED PAINT PAVEMENT MARKING (4"):
SOLID WHITE TURN LANE = 129 LIN. FT. WHITE
DBL. CENTERLINE = 4095 LIN. FT. YELLOW
RT. AND LT. EDGE LINES = 2414 LIN. FT. WHITE

RAISED PAVEMENT MARKERS (TYPE II) (YELLOW/YELLOW) = 59 EACH
RAISED PAVEMENT MARKERS (TYPE II) (RED/WHITE) = 3 EACH

LEFT TURN LANE
STA. 770+57 TO STA. 783+30
PERMANENT PAVEMENT MARKING DETAILS

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				6	ARK.			
				JOB NO.		070368	79	335

(2) QUANTITIES

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

ADVANCE WARNING SIGNS AND DEVICES

SIGN NUMBER	DESCRIPTION	SIGN SIZE	STAGE 1	STAGE 2	STAGE 3	MAXIMUM NUMBER REQUIRED	TOTAL SIGNS REQUIRED		VERTICAL PANELS	TRAFFIC DRUMS	BARRICADES (TYPE III)	
			LIN. FT. - EACH				NO.	SQ. FT.	EACH		RIGHT	LEFT
											LIN. FT.	
W20-1	ROAD WORK 1500 FT.	48"x48"	2	2	2	2	2	32.0				
W20-1	ROAD WORK 1000 FT.	48"x48"	2	2	2	2	2	32.0				
W20-1	ROAD WORK 500 FT.	48"x48"	2	2	2	2	2	32.0				
W20-1	ROAD WORK AHEAD	48"x48"	21	21	21	21	21	336.0				
G20-2	END ROAD WORK	48"x24"	21	21	21	21	21	168.0				
G20-1	ROAD WORK NEXT xx MILES	60"x24"	2	2	2	2	2	20.0				
W1-4AR	REVERSE CURVE RT.	48"x48"		1		1	1	16.0				
W1-4AL	REVERSE CURVE LT.	48"x48"		1		1	1	16.0				
W13-1	SPEED LIMIT (ADVISORY)	24"x24"		1		1	1	4.0				
R11-2	ROAD CLOSED	48"x30"	8	8	8	8	8	80.0				
OM-3L	OBJECT MARKER	12"x36"		2		2	2	6.0				
OM-3R	OBJECT MARKER	12"x36"		2		2	2	6.0				
W1-6	LARGE ARROW	48"x24"		8	8	8	8	64.0				
W1-8	CHEVRONS	18"x24"		16		16	16	48.0				
R4-1	DO NOT PASS	24"x30"	30	30	30	30	30	150.0				
RSP-1	SHOULDER CLOSED	48"x30"	30	30	30	30	30	300.0				
	VERTICAL PANELS		212	212		212			212			
	TRAFFIC DRUMS		365	834	430	834				834		
	TYPE III BARRICADE-RT. (16')		4	4	4	4					64	
	TYPE III BARRICADE-LT. (16')		4	4	4	4						64
TOTALS:								1310.0	212	834	64	64

NOTE: THIS IS A LOW TRAFFIC VOLUME ROAD AS DEFINED IN SECTION 604.03, STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

THE QUANTITY OF VERTICAL PANELS PROVIDED IN THE CONTRACT IS FOR ONE SIDE OF THE ROADWAY FOR 2 MILES. THIS IS THE MAXIMUM QUANTITY REQUIRED TO ALLOW THE CONTRACTOR TO NOTCH ONE MILE, BACKFILL TO A POINT WHERE THE VERTICAL DIFFERENTIAL IS 4" OR LESS, AND THEN NOTCH ANOTHER ONE-MILE SECTION. THIS IS THE MAXIMUM NUMBER OF VERTICAL PANELS THAT WILL BE PAID FOR. REFER TO SECTION 603.02 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION REQUIREMENTS.

CONSTRUCTION PAVEMENT MARKINGS AND PERMANENT PAVEMENT MARKINGS

DESCRIPTION	STAGE 1	STAGE 2	STAGE 3	REMOVAL OF PERMANENT PAVEMENT MARKINGS	CONSTRUCTION PAVEMENT MARKINGS	RAISED PAVEMENT MARKERS		REFLECTORIZED PAINT PAVEMENT MARKING	
						TYPE II (WHITE/RED	TYPE II (YEL/YEL)	4" WHITE	4" YELLOW
	LIN. FT. - EACH			LIN. FT.		EACH		LIN. FT.	
REMOVAL OF PERMANENT PAVEMENT MARKINGS		5888		5888					
CONSTRUCTION PAVEMENT MARKINGS	155317	16368			171685				
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED)			6			6			
RAISED PAVEMENT MARKERS TYPE II (YEL/YEL)		22	1013				1035		
REFLECTORIZED PAINT PAVEMENT MARKING WHITE (4")			80565					80565	
REFLECTORIZED PAINT PAVEMENT MARKING YELLOW (4")			80477						80477
TOTALS:				5888	171685	6	1035	80565	80477

NOTE: THIS IS A LOW TRAFFIC VOLUME ROAD AS DEFINED IN SECTION 604.03, STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

NOTE: THE 4" YELLOW STRIPING QUANTITY HAS BEEN ESTIMATED BASED ON A DOUBLE YELLOW CENTERLINE STRIPE FOR THE ENTIRE PROJECT.
THE PROJECT MUST BE MARKED FOR PASSING/NO PASSING ZONES PRIOR TO THE PLACEMENT OF ANY FINAL STRIPING.
CONTACT THE MAINTENANCE DIVISION AFTER THE FINAL LIFT OF SURFACE COURSE HAS BEEN PLACED TO SCHEDULE THE ZONING OF THE PROJECT.

9/2/2016

R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	80	335

(2) QUANTITIES

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

REMOVAL OF EXISTING BRIDGE STRUCTURE

STATION	STATION	LOCATION	LUMP SUM
876+60	876+98	38'X24' BRIDGE PRECAST CONCRETE	1.00
		CHANNEL BEAMS W/ TIMBER PILING	
		(SITE NO. 1)	

BENCH MARKS

STATION	LOCATION	BENCH MARKS
		EACH
702+68	RT. HEADWALL	1
729+24	LT. HEADWALL	1
747+80	RT. HEADWALL	1
781+67	LT. HEADWALL	1
810+38	RT. HEADWALL	1
836+13	LT. HEADWALL	1
865+65	RT. HEADWALL	1
876+79	LT. HEADWALL	1
914+87	RT. HEADWALL	1
938+00	LT. HEADWALL	1
961+99	RT. HEADWALL	1
998+88	LT. HEADWALL	1
1029+14	RT. HEADWALL	1
1041+55	LT. HEADWALL	1
1072+35	RT. HEADWALL	1
TOTAL:		15

NOTE: SHOWN FOR INFORMATION ONLY. BENCH MARKS SHALL BE FURNISHED AND PLACED BY STATE FORCES.

CLEARING AND GRUBBING

STATION	STATION	LOCATION	CLEARING	GRUBBING
			STATION	
700+00	709+00	MAIN LANES	9	9
710+00	770+00	MAIN LANES	60	60
771+00	774+00	MAIN LANES	3	3
781+00	854+00	MAIN LANES	73	73
855+00	995+00	MAIN LANES	140	140
997+00	1063+50	MAIN LANES	67	67
1071+80	1090+00	MAIN LANES	19	19
TOTALS:			371	371

REMOVAL AND DISPOSAL OF ITEMS

STATION	STATION	LOCATION	SIGNS	SIGN FOUNDATIONS	BUILDINGS	SPRINKLER SYSTEM	SEPTIC SYSTEMS	PLANTERS	LIGHTS	COLUMNS	POSTS
			EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
700+58		RT. OF MAIN LANES	1	2							
706+30		LT. OF MAIN LANES							1		1
706+50		LT. OF MAIN LANES							1		1
716+73		LT. OF MAIN LANES	1	2							
722+22		LT. OF MAIN LANES	1	2							
759+80		RT. OF MAIN LANES									1
760+00		RT. OF MAIN LANES									1
770+20		LT. OF MAIN LANES								1	
770+50		LT. OF MAIN LANES								1	
807+60	808+20	LT. OF MAIN LANES				1					
808+00		LT. OF MAIN LANES						1			
808+50	809+50	LT. OF MAIN LANES				1					
808+60		LT. OF MAIN LANES						1			
809+75		LT. OF MAIN LANES							1		
811+85		LT. OF MAIN LANES								1	
816+60		LT. OF MAIN LANES			1		1				
818+60		RT. OF MAIN LANES								1	
818+80		RT. OF MAIN LANES								1	
840+10		LT. OF MAIN LANES		1							
840+30		LT. OF MAIN LANES	1	2							
841+10		LT. OF MAIN LANES	1	2							
865+65		RT. OF MAIN LANES			1		1				
869+20		RT. OF MAIN LANES	1	1							
882+00		LT. OF MAIN LANES	1	2							
918+80		LT. OF MAIN LANES	1	1							
930+95		LT. OF MAIN LANES		1							
1024+80		RT. OF MAIN LANES									1
1036+00		LT. OF MAIN LANES									1
1036+15		LT. OF MAIN LANES	1	1							
1036+15		LT. OF MAIN LANES									1
1051+70		LT. OF MAIN LANES	1	2							
1052+55		LT. OF MAIN LANES									1
1060+85		RT. OF MAIN LANES									1
1061+05		RT. OF MAIN LANES									1
882+00		LT. OF MAIN LANES						1			
TOTALS:			10	19	2	2	2	3	3	5	10

REMOVAL AND DISPOSAL OF FENCE

STATION	STATION	LOCATION	FENCE	GATES
			LIN. FT.	EACH
702+80	703+45	3' CHAINLINK FENCE - RT. OF MAIN LANES	105	
703+90	705+50	PIPE FENCE - RT. OF MAIN LANES	200	
705+70	712+90	3' CHAINLINK FENCE - LT. OF MAIN LANES	740	
721+35	723+45	SHEET METAL FENCE - RT. OF MAIN LANES	250	
723+70	724+20	WIRE FENCE - RT. OF MAIN LANES	50	
724+42	726+09	WIRE FENCE - RT. OF MAIN LANES	210	
730+00		CABLE GATE - LT. OF MAIN LANES		1
734+50	734+73	WIRE FENCE - RT. OF MAIN LANES	24	
734+83	735+22	WIRE FENCE - RT. OF MAIN LANES	44	
754+13	755+40	3' CHAINLINK FENCE - RT. OF MAIN LANES	130	
759+65		METAL GATE - RT. OF MAIN LANES		2
787+46	789+06	WIRE FENCE - LT. OF MAIN LANES	161	
787+63	788+03	WIRE FENCE - RT. OF MAIN LANES	44	
788+15	788+16	WIRE FENCE - RT. OF MAIN LANES	11	
799+00	799+15	WIRE FENCE - LT. OF MAIN LANES	16	
799+66	800+34	WIRE FENCE - LT. OF MAIN LANES	68	
802+62	803+09	WIRE FENCE - LT. OF MAIN LANES	55	
811+84		BOARD FENCE - LT. OF MAIN LANES	9	
818+40	820+50	BOARD FENCE - RT. OF MAIN LANES	210	
820+50	828+40	WIRE FENCE - RT. OF MAIN LANES	790	
824+71	825+15	WIRE FENCE - LT. OF MAIN LANES	72	
825+56	826+38	WIRE FENCE - RT. OF MAIN LANES	86	
826+54	828+54	WIRE FENCE - RT. OF MAIN LANES	217	
828+96	829+03	WIRE FENCE - LT. OF MAIN LANES	17	
829+47	832+37	WIRE FENCE - RT. OF MAIN LANES	270	
856+22	859+88	WIRE FENCE - LT. OF MAIN LANES	375	
858+15		METAL GATE - RT. OF MAIN LANES		1
866+73	867+38	WIRE FENCE - RT. OF MAIN LANES	66	
867+68	871+24	WIRE FENCE - LT. OF MAIN LANES	372	
872+85	880+60	3' CHAINLINK FENCE - LT. OF MAIN LANES	775	
877+08	880+57	WIRE FENCE - LT. OF MAIN LANES	359	
883+37	883+60	WIRE FENCE - LT. OF MAIN LANES	34	
885+45		3' CHAINLINK FENCE - LT. OF MAIN LANES	4	
888+45	892+70	WIRE FENCE - LT. OF MAIN LANES	425	
893+00	905+70	WIRE FENCE - LT. OF MAIN LANES	1160	
910+05	912+73	WIRE FENCE - LT. OF MAIN LANES	276	
965+45	966+00	6' CHAINLINK FENCE - LT. OF MAIN LANES	60	
969+80	985+00	6' CHAINLINK FENCE - RT. OF MAIN LANES	1520	
969+81	969+83	6' CHAINLINK FENCE - RT. OF MAIN LANES	11	
969+88	974+46	WIRE FENCE - RT. OF MAIN LANES	495	
974+93	984+60	WIRE FENCE - RT. OF MAIN LANES	995	
975+60	977+70	4' CHAINLINK FENCE - LT. OF MAIN LANES	210	
978+29	984+95	WIRE FENCE - RT. OF MAIN LANES	685	
985+00	991+35	WIRE FENCE ON CENTERLINE	640	
999+70	1003+15	WIRE FENCE ON CENTERLINE	345	
1003+45	1005+45	WIRE FENCE - LT. OF MAIN LANES	200	
1008+93	1009+21	WIRE FENCE - LT. OF MAIN LANES	29	
1009+22	1009+58	WIRE FENCE - LT. OF MAIN LANES	37	
1014+81	1018+47	3' CHAINLINK FENCE - LT. OF MAIN LANES	354	
1016+69	1016+58	BOARD FENCE - LT. OF MAIN LANES	72	
1017+14	1024+02	3' CHAINLINK FENCE - LT. OF MAIN LANES	731	
1024+85		BOARD FENCE - LT. OF MAIN LANES	8	
1026+70	1028+78	BOARD FENCE - LT. OF MAIN LANES	204	
1032+34	1032+51	BOARD FENCE - LT. OF MAIN LANES	26	
1034+06	1036+25	BOARD FENCE - LT. OF MAIN LANES	244	
1044+15	1047+45	4' CHAINLINK FENCE - LT. OF MAIN LANES	330	
1050+35	1051+55	3' CHAINLINK FENCE - RT. OF MAIN LANES	120	
1058+49	1058+74	FENCE - RT. OF MAIN LANES	31	
1062+50		METAL GATE - LT. OF MAIN LANES		1
1074+50	1082+43	FENCE - RT. OF MAIN LANES	776	
1076+85	1082+50	5' CHAINLINK FENCE - LT. OF MAIN LANES	599	
1082+20	1083+10	BOARD FENCE - LT. OF MAIN LANES	90	
1085+65	1088+43	BOARD FENCE - LT. OF MAIN LANES	291	
1086+34	1087+00	FENCE - RT. OF MAIN LANES	97	
1087+65		METAL GATE - RT. OF MAIN LANES		1
TOTALS:			16825	6

9/2/2016

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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.		070368	81	335

(2) QUANTITIES

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

REMOVAL AND DISPOSAL OF CULVERTS (BOX 1 OF 2)

STATION	DESCRIPTION	PIPE CULVERTS
		EACH
702+68	18"X29' R.C. PIPE CULVERT-CROSS DRAIN	1
703+52	14"X17' PVC PIPE CULVERT ON RT.	1
704+27	10"X24' PVC PIPE CULVERT ON LT.	1
708+51	18"X25' C.P. PIPE CULVERT ON RT.	1
710+95	18"X25' C.P. PIPE CULVERT ON RT.	1
714+18	60"X34' C.M. PIPE CULVERT ON LT.	1
716+44	24"X42' PVC PIPE CULVERT ON LT.	1
716+96	18"X29' R.C. PIPE CULVERT ON RT.	1
719+36	18"X29' R.C. PIPE CULVERT ON RT.	1
720+19	18"X28' R.C. PIPE CULVERT ON RT.	1
722+47	18"X41' R.C. PIPE CULVERT ON LT.	1
725+65	18"X25' C.M. PIPE CULVERT ON LT.	1
726+32	18"X21' C.P. PIPE CULVERT ON LT.	1
727+71	18"X25' C.M. PIPE CULVERT ON LT.	1
729+21	30"X32' C.M. PIPE CULVERT-CROSS DRAIN	1
732+87	36"X38' C.M. PIPE CULVERT-CROSS DRAIN	1
736+43	16"X38' R.C. PIPE CULVERT ON LT.	1
736+50	18"X38' C.M. PIPE CULVERT ON LT.	1
738+17	24"X29' R.C. PIPE CULVERT-CROSS DRAIN	1
748+00	18"X28' R.C. PIPE CULVERT-CROSS DRAIN	1
752+75	12"X30' C.M. PIPE CULVERT ON RT.	1
755+50	12"X31' C.M. PIPE CULVERT ON LT.	1
755+52	18"X31' R.C. PIPE CULVERT ON RT.	1
756+37	18"X20' C.M. PIPE CULVERT ON LT.	1
757+84	18"X25' R.C. PIPE CULVERT ON RT.	1
761+77	24"X34' C.M. PIPE CULVERT-CROSS DRAIN	1
781+67	18"X61' C.M. PIPE CULVERT-CROSS DRAIN	1
792+10	18"X36' R.C. PIPE CULVERT-CROSS DRAIN	1
798+36	12"X26' C.M. PIPE CULVERT ON LT.	1
799+44	18"X21' R.C. PIPE CULVERT ON LT.	1
802+79	24"X25' METAL PIPE CULVERT ON LT.	1
808+36	12"X57' C.P. PIPE CULVERT ON LT	1
809+57	18"X30' R.C. PIPE CULVERT ON LT.	1
810+09	18"X30' R.C. PIPE CULVERT ON RT.	1
813+58	18"X24' R.C. PIPE CULVERT ON LT.	1
816+86	18"X32' R.C. PIPE CULVERT ON LT.	1
818+73	18"X20' C.M. PIPE CULVERT ON RT.	1
819+39	18"X25' C.P. PIPE CULVERT ON RT.	1
825+73	18"X26' R.C. PIPE CULVERT ON LT.	1
826+49	18"X20' C.M. PIPE CULVERT ON RT.	1
831+66	18"X46' R.C. PIPE CULVERT ON LT.	1
831+66	18"X47' R.C. PIPE CULVERT ON LT.	1
834+80	18"X41' C.P. PIPE CULVERT ON RT.	1
836+64	18"X25' C.M. PIPE CULVERT ON LT.	1
845+44	18"X25' R.C. PIPE CULVERT ON RT.	1
847+07	18"X24' C.M. PIPE CULVERT ON RT.	1
848+44	18"X25' R.C. PIPE CULVERT ON RT.	1
850+22	15"X24' C.M. PIPE CULVERT ON LT.	1
850+65	18"X25' R.C. PIPE CULVERT ON RT.	1
852+01	18"X25' R.C. PIPE CULVERT ON RT.	1
852+16	18"X25' C.M. PIPE CULVERT ON LT.	1
853+95	18"X25' R.C. PIPE CULVERT ON LT.	1
853+98	18"X25' R.C. PIPE CULVERT ON RT.	1
855+87	18"X22' C.M. PIPE CULVERT ON RT.	1
858+04	18"X24' C.M. PIPE CULVERT ON RT.	1
866+96	18"X30' R.C. PIPE CULVERT ON LT.	1
872+70	18"X35' C.M. PIPE CULVERT ON LT.	1
880+31	18"X24' C.M. PIPE CULVERT ON RT.	1
883+32	18"X20' C.P. PIPE CULVERT ON RT.	1
883+79	18"X31' R.C. PIPE CULVERT ON RT.	1
884+42	15"X25' C.M. PIPE CULVERT ON LT.	1
889+00	18"X31' R.C. PIPE CULVERT ON LT.	1
901+45	18"X25' C.P. PIPE CULVERT ON RT.	1
905+47	24"X41' C.M. PIPE CULVERT-CROSS DRAIN	1
916+15	18"X25' R.C. PIPE CULVERT ON LT.	1
918+53	12"X24' C.M. PIPE CULVERT ON RT.	1
920+20	18"X25' C.M. PIPE CULVERT ON LT.	1
931+42	18"X48' C.M. PIPE CULVERT ON RT.	1
935+72	18"X43' C.M. PIPE CULVERT ON RT.	1
938+00	18"X46' R.C. PIPE CULVERT ON LT.	1
942+92	18"X21' R.C. PIPE CULVERT ON RT.	1
945+64	18"X25' R.C. PIPE CULVERT ON LT.	1
947+10	18"X20' C.M. PIPE CULVERT ON LT.	1
SUBTOTAL (BOX 1 OF 2):		73

REMOVAL AND DISPOSAL OF CULVERTS (BOX 2 OF 2)

STATION	DESCRIPTION	PIPE CULVERTS
		EACH
950+42	18"X25' R.C. PIPE CULVERT ON LT.	1
953+16	18"X25' R.C. PIPE CULVERT ON LT.	1
954+26	18"X17' C.M. PIPE CULVERT ON LT.	1
955+56	18"X25' C.P. PIPE CULVERT ON LT.	1
957+43	18"X28' R.C. PIPE CULVERT ON RT.	1
958+31	18"X25' C.M. PIPE CULVERT ON LT.	1
959+34	18"X21' C.P. PIPE CULVERT ON LT.	1
961+38	18"X28' C.M. PIPE CULVERT ON RT.	1
961+99	18"X41' R.C. PIPE CULVERT ON LT.	1
963+51	18"X24' C.M. PIPE CULVERT ON RT.	1
965+55	12"X42' C.M. PIPE CULVERT ON LT.	1
965+61	18"X25' C.M. PIPE CULVERT ON RT.	1
974+96	18"X21' C.P. PIPE CULVERT ON LT.	1
975+93	15"X24' C.M. PIPE CULVERT ON LT.	1
979+90	18"X24' C.M. PIPE CULVERT ON RT.	1
982+05	18"X25' C.M. PIPE CULVERT ON LT.	1
985+95	18"X25' R.C. PIPE CULVERT ON LT.	1
998+84	24"X36' C.M. PIPE CULVERT-CROSS DRAIN	1
1003+31	18"X40' C.P. PIPE CULVERT ON LT.	1
1009+56	36"X42' C.M. PIPE CULVERT-CROSS DRAIN	1
1020+16	12"X25' R.C. PIPE CULVERT ON RT.	1
1022+66	18"X29' R.C. PIPE CULVERT ON RT.	1
1024+62	18"X27' R.C. PIPE CULVERT ON RT.	1
1025+27	18"X23' R.C. PIPE CULVERT ON LT.	1
1026+62	18"X21' R.C. PIPE CULVERT ON LT.	1
1028+96	49"X33"X41' C.M. ARCH PIPE CULVERT	1
1029+05	49"X33"X41' C.M. ARCH PIPE CULVERT	1
1033+60	18"x33' R.C. PIPE CULVERT ON RT.	1
1033+70	18"X30' C.M. PIPE CULVERT ON LT.	1
1034+40	18"X25' C.M. PIPE CULVERT ON RT.	1
1036+88	18"X29' R.C. PIPE CULVERT ON RT.	1
1037+59	12"X21' C.P. PIPE CULVERT ON RT.	1
1039+50	18"X34' R.C. PIPE CULVERT ON RT.	1
1040+89	18"X29' C.P. PIPE CULVERT ON RT.	1
1041+99	24"X40' C.M. PIPE CULVERT-CROSS DRAIN	1
1051+12	24"X35' C.M. PIPE CULVERT ON LT.	1
1053+44	12"X21' C.M. PIPE CULVERT ON RT.	1
1056+27	18"X26' C.P. PIPE CULVERT ON RT.	1
1056+54	12"X21' C.M. PIPE CULVERT ON RT.	1
1056+84	18"X24' C.M. PIPE CULVERT ON RT.	1
1058+22	18"X21' C.M. PIPE CULVERT-CROSS DRAIN	1
1060+94	24"X24' C.M. PIPE CULVERT ON RT.	1
1062+49	18"X25' R.C. PIPE CULVERT ON LT.	1
1072+35	36"X37' C.M. PIPE CULVERT ON RT.	1
1074+70	18"X40' C.M. PIPE CULVERT ON LT.	1
1080+42	18"X25' R.C. PIPE CULVERT ON LT.	1
1082+15	24"X17' C.M. PIPE CULVERT ON LT.	1
1083+91	18"x33' R.C. PIPE CULVERT ON LT.	1
1085+78	18"X25' C.M. PIPE CULVERT ON RT.	1
1086+24	24"X41' C.M. PIPE CULVERT ON LT.	1
1089+03	18"X35' C.M. PIPE CULVERT ON RT.	1
1089+08	18"X32' C.M. PIPE CULVERT ON LT.	1
SUBTOTAL (BOX 1 OF 2):		73
SUBTOTAL (BOX 2 OF 2):		52
TOTAL:		125

NOTE: QUANTITIES SHOWN ABOVE SHALL INCLUDE REMOVAL & DISPOSAL OF ALL HEADWALLS AND FLARED END SECTIONS IF APPLICABLE.

ACHM PATCHING OF EXISTING ROADWAY

DESCRIPTION	TON
ENTIRE PROJECT - TO BE USED IF AND WHERE	150
DIRECTED BY THE ENGINEER	
TOTAL:	150

NOTE: QUANTITY ESTIMATED
SEE SECTION 104.03 OF THE STD. SPECS.

FENCING

STATION	STATION	LOCATION	WIRE FENCE (TYPE C)	WIRE FENCE (TYPE D)	WIRE FENCE (TYPE D-1)	* 3' CHAIN LINK FENCE	* 4' CHAIN LINK FENCE	* 5' CHAIN LINK FENCE	* 6' CHAIN LINK FENCE	* 16'-0" GATES	* 18'-0" GATES	* 20'-0" GATES	* 24'-0" GATES
						LIN. FT.				EACH	EACH	EACH	EACH
702+82	703+42	RT. OF MAIN LANES				89				1			
705+71	712+89	LT. OF MAIN LANES				703				1			
706+83	708+20	RT. OF MAIN LANES	147										
723+68	726+08	RT. OF MAIN LANES		207						2			
734+45	735+47	RT. OF MAIN LANES		75								1	
754+06	755+35	RT. OF MAIN LANES				131							
787+45	789+08	LT. OF MAIN LANES		161									
787+60	788+22	RT. OF MAIN LANES		44						1			
798+50	800+34	LT. OF MAIN LANES		169						1			
802+60	803+09	LT. OF MAIN LANES		44						1			
822+40	828+56	RT. OF MAIN LANES		744						2			
824+69	825+15	LT. OF MAIN LANES			48								
829+42	832+54	RT. OF MAIN LANES	318										
856+17	859+91	LT. OF MAIN LANES		361									
866+68	867+37	RT. OF MAIN LANES	82										
867+72	871+24	LT. OF MAIN LANES		347									
872+86	876+56	LT. OF MAIN LANES				380							
877+03	880+56	LT. OF MAIN LANES		364									
883+35	883+61	LT. OF MAIN LANES		36									
888+50	905+37	LT. OF MAIN LANES		1697									
910+02	912+70	LT. OF MAIN LANES		265									
965+08	966+00	LT. OF MAIN LANES							76			1	
969+82	984+99	RT. OF MAIN LANES							1535				1
975+55	977+78	LT. OF MAIN LANES						192		1			
985+81	1009+70	RT. OF MAIN LANES		2330									
1014+85	1016+05	RT. OF MAIN LANES	88							1			
1016+47	1018+48	RT. OF MAIN LANES					185			1			
1017+15	1024+00	LT. OF MAIN LANES					720						
1038+93	1040+24	LT. OF MAIN LANES		115						1			
1044+19	1047+47	LT. OF MAIN LANES					247				1		
1050+31	1051+53	RT. OF MAIN LANES				133							
1058+48	1058+71	RT. OF MAIN LANES	25										
1074+50	1078+51	RT. OF MAIN LANES		726						1			
1076+85	1082+53	LT. OF MAIN LANES							577	3			
1078+67	1082+41	RT. OF MAIN LANES		374						1			
1086+34	1086+98	RT. OF MAIN LANES		147									
TOTALS:			660	8206	48	1436	1152	192	2188	18	1	2	1

* DENOTES ALTERNATE BID ITEM.

SELECTED PIPE BEDDING

LOCATION	SELECTED PIPE BEDDING
	CU.YD.
ENTIRE PROJECT TO BE USED IF	525
AND WHERE DIRECTED BY THE	
ENGINEER	
TOTAL:	525

NOTE: QUANTITY ESTIMATED.
SEE SECTION 104.03 OF THE STD. SPECS.

CULVERT CLEAN OUT

STATION	LOCATION	EACH
836+13	MAIN LANES	1
840+88	MAIN LANES	1
865+65	MAIN LANES	1
TOTAL:		3

ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC

LOCATION	TON	TACK COAT
		GALLON
ENTIRE PROJECT - TO BE USED IF AND WHERE	184	368
DIRECTED BY THE ENGINEER		
TOTALS:	184	368

BASIS OF ESTIMATE:
ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC....25 TON/MILE
TACK COAT FOR MAINTENANCE OF TRAFFIC.....50 GAL./MILE

NOTE: QUANTITY ESTIMATED.
SEE SECTION 104.03 OF THE STD. SPECS.

9/2/2016

R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
10-21-16				6	ARK.			
				JOB NO.		070368	82	335

(2) QUANTITIES

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
10-21-16

SOIL LOG (BOX 1 OF 2)

STATION	LOCATION	DEPTH	LIQUID LIMIT	PLASTICITY INDEX	AASHTO CLASSIFICATION	COLOR
		FEET				
0702+00	18rt	0-5	21	3	A-4(0)	GRAY
0702+00	05rt	0-5	39	24	A-6(15)	BROWN
0702+00	18rt	0-5	31	16	A-6(7)	GRAY
0710+00	05lt	0-5	36	20	A-6(6)	GRAY
0710+00	16lt	0-5	ND	NP	A-2-4(1)	GRAY
0718+00	05rt	0-5	30	14	A-6(9)	BR/GR
0718+00	18rt	0-5	25	8	A-4(3)	BR/GR
0726+00	05lt	0-5	ND	NP	A-4(0)	BR/GR
0726+00	16lt	0-5	22	6	A-4(0)	BR/GR
0734+00	05rt	0-5	26	10	A-4(1)	BR/GR
0734+00	17rt	0-5	28	15	A-6(5)	BR/GR
0742+00	05lt	0-5	49	32	A-7-6(23)	BR/GR
0742+00	16lt	0-5	33	19	A-6(10)	BR/GR
0742+00	16lt	0-5	33	19	A-6(10)	BR/GR
0750+00	05rt	0-5	40	24	A-6(13)	BR/GR
0750+00	20rt	0-5	35	17	A-6(9)	BR/GR
0758+00	16lt	0-5	33	19	A-6(10)	BR/GR
0758+00	05lt	0-5	29	15	A-6(6)	BR/GR
0766+00	05rt	0-5	40	25	A-6(12)	BR/GR
0766+00	18rt	0-5	40	25	A-6(10)	BR/GR
0774+00	05lt	0-5	35	21	A-6(8)	BR/GR
0774+00	19lt	0-5	28	13	A-6(2)	BR/GR
0774+00	19lt	0-5	28	13	A-6(2)	BR/GR
0782+00	08rt	0-5	35	18	A-6(6)	BROWN
0782+00	24rt	0-5	ND	NP	A-2-4(0)	BROWN
0790+00	18lt	0-5	ND	NP	A-4(0)	BROWN
0790+00	05lt	0-5	22	7	A-4(0)	BROWN
0798+00	05rt	0-5	41	22	A-7-6(9)	BROWN
0798+00	18rt	0-5	39	25	A-6(7)	BROWN
0806+00	05lt	0-5	32	15	A-6(6)	GRAY
0806+00	18lt	0-5	28	10	A-4(0)	GRAY
0814+00	05rt	0-5	ND	NP	A-4(0)	BROWN
0814+00	17rt	0-5	36	20	A-6(7)	BR/GR
0822+00	05lt	0-5	37	22	A-6(16)	GRAY
0822+00	17lt	0-5	35	21	A-6(12)	BR/GR
0830+00	05rt	0-5	35	21	A-6(12)	BR/GR
0830+00	17rt	0-5	33	18	A-6(9)	BR/GR
0838+00	05lt	0-5	51	33	A-7-6(27)	GRAY
0838+00	17lt	0-5	65	43	A-7-6(29)	BR/GR
0838+00	17lt	0-5	34	21	A-6(14)	BR/GR
0846+00	05rt	0-5	20	7	A-4(0)	BROWN
0846+00	19rt	0-5	24	11	A-6(1)	BR/GR
0854+00	17lt	0-5	27	13	A-2-6(0)	BR/GR
0854+00	05lt	0-5	22	10	A-4(3)	BR/GR
0862+00	20rt	0-5	49	33	A-7-6(20)	BR/GR
0862+00	05rt	0-5	52	33	A-7-6(23)	BR/GR
0870+00	05lt	0-5	ND	NP	A-4(0)	BR/GR
0870+00	17lt	0-5	28	13	A-2-6(0)	BR/GR
0878+00	05rt	0-5	ND	NP	A-4(0)	GRAY
0878+00	16rt	0-5	ND	NP	A-4(0)	GRAY
0886+00	17lt	0-5	32	17	A-6(4)	BROWN
0886+00	05lt	0-5	ND	NP	A-2-4(0)	BROWN
0894+00	17rt	0-5	43	24	A-7-6(9)	BROWN
0894+00	05rt	0-5	27	10	A-4(2)	BROWN

SOIL LOG (BOX 2 OF 2)

STATION	LOCATION	DEPTH	LIQUID LIMIT	PLASTICITY INDEX	AASHTO CLASSIFICATION	COLOR
		FEET				
0902+00	05lt	0-5	ND	NP	A-2-4(0)	BROWN
0902+00	17lt	0-5	ND	NP	A-4(0)	GRAY
0910+00	18rt	0-5	ND	NP	A-4(0)	GRAY
0910+00	05rt	0-5	ND	NP	A-4(0)	GRAY
0918+00	17lt	0-5	ND	NP	A-2-4(0)	BROWN
0918+00	05lt	0-5	24	9	A-4(1)	BR/GR
0926+00	05rt	0-5	33	17	A-6(4)	BROWN
0926+00	17rt	0-5	29	12	A-6(2)	BROWN
0935+00	05lt	0-5	27	12	A-6(2)	BROWN
0935+00	17lt	0-5	33	20	A-6(3)	BR/GR
0942+00	05rt	0-5	32	17	A-6(14)	BR/GR
0942+00	18rt	0-5	36	20	A-6(18)	BR/GR
0942+00	18rt	0-5	32	16	A-6(14)	BR/GR
0950+00	19lt	0-5	34	18	A-6(3)	BROWN
0950+00	05lt	0-5	35	20	A-6(8)	BROWN
0958+00	05rt	0-5	20	3	A-4(0)	BR/GR
0958+00	18rt	0-5	21	4	A-4(0)	BR/GR
0966+00	20lt	0-5	27	10	A-4(6)	GRAY
0966+00	05lt	0-5	31	15	A-6(11)	GRAY
0974+00	06rt	0-5	18	3	A-4(0)	GRAY
0974+00	17rt	0-5	17	2	A-4(0)	GRAY
0982+00	05lt	0-5	26	11	A-6(6)	GRAY
0982+00	18lt	0-5	24	8	A-4(4)	GRAY
0990+00	05rt	0-5	15	NP	A-4(0)	GRAY
0990+00	20rt	0-5	ND	NP	A-4(0)	GRAY
0998+00	21lt	0-5	27	10	A-4(6)	GRAY
0998+00	05lt	0-5	30	15	A-6(11)	BR/GR
1006+00	18rt	0-5	39	21	A-6(16)	BR/GR
1006+00	05rt	0-5	39	22	A-6(14)	BROWN
1006+00	18rt	0-5	32	15	A-6(11)	GRAY
1016+00	17rt	0-5	ND	NP	A-4(0)	GRAY
1016+00	05lt	0-5	ND	NP	A-4(0)	GRAY
1022+00	05rt	0-5	20	4	A-4(0)	GRAY
1022+00	16rt	0-5	ND	NP	A-4(0)	BROWN
1030+00	05lt	0-5	ND	NP	A-2-4(0)	BR/GR
1030+00	18lt	0-5	ND	NP	A-4(0)	GRAY
1038+00	17rt	0-5	ND	NP	A-2-4(0)	BR/GR
1038+00	05rt	0-5	ND	NP	A-2-4(0)	GRAY
1046+00	05lt	0-5	21	5	A-4(0)	BR/GR
1046+00	17rt	0-5	28	13	A-6(7)	GRAY
1054+00	05rt	0-5	29	15	A-6(7)	GRAY
1054+00	18rt	0-5	30	15	A-6(8)	BR/GR
1062+00	05lt	0-5	23	9	A-4(2)	GRAY
1062+00	20lt	0-5	ND	NP	A-4(0)	BR/GR
1070+00	05rt	0-5	25	8	A-4(0)	BROWN
1070+00	15rt	0-5	ND	NP	A-2-4(0)	BR/GR
1078+00	05lt	0-5	25	9	A-4(3)	BR/GR
1078+00	18lt	0-5	27	11	A-6(4)	BR/GR
1078+00	18lt	0-5	30	16	A-6(6)	BR/GR
1086+00	05rt	0-5	25	10	A-4(5)	BR/GR
1086+00	18rt	0-5	45	27	A-7-6(16)	BR/GR
1094+00	18lt	0-5	ND	NP	A-2-4(0)	BROWN
1094+00	08lt	0-5	ND	NP	A-2-4(0)	GRAY
1094+00	34lt	0-5	ND	NP	A-4(0)	BR/GR

SOIL CHARACTERISTICS TABULATED ABOVE ARE REPRESENTATIVE AT THE LOCATION OF THE SAMPLE, AND FROM SURFACE INDICATIONS ARE TYPICAL FOR THE LIMITS SHOWN. THESE DATA ARE SHOWN FOR INFORMATION ONLY. THE STATE WILL NOT BE RESPONSIBLE FOR VARIATIONS IN THE SOIL CHARACTERISTICS AND/OR EXTENT OF SAME DIFFERING FROM THE ABOVE TABULATIONS.
NP - NON-PLASTIC
ND - NOT DETERMINABLE

MAILBOXES

LOCATION	MAILBOXES	MAILBOX SUPPORTS (SINGLE) EACH	MAILBOX SUPPORTS (DOUBLE) EACH
ENTIRE PROJECT	145	143	1
TOTALS:	145	143	1

4" PIPE UNDERDRAIN

STATION	STATION	LOCATIONS	4" PIPE UNDERDRAINS	UNDERDRAIN OUTLET PROTECTORS
			LIN. FT.	EACH
701+21	1089+55	MAIN LANES	19500	79
* ENTIRE PROJECT TO BE USED IF AND			1250	6
WHERE DIRECTED BY THE ENGINEER				
TOTALS:			20750	85

* NOTE: QUANTITIES ESTIMATED.
SEE SECTION 104.03 OF THE STD. SPECS.

EARTHWORK

STATION	STATION	LOCATION / DESCRIPTION	UNCLASSIFIED EXCAVATION	COMPACTED EMBANKMENT	* SOIL STABILIZATION
			CU. YD.		TON
ENTIRE	PROJECT	STAGE 1-MAIN LANES	56643	11145	
ENTIRE	PROJECT	STAGE 2-MAIN LANES	34112	8497	
872+00.00	882+00.00	STAGE 3 - DETOUR OBLITERATION	2248	124	
ENTIRE	PROJECT	APPROACHES	400	6865	
* ENTIRE	PROJECT	TEMPORARY APPROACHES		200	
		CHANNEL CHANGE	56		
* ENTIRE	PROJECT	TO BE USED IF AND WHERE			500
		DIRECTED BY THE ENGINEER			
TOTALS:			93459	26831	500

* QUANTITY ESTIMATED.
SEE SECTION 104.03 OF THE STD. SPECS.

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

COLD MILLING ASPHALT PAVEMENT

STATION	STATION	LOCATION	AVG. WIDTH	COLD MILLING ASPHALT PAVEMENT
			FEET	SQ. YD.
1088+55.03	1089+55.03	MAIN LANES	20	222.22
TOTAL:				222.22

NOTE: AVERAGE MILLING DEPTH 1"

PAVEMENT REPAIR OVER CULVERTS (CONCRETE)

STATION	LOCATION	WIDTH	LENGTH	CU.YD.
		FEET		
702+68	MAIN LANES	8.50	20	4.7
714+01	MAIN LANES	12.00	20	6.7
714+22	MAIN LANES	12.00	20	6.7
729+21	MAIN LANES	9.08	20	5.0
732+87	MAIN LANES	10.25	20	5.7
747+80	MAIN LANES	8.50	20	4.7
781+67	MAIN LANES	8.50	20	4.7
792+10	MAIN LANES	8.50	20	4.7
810+38	MAIN LANES	8.50	20	4.7
816+86	MAIN LANES	8.50	20	4.7
866+96	MAIN LANES	8.50	20	4.7
883+55	MAIN LANES	8.50	20	4.7
889+00	MAIN LANES	8.50	20	4.7
904+08	MAIN LANES	28.83	20	16.0
905+47	MAIN LANES	8.50	20	4.7
938+00	MAIN LANES	8.50	20	4.7
961+99	MAIN LANES	8.50	20	4.7
979+90	MAIN LANES	8.50	20	4.7
998+88	MAIN LANES	8.50	20	4.7
1009+56	MAIN LANES	10.25	20	5.7
1029+14	MAIN LANES	25.00	20	13.9
1041+99	MAIN LANES	14.00	20	7.8
1050+83	MAIN LANES	8.50	20	4.7
1072+35	MAIN LANES	9.67	20	5.4
TOTAL:				143.4

AVG. DEPTH = 9"

9/2/2016

R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	83	335

(2) QUANTITIES

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

CONCRETE DITCH PAVING

STATION	STATION	LOCATION	LENGTH	"W"	CONC. DITCH PAVING (TYPE B)	SOLID SODDING	WATER
			LIN. FT.	FEET	SQ. YD.	SQ. YD.	M. GAL.
700+21.07	701+21.07	LT. OF MAIN LANES	100.00	7	77.78	44.44	0.56
700+21.07	702+00.00	RT. OF MAIN LANES	178.93	7	139.17	79.52	1.00
706+65.00	709+00.00	LT. OF MAIN LANES	235.00	7	182.78	104.44	1.32
707+00.00	708+00.00	RT. OF MAIN LANES	100.00	7	77.78	44.44	0.56
716+75.00	721+00.00	LT. OF MAIN LANES	425.00	7	330.56	188.89	2.38
717+14.00	719+25.00	RT. OF MAIN LANES	211.00	7	164.11	93.78	1.18
726+32.00	727+70.00	RT. OF MAIN LANES	138.00	7	107.33	61.33	0.77
726+47.00	727+54.00	LT. OF MAIN LANES	107.00	7	83.22	47.56	0.60
740+00.00	745+00.00	RT. OF MAIN LANES	500.00	7	388.89	222.22	2.80
741+00.00	743+00.00	LT. OF MAIN LANES	200.00	7	155.56	88.89	1.12
761+00.00	763+00.00	LT. OF MAIN LANES	200.00	7	155.56	88.89	1.12
761+96.00	763+00.00	RT. OF MAIN LANES	104.00	7	80.89	46.22	0.58
778+00.00	781+67.00	RT. OF MAIN LANES	367.00	7	285.44	163.11	2.06
778+25.00	781+00.00	LT. OF MAIN LANES	275.00	7	213.89	122.22	1.54
784+00.00	787+00.00	LT. OF MAIN LANES	300.00	7	233.33	133.33	1.68
784+00.00	787+00.00	RT. OF MAIN LANES	300.00	7	233.33	133.33	1.68
789+00.00	792+00.00	LT. OF MAIN LANES	300.00	7	233.33	133.33	1.68
789+00.00	790+00.00	RT. OF MAIN LANES	100.00	7	77.78	44.44	0.56
798+00.00	800+00.00	RT. OF MAIN LANES	200.00	7	155.56	88.89	1.12
823+00.00	825+00.00	LT. OF MAIN LANES	200.00	7	155.56	88.89	1.12
832+00.00	833+00.00	RT. OF MAIN LANES	100.00	7	77.78	44.44	0.56
837+00.00	838+00.00	LT. OF MAIN LANES	100.00	7	77.78	44.44	0.56
838+00.00	839+00.00	RT. OF MAIN LANES	100.00	7	77.78	44.44	0.56
861+00.00	865+65.00	LT. OF MAIN LANES	465.00	7	361.67	206.67	2.60
863+00.00	865+65.00	RT. OF MAIN LANES	265.00	7	206.11	117.78	1.48
869+00.00	872+35.00	LT. OF MAIN LANES	335.00	7	260.56	148.89	1.88
869+00.00	874+00.00	RT. OF MAIN LANES	500.00	7	388.89	222.22	2.80
872+89.00	874+00.00	LT. OF MAIN LANES	111.00	7	86.33	49.33	0.62
879+00.00	880+00.00	RT. OF MAIN LANES	100.00	7	77.78	44.44	0.56
879+00.00	880+00.00	LT. OF MAIN LANES	100.00	7	77.78	44.44	0.56
885+00.00	887+00.00	LT. OF MAIN LANES	200.00	7	155.56	88.89	1.12
885+00.00	887+54.00	RT. OF MAIN LANES	254.00	7	197.56	112.89	1.42
889+00.00	891+00.00	LT. OF MAIN LANES	200.00	7	155.56	88.89	1.12
889+05.00	899+00.00	RT. OF MAIN LANES	995.00	7	773.89	442.22	5.57
893+15.00	899+00.00	LT. OF MAIN LANES	585.00	7	455.00	260.00	3.28
904+25.00	905+25.00	LT. OF MAIN LANES	100.00	7	77.78	44.44	0.56
908+00.00	911+00.00	RT. OF MAIN LANES	300.00	7	233.33	133.33	1.68
909+00.00	911+00.00	LT. OF MAIN LANES	200.00	7	155.56	88.89	1.12
915+00.00	916+04.00	LT. OF MAIN LANES	104.00	7	80.89	46.22	0.58
916+17.00	918+00.00	RT. OF MAIN LANES	183.00	7	142.33	81.33	1.02
916+36.00	920+03.00	LT. OF MAIN LANES	367.00	7	285.44	163.11	2.06
922+00.00	925+00.00	RT. OF MAIN LANES	300.00	7	233.33	133.33	1.68
920+35.00	925+00.00	LT. OF MAIN LANES	465.00	7	361.67	206.67	2.60
931+78.00	934+00.00	RT. OF MAIN LANES	222.00	7	172.67	98.67	1.24
931+94.00	934+00.00	LT. OF MAIN LANES	206.00	7	160.22	91.56	1.15
960+96.00	961+96.00	LT. OF MAIN LANES	100.00	7	77.78	44.44	0.56
993+00.00	994+00.00	LT. OF MAIN LANES	100.00	7	77.78	44.44	0.56
1002+00.00	1003+00.00	LT. OF MAIN LANES	100.00	7	77.78	44.44	0.56
1003+00.00	1008+00.00	RT. OF MAIN LANES	500.00	7	388.89	222.22	2.80
1005+00.00	1008+00.00	LT. OF MAIN LANES	300.00	7	233.33	133.33	1.68
1013+00.00	1014+00.00	LT. OF MAIN LANES	100.00	7	77.78	44.44	0.56
1013+00.00	1014+00.00	RT. OF MAIN LANES	100.00	7	77.78	44.44	0.56
1014+60.00	1015+60.00	LT. OF MAIN LANES	100.00	7	77.78	44.44	0.56
1015+00.00	1016+00.00	RT. OF MAIN LANES	100.00	7	77.78	44.44	0.56
1017+00.00	1018+51.00	RT. OF MAIN LANES	151.00	7	117.44	67.11	0.85
1017+29.00	1024+00.00	LT. OF MAIN LANES	671.00	7	521.89	298.22	3.76
1018+83.00	1019+95.00	RT. OF MAIN LANES	112.00	7	87.11	49.78	0.63
1020+27.00	1024+00.00	RT. OF MAIN LANES	373.00	7	290.11	165.78	2.09
1031+00.00	1033+54.00	LT. OF MAIN LANES	254.00	7	197.56	112.89	1.42
1031+00.00	1033+48.00	RT. OF MAIN LANES	248.00	7	192.89	110.22	1.39
1033+86.00	1035+00.00	LT. OF MAIN LANES	114.00	7	88.67	50.67	0.64
1052+00.00	1053+13.00	RT. OF MAIN LANES	113.00	7	87.89	50.22	0.63
1052+33.00	1054+76.00	LT. OF MAIN LANES	243.00	7	189.00	108.00	1.36
1053+45.00	1056+06.00	RT. OF MAIN LANES	261.00	7	203.00	116.00	1.46
1074+00.00	1078+00.00	RT. OF MAIN LANES	400.00	7	311.11	177.78	2.24
1074+72.00	1078+00.00	LT. OF MAIN LANES	328.00	7	255.11	145.78	1.84
1080+00.00	1081+00.00	RT. OF MAIN LANES	100.00	7	77.78	44.44	0.56
1084+00.00	1085+00.00	RT. OF MAIN LANES	100.00	7	77.78	44.44	0.56
1084+07.00	1085+07.00	LT. OF MAIN LANES	100.00	7	77.78	44.44	0.56
1085+97.00	1087+00.00	RT. OF MAIN LANES	103.00	7	80.11	45.78	0.58
1086+40.00	1087+40.00	LT. OF MAIN LANES	100.00	7	77.78	44.44	0.56
TOTALS:					12964.79	7408.31	93.34

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

EROSION CONTROL MATTING (BOX 1 OF 2)

STATION	STATION	LOCATION	LENGTH	CLASS 3
			LIN. FT.	SQ. YD.
704+00.00	706+57.00	LT. OF MAIN LANES	257.0	228.4
704+00.00	706+57.00	RT. OF MAIN LANES	257.0	228.4
709+00.00	710+00.00	LT. OF MAIN LANES	100.0	88.9
709+00.00	710+00.00	RT. OF MAIN LANES	100.0	88.9
726+00.00	726+32.00	LT. OF MAIN LANES	32.0	28.4
726+00.00	726+32.00	RT. OF MAIN LANES	32.0	28.4
729+00.00	729+21.00	LT. OF MAIN LANES	21.0	18.7
729+00.00	729+21.00	RT. OF MAIN LANES	21.0	18.7
732+87.00	733+00.00	RT. OF MAIN LANES	13.0	11.6
733+00.00	739+00.00	LT. OF MAIN LANES	600.0	533.3
743+00.00	745+00.00	LT. OF MAIN LANES	200.0	177.8
747+77.00	752+78.00	RT. OF MAIN LANES	501.0	445.3
750+00.00	753+00.00	LT. OF MAIN LANES	300.0	266.7
760+00.00	761+00.00	LT. OF MAIN LANES	100.0	88.9
760+00.00	761+00.00	RT. OF MAIN LANES	100.0	88.9
763+00.00	764+00.00	RT. OF MAIN LANES	100.0	88.9
766+00.00	766+28.00	RT. OF MAIN LANES	28.0	24.9
765+00.00	767+00.00	LT. OF MAIN LANES	200.0	177.8
769+00.00	771+00.00	LT. OF MAIN LANES	200.0	177.8
769+00.00	771+00.00	RT. OF MAIN LANES	200.0	177.8
773+00.00	775+00.00	LT. OF MAIN LANES	200.0	177.8
773+00.00	775+00.00	RT. OF MAIN LANES	200.0	177.8
777+59.00	778+00.00	LT. OF MAIN LANES	41.0	36.4
777+59.00	778+00.00	RT. OF MAIN LANES	41.0	36.4
781+00.00	781+67.00	LT. OF MAIN LANES	67.0	59.6
783+00.00	784+00.00	LT. OF MAIN LANES	100.0	88.9
783+00.00	784+00.00	RT. OF MAIN LANES	100.0	88.9
787+00.00	788+00.00	LT. OF MAIN LANES	100.0	88.9
787+00.00	788+00.00	RT. OF MAIN LANES	100.0	88.9
790+00.00	792+00.00	RT. OF MAIN LANES	200.0	177.8
792+00.00	793+00.00	LT. OF MAIN LANES	100.0	88.9
797+00.00	798+00.00	LT. OF MAIN LANES	100.0	88.9
797+00.00	798+00.00	RT. OF MAIN LANES	100.0	88.9
799+00.00	802+43.00	LT. OF MAIN LANES	343.0	304.9
800+00.00	803+00.00	RT. OF MAIN LANES	300.0	266.7
805+00.00	806+00.00	LT. OF MAIN LANES	100.0	88.9
805+00.00	806+00.00	RT. OF MAIN LANES	100.0	88.9
807+39.00	808+00.00	RT. OF MAIN LANES	61.0	54.2
808+37.00	809+00.00	LT. OF MAIN LANES	63.0	56.0
809+00.00	811+00.00	RT. OF MAIN LANES	200.0	177.8
813+00.00	814+00.00	LT. OF MAIN LANES	100.0	88.9
813+00.00	814+00.00	RT. OF MAIN LANES	100.0	88.9
816+00.00	816+86.00	LT. OF MAIN LANES	86.0	76.4
816+86.00	817+00.00	RT. OF MAIN LANES	14.0	12.4
819+36.00	820+00.00	LT. OF MAIN LANES	64.0	56.9
822+00.00	824+00.00	RT. OF MAIN LANES	200.0	177.8
825+00.00	825+70.00	LT. OF MAIN LANES	70.0	62.2
829+00.00	830+00.00	RT. OF MAIN LANES	100.0	88.9
829+37.00	831+00.00	LT. OF MAIN LANES	163.0	144.9
831+00.00	832+00.00	RT. OF MAIN LANES	100.0	88.9
833+00.00	835+00.00	RT. OF MAIN LANES	200.0	177.8
836+13.00	837+00.00	LT. OF MAIN LANES	87.0	77.3
836+13.00	838+00.00	RT. OF MAIN LANES	187.0	166.2
840+55.00	841+00.00	LT. OF MAIN LANES	45.0	40.0
840+88.00	841+00.00	RT. OF MAIN LANES	12.0	10.7
852+17.00	855+00.00	RT. OF MAIN LANES	283.0	251.6
854+00.00	857+00.00	LT. OF MAIN LANES	300.0	266.7
860+00.00	861+00.00	LT. OF MAIN LANES	100.0	88.9
860+00.00	863+00.00	RT. OF MAIN LANES	300.0	266.7
865+65.00	866+96.00	LT. OF MAIN LANES	131.0	116.4
866+62.00	866+96.00	RT. OF MAIN LANES	34.0	30.2
874+00.00	876+60.00	LT. OF MAIN LANES	260.0	231.1
874+00.00	879+00.00	RT. OF MAIN LANES	500.0	444.4
878+00.00	879+00.00	LT. OF MAIN LANES	100.0	88.9
881+00.00	882+00.00	LT. OF MAIN LANES	100.0	88.9
883+00.00	885+00.00	LT. OF MAIN LANES	200.0	177.8
884+45.00	885+00.00	RT. OF MAIN LANES	55.0	48.9
888+00.00	888+38.00	LT. OF MAIN LANES	38.0	33.8
891+00.00	892+00.00	LT. OF MAIN LANES	100.0	88.9
903+00.00	903+91.00	LT. OF MAIN LANES	91.0	80.9
905+47.00	907+00.00	LT. OF MAIN LANES	153.0	136.0
908+00.00	909+00.00	LT. OF MAIN LANES	100.0	88.9
913+00.00	914+83.00	LT. OF MAIN LANES	183.0	162.7
913+00.00	914+83.00	RT. OF MAIN LANES	183.0	162.7
915+00.00	916+17.00	RT. OF MAIN LANES	117.0	104.0
920+00.00	922+00.00	RT. OF MAIN LANES	200.0	177.8
SUBTOTAL:				9808.4

NOTE: AVERAGE WIDTH = 8'-0"

EROSION CONTROL MATTING (BOX 2 OF 2)

STATION	STATION	LOCATION	LENGTH	CLASS 3
			LIN. FT.	SQ. YD.
931+00.00	931+46.00	RT. OF MAIN LANES	46.0	40.9
934+00.00	935+00.00	LT. OF MAIN LANES	100.0	88.9
934+00.00	936+98.00	RT. OF MAIN LANES	298.0	264.9
935+72.00	937+98.00	LT. OF MAIN LANES	226.0	200.9
938+00.00	939+00.00	RT. OF MAIN LANES	100.0	88.9
943+05.00	944+05.00	RT. OF MAIN LANES	100.0	88.9
945+00.00	945+64.00	RT. OF MAIN LANES	64.0	56.9
958+28.00	959+00.00	RT. OF MAIN LANES	72.0	64.0
960+00.00	961+00.00	LT. OF MAIN LANES	100.0	88.9
962+00.00	964+00.00	LT. OF MAIN LANES	200.0	177.8
969+00.00	970+00.00	RT. OF MAIN LANES	100.0	88.9
970+00.00	971+00.00	LT. OF MAIN LANES	100.0	88.9
994+00.00	996+00.00	RT. OF MAIN LANES	200.0	177.8
995+00.00	998+00.00	LT. OF MAIN LANES	300.0	266.7
1002+00.00	1003+00.00	RT. OF MAIN LANES	100.0	88.9
1003+00.00	1005+00.00	LT. OF MAIN LANES	200.0	177.8
1008+00.00	1009+61.00	LT. OF MAIN LANES	161.0	143.1
1008+00.00	1009+61.00	RT. OF MAIN LANES	161.0	143.1
1012+00.00	1013+00.00	LT. OF MAIN LANES	100.0	88.9
1012+00.00	1013+00.00	RT. OF MAIN LANES	100.0	88.9
1016+00.00	1016+55.00	LT. OF MAIN LANES	55.0	48.9
1016+00.00	1016+55.00	RT. OF MAIN LANES	55.0	48.9
1024+00.00	1024+57.00	LT. OF MAIN LANES	57.0	50.7
1024+00.00	1024+57.00	RT. OF MAIN LANES	57.0	50.7
1025+29.00	1026+00.00	LT. OF MAIN LANES	71.0	63.1
1028+00.00	1030+00.00	LT. OF MAIN LANES	200.0	177.8
1028+00.00	1030+00.00	RT. OF MAIN LANES	200.0	177.8
1035+00.00	1036+00.00	LT. OF MAIN LANES	100.0	88.9
1035+00.00	1036+00.00	RT. OF MAIN LANES	100.0	88.9
1037+57.00	1038+82.00	LT. OF MAIN LANES	125.0	111.1
1037+57.00	1038+82.00	RT. OF MAIN LANES	125.0	111.1
1040+00.00	1044+00.00	LT. OF MAIN LANES	400.0	355.6
1040+00.00	1041+00.00	RT. OF MAIN LANES	100.0	88.9
1043+00.00	1044+00.00	RT. OF MAIN LANES	100.0	88.9
1047+32.00	1048+00.00	RT. OF MAIN LANES	68.0	60.4
1050+23.00	1051+00.00	RT. OF MAIN LANES	77.0	68.4
1056+00.00	1056+19.00	LT. OF MAIN LANES	19.0	16.9
1056+00.00	1056+79.00	RT. OF MAIN LANES	79.0	70.2
1058+00.00	1058+81.00	RT. OF MAIN LANES	81.0	72.0
1058+81.00	1059+00.00	LT. OF MAIN LANES	19.0	16.9
1062+00.00	1063+00.00	LT. OF MAIN LANES	100.0	88.9
1062+00.00	1063+00.00	RT. OF MAIN LANES	100.0	88.9
1072+00.00	1074+00.00	RT. OF MAIN LANES	200.0	177.8
1072+35.00	1074+00.00	LT. OF MAIN LANES	165.0	146.7
1078+00.00	1078+32.00	LT. OF MAIN LANES	32.0	28.4
1078+00.00	1080+00.00	RT. OF MAIN LANES	200.0	177.8
1079+00.00	1080+00.00	LT. OF MAIN LANES	100.0	88.9
1081+00.00	1082+00.00	LT. OF MAIN LANES	100.0	88.9
1081+00.00	1082+00.00	RT. OF MAIN LANES	100.0	88.9
1083+00.00	1084+00.00	LT. OF MAIN LANES	100.0	88.9
1083+00.00	1084+00.00	RT. OF MAIN LANES	100.0	88.9
1089+00.00	1089+55.03	LT. OF MAIN LANES	55.0	48.9
SUBTOTAL (BOX 2 OF 2):				5572.0
SUBTOTAL (BOX 1 OF 2):				9808.4
TOTAL:				15380.4

NOTE: AVERAGE WIDTH = 8'-0"

DUMPED RIPRAP AND FILTER BLANKET

STATION	LOCATION	DUMPED RIPRAP	FILTER BLANKET
		CU. YDS.	SQ. YDS.
702+68	OUTLET OF PIPE CULVERT	1	1
714+01	OUTLET OF PIPE CULVERT	2	3
714+12	OUTLET OF PIPE CULVERT	2	3
714+22	OUTLET OF PIPE CULVERT	2	3
729+21	OUTLET OF PIPE CULVERT	1	2
732+87	OUTLET OF PIPE CULVERT	1	2
736+50	OUTLET OF PIPE CULVERT	1	1
738+16	OUTLET OF PIPE CULVERT	1	1
747+80	OUTLET OF PIPE CULVERT	1	1
766+28	OUTLET OF PIPE CULVERT	1	1
773+53	OUTLET OF PIPE CULVERT	1	2
781+67	OUTLET OF PIPE CULVERT	1	1
792+10	OUTLET OF PIPE CULVERT	1	1
804+31	OUTLET OF PIPE CULVERT	1	1
810+38	OUTLET OF PIPE CULVERT	1	1
816+86	OUTLET OF PIPE CULVERT	1	1
836+13	OUTLET OF PIPE CULVERT	1	1
840+88	OUTLET OF PIPE CULVERT	1	1
865+65	OUTLET OF PIPE CULVERT	1	1
866+96	OUTLET OF PIPE CULVERT	1	1
876+79	OUTLET OF PIPE CULVERT	11	21
883+79	OUTLET OF PIPE CULVERT	1	1
889+00	OUTLET OF PIPE CULVERT	1	1
903+91	OUTLET OF PIPE CULVERT	1	2
904+08	OUTLET OF PIPE CULVERT	6	11
905+47	OUTLET OF PIPE CULVERT	1	1
914+87	OUTLET OF PIPE CULVERT	1	2
914+96	OUTLET OF PIPE CULVERT	1	2
935+60	OUTLET OF PIPE CULVERT	1	2
938+00	OUTLET OF PIPE CULVERT	1	1
961+99	OUTLET OF PIPE CULVERT	1	1
979+90	OUTLET OF PIPE CULVERT	1	1
998+88	OUTLET OF PIPE CULVERT	1	1
1009+56	OUTLET OF PIPE CULVERT	1	2
1029+14	OUTLET OF PIPE CULVERT	5	10
1041+99	OUTLET OF PIPE CULVERT	2	3
1041+99	OUTLET OF PIPE CULVERT	1	1
1050+83	OUTLET OF PIPE CULVERT	1	1
1058+81	OUTLET OF PIPE CULVERT	2	3
1072+35	OUTLET OF PIPE CULVERT	1	2
	TO BE USED IF AND WHERE	10	20
	DIRECTED BY THE ENGINEER		
TOTALS:		74	118

*NOTE: QUANTITY ESTIMATED.
SEE SECTION 104.03 OF THE STANDARD SPECIFICATIONS

NOTE: FILTER BLANKET SHALL BE GEOTEXTILE FABRIC (TYPE 5).

9/2/2016

R070368.DGN

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.		070368	84	335

(2) QUANTITIES

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

DRIVEWAYS & TURNOUTS (BOX 1 OF 2)

STATION	SIDE	LOCATION	WIDTH	PORTLAND CEMENT CONCRETE DRIVEWAY	ACHM SURFACE COURSE (1/2") 220 LBS. PER SQ. YD. (PG 64-22)		AGGREGATE BASE COURSE (CLASS 7)	SIDE DRAINS		STANDARD DRAWINGS
								18"	24"	
			FEET	SQ. YD.	SQ. YD.	TON	TON	LIN. FT.		
701+60	LT.	HWY. 335 DRIVEWAY	16		80.00	8.80	32.67	32		PCC-1, PCM-1, PCP-1, PCP-2
703+52	RT.	HWY. 335 DRIVEWAY	16	79.50				32		PCC-1, PCM-1, PCP-1, PCP-2
704+29	LT.	HWY. 335 DRIVEWAY	16	53.70				30		PCC-1, PCM-1, PCP-1, PCP-2
705+54	LT.	HWY. 335 DRIVEWAY	16	54.80				30		PCC-1, PCM-1, PCP-1, PCP-2
706+34	LT.	HWY. 335 DRIVEWAY	16	55.80						
706+62	RT.	HWY. 335 DRIVEWAY	16		75.20	8.27	30.71	32		PCC-1, PCM-1, PCP-1, PCP-2
708+51	RT.	HWY. 335 DRIVEWAY	16		71.50	7.87	29.20	32		PCC-1, PCM-1, PCP-1, PCP-2
710+95	RT.	HWY. 335 DRIVEWAY	16		65.60	7.22	26.79	32		PCC-1, PCM-1, PCP-1, PCP-2
716+48	LT.	HWY. 335/FAWNWOOD CIRCLE	20		115.30	12.68	47.08		44	PCC-1, PCM-1, PCP-1, PCP-2
716+97	RT.	HWY. 335 DRIVEWAY	20		74.80	8.23	30.54	34		PCC-1, PCM-1, PCP-1, PCP-2
719+41	RT.	HWY. 335 DRIVEWAY	16		60.80	6.69	24.83	30		PCC-1, PCM-1, PCP-1, PCP-2
720+22	RT.	HWY. 335 DRIVEWAY	20		73.70	8.11	30.09	34		PCC-1, PCM-1, PCP-1, PCP-2
721+19	RT.	HWY. 335 DRIVEWAY	16		60.50	6.66	24.70	30		PCC-1, PCM-1, PCP-1, PCP-2
722+48	LT.	HWY. 335/FAWNWOOD CIRCLE	20		101.60	11.18	41.49	46		PCC-1, PCM-1, PCP-1, PCP-2
724+30	RT.	HWY. 335 DRIVEWAY	16		61.50	6.77	25.11	30		PCC-1, PCM-1, PCP-1, PCP-2
725+46	RT.	HWY. 335 DRIVEWAY	16		71.00	7.81	28.99	32		PCC-1, PCM-1, PCP-1, PCP-2
725+68	LT.	HWY. 335 DRIVEWAY	16	60.60				32		PCC-1, PCM-1, PCP-1, PCP-2
726+32	LT.	HWY. 335 DRIVEWAY	16		58.70	6.46	23.97	30		PCC-1, PCM-1, PCP-1, PCP-2
727+69	LT.	HWY. 335 DRIVEWAY	16		55.00	6.05	22.46	30		PCC-1, PCM-1, PCP-1, PCP-2
732+40	LT.	HWY. 335 DRIVEWAY	16		55.70	6.13	22.74	30		PCC-1, PCM-1, PCP-1, PCP-2
735+26	RT.	HWY. 335 DRIVEWAY	20		182.20	20.04	74.40	56		PCC-1, PCM-1, PCP-1, PCP-2
737+42	LT.	HWY. 335 DRIVEWAY	66	640.70						
751+20	RT.	HWY. 335 DRIVEWAY/ACCESS RD.	20		277.80	30.56	113.44	56		PCC-1, PCM-1, PCP-1, PCP-2
752+78	RT.	HWY. 335 DRIVEWAY	16	74.20				32		PCC-1, PCM-1, PCP-1, PCP-2
755+44	LT.	HWY. 335 DRIVEWAY	16		53.40	5.87	21.81	30		PCC-1, PCM-1, PCP-1, PCP-2
755+58	RT.	HWY. 335 DRIVEWAY	16		62.40	6.86	25.48	32		PCC-1, PCM-1, PCP-1, PCP-2
756+38	LT.	HWY. 335 DRIVEWAY	16		54.10	5.95	22.09	30		PCC-1, PCM-1, PCP-1, PCP-2
757+89	RT.	HWY. 335 DRIVEWAY	16	70.40				32		PCC-1, PCM-1, PCP-1, PCP-2
758+52	LT.	HWY. 335 DRIVEWAY	24	79.20				38		PCC-1, PCM-1, PCP-1, PCP-2
759+86	RT.	HWY. 335 DRIVEWAY	16		62.40	6.86	25.48			
760+09	LT.	HWY. 335 DRIVEWAY	20		79.90	8.79	32.63			
761+81	RT.	HWY. 335 DRIVEWAY	16		70.60	7.77	28.83		30	PCC-1, PCM-1, PCP-1, PCP-2
770+34	LT.	HWY. 335/SHADY BROOK LANE	24		108.90	11.98	44.47	50		PCC-1, PCM-1, PCP-1, PCP-2
777+59	LT.	HWY. 335/MYSTIC CREEK GOLF COURSE	64		211.00	23.21	86.16			
788+11	RT.	HWY. 335 DRIVEWAY	16		61.90	6.81	25.28			
798+33	LT.	HWY. 335/RANDALL LANE	20		135.10	14.86	55.17	54		PCC-1, PCM-1, PCP-1, PCP-2
799+48	LT.	HWY. 335 DRIVEWAY	16		74.30	8.17	30.34	32		PCC-1, PCM-1, PCP-1, PCP-2
802+55	RT.	HWY. 335 DRIVEWAY	16		60.60	6.67	24.75	30		PCC-1, PCM-1, PCP-1, PCP-2
802+85	LT.	HWY. 335 DRIVEWAY	16		73.80	8.12	30.14		30	PCC-1, PCM-1, PCP-1, PCP-2
805+74	RT.	HWY. 335 DRIVEWAY	16		58.30	6.41	23.81			
807+40	LT.	HWY. 335 DRIVEWAY	16		77.40	8.51	31.61	32		PCC-1, PCM-1, PCP-1, PCP-2
808+37	LT.	HWY. 335 DRIVEWAY	32	139.00				48		PCC-1, PCM-1, PCP-1, PCP-2
809+58	LT.	HWY. 335 DRIVEWAY	16	82.20				32		PCC-1, PCM-1, PCP-1, PCP-2
812+18	LT.	HWY. 335 DRIVEWAY	16		70.80	7.79	28.91	32		PCC-1, PCM-1, PCP-1, PCP-2
813+55	LT.	HWY. 335 DRIVEWAY	16		70.80	7.79	28.91	32		PCC-1, PCM-1, PCP-1, PCP-2
815+29	LT.	HWY. 335 DRIVEWAY	16		59.40	6.53	24.26			
815+54	RT.	HWY. 335 DRIVEWAY	16		60.80	6.69	24.83			
818+26	LT.	HWY. 335 DRIVEWAY	20		164.40	18.08	67.13			
818+71	RT.	HWY. 335 DRIVEWAY	16		75.40	8.29	30.79	32		PCC-1, PCM-1, PCP-1, PCP-2
819+31	RT.	HWY. 335 DRIVEWAY	16		73.60	8.10	30.05	32		PCC-1, PCM-1, PCP-1, PCP-2
822+40	RT.	HWY. 335 DRIVEWAY	16		84.30	9.27	34.42			
825+71	LT.	HWY. 335 DRIVEWAY	16		58.90	6.48	24.05	30		PCC-1, PCM-1, PCP-1, PCP-2
826+48	RT.	HWY. 335 DRIVEWAY	16		68.80	7.57	28.09	32		PCC-1, PCM-1, PCP-1, PCP-2
828+15	LT.	HWY. 335 DRIVEWAY	16	55.50				28		PCC-1, PCM-1, PCP-1, PCP-2
829+28	RT.	HWY. 335 DRIVEWAY	16		157.20	17.29	64.19			
829+38	LT.	HWY. 335 DRIVEWAY	16		66.00	7.26	26.95	32		PCC-1, PCM-1, PCP-1, PCP-2
831+68	LT.	HWY. 335 DRIVEWAY	32	107.40				48		PCC-1, PCM-1, PCP-1, PCP-2
836+58	LT.	HWY. 335/MOODY LANE	20		180.00	19.80	73.50	52		PCC-1, PCM-1, PCP-1, PCP-2
839+49	LT.	HWY. 335 DRIVEWAY	40	182.50				62		PCC-1, PCM-1, PCP-1, PCP-2
840+55	RT.	HWY. 335/MOUNT HOLLY ROAD	22		264.70	29.12	108.09			
840+56	LT.	HWY. 335/MOUNT HOLLY ROAD	26		305.90	33.65	124.91			
841+54	RT.	HWY. 335 DRIVEWAY	16		118.10	12.99	48.22	30		PCC-1, PCM-1, PCP-1, PCP-2
842+11	RT.	HWY. 335 DRIVEWAY	16	62.40						
843+22	LT.	HWY. 335 DRIVEWAY	16		68.10	7.49	27.81	32		PCC-1, PCM-1, PCP-1, PCP-2
843+88	RT.	HWY. 335 DRIVEWAY	16		57.10	6.28	23.32	30		PCC-1, PCM-1, PCP-1, PCP-2
845+42	RT.	HWY. 335 DRIVEWAY	16	59.20				32		PCC-1, PCM-1, PCP-1, PCP-2
847+05	RT.	HWY. 335 DRIVEWAY	16	83.20				38		PCC-1, PCM-1, PCP-1, PCP-2
* 848+50	RT.	HWY. 335 DRIVEWAY	16		90.00	9.90	36.75	42		PCC-1
850+23	LT.	HWY. 335 DRIVEWAY	16		63.00	6.93	25.73	32		PCC-1, PCM-1, PCP-1, PCP-2
850+73	RT.	HWY. 335 DRIVEWAY	16		75.40	8.29	30.79	32		PCC-1, PCM-1, PCP-1, PCP-2
851+80	RT.	HWY. 335 DRIVEWAY	16		71.00	7.81	28.99	32		PCC-1, PCM-1, PCP-1, PCP-2
852+18	LT.	HWY. 335 DRIVEWAY	16		62.40	6.86	25.48	32		PCC-1, PCM-1, PCP-1, PCP-2
853+98	LT.	HWY. 335 DRIVEWAY	16		61.50	6.77	25.11	32		PCC-1, PCM-1, PCP-1, PCP-2
853+98	RT.	HWY. 335 DRIVEWAY	16		62.80	6.91	25.64	32		PCC-1, PCM-1, PCP-1, PCP-2
855+81	RT.	HWY. 335 DRIVEWAY	16		83.60	9.20	34.14	32		PCC-1, PCM-1, PCP-1, PCP-2
857+09	LT.	HWY. 335 DRIVEWAY	16		61.90	6.81	25.28	32		PCC-1, PCM-1, PCP-1, PCP-2
858+13	RT.	HWY. 335 DRIVEWAY	16		64.00	7.04	26.13	30		PCC-1, PCM-1, PCP-1, PCP-2
866+59	LT.	HWY. 335 DRIVEWAY	16		76.10	8.37	31.07	32		PCC-1, PCM-1, PCP-1, PCP-2
872+62	LT.	HWY. 335/UNION ROAD 767	20		235.50	25.91	96.16	64		PCC-1, PCM-1, PCP-1, PCP-2
880+38	RT.	HWY. 335 DRIVEWAY	16	77.20				32		PCC-1, PCM-1, PCP-1, PCP-2
882+22	LT.	HWY. 335 DRIVEWAY	36	72.50						PCC-1, PCM-1, PCP-1, PCP-2
883+30	RT.	HWY. 335 DRIVEWAY	16	79.80				32		PCC-1, PCM-1, PCP-1, PCP-2
884+49	LT.	HWY. 335 DRIVEWAY	16	61.00				30		PCC-1, PCM-1, PCP-1, PCP-2
887+46	LT.	HWY. 335 DRIVEWAY	16		77.90	8.57	31.81			
888+41	RT.	HWY. 335/CHARLIE VANCE ROAD	20		153.30	16.86	62.60			
SUBTOTALS (BOX 1 OF 2):				2230.80	6027.70	663.07	2461.37	2254	104	

* PROPERTY OWNER HAS AN EXISTING CONCRETE CULVERT; RIGHT OF WAY NEGOTIATED TO PUT A CONCRETE CULVERT BACK.

DRIVEWAYS & TURNOUTS (BOX 2 OF 2)

STATION	SIDE	LOCATION	WIDTH	PORTLAND CEMENT CONCRETE DRIVEWAY	ACHM SURFACE COURSE (1/2") 220 LBS. PER SQ. YD. (PG 64-22)		AGGREGATE BASE COURSE (CLASS 7)	SIDE DRAINS		STANDARD DRAWINGS
								18"	24"	
			FEET	SQ. YD.	SQ. YD.	TON	TON	LIN. FT.		
892+50	RT.	HWY. 335 DRIVEWAY	16		141.90	15.61	57.94	34		PCC-1, PCM-1, PCP-1, PCP-2
892+86	LT.	HWY. 335 DRIVEWAY	16		55.80	6.14	22.79			
901+44	RT.	HWY. 335 DRIVEWAY	18		75.80	8.34	30.95	34		PCC-1, PCM-1, PCP-1, PCP-2
906+97	LT.	HWY. 335/TRACY DRIVE	20		131.10	14.42	53.53	54		PCC-1, PCM-1, PCP-1, PCP-2
912+95	RT.	HWY. 335 DRIVEWAY	16		70.20	7.72	28.67			
912+97	LT.	HWY. 335 DRIVEWAY	16		76.60	8.43	31.28			
916+20	LT.	HWY. 335 DRIVEWAY	16		87.10	9.58	35.57	32		PCC-1, PCM-1, PCP-1, PCP-2
918+40	RT.	HWY. 335 DRIVEWAY	16		56.60	6.23	23.11	28		PCC-1, PCM-1, PCP-1, PCP-2
920+19	LT.	HWY. 335 DRIVEWAY	16		80.20	8.82	32.75	32		PCC-1, PCM-1, PCP-1, PCP-2
931+43	LT.	HWY. 335/MORNING STAR ROAD	20		169.90	18.69	69.38			
931+43	RT.	HWY. 335/MORNING STAR ROAD	20		142.70	15.70	58.27	64		PCC-1, PCM-1, PCP-1, PCP-2
936+07	RT.	HWY. 335 DRIVEWAY	20		161.10	17.72	65.78			
940+81	LT.	HWY. 335 DRIVEWAY	16		57.40	6.31	23.44	32		PCC-1, PCM-1, PCP-1, PCP-2
942+90	RT.	HWY. 335 DRIVEWAY	16		89.60	9.86	36.59	30		PCC-1, PCM-1, PCP-1, PCP-2
945+65	LT.	HWY. 335 DRIVEWAY	16	68.50				34		PCC-1, PCM-1, PCP-1, PCP-2
947+07	LT.	HWY. 335 DRIVEWAY	16		82.00	9.02	33.48	36		PCC-1, PCM-1, PCP-1, PCP-2
947+15	RT.	HWY. 335 DRIVEWAY	16		81.40	8.95	33.24			
950+41	LT.	HWY. 335 DRIVEWAY	16		53.00	5.83	21.64	30		PCC-1, PCM-1, PCP-1, PCP-2
951+85	RT.	HWY. 335 DRIVEWAY	16		54.40	5.98	22.21	28		PCC-1, PCM-1, PCP-1, PCP-2
953+10	LT.	HWY. 335 DRIVEWAY	16		52.50	5.78	21.44	28		PCC-1, PCM-1, PCP-1, PCP-2
954+25	LT.	HWY. 335 DRIVEWAY	16		52.80	5.81	21.56	28		PCC-1, PCM-1, PCP-1, PCP-2
955+52	LT.	HWY. 335 DRIVEWAY	16		52.80	5.81	21.56	30		PCC-1, PCM-1, PCP-1, PCP-2
957+57	RT.	HWY. 335 DRIVEWAY	16		54.10	5.95	22.09	32		PCC-1, PCM-1, PCP-1, PCP-2
958+28	LT.	HWY. 335 DRIVEWAY	16		52.80	5.81	21.56	30		PCC-1, PCM-1, PCP-1, PCP-2
959+33	LT.	HWY. 335 DRIVEWAY	16		52.80	5.81	21.56	32		PCC-1, PCM-1, PCP-1, PCP-2
961+37	RT.	HWY. 335 DRIVEWAY	16		71.30	7.84	29.11	36		PCC-1, PCM-1, PCP-1, PCP-2
963+65	RT.	HWY. 335 DRIVEWAY	16		69.50	7.65	28.38	32		PCC-1, PCM-1, PCP-1, PCP-2
965+57	RT.	HWY. 335 DRIVEWAY	16		61.00	6.71	24.91	32		PCC-1, PCM-1, PCP-1, PCP-2
965+68	LT.	HWY. 335 DRIVEWAY	20		206.20	22.68	84.20	62		PCC-1, PCM-1, PCP-1, PCP-2
970+90	RT.	HWY. 335 DRIVEWAY	22		96.60	10.63	39.45	38		PCC-1, PCM-1, PCP-1, PCP-2
971+79	LT.	HWY. 335 DRIVEWAY	16		64.40	7.08	26.30	30		PCC-1, PCM-1, PCP-1, PCP-2
974+93	LT.	HWY. 335 DRIVEWAY	16		71.80	7.90	29.32	32		PCC-1, PCM-1, PCP-1, PCP-2
975+94	LT.	HWY. 335 DRIVEWAY	16		78.40	8.62	32.01	32		PCC-1, PCM-1, PCP-1, PCP-2
982+19	LT.	HWY. 335 DRIVEWAY	16		77.90	8.57	31.81	32		PCC-1, PCM-1, PCP-1, PCP-2
986+09	LT.	HWY. 335 DRIVEWAY	16		73.80	8.12	30.14	32		PCC-1, PCM-1, PCP-1, PCP-2
995+48	LT.	HWY. 335/MYRTLE GROVE ROAD	20		532.70	58.60	217.52	52		PCC-1, PCM-1, PCP-1, PCP-2
1003+35	LT.	HWY. 335 DRIVEWAY	16		65.10	7.16	26.58	30		PCC-1, PCM-1, PCP-1, PCP-2
1015+79	RT.	HWY. 335 DRIVEWAY	16		86.10	9.47	35.16	32		PCC-1, PCM-1, PCP-1, PCP-2
1016+49	LT.	HWY. 335 DRIVEWAY	16		74.30	8.17	30.34			
1016+59	RT.	HWY. 335 DRIVEWAY	16		83.60	9.20	34.14			
1017+13	LT.	HWY. 335 DRIVEWAY	16		75.40	8.29	30.79	32		PCC-1, PCM-1, PCP-1, PCP-2
1018+67	RT.	HWY. 335 DRIVEWAY	16	37.00				32		PCC-1, PCM-1, PCP-1, PCP-2
1020+11	RT.	HWY. 335 DRIVEWAY	16		75.80	8.34	30.95	32		PCC-1, PCM-1, PCP-1, PCP-2
1022+57	RT.	HWY. 335 DRIVEWAY	16		71.70	7.89	29.28	32		PCC-1, PCM-1, PCP-1, PCP-2
1024+54	RT.	HWY. 335 DRIVEWAY	16		64.40	7.08	26.30	32		PCC-1, PCM-1, PCP-1, PCP-2
1025+28	LT.	HWY. 335 DRIVEWAY	16	53.40				154		PCC-1, PCM-1, PCP-1, PCP-2
1026+50	LT.	HWY. 335 DRIVEWAY	16	77.90						PCC-1, PCM-1, PCP-1, PCP-2
1030+65	LT.	HWY. 335/MYRTLE GROVE ROAD	20		20.00	2.20	8.17	56		PCC-1, PCM-1, PCP-1, PCP-2
1033+64	RT.	HWY. 335 DRIVEWAY	16		86.10	9.47	35.16	32		PCC-1, PCM-1, PCP-1, PCP-2
1033+70	LT.	HWY. 335 DRIVEWAY	16		58.90	6.48	24.05	32		PCC-1, PCM-1, PCP-1, PCP-2
1034+33	RT.	HWY. 335 DRIVEWAY	16		86.20	9.48	35.20	32		PCC-1, PCM-1, PCP-1, PCP-2
1035+97	LT.	HWY. 335 DRIVEWAY	16	59.20				28		PCC-1, PCM-1, PCP-1, PCP-2
1036+53	LT.	HWY. 335 DRIVEWAY	16		60.50	6.66	24.70			
1036+79	RT.	HWY. 335 DRIVEWAY	16		75.00	8.25	30.63	32		PCC-1, PCM-1, PCP-1, PCP-2
1037+58	RT.	HWY. 335 DRIVEWAY	16		73.10	8.04	29.85	32		PCC-1, PCM-1, PCP-1, PCP-2
1038+83	LT.	HWY. 335 DRIVEWAY	16		68.60	7.55	28.01	32		PCC-1, PCM-1, PCP-1, PCP-2
1039+44	RT.	HWY. 335 DRIVEWAY	16		69.90	7.69	28.54	32		PCC-1, PCM-1, PCP-1, PCP-2
1040+95	RT.	HWY. 335 DRIVEWAY	16		71.00	7.81	28.99	32		PCC-1, PCM-1, PCP-1, PCP-2
1043+71	LT.	HWY. 335 DRIVEWAY	18		71.20	7.83	29.07	34		PCC-1, PCM-1, PCP-1, PCP-2
1044+08	LT.	HWY. 335 DRIVEWAY	16		58.00	6.38	23.68	32		PCC-1, PCM-1, PCP-1, PCP-2
1045+66	LT.	HWY. 335 DRIVEWAY	18		76.40	8.40	31.20	34		PCC-1, PCM-1, PCP-1, PCP-2
1047+32	RT.	HWY. 335 DRIVEWAY	18	51.80						
1047+68	LT.	HWY. 335 DRIVEWAY	16		62.20	6.84	25.40	30		PCC-1, PCM-1, PCP-1, PCP-2
1049+00	LT.	HWY. 335 DRIVEWAY	18	64.00				32		PCC-1, PCM-1, PCP-1, PCP-2
1050+22	LT.	HWY. 335 DRIVEWAY	16		53.90	5.93	22.01	30		PCC-1, PCM-1, PCP-1, PCP-2
1051+67	RT.	HWY. 335 DRIVEWAY	16		89.30	9.82	36.46			
1052+05	LT.	HWY. 335 DRIVEWAY	16		67.90	7.47	27.73			
1053+29	RT.	HWY. 335 DRIVEWAY	16		76.80	8.45	31.36	32		PCC-1, PCM-1, PCP-1, PCP-2
1054+93	LT.	HWY. 335 DRIVEWAY	16		89.40	9.83	36.51	32		PCC-1, PCM-1, PCP-1, PCP-2
1056+36	RT.	HWY. 335 DRIVEWAY	16		55.80	6.14	22.79			PCC-1, PCM-1, PCP-1, PCP-2
1056+56	RT.	HWY. 335 DRIVEWAY	16		57.40	6.31	23.44	92		
1056+93	RT.	HWY. 335 DRIVEWAY	16		81.40	8.95	33.24			PCC-1, PCM-1, PCP-1, PCP-2
1058+15	LT.	HWY. 335 DRIVEWAY	16		62.60	6.89	25.56	30		PCC-1, PCM-1, PCP-1, PCP-2
1060+98	RT.	HWY. 335 DRIVEWAY	16		64.20	7.06	26.22		30	PCC-1, PCM-1, PCP-1, PCP-2
1062+55	LT.	HWY. 335 DRIVEWAY	16		58.30	6.41	23.81	30		PCC-1, PCM-1, PCP-1, PCP-2
1066+69	RT.	HWY. 335 DRIVEWAY	16		37.00	4.07	15.11			
1067+30	RT.	HWY. 335 DRIVEWAY	24		51.20	5.63	20.91			
1074+56	LT.	HWY. 335 DRIVEWAY	16		76.80	8.45	31.36	32		PCC-1, PCM-1, PCP-1, PCP-2
1078+22	LT.	HWY. 335 DRIVEWAY	16		77.50	8.53	31.65	32		PCC-1, PCM-1, PCP-1, PCP-2
1078+62	RT.	HWY. 335 DRIVEWAY	16		60.80	6.69	24.83			
1080+42	LT.	HWY. 335 DRIVEWAY	16		75.00	8.25	30.63	32		PCC-1, PCM-1, PCP-1, PCP-2
1082+15	LT.	HWY. 335 DRIVEWAY	16	72.90					30	PCC-1, PCM-1, PCP-1, PCP-2
1082+51	RT.	HWY. 335 DRIVEWAY	16		62.80	6.91	25.64	30		PCC-1, PCM-1, PCP-1, PCP-2
1083+88	LT.	HWY. 335 DRIVEWAY	24		102.10	11.23	41.69		38	PCC-1, PCM-1, PCP-1, PCP-2
1085+81	RT.	HWY. 335 DRIVEWAY	16		62.40	6.86	25.48	32		PCC-1, PCM-1, PCP-1, PCP-2
1086+25	LT.	HWY. 335 DRIVEWAY	16	88.60					30	PCC-1, PCM-1, PCP-1, PCP-2
1089+00	RT.	HWY. 335 DRIVEWAY	20		75.40	8.29	30.79	32		PCC-1, PCM-1, PCP-1, PCP-2
1089+05	LT.	HWY. 335 DRIVEWAY	16		62.70	6.90	25.60		28	PCC-1, PCM-1, PCP-1, PCP-2
* ENTIRE PROJECT		TEMPORARY DRIVES					2000.00			
SUBTOTALS (BOX 1 OF 2):				2230.80	6027.70	663.07	2461.37	2254	104	
SUBTOTALS (BOX 2 OF 2):				573.30	6422.40	706.47	4622.55	2372	156	
TOTALS:				2804.10	12450.10	1369.54	7083.92	4626	260	

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2").....94.7% MIN. AGGR.....5.3% ASPHALT BINDER
NMAX = 115 FOR PG 64-22

* QUANTITY ESTIMATED
SEE SECTION 104.03 OF THE STD. SPECS.
TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.

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

9/2/2016

R070368.DGN

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.		070368	85	335

(2) QUANTITIES

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

EROSION CONTROL

STATION	STATION	LOCATION	PERMANENT EROSION CONTROL					TEMPORARY EROSION CONTROL								
			SEEDING	LIME	MULCH COVER	WATER	SECOND SEEDING APPLICATION	TEMPORARY SEEDING	MULCH COVER	WATER	SAND BAG DITCH CHECKS (E-5)	ROCK DITCH CHECKS (E-6)	SILT FENCE (E-11)	SEDIMENT BASIN (E-14)	OBLITERATION OF SEDIMENT BASIN	*SEDIMENT REMOVAL & DISPOSAL
			ACRE	TON	ACRE	M.GAL.	ACRE	ACRE	ACRE	M.GAL.	BAG	CU.YD.	LIN. FT.	CU.YD.	CU.YD.	CU. YD.
ENTIRE	PROJECT	CLEARING AND GRUBBING									2464	339	34227			1493
ENTIRE	PROJECT	STAGE 1	17.42	34.84	17.42	1776.8	17.42	17.42	17.42	355.4	748	111		3347	3347	3418
ENTIRE	PROJECT	STAGE 2	18.15	36.30	18.15	1851.3	18.15	18.15	18.15	370.3	748	105		4841	4841	4910
ENTIRE	PROJECT	STAGE 3 - DETOUR OBLITERATION	0.45	0.90	0.45	45.9	0.45						1170			43
ENTIRE	PROJECT	TEMPORARY SEEDING						1.00	1.00	20.4						
*ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.			3.06	6.12	3.06	312.1	3.06	3.06	3.06	62.4	550	75	3500			180
TOTALS:			39.08	78.16	39.08	3986.1	39.08	39.63	39.63	808.5	4510	630	38897	8188	8188	10044

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
SAND BAG DITCH CHECKS.....22 BAGS / LOCATION
ROCK DITCH CHECKS.....3 CU.YD./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 ON U.S. WATERWAYS AS EXPLAINED BY THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT.

*QUANTITY ESTIMATED.
SEE SECTION 104.03 OF THE STD. SPECS.

STRUCTURES OVER 20'-0" SPAN

STATION	DESCRIPTION	SPAN	HEIGHT	LENGTH	CLASS S CONCRETE-ROADWAY	REINF. STEEL-ROADWAY (GRADE 60)	UNCL.EXC. FOR STR.-ROADWAY	SOLID SODDING	WATER	STD. DWG. NOS.
		LIN. FT.			CU.YD.	POUND	CU.YD.	SQ.YD.	M.GAL	
876+79	CONSTRUCT TRIPLE R.C. BOX CULVERT	10	5	64	171.53	24822	82	29	0.37	SPECIAL DETAILS, PBC-1
TOTALS:					171.53	24822	82	29	0.37	

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

STRUCTURES

| STATION | DESCRIPTION | R. C. PIPE CULVERT (CLASS IV) | C.M. PIPE CULVERT | | | | | FLARED END SECTIONS | FLARED END SECTIONS | | | | | REINFORCED CONCRETE PIPE CULVERT | | | | | | | | | | | | CORRUGATED METAL PIPE CULVERT | | | | | | | | | | | | | | | | | | FLARED END SECTIONS | | | | | | | | | | | | FLARED END SECTIONS | | | | | | | | | | | | TEMPORARY CULVERTS | SOLID SODDING | WATER | STD. DWG. NOS. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---

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.	070368		86	335

(2) QUANTITIES

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 11425 TRINITY D. SMITH

9-30-16

BASE AND SURFACING

STATION	STATION	LOCATION	LENGTH	AGGREGATE BASE COURSE (CLASS 7)		TACK COAT				ACHM BINDER COURSE (1")				ACHM SURFACE COURSE (1/2")								
				TON / STATION	TON	AVG. WID.	SQ.YD.	GALLONS / SQ.YD.	GALLON	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 64-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 64-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 64-22	TOTAL PG 64-22
			FEET			FEET				FEET			TON	FEET			TON	FEET			TON	TON
MAIN LANES																						
700+21.07	702+68.00	FULL DEPTH - TRANSITION - MAIN LANES	246.93	VAR.	570.28	VAR.	3839.76	0.05	191.99	VAR.	1313.67	440.00	289.01	VAR.	1313.67	220.00	144.50	VAR.	1313.67	220.00	144.50	289.00
702+68.00	733+00.00	NOTCH AND WIDEN	3032.00	82.50	2501.40	26.63	8971.35	0.05	448.57	2.25	758.00	440.00	166.76	2.13	717.57	220.00	78.93	30.00	10106.67	220.00	1111.73	1190.66
733+00.00	733+11.00	FULL DEPTH	11.00	185.50	20.41	67.25	82.19	0.05	4.11	22.50	27.50	440.00	6.05	22.25	27.19	220.00	2.99	30.00	36.67	220.00	4.03	7.02
733+11.00	735+81.00	FULL DEPTH - TRANSITION	270.00	VAR.	563.98	VAR.	2557.50	0.05	127.88	VAR.	855.00	440.00	188.10	VAR.	847.50	220.00	93.23	VAR.	1080.00	220.00	118.80	212.03
735+81.00	737+73.00	FULL DEPTH - TURN LANE	192.00	232.25	445.92	103.25	2202.67	0.05	110.13	34.50	736.00	440.00	161.92	34.25	730.67	220.00	80.37	42.00	896.00	220.00	98.56	178.93
737+73.00	740+43.00	FULL DEPTH - TRANSITION	270.00	VAR.	563.98	VAR.	2557.50	0.05	127.88	VAR.	855.00	440.00	188.10	VAR.	847.50	220.00	93.23	VAR.	1080.00	220.00	118.80	212.03
740+43.00	743+00.00	FULL DEPTH	257.00	185.50	476.74	67.25	1920.36	0.05	96.02	22.50	642.50	440.00	141.35	22.25	635.36	220.00	69.89	30.00	856.67	220.00	94.23	164.12
743+00.00	746+00.00	NOTCH AND WIDEN	300.00	82.50	247.50	26.63	887.67	0.05	44.38	2.25	75.00	440.00	16.50	2.13	71.00	220.00	7.81	30.00	1000.00	220.00	110.00	117.81
746+00.00	753+50.00	FULL DEPTH	750.00	185.50	1391.25	67.25	5604.17	0.05	280.21	22.50	1875.00	440.00	412.50	22.25	1854.17	220.00	203.96	30.00	2500.00	220.00	275.00	478.96
753+50.00	770+57.00	NOTCH AND WIDEN - TRANSITION	1707.00	VAR.	2486.93	VAR.	10334.94	0.05	516.75	VAR.	2822.24	440.00	620.89	VAR.	2786.20	220.00	306.48	VAR.	6259.00	220.00	688.49	994.97
770+57.00	775+97.00	NOTCH AND WIDEN - TRANSITION	540.00	VAR.	571.75	VAR.	2497.80	0.05	124.89	VAR.	435.00	440.00	95.70	VAR.	427.80	220.00	47.06	VAR.	2160.00	220.00	237.60	284.66
775+97.00	777+90.00	NOTCH AND WIDEN - TURN LANE	193.00	129.25	249.45	56.63	1214.40	0.05	60.72	12.25	262.69	440.00	57.79	12.13	260.12	220.00	28.61	42.00	900.67	220.00	99.07	127.68
777+90.00	783+30.00	NOTCH AND WIDEN - TRANSITION	540.00	VAR.	571.75	VAR.	2497.80	0.05	124.89	VAR.	435.00	440.00	95.70	VAR.	427.80	220.00	47.06	VAR.	2160.00	220.00	237.60	284.66
783+30.00	876+50.00	NOTCH AND WIDEN	9320.00	82.50	7689.00	26.63	27576.84	0.05	1378.84	2.25	2330.00	440.00	512.60	2.13	2205.73	220.00	242.63	30.00	31066.67	220.00	3417.33	3659.96
876+50.00	877+00.00	FULL DEPTH	50.00	185.50	92.75	67.25	373.61	0.05	18.68	22.50	125.00	440.00	27.50	22.25	123.61	220.00	13.60	30.00	166.67	220.00	18.33	31.93
877+00.00	911+50.00	NOTCH AND WIDEN	3450.00	82.50	2846.25	26.63	10208.17	0.05	510.41	2.25	862.50	440.00	189.75	2.13	816.50	220.00	89.82	30.00	11500.00	220.00	1265.00	1354.82
911+50.00	913+50.00	FULL DEPTH - MAINTENANCE OF TRAFFIC	200.00	185.50	371.00	67.25	1494.44	0.05	74.72	22.50	500.00	440.00	110.00	22.25	494.44	220.00	54.39	30.00	666.67	220.00	73.33	127.72
913+50.00	989+00.00	NOTCH AND WIDEN	7550.00	82.50	6228.75	26.63	22339.61	0.05	1116.98	2.25	1887.50	440.00	415.25	2.13	1786.83	220.00	196.55	30.00	25166.67	220.00	2768.33	2964.88
989+00.00	999+98.23	FULL DEPTH	1098.23	185.50	2037.22	67.25	8206.22	0.05	410.31	22.50	2745.58	440.00	604.03	22.25	2715.07	220.00	298.66	30.00	3660.77	220.00	402.68	701.34
999+98.23	1063+00.00	NOTCH AND WIDEN	6301.77	82.50	5198.96	26.63	18646.24	0.05	932.31	2.25	1575.44	440.00	346.60	2.13	1491.42	220.00	164.06	30.00	21005.90	220.00	2310.65	2474.71
1063+00.00	1063+50.00	NOTCH AND WIDEN - TRANSITION	50.00	VAR.	20.63	VAR.	129.56	0.05	6.48	VAR.	6.28	440.00	1.38	VAR.	61.50	220.00	6.77	VAR.	83.33	220.00	9.17	15.94
1063+50.00	1071+80.00	OVERLAY	830.00			20.00	1844.44	0.17	313.55					20.00	1844.44	220.00	202.89					202.89
1071+80.00	1072+30.00	OVERLAY - TRANSITION	50.00	VAR.	20.63	VAR.	129.56	0.05	6.48	VAR.	6.28	440.00	1.38	VAR.	61.50	220.00	6.77	VAR.	83.33	220.00	9.17	15.94
1072+30.00	1088+55.03	NOTCH AND WIDEN	1625.03	82.50	1340.65	26.63	4808.28	0.05	240.41	2.25	406.26	440.00	89.38	2.13	384.59	220.00	42.30	30.00	5416.77	220.00	595.84	638.14
1088+55.03	1089+55.03	OVERLAY - TRANSITION - MAIN LANES	100.00			23.71	263.44	0.17	44.78					23.71	263.44	220.00	28.98					28.98
DETOUR																						
2+50.25	4+18.00	TRANSITION	167.75	VAR.	172.16	VAR.	244.73	0.05	12.24	VAR.	93.19	330.00	15.38	VAR.	151.53	220.00	16.67					16.67
4+18.00	9+48.00	LT. OF MAIN LANES	530.00	119.25	632.03	20.25	1192.50	0.05	59.63	20.25	1192.50	330.00	196.76	24.00	1413.33	220.00	155.47					155.47
9+48.00	11+13.51	TRANSITION	165.51	VAR.	169.86	VAR.	130.75	0.05	6.54	VAR.	36.96	330.00	6.10	VAR.	93.79	220.00	10.32					10.32
ADDITIONAL FOR LEVELING																						
700+21.07	733+00.00	MAIN LANES	3278.93			22.75	8288.41	0.17	1409.03					22.75	8288.41	220.00	911.73					911.73
743+00.00	746+00.00	MAIN LANES	300.00			20.00	666.67	0.17	113.33					20.00	666.67	220.00	73.33					73.33
753+50.00	876+50.00	MAIN LANES	12300.00			20.00	27333.33	0.17	4646.67					20.00	27333.33	220.00	3006.67					3006.67
877+00.00	911+50.00	MAIN LANES	3450.00			20.00	7666.67	0.17	1303.33					20.00	7666.67	220.00	843.33					843.33
911+50.00	913+50.00	MAIN LANES	200.00			20.00	444.44	0.17	75.55					20.00	444.44	220.00	48.89					48.89
913+50.00	989+00.00	MAIN LANES	7550.00			20.00	16777.78	0.17	2852.22					20.00	16777.78	220.00	1845.56					1845.56
999+98.23	1063+50.00	MAIN LANES	6351.77			20.00	14115.04	0.17	2399.56					20.00	14115.04	220.00	1552.65					1552.65
1063+50.00	1072+30.00	MAIN LANES	880.00			20.00	1955.56	0.17	332.45					20.00	1955.56	220.00	215.11					215.11
1072+30.00	1088+55.03	MAIN LANES	1625.03			20.00	3611.18	0.17	613.90					20.00	3611.18	220.00	397.23					397.23
1088+55.03	1089+55.03	MAIN LANES	100.00			22.89	254.33	0.17	43.24					22.89	254.33	220.00	27.98					27.98
ADDITIONAL FOR METHOD OF GRADE RAISE																						
700+21.07	702+68.00	TRANSITION - MAIN LANES	246.93			VAR.	2496.74	0.05	124.84	VAR.	519.38	122.10	31.71									
886+00.00	891+00.00	MAIN LANES	500.00			VAR.	2222.22	0.05	111.11	VAR.	167.22	44.00	3.68									
930+00.00	934+00.00	MAIN LANES	400.00			VAR.	2666.67	0.05	133.33	VAR.	273.78	84.70	11.59									
ADDITIONAL FOR SUPERELEVATION																						
731+80.00	744+61.42	MAIN LANES	1281.42	VAR.	818.57																	
744+61.42	756+63.00	MAIN LANES	1201.58	VAR.	767.57																	
757+68.13	763+47.59	MAIN LANES	579.46	VAR.	370.16																	
763+47.59	769+18.60	MAIN LANES	571.01	VAR.	364.76																	
775+42.10	784+06.39	MAIN LANES	864.29	VAR.	552.11																	
784+06.40	790+03.00	MAIN LANES	596.60	VAR.	381.11																	
817+46.09	824+75.54	MAIN LANES	729.45	VAR.	465.97																	
824+75.56	835+47.20	MAIN LANES	1071.64	VAR.	684.56																	
835+47.20	839+68.96	MAIN LANES	421.76	VAR.	269.42																	
839+70.19	844+62.68	MAIN LANES	492.49	VAR.	314.60																	
845+97.97	851+45.90	MAIN LANES	547.93	VAR.	350.02																	
852+18.41	858+33.28	MAIN LANES	614.87	VAR.	392.78																	
863+44.24	871+74.54	MAIN LANES	830.30	VAR.	530.40																	
879+29.66	885+81.97	MAIN LANES	652.31	VAR.	416.70																	
885+81.98	890+54.53	MAIN LANES	472.55	VAR.	301.86																	
890+58.23	896+72.59	MAIN LANES	614.36	VAR.	392.45																	
904+55.49	909+96.60	MAIN LANES	541.11	VAR.	345.66																	
909+96.61	916+25.41	MAIN LANES	628.80	VAR.	401.68																	
920+98.92	928+44.82	MAIN LANES	745.90	VAR.	476.48																	
928+83.60	934+22.39	MAIN LANES	538.79	VAR.	344.18																	
939+12.32	949+13.30	MAIN LANES	1000.98	VAR.	639.43																	
967+83.07	971+49.96	MAIN LANES	366.89	VAR.	234.37																	
971+49.97	978+03.85	MAIN LANES	653.88	VAR.	417.70																	
978+03.85	987+60.56	MAIN LANES	956.71	VAR.	611.15																	
987+60.57	1002+48.48	MAIN LANES	1487.91	VAR.	950.48																	
1044+48.81	1057+62.65	MAIN LANES	1313.84	VAR.	839.29																	
4+54.11	6+69.22	DETOUR	215.11	VAR.	6.99																	
6+99.72	8+10.23	DETOUR	110.51	VAR.	3.59																	
TOTALS:					50125.27		231255.54		21549.34		23820.47		5003.46		105967.68		11656.48		129166.13		14208.24	25864.72

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2").....94.7% MIN. AGGR.....5.3% ASPHALT BINDER
ACHM BINDER COURSE (1").....95.7% MIN. AGGR.....4.3% ASPHALT BINDER
MAXIMUM NUMBER OF GYRATIONS = 115 FOR PG 64-22

9/2/2016

R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
10-21-16				6	ARK.			
				JOB NO.		070368	87	335

(2) SUMMARY OF QUANTITIES AND REVISIONS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
10-21-16

SUMMARY OF QUANTITIES (BOX 1 OF 2)

ITEM NUMBER	ITEM		QUANTITY	UNIT
201	CLEARING		371	STATION
201	GRUBBING		371	STATION
202	REMOVAL AND DISPOSAL OF FENCE		16825	LIN. FT.
202	REMOVAL AND DISPOSAL OF GATES		6	EACH
202	REMOVAL AND DISPOSAL OF SIGN FOUNDATIONS		19	EACH
202	REMOVAL AND DISPOSAL OF PIPE CULVERTS		125	EACH
202	REMOVAL AND DISPOSAL OF BUILDINGS		2	EACH
202	REMOVAL AND DISPOSAL OF SIGNS		10	EACH
202	REMOVAL AND DISPOSAL OF PLANTERS		3	EACH
202	REMOVAL AND DISPOSAL OF SPRINKLER SYSTEM		2	EACH
202	REMOVAL AND DISPOSAL OF SEPTIC SYSTEM		2	EACH
202	REMOVAL AND DISPOSAL OF LIGHTS		3	EACH
202	REMOVAL AND DISPOSAL OF COLUMNS		5	EACH
202	REMOVAL AND DISPOSAL OF POSTS		10	EACH
210	UNCLASSIFIED EXCAVATION		93459	CU. YD.
210	COMPACTED EMBANKMENT		26831	CU. YD.
SP & 210	SOIL STABILIZATION		500	TON
SS & 303	AGGREGATE BASE COURSE (CLASS 7)		57209	TON
SS & 401	TACK COAT		21917	GAL.
SP, SS, & 406	MINERAL AGGREGATE IN ACHM BINDER COURSE (1")		4788	TON
SP, SS, & 406	ASPHALT BINDER (PG 64-22) IN ACHM BINDER COURSE (1")		215	TON
SP, SS, & 407	MINERAL AGGREGATE IN ACHM SURFACE COURSE (1/2")		25791	TON
SP, SS, & 407	ASPHALT BINDER (PG 64-22) IN ACHM SURFACE COURSE (1/2")		1443	TON
412	COLD MILLING ASPHALT PAVEMENT		222	SQ. YD.
SP & 414	ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC		184	TON
SP & 415	ACHM PATCHING OF EXISTING ROADWAY		150	TON
505	PORTLAND CEMENT CONCRETE DRIVEWAY		2804.10	SQ. YD.
601	MOBILIZATION		1.00	LUMP SUM
SP & 602	FURNISHING FIELD OFFICE		1	EACH
603	MAINTENANCE OF TRAFFIC		1.00	LUMP SUM
603	60" TEMPORARY CULVERT		92	LIN. FT.
SS & 604	SIGNS		1310	SQ. FT.
SS & 604	BARRICADES		128	LIN. FT.
SS & 604	TRAFFIC DRUMS		834	EACH
604	CONSTRUCTION PAVEMENT MARKINGS		171685	LIN. FT.
604	REMOVAL OF PERMANENT PAVEMENT MARKINGS		5888	LIN. FT.
SS & 604	VERTICAL PANELS		212	EACH
605	CONCRETE DITCH PAVING (TYPE B)		12965	SQ. YD.
SP	CULVERT CLEAN OUT		3	EACH
606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS IV)		28	LIN. FT.
* 606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	(ALTERNATE NO. 1)	246	LIN. FT.
* 606	24" ASPHALT COATED CORRUGATED STEEL PIPE CULVERTS (16 GAUGE)	(ALTERNATE NO. 2)	262	LIN. FT.
* 606	24" ALUMINUM COATED CORRUGATED STEEL PIPE CULVERTS (16 GAUGE)	(ALTERNATE NO. 3)	262	LIN. FT.
* 606	24" POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE CULVERTS (16 GAUGE)	(ALTERNATE NO. 4)	262	LIN. FT.
* SP & 606	24" HIGH DENSITY POLYETHYLENE PIPE	(ALTERNATE NO. 5)	262	LIN. FT.
* SP & 606	24" PVC PIPE	(ALTERNATE NO. 6)	262	LIN. FT.
* 606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS IV)	(ALTERNATE NO. 1)	202	LIN. FT.
* 606	24" ASPHALT COATED CORRUGATED STEEL PIPE CULVERTS (16 GAUGE)	(ALTERNATE NO. 2)	214	LIN. FT.
* 606	24" ALUMINUM COATED CORRUGATED STEEL PIPE CULVERTS (16 GAUGE)	(ALTERNATE NO. 3)	214	LIN. FT.
* 606	24" POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE CULVERTS (16 GAUGE)	(ALTERNATE NO. 4)	214	LIN. FT.
* SP & 606	24" HIGH DENSITY POLYETHYLENE PIPE	(ALTERNATE NO. 5)	214	LIN. FT.
* SP & 606	24" PVC PIPE	(ALTERNATE NO. 6)	214	LIN. FT.
* 606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS V)	(ALTERNATE NO. 1)	656	LIN. FT.
* 606	24" ASPHALT COATED CORRUGATED STEEL PIPE CULVERTS (16 GAUGE)	(ALTERNATE NO. 2)	700	LIN. FT.
* 606	24" ALUMINUM COATED CORRUGATED STEEL PIPE CULVERTS (16 GAUGE)	(ALTERNATE NO. 3)	700	LIN. FT.
* 606	24" POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE CULVERTS (16 GAUGE)	(ALTERNATE NO. 4)	700	LIN. FT.
* SP & 606	24" HIGH DENSITY POLYETHYLENE PIPE	(ALTERNATE NO. 5)	700	LIN. FT.
* SP & 606	24" PVC PIPE	(ALTERNATE NO. 6)	700	LIN. FT.
606	24" ALUMINUM COATED CORRUGATED STEEL PIPE CULVERTS (16 GAUGE)		166	LIN. FT.
* 606	30" REINFORCED CONCRETE PIPE CULVERTS (CLASS IV)	(ALTERNATE NO. 1)	232	LIN. FT.
* 606	30" ASPHALT COATED CORRUGATED STEEL PIPE CULVERTS (16 GAUGE)	(ALTERNATE NO. 2)	248	LIN. FT.
* 606	30" ALUMINUM COATED CORRUGATED STEEL PIPE CULVERTS (16 GAUGE)	(ALTERNATE NO. 3)	248	LIN. FT.
* 606	30" POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE CULVERT (16 GAUGE)	(ALTERNATE NO. 4)	248	LIN. FT.
* SP & 606	30" HIGH DENSITY POLYETHYLENE PIPE	(ALTERNATE NO. 5)	248	LIN. FT.
* SP & 606	30" PVC PIPE	(ALTERNATE NO. 6)	248	LIN. FT.
* 606	30" REINFORCED CONCRETE PIPE CULVERTS (CLASS V)	(ALTERNATE NO. 1)	58	LIN. FT.
* 606	30" ASPHALT COATED CORRUGATED STEEL PIPE CULVERTS (16 GAUGE)	(ALTERNATE NO. 2)	62	LIN. FT.
* 606	30" ALUMINUM COATED CORRUGATED STEEL PIPE CULVERTS (16 GAUGE)	(ALTERNATE NO. 3)	62	LIN. FT.
* 606	30" POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE CULVERT (16 GAUGE)	(ALTERNATE NO. 4)	62	LIN. FT.
* SP & 606	30" HIGH DENSITY POLYETHYLENE PIPE	(ALTERNATE NO. 5)	62	LIN. FT.
* SP & 606	30" PVC PIPE	(ALTERNATE NO. 6)	62	LIN. FT.
606	30" ALUMINUM COATED CORRUGATED STEEL PIPE CULVERTS (16 GAUGE)		8	LIN. FT.
* 606	36" REINFORCED CONCRETE PIPE CULVERTS (CLASS IV)	(ALTERNATE NO. 1)	56	LIN. FT.
* 606	36" ASPHALT COATED CORRUGATED STEEL PIPE CULVERTS (14 GAUGE)	(ALTERNATE NO. 2)	62	LIN. FT.
* 606	36" ALUMINUM COATED CORRUGATED STEEL PIPE CULVERTS (14 GAUGE)	(ALTERNATE NO. 3)	62	LIN. FT.
* 606	36" POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE CULVERT (14 GAUGE)	(ALTERNATE NO. 4)	62	LIN. FT.
* SP & 606	36" HIGH DENSITY POLYETHYLENE PIPE	(ALTERNATE NO. 5)	62	LIN. FT.
* SP & 606	36" PVC PIPE	(ALTERNATE NO. 6)	62	LIN. FT.
* 606	36" REINFORCED CONCRETE PIPE CULVERTS (CLASS V)	(ALTERNATE NO. 1)	174	LIN. FT.
* 606	36" ASPHALT COATED CORRUGATED STEEL PIPE CULVERTS (14 GAUGE)	(ALTERNATE NO. 2)	186	LIN. FT.
* 606	36" ALUMINUM COATED CORRUGATED STEEL PIPE CULVERTS (14 GAUGE)	(ALTERNATE NO. 3)	186	LIN. FT.
* 606	36" POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE CULVERT (14 GAUGE)	(ALTERNATE NO. 4)	186	LIN. FT.
* SP & 606	36" HIGH DENSITY POLYETHYLENE PIPE	(ALTERNATE NO. 5)	186	LIN. FT.
* SP & 606	36" PVC PIPE	(ALTERNATE NO. 6)	186	LIN. FT.
606	36" ALUMINUM COATED CORRUGATED STEEL PIPE CULVERTS (14 GAUGE)		22	LIN. FT.
* 606	42" REINFORCED CONCRETE PIPE CULVERTS (CLASS V)	(ALTERNATE NO. 1)	58	LIN. FT.
* 606	42" ASPHALT COATED CORRUGATED STEEL PIPE CULVERTS (14 GAUGE)	(ALTERNATE NO. 2)	62	LIN. FT.
* 606	42" ALUMINUM COATED CORRUGATED STEEL PIPE CULVERTS (14 GAUGE)	(ALTERNATE NO. 3)	62	LIN. FT.
* 606	42" POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE CULVERT (14 GAUGE)	(ALTERNATE NO. 4)	62	LIN. FT.
* SP & 606	42" HIGH DENSITY POLYETHYLENE PIPE	(ALTERNATE NO. 5)	62	LIN. FT.
606	42" ALUMINUM COATED CORRUGATED STEEL PIPE CULVERTS (14 GAUGE)		44	LIN. FT.
* 606	60" REINFORCED CONCRETE PIPE CULVERTS (CLASS IV)	(ALTERNATE NO. 1)	116	LIN. FT.
* 606	60" ASPHALT COATED CORRUGATED STEEL PIPE CULVERTS (16 GAUGE)	(ALTERNATE NO. 2)	124	LIN. FT.
* 606	60" ALUMINUM COATED CORRUGATED STEEL PIPE CULVERTS (16 GAUGE)	(ALTERNATE NO. 3)	124	LIN. FT.
* 606	60" POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE CULVERT (16 GAUGE)	(ALTERNATE NO. 4)	124	LIN. FT.
606	60" ALUMINUM COATED CORRUGATED STEEL PIPE CULVERTS (16 GAUGE)		56	LIN. FT.

* DENOTES ALTERNATE BID ITEMS.

SUMMARY OF QUANTITIES (BOX 2 OF 2)

ITEM NUMBER	ITEM		QUANTITY	UNIT
* 606	29" X 18" REINFORCED CONCRETE ARCH PIPE CULVERTS (CLASS IV)	(ALTERNATE NO. 1)	54	LIN. FT.
* 606	28" X 20" ASPHALT COATED CORRUGATED STEEL ARCH PIPE CULVERTS (16 GAUGE)	(ALTERNATE NO. 2)	58	LIN. FT.
* 606	28" X 20" ALUMINUM COATED CORRUGATED STEEL ARCH PIPE CULVERTS (16 GAUGE)	(ALTERNATE NO. 3)	58	LIN. FT.
* 606	28" X 20" POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL ARCH PIPE CULVERT (16 GAUGE)	(ALTERNATE NO. 4)	58	LIN. FT.
* 606	44" X 27" REINFORCED CONCRETE ARCH PIPE CULVERTS (CLASS V)	(ALTERNATE NO. 1)	58	LIN. FT.
* 606	42" X 29" ASPHALT COATED CORRUGATED STEEL ARCH PIPE CULVERTS (14 GAUGE)	(ALTERNATE NO. 2)	62	LIN. FT.
* 606	42" X 29" ALUMINUM COATED CORRUGATED STEEL ARCH PIPE CULVERTS (14 GAUGE)	(ALTERNATE NO. 3)	62	LIN. FT.
* 606	42" X 29" POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL ARCH PIPE CULVERT (14 GAUGE)	(ALTERNATE NO. 4)	62	LIN. FT.
SP, SS, & 606	18" SIDE DRAIN		4626	LIN. FT.
SP, SS, & 606	24" SIDE DRAIN		260	LIN. FT.
606	24" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS		2	EACH
606	24" FLARED END SECTIONS FOR CORRUGATED STEEL PIPE CULVERTS		10	EACH
* 606	24" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS	(ALTERNATE NO. 1)	36	EACH
* 606	24" FLARED END SECTIONS FOR CORRUGATED STEEL PIPE CULVERTS	(ALTERNATE NO. 2)	36	EACH
606	30" FLARED END SECTIONS FOR CORRUGATED STEEL PIPE CULVERTS		3	EACH
* 606	30" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS	(ALTERNATE NO. 1)	4	EACH
* 606	30" FLARED END SECTIONS FOR CORRUGATED STEEL PIPE CULVERTS	(ALTERNATE NO. 2)	4	EACH
606	36" FLARED END SECTIONS FOR CORRUGATED STEEL PIPE CULVERTS		2	EACH
* 606	36" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS	(ALTERNATE NO. 1)	8	EACH
* 606	36" FLARED END SECTIONS FOR CORRUGATED STEEL PIPE CULVERTS	(ALTERNATE NO. 2)	8	EACH
606	42" FLARED END SECTIONS FOR CORRUGATED STEEL PIPE CULVERTS		4	EACH
* 606	42" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS	(ALTERNATE NO. 1)	2	EACH
* 606	42" FLARED END SECTIONS FOR CORRUGATED STEEL PIPE CULVERTS	(ALTERNATE NO. 2)	2	EACH
606	60" FLARED END SECTIONS FOR CORRUGATED STEEL PIPE CULVERTS		4	EACH
* 606	60" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS	(ALTERNATE NO. 1)	4	EACH
* 606	60" FLARED END SECTIONS FOR CORRUGATED STEEL PIPE CULVERTS	(ALTERNATE NO. 2)	4	EACH
* 606	29" X 18" FLARED END SECTIONS FOR REINFORCED CONCRETE ARCH PIPE CULVERTS	(ALTERNATE NO. 1)	2	EACH
* 606	28" X 20" FLARED END SECTIONS FOR CORRUGATED STEEL ARCH PIPE CULVERT	(ALTERNATE NO. 2)	2	EACH
* 606	44" X 27" FLARED END SECTIONS FOR REINFORCED CONCRETE ARCH PIPE CULVERTS	(ALTERNATE NO. 1)	2	EACH
* 606	42" X 29" FLARED END SECTIONS FOR CORRUGATED STEEL ARCH PIPE CULVERTS	(ALTERNATE NO. 2)	2	EACH
606	SELECTED PIPE BEDDING		525	CU. YD.
611	UNDERDRAIN OUTLET PROTECTORS		85	EACH
611	4" PIPE UNDERDRAINS		20750	LIN. FT.
615	PAVEMENT REPAIR OVER CULVERTS (CONCRETE)		143.4	CU. YD.
619	WIRE FENCE (TYPE C)		660	LIN. FT.
619	WIRE FENCE (TYPE D)		8206	LIN. FT.
619	WIRE FENCE (TYPE D-1)		48	LIN. FT.
* 619	3' STEEL CHAIN LINK FENCE	(ALTERNATE NO. 1)	1436	LIN. FT.
* 619	3' ALUMINUM CHAIN LINK FENCE	(ALTERNATE NO. 2)	1436	LIN. FT.
* 619	4' STEEL CHAIN LINK FENCE	(ALTERNATE NO. 1)	1152	LIN. FT.
* 619	4' ALUMINUM CHAIN LINK FENCE	(ALTERNATE NO. 2)	1152	LIN. FT.
* 619	5' STEEL CHAIN LINK FENCE	(ALTERNATE NO. 1)	192	LIN. FT.
* 619	5' ALUMINUM CHAIN LINK FENCE	(ALTERNATE NO. 2)	192	LIN. FT.
* 619	6' STEEL CHAIN LINK FENCE	(ALTERNATE NO. 1)	2188	LIN. FT.
* 619	6' ALUMINUM CHAIN LINK FENCE	(ALTERNATE NO. 2)	2188	LIN. FT.
* 619	16' STEEL GATES	(ALTERNATE NO. 1)	18	EACH
* 619	16' ALUMINUM GATES	(ALTERNATE NO. 2)	18	EACH
* 619	18' STEEL GATES	(ALTERNATE NO. 1)	1	EACH
* 619	18' ALUMINUM GATES	(ALTERNATE NO. 2)	1	EACH
* 619	20' STEEL GATES	(ALTERNATE NO. 1)	2	EACH
* 619	20' ALUMINUM GATES	(ALTERNATE NO. 2)	2	EACH
* 619	24' STEEL GATES	(ALTERNATE NO. 1)	1	EACH
* 619	24' ALUMINUM GATES	(ALTERNATE NO. 2)	1	EACH
620	LIME		78	TON
620	SEEDING		39.08	ACRE
SS & 620	MULCH COVER		78.71	ACRE
620	WATER		4902.1	M.GAL.
621	TEMPORARY SEEDING		39.63	ACRE
621	SILT FENCE		38897	LIN. FT.
621	SAND BAG DITCH CHECKS		4510	BAG
621	SEDIMENT BASIN		8188	CU. YD.
621	OBLITERATION OF SEDIMENT BASIN		8188	CU. YD.
621	SEDIMENT REMOVAL AND DISPOSAL		10044	CU. YD.
621	ROCK DITCH CHECKS		630	CU. YD.
623	SECOND SEEDING APPLICATION		39.08	ACRE
624	SOLID SODDING		8536	SQ. YD.
626	EROSION CONTROL MATTING (CLASS 3)		15380	SQ. YD.
635	ROADWAY CONSTRUCTION CONTROL		1.00	LUMP SUM
637	MAILBOXES		145	EACH
637	MAILBOX SUPPORTS (SINGLE)		143	EACH
637	MAILBOX SUPPORTS (DOUBLE)		1	EACH
718	REFLECTORIZED PAINT PAVEMENT MARKING WHITE (4")		80565	LIN. FT.
718	REFLECTORIZED PAINT PAVEMENT MARKING YELLOW (4")		80477	LIN. FT.
721	RAISED PAVEMENT MARKERS (TYPE II)		1041	EACH
816	FILTER BLANKET		118	SQ. YD.
816	DUMPED RIPRAP		74	CU. YD.
	STRUCTURES OVER 20' SPAN			
205	REMOVAL OF EXISTING BRIDGE STRUCTURE (SITE NO. 1)		1.00	LUMP SUM
801	UNCLASSIFIED EXCAVATION FOR STRUCTURES-ROADWAY		82	CU. YD.
802	CLASS S CONCRETE-ROADWAY		171.53	CU. YD.
804	REINFORCING STEEL-ROADWAY (GRADE 60)		24822	POUND

* DENOTES ALTERNATE BID ITEMS.

REVISIONS

DATE	REVISION	SHEET NUMBER
10/21/2016	ADDED PLAN QUANTITY NOTE TO EARTHWORK BOX	82 & 87

9/2/2016

R070368.DGN

SUMMARY OF QUANTITIES AND REVISIONS

SURVEY CONTROL COORDINATES
Project Name: 070368
Date: 11/7/2013
Coordinate System: Arkansas State Plane Coordinates
Based on AHTD GPS PTS : *700028-700028a, 700029-700029a, 700027-700027a, 700015a*
Projected to Ground Coordinates
Units: U.S. Survey Foot

COORDINATES LISTED BELOW ARE GROUND (Localized) COORDINATES !!!!

Point No.	Northing	SY	Easting	SX	Elevation	SZ	Feature Code	Point Description
1	1539313.4333	0.0350	1106521.5436	0.0350	157.04	0.015	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:1
2	1539002.7772	0.0350	1105804.0852	0.0350	161.85	0.015	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:2
4	1538186.4009	0.0300	1104357.2691	0.0300	170.53	0.016	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:4
5	1537796.3189	0.0300	1103662.3519	0.0300	155.27	0.017	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:5
6	1537395.8517	0.0300	1103014.5686	0.0300	166.78	0.017	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:6
7	1536970.2199	0.0300	1102337.0632	0.0300	176.08	0.017	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:7
8	1536605.7693	0.0300	1101659.5824	0.0300	180.00	0.017	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:8
10	1535921.9014	0.0300	1100234.9350	0.0300	177.73	0.018	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:10
11	1535586.5195	0.0300	1099515.2500	0.0300	187.63	0.018	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:11
12	1535250.3114	0.0300	1098808.7745	0.0300	185.03	0.018	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:12
13	1534938.4576	0.0300	1098079.0494	0.0300	197.76	0.018	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:13
15	1534168.1057	0.0300	1097831.0087	0.0300	212.22	0.018	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:15
16	1533537.8173	0.0300	1098226.6411	0.0300	209.16	0.019	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:16
17	1532759.1233	0.0300	1098195.1741	0.0300	210.26	0.019	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:17
18	1532184.7090	0.0300	1097670.5802	0.0300	220.50	0.019	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:18
19	1531517.9555	0.0300	1097229.2436	0.0300	218.82	0.018	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:19
20	1530841.6457	0.0300	1096785.1611	0.0300	226.99	0.019	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:20
21	1530207.7922	0.0300	1096301.4338	0.0300	229.77	0.019	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:21
22	1529819.3364	0.0300	1095588.4782	0.0300	235.89	0.019	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:22
23	1529367.9419	0.0300	1094917.6745	0.0300	254.70	0.019	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:23
24	1528929.8650	0.0300	1094248.5907	0.0300	217.42	0.019	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:24
25	1528585.7061	0.0300	1093609.8456	0.0300	198.62	0.019	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:25
26	1528275.6750	0.0300	1092938.8778	0.0300	174.36	0.018	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:26
27	1527850.6619	0.0300	1092236.9012	0.0300	195.85	0.019	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:27
28	1527376.5828	0.0300	1091629.6542	0.0300	200.37	0.018	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:28
29	1526831.4533	0.0300	1091054.3761	0.0300	178.93	0.018	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:29
30	1526336.0657	0.0300	1090451.2728	0.0300	173.78	0.018	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:30
31	1525731.4804	0.0300	1089851.9522	0.0300	197.06	0.018	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:31
32	1525030.3229	0.0300	1089460.0298	0.0300	220.67	0.017	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:32
33	1524270.8290	0.0300	1089411.5210	0.0300	233.62	0.017	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:33
34	1523528.2837	0.0300	1089277.6475	0.0300	235.11	0.017	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:34
35	1522749.7859	0.0300	1089342.1369	0.0300	230.60	0.017	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:35
36	1522183.0111	0.0300	1089307.1659	0.0300	243.57	0.016	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:36
37	1521651.8340	0.0300	1088960.6754	0.0300	254.41	0.016	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:37
38	1520857.2011	0.0300	1088950.7917	0.0300	246.99	0.015	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:38
39	1520073.0476	0.0300	1088938.7326	0.0300	248.10	0.015	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:39
40	1519275.4571	0.0300	1088916.5896	0.0300	259.52	0.015	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:40
41	1518427.9567	0.0300	1088824.8757	0.0300	276.85	0.014	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:41
43	1516905.3358	0.0300	1088961.3154	0.0300	265.52	0.014	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:43
44	1516148.5347	0.0300	1088991.8401	0.0300	272.94	0.013	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:44
45	1515397.7736	0.0300	1088954.2445	0.0300	293.78	0.012	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:45
46	1514626.1346	0.0300	1088910.1260	0.0300	283.17	0.012	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:46
47	1514343.1797	0.0300	1088510.4714	0.0300	275.01	0.012	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:47
48	1514090.9677	0.0300	1087741.6916	0.0300	246.74	0.011	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:48
49	1513368.2063	0.0300	1087595.7605	0.0300	247.82	0.009	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:49
50	1512605.5454	0.0300	1087594.0020	0.0300	253.67	0.009	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:50
51	1511814.8576	0.0300	1087586.2521	0.0300	232.23	0.008	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:51
53	1538089.9506	0.0300	1104105.0669	0.0300	180.62	0.016	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:53
54	1536515.2403	0.0300	1101484.5402	0.0300	182.29	0.017	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:54
55	1535701.0446	0.0300	1099698.5175	0.0300	197.04	0.018	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:55
57	1529625.3099	0.0300	1095211.6201	0.0300	252.97	0.019	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:57
58	1529218.2543	0.0300	1094717.0184	0.0300	249.24	0.019	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:58
59	1527653.0367	0.0300	1091927.7161	0.0300	213.13	0.019	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:59
61	1517272.9284	0.0300	1088958.1664	0.0300	272.27	0.014	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:61
62	1513818.0942	0.0300	1087604.2509	0.0300	246.69	0.011	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:62
63	1510697.3215	0.0300	1087569.4946	0.0300	247.19	0.003	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:63
64	1510966.2865	0.0300	1087574.0782	0.0300	244.30	0.003	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:64
65	1514414.7469	0.0300	1088898.5266	0.0300	284.18	0.002	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:65
66	1517910.9845	0.0300	1088830.2696	0.0300	263.65	0.003	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:66
67	1525461.7339	0.0300	1089695.5816	0.0300	210.91	0.002	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:67
68	1526067.1113	0.0300	1090125.6927	0.0300	193.23	0.002	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:68
69	1534679.4022	0.0300	1097643.9942	0.0300	210.67	0.002	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:69
70	1535141.0127	0.0300	1098492.0416	0.0300	196.12	0.002	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:70
71	1536333.7518	0.0300	1101012.4884	0.0300	165.86	0.003	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:71
72	1538700.5773	0.0300	1105309.3389	0.0300	176.69	0.002	CTL	5/8" X 24" Rebar with 2" Aluminum cap Stamped PN:72
100	1541442.2918	0.0001	1105473.4333	0.0001	141.59	0.016	GPS	5/8" X 48" Rebar with 2.5" Aluminum cap Stamped PN: 700015A
101	1539004.8687	0.0300	1106946.5306	0.0300	164.79	0.015	GPS	5/8" X 48" Rebar with 2.5" Aluminum cap Stamped PN:700027
102	1530255.7468	0.0001	1096350.3153	0.0001	228.66	0.019	GPS	5/8" X 48" Rebar with 2.5" Aluminum cap Stamped PN:700028
103	1531842.3437	0.0001	1097487.7915	0.0001	215.50	0.018	GPS	5/8" X 48" Rebar with 2.5" Aluminum cap Stamped PN:700028A
104	1523017.0073	0.0001	1090320.0714	0.0001	229.53	0.018	GPS	5/8" X 48" Rebar with 2.5" Aluminum cap Stamped PN:700029
105	1523578.2579	0.0001	1089016.3032	0.0001	240.31	0.017	GPS	5/8" X 48" Rebar with 2.5" Aluminum cap Stamped PN:700029A
106	1510550.9394	0.0001	1070301.5226	0.0001	211.46	0.006	GPS	5/8" X 48" Rebar with 2.5" Aluminum cap Stamped PN:700032A
107	1510276.0117	0.0001	1086048.2088	0.0001	229.71	0.014	GPS	5/8" X 48" Rebar with 2.5" Aluminum cap Stamped PN:WYATT AZ
108	1510134.6898	0.0250	1087619.7244	0.0250	257.55	0.014	GPS	5/8" X 48" Rebar with 2.5" Aluminum cap Stamped PN: WYATT 1941
900	1547384.7669	30.0000	1110159.2641	30.0000	151.62	0.007	TBM	AHTD ALUM CAP 2009 U 325 IN CONCRETE HEADWALL NORTH CORNER
901	1545495.1214	30.0000	1108833.2013	30.0000	168.62	0.010	TBM	CHISELED X INTERSECTION OF PADGETT AND HICKS
903	1540096.3401	30.0000	1107779.4140	30.0000	160.42	0.013	TBM	CHISELED SQUARE E SIDE OF EAST PADGETT RD.
904	1539365.0108	30.0000	1106781.4122	30.0000	157.41	0.014	TBM	CHISELED SQUARE NE INTERSECTION HWY 335 AND HWY 7
906	1536689.1425	30.0000	1101814.2780	30.0000	172.75	0.017	TBM	CHISELED SQUARE NORTH END EAST SIDE HWY 335
908	1533762.8564	30.0000	1098101.1732	30.0000	209.95	0.018	TBM	CHISELED SQUARE SOUTH END WEST SIDE OF HWY 335
909	1531705.7264	30.0000	1097390.8127	30.0000	216.78	0.018	TBM	CHISELED SQUARE EAST SIDE OF HWY 335
910	1529837.7006	30.0000	1095645.6768	30.0000	235.85	0.018	TBM	CHISELED SQUARE SOUTH SIDE OF HWY 335
912	1526597.2225	30.0000	1090723.0212	30.0000	168.73	0.017	TBM	CHISELED SQUARE SW BRIDGE CORNER
913	1524625.2236	30.0000	1089435.0890	30.0000	230.78	0.017	TBM	CHISELED SQUARE S/END 18" RCP
914	1523423.3537	30.0000	1089299.1283	30.0000	234.20	0.016	TBM	CHISELED SQUARE CONCRETE TLPD PAD INTERSECTION 335 AND MT. HOLLY
915	1520939.4226	30.0000	1088933.1697	30.0000	247.15	0.016	TBM	CHISELED SQUARE NORTH END 18" RCP
918	1512458.3387	30.0000	1087598.1790	30.0000	253.90	0.009	TBM	CHISELED SQUARE INCONCRETE HEADWALL INTERSECTION FAWNWOOD CIR. AND HWY. 335
957	1510244.3321	30.0000	1087650.2655	30.0000	256.46	0.000	TBM	FIRE HYDRANT INTRSCTN HWY 335 AND 82 TBM 957 FROM JOB:070367
990	1549508.8854	30.0000	1108995.0958	30.0000	190.23	0.000	BM	PD:NGS BM MON. N 198 FIRST ORDER CLASS 2
991	1510470.9070	30.0000	1069485.2768	30.0000	228.16	0.000	BM	PD:NGS BM MON. P 121 DISK SET IN CONCRETE STAMPED P121 1934

*Standard Primary Control Monument - Rebar and Cap - Standard - 5/8"x 24" Rebar with 2"Aluminum Cap stamped: "(include all common information here)" plus other markings indicated in the point description of the individual point. AHTD monuments will be stamped "Arkansas Hwy & Trans Dept" with "PN: ###" & "Job ######". Monuments that are set by Consultants will be stamped "Arkansas Hwy & Trans Dept" with "PN:###", "Job######", & "PS#####". The consultant Professional Surveyor in charge will stamp his/her PS license number on the cap.

**Standard GPS Control Point Monument - 5/8" x 48" Rebar with 2.5"Aluminum Cap stamped: "(include all common information here)" plus other markings indicated in the point description of the individual point. These monuments will be stamped "Ark. State Hwy Trans. Dept.", "GPS Survey", & "Point No. ######".

SX, SY, SZ – Represents the standard error estimate of the coordinate values of each point at the 67% confidence level (one sigma) based on the least squares analysis of the control network. See the AASHTO SDMS Technical Data Guide data tag definition for SX:, SY:, and SZ: for additional information. These values shall be used when control points are added and the entire network is reprocessed using least square analysis. A value of 0.001 is defined as fixed (no adjustment) in the least square analysis process. A value of 30 is defined as location by handheld GPS device or scaled from USGS Quadmap.

Reference Control points (1500 series) shall be used to re-establish horizontal datum if the primary control has been destroyed. These reference control points shall not be used for vertical control unless the elevation has been established from the project datum with 3-wire level techniques.

All additional project control shall be occupied, measured, and adjusted with direct survey ties to at least two of the control points listed in the table above. New survey control shall not be independent of the survey control listed above. This includes horizontal coordinates and elevations.

Positional Accuracy:
Horizontal - GPS (1.0 cm± 1PPM) *PN: 100-108*
Horizontal - Primary (2.0cm± 20PPM): *PN:1-72*
Horizontal - Secondary (3 cm ± 50PPM): *PN:N/A*
Vertical - NGS 1st Order (±4mm x Vdist in km) *PN:990*
Vertical - NGS 2nd Order (±6mm x Vdist in km) *PN:*
Vertical - NGS 3rd Order (±8mm x Vdist in km) *PN:900-918,991*

Horizontal Datum: NAD 1983 (1997) State Plane Zone: 0302 - South Zone
The adjustment year is based on metadata in the SDMS Control file
A project CAF of: 1.000009213 has been used to compute the above coordinates.
The project CAF shall have a minimum precision of 9 digits right of the decimal.
This CAF is intended for use within the project limits only.
Grid Distance = Ground Distance X CAF
If Coordinates are listed as Ground:
To compute Grid Coordinates, multiply the Ground Coordinates by CAF about the origin of X=0 & Y=0
If Coordinates are listed as Grid:
To compute Ground Coordinates, divide the Grid Coordinates by CAF about the origin of X=0 & Y=0

Vertical Datum: NAVD 1988 based NGS BM:
A project Elevation Factor of: 0.9999896469 has been computed and incorporated in the above CAF.
This is based on the average elevation of the project: 216.44 Feet
3-Wire Leveling techniques have been used to establish elevations on
Points: 1-72, 100-108 From NGS BM: N 198 AND P121

Basis of Bearing: Grid Bearings based on AHTD GPS points: *700028-700028a, 700029-700029a, 700027-700027a, 700015a*
Convergence Angle is: 00 24 13 LEFT at PN: 59
LT: 33-15-22.6 N LG: 92-43-15.3 W
Grid Azimuth = Astronomical Azimuth - Convergence Angle

Note: Information in Italics is for clarification only. It is not to be part of the actual Control Table or Control Detail Sheets.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
KEITH D. TRINITY
9-30-16

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.ROAD DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		88	335

JOB NO. 070368

(2) SURVEY CONTROL DETAILS

SURVEY CONTROL DETAILS

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.		070368	89	335

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

CONST

POINT NO.	TYPE	STATION	NORTHING	EASTING
8000	POB	700+00.00	1510190.69	1087582.53
8001	PI	703+10.14	1510500.84	1087583.33
8002	PI	705+43.45	1510734.13	1087585.55
8003	PI	710+08.18	1511198.81	1087592.57
8004	PI	714+94.17	1511684.66	1087604.00
8005	PI	722+48.68	1512439.15	1087609.27
8006	PI	727+44.38	1512934.86	1087610.17
8007	PI	731+79.28	1513369.74	1087614.29
8008	PC	732+26.09	1513416.55	1087614.25
8009	PT	744+01.66	1514273.98	1088287.83
8010	PC	745+21.18	1514302.16	1088403.98
8011	PT	754+38.00	1514968.32	1088934.63
8012	PC	759+55.63	1515485.92	1088941.15
8013	PT	762+35.22	1515765.17	1088953.85
8014	PC	764+64.08	1515993.33	1088971.77
8015	PT	767+31.10	1516260.11	1088973.24
8016	PI	769+36.19	1516464.73	1088959.45
8017	PI	771+92.62	1516720.74	1088944.83
8018	PC	777+29.60	1517257.33	1088924.36
8019	PT	782+88.69	1517814.09	1088875.86
8020	PC	785+24.10	1518047.34	1088844.02
8021	PT	788+15.50	1518338.07	1088834.61
8022	PI	797+22.07	1519242.36	1088898.92
8023	PI	799+02.00	1519421.94	1088910.04
8024	PC	801+00.80	1519620.10	1088925.95
8025	PT	809+65.22	1520483.54	1088962.59
8026	PI	813+10.48	1520828.80	1088964.22
8027	PI	817+14.32	1521232.64	1088963.39
8028	PC	819+71.09	1521489.38	1088966.27
8029	PT	823+68.15	1521863.91	1089080.93
8030	PI	824+75.56	1521953.57	1089140.06
8031	PC	826+41.62	1522091.72	1089232.20
8032	PT	834+62.48	1522877.57	1089358.12
8033	PC	836+31.93	1523040.86	1089312.85
8034	PT	839+30.39	1523336.35	1089282.23
8035	PC	840+07.54	1523413.35	1089287.17
8036	PT	842+75.18	1523679.54	1089314.32
8037	PC	847+85.47	1524184.89	1089385.15
8038	PT	849+58.41	1524356.93	1089402.29
8039	PC	854+02.64	1524800.38	1089428.59
8040	PT	857+72.64	1525151.60	1089533.96
8041	PI	858+33.29	1525204.12	1089564.29
8042	PI	860+76.08	1525414.84	1089684.88
8043	PC	865+69.25	1525841.59	1089932.08
8044	PT	869+49.55	1526129.65	1090177.21
8045	PI	875+55.44	1526513.32	1090646.14
8046	PC	881+17.16	1526869.93	1091080.16
8047	PT	884+50.67	1527095.33	1091325.74
8048	PC	887+13.29	1527283.23	1091509.21
8049	PT	888+89.85	1527401.90	1091639.80
8050	PC	892+26.63	1527613.13	1091902.10

CONST

POINT NO.	TYPE		STATION	NORTHING	EASTING
8051	PT		894+85.09	1527761.14	1092113.75
8052	PI		898+22.87	1527935.55	1092403.02
8053	PI		903+20.61	1528192.10	1092829.56
8054	PC		906+26.17	1528353.23	1093089.17
8055	PT		909+11.88	1528473.24	1093347.69
8056	PC		910+81.35	1528525.55	1093508.88
8057	PT		914+37.92	1528670.38	1093833.99
8058	PI		917+57.19	1528830.21	1094110.38
8059	PI		920+39.05	1528975.33	1094352.01
8060	PC		922+86.42	1529101.97	1094564.50
8061	PT		927+70.78	1529382.70	1094958.55
8062	PI		928+44.84	1529430.44	1095015.17
8063	PC		930+71.11	1529578.51	1095186.27
8064	PT		932+34.90	1529669.38	1095322.04
8065	PI		936+54.22	1529857.87	1095696.60
8066	PC		940+99.82	1530057.16	1096095.16
8067	PT		947+25.81	1530468.43	1096557.49
8068	PI		952+90.90	1530940.96	1096867.39
8069	PI		956+28.56	1531222.81	1097053.35
8070	PI		960+38.15	1531564.28	1097279.52
8071	PI		965+75.83	1532012.56	1097576.41
8072	PC		968+62.47	1532251.17	1097735.25
8073	PT		970+70.56	1532405.37	1097873.90
8074	PC		972+29.38	1532506.88	1097996.03
8075	PT		977+02.15	1532912.04	1098217.26
8076	PC		979+05.56	1533113.93	1098242.06
8077	PT		986+85.87	1533856.11	1098062.49
8078	PC		988+31.25	1533976.34	1097980.75
8079	PT		1000+23.48	1534991.79	1098252.32
8080	PI		1004+09.01	1535159.88	1098599.28
8081	PI		1007+54.33	1535307.61	1098911.40
8082	PI	EQ.	1014+95.60	1535628.59	1099579.57
8082	PI	=	1015+00.26	1535628.59	1099579.57
8083	PI		1017+65.58	1535739.56	1099820.57
8084	PI		1025+78.67	1536085.41	1100556.44
8085	PI		1029+54.89	1536247.92	1100895.74
8086	PI		1035+57.71	1536507.24	1101439.94
8087	PC		1038+34.84	1536632.59	1101687.10
8088	PT		1043+32.87	1536867.83	1102126.02
8089	PC		1050+32.31	1537212.12	1102734.86
8090	PT		1055+75.15	1537498.36	1103195.92
8091	PI		1061+09.95	1537798.79	1103638.36
8092	PC		1062+28.07	1537864.58	1103736.47
8093	PT		1066+00.22	1538051.21	1104058.13
8094	PI		1066+55.03	1538075.58	1104107.22
8095	PI		1069+67.74	1538217.58	1104385.83
8096	PI		1072+61.59	1538354.08	1104646.06
8097	PI		1076+49.64	1538538.40	1104987.53
8098	PI		1084+45.31	1538920.42	1105685.50
8099	PI		1088+55.03	1539119.50	1106043.60
8100	PI		1089+55.03	1539169.43	1106130.25
8101	POE		1094+18.38	1539396.72	1106534.02

DETOUR 2

POINT NO.	TYPE	STATION	NORTHING	EASTING
8500	POB	2+00.00	1526289.03	1090370.42
8501	PC	2+50.24	1526320.84	1090409.31
8502	PT	4+41.44	1526460.64	1090538.87
8503	PC	4+66.78	1526481.41	1090553.38
8504	PT	6+56.55	1526620.30	1090681.82
8505	PC	7+06.96	1526652.30	1090720.78
8506	PT	9+02.99	1526753.87	1090887.68
8507	PC	9+17.48	1526759.59	1090901.00
8508	PT	11+13.51	1526861.15	1091067.90
8509	POE	11+28.55	1526870.70	1091079.52

9/26/2016

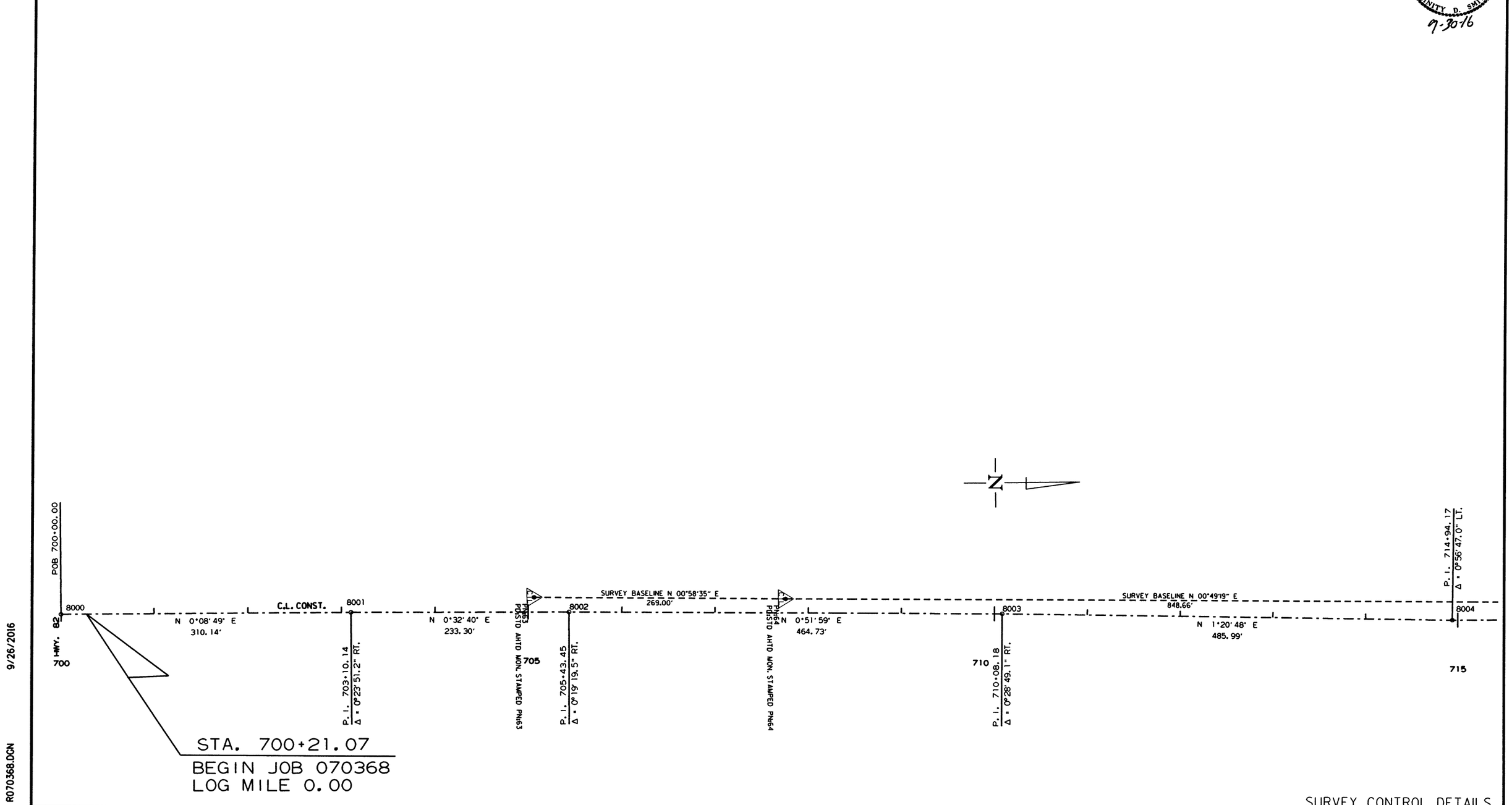
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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		070368	90	335

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



9/26/2016

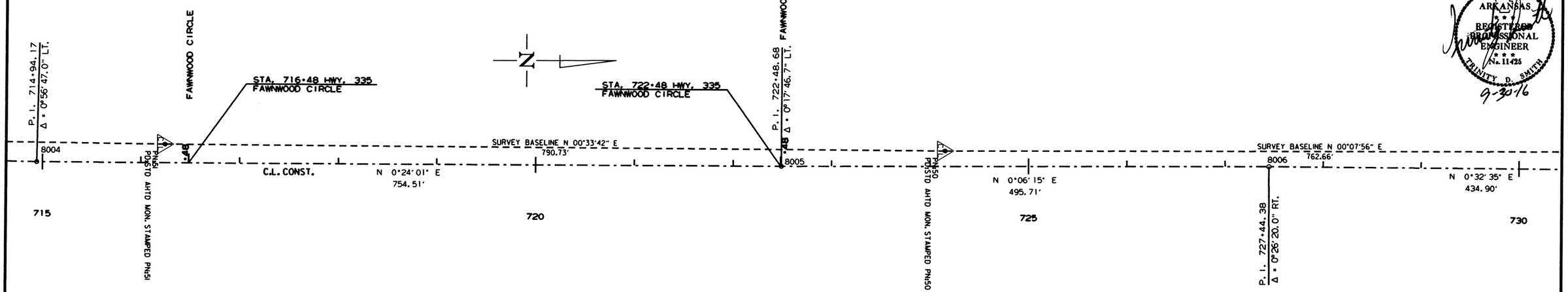
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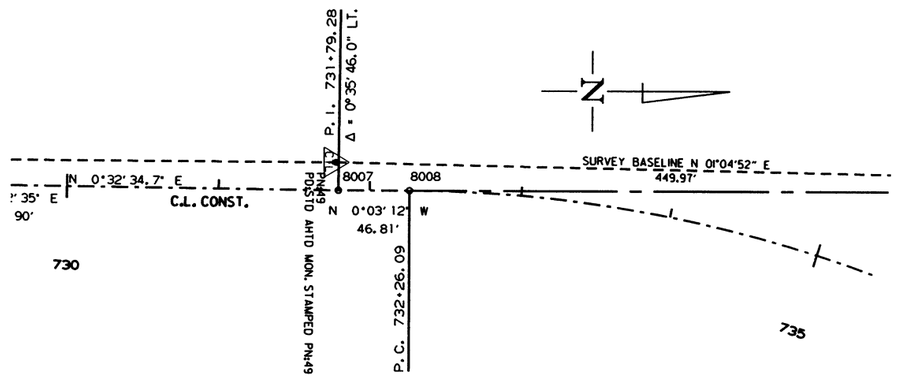
SURVEY CONTROL DETAILS

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.		070368	91	335

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16





C. L. CONSTRUCT
PI = 739+19.89
Δ = 76°24'43" RT.
D = 6°30'00"
T = 693.80'
L = 1175.57'
PC = 732+26.09
PT = 744+01.66
e = 0.095'/'
Ls = 300'

9/26/2016

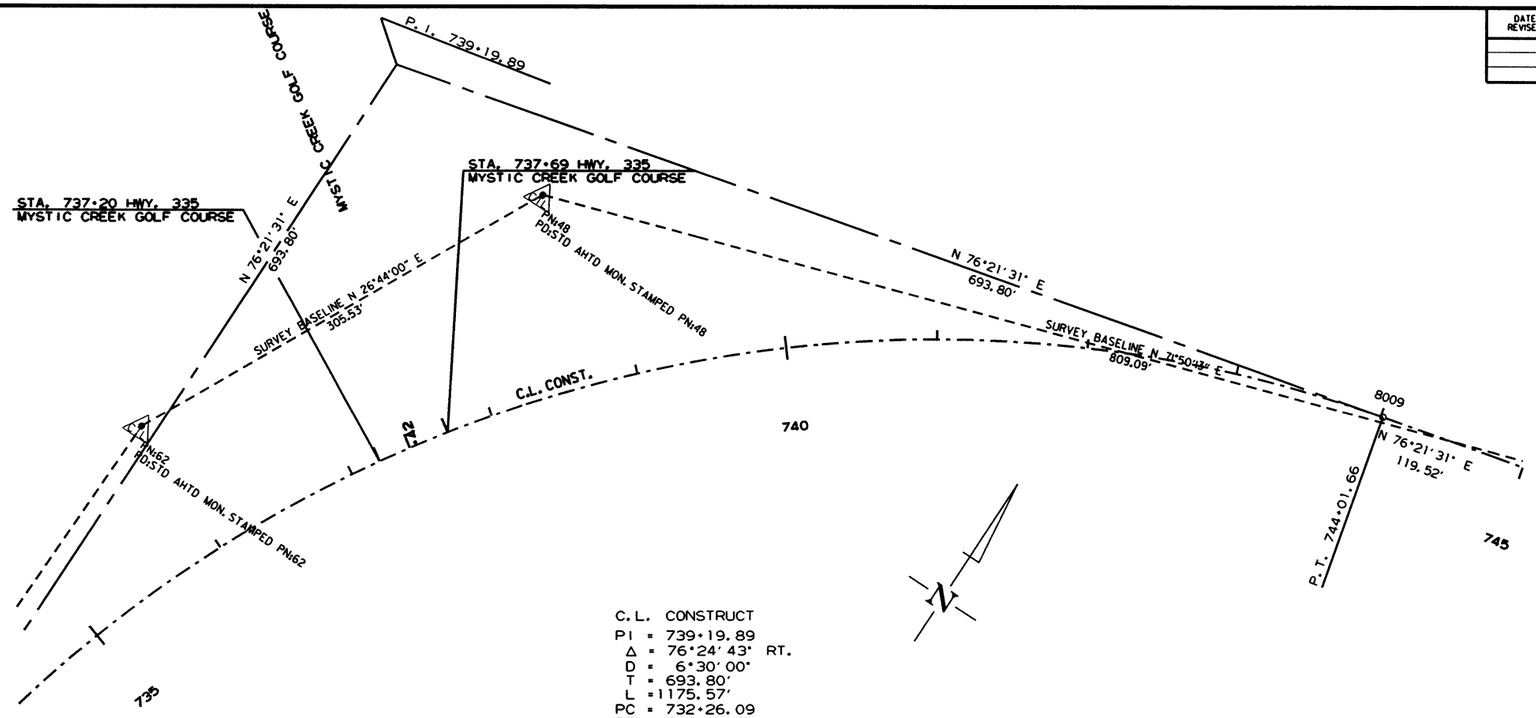
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SURVEY CONTROL DETAILS

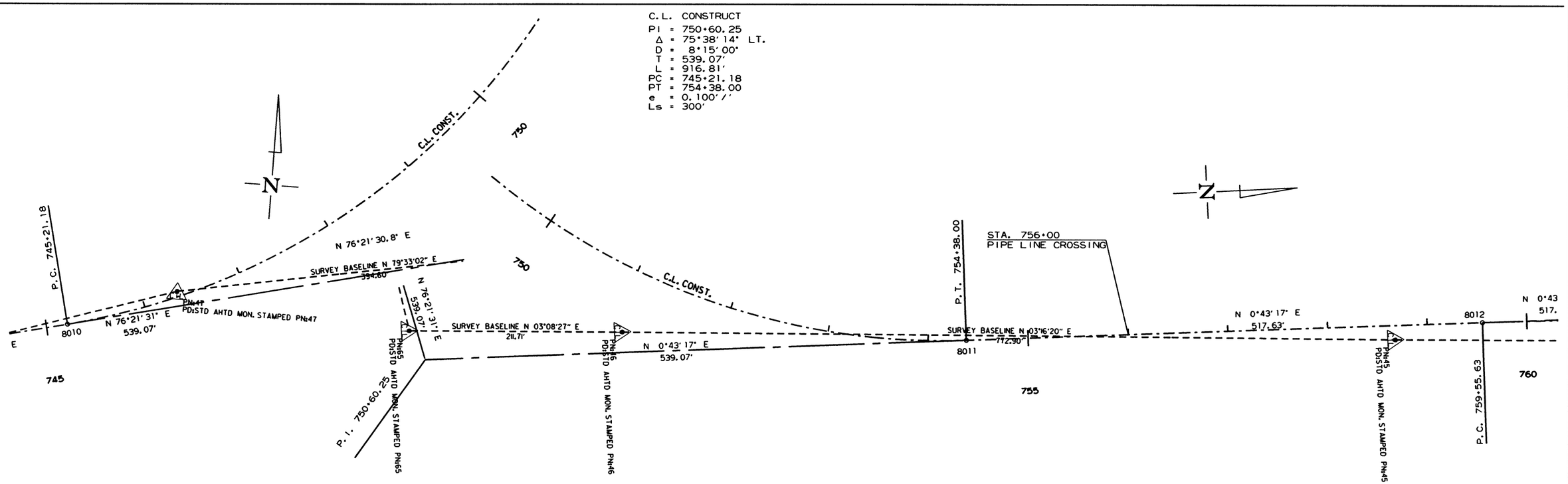
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	92	335

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



C.L. CONSTRUCT
PI = 739+19.89
Δ = 76°24'43" RT.
D = 6°30'00"
T = 693.80'
L = 1175.57'
PC = 732+26.09
PT = 744+01.66
e = 0.095'/'
Ls = 300'



SURVEY CONTROL DETAILS

9/26/2016

R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	93	335

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

C.L. CONSTRUCT
PI = 765+97.83
Δ = 08°20'46" LT.
D = 3°07'32"
T = 133.75'
L = 267.02'
PC = 764+64.08
PT = 767+31.10
e = 0.059'/'
Ls = 250'

C.L. CONSTRUCT
PI = 760+95.48
Δ = 03°46'05" RT.
D = 1°20'52"
T = 139.85'
L = 279.59'
PC = 759+55.63
PT = 762+35.22
e = 0.034'/'
Ls = 250'

C.L. CONSTRUCT
PI = 780+09.37
Δ = 05°35'24" LT.
D = 0°59'59"
T = 279.77'
L = 559.09'
PC = 777+29.60
PT = 782+88.69
e = 0.021'/'
Ls = 250'

C.L. CONSTRUCT
PI = 786+70.32
Δ = 11°50'28" RT.
D = 4°03'49"
T = 146.22'
L = 291.40'
PC = 785+24.10
PT = 788+15.50
e = 0.073'/'
Ls = 250'

9/26/2016

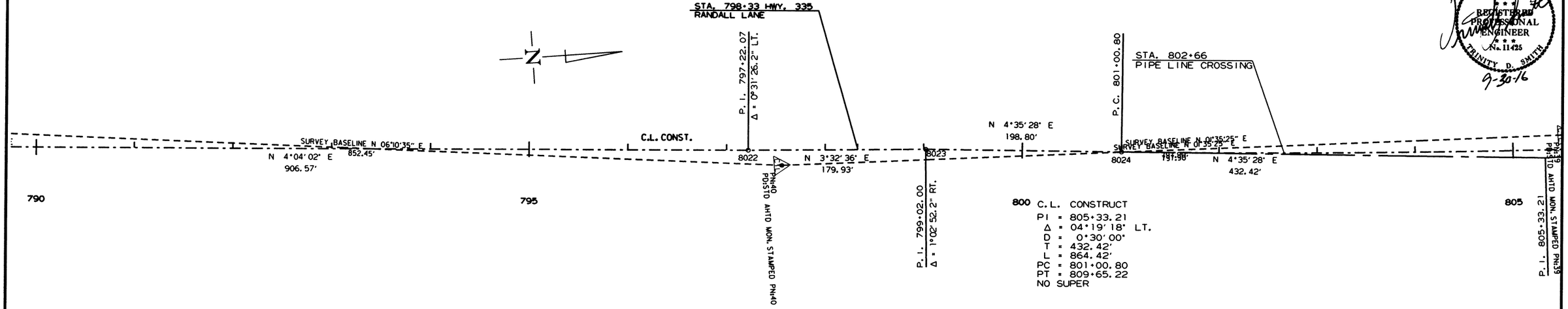
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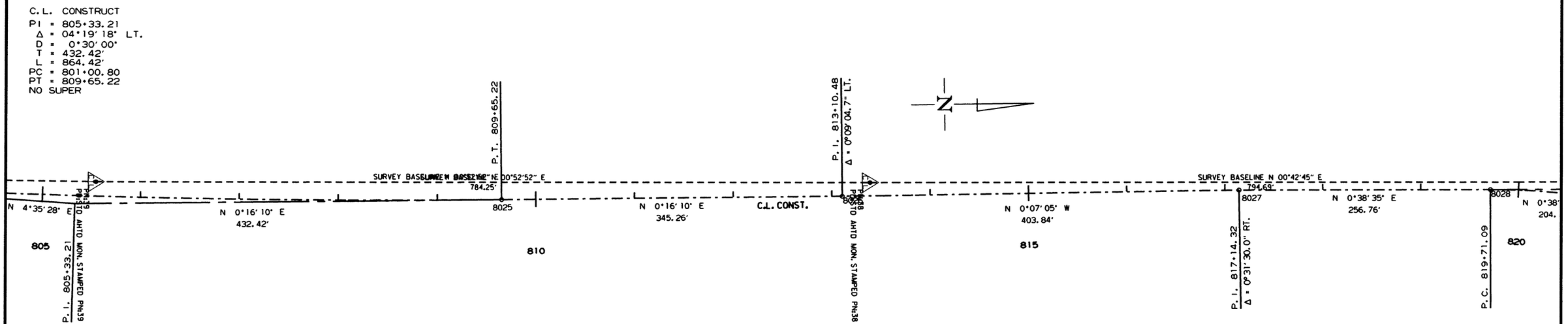
SURVEY CONTROL DETAILS

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.		070368	94	335

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16





9/26/2016

R070368.DGN

SURVEY CONTROL DETAILS

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.		070368	95	335

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

C. L. CONSTRUCT
PI = 830+79.28
Δ = 49°12'01" LT.
D = 5°59'37"
T = 437.66'
L = 820.86'
PC = 826+41.62
PT = 834+62.48
e = 0.092'/'
Ls = 300'

P.I. 821+75.21
N 33°24'05" E
204.13'
PK NAIL SET
PDSTD AHTD MON. STAMPED PN37
8028
N 0°38'35" E
204.13'
820
P.C. 819+71.09
8029
N 33°24'05" E
107.40'
SURVEY BASELINE N 33°19'00" E
634.20'
8030
N 33°42'12" E
166.06'
P.T. 823+68.15
P.I. 824+75.56
Δ = 0°18'07.4" RT.
825
P.C. 826+41.62
8031
C.L. CONST.
PK NAIL SET
PDSTD AHTD MON. STAMPED PN36
N 33°42'12" E
437.66'
830
P.I. 830+79.28
P.I. 834+62.48
8032
N 15°29'49" W
169.44'
835
SURVEY BASELINE N 03°31'51" E
567.85'
PK NAIL SET
PDSTD AHTD MON. STAMPED PN35
N 15°29'49" W
437.66'

C. L. CONSTRUCT
PI = 821+75.21
Δ = 32°45'30" RT.
D = 8°15'00"
T = 204.13'
L = 397.07'
PC = 819+71.09
PT = 823+68.15
e = 0.100'/'
Ls = 300'

STA. 836+58 HWY. 335
MOODY LANE
MOODY LANE
P.I. 837+82.57
N 15°29'49" W
150.64'
N 3°40'02" E
150.64'
8033
8034
8035
N 15°29'49" W
169.44'
032
835
P.C. 836+31.63
N 3°40'02" E
77.15'
P.T. 839+30.39
840
P.C. 840+07.54
MT. HOLLY ROAD
PK NAIL SET
PDSTD AHTD MON. STAMPED PN34
N 3°40'02" E
133.88'
P.I. 841+41.43
STA. 840+56 HWY. 335
MOUNT HOLLY ROAD
C.L. CONST.
N 7°58'46" E
133.88'
8036
P.T. 842+75.18
845
SURVEY BASELINE N 10°13'12" E
754.52'
N 7°58'46" E
510.29'
P.C. 847+85.47
8037
N 7°58'46" E
86.51'
N 3°23'42" E
86.51'
8038
P.T. 849+58.41
N 3°23'42" E
444.24'
850
PK NAIL SET
PDSTD AHTD MON. STAMPED PN33
P.I. 848+71.98

C. L. CONSTRUCT
PI = 837+82.57
Δ = 19°09'51" RT.
D = 6°25'16"
T = 150.64'
L = 298.46'
PC = 836+31.93
PT = 839+30.39
e = 0.095'/'
Ls = 300'

STA. 840+55 HWY. 335
MOUNT HOLLY ROAD

C. L. CONSTRUCT
PI = 841+41.43
Δ = 04°18'44" RT.
D = 1°36'40"
T = 133.88'
L = 267.63'
PC = 840+07.54
PT = 842+75.18
e = 0.033'/'
Ls = 250'

C. L. CONSTRUCT
PI = 848+71.98
Δ = 04°35'04" LT.
D = 2°39'04"
T = 86.51'
L = 172.93'
PC = 847+85.47
PT = 849+58.41
e = 0.052'/'
Ls = 250'

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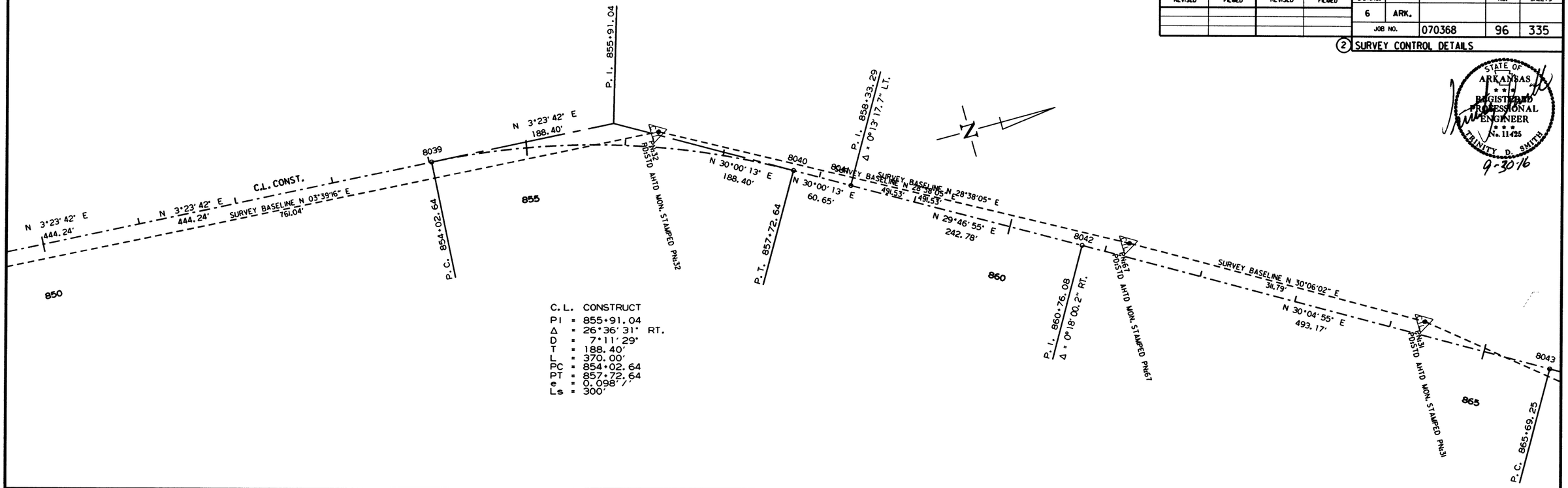
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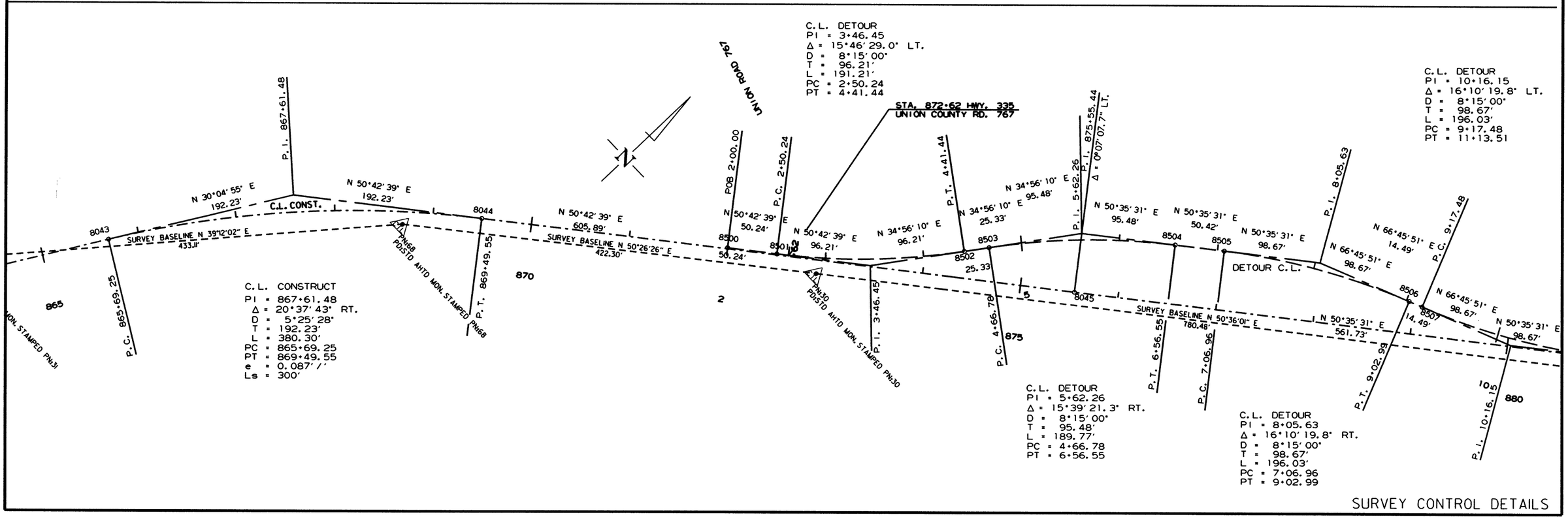
SURVEY CONTROL DETAILS

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.		070368	96	335

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16





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SURVEY CONTROL DETAILS

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.		070368	97	335

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

C.L. DETOUR
PI = 10+16.15
Δ = 16°10'19.8" LT.
D = 8°15'00"
T = 98.67'
L = 196.03'
PC = 9+17.48
PT = 11+13.51

C.L. CONSTRUCT
PI = 882+84.08
Δ = 06°16'30" LT.
D = 1°52'54"
T = 166.92'
L = 333.51'
PC = 881+17.16
PT = 884+50.67
e = 0.038'/'
Ls = 250'

C.L. CONSTRUCT
PI = 888+01.67
Δ = 06°50'20" RT.
D = 3°52'24"
T = 88.38'
L = 176.56'
PC = 887+13.29
PT = 888+89.85
e = 0.071'/'
Ls = 250'

C.L. CONSTRUCT
PI = 893+56.06
Δ = 07°45'29" RT.
D = 3°00'06"
T = 129.43'
L = 258.46'
PC = 892+26.63
PT = 894+85.09
e = 0.057'/'
Ls = 250'

C.L. CONSTRUCT
PI = 907+69.72
Δ = 13°50'42" RT.
D = 4°50'45"
T = 143.55'
L = 285.71'
PC = 906+26.17
PT = 909+11.88
e = 0.082'/'
Ls = 250'

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SURVEY CONTROL DETAILS

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.		070368	98	335

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

C.L. CONSTRUCT
PI = 912+60.29
Δ = 12°03' 38" LT.
D = 3°22' 57"
T = 178.95'
L = 356.57'
PC = 910+81.35
PT = 914+37.92
e = 0.063'/'
Ls = 250'

C.L. CONSTRUCT
PI = 925+29.13
Δ = 09°20' 45" LT.
D = 1°55' 46"
T = 242.72'
L = 484.36'
PC = 922+86.42
PT = 927+70.78
e = 0.039'/'
Ls = 250'

C.L. CONSTRUCT
PI = 931+53.42
Δ = 14°09' 37" RT.
D = 8°38' 44"
T = 82.31'
L = 163.79'
PC = 930+71.11
PT = 932+34.90
e = 0.088'/'
Ls = 250'

STA. 931+43 HWY. 335
MORNING STAR ROAD

MORNING STAR ROAD

SURVEY BASELINE N 61°41'02" E
725.56'

SURVEY BASELINE N 58°22'53" E
550.08'

SURVEY BASELINE N 53°16'39" E
250.34'

SURVEY BASELINE N 48°47'45" E
390.69'

SURVEY BASELINE N 62°45'29" E
423.87'

SURVEY BASELINE N 61°24'58" E
811.91'

N 72°01' 11" E
169.47'

N 72°01' 11" E
178.95'

N 59°57' 33" E
178.95'

N 59°57' 33" E
319.27'

N 59°00' 40" E
281.86'

N 59°12' 22" E
247.37'

N 59°12' 22" E
242.72'

N 49°51' 37" E
242.72'

N 49°51' 37" E
74.06'

N 49°07' 36" E
226.27'

N 49°07' 36" E
82.31'

N 63°17' 14" E
82.31'

N 63°17' 14" E
419.32'

N 63°26' 00" E
445.60'

P.C. 910+81.35
P.T. 914+37.92
P.I. 917+57.19
Δ = 0°56' 52.3" LT.
P.C. 922+86.42
P.I. 912+60.29
P.I. 920+39.05
Δ = 0°11' 41.5" RT.
P.I. 925+29.13
P.C. 927+70.78
P.I. 928+44.84
Δ = 0°44' 00.3" LT.
P.I. 931+53.42
P.C. 930+71.11
P.T. 932+34.90
P.I. 936+54.22
Δ = 0°08' 46.0" RT.

PN25 POSTD AHTD MON. STAMPED PN25
PN24 POSTD AHTD MON. STAMPED PN24
PN58 POSTD AHTD MON. STAMPED PN58
PN23 POSTD AHTD MON. STAMPED PN23
PN57 POSTD AHTD MON. STAMPED PN57
PN22 POSTD AHTD MON. STAMPED PN22

8056 8057 8058 8059 8060 8061 8062 8063 8064 8065

910 915 920 925 930 935 940

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SURVEY CONTROL DETAILS

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				6	ARK.			
				JOB NO.		070368	99	335

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

C.L. CONSTRUCT
PI = 944+20.26
Δ = 30°10'32" LT.
D = 4°49'14"
T = 320.43'
L = 625.99'
PC = 940+99.82
PT = 947+25.81
e = 0.081'/'
Ls = 250'

N 61°24'58" E
P.C. 940+99.82
N 63°26'00" E
445.60'
940
8068
N 63°26'00" E
320.43'
PK21 PDSTD AHTD MON. STAMPED PK21
P.I. 944+20.26
N 33°15'28" E
320.43'
945
P.T. 947+25.81
SURVEY BASELINE N 33°17'24" E
797.35'
8067
C.L. CONST.
N 33°15'28" E
565.09'
950
PK20 PDSTD AHTD MON. STAMPED PK20
8068
N 33°25'02" E
337.66'
P.I. 952+90.90
Δ = 0°09'33.7" RT.
955

SURVEY BASELINE N 33°17'24" E
809.08'
8069
N 33°25'02" E
337.66'
955
P.I. 956+28.56
Δ = 0°06'03.1" RT.
N 33°31'05" E
409.59'
PK19 PDSTD AHTD MON. STAMPED PK19
960
P.I. 960+38.15
Δ = 0°00'07.9" LT.
8070
C.L. CONST.
STA. 965+43
PIPE LINE CROSSING
SURVEY BASELINE N 33°30'05" E
799.59'
N 33°30'57" E
537.68'
965
8071
P.I. 965+75.83
Δ = 0°08'11.9" RT.
N 33°39'09" E
286.64'
PK18 PDSTD AHTD MON. STAMPED PK18
8072
P.C. 968+62.47
N 33°39'09" E
104.78'
P.I. 969+67.25
N 50°16'01" E
104.78'
970

C.L. CONSTRUCT
PI = 969+67.25
Δ = 16°36'53" RT.
D = 7°59'04"
T = 104.78'
L = 208.09'
PC = 968+62.47
PT = 970+70.56
e = 0.100'/'
Ls = 300'

SURVEY CONTROL DETAILS

9/26/2016

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				6	ARK.			
				JOB NO.		070368	100	335

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

C.L. CONSTRUCT
PI = 983+13.45
Δ = 41°12'42" LT.
D = 5°16'53"
T = 407.89'
L = 780.31'
PC = 979+05.56
PT = 986+85.87
e = 0.086'/'
Ls = 300'

C.L. CONSTRUCT
PI = 969+67.25
Δ = 16°36'53" RT.
D = 7°59'04"
T = 104.78'
L = 208.09'
PC = 968+62.47
PT = 970+70.56
e = 0.100'/'
Ls = 300'

C.L. CONSTRUCT
PI = 974+77.67
Δ = 43°15'46" LT.
D = 9°09'03"
T = 248.30'
L = 472.77'
PC = 972+29.38
PT = 977+02.15
e = 0.090'/'
Ls = 250'

P.I. 969+67.25
N 50°16'01" E
104.78'
8073
970
P.T. 970+70.56
SURVEY BASELINE N 42°24'16" E
777.91'
N 50°16'01" E
158.82'
P.C. 972+29.38
8074
N 50°16'01" E
248.30'
975
P.I. 974+77.67
PNH7 PDSTD AHTD MON. STAMPED PNH7
N 7°00'15" E
248.30'
8075
P.T. 977+02.15
N 7°00'15" E
203.41'
C. 979+05.56
SURVEY BASELINE N 02°18'51" E
779.33'
8076
980
C.L. CONST.
N 7°00'15" E
407.89'
PNH6 PDSTD AHTD MON. STAMPED PNH6
P.T. 983+13.45
N 34°12'27" W
407.89'
985

N

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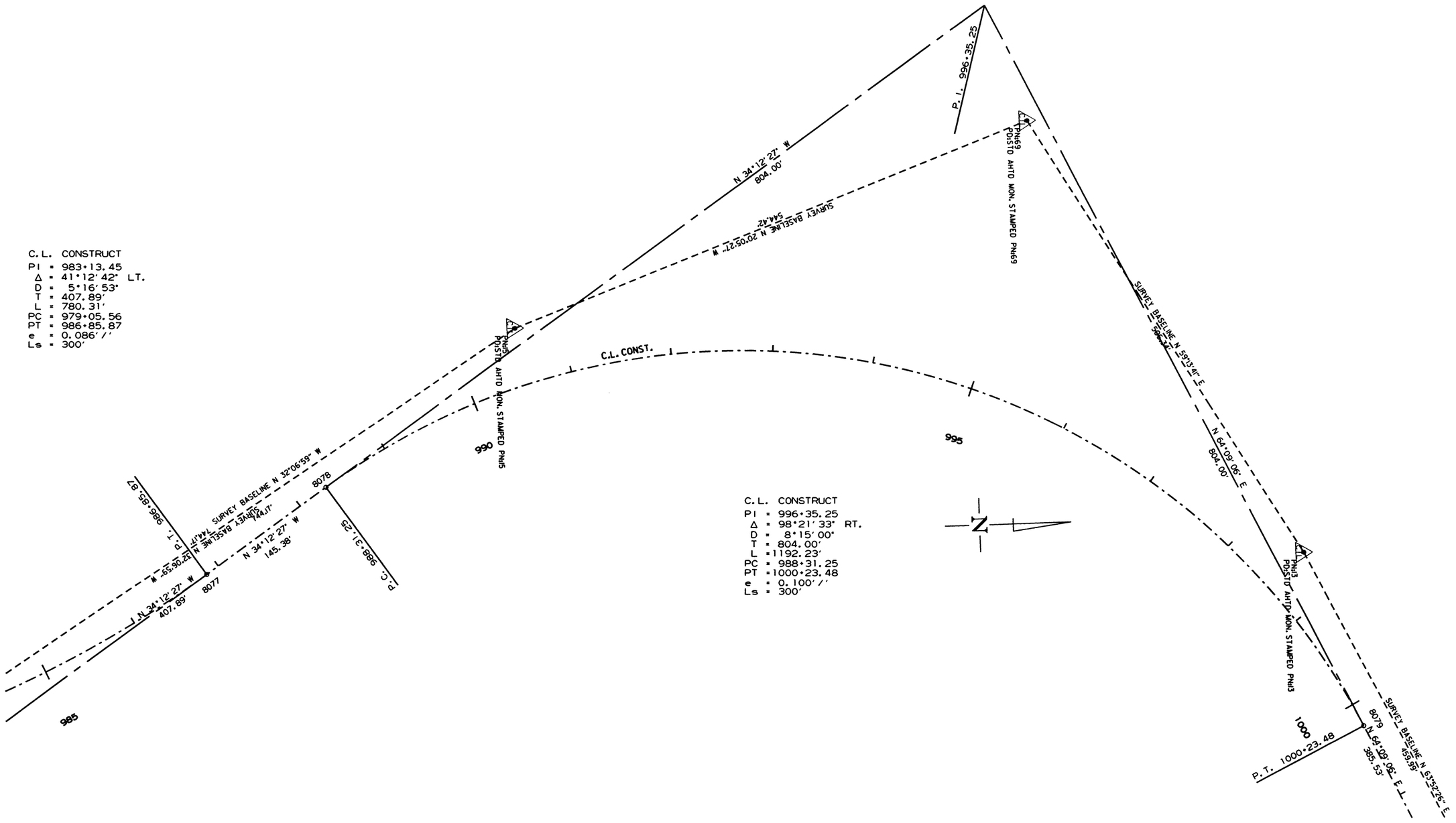
SURVEY CONTROL DETAILS

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.		070368	101	335

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-2016

C. L. CONSTRUCT
PI = 983+13.45
Δ = 41°12'42" LT.
D = 5°16'53"
T = 407.89'
L = 780.31'
PC = 979+05.56
PT = 986+85.87
e = 0.086'/'
Ls = 300'



C. L. CONSTRUCT
PI = 996+35.25
Δ = 98°21'33" RT.
D = 8°15'00"
T = 804.00'
L = 1192.23'
PC = 988+31.25
PT = 1000+23.48
e = 0.100'/'
Ls = 300'

9/26/2016

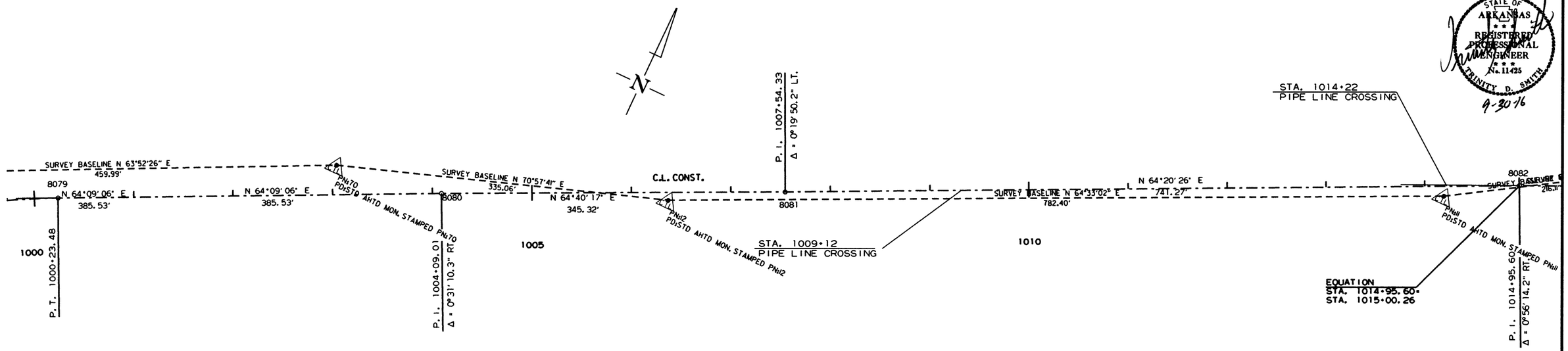
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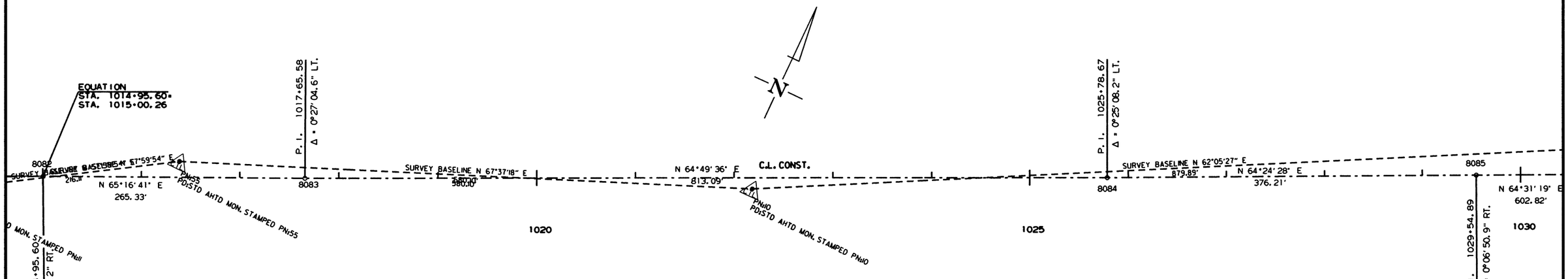
SURVEY CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	102	335

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
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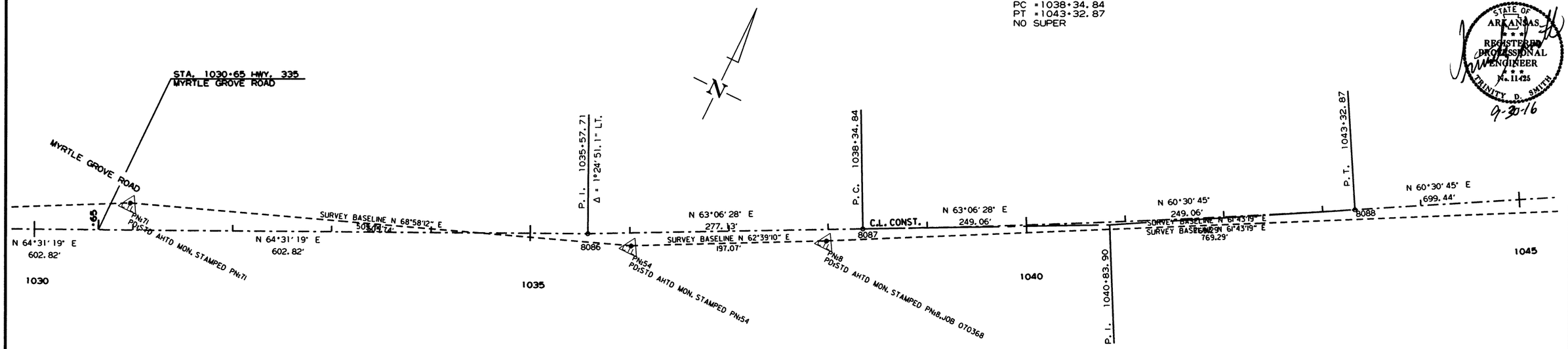
SURVEY CONTROL DETAILS

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.		070368	103	335

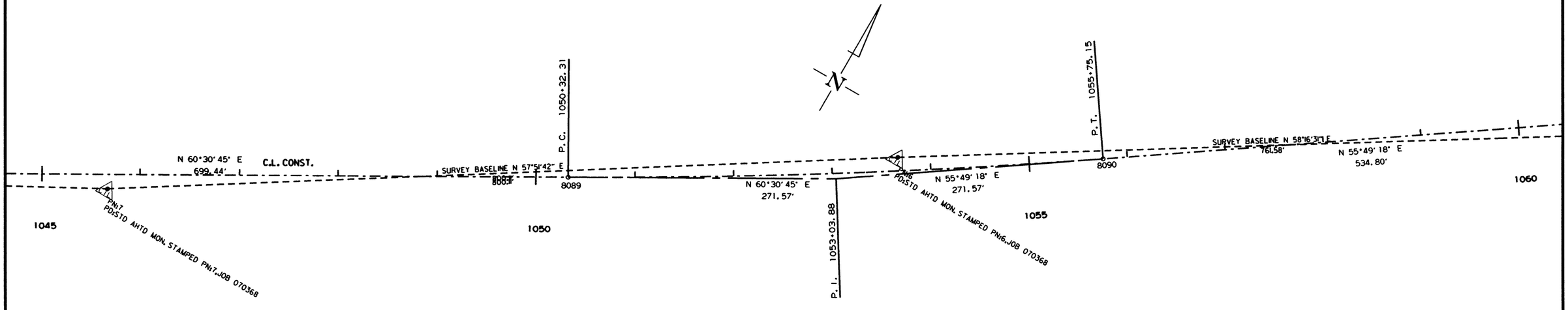
(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

C.L. CONSTRUCT
PI =1040+83.90
Δ = 02°35'42" LT.
D = 0°31'16"
T = 249.06'
L = 498.03'
PC =1038+34.84
PT =1043+32.87
NO SUPER



C.L. CONSTRUCT
PI =1053+03.88
Δ = 04°41'27" LT.
D = 0°51'51"
T = 271.57'
L = 542.84'
PC =1050+32.31
PT =1055+75.15
e = 0.020'/'
Ls = 250'



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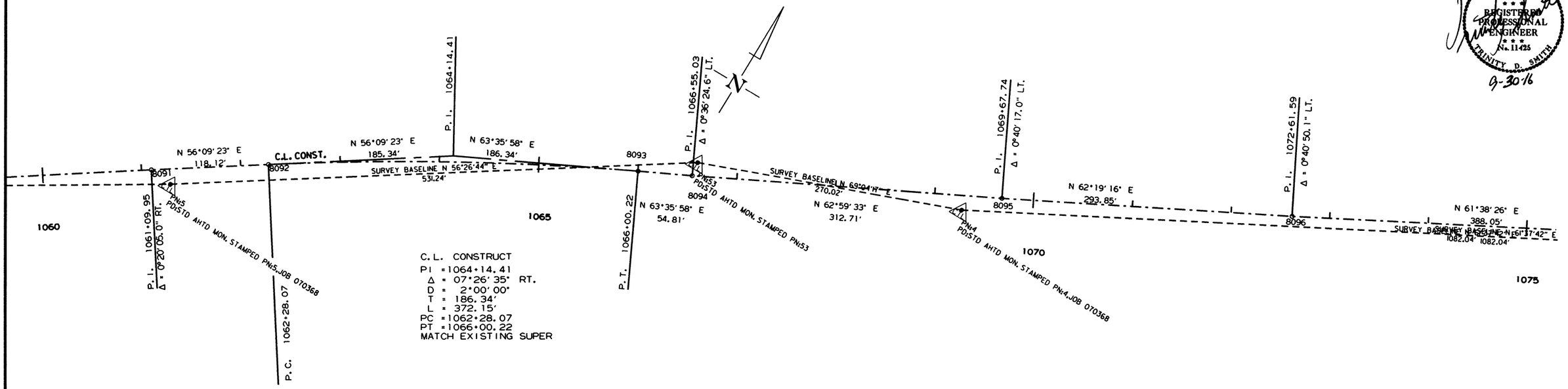
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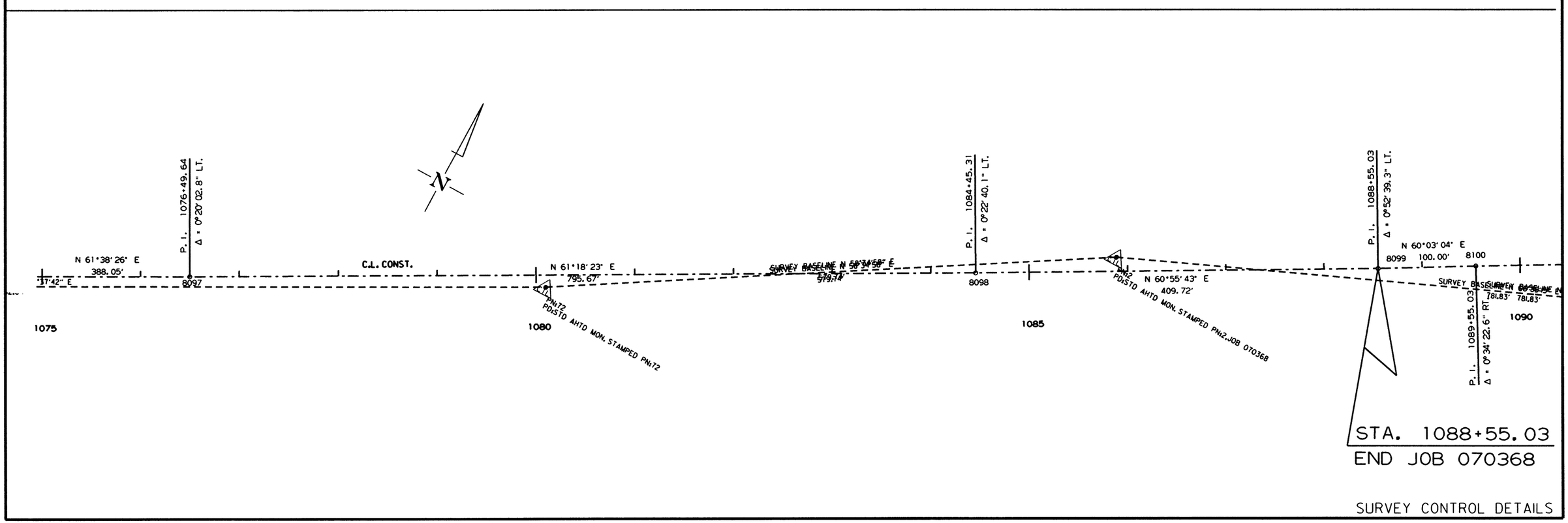
SURVEY CONTROL DETAILS

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.		070368	104	335

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16





SURVEY CONTROL DETAILS

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				6	ARK.			
				JOB NO.		070368	105	335

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

STA. 702+68 IN PLACE
18" X 29' R.C. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE & CONSTRUCT
24" X 58' PIPE CULVERT
WITH FES LT. & RT.
D.A. = 12.8 AC., Q25 = 18.8 C.F.S.
R.C. PIPE (CLASS IV)(TYPE 3 BEDDING) = 58 LIN. FT.
C.M. PIPE (TYPE 2 BEDDING) = 62 LIN. FT.
24" FES = 2 EACH

STA. 701+60 INSTALL
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 70 CU. YDS.

STA. 704+27 IN PLACE
10' X 24' PVC PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +29
18" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 25 CU. YDS.

STA. 705+54 INSTALL
18" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 25 CU. YDS.

STA. 706+34 CONSTRUCT
APPR. ON LT. = 25 CU. YDS.

STA. 714+12 IN PLACE
60" X 34' C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE HDWLS. LT. & RT. & EXTEND C.M. PIPE
12' LT. & 18' RT.
(TYPE 2 BEDDING) WITH
FES LT. & RT.
D.A. = 194.5 AC., Q25 = 224.4 C.F.S.
60" C.M. PIPE = 30 LIN. FT.
60" FES = 2 EACH

REMOVAL AND DISPOSAL OF FENCE

STA. 702+80 - STA. 703+45	RT.	105	LIN. FT.
STA. 703+90 - STA. 705+50	RT.	200	LIN. FT.
STA. 705+70 - STA. 712+90	LT.	740	LIN. FT.

STA. 714+01 CONSTRUCT
60" X 58' PIPE CULVERT
WITH FES LT. & RT.
D.A. = 194.5 AC., Q25 = 224.4 C.F.S.
R.C. PIPE (CLASS IV)(TYPE 3 BEDDING) = 58 LIN. FT.
C.M. PIPE (TYPE 2 BEDDING) = 62 LIN. FT.
60" FES = 2 EACH

3' CHAIN LINK FENCE — 16'-0" GATES

STA. 702+82 - STA. 703+42	RT.	89	LIN. FT.	1
STA. 705+71 - STA. 712+89	LT.	703	LIN. FT.	1

STA. 714+18 IN PLACE
60" X 34' C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE & CONSTRUCT @ +22
60" X 58' PIPE CULVERT
WITH FES LT. & RT.
D.A. = 194.5 AC., Q25 = 224.4 C.F.S.
R.C. PIPE (CLASS IV)(TYPE 3 BEDDING) = 58 LIN. FT.
C.M. PIPE (TYPE 2 BEDDING) = 62 LIN. FT.
60" FES = 2 EACH

STA. 700+21.07
BEGIN JOB 070368
LOG MILE 0.00

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

STA. 703+52 IN PLACE
14" X 17' PVC PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 35 CU. YDS.
UNCLASS. EXC. ON RT. = 5 CU. YDS.

STA. 706+62 INSTALL
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 35 CU. YDS.
UNCLASS. EXC. ON RT. = 5 CU. YDS.

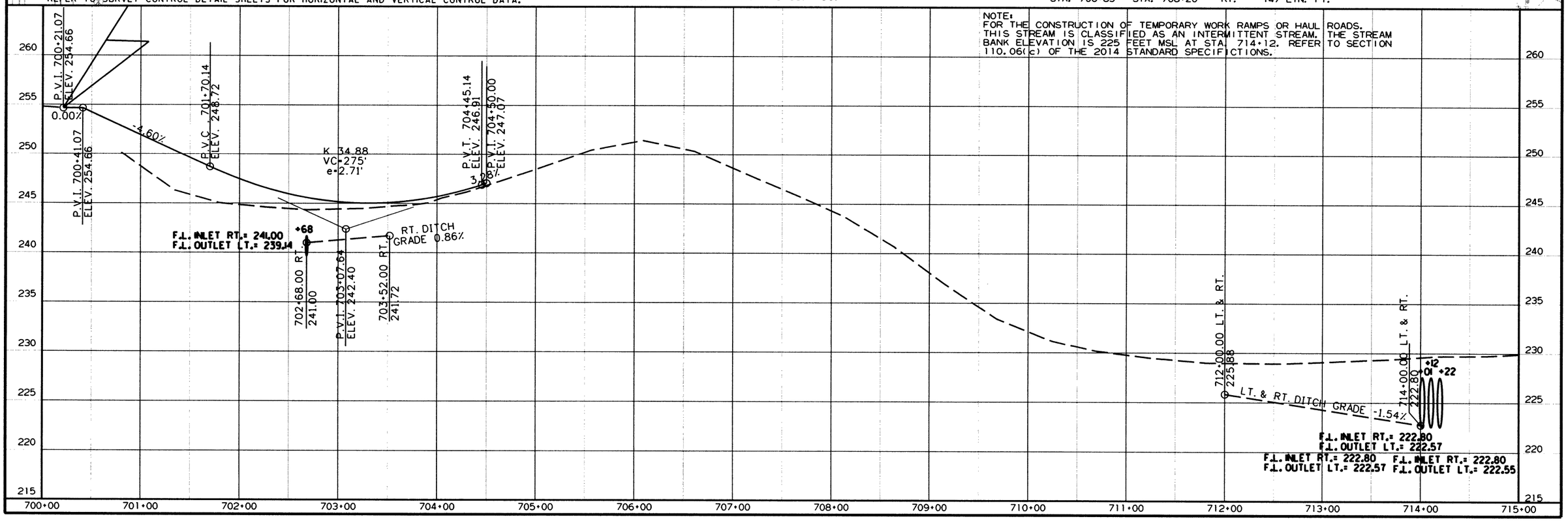
STA. 708+51 IN PLACE
18" X 25' C.P. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 35 CU. YDS.
UNCLASS. EXC. ON RT. = 5 CU. YDS.

STA. 710+95 IN PLACE
18" X 25' C.P. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.

WIRE FENCE (TYPE C)

STA. 706+83 - STA. 708+20	RT.	147	LIN. FT.

NOTE:
FOR THE CONSTRUCTION OF TEMPORARY WORK RAMPS OR HAUL ROADS. THIS STREAM IS CLASSIFIED AS AN INTERMITTENT STREAM. THE STREAM BANK ELEVATION IS 225 FEET MSL AT STA. 714+12. REFER TO SECTION 110.06(c) OF THE 2014 STANDARD SPECIFICTIONS.



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				6	ARK.			
				JOB NO.		070368	106	335

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
TRINITY D. SMITH
No. 11425
9-26-16

STA. 716+44 IN PLACE
24" X 42' PVC PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +48
24" X 44' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT TURNOUT ON LT. = 40 CU. YDS.
UNCLASS. EXC. ON LT. = 10 CU. YDS.

STA. 722+47 IN PLACE
18" X 41' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +48
18" X 46' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT TURNOUT ON LT. = 40 CU. YDS.
UNCLASS. EXC. ON LT. = 5 CU. YDS.

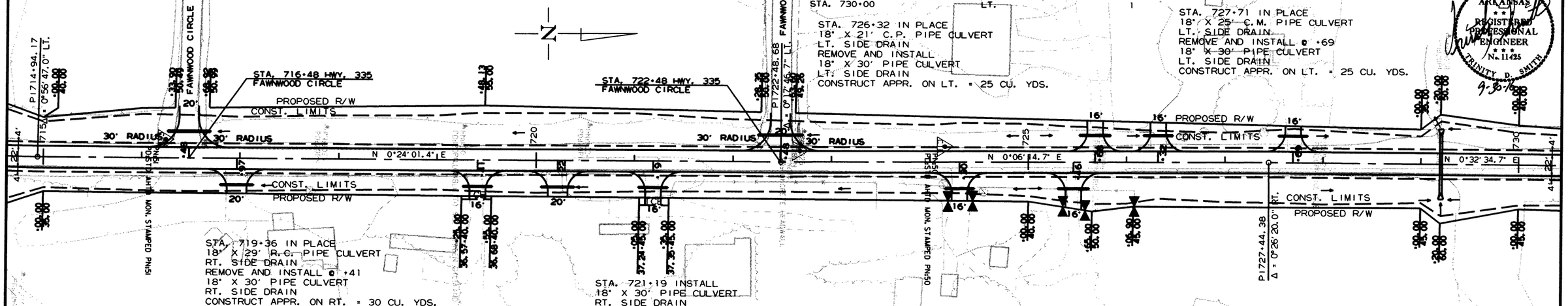
STA. 725+65 IN PLACE
18" X 25' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +68
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.

REMOVAL AND DISPOSAL OF FENCE — GATES

STA. 721+35 - STA. 723+45	RT.	250 LIN. FT.	
STA. 723+70 - STA. 724+20	RT.	50 LIN. FT.	
STA. 724+42 - STA. 726+09	RT.	210 LIN. FT.	
STA. 730+00	LT.		1

STA. 726+32 IN PLACE
18" X 21' C.P. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
18" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 25 CU. YDS.

STA. 727+71 IN PLACE
18" X 25' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +69
18" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 25 CU. YDS.



STA. 719+36 IN PLACE
18" X 29' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +41
18" X 30' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.

STA. 721+19 INSTALL
18" X 30' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 25 CU. YDS.

STA. 716+96 IN PLACE
18" X 29' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +97
18" X 34' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 35 CU. YDS.

STA. 720+19 IN PLACE
18" X 28' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +22
18" X 34' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.

STA. 724+30 INSTALL
18" X 30' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.

WIRE FENCE (TYPE D) — 16'-0" GATES

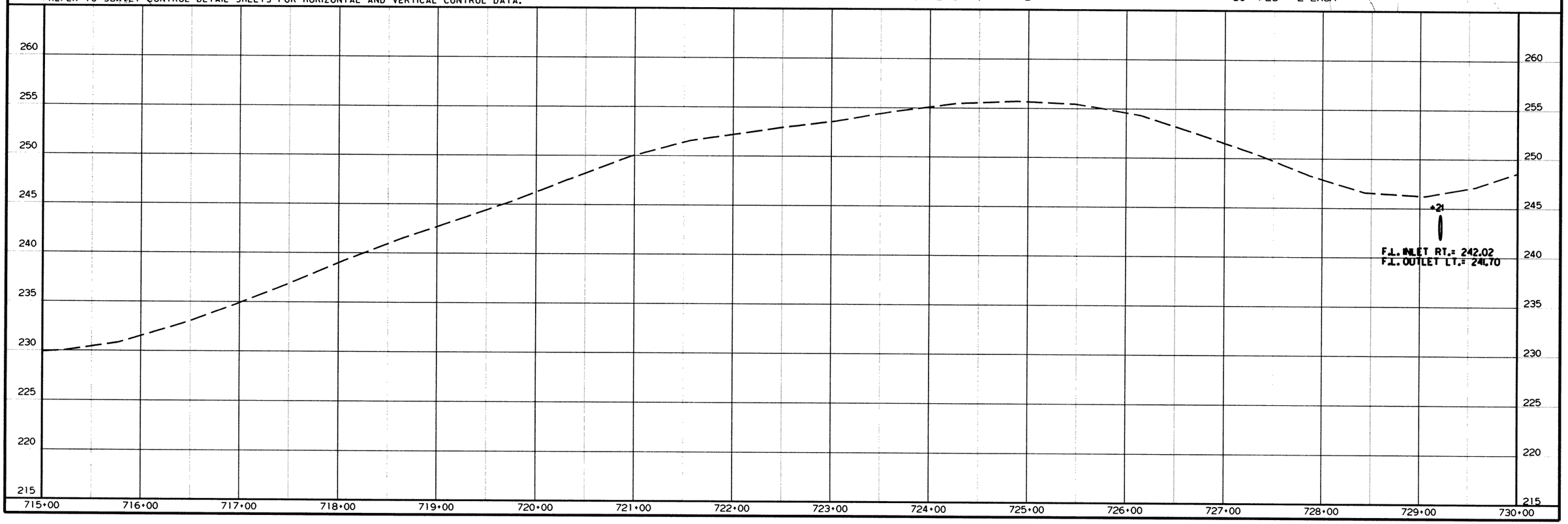
STA. 723+68 - STA. 726+08	RT.	207 LIN. FT.	2

STA. 725+46 INSTALL
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 35 CU. YDS.
UNCLASS. EXC. ON RT. = 5 CU. YDS.

16'-0" GATES

STA. 729+21 IN PLACE
30" X 32' C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE & CONSTRUCT
30" X 58' PIPE CULVERT
WITH FES LT. & RT.
D.A. = 12.8 AC., Q25 = 18.8 C.F.S.
R.C. PIPE (CLASS V)(TYPE 3 BEDDING) = 58 LIN. FT.
C.M. PIPE (TYPE 2 BEDDING) = 62 LIN. FT.
30" FES = 2 EACH

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.



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(2) PLAN AND PROFILE SHEETS

WIRE FENCE (TYPE D) 20'-0" GATES

STA. 734+45 - STA. 735+47 RT. 75 LIN. FT. 1

STA. 732+40 INSTALL
18" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 25 CU. YDS.

STA. 736+50 IN PLACE
18" X 38' C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE

STA. 736+43 IN PLACE
16" X 38' R.C. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE

STA. 737+42 CONSTRUCT
TURNOUT ON LT. = 730 CU. YDS.

STA. 738+17 IN PLACE
24" X 29' R.C. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE

REMOVAL AND DISPOSAL OF FENCE

STA. 734+50 - STA. 734+73 RT. 24 LIN. FT.
STA. 734+83 - STA. 735+22 RT. 44 LIN. FT.

OBLITERATE ROADWAY

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STA. 732+87 IN PLACE
36" X 38' C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE & CONSTRUCT
44" X 27" X 58' ARCH PIPE CULVERT
WITH FES LT. & RT.
D.A. = 6.6 AC., Q25 = 8.6 C.F.S.
R.C. ARCH PIPE (CLASS V)(TYPE 3 BEDDING) = 58 LIN. FT.
C.M. ARCH PIPE (TYPE 2 BEDDING) = 62 LIN. FT.
44" X 27" ARCH FES = 2 EACH

STA. 735+26 INSTALL
18" X 34' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 35 CU. YDS.
UNCLASS. EXC. ON RT. = 40 CU. YDS.

STA. 738+16 CONSTRUCT
24" X 72' PIPE CULVERT
WITH FES LT. & RT.
D.A. = 9.8 AC., Q25 = 12.9 C.F.S.
R.C. PIPE (CLASS V)(TYPE 3 BEDDING) = 72 LIN. FT.
C.M. PIPE (TYPE 2 BEDDING) = 76 LIN. FT.
24" FES = 2 EACH

STA. 736+50 CONSTRUCT
24" X 76' PIPE CULVERT
WITH FES LT. & RT.
D.A. = 1.28 AC., Q25 = 2.9 C.F.S.
R.C. PIPE (CLASS IV)(TYPE 3 BEDDING) = 76 LIN. FT.
C.M. PIPE (TYPE 2 BEDDING) = 80 LIN. FT.
24" FES = 2 EACH

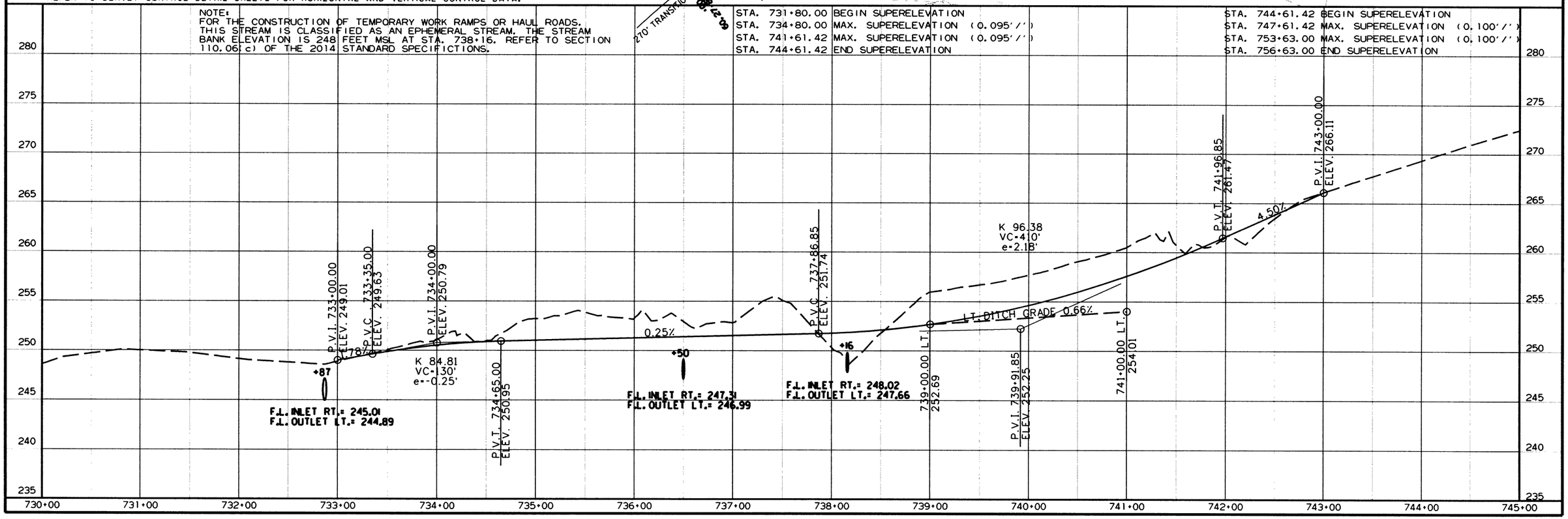
C.L. CONSTRUCT
PI = 739+19.89
Δ = 76°24'42.5" RT.
D = 6°30'00"
T = 693.80'
L = 1175.57'
PC = 732+26.09
PT = 744+01.66
e = 0.095'/'
Ls = 300'

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

NOTE:
FOR THE CONSTRUCTION OF TEMPORARY WORK RAMPS OR HAUL ROADS. THIS STREAM IS CLASSIFIED AS AN EPHEMERAL STREAM. THE STREAM BANK ELEVATION IS 248 FEET MSL AT STA. 738+16. REFER TO SECTION 110.06(c) OF THE 2014 STANDARD SPECIFICTIONS.

STA. 731+80.00 BEGIN SUPERELEVATION
STA. 734+80.00 MAX. SUPERELEVATION (0.095'/')
STA. 741+61.42 MAX. SUPERELEVATION (0.095'/')
STA. 744+61.42 END SUPERELEVATION

STA. 744+61.42 BEGIN SUPERELEVATION
STA. 747+61.42 MAX. SUPERELEVATION (0.100'/')
STA. 753+63.00 MAX. SUPERELEVATION (0.100'/')
STA. 756+63.00 END SUPERELEVATION



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(2) PLAN AND PROFILE SHEETS

3' CHAIN LINK FENCE

STA. 754+06 - STA. 755+35 RT. 131 LIN. FT.

C.L. CONSTRUCT
PI = 750+60.25
Δ = 75°38'13.8" LT.
D = 8°15'00"
T = 539.07'
L = 916.81'
PC = 745+21.18
PT = 754+38.00
e = 0.100'/'
Ls = 300'

C.L. CONSTRUCT
PI = 750+60.25
Δ = 75°38'13.8" LT.
D = 8°15'00"
T = 539.07'
L = 916.81'
PC = 745+21.18
PT = 754+38.00
e = 0.100'/'
Ls = 300'

OBLITERATE ROADWAY

REMOVAL AND DISPOSAL OF FENCE GATES
STA. 754+13 - STA. 755+40 RT. 130 LIN. FT. 2
STA. 759+65 RT.

STA. 748+00 IN PLACE
18" X 28' R.C. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE

STA. 750+80 IN PLACE
18" X 20' C.M. PIPE CULVERT
RT. SIDE DRAIN
RETAIN

STA. 749+97 IN PLACE
24" X 22' C.M. PIPE CULVERT
RT. SIDE DRAIN
RETAIN

STA. 747+80 CONSTRUCT
24" X 68' PIPE CULVERT ON 30° RT. FWD. SKEW
WITH FES LT. & RT.
D.A. = 6.3 AC., Q25 = 12.2 C.F.S.
R.C. PIPE (CLASS IV)(TYPE 3 BEDDING) = 68 LIN. FT.
C.M. PIPE (TYPE 2 BEDDING) = 72 LIN. FT.
24" FES = 2 EACH

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

STA. 751+20 INSTALL
18" X 56' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT TURNOUT ON RT. = 85 CU. YDS.

STA. 752+75 IN PLACE
12" X 30' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +78
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 35 CU. YDS.

STA. 755+50 IN PLACE
12" X 31' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +44
18" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 25 CU. YDS.

STA. 756+37 IN PLACE
18" X 20' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +36
18" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 25 CU. YDS.

STA. 755+52 IN PLACE
18" X 31' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +58
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.

STA. 757+84 IN PLACE
18" X 25' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +89
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 35 CU. YDS.

STA. 758+52 INSTALL
18" X 38' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 35 CU. YDS.

STA. 759+88 CONSTRUCT
APPR. ON RT. = 30 CU. YDS.

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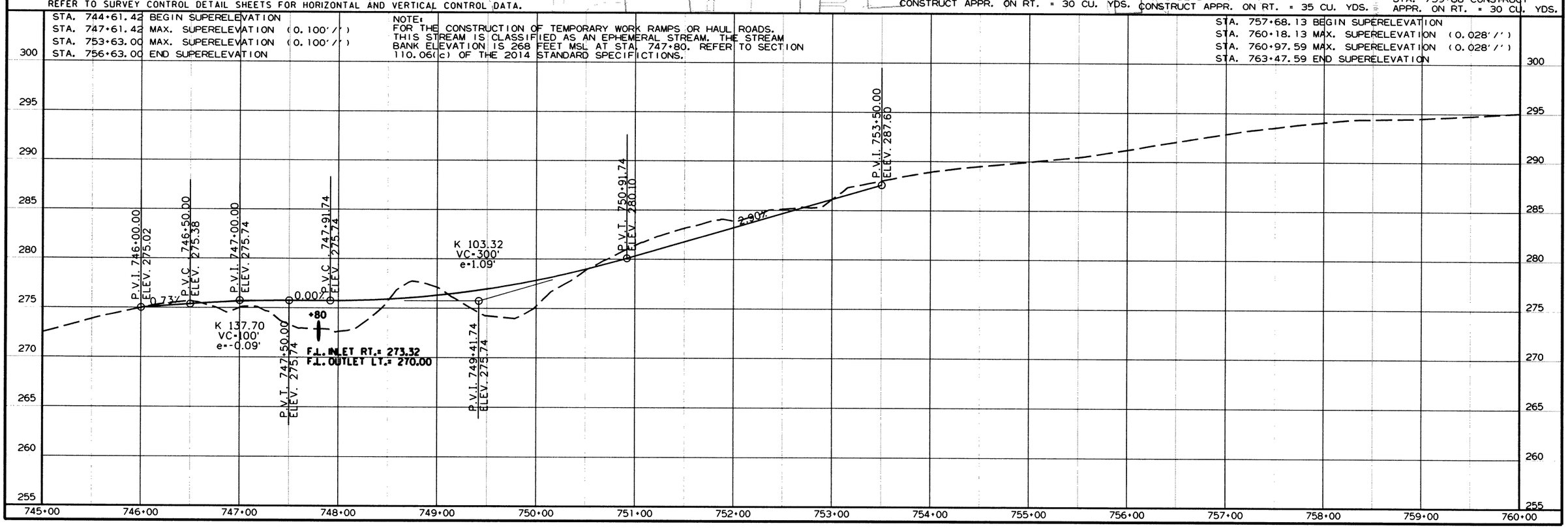
STA. 756+00
PIPE LINE CROSSING

PROPOSED R/W
CONST. LIMITS
EXIST. R/W
MATCHLINE
N 0°43'17.1" E
N 76°21'30.8" E
PC745+21.18
PT754+38.00
PI 750+60.25
PC759+55.63
TCE
CP
PNH45 POSTO AHTD MON. STAMPED PN45
PNH46 POSTO AHTD MON. STAMPED PN46
PNH47 POSTO AHTD MON. STAMPED PN47
PNH65 POSTO AHTD MON. STAMPED PN65

NOTE:
FOR THE CONSTRUCTION OF TEMPORARY WORK RAMPS OR HAUL ROADS, THIS STREAM IS CLASSIFIED AS AN EPHEMERAL STREAM. THE STREAM BANK ELEVATION IS 268 FEET MSL AT STA. 747+80. REFER TO SECTION 110.06(c) OF THE 2014 STANDARD SPECIFICTIONS.

STA. 744+61.42 BEGIN SUPERELEVATION
STA. 747+61.42 MAX. SUPERELEVATION (0.100'/')
STA. 753+63.00 MAX. SUPERELEVATION (0.100'/')
STA. 756+63.00 END SUPERELEVATION

STA. 757+68.13 BEGIN SUPERELEVATION
STA. 760+18.13 MAX. SUPERELEVATION (0.028'/')
STA. 760+97.59 MAX. SUPERELEVATION (0.028'/')
STA. 763+47.59 END SUPERELEVATION



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(2) PLAN AND PROFILE SHEETS

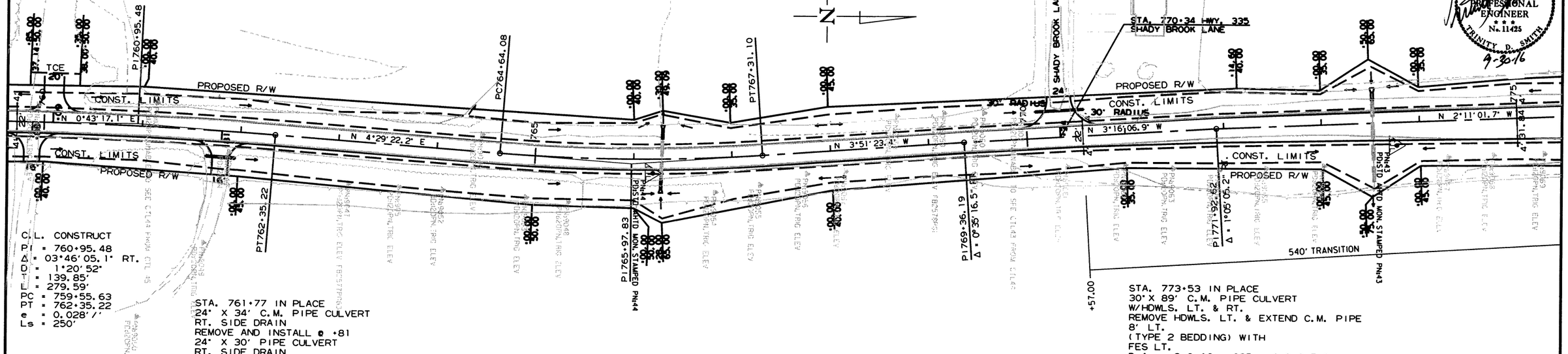
STATE OF ARKANSAS
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STA. 760+09 CONSTRUCT
APPR. ON LT. = 40 CU. YDS.

C.L. CONSTRUCT
PI = 765+97.83
Δ = 08°20'45.5" LT.
D = 3°07'32"
T = 133.75'
L = 267.02'
PC = 764+64.08
PT = 767+31.10
e = 0.059'/'
Ls = 250'

STA. 766+28 IN PLACE
24" X 40' C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE HDWLS. LT. & RT. & EXTEND C.M. PIPE
12' LT. & 12' RT.
(TYPE 2 BEDDING) WITH
FES LT. & RT.
D.A. = 1.9 AC., Q25 = 2.5 C.F.S.
24" C.M. PIPE = 24 LIN. FT.
24" FES = 2 EACH

STA. 770+34 INSTALL
18" X 50' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT TURNOUT ON LT. = 45 CU. YDS.


STA. 770+34 HWY. 335
SHADY BROOK LANE
SHADY BROOK LANE
P.I. 760+95.48
TCE
20'
PROPOSED R/W
CONST. LIMITS
N 0°43'17.1" E
N 4°29'22.2" E
N 3°51'23.4" W
N 3°16'06.9" W
N 2°11'01.7" W
PC 764+64.08
PT 767+31.10
PT 762+35.22
P.I. 765+97.83
Δ = 08°20'45.5" RT.
PHN44
PDSTD. MTD. MON. STAMPED PHN44
P.I. 769+36.19
Δ = 0°35'16.5" RT.
30' RADIUS
24'
14'
16'
4'
4'
4

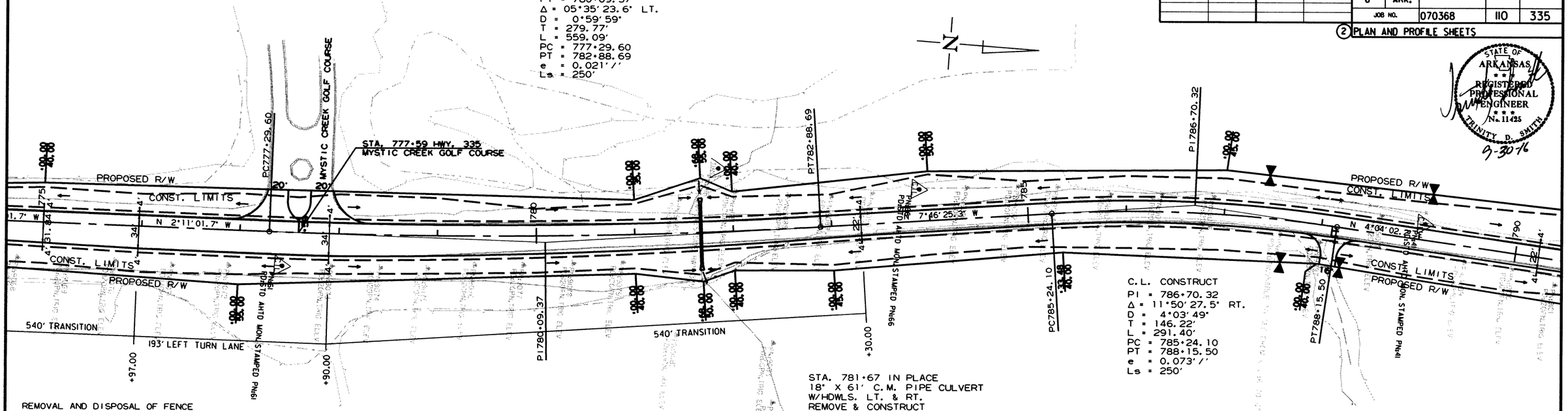
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(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
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STA. 777+59 CONSTRUCT
TURNOUT ON LT. = 95 CU. YDS.

C.L. CONSTRUCT
PI = 780+09.37
Δ = 05°35'23.6" LT.
D = 0°59'59"
T = 279.77'
L = 559.09'
PC = 777+29.60
PT = 782+88.69
e = 0.021'/'
Ls = 250'



C.L. CONSTRUCT
PI = 786+70.32
Δ = 11°50'27.5" RT.
D = 4°03'49"
T = 146.22'
L = 291.40'
PC = 785+24.10
PT = 788+15.50
e = 0.073'/'
Ls = 250'

STA. 788+11 CONSTRUCT
APPR. ON RT. = 30 CU. YDS.

STA. 781+67 IN PLACE
18" X 61' C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE & CONSTRUCT
24" X 62' PIPE CULVERT
WITH FES LT. & RT.
D.A. = 8.1 AC., Q25 = 19.7 C.F.S.
R.C. PIPE (CLASS V)(TYPE 3 BEDDING) = 62 LIN. FT.
C.M. PIPE (TYPE 2 BEDDING) = 66 LIN. FT.
24" FES = 2 EACH

REMOVAL AND DISPOSAL OF FENCE

STA. 787+46 - STA. 789+06	LT.	161 LIN. FT.	
STA. 787+63 - STA. 788+03	RT.	44 LIN. FT.	
STA. 788+15 - STA. 788+16	RT.	11 LIN. FT.	

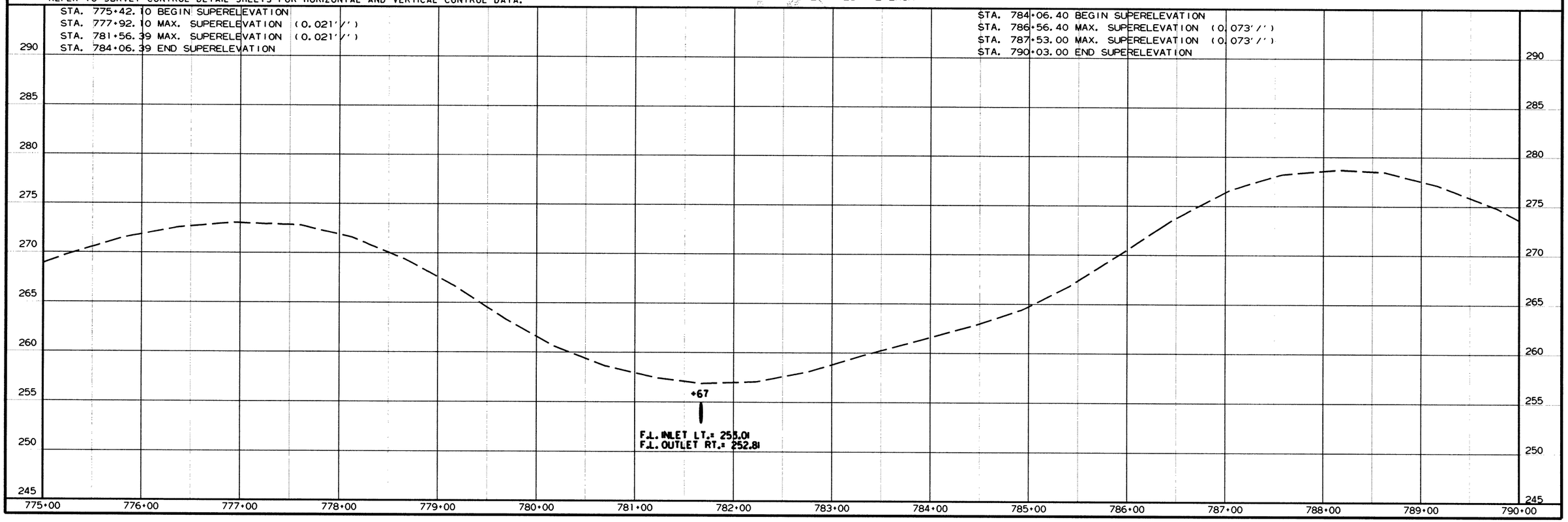
WIRE FENCE (TYPE D) 16'-0" GATES

STA. 787+45 - STA. 789+08	LT.	161 LIN. FT.	
STA. 787+60 - STA. 788+22	RT.	44 LIN. FT.	1

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

STA. 775+42.10 BEGIN SUPERELEVATION
STA. 777+92.10 MAX. SUPERELEVATION (0.021'/')
STA. 781+56.39 MAX. SUPERELEVATION (0.021'/')
STA. 784+06.39 END SUPERELEVATION

STA. 784+06.40 BEGIN SUPERELEVATION
STA. 786+56.40 MAX. SUPERELEVATION (0.073'/')
STA. 787+53.00 MAX. SUPERELEVATION (0.073'/')
STA. 790+03.00 END SUPERELEVATION



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(2) PLAN AND PROFILE SHEETS

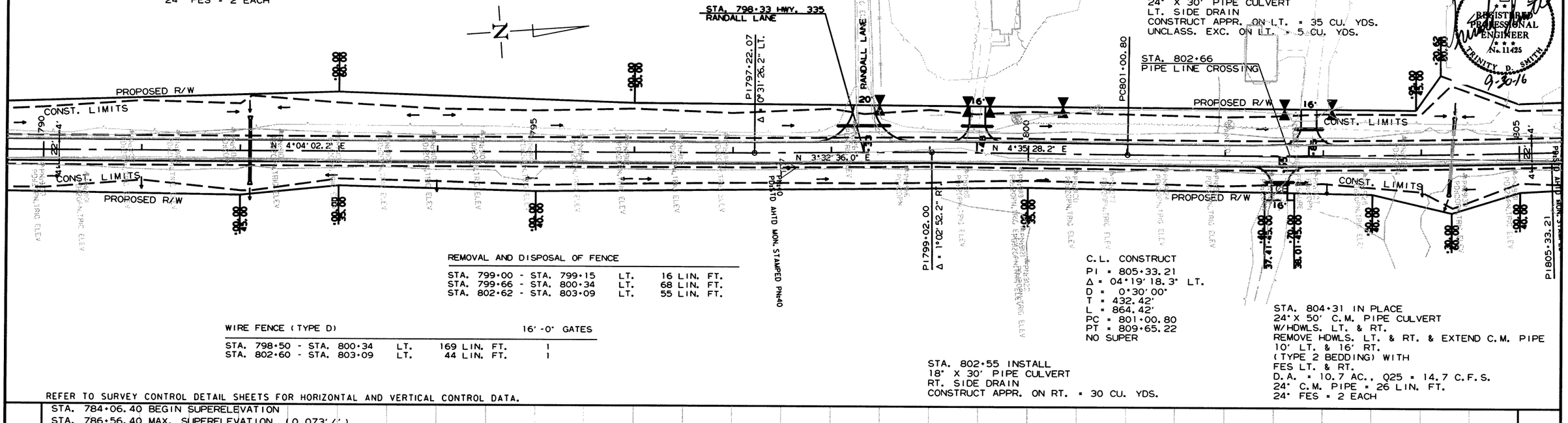
STATE OF ARKANSAS
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STA. 792+10 IN PLACE
18" X 36' R.C. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE & CONSTRUCT
24" X 62' PIPE CULVERT
WITH FES LT. & RT.
D.A. = 2.2 AC., Q25 = 3.1 C.F.S.
R.C. PIPE (CLASS III)(TYPE 3 BEDDING) = 58 LIN. FT.
C.M. PIPE (TYPE 2 BEDDING) = 62 LIN. FT.
24" FES = 2 EACH

STA. 798+36 IN PLACE
12" X 26' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +33
18" X 54' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT TURNOUT ON LT. = 40 CU. YDS.
UNCLASS. EXC. ON LT. = 5 CU. YDS.

STA. 799+44 IN PLACE
18" X 21' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +48
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 35 CU. YDS.

STA. 802+79 IN PLACE
24" X 25' METAL PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +85
24" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 35 CU. YDS.
UNCLASS. EXC. ON LT. = 5 CU. YDS.



REMOVAL AND DISPOSAL OF FENCE

STA. 799+00 - STA. 799+15	LT.	16 LIN. FT.
STA. 799+66 - STA. 800+34	LT.	68 LIN. FT.
STA. 802+62 - STA. 803+09	LT.	55 LIN. FT.

WIRE FENCE (TYPE D)

			16'-0" GATES
STA. 798+50 - STA. 800+34	LT.	169 LIN. FT.	1
STA. 802+60 - STA. 803+09	LT.	44 LIN. FT.	1

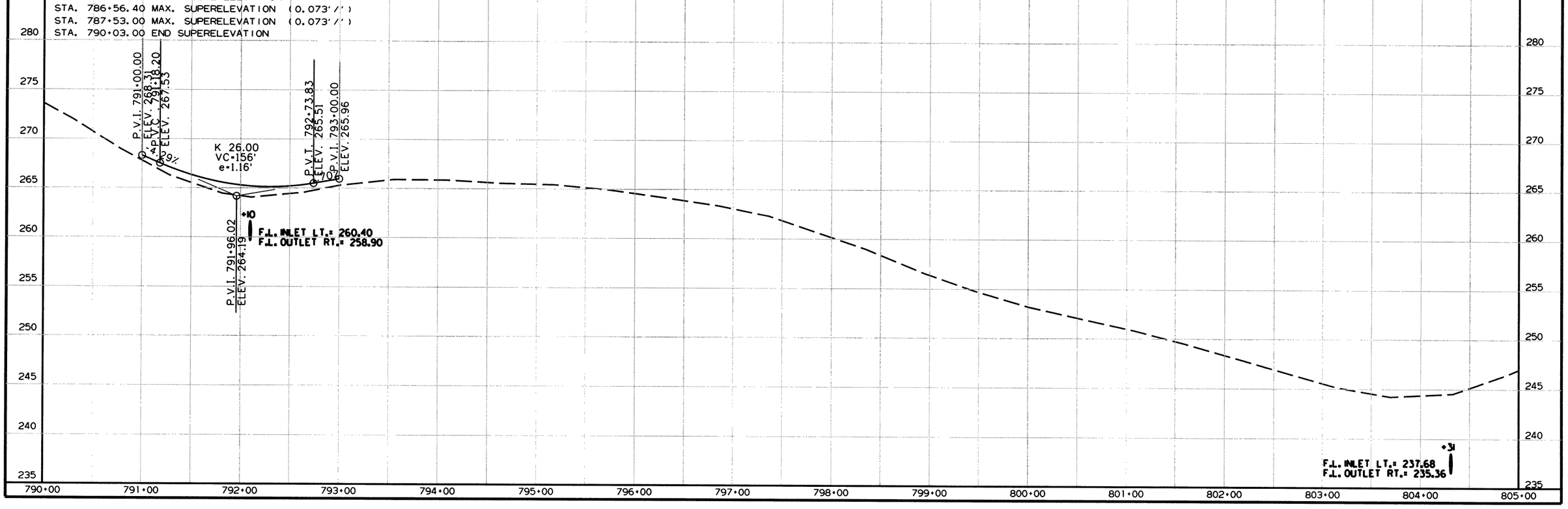
C.L. CONSTRUCT
PI = 805+33.21
Δ = 04°19'18.3" LT.
D = 0°30'00"
T = 432.42'
L = 864.42'
PC = 801+00.80
PT = 809+65.22
NO SUPER

STA. 802+55 INSTALL
18" X 30' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.

STA. 804+31 IN PLACE
24" X 50' C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE HDWLS. LT. & RT. & EXTEND C.M. PIPE
10' LT. & 16' RT.
(TYPE 2 BEDDING) WITH
FES LT. & RT.
D.A. = 10.7 AC., Q25 = 14.7 C.F.S.
24" C.M. PIPE = 26 LIN. FT.
24" FES = 2 EACH

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

STA. 784+06.40 BEGIN SUPERELEVATION
STA. 786+56.40 MAX. SUPERELEVATION (0.073'/')
STA. 787+53.00 MAX. SUPERELEVATION (0.073'/')
STA. 790+03.00 END SUPERELEVATION



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(2) PLAN AND PROFILE SHEETS

STA. 807+40 INSTALL
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 35 CU. YDS.
UNCLASS. EXC. ON LT. = 5 CU. YDS.

STA. 808+36 IN PLACE
12" X 57' C.P. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +37
18" X 48' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 60 CU. YDS.
UNCLASS. EXC. ON LT. = 5 CU. YDS.

C.L. CONSTRUCT
PI = 805+33.21
Δ = 04°19'18.3" LT.
D = 0°30'00"
T = 432.42'
L = 864.42'
PC = 801+00.80
PT = 809+65.22
NO SUPER

STA. 809+57 IN PLACE
18" X 30' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +58
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 35 CU. YDS.
UNCLASS. EXC. ON LT. = 5 CU. YDS.

STA. 812+16 IN PLACE
18" X 25' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +18
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 35 CU. YDS.

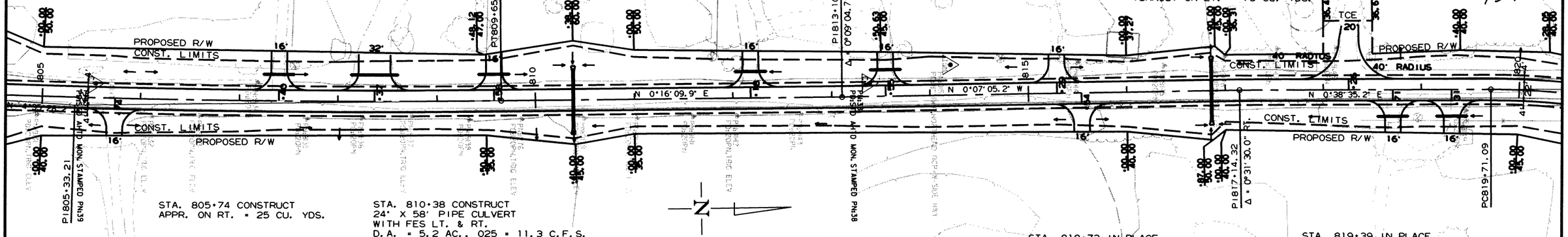
STA. 813+58 IN PLACE
18" X 24' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +55
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.

STA. 815+29 CONSTRUCT
APPR. ON LT. = 25 CU. YDS.

STA. 816+86 IN PLACE
18" X 32' R.C. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE & CONSTRUCT
24" X 58' PIPE CULVERT
WITH FES LT. & RT.
D.A. = 1.9 AC., Q25 = 4.2 C.F.S.
R.C. PIPE (CLASS V)(TYPE 3 BEDDING) = 58 LIN. FT.
C.M. PIPE (TYPE 2 BEDDING) = 62 LIN. FT.
24" FES = 2 EACH

STA. 818+26 CONSTRUCT
TURNOUT ON LT. = 75 CU. YDS.

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STA. 805+74 CONSTRUCT
APPR. ON RT. = 25 CU. YDS.

STA. 810+09 IN PLACE
18" X 30' R.C. PIPE CULVERT
WITH FES LT. & RT.
REMOVE

STA. 810+38 CONSTRUCT
24" X 58' PIPE CULVERT
WITH FES LT. & RT.
D.A. = 5.2 AC., Q25 = 11.3 C.F.S.
R.C. PIPE (CLASS V)(TYPE 3 BEDDING) = 58 LIN. FT.
C.M. PIPE (TYPE 2 BEDDING) = 62 LIN. FT.
24" FES = 2 EACH

STA. 815+54 CONSTRUCT
APPR. ON RT. = 30 CU. YDS.

REMOVAL AND DISPOSAL OF FENCE

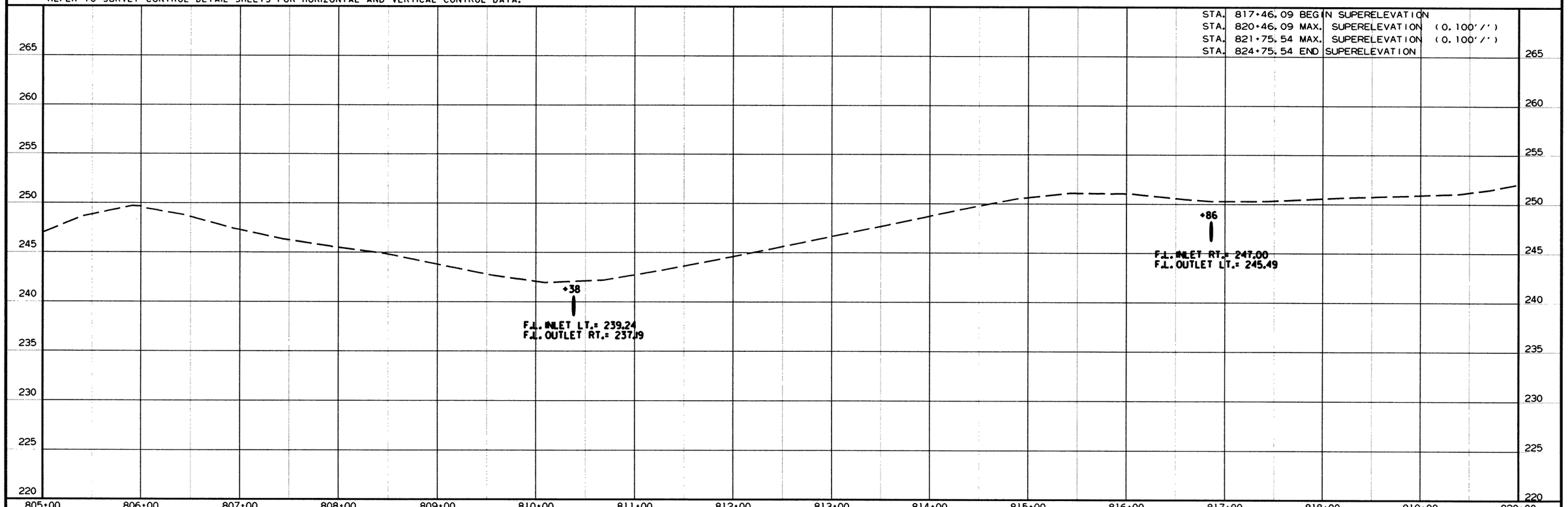
STA. 811+84	LT.	9 LIN. FT.
STA. 818+40 - STA. 820+50	RT.	210 LIN. FT.

STA. 818+73 IN PLACE
18" X 20' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +71
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.

STA. 819+39 IN PLACE
18" X 25' C.P. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +31
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

STA. 817+46.09 BEGIN SUPERELEVATION
STA. 820+46.09 MAX. SUPERELEVATION (0.100'/')
STA. 821+75.54 MAX. SUPERELEVATION (0.100'/')
STA. 824+75.54 END SUPERELEVATION



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(2) PLAN AND PROFILE SHEETS

WIRE FENCE (TYPE D) 16'-0" GATES

STA. 822+40 - STA. 828+56 RT. 744 LIN. FT. 2

REMOVAL AND DISPOSAL OF FENCE

STA. 818+40 - STA. 820+50	RT.	210	LIN. FT.
STA. 820+50 - STA. 828+40	RT.	790	LIN. FT.
STA. 824+71 - STA. 825+15	LT.	72	LIN. FT.
STA. 825+56 - STA. 826+38	RT.	86	LIN. FT.
STA. 826+54 - STA. 828+54	RT.	217	LIN. FT.
STA. 828+96 - STA. 829+03	LT.	17	LIN. FT.
STA. 829+47 - STA. 832+37	RT.	270	LIN. FT.

STA. 822+40 CONSTRUCT
APPR. ON RT. = 35 CU. YDS.
UNCLASS. EXC. ON RT. = 10 CU. YDS.

C.L. CONSTRUCT
PI = 821+75.21
Δ = 32°45'29.6" RT.
D = 8°15'00"
T = 204.13'
L = 397.07'
PC = 819+71.09
PT = 823+68.15
e = 0.100'/'
Ls = 300'

STA. 825+73 IN PLACE
18" X 26' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +71
18" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 25 CU. YDS.

WIRE FENCE (TYPE D-1)

STA. 824+69 - STA. 825+15 LT. 48 LIN. FT.

STA. 826+49 IN PLACE
18" X 20' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +48
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.

STA. 828+15 INSTALL
18" X 28' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 20 CU. YDS.

STA. 829+38 INSTALL
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.

STA. 829+28 CONSTRUCT
APPR. ON RT. = 205 CU. YDS.

C.L. CONSTRUCT
PI = 830+79.28
Δ = 49°12'01.3" LT.
D = 5°59'37"
T = 437.66'
L = 820.86'
PC = 826+41.62
PT = 834+62.48
e = 0.092'/'
Ls = 300'

STA. 831+66 IN PLACE
18" X 46' R.C. PIPE CULVERT
18" X 47' R.C. PIPE CULVERT
LT. SIDE DRAINS
REMOVE AND INSTALL @ +68
18" X 48' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 50 CU. YDS.

STA. 834+80 IN PLACE
18" X 41' C.P. PIPE CULVERT
RT. SIDE DRAIN
REMOVE

WIRE FENCE (TYPE C)

STA. 829+42 - STA. 832+54 RT. 318 LIN. FT.

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

STA. 817+46.09 BEGIN SUPERELEVATION
STA. 820+46.09 MAX. SUPERELEVATION (0.100'/')
STA. 821+75.54 MAX. SUPERELEVATION (0.100'/')
STA. 824+75.54 END SUPERELEVATION

STA. 824+75.56 BEGIN SUPERELEVATION
STA. 827+75.56 MAX. SUPERELEVATION (0.092'/')
STA. 832+47.20 MAX. SUPERELEVATION (0.092'/')
STA. 835+47.20 END SUPERELEVATION

260 255 250 245 240 235 230 225 220 215

820+00 821+00 822+00 823+00 824+00 825+00 826+00 827+00 828+00 829+00 830+00 831+00 832+00 833+00 834+00 835+00

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(2) PLAN AND PROFILE SHEETS

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STA. 836+64 IN PLACE
18" X 25' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +58
18" X 52' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT TURNOUT ON LT. = 40 CU. YDS.

STA. 839+49 INSTALL
18" X 62' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 65 CU. YDS.

STA. 840+56 CONSTRUCT
TURNOUT ON LT. = 40 CU. YDS.
UNCLASS. EXC. ON LT. = 75 CU. YDS.

STA. 840+88 IN PLACE
24" X 45' C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE HDWLS. LT. & RT. & EXTEND C.M. PIPE
32' LT. & 16' RT.
(TYPE 2 BEDDING) WITH
FES LT. & RT.
D.A. = 0.37 AC., Q25 = 1.0 C.F.S.
24" C.M. PIPE = 48 LIN. FT.
24" FES = 2 EACH

STA. 843+22 INSTALL
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.

C.L. CONSTRUCT
PI = 848+71.98
Δ = 04°35'04.1" LT.
D = 2°39'04"
T = 86.51'
L = 172.93'
PC = 847+85.47
PT = 849+58.41
e = 0.052'/'
Ls = 250'

C.L. CONSTRUCT
PI = 837+82.57
Δ = 19°09'51.4" RT.
D = 6°25'16"
T = 150.64'
L = 298.46'
PC = 836+31.93
PT = 839+30.39
e = 0.095'/'
Ls = 300'

STA. 836+13 IN PLACE
24" X 38' R.C. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE HDWLS. LT. & RT. & EXTEND R.C. PIPE
8' LT. & 12' RT.
(CLASS IV)(TYPE 2 BEDDING) WITH
FES LT. & RT.
D.A. = 4.7 AC., Q25 = 10.7 C.F.S.
24" R.C. PIPE = 28 LIN. FT.
24" FES = 2 EACH

C.L. CONSTRUCT
PI = 841+41.43
Δ = 04°18'43.7" RT.
D = 1°36'40"
T = 133.88'
L = 267.63'
PC = 840+07.54
PT = 842+75.18
e = 0.033'/'
Ls = 250'

STA. 840+55 CONSTRUCT
TURNOUT ON RT. = 220 CU. YDS.

STA. 841+54 INSTALL
18" X 30' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.

STA. 842+11 CONSTRUCT
APPR. ON RT. = 30 CU. YDS.

STA. 843+88 INSTALL
18" X 30' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.

STA. 845+44 IN PLACE
18" X 25' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +42
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.

STA. 847+07 IN PLACE
18" X 24' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +05
18" X 38' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 60 CU. YDS.

STA. 848+44 IN PLACE
18" X 25' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +50
18" X 42' R.C. PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 100 CU. YDS.

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

STA. 824+75.56 BEGIN SUPERELEVATION
STA. 827+75.56 MAX. SUPERELEVATION (0.092'/')
STA. 832+47.20 MAX. SUPERELEVATION (0.092'/')
STA. 835+47.20 END SUPERELEVATION

STA. 835+47.20 BEGIN SUPERELEVATION
STA. 837+81.15 MAX. SUPERELEVATION (0.074'/')
STA. 837+98.17 MAX. SUPERELEVATION (0.074'/')
STA. 839+68.96 END SUPERELEVATION (R.C.)

STA. 839+70.19 BEGIN SUPERELEVATION (R.C.)
STA. 840+70.04 MAX. SUPERELEVATION (0.033'/')
STA. 842+12.68 MAX. SUPERELEVATION (0.033'/')
STA. 844+62.68 END SUPERELEVATION

STA. 845+97.97 BEGIN SUPERELEVATION
STA. 848+47.97 MAX. SUPERELEVATION (0.052'/')
STA. 848+95.90 MAX. SUPERELEVATION (0.052'/')
STA. 851+45.90 END SUPERELEVATION

+13
F.I. INLET LT.= 220.63
F.I. OUTLET RT.= 219.29

+88
F.I. INLET LT.= 232.43
F.I. OUTLET RT.= 230.22

845+00.00 LT. & RT.
231.24

849+00.00 LT.
230.84

RT. DITCH GRADE -0.10%
LT. DITCH GRADE -0.10%

255 250 245 240 235 230 225 220 215 210

835+00 836+00 837+00 838+00 839+00 840+00 841+00 842+00 843+00 844+00 845+00 846+00 847+00 848+00 849+00 850+00

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(2) PLAN AND PROFILE SHEETS

STA. 850+22 IN PLACE
15" X 24' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +23
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 25 CU. YDS.

STA. 852+16 IN PLACE
18" X 25' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +18
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.

STA. 853+95 IN PLACE
18" X 25' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +98
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.

STA. 857+09 INSTALL
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.

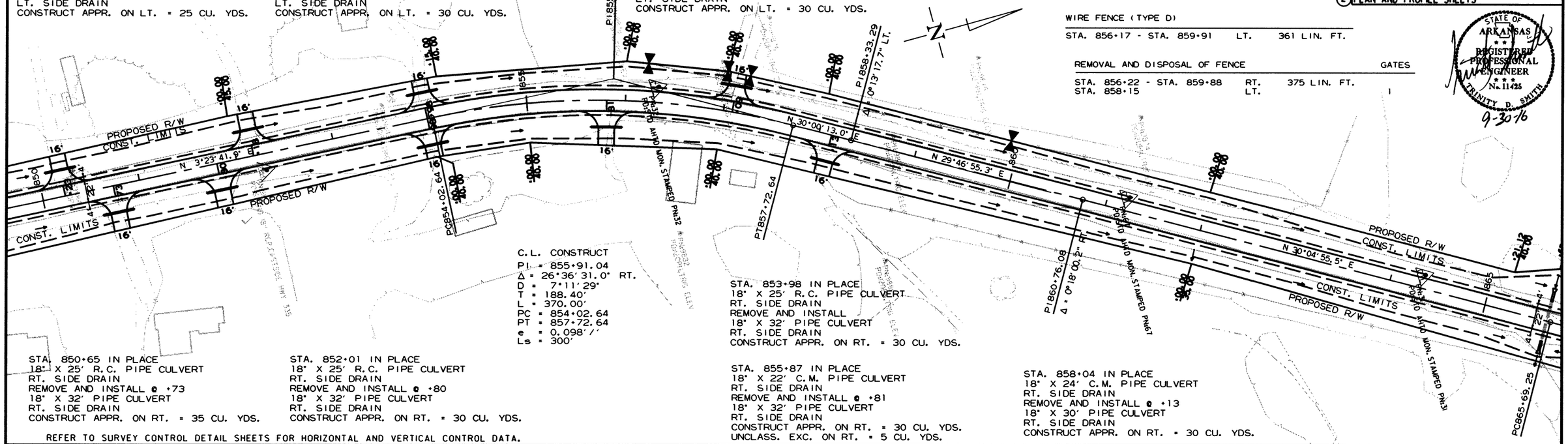
WIRE FENCE (TYPE D)

STA. 856+17 - STA. 859+91 LT. 361 LIN. FT.

REMOVAL AND DISPOSAL OF FENCE GATES

STA. 856+22 - STA. 859+88 RT. 375 LIN. FT.
STA. 858+15 LT. 1

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No. 11425
TRINITY D. SMITH
9-30-16



C.L. CONSTRUCT
PI = 855+91.04
Δ = 26°36' 31.0" RT.
D = 7°11' 29"
T = 188.40'
L = 370.00'
PC = 854+02.64
PT = 857+72.64
e = 0.098'/'
Ls = 300'

STA. 850+65 IN PLACE
18" X 25' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +73
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 35 CU. YDS.

STA. 852+01 IN PLACE
18" X 25' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +80
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.

STA. 853+98 IN PLACE
18" X 25' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.

STA. 855+87 IN PLACE
18" X 22' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +81
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.
UNCLASS. EXC. ON RT. = 5 CU. YDS.

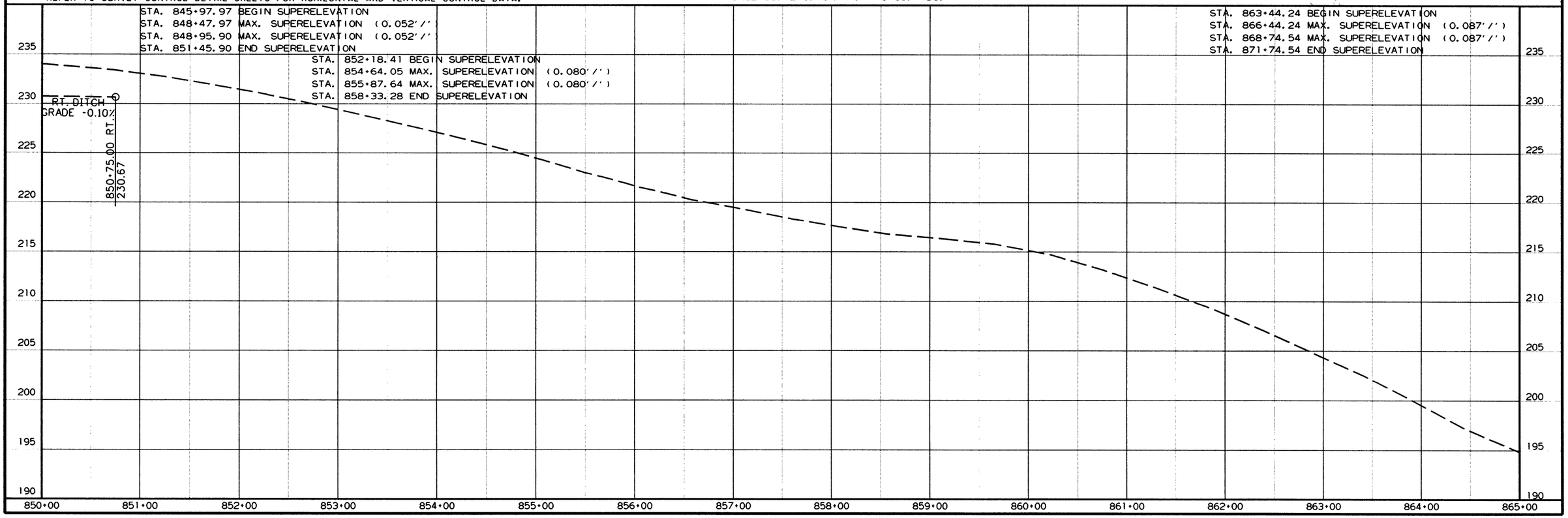
STA. 858+04 IN PLACE
18" X 24' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +13
18" X 30' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

STA. 845+97.97 BEGIN SUPERELEVATION
STA. 848+47.97 MAX. SUPERELEVATION (0.052'/')
STA. 848+95.90 MAX. SUPERELEVATION (0.052'/')
STA. 851+45.90 END SUPERELEVATION

STA. 852+18.41 BEGIN SUPERELEVATION
STA. 854+64.05 MAX. SUPERELEVATION (0.080'/')
STA. 855+87.64 MAX. SUPERELEVATION (0.080'/')
STA. 858+33.28 END SUPERELEVATION

STA. 863+44.24 BEGIN SUPERELEVATION
STA. 866+44.24 MAX. SUPERELEVATION (0.087'/')
STA. 868+74.54 MAX. SUPERELEVATION (0.087'/')
STA. 871+74.54 END SUPERELEVATION



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(2) PLAN AND PROFILE SHEETS

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REGISTERED PROFESSIONAL ENGINEER
TRINITY D. SMITH
No. 11425
9-30-16

STA. 866+59 INSTALL
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 35 CU. YDS.

STA. 866+96 IN PLACE
18" X 30' R.C. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE & CONSTRUCT
24" X 58' PIPE CULVERT
WITH FES LT. & RT.
D.A. = 0.97 AC., Q25 = 1.1 C.F.S.
R.C. PIPE (CLASS V)(TYPE 3 BEDDING) = 58 LIN. FT.
C.M. PIPE (TYPE 2 BEDDING) = 62 LIN. FT.
24" FES = 2 EACH

STA. 872+70 IN PLACE
18" X 35' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +62
18" X 54' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT TURNOUT ON LT. = 35 CU. YDS.

STA. 876+60.22 TO STA. 876+98.11 - IN PLACE
24' X 38' PRECAST CONCRETE CHANNEL BEAMS SPANS
WITH TIMBER PILING
BRIDGE NO. M2911
REMOVE AS EXISTING BRIDGE STRUCTURE
(SITE NO. 1) = 1.00 LUMP SUM

STA. 872+62 HWY. 335
UNION COUNTY RD. 767

UNION ROAD 767

PROPOSED R/W
CONST. LIMITS
C.L. DETOUR
TCE
40' RADIUS
N 30°09'55.5" E
N 50°42'39" E
N 50°35'30.8" E
N 66°32'50.4" E
PC865+69.25
PT869+49.55
PI867+61.48
PI872+50.24
PI874+41.44
PI875+62.26
PI876+56.56
PI878+05.63
PI879+02.96
PI880+16.75
PC865+69.25
PT869+49.55
PI867+61.48
PI872+50.24
PI874+41.44
PI875+62.26
PI876+56.56
PI878+05.63
PI879+02.96
PI880+16.75

C.L. CONSTRUCT
PI = 867+61.48
Δ = 20°37'43.1" RT.
D = 5°25'28"
T = 192.23'
L = 380.30'
PC = 865+69.25
PT = 869+49.55
e = 0.087'/'
Ls = 300'

WIRE FENCE (TYPE C)

STA. 866+68 - STA. 867+37	RT.	82 LIN. FT.

WIRE FENCE (TYPE D)

STA. 867+72 - STA. 871+24	LT.	347 LIN. FT.
STA. 877+03 - STA. 880+56	LT.	364 LIN. FT.

REMOVAL AND DISPOSAL OF FENCE

STA. 866+73 - STA. 867+38	RT.	66 LIN. FT.
STA. 867+68 - STA. 871+24	LT.	372 LIN. FT.
STA. 872+85 - STA. 880+60	LT.	775 LIN. FT.
STA. 877+08 - STA. 880+57	LT.	359 LIN. FT.

STA. 865+65 IN PLACE
24"X 40' C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE HDWLS. LT. & RT. & EXTEND C.M. PIPE
12' LT. & 12' RT.
(TYPE 2 BEDDING) WITH
FES LT. & RT.
D.A. = 10.7 AC., Q25 = 10.4 C.F.S.
24" C.M. PIPE = 24 LIN. FT.
24" FES = 2 EACH

STA. 876+79 CONSTRUCT
TRI. 10' X 5' X 64' R.C. BOX CULVERT
W/3:1 WINGS LT. & RT.
D.A. = 1.6 SQ. MI., Q25 = 620 C.F.S.
SPAN = 32' - 4"
CHANNEL CHANGE = 56 CU. YDS.

3' CHAIN LINK FENCE

STA. 872+86 - STA. 876+56	LT.	380 LIN. FT.

FLOODPLAIN BOUNDARIES
STA. 875+22 - STA. 878+39 IN SFHA
FLOODPLAIN BOUNDARIES

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

STA. 863+44.24 BEGIN SUPERELEVATION
STA. 866+44.24 MAX. SUPERELEVATION (0.087'/')
STA. 868+74.54 MAX. SUPERELEVATION (0.087'/')
STA. 871+74.54 END SUPERELEVATION

NOTE:
FOR THE CONSTRUCTION OF TEMPORARY WORK RAMPS OR HAUL ROADS. THIS STREAM IS CLASSIFIED AS AN INTERMITTENT STREAM. THE STREAM BANK ELEVATION IS 164 FEET MSL AT STA. 876+80. REFER TO SECTION 110.06(c) OF THE 2014 STANDARD SPECIFICTIONS.

STA. 879+29.66 BEGIN SUPERELEVATION
STA. 881+79.66 MAX. SUPERELEVATION (0.038'/')
STA. 883+31.97 MAX. SUPERELEVATION (0.038'/')
STA. 885+81.97 END SUPERELEVATION

+65
F.I. INLET LT.= 190.22
F.I. OUTLET RT.= 188.42

+96
F.I. INLET LT.= 189.69
F.I. OUTLET RT.= 186.14

P.V.I. 876+50.00
ELEV. 168.48
G -0.08%
P.V.I. 877+00.00
ELEV. 168.44
DESIGN HW
Q25 = 165.3
+79
F.I. INLET RT.= 160.33
F.I. OUTLET LT.= 160.13

200 195 190 185 180 175 170 165 160 155

865+00 866+00 867+00 868+00 869+00 870+00 871+00 872+00 873+00 874+00 875+00 876+00 877+00 878+00 879+00 880+00

9/26/2016

R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	117	335

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

STA. 882+22 CONSTRUCT
APPR. ON LT. = 5 CU. YDS.

WIRE FENCE (TYPE D)

STA. 877+03 - STA. 880+56	LT.	364 LIN. FT.
STA. 883+35 - STA. 883+61	LT.	36 LIN. FT.
STA. 888+50 - STA. 905+37	LT.	1697 LIN. FT.

C.L. CONSTRUCT
PI = 882+84.08
Δ = 06°16'30.4" LT.
D = 1°52'54"
T = 166.92'
L = 333.51'
PC = 881+17.16
PT = 884+50.67
e = 0.038'/'
Ls = 250'

STA. 884+42 IN PLACE
15" X 25' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +49
18" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.

REMOVAL AND DISPOSAL OF FENCE

STA. 872+85 - STA. 880+60	LT.	775 LIN. FT.
STA. 877+08 - STA. 880+57	LT.	359 LIN. FT.
STA. 883+37 - STA. 883+60	LT.	34 LIN. FT.
STA. 885+45	LT.	4 LIN. FT.
STA. 888+45 - STA. 892+70	LT.	425 LIN. FT.
STA. 893+00 - STA. 905+70	LT.	1160 LIN. FT.

STA. 887+46 CONSTRUCT
APPR. ON LT. = 40 CU. YDS.

STA. 889+00 IN PLACE
18" X 31' R.C. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE & CONSTRUCT
24" X 58' PIPE CULVERT
WITH FES LT. & RT.
D.A. = 4.5 AC., Q25 = 9.6 C.F.S.
R.C. PIPE (CLASS III)(TYPE 2 BEDDING) = 58 LIN. FT.
C.M. PIPE (TYPE 2 BEDDING) = 62 LIN. FT.
24" FES = 2 EACH

STA. 892+86 CONSTRUCT
APPR. ON LT. = 30 CU. YDS.

C.L. DETOUR
PI 10+16.15

C.L. DETOUR
PI 11+13.51

C.L. DETOUR
PT 11+28.55

C.L. DETOUR
PC 61+17.16

PROPOSED R/W

CONST. LIMITS

N 50°35'30.8" E

PROPOSED MON. STAMPED PN129

PROPOSED MON. STAMPED PN128

PROPOSED MON. STAMPED PN127

PROPOSED MON. STAMPED PN126

PROPOSED MON. STAMPED PN125

PROPOSED MON. STAMPED PN124

PROPOSED MON. STAMPED PN123

PROPOSED MON. STAMPED PN122

PROPOSED MON. STAMPED PN121

PROPOSED MON. STAMPED PN120

PROPOSED MON. STAMPED PN119

PROPOSED MON. STAMPED PN118

PROPOSED MON. STAMPED PN117

PROPOSED MON. STAMPED PN116

PROPOSED MON. STAMPED PN115

PROPOSED MON. STAMPED PN114

PROPOSED MON. STAMPED PN113

PROPOSED MON. STAMPED PN112

PROPOSED MON. STAMPED PN111

PROPOSED MON. STAMPED PN110

PROPOSED MON. STAMPED PN109

PROPOSED MON. STAMPED PN108

PROPOSED MON. STAMPED PN107

PROPOSED MON. STAMPED PN106

PROPOSED MON. STAMPED PN105

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PROPOSED MON. STAMPED PN103

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PROPOSED MON. STAMPED PN101

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PROPOSED MON. STAMPED PN97

PROPOSED MON. STAMPED PN96

PROPOSED MON. STAMPED PN95

PROPOSED MON. STAMPED PN94

PROPOSED MON. STAMPED PN93

PROPOSED MON. STAMPED PN92

PROPOSED MON. STAMPED PN91

PROPOSED MON. STAMPED PN90

PROPOSED MON. STAMPED PN89

PROPOSED MON. STAMPED PN88

PROPOSED MON. STAMPED PN87

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PROPOSED MON. STAMPED PN85

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PROPOSED MON. STAMPED PN14

PROPOSED MON. STAMPED PN13

PROPOSED MON. STAMPED PN12

PROPOSED MON. STAMPED PN11

PROPOSED MON. STAMPED PN10

PROPOSED MON. STAMPED PN9

PROPOSED MON. STAMPED PN8

PROPOSED MON. STAMPED PN7

PROPOSED MON. STAMPED PN6

PROPOSED MON. STAMPED PN5

PROPOSED MON. STAMPED PN4

PROPOSED MON. STAMPED PN3

PROPOSED MON. STAMPED PN2

PROPOSED MON. STAMPED PN1

PROPOSED R/W

CONST. LIMITS

N 44°19'00.5" E

N 51°09'20.6" E

N 58°54'49.2" E

32'

16'

20'

40' RADIUS

40' RADIUS

TCE

16'

PI 882+84.08

PT 884+50.67

PI 888+01.67

PI 893+56.06

PI 882+84.08

PC 887+13.29

PT 888+89.85

PC 892+26.63

PT 894+85.09

CHARLIE VANCE ROAD

STA. 888+41 HWY. 335
CHARLIE VANCE ROAD

STA. 880+31 IN PLACE
18" X 24' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +38
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 35 CU. YDS.
UNCLASS. EXC. ON RT. = 5 CU. YDS.

STA. 883+79 IN PLACE
18" X 31' R.C. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE & CONSTRUCT @ +55
24" X 58' PIPE CULVERT
WITH FES LT. & RT.
D.A. = 4.5 AC., Q25 = 5.8 C.F.S.
R.C. PIPE (CLASS V)(TYPE 3 BEDDING) = 58 LIN. FT.
C.M. PIPE (TYPE 2 BEDDING) = 62 LIN. FT.
24" FES = 2 EACH

STA. 883+32 IN PLACE
18" X 20' C.P. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +30
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.

C.L. CONSTRUCT
PI = 888+01.67
Δ = 06°50'20.1" RT.
D = 3°52'24"
T = 88.38'
L = 176.56'
PC = 887+13.29
PT = 888+89.85
e = 0.071'/'
Ls = 250'

STA. 888+41 CONSTRUCT
TURNOUT ON RT. = 40 CU. YDS.
UNCLASS. EXC. ON RT. = 15 CU. YDS.

STA. 892+50 INSTALL
18" X 34' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 45 CU. YDS.

C.L. CONSTRUCT
PI = 893+56.06
Δ = 07°45'28.6" RT.
D = 3°00'06"
T = 129.43'
L = 258.46'
PC = 892+26.63
PT = 894+85.09
e = 0.057'/'
Ls = 250'

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

STA. 879+29.66 BEGIN SUPERELEVATION
STA. 881+79.66 MAX. SUPERELEVATION (0.038'/')
STA. 883+31.97 MAX. SUPERELEVATION (0.038'/')
STA. 885+81.97 END SUPERELEVATION

STA. 885+81.98 BEGIN SUPERELEVATION
STA. 888+01.56 MAX. SUPERELEVATION (0.062'/')
STA. 888+34.95 MAX. SUPERELEVATION (0.062'/')
STA. 890+54.53 END SUPERELEVATION

STA. 890+58.23 BEGIN SUPERELEVATION
STA. 893+08.23 MAX. SUPERELEVATION (0.057'/')
STA. 894+22.59 MAX. SUPERELEVATION (0.057'/')
STA. 896+72.59 END SUPERELEVATION

+79
F.L. INLET RT.= 182.06
F.L. OUTLET LT.= 180.94

+00
F.L. INLET RT.= 195.99
F.L. OUTLET LT.= 195.92

215 210 205 200 195 190 185 180 175 170

880+00 881+00 882+00 883+00 884+00 885+00 886+00 887+00 888+00 889+00 890+00 891+00 892+00 893+00 894+00 895+00

9/26/2016

R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	118	335

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

STA. 903+91 IN PLACE
30" X 41' C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE HDWLS. LT. & RT. & EXTEND C.M. PIPE
12' LT. & 10' RT.
(TYPE 2 BEDDING) WITH
FES LT. & RT.
D.A. = 138.7 AC., Q25 = 174.2 C.F.S.
30" C.M. PIPE = 22 LIN. FT.
30" FES = 2 EACH

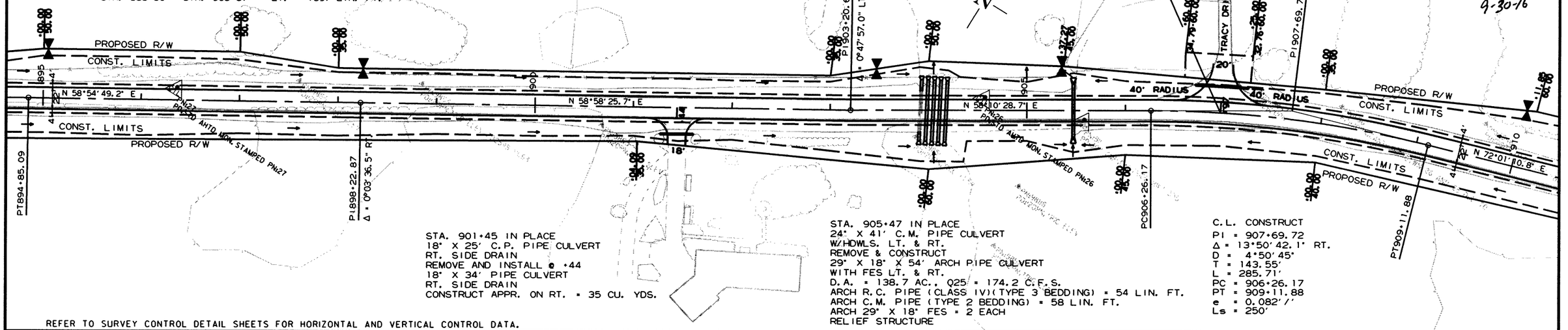
STA. 904+08 CONSTRUCT
QUAD. 30" X 62' PIPE CULVERT
WITH FES LT. & RT.
D.A. = 138.7 AC., Q25 = 174.2 C.F.S.
R.C. PIPE (CLASS IV)(TYPE 3 BEDDING) = 232 LIN. FT.
C.M. PIPE (TYPE 2 BEDDING) = 248 LIN. FT.
30" FES = 8 EACH

STA. 906+97 INSTALL
18" X 54' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT TURNOUT ON LT. = 60 CU. YDS.

WIRE FENCE (TYPE D)
STA. 888+50 - STA. 905+37 LT. 1697 LIN. FT.

REMOVAL AND DISPOSAL OF FENCE
STA. 893+00 - STA. 905+70 LT. 1160 LIN. FT.

STA. 906+97 HWY. 335
TRACY DRIVE



STA. 901+45 IN PLACE
18" X 25' C.P. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +44
18" X 34' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 35 CU. YDS.

STA. 905+47 IN PLACE
24" X 41' C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE & CONSTRUCT
29" X 18" X 54' ARCH PIPE CULVERT
WITH FES LT. & RT.
D.A. = 138.7 AC., Q25 = 174.2 C.F.S.
ARCH R.C. PIPE (CLASS IV)(TYPE 3 BEDDING) = 54 LIN. FT.
ARCH C.M. PIPE (TYPE 2 BEDDING) = 58 LIN. FT.
ARCH 29" X 18" FES = 2 EACH
RELIEF STRUCTURE

C.L. CONSTRUCT
P.I. = 907+69.72
Δ = 13°50' 42.1" RT.
D = 4°50' 45"
T = 143.55'
L = 285.71'
PC = 906+26.17
PT = 909+11.88
e = 0.082'/'
Ls = 250'

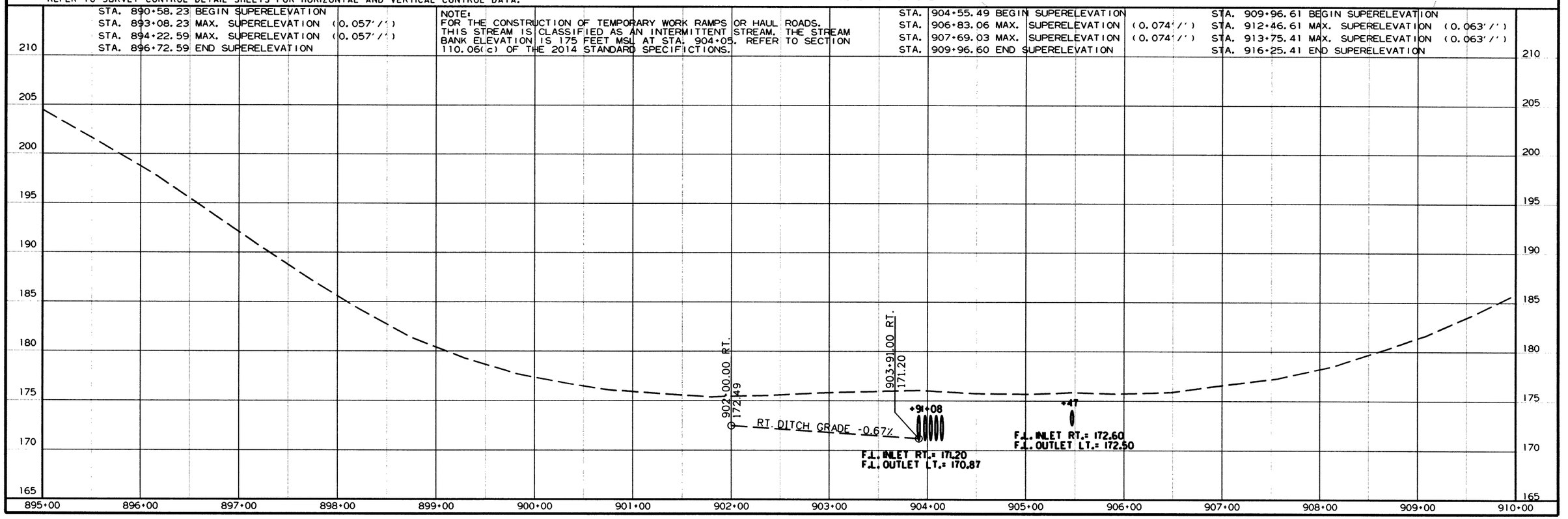
REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

STA. 890+58.23 BEGIN SUPERELEVATION
STA. 893+08.23 MAX. SUPERELEVATION (0.057'/')
STA. 894+22.59 MAX. SUPERELEVATION (0.057'/')
STA. 896+72.59 END SUPERELEVATION

NOTE:
FOR THE CONSTRUCTION OF TEMPORARY WORK RAMPS OR HAUL ROADS. THIS STREAM IS CLASSIFIED AS AN INTERMITTENT STREAM. THE STREAM BANK ELEVATION IS 175 FEET MSL AT STA. 904+05. REFER TO SECTION 110.06(c) OF THE 2014 STANDARD SPECIFICTIONS.

STA. 904+55.49 BEGIN SUPERELEVATION
STA. 906+83.06 MAX. SUPERELEVATION (0.074'/')
STA. 907+69.03 MAX. SUPERELEVATION (0.074'/')
STA. 909+96.60 END SUPERELEVATION

STA. 909+96.61 BEGIN SUPERELEVATION
STA. 912+46.61 MAX. SUPERELEVATION (0.063'/')
STA. 913+75.41 MAX. SUPERELEVATION (0.063'/')
STA. 916+25.41 END SUPERELEVATION



9/26/2016

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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.		070368	119	335

(2) PLAN AND PROFILE SHEETS

STA. 912+97 CONSTRUCT
APPR. ON LT. = 30 CU. YDS.
UNCLASS. EXC. ON LT. = 5 CU. YDS.

STA. 914+87 IN PLACE
42" X 41' C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE HDWLS. LT. & RT. & EXTEND C.M. PIPE
8' LT. & 14' RT.
(TYPE 2 BEDDING) WITH
FES LT. & RT.
D.A. = 19.1 AC., Q25 = 25.9 C.F.S.
42" C.M. PIPE = 22 LIN. FT.
42" FES = 2 EACH

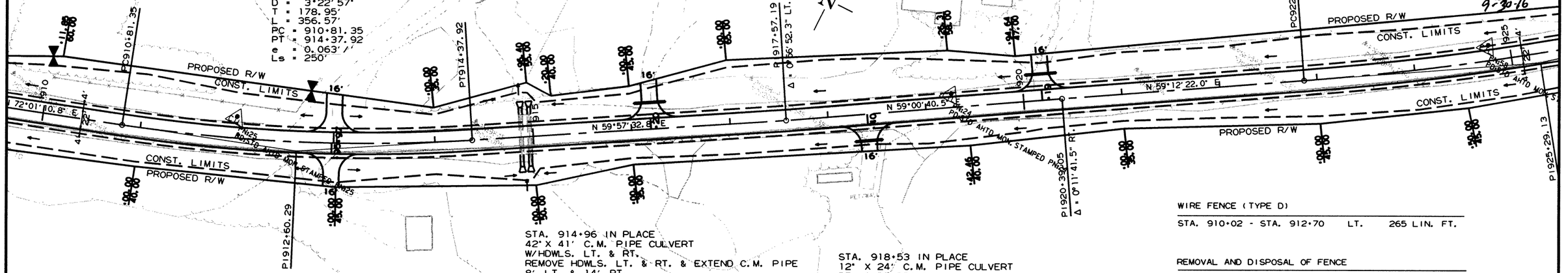
STA. 916+15 IN PLACE
18" X 25' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +20
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 40 CU. YDS.

STA. 920+20 IN PLACE
18" X 25' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +19
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.

C.L. CONSTRUCT
PI = 912+60.29
Δ = 12°03'38.0" LT.
D = 3°22'57"
T = 178.95'
L = 356.57'
PC = 910+81.35
PT = 914+37.92
e = 0.063'/'
Ls = 250'

C.L. CONSTRUCT
PI = 925+29.13
Δ = 09°20'45.2" LT.
D = 1°55'46"
T = 242.72'
L = 484.36'
PC = 922+86.42
PT = 927+70.78
e = 0.039'/'
Ls = 250'

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16



STA. 912+95 CONSTRUCT
APPR. ON RT. = 30 CU. YDS.
UNCLASS. EXC. ON RT. = 5 CU. YDS.

STA. 914+96 IN PLACE
42" X 41' C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE HDWLS. LT. & RT. & EXTEND C.M. PIPE
8' LT. & 14' RT.
(TYPE 2 BEDDING) WITH
FES LT. & RT.
D.A. = 19.1 AC., Q25 = 25.9 C.F.S.
42" C.M. PIPE = 22 LIN. FT.
42" FES = 2 EACH

STA. 918+53 IN PLACE
12" X 24' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +40
18" X 28' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 20 CU. YDS.

WIRE FENCE (TYPE D)

STA. 910+02 - STA. 912+70 LT. 265 LIN. FT.

REMOVAL AND DISPOSAL OF FENCE

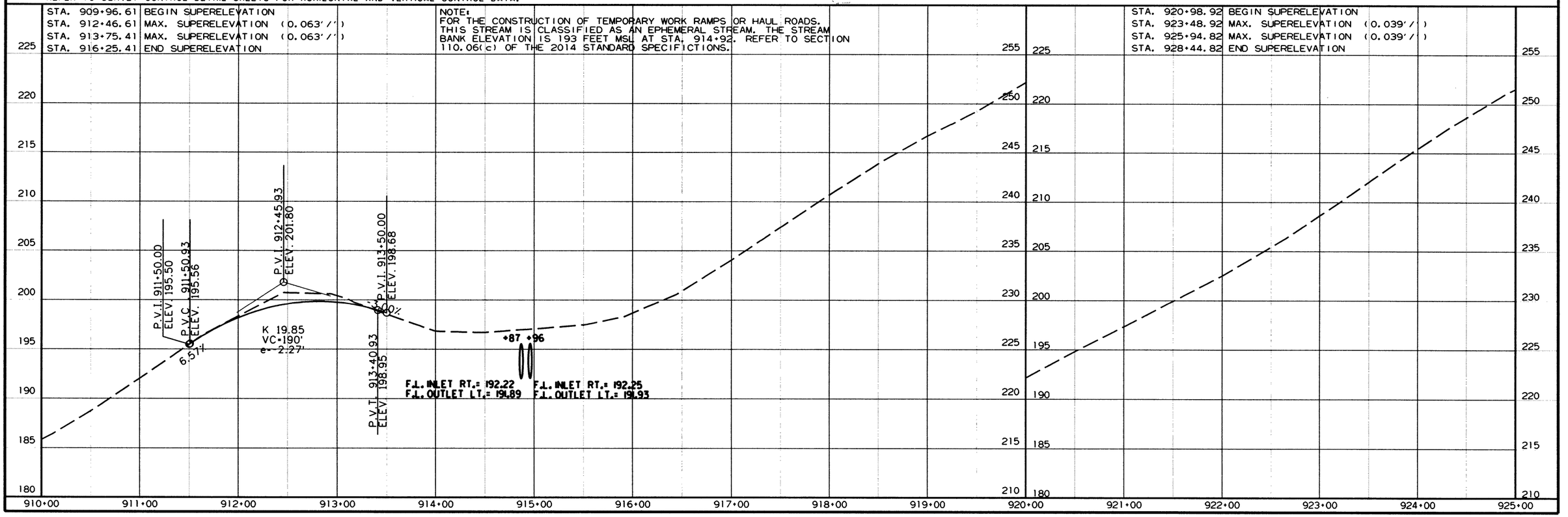
STA. 910+05 - STA. 912+73 LT. 276 LIN. FT.

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

STA. 909+96.61 BEGIN SUPERELEVATION
STA. 912+46.61 MAX. SUPERELEVATION (0.063'/')
STA. 913+75.41 MAX. SUPERELEVATION (0.063'/')
STA. 916+25.41 END SUPERELEVATION

NOTE:
FOR THE CONSTRUCTION OF TEMPORARY WORK RAMPS OR HAUL ROADS. THIS STREAM IS CLASSIFIED AS AN EPHEMERAL STREAM. THE STREAM BANK ELEVATION IS 193 FEET MSL AT STA. 914+92. REFER TO SECTION 110.06(c) OF THE 2014 STANDARD SPECIFICTIONS.

STA. 920+98.92 BEGIN SUPERELEVATION
STA. 923+48.92 MAX. SUPERELEVATION (0.039'/')
STA. 925+94.82 MAX. SUPERELEVATION (0.039'/')
STA. 928+44.82 END SUPERELEVATION



9/26/2016

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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.		070368	120	335

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

STA. 931+43 CONSTRUCT
TURNOUT ON LT. = 110 CU. YDS.

C.L. CONSTRUCT
PI = 925+29.13
Δ = 09°20'45.2" LT.
D = 1°55'46"
T = 242.72'
L = 484.36'
PC = 922+86.42
PT = 927+70.78
e = 0.039'/'
Ls = 250'

STA. 938+00 IN PLACE
18" X 46' R.C. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE & CONSTRUCT
24" X 68' PIPE CULVERT
WITH FES LT. & RT.
D.A. = 2.1 AC., Q25 = 4.5 C.F.S.
R.C. PIPE (CLASS III)(TYPE 3 BEDDING) = 68 LIN. FT.
C.M. PIPE (TYPE 2 BEDDING) = 72 LIN. FT.
24" FES = 2 EACH

STA. 931+42 IN PLACE
18" X 48' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +43
18" X 64' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT TURNOUT ON RT. = 25 CU. YDS.
UNCLASS. EXC. ON RT. = 10 CU. YDS.

C.L. CONSTRUCT
PI = 931+53.42
Δ = 14°09'37.4" RT.
D = 8°38'44"
T = 82.31'
L = 163.79'
PC = 930+71.11
PT = 932+34.90
e = 0.088'/'
Ls = 250'

STA. 935+60 IN PLACE
36" X 41' C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE HDWLS. LT. & RT. & EXTEND C.M. PIPE
10' LT. & 12' RT.
(TYPE 2 BEDDING) WITH
FES LT. & RT.
D.A. = 3.5 AC., Q25 = 4.2 C.F.S.
36" C.M. PIPE = 22 LIN. FT.
36" FES = 2 EACH

STA. 935+72 IN PLACE
18" X 43' C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE

STA. 936+07 CONSTRUCT
TURNOUT ON RT. = 40 CU. YDS.
UNCLASS. EXC. ON RT. = 5 CU. YDS.

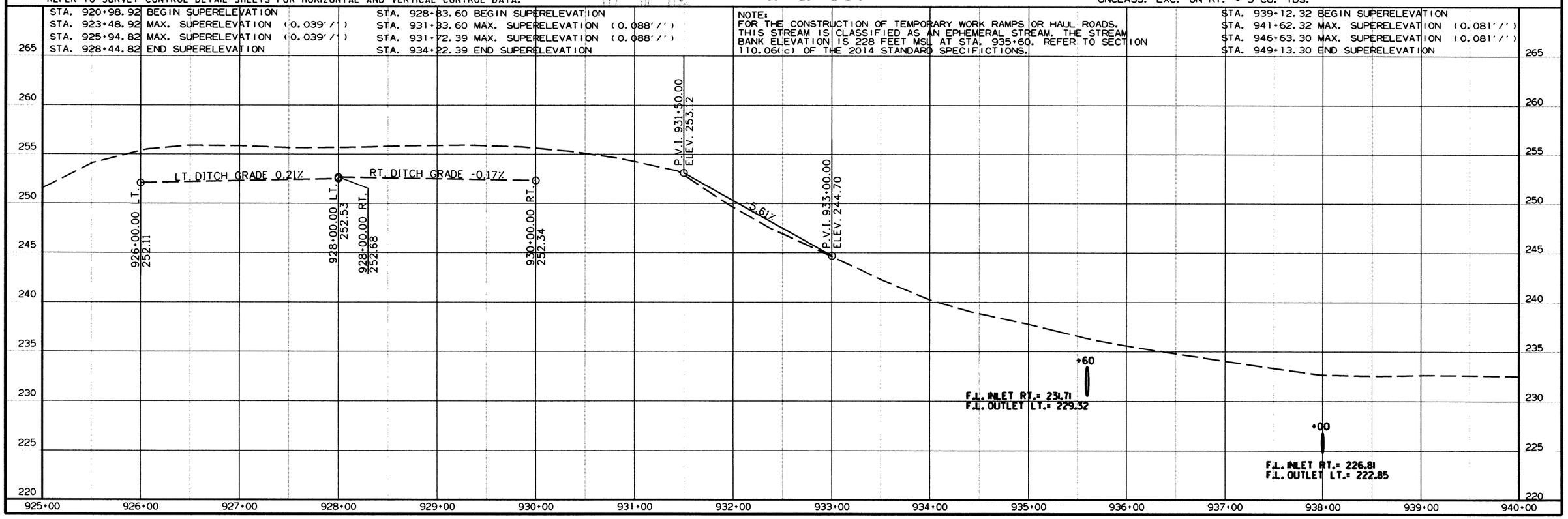
REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

STA. 920+98.92 BEGIN SUPERELEVATION
STA. 923+48.92 MAX. SUPERELEVATION (0.039'/')
STA. 925+94.82 MAX. SUPERELEVATION (0.039'/')
STA. 928+44.82 END SUPERELEVATION

STA. 928+83.60 BEGIN SUPERELEVATION
STA. 931+72.39 MAX. SUPERELEVATION (0.088'/')
STA. 934+22.39 END SUPERELEVATION

NOTE:
FOR THE CONSTRUCTION OF TEMPORARY WORK RAMPS OR HAUL ROADS. THIS STREAM IS CLASSIFIED AS AN EPHEMERAL STREAM. THE STREAM BANK ELEVATION IS 228 FEET MSL AT STA. 935+60. REFER TO SECTION 110.06(c) OF THE 2014 STANDARD SPECIFICTIONS.

STA. 939+12.32 BEGIN SUPERELEVATION
STA. 941+62.32 MAX. SUPERELEVATION (0.081'/')
STA. 946+63.30 MAX. SUPERELEVATION (0.081'/')
STA. 949+13.30 END SUPERELEVATION



9/26/2016

R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	121	335

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

STA. 940+81 INSTALL
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 35 CU. YDS.

STA. 945+64 IN PLACE
18" X 25' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +65
18" X 34' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 35 CU. YDS.

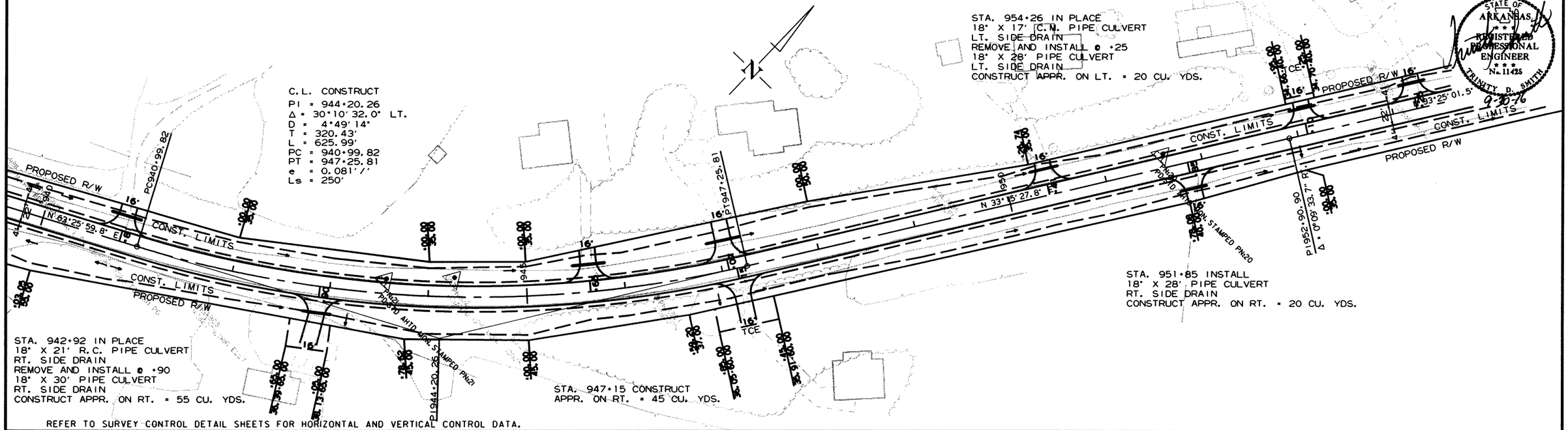
STA. 947+10 IN PLACE
18" X 20' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +07
18" X 36' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 55 CU. YDS.

STA. 950+42 IN PLACE
18" X 25' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +41
18" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 25 CU. YDS.

STA. 953+16 IN PLACE
18" X 25' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +10
18" X 28' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 25 CU. YDS.

STA. 954+26 IN PLACE
18" X 17' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +25
18" X 28' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 20 CU. YDS.

C.L. CONSTRUCT
PI = 944+20.26
Δ = 30°10'32.0" LT.
D = 4°49'14"
T = 320.43'
L = 625.99'
PC = 940+99.82
PT = 947+25.81
e = 0.081'/'
Ls = 250'



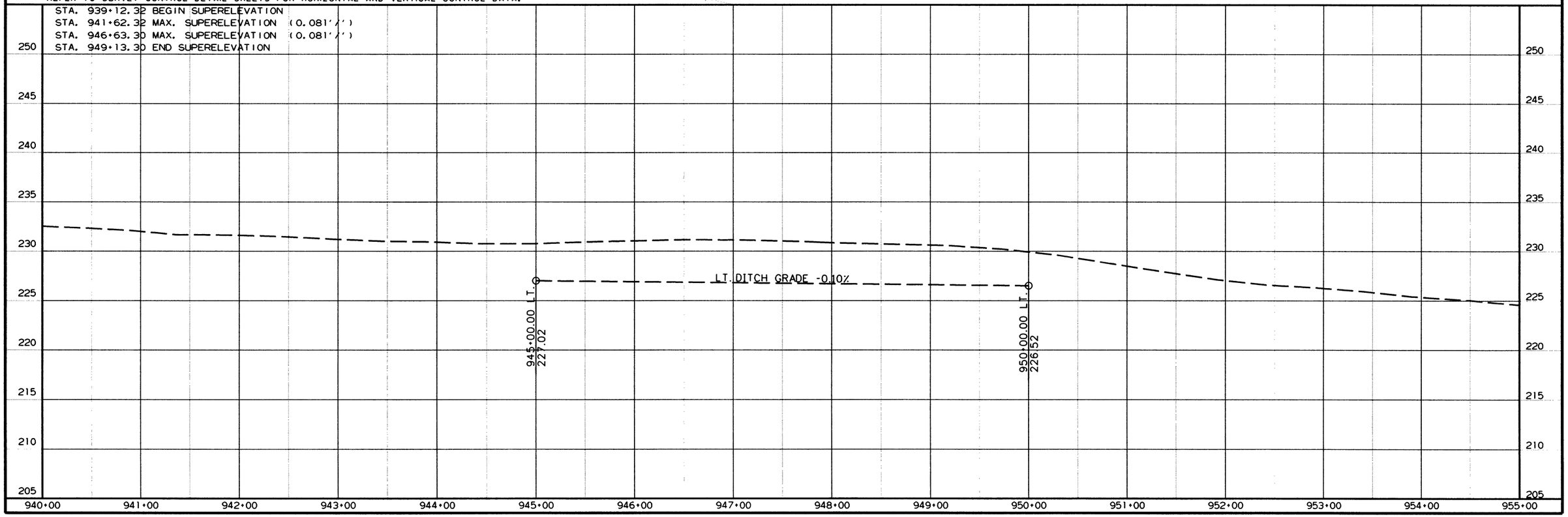
STA. 942+92 IN PLACE
18" X 21' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +90
18" X 30' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 55 CU. YDS.

STA. 947+15 CONSTRUCT
APPR. ON RT. = 45 CU. YDS.

STA. 951+85 INSTALL
18" X 28' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 20 CU. YDS.

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

STA. 939+12.32 BEGIN SUPERELEVATION
STA. 941+62.32 MAX. SUPERELEVATION (0.081'/')
STA. 946+63.30 MAX. SUPERELEVATION (0.081'/')
STA. 949+13.30 END SUPERELEVATION



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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.		070368	122	335

(2) PLAN AND PROFILE SHEETS

STA. 955+56 IN PLACE
18" X 25' C.P. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +52
18" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 25 CU. YDS.

STA. 958+31 IN PLACE
18" X 25' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +28
18" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 25 CU. YDS.

STA. 959+34 IN PLACE
18" X 21' C.P. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +33
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.

STA. 961+99 IN PLACE
18" X 41' R.C. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE & CONSTRUCT
24" X 62' PIPE CULVERT
WITH FES LT. & RT.
D.A. = 3.9 AC., Q25 = 7.9 C.F.S.
R.C. PIPE (CLASS III)(TYPE 3 BEDDING) = 62 LIN. FT.
C.M. PIPE (TYPE 2 BEDDING) = 66 LIN. FT.
24" FES = 2 EACH

STA. 965+55 IN PLACE
12" X 42' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +68
18" X 62' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT TURNOUT ON LT. = 40 CU. YDS.
UNCLASS. EXC. ON LT. = 15 CU. YDS.

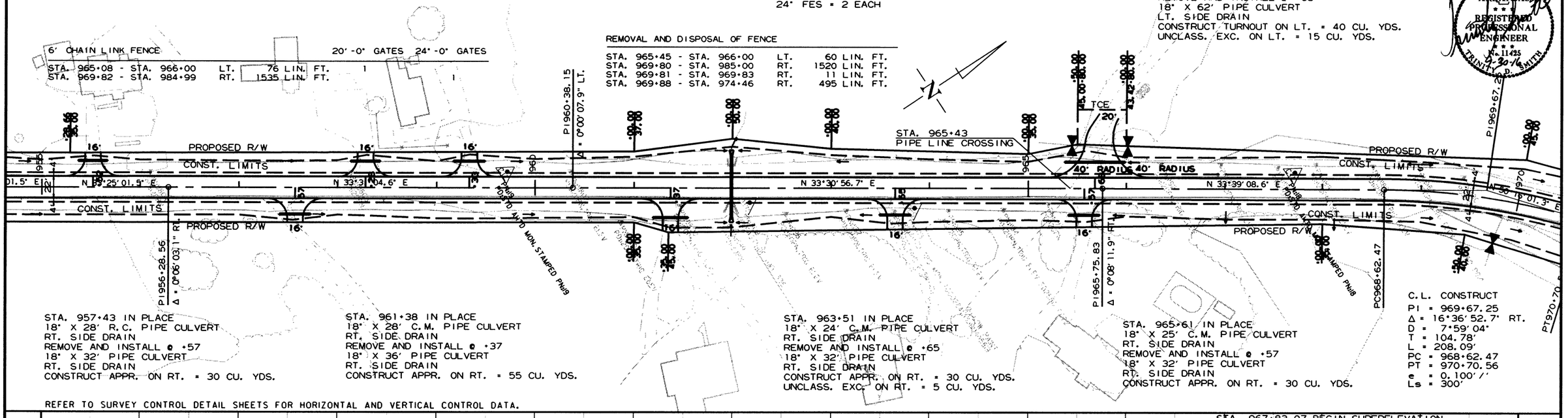
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-30-16

6' CHAIN LINK FENCE — 20'-0" GATES — 24'-0" GATES

STA. 965+08 - STA. 966+00	LT.	76 LIN. FT.	1	
STA. 969+82 - STA. 984+99	RT.	1535 LIN. FT.	1	1

REMOVAL AND DISPOSAL OF FENCE

STA. 965+45 - STA. 966+00	LT.	60 LIN. FT.
STA. 969+80 - STA. 985+00	RT.	1520 LIN. FT.
STA. 969+81 - STA. 969+83	RT.	11 LIN. FT.
STA. 969+88 - STA. 974+46	RT.	495 LIN. FT.



C.L. CONSTRUCT
PI = 969+67.25
Δ = 16°36'52.7" RT.
D = 7°59'04"
T = 104.78'
L = 208.09'
PC = 968+62.47
PT = 970+70.56
e = 0.100'/'
Ls = 300'

STA. 957+43 IN PLACE
18" X 28' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +57
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.

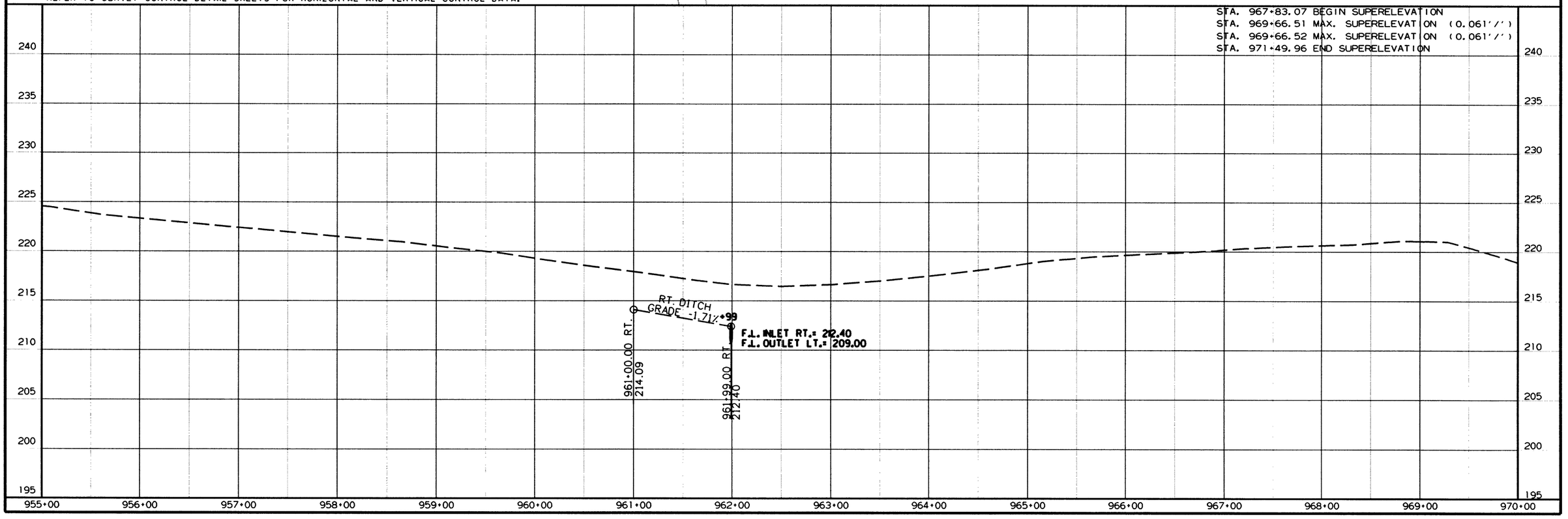
STA. 961+38 IN PLACE
18" X 28' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +37
18" X 36' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 55 CU. YDS.

STA. 963+51 IN PLACE
18" X 24' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +65
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.
UNCLASS. EXC. ON RT. = 5 CU. YDS.

STA. 965+61 IN PLACE
18" X 25' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +57
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

STA. 967+83.07 BEGIN SUPERELEVATION
STA. 969+66.51 MAX. SUPERELEVATION (0.061'/')
STA. 969+66.52 MAX. SUPERELEVATION (0.061'/')
STA. 971+49.96 END SUPERELEVATION



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				6	ARK.			
				JOB NO.		070368	123	335

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

STA. 971+79 INSTALL
18" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.

STA. 974+96 IN PLACE
18" X 21' C.P. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +93
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.
UNCLASS. EXC. ON LT. = 5 CU. YDS.

STA. 975+93 IN PLACE
15" X 24' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +94
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.
UNCLASS. EXC. ON LT. = 5 CU. YDS.

STA. 982+05 IN PLACE
18" X 25' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +19
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.
UNCLASS. EXC. ON LT. = 5 CU. YDS.

REMOVAL AND DISPOSAL OF FENCE

STA. 969+80 - STA. 985+00	RT.	1520 LIN. FT.	
STA. 969+88 - STA. 974+46	RT.	495 LIN. FT.	
STA. 974+93 - STA. 984+60	RT.	995 LIN. FT.	
STA. 975+60 - STA. 977+70	LT.	210 LIN. FT.	
STA. 978+29 - STA. 984+95	RT.	685 LIN. FT.	

C.L. CONSTRUCT
PI = 974+77.67
Δ = 43°15'46.2" LT.
D = 9°09'03"
T = 248.30'
L = 472.77'
PC = 972+29.38
PT = 977+02.15
e = 0.090'/'
Ls = 250'

C.L. CONSTRUCT
PI = 983+13.45
Δ = 41°12'41.8" LT.
D = 5°16'53"
T = 407.89'
L = 780.31'
PC = 979+05.56
PT = 986+85.87
e = 0.086'/'
Ls = 300'

C.L. CONSTRUCT
PI = 969+67.25
Δ = 16°36'52.7" RT.
D = 7°59'04"
T = 104.78'
L = 208.09'
PC = 968+62.47
PT = 970+70.56
e = 0.100'/'
Ls = 300'

5' CHAIN LINK FENCE 16'-0" GATES

STA. 975+55 - STA. 977+78	LT.	192 LIN. FT.	1

6' CHAIN LINK FENCE 24'-0" GATES

STA. 969+82 - STA. 984+99	RT.	1535 LIN. FT.	1

STA. 970+90 INSTALL
18" X 38' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 40 CU. YDS.
UNCLASS. EXC. ON RT. = 5 CU. YDS.

STA. 979+90 IN PLACE
18" X 24' C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE & CONSTRUCT
24" X 58' PIPE CULVERT
WITH FES LT. & RT.
D.A. = 1.4 AC., Q25 = 2.2 C.F.S.
R.C. PIPE (CLASS V)(TYPE 3 BEDDING) = 58 LIN. FT.
C.M. PIPE (TYPE 2 BEDDING) = 62 LIN. FT.
24" FES = 2 EACH

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

STA. 967+83.07 BEGIN SUPERELEVATION
STA. 969+66.51 MAX. SUPERELEVATION (0.061'/')
STA. 969+66.52 MAX. SUPERELEVATION (0.061'/')
STA. 971+49.96 END SUPERELEVATION

STA. 971+49.97 BEGIN SUPERELEVATION
STA. 973+99.97 MAX. SUPERELEVATION (0.090'/')
STA. 975+53.85 MAX. SUPERELEVATION (0.090'/')
STA. 978+03.85 END SUPERELEVATION

STA. 978+03.85 BEGIN SUPERELEVATION
STA. 981+03.85 MAX. SUPERELEVATION (0.086'/')
STA. 984+60.56 MAX. SUPERELEVATION (0.086'/')
STA. 987+60.56 END SUPERELEVATION

RT. DITCH GRADE -0.21%
LT. DITCH GRADE 0.06%
RT. DITCH GRADE 0.035%
+90 F.I. INLET RT.= 206.04
F.I. OUTLET LT.= 205.21
978+00.00 RT. 206.44
979+90.00 RT. 206.04
979+90.00 LT. 205.21
982+00.00 LT. 205.34
982+00.00 RT. 207.92

235 230 225 220 215 210 205 200 195 190

970+00 971+00 972+00 973+00 974+00 975+00 976+00 977+00 978+00 979+00 980+00 981+00 982+00 983+00 984+00 985+00

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				6	ARK.			
				JOB NO.	070368		124	335

(2) PLAN AND PROFILE SHEETS

C.L. CONSTRUCT
PI = 983+13.45
Δ = 41°12'41.8" LT.
D = 5°16'53"
T = 407.89'
L = 780.31'
PC = 979+05.56
PT = 986+85.87
e = 0.086'/'
Ls = 300'

STA. 985+95 IN PLACE
18" X 25' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +09
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.

STA. 995+48 INSTALL
18" X 52' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT TURNOUT ON LT. = 40 CU. YDS.
UNCLASS. EXC. ON LT. = 35 CU. YDS.

STA. 995+48 HWY. 335
MYRTLE GROVE ROAD

STA. 998+84 IN PLACE
24" X 36' C.M. PIPE CULVERT
W/ HDWLS. LT. & RT.
REMOVE

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11435
TRINITY D. SMITH
9-30-16

C.L. CONSTRUCT
PI = 996+35.25
Δ = 98°21'33.0" RT.
D = 8°15'00"
T = 804.00'
L = 1192.23'
PC = 988+31.25
PT = 1000+23.48
e = 0.100'/'
Ls = 300'

OBLITERATE ROADWAY

WIRE FENCE (TYPE D)

STA. 985+81 - STA. 1009+70	RT.	2330 LIN. FT.	

REMOVAL AND DISPOSAL OF FENCE

STA. 985+00 - STA. 991+35	CL.	640 LIN. FT.	
STA. 999+70 - STA. 1003+15	CL.	345 LIN. FT.	

STA. 998+88 CONSTRUCT
24" X 58' PIPE CULVERT
WITH FES LT. & RT.
D.A. = 3.65 AC., Q25 = 5.9 C.F.S.
R.C. PIPE (CLASS V)(TYPE 3 BEDDING) = 58 LIN. FT.
C.M. PIPE (TYPE 2 BEDDING) = 62 LIN. FT.
24" FES = 2 EACH

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

	STA. 978+03.85	BEGIN SUPERELEVATION		STA. 987+60.57	BEGIN SUPERELEVATION
	STA. 981+03.85	MAX. SUPERELEVATION	(0.086'/')	STA. 990+60.57	MAX. SUPERELEVATION (0.100'/')
	STA. 984+60.56	MAX. SUPERELEVATION	(0.086'/')	STA. 999+48.48	MAX. SUPERELEVATION (0.100'/')
	STA. 987+60.56	END SUPERELEVATION		STA. 1002+48.48	END SUPERELEVATION

P.V.I. 988+80.58 ELEV. 211.68
P.V.C. 988+92.83 ELEV. 211.71
P.V.I. 989+42.83 ELEV. 211.86
P.V.T. 989+92.83 ELEV. 211.61
P.V.C. 992+67.86 ELEV. 210.23
P.V.I. 993+67.86 ELEV. 209.73
P.V.T. 994+67.86 ELEV. 207.25
P.V.C. 996+48.23 ELEV. 202.72
P.V.I. 998+23.23 ELEV. 198.35
P.V.T. 999+98.23 ELEV. 200.09

0.29%
K 127.09
VC=100'
e=-0.10'
-0.50%
K 100.00
VC=200'
e=-0.50'
-2.50%
K 100.14
VC=350'
e=1.53'

RT. DITCH GRADE 0.035%

988+00.00 RT.
208.13

+88
F.I. INLET RT.= 195.91
F.I. OUTLET LT.= 195.81

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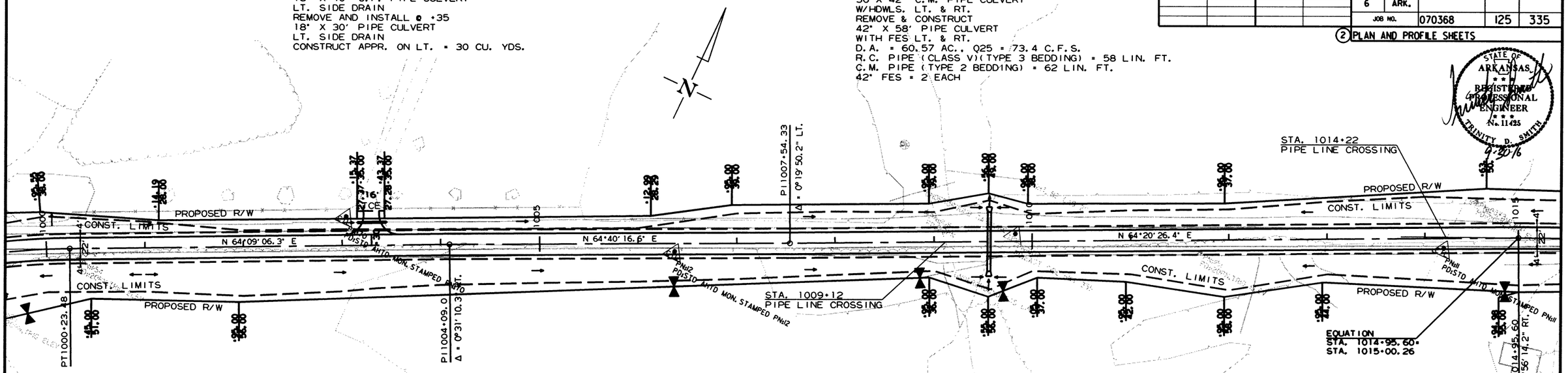
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	125	335

(2) PLAN AND PROFILE SHEETS

STA. 1003+31 IN PLACE
18" X 40' C.P. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +35
18" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.

STA. 1009+56 IN PLACE
36" X 42" C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE & CONSTRUCT
42" X 58' PIPE CULVERT
WITH FES LT. & RT.
D.A. = 60.57 AC., Q25 = 73.4 C.F.S.
R.C. PIPE (CLASS V)(TYPE 3 BEDDING) = 58 LIN. FT.
C.M. PIPE (TYPE 2 BEDDING) = 62 LIN. FT.
42" FES = 2 EACH

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REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
4-30-16



WIRE FENCE (TYPE D)

STA. 985+81 - STA. 1009+70	RT.	2330 LIN. FT.	

REMOVAL AND DISPOSAL OF FENCE

STA. 999+70 - STA. 1003+15	CL.	345 LIN. FT.	
STA. 1003+45 - STA. 1005+45	LT.	200 LIN. FT.	
STA. 1008+93 - STA. 1009+21	LT.	29 LIN. FT.	
STA. 1009+22 - STA. 1009+58	LT.	37 LIN. FT.	
STA. 1014+81 - STA. 1018+47	LT.	354 LIN. FT.	

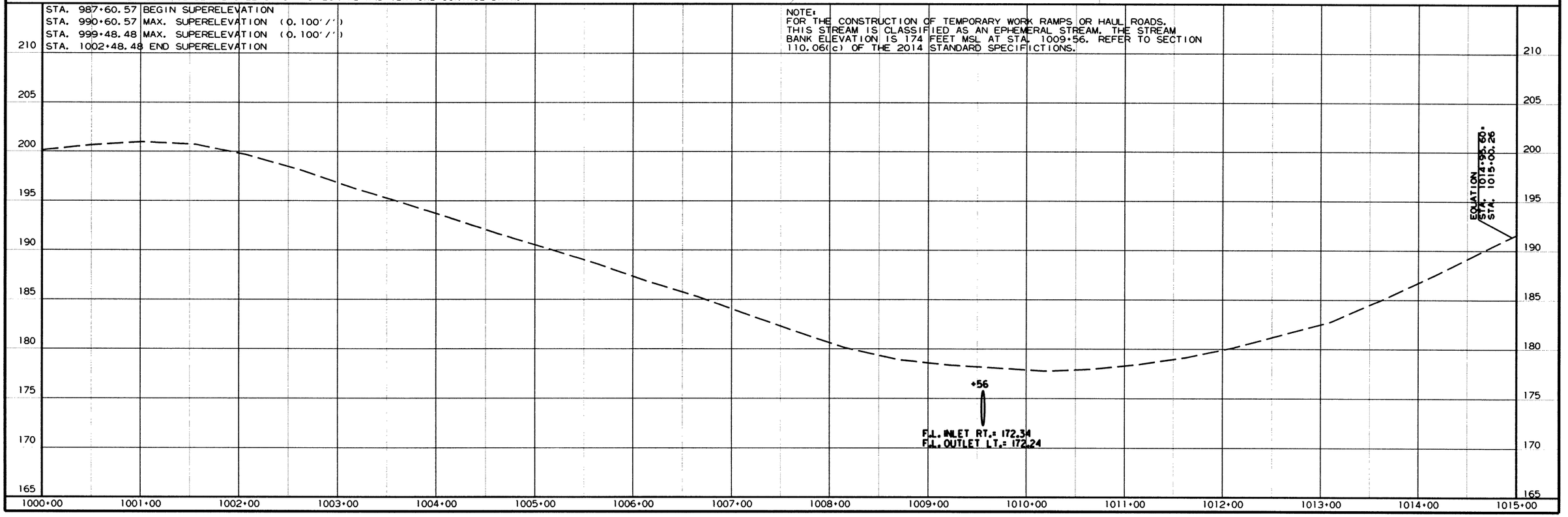
WIRE FENCE (TYPE C) 16'-0" GATES

STA. 1014+85 - STA. 1016+05	RT.	88 LIN. FT.	1

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

STA. 987+60.57 BEGIN SUPERELEVATION
STA. 990+60.57 MAX. SUPERELEVATION (0.100'/')
STA. 999+48.48 MAX. SUPERELEVATION (0.100'/')
STA. 1002+48.48 END SUPERELEVATION

NOTE:
FOR THE CONSTRUCTION OF TEMPORARY WORK RAMPS OR HAUL ROADS. THIS STREAM IS CLASSIFIED AS AN EPHEMERAL STREAM. THE STREAM BANK ELEVATION IS 174 FEET MSL AT STA. 1009+56. REFER TO SECTION 110.06(c) OF THE 2014 STANDARD SPECIFICTIONS.



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				6	ARK.			
				JOB NO.		070368	126	335

(2) PLAN AND PROFILE SHEETS

STA. 1016+49 CONSTRUCT
APPR. ON LT. = 30 CU. YDS.

STA. 1017+13 INSTALL
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.

STA. 1025+27 IN PLACE
18" X 23' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +28
18" X 154' PIPE CULVERT
LT. SIDE DRAIN
UNCLASS. EXC. ON LT. = 5 CU. YDS.

STA. 1026+62 IN PLACE
18" X 21' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND @ +50
END 18" X 154' PIPE CULVERT
LT. SIDE DRAIN
UNCLASS. EXC. ON LT. = 15 CU. YDS.

STA. 1029+14 CONSTRUCT
TRI. 36" X 62' PIPE CULVERT
WITH FES LT. & RT.
D.A. = 194.32 AC., Q25 = 171.1 C.F.S.
R.C. PIPE (CLASS V)(TYPE 3 BEDDING) = 174 LIN. FT.
C.M. PIPE (TYPE 2 BEDDING) = 186 LIN. FT.
36" FES = 6 EACH

WIRE FENCE (TYPE C)

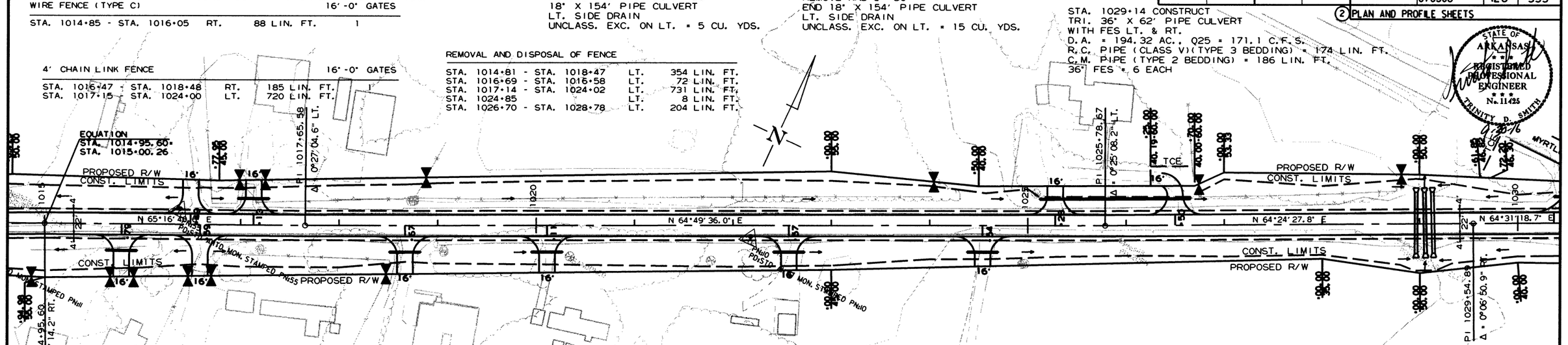
			16'-0" GATES
STA. 1014+85 - STA. 1016+05	RT.	88 LIN. FT.	1

4' CHAIN LINK FENCE

			16'-0" GATES
STA. 1016+47 - STA. 1018+48	RT.	185 LIN. FT.	1
STA. 1017+15 - STA. 1024+00	LT.	720 LIN. FT.	1

REMOVAL AND DISPOSAL OF FENCE

STA. 1014+81 - STA. 1018+47	LT.	354 LIN. FT.
STA. 1016+69 - STA. 1016+58	LT.	72 LIN. FT.
STA. 1017+14 - STA. 1024+02	LT.	731 LIN. FT.
STA. 1024+85	LT.	8 LIN. FT.
STA. 1026+70 - STA. 1028+78	LT.	204 LIN. FT.



STA. 1015+79 INSTALL
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 35 CU. YDS.
UNCLASS. EXC. ON RT. = 5 CU. YDS.

STA. 1016+59 CONSTRUCT
APPR. ON RT. = 35 CU. YDS.
UNCLASS. EXC. ON RT. = 5 CU. YDS.

STA. 1018+67 INSTALL
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.

STA. 1020+16 IN PLACE
12" X 25' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +11
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 35 CU. YDS.
UNCLASS. EXC. ON RT. = 5 CU. YDS.

STA. 1022+66 IN PLACE
18" X 29' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +57
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 35 CU. YDS.

STA. 1024+62 IN PLACE
18" X 27' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +54
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.

STA. 1028+96 IN PLACE
49" X 33" X 41' ARCH C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE

STA. 1029+05 IN PLACE
49" X 33" X 41' ARCH C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

NOTE:
FOR THE CONSTRUCTION OF TEMPORARY WORK RAMPS OR HAUL ROADS. THIS STREAM IS CLASSIFIED AS AN INTERMITTENT STREAM. THE STREAM BANK ELEVATION IS 160 FEET MSL AT STA. 1029+05. REFER TO SECTION 110.06(c) OF THE 2014 STANDARD SPECIFICTIONS.



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				6	ARK.			
				JOB NO.		070368	127	335

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
TRINITY D. SMITH
No. 11425
9-30-16

STA. 1030+65 INSTALL
18" X 56' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT TURNOUT ON LT. = 50 CU. YDS.

STA. 1033+70 IN PLACE
18" X 30' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 25 CU. YDS.

STA. 1035+97 INSTALL
18" X 28' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 25 CU. YDS.

STA. 1036+53 CONSTRUCT
APPR. ON LT. = 25 CU. YDS.

WIRE FENCE (TYPE D) 16'-0" GATES

STA. 1038+93 - STA. 1040+24	LT.	115 LIN. FT.	1

REMOVAL AND DISPOSAL OF FENCE

STA. 1032+34 - STA. 1032+51	LT.	26 LIN. FT.
STA. 1034+06 - STA. 1036+25	LT.	244 LIN. FT.
STA. 1044+15 - STA. 1047+45	LT.	330 LIN. FT.

STA. 1038+83 INSTALL
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.

STA. 1043+71 INSTALL
18" X 34' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 35 CU. YDS.

C.L. CONSTRUCT
PI =1040+83.90
Δ = 02°35' 42.3" LT.
D = 0°31' 16"
T = 249.06'
L = 498.03'
PC =1038+34.84
PT =1043+32.87
NO SUPER

STA. 1044+08 INSTALL
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.

4' CHAIN LINK FENCE 18'-0" GATES

STA. 1044+19 - STA. 1047+47	LT.	247 LIN. FT.	1

STA. 1041+99 CONSTRUCT
DBL. 24" X 62' PIPE CULVERT
WITH FES LT. & RT.
D.A. = 24.3 AC., Q25 = 33.9 C.F.S.
R.C. PIPE (CLASS V)(TYPE 3 BEDDING) = 116 LIN. FT.
C.M. PIPE (TYPE 2 BEDDING) = 124 LIN. FT.
24" FES = 4 EACH

STA. 1030+65 HWY. 335
MYRTLE GROVE ROAD

TOE

MYRTLE GROVE ROAD

PROPOSED R/W

CONST. LIMITS

PI 1035+57.71
Δ = 1°24' 51.1" LT.

PC 1038+34.84

PT 1043+32.87

N 64°31' 18.7" E

N 63°06' 27.6" E

N 60°30' 45.3" E

PN57 POI STD. AHTD MON. STAMPED PN57

PN54 POI STD. AHTD MON. STAMPED PN54

PN8 POI STD. AHTD MON. STAMPED PN8, JOB 070368

PI 1040+83.90

REST HAVEN CEMETERY

STA. 1033+60 IN PLACE
18" X 33' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +64
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 40 CU. YDS.
UNCLASS. EXC. ON RT. = 5 CU. YDS.

STA. 1034+40 IN PLACE
18" X 25' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +33
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 35 CU. YDS.
UNCLASS. EXC. ON RT. = 5 CU. YDS.

STA. 1036+88 IN PLACE
18" X 29' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +79
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 35 CU. YDS.

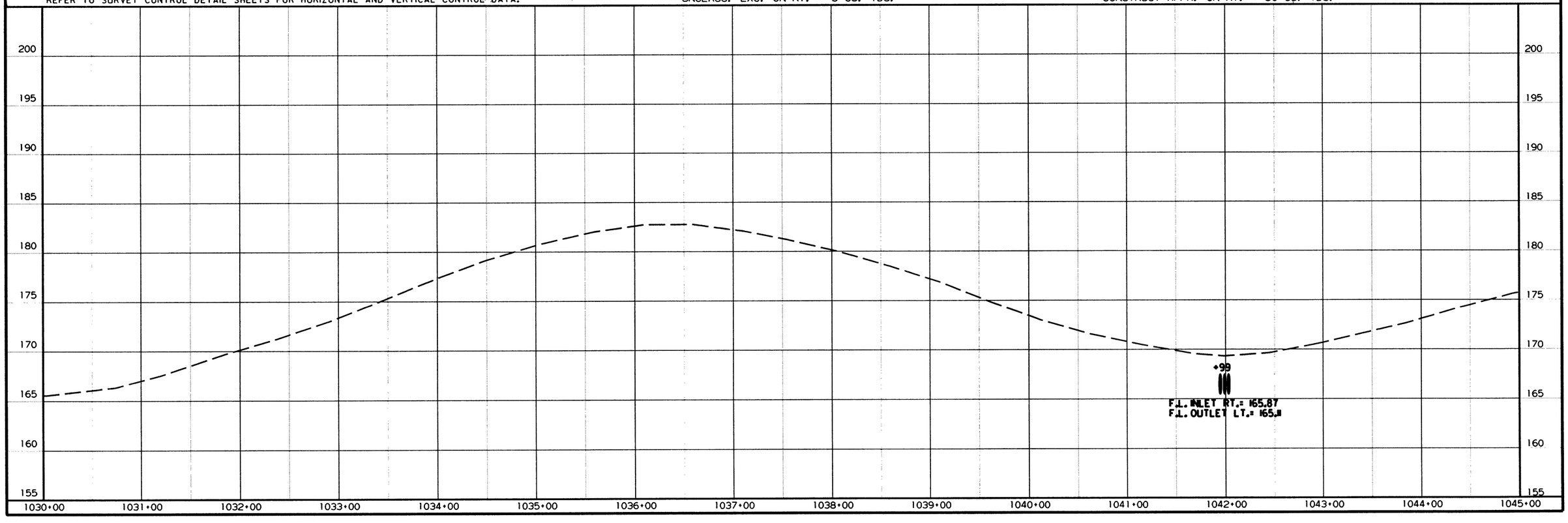
STA. 1037+59 IN PLACE
12" X 21' C.P. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +58
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 35 CU. YDS.
UNCLASS. EXC. ON RT. = 5 CU. YDS.

STA. 1039+50 IN PLACE
18" X 34' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +44
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 35 CU. YDS.

STA. 1040+89 IN PLACE
18" X 29' C.P. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +95
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.

STA. 1041+99 IN PLACE
24" X 40' C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE HDWLS. LT. & RT. & EXTEND C.M. PIPE
10' LT. & 12' RT.
(TYPE 2 BEDDING) WITH
FES LT. & RT.
D.A. = 24.3 AC., Q25 = 33.9 C.F.S.
24" C.M. PIPE = 22 LIN. FT.
24" FES = 2 EACH

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.



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(2) PLAN AND PROFILE SHEETS

STA. 1045+66 INSTALL
18" X 34' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.

STA. 1047+68 INSTALL
18" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.

STA. 1049+00 INSTALL
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.

STA. 1050+22 INSTALL
18" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 25 CU. YDS.

STA. 1051+12 IN PLACE
24" X 35' C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE

STA. 1052+05 CONSTRUCT
APPR. ON LT. = 30 CU. YDS.

C.L. CONSTRUCT
PI =1053+03.88
Δ = 04°41'26.8" LT.
D = 0°51'51"
T = 271.57'
L = 542.84'
PC =1050+32.31
PT =1055+75.15
e = 0.020'/'
Ls = 250'

STA. 1054+93 INSTALL
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 40 CU. YDS.
UNCLASS. EXC. ON LT. = 10 CU. YDS.

REMOVAL AND DISPOSAL OF FENCE

STA. 1044+15 - STA. 1047+45	LT.	330	LIN. FT.
STA. 1050+35 - STA. 1051+55	RT.	120	LIN. FT.
STA. 1058+49 - STA. 1058+74	RT.	31	LIN. FT.

STA. 1058+22 IN PLACE
18" X 21' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +15
18" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 35 CU. YDS.

4' CHAIN LINK FENCE

STA. 1044+19 - STA. 1047+47	LT.	247	LIN. FT.

3' CHAIN LINK FENCE

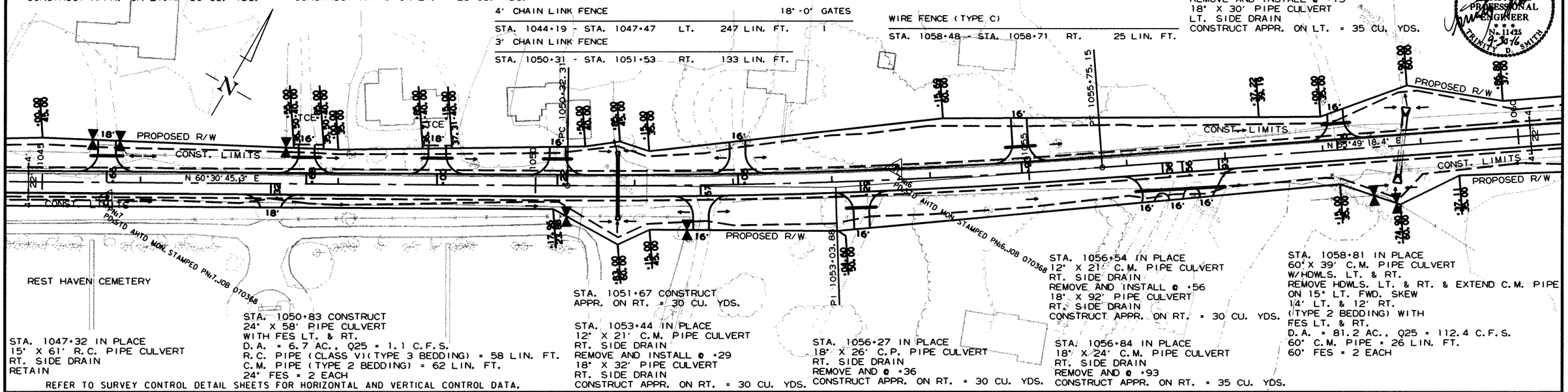
STA. 1050+31 - STA. 1051+53	RT.	133	LIN. FT.

18'-0" GATES
1

WIRE FENCE (TYPE C)

STA. 1058+48 - STA. 1058+71	RT.	25	LIN. FT.

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STA. 1047+32 IN PLACE
15" X 61' R.C. PIPE CULVERT
RT. SIDE DRAIN
RETAIN

STA. 1050+83 CONSTRUCT
24" X 58' PIPE CULVERT
WITH FES LT. & RT.
D.A. = 6.7 AC., Q25 = 1.1 C.F.S.
R.C. PIPE (CLASS V)(TYPE 3 BEDDING) = 58 LIN. FT.
C.M. PIPE (TYPE 2 BEDDING) = 62 LIN. FT.
24" FES = 2 EACH

STA. 1051+67 CONSTRUCT
APPR. ON RT. = 30 CU. YDS.

STA. 1053+44 IN PLACE
12" X 21' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +29
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.

STA. 1056+27 IN PLACE
18" X 26' C.P. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND @ +36
CONSTRUCT APPR. ON RT. = 30 CU. YDS.

STA. 1056+54 IN PLACE
12" X 21' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +56
18" X 92' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.

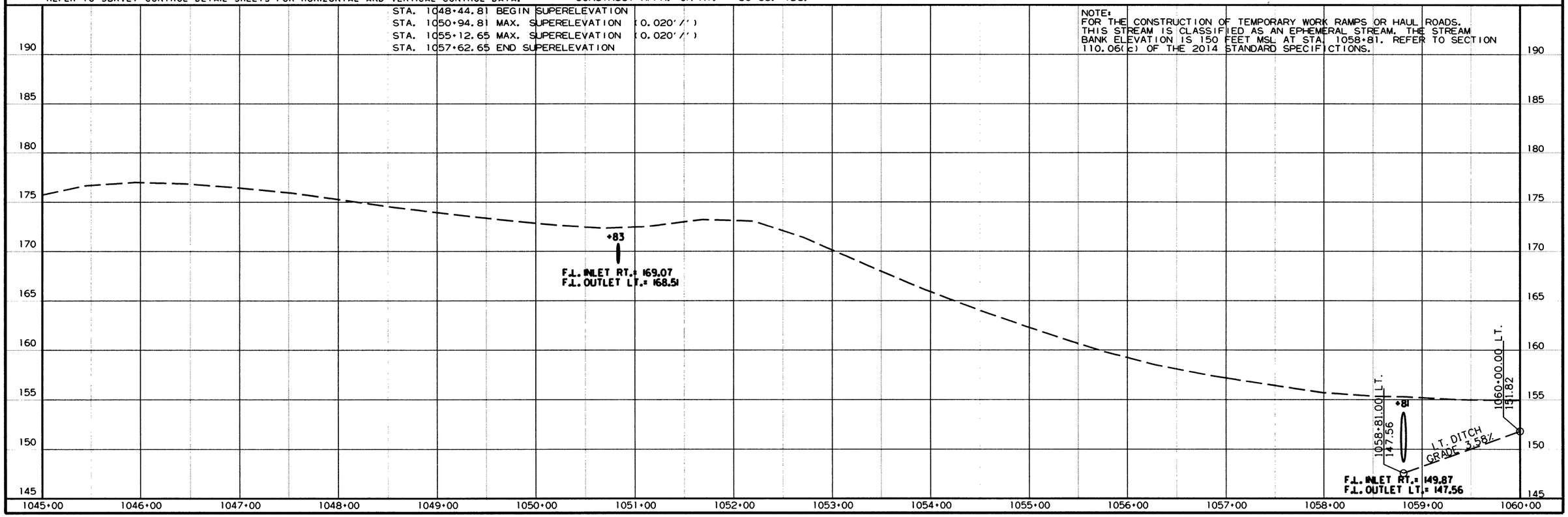
STA. 1056+84 IN PLACE
18" X 24' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND @ +93
CONSTRUCT APPR. ON RT. = 35 CU. YDS.

STA. 1058+81 IN PLACE
60" X 39' C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE HDWLS. LT. & RT. & EXTEND C.M. PIPE
ON 15° LT. FWD. SKEW
14' LT. & 12' RT.
(TYPE 2 BEDDING) WITH
FES LT. & RT.
D.A. = 81.2 AC., Q25 = 112.4 C.F.S.
60" C.M. PIPE = 26 LIN. FT.
60" FES = 2 EACH

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

STA. 1048+44.81 BEGIN SUPERELEVATION
STA. 1050+94.81 MAX. SUPERELEVATION (0.020'/')
STA. 1055+12.65 MAX. SUPERELEVATION (0.020'/')
STA. 1057+62.65 END SUPERELEVATION

NOTE:
FOR THE CONSTRUCTION OF TEMPORARY WORK RAMPS OR HAUL ROADS, THIS STREAM IS CLASSIFIED AS AN EPHEMERAL STREAM. THE STREAM BANK ELEVATION IS 150 FEET MSL AT STA. 1058+81. REFER TO SECTION 110.06(c) OF THE 2014 STANDARD SPECIFICTIONS.



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(2) PLAN AND PROFILE SHEETS

STA. 1062+49 IN PLACE
18" X 25' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +55
18" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.

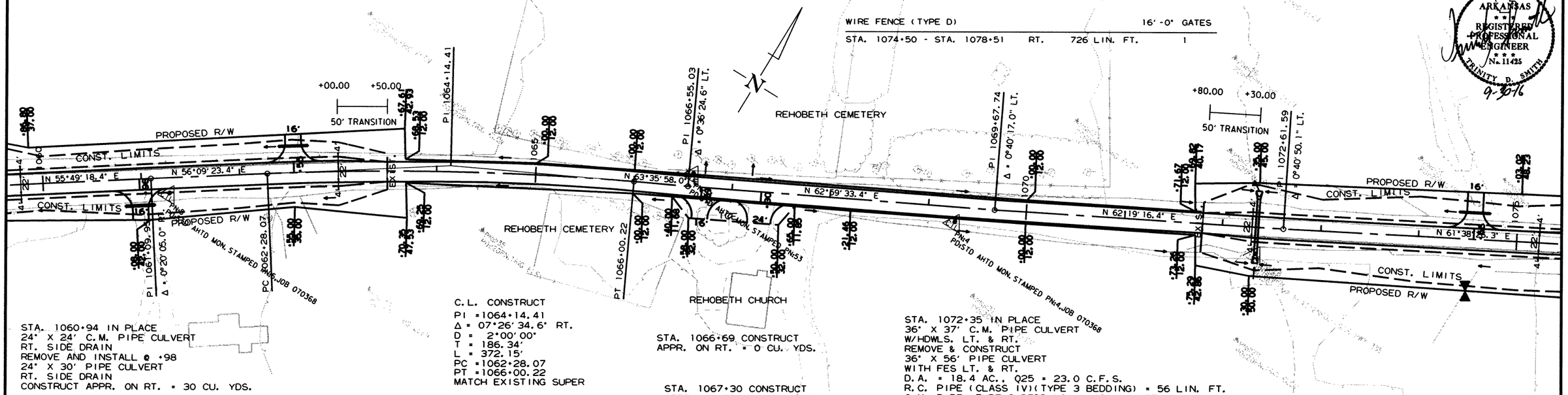
REMOVAL AND DISPOSAL OF FENCE — GATES

STA. 1062+50 LT.
STA. 1074+50 - STA. 1082+43 RT. 776 LIN. FT. 1

STA. 1074+70 IN PLACE
18" X 40' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +56
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.

WIRE FENCE (TYPE D) — 16'-0" GATES

STA. 1074+50 - STA. 1078+51 RT. 726 LIN. FT. 1



C.L. CONSTRUCT
PI =1064+14.41
Δ = 07°26' 34.6" RT.
D = 2°00' 00"
T = 186.34'
L = 372.15'
PC =1062+28.07
PT =1066+00.22
MATCH EXISTING SUPER

STA. 1060+94 IN PLACE
24" X 24' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +98
24" X 30' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.

STA. 1066+69 CONSTRUCT
APPR. ON RT. = 0 CU. YDS.

STA. 1067+30 CONSTRUCT
APPR. ON RT. = 0 CU. YDS.

STA. 1072+35 IN PLACE
36" X 37' C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE & CONSTRUCT
36" X 56' PIPE CULVERT
WITH FES LT. & RT.
D.A. = 18.4 AC., Q25 = 23.0 C.F.S.
R.C. PIPE (CLASS IV)(TYPE 3 BEDDING) = 56 LIN. FT.
C.M. PIPE (TYPE 2 BEDDING) = 62 LIN. FT.
36" FES = 2 EACH

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

NOTE:
FOR THE CONSTRUCTION OF TEMPORARY WORK RAMPS OR HAUL ROADS. THIS STREAM IS CLASSIFIED AS AN EPHEMERAL STREAM. THE STREAM BANK ELEVATION IS 158 FEET MSL AT STA. 1072+35. REFER TO SECTION 110.06(c) OF THE 2014 STANDARD SPECIFICTIONS.



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TRINITY D. SMITH
REGISTERED PROFESSIONAL ENGINEER
No. 11425
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(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-30-16

STA. 1078+22 INSTALL
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.
UNCLASS. EXC. ON LT. = 5 CU. YDS.

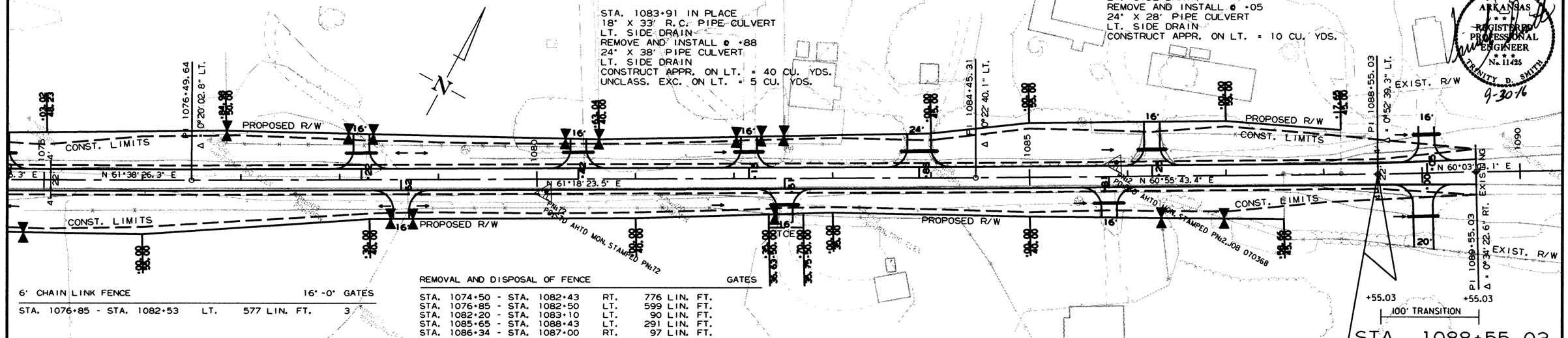
STA. 1080+42 IN PLACE
18" X 25' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.

STA. 1082+15 IN PLACE
24" X 17' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
24" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.
UNCLASS. EXC. ON LT. = 5 CU. YDS.

STA. 1083+91 IN PLACE
18" X 33' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +88
24" X 38' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 40 CU. YDS.
UNCLASS. EXC. ON LT. = 5 CU. YDS.

STA. 1086+24 IN PLACE
24" X 41' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +25
24" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 35 CU. YDS.
UNCLASS. EXC. ON LT. = 15 CU. YDS.

STA. 1089+08 IN PLACE
18" X 32' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +05
24" X 28' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 10 CU. YDS.



6' CHAIN LINK FENCE			16'-0" GATES
STA. 1076+85 - STA. 1082+53	LT.	577 LIN. FT.	3

WIRE FENCE (TYPE D)			16'-0" GATES
STA. 1078+67 - STA. 1082+41	RT.	374 LIN. FT.	1
STA. 1086+34 - STA. 1086+98	RT.	147 LIN. FT.	

REMOVAL AND DISPOSAL OF FENCE

			GATES
STA. 1074+50 - STA. 1082+43	RT.	776 LIN. FT.	
STA. 1076+85 - STA. 1082+50	LT.	599 LIN. FT.	
STA. 1082+20 - STA. 1083+10	LT.	90 LIN. FT.	
STA. 1085+65 - STA. 1088+43	LT.	291 LIN. FT.	
STA. 1086+34 - STA. 1087+00	RT.	97 LIN. FT.	
STA. 1087+65	RT.		1

STA. 1078+62 CONSTRUCT
APPR. ON RT. = 25 CU. YDS.

STA. 1082+51 INSTALL
18" X 30' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.

STA. 1085+78 IN PLACE
18" X 25' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +81
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.

STA. 1089+03 IN PLACE
18" X 35' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +00
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 15 CU. YDS.

+55.03 +55.03
100' TRANSITION

STA. 1088+55.03
END JOB 070368

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.



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(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-27-16

STA. 876+82 INSTALL
DBL. 60" X 46' TEMPORARY PIPE CULVERT

C.L. DETOUR
PI = 3+46.45
Δ = 15°46'29.0" LT.
D = 8°15'00"
T = 96.21'
L = 191.21'
PC = 2+50.24
PT = 4+41.44
NO SUPER

C.L. DETOUR
PI = 10+16.15
Δ = 16°10'19.8" LT.
D = 8°15'00"
T = 98.67'
L = 196.03'
PC = 9+17.48
PT = 11+13.51
NO SUPER

C.L. CONSTRUCT
PI = 867+61.48
Δ = 20°37'43.1" RT.
D = 5°25'28"
T = 192.23'
L = 380.30'
PC = 865+69.25
PT = 869+49.55
e = 0.087'/'
Ls = 300'

C.L. DETOUR
PI = 5+62.26
Δ = 15°39'21.3" RT.
D = 8°15'00"
T = 95.48'
L = 189.77'
PC = 4+66.78
PT = 6+56.55
e = 0.358'/'
Ls = 107.55

C.L. DETOUR
PI = 8+05.63
Δ = 16°10'19.8" RT.
D = 8°15'00"
T = 98.67'
L = 196.03'
PC = 7+06.96
PT = 9+02.99
e = 0.351'/'
Ls = 105.25

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

STA. 4+54.11 BEGIN SUPERELEVATION
STA. 5+61.66 MAX. SUPERELEVATION (0.0358'/')
STA. 5+61.67 MAX. SUPERELEVATION (0.0358'/')
STA. 6+69.22 END SUPERELEVATION

STA. 6+99.72 BEGIN SUPERELEVATION
STA. 8+04.97 MAX. SUPERELEVATION (0.0351'/')
STA. 8+04.98 MAX. SUPERELEVATION (0.0351'/')
STA. 9+10.23 END SUPERELEVATION

P.V.I. 3+67.90
ELEV. 172.00

-2.43%

P.V.C. 5+16.43
ELEV. 168.40

K 64.00
VC=468'
e=4.28'

+79

DESIGN HW
Q25 = 165.3

F.I. INLET RT.= 160.33
F.I. OUTLET LT.= 160.13

P.V.I. 7+50.35
ELEV. 162.72

P.V.T. 9+84.28
ELEV. 174.15

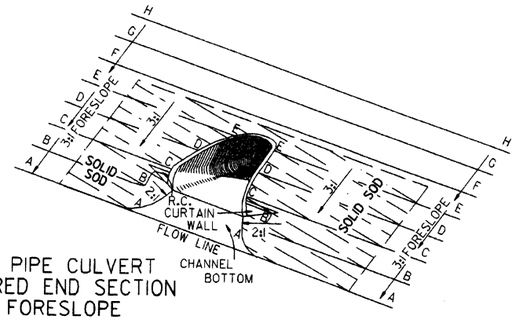
P.V.I. 9+91.68
ELEV. 174.51

200 195 190 185 180 175 170 165 160 155

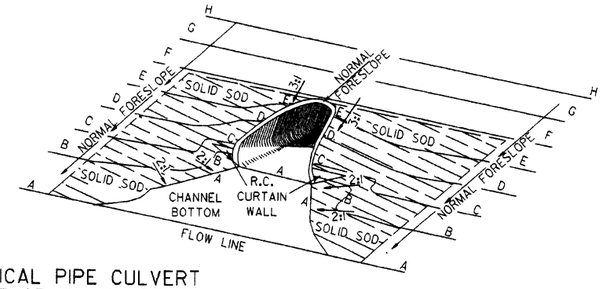
2+00 3+00 4+00 5+00 6+00 7+00 8+00 9+00 10+00 11+00 11+50

9/26/2016

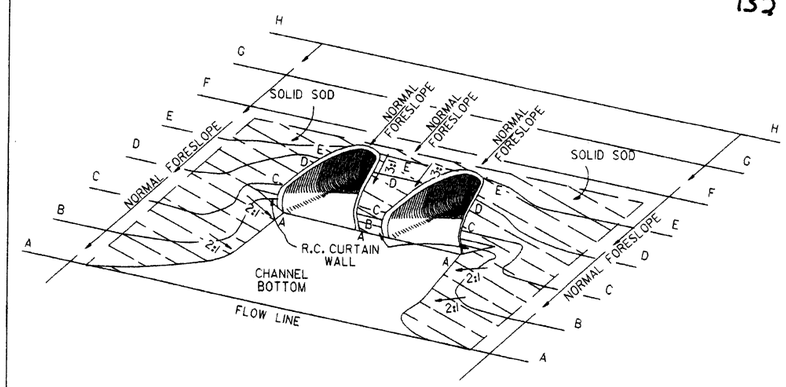
R070368.DGN



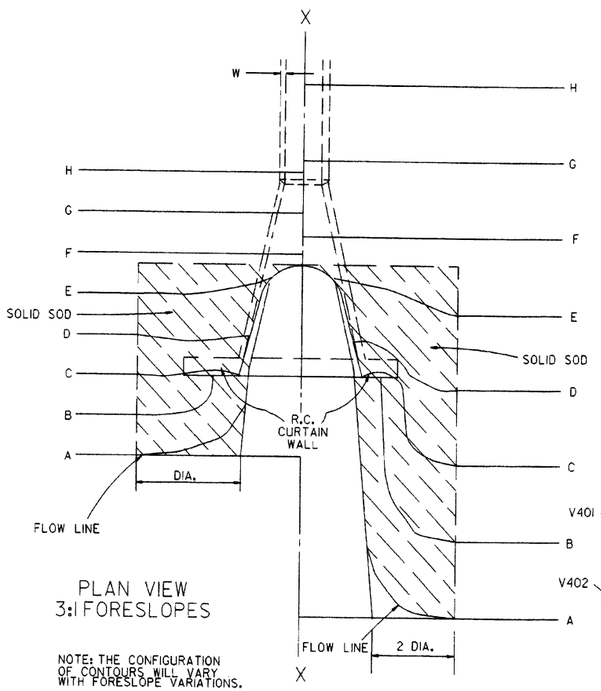
TYPICAL PIPE CULVERT
WITH FLARED END SECTION
& 3:1 FORESLOPE



TYPICAL PIPE CULVERT
WITH FLARED END SECTION
& FLATTENED ADJACENT SLOPES



TYPICAL MULTIPLE PIPE CULVERT
WITH FLARED END SECTIONS
& FLATTENED ADJACENT SLOPES



PLAN VIEW
3:1 FORESLOPES

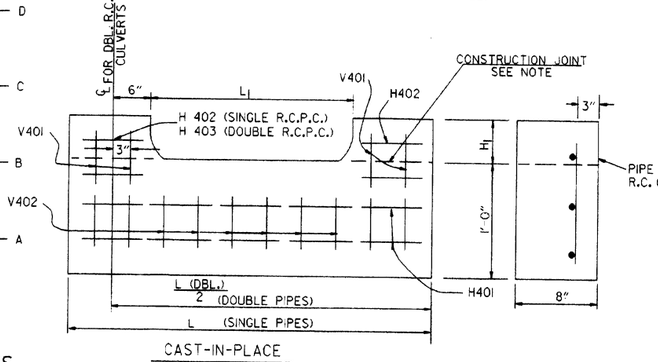
NOTE: THE CONFIGURATION OF CONTOURS WILL VARY WITH FORESLOPE VARIATIONS.

PLAN VIEW
FLATTENED FORESLOPES

R.C. CURTAIN WALL DIMENSIONS & QUANTITIES

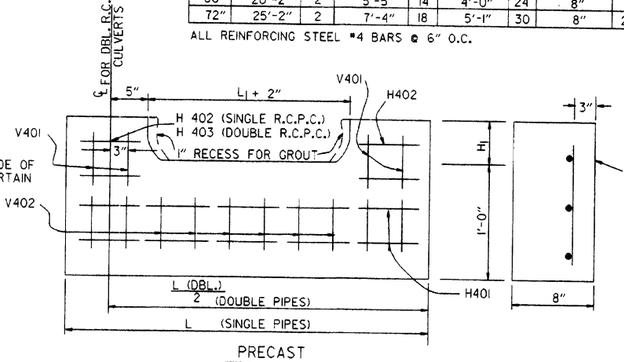
PIPE DIA.	H_1	L_1	L	L (DBL.)/2	SINGLE R.C.P.C. CONC.	SINGLE R.C.P.C. REINF. STEEL	DOUBLE R.C.P.C. CONC.	DOUBLE R.C.P.C. REINF. STEEL
					CU. YDS.	LBS.	CU. YDS.	LBS.
18"	1'-11½"	3'-5"	8'-0"	6'-3"	0.31	27.7	0.45	39.5
24"	1'-0½"	4'-6"	9'-6"	7'-6"	0.37	33.4	0.53	48.0
30"	1'-3½"	5'-7"	11'-0"	9'-0"	0.45	39.0	0.67	59.0
36"	1'-7"	6'-8"	13'-0"	10'-6"	0.58	52.6	0.83	73.9
42"	2'-1½"	7'-3"	15'-6"	12'-0"	0.82	77.1	1.10	100.7
48"	2'-5"	7'-10"	17'-0"	13'-0"	0.98	94.9	1.27	120.4
54"	2'-9½"	8'-5"	18'-6"	14'-0"	1.16	115.8	1.47	143.7
60"	3'-4"	9'-0"	20'-6"	15'-6"	1.47	149.7	1.84	180.3
72"	4'-5"	10'-2"	25'-6"	18'-6"	2.31	232.6	2.73	271.0

NOTE: QUANTITIES SHOWN ARE FOR ONE (1) CURTAIN WALL.



CAST-IN-PLACE

NOTE: THE PORTION OF THE R.C. CURTAIN WALL BENEATH THE FLARED END SECTION (LOWER 1'-0") SHALL BE PLACED MONOLITHICALLY. THE FLARED END SECTION SHALL THEN BE SET IN PLACE & THE REMAINING PORTIONS OF THE R.C. CURTAIN WALL PLACED.



PRECAST

NOTE: THE PRECAST CURTAIN WALL WILL BE SET AND BACKFILLED WITH COMPACTED MATERIAL. THE FLARED END SECTION SHALL THEN BE SET IN PLACE AND THE 1" RECESS FILLED WITH GROUT. WHERE "L" EXCEEDS 11' THE CURTAIN WALL MAY BE CAST IN TWO (2) OR MORE SECTIONS. THE METHOD OF JOINING THE SECTIONS FOR INSTALLATION SHALL BE APPROVED BY THE ENGINEER.

R.C. CURTAIN WALL DETAILS

REINFORCING STEEL SCHEDULE

PIPE DIA.	SINGLE R.C. PIPE CULVERT H401 L	H401 NO.	H402 L	H402 NO.	V401 L	V401 NO.	V402 L	V402 NO.	DOUBLE R.C. PIPE CULVERT H401 L	H401 NO.	H402 L	H402 NO.	H403 L	H403 NO.	V401 L	V401 NO.	V402 L	V402 NO.
18"	7'-8"	2	1'-11½"	4	1'-7½"	8	8"	8	12'-2"	2	1'-11½"	4	8"	2	1'-7½"	10	8"	14
24"	9'-2"	2	2'-2"	4	1'-8½"	10	8"	9	14'-8"	2	2'-2"	4	8"	2	1'-8½"	12	8"	18
30"	10'-8"	2	2'-4½"	4	1'-11½"	10	8"	12	17'-8"	2	2'-4½"	4	8"	2	1'-11½"	14	8"	22
36"	12'-8"	2	2'-10"	6	2'-3"	12	8"	14	20'-8"	2	2'-10"	6	8"	3	2'-3"	14	8"	28
42"	15'-2"	2	3'-9½"	8	2'-9½"	16	8"	15	23'-8"	2	3'-9½"	8	8"	4	2'-9½"	18	8"	30
48"	16'-8"	2	4'-3"	10	3'-1"	18	8"	16	25'-8"	2	4'-3"	10	8"	5	3'-1"	20	8"	32
54"	18'-2"	2	4'-8½"	12	3'-5½"	20	8"	17	27'-8"	2	4'-9"	12	8"	6	3'-5½"	22	8"	34
60"	20'-2"	2	5'-5"	14	4'-0"	24	8"	18	30'-8"	2	5'-5"	14	8"	7	4'-0"	26	8"	36
72"	25'-2"	2	7'-4"	18	5'-1"	30	8"	20	36'-8"	2	7'-4"	18	8"	9	5'-1"	33	8"	40

ALL REINFORCING STEEL #4 BARS @ 6" O.C.

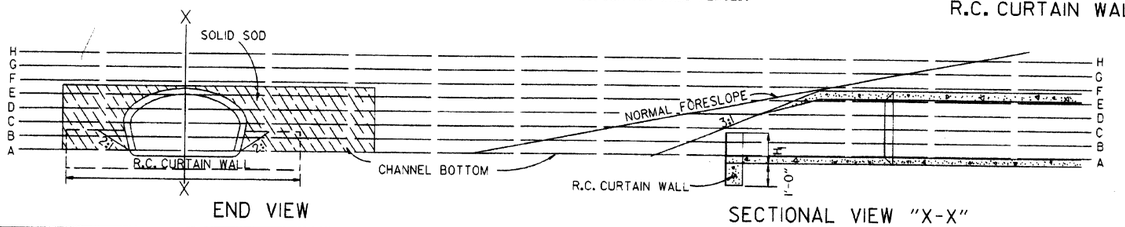
SOLID SODDING

PIPE DIA.	SINGLE R.C.P.C. 3:1	4:1	6:1	DOUBLE R.C.P.C. 3:1	4:1	6:1
	SQ. YDS.			SQ. YDS.		
18"	5	7	12	6	8	13
24"	8	12	19	9	13	20
30"	13	18	29	14	19	30
36"	17	26	41	18	28	43
42"	23	35	55	25	37	57
48"	29	46	68	31	48	70
54"	35	57	85	37	59	87
60"	45	62	104	48	65	107
72"	64	92	156	67	95	159

NOTE: QUANTITIES SHOWN ABOVE ARE FOR ONE (1) END OF F.E.S.

GENERAL NOTES

1. A CAST-IN-PLACE OR PRECAST CURTAIN WALL MAY BE USED. PAYMENT FOR THE CURTAIN WALL SHALL BE CONSIDERED TO BE INCLUDED IN THE UNIT PRICE BID EACH FOR FLARED END SECTIONS OF THE SEVERAL SIZES, WHICH PRICE SHALL BE FULL COMPENSATION FOR FURNISHING ALL MATERIALS INCLUDING REINFORCING STEEL AND CONCRETE: FOR FORMS, MIXING AND PLACING; FOR EXCAVATION AND BACKFILL, AND FOR ALL LABOR, TOOLS, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.
2. ALL EXPOSED EDGES SHALL BE CHAMFERED ¾".
3. CONCRETE FOR CURTAIN WALL SHALL MEET THE REQUIREMENTS FOR CLASS A OR S CONCRETE AS PROVIDED IN SECTION 802 OF THE STANDARD SPECIFICATIONS OR FOR PAVING CONCRETE AS PROVIDED IN SECTION 501 OF THE STANDARD SPECIFICATIONS.
4. WELDED WIRE MESH 3 × 3 W10 × W10 MAY BE USED IN LIEU OF REINFORCING BARS.



END VIEW

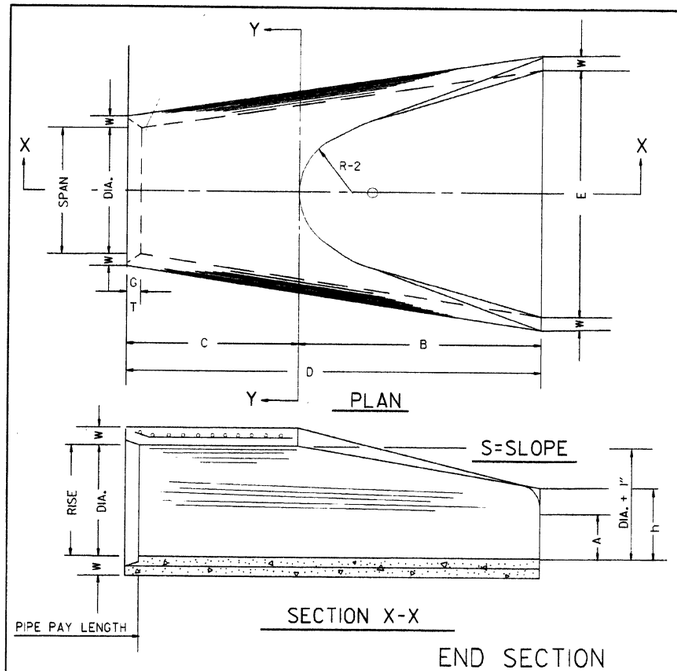
SECTIONAL VIEW "X-X"

DATE	REVISION	FILMED
10-18-96	ADDED NOTE TO SOLID SODDING	10-18-96
10-12-95	CORRECTED SPELLING	
11-3-94	ADDED GENERAL NOTE NO. 4	
8-15-91	REV. CURTAIN WALL QUANT. STEEL SCH. & SOLID SOD QUANT.	
3-2-81	ALLOW PRECAST IN 2 OR MORE PIECES CHAMFER EDGES	
5-15-80	ADDED PRECAST WALL & GENERAL NOTES	
10-2-72	REVISED AND REDRAWN	

ARKANSAS STATE HIGHWAY COMMISSION

FLARED END SECTION

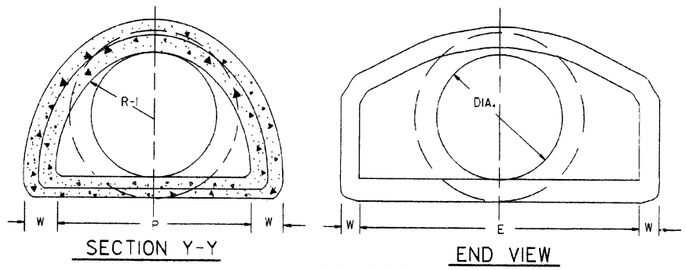
STANDARD DRAWING FES-1



END SECTION FOR REINFORCED CONCRETE PIPE CULVERTS

TABLE OF DIMENSIONS

DIA.	WALL	A	B	C	D	E	S	DIA. + 1"	P	R-1	R-2	G-T	WT.	h
18"	2½"	9"	2'-3"	3'-10"	6'-1"	3'-0"	3:1	19"	29"	15½"	12"	2"	1000	1'-0½"
24"	3"	9½"	3'-7½"	2'-6"	6'-1½"	4'-0"	3:1	25"	33 3/16"	16 13/16"	14"	2½"	1600	1'-1½"
30"	3½"	1'-0"	4'-6"	1'-7¾"	6'-1¾"	5'-0"	3:1	31"	37"	18½"	15"	3¼"	1940	1'-4⅝"
36"	4"	1'-3"	5'-3"	2'-10¾"	8'-1¾"	6'-0"	3:1	37"	47 11/16"	24 5/16"	20"	3½"	4100	1'-8"
42"	4½"	1'-9"	5'-3"	2'-11"	8'-2"	6'-6"	3:1	43"	53⅛"	27½"	22"	3½"	5380	2'-2½"
48"	5"	2'-0"	6'-0"	2'-2"	8'-2"	7'-0"	3:1	49"	56½"	28½"	22"	3½"	6550	2'-6"
54"	5½"	2'-4"	6'-6"	1'-10"	8'-4"	7'-6"	3:1	55"	65½"	33⅛"	24"	4"	8750	2'-10½"
60"	6"	2'-0"	6'-6"	1'-10"	8'-4"	8'-0"	3:1	61"	72½"	36 11/16"	24"	4"	9270	3'-5"
72"	7"	3'-10"	6'-6"	1'-10"	8'-4"	9'-0"	3:1	73"	77 13/16"	38 5/16"	24"	5"	13250	4'-6"

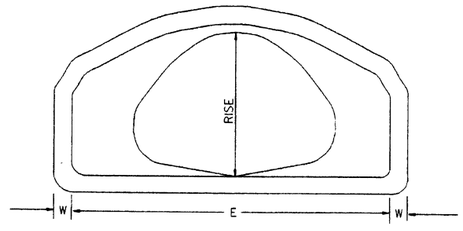


NOTE: TONGUE END ON UPSTREAM SECTION
GROOVE END ON DOWNSTREAM SECTION

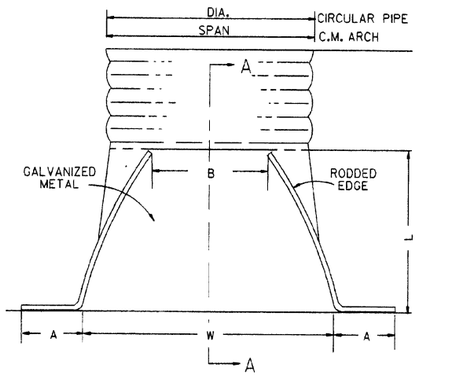
ARCH PIPE

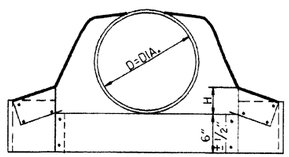
EQUIV. DIA.	• SPAN AASHTO M 206	• SPAN AHD NOMINAL	• RISE AASHTO M 206	• RISE AHD NOMINAL	W	A	B	C	D	E	P	R2	G-T	S
	INCHES													
15	18	18	11	11	2"	4"	2'-0"	4'-0"	6'-0"	3'-0"	29"	12"	1½"	2½:1
18	22	22	13½	14	2½"	5"	2'-0"	4'-1"	6'-1"	3'-6"	32⅛"	13"	2½"	2½:1
21	26	26	15½	16	2¾"	7"	2'-3"	3'-10"	6'-1"	4'-0"	34⅛"	14"	2½"	2½:1
24	28½	29	18	18	3"	9"	2'-3"	3'-10"	6'-1"	5'-0"	36 11/16"	15"	2½"	2½:1
30	36¼	36	22½	23	3½"	10"	3'-1"	3'-0½"	6'-1½"	6'-0"	47 11/16"	20"	3"	2½:1
36	43¾	44	26⅝	27	4"	10½"	4'-0"	2'-1½"	6'-1½"	6'-6"	54⅝"	22"	3½"	2½:1
42	51⅛	51	31 5/16	31	4½"	11½"	4'-7"	1-10¼"	6'-5¼"	7'-2"	59½"	23"	3¾"	2½:1
48	58½	59	36	36	5"	1'-3"	5'-3"	2'-10¾"	8'-1¾"	7'-10"	70 5/16"	24"	4¼"	2½:1
54	65	65	40	40	5½"	1'-7"	5'-3"	2'-11"	8'-2"	8'-6"	72 1/16"	24"	4¾"	2½:1
60	73	73	45	45	6"	1'-10"	5'-6"	2'-8"	8'-2"	9'-0"	77 1/16"	24"	5"	2¼:1

• THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN ± 2 PER CENT FROM THE VALUES SPECIFIED BY AASHTO M 206.



END VIEW
CONCRETE ARCH PIPE

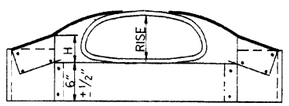




CIRCULAR PIPE

CIRCULAR PIPE

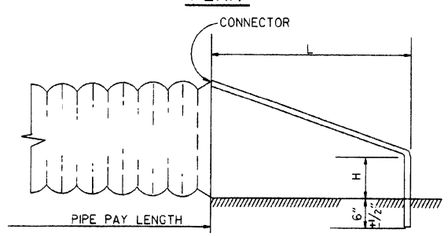
D. DIA.	GAUGE	A 1" ±	B. MAX.	H 1" ±	L 1½" ±	W 2" ±	S
		INCHES					
12	16	6	6	6	21	24	2½:1
15	16	7	8	6	26	30	2½:1
18	16	8	10	6	31	36	2½:1
21	16	9	12	6	36	42	2½:1
24	16	10	13	6	41	48	2½:1
30	14	12	16	8	51	60	2½:1
36	14	14	19	9	60	72	2½:1
42	12	16	22	11	69	84	2½:1
48	12	18	27	12	78	90	2½:1
54	12	18	30	12	84	102	2:1
60	12	18	33	12	87	114	1¾:1
66	12	18	36	12	87	120	1½:1
72	12	18	39	12	87	126	1 1/3:1



C.M. ARCH PIPE

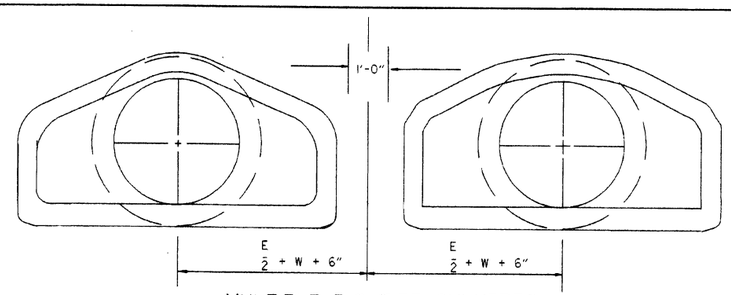
C.M. ARCH PIPE

EQUIV. DIA.	SPAN	RISE	A 1" ±	B MAX.	H 1" ±	L 1½" ±	W 2" ±	S	GAUGE
	INCHES								
15"	17	13	7	9	6	19	30	2½:1	16
18"	21	15	7	10	6	23	36	2½:1	16
21"	24	18	8	12	6	28	42	2½:1	16
24"	28	20	9	14	6	32	48	2½:1	16
30"	35	24	10	16	6	39	60	2½:1	14
36"	42	29	12	18	8	46	75	2½:1	14
42"	49	33	13	21	9	53	85	2½:1	12
48"	57	38	18	26	12	63	90	2½:1	12
54"	64	43	18	30	12	70	102	2¼:1	12
60"	71	47	18	33	12	77	114	2¼:1	12

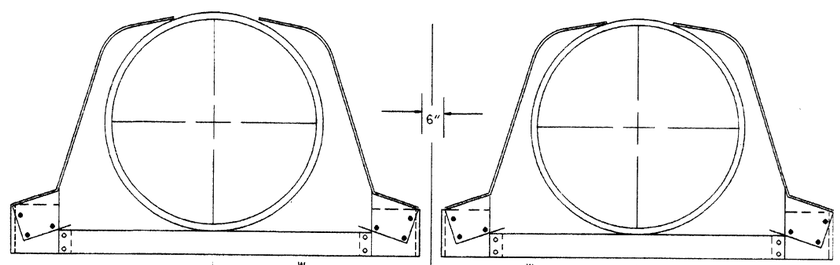


NOTE: ALTERNATE CONNECTIONS TO THE PIPE CULVERTS, IN ACCORDANCE WITH MANUFACTURER'S STANDARD PRACTICES, MAY BE MADE SUBJECT TO THE APPROVAL OF THE ENGINEER.

END SECTIONS FOR CORRUGATED METAL PIPE CULVERTS



MULTIPLE R.C. PIPE CULVERTS



MULTIPLE C.M. PIPE CULVERTS

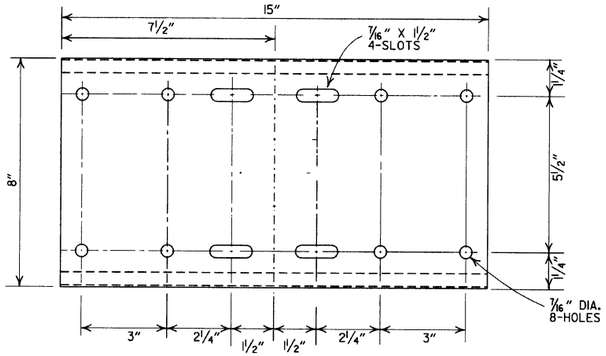
DATE	REVISION	FILMED
10-18-96	REVISED ASTM REF. TO AASHTO	10-18-96
5-15-80	REVISED DISTANCE BETWEEN MULTIPLE R.C.P. F.E.S.	664-5-15-80
7-14-78	C.M. ARCH SIZES TO CONFORM WITH AASHTO SIZES	752-7-14-78
8-22-75	ADDED MULTIPLE PIPE CULVERTS	517-8-22-75
12-5-74	REMOVED NOTE RE REINF. FOR R.C. F.E.S.	500-12-5-74
5-24-73	CMP END SECTION, SHOW PIPE PAY LENGTH	627-5-24-73
10-2-72	REVISED AND REDRAWN	760-10-2-72

ARKANSAS STATE HIGHWAY COMMISION

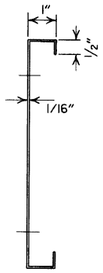
FLARED END SECTION

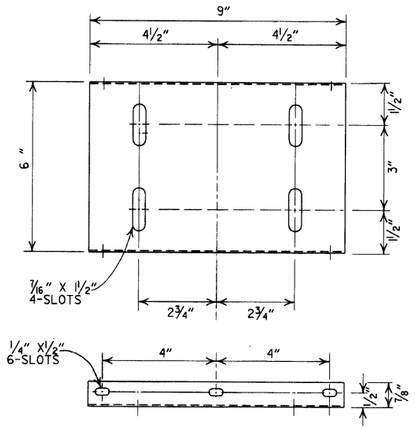
STANDARD DRAWING FES-2

stdfes2.dgn

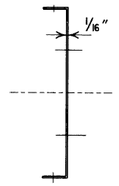


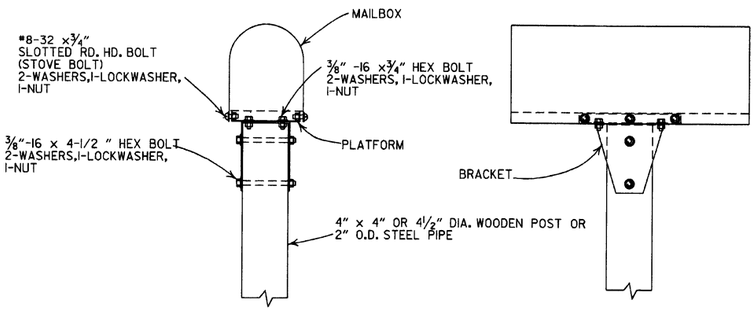
SHELF



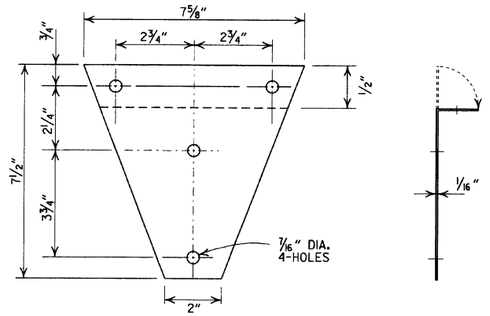


PLATFORM





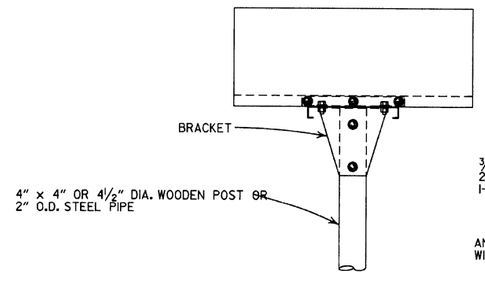
SINGLE INSTALLATION

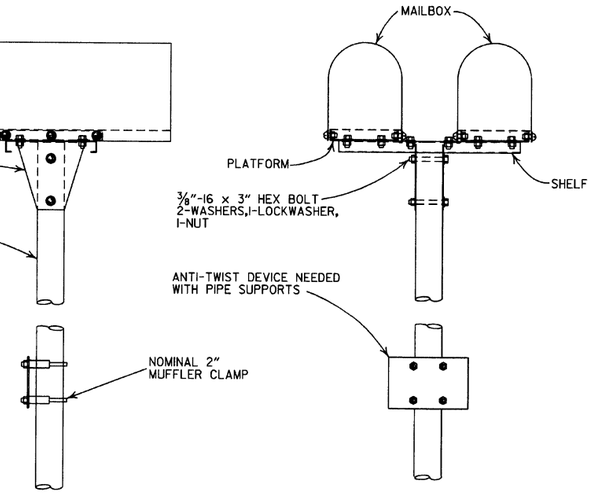


BRACKET

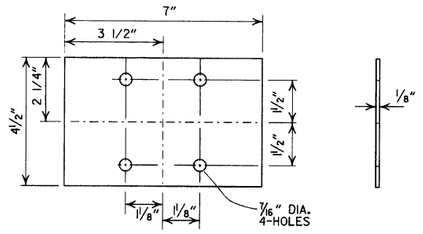
GENERAL NOTES

1. MAILBOX POSTS MAY BE WOOD OR METAL. WOOD POSTS SHALL BE PRESSURE TREATED FOR GROUND CONTACT IN ACCORDANCE WITH SECTION 637.02 OF THE STANDARD SPECIFICATIONS.
2. ANTI-TWIST PLATES SHALL BE USED ONLY ON METAL POSTS.
3. MAILBOX SHELF, BRACKET & PLATFORM SHALL BE GALVANIZED OR PAINTED STEEL, HOWEVER TREATED WOOD MAY BE USED WITH WOODEN POSTS. THE WOODEN SHELF, BRACKET & PLATFORM SHALL BE A MINIMUM OF¾" THICK AND SHALL BE ASSEMBLED WITH BOLTS OF THE APPROPRIATE LENGTH WITH SIX 8 X¾" FLATHEAD WOOD SCREWS USED TO ATTACH THE MAILBOX TO THE PLATFORM.
4. THE MAILBOX SHELF AND PLATFORM THAT IS SHOWN IS FOR STANDARD SIZE MAILBOXES. THE SHELF AND PLATFORM SIZE SHALL BE MODIFIED TO FIT MAILBOXES OF A DIFFERENT SIZE.
5. METAL PIPE FOR MAILBOX SUPPORT SHALL BE 2" OUTSIDE DIAMETER STEEL WITH A WALL THICKNESS OF 0.145" AND A WEIGHT OF 2.72 LBS PER FT. OUTSIDE DIAMETER AND WEIGHT SHALL HAVE A TOLERANCE OF +/- 5% ACCORDING TO AASHTO M 181.
6. MAILBOX SUPPORT SYSTEM DIFFERING FROM THOSE SHOWN MAY BE USED, PROVIDED THEY ARE ON THE AHTD QUALIFIED PRODUCTS LIST FOR MAILBOX SUPPORTS.

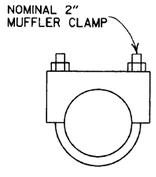




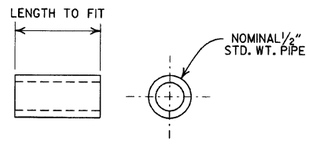
DOUBLE INSTALLATION



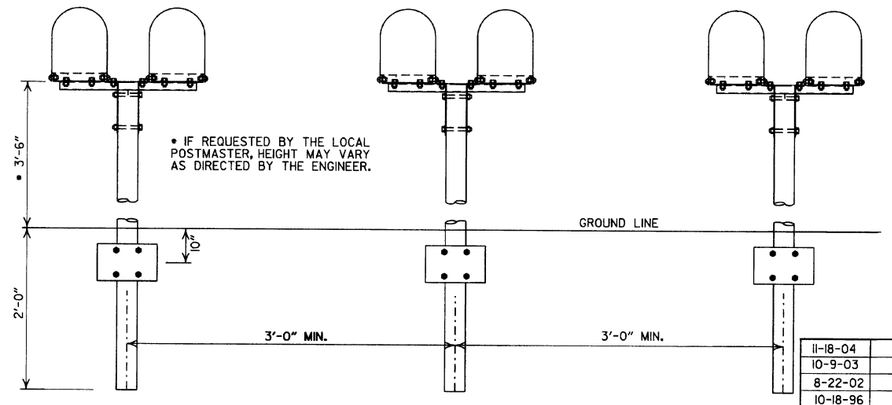
ANTI-TWIST PLATE



CLAMP



SPACER



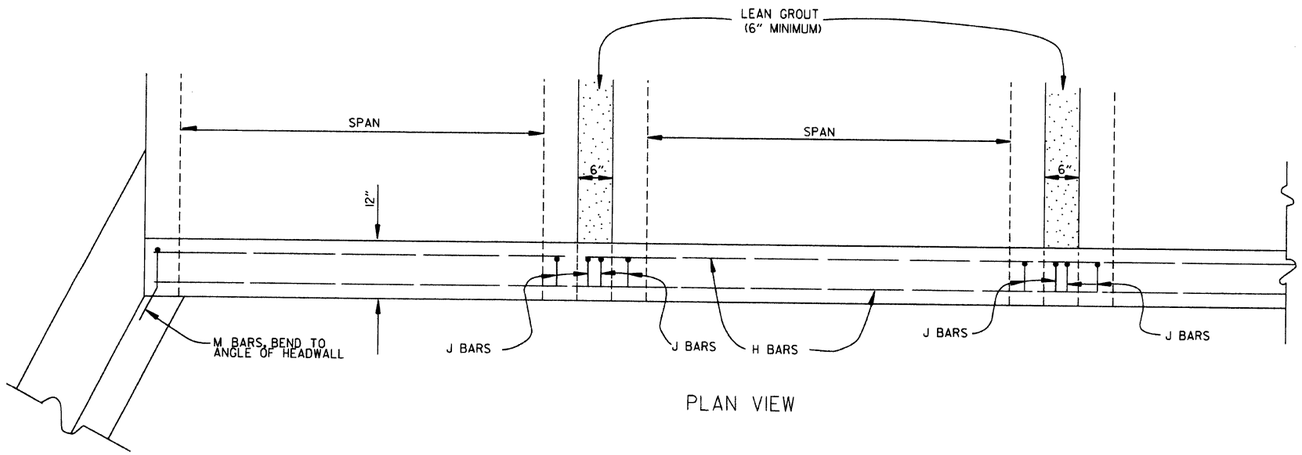
SPACING FOR MULTIPLE POST INSTALLATION

DATE	FILMED	REVISION
11-18-04		REVISED NOTES
10-9-03		REVISED NOTE 6
8-22-02		REVISED NOTE 6
10-18-96		CORRECTED AASHTO
10-1-92		CORRECTED SPELLING
9-26-91		NEW PHONE NUMBER
8-15-91		ADDED NOTE
11-30-89		ADJUSTED HEIGHT & ADDED NOTE
2-16-89		DELETED SLOTS FROM SHELF & PLTF
11-17-88	10-1-92	ADJUSTED DIMENSIONS OF STEEL POSTS
7-15-88	10-7-15-88	ISSUED

ARKANSAS STATE HIGHWAY COMMISSION

MAILBOX DETAILS

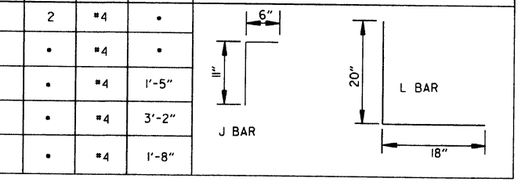
STANDARD DRAWING MB-1



PLAN VIEW

BAR LIST

BAR	NO.	SIZE	LENGTH	BAR BENDING DIAGRAM
H	2	#4	•	
I	•	#4	•	
J	•	#4	1'-5"	
L	•	#4	3'-2"	
M	•	#4	1'-8"	



• NOTE: LENGTH AND NUMBER OF BARS VARIES WITH SIZE OF CULVERT

GENERAL NOTES

WINGS, CURTAIN WALLS AND APRONS SHALL BE TIED TO THE PRECAST CULVERT SECTION BY CASTING BARS IN CULVERT END SECTIONS AS SHOWN OR BY DOWELING AND GROUTING. J BARS AND M BARS SHALL BE EMBEDDED A MINIMUM OF 10" IN PRECAST BOX.

WINGS, FOOTINGS, APRONS AND CURTAIN WALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE WING DRAWING. STEEL AND CONCRETE QUANTITIES WILL BE ADJUSTED TO FIT THE IN-PLACE WIDTH & HEIGHT OF THE PRECAST CONCRETE BOX CULVERTS.

ALL EXPOSED CORNERS TO HAVE ¾" CHAMFERS.

WINGWALLS AND FOOTINGS MAY BE ADJUSTED IN THE FIELD AS DIRECTED BY THE ENGINEER.

ALL CONCRETE, REINFORCING STEEL, LEAN GROUT, MEMBRANE WATERPROOFING, DRAINAGE FILL MATERIAL, GEOTEXTILE FILTER FABRIC, LABOR, MATERIALS AND EQUIPMENT REQUIRED FOR INSTALLING PRECAST BOX CULVERTS WILL NOT BE PAID FOR DIRECTLY BUT WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID FOR THE ITEMS AS SPECIFIED IN SECTION 607 OF THE STANDARD SPECIFICATIONS.

LEAN GROUT SHALL CONSIST OF A SAND CEMENT MIXTURE MEETING THE FOLLOWING REQUIREMENTS:
PORTLAND CEMENT SHALL BE TYPE I AND SHALL MEET THE REQUIREMENTS OF AASHTO M 85.
SAND SHALL MEET THE REQUIREMENTS OF FINE AGGREGATE AS SPECIFIED IN SECTION 802.02 OF THE STANDARD SPECIFICATIONS.
THE SAND CEMENT MIXTURE SHALL CONSIST OF NOT LESS THAN 1.5 SACKS OF PORTLAND CEMENT PER TON OF MATERIAL MIXTURE.
THE MIXTURE SHALL CONTAIN SUFFICIENT WATER TO HYDRATE THE CEMENTS. THE SAND CEMENT MIXTURE SHALL BE PLACED IN MAXIMUM 8 INCH THICK LIFTS, LOOSE MEASURE, AND THOROUGHLY RODDED AND TAMPED AROUND BOX TO THOROUGHLY FILL ALL VOIDS.

MEMBRANE WATERPROOFING CONFORMING TO THE REQUIREMENTS OF SECTION 815 OF THE STANDARD SPECIFICATIONS SHALL BE APPLIED TO ALL BOX CULVERT JOINTS.

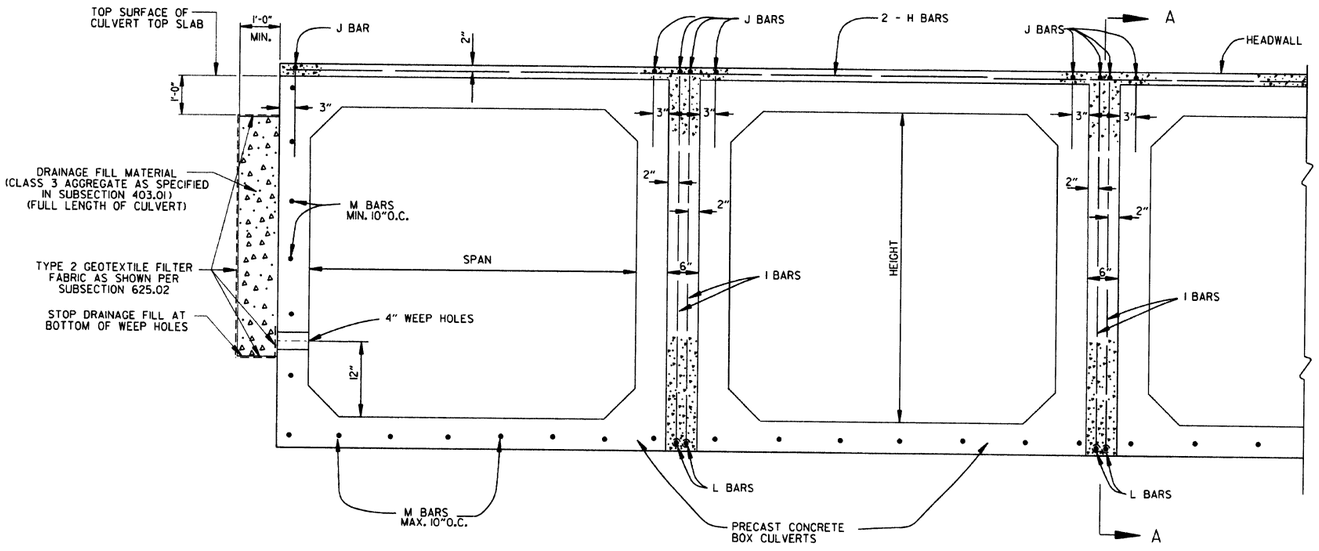
THE MEMBRANE WATERPROOFING WILL BE REQUIRED ON THE TOP EXTERNAL JOINT AND SHALL EXTEND 1 FOOT DOWN THE SIDES OF THE CULVERT.

IN OUTER BARRELS, ONE WEEP HOLE IS REQUIRED IN EXTERIOR WALLS OF EACH PRECAST CULVERT SECTION. WEEP HOLES SHALL HAVE A MAXIMUM HORIZONTAL SPACING OF 10'-0" IN THE ASSEMBLED CULVERT AND SHALL BE SPACED TO CLEAR ALL REINFORCING STEEL. THE DRAIN OPENING SHALL BE 4" DIAMETER AND SHALL BE PLACED 12" ABOVE THE TOP OF THE BOTTOM SLAB.

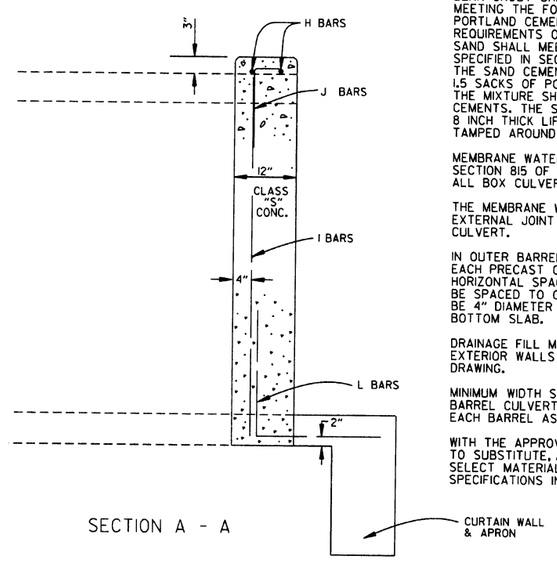
DRAINAGE FILL MATERIAL WITH GEOTEXTILE FABRIC IS REQUIRED AT THE EXTERIOR WALLS OF THE ASSEMBLED CULVERT. SEE DETAILS ON THIS DRAWING.

MINIMUM WIDTH SHALL BE 12" (6" ON EACH SIDE OF JOINT). ON MULTIPLE BARREL CULVERTS, MEMBRANE WATERPROOFING SHALL BE APPLIED TO EACH BARREL AS DESCRIBED ABOVE.

WITH THE APPROVAL OF THE ENGINEER, THE CONTRACTOR WILL BE ALLOWED TO SUBSTITUTE, AT NO ADDITIONAL COST TO THE DEPARTMENT, FLOWABLE SELECT MATERIAL CONFORMING TO SECTION 206 OF THE STANDARD SPECIFICATIONS IN LIEU OF LEAN GROUT.



END VIEW



SECTION A - A

DATE	REVISION	DATE FILMED
1-28-15	REVISED GEOTEXTILE FABRIC PLACEMENT	
12-15-11	ADDED NOTE & DTLS FOR WEEP HOLE AND DRAINAGE FILL	
10-15-09	ADDED GENERAL NOTE	
11-10-05	REVISED SPACING OF "M" BARS	
4-10-03	REVISED GENERAL NOTES	
10-18-96	CORRECTED AASHTO REF.	
10-1-92	ADDED NOTE FOR MEMBRANE WATERPROOFING	
8-15-91	ADDED NOTE FOR LEAN GROUT	
11- 8-90	REVISED FOR 1991 SPECS.	
11-30-89	ISSUED; JABE	

ARKANSAS STATE HIGHWAY COMMISSION

PRECAST CONCRETE BOX CULVERTS

STANDARD DRAWING PBC-1

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	43⅜	44	26⅝	27
42	51⅛	51	31⅝	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	96⅞	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)(1).

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.

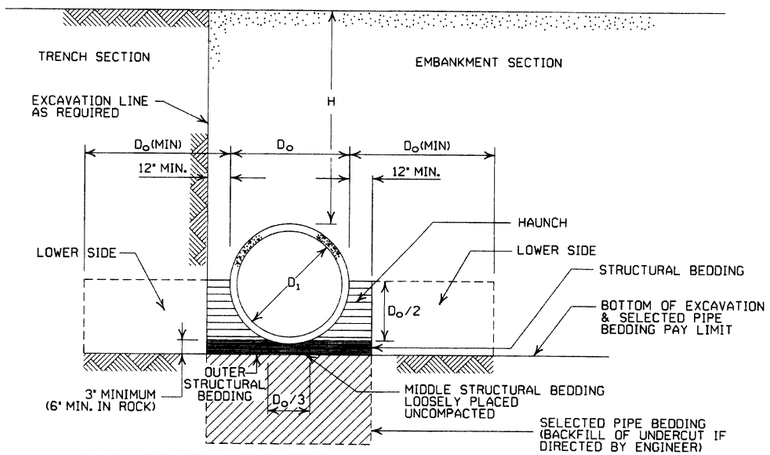
- LEGEND -

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARKANSAS STATE HIGHWAY COMMISSION

CONCRETE PIPE CULVERT FILL HEIGHTS & BEDDING

STANDARD DRAWING PCC-1

CORRUGATED STEEL PIPE (ROUND)

PIPE DIAMETER (INCHES)	① MINUMUM COVER TOP OF PIPE TO TOP OF GROUND "H" (FEET)	MAX. FILL HEIGHT "H" ABOVE TOP OF PIPE (FEET)				
		METAL THICKNESS (INCHES)				
		0.064	0.079	0.109	0.138	0.168
2⅔ INCH BY ½ INCH CORRUGATION RIVETED, WELDED, OR HELICAL LOCK-SEAM						
12	1	84	91			
15	1	67	73			
18	1	56	61			
24	1	42	46	59		
30	2	34	36	47		
36	2		30	39	41	
42	2		43	67	70	73
48	2		37	58	61	64
② 3 INCH BY 1 INCH OR 5 INCH BY 1 INCH CORRUGATION RIVETED, WELDED, BOLTED, OR HELICAL LOCK-SEAM						
36	1	48	60	88	111	118
42	1	41	51	72	90	102
48	1	36	45	64	77	85
54	2	32	40	59	71	79
60	2	29	36	53	64	71
66	2	26	33	47	58	64
72	2	24	30	44	53	59
78	2		28	41	49	54
84	2		26	38	45	51
90	2		24	35	43	45
96	2		22	33	40	44
102	2			31	38	42
108	2			30	35	39
114	2			28	34	37
120	2			27	32	35

CORRUGATED ALUMINUM PIPE (ROUND)

PIPE DIAMETER (INCHES)	① MINUMUM COVER TOP OF PIPE TO TOP OF GROUND "H" (FEET)	MAX. FILL HEIGHT "H" ABOVE TOP OF PIPE (FEET)				
		METAL THICKNESS IN INCHES				
		0.060	0.075	0.105	0.135	0.164
		2 ⅔ INCH BY ½ INCH CORRUGATION RIVETED OR HELICAL LOCK-SEAM				
12	1	45	45			
18	2	30	30	52		
24	2	22	22	39	41	
30	2		18	31	32	34
36	2.5		15	26	27	28
42	2			43	43	44
48	2			40	41	43
54	2			35	37	38
60	2				33	34
66	2					31
72	2					29

CORRUGATED METAL PIPE ARCHES

EQUIV. DIA. (INCHES)	PIPE DIMENSION SPAN X RISE (INCHES)	MINUMUM CORNER RADIUS (INCHES)	STEEL				ALUMINUM		
			MIN. THICKNESS REQUIRED INCHES	① MIN. HEIGHT OF FILL, "H" (FT.) INSTALLATION TYPE 1	MAX. HEIGHT OF FILL, "H" (FT.) INSTALLATION TYPE 1	MIN. THICKNESS REQUIRED INCHES	① MIN. HEIGHT OF FILL, "H" (FT.) INSTALLATION TYPE 1	MAX. HEIGHT OF FILL, "H" (FT.) INSTALLATION TYPE 1
			2 ⅔ INCH BY ½ INCH CORRUGATION RIVETED, WELDED, OR HELICAL LOCK-SEAM			2 ⅔ INCH BY ½ INCH CORRUGATION RIVETED OR HELICAL LOCK-SEAM		
15	17x13	3	0.064	2	15	0.060	2	15
18	21x15	3	0.064	2	15	0.060	2	15
21	24x18	3	0.064	2.25	15	0.060	2.25	15
24	28x20	3	0.064	2.5	15	0.075	2.5	15
30	35x24	3	0.079	3	12	0.075	3	12
36	42x29	3½	0.079	3	12	0.105	3	12
42	49x33	4	0.079	3	12	0.105	3	12
48	57x38	5	0.109	3	13	0.135	3	13
54	64x43	6	0.109	3	14	0.135	3	14
60	71x47	7	0.138	3	15	0.164	3	15
66	77x52	8	0.168	3	15			
72	83x57	9	0.168	3	15			
			② 3 INCH BY 1 INCH OR 5 INCH BY 1 INCH CORRUGATION RIVETED, WELDED, OR HELICAL LOCK-SEAM					
				INSTALLATION TYPE 2	INSTALLATION TYPE 1		INSTALLATION TYPE 2	INSTALLATION TYPE 1
36	40x31	5	0.079	3	2	12		15
42	46x36	6	0.079	3	2	13		15
48	53x41	7	0.079	3	2	13		15
54	60x46	8	0.079	3	2	13		15
60	66x51	9	0.079	3	2	13		15
66	73x55	12	0.079	3	2	15		15
72	81x59	14	0.079	3	2	15		15
78	87x63	14	0.079	3	2	15		15
84	95x67	16	0.109	3	2	15		15
90	103x71	16	0.109	3	2	15		15
96	112x75	18	0.109	3	2	15		15
102	117x79	18	0.109	3	2	15		15
108	128x83	18	0.138	3	2	15		15

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. COMPLETE STRUCTURAL BACKFILL OPERATION BY WORKING FROM SIDE TO SIDE OF THE PIPE. THE SIDE TO SIDE STRUCTURAL BACKFILL DIFFERENTIAL SHALL NOT EXCEED 24 INCHES OR 1/3 THE SIZE OF THE PIPE, WHICHEVER IS LESS.

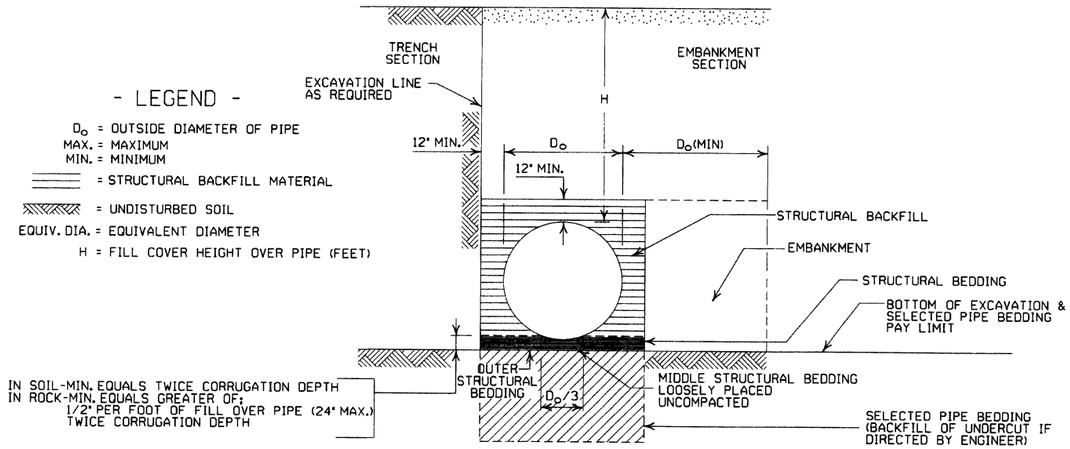
NOTE: STRUCTURAL BACKFILL AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF METAL PIPE.

INSTALLATION TYPE	MATERIAL REQUIREMENTS FOR STRUCTURAL BACKFILL AND STRUCTURAL BEDDING
TYPE 1	AGGREGATE BASE COURSE (CLASS 4, 5, 6, OR 7)
TYPE 2	SELECTED MATERIALS (CLASS SM-1, SM-2, OR SM-4) OR TYPE 1 INSTALLATION MATERIAL ③

③ SM-3 WILL NOT BE ALLOWED.

EQUIVALENT METAL THICKNESSES AND GAUGES

METAL THICKNESS IN INCHES			GAUGE NUMBER
STEEL		ALUMINUM	
ZINC COATED	UNCOATED		
0.064	0.0598	0.060	16
0.079	0.0747	0.075	14
0.109	0.1046	0.105	12
0.138	0.1345	0.135	10
0.168	0.1644	0.164	8



EMBANKMENT AND TRENCH INSTALLATIONS

1. STRUCTURAL BACKFILL, EMBANKMENT, AND OUTER STRUCTURAL BEDDING MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.
2. INSTALLATION TYPE 1 OR 2 MAY BE USED FOR CORRUGATED STEEL OR ALUMINUM PIPE (ROUND).
3. INSTALALTION TYPE 1 SHALL BE USED FOR CORRUGATED STEEL OR ALUMINUM PIPE ARCHES WITH 2⅔" X ½" CORRUGATION.
4. INSTALLATION TYPE 1 OR 2 MAY BE USED FOR CORRUGATED STEEL OR ALUMINUM PIPE ARCHES WITH 3" X 1" OR 5" X 1" CORRUGATION.

GENERAL NOTES

1. METAL PIPE CULVERT CONSTRUCTION SHALL CONFORM TO ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION), WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS. UNLESS OTHERWISE NOTED IN THE PLANS, SECTION AND SUBSECTION REFER TO THE STANDARD CONSTRUCTION SPECIFICATIONS.
2. METAL PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
3. METAL PIPE CULVERT MATERIALS AND INSTALLATIONS SHALL CONFORM TO SECTION 606 AND JOB SPECIAL PROVISION "METAL PIPE".
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. 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."
9. 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 AS STRUCTURAL BACKFILL), 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."

① FOR MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM 12" OF PAVEMENT AND/OR BASE.

② WHERE THE STANDARD 2 2/3"x ½" CORRUGATION AND GAUGE IS SPECIFIED FOR A GIVEN DIAMETER, A PIPE OF THE SAME DIAMETER WITH A 3" x 1" OR 5" x 1" CORRUGATION MAY BE SUBSTITUTED, PROVIDING IT IS GAUGED FOR A FILL HEIGHT CONDITION EQUAL TO OR GREATER THAN THE MAXIMUM FILL HEIGHT CONDITION FOR THE SPECIFIED GAUGE AND CORRUGATION.

DATE	REVISION	DATE FILMED
2-27-14	REVISED GENERAL NOTE 1.	
12-15-11	REVISED FOR LRFD DESIGN SPECS	
3-30-00	REVISED INSTALLATIONS	
11-06-97	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

METAL PIPE CULVERT FILL HEIGHTS & BEDDING

STANDARD DRAWING PCM-1

INSTALLATION TYPE	•• MATERIAL REQUIREMENTS FOR STRUCTURAL BACKFILL AND STRUCTURAL BEDDING
TYPE 2	*SELECTED MATERIALS (CLASS SM-1, SM-2 OR SM-4)

• AGGREGATE BASE COURSE (CLASS 4, 5, 6, OR 7) MAY BE USED IN LIEU OF SELECTED MATERIAL.

SM3 WILL NOT BE ALLOWED.

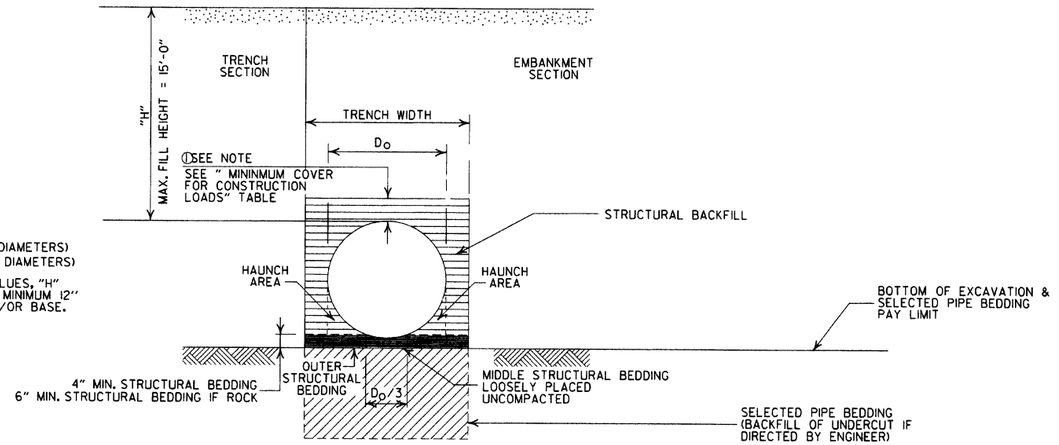
•• STRUCTURAL BEDDING MATERIAL SHALL HAVE A MAXIMUM PARTICLE SIZE OF 1 INCH. STRUCTURAL BACKFILL MATERIAL SHALL BE FREE OF ORGANIC MATERIAL, STONES LARGER THAN 1.50 INCH IN GREATEST DIMENSION, OR FROZEN LUMPS.

STRUCTURAL BACKFILL 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 HDPE PIPE.

MINIMUM TRENCH WIDTH BASED ON FILL HEIGHT "H"

PIPE DIAMETER	TRENCH WIDTH (FEET) "H" < 10'-0"	TRENCH WIDTH (FEET) "H" >OR= 10'-0"
18"	4'-6"	4'-6"
24"	5'-0"	6'-0"
30"	5'-6"	7'-6"
36"	6'-0"	9'-0"
42"	7'-0"	10'-6"
48"	8'-0"	12'-0"

①NOTE:
18" MIN. (18" - 30" DIAMETERS)
24" MIN. (36" - 48" DIAMETERS)
MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM 12" OF PAVEMENT AND/OR BASE.



TYPE 2 EMBANKMENT AND TRENCH INSTALLATIONS

1. STRUCTURAL BACKFILL, EMBANKMENT, AND OUTER STRUCTURAL BEDDING MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.

MULTIPLE INSTALLATION OF HIGH DENSITY POLYETHYLENE PIPES

PIPE DIAMETER	CLEAR DISTANCE BETWEEN PIPES
18"	1'-6"
24"	2'-0"
30"	2'-6"
36"	3'-0"
42"	3'-6"
48"	4'-0"

MINIMUM COVER FOR CONSTRUCTION LOADS

PIPE DIAMETER	② MIN. COVER (FEET) FOR INDICATED CONSTRUCTION LOADS 18.0-50.0 (KIPS)	50.0-75.0 (KIPS)	75.0-110.0 (KIPS)	110.0-175.0 (KIPS)
36" OR LESS	2'-0"	2'-6"	3'-0"	3'-0"
42" OR GREATER	3'-0"	3'-0"	3'-6"	4'-0"

②MINIMUM COVER SHALL BE MEASURED FROM TOP OF PIPE TO TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE. THE SURFACE SHALL BE MAINTAINED.

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. THE STRUCTURAL BACKFILL SHALL BE PLACED AND COMPACTED IN LAYERS NOT EXCEEDING 8". THE LAYERS SHALL BE BROUGHT UP EVENLY AND SIMULTANEOUSLY TO THE ELEVATION OF THE MINIMUM COVER.
5. PIPE INSTALLATION MAY REQUIRE THE USE OF RESTRAINTS, WEIGHTING OR OTHER APPROVED METHODS IN ORDER TO HELP MAINTAIN GRADE AND ALIGNMENT.

GENERAL NOTES

1. PIPE SHALL CONFORM TO AASHTO M294, TYPE S. INSTALLATION SHALL CONFROM TO JOB SPECIAL PROVISION "PLASTIC PIPE" AND SECTION 606 OF THE STANDARD SPECIFICIATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION).
2. PLASTIC PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
3. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PLUS A SUFFICIENT WIDTH TO ENSURE WORKING ROOM TO PROPERLY AND SAFELY PLACE AND COMPACT HAUNCHING AND OTHER BACKFILL MATERIAL.
4. 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.
5. 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."
6. 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 STRUCTURAL BACKFILL), 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."
7. FOR PIPE TYPES THAT ARE NOT SMOOTH ON THE OUTSIDE (CORRUGATED OR PROFILE WALLS), BACKFILL GRADATIONS SHOULD BE SELECTED THAT WILL PERMIT THE FILLING OF THE CORRUGATION OR PROFILE VALLEY.
8. HIGH DENSITY POLYETHYLENE PIPES OF DIAMETERS OTHER THAN SHOWN WILL NOT BE ALLOWED.
9. JOINTS FOR HDPE PIPE SHALL MEET THE REQUIREMENTS FOR SOIL TIGHTNESS AS SPECIFIED IN AASHTO SECTION 26.4.2.4 AND 30.4.2 "AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS." JOINTS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

- LEGEND -

H = FILL HEIGHT (FT.)
Ø = OUTSIDE DIAMETER OF PIPE
MAX. = MAXIMUM
MIN. = MINIMUM

= STRUCTURAL BACKFILL MATERIAL

= UNDISTURBED SOIL

DATE	REVISION	DATE FILMED
2-27-14	REVISED GENERAL NOTE 1.	
12-15-11	REVISED GENERAL NOTES & MINIMUM COVER NOTE	
11-17-10	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

PLASTIC PIPE CULVERT (HIGH DENSITY POLYETHYLENE)

STANDARD DRAWING PCP-1

INSTALLATION TYPE	•• MATERIAL REQUIREMENTS FOR STRUCTURAL BACKFILL AND STRUCTURAL BEDDING
TYPE 2	•SELECTED MATERIALS (CLASS SM-1, SM-2, OR SM-4)

• AGGREGATE BASE COURSE (CLASS 4, 5, 6, OR 7) MAY BE USED IN LIEU OF SELECTED MATERIAL.

SM3 WILL NOT BE ALLOWED.

•• STRUCTURAL BEDDING MATERIAL SHALL HAVE A MAXIMUM PARTICLE SIZE OF 1 INCH. STRUCTURAL BACKFILL MATERIAL SHALL BE FREE OF ORGANIC MATERIAL, STONES LARGER THAN 1.50 INCH IN GREATEST DIMENSION, OR FROZEN LUMPS.

STRUCTURAL BACKFILL 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 PVC PIPE.

MINIMUM TRENCH WIDTH BASED ON FILL HEIGHT "H"

PIPE DIAMETER	TRENCH WIDTH (FEET) "H" < 10'-0"	TRENCH WIDTH (FEET) "H" >OR= 10'-0"
18"	4'-6"	4'-6"
24"	5'-0"	6'-0"
30"	5'-6"	7'-6"
36"	6'-0"	9'-0"

MULTIPLE INSTALLATION OF PVC PIPES

PIPE DIAMETER	CLEAR DISTANCE BETWEEN PIPES
18"	1'-6"
24"	2'-0"
30"	2'-6"
36"	3'-0"

MAXIMUM FILL HEIGHT BASED ON STRUCTURAL BACKFILL

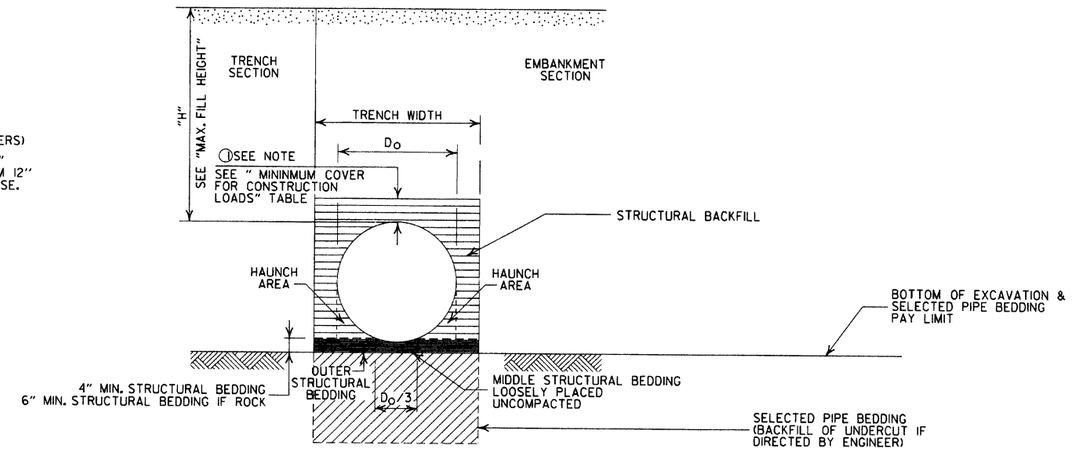
PIPE DIAMETER	"H"
18"	45'-0"
24"	45'-0"
30"	40'-0"
36"	40'-0"

① NOTE:
12" MIN. (18" - 36" DIAMETERS)
MINIMUM COVER VALUE, "H" SHALL INCLUDE A MINIMUM 12" OF PAVEMENT AND/OR BASE.

MINIMUM COVER FOR CONSTRUCTION LOADS

PIPE DIAMETER	② MIN. COVER (FEET) FOR INDICATED CONSTRUCTION LOADS 18.0-50.0 (KIPS)	50.0-75.0 (KIPS)	75.0-110.0 (KIPS)	110.0-175.0 (KIPS)
18" THRU 36"	2'-0"	2'-6"	3'-0"	3'-0"

②MINIMUM COVER SHALL BE MEASURED FROM TOP OF PIPE TO TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE. THE SURFACE SHALL BE MAINTAINED.



TYPE 2 EMBANKMENT AND TRENCH INSTALLATIONS

1. STRUCTURAL BACKFILL, EMBANKMENT, AND OUTER STRUCTURAL BEDDING MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.

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. THE STRUCTURAL BACKFILL SHALL BE PLACED AND COMPACTED IN LAYERS NOT EXCEEDING 8". THE LAYERS SHALL BE BROUGHT UP EVENLY AND SIMULTANEOUSLY TO THE ELEVATION OF THE MINIMUM COVER.
5. PIPE INSTALLATION MAY REQUIRE THE USE OF RESTRAINTS, WEIGHTING OR OTHER APPROVED METHODS IN ORDER TO HELP MAINTAIN GRADE AND ALIGNMENT.

GENERAL NOTES

1. PIPE SHALL CONFORM TO ASTM F949, CELL CLASS 12454. INSTALLATION SHALL CONFROM TO JOB SPECIAL PROVISION "PLASTIC PIPE" AND SECTION 606 OF THE STANDARD SPECIFICIATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION).
2. PLASTIC PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
3. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PLUS A SUFFICIENT WIDTH TO ENSURE WORKING ROOM TO PROPERLY AND SAFELY PLACE AND COMPACT HAUNCHING AND OTHER BACKFILL MATERIAL.
4. 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.
5. 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."
6. 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 STRUCTURAL BACKFILL), 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."
7. FOR PIPE TYPES THAT ARE NOT SMOOTH ON THE OUTSIDE (CORRUGATED OR PROFILE WALLS), BACKFILL GRADATIONS SHOULD BE SELECTED THAT WILL PERMIT THE FILLING OF THE CORRUGATION OR PROFILE VALLEY.
8. PVC PIPES OF DIAMETERS OTHER THAN SHOWN WILL NOT BE ALLOWED.
9. JOINTS FOR PVC PIPE SHALL MEET THE REQUIREMENTS FOR SOIL TIGHTNESS AS SPECIFIED IN AASHTO SECTION 26.4.2.4 AND 30.4.2 "AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS." JOINTS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

- LEGEND -

H = FILL HEIGHT (FT.)
D_O = OUTSIDE DIAMETER OF PIPE
MAX. = MAXIMUM
MIN. = MINIMUM

= STRUCTURAL BACKFILL MATERIAL

= UNDISTURBED SOIL

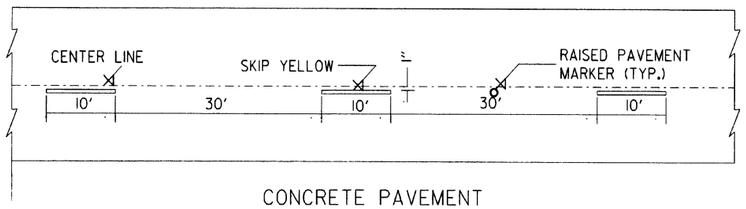
DATE	REVISION	DATE FILMED
2-27-14	REVISED GENERAL NOTE 1.	
12-15-11	REV GENERAL NOTES & MINIMUM COVER NOTE; DELETED SM3 MATERIAL	
11-17-10	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

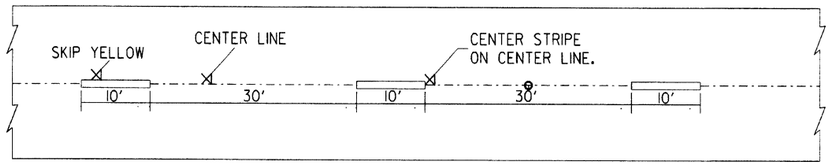
PLASTIC PIPE CULVERT (PVC F949)

STANDARD DRAWING PCP-2

NOTES:
1. REFER TO THE STRIPING DETAILS FOR PAVEMENT MARKING LINE WIDTHS.
2. THIS DRAWING SHALL BE USED IN CONJUNCTION WITH THE LATEST REVISED ADDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."
3. RAISED PAVEMENT MARKERS SHALL BE PLACED ON AN 80 FEET SPACING UNLESS OTHERWISE SHOWN IN THE PLANS.

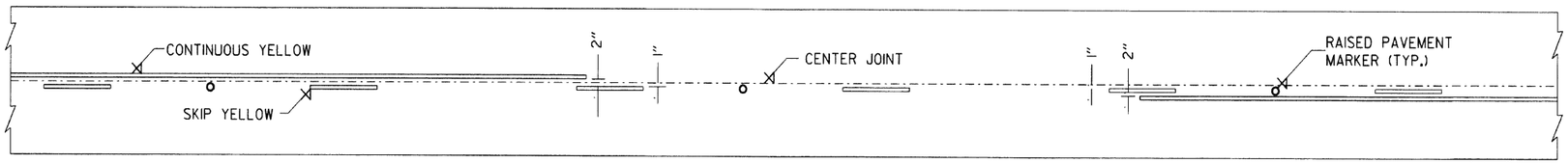


CONCRETE PAVEMENT

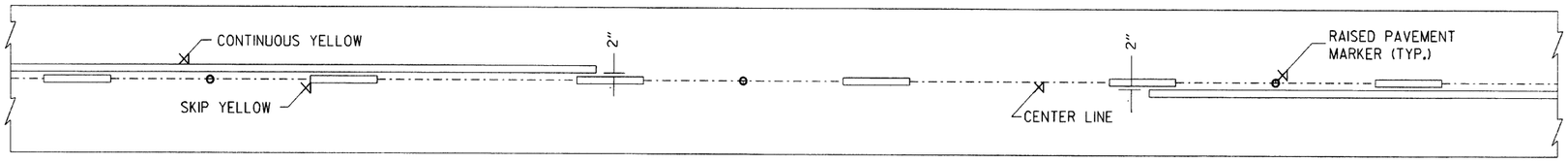


ASPHALT PAVEMENT

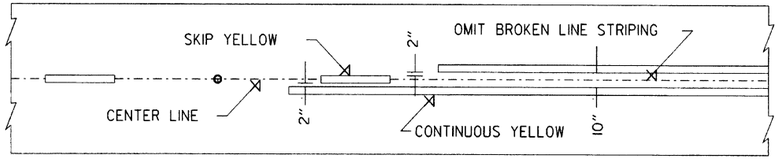
BROKEN LINE STRIPING



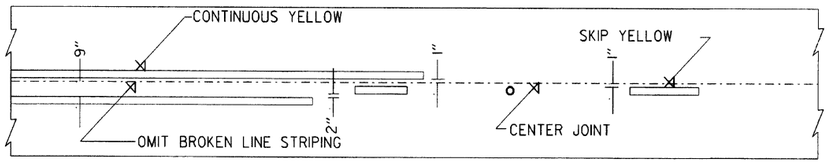
SOLID LINE STRIPING ON CONCRETE PAVEMENT



SOLID LINE STRIPING ON ASPHALT PAVEMENT

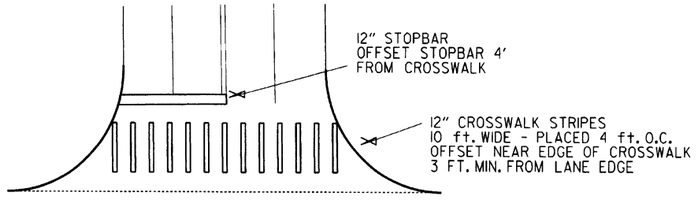


ASPHALT PAVEMENT



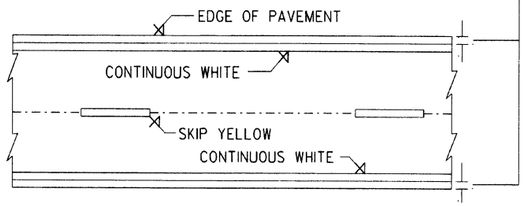
CONCRETE PAVEMENT

STRIPING AT ADJACENT NO PASSING LANES

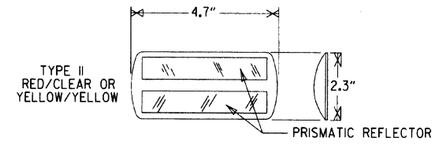


CROSSWALK AND STOPBAR DETAILS

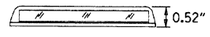
2" FOR ASPHALT OR CONCRETE PAVEMENT
6" FOR BITUMINOUS SURFACE TREATMENT



PAVEMENT EDGE LINE MARKING



NOTE:
THE RED LENS OF THE TYPE II R.P.M. SHALL FACE THE INCORRECT TRAFFIC MOVEMENT.



DETAIL OF STANDARD RAISED PAVEMENT MARKERS

NOTE:
DIMENSIONS SHOWN FOR RAISED PAVEMENT MARKERS ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR MARKERS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR SIMILAR MARKERS MAY BE MADE BY REFERRING TO THE AHTD QUALIFIED PRODUCTS LIST.

DATE	REVISION	FILMED
5-12-16	REVISED LINE WIDTHS, SPACING, & NOTES	
9-12-13	REVISED DETAIL OF STANDARD RAISED PAVEMENT MARKERS	
11-17-10	REVISED GENERAL NOTES & REMOVED PLOWABLE PVMT MRKRS	
11-18-04	REVISED NOTE 2 & GENERAL NOTES	
8-22-02	ADDED CROSSWALK & STOPBAR DTLS.	
7-02-98	ADDED DETAILS OF STD. RAISED PAV'T. MARKERS	
4-26-96	REV. NOTES 3&4; ADDED R.P.M.	
9-30-80	DRAWN	1-9-30-80

ARKANSAS STATE HIGHWAY COMMISSION

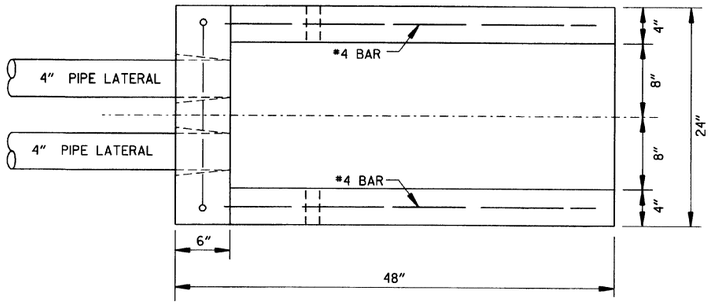
PAVEMENT MARKING DETAILS

STANDARD DRAWING PM-1

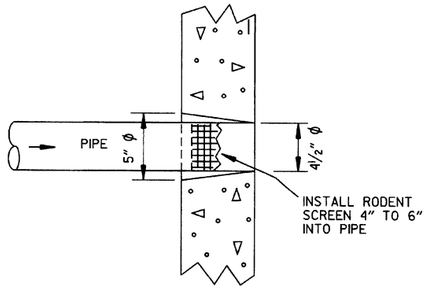
NOTE:
1. GRANULAR BACKFILL TO BE SUBSIDIARY TO PIPE UNDERDRAIN.

2. UNLESS OTHERWISE SPECIFIED ON THE PLANS, THE UNDERDRAIN COVER SHALL BE THOROUGHLY COMPACTED EARTH AND SHALL BE SUBSIDIARY TO PIPE UNDERDRAIN.

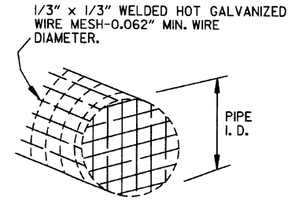
3. GRANULAR MATERIAL SHALL BE WRAPPED WITH GEOTEXTILE FABRIC. LAP FABRIC 12" OR THE WIDTH OF THE TRENCH AT THE TOP.



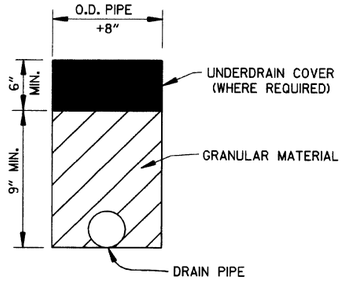
PLAN VIEW

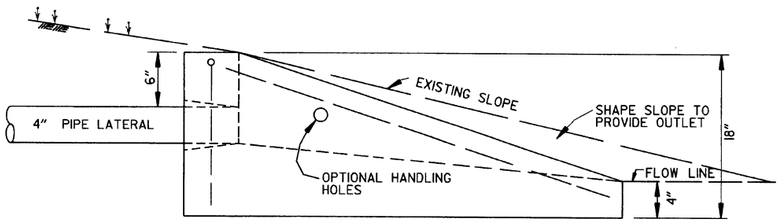


DETAIL OF HOLE FOR 4" PIPE

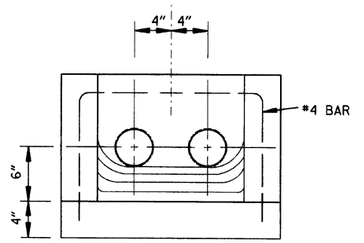


DETAIL OF RODENT SCREEN

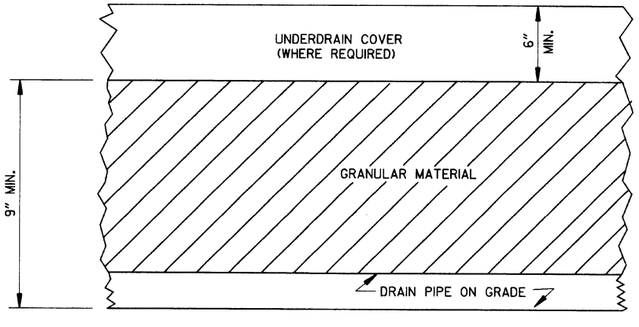




SIDE VIEW

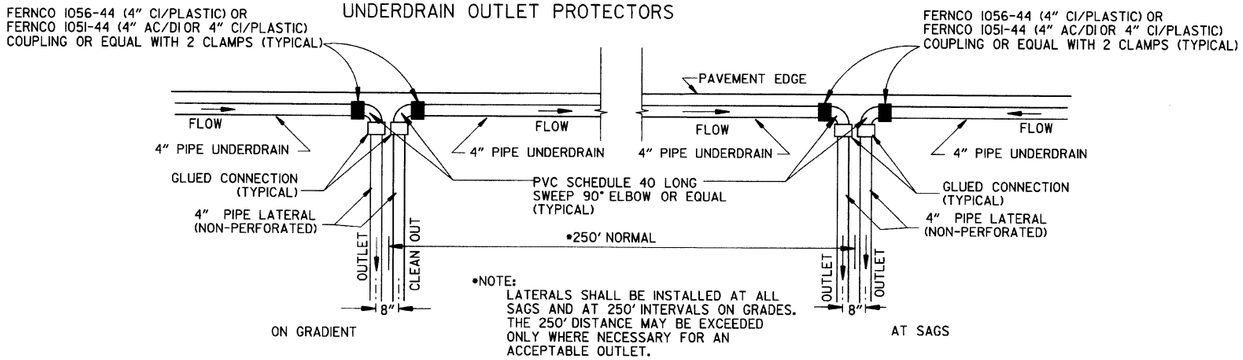


FRONT VIEW



DETAILS OF PIPE UNDERDRAIN

UNDERDRAIN OUTLET PROTECTORS



DETAIL OF PIPE UNDERDRAIN LATERALS WHEN PLACED ALONG PAVEMENT EDGE

NOTE: PVC PIPE FOR LATERALS SHALL MEET THE REQUIREMENTS OF ASTM D 1785 (LATEST REVISION) FOR SCHEDULE 40 PIPE.

DATE	REVISION	DATE FILMED
4-10-03	REVISED NOTE 3	
1-12-00	REVISED DETAIL OF UNDERDRAIN LATERALS	
11-18-98	REVISED NOTE	
10-18-96	REVISED MIN. DEPTH & GEOTEXTILE FABRIC	
4-26-96	ADDED LATERAL NOTE; 5½" TO 5"	
11-22-95	REVISED LATERALS	
7-20-95	REVISED LATERALS & ADDED NOTE	
11- 3-94	REVISED FOR DUAL LATERALS	11- 3-94
10- 1-92	SUBSTITUTED GEOTEXTILE	10- 1-92
8-15-91	ADDED POLYEDTHYLENE PIPE	8-15-91
11- 8-90	DELETED ALTERNATE NOTE	11- 8-90
1-25-90	ADDED 4" SNAP ADAPTER	1-25-90
11-30-89	DEL. (SUBGRADE); ADDED (WHERE REQUIRED)	11-30-89
7-15-88	ISSUED P.L.M.	647-7-15-88

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF PIPE UNDERDRAIN

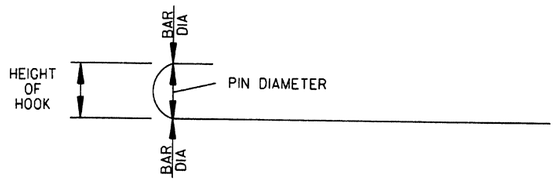
STANDARD DRAWING PU-1

7-20-95 INSTD.PUI

STEEL FABRICATION: REINFORCING STEEL FABRICATION SHALL CONFORM TO THE DIMENSIONS LISTED IN THE TABLE BELOW:

BAR SIZE	PIN DIAMETER	HOOK EXTENSION "K"
3	2¼"	4"
4	3 "	4½"
5	3¾"	5"
6	4½"	6"
7	5¼"	7"
8	6"	8"

IF THE OVERALL HEIGHT OF THE HOOK (SEE DIAGRAM BELOW) FOR A "b", "b1", "b2" or "b3" BENT BAR IS GREATER THAN THE CORRESPONDING TOP OR BOTTOM SLAB THICKNESS, LESS 2¾ INCHES, EACH BENT BAR SHALL BE REPLACED WITH ONE HOOKED BAR AND ONE STRAIGHT BAR, USING LENGTHS AS SHOWN IN THE TABLE BELOW. THE TWO BARS SHALL BE THE SAME DIAMETER AS, AND PLACED AT THE SAME SPACING AS, THE "b", "b1", "b2" OR "b3" BENT BARS THEY REPLACE.



NOTE: DIMENSIONS OF BARS ARE MEASURED OUT TO OUT OF BARS.

OVERALL HEIGHT OF HOOKED BAR DIAGRAM

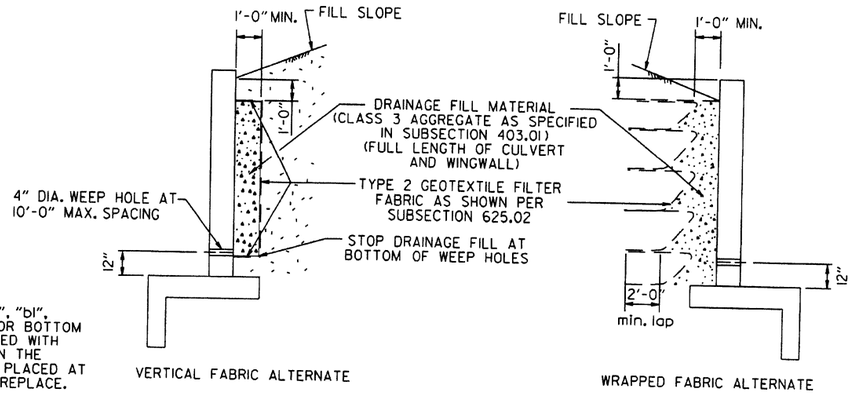
THE HOOKED BARS SHALL BE PLACED IN THE BOTTOM OF THE TOP SLAB AND THE TOP OF THE BOTTOM SLAB. THE STRAIGHT BARS SHALL BE PLACED IN THE TOP OF THE TOP SLAB AND THE BOTTOM OF THE BOTTOM SLAB. SEE TABLE BELOW FOR LENGTHS OF REPLACEMENT HOOKED AND STRAIGHT BARS.

FOR SKEWED CULVERTS, THE REPLACEMENT STRAIGHT BAR MAY HAVE TO BE CUT IN FIELD TO FIT.

REPLACEMENT BAR LENGTHS TABLE

BAR SIZE: "b", "b1", "b2" OR "b3"	LENGTH OF HOOKED BAR	LENGTH OF STRAIGHT BAR
#4	L + 1' - 0"	SEE "c" BAR LENGTH
#5	L + 1' - 2"	SEE "c" BAR LENGTH
#6	L + 1' - 4"	SEE "c" BAR LENGTH
#7	L + 1' - 8"	SEE "c" BAR LENGTH
#8	L + 1' - 10"	SEE "c" BAR LENGTH
#9	L + 2' - 6"	SEE "c" BAR LENGTH

L = "OW" - 3 INCHES



WINGWALL & CULVERT DRAINAGE DETAIL

REINFORCED CONCRETE BOX CULVERT GENERAL NOTES

CONCRETE SHALL BE CLASS S WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3500 PSI.

REINFORCING STEEL SHALL BE AASHTO M 31 OR M 53, GRADE 60.

CONSTRUCTION AND MATERIALS FOR WINGWALL & CULVERT DRAINAGE, INCLUDING WEEP HOLES AND GRANULAR MATERIAL, SHALL BE SUBSIDIARY TO THE BID ITEM, "CLASS S CONCRETE".

MEMBRANE WATERPROOFING SHALL CONFORM TO THE REQUIREMENTS OF SECTION 815 OF THE STANDARD SPECIFICATIONS.

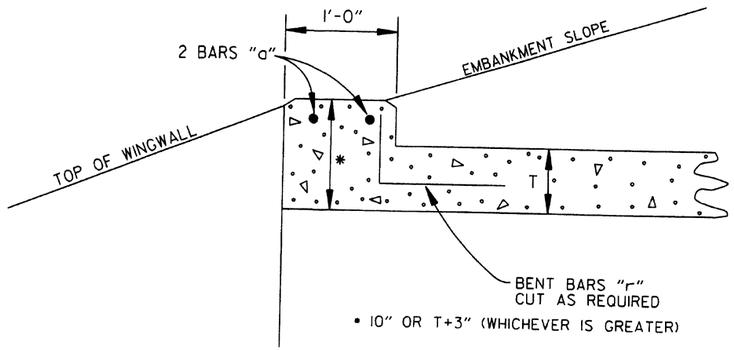
MEMBRANE WATERPROOFING SHALL BE APPLIED TO ALL CONSTRUCTION JOINTS IN THE TOP SLAB AND THE SIDEWALLS OF R.C. BOX CULVERTS AS DIRECTED BY THE ENGINEER. NO PAYMENT SHALL BE MADE FOR THIS ITEM, BUT PAYMENT WILL BE CONSIDERED TO BE INCLUDED IN THE VARIOUS ITEMS BID FOR THE R.C. BOX CULVERT.

REINFORCING STEEL TOLERANCES: THE TOLERANCES FOR REINFORCING STEEL SHALL MEET THOSE LISTED IN "MANUAL OF STANDARD PRACTICE" PUBLISHED BY CONCRETE REINFORCING STEEL INSTITUTE (CRSI) EXCEPT THAT THE TOLERANCE FOR TRUSS BARS SUCH AS FIGURE 3 ON PAGE 7-4 OF THE CRSI MANUAL SHALL BE MINUS ZERO TO PLUS ½ INCH.

WEEP HOLES IN BOX CULVERT WALLS SHALL HAVE A MAXIMUM HORIZONTAL SPACING OF 10'-0" AND SHALL BE SPACED TO CLEAR ALL REINFORCING STEEL. THE DRAIN OPENING SHALL BE 4" DIAMETER AND SHALL BE PLACED 12" ABOVE THE TOP OF THE BOTTOM SLAB.

WEEP HOLES IN WINGWALLS SHALL HAVE A MAXIMUM HORIZONTAL SPACING OF 10'-0" AND SHALL BE SPACED TO CLEAR ALL REINFORCING STEEL. THERE SHALL BE A MINIMUM OF TWO (2) WEEP HOLES IN EACH WINGWALL. THE DRAIN OPENING SHALL BE 4" DIAMETER AND SHALL BE PLACED 12" ABOVE THE TOP OF THE WINGWALL FOOTING.

THE REQUIREMENTS SHOWN ON THIS DRAWING SHALL SUPERCEDE THE CORRESPONDING REQUIREMENTS ON ALL REINFORCED CONCRETE BOX CULVERT STANDARD DRAWINGS.



NOTE: FOR ALL SKEWED R.C. BOX CULVERTS THE LENGTH "K" OF THE MODIFIED HEADWALL SHALL BE EQUAL TO THE ROADWAY LENGTH "RL". THE ENDS OF THE HEADWALL SHALL BE CONSTRUCTED PARALLEL TO THE SKEW ANGLE OF THE BOX CULVERT.

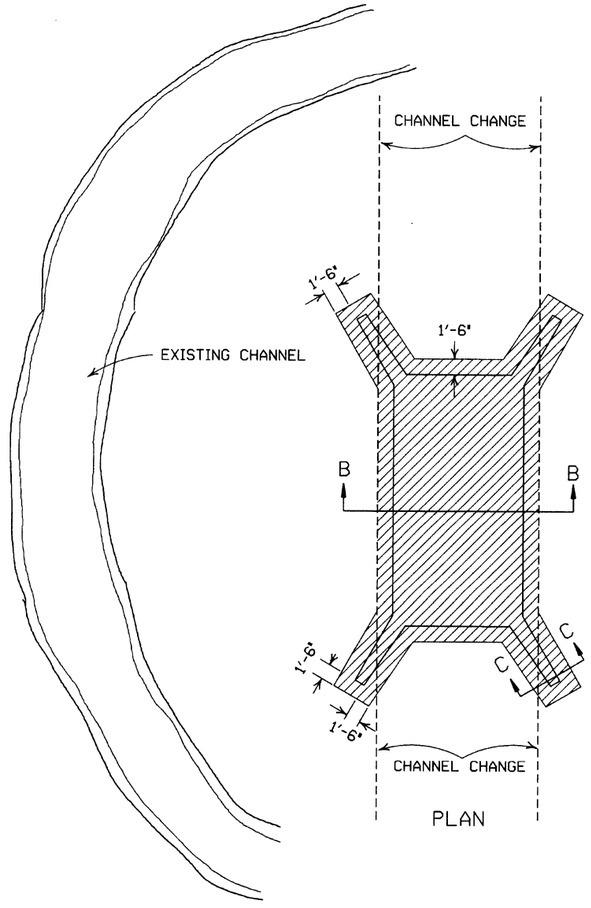
R.C. BOX CULVERT HEADWALL MODIFICATIONS

DATE	REVISION	DATE FILMED
7/26/12	REV. DRAINAGE FILL MATERIAL & DETAIL	
12/15/11	REQUIRE WEEP HOLES IN BOX CULVERT WALLS	
5-25-06	REV. GEN. NOTES AND DETAILS FOR WEEP HOLES; BAR DIAGRAM	
11-16-01	ADDED WINGWALL DRAINAGE DETAIL/EDITED GEN. NOTES	
10-18-96	REV. ASTM REF. TO AASHTO & ADDED BAR DIAGRAM	
10-12-95	MOVED SOLID SODDING DETAIL TO RCB-2	
6-2-94	ADDED SOLID SODDING PLAN DETAIL	
8-5-93	REVISED PIN DIAMETER TO SPECS.	
8-15-91	DRAWN AND ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

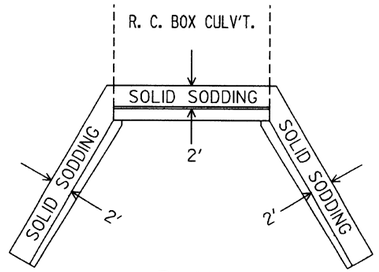
REINFORCED CONCRETE BOX CULVERT DETAILS

STANDARD DRAWING RCB-1



PLAN

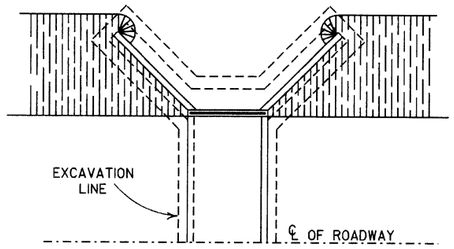
SOLID SODDING



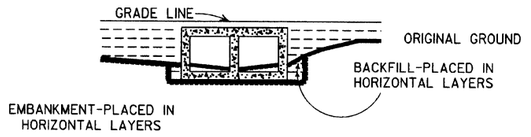
PLAN

PARTIAL SECTION SHOWING SOLID SODDING AT HEADWALLS AND WING WALLS

NOTE: LENGTH MEASURED ALONG THE CENTER OF 2' STRIP OF SOLID SODDING.

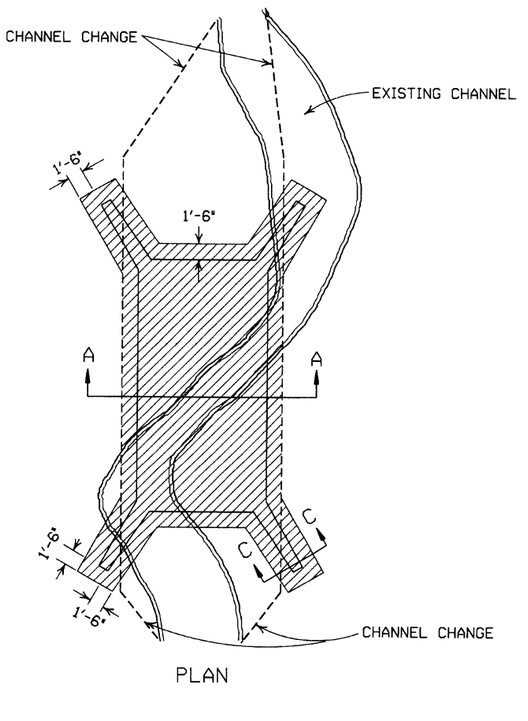


PLAN

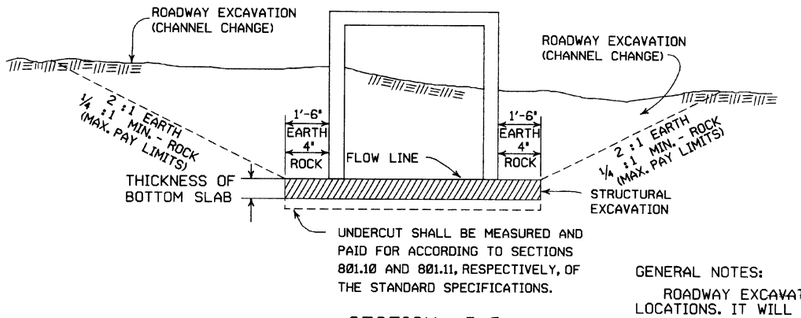


LONGITUDINAL SECTION

BACKFILL DETAILS FOR BOX CULVERT

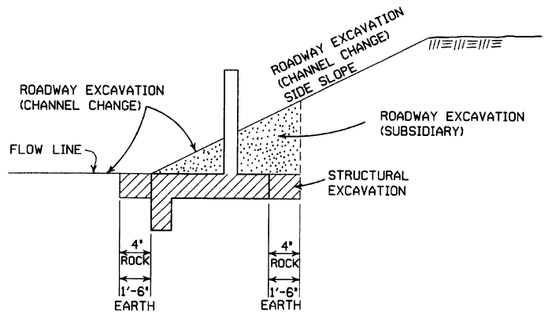


PLAN

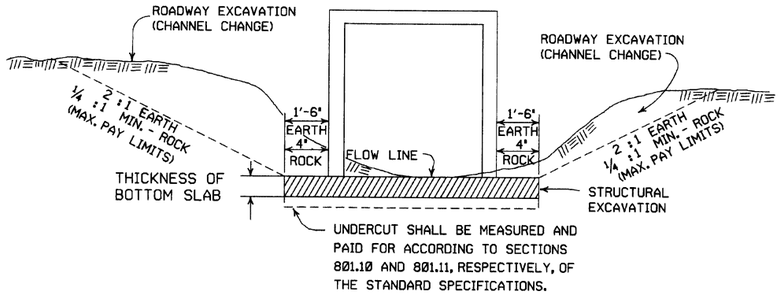


SECTION B-B

DETAILS FOR NEW CHANNELS



SECTION C-C



SECTION A-A

DETAILS THROUGH EXISTING CHANNELS

GENERAL NOTES:

ROADWAY EXCAVATION (CHANNEL CHANGE) WILL BE PAID FOR AT R.C. BOX CULVERT LOCATIONS. IT WILL BE PAID TO THE LIMITS ACTUALLY CUT AND WILL BE CONFINED TO THAT PORTION OF THE INDICATED AREA THAT IS ABOVE THE FLOW LINE. ROADWAY EXCAVATION (CHANNEL CHANGE) SHALL BE MEASURED BY CROSS SECTIONS AND VOLUMES COMPUTED BY AVERAGE END AREA METHOD. ALL CHANNEL CHANGES SHALL BE BROUGHT TO GRADE PRIOR TO MAKING ANY EXCAVATION FOR STRUCTURES.

EXCAVATION FOR STRUCTURES WILL BE PAID FOR AT ALL R.C. BOX CULVERT LOCATIONS. IT WILL BE PAID TO THE LIMITS SHOWN AND SHALL BE CONFINED TO THAT PORTION OF THE INDICATED AREA THAT IS BELOW THE CHANNEL FLOW LINE.

ROADWAY EXCAVATION SHOWN IN SECTION C-C ABOVE AS SUBSIDIARY WILL NOT BE MEASURED OR PAID FOR DIRECTLY, BUT PAYMENT WILL BE CONSIDERED TO BE INCLUDED IN THE VARIOUS ITEMS OF EXCAVATION.

DATE	REVISION	FILMED
11-20-03	REVISED SECTION A-A NOTE	
8-22-02	REVISED SECTION B-B NOTE	
10-12-95	COMBINED 1891B AND 1888A	
1-4-83	REVISED GENERAL NOTES AND ADDED MAXIMUM PAY LIMIT NOTES.	674-1-4-83
2-2-76	EXCAV. PAY LIMITS	917-2-2-76
10-2-72	REVISED AND REDRAWN	564-10-16-72

ARKANSAS STATE HIGHWAY COMMISSION

EXCAVATION PAY LIMITS, BACKFILL, & SOLID SODDING FOR BOX CULVERTS

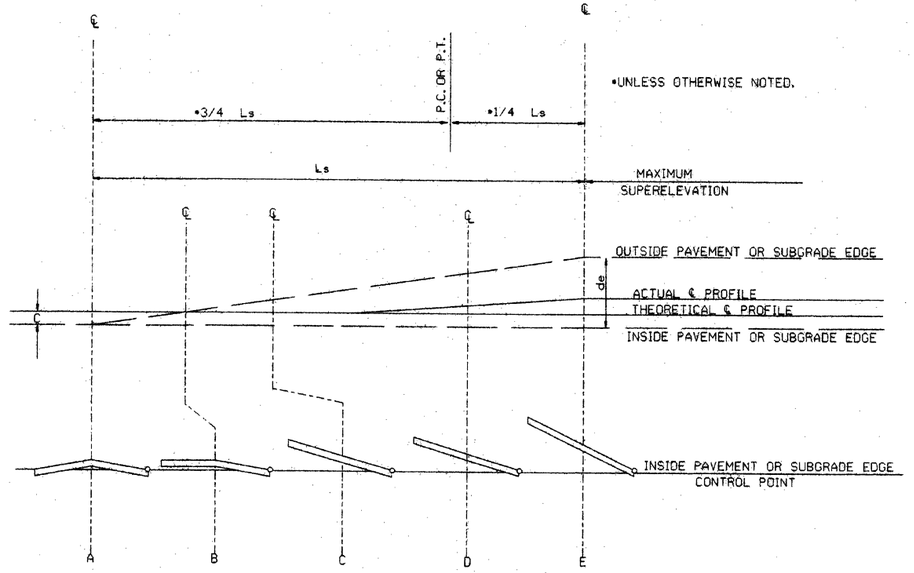
STANDARD DRAWING RCB-2

SUPERELEVATION TABLE FOR TWO - WAY TRAFFIC

DEGREE OF CURVE	30 MPH e	30 MPH Ls (FT) MINIMUM	30 MPH Ls (FT) DESIRABLE	40 MPH e	40 MPH Ls (FT) MINIMUM	40 MPH Ls (FT) DESIRABLE	50 MPH e	50 MPH Ls (FT) MINIMUM	50 MPH Ls (FT) DESIRABLE	55 MPH e	55 MPH Ls (FT) MINIMUM	55 MPH Ls (FT) DESIRABLE	60 MPH e	60 MPH Ls (FT) MINIMUM	60 MPH Ls (FT) DESIRABLE	70 MPH e	70 MPH Ls (FT) MINIMUM	70 MPH Ls (FT) DESIRABLE
0° 15′	N. C.			N. C.			N. C.			N. C.			N. C.			N. C.		
0° 30′	N. C.			N. C.			N. C.			N. C.			N. C.			N. C.		
0° 45′	N. C.			N. C.			R. C.			0.022			0.023			0.028		
1° 00′	N. C.			N. C.			0.021			0.026			0.030			0.037	275	300
1° 15′	N. C.			R. C.			0.026			0.032			0.037			0.046		
1° 30′	N. C.			0.021			0.031	200		0.037	225		0.043	250		0.054		
1° 45′	N. C.			0.025	175		0.036			0.043		300	0.049		300	0.062		
2° 00′	R. C.			0.028			0.040			0.048			0.055			0.070		
2° 15′	R. C.			0.031			0.045		250	0.053			0.061			0.078	300	
2° 30′	0.021			0.034			0.049			0.058			0.067			0.085	315	350
2° 45′	0.023			0.037			0.053			0.063			0.072			0.091	335	
3° 00′	0.025			0.040			0.057			0.067	230		0.077	260		0.096	350	
3° 15′	0.027	150		0.043		200	0.061			0.072	245		0.082	275		0.098	360	400
3° 30′	0.029			0.046			0.065	205		0.076	255		0.086	285		D MAX = 3° 30′		
3° 45′	0.031			0.049			0.069	215		0.080	265		0.090	295				
4° 00′	0.033			0.051			0.072	225		0.083	270		0.093	305	350			
4° 30′	0.037			0.056			0.078	240		0.087	280		0.096	315				
5° 00′	0.040			0.061			0.083	250		0.091	295		0.098	320				
5° 30′	0.043			0.066	185		0.088	260		0.094	300	350	D MAX = 5° 15′					
6° 00′	0.046			0.070	190		0.092	270		0.096	305							
6° 30′	0.050			0.074	200		0.095	280	300	0.100	315							
7° 00′	0.053			0.078	210		0.098	285		D MAX = 6° 30′								
7° 30′	0.056			0.081	215		0.099	290										
8° 00′	0.058			0.084	220		0.100	290										
8° 30′	0.061			0.087	225	250	D MAX = 8° 15′											
9° 00′	0.063			0.089	230													
10° 00′	0.068	160		0.094	235													
11° 00′	0.072	170		0.097	250													
12° 00′	0.076	175		0.099	260													
13° 00′	0.080	180		0.100	265													
14° 00′	0.083	190		D MAX = 13° 15′														
15° 00′	0.086	195																
16° 00′	0.089	200																
17° 00′	0.091	200																
18° 00′	0.093	205																
19° 00′	0.095	210																
20° 00′	0.097	215	250															
21° 00′	0.098	215																
22° 00′	0.099	215																
23° 00′	0.099	215																
24° 00′	0.100	220																
D MAX = 24° 45′																		

ABBREVIATIONS

NC - NORMAL CROWN
RC - REVERSE CROWN, SUPERELEVATION AT NORMAL CROWN SLOPE
e - RATE OF SUPERELEVATION (FT. PER FT.)
Ls - LENGTH OF SUPERELEVATION TRANSITION (FT.)
L - DISTANCE FROM BEGINNING OF SUPERELEVATION TRANSITION TO ANY POINT (FT.)
d - WIDTH OF PAVEMENT (FT.) OR WIDTH OF SUBGRADE (FT.)
C - NORMAL CROWN (FT.)



*UNLESS OTHERWISE NOTED.

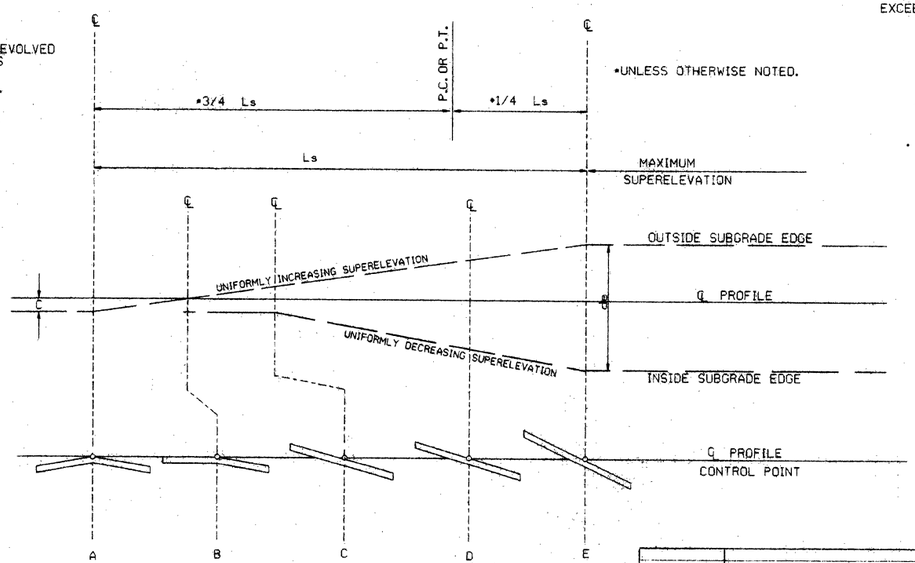
STANDARD METHOD WHEN SUPERELEVATION REVOLVES AROUND INNER SUBGRADE POINT OR INNER PAVEMENT EDGE

NOTE: MAINTAIN NORMAL CROWN ON INSIDE UNTIL SUPERELEVATION EXCEEDS 2C.

GENERAL NOTES

1. ON PAVEMENT WITH TWO-WAY TRAFFIC, THE SUPERELEVATION SHALL BE REVOLVED ON THE INSIDE PAVEMENT EDGE UNLESS OTHERWISE NOTED ON THE PLANS
2. SUPERELEVATION VALUES SHOWN ON THE CROSS SECTIONS ARE VALUES (+) OR (-) TO BE ADDED TO OR SUBTRACTED FROM THE POINT OF CONTROL.
3. LENGTHS FOR L MAY BE ROUNDED IN MULTIPLES OF 25 FT. OR 50 FT. TO PERMIT SIMPLER CALCULATIONS.
4. PAVEMENTS WIDER THAN 2 LANES SHALL HAVE ADDITIONAL TRANSITION LENGTHS AS FOLLOWS:

3 LANE UNDIVIDED - - - - - +20%
4 LANE UNDIVIDED - - - - - +50%
5 LANE UNDIVIDED - - - - - +80%
6 LANE UNDIVIDED - - - - - +100%



*UNLESS OTHERWISE NOTED.

NOTE: MAINTAIN NORMAL CROWN ON INSIDE UNTIL SUPERELEVATION EXCEEDS 2C.

RATE OF SUPERELEVATION SHALL BE COMPUTED ON STRAIGHT LINE METHOD USING APPLICABLE Ls.

STANDARD METHOD WHEN SUPERELEVATION REVOLVES AROUND CENTER LINE

SUPERELEVATION FORMULA = $\frac{Lde}{Ls}$

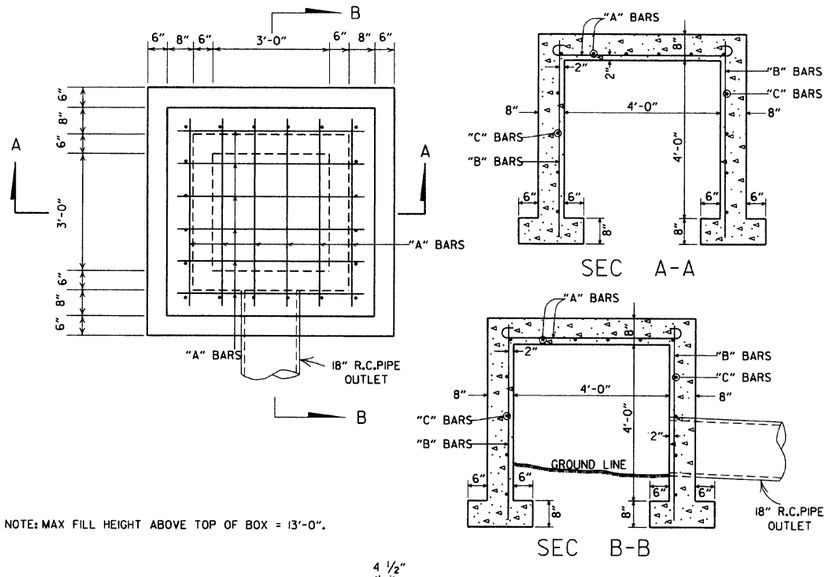
DATE	REVISION	DATE FILMED
10-18-56	ADDED FORMULA	10-18-96
01-09-87	ISSUED	534-1-9-87

ARKANSAS STATE HIGHWAY COMMISSION

TABLES AND METHOD OF SUPERELEVATION FOR TWO-WAY TRAFFIC

STANDARD DRAWING SE-2

FILE STDSE2.DGN

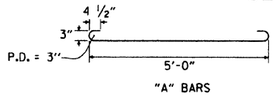


NOTE: MAX FILL HEIGHT ABOVE TOP OF BOX = 13'-0".

STEEL SCHEDULE

BARS	NUMBER	LENGTH	SPACING
"A"	12	6'-0"	10"
"B"	20	5'-0"	10 ½"
"C"	16	5'-0"	12"

ALL STEEL TO BE #4 BARS

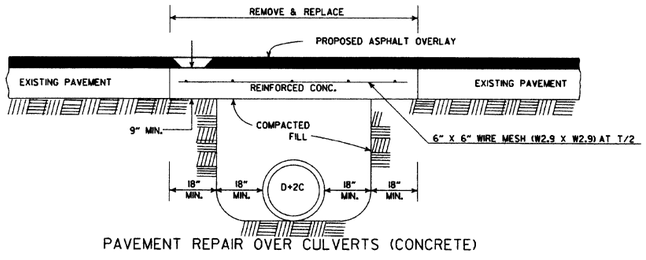


QUANTITIES

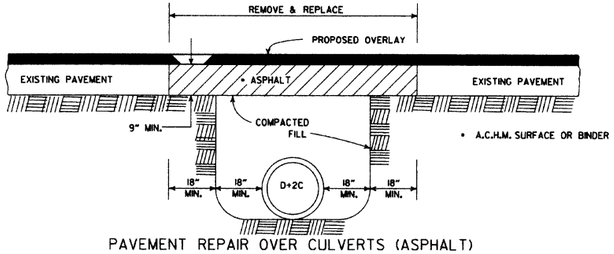
CONCRETE 3.31 CU. YDS.
REINFORCING STEEL 168 LB.

GENERAL NOTE:
THE PAY ITEMS FOR REINFORCED CONCRETE SPRING BOXES SHALL BE FOR THE QUANTITTIES OF CONCRETE OF THE CLASS SPECIFIED, REINFORCING STEEL, EXCAVATION FOR STRUCTURES AND 18" R.C. PIPE CULVERT.

REINFORCED CONCRETE SPRING BOX



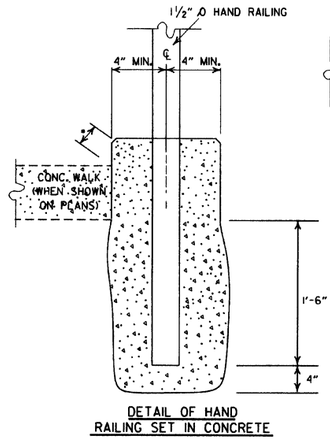
PAVEMENT REPAIR OVER CULVERTS (CONCRETE)



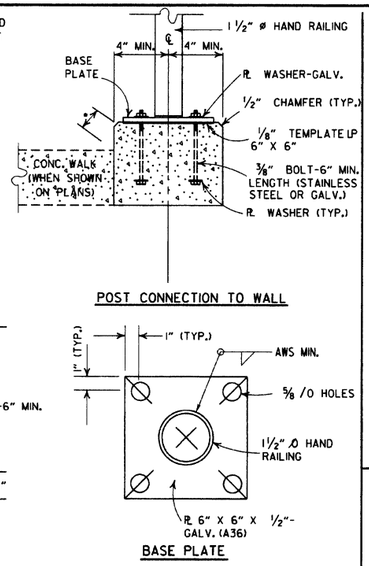
PAVEMENT REPAIR OVER CULVERTS (ASPHALT)

DETAIL SHOWING REPAIR OF EXISTING PAVEMENT AT CULVERT INSTALLATIONS

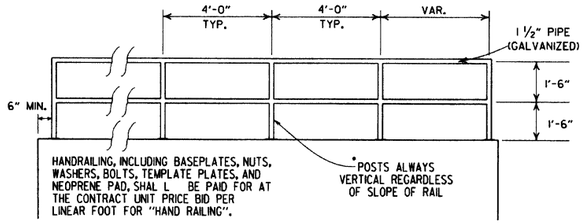
• A 2" MIN. HIGH CURB IS REQUIRED WHEN CONCRETE WALK IS ADJACENT TO THE HAND RAILING. PAYMENT FOR CURB SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR CONCRETE WALKS.



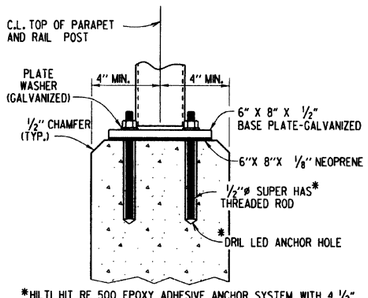
DETAIL OF HAND RAILING SET IN CONCRETE



POST CONNECTION DETAILS



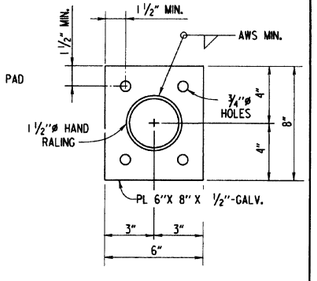
HAND RAILING SHALL CONFORM TO SECTION 633.



*HILTI HIT RE 500 EPOXY ADHESIVE ANCHOR SYSTEM WITH 4 ½" EMBEDMENT OR APPROVED EQUAL.

THE ADHESIVE ANCHOR SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

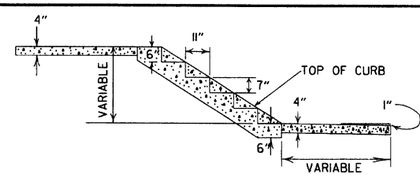
POST CONNECTION TO WALL



BASE PLATE

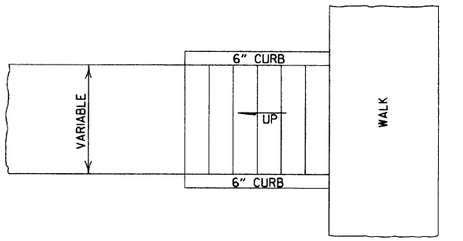
DETAILS OF ALTERNATE POST ANCHOR SYSTEM
(EPOXY ADHESIVE ANCHORS)

HAND RAILING DETAILS



GENERAL NOTES

1. RISE AND TREAD DIMENSIONS OF STEPS MAY BE VARIED AS DIRECTED BY THE ENGINEER, HOWEVER, TREAD WIDTHS SHALL BE 11" MIN. ALL STEPS IN A FLIGHT SHALL HAVE CONSISTENT TREAD & RISER DIMENSIONS.
2. 1" TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE WALKS AT 45' INTERVALS.



DETAILS OF CONCRETE STEPS & WALKS

DATE	REVISION	DATE FILMED
9-12-13	REVISED REINFORCED CONCRETE SPRING BOX	
7-26-12	REMOVED RETAINING WALL DETAILS & REVISED HAND RAILING DETAILS	
4-17-08	REV. JOINT & FOOTING STEP DETAILS	
11-29-07	REVISED RETAINING WALL DRAINAGE	
5-25-06	REVISED PVMT REPAIR OVER CULVERTS (CONC); REVISED REINFORCED CONC SPRING BOX	
10-9-03	REVISED PIPE RAILING DETAILS TO HAND RAILING DETAILS	
4-10-03	REVISED RETAINING WALL DRAWING	
8-22-02	ADDED HAND RAILING DETAIL	
11-16-01	REVISED PVMT REPAIR OVER CULVERTS (CONC); CORRECTED SPELLING IN GENERAL NOTES	
11-18-98	ADDED GENERAL NOTES TO CONCRETE STEPS & WALKS	
7-02-98	ENLARGED PIPE	
4-03-97	ADDED NOTE TO STEEL BAR SCHED.	
10-18-96	CORRECTED SPELLING	
4-26-96	ADD WEEP HOLE; REV. JOINT SPACING IN RET. WALL	
6-2-94	CHANGED CONST. TO CONTRACTION JOINT	
10-1-92	CHANGED MESH FABRIC TO WIRE MESH	10-1-92
8-15-91	DELETED HDWL MODIFICATION DETAIL	8-15-91
11-8-90	DELETED COLD MIX FROM CULV'T. REPAIR	11-8-90
11-30-89	REV. RETAINING WALL STEEL SCHEDULE	11-30-89
11-17-88	V. BARS BEHIND ARROW	665-11-17-88
7-15-88	REV. PAVEMENT REPAIR ADDED HDWL. MODS, DEL. PIPE UNDERDRAINS	649-7-15-88
11-1-84	REV. TRENCH FOR PIPE UNDERDRAIN	510-11-1-84
1-4-83	ELIMINATED CONC. CLASS & ADDED CHAMFER NOTE	682-1-4-83
3-2-81	SPELLING OF "UNDERDRAIN"	721-3-2-81
4-20-79	REV. UNDERDRAIN DET. & PAVEMENT REPAIR	674-4-20-79
2-2-76	12" MIN. GRAN. MAT'L. OVER PIPE	919-2-2-76
4-10-75	REM. SPECS. FOR GRAN. MAT'L.	568-4-10-75-853
5-22-74	GRANULAR MAT'L. TO BE SB-3	567-5-22-74-740
10-2-72	REVISED AND REDRAWN	564-10-16-72

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF SPECIAL ITEMS

STANDARD DRAWING SI - 1

R1-1



STANDARD 30"X30"
EXPRESSWAY 36"X36"
SPECIAL 48"X48"

R1-2



STD. 36"X36"X36"
EXPWY. 48"X48"X48"
FWY. 60"X60"X60"

R2-1



STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

W3-5



STD. 36"X36"
EXPWY. 48"X48"
FWY. 48"X48"

W3-5a



STD. 36"X36"
EXPWY. 48"X48"
FWY. 48"X48"

R4-1



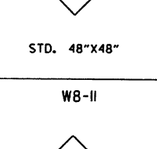
STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

R4-2



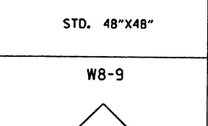
STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

R5-1



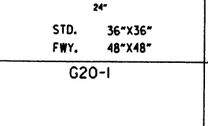
STD. 30"X30"
EXPWY. 36"X36"
SPECIAL 48"X48"

R11-2



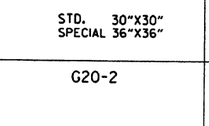
48"X30"

R11-3A



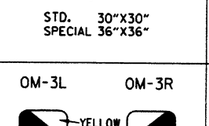
60"X30"

R11-4



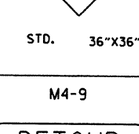
60"X30"

RSP-1



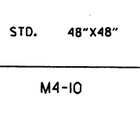
48"X30"

W1-1



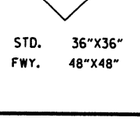
STD. 36"X36"
FWY. 48"X48"

W1-2



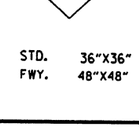
STD. 36"X36"
FWY. 48"X48"

W1-3



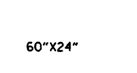
STD. 48"X48"

W1-4



STD. 48"X48"

W1-6



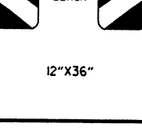
STD. 48"X24"
SPECIAL 60"X30"

W1-8



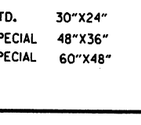
STD. 18"X24"
SPECIAL 24"X30"
EXPWY. 30"X36"
FWY. 36"X48"

W3-1



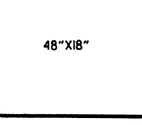
STD. 36"X36"
SPECIAL 48"X48"

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"

W20-3

STD. 48"X48"

W20-4

STD. 48"X48"

W20-5

STD. 48"X48"

W20-7a

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"

R56-1

STD. 18"X18"

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

ADVANCE DISTANCES
(XXXX)

500 FT	½ MILE
1000 FT	¾ MILE
1500 FT	1 MILE
	AHEAD

GENERAL NOTES:

1. ALL TRAFFIC CONTROL DEVICES USED ON ROAD CONSTRUCTION SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION, AND TO THE STANDARD HIGHWAY SIGNS, LATEST EDITION, OR AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION.
2. TRAFFIC CONTROL DEVICES SHALL BE SET UP JUST BEFORE THE START OF CONSTRUCTION OPERATIONS AND SHALL BE PROPERLY MAINTAINED DURING THE TIME SUCH CONDITIONS EXIST. THEY SHALL REMAIN IN PLACE ONLY AS LONG AS NEEDED AND REMOVED THEREAFTER.
3. EXISTING SIGNS AND CONSTRUCTION SIGNS SHALL BE KEPT IN PROPER POSITION, AND BE CLEAN AND LEGIBLE AT ALL TIMES. SIGNS THAT DO NOT APPLY TO EXISTING CONDITIONS SHALL BE REMOVED. SIGNS THAT ARE DAMAGED, DEFACED, OR THAT ACCUMULATE DIRT DURING CONSTRUCTION SHALL BE CLEANED, REPAIRED, OR REPLACED.
- 4. SIGNS ARE USUALLY MOUNTED ON A SINGLE POST, ALTHOUGH THOSE WIDER THAN 36" OR LARGER THAN 10 SQ. FT. SHALL BE MOUNTED ON TWO POSTS OR ABOVE A TYPE III BARRICADE.
- 5. SIGN POSTS DIRECT BURIED IN SOIL SHALL BE 2 LB. MINIMUM CHANNEL POST OR 4"x4" WOOD POSTS. CHANNEL POSTS SHALL BE PAINTED GREEN. WOOD POSTS SHALL BE PAINTED WHITE. ALL POSTS SHALL BE NEATLY CONSTRUCTED, AND SHALL BE REPLUMBED, CLEANED, OR REPAIRED AS NEEDED FOR THE DURATION OF THE JOB. THERE SHALL NOT BE MORE THAN 2 POSTS IN A 7' PATH FOR WOOD OR CHANNEL POSTS. ANY CHANNEL POST SPLICE SHALL BE IN ACCORDANCE WITH STANDARD DRAWING TC-3.
6. POST MOUNTED SIGNS IN RURAL AREAS SHALL BE CONSTRUCTED WITH THE NEAR EDGE OF THE SIGN FROM 6 TO 12 FEET FROM THE PAVEMENT EDGE. SIGNS IN URBAN AREAS AND BARRICADE MOUNTED SIGNS SHALL BE MOUNTED A MINIMUM OF 2 FEET FROM THE PAVEMENT EDGE.
7. ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN URBAN AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE. ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN RURAL AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE, EXCEPT A MINIMUM OF 6' SHALL BE USED WHEN MOUNTING AN ADVISORY SIGN BELOW A WARNING SIGN. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR INTERMEDIATE TERM STATIONARY WORK CONDITIONS. THE SIGNS MINIMUM MOUNTING HEIGHT SHALL BE 5'. RETROREFLECTIVE DEVICES SHALL BE USED. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR SHORT-TERM, SHORT DURATION, AND MOBILE CONDITIONS. THEY SHALL BE NO LESS THAN ONE (1) FOOT ABOVE THE TRAVELED WAY. LONG-TERM STATIONARY SIGNS SHALL BE DIRECT BURIED IN SOIL, UNLESS CONDITIONS NECESSITATE THE USE OF PORTABLE SIGNS, OR AS APPROVED BY THE ENGINEER. CONCRETE PADS, CONCRETE OR ROCK BALLAST, OR OTHER SOLID MATERIALS SHALL NOT BE UTILIZED WITH PORTABLE SIGN SUPPORTS.
8. FLAGGERS SHALL USE REFLECTORIZED STOP-SLOW PADDLES. FLAGS MAY BE USED ONLY FOR EMERGENCY SITUATIONS.
9. MOST OF THE SIGNS SHOWN ARE ORIENTED TO THE RIGHT, HOWEVER, THIS DOES NOT PRECLUDE THE USE OF MIRROR IMAGES OF THESE SIGNS WHERE THE REVERSE ORIENTATION MIGHT BETTER CONVEY TO MOTORISTS THE PROPER DIRECTION OF MOVEMENT.
10. R55-1 SIGNS SHALL BE PLACED AT LEAST 1500' BUT NOT MORE THAN 1 MILE IN ADVANCE OF THE WORK ZONE. IF A SPEED LIMIT REDUCTION IS IN EFFECT, THE SIGN SHALL BE PLACED A MINIMUM OF 500' IN ADVANCE OF THE "REDUCED SPEED AHEAD" SIGN.

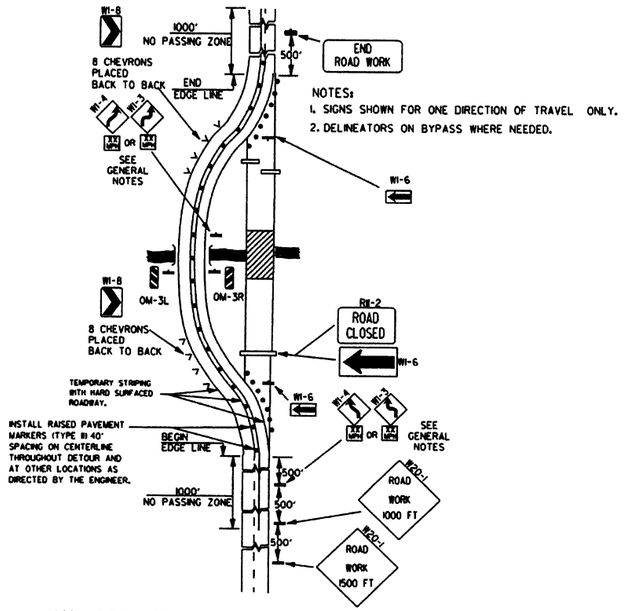
• NOTE: SUPPORTS FOR SIGNS, BARRICADES, AND VERTICAL PANELS THAT ARE DIFFERENT FROM THE REQUIREMENTS SHOWN IN NOTES 4 & 5, BUT MEET THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH), WILL BE ACCEPTED. COMPLIANCE WITH THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY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

DATE	REVISION	FILMED
9-2-15	REVISED REDUCED SPEED LIMIT AHEAD SIGNS REVISED ROAD WORK NEXT XX MILES	
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	

ARKANSAS STATE HIGHWAY COMMISSION

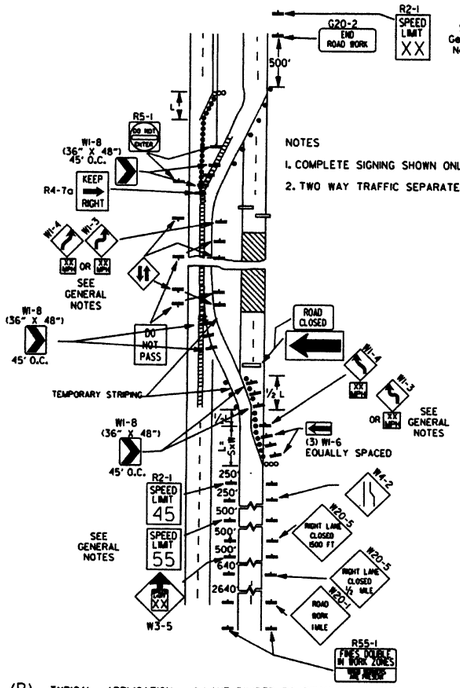
STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

STANDARD DRAWING TC-1



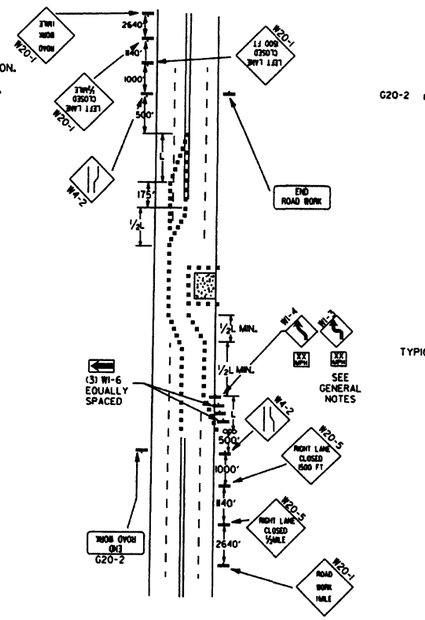
NOTES:
1. SIGNS SHOWN FOR ONE DIRECTION OF TRAVEL ONLY.
2. DELINEATORS ON BYPASS WHERE NEEDED.

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

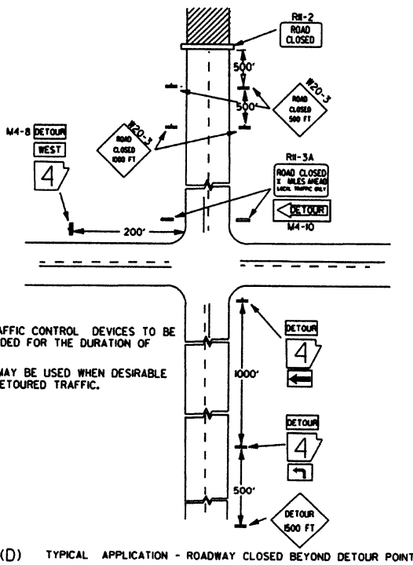


NOTES
1. COMPLETE SIGNING SHOWN ONLY IN CROSSOVER DIRECTION.
2. TWO WAY TRAFFIC SEPARATED WITH POSITIVE BARRIER.

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

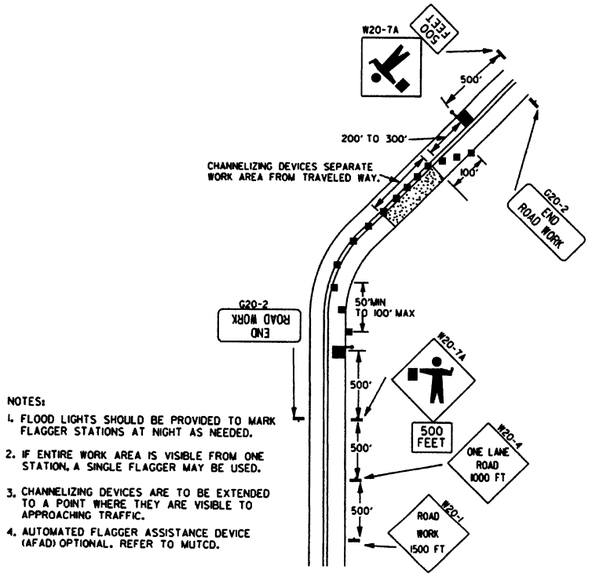


(C) TYPICAL APPLICATION - 4-LANE UNDIVIDED ROADWAY WHERE HALF OF THE ROADWAY IS CLOSED.



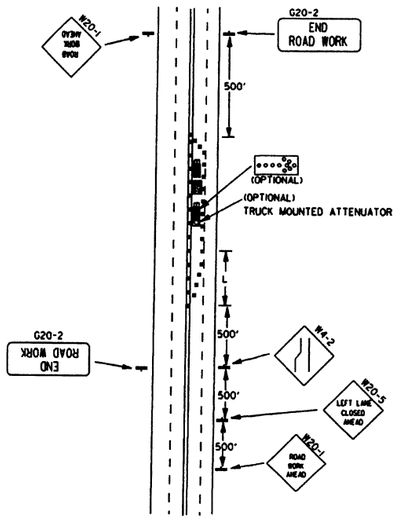
NOTES:
1. REGULATORY TRAFFIC CONTROL DEVICES TO BE MODIFIED AS NEEDED FOR THE DURATION OF THE DETOUR.
2. STREET NAMES MAY BE USED WHEN DESIRABLE FOR DIRECTING DETOURED TRAFFIC.

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



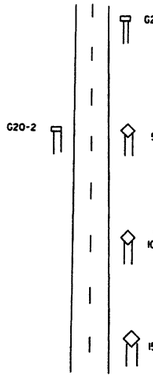
NOTES:
1. FLOOD LIGHTS SHOULD BE PROVIDED TO MARK FLAGGER STATIONS AT NIGHT AS NEEDED.
2. IF ENTIRE WORK AREA IS VISIBLE FROM ONE STATION, A SINGLE FLAGGER MAY BE USED.
3. CHANNELIZING DEVICES ARE TO BE EXTENDED TO A POINT WHERE THEY ARE VISIBLE TO APPROACHING TRAFFIC.
4. AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD) OPTIONAL. REFER TO MUTCD.

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

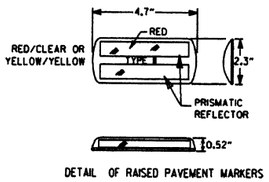


(F) TYPICAL APPLICATION - 4-LANE UNDIVIDED ROADWAY WITH INSIDE LANE CLOSED.

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



TYPICAL ADVANCE WARNING SIGN PLACEMENT



DETAIL OF RAISED PAVEMENT MARKERS

TAPER FORMULAE:

L=SXW FOR SPEEDS OF 45MPH OR MORE.

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

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

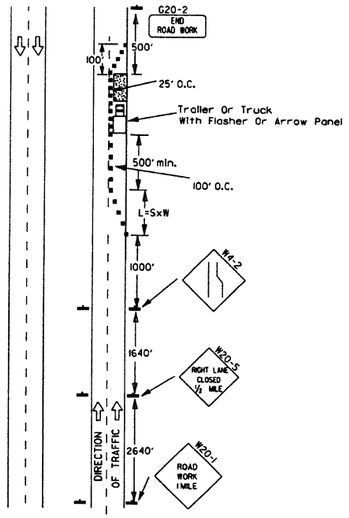
GENERAL NOTES:
1. ADVISORY SPEED POSTED ON W1-3 OR W1-4 CURVE WARNING SIGNS TO BE DETERMINED AT SITE. USE W1-4 WHEN SPEED IS GREATER THAN 30MPH AND W1-3 WHEN 30MPH OR LESS.
2. WHEN THE EXISTING SPEED LIMIT IS 55MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 45MPH, THE R2-1(55) SHALL BE OMITTED AND THE W3-5 SHALL BE INSTALLED AT THAT LOCATION. ADDITIONAL R2-1(45MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(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 R2-1(45) SHALL BE OMITTED. ADDITIONAL R2-1(55MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(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. 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.
8. DIMENSIONS SHOWN FOR RAISED PAVEMENT MARKERS ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR MARKERS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR SIMILAR MARKERS MAY BE MADE BY REFERRING TO THE AHTD QUALIFIED PRODUCTS LIST.

DATE	REVISION	FILMED
9-2-15	REVISED NOTE 2, ADDED NOTE 8, REVISED DRAWING (A) & REPLACED R2-5A WITH W3-5	
9-12-13	REVISED DETAIL OF RAISED PAVEMENT MARKERS	
3-8-10	ADDED (AFAD)	
8-20-08	REVISED SIGN DESIGNATIONS	
8-18-04	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	
8-15-91	DRAWN AND PLACED IN USE	

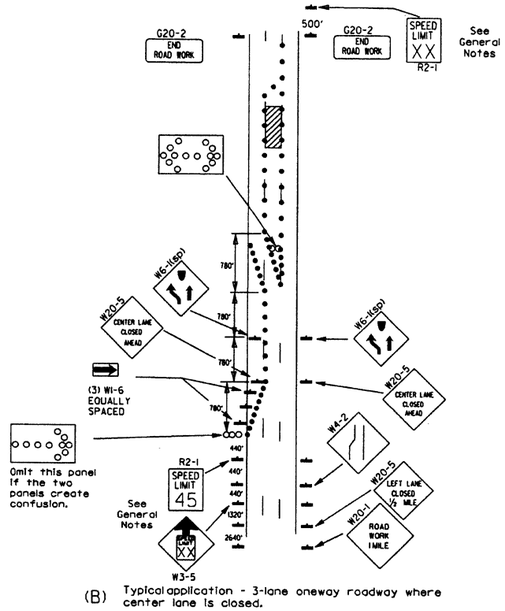
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

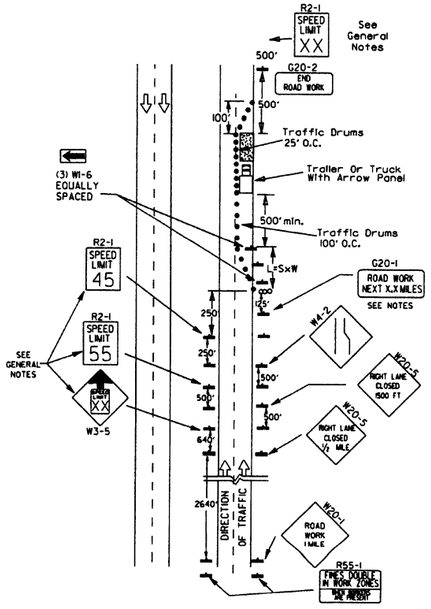
STANDARD DRAWING TC-2



(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.



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

KEY:

ooo Arrow Panel (if Required)

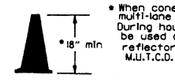
■ Channelizing Device

● Traffic drum

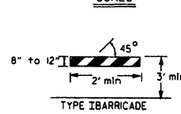
GENERAL NOTES:

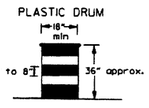
1. A speed limit reduction may be implemented ONLY when designated in the plan or when recommended by the Roadway Design Division.
2. When the existing speed limit is 55mph and the plans require a speed limit of 45mph, the R2-1(55) shall be omitted and the W3-5 shall be installed at that location. Additional R2-1 45mph speed limit signs shall be installed at a maximum of 1 mile intervals. At the end of the work area a R2-1(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 R2-1(45) shall be omitted. Additional R2-1 55mph speed limit signs shall be installed at a maximum of 1 mile intervals. At the end of the work area a R2-1(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 G20-1 sign will be required on jobs of over two miles in length. When the lane closure is not at the beginning of the project, the G20-1 sign shall be erected 125' in advance of the job limit. Additional W20-1 (1 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.

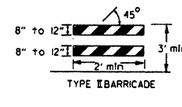
Channelizing devices

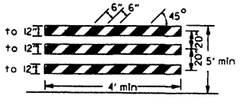


* When cones are used on freeways and multi-lane highways, they shall be 28" min. During hours of darkness, 28" cones shall be reflectorized in accordance with the M.U.T.C.D.

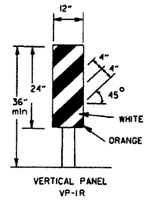




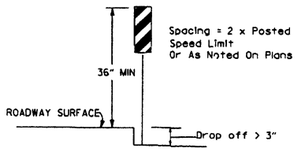




NOTE:
For all road closures, the Type III barricades shall be of sufficient length to extend across entire roadway.



VERTICAL PANEL PLACEMENT



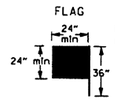
TRAFFIC CONTROL DEVICES FOR VERTICAL PAVEMENT DIFFERENTIALS

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

* When shown on the plans concrete barrier will be used.

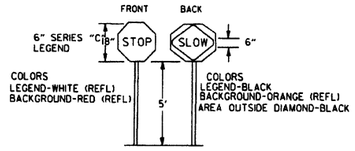
When the shoulder area is used as part of the traveled lane and there is insufficient width to place drums on the remaining shoulder width, then vertical panels shall be used.

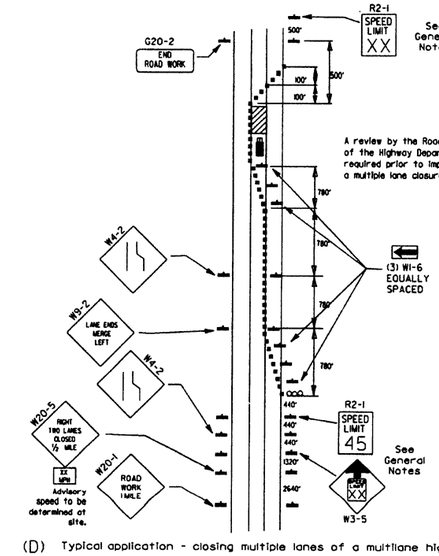
FLAG



Flag shall be of good grade red material

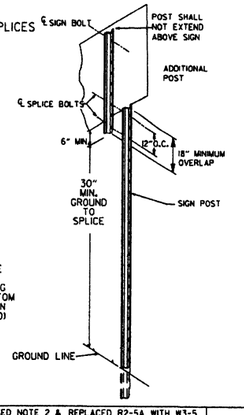
STOP SLOW PADDLE





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

DETAIL OF SPLICES



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

NORMAL INSTALLATIONS WILL REQUIRE 1/4" DIA. BOLTS TO MOUNT SIGNS TO POST AND 5/16" DIA. BOLTS TO ASSEMBLE THE VARIOUS POST SUPPORTS. EACH OF THESE BOLTS SHALL BE CARRIAGE BOLTS.

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

DATE	REVISION	FILMED
9-2-15	REVISED NOTE 2 & REPLACED R2-5A WITH W3-5	
10-15-09	ADDED REFERENCE TO MASH	
8-20-08	REVISED SIGN DESIGNATIONS	
8-18-04	ADDED NOTE	
10-1-98	ADDED NOTE	
4-03-97	ADDED (SP) TO W6-1 & REVISED TRAFFIC CONTROL DEVICES NOTE	
10-18-96	ADDED R55-1	
10-12-95	MOVED UPPER SPLICE	
6-8-95	REVISED SPLICE DETAIL, TEXT	6-8-95
2-2-95	REVISED PER PART VI, MUTCD, SEPT. 3, 1993	
8-15-9	DRAWN AND PLACED IN USE	

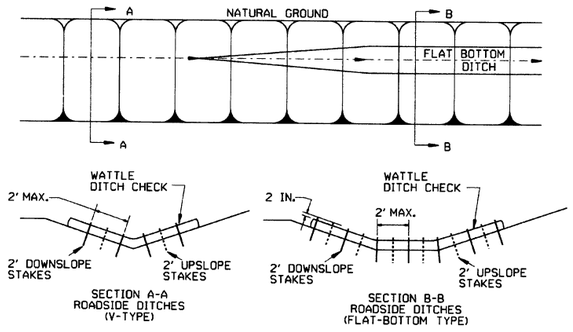
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

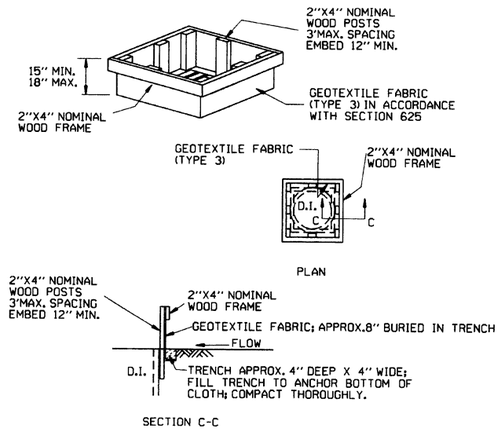
STANDARD DRAWING TC-3

GENERAL NOTES

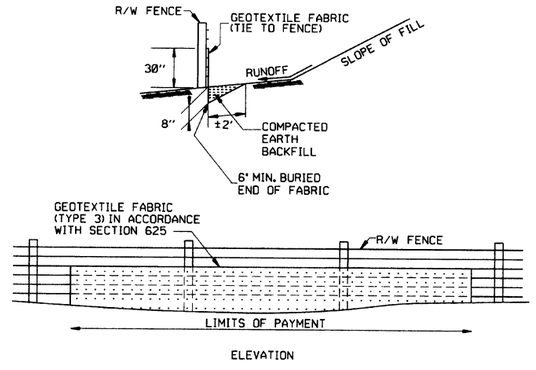
INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.



WATTLE DITCH CHECK (E-1)



DROP INLET SILT FENCE (E-7)



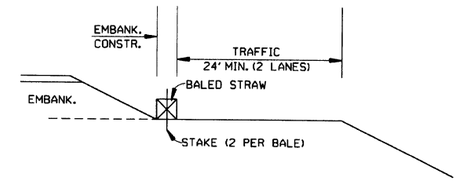
SILT FENCE ON R/W FENCE (E-4)

GENERAL NOTES

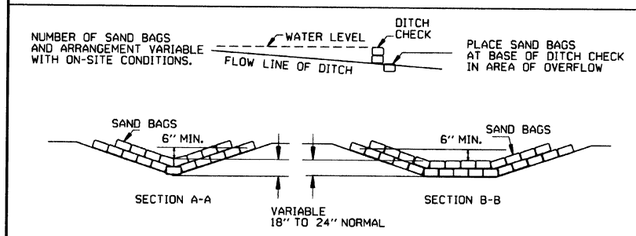
GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST, OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.

GENERAL NOTES

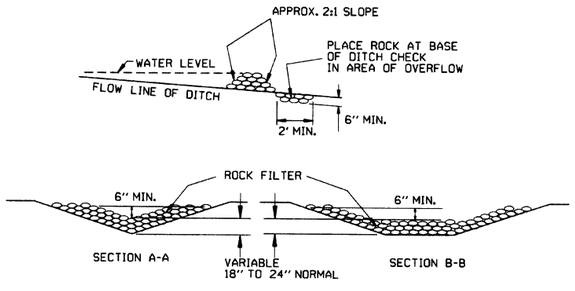
1. STRAW BALES SHALL BE INSTALLED SO THAT THE BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES. THE BALES SHALL BE A MINIMUM OF 30 INCHES IN LENGTH.
2. NO GAPS SHALL BE LEFT BETWEEN BALES.
3. BALED STRAW FILTER BARRIERS COMPLETED AND ACCEPTED WILL BE MEASURED BY THE BALE IN PLACE AS AUTHORIZED BY THE ENGINEER AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER BALE FOR BALED STRAW DITCH CHECKS.



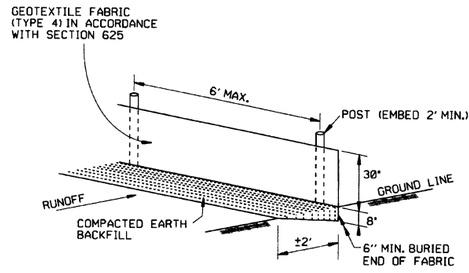
BALED STRAW FILTER BARRIER (E-2)



SAND BAG DITCH CHECK (E-5)



ROCK DITCH CHECK (E-6)



SILT FENCE (E-11)

GENERAL NOTES

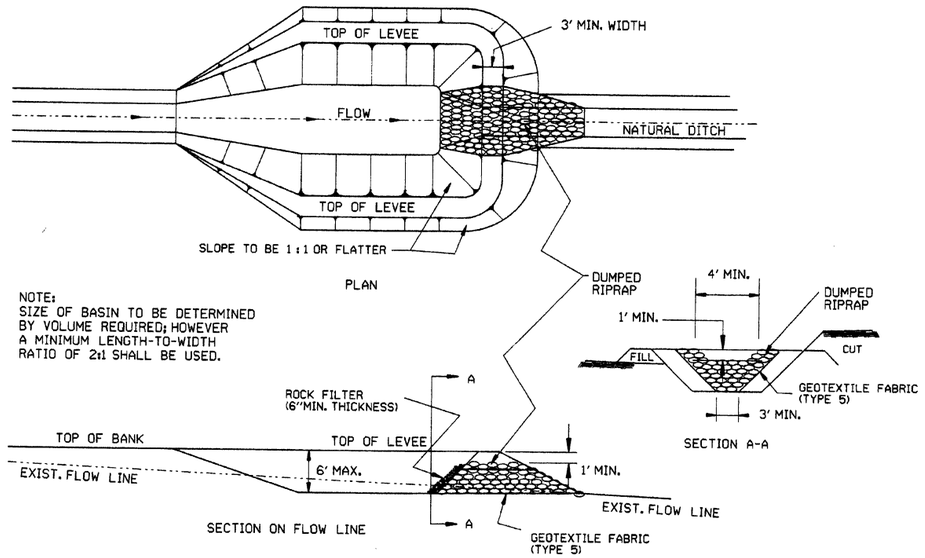
GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.

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

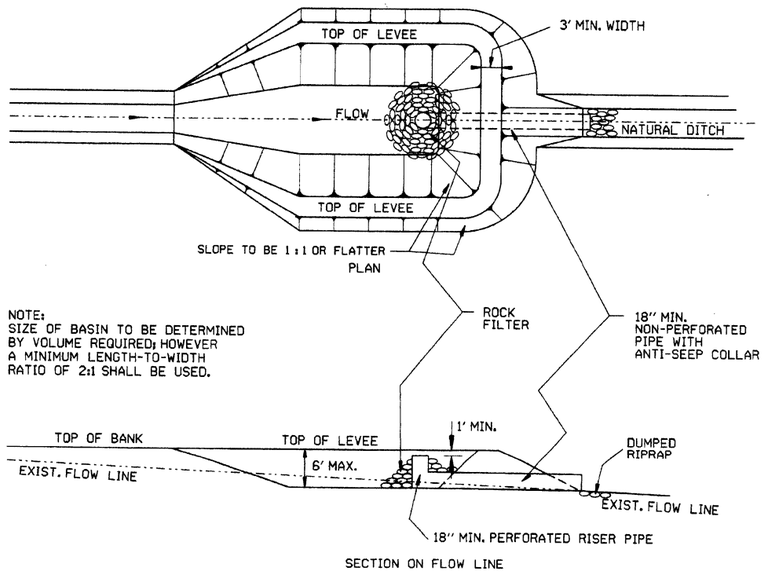
ARKANSAS STATE HIGHWAY COMMISSION

TEMPORARY EROSION CONTROL DEVICES

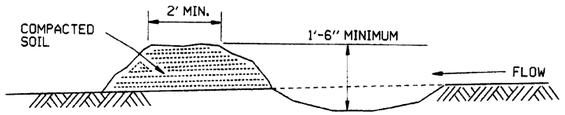
STANDARD DRAWING TEC-1



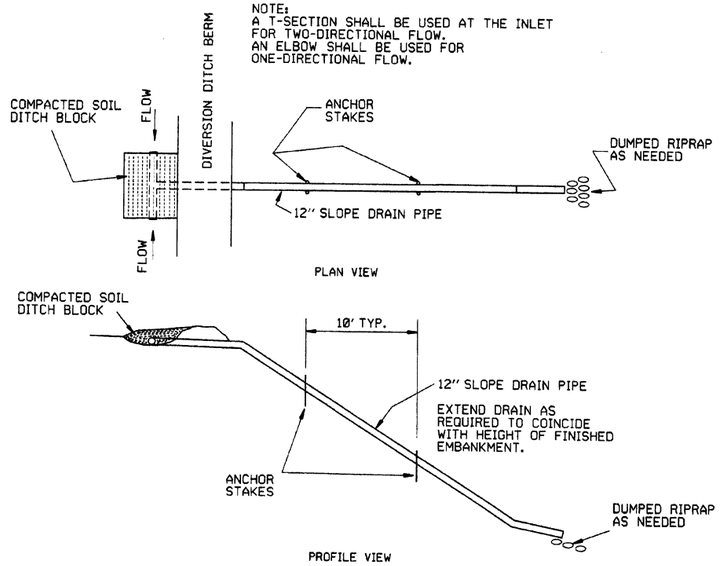
SEDIMENT BASIN WITH RIPRAP OUTLET (E-9)



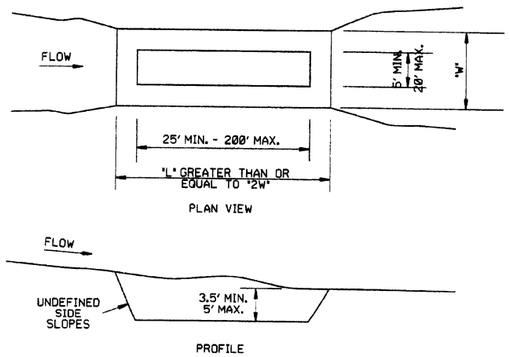
SEDIMENT BASIN WITH PIPE OUTLET (E-10)



DIVERSION DITCH (E-8)



SLOPE DRAIN (E-12)



SEDIMENT BASIN (E-14)

DATE	REVISION	FILMED
6-2-94	Revised E-8 & E-12; Added E-14 & Deleted E-13	
4-1-93	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

TEMPORARY EROSION CONTROL DEVICES

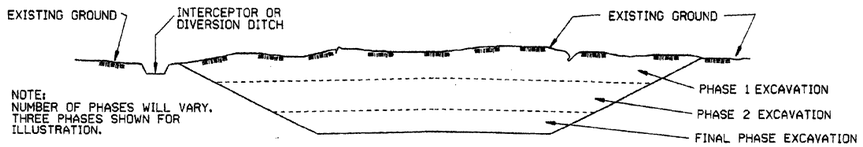
STANDARD DRAWING TEC-2

CLEARING AND GRUBBING

CONSTRUCTION SEQUENCE

1. PLACE PERIMETER CONTROLS (I.E. SILT FENCES , DIVERSION DITCHES, SEDIMENT BASINS, ETC.)
2. PERFORM CLEARING AND GRUBBING OPERATION.

EXCAVATION



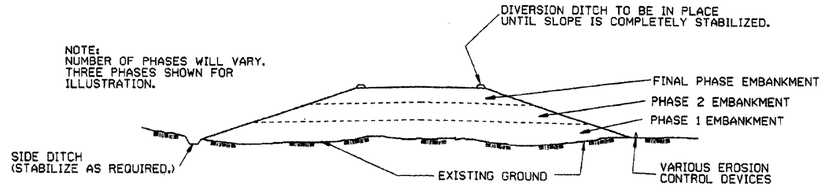
GENERAL NOTE

ALL CUT SLOPES SHALL BE DRESSED, PREPARED, SEEDED, AND MULCHED AS THE WORK PROGRESSES. SLOPES SHALL BE EXCAVATED AND STABILIZED IN EQUAL INCREMENTS NOT TO EXCEED 25 FEET, MEASURED VERTICALLY.

CONSTRUCTION SEQUENCE

1. EXCAVATE AND STABILIZE INTERCEPTOR AND/OR DIVERSION DITCHES.
2. PERFORM PHASE 1 EXCAVATION. PLACE PERMANENT OR TEMPORARY SEEDING.
3. PERFORM PHASE 2 EXCAVATION. PLACE PERMANENT OR TEMPORARY SEEDING.
4. PERFORM FINAL PHASE OF EXCAVATION. PLACE PERMANENT OR TEMPORARY SEEDING. STABILIZE DITCHES. CONSTRUCT DITCH CHECKS, DIVERSION DITCHES, SEDIMENT BASINS, OR OTHER EROSION CONTROL DEVICES AS REQUIRED.

EMBANKMENT



GENERAL NOTE

ALL EMBANKMENT SLOPES SHALL BE DRESSED, PREPARED, SEEDED, AND MULCHED AS THE WORK PROGRESSES. SLOPES SHALL BE CONSTRUCTED AND STABILIZED IN EQUAL INCREMENTS NOT TO EXCEED 25 FEET, MEASURED VERTICALLY.

CONSTRUCTION SEQUENCE

1. CONSTRUCT DIVERSION DITCHES, DITCH CHECKS, SEDIMENT BASINS, SILT FENCES, OR OTHER EROSION CONTROL DEVICES AS SPECIFIED.
2. PLACE PHASE 1 EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING. PROVIDE DIVERSION DITCHES AND SLOPE DRAINS IF EMBANKMENT CONSTRUCTION IS TO BE TEMPORARILY ABANDONED FOR A PERIOD OF GREATER THAN 21 DAYS.
3. PLACE PHASE 2 EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING. PROVIDE DIVERSION DITCHES AND SLOPE DRAINS IF EMBANKMENT CONSTRUCTION IS TO BE TEMPORARILY ABANDONED FOR A PERIOD OF GREATER THAN 21 DAYS.
4. PLACE FINAL PHASE OF EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING. PLACE DIVERSION DITCHES AND SLOPE DRAINS AND MAINTAIN UNTIL ENTIRE SLOPE IS STABILIZED.

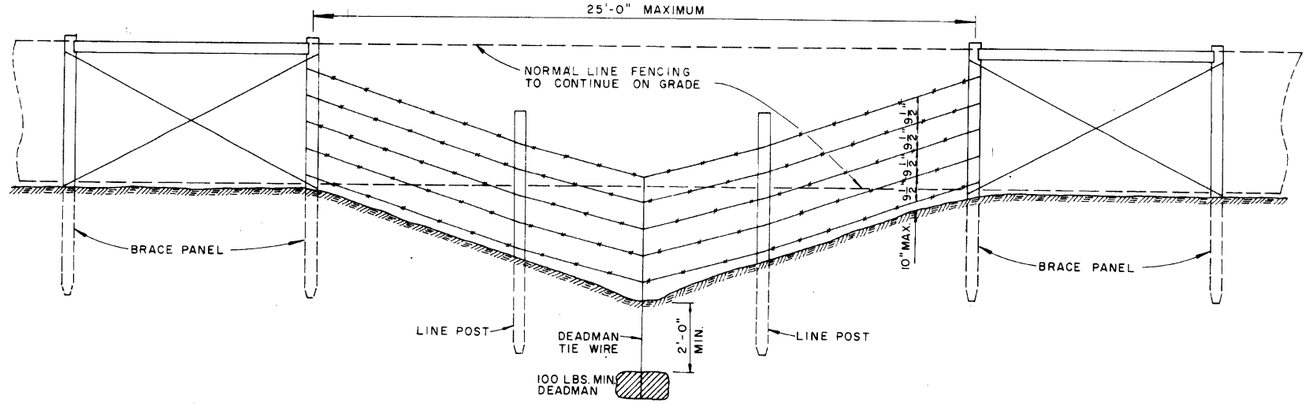
DATE	REVISION	FILMED
11-03-94	CORRECTED SPELLING	
6-2-94	Drawn & Issued	6-2-94

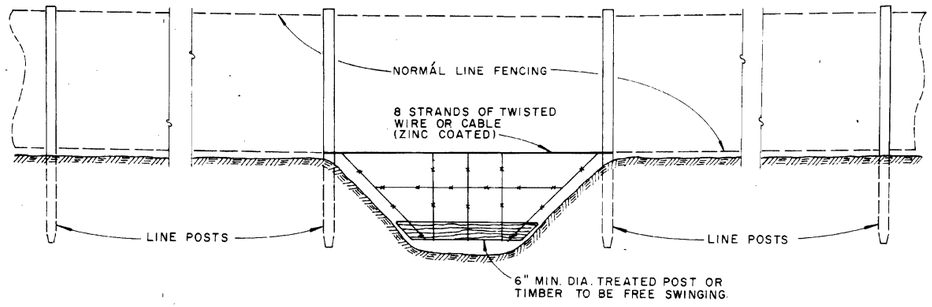
ARKANSAS STATE HIGHWAY COMMISSION

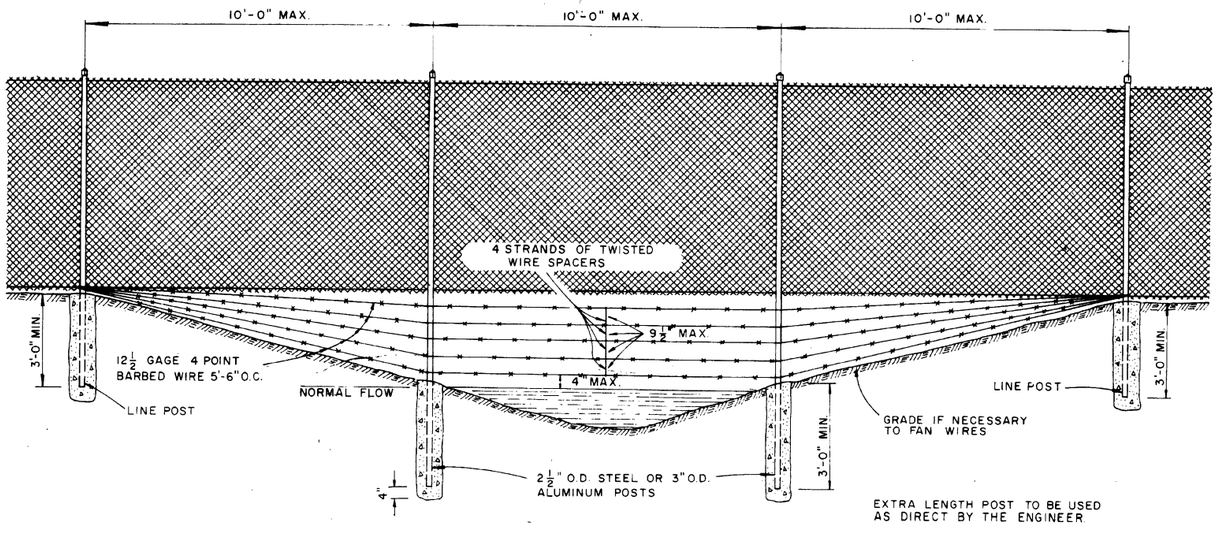
TEMPORARY EROSION CONTROL DEVICES

STANDARD DRAWING TEC-3

stdtec3.dgn







GENERAL NOTES:

THESE INSTALLATIONS TO BE USED WHERE NORMAL FENCING INSTALLATION WOULD CAUSE THE COLLECTING OF DRIFT IN THE CHANNEL OR THE DEPRESSION WILL NOT PERMIT NORMAL INSTALLATION. INSTALLATIONS WILL BE MADE ONLY WHERE DIRECTED BY THE ENGINEER.

WHEN A FENCE LINE APPROACHES A DITCH, GULLY OR DEPRESSION, THE LAST POST ON LEVEL GROUND SHALL BE PLACED CLOSE ENOUGH TO THE EDGE OF THE DROP OFF THAT THE FENCE MAY BE STRUNG TO THE POST IN THE DEPRESSION WITHOUT TOUCHING THE GROUND.

IN TERRAIN OF SUCH EXTREME IRREGULARITY THAT MINOR GRADING WILL NOT BE FEASIBLE, THE NORMAL FENCE SHALL CONTINUE ON GRADE AND THE GULLIES OR DEPRESSIONS TREATED BY AUXILIARY FENCES AS SHOWN.

PAYMENT FOR THE TYPE INSTALLATION USED WILL NOT BE MADE DIRECTLY BUT WILL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR WIRE FENCE OR CHAIN LINK FENCE.

DATE	REVISION	DATE FILM'D.
4-20-79	REVISED TOP RAIL & TENSION WIRE	696 4-20-79
10-2-72	REVISED & REDRAWN	529 10-2-72

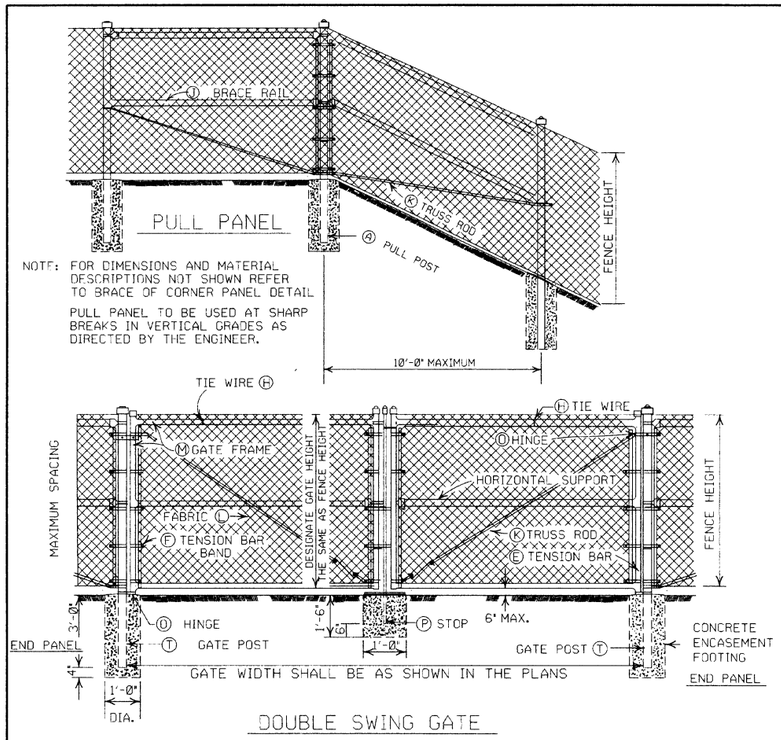
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WIRE FENCE WATER GAPS

STANDARD DRAWING

WF-2

136—11-71—67001—PPABC

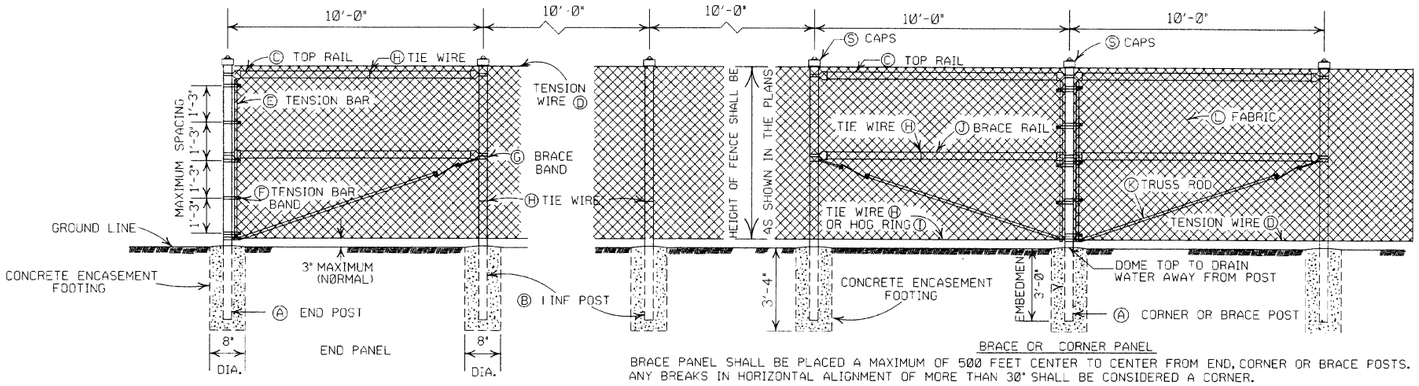


NOTE: FOR DIMENSIONS AND MATERIAL DESCRIPTIONS NOT SHOWN REFER TO BRACE OF CORNER PANEL DETAIL

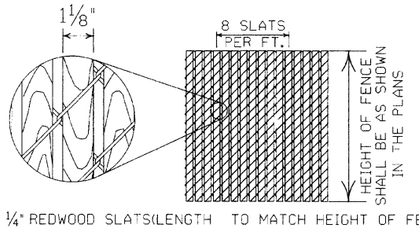
PULL PANEL TO BE USED AT SHARP BREAKS IN VERTICAL GRADES AS DIRECTED BY THE ENGINEER.

DOUBLE SWING GATE

POST SPACING DETAIL



BRACE PANEL SHALL BE PLACED A MAXIMUM OF 500 FEET CENTER TO CENTER FROM END, CORNER OR BRACE POSTS. ANY BREAKS IN HORIZONTAL ALIGNMENT OF MORE THAN 30° SHALL BE CONSIDERED A CORNER.



1⅛" X ¼" REDWOOD SLATS(LENGTH TO MATCH HEIGHT OF FENCE)

DETAIL OF REDWOOD SLAT INSTALLATION

GENERAL NOTES:

(C) CHAIN LINK FENCE BEING PLACED ON PRIVATE PROPERTY SHALL INCLUDE A TOP RAIL. ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER LIN. FT. OF CHAIN LINK FENCE.

(D) TENSION WIRE: SHALL BE SECURED TO ALL TERMINAL, PULL, BRACE OR CORNER POSTS WITH TENSION BAR BANDS.

(J) BRACE RAIL: BRACE RAILS SHALL BE PROVIDED AT ALL TERMINAL, PULL, BRACE OR CORNER POSTS HALFWAY BETWEEN THE TOP RAIL AND GROUND LEVEL WHEN TOPRAIL IS SPECIFIED AND TWELVE INCHES (12") DOWN FROM TOP OF FABRIC WHEN TOP TENSION WIRE IS SPECIFIED. BRACE RAIL SHALL EXTEND FROM SUCH POST TO THE FIRST ADJACENT LINE POST.

(L) FABRIC: SHALL CONFORM TO THE SPECIFICATIONS.

(M) GATE FRAMES: SHALL BE CONSTRUCTED OF TUBULAR MEMBERS ASSEMBLED BY USE OF HEAVY PRESSED STEEL, MALLEABLE FITTINGS OR BY WELDING. ALL GATES SHALL HAVE ONE HORIZONTAL SUPPORT EXTENDING THE WIDTH OF THE GATE AT THE MIDPOINTS OF VERTICAL FRAME MEMBERS. THE COMPLETE FRAME SHALL BE RIGID AND HAVE AMPLE STRENGTH TO BE FREE FROM SAG AND TWIST.

(O) HINGES: SHALL BE OF HEAVY PATTERN, OF ADEQUATE STRENGTH FOR GATE, AND WITH LARGE BEARING SURFACES FOR CLAMPING IN POSITION. THE HINGE SHALL BE OF THE PROPER TYPE TO ALLOW FOR THE DESIGNATED DEGREE OF SWING. THE HINGE SHALL NOT TWIST OR TURN UNDER THE ACTION OF THE GATE. THE GATES SHALL BE CAPABLE OF BEING OPENED AND CLOSED EASILY BY ONE PERSON.

(P) LATCHES AND STOPS: SHALL BE PROVIDED FOR ALL GATES. GATES SHALL HAVE A DROP BAR LATCH. LATCHES SHALL BE ARRANGED FOR LOCKING. THE STOP FOR DROP BAR LATCHES SHALL BE SET IN CONCRETE AND ENGAGE THE PLUNGER OF THE BAR LATCH.

(S) CAPS: ALL POSTS, EXCEPT ROLL FORMED POSTS AND 'T' POSTS SHALL BE CAPPED OVER THE EXTERIOR OF THE POST, AND SHALL CONFORM TO ASTM F626.

CONCRETE REQUIRED FOR THE EMBEDMENT OF ALL POSTS SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR CHAIN LINK FENCE.

POSTS SHALL BE SPACED EQUIDISTANT ON A MAXIMUM OF 10' CENTERS.

EXCAVATION FOR POSTS: IN OTHER THAN ROCK SHALL BE OF THE DIMENSIONS INDICATED. IF ROCK IS ENCOUNTERED BEFORE REACHING THE REQUIRED DEPTH, THE EXCAVATION SHALL BE CONTINUED TO THE DEPTH INDICATED OR 1'-6" INTO THE ROCK, WHICHEVER IS LESS, AND SHALL BE A MINIMUM OF 8 INCHES IN DIAMETER.

HEIGHT OF FENCE FABRIC	(A) END, PULL, CORNER OR BRACE POST	(B) LINE POSTS SIZE	(B) LINE POSTS TIE SPACING	(C) TOP RAIL SIZE	(C) TOP RAIL TIE SPACING	(C) TOP RAIL MIN. LENGTH	(D) TENSION WIRE SIZE	(D) TENSION WIRE TIE SPACING	(E) TENSION BAR SIZE	(E) TENSION BAR LENGTH	(F) TENSION BAR BAND SIZE	(F) TENSION BAR BAND BOLT SIZE	(F) TENSION BAR BAND SPACING	(G) BRACE BAND SIZE	(G) BRACE BAND BOLT SIZE
6' AND LESS	2½" O.D.	2" O.D.	1 TIE EVERY 1'-2" OF FABRIC HEIGHT	1⅝" O.D.	1 TIE EVERY 2'-0"	10'-0"	7 GAUGE COIL SPRING WIRE	1 TIE EVERY 1'-0"	MIN. OF ⅜" X ¾"	MIN. OF 2" LESS THAN FABRIC HEIGHT	MIN. OF ¾" X 0.074	⅝" X 1¼"	1 BAND AT TOP AND BOTTOM 15" MAX. INTERVAL BETWEEN BANDS	MIN. OF ¾" X 0.105	⅝" X 1¼"
OVER 6' TO 12' INCL.	3" O.D.	2½" O.D.													

HEIGHT OF FENCE FABRIC	(H) TIE WIRE	(I) HOG RING	(J) BRACE RAIL SIZE	(J) BRACE RAIL TIE SPACING	(K) TRUSS ROD	(L) FABRIC SIZE	(L) FABRIC MESH	(L) FABRIC SELVAGE	(M) GATE FRAME SIZE	(M) GATE FRAME TIE SPACING	(N) HORIZONTAL SUPPORT SIZE	(N) HORIZONTAL SUPPORT TIE SPACING	(O) HINGE TYPE 180° SWING	(T) GATE POST GATE WIDTH 12' AND LESS	(T) GATE POST GATE WIDTH OVER 12' TO 24' INCL.
6' AND LESS	MIN. OF 12 GA. STEEL OR 9 GA. ALUM.	SAME GAUGE AS FABRIC	1⅝" O.D.	1 TIE EVERY 2'-0"	MIN. OF ⅜" ROUND WITH TIGHTNERS AND FITTINGS	9 GA.	2"	KNUCK-ING AND/OR TWIST-ING	2" O.D.	1 TIE EVERY 1'-0"	2" O.D.	1 TIE EVERY 1'-0"	OFFSET	3" O.D.	4" O.D.
OVER 6' TO 12' INCL.														4" O.D.	

NOTE: POST SIZES SHOWN ARE FOR STEEL. WHERE ALUMINUM IS PROVIDED, LINE POSTS SHALL HAVE AN OUT SIDE DIAMETER OF 2½" FOR FENCE HEIGHT OF 6' AND LESS, AN OUTSIDE DIAMETER OF 3" FOR FENCE HEIGHT OF 6' TO 12'. END, PULL, CORNER OR BRACE POSTS SHALL HAVE AN OUTSIDE DIAMETER OF 3" FOR FENCE HEIGHT OF 6' AND LESS; AN OUTSIDE DIAMETER OF 3½" FOR FENCE HEIGHTS OF 6' TO 12'. GATE POSTS WHERE GATE WIDTH IS 12' AND LESS SHALL HAVE AN OUTSIDE DIAMETER OF 3½" FOR FENCE HEIGHT OF 6' AND LESS. ALUMINUM TENSION WIRE SHALL BE 0.192" IN DIAMETER. MINIMUM THICKNESS OF MATERIAL FROM WHICH EXPANSION SLEEVES SHALL BE MADE WILL BE 0.078". POSTS AND RAILS MAY HAVE ANY CROSS-SECTIONAL SHAPE THAT WILL MEET THE SPECIFICATIONS.

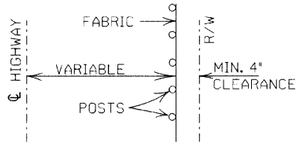
OTHER DETAILS APPLY TO BOTH STEEL AND ALUMINUM FENCE.

ALL MISCELLANEOUS FITTINGS AND HARDWARE SHALL MEET THE REQUIREMENTS AND PRODUCTION TOLERANCES AS SET FORTH IN THE SPECIFICATIONS. 9 GAUGE ALUMINUM WIRE SHALL BE ACCEPTABLE FOR TIEING FABRIC TO TUBULAR AND ROLL FORMED MEMBERS OF STEEL FENCE.

POSTS AND RAILS

SIZE O.D.	GRADE 1 AND ALUMINUM ALLOY O.D. INCHES	WALL THICKNESS	LBS. PER LINEAR FT. STEEL	LBS. PER LINEAR FT. ALUMINUM	GRADE 2 O.D. INCHES	WALL THICKNESS	LBS. PER LINEAR FT.
1⅝	1.660	0.140	2.27	0.786	1.660	0.111	1.84
2	1.900	0.145	2.72	0.940	1.900	0.120	2.28
2½	2.375	0.154	3.65	1.264	2.375	0.130	3.11
3	2.875	0.203	5.79	2.004	2.875	0.160	4.64
3½	3.500	0.216	7.58	2.621	3.500	0.160	5.71
4	4.000	0.226	9.11	3.151	4.000	0.160	6.56

TOLERANCES ON DIMENSIONS AND WEIGHTS ACCORDING TO AASHTO M 181



INSTALLATION MAY BE MODIFIED AS SHOWN IN THE PLANS

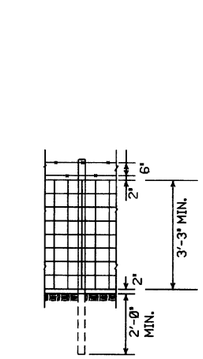
TYPICAL INSTALLATION DIAGRAM

DATE	REVISION	FILMED
11-17-10	REVISED TRUSS ROD	
12-10-09	REVISED POSTS & RAILS TABLE	
5-21-09	ADDED TABLE & GEN. NOTE (C)	
8-22-02	REVISED NOTES, REMOVED TABLE, & REMOVED FENCE ALTERNATE	
4-3-97	REVISED BRACE RAIL NOTE	
10-18-96	REVISED AASHTO & ASTM REF.	
11-3-94	REVISED NOTE (L)	
10-1-92	DELETED ALTERNATE POST	10-1-92
8-15-91	DELETED ROLL FORMED POST DETAIL & ADDED NOTE	8-15-91 8-15-91
11-30-89	DELETED CLASS CONCRETE	11-30-89
11-17-88	REVISED O.D. SIZES	668-11-17-88
10-30-87	GENERAL REVISIONS	548-10-30-87
4-20-79	REVISED TOP RAIL & TENSION WIRE	695-4-20-79
10-2-72	REVISED AND REDRAWN	530-10-2 72

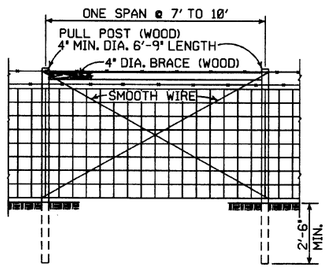
ARKANSAS STATE HIGHWAY COMMISSION

CHAIN LINK FENCE

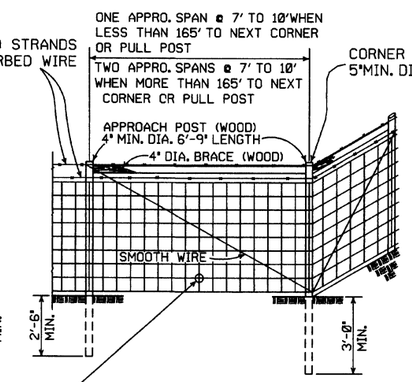
STANDARD DRAWING WF-3

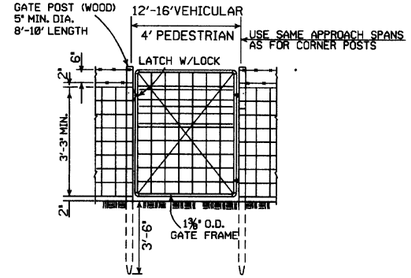


LINE POST
3" MIN. DIA. 6'-3" LENGTH
MAX. SPACING TO BE 10'-0"

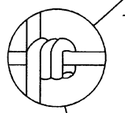


LINE BRACE ASSEMBLY
MAX. SPACING TO BE 330'

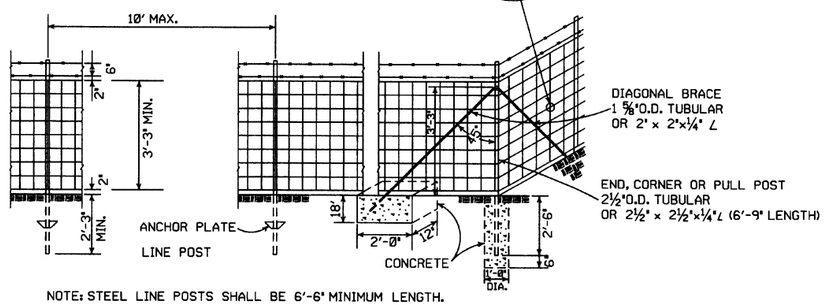




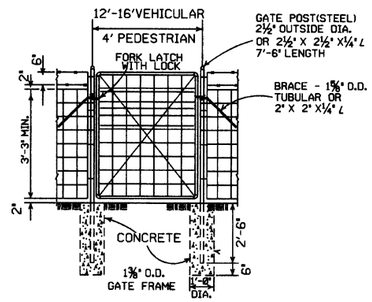
TYPE C FENCE (WOOD POSTS)

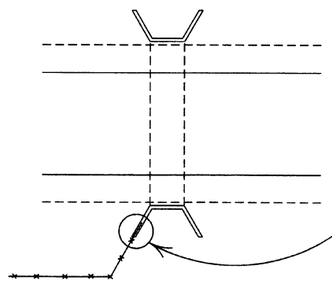


OTHER APPROVED TIES WILL BE PERMITTED

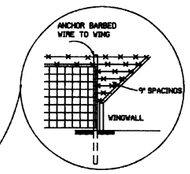


NOTE: STEEL LINE POSTS SHALL BE 6'-6" MINIMUM LENGTH.





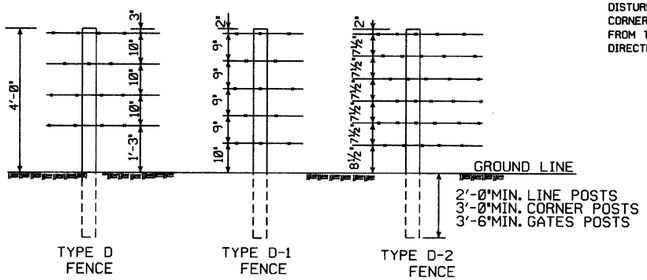
NOTE: USE ⅜" X 1½" LAG BOLT & SHIELD OR AS APPROVED BY THE ENGINEER.



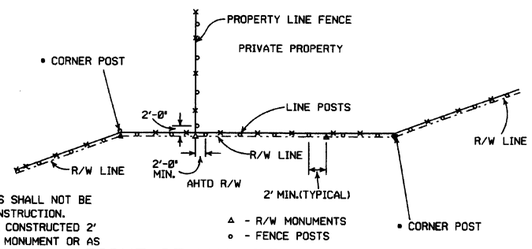
DETAIL OF FENCE CONSTRUCTION AT LARGE CULVERTS (5' IN HEIGHT AND OVER)

TYPE C FENCE (STEEL POSTS)

4 STRANDS BARBED WIRE (D)
5 STRANDS BARBED WIRE (D-1)
6 STRANDS BARBED WIRE (D-2)

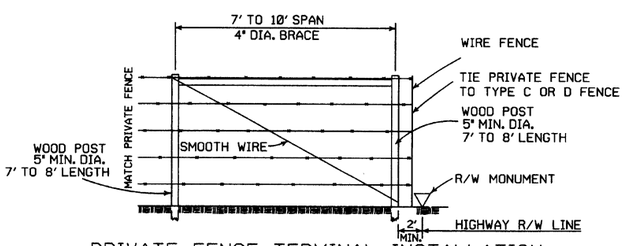


NOTE: SPACING AND SIZE (EXCEPT LENGTH) OF POSTS, APPROACH SPANS, PULL POST ASSEMBLIES, AND CORNER BRACING FOR TYPE D FENCE SHALL CONFORM TO TYPE C FENCE. USE GALVANIZED STAPLES ON WOOD POSTS AND APPROVED FASTENERS ON STEEL POSTS.

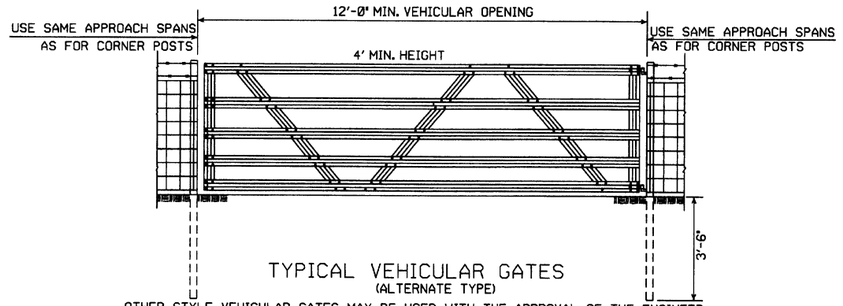


• NOTE: RIGHT-OF-WAY MONUMENTS SHALL NOT BE DISTURBED BY FENCE CONSTRUCTION. CORNER POSTS SHALL BE CONSTRUCTED 2' FROM THE RIGHT-OF-WAY MONUMENT OR AS DIRECTED BY THE ENGINEER.

RIGHT-OF-WAY FENCE LOCATION



PRIVATE FENCE TERMINAL INSTALLATION
WHERE EXISTING FENCE CONSISTS OF STEEL POSTS, USE END POST ASSEMBLY AS SHOWN IN TYPE C FENCE OR OTHER END POST ASSEMBLY AS APPROVED BY THE ENGINEER.



TYPICAL VEHICULAR GATES
(ALTERNATE TYPE)

OTHER STYLE VEHICULAR GATES MAY BE USED WITH THE APPROVAL OF THE ENGINEER.
THE METHOD OF SECURING GATE (LATCH AND/OR LOCK) SHALL MEET THE APPROVAL OF THE ENGINEER.

GENERAL NOTES:

STEEL LINE POSTS SHALL BE PAINTED OR GALVANIZED.
TUBULAR END, CORNER, PULL, OR DIAGONAL BRACES MUST CONFORM TO THE DIMENSIONS AND WEIGHTS SPECIFIED ON STANDARD DRAWING WF-3 (CHAIN LINK). APPROVED ALTERNATES ARE ACCEPTABLE.
AN ACCEPTABLE TOLERANCE IN LENGTH OF TUBULAR OR WOODEN POSTS SHALL BE - 1" TO +2".
TUBULAR POSTS MUST BE PAINTED OR GALVANIZED.

THE CONTRACTOR SHALL FURNISH AT LEAST 25% OF TIMBER LINE POSTS OF 7 FOOT LENGTHS IN ORDER TO PROVIDE SUFFICIENT SET IN SOFT GROUND OR SMALL DEPRESSIONS.

DRIVEWAY GATES, EITHER SINGLE 12' TO 16' OR DOUBLE 6' TO 8' OPENING OF THE SAME TYPE AS THE PEDESTRIAN GATE, SHALL BE INSTALLED ON THE RIGHT SIDE OF EACH THROUGH LANE ROAD AT LARGE CULVERTS OR BRIDGE CROSS FENCE, FOR USE OF MAINTENANCE EQUIPMENT. LOCATION OF GATES TO BE SHOWN ON PLANS OR AS DESIGNATED BY THE ENGINEER.

AT STREAM CROSSINGS, THE FENCE SHALL NOT BE CONSTRUCTED ACROSS LARGE STREAMS. WHERE CLEARANCE IS SUFFICIENT FROM THE TOP OF THE BANK TO THE BRIDGE STRUCTURE A CROSS CONNECTION SHALL BE CONSTRUCTED BETWEEN THE FENCE ON EACH SIDE OF THE ROAD. WHERE THE CLEARANCE IS NOT SUFFICIENT, THE FENCE SHALL BE TERMINATED WITH CROSS CONNECTIONS AND END POSTS ADJACENT TO BRIDGE ABUTMENTS OR CULVERT WINGWALLS.

SPLICE FOR BARBED WIRE BETWEEN PULL POST ASSEMBLY SHALL BE BY THE "EYE METHOD" AS DESCRIBED AS FOLLOWS: THE ENDS OF THE BARBED WIRE SHALL BE BENT TO FORM A LOOP. THE LOOPS SHALL BE CONNECTED. AFTER THE LOOPS ARE CONNECTED THE ENDS OF THE WIRE SHALL BE WRAPPED AROUND THE PROJECTING WIRES A MINIMUM OF 4 TIMES FOR EACH WIRE LOOP.

SPLICE FOR WOVEN WIRE BETWEEN PULL POST SHALL BE BY THE "WESTERN UNION METHOD" AS DESCRIBED AS FOLLOWS: THE VERTICAL WIRES FOR EACH END OF THE FENCE FABRIC SHALL BE PLACED SIDE BY SIDE AND THE PROJECTING HORIZONTAL WIRES SHALL BE WRAPPED A MINIMUM OF 4 TIMES AROUND THE HORIZONTAL WIRES OF THE FIRST WEB.

STAPLE AT LEAST TOP, BOTTOM AND ALTERNATE WIRES OF WOVEN FABRIC FOR WOOD LINE POSTS.

DATE	REVISION	FILMED
8-22-02	REVISED GENERAL NOTES	
10-18-96	REVISED AASHTO	
11-22-95	REVISED R-O-W LOCATION DETAIL	
6-2-94	REVISED BARB WIRE AND ADDED CORNER POST NOTES	6-2-94
8-5-93	REVISED R/W INSTALLATION FENCE	8-5-93
10-1-92	ADDED STAPLE NOTE	10-1-92
8-15-91	ADDED TYPE D-2 FENCE	8-15-91
11-30-89	DELETED CLASS CONCRETE	11-30-89
7-15-88	ADDED SPLICE NOTE	700-7-15-88
10-30-87	GENERAL REVISIONS	549-10-30-87
11-1-84	MAX. POST SPACING MIN. WIRE GAUGE	507-11-1-84
1-4-83	MIN. DIA. LINE POST	648-1-4-83
3-2-81	TOLERANCE FOR POST LENGTH	722-3-2-81
12-1-72	ADDED D-1 & FENCE INSTALLATION	564-12-1-72
10-2-72	REVISED AND REDRAWN	540-10-2-72

ARKANSAS STATE HIGHWAY COMMISSION

WIRE FENCE TYPE C AND D

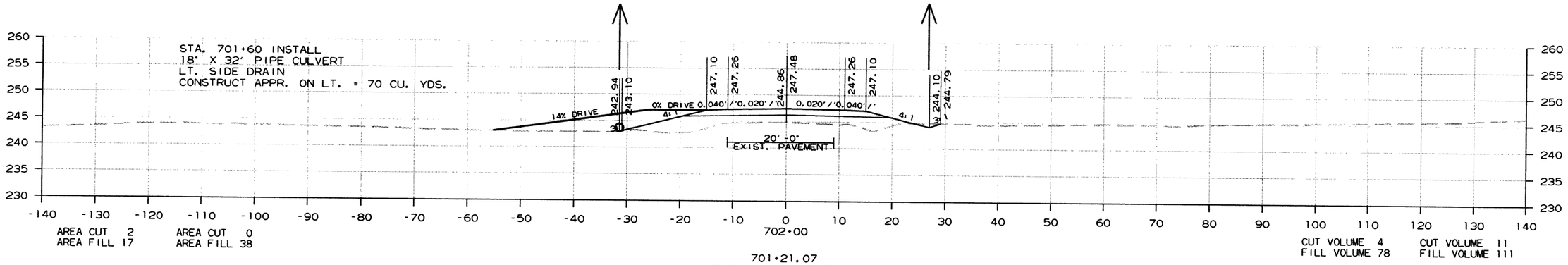
STANDARD DRAWING WF-4

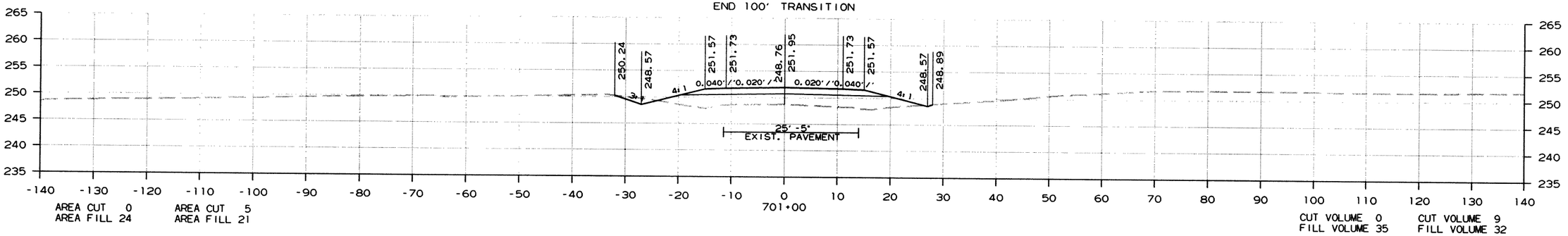
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	155	335

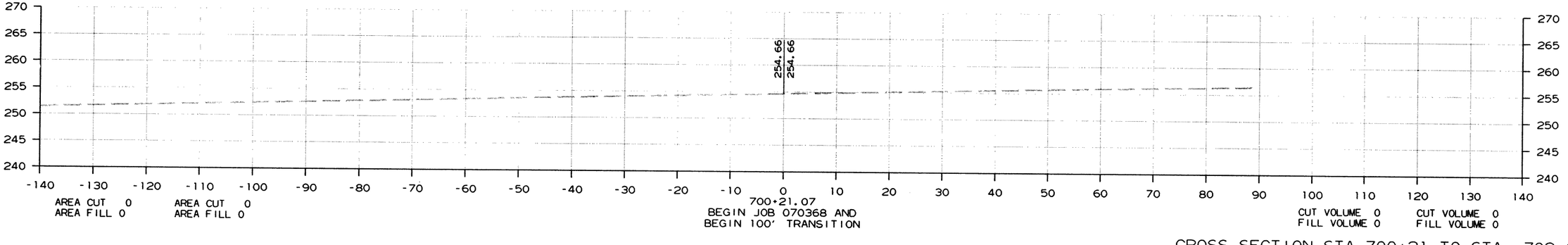
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 700+21 TO STA. 702+00

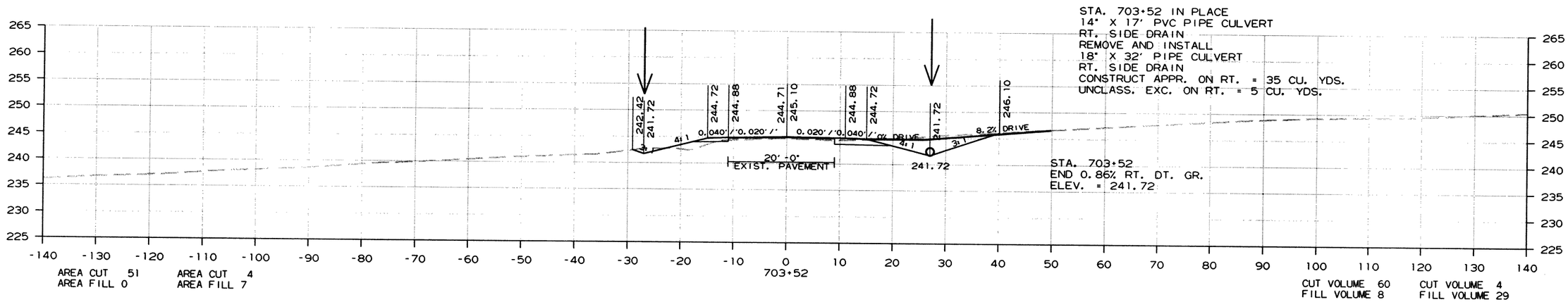
r070368.dgn 1/15/2015

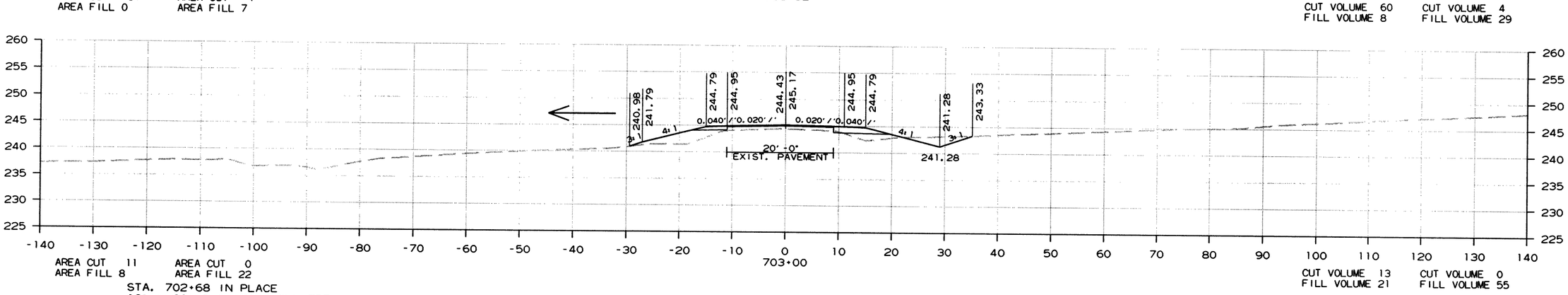
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	156	335

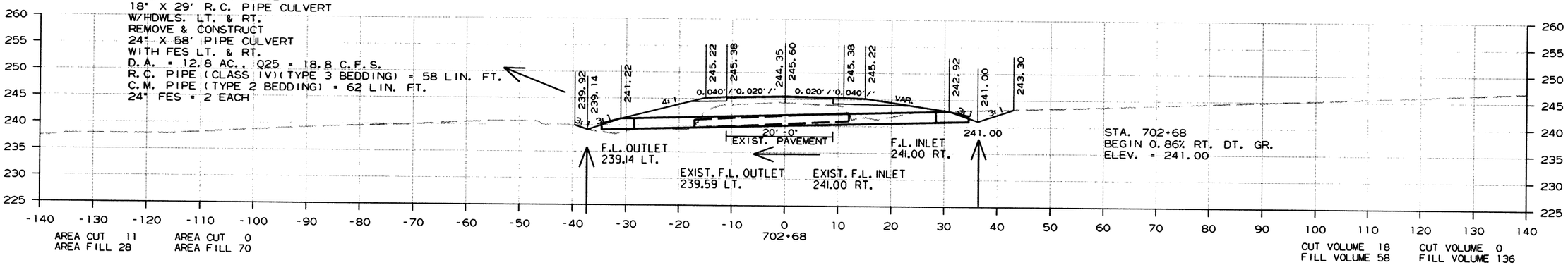
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 702+68 TO STA. 703+52

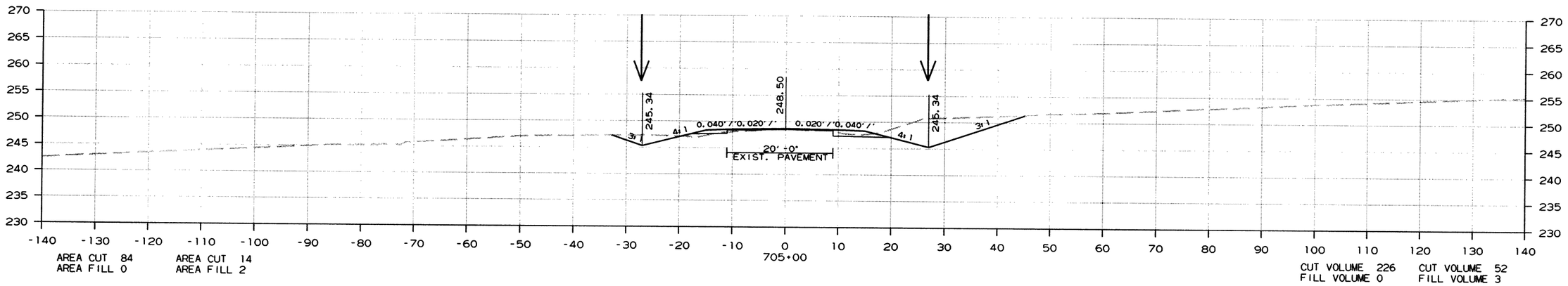
r070368.dgn 1/15/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		070368	157	335

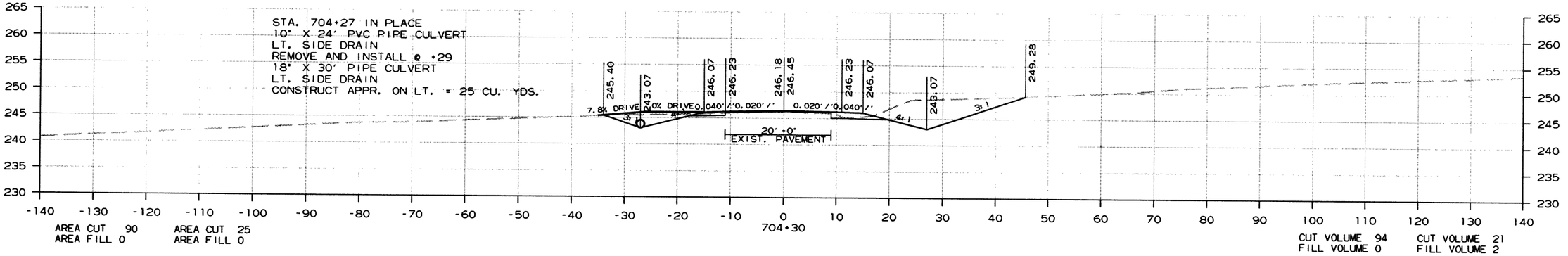
(2) CROSS SECTIONS

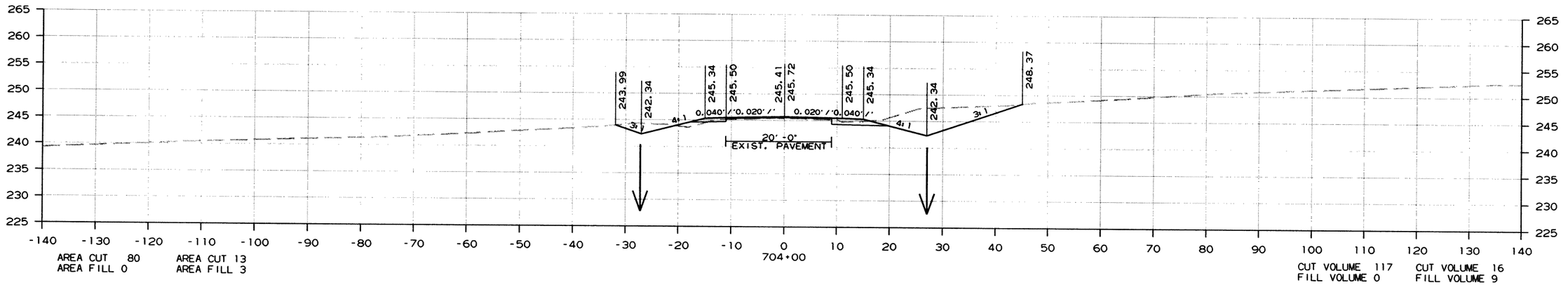
STAGE 1 STAGE 2

STAGE 1 STAGE 2



STA. 704+27 IN PLACE
10' X 24' PVC PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +29
18' X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 25 CU. YDS.





CROSS SECTION STA. 704+00 TO STA. 705+00

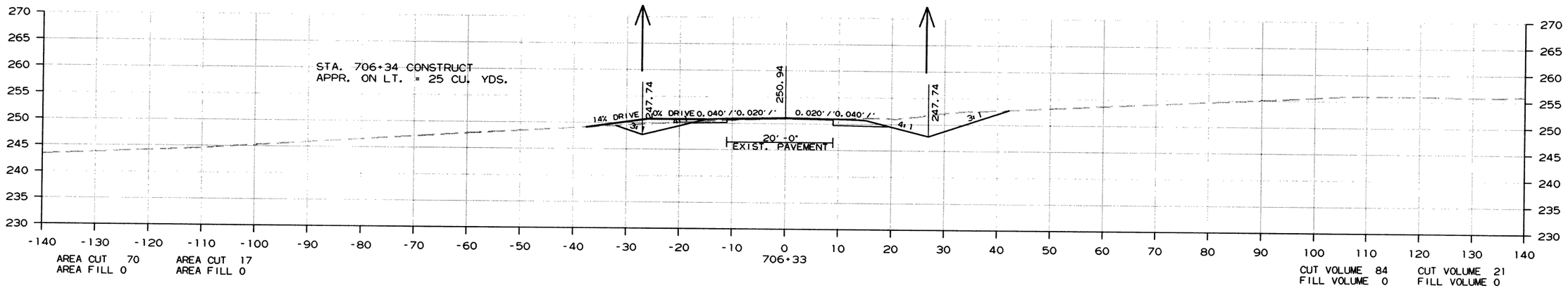
r070368.dgn 1/15/2015

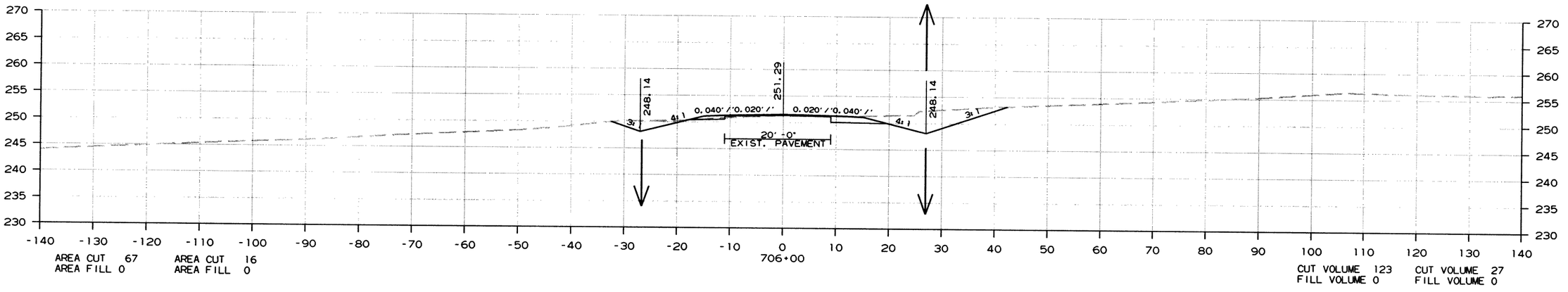
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		070368	158	335

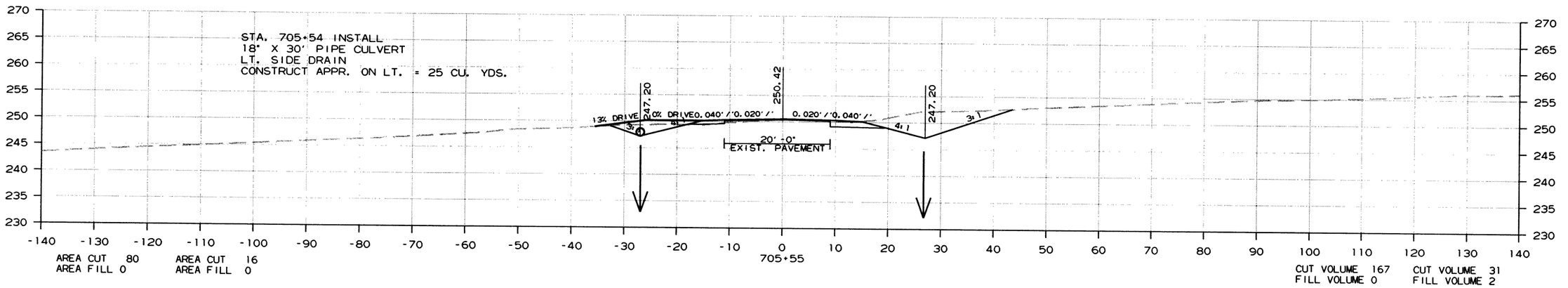
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 705+55 TO STA. 706+33

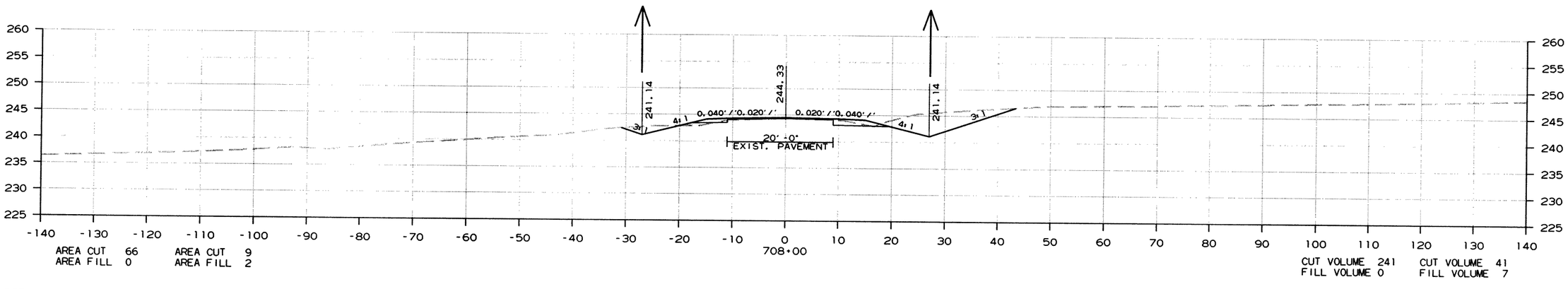
r070368.dgn 1/15/2015

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.		070368	159	335

(2) CROSS SECTIONS

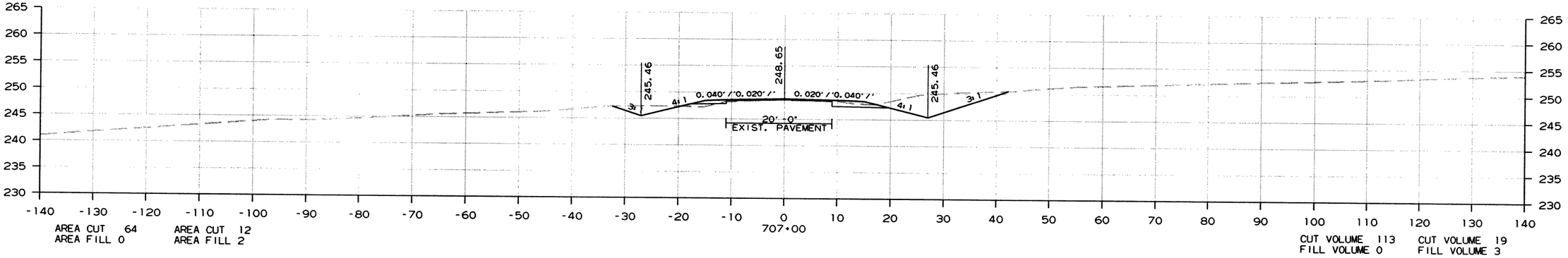
STAGE 1 STAGE 2

STAGE 1 STAGE 2



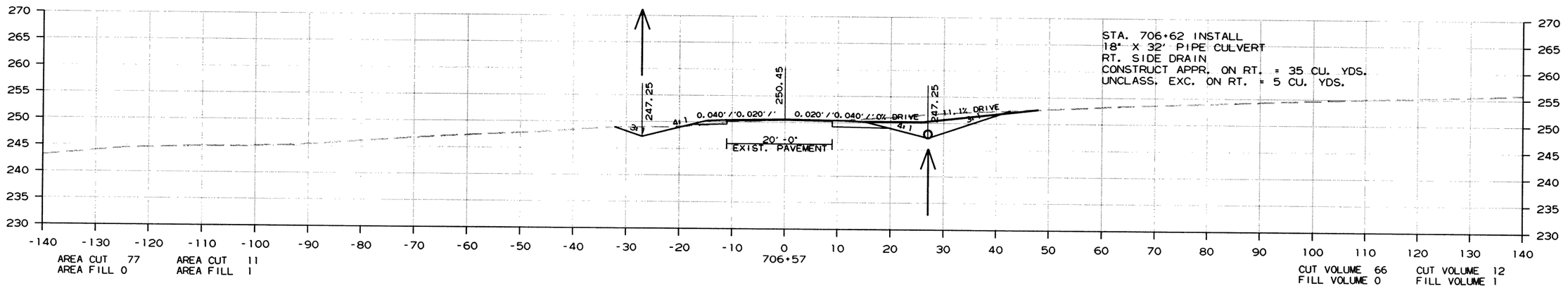
AREA CUT 66 AREA CUT 9
AREA FILL 0 AREA FILL 2

CUT VOLUME 241 CUT VOLUME 41
FILL VOLUME 0 FILL VOLUME 7



AREA CUT 64 AREA CUT 12
AREA FILL 0 AREA FILL 2

CUT VOLUME 113 CUT VOLUME 19
FILL VOLUME 0 FILL VOLUME 3



STA. 706+62 INSTALL
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 35 CU. YDS.
UNCLASS. EXC. ON RT. = 5 CU. YDS.

AREA CUT 77 AREA CUT 11
AREA FILL 0 AREA FILL 1

CUT VOLUME 66 CUT VOLUME 12
FILL VOLUME 0 FILL VOLUME 1

CROSS SECTION STA. 706+57 TO STA. 708+00

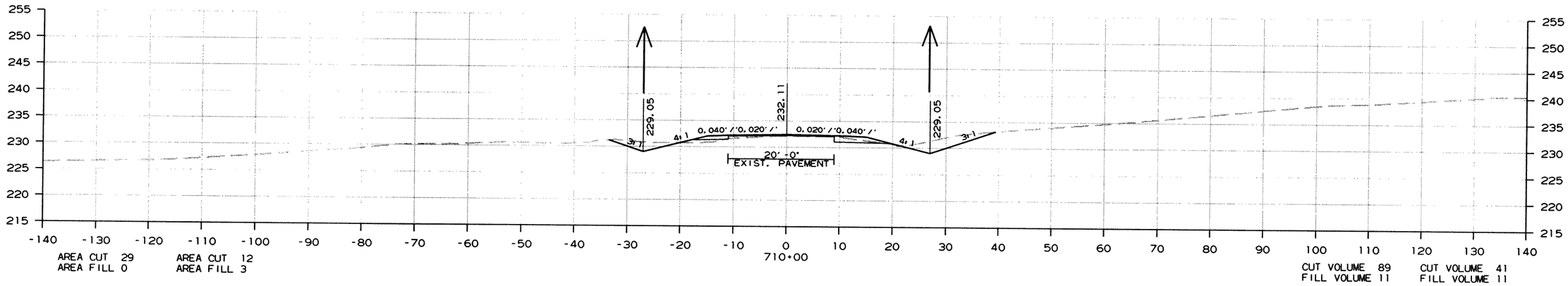
r070368.dgn 1/15/2015

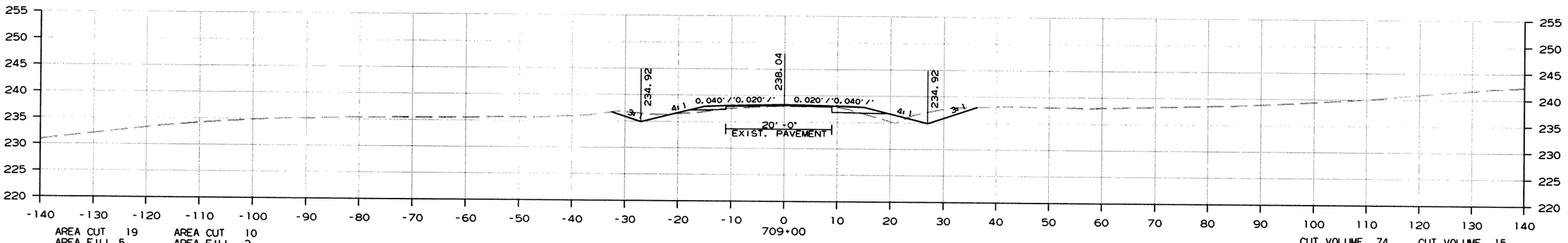
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	160	335

(2) CROSS SECTIONS

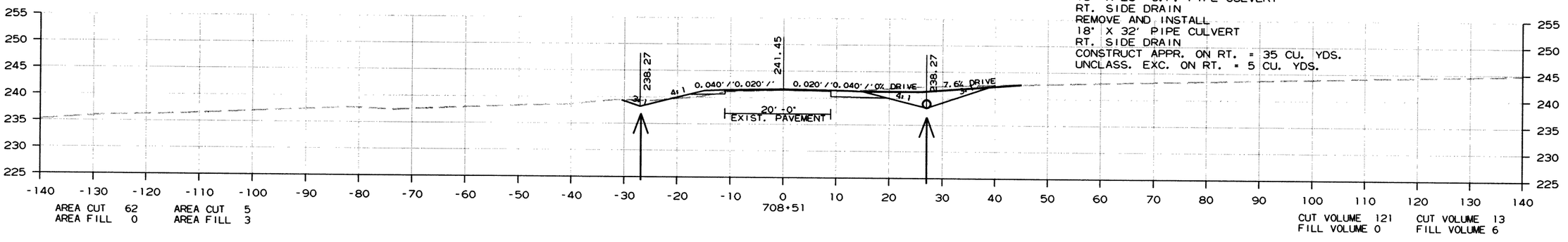
STAGE 1 STAGE 2

STAGE 1 STAGE 2





STA. 708+51 IN PLACE
18" X 25' C.P. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 35 CU. YDS.
UNCLASS. EXC. ON RT. = 5 CU. YDS.



CROSS SECTION STA. 708+51 TO STA. 710+00

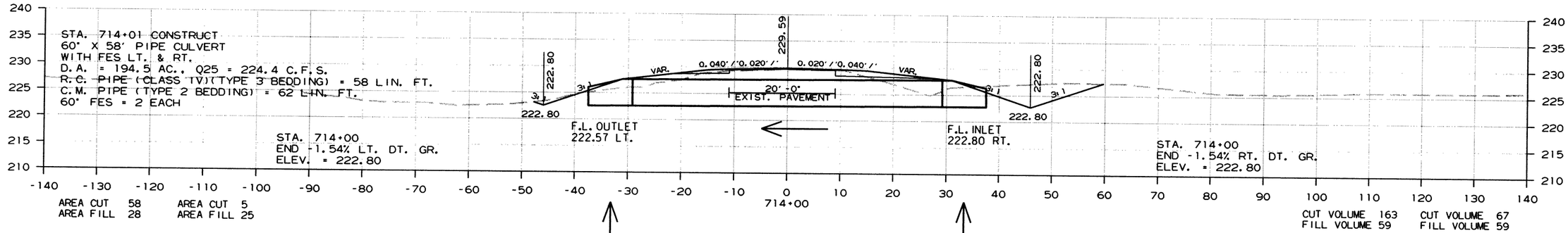
r070368.dgn 1/15/2015

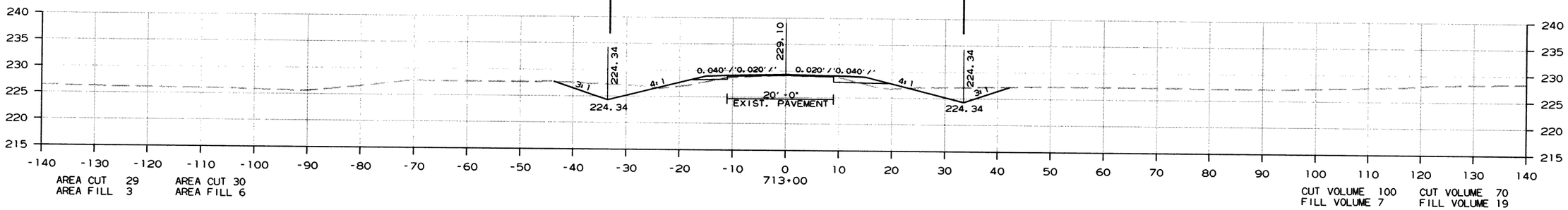
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	161	335

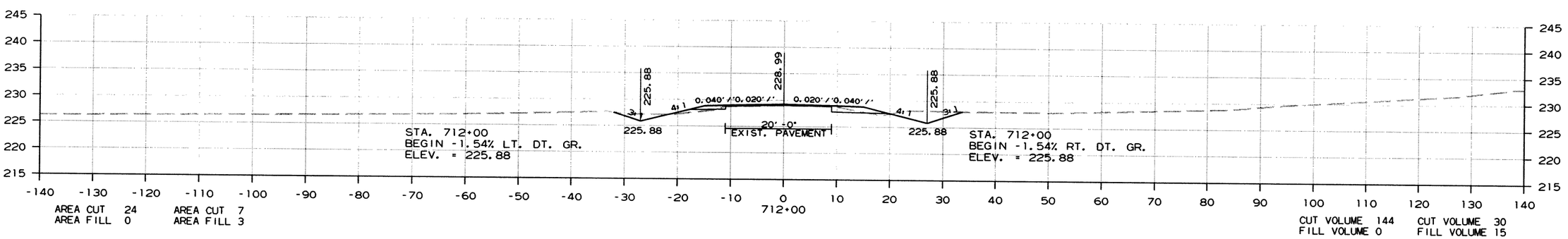
(2) CROSS SECTIONS

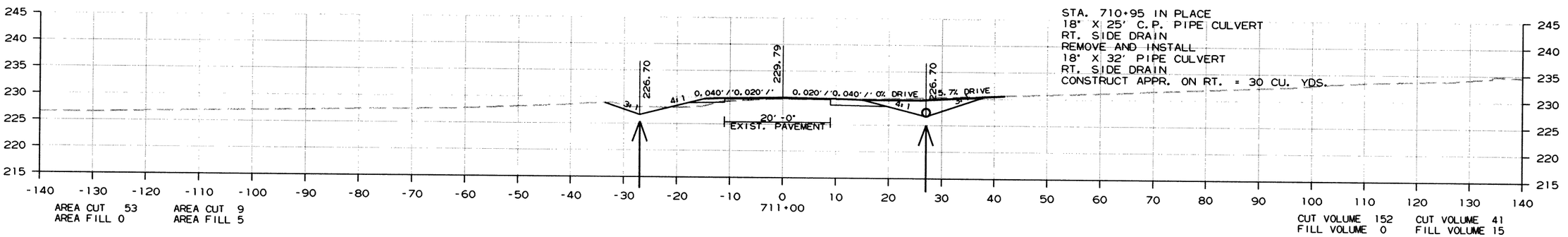
STAGE 1 STAGE 2

STAGE 1 STAGE 2









CROSS SECTION STA. 711+00 TO STA. 714+00

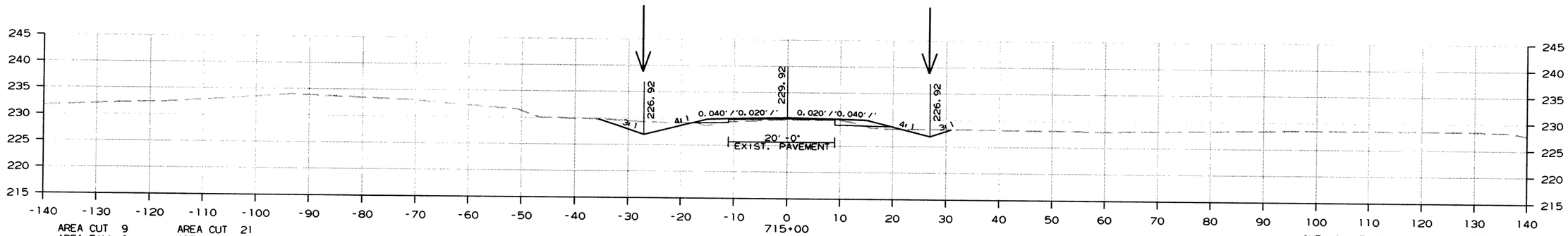
r070368.dgn 1/15/2015

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.		070368	162	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



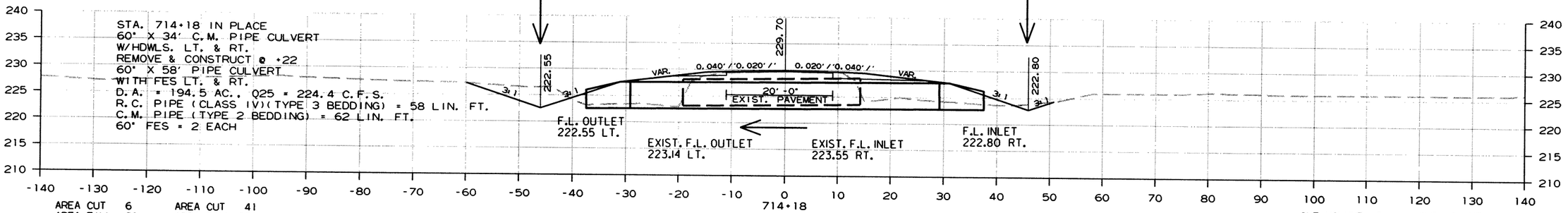
AREA CUT 9
AREA FILL 0

AREA CUT 21
AREA FILL 2

CUT VOLUME 24
FILL VOLUME 125

CUT VOLUME 94
FILL VOLUME 137

STA. 714+18 IN PLACE
60" X 34' C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE & CONSTRUCT @ +22
60" X 58' PIPE CULVERT
WITH FES LT. & RT.
D.A. = 194.5 AC., Q25 = 224.4 C.F.S.
R.C. PIPE (CLASS IV)(TYPE 3 BEDDING) = 58 LIN. FT.
C.M. PIPE (TYPE 2 BEDDING) = 62 LIN. FT.
60" FES = 2 EACH



F.L. OUTLET
222.55 LT.

EXIST. F.L. OUTLET
223.14 LT.

EXIST. F.L. INLET
223.55 RT.

F.L. INLET
222.80 RT.

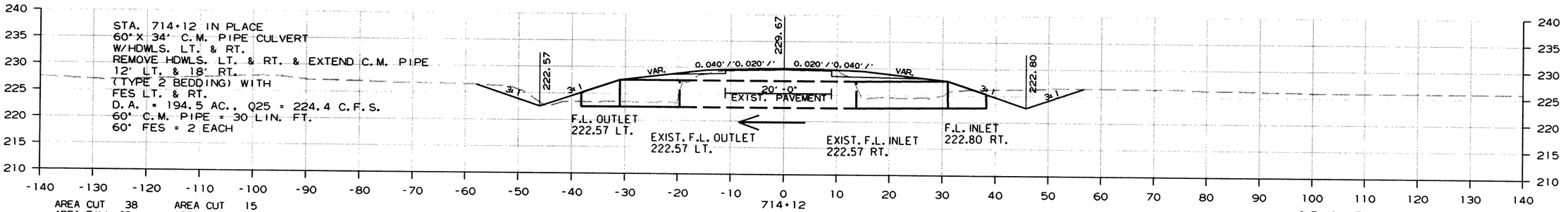
AREA CUT 6
AREA FILL 81

AREA CUT 41
AREA FILL 88

CUT VOLUME 5
FILL VOLUME 16

CUT VOLUME 6
FILL VOLUME 19

STA. 714+12 IN PLACE
60" X 34' C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE HDWLS. LT. & RT. & EXTEND C.M. PIPE
12' LT. & 18' RT.
(TYPE 2 BEDDING) WITH
FES LT. & RT.
D.A. = 194.5 AC., Q25 = 224.4 C.F.S.
60" C.M. PIPE = 30 LIN. FT.
60" FES = 2 EACH



F.L. OUTLET
222.57 LT.

EXIST. F.L. OUTLET
222.57 LT.

EXIST. F.L. INLET
222.57 RT.

F.L. INLET
222.80 RT.

AREA CUT 38
AREA FILL 62

AREA CUT 15
AREA FILL 85

CUT VOLUME 21
FILL VOLUME 20

CUT VOLUME 4
FILL VOLUME 24

CROSS SECTION STA. 714+12 TO STA. 715+00

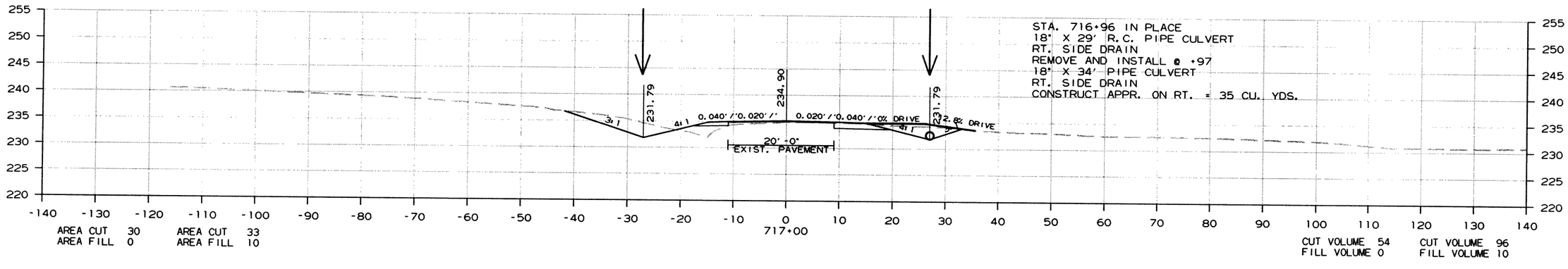
r070368.dgn 1/15/2015

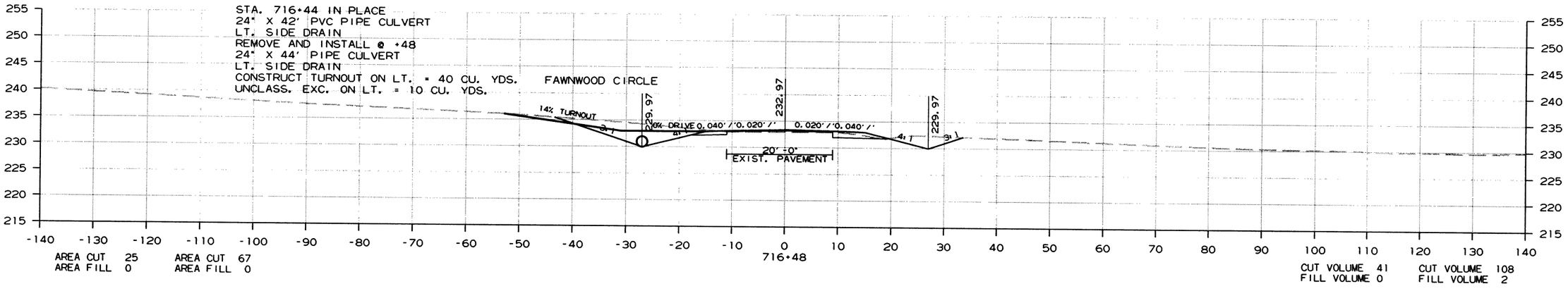
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	163	335

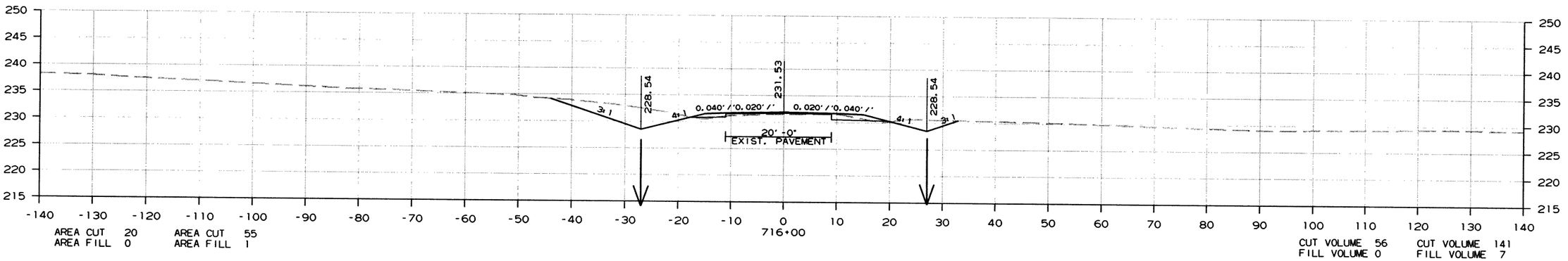
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







r070368.dgn 1/15/2015

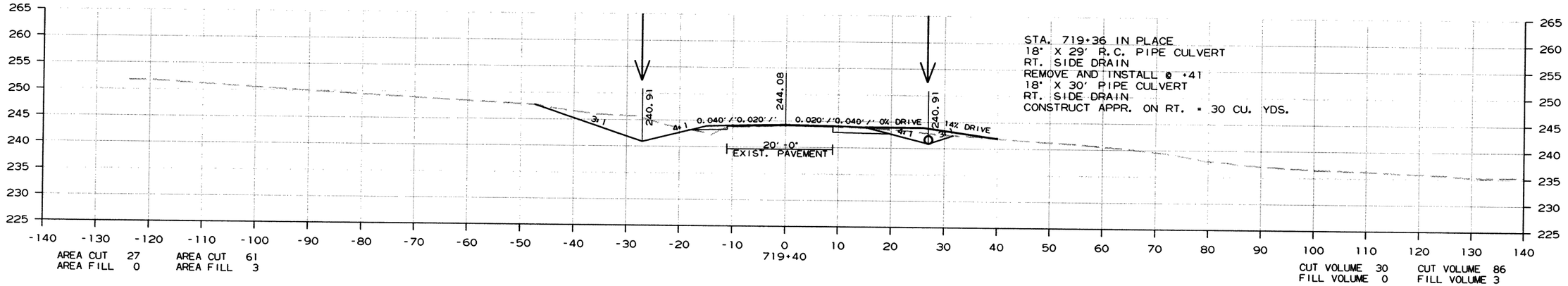
CROSS SECTION STA. 716+00 TO STA. 717+00

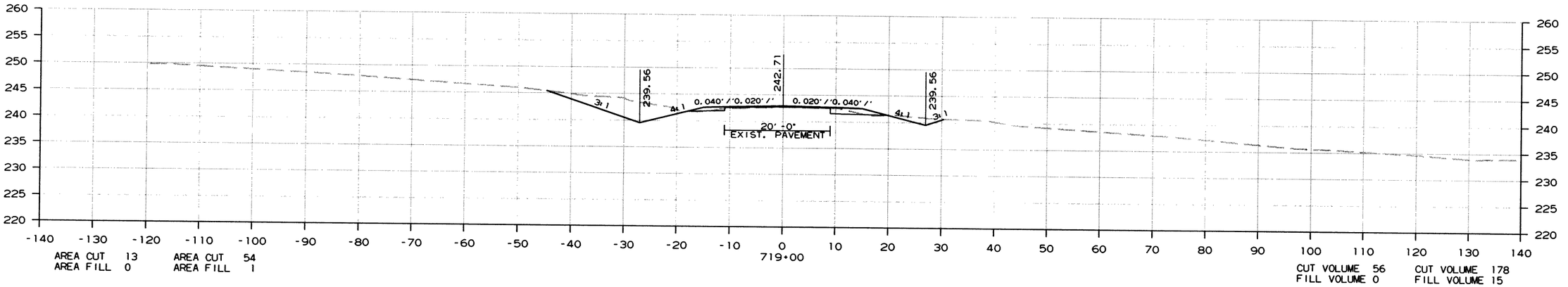
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	164	335

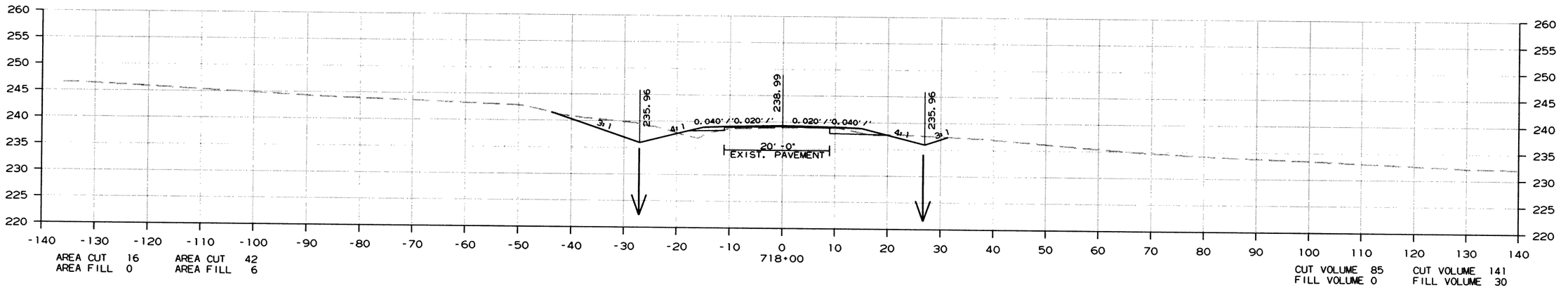
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







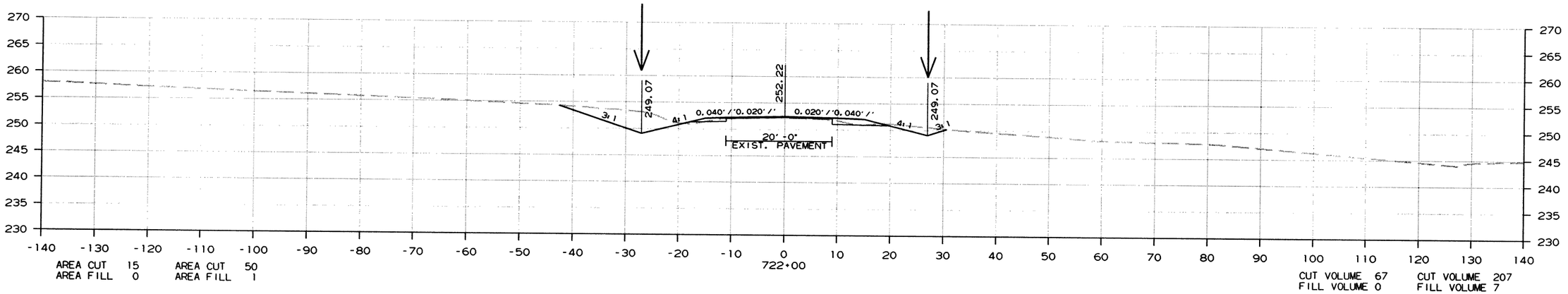
CROSS SECTION STA. 718+00 TO STA. 719+40

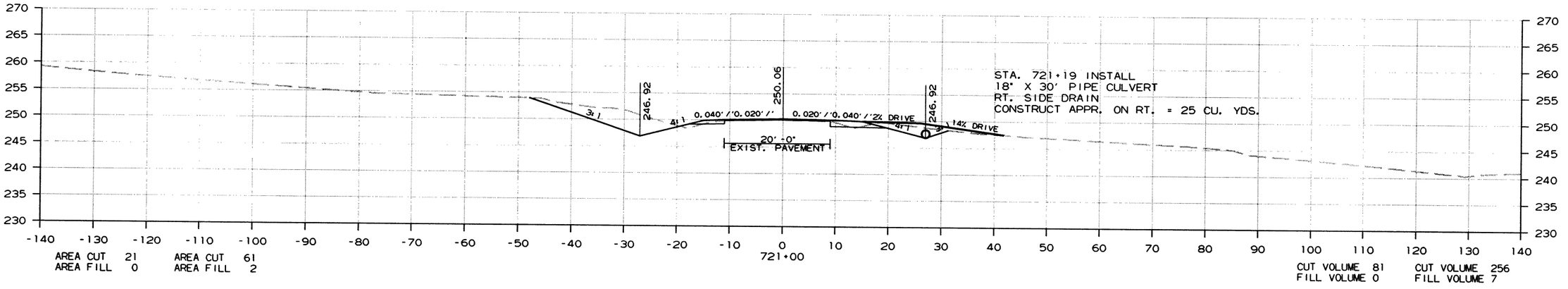
r070368.dgn 1/15/2015

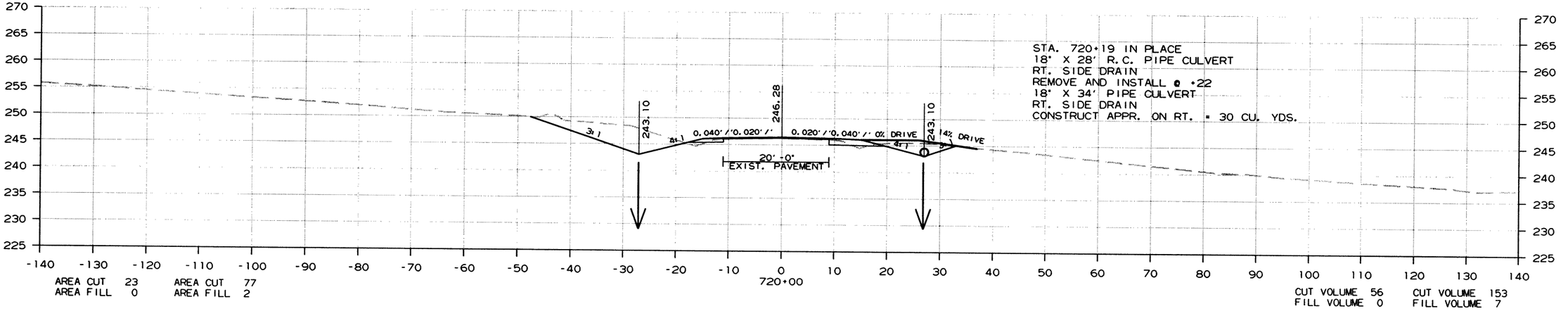
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	165	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2







CROSS SECTION STA. 720+00 TO STA. 722+00

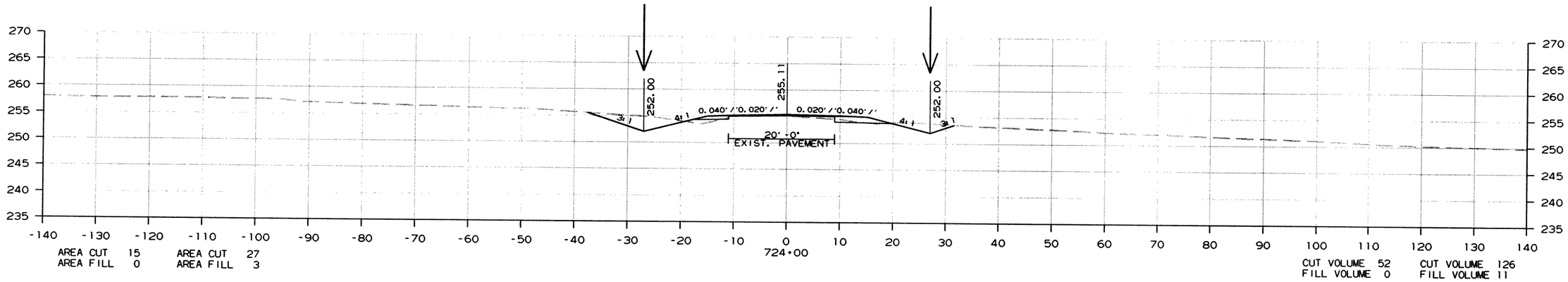
r070368.dgn 1/15/2015

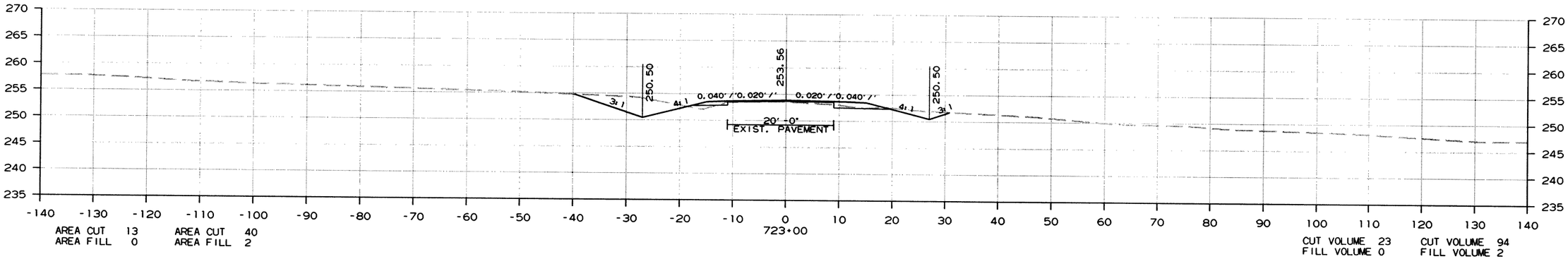
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	166	335

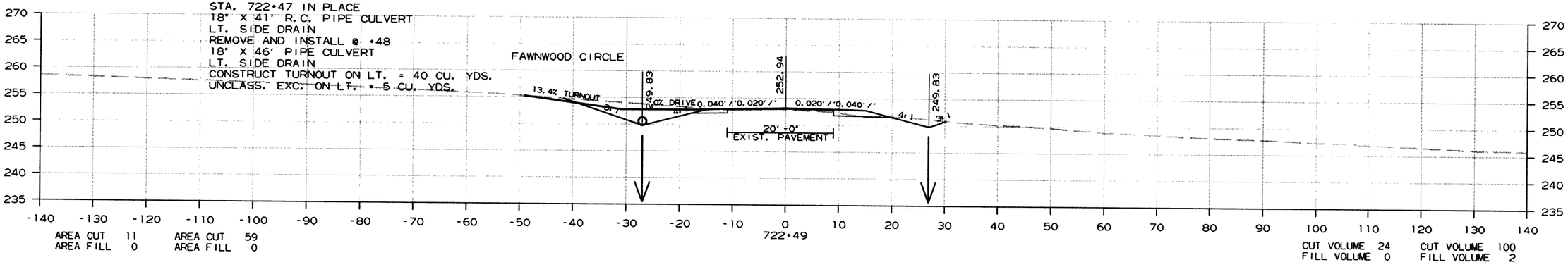
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 722+49 TO STA. 724+00

r070368.dgn 1/15/2015

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.		070368	167	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2

CROSS SECTION STA. 724+31 TO STA. 725+44

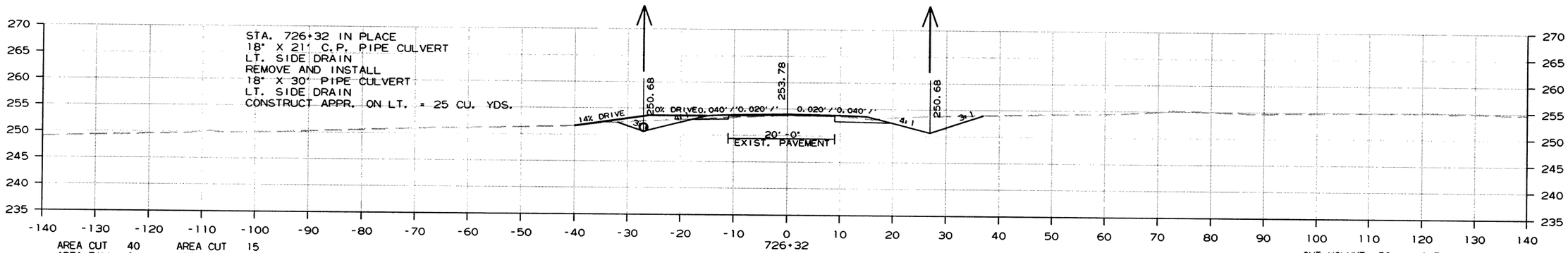
r070368.dgn 1/15/2015

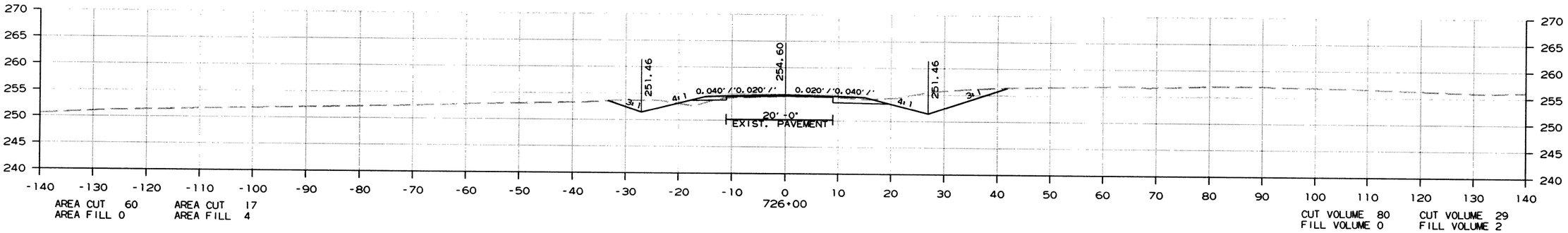
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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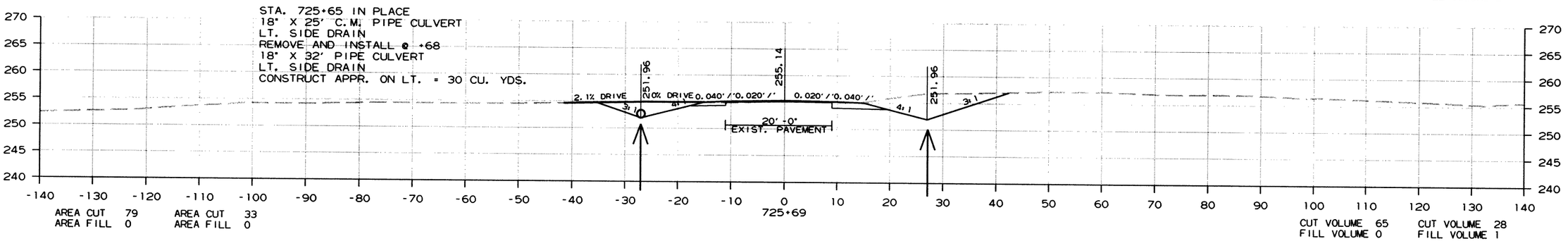
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







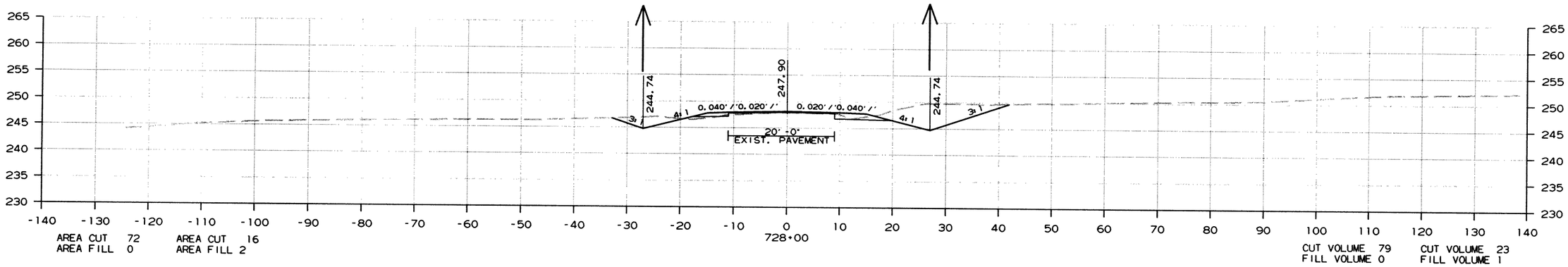
CROSS SECTION STA. 725+69 TO STA. 726+32

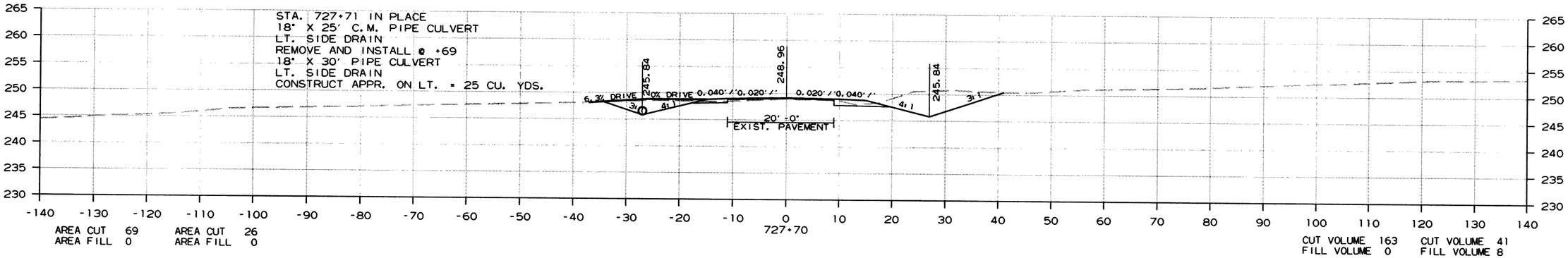
r070368.dgn 1/15/2015

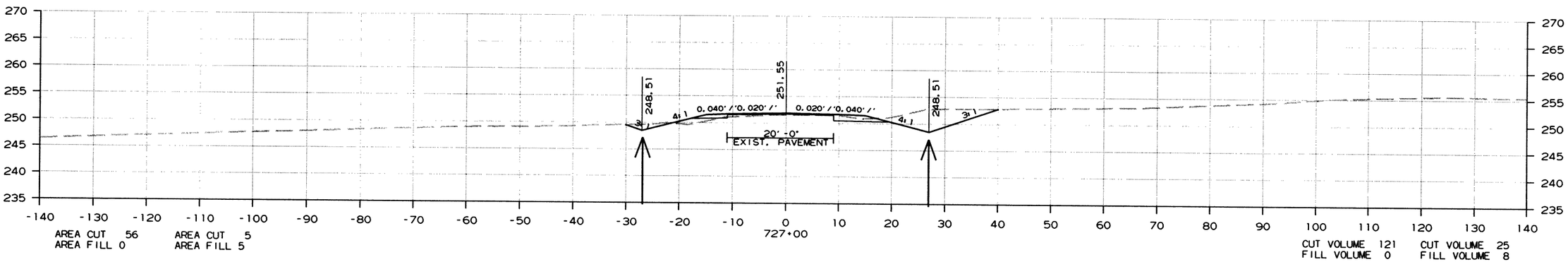
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				6	ARK.			
				JOB NO.		070368	169	335
				(2) CROSS SECTIONS				

STAGE 1 STAGE 2

STAGE 1 STAGE 2







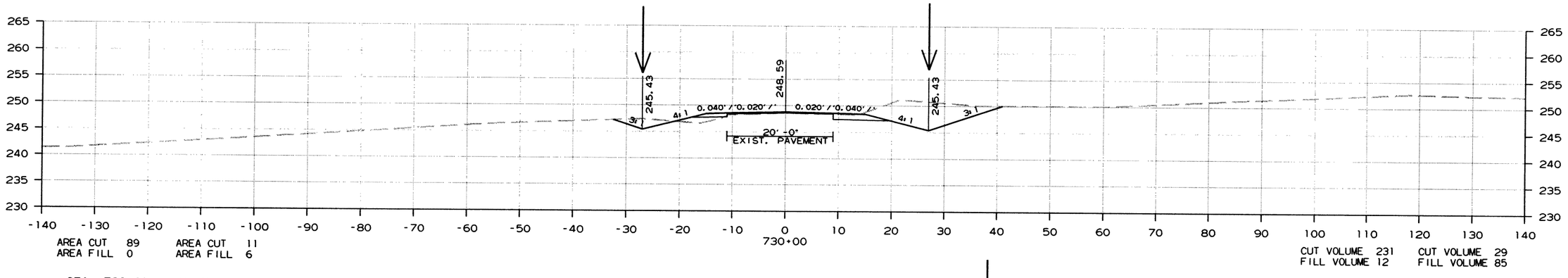
CROSS SECTION STA. 727+00 TO STA. 728+00

r070368.dgn 1/15/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
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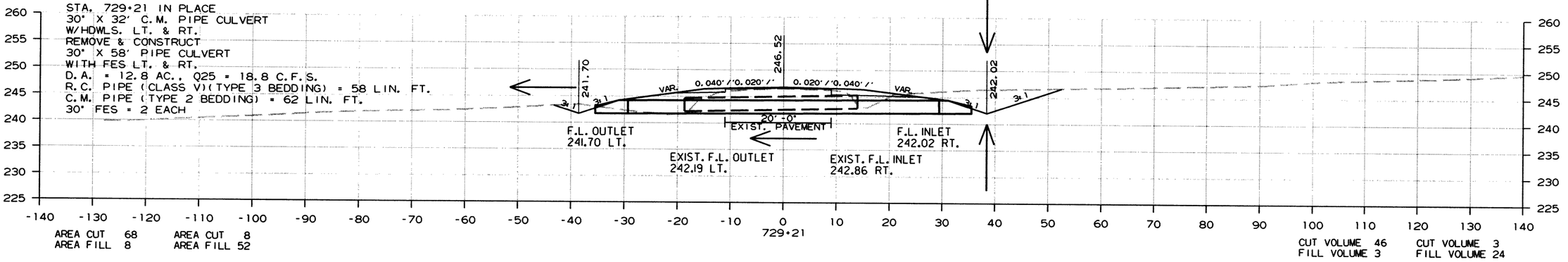
(2) CROSS SECTIONS

STAGE 1 STAGE 2

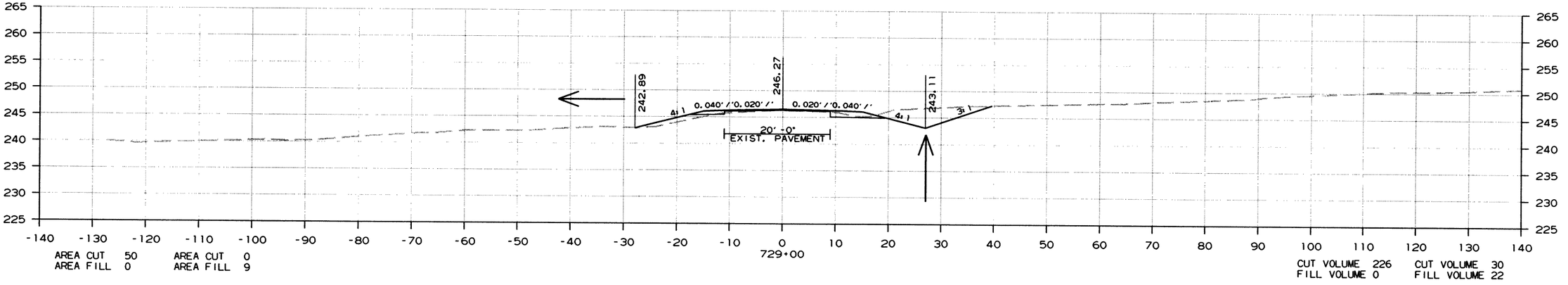


AREA CUT 89 AREA FILL 0
AREA CUT 11 AREA FILL 6
CUT VOLUME 231 FILL VOLUME 12
CUT VOLUME 29 FILL VOLUME 85

STA. 729+21 IN PLACE
30" X 32' C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE & CONSTRUCT
30" X 58' PIPE CULVERT
WITH FES LT. & RT.
D.A. = 12.8 AC., Q25 = 18.8 C.F.S.
R.C. PIPE (CLASS V)(TYPE 3 BEDDING) = 58 LIN. FT.
C.M. PIPE (TYPE 2 BEDDING) = 62 LIN. FT.
30" FES = 2 EACH



AREA CUT 68 AREA FILL 8
AREA CUT 8 AREA FILL 52
CUT VOLUME 46 FILL VOLUME 3
CUT VOLUME 3 FILL VOLUME 24



AREA CUT 50 AREA FILL 0
AREA CUT 0 AREA FILL 9
CUT VOLUME 226 FILL VOLUME 0
CUT VOLUME 30 FILL VOLUME 22

CROSS SECTION STA. 729+00 TO STA. 730+00

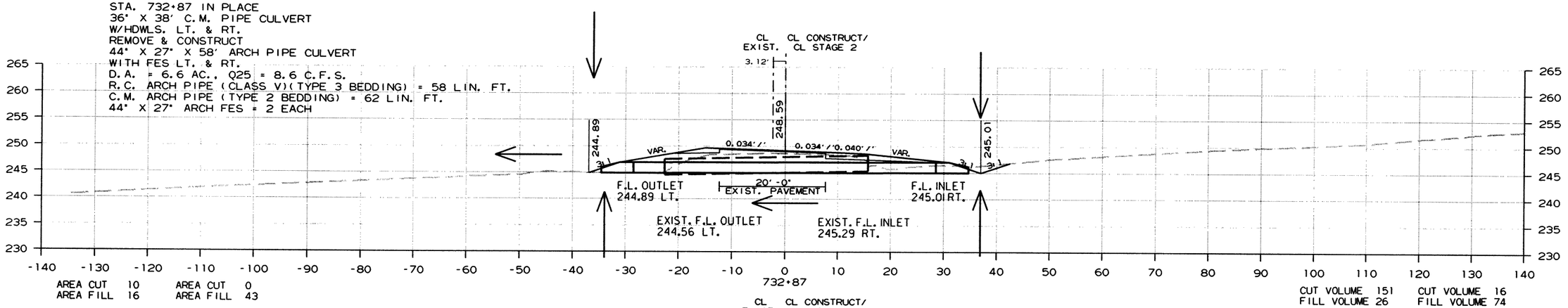
r070368.dgn 1/15/2015

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.		070368	171	335

(2) CROSS SECTIONS

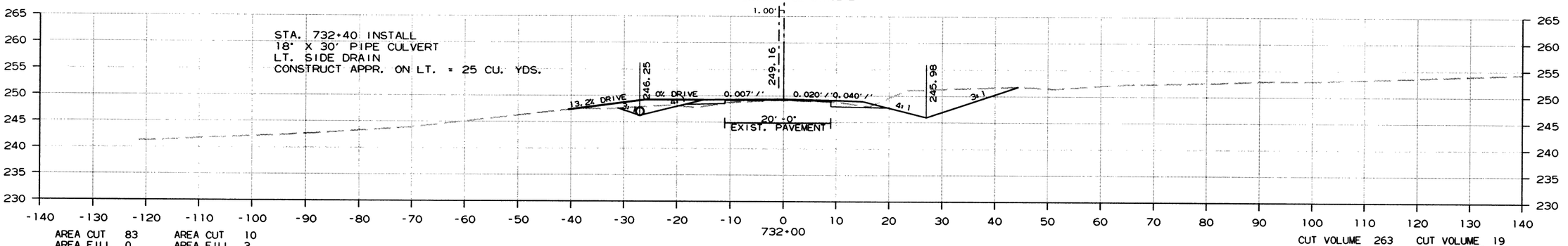
STAGE 1 STAGE 2

STA. 732+87 IN PLACE
36" X 38' C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE & CONSTRUCT
44" X 27" X 58' ARCH PIPE CULVERT
WITH FES LT. & RT.
D.A. = 6.6 AC., Q25 = 8.6 C.F.S.
R.C. ARCH PIPE (CLASS V)(TYPE 3 BEDDING) = 58 LIN. FT.
C.M. ARCH PIPE (TYPE 2 BEDDING) = 62 LIN. FT.
44" X 27" ARCH FES = 2 EACH

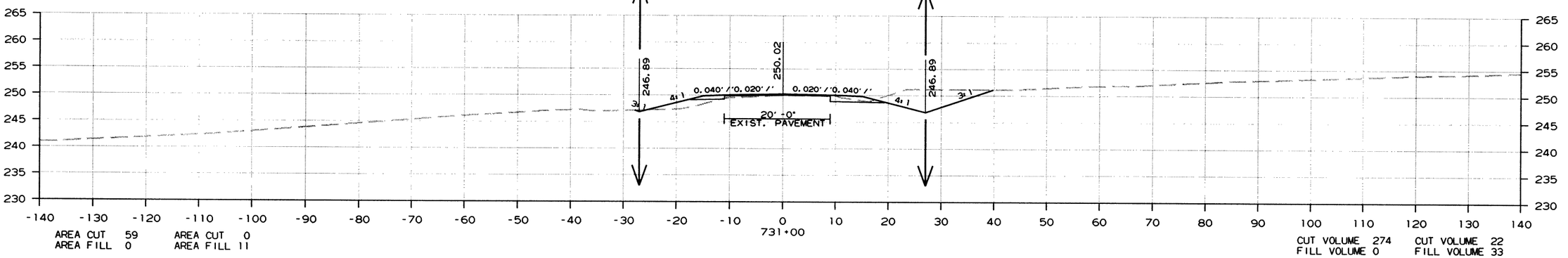


AREA CUT 10 AREA FILL 16
AREA CUT 0 AREA FILL 43
CUT VOLUME 151 FILL VOLUME 26
CUT VOLUME 16 FILL VOLUME 74

STA. 732+40 INSTALL
18" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 25 CU. YDS.



AREA CUT 83 AREA FILL 0
AREA CUT 10 AREA FILL 3
CUT VOLUME 263 FILL VOLUME 0
CUT VOLUME 19 FILL VOLUME 26



AREA CUT 59 AREA FILL 0
AREA CUT 0 AREA FILL 11
CUT VOLUME 274 FILL VOLUME 0
CUT VOLUME 22 FILL VOLUME 33

CROSS SECTION STA. 731+00 TO STA. 732+87

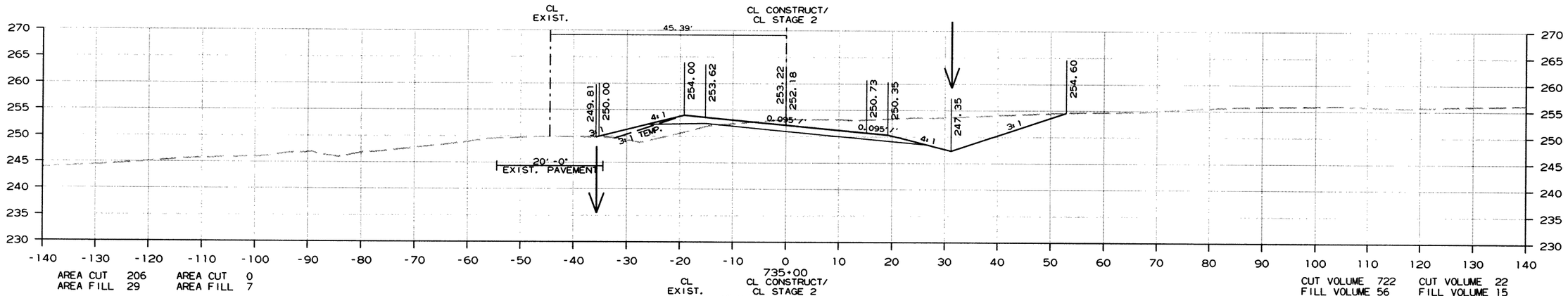
r070368.dgn 1/15/2015

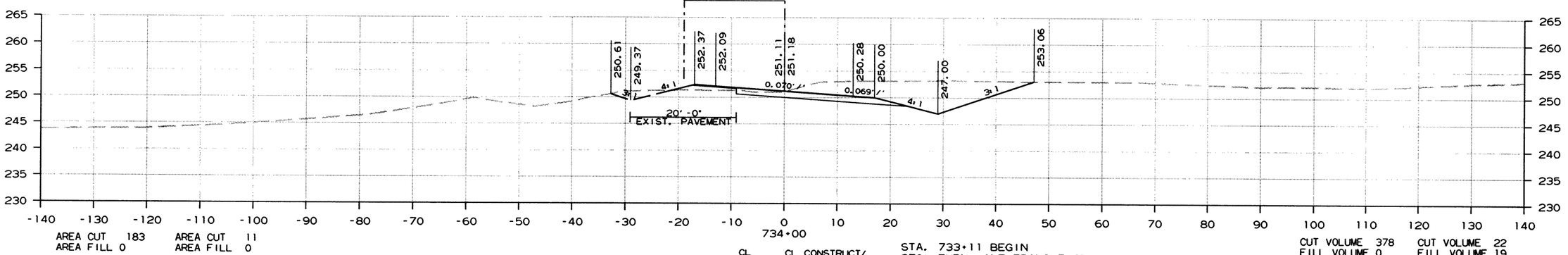
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	172	335

(2) CROSS SECTIONS

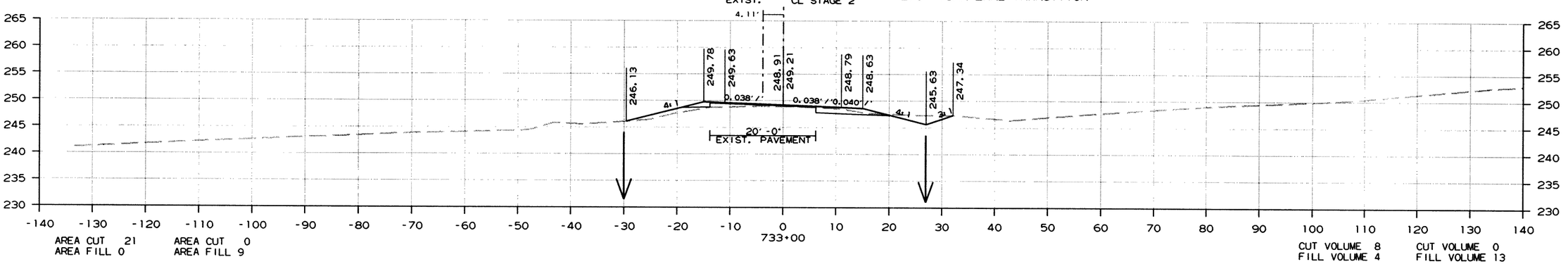
STAGE 1 STAGE 2

STAGE 1 STAGE 2





STA. 733+11 BEGIN
270' TURN LANE TRANSITION



CROSS SECTION STA. 733+00 TO STA. 735+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.			
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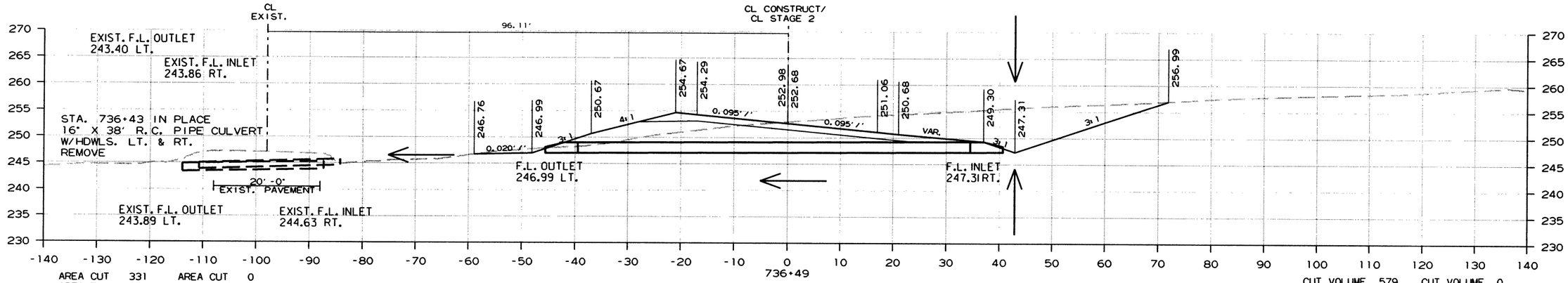
(2) CROSS SECTIONS

STA. 736+50 CONSTRUCT
24" X 76' PIPE CULVERT
WITH FES LT. & RT.
D.A. = 1.28 AC., Q25 = 2.9 C.F.S.
R.C. PIPE (CLASS IV)(TYPE 3 BEDDING) = 76 LIN. FT.
C.M. PIPE (TYPE 2 BEDDING) = 80 LIN. FT.
24" FES = 2 EACH

STAGE 1 STAGE 2

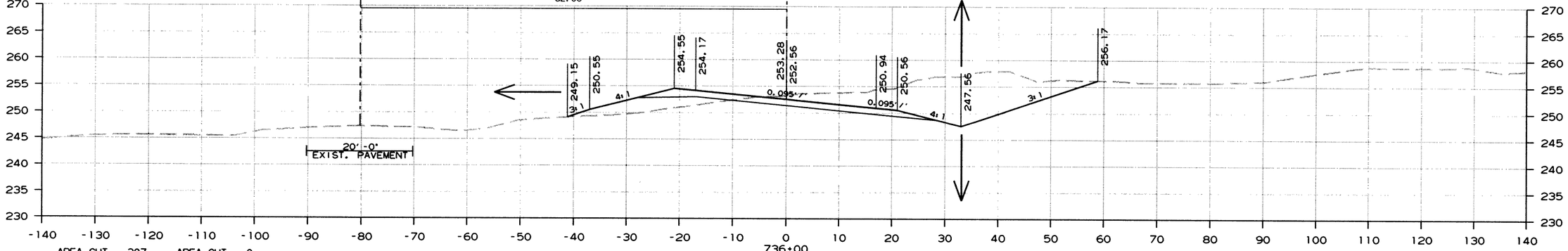
STA. 736+50 IN PLACE
18" X 38' C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE

STA. 736+43 IN PLACE
16" X 38' R.C. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE



AREA CUT 331 AREA CUT 0
AREA FILL 65 AREA FILL 0

CUT VOLUME 579 CUT VOLUME 0
FILL VOLUME 105 FILL VOLUME 0

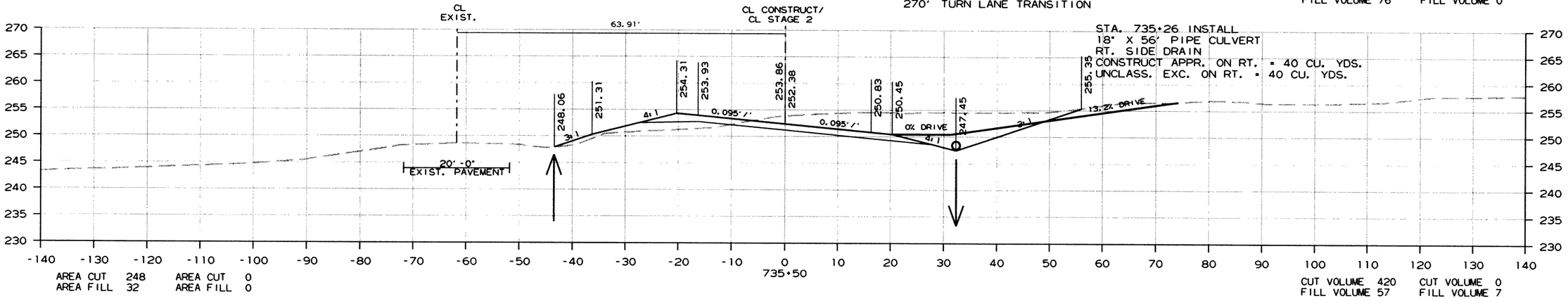


AREA CUT 307 AREA CUT 0
AREA FILL 50 AREA FILL 0

CUT VOLUME 515 CUT VOLUME 0
FILL VOLUME 76 FILL VOLUME 0

STA. 735+81 END
270' TURN LANE TRANSITION

STA. 735+26 INSTALL
18" X 56' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 40 CU. YDS.
UNCLASS. EXC. ON RT. = 40 CU. YDS.



AREA CUT 248 AREA CUT 0
AREA FILL 32 AREA FILL 0

CUT VOLUME 420 CUT VOLUME 0
FILL VOLUME 57 FILL VOLUME 7

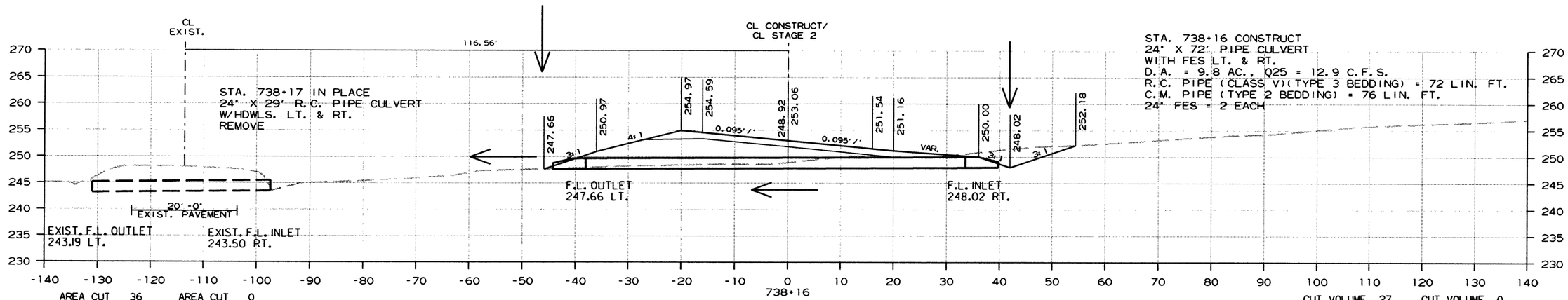
CROSS SECTION STA. 735+50 TO STA. 736+49

r070368.dgn 1/15/2015

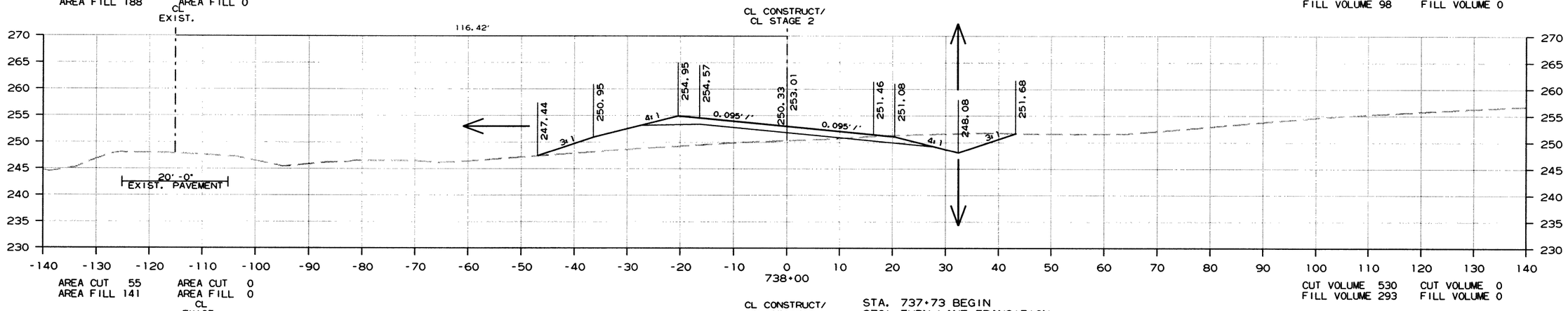
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				6	ARK.			
				JOB NO.		070368	174	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2



STAGE 1 STAGE 2



CROSS SECTION STA. 737+00 TO STA. 738+16

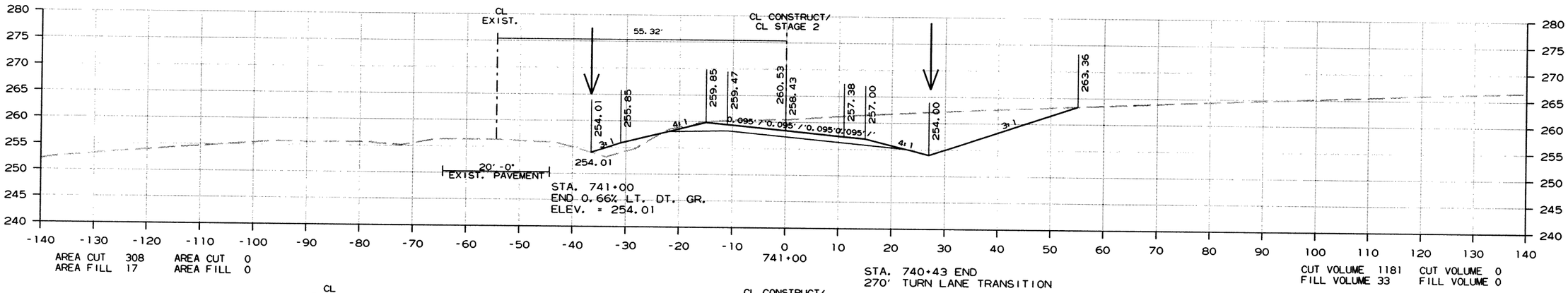
r070368.dgn 1/15/2015

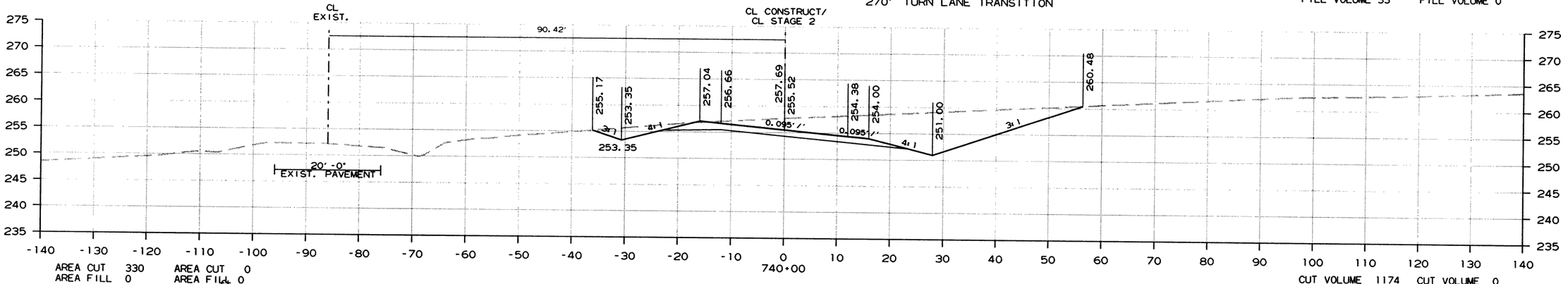
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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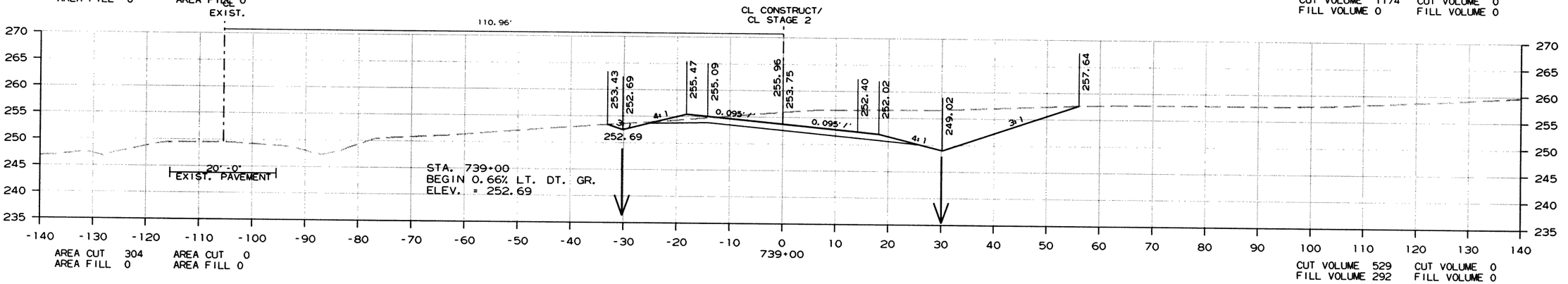
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 739+00 TO STA. 741+00

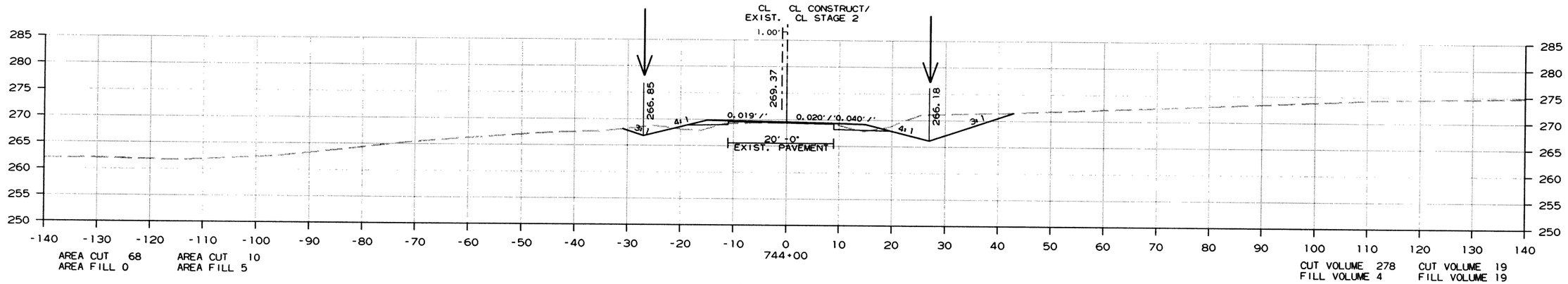
r070368.dgn 1/15/2015

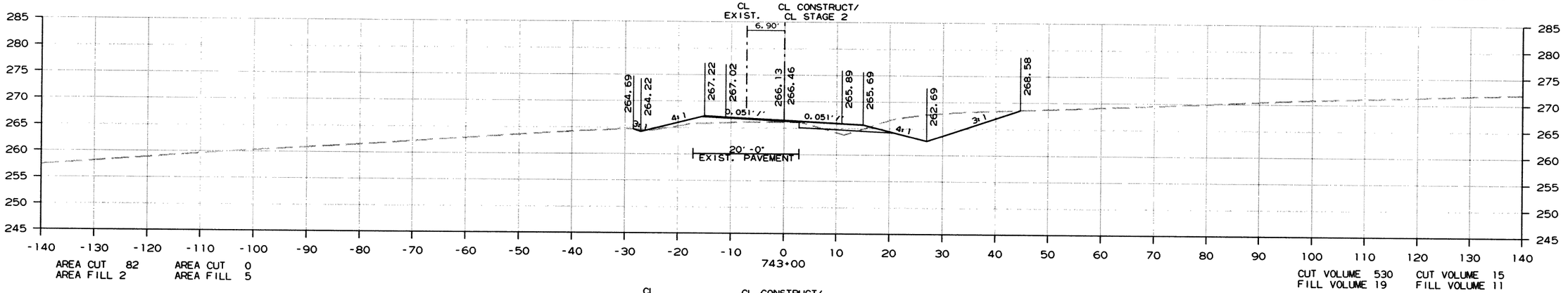
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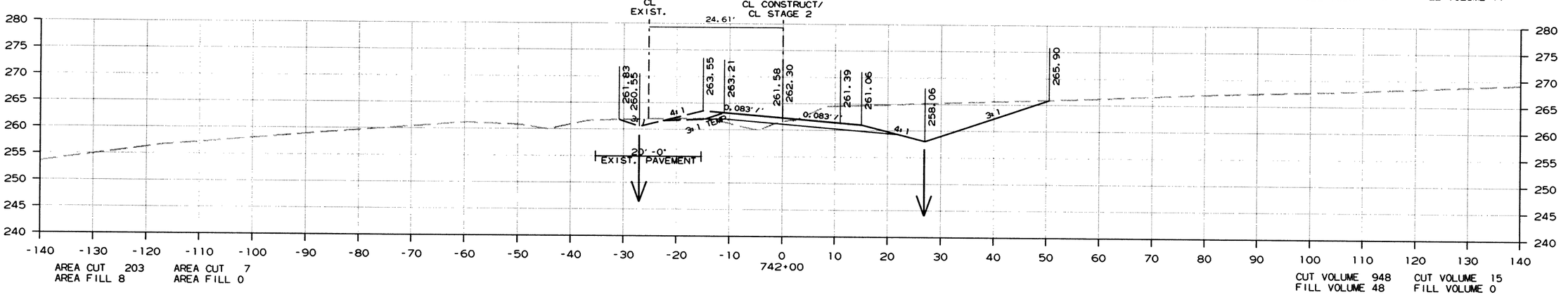
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 742+00 TO STA. 744+00

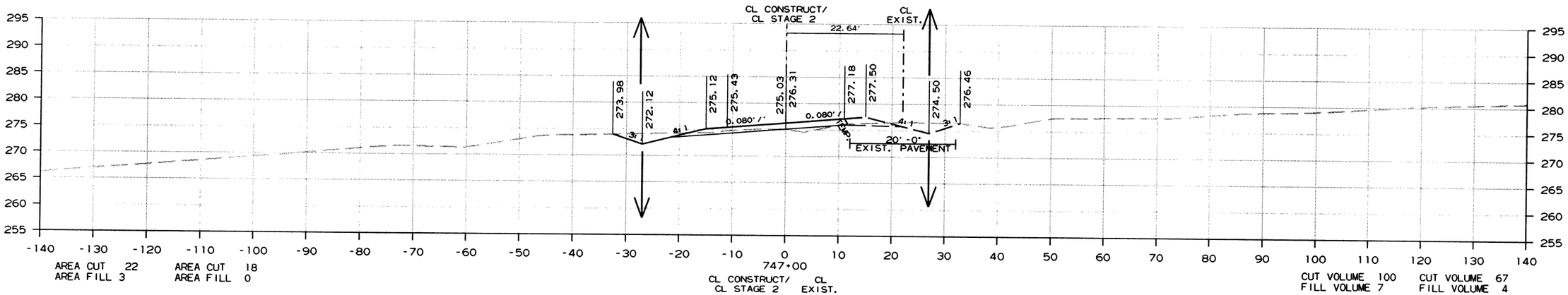
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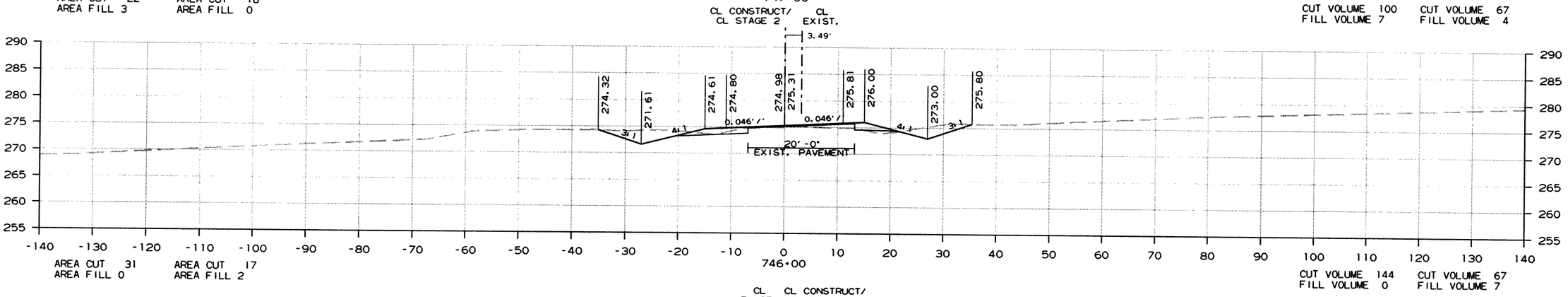
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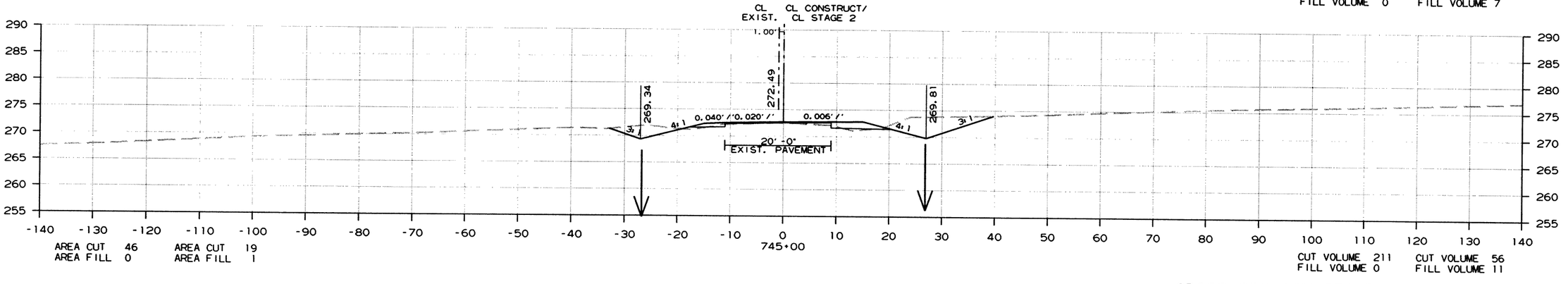
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 745+00 TO STA. 747+00

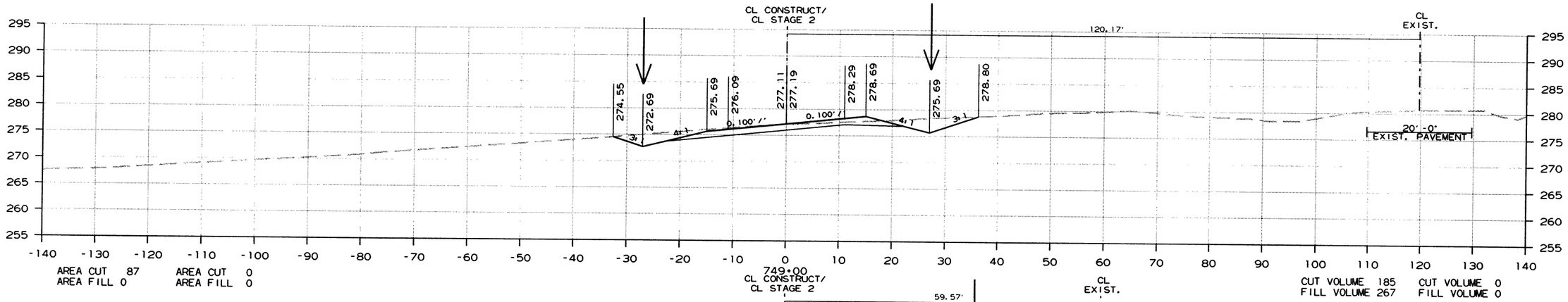
r070368.dgn 1/15/2015

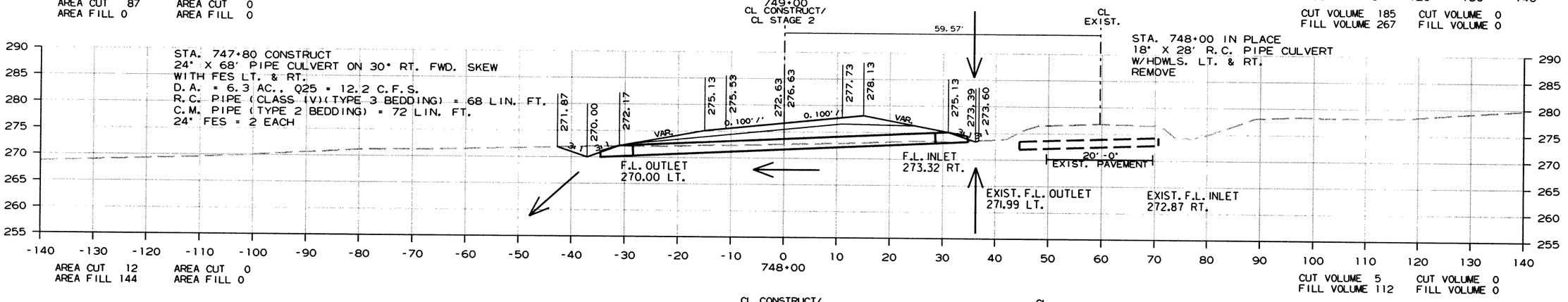
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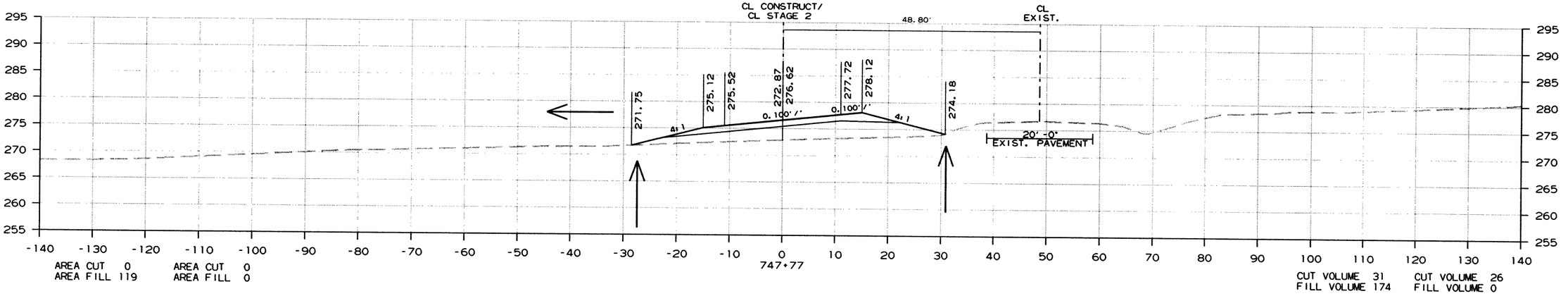
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 747+77 TO STA. 749+00

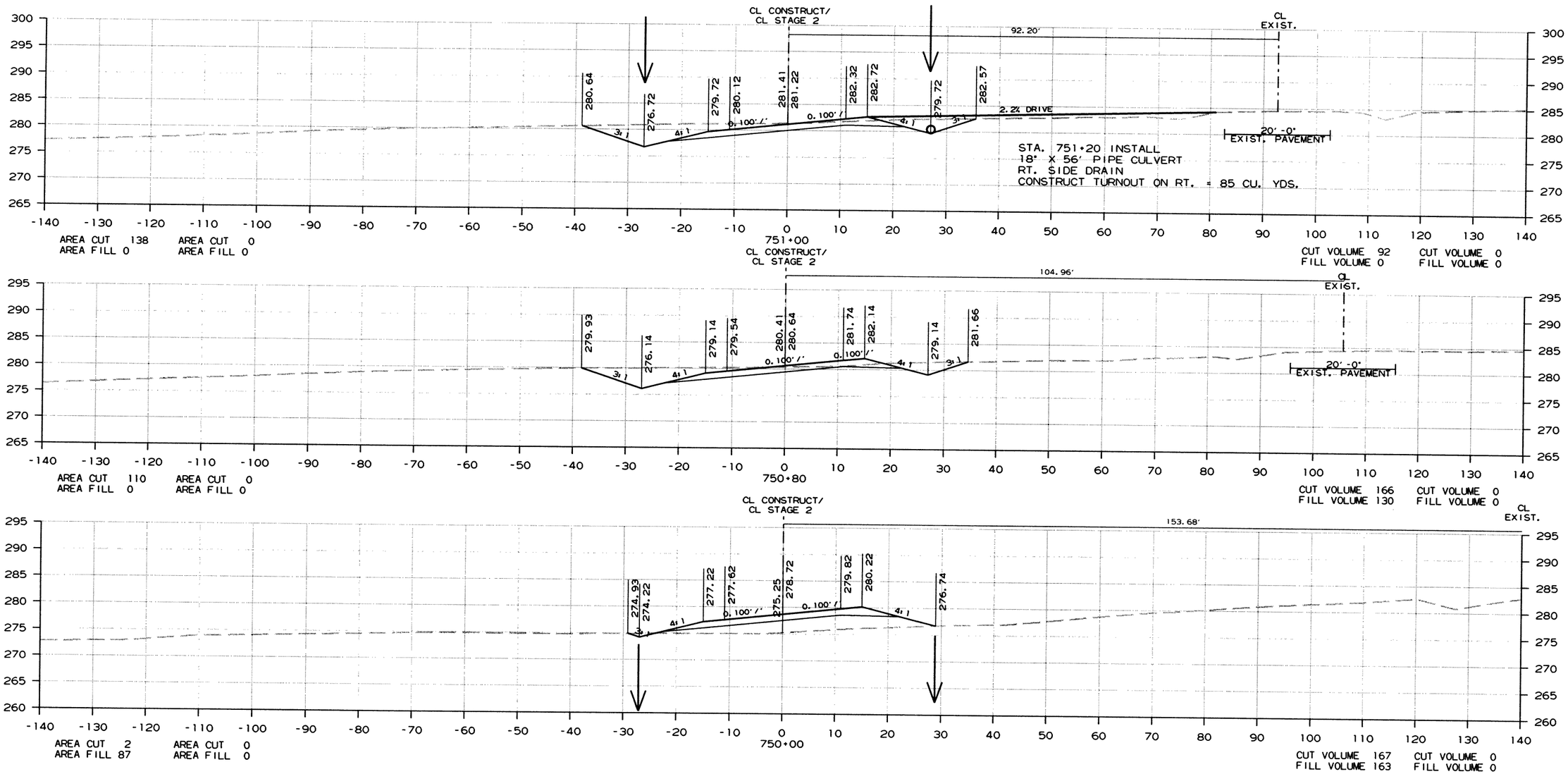
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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	179	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 750+00 TO STA. 751+00

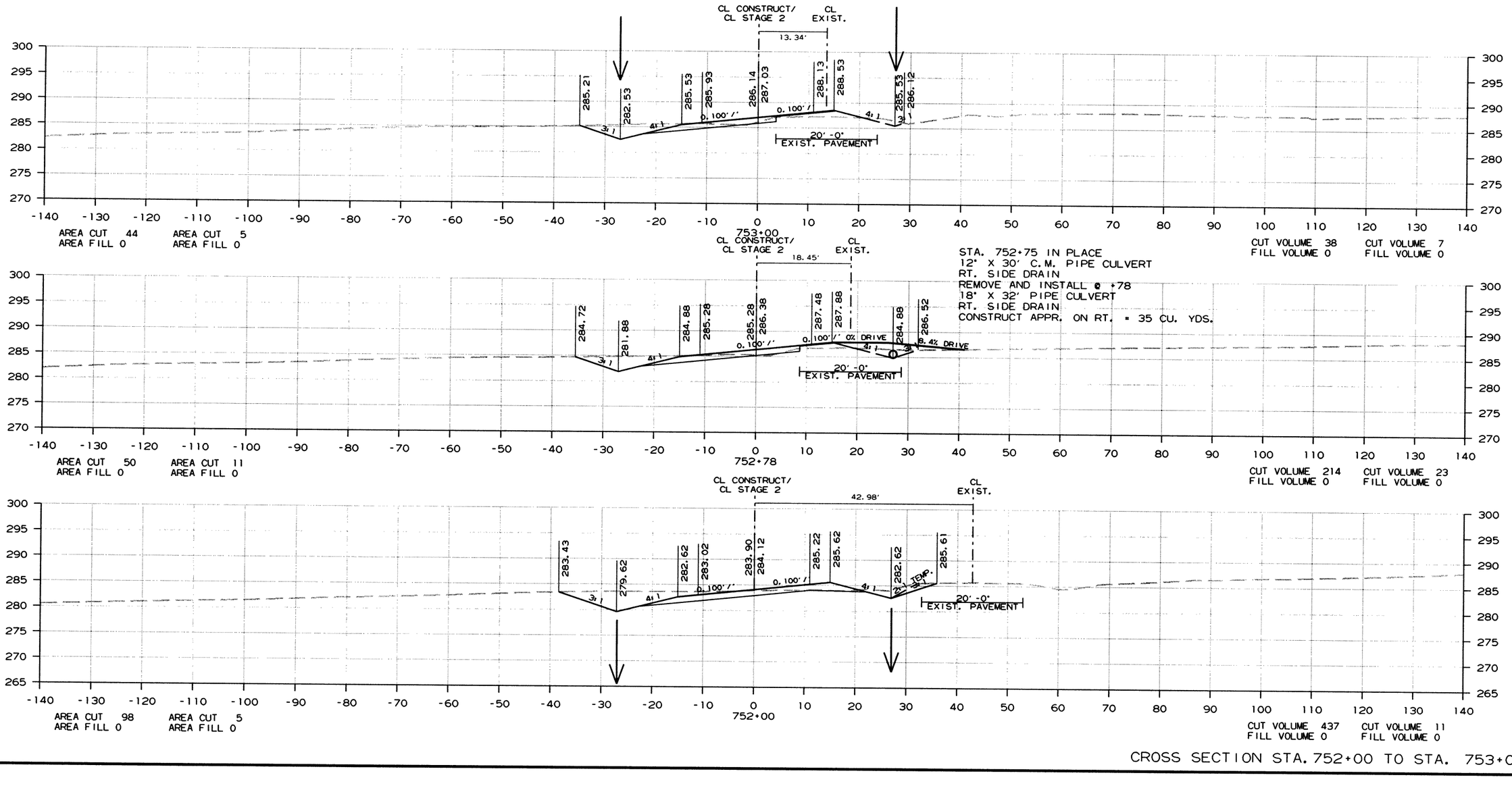
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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	180	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



STA. 752+75 IN PLACE
12" X 30' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +78
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 35 CU. YDS.

CROSS SECTION STA. 752+00 TO STA. 753+00

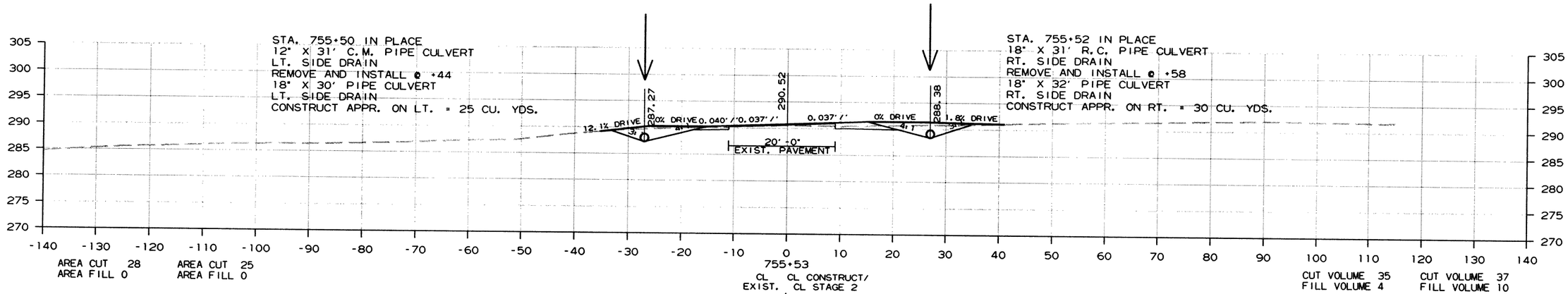
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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 754+00 TO STA. 755+53

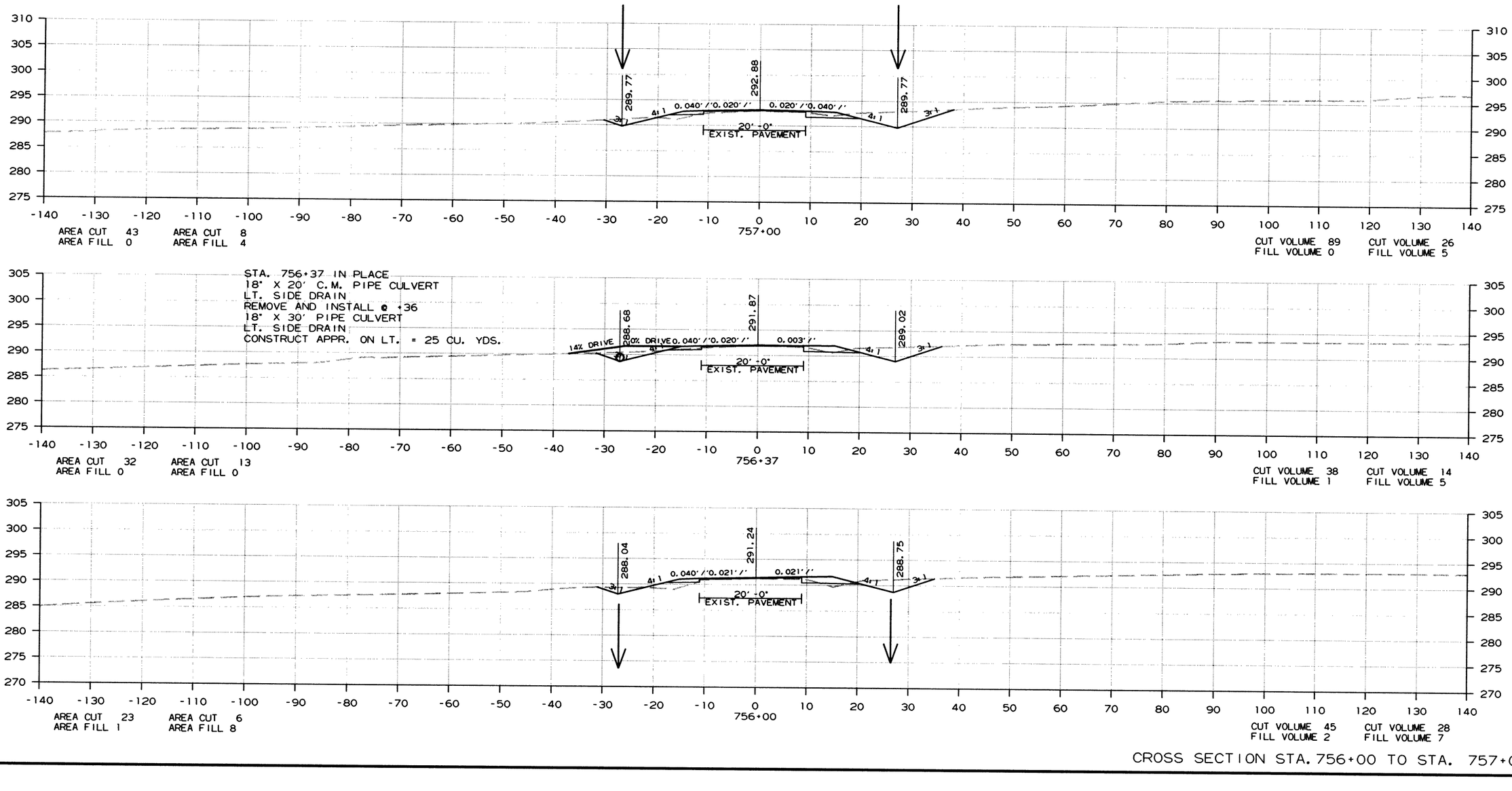
r070368.dgn 1/15/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 756+00 TO STA. 757+00

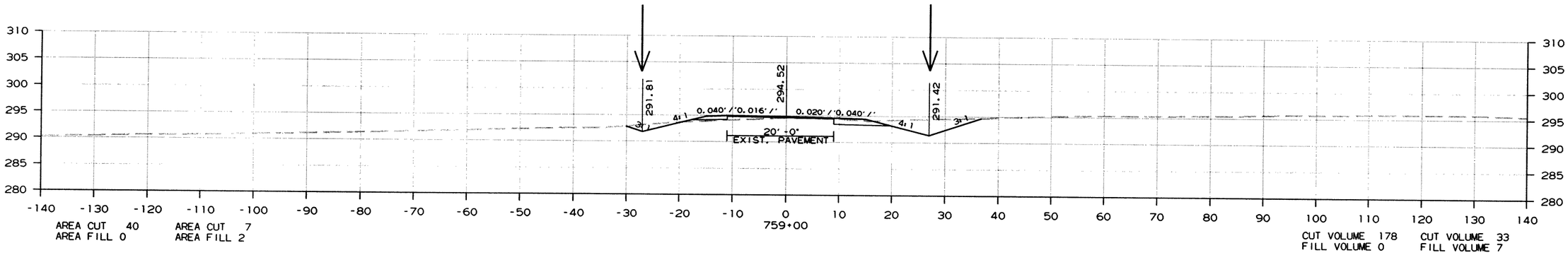
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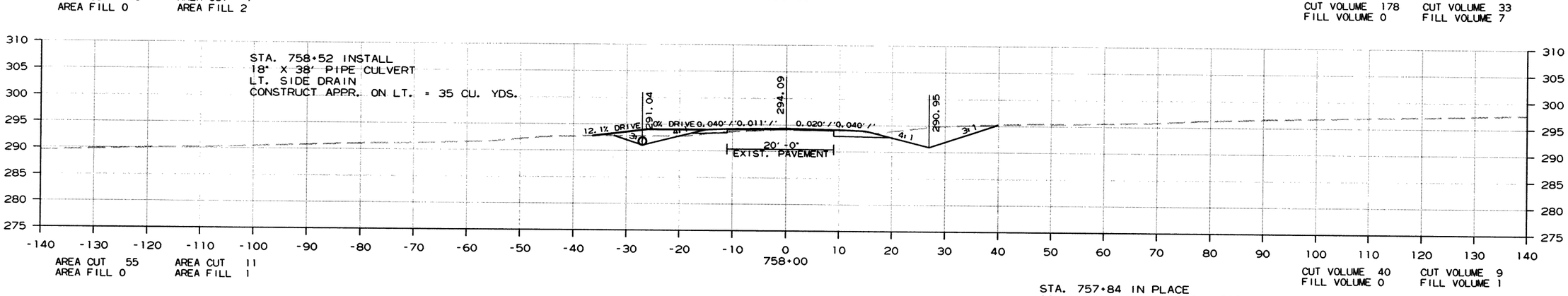
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				JOB NO.		070368	183	335

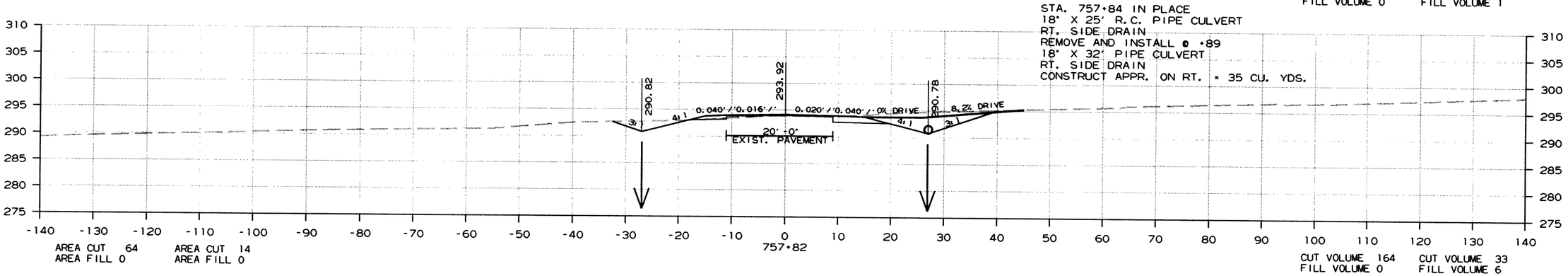
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 757+82 TO STA. 759+00

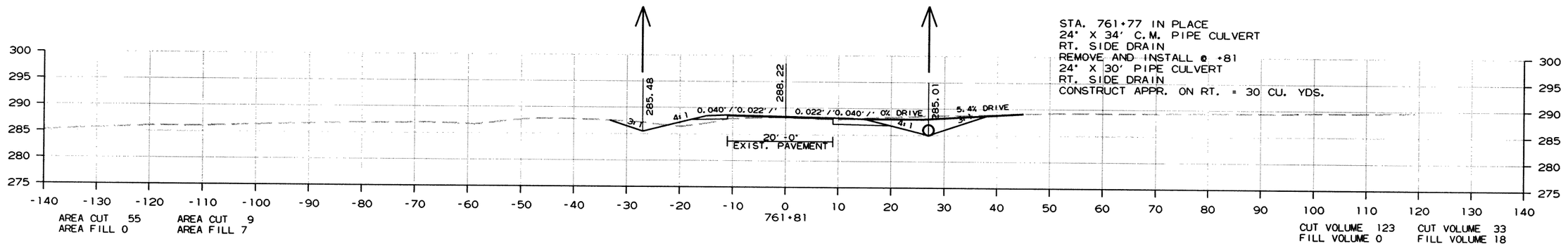
r070368.dgn 1/15/2015

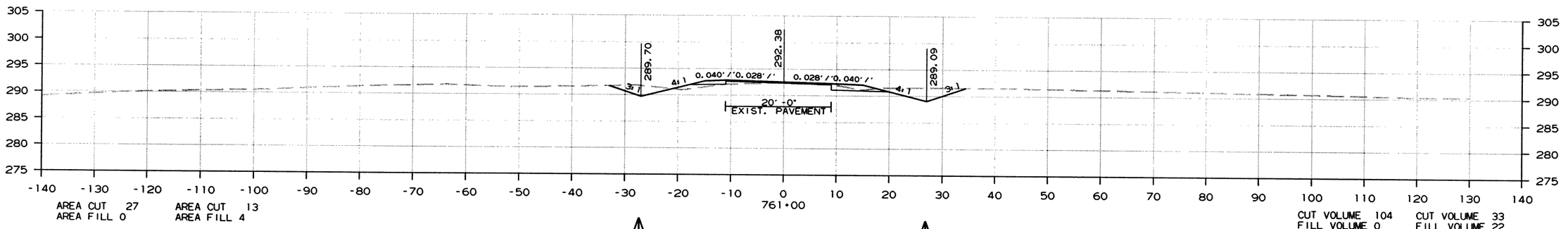
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	184	335

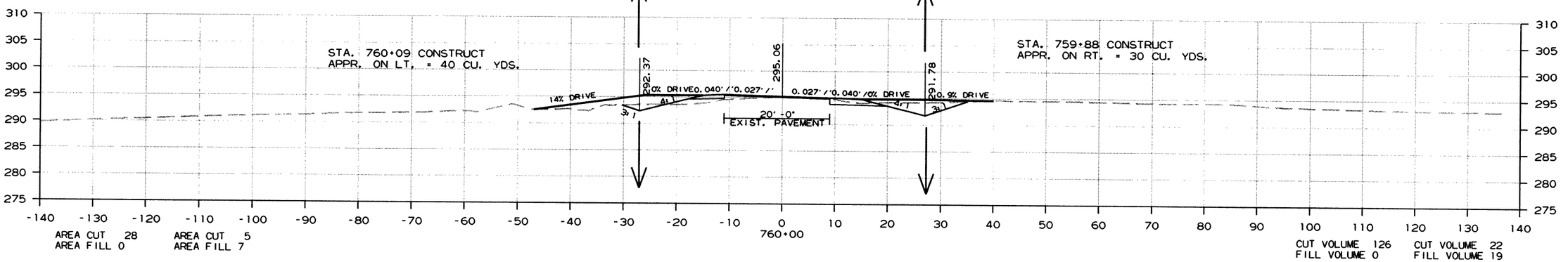
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 760+00 TO STA. 761+81

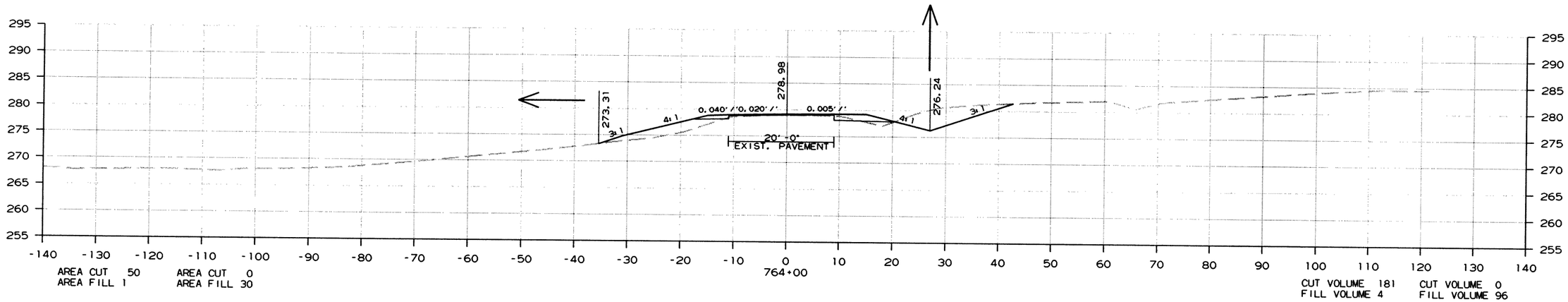
r070368.dgn 1/15/2015

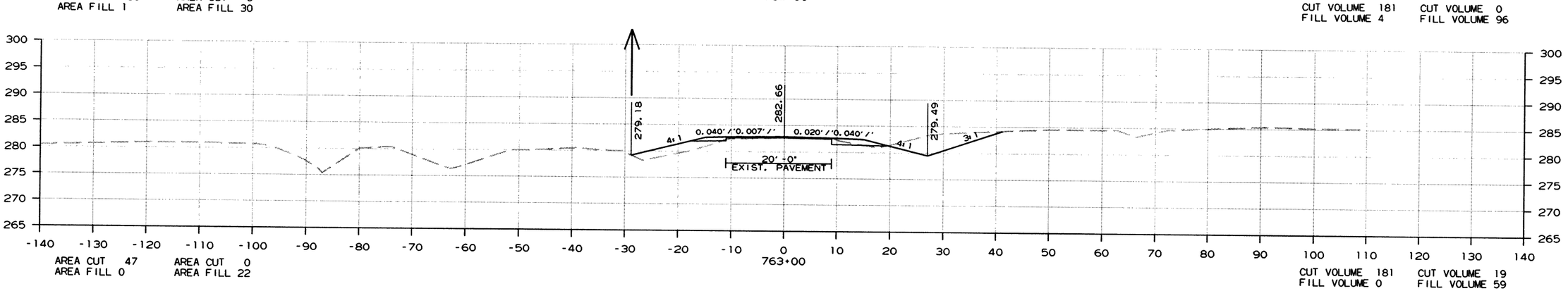
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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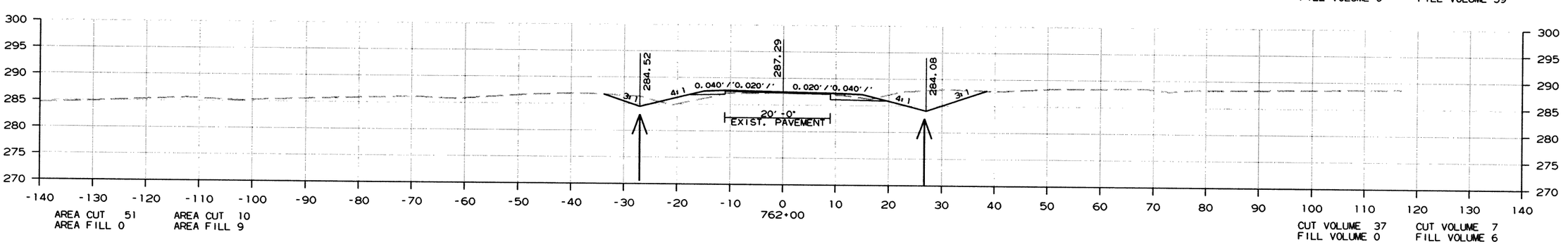
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 762+00 TO STA. 764+00

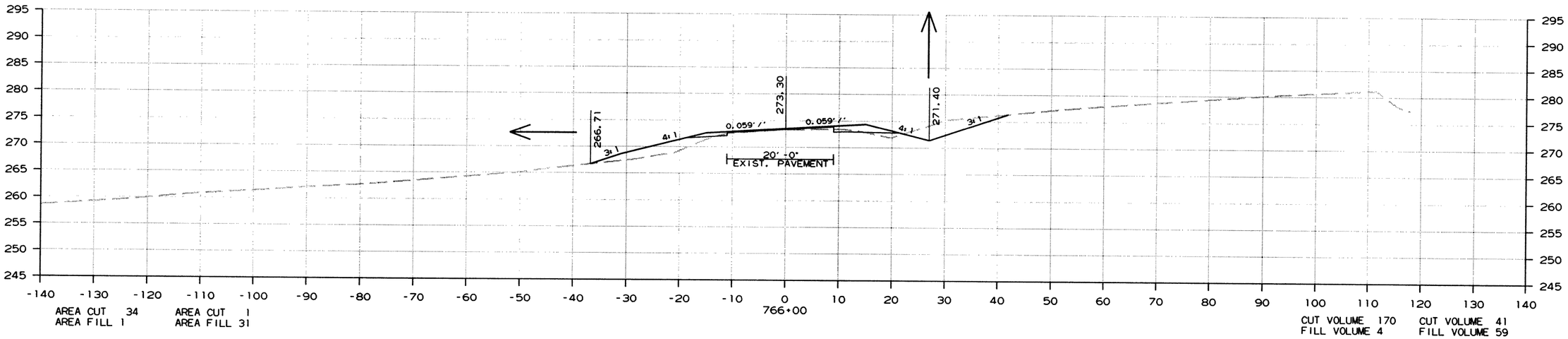
r070368.dgn 1/15/2015

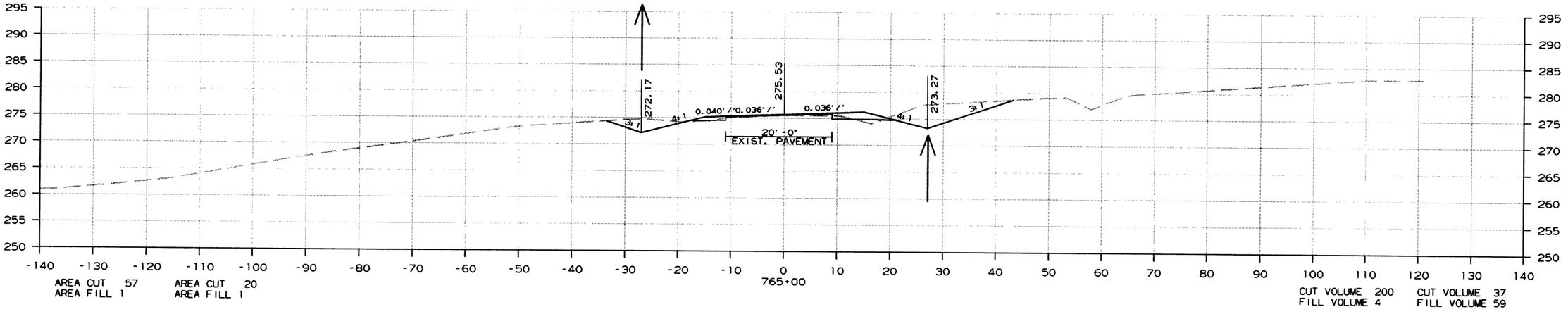
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	186	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2





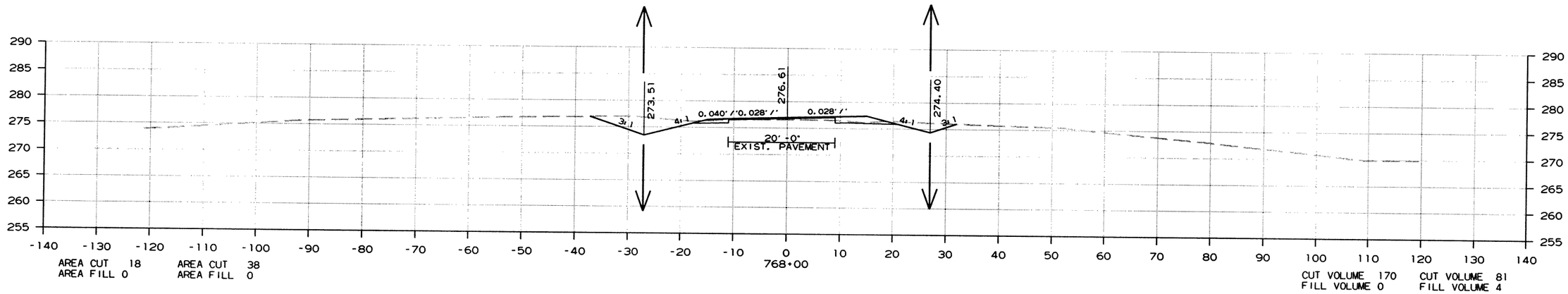
CROSS SECTION STA. 765+00 TO STA. 766+00

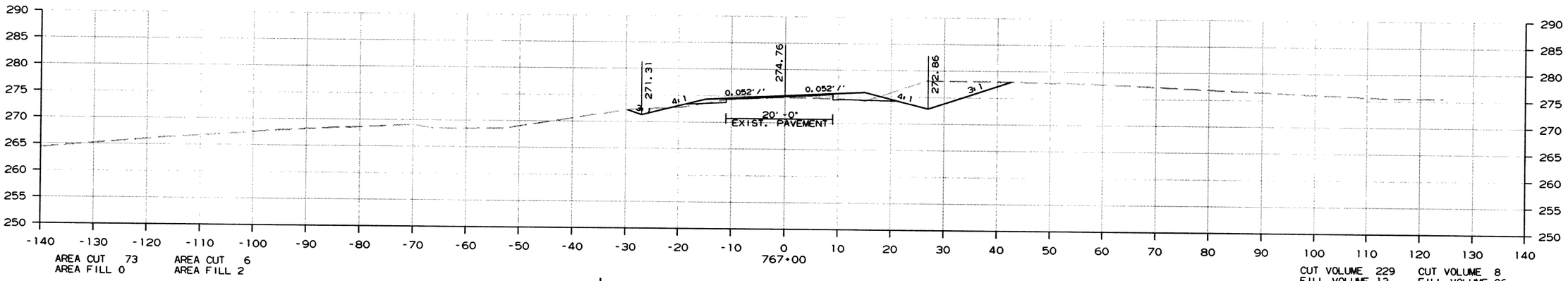
r070368.dgn 1/15/2015

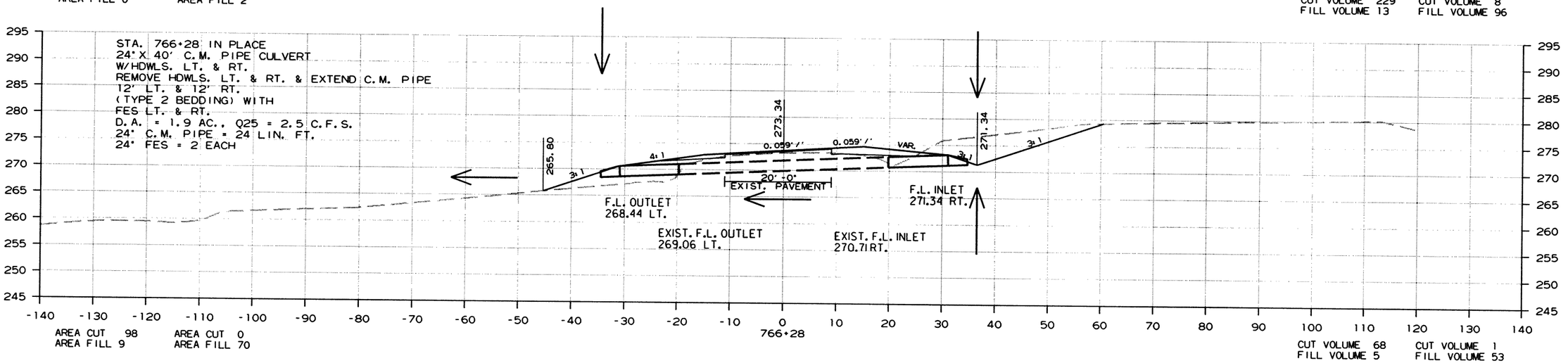
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	187	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2







CROSS SECTION STA. 766+28 TO STA. 768+00

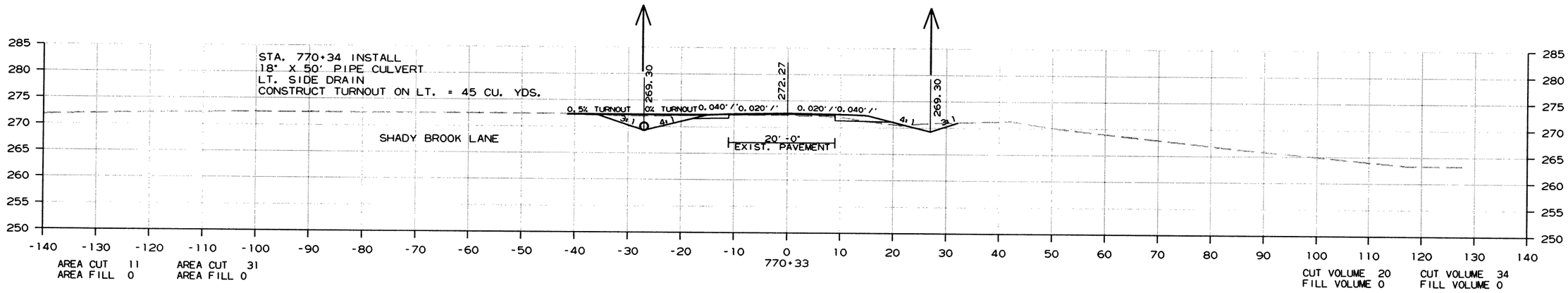
r070368.dgn 1/15/2015

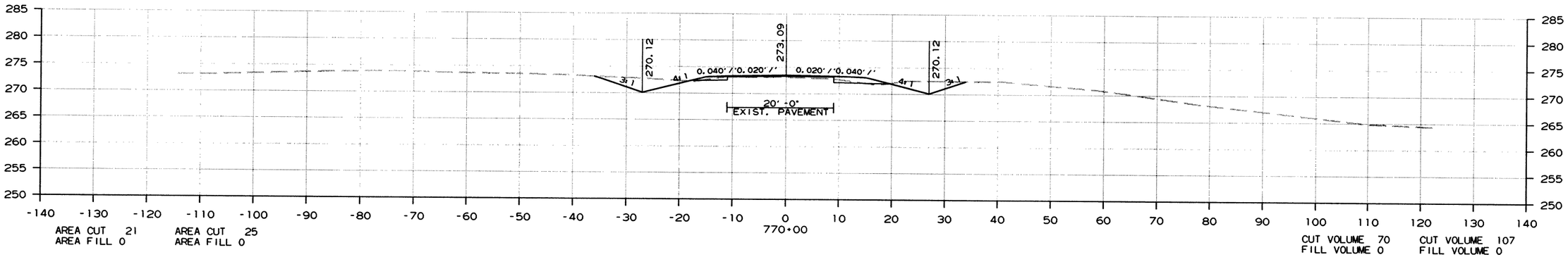
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	188	335

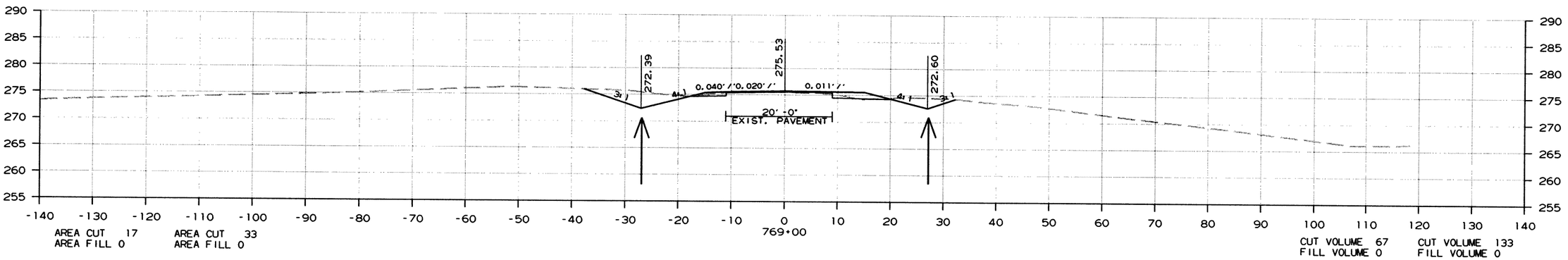
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 769+00 TO STA. 770+33

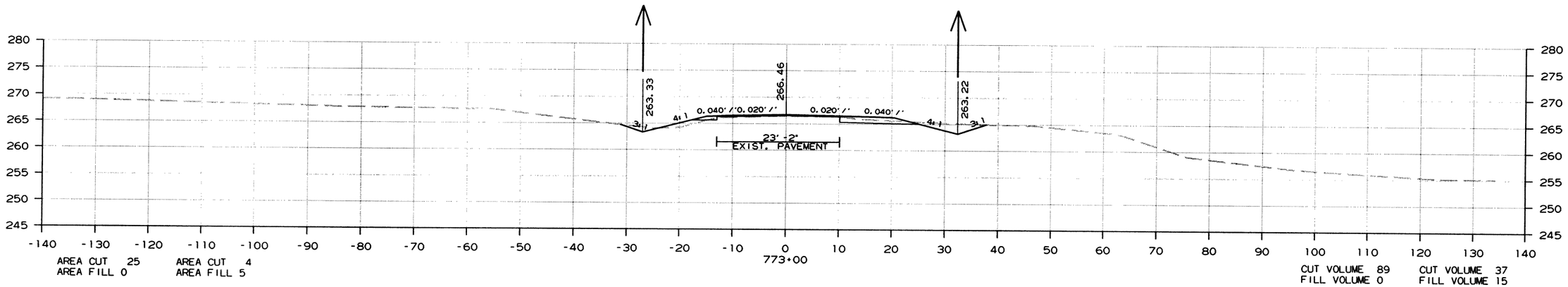
r070368.dgn 1/15/2015

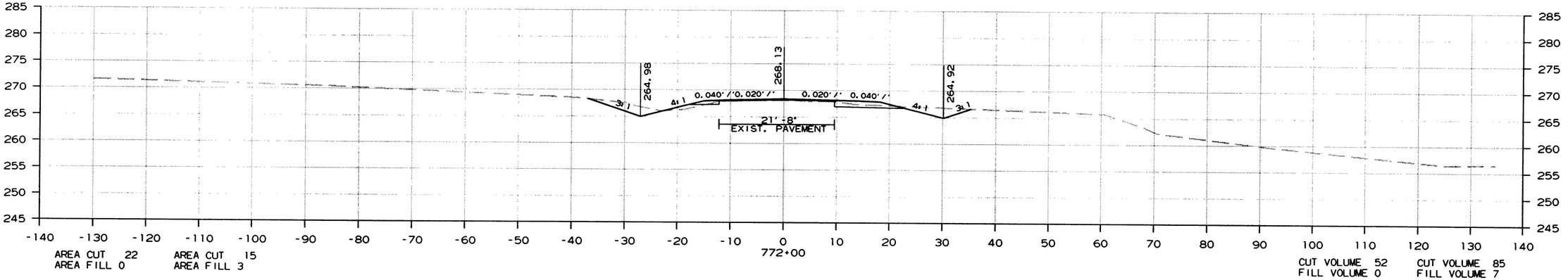
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	189	335

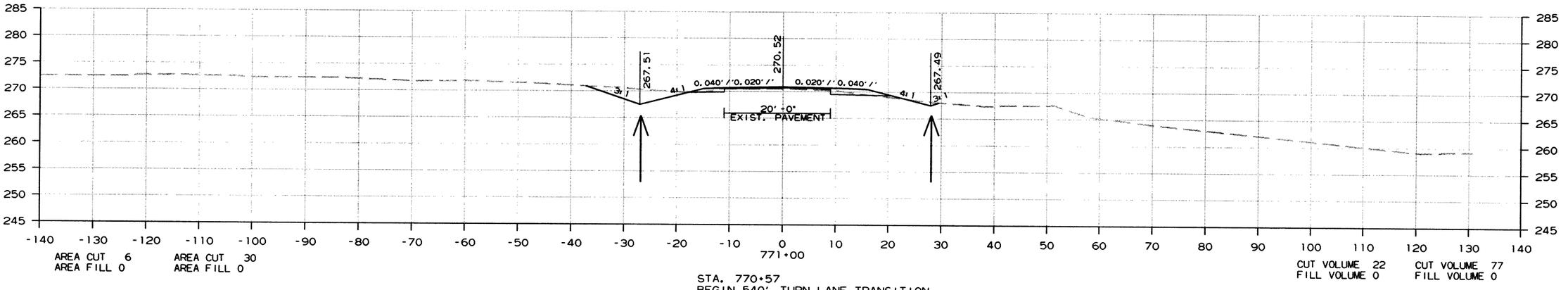
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







STA. 770+57
BEGIN 540' TURN LANE TRANSITION

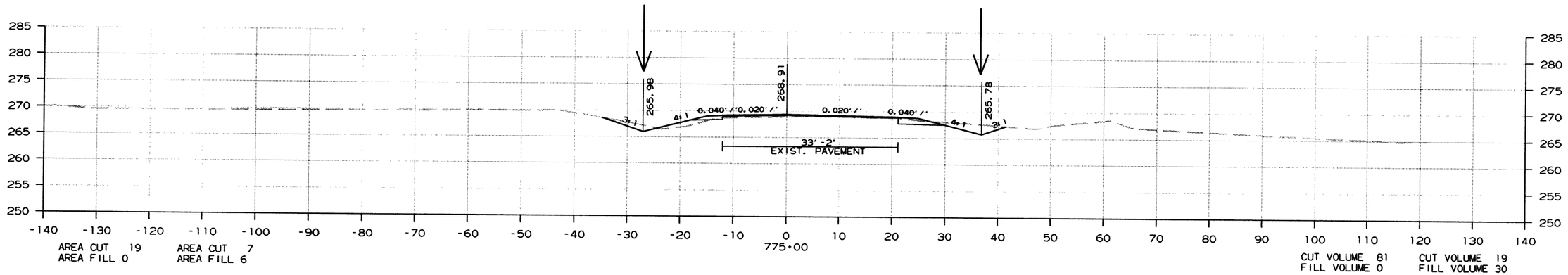
CROSS SECTION STA. 771+00 TO STA. 773+00

r070368.dgn 1/15/2015

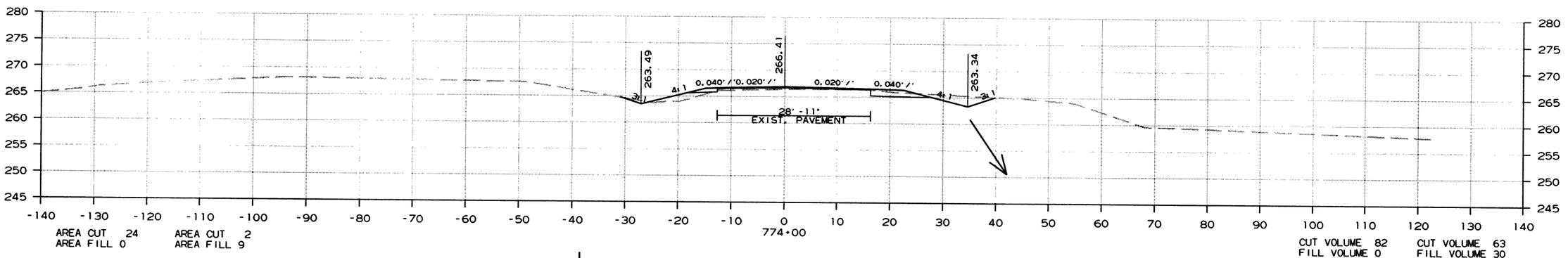
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	190	335

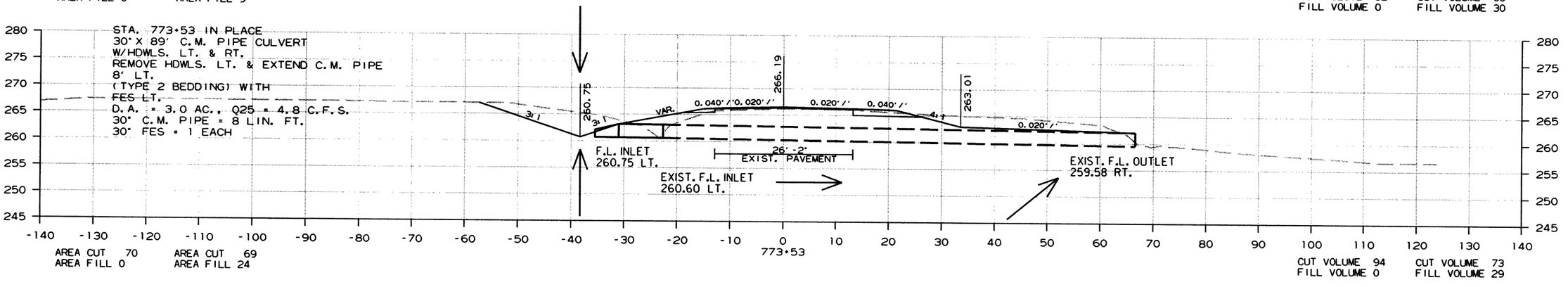
(2) CROSS SECTIONS

STAGE 1 STAGE 2



STAGE 1 STAGE 2





CROSS SECTION STA. 773+53 TO STA. 775+00

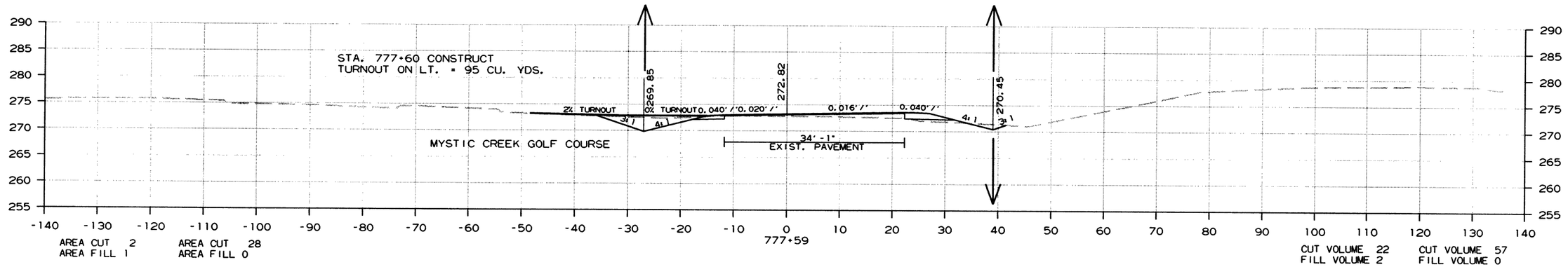
r070368.dgn 1/15/2015

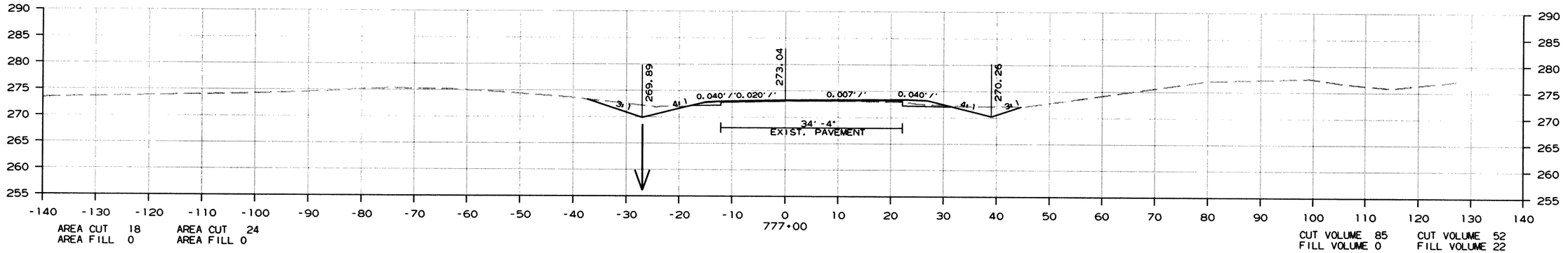
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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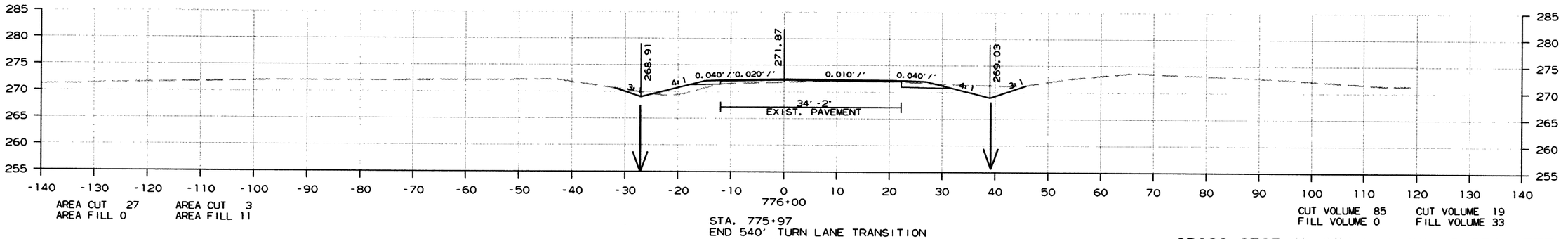
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







STA. 775+97
END 540' TURN LANE TRANSITION
BEGIN 193' LEFT TURN LANE

CROSS SECTION STA. 776+00 TO STA. 777+59

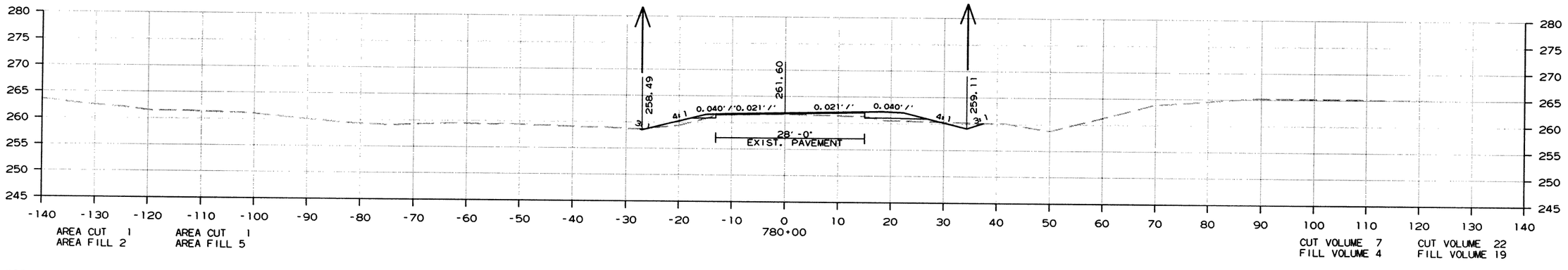
r070368.dgn 1/15/2015

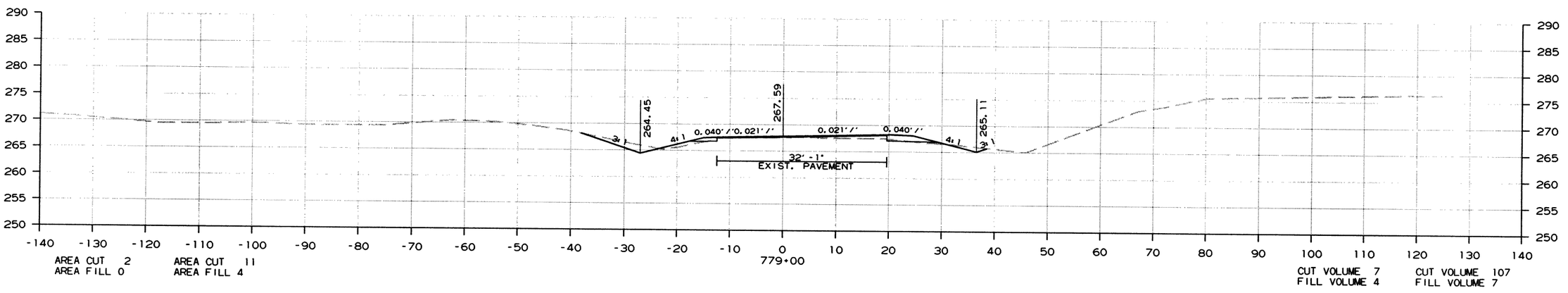
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	192	335

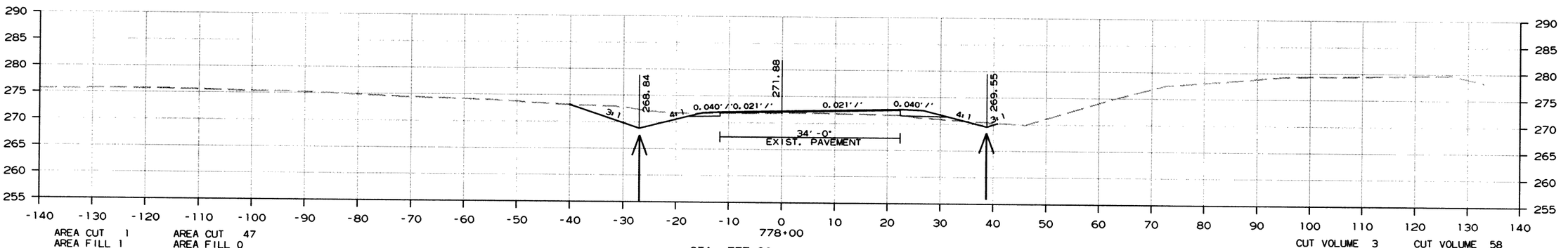
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







STA. 777+90
END 193' LEFT TURN LANE
BEGIN 540' TURN LANE TRANSITION

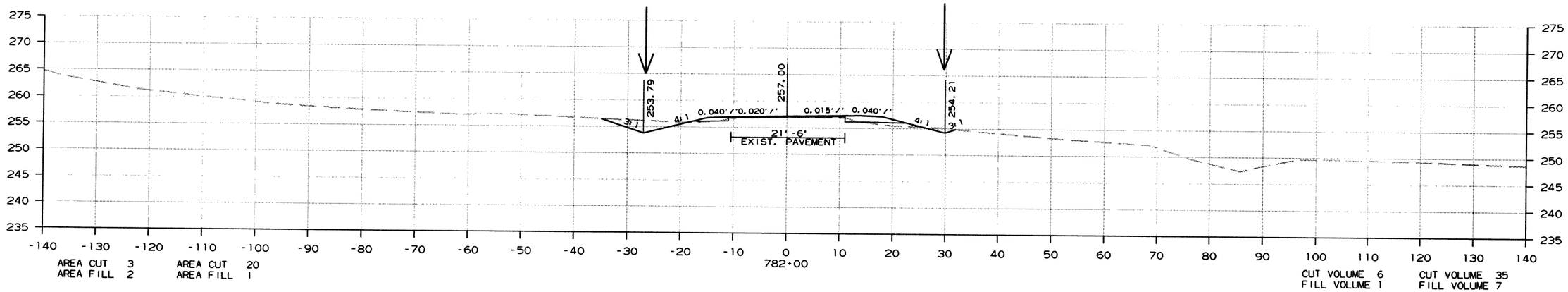
CROSS SECTION STA. 778+00 TO STA. 780+00

r070368.dgn 1/15/2015

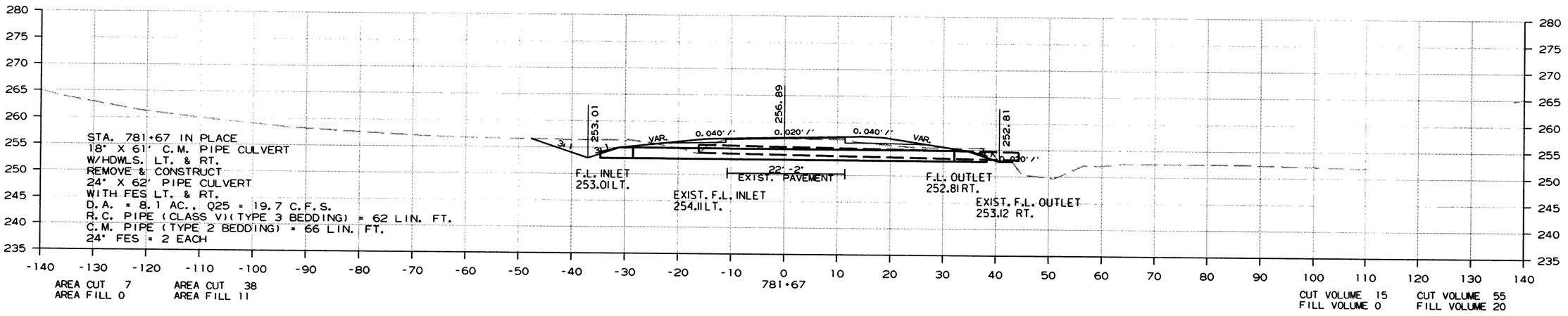
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
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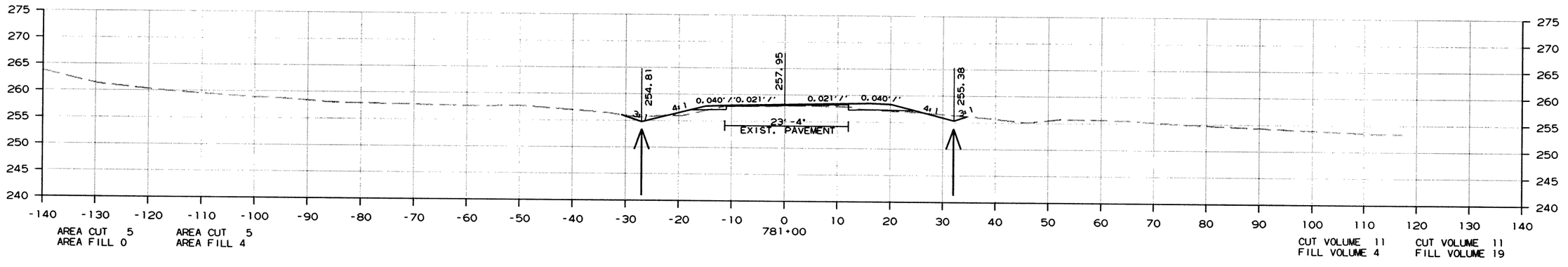
(2) CROSS SECTIONS

STAGE 1 STAGE 2



STA. 781+67 IN PLACE
18" X 61' C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE & CONSTRUCT
24" X 62' PIPE CULVERT
WITH FES LT. & RT.
D.A. = 8.1 AC., Q25 = 19.7 C.F.S.
R.C. PIPE (CLASS V)(TYPE 3 BEDDING) = 62 LIN. FT.
C.M. PIPE (TYPE 2 BEDDING) = 66 LIN. FT.
24" FES = 2 EACH





CROSS SECTION STA. 781+00 TO STA. 782+00

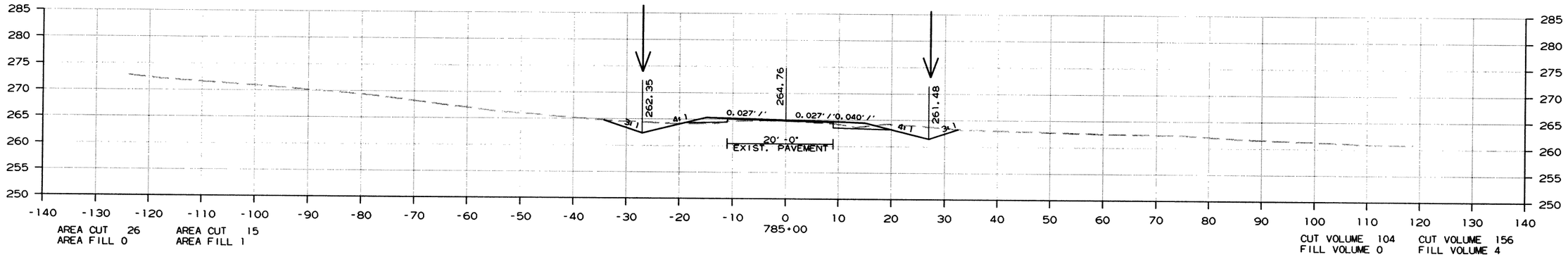
r070368.dgn 1/15/2015

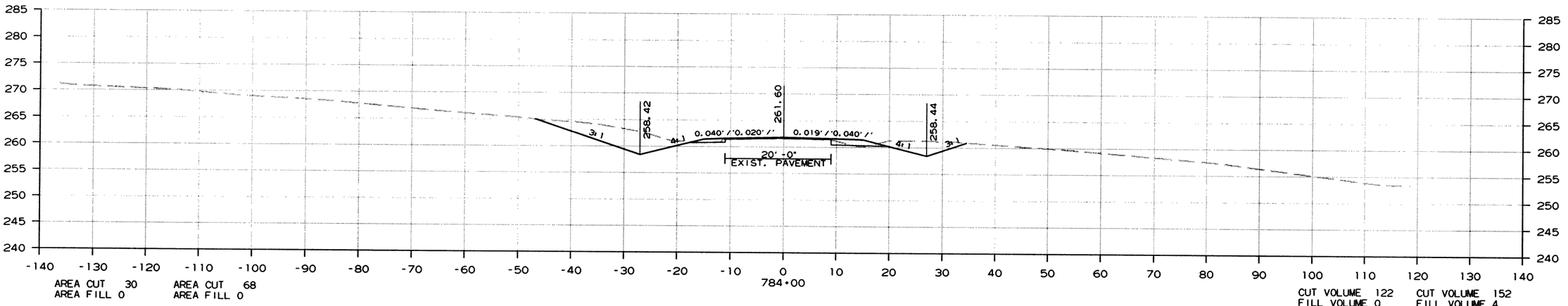
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	194	335

(2) CROSS SECTIONS

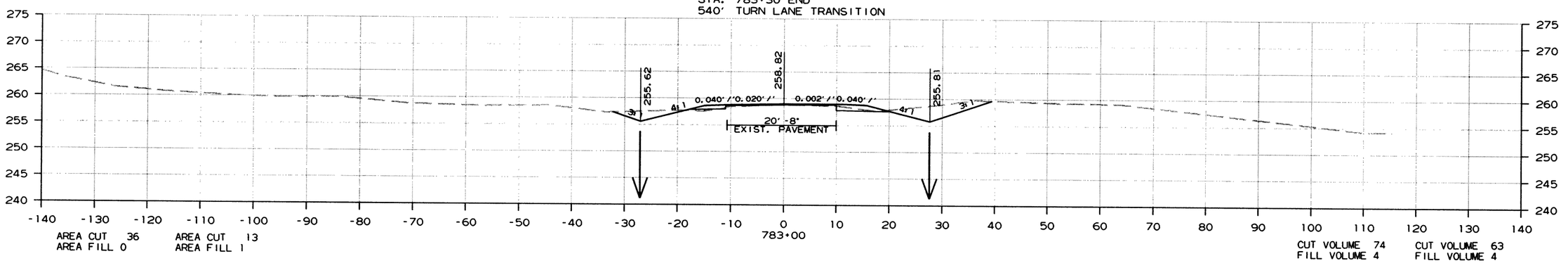
STAGE 1 STAGE 2

STAGE 1 STAGE 2





STA. 783+30 END
540' TURN LANE TRANSITION



CROSS SECTION STA. 783+00 TO STA. 785+00

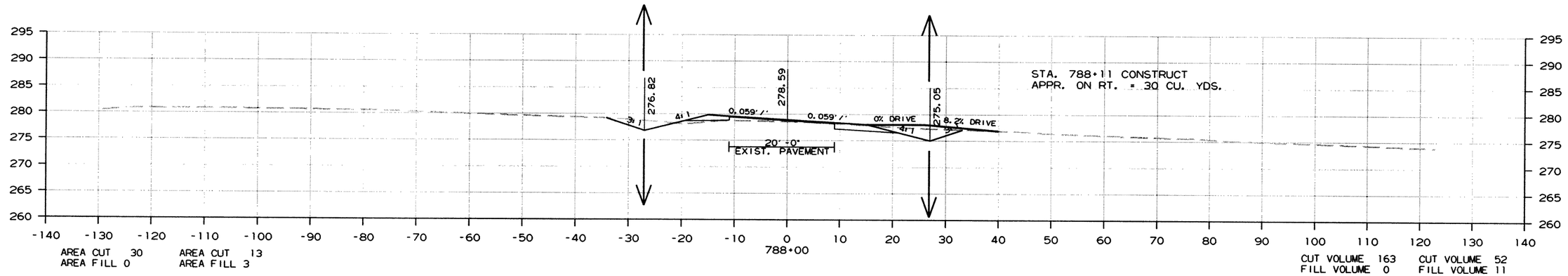
r070368.dgn 1/15/2015

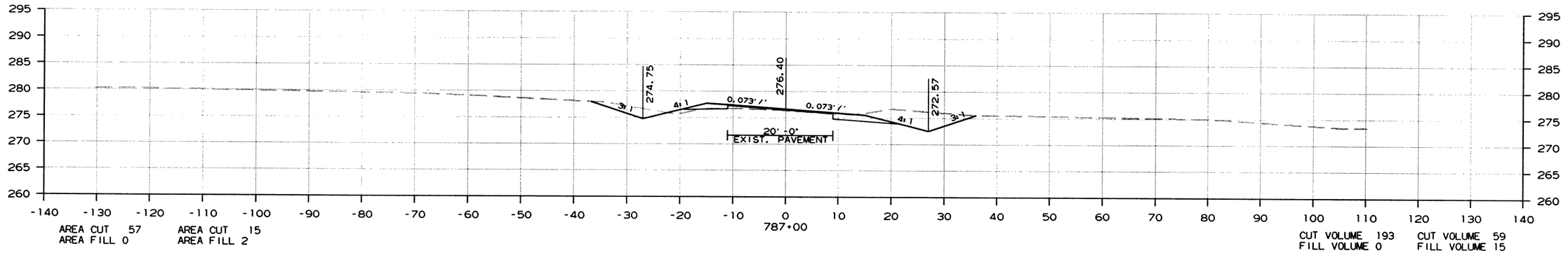
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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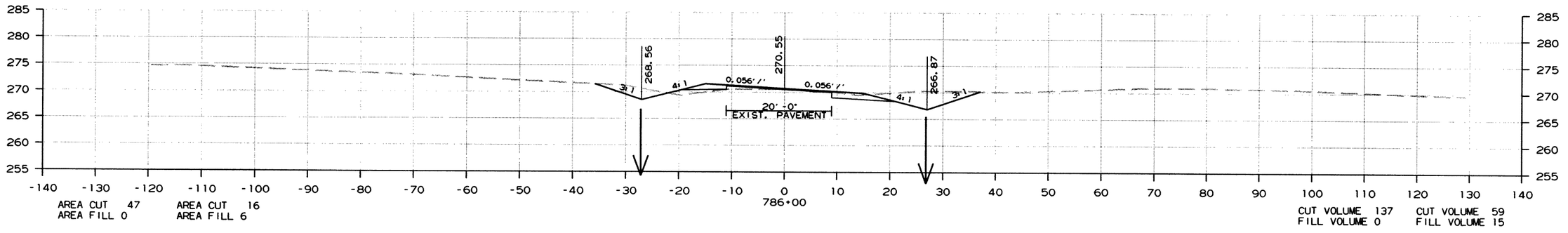
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 786+00 TO STA. 788+00

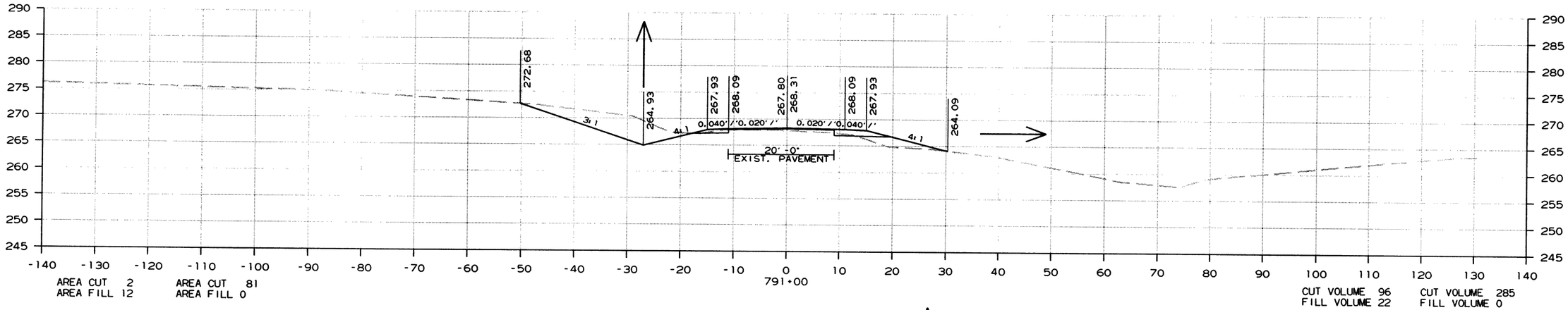
r070368.dgn 1/15/2015

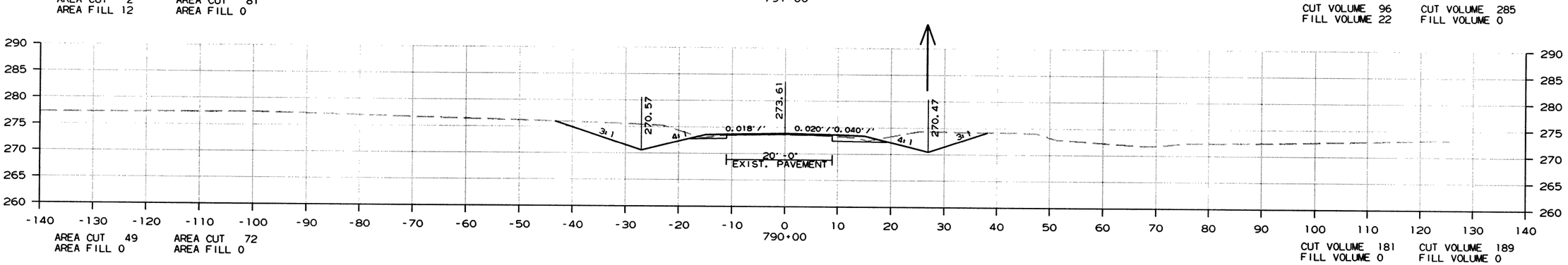
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
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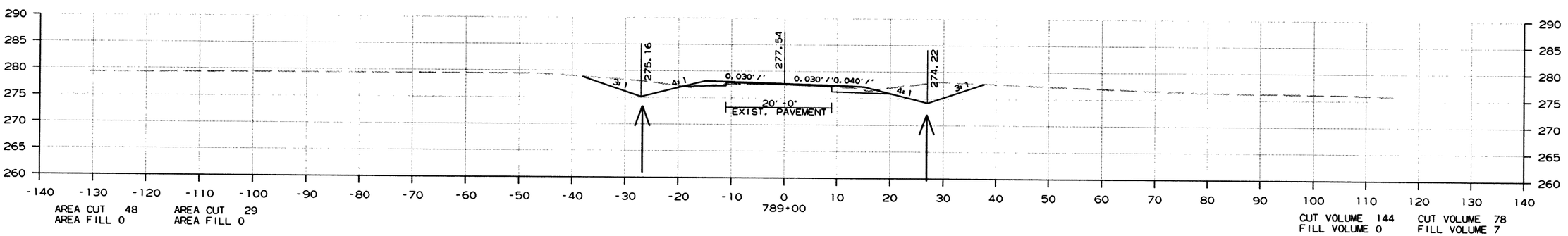
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 789+00 TO STA. 791+00

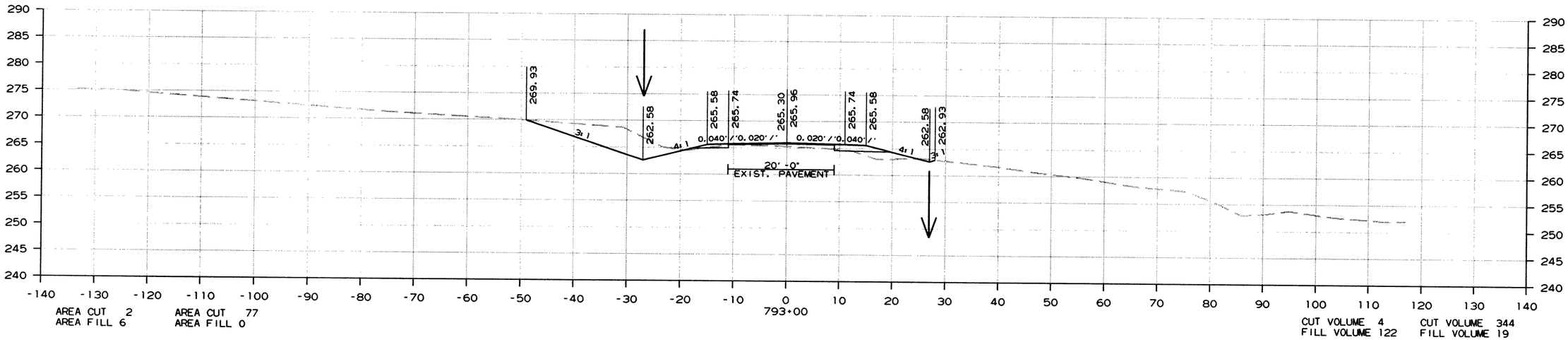
r070368.dgn 1/15/2015

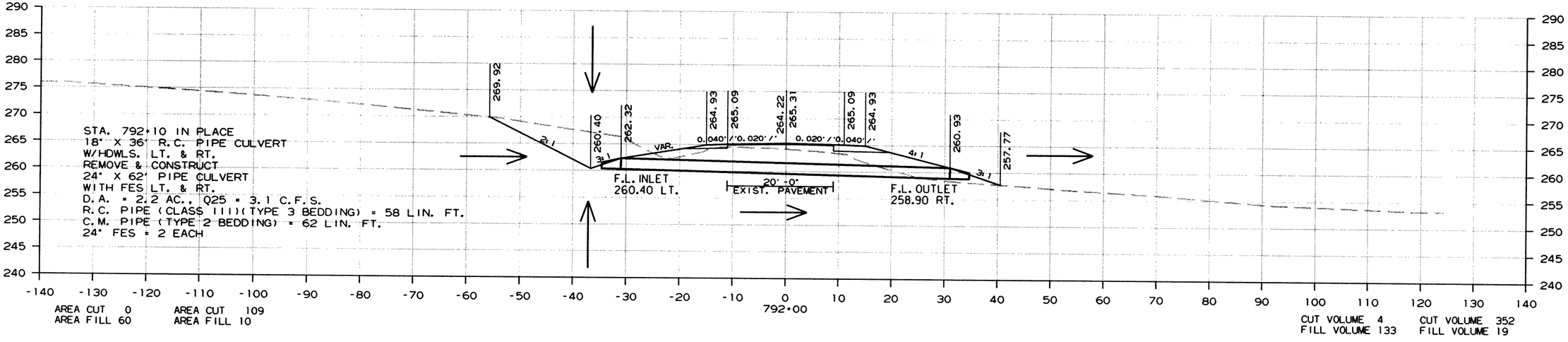
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	197	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2





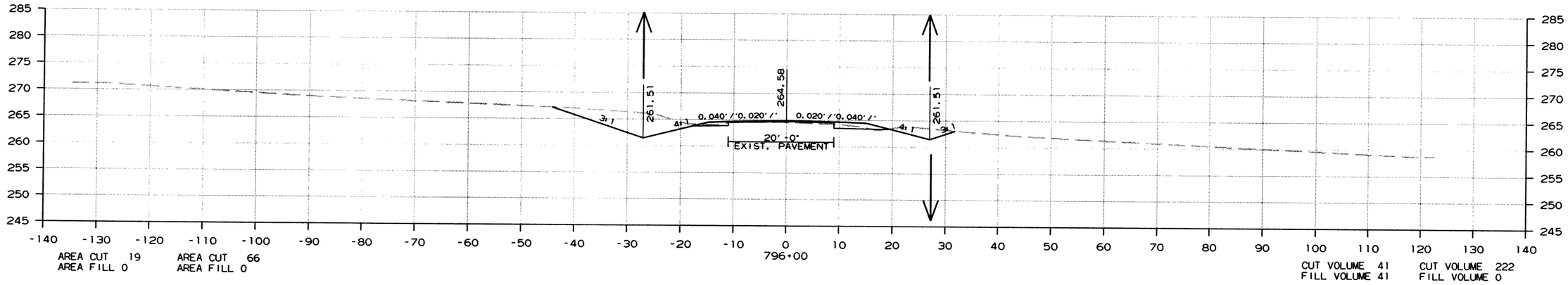
CROSS SECTION STA. 792+00 TO STA. 793+00

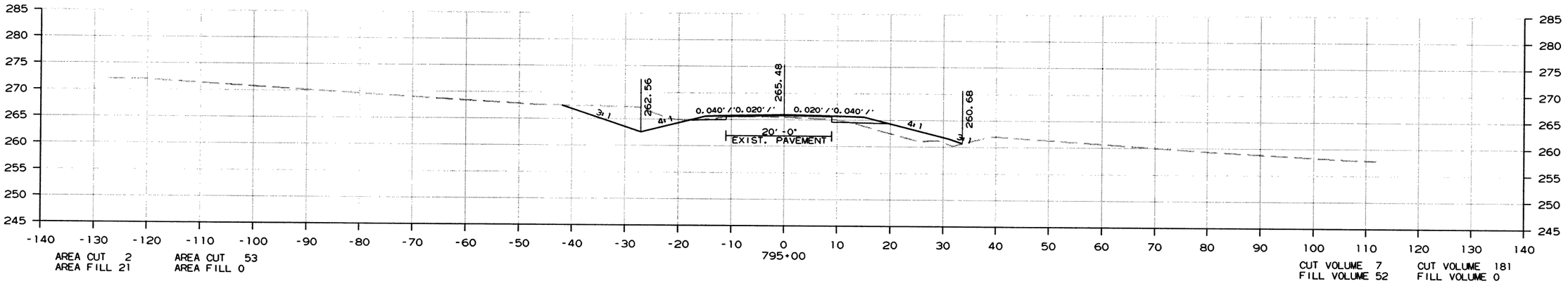
r070368.dgn 1/15/2015

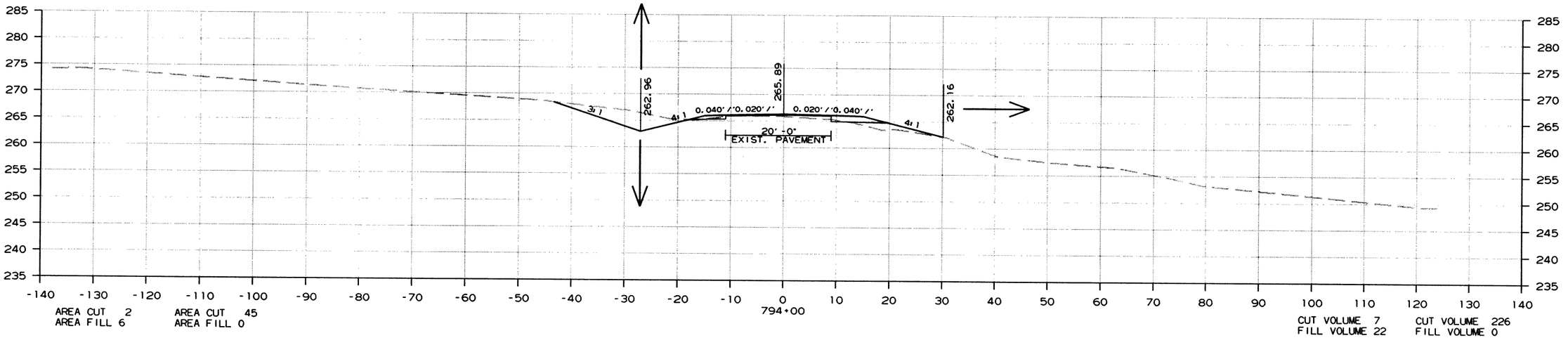
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	198	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2







CROSS SECTION STA. 794+00 TO STA. 796+00

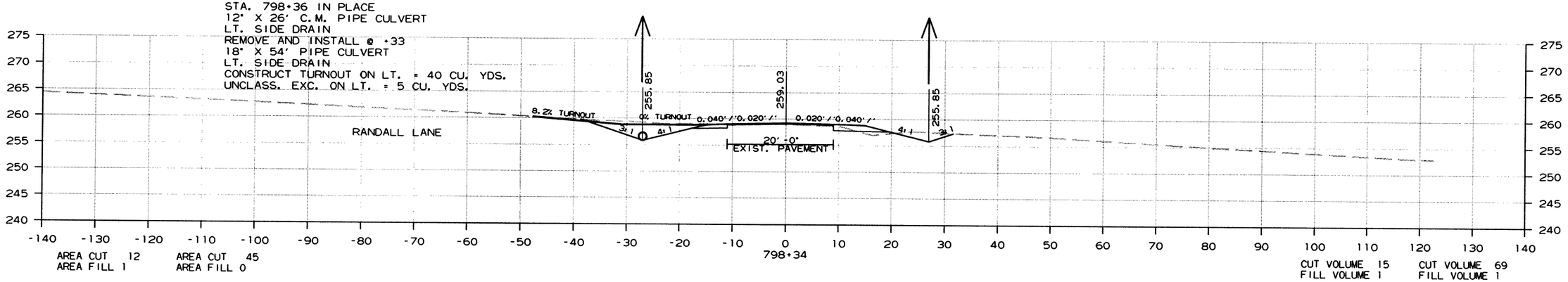
r070368.dgn 1/15/2015

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.		070368	199	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STA. 798+36 IN PLACE
12" X 26' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +33
18" X 54' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT TURNOUT ON LT. = 40 CU. YDS.
UNCLASS. EXC. ON LT. = 5 CU. YDS.



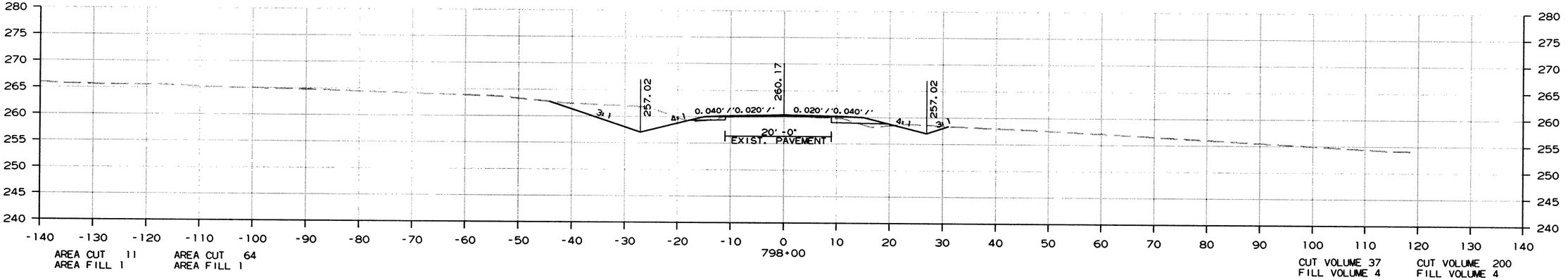
AREA CUT 12
AREA FILL 1

AREA CUT 45
AREA FILL 0

CUT VOLUME 15
FILL VOLUME 1

CUT VOLUME 69
FILL VOLUME 1

STAGE 1 STAGE 2

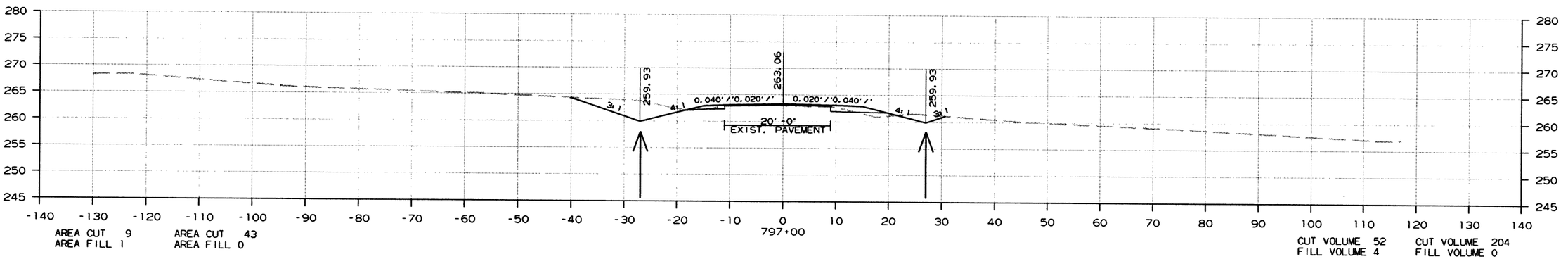


AREA CUT 11
AREA FILL 1

AREA CUT 64
AREA FILL 1

CUT VOLUME 37
FILL VOLUME 4

CUT VOLUME 200
FILL VOLUME 4



AREA CUT 9
AREA FILL 1

AREA CUT 43
AREA FILL 0

CUT VOLUME 52
FILL VOLUME 4

CUT VOLUME 204
FILL VOLUME 0

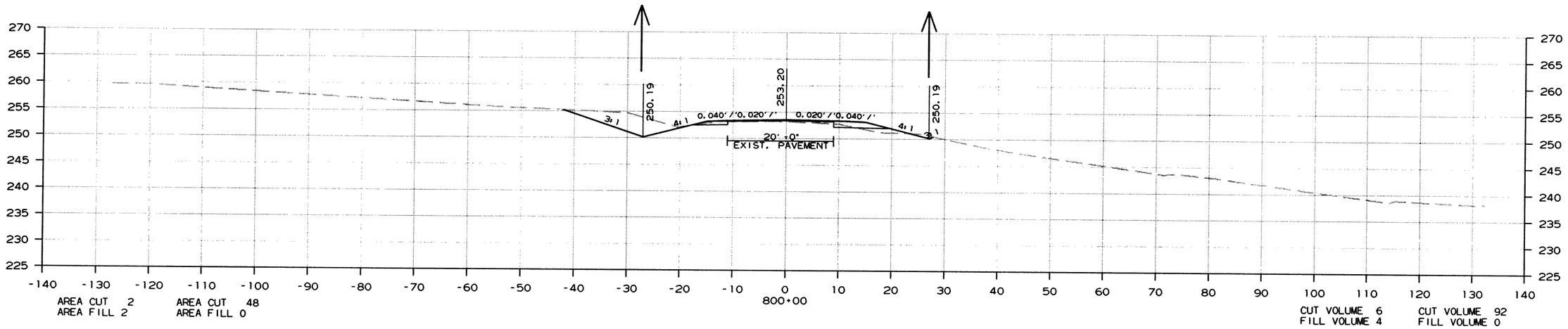
CROSS SECTION STA. 797+00 TO STA. 798+34

r070368.dgn 1/15/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		070368	200	335

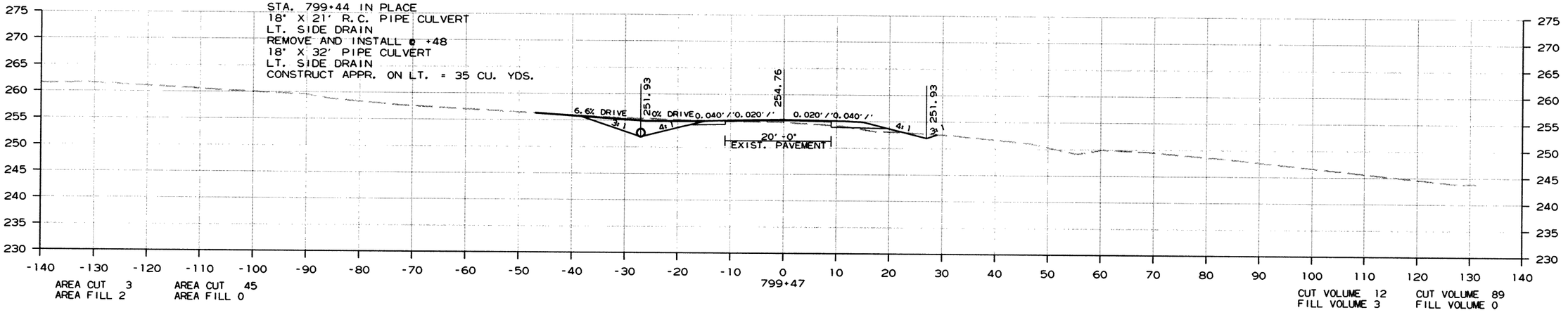
(2) CROSS SECTIONS

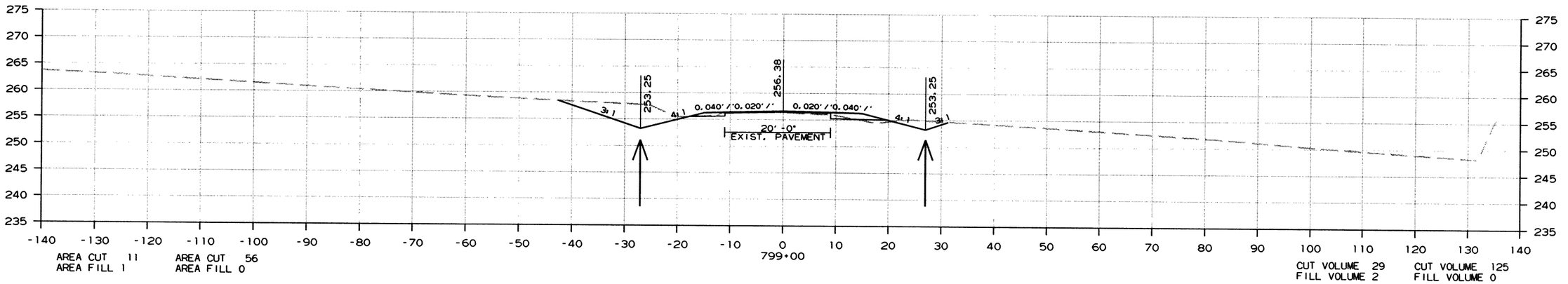
STAGE 1 STAGE 2



STAGE 1 STAGE 2

STA. 799+44 IN PLACE
18" X 21' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +48
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 35 CU. YDS.





CROSS SECTION STA. 799+00 TO STA. 800+00

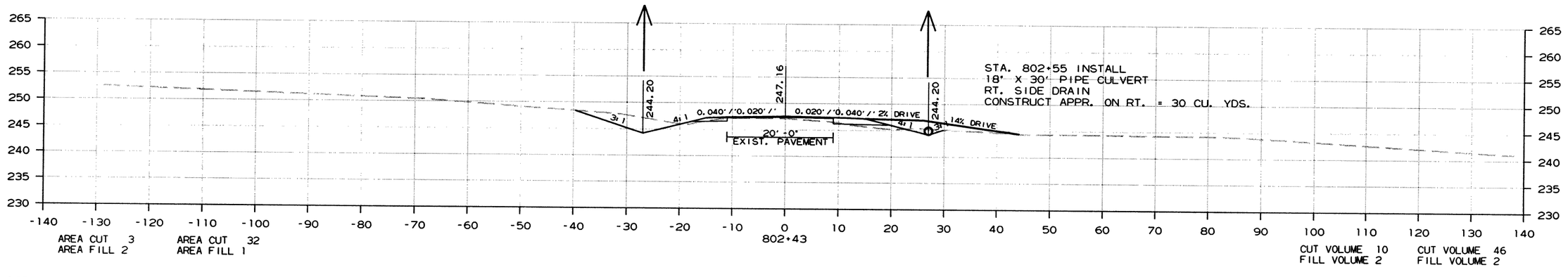
r070368.dgn 1/15/2015

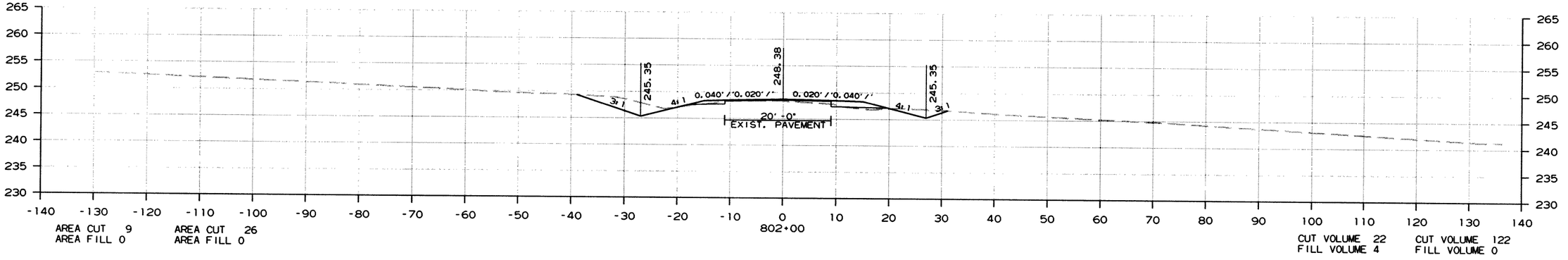
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				6	ARK.			
				JOB NO.		070368	201	335

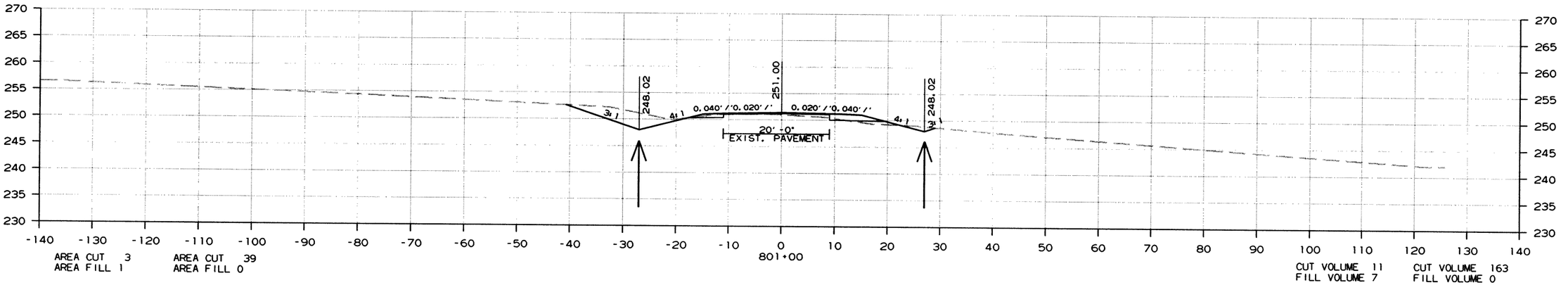
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 801+00 TO STA. 802+43

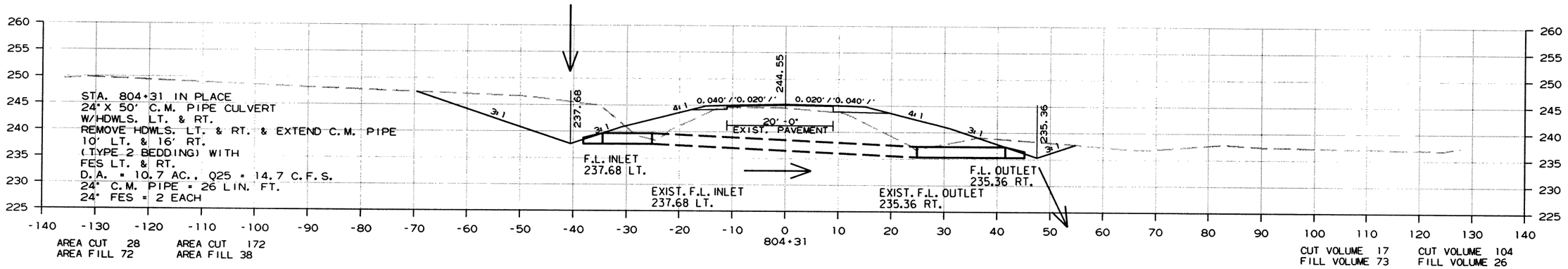
r070368.dgn 1/15/2015

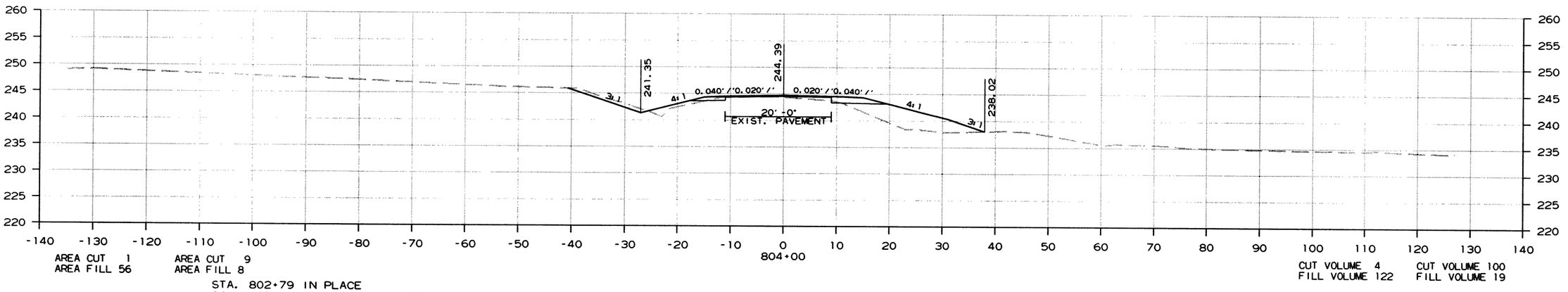
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		070368	202	335

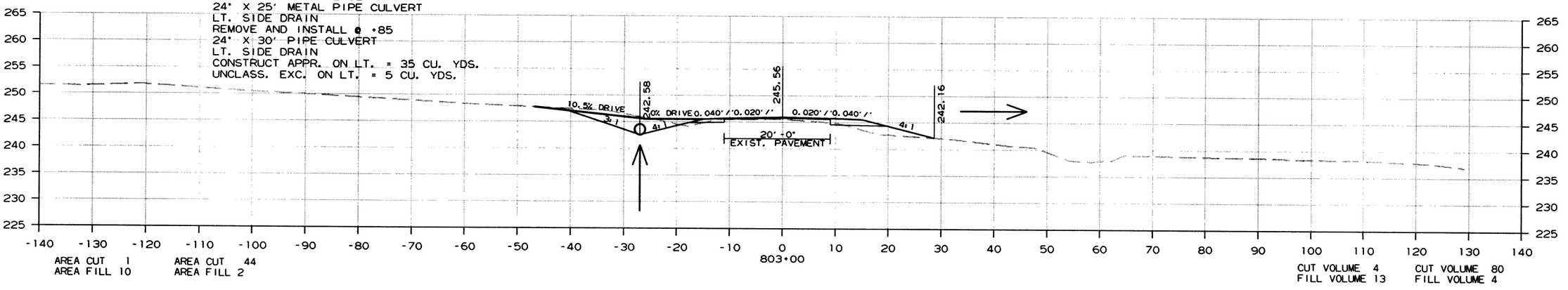
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 803+00 TO STA. 804+31

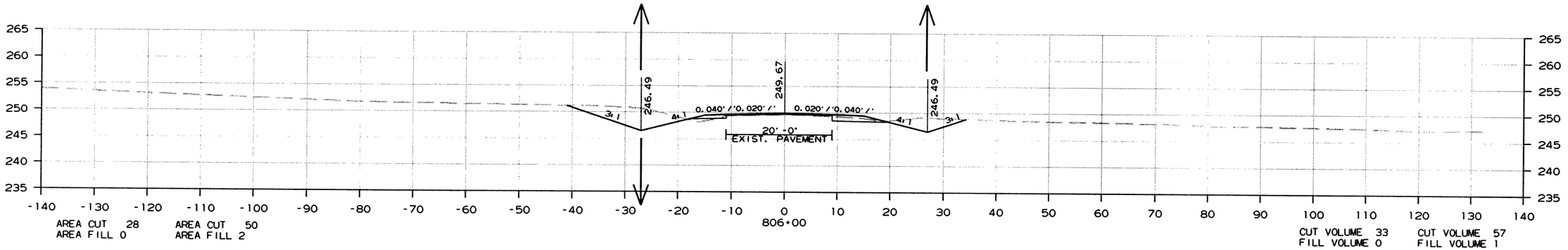
r070368.dgn 1/15/2015

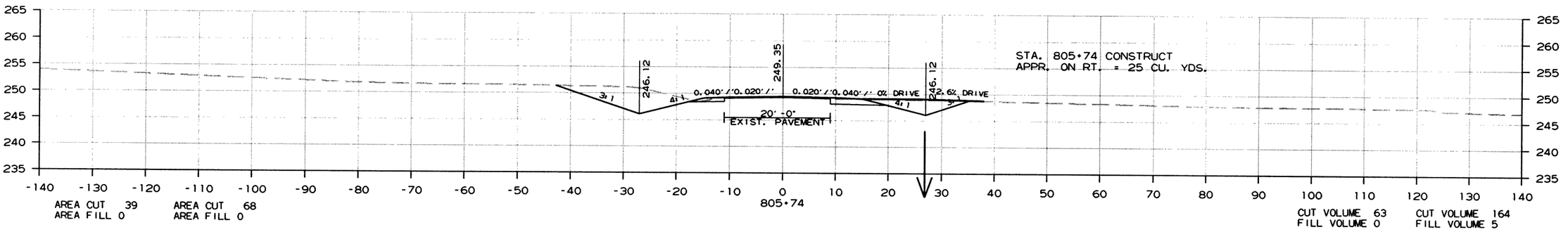
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
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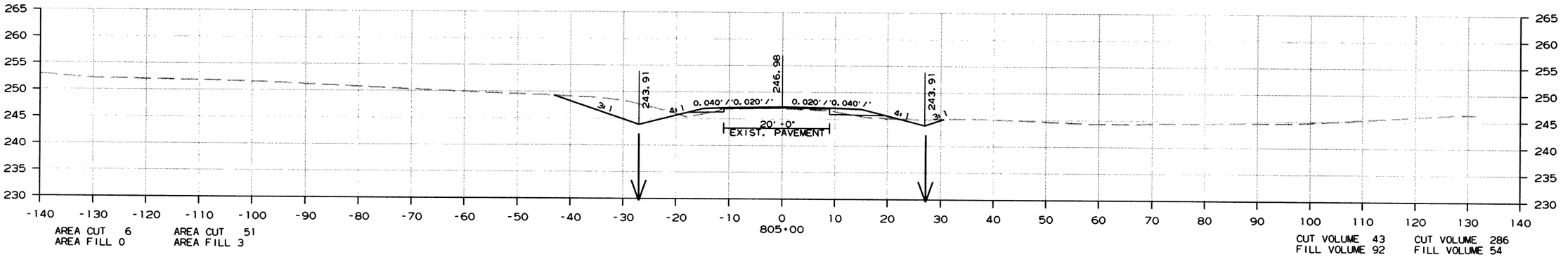
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 805+00 TO STA. 806+00

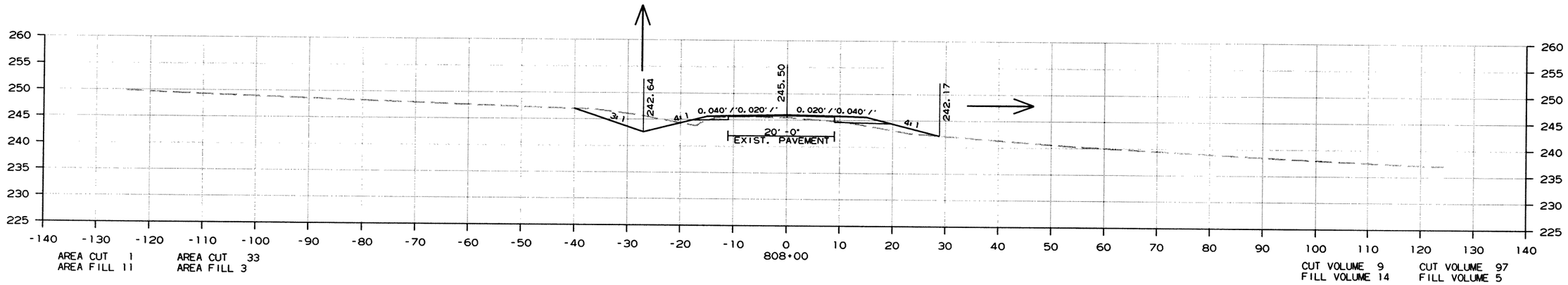
r070368.dgn 1/15/2015

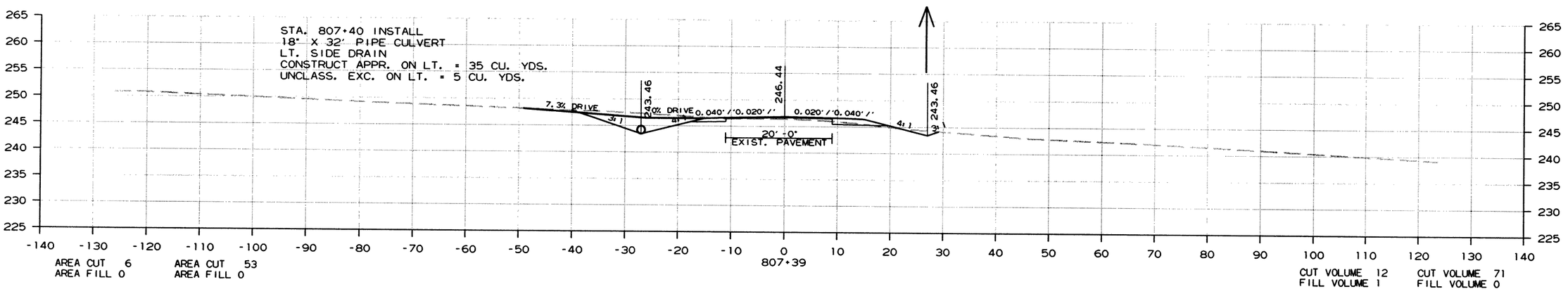
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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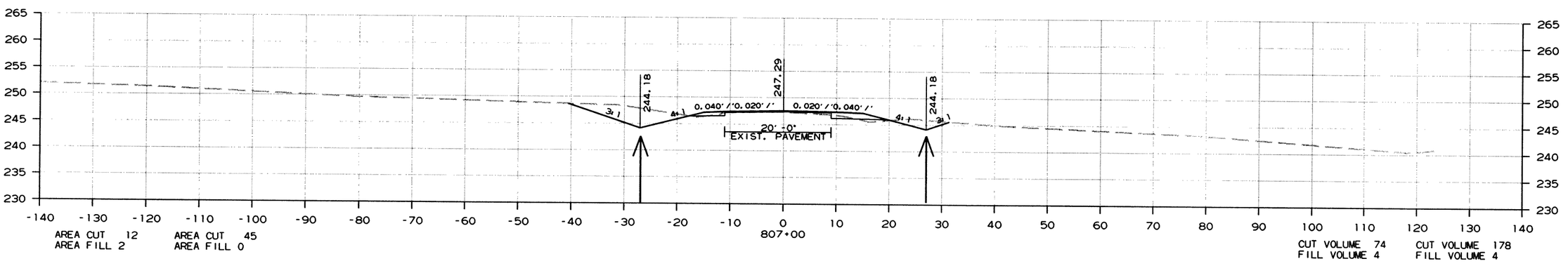
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 807+00 TO STA. 808+00

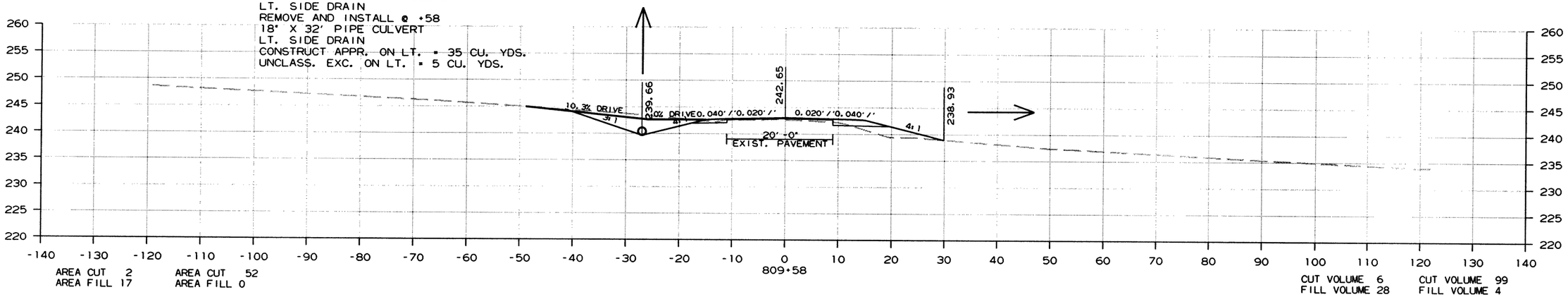
r070368.dgn 1/15/2015

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.		070368	205	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STA. 809+57 IN PLACE
18" X 30' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +58
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 35 CU. YDS.
UNCLASS. EXC. ON LT. = 5 CU. YDS.



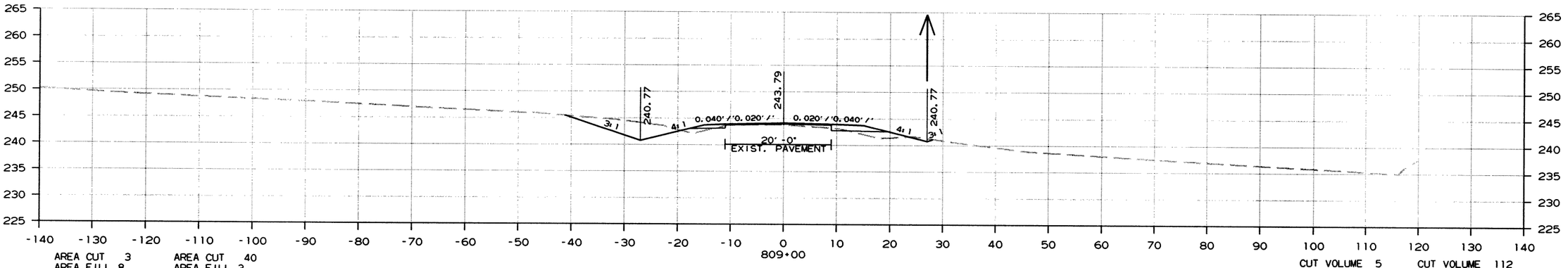
AREA CUT 2
AREA FILL 17

AREA CUT 52
AREA FILL 0

CUT VOLUME 6
FILL VOLUME 28

CUT VOLUME 99
FILL VOLUME 4

STAGE 1 STAGE 2



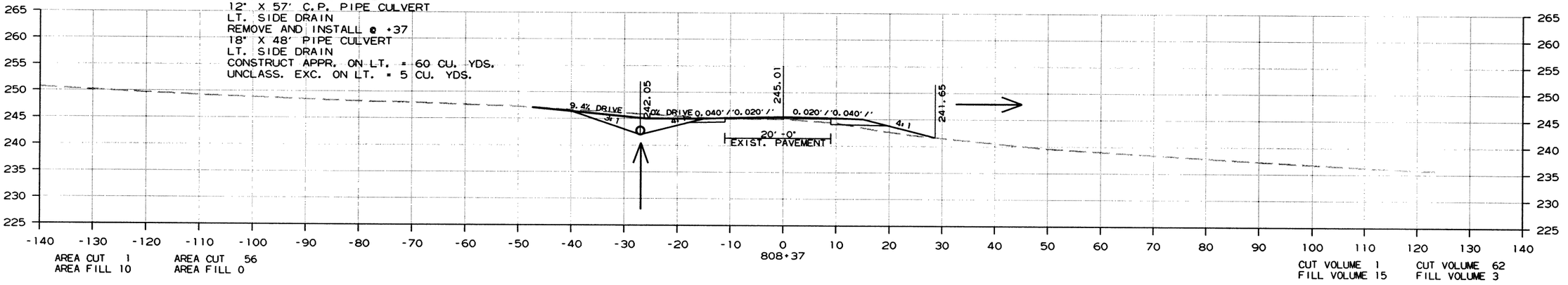
AREA CUT 3
AREA FILL 8

AREA CUT 40
AREA FILL 3

CUT VOLUME 5
FILL VOLUME 21

CUT VOLUME 112
FILL VOLUME 5

STA. 808+36 IN PLACE
12" X 57' C.P. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +37
18" X 48' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 60 CU. YDS.
UNCLASS. EXC. ON LT. = 5 CU. YDS.



AREA CUT 1
AREA FILL 10

AREA CUT 56
AREA FILL 0

CUT VOLUME 1
FILL VOLUME 15

CUT VOLUME 62
FILL VOLUME 3

CROSS SECTION STA. 808+37 TO STA. 809+58

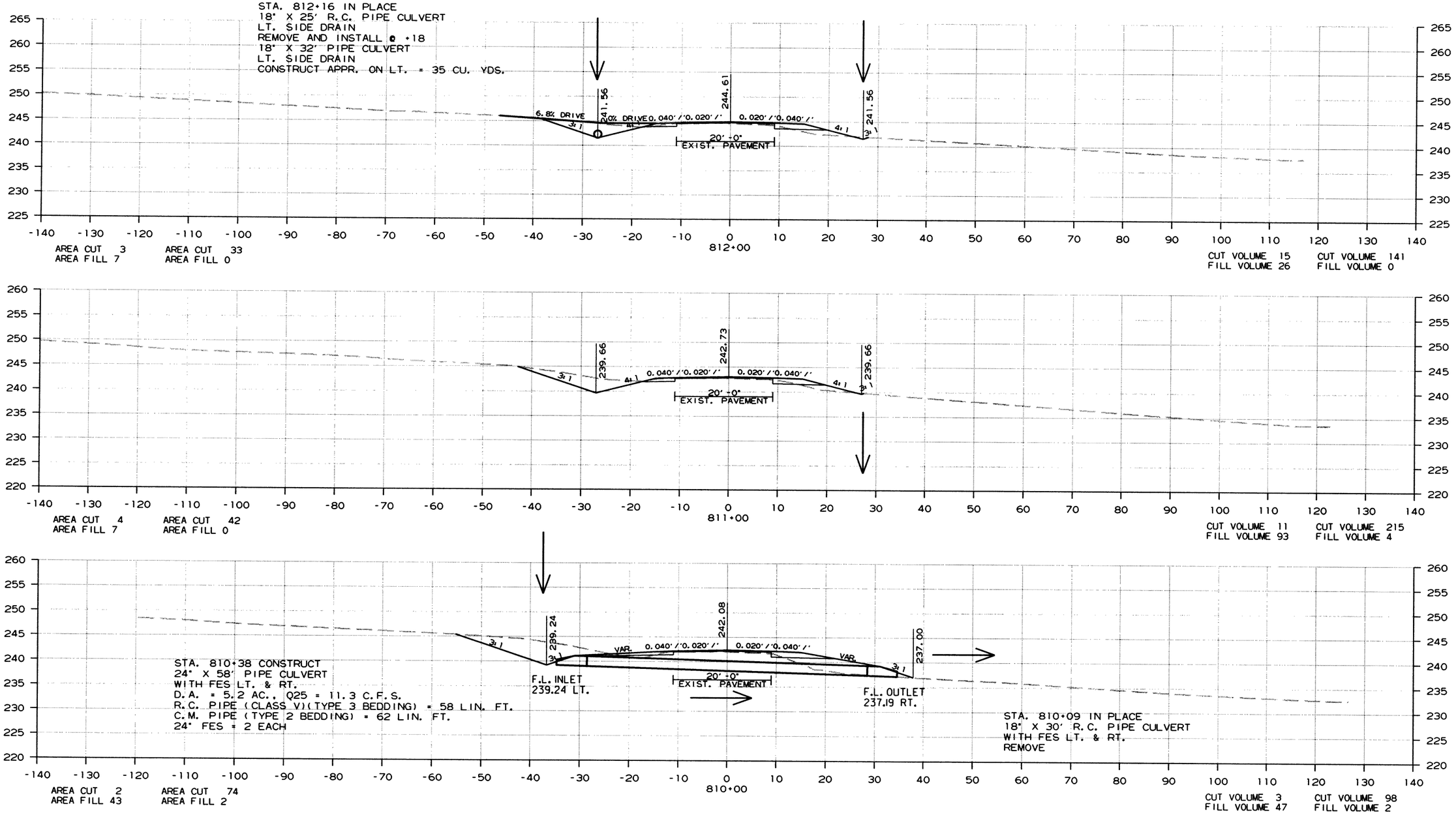
r070368.dgn 1/15/2015

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.		070368	206	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



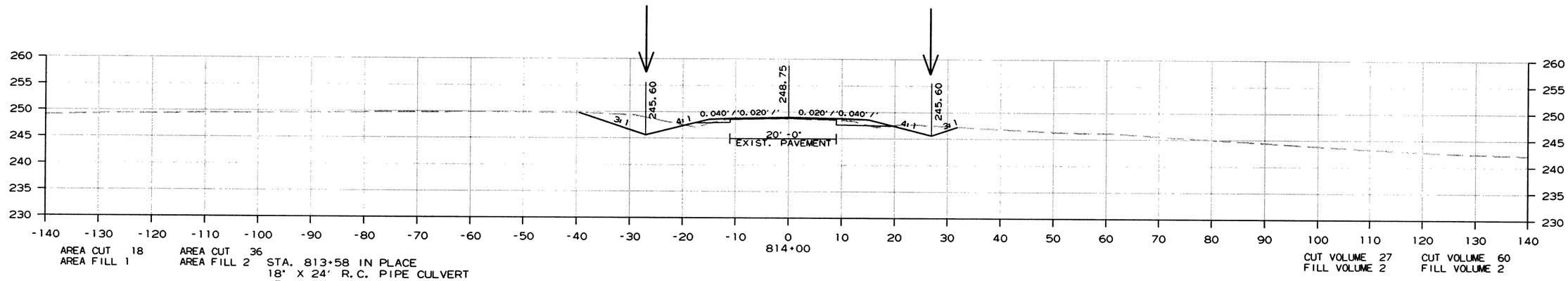
CROSS SECTION STA. 810+00 TO STA. 812+00

r070368.dgn 1/15/2015

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.		070368	207	335
				(2) CROSS SECTIONS				

STAGE 1 STAGE 2

STAGE 1 STAGE 2



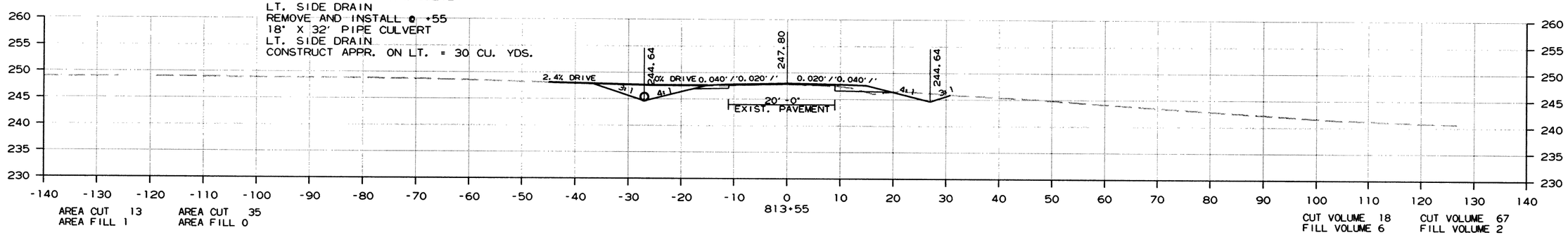
AREA CUT 18
AREA FILL 1

AREA CUT 36
AREA FILL 2

CUT VOLUME 27
FILL VOLUME 2

CUT VOLUME 60
FILL VOLUME 2

STA. 813+58 IN PLACE
18" X 24' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +55
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.

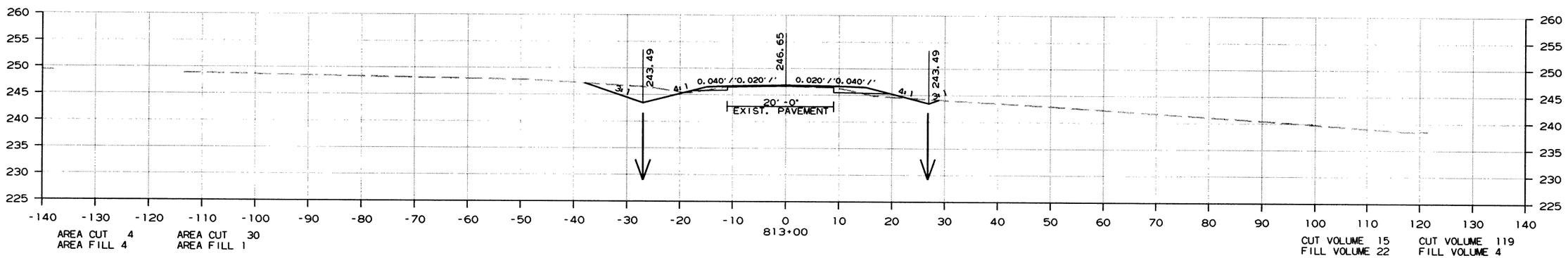


AREA CUT 13
AREA FILL 1

AREA CUT 35
AREA FILL 0

CUT VOLUME 18
FILL VOLUME 6

CUT VOLUME 67
FILL VOLUME 2



AREA CUT 4
AREA FILL 4

AREA CUT 30
AREA FILL 1

CUT VOLUME 15
FILL VOLUME 22

CUT VOLUME 119
FILL VOLUME 4

CROSS SECTION STA. 813+00 TO STA. 814+00

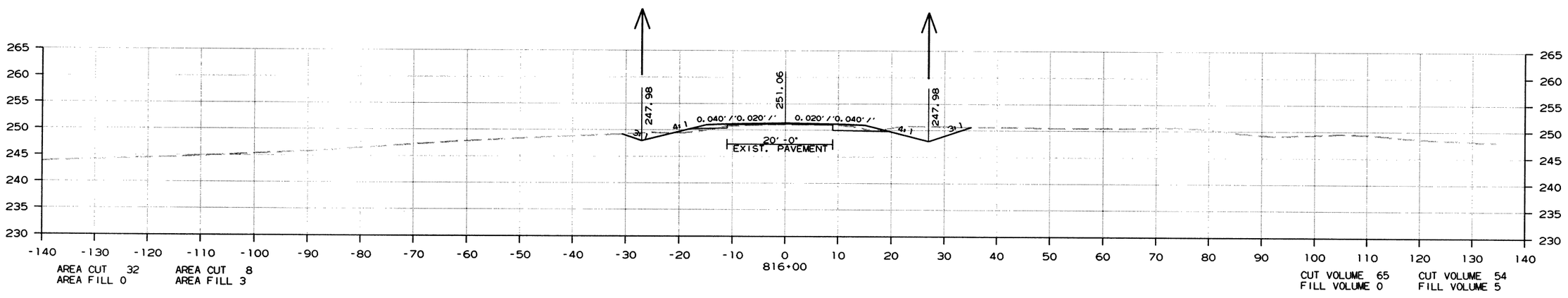
r070368.dgn 1/15/2015

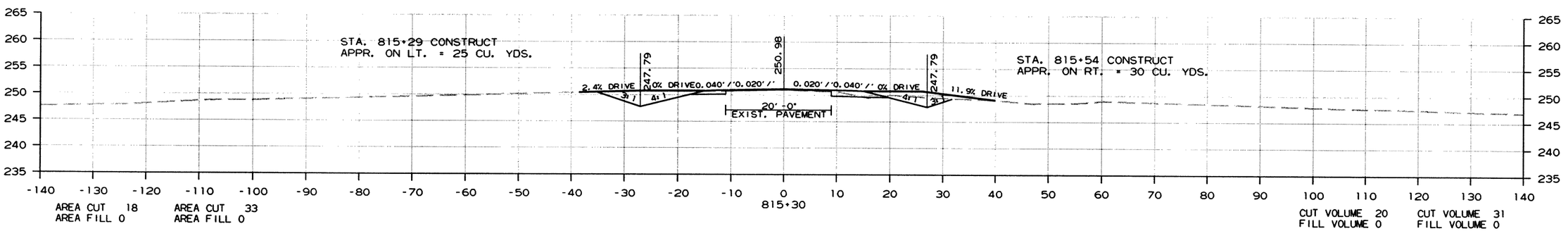
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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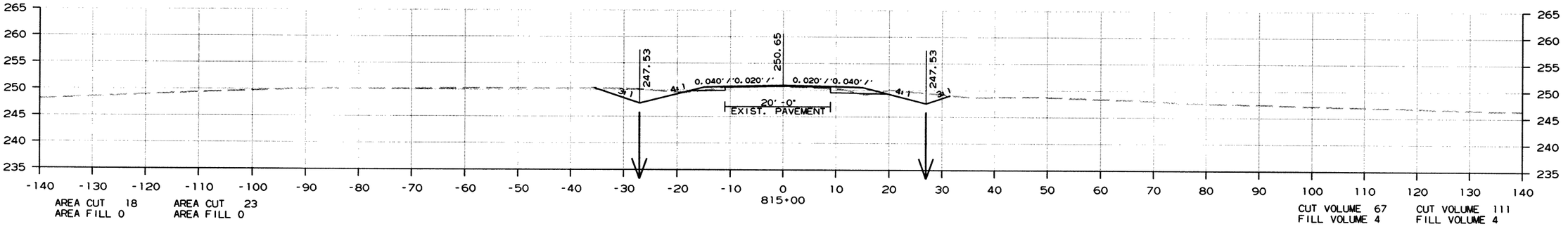
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







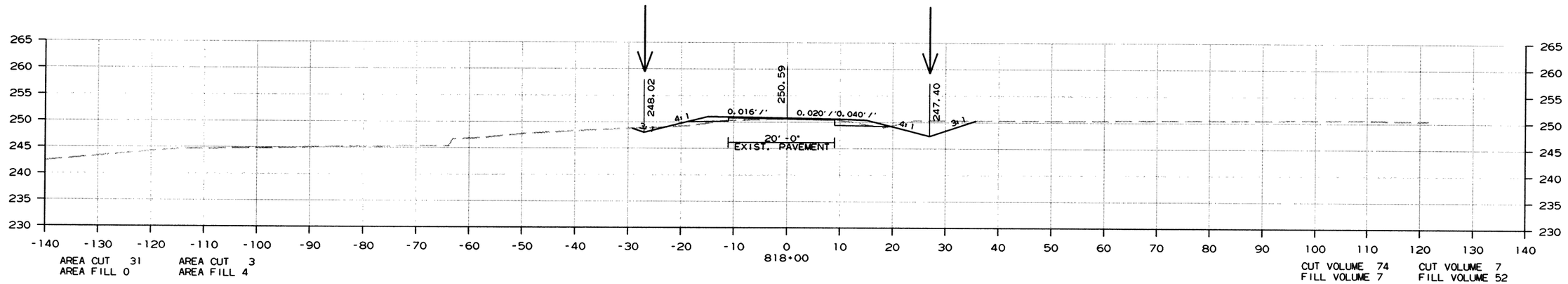
CROSS SECTION STA. 815+00 TO STA. 816+00

r070368.dgn 1/15/2015

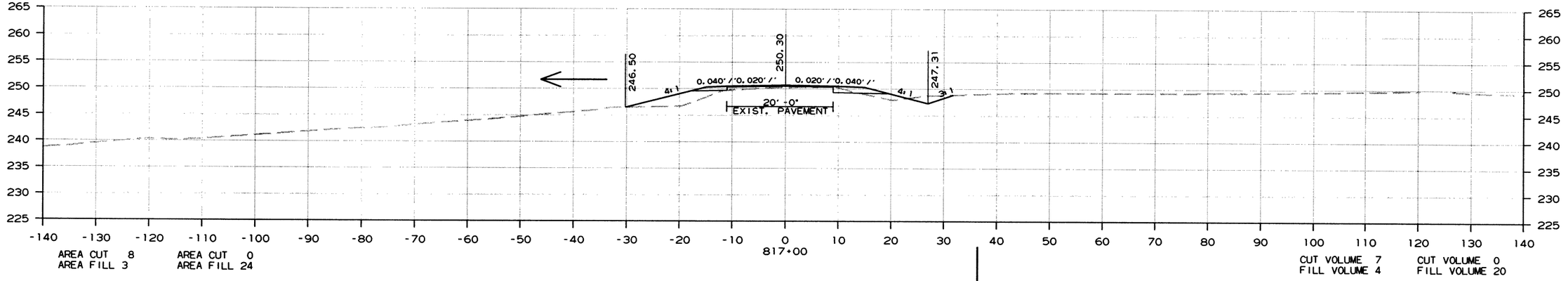
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
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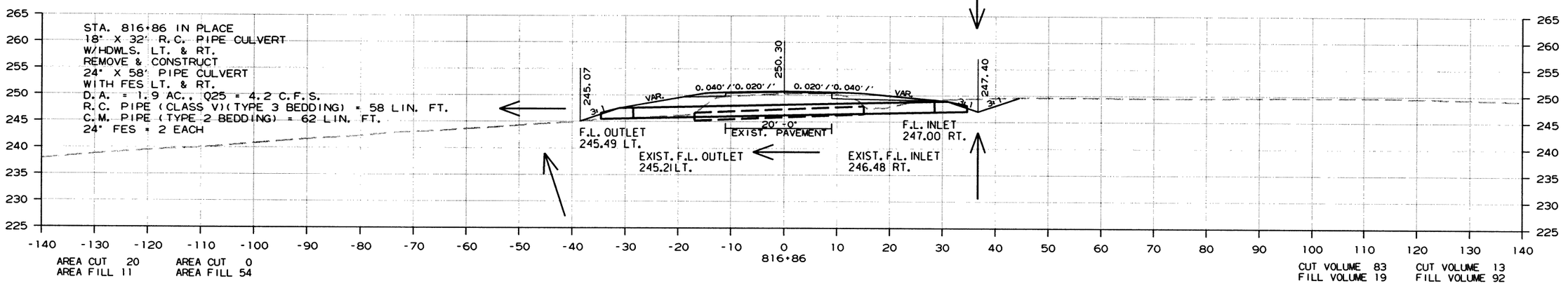
(2) CROSS SECTIONS

STAGE 1 STAGE 2



STAGE 1 STAGE 2





CROSS SECTION STA. 816+86 TO STA. 818+00

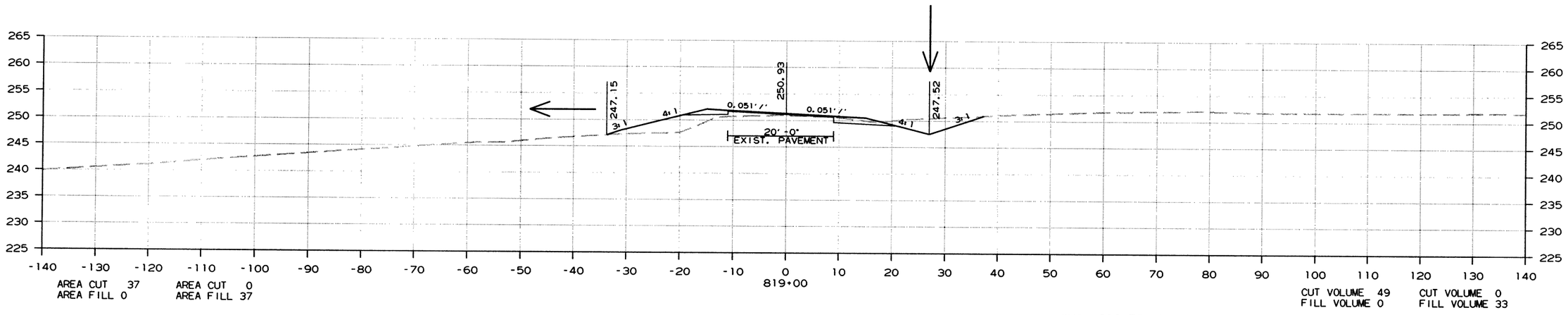
r070368.dgn 1/15/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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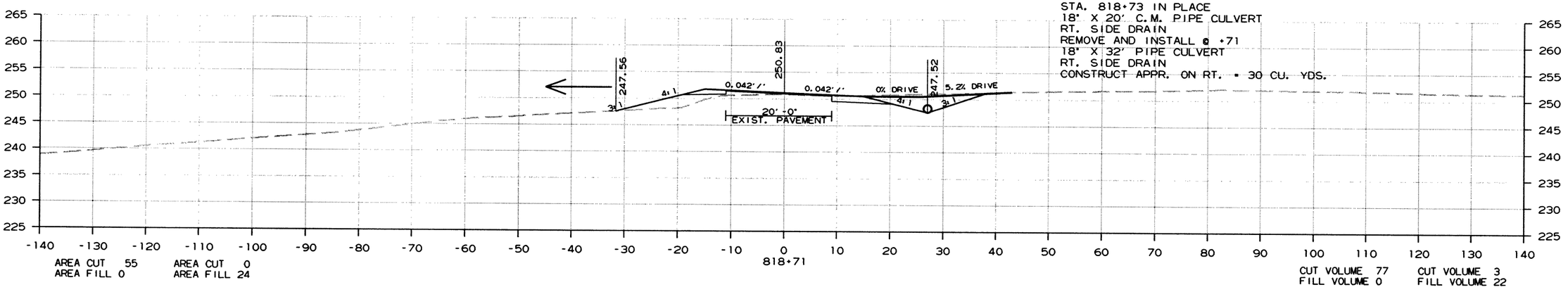
(2) CROSS SECTIONS

STAGE 1 STAGE 2

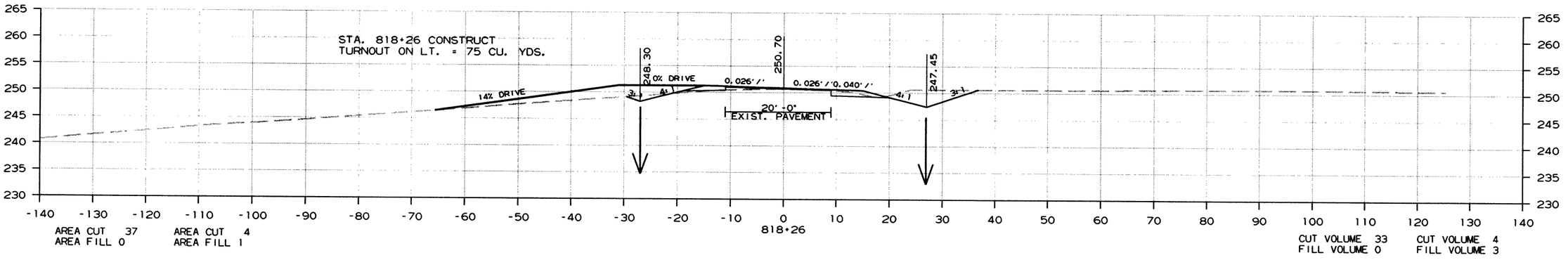
STAGE 1 STAGE 2



STA. 818+73 IN PLACE
18" X 20' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +71
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.



STA. 818+26 CONSTRUCT
TURNOUT ON LT. = 75 CU. YDS.



CROSS SECTION STA. 818+26 TO STA. 819+00

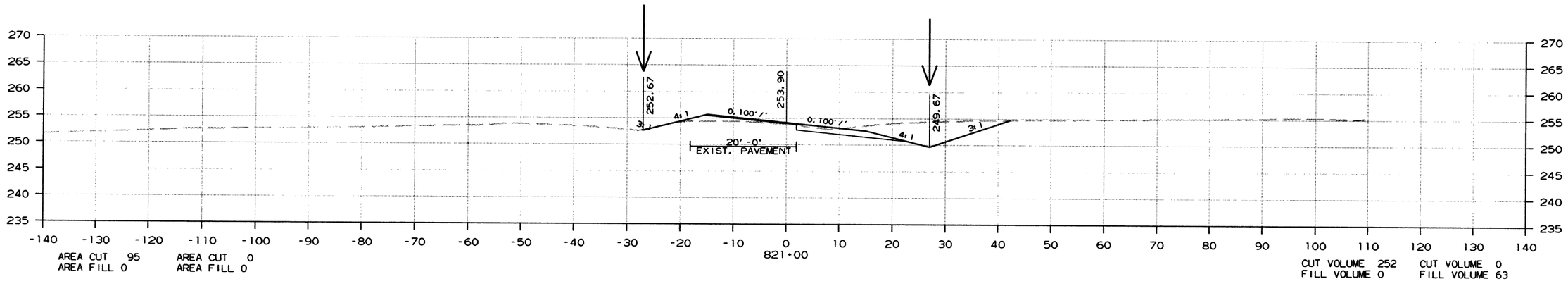
r070368.dgn 1/15/2015

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.		070368	211	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2

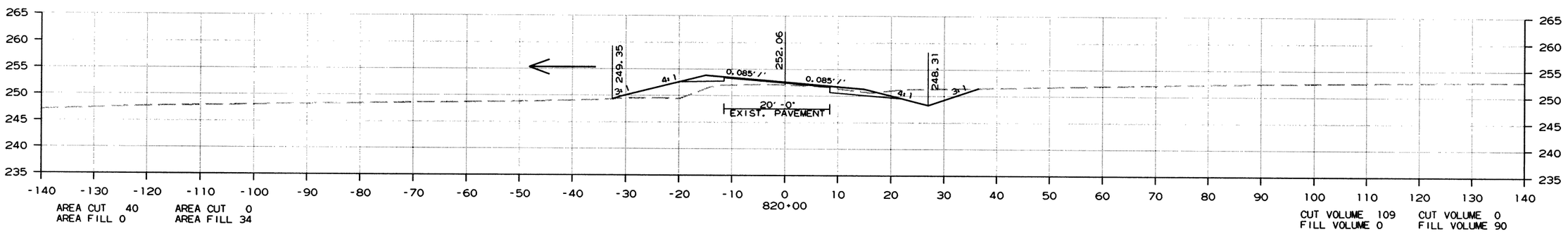


AREA CUT 95
AREA FILL 0

AREA CUT 0
AREA FILL 0

CUT VOLUME 252
FILL VOLUME 0

CUT VOLUME 0
FILL VOLUME 63

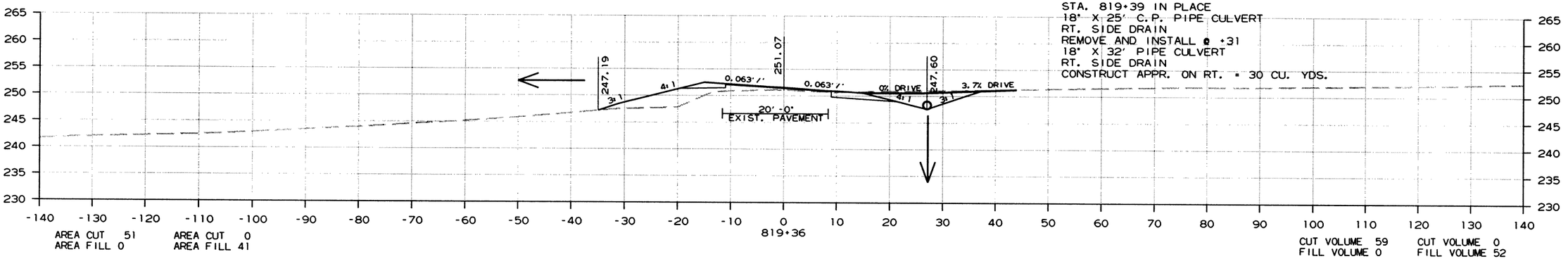


AREA CUT 40
AREA FILL 0

AREA CUT 0
AREA FILL 34

CUT VOLUME 109
FILL VOLUME 0

CUT VOLUME 0
FILL VOLUME 90



STA. 819+39 IN PLACE
18" X 25' C.P. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +31
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.

AREA CUT 51
AREA FILL 0

AREA CUT 0
AREA FILL 41

CUT VOLUME 59
FILL VOLUME 0

CUT VOLUME 0
FILL VOLUME 52

CROSS SECTION STA. 819+36 TO STA. 821+00

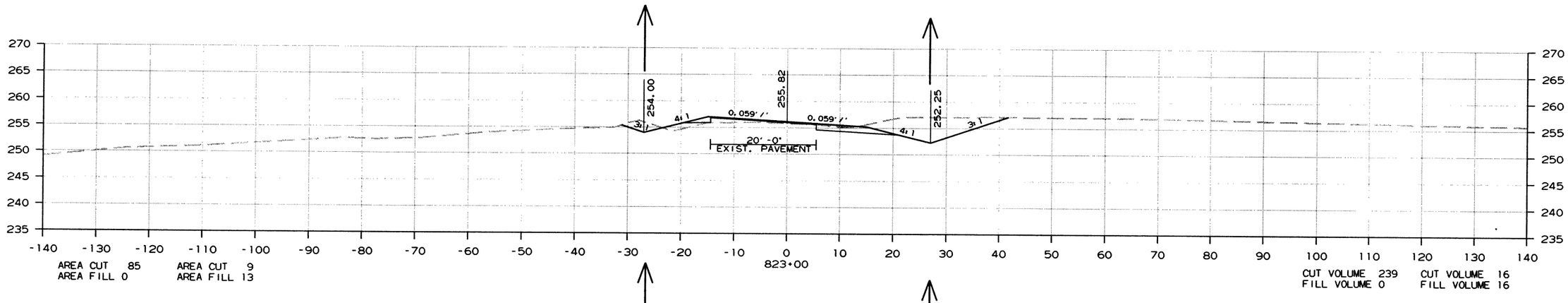
r070368.dgn 1/15/2015

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.		070368	212	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2

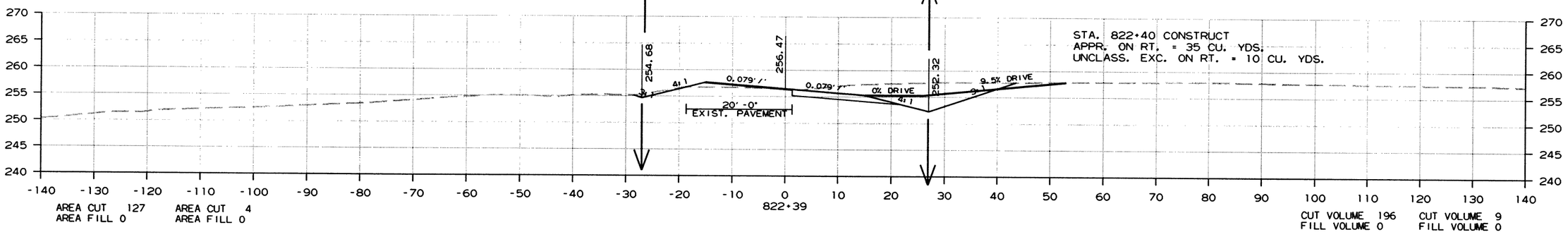


AREA CUT 85 AREA FILL 0

AREA CUT 9 AREA FILL 13

CUT VOLUME 239 FILL VOLUME 0

CUT VOLUME 16 FILL VOLUME 16



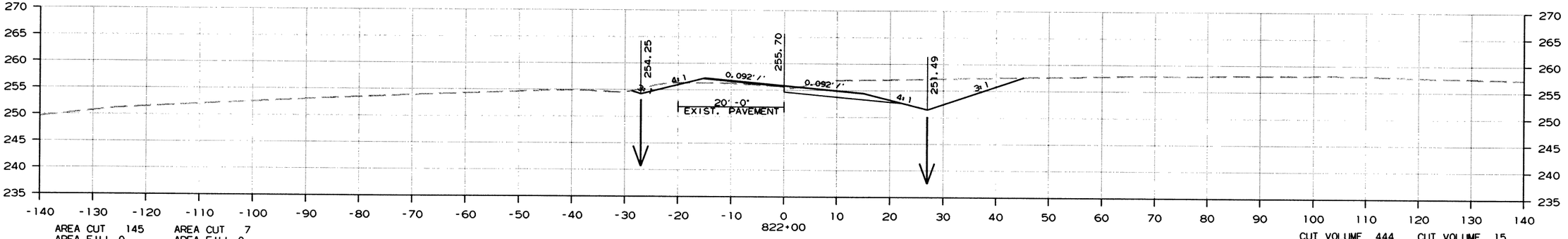
STA. 822+40 CONSTRUCT
APPR. ON RT. = 35 CU. YDS.
UNCLASS. EXC. ON RT. = 10 CU. YDS.

AREA CUT 127 AREA FILL 0

AREA CUT 4 AREA FILL 0

CUT VOLUME 196 FILL VOLUME 0

CUT VOLUME 9 FILL VOLUME 0



AREA CUT 145 AREA FILL 0

AREA CUT 7 AREA FILL 0

CUT VOLUME 444 FILL VOLUME 0

CUT VOLUME 15 FILL VOLUME 0

CROSS SECTION STA. 822+00 TO STA. 823+00

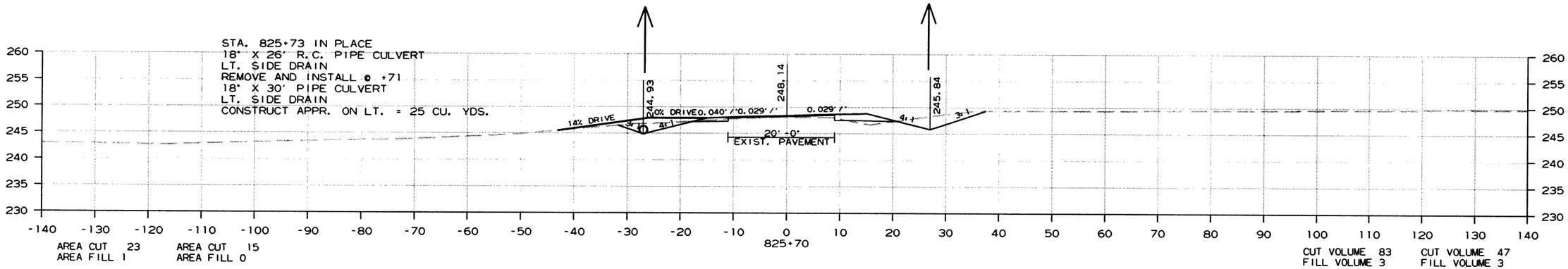
r070368.dgn 1/15/2015

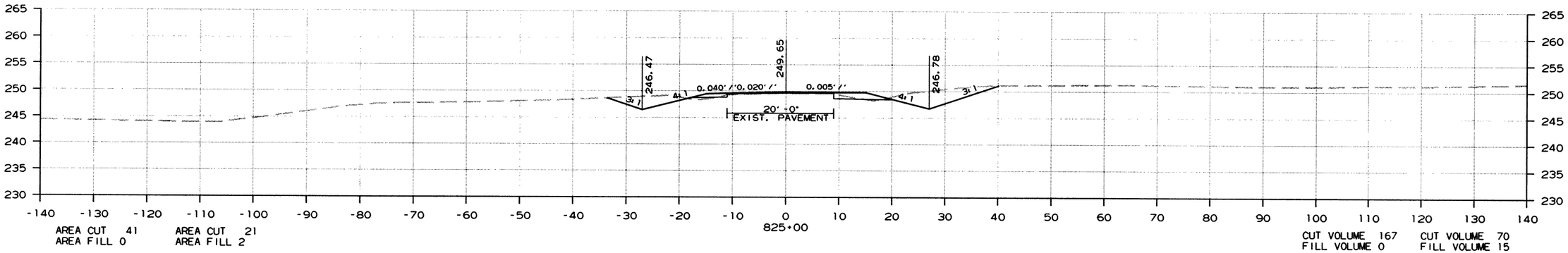
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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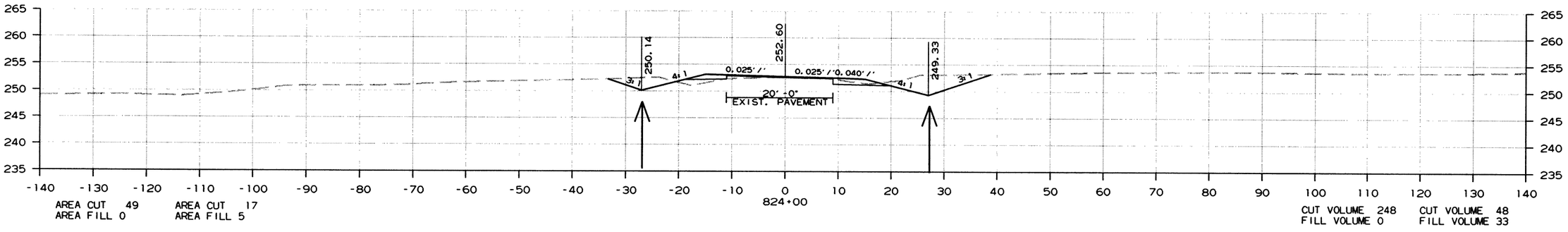
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







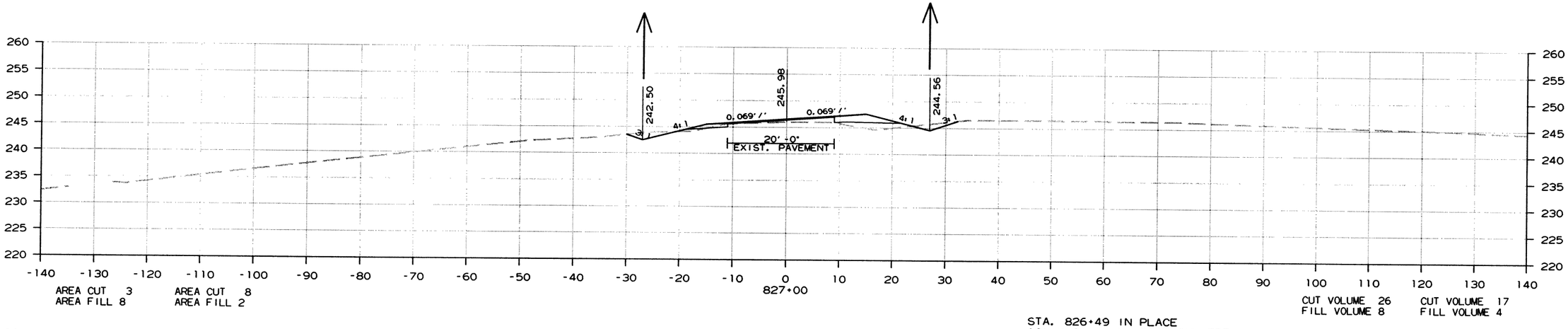
CROSS SECTION STA. 824+00 TO STA. 825+70

r070368.dgn 1/15/2015

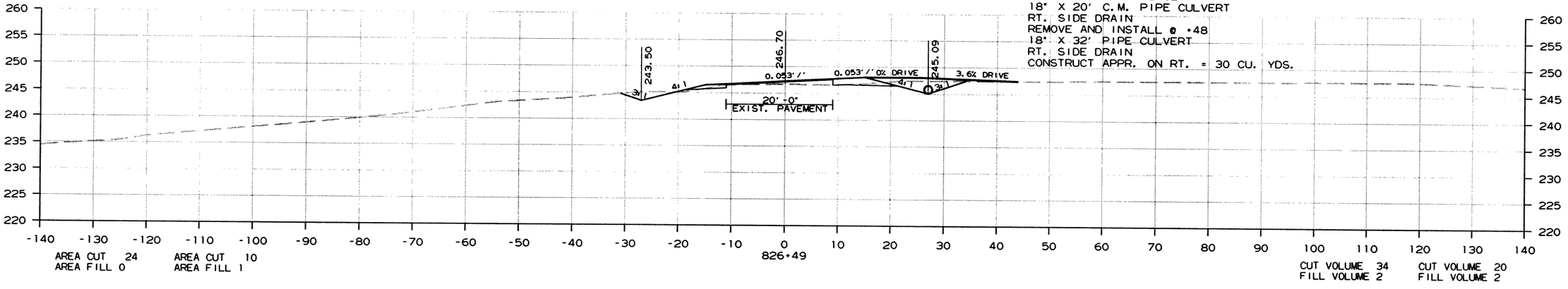
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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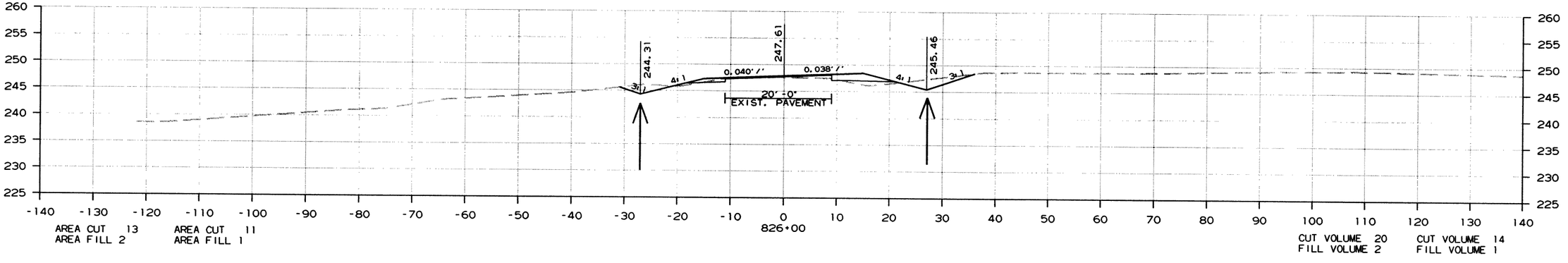
(2) CROSS SECTIONS

STAGE 1 STAGE 2



STA. 826+49 IN PLACE
18" X 20' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +48
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.





CROSS SECTION STA. 826+00 TO STA. 827+00

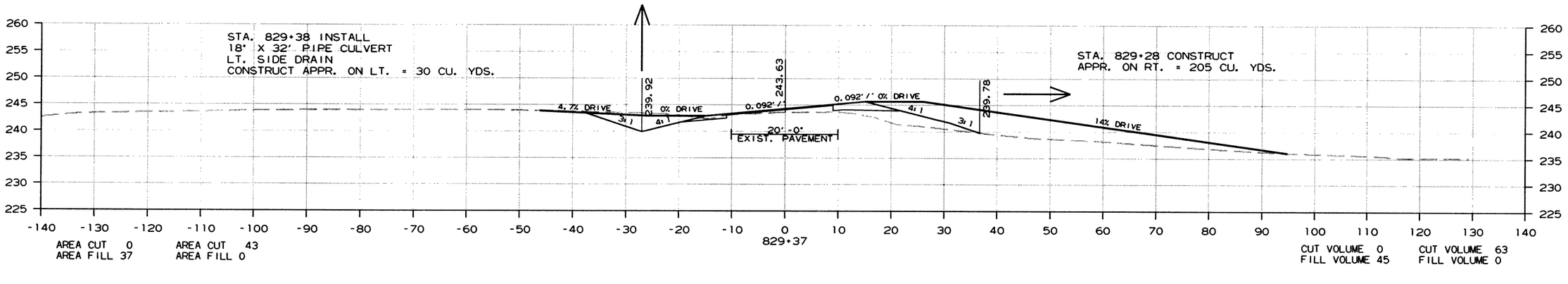
r070368.dgn 1/15/2015

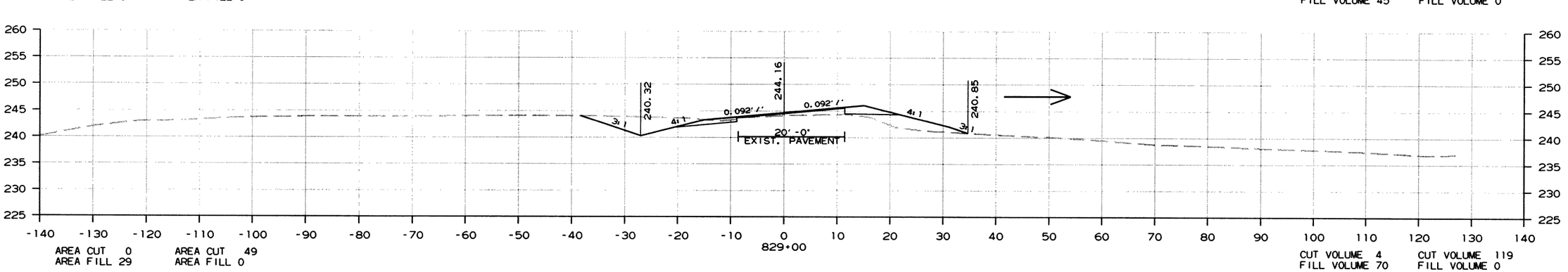
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				JOB NO.		070368	215	335

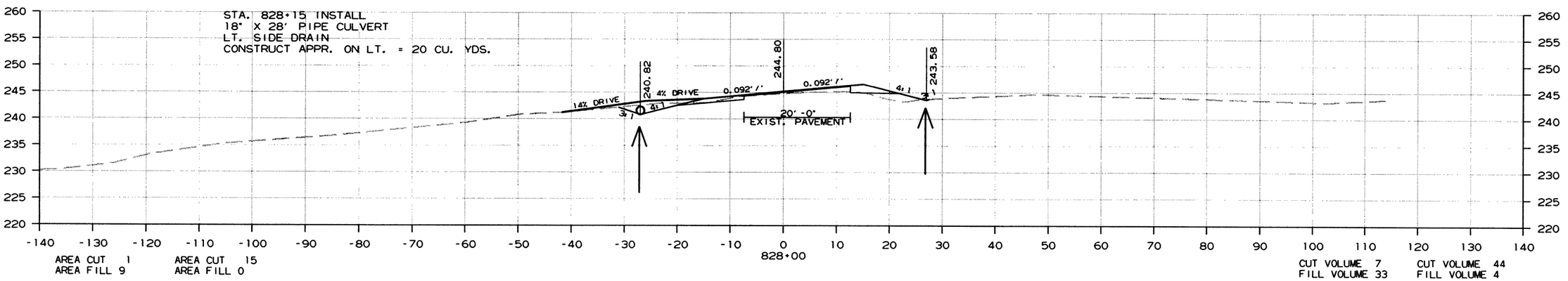
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 828+00 TO STA. 829+37

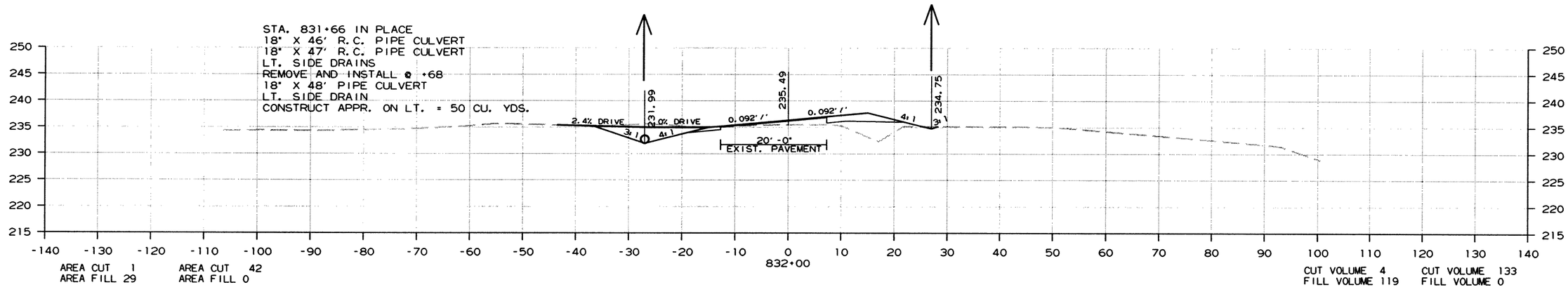
r070368.dgn 1/15/2015

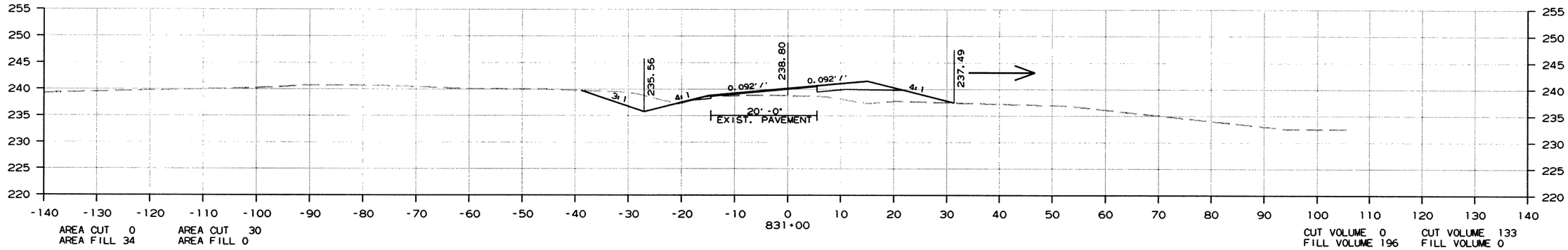
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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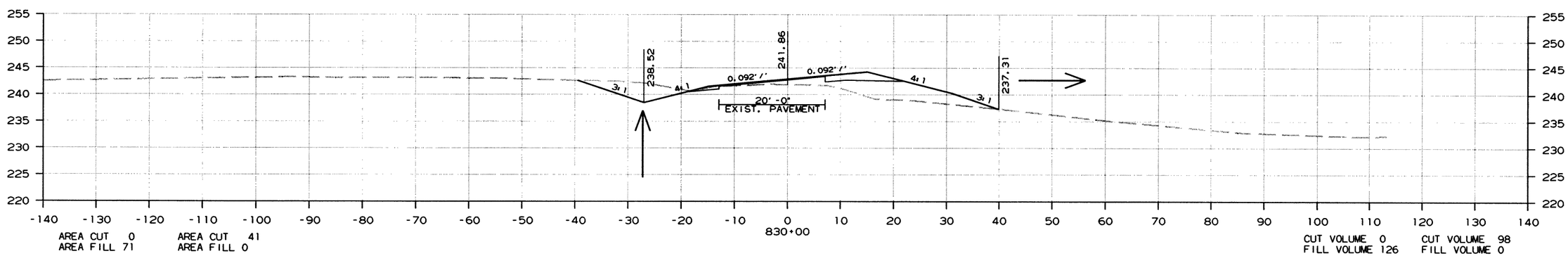
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







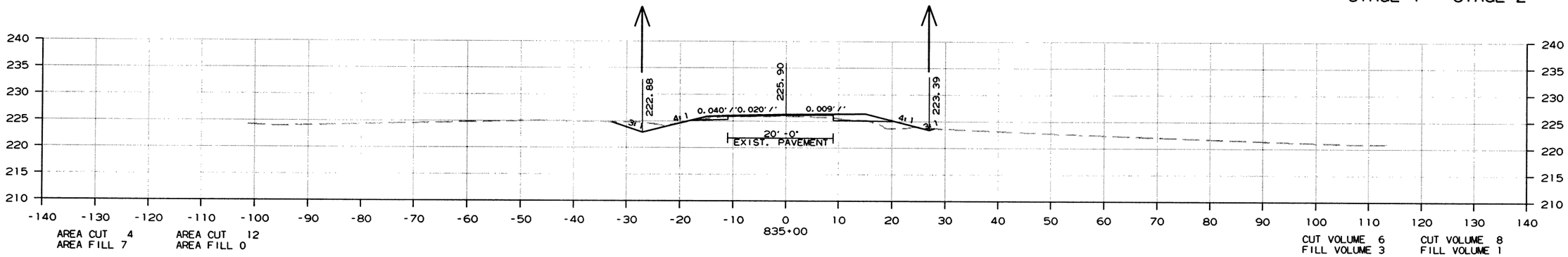
CROSS SECTION STA. 830+00 TO STA. 832+00

r070368.dgn 1/15/2015

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.		070368	217	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

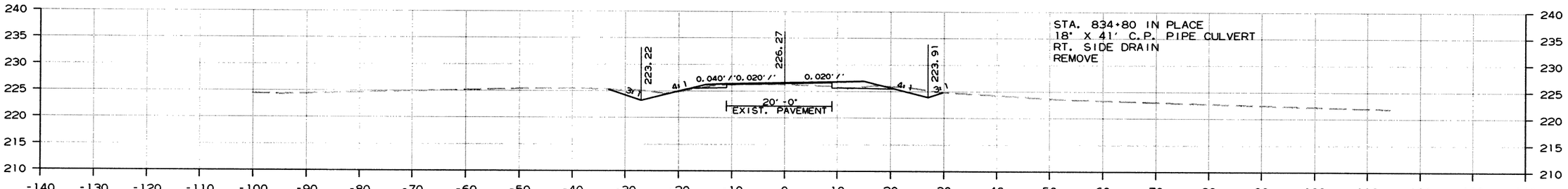


AREA CUT 4
AREA FILL 7

AREA CUT 12
AREA FILL 0

CUT VOLUME 6
FILL VOLUME 3

CUT VOLUME 8
FILL VOLUME 1



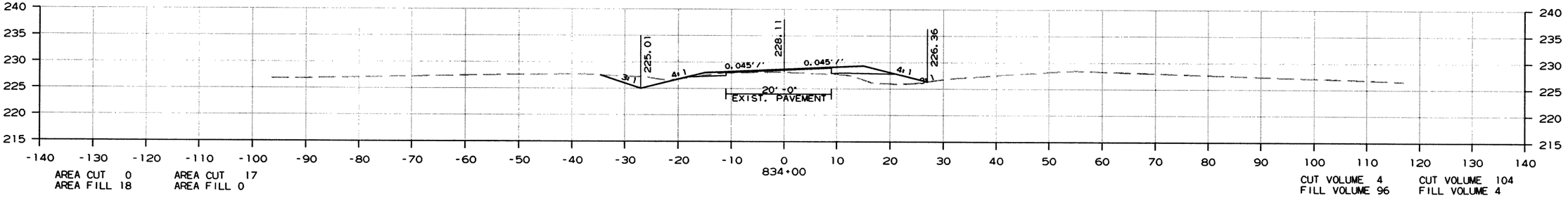
STA. 834+80 IN PLACE
18" X 41' C.P. PIPE CULVERT
RT. SIDE DRAIN
REMOVE

AREA CUT 13
AREA FILL 0

AREA CUT 12
AREA FILL 1

CUT VOLUME 21
FILL VOLUME 27

CUT VOLUME 46
FILL VOLUME 3

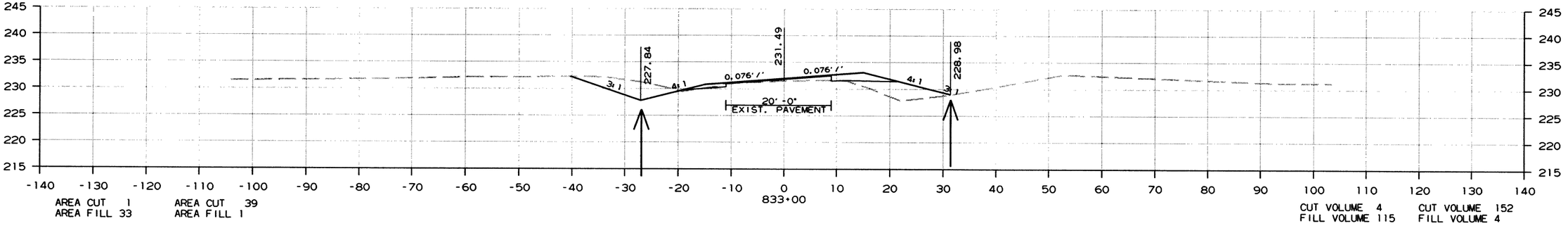


AREA CUT 0
AREA FILL 18

AREA CUT 17
AREA FILL 0

CUT VOLUME 4
FILL VOLUME 96

CUT VOLUME 104
FILL VOLUME 4



AREA CUT 1
AREA FILL 33

AREA CUT 39
AREA FILL 1

CUT VOLUME 4
FILL VOLUME 115

CUT VOLUME 152
FILL VOLUME 4

CROSS SECTION STA. 833+00 TO STA. 835+00

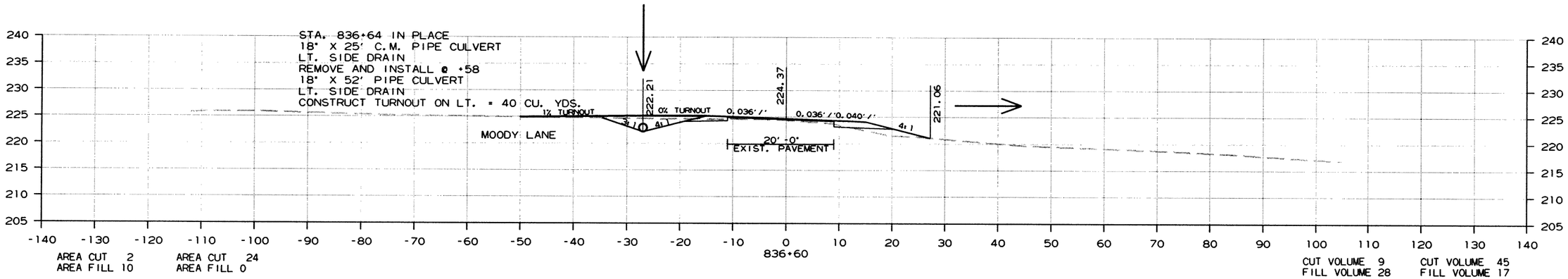
r070368.dgn 1/15/2015

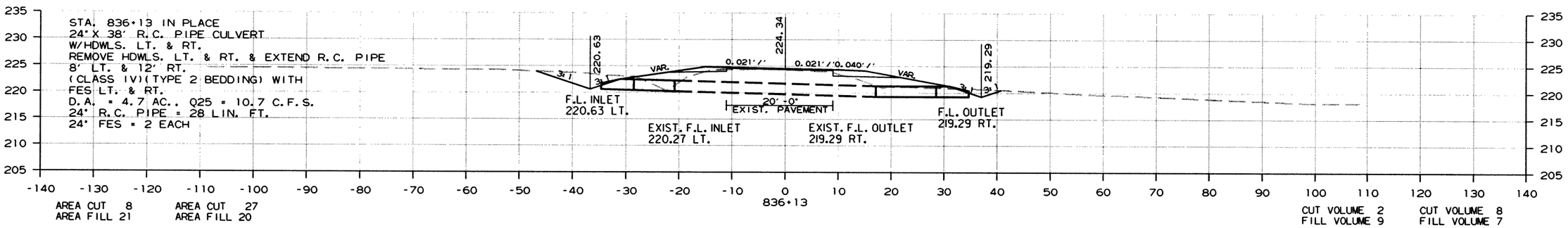
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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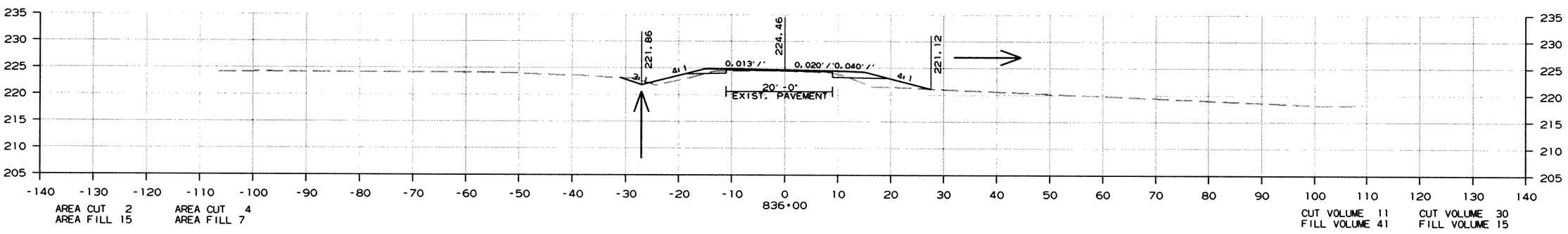
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 836+00 TO STA. 836+60

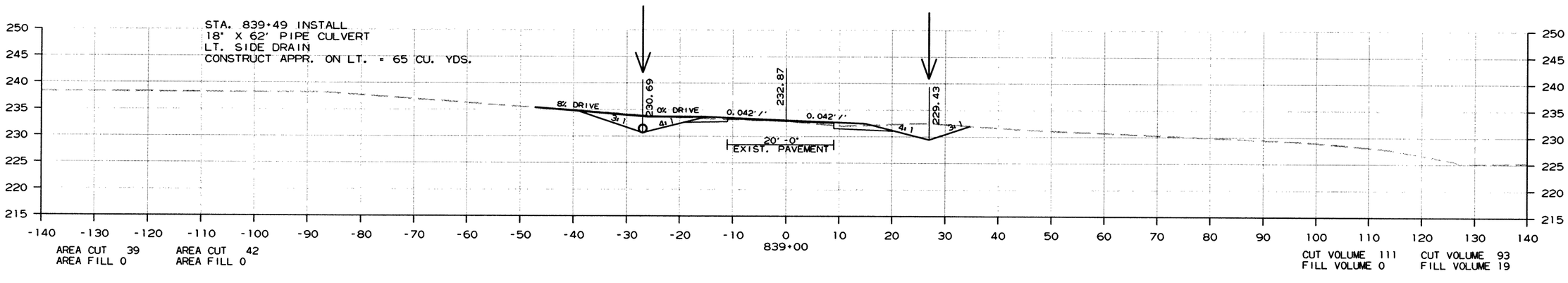
r070368.dgn 1/15/2015

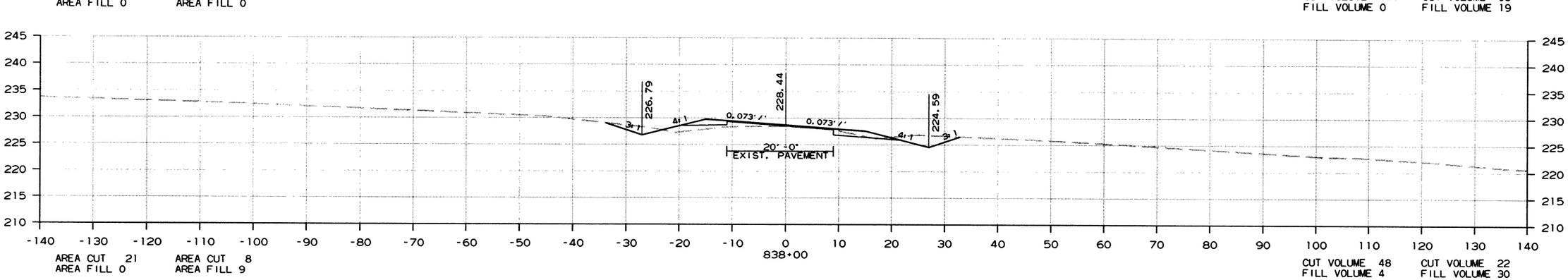
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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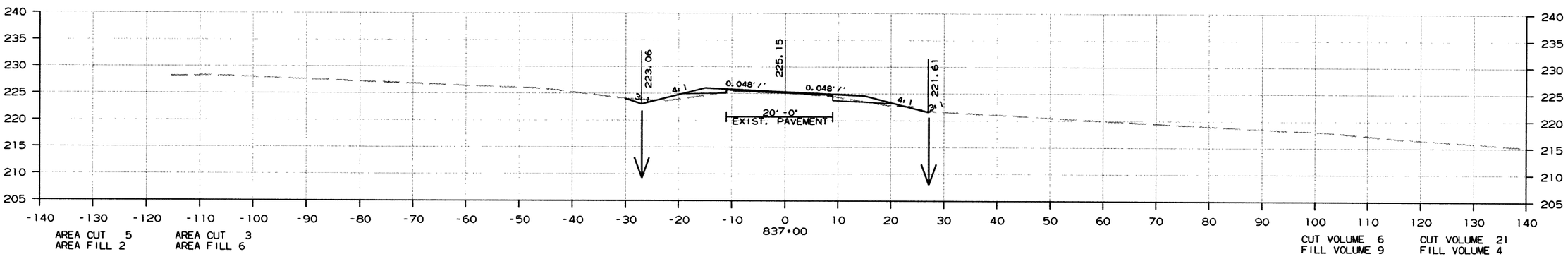
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 837+00 TO STA. 839+00

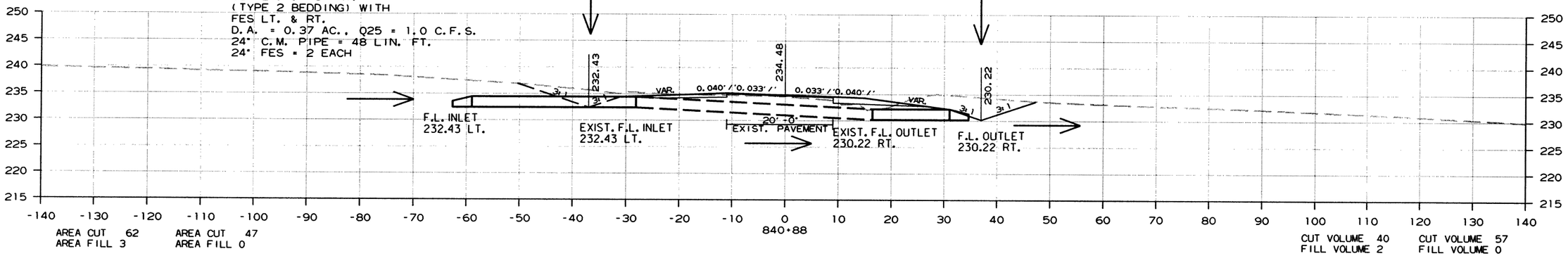
r070368.dgn 1/15/2015

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.		070368	220	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STA. 840+88 IN PLACE
24" X 45' C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE HDWLS. LT. & RT. & EXTEND C.M. PIPE
32' LT. & 16' RT.
(TYPE 2 BEDDING) WITH
FES LT. & RT.
D.A. = 0.37 AC., Q25 = 1.0 C.F.S.
24" C.M. PIPE = 48 LIN. FT.
24" FES = 2 EACH



AREA CUT 62
AREA FILL 3

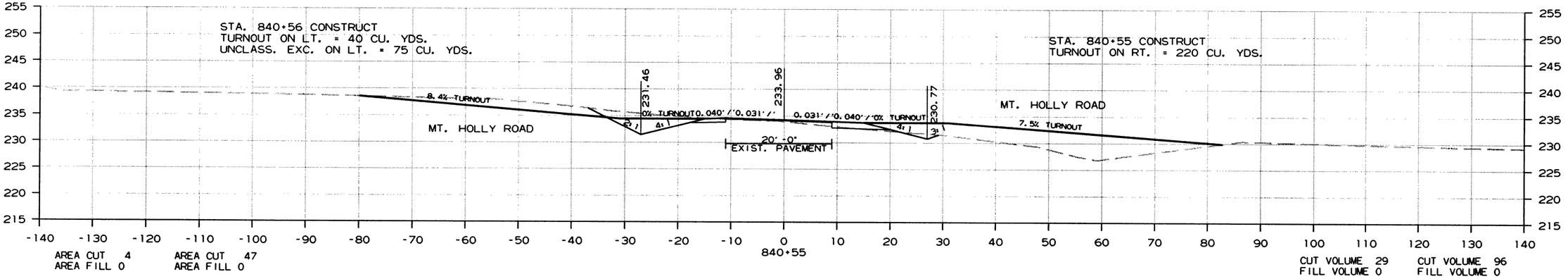
AREA CUT 47
AREA FILL 0

CUT VOLUME 40
FILL VOLUME 2

CUT VOLUME 57
FILL VOLUME 0

STA. 840+56 CONSTRUCT
TURNOUT ON LT. = 40 CU. YDS.
UNCLASS. EXC. ON LT. = 75 CU. YDS.

STA. 840+55 CONSTRUCT
TURNOUT ON RT. = 220 CU. YDS.

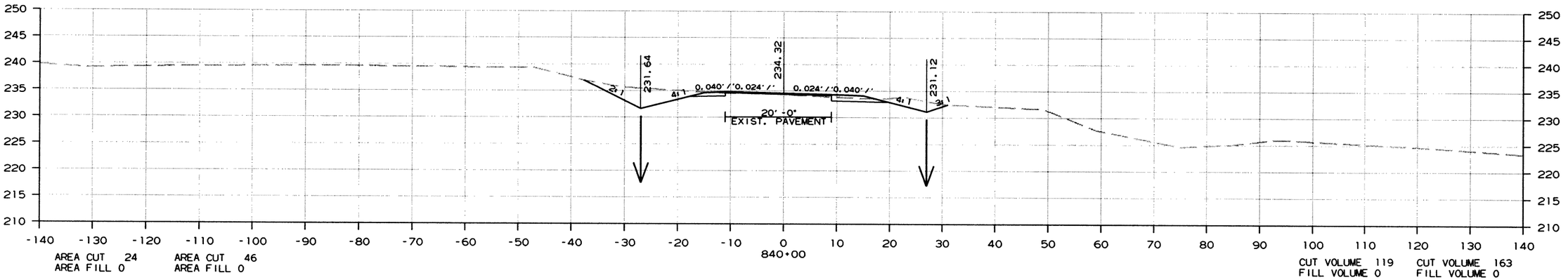


AREA CUT 4
AREA FILL 0

AREA CUT 47
AREA FILL 0

CUT VOLUME 29
FILL VOLUME 0

CUT VOLUME 96
FILL VOLUME 0



AREA CUT 24
AREA FILL 0

AREA CUT 46
AREA FILL 0

CUT VOLUME 119
FILL VOLUME 0

CUT VOLUME 163
FILL VOLUME 0

CROSS SECTION STA. 840+00 TO STA. 840+88

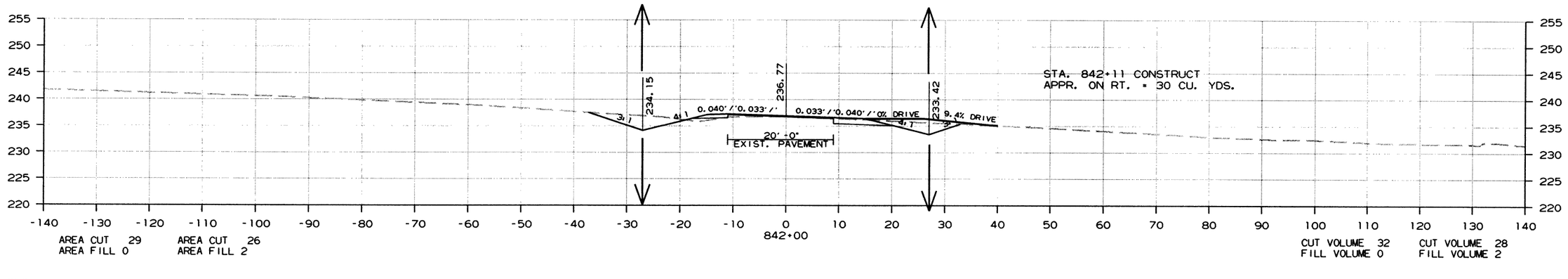
r070368.dgn 1/15/2015

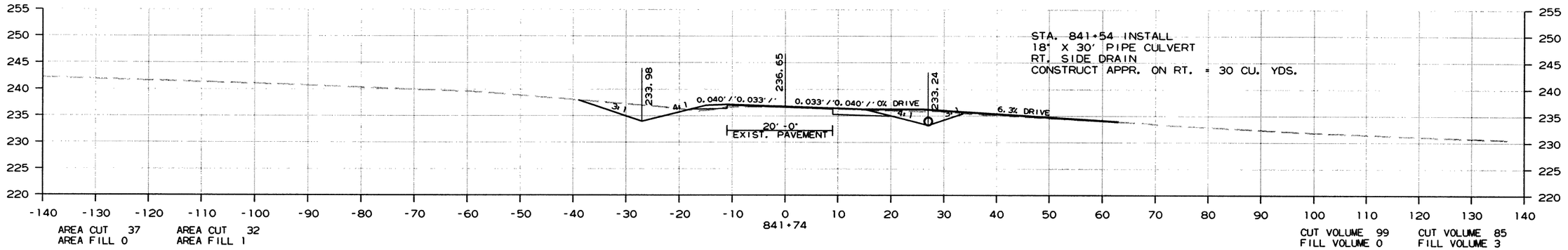
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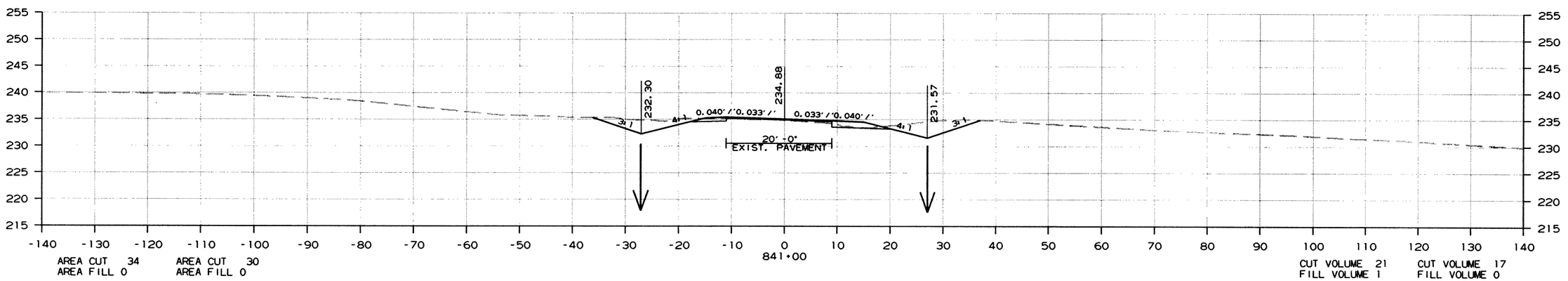
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 841+00 TO STA. 842+00

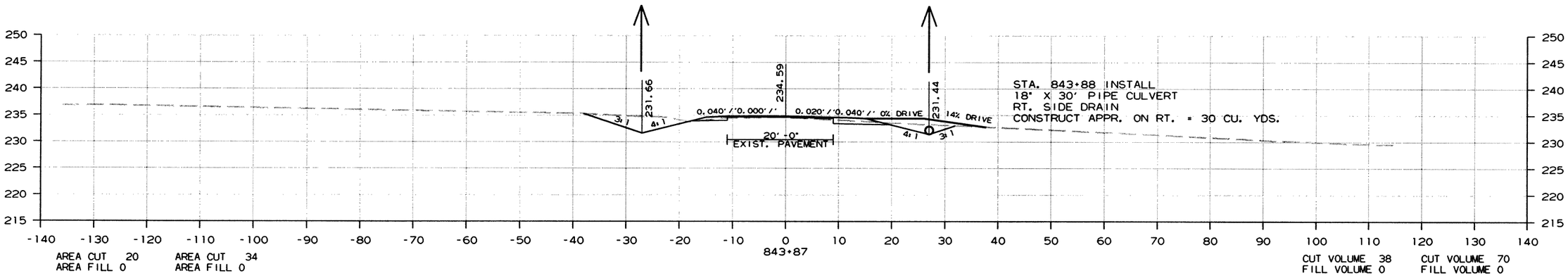
r070368.dgn 1/15/2015

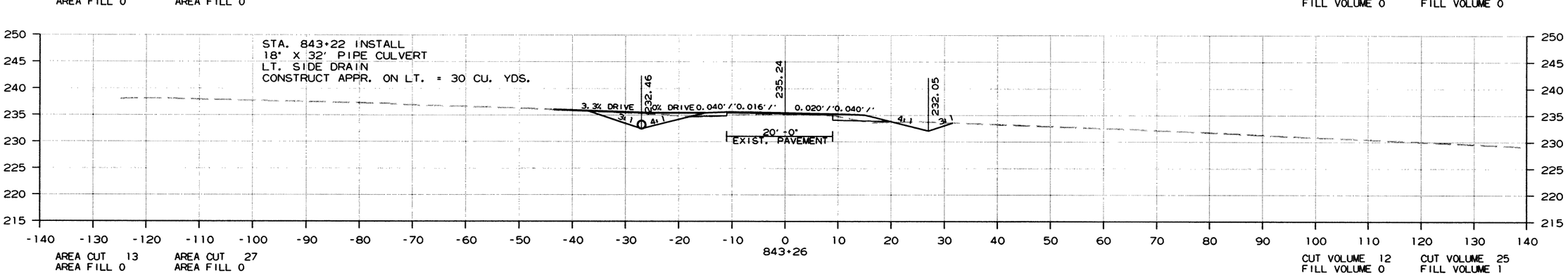
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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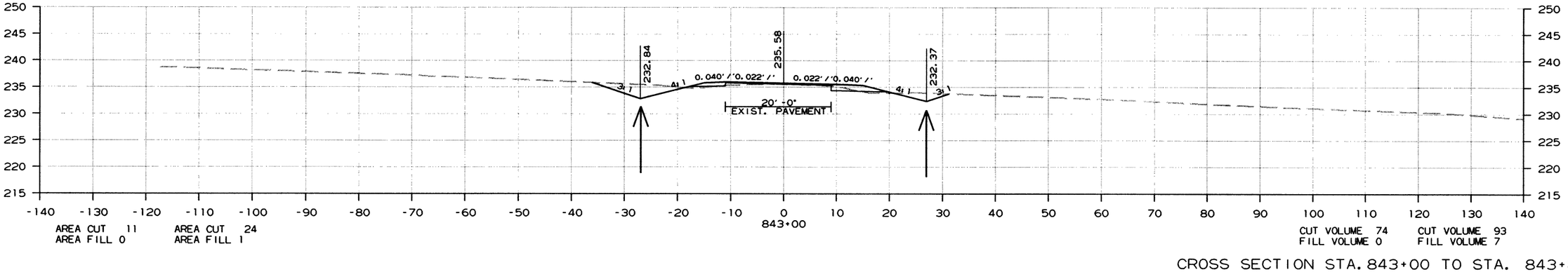
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2





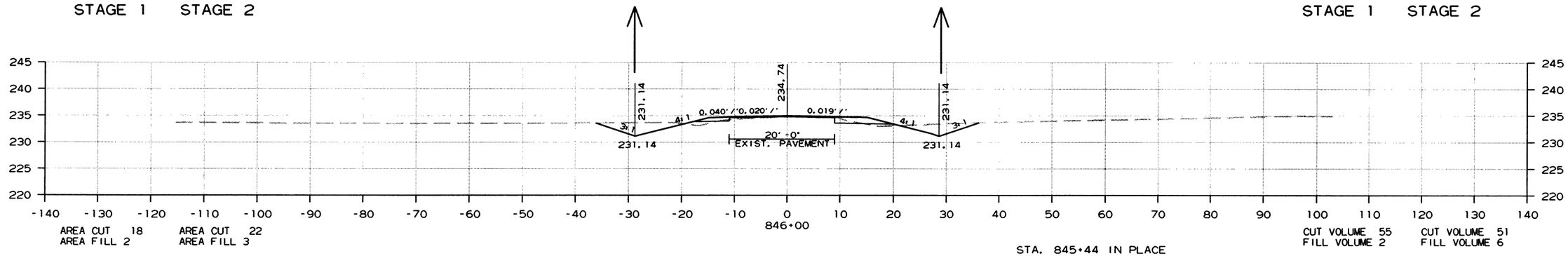


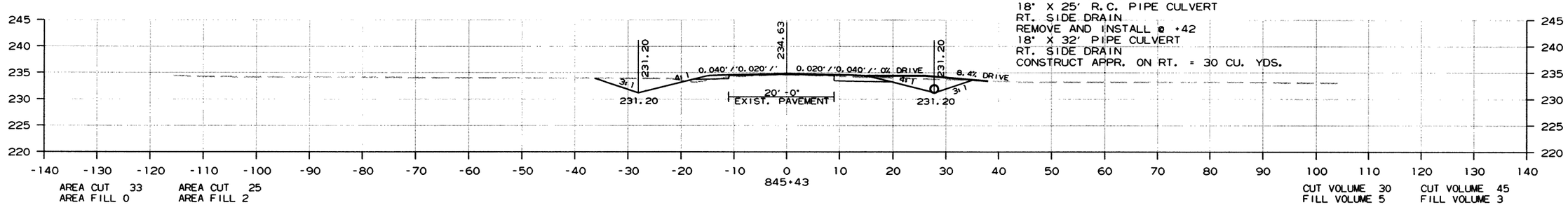
CROSS SECTION STA. 843+00 TO STA. 843+87

r070368.dgn 1/15/2015

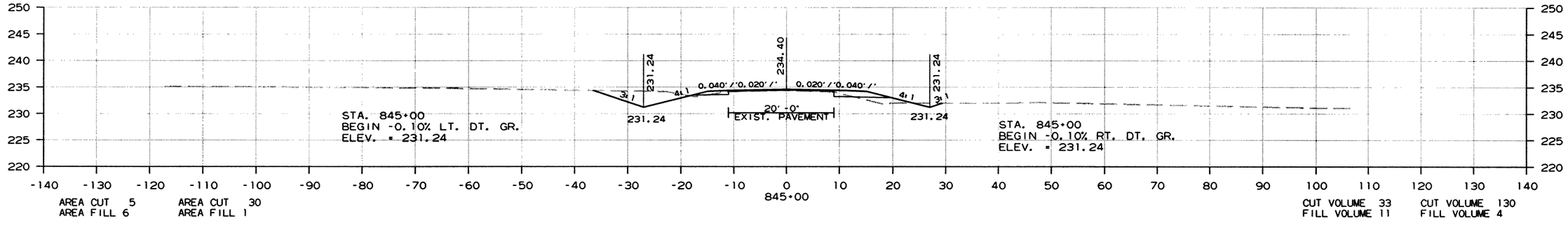
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	223	335

(2) CROSS SECTIONS



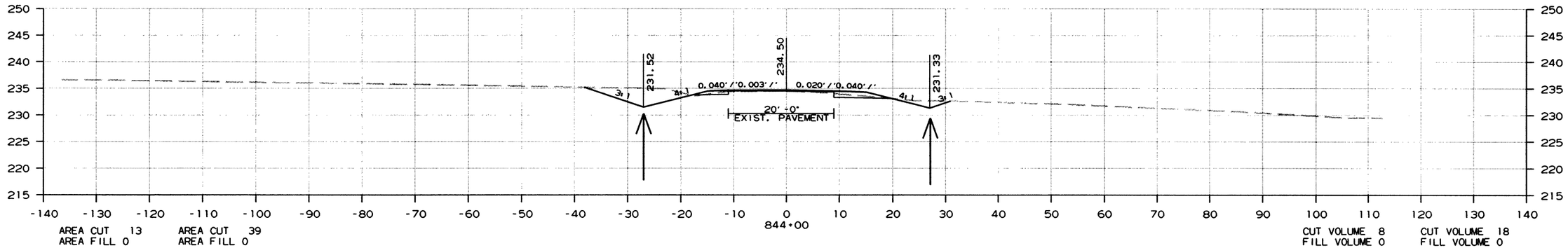


STA. 845+44 IN PLACE
18" X 25' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +42
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.



STA. 845+00
BEGIN -0.10% LT. DT. GR.
ELEV. = 231.24

STA. 845+00
BEGIN -0.10% RT. DT. GR.
ELEV. = 231.24



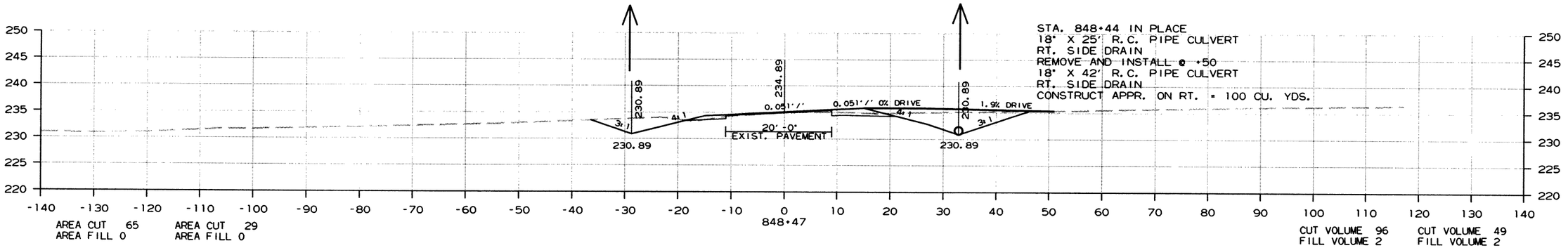
CROSS SECTION STA. 844+00 TO STA. 846+00

r070368.dgn 1/15/2015

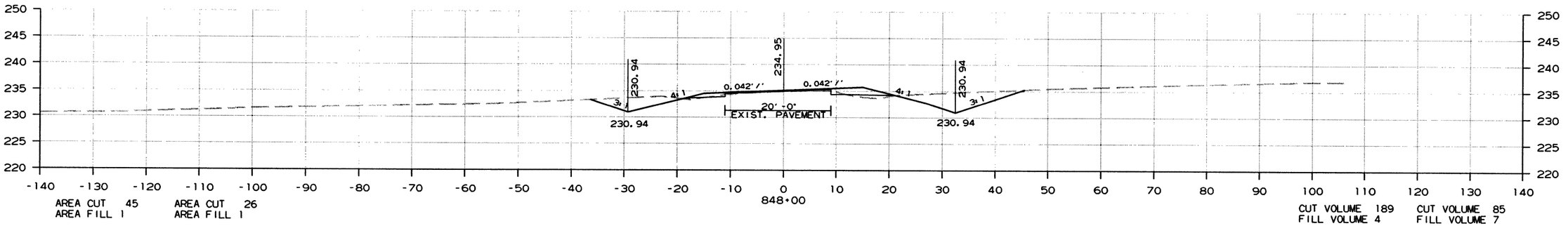
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	224	335

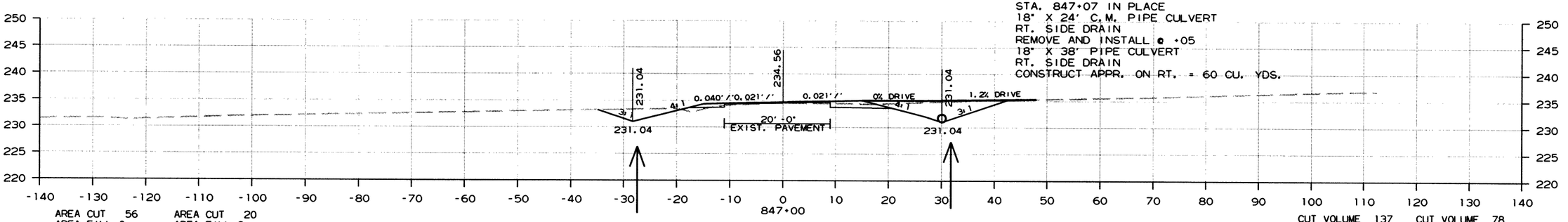
(2) CROSS SECTIONS

STAGE 1 STAGE 2



STAGE 1 STAGE 2





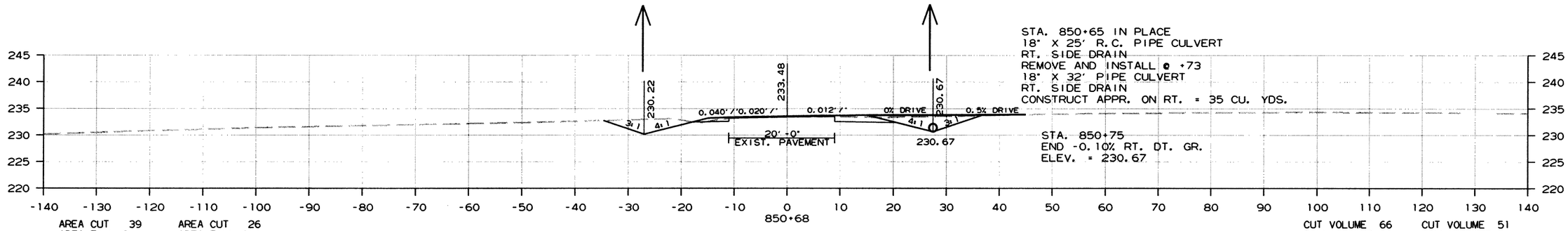
CROSS SECTION STA. 847+00 TO STA. 848+47

r070368.dgn 1/15/2015

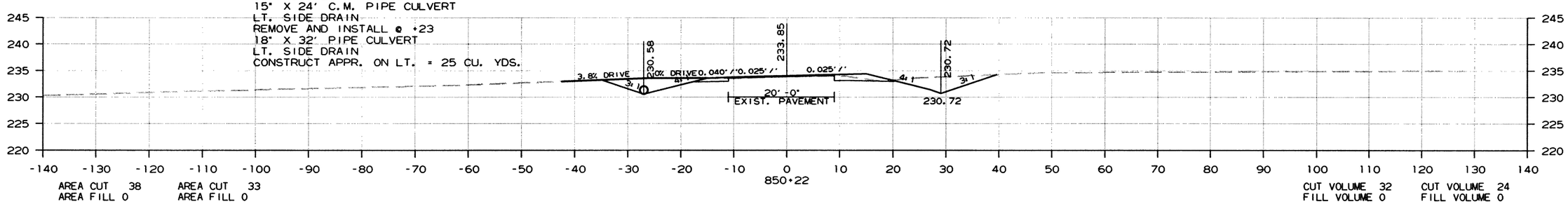
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	225	335

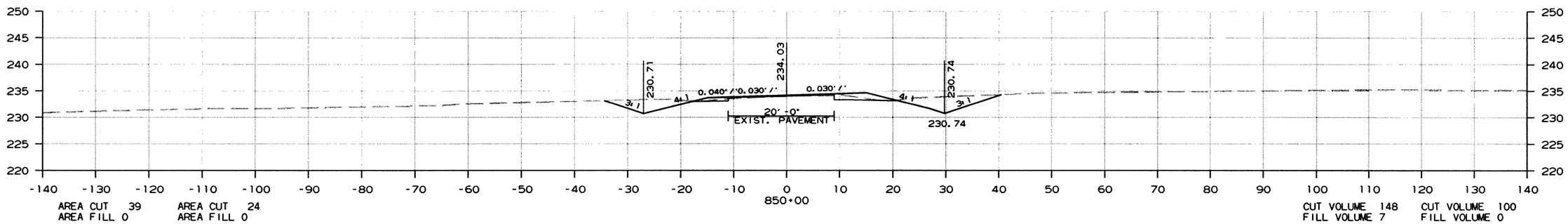
(2) CROSS SECTIONS

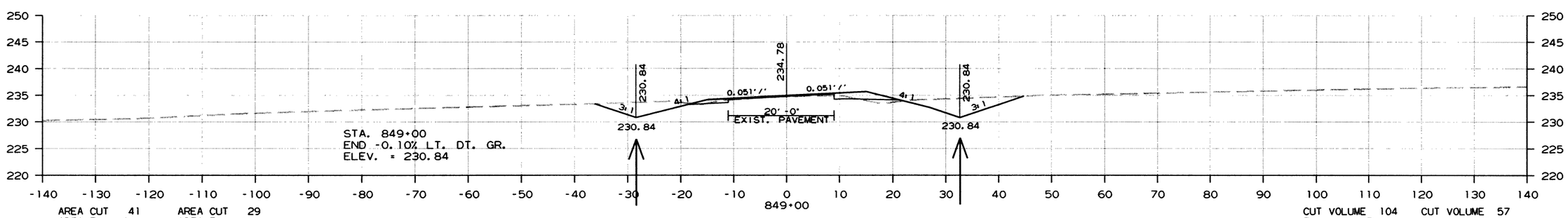
STAGE 1 STAGE 2



STAGE 1 STAGE 2







CROSS SECTION STA. 849+00 TO STA. 850+68

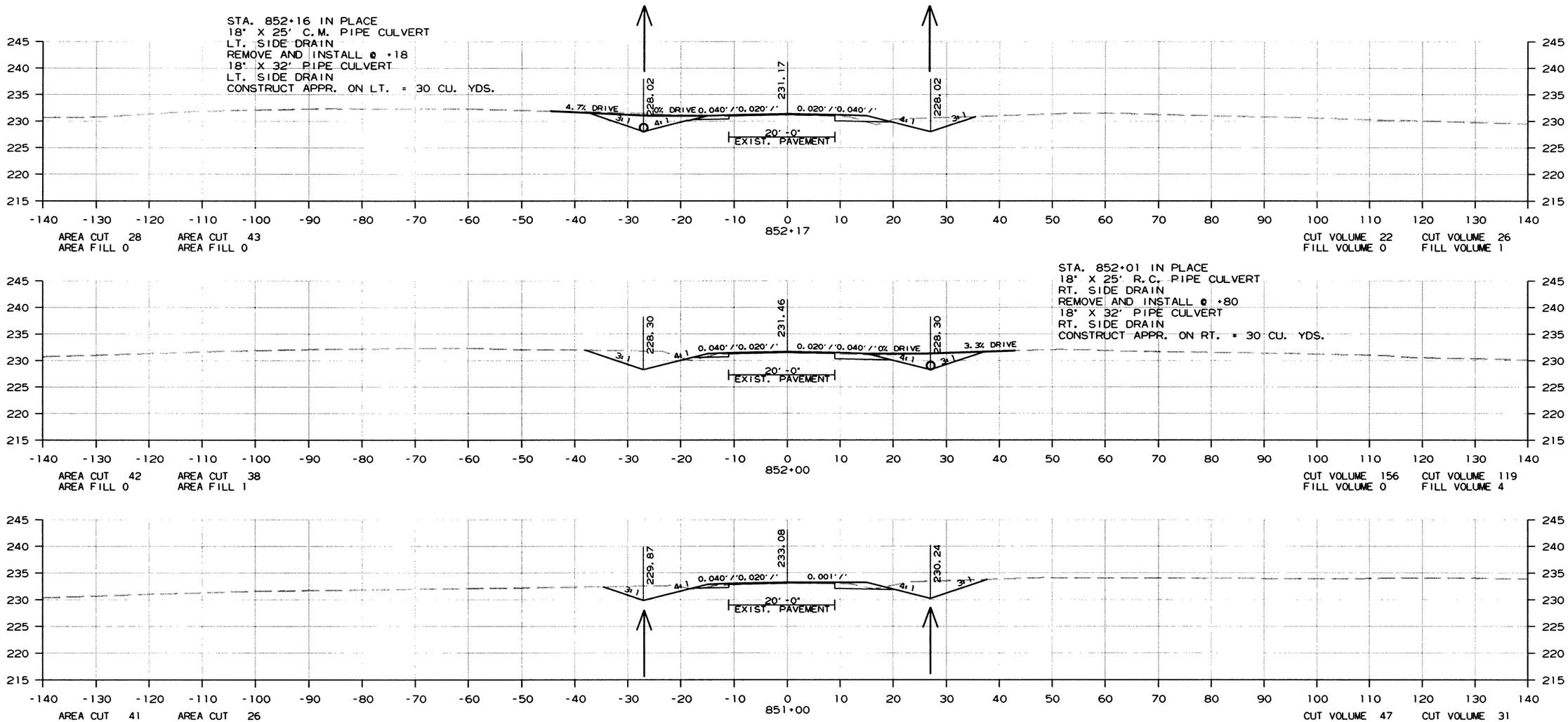
r070368.dgn 1/15/2015

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.		070368	226	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 851+00 TO STA. 852+17

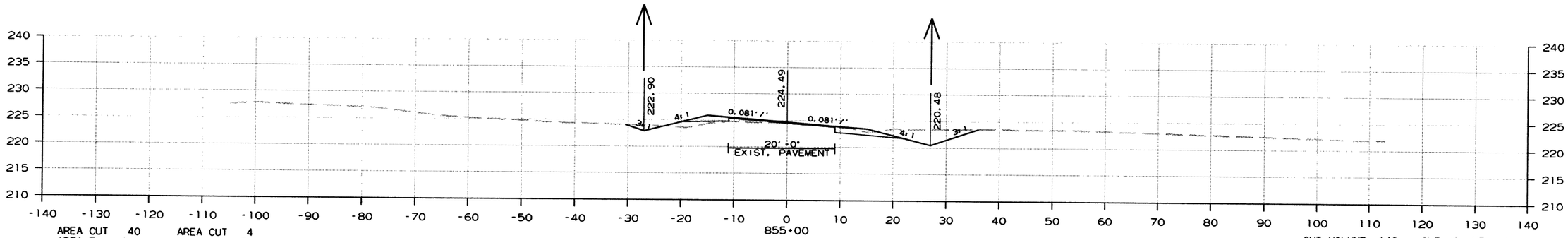
r070368.dgn 1/15/2015

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.		070368	227	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



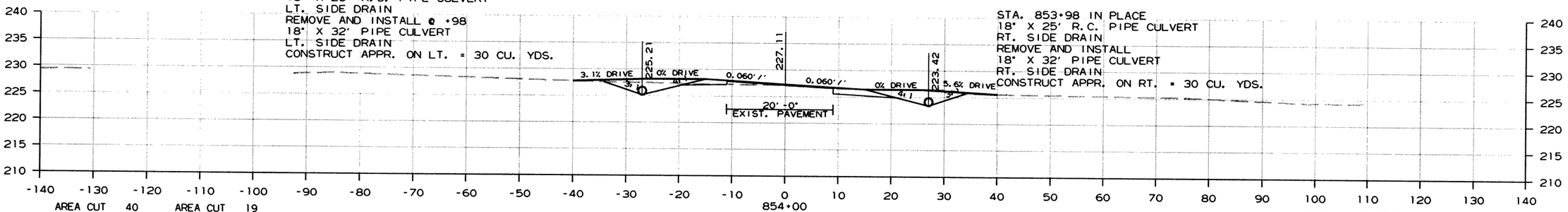
AREA CUT 40
AREA FILL 0

AREA CUT 4
AREA FILL 7

CUT VOLUME 148
FILL VOLUME 0

CUT VOLUME 44
FILL VOLUME 15

STA. 853+95 IN PLACE
18" X 25' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +98
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.



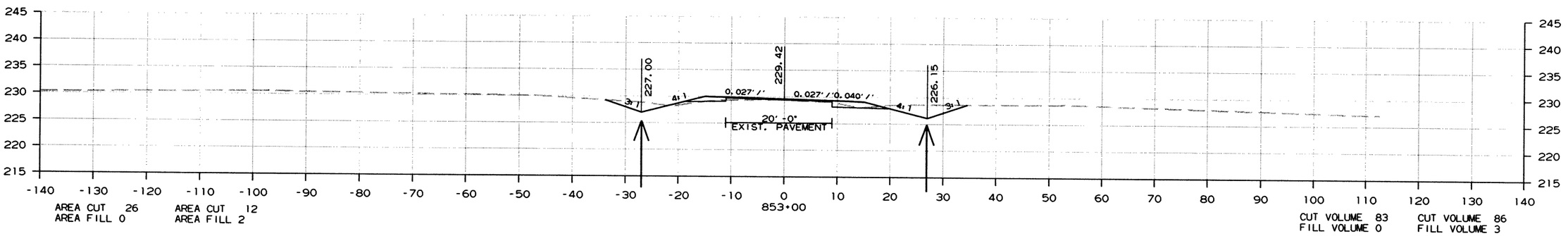
AREA CUT 40
AREA FILL 0

AREA CUT 19
AREA FILL 0

CUT VOLUME 122
FILL VOLUME 0

CUT VOLUME 59
FILL VOLUME 4

STA. 853+98 IN PLACE
18" X 25' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.



AREA CUT 26
AREA FILL 0

AREA CUT 12
AREA FILL 2

CUT VOLUME 83
FILL VOLUME 0

CUT VOLUME 86
FILL VOLUME 3

CROSS SECTION STA. 853+00 TO STA. 855+00

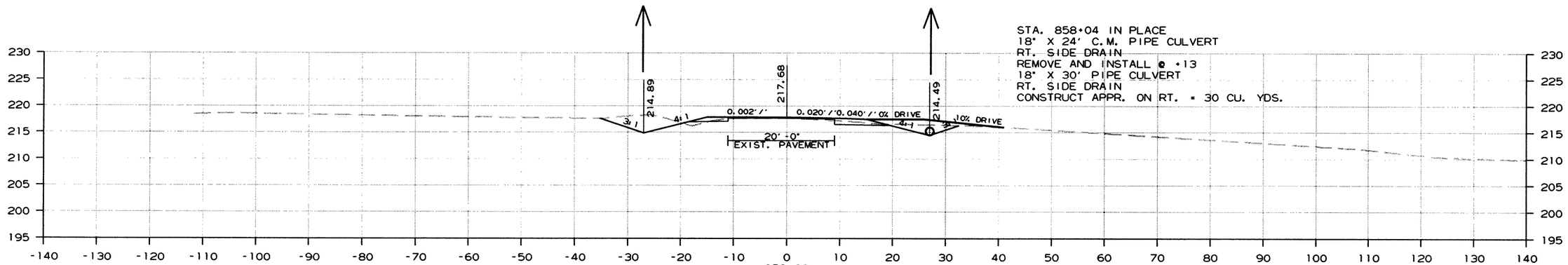
r070368.dgn 1/15/2015

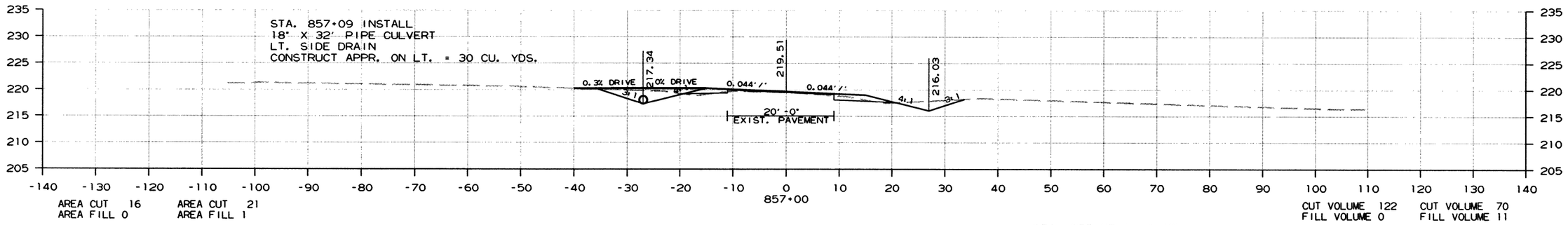
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	228	335

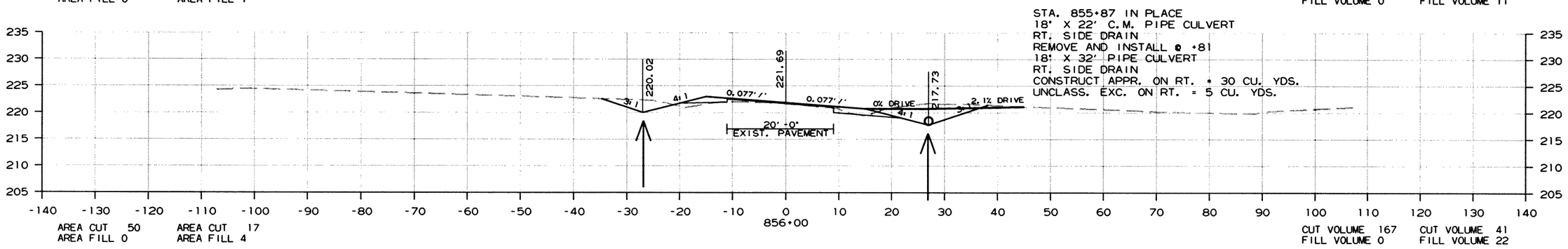
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 856+00 TO STA. 858+00

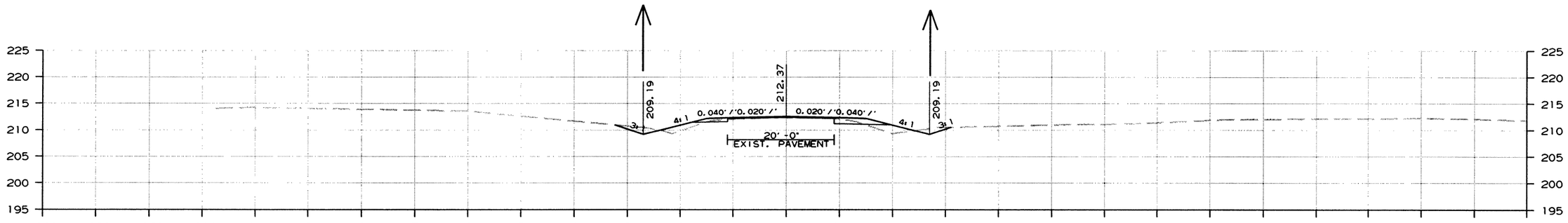
r070368.dgn 1/15/2015

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.		070368	229	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2

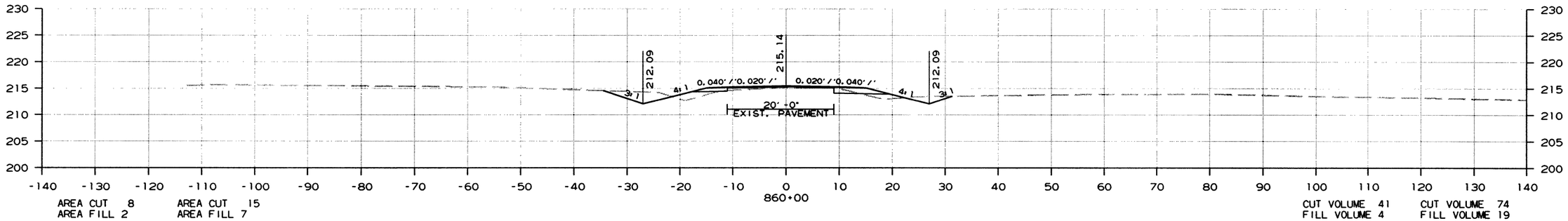


AREA CUT 7
AREA FILL 8

AREA CUT 7
AREA FILL 7

CUT VOLUME 30
FILL VOLUME 19

CUT VOLUME 41
FILL VOLUME 26

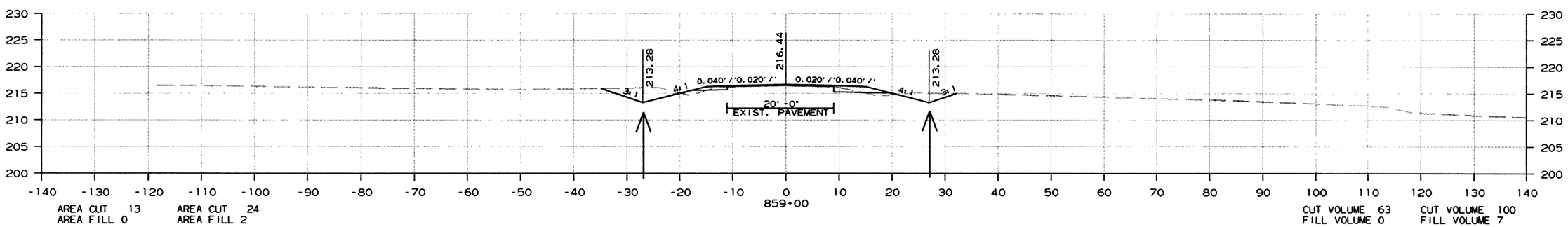


AREA CUT 8
AREA FILL 2

AREA CUT 15
AREA FILL 7

CUT VOLUME 41
FILL VOLUME 4

CUT VOLUME 74
FILL VOLUME 19



AREA CUT 13
AREA FILL 0

AREA CUT 24
AREA FILL 2

CUT VOLUME 63
FILL VOLUME 0

CUT VOLUME 100
FILL VOLUME 7

CROSS SECTION STA. 859+00 TO STA. 861+00

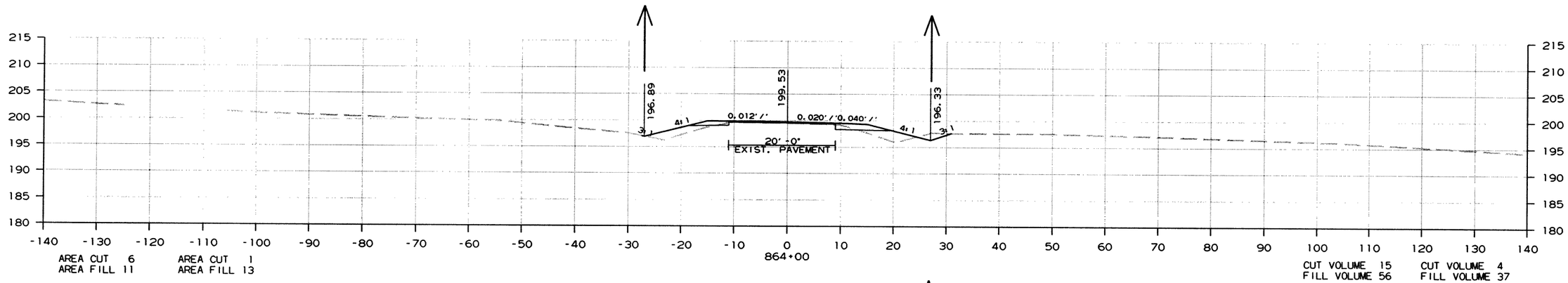
r070368.dgn 1/15/2015

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.		070368	230	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2

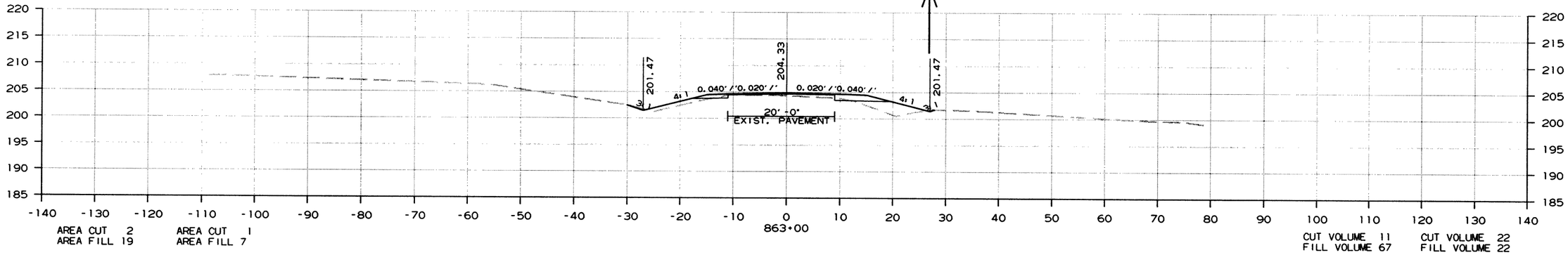


AREA CUT 6
AREA FILL 11

AREA CUT 1
AREA FILL 13

CUT VOLUME 15
FILL VOLUME 56

CUT VOLUME 4
FILL VOLUME 37

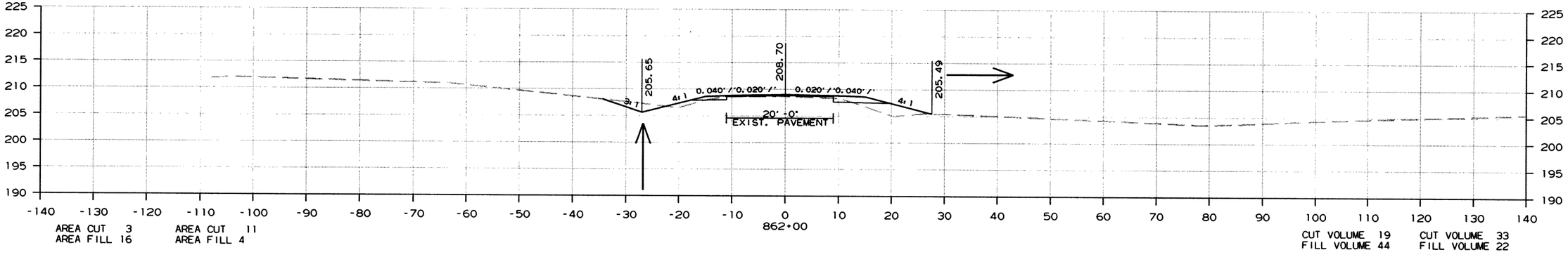


AREA CUT 2
AREA FILL 19

AREA CUT 1
AREA FILL 7

CUT VOLUME 11
FILL VOLUME 67

CUT VOLUME 22
FILL VOLUME 22



AREA CUT 3
AREA FILL 16

AREA CUT 11
AREA FILL 4

CUT VOLUME 19
FILL VOLUME 44

CUT VOLUME 33
FILL VOLUME 22

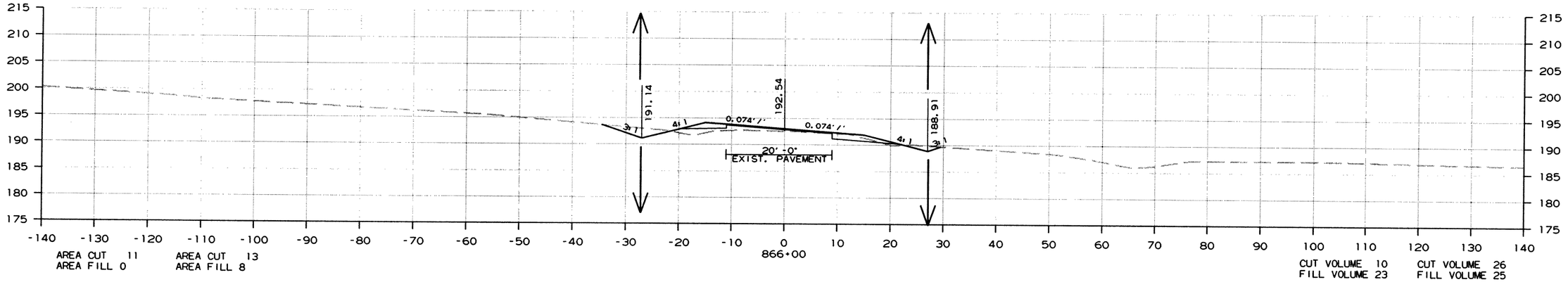
CROSS SECTION STA. 862+00 TO STA. 864+00

r070368.dgn 1/15/2015

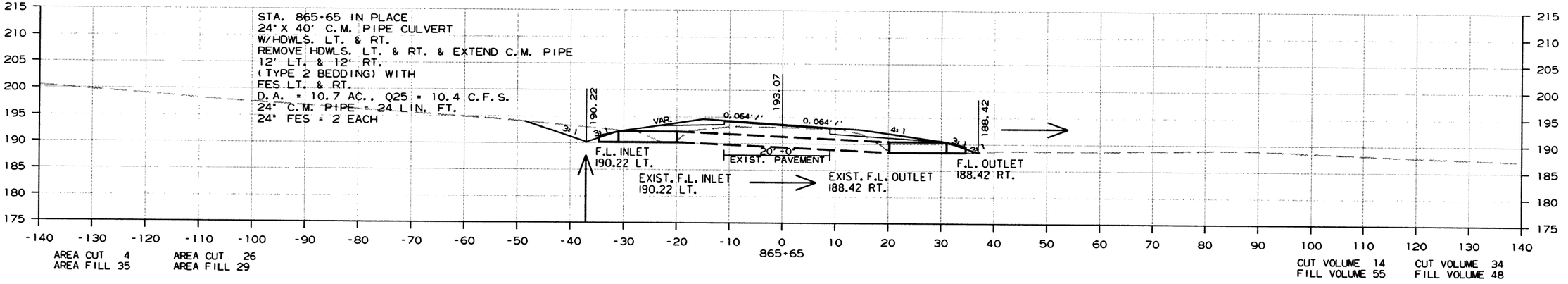
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	231	335

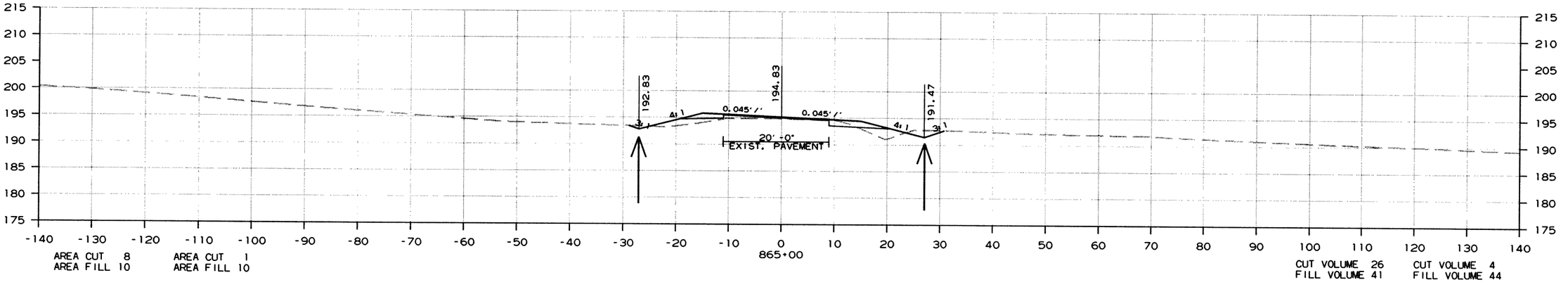
(2) CROSS SECTIONS

STAGE 1 STAGE 2



STAGE 1 STAGE 2





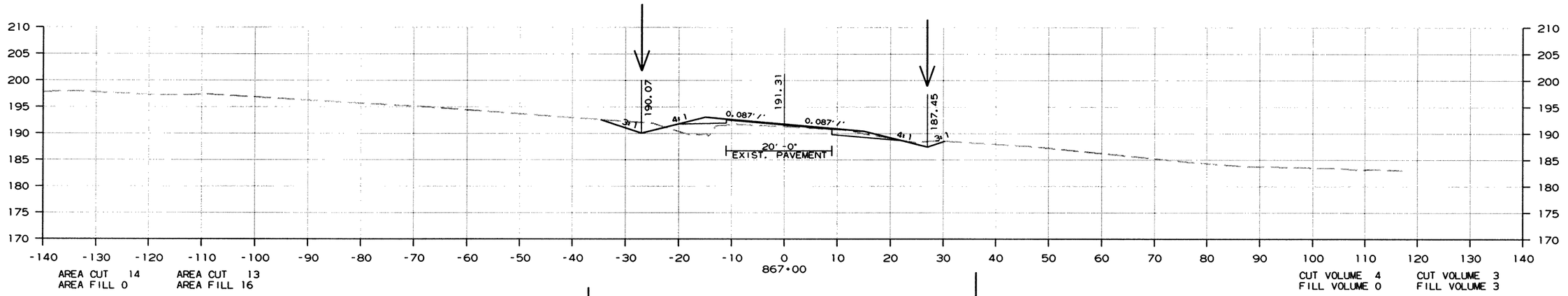
CROSS SECTION STA. 865+00 TO STA. 866+00

r070368.dgn 1/15/2015

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.		070368	232	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2



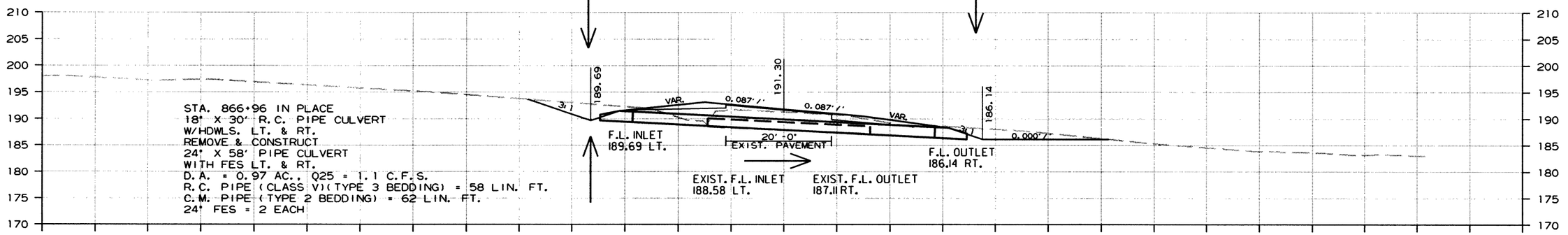
AREA CUT 14
AREA FILL 0

AREA CUT 13
AREA FILL 16

CUT VOLUME 4
FILL VOLUME 0

CUT VOLUME 3
FILL VOLUME 3

STAGE 1 STAGE 2



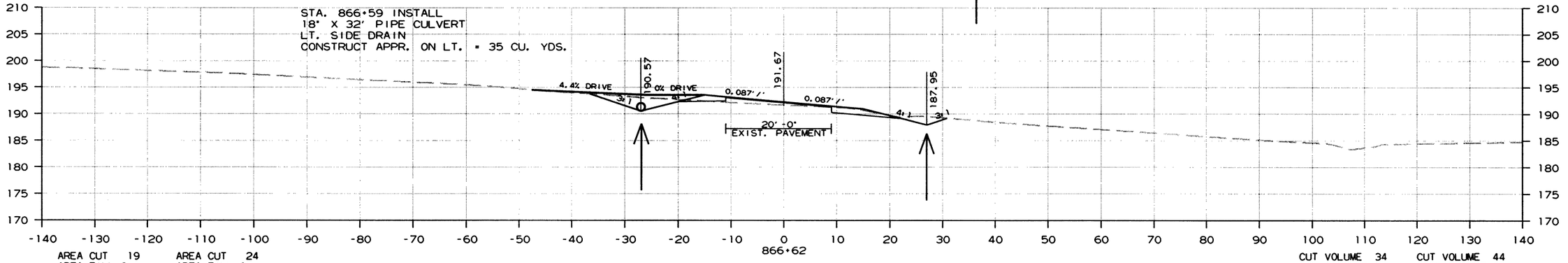
STA. 866+96 IN PLACE
18" X 30' R.C. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE & CONSTRUCT
24" X 58' PIPE CULVERT
WITH FES LT. & RT.
D.A. = 0.97 AC., Q25 = 1.1 C.F.S.
R.C. PIPE (CLASS V)(TYPE 3 BEDDING) = 58 LIN. FT.
C.M. PIPE (TYPE 2 BEDDING) = 62 LIN. FT.
24" FES = 2 EACH

AREA CUT 43
AREA FILL 0

AREA CUT 31
AREA FILL 19

CUT VOLUME 39
FILL VOLUME 0

CUT VOLUME 35
FILL VOLUME 13



AREA CUT 19
AREA FILL 0

AREA CUT 24
AREA FILL 0

CUT VOLUME 34
FILL VOLUME 0

CUT VOLUME 44
FILL VOLUME 9

CROSS SECTION STA. 866+62 TO STA. 867+00

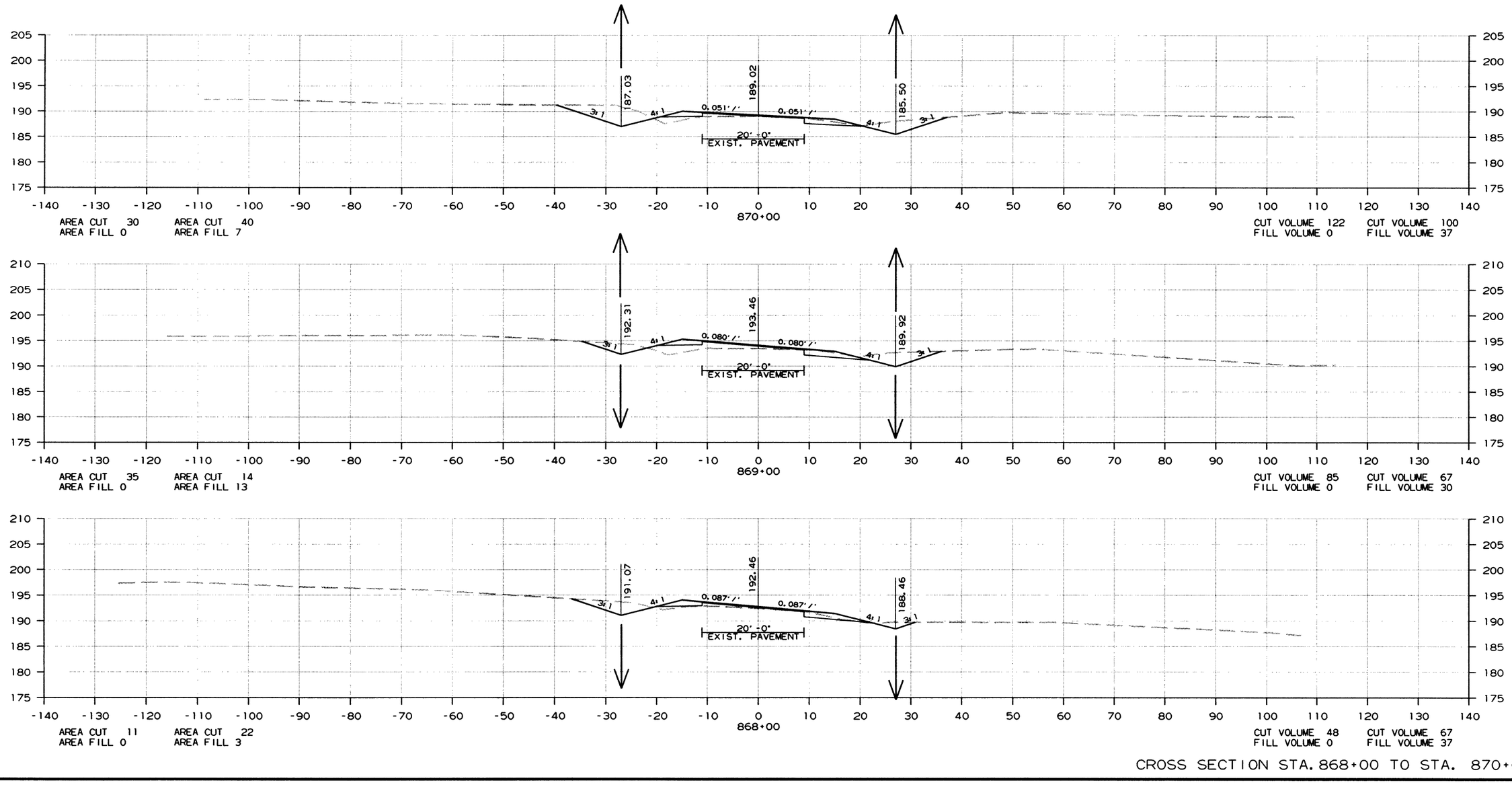
r070368.dgn 1/15/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	233	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 868+00 TO STA. 870+00

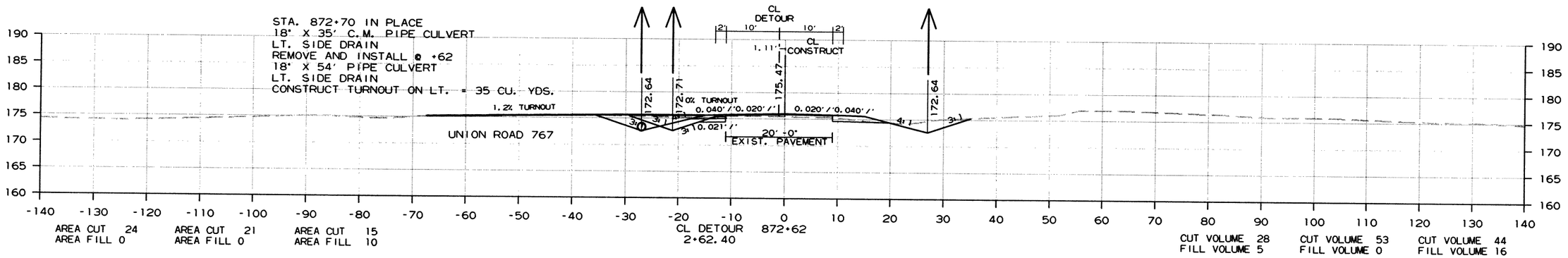
r070368.dgn 1/15/2015

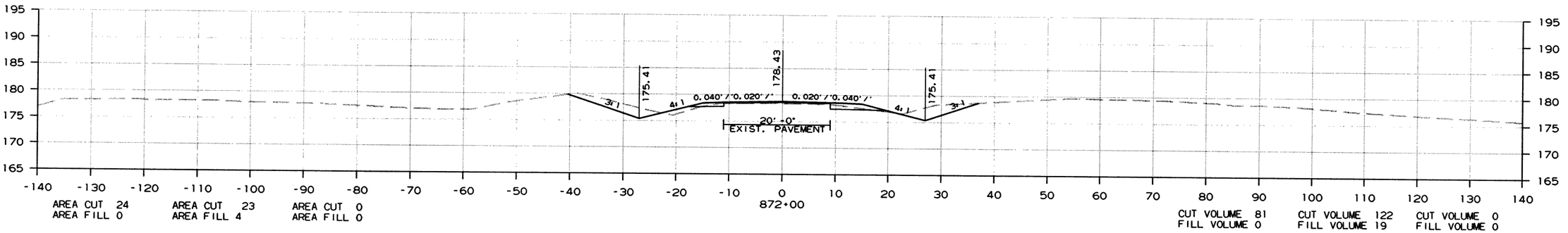
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	234	335

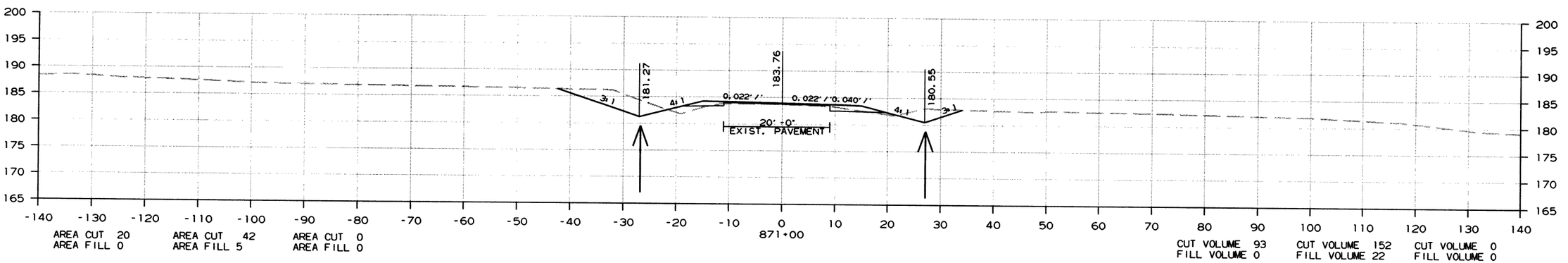
(2) CROSS SECTIONS

STAGE 1 STAGE 2 STAGE 3

STAGE 1 STAGE 2 STAGE 3







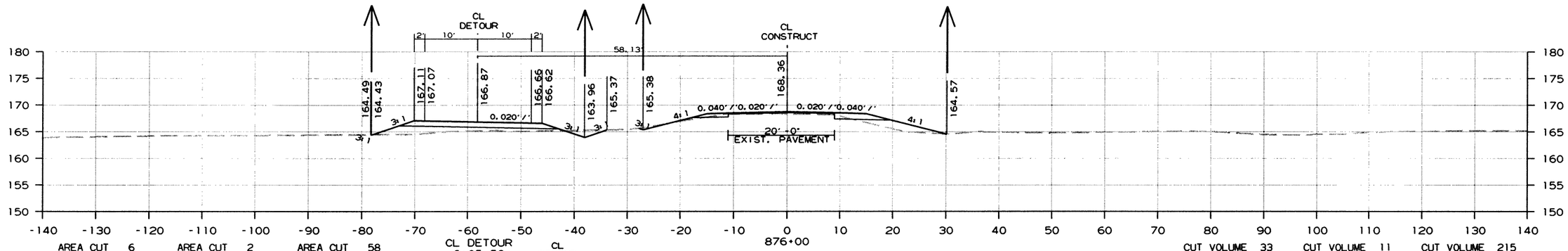
CROSS SECTION STA. 871+00 TO STA. 872+62

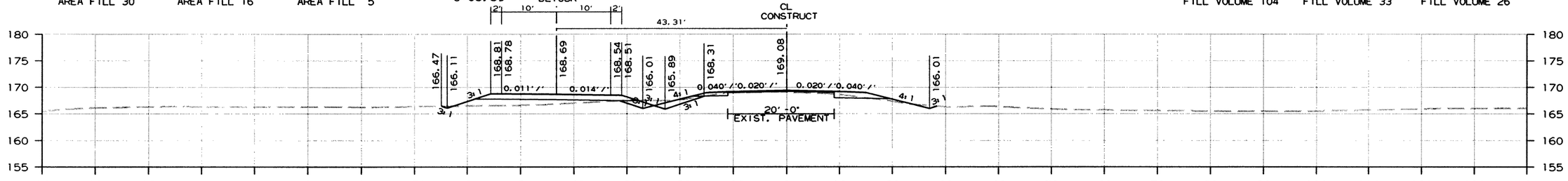
r070368.dgn 1/15/2015

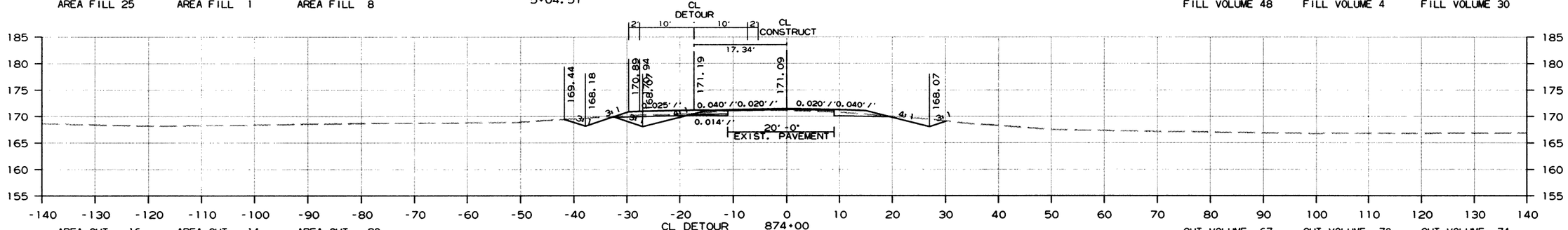
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	235	335

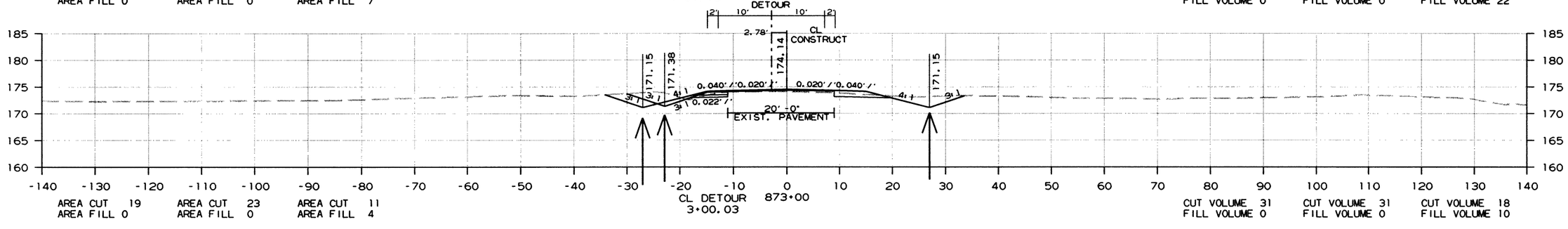
(2) CROSS SECTIONS

STAGE 1 STAGE 2 STAGE 3









CROSS SECTION STA. 873+00 TO STA. 876+00

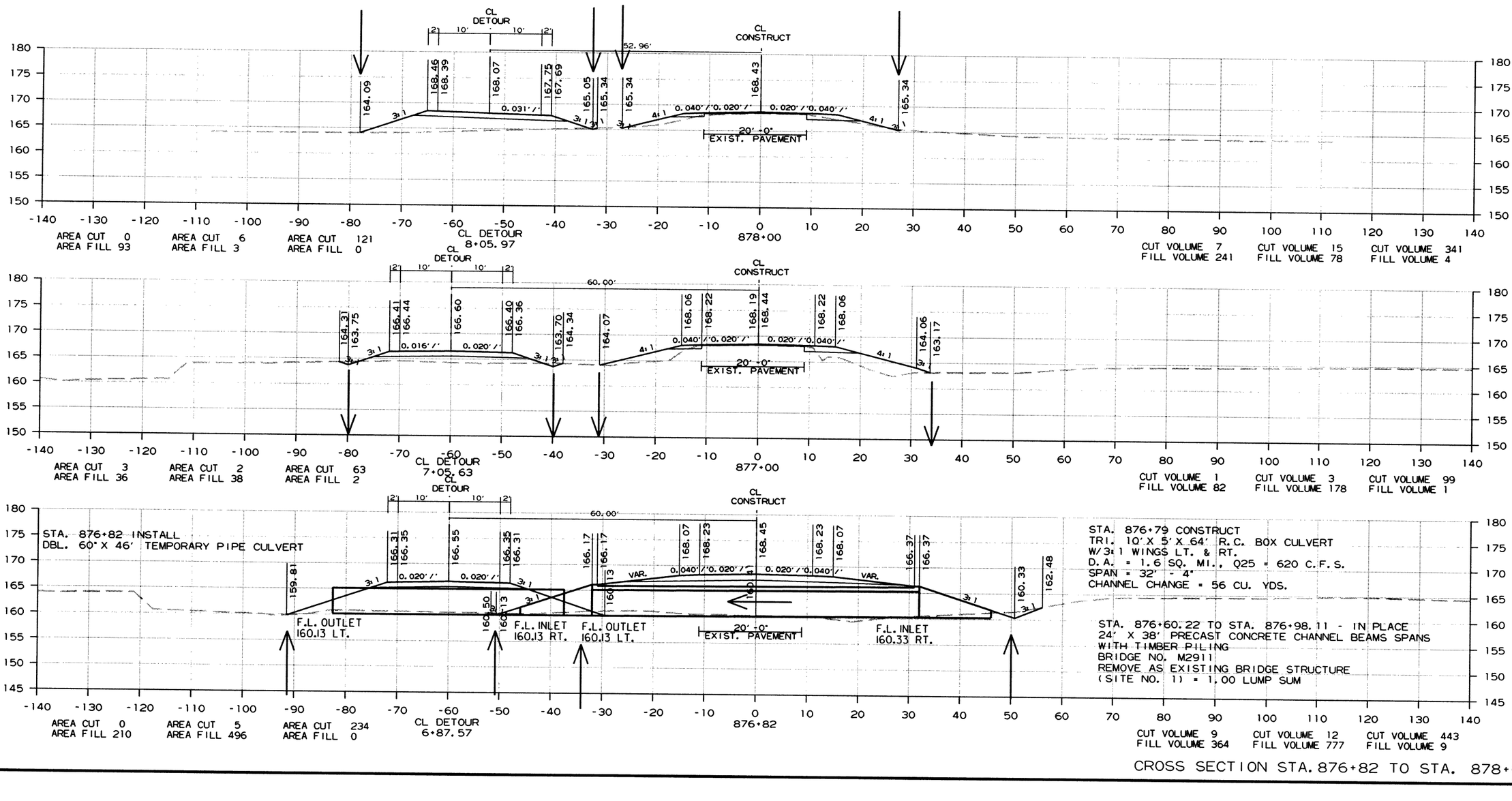
r070368.dgn 1/15/2015

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.		070368	236	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2 STAGE 3

STAGE 1 STAGE 2 STAGE 3



STA. 876+79 CONSTRUCT
TRI. 10' X 5' X 64' R.C. BOX CULVERT
W/3:1 WINGS LT. & RT.
D.A. = 1.6 SQ. MI., Q25 = 620 C.F.S.
SPAN = 32' - 4"
CHANNEL CHANGE = 56 CU. YDS.

STA. 876+60.22 TO STA. 876+98.11 - IN PLACE
24' X 38' PRECAST CONCRETE CHANNEL BEAMS SPANS
WITH TIMBER PILING
BRIDGE NO. M2911
REMOVE AS EXISTING BRIDGE STRUCTURE
(SITE NO. 1) = 1.00 LUMP SUM

CROSS SECTION STA. 876+82 TO STA. 878+00

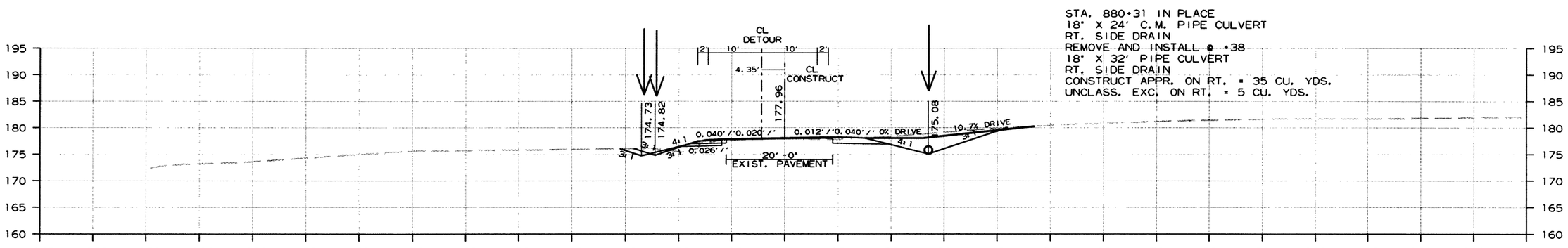
r070368.dgn 1/15/2015

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.		070368	237	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2 STAGE 3

STAGE 1 STAGE 2 STAGE 3



CROSS SECTION STA. 879+00 TO STA. 880+34

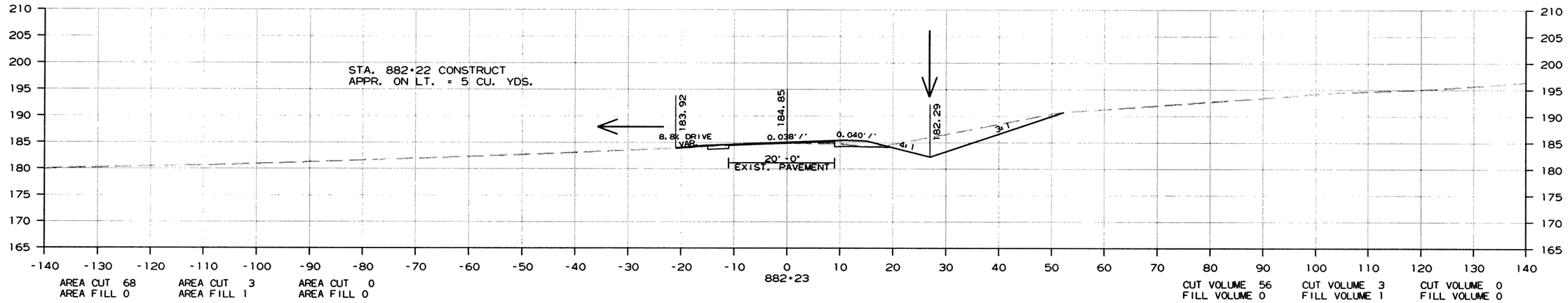
r070368.dgn 1/15/2015

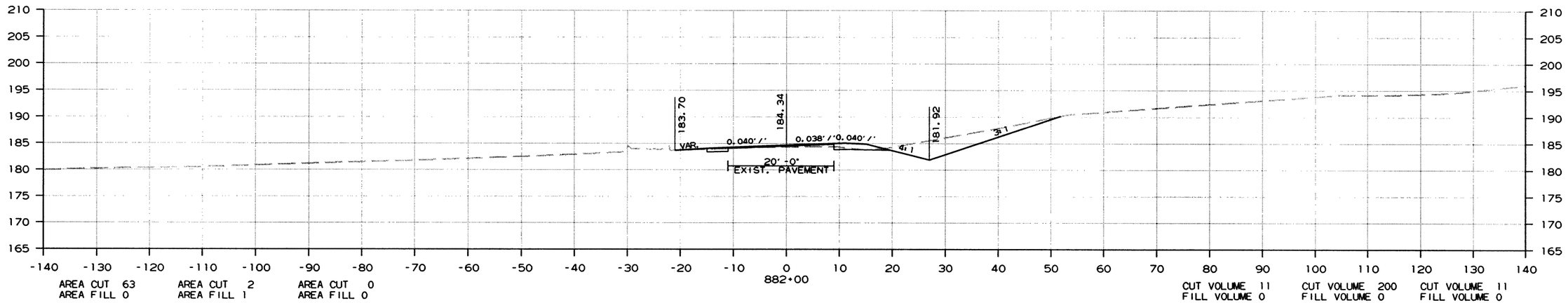
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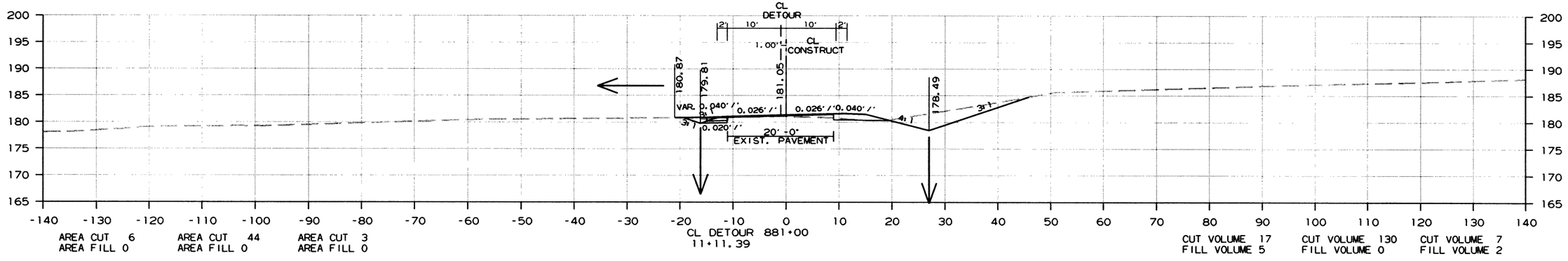
(2) CROSS SECTIONS

STAGE 1 STAGE 2 STAGE 3

STAGE 1 STAGE 2 STAGE 3







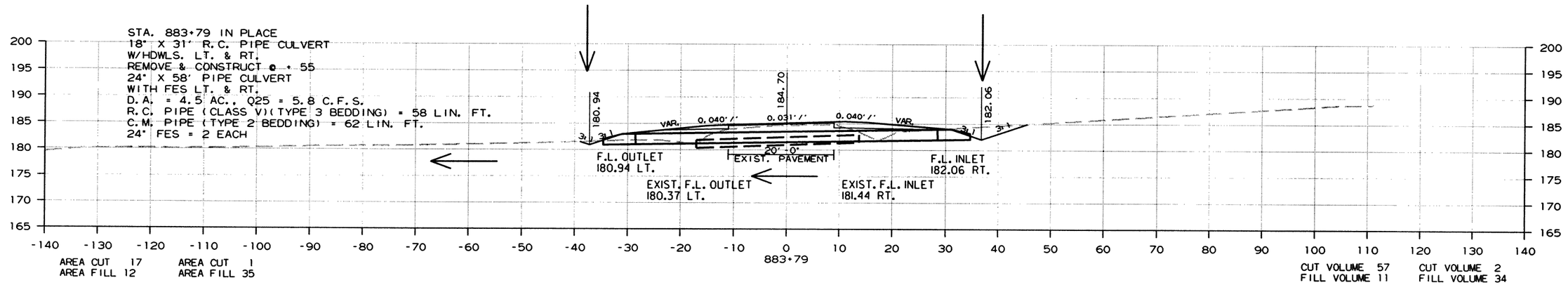
CROSS SECTION STA. 881+00 TO STA. 882+23

r070368.dgn 1/15/2015

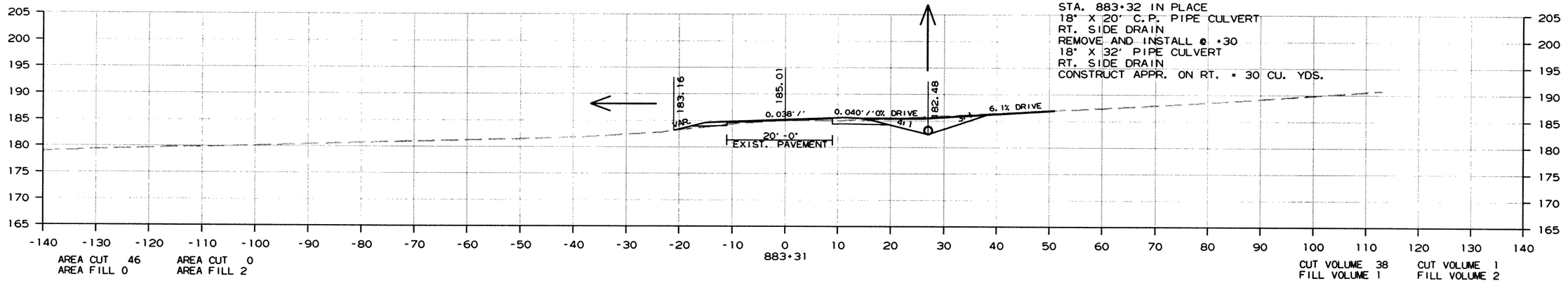
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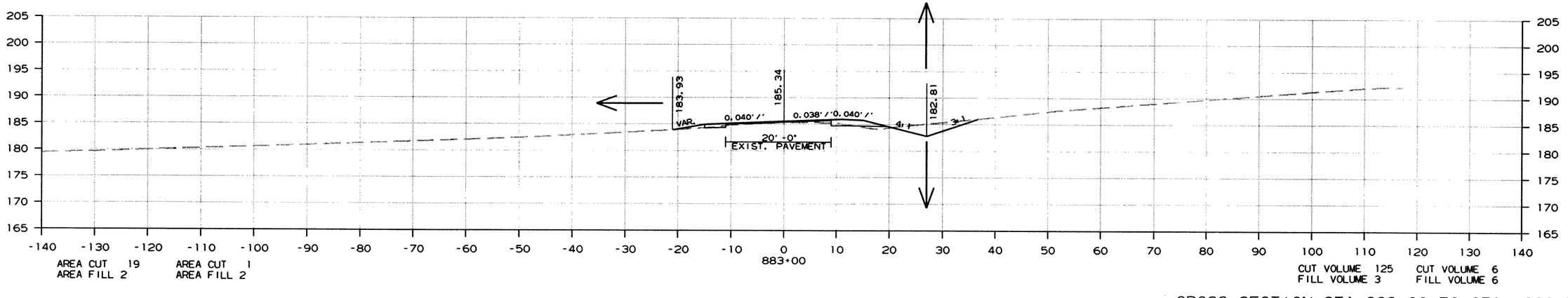
(2) CROSS SECTIONS

STAGE 1 STAGE 2



STAGE 1 STAGE 2





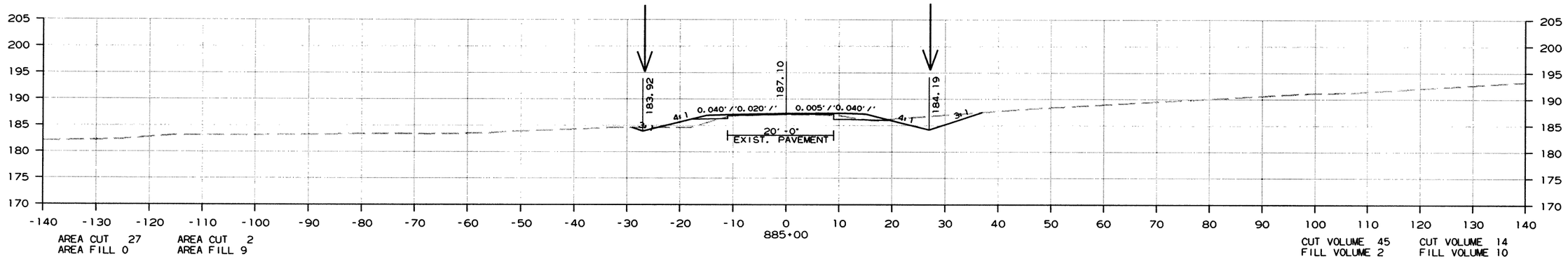
CROSS SECTION STA. 883+00 TO STA. 883+79

r070368.dgn 1/15/2015

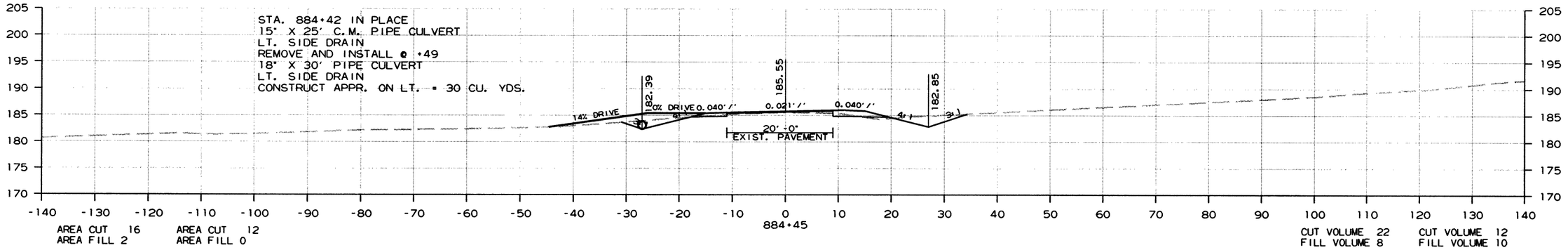
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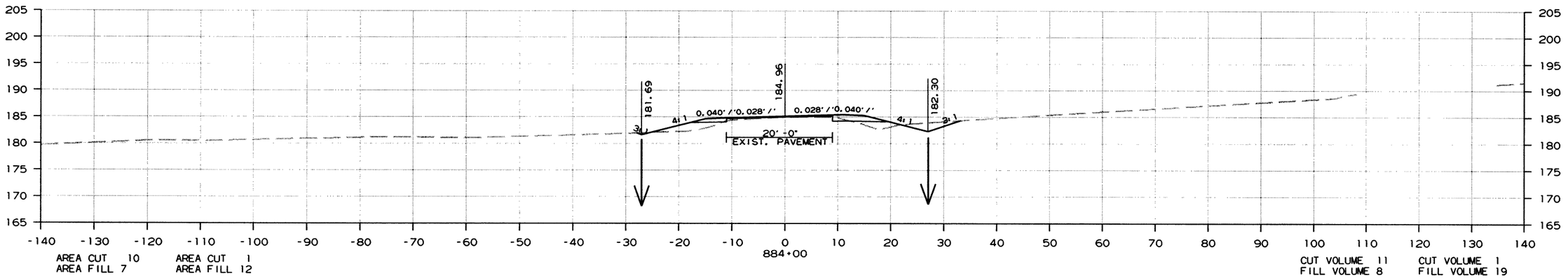
(2) CROSS SECTIONS

STAGE 1 STAGE 2



STA. 884+42 IN PLACE
15" X 25' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +49
18" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.





CROSS SECTION STA. 884+00 TO STA. 885+00

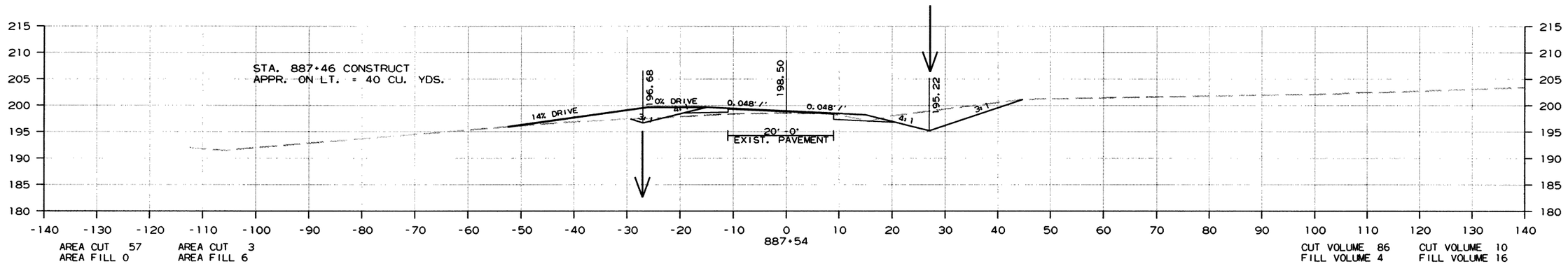
r070368.dgn 1/15/2015

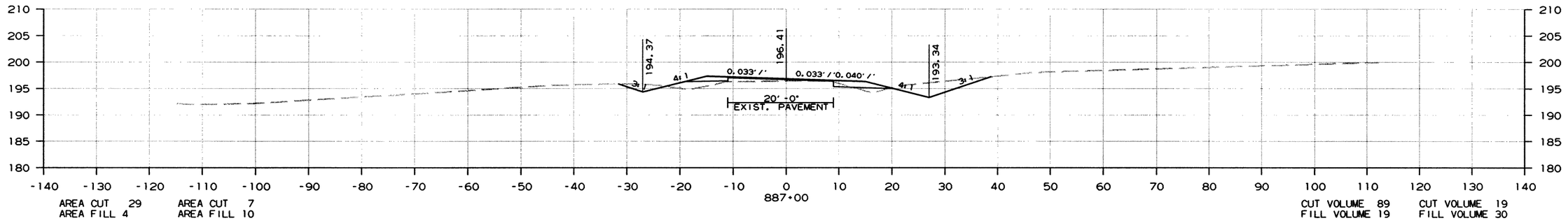
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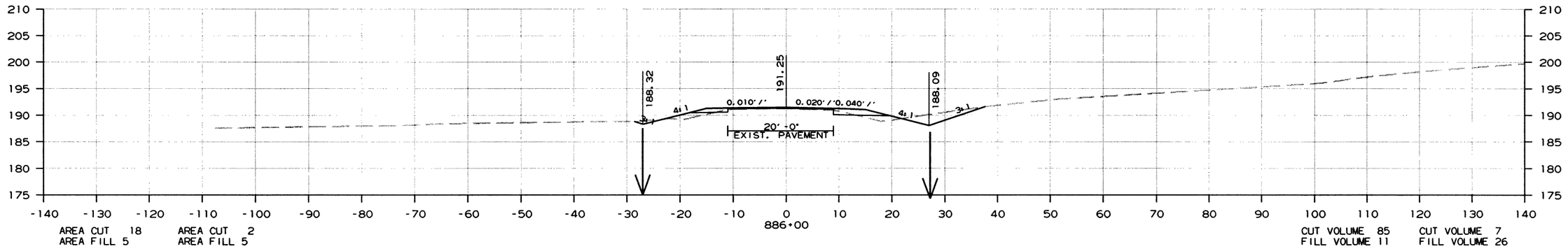
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 886+00 TO STA. 887+54

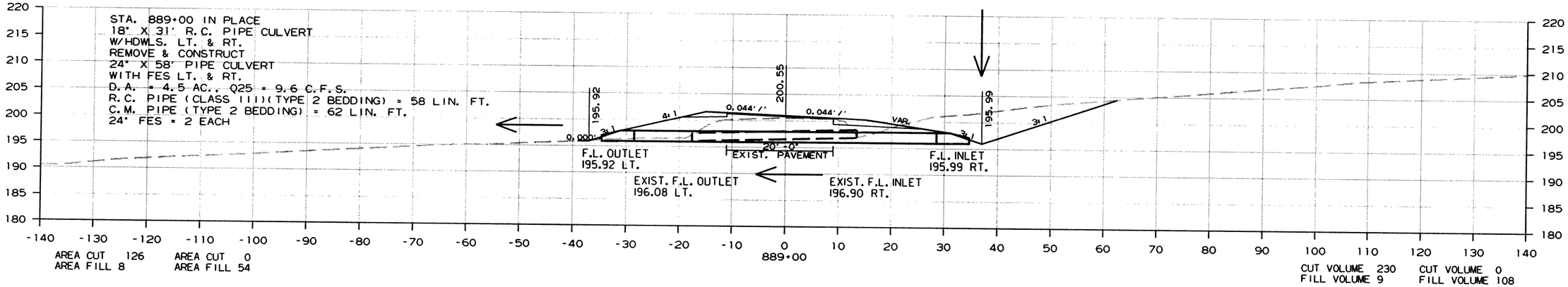
r070368.dgn 1/15/2015

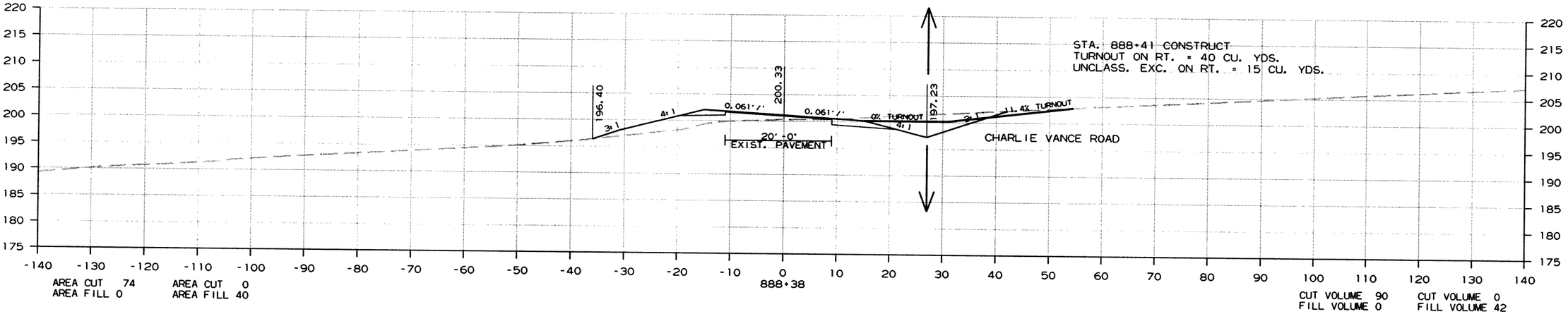
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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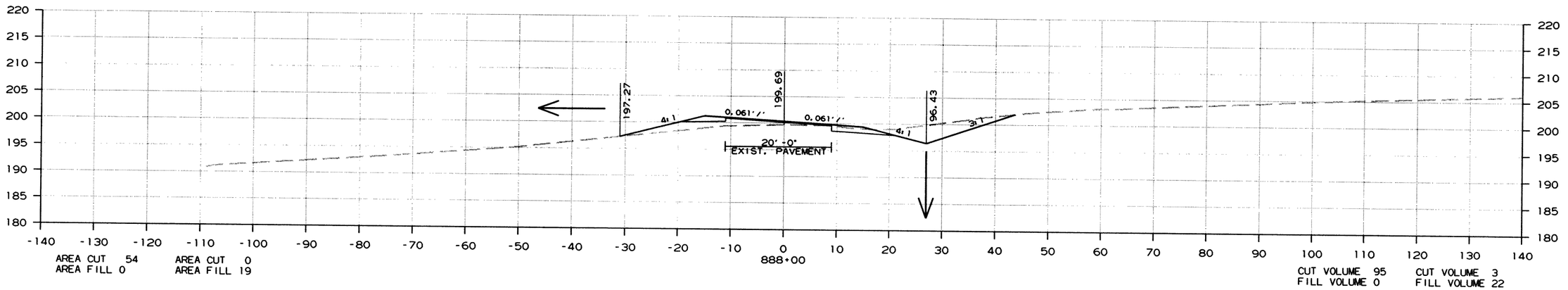
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 888+00 TO STA. 889+00

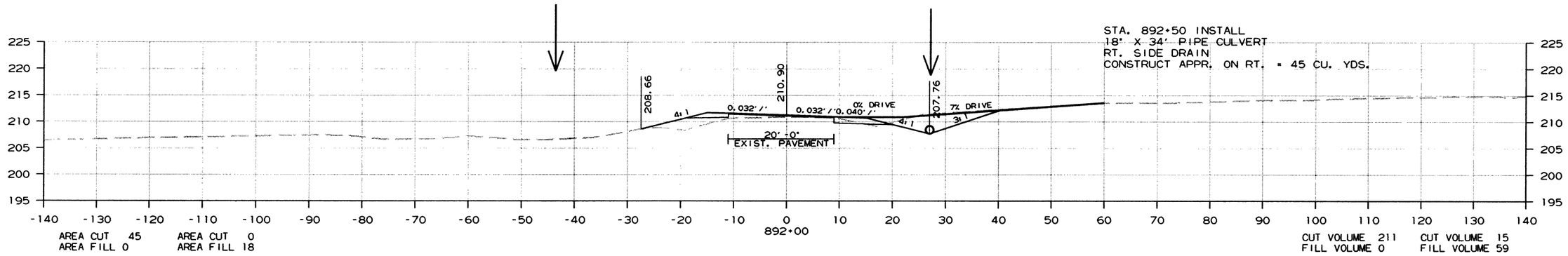
r070368.dgn 1/15/2015

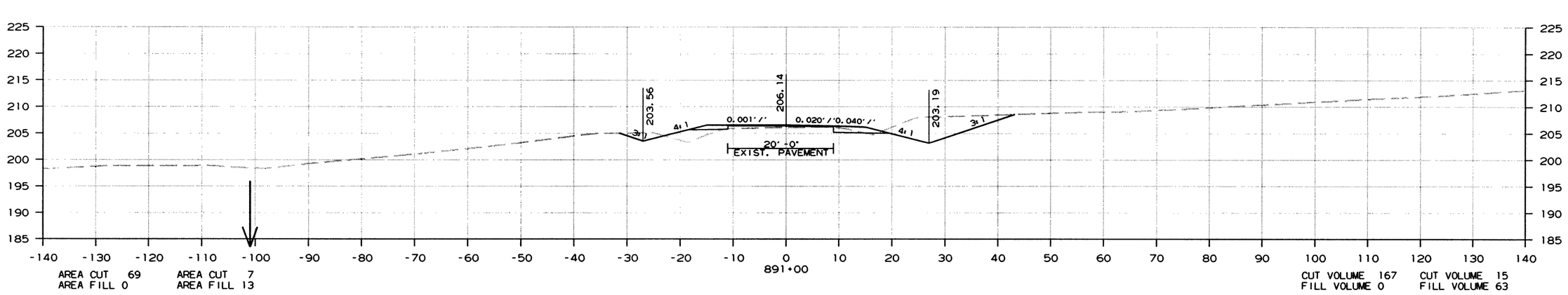
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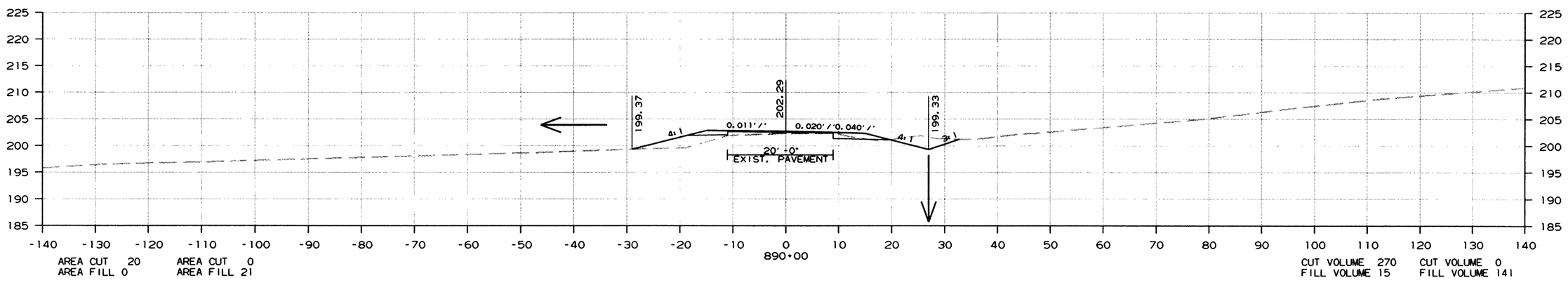
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 890+00 TO STA. 892+00

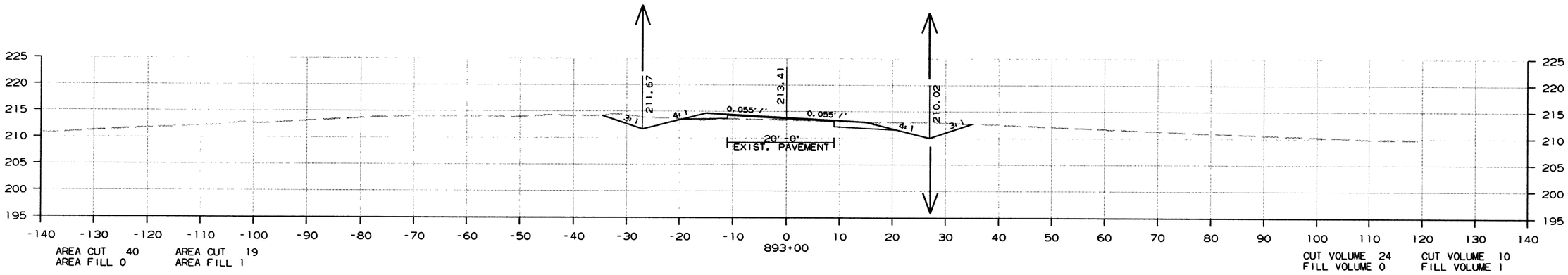
r070368.dgn 1/15/2015

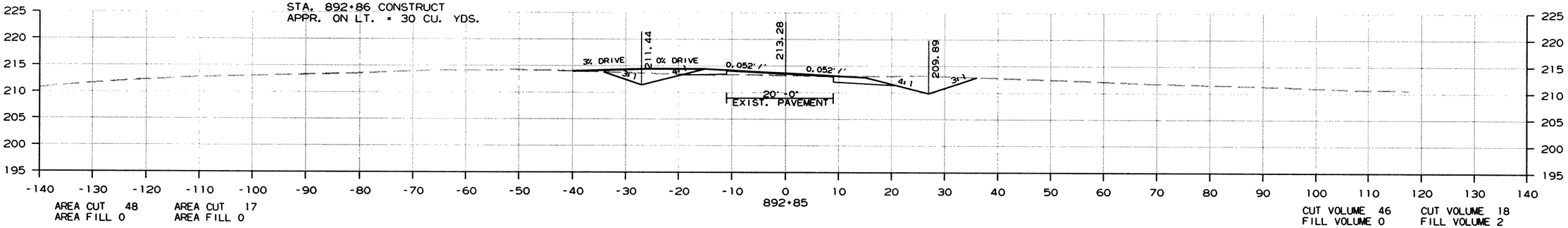
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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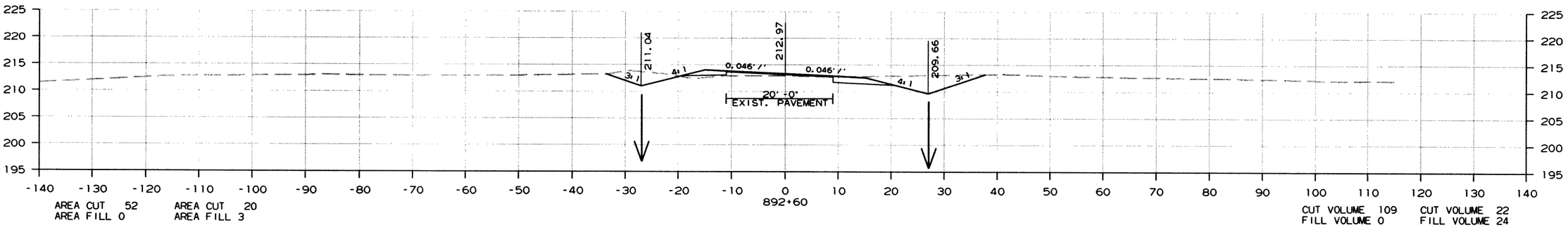
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 892+60 TO STA. 893+00

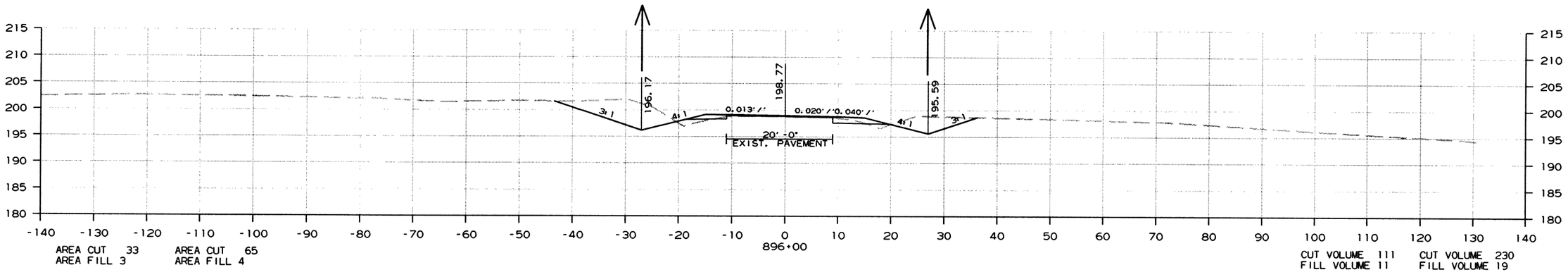
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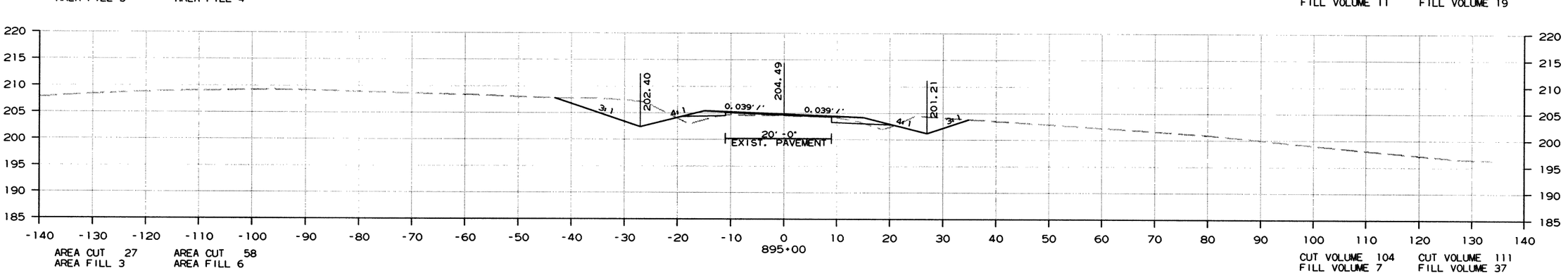
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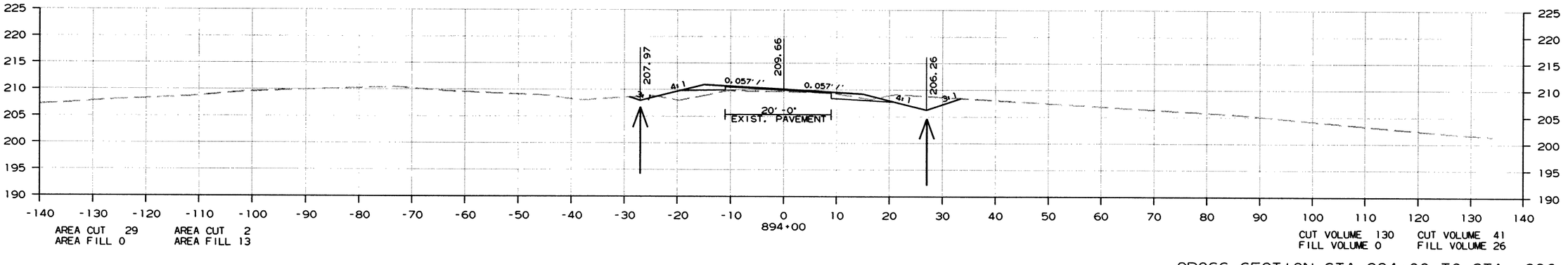
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 894+00 TO STA. 896+00

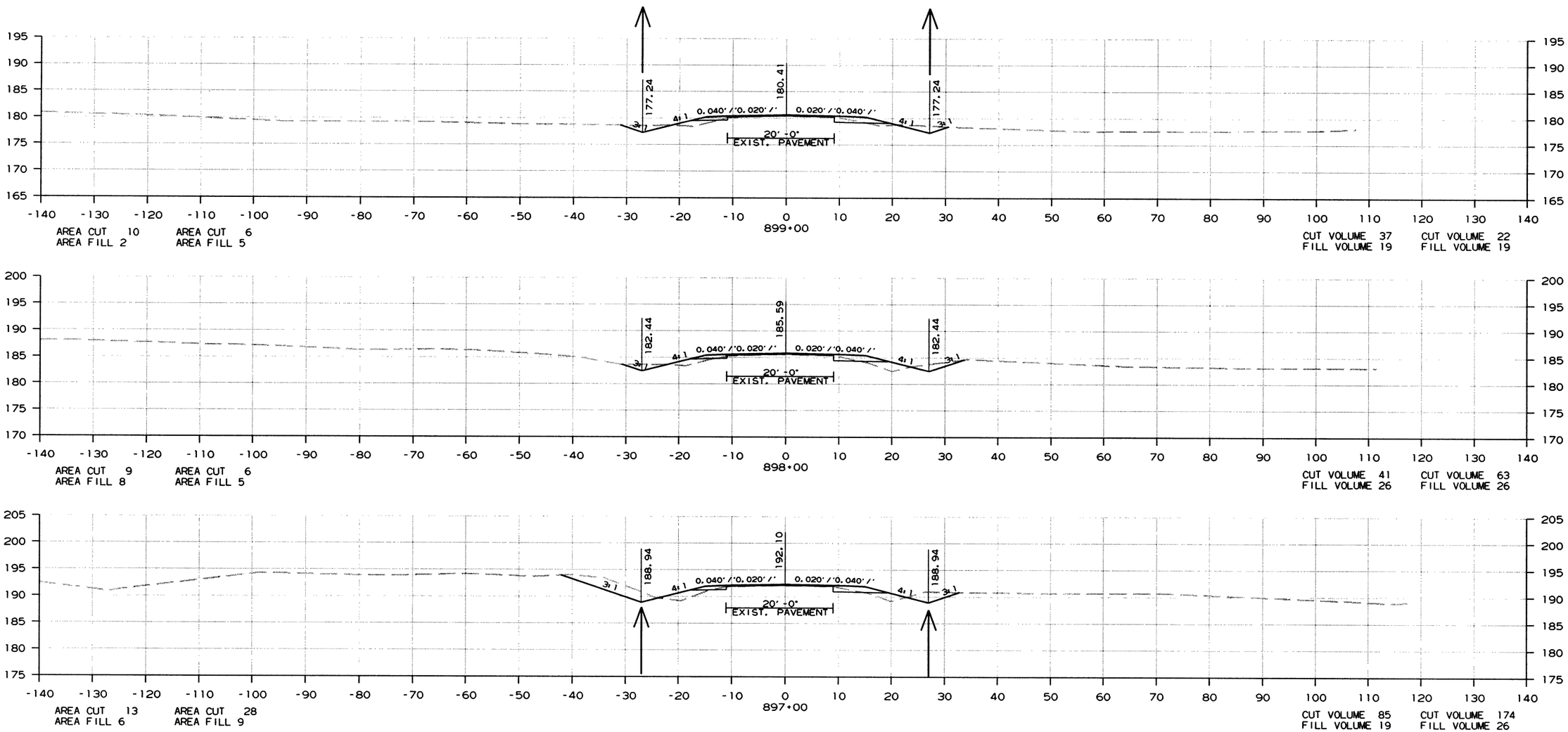
r070368.dgn 1/15/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
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(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 897+00 TO STA. 899+00

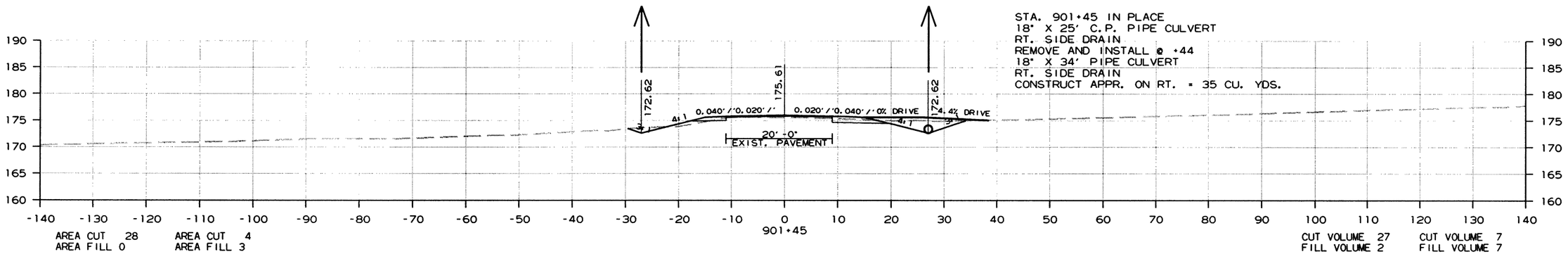
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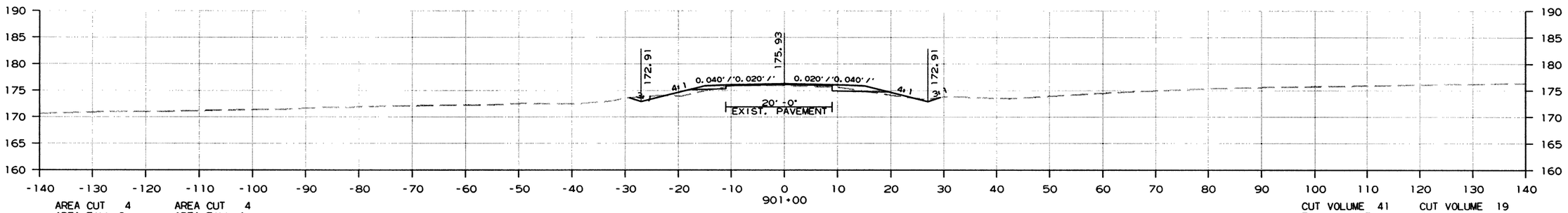
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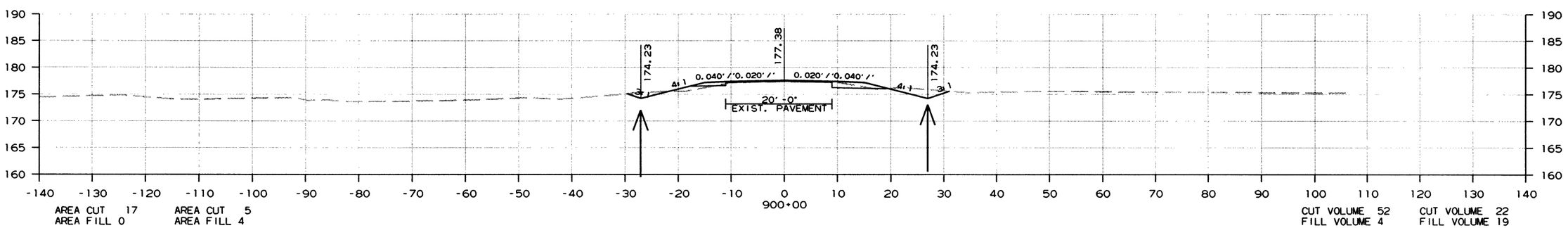
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 900+00 TO STA. 901+45

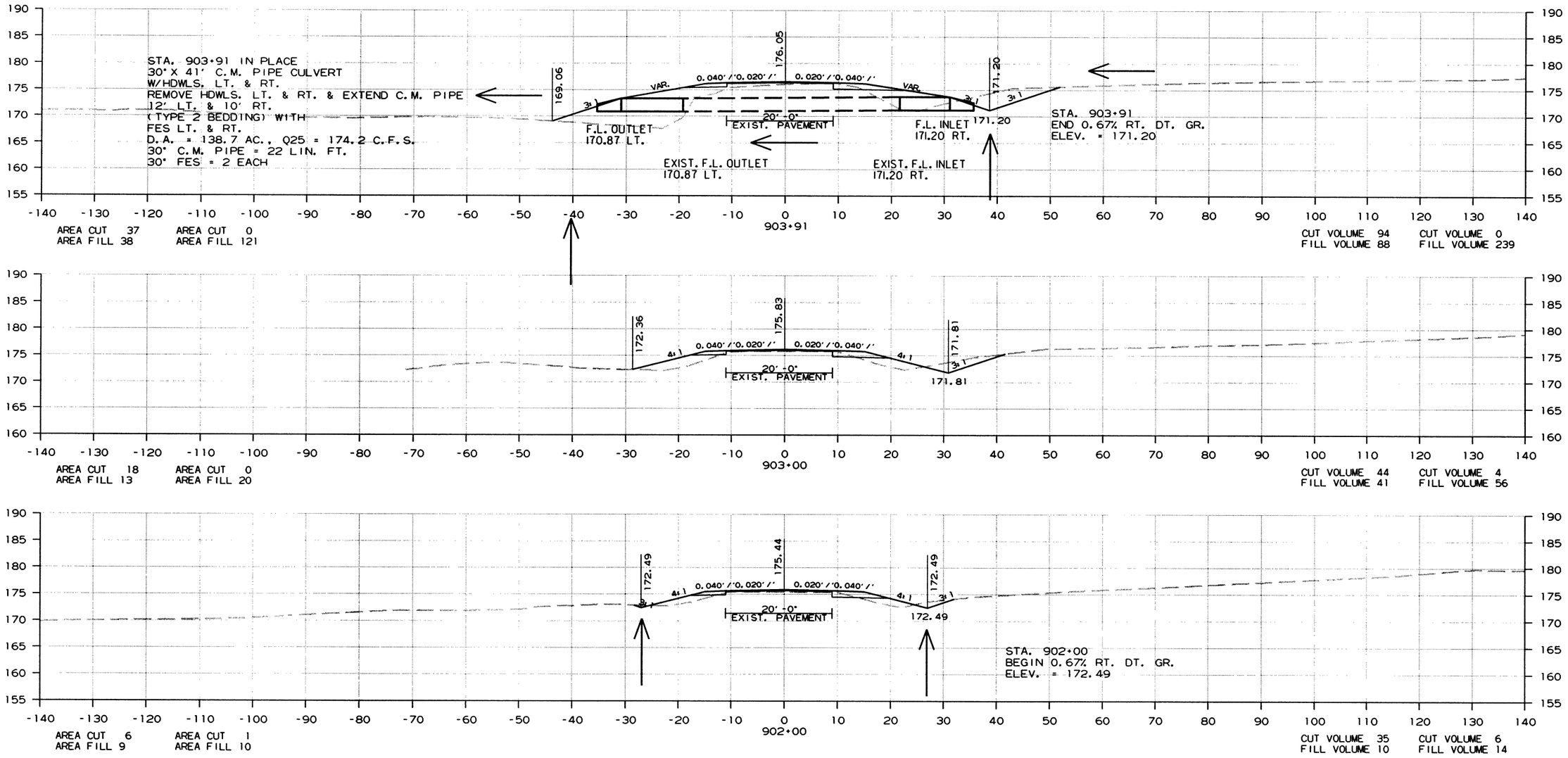
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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		070368	248	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 902+00 TO STA. 903+91

r070368.dgn 1/15/2015

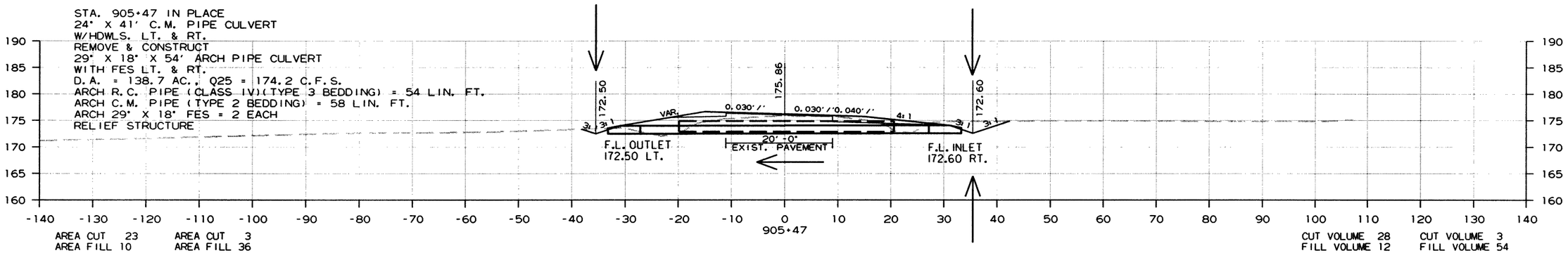
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(2) CROSS SECTIONS

STAGE 1 STAGE 2

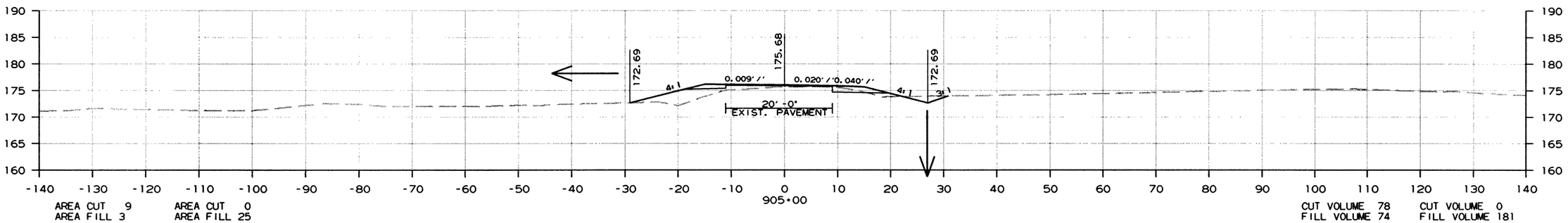
STAGE 1 STAGE 2

STA. 905+47 IN PLACE
24" X 41' C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE & CONSTRUCT
29" X 18" X 54' ARCH PIPE CULVERT
WITH FES LT. & RT.
D.A. = 138.7 AC., Q25 = 174.2 C.F.S.
ARCH R.C. PIPE (CLASS IV)(TYPE 3 BEDDING) = 54 LIN. FT.
ARCH C.M. PIPE (TYPE 2 BEDDING) = 58 LIN. FT.
ARCH 29" X 18" FES = 2 EACH
RELIEF STRUCTURE



AREA CUT 23 AREA CUT 3
AREA FILL 10 AREA FILL 36

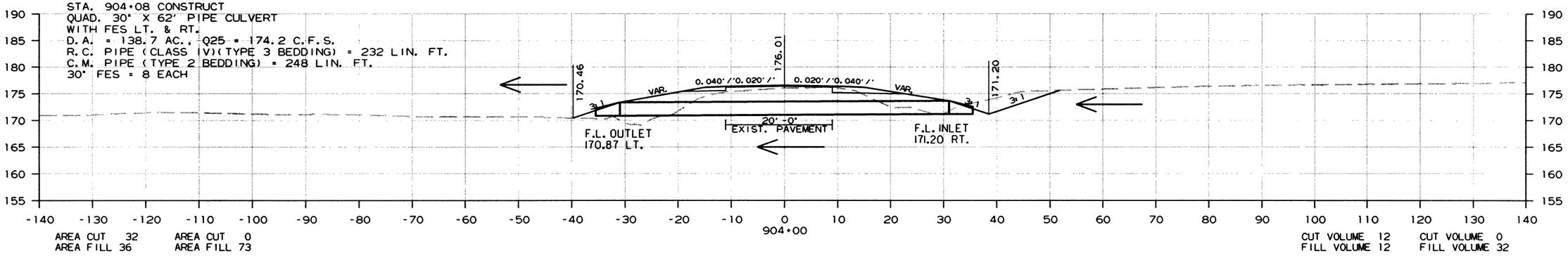
CUT VOLUME 28 CUT VOLUME 3
FILL VOLUME 12 FILL VOLUME 54



AREA CUT 9 AREA CUT 0
AREA FILL 3 AREA FILL 25

CUT VOLUME 78 CUT VOLUME 0
FILL VOLUME 74 FILL VOLUME 181

STA. 904+08 CONSTRUCT
QUAD. 30" X 62' PIPE CULVERT
WITH FES LT. & RT.
D.A. = 138.7 AC., Q25 = 174.2 C.F.S.
R.C. PIPE (CLASS IV)(TYPE 3 BEDDING) = 232 LIN. FT.
C.M. PIPE (TYPE 2 BEDDING) = 248 LIN. FT.
30" FES = 8 EACH



AREA CUT 32 AREA CUT 0
AREA FILL 36 AREA FILL 73

CUT VOLUME 12 CUT VOLUME 0
FILL VOLUME 12 FILL VOLUME 32

CROSS SECTION STA. 904+00 TO STA. 905+47

r070368.dgn 1/15/2015

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.		070368	250	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2

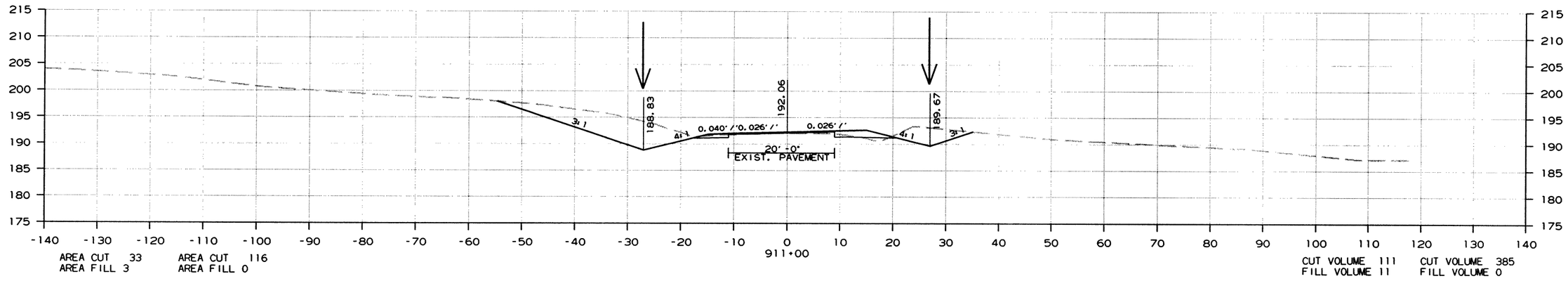
CROSS SECTION STA. 906+00 TO STA. 908+00

r070368.dgn 1/15/2015

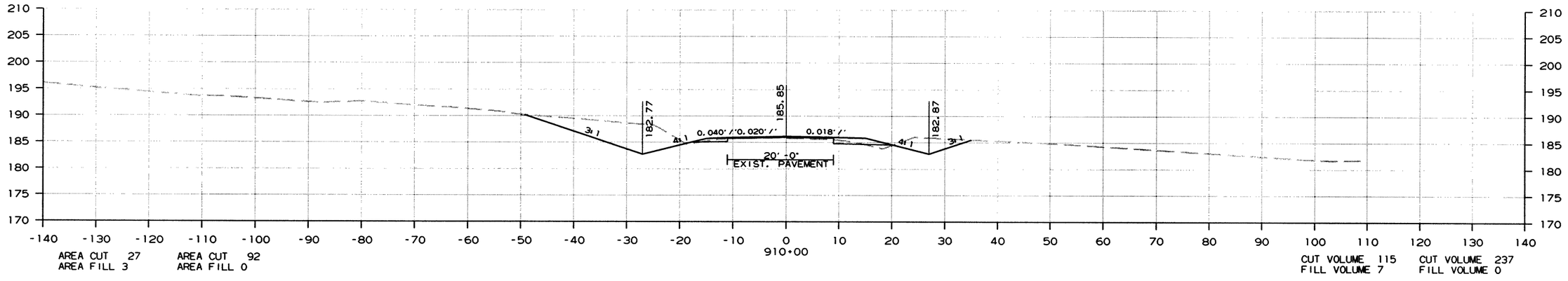
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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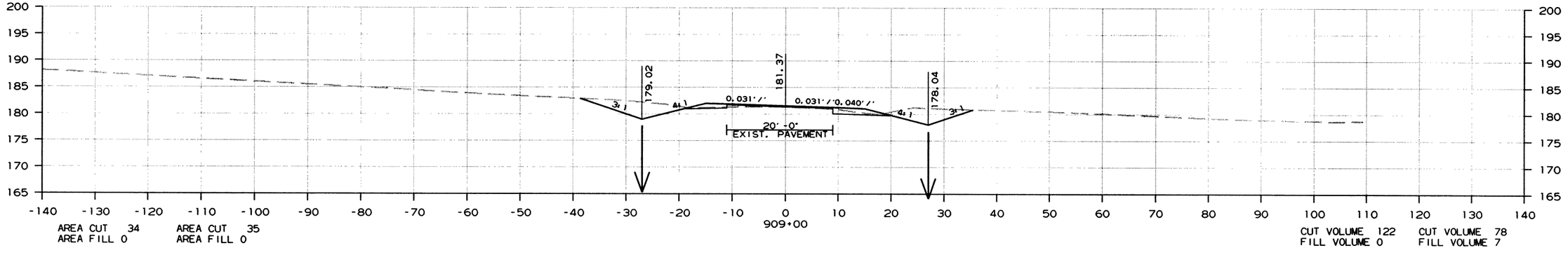
(2) CROSS SECTIONS

STAGE 1 STAGE 2



STAGE 1 STAGE 2





CROSS SECTION STA. 909+00 TO STA. 911+00

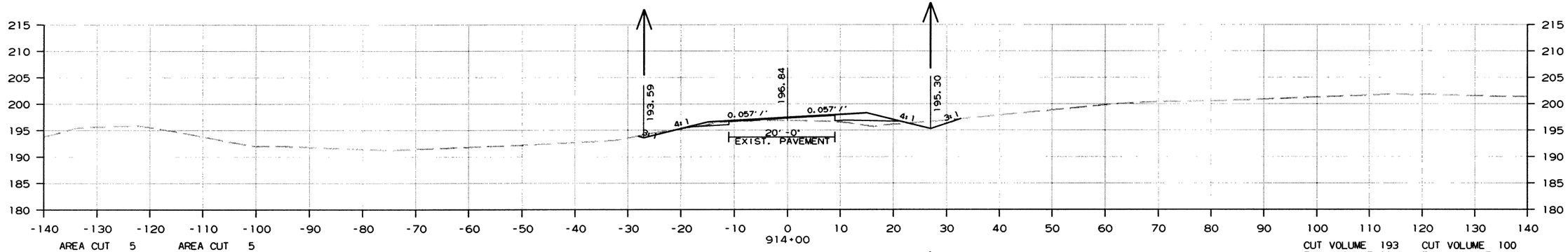
r070368.dgn 1/15/2015

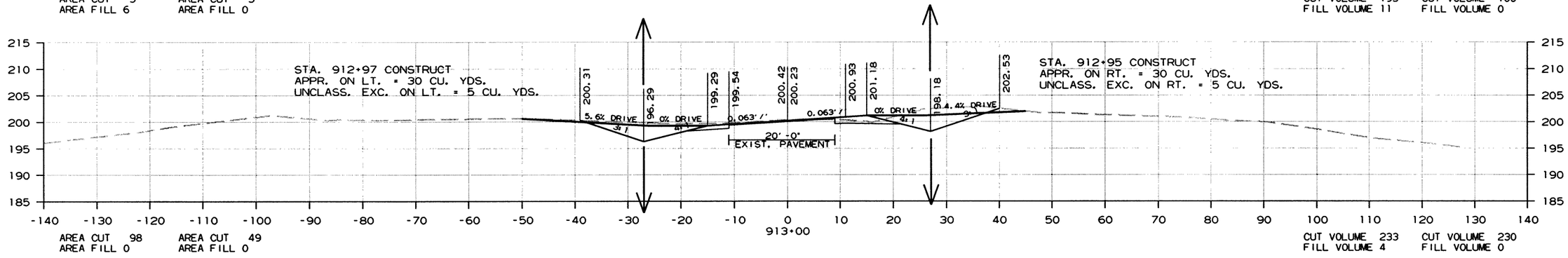
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AND PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	252	335

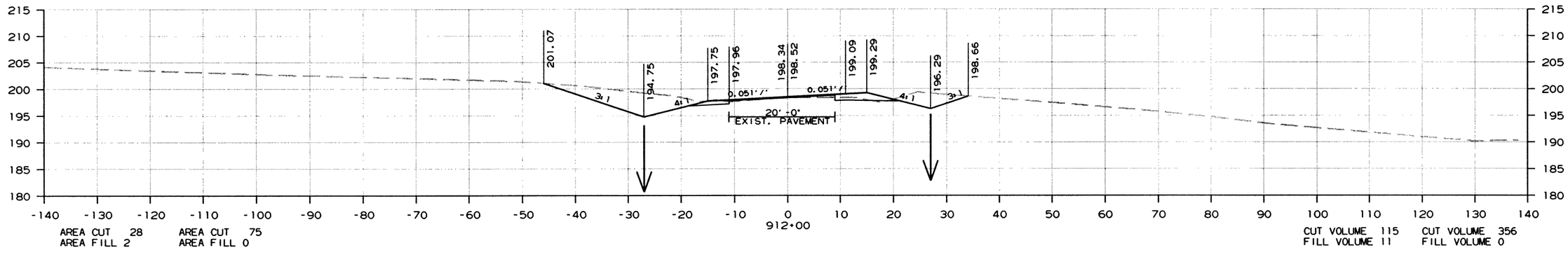
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







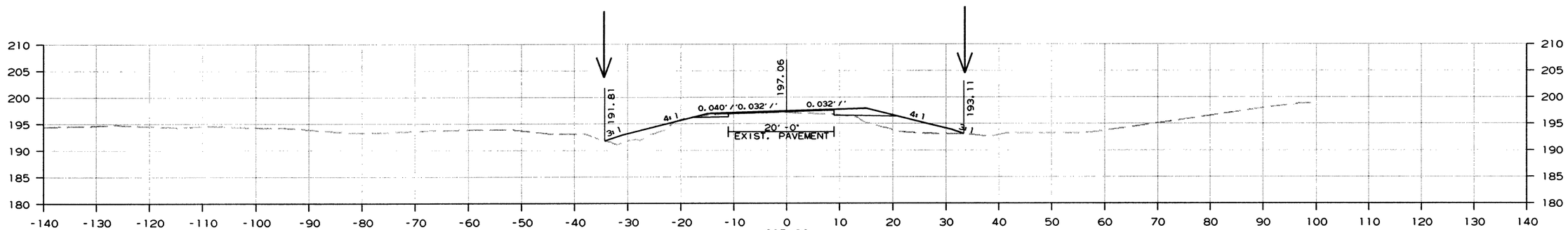
CROSS SECTION STA. 912+00 TO STA. 914+00

r070368.dgn 1/15/2015

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.		070368	253	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2



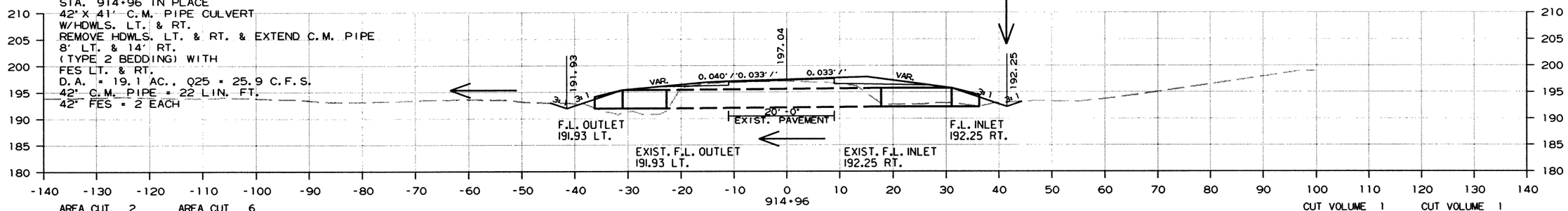
AREA CUT 1
AREA FILL 33

AREA CUT 3
AREA FILL 15

CUT VOLUME 0
FILL VOLUME 7

CUT VOLUME 1
FILL VOLUME 6

STA. 914+96 IN PLACE
42"X 41' C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE HDWLS. LT. & RT. & EXTEND C.M. PIPE
8' LT. & 14' RT.
(TYPE 2 BEDDING) WITH
FES LT. & RT.
D.A. = 19.1 AC., Q25 = 25.9 C.F.S.
42" C.M. PIPE = 22 LIN. FT.
42" FES = 2 EACH



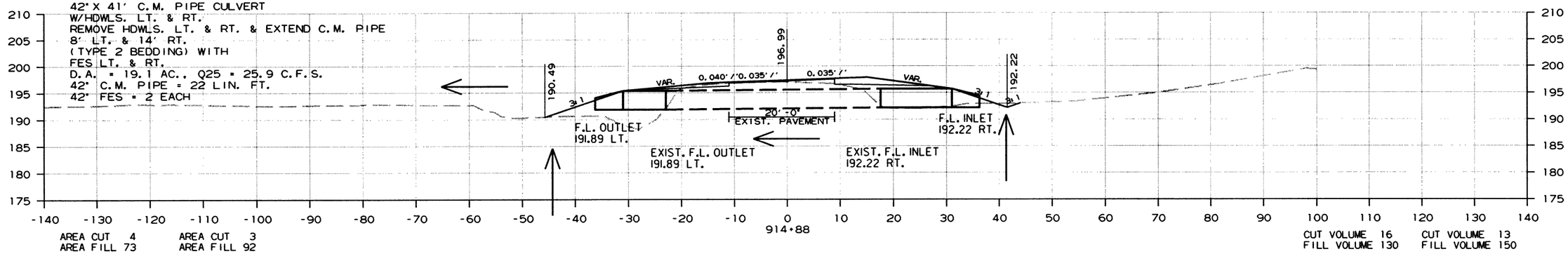
AREA CUT 2
AREA FILL 67

AREA CUT 6
AREA FILL 65

CUT VOLUME 1
FILL VOLUME 21

CUT VOLUME 1
FILL VOLUME 23

STA. 914+87 IN PLACE
42"X 41' C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE HDWLS. LT. & RT. & EXTEND C.M. PIPE
8' LT. & 14' RT.
(TYPE 2 BEDDING) WITH
FES LT. & RT.
D.A. = 19.1 AC., Q25 = 25.9 C.F.S.
42" C.M. PIPE = 22 LIN. FT.
42" FES = 2 EACH



AREA CUT 4
AREA FILL 73

AREA CUT 3
AREA FILL 92

CUT VOLUME 16
FILL VOLUME 130

CUT VOLUME 13
FILL VOLUME 150

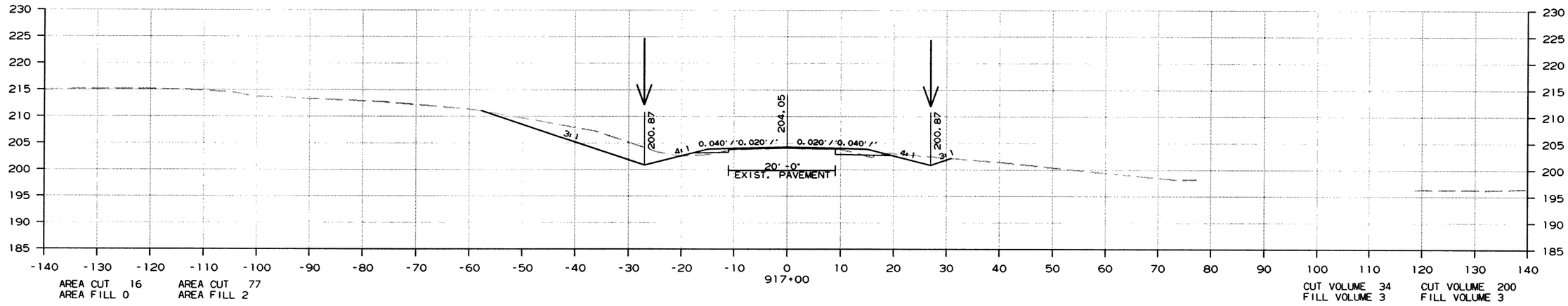
CROSS SECTION STA. 914+88 TO STA. 915+00

r070368.dgn 1/15/2015

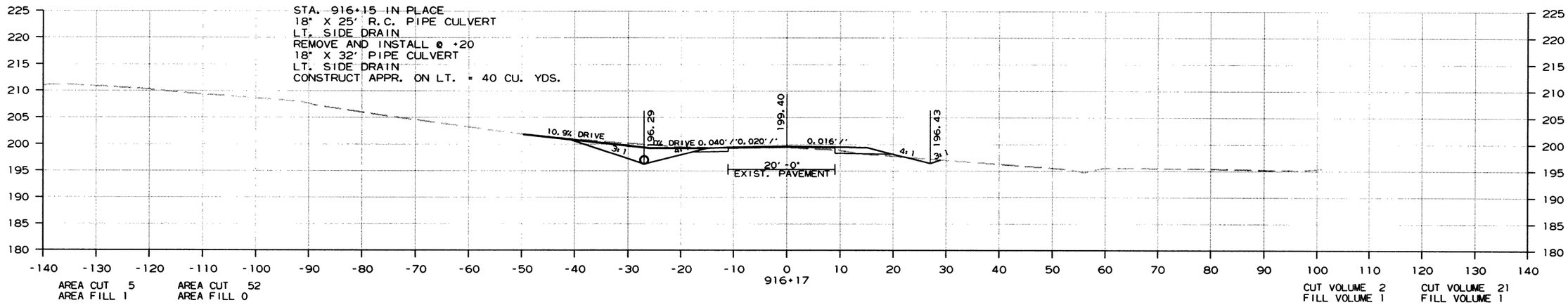
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	254	335

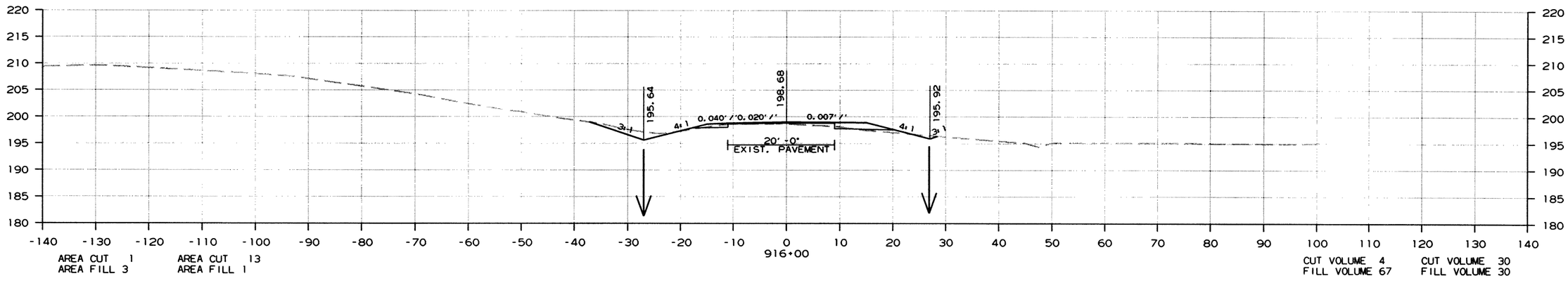
(2) CROSS SECTIONS

STAGE 1 STAGE 2



STA. 916+15 IN PLACE
18" X 25' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +20
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 40 CU. YDS.





CROSS SECTION STA. 916+00 TO STA. 917+00

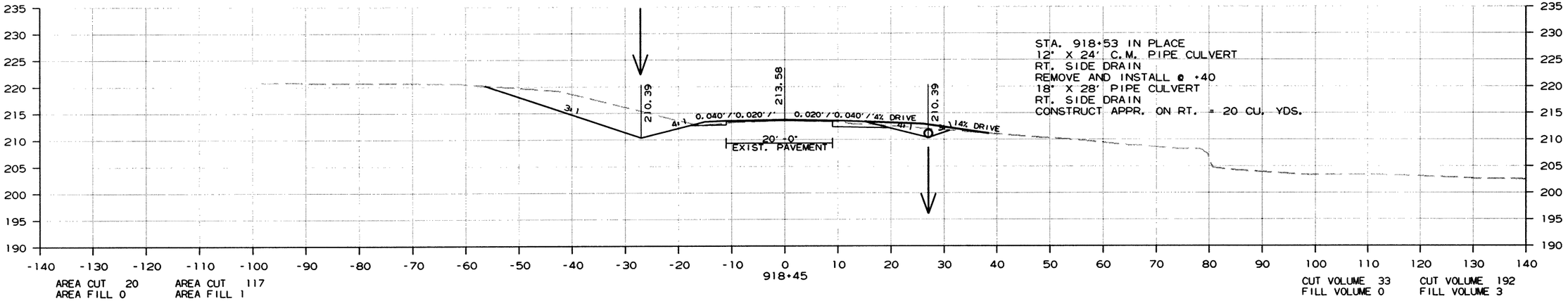
r070368.dgn 1/15/2015

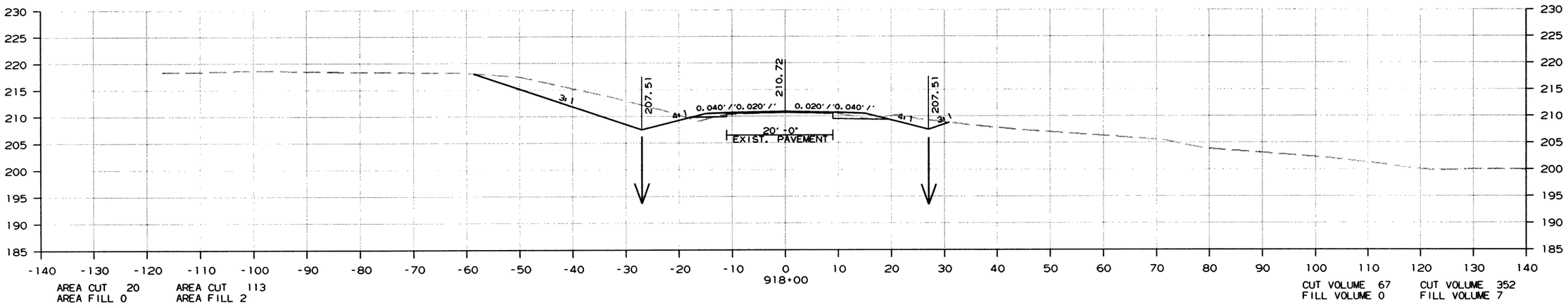
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				JOB NO.		070368	255	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2





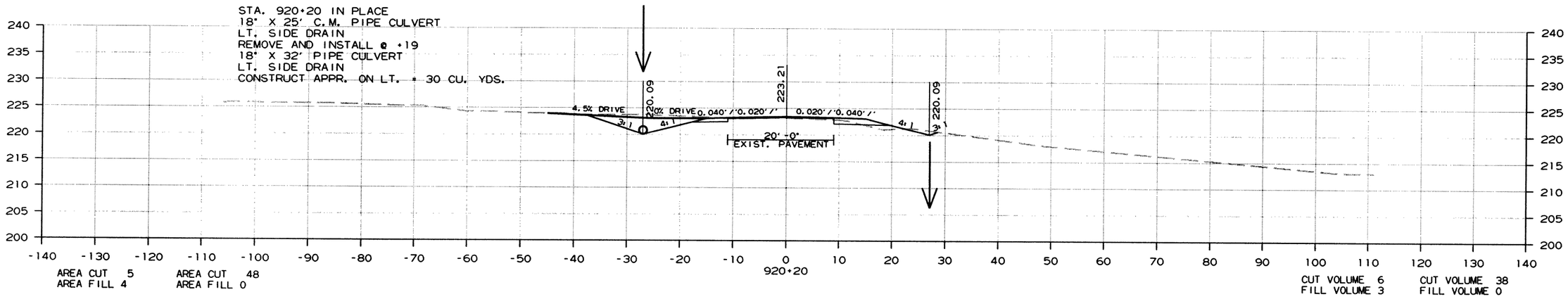
CROSS SECTION STA. 918+00 TO STA. 918+45

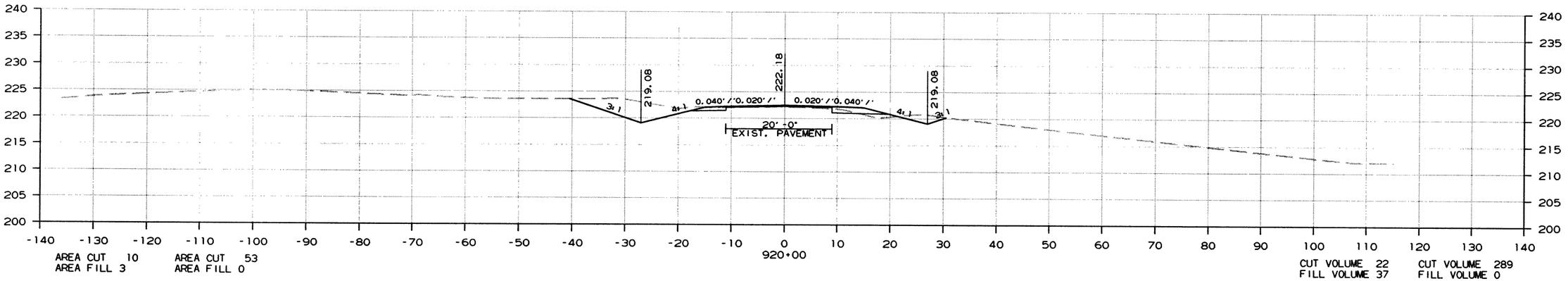
r070368.dgn 1/15/2015

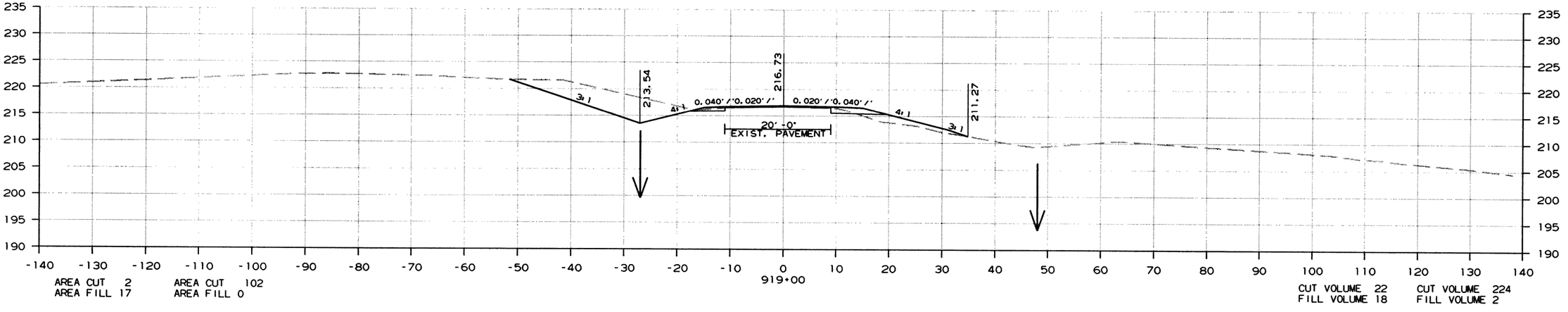
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		070368	256	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2







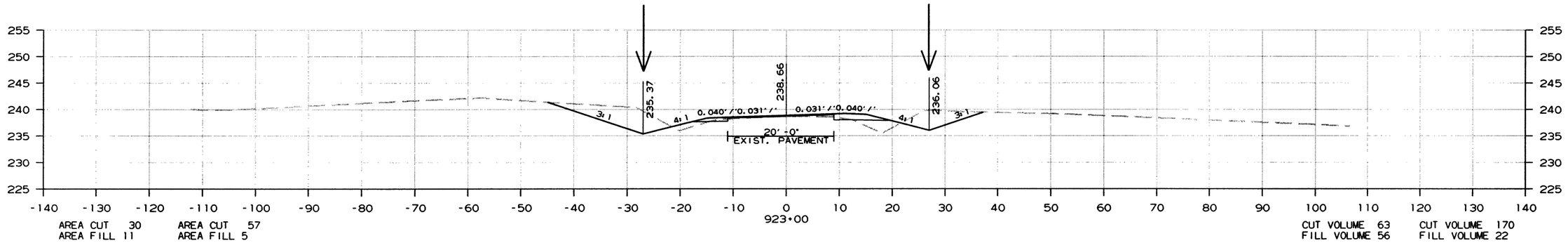
CROSS SECTION STA. 919+00 TO STA. 920+20

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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
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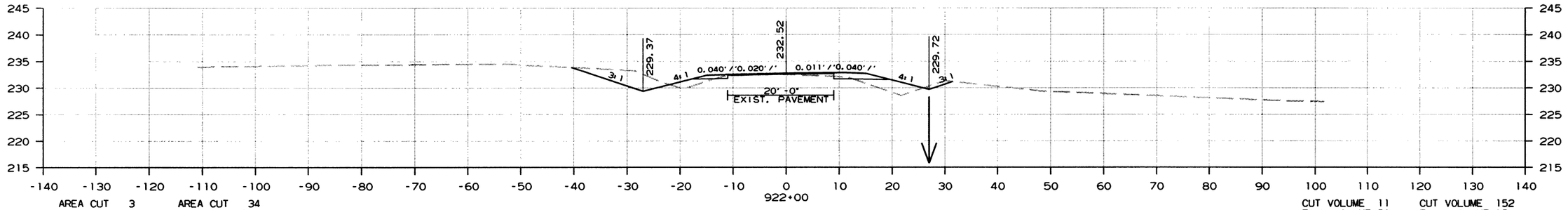
(2) CROSS SECTIONS

STAGE 1 STAGE 2



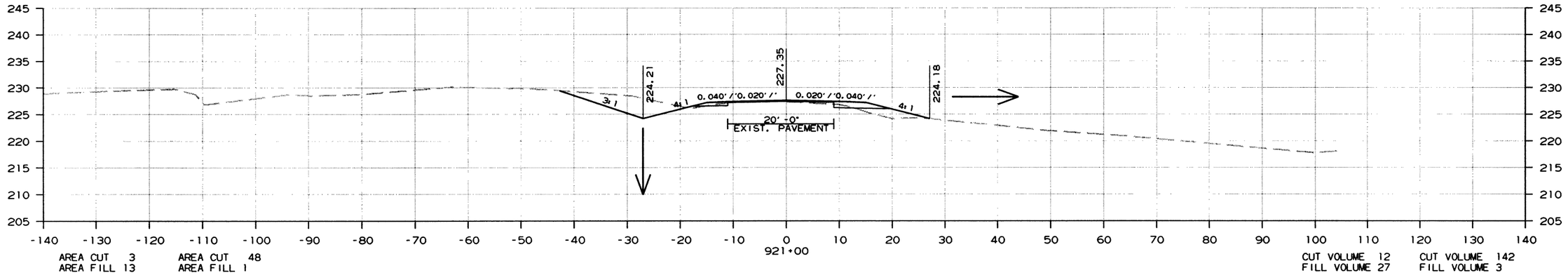
AREA CUT 30 AREA CUT 57
AREA FILL 11 AREA FILL 5

CUT VOLUME 63 CUT VOLUME 170
FILL VOLUME 56 FILL VOLUME 22



AREA CUT 3 AREA CUT 34
AREA FILL 18 AREA FILL 7

CUT VOLUME 11 CUT VOLUME 152
FILL VOLUME 59 FILL VOLUME 15



AREA CUT 3 AREA CUT 48
AREA FILL 13 AREA FILL 1

CUT VOLUME 12 CUT VOLUME 142
FILL VOLUME 27 FILL VOLUME 3

CROSS SECTION STA. 921+00 TO STA. 923+00

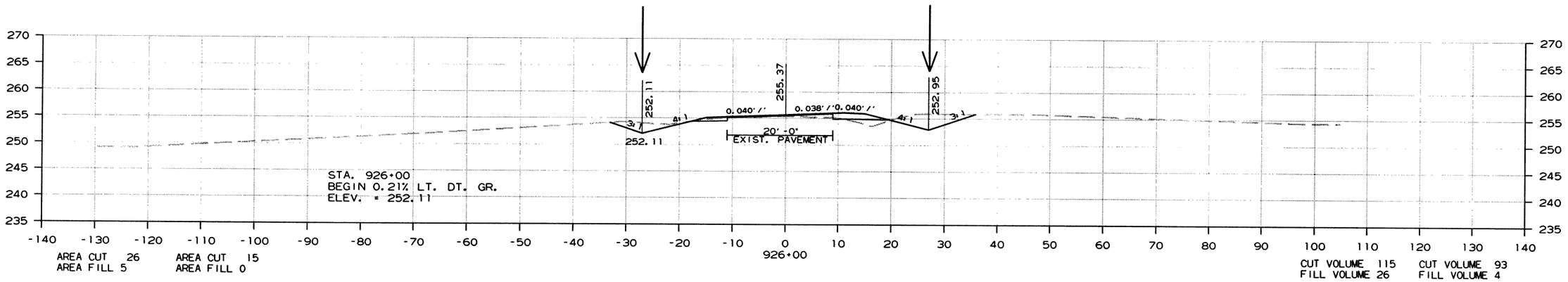
r070368.dgn 1/15/2015

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.		070368	258	335

(2) CROSS SECTIONS

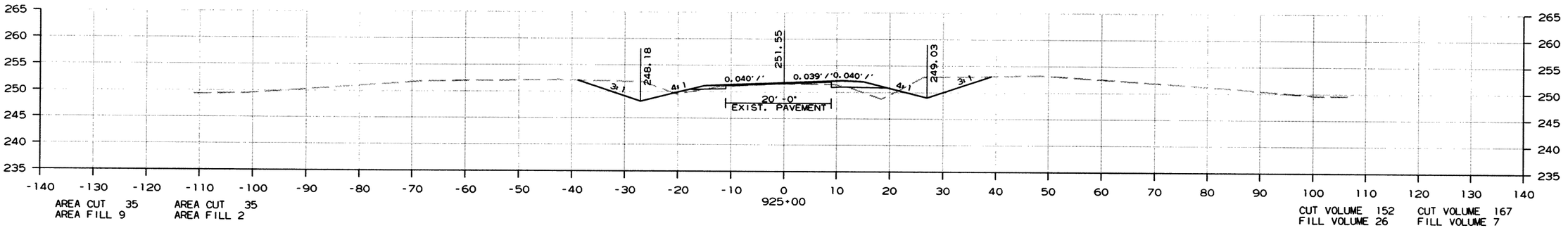
STAGE 1 STAGE 2

STAGE 1 STAGE 2



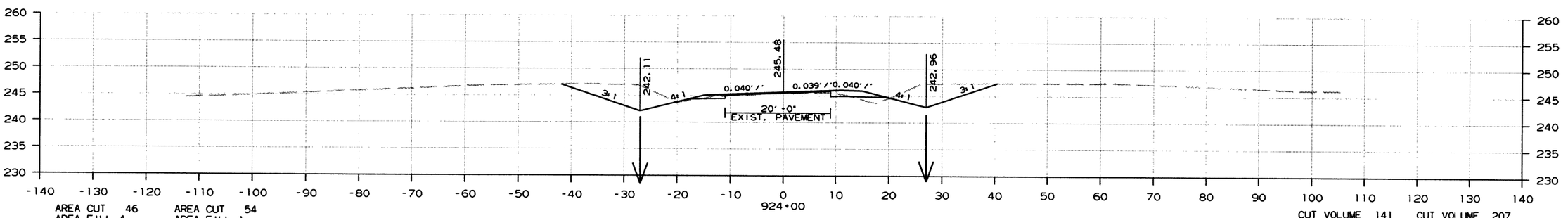
AREA CUT 26 AREA CUT 15
AREA FILL 5 AREA FILL 0

CUT VOLUME 115 CUT VOLUME 93
FILL VOLUME 26 FILL VOLUME 4



AREA CUT 35 AREA CUT 35
AREA FILL 9 AREA FILL 2

CUT VOLUME 152 CUT VOLUME 167
FILL VOLUME 26 FILL VOLUME 7



AREA CUT 46 AREA CUT 54
AREA FILL 4 AREA FILL 1

CUT VOLUME 141 CUT VOLUME 207
FILL VOLUME 30 FILL VOLUME 11

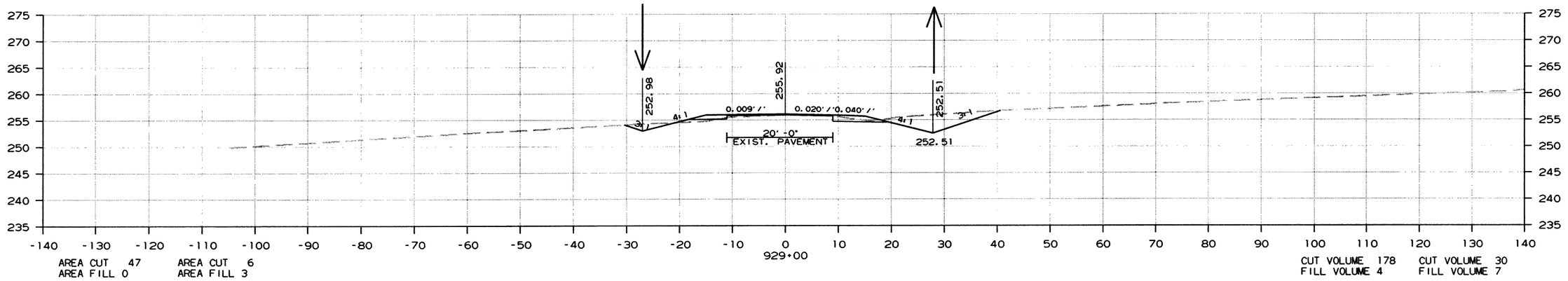
CROSS SECTION STA. 924+00 TO STA. 926+00

r070368.dgn 1/15/2015

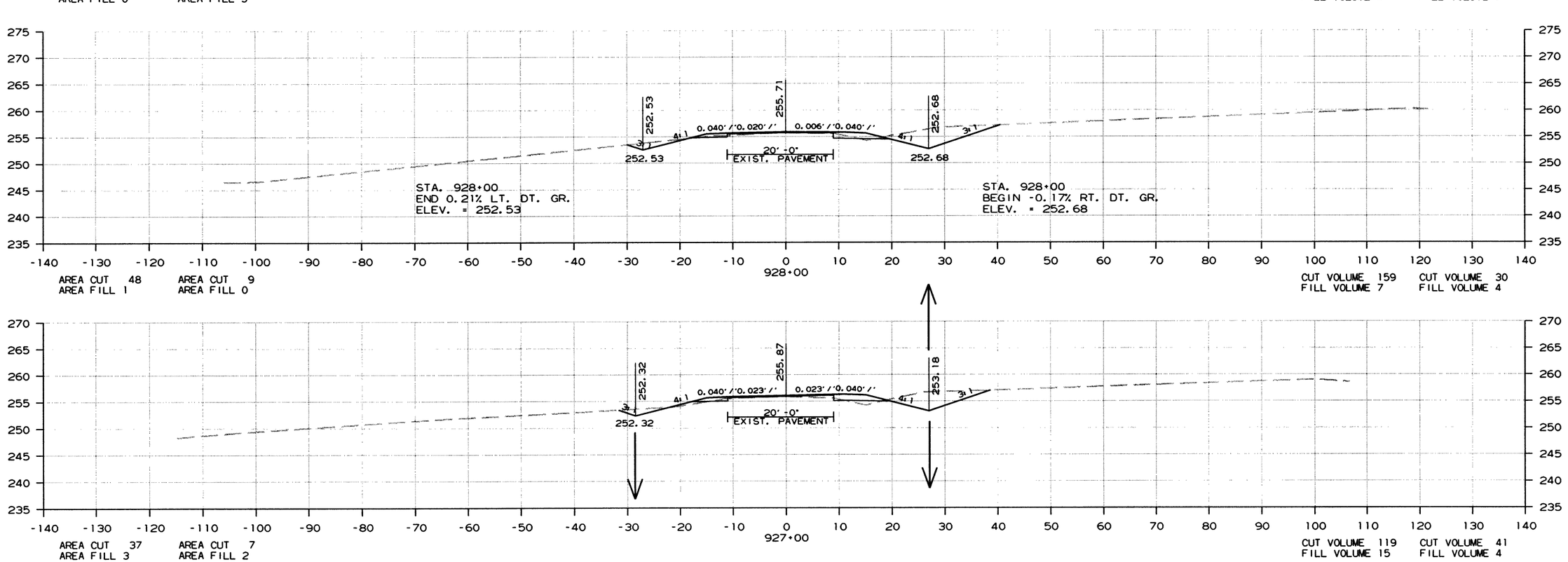
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		070368	259	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2



STAGE 1 STAGE 2



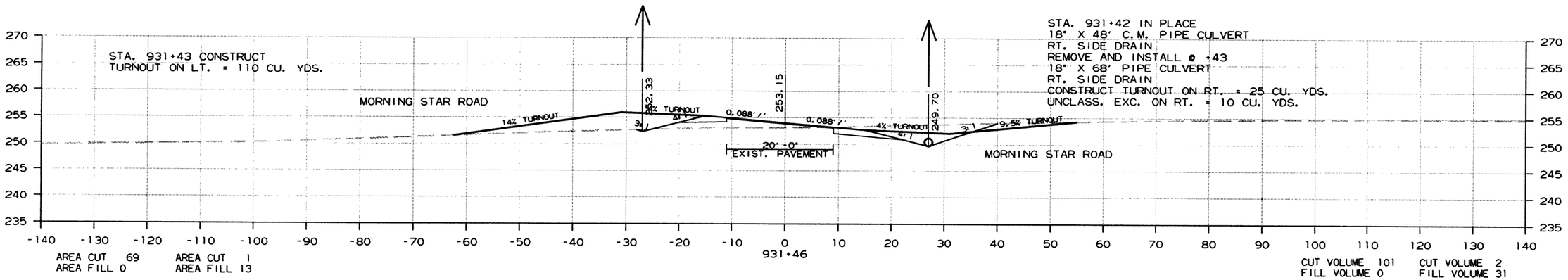
CROSS SECTION STA. 927+00 TO STA. 929+00

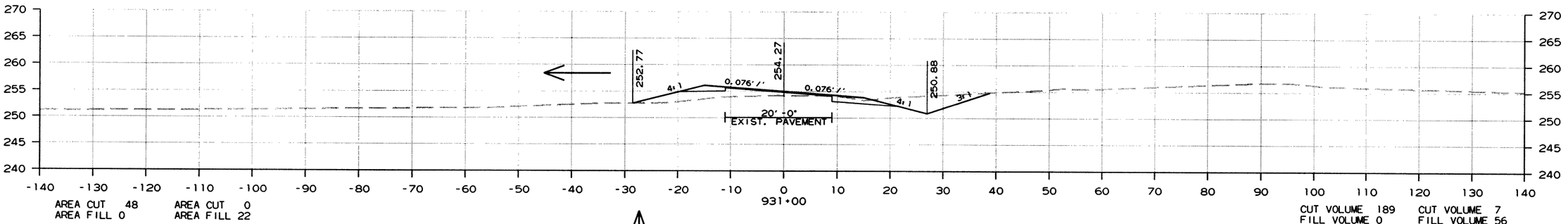
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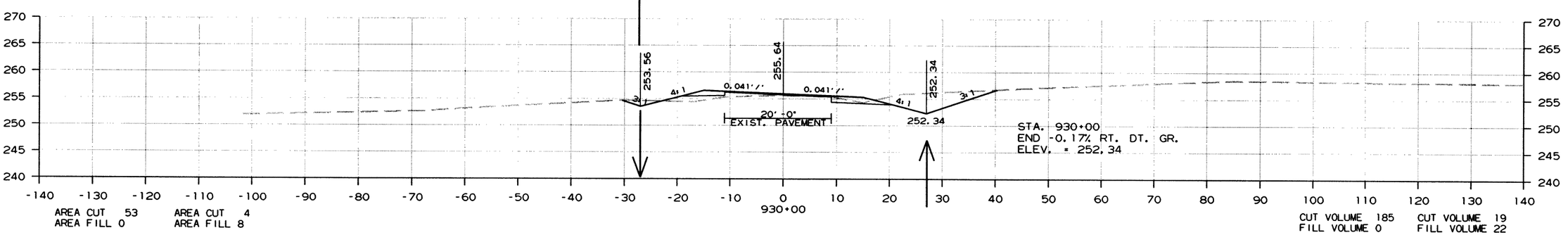
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				JOB NO.		070368	260	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2







CROSS SECTION STA. 930+00 TO STA. 931+46

r070368.dgn 1/15/2015

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.		070368	261	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2

CROSS SECTION STA. 932+00 TO STA. 934+00

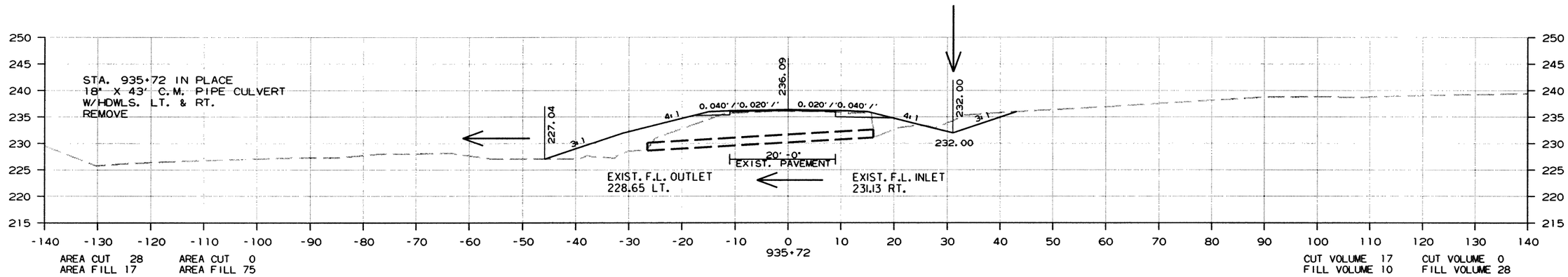
r070368.dgn 1/15/2015

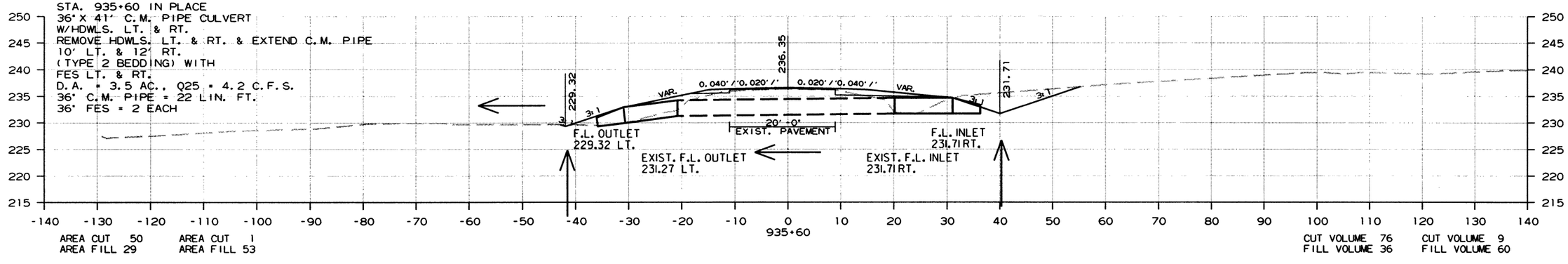
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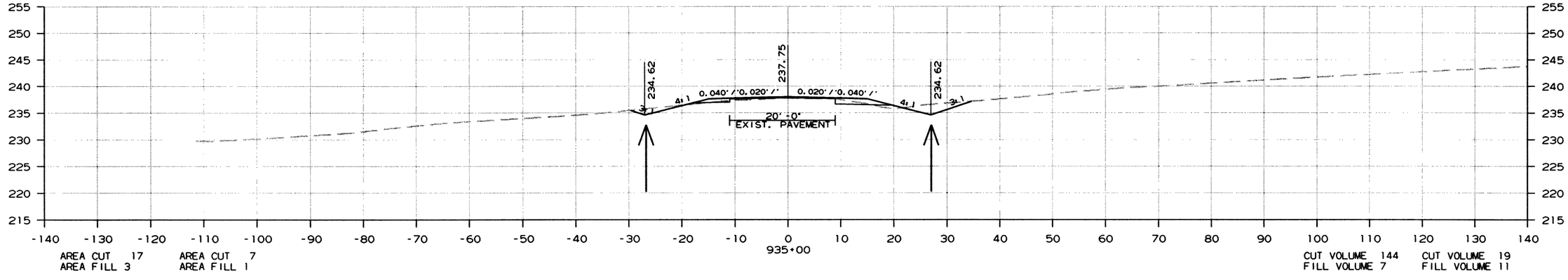
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 935+00 TO STA. 935+72

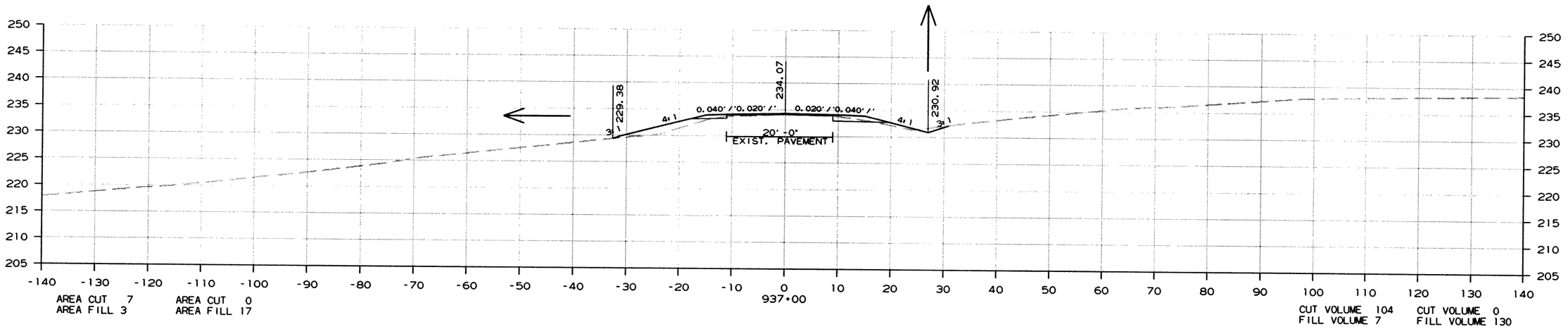
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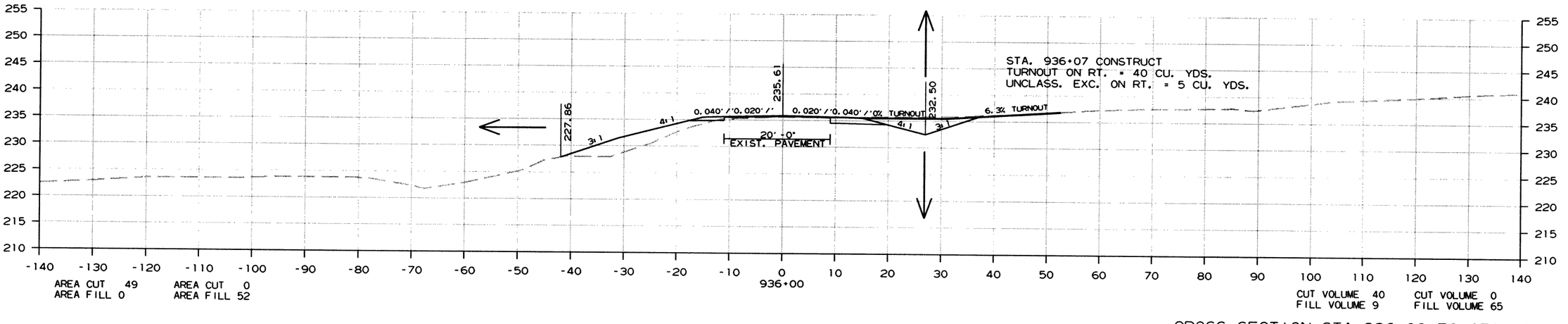
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		070368	263	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2





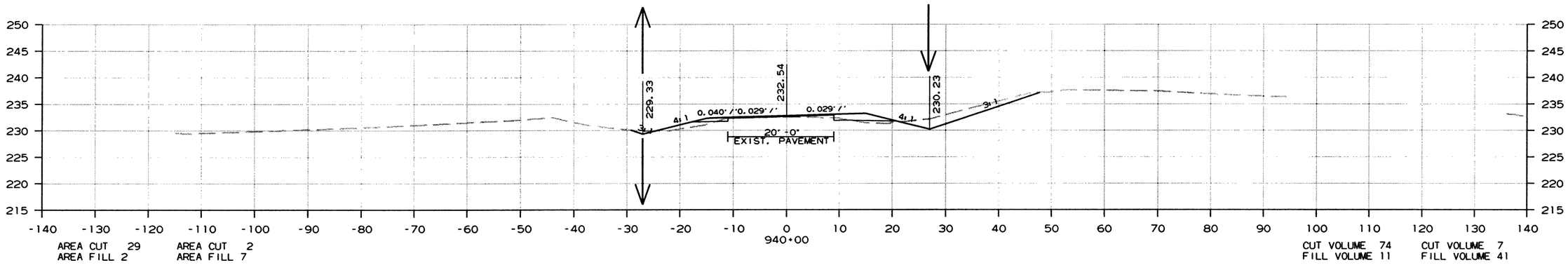
CROSS SECTION STA. 936+00 TO STA. 937+00

r070368.dgn 1/15/2015

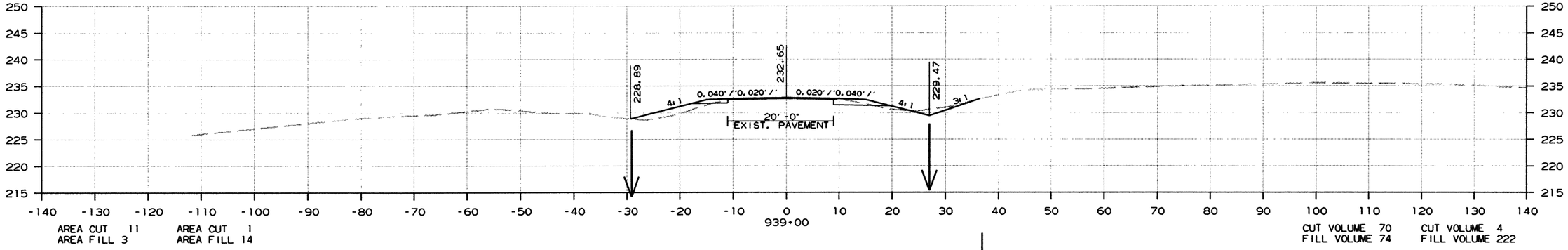
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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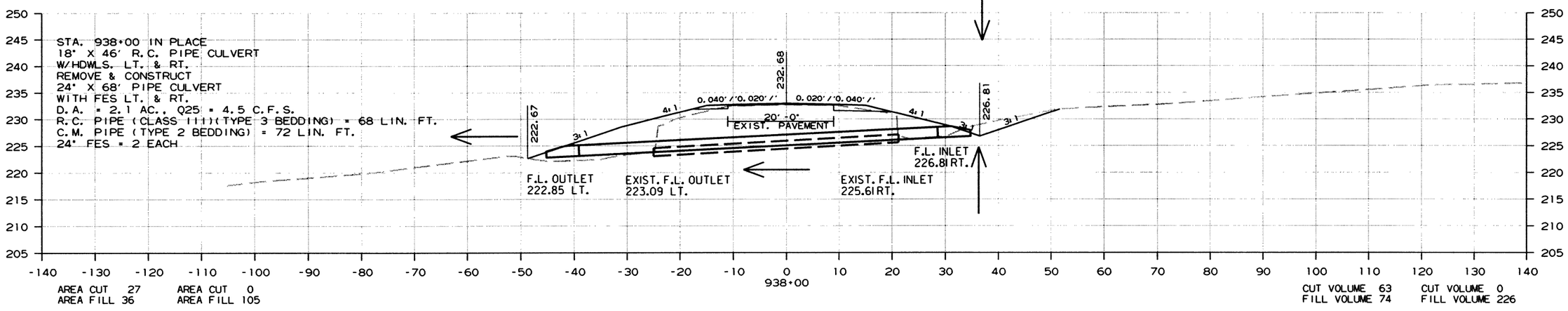
(2) CROSS SECTIONS

STAGE 1 STAGE 2



STAGE 1 STAGE 2





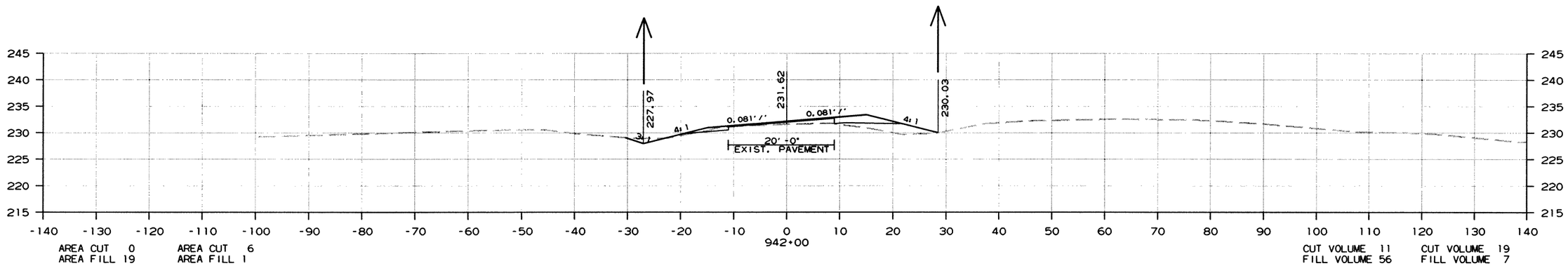
CROSS SECTION STA. 938+00 TO STA. 940+00

r070368.dgn 1/15/2015

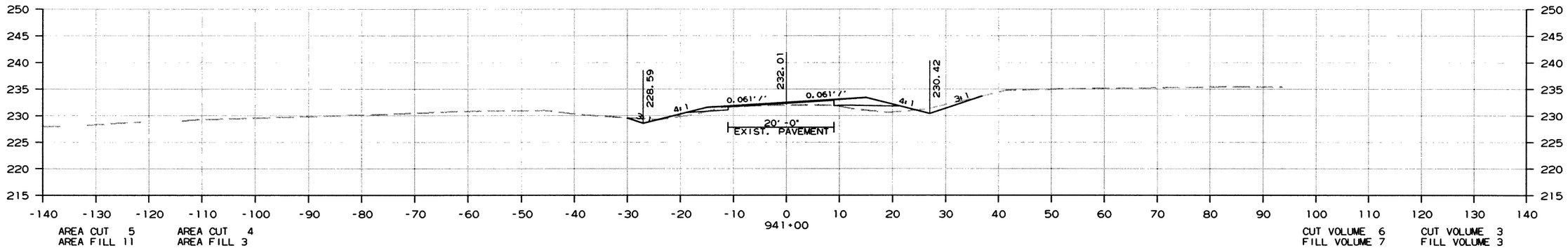
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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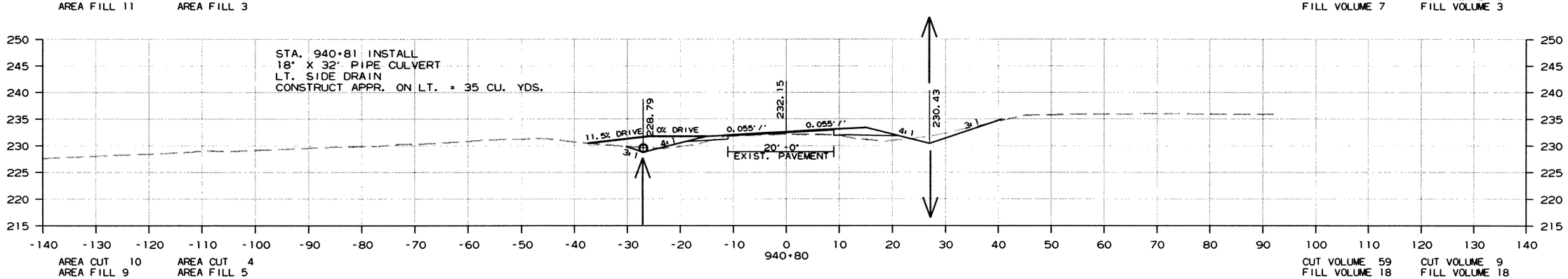
(2) CROSS SECTIONS

STAGE 1 STAGE 2



STAGE 1 STAGE 2





CROSS SECTION STA. 940+80 TO STA. 942+00

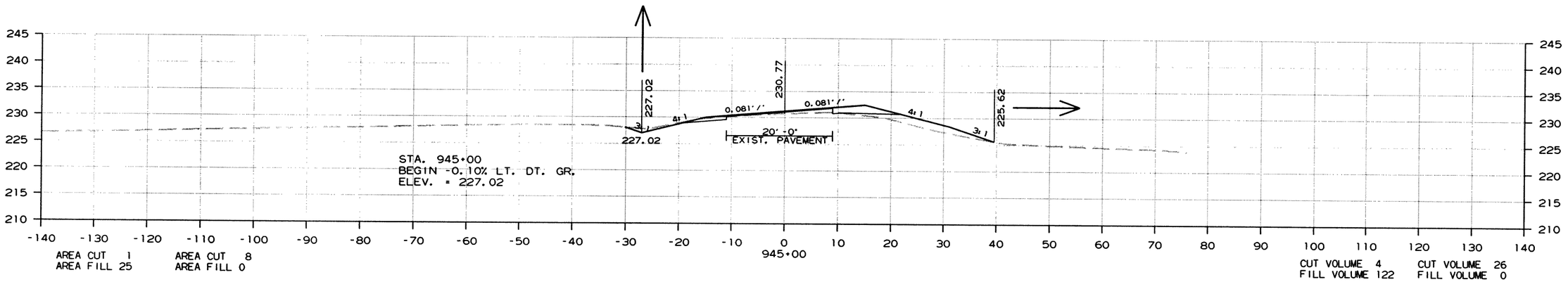
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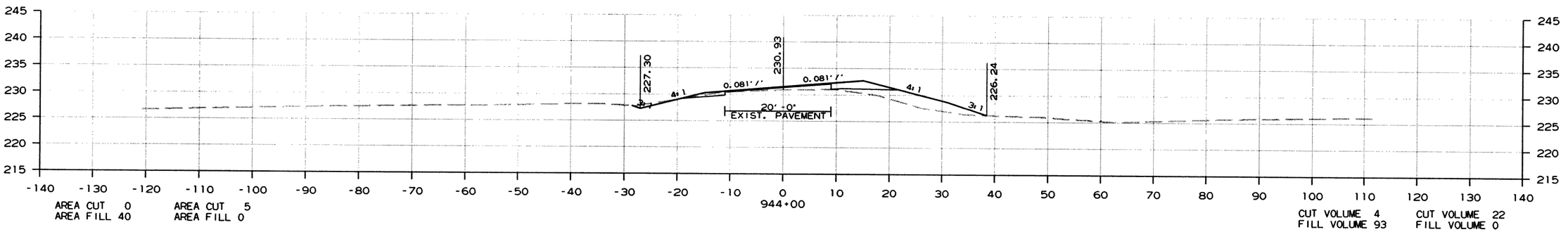
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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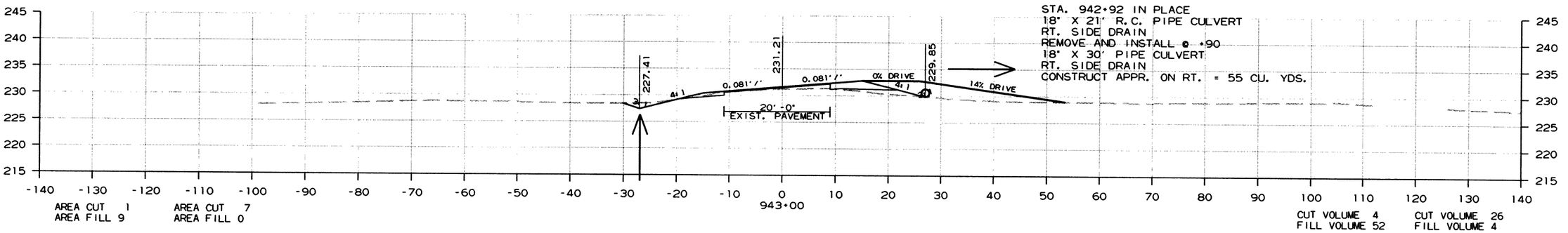
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







STA. 942+92 IN PLACE
18" X 21' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +90
18" X 30' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 55 CU. YDS.

CROSS SECTION STA. 943+00 TO STA. 945+00

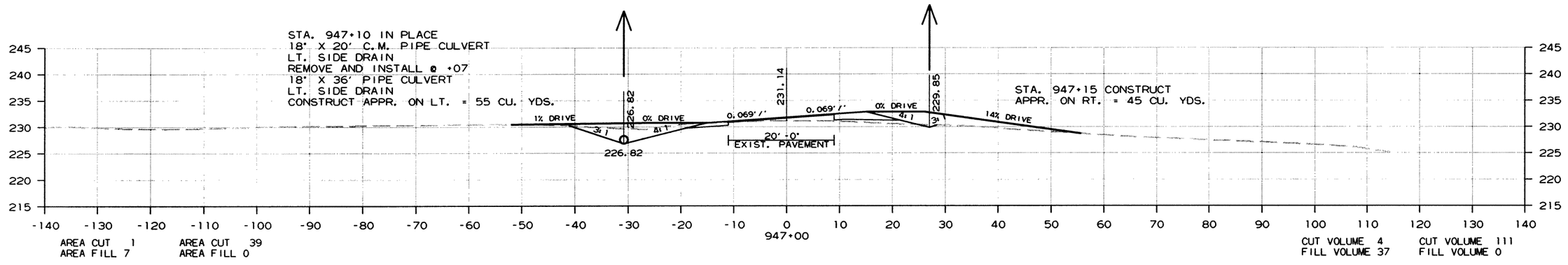
r070368.dgn 1/15/2015

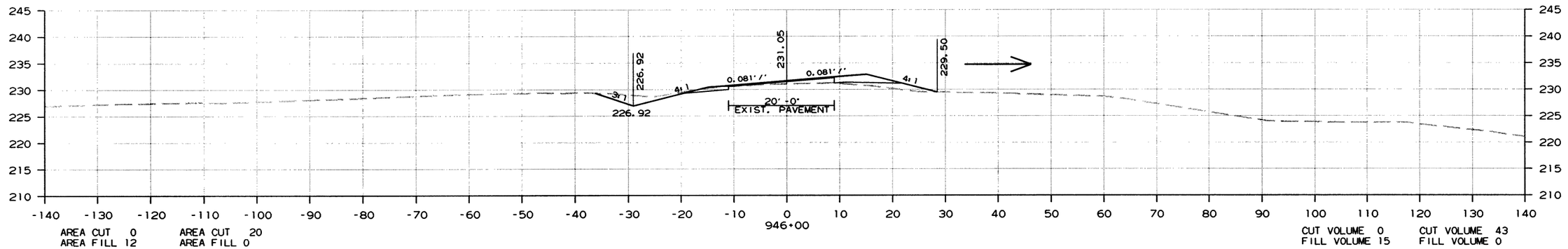
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				6	ARK.			
				JOB NO.		070368	267	335

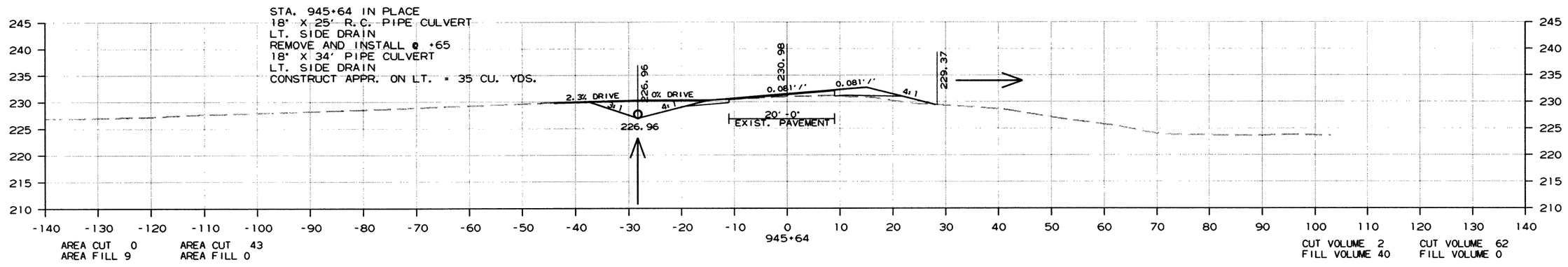
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 945+64 TO STA. 947+00

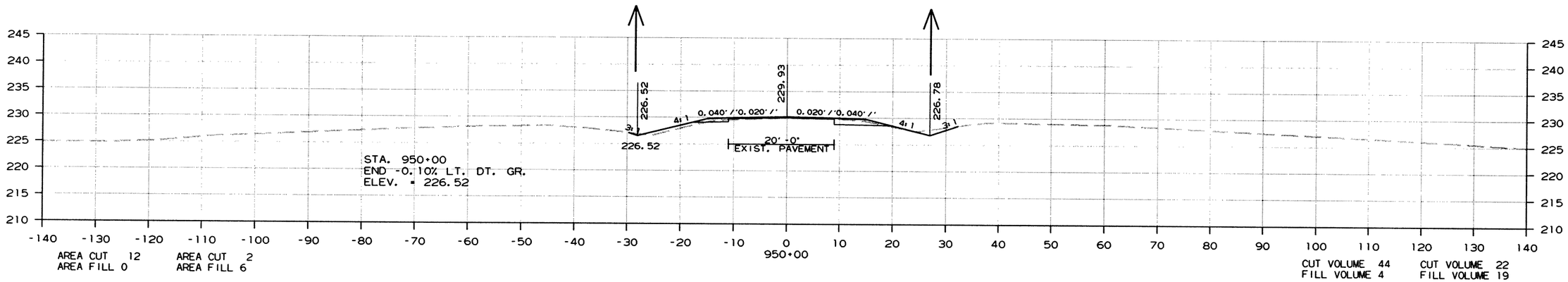
r070368.dgn 1/15/2015

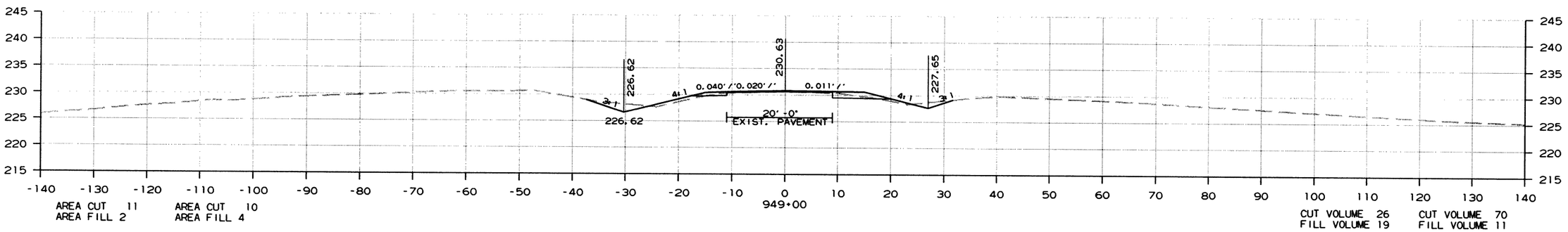
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	268	335

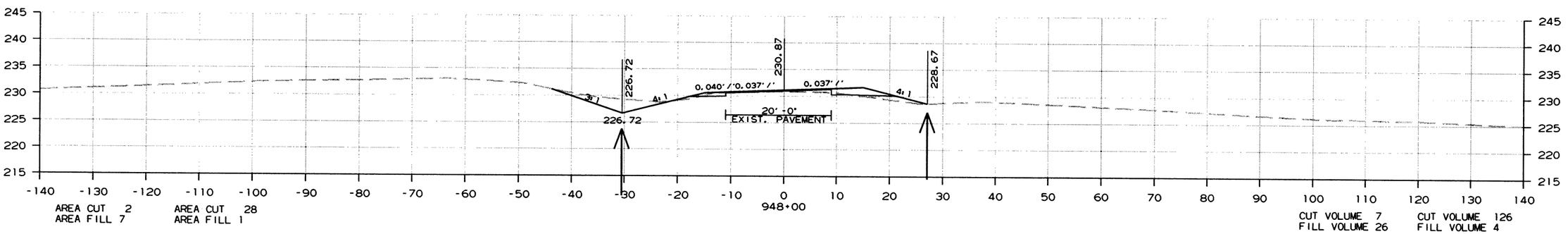
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 948+00 TO STA. 950+00

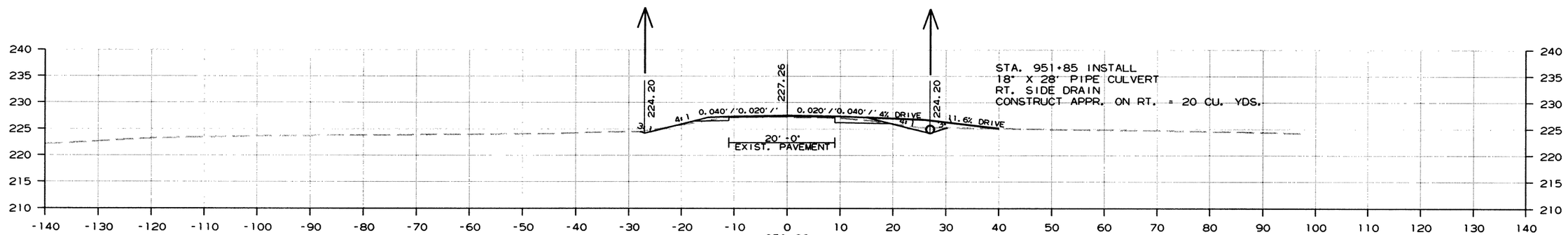
r070368.dgn 1/15/2015

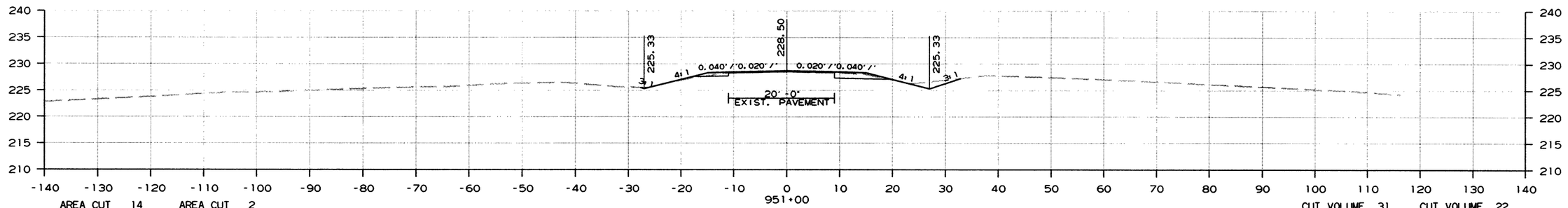
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	269	335

(2) CROSS SECTIONS

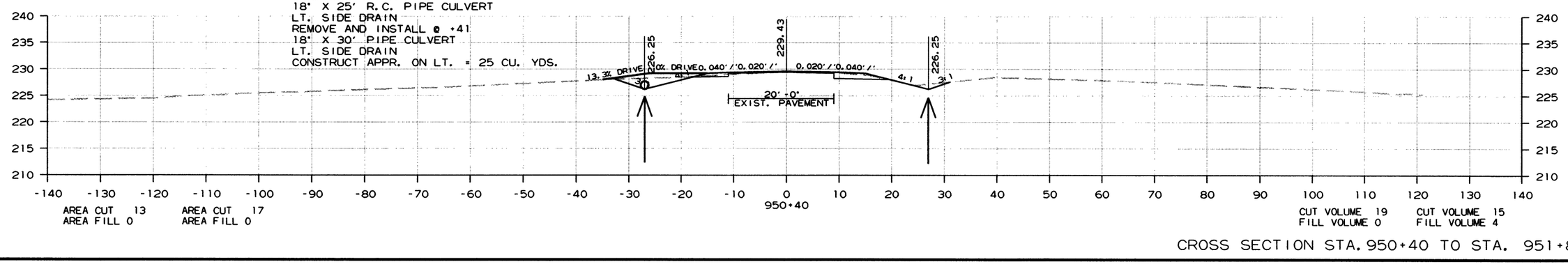
STAGE 1 STAGE 2

STAGE 1 STAGE 2





STA. 950+42 IN PLACE
18" X 25' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +41
18" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 25 CU. YDS.



CROSS SECTION STA. 950+40 TO STA. 951+83

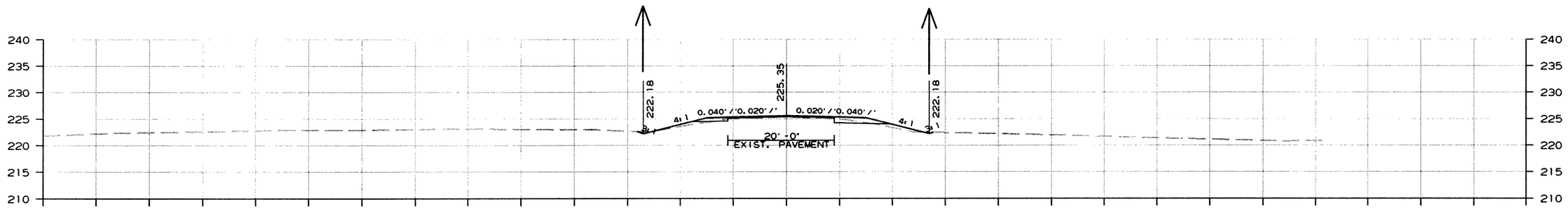
r070368.dgn 1/15/2015

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.		070368	270	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

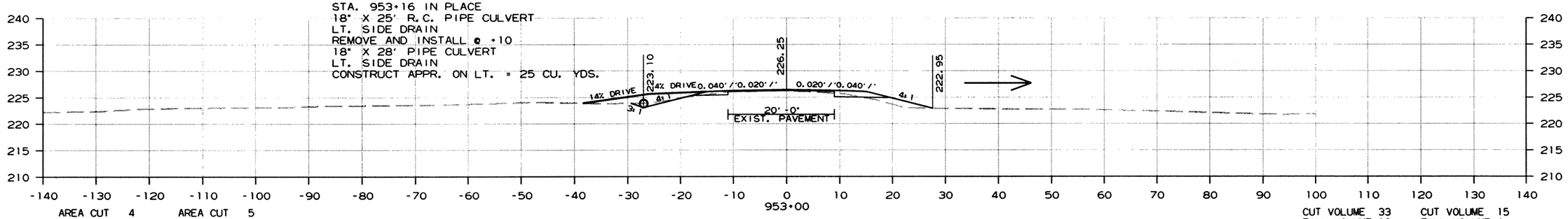
STAGE 1 STAGE 2



AREA CUT 6 AREA CUT 1
AREA FILL 4 AREA FILL 3

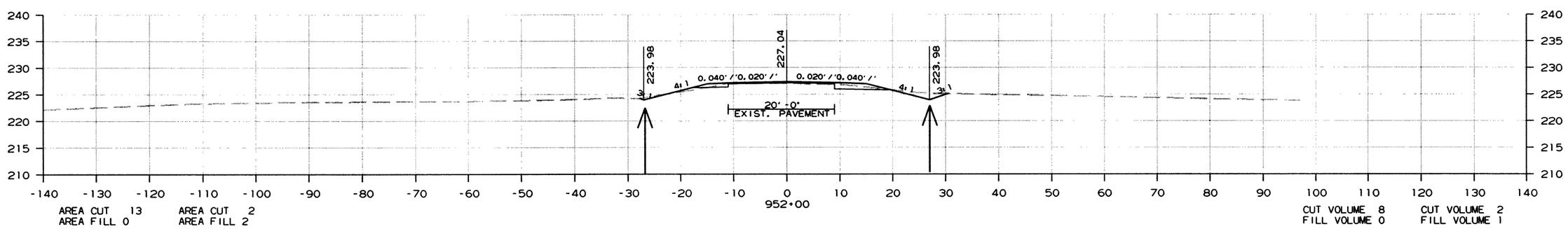
CUT VOLUME 19 CUT VOLUME 11
FILL VOLUME 26 FILL VOLUME 7

STA. 953+16 IN PLACE
18" X 25' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +10
18" X 28' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 25 CU. YDS.



AREA CUT 4 AREA CUT 5
AREA FILL 9 AREA FILL 0

CUT VOLUME 33 CUT VOLUME 15
FILL VOLUME 19 FILL VOLUME 4



AREA CUT 13 AREA CUT 2
AREA FILL 0 AREA FILL 2

CUT VOLUME 8 CUT VOLUME 2
FILL VOLUME 0 FILL VOLUME 1

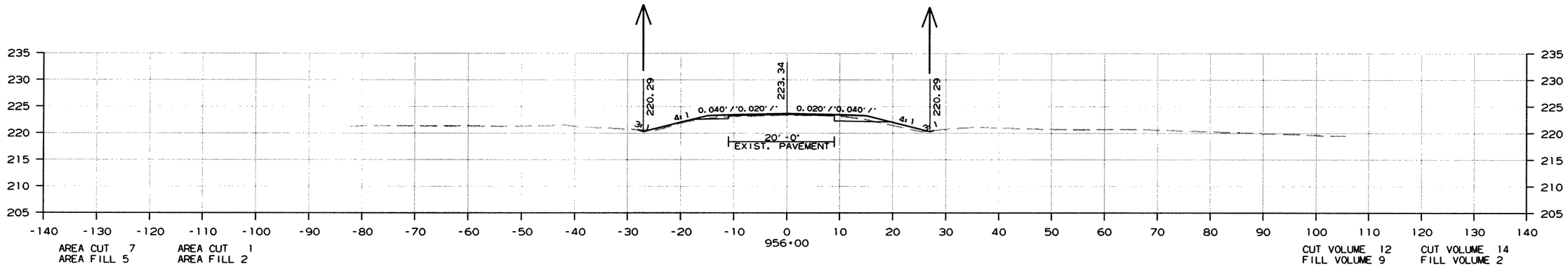
CROSS SECTION STA. 952+00 TO STA. 954+00

r070368.dgn 1/15/2015

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.		070368	271	335

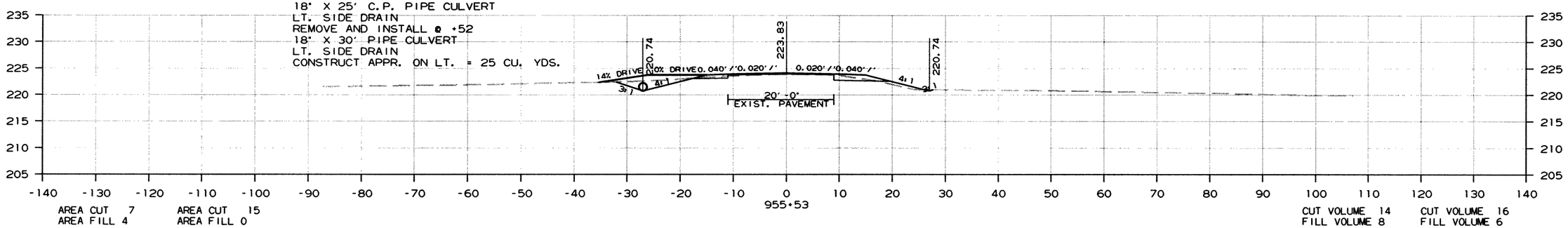
(2) CROSS SECTIONS

STAGE 1 STAGE 2

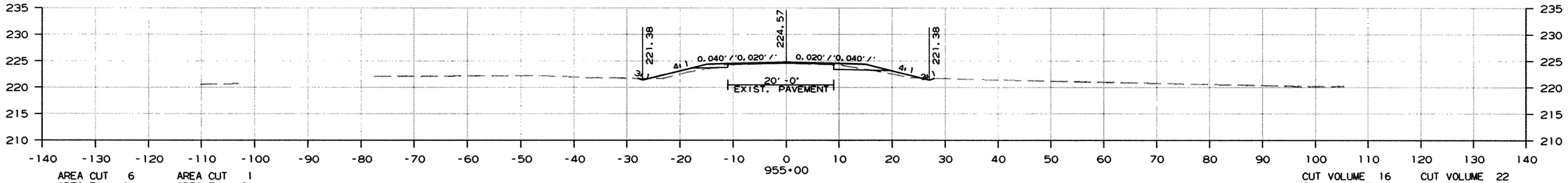


AREA CUT 7 AREA FILL 5 | AREA CUT 1 AREA FILL 2 | CUT VOLUME 12 FILL VOLUME 9 | CUT VOLUME 14 FILL VOLUME 2

STA. 955+56 IN PLACE
18" X 25' C.P. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +52
18" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 25 CU. YDS.

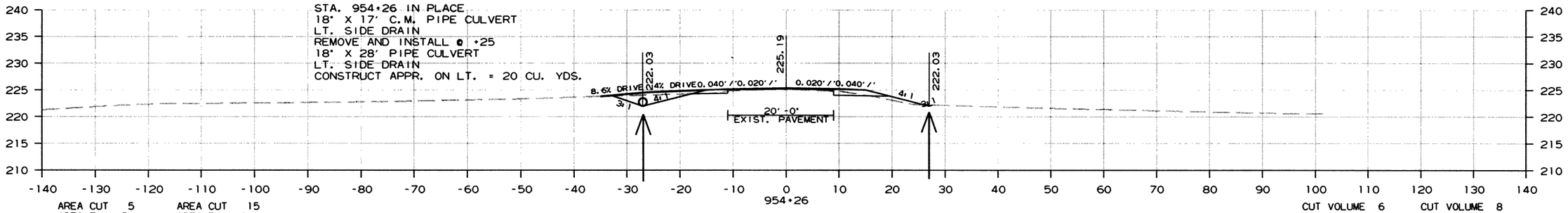


AREA CUT 7 AREA FILL 4 | AREA CUT 15 AREA FILL 0 | CUT VOLUME 14 FILL VOLUME 8 | CUT VOLUME 16 FILL VOLUME 6



AREA CUT 6 AREA FILL 4 | AREA CUT 1 AREA FILL 6 | CUT VOLUME 16 FILL VOLUME 14 | CUT VOLUME 22 FILL VOLUME 8

STA. 954+26 IN PLACE
18" X 17' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +25
18" X 28' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 20 CU. YDS.



AREA CUT 5 AREA FILL 5 | AREA CUT 15 AREA FILL 0 | CUT VOLUME 6 FILL VOLUME 5 | CUT VOLUME 8 FILL VOLUME 2

CROSS SECTION STA. 954+26 TO STA. 956+00

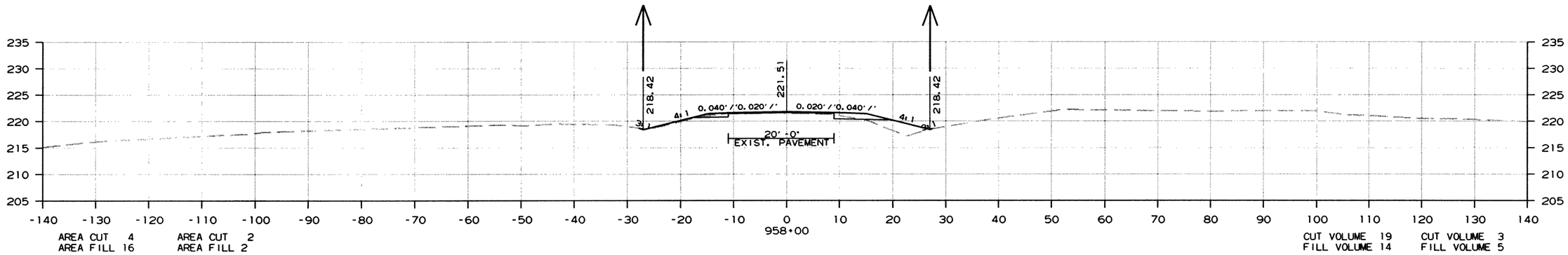
r070368.dgn 1/15/2015

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.		070368	272	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

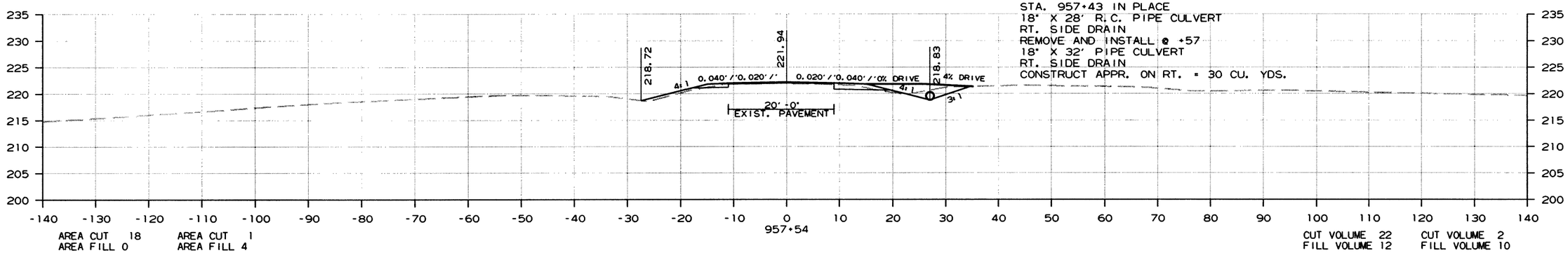
STAGE 1 STAGE 2



AREA CUT 4 AREA FILL 16 | AREA CUT 2 AREA FILL 2

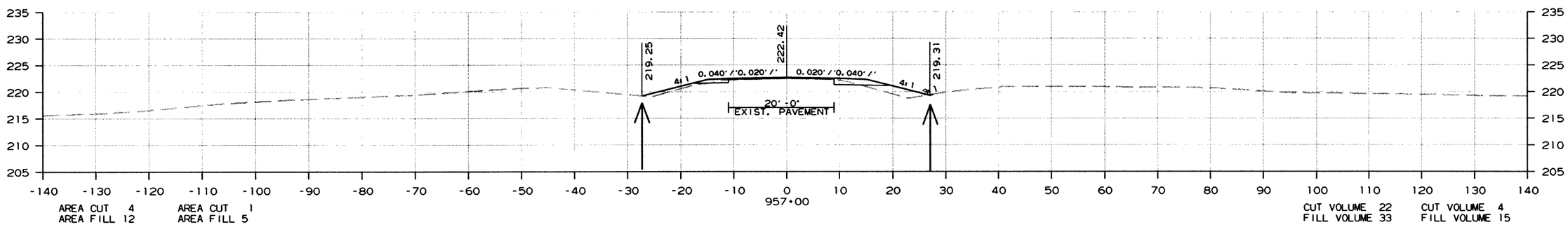
CUT VOLUME 19 FILL VOLUME 14 | CUT VOLUME 3 FILL VOLUME 5

STA. 957+43 IN PLACE
18" X 28' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +57
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.



AREA CUT 18 AREA FILL 0 | AREA CUT 1 AREA FILL 4

CUT VOLUME 22 FILL VOLUME 12 | CUT VOLUME 2 FILL VOLUME 10



AREA CUT 4 AREA FILL 12 | AREA CUT 1 AREA FILL 5

CUT VOLUME 22 FILL VOLUME 33 | CUT VOLUME 4 FILL VOLUME 15

CROSS SECTION STA. 957+00 TO STA. 958+00

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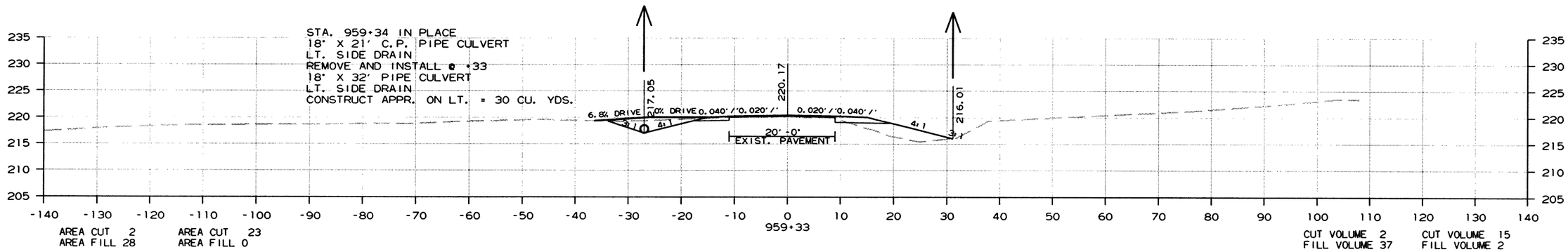
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	273	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2

STA. 959+34 IN PLACE
18" X 21' C.P. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +33
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.

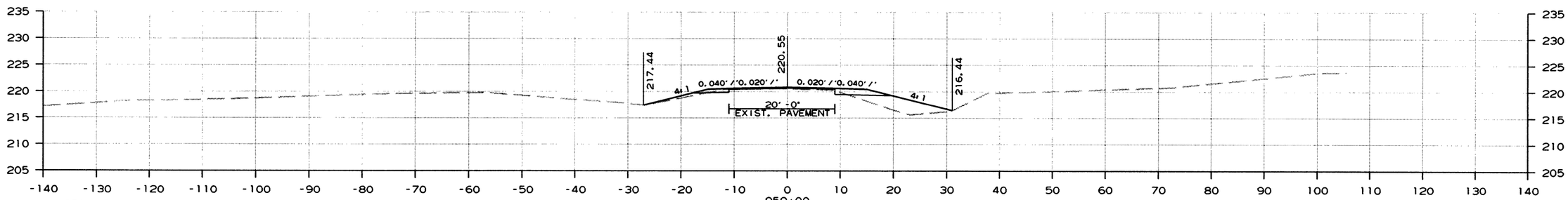


AREA CUT 2
AREA FILL 28

AREA CUT 23
AREA FILL 0

CUT VOLUME 2
FILL VOLUME 37

CUT VOLUME 15
FILL VOLUME 2



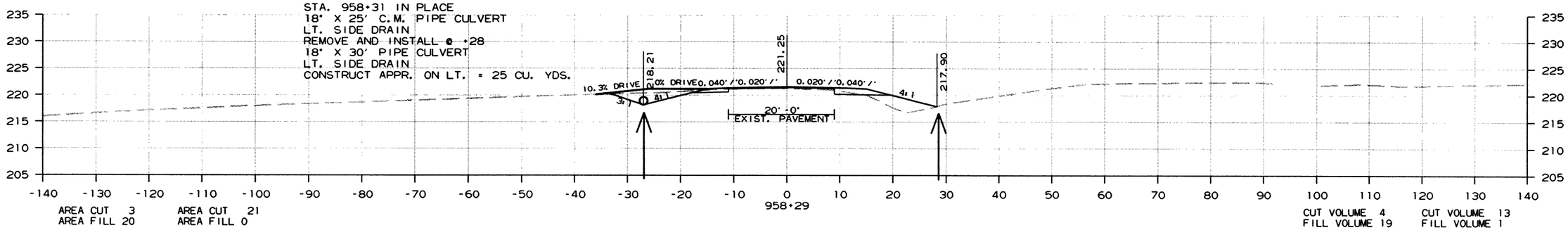
AREA CUT 2
AREA FILL 31

AREA CUT 1
AREA FILL 4

CUT VOLUME 8
FILL VOLUME 68

CUT VOLUME 29
FILL VOLUME 5

STA. 958+31 IN PLACE
18" X 25' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +28
18" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 25 CU. YDS.



AREA CUT 3
AREA FILL 20

AREA CUT 21
AREA FILL 0

CUT VOLUME 4
FILL VOLUME 19

CUT VOLUME 13
FILL VOLUME 1

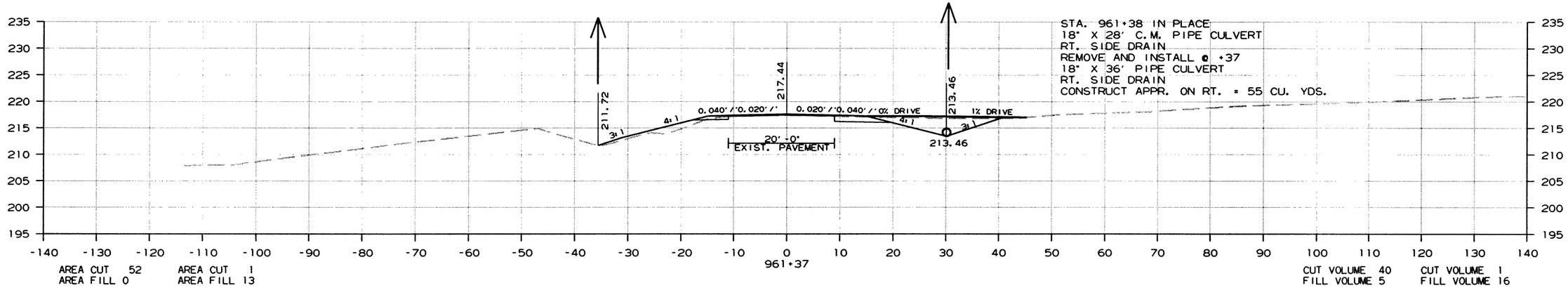
CROSS SECTION STA. 958+29 TO STA. 959+33

r070368.dgn 1/15/2015

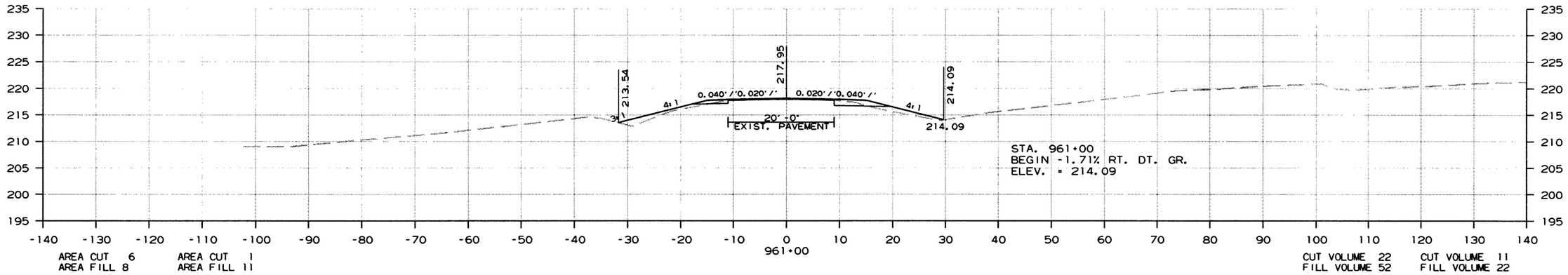
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
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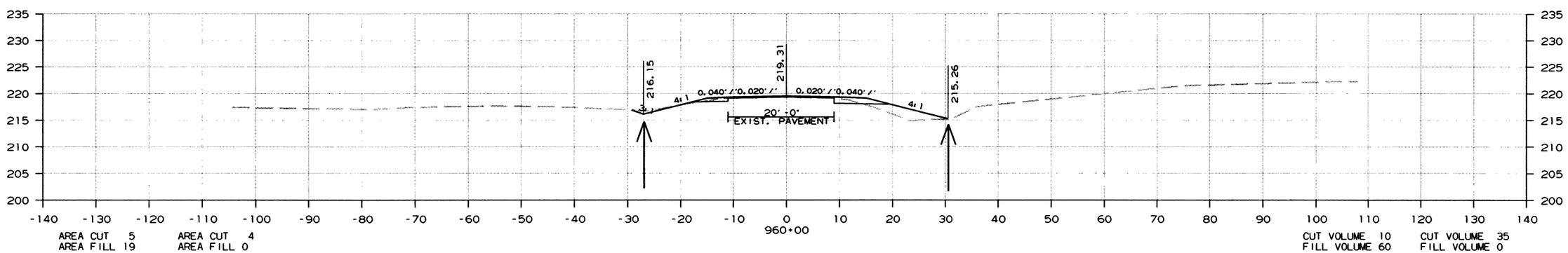
(2) CROSS SECTIONS

STAGE 1 STAGE 2



STAGE 1 STAGE 2





CROSS SECTION STA. 960+00 TO STA. 961+37

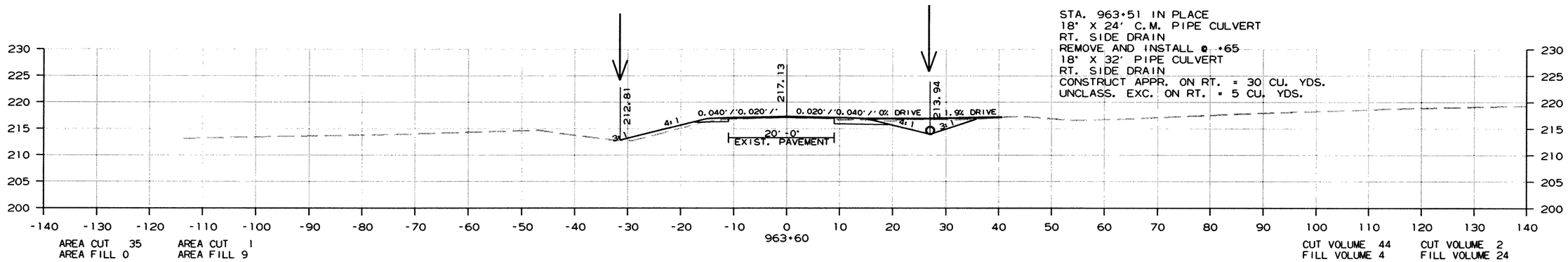
r070368.dgn 1/15/2015

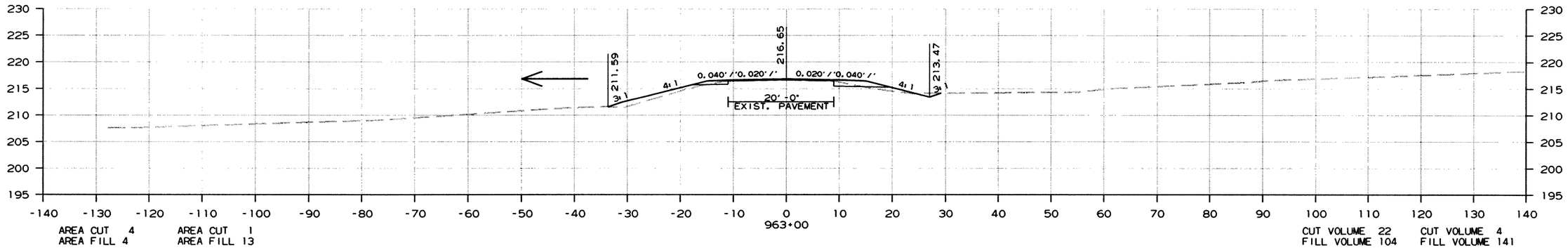
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	275	335

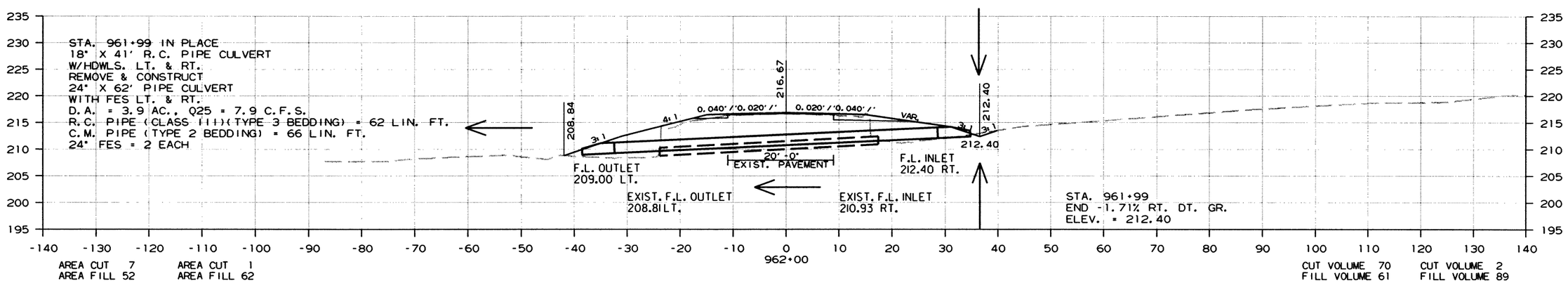
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 962+00 TO STA. 963+60

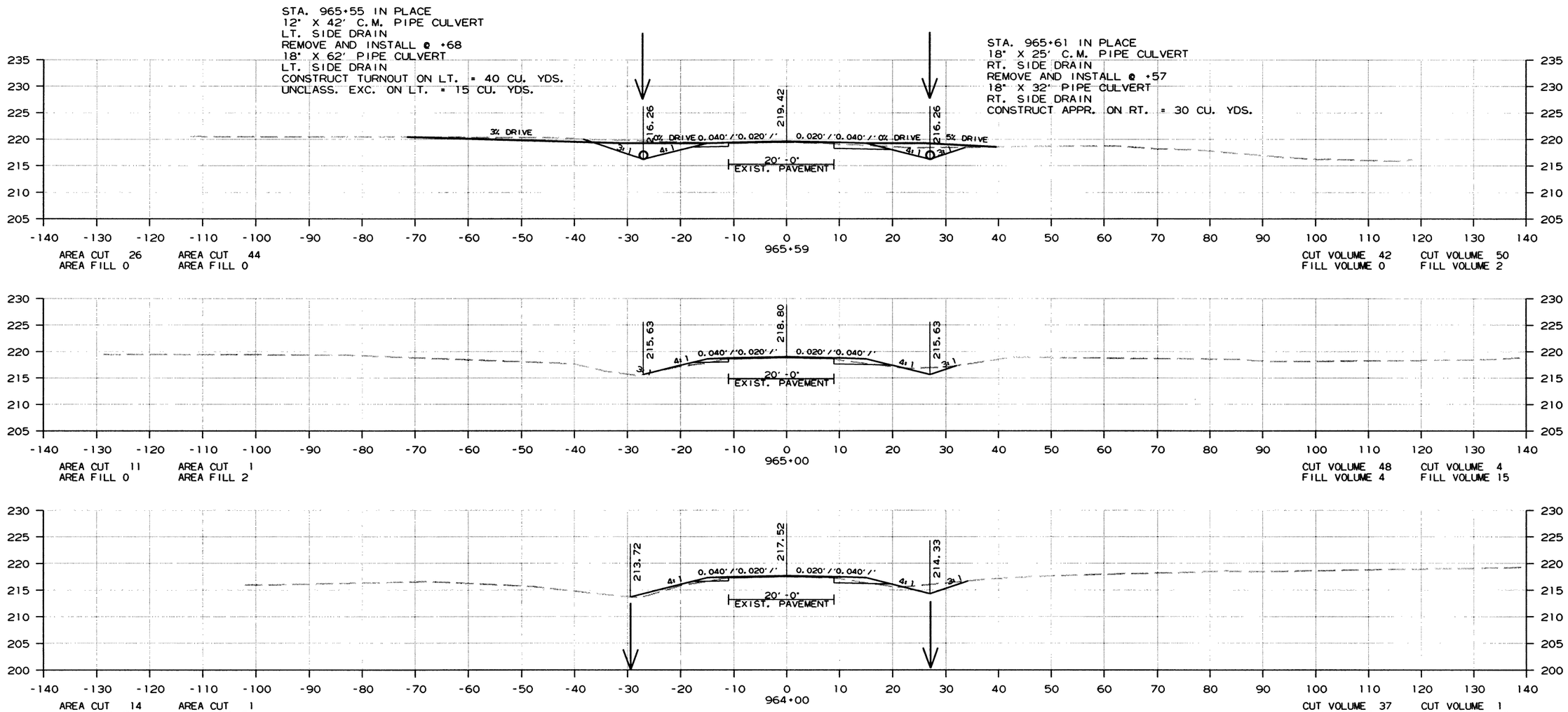
r070368.dgn 1/15/2015

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.		070368	276	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 964+00 TO STA. 965+59

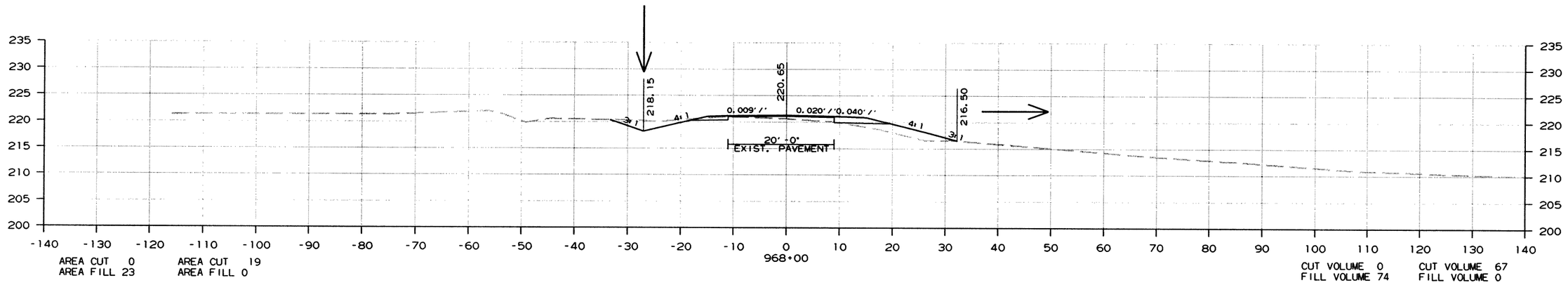
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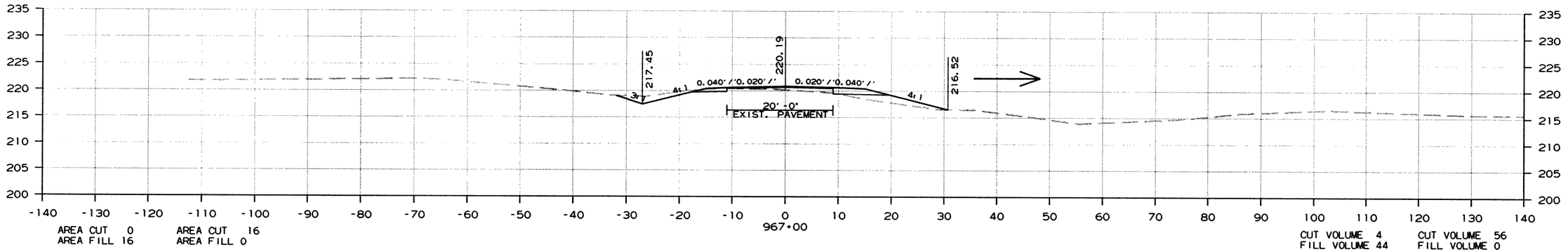
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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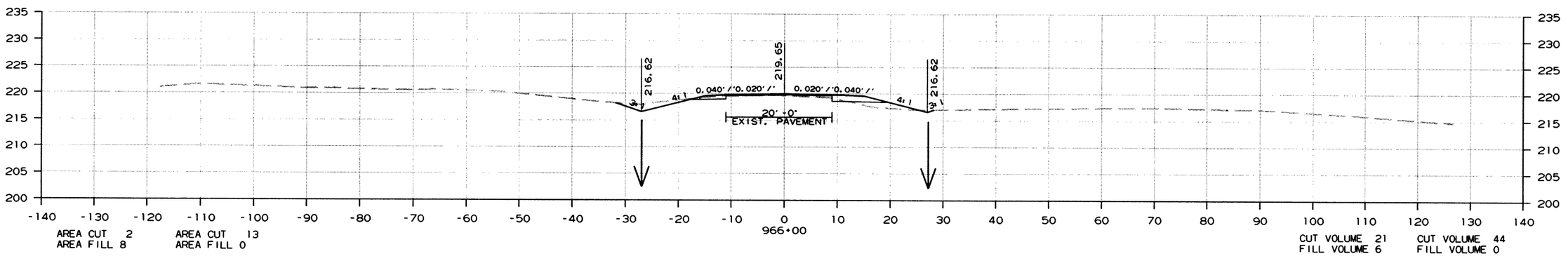
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 966+00 TO STA. 968+00

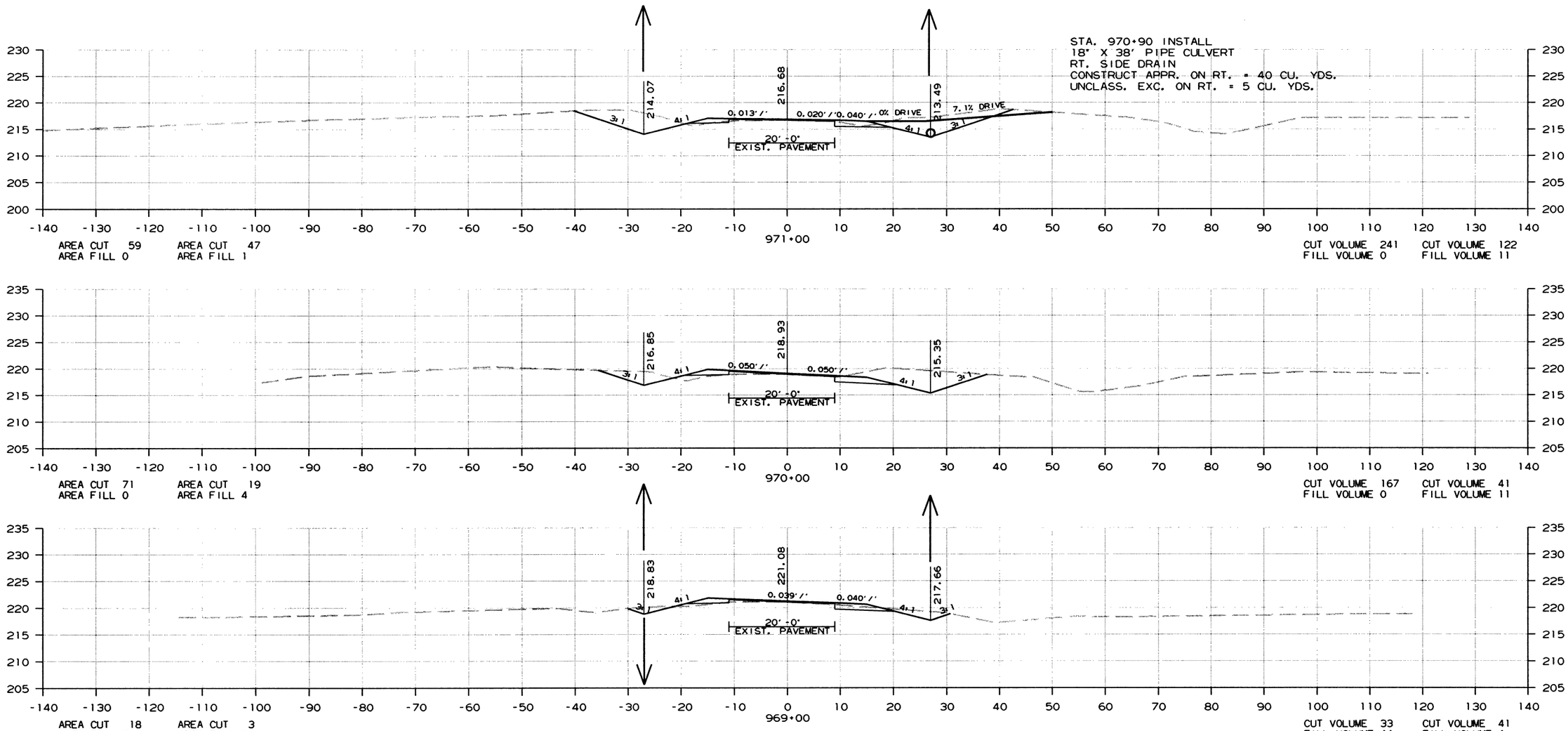
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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		070368	278	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 969+00 TO STA. 971+00

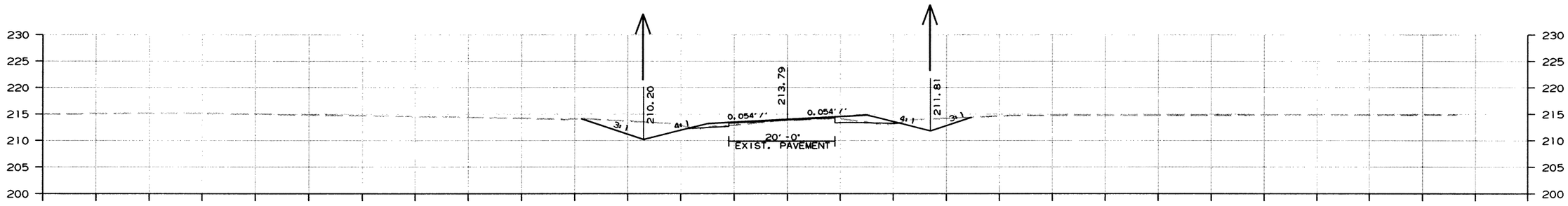
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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		070368	279	335

(2) CROSS SECTIONS

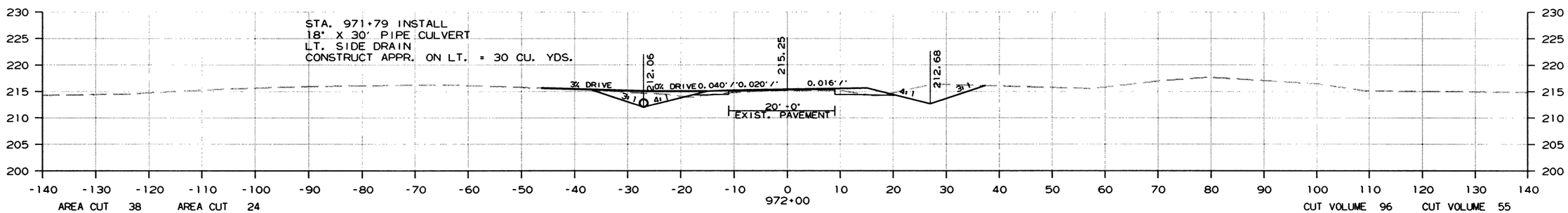
STAGE 1 STAGE 2

STAGE 1 STAGE 2



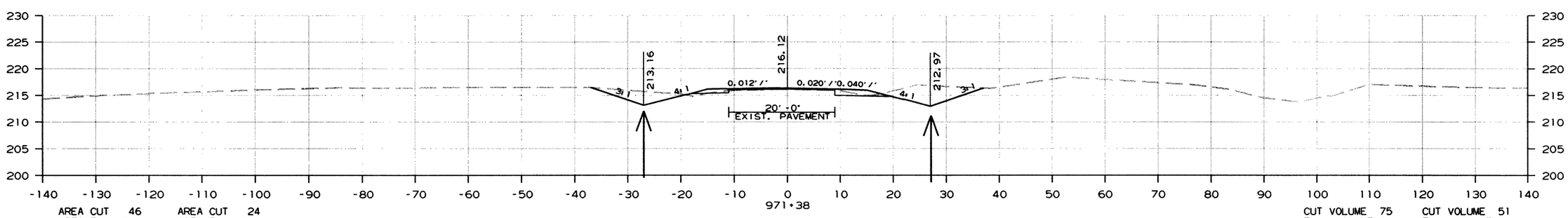
AREA CUT 21 AREA CUT 36
AREA FILL 0 AREA FILL 0

CUT VOLUME 111 CUT VOLUME 111
FILL VOLUME 0 FILL VOLUME 4



AREA CUT 38 AREA CUT 24
AREA FILL 0 AREA FILL 1

CUT VOLUME 96 CUT VOLUME 55
FILL VOLUME 0 FILL VOLUME 2



AREA CUT 46 AREA CUT 24
AREA FILL 0 AREA FILL 1

CUT VOLUME 75 CUT VOLUME 51
FILL VOLUME 0 FILL VOLUME 1

CROSS SECTION STA. 971+38 TO STA. 973+00

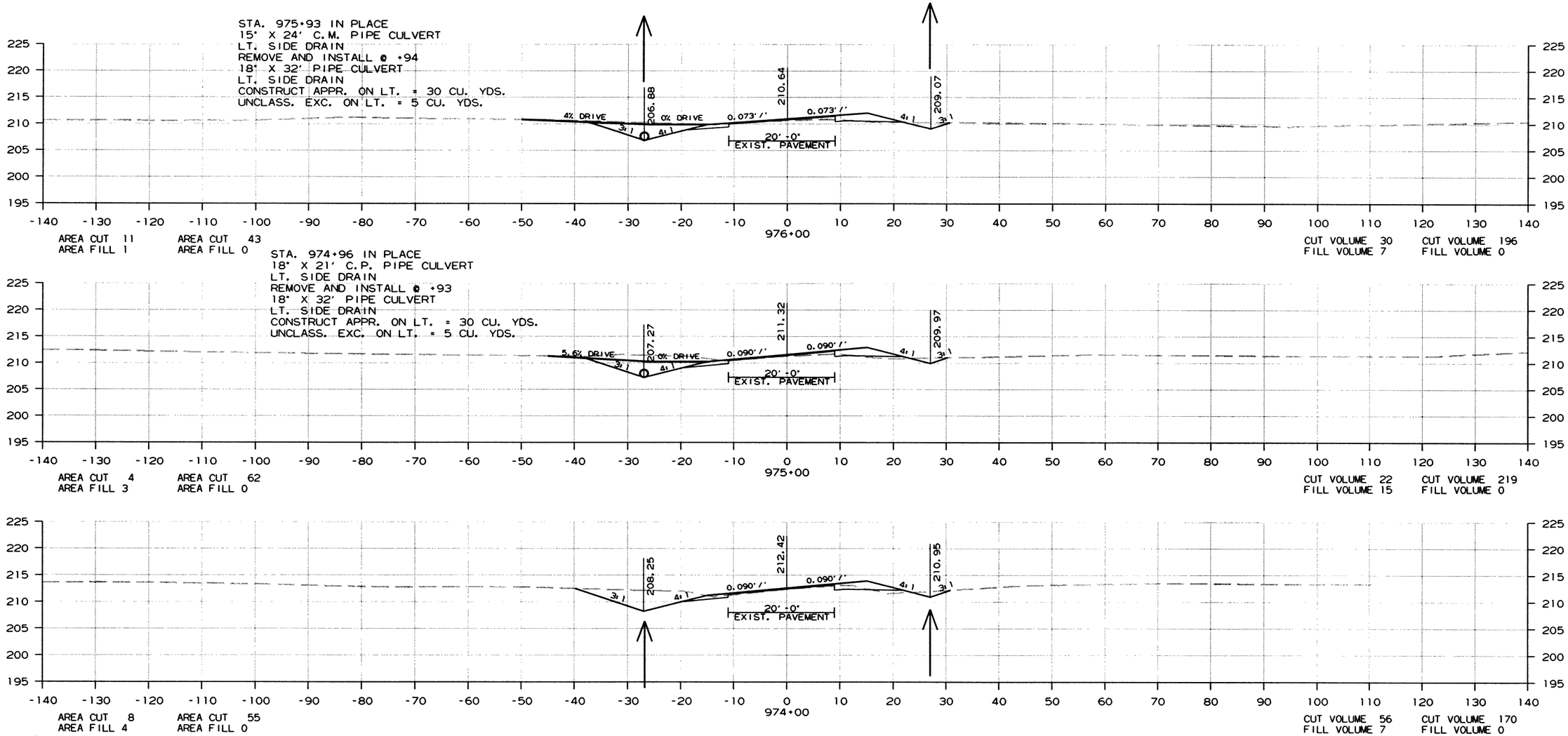
r070368.dgn 1/15/2015

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.		070368	280	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 974+00 TO STA. 976+00

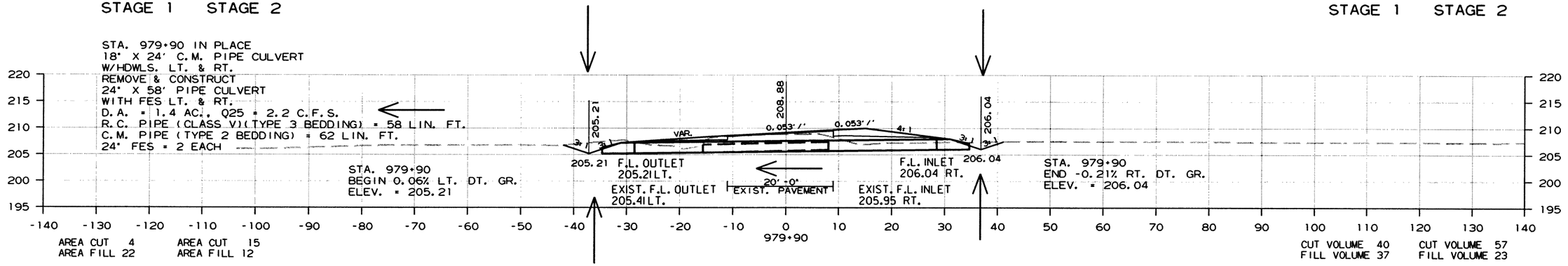
r070368.dgn 1/15/2015

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.		070368	281	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STA. 979+90 IN PLACE
18" X 24' C.M. PIPE CULVERT
W/HDWLS. LT. & RT.
REMOVE & CONSTRUCT
24" X 58' PIPE CULVERT
WITH FES LT. & RT.
D.A. = 1.4 AC., Q25 = 2.2 C.F.S.
R.C. PIPE (CLASS V)(TYPE 3 BEDDING) = 58 LIN. FT.
C.M. PIPE (TYPE 2 BEDDING) = 62 LIN. FT.
24" FES = 2 EACH

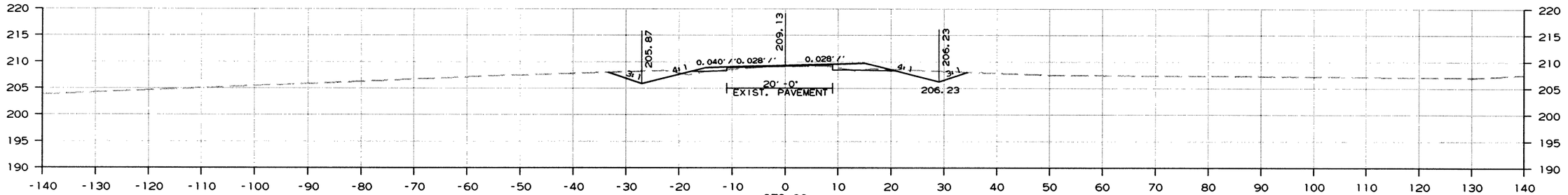


AREA CUT 4
AREA FILL 22

AREA CUT 15
AREA FILL 12

CUT VOLUME 40
FILL VOLUME 37

CUT VOLUME 57
FILL VOLUME 23

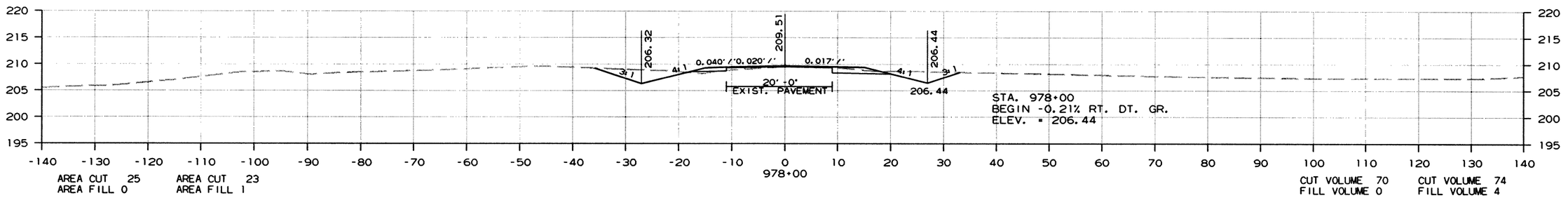


AREA CUT 19
AREA FILL 0

AREA CUT 18
AREA FILL 1

CUT VOLUME 81
FILL VOLUME 0

CUT VOLUME 78
FILL VOLUME 4

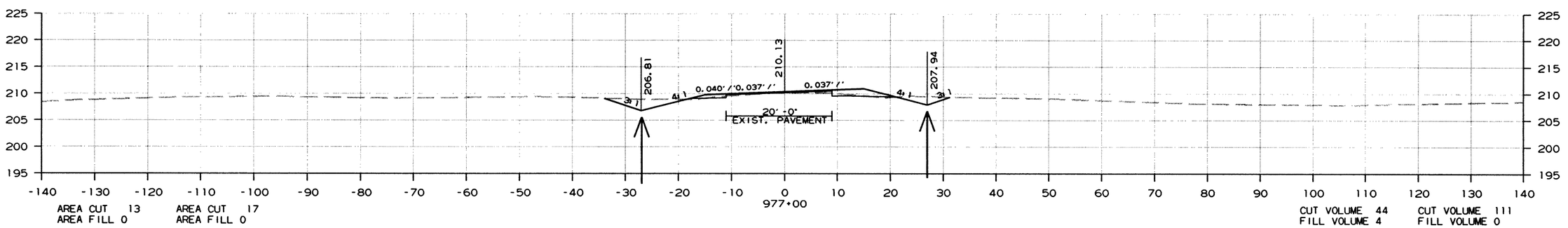


AREA CUT 25
AREA FILL 0

AREA CUT 23
AREA FILL 1

CUT VOLUME 70
FILL VOLUME 0

CUT VOLUME 74
FILL VOLUME 4



AREA CUT 13
AREA FILL 0

AREA CUT 17
AREA FILL 0

CUT VOLUME 44
FILL VOLUME 4

CUT VOLUME 111
FILL VOLUME 0

CROSS SECTION STA. 977+00 TO STA. 979+90

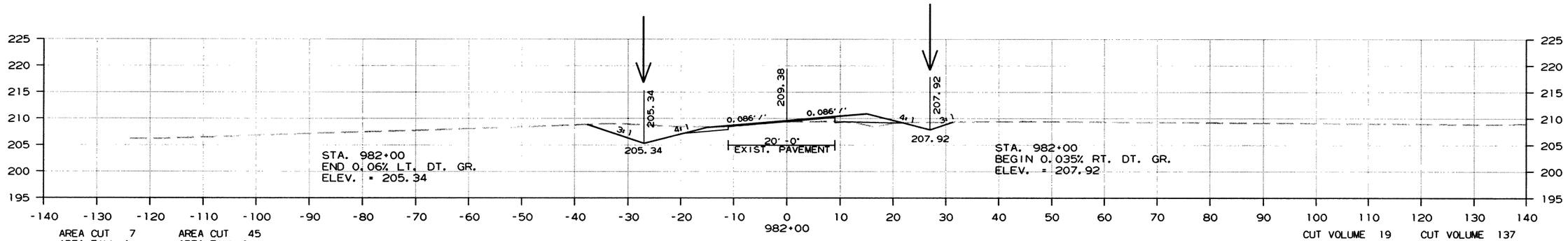
r070368.dgn 1/15/2015

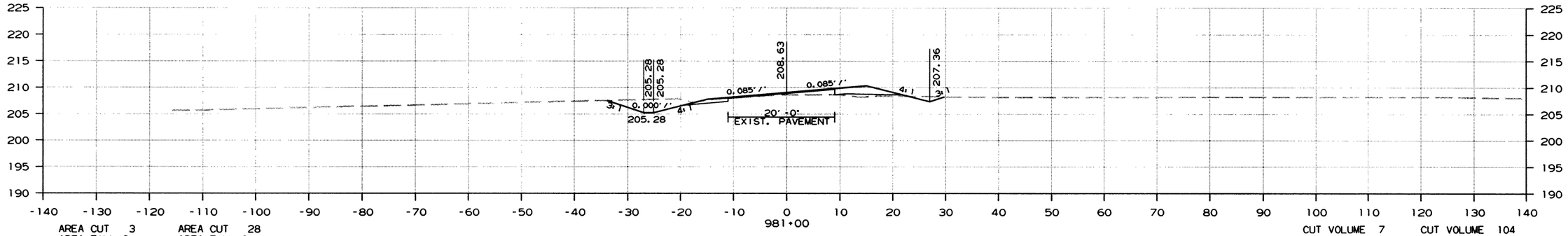
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	282	335

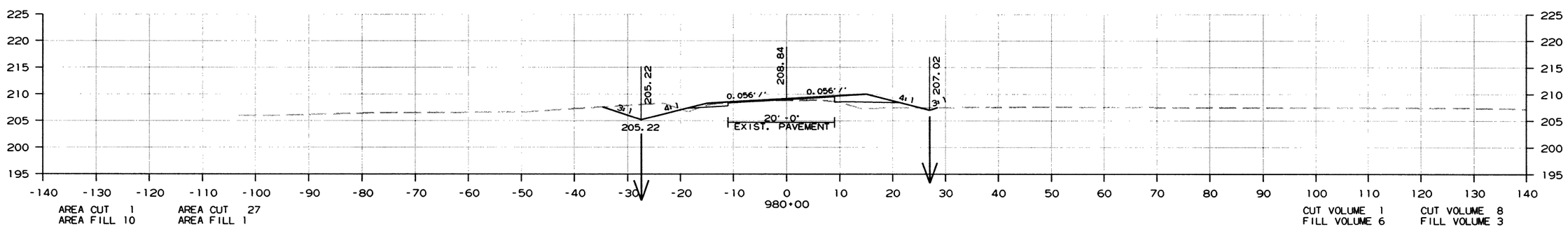
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 980+00 TO STA. 982+00

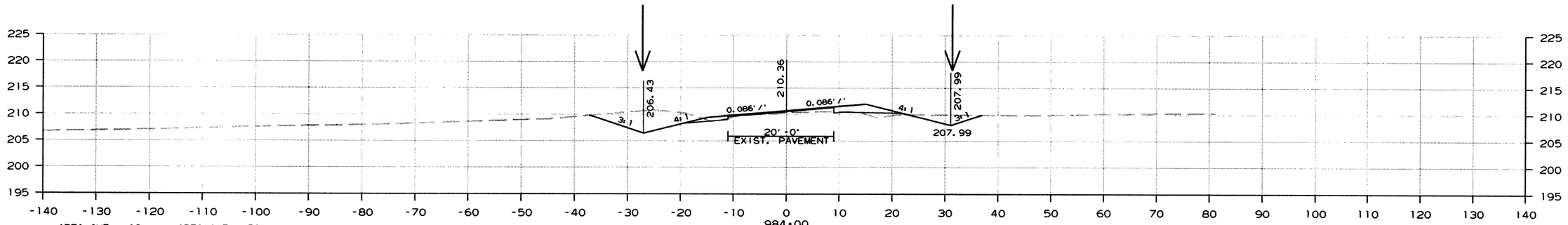
r070368.dgn 1/15/2015

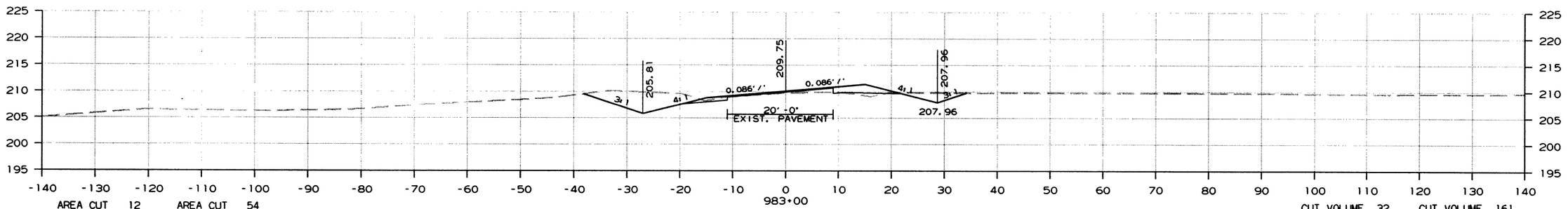
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	283	335

(2) CROSS SECTIONS

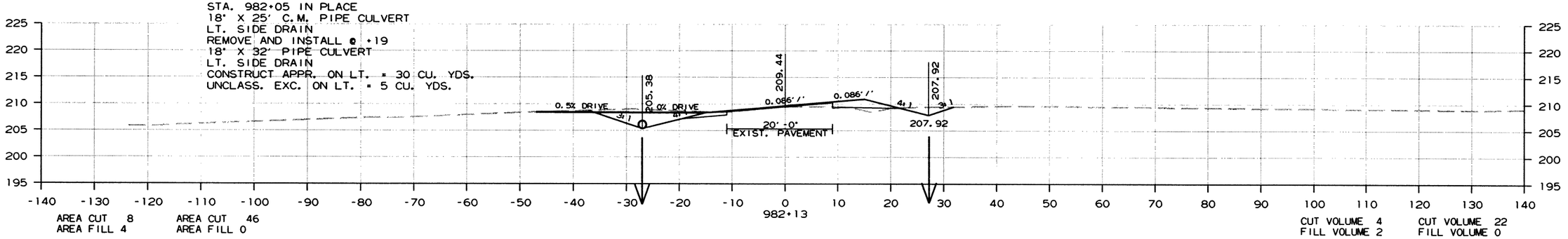
STAGE 1 STAGE 2

STAGE 1 STAGE 2





STA. 982+05 IN PLACE
18" X 25' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +19
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.
UNCLASS. EXC. ON LT. = 5 CU. YDS.



CROSS SECTION STA. 982+13 TO STA. 984+00

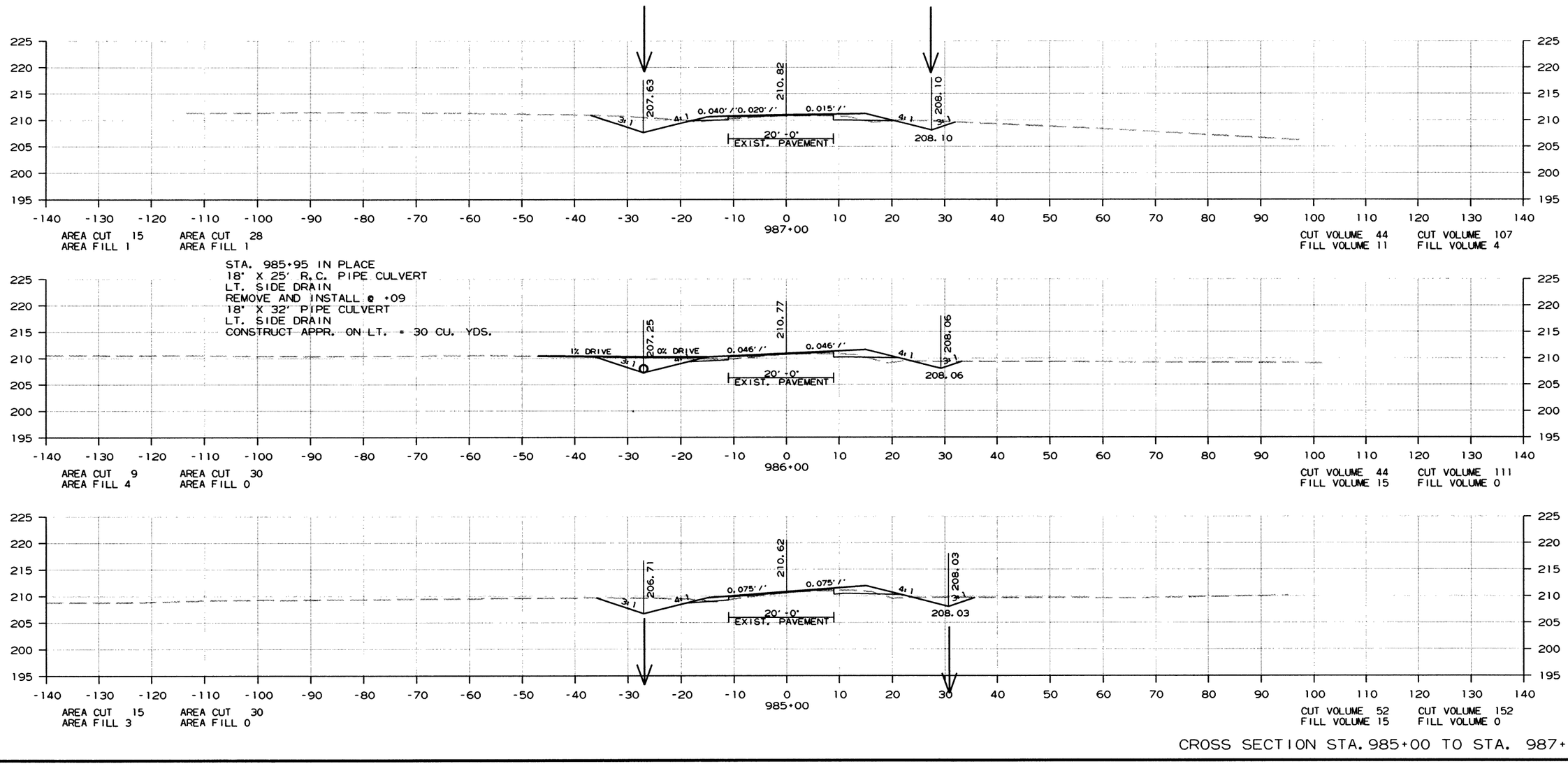
r070368.dgn 1/15/2015

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.		070368	284	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 985+00 TO STA. 987+00

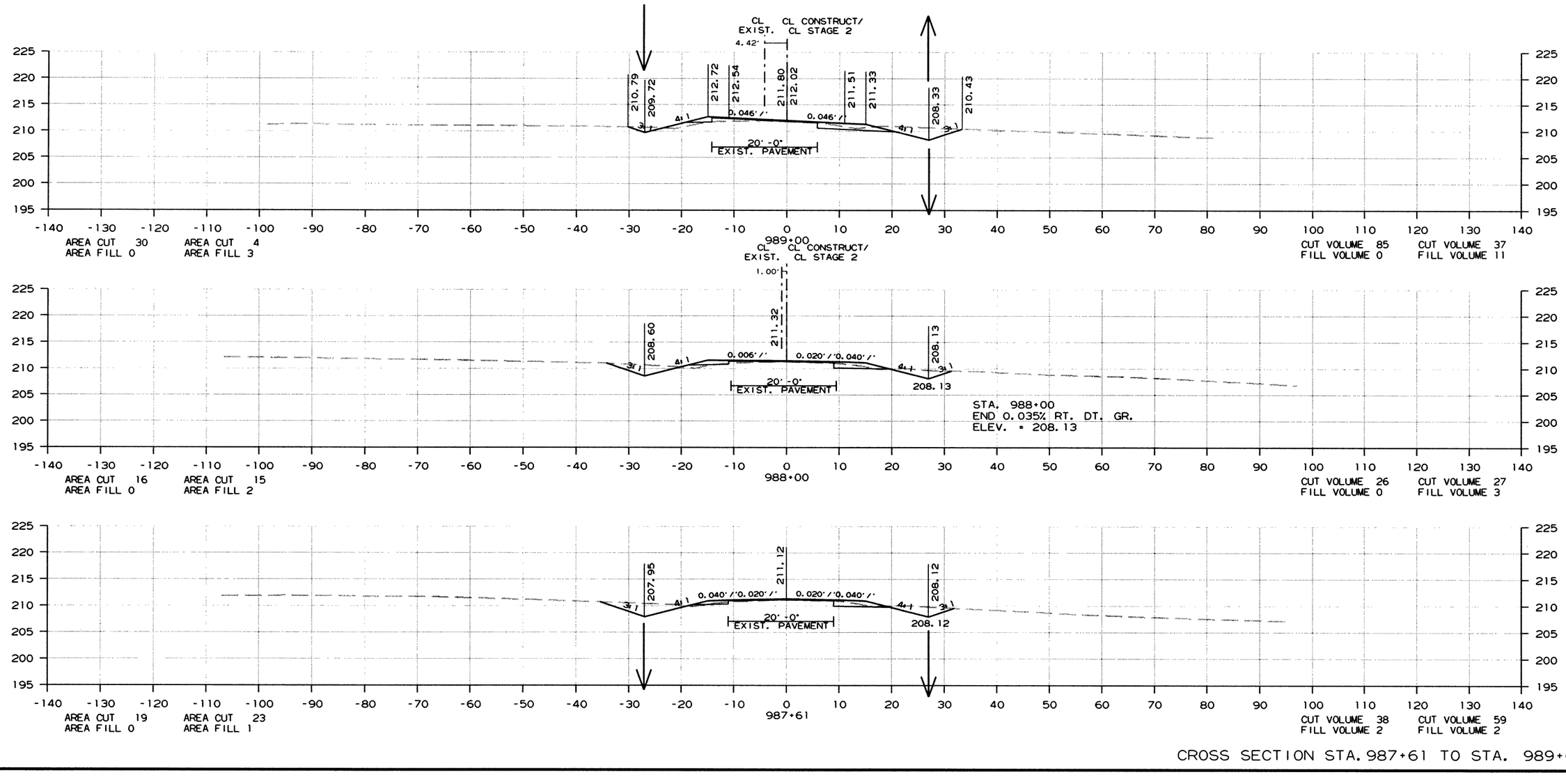
r070368.dgn 1/15/2015

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.		070368	285	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 987+61 TO STA. 989+00

9/2/2016

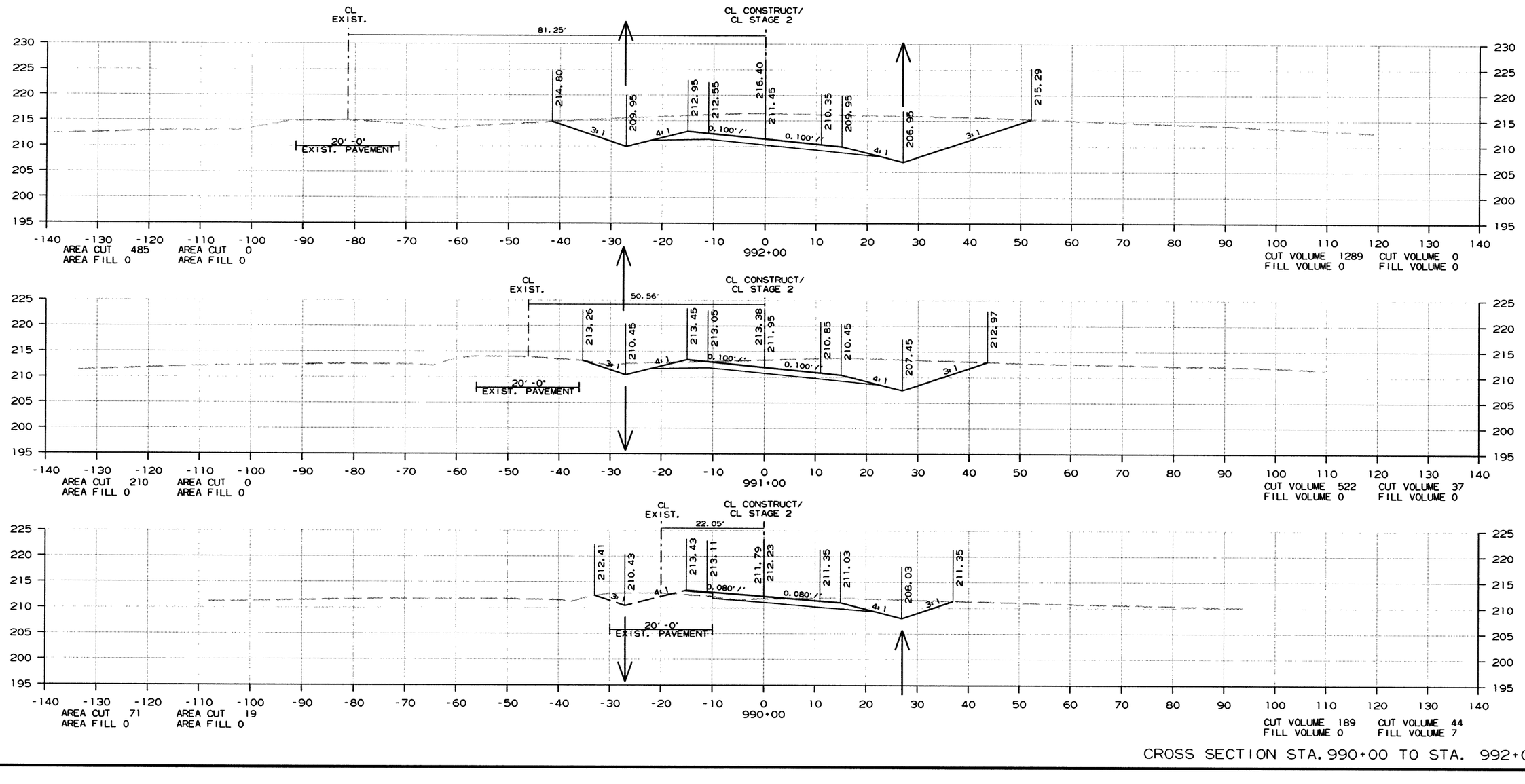
R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	286	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 990+00 TO STA. 992+00

9/2/2016

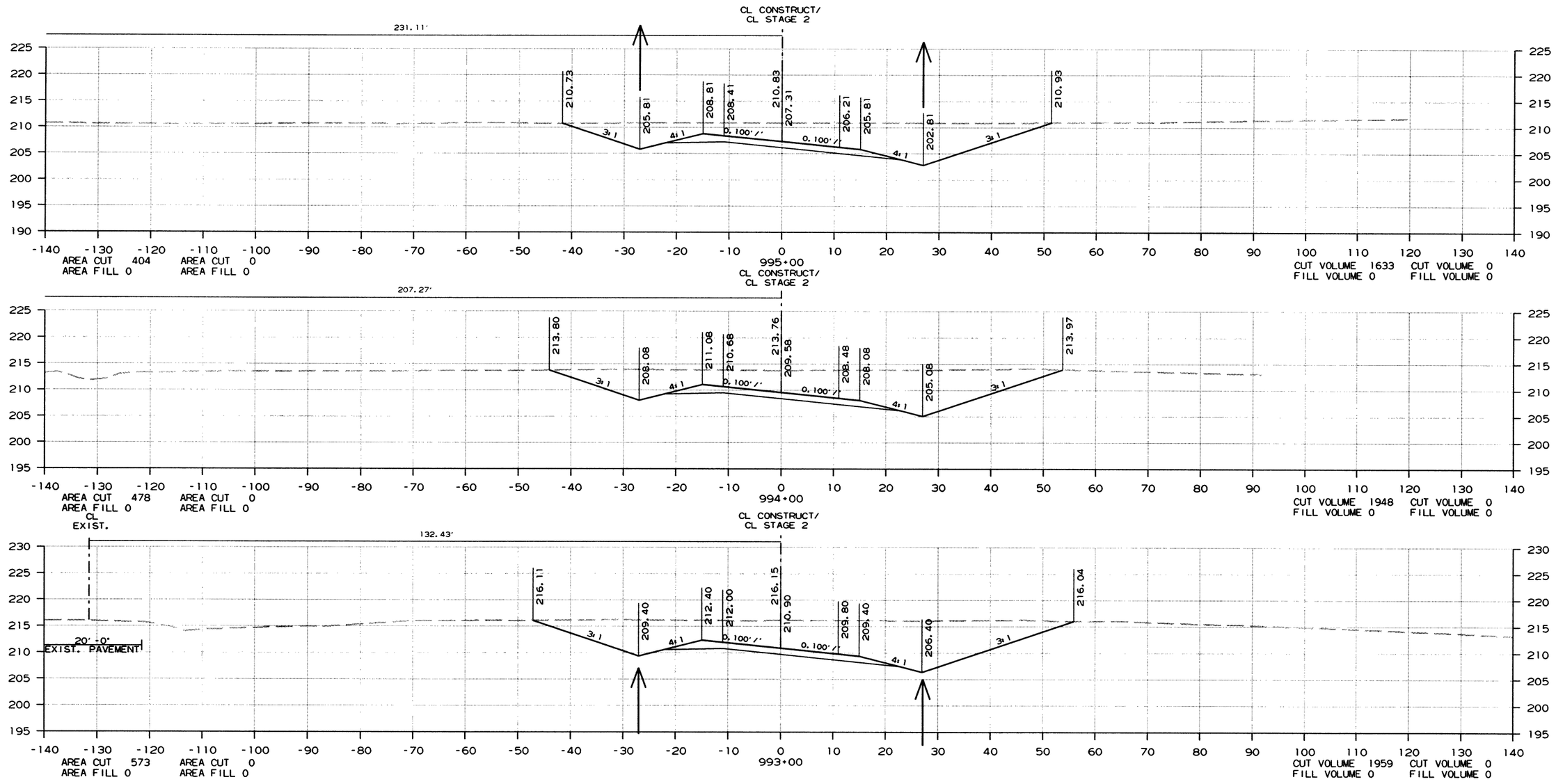
R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	287	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 993+00 TO STA. 995+00

9/2/2016

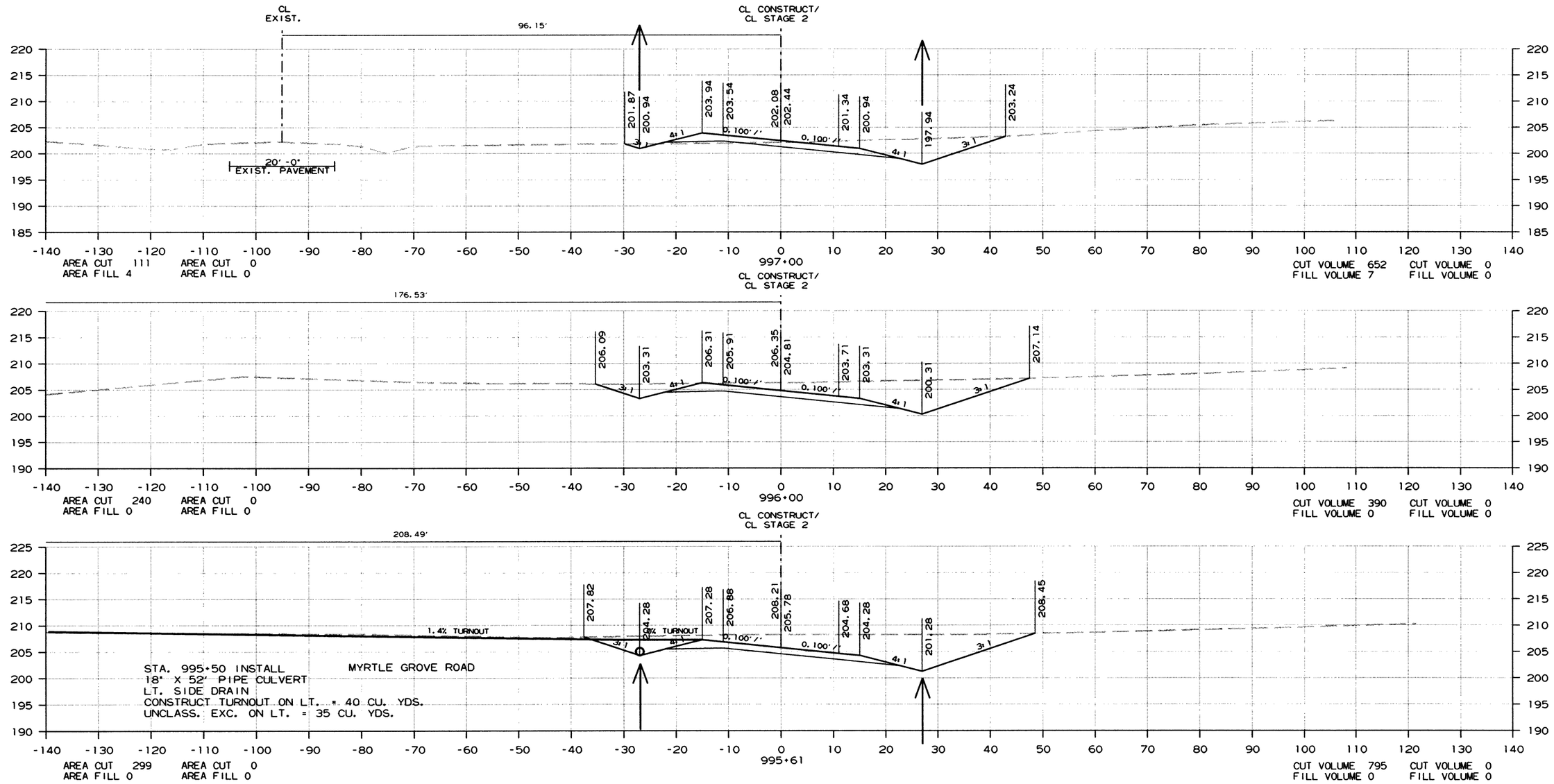
R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	288	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 995+61 TO STA. 997+00

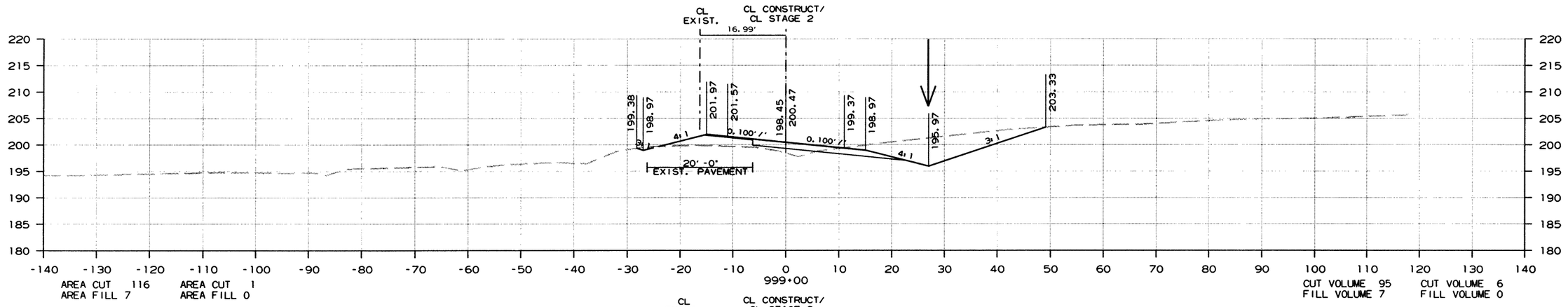
9/2/2016

R070368.DGN

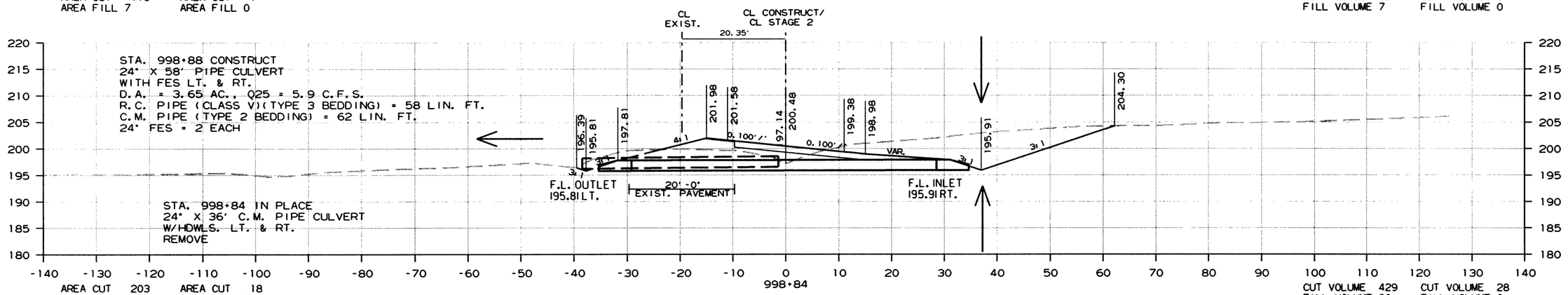
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	289	335

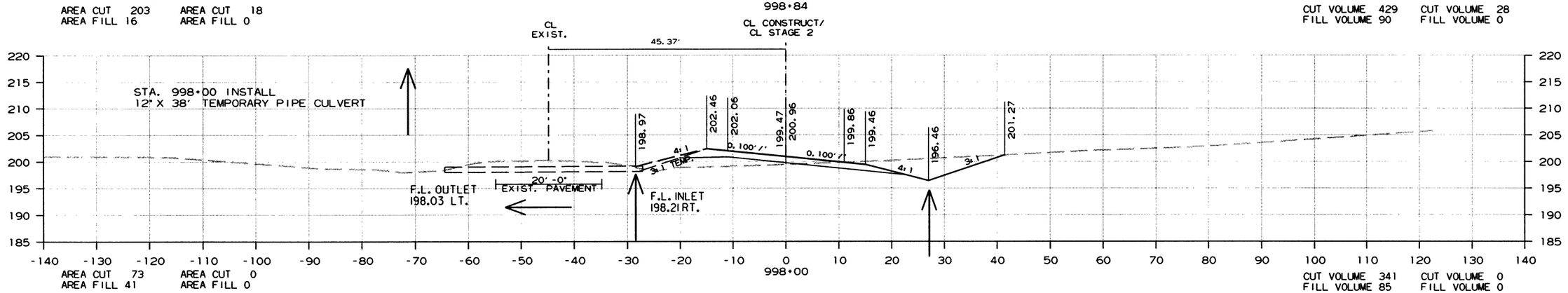
(2) CROSS SECTIONS

STAGE 1 STAGE 2



STAGE 1 STAGE 2





CROSS SECTION STA. 998+00 TO STA. 999+00

9/2/2016

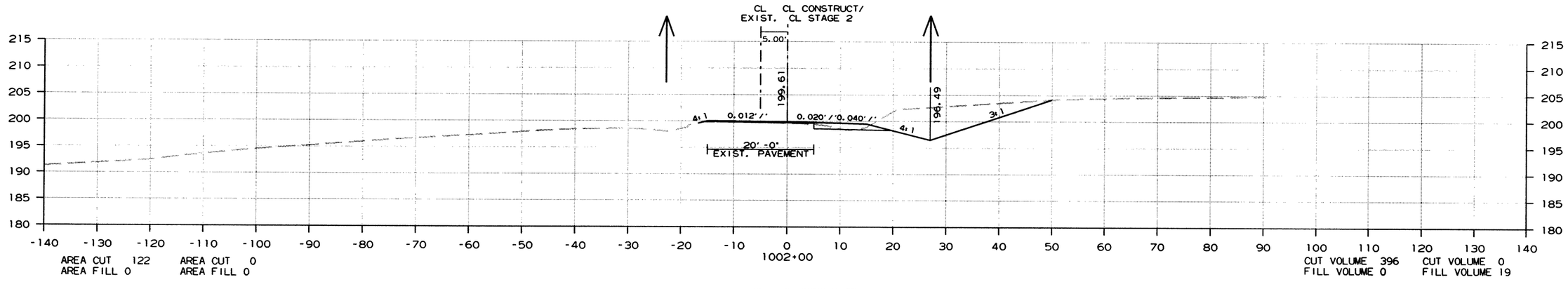
R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	290	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2

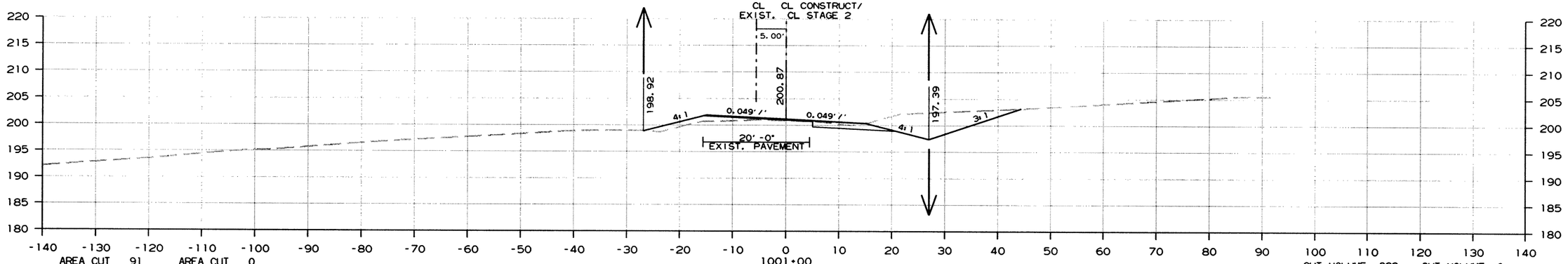


AREA CUT 122
AREA FILL 0

AREA CUT 0
AREA FILL 0

CUT VOLUME 396
FILL VOLUME 0

CUT VOLUME 0
FILL VOLUME 19

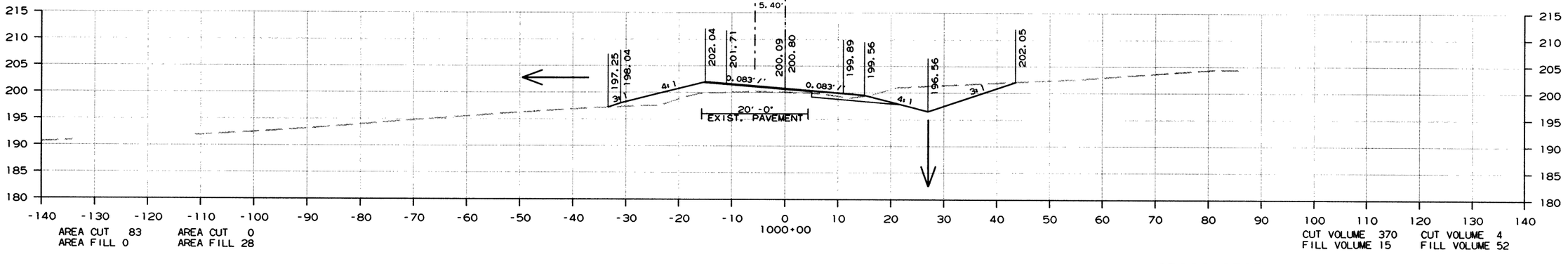


AREA CUT 91
AREA FILL 0

AREA CUT 0
AREA FILL 9

CUT VOLUME 322
FILL VOLUME 0

CUT VOLUME 0
FILL VOLUME 70



AREA CUT 83
AREA FILL 0

AREA CUT 0
AREA FILL 28

CUT VOLUME 370
FILL VOLUME 15

CUT VOLUME 4
FILL VOLUME 52

CROSS SECTION STA. 1000+00 TO STA. 1002+00

9/2/2016

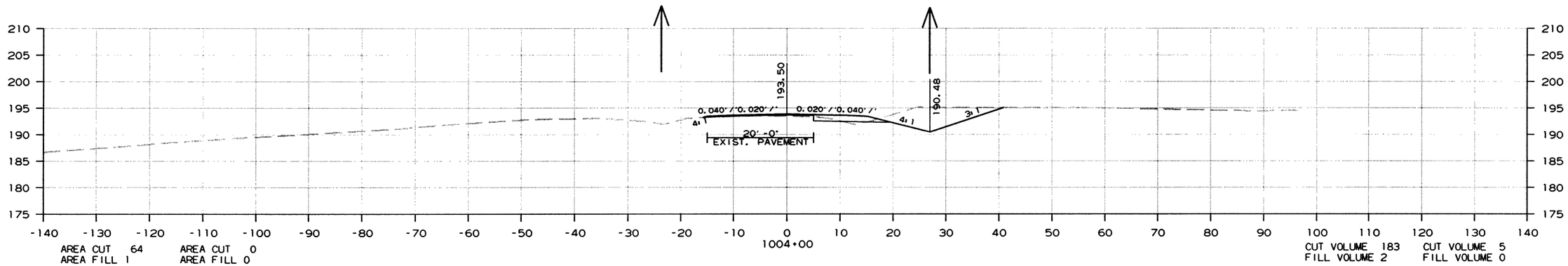
R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	291	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

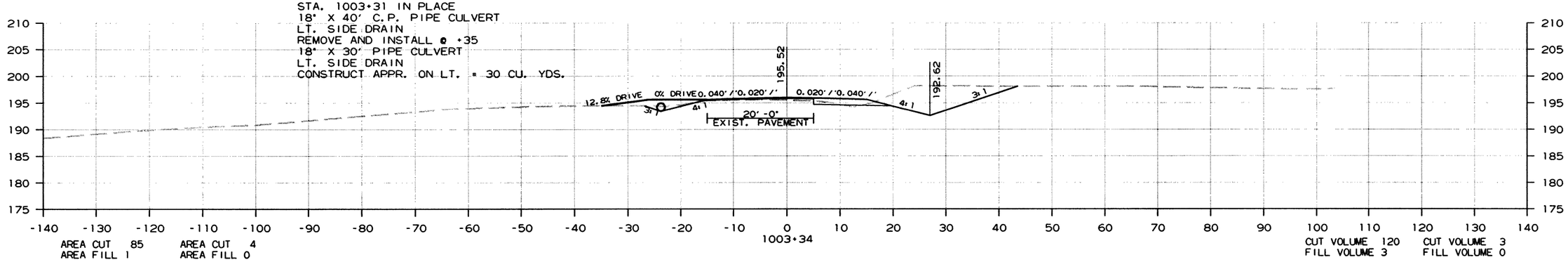
STAGE 1 STAGE 2



AREA CUT 64 AREA CUT 0
AREA FILL 1 AREA FILL 0

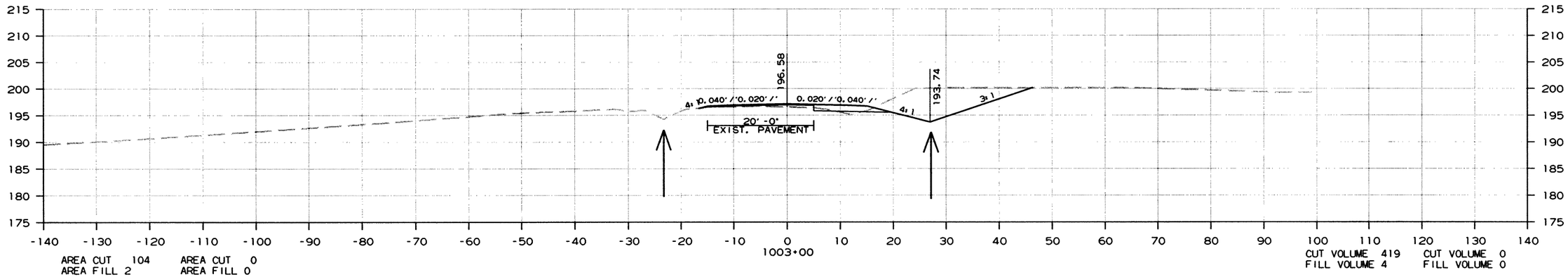
CUT VOLUME 183 CUT VOLUME 5
FILL VOLUME 2 FILL VOLUME 0

STA. 1003+31 IN PLACE
18" X 40' C.P. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +35
18" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.



AREA CUT 85 AREA CUT 4
AREA FILL 1 AREA FILL 0

CUT VOLUME 120 CUT VOLUME 3
FILL VOLUME 3 FILL VOLUME 0



AREA CUT 104 AREA CUT 0
AREA FILL 2 AREA FILL 0

CUT VOLUME 419 CUT VOLUME 0
FILL VOLUME 4 FILL VOLUME 0

CROSS SECTION STA. 1003+00 TO STA. 1004+00

9/2/2016

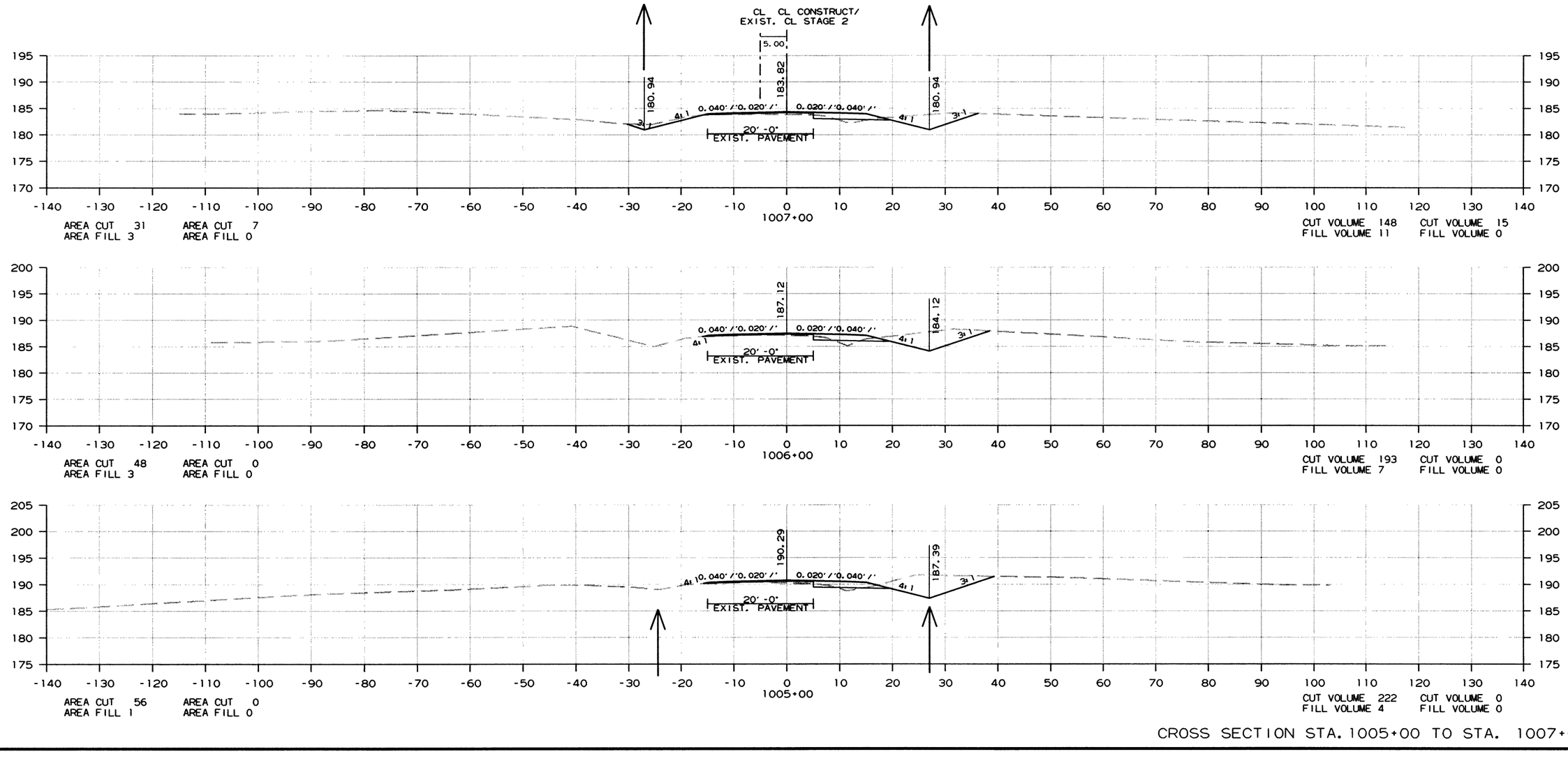
R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	292	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 1005+00 TO STA. 1007+00

9/2/2016

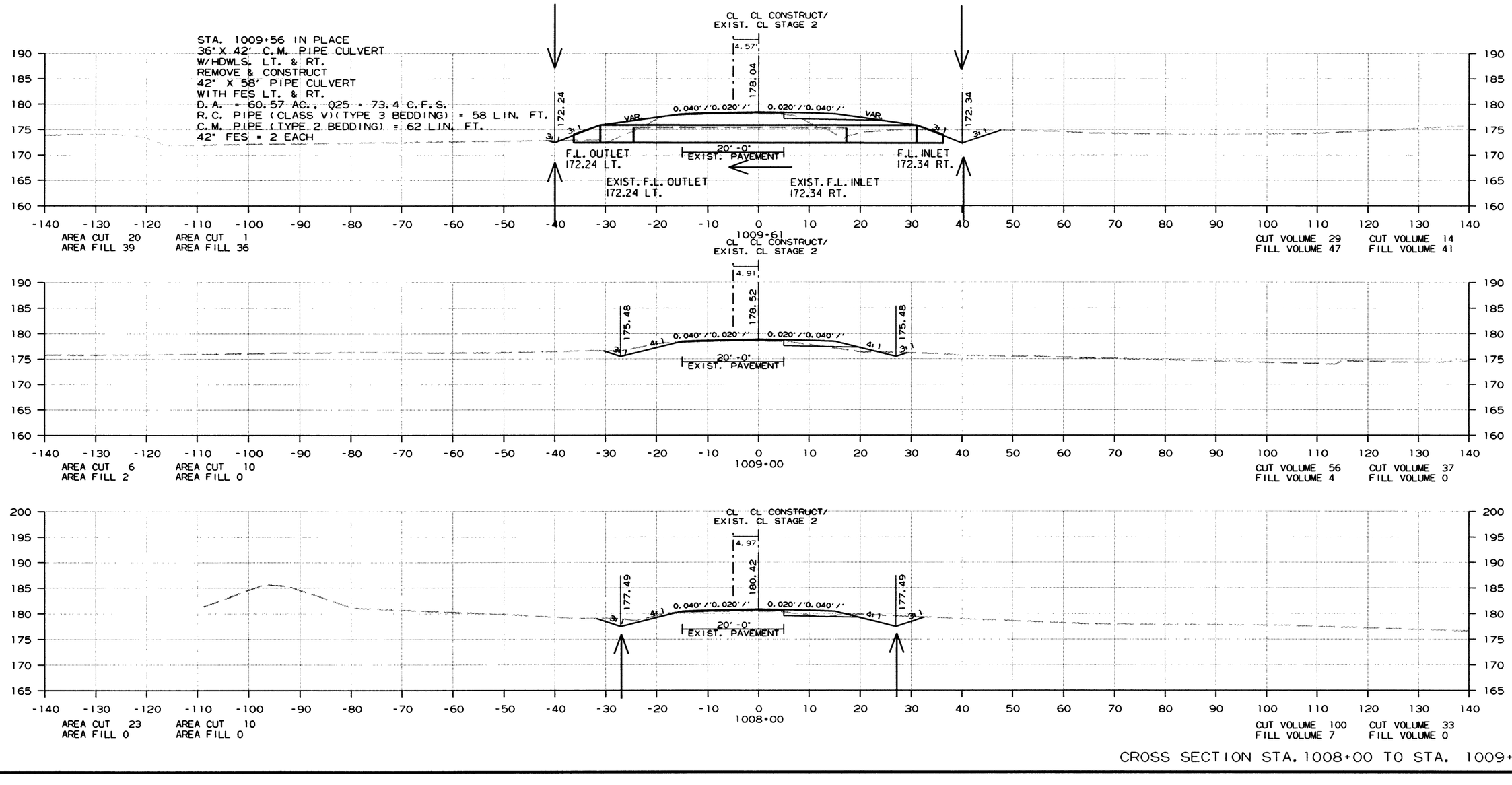
R070368.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	293	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 1008+00 TO STA. 1009+61

9/2/2016

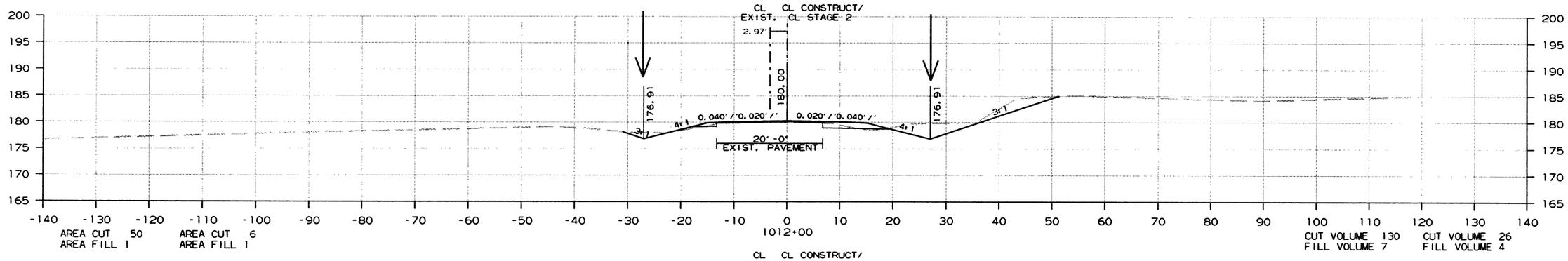
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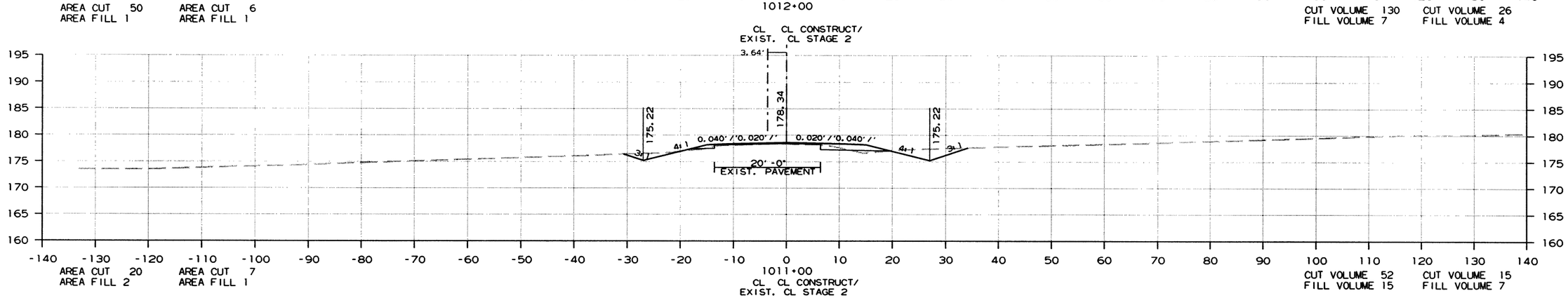
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	294	335

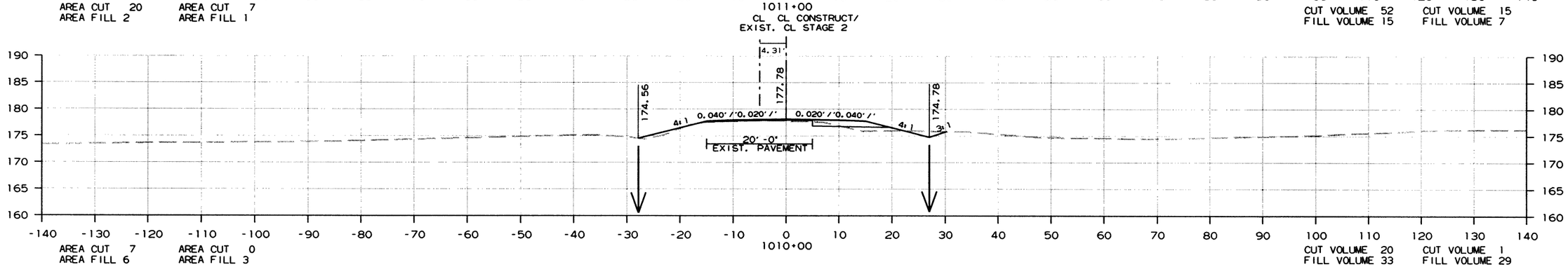
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 1010+00 TO STA. 1012+00

9/2/2016

R070368.DGN

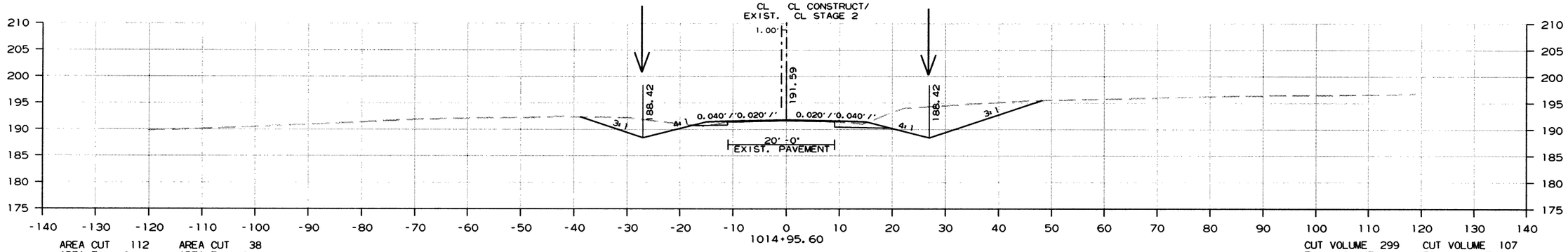
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	295	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2

EQUATION
STA. 1014+95.60=
STA. 1015+00.26

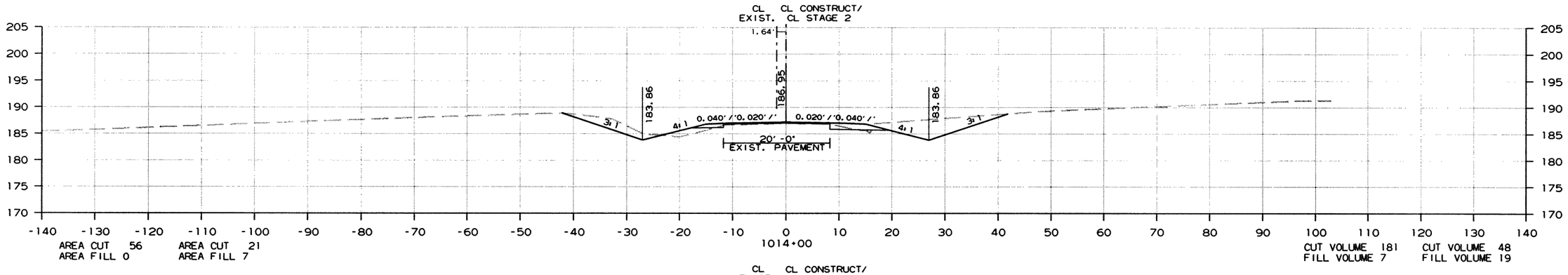


AREA CUT 112
AREA FILL 0

AREA CUT 38
AREA FILL 0

CUT VOLUME 299
FILL VOLUME 0

CUT VOLUME 107
FILL VOLUME 14

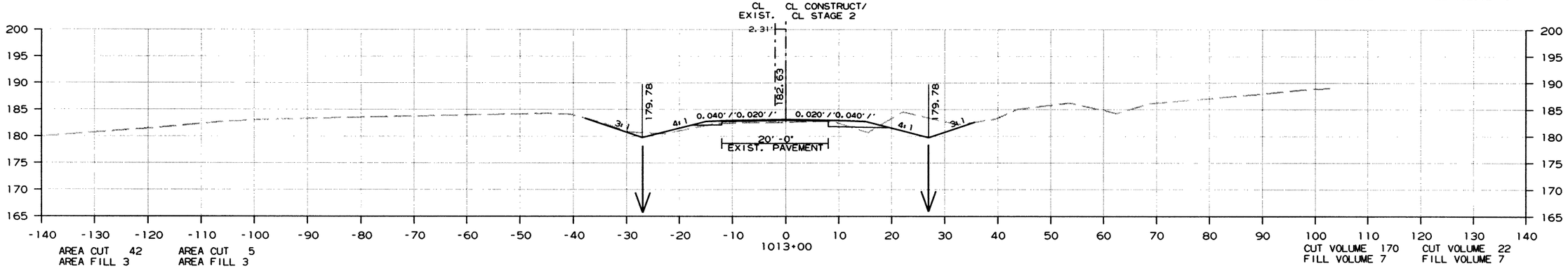


AREA CUT 56
AREA FILL 0

AREA CUT 21
AREA FILL 7

CUT VOLUME 181
FILL VOLUME 7

CUT VOLUME 48
FILL VOLUME 19



AREA CUT 42
AREA FILL 3

AREA CUT 5
AREA FILL 3

CUT VOLUME 170
FILL VOLUME 7

CUT VOLUME 22
FILL VOLUME 7

CROSS SECTION STA. 1013+00 TO STA. 1014+95.60

9/2/2016

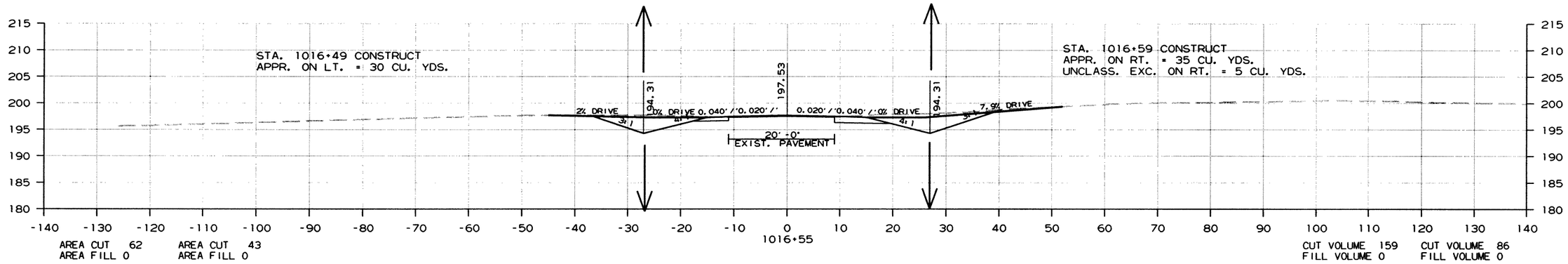
R070368.DGN

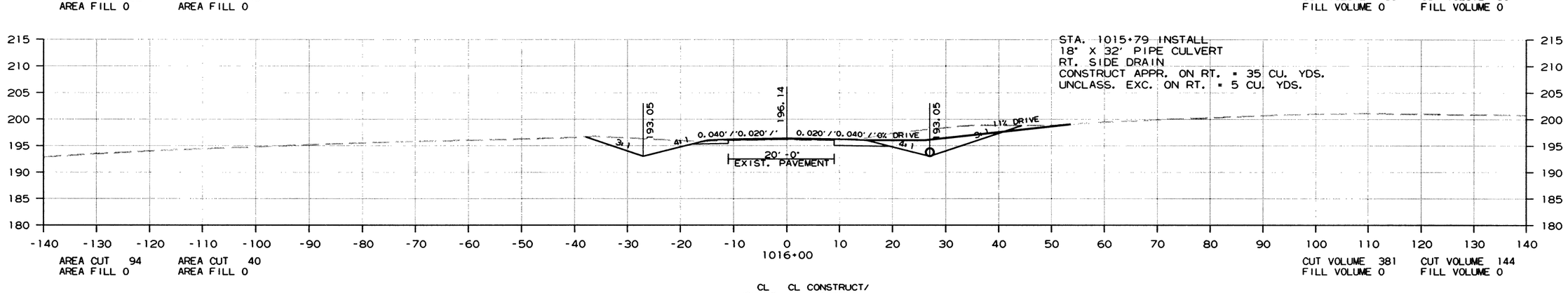
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	296	335

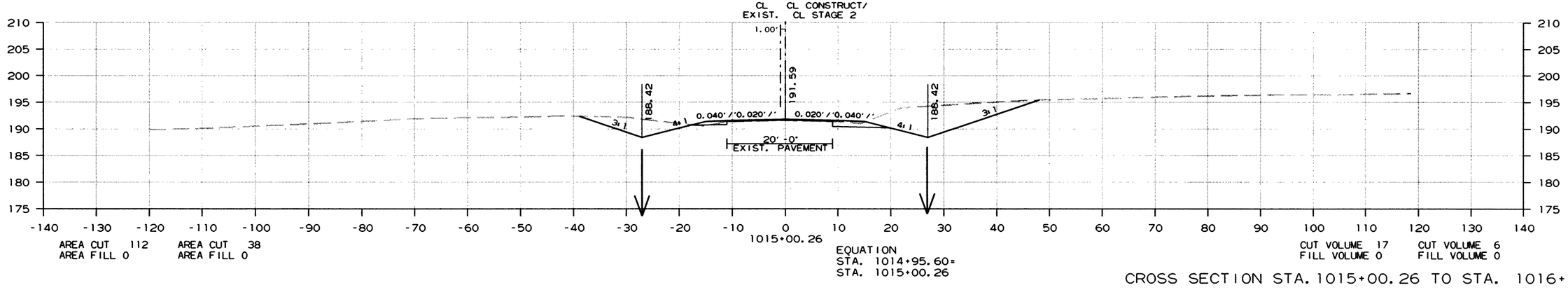
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 1015+00.26 TO STA. 1016+55

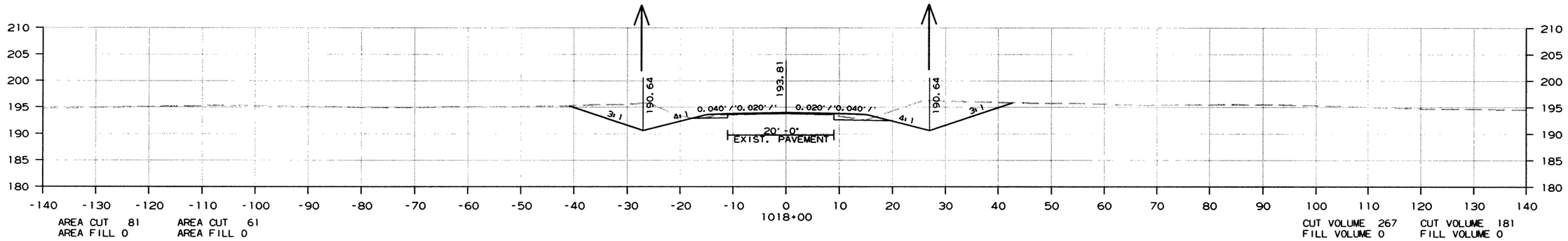
r070368.dgn 1/15/2015

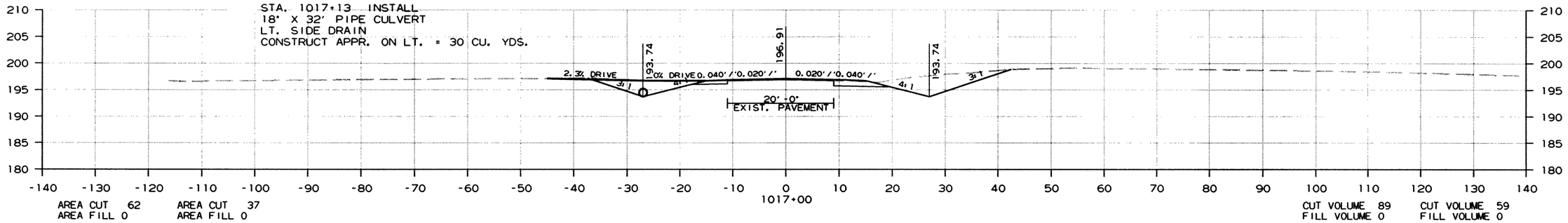
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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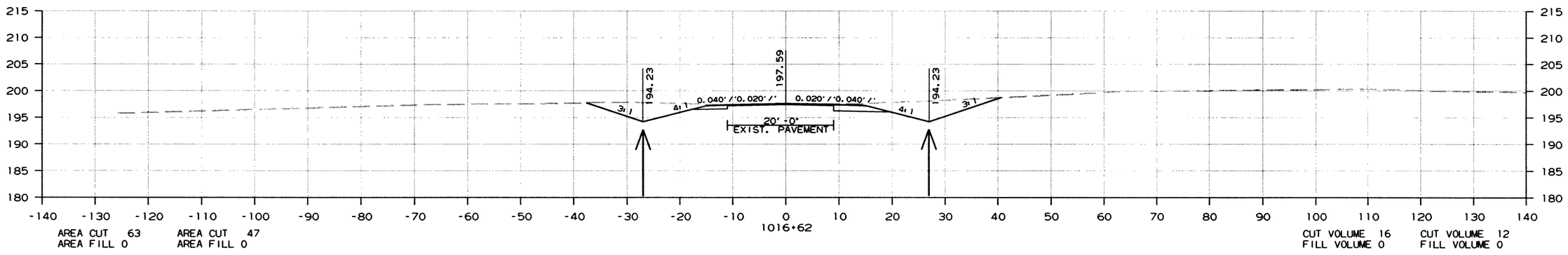
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 1016+62 TO STA. 1018+00

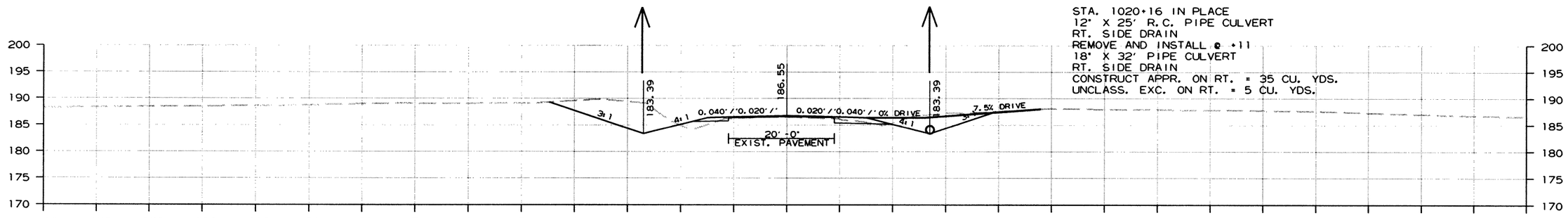
r070368.dgn 1/15/2015

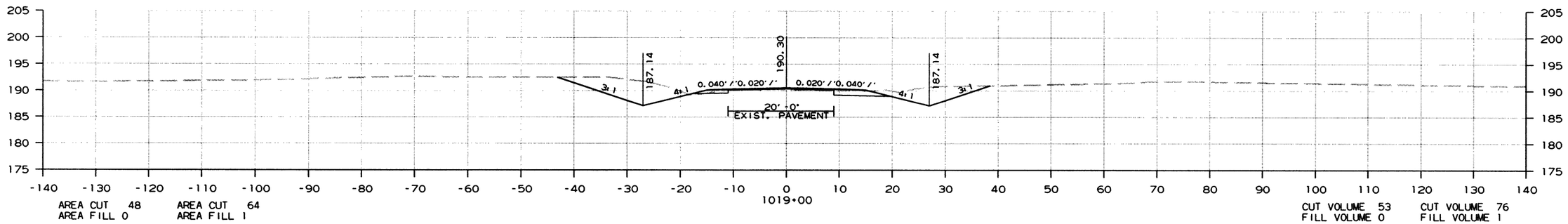
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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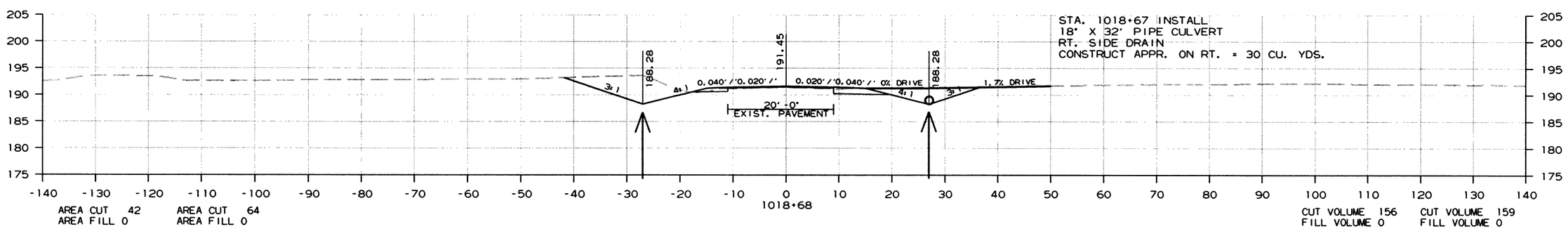
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 1018+68 TO STA. 1020+00

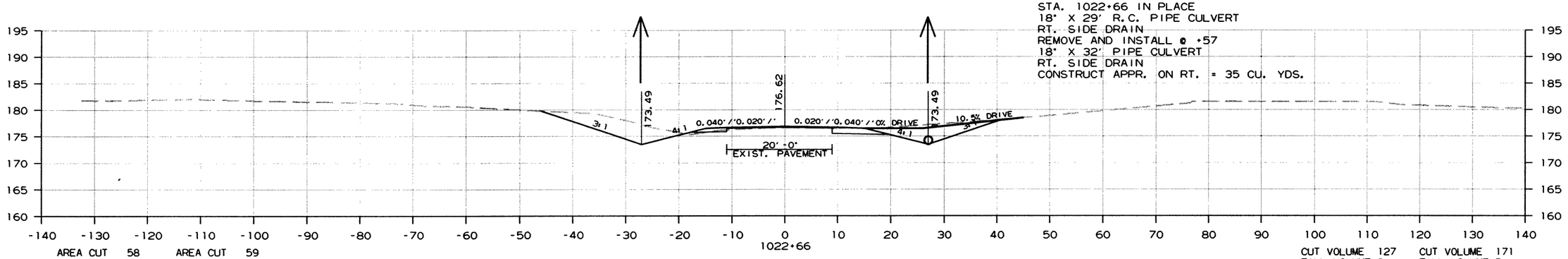
r070368.dgn 1/15/2015

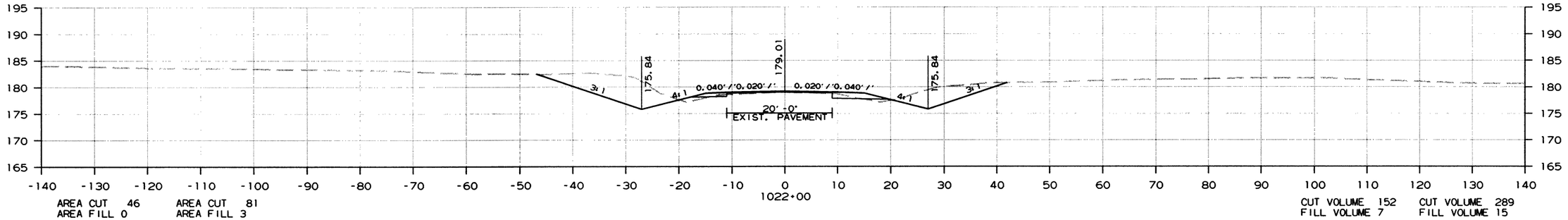
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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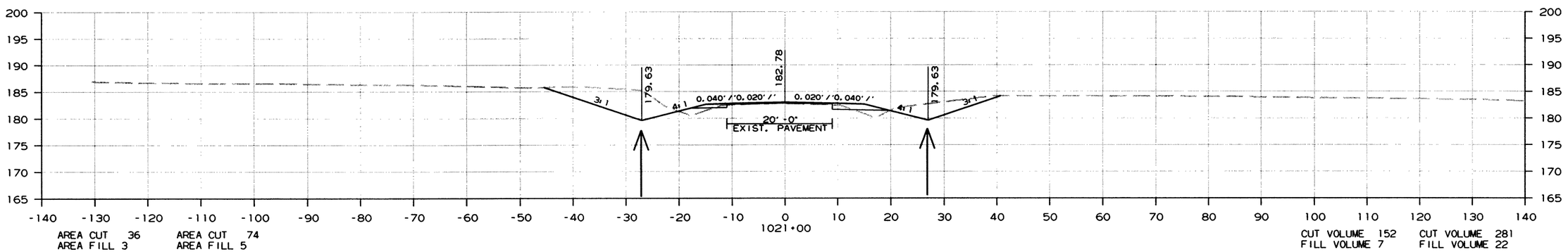
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 1021+00 TO STA. 1022+66

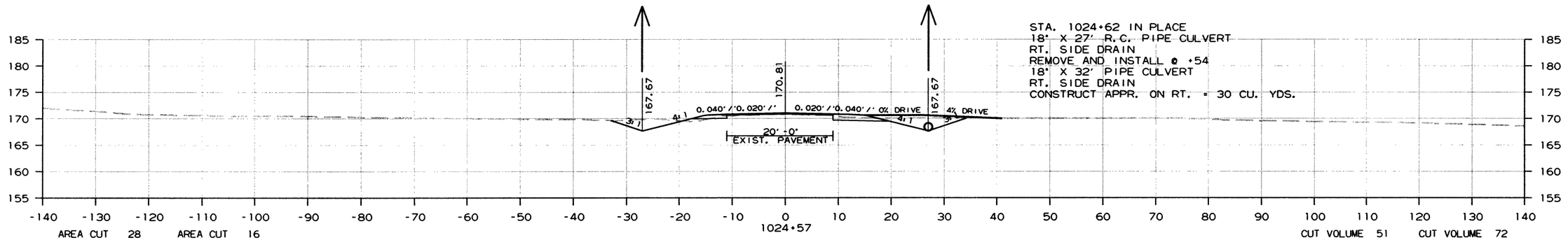
r070368.dgn 1/15/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		070368	300	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2

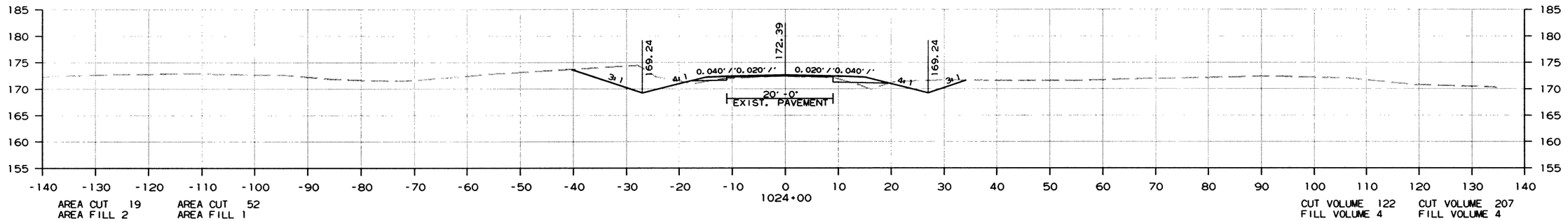


AREA CUT 28
AREA FILL 0

AREA CUT 16
AREA FILL 2

CUT VOLUME 51
FILL VOLUME 2

CUT VOLUME 72
FILL VOLUME 4

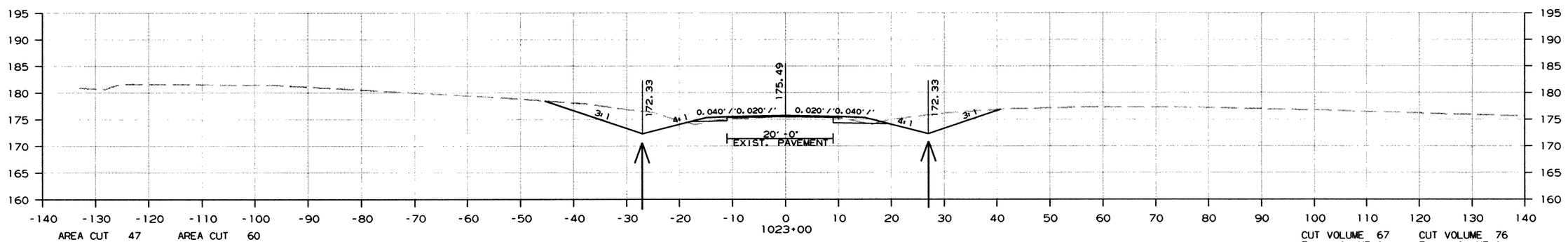


AREA CUT 19
AREA FILL 2

AREA CUT 52
AREA FILL 1

CUT VOLUME 122
FILL VOLUME 4

CUT VOLUME 207
FILL VOLUME 4



AREA CUT 47
AREA FILL 0

AREA CUT 60
AREA FILL 1

CUT VOLUME 67
FILL VOLUME 0

CUT VOLUME 76
FILL VOLUME 1

CROSS SECTION STA. 1023+00 TO STA. 1024+57

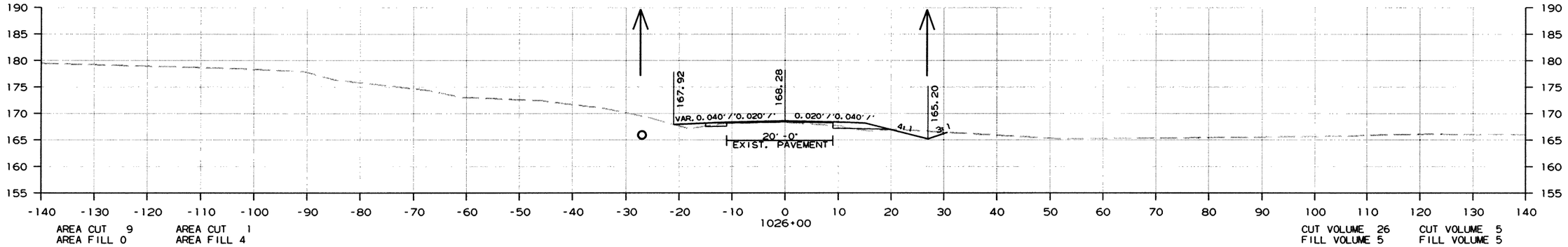
r070368.dgn 1/15/2015

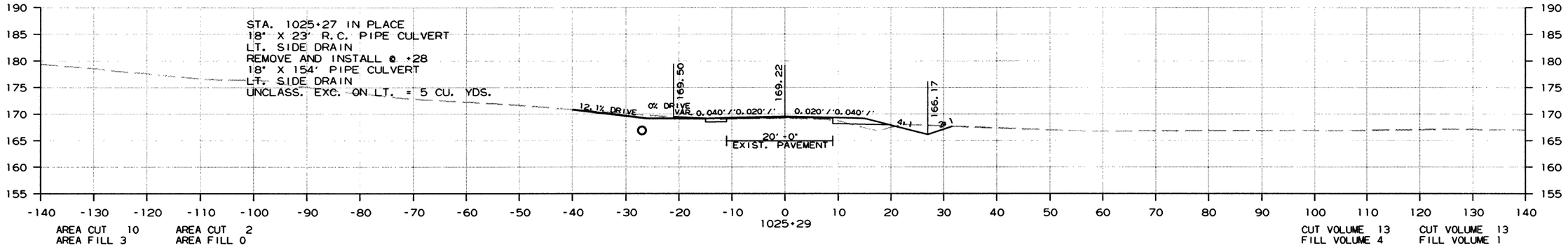
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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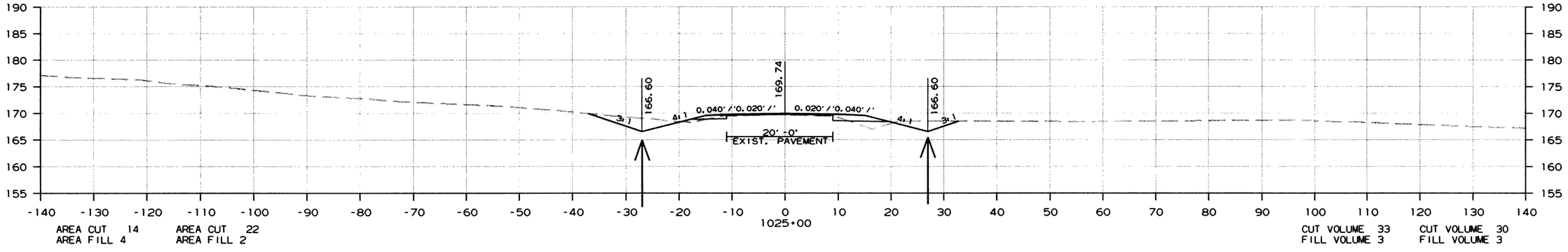
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







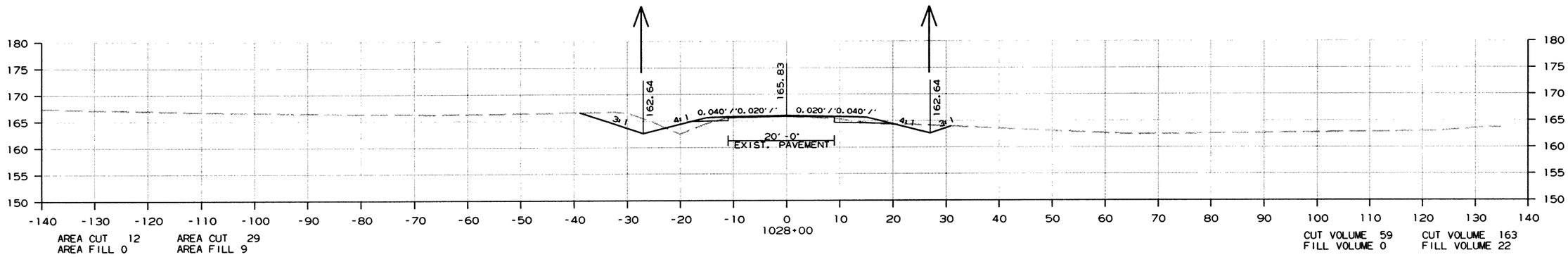
CROSS SECTION STA. 1025+00 TO STA. 1026+00

r070368.dgn 1/15/2015

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.		070368	302	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2



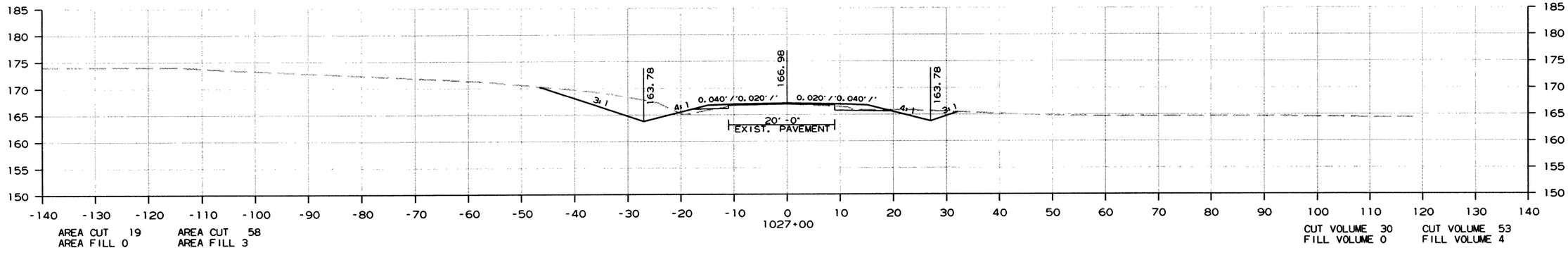
AREA CUT 12
AREA FILL 0

AREA CUT 29
AREA FILL 9

CUT VOLUME 59
FILL VOLUME 0

CUT VOLUME 163
FILL VOLUME 22

STAGE 1 STAGE 2

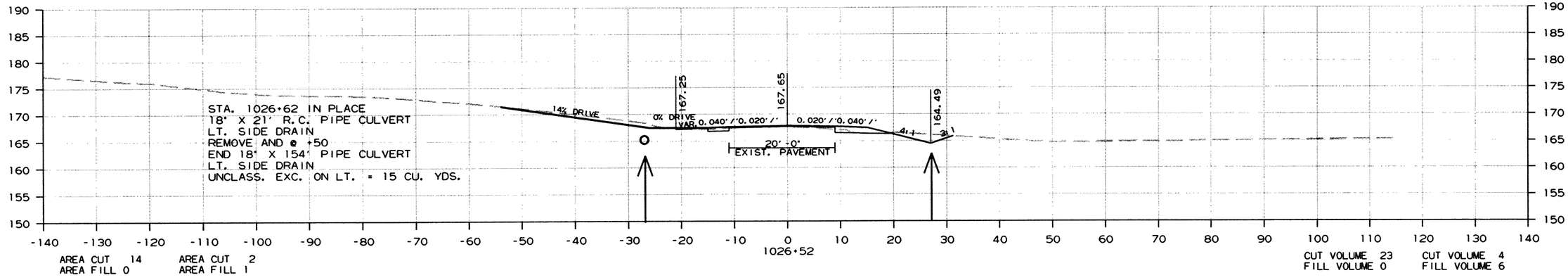


AREA CUT 19
AREA FILL 0

AREA CUT 58
AREA FILL 3

CUT VOLUME 30
FILL VOLUME 0

CUT VOLUME 53
FILL VOLUME 4



AREA CUT 14
AREA FILL 0

AREA CUT 2
AREA FILL 1

CUT VOLUME 23
FILL VOLUME 0

CUT VOLUME 4
FILL VOLUME 6

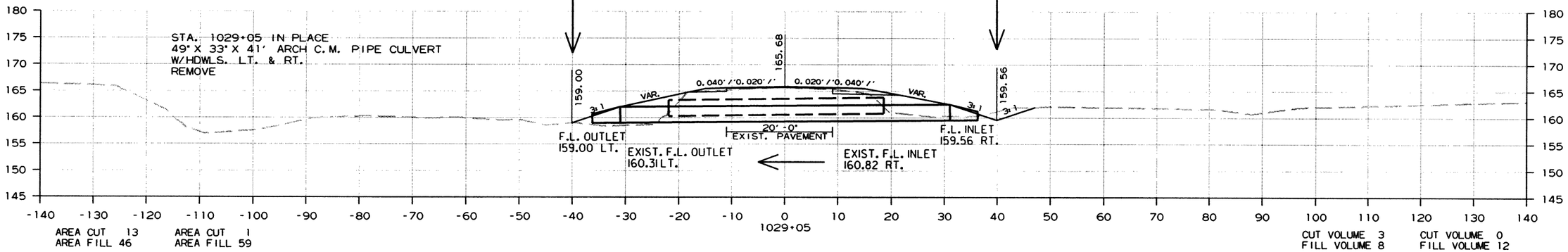
CROSS SECTION STA. 1026+52 TO STA. 1028+00

r070368.dgn 1/15/2015

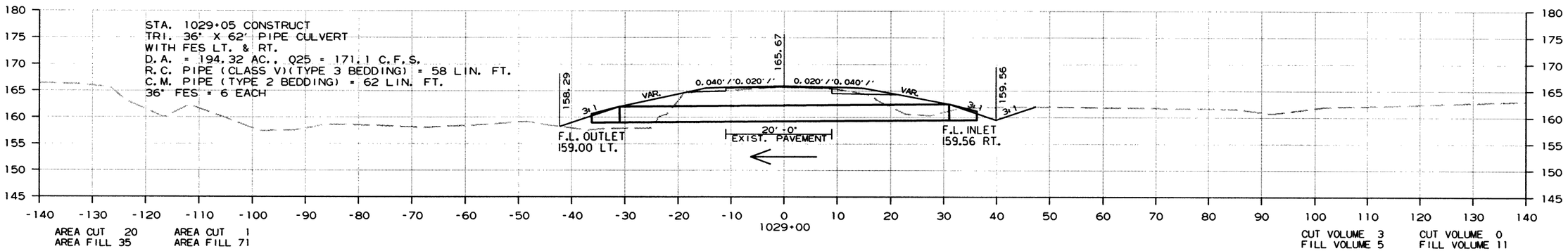
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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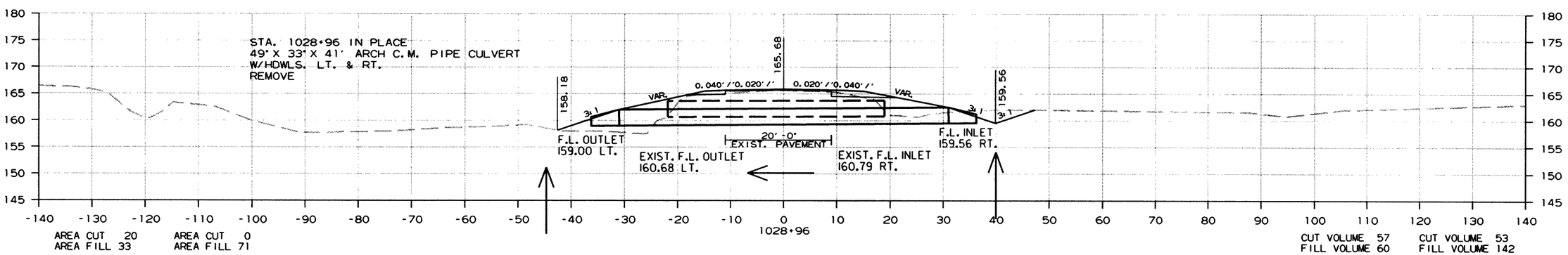
(2) CROSS SECTIONS

STAGE 1 STAGE 2



STAGE 1 STAGE 2





CROSS SECTION STA. 1028+96 TO STA. 1029+05

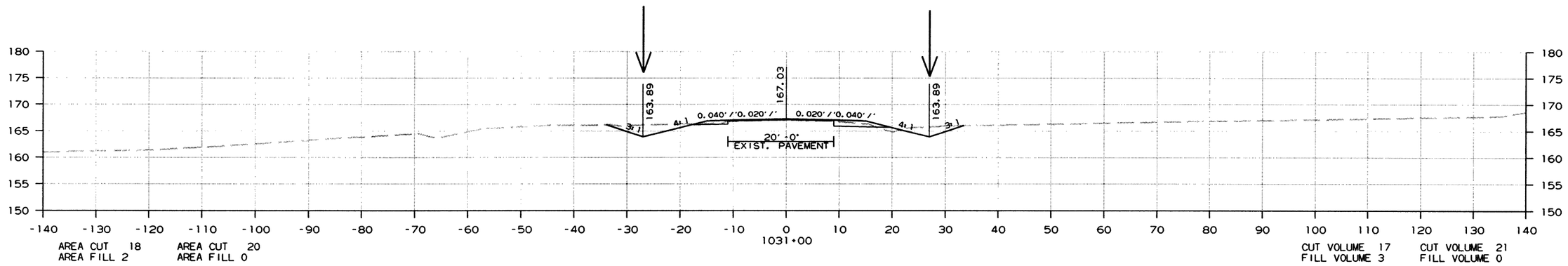
r070368.dgn 1/15/2015

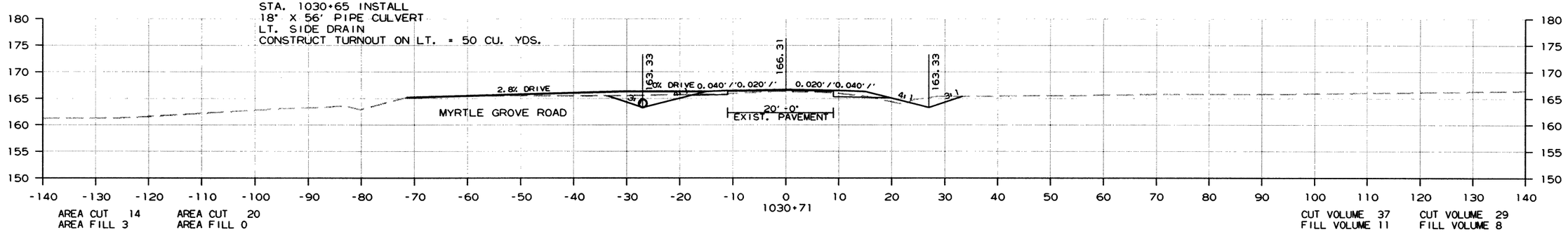
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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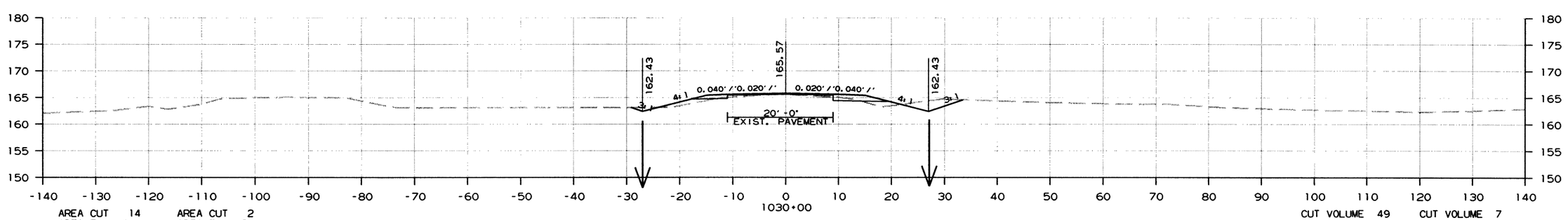
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 1030+00 TO STA. 1031+00

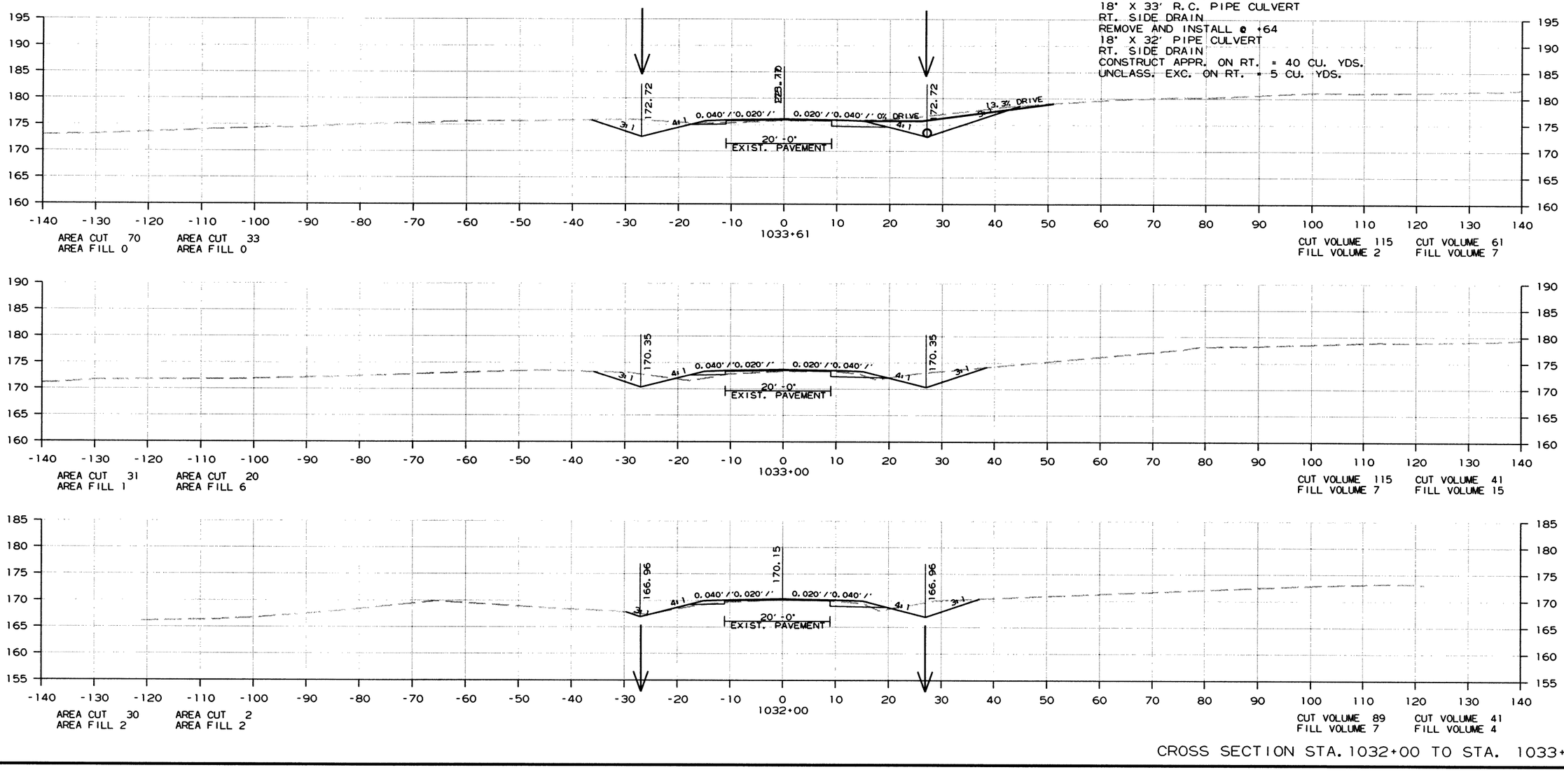
r070368.dgn 1/15/2015

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.		070368	305	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 1032+00 TO STA. 1033+61

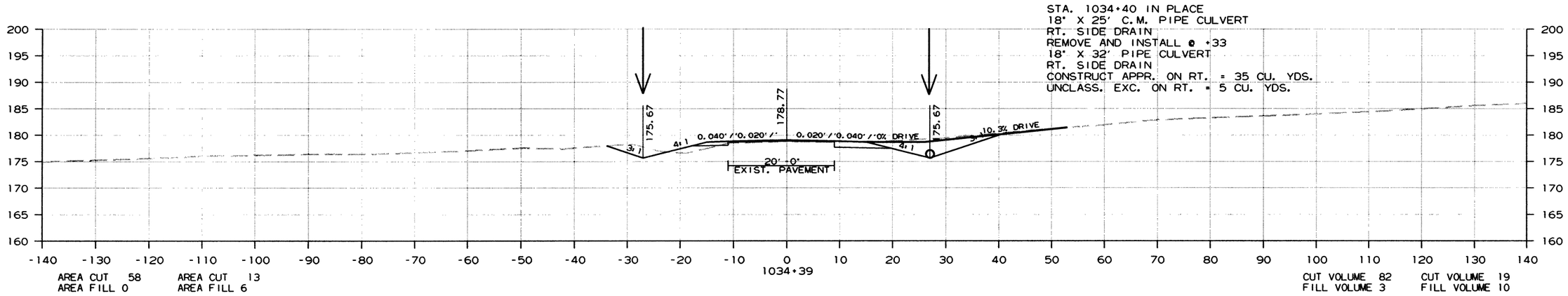
r070368.dgn 1/15/2015

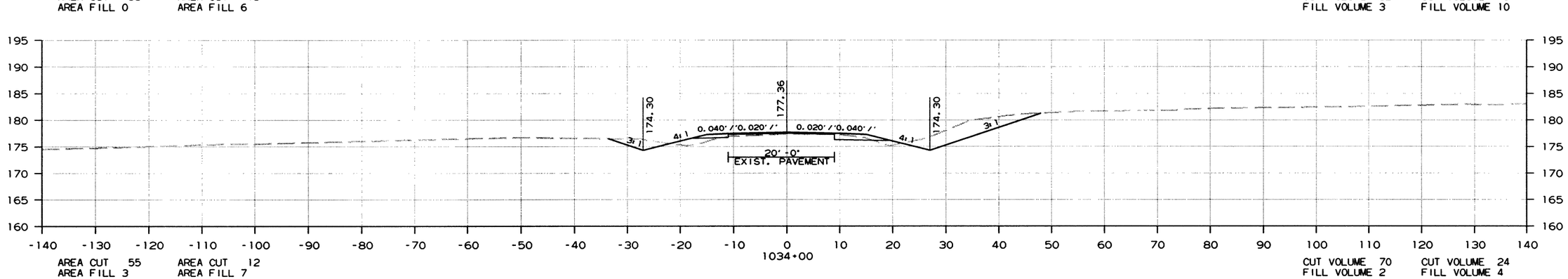
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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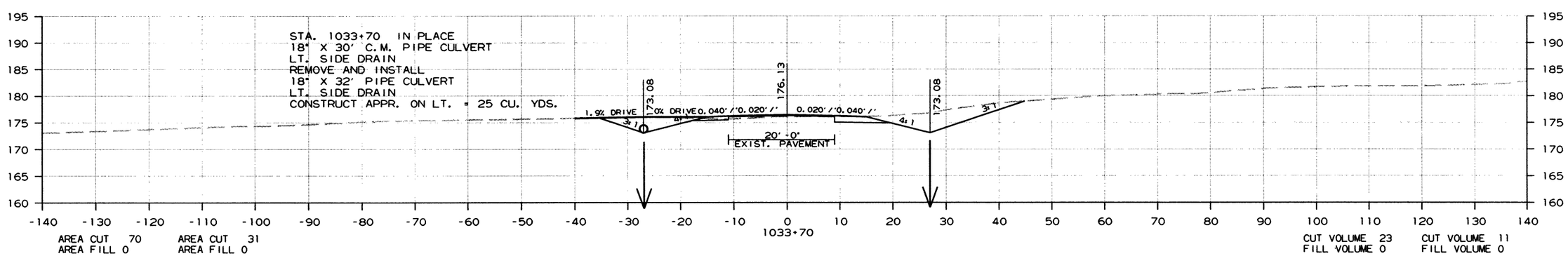
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 1033+70 TO STA. 1034+39

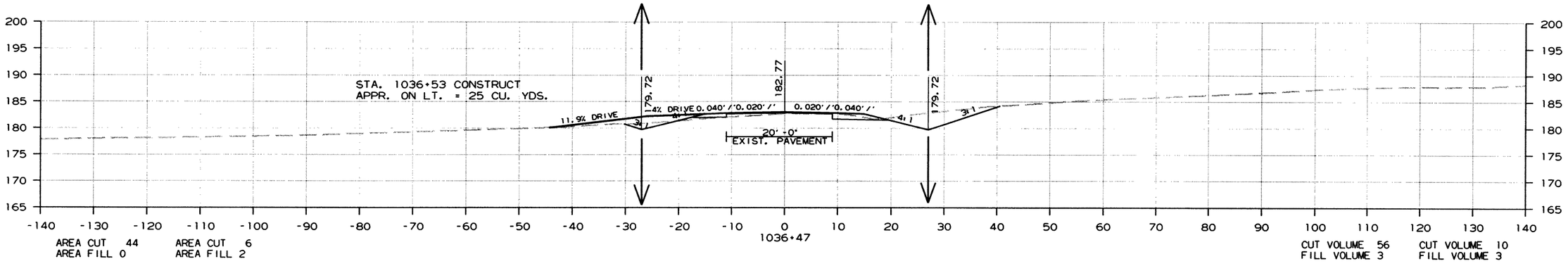
r070368.dgn 1/15/2015

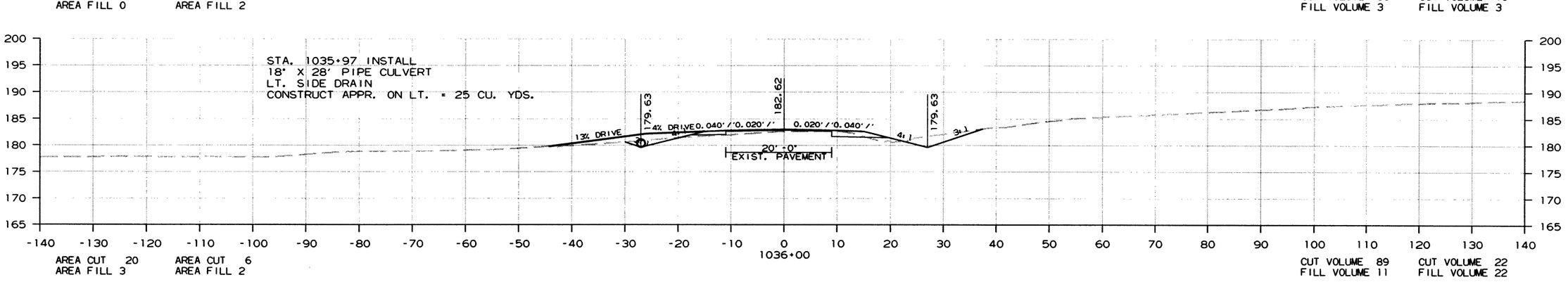
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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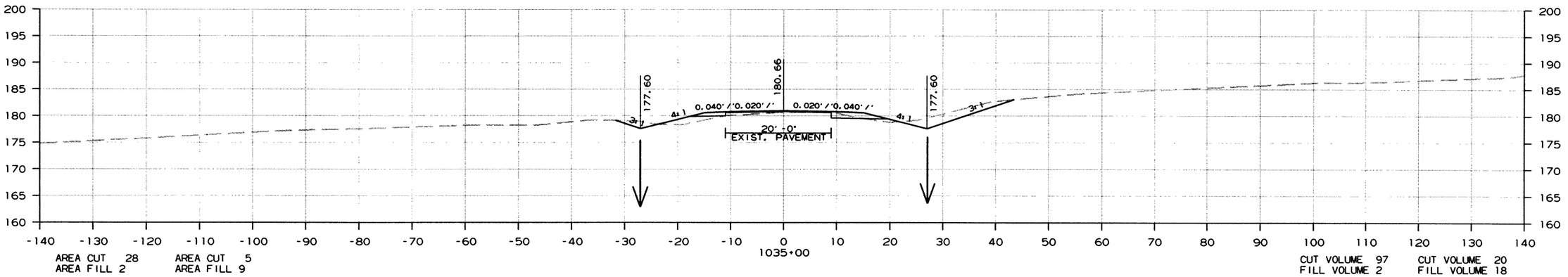
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 1035+00 TO STA. 1036+47

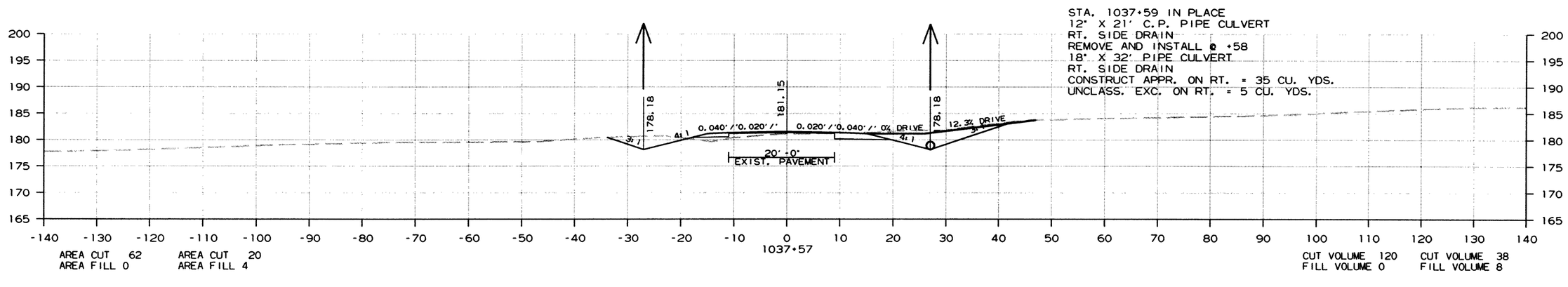
r070368.dgn 1/15/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		070368	308	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 1036+84 TO STA. 1037+57

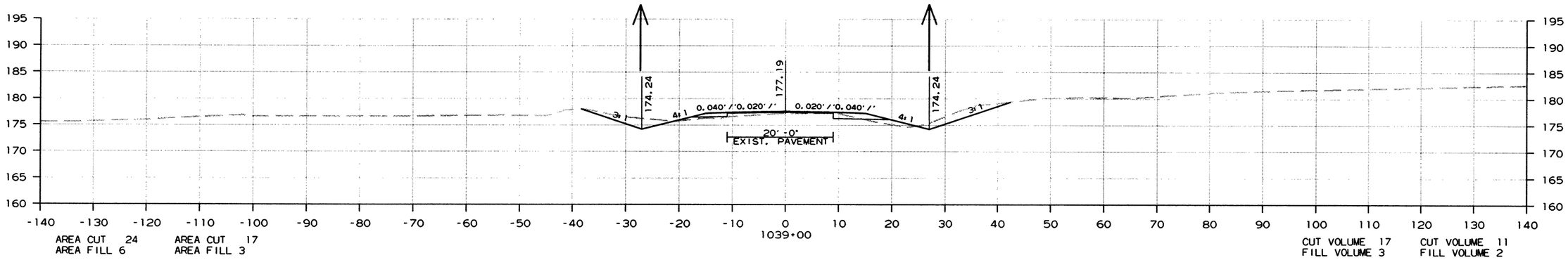
r070368.dgn 1/15/2015

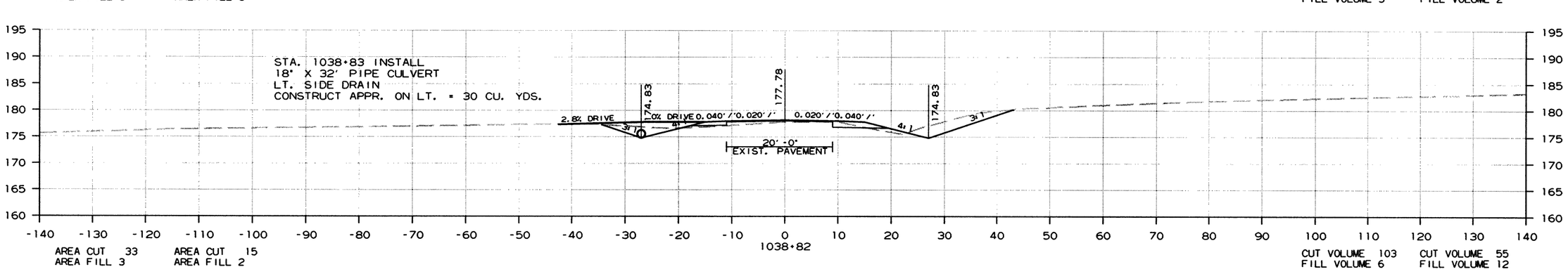
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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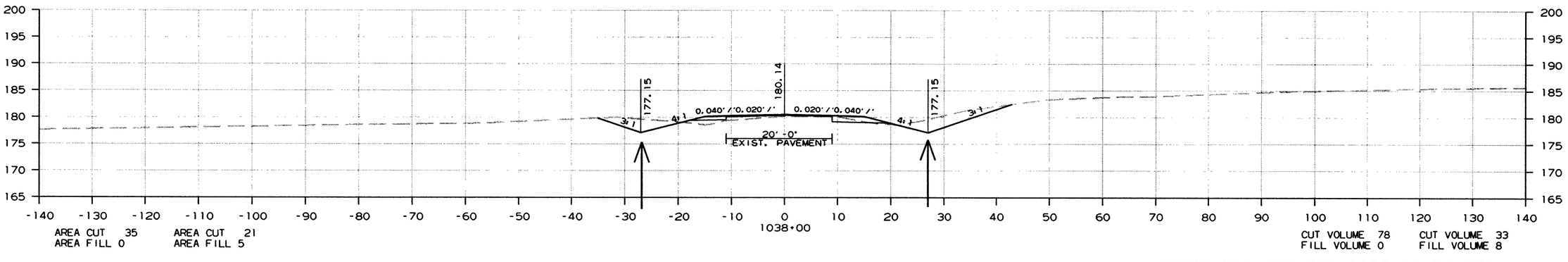
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 1038+00 TO STA. 1039+00

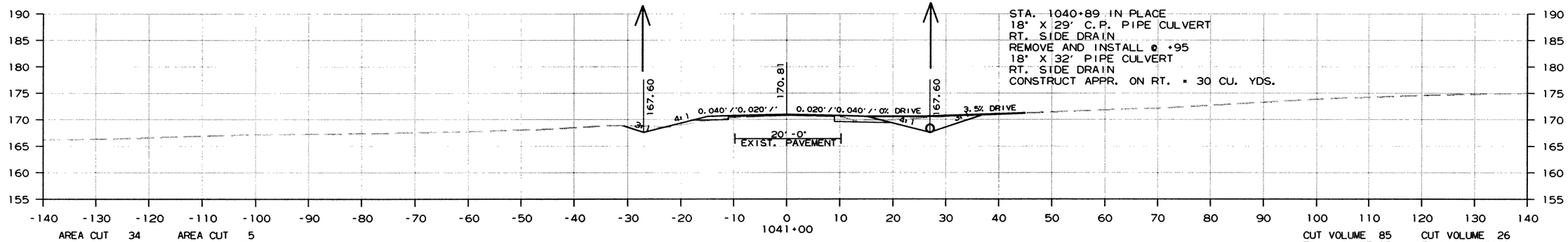
r070368.dgn 1/15/2015

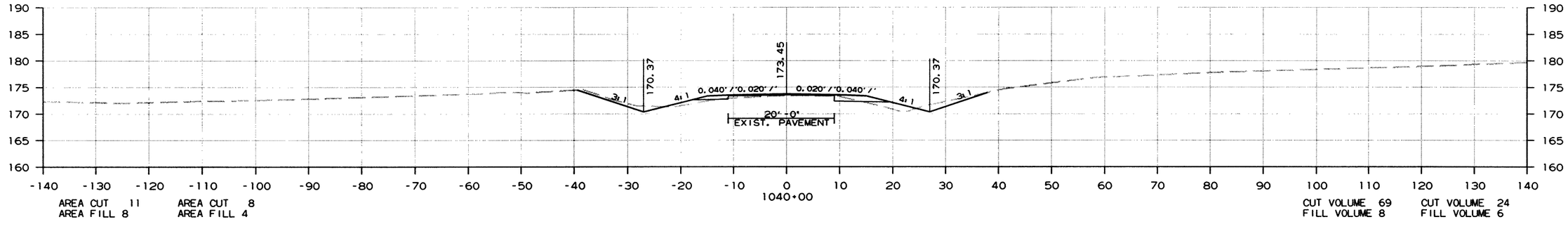
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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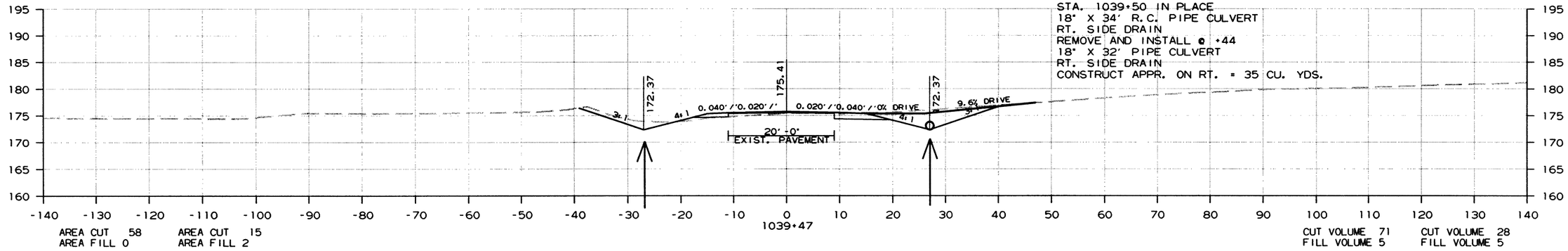
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 1039+47 TO STA. 1041+00

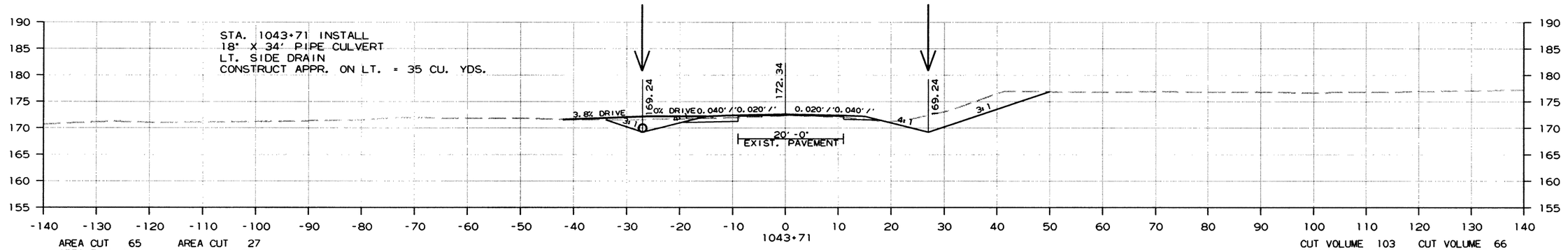
r070368.dgn 1/15/2015

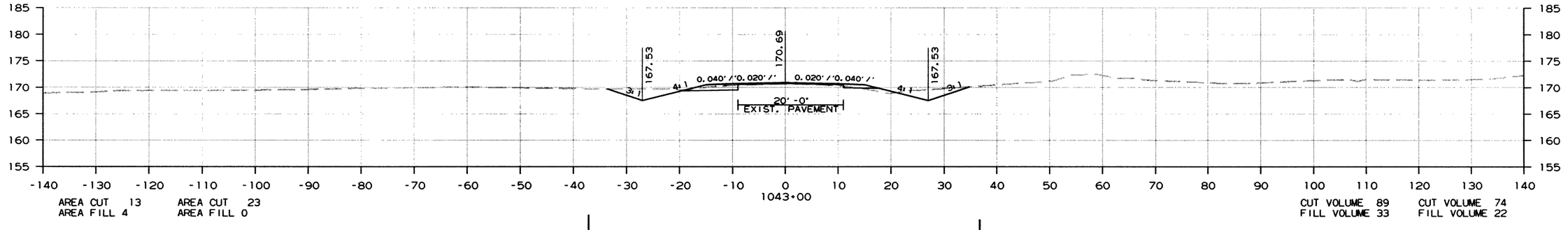
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	311	335

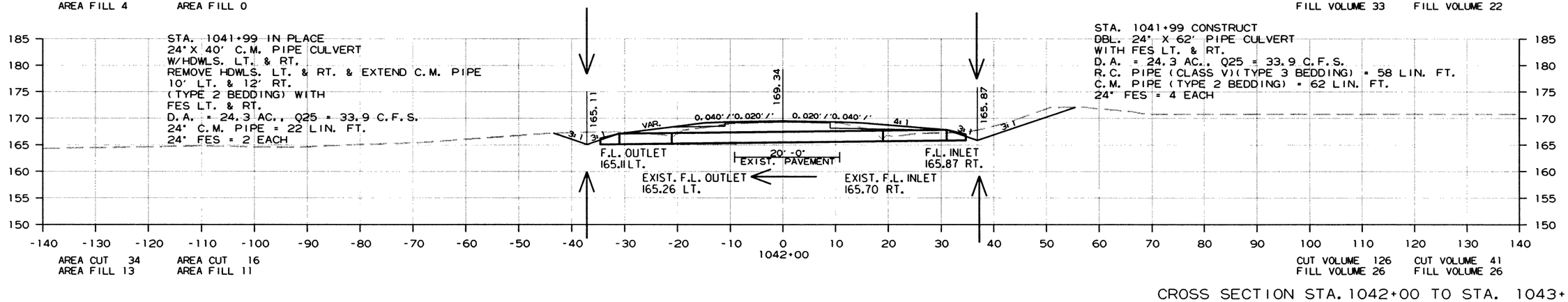
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 1042+00 TO STA. 1043+71

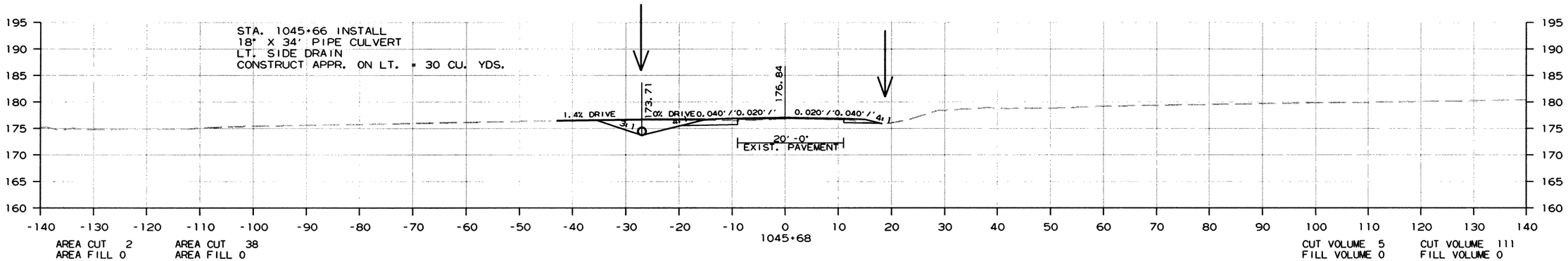
r070368.dgn 1/15/2015

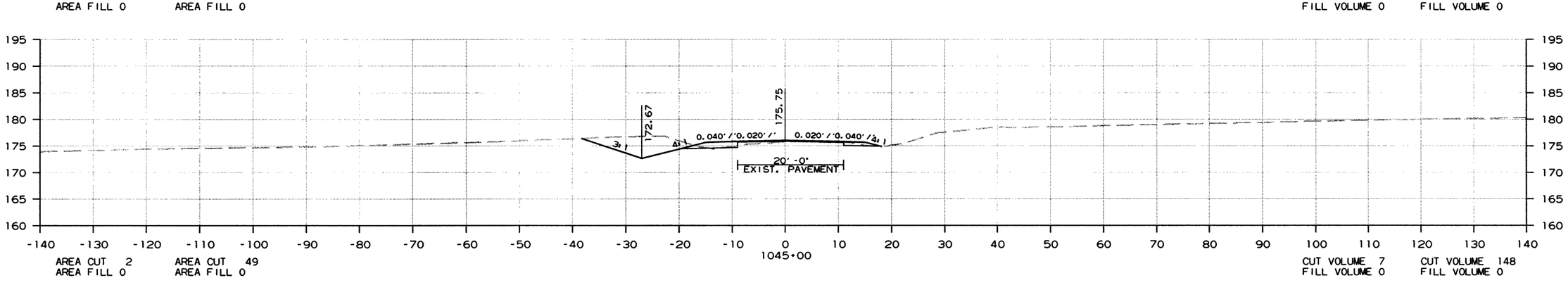
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
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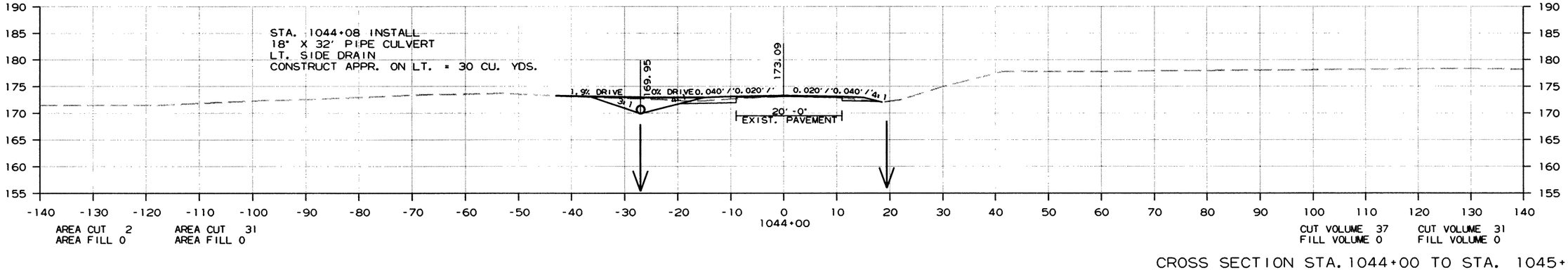
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 1044+00 TO STA. 1045+68

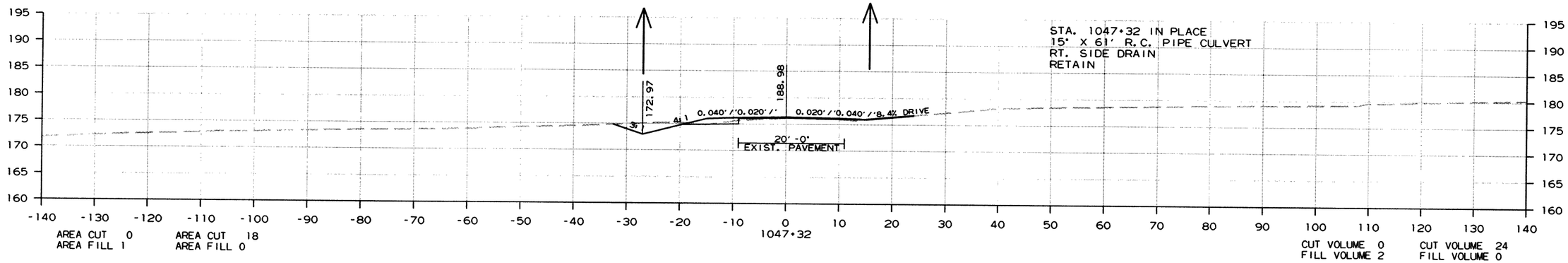
r070368.dgn 1/15/2015

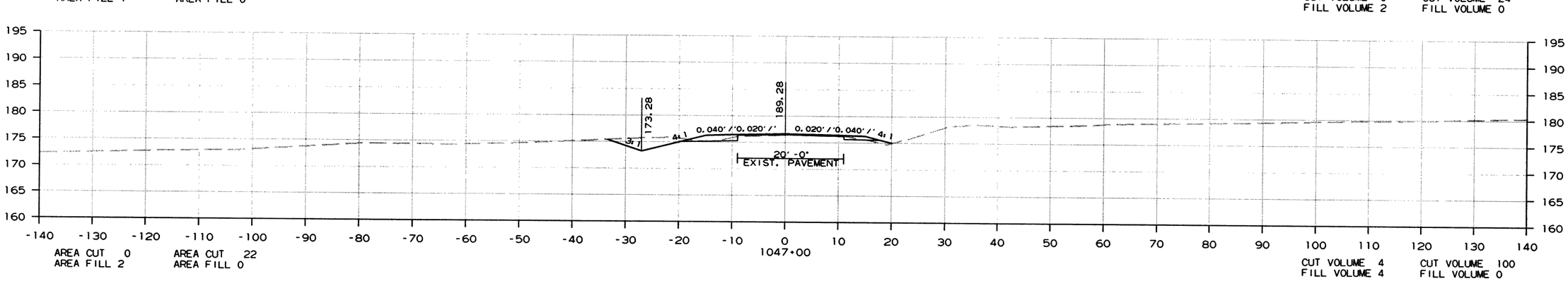
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	313	335

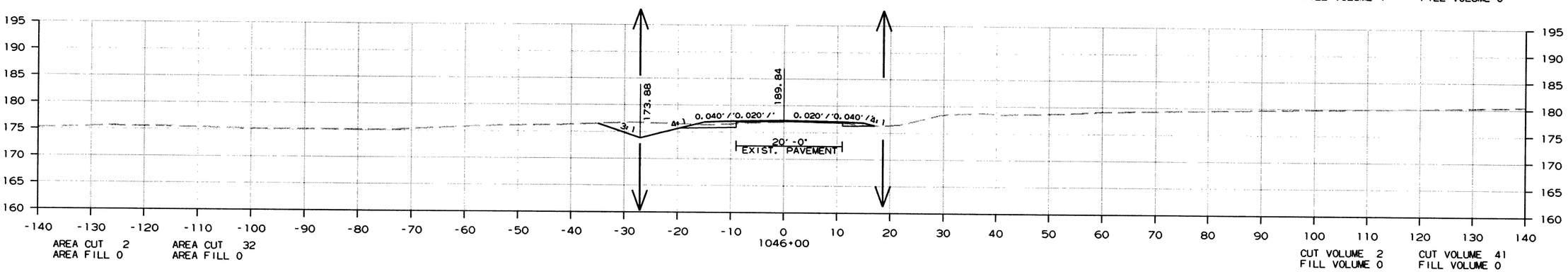
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 1046+00 TO STA. 1047+32

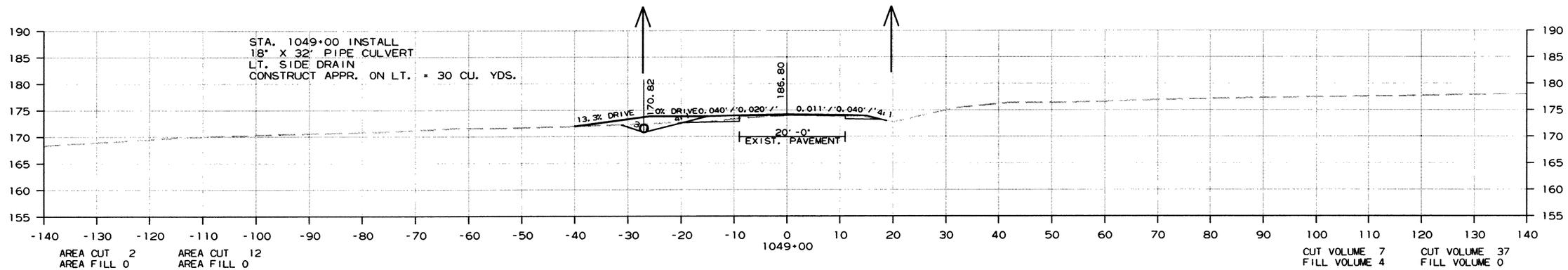
r070368.dgn 1/15/2015

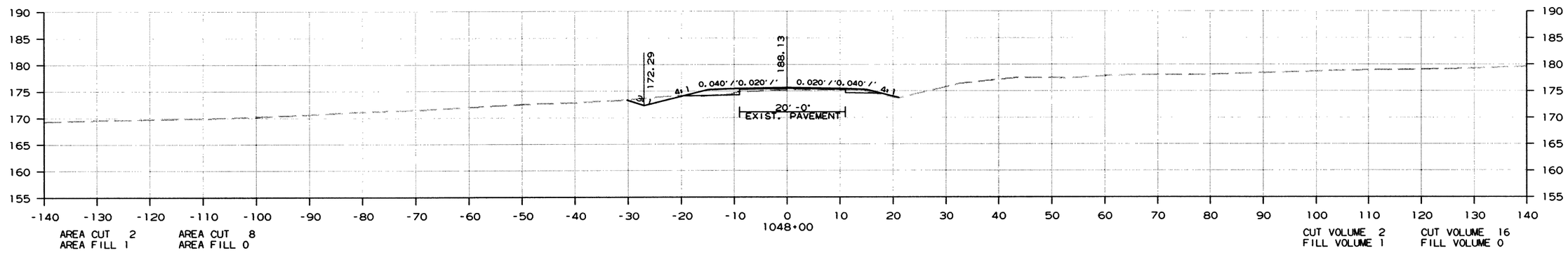
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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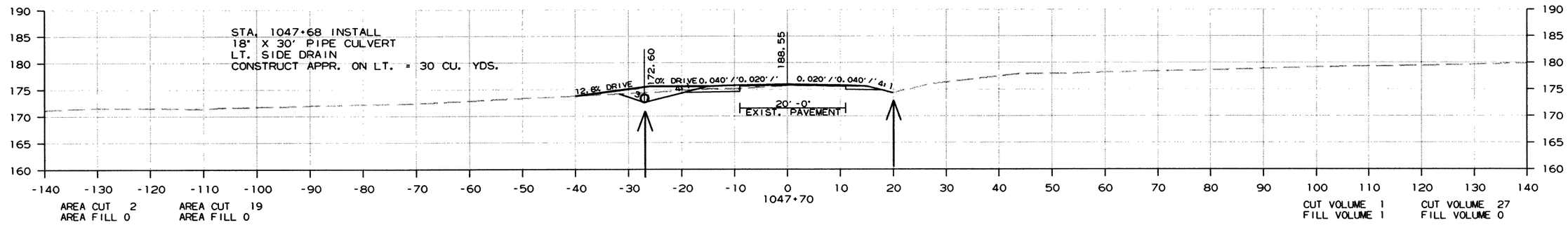
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 1047+70 TO STA. 1049+00

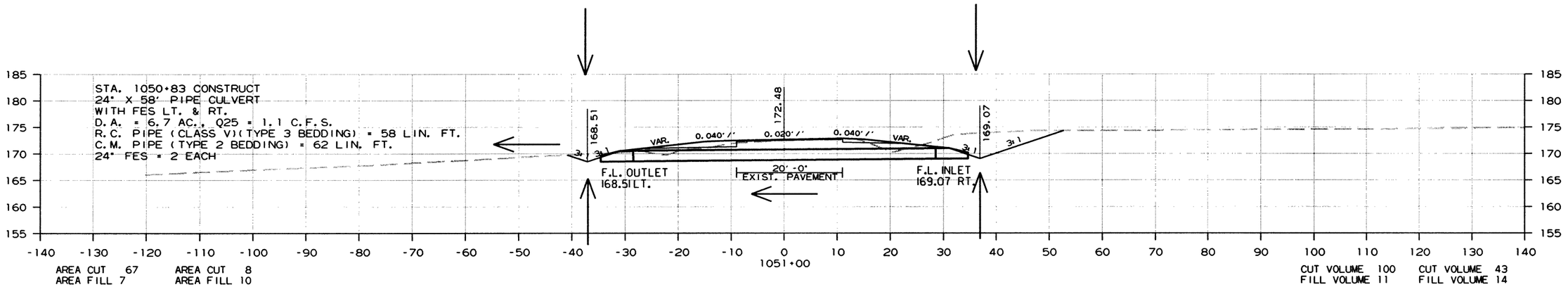
r070368.dgn 1/15/2015

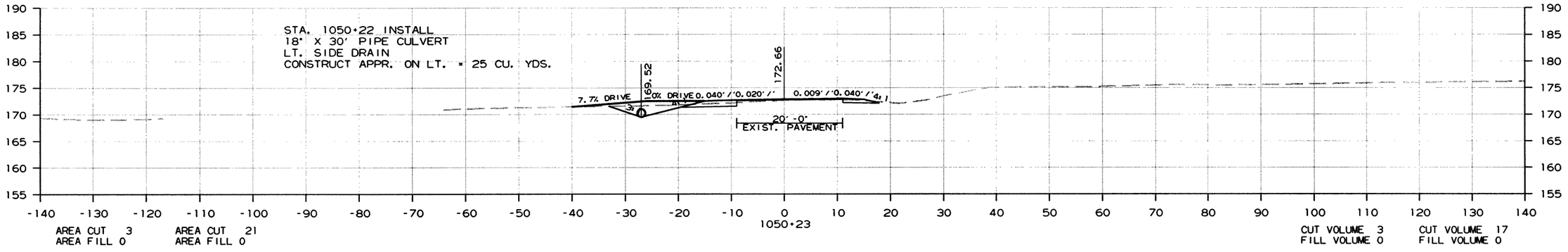
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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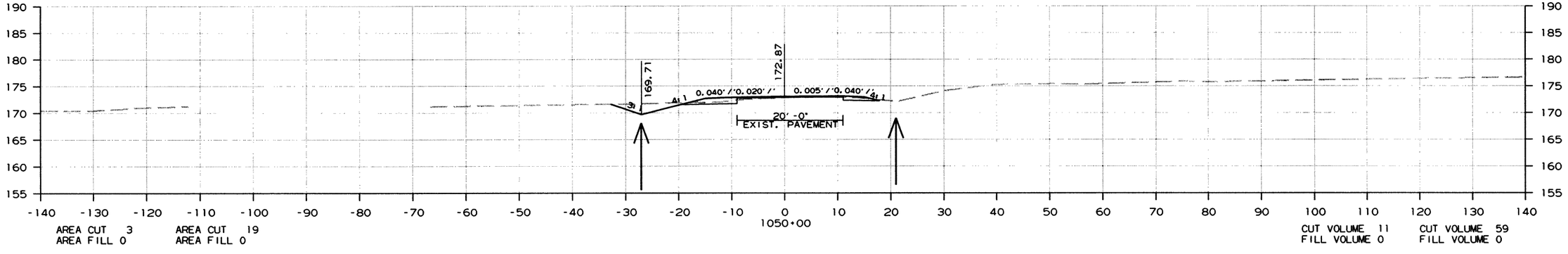
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 1050+00 TO STA. 1051+00

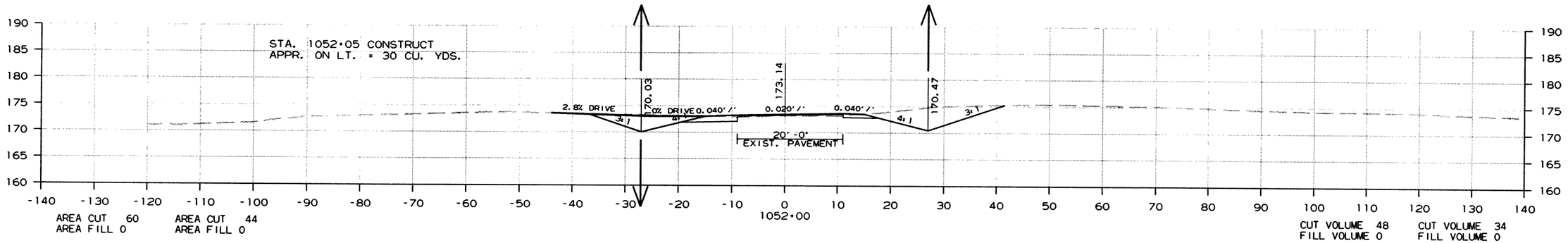
r070368.dgn 1/15/2015

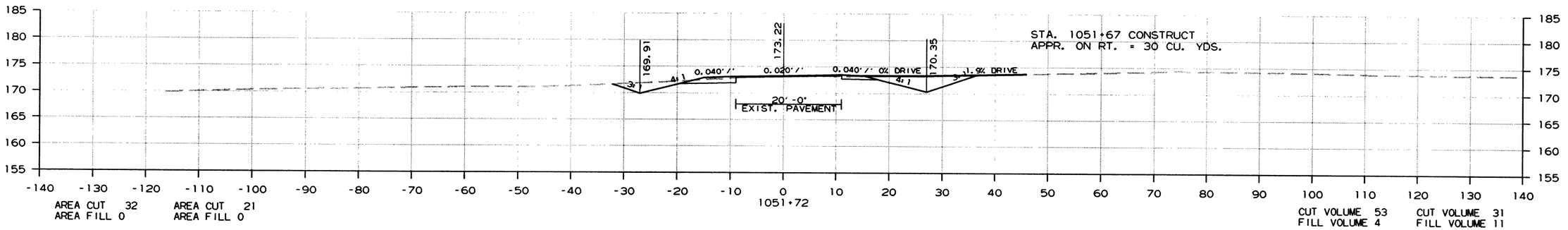
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		070368	316	335

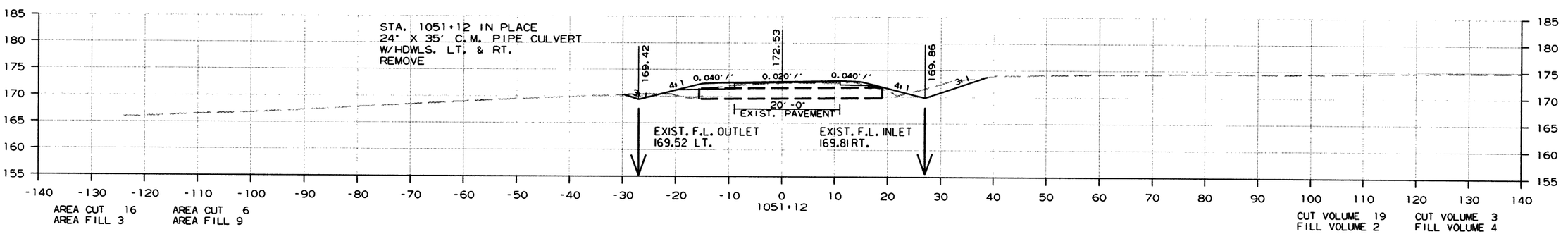
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 1051+12 TO STA. 1052+00

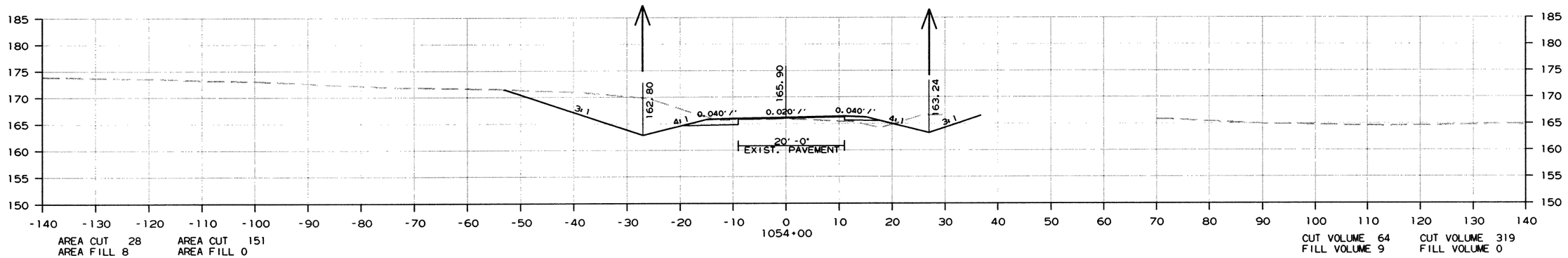
r070368.dgn 1/15/2015

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.		070368	317	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



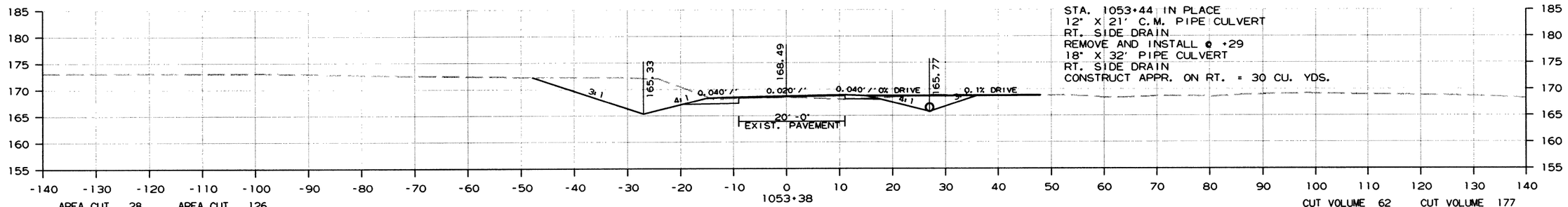
1054+00

AREA CUT 28
AREA FILL 8

AREA CUT 151
AREA FILL 0

CUT VOLUME 64
FILL VOLUME 9

CUT VOLUME 319
FILL VOLUME 0



STA. 1053+44 IN PLACE
12" X 21' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +29
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.

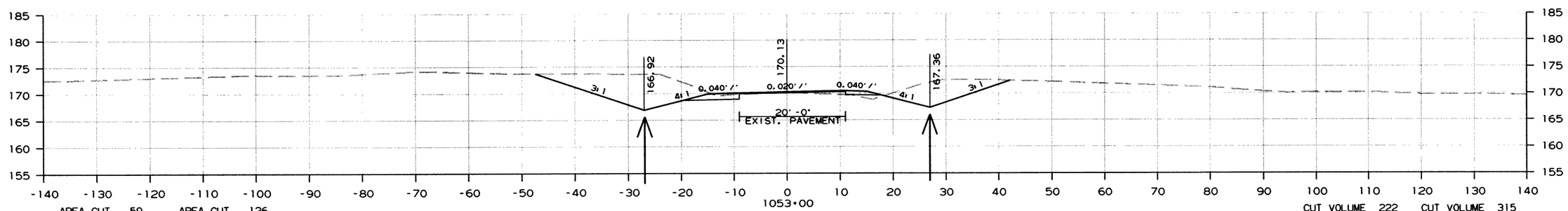
1053+38

AREA CUT 28
AREA FILL 0

AREA CUT 126
AREA FILL 0

CUT VOLUME 62
FILL VOLUME 4

CUT VOLUME 177
FILL VOLUME 0



1053+00

AREA CUT 59
AREA FILL 6

AREA CUT 126
AREA FILL 0

CUT VOLUME 222
FILL VOLUME 11

CUT VOLUME 315
FILL VOLUME 0

CROSS SECTION STA. 1053+00 TO STA. 1054+00

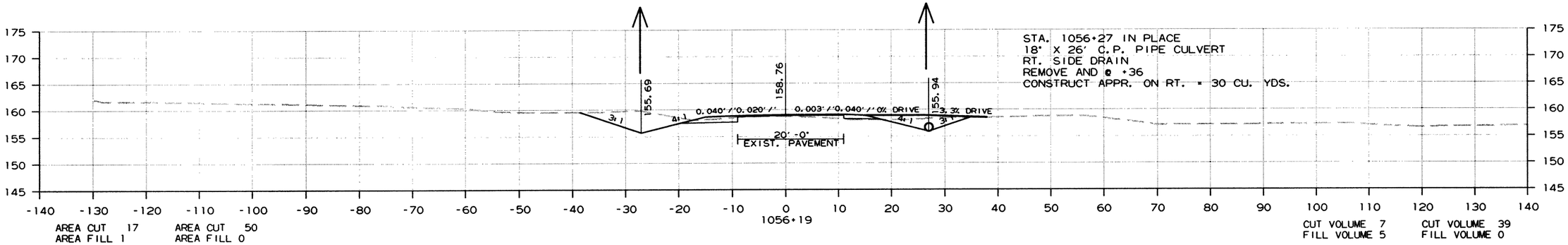
r070368.dgn 1/15/2015

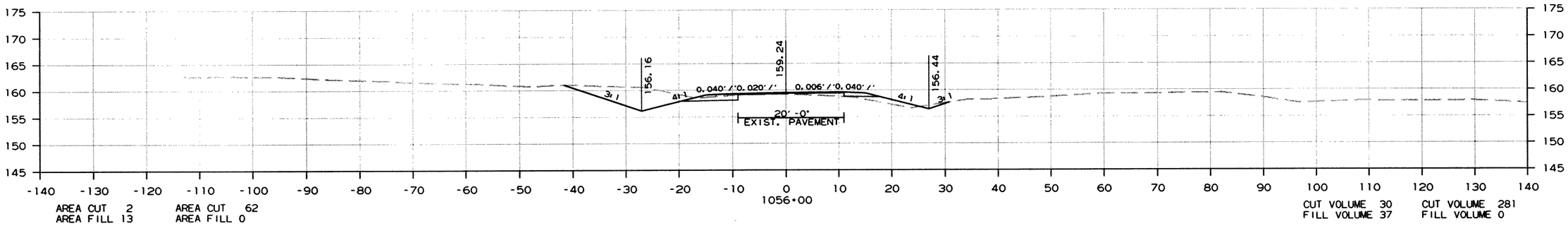
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	318	335

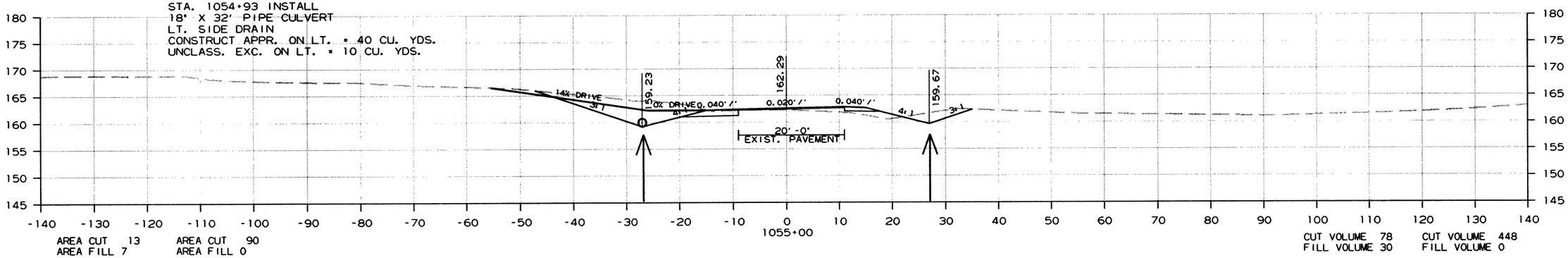
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







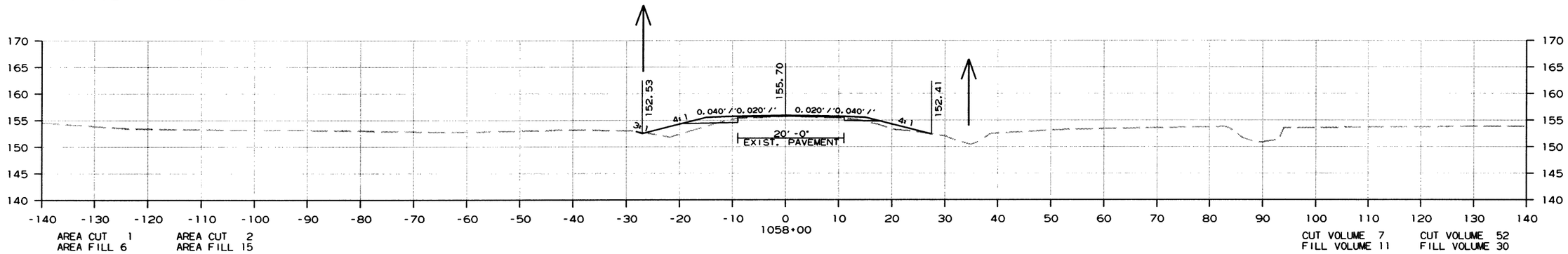
CROSS SECTION STA. 1055+00 TO STA. 1056+19

r070368.dgn 1/15/2015

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.		070368	319	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

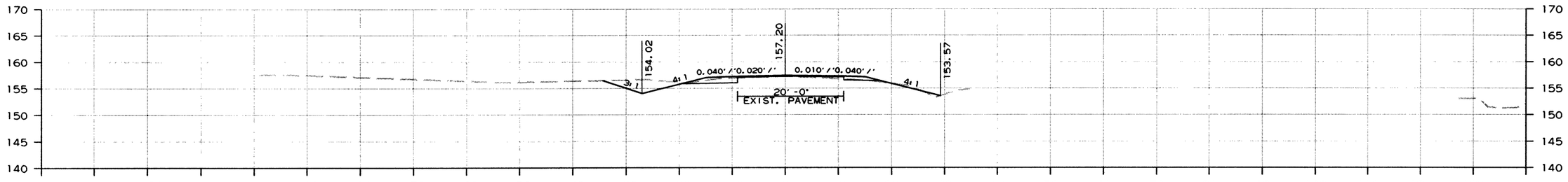


AREA CUT 1 AREA FILL 6

AREA CUT 2 AREA FILL 15

CUT VOLUME 7 FILL VOLUME 11

CUT VOLUME 52 FILL VOLUME 30

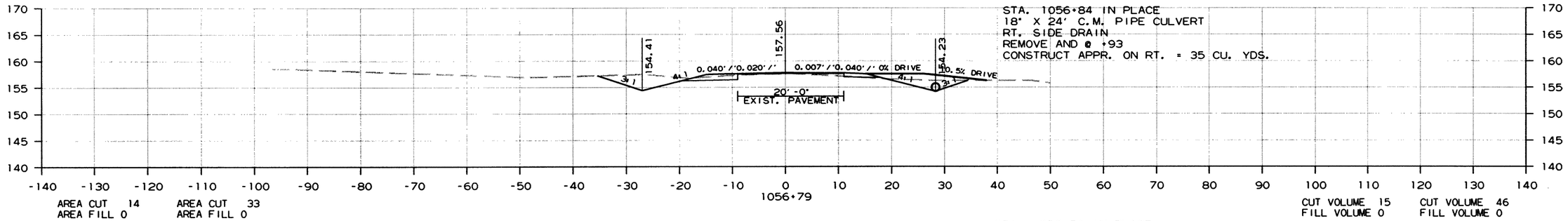


AREA CUT 2 AREA FILL 0

AREA CUT 26 AREA FILL 0

CUT VOLUME 6 FILL VOLUME 0

CUT VOLUME 23 FILL VOLUME 0



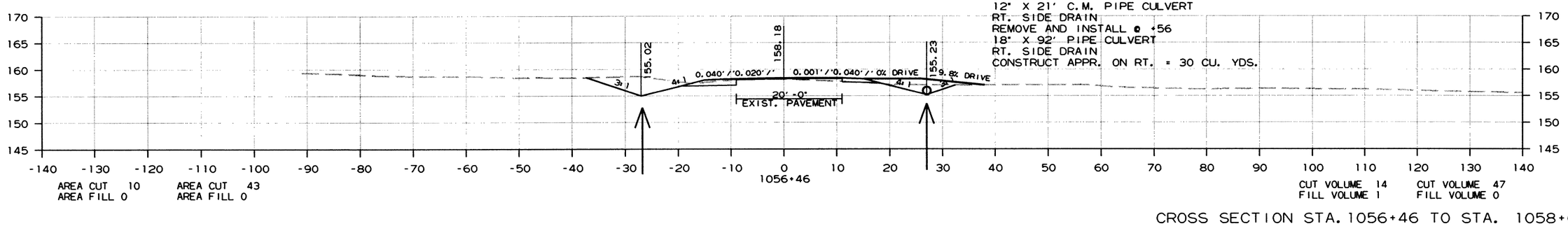
STA. 1056+84 IN PLACE
18" X 24' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND @ +93
CONSTRUCT APPR. ON RT. = 35 CU. YDS.

AREA CUT 14 AREA FILL 0

AREA CUT 33 AREA FILL 0

CUT VOLUME 15 FILL VOLUME 0

CUT VOLUME 46 FILL VOLUME 0



STA. 1056+54 IN PLACE
12" X 21' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +56
18" X 92' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 30 CU. YDS.

AREA CUT 10 AREA FILL 0

AREA CUT 43 AREA FILL 0

CUT VOLUME 14 FILL VOLUME 1

CUT VOLUME 47 FILL VOLUME 0

CROSS SECTION STA. 1056+46 TO STA. 1058+00

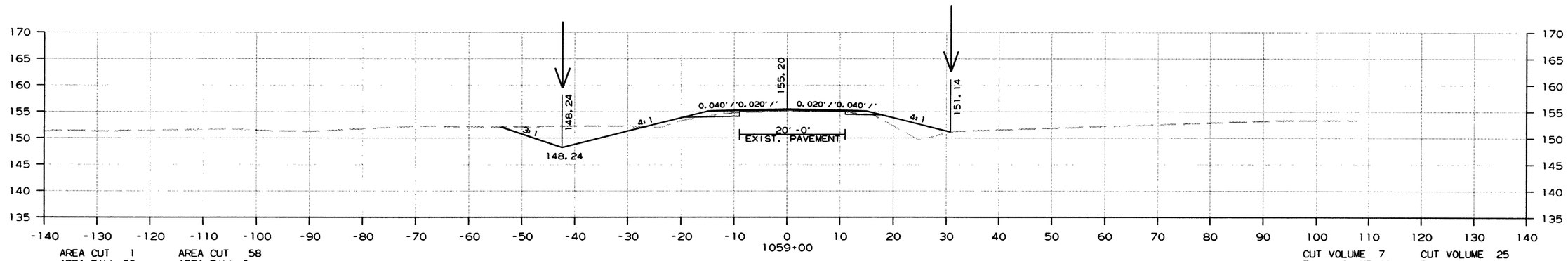
r070368.dgn 1/15/2015

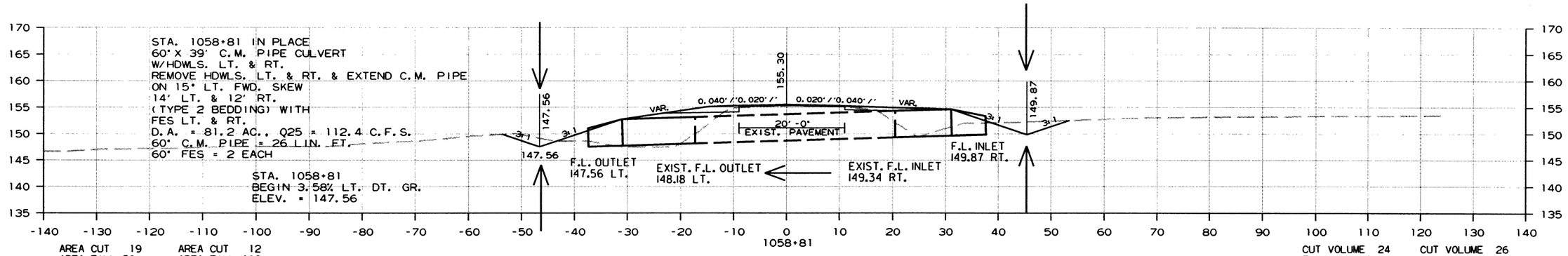
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	320	335

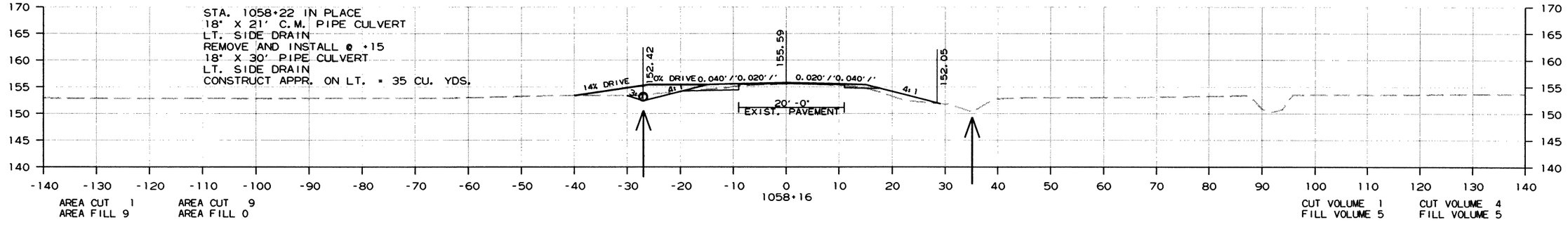
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







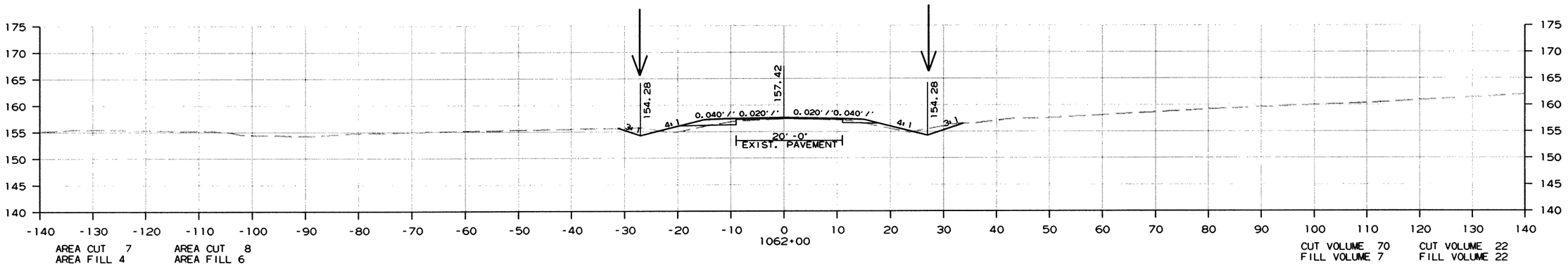
CROSS SECTION STA. 1058+16 TO STA. 1059+00

r070368.dgn 1/15/2015

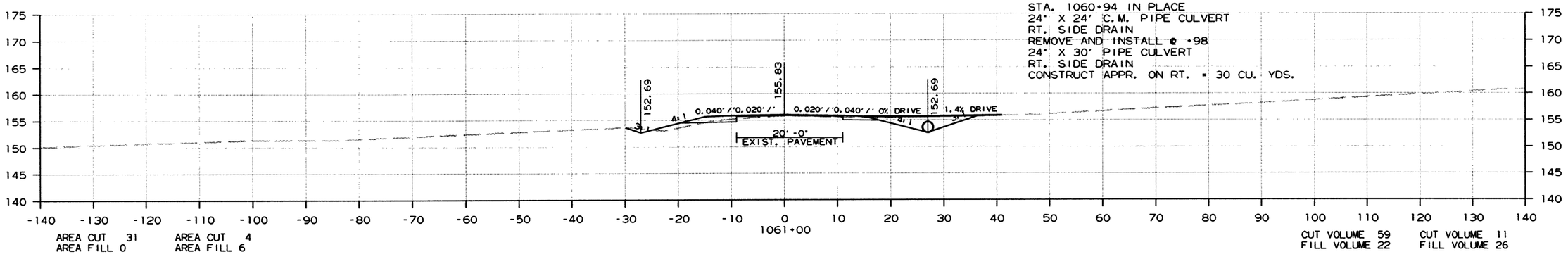
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	321	335

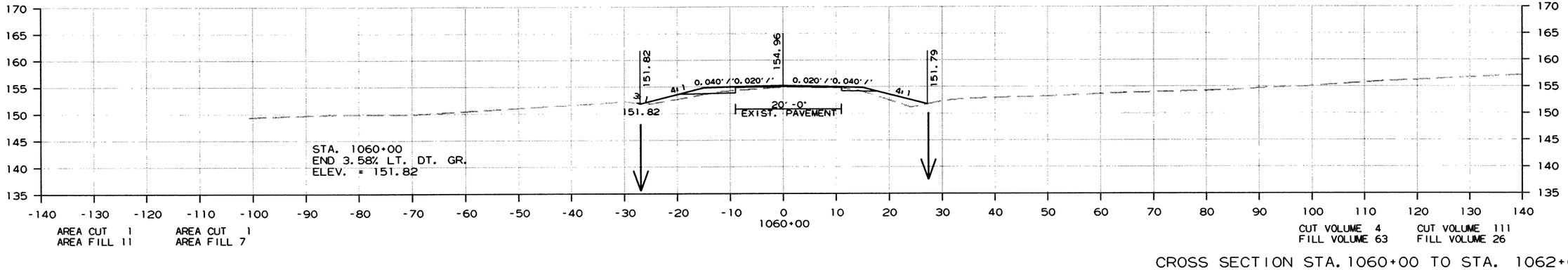
(2) CROSS SECTIONS

STAGE 1 STAGE 2



STAGE 1 STAGE 2





CROSS SECTION STA. 1060+00 TO STA. 1062+00

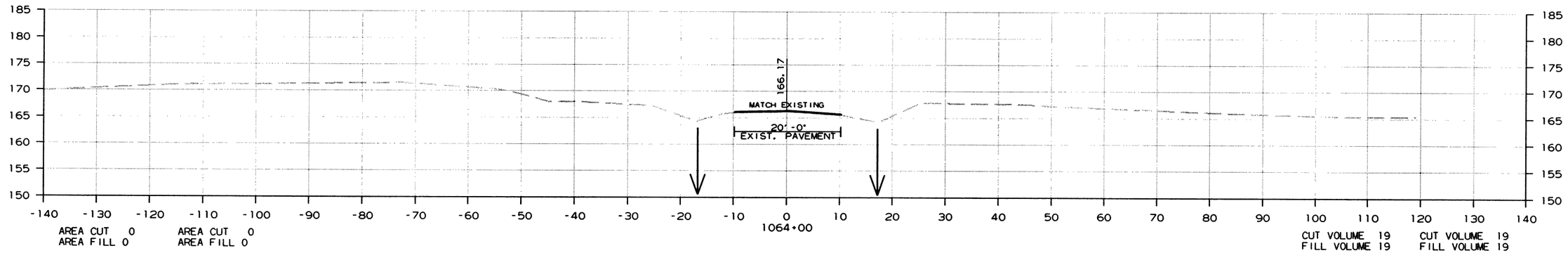
r070368.dgn 1/15/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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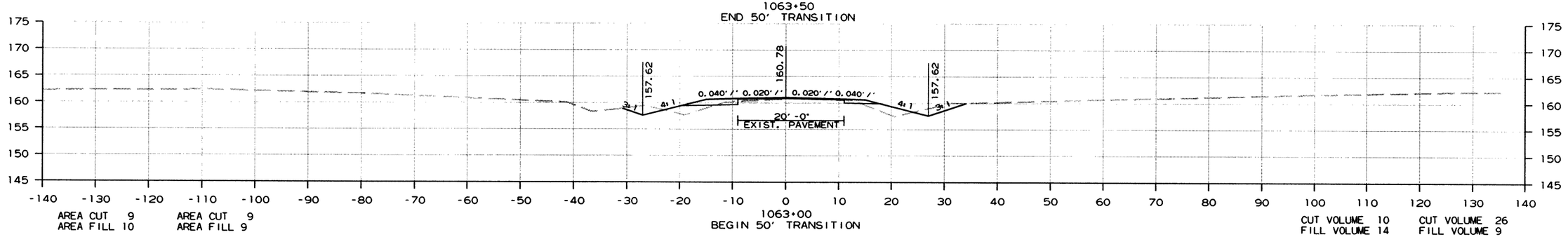
(2) CROSS SECTIONS

STAGE 1 STAGE 2

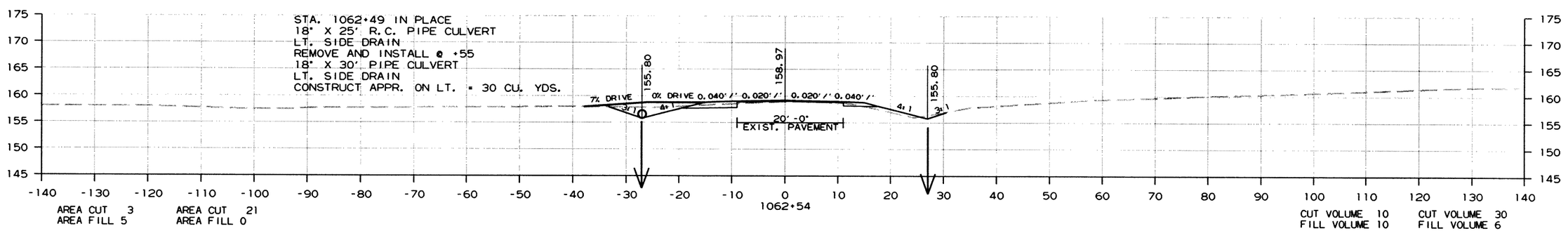
STAGE 1 STAGE 2



1063+50
END 50' TRANSITION



STA. 1062+49 IN PLACE
18" X 25' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +55
18" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 30 CU. YDS.



CROSS SECTION STA. 1062+54 TO STA. 1064+00

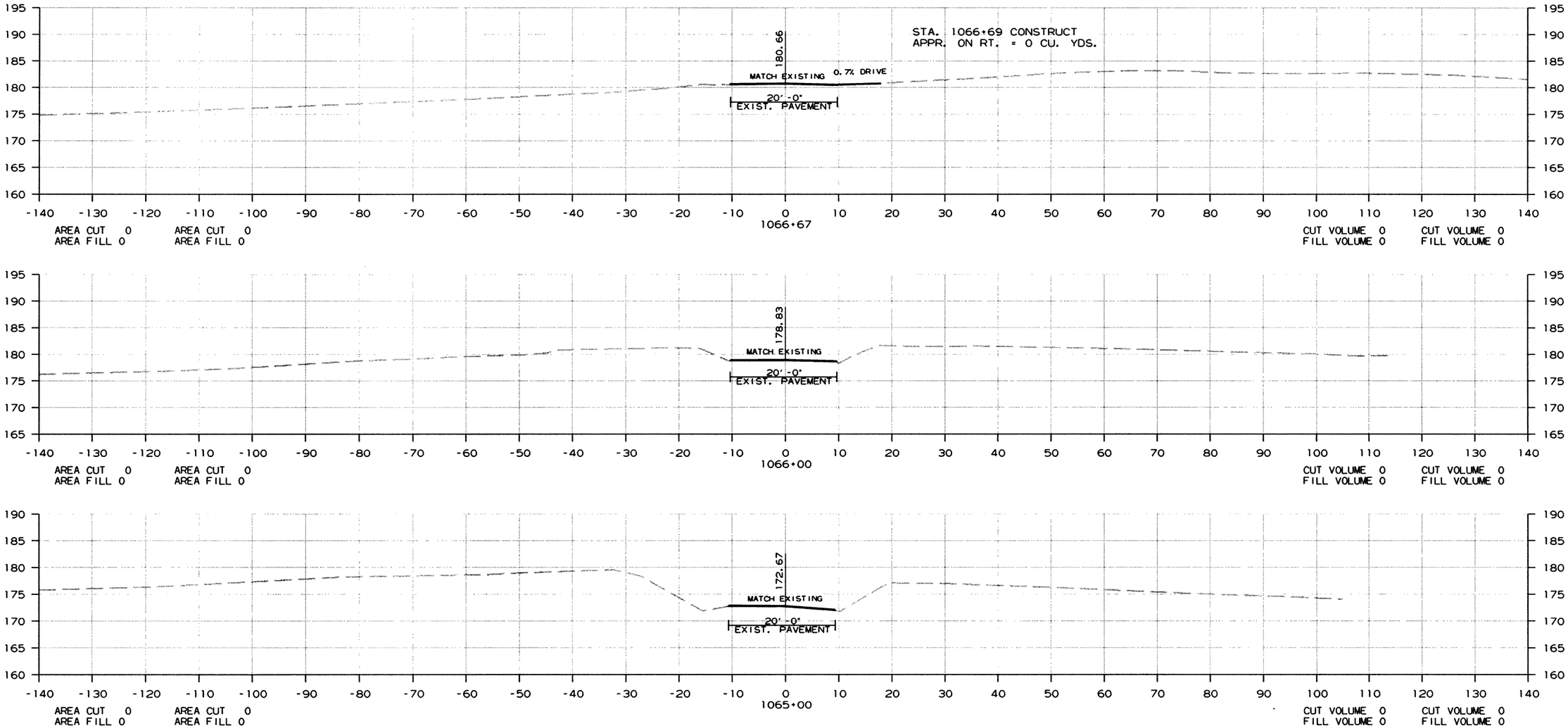
r070368.dgn 1/15/2015

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.		070368	323	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 1065+00 TO STA. 1066+67

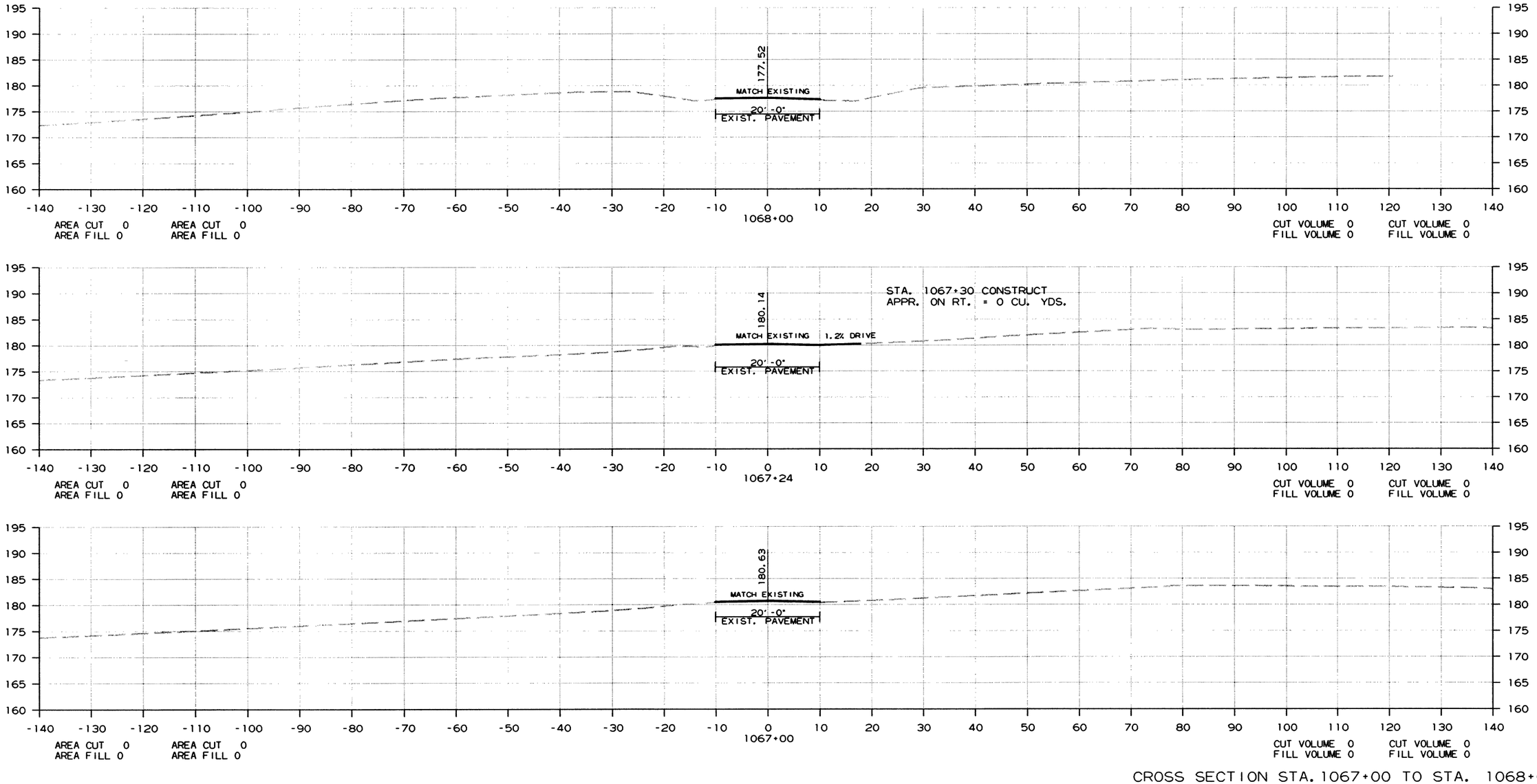
r070368.dgn 1/15/2015

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.		070368	324	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 1067+00 TO STA. 1068+00

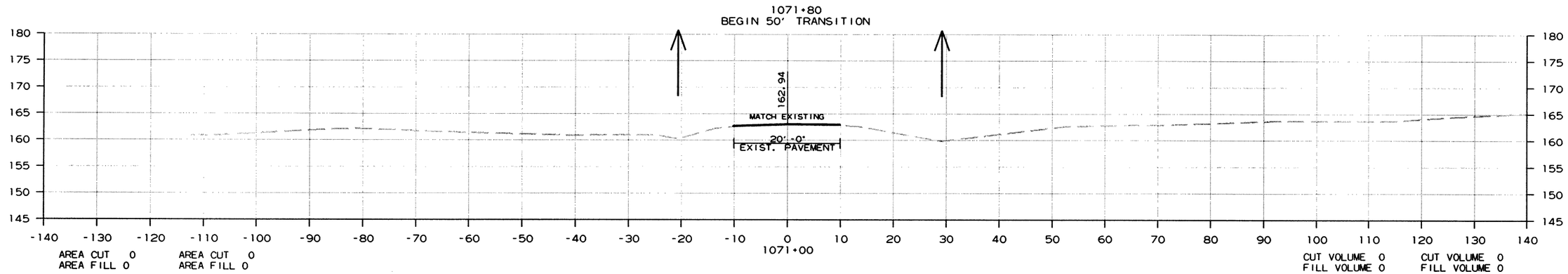
r070368.dgn 1/15/2015

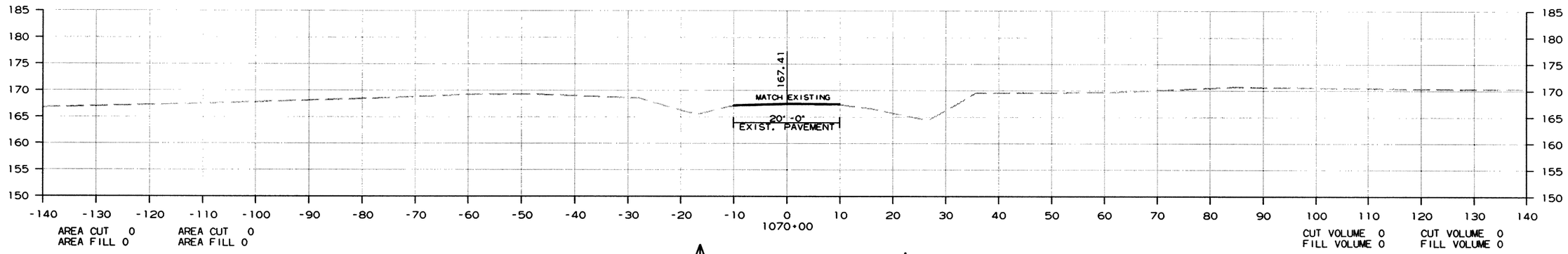
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	325	335

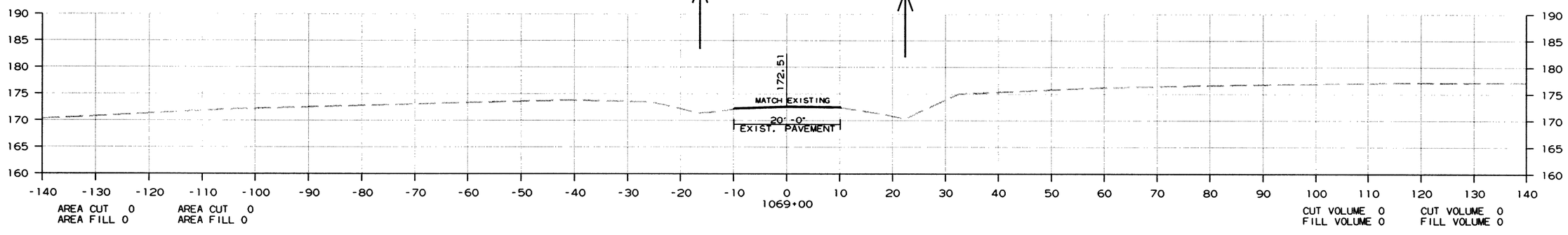
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 1069+00 TO STA. 1071+00

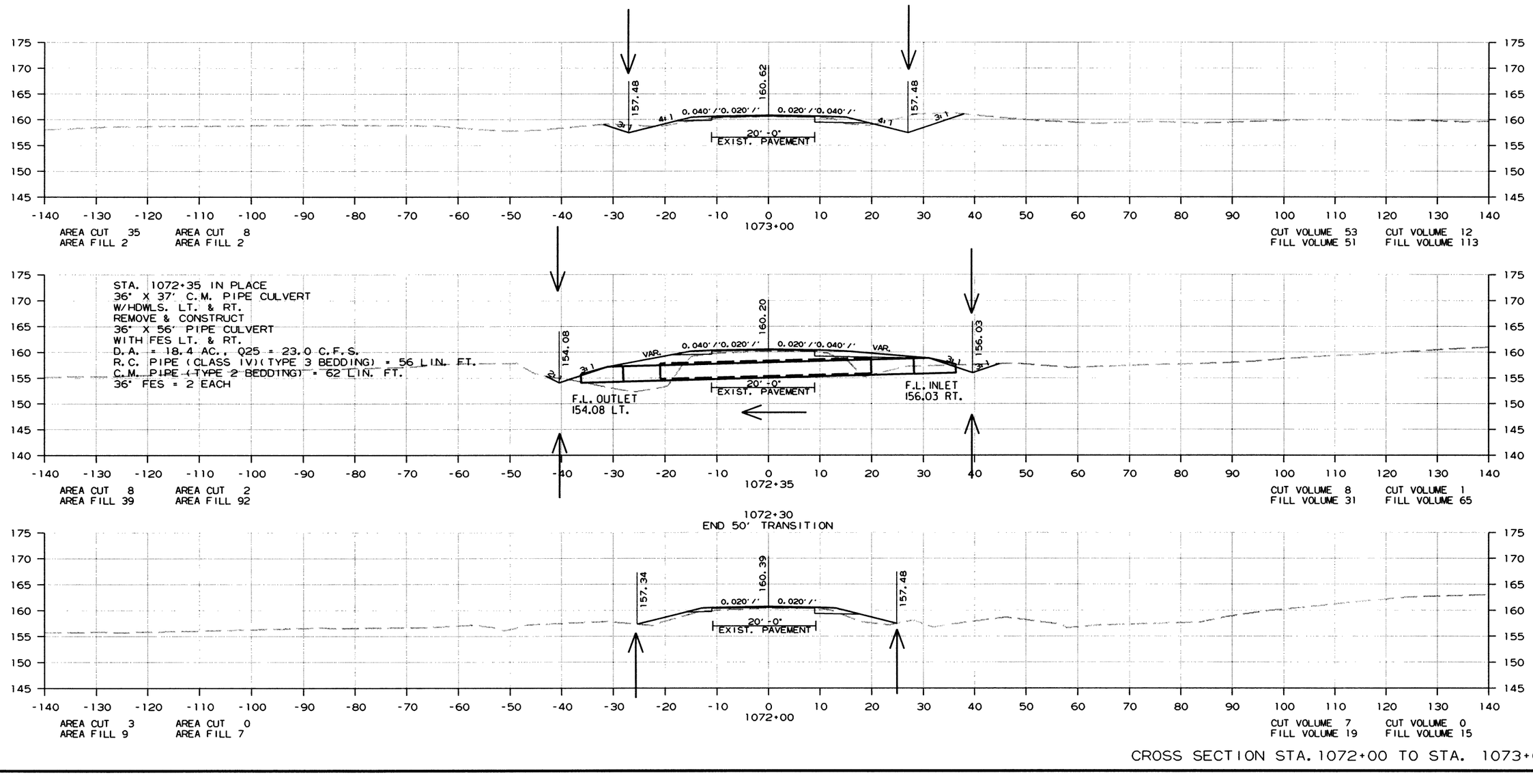
r070368.dgn 1/15/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	326	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 1072+00 TO STA. 1073+00

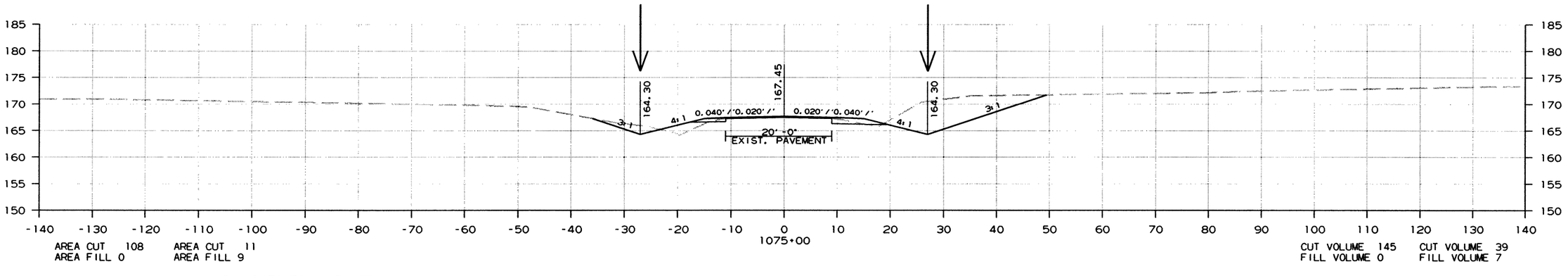
r070368.dgn 1/15/2015

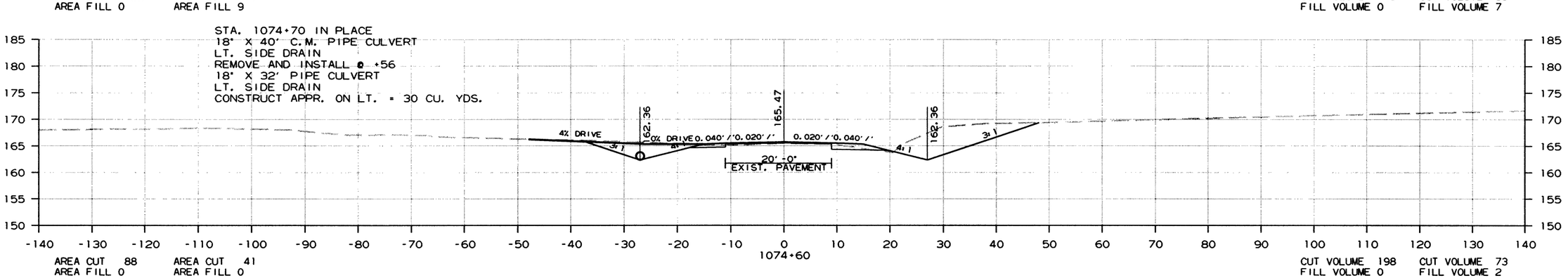
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	327	335

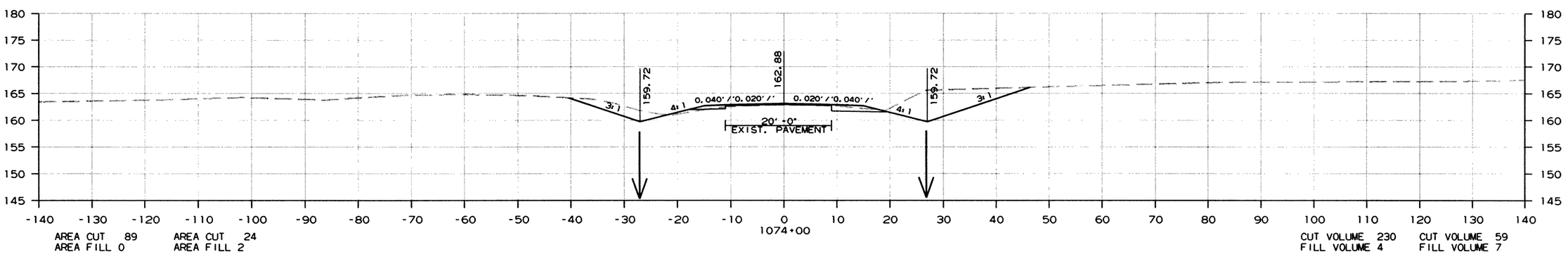
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







CROSS SECTION STA. 1074+00 TO STA. 1075+00

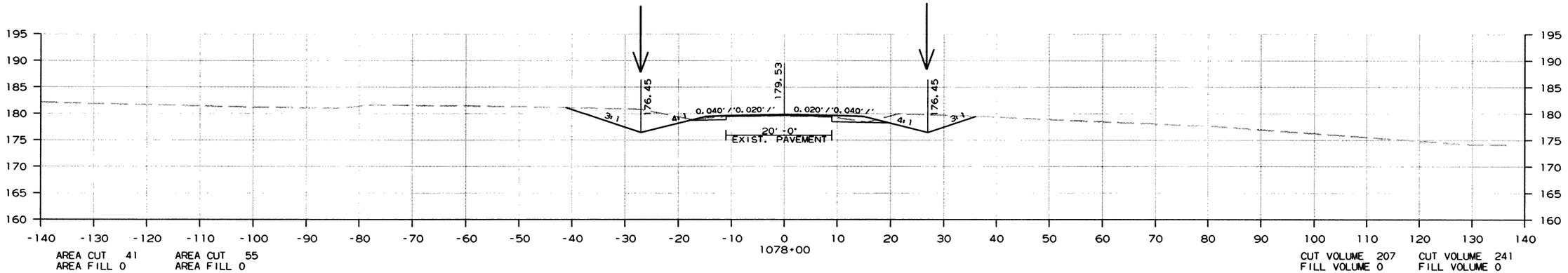
r070368.dgn 1/15/2015

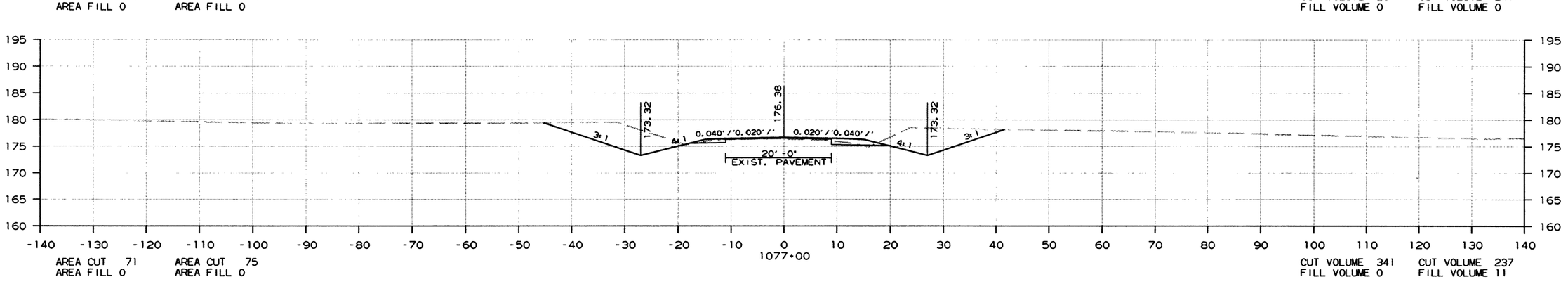
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	328	335

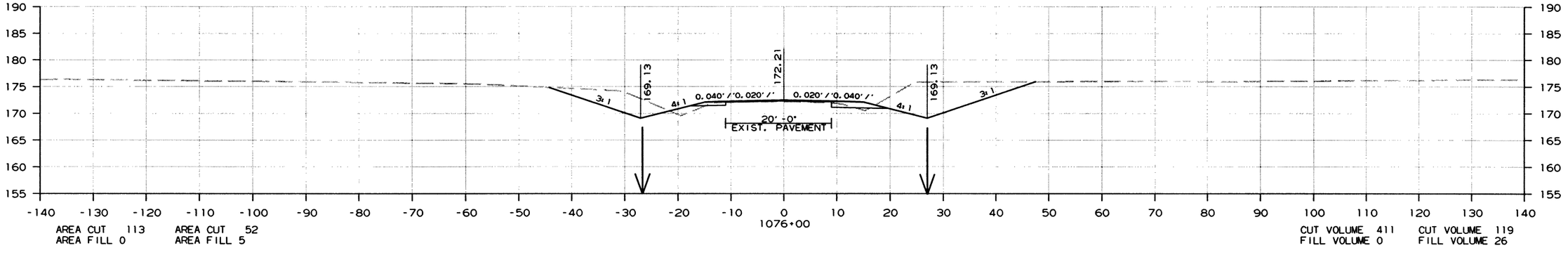
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







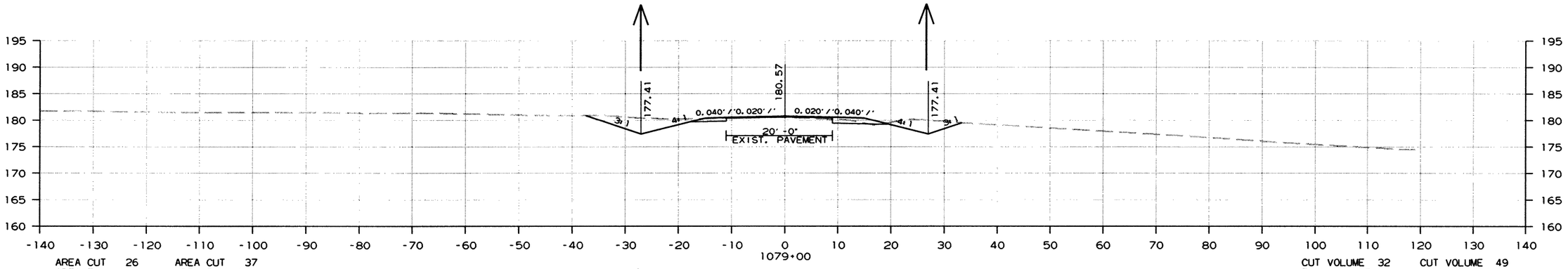
CROSS SECTION STA. 1076+00 TO STA. 1078+00

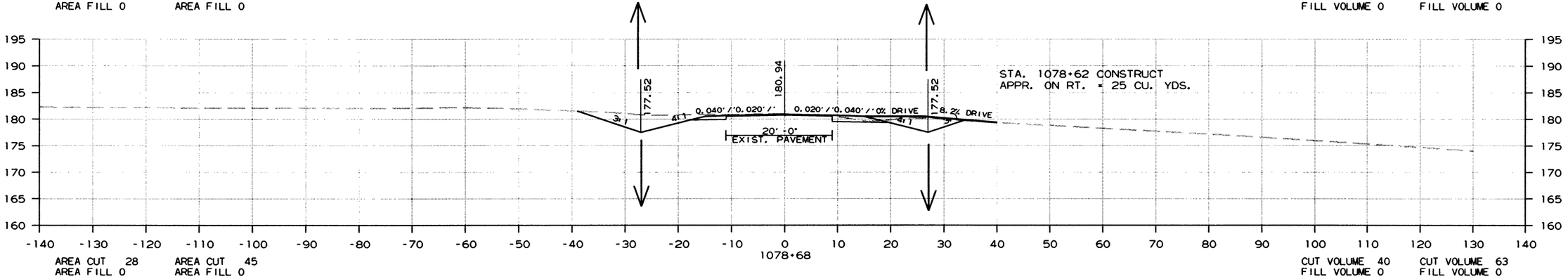
r070368.dgn 1/15/2015

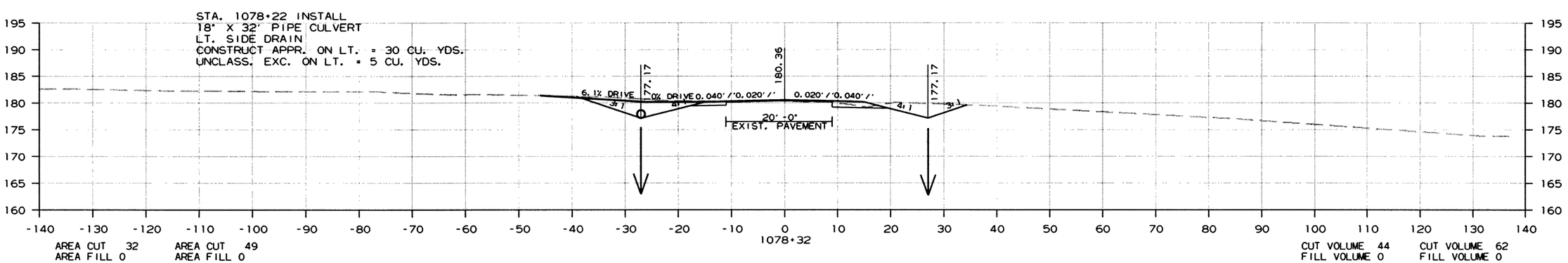
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	329	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2







CROSS SECTION STA. 1078+32 TO STA. 1079+00

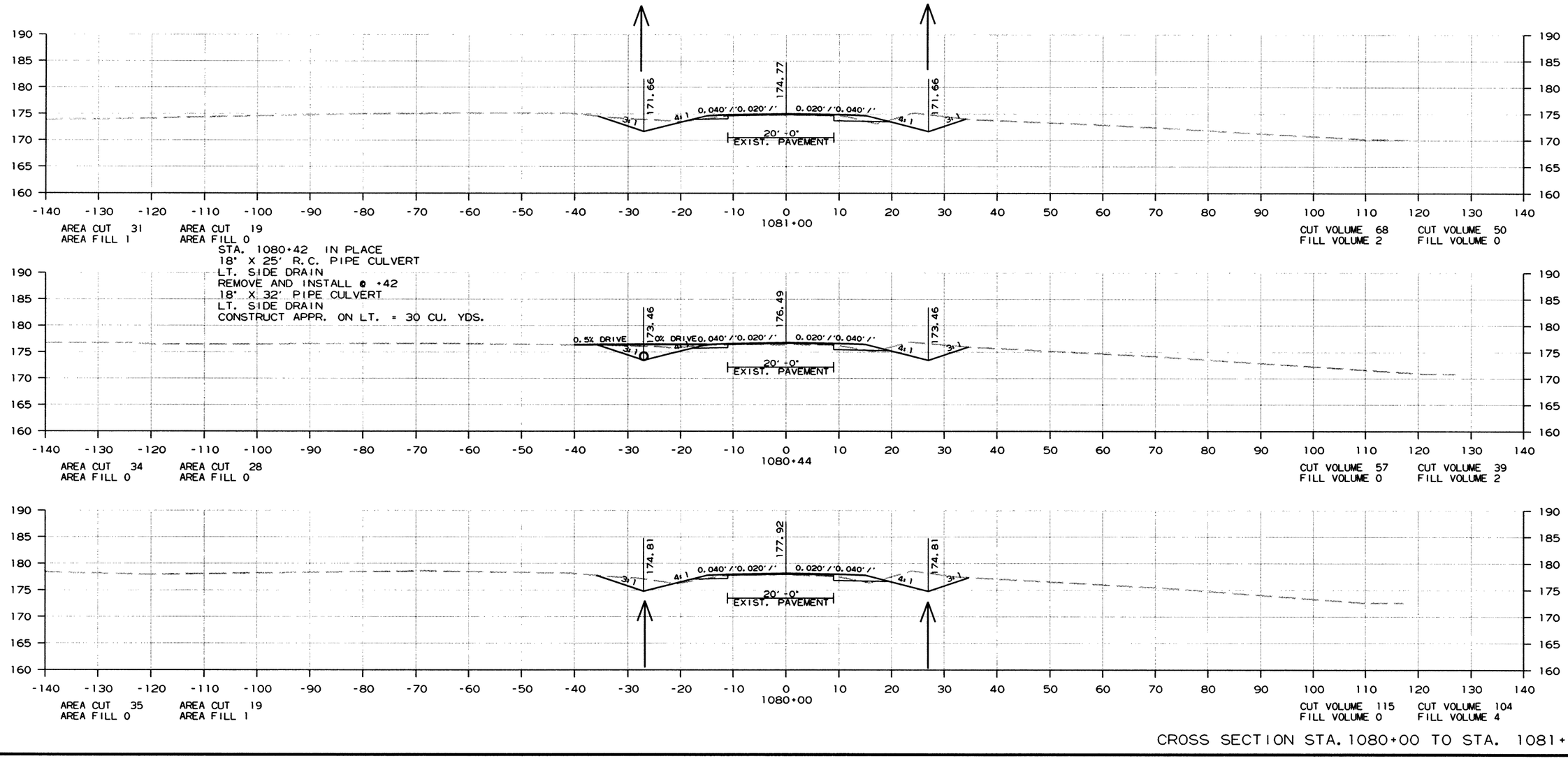
r070368.dgn 1/15/2015

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.		070368	330	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 1080+00 TO STA. 1081+00

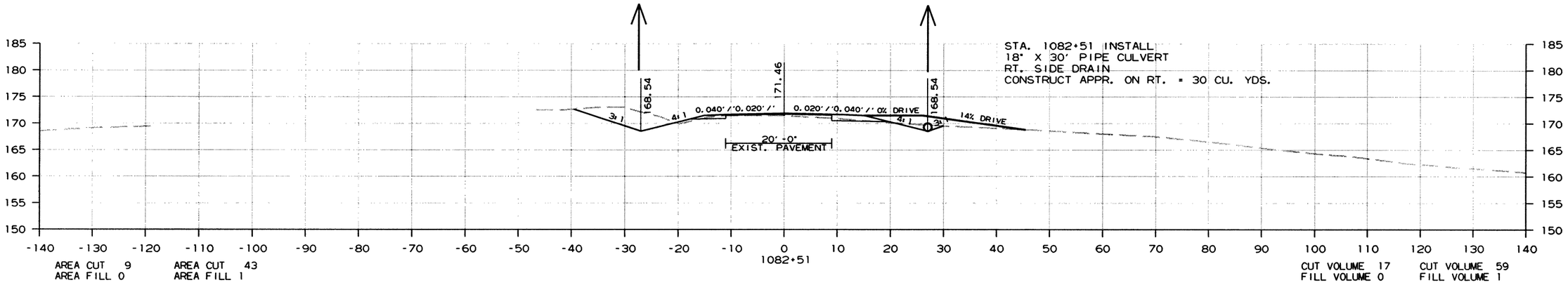
r070368.dgn 1/15/2015

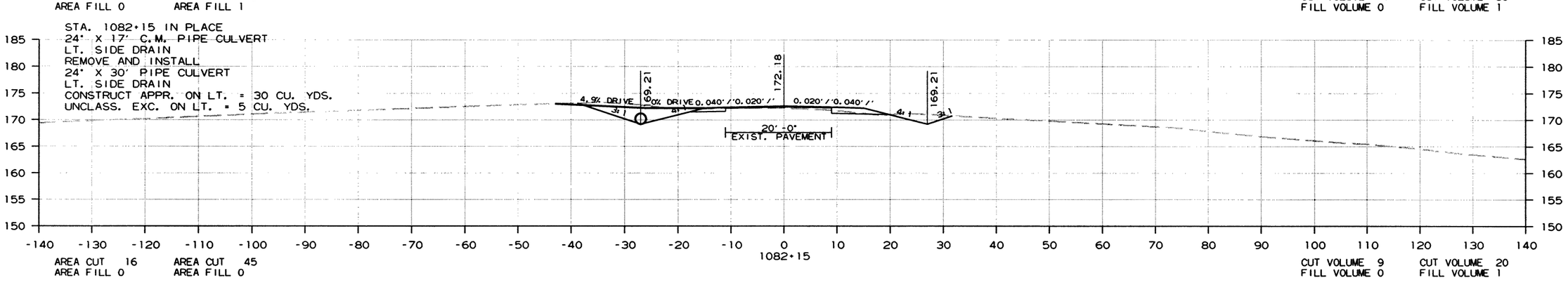
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		070368	331	335

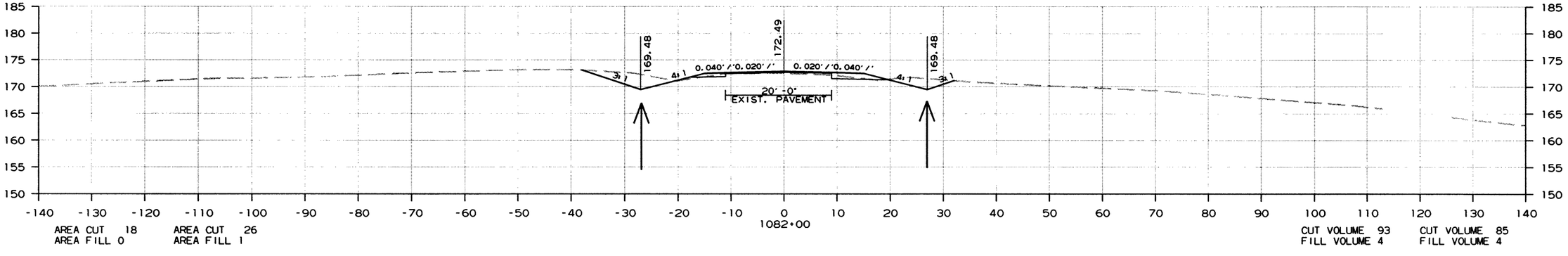
(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2







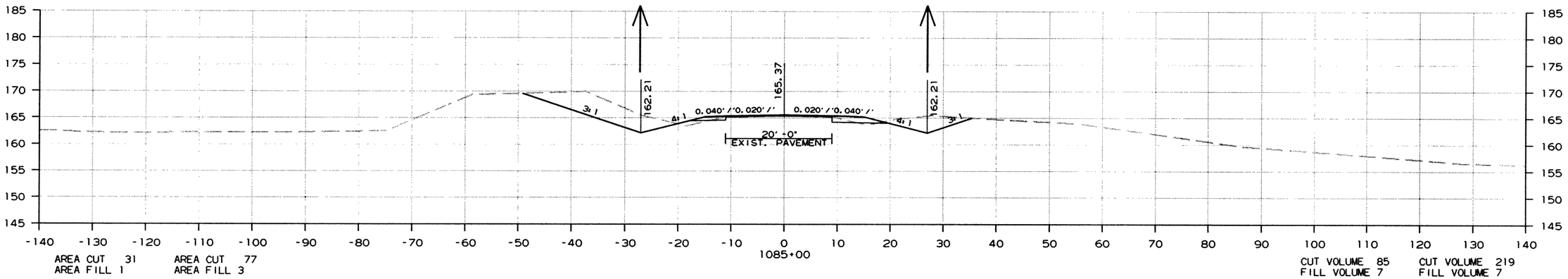
CROSS SECTION STA. 1082+00 TO STA. 1082+51

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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.		070368	332	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2



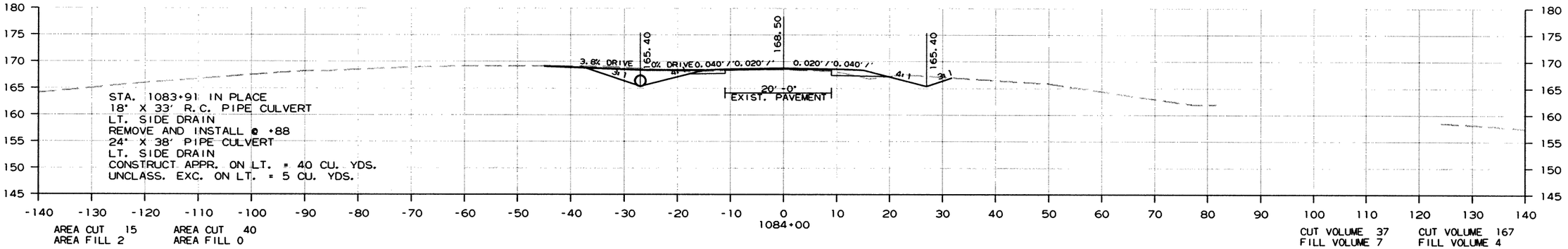
AREA CUT 31
AREA FILL 1

AREA CUT 77
AREA FILL 3

CUT VOLUME 85
FILL VOLUME 7

CUT VOLUME 219
FILL VOLUME 7

STAGE 1 STAGE 2



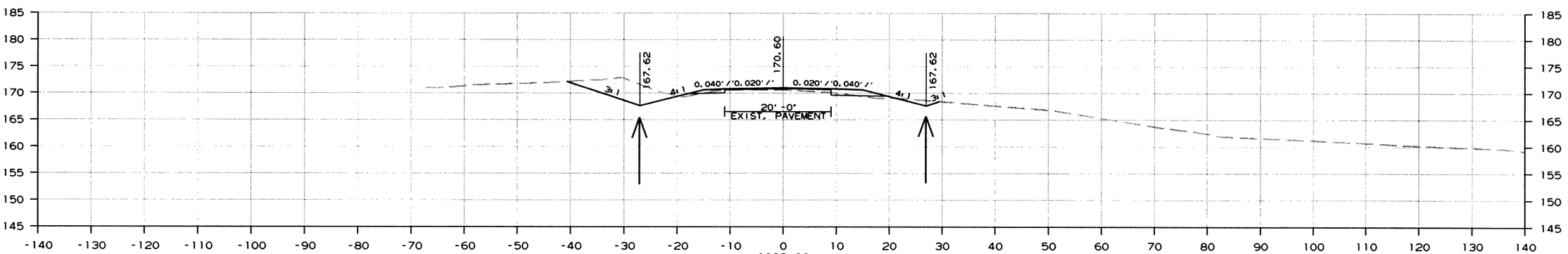
STA. 1083+91 IN PLACE
18" X 33' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +88
24" X 38' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 40 CU. YDS.
UNCLASS. EXC. ON LT. = 5 CU. YDS.

AREA CUT 15
AREA FILL 2

AREA CUT 40
AREA FILL 0

CUT VOLUME 37
FILL VOLUME 7

CUT VOLUME 167
FILL VOLUME 4



AREA CUT 5
AREA FILL 2

AREA CUT 50
AREA FILL 1

CUT VOLUME 13
FILL VOLUME 2

CUT VOLUME 85
FILL VOLUME 2

CROSS SECTION STA. 1083+00 TO STA. 1085+00

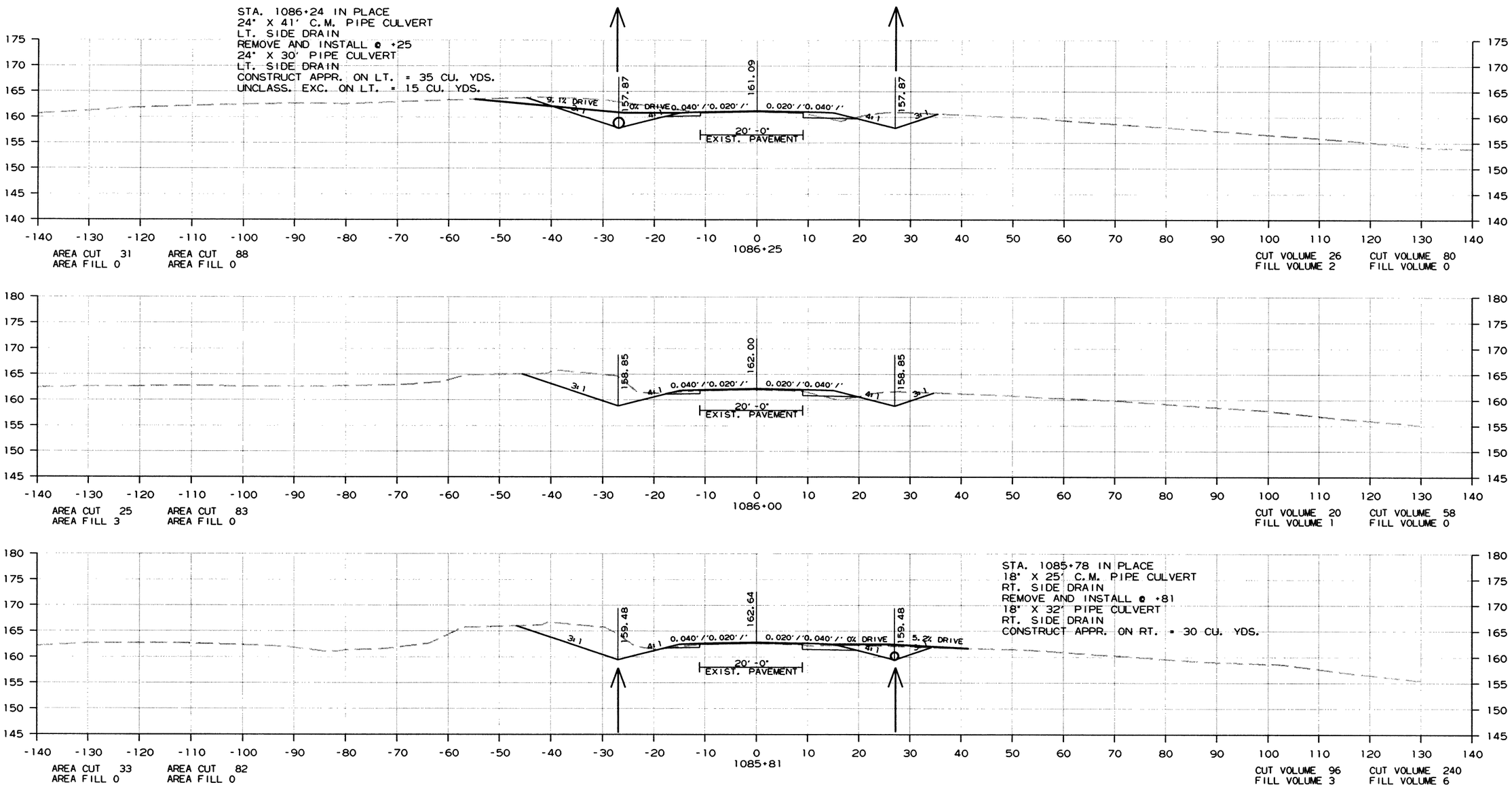
r070368.dgn 1/15/2015

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.		070368	333	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 1085+81 TO STA. 1086+25

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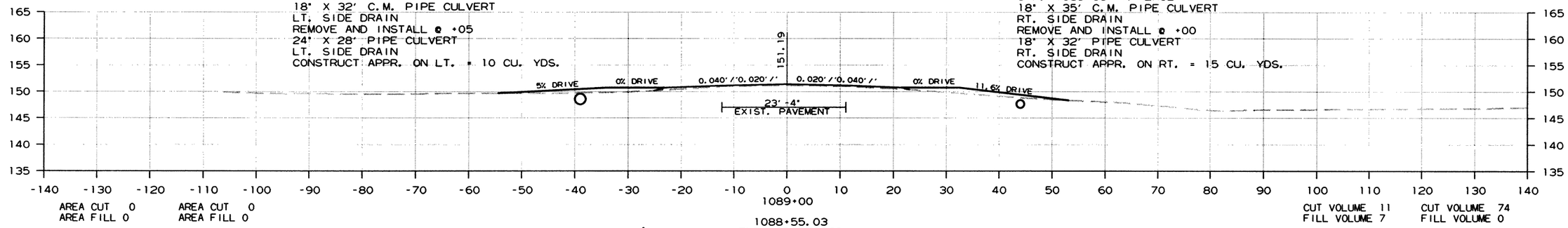
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070368	334	335

(2) CROSS SECTIONS

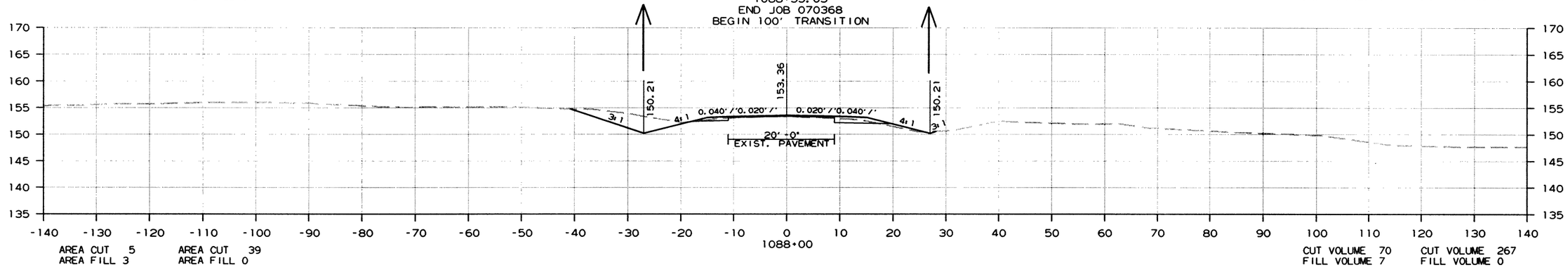
STAGE 1 STAGE 2

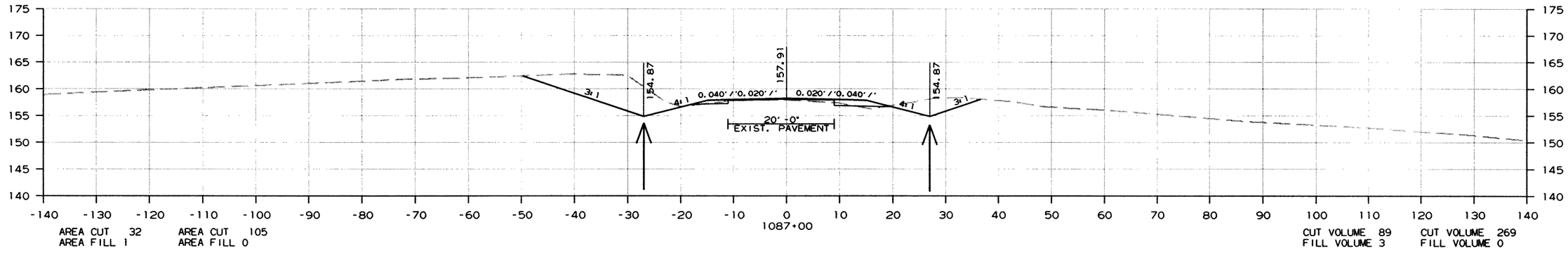
STA. 1089+08 IN PLACE
18" X 32' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL @ +05
24" X 28' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPR. ON LT. = 10 CU. YDS.

STA. 1089+03 IN PLACE
18" X 35' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL @ +00
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPR. ON RT. = 15 CU. YDS.



1088+55.03
END JOB 070368
BEGIN 100' TRANSITION





CROSS SECTION STA. 1087+00 TO STA. 1089+00

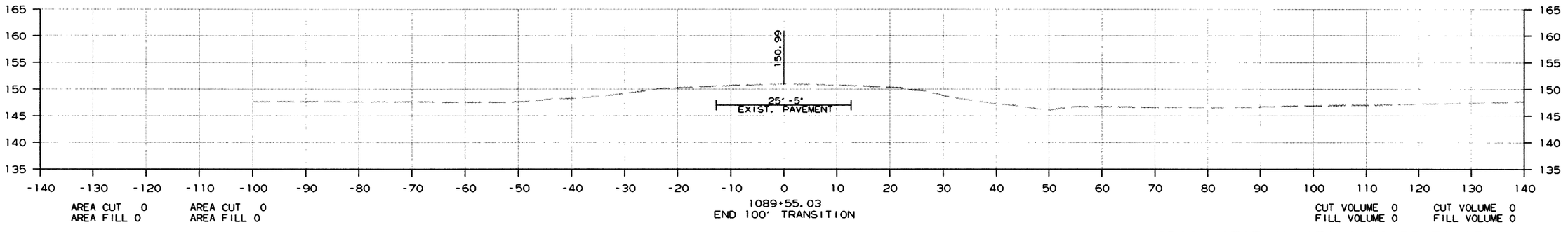
r070368.dgn 1/15/2015

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.		070368	335	335

(2) CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 1089+55 TO STA. 1089+55

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