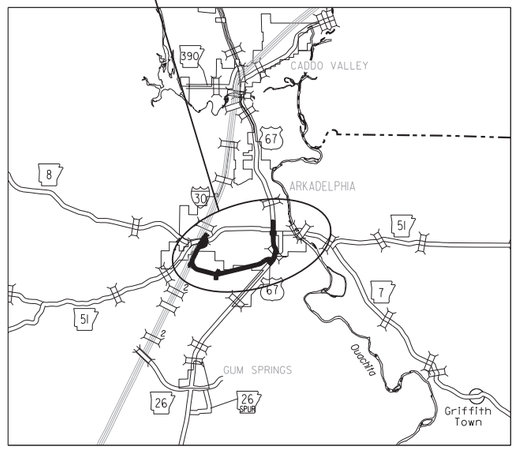
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	1	549
		HWY. 67 - HWY. 51 (ARKADELPHIA BYPASS) (S)				

PROJECT LOCATION



VICINITY MAP

ARKANSAS DEPARTMENT OF TRANSPORTATION
CONSTRUCTION PLANS FOR STATE HIGHWAY

HWY. 67 - HWY. 51
(ARKADELPHIA BYPASS) (S)

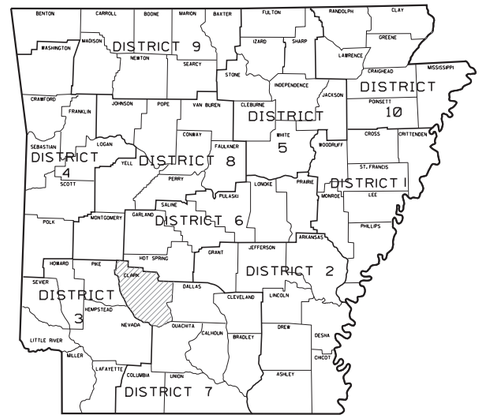
CLARK COUNTY

ROUTE 67 SECTION 5

ROUTE 51 SECTION 1

JOB 070442

FED. AID PROJ. STPF-9013(10)



ARKANSAS HIGHWAY DISTRICT 7

STRUCTURES OVER 20'-0" SPAN

① STA. 197+95 CONSTRUCT
TRP. 6' X 6' X 140' R.C. BOX CULVERT
45° RT. FWD. SKEW
WITH 3:1 WINGS LT. AND RT.
Q50 = 513 CFS DA = 557 ACRES
SPAN = 20'-6"

② STA. 264+00 CONSTRUCT
SEXT. 6' X 3' X 100' R.C. BOX CULVERT
WITH 3:1 WINGS LT. & RT.
Q50 = 67 CFS DA = 22 ACRES
SPAN = 40'-4"

③ STA. 103+28 CONSTRUCT
TRP. 6' X 3' X 110' R.C. BOX CULVERT
45° RT. FWD. SKEW
W/3:1 WINGS LT. AND RT.
Q50 = 181 CFS DA = 865 ACRES
SPAN = 20'-4"

④ STA. 110+00 CONSTRUCT
QUINT. 6' X 3' X 284' R.C. BOX CULVERT
45° RT. FWD. SKEW
WITH 3:1 WINGS LT. AND RT.
Q50 = 666 CFS DA = 863 ACRES
SPAN = 33'-8"

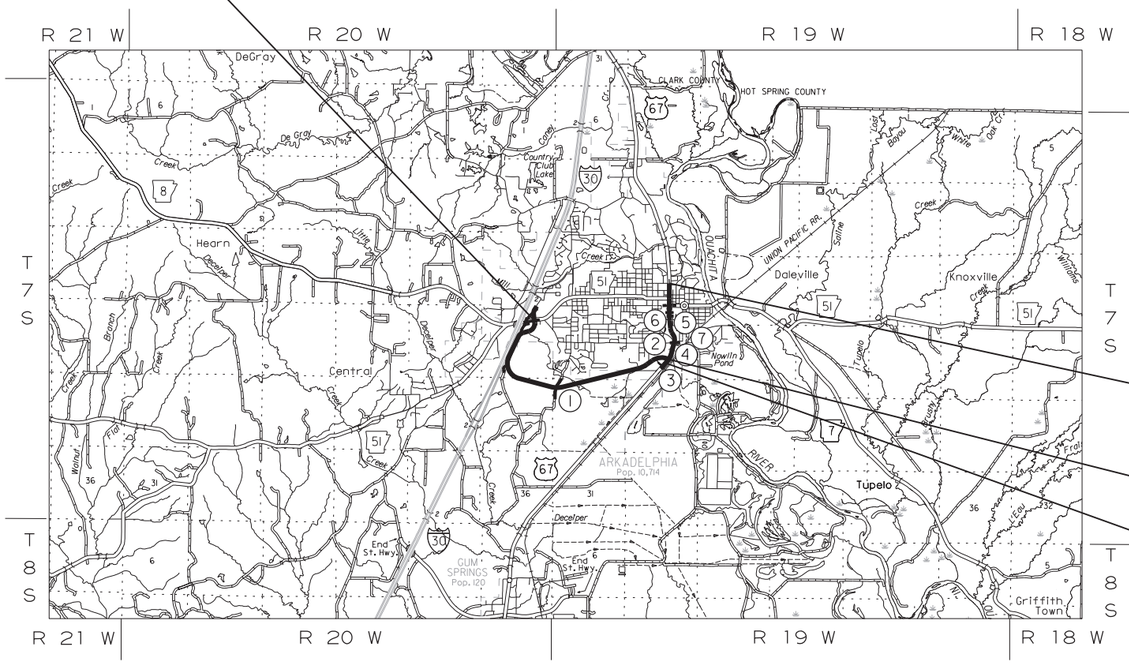
⑤ STA. 118+40 CONSTRUCT
TRP. 12' X 9' X 288' R.C. BOX CULVERT
66° LT. FWD. SKEW
WITH 3:1 WINGS LT. AND RT.
Q50 = 1241 CFS DA = 819 ACRES
SPAN = 39'-5"

⑥ STA. 126+22 CONSTRUCT
QUINT. 6' X 4' X 96' R.C. BOX CULVERT
30° LT. FWD. SKEW
WITH 3:1 WINGS LT. AND RT.
Q50 = 347 CFS DA = 817 ACRES
SPAN = 33'-8"

⑦ STA. 11+00 CONSTRUCT RELIEF
QUINT. 6' X 4' X 160' R.C. BOX CULVERT
WITH 3:1 WINGS LT. AND RT.
Q50 = 95 CFS DA = 819 ACRES
SPAN = 33'-8"

STA. 100+27.88
BEGIN JOB 070442
(BYPASS)

NOT TO SCALE



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· DESIGN TRAFFIC DATA BYPASS ·

DESIGN YEAR	2042
2022 ADT	1400
2042 ADT	1600
2042 DHV	176
DIRECTIONAL DISTRIBUTION	60%
TRUCKS	4%
DESIGN SPEED (URBAN)	40 MPH
DESIGN SPEED (RURAL)	60 MPH

· DESIGN TRAFFIC DATA HWY. 67 ·

DESIGN YEAR	2042
2022 ADT	2800
2042 ADT	3500
2042 DHV	385
DIRECTIONAL DISTRIBUTION	60%
TRUCKS	11%
DESIGN SPEED	40 MPH

STA. 163+60.00
END JOB 070442
(HWY. 67)

STA. 268+05.79
END BYPASS

STA. 102+35.00
BEGIN HWY. 67

GROSS LENGTH OF PROJECT	22902.91 FEET OR	4.338 MILES
NET LENGTH OF ROADWAY	22714.99 FEET OR	4.302 MILES
NET LENGTH OF BRIDGES	187.92 FEET OR	0.036 MILES
NET LENGTH OF PROJECT	22902.91 FEET OR	4.338 MILES

BYPASS PROJECT COORDINATES

	BEGIN	MID-POINT	END
LATITUDE	N 34°07'07"	N 34°06'19"	N 34°06'37"
LONGITUDE	W 93°05'23"	W 93°05'03"	W 93°03'28"
STATION	100+27.88	184+16.84	268+05.79

HWY. 67 PROJECT COORDINATES

	BEGIN	MID-POINT	END
LATITUDE	N 34°06'35"	N 34°07'03"	N 34°07'33"
LONGITUDE	W 93°03'30"	W 93°03'26"	W 93°03'25"
STATION	102+35.00	132+97.50	163+60.00

GARVER LLC No. 766 — CERTIFICATE OF AUTHORIZATION — ARKANSAS ENGINEER

STATE OF ARKANSAS — LICENSED PROFESSIONAL ENGINEER — No. 13422 — JOHN F. CANTABERY

DIGITALLY SIGNED 07/05/2022

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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	2	549
		INDEX OF SHEETS AND STANDARD DRAWINGS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 07/05/2022

INDEX OF SHEETS

SHEET NO.		TITLE
1		TITLE SHEET
2		INDEX OF SHEETS AND STANDARD DRAWINGS
3		GOVERNING SPECIFICATIONS AND GENERAL NOTES
4 - 32		TYPICAL SECTIONS OF IMPROVEMENT
33 - 65		SPECIAL DETAILS
66 - 106		TEMPORARY EROSION CONTROL DETAILS
107 - 142		MAINTENANCE OF TRAFFIC DETAILS
143 - 151		PERMANENT PAVEMENT MARKING DETAILS
152 - 164		SIGN PLACEMENT SHEETS
165 - 168		SIGN DETAILS
169 - 170		SIGN QUANTITIES
171		SOIL BORING LOG
172 - 188		QUANTITIES
189		SUMMARY OF QUANTITIES AND REVISIONS
190 - 208		SURVEY CONTROL DETAILS
209 - 257		PLAN AND PROFILE SHEETS
258		SUMMARY OF TRAFFIC SIGNAL QUANTITIES
259		TRAFFIC SIGNAL NOTES
260		TRAFFIC SIGNAL STREET NAME SIGNS
261		GROUNDING ARRAY DETAIL
262		TRAFFIC SIGNAL QUANTITIES - PROFESSIONAL PARK DR.
263 - 267		SIGNALIZATION PLAN SHEETS
268		TRAFFIC SIGNAL QUANTITIES - CADDO ST.
269 - 278		SIGNALIZATION PLAN SHEETS
279		TRAFFIC SIGNAL QUANTITIES - HENDERSON ST.
280 - 287		SIGNALIZATION PLAN SHEETS
288 - 549		CROSS SECTIONS

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

ROADWAY STANDARD DRAWINGS

DRWG.NO.	TITLE	DATE
CDP-1	CONCRETE DITCH PAVING	12-08-16
CG-1	CURBING DETAILS	11-29-07
CPTJ-6A	TRANSVERSE & LONGITUDINAL JOINTS FOR CONCRETE PAVEMENT (NON-REINFORCED)	11-07-19
DR-1	DETAILS OF DRIVEWAYS & ISLANDS	05-19-22
DR-2	DETAILS OF DRIVEWAYS & STREET TURNOUTS	05-19-22
FES-1	FLARED END SECTION	10-18-96
FES-2	FLARED END SECTION	10-18-96
FPC-9	DETAILS OF DROP INLETS & JUNCTION BOXES	11-16-01
FPC-9D	DETAILS OF DROP INLETS	08-22-02
FPC-9E	DETAILS OF DROP INLETS (TYPE C)	08-22-02
FPC-9M	DETAILS OF DROP INLET (TYPE MO)	08-22-02
FPC-9S	DETAILS OF DROP INLET & JUNCTION BOX (TYPE ST)	07-26-12
MB-1	MAILBOX DETAILS	11-18-04
PBC-1	PRECAST CONCRETE BOX CULVERTS	01-28-15
PCC-1	CONCRETE PIPE CULVERT FILL HEIGHTS & BEDDING	02-27-14
PCM-1	METAL PIPE CULVERT FILL HEIGHTS & BEDDING	02-27-14
PCP-1	PLASTIC PIPE CULVERT (HIGH DENSITY POLYETHYLENE)	02-27-14
PCP-2	PLASTIC PIPE CULVERT (PVC F949)	02-27-14
PCP-3	PLASTIC PIPE CULVERT (POLYPROPYLENE)	02-27-20
PM-1	PAVEMENT MARKING DETAILS	02-27-20
PU-1	DETAILS OF PIPE UNDERDRAIN	12-08-16
RCB-1	REINFORCED CONCRETE BOX CULVERT DETAILS	07-26-12
RCB-2	EXCAVATION PAY LIMITS, BACKFILL, & SOLID SODDING FOR BOX CULVERTS	11-20-03
RCB-3	METHOD OF EXTENDING EXISTING R. C. BOX CULVERTS	10-12-95
SD-1	ANTENNA POLE	11-16-17
SD-5	CONTROLLER CABINET UTILITY DRAWER	09-12-13
SD-6	HEAVY DUTY PULL BOX	11-16-17
SD-7	SPAN WIRE ASSEMBLY WOOD POLE	11-16-17
SD-8	SIGNAL HEAD PLACEMENT	12-08-16
SD-9	SERVICE POINT	11-07-19
SD-11	STEEL POLE WITH MAST ARM	11-16-17
SE-2	TABLES AND METHOD OF SUPERELEVATION FOR TWO-WAY TRAFFIC	11-07-19
SE-3	TABLES AND METHOD OF SUPERELEVATION FOR TWO-WAY TRAFFIC (4% MAXIMUM)	11-07-19
SHS-1	STANDARD HIGHWAY SIGNS AND SUPPORTS ASSEMBLIES	09-12-13
SHS-4	DETAIL OF BREAKAWAY SIGN SUPPORTS FOR STANDARD SIGNS	09-12-13
SHS-6	MOUNTING DETAILS FOR DEMOUNTABLE LEGEND ON GUIDE SIGNS	09-12-13
SHS-7	DETAIL OF OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS	09-12-13
SI-1	DETAILS OF SPECIAL ITEMS	10-25-18
SI-3	CONCRETE WALK (TYPE SPECIAL)	11-05-20
TC-1	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	11-07-19
TC-2	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	05-20-21
TC-3	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	08-12-21
TC-4	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION-TEMPORARY PRECAST BARRIER	11-07-19
TC-5	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION-TEMPORARY PRECAST BARRIER	11-07-19
TEC-1	TEMPORARY EROSION CONTROL DEVICES	11-16-17
TEC-2	TEMPORARY EROSION CONTROL DEVICES	06-02-94
TEC-3	TEMPORARY EROSION CONTROL DEVICES	11-03-94
WF-1	WIRE FENCE TYPE A AND B	08-22-02
WF-3	CHAIN LINK FENCE	11-17-10
WR-1	WHEELCHAIR RAMPS NEW CONSTRUCTION AND ALTERATIONS	11-10-05

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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
07-27-2022		6	ARK.	070442	3	549
		GOVERNING SPECIFICATIONS AND GENERAL NOTES				

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 070442
FHWA-1273__	SUPPLEMENT - POSTERS AND NOTICES REQUIRED FOR FEDERAL-AID PROJECTS
FHWA-1273__	SUPPLEMENT - WAGE RATE DETERMINATON
100-3_____	CONTRACTOR'S LICENSE
100-4_____	DEPARTMENT NAME CHANGE
102-2_____	ISSUANCE OF PROPOSALS
105-4_____	MAINTENANCE DURING CONSTRUCTION
107-2_____	RESTRAINING CONDITIONS
108-1_____	LIQUIDATED DAMAGES
108-2_____	WORK ALLOWED PRIOR TO ISSUANCE OF WORK ORDER
110-1_____	PROTECTION OF WATER QUALITY AND WETLANDS
210-1_____	UNCLASSIFIED EXCAVATION
303-1_____	AGGREGATE BASE COURSE
306-1_____	QUALITY CONTROL AND ACCEPTANCE
307-1_____	CEMENT
308-1_____	CEMENT
400-1_____	TACK COATS
400-4_____	DESIGN AND QUALITY CONTROL OF ASPHALT MIXTURES
400-5_____	PERCENT AIR VOIDS FOR ACHM MIX DESIGNS
400-6_____	LIQUID ANTI-STRIP ADDITIVE
400-7_____	TRACKLESS TACK
404-3_____	DESIGN OF ASPHALT MIXTURES
410-1_____	CONSTRUCTION REQUIREMENTS AND ACCEPTANCE OF ASPHALT CONCRETE PLANT MIX COURSES
410-2_____	DEVICES FOR MEASURING DENSITYFOR ROLLING PATTERNS
410-4_____	EVALUATION OF ACHM SUBLOT REPLACEMENT MATERIAL
501-2_____	CEMENT
502-1_____	WELDED WIRE REINFORCEMENT
505-1_____	PORTLAND CEMENT CONCRETE DRIVEWAY
600-2_____	INCIDENTAL CONSTRUCTION
603-1_____	LANE CLOSURE NOTIFICATION
604-1_____	RETROREFLECTIVE SHEETING FOR TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
604-3_____	TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES (MASH)
605-1_____	CONCRETE DITCH PAVING
606-1_____	PIPE CULVERTS FOR SIDE DRAINS
620-1_____	MULCH COVER
621-1_____	FILTER SOCKS
632-1_____	CONCRETE ISLAND
633-1_____	CONCRETE WALKS, CONCRETE STEPS, AND HAND RAILING
634-1_____	CURBING
700-2_____	TRAFFIC CONTROL FACILITIES
723-1_____	GENERAL REQUIREMENTS FOR SIGNS
800-1_____	STRUCTURES
802-4_____	CEMENT
804-2_____	REINFORCING STEEL FOR STRUCTURES
JOB 070442__	ACTUATED CONTROLLER
JOB 070442__	ANTENNA SUPPORT
JOB 070442__	BIDDING REQUIREMENTS AND CONDITIONS
JOB 070442__	BROADBAND INTERNET SERVICE FOR ASPHALT CONCRETE PLANT
JOB 070442__	BROADBAND INTERNET SERVICE FOR FIELD OFFICE
JOB 070442__	CABINET DRAWER ASSEMBLY
JOB 070442__	CARGO PREFERENCE ACT REQUIREMENTS
JOB 070442__	CLASS C FLY ASH IN PORTLAND CEMENT CONCRETE PAVEMENT AND CLASS S(AE) CONCRETE
JOB 070442__	COLD MILLING - COUNTY PROPERTY
JOB 070442__	CONCRETE WALKS (TYPE SPECIAL)
JOB 070442__	CONSTRUCTION IN SPECIAL FLOOD HAZARD AREAS
JOB 070442__	CONSTRUCTION PROJECT INFORMATION SIGN
JOB 070442__	COORDINATION OF WORK
JOB 070442__	DELAY IN RIGHT OF WAY OCCUPANCY
JOB 070442__	DISADVANTAGED BUSINESS ENTERPRISE BIDDER'S RESPONSIBILITIES
JOB 070442__	DISPOSAL OF ILLEGAL DUMP MATERIAL
JOB 070442__	EDGE CARD VIDEO PROCESSOR
JOB 070442__	ELECTRICAL CONDUCTORS FOR LUMINAIRES
JOB 070442__	ELECTRICAL CONDUCTORS-IN-CONDUIT
JOB 070442__	ESTABLISHING CONTRACT TIME – WORKING DAY CONTRACT
JOB 070442__	FLEXIBLE BEGINNING OF WORK – WORKING DAY CONTRACT
JOB 070442__	GEOTEXTILE FABRIC
JOB 070442__	GOALS FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION
JOB 070442__	LED COUNTDOWN PEDESTRIAN SIGNAL HEAD
JOB 070442__	LED LUMINAIRE ASSEMBLY (BUG U0 TYPE)
JOB 070442__	LED TRAFFIC SIGNAL HEAD
JOB 070442__	LIQUIDATED DAMAGES PROCEDURE FORBID LETTINGS
JOB 070442__	LONGITUDINAL JOINT DENSITIES FOR ACHM SURFACE COURSES
JOB 070442__	MAINTENANCE OF TRAFFIC
JOB 070442__	MANDATORY ELECTRONIC CONTRACT
JOB 070442__	MANDATORY ELECTRONIC DOCUMENT SUBMITTAL
JOB 070442__	OFF-SITE RESTRAINING CONDITIONS FOR INDIANA AND NORTHERN LONG-EARED BATS
JOB 070442__	OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORT
JOB 070442__	PARTNERING REQUIREMENTS
JOB 070442__	PCC PAVEMENT SURFACE SMOOTHNESS (IRI)
JOB 070442__	PERCENT WITHIN LIMITS/PAVEMENT SMOOTHNESS (IRI)
JOB 070442__	PLASTIC PIPE
JOB 070442__	PRICE ADJUSTMENT FOR ASPHALT BINDER
JOB 070442__	PRICE ADJUSTMENT FOR FUEL
JOB 070442__	PROHIBITION OF CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT
JOB 070442__	REACTIVE AGGREGATE TESTING
JOB 070442__	RELOCATION OF TRAFFIC SIGNAL HEAD
JOB 070442__	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT
JOB 070442__	RESTRICTIONS ON THE USE OF RECYCLED ASPHALT PAVEMENT MATERIAL
JOB 070442__	RETROREFLECTIVE BACKPLATES
JOB 070442__	SCARIFYING CONCRETE PAVEMENT
JOB 070442__	SEQUENCE OF WORK FOR UTILITY ADJUSTMENTS
JOB 070442__	SERVICE POINT ASSEMBLY (TRAFFIC CONTROL DEVICES)
JOB 070442__	SHORING FOR CULVERTS
JOB 070442__	SOIL STABILIZATION
JOB 070442__	STORM WATER POLLUTION PREVENTION PLAN
JOB 070442__	STREET NAME SIGN (MAST ARM MOUNTED)
JOB 070442__	SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS
JOB 070442__	SYSTEM LOCAL CONTROLLER
JOB 070442__	TRAFFIC SIGNAL CONTROLLER (MODIFICATION)
JOB 070442__	UTILITY ADJUSTMENTS
JOB 070442__	VALUE ENGINEERING
JOB 070442__	VIDEO DETECTOR (COLOR)
JOB 070442__	VIDEO DETECTOR ROTATION
JOB 070442__	WARM MIX ASPHALT

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 7/27/2022

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 ENSURE 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. THE SEQUENCE AS SHOWN ON THE MAINTENANCE OF TRAFFIC PLANS IS A GENERAL OUTLINE FOR THE CONSTRUCTION OF THIS PROJECT, AND IN NO WAY IS IT INTENDED TO COVER EVERY ITEM IN THE PROJECT. ITEMS NOT CRITICAL TO THE CONSTRUCTION SEQUENCE MAY BE CONSTRUCTED IN ANY STAGE AS APPROVED BY THE RESIDENT ENGINEER.
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.
11. THIS PROJECT IS COVERED UNDER A SECTION 404 STANDARD INDIVIDUAL PERMIT. REFER TO SECTION 110 OF THE STANDARD SPECIFICATIONS, EDITION OF 2014, FOR PERMIT REQUIREMENTS.

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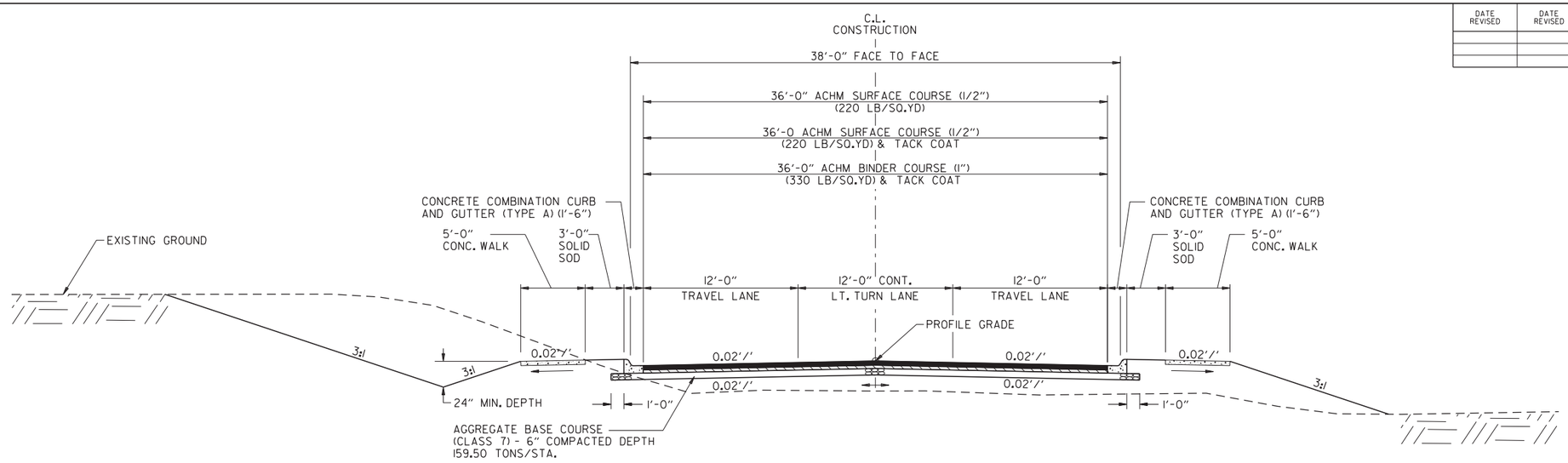
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	4	549
		TYPICAL SECTIONS OF IMPROVEMENT				

STATE OF ARKANSAS
Shaun A. Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022



TYPICAL 3-LANE CURB AND GUTTER SECTION ALTERNATE I

ARKADELPHIA BYPASS	STA. 100+27.88 TO STA. 100+50.00
ARKADELPHIA BYPASS	STA. 110+95.53 TO STA. 112+69.21
ARKADELPHIA BYPASS	STA. 120+05.29 TO STA. 120+78.29

NOTE:
PROFILE GRADE SHOWN ON PLAN AND PROFILE SHEETS IS 15" ABOVE SUBGRADE. USE 1" PER 100' TRANSITION IN SUBGRADE TO MEET PAVEMENT GRADES AT CROSSING ROADS. TRANSITION IN SUBGRADE TO BE INCLUDED IN SUBGRADE PREPARATION.

NOTES:

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

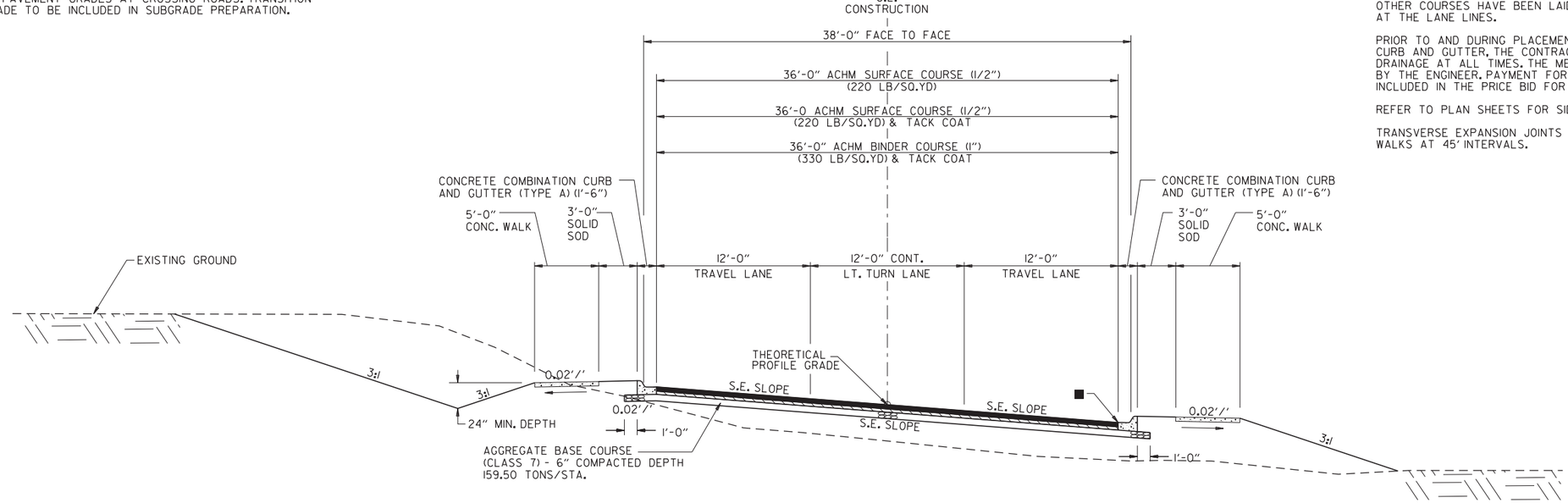
THE THICKNESS OF AGGREGATE BASE COURSE SHALL BE WITHIN PLUS OR MINUS ONE INCH OF THE PLAN THICKNESS SHOWN. THE CONTRACTOR WILL CORRECT ANY DEFICIENT THICKNESS THAT DOES NOT MEET THE TOLERANCE INDICATED. PAYMENT WILL NOT BE MADE FOR MATERIAL PLACED IN EXCESS OF THE TOLERANCE INDICATED.

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

PRIOR TO AND DURING PLACEMENT OF PAVEMENT IN FRONT OF THE CURB AND GUTTER, THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AT ALL TIMES. THE METHOD(S) USED SHALL BE APPROVED BY THE ENGINEER. PAYMENT FOR THIS WORK SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS.

REFER TO PLAN SHEETS FOR SIDEWALK LOCATIONS.

TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE WALKS AT 45' INTERVALS.



TYPICAL 3-LANE CURB AND GUTTER SUPERELEVATED SECTION ALTERNATE I

ARKADELPHIA BYPASS	STA. 100+50.00 TO STA. 110+95.53

■ POINT OF SUPERELEVATION ROTATION (0.36' BELOW PROFILE GRADE)

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WORKSPACE: AHTD
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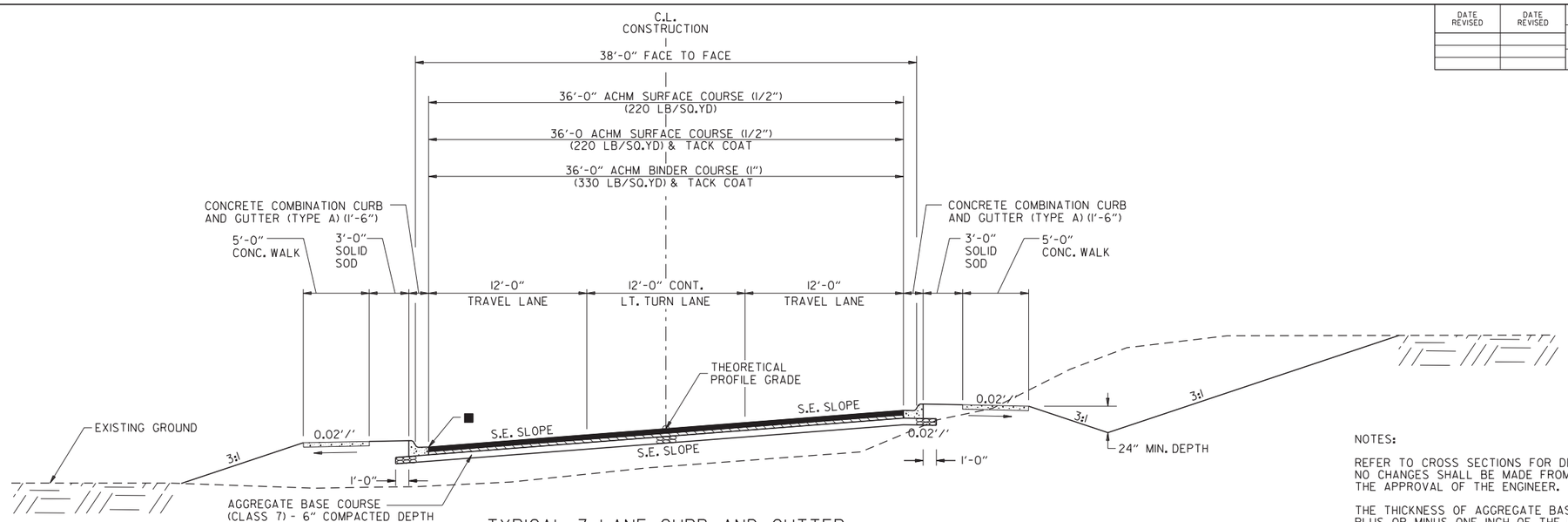
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	5	549
		TYPICAL SECTIONS OF IMPROVEMENT				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022



TYPICAL 3-LANE CURB AND GUTTER
SUPERELEVATED SECTION
ALTERNATE I

ARKADELPHIA BYPASS STA. 112+69.21 TO STA. 120+05.29

■ POINT OF SUPERELEVATION ROTATION
(0.36' BELOW PROFILE GRADE)

NOTES:

REFER TO CROSS SECTIONS FOR DEVIATIONS FROM 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 THE TOLERANCE INDICATED. PAYMENT WILL NOT BE MADE FOR MATERIAL PLACED IN EXCESS OF THE TOLERANCE INDICATED.

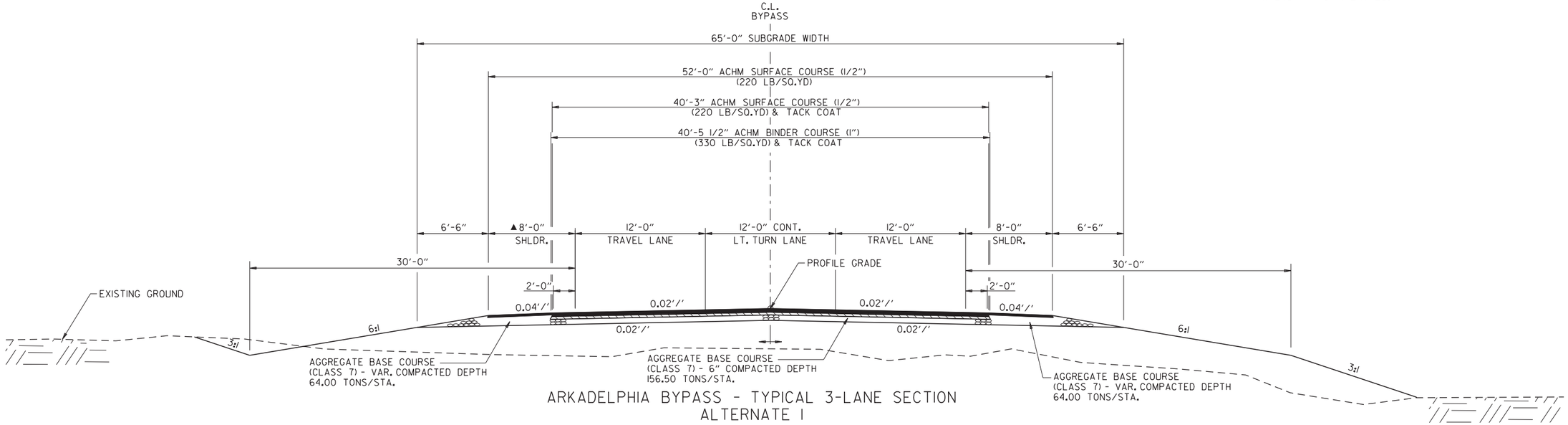
THE FINAL 2" OF SURFACE COURSE IS TO BE PLACED AFTER ALL OTHER COURSES HAVE BEEN LAID. LONGITUDINAL JOINTS SHALL BE AT THE LANE LINES.

PRIOR TO AND DURING PLACEMENT OF PAVEMENT IN FRONT OF THE CURB AND GUTTER, THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AT ALL TIMES. THE METHOD(S) USED SHALL BE APPROVED BY THE ENGINEER. PAYMENT FOR THIS WORK SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS.

REFER TO PLAN SHEETS FOR SIDEWALK LOCATIONS.

TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE WALKS AT 45' INTERVALS.

NOTE:
PROFILE GRADE SHOWN ON PLAN AND PROFILE SHEETS IS 15" ABOVE SUBGRADE. USE 1" PER 100' TRANSITION IN SUBGRADE TO MEET PAVEMENT GRADES AT CROSSING ROADS. TRANSITION IN SUBGRADE TO BE INCLUDED IN SUBGRADE PREPARATION.



ARKADELPHIA BYPASS - TYPICAL 3-LANE SECTION
ALTERNATE I

STA. 120+78.29 TO STA. 131+41.95
STA. 157+90.96 TO STA. 175+39.93
STA. 190+29.82 TO STA. 240+66.32
STA. 266+25.00 TO STA. 268+05.79

▲ FULL DEPTH SHOULDER FROM STA. 266+70.00 TO STA. 267+77.09

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DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	6	549
		TYPICAL SECTIONS OF IMPROVEMENT				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
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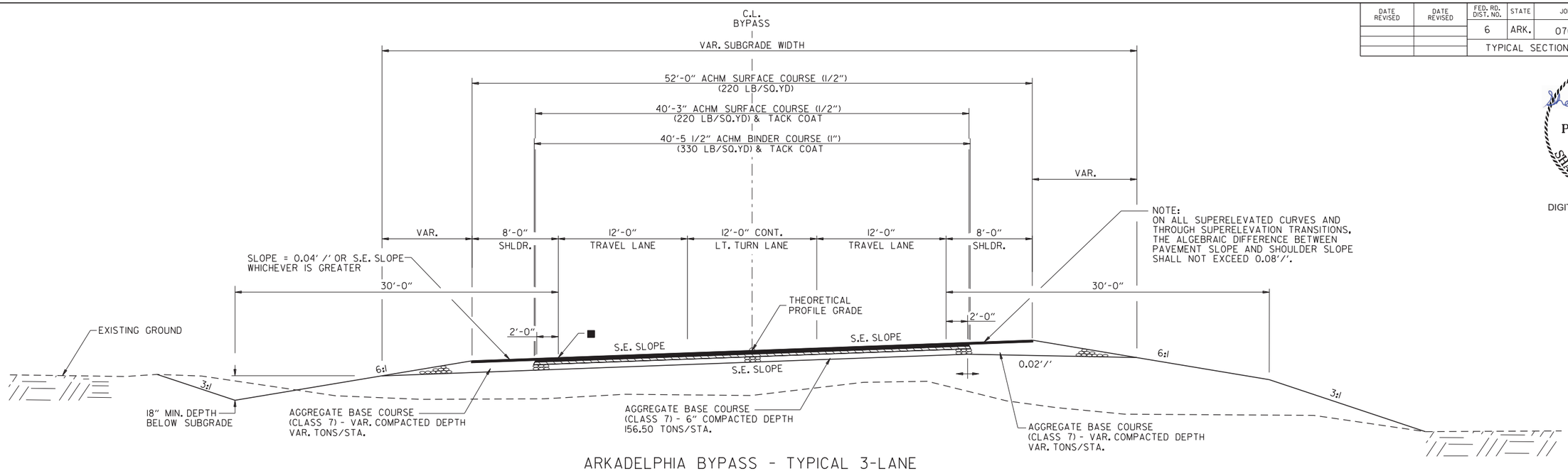

ARKADELPHIA BYPASS - TYPICAL 3-LANE SUPERELEVATED SECTION ALTERNATE I

STA. 131+41.95 TO STA. 157+90.96
STA. 175+39.93 TO STA. 190+29.82
STA. 240+66.32 TO STA. 253+13.34

■ POINT OF SUPERELEVATION ROTATION (0.36' BELOW PROFILE GRADE)

NOTE:
PROFILE GRADE SHOWN ON PLAN AND PROFILE SHEETS IS 15" ABOVE SUBGRADE. USE 1" PER 100' TRANSITION IN SUBGRADE TO MEET PAVEMENT GRADES AT CROSSING ROADS. TRANSITION IN SUBGRADE TO BE INCLUDED IN SUBGRADE PREPARATION.

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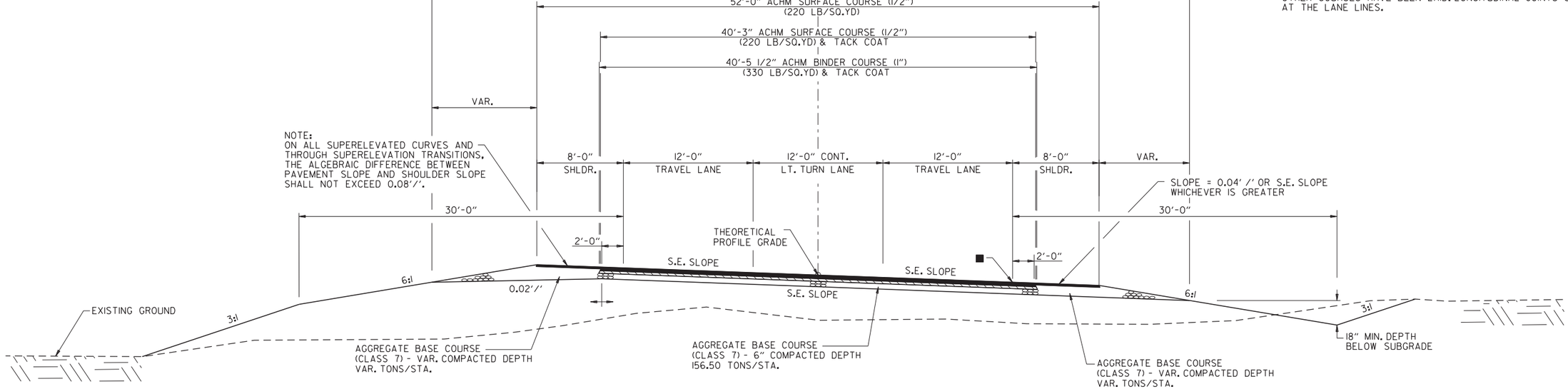

ARKADELPHIA BYPASS - TYPICAL 3-LANE SUPERELEVATED SECTION ALTERNATE I

STA. 253+13.34 TO STA. 266+25.00

■ POINT OF SUPERELEVATION ROTATION (0.36' BELOW PROFILE GRADE)

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		TYPICAL SECTIONS OF IMPROVEMENT				

STATE OF ARKANSAS
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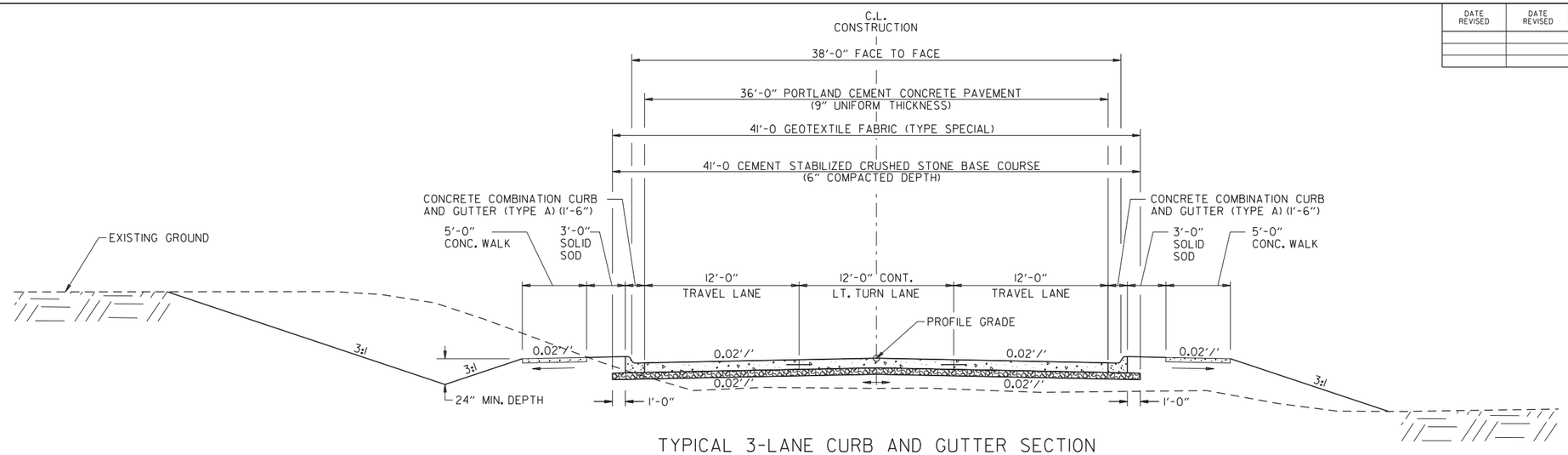

TYPICAL 3-LANE CURB AND GUTTER SECTION ALTERNATE 2

ARKADELPHIA BYPASS	STA. 100+27.88 TO STA. 100+50.00
ARKADELPHIA BYPASS	STA. 110+95.53 TO STA. 112+69.21
ARKADELPHIA BYPASS	STA. 120+05.29 TO STA. 120+78.29

NOTES:

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

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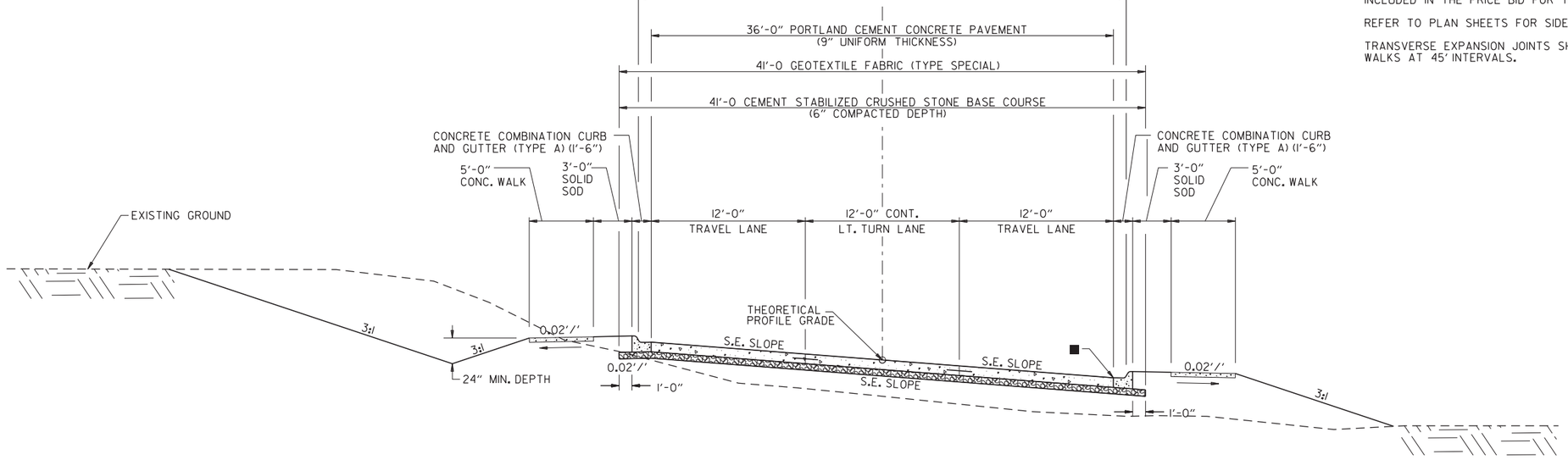
REFER TO PLAN SHEETS FOR SIDEWALK LOCATIONS.

TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE WALKS AT 45' INTERVALS.



TYPICAL 3-LANE CURB AND GUTTER SUPERELEVATED SECTION ALTERNATE 2

ARKADELPHIA BYPASS	STA. 100+50.00 TO STA. 110+95.53

■ POINT OF SUPERELEVATION ROTATION (0.36' BELOW PROFILE GRADE)

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		6	ARK.	070442	8	549
		TYPICAL SECTIONS OF IMPROVEMENT				

STATE OF ARKANSAS
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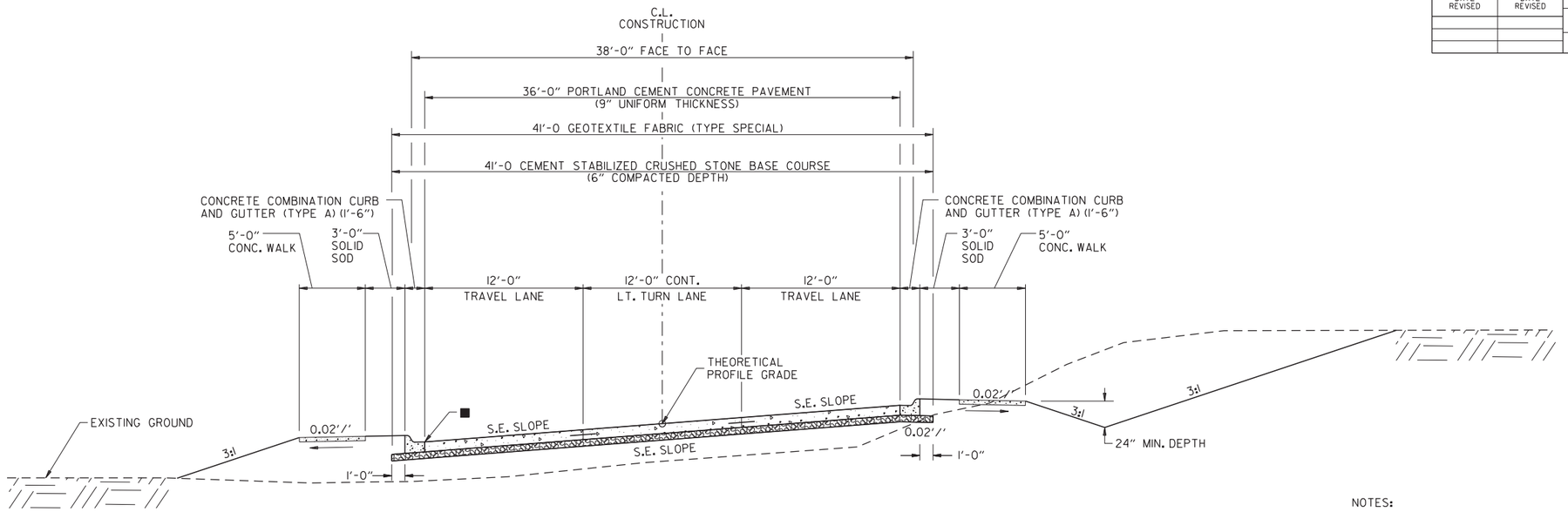

TYPICAL 3-LANE CURB AND GUTTER SUPERELEVATED SECTION ALTERNATE 2

ARKADELPHIA BYPASS STA. 112+69.21 TO STA. 120+05.29

■ POINT OF SUPERELEVATION ROTATION (0.36' BELOW PROFILE GRADE)

NOTES:

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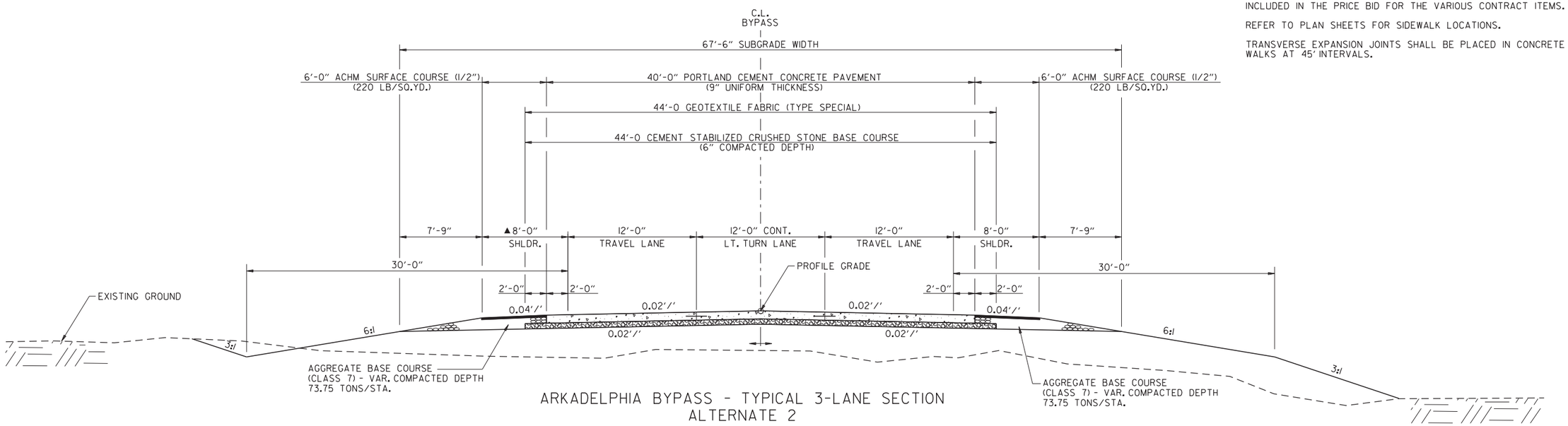
REFER TO PLAN SHEETS FOR SIDEWALK LOCATIONS.

TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE WALKS AT 45' INTERVALS.



ARKADELPHIA BYPASS - TYPICAL 3-LANE SECTION ALTERNATE 2

STA. 120+78.29 TO STA. 131+41.95
STA. 157+90.96 TO STA. 175+39.93
STA. 190+29.82 TO STA. 240+66.32
STA. 266+25.00 TO STA. 268+05.79

▲ FULL DEPTH SHOULDER FROM STA. 266+70.00 TO STA. 267+77.09

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STATE OF ARKANSAS
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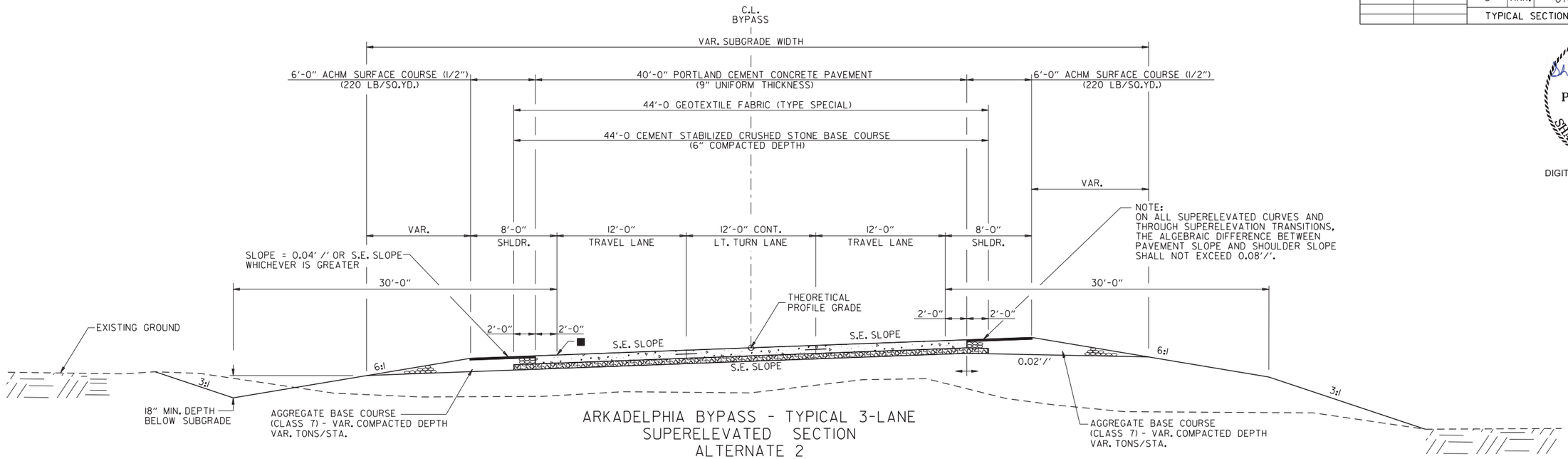

ARKADELPHIA BYPASS - TYPICAL 3-LANE SUPERELEVATED SECTION ALTERNATE 2

STA. 131+41.95 TO STA. 157+90.96
STA. 175+39.93 TO STA. 190+29.82
STA. 240+66.32 TO STA. 253+13.34

■ POINT OF SUPERELEVATION ROTATION (0.36' BELOW PROFILE GRADE)

NOTES:

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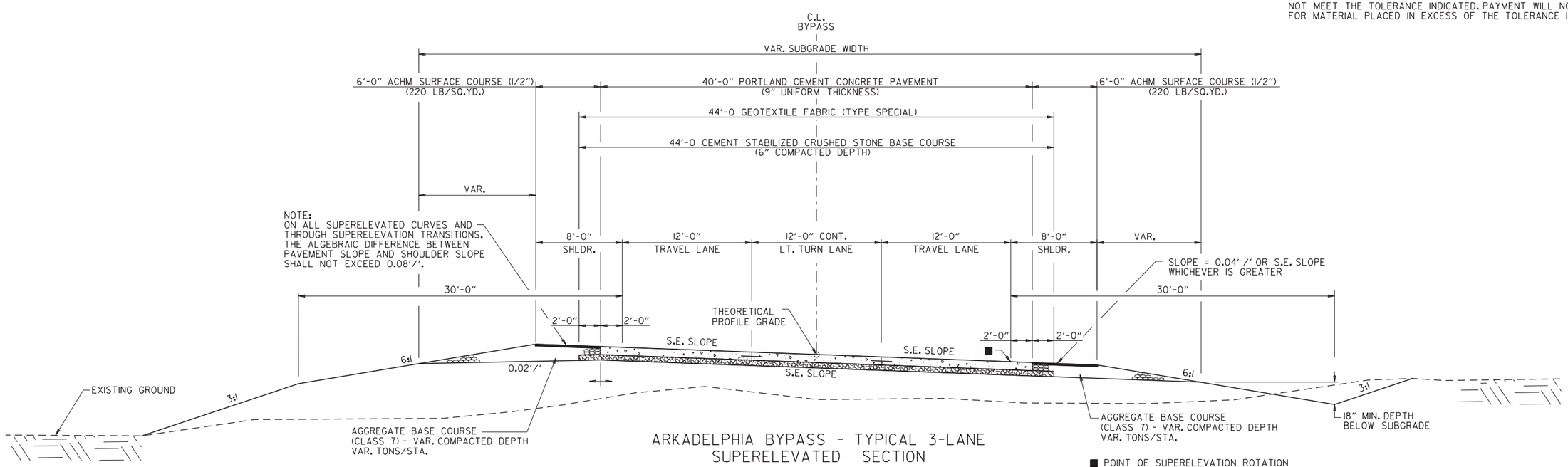

ARKADELPHIA BYPASS - TYPICAL 3-LANE SUPERELEVATED SECTION ALTERNATE 2

STA. 253+13.34 TO STA. 266+25.00

■ POINT OF SUPERELEVATION ROTATION (0.36' BELOW PROFILE GRADE)

TYPICAL SECTIONS OF IMPROVEMENT

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		TYPICAL SECTIONS OF IMPROVEMENT				

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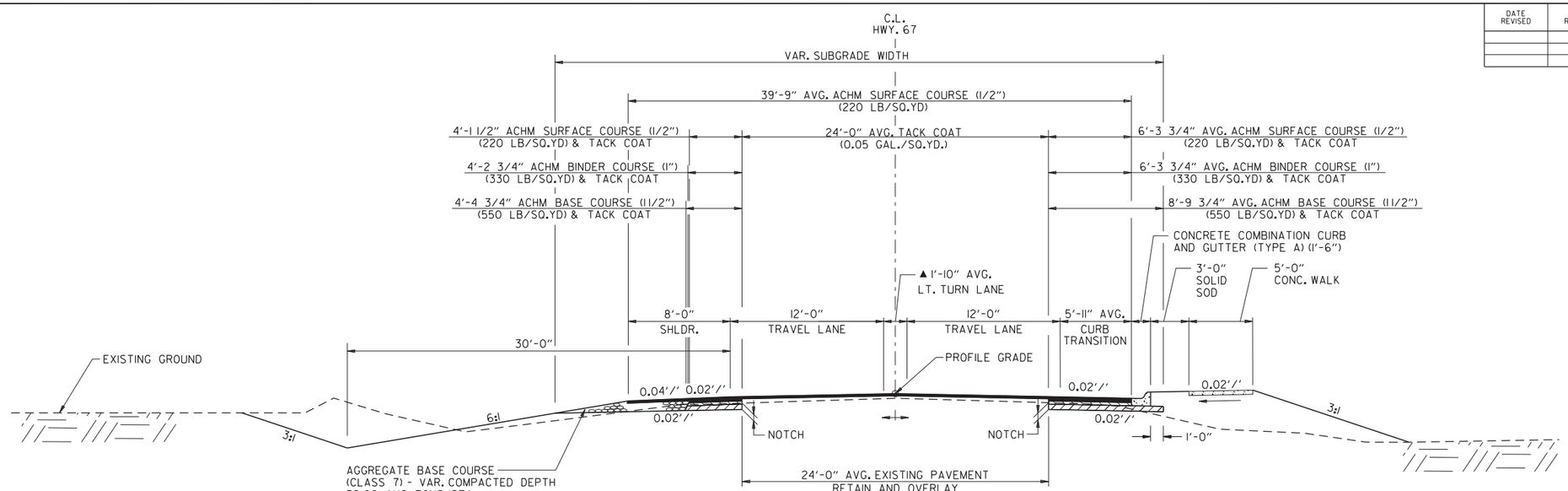

☒ TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

▲ TRANSITION TURN LANE FROM 0'-0" AT STA. 102+35.00 TO 3'-8" AT STA. 102+96.19

HWY. 67 3-LANE NOTCH AND WIDEN SECTION

STA. 102+35.00 TO STA. 102+96.19

NOTES:

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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 THE LANE LINES.

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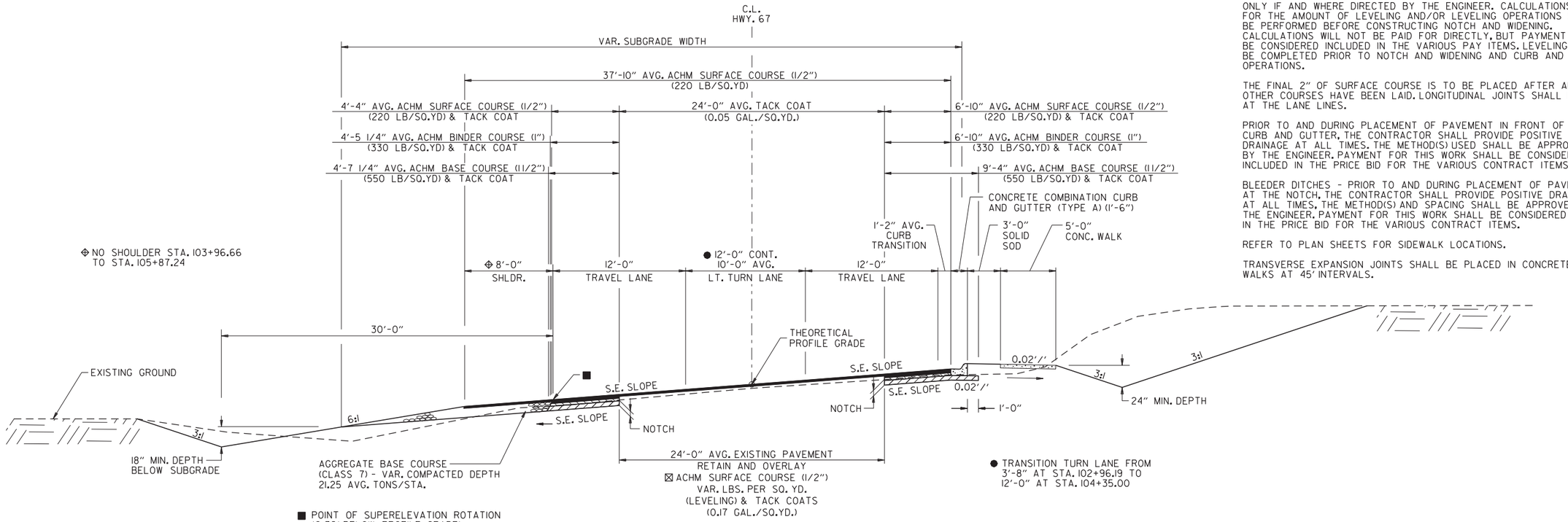
BLEEDER DITCHES - PRIOR TO AND DURING PLACEMENT OF PAVEMENT AT THE NOTCH, THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AT ALL TIMES, THE METHOD(S) AND SPACING SHALL BE APPROVED BY THE ENGINEER. PAYMENT FOR THIS WORK SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS.

REFER TO PLAN SHEETS FOR SIDEWALK LOCATIONS.

TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE WALKS AT 45' INTERVALS.



■ POINT OF SUPERELEVATION ROTATION (0.36' BELOW PROFILE GRADE)

● TRANSITION TURN LANE FROM 3'-8" AT STA. 102+96.19 TO 12'-0" AT STA. 104+35.00

HWY. 67 - 3-LANE NOTCH AND WIDEN CURB AND GUTTER SUPERELEVATED SECTION

STA. 102+96.19 TO STA. 105+87.24

TYPICAL SECTIONS OF IMPROVEMENT

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STATE OF ARKANSAS
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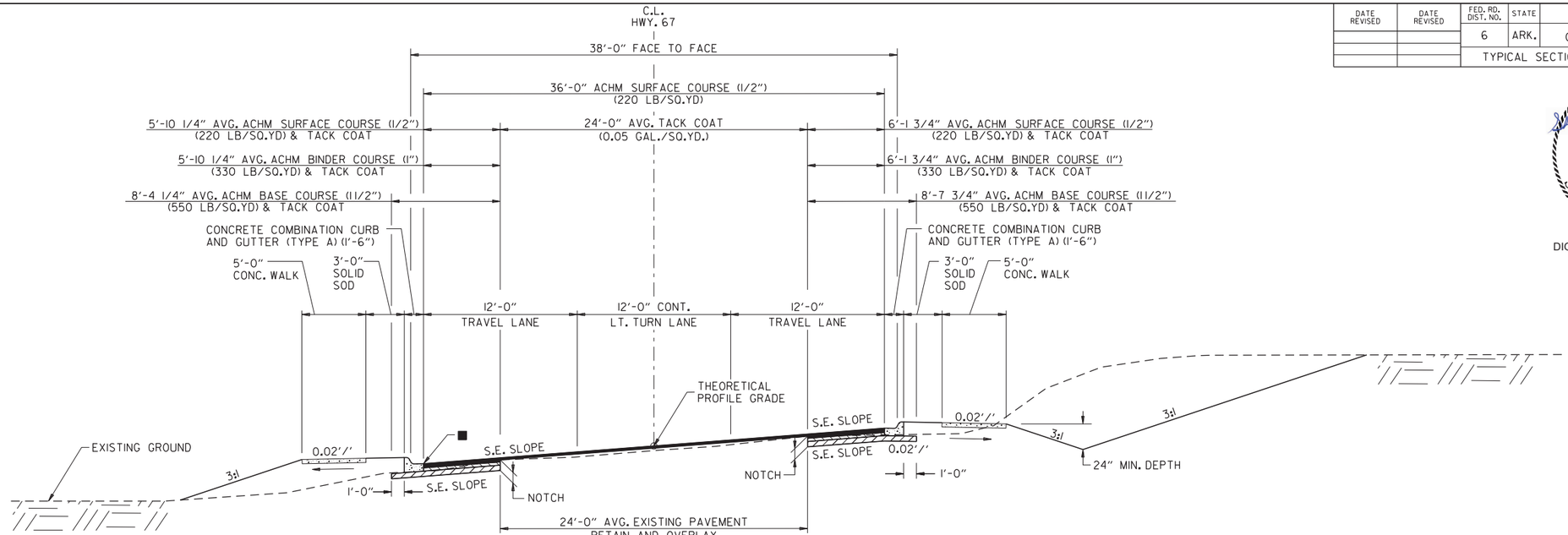

■ POINT OF SUPERELEVATION ROTATION (0.36' BELOW PROFILE GRADE)

☒ TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

HWY. 67 - 3-LANE NOTCH AND WIDEN CURB AND GUTTER SUPERELEVATED SECTION

STA. 105+87.24 TO STA. 110+90.00

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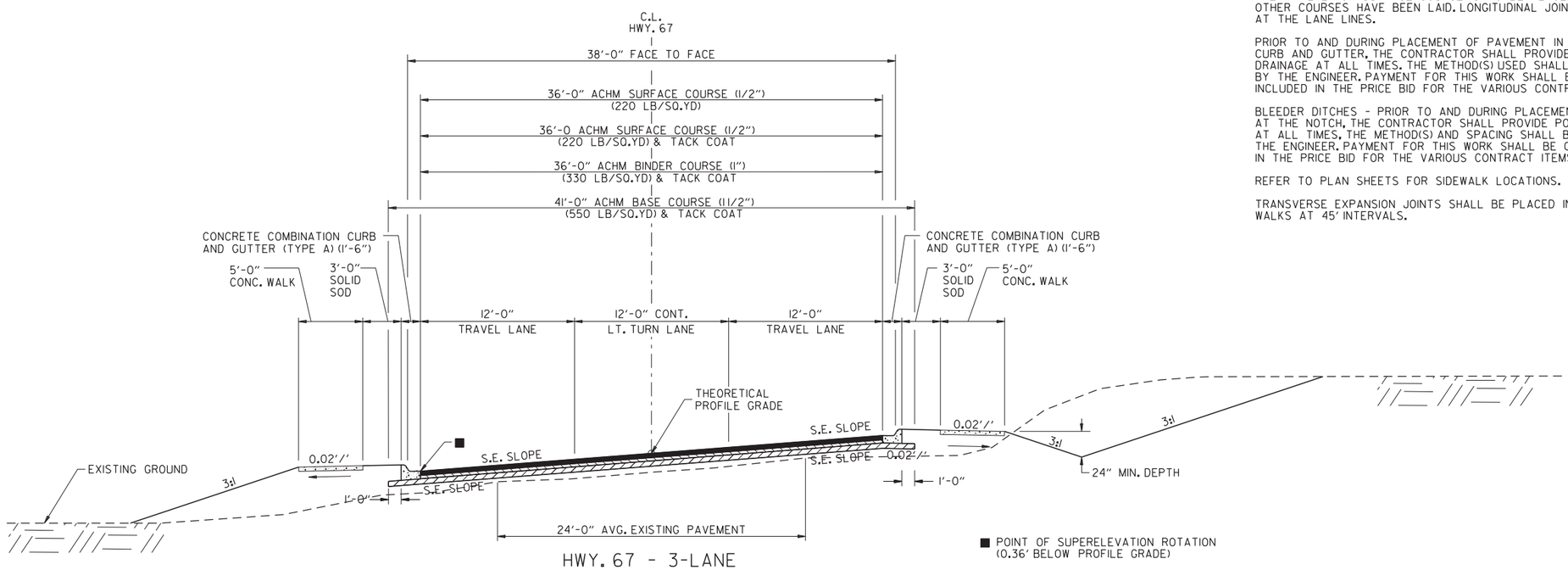

■ POINT OF SUPERELEVATION ROTATION (0.36' BELOW PROFILE GRADE)

HWY. 67 - 3-LANE CURB AND GUTTER SUPERELEVATED SECTION

STA. 110+90.00 TO STA. 112+21.82

TYPICAL SECTIONS OF IMPROVEMENT

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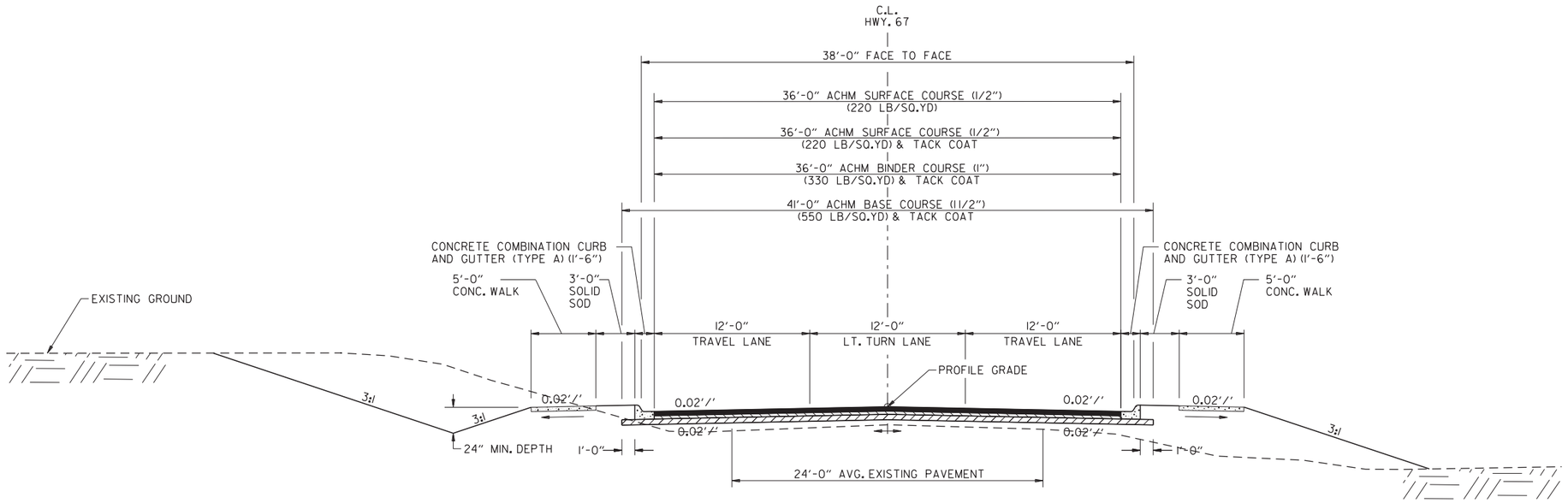
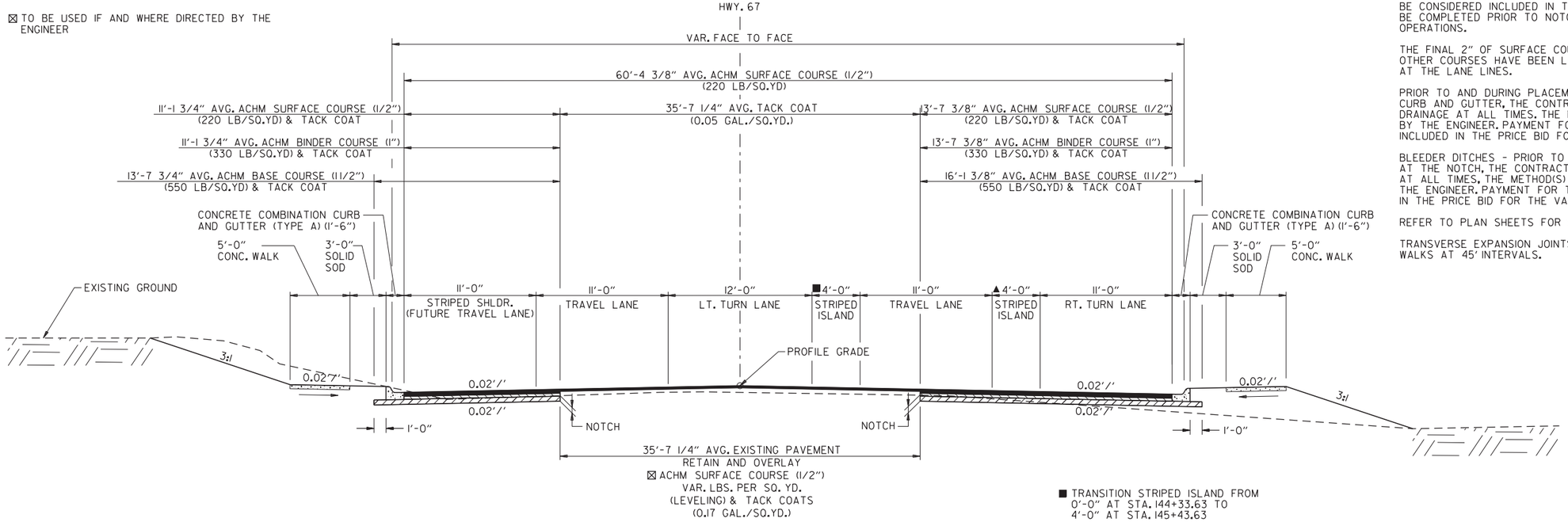


HWY. 67 3-LANE CURB AND GUTTER SECTION

STA. 112+21.82 TO STA. 115+85.00

☒ TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER



HWY. 67 TYPICAL 4-LANE NOTCH AND WIDEN CURB AND GUTTER SECTION W/ STRIPED ISLANDS AND STRIPED SHLDR.

STA. 143+83.04 TO STA. 146+14.21

■ TRANSITION STRIPED ISLAND FROM 0'-0" AT STA. 144+33.63 TO 4'-0" AT STA. 145+43.63

▲ TRANSITION STRIPED ISLAND FROM 0'-0" AT STA. 144+33.63 TO 4'-0" AT STA. 145+43.63

NOTES:

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REFER TO PLAN SHEETS FOR SIDEWALK LOCATIONS.

TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE WALKS AT 45' INTERVALS.

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WORKSPACE: AHTD
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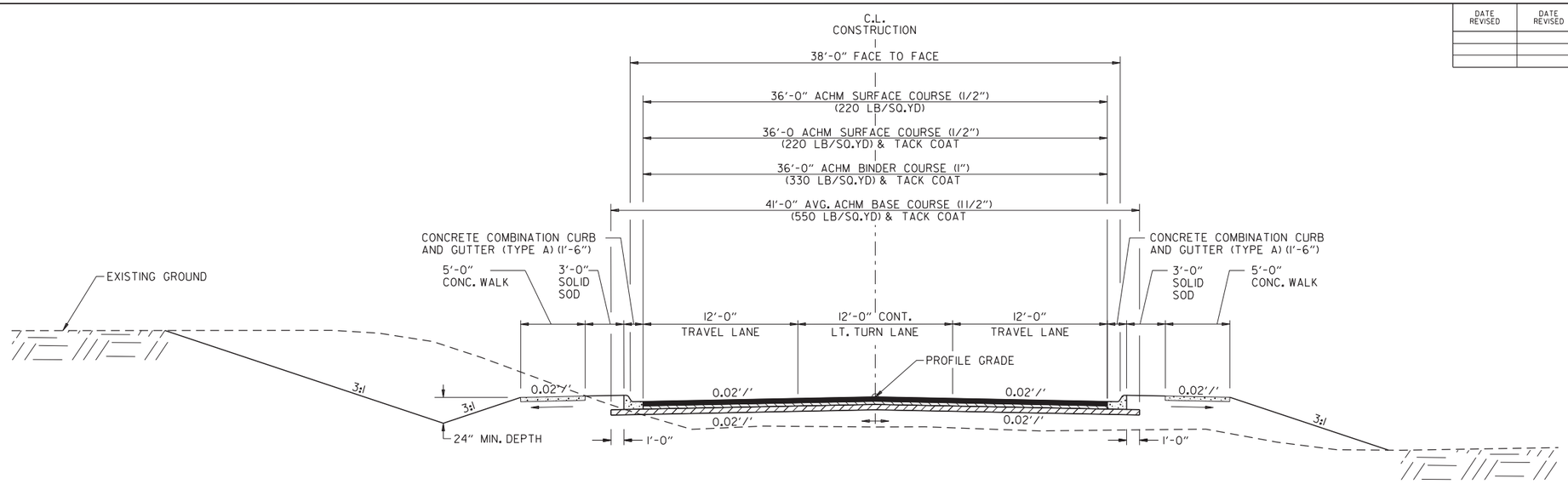
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	13	549
		TYPICAL SECTIONS OF IMPROVEMENT				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022



TYPICAL 3-LANE CURB AND GUTTER SECTION

HWY. 67	STA. 115+85.00 TO STA. 118+54.34
HWY. 67	STA. 125+36.32 TO STA. 125+37.61
HWY. 67	STA. 131+22.24 TO STA. 143+83.04

NOTES:

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

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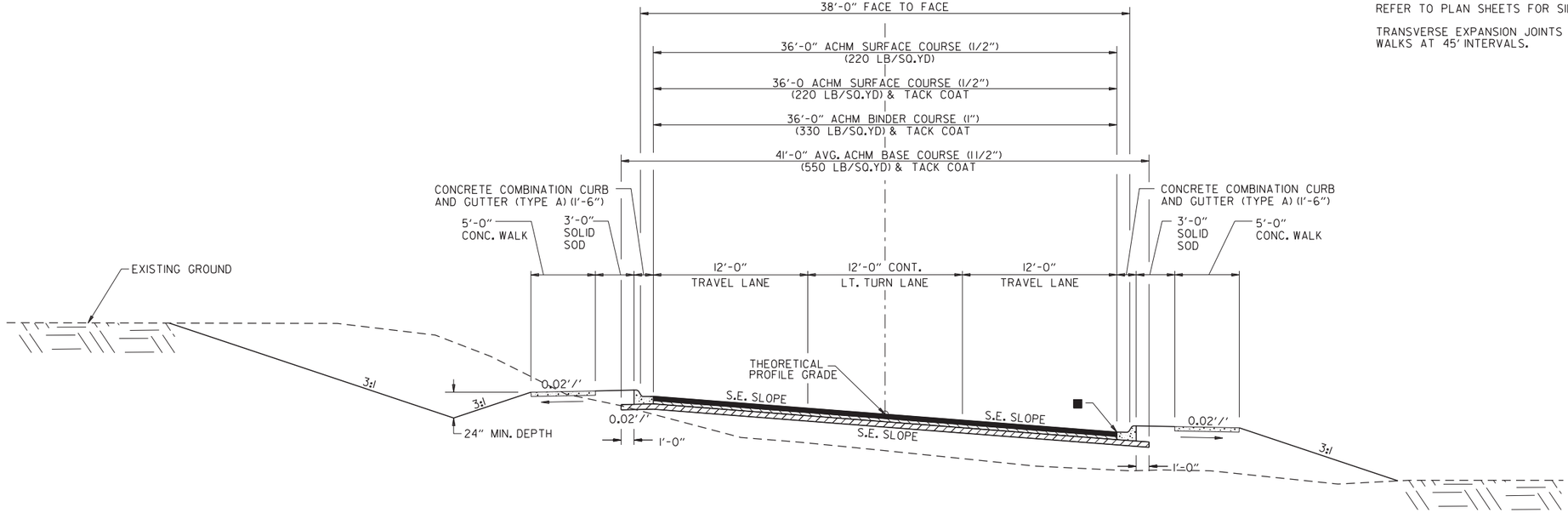

TYPICAL 3-LANE CURB AND GUTTER SUPERELEVATED SECTION

HWY. 67	STA. 125+37.61 TO STA. 131+22.24

■ POINT OF SUPERELEVATION ROTATION (0.36' BELOW PROFILE GRADE)

TYPICAL SECTIONS OF IMPROVEMENT

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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	14	549
		TYPICAL SECTIONS OF IMPROVEMENT				

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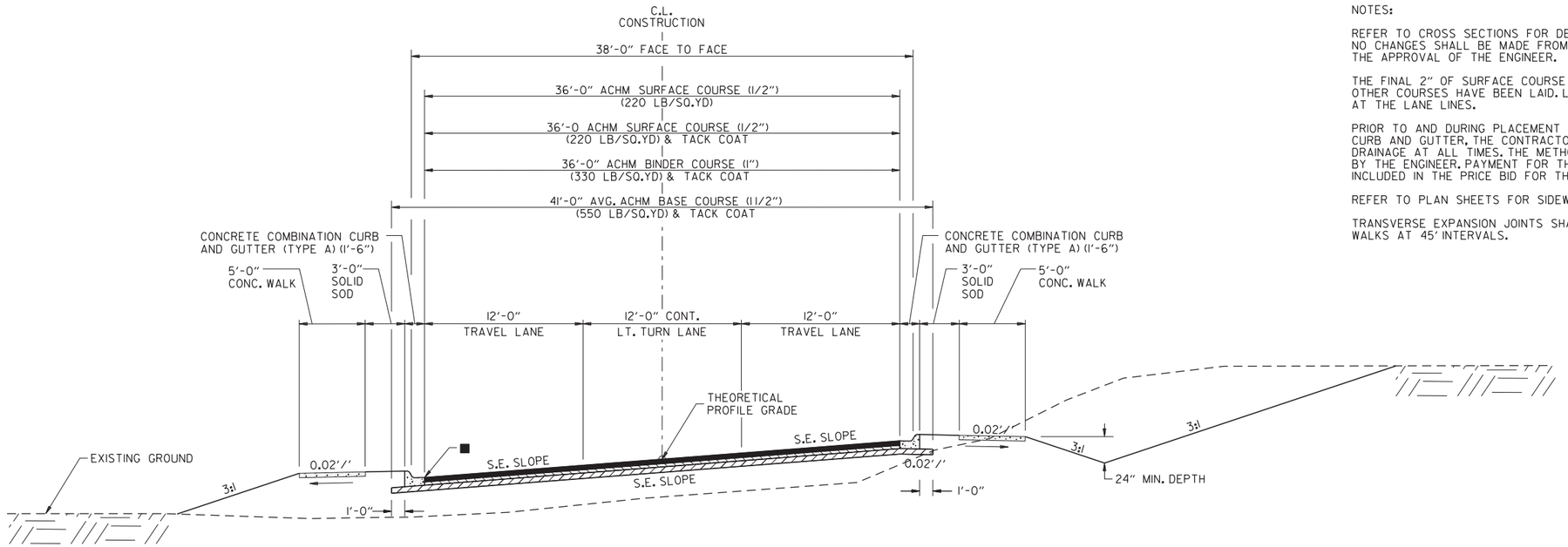

TYPICAL 3-LANE CURB AND GUTTER SUPERELEVATED SECTION

HWY. 67 STA. 118+54.34 TO STA. 125+36.32

■ POINT OF SUPERELEVATION ROTATION (0.36' BELOW PROFILE GRADE)

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		6	ARK.	070442	15	549
		TYPICAL SECTIONS OF IMPROVEMENT				

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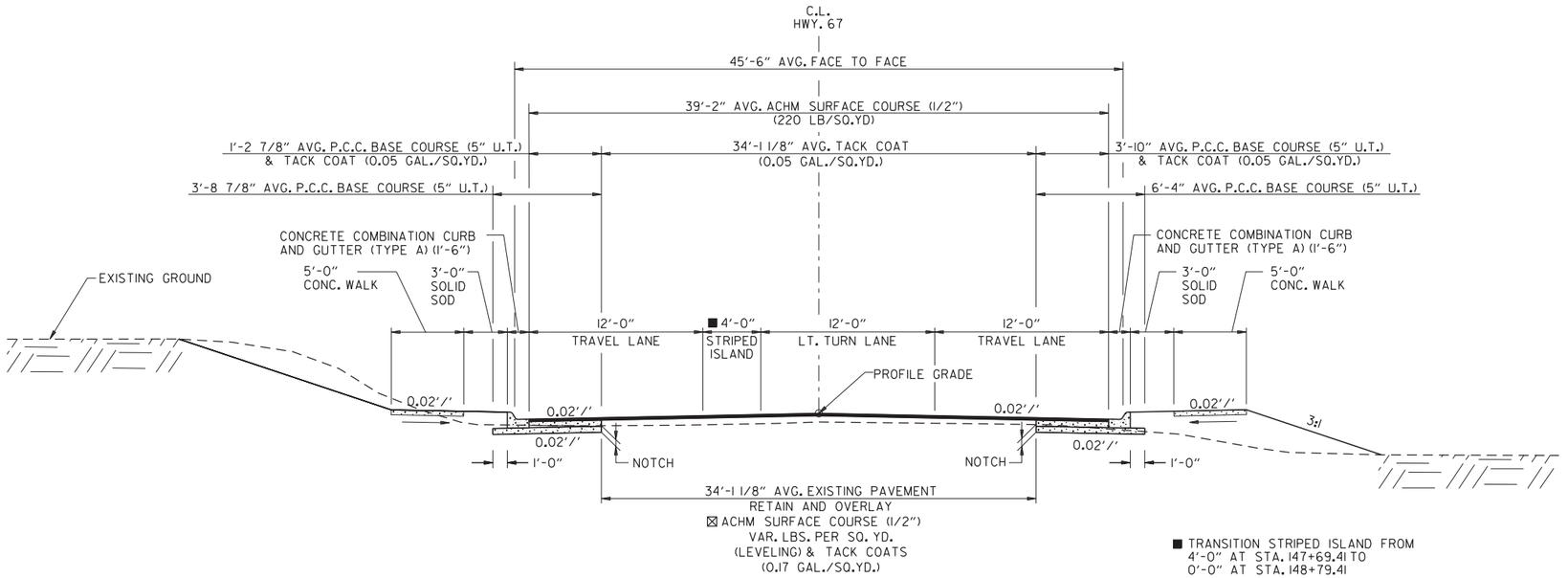
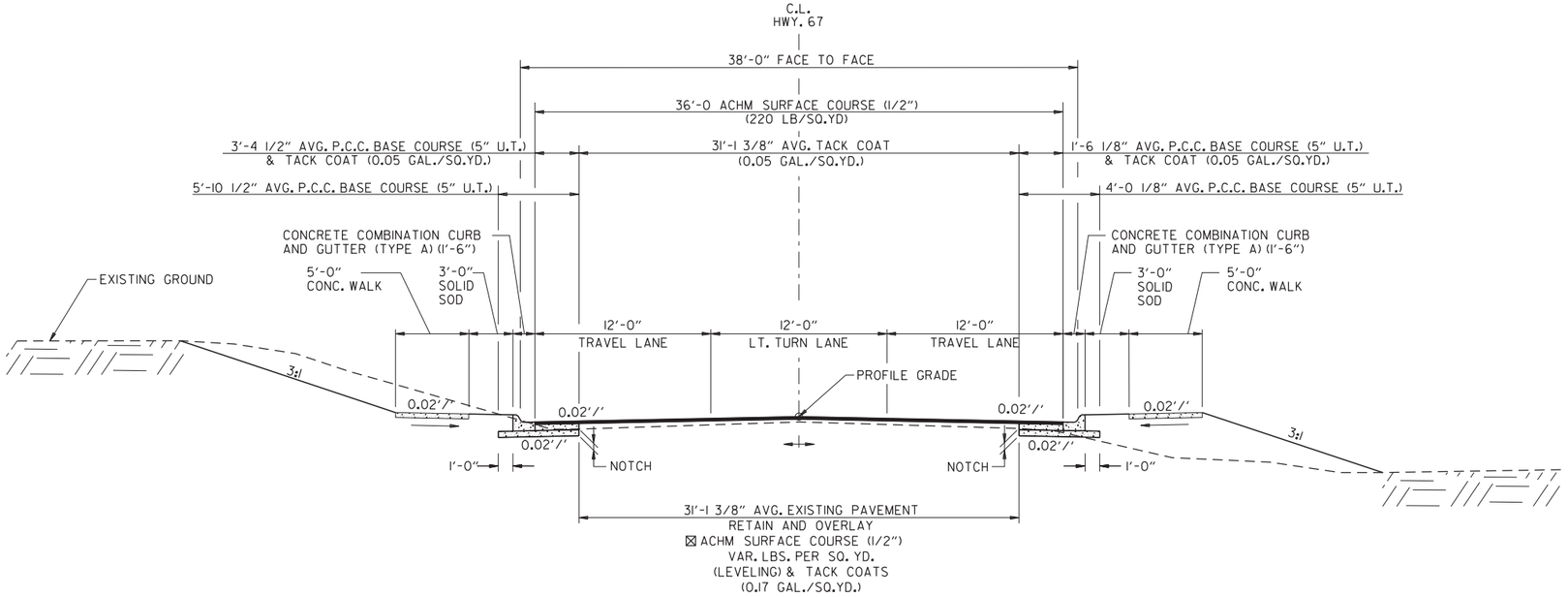


■ TRANSITION STRIPED ISLAND FROM 4'-0" AT STA. 147+69.41 TO 0'-0" AT STA. 148+79.41

HWY. 67 TYPICAL 3-LANE NOTCH AND WIDEN CURB AND GUTTER SECTION W/ STRIPED ISLAND

STA. 146+14.21 TO STA. 148+79.41

☒ TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER



HWY. 67 3-LANE NOTCH AND WIDEN CURB AND GUTTER SECTION

STA. 148+79.41 TO STA. 149+29.14

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DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	16	549
		TYPICAL SECTIONS OF IMPROVEMENT				

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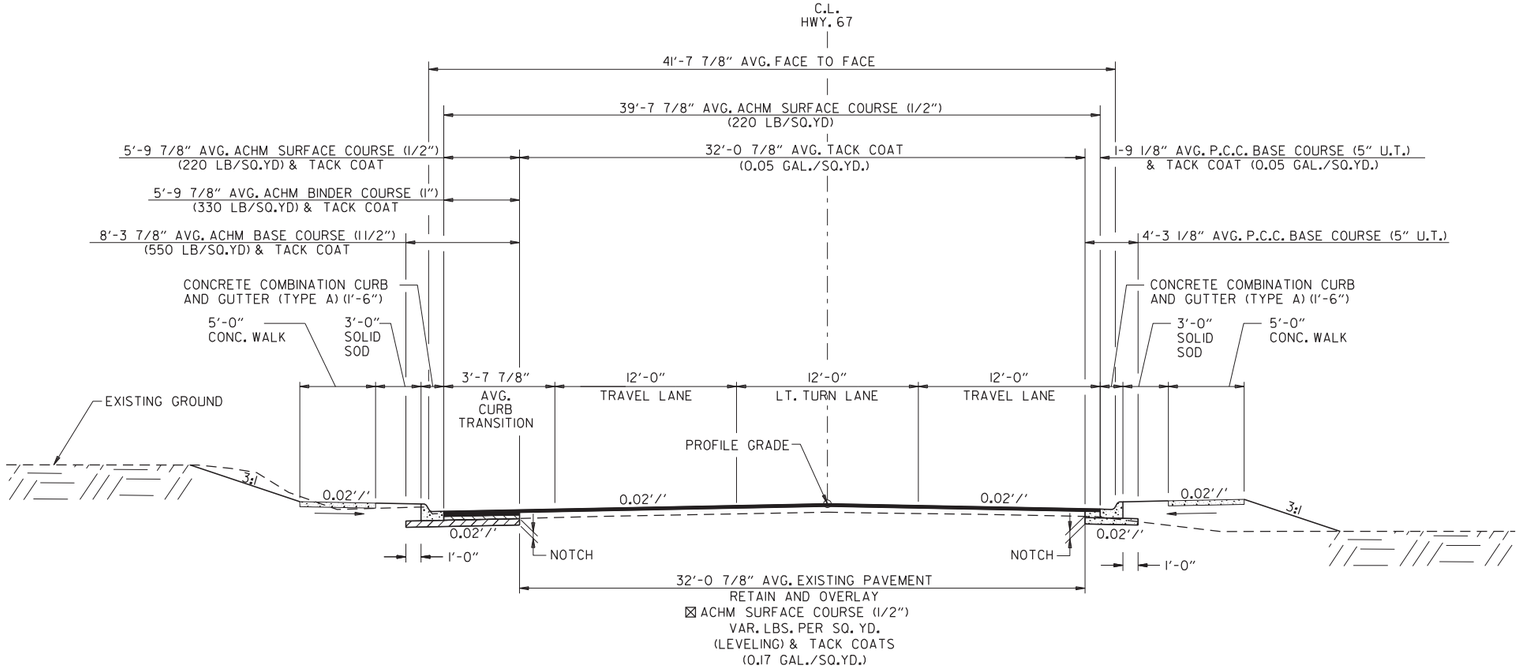
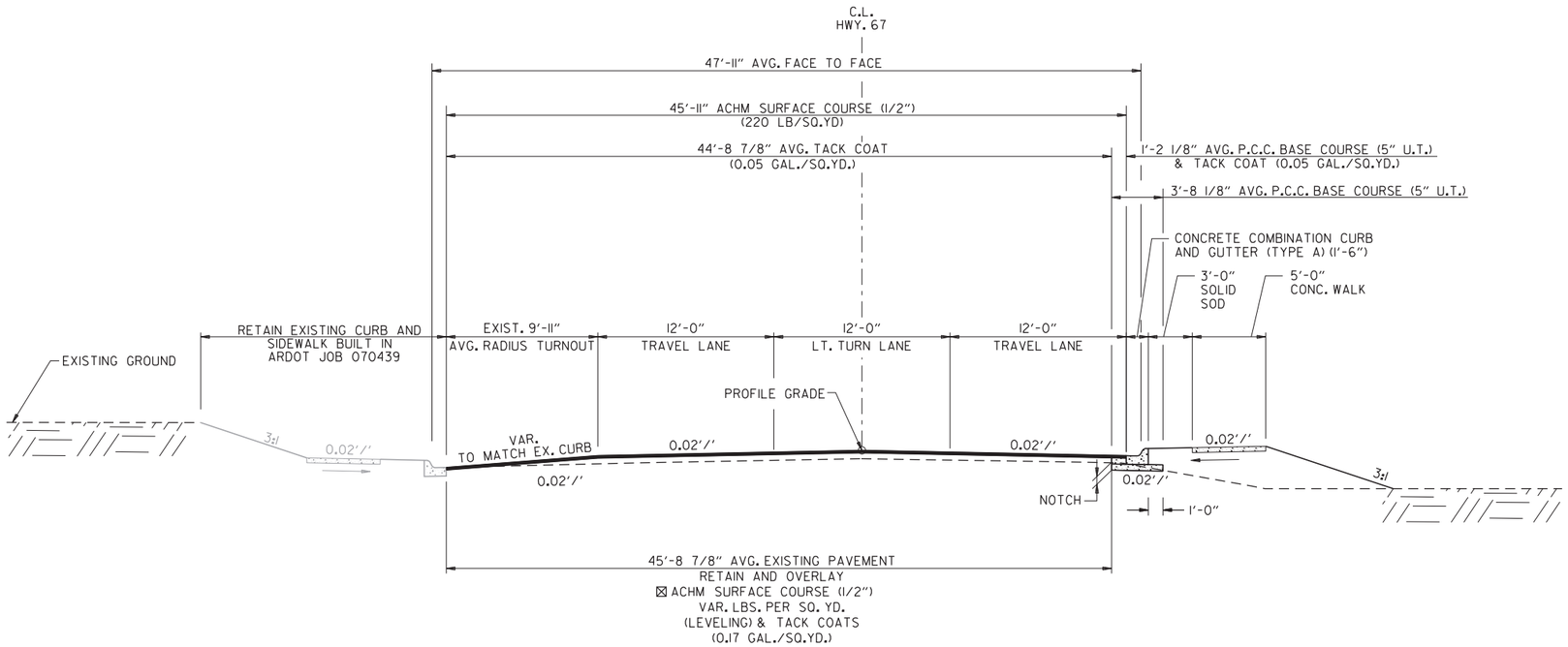


HWY. 67 TYPICAL 3-LANE NOTCH AND WIDEN CURB AND GUTTER SECTION W/ STRIPED ISLANDS

STA. 149+29.14 TO STA. 150+61.42

☒ TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER



HWY. 67 TYPICAL 3-LANE NOTCH AND WIDEN CURB AND GUTTER SECTION W/ STRIPED ISLANDS

STA. 150+61.42 TO STA. 150+98.00

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		6	ARK.	070442	17	549
		TYPICAL SECTIONS OF IMPROVEMENT				

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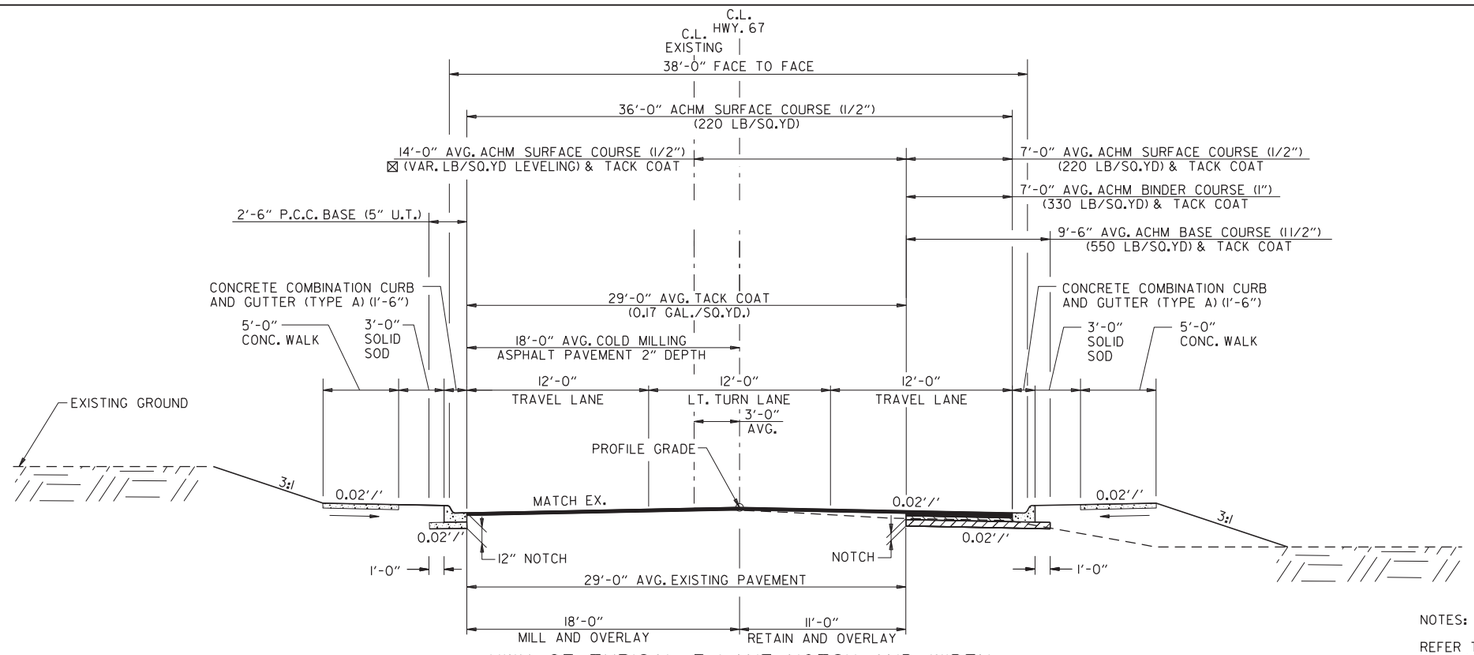
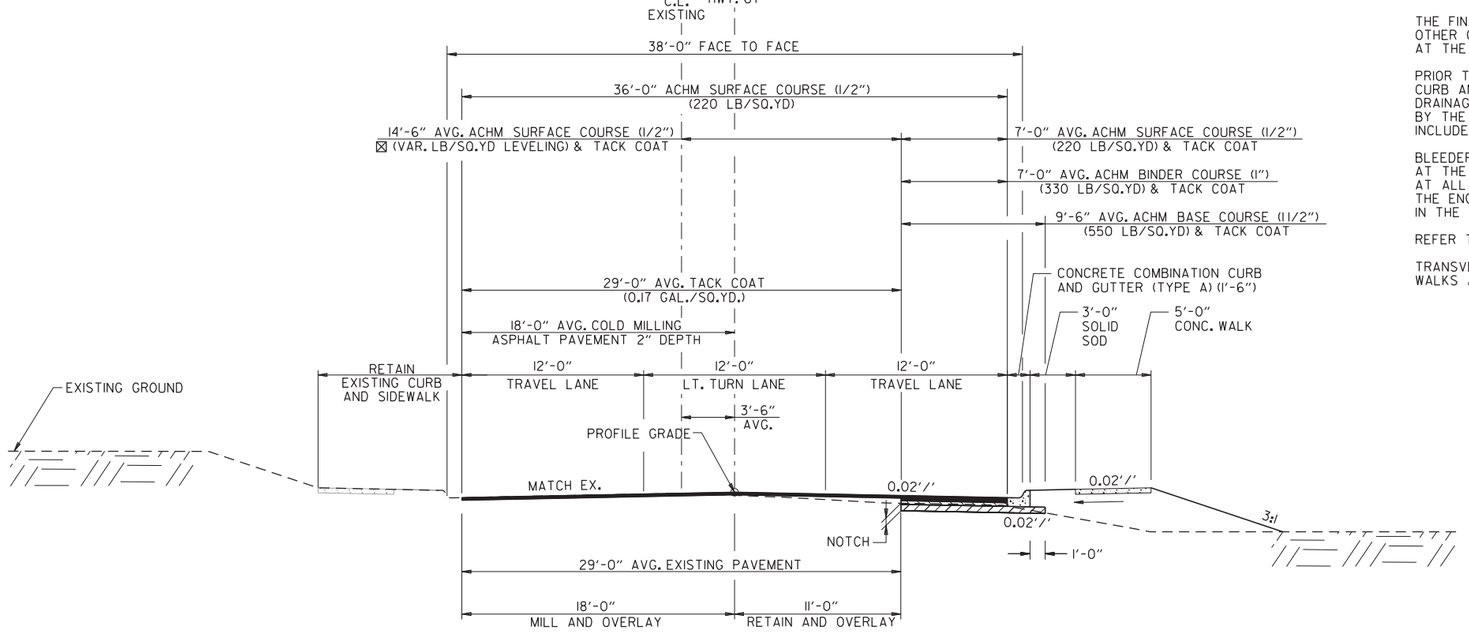


HWY. 67 TYPICAL 3-LANE NOTCH AND WIDEN
CURB AND GUTTER SECTION W/ EXISTING MILL AND OVERLAY

STA. 152+60.04 TO STA. 153+93.04

☒ TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER



HWY. 67 TYPICAL 3-LANE NOTCH AND WIDEN
CURB AND GUTTER SECTION W/ EXISTING MILL AND OVERLAY

STA. 153+93.04 TO STA. 163+60.00

NOTES:

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DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	18	549
		TYPICAL SECTIONS OF IMPROVEMENT				

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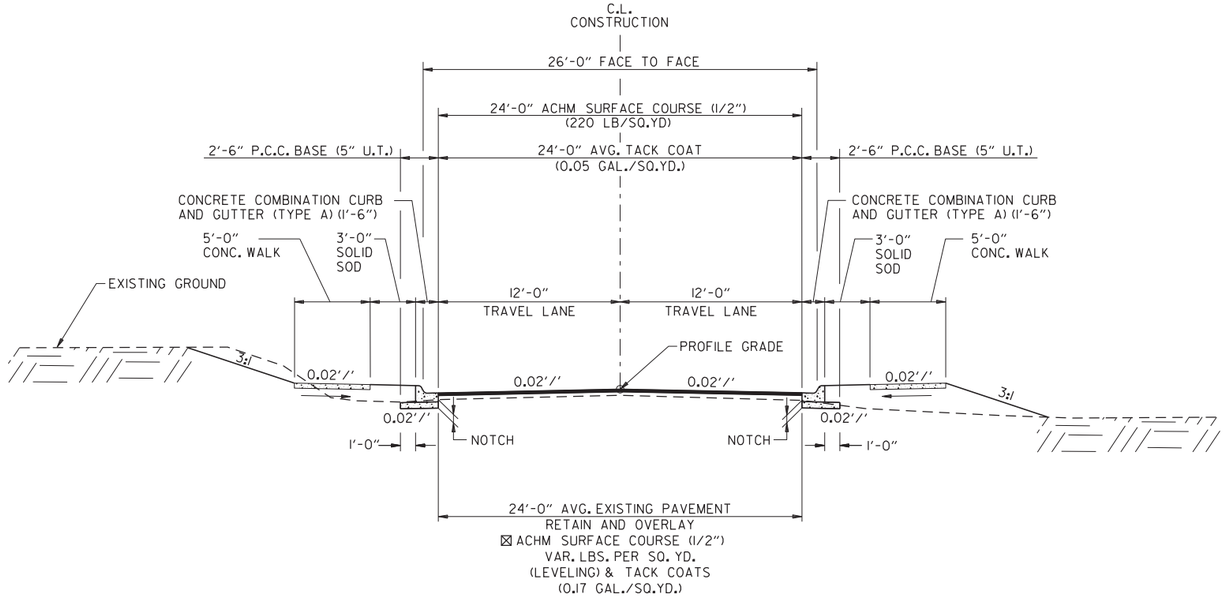
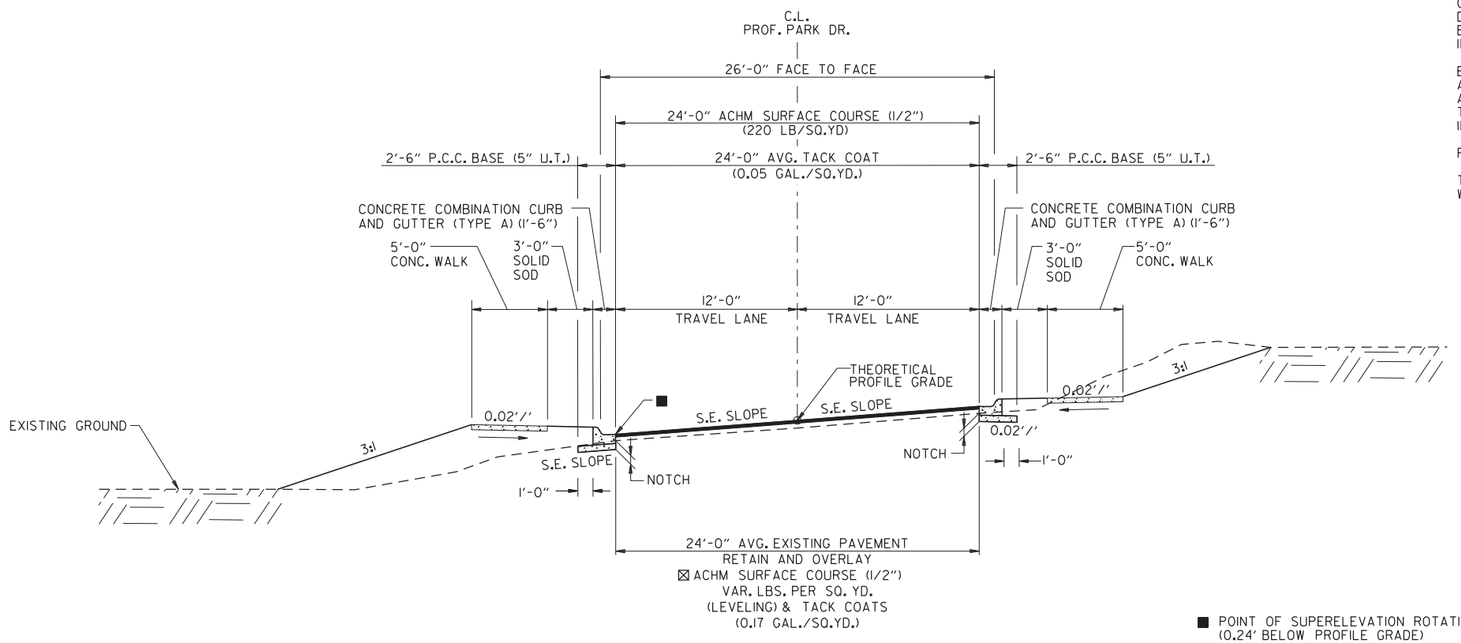


2-LANE NOTCH AND WIDEN CURB AND GUTTER SECTION

PROFESSIONAL PARK	STA. 90+55.00 TO STA. 90+56.06
PROFESSIONAL PARK CUL-DE-SAC	STA. 18+25.00 TO STA. 19+09.86

☒ TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER



PROFESSIONAL PARK DR. NOTCH AND WIDEN CURB AND GUTTER SUPERELEVATED SECTION

STA. 90+56.06 TO STA. 93+30.91

■ POINT OF SUPERELEVATION ROTATION (0.24' BELOW PROFILE GRADE)

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TYPICAL SECTIONS OF IMPROVEMENT

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		6	ARK.	070442	19	549
		TYPICAL SECTIONS OF IMPROVEMENT				

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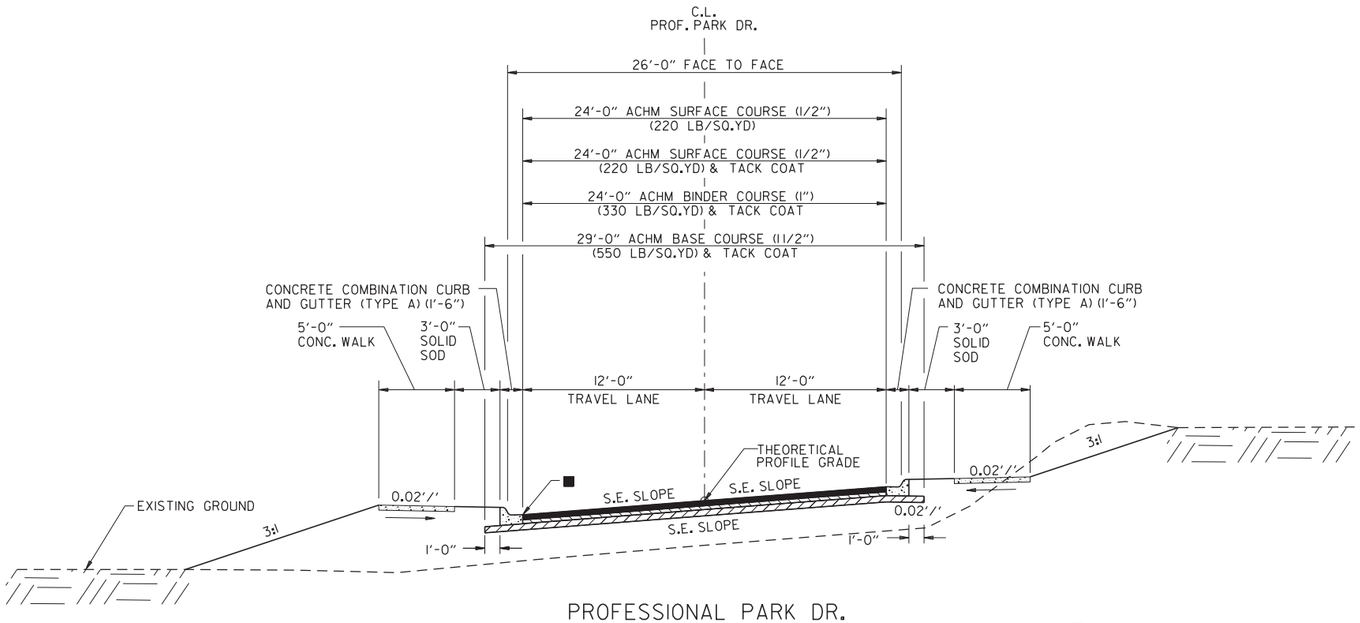

PROFESSIONAL PARK DR.
CURB AND GUTTER SUPERELEVATED SECTION

STA. 93+30.91 TO STA. 96+51.37

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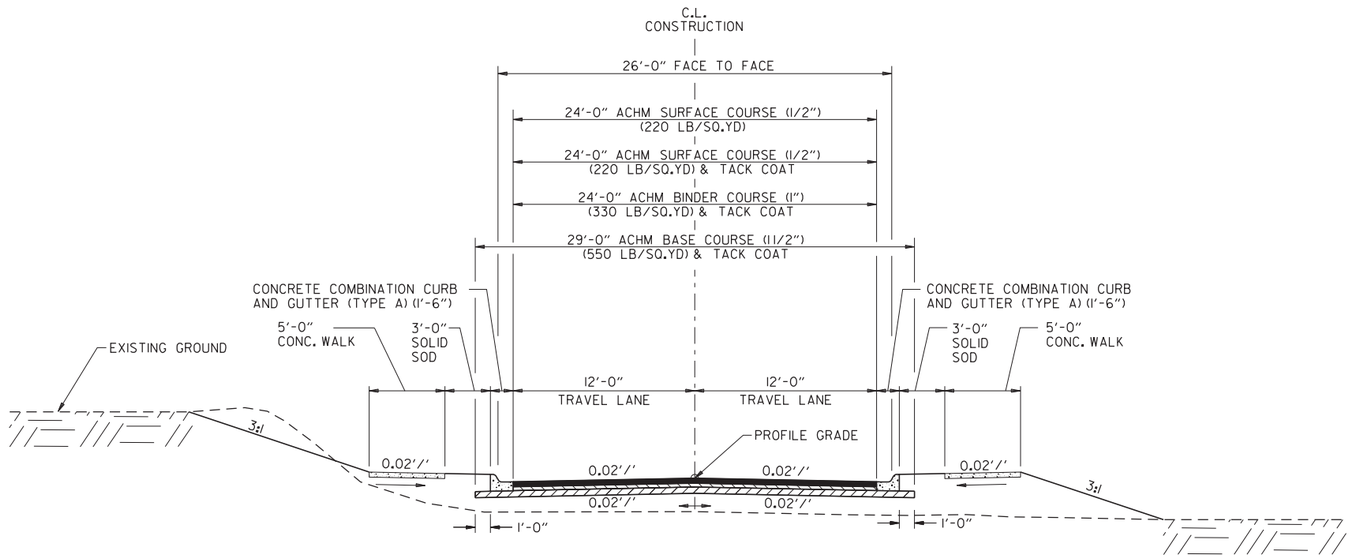

2-LANE CURB AND GUTTER SECTION

PROFESSIONAL PARK	STA. 96+51.37 TO STA. 97+45.00
PROFESSIONAL PARK CUL-DE-SAC	STA. 19+09.86 TO STA. 19+88.00
WALNUT ST.	STA. 8+89.00 TO STA. 9+81.49

TYPICAL SECTIONS OF IMPROVEMENT

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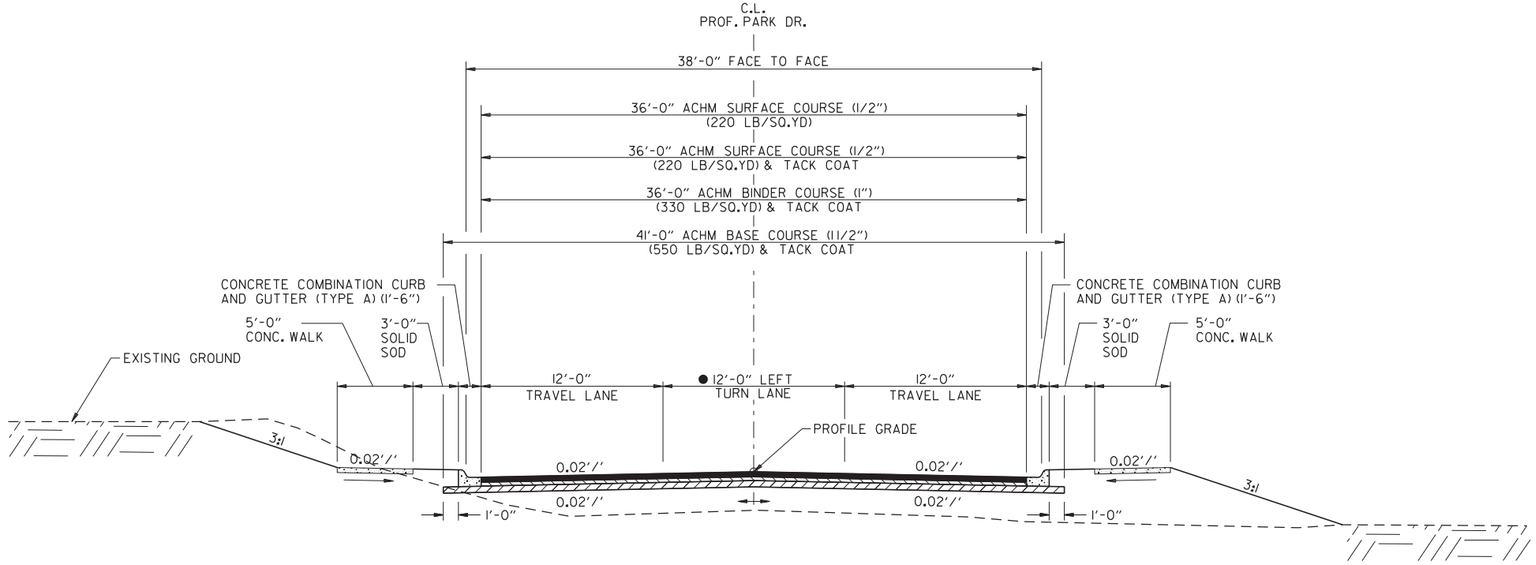

PROFESSIONAL PARK DR. - 3-LANE CURB AND GUTTER SECTION

STA. 97+45.00 TO STA. 99+71.70

● TRANSITION LANE FROM 0'-0" AT STA. 97+45.00 TO 12'-0" AT STA. 98+45.00

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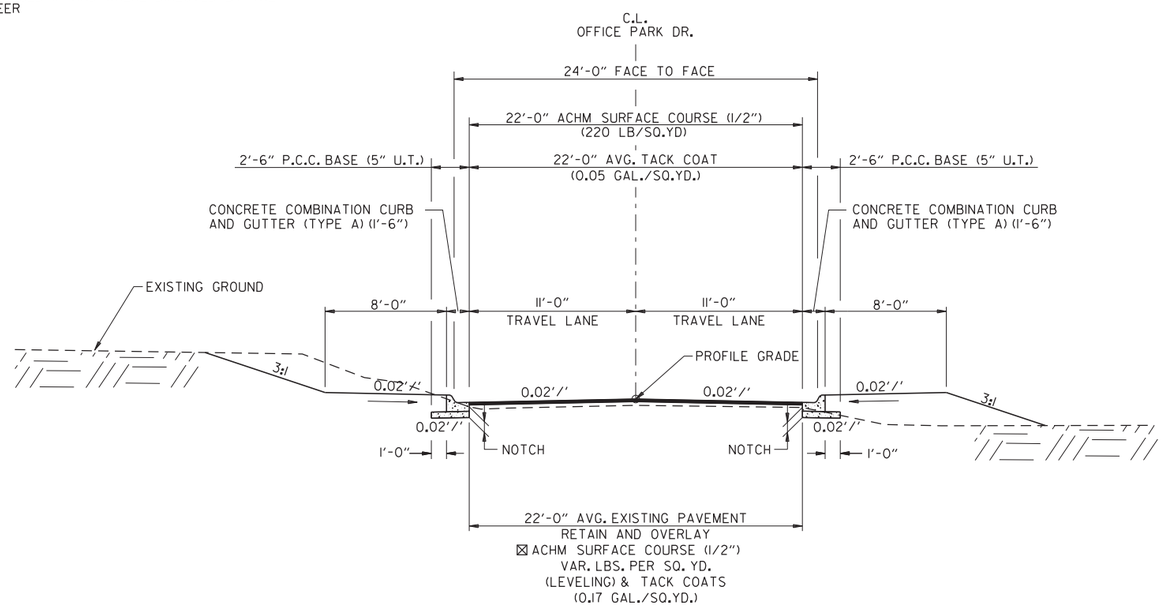

OFFICE PARK DR. TYPICAL 2-LANE NOTCH AND WIDEN CURB AND GUTTER SECTION

STA. 9+30.00 TO STA. 9+87.68

TYPICAL SECTIONS OF IMPROVEMENT

rnfortner 6/28/2022 10:27:58 AM
WORKSPACE: AHTD
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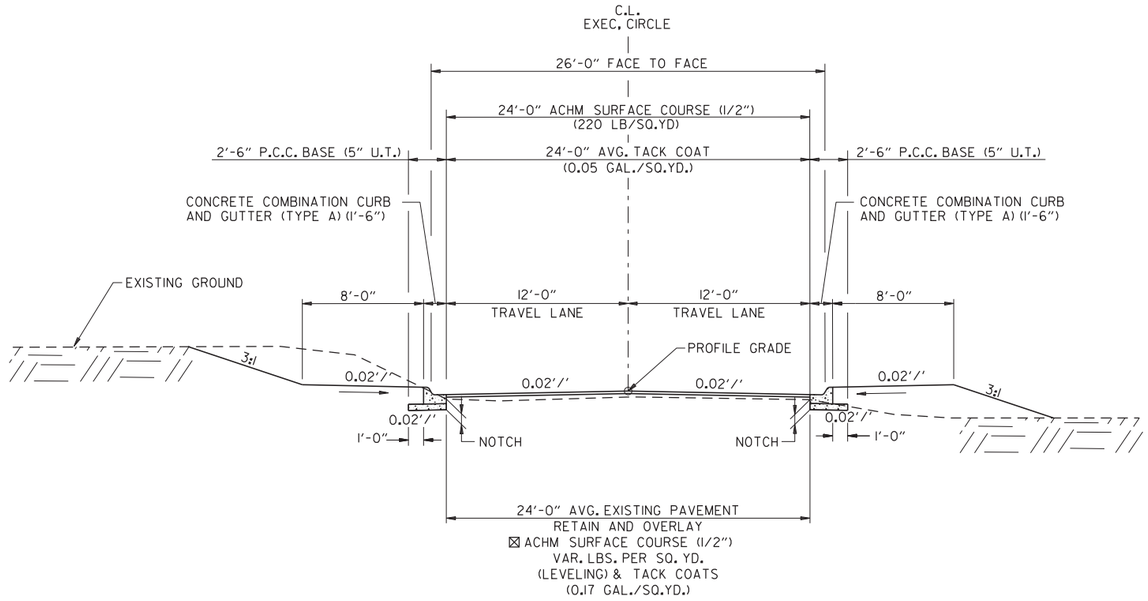
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	21	549
		TYPICAL SECTIONS OF IMPROVEMENT				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022



EXECUTIVE CIRCLE TYPICAL 2-LANE NOTCH AND WIDEN CURB AND GUTTER SECTION

STA. 10+12.03 TO STA. 10+70.00

NOTES:

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

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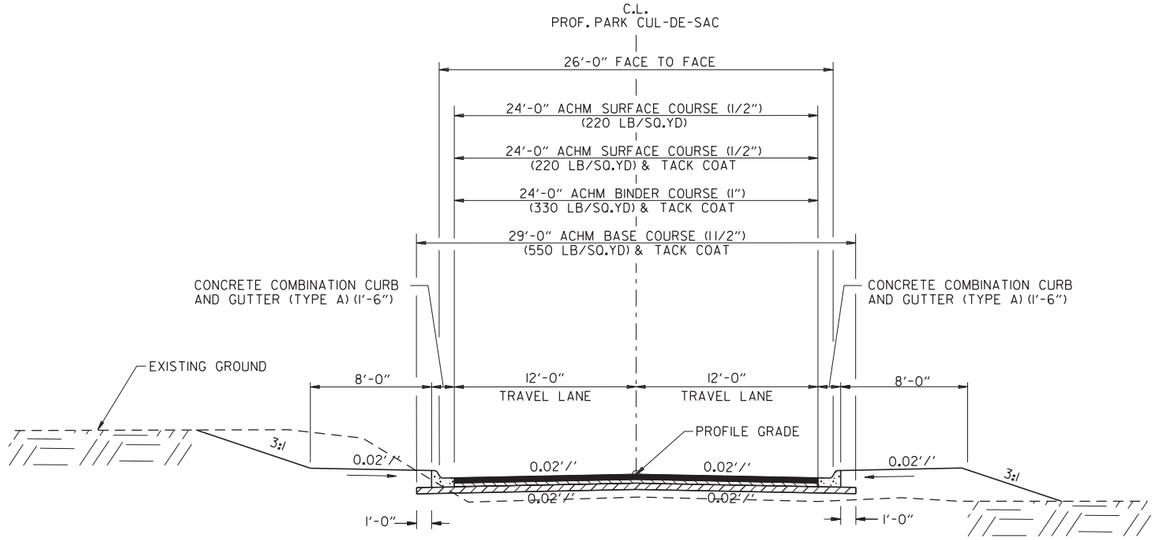

PROFESSIONAL PARK CUL-DE-SAC CURB AND GUTTER SECTION

STA. 12+66.45 TO STA. 14+40.00

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WORKSPACE: AHTD
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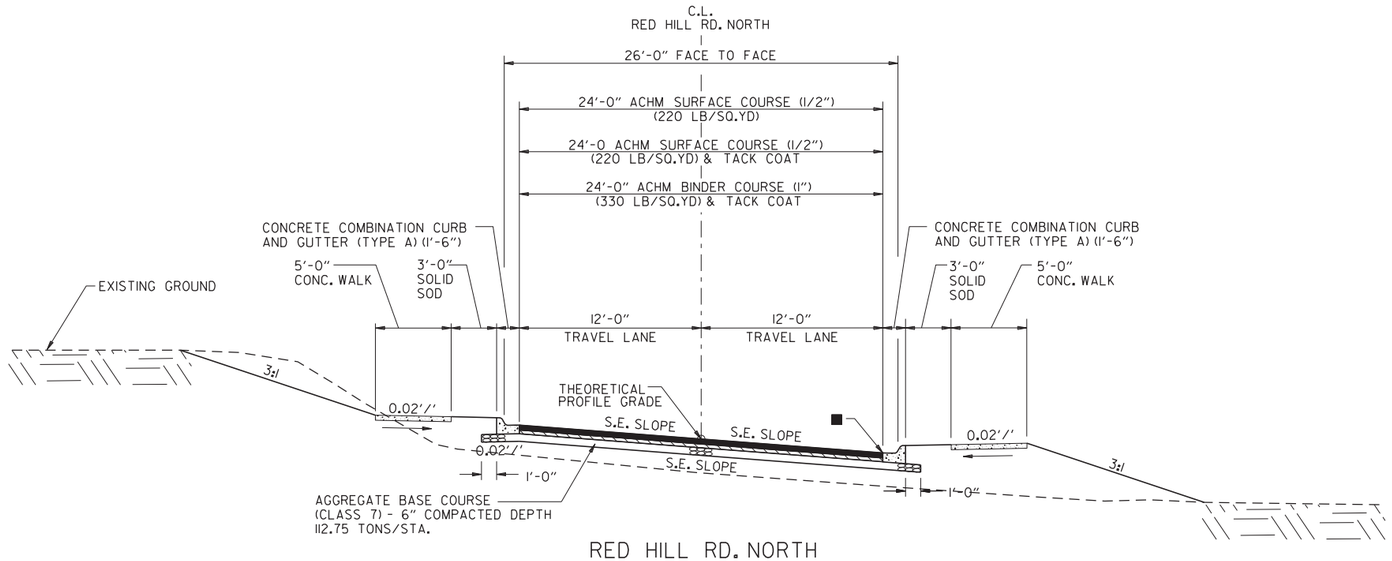
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	22	549
		TYPICAL SECTIONS OF IMPROVEMENT				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022



RED HILL RD. NORTH
CURB AND GUTTER SUPERELEVATED SECTION

STA. 20+18.00 TO STA. 21+75.44

■ POINT OF SUPERELEVATION ROTATION
(0.24' BELOW PROFILE GRADE)

NOTES:

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REFER TO PLAN SHEETS FOR SIDEWALK LOCATIONS.

TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE WALKS AT 45' INTERVALS.

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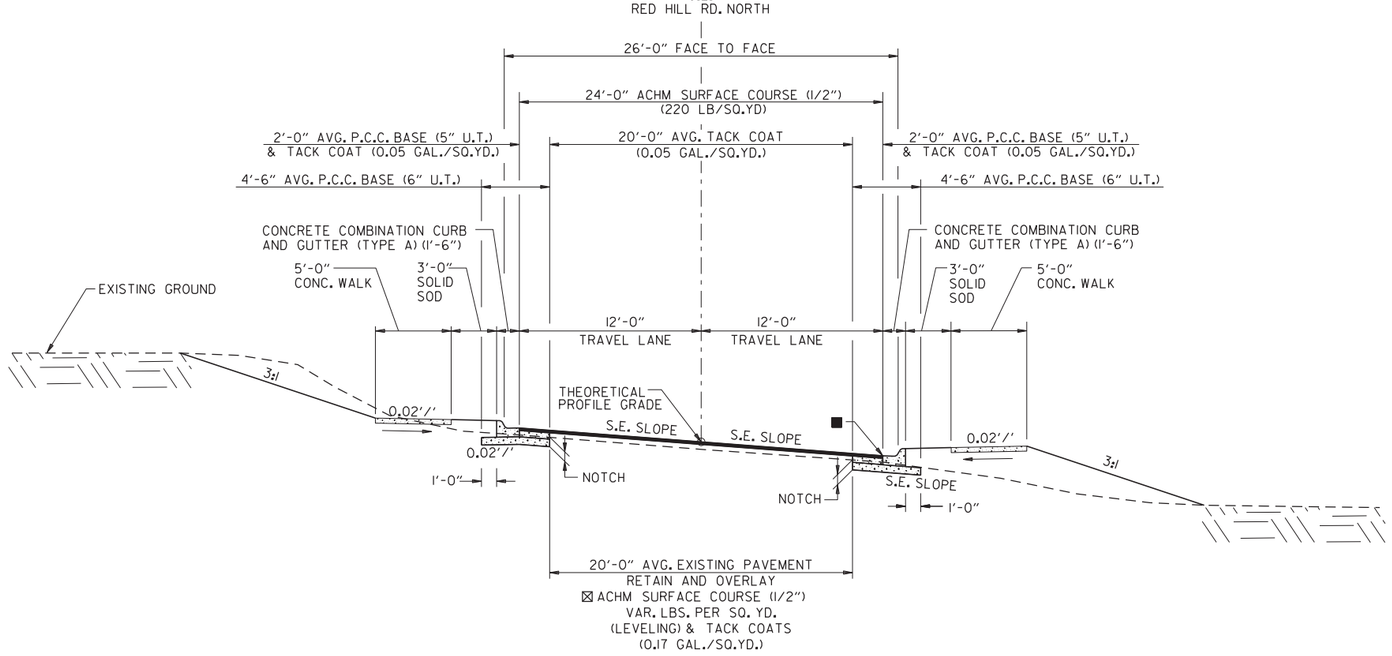

RED HILL RD. NORTH
CURB AND GUTTER SUPERELEVATED SECTION

STA. 21+75.44 TO STA. 22+80.00

■ POINT OF SUPERELEVATION ROTATION
(0.24' BELOW PROFILE GRADE)

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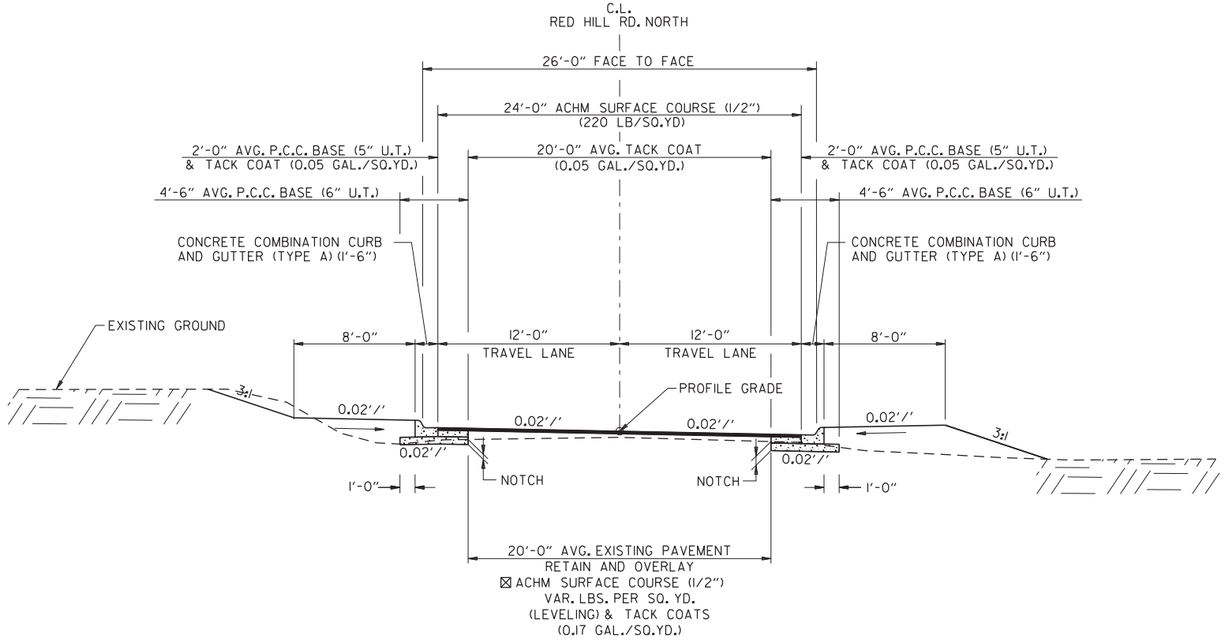
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	23	549
		TYPICAL SECTIONS OF IMPROVEMENT				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022



RED HILL RD. NORTH 2-LANE
NOTCH AND WIDEN CURB AND GUTTER SECTION

STA. 28+82.92 TO STA. 30+12.50

NOTES:

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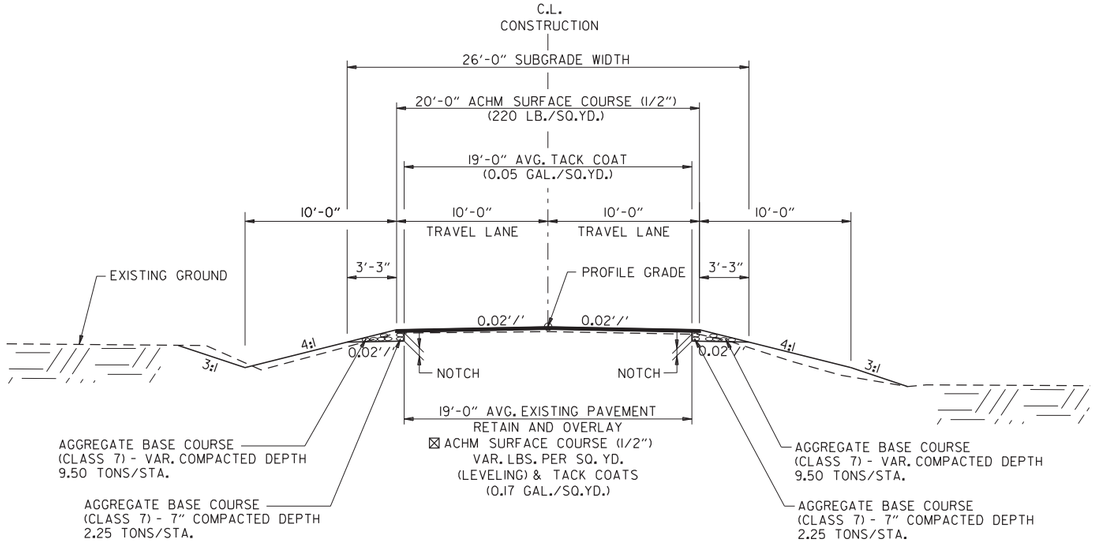

RED HILL RD. SOUTH NOTCH AND WIDEN SECTION

STA. 14+65.00 TO STA. 14+67.68

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DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON
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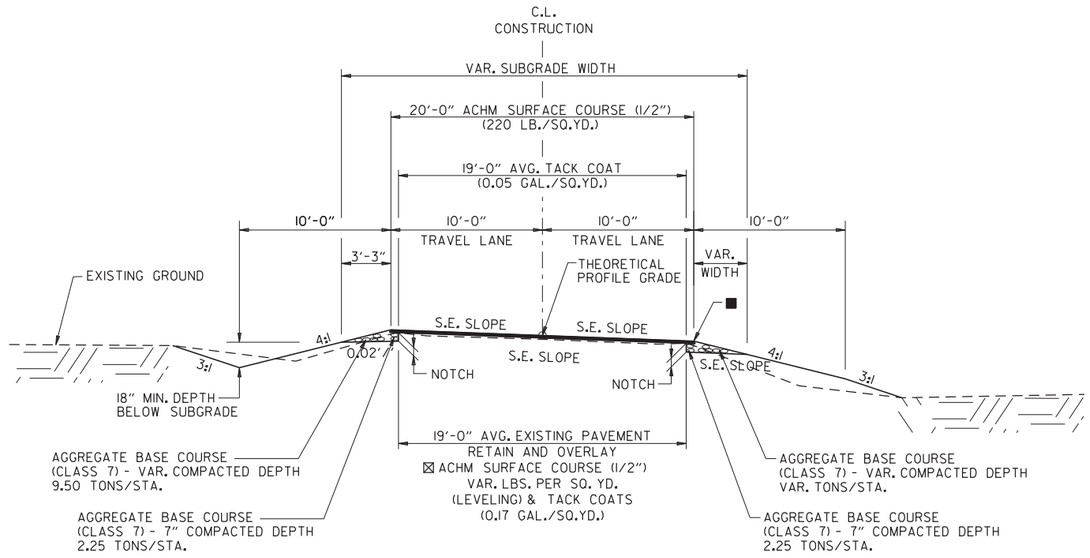

RED HILL RD. SOUTH SUPERELEVATED NOTCH AND WIDEN SECTION

STA. 14+67.68 TO STA. 17+19.86

■ POINT OF SUPERELEVATION ROTATION (0.20' BELOW PROFILE GRADE)

☒ TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

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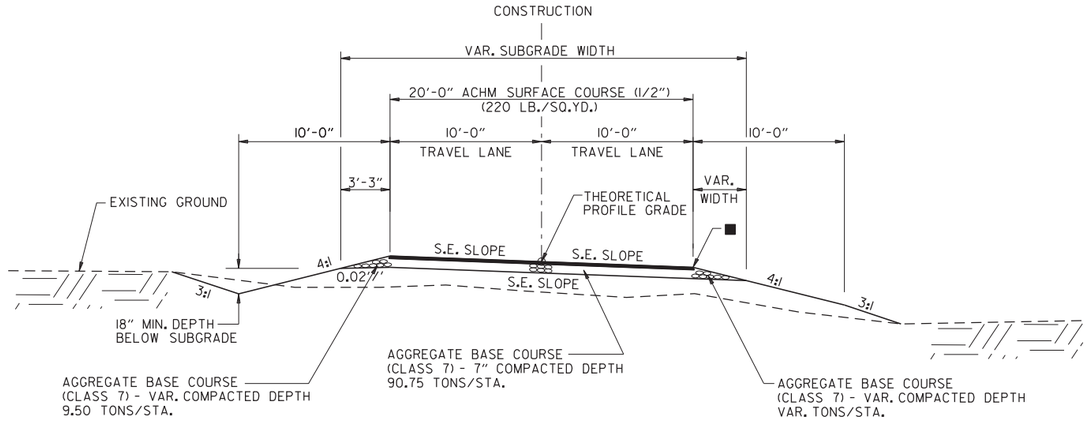

SIDE ROAD SUPERELEVATED SECTION

RED HILL RD. SOUTH STA. 17+19.86 TO STA. 19+82.00
26TH ST. SOUTH STA. 13+53.53 TO STA. 18+61.46
26TH ST. NORTH STA. 20+18.28 TO STA. 23+25.27

■ POINT OF SUPERELEVATION ROTATION (0.20' BELOW PROFILE GRADE)

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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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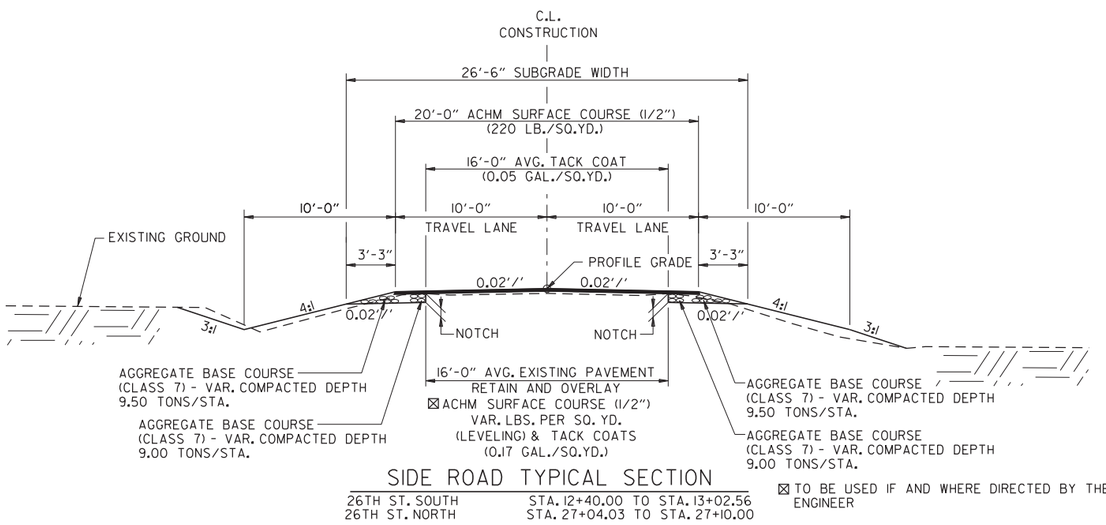

SIDE ROAD TYPICAL SECTION

26TH ST. SOUTH — STA. 12+40.00 TO STA. 13+02.56
26TH ST. NORTH — STA. 27+04.03 TO STA. 27+10.00

☒ TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

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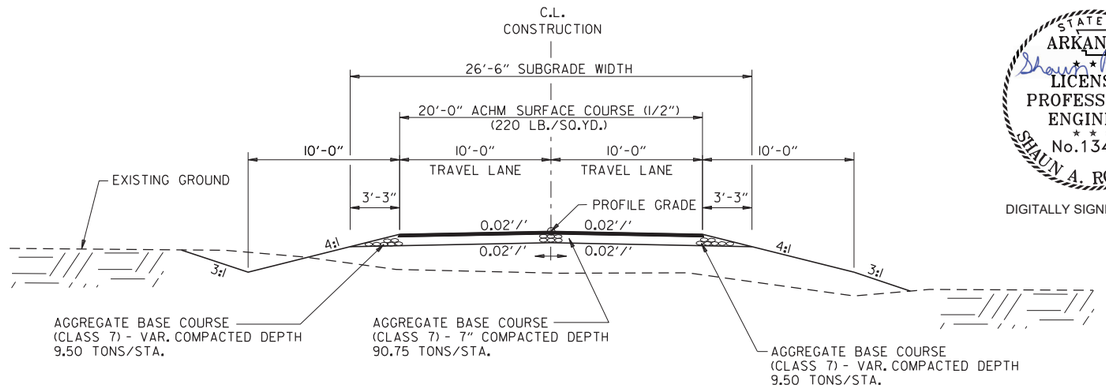
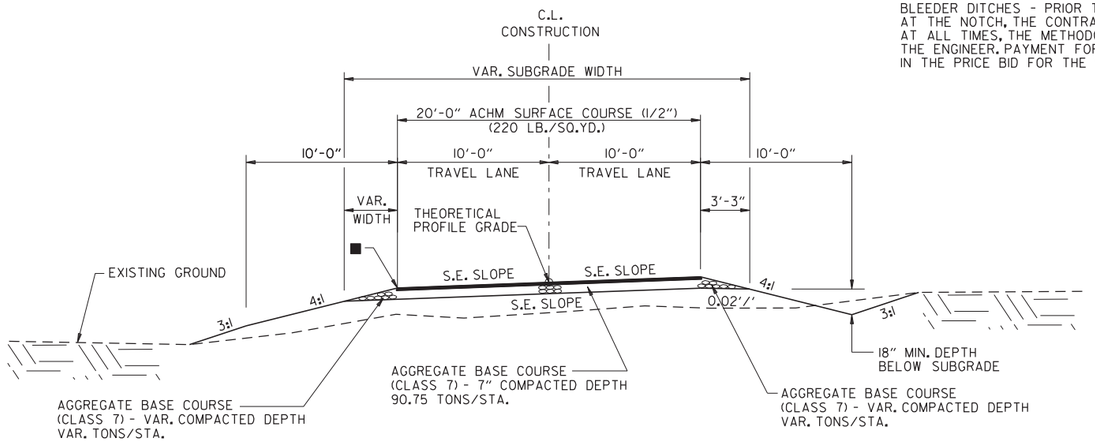


26TH ST. SOUTH TYPICAL SECTION

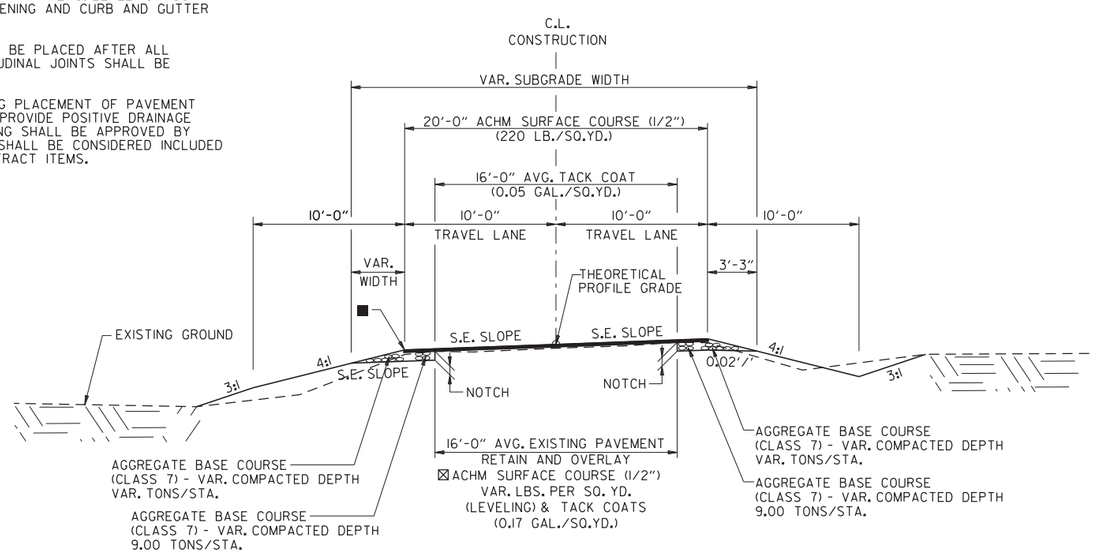
STA. 13+02.56 TO STA. 13+53.53
STA. 18+61.46 TO STA. 19+81.72



26TH ST. NORTH SUPERELEVATED SECTION

STA. 23+25.27 TO STA. 26+03.01

■ POINT OF SUPERELEVATION ROTATION (0.20' BELOW PROFILE GRADE)



■ POINT OF SUPERELEVATION ROTATION (0.20' BELOW PROFILE GRADE ON INSIDE EDGE OF CURVE)

26TH ST. NORTH SUPERELEVATED NOTCH AND WIDEN SECTION

STA. 26+03.01 TO STA. 27+04.03

☒ TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON
Shaun Roberson
DIGITALLY SIGNED 06/28/2022

rnfortner 6/28/2022 10:27:59 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	26	549
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STATE OF ARKANSAS
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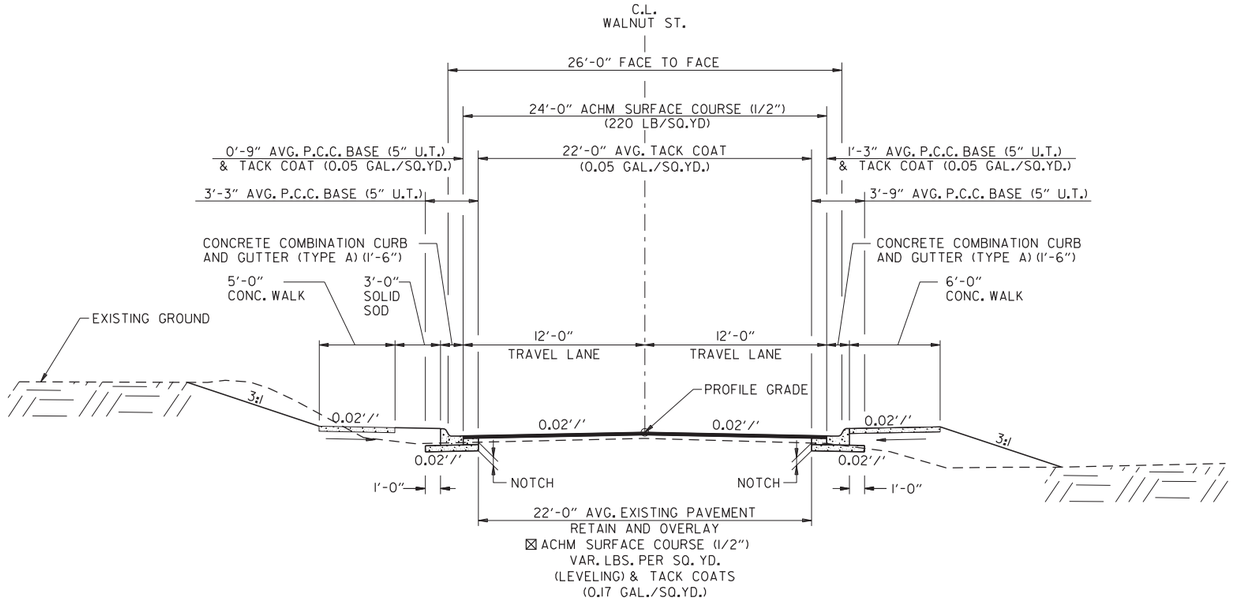

WALNUT ST. TYPICAL 2-LANE NOTCH AND WIDEN CURB AND GUTTER SECTION

STA. 7+05.00 TO STA. 8+89.00

☒ TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

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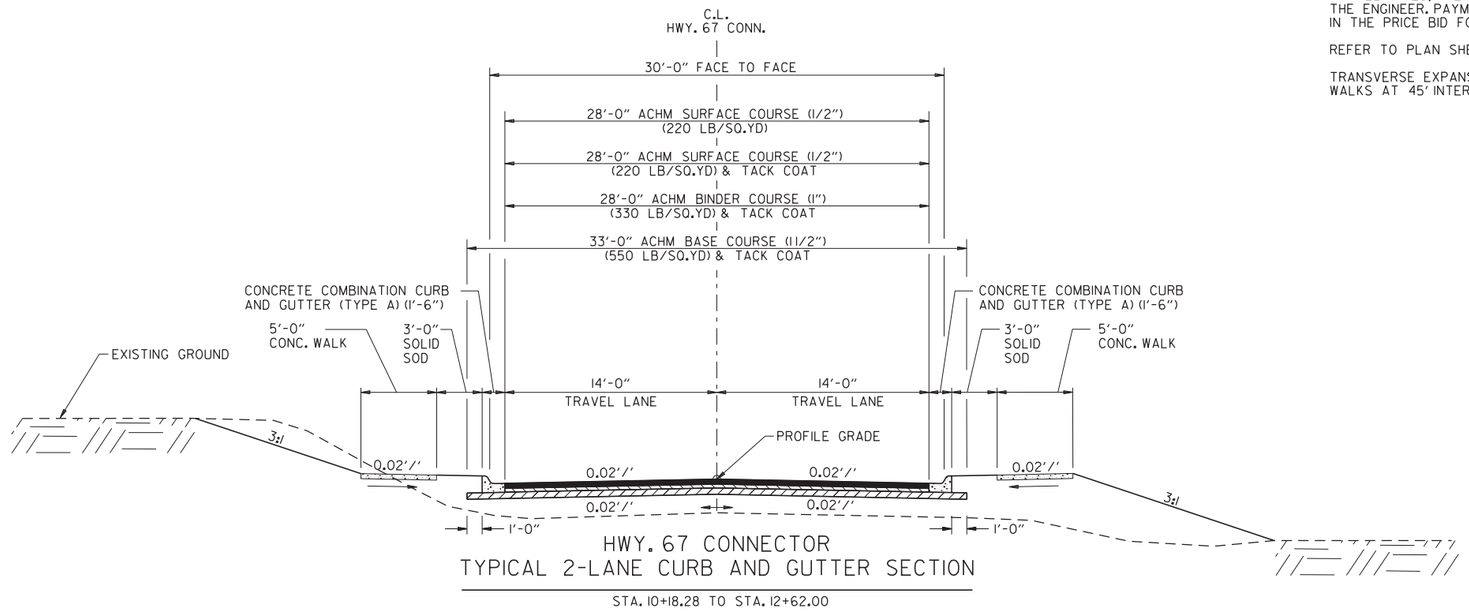

HWY. 67 CONNECTOR TYPICAL 2-LANE CURB AND GUTTER SECTION

STA. 10+18.28 TO STA. 12+62.00

TYPICAL SECTIONS OF IMPROVEMENT

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WORKSPACE: AHTD
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DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	27	549
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STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
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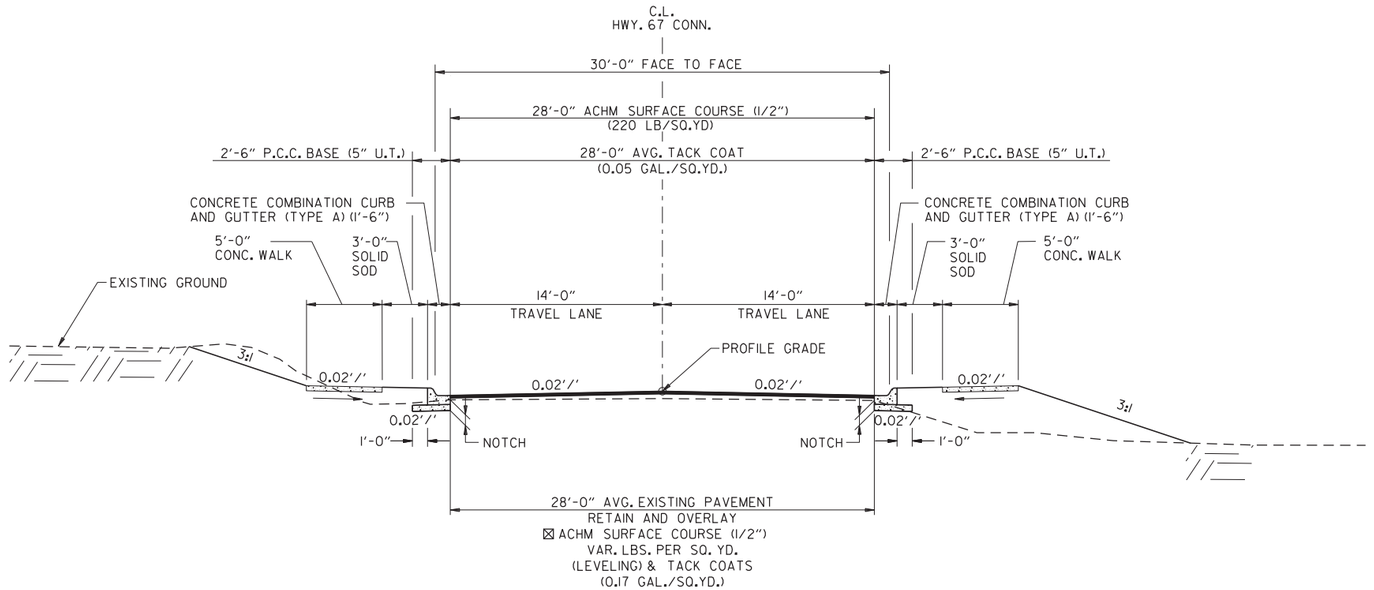

HWY. 67 CONNECTOR TYPICAL 2-LANE NOTCH AND WIDEN CURB AND GUTTER SECTION

STA. 12+62.00 TO STA. 13+70.00

☒ TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

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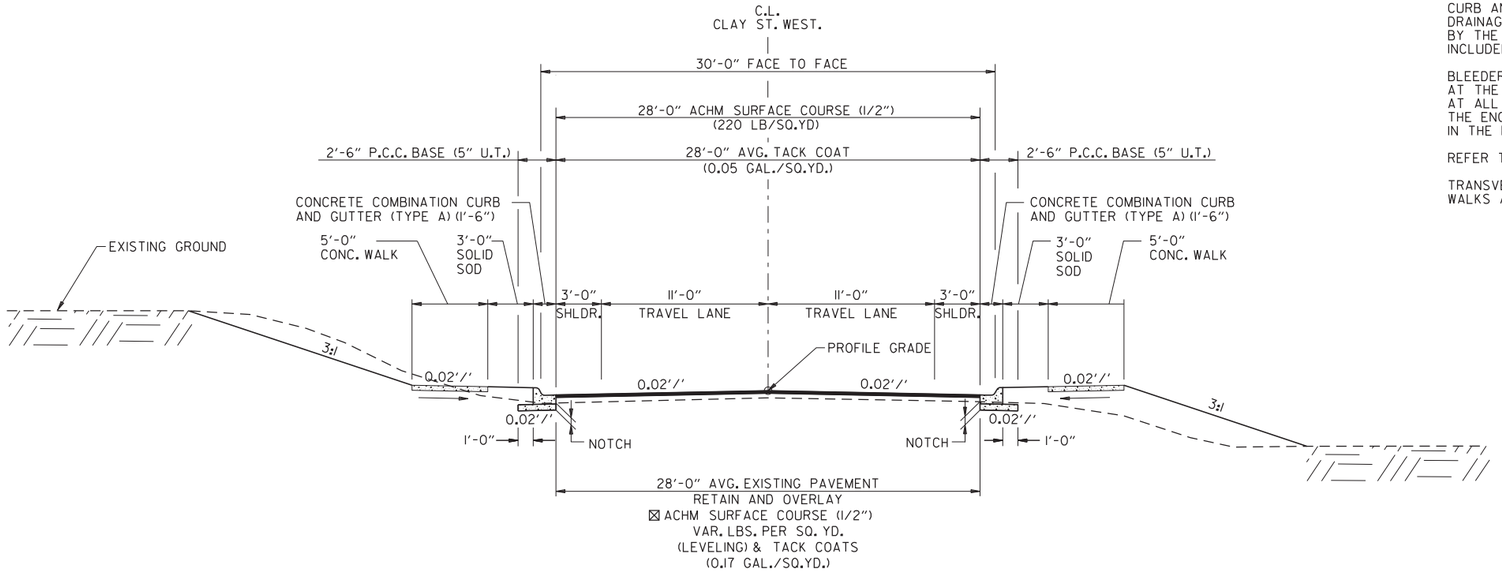

CLAY ST. WEST TYPICAL 2-LANE NOTCH AND WIDEN CURB AND GUTTER SECTION

STA. 18+75.00 TO STA. 19+81.99

rnfortner 6/28/2022 10:28:00 AM
WORKSPACE: AHTD
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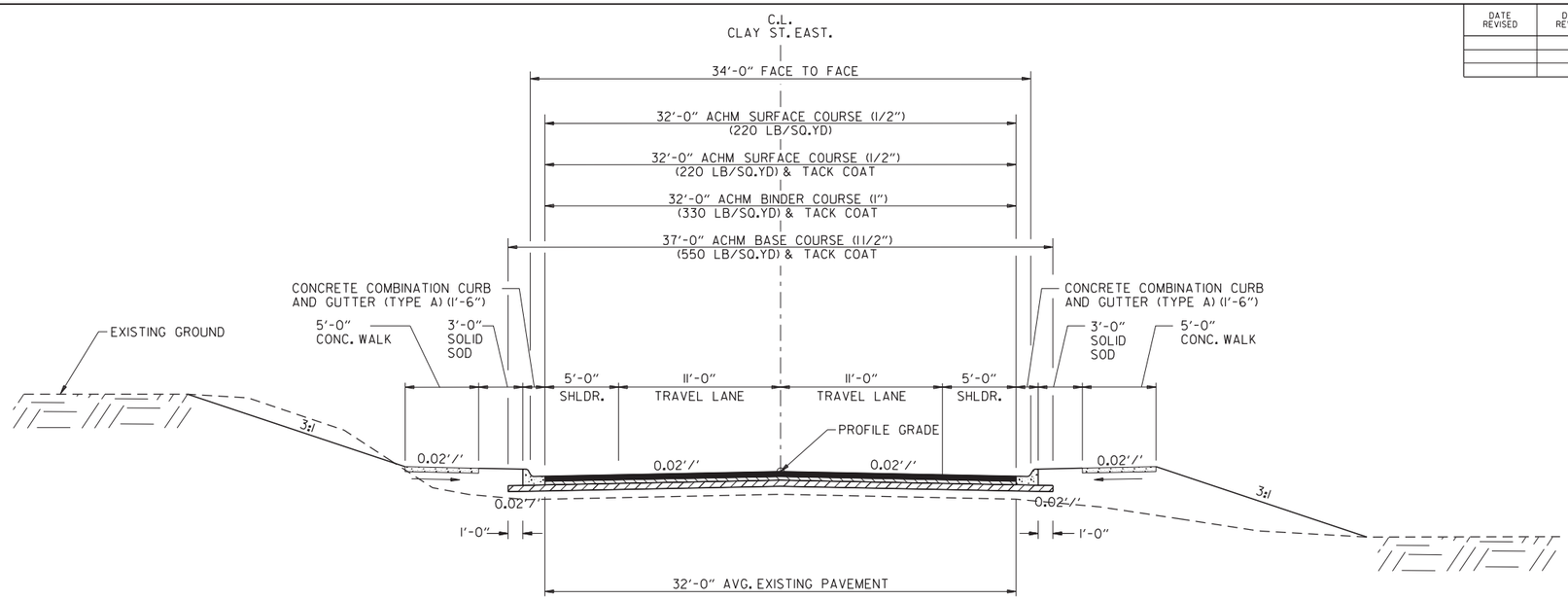
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	28	549
		TYPICAL SECTIONS OF IMPROVEMENT				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022



CLAY ST. EAST TYPICAL 2-LANE
CURB AND GUTTER SECTION

STA. 20+18.01 TO STA. 21+50.00

☒ TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

NOTES:

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

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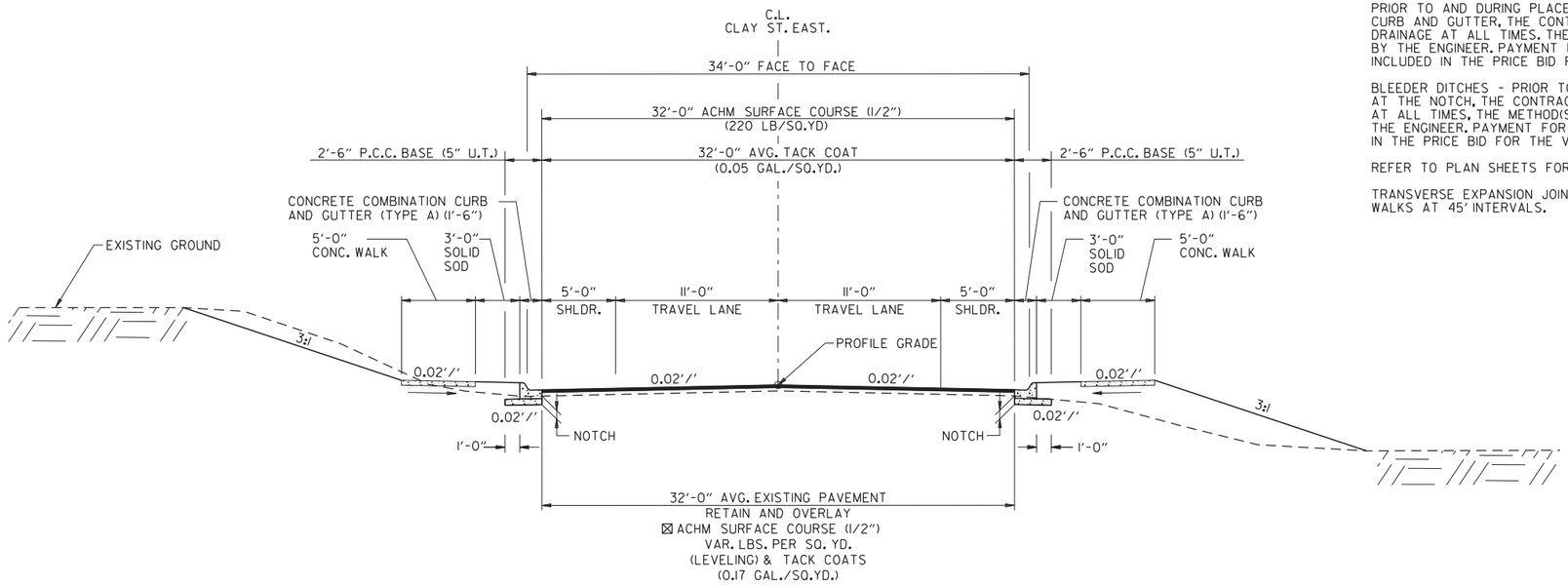
REFER TO PLAN SHEETS FOR SIDEWALK LOCATIONS.

TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE WALKS AT 45' INTERVALS.



CLAY ST. EAST TYPICAL 2-LANE NOTCH AND WIDEN
CURB AND GUTTER SECTION

STA. 21+50.00 TO STA. 22+00.00

TYPICAL SECTIONS OF IMPROVEMENT

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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	29	549
		TYPICAL SECTIONS OF IMPROVEMENT				

STATE OF ARKANSAS
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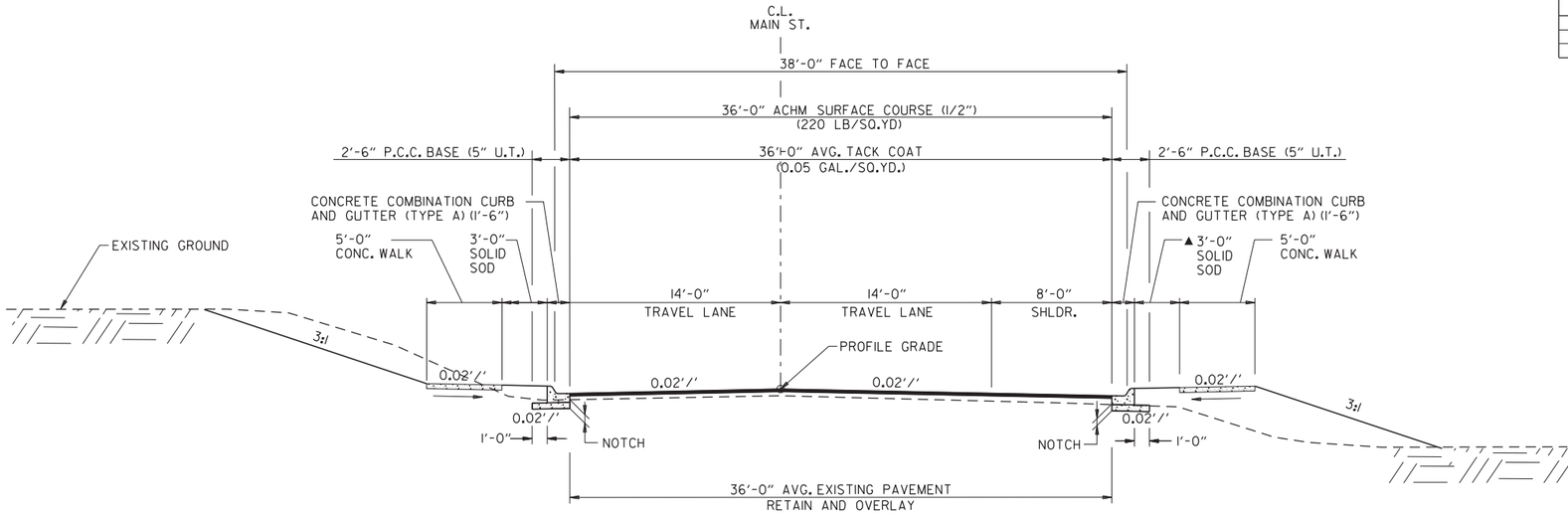

▲ 0' FROM STA. 30+18.00 TO STA. 32+20.00

MAIN ST. TYPICAL 2-LANE NOTCH AND WIDEN CURB AND GUTTER SECTION

MAIN ST. WEST STA. 28+70.00 TO STA. 29+82.00
MAIN ST. EAST STA. 31+75.00 TO STA. 32+20.00

☒ TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

NOTES:

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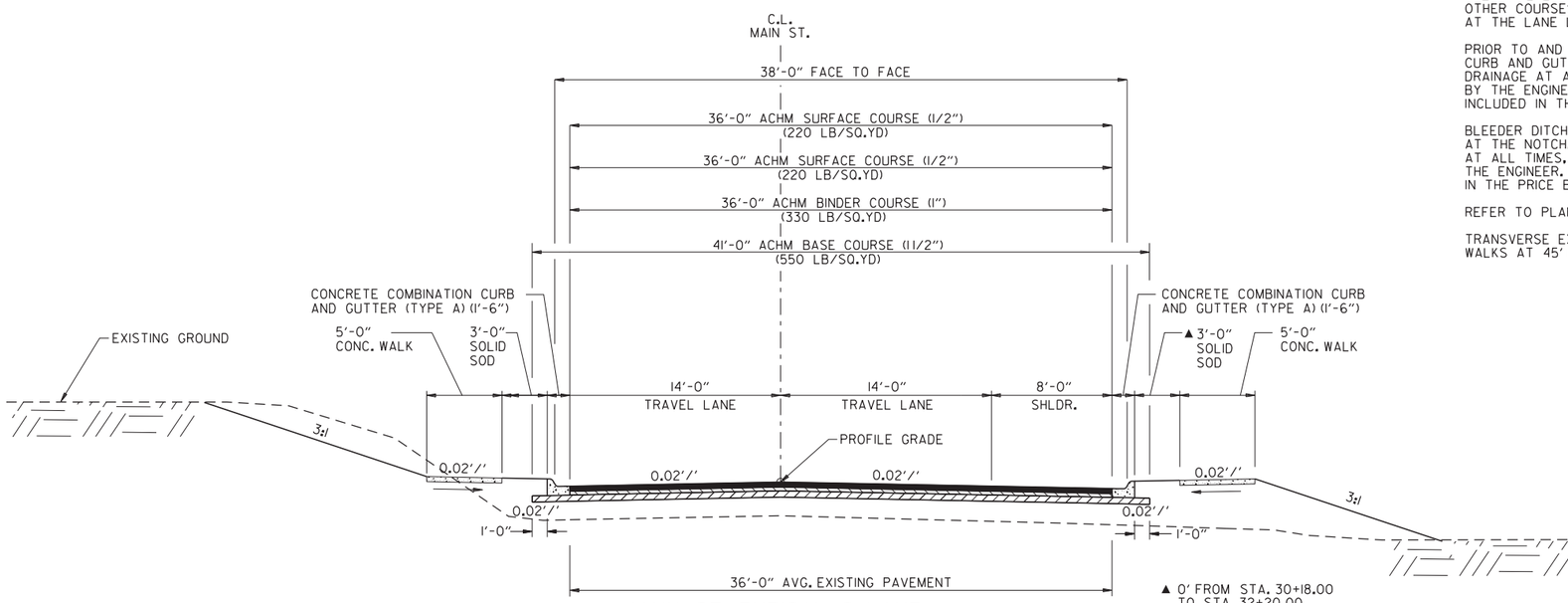
TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE WALKS AT 45' INTERVALS.



▲ 0' FROM STA. 30+18.00 TO STA. 32+20.00

MAIN ST. TYPICAL 2-LANE CURB AND GUTTER SECTION

MAIN ST. EAST STA. 30+18.00 TO STA. 31+75.00

TYPICAL SECTIONS OF IMPROVEMENT

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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	30	549
		TYPICAL SECTIONS OF IMPROVEMENT				

STATE OF ARKANSAS
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SHAUN A. ROBERSON

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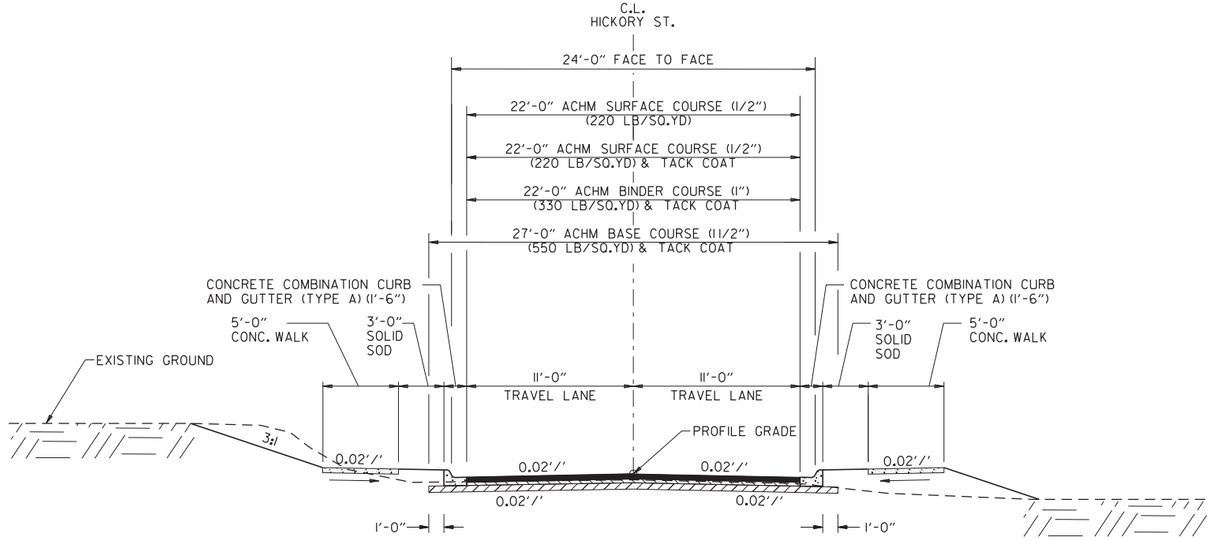

HICKORY ST. TYPICAL 2-LANE CURB AND GUTTER SECTION

STA. 60+18.00 TO STA. 61+75.00

NOTES:

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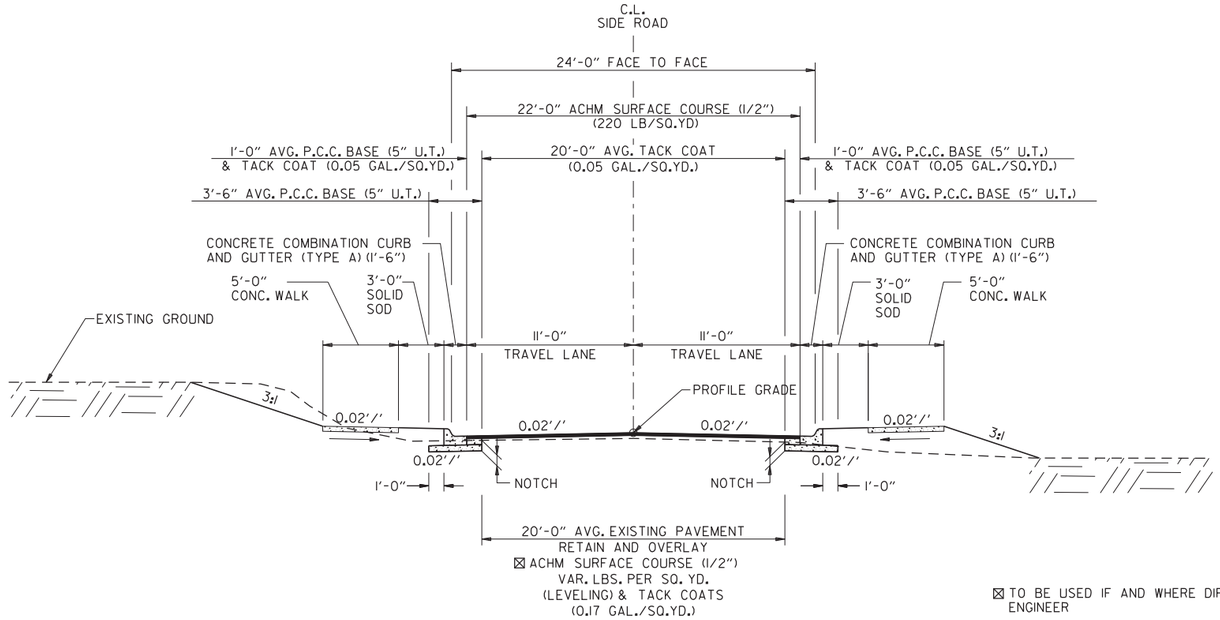
REFER TO PLAN SHEETS FOR SIDEWALK LOCATIONS.

TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE WALKS AT 45' INTERVALS.



☒ TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

CLINTON ST. TYPICAL 2-LANE NOTCH AND WIDEN CURB AND GUTTER SECTION

CLINTON ST. WEST STA. 38+90.00 TO STA. 39+72.00
CLINTON ST. EAST STA. 40+28.00 TO STA. 41+34.00

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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	31	549
		TYPICAL SECTIONS OF IMPROVEMENT				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
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SHAUN A. ROBERSON

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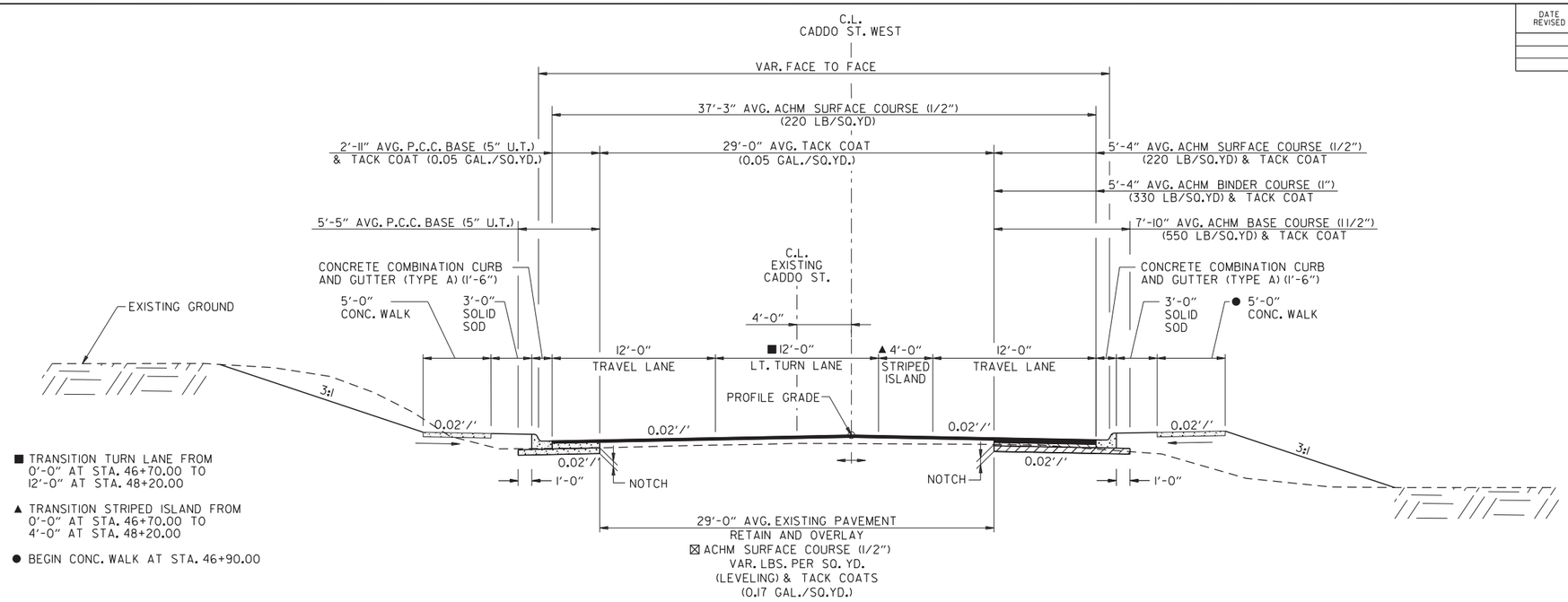


■ TRANSITION TURN LANE FROM 0'-0" AT STA. 46+70.00 TO 12'-0" AT STA. 48+20.00

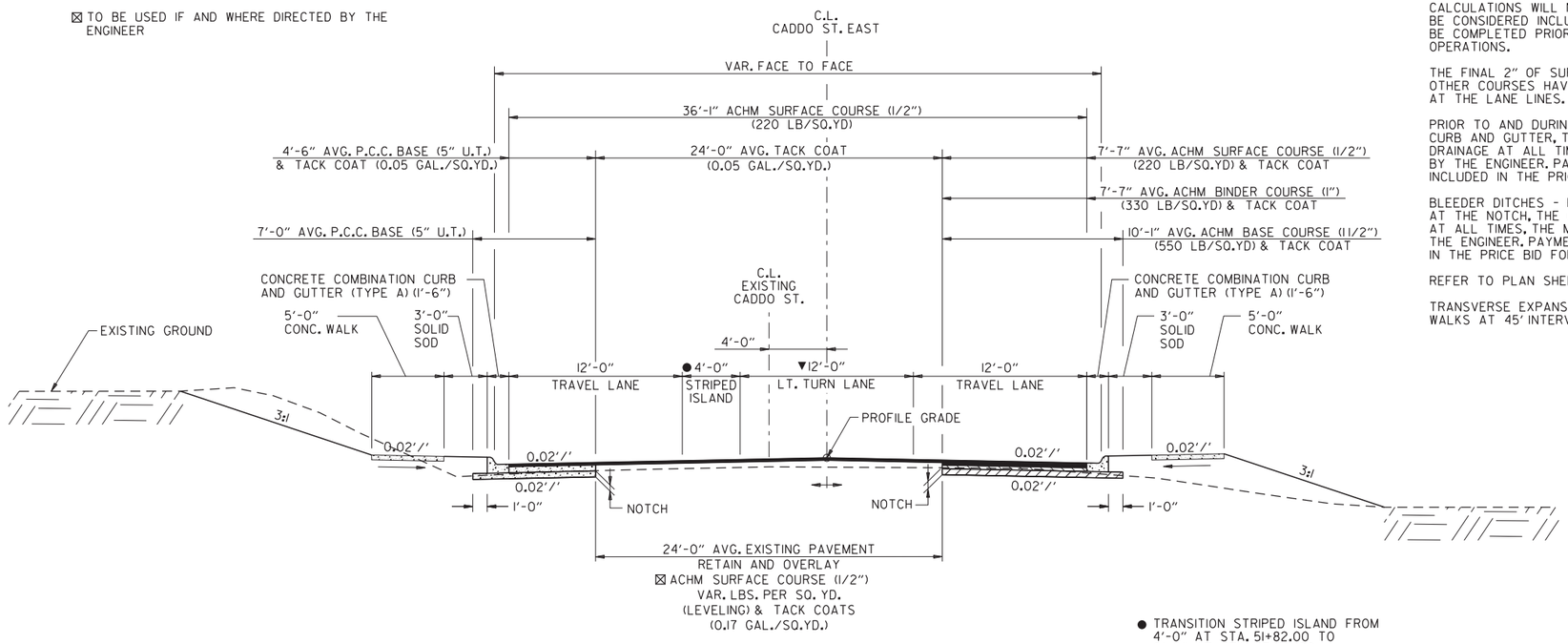
▲ TRANSITION STRIPED ISLAND FROM 0'-0" AT STA. 46+70.00 TO 4'-0" AT STA. 48+20.00

● BEGIN CONC. WALK AT STA. 46+90.00

CADDO ST. WEST TYPICAL 3-LANE CURB AND GUTTER SECTION W/ STRIPED ISLAND

STA. 46+70.00 TO STA. 49+72.00

☒ TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER



● TRANSITION STRIPED ISLAND FROM 4'-0" AT STA. 51+82.00 TO 0'-0" AT STA. 53+32.00

▼ TRANSITION TURN LANE FROM 12'-0" AT STA. 51+82.00 TO 0'-0" AT STA. 53+32.00

CADDO ST. EAST TYPICAL 3-LANE CURB AND GUTTER SECTION W/ STRIPED ISLAND

STA. 50+22.00 TO STA. 53+32.00

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TYPICAL SECTIONS OF IMPROVEMENT

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		TYPICAL SECTIONS OF IMPROVEMENT				

STATE OF ARKANSAS
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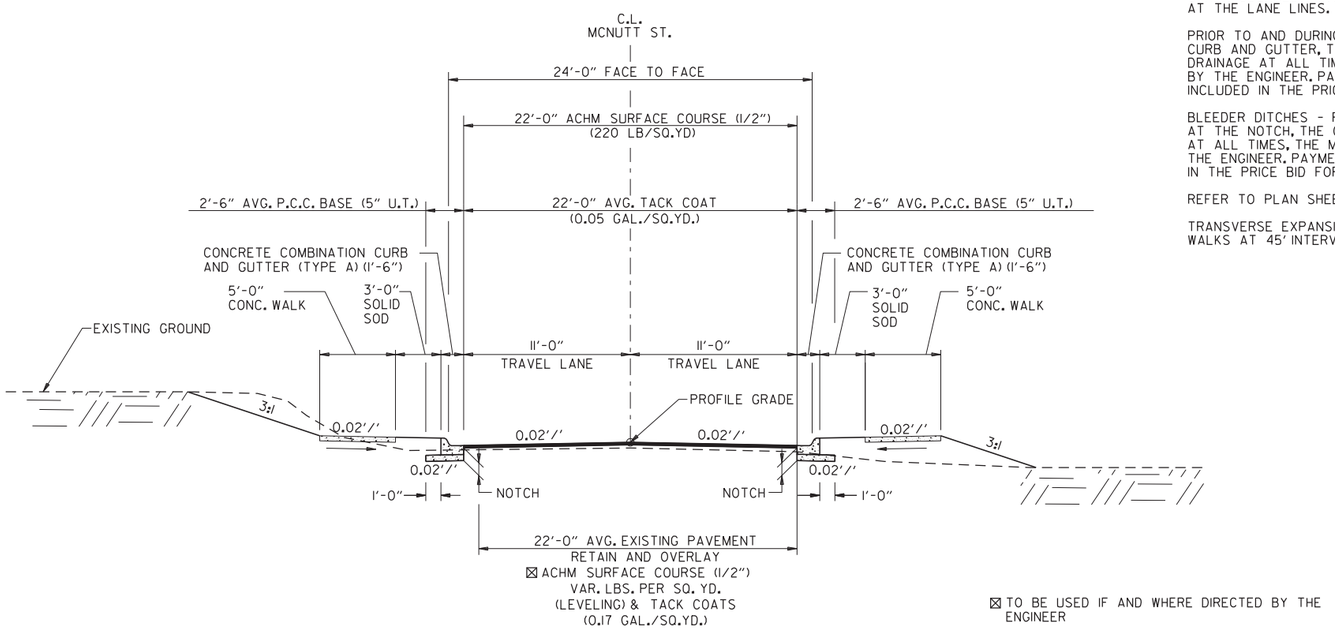

☒ TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

MCNUTT ST. TYPICAL 2-LANE NOTCH AND WIDEN CURB AND GUTTER SECTION

70+18.00 TO STA. 70+50.00

rnfortner 6/28/2022 10:28:01 AM
WORKSPACE: AHTD
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DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	33	549
		SPECIAL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
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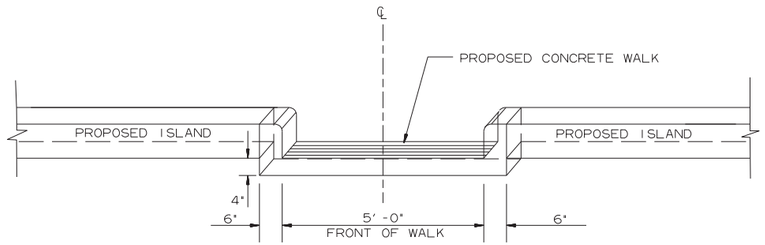
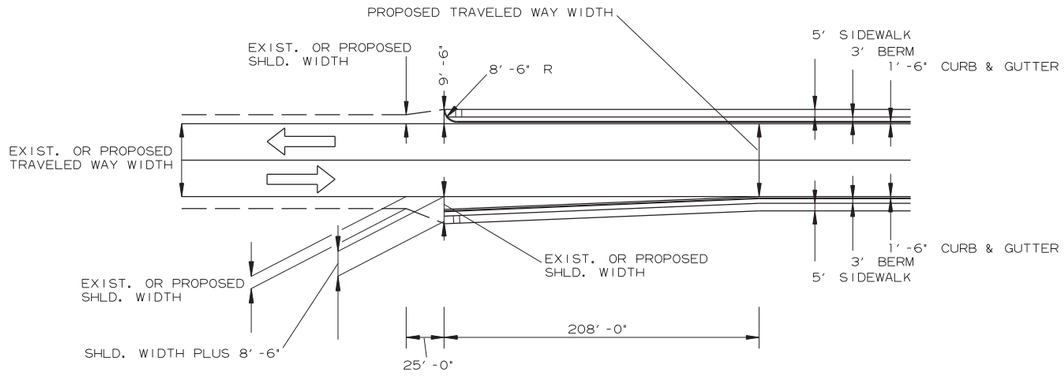


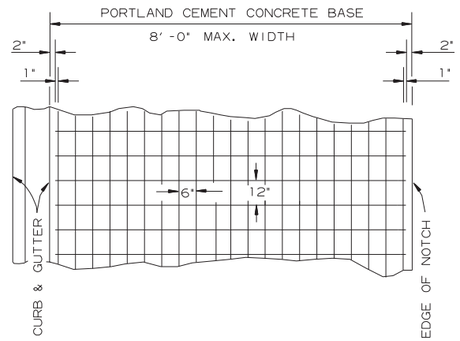
FACE SHALL MEET REQUIREMENTS OF TYPE B CURB

NOTE: CONCRETE WALK THROUGH ISLAND SHALL BE POURED MONOLITHICALLY. ALL MATERIALS REQUIRED TO CONSTRUCT CONCRETE WALK THRU ISLAND SHALL BE INCLUDED IN THE PRICE BID FOR CONCRETE ISLAND.

CONCRETE WALK THROUGH ISLAND



TRANSITION FROM OPEN SHOULDER TO CURB & GUTTER SECTION

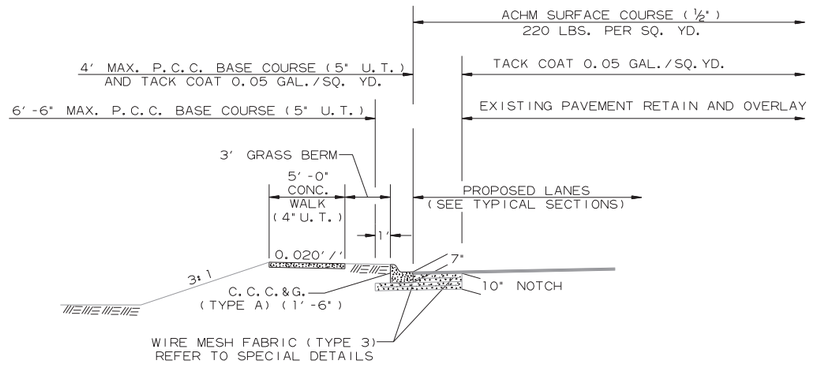


6" X 12" MESH FABRIC (TYPE 3) (W5.5 X W2.9) = 4.26 LBS./SQ.YD.

NOTES:

1. LAP MESH FABRIC MIN. 12" LONGITUDINALLY AND MIN. 6" TRANSVERSELY.
2. MESH FABRIC IS NOT REQUIRED WHEN WIDTH OF PORTLAND CEMENT CONCRETE BASE IS LESS THAN 12".
3. MESH FABRIC (TYPE 3) WILL NOT BE PAID FOR DIRECTLY, BUT FULL COMPENSATION THEREFORE WILL BE CONSIDERED INCLUDED IN THE CONTRACT PRICE BID PER SQ. YD. FOR PORTLAND CEMENT CONCRETE BASE (10" U.T.)

DETAIL OF REINFORCING STEEL FOR PAVEMENT (MESH FABRIC TYPE 3)



P.C.C. BASE WIDENING DETAIL

P.C.C. BASE WIDENING TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.

rnfortner 6/28/2022 10:28:04 AM
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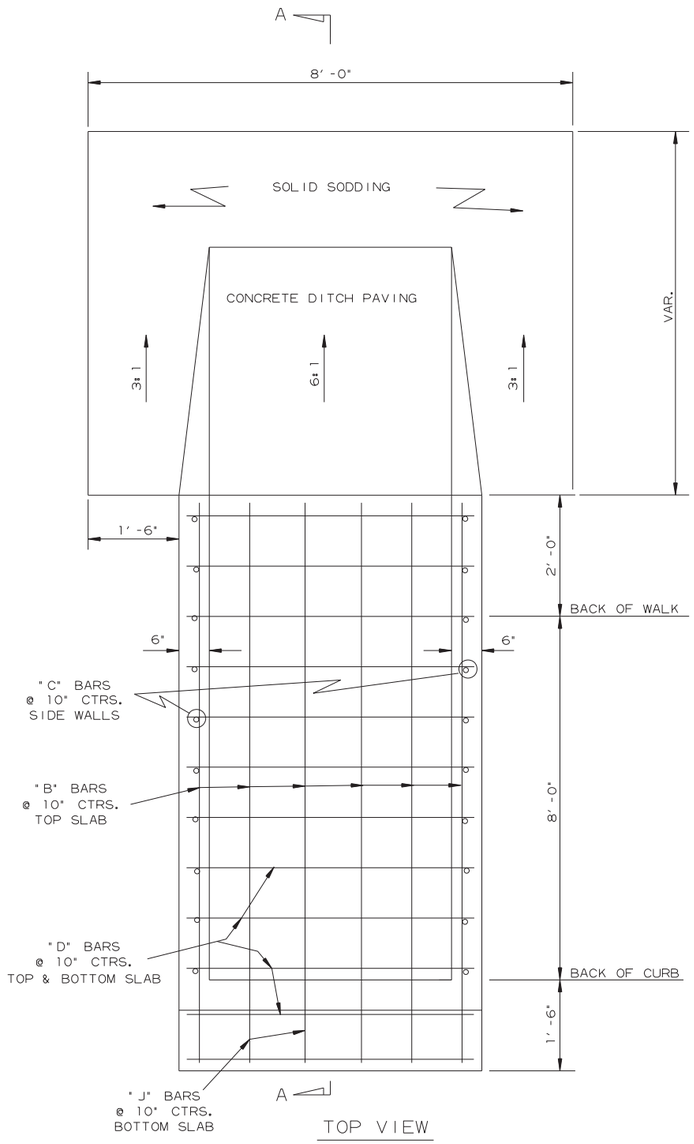
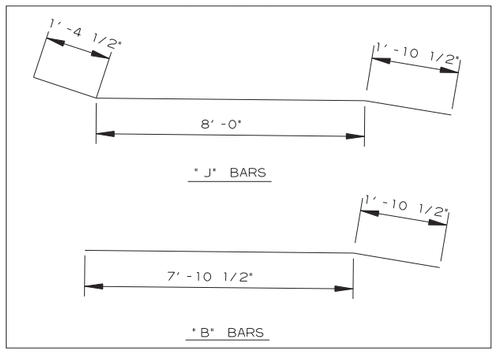


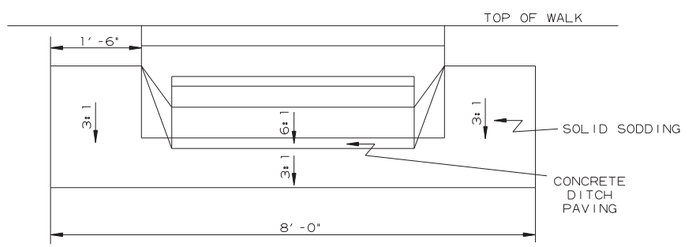
TOP VIEW

BAR DIAGRAM

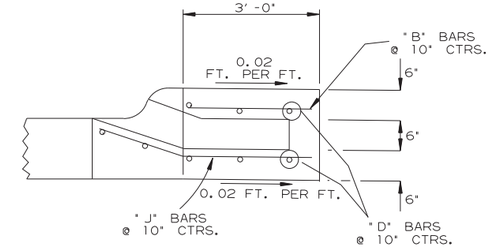


CLASS A CONC.	REINF. STEEL-RDWY. GRADE 60
CU. YDS.	POUND
2.53	207

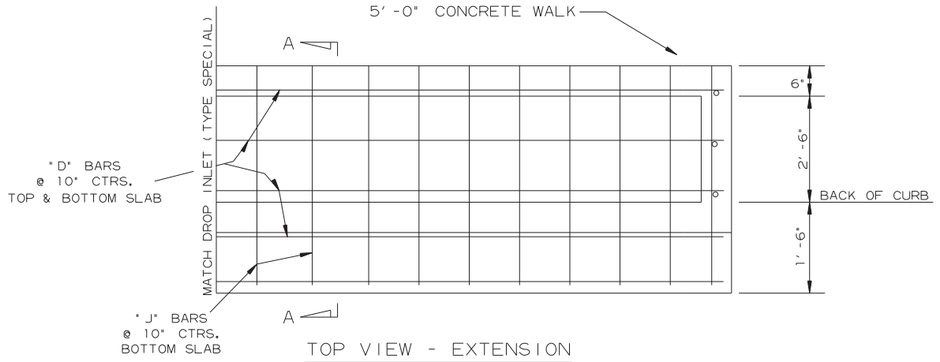
QUANTITIES FOR INFORMATION ONLY
DROP INLET (TYPE SPECIAL)



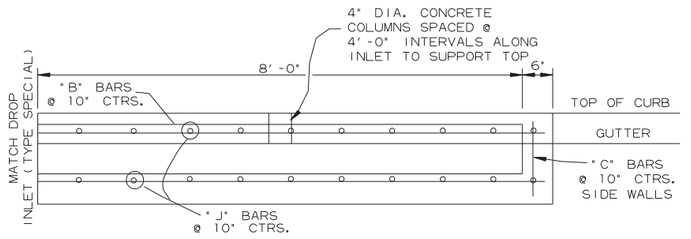
BACK VIEW



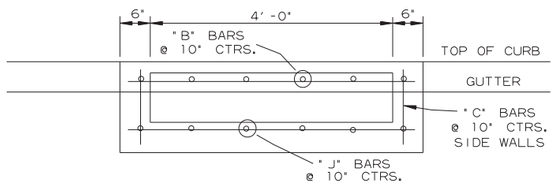
SECTION A-A - EXTENSION



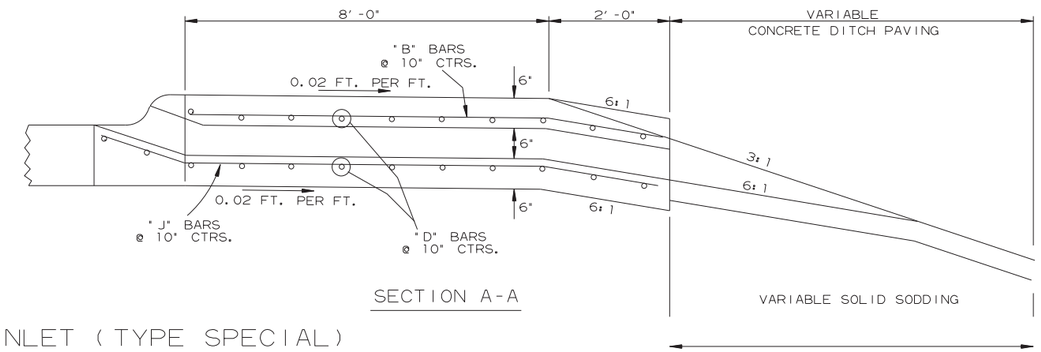
TOP VIEW - EXTENSION



FRONT VIEW - EXTENSION



FRONT VIEW



SECTION A-A

DROP INLET (TYPE SPECIAL)

GENERAL NOTES:

1. ALL EXPOSED CORNERS TO HAVE 3/4" CHAMFER.
2. ALL REINF. BARS SHALL BE #4 AND HAVE 1 1/2" COVER.
3. DROP INLETS AND EXTENSIONS ON CURVED SECTIONS SHALL CONFORM TO THE CURVATURE OF THE CURB.
4. DURING CONSTRUCTION OF THE ROADWAY THE CONTRACTOR SHALL MAINTAIN DRAINAGE INTO OR AROUND THE DROP INLET AS APPROVED BY THE ENGINEER.
5. PAYMENT FOR CURB AND/OR CURB AND GUTTER WITHIN THE LIMITS OF DROP INLETS AND DROP INLET EXTENSIONS SHALL BE CONSIDERED INCLUDED IN PAYMENT MADE FOR DROP INLETS AND/OR DROP INLET EXTENSIONS.
6. CONCRETE DITCH PAVING & SOLID SODDING SHALL BE PAID FOR SEPARATELY.
7. CONSTRUCT EXTENSIONS UPSTREAM OF DROP INLET UNLESS OTHERWISE SPECIFIED.

SPECIAL DETAILS

rnfortner 6/28/2022 10:28:04 AM
WORKSPACE: AHTD
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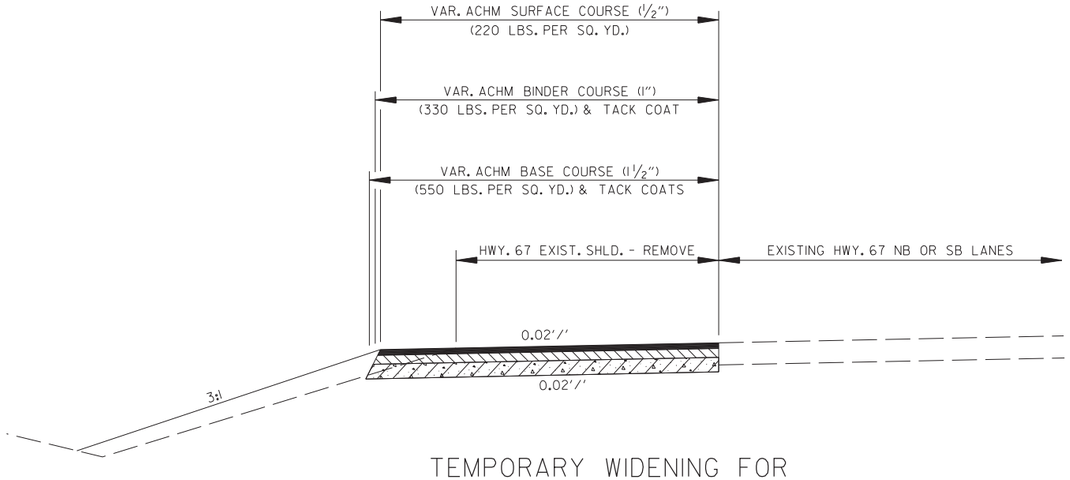
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	35	549
		SPECIAL DETAILS				

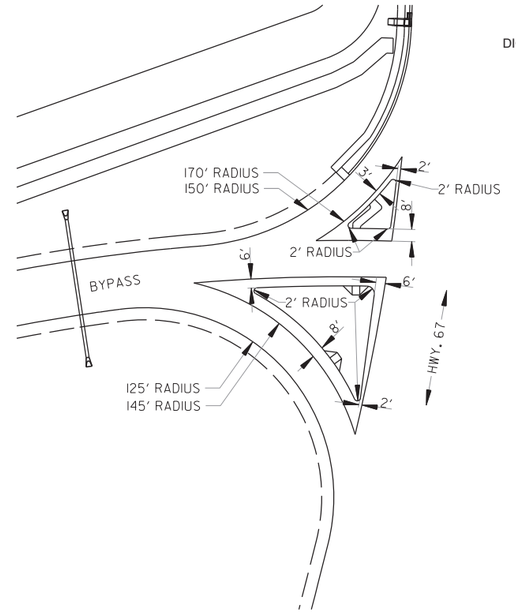
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

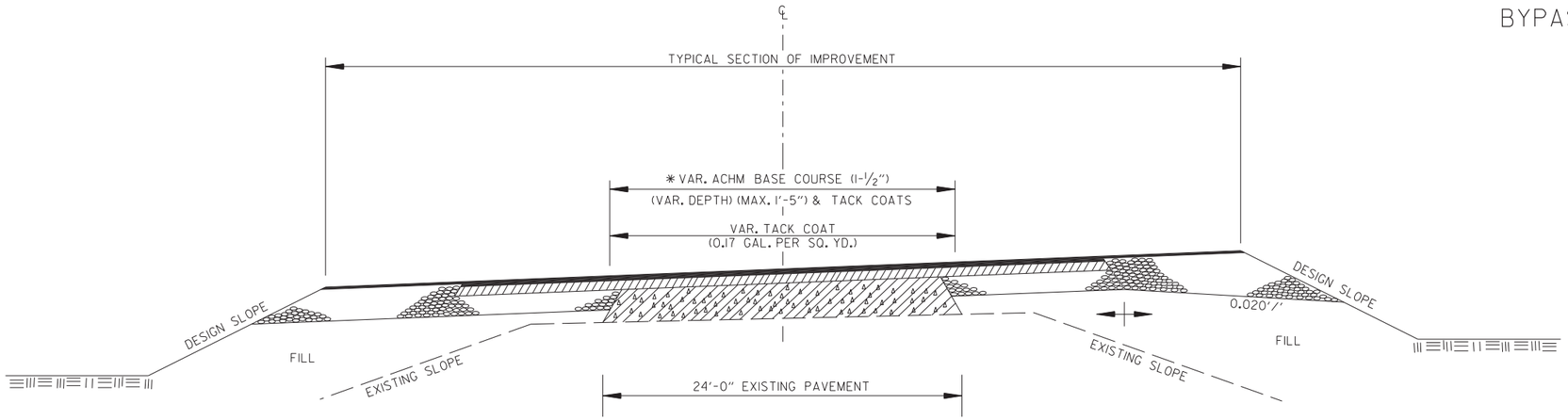


TEMPORARY WIDENING FOR MAINTENANCE OF TRAFFIC

THIS PAVEMENT SECTION TO BE USED ON HWY. 67
BETWEEN STA. 100+65.97 AND STA. 118+21.46
SEE MAINTENANCE OF TRAFFIC DETAILS
FOR LOCATIONS AND WIDTHS



BYPASS/HWY. 67 INTERSECTION ISLAND DETAILS



* X" AGGREGATE BASE COURSE (CLASS 7)
TO BE REPLACED WITH ACHM BASE COURSE (1-1/2")

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.

rnfortner 6/28/2022 10:28:05 AM
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
08-04-2022		6	ARK.	070442	36	549
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SHAUN A. ROBERSON

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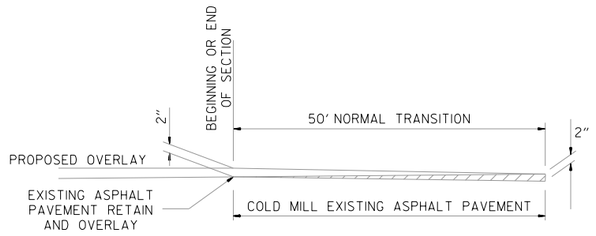
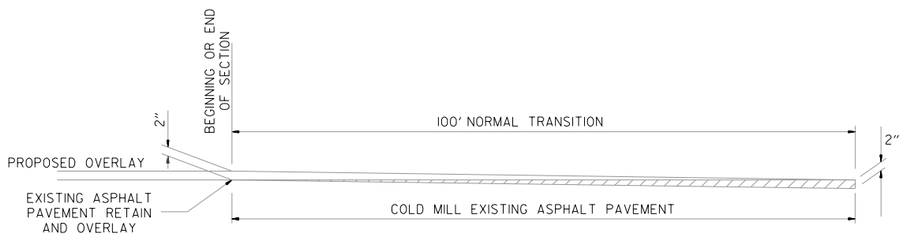
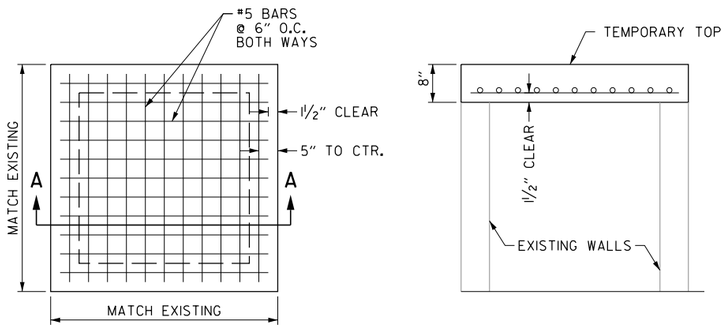


DETAIL FOR 50' TRANSITIONS

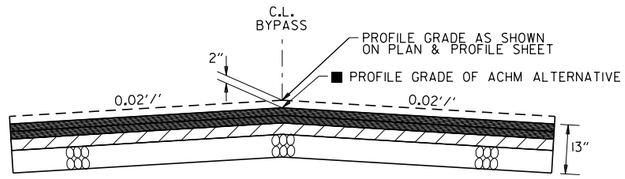


DETAIL FOR 100' TRANSITIONS



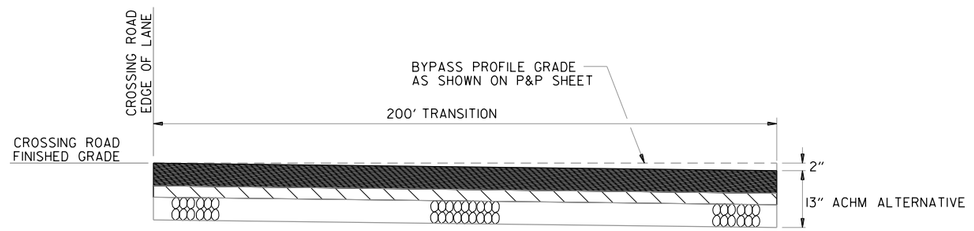
TOP VIEW SECTION A-A

DETAILS OF MODIFIED DROP INLET



■ PROFILE GRADE FOR THE BYPASS ACHM ALTERNATIVE SECTION IS 2" LOWER THAN SHOWN ON THE PLAN AND PROFILE SHEETS.

PROFILE GRADE DETAIL
FOR BYPASS ACHM ALTERNATIVE



TRANSITION AT CROSSING ROADS DETAIL
FOR BYPASS ACHM ALTERNATIVE

NOTE:
PROFILE GRADE SHOWN ON PLAN AND PROFILE SHEETS IS 15" ABOVE SUBGRADE. USE 1" PER 100' TRANSITION IN SUBGRADE TO MEET PAVEMENT GRADES AT CROSSING ROADS. TRANSITION IN SUBGRADE TO BE INCLUDED IN SUBGRADE PREPARATION.

PJoseph 8/5/2022 9:55:58 AM
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	37	549
		SPECIAL DETAILS				

STATE OF ARKANSAS
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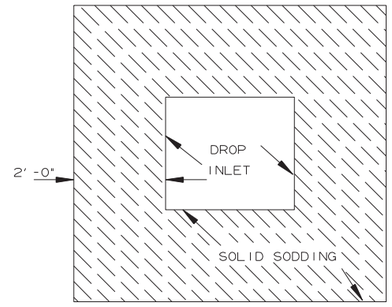
No.13436
SHAUN A. ROBERSON

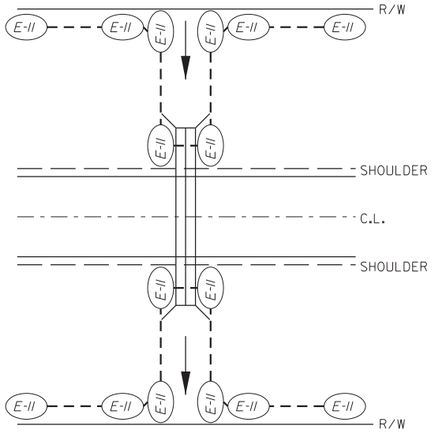
DIGITALLY SIGNED 06/28/2022

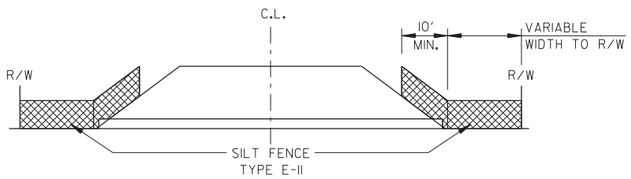
6.0" Radius, 1.3" Border, Black on Orange;
"Job XXXXXX" C 2K; "Start Date Mo Year" C 2K;
"Est Completion Mo Year" C 2K; "IDRIVE " Arial;
" ARKANSAS.COM " Arial;

CONSTRUCTION PROJECT INFORMATION SIGN

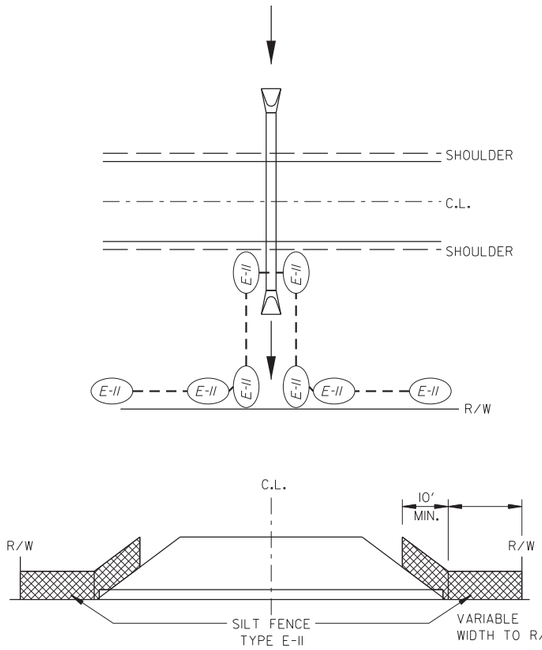


DETAIL FOR SOLID SODDING
AROUND DROP INLETS

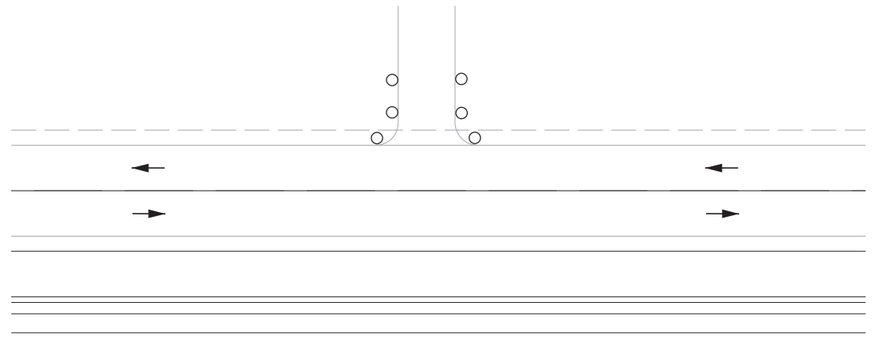




DETAILS OF SILT FENCE
AT R.C. BOX



DETAILS OF SILT FENCE
AT CROSS DRAINS



TRAFFIC DRUMS = 6 EACH (10' O.C.)

DRIVEWAY/TRAFFIC DRUM DETAIL

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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	38	549
		SPECIAL DETAILS				

STATE OF ARKANSAS
Shaun Robertson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERTSON

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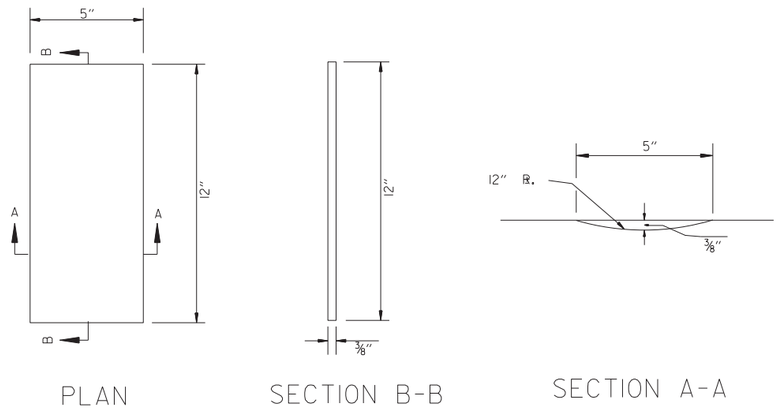
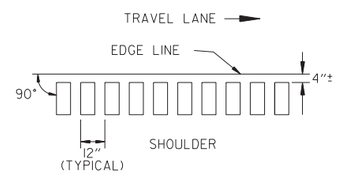


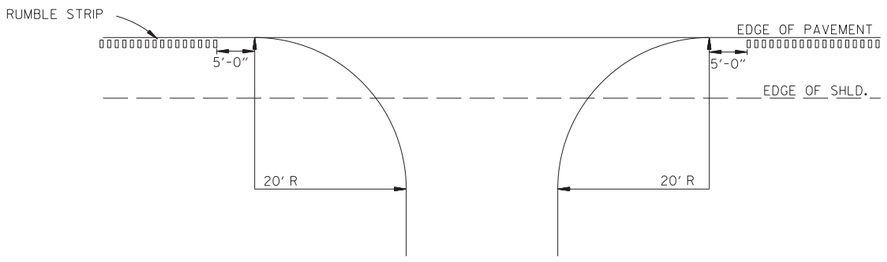
DETAILS OF RUMBLE STRIPS

NOTE:

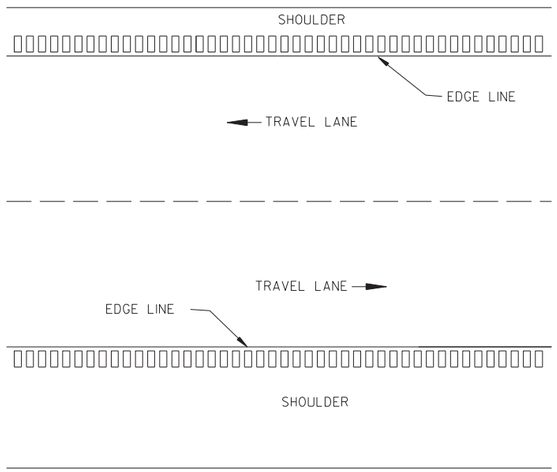
RUMBLE STRIPS LOCATED WITHIN THE FUTURE 5-LANE SECTION SHALL BE PLACED AT THE INTERIM 2-LANE EDGE LINE AS SHOWN IN THE PERMANENT PAVEMENT MARKING DETAILS.



LOCATION PLAN OF RUMBLE STRIPS
LEFT OR RIGHT SHOULDER



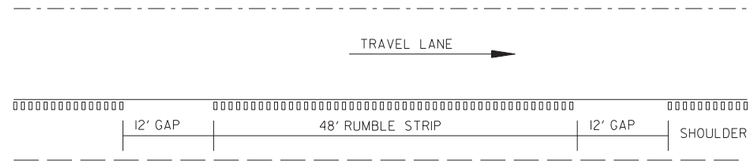
DETAIL FOR RUMBLE STRIP GAP
AT DRIVEWAY TURNOUTS



PLAN VIEW

GENERAL NOTES

1. RUMBLE STRIPS SHALL NOT BE INSTALLED ON CURB SECTIONS, BRIDGE DECKS, APPROACH SLABS, INTERSECTING STREETS OR ROADWAYS, RESIDENTIAL OR COMMERCIAL DRIVEWAYS OR ACROSS TRANSVERSE JOINTS OF CONCRETE SHOULDERS.
2. RUMBLE STRIPS SHALL NOT BE INSTALLED ON A PAVED SHOULDER THAT IS USED AS A DECELERATION LANE FOR THE LENGTH DEEMED APPROPRIATE BY THE ENGINEER.
3. THE 4″ OFFSET FROM THE EDGE LINE MAY BE INCREASED TO AVOID LONGITUDINAL JOINTS. IN ALL CASES, THE LATERAL DEVIATION FROM THE PLANNED OFFSET SHOULD BE KEPT TO A MINIMUM.
4. RUMBLE STRIPS SHALL BE MEASURED BY THE LINEAR FOOT LONGITUDINALLY ALONG THE SHOULDER. PAYMENT SHALL ONLY INCLUDE THAT PORTION OF THE SHOULDER ON WHICH RUMBLE STRIPS HAVE BEEN CONSTRUCTED. NO MEASUREMENT OR PAYMENT WILL BE MADE FOR GAPS, DRIVEWAYS, TURNOUTS, OR OTHER PUBLIC ROAD INTERSECTIONS WHERE RUMBLE STRIPS HAVE NOT BEEN CONSTRUCTED.
5. THE 3/8″ DEPTH SHALL GENERALLY APPLY FOR THE ENTIRE 12″ LENGTH. SOME VARIATION TO SUIT SHOULDER SLOPE BREAKS MAY BE NECESSARY.



NOTE: GAP PATTERN SHALL BE ADJUSTED BY THE ENGINEER IN THE FIELD ALLOWING FOR DRIVEWAYS TO SERVE AS THE GAP.

DETAIL FOR GAP PATTERN RUMBLE STRIP

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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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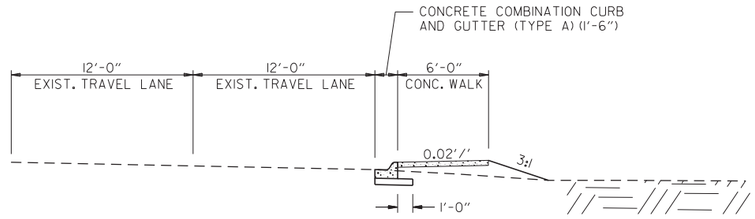

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON

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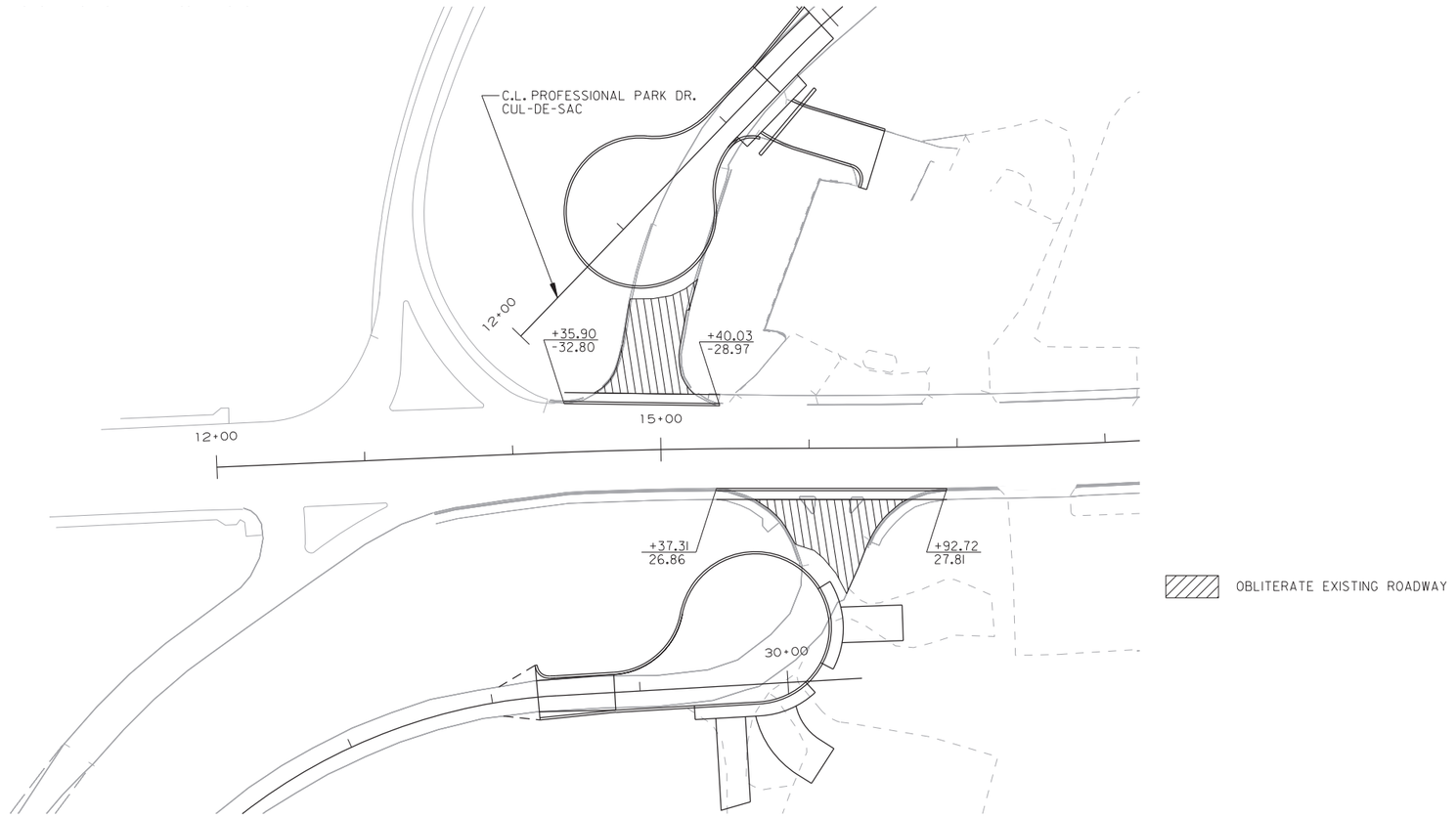
HWY. 51 CURB AND SIDEWALK CROSS SECTION DETAIL (SHOWN IN DIRECTION OF TRAFFIC)

STA. 14+35.90 TO STA. 15+42.36
STA. 15+98.73 TO STA. 16+77.21



HWY. 51 CURB & SIDEWALK PLAN DETAILS

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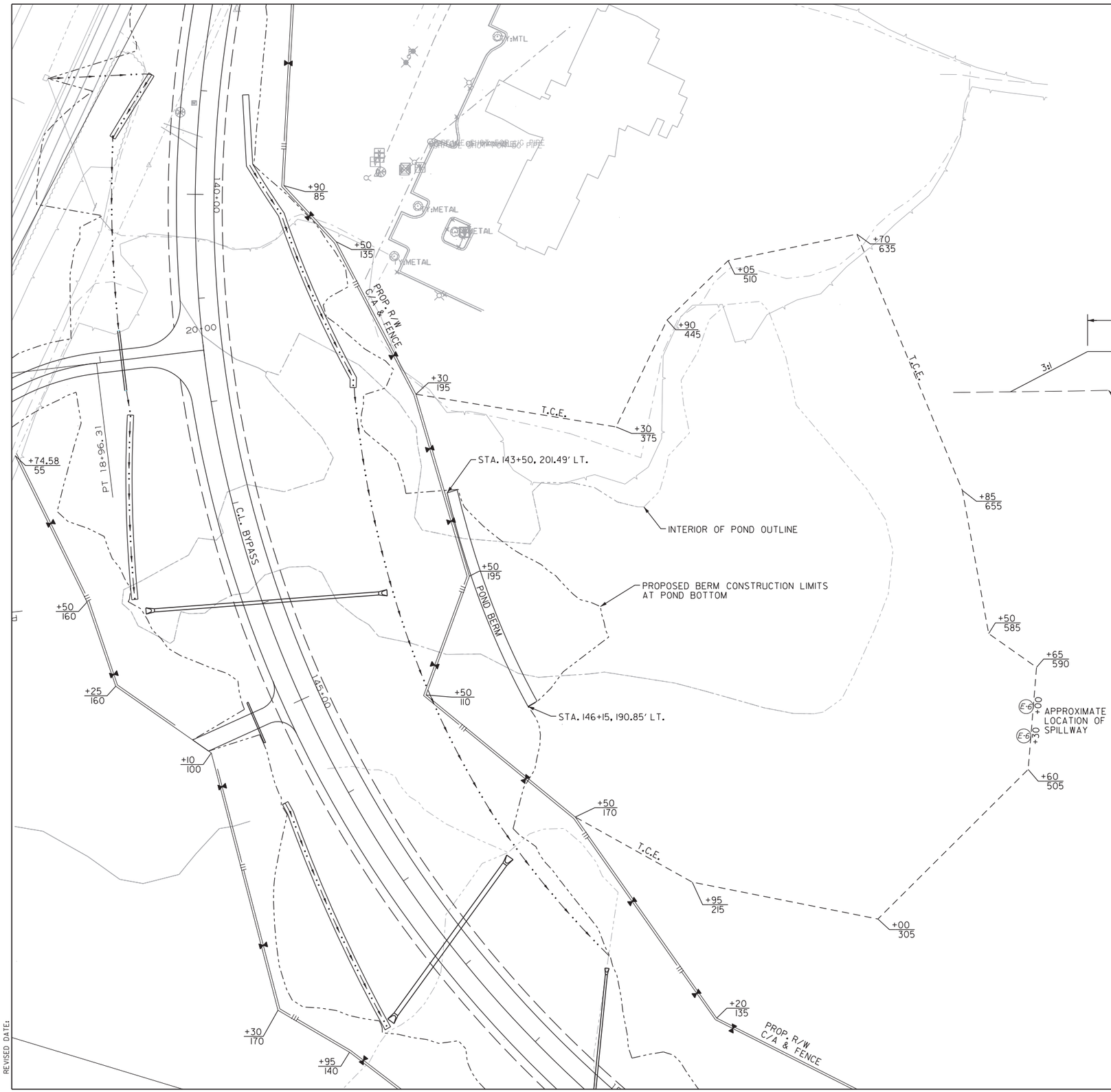

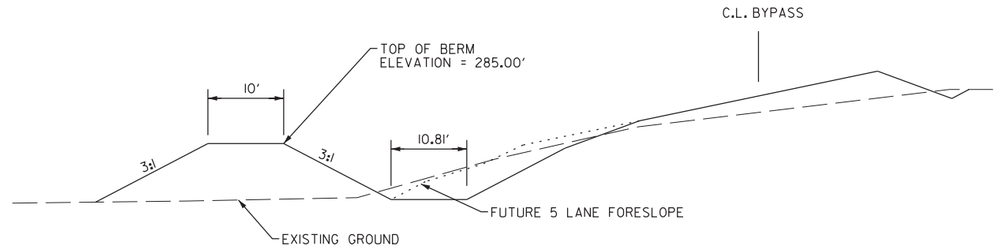

POND BERM
NOT TO SCALE

STA. 143+50 TO STA. 146+15

NOTE: A 10.81' FLAT BOTTOM DITCH IS REQUIRED IN ORDER TO MATCH THE FUTURE 5 LANE DITCH INTERCEPT WITH THE BERM EMBANKMENT

rnfortner 6/28/2022 10:28:06 AM
WORKSPACE: AHTD
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REVISED DATE:

HOTEL POND TCE DETAIL
SPECIAL DETAILS

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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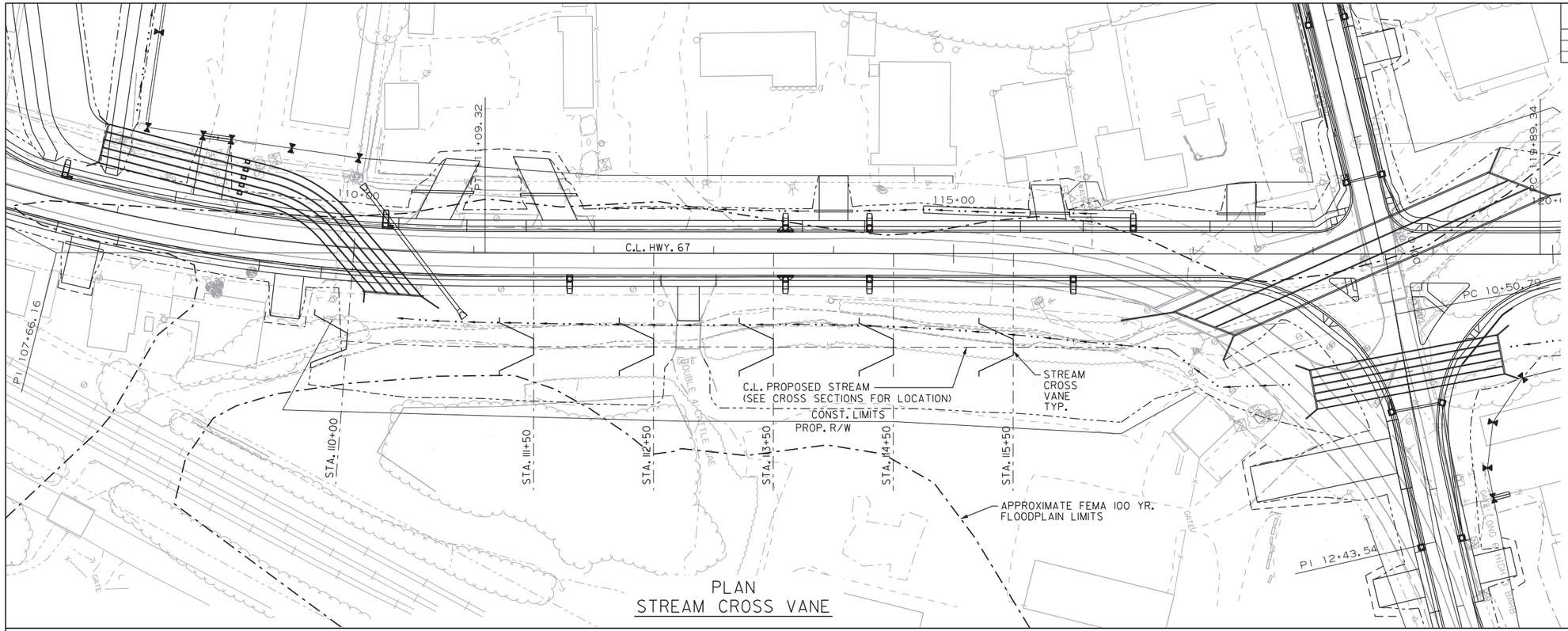
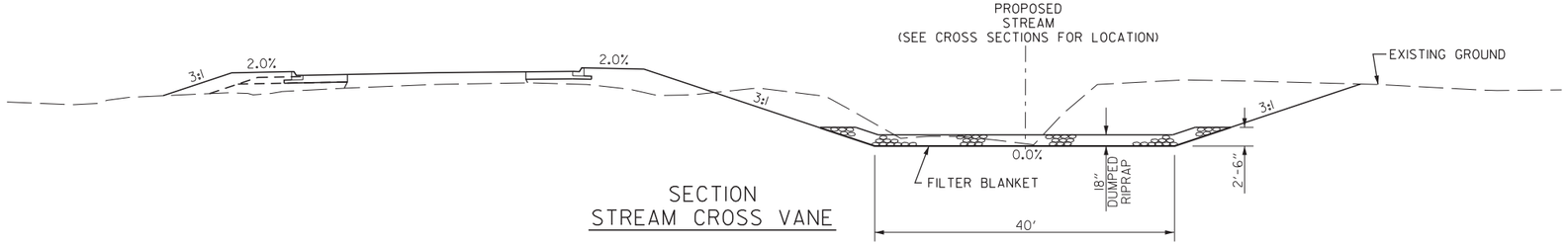
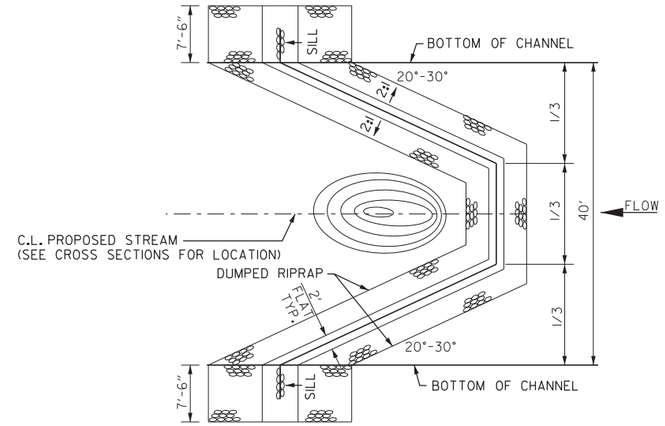


PLAN
STREAM CROSS VANE



SECTION
STREAM CROSS VANE



DETAIL
STREAM CROSS VANE

SPECIAL DETAILS

STATE OF ARKANSAS
Shaun Roberson
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No.13436
SHAUN A. ROBERSON

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rnfortner 6/28/2022 10:28:06 AM
WORKSPACE: AHTD
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REVISED DATE:

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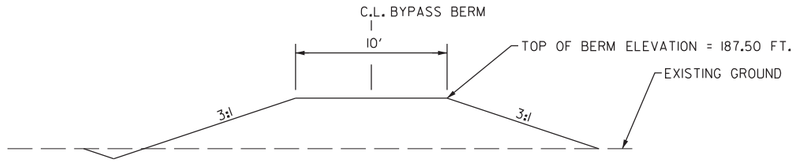
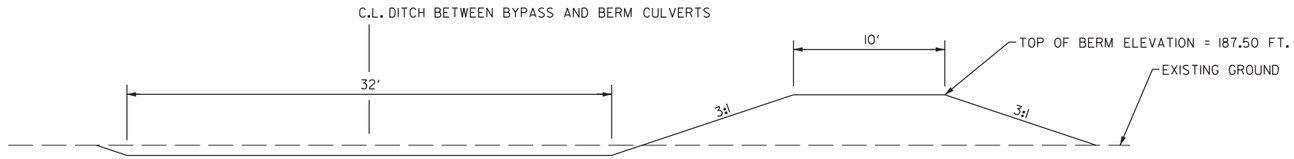
SPECIAL DETAILS



BYPASS BERM



DITCH BETWEEN BYPASS AND BERM CULVERTS

STATE OF ARKANSAS
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SHAUN A. ROBERSON
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STA. 12+63 INSTALL
(2) 24"x32' PIPE CULVERT
SIDE DRAIN
F.L. IN = 184.12
F.L. OUT = 183.83

STA. 14+80.00
END DITCH (0.22%)
ELEV. 184.60

STA. 12+62.00
END DITCH (-0.46% SLOPE)
BEGIN DITCH (+0.22% SLOPE)
ELEV. 184.12

STA. 10+40.00
BEGIN DITCH (-0.46%)
ELEV. 185.15

C.L. BYPASS BERM

C.L. DITCH BETWEEN BYPASS AND BERM CULVERTS

STA. 20+00.00
BEGIN DITCH (0.20%)
ELEV. 183.20

STA. 24+65.77
END DITCH (0.20%)
ELEV. 184.14

C.L. BYPASS

C.L. HWY. 67

POND

ABANDONED

BYPASS BERM AND DITCH BETWEEN BYPASS AND BERM CULVERTS SPECIAL DETAILS

rnfortner 6/28/2022 10:28:07 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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		SPECIAL DETAILS				

STATE OF ARKANSAS
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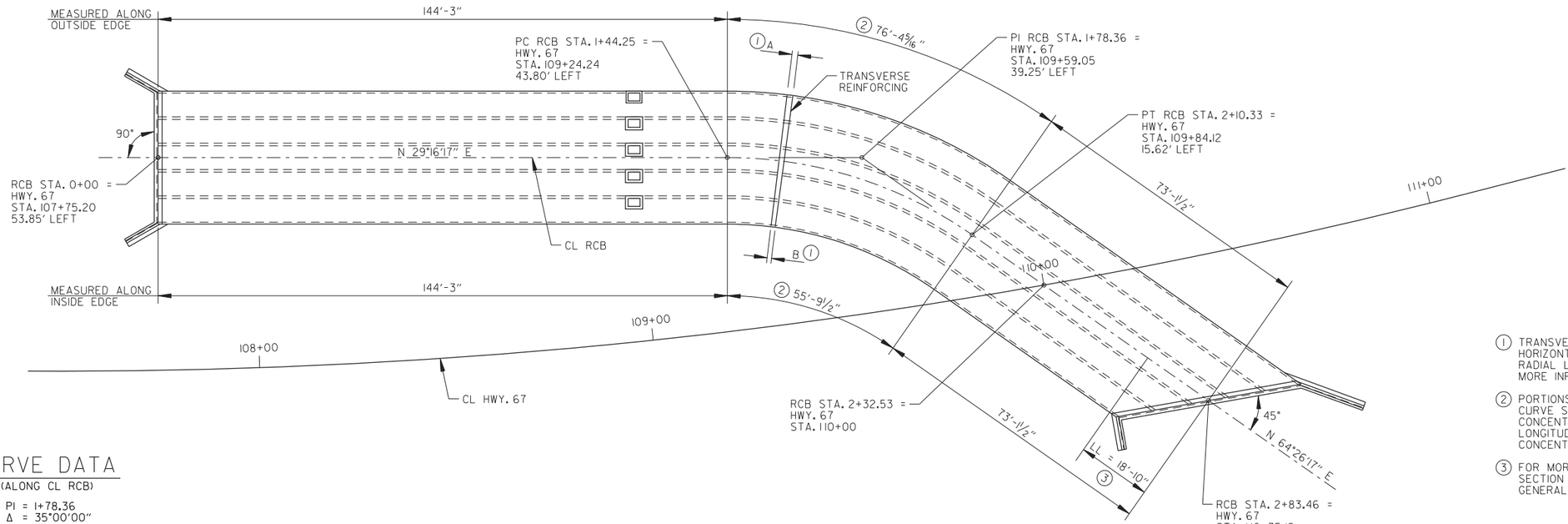


CURVE DATA
(ALONG CL RCB)

PI = 1+78.36
Δ = 35°00'00"
R = 108.167'
L = 66.075'
T = 34.11
PC STA. = 1+44.25
PT STA. = 2+10.33

PLAN - QUINTUPLE BARREL BOX CULVERT
STA. 110+00

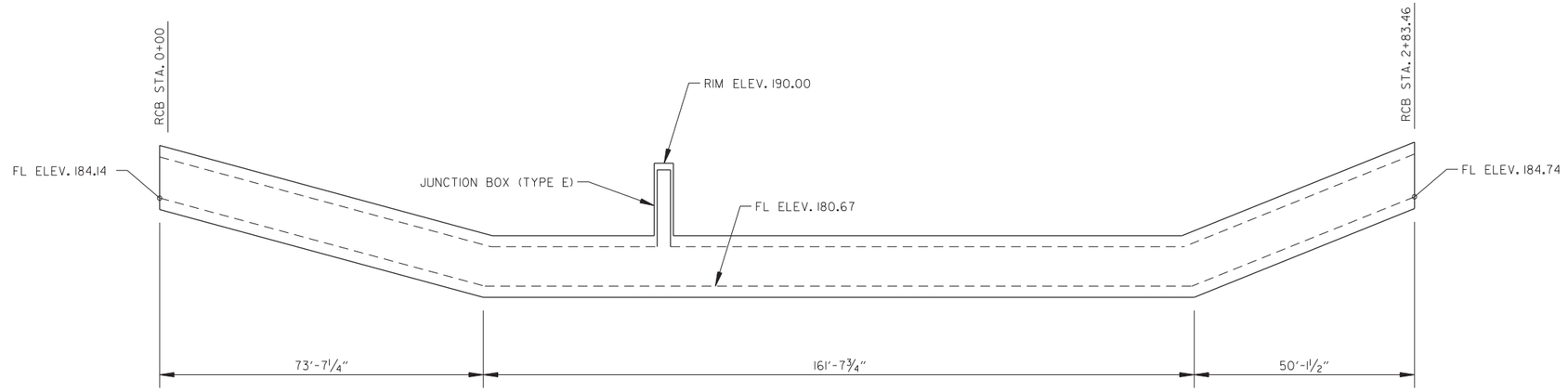
(1) TRANSVERSE REINFORCING WITHIN LIMITS OF HORIZONTAL CURVE SHALL BE PLACED ALONG RADIAL LINES. SEE "BAR SPACING TABLE" FOR MORE INFORMATION.

(2) PORTIONS OF BOX CULVERT WITHIN HORIZONTAL CURVE SHALL BE CONSTRUCTED ON CURVES CONCENTRIC WITH THE ARC ALONG CL RCB. LONGITUDINAL REINFORCING SHALL BE PLACED CONCENTRIC TO CL RCB ARC.

(3) FOR MORE INFORMATION, SEE "SKEWED END SECTION DETAILS" ON SHEET 3 OF 4 OF GENERAL DETAILS OF R.C. BOX CULVERT.

BAR SPACING TABLE

	A	B
TOP SLAB	1'-6"	1'-1 1/8"
BTM. SLAB	2'-0"	1'-5 1/2"



PROFILE - QUINTUPLE BARREL BOX CULVERT
STA. 110+00

0+00 1+00 2+00 3+00

rnfortner 6/28/2022 10:28:07 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	44	549
		SPECIAL DETAILS				

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
20'-6"	6'-0"	0'-9"	0'-8"	45	3:1	27'-4 1/8"	2'-0"	6'-10"	2'-0"	0	60	3'-2"	3'-2"	3'-9"	0'-6"	0'-5 1/8"	14'-6"	29'-0"	16'-4 1/8"	36'-8 3/8"

CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if required)
INLET	INLET
CU.YD	LBS.
11.93	1114

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	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	15	L Min 3'-0"	L -	-	-	-	L -	-	-	-	L -	4	18	4	Min	4	18	4	14'-2"	4	18	10	L Min 4'-9"	4	4	8	17'-2"	6	18	10	Min	-	-	-	Min	4	2	14'-10"	4	2	15'-4"	6	'2	6	L 3'-4"	378
				Max 7'-8"													4'-10"								Max 9'-3"							2'-8"				Max										X 1'-8"	
				X Min 0'-9"	X -				X -				X -				Max								L Min 2'-4"							Max				-										
				Max 0'-9"													9'-4"								Max 2'-4"							2'-8"														
				Y Min 2'-4"	Y -				Y -				Y -				Min								Y Min 2'-6"							Min				Min										
				Max 7'-0"													2'-8"								Max 7'-0"							Max				-										
WING B	4	12	29	L Min 3'-0"	L -	-	-	-	L -	-	-	-	L -	4	18	4	Min	4	18	4	28'-8"	4	18	20	L Min 4'-7"	4	4	8	37'-6"	6	18	20	Min	-	-	-	Min	4	2	28'-11"	4	2	31'-9"	6	'2	6	L 3'-4"	736
				Max 8'-3"													9'-10"								Max 9'-3"							2'-8"				Max										X 1'-8"	
				X Min 0'-9"	X -				X -				X -				Max								L Min 2'-4"							Max				-										
				Max 1'-4"													18'-10"								Max 2'-4"							3'-3"														
				Y Min 2'-4"	Y -				Y -				Y -				Min								Y Min 2'-4"							Min				Min										
				Max 7'-0"													2'-8"								Max 7'-0"							Max				-										

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.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

TABULAR DATA BY: CGG DATE: 10/4/2021
CHECKED BY: SAR DATE: 12/20/2021

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	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	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	BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e" SIZE	"e" SPACING	"e" NO. REQ'D	"e" LENGTHS VARY	SIDE WALL DISTRIBUTION REINFORCING STEEL "d1" SIZE	"d1" SPACING	"d1" NO. REQ'D	"d1" LENGTH	INTERIOR WALL DISTRIBUTION REINFORCING STEEL "d2" SIZE	"d2" SPACING	"d2" NO. REQ'D	"d2" LENGTH
SK	SL	D	S	H	LL	T	HD	B	C	W	OW	OH																																								
45	3:1	5	6	6	12'-3"	8	3	9	7	8	20'-6"	7'-5"	5	7	Max 20'-2" Min 2'-2"	31	6	8	Max 20'-2" Min 2'-2"	28	4	10	Max 20'-2" Min 2'-2"	22	4	11	Max 20'-2" Min 2'-2"	20	4	5.5	55	7'-1"	4	12	52	7'-1"	4	12	41	Max 22'-4" Min 1'-10"	4	12	41	Max 22'-4" Min 1'-10"	4	12	6	LONG 21'-11" SHORT 2'-3"	4	12	12	LONG 15'-5" SHORT 8'-9"
															20'-2"	4			20'-2"	3			20'-2"	3			20'-2"	3																											

CLASS "S" CONCRETE (Includes HDWL)	REINFORCING STEEL (GR 60) (Includes HDWL) ①
CU. YDS.	LBS.
20.56	3120

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

"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
4	28'-8"	6	4	28'-8"	6	4	1'-7"	0'-7"	30

INLET 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	SPACING	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	SPACING	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
D	S	H	T	B	C	W	OW	OH	SL																																								

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

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

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.)	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.)	TOP SLAB REINFORCING STEEL LENGTH = OW - 4" + BENDS "a" SIZE	"a" L	Bent "b" SIZE	Bent "b" L	"c" SIZE	"c" L	SPACING	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	SPACING	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 REINF. STEEL "g" LENGTH = SL SIZE	SPACING	NO. REQ'D	BOTTOM SLAB DISTRIBUTION REINF. STEEL "e" LENGTH = SL SIZE	SPACING	NO. REQ'D	SIDE WALL DISTRIBUTION REINF. STEEL "d1" LENGTH = SL SIZE	SPACING	NO. REQ'D	INTERIOR WALL DISTRIBUTION REINF. STEEL "d2" LENGTH = SL SIZE	SPACING	NO. REQ'D
D	S	H	T	B	C	W	OW	OH	SL																																								
A	5	6	6	8	9	7	8	20'-6"	7'-5"	115.5	4	20'-2"	7	20'-6"	5	20'-2"	16	86	4	20'-2"	4	20'-6"	4	20'-2"	20	69	4	5.5	504	7'-1"	4	12	460	7'-1"	4	12	41	4	12	41	4	12	41	4	12	12	4	12	24

CLASS "S" CONCRETE CU. YDS.	REINFORCING STEEL (GR. 60) LBS.
188.40	23110

SHEET 1 OF 2
DETAILS OF R.C. BOX CULVERT
TRIPLE BARREL BOX CULVERT
Sta. 197+95

SPECIAL DETAILS

LRFD

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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	45	549
		SPECIAL DETAILS				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

TABULAR DATA BY: CGG DATE: 10/4/2021
CHECKED BY: SAR DATE: 12/20/2021

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
20'-6"	6'-0"	0'-9"	0'-8"	45	3:1	27'-4 1/8"	2'-0"	6'-10"	2'-0"	0	60	3'-2"	3'-2"	3'-9"	0'-6"	0'-5 1/8"	14'-6"	29'-0"	16'-4 1/8"	36'-8 3/8"

CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if required)
OUTLET	OUTLET
CU.YD	LBS.
13.10	1114

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	F5 BAR SIZE	F5 SPACING	F5 NO. REQ'D	F5 LENGTHS
WING A	4	12	15	L	Min	3'-0"				L -				L -	4	18	4	Min	4	18	4	14'-2"
					Max	7'-8"												4'-10"				
				X	Min	0'-9"	-	-	-	X -	-	-	-	X -				Max				
					Max	0'-9"												9'-4"				
				Y	Min	2'-4"				Y -				Y -								
					Max	7'-0"																
WING B	4	12	29	L	Min	3'-0"				L -				L -	4	18	4	Min	4	18	4	28'-8"
					Max	8'-3"												9'-10"				
				X	Min	0'-9"	-	-	-	X -	-	-	-	X -				Max				
					Max	1'-4"												18'-10"				
				Y	Min	2'-4"				Y -				Y -								
					Max	7'-0"																

WING	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	F11 BAR SIZE	F11 NO. REQ'D	F11 LENGTHS
WING A	4	18	10	L	Min	4'-9"	4	8	17'-2"	6	18	10	Min	-	-	-	Min	4	2	14'-10"	4	2	15'-4"
					Max	9'-3"							2'-8"				-						
				X	Min	2'-4"							Max				Max						
					Max	2'-4"							2'-8"				-						
				Y	Min	2'-6"																	
					Max	7'-0"																	
WING B	4	18	20	L	Min	4'-7"	4	8	37'-6"	6	18	20	Min	-	-	-	Min	4	2	28'-11"	4	2	31'-9"
					Max	9'-3"							2'-8"				-						
				X	Min	2'-4"							Max				Max						
					Max	2'-4"							3'-3"				-						
				Y	Min	2'-4"																	
					Max	7'-0"																	

WING	F12 BAR SIZE	F12 SPACING	F12 NO. REQ'D	F12 LENGTHS			REINF. STEEL QTY. PER WING (LBS)
WING A	6	12	6	L	3'-4"		378
				X	1'-8"		
WING B	6	12	6	L	3'-4"		736
				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 (Grade 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 REINF. STEEL "a" SIZE	"a" SPACING	"a" LENGTHS VARY	"a" NO. REQ'D	TOP SLAB REINF. STEEL "c" SIZE	"c" SPACING	"c" LENGTHS VARY	"c" NO. REQ'D	BOTTOM SLAB REINF. STEEL "d" SIZE	"d" SPACING	"d" LENGTHS VARY	"d" NO. REQ'D	BOTTOM SLAB REINF. 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																
45	3:1	5	6	6	12'-3"	8	3	9	7	8	20'-6"	7'-5"	5	7	Max 20'-2" Min 2'-2" 20'-2"	31 4	6	8	Max 20'-2" Min 2'-2" 20'-2"	28 3	4	10	Max 20'-2" Min 2'-2" 20'-2"	22 3	4	11	Max 20'-2" Min 2'-2" 20'-2"	20 3

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
4	5.5	55	7'-1"	4	12	52	7'-1"	4	12	41	Max 22'-4" Min 1'-10"	4	12	41	Max 22'-4" Min 1'-10"	4	12	6	LONG 21'-11" SHORT 2'-3"	4	12	12	LONG 15'-5" SHORT 8'-9"

CLASS "S" CONCRETE (Includes HDWL) CU. YDS.	① REINFORCING STEEL (GR 60) (Includes HDWL) LBS.
20.56	3120

"k1" HDWL BARS SIZE	LENGTH	NO. REQ'D	"k2" HDWL BARS SIZE	LENGTH	NO. REQ'D	"h" HDWL BARS SIZE	LENGTH	Y	NO. REQ'D
4	28'-8"	6	4	28'-8"	6	4	1'-7"	0'-7"	30

OUTLET SLOPE SECTION(S)

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

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

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

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. 197+95

SPECIAL DETAILS

LRFD

rnfortner 6/28/2022 10:28:18 AM
WORKSPACE: AHTD
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V 1.17
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	46	549
		SPECIAL DETAILS				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

TABULAR DATA BY: CGG DATE: 10/4/2021
CHECKED BY: SAR DATE: 12/20/2021

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	CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if required)
																					INLET	INLET
OW	H	WB	CW	SK	SL	K	HL	WH1	WH2	AF1	AF2	WE	WF1	WF2	G1	G2	W1	W2	W3	W4	CU.YD	LBS.
5'-0"	3'-0"	0'-9"	0'-8"	15	3:1	4'-1 3/4"	1'-0"	3'-10"	1'-0"	15	45	2'-2"	2'-2"	2'-2"	0'-3"	0'--3 -1/2"	8'-6"	12'-0"	10'-4 5/8"	13'-10 5/8"	3.32	361

WING	F1 BAR SIZE	F1 MAX. SPACING	F1 NO. REQ'D	F1 LENGTHS VARY	F1	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	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	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	9	L	Min	2'-0"	-	-	-	L	-	-	-	L	-	-	-	4	18	2	Min	4	18	6	Min	L	2'-9"	4	6	11'-3"	6	18	6	Min	-	-	-	Min	4	2	8'-6"	4	2	9'-6"	6	12	3	L	3'-4"	156
					Max	4'-8"											4'-10"				8'-2"				5'-3"									1'-8"															
				X	Min	0'-9"				X	-	-	-	X	-	-	Max					X	1'-4"		Max									-				4	2	8'-6"	4	2	9'-6"				X	1'-8"	
					Max	0'-9"																	1'-4"																								
				Y	Min	1'-4"				Y	-	-	-	Y	-	-	4'-10"					Y	1'-6"		Min									Min																
					Max	4'-0"																	4'-0"																								
WING B	4	12	12	L	Min	2'-1"	-	-	-	L	-	-	-	L	-	-	-	4	18	2	Min	4	18	8	Min	L	2'-0"	4	6	14'-9"	6	18	8	Min	-	-	-	Min	4	2	11'-10"	4	2	13'-4"	6	12	3	L	3'-4"	205
					Max	4'-8"											6'-11"				11'-8"				5'-3"									1'-8"															
				X	Min	0'-9"				X	-	-	-	X	-	-	Max					X	1'-4"		Max									-				4	2	11'-10"	4	2	13'-4"				X	1'-8"	
					Max	0'-9"																	1'-4"																								
				Y	Min	1'-5"				Y	-	-	-	Y	-	-	6'-11"					Y	1'-7"		Min									Min																
					Max	4'-0"																	4'-0"																								

INLET SKEWED END SECTION

SKEW (DEGREE)	SLOPE	DESIGN FILL DEPTH (FT.)	CLEAR SPAN (FT.)	CLEAR HEIGHT (FT.)	SECTION LENGTH	TOP SLAB THICKNESS	BOTTOM SLAB THK.	SIDE WALL THICKNESS	HEADWALL DEPTH	OVER ALL WIDTH	OVER ALL HEIGHT	TOP SLAB REINFORCING STEEL "a" SIZE	"a" SPACING	"a" LENGTHS VARY	"a" NO. REQ'D	BOTTOM SLAB REINFORCING STEEL "b" SIZE	"b" SPACEING	"b" LENGTHS VARY	"b" NO. REQ'D	SIDE WALL REINFORCING STEEL "f" SIZE	"f" SPACING	"f" NO. REQ'D	"f" LENGTH	TOP SLAB DISTRIBUTION REINFORCING STEEL "d" SIZE	"d" SPACING	"d" NO. REQ'D	"d" LENGTHS VARY	BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e" SIZE	"e" SPACING	"e" NO. REQ'D	"e" LENGTHS VARY	SIDE WALL DISTRIBUTION REINFORCING STEEL "d1" SIZE	"d1" SPACING	"d1" NO. REQ'D	"d1" LENGTH	HEADWALL REINFORCING STEEL "k1", "k2" & "h" BAR	SIZE	NO. REQ'D	LENGTH	CLASS "S" CONCRETE (Includes HDWL) CU. YDS.	① REINFORCING STEEL (GR 60) (Includes HDWL) LBS.
SK	SL	D	S	H	LL	T	B	C	HD	OW	OH																																
15	3:1	5	4	3	2'-8"	7	7	6	3	5'-0"	4'-2"	5	8	Max 4'-8" Mn 4'-8"	0 3	4	8	Max 4'-8" Min 4'-8"	0 3	4	9	8	3'-10"	4	12	5	Max 3'-2" Min 1'-10"	4	12	5	Max 3'-2" Min 1'-10"	4	12	3 3	LONG 3'-2" SHORT 1'-10"	"k1" "k2" "h"	4 4 4	6 6 7	4'-10" 4'-10" 1'-6" Y 0'-6"	0.98	117

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

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 2 OF 4, "GENERAL DETAILS OF R.C. BOX CULVERT", 'DETAILS OF SINGLE-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.

INLET SLOPE SECTION(S)

R.C. BOX SECTION	DESIGN FILL DEPTH (FT.)	CLEAR SPAN (FT.)	CLEAR HEIGHT (FT.)	TOP SLAB THICKNESS	BOTTOM SLAB THK.	SIDE WALL THICKNESS	OVER ALL WIDTH	OVER ALL HEIGHT	SECTION LENGTH (FT.)	TOP SLAB REINFORCING STEEL "a" LENGTH = OW - 4" SIZE	SPACING	NO. REQ'D	LENGTH	BOTTOM SLAB REINFORCING STEEL "b" LENGTH = OW - 4" SIZE	SPACING	NO. REQ'D	LENGTH	SIDE WALL REINFORCING STEEL "f" LENGTH = OH - 4" SIZE	SPACING	NO. REQ'D	LENGTH	TOP SLAB DISTRIBUTION REINF. STEEL "d" LENGTH = SL SIZE	SPACING	NO. REQ'D	BOTTOM SLAB DISTRIBUTION REINF. STEEL "e" LENGTH = SL SIZE	SPACING	NO. REQ'D	SIDE WALL DISTRIBUTION REINF.STEEL "d1" LENGTH = SL SIZE	SPACING	NO. REQ'D	CLASS "S" CONCRETE CU. YDS.	REINFORCING STEEL (GR. 50) LBS.
	D	S	H	T	B	C	OW	OH	SL																								
HDWL DEPTH	ADDITIONAL REINF. FOR HDWL									"h" HDWL BARS																					TOTAL	
HD	LBS									SIZE	Y		LENGTH	NO. REQ'D																		

MID-SECTION

R.C. BOX SECTION	DESIGN FILL DEPTH (FT.)	CLEAR SPAN (FT.)	CLEAR HEIGHT (FT.)	TOP SLAB THICKNESS	BOTTOM SLAB THK.	SIDE WALL THK	OVER ALL WIDTH	OVER ALL HEIGHT	SECTION LENGTH (FT.)	TOP SLAB REINFORCING STEEL "a" LENGTH = OW - 4" SIZE	SPACING	NO. REQ'D	LENGTH	BOTTOM SLAB REINFORCING STEEL "b" LENGTH = OW - 4" SIZE	SPACING	NO. REQ'D	LENGTH	SIDE WALL REINFORCING STEEL "f" LENGTH = OH - 4" SIZE	SPACING	NO. REQ'D	LENGTH	TOP SLAB DISTRIBUTION REINF. STEEL "d" LENGTH = SL SIZE	SPACING	NO. REQ'D	BOTTOM SLAB DISTRIBUTION REINF. STEEL "e" LENGTH = SL SIZE	SPACING	NO. REQ'D	SIDE WALL DISTRIBUTION REINF. STEEL "d1" LENGTH = SL SIZE	SPACING	NO. REQ'D	CLASS "S" CONCRETE CU. YDS.	REINFORCING STEEL (Gr. 60) LBS.
	D	S	H	T	B	C	OW	OH	SL																								
A	5	4	3	7	7	6	5'-0"	4'-2"	96.67	5	8	145	4'-8"	4	8	145	4'-8"	4	9	256	3'-10"	4	12	5	4	12	5	4	12	6	31.63	2889

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"

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.

SHEET 1 OF 2
DETAILS OF R.C. BOX CULVERT
SINGLE BARREL BOX CULVERT
STA. 200+35

SPECIAL DETAILS

rnfortner 6/28/2022 10:28:29 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_SD_BOX_BYPASS_200+35.dgn
REVISED DATE: V 1.1.17

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	47	549
		SPECIAL DETAILS				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

TABULAR DATA BY: CGG DATE: 10/4/2021
CHECKED BY: SAR DATE: 12/20/2021

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	CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if required)
OW	H	WB	CW	SK	SL	K	HL	WH1	WH2	AF1	AF2	WE	WF1	WF2	G1	G2	W1	W2	W3	W4	OUTLET	OUTLET
5'-0"	3'-0"	0'-9"	0'-8"	15	3:1	4'-1 3/4"	1'-0"	3'-10"	1'-0"	15	45	2'-2"	2'-2"	2'-2"	0'-3"	0'--3 -1/2"	8'-6"	12'-0"	10'-4 5/8"	13'-10 5/8"	CU.YD	LBS.
																					3.65	361

| 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 VARY | F2 LENGTHS | F3 BAR SIZE | F3 SPACING | F3 NO. REQ'D | F3 LENGTHS VARY | F3 LENGTHS | F4 BAR SIZE | F4 SPACING | F4 NO. REQ'D | F4 LENGTHS VARY | F4 LENGTHS | F5 BAR SIZE | F5 SPACING | F5 NO. REQ'D | F5 LENGTHS VARY | 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 VARY | 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 VARY | F12 LENGTHS | REINF. STEEL QTY. PER WING (LBS) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	48	549
		SPECIAL DETAILS				

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
40'-4"	3'-0"	0'-9"	0'-8"	0	3:1	39'-4"	1'-0"	3'-10"	1'-0"	30	30	2'-2"	2'-2"	2'-2"	0'-0"	0'-0"	9'-6"	9'-6"	11'-4 5/8"	11'-4 5/8"

CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if required)
INLET	INLET
CU.YD	LBS.
5.16	390

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	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	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	10	L Min 2'-0"	-	-	-	L -	-	-	-	L -	4	18	2	Min	4	18	2	9'-2"	4	18	7	L Min 2'-7"	4	6	12'-3"	6	18	6	Min	-	-	-	Min	4	2	9'-5"	4	2	10'-7"	6	12	3	L 3'-4"	195
				L Max 4'-8"												5'-5"								Max 5'-3"							1'-8"				-										
				X Min 0'-9"				X -				X -				Max								X Min 1'-4"							Max				Max							X 1'-8"		
				X Max 0'-9"												5'-5"								Max 1'-4"							1'-8"				-										
				Y Min 1'-4"				Y -				Y -												Y Min 1'-4"																					
				Y Max 4'-0"																				Y Max 4'-0"																					
WING B	4	12	10	L Min 2'-0"	-	-	-	L -	-	-	-	L -	4	18	2	Min	4	18	2	9'-2"	4	18	7	L Min 2'-7"	4	6	12'-3"	6	18	6	Min	-	-	-	Min	4	2	9'-5"	4	2	10'-7"	6	12	3	L 3'-4"	195
				L Max 4'-8"												5'-5"								Max 5'-3"							1'-8"				-										
				X Min 0'-9"				X -				X -				Max								X Min 1'-4"							Max				Max							X 1'-8"		
				X Max 0'-9"												5'-5"								Max 1'-4"							1'-8"				-										
				Y Min 1'-4"				Y -				Y -												Y Min 1'-4"																					
				Y Max 4'-0"																				Y Max 4'-0"																					

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	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	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	BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e" SIZE	"e" SPACING	"e" NO. REQ'D	"e" LENGTHS VARY	SIDE WALL DISTRIBUTION REINFORCING STEEL "d1" SIZE	"d1" SPACING	"d1" NO. REQ'D	"d1" LENGTH	INTERIOR WALL DISTRIBUTION REINFORCING STEEL "d2" SIZE	"d2" SPACING	"d2" NO. REQ'D	"d2" LENGTHS VARY
SK	SL	D	S	H	LL	T	HD	B	C	W	OW	OH			Max / Min				Max / Min				Max / Min																																	

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	49	549
		SPECIAL DETAILS				

STATE OF ARKANSAS
SHAUN A. ROBERSON
LICENSED PROFESSIONAL ENGINEER
No. 13436
DIGITALLY SIGNED 06/28/2022

TABULAR DATA BY: CGG DATE: 10/20/2021
CHECKED BY: SAR DATE: 12/20/2021

OUTLET WINGWALL TABLE

OVER ALL WIDTH	CLEAR HEIGHT	FOOTING THK.	WING WALL THK.	BOX SKEW (DEG.)	SLOPE	HDWL LENGTH	HEEL	WALL HEIGHT		WINGWALL ANGLE (DEGREE)		FOOTING WIDTH AT WALL END	WIDTH OF WING FOOTINGS AT HDWL		FOOTING DIMENSION PARALLEL WITH HDWL		LENGTH OF WINGWALLS		LENGTH OF FOOTING HEEL	
								AT HDWL	AT WING END	WING A	WING B		WING A	WING B	WING A	WING B	WING A	WING B	WING A	WING B
OW	H	WB	CW	SK	SL	K	HL	WH1	WH2	AF1	AF2	WE	WF1	WF2	G1	G2	W1	W2	W3	W4
40'-4"	3'-0"	0'-9"	0'-8"	0	3:1	39'-4"	1'-0"	3'-10"	1'-0"	30	30	2'-2"	2'-2"	2'-2"	0'-0"	0'-0"	9'-6"	9'-6"	11'-4 5/8"	11'-4 5/8"

CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if required)
OUTLET	OUTLET
CU.YD	LBS.
6.34	390

WING	F1					F2				F3				F4			F5				F6				F7			F8				F9				F10			F11			F12				REINF. STEEL QTY. PER WING (LBS)
	BAR SIZE	MAX. SPACING	NO. REQ'D	LENGTHS VARY		BAR SIZE	SPACING	NO. REQ'D	LENGTHS	BAR SIZE	SPACING	NO. REQ'D	LENGTHS	BAR SIZE	SPACING	NO. REQ'D	LENGTHS VARY	BAR SIZE	SPACING	NO. REQ'D	LENGTHS	BAR SIZE	SPACING	NO. REQ'D	LENGTHS VARY		BAR SIZE	NO. REQ'D	LENGTHS	BAR SIZE	SPACING	NO. REQ'D	LENGTHS VARY	BAR SIZE	SPACING	NO. REQ'D	LENGTHS	BAR SIZE	NO. REQ'D	LENGTHS	BAR SIZE	NO. REQ'D	LENGTHS	BAR SIZE	SPACING	NO. REQ'D	LENGTHS	
WING A	4	12	10	L	Min	2'-0"	-	-	-	-	-	-	-	4	18	2	Min	4	18	2	9'-2"	4	18	7	L	Min	2'-7"	4	6	12'-3"	6	18	6	Min	-	-	-	Min	4	2	9'-5"	4	2	10'-7"	6	12	3	L	3'-4"	195
					Max	4'-8"											5'-5"									Max	5'-3"							1'-8"				-									
				X	Min	0'-9"			L	-			L	-			Max								X	Min	1'-4"							Max				Max							X	1'-6"	
					Max	0'-9"			X	-			X	-			5'-5"									Max	1'-4"							1'-8"				-									
				Y	Min	1'-4"			Y	-			Y	-											Y	Min	1'-4"																			
					Max	4'-0"																				Max	4'-0"																			
WING B	4	12	10	L	Min	2'-0"	-	-	-	-	-	-	-	4	18	2	Min	4	18	2	9'-2"	4	18	7	L	Min	2'-7"	4	6	12'-3"	6	18	6	Min	-	-	-	Min	4	2	9'-5"	4	2	10'-7"	6	12	3	L	3'-4"	195
					Max	4'-8"											5'-5"									Max	5'-3"							1'-8"				-									
				X	Min	0'-9"			L	-			L	-			Max								X	Min	1'-4"							Max				Max							X	1'-6"	
					Max	0'-9"			X	-			X	-			5'-5"									Max	1'-4"							1'-8"				-									
				Y	Min	1'-4"			Y	-			Y	-											Y	Min	1'-4"																			
					Max	4'-0"																				Max	4'-0"																			

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 (Grade 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								BOTTOM SLAB REINFORCING STEEL								SIDE WALL REINFORCING STEEL				INTERIOR WALL REINFORCING STEEL				TOP SLAB DISTRIBUTION REINFORCING STEEL				BOTTOM SLAB DISTRIBUTION REINFORCING STEEL				SIDE WALL DISTRIBUTION REINFORCING STEEL				INTERIOR WALL DISTRIBUTION REINFORCING STEEL				CLASS "S" CONCRETE (Includes HDWL)	① REINFORCING STEEL (GR 60) (Includes HDWL)
													"a"				"c"				"d"				"f"				"f0"				"f1"				"g"				"e"				"d1"				"d2"					
SK	SL	D	S	H	LL	T	HD	B	C	W	OW	OH	SIZE	SPACING	LENGTHS VARY	NO. REQ'D	SIZE	SPACING	LENGTHS VARY	NO. REQ'D	SIZE	SPACING	LENGTHS VARY	NO. REQ'D	SIZE	SPACING	LENGTHS VARY	NO. REQ'D	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTHS VARY	SIZE	SPACING	NO. REQ'D	LENGTHS VARY	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTHS VARY	CU. YDS.	LBS.
															Max				Max				Max				Max											Max				Max				LONG				LONG		
															Min				Min				Min				Min											Min				SHORT				MID		
																																																	SHORT		

"k1" HDWL BARS		
SIZE	LENGTH	NO. REQ'D

"k2" HDWL BARS		
SIZE	LENGTH	NO. REQ'D

"h" HDWL BARS			
SIZE	LENGTH	Y	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.)	TOP SLAB REINFORCING STEEL LENGTH = OW - 4" + BENDS								BOTTOM SLAB REINFORCING STEEL LENGTH = OW - 4" + BENDS								SIDE WALL REINFORCING STEEL "f0" LENGTH = OH - 4"				INTERIOR WALL REINFORCING STEEL "f1" LENGTH = OH - 4"				TOP SLAB DISTRIBUTION REINF. STEEL "g" LENGTH = SL			BOTTOM SLAB DISTRIBUTION REINF. STEEL "e" LENGTH = SL			SIDE WALL DISTRIBUTION REINF. STEEL "d1" LENGTH = SL			INTERIOR WALL DISTRIBUTION REINF. STEEL "d2" LENGTH = SL			CLASS "S" CONCRETE	REINFORCING STEEL (GR. 60)
											"a"		Bent "b"		"c"				"d"		Bent "b1"		"f"																											
D	S	H	T	B	C	W	OW	OH	SL	SIZE	L	SIZE	L	SIZE	L	SPACING	NO. REQ'D	SIZE	L	SIZE	L	SIZE	L	SPACING	NO. REQ'D	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	SIZE	SPACING	NO. REQ'D	SIZE	SPACING	NO. REQ'D	SIZE	SPACING	NO. REQ'D	SIZE	SPACING	NO. REQ'D	SIZE	SPACING	NO. REQ'D	CU. YDS.	LBS.

HDWL DEPTH	ADDITIONAL REINF. FOR HDWL
HD	LBS.
3"	53

"h" HDWL BARS			
SIZE	Y	LENGTH	NO. REQ'D
4	0'-7"	1'-7"	42

CLASS "S" CONCRETE	REINFORCING STEEL (GR. 60)
CU. YDS.	LBS.
TOTAL	
0.37	98

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
SEXTUPLE BARREL BOX CULVERT
Sta. 264+00

SPECIAL DETAILS

rnfortner 6/28/2022 10:28:53 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_SD_BOX_BYPASS_264+00.dgn
V 1.17
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	50	549
		SPECIAL DETAILS				

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
20'-4"	3'-0"	0'-9"	0'-8"	45	3:1	27'-4"	1'-0"	3'-10"	1'-0"	0	60	2'-2"	2'-2"	2'-3"	0'-6"	0'-6 -7/8"	8'-6"	17'-0"	9'-5 1/2"	21'-3 1/2"

CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if required)
INLET	INLET
CU.YD	LBS.
5.47	472

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	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	9	L	Min 2'-0"	-	-	-	L -	-	-	-	L -	4	18	2	Min	4	18	2	8'-2"	4	18	6	L	Min 2'-9"	4	6	10'-3"	6	18	6	Min	-	-	-	Min	4	2	8'-6"	4	2	9'-4"	6	'2	3	L 3'-4"	168
					Max 4'-8"												4'-10"									Max 5'-3"							1'-8"				-									X 1'-8"	
				X	Min 0'-9"				X -				X -				Max								X	Min 1'-4"							Max				Max									
					Max 0'-9"												4'-10"									Max 1'-4"							1'-8"				-									
				Y	Min 1'-4"				Y -				Y -				Min								Y	Min 1'-6"							Min				Min									
					Max 4'-0"												4'-10"									Max 4'-0"							1'-8"				-									
WING B	4	12	17	L	Min 2'-0"	-	-	-	L -	-	-	-	L -	4	18	2	Min	4	18	2	16'-8"	4	18	12	L	Min 2'-7"	4	6	22'-2"	6	18	11	Min	-	-	-	Min	4	2	16'-9"	4	2	18'-10"	6	'2	3	L 3'-4"	304
					Max 4'-9"												9'-10"									Max 5'-3"							1'-8"				-									X 1'-8"	
				X	Min 0'-9"				X -				X -				Max								X	Min 1'-4"							Max				Max									
					Max 0'-10"												9'-10"									Max 1'-4"							1'-9"				-									
				Y	Min 1'-4"				Y -				Y -				Min								Y	Min 1'-4"							Min				Min									
					Max 4'-0"												4'-10"									Max 4'-0"							1'-8"				-									

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 | TOP SLAB REINFORCING STEEL "a" SIZE | "a" SPACING | "a" LENGTHS VARY | "a" LENGTH | "a" NO. REQ'D | TOP SLAB REINFORCING STEEL "c" SIZE | "c" SPACING | "c" LENGTHS VARY | "c" LENGTH | "c" NO. REQ'D | BOTTOM SLAB REINFORCING STEEL "d" SIZE | "d" SPACING | "d" LENGTHS VARY | "d" LENGTH | "d" NO. REQ'D | BOTTOM SLAB REINFORCING STEEL "f" SIZE | "f" SPACING | "f" LENGTHS VARY | "f" LENGTH | "f" NO. REQ'D | 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 | "g" LENGTH | BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e" SIZE | "e" SPACING | "e" NO. REQ'D | "e" LENGTHS VARY | "e" LENGTH | SIDE WALL DISTRIBUTION REINFORCING STEEL "d1" SIZE | "d1" SPACING | "d1" NO. REQ'D | "d1" LENGTH | INTERIOR WALL DISTRIBUTION REINFORCING STEEL "d2" SIZE | "d2" SPACING | "d2" NO. REQ'D | "d2" LENGTH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	51	549
		SPECIAL DETAILS				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

TABULAR DATA BY: CGG DATE: 10/20/2021
CHECKED BY: SAR DATE: 12/20/2021

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
20'-4"	3'-0"	0'-9"	0'-8"	45	3:1	27'-4"	1'-0"	3'-10"	1'-0"	0	60	2'-2"	2'-2"	2'-3"	0'-6"	0'-6 -7/8"	8'-6"	17'-0"	9'-5 1/2"	21'-3 1/2"

CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if required)
OUTLET	OUTLET
CU.YD	LBS.
6.44	472

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	F5 BAR SIZE	F5 SPACING	F5 NO. REQ'D	F5 LENGTHS
WING A	4	12	9	L	Min	2'-0"	-	-	-	L -	-	-	-	L -	4	18	2	Min	4	18	2	8'-2"
					Max	4'-8"												4'-10"				
				X	Min	0'-9"				X -				X -				Max				
					Max	0'-9"												4'-10"				
				Y	Min	1'-4"				Y -				Y -								
					Max	4'-0"																
WING B	4	12	17	L	Min	2'-0"	-	-	-	L -	-	-	-	L -	4	18	2	Min	4	18	2	16'-8"
					Max	4'-9"												9'-10"				
				X	Min	0'-9"				X -				X -				Max				
					Max	0'-10"												9'-10"				
				Y	Min	1'-4"				Y -				Y -								
					Max	4'-0"																

WING	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	F11 BAR SIZE	F11 NO. REQ'D	F11 LENGTHS
WING A	4	18	6	L	Min	2'-9"	4	6	10'-3"	6	18	6	Min	-	-	-	Min	4	2	8'-6"	4	2	9'-4"
					Max	5'-3"							1'-8"				-						
				X	Min	1'-4"							Max				Max						
					Max	1'-4"							1'-8"				-						
				Y	Min	1'-6"																	
					Max	4'-0"																	
WING B	4	18	12	L	Min	2'-7"	4	6	22'-2"	6	18	11	Min	-	-	-	Min	4	2	16'-9"	4	2	18'-10"
					Max	5'-3"							1'-8"				-						
				X	Min	1'-4"							Max				Max						
					Max	1'-4"							1'-8"				-						
				Y	Min	1'-4"																	
					Max	4'-0"																	

WING	F12 BAR SIZE	F12 SPACING	F12 NO. REQ'D	F12 LENGTHS			REINF. STEEL QTY. PER WING (LBS)
WING A	6	12	3	L	3'-4"		168
				X	1'-8"		
WING B	6	12	3	L	3'-4"		304
				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 (Grade 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 REINF. "a" SIZE | "a" SPACING | "a" LENGTHS VARY | "a" NO. REQ'D | TOP SLAB REINF. "c" SIZE | "c" SPACING | "c" LENGTHS VARY | "c" NO. REQ'D | BOTTOM SLAB REINF. "d" SIZE | "d" SPACING | "d" LENGTHS VARY | "d" NO. REQ'D | BOTTOM SLAB REINF. "f" SIZE | "f" SPACING | "f" LENGTHS VARY | "f" NO. REQ'D | SIDE WALL REINF. "f0" SIZE | "f0" SPACING | "f0" NO. REQ'D | "f0" LENGTH | INTERIOR WALL REINF. "f1" SIZE | "f1" SPACING | "f1" NO. REQ'D | "f1" LENGTH | TOP SLAB DIST. REINF. "g" SIZE | "g" SPACING | "g" NO. REQ'D | "g" LENGTHS VARY | BOTTOM SLAB DIST. REINF. "e" SIZE | "e" SPACING | "e" NO. REQ'D | "e" LENGTHS VARY | SIDE WALL DIST. REINF. "d1" SIZE | "d1" SPACING | "d1" NO. REQ'D | "d1" LENGTH | INTERIOR WALL DIST. REINF. "d2" SIZE | "d2" SPACING | "d2" NO. REQ'D | "d2" LENGTH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	52	549
		SPECIAL DETAILS				

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
33'-8"	3'-0"	0'-9"	0'-8"	45	3:1	46'-2 3/8"	1'-0"	3'-10"	1'-0"	0	60	2'-2"	2'-2"	2'-3"	0'-6"	0'--6 -7/8"	8'-6"	17'-0"	9'-5 1/2"	21'-3 1/2"

CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if required)
INLET	INLET
CU.YD	LBS.
6.58	502

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	9	-	Min	2'-0"	-	-	-	L	-		-	-	-	L	-		4	18	2	Min
					Max	4'-8"																4'-10"
				X	Min	0'-9"				X	-					X	-					Max
					Max	0'-9"																4'-10"
				Y	Min	1'-4"				Y	-					Y	-					
					Max	4'-0"																
WING B	4	12	17	-	Min	2'-0"	-	-	-	L	-		-	-	-	L	-		4	18	2	Min
					Max	4'-9"																9'-10"
				X	Min	0'-9"				X	-					X	-					Max
					Max	0'-10"																9'-10"
				Y	Min	1'-4"				Y	-					Y	-					
					Max	4'-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	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	18	2	8'-2"	4	18	6	Min	2'-9"	L	4	6	10'-3"	6	18	6	Min	-	-	-	Min	4	2	8'-6"	4	2	9'-4"	6	12	3	L	3'-4"	183
								Max	5'-3"							1'-8"				-												
								Min	1'-4"							Max				Max											X	1'-8"	
								Max	1'-4"							1'-8"				-												
								Min	1'-6"	Y																							
								Max	4'-0"																							
WING B	4	18	2	16'-8"	4	18	12	Min	2'-7"	L	4	6	22'-2"	6	18	11	Min	-	-	-	Min	4	2	16'-9"	4	2	18'-10"	6	12	3	L	3'-4"	319
								Max	5'-3"							1'-8"				-												
								Min	1'-4"							Max				Max											X	1'-8"	
								Max	1'-4"							1'-9"				-												
								Min	1'-4"	Y																							
								Max	4'-0"																							

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"

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

TABULAR DATA BY: CGG DATE: 10/22/2021
CHECKED BY: SAR DATE: 12/20/2021

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.

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.	OVERALL WIDTH	OVERALL HEIGHT	TOP SLAB REINF. STEEL "a" SIZE	"a" SPACING	"a" LENGTHS VARY	"a" NO. REQ'D	TOP SLAB REINF. STEEL "c" SIZE	"c" SPACING	"c" LENGTHS VARY	"c" NO. REQ'D	BOTTOM SLAB REINF. STEEL "d" SIZE	"d" SPACING	"d" LENGTHS VARY	"d" NO. REQ'D	BOTTOM SLAB REINF. STEEL "f" SIZE	"f" SPACING	"f" LENGTHS VARY	"f" NO. REQ'D	SIDE WALL REINF. STEEL "f0" SIZE	"f0" SPACING	"f0" NO. REQ'D	"f0" LENGTH	INTERIOR WALL REINF. STEEL "f1" SIZE	"f1" SPACING	"f1" NO. REQ'D	"f1" LENGTH	TOP SLAB DISTRIBUTION REINF. STEEL "g" SIZE	"g" SPACING	"g" NO. REQ'D	"g" LENGTHS VARY	BOTTOM SLAB DISTRIBUTION REINF. STEEL "e" SIZE	"e" SPACING	"e" NO. REQ'D	"e" LENGTHS VARY	SIDE WALL DISTRIBUTION REINF. STEEL "d1" SIZE	"d1" SPACING	"d1" NO. REQ'D	"d1" LENGTH	INTERIOR WALL DISTRIBUTION REINF. STEEL "d2" SIZE	"d2" SPACING	"d2" NO. REQ'D	"d2" LENGTH
SK	SL	D	S	H	LL	T	HD	B	C	W	OW	OH																																							
45	3:1	2	6	3	18'-10"	10	3	10	6	8	33'-8"	4'-8"	4	5.5	Max 33'-4" / Min 2'-1"	69	7	10	Max 33'-4" / Min 2'-1"	38	4	12	Max 33'-4" / Min 2'-1"	32	4	12	Max 33'-4" / Min 2'-1"	32	4	9	51	4'-4"	4	12	160	4'-4"	4	11	79	Max 35'-6" / Min 1'-10"	4	11	79	Max 35'-6" / Min 1'-10"	4	12	3	LONG 35'-2" / SHORT 2'-2"	4	12	6	LONG 28'-9" / MID 22'-0" / SHORT 8'-7"
															33'-4"	5			33'-4"	3			33'-4"	2			33'-4"	2																																

"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
4	24'-6"	12	4	24'-6"	12	4	1'-9"	0'-9"	49

CLASS "S" CONCRETE (Includes HDWL) CU. YDS.	REINFORCING STEEL (GR 60) (Includes HDWL) LBS.
47.99	6785

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

INLET 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.)	TOP SLAB REINF. 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	BOTTOM SLAB REINF. 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 REINF. STEEL "f0" LENGTH = OH - 4" SIZE	"f0" SPACING	"f0" NO. REQ'D	"f0" LENGTH	INTERIOR WALL REINF. STEEL "f1" LENGTH = OH - 4" SIZE	"f1" SPACING	"f1" NO. REQ'D	"f1" LENGTH	TOP SLAB DISTRIBUTION REINF. STEEL "g" LENGTH = SL SIZE	"g" SPACING	"g" NO. REQ'D	BOTTOM SLAB DISTRIBUTION REINF. STEEL "e" LENGTH = SL SIZE	"e" SPACING	"e" NO. REQ'D	SIDE WALL DISTRIBUTION REINF. STEEL "d1" LENGTH = SL SIZE	"d1" SPACING	"d1" NO. REQ'D	INTERIOR WALL DISTRIBUTION REINF. STEEL "d2" LENGTH = SL SIZE	"d2" SPACING	"d2" NO. REQ'D
D	S	S	H	T	B	C	W	OW	OH	SL																																												
A	2	6	3	10	10	6	8	33'-8"	4'-8"	264.63	4	33'-4"	8	34'-4"	8	33'-4"	18	176	4	33'-4"	4	34'-3"	4	33'-4"	24	132	4	10	634	4'-4"	4	12	2112	4'-4"	4	11	79	4	11	79	4	12	3	4	12	24

CLASS "S" CONCRETE CU. YDS.	REINFORCING STEEL (GR. 60) LBS.
657.76	87240

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

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.)
D	S	S	H	T	B	C	W	OW	OH	SL

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

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.

SHEET 1 OF 2
DETAILS OF R.C. BOX CULVERT
QUINTUPLE BARREL BOX CULVERT
Sta. 110+00
SPECIAL DETAILS

rnfortner 6/28/2022 10:29:23 AM
WORKSPACE: AHTD
L:\20\TV\170\7515 - AHTD Arkadelphia Bypass\Drawings\r070442_SD_BOX_HWY 67_110+00.dgn
REVISED DATE:
V 1.17

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	53	549
		SPECIAL DETAILS				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

TABULAR DATA BY: CGG DATE: 10/22/2021
CHECKED BY: SAR DATE: 12/20/2021

OUTLET WINGWALL TABLE

OVER ALL WIDTH	CLEAR HEIGHT	FOOTING THK.	WING WALL THK.	BOX SKEW (DEG.)	SLOPE	HDWL LENGTH	HEEL	WALL HEIGHT		WINGWALL ANGLE (DEGREE)		FOOTING WIDTH AT WALL END	WIDTH OF WING FOOTINGS AT HDWL		FOOTING DIMENSION PARALLEL WITH HDWL		LENGTH OF WINGWALLS		LENGTH OF FOOTING HEEL	
								AT HDWL	AT WING END	WING A	WING B		WING A	WING B	WING A	WING B	WING A	WING B	WING A	WING B
OW	H	WB	CW	SK	SL	K	HL	WH1	WH2	AF1	AF2	WE	WF1	WF2	G1	G2	W1	W2	W3	W4
33'-8"	3'-0"	0'-9"	0'-8"	0	3:1	32'-8"	1'-0"	3'-10"	1'-0"	30	30	2'-2"	2'-2"	2'-2"	0'-0"	0'-0"	9'-6"	9'-6"	11'-4 5/8"	11'-4 5/8"

CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if required)
OUTLET	OUTLET
CU.YD	LBS.
5.79	376

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	F5 BAR SIZE	F5 SPACING	F5 NO. REQ'D	F5 LENGTHS
WING A	4	12	10	L	Min	2'-0"	-	-	-	-	L	-	-	-	L	-	4	18	2	Min	4	18	2	9'-2"
					Max	4'-8"														5'-5"				
				X	Min	0'-9"					X				X					Max				
					Max	0'-9"														5'-5"				
				Y	Min	1'-4"					Y				Y									
					Max	4'-0"																		
WING B	4	12	10	L	Min	2'-0"	-	-	-	-	L	-	-	-	L	-	4	18	2	Min	4	18	2	9'-2"
					Max	4'-8"														5'-5"				
				X	Min	0'-9"					X				X					Max				
					Max	0'-9"														5'-5"				
				Y	Min	1'-4"					Y				Y									
					Max	4'-0"																		

WING	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	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	18	7	L	Min	2'-7"	4	6	12'-3"	6	18	6	Min	-	-	-	Min	4	2	9'-5"	4	2	10'-7"	6	12	3	L	3'-4"	188
					Max	5'-3"							1'-8"				-												
				X	Min	1'-4"							Max				Max										X	1'-8"	
					Max	1'-4"							1'-8"				-												
				Y	Min	1'-4"																							
					Max	4'-0"																							
WING B	4	18	7	L	Min	2'-7"	4	6	12'-3"	6	18	6	Min	-	-	-	Min	4	2	9'-5"	4	2	10'-7"	6	12	3	L	3'-4"	188
					Max	5'-3"							1'-8"				-												
				X	Min	1'-4"							Max				Max										X	1'-8"	
					Max	1'-4"							1'-8"				-												
				Y	Min	1'-4"																							
					Max	4'-0"																							

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 (Grade 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. | OVERALL WIDTH | OVERALL 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 | 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 | BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e" SIZE | "e" SPACING | "e" NO. REQ'D | "e" LENGTHS VARY | SIDE WALL DISTRIBUTION REINFORCING STEEL "d1" SIZE | "d1" SPACING | "d1" NO. REQ'D | "d1" LENGTH | INTERIOR WALL DISTRIBUTION REINFORCING STEEL "d2" SIZE | "d2" SPACING | "d2" NO. REQ'D | "d2" LENGTH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	54	549
		SPECIAL DETAILS				

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
39'-5"	9'-0"	0'-10"	0'-9"	66	3:1	91'-9 1/2"	2'-0"	9'-10"	3'-0"	0	60	3'-3"	4'-4 3/8"	5'-4 1/2"	1'-7 3/8"	3'-6 1/4"	20'-6"	41'-0"	20'-7"	39'-2 3/8"

CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if required)
INLET	INLET
CU.YD	LBS.
26.08	2105

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
WING A	4	12	21	L Min	4'-2"	4	12	6	L 5'-2"	-	-	-	L -	4	18	8	Min	4	18	4	20'-2"
				L Max	12'-0"												4'-10"				
				X Min	0'-10"				X 1'-8"				X -				Max				
				X Max	2'-0"												18'-4"				
				Y Min	3'-5"				Y 3'-7"				Y -								
				Y Max	10'-1"																
WING B	4	12	41	L Min	4'-3"	4	12	18	L 6'-5"	-	-	-	L -	4	18	8	Min	4	18	4	40'-8"
				L Max	12'-11"												9'-10"				
				X Min	0'-10"				X 1'-11"				X -				Max				
				X Max	2'-10"												36'-10"				
				Y Min	3'-6"				Y 4'-7"				Y -								
				Y Max	10'-2"																

WING	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	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	18	14	L Min	5'-1"	4	8	21'-5"	6	18	14	Min	4	18	2	Min	4	2	21'-2"	4	2	21'-4"	6	'2	9	L 3'-4"	726
				L Max	12'-5"							2'-9"				28'-2"											
				X Min	2'-5"							Max				Max										X 1'-8"	
				X Max	2'-5"							3'-10"				28'-2"											
				Y Min	3'-7"																						
				Y Max	10'-1"																						
WING B	4	18	28	L Min	5'-8"	4	8	38'-10"	6	18	30	Min	4	18	2	Min	4	2	41'-1"	4	2	46'-8"	6	'2	9	L 3'-4"	1379
				L Max	12'-6"							2'-9"				33'-5"											
				X Min	2'-5"							Max				Max										X 1'-8"	
				X Max	2'-5"							4'-11"				33'-5"											
				Y Min	3'-4"																						
				Y Max	10'-2"																						

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.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

TABULAR DATA BY: CGG DATE: 10/22/2021
CHECKED BY: SAR DATE: 12/20/2021

ⓘ Any Bar Lap Required for the Skewed End Section shall be considered subsidiary to the item "Reinforcing Steel - Roadway (Grade 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
66	3:1	10	12	9	46'-3"	12	30.5	13	12.5	8	39'-5"	11'-1"

TOP SLAB REINFORCING STEEL "a" SIZE	"a" SPACING	"a" LENGTHS VARY	"a" LENGTHS	"a" NO. REQ'D	"c" SIZE	"c" SPACING	"c" LENGTHS VARY	"c" LENGTHS	"c" NO. REQ'D
6	7	Max	39'-1"	143	8	8	Max	39'-1"	125
		Min	2'-0"				Min	2'-0"	
		39'-1"		4			39'-1"		3

BOTTOM SLAB REINFORCING STEEL "d" SIZE	"d" SPACING	"d" LENGTHS VARY	"d" LENGTHS	"d" NO. REQ'D	"f" SIZE	"f" SPACING	"f" LENGTHS VARY	"f" LENGTHS	"f" NO. REQ'D
6	5	Max	39'-1"	200	6	8.5	Max	39'-1"	118
		Min	2'-0"				Min	2'-0"	
		39'-1"		5			39'-1"		3

SIDE WALL REINFORCING STEEL "f0" SIZE	"f0" SPACING	"f0" NO. REQ'D	"f0" LENGTH
4	4	278	10'-9"

INTERIOR WALL REINFORCING STEEL "f1" SIZE	"f1" SPACING	"f1" NO. REQ'D	"f1" LENGTH
4	12	190	10'-9"

TOP SLAB DISTRIBUTION REINFORCING STEEL "g" SIZE	"g" SPACING	"g" NO. REQ'D	"g" LENGTHS VARY	"g" LENGTHS
4	9	101	Max	90'-4"
			Min	1'-10"

BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e" SIZE	"e" SPACING	"e" NO. REQ'D	"e" LENGTHS VARY	"e" LENGTHS
4	8.5	101	Max	90'-4"
			Min	1'-10"

SIDE WALL DISTRIBUTION REINFORCING STEEL "d1" SIZE	"d1" SPACING	"d1" NO. REQ'D	"d1" LENGTH
4	8.5	13	LONG 88'-5"
			SHORT 3'-10"

INTERIOR WALL DISTRIBUTION REINFORCING STEEL "d2" SIZE	"d2" SPACING	"d2" NO. REQ'D	"d2" LENGTH
4	12	18	LONG 60'-4"
		18	SHORT 31'-10"

CLASS "S" CONCRETE (Includes HDWL) CU. YDS.	ⓘ REINFORCING STEEL (GR 60) (Includes HDWL) LBS.
213.17	33858

"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
0	96'-7"	6	0	96'-7"	6	4	4'-2"	3'-2"	98

INLET 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.)
	D	S	H	T	B	C	W	OW	OH	SL

LENGTH = OW - 4" + BENDS "a" SIZE	"a" L	Bent "b" SIZE	Bent "b" L	"c" SIZE	"c" L	SPACING	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	SPACING	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

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

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.)	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.)
	D	S	H	T	B	C	W	OW	OH	SL
A	10	12	9	12	13	12.5	8	39'-5"	11'-1"	195.5

TOP SLAB REINFORCING STEEL LENGTH = OW - 4" + BENDS "a" SIZE	"a" L	Bent "b" SIZE	Bent "b" L	"c" SIZE	"c" L	SPACING	NO. REQ'D
4	39'-1"	8	39'-9"	7	39'-1"	14	167

BOTTOM SLAB REINFORCING STEEL LENGTH = OW - 4" + BENDS "d" SIZE	"d" L	Bent "b1" SIZE	Bent "b1" L	"f" SIZE	"f" L	SPACING	NO. REQ'D
4	39'-1"	6	39'-10"	6	39'-1"	10	234

SIDE WALL REINFORCING STEEL "f0" LENGTH = OH - 4" SIZE	SPACING	NO. REQ'D	LENGTH
4	4	1172	10'-9"

INTERIOR WALL REINFORCING STEEL "f1" LENGTH = OH - 4" SIZE	SPACING	NO. REQ'D	LENGTH
4	12	780	10'-9"

TOP SLAB DISTRIBUTION REINF. STEEL "g" LENGTH = SL SIZE	SPACING	NO. REQ'D
4	9	101

BOTTOM SLAB DISTRIBUTION REINF. STEEL "e" LENGTH = SL SIZE	SPACING	NO. REQ'D
4	8.5	107

SIDE WALL DISTRIBUTION REINF. STEEL "d1" LENGTH = SL SIZE	SPACING	NO. REQ'D
4	8.5	26

INTERIOR WALL DISTRIBUTION REINF. STEEL "d2" LENGTH = SL SIZE	SPACING	NO. REQ'D
4	12	36

CLASS "S" CONCRETE CU. YDS.	REINFORCING STEEL (GR. 60) LBS.
817.25	120356

SHEET 1 OF 2
DETAILS OF R.C. BOX CULVERT
TRIPLE BARREL BOX CULVERT
Sta. 118+40

SPECIAL DETAILS

LRFD

rnfortner 6/28/2022 10:29:44 AM
WORKSPACE: AHTD
L:\2017\170175 - AHTD Arkadelphia Bypass\Drawings\r070442_SD_BOX_HWY 67_118+40.dgn
V 1.1.17
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	55	549
		SPECIAL DETAILS				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

TABULAR DATA BY: CGG DATE: 10/22/2021
CHECKED BY: SAR DATE: 12/20/2021

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
39'-5"	9'-0"	0'-10"	0'-9"	66	3:1	91'-9 1/2"	2'-0"	9'-10"	3'-0"	0	60	3'-3"	4'-4 3/8"	5'-4 1/2"	1'-7 3/8"	3'-6 1/4"	20'-6"	41'-0"	20'-7"	39'-2 3/8"

CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if required)
OUTLET	OUTLET
CU.YD	LBS.
29.00	2105

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	F5 BAR SIZE	F5 SPACING	F5 NO. REQ'D	F5 LENGTHS
WING A	4	12	21	L	Min	4'-2"	4	12	6	L 5'-2"	-	-	-	L -	4	18	8	Min	4	18	4	20'-2"
					Max	12'-0"												4'-10"				
				X	Min	0'-10"				X 1'-8"				X -				Max				
					Max	2'-0"												18'-4"				
				Y	Min	3'-5"				Y 3'-7"				Y -								
					Max	10'-1"																
WING B	4	12	41	L	Min	4'-3"	4	12	18	L 6'-5"	-	-	-	L -	4	18	8	Min	4	18	4	40'-8"
					Max	12'-11"												9'-10"				
				X	Min	0'-10"				X 1'-11"				X -				Max				
					Max	2'-10"												36'-10"				
				Y	Min	3'-6"				Y 4'-7"				Y -								
					Max	10'-2"																

WING	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	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	18	14	L	Min	5'-11"	4	8	21'-5"	6	18	14	Min	4	18	2	Min	4	2	21'-2"	4	2	21'-4"	6	12	9	L	3'-4"	726
					Max	12'-5"							2'-9"				28'-2"												
					Min	2'-5"							Max				Max										X	1'-8"	
					Max	2'-5"							3'-10"				28'-2"												
				Y	Min	3'-7"																							
					Max	10'-1"																							
WING B	4	18	28	L	Min	5'-8"	4	8	38'-10"	6	18	30	Min	4	18	2	Min	4	2	41'-1"	4	2	46'-8"	6	12	9	L	3'-4"	1379
					Max	12'-6"							2'-9"				33'-5"												
					Min	2'-5"							Max				Max										X	1'-8"	
					Max	2'-5"							4'-11"				33'-5"												
				Y	Min	3'-4"																							
					Max	10'-2"																							

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 (Grade 60)."

OUTLET SKEWED END SECTION

SKEW (DEGREE) SK	SLOPE SL	DESIGN FILL DEPTH (FT.) D	CLEAR SPAN (FT.) S	CLEAR HEIGHT (FT.) H	SECTION LENGTH LL	TOP SLAB THK. T	HDWL DEPTH HD	BOTTOM SLAB THK. B	SIDE WALL THK. C	INTERIOR WALL THK. W	OVER ALL WIDTH OW	OVER ALL HEIGHT OH
66	3:1	10	12	9	46'-3"	12	30.5	13	12.5	8	39'-5"	11'-1"

TOP SLAB REINFORCING STEEL "a" SIZE	"a" SPACING	"a" LENGTHS VARY	"a" NO. REQ'D	"c" SIZE	"c" SPACING	"c" LENGTHS VARY	"c" NO. REQ'D
6	7	Max 39'-1" / Min 2'-0" / 39'-1"	143 / 4	8	8	Max 39'-1" / Min 2'-0" / 39'-1"	125 / 3

BOTTOM SLAB REINFORCING STEEL "d" SIZE	"d" SPACING	"d" LENGTHS VARY	"d" NO. REQ'D	"f" SIZE	"f" SPACING	"f" LENGTHS VARY	"f" NO. REQ'D
6	5	Max 39'-1" / Min 2'-0" / 39'-1"	200 / 5	6	8.5	Max 39'-1" / Min 2'-0" / 39'-1"	118 / 3

SIDE WALL REINFORCING STEEL "f0" SIZE	SPACING	NO. REQ'D	LENGTH
4	4	278	10'-9"

INTERIOR WALL REINFORCING STEEL "f1" SIZE	SPACING	NO. REQ'D	LENGTH
4	12	190	10'-9"

TOP SLAB DISTRIBUTION REINFORCING STEEL "g" SIZE	SPACING	NO. REQ'D	LENGTHS VARY
4	9	101	Max 90'-4" / Min 1'-10"

BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e" SIZE	SPACING	NO. REQ'D	LENGTHS VARY
4	8.5	101	Max 90'-4" / Min 1'-10"

SIDE WALL DISTRIBUTION REINFORCING STEEL "d1" SIZE	SPACING	NO. REQ'D	LENGTH
4	8.5	13	LONG 88'-5"
			SHORT 3'-10"

INTERIOR WALL DISTRIBUTION REINFORCING STEEL "d2" SIZE	SPACING	NO. REQ'D	LENGTH
4	12	18	LONG 60'-4"
			SHORT 31'-10"

CLASS "S" CONCRETE (Includes HDWL) CU. YDS.	① REINFORCING STEEL (GR 60) (Includes HDWL) LBS.
213.17	33858

"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
0	96'-7"	6	0	96'-7"	6

"h" HDWL BARS SIZE	"h" HDWL BARS LENGTH	"h" HDWL BARS Y	"h" HDWL BARS NO, REQ'D
4	4'-2"	3'-2"	98

OUTLET SLOPE SECTION(S)

R.C. BOX SECTION	D	S	H	T	B	C	W	OW	OH	SL
	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

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

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

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. 118+40
SPECIAL DETAILS

LRFD

rnfortner 6/28/2022 10:29:54 AM
WORKSPACE: AHTD
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V 1.17
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	56	549
		SPECIAL DETAILS				

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
33'-8"	4'-0"	0'-9"	0'-8"	30	3:1	37'-8 3/4"	1'-0"	4'-10"	1'-4"	0	60	2'-2"	2'-3 3/4"	2'-7 7/8"	0'-7 3/4"	0'-3"	10'-6"	21'-0"	12'-4 5/8"	22'-10 5/8"

CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if required)
INLET	INLET
CU.YD	LBS.
7.61	630

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	11	-	Min	-	-	-	L	-	-	-	-	L	-	4	18	4	Min
					Max														3'-4"
				X	Min				X					X					Max
					Max														7'-10"
				Y	Min				Y					Y					
					Max														
WING B	4	12	21	-	Min	-	-	-	L	-	-	-	-	L	-	4	18	4	Min
					Max														6'-10"
				X	Min				X					X					Max
					Max														15'-10"
				Y	Min				Y					Y					
					Max														

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
WING A	4	18	2	10'-2"	4	18	7	L	Min	4	6	13'-3"	6	18	7	Min	-	-	-	Min
									3'-3"							1'-8"				-
								X	Min							Max				Max
									1'-4"							7'-10"				-
								Y	Min							Min				
									1'-4"							1'-10"				
									Max							Max				
									2'-0"							-				
WING B	4	18	2	20'-8"	4	18	14	L	Min	4	6	23'-9"	6	18	14	Min	-	-	-	Min
									3'-1"							1'-8"				-
								X	Min							Max				Max
									1'-4"							2'-2"				-
								Y	Min							Min				
									1'-10"							-				
									Max							Max				
									5'-0"							-				

WING	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	2	10'-7"	4	2	11'-4"	6	12	4	L	3'-4"	228
										X	1'-8"	
WING B	4	2	20'-10"	4	2	23'-7"	6	12	4	L	3'-4"	402
										X	1'-8"	

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"

STATE OF ARKANSAS
Shaun A. Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

TABULAR DATA BY: CGG DATE: 10/5/2021
CHECKED BY: SAR DATE: 12/20/2021

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.

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.	OVERALL WIDTH	OVERALL 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
SK	SL	D	S	H	LL	T	HD	B	C	W	OW	OH								
30	3:1	5	6	4	11'-9"	8.5	3	9	6	8	33'-8"	5'-5 1/2"	5	7.5	Max 33'-4" / Min 3'-0"	28	5	5	Max 33'-4" / Min 3'-0"	42
																			33'-4"	5

BOTTOM SLAB REINFORCING STEEL "d" SIZE	"d" SPACING	"d" LENGTHS VARY	"d" NO. REQ'D	"f" SIZE	"f" SPACING	"f" LENGTHS VARY	"f" NO. REQ'D	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
4	8.5	Max 33'-4" / Min 3'-0"	25	4	11	Max 33'-4" / Min 3'-0"	20	4	8.5	34	5'-2"	4	12	104	5'-2"	4	12	69	Max 21'-3" / Min 1'-10"
		33'-4"	3			33'-4"	3												

BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e" SIZE	"e" SPACING	"e" NO. REQ'D	"e" LENGTHS VARY	SIDE WALL DISTRIBUTION REINFORCING STEEL "d1" SIZE	"d1" SPACING	"d1" NO. REQ'D	"d1" LENGTH	INTERIOR WALL DISTRIBUTION REINFORCING STEEL "d2" SIZE	"d2" SPACING	"d2" NO. REQ'D	"d2" LENGTH
4	12	69	Max 21'-3" / Min 1'-10"	4	12	4	LONG 21'-1"	4	12	8	LONG 17'-5"
							SHORT 2'-0"			16	MID 13'-6"
										8	SHORT 5'-9"

CLASS "S" CONCRETE (Includes HDWL) CU. YDS.	① REINFORCING STEEL (GR 60) (Includes HDWL) LBS.
28.64	4541

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

"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
4	38'-7"	6	4	38'-7"	6	4	1'-7"	0'-7"	40

INLET 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.)	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
D	S	S	H	T	B	C	W	OW	OH	SL								

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	"f0" SPACING	"f0" NO. REQ'D	"f0" LENGTH

INTERIOR WALL REINFORCING STEEL "f1" LENGTH = OH - 4" SIZE	"f1" SPACING	"f1" NO. REQ'D	"f1" LENGTH	TOP SLAB DISTRIBUTION REINF. STEEL "g" LENGTH = SL SIZE	"g" SPACING	"g" NO. REQ'D	BOTTOM SLAB DISTRIBUTION REINF. STEEL "e" LENGTH = SL SIZE	"e" SPACING	"e" NO. REQ'D	SIDE WALL DISTRIBUTION REINF. STEEL "d1" LENGTH = SL SIZE	"d1" SPACING	"d1" NO. REQ'D	INTERIOR WALL DISTRIBUTION REINF. STEEL "d2" LENGTH = SL SIZE	"d2" SPACING	"d2" 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

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

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.)	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.)	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
D	S	S	H	T	B	C	W	OW	OH	SL								
A	5	6	4	8.5	9	6	8	33'-8"	5'-5 1/2"	72.5	4	33'-4"	6	34'-1"	6	33'-4"	15	58

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	"f0" SPACING	"f0" NO. REQ'D	"f0" LENGTH
4	33'-4"	4	34'-0"	4	33'-4"	17	51	4	8.5	204	5'-2"

INTERIOR WALL REINFORCING STEEL "f1" LENGTH = OH - 4" SIZE	"f1" SPACING	"f1" NO. REQ'D	"f1" LENGTH	TOP SLAB DISTRIBUTION REINF. STEEL "g" LENGTH = SL SIZE	"g" SPACING	"g" NO. REQ'D	BOTTOM SLAB DISTRIBUTION REINF. STEEL "e" LENGTH = SL SIZE	"e" SPACING	"e" NO. REQ'D	SIDE WALL DISTRIBUTION REINF. STEEL "d1" LENGTH = SL SIZE	"d1" SPACING	"d1" NO. REQ'D	INTERIOR WALL DISTRIBUTION REINF. STEEL "d2" LENGTH = SL SIZE	"d2" SPACING	"d2" NO. REQ'D
4	12	576	5'-2"	4	12	69	4	12	69	4	12	8	4	12	32

CLASS "S" CONCRETE CU. YDS.	REINFORCING STEEL (GR. 60) LBS.
171.22	22143

SHEET 1 OF 2
DETAILS OF R.C. BOX CULVERT
QUINTUPLE BARREL BOX CULVERT
Sta. 126+22

SPECIAL DETAILS

LRFD

rnfortner 6/28/2022 10:30:02 AM
WORKSPACE: AHTD
L:\20\7\0\7515 - AHTD Arkadelphia Bypass\Drawings\r070442_SD_BOX_HWY 67_126+22.dgn
V 1.17
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	57	549
		SPECIAL DETAILS				

STATE OF ARKANSAS
Shaun A. Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

TABULAR DATA BY: CGG DATE: 10/5/2021
CHECKED BY: SAR DATE: 12/20/2021

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	CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if required)
OW	H	WB	CW	SK	SL	K	HL	WH1	WH2	AF1	AF2	WE	WF1	WF2	G1	G2	W1	W2	W3	W4	OUTLET	OUTLET
33'-8"	4'-0"	0'-9"	0'-8"	30	3:1	37'-8 3/4"	1'-0"	4'-10"	1'-4"	0	60	2'-2"	2'-3 3/4"	2'-7 7/8"	0'-7 3/4'	0'-3"	10'-6"	21'-0"	12'-4 5/8"	22'-10 5/8"	CU.YD	LBS.
																					8.89	630

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	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	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	11	L Min 2'-4" / Max 5'-10"	-	-	-	L -	-	-	-	L -	4	18	4	Min 3'-4" / Max 7'-10"	4	18	2	10'-2"	4	18	7	L Min 3'-3" / Max 6'-3"	4	6	13'-3"	6	18	7	Min 1'-8" / Max 1'-10"	-	-	-	Min - / Max -	4	2	10'-7"	4	2	11'-4"	6	12	4	L 3'-4" / X 1'-8"	228
				X Min 0'-9" / Max 0'-11"				X -				X -												X Min 1'-4" / Max 1'-4"																						
				Y Min 1'-8" / Max 5'-0"				Y -				Y -												Y Min 2'-0" / Max 5'-0"																						
WING B	4	12	21	L Min 2'-4" / Max 6'-2"	-	-	-	L -	-	-	-	L -	4	18	4	Min 6'-10" / Max 15'-10"	4	18	2	20'-8"	4	18	14	L Min 3'-1" / Max 6'-3"	4	6	23'-9"	6	18	14	Min 1'-8" / Max 2'-2"	-	-	-	Min - / Max -	4	2	20'-10"	4	2	23'-7"	6	12	4	L 3'-4" / X 1'-8"	402
				X Min 0'-9" / Max 1'-3"				X -				X -												X Min 1'-4" / Max 1'-4"																						
				Y Min 1'-8" / Max 5'-0"				Y -				Y -												Y Min 1'-10" / Max 5'-0"																						

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 (Grade 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.	OVERALL WIDTH	OVERALL 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	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	BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e" SIZE	"e" SPACING	"e" NO. REQ'D	"e" LENGTHS VARY	SIDE WALL DISTRIBUTION REINFORCING STEEL "d1" SIZE	"d1" SPACING	"d1" NO. REQ'D	"d1" LENGTH	INTERIOR WALL DISTRIBUTION REINFORCING STEEL "d2" SIZE	"d2" SPACING	"d2" NO. REQ'D	"d2" LENGTH
SK	SL	D	S	H	LL	T	HD	B	C	W	OW	OH	SIZE	SPACING	LENGTHS VARY	NO. REQ'D	SIZE	SPACING	LENGTHS VARY	NO. REQ'D	SIZE	SPACING	LENGTHS VARY	NO. REQ'D	SIZE	SPACING	LENGTHS VARY	NO. REQ'D	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTHS VARY	SIZE	SPACING	NO. REQ'D	LENGTHS VARY	SIZE	SPACING	NO. REQ'D	LENGTHS VARY	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTH
30	3:1	5	6	4	11'-9"	8.5	3	9	6	8	33'-8"	5'-5 1/2"	5	7.5	Max 33'-4" / Min 3'-0"	28	5	5	Max 33'-4" / Min 3'-0"	42	4	8.5	Max 33'-4" / Min 3'-0'	25	4	11	Max 33'-4" / Min 3'-0"	20	4	8.5	34	5'-2"	4	12	104	5'-2"	4	'2	69	Max 21'-3" / Min 1'-10"	4	12	69	Max 21'3" / Min 1'-10"	4	12	4	LONG 21'-1" / SHORT 2'-0"	4	12	8	LONG 17'-5" / MID 13'-6" / SHORT 5'-9"
															33'-4"	4			33'-4"	5			33'-4"	3			33'-4"	3																									8	

CLASS "S" CONCRETE (Includes HDWL.)	① REINFORCING STEEL (GR 60) (Includes HDWL.)
CU. YDS.	LBS.
28.64	4541

"k1" HDWL BARS			"k2" HDWL BARS			"h" HDWL BARS			
SIZE	LENGTH	NO. REQ'D	SIZE	LENGTH	NO. REQ'D	SIZE	LENGTH	Y	NO. REQ'D
4	38'-7"	6	4	33'-7"	6	4	1'-7"	0'-7"	40

OUTLET SLOPE SECTION(S)

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
QUINTUPLE BARREL BOX CULVERT
Sta. 126+22

SPECIAL DETAILS

rnfortner 6/28/2022 10:30:12 AM
WORKSPACE: AHTD
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V 1.1.17
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	58	549
		SPECIAL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

TABULAR DATA BY: HJB DATE: 05/03/2022
CHECKED BY: SAR DATE: 05/06/2022

INLET WINGWALLS ARE NOT PROPOSED AT THIS LOCATION. TIE TO EXISTING BOX CULVERT.

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 2 OF 4, "GENERAL DETAILS OF R.C. BOX CULVERT", 'DETAILS OF SINGLE-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.

INLET SKEWED END SECTION — INLET WINGWALL TABLE

SKEW (DEGREE)	SLOPE	DESIGN FILL DEPTH (FT.)	CLEAR SPAN (FT.)	CLEAR HEIGHT (FT.)	SECTION LENGTH	TOP SLAB THICKNESS	BOTTOM SLAB THK.	SIDE WALL THICKNESS	HEADWALL DEPTH	OVER ALL WIDTH	OVER ALL HEIGHT	TOP SLAB REINFORCING STEEL "a"				BOTTOM SLAB REINFORCING STEEL "b"				SIDE WALL REINFORCING STEEL "f"				TOP SLAB DISTRIBUTION REINFORCING STEEL "d"				BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e"				SIDE WALL DISTRIBUTION REINFORCING STEEL "d1"				HEADWALL REINFORCING STEEL "k1", "k2" & "h"				CLASS "S" CONCRETE (Includes HDWL)	① REINFORCING STEEL (GR. 60) (Includes HDWL)
SK	SL	D	S	H	LL	T	B	C	HD	OW	OH	SIZE	SPACING	LENGTHS VARY	NO. REQ'D	SIZE	SPACEING	LENGTHS VARY	NO. REQ'D	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTHS VARY	SIZE	SPACING	NO. REQ'D	LENGTHS VARY	SIZE	SPACING	NO. REQ'D	LENGTH	BAR	SIZE	NO. REQ'D	LENGTH	CU. YDS.	LBS.
		0												Max				Max								Max				Max				LONG	"k1"					
																																			"k2"					
														Mn				Min								Min				Min				SHORT						
																																			"h"			Y		

INLET SLOPE SECTION(S)

R.C. BOX SECTION	DESIGN FILL DEPTH (FT.)	CLEAR SPAN (FT.)	CLEAR HEIGHT (FT.)	TOP SLAB THICKNESS	BOTTOM SLAB THK.	SIDE WALL THICKNESS	OVER ALL WIDTH	OVER ALL HEIGHT	SECTION LENGTH (FT.)	TOP SLAB REINFORCING STEEL "a" LENGTH = OW - 4"				BOTTOM SLAB REINFORCING STEEL "b" LENGTH = OW - 4"				SIDE WALL REINFORCING STEEL "f" LENGTH = OH - 4"				TOP SLAB DISTRIBUTION REINF. STEEL "d" LENGTH = SL			BOTTOM SLAB DISTRIBUTION REINF. STEEL "e" LENGTH = SL			SIDE WALL DISTRIBUTION REINF.STEEL "d1" LENGTH = SL			CLASS "S" CONCRETE	REINFORCING STEEL (GR. 50)
	D	S	H	T	B	C	OW	OH	SL	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	SIZE	SPACING	NO. REQ'D	SIZE	SPACING	NO. REQ'D	CU. YDS.	LBS.

HDWL DEPTH	ADDITIONAL REINF. FOR HDWL	"h" HDWL BARS			
HD	LBS	SIZE	Y	LENGTH	NO. REQ'D

TOTAL	

MID-SECTION

R.C. BOX SECTION	DESIGN FILL DEPTH (FT.)	CLEAR SPAN (FT.)	CLEAR HEIGHT (FT.)	TOP SLAB THK.	BOTTOM SLAB THK.	SIDE WALL THK	OVER ALL WIDTH	OVER ALL HEIGHT	SECTION LENGTH (FT.)	TOP SLAB REINFORCING STEEL "a" LENGTH = OW - 4"				BOTTOM SLAB REINFORCING STEEL "b" LENGTH = OW - 4"				SIDE WALL REINFORCING STEEL "f' LENGTH = OH - 4"				TOP SLAB DISTRIBUTION REINF. STEEL "d" LENGTH = SL			BOTTOM SLAB DISTRIBUTION REINF. STEEL "e" LENGTH = SL			SIDE WALL DISTRIBUTION REINF. STEEL "d1" LENGTH = SL			CLASS "S" CONCRETE	REINFORCING STEEL (Gr. 60)
	D	S	H	T	B	C	OW	OH	(SL)	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	SIZE	SPACING	NO. REQ'D	SIZE	SPACING	NO. REQ'D	CU. YDS.	LBS.
A	10	5	5	7	7	6	6'-0"	6'-2"	225.00	4	6	450	5'-8"	4	6	450	5'-8"	4	8	674	5'-10"	4	12	6	4	12	6	4	12	10	100.00	9472

(SL) SECTIONAL LENGTH EQUALS THE SUM OF BARREL LENGTHS AT STA. 156+12 TO STA. 157+18 AND STA. 157+25 TO R.C. BOX OUTLET.

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

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"

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

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.

SHEET 1 OF 2
DETAILS OF R.C. BOX CULVERT
SINGLE BARREL BOX CULVERT
STA. 156+12

SPECIAL DETAILS

LRFD

rnfortner 6/28/2022 10:30:20 AM
WORKSPACE: AHTD
\\garverinc.local\data\Projects\2017\170755 - AHTD Arkadelphia Bypass\Drawings\r070442_SD_BOX_HWY 67_156+12.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	59	549
		SPECIAL DETAILS				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

TABULAR DATA BY: HJB DATE: 05/03/2022
CHECKED BY: SAR DATE: 05/06/2022

OUTLET WINGWALL TABLE

OVER ALL WIDTH	CLEAR HEIGHT	FOOTING THK.	WING WALL THK.	BOX SKEW (DEG.)	SLOPE	HDWL LENGTH	HEEL	WALL HEIGHT		WINGWALL ANGLE (DEGREE)		FOOTING WIDTH AT WALL END	WIDTH OF WING FOOTINGS AT HDWL		FOOTING DIMENSION PARALLEL WITH HDWL		LENGTH OF WINGWALLS		LENGTH OF FOOTING HEEL	
								AT HDWL	AT WING END	WING A	WING B		WING A	WING B	WING A	WING B	WING A	WING B	WING A	WING B
OW	H	WB	CW	SK	SL	K	HL	WH1	WH2	AF1	AF2	WE	WF1	WF2	G1	G2	W1	W2	W3	W4
6'-0"	5'-0"	0'-9"	0'-8"	0	3:1	5'-0"	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)	REINFORCNG STEEL (Includes apron and laps if required)
OUTLET	OUTLET
CU.YD	LBS.
6.10	596

WING	F1 BAR SIZE	F1 MAX. SPACING	F1 NO.REQ'D	F1 LENGTHS VARY		F1	F2 BAR SIZE	F2 SPACING	F2 NO.REQ'D	F2 LENGTHS		F2	F3 BAR SIZE	F3 SPACING	F3 NO.REQ'D	F3 LENGTHS		F3	F4 BAR SIZE	F4 SPACING	F4 NO.REQ'D	F4 LENGTHS VARY	F4
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		F6	F7 BAR SIZE	F7 NO.REQ'D	F7 LENGTHS	F8 BAR SIZE	F8 SPACING	F8 NO.REQ'D	F8 LENGTHS VARY	F8	F9 BAR SIZE	F9 SPACING	F9 NO.REQ'D	F9 LENGTHS	F9
WING A	4	18	2	13'-8"	4	18	10	L	Min	3'-3"	4	6	16'-9"	6	18	10	Min		-	-	-	Min	
									Max	7'-3"												-	
								X	Min	1'-4"							Max					Max	
									Max	1'-4"													
								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"	6	18	10	Min		-	-	-	Min	
									Max	7'-3"												-	
								X	Min	1'-4"							Max					Max	
									Max	1'-4"													
								Y	Min	2'-0"							2'-6"					-	
									Max	6'-0"													

WING	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	2	14'-2"	4	2	15'-8"	6	12	5	L	3'-4"	298
										X	1'-8"	
WING B	4	2	14'-2"	4	2	15'-8"	6	12	5	L	3'-4"	298
										X	1'-8"	

OUTLET SKEWED END SECTION

SKEW (DEGREE)	SLOPE	DESIGN FILL DEPTH (FT.)	CLEAR SPAN (FT.)	CLEAR HEIGHT (FT.)	SECTION LENGTH	TOP SLAB THICKNESS	BOTTOM SLAB THK.	SIDE WALL THICKNESS	HEADWALL DEPTH	OVER ALL WIDTH	OVER ALL HEIGHT	TOP SLAB REINFORCING STEEL "a"				BOTTOM SLAB REINFORCING STEEL "b"				SIDE WALL REINFORCING STEEL "f"				TOP SLAB DISTRIBUTION REINFORCING STEEL "d"				BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e"				SIDE WALL DISTRIBUTION REINFORCING STEEL "d1"				HEADWALL REINFORCING STEEL "k1", "k2" & "h"				CLASS "S" CONCRETE (Includes HDWL)	① REINFORCING STEEL (GR 60) (Includes HDWL)
												SIZE	SPACING	LENGTHS VARY	NO. REQ'D	SIZE	SPACING	LENGTHS VARY	NO. REQ'D	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTHS VARY	SIZE	SPACING	NO. REQ'D	LENGTHS VARY	SIZE	SPACING	NO. REQ'D	LENGTH	BAR	SIZE	NO. REQ'D	LENGTH	CU. YDS.	LBS.
SK	SL	D	S	H	LL	T	B	C	HD	OW	OH																														
		0												Max				Max								Max				Max				LONG	"k1"				
																																			"k2"				
														Min				Min								Min				Min				SHORT					
																																			"h"			Y	

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

OUTLET SLOPE SECTION(S)

R.C. BOX SECTION	DESIGN FILL DEPTH (FT.)	CLEAR SPAN (FT.)	CLEAR HEIGHT (FT.)	TOP SLAB THICKNESS	BOTTOM SLAB THK.	SIDE WALL THICKNESS	OVER ALL WIDTH	OVER ALL HEIGHT	SECTION LENGTH (FT.)	TOP SLAB REINFORCING STEEL "a" LENGTH = OW - 4"				BOTTOM SLAB REINFORCING STEEL "b" LENGTH = OW - 4"				SIDE WALL REINFORCING STEEL "f" LENGTH = OH - 4"				TOP SLAB DISTRIBUTION REINF. STEEL "d" LENGTH = SL			BOTTOM SLAB DISTRIBUTION REINF. STEEL "e" LENGTH = SL			SIDE WALL DISTRIBUTION REINF.STEEL "d1" LENGTH = SL			CLASS "S" CONCRETE	REINFORCING STEEL (GR. 50)
										SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	SIZE	SPACING	NO. REQ'D	SIZE	SPACING	NO. REQ'D	CU. YDS.	LBS.
D	S	H	T	B	C	OW	OH	SL																								

HDWL DEPTH	ADDITIONAL REINF. FOR HDWL	"h" HDWL BARS			
HD	LBS	SIZE	Y	LENGTH	NO. REQ'D
3"	8	4	0'-6"	1'-6"	7

TOTAL	
0.06	15

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"

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
SINGLE BARREL BOX CULVERT
STA. 156+12
SPECIAL DETAILS

rntortner 6/28/2022 10:30:26 AM
WORKSPACE: AHTD
\\garverinc.local\gdata\Projects\2017\17017515 - AHTD Arkadelphia Bypass\Drawings\r070442_SD_BOX_HWY 67_156+12.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	60	549
		SPECIAL DETAILS				

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
33'-8"	4'-0"	0'-9"	0'-8"	0	3:1	32'-8"	1'-0"	4'-10"	1'-4"	30	30	2'-2"	2'-5 3/4"	2'-5 3/4"	0'-4 3/8"	0'-4 3/8"	12'-0"	12'-0"	13'-10 5/8"	13'-10 5/8"

CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if required)
INLET	INLET
CU.YD	LBS.
6.00	488

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	12	-	Min	-	-	-	L	-	-	-	-	L	-	4	18	4	Min
					Max														3'-10"
				X	Min				X					X					Max
					Max														9'-0"
				Y	Min				Y					Y					
					Max														
WING B	4	12	12	-	Min	-	-	-	L	-	-	-	-	L	-	4	18	4	Min
					Max														3'-10"
				X	Min				X					X					Max
					Max														9'-0"
				Y	Min				Y					Y					
					Max														

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
WING A	4	18	2	11'-8"	4	18	8	L	Min	4	6	14'-9"	6	18	8	Min	-	-	-	Min
									Max							Max				-
								X	Min							Min				Max
									Max							Max				-
								Y	Min							Min				
									Max							Max				
WING B	4	18	2	11'-8"	4	18	8	L	Min	4	6	14'-9"	6	18	8	Min	-	-	-	Min
									Max							Max				-
								X	Min							Min				Max
									Max							Max				-
								Y	Min							Min				
									Max							Max				

WING	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	2	12'-0"	4	2	13'-4"	6	12	4	L	3'-4"	249
										X	1'-8"	
WING B	4	2	12'-0"	4	2	13'-4"	6	12	4	L	3'-4"	249
										X	1'-8"	

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

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

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

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

TABULAR DATA BY: PJ DATE: 4/12/2022
CHECKED BY: SAR DATE: 5/6/2022

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.

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.	OVERALL WIDTH	OVERALL 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
SK	SL	D	S	H	LL	T	HD	B	C	W	OW	OH								
															Max				Max	
															Min				Min	

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

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

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

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

"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

INLET 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.)	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
	D	S	H	T	B	C	W	OW	OH	SL								

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	"f0" SPACING	"f0" NO. REQ'D	"f0" LENGTH	INTERIOR WALL REINFORCING STEEL "f1" LENGTH = OH - 4" SIZE	"f1" SPACING	"f1" NO. REQ'D	"f1" LENGTH

TOP SLAB DISTRIBUTION REINF. STEEL "g" LENGTH = SL SIZE	"g" SPACING	"g" NO. REQ'D	BOTTOM SLAB DISTRIBUTION REINF. STEEL "e" LENGTH = SL SIZE	"e" SPACING	"e" NO. REQ'D	SIDE WALL DISTRIBUTION REINF. STEEL "d1" LENGTH = SL SIZE	"d1" SPACING	"d1" NO. REQ'D	INTERIOR WALL DISTRIBUTION REINF. STEEL "d2" LENGTH = SL SIZE	"d2" SPACING	"d2" NO. REQ'D	CLASS "S" CONCRETE CU. YDS.	REINFORCING STEEL (GR. 60) LBS.
												TOTAL	
												0.31	82

HDWL DEPTH	ADDITIONAL REINF. FOR HDWL	"h" HDWL BARS			
HD	LBS.	SIZE	Y	LENGTH	NO. REQ'D
3"	45	4	0'-7"	1'-7"	35

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.)	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.)	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
	D	S	H	T	B	C	W	OW	OH	SL								
A	10	6	4	8	9	6	8	33'-8"	5'-5"	160	4	33'-4"	4	34'-0"	4	33'-4"	14	137

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	"f0" SPACING	"f0" NO. REQ'D	"f0" LENGTH	INTERIOR WALL REINFORCING STEEL "f1" LENGTH = OH - 4" SIZE	"f1" SPACING	"f1" NO. REQ'D	"f1" LENGTH
4	33'-4"	4	34'-0"	4	33'-4"	13	147	4	7.5	512	5'-1"	4	12	1280	5'-1"

TOP SLAB DISTRIBUTION REINF. STEEL "g" LENGTH = SL SIZE	"g" SPACING	"g" NO. REQ'D	BOTTOM SLAB DISTRIBUTION REINF. STEEL "e" LENGTH = SL SIZE	"e" SPACING	"e" NO. REQ'D	SIDE WALL DISTRIBUTION REINF. STEEL "d1" LENGTH = SL SIZE	"d1" SPACING	"d1" NO. REQ'D	INTERIOR WALL DISTRIBUTION REINF. STEEL "d2" LENGTH = SL SIZE	"d2" SPACING	"d2" NO. REQ'D	CLASS "S" CONCRETE CU. YDS.	REINFORCING STEEL (GR. 60) LBS.
4	12	69	4	12	69	4	12	8	4	12	32	369.55	45096

SHEET 1 OF 2
DETAILS OF R.C. BOX CULVERT
QUINTUPLE BARREL BOX CULVERT
STA. 11+00

SPECIAL DETAILS

LRFD

rnfortner 6/28/2022 10:30:32 AM
WORKSPACE: AHTD
L:\20\TV\70\7515 - AHTD Arkadelphia Bypass\Drawings\r070442_SD_BOX_HWY 67 _CONN_I+00.dgn
V 1.17
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	61	549
		SPECIAL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

TABULAR DATA BY: PJ DATE: 4/12/2022
CHECKED BY: SAR DATE: 5/6/2022

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	CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if required)
OW	H	WB	CW	SK	SL	K	HL	WH1	WH2	AF1	AF2	WE	WF1	WF2	G1	G2	W1	W2	W3	W4	OUTLET	OUTLET
33'-8"	4'-0"	0'-9"	0'-8"	0	3:1	32'-8"	1'-0"	4'-10"	1'-4"	30	30	2'-2"	2'-5 3/4"	2'-5 3/4"	0'-4 3/8"	0'-4 3/8"	12'-0"	12'-0"	13'-10 5/8"	13'-10 5/8"	7.07	498

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	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	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	12	L	Min	2'-6"	-	-	-	-	-	-	-	-	4	18	4	Min	4	18	2	11'-8"	4	18	8	L	Min	3'-2"	4	6	14'-9"	6	18	8	Min	-	-	-	-	4	2	12'-0"	4	2	13'-4"	6	12	4	L	3'-4"	249
					Max	6'-0"												3'-10"									Max	6'-3"							1'-8"													
				X	Min	0'-9"				X			X					Max								X	Min	1'-4"							Max												X	1'-8"
					Max	1'-1"												9'-0"									Max	1'-4"							2'-0"													
				Y	Min	1'-10"				Y			Y													Y	Min	1'-11"																				
					Max	5'-0"																					Max	5'-0"																				
WING B	4	12	12	L	Min	2'-6"	-	-	-	-	-	-	-	-	4	18	4	Min	4	18	2	11'-8"	4	18	8	L	Min	3'-2"	4	6	14'-9"	6	18	8	Min	-	-	-	-	4	2	12'-0"	4	2	13'-4"	6	12	4	L	3'-4"	249
					Max	6'-0"												3'-10"									Max	6'-3"							1'-8"													
				X	Min	0'-9"				X			X					Max								X	Min	1'-4"							Max												X	1'-8"
					Max	1'-1"												9'-0"									Max	1'-4"							2'-0"													
				Y	Min	1'-10"				Y			Y													Y	Min	1'-11"																				
					Max	5'-0"																					Max	5'-0"																				

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

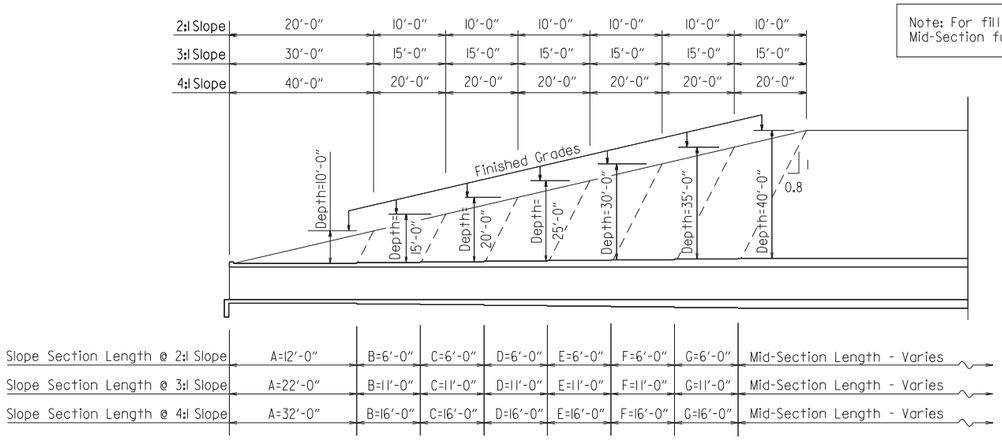
Bar Pin Dia. Table	
#4	3"
#5	3 3/4"
#6	4 1/2"
#7	5 1/4"
#8	6"

① Any Bar Lap Required for the Skewed End Section shall be considered subsidiary to the item "Reinforcing Steel - Roadway (Grade 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. | OVERALL WIDTH | OVERALL 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 | 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 | BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e" SIZE | "e" SPACING | "e" NO. REQ'D | "e" LENGTHS VARY | SIDE WALL DISTRIBUTION REINFORCING STEEL "d1" SIZE | "d1" SPACING | "d1" NO. REQ'D | "d1" LENGTH | INTERIOR WALL DISTRIBUTION REINFORCING STEEL "d2" SIZE | "d2" SPACING | "d2" NO. REQ'D | "d2" LENGTH | CLASS "S" CONCRETE (Includes HDWL) | ①REINFORCING STEEL (GR 60) (Includes HDWL) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	62	549
		SPECIAL DETAILS				

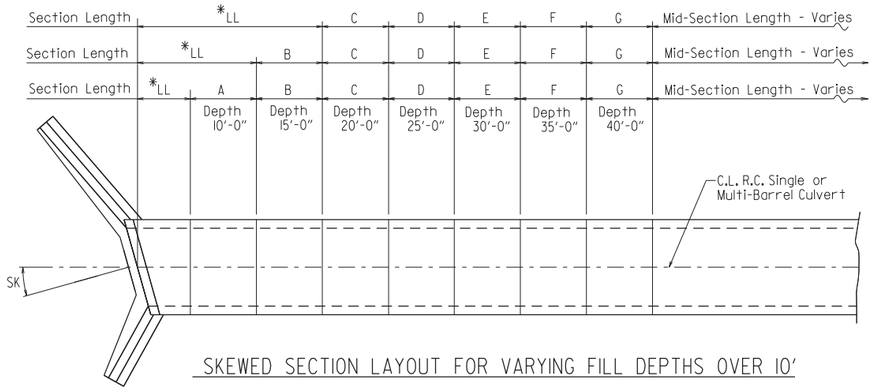


LONGITUDINAL SECTION LENGTH SCHEDULE FOR VARYING FILL DEPTHS OVER 10'

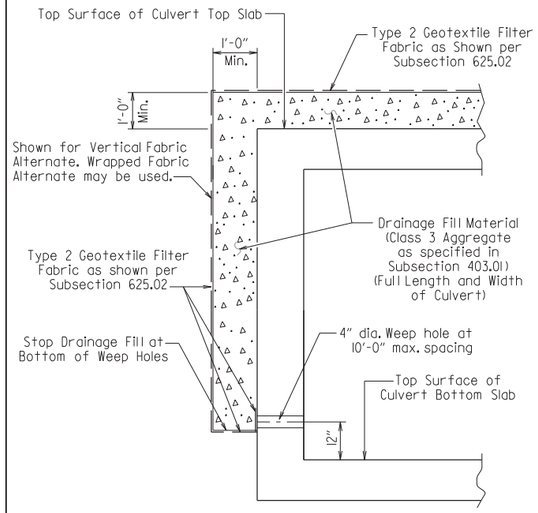
Lengths for Non-Skewed Boxes

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

*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.

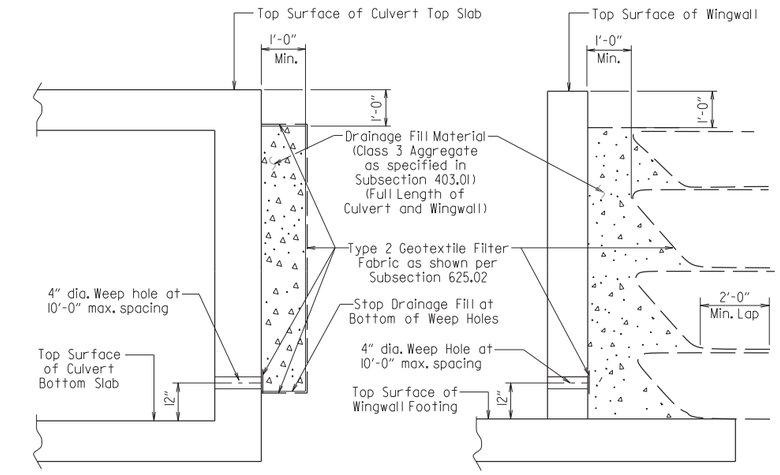


SKEWED SECTION LAYOUT FOR VARYING FILL DEPTHS OVER 10'



CULVERT DRAINAGE DETAIL FOR ROCK FILL

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

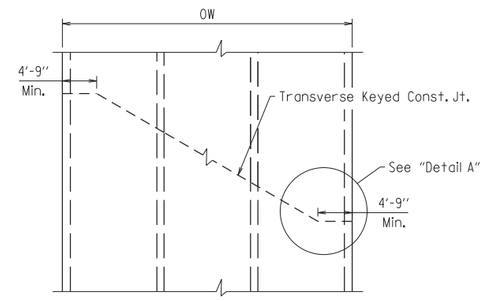


For Details of Excavation and Pay Limits, see Standard Drawing RCB-2.

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

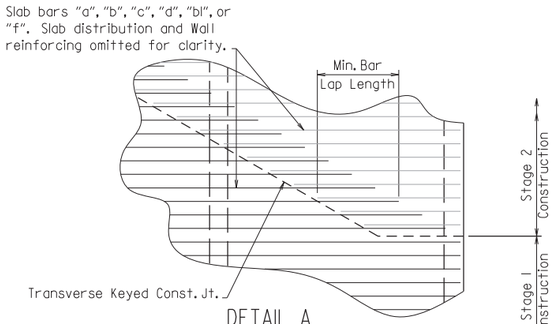
WRAPPED FABRIC ALTERNATE
(Shown for Wingwall, Similar for Culvert)

WINGWALL & CULVERT DRAINAGE DETAIL



SKEWED TRANSVERSE JOINT DETAIL

This detail shall be used to construct a skewed transverse joint only for Multi-Barrel Culverts and only when required by the Maintenance of Traffic Plans. Otherwise, transverse joints should be made normal to the centerline of the barrel.



DETAIL A

See Tabular Data Sheets for Minimum Bar Lap Lengths.

Shown for transverse reinforcing, longitudinal reinforcing similar.

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 keyed and shall be normal to the centerline of barrel except as noted. Reinforcing shall be continuous through joints unless noted otherwise. Reinforcing through stage construction joints shall provide the minimum bar lap length shown on the Tabular Data Sheets. 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.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

SHEET 1 OF 4
GENERAL DETAILS OF R.C. BOX CULVERT
GENERAL NOTES &
LONGITUDINAL SECTION LENGTH SCHEDULE

SPECIAL DETAILS

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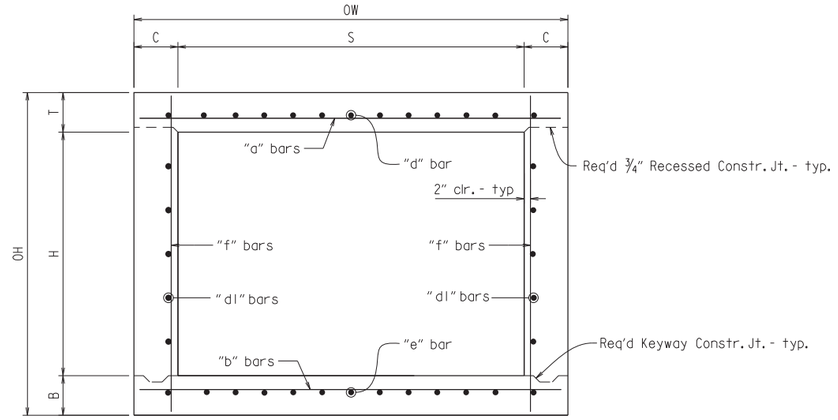
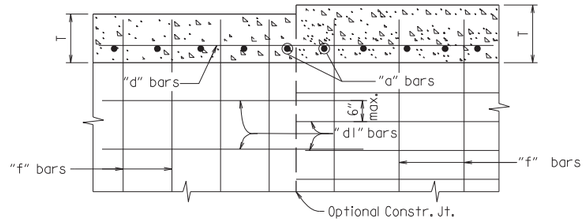
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	63	549
		SPECIAL DETAILS				

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



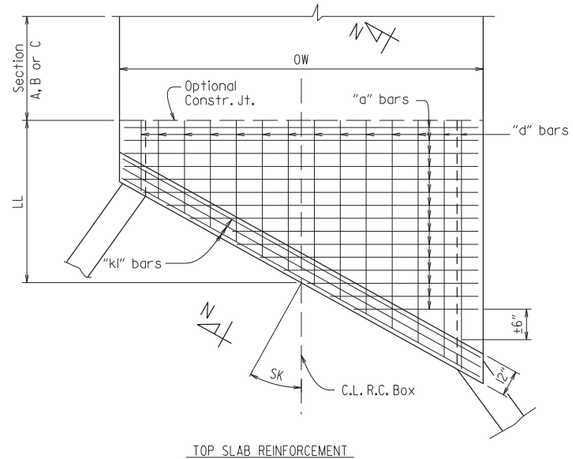
TYPICAL SECTION M-M



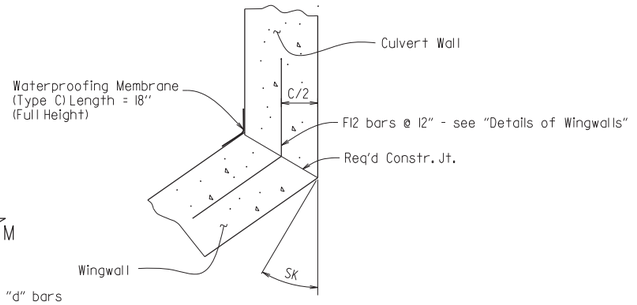
Longitudinal Bar Spacing at individual sections shall be maintained, which may result in noncontact bar laps.

LONGITUDINAL LAP DETAIL AT CHANGE IN SECTIONS

TOP SLAB SHOWN, BOTTOM SLAB SIMILAR

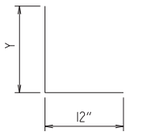


TOP SLAB REINFORCEMENT

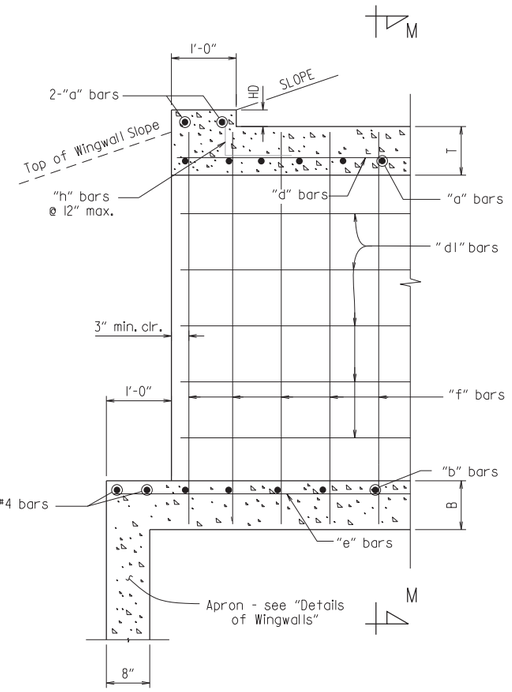


WINGWALL ATTACHMENT

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

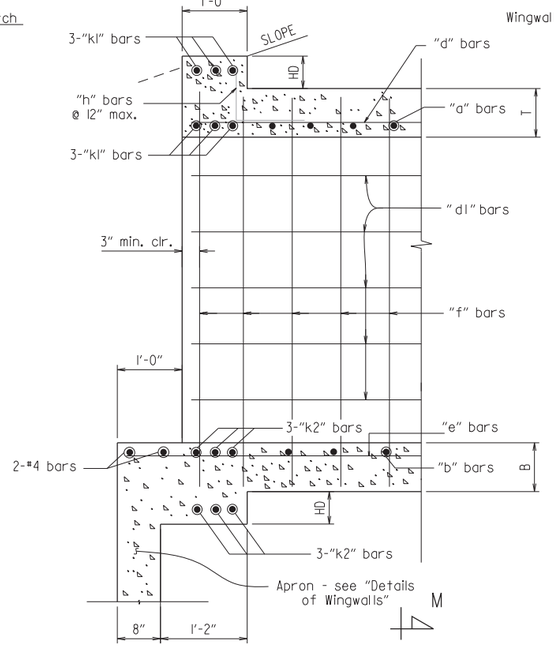


"h" bars sketch



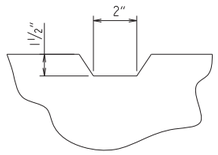
PART LONGITUDINAL SECTION

(Non-Skewed Ends)



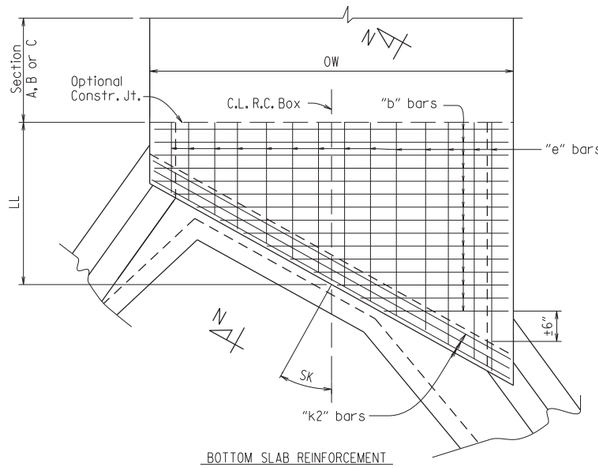
PART LONGITUDINAL SECTION N-N

(Skewed Ends)



TYPICAL KEYWAY DETAIL

(All Construction Joints)



BOTTOM SLAB REINFORCEMENT

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
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

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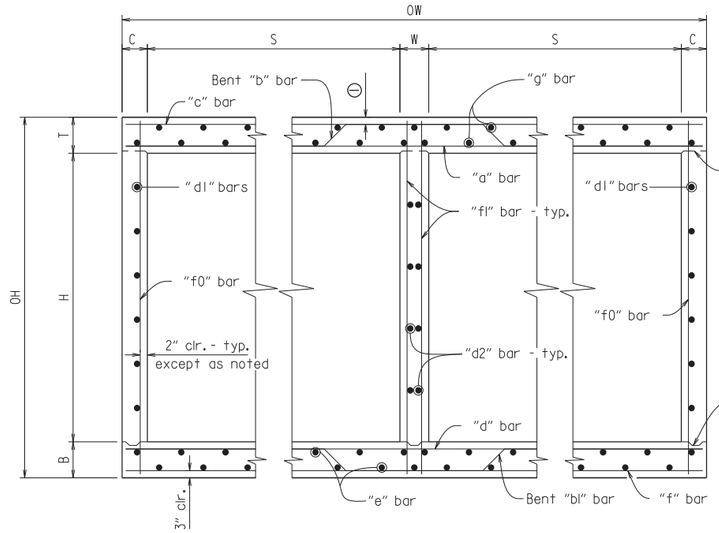
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	64	549
		SPECIAL DETAILS				

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

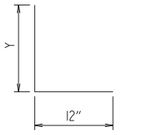
Note: When top slab of culvert serves as finished roadway surface, see General Notes on Sheet 1 of 4.



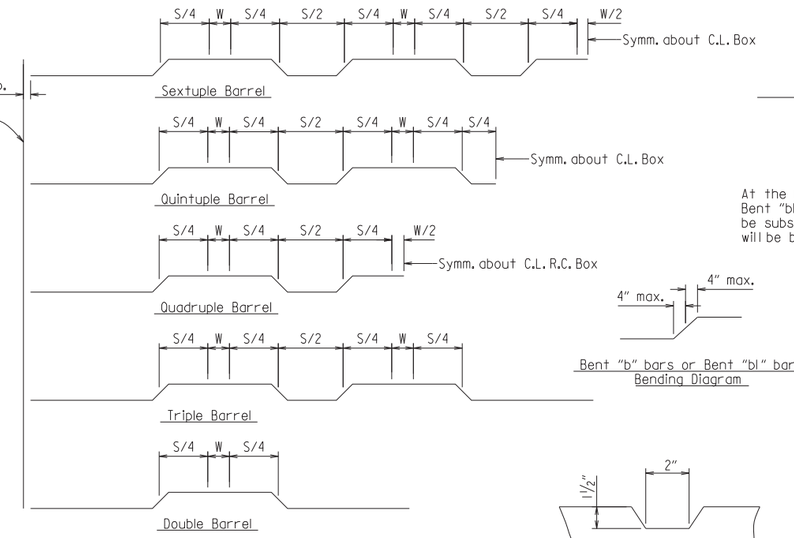
TYPICAL SECTION M-M

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

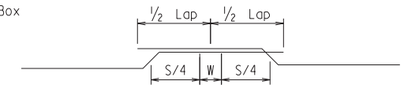
Bottom Slab
Straight "d" bars shall alternate with Bent "b1" bars in top.
Straight "f" bars shall alternate with Bent "b1" bars in bottom.



"h" bars sketch



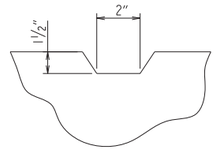
Bent "b" bars or Bent "b1" bars sketch



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

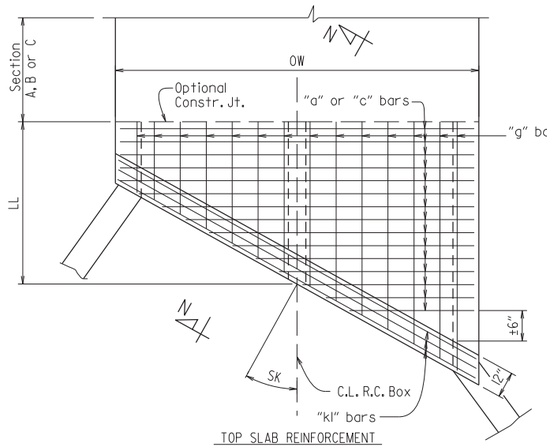
At the Contractor's option in lieu of providing Bent "b" or Bent "b1" bars, one bar top and bottom of equivalent size may be substituted for each bent bar. Payment for the reinforcing will be based on the weight of the "b" or "b1" bar.

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

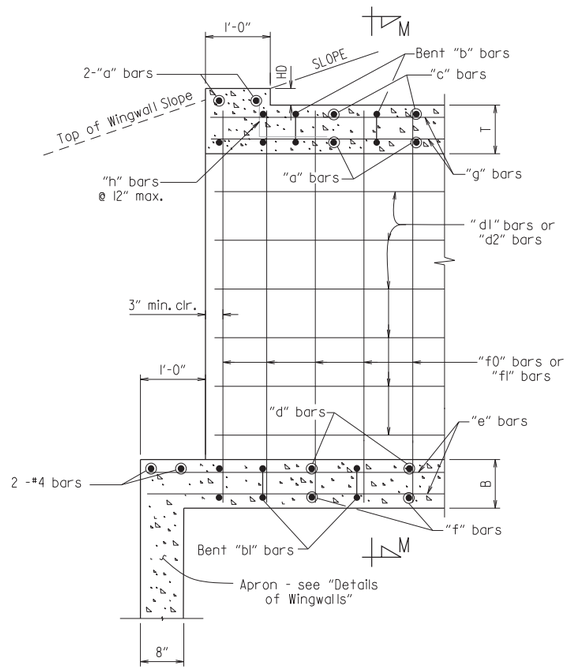


TYPICAL KEYWAY DETAIL

(All Construction Joints)

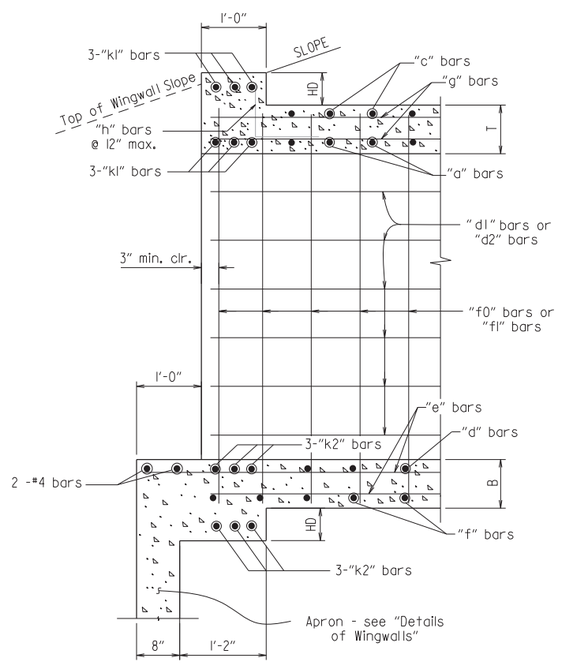


TOP SLAB REINFORCEMENT
Straight "c" bars in top.
Straight "a" bars in bottom.



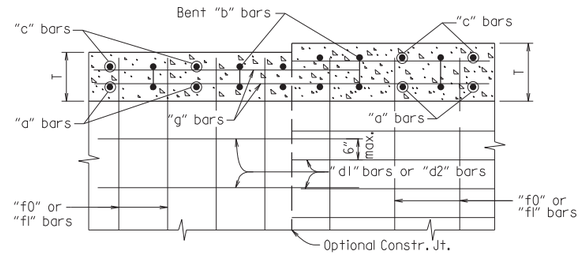
PART LONGITUDINAL SECTION

(Non-Skewed Ends)



PART LONGITUDINAL SECTION N-N

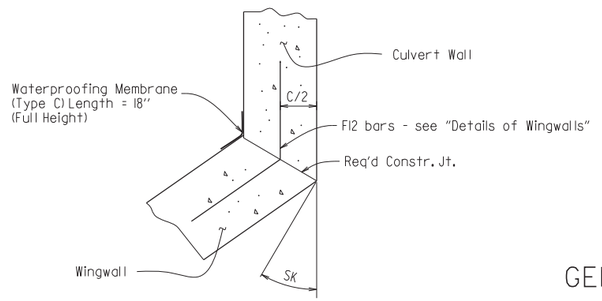
(Skewed Ends)



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

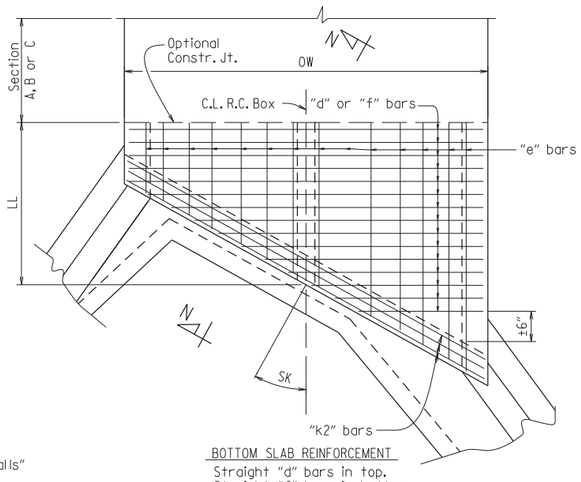
LONGITUDINAL LAP DETAIL AT CHANGE IN SECTIONS

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

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

DETAILS OF MULTI-BARREL
R.C. BOX CULVERT

SPECIAL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

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DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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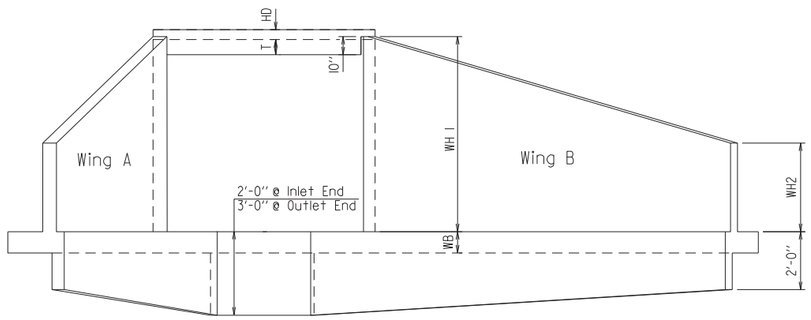
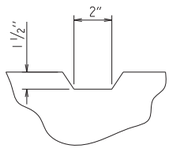


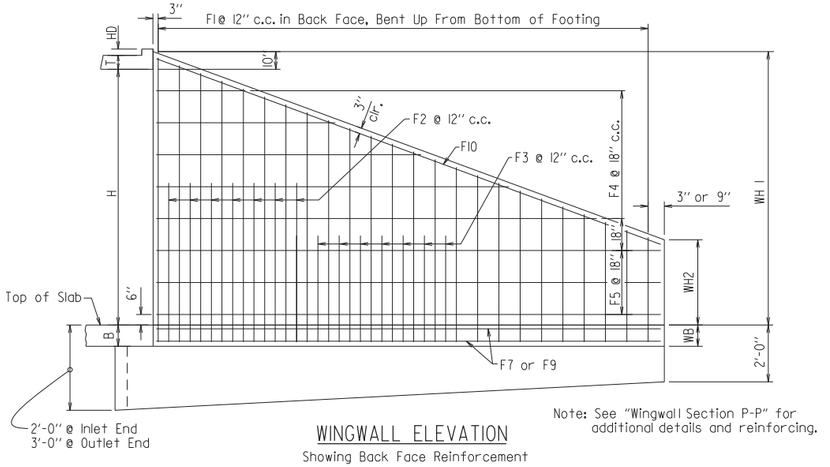
END ELEVATION

Flared Wingwalls Shown



TYPICAL KEYWAY DETAIL

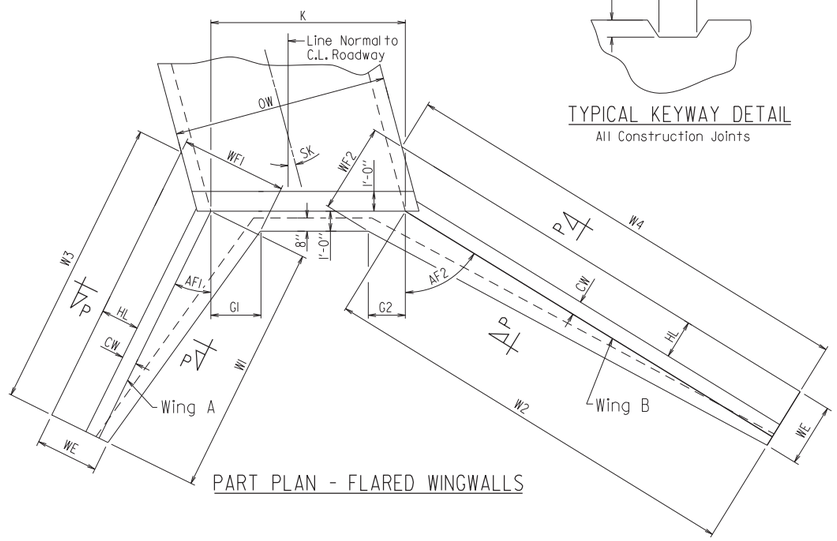
All Construction Joints



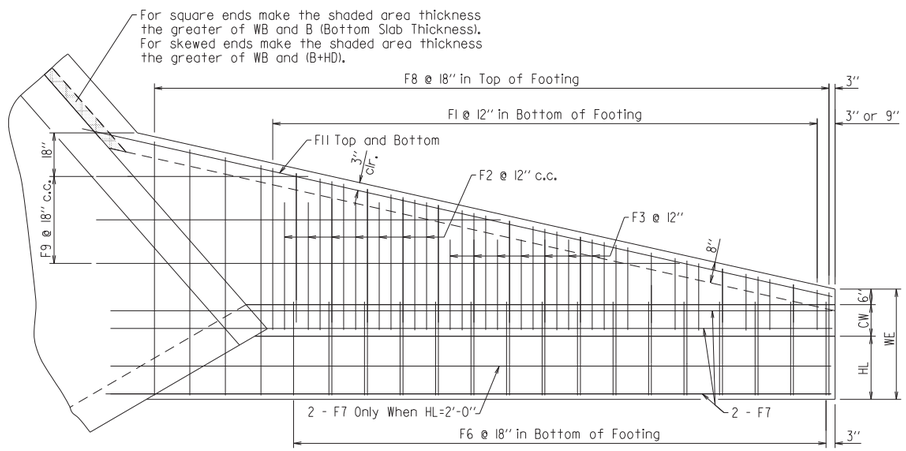
WINGWALL ELEVATION

Showing Back Face Reinforcement

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

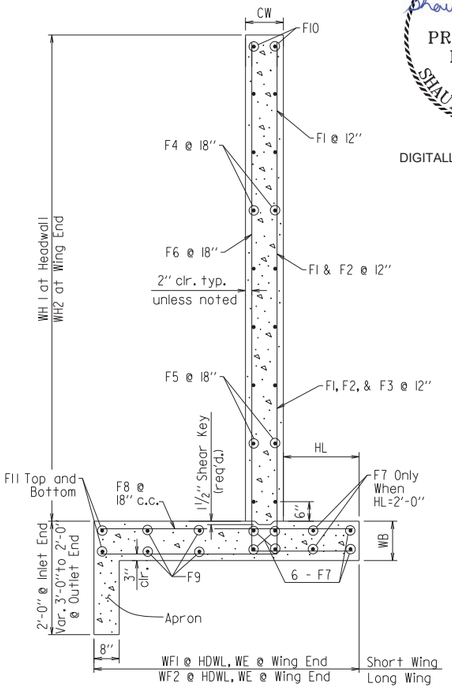


PART PLAN - FLARED WINGWALLS

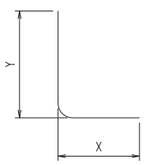


PLAN - FLARED WINGWALLS

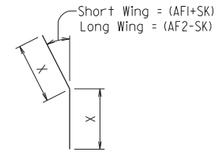
Showing Footing Reinforcement



WINGWALL SECTION P-P

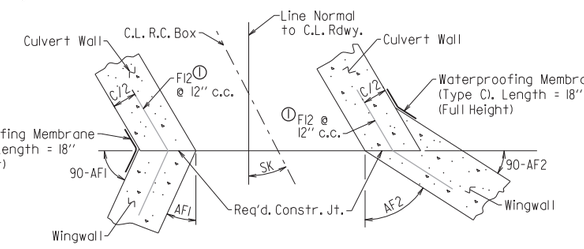


F1, F2, F3, & F6 BARS



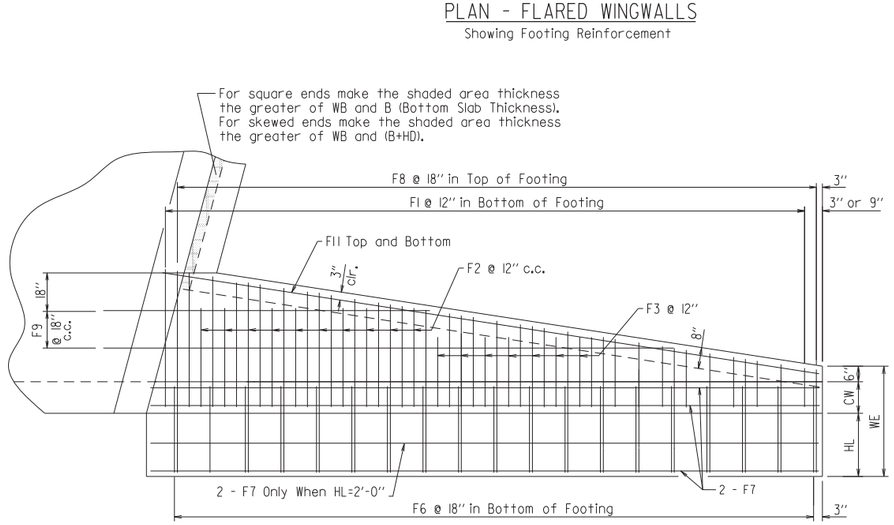
①F12 BAR

①F12 is a straight bar for parallel wingwalls



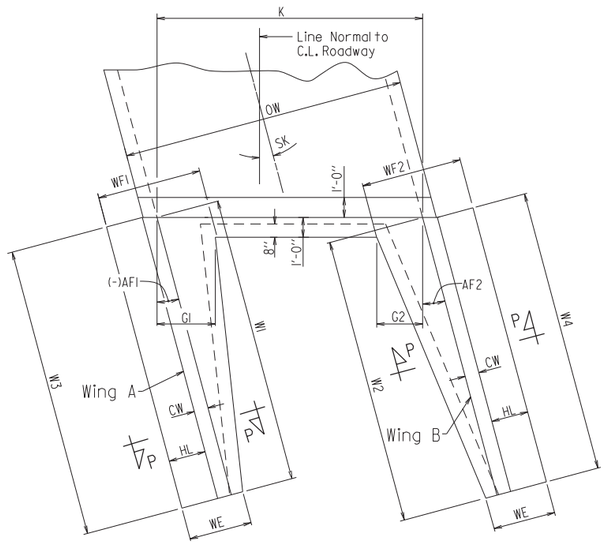
CONSTRUCTION JOINTS

Flared Wingwalls Shown



PLAN - PARALLEL WINGWALLS

Showing Footing Reinforcement



PART PLAN - PARALLEL WINGWALLS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

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

LRFD

rnfortner 6/28/2022 10:30:54 AM
WORKSPACE: AHTD
L:\2017\17017515 - AHTD Arkadelphia Bypass\Drawings\r070442_SD_BOX CULVERT GENERAL.dgn
V 1.1.17
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	66	549
		TEMPORARY EROSION CONTROL DETAILS				

BYPASS

SILT FENCE	E-II	LIN. FT.
STA. 100+80 TO 110+00	RT.	215
STA. 101+70 TO 103+05	RT.	70
STA. 101+95 TO 104+70	RT.	255
STA. 105+50 TO 107+15	RT.	150
STA. 105+90 TO 109+75	RT.	95
STA. 106+75 TO 108+25	LT.	250
STA. 108+65 TO 109+95	RT.	130
STA. 108+75 TO 112+55	LT.	865
STA. 112+45 TO 113+40	LT.	140
STA. 113+30 TO 113+40	RT.	200
STA. 113+95 TO 115+25	RT.	280

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

BYPASS STA. 100+27.88
BEGIN JOB 070442
(BYPASS)

105+00

C.L. BYPASS

T.C.E.

PROP. R/W C/A & FENCE

EXIST. R/W

PROP. R/W

C.L. PROFESSIONAL PARK DR.

C.L. HWY. 51 - PINE ST.

100+00

110+00

115+00

120+00

125+00

130+00

135+00

140+00

145+00

150+00

155+00

160+00

165+00

170+00

175+00

180+00

185+00

190+00

195+00

200+00

205+00

210+00

215+00

220+00

225+00

230+00

235+00

240+00

245+00

250+00

255+00

260+00

265+00

270+00

275+00

280+00

285+00

290+00

295+00

300+00

305+00

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	67	549
		TEMPORARY EROSION CONTROL DETAILS				

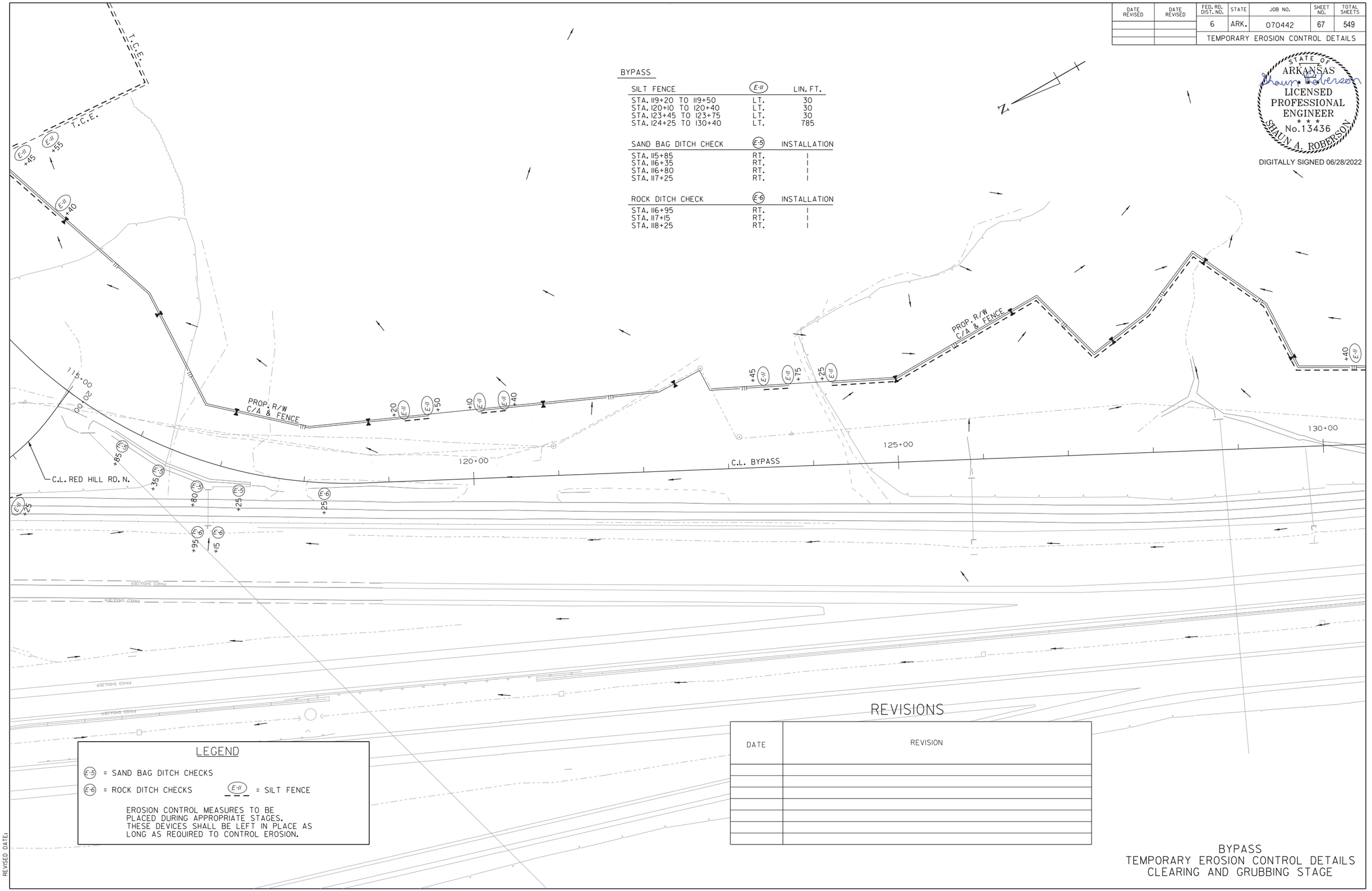
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

BYPASS

SILT FENCE (E-11)		LIN. FT.
STA. 119+20 TO 119+50	LT.	30
STA. 120+10 TO 120+40	LT.	30
STA. 123+45 TO 123+75	LT.	30
STA. 124+25 TO 130+40	LT.	785

SAND BAG DITCH CHECK (E-5)		INSTALLATION
STA. 115+85	RT.	1
STA. 116+35	RT.	1
STA. 116+80	RT.	1
STA. 117+25	RT.	1

ROCK DITCH CHECK (E-6)		INSTALLATION
STA. 116+95	RT.	1
STA. 117+15	RT.	1
STA. 118+25	RT.	1



LEGEND

(E-5) = SAND BAG DITCH CHECKS

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

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE	REVISION

BYPASS
TEMPORARY EROSION CONTROL DETAILS
CLEARING AND GRUBBING STAGE

rnfortner 6/28/2022 10:3:00 AM
WORKSPACE: AHTD
L:\20I7\I70I75I5 - AHTD Arkadelphia Bypass\Drawings\r070442.EC.CG.02.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	68	549
		TEMPORARY EROSION CONTROL DETAILS				

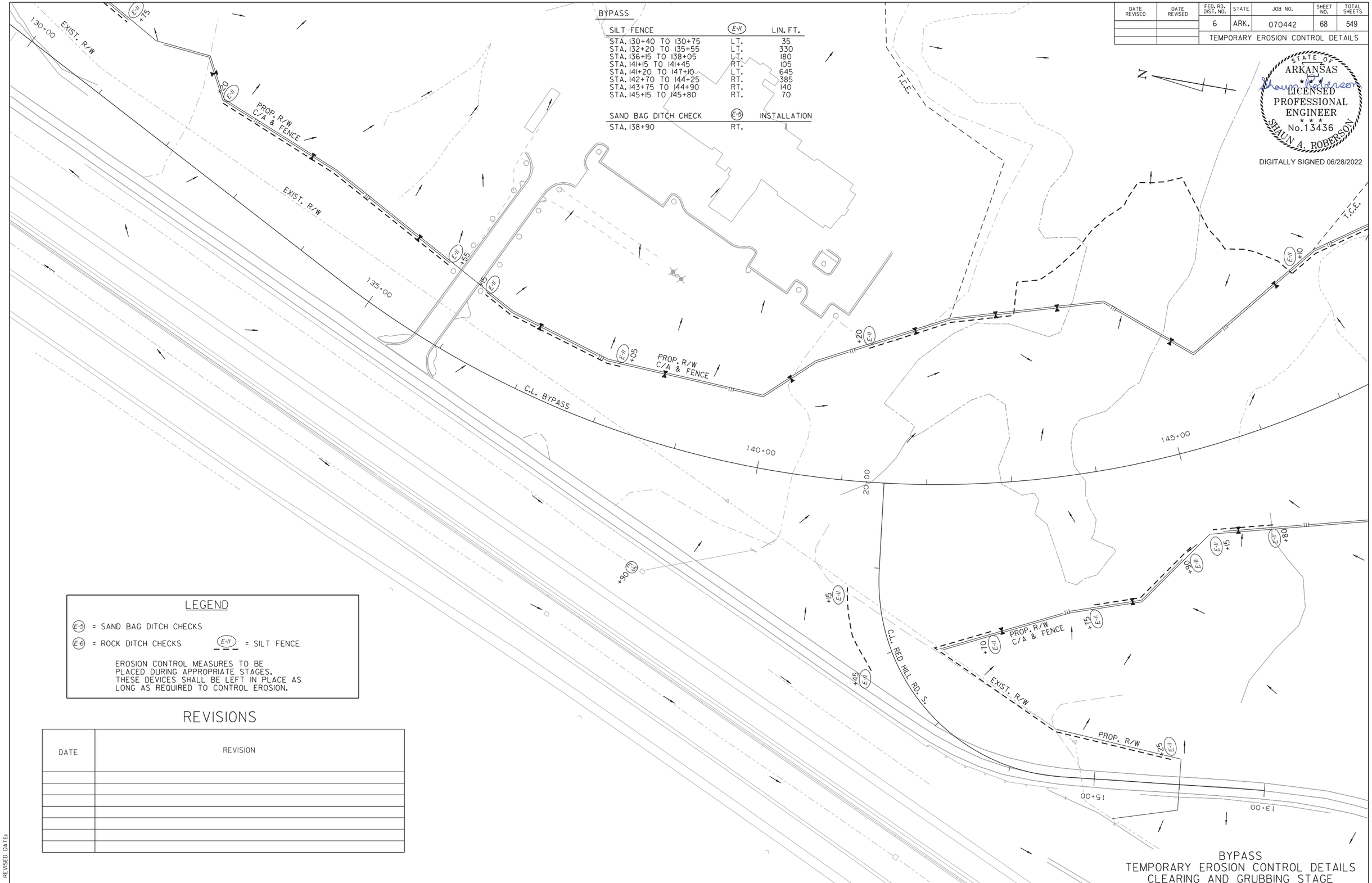
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

BYPASS

SILT FENCE	(E-11)	LIN. FT.
STA. 130+40 TO 130+75	LT.	35
STA. 132+20 TO 135+55	LT.	330
STA. 136+15 TO 138+05	LT.	180
STA. 141+15 TO 141+45	RT.	105
STA. 141+20 TO 147+10	LT.	645
STA. 142+70 TO 144+25	RT.	385
STA. 143+75 TO 144+90	RT.	140
STA. 145+15 TO 145+80	RT.	70

SAND BAG DITCH CHECK	(E-5)	INSTALLATION
STA. 138+90	RT.	1



LEGEND

(E-5) = SAND BAG DITCH CHECKS

(E-6) = ROCK DITCH CHECKS

(E-11) = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE	REVISION

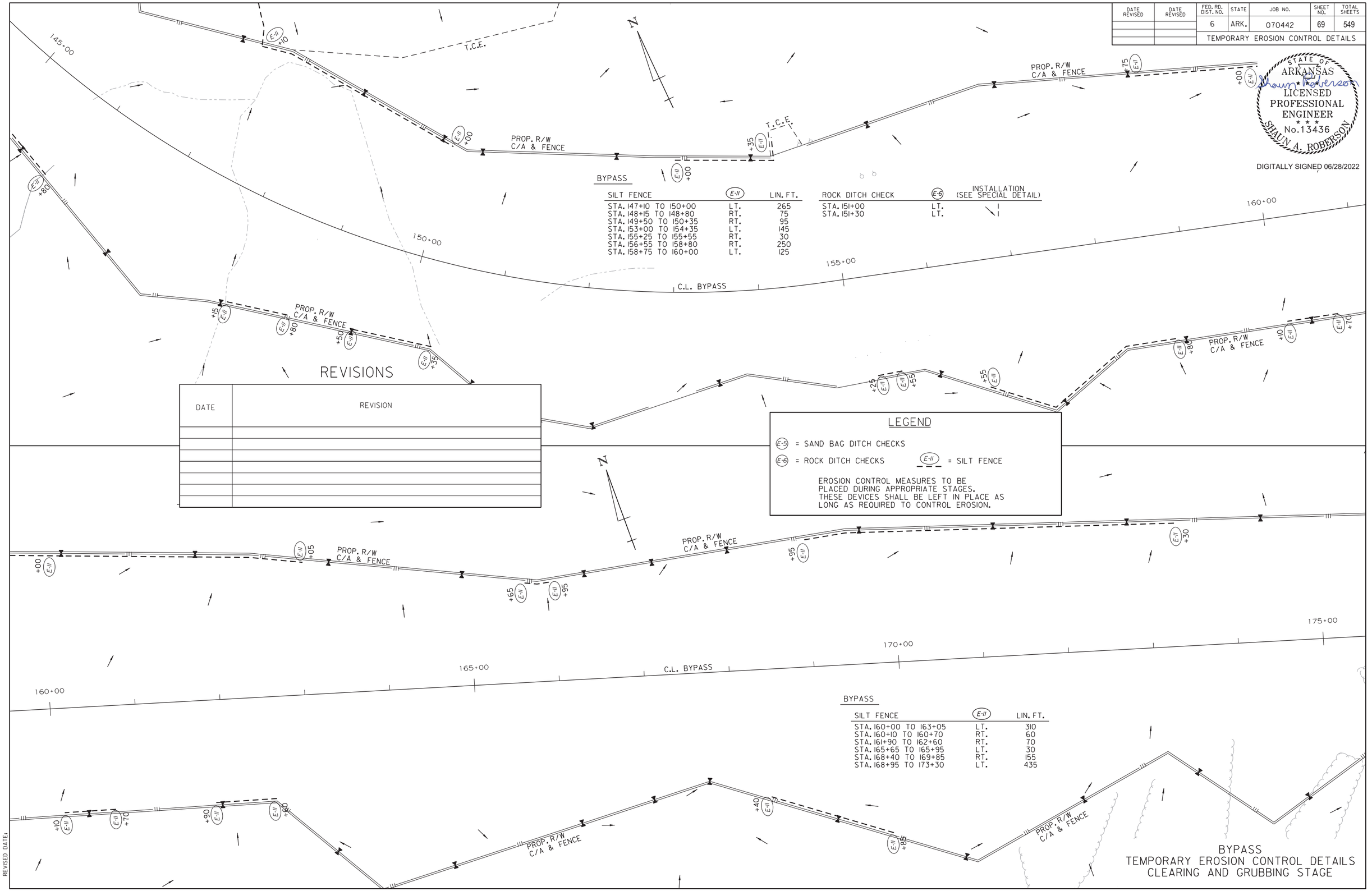
BYPASS
TEMPORARY EROSION CONTROL DETAILS
CLEARING AND GRUBBING STAGE

rnfortner 6/28/2022 10:31:00 AM
WORKSPACE: AHTD
L:\2017\1701715 - AHTD Arkadelphia Bypass\Drawings\r070442_EC_CG_03.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	69	549
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022



BYPASS

SILT FENCE	E-11	LIN. FT.
STA. 147+10 TO 150+00	LT.	265
STA. 148+15 TO 148+80	RT.	75
STA. 149+50 TO 150+35	RT.	95
STA. 153+00 TO 154+35	LT.	145
STA. 155+25 TO 155+55	RT.	30
STA. 156+55 TO 158+80	RT.	250
STA. 158+75 TO 160+00	LT.	125

ROCK DITCH CHECK	E-6	INSTALLATION (SEE SPECIAL DETAIL)
STA. 151+00	LT.	1
STA. 151+30	LT.	1

REVISIONS

DATE	REVISION

LEGEND

E-5 = SAND BAG DITCH CHECKS

E-6 = ROCK DITCH CHECKS

E-11 = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

BYPASS

SILT FENCE	E-11	LIN. FT.
STA. 160+00 TO 163+05	LT.	310
STA. 160+10 TO 160+70	RT.	60
STA. 161+90 TO 162+60	RT.	70
STA. 165+65 TO 165+95	LT.	30
STA. 168+40 TO 169+85	RT.	155
STA. 168+95 TO 173+30	LT.	435

BYPASS
TEMPORARY EROSION CONTROL DETAILS
CLEARING AND GRUBBING STAGE

rnfortner 6/28/2022 10:3:00 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	70	549

TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

BYPASS

SILT FENCE	E-11	LIN. FT.
STA. 175+70 TO 175+95	RT.	30
STA. 176+40 TO 177+45	LT.	105
STA. 176+50 TO 176+90	RT.	45
STA. 177+95 TO 179+95	LT.	190
STA. 178+55 TO 179+35	RT.	85
STA. 184+25 TO 190+00	LT.	595
STA. 185+00 TO 190+00	RT.	525

REVISIONS

DATE	REVISION

BYPASS

SILT FENCE	E-11	LIN. FT.
STA. 190+00 TO 195+00	LT.	500
STA. 190+00 TO 190+85	RT.	85
STA. 191+15 TO 201+75	RT.	1060
STA. 197+45 TO 201+75	LT.	435
STA. 202+25 TO 205+00	LT.	275
STA. 202+25 TO 205+00	RT.	275

LEGEND

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

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

C.L. BYPASS
C.L. 26TH ST. N.
C.L. 26TH ST. S.
36TH STREET
PROP. R/W C/A & FENCE
APPROXIMATE FEMA 100 YR. FLOODPLAIN LIMITS
175+00
180+00
185+00
190+00
195+00
200+00
205+00

BYPASS
TEMPORARY EROSION CONTROL DETAILS
CLEARING AND GRUBBING STAGE

rnfortner
6/28/2022 10:31:01 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	71	549
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

BYPASS

SILT FENCE	(E-11)	LIN. FT.
STA. 205+00 TO 207+20	RT.	220
STA. 205+00 TO 207+70	LT.	270
STA. 207+55 TO 210+75	RT.	320
STA. 208+05 TO 210+75	LT.	270
STA. 211+25 TO 220+00	LT.	875
STA. 211+25 TO 220+00	RT.	875

N

PROP. R/W C/A & FENCE

C.L. BYPASS

205+00 210+00 215+00 220+00

REVISIONS

DATE	REVISION

LEGEND

(E-5) = SAND BAG DITCH CHECKS

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

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

APPROXIMATE FEMA 100 YR. FLOODPLAIN LIMITS

N

PROP. R/W C/A & FENCE

C.L. BYPASS

220+00 225+00 230+00 235+00

BYPASS

SILT FENCE	(E-11)	LIN. FT.
STA. 220+00 TO 221+75	RT.	175
STA. 221+45 TO 221+75	LT.	30
STA. 222+25 TO 222+55	LT.	30
STA. 222+25 TO 230+75	RT.	850
STA. 224+10 TO 230+75	LT.	665
STA. 231+25 TO 235+00	LT.	375
STA. 231+25 TO 235+00	RT.	375

BYPASS
TEMPORARY EROSION CONTROL DETAILS
CLEARING AND GRUBBING STAGE

rnfortner 6/28/2022 10:31:01 AM
WORKSPACE: AHTD
L:\2017\170175 - AHTD Arkadelphia Bypass\Drawings\r070442_EC_CG_06.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	72	549
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

BYPASS

SILT FENCE	E-II	LIN. FT.
STA. 235+00 TO 236+75	LT.	180
STA. 235+00 TO 240+90	RT.	595
STA. 242+40 TO 243+30	RT.	130
STA. 243+40 TO 243+70	LT.	30
STA. 244+20 TO 244+50	LT.	30
STA. 243+80 TO 250+00	RT.	660
STA. 249+10 TO 250+00	LT.	85

REVISIONS

DATE	REVISION

LEGEND

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

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

BYPASS

SILT FENCE	E-II	LIN. FT.
STA. 250+00 TO 251+55	LT.	150
STA. 250+00 TO 257+90	RT.	775
STA. 260+15 TO 262+85	RT.	235
STA. 263+15 TO 265+00	RT.	160

BYPASS
TEMPORARY EROSION CONTROL DETAILS
CLEARING AND GRUBBING STAGE

rnfortner 6/28/2022 10:31:02 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	73	549
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

BYPASS

SILT FENCE	E-11	LIN. FT.
STA. 265+00 TO 265+25	RT.	20

FUTURE C.L. BYPASS TO HWY. 67 CONNECTOR

PROP. R/W

PROP. R/W

15+00

+85 E-11 PROP. R/W C/A & FENCE

E-11 +00

+25 E-11

STA. 268+05.79
END BYPASS

265+00 C.L. BYPASS

PROP. R/W C/A & FENCE

E-11 +90

E-11 +90

110+00

E-7

E-7

EXIST. R/W

EXIST. R/W

105+00

100+00

E-6 +35

C.L. HWY. 67

T.C.E.

T.C.E.

E-11 +80

+35 E-11

EXIST. R/W

EXIST. R/W

EXIST. R/W

EXIST. R/W

EXIST. R/W

EXIST. R/W

STA. 102+35.00
BEGIN HWY. 67

APPROXIMATE FEMA 100 YR. FLOODPLAIN LIMITS

HWY. 67

SILT FENCE	E-11	LIN. FT.
STA. 101+35 TO 106+80	RT.	600
STA. 108+90 TO 109+90	LT.	95

ROCK DITCH CHECK	E-6	INSTALLATION
STA. 101+35	LT.	1

DROP INLET SILT FENCE	E-7	INSTALLATION
STA. 108+10	LT.	1
STA. 109+05	LT.	1

LEGEND

E-5 = SAND BAG DITCH CHECKS
E-6 = ROCK DITCH CHECKS
E-7 = DROP INLET SILT FENCE
E-11 = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE	REVISION

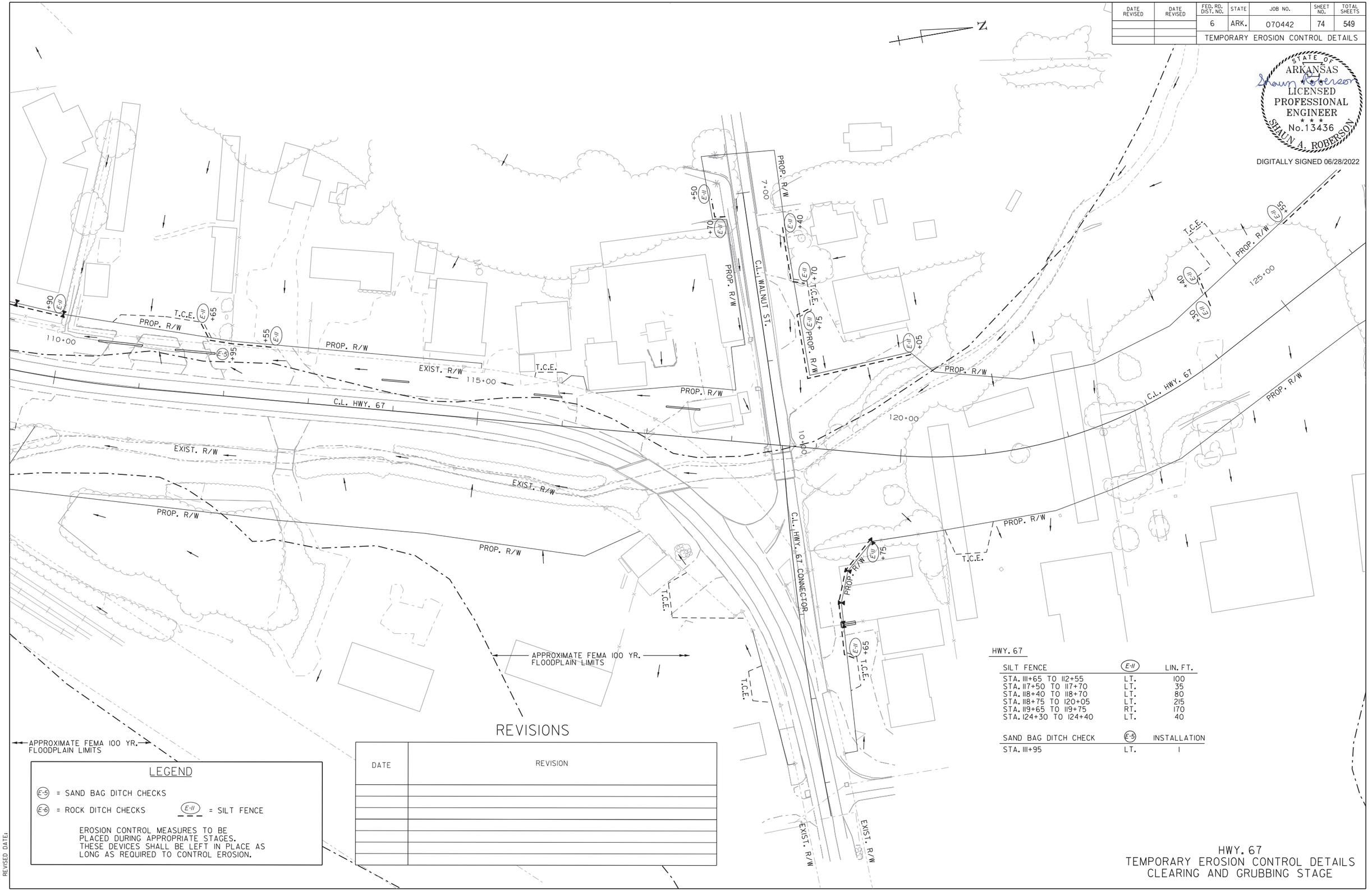
BYPASS & HWY. 67
TEMPORARY EROSION CONTROL DETAILS
CLEARING AND GRUBBING STAGE

rnfortner 6/28/2022 10:3:02 AM
WORKSPACE: AHTD
L:\2017\170755 - AHTD Arkadelphia Bypass\Drawings\r070442_EC_CG_08_HWY 67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	74	549
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

N



HWY. 67

SILT FENCE	E-II	LIN. FT.
STA. 111+65 TO 112+55	LT.	100
STA. 117+50 TO 117+70	LT.	35
STA. 118+40 TO 118+70	LT.	80
STA. 118+75 TO 120+05	LT.	215
STA. 119+65 TO 119+75	RT.	170
STA. 124+30 TO 124+40	LT.	40

SAND BAG DITCH CHECK	E-5	INSTALLATION
STA. 111+95	LT.	1

LEGEND

E-5 = SAND BAG DITCH CHECKS

E-6 = ROCK DITCH CHECKS

E-II = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE	REVISION

HWY. 67
TEMPORARY EROSION CONTROL DETAILS
CLEARING AND GRUBBING STAGE

rnfortner 6/28/2022 10:3:03 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	75	549
		TEMPORARY EROSION CONTROL DETAILS				

HWY. 67

SILT FENCE	E-11	LIN. FT.
STA. 125+55 TO 126+50	LT.	95
STA. 126+85 TO 130+10	LT.	385
STA. 127+45 TO 128+75	RT.	120
STA. 131+55 TO 132+70	LT.	140
STA. 133+00 TO 136+95	LT.	405
STA. 134+55 TO 136+20	RT.	165
STA. 137+70 TO 137+85	RT.	120
STA. 138+20 TO 138+30	LT.	20
STA. 139+00 TO 139+00	LT.	55

N

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 7/6/2022

APPROXIMATE FEMA 100 YR. FLOODPLAIN LIMITS

PROP. R/W
C.L. HWY. 67
C.L. CLAY ST.
T.C.E.
125+00
130+00
135+00
140+00
18+00
20+00
23+00

LEGEND

E-5 = SAND BAG DITCH CHECKS

E-6 = ROCK DITCH CHECKS

E-11 = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE	REVISION

HWY. 67
TEMPORARY EROSION CONTROL DETAILS
CLEARING AND GRUBBING STAGE

CGGervasini 7/6/2022 11:01:43 AM
WORKSPACE: AHTD
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REVISED DATE:

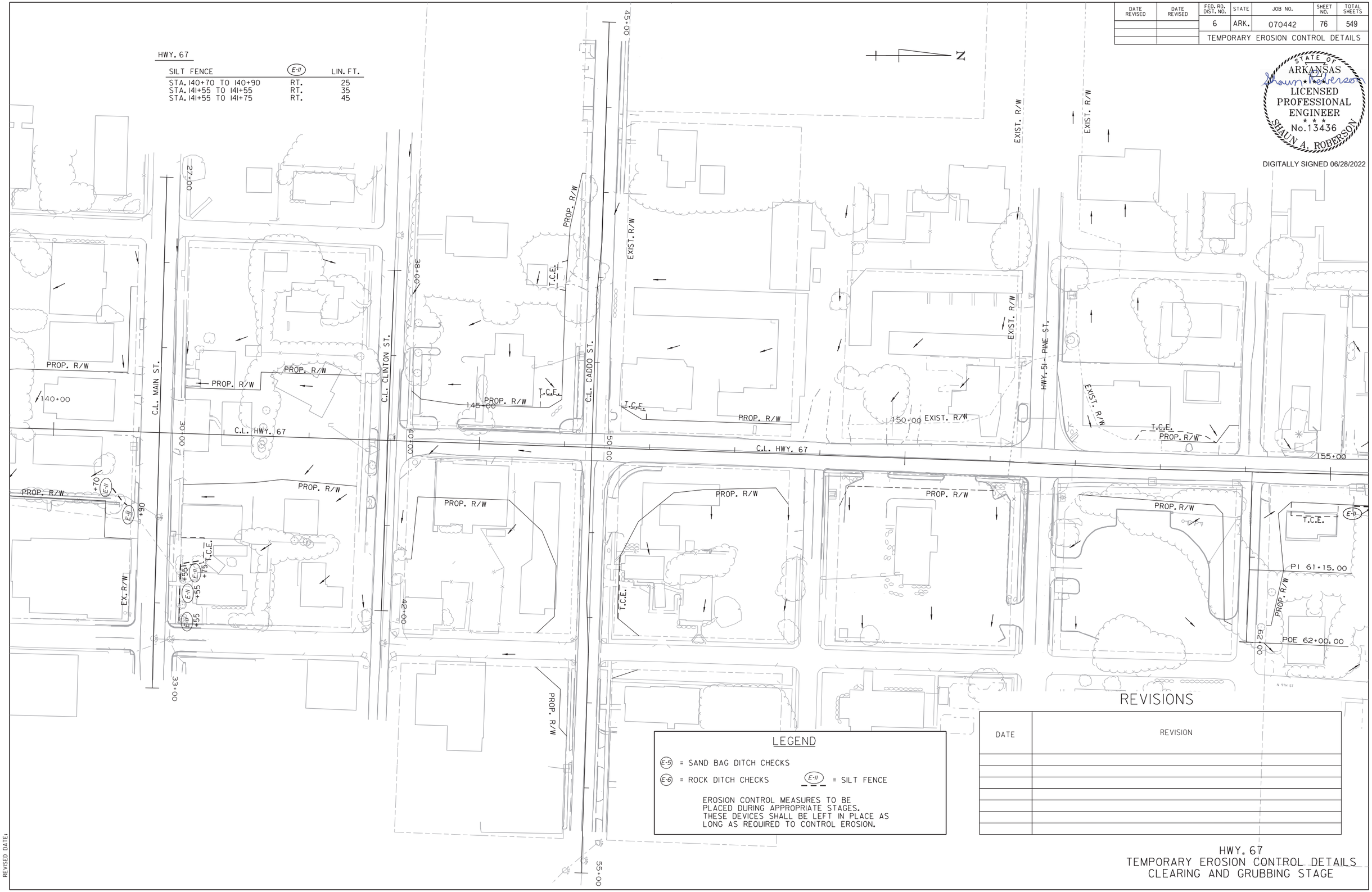
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	76	549
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

HWY. 67

SILT FENCE	(E-11)	LIN. FT.
STA. 140+70 TO 140+90	RT.	25
STA. 141+55 TO 141+55	RT.	35
STA. 141+55 TO 141+75	RT.	45



LEGEND

(E-5) = SAND BAG DITCH CHECKS

(E-6) = ROCK DITCH CHECKS

(E-11) = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE	REVISION

HWY. 67
TEMPORARY EROSION CONTROL DETAILS
CLEARING AND GRUBBING STAGE

rnfortner 6/28/2022 10:31:04 AM
WORKSPACE: AHTD
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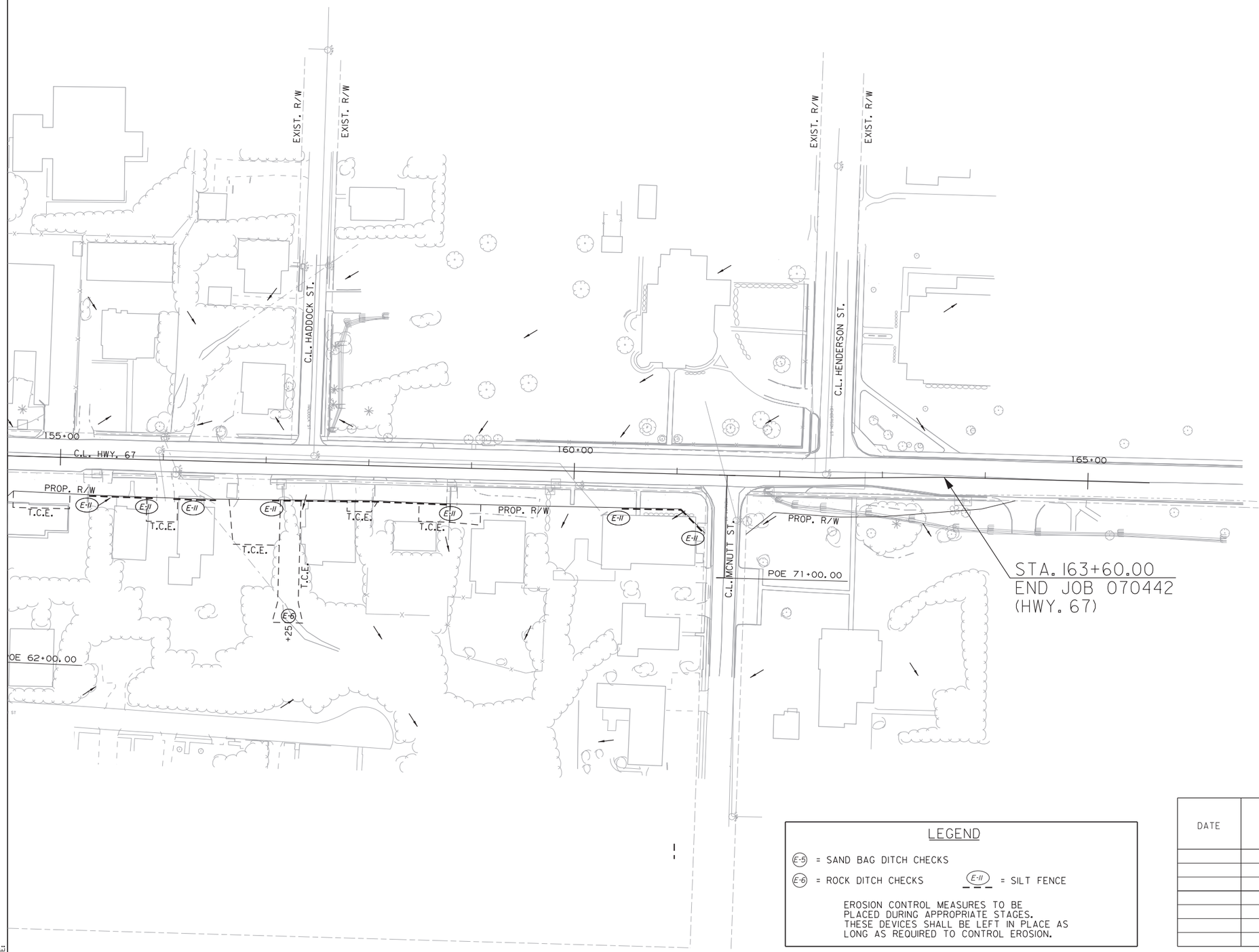
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	77	549
		TEMPORARY EROSION CONTROL DETAILS				



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STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

HWY. 67

SILT FENCE	(E-11)	LIN. FT.
STA. 155+25 TO 155+90	RT.	65
STA. 156+10 TO 156+55	RT.	45
STA. 157+05 TO 158+80	RT.	175
STA. 160+45 TO 161+30	RT.	90

ROCK DITCH CHECK	(E-6)	INSTALLATION
STA. 157+25	RT.	1

LEGEND

(E-5) = SAND BAG DITCH CHECKS

(E-6) = ROCK DITCH CHECKS

(E-11) = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE	REVISION

HWY. 67
TEMPORARY EROSION CONTROL DETAILS
CLEARING AND GRUBBING STAGE

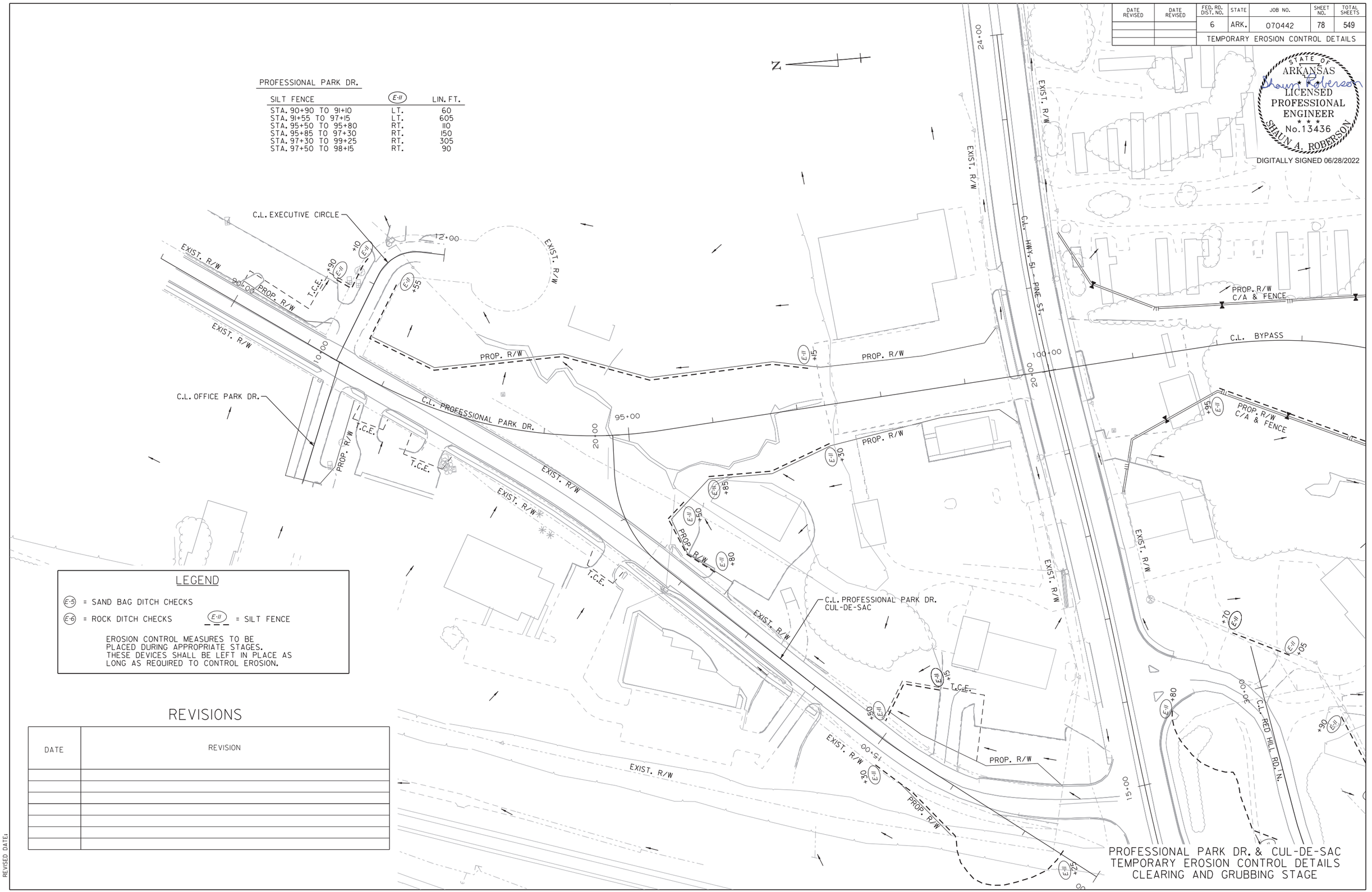
rnfortner 6/28/2022 10:31:04 AM
WORKSPACE: AHTD
L:\2017\170755 - AHTD Arkadelphia Bypass\Drawings\r070442_EC_CG_HWY 67_05.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	78	549
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

PROFESSIONAL PARK DR.

SILT FENCE	(E-11)	LIN. FT.
STA. 90+90 TO 91+10	LT.	60
STA. 91+55 TO 97+15	LT.	605
STA. 95+50 TO 95+80	RT.	110
STA. 95+85 TO 97+30	RT.	150
STA. 97+30 TO 99+25	RT.	305
STA. 97+50 TO 98+15	RT.	90



LEGEND

(E-5) = SAND BAG DITCH CHECKS

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

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE	REVISION

PROFESSIONAL PARK DR. & CUL-DE-SAC
TEMPORARY EROSION CONTROL DETAILS
CLEARING AND GRUBBING STAGE

rnfortner 6/28/2022 10:31:05 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	79	549
		TEMPORARY EROSION CONTROL DETAILS				

BYPASS

SILT FENCE	(E-11)	LIN. FT.
STA. 181+05 TO 181+70	RT.	575
STA. 182+45 TO 185+00	RT.	700
STA. 183+50 TO 185+00	LT.	155
STA. 185+00 TO 185+80	LT.	70
STA. 185+85 TO 186+80	LT.	200

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

LEGEND

(E-5) = SAND BAG DITCH CHECKS

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

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE	REVISION

PROP. R/W
C.L. 26TH ST. S.
C.L. 26TH ST. N.
C.L. BYPASS
15+00
20+00
180+00
185+00
190+00
+70
+45
+05
+95
+50
+00
+25
+80
+85
T.C.E.
APPROXIMATE FEMA 100 YR. FLOODPLAIN LIMITS
WOODS AND SMALL BRUSH
WOODS AND LIGHT BRUSH
WOODS
26TH STREET
27.50
PROP. R/W C/A & FENCE
PDHRN1521 PDB-SPK
PDHRN1518 PDB-SPK
PDHRN1517 PDB-SPK
PDHRN1518 PDHARDOT STD. MON. STAMPED PN:18
PDHARDOT STD. MON. STAMPED PN:17
GRAVEL DRIVE
4.91
CABLE TV PEDESTAL
CABLE TV PEDESTAL
POWER POLE
POWER POLE
POWER POLE

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	80	549
		TEMPORARY EROSION CONTROL DETAILS				

BYPASS

SILT FENCE	E-11	LIN. FT.
STA. 100+80 TO 110+00	RT.	RETAIN
STA. 101+65 TO 103+05	RT.	RETAIN
STA. 101+95 TO 104+70	RT.	RETAIN
STA. 105+50 TO 107+15	RT.	RETAIN
STA. 105+90 TO 109+75	RT.	RETAIN
STA. 106+75 TO 108+25	LT.	RETAIN
STA. 108+65 TO 109+95	RT.	RETAIN
STA. 108+75 TO 112+55	LT.	RETAIN
STA. 112+45 TO 113+40	LT.	RETAIN
STA. 113+30 TO 113+40	RT.	RETAIN
STA. 113+95 TO 115+25	RT.	RETAIN

BYPASS

ROCK DITCH CHECK	E-6	INSTALLATION
STA. 105+30	RT.	I
STA. 105+70	RT.	I
STA. 109+90	RT.	I
STA. 110+10	RT.	I
STA. 113+90	RT.	I
STA. 114+15	LT.	I
STA. 115+60	RT.	I

BYPASS

DROP INLET SILT FENCE	E-7	INSTALLATION
STA. 100+15	LT.	I
STA. 100+30	RT.	I
STA. 100+40	RT.	I
STA. 100+70	RT.	I
STA. 100+95	RT.	I
STA. 102+50	RT.	I
STA. 104+20	RT.	I
STA. 108+00	RT.	I
STA. 110+00	RT.	I
STA. 110+75	RT.	I
STA. 110+95	LT.	I
STA. 111+50	RT.	I
STA. 111+50	LT.	I
STA. 114+00	LT.	I
STA. 114+75	RT.	I
STA. 114+95	RT.	I
STA. 116+00	LT.	I

BYPASS

SAND BAG DITCH CHECK	E-5	INSTALLATION
STA. 103+40	LT.	I
STA. 103+90	LT.	I
STA. 104+30	LT.	I
STA. 105+90	LT.	I
STA. 106+30	LT.	I
STA. 108+25	LT.	I
STA. 113+15	RT.	I
STA. 114+15	RT.	I
STA. 114+55	RT.	I
STA. 115+10	LT.	I
STA. 115+40	RT.	I
STA. 115+50	LT.	I
STA. 116+00	LT.	I

BYPASS

DIVERSION DITCH	E-8	LIN. FT.
STA. 104+75 TO 106+25	RT.	150
STA. 109+65 TO 110+15	RT.	50
STA. 111+90 TO 115+35	LT.	345

SLOPE DRAIN	E-12	LIN. FT.
STA. 106+25	RT.	65
STA. 110+15	RT.	60
STA. 111+90	LT.	75

DUMPED RIPRAP	E-12	CU. YD.
STA. 106+25	RT.	2
STA. 110+15	RT.	2
STA. 111+90	LT.	2

BYPASS STA. 100+27.88
BEGIN JOB 070442
(BYPASS)

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

LEGEND

- E-5 = SAND BAG DITCH CHECKS
- E-6 = ROCK DITCH CHECKS
- E-9 = DUMPED RIPRAP
- E-7 = DROP INLET SILT FENCE
- E-8 = DIVERSION DITCH (TYPE E-8)
- E-11 = SILT FENCE
- E-12 = SLOPE PIPE DRAIN (12") (TYPE E-12)

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE	REVISION

BYPASS & RED HILL RD. N.
TEMPORARY EROSION CONTROL DETAILS
STAGE I

rnfortner 6/28/2022 10:3:06 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	81	549
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

BYPASS

DIVERSION DITCH	(E-8)	LIN. FT.
STA. 125+75 TO 129+35	LT.	360

SLOPE DRAIN	(E-12)	LIN. FT.
STA. 125+75	LT.	70

DUMPED RIPRAP	(E-12)	CU. YD.
STA. 125+75	LT.	2

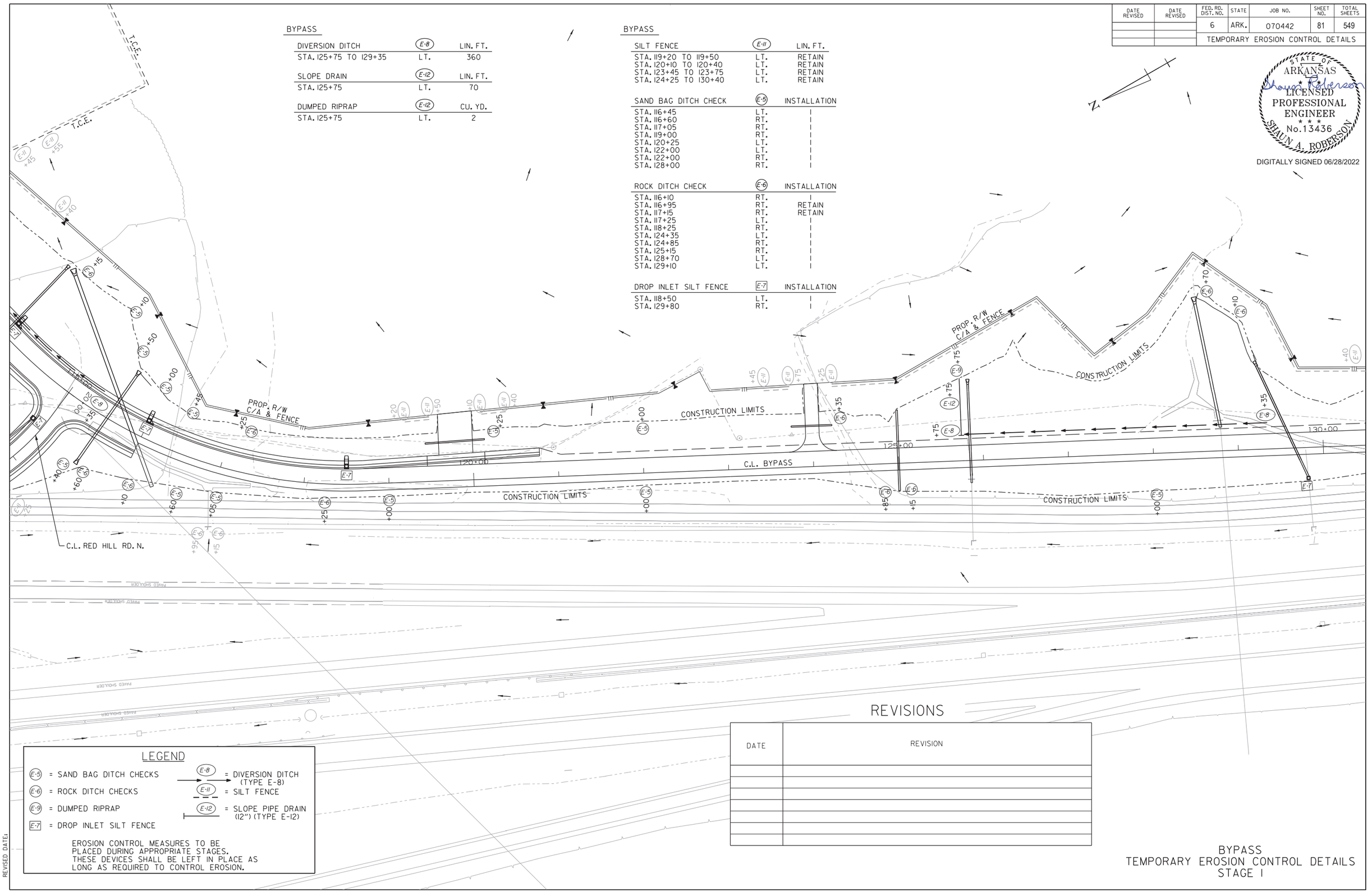
BYPASS

SILT FENCE	(E-11)	LIN. FT.
STA. 119+20 TO 119+50	LT.	RETAIN
STA. 120+10 TO 120+40	LT.	RETAIN
STA. 123+45 TO 123+75	LT.	RETAIN
STA. 124+25 TO 130+40	LT.	RETAIN

SAND BAG DITCH CHECK	(E-5)	INSTALLATION
STA. 116+45	LT.	I
STA. 116+60	RT.	I
STA. 117+05	RT.	I
STA. 119+00	RT.	I
STA. 120+25	LT.	I
STA. 122+00	LT.	I
STA. 122+00	RT.	I
STA. 128+00	RT.	I

ROCK DITCH CHECK	(E-6)	INSTALLATION
STA. 116+10	RT.	I
STA. 116+95	RT.	RETAIN
STA. 117+15	RT.	RETAIN
STA. 117+25	LT.	I
STA. 118+25	RT.	I
STA. 124+35	LT.	I
STA. 124+85	RT.	I
STA. 125+15	RT.	I
STA. 128+70	LT.	I
STA. 129+10	LT.	I

DROP INLET SILT FENCE	[E-7]	INSTALLATION
STA. 118+50	LT.	I
STA. 129+80	RT.	I



LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-9) = DUMPED RIPRAP
- [E-7] = DROP INLET SILT FENCE
- (E-8) = DIVERSION DITCH (TYPE E-8)
- (E-11) = SILT FENCE
- (E-12) = SLOPE PIPE DRAIN (12") (TYPE E-12)

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE	REVISION

BYPASS
TEMPORARY EROSION CONTROL DETAILS
STAGE I

rnfortner 6/28/2022 10:31:07 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	82	549
		TEMPORARY EROSION CONTROL DETAILS				

BYPASS

ROCK DITCH CHECK	(E-6)	INSTALLATION
STA. 131+30	LT.	I
STA. 138+00	RT.	I
STA. 140+20	RT.	I
STA. 141+15	RT.	I
STA. 143+85	RT.	I
STA. 144+80	RT.	I

DIVERSION DITCH	(E-8)	LIN. FT.
STA. 140+85 TO 144+65	LT.	380

SLOPE DRAIN	(E-12)	LIN. FT.
STA. 144+65	LT.	90

DUMPED RIPRAP	(E-12)	CU. YD.
STA. 144+65	LT.	2

BYPASS

SILT FENCE	(E-11)	LIN. FT.
STA. 130+40 TO 130+75	LT.	RETAIN
STA. 132+20 TO 135+55	LT.	RETAIN
STA. 136+15 TO 138+05	LT.	RETAIN
STA. 141+15 TO 141+45	RT.	RETAIN
STA. 141+20 TO 147+10	LT.	RETAIN
STA. 142+70 TO 144+25	RT.	RETAIN
STA. 143+75 TO 144+90	RT.	RETAIN
STA. 145+15 TO 145+80	RT.	RETAIN

SAND BAG DITCH CHECK	(E-5)	INSTALLATION
STA. 131+40	RT.	I
STA. 131+70	RT.	I
STA. 135+45	LT.	I
STA. 137+00	RT.	I
STA. 138+00	LT.	I
STA. 138+55	RT.	I
STA. 138+90	RT.	RETAIN
STA. 139+05	LT.	I
STA. 139+40	RT.	I
STA. 139+55	LT.	I
STA. 140+00	LT.	I
STA. 140+50	LT.	I
STA. 141+00	LT.	I
STA. 141+55	LT.	I
STA. 142+00	LT.	I
STA. 142+10	RT.	I
STA. 142+55	RT.	I
STA. 143+00	RT.	I
STA. 143+45	RT.	I
STA. 145+90	RT.	I
STA. 146+35	RT.	I
STA. 146+80	RT.	I

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

LEGEND

(E-5) = SAND BAG DITCH CHECKS
(E-6) = ROCK DITCH CHECKS
(E-9) = DUMPED RIPRAP
(E-8) = DIVERSION DITCH (TYPE E-8)
(E-11) = SILT FENCE
(E-12) = SLOPE PIPE DRAIN (12") (TYPE E-12)

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE	REVISION

BYPASS
TEMPORARY EROSION CONTROL DETAILS
STAGE I

rnfortner 6/28/2022 10:31:07 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	83	549
		TEMPORARY EROSION CONTROL DETAILS				

BYPASS

SILT FENCE	E-11	LIN. FT.
STA. 147+10 TO 150+00	LT.	RETAIN
STA. 148+15 TO 148+80	RT.	RETAIN
STA. 149+50 TO 150+35	RT.	RETAIN
STA. 153+00 TO 154+35	LT.	RETAIN
STA. 155+25 TO 155+55	RT.	RETAIN
STA. 156+55 TO 158+80	RT.	RETAIN
STA. 158+75 TO 160+00	LT.	RETAIN

BYPASS

SAND BAG DITCH CHECK	E-5	INSTALLATION
STA. 147+30	RT.	1
STA. 147+80	RT.	1
STA. 149+00	LT.	1
STA. 149+10	RT.	1
STA. 149+70	RT.	1
STA. 152+40	LT.	1
STA. 152+75	LT.	1
STA. 153+00 TO 154+40	RT.	4
STA. 155+70 TO 156+85	RT.	4
STA. 156+10 TO 158+90	LT.	7
STA. 159+30	RT.	1
STA. 160+00	RT.	1

BYPASS

ROCK DITCH CHECK	E-6	INSTALLATION
STA. 148+20	RT.	1
STA. 150+10	RT.	1
STA. 150+30	RT.	1
STA. 151+00	LT.	RETAIN
STA. 151+30	LT.	RETAIN
STA. 154+35	LT.	1
STA. 157+05	RT.	1

BYPASS

DIVERSION DITCH	E-8	LIN. FT.
STA. 146+85 TO 142+60	LT.	75
STA. 158+00 TO 159+50	LT.	150

BYPASS

SLOPE DRAIN	E-12	LIN. FT.
STA. 147+60	LT.	75
STA. 159+50	LT.	25

BYPASS

DUMPED RIPRAP	E-12	CU. YD.
STA. 147+60	LT.	2
STA. 159+50	LT.	2

STATE OF ARKANSAS
Shaun A. Roberson
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

REVISIONS

DATE	REVISION

BYPASS

SAND BAG DITCH CHECK	E-5	INSTALLATION
STA. 160+90 TO 161+75	RT.	3
STA. 163+00	LT.	1
STA. 163+10	RT.	1
STA. 164+30	LT.	1
STA. 165+75	LT.	1
STA. 167+10	LT.	1
STA. 167+65 TO 168+60	LT.	3
STA. 167+70 TO 168+40	RT.	2
STA. 171+85 TO 173+65	RT.	5
STA. 173+10 TO 173+45	LT.	2

BYPASS

ROCK DITCH CHECK	E-6	INSTALLATION
STA. 160+25	RT.	1
STA. 167+05	RT.	1
STA. 163+75	LT.	1
STA. 164+80	LT.	1
STA. 165+10	RT.	1
STA. 165+90	RT.	1
STA. 166+55	LT.	1

BYPASS

SILT FENCE	E-11	LIN. FT.
STA. 160+00 TO 163+05	LT.	RETAIN
STA. 160+10 TO 160+70	RT.	RETAIN
STA. 161+90 TO 162+60	RT.	RETAIN
STA. 165+65 TO 165+95	LT.	RETAIN
STA. 168+40 TO 169+85	RT.	RETAIN
STA. 168+95 TO 173+30	LT.	RETAIN

LEGEND

- E-5 = SAND BAG DITCH CHECKS
- E-6 = ROCK DITCH CHECKS
- E-9 = DUMPED RIPRAP
- E-8 = DIVERSION DITCH (TYPE E-8)
- E-11 = SILT FENCE
- E-12 = SLOPE PIPE DRAIN (12") (TYPE E-12)

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

BYPASS

DIVERSION DITCH	E-8	LIN. FT.
STA. 160+55 TO 162+30	LT.	175
STA. 168+55 TO 169+85	LT.	130

BYPASS

DUMPED RIPRAP	E-12	CU. YD.
STA. 162+30	LT.	2
STA. 169+85	LT.	2

BYPASS

SLOPE DRAIN	E-12	LIN. FT.
STA. 162+30	LT.	75
STA. 169+85	LT.	65

BYPASS

ROCK DITCH CHECK	E-6	INSTALLATION
STA. 166+55	RT.	1
STA. 168+85	RT.	1
STA. 175+00	RT.	1

BYPASS
TEMPORARY EROSION CONTROL DETAILS
STAGE 1

rnfortner 6/28/2022 10:31:08 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	84	549

TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

BYPASS

ROCK DITCH CHECK	(E-6)	INSTALLATION
STA. 176+85	RT.	I
STA. 180+15	LT.	I
STA. 181+90	LT.	I
STA. 182+85	LT.	I

BYPASS

SAND BAG DITCH CHECK	(E-5)	INSTALLATION
STA. 181+10	RT.	I
STA. 181+15	LT.	I
STA. 181+50	RT.	I
STA. 181+65	RT.	I
STA. 182+50	LT.	I
STA. 183+35	LT.	I
STA. 183+70	LT.	I
STA. 184+30	LT.	I

BYPASS

SILT FENCE	(E-11)	LIN. FT.
STA. 175+70 TO 175+95	RT.	RETAIN
STA. 176+40 TO 177+45	LT.	RETAIN
STA. 176+50 TO 176+90	RT.	RETAIN
STA. 177+95 TO 179+95	LT.	RETAIN
STA. 178+55 TO 179+35	RT.	RETAIN
STA. 183+65 TO 184+25	LT.	55
STA. 184+25 TO 190+00	LT.	RETAIN
STA. 185+00 TO 190+00	RT.	RETAIN

BYPASS

DIVERSION DITCH	(E-8)	LIN. FT.
STA. 183+75 TO 185+00	LT.	125

SLOPE DRAIN	(E-12)	LIN. FT.
STA. 185+00	LT.	65

BYPASS

DUMPED RIPRAP	(E-12)	CU. YD.
STA. 185+00	LT.	2

BYPASS

ROCK DITCH CHECK	(E-6)	INSTALLATION
STA. 195+30	LT.	I
STA. 196+00	LT.	I
STA. 196+80	LT.	I
STA. 201+60	LT.	I

BYPASS

SILT FENCE	(E-11)	LIN. FT.
STA. 190+00 TO 195+00	LT.	RETAIN
STA. 190+00 TO 190+85	RT.	RETAIN
STA. 191+15 TO 198+80	RT.	RETAIN
STA. 195+00 TO 197+45	LT.	665
STA. 197+45 TO 200+55	LT.	RETAIN
STA. 198+80 TO 199+40	RT.	260
STA. 199+40 TO 199+90	RT.	RETAIN
STA. 199+90 TO 200+20	RT.	175
STA. 200+20 TO 201+75	RT.	RETAIN
STA. 200+55 TO 200+80	LT.	175
STA. 200+80 TO 201+75	LT.	RETAIN
STA. 202+25 TO 205+00	LT.	RETAIN
STA. 202+25 TO 205+00	RT.	RETAIN

REVISIONS

DATE	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-9) = DUMPED RIPRAP
- (E-8) = DIVERSION DITCH (TYPE E-8)
- (E-11) = SILT FENCE
- (E-12) = SLOPE PIPE DRAIN (12") (TYPE E-12)

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

CONSTRUCTION LIMITS
PROP. R/W C/A & FENCE
C.L. BYPASS
C.L. 26TH ST. N.
C.L. 26TH ST. S.
36TH STREET
APPROXIMATE FEMA 100 YR. FLOODPLAIN LIMITS

BYPASS
TEMPORARY EROSION CONTROL DETAILS
STAGE 1

rnfortner 6/28/2022 10:38:08 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	85	549
		TEMPORARY EROSION CONTROL DETAILS				

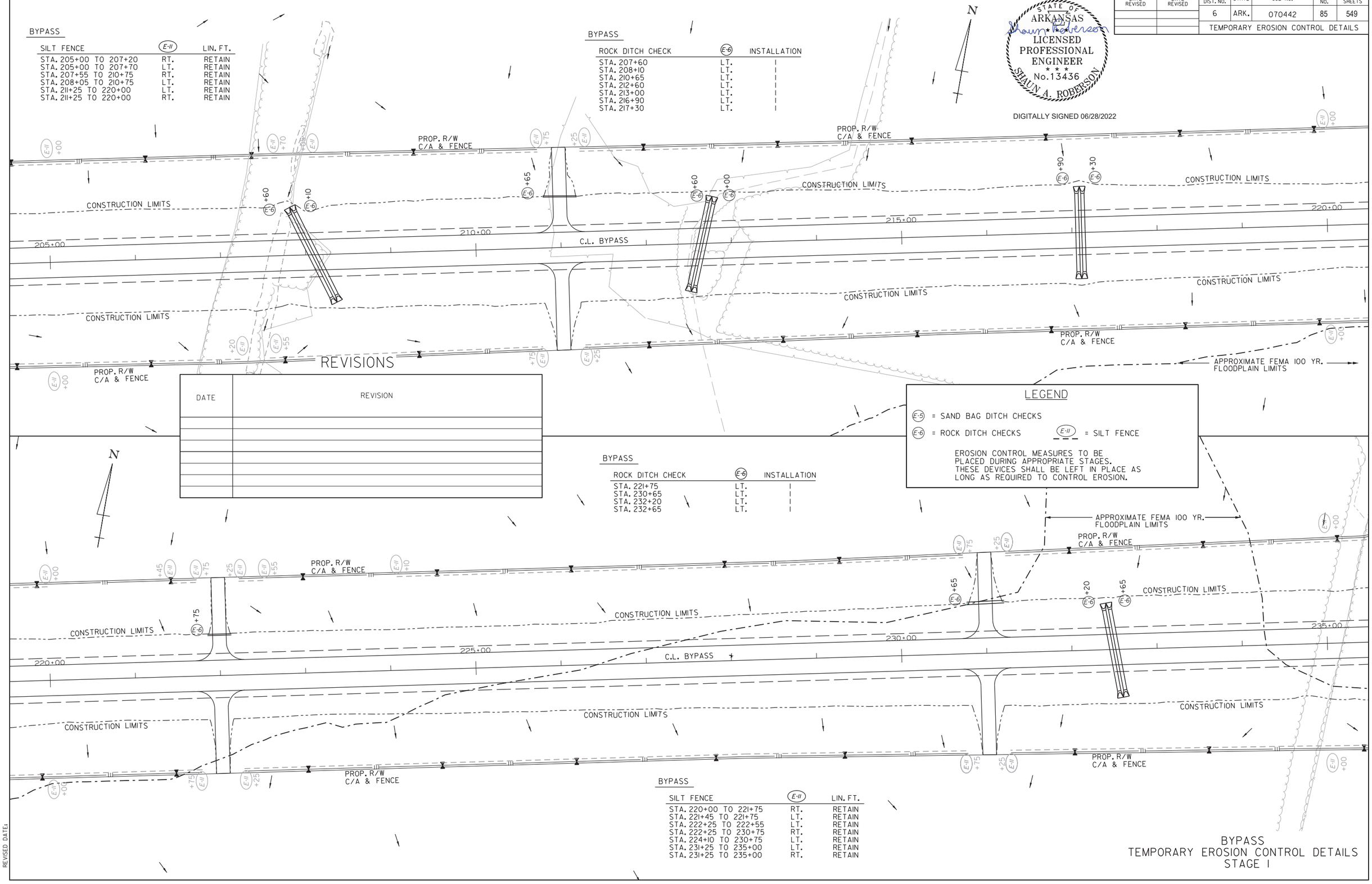
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

BYPASS

SILT FECE	(E-11)	LIN. FT.
STA. 205+00 TO 207+20	RT.	RETAIN
STA. 205+00 TO 207+70	LT.	RETAIN
STA. 207+55 TO 210+75	RT.	RETAIN
STA. 208+05 TO 210+75	LT.	RETAIN
STA. 211+25 TO 220+00	LT.	RETAIN
STA. 211+25 TO 220+00	RT.	RETAIN

BYPASS

ROCK DITCH CHECK	(E-6)	INSTALLATION
STA. 207+60	LT.	I
STA. 208+10	LT.	I
STA. 210+65	LT.	I
STA. 212+60	LT.	I
STA. 213+00	LT.	I
STA. 216+90	LT.	I
STA. 217+30	LT.	I



REVISIONS

DATE	REVISION

LEGEND

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

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

BYPASS

ROCK DITCH CHECK	(E-6)	INSTALLATION
STA. 221+75	LT.	I
STA. 230+65	LT.	I
STA. 232+20	LT.	I
STA. 232+65	LT.	I

BYPASS

SILT FECE	(E-11)	LIN. FT.
STA. 220+00 TO 221+75	RT.	RETAIN
STA. 221+45 TO 221+75	LT.	RETAIN
STA. 222+25 TO 222+55	LT.	RETAIN
STA. 222+25 TO 230+75	RT.	RETAIN
STA. 224+10 TO 230+75	LT.	RETAIN
STA. 231+25 TO 235+00	LT.	RETAIN
STA. 231+25 TO 235+00	RT.	RETAIN

BYPASS
TEMPORARY EROSION CONTROL DETAILS
STAGE I

rnfortner 6/28/2022 10:3:09 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442.EC.ST01.06.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	86	549
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

BYPASS

SILT FENCE	E-11	LIN. FT.
STA. 235+00 TO 236+75	LT.	RETAIN
STA. 235+00 TO 240+90	RT.	RETAIN
STA. 242+40 TO 243+30	RT.	RETAIN
STA. 243+40 TO 243+70	LT.	RETAIN
STA. 244+20 TO 244+50	LT.	RETAIN
STA. 243+80 TO 250+00	RT.	RETAIN
STA. 249+10 TO 250+00	LT.	RETAIN

BYPASS

ROCK DITCH CHECK	E-6	INSTALLATION
STA. 237+35	LT.	I
STA. 237+65	LT.	I
STA. 240+40	LT.	I
STA. 241+50	LT.	I
STA. 241+75	LT.	I
STA. 243+35	LT.	I
STA. 245+15	LT.	I
STA. 249+20	LT.	I
STA. 249+60	LT.	I

REVISIONS

DATE	REVISION

LEGEND

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

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

BYPASS

ROCK DITCH CHECK	E-6	INSTALLATION
STA. 252+30	LT.	I
STA. 253+55	LT.	I
STA. 261+80	LT.	I

BYPASS

SILT FENCE	E-11	LIN. FT.
STA. 250+00 TO 251+55	LT.	RETAIN
STA. 250+00 TO 257+90	RT.	RETAIN
STA. 260+15 TO 262+85	RT.	RETAIN
STA. 263+15 TO 263+70	RT.	RETAIN
STA. 263+45 TO 263+70	LT.	465
STA. 263+70 TO 264+30	RT.	300
STA. 264+30 TO 265+00	RT.	RETAIN

BYPASS

SAND BAG DITCH CHECK	E-5	INSTALLATION
STA. 251+50	LT.	I
STA. 255+10	LT.	I
STA. 255+60	LT.	I
STA. 256+05	LT.	I
STA. 259+20	LT.	I
STA. 259+65	LT.	I
STA. 260+15	LT.	I
STA. 260+60	LT.	I

BYPASS
TEMPORARY EROSION CONTROL DETAILS
STAGE I

rnfortner 6/28/2022 10:31:10 AM
WORKSPACE: AHTD
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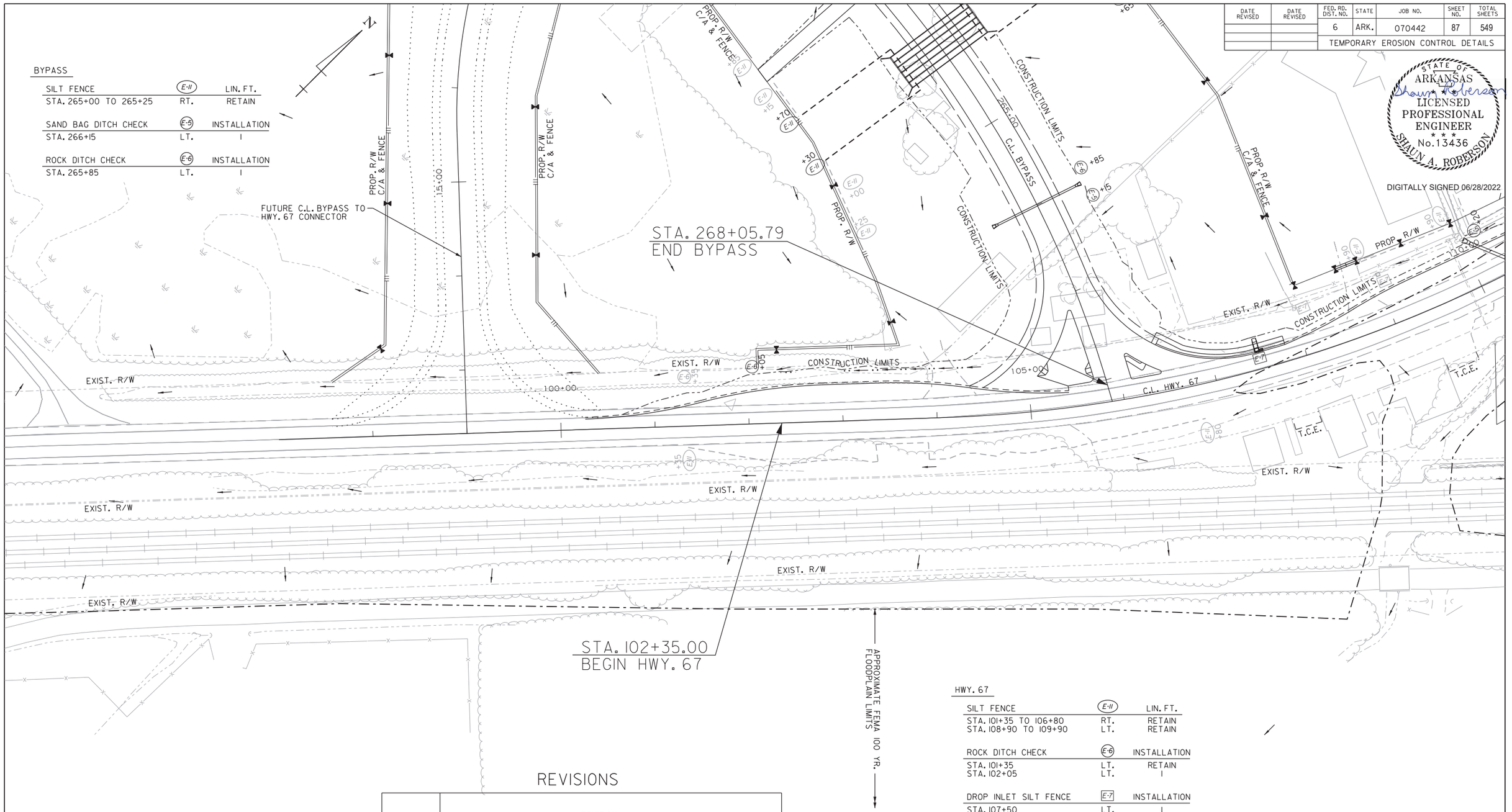
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	87	549
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

BYPASS

SILT FENCE (E-11)		LIN. FT.
STA. 265+00 TO 265+25	RT.	RETAIN
SAND BAG DITCH CHECK (E-5)		INSTALLATION
STA. 266+15	LT.	I
ROCK DITCH CHECK (E-6)		INSTALLATION
STA. 265+85	LT.	I



HWY. 67

SILT FENCE (E-11)		LIN. FT.
STA. 101+35 TO 106+80	RT.	RETAIN
STA. 108+90 TO 109+90	LT.	RETAIN
ROCK DITCH CHECK (E-6)		INSTALLATION
STA. 101+35	LT.	RETAIN
STA. 102+05	LT.	I
DROP INLET SILT FENCE (E-7)		INSTALLATION
STA. 107+50	LT.	I
STA. 108+10	LT.	RETAIN
STA. 109+05	LT.	RETAIN

LEGEND

(E-5) = SAND BAG DITCH CHECKS
(E-6) = ROCK DITCH CHECKS
(E-7) = DROP INLET SILT FENCE
(E-11) = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE	REVISION

BYPASS & HWY. 67
TEMPORARY EROSION CONTROL DETAILS
STAGE I

rnfortner 6/28/2022 10:3:10 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	88	549
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
Shaun A. Roberson
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

HWY. 67

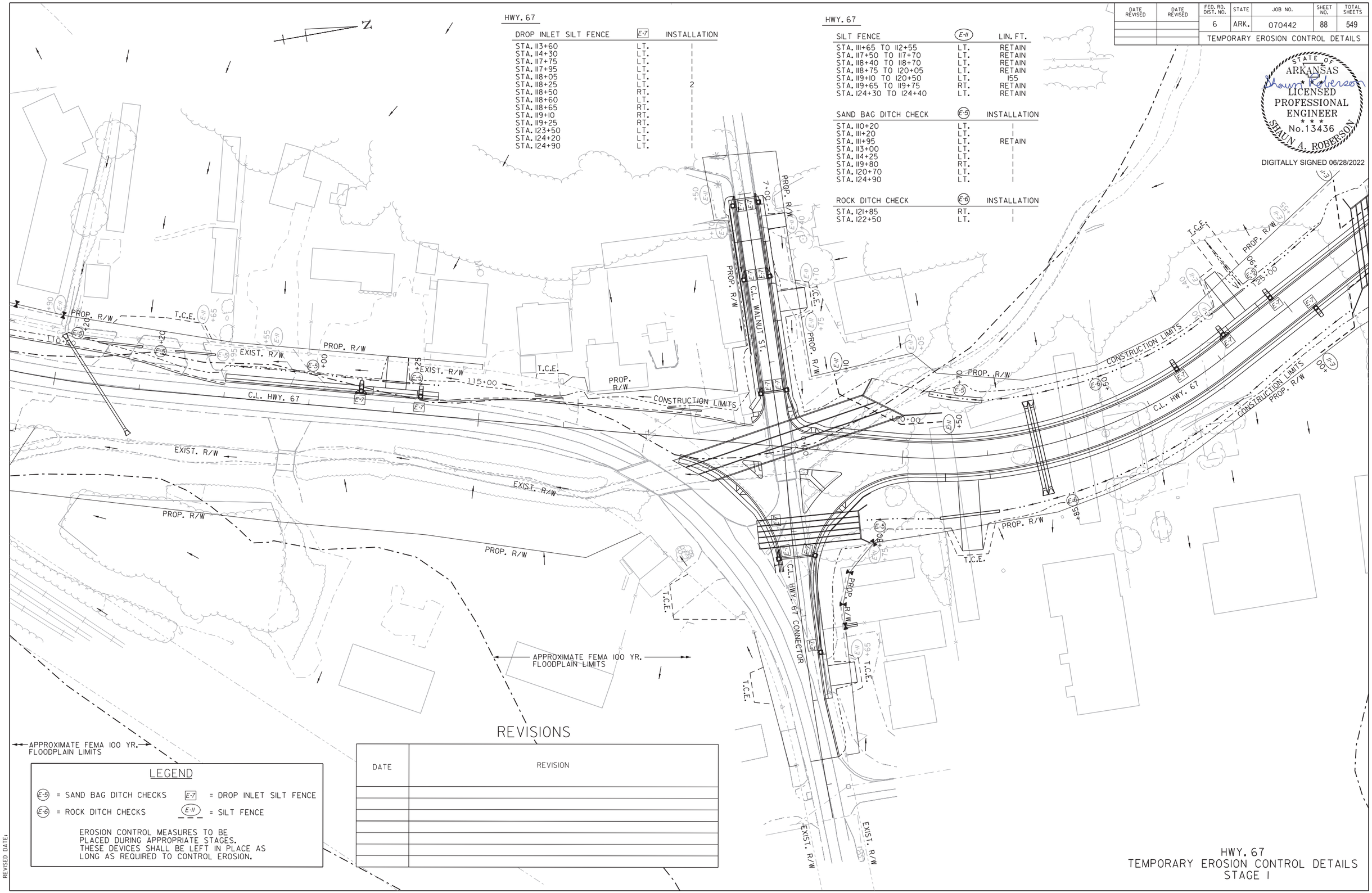
DROP INLET SILT FENCE	E-7	INSTALLATION
STA. 113+60	LT.	1
STA. 114+30	LT.	1
STA. 117+75	LT.	1
STA. 117+95	LT.	1
STA. 118+05	LT.	1
STA. 118+25	LT.	2
STA. 118+50	RT.	1
STA. 118+60	LT.	1
STA. 118+65	RT.	1
STA. 119+10	RT.	1
STA. 119+25	RT.	1
STA. 123+50	LT.	1
STA. 124+20	LT.	1
STA. 124+90	LT.	1

HWY. 67

SILT FENCE	E-11	LIN. FT.
STA. 111+65 TO 112+55	LT.	RETAIN
STA. 117+50 TO 117+70	LT.	RETAIN
STA. 118+40 TO 118+70	LT.	RETAIN
STA. 118+75 TO 120+05	LT.	RETAIN
STA. 119+10 TO 120+50	LT.	155
STA. 119+65 TO 119+75	RT.	RETAIN
STA. 124+30 TO 124+40	LT.	RETAIN

SAND BAG DITCH CHECK	E-5	INSTALLATION
STA. 110+20	LT.	1
STA. 111+20	LT.	1
STA. 111+95	LT.	RETAIN
STA. 113+00	LT.	1
STA. 114+25	LT.	1
STA. 119+80	RT.	1
STA. 120+70	LT.	1
STA. 124+90	LT.	1

ROCK DITCH CHECK	E-6	INSTALLATION
STA. 121+85	RT.	1
STA. 122+50	LT.	1



LEGEND

E-5 = SAND BAG DITCH CHECKS
E-6 = ROCK DITCH CHECKS
E-7 = DROP INLET SILT FENCE
E-11 = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE	REVISION

HWY. 67
TEMPORARY EROSION CONTROL DETAILS
STAGE 1

rnfortner 6/28/2022 10:31:11 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	89	549
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

HWY. 67

ROCK DITCH CHECK	E-6	INSTALLATION
STA. 133+00	LT.	1

DROP INLET SILT FENCE	E-7	INSTALLATION
STA. 125+25	RT.	1
STA. 126+50	RT.	1
STA. 128+00	RT.	1
STA. 131+00	RT.	1
STA. 131+25	LT.	1
STA. 133+35	LT.	1
STA. 133+35	RT.	1
STA. 134+50	LT.	1
STA. 135+25	LT.	1
STA. 135+25	RT.	1
STA. 137+00	LT.	1
STA. 137+00	RT.	1
STA. 137+50	LT.	1
STA. 137+50	RT.	1
STA. 138+35	RT.	1
STA. 138+40	RT.	2
STA. 138+45	LT.	1
STA. 138+45	RT.	1
STA. 138+50	LT.	1
STA. 138+75	RT.	1
STA. 138+80	LT.	2
STA. 138+80	RT.	3
STA. 138+90	RT.	1
STA. 138+95	RT.	1
STA. 139+10	LT.	1
STA. 139+10	RT.	1

HWY. 67

SILT FENCE	E-11	LIN. FT.
STA. 125+00 TO 126+65	RT.	275
STA. 125+55 TO 126+35	LT.	RETAIN
STA. 126+35 TO 127+05	LT.	195
STA. 127+05 TO 130+10	LT.	RETAIN
STA. 127+45 TO 128+75	RT.	RETAIN
STA. 131+55 TO 132+70	LT.	RETAIN
STA. 133+00 TO 136+95	LT.	RETAIN
STA. 134+55 TO 136+20	RT.	RETAIN
STA. 137+70 TO 137+85	RT.	RETAIN
STA. 138+20 TO 138+30	LT.	RETAIN
STA. 139+00 TO 139+00	LT.	RETAIN

HWY. 67

SAND BAG DITCH CHECK	E-5	INSTALLATION
STA. 126+50	RT.	1
STA. 127+05	RT.	1
STA. 127+60	RT.	1
STA. 128+20	RT.	1
STA. 128+75	RT.	1
STA. 129+20	RT.	1
STA. 129+75	RT.	1
STA. 130+25	RT.	1
STA. 130+65	LT.	1
STA. 130+75	RT.	1
STA. 131+25	RT.	1
STA. 131+35	LT.	1
STA. 131+75	RT.	1
STA. 133+00	RT.	1
STA. 135+05	RT.	1
STA. 135+55	RT.	1
STA. 136+05	RT.	1
STA. 136+55	RT.	1
STA. 137+15	RT.	1
STA. 137+25	LT.	1
STA. 139+25	RT.	1
STA. 139+50	LT.	1

LEGEND

E-5 = SAND BAG DITCH CHECKS
E-6 = ROCK DITCH CHECKS
E-7 = DROP INLET SILT FENCE
E-11 = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE	REVISION

HWY. 67
TEMPORARY EROSION CONTROL DETAILS
STAGE I

rnfortner 6/28/2022 10:3413 AM
WORKSPACE: AHTD
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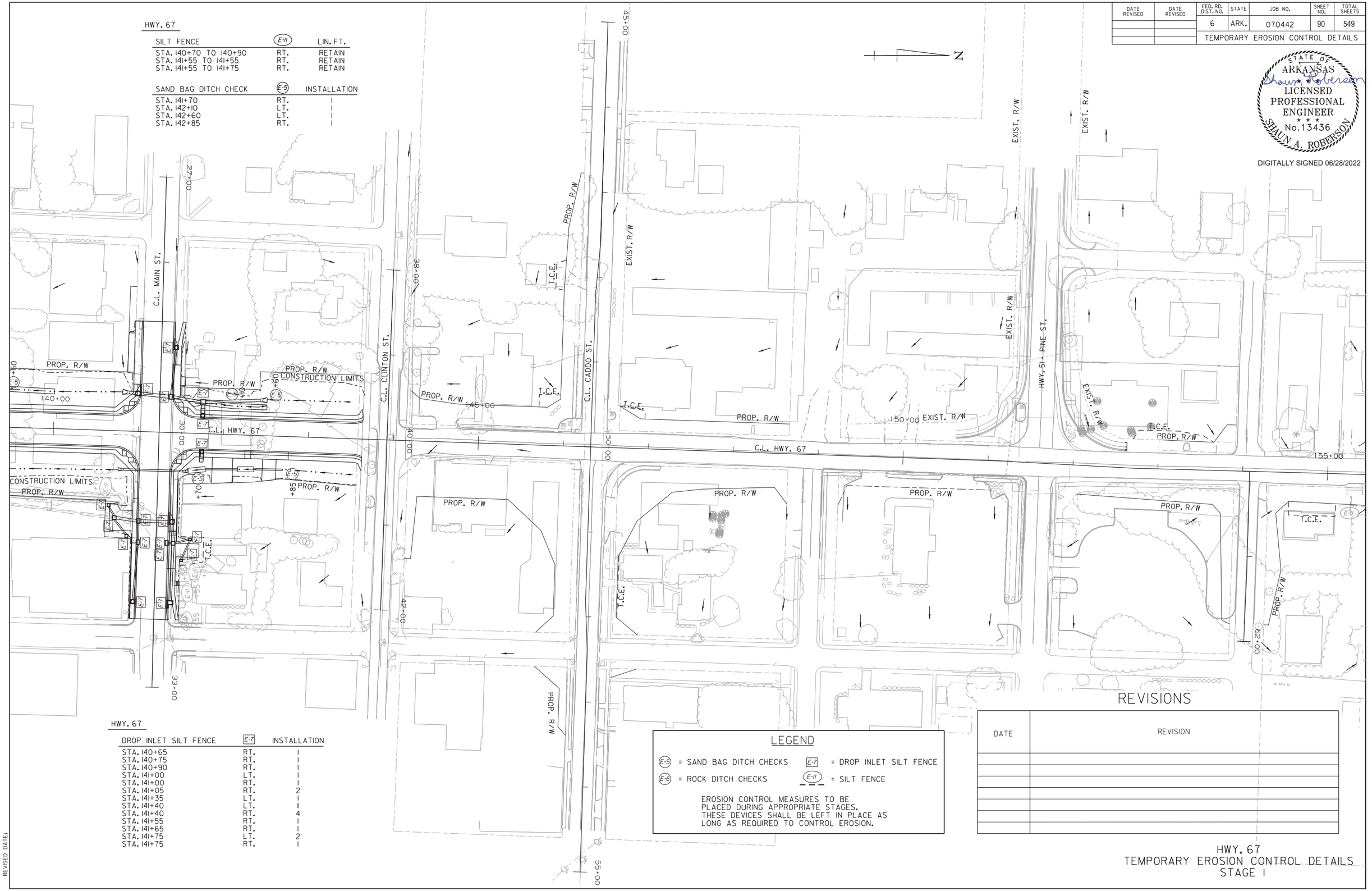
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	90	549
		TEMPORARY EROSION CONTROL DETAILS				

HWY. 67

SILT FENCE	E-11	LIN. FT.
STA. 140+70 TO 140+90	RT.	RETAIN
STA. 141+55 TO 141+55	RT.	RETAIN
STA. 141+55 TO 141+75	RT.	RETAIN

SAND BAG DITCH CHECK	E-5	INSTALLATION
STA. 141+70	RT.	1
STA. 142+10	LT.	1
STA. 142+60	LT.	1
STA. 142+85	RT.	1



HWY. 67

DROP INLET SILT FENCE	E-7	INSTALLATION
STA. 140+65	RT.	1
STA. 140+75	RT.	1
STA. 140+90	RT.	1
STA. 141+00	LT.	1
STA. 141+00	RT.	1
STA. 141+05	RT.	2
STA. 141+35	LT.	1
STA. 141+40	LT.	1
STA. 141+40	RT.	4
STA. 141+55	RT.	1
STA. 141+65	RT.	1
STA. 141+75	LT.	2
STA. 141+75	RT.	1

LEGEND

E-5 = SAND BAG DITCH CHECKS E-7 = DROP INLET SILT FENCE

E-6 = ROCK DITCH CHECKS E-11 = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

REVISIONS

DATE	REVISION

HWY. 67
TEMPORARY EROSION CONTROL DETAILS
STAGE I

rnfortner 6/28/2022 10:3ul4 AM
WORKSPACE: AHTD
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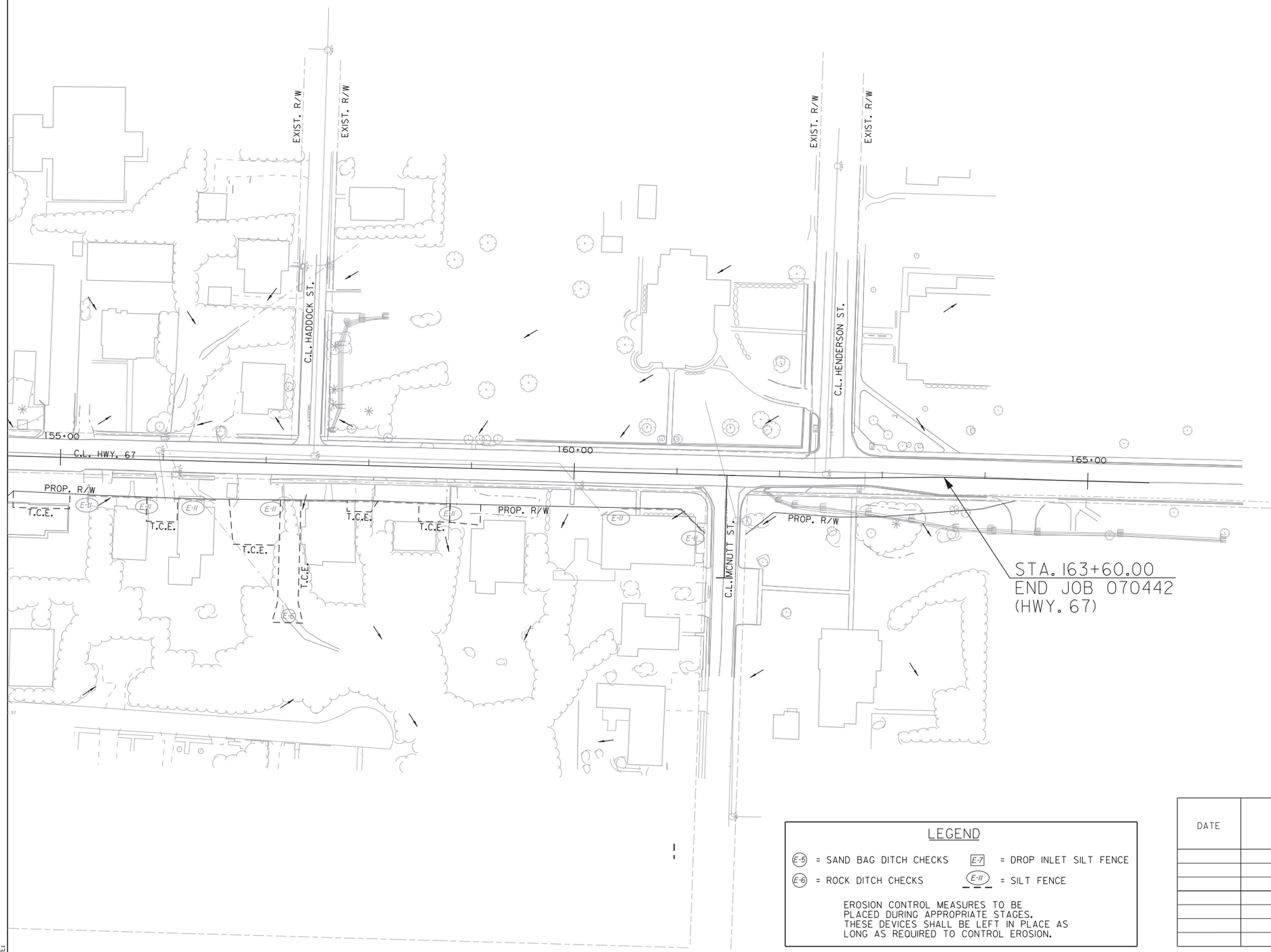
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	91	549
		TEMPORARY EROSION CONTROL DETAILS				



HWY. 67

SILT FENCE	(E-II)	LIN. FT.
STA. 155+25 TO 155+90	RT.	RETAIN
STA. 156+10 TO 156+55	RT.	RETAIN
STA. 157+05 TO 158+80	RT.	RETAIN
STA. 160+45 TO 161+30	RT.	RETAIN

ROCK DITCH CHECK	(E-6)	INSTALLATION
STA. 157+25	RT.	RETAIN

LEGEND

(E-5) = SAND BAG DITCH CHECKS
(E-6) = ROCK DITCH CHECKS
[E-7] = DROP INLET SILT FENCE
(E-II) = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE	REVISION

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

HWY. 67
TEMPORARY EROSION CONTROL DETAILS
STAGE I

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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	92	549
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

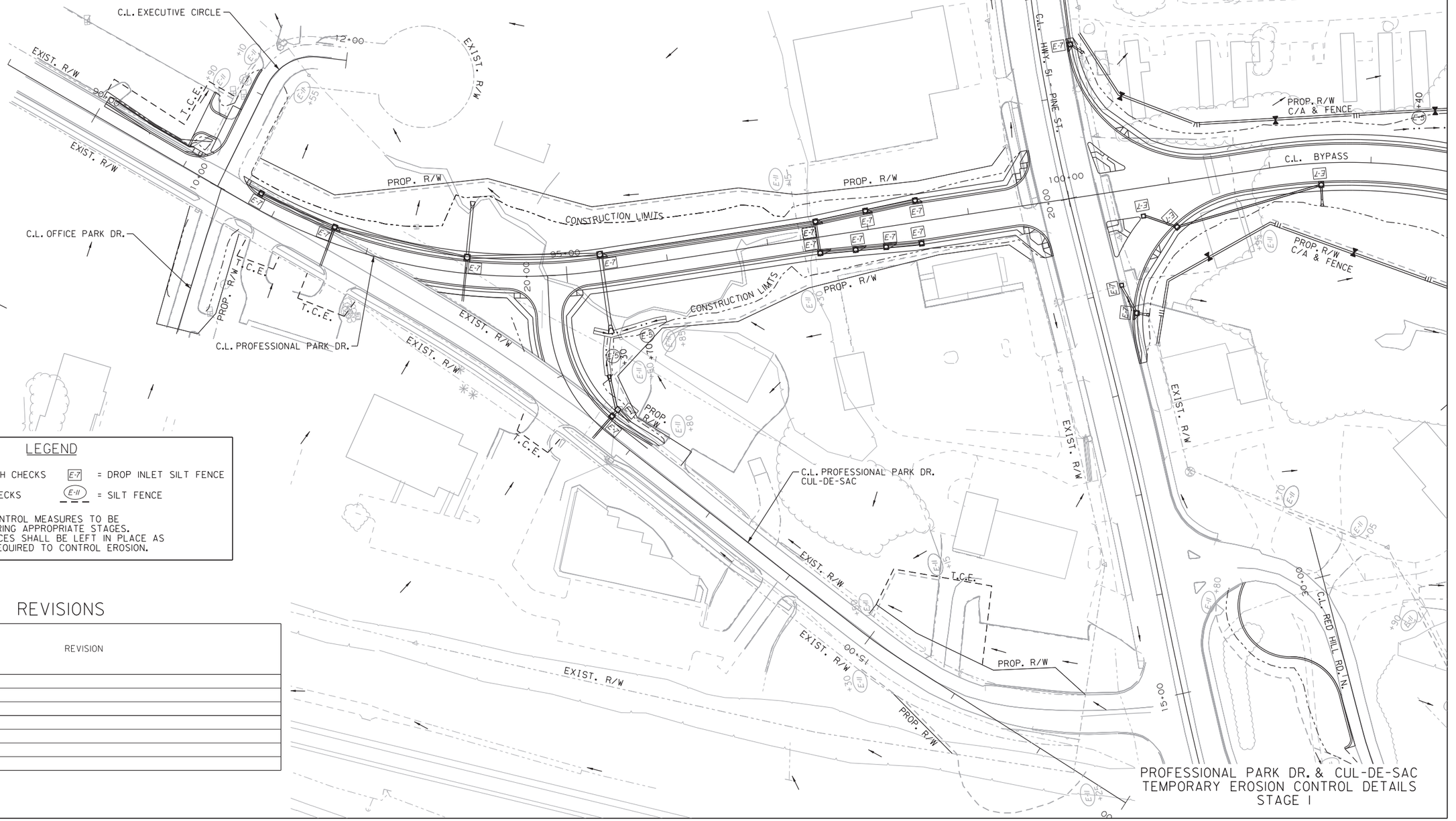
PROFESSIONAL PARK DR.

SILT FENCE	E-11	LIN. FT.
STA. 90+90 TO 91+10	LT.	RETAIN
STA. 91+55 TO 97+15	LT.	RETAIN
STA. 95+50 TO 95+80	RT.	RETAIN
STA. 95+85 TO 97+30	RT.	RETAIN
STA. 97+30 TO 99+25	RT.	RETAIN
STA. 97+50 TO 98+15	RT.	RETAIN

SAND BAG DITCH CHECK	E-5	INSTALLATION
STA. 95+30	RT.	I
STA. 95+70	RT.	I

PROFESSIONAL PARK DR.

DROP INLET SILT FENCE	E-7	INSTALLATION
STA. 91+80	LT.	I
STA. 92+60	LT.	I
STA. 94+00	LT.	I
STA. 95+25	RT.	I
STA. 95+30	RT.	I
STA. 95+35	LT.	I
STA. 97+50	LT.	I
STA. 97+50	RT.	I
STA. 97+85	RT.	I
STA. 98+00	LT.	I
STA. 98+15	RT.	I
STA. 98+50	LT.	I
STA. 98+50	RT.	I



LEGEND

E-5 = SAND BAG DITCH CHECKS
E-7 = DROP INLET SILT FENCE
E-6 = ROCK DITCH CHECKS
E-11 = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE	REVISION

PROFESSIONAL PARK DR. & CUL-DE-SAC
TEMPORARY EROSION CONTROL DETAILS
STAGE I

rnfortner 6/28/2022 10:3:15 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	93	549
		TEMPORARY EROSION CONTROL DETAILS				

BYPASS

SILT FENCE	(E-11)	LIN. FT.
STA. 181+05 TO 181+70	RT.	RETAIN
STA. 182+45 TO 185+00	RT.	RETAIN
STA. 183+50 TO 185+00	LT.	RETAIN
STA. 184+75 TO 185+00	LT.	30
STA. 185+00 TO 185+80	LT.	RETAIN
STA. 185+85 TO 186+80	LT.	RETAIN

SAND BAG DITCH CHECK	(E-5)	INSTALLATION
STA. 181+35	RT.	2
STA. 181+40	RT.	2
STA. 181+45	RT.	1
STA. 181+55	RT.	1
STA. 181+60	RT.	1
STA. 181+70	RT.	1
STA. 181+80	RT.	1

LEGEND

(E-5) = SAND BAG DITCH CHECKS

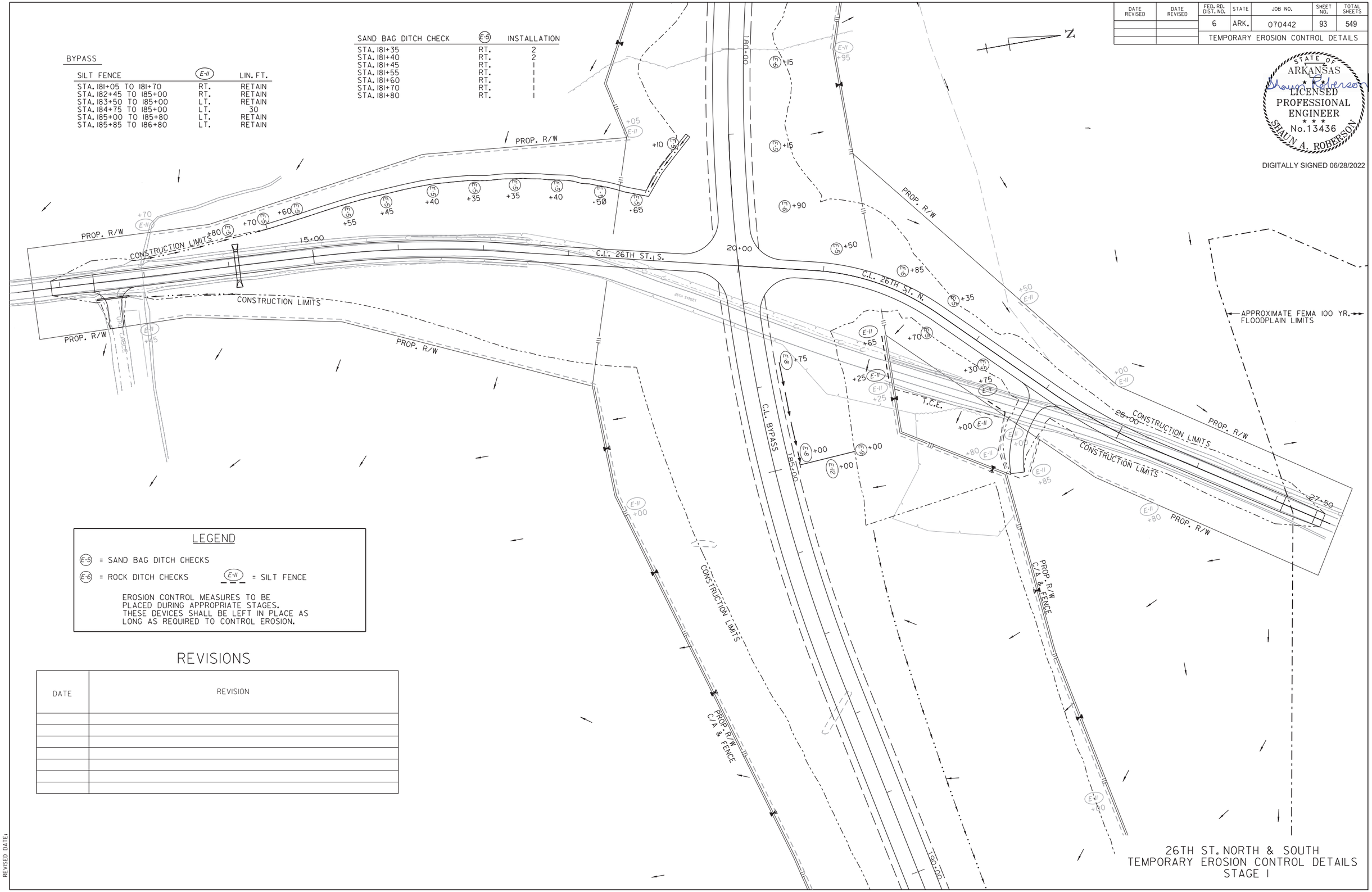
(E-6) = ROCK DITCH CHECKS (E-11) = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE	REVISION

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022



26TH ST. NORTH & SOUTH
TEMPORARY EROSION CONTROL DETAILS
STAGE I

rnfortner 6/28/2022 10:31:15 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	94	549
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
SHAUN A. ROBERSON
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

BYPASS

SILT FENCE	(E-11)	LIN. FT.
STA. 100+80 TO 110+00	RT.	RETAIN
STA. 101+65 TO 103+05	RT.	RETAIN
STA. 101+95 TO 104+70	RT.	RETAIN
STA. 105+50 TO 107+15	RT.	RETAIN
STA. 105+90 TO 109+75	RT.	RETAIN
STA. 106+75 TO 108+25	LT.	RETAIN
STA. 108+65 TO 109+95	RT.	RETAIN
STA. 108+75 TO 112+55	LT.	RETAIN
STA. 112+45 TO 113+40	LT.	RETAIN
STA. 113+30 TO 113+40	RT.	RETAIN
STA. 113+95 TO 115+25	RT.	RETAIN

BYPASS

ROCK DITCH CHECK	(E-6)	INSTALLATION
STA. 105+30	RT.	RETAIN
STA. 105+70	RT.	RETAIN
STA. 109+90	RT.	RETAIN
STA. 110+10	RT.	RETAIN
STA. 113+90	RT.	RETAIN
STA. 114+15	LT.	RETAIN
STA. 115+60	RT.	RETAIN

BYPASS

DROP INLET SILT FENCE	(E-7)	INSTALLATION
STA. 100+15	LT.	RETAIN
STA. 100+30	RT.	RETAIN
STA. 100+40	RT.	RETAIN
STA. 100+70	RT.	RETAIN
STA. 100+95	RT.	RETAIN
STA. 102+50	RT.	RETAIN
STA. 104+20	RT.	RETAIN
STA. 108+00	RT.	RETAIN
STA. 110+00	RT.	RETAIN
STA. 110+75	RT.	RETAIN
STA. 110+95	LT.	RETAIN
STA. 111+50	RT.	RETAIN
STA. 111+50	LT.	RETAIN
STA. 114+00	LT.	RETAIN
STA. 114+75	RT.	RETAIN
STA. 114+95	RT.	RETAIN
STA. 116+00	LT.	RETAIN

BYPASS

SAND BAG DITCH CHECK	(E-5)	INSTALLATION
STA. 103+40	LT.	RETAIN
STA. 103+90	LT.	RETAIN
STA. 104+30	LT.	RETAIN
STA. 105+90	LT.	RETAIN
STA. 106+30	LT.	RETAIN
STA. 108+25	LT.	RETAIN
STA. 113+15	RT.	RETAIN
STA. 114+15	RT.	RETAIN
STA. 114+55	RT.	RETAIN
STA. 115+10	LT.	RETAIN
STA. 115+40	RT.	RETAIN
STA. 115+50	LT.	RETAIN
STA. 116+00	LT.	RETAIN

BYPASS

DIVERSION DITCH	(E-8)	LIN. FT.
STA. 104+75 TO 106+25	RT.	RETAIN
STA. 109+65 TO 110+15	RT.	RETAIN
STA. 111+90 TO 115+35	LT.	RETAIN

SLOPE DRAIN	(E-12)	LIN. FT.
STA. 106+25	RT.	RETAIN
STA. 110+15	RT.	RETAIN
STA. 111+90	LT.	RETAIN

DUMPED RIPRAP	(E-12)	CU. YD.
STA. 106+25	RT.	RETAIN
STA. 110+15	RT.	RETAIN
STA. 111+90	LT.	RETAIN

BYPASS STA. 100+27.88
BEGIN JOB 070442
(BYPASS)

C.L. BYPASS
C.L. HWY. 51 - PINE ST.
C.L. PROFESSIONAL PARK DR.
C.L. RED HILL RD. N.
PROP. R/W C/A & FENCE
EXIST. R/W
PROP. R/W
T.C.E.
CONSTRUCTION LIMITS
105+00
100+00
110+00
115+00
25+00
30+00
15+00
12+00

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-9) = DUMPED RIPRAP
- (E-7) = DROP INLET SILT FENCE
- (E-8) = DIVERSION DITCH (TYPE E-8)
- (E-11) = SILT FENCE
- (E-12) = SLOPE PIPE DRAIN (12") (TYPE E-12)

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE	REVISION

rnfortner 6/28/2022 10:3:17 AM
WORKSPACE: AHTD
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REVISED DATE:

BYPASS & RED HILL RD. N.
TEMPORARY EROSION CONTROL DETAILS
STAGE 2

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	95	549
		TEMPORARY EROSION CONTROL DETAILS				

BYPASS

DIVERSION DITCH	(E-8)	LIN. FT.
STA. 125+75 TO 129+35	LT.	RETAIN

SLOPE DRAIN	(E-12)	LIN. FT.
STA. 125+75	LT.	RETAIN

DUMPED RIPRAP	(E-12)	CU. YD.
STA. 125+75	LT.	RETAIN

BYPASS

SILT FENCE	(E-11)	LIN. FT.
STA. 119+20 TO 119+50	LT.	RETAIN
STA. 120+10 TO 120+40	LT.	RETAIN
STA. 123+45 TO 123+75	LT.	RETAIN
STA. 124+25 TO 130+40	LT.	RETAIN

SAND BAG DITCH CHECK	(E-5)	INSTALLATION
STA. 116+45	LT.	RETAIN
STA. 116+65	RT.	I
STA. 117+10	RT.	I
STA. 120+25	LT.	RETAIN
STA. 122+00	LT.	RETAIN
STA. 122+00	RT.	I
STA. 128+00	RT.	I

ROCK DITCH CHECK	(E-6)	INSTALLATION
STA. 116+10	RT.	I
STA. 117+25	LT.	RETAIN
STA. 118+25	RT.	I
STA. 119+00	RT.	I
STA. 124+35	LT.	RETAIN
STA. 128+70	LT.	RETAIN
STA. 129+10	LT.	RETAIN

DROP INLET SILT FENCE	(E-7)	INSTALLATION
STA. 118+50	LT.	RETAIN
STA. 119+80	RT.	I
STA. 129+80	RT.	RETAIN

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

T.C.E.

PROP. R/W C/A & FENCE

C.L. RED HILL RD. N.

C.L. BYPASS

CONSTRUCTION LIMITS

115+00 120+00 125+00 130+00

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-9) = DUMPED RIPRAP
- (E-7) = DROP INLET SILT FENCE
- (E-8) = DIVERSION DITCH (TYPE E-8)
- (E-11) = SILT FENCE
- (E-12) = SLOPE PIPE DRAIN (12") (TYPE E-12)

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE	REVISION

BYPASS
TEMPORARY EROSION CONTROL DETAILS
STAGE 2

rnfortner 6/28/2022 10:3:17 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	96	549
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

BYPASS

ROCK DITCH CHECK	(E-6)	INSTALLATION
STA. 131+30	LT.	RETAIN
STA. 138+00	RT.	I
STA. 140+20	RT.	RETAIN
STA. 141+15	RT.	RETAIN
STA. 143+85	RT.	RETAIN
STA. 144+80	RT.	RETAIN

DIVERSION DITCH	(E-8)	LIN. FT.
STA. 140+85 TO 144+65	LT.	RETAIN

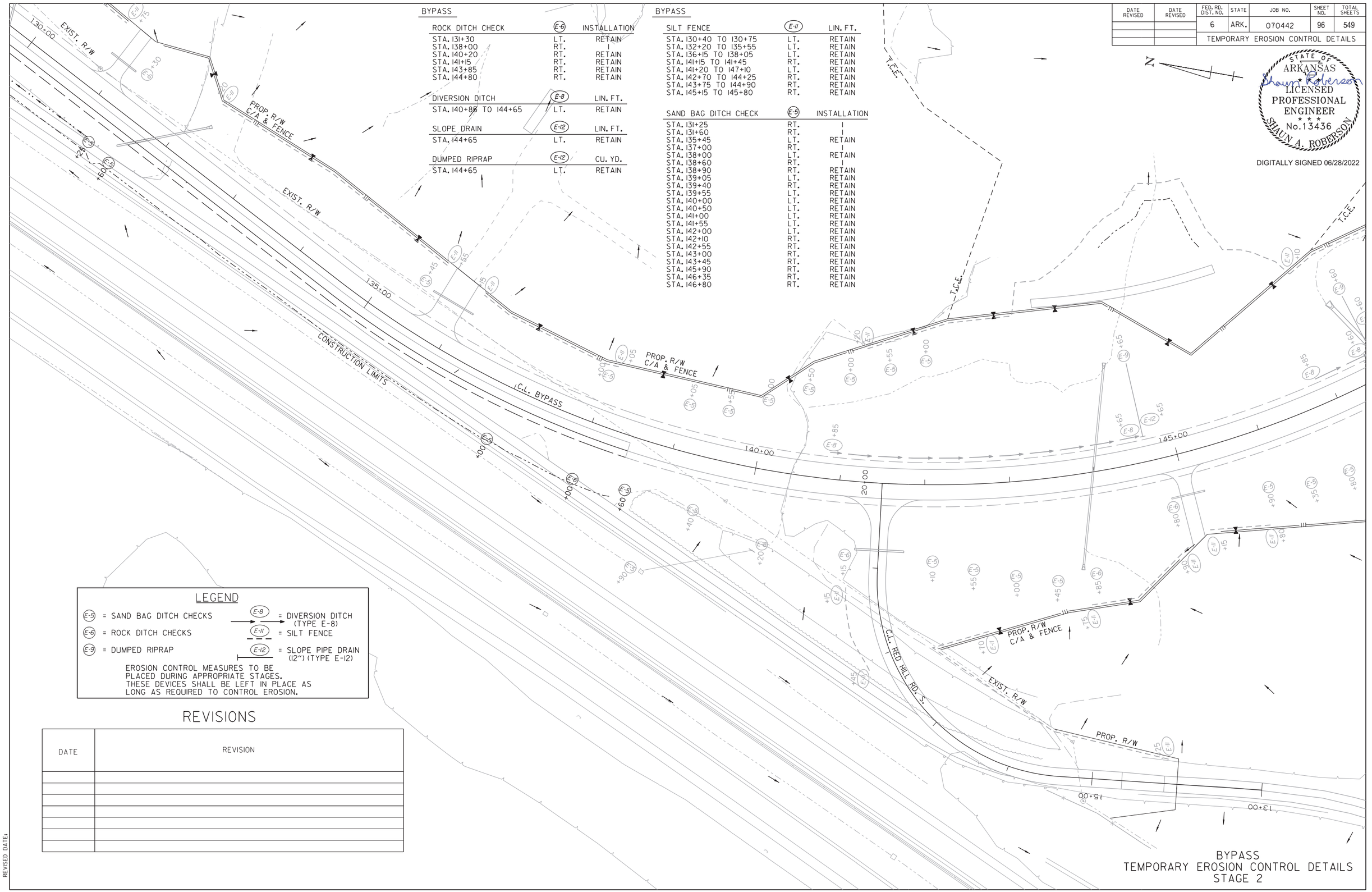
SLOPE DRAIN	(E-12)	LIN. FT.
STA. 144+65	LT.	RETAIN

DUMPED RIPRAP	(E-12)	CU. YD.
STA. 144+65	LT.	RETAIN

BYPASS

SILT FENCE	(E-11)	LIN. FT.
STA. 130+40 TO 130+75	LT.	RETAIN
STA. 132+20 TO 135+55	LT.	RETAIN
STA. 136+15 TO 138+05	LT.	RETAIN
STA. 141+15 TO 141+45	RT.	RETAIN
STA. 141+20 TO 147+10	LT.	RETAIN
STA. 142+70 TO 144+25	RT.	RETAIN
STA. 143+75 TO 144+90	RT.	RETAIN
STA. 145+15 TO 145+80	RT.	RETAIN

SAND BAG DITCH CHECK	(E-5)	INSTALLATION
STA. 131+25	RT.	I
STA. 131+60	RT.	I
STA. 135+45	LT.	RETAIN
STA. 137+00	RT.	I
STA. 138+00	LT.	RETAIN
STA. 138+60	RT.	I
STA. 138+90	RT.	RETAIN
STA. 139+05	LT.	RETAIN
STA. 139+40	RT.	RETAIN
STA. 139+55	LT.	RETAIN
STA. 140+00	LT.	RETAIN
STA. 140+50	LT.	RETAIN
STA. 141+00	LT.	RETAIN
STA. 141+55	LT.	RETAIN
STA. 142+00	LT.	RETAIN
STA. 142+10	RT.	RETAIN
STA. 142+55	RT.	RETAIN
STA. 143+00	RT.	RETAIN
STA. 143+45	RT.	RETAIN
STA. 145+90	RT.	RETAIN
STA. 146+35	RT.	RETAIN
STA. 146+80	RT.	RETAIN



LEGEND

(E-5) = SAND BAG DITCH CHECKS
(E-6) = ROCK DITCH CHECKS
(E-9) = DUMPED RIPRAP
(E-8) = DIVERSION DITCH (TYPE E-8)
(E-11) = SILT FENCE
(E-12) = SLOPE PIPE DRAIN (12") (TYPE E-12)

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE	REVISION

BYPASS
TEMPORARY EROSION CONTROL DETAILS
STAGE 2

rnfortner 6/28/2022 10:3118 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	97	549

TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
Shaun A. Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

BYPASS

SILT FENCE	E-11	LIN. FT.
STA. 265+00 TO 265+25	RT.	RETAIN
SAND BAG DITCH CHECK	E-5	INSTALLATION
STA. 266+15	LT.	RETAIN
ROCK DITCH CHECK	E-6	INSTALLATION
STA. 265+85	LT.	RETAIN

FUTURE C.L. BYPASS TO HWY. 67 CONNECTOR

PROP. R/W C/A & FENCE

115.00

PROP. R/W C/A & FENCE

STA. 268+05.79
END BYPASS

PROP. R/W C/A & FENCE

265.00

C.L. BYPASS

PROP R/W C/A & FENCE

PROP R/W

110.00

EXIST. R/W

EXIST. R/W

100+00

EXIST. R/W

105+00

C.L. HWY. 67

T.C.E.

T.C.E.

CONSTRUCTION LIMITS

EXIST. R/W

EXIST. R/W

EXIST. R/W

EXIST. R/W

EXIST. R/W

STA. 102+35.00
BEGIN HWY. 67

APPROXIMATE FEMA 100 YR. FLOODPLAIN LIMITS

HWY. 67

SILT FENCE	E-11	LIN. FT.
STA. 101+35 TO 106+80	RT.	RETAIN
STA. 108+90 TO 109+90	LT.	RETAIN
SAND BAG DITCH CHECK	E-5	INSTALLATION
STA. 108+05	RT.	I
ROCK DITCH CHECK	E-6	INSTALLATION
STA. 101+35	LT.	RETAIN
STA. 102+05	LT.	RETAIN
DROP INLET SILT FENCE	E-7	INSTALLATION
STA. 107+50	LT.	RETAIN
STA. 108+10	LT.	RETAIN
STA. 109+05	LT.	RETAIN

LEGEND

E-5 = SAND BAG DITCH CHECKS
E-7 = DROP INLET SILT FENCE
E-6 = ROCK DITCH CHECKS
E-11 = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE	REVISION

BYPASS & HWY. 67
TEMPORARY EROSION CONTROL DETAILS
STAGE 2

rnfortner 6/28/2022 10:31:19 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	98	549
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

HWY. 67

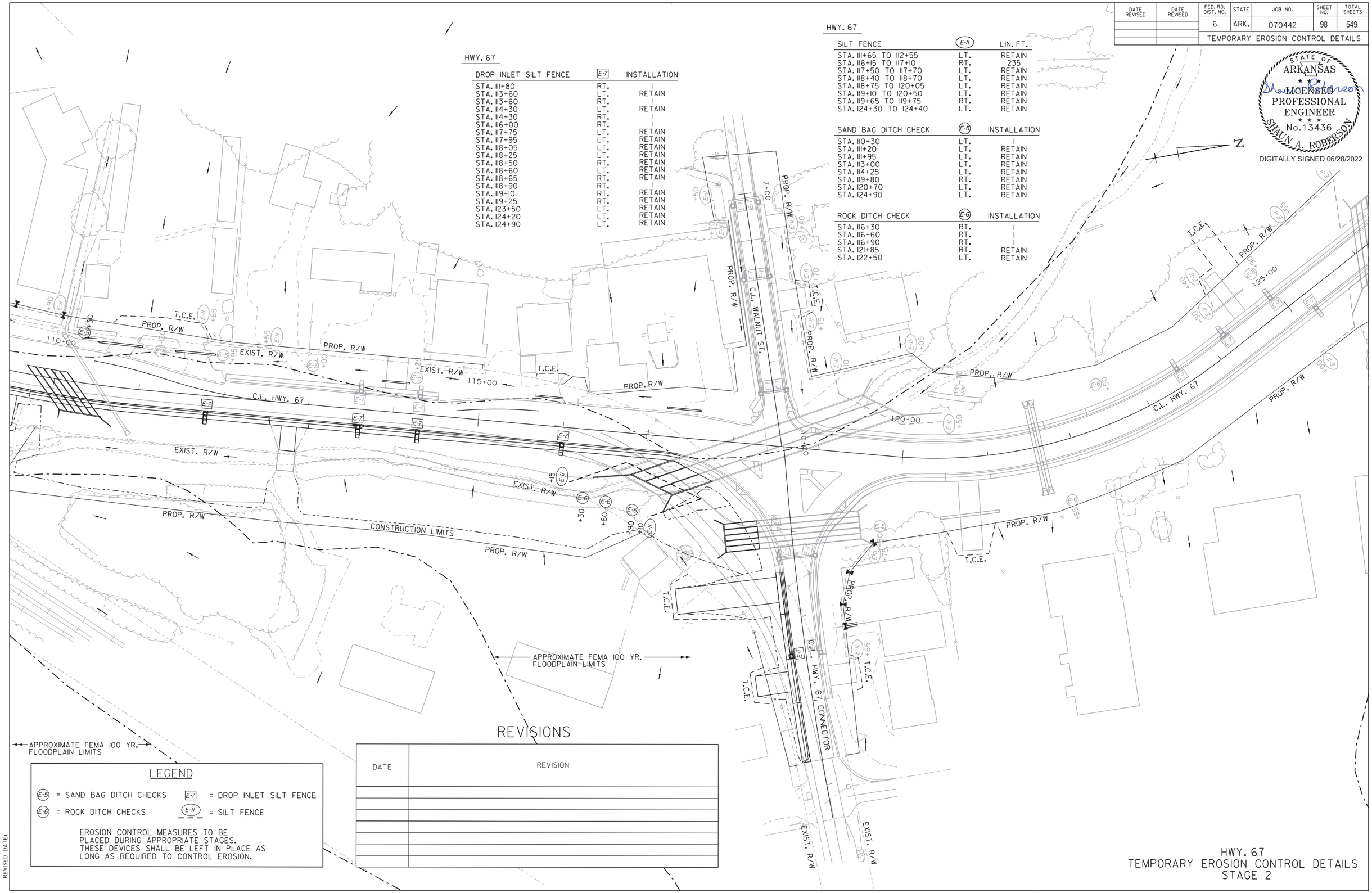
DROP INLET SILT FENCE	E-7	INSTALLATION
STA. 111+80	RT.	1
STA. 113+60	LT.	RETAIN
STA. 113+60	RT.	1
STA. 114+30	LT.	RETAIN
STA. 114+30	RT.	1
STA. 116+00	RT.	1
STA. 117+75	LT.	RETAIN
STA. 117+95	LT.	RETAIN
STA. 118+05	LT.	RETAIN
STA. 118+25	LT.	RETAIN
STA. 118+50	RT.	RETAIN
STA. 118+60	LT.	RETAIN
STA. 118+65	RT.	RETAIN
STA. 118+90	RT.	1
STA. 119+10	RT.	RETAIN
STA. 119+25	RT.	RETAIN
STA. 123+50	LT.	RETAIN
STA. 124+20	LT.	RETAIN
STA. 124+90	LT.	RETAIN

HWY. 67

SILT FENCE	E-11	LIN. FT.
STA. 111+65 TO 112+55	LT.	RETAIN
STA. 116+15 TO 117+10	RT.	235
STA. 117+50 TO 117+70	LT.	RETAIN
STA. 118+40 TO 118+70	LT.	RETAIN
STA. 118+75 TO 120+05	LT.	RETAIN
STA. 119+10 TO 120+50	LT.	RETAIN
STA. 119+65 TO 119+75	RT.	RETAIN
STA. 124+30 TO 124+40	LT.	RETAIN

SAND BAG DITCH CHECK	E-5	INSTALLATION
STA. 110+30	LT.	1
STA. 111+20	LT.	RETAIN
STA. 111+95	LT.	RETAIN
STA. 113+00	LT.	RETAIN
STA. 114+25	LT.	RETAIN
STA. 119+80	RT.	RETAIN
STA. 120+70	LT.	RETAIN
STA. 124+90	LT.	RETAIN

ROCK DITCH CHECK	E-6	INSTALLATION
STA. 116+30	RT.	1
STA. 116+60	RT.	1
STA. 116+90	RT.	1
STA. 121+85	RT.	RETAIN
STA. 122+50	LT.	RETAIN



LEGEND

E-5 = SAND BAG DITCH CHECKS
E-6 = ROCK DITCH CHECKS
E-7 = DROP INLET SILT FENCE
E-11 = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE	REVISION

HWY. 67
TEMPORARY EROSION CONTROL DETAILS
STAGE 2

rnfortner 6/28/2022 10:31:19 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	99	549
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
SHAUN A. ROBERSON
LICENSED PROFESSIONAL ENGINEER
No. 13436
DIGITALLY SIGNED 06/28/2022

HWY. 67

ROCK DITCH CHECK	(E-6)	INSTALLATION
STA. 133+00	LT.	RETAIN

DROP INLET SILT FENCE	(E-7)	INSTALLATION
STA. 125+25	RT.	RETAIN
STA. 126+50	RT.	RETAIN
STA. 128+00	RT.	RETAIN
STA. 131+00	RT.	RETAIN
STA. 131+25	LT.	RETAIN
STA. 133+35	LT.	RETAIN
STA. 133+35	RT.	RETAIN
STA. 134+50	LT.	RETAIN
STA. 135+25	LT.	RETAIN
STA. 135+25	RT.	RETAIN
STA. 137+00	LT.	RETAIN
STA. 137+00	RT.	RETAIN
STA. 137+50	LT.	RETAIN
STA. 137+50	RT.	RETAIN
STA. 138+35	RT.	RETAIN
STA. 138+40	RT.	RETAIN
STA. 138+45	LT.	RETAIN
STA. 138+45	RT.	RETAIN
STA. 138+50	LT.	RETAIN
STA. 138+75	RT.	RETAIN
STA. 138+80	LT.	RETAIN
STA. 138+80	RT.	RETAIN
STA. 138+90	RT.	RETAIN
STA. 138+95	RT.	RETAIN
STA. 139+10	LT.	RETAIN
STA. 139+10	RT.	RETAIN

HWY. 67

SILT FENCE	(E-11)	LIN. FT.
STA. 125+00 TO 126+65	RT.	RETAIN
STA. 125+55 TO 130+10	LT.	RETAIN
STA. 127+45 TO 128+75	RT.	RETAIN
STA. 131+55 TO 132+70	LT.	RETAIN
STA. 133+00 TO 136+95	LT.	RETAIN
STA. 134+55 TO 136+20	RT.	RETAIN
STA. 137+70 TO 137+85	RT.	RETAIN
STA. 138+20 TO 138+30	LT.	RETAIN
STA. 139+00 TO 139+00	LT.	RETAIN

HWY. 67

SAND BAG DITCH CHECK	(E-5)	INSTALLATION
STA. 126+50	RT.	RETAIN
STA. 127+05	RT.	RETAIN
STA. 127+60	RT.	RETAIN
STA. 128+20	RT.	RETAIN
STA. 128+75	RT.	RETAIN
STA. 129+20	RT.	RETAIN
STA. 129+75	RT.	RETAIN
STA. 130+25	RT.	RETAIN
STA. 130+65	LT.	RETAIN
STA. 130+75	RT.	RETAIN
STA. 131+25	RT.	RETAIN
STA. 131+35	LT.	RETAIN
STA. 131+75	RT.	RETAIN
STA. 133+00	RT.	RETAIN
STA. 135+20	RT.	RETAIN
STA. 135+55	RT.	RETAIN
STA. 136+05	RT.	RETAIN
STA. 136+55	RT.	RETAIN
STA. 137+15	RT.	RETAIN
STA. 137+25	LT.	RETAIN
STA. 139+25	RT.	RETAIN
STA. 139+50	LT.	RETAIN

APPROXIMATE FEMA 100 YR. FLOODPLAIN LIMITS

PROP. R/W

125+00

130+00

135+00

140+00

C.L. HWY. 67

10TH ST.

9TH ST.

C.L. CLAY ST.

T.C.E.

18+00

23+00

LEGEND

(E-5) = SAND BAG DITCH CHECKS
(E-6) = ROCK DITCH CHECKS
(E-7) = DROP INLET SILT FENCE
(E-11) = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE	REVISION

HWY. 67
TEMPORARY EROSION CONTROL DETAILS
STAGE 2

rnfortner 6/28/2022 10:32:20 AM
WORKSPACE: AHTD
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REVISED DATE:

HWY. 67

SILT FENCE	(E-11)	LIN. FT.
STA. 140+70 TO 140+90	RT.	RETAIN
STA. 141+55 TO 141+55	RT.	RETAIN
STA. 141+55 TO 141+75	RT.	RETAIN

SAND BAG DITCH CHECK	(E-5)	INSTALLATION
STA. 141+70	RT.	RETAIN
STA. 142+10	LT.	RETAIN
STA. 142+60	LT.	RETAIN
STA. 142+85	RT.	RETAIN

HWY. 67

DROP INLET SILT FENCE	[E-7]	INSTALLATION
STA. 140+65	RT.	RETAIN
STA. 140+75	RT.	RETAIN
STA. 140+90	RT.	RETAIN
STA. 141+00	LT.	RETAIN
STA. 141+00	RT.	RETAIN
STA. 141+05	RT.	RETAIN
STA. 141+35	LT.	RETAIN
STA. 141+40	LT.	RETAIN
STA. 141+40	RT.	RETAIN
STA. 141+55	RT.	RETAIN
STA. 141+65	RT.	RETAIN
STA. 141+75	LT.	RETAIN
STA. 141+75	RT.	RETAIN
STA. 143+75	RT.	1
STA. 143+75	LT.	1
STA. 143+80	RT.	1
STA. 143+80	LT.	2
STA. 144+05	RT.	1
STA. 144+10	LT.	3
STA. 144+15	RT.	1
STA. 144+15	LT.	1
STA. 145+10	RT.	1
STA. 146+00	LT.	2
STA. 146+00	RT.	1
STA. 146+10	RT.	1
STA. 146+10	LT.	1
STA. 146+20	LT.	1
STA. 147+00	RT.	1
STA. 147+10	RT.	1
STA. 148+40	RT.	1
STA. 149+50	RT.	2
STA. 150+00	RT.	1

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	100	549
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

N

C.L. MAIN ST.
C.L. CLINTON ST.
C.L. CADDO ST.
C.L. HWY. 67
HWY. 51 - PINE ST.
PROP. R/W
EXIST. R/W
T.C.E.
CONSTRUCTION LIMITS
140+00
145+00
150+00
155+00
27+00
30+00
33+00
36+00
40+00
42+00
45+00
50+00
55+00
62+00

LEGEND

(E-5) = SAND BAG DITCH CHECKS
[E-7] = DROP INLET SILT FENCE
(E-6) = ROCK DITCH CHECKS
(E-11) = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE	REVISION

HWY. 67
TEMPORARY EROSION CONTROL DETAILS
STAGE 2

rnfortner 6/28/2022 10:31:20 AM
WORKSPACE: AHTD
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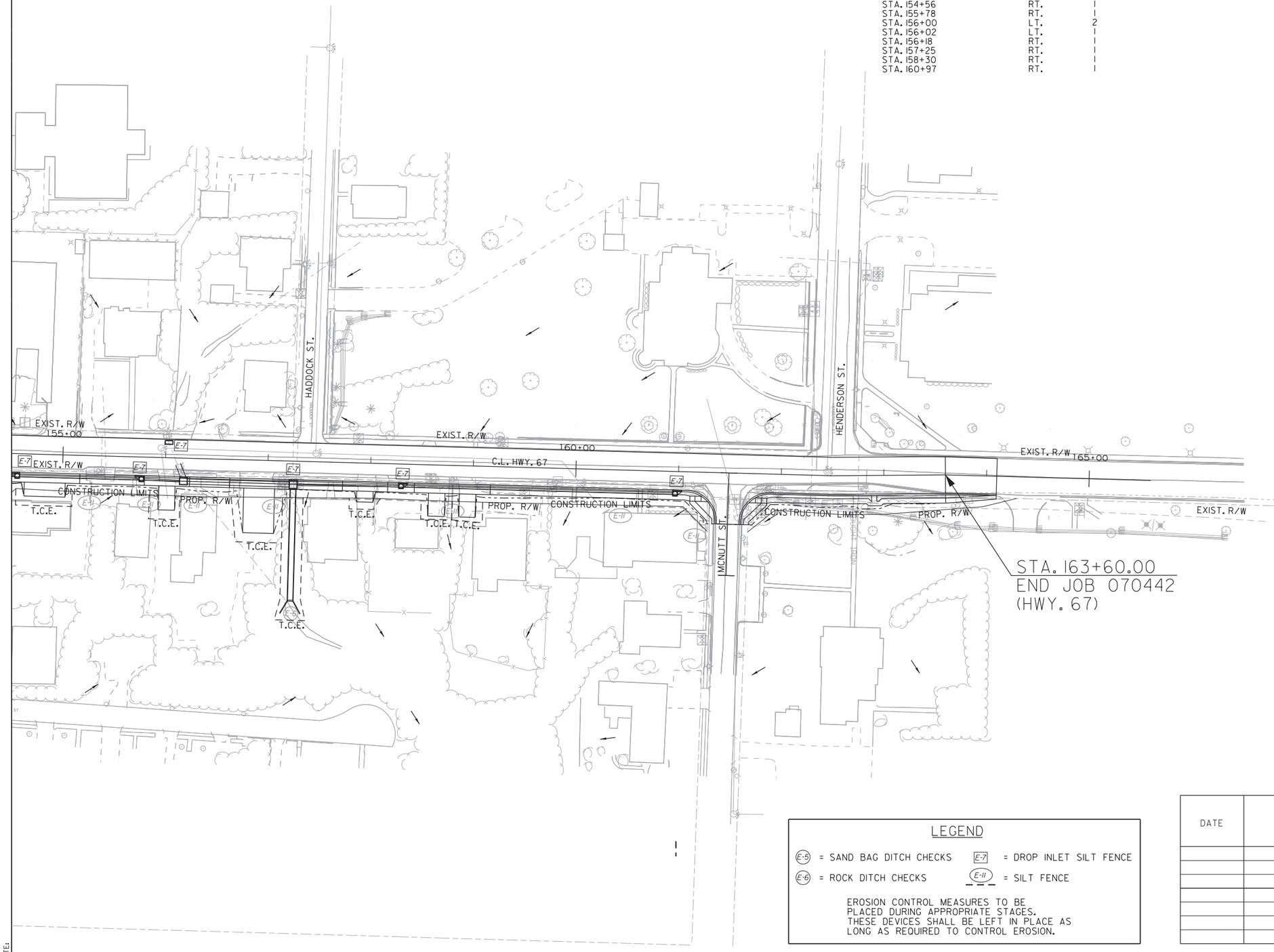
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	101	549
		TEMPORARY EROSION CONTROL DETAILS				

HWY. 67

DROP INLET SILT FENCE	E-7	INSTALLATION
STA. 154+56	RT.	1
STA. 155+78	RT.	1
STA. 156+00	LT.	2
STA. 156+02	LT.	1
STA. 156+18	RT.	1
STA. 157+25	RT.	1
STA. 158+30	RT.	1
STA. 160+97	RT.	1



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STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

HWY. 67

SILT FENCE	E-11	LIN. FT.
STA. 155+25 TO 155+90	RT.	RETAIN
STA. 156+10 TO 156+55	RT.	RETAIN
STA. 157+05 TO 158+80	RT.	RETAIN
STA. 160+45 TO 161+30	RT.	RETAIN

ROCK DITCH CHECK	E-6	INSTALLATION
STA. 157+25	RT.	RETAIN

LEGEND

E-5 = SAND BAG DITCH CHECKS
E-6 = ROCK DITCH CHECKS
E-7 = DROP INLET SILT FENCE
E-11 = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE	REVISION

HWY. 67
TEMPORARY EROSION CONTROL DETAILS
STAGE 2

rnfortner 6/28/2022 10:31:26 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_EC_STG2_IL_HWY 67_05.dgn
REVISED DATE:

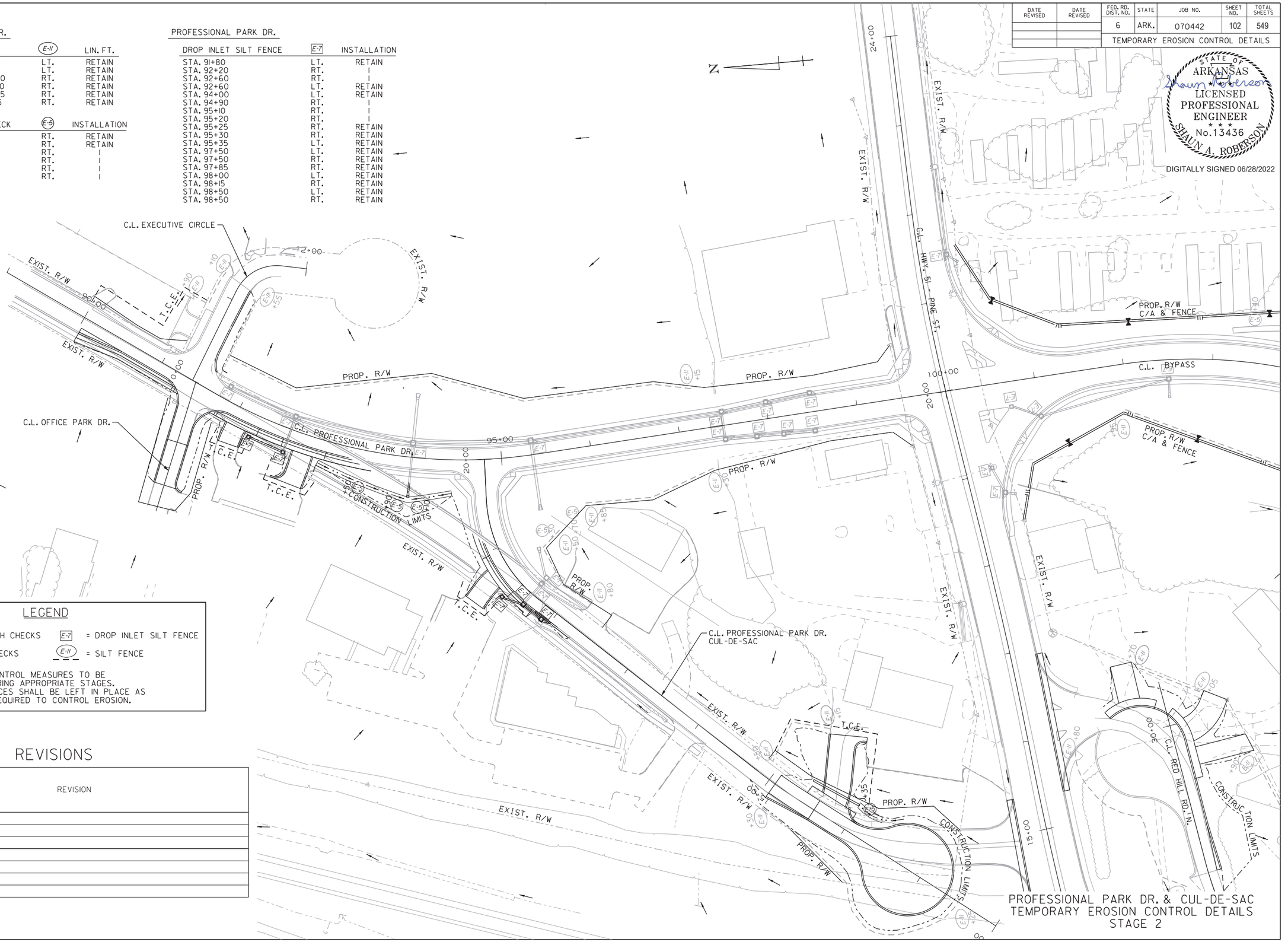
PROFESSIONAL PARK DR.

SILT FENCE (E-11)		LIN. FT.
STA. 90+90 TO 91+10	LT.	RETAIN
STA. 91+55 TO 97+15	LT.	RETAIN
STA. 95+50 TO 95+80	RT.	RETAIN
STA. 95+85 TO 97+30	RT.	RETAIN
STA. 97+30 TO 99+25	RT.	RETAIN
STA. 97+50 TO 98+15	RT.	RETAIN

SAND BAG DITCH CHECK (E-5)		INSTALLATION
STA. 95+30	RT.	RETAIN
STA. 95+70	RT.	RETAIN
STA. 93+50	RT.	I
STA. 93+90	RT.	I
STA. 94+10	RT.	I
STA. 98+35	RT.	I

PROFESSIONAL PARK DR.

DROP INLET SILT FENCE (E-7)		INSTALLATION
STA. 91+80	LT.	RETAIN
STA. 92+20	RT.	I
STA. 92+60	RT.	I
STA. 92+60	LT.	RETAIN
STA. 94+00	LT.	RETAIN
STA. 94+90	RT.	I
STA. 95+10	RT.	I
STA. 95+20	RT.	I
STA. 95+25	RT.	RETAIN
STA. 95+30	RT.	RETAIN
STA. 95+35	LT.	RETAIN
STA. 97+50	LT.	RETAIN
STA. 97+50	RT.	RETAIN
STA. 97+85	RT.	RETAIN
STA. 98+00	LT.	RETAIN
STA. 98+15	RT.	RETAIN
STA. 98+50	LT.	RETAIN
STA. 98+50	RT.	RETAIN



LEGEND

(E-5) = SAND BAG DITCH CHECKS
(E-6) = ROCK DITCH CHECKS
[E-7] = DROP INLET SILT FENCE
(E-11) = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE	REVISION

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	102	549
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

PROFESSIONAL PARK DR. & CUL-DE-SAC
TEMPORARY EROSION CONTROL DETAILS
STAGE 2

rnfortner 6/28/2022 10:31:27 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_EC_STG2_12_ProfessionalPark DR and Cul De Sac.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	103	549
		TEMPORARY EROSION CONTROL DETAILS				

BYPASS

SILT FENCE	(E-11)	LIN. FT.
STA. 263+75 TO 267+35	LT.	415
STA. 265+00 TO 265+25	RT.	RETAIN
STA. 265+40 TO 267+80	LT.	260

SAND BAG DITCH CHECK	(E-5)	INSTALLATION
STA. 266+00	LT.	2
STA. 266+15	LT.	RETAIN

ROCK DITCH CHECK	(E-6)	INSTALLATION
STA. 265+60	LT.	1
STA. 265+90	LT.	1
STA. 265+85	LT.	RETAIN

STATE OF ARKANSAS
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No. 13436
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PROP. R/W C/A & FENCE
FUTURE C.L. BYPASS TO HWY. 67 CONNECTOR
115+00
100+00
EXIST. R/W
CONSTRUCTION LIMITS
STA. 268+05.79
END BYPASS
265.00 C.L. BYPASS
105+00
POND
C.L. HWY. 67
T.C.E.
PROP. R/W
STA. 102+35.00
BEGIN HWY. 67
APPROXIMATE FEMA 100 YR. FLOODPLAIN LIMITS

LEGEND

(E-5) = SAND BAG DITCH CHECKS
[E-7] = DROP INLET SILT FENCE
(E-6) = ROCK DITCH CHECKS
(E-11) = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE	REVISION

HWY. 67

SILT FENCE	(E-11)	LIN. FT.
STA. 101+35 TO 106+80	RT.	RETAIN
STA. 108+90 TO 109+90	LT.	RETAIN

SAND BAG DITCH CHECK	(E-5)	INSTALLATION
STA. 108+05	RT.	RETAIN

ROCK DITCH CHECK	(E-6)	INSTALLATION
STA. 101+35	LT.	RETAIN
STA. 102+05	LT.	RETAIN
STA. 103+65	LT.	1

DROP INLET SILT FENCE	[E-7]	INSTALLATION
STA. 107+50	LT.	RETAIN

BYPASS & HWY. 67
TEMPORARY EROSION CONTROL DETAILS
STAGE 3

rnfortner 6/28/2022 10:31:28 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	104	549
		TEMPORARY EROSION CONTROL DETAILS				

HWY. 67

DROP INLET SILT FENCE	E-7	INSTALLATION
STA. 110+25	LT.	I
STA. 111+80	RT.	RETAIN
STA. 113+60	LT.	RETAIN
STA. 113+60	RT.	RETAIN
STA. 114+30	LT.	RETAIN
STA. 114+30	RT.	RETAIN
STA. 116+00	RT.	RETAIN
STA. 116+50	LT.	I
STA. 117+75	LT.	RETAIN
STA. 117+95	LT.	RETAIN
STA. 118+05	LT.	RETAIN
STA. 118+25	LT.	RETAIN
STA. 118+50	RT.	RETAIN
STA. 118+60	LT.	RETAIN
STA. 118+65	RT.	RETAIN
STA. 118+90	RT.	RETAIN
STA. 119+10	RT.	RETAIN
STA. 119+25	RT.	RETAIN
STA. 123+50	LT.	RETAIN
STA. 124+20	LT.	RETAIN
STA. 124+90	LT.	RETAIN

HWY. 67

SILT FENCE	E-11	LIN. FT.
STA. 111+65 TO 112+55	LT.	RETAIN
STA. 116+15 TO 117+10	RT.	RETAIN
STA. 117+50 TO 117+70	LT.	RETAIN
STA. 118+40 TO 118+70	LT.	RETAIN
STA. 118+75 TO 120+05	LT.	RETAIN
STA. 119+10 TO 120+50	LT.	RETAIN
STA. 119+65 TO 119+75	RT.	RETAIN
STA. 124+30 TO 124+40	LT.	RETAIN

SAND BAG DITCH CHECK	E-5	INSTALLATION
STA. 110+30	LT.	RETAIN
STA. 111+20	LT.	RETAIN
STA. 111+95	LT.	RETAIN
STA. 113+00	LT.	RETAIN
STA. 114+25	LT.	RETAIN
STA. 119+80	RT.	RETAIN
STA. 120+70	LT.	RETAIN
STA. 124+90	LT.	RETAIN

ROCK DITCH CHECK	E-6	INSTALLATION
STA. 116+30	RT.	RETAIN
STA. 116+60	RT.	RETAIN
STA. 116+90	RT.	RETAIN
STA. 121+85	RT.	RETAIN
STA. 122+50	LT.	RETAIN

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

N

110+00
115+00
120+00
125+00
T.C.E.
EXIST. R/W
PROP. R/W
C.L. HWY. 67
C.L. WALNUT ST.
C.L. HWY. 67 CONNECTOR
L.C.E.
APPROXIMATE FEMA 100 YR. FLOODPLAIN LIMITS

APPROXIMATE FEMA 100 YR. FLOODPLAIN LIMITS

LEGEND

E-5 = SAND BAG DITCH CHECKS
E-6 = ROCK DITCH CHECKS
E-7 = DROP INLET SILT FENCE
E-11 = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE	REVISION

HWY. 67
TEMPORARY EROSION CONTROL DETAILS
STAGE 3

rnfortner 6/28/2022 10:31:28 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	105	549
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
Shaun Roberson
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SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

APPROXIMATE FEMA 100 YR. FLOODPLAIN LIMITS

PROP. R/W

125+00

130+00

135+00

140+00

C.L. HWY. 67

C.L. CLAY ST.

T.C.E.

HWY. 67

ROCK DITCH CHECK	(E-6)	INSTALLATION
STA. 133+00	LT.	RETAIN

DROP INLET SILT FENCE	E-7	INSTALLATION
STA. 125+25	RT.	RETAIN
STA. 126+50	RT.	RETAIN
STA. 128+00	RT.	RETAIN
STA. 131+00	RT.	RETAIN
STA. 131+25	LT.	RETAIN
STA. 133+35	LT.	RETAIN
STA. 133+35	RT.	RETAIN
STA. 134+50	LT.	RETAIN
STA. 135+25	LT.	RETAIN
STA. 135+25	RT.	RETAIN
STA. 137+00	LT.	RETAIN
STA. 137+00	RT.	RETAIN
STA. 137+50	LT.	RETAIN
STA. 137+50	RT.	RETAIN
STA. 138+35	RT.	RETAIN
STA. 138+40	RT.	RETAIN
STA. 138+45	LT.	RETAIN
STA. 138+45	RT.	RETAIN
STA. 138+50	LT.	RETAIN
STA. 138+75	RT.	RETAIN
STA. 138+80	LT.	RETAIN
STA. 138+80	RT.	RETAIN
STA. 138+90	RT.	RETAIN
STA. 138+95	RT.	RETAIN
STA. 139+10	LT.	RETAIN
STA. 139+10	RT.	RETAIN

HWY. 67

SILT FENCE	E-11	LIN. FT.
STA. 125+00 TO 126+65	RT.	RETAIN
STA. 125+55 TO 130+10	LT.	RETAIN
STA. 127+45 TO 128+75	RT.	RETAIN
STA. 131+55 TO 132+70	LT.	RETAIN
STA. 133+00 TO 136+95	LT.	RETAIN
STA. 134+55 TO 136+20	RT.	RETAIN
STA. 137+70 TO 137+85	RT.	RETAIN
STA. 138+20 TO 138+30	LT.	RETAIN
STA. 139+00 TO 139+00	LT.	RETAIN

HWY. 67

SAND BAG DITCH CHECK	(E-5)	INSTALLATION
STA. 126+50	RT.	RETAIN
STA. 127+05	RT.	RETAIN
STA. 127+60	RT.	RETAIN
STA. 128+15	RT.	RETAIN
STA. 128+75	RT.	RETAIN
STA. 129+20	RT.	RETAIN
STA. 129+75	RT.	RETAIN
STA. 130+25	RT.	RETAIN
STA. 130+65	LT.	RETAIN
STA. 130+75	RT.	RETAIN
STA. 131+25	RT.	RETAIN
STA. 131+35	LT.	RETAIN
STA. 131+75	RT.	RETAIN
STA. 133+00	RT.	RETAIN
STA. 135+20	RT.	RETAIN
STA. 135+55	RT.	RETAIN
STA. 136+05	RT.	RETAIN
STA. 136+55	RT.	RETAIN
STA. 137+15	RT.	RETAIN
STA. 137+25	LT.	RETAIN
STA. 139+25	RT.	RETAIN
STA. 139+50	LT.	RETAIN

LEGEND

(E-5) = SAND BAG DITCH CHECKS
E-7 = DROP INLET SILT FENCE
(E-6) = ROCK DITCH CHECKS
E-11 = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE	REVISION

HWY. 67
TEMPORARY EROSION CONTROL DETAILS
STAGE 3

rnfortner 6/28/2022 10:31:29 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	106	549
		TEMPORARY EROSION CONTROL DETAILS				

HWY. 67

SILT FENCE (E-11)		LIN. FT.
STA. 140+70 TO 140+90	RT.	RETAIN
STA. 141+55 TO 141+55	RT.	RETAIN
STA. 141+55 TO 141+75	RT.	RETAIN

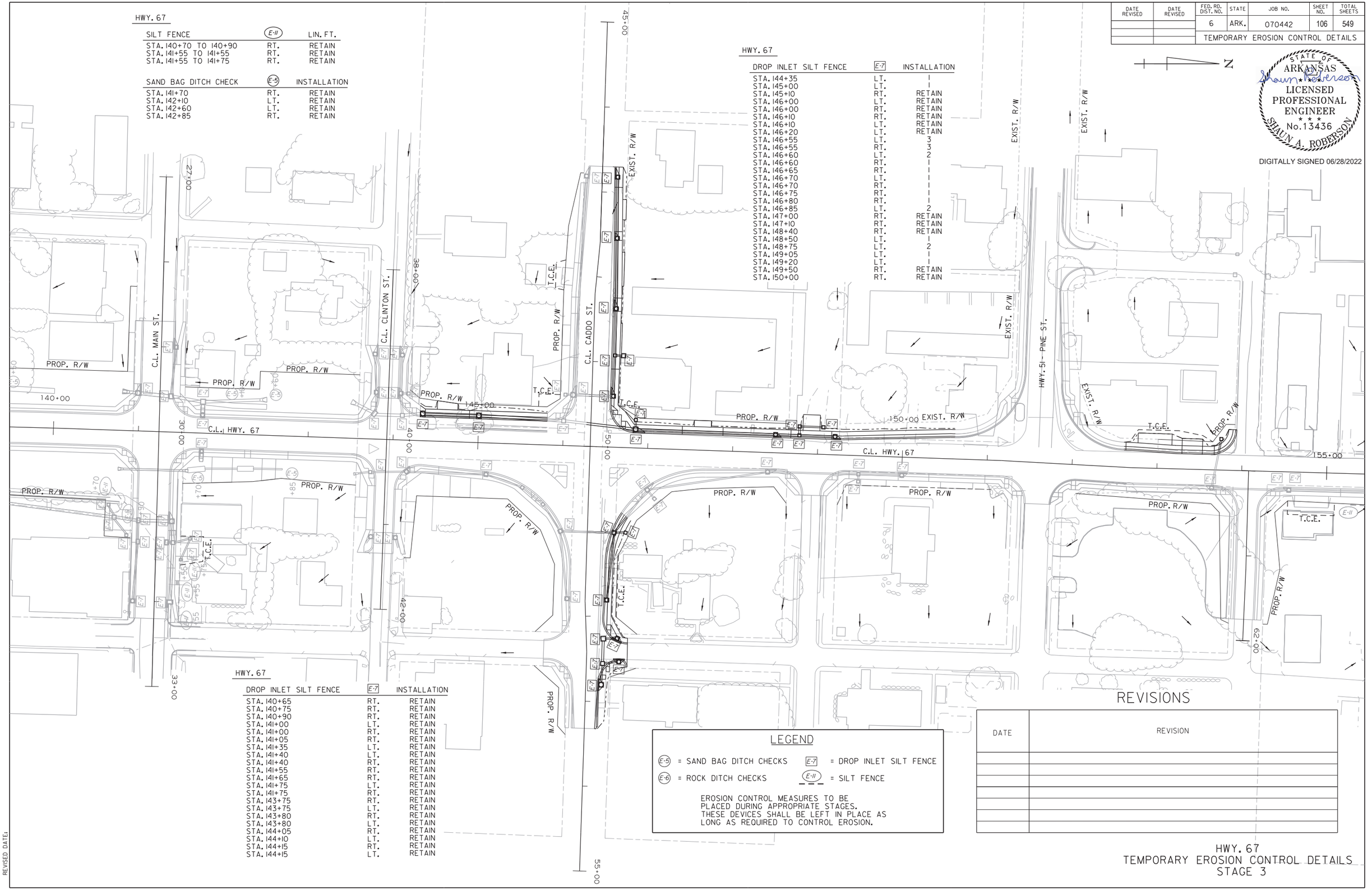
SAND BAG DITCH CHECK (E-5)		INSTALLATION
STA. 141+70	RT.	RETAIN
STA. 142+10	LT.	RETAIN
STA. 142+60	LT.	RETAIN
STA. 142+85	RT.	RETAIN

HWY. 67

DROP INLET SILT FENCE (E-7)		INSTALLATION
STA. 144+35	LT.	1
STA. 145+00	LT.	1
STA. 145+10	RT.	RETAIN
STA. 146+00	LT.	RETAIN
STA. 146+00	RT.	RETAIN
STA. 146+10	RT.	RETAIN
STA. 146+10	LT.	RETAIN
STA. 146+20	LT.	RETAIN
STA. 146+55	LT.	3
STA. 146+55	RT.	3
STA. 146+60	LT.	2
STA. 146+60	RT.	1
STA. 146+65	RT.	1
STA. 146+70	LT.	1
STA. 146+70	RT.	1
STA. 146+75	RT.	1
STA. 146+80	RT.	1
STA. 146+85	LT.	2
STA. 147+00	RT.	RETAIN
STA. 147+10	RT.	RETAIN
STA. 148+40	RT.	RETAIN
STA. 148+50	LT.	1
STA. 148+75	LT.	2
STA. 149+05	LT.	1
STA. 149+20	LT.	1
STA. 149+50	RT.	RETAIN
STA. 150+00	RT.	RETAIN

HWY. 67

DROP INLET SILT FENCE (E-7)		INSTALLATION
STA. 140+65	RT.	RETAIN
STA. 140+75	RT.	RETAIN
STA. 140+90	RT.	RETAIN
STA. 141+00	LT.	RETAIN
STA. 141+00	RT.	RETAIN
STA. 141+05	RT.	RETAIN
STA. 141+35	LT.	RETAIN
STA. 141+40	LT.	RETAIN
STA. 141+40	RT.	RETAIN
STA. 141+55	RT.	RETAIN
STA. 141+65	RT.	RETAIN
STA. 141+75	LT.	RETAIN
STA. 141+75	RT.	RETAIN
STA. 143+75	RT.	RETAIN
STA. 143+75	LT.	RETAIN
STA. 143+80	RT.	RETAIN
STA. 143+80	LT.	RETAIN
STA. 144+05	RT.	RETAIN
STA. 144+10	LT.	RETAIN
STA. 144+15	RT.	RETAIN
STA. 144+15	LT.	RETAIN



STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

LEGEND

(E-5) = SAND BAG DITCH CHECKS [E-7] = DROP INLET SILT FENCE

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

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE	REVISION

HWY. 67
TEMPORARY EROSION CONTROL DETAILS
STAGE 3

rnfortner 6/28/2022 10:31:32 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	107	549
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
SHAUN A. ROBERSON
LICENSED PROFESSIONAL ENGINEER
No.13436
DIGITALLY SIGNED 06/28/2022

1 ROAD CLOSED — (1) R11-2 (48" X 30")

8' BARR. TYPE III LT. — 8' BARR. TYPE III RT.

2 DETOUR 1500 FT — (1) W20-2 (48" X 48")

3 ROAD CLOSED 500 FT — (1) W20-2 (48" X 48")

4 DETOUR / 26TH ST. — (1) M4-8 (24" X 12"); (1) D3-1 (24" X 12"); (1) M5-1L (30" X 21")

5 DETOUR / 26TH ST. — (1) M4-10L (48" X 18"); (1) D3-1 (24" X 12")

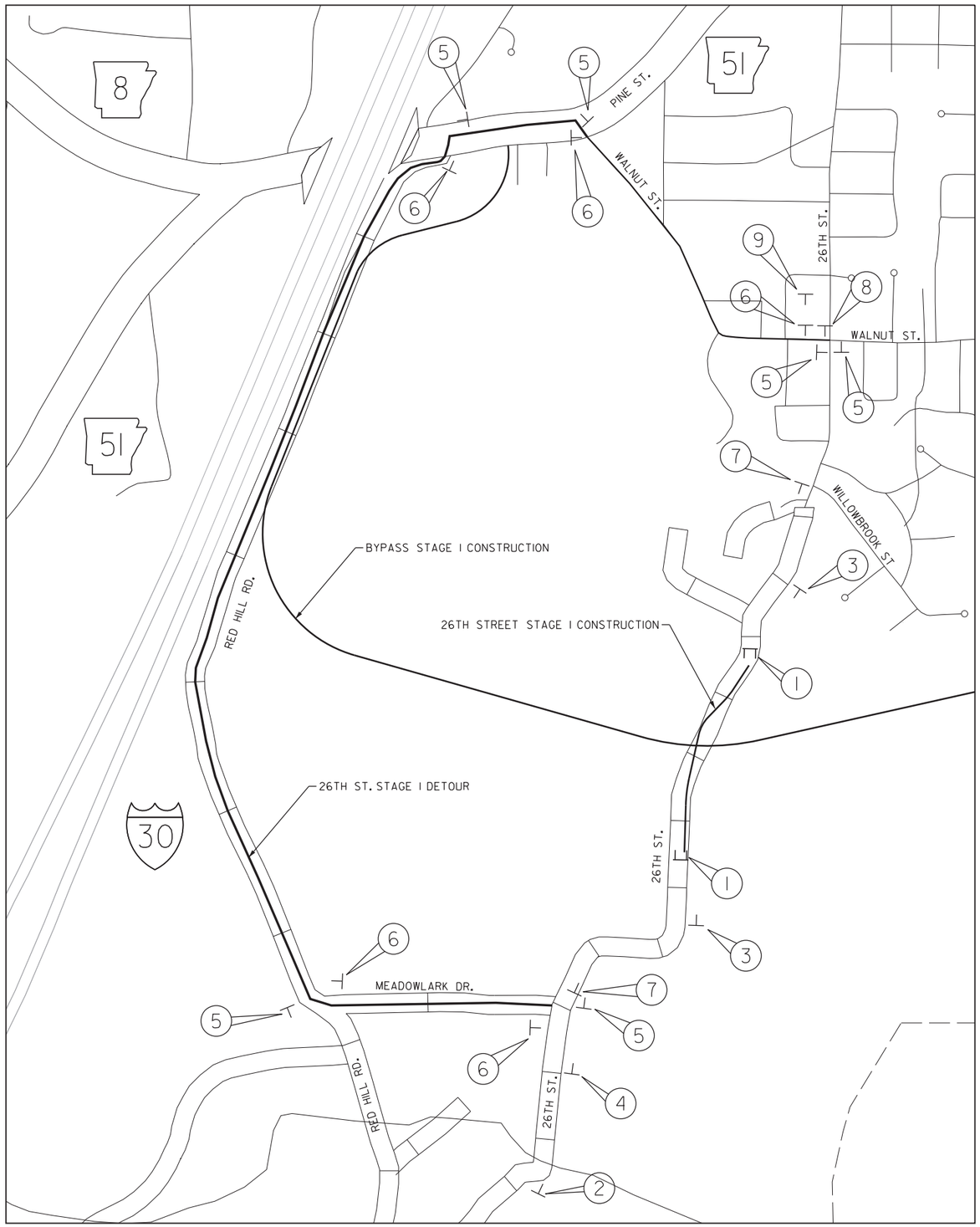
6 DETOUR / 26TH ST. — (1) M4-10R (48" X 18"); (1) D3-1 (24" X 12")

7 ROAD CLOSED 0.35 MILES AHEAD LOCAL TRAFFIC ONLY — (1) R11-4 (60" X 30")

8 ROAD CLOSED 0.50 MILES AHEAD LOCAL TRAFFIC ONLY — (1) R11-4 (60" X 30")

9 ROAD CLOSED AHEAD — (1) W20-3 (48" X 48")

26TH ST. DETOUR STAGE I



N

1" = 1000'

26TH ST. DETOUR
MAINTENANCE OF TRAFFIC DETAILS
STAGE I

rnfortner 6/28/2022 10:31:33 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	108	549

MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

STAGE I
CONSTRUCTION SEQUENCE NOTES

1. MAINTAIN TRAFFIC ON EXISTING LANES.
2. INSTALL ADVANCE WARNING SIGNS AS SHOWN.
3. AS SHOWN, CONSTRUCT BYPASS AND SIDE ROADS AND PERFORM LEVELING AND NOTCH AND WIDEN OPERATIONS.
4. PLACE CONSTRUCTION PAVEMENT MARKINGS SHOWN FOR STAGE 2 TRAFFIC CONFIGURATION PRIOR TO SWITCHING TRAFFIC.

CONSTRUCTION PAVEMENT MARKINGS

DOUBLE YELLOW CENTERLINE = 2926 LIN. FT.
TRAFFIC DRUMS = 171 EACH

N
1" = 100'

(I) W20-1 (48" X 48")
ROAD WORK AHEAD
(I) G20-2 (48" X 24") END ROAD WORK
C.L. EXECUTIVE CIRCLE
2 TRAFFIC DRUMS AT 25' O.C.
3 TRAFFIC DRUMS AT 50' O.C.
4" DOUBLE YELLOW
C.L. OFFICE PARK DR.
C.L. PROFESSIONAL PARK DR.
ROAD WORK 500 FT.
(I) W20-1 (48" X 48")
(I) G20-2 (48" X 24") END ROAD WORK
ROAD WORK AHEAD
(I) W20-1 (48" X 48")
4" DOUBLE YELLOW
4 TRAFFIC DRUMS AT 50' O.C.
5 TRAFFIC DRUMS AT 50' O.C.
CONSTRUCTION LIMITS
12+00
95+00
90+00
85+00
80+00
100+00
105+00
110+00
115+00
120+00
500'
90'

AS PER TYPICAL SECTION AND METHOD OF RAISING GRADE SPECIAL DETAIL
78' TEMPORARY VERTICAL TIE
VAR. ACHM SURFACE COURSE
VAR. TONS/STA.
STA. 93+31
STA. 93+95
1.91%
-0.30%
1.07%
0'-9"
EXISTING ROADWAY

PROFESSIONAL PARK DR. TEMPORARY VERTICAL TIE

BYPASS STA. 100+27.88
BEGIN JOB 070442
(BYPASS)

ROAD WORK 500 FT.
(I) W20-1 (48" X 48")
END ROAD WORK
(I) G20-2 (48" X 24")
5 TRAFFIC DRUMS AT 50' O.C.
C.L. BYPASS
CONSTRUCTION LIMITS
8 TRAFFIC DRUMS AT 50' O.C.

AS PER TYPICAL SECTION AND METHOD OF RAISING GRADE SPECIAL DETAIL
100' TEMPORARY VERTICAL TIE
VAR. ACHM SURFACE COURSE
VAR. TONS/STA.
STA. 19+10
STA. 19+56
0.98%
-2.20%
-0.98%
1'-3"
EXISTING ROADWAY

PROFESSIONAL PARK DR. CUL-DE-SAC
TEMPORARY VERTICAL TIE

C.L. HWY. 51 - PINE ST.
C.L. PROFESSIONAL PARK DR. CUL-DE-SAC
C.L. RED HILL RD. N.
CONSTRUCTION LIMITS
END ROAD WORK
(I) G20-2 (48" X 24")
ROAD WORK 500 FT.
(I) W20-1 (48" X 48")
15+00
120+00
130+00
150+00

EX. C.L. PROF. PK. DR.
STAGE I WORK AREA
2'
11'-0" TRAVEL LANE
11'-0" TRAVEL LANE
OMIT TOP LIFT OF SURFACE COURSE
EXISTING GROUND
3:1
24'-0" NOMINAL EXISTING PAVEMENT
STAGE I TRAFFIC DRUMS 50' O.C. (NORMAL)
PLACE LEVELING COURSE UNDER TRAFFIC TO 2" BELOW FINISHED GRADE

STAGE I TYPICAL SECTION

- STAGE I CONSTRUCTION
- STAGE I OVERLAY OR METHOD OF RAISING GRADE UNDER TRAFFIC
- STAGE I TEMP. VERTICAL TIE OVERLAY OR METHOD OF RAISING GRADE UNDER TRAFFIC
- STAGE I TRAFFIC
- TRAFFIC DRUMS

BUMP (4) W8-1 (30" X 30")
DO NOT PASS (4) R4-1 (24" X 30")
RIGHT SHOULDER CLOSED (4) W21-5a (36" X 36")
TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

PROFESSIONAL PARK DR. & CUL-DE-SAC
MAINTENANCE OF TRAFFIC DETAILS
STAGE I

rnfortner 6/28/2022 10:31:34 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	109	549
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
Shaun A. Roberson
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No.13436
SHAUN A. ROBERSON
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STAGE I CONSTRUCTION

STAGE I OVERLAY OR METHOD OF RAISING GRADE UNDER TRAFFIC

STAGE I TEMP. VERTICAL TIE OVERLAY OR METHOD OF RAISING GRADE UNDER TRAFFIC

STAGE I TRAFFIC

TRAFFIC DRUMS

BUMP (4) W8-1 (30" X 30")

DO NOT PASS (4) R4-1 (24" X 30")

RIGHT SHOULDER CLOSED (4) W21-5a (36" X 36")

TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

N

1" = 100'

CONSTRUCTION LIMITS

C.L. BYPASS

END ROAD WORK
(1) G20-2
(48" X 24")

ROAD WORK 500 FT.
(1) W20-1
(48" X 48")

500'

100.00

20+00

5 TRAFFIC DRUMS AT 50' O.C.

8 TRAFFIC DRUMS AT 50' O.C.

C.L. PROFESSIONAL PARK DR.

C.L. HWY. 51 - PINE ST.

4" DOUBLE YELLOW

30+00

5 TRAFFIC DRUMS AT 50' O.C.

2 TRAFFIC DRUMS AT 50' O.C.

CONSTRUCTION LIMITS

ROAD WORK 500 FT.
(1) W20-1
(48" X 48")

15+00

C.L. RED HILL RD. N.

25+00

12+00

END ROAD WORK
(1) G20-2
(48" X 24")

4 TRAFFIC DRUMS AT 50' O.C.

4" DOUBLE YELLOW

BYPASS, PROF. PARK CUL-DE-SAC & RED HILL DR. N.
MAINTENANCE OF TRAFFIC DETAILS
STAGE I

rnfortner 6/28/2022 10:31:35 AM
WORKSPACE: AHTD
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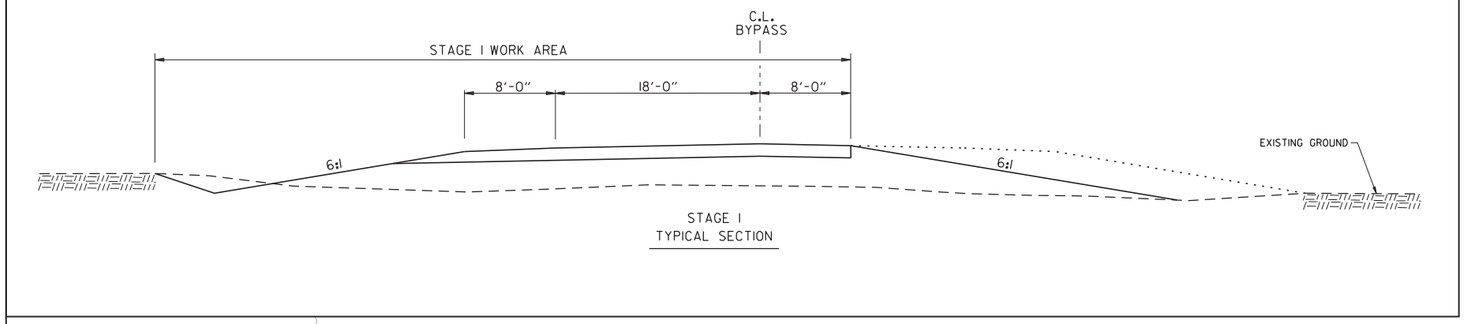
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	110	549
		MAINTENANCE OF TRAFFIC DETAILS				



STAGE I
TYPICAL SECTION

N

1" = 100'

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

STA. 125+00 CONSTRUCT
TEMPORARY 24" X 95' R.C. PIPE CULVERT
CLASS III (TYPE 3 BEDDING)

CONSTRUCTION LIMITS

CONSTRUCTION LIMITS

CONSTRUCTION LIMITS

C.L. BYPASS

120+00

125+00

130+00

C.L. RED HILL RD. N.

14 TRAFFIC DRUMS
AT 10' O.C.

16 TRAFFIC DRUMS
AT 10' O.C.

STAGE I CONSTRUCTION

STAGE I TRAFFIC

TRAFFIC DRUMS

BUMP (4) W8-1 (30" X 30")

DO NOT PASS (4) R4-1 (24" X 30")

RIGHT SHOULDER CLOSED (4) W21-5a (36" X 36")

TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

BYPASS
MAINTENANCE OF TRAFFIC DETAILS
STAGE I

rnfortner 6/28/2022 10:31:35 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_MOT_STG1_03.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	111	549
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

1" = 100'

CONSTRUCTION LIMITS

130+00

30'-0"

15 TRAFFIC DRUMS AT 10' O.C.

C.L. BYPASS

145+00

24'-0"

155+00

CONSTRUCTION LIMITS

POND BERM

CONSTRUCTION LIMITS

CONSTRUCTION LIMITS

C.L. RED HILL RD. S.

(1) W20-1 (48" X 48")

ROAD WORK 500 FT.

500'

4 TRAFFIC DRUMS AT 10' O.C.

4" DOUBLE YELLOW

CONSTRUCTION LIMITS

150+00

130+00

END ROAD WORK

(1) G20-2 (48" X 24")

STAGE I CONSTRUCTION

STAGE I OVERLAY OR METHOD OF RAISING GRADE UNDER TRAFFIC

STAGE I TRAFFIC

TRAFFIC DRUMS

BUMP (4) W8-1 (30" X 30")

DO NOT PASS (4) R4-1 (24" X 30")

RIGHT SHOULDER CLOSED (4) W21-5a (36" X 36")

TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

BYPASS
MAINTENANCE OF TRAFFIC DETAILS
STAGE I

rnfortner 6/28/2022 10:36:36 AM
WORKSPACE: AHTD
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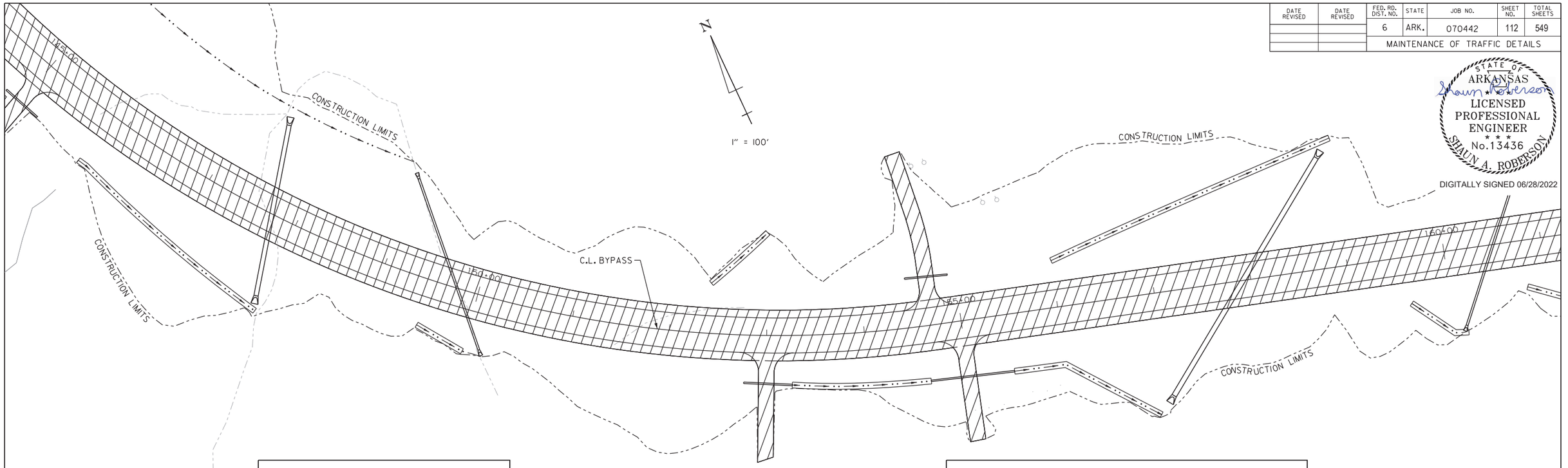
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	112	549
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022



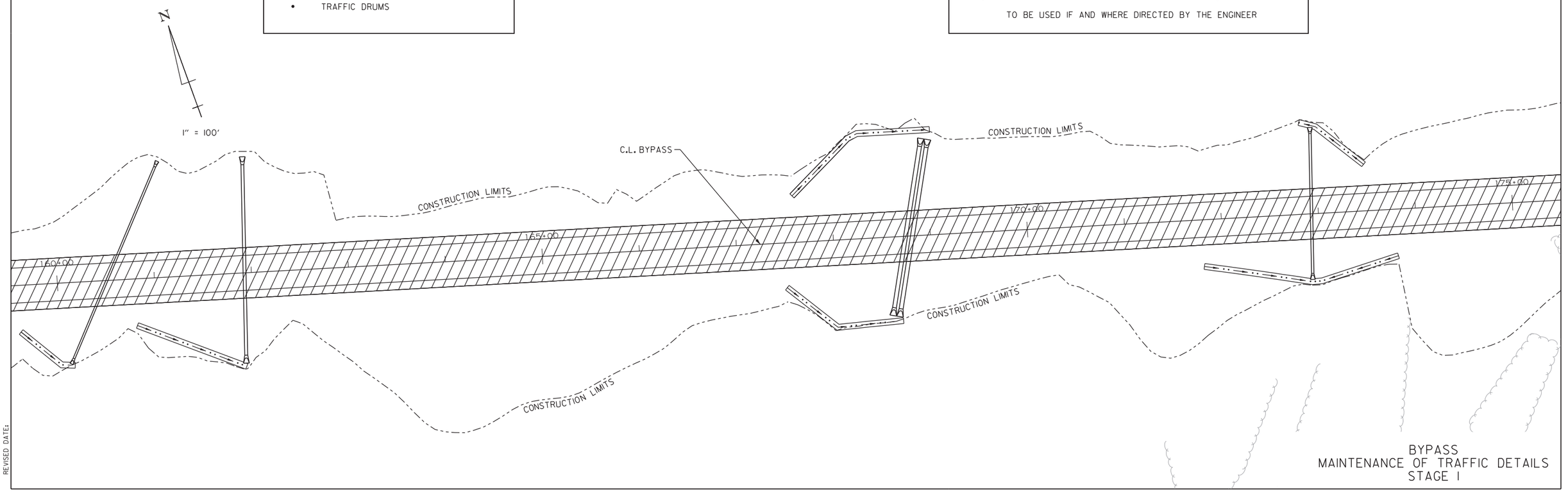
STAGE I CONSTRUCTION

STAGE I TRAFFIC

TRAFFIC DRUMS

BUMP	(4) W8-1 (30" X 30")	DO NOT PASS	(4) R4-1 (24" X 30")	RIGHT SHOULDER CLOSED	(4) W21-5a (36" X 36")

TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER



BYPASS
MAINTENANCE OF TRAFFIC DETAILS
STAGE I

rnfortner 6/28/2022 10:31:36 AM
WORKSPACE: AHTD
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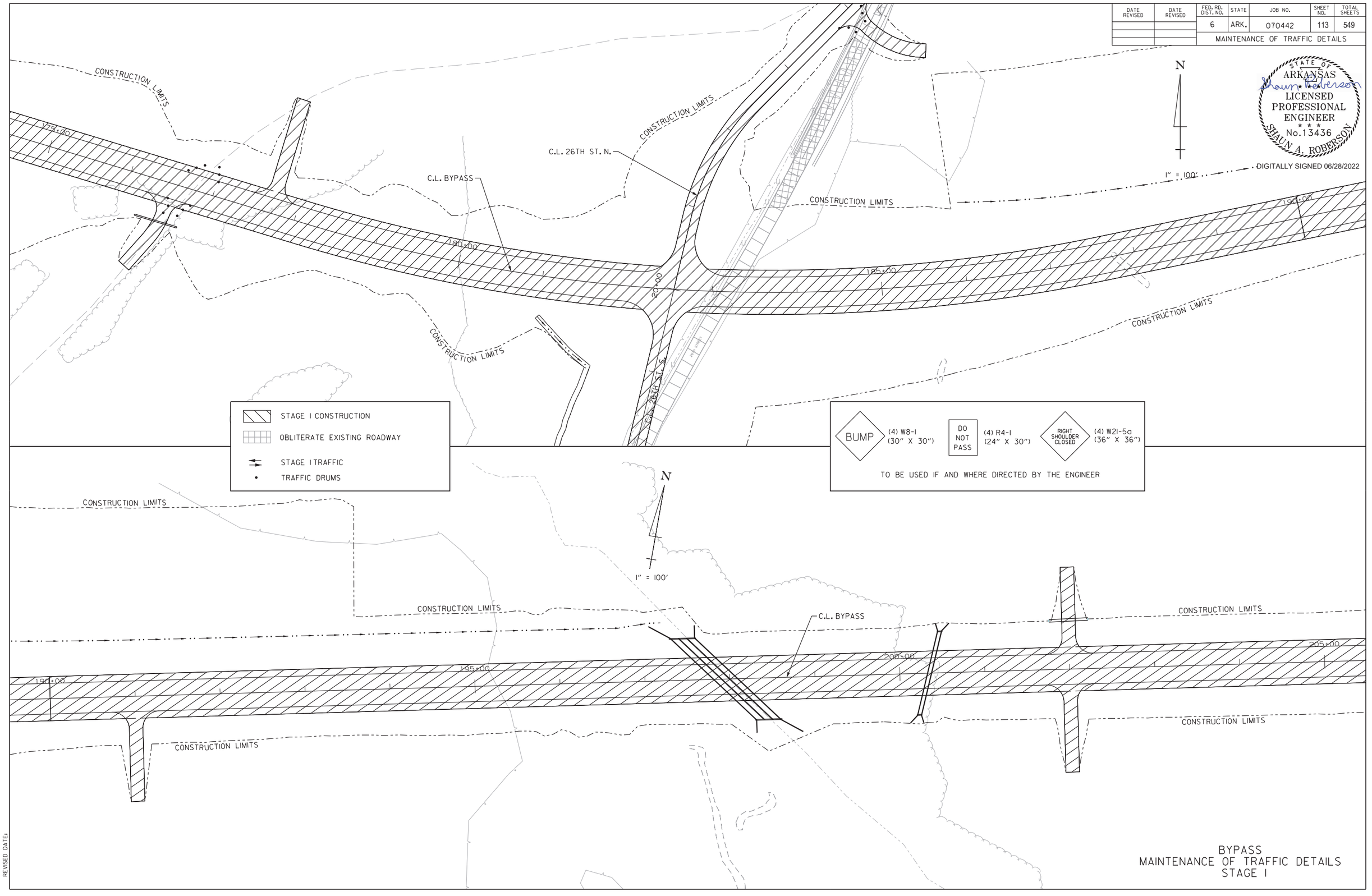
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	113	549

MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
SHAUN A. ROBERSON
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022



BYPASS
MAINTENANCE OF TRAFFIC DETAILS
STAGE I

rnfortner 6/28/2022 10:31:37 AM
WORKSPACE: AHTD
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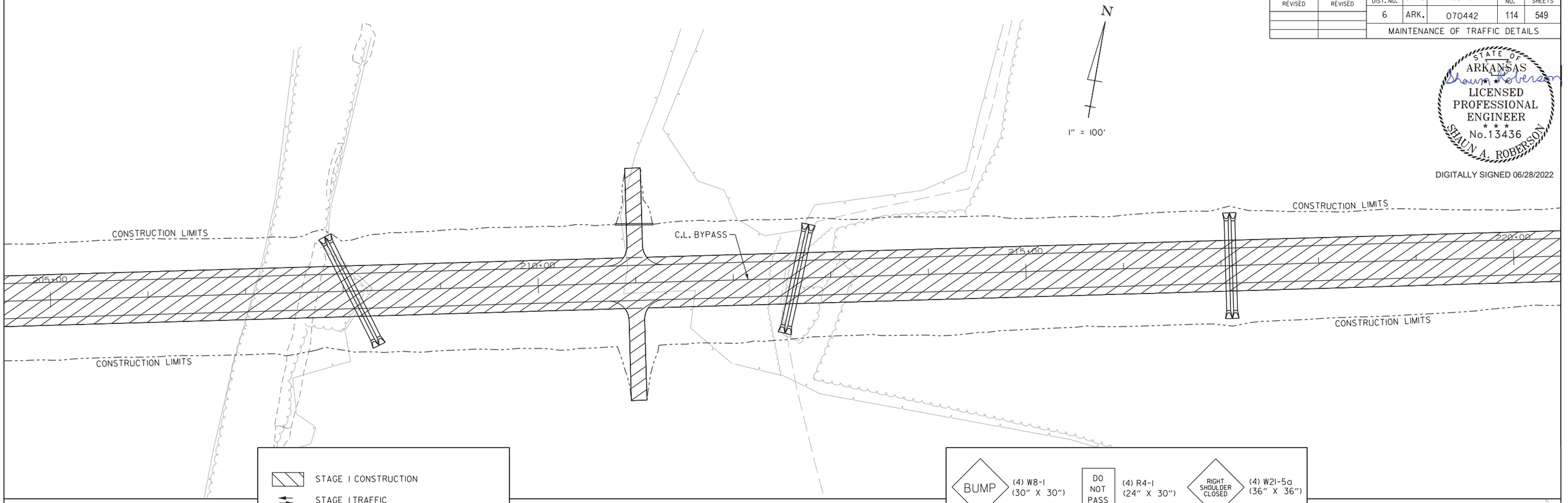
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	114	549
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

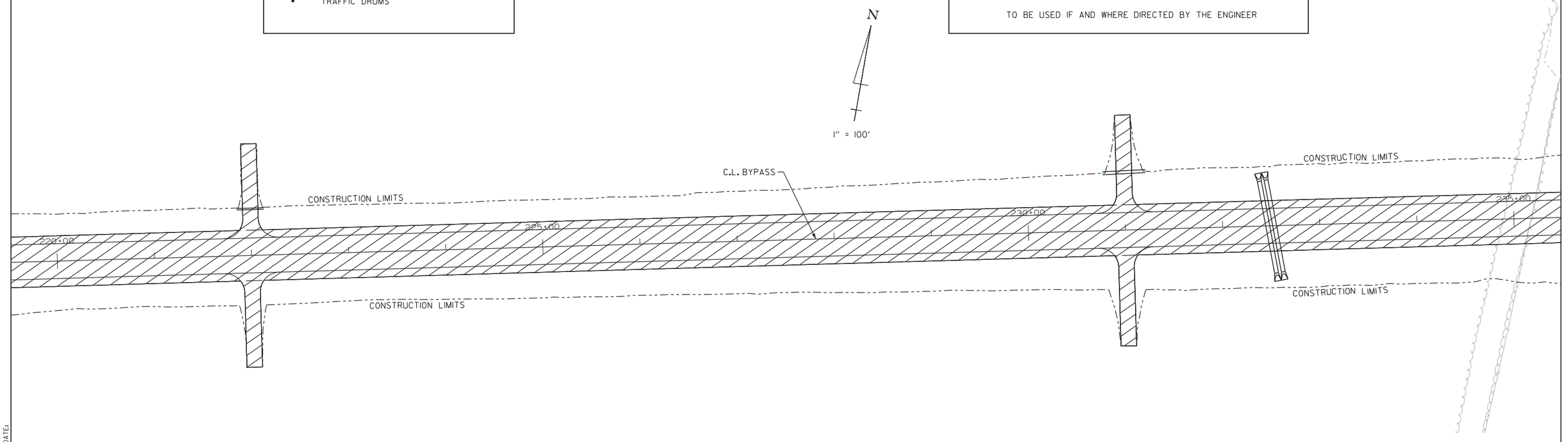
DIGITALLY SIGNED 06/28/2022



- STAGE I CONSTRUCTION
- STAGE I TRAFFIC
- TRAFFIC DRUMS

BUMP	(4) W8-1 (30" X 30")	DO NOT PASS	(4) R4-1 (24" X 30")	RIGHT SHOULDER CLOSED	(4) W21-5a (36" X 36")

TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER



BYPASS
MAINTENANCE OF TRAFFIC DETAILS
STAGE I

rnfortner 6/28/2022 10:34:37 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	115	549
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

N

1" = 100'

CONSTRUCTION LIMITS

C.L. BYPASS

235+00

240+00

245+00

250+00

CONSTRUCTION LIMITS

CONSTRUCTION LIMITS

CONSTRUCTION LIMITS

STAGE I CONSTRUCTION

STAGE I TRAFFIC

TRAFFIC DRUMS

BUMP	(4) W8-1 (30" X 30")	DO NOT PASS	(4) R4-1 (24" X 30")	RIGHT SHOULDER CLOSED	(4) W21-5a (36" X 36")

TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

N

1" = 100'

C.L. BYPASS

CONSTRUCTION LIMITS

CONSTRUCTION LIMITS

CONSTRUCTION LIMITS

CONSTRUCTION LIMITS

250+00

255+00

260+00

265+00

FUTURE C.L. BYPASS TO HWY. 67 CONNECTOR

BYPASS
MAINTENANCE OF TRAFFIC DETAILS
STAGE I

rnfortner 6/28/2022 10:31:38 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	116	549
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

1 ROAD CLOSED — (1) R11-2 (48" X 30")
8' BARR. TYPE III LT. | 8' BARR. TYPE III RT.

2 DETOUR 1500 FT — (1) W20-2 (48" X 48")

3 DETOUR — (1) M4-10L (48" X 18")
67 — (1) M1-5 (MODIFIED) (24" X 24")
ROAD CLOSED TO THRU TRAFFIC — (1) R11-4 (60" X 30")
8' BARR. TYPE III RT.

4 DETOUR — (1) M4-10R (48" X 18")
67 — (1) M1-5 (MODIFIED) (24" X 24")

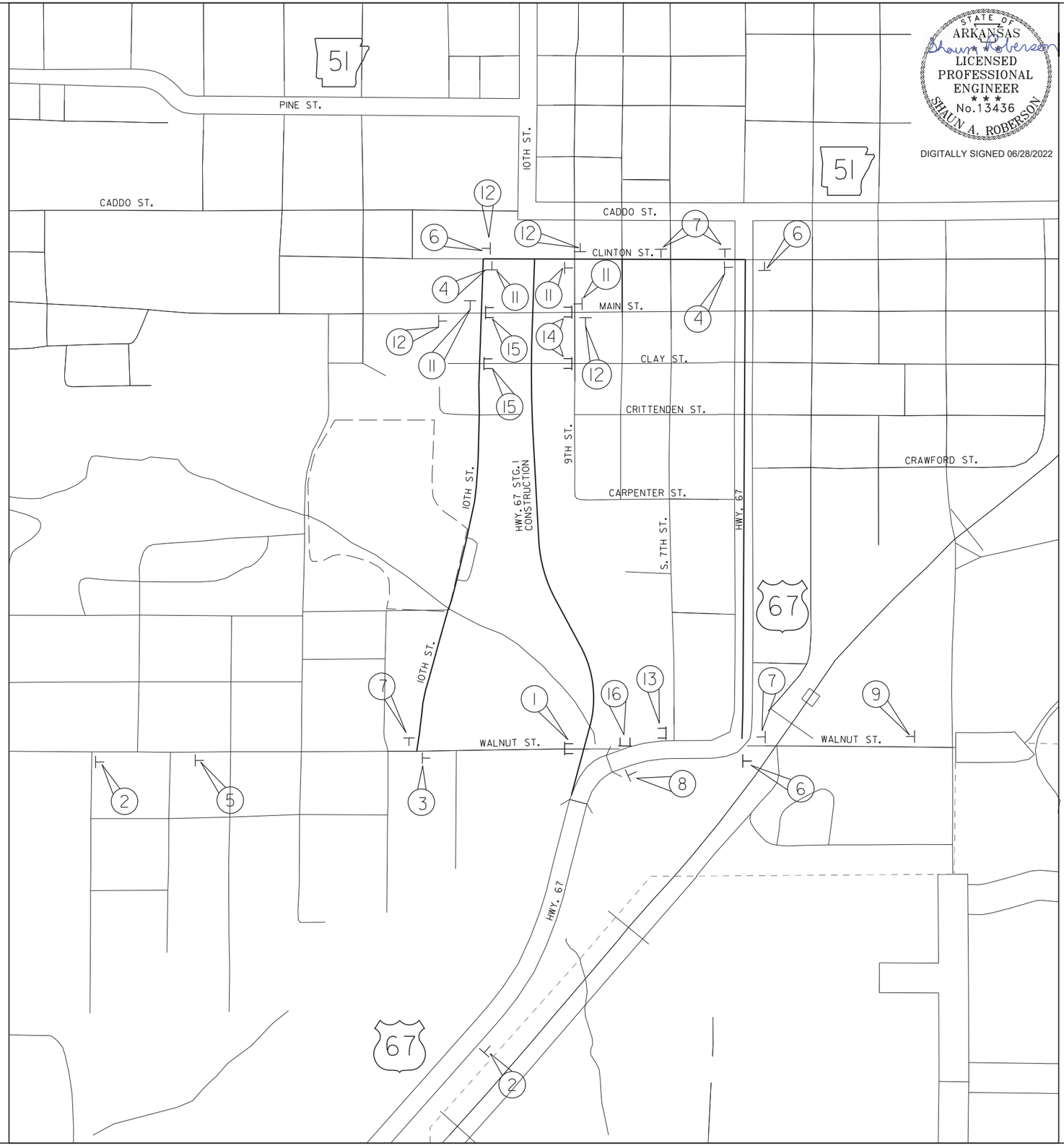
5 DETOUR — (1) M4-8 (24" X 12")
67 — (1) M1-5 (MODIFIED) (24" X 24")
(1) M5-1L (30" X 21")

6 DETOUR — (1) M4-10L (48" X 18")
WALNUT ST. — (1) D3-1 (24" X 12")

7 DETOUR — (1) M4-10R (48" X 18")
WALNUT ST. — (1) D3-1 (24" X 12")

8 DETOUR — (1) M4-8 (24" X 12")
WALNUT ST. — (1) D3-1 (24" X 12")
(1) M6-3 (30" X 21")

9 DETOUR — (1) M4-8 (24" X 12")
WALNUT ST. — (1) D3-1 (24" X 12")
(1) M5-1R (30" X 21")



11 DETOUR / MAIN ST. — (1) M4-1OR (48" X 18") (1) D3-1 (24" X 12")

12 DETOUR / MAIN ST. — (1) M4-1OL (48" X 18") (1) D3-1 (24" X 12")

13 (1) W1-6 (48" X 24") ROAD CLOSED — (1) R11-2 (48" X 30") 16' BARR. TYPE III RT.

14 (1) W1-6 (48" X 24") ROAD CLOSED TO THRU TRAFFIC — (1) R11-4 (60" X 30") 8' BARR. TYPE III LT.

15 (1) W1-6 (48" X 24") ROAD CLOSED TO THRU TRAFFIC — (1) R11-4 (60" X 30") 8' BARR. TYPE III RT.

16 ROAD CLOSED — (1) R11-2 (48" X 30")
16' BARR. TYPE III LT. | 16' BARR. TYPE III RT.

N

1" = 550'

WALNUT, CLAY AND MAIN ST. DETOUR MAINTENANCE OF TRAFFIC DETAILS STAGE I

rnfortner 6/28/2022 10:38:38 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	117	549
		MAINTENANCE OF TRAFFIC DETAILS				

STAGE I
CONSTRUCTION SEQUENCE NOTES

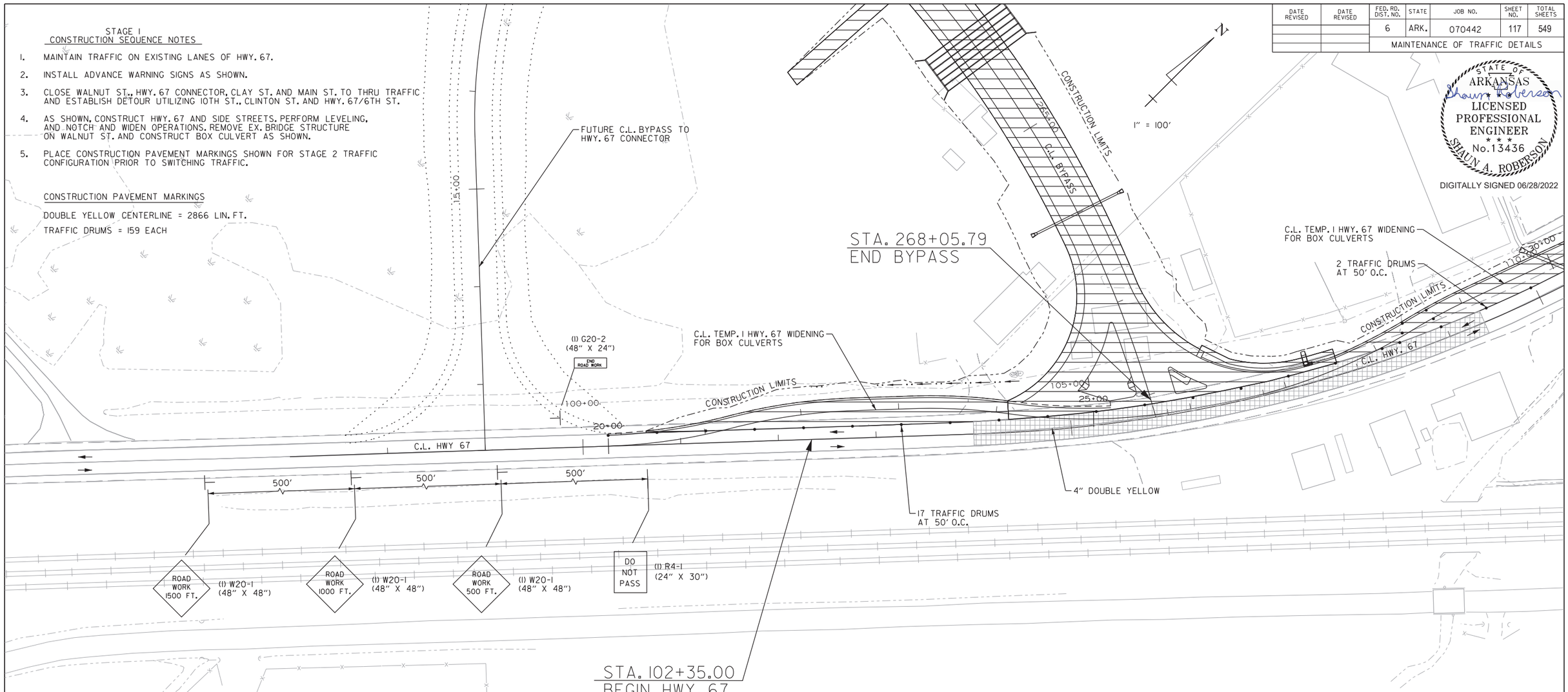
1. MAINTAIN TRAFFIC ON EXISTING LANES OF HWY. 67.
2. INSTALL ADVANCE WARNING SIGNS AS SHOWN.
3. CLOSE WALNUT ST., HWY. 67 CONNECTOR, CLAY ST. AND MAIN ST. TO THRU TRAFFIC AND ESTABLISH DETOUR UTILIZING 10TH ST., CLINTON ST. AND HWY. 67/6TH ST.
4. AS SHOWN, CONSTRUCT HWY. 67 AND SIDE STREETS. PERFORM LEVELING, AND NOTCH AND WIDEN OPERATIONS. REMOVE EX. BRIDGE STRUCTURE ON WALNUT ST. AND CONSTRUCT BOX CULVERT AS SHOWN.
5. PLACE CONSTRUCTION PAVEMENT MARKINGS SHOWN FOR STAGE 2 TRAFFIC CONFIGURATION PRIOR TO SWITCHING TRAFFIC.

CONSTRUCTION PAVEMENT MARKINGS

DOUBLE YELLOW CENTERLINE = 2866 LIN. FT.

TRAFFIC DRUMS = 159 EACH

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022



STAGE I CONSTRUCTION

STAGE I OVERLAY OR METHOD OF RAISING GRADE UNDER TRAFFIC

STAGE I TRAFFIC

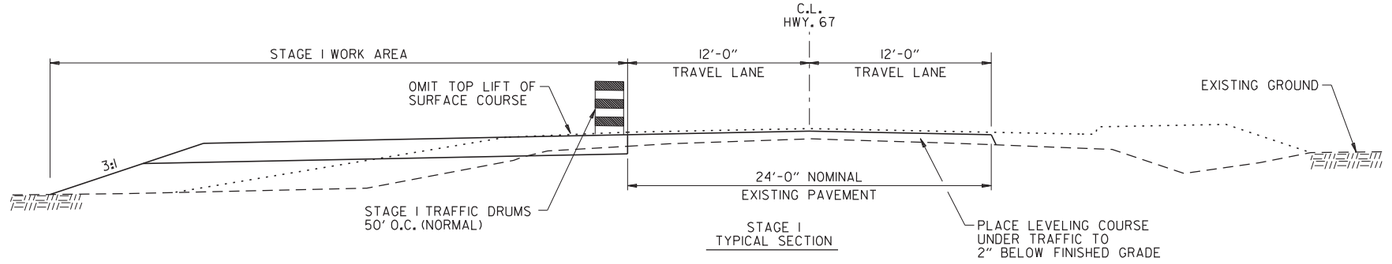
TRAFFIC DRUMS

BUMP (4) W8-1 (30" X 30")

DO NOT PASS (4) R4-1 (24" X 30")

RIGHT SHOULDER CLOSED (4) W21-5a (36" X 36")

TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER



STAGE I
TYPICAL SECTION

BYPASS & HWY. 67
MAINTENANCE OF TRAFFIC DETAILS
STAGE I

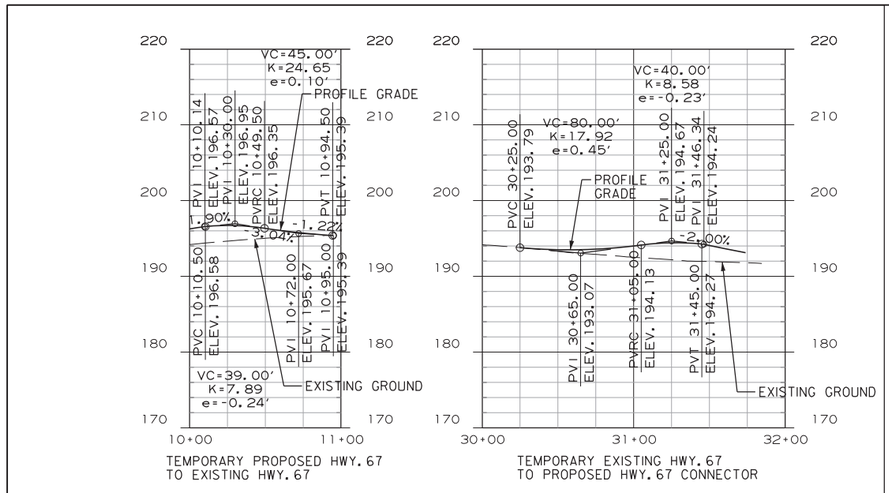
rnfortner 6/28/2022 10:31:39 AM
WORKSPACE: AHTD
L:\2017\170755 - AHTD Arkadelphia Bypass\Drawings\r070442_MOT_ST01_09_HWY 67_01.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	118	549

MAINTENANCE OF TRAFFIC DETAILS

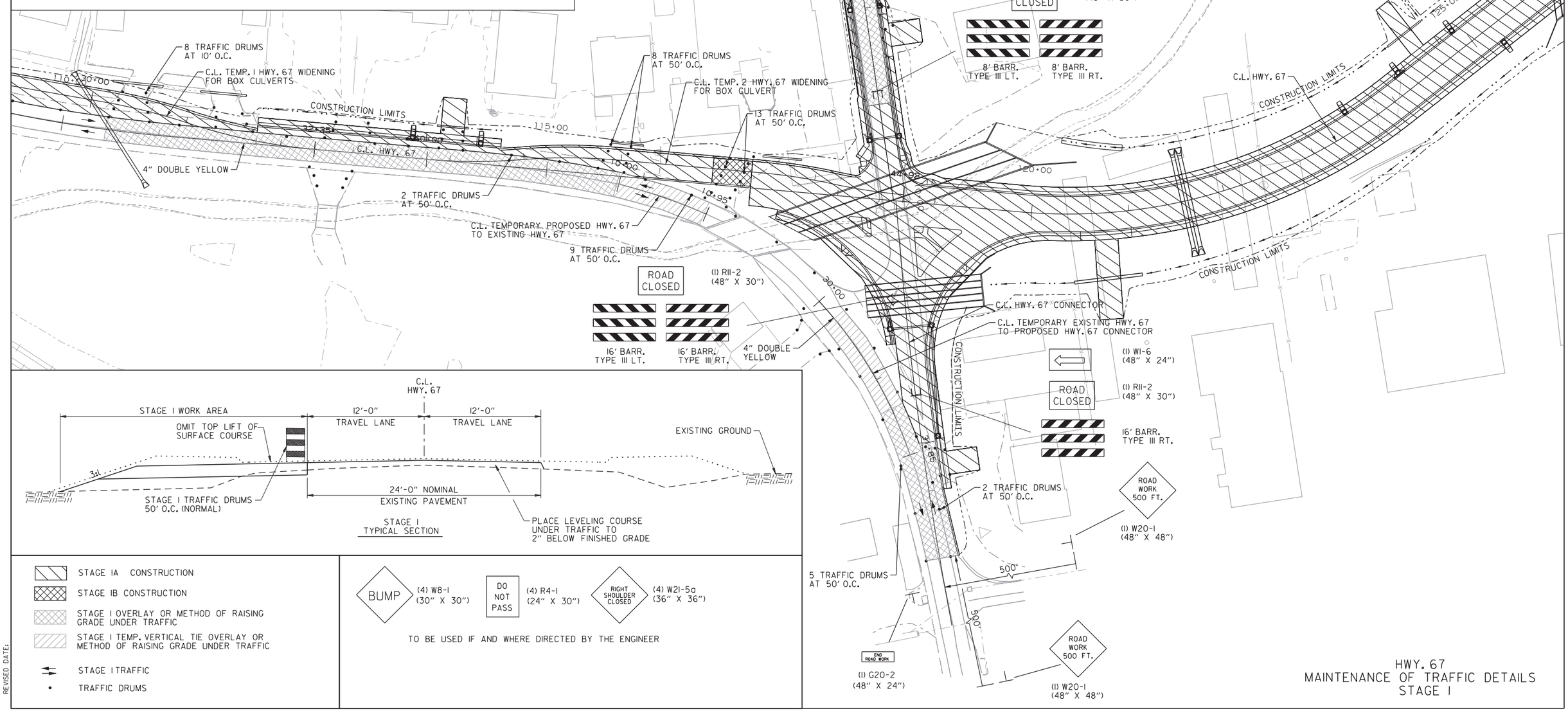
STATE OF ARKANSAS
Shaun A. Roberson
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022



TEMPORARY PROPOSED HWY. 67 TO EXISTING HWY. 67

TEMPORARY EXISTING HWY. 67 TO PROPOSED HWY. 67 CONNECTOR



STAGE I TYPICAL SECTION

STAGE IA CONSTRUCTION

STAGE IB CONSTRUCTION

STAGE I OVERLAY OR METHOD OF RAISING GRADE UNDER TRAFFIC

STAGE I TEMP. VERTICAL TIE OVERLAY OR METHOD OF RAISING GRADE UNDER TRAFFIC

STAGE I TRAFFIC

TRAFFIC DRUMS

BUMP (4) W8-1 (30" X 30")

DO NOT PASS (4) R4-1 (24" X 30")

RIGHT SHOULDER CLOSED (4) W21-5a (36" X 36")

TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

HWY. 67
MAINTENANCE OF TRAFFIC DETAILS
STAGE I

rnfortner 6/28/2022 10:31:40 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	119	549
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

N

1" = 100'

10TH ST.

(I) WI-6 (48" X 24")

ROAD CLOSED TO THRU TRAFFIC

(I) RII-4 (60" X 30")

8' BARR. TYPE III RT.

ROAD CLOSED

(I) RII-2 (48" X 30")

8' BARR. TYPE III LT.

8' BARR. TYPE III RT.

CONSTRUCTION LIMITS

125+00

130+00

135+00

140+00

C.L. HWY. 67

C.L. CLAY ST.

9TH ST.

18+00

20+00

23+00

STAGE I CONSTRUCTION

STAGE I OVERLAY OR METHOD OF RAISING GRADE

STAGE I TRAFFIC

TRAFFIC DRUMS

BUMP (4) W8-1 (30" X 30")

DO NOT PASS (4) R4-1 (24" X 30")

RIGHT SHOULDER CLOSED (4) W21-5a (36" X 36")

TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

HWY. 67
MAINTENANCE OF TRAFFIC DETAILS
STAGE I

rnfortner 6/28/2022 10:31:41 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	120	549
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
Shaun A. Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

N

1" = 100'

(1) W1-6 (48" X 24")

ROAD CLOSED TO THRU TRAFFIC — (1) R11-4 (60" X 30")

8' BARR. TYPE III RT.

27+00

10TH ST.

ROAD CLOSED — (1) R11-2 (48" X 30")

38+00

C.L. MAIN ST.

8' BARR. TYPE III LT.

8' BARR. TYPE III RT.

C.L. CLINTON ST.

C.L. CADDO ST.

45+00

ROAD WORK AHEAD

(1) W20-1 (48" X 48")

CONSTRUCTION LIMITS

140+00

145+00

150+00

HWY. 51 PINE ST.

30+00

C.L. HWY. 67

40+00

50+00

C.L. HWY. 67

155+00

CONSTRUCTION LIMITS

CONSTRUCTION LIMITS

END ROAD WORK

(1) G20-2 (48" X 24")

ROAD CLOSED — (1) R11-2 (48" X 30")

8' BARR. TYPE III LT.

8' BARR. TYPE III RT.

42+00

HICKORY ST.

62+00

9TH ST.

33+00

N 9TH ST

55+00

(1) W1-6 (48" X 24")

ROAD CLOSED TO THRU TRAFFIC — (1) R11-4 (60" X 30")

8' BARR. TYPE III LT.

STAGE I CONSTRUCTION

STAGE I OVERLAY OR METHOD OF RAISING GRADE

STAGE I TRAFFIC

TRAFFIC DRUMS

BUMP — (4) W8-1 (30" X 30")

DO NOT PASS — (4) R4-1 (24" X 30")

RIGHT SHOULDER CLOSED — (4) W21-5a (36" X 36")

TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

HWY. 67
MAINTENANCE OF TRAFFIC DETAILS
STAGE I

rnfortner 6/28/2022 10:34:42 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	121	549

MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

N
1" = 100'

(1) R11-2
(48" X 30")
ROAD CLOSED
8' BARR. TYPE III LT.
8' BARR. TYPE III RT.

(1) W20-3
(48" X 48")
ROAD CLOSED 500 FT.
500'

CONSTRUCTION LIMITS
15+00
C.L. 26TH ST. SOUTH
20+00
C.L. 26TH ST. NORTH
C.L. BYPASS
25+00

STAGE I CONSTRUCTION
OBLITERATE EXISTING ROADWAY
STAGE I TRAFFIC
TRAFFIC DRUMS

BUMP (4) W8-1 (30" X 30")
DO NOT PASS (4) R4-1 (24" X 30")
RIGHT SHOULDER CLOSED (4) W21-5a (36" X 36")
TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

N
1" = 100'

C.L. BYPASS
CONSTRUCTION LIMITS
C.L. HWY. 26TH N.
20+00
25+00
27+50
C.L. HWY. 26TH S.
26TH STREET
CONSTRUCTION LIMITS
CONSTRUCTION LIMITS
CONSTRUCTION LIMITS
25+00

(1) W20-3
(48" X 48")
ROAD CLOSED 500 FT.
500'

(1) R11-2
(48" X 30")
ROAD CLOSED
8' BARR. TYPE III LT.
8' BARR. TYPE III RT.

26TH ST. NORTH & SOUTH
MAINTENANCE OF TRAFFIC DETAILS
STAGE I

rntortner 6/28/2022 10:3:42 AM
WORKSPACE: AHTD
L:\2017\170755 - AHTD Arkadelphia Bypass\Drawings\r070442_MOT_STG1_3_26TH ST.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	122	549
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

N

1" = 100'

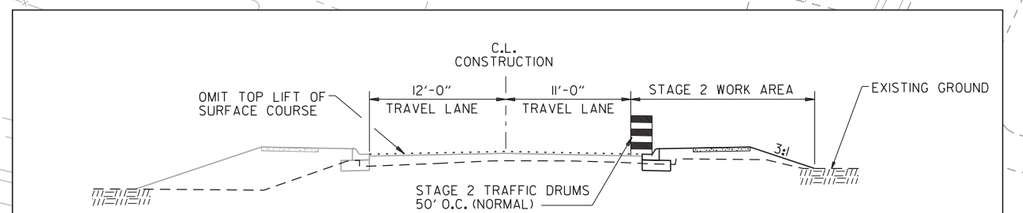
STAGE 2
CONSTRUCTION SEQUENCE NOTES

1. INSTALL ADVANCE WARNING SIGNS AS SHOWN.
2. SHIFT TRAFFIC TO PROPOSED ALIGNMENT.
3. AS SHOWN, CONSTRUCT BYPASS AND SIDE ROADS AND PERFORM LEVELING AND NOTCH AND WIDEN OPERATIONS.
4. PLACE FINAL 2" ACHM SURFACE COURSE.
5. PLACE PERMANENT PAVEMENT MARKINGS.

CONSTRUCTION PAVEMENT MARKINGS

DOUBLE YELLOW CENTERLINE = 13030 LIN. FT.
SOLID WHITE = 4079 LIN. FT.
12" SOLID WHITE LINE = 48 LIN. FT.
REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS = 794 LIN. FT.
TRAFFIC DRUMS = 191 EACH

ROAD WORK 500 FT.
(1) W20-1 (48" X 48")
END ROAD WORK
(1) G20-2 (48" X 24")
ROAD WORK AHEAD
(1) W20-1 (48" X 48")
C.L. EXECUTIVE CIRCLE
4" DOUBLE YELLOW
3 TRAFFIC DRUMS AT 50' O.C.
C.L. OFFICE PARK DR.
C.L. PROFESSIONAL PARK DR.
4" SOLID WHITE
CONSTRUCTION LIMITS
4" DOUBLE YELLOW
3 TRAFFIC DRUMS AT 40' O.C.
4" SOLID WHITE
C.L. PROFESSIONAL PARK DR. CUL-DE-SAC
BYPASS STA. 100+27.88
BEGIN JOB 070442
(BYPASS)
12" SOLID WHITE LINE
4" SOLID YELLOW
C.L. BYPASS
(2) R11-2 (48" X 30")
ROAD CLOSED
8' BARR. TYPE III LT.
8' BARR. TYPE III RT.
5 TRAFFIC DRUMS AT 10' O.C.
4 TRAFFIC DRUMS AT 40' O.C.
C.L. HWY. 51 PINE ST.
5 TRAFFIC DRUMS AT 40' O.C.
C.L. RED HILL RD. N.
ROAD WORK AHEAD
(1) W20-1 (48" X 48")
3 TRAFFIC DRUMS AT 40' O.C.
CONSTRUCTION LIMITS
CONSTRUCTION LIMITS
(1) G20-2 (48" X 24")



STAGE 2
TYPICAL SECTION

STAGE 2 CONSTRUCTION
OBLITERATE EXISTING ROADWAY
STAGE 2 TRAFFIC
TRAFFIC DRUMS

BUMP (4) W8-1 (30" X 30")
DO NOT PASS (4) R4-1 (24" X 30")
RIGHT SHOULDER CLOSED (4) W21-5a (36" X 36")

TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

PROFESSIONAL PARK DR. & CUL-DE-SAC
MAINTENANCE OF TRAFFIC DETAILS
STAGE 2

rnfortner 6/28/2022 10:31:43 AM
WORKSPACE: AHTD
L:\2017\170715 - AHTD Arkadelphia Bypass\Drawings\r070442_MOT_ST02_01.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	123	549
		MAINTENANCE OF TRAFFIC DETAILS				

STAGE 2 CONSTRUCTION
OBLITERATE EXISTING ROADWAY
STAGE 2 TRAFFIC
TRAFFIC DRUMS

1" = 100'

BUMP (4) W8-1 (30" X 30")
DO NOT PASS (4) R4-1 (24" X 30")
RIGHT SHOULDER CLOSED (4) W21-5a (36" X 36")
TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

4" SOLID YELLOW
105+00
END ROAD WORK
(1) G20-2 (48" X 24")
12" SOLID WHITE LINE
ROAD WORK 500 FT.
(1) W20-1 (48" X 48")
500'
100.00
4" SOLID YELLOW
C.L. PROFESSIONAL PARK DR.
12" SOLID WHITE LINE
C.L. HWY. 51 - PINE ST.
C.L. BYPASS
110+00
ROAD CLOSED
(1) R11-2 (48" X 30")
16' BARR. TYPE III RT.
(2) R11-2 (48" X 30")
ROAD CLOSED
8' BARR. TYPE III LT.
8' BARR. TYPE III RT.
5 TRAFFIC DRUMS AT 40' O.C.
30+00
3 TRAFFIC DRUMS AT 40' O.C.
CONSTRUCTION LIMITS
4" SOLID WHITE
4" DOUBLE YELLOW
115+00
5 TRAFFIC DRUMS AT 20' O.C.
4 TRAFFIC DRUMS AT 20' O.C.
(1) R11-2 (48" X 30")
ROAD CLOSED
16' BARR. TYPE III LT.
16' BARR. TYPE III RT.
5 TRAFFIC DRUMS AT 10' O.C.
4 TRAFFIC DRUMS AT 40' O.C.
15+00
ROAD WORK AHEAD
(1) W20-1 (48" X 48")
C.L. RED HILL RD. N.
4" DOUBLE YELLOW
5 TRAFFIC DRUMS AT 50' O.C.
DETOUR
RED HILL RD.
(1) M4-10R (48" X 18")
(1) D3-1 (24" X 12")
25+00
00+00
12+00
END ROAD WORK
(1) G20-2 (48" X 24")
CONSTRUCTION LIMITS
(1) W1-6 (48" X 24")
ROAD CLOSED
(1) R11-2 (48" X 30")
8' BARR. TYPE III RT.

BYPASS, PROF. PARK CUL-DE-SAC & RED HILL DR. N.
MAINTENANCE OF TRAFFIC DETAILS
STAGE 2

rnfortner
6/28/2022 10:31:44 AM
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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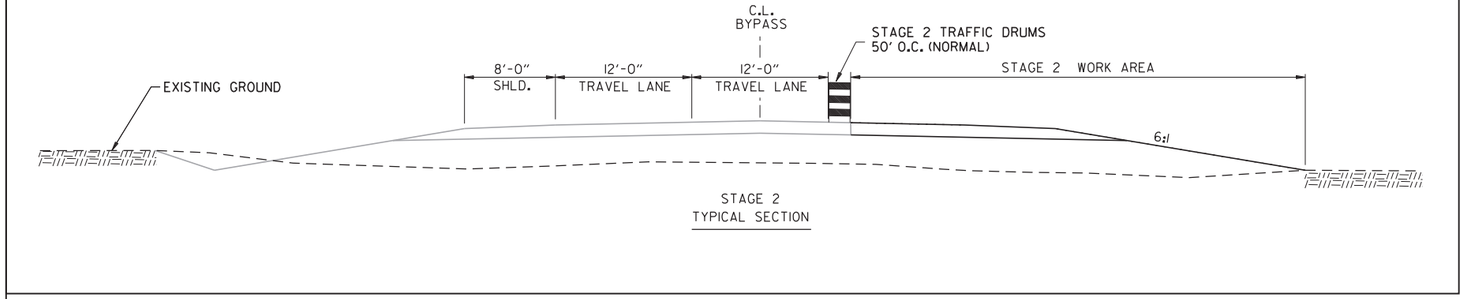
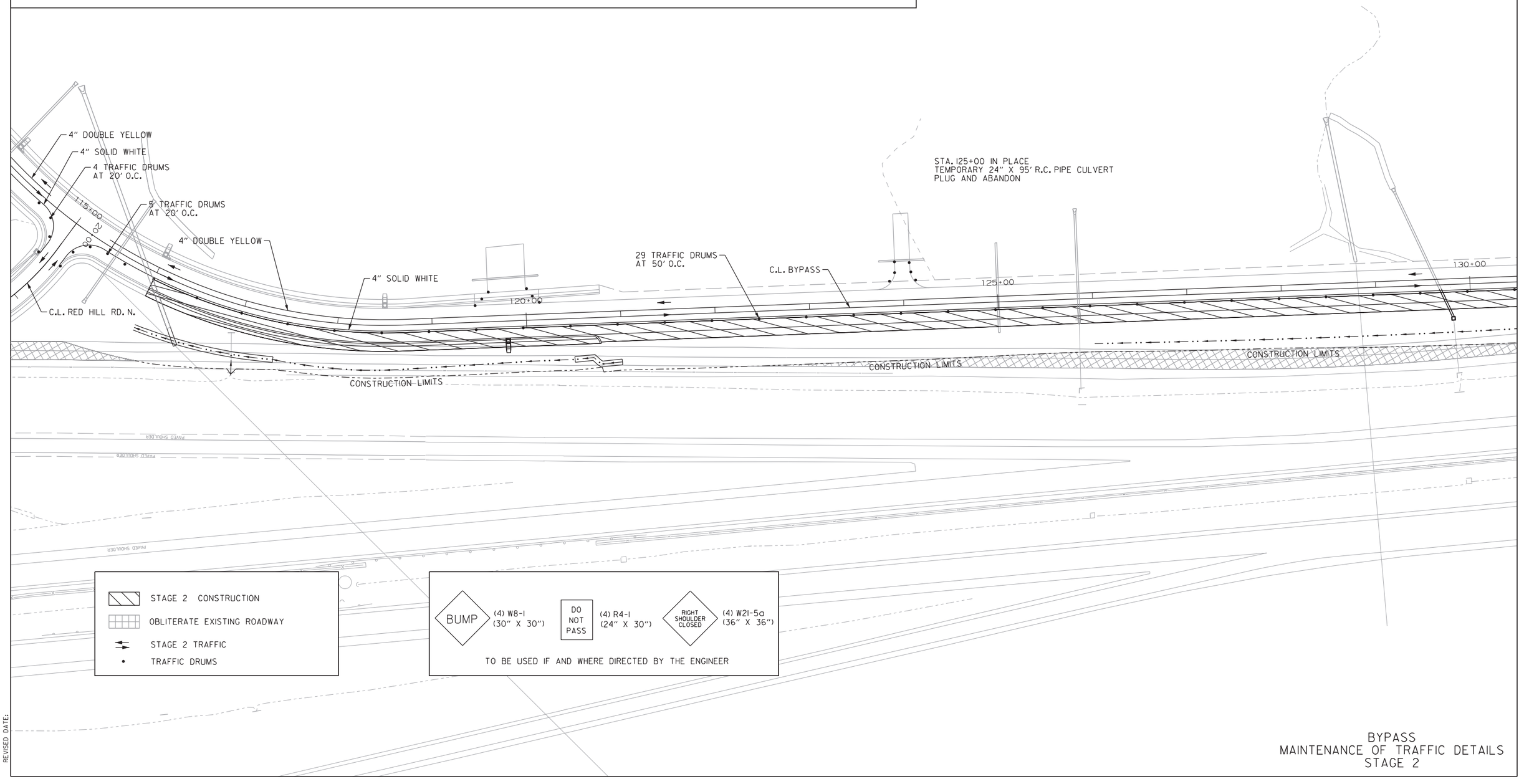


STAGE 2
TYPICAL SECTION

N
1" = 100'

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022



BYPASS
MAINTENANCE OF TRAFFIC DETAILS
STAGE 2

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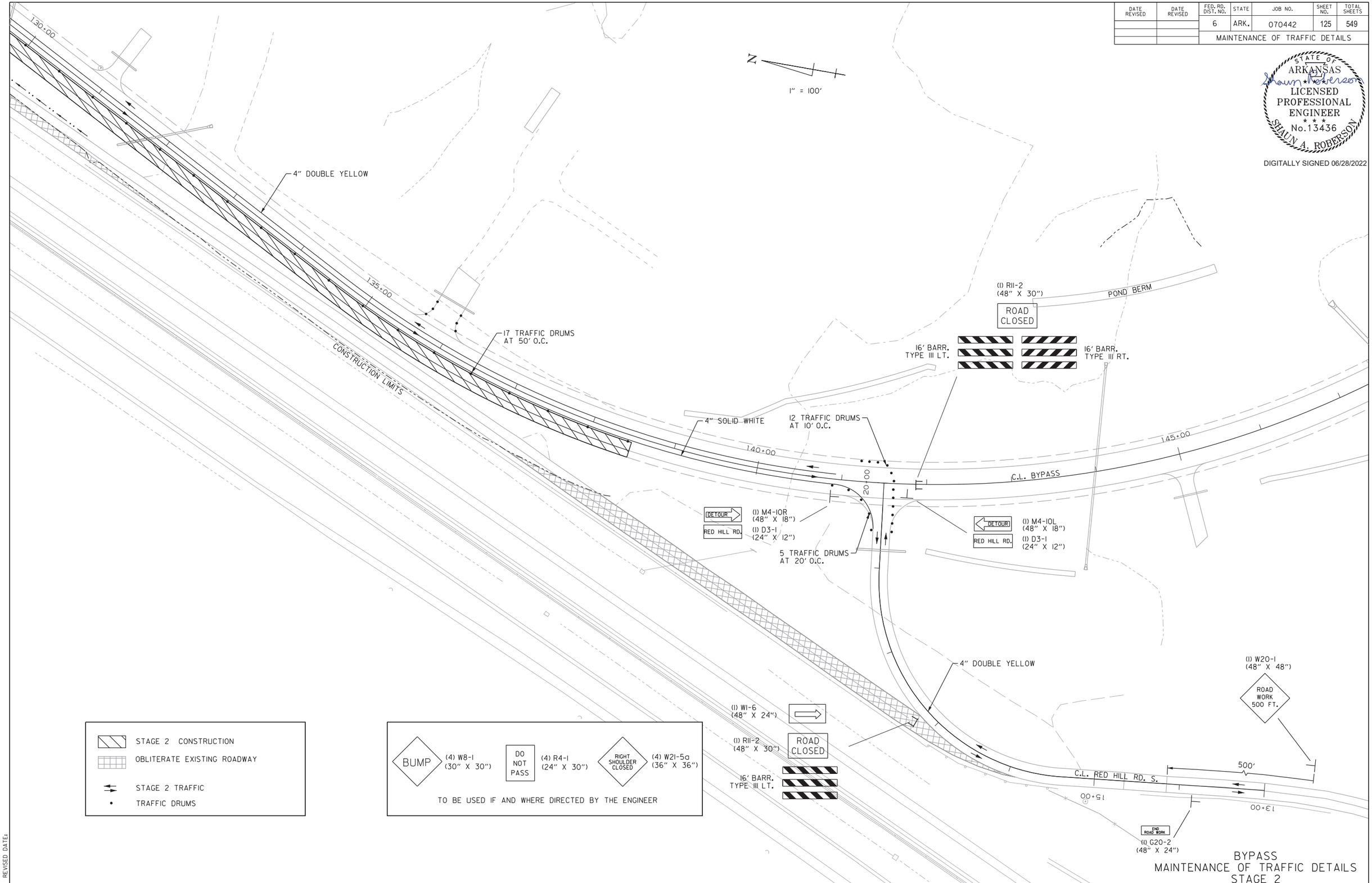
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	125	549
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022



BYPASS
MAINTENANCE OF TRAFFIC DETAILS
STAGE 2

rnfortner 6/28/2022 10:31:45 AM
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	126	549
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
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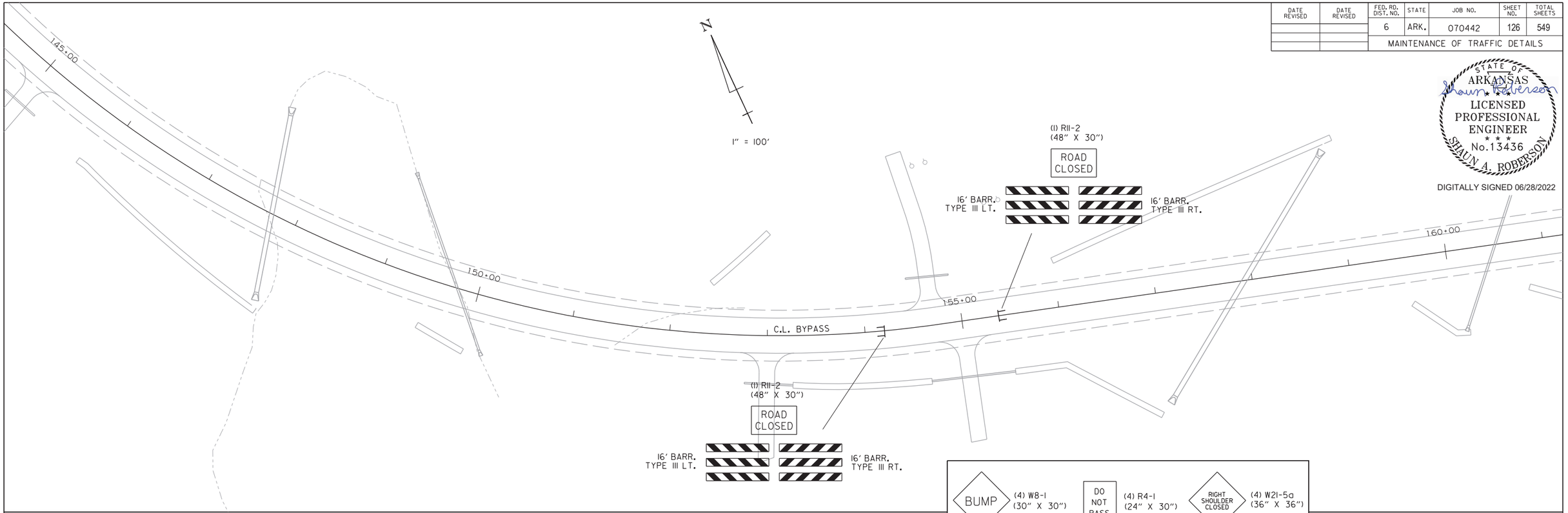
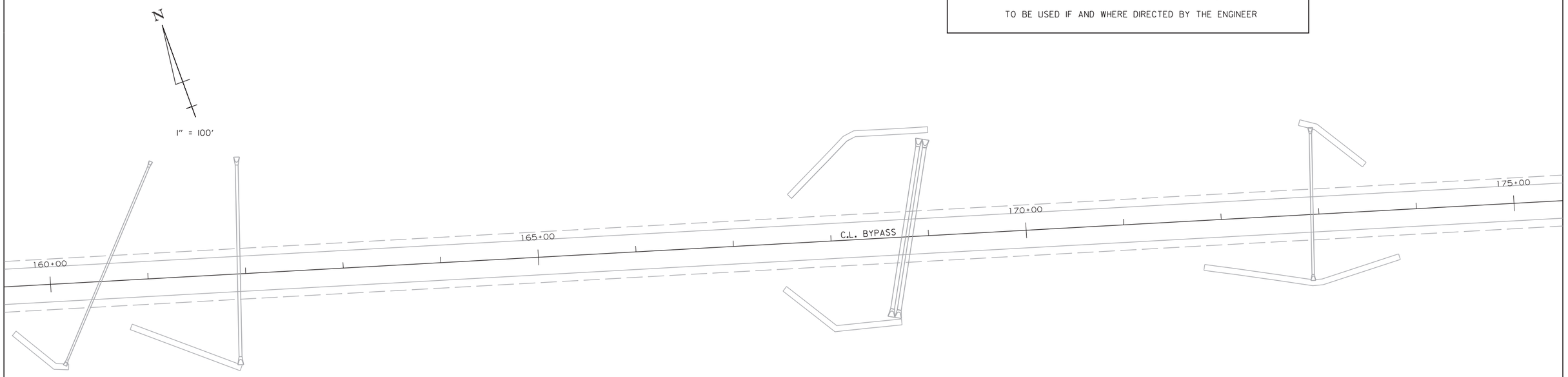


BUMP	(4) W8-1 (30" X 30")	DO NOT PASS	(4) R4-1 (24" X 30")	RIGHT SHOULDER CLOSED	(4) W21-5a (36" X 36")

TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER



BYPASS
MAINTENANCE OF TRAFFIC DETAILS
STAGE 2

rnfortner 6/28/2022 10:31:45 AM
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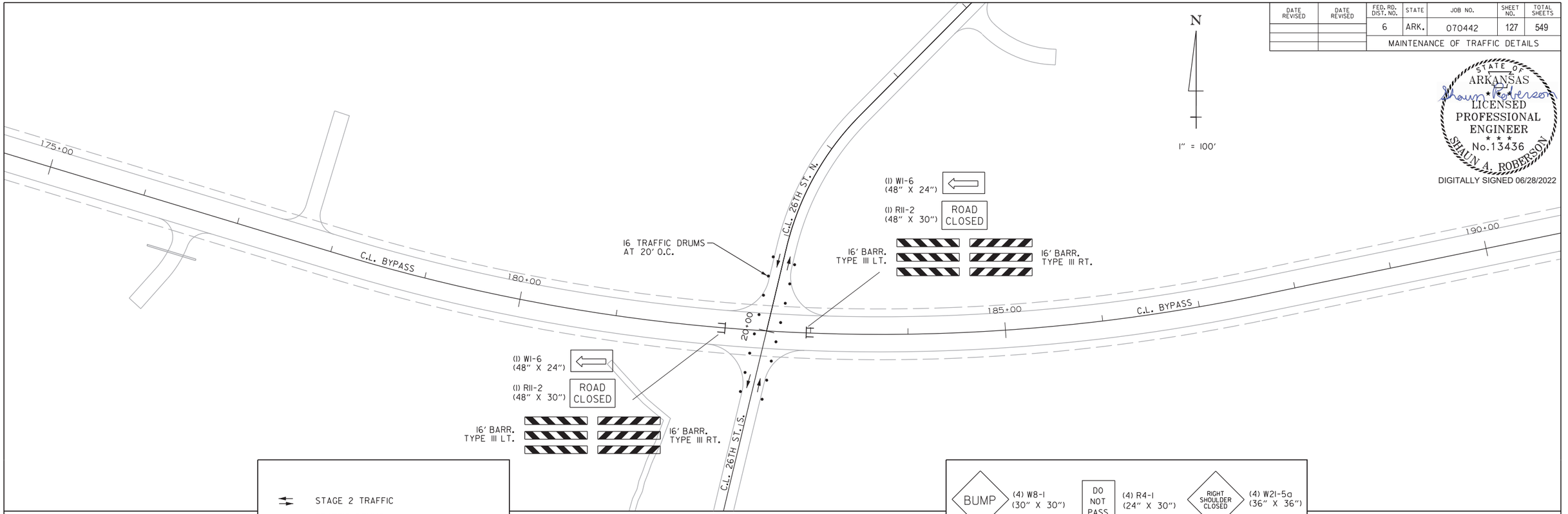
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	127	549
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

N

1" = 100'



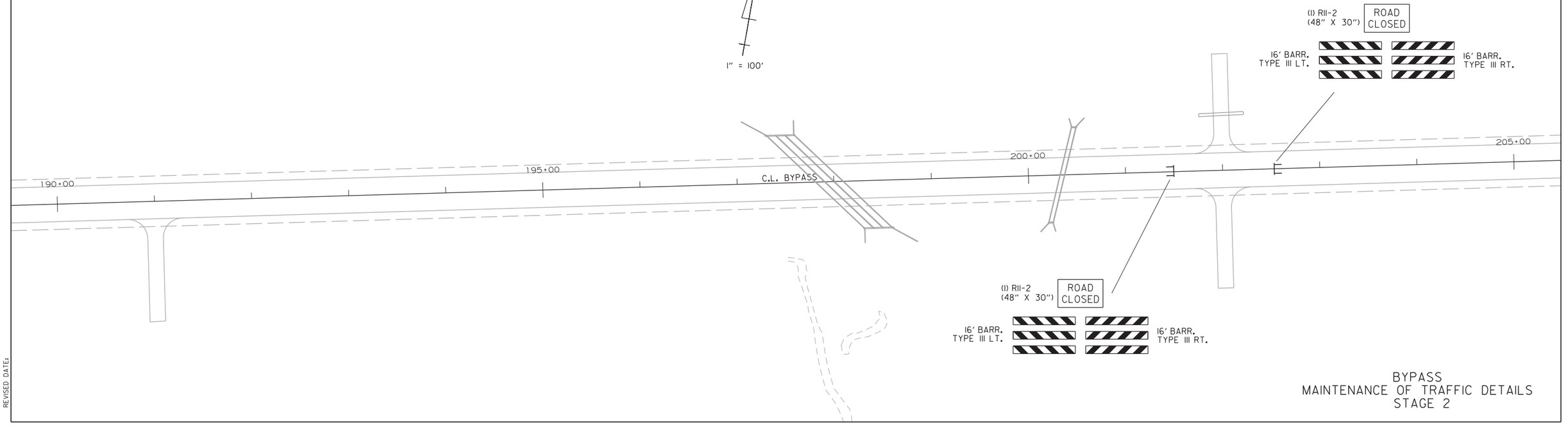
- STAGE 2 TRAFFIC
- TRAFFIC DRUMS

BUMP (4) W8-1 (30" X 30")
DO NOT PASS (4) R4-1 (24" X 30")
RIGHT SHOULDER CLOSED (4) W21-5a (36" X 36")

TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

N

1" = 100'



BYPASS
MAINTENANCE OF TRAFFIC DETAILS
STAGE 2

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WORKSPACE: AHTD
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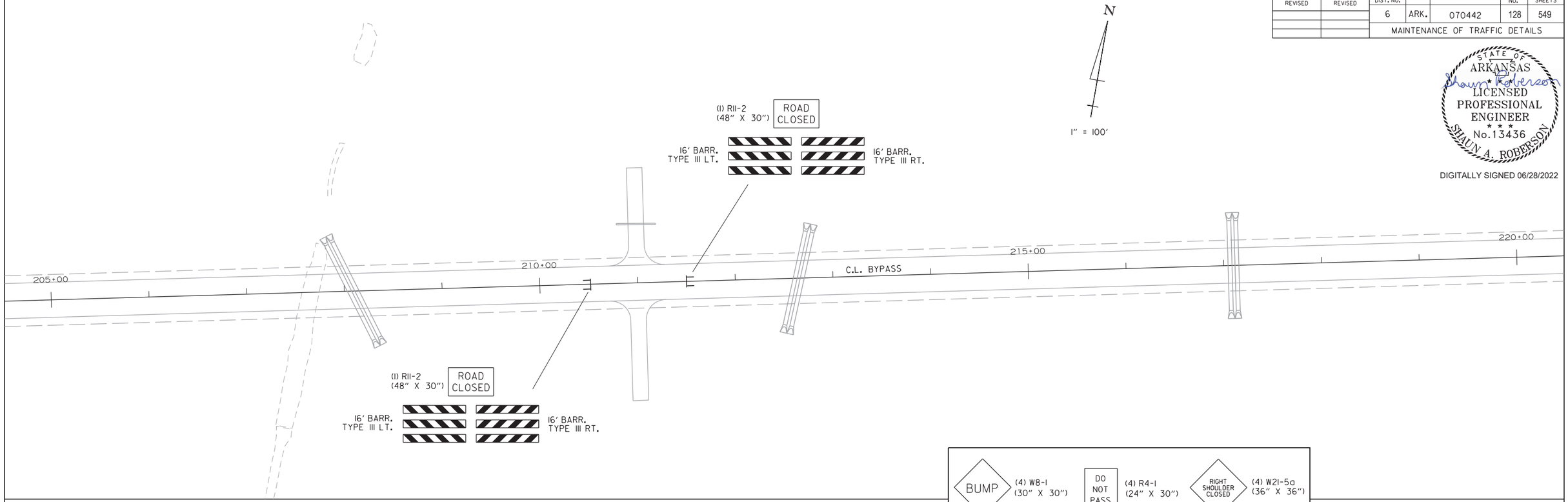
REVISED DATE:

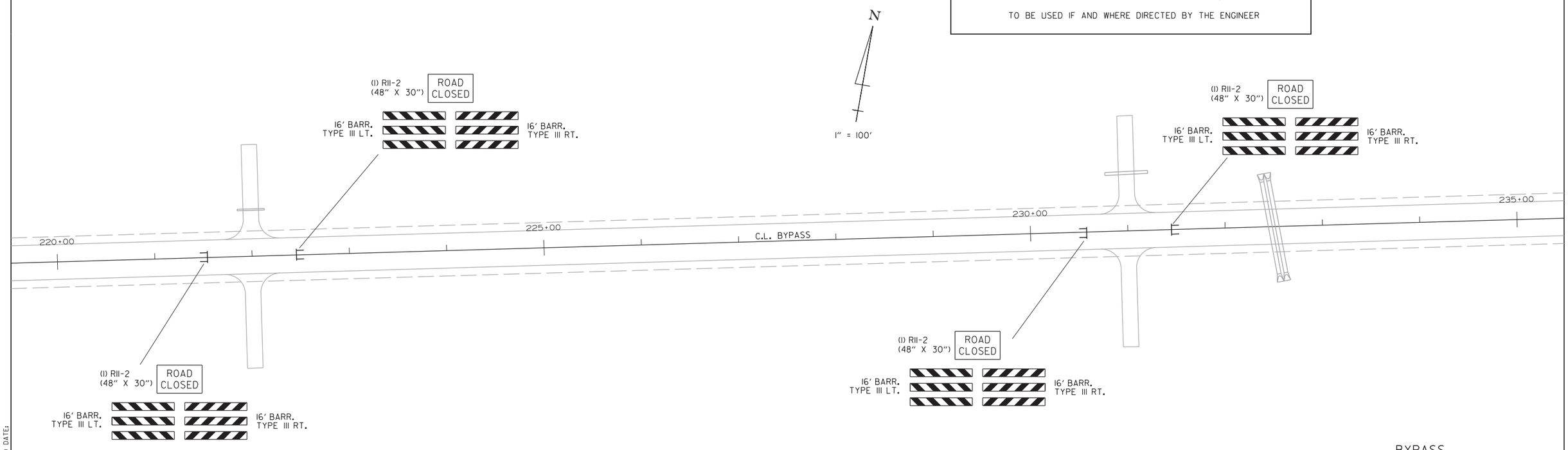
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	128	549
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022



BUMP	(4) W8-1 (30" X 30")	DO NOT PASS	(4) R4-1 (24" X 30")	RIGHT SHOULDER CLOSED	(4) W21-5a (36" X 36")

TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER



BYPASS
MAINTENANCE OF TRAFFIC DETAILS
STAGE 2

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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	129	549
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

N

1" = 100'

(1) R11-2 (48" X 30") ROAD CLOSED

16' BARR. TYPE III LT.

16' BARR. TYPE III RT.

(1) R11-2 (48" X 30") ROAD CLOSED

16' BARR. TYPE III LT.

16' BARR. TYPE III RT.

235+00

240+00

C.L. BYPASS

245+00

250+00

BUMP	(4) W8-1 (30" X 30")	DO NOT PASS	(4) R4-1 (24" X 30")	RIGHT SHOULDER CLOSED	(4) W21-5a (36" X 36")

TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

N

1" = 100'

250+00

255+00

C.L. BYPASS

260+00

20+00

265+00

FUTURE C.L. BYPASS TO HWY. 67 CONNECTOR

BYPASS
MAINTENANCE OF TRAFFIC DETAILS
STAGE 2

rnfortner 6/28/2022 10:31:46 AM
WORKSPACE: AHTD
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REVISED DATE:

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		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

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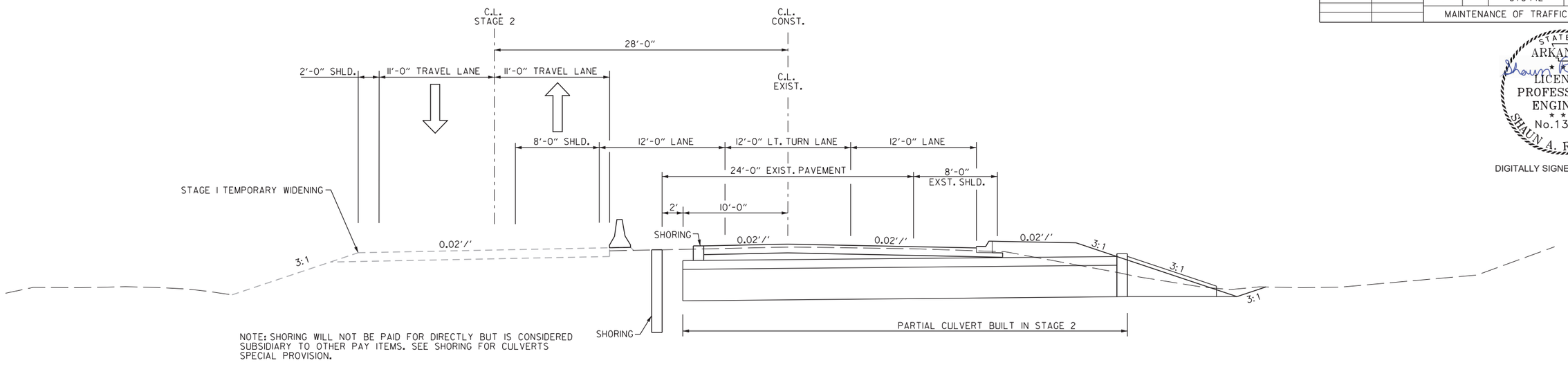
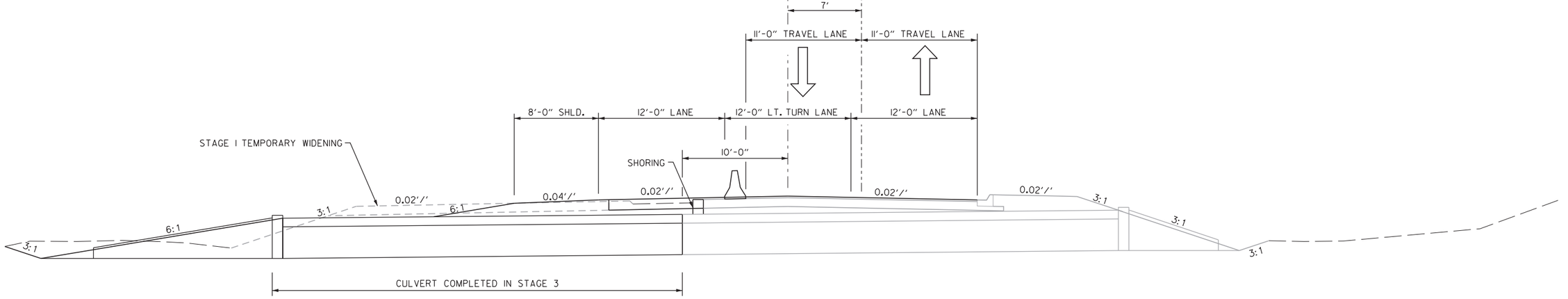


NOTE: SHORING WILL NOT BE PAID FOR DIRECTLY BUT IS CONSIDERED SUBSIDIARY TO OTHER PAY ITEMS. SEE SHORING FOR CULVERTS SPECIAL PROVISION.

STAGE 2 CULVERT CONSTRUCTION
HWY. 67 STA. 103+28.00



STAGE 3 CULVERT CONSTRUCTION
HWY. 67 STA. 103+28.00

rnfortner 6/28/2022 10:31:47 AM
WORKSPACE: AHTD
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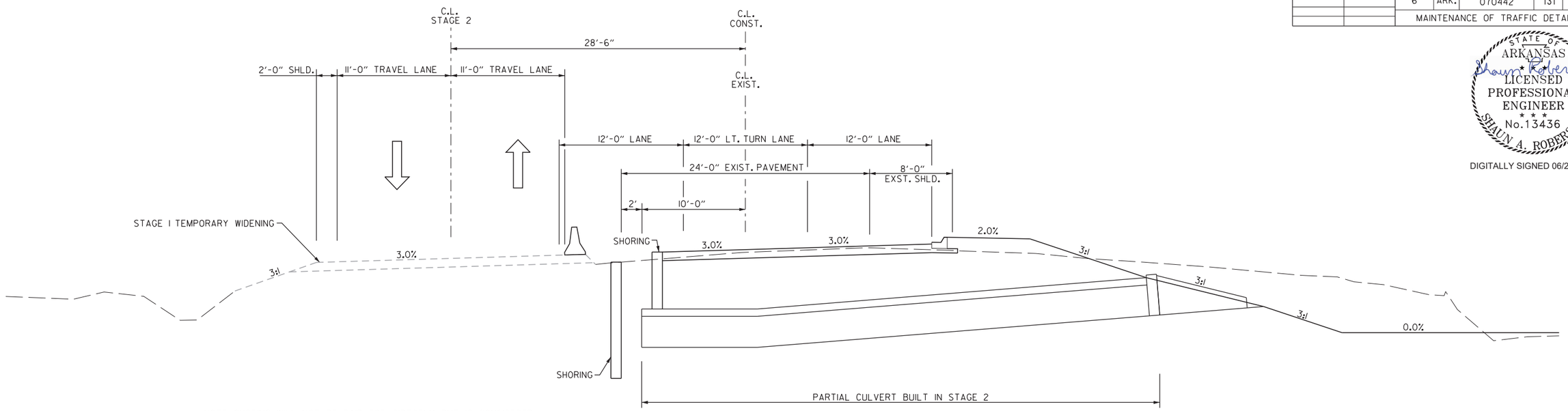
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	131	549
		MAINTENANCE OF TRAFFIC DETAILS				

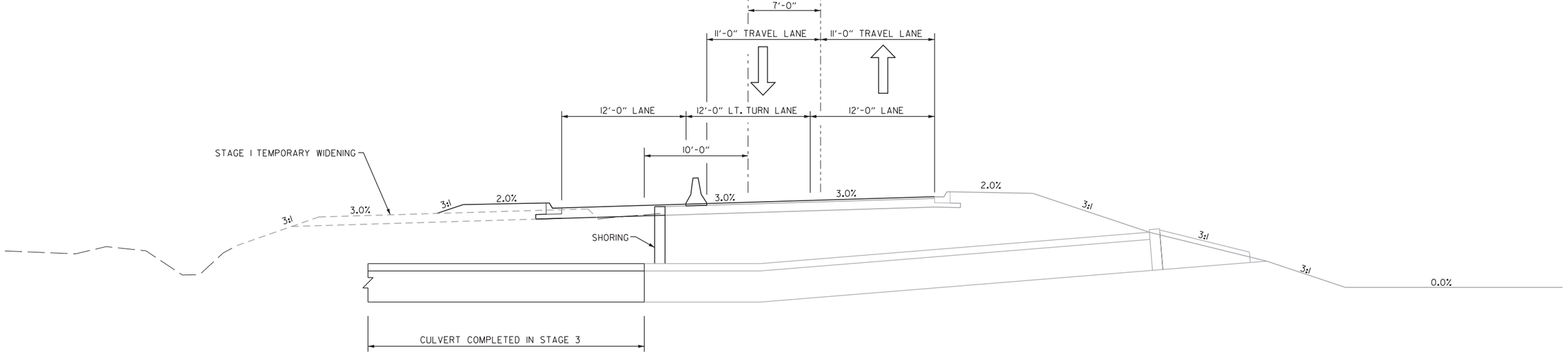
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022



NOTE: SHORING WILL NOT BE PAID FOR DIRECTLY BUT IS CONSIDERED SUBSIDIARY TO OTHER PAY ITEMS. SEE SHORING FOR CULVERTS SPECIAL PROVISION.

STAGE 2 CULVERT CONSTRUCTION
HWY. 67 STA. 110+00.00



STAGE 3 CULVERT CONSTRUCTION
HWY. 67 STA. 110+00.00

HWY. 67 CULVERT CONSTRUCTION
MAINTENANCE OF TRAFFIC DETAILS

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WORKSPACE: AHTD
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REVISED DATE:

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		6	ARK.	070442	132	549
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
Shaun A. Robertson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERTSON

DIGITALLY SIGNED 06/28/2022

(7)
DETOUR — (1) M4-8 (24" X 12")
CLINTON ST. — (1) D3-1 (24" X 12")
(1) M5-1R (30" X 21")

(8)
DETOUR — (1) M4-10R (48" X 18")
CLINTON ST. — (1) D3-1 (24" X 12")

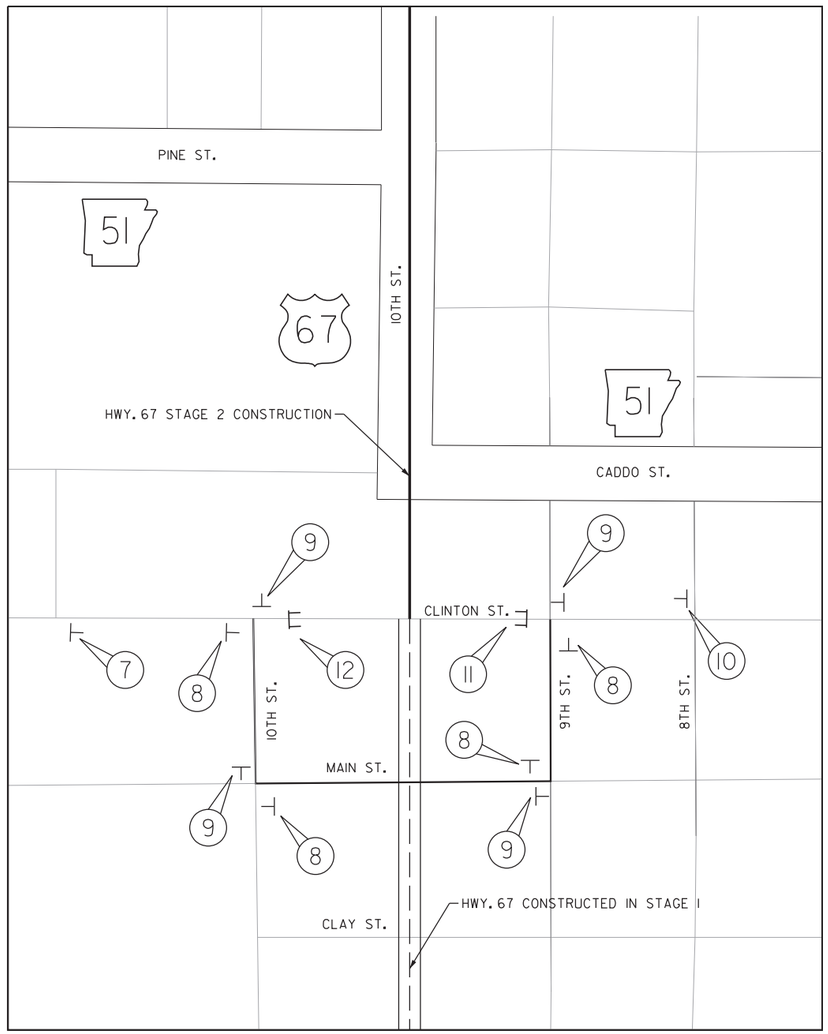
(9)
DETOUR — (1) M4-10L (48" X 18")
CLINTON ST. — (1) D3-1 (24" X 12")

(10)
DETOUR — (1) M4-8 (24" X 12")
CLINTON ST. — (1) D3-1 (24" X 12")
(1) M5-1L (30" X 21")

(11)
(1) W1-6 (48" X 24")
ROAD CLOSED TO THRU TRAFFIC — (1) R11-4 (60" X 30")
8' BARR. TYPE III RT.

(12)
(1) W1-6 (48" X 24")
ROAD CLOSED TO THRU TRAFFIC — (1) R11-4 (60" X 30")
8' BARR. TYPE III LT.

CLINTON ST. DETOUR STAGE 2



N

1" = 250'

CLINTON ST. DETOUR
MAINTENANCE OF TRAFFIC DETAILS
STAGE 2

rnfortner 6/28/2022 10:31:47 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	133	549
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
Shaun A. Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

(7)
- DETOUR — (I) M4-8 (24" X 12")
- HICKORY ST. — (I) D3-1 (24" X 12")
- (I) M5-1R (30" X 21")

(8)
- DETOUR — (I) M4-10R (48" X 18")
- HICKORY ST. — (I) D3-1 (24" X 12")

(9)
- DETOUR — (I) M4-10L (48" X 18")
- HICKORY ST. — (I) D3-1 (24" X 12")

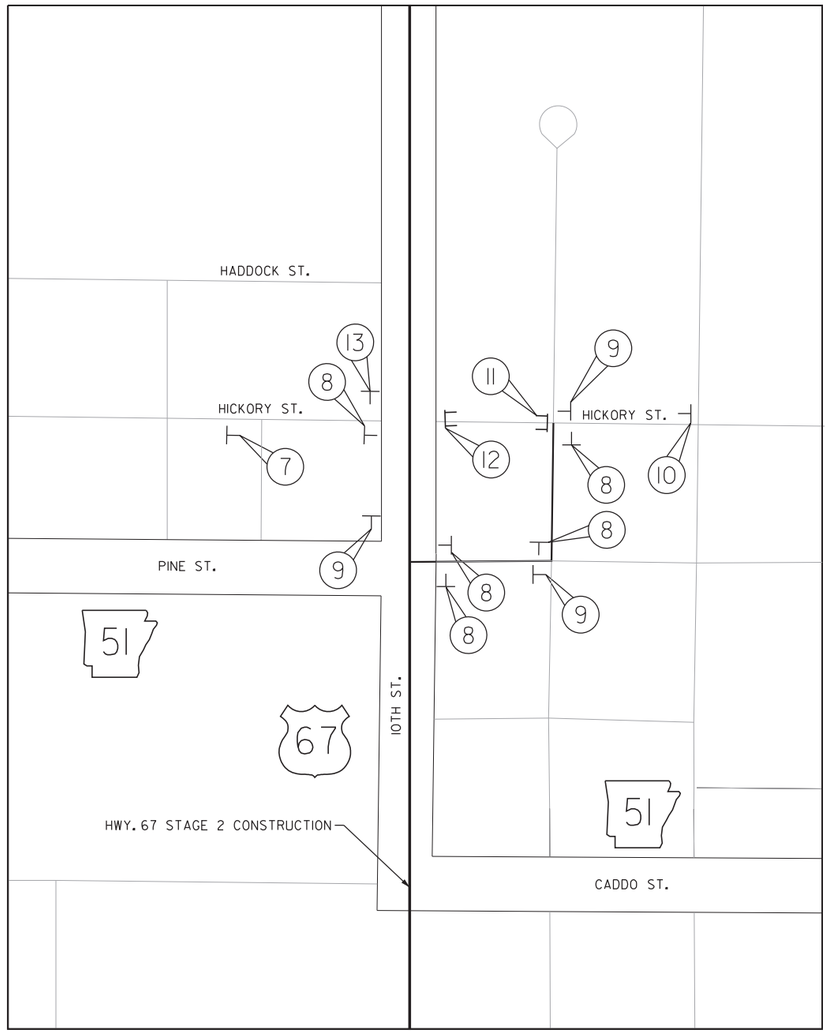
(10)
- DETOUR — (I) M4-8 (24" X 12")
- HICKORY ST. — (I) D3-1 (24" X 12")
- (I) M5-1L (30" X 21")

(11)
- (I) W1-6 (48" X 24")
- ROAD CLOSED TO THRU TRAFFIC — (I) R11-4 (60" X 30")
- 8' BARR. TYPE III RT.

(12)
- (I) W1-6 (48" X 24")
- ROAD CLOSED TO THRU TRAFFIC — (I) R11-4 (60" X 30")
- 8' BARR. TYPE III LT.

(13)
- DETOUR — (I) M4-8 (24" X 12")
- HICKORY ST. — (I) D3-1 (24" X 12")
- (I) M6-3 (30" X 21")

HICKORY ST. DETOUR STAGE 2



N

1" = 250'

HICKORY ST. DETOUR
MAINTENANCE OF TRAFFIC DETAILS
STAGE 2

rnfortner 6/28/2022 10:31:48 AM
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	134	549
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

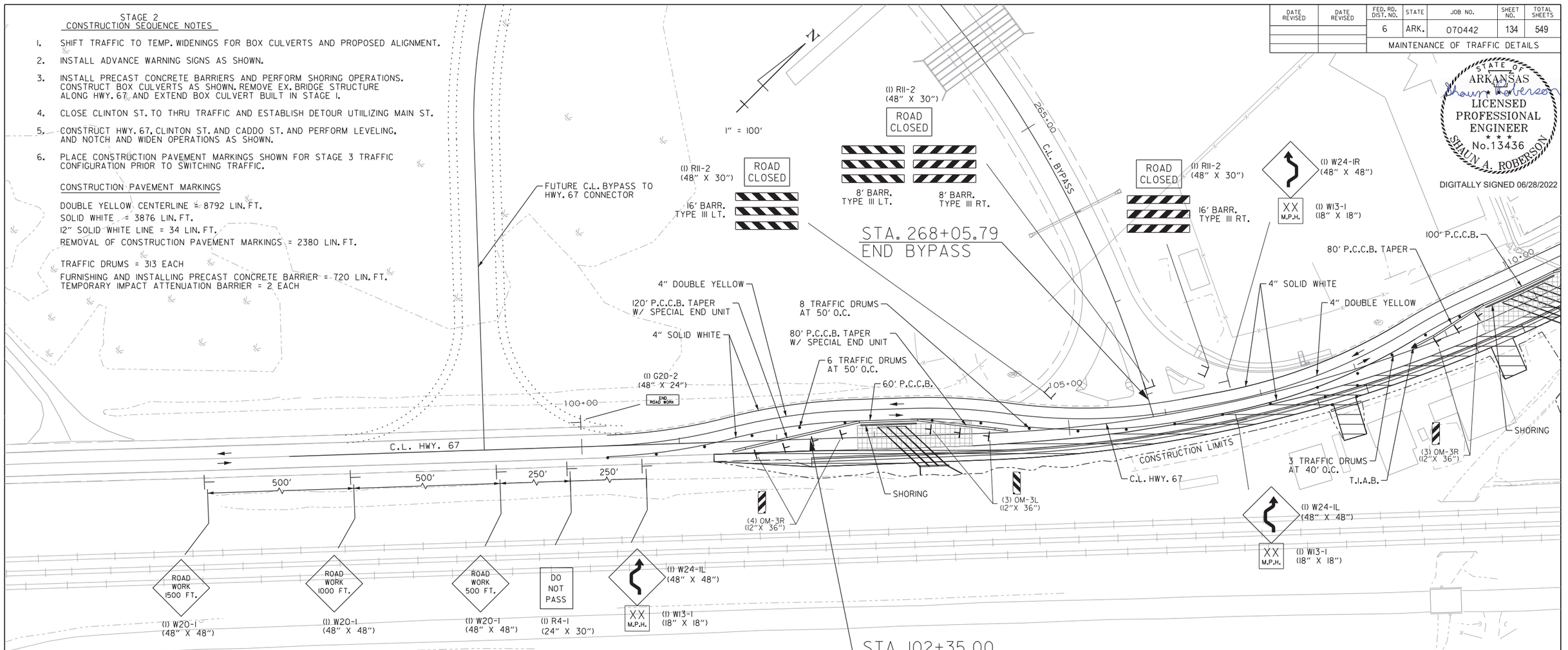
STAGE 2
CONSTRUCTION SEQUENCE NOTES

1. SHIFT TRAFFIC TO TEMP. WIDENINGS FOR BOX CULVERTS AND PROPOSED ALIGNMENT.
2. INSTALL ADVANCE WARNING SIGNS AS SHOWN.
3. INSTALL PRECAST CONCRETE BARRIERS AND PERFORM SHORING OPERATIONS. CONSTRUCT BOX CULVERTS AS SHOWN. REMOVE EX. BRIDGE STRUCTURE ALONG HWY. 67 AND EXTEND BOX CULVERT BUILT IN STAGE 1.
4. CLOSE CLINTON ST. TO THRU TRAFFIC AND ESTABLISH DETOUR UTILIZING MAIN ST.
5. CONSTRUCT HWY. 67, CLINTON ST. AND CADDO ST. AND PERFORM LEVELING, AND NOTCH AND WIDEN OPERATIONS AS SHOWN.
6. PLACE CONSTRUCTION PAVEMENT MARKINGS SHOWN FOR STAGE 3 TRAFFIC CONFIGURATION PRIOR TO SWITCHING TRAFFIC.

CONSTRUCTION PAVEMENT MARKINGS

DOUBLE YELLOW CENTERLINE = 8792 LIN. FT.
SOLID WHITE = 3876 LIN. FT.
12" SOLID WHITE LINE = 34 LIN. FT.
REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS = 2380 LIN. FT.

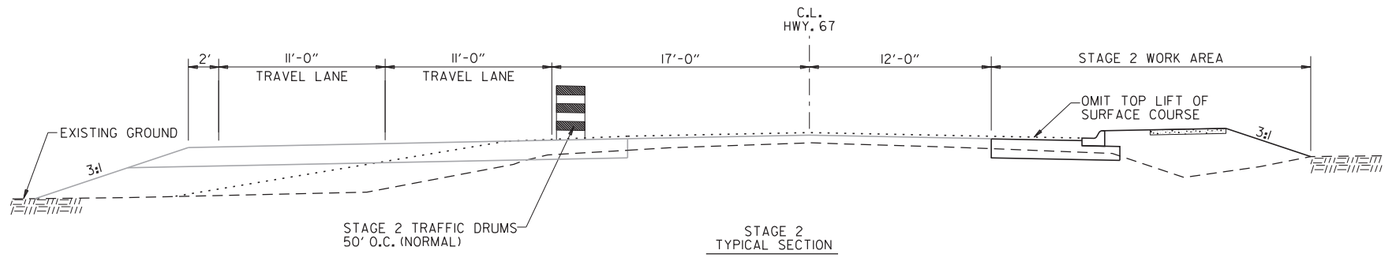
TRAFFIC DRUMS = 313 EACH
FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER = 720 LIN. FT.
TEMPORARY IMPACT ATTENUATION BARRIER = 2 EACH



STAGE 2 CONSTRUCTION
STAGE 2 OVERLAY OR METHOD OF RAISING GRADE
STAGE 2 TRAFFIC
TRAFFIC DRUMS
PRECAST CONCRETE BARRIER (P.C.C.B.)
TEMPORARY IMPACT ATTENUATION BARRIER (T.I.A.B.)

BUMP (4) W8-1 (30" X 30")
DO NOT PASS (4) R4-1 (24" X 30")
RIGHT SHOULDER CLOSED (4) W21-5a (36" X 36")

TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER



STAGE 2
TYPICAL SECTION

BYPASS & HWY. 67
MAINTENANCE OF TRAFFIC DETAILS
STAGE 2

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WORKSPACE: AHTD
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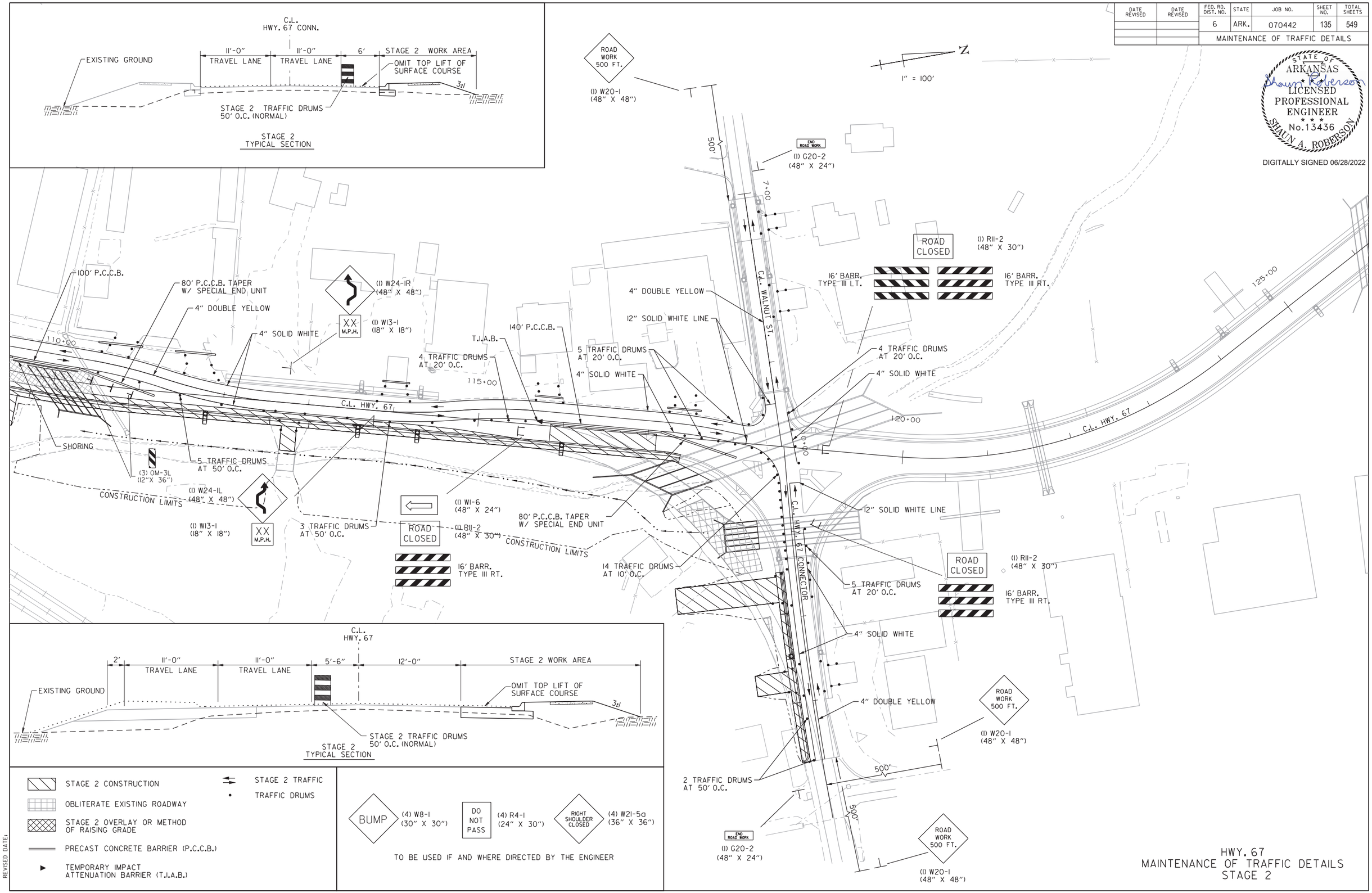
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	135	549

MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022



HWY. 67
MAINTENANCE OF TRAFFIC DETAILS
STAGE 2

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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	136	549
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

1" = 100'

C.L. 10TH ST.

ROAD CLOSED

(1) R11-2 (48" X 30")

16' BARR. TYPE III LT.

16' BARR. TYPE III RT.

18+00

4" DOUBLE YELLOW

130+00

135+00

125+00

C.L. HWY. 67

140+00

20+00

C.L. CLAY ST.

4" DOUBLE YELLOW

C.L. 9TH ST.

ROAD CLOSED

(1) R11-2 (48" X 30")

16' BARR. TYPE III LT.

16' BARR. TYPE III RT.

23+00

STAGE 2 CONSTRUCTION

STAGE 2 OVERLAY OR METHOD OF RAISING GRADE UNDER TRAFFIC

STAGE 2 TRAFFIC

TRAFFIC DRUMS

BUMP (4) W8-1 (30" X 30")

DO NOT PASS (4) R4-1 (24" X 30")

RIGHT SHOULDER CLOSED (4) W21-5a (36" X 36")

TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

HWY. 67
MAINTENANCE OF TRAFFIC DETAILS
STAGE 2

rnfortner 6/28/2022 10:31:49 AM
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STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
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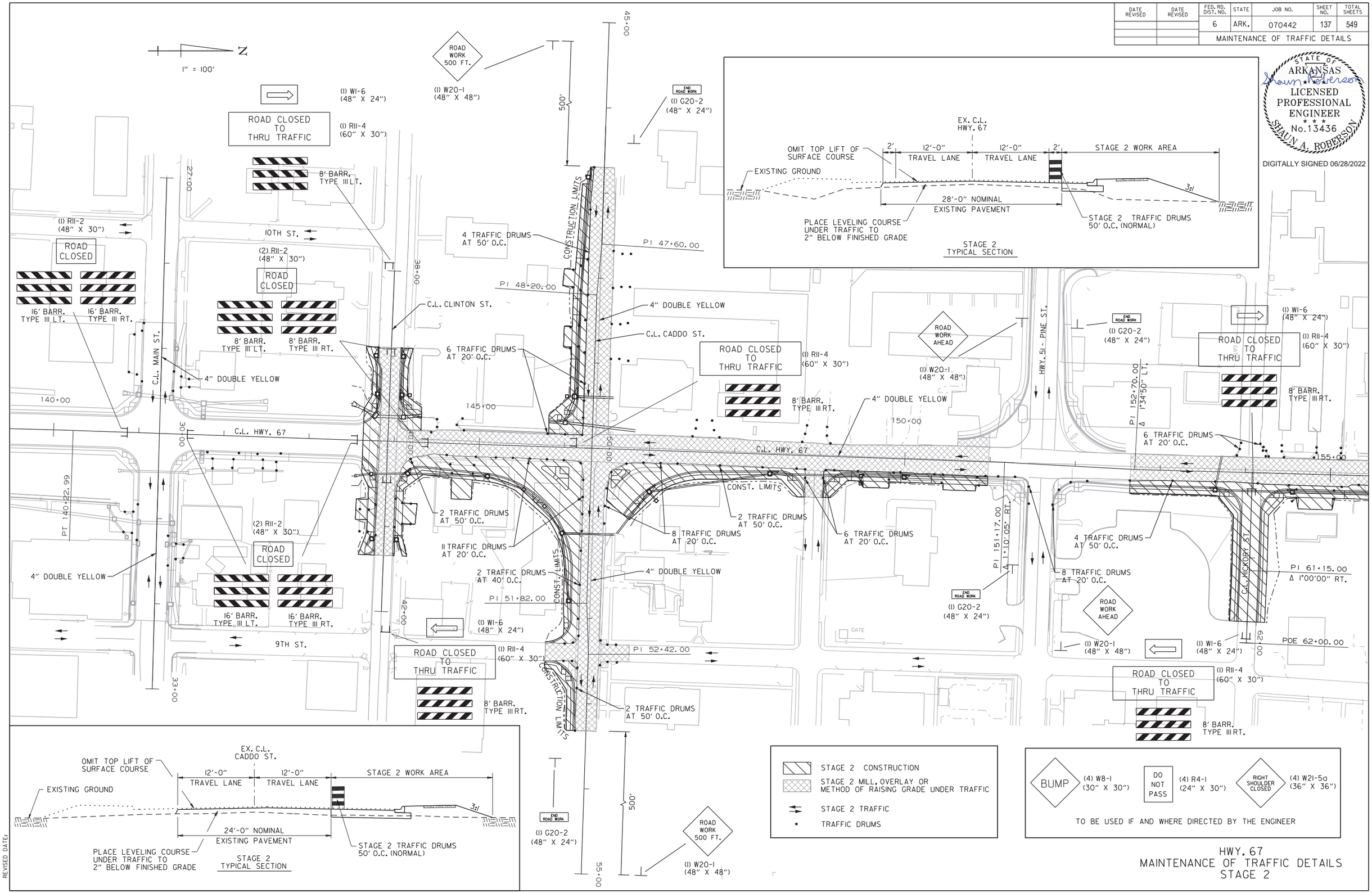

HWY. 67
MAINTENANCE OF TRAFFIC DETAILS
STAGE 2

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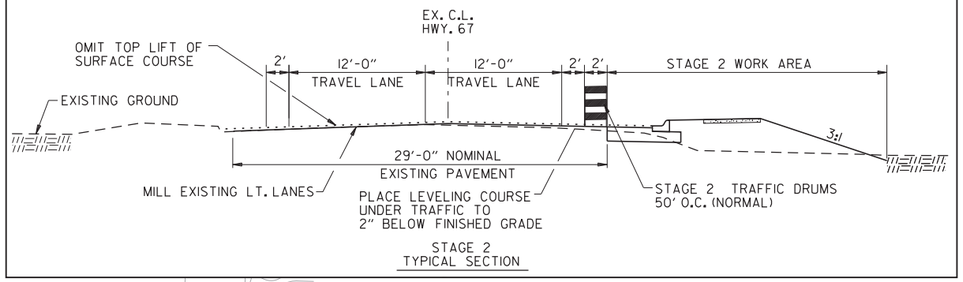
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

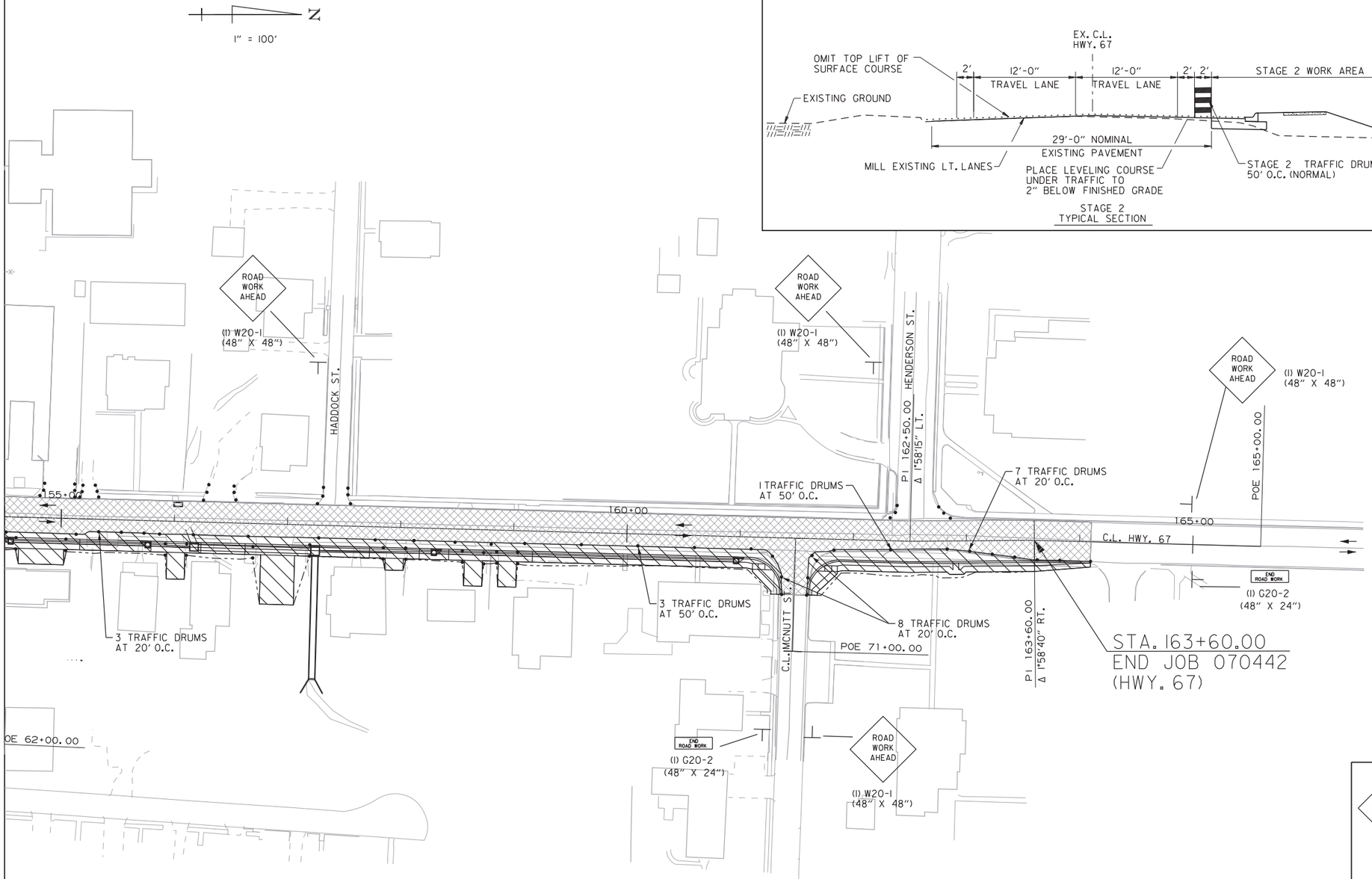
DIGITALLY SIGNED 06/28/2022

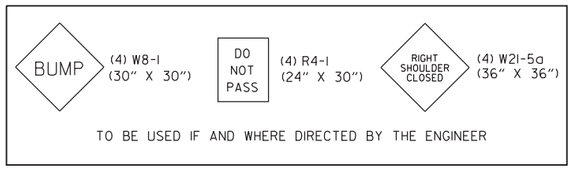
N

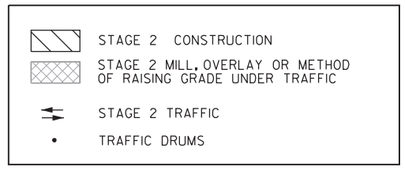
1" = 100'



STAGE 2
TYPICAL SECTION







HWY. 67
MAINTENANCE OF TRAFFIC DETAILS
STAGE 2

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		6	ARK.	070442	139	549
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
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STAGE 3
CONSTRUCTION SEQUENCE NOTES

1. SHIFT TRAFFIC TO PROPOSED ALIGNMENT.
2. INSTALL ADVANCE WARNING SIGNS AS SHOWN.
3. INSTALL PRECAST CONCRETE BARRIERS AND PERFORM SHORING OPERATIONS; EXTEND BOX CULVERTS BUILT IN STAGE 2.
4. AS SHOWN, CONSTRUCT HWY. 67 AND CADDO ST.
5. PERFORM STAGE 3B CONSTRUCTION AND PLACE FINAL 2" ACHM SURFACE COURSE.
6. PLACE FINAL PERMANENT PAVEMENT MARKINGS.

CONSTRUCTION PAVEMENT MARKINGS

DOUBLE YELLOW CENTERLINE = 6086 LIN. FT.
SOLID WHITE = 4128 LIN. FT.
12" SOLID WHITE LINE = 78 LIN. FT.
REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS = 8277 LIN. FT.

TRAFFIC DRUMS = 216 EACH
FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER = 540 LIN. FT.
TEMPORARY IMPACT ATTENUATION BARRIER = 1 EACH

1" = 100'

FUTURE C.L. BYPASS TO HWY. 67 CONNECTOR

ROAD CLOSED
(2) R11-2 (48" X 30")
16' BARR. TYPE III RT.

STA. 268+05.79
END BYPASS

265.00
C.L. BYPASS

CONSTRUCTION LIMITS

3 TRAFFIC DRUMS AT 50' O.C.

(4) OM-3L (12"X 36")

4" SOLID WHITE

(4) OM-3R (12"X 36")

60' P.C.C.B.

(1) G20-2 (48" X 24") END ROAD WORK

100+00

105+00

110+00

C.L. HWY. 67

500' 500' 250' 250'

SHORING

120' P.C.C.B. TAPER W/ SPECIAL END UNIT

12 TRAFFIC DRUMS AT 50' O.C.

4" DOUBLE YELLOW

40' P.C.C.B. TAPER W/ SPECIAL END UNIT

100' P.C.C.B.

(2) OM-3L (12"X 36")

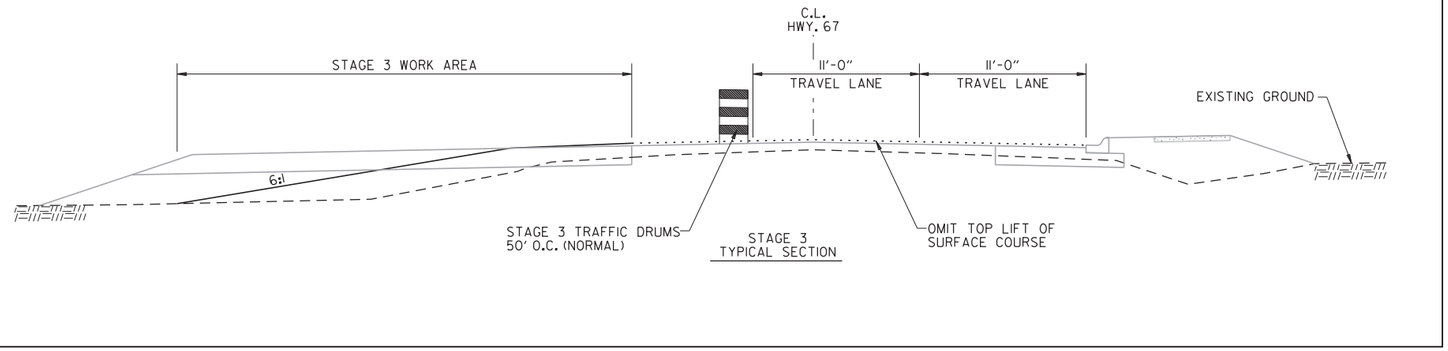
ROAD WORK 1500 FT. — (1) W20-1 (48" X 48")
ROAD WORK 1000 FT. — (1) W20-1 (48" X 48")
ROAD WORK 500 FT. — (1) W20-1 (48" X 48")
DO NOT PASS — (1) R4-1 (24" X 30")
XX M.P.H. — (1) W13-1 (18" X 18")
(1) W24-1R (48" X 48")

STA. 102+35.00
BEGIN HWY. 67

STAGE 3A CONSTRUCTION
STAGE 3B CONSTRUCTION (MILL AND OVERLAY UNDER TRAFFIC)
STAGE 3 TRAFFIC
TRAFFIC DRUMS
PRECAST CONCRETE BARRIER (P.C.C.B.)

BUMP — (4) W8-1 (30" X 30")
DO NOT PASS — (4) R4-1 (24" X 30")
RIGHT SHOULDER CLOSED — (4) W21-5a (36" X 36")

TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER



BYPASS & HWY. 67
MAINTENANCE OF TRAFFIC DETAILS
STAGE 3

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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	140	549
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
Shaun Roberson
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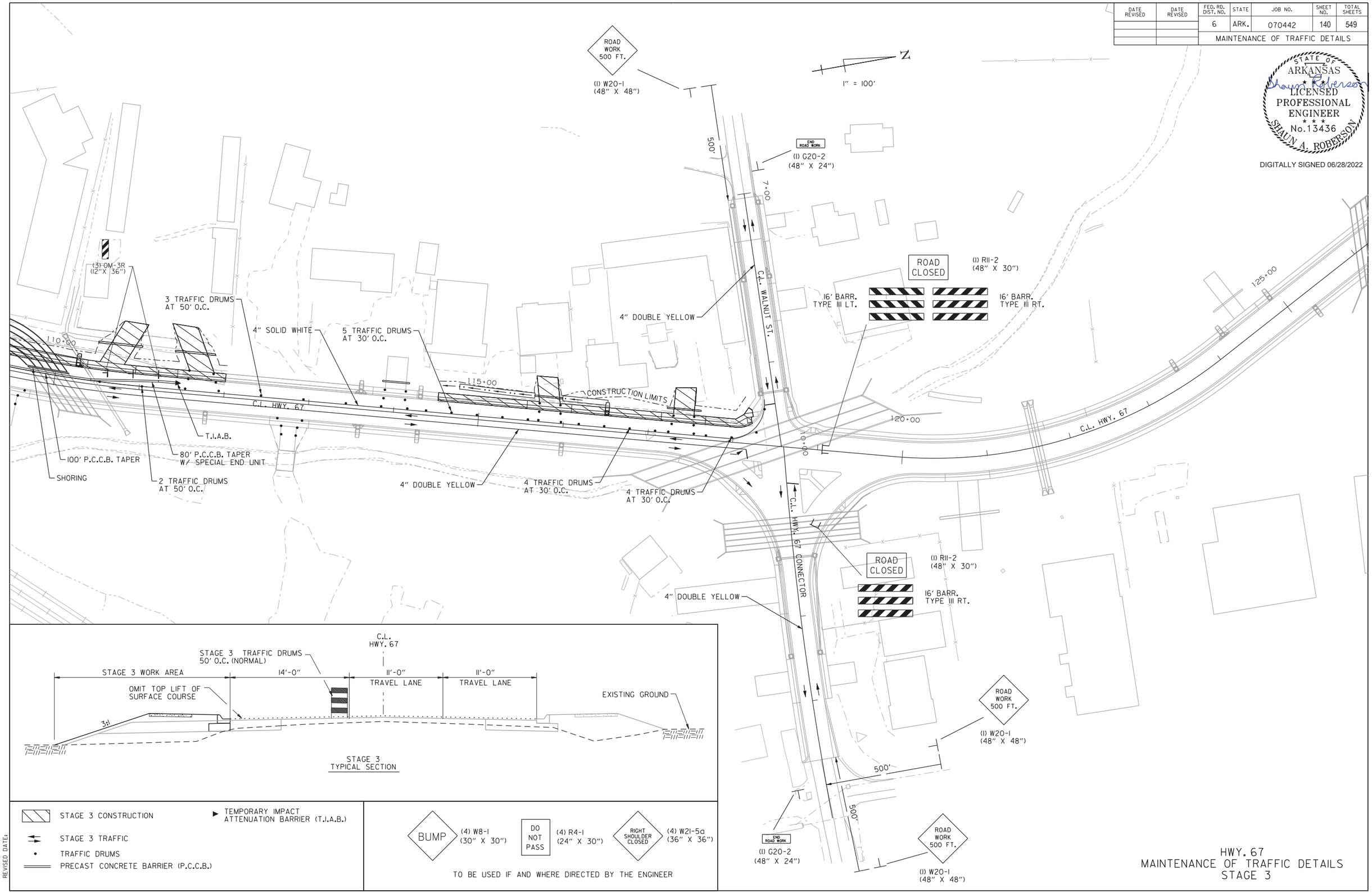

HWY. 67
MAINTENANCE OF TRAFFIC DETAILS
STAGE 3

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REVISED DATE:

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		6	ARK.	070442	141	549
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
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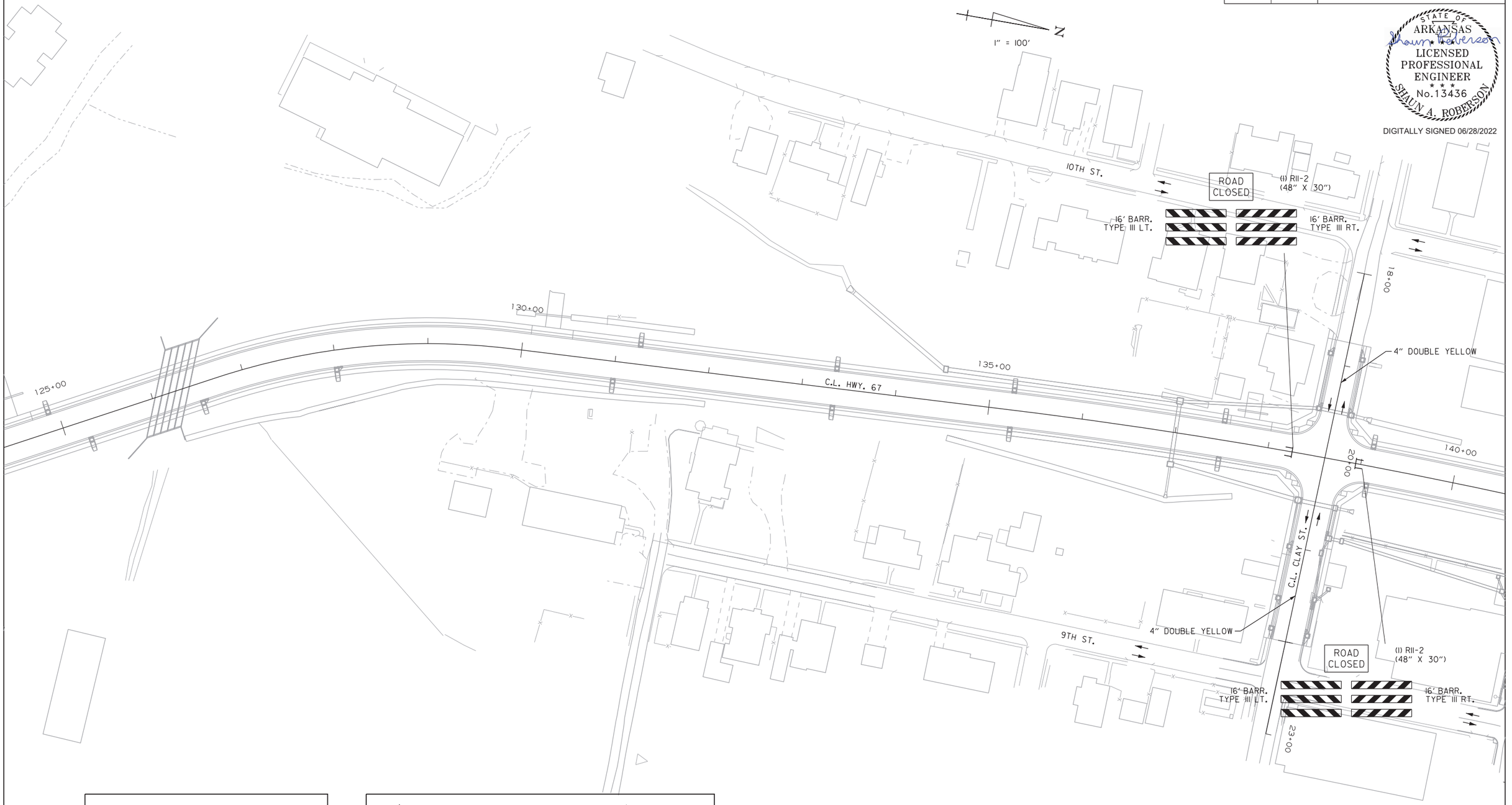

STAGE 3 TRAFFIC
TRAFFIC DRUMS

BUMP (4) W8-1 (30" X 30")
DO NOT PASS (4) R4-1 (24" X 30")
RIGHT SHOULDER CLOSED (4) W21-5a (36" X 36")

TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

HWY. 67
MAINTENANCE OF TRAFFIC DETAILS
STAGE 3

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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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		MAINTENANCE OF TRAFFIC DETAILS				

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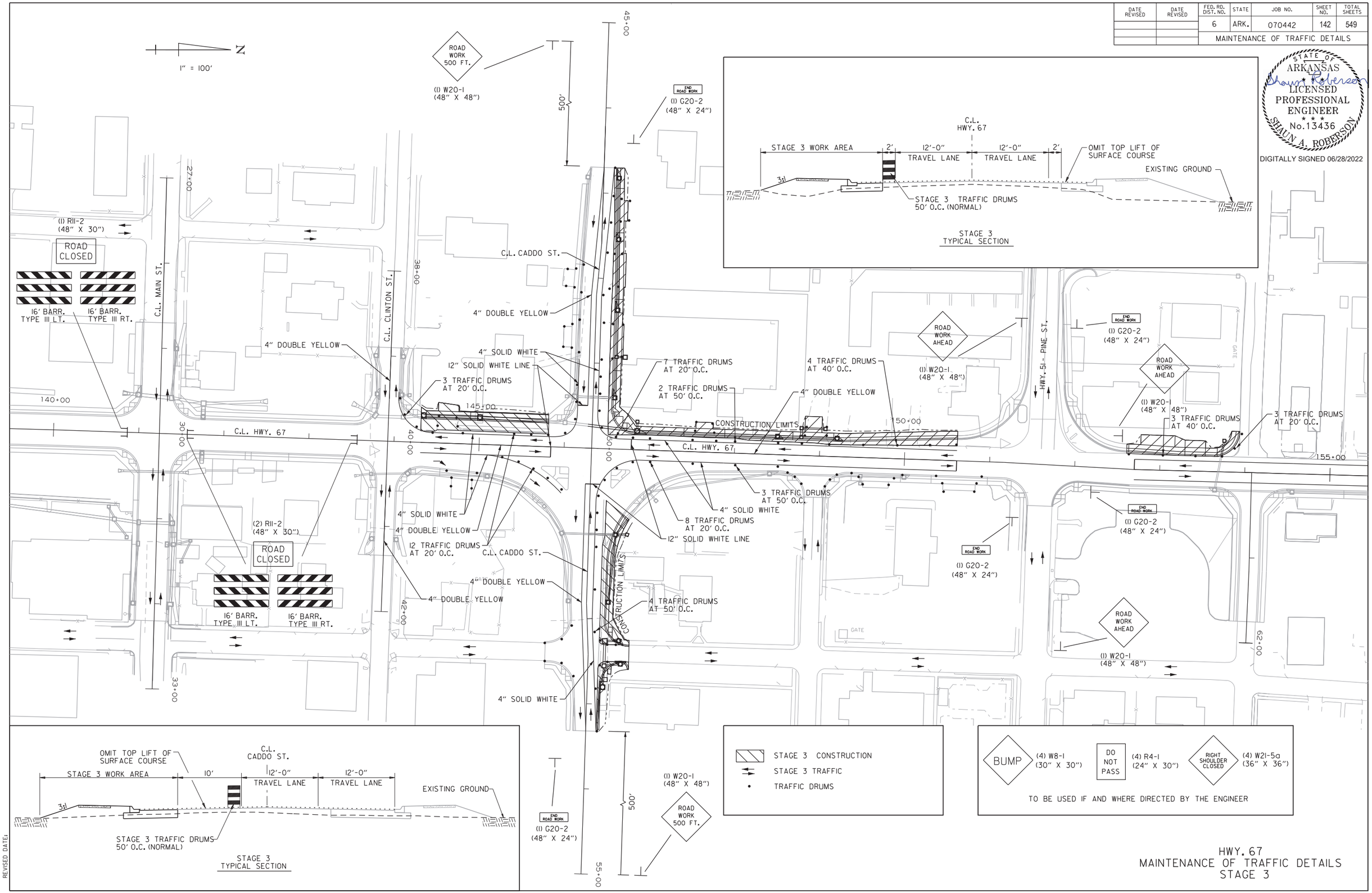

STAGE 3
TYPICAL SECTION

STAGE 3
TYPICAL SECTION

HWY. 67
MAINTENANCE OF TRAFFIC DETAILS
STAGE 3

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REVISED DATE:

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		6	ARK.	070442	143	549
		PERMANENT PAVEMENT MAKING DETAILS				

STATE OF ARKANSAS
Shaun Roberson
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No.13436
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N

6" YELLOW THERMOPLASTIC PAVEMENT MARKING

STA.	STA.	LOCATION	LIN. FT.
90+03	99+45	PROF. PARK DR.	1884
17+52	19+52	HWY. 51	400
20+48	22+48	HWY. 51	399

6" YELLOW THERMOPLASTIC PAVEMENT MARKING W/ SKIP LINE

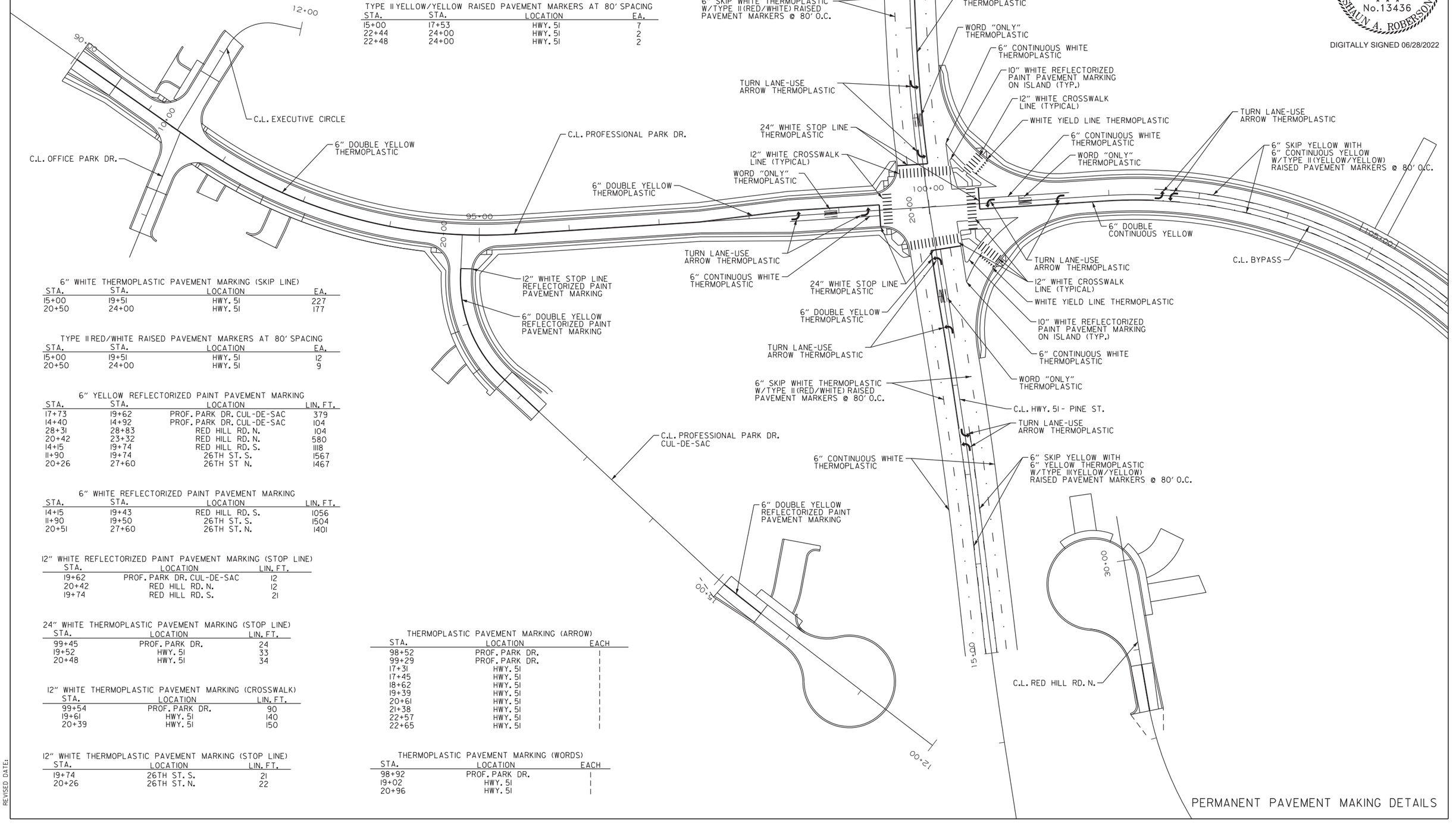
STA.	STA.	LOCATION	LIN. FT.
15+00	17+53	HWY. 51	631
22+44	24+00	HWY. 51	195
22+48	24+00	HWY. 51	190

6" WHITE THERMOPLASTIC PAVEMENT MARKING

STA.	STA.	LOCATION	LIN. FT.
15+00	19+49	HWY. 51	448
15+00	18+26	HWY. 51	327
98+45	99+45	PROF. PARK DR.	100
18+52	19+52	HWY. 51	100
20+55	24+00	HWY. 51	347
20+48	21+48	HWY. 51	100
21+56	24+00	HWY. 51	243
19+11	19+79	HWY. 51	199
20+12	20+68	HWY. 51	145

TYPE II YELLOW/YELLOW RAISED PAVEMENT MARKERS AT 80' SPACING

STA.	STA.	LOCATION	EA.
15+00	17+53	HWY. 51	7
22+44	24+00	HWY. 51	2
22+48	24+00	HWY. 51	2



6" WHITE THERMOPLASTIC PAVEMENT MARKING (SKIP LINE)

STA.	STA.	LOCATION	EA.
15+00	19+51	HWY. 51	227
20+50	24+00	HWY. 51	177

TYPE II RED/WHITE RAISED PAVEMENT MARKERS AT 80' SPACING

STA.	STA.	LOCATION	EA.
15+00	19+51	HWY. 51	12
20+50	24+00	HWY. 51	9

6" YELLOW REFLECTORIZED PAINT PAVEMENT MARKING

STA.	STA.	LOCATION	LIN. FT.
17+73	19+62	PROF. PARK DR. CUL-DE-SAC	379
14+40	14+92	PROF. PARK DR. CUL-DE-SAC	104
28+31	28+83	RED HILL RD. N.	104
20+42	23+32	RED HILL RD. N.	580
14+15	19+74	RED HILL RD. S.	1118
11+90	19+74	26TH ST. S.	1567
20+26	27+60	26TH ST N.	1467

6" WHITE REFLECTORIZED PAINT PAVEMENT MARKING

STA.	STA.	LOCATION	LIN. FT.
14+15	19+43	RED HILL RD. S.	1056
11+90	19+50	26TH ST. S.	1504
20+51	27+60	26TH ST. N.	1401

12" WHITE REFLECTORIZED PAINT PAVEMENT MARKING (STOP LINE)

STA.	LOCATION	LIN. FT.
19+62	PROF. PARK DR. CUL-DE-SAC	12
20+42	RED HILL RD. N.	12
19+74	RED HILL RD. S.	21

24" WHITE THERMOPLASTIC PAVEMENT MARKING (STOP LINE)

STA.	LOCATION	LIN. FT.
99+45	PROF. PARK DR.	24
19+52	HWY. 51	33
20+48	HWY. 51	34

12" WHITE THERMOPLASTIC PAVEMENT MARKING (CROSSWALK)

STA.	LOCATION	LIN. FT.
99+54	PROF. PARK DR.	90
19+61	HWY. 51	140
20+39	HWY. 51	150

12" WHITE THERMOPLASTIC PAVEMENT MARKING (STOP LINE)

STA.	LOCATION	LIN. FT.
19+74	26TH ST. S.	21
20+26	26TH ST. N.	22

THERMOPLASTIC PAVEMENT MARKING (ARROW)

STA.	LOCATION	EACH
98+52	PROF. PARK DR.	1
99+29	PROF. PARK DR.	1
17+31	HWY. 51	1
17+45	HWY. 51	1
18+62	HWY. 51	1
19+39	HWY. 51	1
20+61	HWY. 51	1
21+38	HWY. 51	1
22+57	HWY. 51	1
22+65	HWY. 51	1

THERMOPLASTIC PAVEMENT MARKING (WORDS)

STA.	LOCATION	EACH
98+92	PROF. PARK DR.	1
19+02	HWY. 51	1
20+96	HWY. 51	1

PERMANENT PAVEMENT MAKING DETAILS

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REVISED DATE:

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		6	ARK.	070442	144	549
		PERMANENT PAVEMENT MAKING DETAILS				

STATE OF ARKANSAS
Shaun Roberson
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10" WHITE REFLECTORIZED PAINT PAVEMENT MARKING (ISLAND)

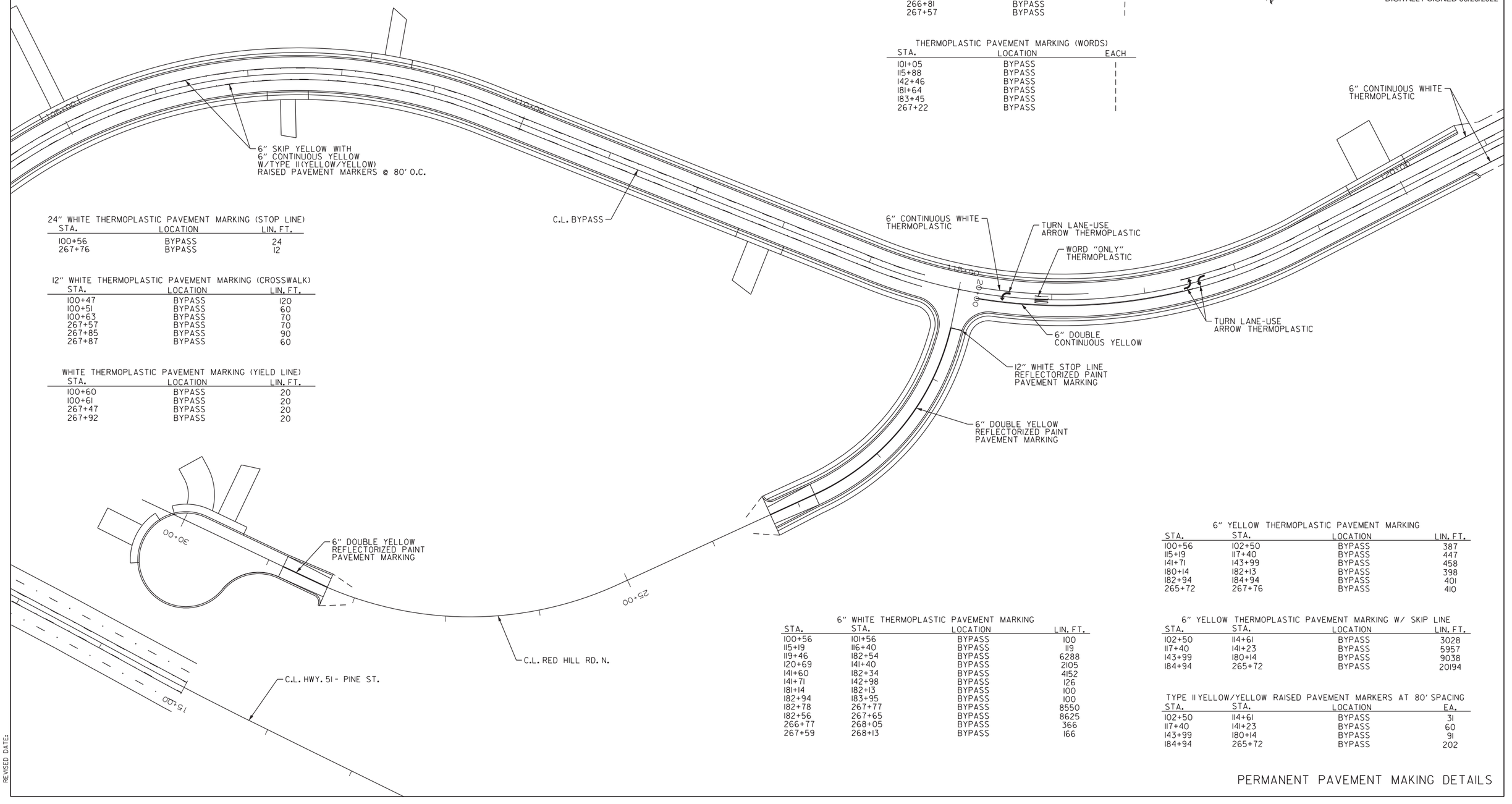
STA.	STA.	LOCATION	LIN. FT.
100+28	100+59	BYPASS	104
100+33	100+66	BYPASS	116
267+17	267+96	BYPASS	257
267+80	268+09	BYPASS	105

THERMOPLASTIC PAVEMENT MARKING (ARROW)

STA.	LOCATION	EACH
100+70	BYPASS	1
101+45	BYPASS	1
102+56	BYPASS	1
102+72	BYPASS	1
115+51	BYPASS	1
117+46	BYPASS	1
117+61	BYPASS	1
142+12	BYPASS	1
144+04	BYPASS	1
144+21	BYPASS	1
179+92	BYPASS	1
180+10	BYPASS	1
182+00	BYPASS	1
183+09	BYPASS	1
185+03	BYPASS	1
185+19	BYPASS	1
265+51	BYPASS	1
265+68	BYPASS	1
266+81	BYPASS	1
267+57	BYPASS	1

THERMOPLASTIC PAVEMENT MARKING (WORDS)

STA.	LOCATION	EACH
101+05	BYPASS	1
115+88	BYPASS	1
142+46	BYPASS	1
181+64	BYPASS	1
183+45	BYPASS	1
267+22	BYPASS	1



24" WHITE THERMOPLASTIC PAVEMENT MARKING (STOP LINE)

STA.	LOCATION	LIN. FT.
100+56	BYPASS	24
267+76	BYPASS	12

12" WHITE THERMOPLASTIC PAVEMENT MARKING (CROSSWALK)

STA.	LOCATION	LIN. FT.
100+47	BYPASS	120
100+51	BYPASS	60
100+63	BYPASS	70
267+57	BYPASS	70
267+85	BYPASS	90
267+87	BYPASS	60

WHITE THERMOPLASTIC PAVEMENT MARKING (YIELD LINE)

STA.	LOCATION	LIN. FT.
100+60	BYPASS	20
100+61	BYPASS	20
267+47	BYPASS	20
267+92	BYPASS	20

6" WHITE THERMOPLASTIC PAVEMENT MARKING

STA.	STA.	LOCATION	LIN. FT.
100+56	101+56	BYPASS	100
115+19	116+40	BYPASS	119
119+46	182+54	BYPASS	6288
120+69	141+40	BYPASS	2105
141+60	182+34	BYPASS	4152
141+71	142+98	BYPASS	126
181+14	182+13	BYPASS	100
182+94	183+95	BYPASS	100
182+78	267+77	BYPASS	8550
182+56	267+65	BYPASS	8625
266+77	268+05	BYPASS	366
267+59	268+13	BYPASS	166

6" YELLOW THERMOPLASTIC PAVEMENT MARKING

STA.	STA.	LOCATION	LIN. FT.
100+56	102+50	BYPASS	387
115+19	117+40	BYPASS	447
141+71	143+99	BYPASS	458
180+14	182+13	BYPASS	398
182+94	184+94	BYPASS	401
265+72	267+76	BYPASS	410

6" YELLOW THERMOPLASTIC PAVEMENT MARKING W/ SKIP LINE

STA.	STA.	LOCATION	LIN. FT.
102+50	114+61	BYPASS	3028
117+40	141+23	BYPASS	5957
143+99	180+14	BYPASS	9038
184+94	265+72	BYPASS	20194

TYPE II YELLOW/YELLOW RAISED PAVEMENT MARKERS AT 80' SPACING

STA.	STA.	LOCATION	EA.
102+50	114+61	BYPASS	31
117+40	141+23	BYPASS	60
143+99	180+14	BYPASS	91
184+94	265+72	BYPASS	202

PERMANENT PAVEMENT MAKING DETAILS

rnfortner 6/28/2022 10:31:53 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	145	549
		PERMANENT PAVEMENT MAKING DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
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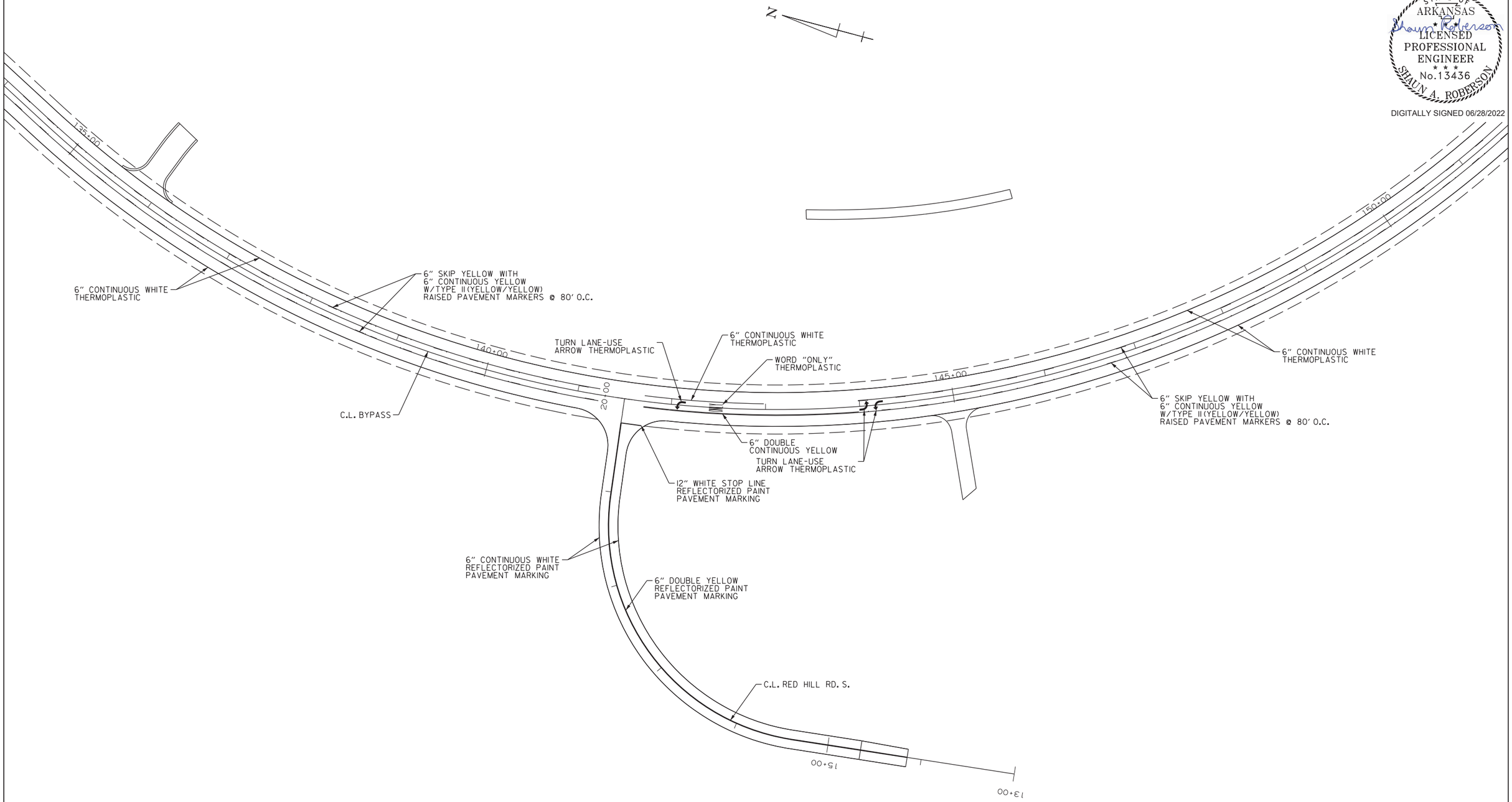

PERMANENT PAVEMENT MAKING DETAILS

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WORKSPACE: AHTD
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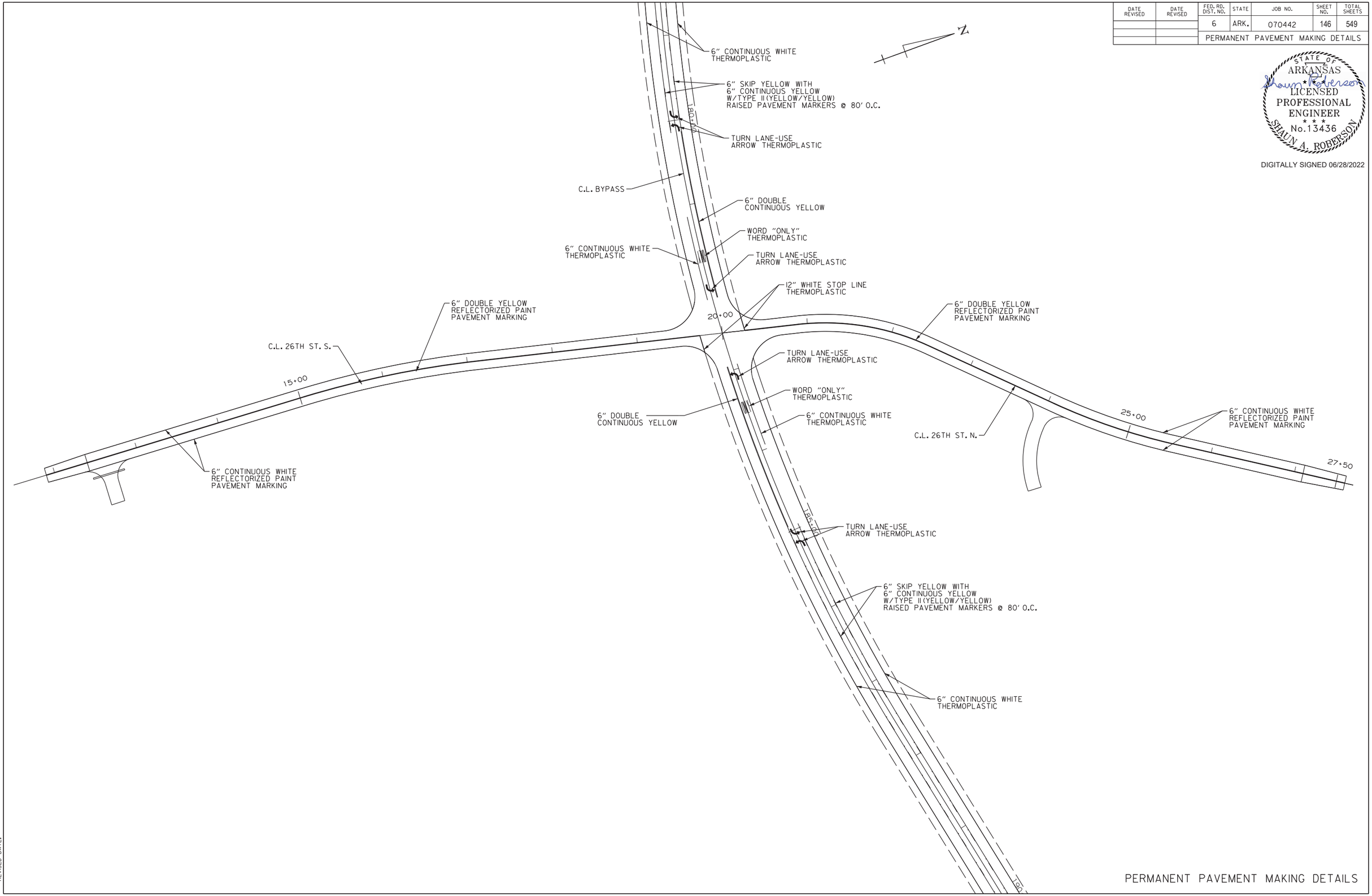
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	146	549
		PERMANENT PAVEMENT MAKING DETAILS				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022



PERMANENT PAVEMENT MAKING DETAILS

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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	147	549
		PERMANENT PAVEMENT MAKING DETAILS				

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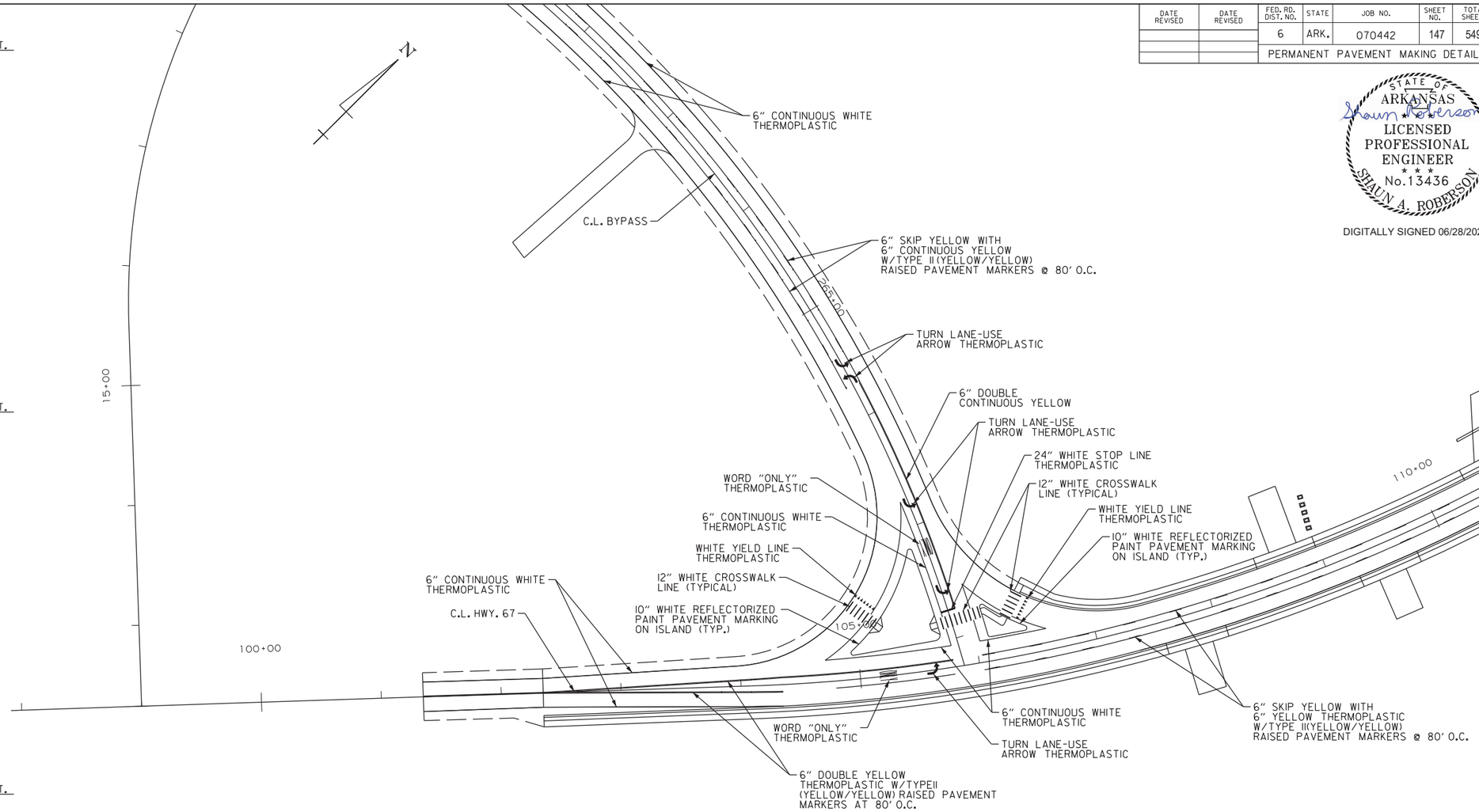

6" WHITE THERMOPLASTIC PAVEMENT MARKING

STA.	STA.	LOCATION	LIN. FT.
101+35	103+96	HWY. 67	262
101+35	104+35	HWY. 67	300
104+79	105+79	HWY. 67	100
119+02	120+06	HWY. 67	104
118+77	119+53	HWY. 67	223
117+98	118+58	HWY. 67	148
117+16	118+13	HWY. 67	97
137+15	138+15	HWY. 67	100
140+13	140+76	HWY. 67	62
141+63	142+25	HWY. 67	62
142+74	143+61	HWY. 67	87
144+06	145+88	HWY. 67	190
144+34	145+84	HWY. 67	301
144+34	145+84	HWY. 67	46
144+34	145+88	HWY. 67	307
144+34	145+88	HWY. 67	36
145+89	146+14	HWY. 67	102
144+04	144+04	HWY. 67	12
145+98	146+12	HWY. 67	21
146+54	146+99	HWY. 67	122
146+79	148+78	HWY. 67	401
146+79	148+78	HWY. 67	63
149+29	151+15	HWY. 67	186
152+11	153+67	HWY. 67	155
162+62	162+72	HWY. 67	65
162+62	162+72	HWY. 67	42
161+71	162+28	HWY. 67	57

6" YELLOW THERMOPLASTIC PAVEMENT MARKING

STA.	STA.	LOCATION	LIN. FT.
101+35	102+35	HWY. 67	199
102+35	105+79	HWY. 67	686
102+35	104+35	HWY. 67	400
116+16	118+13	HWY. 67	395
119+02	121+07	HWY. 67	413
136+17	138+15	HWY. 67	397
139+65	140+76	HWY. 67	221
141+64	143+61	HWY. 67	398
144+33	145+84	HWY. 67	302
146+89	148+68	HWY. 67	359
149+29	151+15	HWY. 67	371
152+76	153+67	HWY. 67	183
161+71	162+28	HWY. 67	114
162+49	162+52	HWY. 67	100
163+00	164+10	HWY. 67	453

6" YELLOW THERMOPLASTIC PAVEMENT MARKING W/ SKIP LINE

STA.	STA.	LOCATION	LIN. FT.
106+03	116+16	HWY. 67	2531
121+07	136+17	HWY. 67	3775
139+04	139+65	HWY. 67	154
154+49	161+08	HWY. 67	1648

TYPE II YELLOW/YELLOW RAISED PAVEMENT MARKERS AT 80' SPACING

STA.	STA.	LOCATION	EA.
106+03	116+16	HWY. 67	26
121+07	136+17	HWY. 67	38
139+04	139+65	HWY. 67	2
154+49	161+08	HWY. 67	17

8" YELLOW THERMOPLASTIC PAVEMENT MARKING

STA.	STA.	LOCATION	LIN. FT.
163+00	164+10	HWY. 67	87

8" WHITE THERMOPLASTIC PAVEMENT MARKING

STA.	STA.	LOCATION	LIN. FT.
144+04	146+15	HWY. 67	138

10" WHITE REFLECTORIZED PAINT PAVEMENT MARKING (ISLAND)

STA.	STA.	LOCATION	LIN. FT.
118+14	118+37	HWY. 67	72
118+81	119+30	HWY. 67	166
145+74	146+06	HWY. 67	100
146+57	146+78	HWY. 67	74

THERMOPLASTIC PAVEMENT MARKING (ARROW)

STA.	LOCATION	EACH
105+60	HWY. 67	1
115+94	HWY. 67	1
116+11	HWY. 67	1
117+23	HWY. 67	1
118+00	HWY. 67	1
119+16	HWY. 67	1
119+93	HWY. 67	1
121+12	HWY. 67	1
121+30	HWY. 67	1
135+95	HWY. 67	1
136+12	HWY. 67	1
138+02	HWY. 67	1
140+62	HWY. 67	1
141+75	HWY. 67	1
143+55	HWY. 67	1
144+88	HWY. 67	2
145+63	HWY. 67	2
147+00	HWY. 67	1
147+74	HWY. 67	1
150+18	HWY. 67	1
150+97	HWY. 67	1
152+94	HWY. 67	1
162+18	HWY. 67	1

24" WHITE THERMOPLASTIC PAVEMENT MARKING (STOP LINE)

STA.	LOCATION	LIN. FT.
118+13	HWY. 67	24
119+02	HWY. 67	24
140+76	HWY. 67	24
141+64	HWY. 67	24
145+84	HWY. 67	27
146+80	HWY. 67	16
146+89	HWY. 67	12
151+15	HWY. 67	24
152+11	HWY. 67	31
152+76	HWY. 67	12

12" WHITE THERMOPLASTIC PAVEMENT MARKING (STOP LINE)

STA.	LOCATION	LIN. FT.
149+00	HWY. 67	13
162+28	HWY. 67	14
162+43	HWY. 67	14
162+99	HWY. 67	14

THERMOPLASTIC PAVEMENT MARKING (WORDS)

STA.	LOCATION	EACH
105+25	HWY. 67	1
117+62	HWY. 67	1
119+52	HWY. 67	1
137+66	HWY. 67	1
140+26	HWY. 67	1
142+11	HWY. 67	1
143+21	HWY. 67	1
145+30	HWY. 67	2
147+35	HWY. 67	1
150+60	HWY. 67	1
153+49	HWY. 67	1
161+82	HWY. 67	1

WHITE THERMOPLASTIC PAVEMENT MARKING (YIELD LINE)

STA.	LOCATION	LIN. FT.
118+14	HWY. 67	20
119+17	HWY. 67	20
145+70	HWY. 67	20
146+74	HWY. 67	20

12" WHITE THERMOPLASTIC PAVEMENT MARKING (CROSSWALK)

STA.	LOCATION	LIN. FT.
118+24	HWY. 67	100
118+24	HWY. 67	60
118+93	HWY. 67	100
119+21	HWY. 67	70
140+84	HWY. 67	100
141+54	HWY. 67	100
145+93	HWY. 67	130
145+81	HWY. 67	70
146+78	HWY. 67	70
146+70	HWY. 67	120
148+95	HWY. 67	90
151+23	HWY. 67	170
152+02	HWY. 67	160
162+56	HWY. 67	80
162+90	HWY. 67	90

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PERMANENT PAVEMENT MAKING DETAILS

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STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 13436
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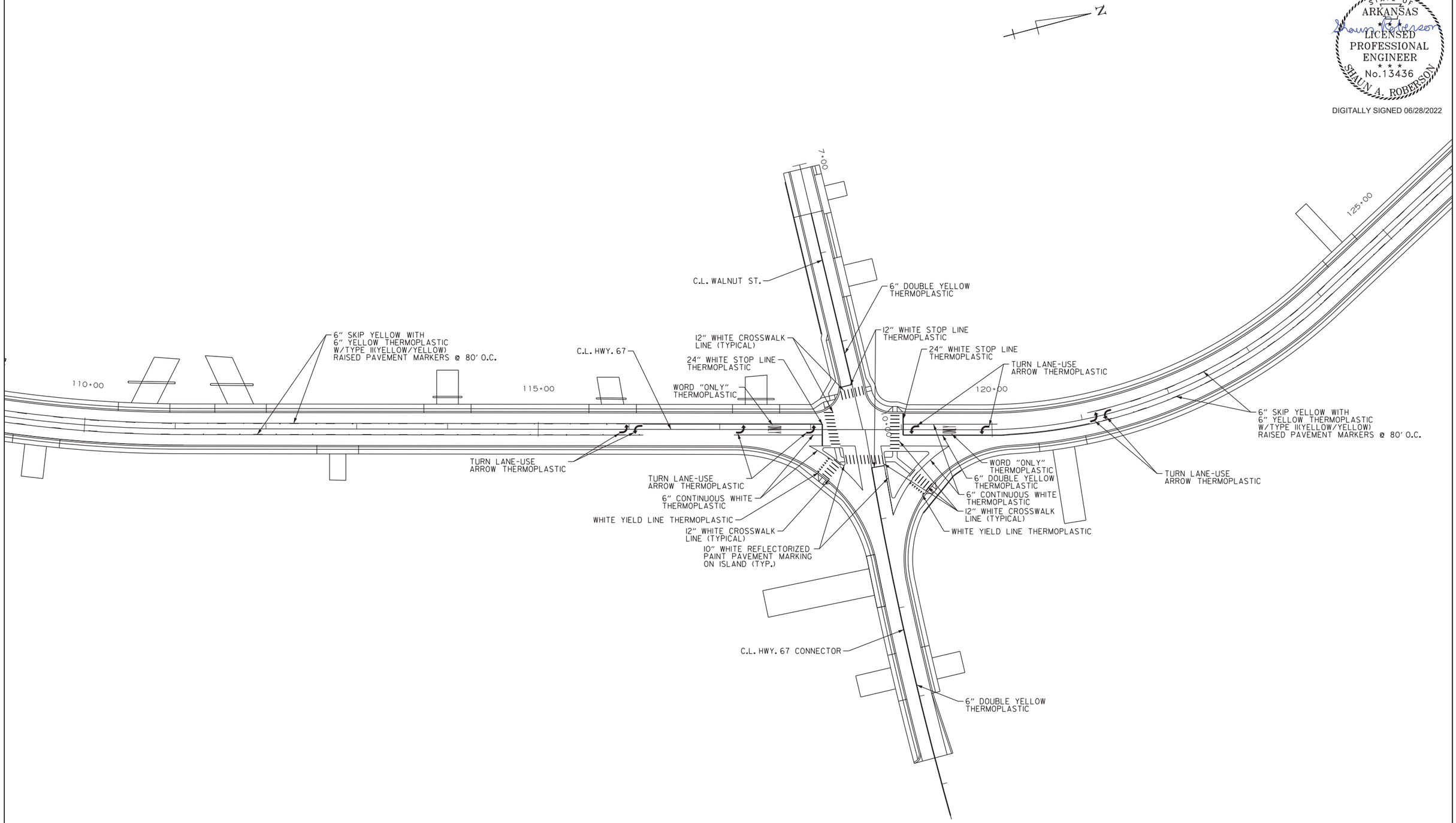

PERMANENT PAVEMENT MAKING DETAILS

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REVISED DATE:

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STATE OF ARKANSAS
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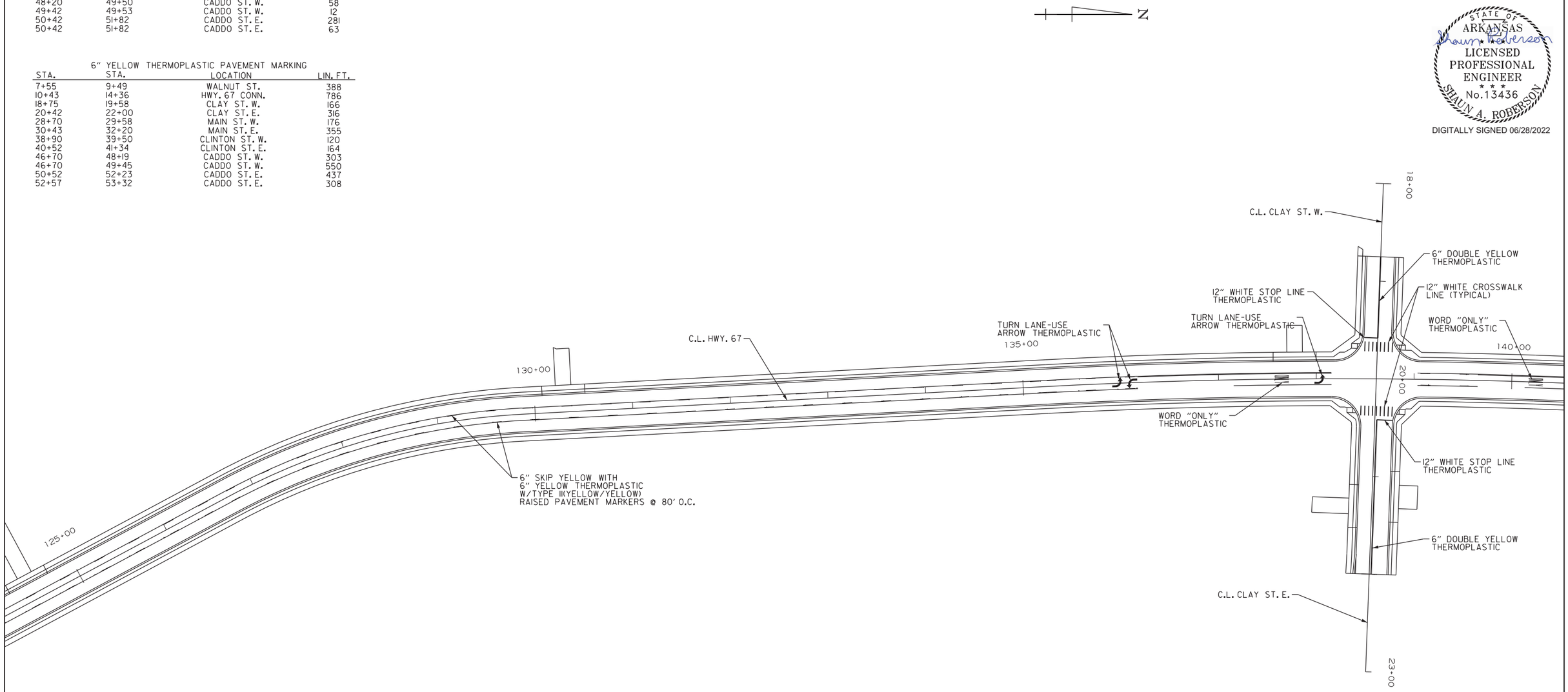
6" WHITE THERMOPLASTIC PAVEMENT MARKING

STA.	STA.	LOCATION	LIN. FT.
48+20	49+50	CADDO ST. W.	261
48+20	49+50	CADDO ST. W.	58
49+42	49+53	CADDO ST. W.	12
50+42	51+82	CADDO ST. E.	281
50+42	51+82	CADDO ST. E.	63

6" YELLOW THERMOPLASTIC PAVEMENT MARKING

STA.	STA.	LOCATION	LIN. FT.
7+55	9+49	WALNUT ST.	388
10+43	14+36	HWY. 67 CONN.	786
18+75	19+58	CLAY ST. W.	166
20+42	22+00	CLAY ST. E.	316
28+70	29+58	MAIN ST. W.	176
30+43	32+20	MAIN ST. E.	355
38+90	39+50	CLINTON ST. W.	120
40+52	41+34	CLINTON ST. E.	164
46+70	48+19	CADDO ST. W.	303
46+70	49+45	CADDO ST. W.	550
50+52	52+23	CADDO ST. E.	437
52+57	53+32	CADDO ST. E.	308



8" YELLOW THERMOPLASTIC PAVEMENT MARKING

STA.	STA.	LOCATION	LIN. FT.
47+07	47+96	CADDO ST. W.	38
51+94	52+22	CADDO ST. E.	17
52+64	53+13	CADDO ST. E.	19

THERMOPLASTIC PAVEMENT MARKING (ARROW)

STA.	LOCATION	EACH
48+57	CADDO ST. W.	1
49+35	CADDO ST. W.	1
50+71	CADDO ST. E.	1

24" WHITE THERMOPLASTIC PAVEMENT MARKING (STOP LINE)

STA.	LOCATION	LIN. FT.
49+50	CADDO ST. W.	16
49+45	CADDO ST. W.	12
50+42	CADDO ST. E.	16
50+52	CADDO ST. E.	12

12" WHITE THERMOPLASTIC PAVEMENT MARKING (STOP LINE)

STA.	LOCATION	LIN. FT.
9+49	WALNUT ST.	12
10+43	HWY. 67 CONN.	14
19+58	CLAY ST. W.	14
20+42	CLAY ST. E.	16
29+58	MAIN ST. W.	18
30+43	MAIN ST. E.	18
39+50	CLINTON ST. W.	11
40+52	CLINTON ST. E.	11
60+35	HICKORY ST.	14
70+35	MCNUTT ST.	14

THERMOPLASTIC PAVEMENT MARKING (WORDS)

STA.	LOCATION	EACH
48+97	CADDO ST. W.	1
51+08	CADDO. ST. E.	1

12" WHITE THERMOPLASTIC PAVEMENT MARKING (CROSSWALK)

STA.	LOCATION	LIN. FT.
9+58	WALNUT ST.	110
10+33	HWY. 67 CONN.	70
19+67	CLAY ST W.	80
20+33	CLAY ST. E.	90
29+67	MAIN ST. W.	100
30+34	MAIN ST. E.	100
39+59	CLINTON ST. W.	70
40+44	CLINTON ST. E.	60
49+59	CADDO ST. W.	110
50+33	CADDO ST. E.	130
60+26	HICKORY ST.	80
70+26	MCNUTT ST.	90

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REVISED DATE:

PERMANENT PAVEMENT MAKING DETAILS

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	150	549
		PERMANENT PAVEMENT MAKING DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
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N

C.L. MAIN ST. W.
27+00
12" WHITE STOP LINE THERMOPLASTIC
24" WHITE STOP LINE THERMOPLASTIC
6" DOUBLE YELLOW THERMOPLASTIC
WORD "ONLY" THERMOPLASTIC
140+00
TURN LANE-USE ARROW THERMOPLASTIC
12" WHITE CROSSWALK LINE (TYPICAL)
6" DOUBLE YELLOW THERMOPLASTIC
12" WHITE CROSSWALK LINE (TYPICAL)
24" WHITE STOP LINE THERMOPLASTIC
12" WHITE STOP LINE THERMOPLASTIC
6" DOUBLE YELLOW THERMOPLASTIC
C.L. MAIN ST. E.
33+00

C.L. CLINTON ST. W.
38+00
6" DOUBLE YELLOW THERMOPLASTIC
12" WHITE STOP LINE THERMOPLASTIC
6" DOUBLE YELLOW THERMOPLASTIC
12" WHITE CROSSWALK LINE (TYPICAL)
TURN LANE-USE ARROW THERMOPLASTIC
6" CONTINUOUS WHITE THERMOPLASTIC
6" DOUBLE YELLOW THERMOPLASTIC
WORD "ONLY" THERMOPLASTIC
TURN LANE-USE ARROW THERMOPLASTIC
12" WHITE STOP LINE THERMOPLASTIC
6" DOUBLE YELLOW THERMOPLASTIC
C.L. CLINTON ST. E.
42+00

C.L. CADDO ST. W.
45+00
8" YELLOW - 45°DIAGONAL THERMOPLASTIC @ 20' O.C.
WORD "ONLY" THERMOPLASTIC
6" WHITE THERMOPLASTIC @ 10' O.C.
24" WHITE STOP LINE THERMOPLASTIC
12" WHITE CROSSWALK LINE (TYPICAL)
6" DOUBLE YELLOW THERMOPLASTIC
6" DOUBLE YELLOW THERMOPLASTIC
8" WHITE 45°DIAGONAL THERMOPLASTIC @ 20' O.C.
6" WHITE THERMOPLASTIC @ 10' O.C.
WORD "ONLY" THERMOPLASTIC
145+00
TURN LANE-USE ARROW THERMOPLASTIC
6" CONTINUOUS WHITE THERMOPLASTIC
WHITE YIELD LINE THERMOPLASTIC
12" WHITE CROSSWALK LINE (TYPICAL)
10" WHITE REFLECTORIZED PAINT PAVEMENT MARKING ON ISLAND (TYP.)
6" DOUBLE YELLOW THERMOPLASTIC
WORD "ONLY" THERMOPLASTIC
TURN LANE-USE ARROW THERMOPLASTIC
6" CONTINUOUS WHITE THERMOPLASTIC
8" YELLOW - 45°DIAGONAL THERMOPLASTIC @ 15' O.C.
40+00
C.L. CADDO ST. E.
55+00

12" WHITE CROSSWALK LINE (TYPICAL)
TURN LANE-USE ARROW THERMOPLASTIC
6" DOUBLE YELLOW THERMOPLASTIC
TURN LANE-USE ARROW THERMOPLASTIC
12" WHITE CROSSWALK LINE (TYPICAL)
6" WHITE THERMOPLASTIC @ 10' O.C.
6" CONTINUOUS WHITE THERMOPLASTIC
150+00
WORD "ONLY" THERMOPLASTIC
24" WHITE STOP LINE THERMOPLASTIC
10" WHITE REFLECTORIZED PAINT PAVEMENT MARKING ON ISLAND (TYP.)
12" WHITE STOP LINE THERMOPLASTIC
12" WHITE CROSSWALK LINE (TYPICAL)
WHITE YIELD LINE THERMOPLASTIC
6" DOUBLE YELLOW THERMOPLASTIC
24" WHITE STOP LINE THERMOPLASTIC
TURN LANE-USE ARROW THERMOPLASTIC
6" WHITE THERMOPLASTIC @ 10' O.C.
8" YELLOW - 45°DIAGONAL THERMOPLASTIC @ 15' O.C.
6" DOUBLE YELLOW THERMOPLASTIC
6" DOUBLE YELLOW THERMOPLASTIC
63+00

HWY. 51 - PINE ST.
EXISTING PAVEMENT MARKINGS
24" WHITE STOP LINE THERMOPLASTIC
12" WHITE CROSSWALK LINE (TYPICAL)
6" SKIP YELLOW WITH 6" YELLOW THERMOPLASTIC W/TYPE II(YELLOW/YELLOW) RAISED PAVEMENT MARKERS @ 80' O.C.
6" CONTINUOUS WHITE THERMOPLASTIC
24" WHITE STOP LINE THERMOPLASTIC
WORD "ONLY" THERMOPLASTIC
155+00
WORD "ONLY" THERMOPLASTIC
C.L. HWY. 67
TURN LANE-USE ARROW THERMOPLASTIC
6" CONTINUOUS WHITE THERMOPLASTIC
6" DOUBLE YELLOW THERMOPLASTIC
12" WHITE STOP LINE THERMOPLASTIC
12" WHITE CROSSWALK LINE (TYPICAL)
62+00

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PERMANENT PAVEMENT MAKING DETAILS

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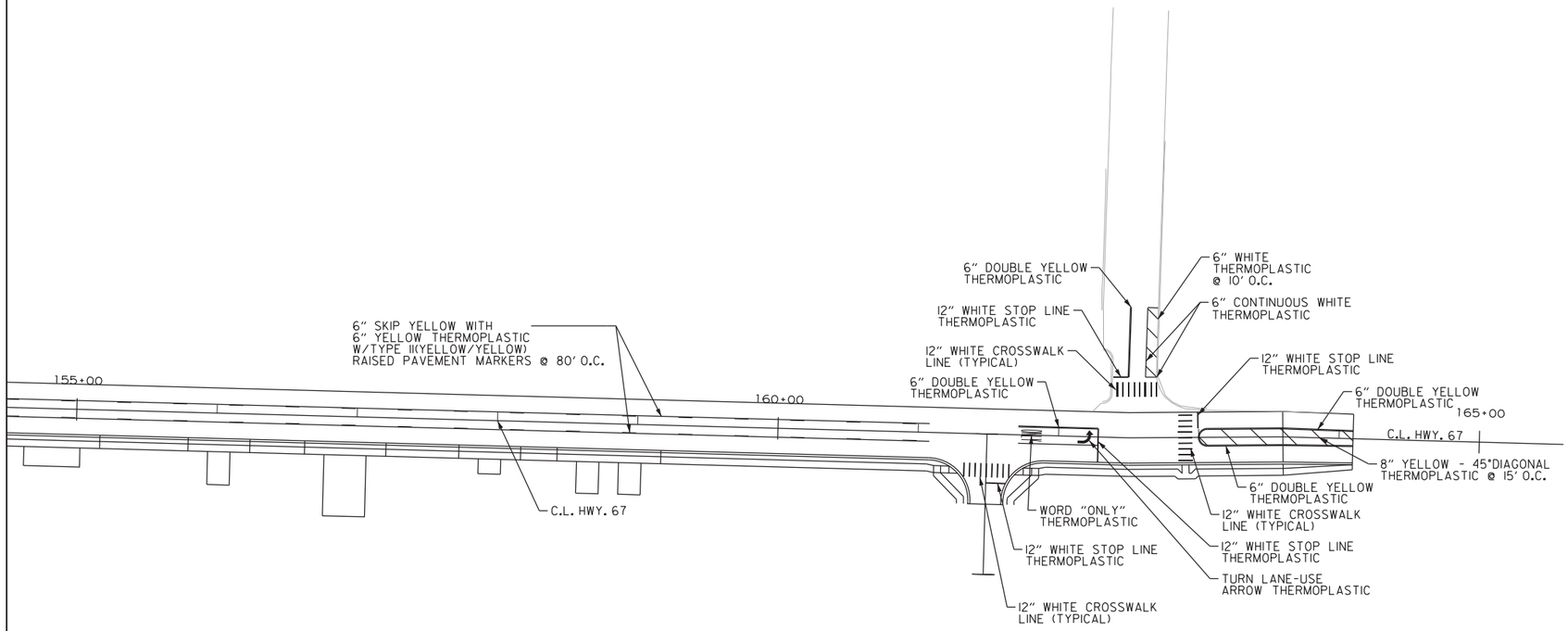

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		6	ARK.	070442	152	549
		SIGN PLACEMENT SHEET				

STATE OF ARKANSAS
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NICCI D. TINER
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INSTALL
SS-EXC-10-STA10+30EB

INSTALL
SS-OPD-10-STA11+70WB

INSTALL
SS-PPD-10-STA19+55EB

INSTALL
SS-PPD-10-STA19+70WB

INSTALL
SS-PPD-10-STA95+50SB

INSTALL
SS-PPD-10-STA99+25SB

INSTALL
SS-PINE-10-STA21+00SB

INSTALL
SS-BPS-10-STA100+50EB

INSTALL
SS-BPS-10-STA102+00NB

INSTALL
SS-BPS-10-STA100+90SB

INSTALL
SS-BPS-10-STA103+00SB

INSTALL
SS-BPS-10-STA104+50SB

INSTALL
SS-PINE-10-STA18+00EB

INSTALL
SS-PINE-10-STA18+00WB

PROFESSIONAL PARK DR

OFFICE PARK DR

EXECUTIVE CIR

PROFESSIONAL PARK DR
CUL-DE-SAC

PINE ST

HWY 5I - PINE ST

HWY 8 & 5I BYPASS

MATCH LINE STA 105+00

90+00
10+00
12+00
95+00
20+00
100+00
15+00
30+00

N

SCALE IN FEET
0 50 100 200

SIGN PLACEMENT SHEET

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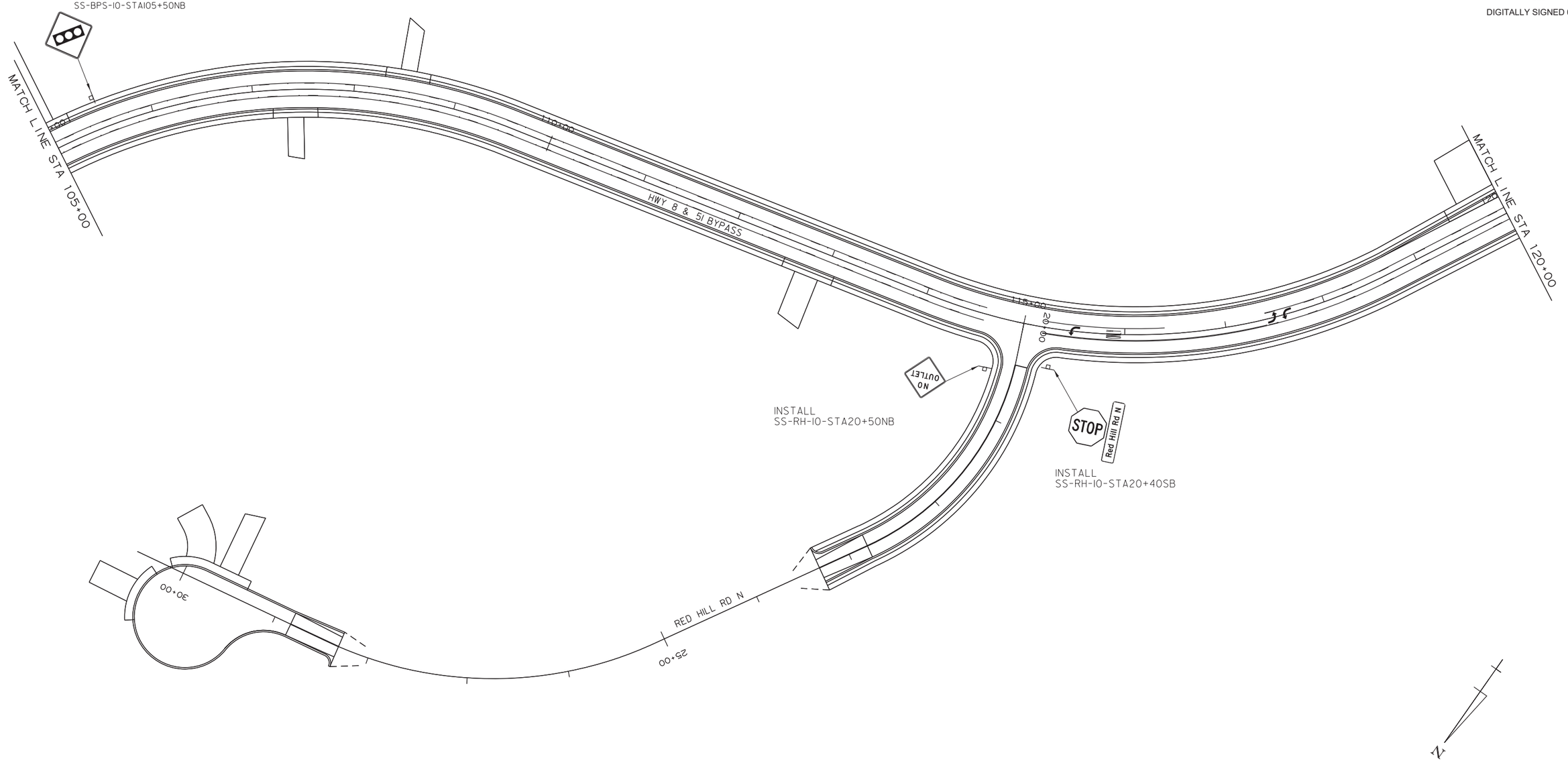

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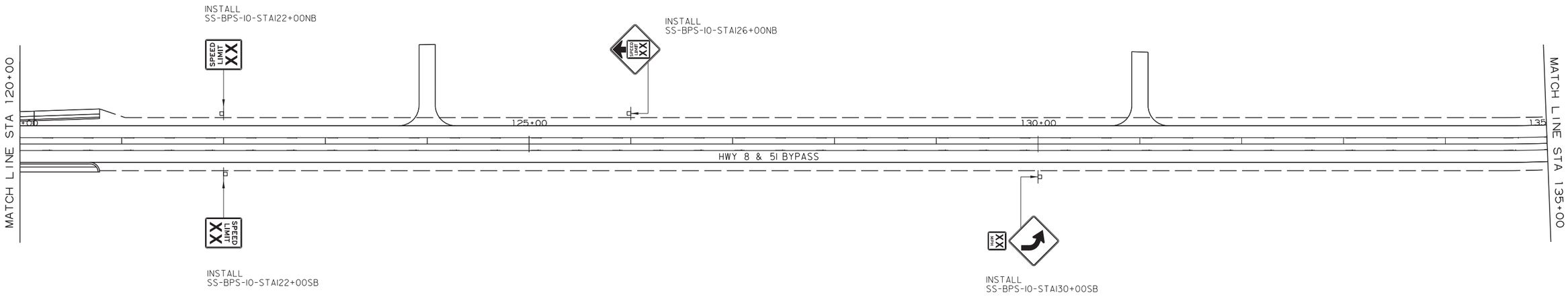

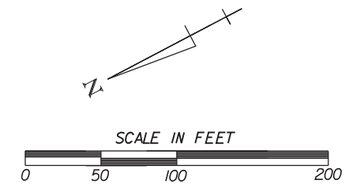

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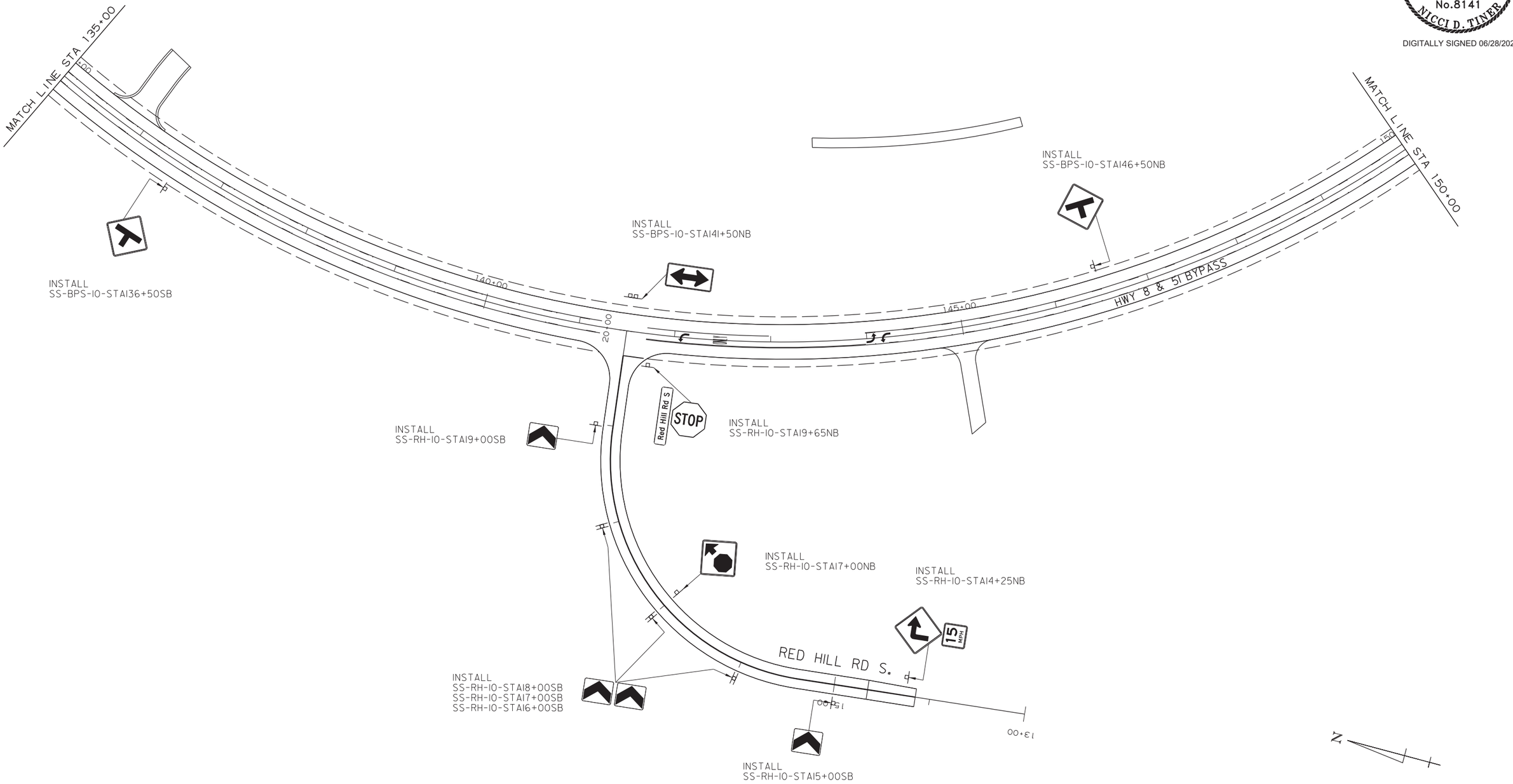
NICCI D. TINER

DIGITALLY SIGNED 06/28/2022



SIGN PLACEMENT SHEET

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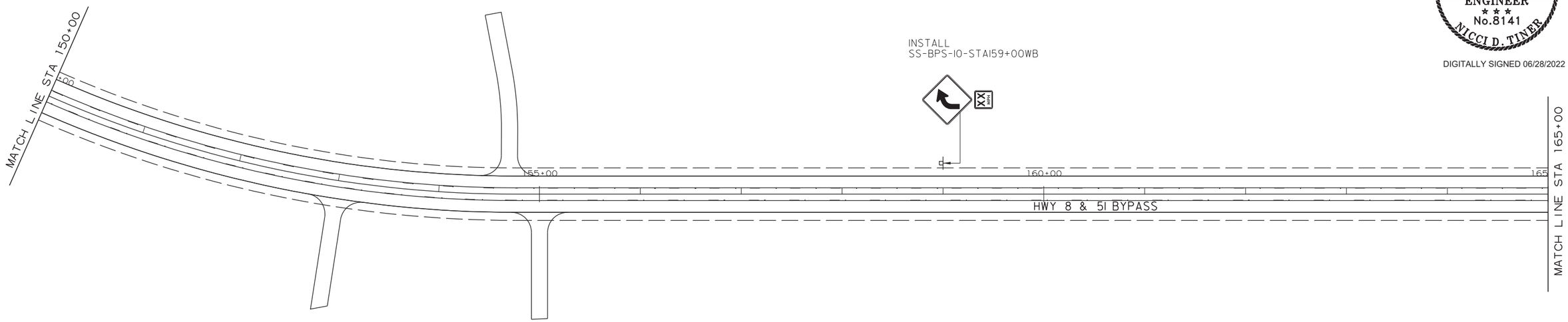
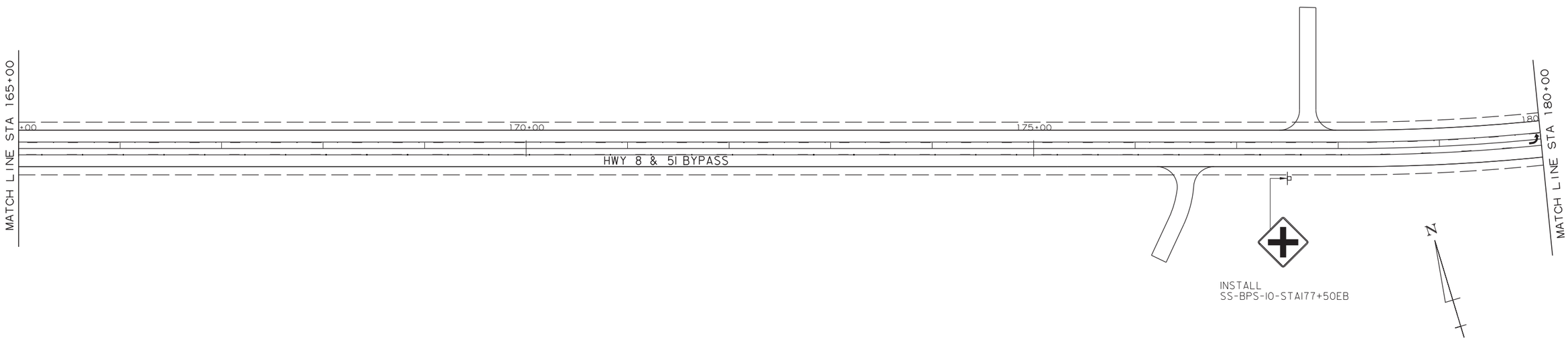
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	156	549
		SIGN PLACEMENT SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER

DIGITALLY SIGNED 06/28/2022





SIGN PLACEMENT SHEET

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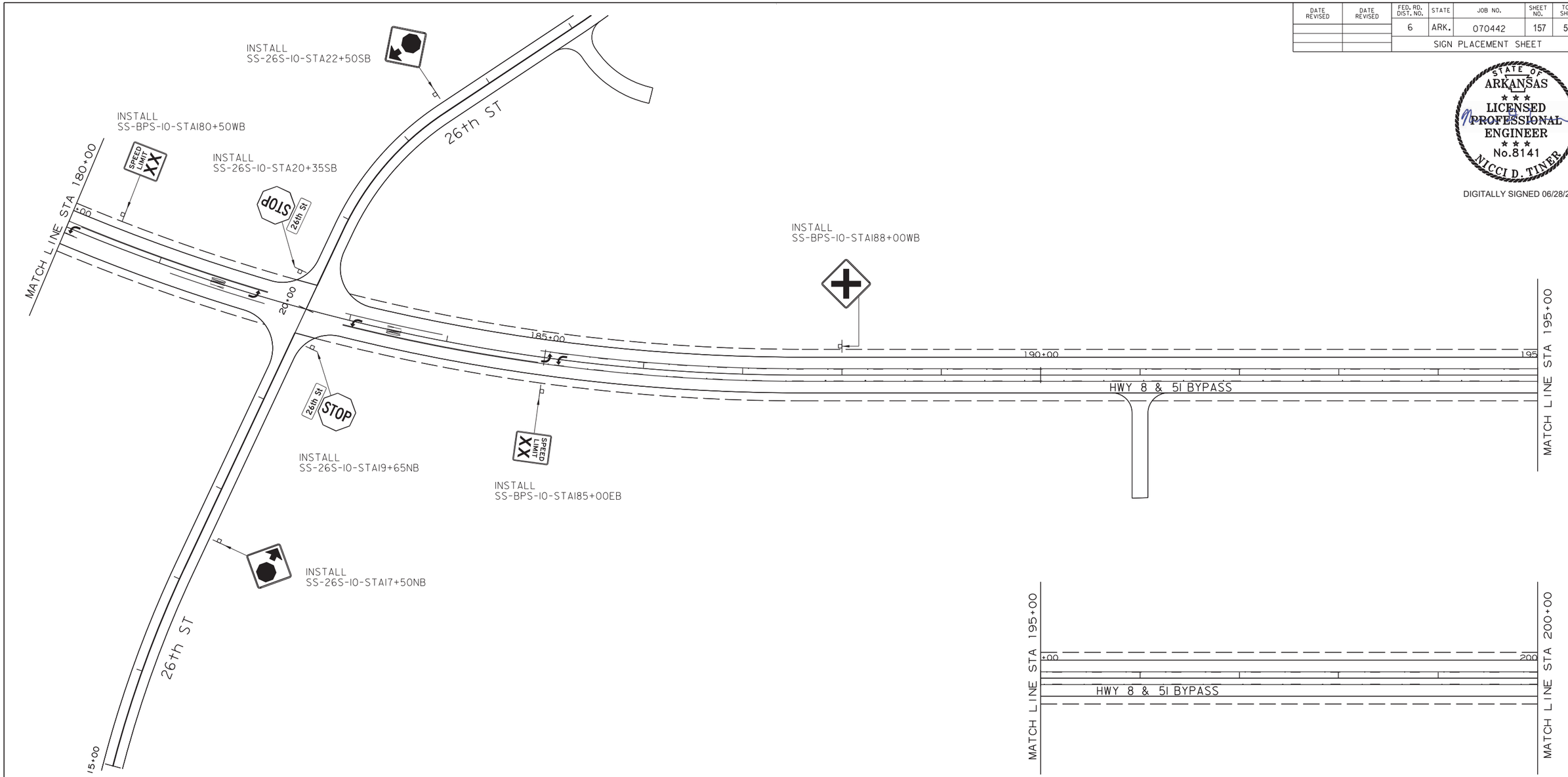
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	157	549
		SIGN PLACEMENT SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER

DIGITALLY SIGNED 06/28/2022



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SCALE IN FEET
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SIGN PLACEMENT SHEET

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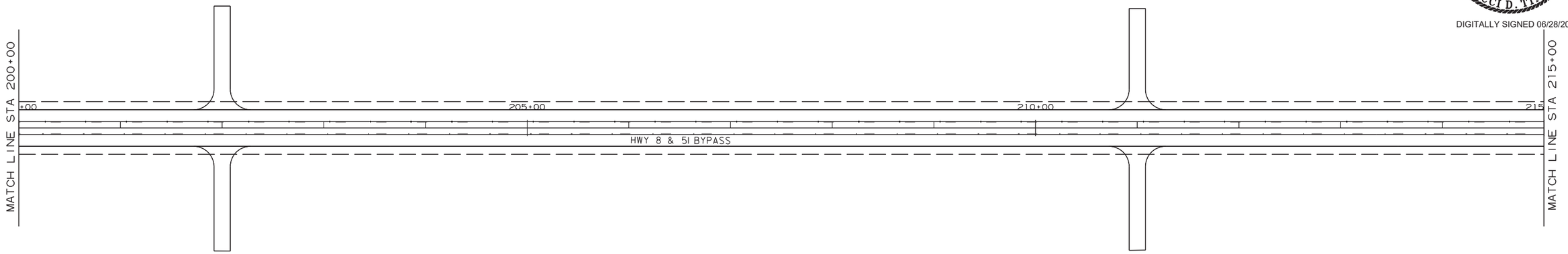
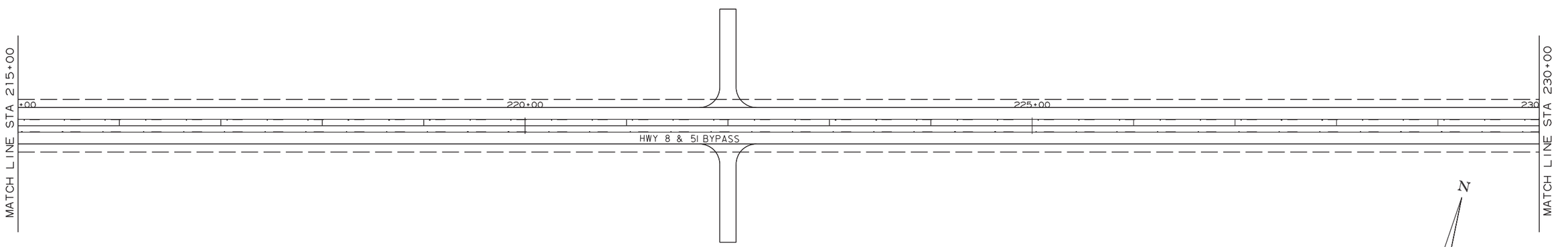
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	158	549
		SIGN PLACEMENT SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER

DIGITALLY SIGNED 06/28/2022





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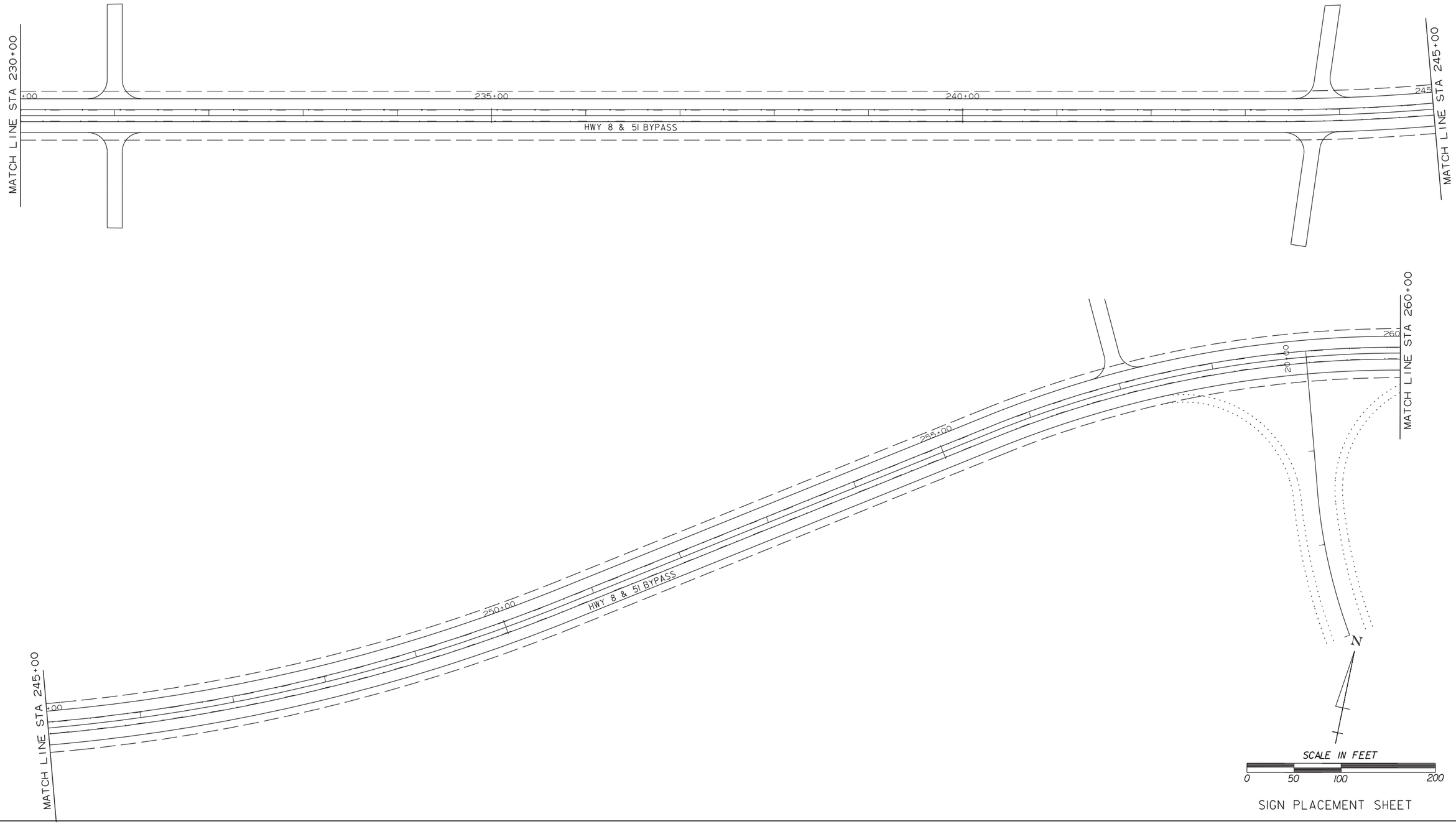
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	159	549
		SIGN PLACEMENT SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER

DIGITALLY SIGNED 06/28/2022



SIGN PLACEMENT SHEET

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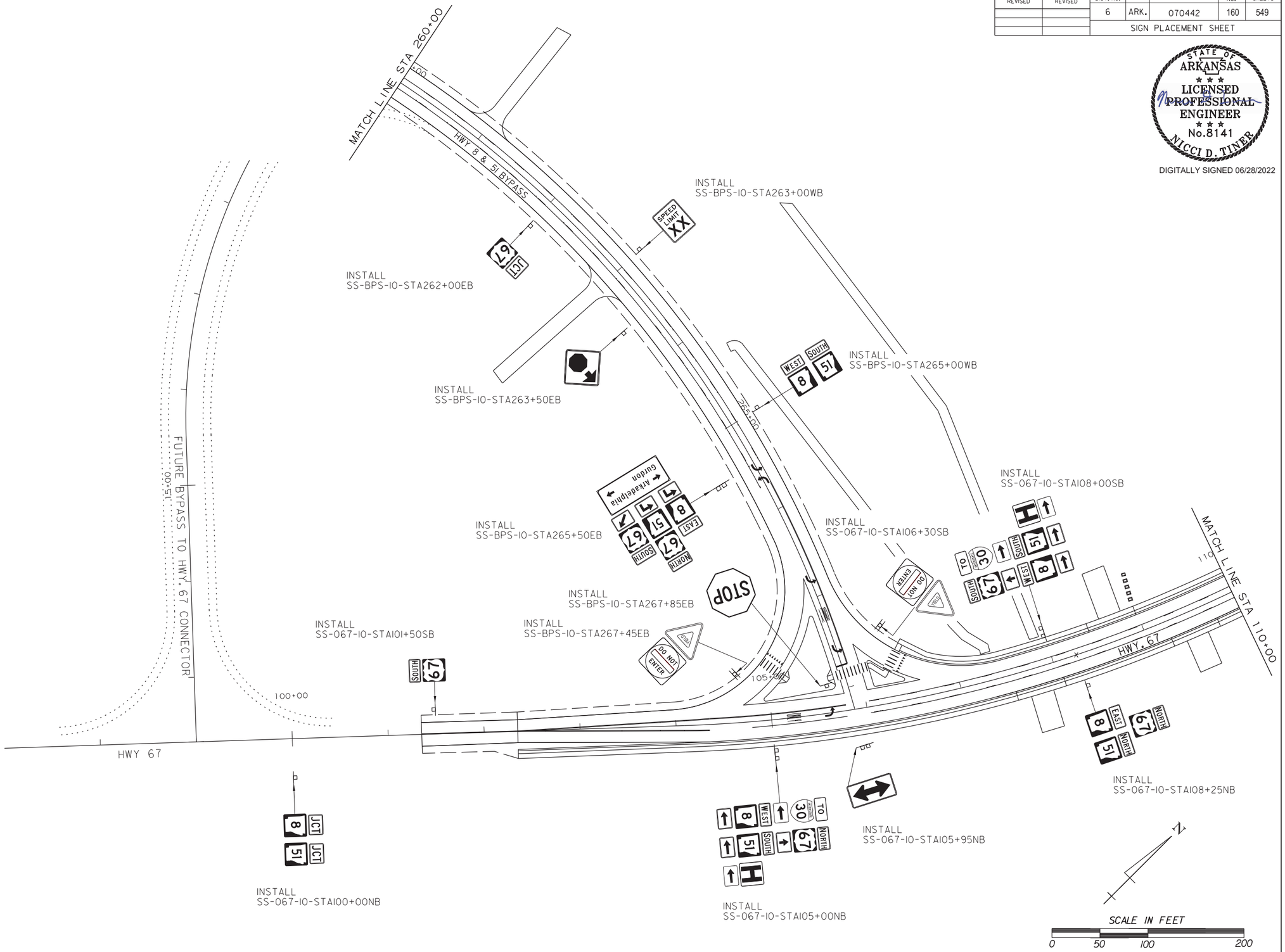
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	160	549
		SIGN PLACEMENT SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER

DIGITALLY SIGNED 06/28/2022



SIGN PLACEMENT SHEET

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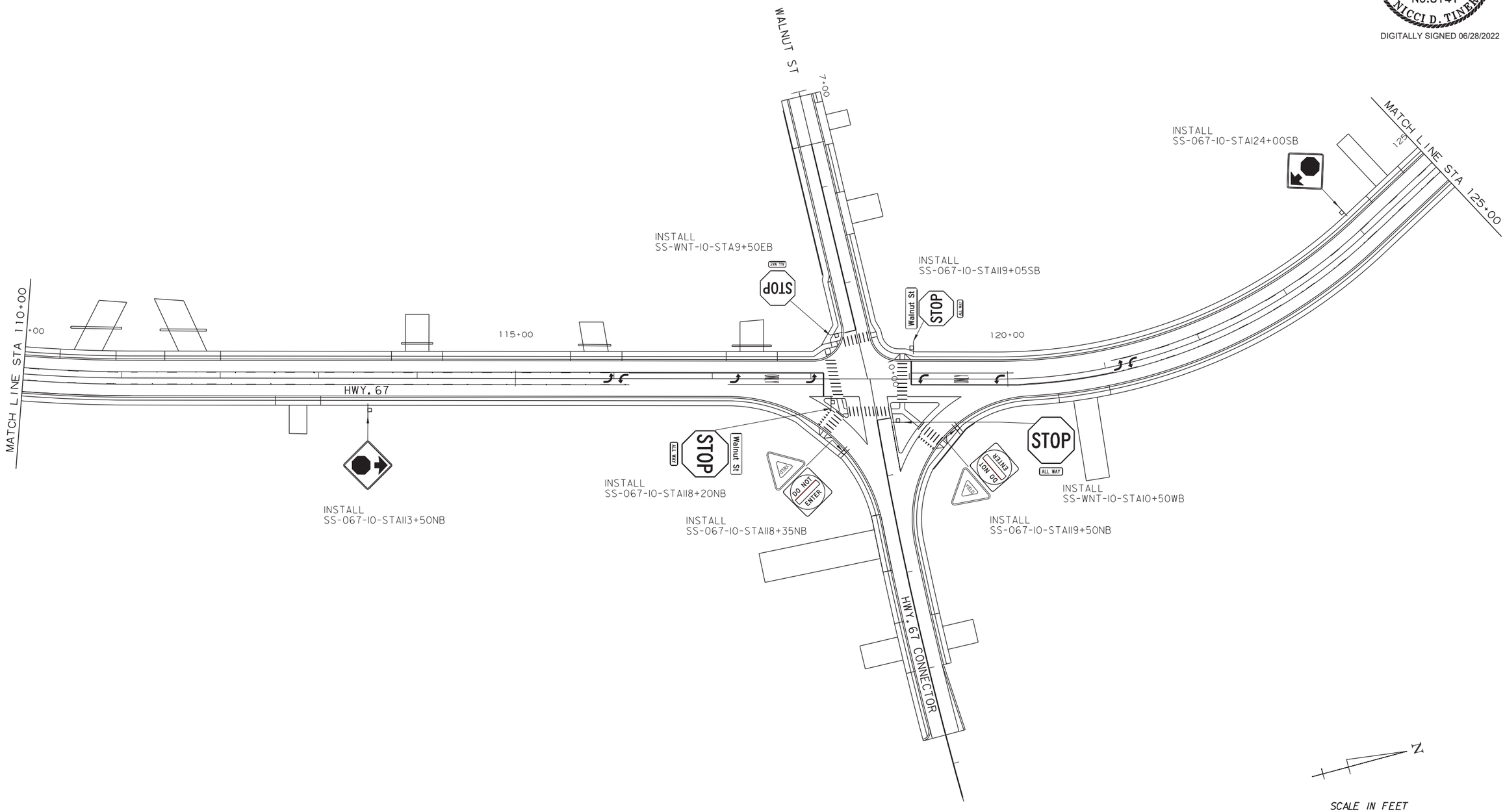
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	161	549
		SIGN PLACEMENT SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER
DIGITALLY SIGNED 06/28/2022



SIGN PLACEMENT SHEET

rnfortner
6/28/2022 10:32:01 AM
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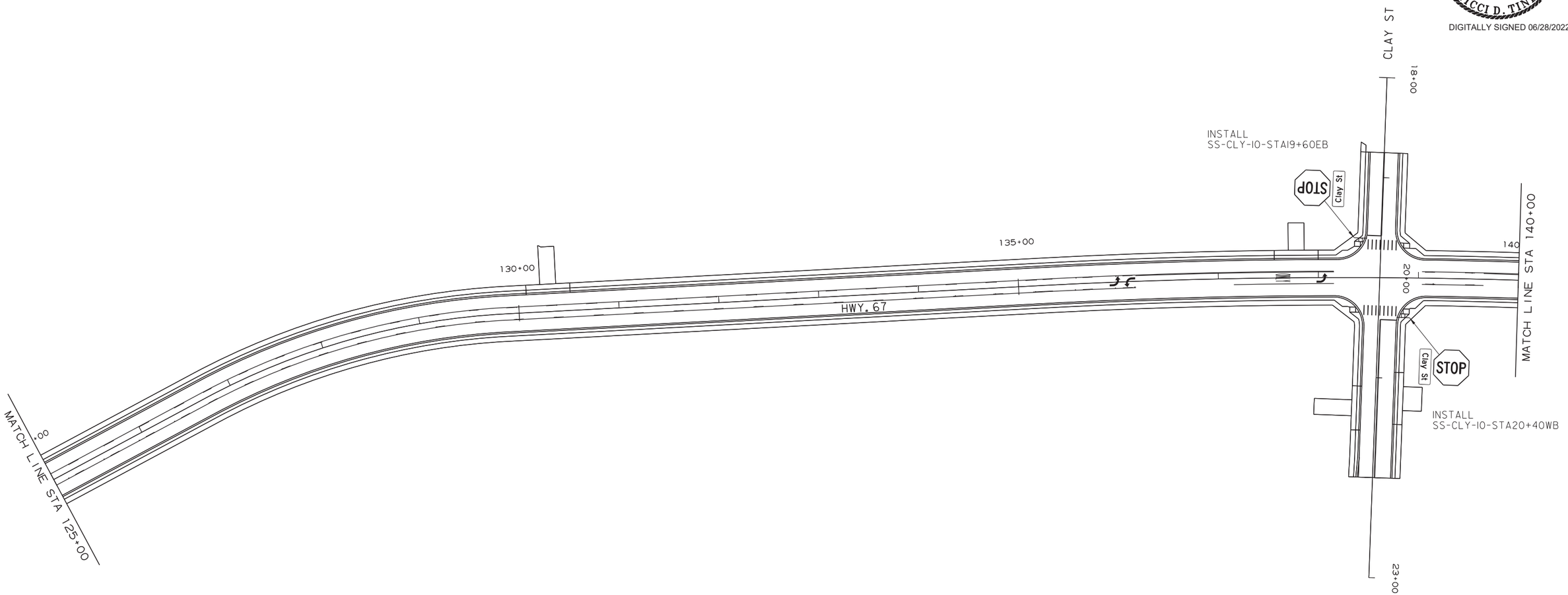
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	162	549
		SIGN PLACEMENT SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER
DIGITALLY SIGNED 06/28/2022



SIGN PLACEMENT SHEET

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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	163	549
		SIGN PLACEMENT SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER
DIGITALLY SIGNED 06/28/2022

MAIN ST
CLINTON ST
CADDO ST
PINE ST
27+00
38+00
40+00
50+00
MATCH LINE STA 140+00
MATCH LINE STA 155+00
HWY. 67 - N. 10TH ST
HWY 67 & HWY 7 - N. 10TH ST
HWY 7, 8 & 51
HICKORY ST
33+00
42+00
55+00
62+00
145+00
150+00
155

INSTALL SS-MNS-I0-STA29+60EB
INSTALL SS-067-I0-STAI41+60SB
INSTALL SS-CLNT-I0-STA39+60EB
INSTALL SS-067-I0-STAI44+40SB
INSTALL SS-067-I0-STAI48+00SB
INSTALL SS-008-I0-STA00+00EB
INSTALL SS-067-I0-STAI53+20SB
INSTALL SS-067-I0-STAI53+75SB
INSTALL SS-067-I0-STAI40+80NB
INSTALL SS-MNS-I0-STA30+40WB
INSTALL SS-067-I0-STAI43+00NB
INSTALL SS-CLNT-I0-STA40+50WB
INSTALL SS-067-I0-STAI44+50NB
INSTALL SS-067-I0-STAI45+85NB
INSTALL SS-CAD-I0-STA50+50WB
INSTALL SS-067-I0-STAI48+00NB
INSTALL SS-CAD-I0-STA5I+75WB
INSTALL SS-CAD-I0-STA54+00WB
INSTALL SS-067-I0-STAI49+I5NB
INSTALL SS-067-I0-STAI50+00NB
INSTALL SS-067-I0-STAI5I+I5EB
INSTALL SS-067-I0-STAI53+20NB
INSTALL SS-067-I0-STAI54+30NB

N

SCALE IN FEET
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SIGN PLACEMENT SHEET

rnfortner
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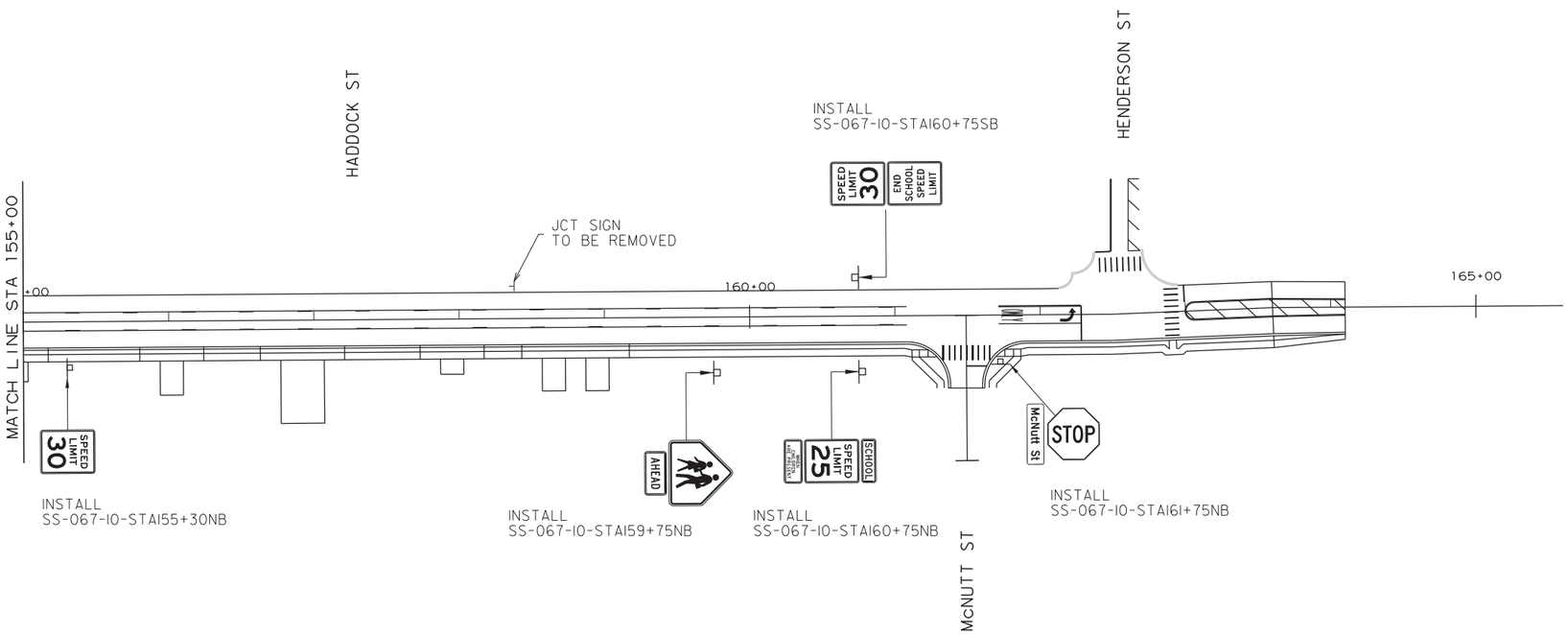
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	164	549
		SIGN PLACEMENT SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER

DIGITALLY SIGNED 06/28/2022



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SIGN PLACEMENT SHEET

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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	165	549
		SIGN DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER

DIGITALLY SIGNED 07/05/2022

M4-5 (24" X 12")
MI-1(24" X 24")
M6-1(21" X 15")
M3-4 (24" X 12")
MI-5 (24" X 24")
M6-1(21" X 15")

D9-1(24" X 24")
M6-3 (21" X 15")
M3-3 (24" X 12")
MI-5 (24" X 24")
M6-1(21" X 15")

SS-BPS-10-STA102+00NB

M4-5 (24" X 12")
MI-1(24" X 24")
M6-1(21" X 15")

SS-PPD-10-STA99+25SB

D9-1(24" X 24")
M6-1(21" X 15")
M3-2 (24" X 12")
MI-5 (24" X 24")
M6-2R (21" X 15")

M3-1(24" X 24")
MI-5 (24" X 24")
M6-2R (21" X 15")

SS-PINE-10-STA18+00EB

JCT
INTERSTATE
30
M2-1(21" X 15")
MI-1(24" X 24")

SS-PINE-10-STA21+00WB

M3-2 (24" X 12")
MI-5 (24" X 24")

M3-1(24" X 12")
MI-5 (24" X 24")

SS-BPS-10-STA103+00SB

M3-4 (24" X 12")
MI-5 (24" X 24")

M3-3 (24" X 12")
MI-5 (24" X 24")

SS-PINE-10-STA18+00WB
SS-BPS-10-STA265+00WB

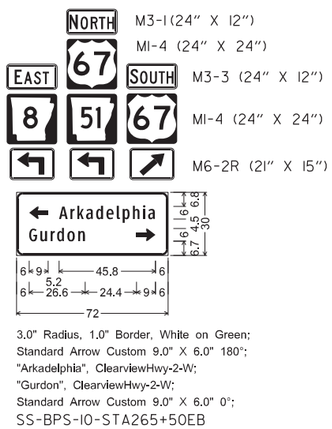
JCT
67
M2-1(21" X 15")
MI-4 (24" X 24")

SS-BPS-10-STA262+00EB
SS-CAD-10-STA54+00WB

SOUTH
67
M3-3 (24" X 12")
MI-4 (24" X 24")

SS-067-10-STA101+50SB

NORTH
67
M3-1(24" X 12")
MI-4 (24" X 24")
M3-2 (24" X 12")
MI-5 (24" X 24")
MI-5 (24" X 24")
M5-1L (21" X 15")
M5-1L (21" X 15")



3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 180°;
"Arkadelphia", ClearviewHwy-2-W;
"Gurdon", ClearviewHwy-2-W;
Standard Arrow Custom 9.0" X 6.0" 0°;
SS-BPS-10-STA265+50EB

M4-5 (24" X 12")
MI-1(24" X 24")
M6-1(21" X 15")
M3-4 (24" X 12")
MI-5 (24" X 24")
M6-1(21" X 15")

M3-1(24" X 24")
MI-4 (24" X 24")
M6-3 (21" X 15")
M3-3 (24" X 12")
MI-5 (24" X 24")
D9-1(24" X 24")
M6-1(21" X 15")
M6-1(21" X 15")

SS-067-10-STA105+00NB

M3-3 (24" X 12")
MI-4 (24" X 24")
M6-3 (21" X 15")
M3-4 (24" X 12")
MI-5 (24" X 24")
M6-1(21" X 15")

M4-5 (24" X 12")
MI-1(24" X 24")
M6-1(21" X 15")
M3-3 (24" X 12")
MI-5 (24" X 24")
D9-1(24" X 24")
M6-1(21" X 15")
M6-1(21" X 15")

SS-067-10-STA108+00SB

NORTH
67
M3-1 (24" X 12")
MI-4 (24" X 24")
M2-1(21" X 15")
MI-5 (24" X 24")
M3-2 (24" X 12")
MI-5 (24" X 24")

M2-1 (21" X 15")
MI-5 (24" X 24")

SS-067-10-STA100+00NB

M3-1 (24" X 12")
MI-5 (24" X 24")

SS-067-10-STA108+25NB

JCT
7
M2-1 (21" X 15")
MI-5 (24" X 24")

SS-067-10-STA143+00NB

SOUTH
67
M3-3 (24" X 12")
MI-4 (24" X 24")
M3-4 (24" X 12")
MI-5 (24" X 24")

M3-3 (24" X 12")
MI-5 (24" X 24")

SS-067-10-STA144+40SB

SIGN DETAIL SHEET

rnfortner 7/5/2022 12:33:14 PM
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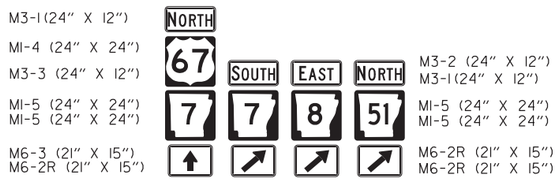
REVISED DATE:

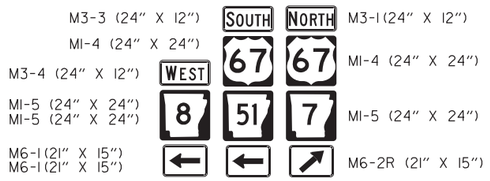
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	166	549
		SIGN DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER

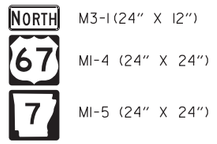
DIGITALLY SIGNED 07/05/2022



SS-067-I0-STAI44+50NB



SS-CAD-I0-STA5I+75WB



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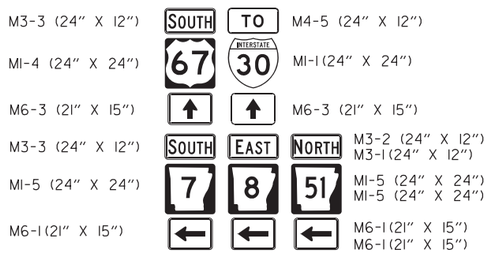
SS-067-I0-STAI53+20NB



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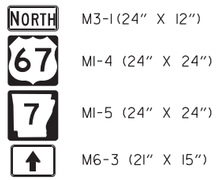
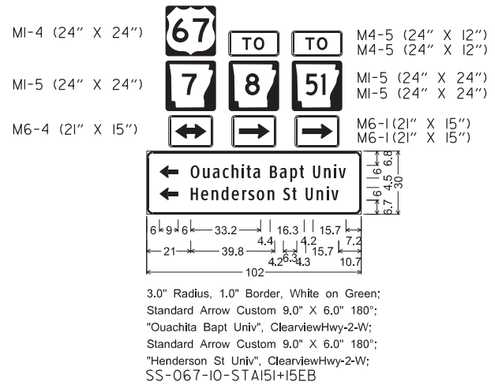
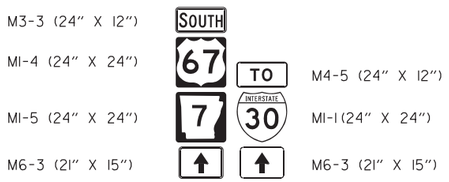


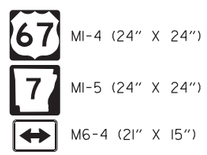
SS-067-I0-STAI50+00NB



3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 180°;
"Ouachita Bapt Univ", ClearviewHwy-2-W;
Standard Arrow Custom 9.0" X 6.0" 180°;
"Henderson St Univ", ClearviewHwy-2-W;
SS-067-I0-STAI5I+I5EB



SS-067-I0-STAI53+20SB



SS-008-I0-STA00+00EB

SIGN DETAIL SHEET

rntortner 7/5/2022 12:33:14 PM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	167	549
		SIGN DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER

DIGITALLY SIGNED 07/05/2022

R1-1 (36" X 36")

SS-EXC-10-STA10+30EB
SS-OPD-10-STA11+70WB
SS-PPD-10-STA19+70WB
SS-RH-10-STA19+65NB
SS-RH-10-STA20+40SB
SS-26S-10-STA19+65NB
SS-26S-10-STA20+35SB
SS-CLY-10-STA19+60EB
SS-CLY-10-STA20+40WB
SS-CLNT-10-STA39+60EB
SS-CLNT-10-STA40+50WB
SS-067-10-STA149+15NB
SS-067-10-STA153+75SB
SS-067-10-STA154+30NB
SS-067-10-STA161+75NB

R1-1 (36" X 36")
R1-3P (18" X 6")

SS-WNT-10-STA9+50EB
SS-067-10-STA119+05SB
SS-MNS-10-STA29+60EB
SS-MNS-10-STA30+40WB
SS-067-10-STA140+80NB
SS-067-10-STA141+60SB

R1-1 (48" X 48")

SS-BPS-10-STA267+85EB

R1-1 (48" X 48")
R1-3P (30" X 12")

SS-067-10-STA118+20NB
SS-WNT-10-STA10+50WB

R5-1 (36" X 36")

R1-2 (48" X 48" X 48")

SS-BPS-10-STA100+50EB
SS-BPS-10-STA100+90SB
SS-BPS-10-STA267+45EB
SS-067-10-STA106+30SB
SS-067-10-STA118+35NB
SS-067-10-STA119+50NB
SS-067-10-STA145+85NB
SS-CAD-10-STA50+50WB

R2-1 (24" X 30")

SS-067-10-STA155+30NB

R2-1 (24" X 30")

SS-BPS-10-STA104+50SB
SS-BPS-10-STA122+00NB
SS-BPS-10-STA122+00SB
SS-BPS-10-STA180+50WB
SS-BPS-10-STA185+00EB
SS-BPS-10-STA263+00WB

W2-1 (36" X 36")

SS-BPS-10-STA177+50SB
SS-BPS-10-STA188+00WB

W2-2 (36" X 36")

SS-BPS-10-STA136+50SB (L)
SS-BPS-10-STA146+50NB (R)

W1-1R (36" X 36")
W13-1P (18" X 18")

SS-RH-10-STA14+25NB

W1-2L (36" X 36")
W13-1P (18" X 18")

SS-BPS-10-STA130+00SB

W1-2R (36" X 36")
W13-1P (18" X 18")

SS-BPS-10-STA159+00WB

W1-7 (48" X 24")

SS-BPS-10-STA141+50NB
SS-067-10-STA105+95NB

W1-8 (24" X 30")
W1-8 (24" X 30")

SS-RH-10-STA18+00SB
SS-RH-10-STA17+00SB
SS-RH-10-STA16+00SB

W1-8 (24" X 30")

SS-RH-10-STA19+00SB
SS-RH-10-STA15+00SB

W3-1 (36" X 36")

SS-RH-10-STA17+00NB
SS-26S-10-STA17+50NB
SS-26S-10-STA22+50SB
SS-BPS-10-STA263+50EB
SS-067-10-STA113+50NB
SS-067-10-STA124+00SB

W3-3 (36" X 36")

SS-PPD-10-STA95+50SB
SS-BPS-10-STA105+50NB

W3-5 (36" X 36")

SS-BPS-10-STA126+00NB

W14-2 (30" X 30")

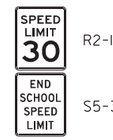
SS-PPD-10-STA19+55EB
SS-RH-10-STA20+50NB

S1-1 (36" X 36")
W16-9P (24" X 12")

SS-067-10-STA159+75NB

S4-3P (24" X 8")
R2-1 (24" X 30")
S4-2P (24" X 10")

SS-067-10-STA160+75NB



R2-1 (24" X 30")
S5-3 (24" X 30")

SS-067-10-STA160+75SB

SIGN DETAIL SHEET

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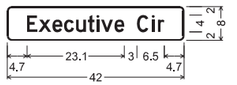
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	168	549
		SIGN DETAILS				

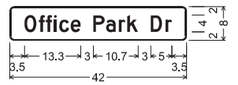
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER

DIGITALLY SIGNED 07/05/2022



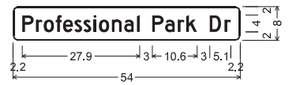
D3-1(3)_36x8;
1.0" Radius, 0.4" Border, White on Green;
"Executive", D 2K;
"Cir", D 2K;

SS-EXC-10-STA10+30EB



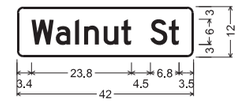
D3-1(3)_36x8;
1.0" Radius, 0.4" Border, White on Green;
"Office", D 2K;
"Park", D 2K; "Dr", D 2K;

SS-OPD-10-STA11+70WB



D3-1(3)_36x8;
1.0" Radius, 0.4" Border, White on Green;
"Professional", D 2K; "Park", D 2K;
"Dr", D 2K;

SS-PPD-10-STA19+70WB



D3-1(3)_36x8;
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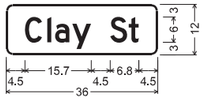
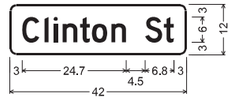
"Walnut", D 2K; "St", D 2K;

SS-067-10-STA18+20NB
SS-067-10-STA19+05SB



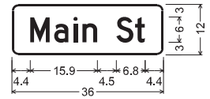
D3-1(3)_36x8;
1.5" Radius, 0.5" Border, White on Green;
"Clay", D 2K; "St", D 2K;

SS-CLY-10-STA19+60EB
SS-CLY-10-STA20+40WB



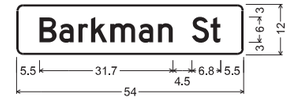
D3-1(3)_36x8;
1.5" Radius, 0.5" Border, White on Green;
"Clinton", D 2K; "St", D 2K;

SS-CLNT-10-STA39+60EB
SS-CLNT-10-STA40+50WB



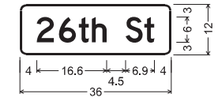
D3-1(3)_36x8;
1.5" Radius, 0.5" Border, White on Green;
"Main", D 2K; "St", D 2K;

SS-MNS-10-STA29+60EB
SS-MNS-10-STA30+40WB



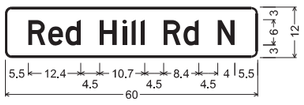
D3-1(3)_36x8;
1.5" Radius, 0.5" Border, White on Green;
"Barkman", D 2K; "St", D 2K;

SS-067-10-STA149+15NB



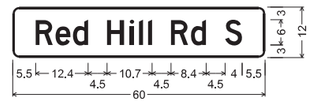
D3-1(3)_36x8;
1.5" Radius, 0.5" Border, White on Green;
"26th", D 2K; "St", D 2K;

SS-26S-10-STA20+35SB
SS-26S-10-STA19+65NB



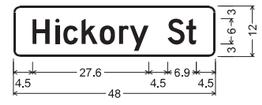
D3-1(3)_36x8;
1.5" Radius, 0.5" Border, White on Green;
"Red", D 2K; "Hill", D 2K; "Rd", D 2K;
"N", D 2K;

SS-RH-10-STA20+40SB



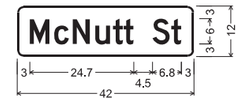
D3-1(3)_36x8;
1.5" Radius, 0.5" Border, White on Green;
"Red", D 2K; "Hill", D 2K; "Rd", D 2K;
"S", D 2K;

SS-RH-10-STA19+65NB



D3-1(3)_36x8;
1.5" Radius, 0.5" Border, White on Green;
"Hickory", D 2K; "St", D 2K;

SS-067-10-STA154+30NB



D3-1(3)_36x8;
1.5" Radius, 0.5" Border, White on Green;
"McNutt", D 2K; "St", D 2K;

SS-067-10-STA161+75NB

SIGN DETAIL SHEET

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WORKSPACE: AHTD
\\garverinc.local\gdata\Projects\2017\17017515 - AHTD Arkadelphia Bypass\Drawings\r070442_SIGN_17.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	169	549
		SIGN QUANTITIES				

STANDARD SIGN QUANTITIES
SQUARE TUBE POSTS (BOX 1 of 2)

SIGN NO./LOCATION	STANDARD ROADSIDE SIGNS TO BE MOUNTED	SQUARE TUBE POST ASSEMBLIES					
		G-1	G-2	G2-1	G2-2	G2-3	G2-6
		EACH	EACH	EACH	EACH	EACH	EACH
SS-EXC-10-STA10+30EB	R1-1, D3-1	1					
SS-OPD-10-STA11+70WB	R1-1, D3-1	1					
SS-PPD-10-STA19+55EB	W14-2	1					
SS-PPD-10-STA19+70WB	R1-1, D3-1	1					
SS-PPD-10-STA95+50SB	W3-3			1			
SS-PPD-10-STA99+25SB	M4-5, M1-1, M6-1	1					
SS-PINE-10-STA18+00EB	D9-1, M6-1 M3-2, M1-5, M6-2R; M3-1, M1-5, M6-2R				1		
SS-PINE-10-STA18+00WB	M3-4,M1-5 ; M3-3,M1-5		1				
SS-PINE-10-STA21+00SB	M2-1, M1-1	1					
SS-BPS-10-STA100+50EB	R1-2, R5-1					1	
SS-BPS-10-STA100+90SB	R1-2, R5-1					1	
SS-BPS-10-STA102+00NB	M4-5, M1-1, M6-1; D9-1, M6-3 M3-4, M1-5, M6-1; M3-3, M1-5, M6-1				1		
SS-BPS-10-STA103+00SB	M3-2,M1-5 ; M3-1,M1-5		1				
SS-BPS-10-STA104+50SB	R2-1	1					
SS-BPS-10-STA105+50NB	W3-3			1			
SS-RH-10-STA20+50NB	W14-2	1					
SS-RH-10-STA20+40SB	R1-1, D3-1	1					
SS-BPS-10-STA122+00NB	R2-1	1					
SS-BPS-10-STA122+00SB	R2-1	1					
SS-BPS-10-STA126+00NB	W3-5			1			
SS-BPS-10-STA130+00SB	W1-2L, W13-1P				1		
SS-BPS-10-STA136+50SB	W2-2			1			
SS-RH-10-STA14+25NB	W1-1R, W13-1P				1		
SS-RH-10-STA15+00SB	W1-8	1					
SS-RH-10-STA16+00SB	W1-8, W1-8	1					
SS-RH-10-STA17+00SB	W1-8, W1-8	1					
SS-RH-10-STA17+00NB	W3-1			1			
SS-RH-10-STA18+00SB	W1-8, W1-8	1					
SS-RH-10-STA19+00SB	W1-8	1					
SS-RH-10-STA19+65NB	R1-1, D3-1	1					
SS-BPS-10-STA141+50NB	W1-7			1			
SS-BPS-10-STA146+50NB	W2-2			1			
SS-BPS-10-STA159+00WB	W1-2R, W13-1P				1		
SS-BPS-10-STA177+50EB	W2-1			1			
SS-BPS-10-STA180+50WB	R2-1	1					
SS-26S-10-STA17+50NB	W3-1			1			
SS-26S-10-STA19+65NB	R1-1, D3-1	1					
SS-26S-10-STA20+35SB	R1-1, D3-1	1					
SS-26S-10-STA22+50SB	W3-1			1			
SS-BPS-10-STA185+00EB	R2-1	1					
SS-BPS-10-STA188+00WB	W2-1			1			
SS-BPS-10-STA262+00EB	M2-1, M1-4	1					
SS-BPS-10-STA263+00WB	R2-1	1					
SS-BPS-10-STA263+50EB	W3-1			1			
SS-BPS-10-STA265+00EB	M3-4, M1-5; M3-3, M1-5			1			
SS-BPS-10-STA265+50WB	D1-2; M3-2, M1-5, M5-1L; M3-1, M1-4, M1-5, M5-1L; M-3-3, M1-4, M6-2R						1
SS-BPS-10-STA267+45EB	R1-2, R5-1					1	
SS-BPS-10-STA267+85EB	R1-1 (48)			1			
SS-067-10-STA100+00NB	M2-1, M1-5 ; M2-1, M1-5			1			
SS-067-10-STA101+50SB	M3-3, M1-4	1					
SS-067-10-STA105+00NB	M4-5, M1-1, M6-1; M3-1, M1-4, M6-3 M3-4, M1-5, M6-1; M3-3, M1-5, M6-1; D9-1, M6-1				1		
SS-067-10-STA105+95NB	W1-7			1			
SS-067-10-STA106+30SB	R1-2, R5-1					1	
SS-067-10-STA108+00SB	M3-3, M1-4, M6-3; M4-5, M1-1, M6-1 M3-4, M1-5, M6-1; M3-3, M1-5, M6-1; D9-1, M6-1				1		
SS-067-10-STA108+25NB	M3-1, M1-4; M3-2, M1-5; M3-1, M1-5			1			
SS-067-10-STA113+50NB	W3-1			1			
SS-067-10-STA118+20NB	R1-1(48), R1-3P, D3-1			1			
SS-067-10-STA118+35NB	R1-2, R5-1					1	
SS-067-10-STA119+05SB	R1-1, R1-3P, D3-1	1					
SS-067-10-STA119+50NB	R1-2, R5-1					1	
SS-067-10-STA124+00SB	W3-1			1			
SS-WNT-10-STA9+50EB	R1-1, R1-3P	1					
SS-WNT-10-STA10+50WB	R1-1(48), R1-3P			1			
SS-CLY-10-STA19+60EB	R1-1, D3-1	1					
SS-CLY-10-STA20+40WB	R1-1, D3-1	1					
SS-MNS-10-STA29+60EB	R1-1, R1-3P, D3-1	1					
SS-MNS-10-STA30+40WB	R1-1, R1-3P, D3-1	1					
SS-067-10-STA140+80NB	R1-1, R1-3P	1					
SUBTOTALS		31	2	21	7	6	1

STANDARD SIGN QUANTITIES
SQUARE TUBE POSTS (BOX 2 of 2)

SIGN NO./LOCATION	STANDARD ROADSIDE SIGNS TO BE MOUNTED	SQUARE TUBE POST ASSEMBLIES					
		G-1	G-2	G2-1	G2-2	G2-3	G2-6
		EACH	EACH	EACH	EACH	EACH	EACH
SS-067-10-STA141+60SB	R1-1, R1-3P	1					
SS-067-10-STA143+00NB	M2-1, M1-5	1					
SS-CLNT-10-STA39+60EB	R1-1, D3-1	1					
SS-CLNT-10-STA40+50WB	R1-1, D3-1	1					
SS-067-10-STA144+40SB	M3-3, M1-4; M3-4, M1-5; M3-3, M1-5				1		
SS-067-10-STA144+50NB	M3-1, M1-4, M1-5, M6-3; M3-3, M1-5, M6-2R; M3-2, M1-5,M6-2R; M3-1, M1-5, M6-2R				1		
SS-067-10-STA145+85NB	R1-2, R5-1					1	
SS-CAD-10-STA50+50WB	R1-2, R5-1					1	
SS-CAD-10-STA51+75WB	M3-4, M1-5, M6-1; M3-3, M1-4, M1-5, M6-1; M3-1, M1-4,M1-5, M6-2R				1		
SS-CAD-10-STA54+00WB	M2-1, M1-4	1					
SS-067-10-STA148+00NB	M3-1, M1-4, M1-5	1					
SS-067-10-STA148+00SB	M3-3, M1-4, M6-3; M4-5, M1-1, M6-3 M3-3, M1-5, M6-1; M3-2, M1-5, M6-1; M3-1, M1-5, M6-1				1		
SS-067-10-STA149+15NB	R1-1, D3-1	1					
SS-067-10-STA150+00NB	M3-1, M1-4, M1-5, M6-3	1					
SS-067-10-STA151+15EB	D1-2 M1-4, M1-5, M6-4; M4-5, M1-5, M6-1; M4-5, M1-5, M6-1						1
SS-008-10-STA00+00EB	M1-4, M1-5, M6-4	1					
SS-067-10-STA153+20NB	M3-1, M1-4, M1-5	1					
SS-067-10-STA153+20SB	M3-3, M1-4, M1-5, M6-3; M4-5, M1-1, M6-3				1		
SS-067-10-STA153+75SB	R1-1	1					
SS-067-10-STA154+30NB	R1-1, D3-1	1					
SS-067-10-STA155+30NB	R2-1	1					
SS-067-10-STA159+75NB	S1-1, W16-9P	1					
SS-067-10-STA160+75NB	S4-3P, R2-1, S4-2P	1					
SS-067-10-STA160+75SB	R2-1, S5-3	1					
SS-067-10-STA161+75NB	R1-1, D3-1	1					
SUBTOTAL		17	0	0	5	2	1
TOTAL		48	2	21	12	8	2

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER

DIGITALLY SIGNED 07/05/2022

SIGN QUANTITY SHEET

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WORKSPACE: AHTD
\\garverinc.local\gdata\Projects\2017\17015\5 - AHTD Arkadelphia Bypass\Drawings\r070442_SIGN_18.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	170	549
		SIGN QUANTITIES				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER

DIGITALLY SIGNED 07/05/2022

STANDARD ROADSIDE SIGN
SHEET ALUMINUM 0.100" THICKNESS (5 SF OR LESS)

SIGN NO.	SIZE OF SIGN	UNIT AREA (SQ. FT.)	QUANTITY REQUIRED	TOTAL SIGN AREA (SQ. FT.)	LEGEND/BACKGROUND
D9-1	24" x 24"	4.00	4	16.00	WHITE/BLUE
M1-1	24" x 24"	4.00	7	28.00	WHITE/BLUE
M1-4	24" x 24"	4.00	19	76.00	BLACK/WHITE
M1-5	24" x 24"	4.00	41	164.00	BLACK/WHITE
M2-1	21" x 15"	2.19	1	2.19	WHITE/BLUE
M2-1	21" x 15"	2.19	5	10.94	BLACK/WHITE
M3-1	24" x 12"	2.00	13	26.00	BLACK/WHITE
M3-2	24" x 12"	2.00	6	12.00	BLACK/WHITE
M3-3	24" x 12"	2.00	15	30.00	BLACK/WHITE
M3-4	24" x 12"	2.00	7	14.00	BLACK/WHITE
M4-5	24" x 12"	2.00	6	12.00	WHITE/BLUE
M4-5	24" x 12"	2.00	2	4.00	BLACK/WHITE
M5-1L	21" x 15"	2.19	2	4.38	BLACK/WHITE
M6-1	21" x 15"	2.19	7	15.31	WHITE/BLUE
M6-1	21" x 15"	2.19	13	28.44	BLACK/WHITE
M6-2R	21" x 15"	2.19	7	15.31	BLACK/WHITE
M6-3	21" x 15"	2.19	3	6.56	BLUE/WHITE
M6-3	21" x 15"	2.19	6	13.13	BLACK/WHITE
M6-4	21" x 15"	2.19	2	4.38	BLACK/WHITE
R1-3P	18" x 6"	0.75	6	4.50	WHITE/RED
R1-3P	30" x 12"	2.50	2	5.00	WHITE/RED
R2-1	24" x 30"	5.00	9	45.00	BLACK/WHITE
S4-2P	24" x 10"	1.67	1	1.67	BLACK/WHITE
S4-3P	24" x 8"	1.33	1	1.33	BLACK/FL.YELLOW-GRN
S5-3	24" x 30"	5.00	1	5.00	BLACK/WHITE
W1-8	24" x 30"	5.00	8	40.00	BLACK/YELLOW
W13-1P	18" x 18"	2.25	3	6.75	BLACK/YELLOW
W16-9P	24" x 12"	2.00	1	2.00	BLACK/FL.YELLOW-GRN
TOTAL 0.100" THICKNESS				**593.89**	

STANDARD ROADSIDE SIGNS
SHEET ALUMINUM 0.125" THICKNESS (GREATER THAN 5 SF)

SIGN NO.	SIZE OF SIGN	UNIT AREA (SQ. FT.)	QUANTITY REQUIRED	TOTAL SIGN AREA (SQ. FT.)	LEGEND/BACKGROUND
R1-1	36" x 36"	7.46	21	156.66	WHITE/RED
R1-1	48" x 48"	13.25	3	39.75	WHITE/RED
R1-2	48" x 48" x 48"	6.932	8	55.46	RED/WHITE
R5-1	36" x 36"	9	8	72.00	RED/WHITE
S1-1	36" x 36"	9	1	9.00	BLACK/FL.YELLOW-GRN
W1-1R	36" x 36"	9	1	9.00	BLACK/YELLOW
W1-2L	36" x 36"	9	1	9.00	BLACK/YELLOW
W1-2R	36" x 36"	9	1	9.00	BLACK/YELLOW
W1-7	48" x 24"	8	2	16.00	BLACK/YELLOW
W2-1	36" x 36"	9	2	18.00	BLACK/YELLOW
W2-2	36" x 36"	9	2	18.00	BLACK/YELLOW
W3-1	36" x 36"	9	6	54.00	BLACK/YELLOW
W3-3	36" x 36"	9	2	18.00	BLACK/YELLOW
W3-5	36" x 36"	9	1	9.00	BLACK/YELLOW
W14-2	30" x 30"	6.25	2	12.50	BLACK/YELLOW
TOTAL 0.125" THICKNESS				**505.37**	

DIRECTIONAL GUIDE SIGNS AND GROUND MOUNTED STREET NAME SIGNS

SIGN NO.	SIZE OF SIGN	UNIT AREA (SQ. FT.)	QUANTITY REQUIRED	TOTAL SIGN AREA (SQ. FT.)	LEGEND/BACKGROUND
D1-2	72" x 30"	15	1	15.00	WHITE/GREEN
D1-2	102" x 30"	21.25	1	21.25	WHITE/GREEN
D3-1	42" x 8"	2.33	1	2.33	WHITE/GREEN
D3-1	42" x 8"	2.33	1	2.33	WHITE/GREEN
D3-1	54" x 8"	3	1	3.00	WHITE/GREEN
D3-1	42" x 12"	3.5	2	7.00	WHITE/GREEN
D3-1	36" x 12"	3	2	6.00	WHITE/GREEN
D3-1	42" x 12"	3.5	2	7.00	WHITE/GREEN
D3-1	36" x 12"	3	2	6.00	WHITE/GREEN
D3-1	54" x 12"	4.5	1	4.50	WHITE/GREEN
D3-1	36" x 12"	3	2	6.00	WHITE/GREEN
D3-1	60" x 12"	5	1	5.00	WHITE/GREEN
D3-1	60" x 12"	5	1	5.00	WHITE/GREEN
D3-1	48" x 12"	4	1	4.00	WHITE/GREEN
D3-1	42" x 12"	3.5	1	3.50	WHITE/GREEN
				97.91	

ITEM NUMBER	ITEM	UNIT	ESTIMATED QUANTITY
SP & 725	GUIDE SIGN - ROADSIDE MOUNTED (DEMOUNTABLE LEGEND)	SQ. FT.	98
SP & 726	STANDARD SIGN	SQ. FT.	1100
SP	OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS (TYPE G-1)	EACH	48
SP	OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS (TYPE G-2)	EACH	2
SP	OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS (TYPE G2-1)	EACH	21
SP	OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS (TYPE G2-2)	EACH	12
SP	OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS (TYPE G2-3)	EACH	8
SP	OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS (TYPE G2-6)	EACH	2

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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	171	549
		SOIL BORING LOG				

DIGITALLY SIGNED 06/28/2022

SOIL BORING LOG

BORING NO.	ALIGNMENT	APPROX. STATION	SAMPLE DEPTH (ft)	WATER CONTENT (%)	ATTERBERG LIMITS			PERCENT PASSING #200	UNIFIED CLASS.	AASHTO CLASS.
					LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX			
5	EYPASS	121+00, 10' LT.	0.5-1.5	24	47	23	24	38	SC	A-7-6
8	EYPASS	135+45, 10' RT.	0.5-1.5	22	42	20	22	42	SC	A-7-6
8			2.5-3.5	23	48	23	25	38	SC	A-7-6
9	EYPASS	141+50, C.L.	0.5-1.5	23	52	19	33	48	SC	A-7-6
34	EYPASS	266+00, 10' RT.	0.5-1.5	21	---	---	---	41	SM	A-4
34			4.5-5.5	19	26	16	10	69	CL	A-4
35	EYPASS	267+70, 90' RT.	2.5-3.5	19	23	15	8	71	CL	A-4
36	EYPASS	268+70, 70' LT.	2.5-3.5	16	23	12	11	61	CL	A-6
37	HWY. 67	111+20, 20' LT.	0.5-1.5	14	27	18	9	42	SC	A-4
37			2.5-3.5	25	46	18	28	47	SC	A-7-6
39	HWY. 67	121+00, 10' LT.	0.5-1.5	11	31	19	12	45	SC	A-6
39			4.5-5.5	21	---	---	---	33	SM	A-2-4
40	HWY. 67	126+00,10' RT.	2.5-3.5	21	---	---	---	22	SM	A-2-4
40			6.5-7.5	15	20	16	4	44	SM-SC	A-4
41	HWY. 67	130+65, 10' LT.	2.5-3.5	17	42	14	28	49	SC	A-7-6
41			6.5-7.5	6	---	---	---	9	GM-GP	A-1-a
50	26TH ST. S.	15+00, 5' LT.	0.5-1.5	7	22	18	4	18	GM-GC	A-1-b
50			2.5-3.5	17	---	---	---	14	SM	A-2-4
50			4.5-5.5	23	63	15	48	61	CH	A-7-6
51	26TH ST. N.	23+50, 5' RT.	0.5-1.5	9	26	18	8	22	GC	A-2-4
51			2.5-3.5	13	25	17	8	54	CL	A-4
52	RED HILL RD. N.	22+80, C.L.	4.5-5.5	20	48	22	26	49	SC	A-7-6
53	RED HILL RD. S.	15+25, 5' RT.	0.5-1.5	7	25	22	3	15	SM	A-1-b
53			2.5-3.5	32	89	32	57	73	CH	A-7-5

SOIL CHARACTERISTICS TABULATED ABOVE ARE REPRESENTATIVE AT THE LOCATION OF THE SAMPLE, AND FROM SURFACE INDICATIONS ARE TYPICAL FOR THE LIMIT 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.

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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	172	549
		QUANTITIES				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 07/05/2022

ADVANCE WARNING SIGNS AND DEVICES

SIGN NUMBER	DESCRIPTION	SIGN SIZE	STAGE 1	STAGE 2	STAGE 3	MAXIMUM NUMBER REQUIRED	TOTAL SIGNS REQUIRED		TRAFFIC DRUMS	BARRICADES (TYPE III)		FURNISHING & INSTALLING PRECAST CONC. BARRIER	RELOCATING PRECAST CONCRETE BARRIER	TEMPORARY IMPACT ATTENUATION BARRIER	TEMP. IMPACT ATTEN.BARR. (REPAIR)	CONSTRUCTION PROJECT INFORMATION SIGN UPDATE
										RIGHT	LEFT					
			LIN. FT. - EACH				NO.	SQ. FT.	EACH			LIN. FT.			EACH	
W20-1	ROAD WORK 1500 FT.	48"x48"	1	1	1	1	1	16.0								
W20-1	ROAD WORK 1000 FT.	48"x48"	1	1	1	1	1	16.0								
W20-1	ROAD WORK 500 FT.	48"x48"	7	9	6	9	9	144.0								
W20-1	ROAD WORK AHEAD	48"x48"	2	9	3	9	9	144.0								
W20-2	DETOUR 1500 FT.	48"x48"	3			3	3	48.0								
W20-2	ROAD CLOSED 500 FT.	48"x48"	4			4	4	64.0								
W20-3	ROAD CLOSED AHEAD	48"x48"	1			1	1	16.0								
D3-1	26TH ST.	24"x12"	12			12	12	24.0								
D3-1	CLINTON ST.	24"x12"		10		10	10	20.0								
D3-1	HICKORY ST.	24"x12"		11		11	11	22.0								
D3-1	MAIN ST.	24"x12"	8			8	8	16.0								
D3-1	RED HILL RD.	24"x12"		3		3	3	6.0								
D3-1	WALNUT ST.	24"x12"	9			9	9	18.0								
M1-5	STATE ROUTE 67	24"x24"	4			4	4	16.0								
M4-8	DETOUR	24"x12"	4	5		5	5	10.0								
M4-10L	DETOUR LT.	48"x18"	14	8		14	14	84.0								
M4-10R	DETOUR RT.	48"x18"	15	11		15	15	90.0								
M5-1L	ADVANCE TURN ARROW LT.	30"x21"	2	3		3	3	13.1								
M5-1R	ADVANCE TURN ARROW RT.	30"x21"	1	2		2	2	8.8								
M6-3	STRAIGHT ARROW	30"x21"	1			1	1	4.4								
G20-2	END ROAD WORK	48"x24"	8	15	8	15	15	120.0								
W13-1	SPEED LIMIT (ADVISORY)	18"x18"		5	1	5	5	11.3								
R11-2	ROAD CLOSED	48"x30"	13	34	9	34	34	340.0								
R11-4	ROAD CLOSED TO THRU TRAFFIC	60"x30"	7	7		7	7	87.5								
R11-4	ROAD CLOSED XX MILES AHEAD	60"x30"	3			3	3	37.5								
OM-3L	OBJECT MARKER	12"x36"		6	6	6	6	18.0								
OM-3R	OBJECT MARKER	12"x36"		7	7	7	7	21.0								
W1-6	LARGE ARROW	48"x24"	7	9		9	9	72.0								
W1-8	CHEVRONS	18"x24"														
* R4-1	DO NOT PASS	24"x30"	5	5	5	5	5	25.0								
* W21-5a	RIGHT SHOULDER CLOSED	36"x36"	4	4	4	4	4	64.0								
* W8-1	BUMP	30"x30"	4	4	4	4	4	64.0								
W24-1R	DOUBLE REVERSE CURVE RT.	48"x48"		2	1	2	2	32.0								
W24-1L	DOUBLE REVERSE CURVE LT.	48"x48"		3		3	3	48.0								
SPECIAL	CONSTRUCTION PROJECT INFORMATION SIGN	48"x96"	2	2	2	2	2	64.0								
	CONSTRUCTION PROJECT INFORMATION SIGN UPDATE															4
	TRAFFIC DRUMS		330	504	216	504			504							
	TYPE II BARRICADE-RT. (8')		14	8		14				112						
	TYPE II BARRICADE-LT. (8')		12	8		12					96					
	TYPE II BARRICADE-RT. (16')		3	28	9	28				448						
	TYPE II BARRICADE-LT. (16')		2	24	6	24					384					
	FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER			740		740						740				
	RELOCATING PRECAST CONCRETE BARRIER				520	520							520			
	TEMPORARY IMPACT ATTENUATION BARRIER			2	1	3								3		
	TEMPORARY IMPACT ATTENUATION BARRIER (REPAIR)			2	1	3									3	
TOTALS:							**1784.5**	**504**	**560**	**480**		**740**	**520**	**3**	**3**	**4**

NOTE: ARKADELPHIA BYPASS IS A LOW TRAFFIC VOLUME ROAD AS DEFINED IN SECTION 604.03, STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
HWY. 67 IS A HIGH TRAFFIC VOLUME ROAD AS DEFINED IN SECTION 604.03, STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

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

CONSTRUCTION PAVEMENT MARKINGS AND PERMANENT PAVEMENT MARKINGS

DESCRIPTION	STAGE 1	STAGE 2	STAGE 3	END OF JOB	CONSTRUCTION PAVEMENT MARKINGS	REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS	RAISED PAVEMENT MARKERS		THERMOPLASTIC PAVEMENT MARKING									REFLECTORIZED PAINT PAVEMENT MARKING			
							TYPE II (WHITE/RED)	TYPE II (YELLOW/YELLOW)	6" WHITE	6" YELLOW	8" WHITE	8" YELLOW	12" WHITE	24" WHITE	YIELD LINE WHITE	WORDS	ARROWS	6" WHITE	6" YELLOW	10" WHITE	12" WHITE
	LIN. FT. - EACH				LIN. FT.	LIN. FT.	EACH		LIN. FT.							EACH		LIN. FT.			
CONSTRUCTION PAVEMENT MARKINGS	5792	30023	10448		46263																
* REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS		3174	8277			11451															
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED)				21			21														
RAISED PAVEMENT MARKERS TYPE II (YELLOW/YELLOW)				478				478													
THERMOPLASTIC PAVEMENT MARKING WHITE (6")				37536					37536												
THERMOPLASTIC PAVEMENT MARKING YELLOW (6")				61585						61585											
THERMOPLASTIC PAVEMENT MARKING WHITE (8")				138							138										
THERMOPLASTIC PAVEMENT MARKING YELLOW (8")				161								161									
THERMOPLASTIC PAVEMENT MARKING WHITE (12")				3690									3690								
THERMOPLASTIC PAVEMENT MARKING WHITE (24")				401										401							
THERMOPLASTIC PAVEMENT MARKING WHITE (YIELD LINE)				160											160						
THERMOPLASTIC PAVEMENT MARKING (WORDS)				24												24					
THERMOPLASTIC PAVEMENT MARKING (ARROWS)				58													58				
REFLECTORIZED PAINT PAVEMENT MARKING WHITE (6")				3961														3961			
REFLECTORIZED PAINT PAVEMENT MARKING YELLOW (6")				5319															5319		
REFLECTORIZED PAINT PAVEMENT MARKING WHITE (10")				994																994	
REFLECTORIZED PAINT PAVEMENT MARKING WHITE (12")				45																	45
TOTALS:					**46263**	**11451**	**21**	**478**	**37536**	**61585**	**138**	**161**	**3690**	**401**	**160**	**24**	**58**	**3961**	**5319**	**994**	**45**

NOTE: ARKADELPHIA BYPASS IS A LOW TRAFFIC VOLUME ROAD AS DEFINED IN SECTION 604.03, STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
HWY. 67 IS A HIGH TRAFFIC VOLUME ROAD AS DEFINED IN SECTION 604.03, STANDARD SPECIFICATONS FOR HIGHWAY CONSTRUCTION.

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

QUANTITIES

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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	173	549
		QUANTITIES				

CLEARING AND GRUBBING

STATION	STATION	LOCATION	CLEARING	GRUBBING
			STATION	
100+20	116+37	BYPASS	17	17
124+00	132+00	BYPASS	8	8
140+30	267+65	BYPASS	128	128
101+35	105+51	HWY. 67	5	5
119+00	123+00	HWY. 67	4	4
125+73	136+47	HWY. 67	13	13
138+90	141+00	HWY. 67	3	3
142+30	142+75	HWY. 67	1	1
144+80	145+25	HWY. 67	1	1
151+25	163+60	HWY. 67	13	13
11+90	18+90	26TH ST. SOUTH	7	7
20+90	27+60	26TH ST. NORTH	7	7
46+70	48+35	CADDO ST. WEST	2	2
38+90	39+25	CLINTON ST. WEST	1	1
60+12	61+75	HICKORY ST.	2	2
91+45	97+50	PROF. PARK DRIVE	7	7
12+50	13+70	PROF. PARK CUL-DE-SAC	2	2
21+15	23+57	RED HILL RD. NORTH	3	3
17+10	18+78	RED HILL RD. SOUTH	2	2
TOTALS:			**226**	**226**

EARTHWORK

STATION	STATION	LOCATION / DESCRIPTION	UNCLASSIFIED EXCAVATION	COMPACTED EMBANKMENT
			CU. YD.	
100+00	268+06	STAGE 1 - BYPASS	200819	517629
100+00	268+06	STAGE 2 - BYPASS	6230	1893
235+00	245+00	STAGE 1 - BYPASS - BACKFILL OF ILLEGAL DUMP		44444
100+00	164+10	STAGE 1 - HWY. 67	8199	54161
100+00	164+10	STAGE 2 - HWY. 67	10791	2686
100+00	164+10	STAGE 3 - HWY. 67	1210	781
90+00	99+50	STAGE 1 - PROFESSIONAL PARK DR.	999	9656
90+00	99+50	STAGE 2 - PROFESSIONAL PARK DR.	311	131
10+50	11+20	STAGE 1 - EXECUTIVE CIRCLE	3	9
10+50	11+20	STAGE 2 - EXECUTIVE CIRCLE	2	6
8+50	9+50	STAGE 2 - OFFICE PARK DR.	15	
12+50	19+50	STAGE 1 - PROFESSIONAL PARK CUL-DE-SAC	34	589
12+50	19+50	STAGE 2 - PROFESSIONAL PARK CUL-DE-SAC	427	518
20+50	30+50	STAGE 1 - RED HILL RD. NORTH	65	7572
20+50	30+50	STAGE 2 - RED HILL RD. NORTH	33	352
14+00	19+21	STAGE 1 - RED HILL RD. SOUTH	192	1580
11+50	19+00	STAGE 1 - 26TH ST. SOUTH	47	42199
21+00	27+70	STAGE 1 - 26TH ST. NORTH	1678	1739
7+00	10+00	STAGE 1 - WALNUT ST.	31	375
10+50	14+00	STAGE 1 - HWY. 67 CONNECTOR	112	1208
10+50	14+00	STAGE 2 - HWY. 67 CONNECTOR	4	324
18+50	19+50	STAGE 1 - CLAY ST. WEST	37	35
20+50	22+50	STAGE 1 - CLAY ST. EAST	6	219
28+50	29+58	STAGE 1 - MAIN ST. WEST	29	28
30+45	32+50	STAGE 1 - MAIN ST. EAST	5	214
38+50	39+60	STAGE 2 - CLINTON ST. WEST	43	16
40+42	41+50	STAGE 2 - CLINTON ST. EAST	17	74
46+50	49+50	STAGE 2 - CADDO ST. WEST	154	16
46+50	49+50	STAGE 3 - CADDO ST. WEST	56	31
50+00	53+50	STAGE 2 - CADDO ST. EAST	67	67
50+00	53+50	STAGE 3 - CADDO ST. EAST	47	48
60+21	62+00	STAGE 2 - HICKORY ST.	393	66
ENTIRE	PROJECT	APPROACHES		5526
ENTIRE	PROJECT	TEMPORARY APPROACHES		550
TOTALS:			**232056**	**694742**

BENCH MARKS

STATION	LOCATION	BENCH MARKS
		EACH
197+95	BYPASS NE HEADWALL	1
264+00	BYPASS NE HEADWALL	1
103+28	HWY. 67 NE HEADWALL	1
110+00	HWY. 67 NE HEADWALL	1
118+40	HWY. 67 NE HEADWALL	1
126+22	HWY. 67 NE HEADWALL	1
TOTAL:		**6**

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

STATE OF ARKANSAS
Shaun A. Roberson
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 7/6/2022

SOIL STABILIZATION

STATION	STATION	LOCATION / DESCRIPTION	SOIL STABILIZATION
			TON
ENTIRE	PROJECT	TO BE USED IF AND WHERE	1000
		DIRECTED BY THE ENGINEER	
TOTAL:			**1000**

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

ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC

LOCATION	TON	TACK COAT
		GALLON
ENTIRE PROJECT - TO BE USED IF AND WHERE	109	218
DIRECTED BY THE ENGINEER		
TOTALS:	**109**	**218**

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

EROSION CONTROL

STATION	STATION	LOCATION	PERMANENT EROSION CONTROL					TEMPORARY EROSION CONTROL														
			SEEDING	LIME	MULCH COVER	WATER	SECOND SEEDING APPLICATION	TEMPORARY SEEDING	MULCH COVER	WATER	WATTLE (18")	SAND BAG DITCH CHECKS	ROCK DITCH CHECKS	DROP INLET SILT FENCE	FILTER SOCK (18")	SILT FENCE	DIVERSION DITCH	PIPE FOR SLOPE DRAINS	DUMPED RIPRAP	SEDIMENT BASIN	OBLITERATION OF SEDIMENT BASIN	*SEDIMENT REMOVAL & DISPOSAL
											(E-1)	(E-5)	(E-6)	(E-7)	(E-13)	(E-11)	(E-8)	SLOPE DRAIN (E-12)		(E-14)		
			ACRE	TON	ACRE	M.GAL.	ACRE	ACRE	ACRE	M.GAL.	LIN. FT.	BAG	CU.YD.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	CU.YD.	CU.YD.	CU.YD.	CU. YD.
BYPASS																						
		CLEARING AND GRUBBING										110	15			23150						867
		STAGE 1										2486	201	640		2040	1940	665	20			279
		STAGE 2										264	12	120								20
		STAGE 3										44	5			415						19
HWY. 67																						
		CLEARING AND GRUBBING										22	5	40		3320						127
		STAGE 1										726	12	1280		625						108
		STAGE 2										44	9	760		235						42
		STAGE 3											3	500								20
*ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.			49.48	98.96	49.48	5047.0	49.48	49.48	49.48	1009.4	100	370	26	334	100	2979	194	67		600	600	600
TOTALS:			**49.48**	**98.96**	**49.48**	**5047.0**	**49.48**	**49.48**	**49.48**	**1009.4**	**100**	**4066**	**290**	**3674**	**100**	**32764**	**2134**	**732**	**20**	**600**	**600**	**2082**

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
DROP INLET SILT FENCE.....20 LIN. FT./ 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.

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

CGGervasini 7/6/2022 5:02:31 PM
WORKSPACE: AHTD
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REVISED DATE:

REMOVAL AND DISPOSAL OF ITEMS (BOX 1 OF 2)

STATION	STATION	LOCATION	CURB	CURB AND GUTTER	CONCRETE PAVEMENT	CONCRETE ISLANDS	CONCRETE DRIVEWAYS	CONCRETE SLABS	CANOPY	WALKS	RETAINING WALLS	SIGN FOUNDATIONS	HEADWALLS	GUARDRAIL	BUILDINGS	MAILBOXES	FLAG POLE	SIGNS	SEPTIC SYSTEM	LUMINAIRE POLES	LUMINAIRE POLE & FOUNDATION	POSTS	PLANTERS
			LIN. FT.	LIN. FT.	SQ. YD.	SQ. YD.	SQ. YD.	SQ. YD.	EACH	SQ. YD.	LIN. FT.	EACH	EACH	LIN. FT.	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
BYPASS																							
100+60	100+60	BYPASS RT.										1			1			1					
101+26	101+62	BYPASS RT.													1				1				
101+37	101+44	BYPASS LT.													1								
111+78	111+78	BYPASS RT.										2						1					
116+94	116+94	BYPASS LT.											1										
117+20	117+20	BYPASS LT.										1						2					
123+25	123+25	BYPASS RT.										2						1					
135+32	136+10	BYPASS LT. & RT.		272			407					2						1					
140+12	140+12	BYPASS LT.											1										
264+52	264+87	BYPASS RT.													1								
264+77	264+96	BYPASS RT.													1								
266+29	266+53	BYPASS RT.													1								
266+80	267+17	BYPASS LT.													1								
267+09	267+34	BYPASS LT. & RT.													1								
267+21	267+40	BYPASS RT.													1								
267+43	267+66	BYPASS LT. & RT.													1								
266+80	267+17	BYPASS LT.													1								
HWY. 67																							
104+00	104+00	HWY. 67 LT.													1								
104+20	104+20	HWY. 67 LT.													1								
104+45	104+45	HWY. 67 LT.														1							
104+50	104+50	HWY. 67 LT.													1	1			1				
105+10	105+10	HWY. 67 LT.							1														
105+60	105+60	HWY. 67 LT.													1				1				
105+71	105+85	HWY. 67 LT.	30																				
105+75	105+75	HWY. 67 LT.							1														
106+75	106+75	HWY. 67 LT.													1				1				
107+16	107+29	HWY. 67 LT.	13																				
108+38	108+38	HWY. 67 LT.														2							
108+70	108+70	HWY. 67 RT.			28																		
109+13	109+13	HWY. 67 LT.																1					
109+95	109+95	HWY. 67 LT.										1											
110+17	110+18	HWY. 67 LT.	102																				
110+66	110+66	HWY. 67 LT.					195																
110+84	111+44	HWY. 67 LT.	148																				
111+78	111+78	HWY. 67 LT.					173																
111+88	111+88	HWY. 67 LT.										1						1					
111+78	112+02	HWY. 67 LT.	48																				
112+79	112+79	HWY. 67 RT.					154																
113+66	113+66	HWY. 67 LT.										1						1		1			
115+78	115+78	HWY. 67 LT.					22																
115+96	115+96	HWY. 67 LT.										1						1					
116+15	116+15	HWY. 67 LT.														1							
116+15	118+12	HWY. 67 LT.			872																		
116+64	117+17	HWY. 67 RT.												58									
117+05	117+57	HWY. 67 RT.												61									
117+34	117+34	HWY. 67 RT.																1					
117+75	117+75	HWY. 67 LT.						270															
117+90	117+90	HWY. 67 RT.					166																
118+08	118+20	HWY. 67 LT.													1								
118+15	118+15	HWY. 67 RT.																1					
119+16	119+16	HWY. 67 RT.										1						1					
119+85	119+85	HWY. 67 RT.										1						1					
120+31	120+67	HWY. 67 LT. & RT.													1								
120+77	121+67	HWY. 67 LT.													1								
122+10	122+39	HWY. 67 LT. & RT.													1								
122+31	122+67	HWY. 67 RT.													1								
123+50	123+50	HWY. 67 RT.						178							1								
130+70	131+65	HWY. 67 LT. & RT.													1								
136+43	136+97	HWY. 67 LT.													1								
137+12	137+29	HWY. 67 LT.													1								
137+12	138+32	HWY. 67 LT.													1								
137+37	137+64	HWY. 67 LT.													1								
138+79	140+98	HWY. 67 RT.			1243																		
138+84	139+09	HWY. 67 RT.									26												
138+96	139+56	HWY. 67 RT.													1								
139+62	140+85	HWY. 67 LT.			851																		
139+77	140+57	HWY. 67 RT.													1								
139+88	140+71	HWY. 67 LT.													1								
140+64	140+81	HWY. 67 RT.									17												
140+86	140+86	HWY. 67 RT.										1						1					
140+88	140+88	HWY. 67 RT.										2						2					
140+90	140+90	HWY. 67 RT.									120												
141+40	142+46	HWY. 67 LT. & RT.			630																		
141+54	141+83	HWY. 67 LT. & RT.									124												
141+97	142+32	HWY. 67 LT. & RT.													1								
142+52	143+36	HWY. 67 LT.													1								
143+47	143+83	HWY. 67 LT. & RT.			404																		
143+58	143+58	HWY. 67 RT.										1						2					
143+73	143+73	HWY. 67 RT.																			1		
143+75	143+75	HWY. 67 LT. & RT.										1						1			1		
143+76	143+76	HWY. 67 RT.																					2
143+93	146+13	HWY. 67 LT.			33																		
144+20	144+20	HWY. 67 LT. & RT.																			2		
144+22	144+50	HWY. 67 LT.		28																			
144+25	145+75	HWY. 67 RT.			1647																		
144+30	144+94	HWY. 67 LT.			162																		
144+51	145+36	HWY. 67 RT.													1								
144+78	145+97	HWY. 67 LT.		119																			
144+75	144+75	HWY. 67 LT.										1						1					
145+00	145+00	HWY. 67 RT.													1								
145+67	145+97	HWY. 67 RT.													1								
145+80	145+80	HWY. 67 RT.							1			1						1					
145+85	145+85	HWY. 67 LT.										1						1					
146+53	148+84	HWY. 67 RT.			1072																		
146+75	146+75	HWY. 67 RT.										2						1					
146+03	147+84	HWY. 67 RT.													1								
147+00	147+00	HWY. 67 RT.							1														
147+45	147+74	HWY. 67 LT.			15																		
148+23	148+23	HWY. 67 LT.										1			1			1					
149+06	151+42	HWY. 67 RT.			376																		
149+12	150+62	HWY. 67 LT.			270																		
149+35	149+35	HWY. 67 RT.																					1
149+84	149+84	HWY. 67 LT.										2						1					
149+87	150+47	HWY. 67 RT.		61																			
150+84	151+15	HWY. 67 RT.		31																			
151+13	151+13	HWY. 67 RT.																					1
151+75	153+00	HWY. 67 RT.		144						77													
153+00	153+97	HWY. 67 RT.								54													
154+28	155+23	HWY. 67 RT.					257																
155+23	155+41	HWY. 67 RT.								10		1						1					
155+41	155+50	HWY. 67 RT.					14																
155+50	155+95	HWY. 67 RT.								25													
155+95	156+09	HWY. 67 RT.					19																
156+09	156+61	HWY. 67 RT.		52	45					16													
156+67	156+67	HWY. 67 RT.										1						1					
156+73	157+17	HWY. 67 RT.					256																
157+05	157+88	HWY. 67 RT.								37	27												
157+88	158+05	HWY. 67 RT.					48																
158+05	158+05	HWY. 67 RT.									30												
158+08	158+77	HWY. 67 RT.			82		27																
SUBTOTALS (BOX 1 OF 2):			**341**	**707**	**7730**		**1738**	**448**	**4**	**219**	**344**	**29**	**2**	**119**	**37**	**5**		**28**	**4**	**1**	**4**		**4**

NOTE: THE QUANTITY SHOWN ABOVE FOR THE REMOVAL AND DISPOSAL OF GUARDRAIL SHALL INCLUDE THE REMOVAL AND DISPOSAL OF ALL GUARDRAIL TERMINALS AND TERMINAL ANCHOR POSTS.

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	174	549
		QUANTITIES				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 07/05/2022

REMOVAL AND DISPOSAL OF CULVERTS AND DROP INLETS

STATION	DESCRIPTION	PIPE CULVERTS	DROP INLETS
		EACH	EACH
BYPASS			
100+25	BYPASS LT.	1	1
100+39	BYPASS RT.	1	
139+02	BYPASS RT.		1
267+61	BYPASS	1	
HWY. 67			
103+89	HWY. 67 LT.	1	
108+00	HWY. 67 LT.	1	
108+02	HWY. 67 LT.		1
108+52	HWY. 67 LT.	1	
109+02	HWY. 67 LT.		1
137+43	HWY. 67 RT.	1	
146+16	HWY. 67 LT.		1
146+21	HWY. 67 LT.	1	
146+25	HWY. 67	1	
146+47	HWY. 67	1	
146+50	HWY. 67 LT.	1	
146+55	HWY. 67 LT.		1
156+13	HWY. 67 RT.	1	2
157+20	HWY. 67 RT.	1	
SIDE ROADS			
14+25	PROF. PARK CUL-DE-SAC RT.	1	
18+08	PROF. PARK CUL-DE-SAC LT.		1
18+20	PROF. PARK CUL-DE-SAC	1	
18+64	PROF. PARK CUL-DE-SAC RT.	1	
19+70	PROF. PARK CUL-DE-SAC LT.	1	
12+57	26TH ST. SOUTH RT.	1	
12+99	26TH ST. SOUTH	1	
8+70	WALNUT ST. RT.		1
9+01	WALNUT ST. RT.	1	
9+30	WALNUT ST. RT.		1
9+66	WALNUT ST. RT.	1	
20+77	CLAY ST. EAST RT.		1
20+79	CLAY ST. EAST	1	
20+82	CLAY ST. EAST LT.		1
31+05	MAIN ST. EAST RT.		1
31+18	MAIN ST. EAST LT.	1	1
31+30	MAIN ST. EAST	1	
31+38	MAIN ST. EAST LT.	1	
52+25	CADDO ST. EAST RT.		1
52+28	CADDO ST. EAST LT.		1
52+55	CADDO ST. EAST LT.		1
TOTALS:		**25**	**18**

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

QUANTITIES

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WORKSPACE: AHTD
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REVISED DATE:

REMOVAL AND DISPOSAL OF ITEMS (BOX 2 OF 2)

STATION	STATION	LOCATION	CURB	CURB AND GUTTER	CONCRETE PAVEMENT	CONCRETE ISLANDS	CONCRETE DRIVEWAYS	CONCRETE SLABS	CANOPY	WALKS	RETAINING WALLS	SIGN FOUNDATIONS	HEADWALLS	GUARDRAIL	BUILDINGS	MAILBOXES	FLAG POLE	SIGNS	SEPTIC SYSTEM	LUMINAIRE POLES	LUMINAIRE POLE & FOUNDATION	POSTS	PLANTERS
			LIN. FT.	LIN. FT.	SQ. YD.	SQ. YD.	SQ. YD.	SQ. YD.	EACH	SQ. YD.	LIN. FT.	EACH	EACH	LIN. FT.	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
158+18	158+68	HWY. 67 RT.								22													
158+77	158+87	HWY. 67 RT.								4	22												
158+87	159+70	HWY. 67 RT.			32		101																
159+02	159+59	HWY. 67 RT.								25													
159+70	161+32	HWY. 67 RT.								72		1						1					
161+70	164+10	HWY. 67 RT.		240						80													
SIDE ROADS																							
90+03	91+23	PROFESSIONAL PARK DR. LT.		134						76													
90+03	91+30	PROFESSIONAL PARK DR. RT.		127																			
90+03	91+38	PROFESSIONAL PARK DR. RT.																					
90+08	90+08	PROFESSIONAL PARK DR. LT.																					1
91+00	91+00	PROFESSIONAL PARK DR. LT.										2						1					
91+10	91+10	PROFESSIONAL PARK DR. LT.										2						1					
91+13	91+13	PROFESSIONAL PARK DR. LT.																					1
91+18	91+20	PROFESSIONAL PARK DR. LT.		49																			
91+45	95+56	PROFESSIONAL PARK DR. LT.		583																			
91+71	91+86	PROFESSIONAL PARK DR. RT.		15																			
92+04	92+04	PROFESSIONAL PARK DR. RT.					75																
92+21	92+65	PROFESSIONAL PARK DR. RT.		46																			
92+50	92+50	PROFESSIONAL PARK DR. RT.										1						1					
92+82	92+82	PROFESSIONAL PARK DR. RT.					94																
92+99	94+68	PROFESSIONAL PARK DR. RT.		215																			
94+91	95+43	PROFESSIONAL PARK DR. RT.		84																			
97+30	99+50	PROFESSIONAL PARK DR. RT.																				1	
97+44	99+67	PROFESSIONAL PARK DR. LT. & RT.			772																		
10+53	10+53	EXECUTIVE CIRCLE RT.					119																
12+54	12+54	PROF. PARK CUL-DE-SAC RT.										2						1					
12+72	13+42	PROF. PARK CUL-DE-SAC LT.												78									
12+74	12+74	PROF. PARK CUL-DE-SAC RT.										1						1					
14+23	14+23	PROF. PARK CUL-DE-SAC RT.					272																
14+62	14+62	PROF. PARK CUL-DE-SAC RT.										2						1					
16+25	16+25	PROF. PARK CUL-DE-SAC LT.										2						1					
18+75	18+75	PROF. PARK CUL-DE-SAC LT.					85																
14+36	14+81	HWY. 51 LT.		88																			
15+40	15+48	HWY. 51 LT.		177																			
15+37	15+81	HWY. 51 RT.								42													
15+81	15+93	HWY. 51 RT.		31																			
16+00	16+00	HWY. 51 RT.				9																	
16+33	16+33	HWY. 51 RT.				7																	
16+40	16+93	HWY. 51 RT.								45													
18+26	21+56	HWY. 51 RT.								311													
19+49	20+55	HWY. 51 LT.								86													
29+74	29+74	RED HILL N. RT.														1							
29+96	29+96	RED HILL N. RT.					168																
15+42	16+91	RED HILL S. LT.												163									
7+05	7+27	WALNUT ST. LT.		22																			
7+05	8+76	WALNUT ST. RT.		174																			
7+23	7+23	WALNUT ST. LT.														1							
7+25	7+25	WALNUT ST. LT.									23												
7+43	7+96	WALNUT ST. LT.		53																			
9+27	10+00	WALNUT ST. RT.		85																			
9+62	10+00	WALNUT ST. LT.		45																			
11+27	11+48	HWY. 67 CONN. LT.		21																			
11+79	12+53	HWY. 67 CONN. LT.		77																			
12+95	13+69	HWY. 67 CONN. LT.		76																			
18+75	22+00	CLAY ST. RT.		325																			
18+75	19+20	CLAY ST. LT.		53																			
28+70	29+62	MAIN ST. LT								42													
29+39	29+39	MAIN ST. LT					12																
30+07	32+20	MAIN ST. RT								151													
30+54	32+20	MAIN ST. LT								77													
30+95	30+95	MAIN ST. RT																					
31+38	31+38	MAIN ST. LT					38										1						
38+90	39+87	MAIN ST. LT								69													
38+90	39+23	CLINTON ST. RT.		38																			
38+96	39+76	CLINTON ST. LT.		80																			
39+88	40+42	CLINTON ST. RT.		58																			
40+67	41+33	CLINTON ST. RT.		43																			
46+70	47+03	CADDO ST. LT.								16													
46+70	47+01	CADDO ST. LT.	31																				
46+70	48+49	CADDO ST. RT.		179																			
47+02	48+08	CADDO ST. LT.			171																		
48+04	48+53	CADDO ST. LT.	48																				
48+69	48+69	CADDO ST. RT.					82																
48+81	49+67	CADDO ST. RT.								42													
48+90	49+67	CADDO ST. RT.		82																			
48+95	49+67	CADDO ST. LT.			98																		
50+99	52+33	CADDO ST. LT.								71													
50+99	52+25	CADDO ST. LT.	126																				
52+50	52+64	CADDO ST. LT.								7													
52+52	53+32	CADDO ST. RT.								39													
52+58	53+30	CADDO ST. LT.	72																				
52+59	53+32	CADDO ST. RT.	73																				
60+21	61+75	HICKORY ST. RT.		154																			
60+30	61+75	HICKORY ST. LT.		145																			
70+12	70+50	MCNUTT ST. RT.		38						12													
70+20	70+50	MCNUTT ST. LT.		30																			
SUBTOTALS (BOX 2 OF 2):			**350**	**3567**	**2073**	**16**	**1046**			**1289**	**45**	**13**		**241**		**2**	**1**	**8**				**11**	**2**
SUBTOTALS (BOX 1 OF 2):			**341**	**707**	**7730**		**1738**	**448**	**4**	**219**	**344**	**29**	**2**	**119**	**37**	**5**		**28**	**4**	**1**	**4**		**4**
TOTALS:			**691**	**4274**	**9803**	**16**	**2784**	**448**	**4**	**1508**	**389**	**42**	**2**	**360**	**37**	**7**	**1**	**36**	**4**	**1**	**4**	**11**	**6**

NOTE: THE QUANTITY SHOWN ABOVE FOR THE REMOVAL AND DISPOSAL OF GUARDRAIL SHALL INCLUDE THE REMOVAL AND DISPOSAL OF ALL GUARDRAIL TERMINALS AND TERMINAL ANCHOR POSTS.

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	175	549
		QUANTITIES				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 7/7/2022

REMOVAL AND DISPOSAL OF FENCE

STATION	STATION	LOCATION	FENCE	GATES
			LIN. FT.	EACH
BYPASS				
100+60	101+60	BYPASS LT.	190	
131+91	137+53	BYPASS RT.	580	
252+16	252+96	BYPASS RT.	146	
252+96	253+21	BYPASS LT.	49	
264+50	264+57	BYPASS RT.	105	
265+86	267+71	BYPASS LT.	291	
HWY. 67				
103+47	103+75	HWY. 67 LT.	35	
106+84	109+98	HWY. 67 LT.	360	2
110+13	110+14	HWY. 67 LT.	12	
112+04	112+04	HWY. 67 LT.	4	
112+95	112+95	HWY. 67 LT.	5	
117+53	118+10	HWY. 67 LT.	72	
117+96	117+97	HWY. 67 LT.	4	
122+28	122+30	HWY. 67 RT.	10	
122+44	122+60	HWY. 67 LT.	57	
125+93	126+20	HWY. 67 RT.	46	
130+87	131+17	HWY. 67 LT.	40	
133+87	133+89	HWY. 67 RT.	16	
134+79	134+80	HWY. 67 RT.	6	
134+80	134+81	HWY. 67 RT.	13	
136+17	136+45	HWY. 67 LT.	29	
136+81	137+33	HWY. 67 LT.	55	
138+84	139+09	HWY. 67 RT.	25	
145+43	145+44	HWY. 67 RT.	37	
146+65	146+72	HWY. 67 RT.	7	
SIDE ROADS				
21+91	23+65	RED HILL RD. N. LT.	183	
30+27	30+42	RED HILL RD. N. RT.	16	
14+78	15+52	RED HILL RD. N. LT.	81	
10+39	12+18	HWY. 67 CONN. LT.	231	3
11+24	11+27	HWY. 67 CONN. LT.	73	
TOTALS:			**2778**	**5**

REMOVAL OF EXISTING BRIDGE STRUCTURE

STATION	STATION	LOCATION	LUMP SUM
116+67	117+58	HWY. 67 RT. (SITE 1)	1.00
118+49	118+79	HWY. 67 RT. (SITE 2)	1.00

REMOVAL AND DISPOSAL OF TIRES

STATION	STATION	LOCATION	EACH
235+00	245+00	BYPASS	25

DISPOSAL OF WASTE

STATION	STATION	LOCATION	CU.YDS.
235+00	245+00	BYPASS	44444

CGGervasini 7/7/2022 2:17:23 PM
WORKSPACE: AHTD
L:\20\TN\70\7515 - AHTD Arkadelphia Bypass\Drawings\r070442_QTY_01.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	176	549
		QUANTITIES				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

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.
BYPASS							
103+20.00	104+72.00	BYPASS LT.	172.00	6.00	114.67	76.44	0.96
105+70.00	106+50.00	BYPASS LT.	115.00	6.00	76.67	51.11	0.64
110+00.00	110+75.00	BYPASS RT.	101.00	6.00	67.33	44.89	0.57
115+00.00	116+00.00	BYPASS LT.	106.00	6.00	70.67	47.11	0.59
115+55.00	116+00.00	BYPASS RT.	56.00	6.00	37.33	24.89	0.31
116+00.00	116+50.00	BYPASS LT.	48.00	6.00	32.00	21.33	0.27
116+00.00	117+40.00	BYPASS RT.	149.00	6.00	99.33	66.22	0.83
120+50.00	121+00.00	BYPASS RT.	53.00	6.00	35.33	23.56	0.30
128+59.00	129+22.00	BYPASS LT.	106.00	6.00	70.67	47.11	0.59
138+90.00	139+50.00	BYPASS RT.	60.00	6.00	40.00	26.67	0.34
139+00.00	142+10.00	BYPASS LT.	305.00	6.00	203.33	135.56	1.71
142+00.00	143+60.00	BYPASS RT.	177.00	6.00	118.00	78.67	0.99
145+80.00	148+00.00	BYPASS RT.	238.00	6.00	158.67	105.78	1.33
149+50.00	150+00.00	BYPASS RT.	54.00	6.00	36.00	24.00	0.30
152+40.00	153+00.00	BYPASS LT.	78.00	6.00	52.00	34.67	0.44
153+26.00	154+62.00	BYPASS RT.	143.00	6.00	95.33	63.56	0.80
155+47.00	156+90.00	BYPASS RT.	111.00	6.00	74.00	49.33	0.62
156+00.00	159+00.00	BYPASS LT.	312.00	6.00	208.00	138.67	1.75
159+58.00	160+14.00	BYPASS RT.	70.00	6.00	46.67	31.11	0.39
160+80.00	161+90.00	BYPASS RT.	120.00	6.00	80.00	53.33	0.67
167+52.00	168+68.00	BYPASS RT.	134.00	6.00	89.33	59.56	0.75
167+58.00	169+05.00	BYPASS LT.	168.00	6.00	112.00	74.67	0.94
171+80.00	173+80.00	BYPASS RT.	205.00	6.00	136.67	91.11	1.15
172+85.00	173+49.00	BYPASS LT.	81.00	6.00	54.00	36.00	0.45
181+00.00	181+60.00	BYPASS RT.	82.00	6.00	54.67	36.44	0.46
255+00.00	256+20.00	BYPASS LT.	123.00	6.00	82.00	54.67	0.69
259+10.00	260+75.00	BYPASS LT.	161.00	6.00	107.33	71.56	0.90
HWY. 67							
114+75.00	115+64.00	HWY. 67 LT.	90.00	6.00	60.00	40.00	0.50
115+97.00	116+50.00	HWY. 67 LT.	53.00	6.00	35.33	23.56	0.30
120+30.00	121+00.00	HWY. 67 LT.	63.00	6.00	42.00	28.00	0.35
126+20.00	132+00.00	HWY. 67 RT.	560.00	6.00	373.33	248.89	3.14
129+90.00	130+10.00	HWY. 67 LT.	20.00	6.00	13.33	8.89	0.11
130+48.00	131+80.00	HWY. 67 LT.	132.00	6.00	88.00	58.67	0.74
134+60.00	137+70.00	HWY. 67 RT.	313.00	6.00	208.67	139.11	1.75
136+80.00	137+30.00	HWY. 67 LT.	50.00	6.00	33.33	22.22	0.28
139+00.00	140+00.00	HWY. 67 LT.	100.00	6.00	66.67	44.44	0.56
141+55.00	142+50.00	HWY. 67 LT.	84.00	6.00	56.00	37.33	0.47
141+60.00	141+80.00	HWY. 67 RT.	20.00	6.00	13.33	8.89	0.11
142+18.00	142+37.00	HWY. 67 RT.	19.00	6.00	12.67	8.44	0.11
SIDE ROADS							
93+00.00	94+44.00	PROFESSIONAL PARK DR. RT.	160.00	6.00	106.67	71.11	0.90
95+21.00	95+90.00	PROFESSIONAL PARK DR. RT.	112.00	6.00	74.67	49.78	0.63
13+70.00	14+00.00	PROF. PARK CUL-DE-SAC RT.	30.00	6.00	20.00	13.33	0.17
14+50.00	18+90.00	26TH ST. S.	457.00	6.00	304.67	203.11	2.56
TOTALS					**3860.67**	**2573.79**	**32.42**

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

CONCRETE BASE

STATION	STATION	LOCATION	LENGTH	PORTLAND CEMENT CONCRETE BASE		
				AVG. WID.	5" U.T.	6" U.T.
			FEET	FEET	SQ. YD.	SQ. YD.
HWY. 67						
146+14.21	148+79.41	HWY. 67 - NOTCH & WIDEN	265.20	15.14	446.13	
148+79.41	149+29.14	HWY. 67 - NOTCH & WIDEN	49.73	14.78	81.67	
149+29.14	150+61.42	HWY. 67 - NOTCH & WIDEN	132.28	6.02	88.48	
150+61.42	151+46.45	HWY. 67 - NOTCH & WIDEN	85.03	4.86	45.92	
153+00.61	153+93.04	HWY. 67 - NOTCH & WIDEN	92.43	2.50	25.68	
SIDE ROADS						
90+55.00	93+30.91	PROFESSIONAL PARK DR. - NOTCH & WIDEN	275.91	5.00	153.28	
9+30.00	9+87.68	OFFICE PARK DR. - NOTCH & WIDEN	57.68	5.00	32.04	
10+12.03	10+70.00	EXECUTIVE CIRCLE - NOTCH & WIDEN	57.97	5.00	32.21	
18+25.00	19+09.86	PRO. PARK DR. CUL-DE-SAC - NOTCH & WIDEN	84.86	5.00	47.14	
21+75.44	22+80.00	RED HILL RD. NORTH - NOTCH & WIDEN	104.56	4.00	46.47	
21+75.44	22+80.00	RED HILL RD. NORTH - NOTCH & WIDEN	104.56	9.00		104.56
28+82.92	30+12.50	RED HILL RD. NORTH - NOTCH & WIDEN	129.58	4.00	57.59	
28+82.92	30+12.50	RED HILL RD. NORTH - NOTCH & WIDEN	129.58	9.00		129.58
7+05.00	8+89.00	WALNUT ST. - NOTCH & WIDEN	184.00	9.00	184.00	
12+62.00	13+70.00	HWY. 67 CONNECTOR - NOTCH & WIDEN	108.00	5.00	60.00	
18+75.00	19+81.99	CLAY ST. WEST - NOTCH & WIDEN	106.99	5.00	59.44	
21+50.00	22+00.00	CLAY ST. EAST - NOTCH & WIDEN	50.00	5.00	27.78	
28+70.00	29+82.00	MAIN ST. WEST - NOTCH & WIDEN	112.00	5.00	62.22	
31+75.00	32+20.00	MAIN ST. EAST - NOTCH & WIDEN	45.00	5.00	25.00	
38+90.00	41+34.00	CLINTON ST. WEST & EAST - NOTCH & WIDEN	188.00	9.00	188.00	
46+70.00	49+72.00	CADDO ST. WEST - NOTCH & WIDEN	302.00	8.33	279.63	
50+22.00	53+32.00	CADDO ST. EAST - NOTCH & WIDEN	310.00	11.50	396.11	
70+18.00	70+50.00	MCNUTT ST. - NOTCH & WIDEN	32.00	5.00	17.78	
TOTALS:					**2356.57**	**234.14**

EROSION CONTROL MATTING

STATION	STATION	LOCATION	LENGTH	CLASS 3
			LIN.FT.	SQ. YD.
BYPASS				
100+28.00	102+00.00	BYPASS LT.	262.00	232.89
102+00.00	103+20.00	BYPASS LT.	120.00	106.67
108+66.00	109+00.00	BYPASS LT.	34.00	30.22
110+70.00	111+40.00	BYPASS LT.	70.00	62.22
113+99.00	114+94.00	BYPASS LT.	95.00	84.44
116+51.00	119+44.00	BYPASS LT.	293.00	260.44
120+14.00	123+75.00	BYPASS LT.	361.00	320.89
124+23.00	124+90.00	BYPASS LT.	67.00	59.56
130+10.00	130+82.00	BYPASS LT.	72.00	64.00
131+18.00	132+26.00	BYPASS LT.	108.00	96.00
135+40.00	135+58.00	BYPASS LT.	18.00	16.00
136+15.00	136+30.00	BYPASS LT.	15.00	13.33
137+90.00	139+00.00	BYPASS LT.	110.00	97.78
144+50.00	145+60.00	BYPASS LT.	110.00	97.78
148+40.00	148+60.00	BYPASS LT.	20.00	17.78
149+80.00	152+36.00	BYPASS LT.	256.00	227.56
153+60.00	154+47.00	BYPASS LT.	87.00	77.33
154+93.00	155+99.00	BYPASS LT.	106.00	94.22
162+90.00	165+70.00	BYPASS LT.	280.00	248.89
166+00.00	167+58.00	BYPASS LT.	158.00	140.44
173+52.00	176+40.00	BYPASS LT.	288.00	256.00
177+90.00	178+70.00	BYPASS LT.	80.00	71.11
179+80.00	181+88.00	BYPASS LT.	208.00	184.89
220+00.00	221+86.00	BYPASS LT.	186.00	165.33
222+14.00	224+10.00	BYPASS LT.	196.00	174.22
238+00.00	239+70.00	BYPASS LT.	170.00	151.11
240+10.00	243+40.00	BYPASS LT.	330.00	293.33
244+20.00	249+10.00	BYPASS LT.	490.00	435.56
251+50.00	254+99.00	BYPASS LT.	349.00	310.22
256+21.00	256+72.00	BYPASS LT.	51.00	45.33
257+45.00	259+10.00	BYPASS LT.	165.00	146.67
261+22.00	262+30.00	BYPASS LT.	108.00	96.00
262+80.00	263+75.00	BYPASS LT.	95.00	84.44
266+02.00	267+64.00	BYPASS LT.	162.00	144.00
100+52.00	102+00.00	BYPASS RT.	255.00	226.67
107+53.00	108+90.00	BYPASS RT.	137.00	121.78
110+15.00	112+60.00	BYPASS RT.	245.00	217.78
113+02.00	113+40.00	BYPASS RT.	38.00	33.78
115+16.00	138+90.00	BYPASS RT.	2374.00	2110.22
139+50.00	141+24.00	BYPASS RT.	174.00	154.67
144+60.00	144+85.00	BYPASS RT.	25.00	22.22
148+60.00	149+49.00	BYPASS RT.	89.00	79.11
150+40.00	152+85.00	BYPASS RT.	245.00	217.78
158+80.00	159+58.00	BYPASS RT.	78.00	69.33
162+40.00	167+48.00	BYPASS RT.	508.00	451.56
170+30.00	171+79.00	BYPASS RT.	149.00	132.44
173+81.00	176+18.00	BYPASS RT.	237.00	210.67
176+70.00	178+40.00	BYPASS RT.	170.00	151.11
179+50.00	180+98.00	BYPASS RT.	148.00	131.56
265+40.00	267+65.00	BYPASS RT.	328.00	291.56
HWY. 67				
102+35.00	103+97.00	HWY. 67 LT.	162.00	144.00
112+00.00	113+82.00	HWY. 67 LT.	182.00	161.78
114+16.00	114+75.00	HWY. 67 LT.	59.00	52.44
116+50.00	117+20.00	HWY. 67 LT.	70.00	62.22
117+60.00	118+01.00	HWY. 67 LT.	41.00	36.44
121+06.00	124+28.00	HWY. 67 LT.	322.00	286.22
124+71.00	125+90.00	HWY. 67 LT.	119.00	105.78
124+72.00	124+72.00	HWY. 67 LT.	70.00	62.22
137+32.00	138+37.00	HWY. 67 LT.	105.00	93.33
140+00.00	140+80.00	HWY. 67 LT.	80.00	71.11
142+50.00	143+49.00	HWY. 67 LT.	99.00	88.00
144+90.00	145+85.00	HWY. 67 LT.	95.00	84.44
107+00.00	107+63.00	HWY. 67 RT.	63.00	56.00
107+96.00	109+33.00	HWY. 67 RT.	137.00	121.78
109+64.00	109+90.00	HWY. 67 RT.	26.00	23.11
117+25.00	118+00.00	HWY. 67 RT.	75.00	66.67
119+64.00	120+44.00	HWY. 67 RT.	80.00	71.11
120+98.00	126+19.00	HWY. 67 RT.	521.00	463.11
132+00.00	134+59.00	HWY. 67 RT.	259.00	230.22
139+02.00	140+78.00	HWY. 67 RT.	176.00	156.44
142+71.00	143+55.00	HWY. 67 RT.	84.00	74.67
SIDE ROADS				
13+55.00	13+70.00	PROF. PARK CUL-DE-SAC RT.	15.00	13.33
14+15.00	17+90.00	RED HILL RD. SOUTH. LT.	375.00	333.33
11+90.00	13+00.00	26TH ST. SOUTH LT.	110.00	97.78
11+90.00	12+80.00	26TH ST. SOUTH RT.	90.00	80.00
20+91.00	23+12.00	26TH ST. NORTH LT.	221.00	196.44
24+90.00	27+60.00	26TH ST. NORTH LT.	270.00	240.00
22+20.00	23+50.00	26TH ST. NORTH RT.	130.00	115.56
25+70.00	27+60.00	27TH ST. NORTH RT.	190.00	168.89
11+00.00	12+00.00	HWY. 67 CONN. LT.	100.00	88.89
TOTAL:				**13374.20**

NOTE: AVERAGE WIDTH = 8'-0"

MAILBOXES

STATION	LOCATION	MAILBOXES	MAILBOX SUPPORTS (SINGLE) EACH	MAILBOX SUPPORTS (DOUBLE) EACH
HWY. 67				
108+29	HWY. 67 LT.	2		1
116+15	HWY. 67 LT.	1	1	
SIDE ROADS				
29+74	RED HILL RD. N. RT.	1	1	
7+24	WALNUT ST. LT.	1	1	
TOTALS:		**5**	**3**	**1**

CONCRETE ISLAND

STATION	LOCATION	CURB FACE TYPE	CONCRETE ISLAND SQ.YD.
BYPASS			
100+50	BYPASS RT.	B	72
100+46	BYPASS LT.	B	53
HWY. 67			
105+31	HWY. 67 LT.	B	290
106+28	HWY. 67 LT.	B	57
118+24	HWY. 67 RT.	B	29
119+06	HWY. 67 RT.	B	142
145+90	HWY. 67 RT.	B	54
146+67	HWY. 67 RT.	B	32
TOTAL:			**729**

DUMPED RIPRAP AND FILTER BLANKET

STATION	STATION	LOCATION	DUMPED RIPRAP	FILTER BLANKET
			CU. YD.	SQ. YD.
110+00	115+50	HWY. 67 RT. - STREAM CROSS VANES	152	596
TOTALS:			**152**	**596**

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

rnfortner 6/28/2022 10:32:58 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	177	549
		QUANTITIES				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 7/6/2022

CONCRETE WALKS & HAND RAILING (BOX 1 OF 2)

STATION	STATION	LOCATION	LENGTH	CONCRETE WALKS	CONCRETE WALKS (TYPE SPECIAL)	HAND RAILING	SOLID SODDING	WATER
			LIN. FT.	SQ.YD.	SQ.YD.	LIN. FT.	SQ.YD.	M.GAL.
BYPASS								
100+21	101+94	BYPASS LT.	245	136			82	1.0
101+94	104+79	BYPASS LT.	285	158			95	1.2
105+21	108+29	BYPASS LT.	308	171			103	1.3
108+71	119+46	BYPASS LT.	1075	597			356	4.5
120+14	120+78	BYPASS LT.	64	36			21	0.3
100+44	101+94	BYPASS RT.	238	132			79	1.0
101+94	107+19	BYPASS RT.	525	292			175	2.2
107+65	112+57	BYPASS RT.	492	273			164	2.1
113+09	114+61	BYPASS RT.	152	84			51	0.6
115+38	120+77	BYPASS RT.	539	299			180	2.3
HWY. 67								
106+48	107+46	HWY. 67 LT.	107	59			36	0.4
107+46	108+45	HWY. 67 LT.	99	55			33	0.4
108+99	110+36	HWY. 67 LT.	137	76			46	0.6
110+94	111+44	HWY. 67 LT.	50	28			17	0.2
112+00	113+74	HWY. 67 LT.	174	97			58	0.7
114+26	115+56	HWY. 67 LT.	130	72			43	0.5
116+08	117+14	HWY. 67 LT.	106	59			35	0.4
117+66	118+22	HWY. 67 LT.	79	44			26	0.3
118+71	119+06	HWY. 67 LT.	49	27			16	0.2
119+06	124+28	HWY. 67 LT.	522	290			174	2.2
124+72	130+08	HWY. 67 LT.	536	298			179	2.3
130+52	137+56	HWY. 67 LT.	704	391			235	3.0
138+00	138+39	HWY. 67 LT.	57	32			19	0.2
138+86	139+07	HWY. 67 LT.	34	19			11	0.1
139+07	140+72	HWY. 67 LT.	165	92			55	0.7
140+72	140+93	HWY. 67 LT.	45	25			15	0.2
141+48	141+68	HWY. 67 LT.	36	20			12	0.2
141+68	143+52	HWY. 67 LT.	184	102			61	0.8
144+89	145+81	HWY. 67 LT.	92	51			31	0.4
145+81	146+05	HWY. 67 LT.	52	29			17	0.2
146+62	146+83	HWY. 67 LT.	43	24			14	0.2
146+83	147+40	HWY. 67 LT.	57	32			19	0.2
147+88	148+68	HWY. 67 LT.	80	44			27	0.3
149+16	150+61	HWY. 67 LT.	145	81			48	0.6
153+67	153+88	HWY. 67 LT.	32	18			11	0.1
102+35	107+54	HWY. 67 RT.	519	288			173	2.2
108+06	109+23	HWY. 67 RT.	117	65			39	0.5
109+75	112+56	HWY. 67 RT.	281	156			94	1.2
113+02	117+16	HWY. 67 RT.	414	230			138	1.7
117+16	118+62	HWY. 67 RT.	200	111			67	0.8
119+15	119+24	HWY. 67 RT.	78	43			26	0.3
119+24	119+66	HWY. 67 RT.	63		35	63	21	0.3
119+66	120+50	HWY. 67 RT.	91	51			30	0.4
121+00	138+14	HWY. 67 RT.	1714	952			571	7.2
138+14	138+36	HWY. 67 RT.	35	19			12	0.1
138+88	139+07	HWY. 67 RT.	34	19			11	0.1
139+07	140+72	HWY. 67 RT.	165	92			55	0.7
140+72	140+96	HWY. 67 RT.	42	23			14	0.2
141+48	141+74	HWY. 67 RT.	49	27			16	0.2
142+26	142+33	HWY. 67 RT.	7	4			2	0.0
142+77	143+51	HWY. 67 RT.	74	41			25	0.3
144+13	144+55	HWY. 67 RT.	62	34			21	0.3
145+07	146+05	HWY. 67 RT.	162	90			54	0.7
146+64	148+80	HWY. 67 RT.	290	161			97	1.2
149+14	149+38	HWY. 67 RT.	41	23			14	0.2
149+96	150+32	HWY. 67 RT.	36	20			12	0.2
152+66	153+71	HWY. 67 RT.	105		59		35	0.4
153+71	153+76	HWY. 67 RT.	5	3			2	0.0
154+45	154+49	HWY. 67 RT.	4	2			1	0.0
155+17	155+80	HWY. 67 RT.	63	35			21	0.3
156+24	156+63	HWY. 67 RT.	39	22			13	0.2
157+21	157+73	HWY. 67 RT.	52	29			17	0.2
158+17	158+43	HWY. 67 RT.	26	14			9	0.1
159+17	161+34	HWY. 67 RT.	227	126			76	1.0
161+65	164+10	HWY. 67 RT.	260	139			87	1.1
SUBTOTALS (BOX 1 OF 2):				**7062**	**94**	**63**	**4299**	**54.0**

CONCRETE WALKS & HAND RAILING (BOX 2 OF 2)

STATION	STATION	LOCATION	LENGTH	CONCRETE WALKS	CONCRETE WALKS (TYPE SPECIAL)	HAND RAILING	SOLID SODDING	WATER
			LIN. FT.	SQ.YD.	SQ.YD.	LIN. FT.	SQ.YD.	M.GAL.
SIDE ROADS								
90+03	91+01	PROFESSIONAL PARK DR. LT.	97		65	90	32	0.4
91+56	97+45	PROFESSIONAL PARK DR. LT.	589	327			196	2.5
97+45	99+39	PROFESSIONAL PARK DR. LT.	194	108			65	0.8
99+39	99+66	PROFESSIONAL PARK DR. LT.	46	26			15	0.2
90+03	91+33	PROFESSIONAL PARK DR. RT.	126	70			42	0.5
92+29	92+58	PROFESSIONAL PARK DR. RT.	29	16			10	0.1
93+06	94+48	PROFESSIONAL PARK DR. RT.	142	79			47	0.6
95+14	97+45	PROFESSIONAL PARK DR. RT.	231	128			77	1.0
97+45	99+43	PROFESSIONAL PARK DR. RT.	198	110			66	0.8
99+43	99+75	PROFESSIONAL PARK DR. RT.	54	30			18	0.2
18+25	18+52	PROFESSIONAL PARK CUL-DE-SAC LT.	33	18			11	0.1
18+96	19+58	PROFESSIONAL PARK CUL-DE-SAC LT.	62	34			21	0.3
19+58	19+80	PROFESSIONAL PARK CUL-DE-SAC LT.	29	16			10	0.1
17+77	19+58	PROFESSIONAL PARK CUL-DE-SAC RT.	181	101			60	0.8
19+58	19+80	PROFESSIONAL PARK CUL-DE-SAC RT.	29	16			10	0.1
14+36	15+40	HWY. 51 LT.	104	58				
15+37	16+93	HWY. 51 RT.	156	87				
20+26	20+49	RED HILL RD. N. RT.	36	20			12	0.2
20+49	23+31	RED HILL RD. N. RT.	282	157			94	1.2
20+26	20+45	RED HILL RD. N. LT.	34	19			11	0.1
20+45	23+32	RED HILL RD. N. LT.	287	159			96	1.2
7+05	7+15	WALNUT ST. LT.	10	6			3	0.0
7+59	8+09	WALNUT ST. LT.	50	28			17	0.2
8+53	9+55	WALNUT ST. LT.	102	57			34	0.4
7+05	7+15	WALNUT ST. RT.	10	7				
7+15	8+87	WALNUT ST. RT.	172		115	172		
8+87	9+39	WALNUT ST. RT.	56	31			19	0.2
11+73	12+48	HWY. 67 CONN. LT.	75	42			25	0.3
11+95	12+48	HWY. 67 CONN. RT.	53	29			18	0.2
13+00	13+70	HWY. 67 CONN. RT.	70	39			23	0.3
18+75	19+55	CLAY ST. LT.	80	44			27	0.3
20+46	20+94	CLAY ST. LT.	48	27			16	0.2
21+46	22+00	CLAY ST. LT.	54	30			18	0.2
18+65	19+56	CLAY ST. RT.	91	51			30	0.4
20+45	21+09	CLAY ST. RT.	64	36			21	0.3
21+53	22+00	CLAY ST. RT.	47	26			16	0.2
28+70	29+20	MAIN ST. LT.	45	25			15	0.2
30+55	31+28	MAIN ST. LT.	73		41	73	24	0.3
31+60	32+20	MAIN ST. LT.	61	34			20	0.3
30+50	30+79	MAIN ST. RT.	29	16				
31+20	32+20	MAIN ST. RT.	100		56	100		
60+49	61+75	HICKORY ST. LT.	126	88			42	0.5
60+29	61+75	HICKORY ST. RT.	146		85		49	0.6
38+90	39+67	CLINTON ST. LT.	93	52			31	0.4
41+10	41+34	CLINTON ST. LT.	25	14			8	0.1
38+90	39+73	CLINTON ST. RT.	102	57			34	0.4
40+23	40+55	CLINTON ST. RT.	55	31			18	0.2
41+07	41+34	CLINTON ST. RT.	31	17			10	0.1
46+70	46+94	CADDO ST. LT.	24	13			8	0.1
47+46	47+56	CADDO ST. LT.	10	6			3	0.0
48+24	48+40	CADDO ST. LT.	16	9			5	0.1
49+08	49+49	CADDO ST. LT.	41	23			14	0.2
51+37	52+27	CADDO ST. LT.	106	59			35	0.4
46+90	47+79	CADDO ST. RT.	89	49			30	0.4
48+25	48+44	CADDO ST. RT.	19	11			6	0.1
48+96	49+40	CADDO ST. RT.	44	24			15	0.2
51+48	52+04	CADDO ST. RT.	56	31			19	0.2
52+56	53+32	CADDO ST. RT.	99	55			33	0.4
SUBTOTALS (BOX 2 OF 2):				**2646**	**362**	**435**	**1579**	**19.9**
SUBTOTALS (BOX 1 OF 2):				**7062**	**94**	**63**	**4299**	**54.0**
TOTALS:				**9708**	**456**	**498**	**5878**	**73.9**

CGervasini 7/6/2022 4:40:21 PM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	178	549
		QUANTITIES				

FLOWABLE SELECT MATERIAL

STATION	LOCATION	CU. YD.
115+88	BYPASS RT.	54
116+94	BYPASS RT.	5
129+67	BYPASS RT.	4
140+13	BYPASS RT.	15
TOTAL:		78

SELECTED PIPE BEDDING

LOCATION	SELECTED PIPE BEDDING CU.YD.
ENTIRE PROJECT TO BE USED IF	
AND WHERE DIRECTED BY THE	1020
ENGINEER	
TOTAL:	1020

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

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

STRUCTURES (BOX 1 OF 3)

| STATION | DESCRIPTION | REINFORCED CONCRETE PIPE CULVERT (CLASS III) 18" | 24" | 30" | 36" | 48" | 54" | 44"X27" | (CLASS IV) 18" | 24" | 36" | 48" | 54" | 22"X14" | (CLASS V) 24" | 30' | 36" | 54" | 60" | PIPE CULVERT ALTERNATES 1 & 2 18" | 24" | 30" | 36" | 42" | 48" | 54" | SIDE DRAIN 24" | FLARED END SECTIONS FOR R.C. PIPE CULVERTS 18" | 24" | 30" | 36" | 48" | 54" | 60" | TEMPORARY CULVERTS 24" | DROP INLETS TYPE C | E | MO | ST | SPECIAL | EXT. 4' | 8' | JUNCT. BOXES (TYPE E) | (TYPE ST) | SPAN | HEIGHT | LENGTH | CLASS S CONCRETE-ROADWAY | REINF. STEEL-ROADWAY (GRADE 60) | UNCL.EXC. FOR STR.-ROADWAY | SOLID SODDING | WATER | STD. DWG. NOS. |
|---|---|---|---|---|---|---

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	179	549
		QUANTITIES				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

STRUCTURES (BOX 2 OF 3)

| STATION | DESCRIPTION | REINFORCED CONCRETE PIPE CULVERT (CLASS III) 18" | 24" | 30" | 36" | 48" | 54" | 44"X27" | (CLASS IV) 18" | 24" | 36" | 48" | 54" | 22"X14" | (CLASS V) 24" | 30" | 36" | 54" | 60" | PIPE CULVERT ALTERNATES 1 & 2 18" | 24" | 30" | 36" | 42" | 48" | 54" | SIDE DRAIN 24" | FLARED END SECTIONS FOR R.C. PIPE CULVERTS 18" | 24" | 30" | 36" | 48" | 54" | 60" | TEMPORARY CULVERTS 24" | DROP INLETS TYPE C | E | MO | ST | SPECIAL | EXT. 4' | 8' | JUNCT. BOXES (TYPE E) | (TYPE ST) | SPAN | HEIGHT | LENGTH | CLASS S CONCRETE-ROADWAY | REINF. STEEL-ROADWAY (GRADE 60) | UNCL.EXC. FOR STR.-ROADWAY | SOLID SODDING | WATER | STD. DWG. NOS. |
|---|---|---|---|---|---|---

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	180	549
		QUANTITIES				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

STRUCTURES (BOX 3 OF 3)

STATION	DESCRIPTION	REINFORCED CONCRETE PIPE CULVERT (CLASS III) 18"	24"	30"	36"	48"	54"	44"X27"	(CLASS IV) 18"	24"	36"	48"	54"	22"X14"	(CLASS V) 24"	30"	36"	54"	60"	PIPE CULVERT ALTERNATES 1 & 2 18"	24"	30"	36"	42"	48"	54"	SIDE DRAIN 24"	FLARED END SECTIONS FOR R.C. PIPE CULVERTS 18"	24"	30"	36"	48"	54"	60"	TEMPORARY CULVERTS 24"	DROP INLETS TYPE C	E	MO	ST	SPECIAL	EXT. 4'	8'	JUNCT. BOXES (TYPE E)	(TYPE ST)	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.																										EACH							LIN. FT.	EACH									LIN. FT.			CU.YD.	POUND	CU.YD.	SQ.YD.	M.GAL.	
HWY. 67 SIDE ROADS																																																						
7+12	WALNUT ST. LT.																			84																	1			1															FPC-9E, FPC-9M, PCC-1, PCM-·
8+00	WALNUT ST. LT.																			131																	1			1															FPC-9E, FPC-9M, PCC-1, PCM-·
9+35	WALNUT ST. LT.	33																																			1																FPC-9M, PCC-1
7+12	WALNUT ST. RT.																			84																	1					1													FPC-9E, FPC-9M, PCC-1, PCM-·
8+00	WALNUT ST. RT.																			131																	1					1													FPC-9E, FPC-9M, PCC-1, PCM-·
9+35	WALNUT ST. RT.																			27																	1						1													FPC-9E, FPC-9M, PCC-1, PCM-·
11+30	HWY. 67 CONNECTOR LT.	39																																			1																FPC-9M, PCC-1
12+45	HWY. 67 CONNECTOR LT.																			110																	1																FPC-9E, FPC-9M, PCC-1, PCM-·
11+30	HWY. 67 CONNECTOR RT.																			13																	1						1													FPC-9E, FPC-9M, PCC-1, PCM-·
12+45	HWY. 67 CONNECTOR RT.																			111																	1																FPC-9E, FPC-9M, PCC-1, PCM-·
18+90	CLAY ST. LT.																			56																	1			1															FPC-9E, FPC-9M, PCC-1, PCM-·
19+50	CLAY ST. LT.				44																										1					1					1													17	0.21	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1
20+50	CLAY ST. LT.			12		36																								1								1														13	0.16	FES-1, FES-2, FPC-9S, PCC-1
20+83	CLAY ST. LT.																						10															1																FPC-9S, PCC-1, PCM-1
20+83	CLAY ST. LT.																							28														1					1												FPC-9E, PCC-1, PCM-1
21+00	CLAY ST. LT.																			13																				1														FPC-9S, PCC-1, PCM-1
21+36	CLAY ST. LT.																			16																				1														FPC-9S, PCC-1, PCM-1
21+50	CLAY ST. LT.																			46																			1						1									FPC-9E, PCC-1, PCM-1
21+89	CLAY ST. LT.																			35																	1			1															FPC-9E, FPC-9M, PCC-1, PCM-·
18+90	CLAY ST. RT.																			56																	1					1													FPC-9E, FPC-9M, PCC-1, PCM-·
19+50	CLAY ST. RT.																						143															1					1													FPC-9E, FPC-9M, PCC-1, PCM-·
20+50	CLAY ST. RT.																							137														1																FPC-9M, PCC-1, PCM-1
21+00	CLAY ST. RT.																			45																	1					2													FPC-9E, FPC-9M, PCC-1, PCM-·
21+56	CLAY ST. RT.																			52																	1					1													FPC-9E, FPC-9M, PCC-1, PCM-·
21+89	CLAY ST. RT.																			29																	1						1													FPC-9E, FPC-9M, PCC-1, PCM-·
29+00	MAIN ST. LT.																			54																	1						1													FPC-9E, FPC-9M, PCC-1, PCM-·
29+58	MAIN ST. LT.							35																													1			1															FPC-9S, PCC-1
30+45	MAIN ST. LT.									70																				2																									16	0.20	FES-1, FES-2, PCC-1
31+05	MAIN ST. LT.				36																																1						1													FPC-9E, FPC-9M, PCC-1
31+25	MAIN ST. LT.																			17																				1																FPC-9S, PCC-1, PCM-1
31+30	MAIN ST. LT.																						21																																FPC-9S, PCC-1, PCM-1
31+30	MAIN ST. LT.																			4																				1															FPC-9S, PCC-1, PCM-1
31+50	MAIN ST. LT.																			25																				1															FPC-9S, PCC-1, PCM-1
32+00	MAIN ST. LT.																						66																				1					1								FPC-9E, PCC-1, PCM-1
29+55	MAIN ST. RT.				8																										1								1						1									17	0.21	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1
31+02	MAIN ST. RT.																																																						FPC-9S
30+87	MAIN ST. RT.																			13																				1															FPC-9S, PCC-1, PCM-1
31+05	MAIN ST. RT.																						25																				1													FPC-9S, PCC-1, PCM-1
31+23	MAIN ST. RT.																			23																				1															FPC-9S, PCC-1, PCM-1
31+30	MAIN ST. RT.																			20																				1															FPC-9S, PCC-1, PCM-1
32+00	MAIN ST. RT.																			66																	1																FPC-9M, PCC-1, PCM-1
39+00	CLINTON ST. LT.																			41																	1			1															FPC-9E, FPC-9M, PCC-1, PCM-·
39+45	CLINTON ST. LT.																			5																				1															FPC-9S, PCC-1, PCM-1
39+45	CLINTON ST. LT.																				22																	1					2													FPC-9E, FPC-9M, PCC-1, PCM-·
41+15	CLINTON ST. LT.																			11																	1																FPC-9M, PCC-1, PCM-1
39+00	CLINTON ST. RT.																			41																	1						1													FPC-9E, FPC-9M, PCC-1, PCM-·
39+45	CLINTON ST. RT.																			21																	1					2													FPC-9E, FPC-9M, PCC-1, PCM-·
41+15	CLINTON ST. RT.																			7																	1																FPC-9M, PCC-1, PCM-1
46+82	CADDO ST. LT.																			68																	1						1													FPC-9E, FPC-9M, PCC-1, PCM-·
47+54	CADDO ST. LT.																			79																	1					1													FPC-9E, FPC-9M, PCC-1, PCM-·
48+37	CADDO ST. LT.																			52																	1						1													FPC-9E, FPC-9M, PCC-1, PCM-·
48+92	CADDO ST. LT.																			7																				1																FPC-9S, PCC-1, PCM-1
48+92	CADDO ST. LT.																			45																																				FPC-9S, PCC-1, PCM-1
49+40	CADDO ST. LT.									43																													1						1													FPC-9E, FPC-9M, PCC-1
51+00	CADDO ST. LT.																			10																				1															FPC-9S, PCC-1, PCM-1
51+00	CADDO ST. LT.	60																																			1																FPC-9M, PCC-1
51+01	CADDO ST. LT.																			76																	1																FPC-9M, PCC-1, PCM-1
51+02	CADDO ST. LT.																																																					FPC-9S
51+03	CADDO ST. LT.																			12																	1					2													FPC-9E, FPC-9M, PCC-1, PCM-·
51+04	CADDO ST. LT.																			16																	1					2													FPC-9E, FPC-9M, PCC-1, PCM-·
51+05	CADDO ST. LT.			25																																																FPC-9S, PCC-1
51+06	CADDO ST. LT.																			21																	1					2													FPC-9E, FPC-9M, PCC-1, PCM-·
46+82	CADDO ST. RT.																			254																	1						1													FPC-9E, FPC-9M, PCC-1, PCM-·
49+40	CADDO ST. RT.																			5																				1															FPC-9S, PCC-1, PCM-1
49+40	CADDO ST. RT.																					28																				1						1								FPC-9E, FPC-9M, PCC-1, PCM-·
51+00	CADDO ST. RT.																			34																				1															FPC-9M, PCC-1, PCM-1
51+80	CADDO ST. RT.																			76																				1															FPC-9M, PCC-1, PCM-1
SUBTOTALS (BOX 3 OF 3):		132		37	88	36		35		113										2141	22	28	265	28	137					2	1	2						3		42	16		20	19		5								63	0.78	
SUBTOTALS (BOX 1 OF 3):		173	470	191	188				32	481	334	1408	198	28	430	289	412	36	284	1006	20	126				58	5	17	5	10	25	4	2	95		4	20	1	11	17	5	1					40.56	3845	21	1093	13.74	
SUBTOTALS (BOX 2 OF 3):		12	27		237	255	125													1296	194	177	115			246		1	1		4	4	1			2		15	9	27	18	3	5	10				106.16	10083	44	246	3.09	
TOTALS:		317	497	228	513	291	125	35	32	594	334	1408	198	28	430	289	412	36	284	4443	236	331	380	28	137	246	58	6	20	6	16	29	5	2	95	5	4	77	26	38	55	27	6	15				146.72	13928	65	1402	17.61	

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

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.

QUANTITIES

rnfortner
WORKSPACE: AHTD
L:\2017\170175 - AHTD Arkadelphia Bypass\Drawings\r070442_QTY_01.dgn
6/28/2022 10:33:33 AM
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	181	549
		QUANTITIES				

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.	
197+95	BYPASS - CONST. TRP. 6'X6' R.C. BOX CULVERT	6	6	140	254.55	31578	103	33	0.41	RCB-1, RCB-2, SPECIAL DETAILS
264+00	BYPASS - CONST. SEXT. 6'X3' R.C. BOX CULVERT	6	3	100	278.24	36657	128	27	0.34	RCB-1, RCB-2, SPECIAL DETAILS
103+28	HWY. 67 - CONST. TRP. 6'X3' R.C. BOX CULVERT	6	3	110	179.65	24131	87	25	0.32	RCB-1, RCB-2, SPECIAL DETAILS
110+00	HWY. 67 - CONST. QUINT. 6'X3' R.C. BOX CULVERT	6	3	284	718.43	96814	329	29	0.37	RCB-1, RCB-2, SPECIAL DETAILS
118+40	HWY. 67 - CONST. TRP. 12'X9' R.C. BOX CULVERT	12	9	288	1298.67	192282	516	54	0.68	RCB-1, RCB-2, SPECIAL DETAILS
126+22	HWY. 67 - CONST. QUINT. 6'X4' R.C. BOX CULVERT	6	4	96	245.00	32485	110	36	0.46	RCB-1, RCB-2, SPECIAL DETAILS
11+00	HWY. 67 CONN. - CONST. QUINT. 6'X4' R.C. BOX CULVERT	6	4	160	383.12	46224	171	26	0.32	RCB-1, RCB-2, SPECIAL DETAILS
TOTALS:					**3357.66**	**460171**	**1444**	**230**	**2.90**	

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

WHEELCHAIR RAMPS

STATION	LOCATION	TYPE 3	TYPE 4
		SQ. YD.	
100+62	BYPASS LT.		7.2
100+75	BYPASS RT.		7.4
267+69	BYPASS RT.		7.3
267+79	BYPASS LT.	4.2	
267+87	BYPASS RT		7.3
118+15	HWY. 67 RT.		7.2
118+18	HWY. 67 LT.	3.9	
118+93	HWY. 67 LT.		7.3
119+32	HWY. 67 RT.		7.2
140+84	HWY. 67 LT.	4.1	
140+84	HWY. 67 RT.	4.0	
141+54	HWY. 67 LT.	4.2	
141+54	HWY. 67 RT.	4.2	
145+71	HWY. 67 RT.		7.2
145+93	HWY. 67 LT.	3.9	
146+70	HWY. 67 LT.	4.4	
146+89	HWY. 67 RT.		7.2
148+72	HWY. 67 RT.	5.2	
149+15	HWY. 67 RT.	5.0	
153+80	HWY. 67 RT.	5.2	
154+35	HWY. 67 RT.	5.2	
161+20	HWY. 67 RT.	5.2	
161+79	HWY. 67 RT.	5.2	
162+90	HWY. 67 RT.	3.4	
99+54	PROFESSIONAL PARK DR. LT.		5.9
99+54	PROFESSIONAL PARK DR. RT.	4.4	
9+74	OFFICE PARK DR. RT.	3.4	
9+85	OFFICE PARK DR. LT.	3.6	
10+17	EXECUTIVE CIRCLE RT.	3.5	
10+21	EXECUTIVE CIRCLE LT.	3.6	
19+81	PROFESSIONAL PARK DR. CUL DE SAC LT.	5.5	
19+81	PROFESSIONAL PARK DR. CUL DE SAC RT.	5.5	
9+58	WALNUT ST. LT.	3.3	
9+58	WALNUT ST. RT.	4.5	
19+67	CLAY ST. W. LT.	4.4	
19+67	CLAY ST. W. RT.	4.2	
20+33	CLAY ST. E. LT.	4.2	
20+33	CLAY ST. E. RT.	4.4	
29+67	MAIN ST. W. LT.	4.3	
29+67	MAIN ST. W. RT.	4.3	
30+34	MAIN ST. E. LT.	4.2	
30+34	MAIN ST. E. RT.	4.2	
39+53	CLINTON ST. W. LT.	4.5	
39+53	CLINTON ST. W. RT.	3.7	
40+43	CLINTON ST. E. LT.	4.2	
40+43	CLINTON ST. E. RT.	3.6	
49+59	CADDO ST. W. LT.	3.7	
49+59	CADDO ST. W. RT.	4.5	
52+14	CADDO ST. E. RT.	5.7	
52+30	CADDO ST. E. LT.	5.3	
52+57	CADDO ST. E. LT.	3.5	
52+58	CADDO ST. E. RT.	4.5	
52+71	CADDO ST. E. LT.	3.7	
52+71	CADDO ST. E. RT.	3.9	
TOTALS:		**189.6**	**71.2**

CONCRETE COMBINATION CURB AND GUTTER (BOX 1 OF 2)

STATION	STATION	LOCATION	TYPE A (1' 6")
			LIN. FT.
BYPASS			
100+21	101+94	BYPASS LT.	256
101+94	104+73	BYPASS LT.	284
105+22	108+23	BYPASS LT.	306
108+72	119+43	BYPASS LT.	1074
120+14	120+78	BYPASS LT.	64
100+44	101+94	BYPASS RT.	249
101+94	107+20	BYPASS RT.	526
107+64	112+57	BYPASS RT.	493
113+09	114+89	BYPASS RT.	201
115+11	120+78	BYPASS RT.	600
135+52	135+72	BYPASS RT. (DRWY STA. 135+85)	85
136+02	136+18	BYPASS RT. (DRWY STA. 135+85)	82
HWY. 67			
106+44	108+46	HWY. 67 LT.	204
108+98	110+36	HWY. 67 LT.	138
110+94	111+44	HWY. 67 LT.	50
112+00	113+74	HWY. 67 LT.	174
114+26	115+56	HWY. 67 LT.	130
116+08	117+14	HWY. 67 LT.	106
117+66	118+32	HWY. 67 LT.	91
118+62	118+89	HWY. 67 LT.	40
118+89	124+28	HWY. 67 LT.	539
124+72	130+08	HWY. 67 LT.	536
130+52	137+56	HWY. 67 LT.	704
138+00	138+19	HWY. 67 LT.	19
138+19	138+49	HWY. 67 LT.	46
138+77	139+06	HWY. 67 LT.	48
139+06	140+72	HWY. 67 LT.	166
140+72	141+02	HWY. 67 LT.	55
141+39	141+68	HWY. 67 LT.	38
141+68	143+52	HWY. 67 LT.	184
143+52	143+80	HWY. 67 LT.	47
144+04	144+37	HWY. 67 LT.	50
144+89	146+14	HWY. 67 LT.	142
146+54	147+40	HWY. 67 LT.	103
147+88	148+68	HWY. 67 LT.	80
149+16	150+61	HWY. 67 LT.	145
152+60	152+62	HWY. 67 LT.	2
153+67	153+93	HWY. 67 LT.	43
102+35	107+54	HWY. 67 RT.	519
108+06	109+24	HWY. 67 RT.	118
109+76	112+56	HWY. 67 RT.	280
113+02	117+16	HWY. 67 RT.	414
117+16	118+71	HWY. 67 RT.	211
119+06	120+49	HWY. 67 RT.	246
121+01	138+15	HWY. 67 RT.	1714
138+15	138+46	HWY. 67 RT.	48
138+80	139+08	HWY. 67 RT.	47
139+08	140+73	HWY. 67 RT.	165
140+73	141+03	HWY. 67 RT.	47
141+39	141+74	HWY. 67 RT.	53
142+26	142+33	HWY. 67 RT.	7
142+77	143+51	HWY. 67 RT.	74
143+51	143+81	HWY. 67 RT.	54
144+03	144+55	HWY. 67 RT.	69
145+07	146+14	HWY. 67 RT.	173
146+54	147+69	HWY. 67 RT.	181
147+69	148+53	HWY. 67 RT.	84
148+53	148+84	HWY. 67 RT.	48
149+04	149+38	HWY. 67 RT.	47
149+96	150+32	HWY. 67 RT.	36
152+65	153+89	HWY. 67 RT.	138
154+28	154+49	HWY. 67 RT.	24
155+17	155+80	HWY. 67 RT.	63
156+24	156+63	HWY. 67 RT.	39
157+21	157+73	HWY. 67 RT.	52
158+17	158+43	HWY. 67 RT.	26
159+17	161+29	HWY. 67 RT.	215
161+69	164+10	HWY. 67 RT.	244
SUBTOTAL (BOX 1 OF 2):			**13536**

CONCRETE COMBINATION CURB AND GUTTER (BOX 2 OF 2)

STATION	STATION	LOCATION	TYPE A (1' 6")
			LIN. FT.
SIDE ROADS			
90+03	90+94	PROFESSIONAL PARK DR. LT.	91
90+94	91+20	PROFESSIONAL PARK DR. LT.	20
91+48	91+79	PROFESSIONAL PARK DR. LT.	35
91+79	99+38	PROFESSIONAL PARK DR. LT.	759
99+38	99+68	PROFESSIONAL PARK DR. LT.	53
90+03	91+11	PROFESSIONAL PARK DR. RT.	108
91+11	91+40	PROFESSIONAL PARK DR. RT.	30
91+67	91+74	PROFESSIONAL PARK DR. RT.	29
91+94	91+96	PROFESSIONAL PARK DR. RT. (DRWY. STA. 92+05)	23
92+16	92+16	PROFESSIONAL PARK DR. RT. (DRWY. STA. 92+05)	20
92+29	92+58	PROFESSIONAL PARK DR. RT.	29
92+58	92+71	PROFESSIONAL PARK DR. RT. (DRWY. STA. 92+82)	43
92+91	92+93	PROFESSIONAL PARK DR. RT. (DRWY. STA. 92+82)	38
93+06	94+42	PROFESSIONAL PARK DR. RT.	136
94+42	94+70	PROFESSIONAL PARK DR. RT.	45
94+94	95+20	PROFESSIONAL PARK DR. RT.	45
95+20	99+46	PROFESSIONAL PARK DR. RT.	426
99+46	99+76	PROFESSIONAL PARK DR. RT.	52
8+80	9+66	OFFICE PARK DR. LT.	86
8+78	9+48	OFFICE PARK DR. RT.	70
10+23	10+42	EXECUTIVE CIR. LT. (DRWY. STA. 10+53)	36
10+64	10+82	EXECUTIVE CIR. LT. (DRWY. STA. 10+53)	36
10+78	11+20	EXECUTIVE CIR. LT.	42
10+39	11+20	EXECUTIVE CIR. RT.	81
14+08	14+92	PROF. PARK CUL-DE-SAC LT. & RT.	457
14+11	14+31	PROF. PARK CUL-DE-SAC RT. (DRWY. STA. 14+25)	84
14+43	14+73	PROF. PARK CUL-DE-SAC RT. (DRWY. STA. 14+25)	66
17+85	19+60	PROF. PARK CUL-DE-SAC RT.	175
17+73	18+52	PROF. PARK CUL-DE-SAC LT.	79
18+59	18+64	PROF. PARK CUL-DE-SAC LT. (DRWY. STA. 18+74)	30
18+74	18+83	PROF. PARK CUL-DE-SAC LT. (DRWY. STA. 18+74)	38
18+96	19+60	PROF. PARK CUL-DE-SAC LT.	64
14+36	15+40	HWY. 51 LT.	104
15+37	16+93	HWY. 51 RT.	156
20+45	23+32	RED HILL RD. N. LT.	287
28+31	30+24	RED HILL RD. N. LT.	244
20+49	23+31	RED HILL RD. N. RT.	282
28+31	29+36	RED HILL RD. N. RT.	105
30+12	30+23	RED HILL RD. N. RT.	17
7+05	7+15	WALNUT ST. LT.	10
7+59	8+09	WALNUT ST. LT.	50
8+53	9+61	WALNUT ST. LT.	108
7+05	9+41	WALNUT ST. RT.	236
11+73	12+48	HWY. 67 CONN. LT.	75
13+00	13+70	HWY. 67 CONN. LT.	70
11+95	12+48	HWY. 67 CONN. RT.	53
13+00	13+69	HWY. 67 CONN. RT.	76
18+75	19+51	CLAY ST. LT.	76
20+47	20+94	CLAY ST. LT.	47
21+46	22+00	CLAY ST. LT.	54
18+75	19+53	CLAY ST. RT.	78
20+50	21+09	CLAY ST. RT.	59
21+53	22+00	CLAY ST. RT.	47
70+27	70+50	MCNUTT ST. LT.	26
70+27	70+50	MCNUTT ST. RT.	26
28+70	29+20	MAIN ST. LT.	50
30+48	31+16	MAIN ST. LT.	68
31+60	32+20	MAIN ST. LT.	60
30+48	30+79	MAIN ST. RT.	31
31+31	32+20	MAIN ST. RT.	89
60+27	61+75	HICKORY ST. LT.	151
60+27	61+75	HICKORY ST. RT.	151
38+90	39+42	CLINTON ST. LT.	57
41+10	41+34	CLINTON ST. LT.	24
38+90	39+52	CLINTON ST. RT.	63
41+07	41+34	CLINTON ST. RT.	32
46+70	46+94	CADDO ST. LT.	24
47+46	47+57	CADDO ST. LT.	11
48+24	48+40	CADDO ST. LT.	16
49+08	49+52	CADDO ST. LT.	44
51+37	52+33	CADDO ST. LT.	111
52+58	53+30	CADDO ST. LT.	110
46+70	47+79	CADDO ST. RT.	109
48+25	48+44	CADDO ST. RT.	19
48+96	49+42	CADDO ST. RT.	46
51+48	52+27	CADDO ST. RT.	99
52+53	53+32	CADDO ST. RT.	104
SUBTOTAL (BOX 2 OF 2):			**7081**
SUBTOTAL (BOX 1 OF 2):			**13536**
TOTAL:			**20617**

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 07/05/2022

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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	182	549
		QUANTITIES				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

DRIVEWAYS & TURNOUTS (BOX 1 OF 2)

STATION	SIDE	LOCATION	WIDTH	**MODIFIED CURB		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"	36"	22"X14"	
			FEET	STATION	STATION	SQ. YD.	SQ. YD.	TON	TON	LIN. FT.				
BYPASS														
105+00	LT.	BYPASS	16	104+78	105+22	46.85	203.22	22.35	82.98	100				DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
107+42	RT.	BYPASS	16	107+20	107+64	46.44	70.33	7.74	28.72					DR-1
108+50	LT.	BYPASS	16	108+28	108+72	46.44	82.00	9.02	33.48	30				DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
112+83	RT.	BYPASS	24	112+57	113+09	54.89	127.88	14.07	52.22	44				DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
119+80	LT.	BYPASS	40	119+46	120+14	99.67	216.11	23.77	88.24	70				DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
124+00	LT.	BYPASS	16				130.89	14.40	53.45	48				PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
131+00	LT.	BYPASS	16				118.22	13.00	48.27	36				PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
135+85	LT.	BYPASS	24			212.44				58				DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
145+00	RT.	BYPASS	16				175.44	19.30	71.64	32				PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
153+00	RT.	BYPASS	16				183.56	20.19	74.95	32				PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
154+70	LT.	BYPASS	16				278.11	30.59	113.56	44				PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
155+00	RT.	BYPASS	16				177.33	19.51	72.41	86				PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
176+50	RT.	BYPASS	16				160.11	17.61	65.38	52				PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
177+70	LT.	BYPASS	16				204.44	22.49	83.48					
191+00	RT.	BYPASS	16				177.12	19.48	72.32					
202+00	LT.	BYPASS	16				170.56	18.76	69.65					
202+00	RT.	BYPASS	16				172.78	19.01	70.55					
211+00	LT.	BYPASS	16				166.44	18.31	67.96	40				PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
211+00	RT.	BYPASS	16				171.22	18.83	69.91					
222+00	LT.	BYPASS	16				161.67	17.78	66.02	28				PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
222+00	RT.	BYPASS	16				161.67	17.78	66.02					
231+00	LT.	BYPASS	16				167.78	18.46	68.51			44		PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
231+00	RT.	BYPASS	16				169.22	18.61	69.10					
243+70	RT.	BYPASS	16				197.67	21.74	80.72					
243+83	LT.	BYPASS	16				167.11	18.38	68.24	68				PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
257+00	LT.	BYPASS	16				229.64	25.26	93.77	76				PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
261+00	LT.	BYPASS	16				212.33	23.36	86.70	50				PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
263+00	RT.	BYPASS	16				253.27	27.86	103.42					
BYPASS SIDE ROADS														
92+05	RT.	PROF. PARK DR.	22	91+80	92+30	103.67								DR-1
92+82	RT.	PROF. PARK DR.	22	92+57	93+07	146.89								DR-1
10+53	LT.	EXECUTIVE CIR.	22	10+28	10+78	108.22								DR-1
14+25	RT.	PROF. PARK DR. CUL-DE-SAC	28	13+97	14+53	296.33				58				DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
18+74	LT.	PROF. PARK DR. CUL-DE-SAC	22	18+49	18+99	134.00								DR-1
29+60	RT.	RED HILL RD. N.	20	29+36	29+84	40.00	133.00	14.63	54.31					DR-1
29+90	RT.	RED HILL RD. N.	28	29+62	30+18	199.67								DR-1
30+30	LT.	RED HILL RD. N.	24	30+04	30+56	60.33	108.00	11.88	44.10					DR-1
12+61	RT.	25TH ST. S.	16				99.42	10.94	40.60	38				PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
24+00	RT.	26TH ST. N.	16				192.89	21.22	78.76					
SUBTOTALS (BOX 1 OF 2):						**1595.85**	**5239.43**	**576.33**	**2139.44**	**990**		**44**		

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2") 94.8% MIN. AGGR 5.2% ASPHALT BINDER
MAXIMUM NUMBER OF GYRATIONS = 115 FOR PG 64-22

THE CONTRACTOR, WITH THE APPROVAL OF THE ENGINEER, WILL BE ALLOWED TO SUBSTITUTE A HIGHER PERFORMANCE GRADE ASPHALT SURFACE COURSE FOR DRIVEWAYS AND MINOR SIDE STREET CONSTRUCTION AT NO ADDITIONAL COST TO THE DEPARTMENT.

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

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.

FENCING

STATION	STATION	LOCATION	WIRE FENCE (TYPE A) LIN. FT.	* 6' CHAIN LINK FENCE LIN. FT.	* 12'-0" GATES EACH	* 14'-0" GATES EACH
BYPASS						
100+36	104+75	BYPASS LT.	535			
105+25	108+25	BYPASS LT.	495			
108+75	115+00	BYPASS LT.	671			
100+68	107+17	BYPASS RT.	653			
107+67	112+53	BYPASS RT.	505			
113+13	113+93	BYPASS RT.	104			
115+00	119+50	BYPASS LT.	419			
120+10	123+75	BYPASS LT.	387			
124+25	130+00	BYPASS LT.	745			
130+00	130+75	BYPASS LT.	75			
131+25	135+55	BYPASS LT.	436			
136+15	145+00	BYPASS LT.	829			
142+18	144+75	BYPASS RT.	309			
145+00	154+30	BYPASS LT.	841			
154+80	160+00	BYPASS LT.	525			
145+25	152+75	BYPASS RT.	876			
153+25	154+75	BYPASS RT.	170			
155+25	160+00	BYPASS RT.	509			
160+00	175+00	BYPASS LT.	1507			
160+00	175+00	BYPASS RT.	1647			
175+00	177+45	BYPASS LT.	245			
177+95	181+30	BYPASS LT.	315			
183+65	190+00	BYPASS LT.	645			
175+00	175+97	BYPASS RT.	117			
176+47	181+00	BYPASS RT.	509			
183+65	190+00	BYPASS RT.	675			
190+00	201+75	BYPASS LT.	1186			
202+25	205+00	BYPASS LT.	275			
190+00	190+75	BYPASS RT.	75			
191+25	201+75	BYPASS RT.	1050			
202+25	205+00	BYPASS RT.	275			
205+00	210+75	BYPASS LT.	575			
211+25	220+00	BYPASS LT.	875			
205+00	210+75	BYPASS RT.	575			
211+25	220+00	BYPASS RT.	875			
220+00	221+75	BYPASS LT.	175			
222+25	230+75	BYPASS LT.	850			
231+25	235+00	BYPASS LT.	375			
220+00	221+75	BYPASS RT.	175			
222+25	230+75	BYPASS RT.	850			
231+25	235+00	BYPASS RT.	375			
235+00	243+71	BYPASS LT.	877			
244+21	250+00	BYPASS LT.	544			
235+00	243+32	BYPASS RT.	832			
243+82	250+00	BYPASS RT.	659			
250+00	256+75	BYPASS LT.	695			
257+25	260+75	BYPASS LT.	398			
261+25	265+00	BYPASS LT.	449			
250+00	257+89	BYPASS RT.	771			
260+15	262+75	BYPASS RT.	258			
263+25	265+00	BYPASS RT.	150			
265+00	265+86	BYPASS LT.	103			
265+86	267+67	BYPASS LT.		217		
265+00	266+79	BYPASS RT.	150			
HWY. 67						
102+10	103+60	HWY. 67 LT.	170			
108+11	109+98	HWY. 67 LT.		153	2	
SIDE ROAD						
11+23	12+18	HWY. 67 CONN. LT.		109		1
12+93	18+29	FUTURE BYPASS TO HWY. 67 LT.	609			
11+23	12+18	FUTURE BYPASS TO HWY. 67 RT.	537			
TOTALS:			**30507**	**479**	**2**	**1**

* DENOTES ALTERNATE BID ITEM.

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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	183	549
		QUANTITIES				

DRIVEWAYS & TURNOUTS (BOX 2 OF 2)

STATION	SIDE	LOCATION	WIDTH	**MODIFIED CURB		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"	36"	22"X14"	
			FEET	STATION	STATION	SQ. YD.	SQ. YD.	TON	TON	LIN. FT.				
HWY. 67														
107+80	RT.	HWY. 67	24	107+54	108+06	54.89	104.78	11.53	42.79				32	DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
108+72	LT.	HWY. 67	24	108+46	108+98	54.89	133.56	14.69	54.54					DR-1
109+50	RT.	HWY. 67	24	109+24	109+76	54.89	94.67	10.41	38.66					DR-1
110+65	LT.	HWY. 67	24	110+39	110+91	220.78					52			DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
111+72	LT.	HWY. 67	24	111+46	111+98	226.56					47			DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
112+79	RT.	HWY. 67	18	112+50	113+02	100.11								DR-1
114+00	LT.	HWY. 67	24	113+74	114+26	54.89	100.00	11.00	40.83	32				DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
115+82	LT.	HWY. 67	24	115+56	116+08	136.33				32				DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
117+40	LT.	HWY. 67	24	117+14	117+66	138.78							32	DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
120+75	RT.	HWY. 67	24	120+49	121+01	55.35	218.72	24.06	89.31			62		DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
124+50	LT.	HWY. 67	16	124+28	124+72	46.44	103.56	11.39	42.29	43				DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
130+30	LT.	HWY. 67	16	130+08	130+52	46.44	66.89	7.36	27.31	36				DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
137+78	LT.	HWY. 67	16	137+56	138+00	46.44	48.79	5.37	19.92	32				DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
142+00	RT.	HWY. 67	24	141+74	142+26	134.11				38				DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
142+55	RT.	HWY. 67	16	142+33	142+77	46.44	44.00	4.84	17.97	34				DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
144+63	LT.	HWY. 67	24	144+37	144+89	78.44								DR-1
144+81	RT.	HWY. 67	24	144+55	145+07	119.11								DR-1
147+64	LT.	HWY. 67	20	147+40	147+88	67.33								DR-1
148+92	LT.	HWY. 67	20	148+68	149+16	50.67	41.56	4.57	16.97					DR-1
149+67	RT.	HWY. 67	30	149+38	149+96	85.89								DR-1
150+65	RT.	HWY. 67	38	150+32	150+98	99.76								DR-1
152+97	LT.	HWY. 67	40	152+63	153+31	123.11								DR-1
153+41	LT.	HWY. 67	24	153+15	153+67	69.11								DR-1
154+80	RT.	HWY. 67	40	154+46	155+14	131.78								DR-1
156+00	RT.	HWY. 67	16	155+78	156+22	88.22								DR-1
156+93	RT.	HWY. 67	30	156+64	157+22	206.22								DR-1
157+95	RT.	HWY. 67	16	157+73	158+17	65.11								DR-1
158+65	RT.	HWY. 67	16	158+43	158+87	79.11								DR-1
158+95	RT.	HWY. 67	16	158+73	159+17	79.11								DR-1
SIDE ROADS														
7+37	LT.	WALNUT ST.	16	7+15	7+59	46.44	39.11	4.30	15.97					DR-1
8+31	LT.	WALNUT ST.	24	8+05	8+57	46.44	85.67	9.42	34.98					DR-1
11+66	RT.	HWY. 67 CONN.	30	11+37	11+95	459.56								DR-1
12+74	RT.	HWY. 67 CONN.	24	12+48	13+00	54.89	105.11	11.56	42.92					DR-1
12+74	LT.	HWY. 67 CONN.	24	12+48	13+00	55.00	84.22	9.26	34.39					DR-1
21+30	RT.	CLAY ST. E.	16	21+08	21+52	46.44	66.67	7.33	27.22					DR-1
21+20	LT.	CLAY ST. E.	24	20+94	21+46	109.78								DR-1
29+07	RT.	MAIN ST. W.	46	28+70	29+44	115.78								DR-1
29+39	LT.	MAIN ST. W.	10	29+20	29+58	48.11								DR-1
31+05	RT.	MAIN ST. E.	24	30+79	31+31	118.33								DR-1
31+38	LT.	MAIN ST. E.	16	31+16	31+60	94.67								DR-1
40+81	RT.	CLINTON ST. E.	24	40+55	41+07	92.22								DR-1
40+84	LT.	CLINTON ST. E.	24	40+58	41+10	97.33								DR-1
47+20	LT.	CADDO ST.	24	46+94	47+46	57.65								DR-1
47+88	LT.	CADDO ST.	40	47+54	48+22	71.77								DR-1
48+03	RT.	CADDO ST.	20	47+79	48+27	79.56								DR-1
48+70	RT.	CADDO ST.	24	48+44	48+96	80.22								DR-1
48+74	LT.	CADDO ST.	40	48+40	49+08	68.39								DR-1
* ENTIRE PROJECT TEMPORARY DRIVES							340.00	37.40	138.83					
SUBTOTALS (BOX 2 OF 2):						4508.89	1677.31	184.49	684.90	247	99	62	64	
SUBTOTALS (BOX 1 OF 2):						1595.85	5239.43	576.33	2139.44	990		44		
TOTALS:						6104.74	6916.74	760.82	2824.34	1237	99	106	64	

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2") 94.8% MIN. AGGR 5.2% ASPHALT BINDER
MAXIMUM NUMBER OF GYRATIONS = 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.
** FOR INFORMATION ONLY

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.

THE CONTRACTOR, WITH THE APPROVAL OF THE ENGINEER, WILL BE ALLOWED TO SUBSTITUTE A HIGHER PERFORMANCE GRADE ASPHALT SURFACE COURSE FOR DRIVEWAYS AND MINOR SIDE STREET CONSTRUCTION AT NO ADDITIONAL COST TO THE DEPARTMENT.

4" PIPE UNDERDRAIN

	STATION	STATION	LOCATIONS	4" PIPE UNDERDRAINS	UNDERDRAIN OUTLET PROTECTORS
				LIN. FT.	EACH
*	ENTIRE PROJECT TO BE USED IF AND			500	4
	WHERE DIRECTED BY THE ENGINEER				
	TOTALS:			**500**	**4**

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

UNDERDRAINS SHALL BE STUBBED INTO THE PROPOSED DROP INLET IF AND WHERE DIRECTED BY THE ENGINEER. PAYMENT FOR THIS TO BE INCLUDED IN THE UNIT FRICE BID FOR 4" PIPE UNDERDRAIN.

COLD MILLING ASPHALT PAVEMENT

STATION	STATION	LOCATION	AVG. WIDTH	COLD MILLING ASPHALT PAVEMENT
			FEET	SQ. YD.
101+35.00	102+35.00	HWY. 67	24.00	266.67
151+75.33	153+00.61	HWY. 67	18.00	250.56
153+00.61	153+93.04	HWY. 67	18.00	184.86
153+93.04	163+60.00	HWY. 67	18.00	1933.92
90+05.00	90+55.00	PROFESSIONAL PARK DR.	24.00	133.33
14+40.00	19+90.00	PROF. PARK CUL-DE-SAC	24.00	1466.67
17+75.00	18+25.00	PROF. PARK CUL-DE-SAC	24.00	133.33
22+80.00	23+30.00	RED HILL RD. N.	22.00	122.22
28+32.92	28+82.92	RED HILL RD. N.	22.00	122.22
14+15.00	14+65.00	RED HILL RD. S.	19.50	108.33
11+90.00	12+40.00	26TH ST. S.	18.00	100.00
27+10.00	27+60.00	26TH ST. N.	18.00	100.00
18+75.00	19+25.00	CLAY ST. W.	28.00	155.56
21+50.00	22+00.00	CLAY ST. E.	32.00	177.78
41+07.00	41+34.00	CLINTON ST. E.	21.00	63.00
52+82.00	53+32.00	CADDO ST. E.	27.00	150.00
TOTAL:				**5468.45**

NOTE: AVERAGE MILLING DEPTH 1".

COLD MILLING STOCKPILE LOCATION:
ROUTE 26 SECTION 5 LOG MILE 0.047 LEFT
34°04'27.57" N
93°07'15.85" W

SCARIFYING CONCRETE PAVEMENT

STATION	STATION	LOCATION	AVG. WIDTH	SCARIFYING CONCRETE PAVEMENT
			FEET	SQ. YD.
08+80.00	09+30.00	OFFICE PARK DR.	22.00	122.22
10+70.00	11+20.00	EXECUTIVE CIR.	24.50	136.11
28+70.00	29+45.00	MAIN ST. W.	36.00	300.00
31+70.00	32+20.00	MAIN ST. E.	36.00	200.00
38+90.00	39+15.00	CLINTON W.	21.50	59.72
46+70.00	47+20.00	CADDO ST. W.	29.00	161.11
-	-	BARKMAN ST.	21.00	78.94
-	-	PINE ST.	30.00	108.87
TOTAL:				**1166.97**

NOTE: AVERAGE MILLING DEPTH 1".

PAVEMENT REPAIR OVER CULVERTS (ASPHALT)

STATION	LOCATION	WIDTH	LENGTH	TON
		FEET		
HWY. 67				
103+28	HWY. 67	32.00	35	62
110+00	HWY. 67	55.00	36	109
110+50	HWY. 67	9.67	32	17
148+95	HWY. 67 RT.	7.92	22	10
153+69	HWY. 67	7.92	31	13
156+12	HWY. 67 RT.	12.00	7	5
SIDE ROADS				
92+62	PROFESSIONAL PARK DR.	7.92	35	15
18+35	PROF. PARK CUL-DE-SAC	7.92	24	10
14+10	26TH ST.	11.42	23	14
9+35	WALNUT ST.	7.92	23	10
10+95	HWY. 67 CONN.	9.67	37	20
11+31	HWY. 67 CONN.	7.92	30	13
19+50	CLAY ST. W.	9.67	27	14
20+50	CLAY ST. E.	10.83	31	18
29+57	MAIN ST. W.	10.25	32	18
30+45	MAIN ST. E.	8.50	36	17
31+05	MAIN ST. E.	9.67	33	18
39+71	CLINTON ST. W.	9.67	20	11
40+38	CLINTON ST. E.	7.92	26	11
49+40	CADDO ST. W.	8.50	29	14
49+74	CADDO ST. W.	9.08	30	15
51+00	CADDO ST. E.	7.92	28	12
52+42	CADDO ST. E. LT.	9.08	20	10
TOTAL:				**436**

AVG. DEPTH = 9"

RUMBLE STRIPS IN ASPHALT SHOULDERS

STATION	STATION	LOCATION	* RUMBLE STRIPS IN ASPHALT SHOULDERS
			LIN.FT.
120+78	123+67	BYPASS LT.	231
124+33	130+67	BYPASS LT.	507
131+33	135+43	BYPASS LT.	328
136+27	154+36	BYPASS LT.	1447
155+03	177+37	BYPASS LT.	1787
178+03	182+08	BYPASS LT.	324
183+23	201+67	BYPASS LT.	1475
202+33	210+67	BYPASS LT.	667
211+33	221+67	BYPASS LT.	827
222+33	230+67	BYPASS LT.	667
231+33	243+48	BYPASS LT.	972
244+16	256+68	BYPASS LT.	1002
257+32	260+68	BYPASS LT.	269
261+32	266+85	BYPASS LT.	442
120+78	140+97	BYPASS RT.	1615
142+03	144+68	BYPASS RT.	212
145+32	152+68	BYPASS RT.	589
153+32	154+67	BYPASS RT.	108
155+33	176+16	BYPASS RT.	1666
176+83	181+91	BYPASS RT.	406
182+99	190+67	BYPASS RT.	614
191+33	201+67	BYPASS RT.	827
202+33	210+67	BYPASS RT.	667
211+33	221+67	BYPASS RT.	827
222+33	230+67	BYPASS RT.	667
231+33	243+37	BYPASS RT.	963
244+03	262+66	BYPASS RT.	1490
263+34	266+26	BYPASS RT.	234
TOTAL:			**21830**

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

ACHM PATCHING OF EXISTING ROADWAY

DESCRIPTION	TON
ENTIRE PROJECT - TO BE USED IF AND WHERE	100
DIRECTED BY THE ENGINEER	
TOTAL:	**100**

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

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

QUANTITIES

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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	184	549
		QUANTITIES				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

BASE AND SURFACING - BYPASS (ALTERNATE 1)

STATION	STATION	LOCATION	LENGTH	AGGREGATE BASE COURSE (CLASS 7)		TACK COAT (0.05 GAL. PER SQ. YD.)			ACHM BINDER COURSE (1")				ACHM SURFACE COURSE (1/2")										
				TON / STATION	TON	TOTAL WID.	SQ.YD.	GALLON	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 64-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 64-22	PG 76-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 64-22	PG 76-22	TOTAL PG 64-22	TOTAL PG 76-22
			FEET			FEET			FEET			TON	FEET			TON	TON	FEET			TON	TON	TON	TON
BYPASS																								
100+27.88	100+50.00	BYPASS - FULL DEPTH, CURB & GTR.	22.12	159.50	35.28	72.00	176.96	8.85	36.00	88.48	330.00	14.60	36.00	88.48	220.00		9.73	36.00	88.48	220.00		9.73		19.46
100+50.00	110+95.53	BYPASS - FULL DEPTH, CURB & GTR., S.E.	1045.53	159.50	1667.62	72.00	8364.24	418.21	36.00	4182.12	330.00	690.05	36.00	4182.12	220.00		460.03	36.00	4182.12	220.00		460.03		920.06
110+95.53	112+69.21	BYPASS - FULL DEPTH, CURB & GTR.	173.68	159.50	277.02	72.00	1389.44	69.47	36.00	694.72	330.00	114.63	36.00	694.72	220.00		76.42	36.00	694.72	220.00		76.42		152.84
112+69.21	120+05.29	BYPASS - FULL DEPTH, CURB & GTR., S.E.	736.08	159.50	1174.05	72.00	5888.64	294.43	36.00	2944.32	330.00	485.81	36.00	2944.32	220.00		323.88	36.00	2944.32	220.00		323.88		647.76
120+05.29	120+78.29	BYPASS - FULL DEPTH, CURB & GTR.	73.00	159.50	116.44	72.00	584.00	29.20	36.00	292.00	330.00	48.18	36.00	292.00	220.00		32.12	36.00	292.00	220.00		32.12		64.24
120+78.29	131+41.95	BYPASS - FULL DEPTH	1063.66	284.50	3026.11	80.71	9538.47	476.92	40.46	4781.54	330.00	788.95	40.25	4756.92	220.00	523.26		52.00	6145.59	220.00	676.01		1199.27	
131+41.95	157+90.96	BYPASS - FULL DEPTH, S.E.	2649.01	284.50	7536.43	80.71	23755.23	1187.76	40.46	11908.27	330.00	1964.86	40.25	11846.96	220.00	1303.17		52.00	15305.39	220.00	1683.59		2986.76	
157+90.96	175+39.93	BYPASS - FULL DEPTH	1748.97	284.50	4975.82	80.71	15684.04	784.20	40.46	7862.26	330.00	1297.27	40.25	7821.78	220.00	860.40		52.00	10105.16	220.00	1111.57		1971.97	
175+39.93	190+29.82	BYPASS - FULL DEPTH, S.E.	1489.89	284.50	4238.74	80.71	13360.72	668.04	40.46	6697.60	330.00	1105.10	40.25	6663.12	220.00	732.94		52.00	8608.25	220.00	946.91		1679.85	
190+29.82	240+66.32	BYPASS - FULL DEPTH	5036.50	284.50	14328.84	80.71	45165.26	2258.26	40.46	22640.91	330.00	3735.75	40.25	22524.35	220.00	2477.68		52.00	29099.78	220.00	3200.98		5678.66	
240+66.32	253+13.34	BYPASS - FULL DEPTH, S.E.	1247.02	284.50	3547.77	80.71	11182.76	559.14	40.46	5605.81	330.00	924.96	40.25	5576.95	220.00	613.46		52.00	7205.00	220.00	792.55		1406.01	
253+13.34	266+25.00	BYPASS - FULL DEPTH, S.E.	1311.66	284.50	3731.67	80.71	11762.43	588.12	40.46	5896.39	330.00	972.90	40.25	5866.04	220.00	645.26		52.00	7578.48	220.00	833.63		1478.89	
266+25.00	266+70.00	BYPASS - FULL DEPTH	45.00	284.50	128.03	80.71	403.54	20.18	40.46	202.29	330.00	33.38	40.25	201.25	220.00		22.14	52.00	260.00	220.00		28.60		50.74
266+70.00	267+77.09	BYPASS - FULL DEPTH SHLDR.	107.09	264.00	282.72	92.71	1103.13	55.16	46.46	552.80	330.00	91.21	46.25	550.32	220.00		60.54	52.00	618.74	220.00		68.06		128.60
267+77.09	268+05.79	BYPASS - FULL DEPTH	28.70	284.50	81.65	80.71	257.37	12.87	40.46	129.02	330.00	21.29	40.25	128.35	220.00		14.12	52.00	165.82	220.00		18.24		32.36
ADDITIONAL FOR SUPERELEVATION																								
131+41.95	157+90.96	BYPASS - FULL DEPTH, S.E.	2649.01	108.25	2867.55																			
175+39.93	190+29.82	BYPASS - FULL DEPTH, S.E.	1489.89	74.75	1113.69																			
240+66.32	253+13.34	BYPASS - FULL DEPTH, S.E.	1247.02	71.00	885.38																			
253+13.34	266+25.00	BYPASS - FULL DEPTH, S.E.	1311.66	87.50	1147.70																			
ADDITIONAL FOR RADIUS RETURNS																								
100+20.92	101+50.90	SW CORNER PINE ST. & BYPASS	129.98	VAR.	137.17	46.60	672.97	33.65	23.30	336.48	330.00	55.52	23.30	336.48	220.00		37.01	23.30	336.48	220.00		37.01		74.02
100+43.32	101+72.66	SE CORNER PINE ST. & BYPASS	129.34	VAR.	187.42	66.21	951.46	47.57	33.10	475.73	330.00	78.50	33.10	475.73	220.00		52.33	33.10	475.73	220.00		52.33		104.66
266+26.38	267+64.89	SW CORNER BYPASS & HWY. 67	138.51	VAR.	262.29	97.20	1495.97	74.80	48.69	749.39	330.00	123.65	48.51	746.58	220.00		82.12	61.90	952.65	220.00		104.79		186.91
266+84.56	268+17.05	NW CORNER BYPASS & HWY. 67	132.49	VAR.	152.96	57.20	841.97	42.10	29.69	437.06	330.00	72.11	27.51	404.95	220.00		44.54	33.61	494.77	220.00		54.42		98.96
TOTALS:					**51902.35**		**152578.60**	**7628.93**		**76477.19**		**12618.72**		**76101.42**		**7156.17**	**1214.98**		**95553.48**		**9245.24**	**1265.63**	**16401.41**	**2480.61**

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2").....94.8% MIN. AGGR.....5.2% ASPHALT BINDER
ACHM BINDER COURSE (1").....95.8% MIN. AGGR.....4.2% ASPHALT BINDER
ACHM BASE COURSE (1 1/2").....96.2% MIN. AGGR.....3.8% ASPHALT BINDER
MAXIMUM NUMBER OF GYRATIONS = 115 FOR PG 64-22
MAXIMUM NUMBER OF GYRATIONS = 205 FOR PG 76-22
TACK COAT QUANTITIES WERE CALCULATED USING THE EMULSIFIED ASPHALT RATES. REFER TO SS-400-1 FOR THE RESIDUAL ASPHALT APPLICATION RATES.

CONCRETE PAVEMENT - BYPASS (ALTERNATE 2)

STATION	STATION	LOCATION	LENGTH	CEMENT STABILIZED CRUSHED STONE BASE COURSE (6" COMP'D. DEPTH)				GEOTEXTILE FABRIC (TYPE SPECIAL)		PORTLAND CEMENT CONCRETE PAVEMENT		AGGREGATE BASE COURSE (CLASS 7)		ACHM SURFACE COURSE (1/2") 220 LBS. PER SQ. YD.		
				AVG. WID.	PROCESSING	CEMENT	AGGREGATE	AVG. WID.	SQ. YD.	AVG. WID.	9" U.T.	TON / STATION	TON	AVG. WID.	SQ. YD.	TON
			FEET	FEET	SQ. YD.	TON	TON	FEET		FEET	SQ. YD.			FEET		
BYPASS																
100+27.88	100+50.00	BYPASS - FULL DEPTH, CURB & GTR.	22.12	41.00	100.77	2.12	33.15	41.00	100.77	36.00	88.48					
100+50.00	110+95.53	BYPASS - FULL DEPTH, CURB & GTR., S.E.	1045.53	41.00	4762.97	100.02	1567.02	41.00	4762.97	36.00	4182.12					
110+95.53	112+69.21	BYPASS - FULL DEPTH, CURB & GTR.	173.68	41.00	791.21	16.62	260.31	41.00	791.21	36.00	694.72					
112+69.21	120+05.29	BYPASS - FULL DEPTH, CURB & GTR., S.E.	736.08	41.00	3353.25	70.42	1103.22	41.00	3353.25	36.00	2944.32					
120+05.29	120+78.29	BYPASS - FULL DEPTH, CURB & GTR.	73.00	41.00	332.56	6.98	109.41	41.00	332.56	36.00	292.00					
120+78.29	131+41.95	BYPASS - FULL DEPTH	1063.66	44.00	5200.12	109.20	1710.84	44.00	5200.12	40.00	4727.38	147.50	1568.90	12.00	1418.21	156.00
131+41.95	157+90.96	BYPASS - FULL DEPTH, S.E.	2649.01	44.00	12950.72	271.97	4260.79	44.00	12950.72	40.00	11773.38	147.50	3907.29	12.00	3532.01	388.52
157+90.96	175+39.93	BYPASS - FULL DEPTH	1748.97	44.00	8550.52	179.56	2813.12	44.00	8550.52	40.00	7773.20	147.50	2579.73	12.00	2331.96	256.52
175+39.93	190+29.82	BYPASS - FULL DEPTH, S.E.	1489.89	44.00	7283.91	152.96	2396.41	44.00	7283.91	40.00	6621.73	147.50	2197.59	12.00	1986.52	218.52
190+29.82	240+66.32	BYPASS - FULL DEPTH	5036.50	44.00	24622.89	517.08	8100.93	44.00	24622.89	40.00	22384.44	147.50	7428.84	12.00	6715.33	738.69
240+66.32	253+13.34	BYPASS - FULL DEPTH, S.E.	1247.02	44.00	6096.54	128.03	2005.76	44.00	6096.54	40.00	5542.31	147.50	1839.35	12.00	1662.69	182.90
253+13.34	266+25.00	BYPASS - FULL DEPTH, S.E.	1311.66	44.00	6412.56	134.66	2109.73	44.00	6412.56	40.00	5829.60	147.50	1934.70	12.00	1748.88	192.38
266+25.00	266+70.00	BYPASS - FULL DEPTH	45.00	44.00	220.00	4.62	72.38	44.00	220.00	40.00	200.00	147.50	66.38	12.00	60.00	6.60
266+70.00	267+77.09	BYPASS - FULL DEPTH SHLDR.	107.09	50.00	594.94	12.49	195.74	50.00	594.94	46.00	547.35	99.75	106.82	6.00	71.39	7.85
267+77.09	268+05.79	BYPASS - FULL DEPTH	28.70	44.00	140.31	2.95	46.16	44.00	140.31	40.00	127.56	147.50	42.33	12.00	38.27	4.21
ADDITIONAL FOR SUPERELEVATION																
131+41.95	157+90.96	BYPASS - FULL DEPTH, S.E.	2649.01									125.43	3322.65			
175+39.93	190+29.82	BYPASS - FULL DEPTH, S.E.	1489.89									85.15	1268.64			
240+66.32	253+13.34	BYPASS - FULL DEPTH, S.E.	1247.02									80.61	1005.22			
253+13.34	266+25.00	BYPASS - FULL DEPTH, S.E.	1311.66									100.71	1320.97			
ADDITIONAL FOR RADIUS RETURNS																
100+20.92	101+50.90	SW CORNER PINE ST. & BYPASS	129.98	27.14	391.91	8.23	128.94	27.14	391.91	7.73	336.48					
100+43.32	101+72.66	SE CORNER PINE ST. & BYPASS	129.34	37.26	535.50	11.25	176.18	37.26	535.50	8.00	475.73					
266+26.38	267+64.89	SW CORNER BYPASS & HWY. 67	138.51	48.69	749.39	15.74	246.55	48.69	749.39	11.44	952.65					
266+84.56	268+17.05	NW CORNER BYPASS & HWY. 67	132.49	29.69	437.02	9.18	143.78	29.69	437.02	10.19	494.77					
TOTALS:					**83527.09**	**1754.03**	**27480.42**		**83527.09**		**75988.22**		**28589.41**		**19565.26**	**2152.19**

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2") 94.8% MIN. AGGR 5.2% ASPHALT BINDER
MAXIMUM NUMBER OF GYRATIONS = 115 FOR PG 64-22
CEMENT STABILIZED CRUSHED STONE BASE COURSE = 94.0% AGGR. 6.0% CEMENT

rnfortner 6/28/2022 10:34:05 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	185	549
		QUANTITIES				

DIGITALLY SIGNED 06/28/2022

BASE AND SURFACING - BYPASS SIDE ROADS (BOX 1 OF 2)

STATION	STATION	LOCATION	LENGTH	AGGREGATE BASE COURSE (CLASS 7)		TACK COAT							ACHM BASE COURSE (1 1/2")					ACHM BINDER COURSE (1")					ACHM SURFACE COURSE (1.2")									
				TON / STATION	TON	(0.05 GAL. PER SQ. YD.)			(0.17 GAL. PER SQ. YD.)			TOTAL GALLONS	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	PG 76-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 64-22	PG 76-22	TOTAL PG 64-22	TOTAL PG 76-22
			FEET			TOTAL WID. FEET	SQ.YD.	GALLON	TOTAL WID. FEET	SQ.YD.	GALLON		FEET			TON	FEET			TON	FEET			TON	TON	FEET			TON	TON	TON
PROFESSIONAL PARK DR.																															
90+03.00	90+55.00	PROFESSIONAL PARK DR. TRANSITION	52.00						28.08	162.21	27.58	27.58													28.08	162.21	220.00		17.84		17.84
90+55.00	90+56.06	PROFESSIONAL PARK DR - NOTCH & WIDEN	1.06			24.00	2.83	0.14				0.14													24.00	2.83	220.00		0.31		0.31
90+56.06	93+30.91	PROFESSIONAL PARK DR - NOTCH & WIDEN - SE	274.85			24.00	732.93	36.65				36.65													24.00	732.93	220.00		80.62		80.62
93+30.91	96+51.37	PROFESSIONAL PARK DR - FULL DEPTH - SE	320.46			77.00	2741.71	137.09				137.09	29.00	1032.59	550.00	283.96	24.00	854.56	330.00	141.00	24.00	854.56	220.00		94.00	24.00	854.56	220.00		94.00		188.00
96+51.37	97+45.00	PROFESSIONAL PARK DR - FULL DEPTH	93.63			77.00	801.06	40.05				40.05	29.00	301.70	550.00	82.97	24.00	249.68	330.00	41.20	24.00	249.68	220.00		27.46	24.00	249.68	220.00		27.46		54.92
97+45.00	98+45.00	PRO. PARK DR. - FULL DEPTH - LANE TRANSITION	100.00			95.00	1055.56	52.78				52.78	35.00	388.89	550.00	106.94	30.00	333.33	330.00	55.00	30.00	333.33	220.00		36.67	30.00	333.33	220.00		36.67		73.34
98+45.00	99+71.70	PROFESSIONAL PARK DR - FULL DEPTH	126.70			113.00	1590.79	79.54				79.54	41.00	577.19	550.00	158.73	36.00	506.80	330.00	83.62	36.00	506.80	220.00		55.75	36.00	506.80	220.00		55.75		111.50
OFFICE PARK DR.																															
8+80.00	9+30.00	OFFICE PARK DR. - TRANSITION	50.00						22.00	122.22	20.78	20.78													22.00	122.22	220.00		13.44		13.44
9+30.00	9+87.68	OFFICE PARK DR. - NOTCH & WIDEN	57.68			22.00	141.00	7.05				7.05													22.00	141.00	220.00		15.51		15.51
EXECUTIVE CIR.																															
10+12.03	10+70.00	EXECUTIVE CIR. - NOTCH & WIDEN	57.97			24.00	154.59	7.73				7.73													24.00	154.59	220.00		17.00		17.00
10+70.00	11+20.00	EXECUTIVE CIR. - TRANSITION	50.00						24.00	133.33	22.67	22.67													24.00	133.33	220.00		14.67		14.67
PROFESSIONAL PARK CUL-DE-SAC																															
12+66.45	14+40.00	PRO. PARK CUL-DE-SAC - FULL DEPTH	173.55			176.90	3411.13	170.56				170.56	63.11	1216.97	550.00	334.67	56.89	1097.08	330.00	181.02	56.89	1097.08	220.00		120.68	56.89	1097.08	220.00		120.68		241.36
14+40.00	14+92.00	PRO. PARK CUL-DE-SAC - TRANSITION	52.00						26.50	153.11	26.03	26.03													26.50	153.11	220.00		16.84		16.84
17+73.00	18+25.00	PRO. PARK CUL-DE-SAC - TRANSITION	52.00						24.00	138.67	23.57	23.57													24.00	138.67	220.00		15.25		15.25
18+25.00	19+09.86	PRO. PARK CUL-DE-SAC - NOTCH & WIDEN	84.86			24.00	226.29	11.31				11.31													24.00	226.29	220.00		24.89		24.89
19+09.86	19+88.00	PRO. PARK CUL-DE-SAC - FULL DEPTH	78.14			77.00	668.53	33.43				33.43	29.00	251.78	550.00	69.24	24.00	208.37	330.00	34.38	24.00	208.37	220.00		22.92	24.00	208.37	220.00		22.92		45.84
RED HILL RD. NORTH																															
20+18.00	21+75.44	RED HILL RD. N. - FULL DEPTH - SE	157.44	112.75	177.51	48.00	839.68	41.98				41.98					24.00	419.84	330.00	69.27	24.00	419.84	220.00		46.18	24.00	419.84	220.00		46.18		92.36
21+75.44	22+80.00	RED HILL RD. N. - NOTCH & WIDEN - SE	104.56			20.00	232.36	11.62				11.62													24.00	278.83	220.00		30.67		30.67
22+80.00	23+32.00	RED HILL RD. N. - TRANSITON	52.00						25.50	147.33	25.05	25.05													25.50	147.33	220.00		16.21		16.21
28+30.92	28+82.92	RED HILL RD. N. - TRANSITON	52.00						25.00	144.44	24.55	24.55													25.00	144.44	220.00		15.89		15.89
28+82.92	30+12.50	RED HILL RD. N. - NOTCH & WIDEN	129.58	VAR.	275.43	124.62	1794.32	89.72				89.72					47.87	689.23	330.00	113.72	47.87	1105.09	220.00		121.56	76.75	1105.09	220.00		121.56		243.12
RED HILL RD. SOUTH																															
14+15.00	14+65.00	RED HILL RD. S. - TRANSITON	50.00	11.75	5.88				19.00	105.56	17.95	17.95													19.50	108.33	220.00	11.92		11.92	
14+65.00	14+67.68	RED HILL RD. S. - NOTCH & WIDEN	2.68	23.50	0.63	19.00	5.66	0.28				0.28													20.00	5.96	220.00	0.66		0.66	
14+67.68	17+19.86	RED HILL RD. S. - NOTCH & WIDEN, S.E.	252.18	23.50	59.26	19.00	532.38	26.62				26.62													20.00	560.40	220.00	61.64		61.64	
17+19.86	19+82.00	RED HILL RD. S. - FULL DEPTH, S.E.	262.14	109.75	287.70																				20.00	582.53	220.00	64.08		64.08	
26TH ST. SOUTH																															
11+90.00	12+40.00	26TH ST. S. - TRANSITION	50.00	18.50	9.25				16.00	88.89	15.11	15.11													18.50	102.78	220.00	11.31		11.31	
12+40.00	13+02.56	26TH ST. S. - NOTCH & WIDEN	62.56	37.00	23.15	16.00	111.22	5.56				5.56													20.00	139.02	220.00	15.29		15.29	
13+02.56	13+53.53	26TH ST. S. - FULL DEPTH	50.97	109.75	55.94																				20.00	113.27	220.00	12.46		12.46	
13+53.53	18+61.46	26TH ST. S. - FULL DEPTH, S.E.	507.93	109.75	557.45																				20.00	1128.73	220.00	124.16		124.16	
18+61.46	19+81.72	26TH ST. S. - FULL DEPTH	120.26	109.75	131.99																				20.00	267.24	220.00	29.40		29.40	
26TH ST. NORTH																															
20+18.28	23+25.27	26TH ST. N. - FULL DEPTH, S.E.	306.99	109.75	336.92																				20.00	682.20	220.00	75.04		75.04	
23+25.27	26+03.01	26TH ST. N. - FULL DEPTH, S.E.	277.74	109.75	304.82																				20.00	617.20	220.00	67.89		67.89	
26+03.01	27+04.03	26TH ST. N. - NOTCH & WIDEN, S.E.	101.02	37.00	37.38	16.00	179.59	8.98				8.98													20.00	224.49	220.00	24.69		24.69	
27+04.03	27+10.00	26TH ST. N. - NOTCH & WIDEN	5.97	37.00	2.21	16.00	10.61	0.53				0.53													20.00	13.27	220.00	1.46		1.46	
27+10.00	27+60.00	26TH ST. N. - TRANSITION	50.00	18.50	9.25				16.00	88.89	15.11	15.11													18.50	102.78	220.00	11.31		11.31	
SUBTOTALS - BYPASS SIDE ROADS (BOX 1 OF 2)					**2274.77**		**15232.24**	**761.62**		**1284.65**	**218.40**	**980.02**		**3769.12**		**1036.51**		**4358.89**		**719.21**		**4774.75**			**525.22**		**11960.73**		**511.31**	**804.36**	**511.31**	**1329.58**

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2").....94.8% MIN. AGGR.....5.2% ASPHALT BINDER
ACHM BINDER COURSE (1").....95.8% MIN. AGGR.....4.2% ASPHALT BINDER
ACHM BASE COURSE (1 1/2").....96.2% MIN. AGGR.....3.8% ASPHALT BINDER
MAXIMUM NUMBER OF GYRATIONS = 115 FOR PG 64-22
MAXIMUM NUMBER OF GYRATIONS = 205 FOR PG 76-22
TACK COAT QUANTITIES WERE CALCULATED USING THE EMULSIFIED ASPHALT RATES. REFER TO SS-400-1 FOR THE RESIDUAL ASPHALT APPLICATION RATES.

rnfortner 6/28/2022 10:34:14 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	186	549
		QUANTITIES				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

BASE AND SURFACING - BYPASS SIDE ROADS (BOX 2 OF 2)

STATION	STATION	LOCATION	LENGTH	AGGREGATE BASE COURSE (CLASS 7)		TACK COAT							ACHM BASE COURSE (1 1/2")				ACHM BINDER COURSE (1")				ACHM SURFACE COURSE (1.2")											
				TON / STATION	TON	(0.06 GAL. PER SQ. YD.)			(0.17 GAL. PER SQ. YD.)			TOTAL GALLONS	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	PG 76-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 64-22	PG 76-22	TOTAL PG 64-22	TOTAL PG 76-22
			FEET			TOTAL WID. FEET	SQ.YD.	GALLON	TOTAL WID. FEET	SQ.YD.	GALLON		FEET			TON	FEET			TON	FEET			TON	TON	FEET			TON	TON		
ADDITIONAL FOR LEVELING SIDE ROADS - BYPASS																																
90+55.00	93+30.91	PRO. PARK DR. - NOTCH & WIDEN	275.91						21.30	652.99	111.01	111.01									21.30	652.99	VAR.	160.54						160.54	
9+30.00	9+87.68	OFFICE PARK DR. - NOTCH & WIDEN	57.68						22.00	141.00	23.97	23.97									22.00	141.00	VAR.	20.08						20.08	
10+12.03	10+70.00	EXECUTIVE CIR. - NOTCH & WIDEN	57.97						24.00	154.59	26.28	26.28									24.00	154.59	VAR.	12.90						12.90	
18+25.00	19+09.86	PRO. PARK CUL-DE-SAC -NOTCH & WIDEN	84.86						24.00	226.29	38.47	38.47									24.00	226.29	VAR.	53.58						53.58	
21+75.44	22+80.00	RED HILL RD. N. - NOTCH & WIDEN - SE	104.56						20.00	232.36	39.50	39.50									20.00	232.36	VAR.	3.84						3.84	
28+82.92	30+12.50	RED HILL RD. N. - NOTCH & WIDEN	129.58						28.88	415.86	70.70	70.70									28.88	415.86	VAR.	75.75						75.75	
14+65.00	17+19.86	RED HILL RD. SOUTH - NOTCH & WIDEN	254.86						20.00	566.36	96.28	96.28									19.00	538.04	VAR.	75.59						75.59	
12+40.00	13+02.56	26TH ST. S. - NOTCH & WIDEN	62.56						16.00	111.22	18.91	18.91									16.00	111.22	VAR.	14.74						14.74	
26+03.01	27+10.00	26TH ST. NORTH - NOTCH & WIDEN	106.99						16.00	190.20	32.33	32.33									16.00	190.20	VAR.	46.26						46.26	
ADDITIONAL FOR RADIUS RETURNS SIDE ROADS - BYPASS																																
90+93.96	91+23.89	NE CORNER PRO. PARK DR. & EXECUTIVE CIR.	29.93			VAR.	88.72	4.44				4.44	11.52	38.31	550.00	10.53	7.58	25.21	330.00	4.16	7.58	25.21	220.00		2.77	7.58	25.21	220.00		2.77		5.54
91+10.84	91+40.07	NW CORNER PRO. PARK DR. & OFFICE PARK DR.	29.23			VAR.	47.78	2.39				2.39	7.11	23.08	550.00	6.35	3.80	12.35	330.00	2.04	3.80	12.35	220.00		1.36	3.80	12.35	220.00		1.36		2.72
91+48.23	91+78.96	SE CORNER PRO. PARK DR. & EXECUTIVE CIR.	30.73			VAR.	67.51	3.38				3.38	8.96	30.60	550.00	8.41	5.41	18.46	330.00	3.05	5.41	18.46	220.00		2.03	5.41	18.46	220.00		2.03		4.06
91+65.63	91+92.99	SW CORNER PRO. PARK DR. & OFFICE PARK DR.	27.36			VAR.	115.92	5.80				5.80	15.78	47.97	550.00	13.19	11.18	33.97	330.00	5.61	11.18	33.97	220.00		3.74	11.18	33.97	220.00		3.74		7.48
94+42.03	94+69.96	NW CORNER PRO. PARK DR. & PRO. PRK. C.D.S.	27.93			VAR.	68.52	3.43				3.43	9.93	30.82	550.00	8.48	6.07	18.85	330.00	3.11	6.07	18.85	220.00		2.07	6.07	18.85	220.00		2.07		4.14
94+92.23	95+20.10	SW CORNER PRO. PARK DR. & PRO. PRK. C.D.S.	27.87			VAR.	68.52	3.43				3.43	9.95	30.82	550.00	8.48	6.09	18.85	330.00	3.11	6.09	18.85	220.00		2.07	6.09	18.85	220.00		2.07		4.14
99+38.00	99+67.97	NE CORNER PRO. PARK DR. & PINE ST.	29.97			VAR.	90.33	4.52				4.52	11.63	38.72	550.00	10.65	7.75	25.80	330.00	4.26	7.75	25.80	220.00		2.84	7.75	25.80	220.00		2.84		5.68
99+45.79	99+75.66	NW CORNER PRO. PARK DR. & PINE ST.	29.87			VAR.	64.92	3.25				3.25	8.89	29.50	550.00	8.11	5.34	17.71	330.00	2.92	5.34	17.71	220.00		1.95	5.34	17.71	220.00		1.95		3.90
20+16.57	20+48.60	NE CORNER RED ROCK RD. N. & BYPASS	32.03	VAR.	11.20	VAR.	39.26	1.96				1.96					5.52	19.33	330.00	3.24	5.52	19.63	220.00		2.16	5.52	19.63	220.00		2.16		4.32
20+16.60	20+45.01	NW CORNER RED ROCK RD. N. & BYPASS	28.41	VAR.	10.55	VAR.	36.69	1.83				1.83					5.81	18.35	330.00	3.03	5.81	18.35	220.00		2.02	5.81	18.35	220.00		2.02		4.04
19+43.04	19+83.00	NW CORNER RED ROCK RD. S. & BYPASS	39.96	VAR.	12.43																					8.00	35.51	220.00	3.91		3.91	
19+43.04	19+83.00	SW CORNER RED ROCK RD. S. & BYPASS	39.96	VAR.	12.43																					8.00	35.51	220.00	3.91		3.91	
19+33.24	19+72.83	SW CORNER 26TH ST. S. & BYPASS	39.59	VAR.	18.86																					12.25	53.89	220.00	5.93		5.93	
19+50.35	19+89.59	SE CORNER 26TH ST. S. & BYPASS	39.24	VAR.	8.45																					5.54	24.14	220.00	2.65		2.65	
20+10.99	20+50.53	NW CORNER 26TH ST. N. & BYPASS	39.54	VAR.	9.12																					5.93	26.06	220.00	2.87		2.87	
20+29.60	20+68.74	NE CORNER 26TH ST. N. & BYPASS	39.14	VAR.	20.96																					13.77	59.87	220.00	6.59		6.59	
SUBTOTALS - BYPASS SIDE ROADS (BOX 2 OF 2):					**104.00**		**688.17**	**34.43**		**2690.87**	**457.45**	**491.88**		**269.82**		**74.20**		**209.18**		**34.53**		**2171.73**		**463.28**	**23.01**		**444.16**		**25.86**	**23.01**	**489.14**	**46.02**
SUBTOTALS - BYPASS SIDE ROADS (BOX 1 OF 2):					**2274.77**		**15232.24**	**761.62**		**1284.65**	**218.40**	**980.02**		**3769.12**		**1036.51**		**4351.89**		**719.21**		**4774.75**			**525.22**		**11960.73**		**511.31**	**804.36**	**511.31**	**1329.58**
TOTALS - BYPASS SIDE ROADS:					**2378.77**		**15920.41**	**796.05**		**3975.52**	**675.85**	**1471.90**		**4038.94**		**1110.71**		**4561.07**		**753.74**		**7446.48**		**463.28**	**548.23**		**12404.89**		**537.17**	**827.37**	**1000.45**	**1375.60**

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2").....94.8% MIN. AGGR.....5.2% ASPHALT BINDER
ACHM BINDER COURSE (1").....95.8% MIN. AGGR.....4.2% ASPHALT BINDER
ACHM BASE COURSE (1 1/2").....96.2% MIN. AGGR.....3.8% ASPHALT BINDER
MAXIMUM NUMBER OF GYRATIONS = 115 FOR PG 64-22
MAXIMUM NUMBER OF GYRATIONS = 205 FOR PG 76-22
TACK COAT QUANTITIES WERE CALCULATED USING THE EMULSIFIED ASPHALT RATES. REFER TO SS-400-1 FOR THE RESIDUAL ASPHALT APPLICATION RATES.

rnfortner 6/28/2022 10:34:22 AM
WORKSPACE: AHTD
L:\20\7\7017515 - AHTD Arkadelphia Bypass\Drawings\r070442_QTY_01.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	187	549
		QUANTITIES				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

BASE AND SURFACING - HWY. 67

STATION	STATION	LOCATION	LENGTH	AGGREGATE BASE COURSE (CLASS 7)		TACK COAT							ACHM BASE COURSE (1 1/2")				ACHM BINDER COURSE (1")				ACHM SURFACE COURSE (1/2")							
						(0.05 GAL. PER SQ. YD.)			(0.17 GAL. PER SQ. YD.)																			
				TON / STATION	TON	TOTAL WID.	SQ.YD.	GALLON	TOTAL WID.	SQ.YD.	GALLON	TOTAL GALLONS	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 76-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 76-22	TOTAL PG 76-22
			FEET			FEET			FEET				FEET			TON	FEET			TON	FEET			TON	FEET			TON	TON
HWY. 67																												
101+35.00	102+35.00	HWY. 67 - TRANSITION	100.00	33.00	33.00				24.00	266.67	45.33	45.33													41.11	456.78	220.00	50.25	50.25
102+35.00	102+96.19	HWY. 67 - NOTCH & WIDEN, CURB & GTR., OPEN SHLD.	61.19	52.00	31.82	58.18	395.56	19.78				19.78	13.21	89.81	550.00	24.70	10.54	71.66	330.00	11.82	10.43	70.91	220.00	7.80	39.75	270.26	220.00	29.73	37.53
102+96.19	105+87.24	HWY. 67 - NOTCH & WIDEN, CURB & GTR., OPEN SHLD., S.E.	291.05	21.25	61.85	62.95	2035.73	101.79				101.79	13.85	447.89	550.00	123.17	11.27	364.46	330.00	60.14	11.08	358.31	220.00	39.41	37.83	1223.38	220.00	134.57	173.98
105+87.24	110+90.00	HWY. 67 - NOTCH & WIDEN, CURB & GTR., S.E.	502.76			64.97	3629.37	181.47				181.47	16.99	949.10	550.00	261.00	11.99	669.79	330.00	110.52	11.99	669.79	220.00	73.68	36.00	2011.04	220.00	221.21	294.89
110+90.00	112+21.82	HWY. 67 - FULL DEPTH, CURB & GTR., S.E.	131.82			113.00	1655.07	82.75				82.75	41.00	600.51	550.00	165.14	36.00	527.28	330.00	87.00	36.00	527.28	220.00	58.00	36.00	527.28	220.00	58.00	116.00
112+21.82	115+85.00	HWY. 67 - FULL DEFTH, CURB & GTR.	363.18			113.00	4559.93	228.00				228.00	41.00	1654.49	550.00	454.98	36.00	1452.72	330.00	239.70	36.00	1452.72	220.00	159.80	36.00	1452.72	220.00	159.80	319.60
115+85.00	118+54.34	HWY. 67 - FULL DEFTH, CURB & GTR.	269.34			113.00	3381.71	169.09				169.09	41.00	1226.99	550.00	337.42	36.00	1077.36	330.00	177.76	36.00	1077.36	220.00	118.51	36.00	1077.36	220.00	118.51	237.02
118+54.34	125+36.32	HWY. 67 - FULL DEFTH, CURB & GTR., S.E.	681.98			113.00	8562.64	428.13				428.13	41.00	3106.80	550.00	854.37	36.00	2727.92	330.00	450.11	36.00	2727.92	220.00	300.07	36.00	2727.92	220.00	300.07	600.14
125+36.32	125+37.61	HWY. 67 - FULL DEFTH, CURB & GTR.	1.29			113.00	16.20	0.81				0.81	41.00	5.88	550.00	1.62	36.00	5.16	330.00	0.85	36.00	5.16	220.00	0.57	36.00	5.16	220.00	0.57	1.14
125+37.61	131+22.24	HWY. 67 - FULL DEFTH, CURB & GTR., S.E.	584.63			113.00	7340.35	367.02				367.02	41.00	2663.31	550.00	732.41	36.00	2338.52	330.00	385.86	36.00	2338.52	220.00	257.24	36.00	2338.52	220.00	257.24	514.48
131+22.24	143+83.04	HWY. 67 - FULL DEFTH, CURB & GTR.	1260.80			113.00	15830.04	791.50				791.50	41.00	5743.64	550.00	1579.50	36.00	5043.20	330.00	832.13	36.00	5043.20	220.00	554.75	36.00	5043.20	220.00	554.75	1109.50
143+83.04	146+14.21	HWY. 67 - NOTCH & WIDEN, CURB & GTR.	231.17			114.88	2950.76	147.54				147.54	29.76	764.40	550.00	210.21	24.76	635.97	330.00	104.94	24.76	635.97	220.00	69.96	60.36	1550.38	220.00	170.54	240.50
146+14.21	148+79.41	HWY. 67 - NOTCH & WIDEN, CURB & GTR.	265.20			39.16	1153.91	57.70				57.70													39.16	1153.91	220.00	126.93	126.93
148+79.41	149+29.14	HWY. 67 - NOTCH & WIDEN, CURB & GTR.	49.73			36.00	198.92	9.95				9.95													36.00	198.92	220.00	21.88	21.88
149+29.14	150+61.42	HWY. 67 - NOTCH & WIDEN, CURB & GTR.	132.28			52.03	764.73	38.24				38.24	8.32	122.29	550.00	53.63	5.82	85.54	330.00	14.11	5.82	85.54	220.00	9.41	39.66	582.91	220.00	64.12	73.53
150+61.42	150+98.00	HWY. 67 - NOTCH & WIDEN, CURB & GTR.	36.58			44.74	181.84	9.09				9.09													45.92	186.63	220.00	20.53	20.53
152+60.04	153+93.04	HWY. 67 - NOTCH & WIDEN, CURB & GTR.	133.00			59.50	879.28	43.96				43.96	9.50	140.39	550.00	38.61	7.00	103.44	330.00	17.07	7.00	103.44	220.00	11.38	36.00	532.00	220.00	58.52	69.90
153+93.04	163+60.00	HWY. 67 - NOTCH & WIDEN, CURB & GTR.	966.96			59.50	6392.68	319.63				319.63	9.50	1020.68	550.00	280.69	7.00	752.08	330.00	124.09	7.00	752.08	220.00	82.73	36.00	3867.84	220.00	425.46	508.19
ADDITIONAL FOR LEVELING - HWY. 67																												
102+35.00	102+96.19	HWY. 67 - NOTCH & WIDEN, CURB & GTR., OPEN SHLD.	61.19						24.00	163.17	27.74	27.74													24.00	163.17	VAR.	14.01	14.01
102+96.19	105+87.24	HWY. 67 - NOTCH & WIDEN, CURB & GTR., OPEN SHLD., S.E.	291.05						26.75	865.07	147.06	147.06													26.75	865.07	VAR.	218.64	218.64
105+87.24	110+90.00	HWY. 67 - NOTCH & WIDEN, CURB & GTR., S.E.	502.76						24.00	1340.69	227.92	227.92													24.00	1340.69	VAR.	327.35	327.35
143+83.04	146+14.21	HWY. 67 - NOTCH & WIDEN, CURB & GTR.	231.17						35.60	914.41	155.45	155.45													35.60	914.41	VAR.	353.40	353.40
146+14.21	148+79.41	HWY. 67 - NOTCH & WIDEN, CURB & GTR.	265.20						34.09	1004.52	170.77	170.77													34.09	1004.52	VAR.	472.26	472.26
148+79.41	149+29.14	HWY. 67 - NOTCH & WIDEN, CURB & GTR.	49.73						31.11	171.90	29.22	29.22													31.11	171.90	VAR.	63.39	63.39
149+29.14	150+61.42	HWY. 67 - NOTCH & WIDEN, CURB & GTR.	132.28						32.07	471.36	80.13	80.13													32.07	471.36	VAR.	130.99	130.99
150+61.42	150+98.00	HWY. 67 - NOTCH & WIDEN, CURB & GTR.	36.58						44.74	181.84	30.91	30.91													44.74	181.84	VAR.	11.78	11.78
152+60.04	153+93.04	HWY. 67 - NOTCH & WIDEN, CURB & GTR.	133.00						11.00	162.56	27.64	27.64													11.00	162.56	VAR.	13.41	13.41
153+93.04	163+60.00	HWY. 67 - NOTCH & WIDEN, CURB & GTR.	966.96						11.00	1181.84	200.91	200.91													11.00	1181.84	VAR.	109.92	109.92
ADDITIONAL FOR RAISING GRADE - HWY. 67																												
110+90.00	112+21.82	HWY. 67 - FULL DEPTH, CURB & GTR., S.E.	131.82			24.00	351.52	17.58	24.00	351.52	59.76	77.34	24.00	351.52	VAR.	163.00													
112+21.82	115+85.00	HWY. 67 - FULL DEPTH, CURB & GTR.	363.18			48.00	1936.96	96.85	24.00	968.48	164.64	261.49	24.00	968.48	VAR.	429.49													
ADDITIONAL FOR TEMPORARY WIDENING - HWY. 67																												
20+39.68	24+09.90	TEMPORARY 1 HWY. 67 WIDENING FOR BOX CULVETS	370.22			65.12	2678.73	133.94				133.94	21.85	898.99	550.00	247.22	21.68	891.94	330.00	147.17	21.58	887.79	220.00	97.66	21.46	882.61	220.00	97.09	194.75
27+58.41	31+73.47	TEMPORARY 1 HWY. 67 WIDENING FOR BOX CULVETS	415.06			61.86	2852.74	142.64				142.64	20.77	957.67	550.00	263.36	20.60	949.84	330.00	156.72	20.50	945.23	220.00	103.98	20.37	939.47	220.00	103.34	207.32
ADDITIONAL FOR RADIUS RETURNS - HWY. 67																												
117+16.03	118+72.86	SE CORNER HWY. 67 & HWY. 67 CONNECTOR	156.83			VAR.	1222.13	61.11				61.11	25.69	447.69	550.00	123.12	22.22	387.22	330.00	63.89	22.22	387.22	220.00	42.59	22.22	387.22	220.00	42.59	85.18
118+02.92	118+32.09	SW CORNER HWY. 67 & WALNUT ST.	29.17			VAR.	124.01	6.20				6.20	15.72	50.95	550.00	14.01	11.27	36.53	330.00	6.03	11.27	36.53	220.00	4.02	11.27	36.53	220.00	4.02	8.04
118+60.14	118+89.31	NW CORNER HWY. 67 & WALNUT ST.	29.17			VAR.	46.89	2.34				2.34	7.02	22.74	550.00	6.25	3.73	12.07	330.00	1.99	3.73	12.07	220.00	1.33	3.73	12.07	220.00	1.33	2.66
119+05.82	120+20.12	NE CORNER HWY. 67 & HWY. 67 CONNECTOR	114.30			VAR.	1741.85	87.09				87.09	48.82	620.06	550.00	170.52	44.17	560.90	330.00	92.55	44.17	560.90	220.00	61.70	44.17	560.90	220.00	61.70	123.40
138+15.48	138+45.72	SE CORNER HWY. 67 & CLAY ST.	30.24			VAR.	82.95	4.15				4.15	10.78	36.22	550.00	9.96	6.95	23.37	330.00	3.86	6.95	23.37	220.00	2.57	6.95	23.37	220.00	2.57	5.14
138+19.15	138+48.89	SW CORNER HWY. 67 & CLAY ST.	29.74			VAR.	71.38	3.57				3.57	9.67	31.95	550.00	8.79	5.97	19.71	330.00	3.25	5.97	19.71	220.00	2.17	5.97	19.71	220.00	2.17	4.34
138+76.72	139+06.46	NW CORNER HWY. 67 & CLAY ST.	29.74			VAR.	80.87	4.04				4.04	10.72	35.44	550.00	9.75	6.87	22.71	330.00	3.75	6.87	22.71	220.00	2.50	6.87	22.71	220.00	2.50	5.00
138+78.06	139+08.30	NE CORNER HWY. 67 & CLAY ST.	30.24			VAR.	73.22	3.66				3.66	9.72	32.65	550.00	8.98	6.04	20.29	330.00	3.35	6.04	20.29	220.00	2.23	6.04	20.29	220.00	2.23	4.46
140+72.65	141+02.65	SE CORNER HWY. 67 & MAIN ST.	30.00			VAR.	76.01	3.80				3.80	10.10	33.67	550.00	9.26	6.35	21.17	330.00	3.49	6.35	21.17	220.00	2.33	6.35	21.17	220.00	2.33	4.66
140+72.09	141+02.09	SW CORNER HWY. 67 & MAIN ST.	30.00			VAR.	77.85	3.89				3.89	10.30	34.34	550.00	9.44	6.53	21.75	330.00	3.59	6.53	21.75	220.00	2.39	6.53	21.75	220.00	2.39	4.78
141+38.09	141+68.09	NW CORNER HWY. 67 & MAIN ST.	30.00			VAR.	76.01	3.80				3.80	10.10	33.67	550.00	9.26	6.35	21.17	330.00	3.49	6.35	21.17	220.00	2.33	6.35	21.17	220.00	2.33	4.66
141+38.65	141+68.65	NE CORNER HWY. 67 & MAIN ST.	30.00			VAR.	77.85	3.89				3.89	10.30	34.34	550.00	9.44	6.53	21.75	330.00	3.59	6.53	21.75	220.00	2.39	6.53	21.75	220.00	2.39	4.78
143+51.45	143+81.45	SE CORNER HWY. 67 & CLINTON ST.	30.00			VAR.	77.62	3.88				3.88	10.28	34.26	550.00	9.42	6.50	21.68	330.00	3.58	6.50	21.68	220.00	2.38	6.50	21.68	220.00	2.38	4.76
143+51.87	143+81.87	SW CORNER HWY. 67 & CLINTON ST.	30.00			VAR.	76.24	3.81				3.81	10.13	33.75	550.00	9.28	6.37	21.24	330.00	3.51	6.37	21.24	220.00	2.34	6.37	21.24	220.00	2.34	4.68
144+03.91	144+33.91	NW CORNER HWY. 67 & CLINTON ST.	30.00			VAR.	77.62	3.88				3.88	10.28	34.26	550.00	9.42	6.50	21.68	330.00	3.58	6.50	21.68	220.00	2.38	6.50	21.68	220.00	2.38	4.76
144+03.40	144+35.58	NE CORNER HWY. 67 & CLINTON ST.	32.18			VAR.	77.45	3.87				3.87	9.66	34.54	550.00	9.50	6.00	21.46	330.00	3.54	6.00	21.46	220.00	2.36	6.00	21.46	220.00	2.36	4.72
145+07.76	146+14.42	SE CORNER HWY. 67 & CADDO ST.	106.66			VAR.	901.87	45.09				45.09	28.03	332.23	550.00	91.36	24.03	284.82	330.00	47.00	24.03	284.82	220.00	31.33	24.03	284.82	220.00	31.33	62.66
145+84.12	146+14.12	SW CORNER HWY. 67 & CADDO ST.	30.00			VAR.	77.16	3.86				3.86	10.23	34.09	550.00	9.37	6.46	21.53	330.00	3.55	6.46	21.53	220.00	2.37	6.46	21.53	220.00	2.37	4.74
146+54.14	146+84.14	NW CORNER HWY. 67 & CADDO ST.	30.00			VAR.	76.70	3.83				3.83	10.18	33.92	550.00	9.33	6.42	21.39	330.00	3.53	6.42	21.39	220.00	2.35	6.42	21.39	220.00	2.35	4.70
146+54.41	147+69.41	NE CORNER HWY. 67 & CADDO ST.	115.00			VAR.	999.54	49.98				49.98	28.67	366.30	550.00	100.73	24.78	316.62	330.00	52.24	24.78	316.62	220.00	34.83	24.78	316.62	220.00	34.83	69.66
153+67.04	153+93.04	SE CORNER HWY. 67 & HICKORY ST.	26.00			VAR.	76.90	3.85				3.85	11.76	33.98	550.00	9.34	7.43	21.46	330.00	3.54	7.43	21.46	220.00	2.36	7.43	21.46	220.00	2.36	4.72
153+67.01	153+97.01	SW CORNER HWY. 67 & HICKORY ST.	30.00			VAR.	76.84	3.84				3.84	10.18	33.92	550.00	9.33	6.44	21.46	330.00	3.54	6.44	21.46	220.00	2.36	6.44	21.46	220.00	2.36	4.72
154+19.02	154+49.01	NE CORNER HWY. 67 & HICKORY ST.	29.99			VAR.	77.03	3.85				3.85	10.22	34.07	550.00	9.37	6.45	21.48	330.00	3.54	6.45	21.48	220.00	2.36	6.45	21.48	220.00	2.36	4.72
161+08.04	161+38.03	SE CORNER HWY. 67 & MCNUTT ST.	29.99			VAR.	76.86	3.84				3.84	10.19	33.94	550.00	9.33	6.44	21.46	330.00	3.54	6.44	21.46	220.00	2.36	6.44	21.46	220.00	2.36	4.72
161+60.04	161+90.04	NE CORNER HWY. 67 & MCNUTT ST.	30.00			VAR.	76.86	3.84				3.84	10.18	33.94	550.00	9.33	6.44	21.46	330.00	3.54	6.44	21.46	220.00	2.36	6.44	21.46	220.00	2.36	4.72
TOTALS:					**126.67**		**74248.38**	**3712.42**		**8044.03**	**1367.48**	**5079.90**		**24199.76**		**6884.41**		**19703.26**		**3251.05**		**26144.96**		**3880.79**		**29034.67**		**3193.80**	**7074.59**

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2").....94.8% MIN. AGGR.....5.2% ASPHALT BINDER
ACHM BINDER COURSE (1").....95.8% MIN. AGGR.....4.2% ASPHALT BINDER
ACHM BASE COURSE (1 1/2").....96.2% MIN. AGGR.....3.8% ASPHALT BINDER
MAXIMUM NUMBER OF GYRATIONS = 115 FOR PG 64-22
MAXIMUM NUMBER OF GYRATIONS = 205 FOR PG 76-22
TACK COAT QUANTITIES WERE CALCULATED USING THE EMULSIFIED ASPHALT RATES. REFER TO SS-400-1 FOR THE RESIDUAL ASPHALT APPLICATION RATES.

rnfortner 6/28/2022 10:34:28 AM
WORKSPACE: AHTD
L:\20IT\170I75\5 - AHTD Arkadelphia Bypass\Drawings\r070442_QTY_01.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	188	549
		QUANTITIES				

DIGITALLY SIGNED 06/28/2022

BASE AND SURFACING - SIDE ROADS HWY. 67

STATION	STATION	LOCATION	LENGTH	AGGREGATE BASE COURSE (CLASS 7)		TACK COAT							ACHM BASE COURSE (1 1/2")					ACHM BINDER COURSE (1")				ACHM SURFACE COURSE (1/2")									
						(0.05 GAL. PER SQ. YD.)			(0.17 GAL. PER SQ. YD.)																					
			FEET	TON / STATION	TON	TOTAL WID. FEET	SQ.YD.	GALLON	TOTAL WID. FEET	SQ.YD.	GALLON	TOTAL GALLONS	AVG. WID. FEET	SQ.YD.	POUND / SQ.YD.	PG 64-22 TON	AVG. WID. FEET	SQ.YD.	POUND / SQ.YD.	PG 64-22 TON	AVG. WID. FEET	SQ.YD.	POUND / SQ.YD.	PG 64-22 TON	PG 76-22 TON	AVG. WID. FEET	SQ.YD.	POUND / SQ.YD.	PG 76-22 TON	TOTAL PG 64-22 TON	TOTAL PG 76-22 TON
SIDE ROADS - HWY. 67																														
WALNUT ST.																														
7+05.00	8+89.00	WALNUT ST. - NOTCH & WIDEN	184.00			24.00	490.67	24.53				24.53														24.00	490.67	220.00	53.97		53.97
8+89.00	9+00.00	WALNUT ST. - FULL DEPTH	11.00			77.00	94.11	4.71				4.71	29.00	35.44	550.00	9.75	24.00	29.33	330.00	4.84	24.00	29.33	220.00		3.23	24.00	29.33	220.00	3.23		6.46
9+00.00	9+81.49	WALNUT ST. - FULL DEPTH	81.49			77.00	697.19	34.86				34.86	29.00	262.58	550.00	72.21	24.00	217.31	330.00	35.86	24.00	217.31	220.00		23.90	24.00	217.31	220.00	23.90		47.80
HWY. 67 CONNECTOR.																														
10+18.28	12+07.19	HWY. 67 CONNECTOR - FULL DEPTH	188.91			89.00	1868.11	93.41				93.41	33.00	692.67	550.00	190.48	28.00	587.72	330.00	96.97	28.00	587.72	220.00		64.65	28.00	587.72	220.00	64.65		129.30
12+07.19	12+62.00	HWY. 67 CONNECTOR - FULL DEPTH	54.81			89.00	542.01	27.10				27.10	33.00	200.97	550.00	55.27	28.00	170.52	330.00	28.14	28.00	170.52	220.00		18.76	28.00	170.52	220.00	18.76		37.52
12+62.00	13+70.00	HWY. 67 CONNECTOR NOTCH & WIDEN	108.00			28.00	336.00	16.80				16.80														28.00	336.00	220.00	36.96		36.96
CLAY ST.																														
18+75.00	19+81.99	CLAY ST. WEST. - NOTCH & WIDEN	106.99			28.00	332.86	16.64				16.64														28.00	332.86	220.00	36.61		36.61
20+18.01	21+50.00	CLAY ST. EAST - FULL DEPTH	131.99			101.00	1481.22	74.06				74.06	37.00	542.63	550.00	149.22	32.00	469.30	330.00	77.43	32.00	469.30	220.00		51.62	32.00	469.30	220.00	51.62		103.24
21+50.00	22+00.00	CLAY ST. EAST - NOTCH & WIDEN	50.00			32.00	177.78	8.89				8.89														32.00	177.78	220.00	19.56		19.56
MAIN ST.																														
28+70.00	29+82.00	MAIN ST. WEST - NOTCH & WIDEN	112.00			36.00	448.00	22.40				22.40														36.00	448.00	220.00	49.28		49.28
30+18.00	31+75.00	MAIN ST. EAST - FULL DEPTH	157.00			113.00	1971.22	98.56				98.56	41.00	715.22	550.00	196.69	36.00	628.00	330.00	103.62	36.00	628.00	220.00		69.08	36.00	628.00	220.00	69.08		138.16
31+75.00	32+20.00	MAIN ST. EAST - NOTCH & WIDEN	45.00			36.00	180.00	9.00				9.00														36.00	180.00	220.00	19.80		19.80
CLINTON ST.																														
38+90.00	41+34.00	CLINTON ST. WEST & EAST - NOTCH & WIDEN	188.00			22.00	459.56	22.98				22.98														22.00	459.56	220.00	50.55		50.55
CADDO ST.																														
46+70.00	49+72.00	CADDO ST. WEST - NOTCH & WIDEN	302.00			47.49	1593.55	79.68				79.68	7.83	262.74	550.00	72.25	5.33	178.85	330.00	29.51	5.33	178.85	220.00		19.67	37.25	1249.94	220.00	137.49		157.16
50+22.00	53+32.00	CADDO ST. EAST - NOTCH & WIDEN	310.00			49.24	1696.04	84.80				84.80	10.08	347.20	550.00	95.48	7.58	261.09	330.00	43.08	7.58	261.09	220.00		36.11	36.08	1242.76	220.00	136.70		172.81
HICKORY ST.																														
60+18.00	61+75.00	HICKORY ST. - NOTCH & WIDEN	157.00			22.00	383.78	19.19				19.19	27.00	471.00	550.00	129.53	22.00	383.78	330.00	63.32	22.00	383.78	220.00	42.22	42.22	22.00	383.78	220.00	42.22		84.44
MCNUTT ST.																														
70+18.00	70+50.00	MCNUTT ST. - NOTCH & WIDEN	32.00			22.00	78.22	3.91				3.91														22.00	78.22	220.00	8.60		8.60
ADDITIONAL FOR RAISING GRADE SIDE ROADS - HWY. 67																														
8+89.00	9+00.00	WALNUT ST. - FULL DEPTH	11.00						22.00	26.89	4.57	4.57	22.00	26.89	VAR.	4.43															
12+07.19	12+62.00	HWY. 67 CONNECTOR - FULL DEPTH	54.81						28.00	170.52	28.99	28.99	28.00	170.52	VAR.	55.59															
20+18.01	21+50.00	CLAY ST. EAST - FULL DEPTH	131.99						36.00	527.96	89.75	89.75	36.00	527.96	VAR.	209.81															
30+18.00	31+75.00	MAIN ST. EAST - FULL DEPTH	157.00						32.00	558.22	94.90	94.90	32.00	558.22	VAR.	371.08															
ADDITIONAL FOR LEVELING SIDE ROADS - HWY. 67																														
7+05.00	8+89.00	WALNUT ST. - NOTCH AND WIDEN	184.00						22.00	449.78	76.46	76.46									22.00	449.78	VAR.	10.64					10.64		
12+62.00	13+70.00	HWY. 67 CONNECTOR - NOTCH & WIDEN	108.00						28.00	336.00	57.12	57.12									28.00	336.00	VAR.	56.92					56.92		
18+75.00	19+81.99	CLAY ST.WEST - NOTCH AND WIDEN	106.99						28.00	332.86	56.59	56.59									28.00	332.86	VAR.	45.55					45.55		
21+50.00	22+00.00	CLAY ST. EAST - NOTCH AND WIDEN	50.00						32.00	177.78	30.22	30.22									32.00	177.78	VAR.	39.15					39.15		
28+70.00	29+82.00	MAIN ST. WEST - NOTCH AND WIDEN	112.00						36.00	448.00	76.16	76.16									36.00	448.00	VAR.	63.14					63.14		
31+75.00	32+20.00	MAIN ST. EAST - NOTCH AND WIDEN	45.00						36.00	180.00	30.60	30.60									36.00	180.00	VAR.	56.43					56.43		
38+90.00	41+34.00	CLINTON ST. WEST & EAST - NOTCH & WIDEN	188.00						20.00	417.78	71.02	71.02									20.00	417.78	VAR.	25.61					25.61		
46+70.00	49+72.00	CADDO ST. WEST - NOTCH AND WIDEN	302.00						29.00	973.11	165.43	165.43									29.00	973.11	VAR.	111.70					111.70		
50+22.00	53+32.00	CADDO ST. EAST - NOTCH AND WIDEN	310.00						24.00	826.67	140.53	140.53									24.00	826.67	VAR.	181.47					181.47		
TOTALS SIDE ROADS - HWY. 67						**12830.32**	**641.52**		**5425.57**	**922.34**	**1563.86**		**4814.04**		**1611.79**		**2925.90**		**482.77**		**7067.88**		**632.83**	**329.24**		**7481.75**		**822.98**	**590.61**	**1152.22**

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2").....94.8% MIN. AGGR.....5.2% ASPHALT BINDER
ACHM BINDER COURSE (1").....95.8% MIN. AGGR.....4.2% ASPHALT BINDER
ACHM BASE COURSE (1 1/2").....96.2% MIN. AGGR.....3.8% ASPHALT BINDER
MAXIMUM NUMBER OF GYRATIONS = 115 FOR PG 64-22
MAXIMUM NUMBER OF GYRATIONS = 205 FOR PG 76-22
TACK COAT QUANTITIES WERE CALCULATED USING THE EMULSIFIED ASPHALT RATES. REFER TO SS-400-1 FOR THE RESIDUAL ASPHALT APPLICATION RATES.

rntortner 6/28/2022 10:34:38 AM
WORKSPACE: AHTD
L:\2017\170755 - AHTD Arkadelphia Bypass\Drawings\r070442_QTY_01.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
07-27-2022		6	ARK.	070442	189	549
08-04-2022		SUMMARY OF QUANTITIES & REVISIONS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 8/4/2022

SUMMARY OF QUANTITIES (BOX 1 OF 2)

ITEM NUMBER	ITEM	QUANTITY ALT. 1	QUANTITY ALT. 2	UNIT
201	CLEARING	226	226	STATION
201	GRUBBING	226	226	STATION
202	REMOVAL AND DISPOSAL OF CURB	691	691	LIN. FT.
202	REMOVAL AND DISPOSAL OF CURB AND GUTTER	4274	4274	LIN. FT.
SP	REMOVAL AND DISPOSAL OF TREES	25	25	EACH
202	REMOVAL AND DISPOSAL OF FENCE	2778	2778	LIN. FT.
202	REMOVAL AND DISPOSAL OF GATES	5	5	EACH
202	REMOVAL AND DISPOSAL OF POSTS	11	11	EACH
202	REMOVAL AND DISPOSAL OF CONCRETE SLABS	448	448	SQ. YD.
202	REMOVAL AND DISPOSAL OF RETAINING WALLS	389	389	LIN. FT.
202	REMOVAL AND DISPOSAL OF CONCRETE PAVEMENT	9803	9803	SQ. YD.
202	REMOVAL AND DISPOSAL OF CONCRETE ISLANDS	16	16	SQ. YD.
202	REMOVAL AND DISPOSAL OF CONCRETE DRIVEWAYS	2784	2784	SQ. YD.
202	REMOVAL AND DISPOSAL OF WALKS	1508	1508	SQ. YD.
202	REMOVAL AND DISPOSAL OF SIGN FOUNDATIONS	42	42	EACH
202	REMOVAL AND DISPOSAL OF DROP INLETS	18	18	EACH
202	REMOVAL AND DISPOSAL OF PIPE CULVERTS	25	25	EACH
202	REMOVAL AND DISPOSAL OF HEADWALLS	2	2	EACH
202	REMOVAL AND DISPOSAL OF GUARDRAIL	360	360	LIN. FT.
202	REMOVAL AND DISPOSAL OF LUMINAIRE POLES	1	1	EACH
202	REMOVAL AND DISPOSAL OF LUMINAIRE POLE AND FOUNDATION	4	4	EACH
202	REMOVAL AND DISPOSAL OF BUILDINGS	37	37	EACH
202	REMOVAL AND DISPOSAL OF SIGNS	36	36	EACH
202	REMOVAL AND DISPOSAL OF PLANTERS	6	6	EACH
202	REMOVAL AND DISPOSAL OF MAILBOXES	7	7	EACH
202	REMOVAL AND DISPOSAL OF FLAG POLE	1	1	EACH
202	REMOVAL AND DISPOSAL OF CANOPY	4	4	EACH
202	REMOVAL AND DISPOSAL OF SEPTIC SYSTEM	4	4	EACH
SP	DISPOSAL OF WASTE	44444	44444	CU. YD.
SS & 206	FLOWABLE SELECT MATERIAL	78	78	CU. YD.
SP, SS & 210	UNCLASSIFIED EXCAVATION	232056	232056	CU. YD.
SP & 210	COMPACTED EMBANKMENT	694478	694478	CU. YD.
SP & 210	SOIL STABILIZATION	1000	1000	TON
SP, SS & 303	AGGREGATE BASE COURSE (CLASS 7)	57089	33776	TON
SP, SS & 308	AGGREGATE IN CEMENT STABILIZED CRUSHED STONE BASE COURSE		27480	TON
SP, SS & 308	CEMENT IN CEMENT STABILIZED CRUSHED STONE BASE COURSE		1754	TON
SP, SS & 308	PROCESSING CEMENT STABILIZED CRUSHED STONE BASE COURSE		83527	SQ. YD.
SP, SS & 309	PORTLAND CEMENT CONCRETE BASE (5" UNIFORM THICKNESS)	2357	2357	SQ. YD.
SP, SS & 309	PORTLAND CEMENT CONCRETE BASE (6" UNIFORM THICKNESS)	234	234	SQ. YD.
SS & 401	TACK COAT	15963	8334	GAL.
SP, SS, & 405	MINERAL AGGREGATE IN ACHM BASE COURSE (1 1/2")	9242	9242	TON
SP, SS, & 405	ASPHALT BINDER (PG 64-22) IN ACHM BASE COURSE (1 1/2")	365	365	TON
SP, SS, & 406	MINERAL AGGREGATE IN ACHM BINDER COURSE (1")	16388	4299	TON
SP, SS, & 406	ASPHALT BINDER (PG 64-22) IN ACHM BINDER COURSE (1")	718	188	TON
SP, SS, & 407	MINERAL AGGREGATE IN ACHM SURFACE COURSE (1/2")	29196	13336	TON
SP, SS, & 407	ASPHALT BINDER (PG 64-22) IN ACHM SURFACE COURSE (1/2")	973	232	TON
SP, SS, & 407	ASPHALT BINDER (PG 76-22) IN ACHM SURFACE COURSE (1/2")	628	499	TON
SP & 412	COLD MILLING ASPHALT PAVEMENT	5468	5468	SQ. YD.
SP, SS, & 414	ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC	109	109	TON
SP, SS, & 415	ACHM PATCHING OF EXISTING ROADWAY	100	100	TON
SP, SS, & 501	PORTLAND CEMENT CONCRETE PAVEMENT (9" UNIFORM THICKNESS)		75988	SQ. YD.
SP, SS, & 505	PORTLAND CEMENT CONCRETE DRIVEWAY	6049.39	6049.39	SQ. YD.
SP	SCARIFYING CONCRETE PAVEMENT	1167	1167	SQ. YD.
601	MOBILIZATION	1.00	1.00	LUMP SUM
SP & 602	FURNISHING FIELD OFFICE	1	1	EACH
602	FURNISHING FIELD LABORATORY	1	1	EACH
SP, SS & 603	MAINTENANCE OF TRAFFIC	1.00	1.00	LUMP SUM
603	24" TEMPORARY CULVERT	95	95	LIN. FT.
SS & 604	SIGNS	1785	1785	SQ. FT.
SP, SS, & 604	CONSTRUCTION PROJECT INFORMATION SIGN UPDATE	4	4	EACH
SS & 604	BARRICADES	1040	1040	LIN. FT.
SS & 604	TRAFFIC DRUMS	498	498	EACH
SS & 604	FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER	740	740	LIN. FT.
SS & 604	RELOCATING PRECAST CONCRETE BARRIER	520	520	LIN. FT.
604	CONSTRUCTION PAVEMENT MARKINGS	46263	46263	LIN. FT.
604	REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS	11451	11451	LIN. FT.
SP, SS & 605	CONCRETE DITCH PAVING (TYPE B)	3861	3861	SQ. YD.
SS & 606	18" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	317	317	LIN. FT.
* SS & 606	18" REINFORCED CONCRETE PIPE CULVERTS (CLASS III) (ALTERNATE NO. 1)	4443	4443	LIN. FT.
* SS & 606	18" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE (ALTERNATE NO. 2)	4443	4443	LIN. FT.
SS & 606	18" REINFORCED CONCRETE PIPE CULVERTS (CLASS IV)	32	32	LIN. FT.
SS & 606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	497	497	LIN. FT.
* SS & 606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS III) (ALTERNATE NO. 1)	236	236	LIN. FT.
* SS & 606	24" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE (ALTERNATE NO. 2)	236	236	LIN. FT.
SS & 606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS IV)	594	594	LIN. FT.
SS & 606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS V)	430	430	LIN. FT.
SS & 606	30" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	228	228	LIN. FT.
* SS & 606	30" REINFORCED CONCRETE PIPE CULVERTS (CLASS III) (ALTERNATE NO. 1)	331	331	LIN. FT.
* SS & 606	30" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE (ALTERNATE NO. 2)	331	331	LIN. FT.
SS & 606	30" REINFORCED CONCRETE PIPE CULVERTS (CLASS V)	280	280	LIN. FT.
SS & 606	36" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	513	513	LIN. FT.
* SS & 606	36" REINFORCED CONCRETE PIPE CULVERTS (CLASS III) (ALTERNATE NO. 1)	380	380	LIN. FT.
* SS & 606	36" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE (ALTERNATE NO. 2)	380	380	LIN. FT.
SS & 606	36" REINFORCED CONCRETE PIPE CULVERTS (CLASS IV)	334	334	LIN. FT.
SS & 606	36" REINFORCED CONCRETE PIPE CULVERTS (CLASS V)	412	412	LIN. FT.
* SS & 606	42" REINFORCED CONCRETE PIPE CULVERTS (CLASS III) (ALTERNATE NO. 1)	28	28	LIN. FT.
* SS & 606	42" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE (ALTERNATE NO. 2)	28	28	LIN. FT.
SS & 606	48" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	291	291	LIN. FT.
* SS & 606	48" REINFORCED CONCRETE PIPE CULVERTS (CLASS III) (ALTERNATE NO. 1)	137	137	LIN. FT.
* SS & 606	48" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE (ALTERNATE NO. 2)	137	137	LIN. FT.
SS & 606	48" REINFORCED CONCRETE PIPE CULVERTS (CLASS IV)	1408	1408	LIN. FT.
SS & 606	54" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	125	125	LIN. FT.
* SS & 606	54" REINFORCED CONCRETE PIPE CULVERTS (CLASS III) (ALTERNATE NO. 1)	246	246	LIN. FT.
* SS & 606	54" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE (ALTERNATE NO. 2)	246	246	LIN. FT.
SS & 606	54" REINFORCED CONCRETE PIPE CULVERTS (CLASS IV)	198	198	LIN. FT.
SS & 606	54" REINFORCED CONCRETE PIPE CULVERTS (CLASS V)	36	36	LIN. FT.
SS & 606	60" REINFORCED CONCRETE PIPE CULVERTS (CLASS V)	284	284	LIN. FT.
SS & 606	44" X 27" REINFORCED CONCRETE ARCH PIPE CULVERTS (CLASS III)	35	35	LIN. FT.
SS & 606	22" X 14" REINFORCED CONCRETE ARCH PIPE CULVERTS (CLASS IV)	28	28	LIN. FT.
SP, SS, & 606	18" SIDE DRAIN	1189	1189	LIN. FT.
SP, SS, & 606	24" SIDE DRAIN	157	157	LIN. FT.
SP, SS, & 606	30" SIDE DRAIN	44	44	LIN. FT.
SS & 606	22" X 14" SIDE DRAIN	64	64	LIN. FT.
SS & 606	18" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS	6	6	EACH
SS & 606	24" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS	20	20	EACH
SS & 606	30" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS	6	6	EACH
SS & 606	36" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS	16	16	EACH
SS & 606	48" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS	29	29	EACH
SS & 606	54" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS	5	5	EACH
SS & 606	60" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS	2	2	EACH
SS & 606	SELECTED PIPE BEDDING	1020	1020	CU. YD.
SS & 609	DROP INLETS (TYPE C)	5	5	EACH
SS & 609	DROP INLETS (TYPE E)	4	4	EACH
SS & 609	DROP INLETS (TYPE MO)	77	77	EACH
SS & 609	DROP INLETS (TYPE ST)	26	26	EACH
SS & 609	DROP INLETS (TYPE SPECIAL)	38	38	EACH
SS & 609	JUNCTION BOXES (TYPE E)	6	6	EACH
SS & 609	JUNCTION BOXES (TYPE ST)	15	15	EACH
SS & 609	DROP INLET EXTENSIONS (4')	55	55	EACH
SS & 609	DROP INLET EXTENSIONS (8')	27	27	EACH
SS & 611	4" PIPE UNDERDRAINS	500	500	LIN. FT.
SS & 611	UNDERDRAIN OUTLET PROTECTORS	4	4	EACH
SP, SS, & 615	PAVEMENT REPAIR OVER CULVERTS (ASPHALT)	456	456	TON
SS & 619	WIRE FENCE (TYPE A)	30507	30507	LIN. FT.

* DENOTES ALTERNATE BID ITEMS.

SUMMARY OF QUANTITIES (BOX 2 OF 2)

ITEM NUMBER	ITEM	QUANTITY ALT. 1	QUANTITY ALT. 2	UNIT
* SS & 619	6' STEEL CHAIN LINK FENCE (ALTERNATE NO. 1)	479	479	LIN. FT.
* SS & 619	6' ALUMINUM CHAIN LINK FENCE (ALTERNATE NO. 2)	479	479	LIN. FT.
* SS & 619	12' STEEL GATES (ALTERNATE NO. 1)	2	2	EACH
* SS & 619	12' ALUMINUM GATES (ALTERNATE NO. 2)	2	2	EACH
* SS & 619	14' STEEL GATES (ALTERNATE NO. 1)	1	1	EACH
* SS & 619	14' ALUMINUM GATES (ALTERNATE NO. 2)	1	1	EACH
620	LIME	99	99	TON
620	SEEDING	49.48	49.48	ACRE
SS & 620	MULCH COVER	98.96	98.96	ACRE
620	WATER	6183.2	6183.2	M. GAL.
621	TEMPORARY SEEDING	49.48	49.48	ACRE
621	SILT FENCE	32764	32764	LIN. FT.
621	SAND BAG DITCH CHECKS	4066	4066	BAG
621	DIVERSION DITCH	2134	2134	LIN. FT.
621	DROP INLET SILT FENCE	3674	3674	LIN. FT.
621	SEDIMENT BASIN	600	600	CU. YD.
621	OBLITERATION OF SEDIMENT BASIN	600	600	CU. YD.
621	SEDIMENT REMOVAL AND DISPOSAL	2082	2082	CU. YD.
621	PIPE FOR SLOPE DRAINS	732	732	LIN. FT.
621	ROCK DITCH CHECKS	290	290	CU. YD.
SS & 621	FILTER SOCK (18")	100	100	LIN. FT.
621	WATTLE (18")	100	100	LIN. FT.
623	SECOND SEEDING APPLICATION	49.48	49.48	ACRE
624	SOLID SODDING	10084	10084	SQ. YD.
SP & 625	GEOTEXTILE FABRIC (TYPE SPECIAL)		83527	SQ. YD.
626	EROSION CONTROL MATTING (CLASS 3)	13374	13374	SQ. YD.
SP, SS & 632	CONCRETE ISLAND	729	729	SQ. YD.
SP, SS & 633	CONCRETE WALKS	9708	9708	SQ. YD.
SP, SS, & 633	CONCRETE WALKS (TYPE SPECIAL)	456	456	SQ. YD.
SS & 633	HAND RAILING	498	498	LIN. FT.
SS & 634	CONCRETE COMBINATION CURB AND GUTTER (TYPE A) (1'6")	20617	20617	LIN. FT.
635	ROADWAY CONSTRUCTION CONTROL	1.00	1.00	LUMP SUM
637	MAILBOXES	5	5	EACH
637	MAILBOX SUPPORTS (SINGLE)	3	3	EACH
637	MAILBOX SUPPORTS (DOUBLE)	1	1	EACH
SP, SS & 641	WHEELCHAIR RAMPS (TYPE 3)	190	190	SQ. YD.
SP, SS & 641	WHEELCHAIR RAMPS (TYPE 4)	71	71	SQ. YD.
642	RUMBLE STRIPS IN ASPHALT SHOULDERS	21830	21830	LIN. FT.
SP & 701	ACTUATED CONTROLLER TS2-TYPE 2 (8 PHASES)	2	2	EACH
SP & 701	SYSTEM LOCAL CONTROLLER TS2-TYPE 2 (8 PHASES)	1	1	EACH
SP	TRAFFIC SIGNAL CONTROLLER (MODIFICATION)	1	1	EACH
SP	ANTENNA SUPPORT (SHOE BASE, 35' HT.)	1	1	EACH
SP	LOCAL RADIO WITH ANTENNA	1	1	EACH
SP	ANTENNA CABLE (TYPE 6)	69	69	LIN. FT.
SP & 706	TRAFFIC SIGNAL HEAD, LED, (3 SECTION, 1 WAY)	33	33	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (4 SECTION, 1 WAY)	6	6	EACH
SP	RELOCATION OF TRAFFIC SIGNAL HEAD	9	9	EACH
SP & 707	COUNTDOWN PEDESTRIAN SIGNAL HEAD, LED	20	20	EACH
708	TRAFFIC SIGNAL CABLE (5C/14 A.W.G.)	5723	5723	LIN. FT.
708	TRAFFIC SIGNAL CABLE (7C/14 A.W.G.)	1541	1541	LIN. FT.
708	TRAFFIC SIGNAL CABLE (12C/14 A.W.G.)	172	172	LIN. FT.
708	TRAFFIC SIGNAL CABLE (20C/14 A.W.G.)	1414	1414	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., E.G.C.)	1699	1699	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/12 A.W.G., E.G.C.)	475	475	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G.)	150	150	LIN. FT.
SP	ELECTRICAL CONDUCTORS FOR LUMINAIRES	1889	1889	LIN. FT.
709	GALVANIZED STEEL CONDUIT (2")	55	55	LIN. FT.
709	GALVANIZED STEEL CONDUIT (3")	30	30	LIN. FT.
710	NON-METALLIC CONDUIT (2")	137	137	LIN. FT.
710	NON-METALLIC CONDUIT (3")	1633	1633	LIN. FT.
SS & 711	CONCRETE PULL BOX (TYPE 2)	16	16	EACH
SS & 711	CONCRETE PULL BOX (TYPE 1 HD)	1	1	EACH
SS & 711	CONCRETE PULL BOX (TYPE 2 HD)	3	3	EACH
SS & 711	CONCRETE PULL BOX (TYPE 3 HD)	4	4	EACH
SS & 713	SPAN WIRE ASSEMBLY	1	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (30')	1	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (32')	1	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (34')	2	2	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (36')	1	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (38')	2	2	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (42')	1	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (52'-32')	1	1	EACH
SP	LED LUMINAIRE ASSEMBLY	9	9	EACH
SS & 715	TRAFFIC SIGNAL PEDESTAL POLE WITH FOUNDATION	11	11	EACH
SP	SERVICE POINT ASSEMBLY (2 CIRCUITS)	2	2	EACH
SP	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT	1.00	1.00	LUMP SUM
716	TREATED WOOD POLE (CLASS 2, 45')	4	4	EACH
718	REFLECTORIZED PAINT PAVEMENT MARKING WHITE (6")	3961	3961	LIN. FT.
718	REFLECTORIZED PAINT PAVEMENT MARKING WHITE (10")	994	994	LIN. FT.
718	REFLECTORIZED PAINT PAVEMENT MARKING WHITE (12")	45	45	LIN. FT.
718	REFLECTORIZED PAINT PAVEMENT MARKING YELLOW (6")	5319	5319	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING WHITE (6")	37536	37536	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING WHITE (8")	138	138	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING WHITE (12")	3690	3690	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING WHITE (24")	401	401	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING YELLOW (6")	61585	61585	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING YELLOW (8")	161	161	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING (YIELD LINE)	160	160	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING (WORDS)	24	24	EACH
719	THERMOPLASTIC PAVEMENT MARKING (ARROWS)	58	58	EACH
721	RAISED PAVEMENT MARKERS (TYPE II)	499	499	EACH
SP, SS & 725	GUIDE SIGN-ROADSIDE MOUNTED (DEMOUNTABLE LEGEND)	98	98	SQ. FT.
SP, SS & 726	STANDARD SIGN	1099	1099	SQ. FT.
SP	18" STREET NAME SIGN	8	8	EACH
SP	30" STREET NAME SIGN	2	2	EACH
SP	VIDEO DETECTOR ROTATION	5	5	EACH
SP & 733	VIDEO DETECTOR (CLR)	21	21	EACH
733	VIDEO CABLE	4353	4353	LIN. FT.
733	VIDEO MONITOR (CLR)	3	3	EACH
SP & 733	VIDEO PROCESSOR, EDGE CARD (2 CAMERA)	13	13	EACH
SP & 733	VEHICLE DETECTOR RACK (16 CHANNEL)	3	3	EACH
SP	OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS (TYPE G-1)	48	48	EACH
SP	OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS (TYPE G-2)	2	2	EACH
SP	OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS (TYPE G2-1)	21	21	EACH
SP	OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS (TYPE G2-2)	12	12	EACH
SP	OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS (TYPE G2-3)	8	8	EACH
SP	OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS (TYPE G2-6)	2	2	EACH
SS & 731	TEMPORARY IMPACT ATTENUATION BARRIER	3	3	EACH
SS & 731	TEMPORARY IMPACT ATTENUATION BARRIER (REPAIR)	3	3	EACH
801	UNCLASSIFIED EXCAVATION FOR STRUCTURES-ROADWAY	65	65	CU. YD.
SP, SS & 802	CLASS S CONCRETE-ROADWAY	146.72	146.72	CU. YD.
SS & 804	REINFORCING STEEL-ROADWAY (GRADE 60)	13928	13928	POUND
SS & 816	FILTER BLANKET	596	596	SQ. YD.
SS & 816	DUMPED RIPRAP	172	172	CU. YD.
	STRUCTURES OVER 20' SPAN			
205	REMOVAL OF EXISTING BRIDGE STRUCTURE (SITE NO. 1)	1.00	1.00	LUMP SUM
205	REMOVAL OF EXISTING BRIDGE STRUCTURE (SITE NO. 2)	1.00	1.00	LUMP SUM
801	UNCLASSIFIED EXCAVATION FOR STRUCTURES-ROADWAY	1444	1444	CU. YD.
SP, SS, & 802	CLASS S CONCRETE-ROADWAY	3357.66	3357.66	CU. YD.
SS & 804	REINFORCING STEEL-ROADWAY (GRADE 60)	460171	460171	POUND

* DENOTES ALTERNATE BID ITEMS.

REVISIONS

DATE	REVISION	SHEET NUMBER
07-27-2022	ADDED MAINTENANCE OF TRAFFIC SP; ADDED SEQUENCE OF WORK FOR UTILITY ADJUSTMENTS SP; ADDED FLEXIBLE BEGINNING OF WORK - WORKING DAY CONTRACT SP; REVISED ESTABLISHING CONTRACT TIME - WORKING DAY CONTRACT SP; REVISED UTILITY ADJUSTMENTS SP; REVISED DELAY IN RIGHT OF WAY OCCUPANCY SP; REMOVED REMOVAL AND DISPOSAL OF ILLEGAL DUMP SP	3, 189
08-04-2022	ADDED SPECIAL DETAIL TO SHOW PROFILE GRADE TRANSITION FOR ACHM ALTERNATIVE	36, 189

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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	190	549
		SURVEY CONTROL DETAILS				

STATE OF ARKANSAS
Shaun A. Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

SURVEY CONTROL COORDINATES

Project Name: s070442
Date: 11/4/2020
Coordinate System: ARKANSAS STATE PLANE - NORTH ZONE BASED ON GPS CONTROL, 100021 - 100005A, 100030, 100031 - 100031A, 100035 - 100035A, 100036 - 100036A PROJECTED TO GROUND.
Units: U.S. SURVEY FOOT

Point Name	Northing	Easting	Elev	Feature	Description
1	1843870.1008	992491.4259	248.033	CTL	ARDOT STD. MON. STAMPED PN: 1
2	1843129.4637	992499.5842	241.132	CTL	ARDOT STD. MON. STAMPED PN: 2
3	1842630.3712	992621.6289	230.018	CTL	ARDOT STD. MON. STAMPED PN: 3
4	1841954.6998	992915.2757	226.872	CTL	ARDOT STD. MON. STAMPED PN: 4
5	1841887.6044	993183.0507	227.210	CTL	ARDOT STD. MON. STAMPED PN: 5
6	1841386.5966	993178.7680	205.743	CTL	ARDOT STD. MON. STAMPED PN: 6
7	1840707.6625	993084.1939	190.094	CTL	ARDOT STD. MON. STAMPED PN: 7
8	1840525.0596	992692.9117	196.551	CTL	ARDOT STD. MON. STAMPED PN: 8
9	1839669.7454	992469.4632	187.786	CTL	ARDOT STD. MON. STAMPED PN: 9
10	1839195.4046	992029.8929	184.939	CTL	ARDOT STD. MON. STAMPED PN: 10
11	1839709.3382	991863.7132	183.123	CTL	ARDOT STD. MON. STAMPED PN: 11
12	1839000.4450	980298.2901	318.121	CTL	ARDOT STD. MON. STAMPED PN: 12
13	1839916.2571	980563.3058	321.995	CTL	ARDOT STD. MON. STAMPED PN: 13
14	1840693.8977	980928.9959	317.872	CTL	ARDOT STD. MON. STAMPED PN: 14
15	1841862.1552	981527.9200	318.473	CTL	ARDOT STD. MON. STAMPED PN: 15
100	1842486.9723	981778.0154	333.919	GPS	ARDOT GPS *100021
101	1841315.8970	981275.7599	310.274	GPS	ARDOT GPS *100005A
102	1839711.3873	985207.6468	281.509	GPS	ARDOT GPS *100036
103	1838695.4950	985998.7062	204.923	GPS	ARDOT GPS *100036A
104	1837547.4317	990465.7300	183.296	GPS	ARDOT GPS *100035A
105	1838728.3997	991587.8416	184.570	GPS	ARDOT GPS *100035
106	1842558.7751	992964.5469	243.613	GPS	ARDOT GPS *100031A
107	1843919.7305	992977.9067	245.360	GPS	ARDOT GPS *100031
108	1844591.7437	985446.9574	296.492	GPS	ARDOT GPS *100030
900	1842368.3960	992924.0229	240.908	TBM	CHSLD SQ COR OF CURB
901	1840696.4198	993123.1750	191.075	TBM	CHSLD SQ SW COR SIGN BASE
902	1842654.0448	983281.5790	299.798	TBM	CHSLD SQ S SIDE OF SIGNAL

*Note - Rebar and Cap - Standard - 5/8" Rebar with 2" Aluminum Cap stamped *(standard markings common to all caps), or as indicated (other markings indicated in the point description of the individual point).
ALL DISTANCES ARE GROUND.
USE CAF = 1.0 FOR STAKEOUT FOR THIS PROJECT.
A PROJECT CAF OF 0.999902573 HAS BEEN USED TO COMPUTE THE ABOVE GROUND COORDINATES.
THIS CAF IS INTENDED FOR USE WITHIN THE PROJECT LIMITS.
GRID DISTANCE = GROUND DISTANCE X CAF.
GRID COORDINATES ARE STORED UNDER FILE NAME s070442gi.CTL
HORIZONTAL DATUM: NAD 83 (2011)
VERTICAL DATUM: NAVD 88 POSITIONAL ACCURACY THIRD ORDER, UNLESS SPECIFIED OTHERWISE AT A SPECIFIC POINT.

REFERENCE POINTS (1500 SERIES) ARE TO BE USED TO ESTABLISH CONTROL IF THE PRIMARY CONTROL POINTS LISTED ABOVE HAVE BEEN DESTROYED.
REFERENCE POINTS ARE NOT TO BE USED FOR VERTICAL CONTROL

BASIS OF BEARING:
ARKANSAS STATE PLANE GRID BEARINGS - 0301-NORTH ZONE
DETERMINED FROM GPS CONTROL POINTS: 100021 - 100005A, 100030, 100031 - 100031A, 100035 - 100035A, 100036 - 100036A
CONVERGENCE ANGLE: 0°36'12.95" LEFT AT PN:103 LT:N34°06'28.65" LG:W93°04'42.42"
GRID AZIMUTH = ASTRONOMICAL AZIMUTH - CONVERGENCE ANGLE.

ALIGNMENT NAME : BYPASS

POINT	STATION	TYPE	NORTHING	EASTING
8000	100+00.00	POB	1842656.1008	982652.6781
8001	101+94.27	PC	1842462.2401	982665.3345
8002	109+60.53	PT	1841895.6048	982246.1509
8003	114+04.21	PC	1841793.7008	981814.3367
8004	118+70.29	PT	1841516.9623	981456.8973
8005	134+56.95	PC	1840113.2076	980717.3297
8006	154+75.96	PT	1838482.2561	981399.3281
8007	178+09.93	PC	1837806.4128	983633.3083
8008	187+59.82	PT	1837764.0308	984572.4743
8009	243+36.32	PC	1838891.4808	990033.8208
8010	250+69.15	PT	1839172.0439	990705.9527
8011	255+57.52	PC	1839442.6513	991112.4925
8012	268+05.66	PT	1839493.3158	992298.7645
8013	268+23.94	POE	1839484.5225	992314.7873

ALIGNMENT NAME : HWY. 67

POINT	STATION	TYPE	NORTHING	EASTING
8015	97+00.00	POB	1838829.3285	991717.1082
8016	104+08.69	PC	1839346.8783	992201.2467
8017	111+09.32	PT	1839953.1151	992538.3566
8018	119+89.34	PC	1840802.8924	992767.0812
8019	124+01.32	PT	1841202.5211	992721.0942
8020	126+72.61	PC	1841441.6228	992592.9243
8021	129+87.24	PT	1841742.2224	992508.9495
8022	135+24.32	PC	1842278.5504	992480.6277
8023	140+22.99	PT	1842777.0417	992476.0211
8024	151+17.00	PI	1843870.4118	992513.5'26
8025	152+70.00	PI	1844023.1839	992521.8722
8026	162+50.00	PI	1845002.8240	992548.4043
8027	163+60.00	PI	1845112.8211	992547.5990
8028	165+60.00	POE	1845312.7471	992553.0379

ALIGNMENT NAME : PROFESSIONAL PARK DR.

POINT	STATION	TYPE	NORTHING	EASTING
8030	89+00.00	POB	1843685.5276	982875.5751
8031	91+68.56	PC	1843465.9302	982720.9682
8032	95+38.87	PT	1843116.2466	982622.6369
8000	100+00.00	POE	1842656.1008	982652.6781

ALIGNMENT NAME : EXECUTIVE CIR.

POINT	STATION	TYPE	NORTHING	EASTING
8035	10+00.00	POB	1843490.1034	982737.9873
8036	11+11.00	PC	1843432.6882	982832.9880
8037	11+72.78	PT	1843379.5492	982856.0437
8038	12+00.00	POE	1843352.9222	982850.4'16

ALIGNMENT NAME : OFFICE PARK DR.

POINT	STATION	TYPE	NORTHING	EASTING
8040	8+50.00	POB	1843543.2020	982596.6258
8041	10+00.00	POE	1843486.6535	982735.5584

ALIGNMENT NAME: PROFESSIONAL PARK DR. CUL-DE-SAC

POINT	STATION	TYPE	NORTHING	EASTING
8045	12+00.00	POB	1842652.3131	982055.1885
8046	14+60.23	PC	1842858.6104	982213.8039
8047	15+15.42	PT	1842900.6787	982249.4997
8048	18+27.14	PC	1843128.3821	982462.3933
8049	19+56.11	PT	1843175.8146	982578.0736
8050	20+00.00	POE	1843174.0264	982621.9308

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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	191	549
		SURVEY CONTROL DETAILS				

ALIGNMENT NAME: HWY. 51 - PINE ST.

POINT	STATION	TYPE	NORTHING	EASTING
8055	12+00.00	POB	1842541.7992	981860.9915
8056	14+08.49	PC	1842573.7231	982067.0270
8057	15+61.86	PT	1842594.1580	982219.0201
8058	16+39.36	PC	1842602.9405	982296.0189
8059	18+12.93	PT	1842626.5212	982467.9665
8060	19+87.49	PC	1842654.1606	982640.3206
8061	22+28.42	PT	1842677.2234	982879.9865
8062	24+00.00	POE	1842682.8600	983051.4701

ALIGNMENT NAME: RED HILL RD. N.

POINT	STATION	TYPE	NORTHING	EASTING
8065	20+00.00	POB	1841763.6489	981723.5081
8066	20+35.56	PC	1841796.3018	981709.4207
8067	22+79.71	PT	1842031.1655	981723.8673
8068	25+10.47	PC	1842230.2475	981840.5577
8069	28+43.89	PT	1842413.7035	982106.3220
8070	30+50.00	POE	1842448.1138	982309.5370

ALIGNMENT NAME: RED HILL RD. S.

POINT	STATION	TYPE	NORTHING	EASTING
8075	13+00.00	POB	1838939.7144	980315.8305
8076	15+39.06	PC	1839177.3846	980290.0820
8077	18+96.31	PT	1839429.6068	980490.5182
8078	20+00.00	POE	1839442.0092	980593.4598

ALIGNMENT NAME: 26TH ST. S.

POINT	STATION	TYPE	NORTHING	EASTING
8080	11+50.00	POB	1836889.0229	983954.2237
8081	15+03.53	PC	1837242.0387	983973.2393
8082	17+11.46	PT	1837447.5235	984003.1494
8083	20+00.00	POE	1837728.1116	984070.4096

ALIGNMENT NAME: 26TH ST. N.

POINT	STATION	TYPE	NORTHING	EASTING
8083	20+00.00	POB	1837728.1116	984070.4096
8084	20+88.29	PC	1837813.9687	984090.9905
8085	22+44.53	PT	1837948.7977	984166.0488
8086	24+06.00	PC	1838063.5111	984279.6807
8087	25+54.03	PT	1838178.6604	984372.2876
8088	27+70.00	POE	1838360.0218	984489.5532

ALIGNMENT NAME: FUTURE BYPASS TO HWY. 67 CONNECTOR

POINT	STATION	TYPE	NORTHING	EASTING
8090	12+32.47	POB	1838975.3857	991853.7364
8091	15+51.98	PC	1839193.6602	991620.3984
8092	18+55.84	PT	1839449.1142	991462.5176
8093	20+00.00	POE	1839587.3222	991421.5127

ALIGNMENT NAME: WALNUT ST.

POINT	STATION	TYPE	NORTHING	EASTING
8095	7+00.00	POB	1840683.9089	992432.9629
8096	10+00.00	POE	1840675.7176	992732.8511

ALIGNMENT NAME: HWY 67. CONNECTOR

POINT	STATION	TYPE	NORTHING	EASTING
8100	10+00.00	POB	1840678.0668	992733.4834
8101	10+50.79	PC	1840673.5835	992784.0705
8102	14+35.97	PT	1840658.9663	993168.8107
8103	14+40.00	POE	1840659.0165	993172.8441

ALIGNMENT NAME: CLAY ST. W.

POINT	STATION	TYPE	NORTHING	EASTING
8105	18+00.00	POB	1842622.7731	992272.8952
8106	20+00.00	POE	1842615.4527	992472.7611

ALIGNMENT NAME: CLAY ST. E.

POINT	STATION	TYPE	NORTHING	EASTING
8106	20+00.00	POB	1842615.4527	992472.7611
8107	23+00.00	POE	1842604.4720	992772.5601

ALIGNMENT NAME: MAIN ST. W.

POINT	STATION	TYPE	NORTHING	EASTING
8110	27+00.00	POB	1842886.8992	992179.6169
8111	30+00.00	POE	1842878.3627	992479.4954

ALIGNMENT NAME: MAIN ST. E.

POINT	STATION	TYPE	NORTHING	EASTING
8111	30+00.00	POB	1842878.3627	992479.4954
8112	33+00.00	POE	1842869.8263	992779.3739

ALIGNMENT NAME: CLINTON ST. W.

POINT	STATION	TYPE	NORTHING	EASTING
8115	38+00.00	POB	1843154.2201	992288.8389
8116	40+00.00	POE	1843146.4941	992488.6896

ALIGNMENT NAME: CLINTON ST. E.

POINT	STATION	TYPE	NORTHING	EASTING
8116	40+00.00	POB	1843146.4941	992488.6896
8117	42+00.00	POE	1843138.7681	992688.5403

ALIGNMENT NAME: CADDO ST. W.

POINT	STATION	TYPE	NORTHING	EASTING
8120	45+00.00	POB	1843406.3041	991997.4328
8121	47+60.00	PI	1843397.7720	992257.2928
8122	48+20.00	PI	1843391.8095	992316.9958
8123	50+00.00	POE	1843385.9026	992496.8989

ALIGNMENT NAME: CADDO ST. E.

POINT	STATION	TYPE	NORTHING	EASTING
8123	50+00.00	POB	1843385.9026	992496.8989
8124	51+82.00	PI	1843379.9301	992678.8009
8125	52+42.00	PI	1843381.9634	992738.7664
8126	55+00.00	POE	1843373.4968	992996.6274

ALIGNMENT NAME: HICKORY ST.

POINT	STATION	TYPE	NORTHING	EASTING
8180	60+00.00	POB	1844161.1327	992525.6083
8181	61+15.00	PI	1844158.0192	992640.5662
8182	62+00.00	POE	1844154.2354	992725.4819

ALIGNMENT NAME: MCNUTT ST.

POINT	STATION	TYPE	NORTHING	EASTING
8190	70+00.00	POB	1844901.8611	992545.6698
8191	71+00.00	POE	1844899.1537	992645.6332

ALIGNMENT NAME: BYPASS BERM

POINT	STATION	TYPE	NORTHING	EASTING
8150	10+00.00	POB	1839806.8361	991891.2226
8151	12+68.42	PI	1839770.7621	992157.2117
8152	15+26.42	POE	1839669.0217	992394.3049

ALIGNMENT NAME: DITCH BETWEEN BYPASS AND BERM CULVERT

POINT	STATION	TYPE	NORTHING	EASTING
8155	20+00.00	POB	1839671.5950	991923.7011
8156	20+04.29	PC	1839675.5273	991925.4088
8157	20+56.05	PT	1839699.2400	991967.4036
8158	24+20.26	PC	1839650.9321	992328.3991
8159	24+64.38	PT	1839667.9581	992366.6941
8160	24+65.77	POE	1839669.1119	992367.4852

ALIGNMENT NAME: R.C. BOX CULVERT - STA. 110+00

POINT	STATION	TYPE	NORTHING	EASTING
8165	0+00.00	POB	1839669.1119	992367.4852
8166	1+44.25	PC	1839794.7397	992438.3830
8167	2+10.33	PT	1839839.1569	992485.9116
8168	3+22.80	POE	1839887.6888	992587.3786

ALIGNMENT NAME: TEMP. 1 HWY. 67 WIDENING FOR BOX CULVERTS

POINT	STATION	TYPE	NORTHING	EASTING
8110	20+00.00	PC	1839067.4580	991939.8648
8111	21+26.92	PRC	1839168.9534	992015.6375
8112	22+53.84	PT	1839270.4488	992091.4101
8113	23+13.84	PC	1839314.2660	992132.3986
8114	24+12.21	PRC	1839379.9998	992205.4247
8115	25+95.60	PT	1839511.8902	992331.7162
8116	26+31.07	PC	1839541.0947	992351.8543
8117	28+41.69	PRC	1839732.3325	992437.2296
8118	29+05.99	PT	1839793.8785	992455.7437
8119	30+16.94	PC	1839898.1677	992493.6140
8120	31+01.62	PRC	1839975.3343	992528.2795
8121	32+35.22	PT	1840099.1471	992577.6624

ALIGNMENT NAME: TEMP. 2 HWY. 67 WIDENING FOR BOX CULVERTS

POINT	STATION	TYPE	NORTHING	EASTING
8130	40+00.00	PC	1840210.8626	992607.7315
8131	40+97.35	PRC	1840306.5574	992624.9449
8132	41+94.70	PT	1840402.2522	992642.1584
8133	43+44.70	PC	1840547.0972	992681.1446
8134	44+18.52	PRC	1840618.9567	992704.8669
8135	44+92.35	PT	1840688.8162	992728.5893

ALIGNMENT NAME: TEMP. PROP. HWY. 67 TO EXISTING HWY. 67

POINT	STATION	TYPE	NORTHING	EASTING
8140	10+00.00	PC	1840400.7069	992667.1373
8141	10+95.00	PT	1840483.7688	992713.0183

ALIGNMENT NAME: TEMP. EXISTING HWY. 67 TO PROP. HWY. 67 CONNECTOR

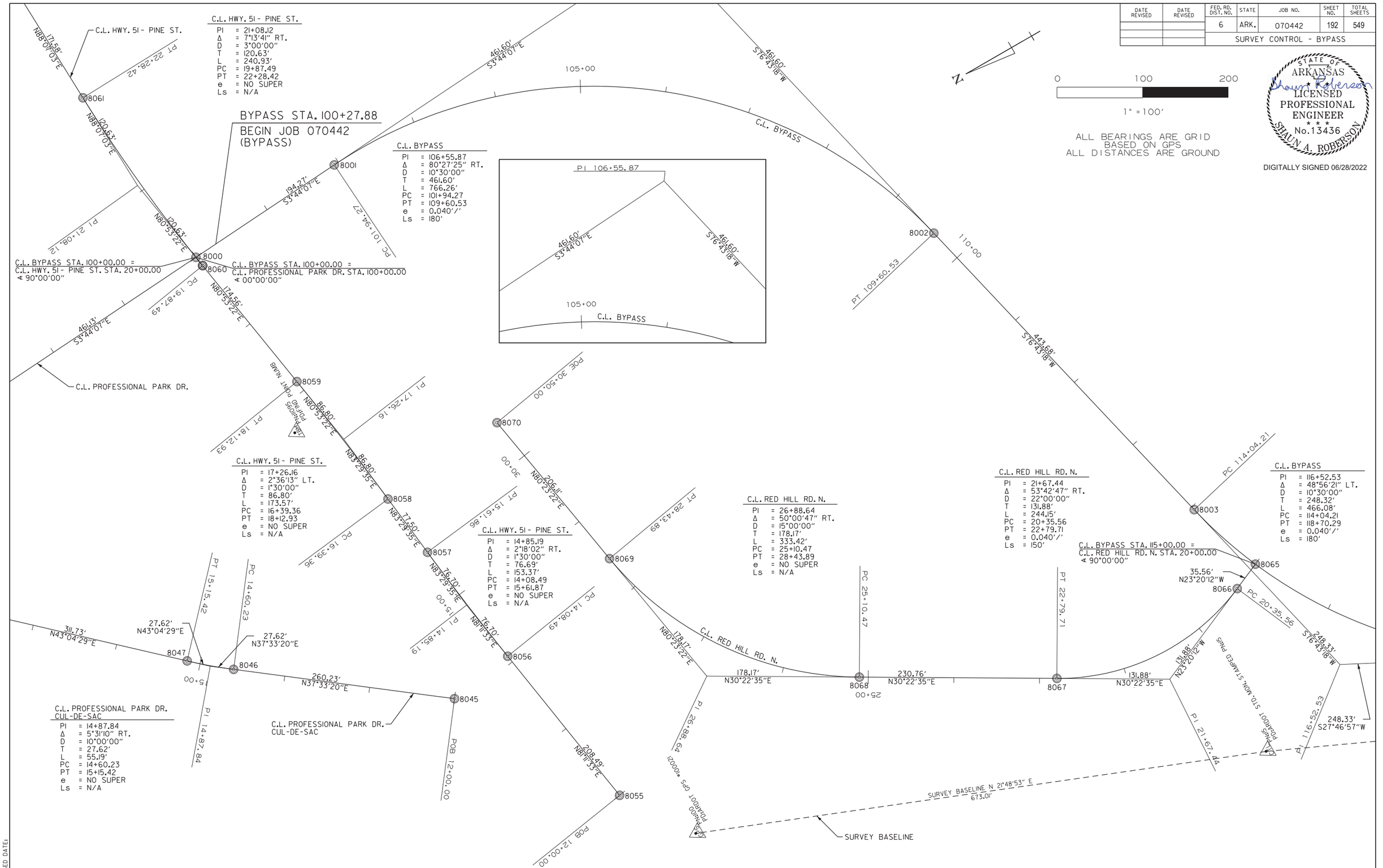
POINT	STATION	TYPE	NORTHING	EASTING
8145	30+00.00	PC	1840582.5547	992821.4171
8146	31+84.62	PT	1840647.1297	992992.9417

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

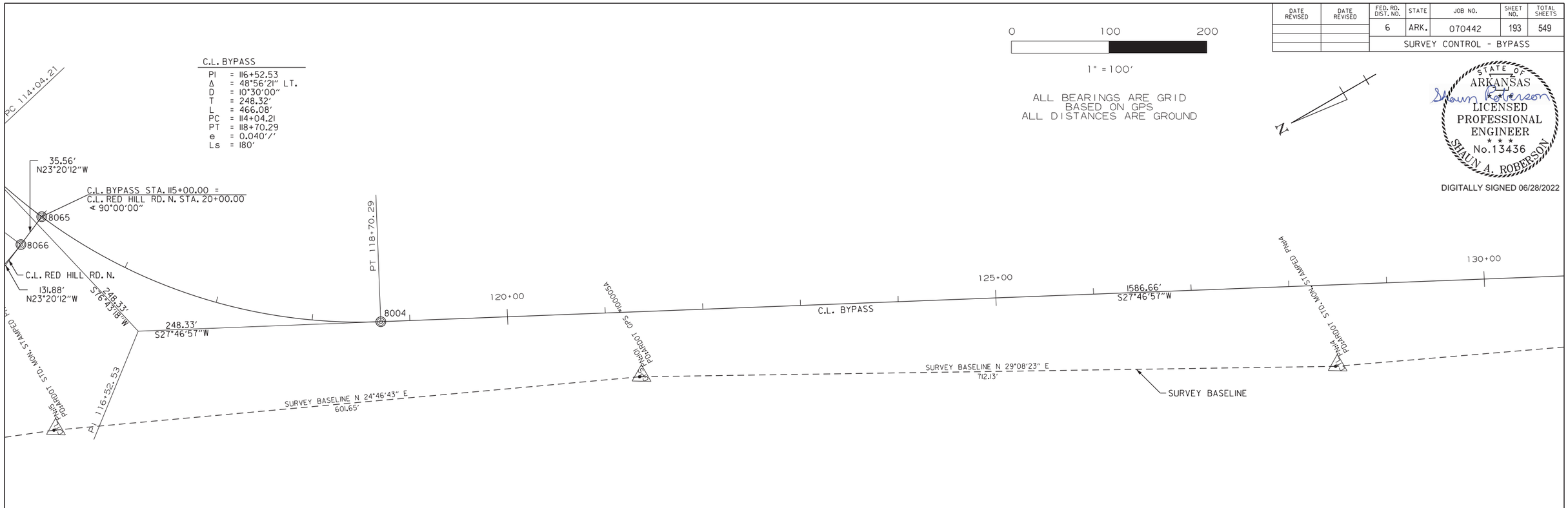
DIGITALLY SIGNED 06/28/2022

rnfortner 6/28/2022 10:34:59 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r-070442_SC_02.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	192	549
		SURVEY CONTROL - BYPASS				


C.L. HWY. 51 - PINE ST.
PI = 21+08.12
Δ = 7°13'41" RT.
D = 3°00'00"
T = 120.63'
L = 240.93'
PC = 19+87.49
PT = 22+28.42
e = NO SUPER
Ls = N/A
BYPASS STA. 100+27.88
BEGIN JOB 070442
(BYPASS)
C.L. BYPASS
PI = 106+55.87
Δ = 80°27'25" RT.
D = 10°30'00"
T = 461.60'
L = 766.26'
PC = 101+94.27
PT = 109+60.53
e = 0.040'/'
Ls = 180'
C.L. BYPASS STA. 100+00.00 = C.L. HWY. 51 - PINE ST. STA. 20+00.00 ∢ 90°00'00"
C.L. BYPASS STA. 100+00.00 = C.L. PROFESSIONAL PARK DR. STA. 100+00.00 ∢ 00°00'00"
C.L. PROFESSIONAL PARK DR.
C.L. HWY. 51 - PINE ST.
PI = 17+26.16
Δ = 2°36'13" LT.
D = 1°30'00"
T = 86.80'
L = 173.57'
PC = 16+39.36
PT = 18+12.93
e = NO SUPER
Ls = N/A
C.L. HWY. 51 - PINE ST.
PI = 14+85.19
Δ = 2°18'02" RT.
D = 1°30'00"
T = 76.69'
L = 153.37'
PC = 14+08.49
PT = 15+61.87
e = NO SUPER
Ls = N/A
C.L. PROFESSIONAL PARK DR. CUL-DE-SAC
PI = 14+87.84
Δ = 5°31'10" RT.
D = 10°00'00"
T = 27.62'
L = 55.19'
PC = 14+60.23
PT = 15+15.42
e = NO SUPER
Ls = N/A
C.L. RED HILL RD. N.
PI = 26+88.64
Δ = 50°00'47" RT.
D = 15°00'00"
T = 178.17'
L = 333.42'
PC = 25+10.47
PT = 28+43.89
e = NO SUPER
Ls = N/A
C.L. RED HILL RD. N.
PI = 21+67.44
Δ = 53°42'47" RT.
D = 22°00'00"
T = 131.88'
L = 244.15'
PC = 20+35.56
PT = 22+79.71
e = 0.040'/'
Ls = 150'
C.L. BYPASS STA. 115+00.00 = C.L. RED HILL RD. N. STA. 20+00.00 ∢ 90°00'00"
C.L. BYPASS
PI = 116+52.53
Δ = 48°56'21" LT.
D = 10°30'00"
T = 248.32'
L = 466.08'
PC = 114+04.21
PT = 118+70.29
e = 0.040'/'
Ls = 180'
PI 106+55.87
461.60' S3°44'07"E
461.60' S76°43'18"W
105+00
C.L. BYPASS
8000
8001
8002
8003
8056
8057
8058
8059
8060
8061
8065
8066
8067
8068
8069
8070
8045
8046
8047
8055
194.27' S3°44'07"E
120.63' N88°01'03"E
120.63' N80°53'22"E
461.13' S3°44'07"E
174.56' N80°53'22"E
86.80' N83°29'35"E
77.50' N83°29'35"E
76.70' N8°11'33"E
206.11' N80°23'22"E
178.17' N80°23'22"E
230.76' N30°22'35"E
178.17' N30°22'35"E
131.88' N30°22'35"E
131.88' N23°20'12"W
35.56' N23°20'12"W
443.68' S76°43'18"W
248.33' S76°43'18"W
248.33' S27°46'57"W
311.73' N43°04'29"E
27.62' N43°04'29"E
27.62' N37°33'20"E
260.23' N37°33'20"E
208.49' N8°11'33"E
POINT NUMBER 8059
POINT NUMBER 8070
POINT NUMBER 8047
POINT NUMBER 8066
POINT NUMBER 8067
POINT NUMBER 8068
POINT NUMBER 8069
POINT NUMBER 8003
POINT NUMBER 8065
POINT NUMBER 8046
POINT NUMBER 8045
POINT NUMBER 8055
POINT NUMBER 8056
POINT NUMBER 8057
POINT NUMBER 8058
POINT NUMBER 8060
POINT NUMBER 8061
POINT NUMBER 8001
POINT NUMBER 8000
POINT NUMBER 8002
POE 30+50.00
POB 12+00.00
POB 12+00.00
POB 12+00

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	193	549
		SURVEY CONTROL - BYPASS				



STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
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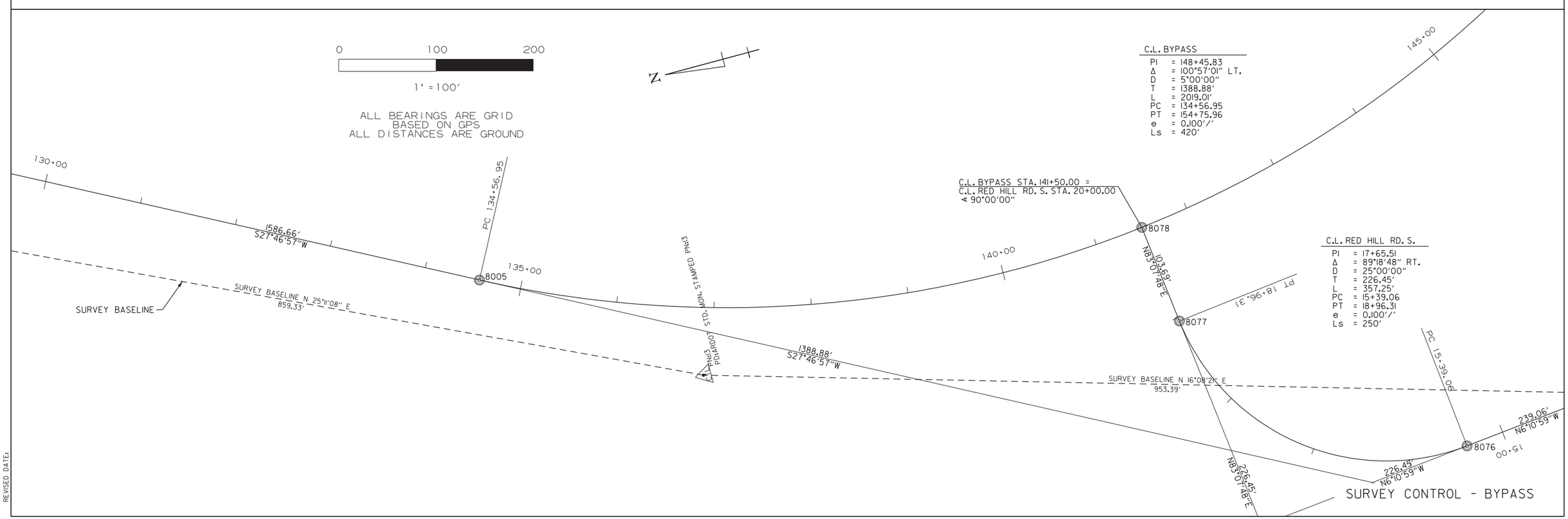


SURVEY CONTROL - BYPASS

rnfortner 6/28/2022 10:35:05 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_SC_04.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	194	549
		SURVEY CONTROL - BYPASS				

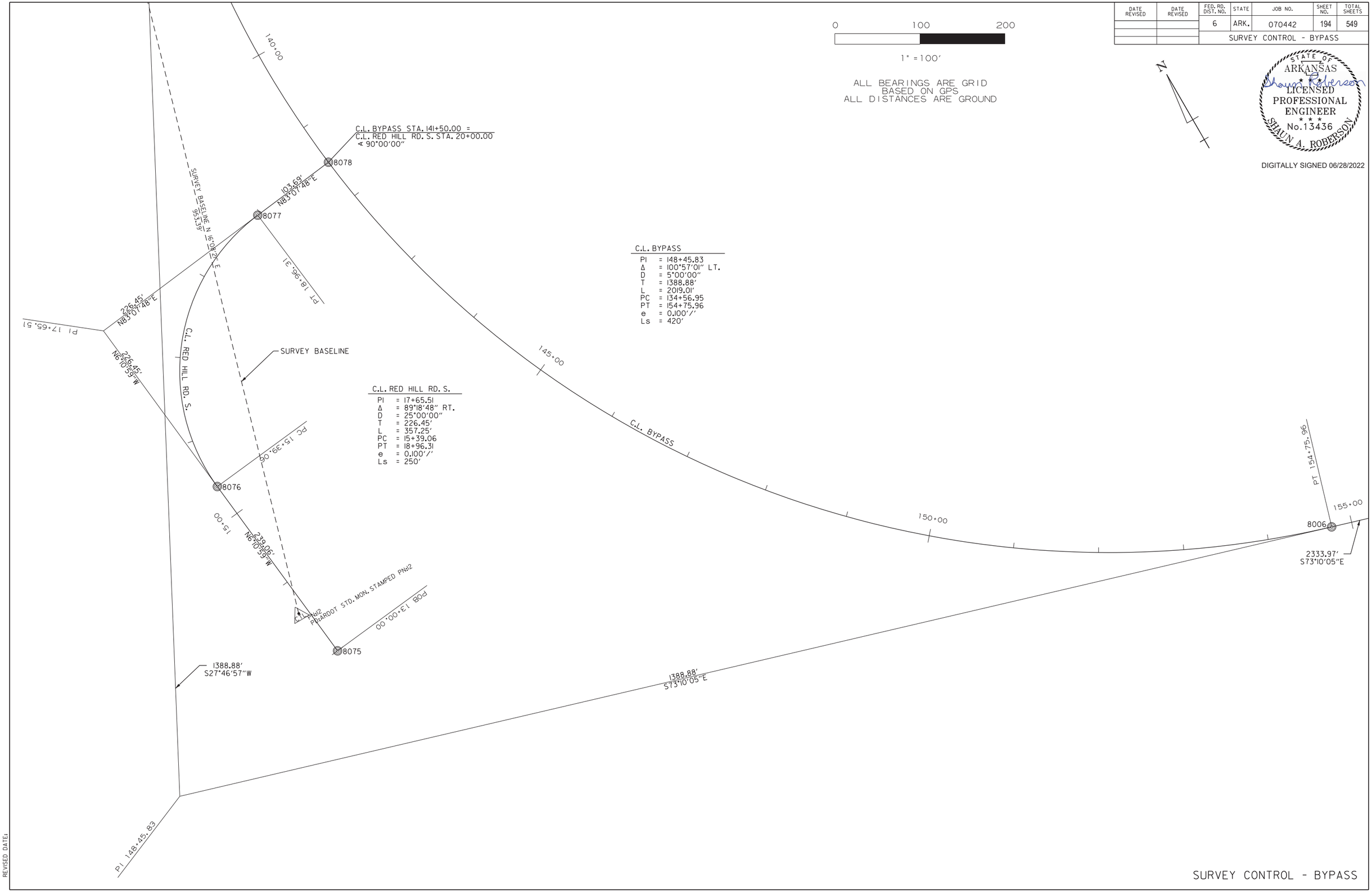
0 100 200

1" = 100'

ALL BEARINGS ARE GRID
BASED ON GPS
ALL DISTANCES ARE GROUND

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022



C.L. BYPASS

PI	= 148+45.83
Δ	= 100°57'01" LT.
D	= 5°00'00"
T	= 1388.88'
L	= 2019.01'
PC	= 134+56.95
PT	= 154+75.96
e	= 0.100'/'
Ls	= 420'

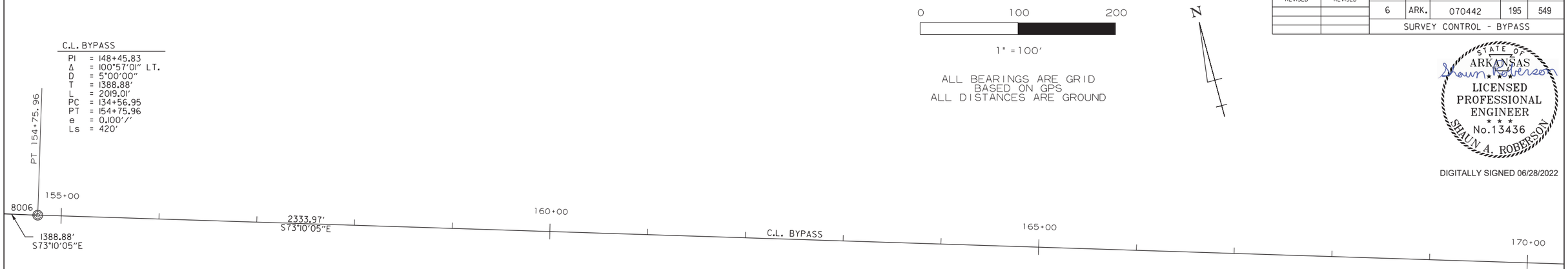
C.L. RED HILL RD. S.

PI	= 17+65.51
Δ	= 89°18'48" RT.
D	= 25°00'00"
T	= 226.45'
L	= 357.25'
PC	= 15+39.06
PT	= 18+96.31
e	= 0.100'/'
Ls	= 250'

SURVEY CONTROL - BYPASS

rnfortner 6/28/2022 10:35:05 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_SC_05.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	195	549
		SURVEY CONTROL - BYPASS				



STATE OF ARKANSAS
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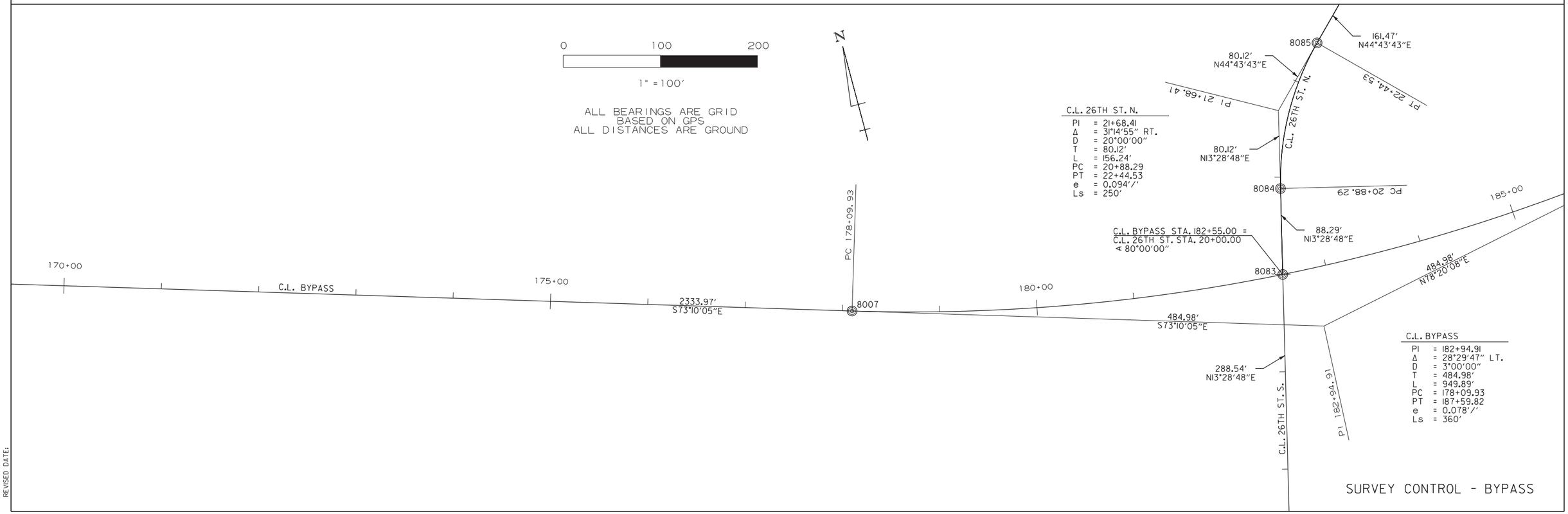

SURVEY CONTROL - BYPASS

rnfortner 6/28/2022 10:35:06 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	196	549
		SURVEY CONTROL - BYPASS				

PT 22+A

C.L. BYPASS
PI = 182+94.91
Δ = 28°29'47" LT.
D = 3°00'00"
T = 484.98'
L = 949.88'
PC = 178+09.93
PT = 187+59.82
e = 0.078'/'
Ls = 360'

PT 187+59.82

185+00

484.98'
S78°20'08"E

8008

190+00

C.L. BYPASS

195+00

5576.51'
S78°20'08"E

200+00

0 100 200
1" = 100'

ALL BEARINGS ARE GRID
BASED ON GPS
ALL DISTANCES ARE GROUND

N

STATE OF ARKANSAS
Shaun A. Roberson
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0 100 200
1" = 100'

ALL BEARINGS ARE GRID
BASED ON GPS
ALL DISTANCES ARE GROUND

N

200+00

5576.51'
S78°20'08"E

205+00

C.L. BYPASS

210+00

215+00

SURVEY CONTROL - BYPASS

rnfortner 6/28/2022 10:35:06 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	197	549
		SURVEY CONTROL - BYPASS				

0 100 200

1" = 100'

ALL BEARINGS ARE GRID
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N

STATE OF ARKANSAS
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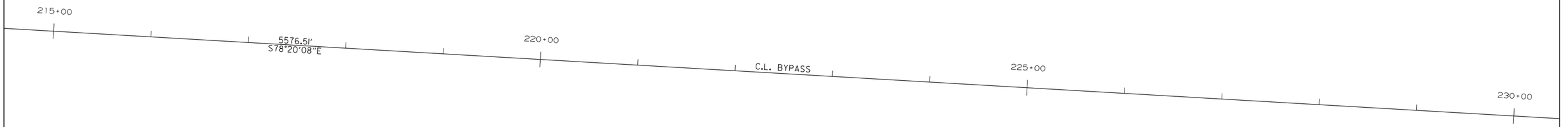


0 100 200

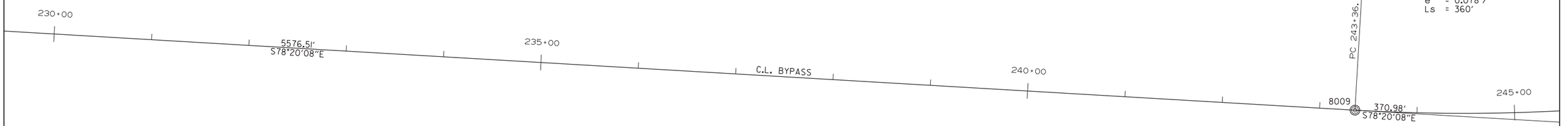
1" = 100'

ALL BEARINGS ARE GRID
BASED ON GPS
ALL DISTANCES ARE GROUND

N

C.L. BYPASS

PI	= 247+07.30
Δ	= 21°59'05" LT.
D	= 3°00'00"
T	= 370.98'
L	= 732.83'
PC	= 243+36.32
PT	= 250+69.15
e	= 0.078'/'
Ls	= 360'



SURVEY CONTROL - BYPASS

rnfortner 6/28/2022 10:35:07 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	198	549
		SURVEY CONTROL - BYPASS				

0 100 200

1" = 100'

ALL BEARINGS ARE GRID
BASED ON GPS
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N

STATE OF ARKANSAS
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No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

C.L. BYPASS
PI = 247+07.30
Δ = 21°59'05" LT.
D = 3°00'00"
T = 370.98'
L = 732.83'
PC = 243+36.32
PT = 250+69.15
e = 0.078'/'
Ls = 360'

C.L. BYPASS
PI = 262+51.61
Δ = 62°24'26" RT.
D = 5°00'00"
T = 694.09'
L = 1248.14'
PC = 255+57.52
PT = 268+05.66
e = 0.100'/'
Ls = 420'

245+00
370.98'
N78°20'08"E
C.L. BYPASS
370.98'
N56°21'03"E
PI 247+07.30
250+00
PT 250+69.15
8010
488.37'
N56°21'03"E
255+00
8011
694.09'
N56°21'03"E
PC 255+57.52
C.L. BYPASS STA. 259+00.00 =
C.L. FUTURE BYPASS TO HWY. 67 CONNECTOR STA. 20+00.00
∢ 90°00'00"
8093
260+00
144.16'
N16°31'30"W
8092
PT 18+55.84
C.L. FUTURE BYPASS
TO HWY. 67 CONNECTOR
155.59'
N16°31'30"W
C.L. FUTURE BYPASS
TO HWY 67. CONNECTOR
PI = 17+07.57
Δ = 30°23'07" RT.
D = 10°00'00"
T = 155.59'
L = 303.86'
PC = 15+51.98
PT = 18+55.84
e = NO SUPER
Ls = N/A
PI 17+07.57
155.59'
N46°54'37"W
PC 15+51.98
8091
319.52'
N46°54'37"W

SURVEY CONTROL - BYPASS

rnfortner 6/28/2022 10:35:07 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	199	549
		SURVEY CONTROL - BYPASS				

0 100 200

1" = 100'

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BASED ON GPS
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STATE OF ARKANSAS
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C.L. BYPASS
PI = 262+51.61
Δ = 62°24'26" RT.
D = 5°00'00"
T = 694.09'
L = 1248.14'
PC = 255+57.52
PT = 268+05.66
e = 0.100'/'
Ls = 420'

C.L. HWY. 67
PI = 107+66.16
Δ = 28°01'30" LT.
D = 4°00'00"
T = 357.47'
L = 700.63'
PC = 104+08.69
PT = 111+09.32
e = 0.030'/'
Ls = 150'

C.L. DITCH BETWEEN BYPASS AND BERM CULVERT
PI = 20+34.51
Δ = 74°08'49" RT.
D = 143°14'22"
T = 30.22'
L = 51.76'
PC = 20+04.29
PT = 20+56.05
e = NO SUPER
Ls = N/A

C.L. DITCH BETWEEN BYPASS AND BERM CULVERT
PI = 24+44.87
Δ = 63°11'02" LT.
D = 143°14'22"
T = 24.61'
L = 44.12'
PC = 24+20.26
PT = 24+64.38
e = NO SUPER
Ls = N/A

C.L. FUTURE BYPASS TO HWY. 67 CONNECTOR
PI = 17+07.57
Δ = 30°23'07" RT.
D = 10°00'00"
T = 155.59'
L = 303.86'
PC = 15+51.98
PT = 18+55.84
e = NO SUPER
Ls = N/A

C.L. BYPASS STA. 268+23.94 =
C.L. HWY. 67 STA. 105+87.24
∢ 82°48'37"

C.L. BYPASS STA. 259+00.00 =
C.L. FUTURE BYPASS TO HWY. 67 CONNECTOR STA. 20+00.00
∢ 90°00'00"

C.L. HWY. 67 STA. 99+00.00 =
C.L. FUTURE BYPASS TO HWY. 67 CONNECTOR STA. 12+32.47
∢ 90°00'00"

STA. 268+05.79
END BYPASS

STA. 102+35.00
BEGIN HWY. 67

C.L. R.C. BOX CULVERT -STA. 110+00

C.L BYPASS BERM

SURVEY BASELINE

C.L DITCH BETWEEN BYPASS AND BERM CULVERT

C.L. HWY. 67

C.L. BYPASS

C.L. FUTURE BYPASS TO HWY. 67 CONNECTOR

SURVEY BASELINE N 17°55'07" W 540.13'

SURVEY BASELINE S 3°44'23" E 607.04'

POB 10+00.00

POB 00+00.00

POE 24+65.77

PT 24+64.38

PC 24+20.26

POE 15+26.42

PI 12+68.42

PI 262+51.61

PI 20+34.51

PC 20+04.29

PT 20+56.05

POB 20+00.00

PC 104+08.69

PT 268+05.66

PC 255+57.52

PI 17+07.57

PC 15+51.98

PT 18+55.84

PI 107+66.16

8150 8151 8152 8153 8154 8155 8156 8157 8158 8159 8160 8161 8162 8163 8164 8165 8011 8012 8013 8016 8090 8091 8092 8093

PN:9 PD:ARDOT STD. MON. STAMPED PN:9

PN:10 PD:ARDOT STD. MON. STAMPED PN:10

PN:11 PD:ARDOT STD. MON. STAMPED PN:11

694.09' S61°14'31"E

694.09' N56°21'03"E

268.42' S82°16'36"E

258.00' S66°46'30"E

24.60' N34°26'17"E

144.25' N29°26'17"E

1.40' N34°26'17"E

24.60' S7°37'19"W

364.21' S7°37'19"W

30.22' S7°37'19"W

30.22' N23°28'30"E

4.29' N23°28'30"E

24+44.87

18.28' S61°14'31"E

357.47' N15°03'53"E

357.47' N43°05'23"E

144.16' N16°31'30"W

155.59' N16°31'30"W

155.59' N46°54'37"W

319.52' N46°54'37"W

488.37' N56°21'03"E

708.69' N43°05'23"E

265+00

260+00

105+00

100+00

15+00

rnfortner 6/28/2022 10:35:07 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_Sc_10.dgn
REVISED DATE:

SURVEY CONTROL - BYPASS

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	200	549
		SURVEY CONTROL - HWY. 67				

0 100 200

1" = 100'

ALL BEARINGS ARE GRID
BASED ON GPS
ALL DISTANCES ARE GROUND

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

C.L. FUTURE BYPASS TO HWY. 67 CONNECTOR
PI = 17+07.57
Δ = 30°23'07" RT.
D = 10°00'00"
T = 155.59'
L = 303.85'
PC = 15+51.98
PT = 18+55.84
e = NO SUPER
Ls = N/A

C.L. BYPASS
PI = 262+51.61
Δ = 62°24'26" RT.
D = 5°00'00"
T = 694.09'
L = 1248.14'
PC = 255+57.52
PT = 268+05.66
e = 0.100'/'
Ls = 420'

C.L. HWY. 67
PI = 107+66.16
Δ = 28°01'30" LT.
D = 4°00'00"
T = 357.47'
L = 700.63'
PC = 104+08.69
PT = 111+09.32
e = 0.030'/'
Ls = 150'

C.L. R.C. BOX CULVERT - STA. 110+00
PI = 1+78.36
Δ = 35°00'00" RT.
D = 52°58'12"
T = 34.11'
L = 66.08'
PC = 1+44.25
PT = 2+10.33

C.L. DITCH BETWEEN BYPASS AND BERM CULVERT
PI = 20+34.51
Δ = 74°08'49" RT.
D = 143°14'22"
T = 30.22'
L = 51.76'
PC = 20+04.29
PT = 20+56.05
e = NO SUPER
Ls = N/A

C.L. DITCH BETWEEN BYPASS AND BERM CULVERT
PI = 24+44.87
Δ = 63°11'02" LT.
D = 143°14'22"
T = 24.61'
L = 44.12'
PC = 24+20.26
PT = 24+64.38
e = NO SUPER
Ls = N/A

STA. 102+35.00
BEGIN HWY. 67

STA. 268+05.79
END BYPASS

C.L. HWY. 67 STA. 99+00.00 =
C.L. FUTURE BYPASS TO HWY. 67 CONNECTOR STA. 12+32.47
Δ 90°00'00"

C.L. HWY. 67 STA. 105+87.24 =
C.L. BYPASS STA. 268+23.94
Δ 82°48'37"

rnfortner 6/28/2022 10:35:08 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_Sc_ll.dgn
REVISED DATE:

SURVEY CONTROL - HWY. 67

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	201	549
		SURVEY CONTROL - HWY. 67				

0 100 200

1" = 100'

ALL BEARINGS ARE GRID
BASED ON GPS
ALL DISTANCES ARE GROUND

N

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
* * *
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

144.25'
N29°26'17"E

C.L. R.C. BOX CULVERT
-STA. 110+00

PI 1+78.36

C.L. HWY. 67
PI = 107+66.16
Δ = 28°01'30" LT.
D = 4°00'00"
T = 357.47'
L = 700.62'
PC = 104+08.69
PT = 111+09.32
e = 0.030'/'
Ls = 150'

PT 111+09.32

POB 7+00.00

8095

300.00'
S88°26'07"E

C.L. WALNUT ST.

C.L. HWY. 67
PI = 122+05.71
Δ = 43°15'29" LT.
D = 10°30'00"
T = 216.37'
L = 411.98'
PC = 119+89.34
PT = 124+01.32
e = 0.040'/'
Ls = 180'

PT 124+01.32

125+00

271.29'
N28°11'36"W

8019

8166

110+00

8167

8017

115+00

PC 1+44.25

PT 2+10.33

112.48'
N64°26'17"E

357.47'
N15°03'53"E

8168

POE 3+22.80

SURVEY BASELINE N 14°38'28" E
884.02'

C.L. HWY. 67 STA. 118+57.64 =
C.L. WALNUT ST. STA. 10+00.00
Δ 76°30'00"

PC 119+89.34

120+00

880.02'
N15°03'53"E

8100

8096

8018

C.L. HWY. 67

216.37'
N28°11'36"W

50.79'
S84°56'07"E

216.37'
N15°03'53"E

PI 122+05.71

C.L. HWY. 67 STA. 118+60.07 =
C.L. HWY. 67 CONNECTOR STA. 10+00.00
Δ 80°00'00"

PC 10+50.79

8101

C.L. HWY. 67 CONNECTOR

SURVEY BASELINE N 64°38'57" E
431.79'

192.75'
S84°56'07"E

C.L. HWY. 67 CONNECTOR
PI = 12+43.54
Δ = 5°46'40" LT.
D = 1°30'00"
T = 192.75'
L = 385.18'
PC = 10+50.79
PT = 14+35.97
e = NO SUPER
Ls = N/A

PI 12+43.54

192.75'
N89°17'13"E

SURVEY BASELINE

SURVEY BASELINE N 7°55'49" E
685.49'

PT 14+35.97

8102

POE 14+40.00

8103

4.03'
N89°17'13"E

C.L. R.C. BOX CULVERT
- STA. 110+00

PI = 1+78.36
Δ = 35°00'00" RT.
D = 52°58'12"
T = 34.11'
L = 66.08'
PC = 1+44.25
PT = 2+10.33

SURVEY CONTROL - HWY. 67

rnfortner 6/28/2022 10:35:12 AM
WORKSPACE: AHTD
L:\20\T\1701751S - AHTD Arkadelphia Bypass\Drawings\r-070442_SC_12.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	202	549
		SURVEY CONTROL - HWY. 67				

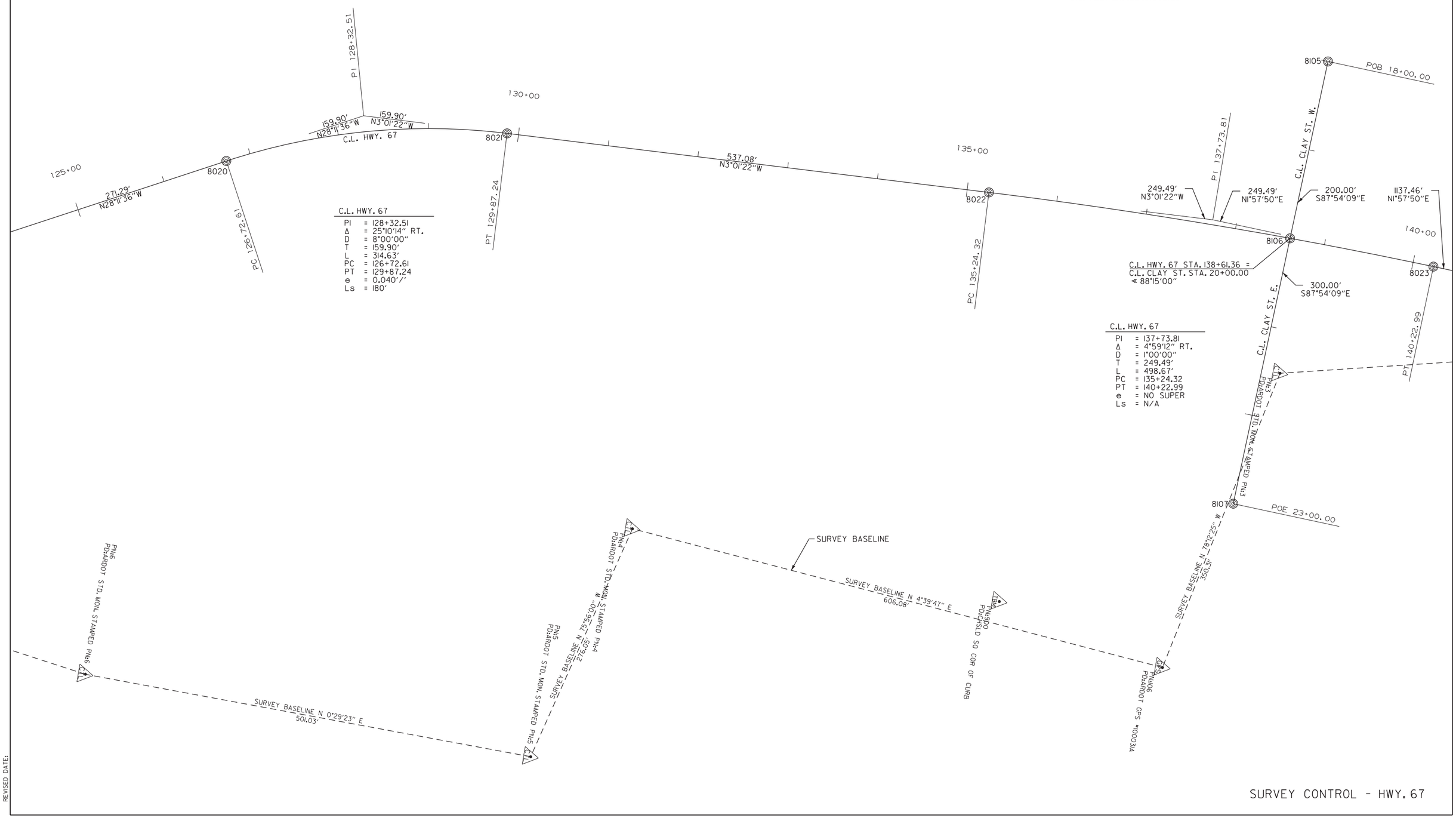
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

0 100 200

1" = 100'

ALL BEARINGS ARE GRID
BASED ON GPS
ALL DISTANCES ARE GROUND



C.L. HWY. 67

PI	= 128+32.51
Δ	= 25°10'14" RT.
D	= 8°00'00"
T	= 159.90'
L	= 314.63'
PC	= 126+72.61
PT	= 129+87.24
e	= 0.040'/'
Ls	= 180'

C.L. HWY. 67

PI	= 137+73.81
Δ	= 4°59'12" RT.
D	= 1°00'00"
T	= 249.49'
L	= 498.67'
PC	= 135+24.32
PT	= 140+22.99
e	= NO SUPER
Ls	= N/A

SURVEY CONTROL - HWY. 67

rnfortner 6/28/2022 10:35:12 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_SC_13.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	203	549
		SURVEY CONTROL - HWY. 67				

0 100 200

1" = 100'

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N

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POB 45+00.00 8120

C.L. CADDO ST. W.

260.00' S88°07'10"E

8121 PI 47+60.00

60.00' S84°17'49"E

POB 38+00.00 8115

200.00' S87°47'10"E

PI 48+20.00 8122

180.00' S88°07'10"E

POB 27+00.00 8110

300.00' S88°22'10"E

C.L. MAIN ST. W.

C.L. HWY. 67
PI = 137+73.81
Δ = 4°59'12" RT.
D = 1°00'00"
T = 249.49'
L = 498.67'
PC = 135+24.32
PT = 140+22.99
e = NO SUPER
Ls = N/A

C.L. CLINTON ST. W.

C.L. HWY. 67 STA. 141+24.37 = C.L. MAIN ST. STA. 30+00.00 Δ 89°40'00"

C.L. HWY. 67 STA. 143+92.66 = C.L. CLINTON ST. STA. 40+00.00 Δ 89°45'00"

C.L. HWY. 67 STA. 146+32.21 = C.L. CADDO ST. STA. 50+00.00 Δ 90°00'00"

SURVEY BASELINE

140+00 145+00 150+00 155+00

249.49' N1°57'50"E 8023

8111 8116 8123

SURVEY BASELINE N 0°37'52" W 740.68'

C.L. HWY. 67 1094.01' N1°57'50"E

PI 140+22.99

SURVEY BASELINE N 13°44'28" W 515.80'

C.L. MAIN ST. E.

C.L. CLINTON ST. E.

C.L. HWY. 67 PK NAIL POINT ON PAVEMENT

PK NAIL POINT ON PAVEMENT STAMPED PN2

PK NAIL POINT ON PAVEMENT STAMPED PN1

PK NAIL POINT ON PAVEMENT STAMPED PN3

ARDOT STD. MON. STAMPED PN2

8024 153.00' N3°7'55"E 8025 980.00' N1°33'5"E 8180

PI 152+70.00 Δ 1°34'50" LT.

PI 151+17.00 Δ 1°10'05" RT.

C.L. HWY. 67 STA. 154+08.00= C.L. HICKORY 60+00.00 Δ 90°00'00"

115.00' S88°26'55"E

8181 PI 61+15.00 Δ 1°00'00" RT.

85.00' S88°26'55"E

8182 POE 62+00.00

182.00' S88°07'10"E

POE 42+00.00 8117

200.00' S87°47'10"E

PI 51+82.00 8124

60.00' S88°03'29"E

8125 PI 52+42.00

258.00' S88°07'10"E

C.L. CADDO ST. E.

POE 55+00.00 8126

300.00' S88°22'10"E

8112 POE 33+00.00

SURVEY CONTROL - HWY. 67

rnfortner 6/28/2022 10:35:13 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	204	549
		SURVEY CONTROL - HWY. 67				

0 100 200

1" = 100'

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BASED ON GPS
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N

STATE OF ARKANSAS
Shaun Roberson
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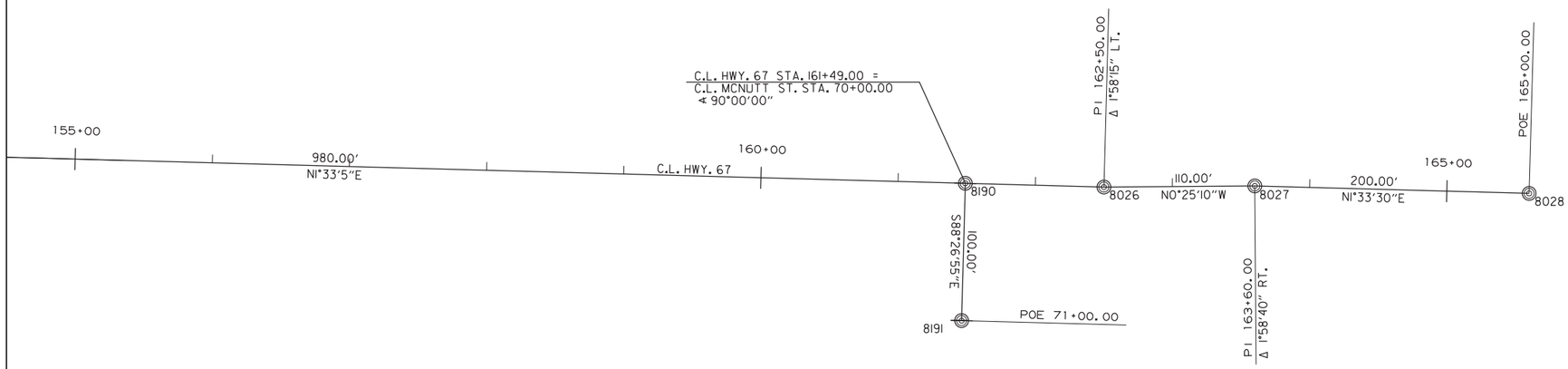

rnfortner 6/28/2022 10:35:13 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_SC.14.02.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	205	549

SURVEY CONTROL - OFFICE PARK

STATE OF ARKANSAS
Shaun A. Roberson
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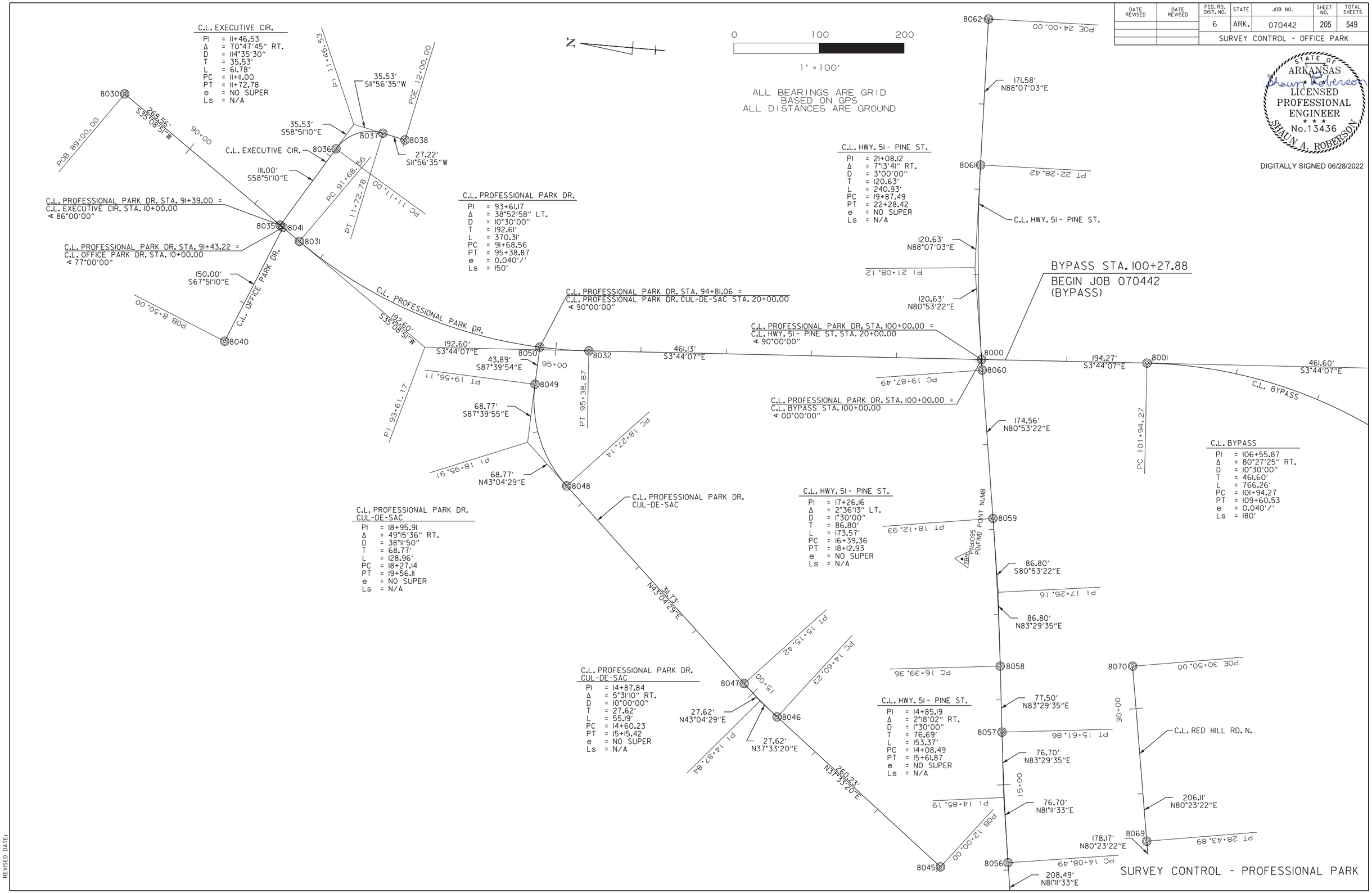

rnfortner 6/28/2022 10:35:13 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	206	549
		SURVEY CONTROL - 26TH STREET				

0 100 200

1" = 100'

N

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STATE OF ARKANSAS
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No.13436
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8080 POB 11+50.00

353.53' N03°05'00"E

8081 15+00

104.25' N03°05'00"E

PI 16+07.78

104.25' NI3°28'48"E

C.L. 26TH ST. S.

8082

288.54' NI3°28'48"E

PC 15+03.53

PT 17+11.46

C.L. 26TH ST. S.

PI	= 16+07.78
Δ	= 10°23'48" RT.
D	= 5°00'00"
T	= 104.25'
L	= 207.93'
PC	= 15+03.53
PT	= 17+11.46
e	= 0.040'/'
Ls	= 200'

8007

2333.97' S73°10'05"E

PC 178+09.93

180+00

484.98' S73°10'05"E

C.L. BYPASS

PI	= 182+94.91
Δ	= 28°29'47" LT.
D	= 3°00'00"
T	= 484.98'
L	= 949.89'
PC	= 178+09.93
PT	= 187+59.82
e	= 0.078'/'
Ls	= 360'

C.L. 26TH ST. STA. 20+00.00 = C.L. BYPASS STA. 182+55.00 ∢ 80°00'00"

8083

88.29' NI3°28'48"E

PI 182+94.91

8084

80.12' NI3°28'48"E

PI 21+68.41

80.12' N44°43'43"E

C.L. 26TH ST. N.

PI	= 21+68.41
Δ	= 31°14'55" RT.
D	= 20°00'00"
T	= 80.12'
L	= 156.24'
PC	= 20+88.29
PT	= 22+44.53
e	= 0.094'/'
Ls	= 250'

C.L. BYPASS

PC 20+88.29

PT 22+44.53

8085

161.47' N44°43'43"E

PC 24+06.00

8086

74.28' N44°43'43"E

PI 24+80.28

25+00

PT 25+54.03

74.28' N32°53'10"E

8087

215.97' N32°53'10"E

POE 27+70.00

8088

C.L. 26TH ST. N.

PI	= 24+80.28
Δ	= 11°50'33" LT.
D	= 8°00'00"
T	= 74.28'
L	= 148.03'
PC	= 24+06.00
PT	= 25+54.03
e	= 0.058'/'
Ls	= 200'

484.98' N78°20'08"E

185+00

PT 187+59.82

8008

5576.51' N78°20'08"E

SURVEY CONTROL - 26TH STREET

rnfortner 6/28/2022 10:35:14 AM
WORKSPACE: AHTD
L:\201\1701715 - AHTD Arkadelphia Bypass\Drawings\r070442_SC_16.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	207	549
		TEMPORARY SURVEY CONTROL DETAILS				

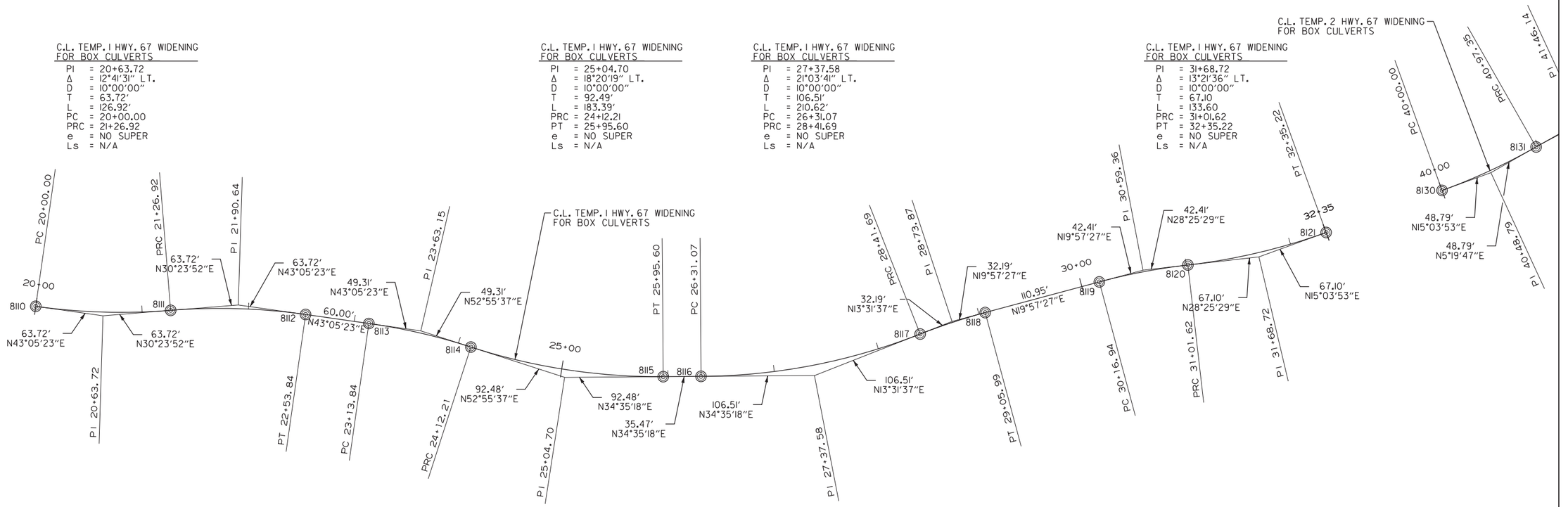
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

0 100 200

1" = 100'

ALL BEARINGS ARE GRID
BASED ON GPS
ALL DISTANCES ARE GROUND



C.L. TEMP. 1 HWY. 67 WIDENING FOR BOX CULVERTS
PI = 21+90.64
Δ = 12°41'31" RT.
D = 10°00'00"
T = 63.72'
L = 126.92'
PRC = 21+26.92
PT = 22.53.84
e = NO SUPER
Ls = N/A

C.L. TEMP. 1 HWY. 67 WIDENING FOR BOX CULVERTS
PI = 23+63.15
Δ = 9°50'15" RT.
D = 10°00'00"
T = 49.31'
L = 98.37'
PC = 23+13.84
PRC = 24+12.21
e = NO SUPER
Ls = N/A

C.L. TEMP. 1 HWY. 67 WIDENING FOR BOX CULVERTS
PI = 28+73.87
Δ = 6°25'49" RT.
D = 10°00'00"
T = 32.18'
L = 64.30'
PRC = 28+41.69
PT = 29+05.99
e = NO SUPER
Ls = N/A

C.L. TEMP. 1 HWY. 67 WIDENING FOR BOX CULVERTS
PI = 30+59.36
Δ = 8°28'02" RT.
D = 10°00'00"
T = 42.42'
L = 84.68'
PC = 30+16.94
PRC = 31+01.62
e = NO SUPER
Ls = N/A

TEMPORARY SURVEY CONTROL DETAILS - HWY. 67

rnfortner 6/28/2022 10:35:14 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_SC_MOT_01.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	208	549
		TEMPORARY SURVEY CONTROL DETAILS				

0 100 200

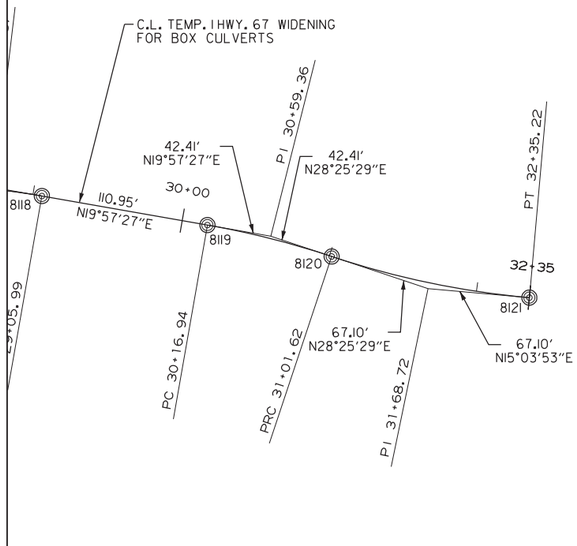
1" = 100'

ALL BEARINGS ARE GRID
BASED ON GPS
ALL DISTANCES ARE GROUND

N

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022



C.L. TEMP. 2 HWY. 67 WIDENING FOR BOX CULVERTS

PI = 40+48.79
Δ = 9°44'05" LT.
D = 10°00'00"
T = 48.79'
L = 97.35'
PC = 40+00.00
PRC = 40+97.35
e = NO SUPER
Ls = N/A

C.L. TEMP. 2 HWY. 67 WIDENING FOR BOX CULVERTS

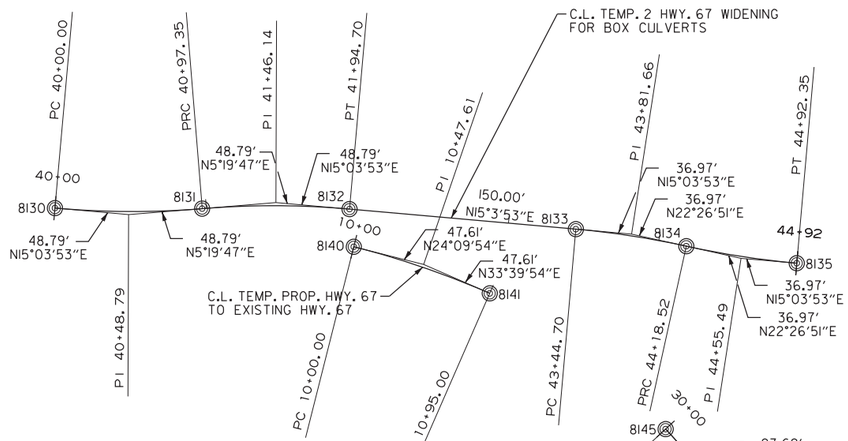
PI = 41+46.14
Δ = 9°44'05" RT.
D = 10°00'00"
T = 48.79'
L = 97.35'
PRC = 40+97.35
PT = 41+94.70
e = NO SUPER
Ls = N/A

C.L. TEMP. 2 HWY. 67 WIDENING FOR BOX CULVERTS

PI = 43.81.66
Δ = 7°22'58" RT.
D = 10°00'00"
T = 36.96'
L = 73.82'
PC = 43+44.70
PRC = 44+18.52
e = NO SUPER
Ls = N/A

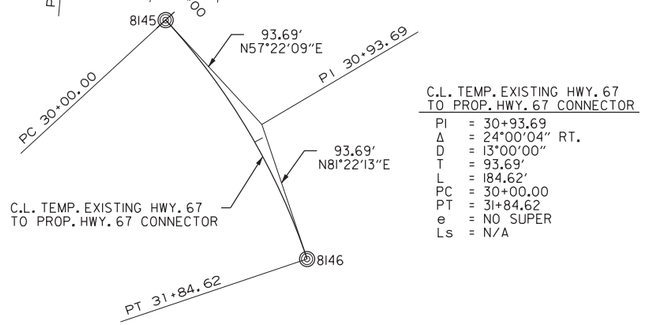
C.L. TEMP. 2 HWY. 67 WIDENING FOR BOX CULVERTS

PI = 44+55.49
Δ = 7°22'58" LT.
D = 10°00'00"
T = 36.97'
L = 73.83'
PRC = 44+18.52
PT = 44+92.35
e = NO SUPER
Ls = N/A



C.L. TEMP. PROP. HWY. 67 TO EXISTING HWY. 67

PI = 10+47.61
Δ = 9°30'00" RT.
D = 10°00'00"
T = 47.61'
L = 95.00'
PC = 10+00.00
PT = 10+95.00
e = NO SUPER
Ls = N/A



C.L. TEMP. EXISTING HWY. 67 TO PROP. HWY. 67 CONNECTOR

PI = 30+93.69
Δ = 24°00'04" RT.
D = 13°00'00"
T = 93.69'
L = 184.62'
PC = 30+00.00
PT = 31+84.62
e = NO SUPER
Ls = N/A

TEMPORARY SURVEY CONTROL DETAILS - HWY. 67

rnfortner 6/28/2022 10:35:15 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_SC_MOT_02.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	209	549
		PLAN SHEET - BYPASS				

REMOVAL AND DISPOSAL OF FENCE
(STATIONING ALONG C.L. BYPASS)

STA.	STA.	SIDE	UNIT
100+60	101+63	LT.	104 LIN. FT.

CONCRETE DITCH PAVING (TYPE B)

STA.	STA.	SIDE	"W"	SQ. YDS.
103+20	104+72	LT. = 172 LIN. FT.	6'-0"	115
105+70	106+50	LT. = 115 LIN. FT.	6'-0"	77
110+00	110+75	RT. = 101 LIN. FT.	6'-0"	68
115+00	116+00	LT. = 106 LIN. FT.	6'-0"	71
115+55	116+00	RT. = 56 LIN. FT.	6'-0"	38

HWY. 5I STA. 21+50 CONSTRUCT
DROP INLET ON RT. H=4'-6"
WITH 18"x7' PIPE INLET FROM FES RT.
AND 18"x95' PIPE OUTLET
TO EXIST DROP INLET RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 102 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 95 LIN. FT.
18" FES = 1 EACH

C.L. BYPASS
PI = 106+55.87
Δ = 80°27'25" RT.
D = 10°30'00"
T = 461.60'
L = 766.26'
PC = 101+94.27
PT = 109+60.53
e = 0.040'/'
Ls = 180'

STA. 106+07 CONSTRUCT
30" X 280' R.C. PIPE CULVERT
20° LT. FWD. SKEW
CLASS V (TYPE 2 BEDDING) W/
F.E.S. LT. & RT.
050 = 23 CFS DA = 4 ACRES
30" R.C. PIPE = 280 LIN. FT.
30" F.E.S. = 2 EA.

STA. 105+00 INSTALL
18" X 124' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 537 CU. YDS.

STA. 107+42 CONSTRUCT
APPROACH ON RT. = 18 CU. YDS.

STA. 110+95 CONSTRUCT
TYPE SPECIAL INLET ON LT. W/ DBL. 4' EXT.

STA. 111+50 CONSTRUCT
TYPE SPECIAL INLET ON LT. W/ 4' EXT.

STA. 114+00 CONSTRUCT
TYPE SPECIAL INLET ON LT. W/ 4' EXT.

STA. 116+00 CONSTRUCT
TYPE SPECIAL INLET ON LT. W/ 4' EXT.

STA. 108+50 INSTALL
18" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 13 CU. YDS.

STA. 110+05 CONSTRUCT
36" X 186' R.C. PIPE CULVERT
2° LT. FWD. SKEW
CLASS IV (TYPE 2 BEDDING) W/
F.E.S. LT. & RT.
050 = 44 CFS DA = 7 ACRES
36" R.C. PIPE = 186 LIN. FT.
36" F.E.S. = 2 EA.

OBLITERATE EXISTING ROADWAY

STATE OF ARKANSAS
Shaun A. Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

BYPASS STA. 100+27.88
BEGIN JOB 070442
(BYPASS)

STA. 100+70 CONSTRUCT
DROP INLET 28' RT. H=3'-9"
WITH 18"x32' PIPE OUTLET
TO DROP INLET AT STA. 101+00 RT.
TYPE ST DROP INLET = 3'x3'
18" R.C. PIPE (CLASS IV)
(TYPE 3 BEDDING) = 32 LIN. FT.

STA. 101+00 CONSTRUCT
DROP INLET ON RT. H=4'-6"
WITH 18"x144' PIPE OUTLET
TO DROP INLET AT STA. 102+50 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 144 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 144 LIN. FT.

STA. 102+50 CONSTRUCT
DROP INLET ON RT. H=4'-9"
WITH 18"x13' PIPE OUTLET
TO FES RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 13 LIN. FT.
18" FES = 1 EACH

STA. 104+25 CONSTRUCT
TYPE SPECIAL INLET ON RT. W/ 4' EXT.

STA. 108+00 CONSTRUCT
TYPE SPECIAL INLET ON RT. W/ 4' EXT.

STA. 110+00 CONSTRUCT
TYPE SPECIAL INLET ON RT. W/ 4' EXT.

STA. 110+75 CONSTRUCT
TYPE SPECIAL INLET ON RT. W/ DBL. 4' EXT.

STA. 111+50 CONSTRUCT
TYPE SPECIAL INLET ON RT. W/ 4' EXT.

STA. 113+97 CONSTRUCT
24" X 194' R.C. PIPE CULVERT
3° RT. FWD. SKEW
CLASS IV (TYPE 2 BEDDING) W/
F.E.S. LT. & RT.
050 = 5 CFS DA = 1 ACRE
24" R.C. PIPE = 194 LIN. FT.
24" F.E.S. = 2 EA.

STA. 112+83 INSTALL
18" X 42' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPROACH = 33 CU. YDS.

STA. 100+62 CONSTRUCT
TYPE 4 WHEELCHAIR RAMP ON LT.
= 7.2 SQ. YD.

STA. 100+75 CONSTRUCT
TYPE 4 WHEELCHAIR RAMP ON RT.
= 7.4 SQ. YD.

STA. 100+38 IN PLACE
18"x61' R.C. PIPE AND DROP INLET ON RT.
RETAIN AND MODIFY DROP INLET
TO GRADE

HWY. 5I STA. 18+75 CONSTRUCT
DROP INLET ON RT. H=3'-0"
WITH 18"x4' PIPE INLET FROM FES RT.
AND 22"x14"x28' PIPE OUTLET
TO EXIST. DROP INLET
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 4 LIN. FT.
22"x14" R.C. ARCH PIPE (CLASS IV)
(TYPE 3 BEDDING) = 28 LIN. FT.
18" FES = 1 EACH

FENCING

STA.	STA.	SIDE	WIRE FENCE (TYPE A)
100+36	104+75	LT.	535 LIN. FT.
105+25	108+25	LT.	495 LIN. FT.
108+75	115+00	LT.	671 LIN. FT.
100+66	107+17	RT.	653 LIN. FT.
107+67	112+53	RT.	505 LIN. FT.
113+13	113+93	RT.	104 LIN. FT.

C.L. BYPASS STA. 115+00.00 =
C.L. RED HILL RD. NORTH STA. 20+00.00
@ 90°00'00"

C.L. BYPASS
PI = 116+52.53
Δ = 48°56'21" LT.
D = 10°30'00"
T = 248.32'
L = 466.08'
PC = 114+04.21
PT = 118+70.29
e = 0.040'/'
Ls = 180'

C.L. PROFESSIONAL PARK DR.
CUL-DE-SAC

BYPASS

rnfortner 6/28/2022 10:35:18 AM
WORKSPACE: AHTD
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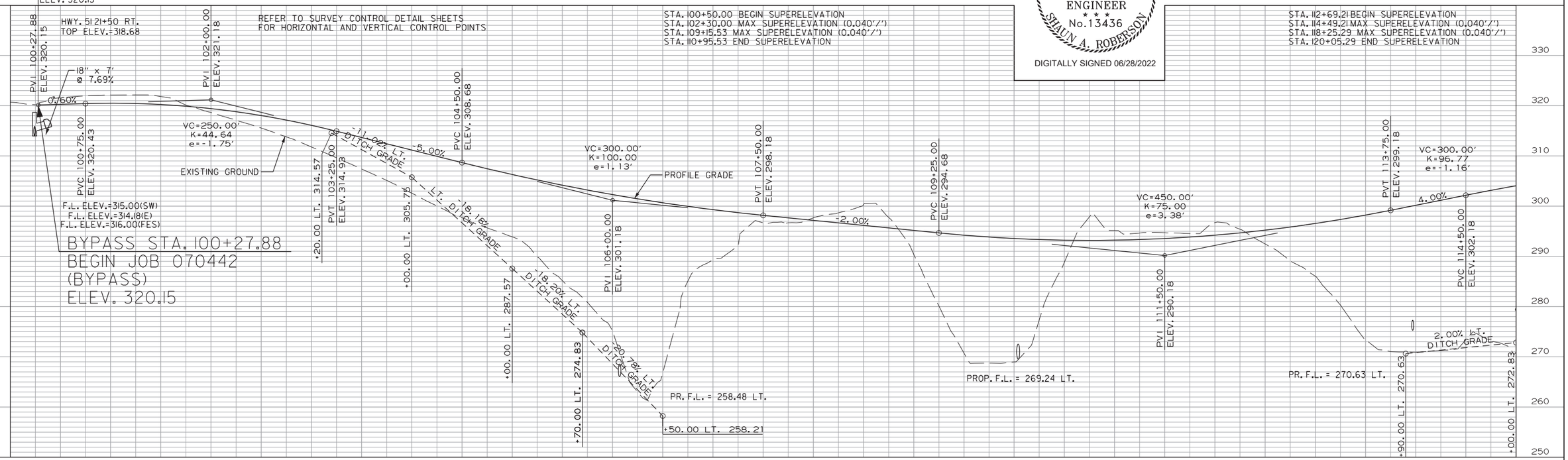
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	070442	210	549
				PROFILE SHEET - BYPASS				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

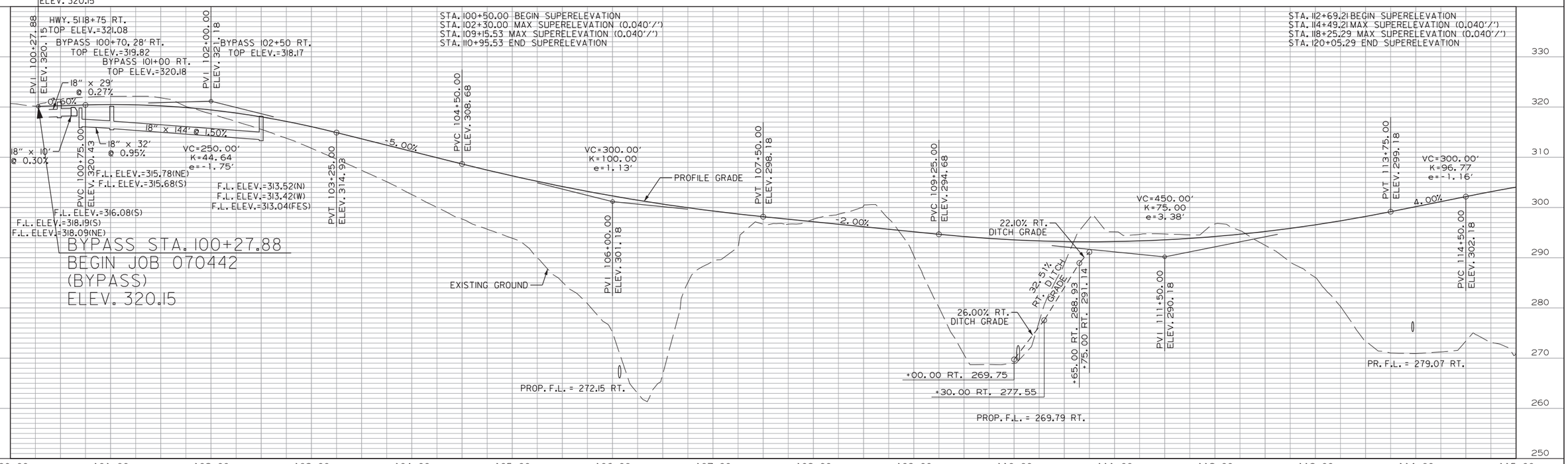
BYPASS LT. SIDE PROFILE

C.L. HWY. 51 STA. 19+97.53, 27.77' RT. =
C.L. BYPASS STA. 100+27.88
ELEV. 320.15



BYPASS RT. SIDE PROFILE

C.L. HWY. 51 STA. 19+97.53, 27.77' RT. =
C.L. BYPASS STA. 100+27.88
ELEV. 320.15



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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	211	549
		PLAN SHEET - BYPASS				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

C.L. BYPASS

PI	= 116+52.53
Δ	= 48°56'21" LT.
D	= 10°30'00"
T	= 248.32'
L	= 466.08'
PC	= 114+04.21
PT	= 118+70.29
e	= 0.040'/'
Ls	= 180'

OBLITERATE EXISTING ROADWAY

CONCRETE DITCH PAVING (TYPE B)

STA.	STA.	SIDE	"W"	SQ. YDS.
116+00	116+50	LT. = 48 LIN. FT.	6'-0"	32
116+00	117+40	RT. = 149 LIN. FT.	6'-0"	100
120+50	121+00	RT. = 53 LIN. FT.	6'-0"	36
128+59	129+22	LT. = 106 LIN. FT.	6'-0"	71

STA. 118+50 CONSTRUCT
TYPE SPECIAL INLET ON LT.

FENCING

STA.	STA.	SIDE	WIRE FENCE (TYPE A)
115+00	119+50	LT.	419 LIN. FT.
120+10	123+75	LT.	387 LIN. FT.
124+25	130+00	LT.	745 LIN. FT.

STA. 115+54 CONSTRUCT
30" X 120' R.C. PIPE CULVERT
4° LT. FWD. SKEW
CLASS III (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 23 CFS DA = 6 ACRE
30" R.C. PIPE = 120 LIN. FT.
30" F.E.S. = 2 EA.

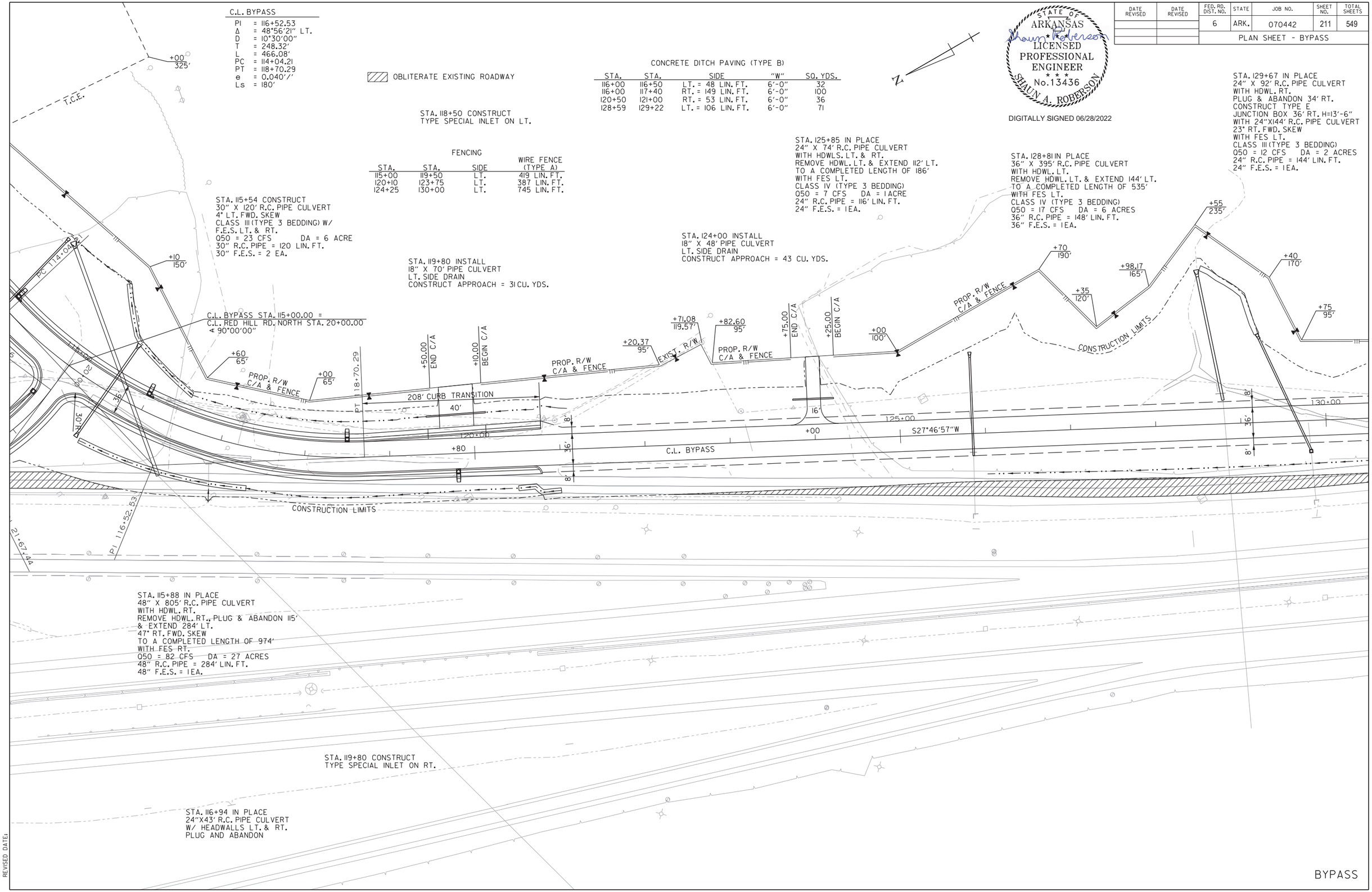
STA. 119+80 INSTALL
18" X 70' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 31 CU. YDS.

STA. 124+00 INSTALL
18" X 48' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 43 CU. YDS.

STA. 125+85 IN PLACE
24" X 74' R.C. PIPE CULVERT
WITH HDWLS. LT. & RT.
REMOVE HDWL. LT. & EXTEND 112' LT.
TO A COMPLETED LENGTH OF 186'
WITH FES LT.
CLASS IV (TYPE 3 BEDDING)
Q50 = 7 CFS DA = 1 ACRE
24" R.C. PIPE = 116' LIN. FT.
24" F.E.S. = 1 EA.

STA. 128+81 IN PLACE
36" X 395' R.C. PIPE CULVERT
WITH HDWL. LT.
REMOVE HDWL. LT. & EXTEND 144' LT.
TO A COMPLETED LENGTH OF 535'
WITH FES LT.
CLASS IV (TYPE 3 BEDDING)
Q50 = 17 CFS DA = 6 ACRES
36" R.C. PIPE = 148' LIN. FT.
36" F.E.S. = 1 EA.

STA. 129+67 IN PLACE
24" X 92' R.C. PIPE CULVERT
WITH HDWL. RT.
PLUG & ABANDON 34' RT.
CONSTRUCT TYPE E
JUNCTION BOX 36' RT. H=13'-6"
WITH 24"X144' R.C. PIPE CULVERT
23° RT. FWD. SKEW
WITH FES LT.
CLASS III (TYPE 3 BEDDING)
Q50 = 12 CFS DA = 2 ACRES
24" R.C. PIPE = 144' LIN. FT.
24" F.E.S. = 1 EA.



STA. 115+88 IN PLACE
48" X 805' R.C. PIPE CULVERT
WITH HDWL. RT.
REMOVE HDWL. RT., PLUG & ABANDON 115'
& EXTEND 284' LT.
47° RT. FWD. SKEW
TO A COMPLETED LENGTH OF 974'
WITH FES RT.
Q50 = 82 CFS DA = 27 ACRES
48" R.C. PIPE = 284' LIN. FT.
48" F.E.S. = 1 EA.

STA. 119+80 CONSTRUCT
TYPE SPECIAL INLET ON RT.

STA. 116+94 IN PLACE
24"X43' R.C. PIPE CULVERT
W/ HEADWALLS LT. & RT.
PLUG AND ABANDON

BYPASS

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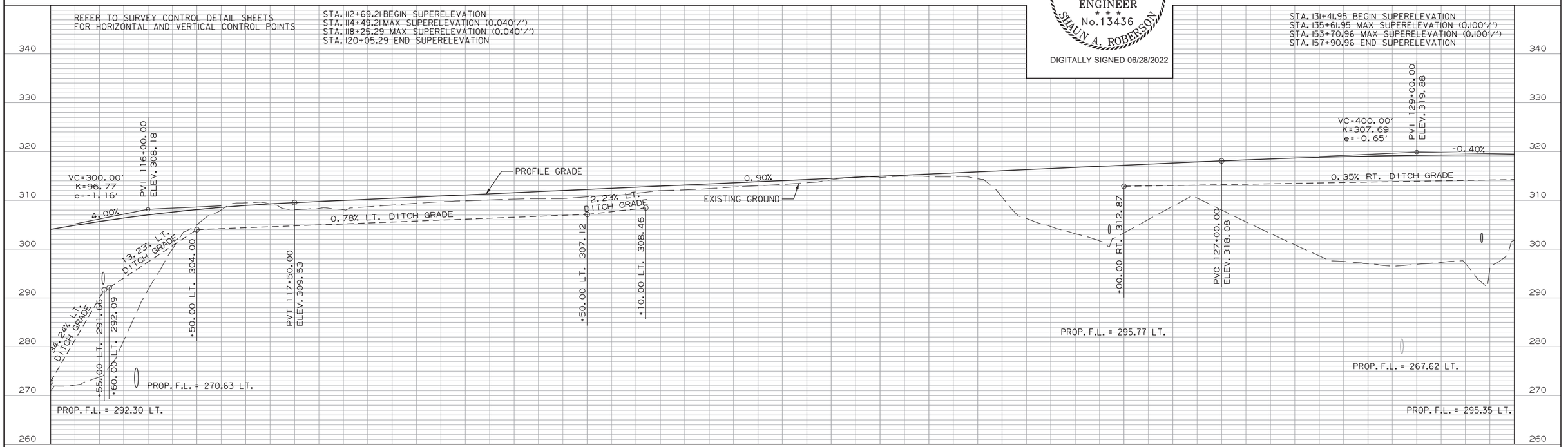
REVISED DATE:

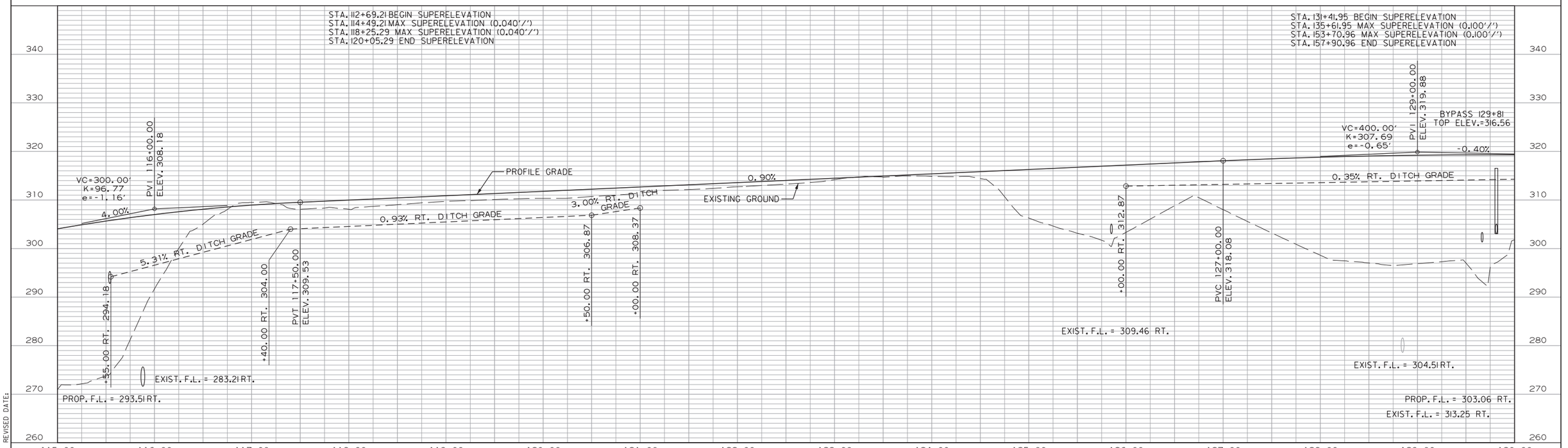
DATE REVISED	DATE FILMED	DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	070442	212	549
				PROFILE SHEET - BYPASS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

BYPASS LT. SIDE PROFILE



BYPASS RT. SIDE PROFILE



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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	213	549
		PLAN AND PROFILE - BYPASS				

STA. 131+00 INSTALL
18" X 36' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 129 CU. YDS.

FENCING

STA.	STA.	SIDE	WIRE FENCE (TYPE A)
130+00	130+75	LT.	75 LIN. FT.
131+25	135+55	LT.	436 LIN. FT.
136+15	145+00	LT.	829 LIN. FT.
142+18	145+75	RT.	309 LIN. FT.

OBLITERATE EXISTING ROADWAY

CONCRETE DITCH PAVING (TYPE B)

STA.	STA.	SIDE	"W"	SQ. YDS.
139+00	142+10	LT. = 305 LIN. FT.	6'-0"	203
142+00	143+60	RT. = 177 LIN. FT.	6'-0"	118

C.L. BYPASS
PI = 148+45.83
Δ = 100°57'01" LT.
D = 5°00'00"
T = 1388.88'
L = 2019.01'
PC = 134+56.95
PT = 154+75.96
e = 0.100'/'
Ls = 420'

STA. 131+84 CONSTRUCT
24" X 124' R.C. PIPE CULVERT
49° LT. FWD. SKEW
CLASS V (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 2 CFS DA = 0.4 ACRES
24" R.C. PIPE = 124 LIN. FT.
24" F.E.S. = 2 EA.

STA. 135+85 INSTALL
18" X 58' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 143 CU. YDS.

C.L. BYPASS STA. 141+50.00 =
C.L. RED HILL RD. SOUTH STA. 20+00.00
∢ 90°00'00"

STA. 143+99 CONSTRUCT
36" X 216' R.C. PIPE CULVERT
15° LT. FWD. SKEW
CLASS V (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 28 CFS DA = 7 ACRES
36" R.C. PIPE = 216 LIN. FT.
36" F.E.S. = 2 EA.

STA. 145+00 INSTALL
18" X 42' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPROACH
= 54 CU. YDS.

REMOVAL AND DISPOSAL OF FENCE
(STATIONING ALONG C.L. BYPASS)

STA.	STA.	SIDE	UNIT
131+91	137+53	RT.	580 LIN. FT.

STA. 140+13 IN PLACE
24"X132' R.C. PIPE CULVERT
W/ HEADWALL RT. AND DROP INLET RT.
REMOVE WINGS AND DROP INLET
AND PLUG AND ABANDON

STA. 141+50 INSTALL
24" X 58' PIPE CULVERT
RT. SIDE DRAIN

REFER TO SURVEY CONTROL DETAIL SHEETS
FOR HORIZONTAL AND VERTICAL CONTROL POINTS

STA. 131+41.95 BEGIN SUPERELEVATION
STA. 135+61.95 MAX SUPERELEVATION (0.100'/')
STA. 153+70.96 MAX SUPERELEVATION (0.100'/')
STA. 157+90.96 END SUPERELEVATION

VC=400.00'
K=307.69
e=-0.65'
PVT 131+00.00
ELEV. 319.08
+50.00 RT. 314.79
PROP. F.L. = 314.76 RT.
PROP. F.L. = 313.71 LT.
-0.40%
VC=500.00'
K=172.41
e=-1.81'
PVC 134+50.00
ELEV. 317.68
PVI 137+00.00
ELEV. 316.68
EXISTING GROUND
PVT 139+50.00
ELEV. 308.43
+90.00 RT. 310.51
PROFILE GRADE
-3.30%
+50.00 RT. 297.85
+70.00 LT. 301.77
+20.00 LT. 289.71
-2.98% RT. DITCH GRADE
-13.63% LT. DITCH GRADE
+00.00 RT. 290.41
+00.00 LT. 265.18
-11.92% RT. DITCH GRADE
+60.00 RT. 272.78
-0.84% LT. DITCH GRADE
PROP. F.L. = 273.43 RT.
PROP. F.L. = 263.45 LT.
VC=400.00'
K=181.82
e=1.10'
PVC 144+50.00
ELEV. 291.93

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON
Shaun Roberson
DIGITALLY SIGNED 06/28/2022

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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	214	549

PLAN AND PROFILE - BYPASS

CONCRETE DITCH PAVING (TYPE B)

STA.	STA.	SIDE	"W"	SQ. YDS.
145+80	148+00	RT. = 238 LIN. FT.	6'-0"	159
149+50	150+00	RT. = 54 LIN. FT.	6'-0"	36
152+40	153+00	LT. = 78 LIN. FT.	6'-0"	52
153+26	154+62	RT. = 143 LIN. FT.	6'-0"	96
155+47	156+90	RT. = 111 LIN. FT.	6'-0"	74
156+00	159+00	LT. = 312 LIN. FT.	6'-0"	208
159+58	160+14	RT. = 70 LIN. FT.	6'-0"	47

C.L. BYPASS

PI	= 148+45.83
Δ	= 100°57'01" LT.
D	= 5°00'00"
T	= 1388.88'
L	= 2019.01'
PC	= 134+56.95
PT	= 154+75.96
e	= 0.100'/'
Ls	= 420'

FENCING

STA.	STA.	SIDE	WIRE FENCE (TYPE A)
145+00	154+30	LT.	841 LIN. FT.
154+80	160+00	LT.	525 LIN. FT.
145+25	152+75	RT.	876 LIN. FT.
153+25	154+75	RT.	170 LIN. FT.
155+25	160+00	RT.	509 LIN. FT.

STATE OF ARKANSAS
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+50 110'
145+00
8'
36'
8'
+50 170'
T.C.E.
+70.00 END C/A
+20 135'
+30.00 BEGIN C/A
PROP. R/W C/A & FENCE
+72.20 160'
STA. 154+70 INSTALL
18" X 44' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 723 CU. YDS.
+30 155'
+60 190'
+75 163.34'
+30.00 END C/A
+80.00 BEGIN C/A
T.C.E.
+90 205'
PROP. R/W C/A & FENCE
CONSTRUCTION LIMITS
PT 154+75.96
16'
155+00
150+00
C.L. BYPASS
+70
+00
160+00
S73°10'5"E
PI 148+45.83
+30 170'
+95 140'
PROP. R/W C/A & FENCE
+35 105'
STA. 147+73 CONSTRUCT
54" X 178' R.C. PIPE CULVERT
16° RT. FWD. SKEW
CLASS IV (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 54 CFS DA = 9 ACRES
54" R.C. PIPE = 178 LIN. FT.
54" F.E.S. = 2 EA.
STA. 149+79 CONSTRUCT
24" X 186' R.C. PIPE CULVERT
36° RT. FWD. SKEW
CLASS III (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 15 CFS DA = 3 ACRES
24" R.C. PIPE = 186 LIN. FT.
24" F.E.S. = 2 EA.
+25.70 160'
+15 165'
+75.00 END C/A
+25.00 BEGIN C/A
+80.54 100'
+75 125'
STA. 153+00 INSTALL
18" X 50' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPROACH = 85 CU. YDS.
+75.00 END C/A
+25.00 BEGIN C/A
+80 120'
STA. 155+00 INSTALL
18" X 86' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPROACH = 218 CU. YDS.
+27.19 190'
STA. 157+92 CONSTRUCT
60" X 284' R.C. PIPE CULVERT
39° LT. FWD. SKEW
CLASS V (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 81 CFS DA = 15 ACRES
60" R.C. PIPE = 284 LIN. FT.
60" F.E.S. = 2 EA.
+20 130'
+75.00 END C/A
+25.00 BEGIN C/A
PROP. R/W C/A & FENCE

BYPASS

REFER TO SURVEY CONTROL DETAIL SHEETS
FOR HORIZONTAL AND VERTICAL CONTROL POINTS

STA. 131+41.95 BEGIN SUPERELEVATION
STA. 135+61.95 MAX. SUPERELEVATION (0.100'/')
STA. 153+70.96 MAX. SUPERELEVATION (0.100'/')
STA. 157+90.96 END SUPERELEVATION

VC=400.00'
K=181.82
e=1.10'
-3.30%
+80.00 RT. 285.67
-6.12% RT. DITCH GRADE
PVI 146+50.00
ELEV. 285.33
-0.84% LT. DITCH GRADE
+00.00 LT. 260.98
-1.70% LT. DITCH GRADE
+00.00 RT. 267.80
PROP. F.L. = 267.77 RT.
PROP. F.L. = 260.31 LT.
PVT 148+50.00
ELEV. 283.13
+50.00 RT. 282.30
-9.00% RT. DITCH GRADE
+00.00 RT. 277.80
-2.35% RT. DITCH GRADE
+20.00 RT. 277.33
+90.00 LT. 257.75
PROP. F.L. = 277.18 RT.
PROP. F.L. = 259.32 LT.
-1.10%
EXISTING GROUND
PROFILE GRADE
+40.00 LT. 272.84
-30.97% LT. DITCH GRADE
+90.00 RT. 278.49
+00.00 LT. 254.26
-3.28% RT. DITCH GRADE
PVC 154+50.00
ELEV. 276.53
VC=300.00'
K=166.67
e=-0.68'
PVI 156+00.00
ELEV. 274.88
+00.00 LT. 269.81
+00.00 RT. 268.32
-27.30% RT. DITCH GRADE
+90.00 RT. 243.75
-17.98% LT. DITCH GRADE
PVT 157+50.00
ELEV. 270.53
LT. 233.87
PROP. F.L. = 243.66 RT.
PROP. F.L. = 234.07 LT.
-2.90%
+60.00 RT. 260.13
-32.97% RT. DITCH GRADE
+00.00 RT. 246.94

310 300 290 280 270 260 250 240 230 220

145+00 146+00 147+00 148+00 149+00 150+00 151+00 152+00 153+00 154+00 155+00 156+00 157+00 158+00 159+00 160+00

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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	215	549

PLAN AND PROFILE - BYPASS

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

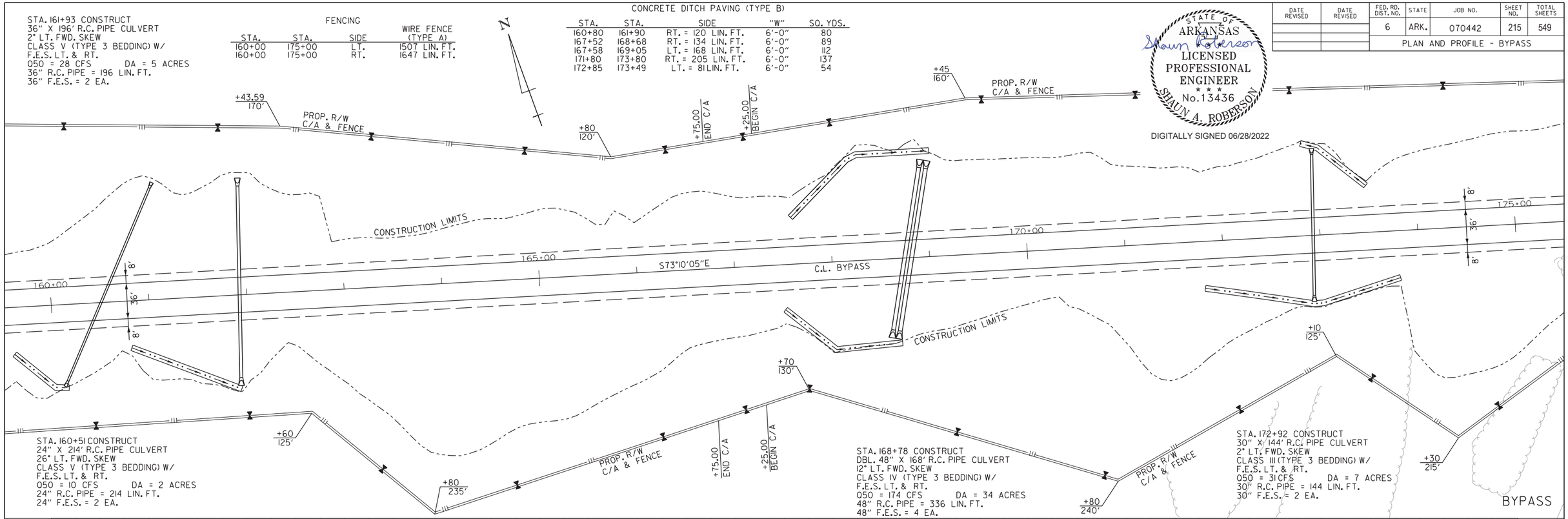
STA. 161+93 CONSTRUCT
36" X 196' R.C. PIPE CULVERT
2° LT. FWD. SKEW
CLASS V (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 28 CFS DA = 5 ACRES
36" R.C. PIPE = 196 LIN. FT.
36" F.E.S. = 2 EA.

FENCING

STA.	STA.	SIDE	WIRE FENCE (TYPE A)
160+00	175+00	LT.	1507 LIN. FT.
160+00	175+00	RT.	1647 LIN. FT.

CONCRETE DITCH PAVING (TYPE B)

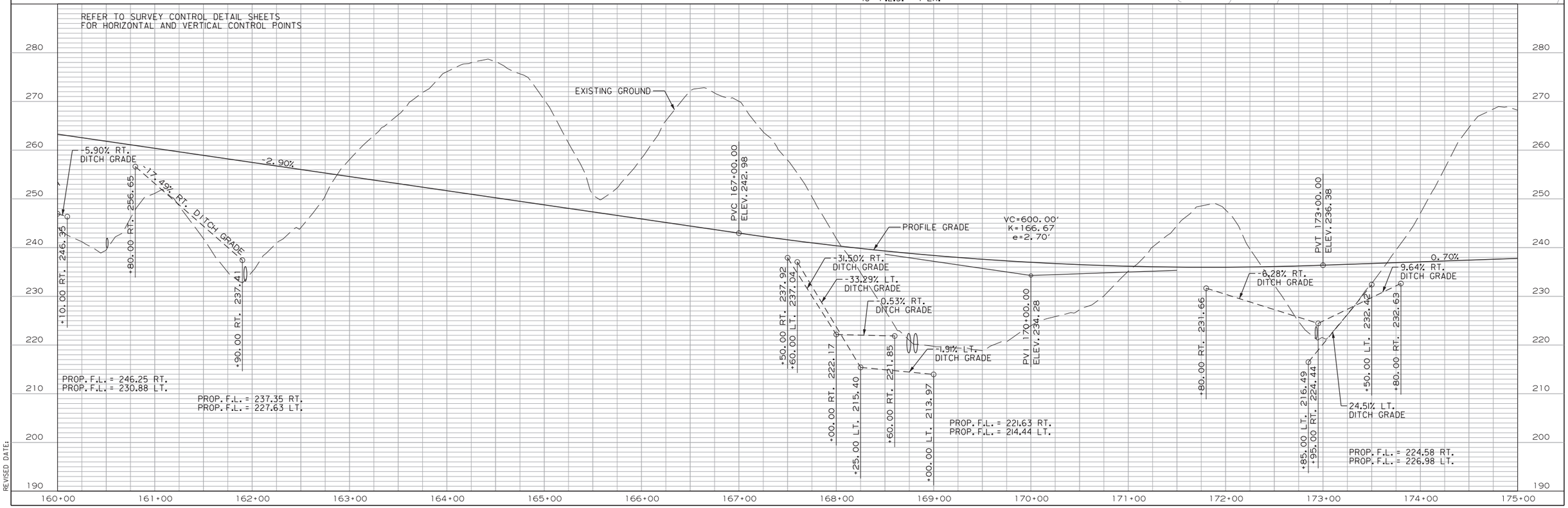
STA.	STA.	SIDE	"W"	SQ. YDS.
160+80	161+90	RT. = 120 LIN. FT.	6'-0"	80
167+52	168+68	RT. = 134 LIN. FT.	6'-0"	89
167+58	169+05	LT. = 168 LIN. FT.	6'-0"	112
171+80	173+80	RT. = 205 LIN. FT.	6'-0"	137
172+85	173+49	LT. = 81 LIN. FT.	6'-0"	54



STA. 160+51 CONSTRUCT
24" X 214' R.C. PIPE CULVERT
26° LT. FWD. SKEW
CLASS V (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 10 CFS DA = 2 ACRES
24" R.C. PIPE = 214 LIN. FT.
24" F.E.S. = 2 EA.

STA. 168+78 CONSTRUCT
DBL. 48" X 168' R.C. PIPE CULVERT
12° LT. FWD. SKEW
CLASS IV (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 174 CFS DA = 34 ACRES
48" R.C. PIPE = 336 LIN. FT.
48" F.E.S. = 4 EA.

STA. 172+92 CONSTRUCT
30" X 144' R.C. PIPE CULVERT
2° LT. FWD. SKEW
CLASS III (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 31 CFS DA = 7 ACRES
30" R.C. PIPE = 144 LIN. FT.
30" F.E.S. = 2 EA.



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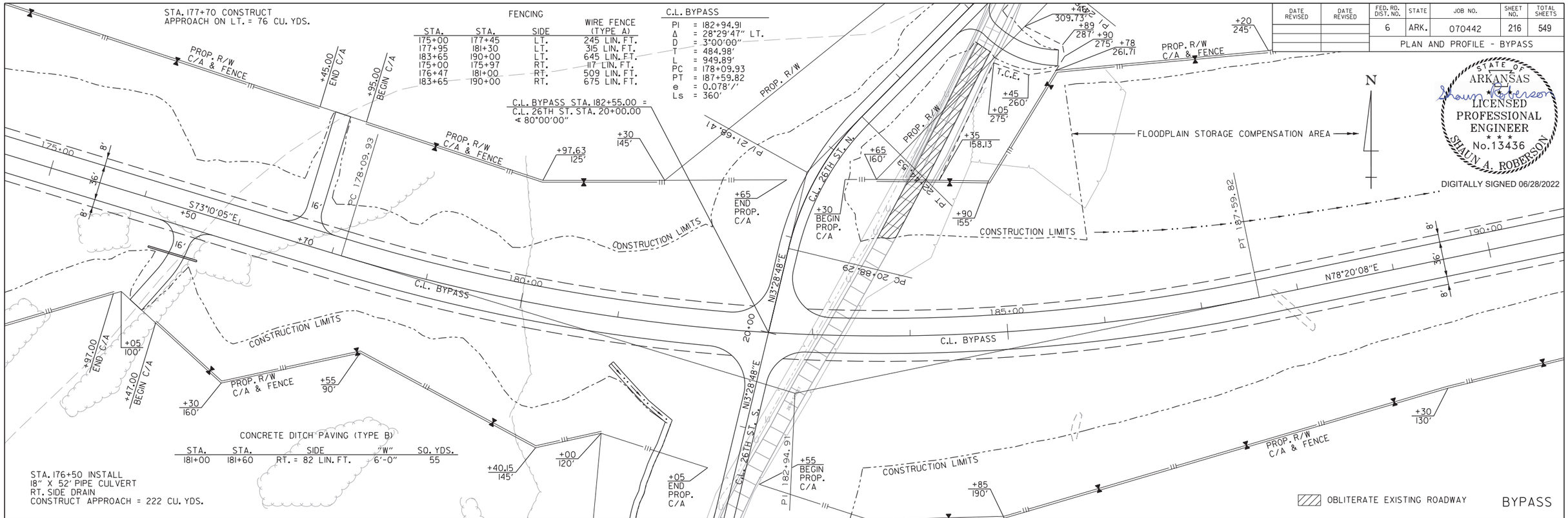
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	216	549

PLAN AND PROFILE - BYPASS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022



FENCING

STA.	STA.	SIDE	WIRE FENCE (TYPE A)
175+00	177+45	LT.	245 LIN. FT.
177+95	181+30	LT.	315 LIN. FT.
183+65	190+00	LT.	645 LIN. FT.
175+00	175+97	RT.	117 LIN. FT.
176+47	181+00	RT.	509 LIN. FT.
183+65	190+00	RT.	675 LIN. FT.

C.L. BYPASS

PI	= 182+94.91
Δ	= 28°29'47" LT.
D	= 3°00'00"
T	= 484.98'
L	= 949.89'
PC	= 178+09.93
PT	= 187+59.82
e	= 0.078'/'
Ls	= 360'

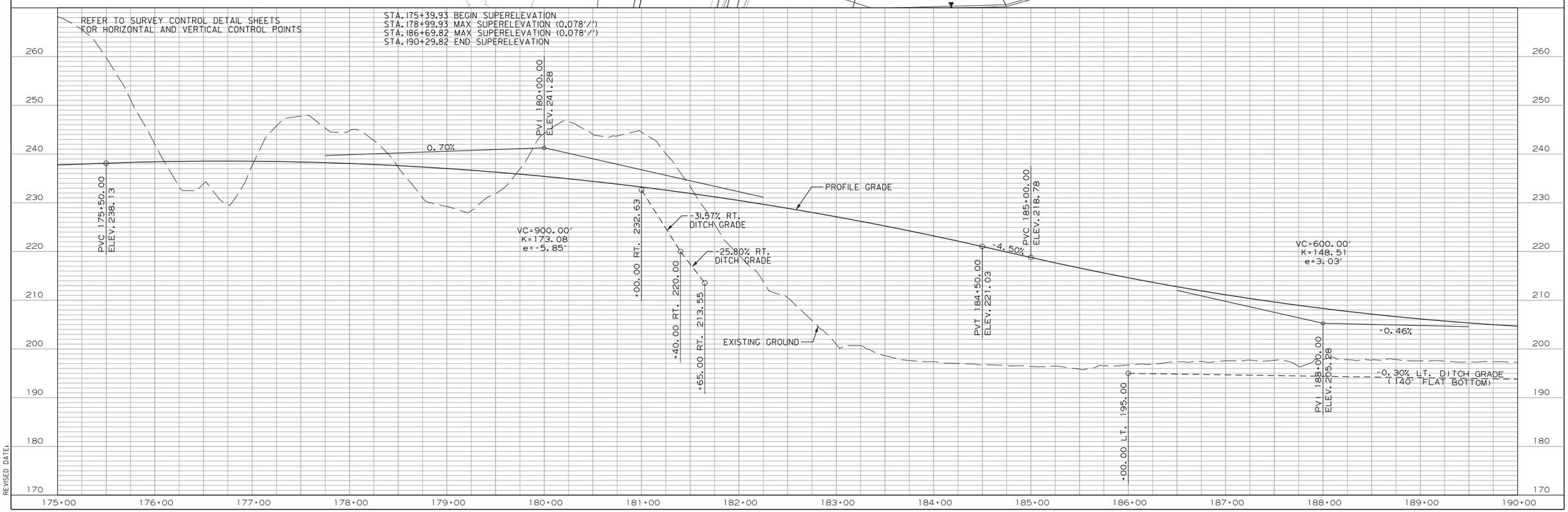
CONCRETE DITCH PAVING (TYPE B)

STA.	STA.	SIDE	"W"	SQ. YDS.
181+00	181+60	RT. = 82 LIN. FT.	6'-0"	55

STA. 176+50 INSTALL
18" X 52' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPROACH = 222 CU. YDS.

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL POINTS

STA. 175+39.93 BEGIN SUPERELEVATION
STA. 178+99.93 MAX SUPERELEVATION (0.078'/')
STA. 186+69.82 MAX SUPERELEVATION (0.078'/')
STA. 190+29.82 END SUPERELEVATION



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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	217	549
		PLAN AND PROFILE - BYPASS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
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PROP. R/W C/A & FENCE

+55 244.38'

+40 245'

APPROXIMATE FEMA 100 YR. FLOODPLAIN LIMITS

FLOODPLAIN STORAGE COMPENSATION AREA

CONSTRUCTION LIMITS

STA. 197+95 CONSTRUCT
TRP. 6' X 6' X 140' R.C. BOX CULVERT
45° RT. FWD. SKEW
WITH 3:1 WINGS LT. & RT.
Q50 = 513 CFS DA = 557 ACRES
SPAN = 20'-6"

STA. 200+35 CONSTRUCT
4' X 3' X 102' R.C. BOX CULVERT
15° LT. FWD. SKEW
WITH 3:1 WINGS LT. & RT.
Q50 = 73 CFS DA = 23 ACRES
SPAN = 5'-0"

STA. 202+00 INSTALL
36" X 46' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 83 CU. YDS.

N

+50 120'

+75.00 END C/A

+25.00 BEGIN C/A

PROP. R/W C/A & FENCE

16'

8'

36'

8'

190+00

+00

195+00

200+00

205+00

N78°20'08"E

C.L. BYPASS

CONSTRUCTION LIMITS

PROP. R/W C/A & FENCE

+35.90 115'

+75.00 END C/A

+25.00 BEGIN C/A

FENCING

STA.	STA.	SIDE	WIRE FENCE (TYPE A)
190+00	201+75	LT.	1186 LIN. FT.
202+25	205+00	LT.	275 LIN. FT.
190+00	190+75	RT.	75 LIN. FT.
191+25	201+75	RT.	1050 LIN. FT.
202+25	205+00	RT.	275 LIN. FT.

STA. 191+00 CONSTRUCT
APPROACH ON RT. = 108 CU. YDS.

STA. 202+00 CONSTRUCT
APPROACH ON RT. = 75 CU. YDS.

BYPASS

REFER TO SURVEY CONTROL DETAIL SHEETS
FOR HORIZONTAL AND VERTICAL CONTROL POINTS

STA. 175+39.93 BEGIN SUPERELEVATION
STA. 178+99.93 MAX SUPERELEVATION (0.078'/')
STA. 186+69.82 MAX SUPERELEVATION (0.078'/')
STA. 190+29.82 END SUPERELEVATION

240 230 220 210 200 190 180 170 160 150

VC=600.00'
K=148.51
e=3.03'

PVT 191+00.00
ELEV. 203.90

-0.46%

PROFILE GRADE

-0.30% LT. DITCH GRADE
(140' FLAT BOTTOM)

-0.30% LT. DITCH GRADE
(110' FLAT BOTTOM)

+50.00 LT. 192.75

+20.00 LT. 191.64

EXISTING GROUND

PROP. F.L. = 189.32 LT.
PROP. F.L. = 188.98 RT.

PROP. F.L. = 192.84 LT.
PROP. F.L. = 191.79 RT.

190+00 191+00 192+00 193+00 194+00 195+00 196+00 197+00 198+00 199+00 200+00 201+00 202+00 203+00 204+00 205+00

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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	218	549
		PLAN AND PROFILE - BYPASS				

STA. 208+10 CONSTRUCT
DBL. 48" X 108' R.C. PIPE CULVERT
25° RT. FWD. SKEW
CLASS IV (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 113 CFS DA = 47 ACRES
48" R.C. PIPE = 216 LIN. FT.
48" F.E.S. = 4 EA.

FENCING

STA.	STA.	SIDE	WIRE FENCE (TYPE A)
205+00	210+75	LT.	575 LIN. FT.
211+25	220+00	LT.	875 LIN. FT.
205+00	210+75	RT.	575 LIN. FT.
211+25	220+00	RT.	875 LIN. FT.

STA. 211+00 INSTALL
18" X 40' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 57 CU. YDS.

STA. 212+65 CONSTRUCT
DBL. 48" X 98' R.C. PIPE CULVERT
14° LT. FWD. SKEW
CLASS IV (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 98 CFS DA = 17 ACRES
48" R.C. PIPE = 196 LIN. FT.
48" F.E.S. = 4 EA.

STA. 217+10 CONSTRUCT
DBL. 48" X 92' R.C. PIPE CULVERT
CLASS IV (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 106 CFS DA = 48 ACRES
48" R.C. PIPE = 184 LIN. FT.
48" F.E.S. = 4 EA.

N

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

+00.00 END C/A
+50.00 BEGIN C/A
+79.58 120'
+75.00 END C/A
+25.00 BEGIN C/A
+76.85 115'
PROP. R/W C/A & FENCE
CONSTRUCTION LIMITS
205+00
210+00
215+00
220+00
+00
N78°20'08"E
C.L. BYPASS
8'
36'
8'
16'
16'
+17.91 125'
+75.00 END C/A
+25.00 BEGIN C/A
+38.85 115'
APPROXIMATE FEMA 100 YR. FLOODPLAIN LIMITS

STA. 211+00 CONSTRUCT
APPROACH ON RT. = 84 CU. YDS.

BYPASS

REFER TO SURVEY CONTROL DETAIL SHEETS
FOR HORIZONTAL AND VERTICAL CONTROL POINTS

-0.46%
PROFILE GRADE
EXISTING GROUND
PROP. F.L. = 186.58 LT.
PROP. F.L. = 186.36 RT.
PROP. F.L. = 185.00 LT.
PROP. F.L. = 184.71 RT.
PROP. F.L. = 185.06 LT.
PROP. F.L. = 183.78 RT.

230 220 210 200 190 180 170 160 150 140

205+00 206+00 207+00 208+00 209+00 210+00 211+00 212+00 213+00 214+00 215+00 216+00 217+00 218+00 219+00 220+00

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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	219	549
		PLAN AND PROFILE - BYPASS				

STA. 222+00 INSTALL
18" X 28' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 39 CU. YDS.

FENCING

STA.	STA.	SIDE	WIRE FENCE (TYPE A)
220+00	221+75	LT.	175 LIN. FT.
222+25	230+75	LT.	850 LIN. FT.
231+25	235+00	LT.	375 LIN. FT.
220+00	221+75	RT.	175 LIN. FT.
222+25	230+75	RT.	850 LIN. FT.
231+25	235+00	RT.	375 LIN. FT.

N

STA. 231+00 INSTALL
36" X 44' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 54 CU. YDS.

APPROXIMATE FEMA 100 YR. FLOODPLAIN LIMITS

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

+75.00 END C/A
+25.00 BEGIN C/A
PROP. R/W C/A & FENCE
+68.54 115'
CONSTRUCTION LIMITS
16'
8'
36'
220+00
225+00
+00
230+00
235+00
N78°20'08"E
C.L. BYPASS
+50.00 END C/A
+00.00 BEGIN C/A
+12.47 115'
+86.11 125'

STA. 232+50 CONSTRUCT
DBL. 48" X 96' R.C. PIPE CULVERT
9° RT. FWD. SKEW
CLASS IV (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 141 CFS DA = 92 ACRES
48" R.C. PIPE = 192 LIN. FT.
48" F.E.S. = 4 EA.

BYPASS

STA. 222+00 CONSTRUCT
APPROACH ON RT. = 30 CU. YDS.

STA. 231+00 CONSTRUCT
APPROACH ON RT. = 59 CU. YDS.

REFER TO SURVEY CONTROL DETAIL SHEETS
FOR HORIZONTAL AND VERTICAL CONTROL POINTS

PVC 224+00.00
ELEV. 188.72
PROFILE GRADE
VC=600.00'
K=625.00
e=0.72'
PVI 227+00.00
ELEV. 187.34
PVT 230+00.00
ELEV. 188.84
EXISTING GROUND
0.50%
PROP. F.L. = 181.10 LT.
PROP. F.L. = 180.67 RT.

230 220 210 200 190 180 170 160 150 140

220+00 221+00 222+00 223+00 224+00 225+00 226+00 227+00 228+00 229+00 230+00 231+00 232+00 233+00 234+00 235+00

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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	220	549

PLAN AND PROFILE - BYPASS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

STA. 237+57 CONSTRUCT
36" X 120' R.C. PIPE CULVERT
5° RT. FWD. SKEW
CLASS III (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 36 CFS DA = 7 ACRES
36" R.C. PIPE = 120 LIN. FT.
36" F.E.S. = 2 EA.

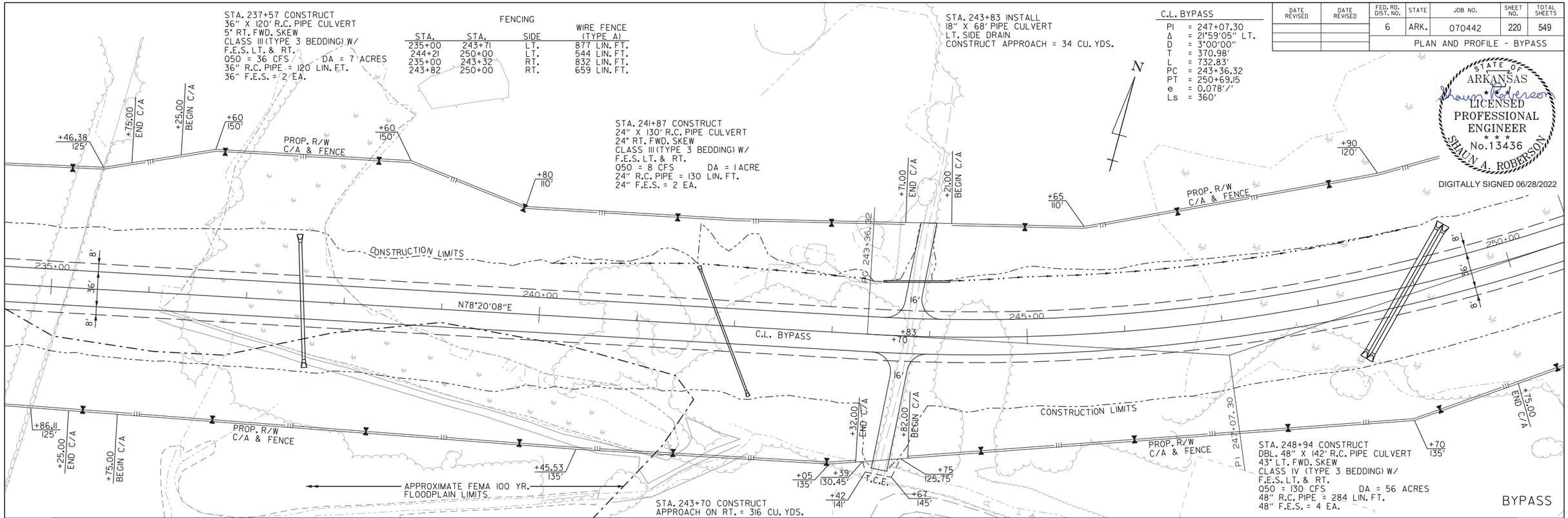
FENCING

STA.	STA.	SIDE	WIRE FENCE (TYPE A)
235+00	243+71	LT.	877 LIN. FT.
244+21	250+00	LT.	544 LIN. FT.
235+00	243+32	RT.	832 LIN. FT.
243+82	250+00	RT.	659 LIN. FT.

STA. 241+87 CONSTRUCT
24" X 130' R.C. PIPE CULVERT
24° RT. FWD. SKEW
CLASS III (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 8 CFS DA = 1 ACRE
24" R.C. PIPE = 130 LIN. FT.
24" F.E.S. = 2 EA.

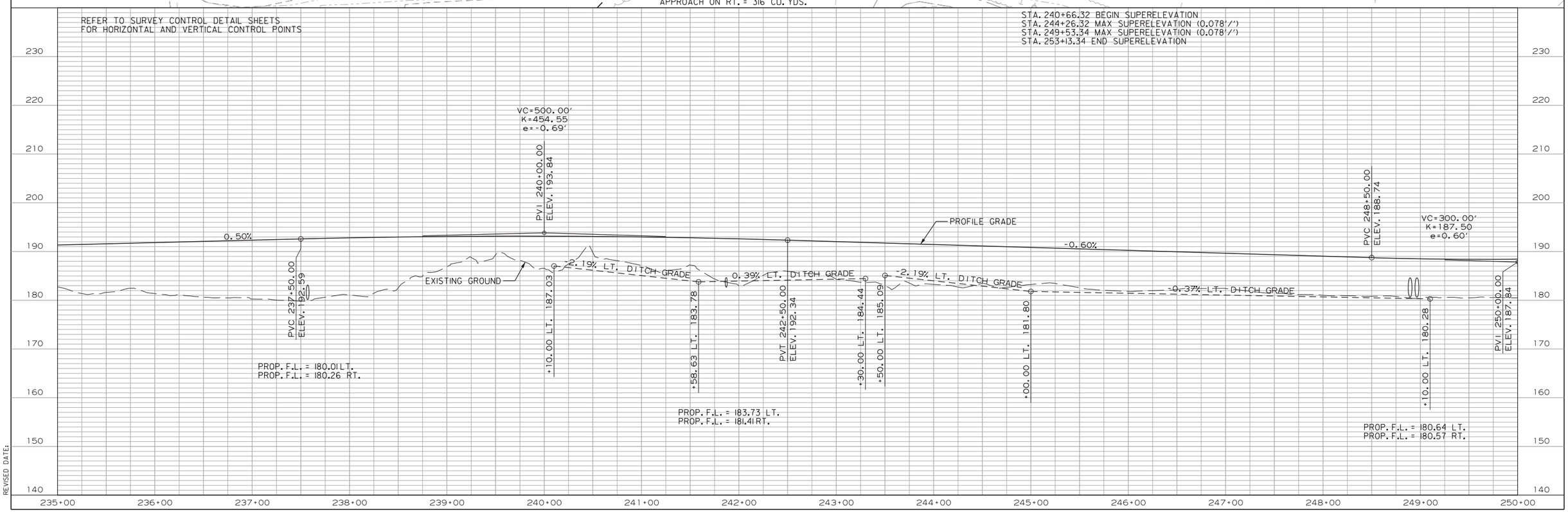
STA. 243+83 INSTALL
18" X 68' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 34 CU. YDS.

C.L. BYPASS
PI = 247+07.30
Δ = 21°59'05" LT.
D = 3°00'00"
T = 370.98'
L = 732.83'
PC = 243+36.32
PT = 250+69.15
e = 0.078'/'
Ls = 360'



REFER TO SURVEY CONTROL DETAIL SHEETS
FOR HORIZONTAL AND VERTICAL CONTROL POINTS

STA. 240+66.32 BEGIN SUPERELEVATION
STA. 244+26.32 MAX SUPERELEVATION (0.078'/')
STA. 249+53.34 MAX SUPERELEVATION (0.078'/')
STA. 253+13.34 END SUPERELEVATION



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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	221	549

PLAN AND PROFILE - BYPASS

C.L. BYPASS

PI	= 247+07.30
Δ	= 21°59'05" LT.
D	= 3°00'00"
T	= 370.98'
L	= 732.83'
PC	= 243+36.32
PT	= 250+69.15
e	= 0.078'/'
Ls	= 360'

N

CONCRETE DITCH PAVING (TYPE B)

STA.	STA.	SIDE	"W"	SQ. YDS.
255+00	256+20	LT. = 123 LIN. FT.	6'-0"	82
259+10	260+61	LT. = 161 LIN. FT.	6'-0"	107

FENCING

STA.	STA.	SIDE	WIRE FENCE (TYPE A)
250+00	256+75	LT.	695 LIN. FT.
257+25	260+75	LT.	398 LIN. FT.
261+25	265+00	LT.	449 LIN. FT.
250+00	257+89	RT.	771 LIN. FT.
260+15	262+75	RT.	258 LIN. FT.
263+25	265+00	RT.	150 LIN. FT.
17+00	18+29	LT.	149 LIN. FT.
17+00	18+55	RT.	129 LIN. FT.

STA. 257+00 INSTALL 24" X 64' PIPE CULVERT LT. SIDE DRAIN CONSTRUCT APPROACH = 303 CU. YDS.

STA. 261+00 INSTALL 18" X 88' PIPE CULVERT LT. SIDE DRAIN CONSTRUCT APPROACH = 345 CU. YDS.

REMOVAL AND DISPOSAL OF FENCE (STATIONING ALONG C.L. BYPASS)

STA.	STA.	SIDE	UNIT
252+16	252+96	RT.	146 LIN. FT.
252+96	253+21	LT.	49 LIN. FT.
264+50	264+57	RT.	106 LIN. FT.

C.L. BYPASS STA. 259+00.00 = C.L. FUTURE BYPASS TO HWY. 67 CONNECTOR STA. 20+00.00 Δ 90°00'00"

FUTURE C.L. BYPASS TO HWY. 67 CONNECTOR

STA. 264+00 CONSTRUCT SEXT. 6' X 3' X 100' R.C. BOX CULVERT WITH 3:1 WINGS LT. & RT. Q50 = 67 CFS DA = 22 ACRES SPAN = 40'-4"

STA. 263+00 CONSTRUCT APPROACH ON RT. = 37 CU. YDS.

C.L. BYPASS

PI	= 262+51.61
Δ	= 62°24'26" RT.
D	= 5°00'00"
T	= 694.09'
L	= 1248.14'
PC	= 255+57.52
PT	= 268+05.66
e	= 0.100'/'
Ls	= 420'

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No.13436 SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

BYPASS

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL POINTS

STA. 240+66.32 BEGIN SUPERELEVATION
STA. 244+26.32 MAX SUPERELEVATION (0.078'/')
STA. 249+53.34 MAX SUPERELEVATION (0.078'/')
STA. 253+13.34 END SUPERELEVATION

STA. 253+13.34 BEGIN SUPERELEVATION
STA. 257+33.34 MAX SUPERELEVATION (0.100'/')
STA. 262+05.00 MAX SUPERELEVATION (0.100'/')
STA. 266+25.00 END SUPERELEVATION

VC=300.00'
K=187.50
e=0.60'

PVI 250+00.00
ELEV. 187.84

PVT 251+50.00
ELEV. 189.34

+10.00 LT. 181.12

1.00%

1.50% LT. DITCH GRADE

+00.00 LT. 186.97

5.61% LT. DITCH GRADE

PVC 256+00.00
ELEV. 193.84

+20.00 LT. 193.70

PVI 258+00.00
ELEV. 195.84

VC=400.00'
K=185.19
e=-1.08'

PROFILE GRADE

EXISTING GROUND

+10.00 LT. 194.55

-6.20% LT. DITCH GRADE

PVT 260+00.00
ELEV. 193.52

+75.00 LT. 184.32

-1.16%

-0.34% LT. DITCH GRADE

+87.03 LT. 183.25

PROP. F.L. = 183.19 LT.
PROP. F.L. = 182.52 RT.

230
220
210
200
190
180
170
160
150
140

250+00 251+00 252+00 253+00 254+00 255+00 256+00 257+00 258+00 259+00 260+00 261+00 262+00 263+00 264+00 265+00

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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	222	549
		PLAN AND PROFILE - BYPASS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON

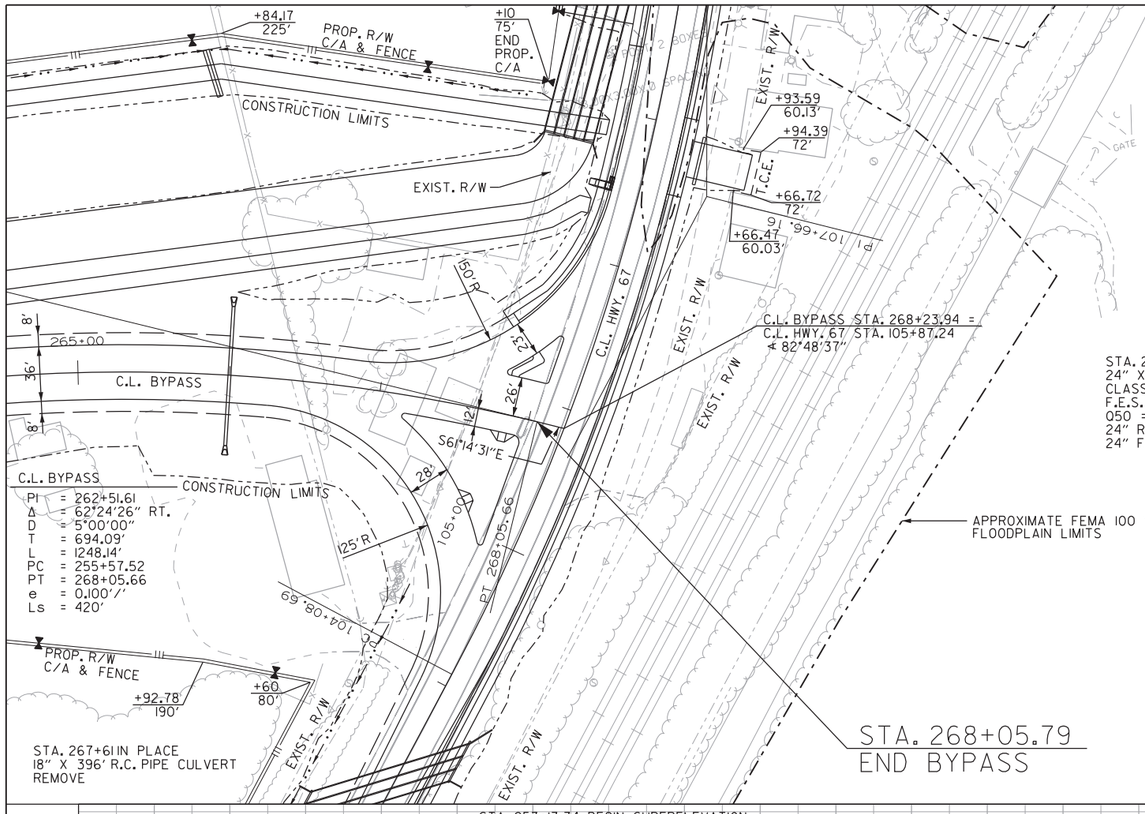
DIGITALLY SIGNED 06/28/2022

REMOVAL AND DISPOSAL OF FENCE
(STATIONING ALONG C.L. BYPASS)

STA.	STA.	SIDE	UNIT
265+86	267+71	LT.	291 LIN. FT.

FENCING

STA.	STA.	SIDE	WIRE FENCE (TYPE A)	6' CHAIN LINK FENCE
265+00	265+86	LT.	103 LIN. FT.	
265+86	267+67	LT.		217 LIN. FT.
265+00	266+79	RT.	150 LIN. FT.	



STA. 266+00 CONSTRUCT
24" X 92' R.C. PIPE CULVERT
CLASS V (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 4 CFS DA = 1 ACRE
24" R.C. PIPE = 92 LIN. FT.
24" F.E.S. = 2 EA.

STA. 267+69 CONSTRUCT
TYPE 4 WHEELCHAIR RAMP ON RT.
= 7.3 SQ. YD.

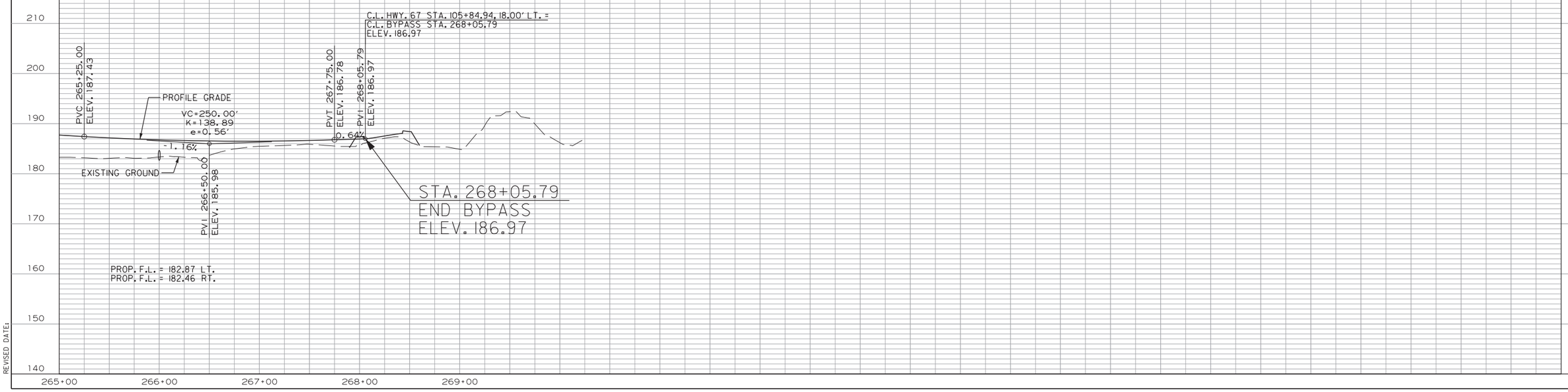
STA. 267+79 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 4.2 SQ. YD.

STA. 267+87 CONSTRUCT
TYPE 4 WHEELCHAIR RAMP ON RT.
= 7.3 SQ. YD.

BYPASS

REFER TO SURVEY CONTROL DETAIL SHEETS
FOR HORIZONTAL AND VERTICAL CONTROL POINTS

STA. 253+13.34 BEGIN SUPERELEVATION
STA. 257+33.34 MAX SUPERELEVATION (0.100'/')
STA. 262+05.00 MAX SUPERELEVATION (0.100'/')
STA. 266+25.00 END SUPERELEVATION



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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	223	549
		PLAN SHEET - HWY. 67				

FENCING

STA.	STA.	SIDE	WIRE FENCE (TYPE A)	6' CHAIN LINK FENCE	12' GATE
102+10	103+60	LT.	170 LIN. FT.	153 LIN. FT.	2 EACH
108+11	109+98	LT.			
12+93	17+00	LT.	460 LIN. FT.		
12+92	17+00	RT.	408 LIN. FT.		

STA. 108+72 CONSTRUCT
APPROACH ON LT. = 41 CU. YDS.

STA. 107+50 CONSTRUCT
TYPE SPECIAL INLET ON LT. W/ 4' EXT.

STATE OF ARKANSAS
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STA. 109+00 CONSTRUCT
5 JUNCTION BOXES ON LT. H=5'-6"
ABOVE R.C. BOX CULVERT
TYPE E JUNCTION BOX = 3'X2'

C.L. BYPASS
PI = 262+51.61
Δ = 62°24'26" RT.
D = 5°00'00"
T = 694.09'
L = 1248.14'
PC = 255+57.52
PT = 268+05.66
e = 0.100'/'
Ls = 420'

C.L. HWY. 67
PI = 107+66.16
Δ = 28°01'30" LT.
D = 4°00'00"
T = 357.47'
L = 700.63'
PC = 104+08.69
PT = 111+09.32
e = 0.030'/'
Ls = 150'

C.L. FUTURE BYPASS TO HWY. 67 CONNECTOR

C.L. HWY. 67 STA. 99+00.00 =
C.L. FUTURE BYPASS TO HWY. 67 CONNECTOR STA. 12+32.47
∢ 90°00'00"

C.L. HWY. 67 STA. 105+87.24 =
C.L. BYPASS STA. 268+23.94
∢ 82°48'37"

STA. 102+35.00
BEGIN HWY. 67

STA. 103+28 CONSTRUCT
TRP. 6' X 3' X 110' R.C. BOX CULVERT
45° RT. FWD. SKEW
WITH 3:1 WINGS LT. & RT.
Q50 = 181 CFS DA = 865 ACRES
SPAN = 20'-4"

STA. 107+80 INSTALL
22"x14"x32' ARCH PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPROACH = 28 CU. YDS.

STA. 109+50 CONSTRUCT
APPROACH ON RT. = 17 CU. YDS.

REMOVAL AND DISPOSAL OF FENCE
(STATIONING ALONG C.L. HWY. 67)

STA.	STA.	SIDE	UNIT	GATE
106+84	109+98	LT.	311 LIN. FT.	2 EACH

HWY. 67

rnfortner 6/28/2022 10:35:25 AM
WORKSPACE: AHTD
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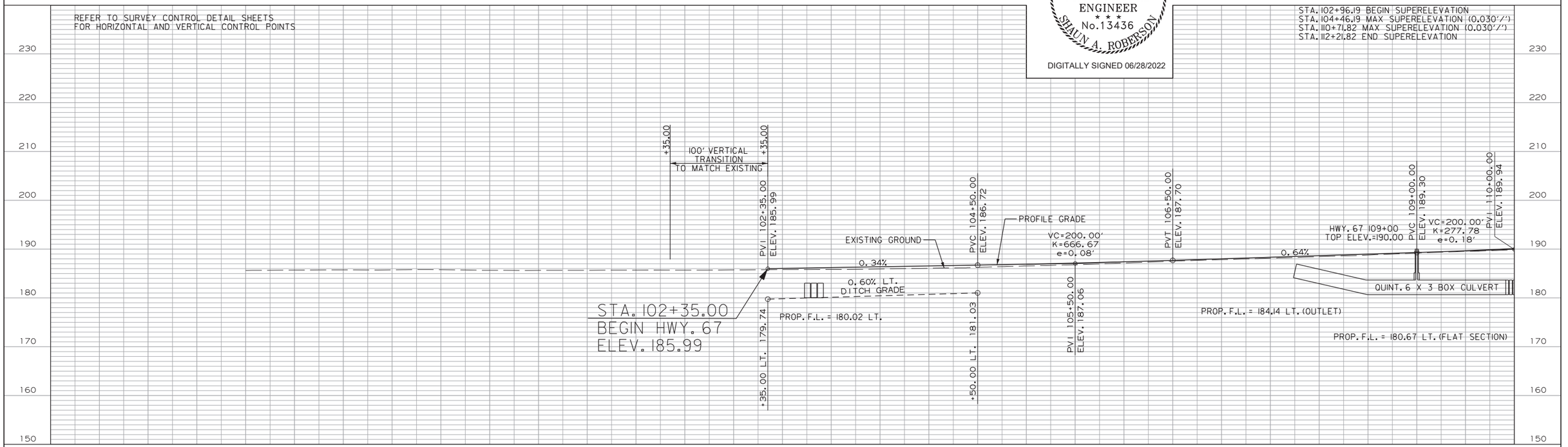
REVISED DATE:

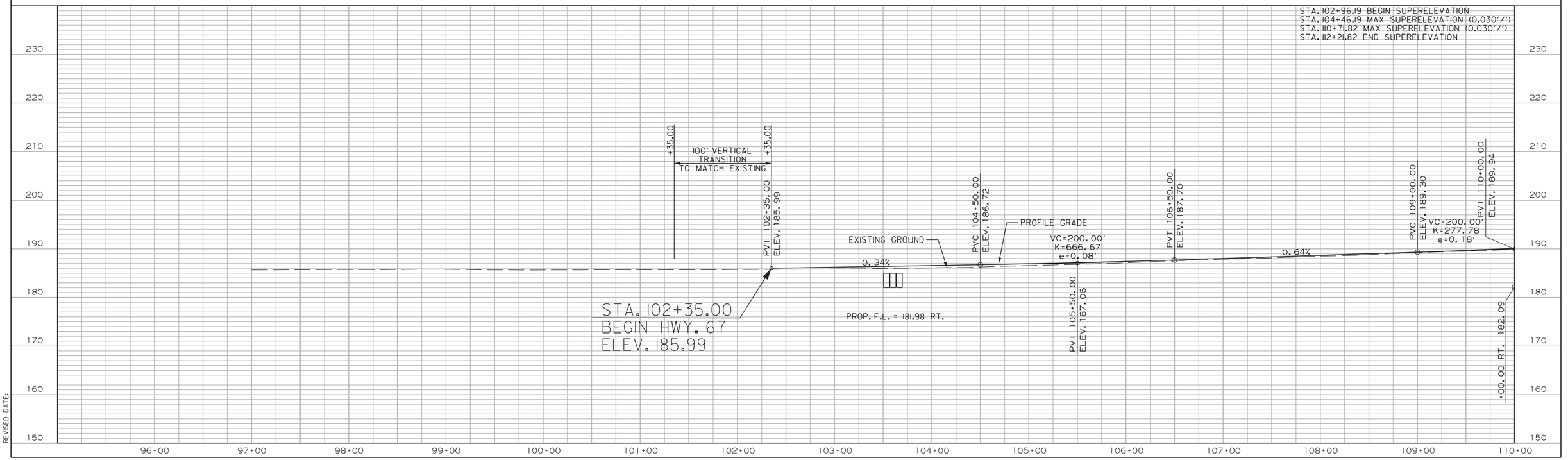
DATE REVISED	DATE FILMED	DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	070442	224	549
				PROFILE SHEET - HWY. 67				

STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

HWY. 67 LT. SIDE PROFILE



HWY. 67 RT. SIDE PROFILE



rnfortner 6/28/2022 10:35:26 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	225	549
		PLAN SHEET - HWY. 67				

C.L. HWY. 67
PI = 107+66.16
Δ = 28°01'30" LT.
D = 4°00'00"
T = 357.47'
L = 700.63'
PC = 104+08.69
PT = 111+09.32
e = 0.030'/'
Ls = 150'

STA. 110+25 CONSTRUCT
TYPE SPECIAL INLET ON LT. W/ 4' EXT.

STA. 110+50 CONSTRUCT
36"x123' R.C. PIPE CULVERT
40°RT. FWD. SKEW
(CLASS III)(TYPE 3 BEDDING)
W/ FES LT. & RT.
Q50 = 30 CFS DA = 5.7 AC.
36" R.C. PIPE = 123 LIN. FT.
36" F.E.S. = 2 EA.

STA. 110+65 INSTALL
24"x52' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 78 CU. YDS.

STA. 111+72 INSTALL
24"x47' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 90 CU. YDS.

STA. 113+60 CONSTRUCT
TYPE SPECIAL INLET ON LT.
W/ DBL. 4' EXT.

STA. 114+30 CONSTRUCT
TYPE SPECIAL INLET ON LT.

STA. 116+50 CONSTRUCT
TYPE SPECIAL INLET ON LT.

STA. 114+00 INSTALL
18"x32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 24 CU. YDS.

STA. 115+82 INTALL
18"x32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 14 CU. YDS.

STA. 117+40 INSTALL
22"x14"x32' ARCH PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 13 CU. YDS.

REMOVAL AND DISPOSAL OF FENCE
(STATIONING ALONG C.L. HWY. 67)

STA.	STA.	SIDE	UNIT
110+13	110+14	LT.	12 LIN. FT.
112+04	112+04	LT.	4 LIN. FT.
112+95	112+95	LT.	5 LIN. FT.
117+53	118+10	LT.	72 LIN. FT.
117+96	117+97	LT.	4 LIN. FT.
122+27	122+30	RT.	10 LIN. FT.
122+44	122+60	LT.	57 LIN. FT.

STA. 123+50 CONSTRUCT
TYPE SPECIAL INLET ON LT.

STA. 124+20 CONSTRUCT
TYPE SPECIAL INLET ON LT.
W/ DBL. 4' EXT.

STA. 124+90 CONSTRUCT
TYPE SPECIAL INLET ON LT.

STA. 124+50 INSTALL
18"x43' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 77 CU. YDS.

REMOVAL AND DISPOSAL OF GUARDRAIL

STA.	STA.	SIDE	LIN. FT.
116+64	117+17	RT.	58
117+05	117+57	RT.	61

CONCRETE DITCH PAVING (TYPE B)

STA.	STA.	SIDE	"W"	SQ. YDS.
114+75	115+64	LT. = 90 LIN. FT.	6'-0"	60
115+97	116+50	LT. = 53 LIN. FT.	6'-0"	35
120+30	121+00	LT. = 63 LIN. FT.	6'-0"	42

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

APPROXIMATE FEMA 100 YR. FLOODPLAIN LIMITS

C.L. HWY. 67 STA. 118+57.64 =
C.L. WALNUT ST. STA. 10+00.00
∠ 76°30'00"

C.L. WALNUT ST.
S88°26'07"E
N15°03'53"E
C.L. HWY. 67

PROP. R/W
EXIST. R/W
CONSTRUCTION LIMITS
T.C.E.
PROP. R/W CONSTRUCTION LIMITS 125'-00
N28°11'36"W

STA. 110+00 CONSTRUCT
QUINT. 6' X 3' X 284' R.C. BOX CULVERT
45° RT. FWD. SKEW
WITH 31 WINGS LT. & RT.
Q50 = 666 CFS DA = 863 ACRES
SPAN = 33'-8"

BRIDGE NO. 01616 IN PLACE
59'-0" X 30'-2" BRIDGE CONSISTING OF
A CONCRETE SUPERSTRUCTURE SUPPORTED
BY A STEEL SUBSTRUCTURE. REMOVE AS
EXISTING BRIDGE STRUCTURE (SITE NO. 1) LUMP SUM

℄ C.L. HWY. 67 STA. 118+60.07 =
C.L. HWY. 67 CONNECTOR STA. 10+00.00
80°00'00"

C.L. HWY. 67 CONNECTOR

PC 10+50.79
PI 12+43.54
PT 14+35.97
160' R
125' R
30' R
9TH ST.
SQUARE LIGHTED RING

CONCRETE WALKS (TYPE SPECIAL)

STA.	STA.	SIDE	"W"	LIN. FT.	SQ. YD.
119+24	119+66	RT.	5'-0"	63	35

STA. 118+40 CONSTRUCT
TRP. 12' X 9' X 288' R.C. BOX CULVERT
66° LT. FWD. SKEW
WITH 31 WINGS LT. AND RT.
Q50 = 1241CFS DA = 819 ACRES
SPAN = 39'-5"

STA. 120+75 INSTALL
36"x70' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPROACH = 201 CU. YDS.

STA. 121+60 CONSTRUCT
DBL. 48"x96' R.C. PIPE CULVERT
(CLASS III)(TYPE 3 BEDDING)
W/ FES LT. & RT.
Q50 = 15 CFS DA = 2.3 AC.
48" R.C. PIPE = 192 LIN. FT.
48" F.E.S. = 4 EA.

C.L. HWY. 67
PI = 122+05.71
Δ = 43°15'29" LT.
D = 10°30'00"
T = 216.37'
L = 411.98'
PC = 119+89.34
PT = 124+01.32
e = 0.040'/'
Ls = 180'

STA. 111+80 CONSTRUCT
TYPE SPECIAL INLET ON RT.

STA. 113+60 CONSTRUCT
TYPE SPECIAL INLET ON RT.
W/ DBL. 4' EXT.

STA. 114+30 CONSTRUCT
TYPE SPECIAL INLET ON RT.

STA. 116+00 CONSTRUCT
TYPE SPECIAL INLET ON RT.

STA. 112+79 CONSTRUCT
APPROACH ON RT. = 9 CU. YDS.
RETAIN EXISTING BRIDGE

STA. 118+15 CONSTRUCT
TYPE 4 WHEELCHAIR RAMP ON RT.
= 7.2 SQ. YD.

STA. 118+18 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 3.9 SQ. YD.

STA. 118+93 CONSTRUCT
TYPE 4 WHEELCHAIR RAMP ON LT.
= 7.3 SQ. YD.

STA. 119+32 CONSTRUCT
TYPE 4 WHEELCHAIR RAMP ON RT.
= 7.2 SQ. YD.

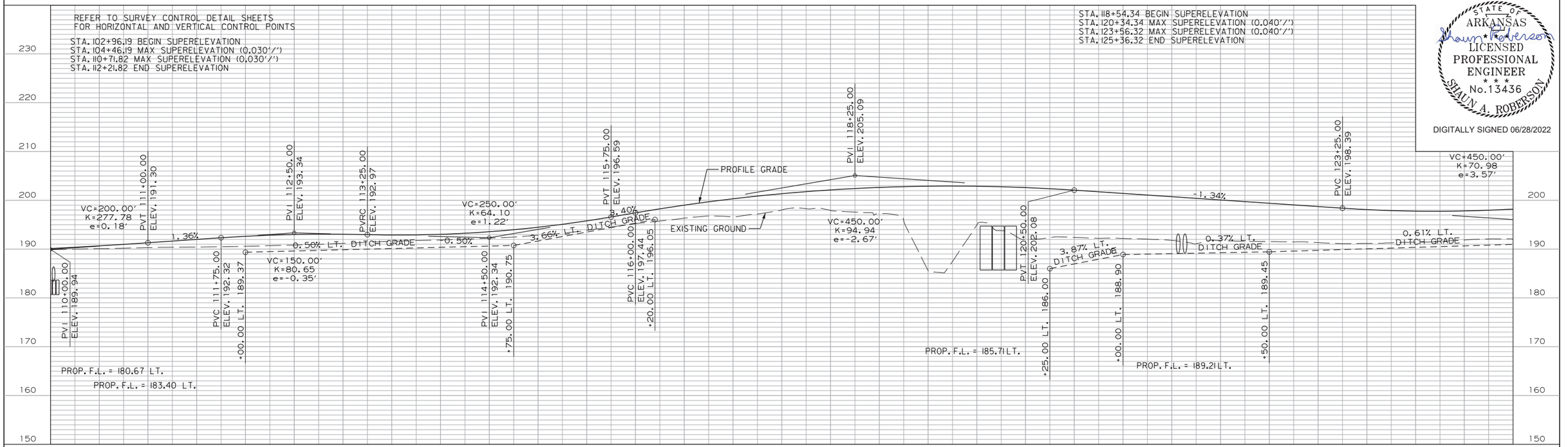
OBLITERATE EXISTING ROADWAY

HWY. 67

rnfortner 6/28/2022 10:35:29 AM
WORKSPACE: AHTD
L:\20IT\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_PP_15_HWY 67_02.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	070442	226	549
				PROFILE SHEET - HWY. 67				

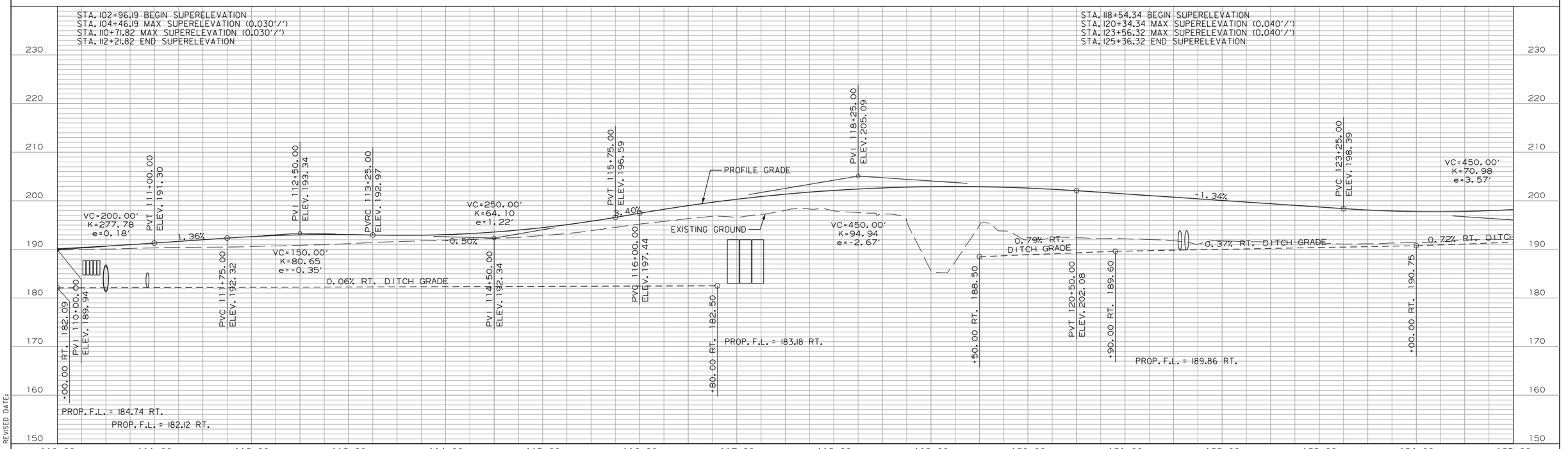
HWY. 67 LT. SIDE PROFILE



STATE OF ARKANSAS
Shaun A. Roberson
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

HWY. 67 RT. SIDE PROFILE



rnfortner 6/28/2022 10:35:30 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	227	549
		PLAN SHEET - HWY. 67				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

STA. 130+30 INSTALL
18"×38' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 37 CU. YDS.

STA. 131+25 CONSTRUCT
TYPE SPECIAL INLET ON LT.

STA. 133+35 CONSTRUCT
TYPE SPECIAL INLET ON LT.

STA. 134+50 CONSTRUCT
JUNCTION BOX ON LT. H=24'-6"
AND 54"x125' PIPE OUTLET
TO FES LT.
TYPE ST JUNCTION BOX = 6'x5'
54" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 125 LIN. FT.
54" FES = 1EACH

STA. 135+25 CONSTRUCT
TYPE SPECIAL INLET ON LT.

STA. 137+00 CONSTRUCT
JUNCTION BOX ON LT. H=15'-6"
AND 54"x246' PIPE OUTLET
TO DROP INLET AT STA. 134+50 LT.
TYPE ST JUNCTION BOX = 6'x5'
54" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 246 LIN. FT.
54" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 246 LIN. FT.

STA. 137+50 CONSTRUCT
TYPE SPECIAL INLET ON LT.

STA. 139+10 CONSTRUCT
TYPE SPECIAL INLET ON LT.

APPROXIMATE FEMA 100 YR.
FLOODPLAIN LIMITS

STA. 124+90 CONSTRUCT
TYPE SPECIAL INLET ON LT.

STA. 137+78 INSTALL
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 19 CU. YDS.

10TH ST.

C.L. HWY. 67 STA. 138+61.36 =
C.L. CLAY ST. STA. 20+00.00
∢ 88°15'00"

PROP. R/W
CONSTRUCTION LIMITS
RET/WALL
C.L. HWY. 67
C.L. CLAY ST.
T.C.E.
T.C.E.
9TH ST.
N28°11'36"W
N03°01'22"W
N01°57'50"E
S87°54'09"E
S87°54'09"E
PI 128+32.51
PC 129+72.12
PT 129+87.24
PC 135+24.32
PT 140+22.99
30' R
30' R
30' R
125.00
135.00
140.00
230.00
180.00
78
16'
30'
36'
+85 135'
+85 74.55'
+80 110'
+79.61 115'
+40 115'
+90 115'
+25 65'
+55 65'
30+00
+30
+10 65'
+25 60'
+25 70'
+00 50'
+90 50'
+76.91 65'
+77.70 65'
+71.25 68.59'
+77.47 85'
+18.97 89.93'
+98.81 100'
+21.90 95.74'
+60.22 90'
+23.38 85'
+92.84 75'
+49.40 70'
+17.54 134.26'
+76.66 129.07'
+74.08 100'
+92.31 95'
+90.03 75'
+30.39 70'
+30.22 60'
+65 55'
+27.50 55'
+32.80 123.23'
+91.95 139.99'
+05 139.71'
+05 65'
+55.13 69.52'
137+73.81
+15 70'
+70 70'
+60 90'
+03 78'
+11 105'
+00.80 103'
+64 82.16'
+64 125'
+10 138'
+97.50 140'
+90 115'
+89 141'
+16.43 110'
+17.81 148'
+20.52 220.86'
+90 222.42'
T.C.E.
T.C.E.
T.C.E.
T.C.E.

STA. 126+22 CONSTRUCT
QUINT. 6' X 4' X 96' R.C. BOX CULVERT
30° LT. FWD. SKEW
WITH 3:1 WINGS LT. AND RT.
Q50 = 347 CFS DA = 8.17 ACRES
SPAN = 33'-8"

STA. 125+25 CONSTRUCT
TYPE SPECIAL INLET ON RT.

STA. 126+50 CONSTRUCT
TYPE SPECIAL INLET ON RT. W/ 4' EXT.

STA. 128+00 CONSTRUCT
TYPE SPECIAL INLET ON RT. W/ 4' EXT.

STA. 131+00 CONSTRUCT
TYPE SPECIAL INLET ON RT.

STA. 133+35 CONSTRUCT
TYPE SPECIAL INLET ON RT.

STA. 135+25 CONSTRUCT
TYPE SPECIAL INLET ON RT.

CONCRETE DITCH PAVING (TYPE B)

STA.	STA.	SIDE	"W"	SQ. YDS.
126+20	132+00	RT. = 560 LIN. FT.	6'-0"	373
129+90	130+10	LT. = 20 LIN. FT.	6'-0"	13
130+48	131+80	LT. = 132 LIN. FT.	6'-0"	88
134+60	137+70	RT. = 313 LIN. FT.	6'-0"	209
136+80	137+30	LT. = 50 LIN. FT.	6'-0"	33
139+00	140+00	LT. = 100 LIN. FT.	6'-0"	67

STA. 137+00 CONSTRUCT
JUNCTION BOX ON RT. H=14'-0"
WITH 24"x27' PIPE INLET
FROM FES RT.
AND 48"x63' PIPE OUTLET
TO JUNCTION BOX AT STA. 137+00 LT.
TYPE ST DROP INLET = 5'x5'
24" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 27 LIN. FT.
48" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 63 LIN. FT.
24" FES = 1EACH

STA. 137+50 CONSTRUCT
TYPE SPECIAL INLET ON RT.

STA. 139+10 CONSTRUCT
TYPE SPECIAL INLET ON RT.

STA. 127+11 RT. IN PLACE
36"X276' PLASTIC PIPE CULVERT

C.L. HWY. 67

PI	= 128+32.51
Δ	= 25°10'14" RT.
D	= 8°00'00"
T	= 159.90'
L	= 314.63'
PC	= 126+72.61
PT	= 129+87.24
e	= 0.040'/'
Ls	= 180'

REMOVAL AND DISPOSAL OF FENCE
(STATIONING ALONG C.L. HWY. 67)

STA.	STA.	SIDE	UNIT
125+93	126+20	RT.	46 LIN. FT.
130+87	131+17	LT.	40 LIN. FT.
133+87	133+89	RT.	16 LIN. FT.
134+79	134+80	RT.	6 LIN. FT.
134+80	134+81	RT.	13 LIN. FT.
136+17	136+45	LT.	29 LIN. FT.
136+81	137+33	LT.	55 LIN. FT.
138+84	139+09	RT.	25 LIN. FT.

C.L. HWY. 67

PI	= 137+73.81
Δ	= 4°59'12" RT.
D	= 1°00'00"
T	= 249.49'
L	= 498.67'
PC	= 135+24.32
PT	= 140+22.99
e	= NO SUPER
Ls	= N/A

HWY. 67

rnfortner 6/28/2022 10:35:31 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_PP_16.HWY 67_03.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	070442	228	549
				PROFILE SHEET - HWY. 67				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
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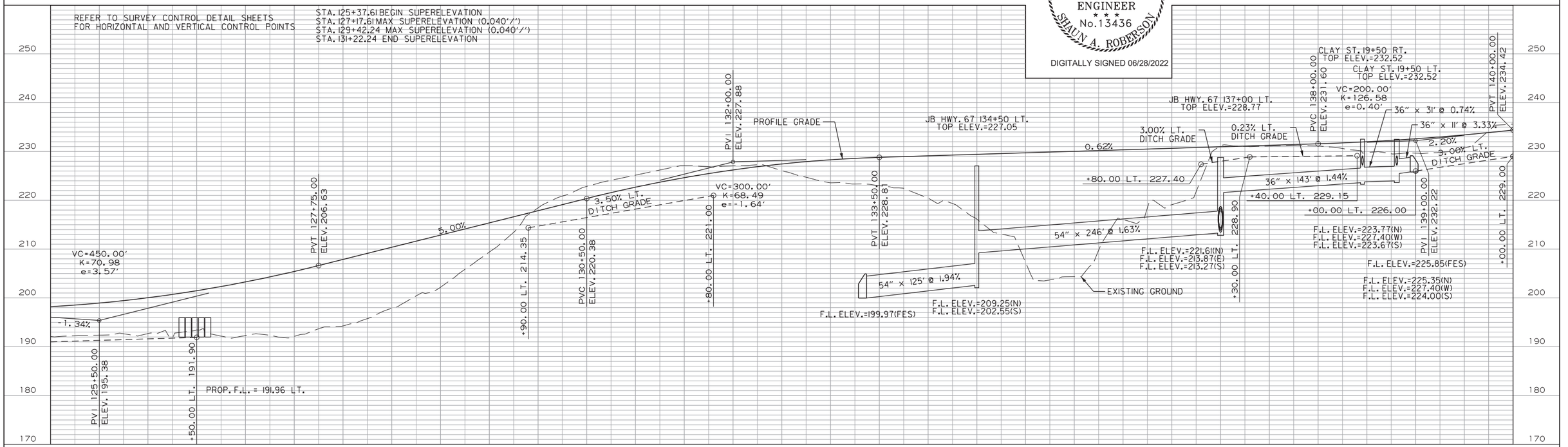
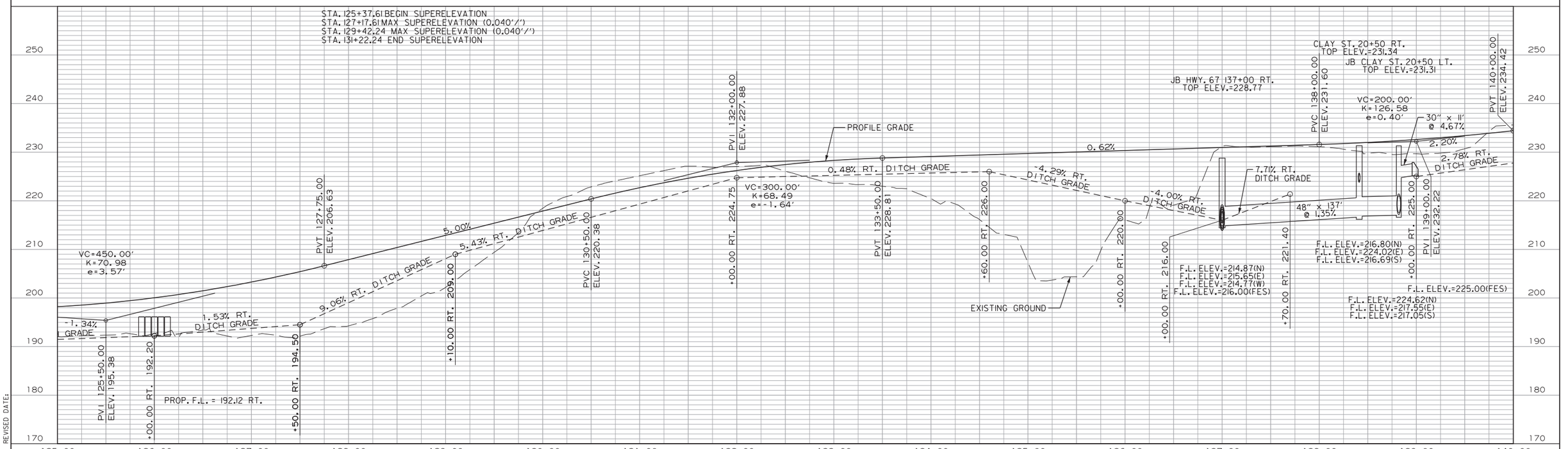
HWY. 67 LT. SIDE PROFILE



HWY. 67 RT. SIDE PROFILE



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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	229	549
		PLAN SHEET - HWY. 67				

C.L. HWY. 67

PI	= 137+73.81
Δ	= 4°59'12" RT.
D	= 1°00'00"
T	= 249.49'
L	= 498.67'
PC	= 135+24.32
PT	= 140+22.99
e	= NO SUPER
Ls	= N/A

STA. 141+75 CONSTRUCT
DROP INLET 37' LT. H=4'-9"
WITH 36"x65' PIPE INLET
FROM FES LT.
AND 36"x34' PIPE OUTLET
TO DROP INLET AT
C.L. MAIN ST. STA. 29+55 RT.
TYPE ST DROP INLET = 5'x5'
36" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 65 LIN. FT.
36" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 34 LIN. FT.
36" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 34 LIN. FT.
36" FES = 1EACH

STA. 141+75 CONSTRUCT
TYPE SPECIAL INLET ON LT.

STA. 143+77 CONSTRUCT
DROP INLET ON LT. H=4'-11"
WITH 36"x20' PIPE OUTLET
TO FES LT.
TYPE ST DROP INLET = 6'x4'
36" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 20 LIN. FT.
36" FES = 1EACH

STA. 144+10 CONSTRUCT
JUNCTION BOX ON LT. H=5'-1"
WITH 36"x29' PIPE OUTLET
TO DROP INLET AT STA. 143+77 LT.
TYPE ST JUNCTION BOX = 4'x4'
36" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 29 LIN. FT.

STA. 144+34 CONSTRUCT
DROP INLET ON LT. H=5'-9"
WITH 36"x20' PIPE OUTLET
TO JUNCTION BOX AT STA. 144+10 LT.
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 5'x4'
36" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 20 LIN. FT.
36" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 20 LIN. FT.

STA. 145+00 CONSTRUCT
DROP INLET ON LT. H=6'-5"
WITH 36"x61' PIPE OUTLET
TO DROP INLET AT STA. 144+34 LT.
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 5'x4'
36" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 61 LIN. FT.
36" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 61 LIN. FT.

STA. 146+45 CONSTRUCT
DROP INLET ON LT. H=5'-11" W/ 8' EXT.
WITH 30"x81' PIPE OUTLET
TO JUNCTION BOX AT STA. 146+00 LT.
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 5'x4'
30" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 81 LIN. FT.
30" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 81 LIN. FT.

STA. 147+64 CONSTRUCT
APPROACH ON LT. = 2 CU. YDS.

STA. 148+92 CONSTRUCT
APPROACH ON LT. = 2 CU. YDS.

STA. 146+00 CONSTRUCT
JUNCTION BOX ON LT. H=6'-0"
WITH 30"x96' PIPE OUTLET
TO DROP INLET AT STA. 145+00 LT.
TYPE ST JUNCTION BOX = 4'x4'
30" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 96 LIN. FT.
30" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 96 LIN. FT.

STA. 146+85 CONSTRUCT
DROP INLET 33' LT. H=2'-9"
WITH 18"x8' PIPE OUTLET
TO DROP INLET AT STA. 146+85 LT.
TYPE ST DROP INLET = 3'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 8 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 8 LIN. FT.

STA. 148+50 CONSTRUCT
DROP INLET ON LT. H=4'-6" W/ 4' EXT.
WITH 24"x16' PIPE OUTLET
TO DROP INLET AT STA. 146+85 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
24" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 16 LIN. FT.
24" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 16 LIN. FT.

STA. 149+49 CONSTRUCT
DROP INLET 30' RT. H=3'-0"
WITH 18"x6' PIPE OUTLET
TO JUNCTION BOX AT STA. 149+49 RT.
TYPE ST DROP INLET = 3'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 6 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 6 LIN. FT.

STA. 148+92 CONSTRUCT
APPROACH ON LT. = 3 CU. YDS.

STA. 152+97 CONSTRUCT
APPROACH ON LT. = 8 CU. YDS.

STA. 153+41 CONSTRUCT
APPROACH ON LT. = 2 CU. YDS.

STA. 148+78 CONSTRUCT
JUNCTION BOX ON LT. H=4'-5"
WITH 24"x25' PIPE OUTLET
TO DROP INLET AT STA. 148+50 LT.
TYPE ST JUNCTION BOX = 3'x3'
24" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 25 LIN. FT.
24" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 25 LIN. FT.

STA. 148+78 CONSTRUCT
DROP INLET 32' LT. H=3'-4"
WITH 24"x8' PIPE OUTLET
TO JUNCTION BOX AT STA. 148+78 LT.
TYPE ST DROP INLET = 3'x3'
24" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 8 LIN. FT.
24" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 8 LIN. FT.

STA. 150+00 CONSTRUCT
DROP INLET ON RT. H=3'-6" W/ 4' EXT.
WITH 18"x48' PIPE OUTLET
TO JUNCTION BOX AT STA. 149+49 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 48 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 48 LIN. FT.

STA. 149+06 CONSTRUCT
DROP INLET 32' LT. H=3'-1"
WITH 18"x25' PIPE OUTLET
TO DROP INLET AT STA. 149+06.32' LT.
TYPE ST DROP INLET = 3'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 25 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 25 LIN. FT.

STA. 149+20 CONSTRUCT
DROP INLET ON LT. H=3'-5" W/ 4' EXT.
WITH 18"x39' PIPE OUTLET
TO JUNCTION BOX AT STA. 148+78 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 39 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 39 LIN. FT.

STA. 153+75 CONSTRUCT
DROP INLET ON LT. H=4'-5"
WITH 18"x56' PIPE OUTLET
TO DROP INLET AT STA. 153+65 RT.
TYPE ST DROP INLET = 3'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 56 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 56 LIN. FT.

STATE OF ARKANSAS
SHAUN A. ROBERSON
LICENSED PROFESSIONAL ENGINEER
No. 13436
DIGITALLY SIGNED 06/28/2022

C.L. HWY. 67 STA. 141+24.37 =
C.L. MAIN ST. STA. 30+00.00
∢ 89°40'00"

C.L. HWY. 67 STA. 143+92.66 =
C.L. CLINTON ST. STA. 40+00.00
∢ 89°45'00"

C.L. HWY. 67 STA. 146+32.21 =
C.L. CADDO ST. STA. 50+00.00
∢ 90°00'00"

C.L. HWY. 67 STA. 154+08.00=
C.L. HICKORY 60+00.00
∢ 90°00'00"

P I 47+60.00
P I 48+20.00
P I 51+82.00
P I 52+42.00
P I 61+15.00
Δ 1°00'00" RT.
P I 152+70.00
Δ 1°34'50" LT.
P I 151+17.00
Δ 1°10'05" RT.

C.L. MAIN ST.
C.L. CLINTON ST.
C.L. CADDO ST.
PINE ST.
HICKORY ST.
HWY. 51
EXIST. R/W
PROP. R/W
CONSTRUCTION LIMITS
T.C.E.
50' TAPER

S88°22'10"E
S87°47'10"E
S88°07'10"E
N88°07'10"W
NO1°57'50"E
NO3°07'55"E
NO1°33'05"E

STA. 142+00 INSTALL
18"x38' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPROACH = 10 CU. YDS.

STA. 142+55 INSTALL
18"x34' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPROACH = 5 CU. YDS.

CONCRETE DITCH PAVING (TYPE B)

STA.	STA.	SIDE	"W"	SQ. YDS.
141+55	142+50	LT. = 84 LIN. FT.	6'-0"	56
141+60	141+80	RT. = 20 LIN. FT.	6'-0"	13
142+18	142+37	RT. = 19 LIN. FT.	6'-0"	13

STA. 140+84 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 4.1 SQ. YD.

STA. 140+84 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 4.0 SQ. YD.

STA. 141+54 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 4.2 SQ. YD.

STA. 141+54 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 4.2 SQ. YD.

STA. 141+75 CONSTRUCT
TYPE SPECIAL INLET ON RT.

STA. 143+75 CONSTRUCT
JUNCTION BOX ON RT. H=5'-0"
WITH 18"x12' PIPE OUTLET
TO FES RT.
TYPE ST JUNCTION BOX = 3'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 12 LIN. FT.
18" FES = 1EACH

STA. 144+63 CONSTRUCT
APPROACH ON LT. = 3 CU. YDS.

STA. 144+81 CONSTRUCT
APPROACH ON RT. = 5 CU. YDS.

STA. 144+17 CONSTRUCT
DROP INLET ON RT. H=5'-3"
WITH 18"x39' PIPE OUTLET
TO JUNCTION BOX AT STA. 143+75 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 39 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 39 LIN. FT.

STA. 145+11 CONSTRUCT
DROP INLET ON RT. H=6'-1"
WITH 18"x90' PIPE OUTLET
TO DROP INLET AT STA. 144+17 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 90 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 90 LIN. FT.

STA. 149+54 CONSTRUCT
JUNCTION BOX ON RT. H=6'-0"
WITH 18"x42' PIPE OUTLET
TO DROP INLET AT STA. 145+11 RT.
TYPE ST JUNCTION BOX = 3'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 42 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 42 LIN. FT.

STA. 149+79 CONSTRUCT
JUNCTION BOX ON RT. H=5'-9"
WITH 18"x28' PIPE OUTLET
TO JUNCTION BOX AT STA. 145+54 RT.
TYPE ST JUNCTION BOX = 3'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 28 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 28 LIN. FT.

STA. 147+00 CONSTRUCT
DROP INLET ON RT. H=5'-3" W/ 8' EXT.
WITH 18"x60' PIPE OUTLET
TO DROP INLET AT
C.L. CADDO ST. STA. 51+00 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 60 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 60 LIN. FT.

STA. 147+10 CONSTRUCT
DROP INLET 59' RT. H=4'-0"
WITH 18"x10' PIPE OUTLET
TO DROP INLET AT STA. 147+00 RT.
TYPE ST DROP INLET = 3'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 10 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 10 LIN. FT.

STA. 145+71 CONSTRUCT
TYPE 4 WHEELCHAIR RAMP ON RT.
= 7.2 SQ. YD.

STA. 145+93 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 3.9 SQ. YD.

STA. 146+70 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 4.4 SQ. YD.

STA. 146+89 CONSTRUCT
TYPE 4 WHEELCHAIR RAMP ON RT.
= 7.2 SQ. YD.

STA. 148+72 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 5.2 SQ. YD.

STA. 149+15 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 5.0 SQ. YD.

STA. 149+67 CONSTRUCT
APPROACH ON RT. = 3 CU. YDS.

STA. 150+65 CONSTRUCT
APPROACH ON RT. = 10 CU. YDS.

STA. 154+35 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 5.2 SQ. YD.

STA. 153+80 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 5.2 SQ. YD.

CONCRETE WALK TYPE SPECIAL

STA.	STA.	SIDE	"W"	SQ. YDS.
152+66	153+71	RT. = 105 LIN. FT.	5'-0"	59

STA. 148+42 CONSTRUCT
DROP INLET ON RT. H=4'-1" W/ 8' EXT.
WITH 18"x139' PIPE OUTLET
TO DROP INLET AT STA. 147+00 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 139 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 139 LIN. FT.

STA. 149+49 CONSTRUCT
JUNCTION BOX ON RT. H=4'-0"
WITH 18"x103' PIPE OUTLET
TO DROP INLET AT STA. 148+42 RT.
TYPE ST JUNCTION BOX = 3'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 103 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 103 LIN. FT.

REMOVAL AND DISPOSAL OF FENCE
(STATIONING ALONG C.L. HWY. 67)

STA.	STA.	SIDE	UNIT
145+43	145+44	RT.	37 LIN. FT.
146+65	146+72	RT.	7 LIN. FT.

STA. 153+65 CONSTRUCT
DROP INLET ON RT. H=5'-6" W/ 4' EXT.
WITH 18"x87' PIPE OUTLET
TO DROP INLET AT STA. 154+56 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 87 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 87 LIN. FT.

STA. 154+56 CONSTRUCT
DROP INLET ON RT. H=3'-9" W/ 4' EXT.
WITH 18"x117' PIPE OUTLET
TO DROP INLET AT STA. 155+77 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 117 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 117 LIN. FT.

STA. 154+83 CONSTRUCT
APPROACH ON RT. = 14 CU. YDS.

HWY. 67

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REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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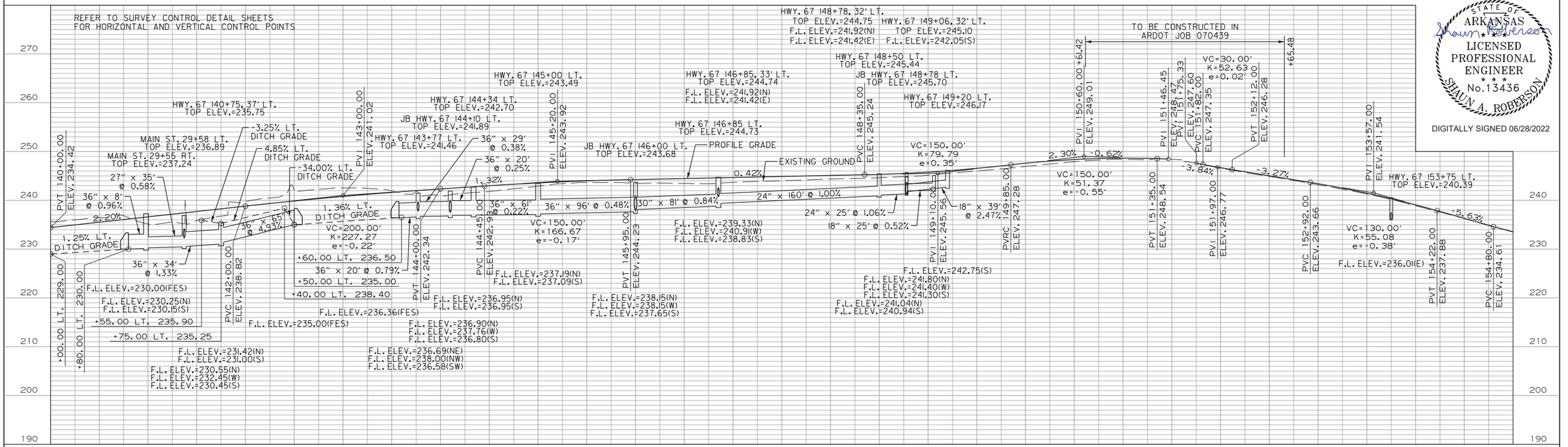
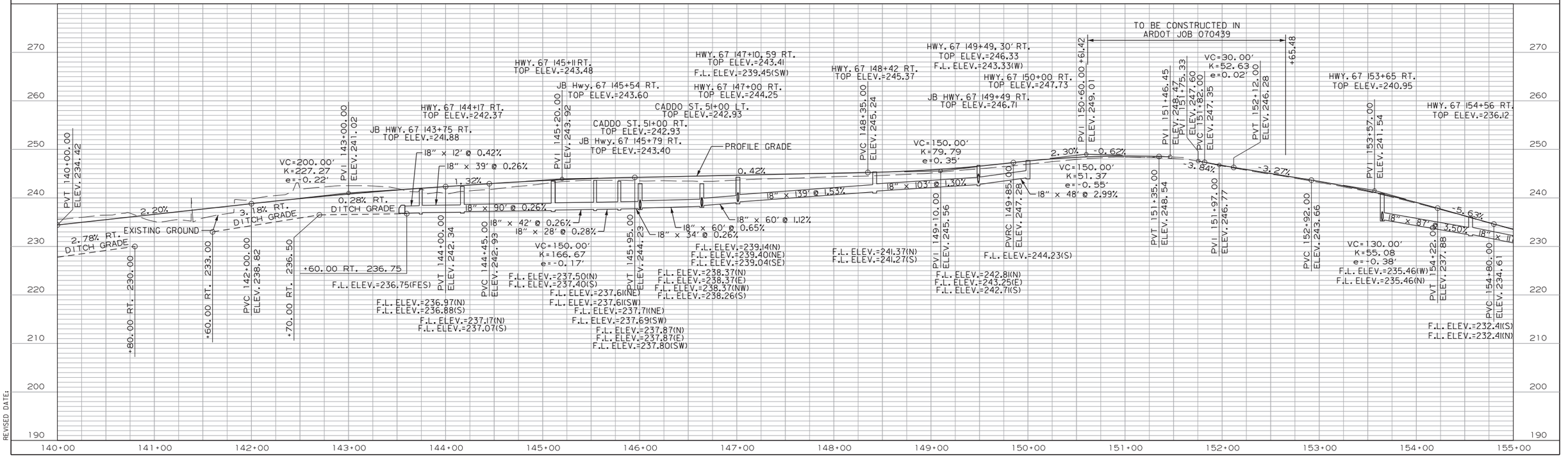
				PROFILE SHEET - HWY. 67				

HWY. 67 LT. SIDE PROFILE



HWY. 67 RT. SIDE PROFILE



STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	231	549
		PLAN SHEET - HWY. 67				

STATE OF ARKANSAS
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SHAUN A. ROBERSON

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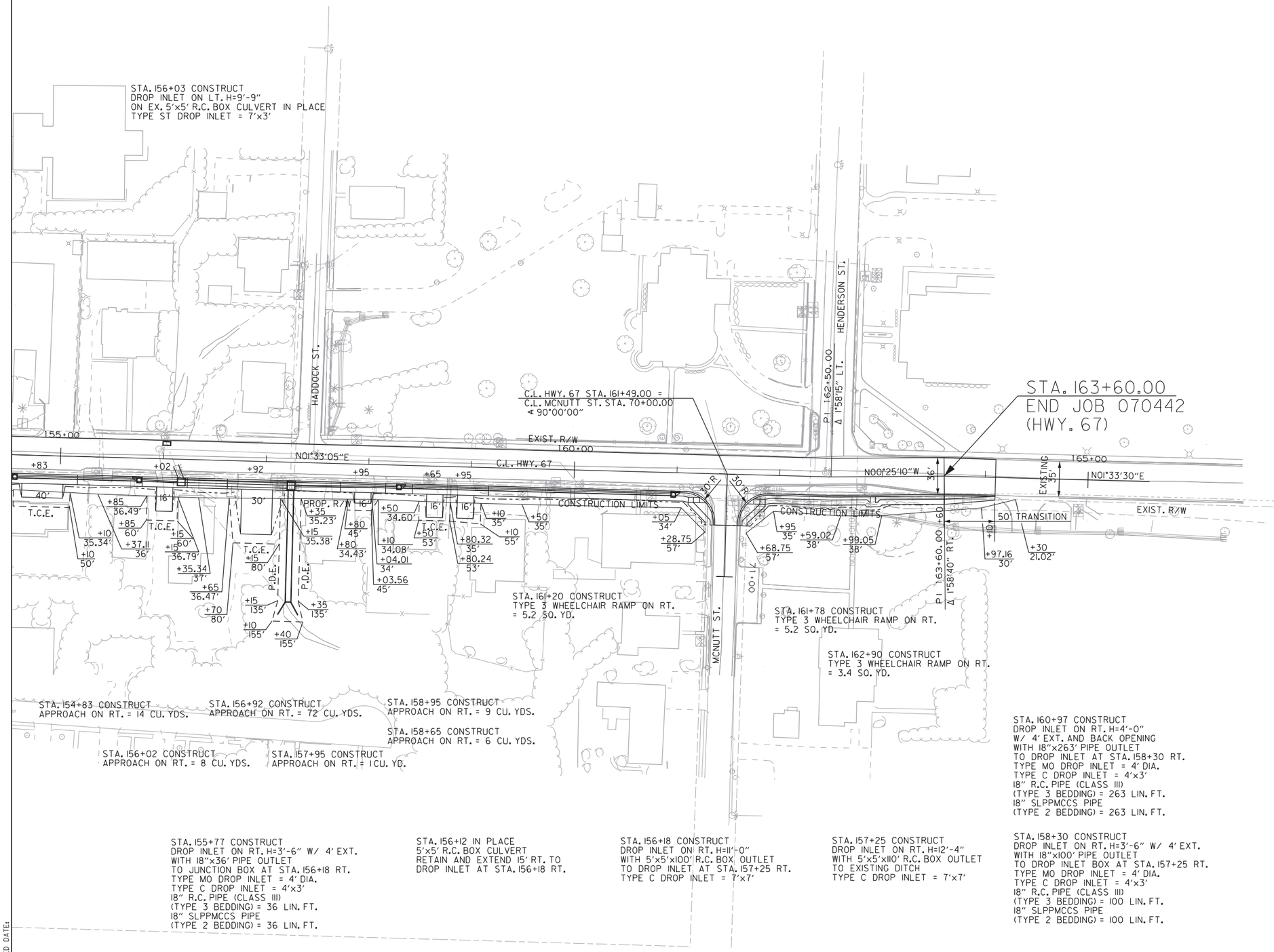

STA. 160+97 CONSTRUCT
DROP INLET ON RT. H=4'-0"
W/ 4' EXT. AND BACK OPENING
WITH 18"x263' PIPE OUTLET
TO DROP INLET AT STA. 158+30 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 263 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 263 LIN. FT.

STA. 155+77 CONSTRUCT
DROP INLET ON RT. H=3'-6" W/ 4' EXT.
WITH 18"x36' PIPE OUTLET
TO JUNCTION BOX AT STA. 156+18 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 36 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 36 LIN. FT.

STA. 156+12 IN PLACE
5'x5' R.C. BOX CULVERT
RETAIN AND EXTEND 15' RT. TO
DROP INLET AT STA. 156+18 RT.

STA. 156+18 CONSTRUCT
DROP INLET ON RT. H=11'-0"
WITH 5'x5'x100' R.C. BOX OUTLET
TO DROP INLET AT STA. 157+25 RT.
TYPE C DROP INLET = 7'x7'

STA. 157+25 CONSTRUCT
DROP INLET ON RT. H=12'-4"
WITH 5'x5'x110' R.C. BOX OUTLET
TO EXISTING DITCH
TYPE C DROP INLET = 7'x7'

STA. 158+30 CONSTRUCT
DROP INLET ON RT. H=3'-6" W/ 4' EXT.
WITH 18"x100' PIPE OUTLET
TO DROP INLET BOX AT STA. 157+25 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 100 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 100 LIN. FT.

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REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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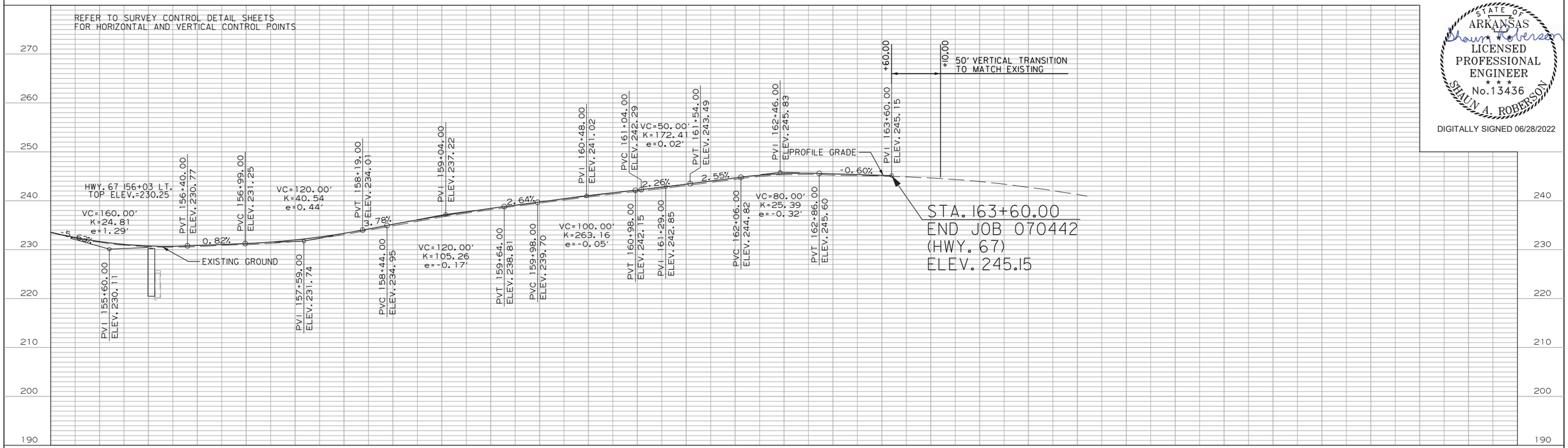
				PROFILE SHEET - HWY. 67				

HWY. 67 LT. SIDE PROFILE



STATE OF ARKANSAS
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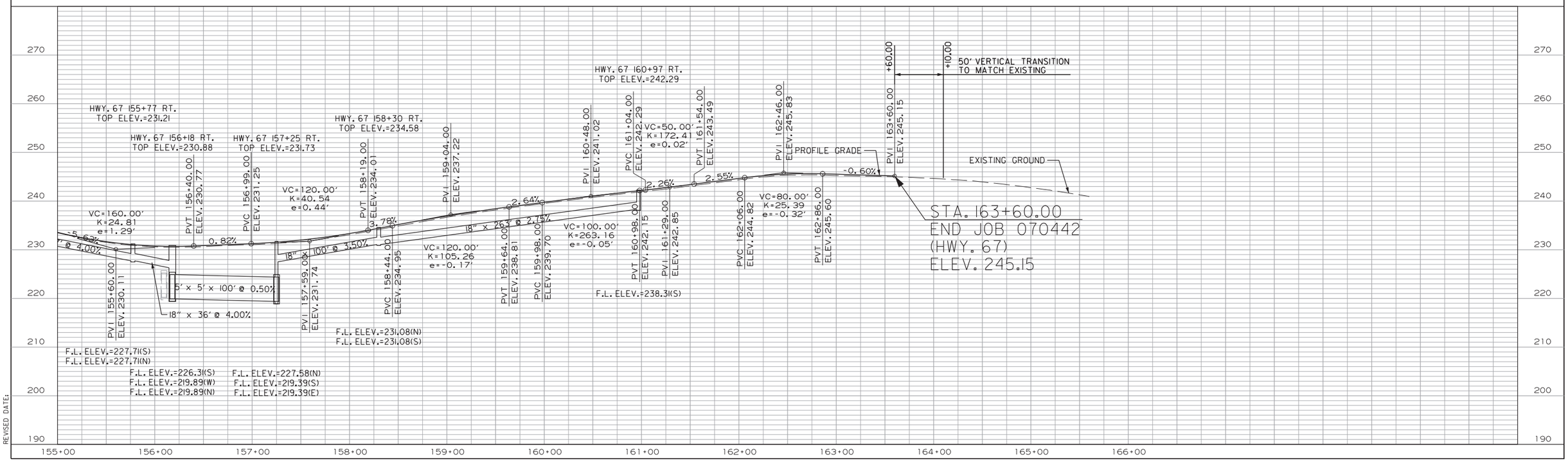
HWY. 67 RT. SIDE PROFILE



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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	233	549
		PLAN SHEET - PROFESSIONAL PARK DR.				

STATE OF ARKANSAS
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STA. 91+80 CONSTRUCT
DROP INLET ON LT. H=3'-6"
WITH 18"x76' PIPE OUTLET
TO DROP INLET AT STA. 92+62 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 76 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 76 LIN. FT.

STA. 92+62 CONSTRUCT
DROP INLET ON LT. H=5'-5" W/4' EXT.
WITH 18"x129' PIPE OUTLET
TO DROP INLET AT STA. 94+00 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 129 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 129 LIN. FT.

STA. 94+00 CONSTRUCT
DROP INLET ON LT. H=15'-0"
WITH 18"x54' PIPE INLET
FROM FES ON RT.
AND 30"x47' PIPE OUTLET
TO FES ON LT.
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 5'x4'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 54 LIN. FT.
30" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 47 LIN. FT.
18" FES = 1EACH
30" FES = 1EACH

C.L. PROFESSIONAL PARK DR.

PI	= 93+61.17
Δ	= 38°52'58" LT.
D	= 10°30'00"
T	= 192.61'
L	= 370.31'
PC	= 91+68.56
PT	= 95+38.87
e	= 0.040'/'
Ls	= 150'

CONCRETE WALKS (TYPE SPECIAL)

STA.	STA.	SIDE	"W"	LIN. FT.	SQ. YD.
90+03	91+01	LT.	6'-0"	98	65

STA. 95+35 CONSTRUCT
DROP INLET ON LT. H=13'-5" W/ 4' EXT.
WITH 36"x68' PIPE INLET
FROM FES ON RT.
AND 30"x126' PIPE OUTLET
TO DROP INLET AT STA. 94+00 LT.
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 5'x4'
36" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 68 LIN. FT.
30" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 126 LIN. FT.
30" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 126 LIN. FT.
36" FES = 1EACH

STA. 97+50 CONSTRUCT
DROP INLET ON LT. H=5'-3" W/ 4' EXT.
WITH 18"x210' PIPE OUTLET
TO DROP INLET AT STA. 95+35 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 210 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 210 LIN. FT.

STA. 98+00 CONSTRUCT
DROP INLET ON LT. H=4'-0" W/ 4' EXT.
WITH 18"x46' PIPE OUTLET
TO DROP INLET AT STA. 97+50 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 46 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 46 LIN. FT.

STA. 98+50 CONSTRUCT
DROP INLET ON LT. H=3'-6" W/ 4' EXT.
WITH 18"x46' PIPE OUTLET
TO DROP INLET AT STA. 98+00 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 46 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 46 LIN. FT.

C.L. PROFESSIONAL PARK DR. STA. 91+39.00 =
C.L. EXECUTIVE CIRCLE STA. 10+00.00
∢ 86°00'00"

C.L. PROFESSIONAL PARK DR. STA. 94+81.06 =
C.L. PROFESSIONAL PARK DR. CUL-DE-SAC STA. 20+00.00
∢ 90°00'00"

C.L. PROFESSIONAL PARK DR. STA. 91+43.22 =
C.L. OFFICE PARK DR. STA. 10+00.00
∢ 77°00'00"

C.L. PROFESSIONAL PARK DR. STA. 100+00.00 =
C.L. HWY. 51 STA. 20+00.00
∢ 85°00'00"

STA. 99+54 CONSTRUCT
TYPE 4 WHEELCHAIR RAMP ON LT.
= 5.9 SQ. YD.

STA. 99+54 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 4.4 SQ. YD.

STA. 98+50 CONSTRUCT
DROP INLET ON LT. H=3'-6" W/ 4' EXT.
WITH 18"x46' PIPE OUTLET
TO DROP INLET AT STA. 98+00 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 46 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 46 LIN. FT.

HWY. 51 - PINE ST.
STA. 19+61 CONSTRUCT
TYPE 4 WHEELCHAIR RAMP ON LT.
= 9.5 SQ. YD.

HWY. 51 - PINE ST.
STA. 20+41 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 3.8 SQ. YD.

CONCRETE DITCH PAVING (TYPE B

STA.	STA.	SIDE	"W"	SQ. YDS.
93+00	94+44	RT. = 160 LIN. FT.	6'-0"	107
95+21	95+90	RT. = 112 LIN. FT.	6'-0"	75

STA. 92+05 CONSTRUCT
APPROACH ON RT. = 4 CU. YDS.

STA. 92+82 CONSTRUCT
APPROACH ON RT. = 8 CU. YDS.

STA. 92+22 CONSTRUCT
DROP INLET 26' RT. H=3'-0"
WITH 18"x39' PIPE OUTLET
TO DROP INLET AT STA. 92+62.27' RT.
TYPE E DROP INLET = 3'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 39 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 39 LIN. FT.

STA. 92+62 CONSTRUCT
DROP INLET 27' RT. H=4'-10"
WITH 18"x39' PIPE OUTLET
TO DROP INLET AT STA. 92+62 LT.
TYPE E DROP INLET = 3'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 39 LIN. FT.

STA. 97+50 CONSTRUCT
DROP INLET ON RT. H=5'-0" W/ 8' EXT.
WITH 18"x28' PIPE OUTLET
TO DROP INLET AT STA. 97+50 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 28 LIN. FT.

STA. 97+85 CONSTRUCT
DROP INLET ON RT. H=4'-6" W/ 8' EXT.
WITH 18"x31' PIPE OUTLET
TO DROP INLET AT STA. 97+50 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 31 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 31 LIN. FT.

STA. 98+15 CONSTRUCT
DROP INLET ON RT. H=4'-0" W/ 8' EXT.
WITH 18"x26' PIPE OUTLET
TO DROP INLET AT STA. 97+85 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 26 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 26 LIN. FT.

STA. 98+50 CONSTRUCT
DROP INLET ON RT. H=3'-6"
WITH 18"x31' PIPE OUTLET
TO DROP INLET AT STA. 98+15 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 31 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 31 LIN. FT.

PROFESSIONAL PARK DR.

rnfortner 6/28/2022 10:35:36 AM
WORKSPACE: AHTD
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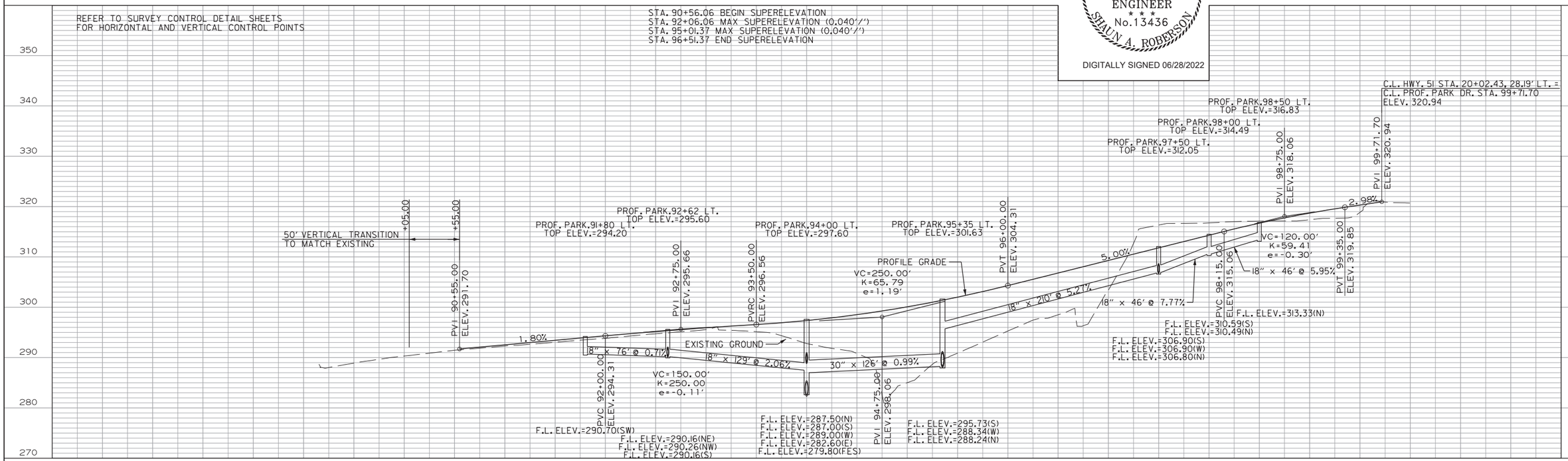
REVISED DATE:

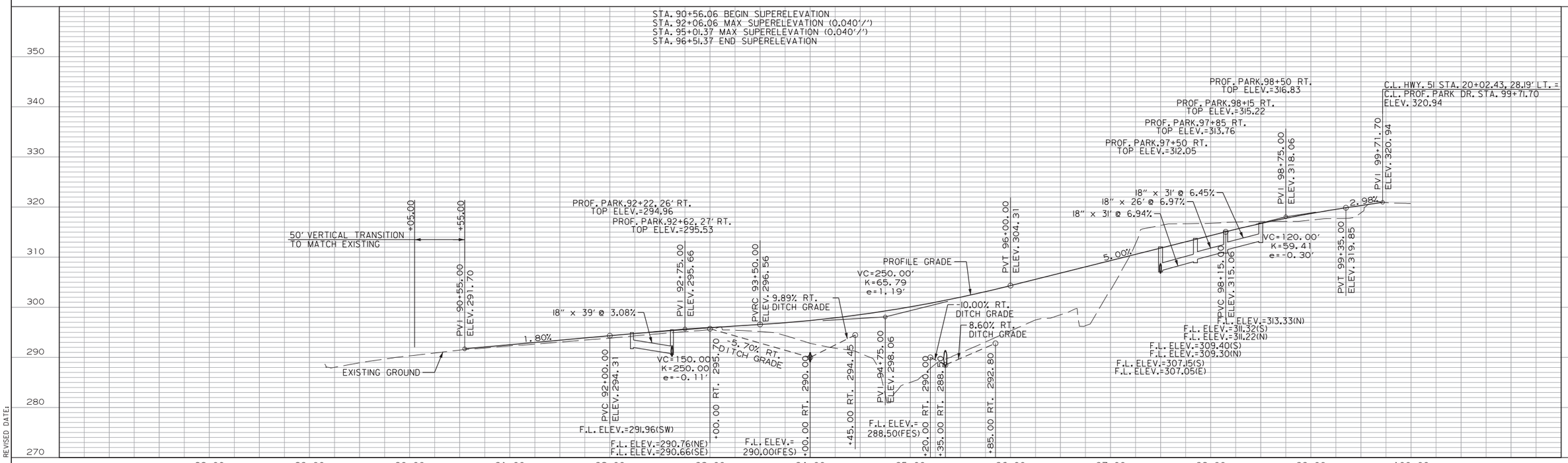
DATE REVISED	DATE FILMED	DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	070442	234	549
				PROFILE SHEET - PROFESSIONAL PARK DR.				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

PROFESSIONAL PARK DR. LT. SIDE PROFILE



PROFESSIONAL PARK DR. RT. SIDE PROFILE



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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	235	549
		PLAN SHEET - OFF. PK. DR./EXE. CR.				

STATE OF ARKANSAS
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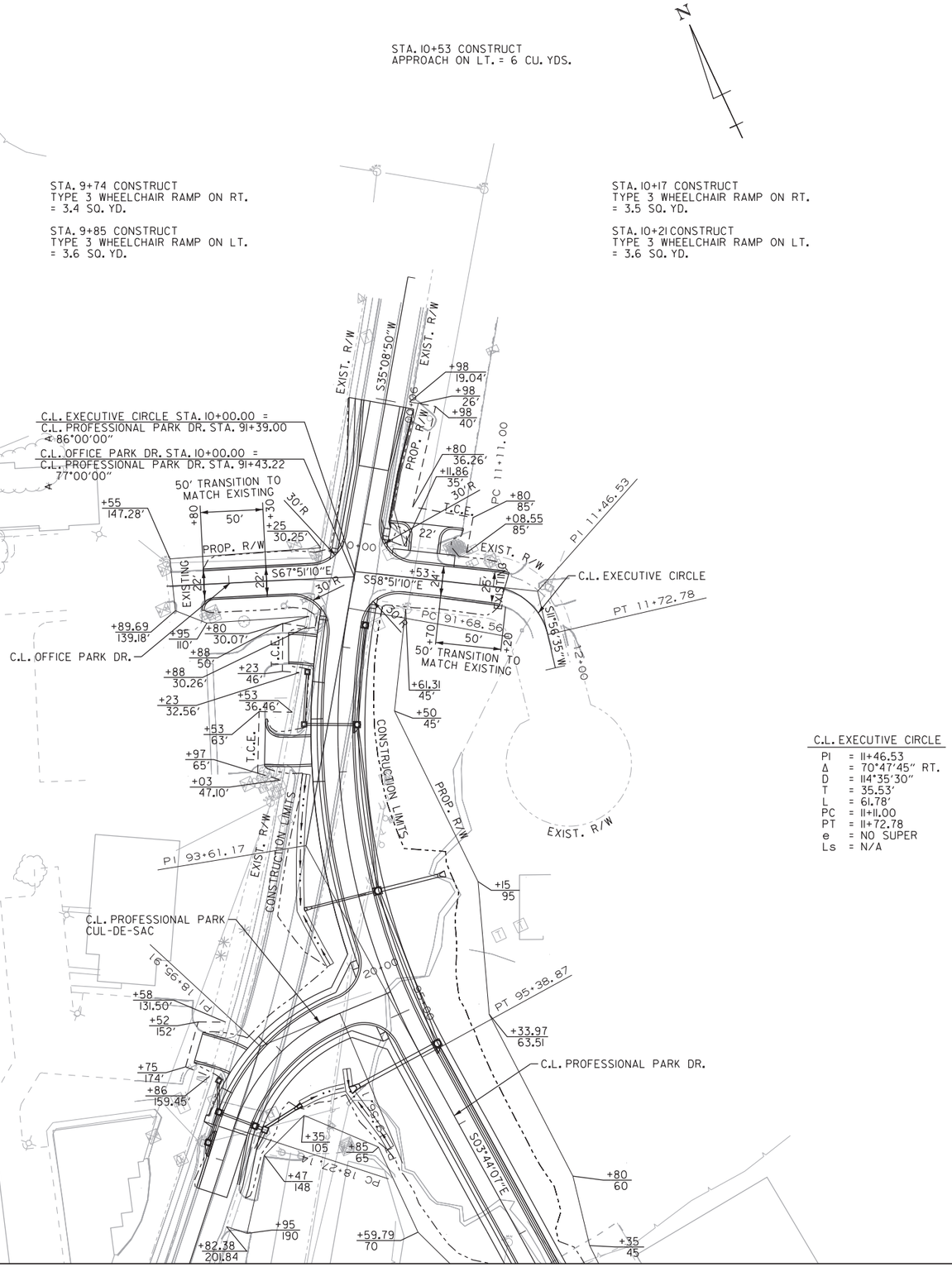
STA. 10+53 CONSTRUCT
APPROACH ON LT. = 6 CU. YDS.

STA. 9+74 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 3.4 SQ. YD.

STA. 9+85 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 3.6 SQ. YD.

STA. 10+17 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 3.5 SQ. YD.

STA. 10+21 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 3.6 SQ. YD.



C.L. EXECUTIVE CIRCLE

PI	= 11+46.53
Δ	= 70°47'45" RT.
D	= 114°35'30"
T	= 35.53'
L	= 61.78'
PC	= 11+11.00
PT	= 11+72.78
e	= NO SUPER
Ls	= N/A

OFFICE PARK DR./EXECUTIVE CIRCLE

rnfortner 6/28/2022 10:35:38 AM
WORKSPACE: AHTD
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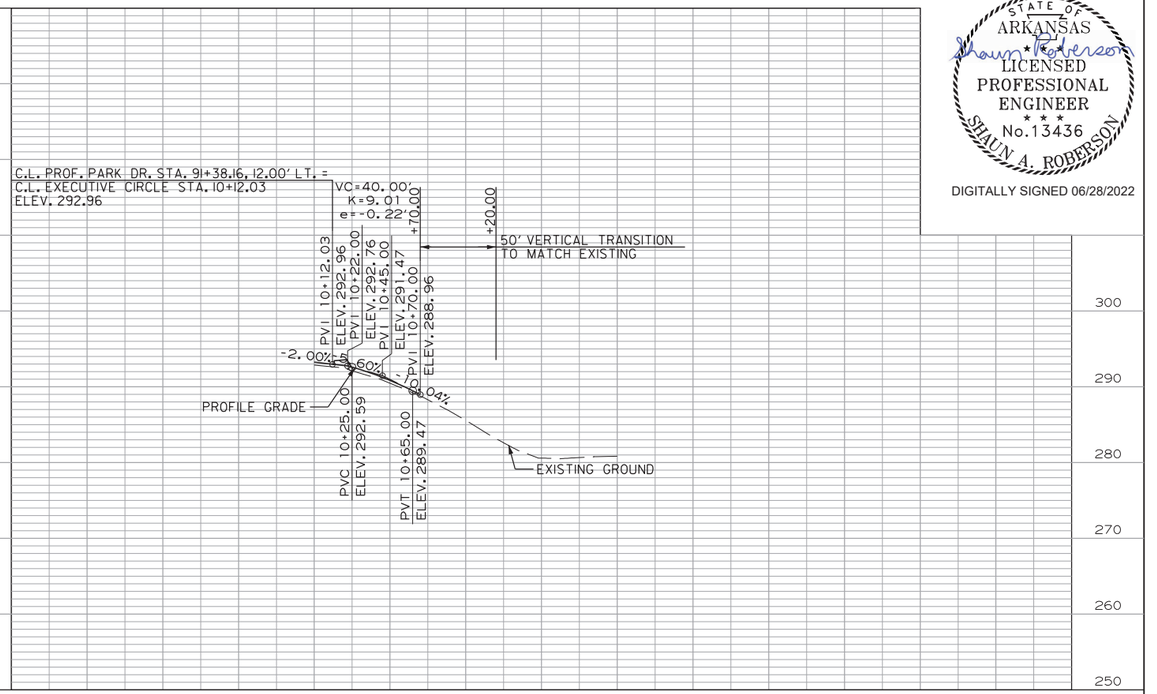
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	236	549
		PROFILE SHEET - OFF. PK. DR./EXE. CR.				

OFFICE PARK DR. LT. SIDE PROFILES

EXECUTIVE CIRCLE LT. SIDE PROFILES



STATE OF ARKANSAS
Shaun Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
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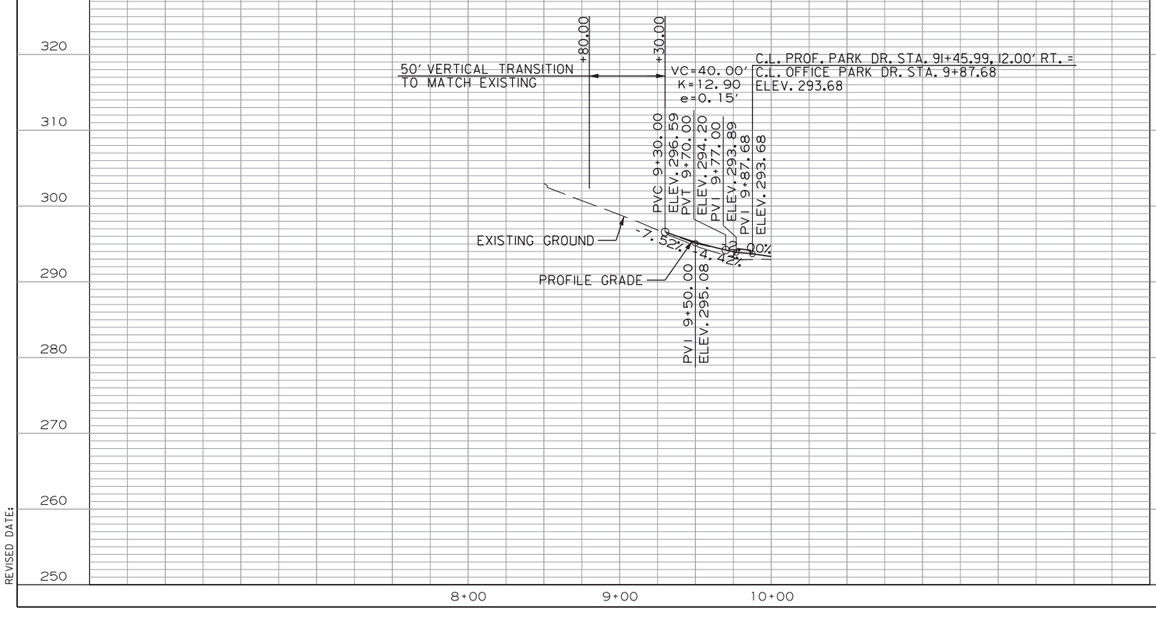
REFER TO SURVEY CONTROL DETAIL SHEETS
FOR HORIZONTAL AND VERTICAL CONTROL POINTS

OFFICE PARK DR. RT. SIDE PROFILES



EXECUTIVE CIRCLE RT. SIDE PROFILES

rnfortner 6/28/2022 10:35:39 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	237	549
		PLAN SHEET - PROF. PARK CUL-DE-SAC				

STATE OF ARKANSAS
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No.13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

REMOVAL AND DISPOSAL OF GUARDRAIL

STA.	STA.	SIDE	LIN. FT.
12+71	13+42	LT. & RT.	78

STA. 14+25 IN PLACE
18"X40' CM PIPE
RT. SIDE DRAIN
REMOVE AND INSTALL
18"x58' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPROACH = 102 CU. YDS.

CONCRETE DITCH PAVING (TYPE B)

STA.	STA.	SIDE	"W"	SQ. YDS.
13+70	14+00	RT. = 30 LIN. FT.	6'-0"	20

STA. 18+10 CONSTRUCT
DROP INLET ON LT. H=3'-7"
W/ DBL. 8' EXT. AND BACK OPENING
WITH 18"x22' PIPE OUTLET
TO DROP INLET AT STA. 18+35 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 22 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 22 LIN. FT.

STA. 18+35 CONSTRUCT
DROP INLET ON LT. H=4'-7"
WITH 24"x27' PIPE OUTLET
TO DROP INLET AT STA. 18+35 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
24" R.C. PIPE (CLASS IV)
(TYPE 3 BEDDING) = 27 LIN. FT.

STA. 18+55 CONSTRUCT
DROP INLET 27' LT. H=3'-0"
WITH 18"x22' PIPE OUTLET
TO DROP INLET AT STA. 18+35 LT.
TYPE E DROP INLET = 3'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 22 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 22 LIN. FT.

STA. 18+74 CONSTRUCT
APPROACH ON LT. = 14 CU. YDS.

C.L. PROFESSIONAL PARK DR. CUL-DE-SAC
PI = 14+87.84
Δ = 5°31'10" RT.
D = 10°00'00"
T = 27.62'
L = 55.19'
PC = 14+60.23
PT = 15+15.42
e = NO SUPER
Ls = N/A

C.L. PROFESSIONAL PARK DR. CUL-DE-SAC
PI = 18+95.91
Δ = 49°15'36" RT.
D = 38°11'50"
T = 68.77'
L = 128.96'
PC = 18+27.14
PT = 19+56.11
e = NO SUPER
Ls = N/A

STA. 18+35 CONSTRUCT
DROP INLET ON RT. H=5'-0"
WITH 24"x5' PIPE OUTLET
TO JUNCTION BOX AT STA. 18+35 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
24" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 5 LIN. FT.
24" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 5 LIN. FT.

STA. 18+35 CONSTRUCT
JUNCTION BOX ON RT. H=4'-6"
WITH 24"x15' PIPE INLET
FROM EX. PIPE RT.
AND 24"x34' PIPE OUTLET
TO FES RT.
TYPE E JUNCTION BOX = 4'x4'
24" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 15 LIN. FT.
24" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 15 LIN. FT.
24" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 34 LIN. FT.
24" FES = 1EACH

STA. 19+81 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 5.5 SQ. YD.

STA. 19+81 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 5.5 SQ. YD.

C.L. PROFESSIONAL PARK DR. STA. 91+43.22 =
C.L. OFFICE PARK DR. STA. 10+00.00
∢ 77°00'00"

C.L. PROFESSIONAL PARK DR. STA. 91+39.00 =
C.L. EXECUTIVE CIRCLE STA. 10+00.00
∢ 86°00'00"

C.L. PROFESSIONAL PARK DR. CUL-DE-SAC STA. 20+00.00 =
C.L. PROFESSIONAL PARK DR. STA. 94+81.06
∢ 90°00'00"

C.L. PROFESSIONAL PARK DR. STA. 100+00.00 =
C.L. HWY. 51 STA. 20+00.00
∢ 85°00'00"

C.L. OFFICE PARK DR.
C.L. EXECUTIVE CIRCLE
C.L. RED HILL RD. N.
C.L. HWY. 51 — PINE ST.
C.L. BYPASS
C.L. PROFESSIONAL PARK DR.
CUL-DE-SAC
EXIST. R/W
PROP. R/W
CONSTRUCTION LIMITS
T.C.E.
52' CURB TRANSITION
25' SHOULDER TRANSITION
N43°04'29"E
S35°08'50"W
S97°39'53"E
S03°44'01"E
N37°33'20"E
PI 14+87.84
PI 18+95.91
PI 93+61.17
PI 15+00
PI 11+46.53
PI 17+26.16
PI 21+08.12
PC 14+08.49
PC 14+85.19
PC 16+39.36
PC 18+27.14
PC 101+94.20
PC 11+11.00
PT 15+15.42
PT 15+61.04
PT 18+12.93
PT 19+87.49
PT 95+38.87
PT 91+68.56
PI 61+31.45
+72.78
+55 147.28'
+89.69 136.18'
+95 110'
+58 131.50
+52 152'
+86 159.45'
+75 174'
+70 51.04'
+50 32.73'
+92
+17
+73
+25
+74
+82.38 201.84'
+95 190'
+47 148'
+15 18.83'
+15 30'
+63.84 30'
+23 68'
+80 40'
+92 38.57'
+90.57 68.43'
+30 75'
+26 109'
+59.79 70'
+85 65'
+33.02 48'
+33.97 63.51'
+80 60'
+65 35'
+54.87 54.75'
+35 36'
+55 40'
+30 44'
+46.32 60.17'
+35 105'
+15 95'
+50 45'
+80 85'
+08.55 85'
+80 36.26'
+98 19.04'
+98 40'
+98 26'
+53 63'
+53 36.46'
+23 46'
+80 50'
+80 30.07'
+23 32.56'
+97 65'
+03 47.10'
+25 30.25'
50' R
30' R
20' R
15' R
28'
24'
22'
20.00
00.00
00.26
00.12

rnfortner 6/28/2022 10:35:40 AM
WORKSPACE: AHTD
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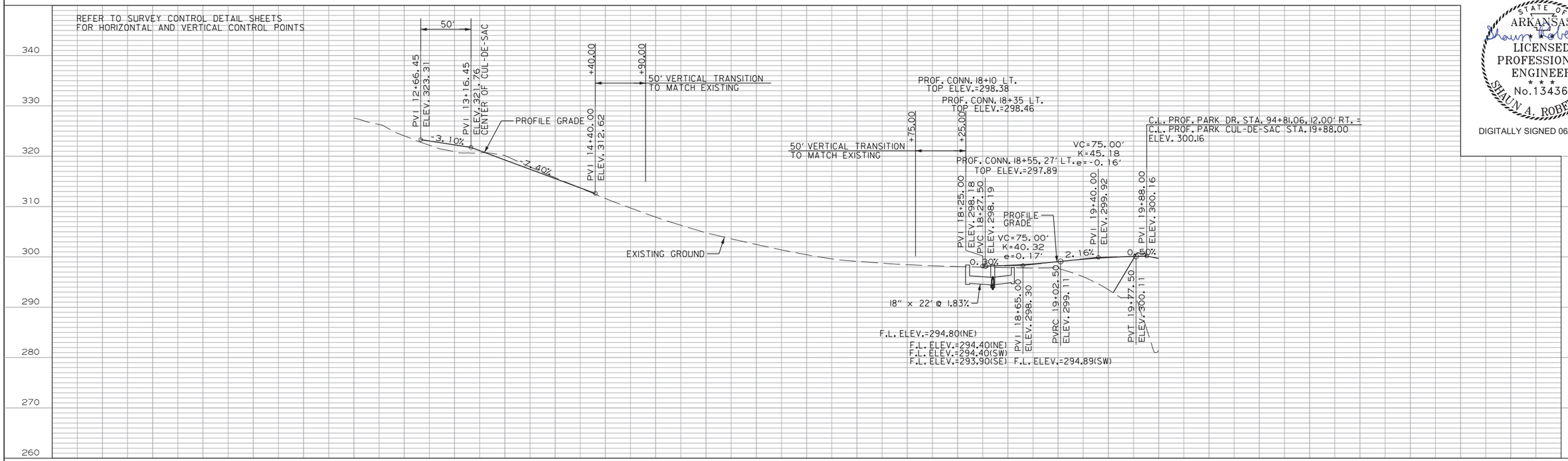
REVISED DATE:

PROFESSIONAL PARK CUL-DE-SAC

DATE REVISED	DATE FILMED	DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	070442	238	549
				PROFILE SHEET - PROF. PARK CUL-DE-SAC				

PROFESSIONAL PARK CUL-DE-SAC LT. SIDE PROFILE



STATE OF ARKANSAS
Shaun A. Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
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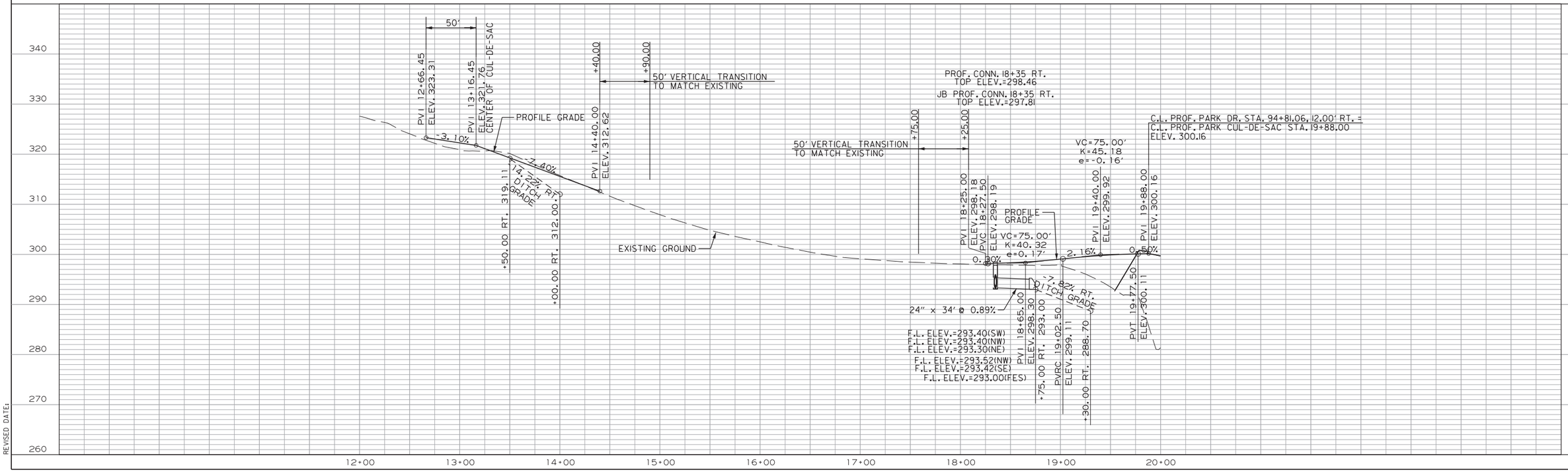
PROFESSIONAL PARK CUL-DE-SAC RT. SIDE PROFILE



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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	239	549
		PLAN SHEET - RED HILL RD. NORTH				

STATE OF ARKANSAS
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REMOVAL AND DISPOSAL OF FENCE
(STATIONING ALONG C.L. RED HILL RD. N.)

STA.	STA.	SIDE	UNIT
21+91	23+64	LT.	183 LIN. FT.
30+27	30+42	RT.	16 LIN. FT.

STA. 20+50 CONSTRUCT
DROP INLET ON RT. H=3'-6"
WITH 18"x89' PIPE OUTLET
TO DROP INLET AT STA. 21+50 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 89 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 89 LIN. FT.

STA. 21+50 CONSTRUCT
DROP INLET ON RT. H=8'-0" W/ 4' EXT.
WITH 18"x28' PIPE OUTLET
TO FES RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 28 LIN. FT.
18" FES = 1EACH

C.L. RED HILL RD. N.	
PI	= 21+67.44
Δ	= 53°42'47" RT.
D	= 22°00'00"
T	= 131.88'
L	= 244.15'
PC	= 20+35.56
PT	= 22+79.71
e	= 0.040'/'
Ls	= 150'

C.L. RED HILL RD. N.	
PI	= 26+88.64
Δ	= 50°00'47" RT.
D	= 15°00'00"
T	= 178.17'
L	= 333.42'
PC	= 25+10.47
PT	= 28+43.89
e	= NO SUPER
Ls	= N/A

C.L. RED HILL RD. NORTH STA. 20+00.00 =
C.L. BYPASS STA. 115+00.00
Δ 90°00'00"

C.L. BYPASS STA. 100+00.00 =
C.L. HWY. 51 STA. 20+00.00
Δ 85°00'00"

RED HILL ROAD NORTH

rnfortner 6/28/2022 10:35:42 AM
WORKSPACE: AHTD
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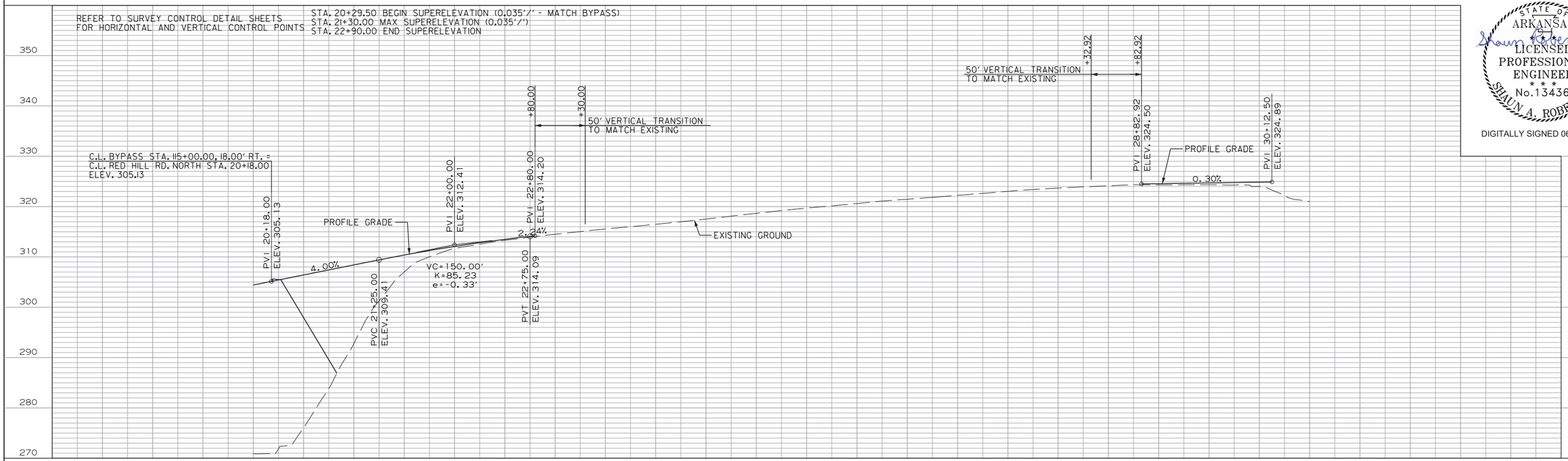
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	070442	240	549
				PROFILE SHEET - RED HILL RD. NORTH				

RED HILL RD. NORTH LT. SIDE PROFILE



STATE OF ARKANSAS
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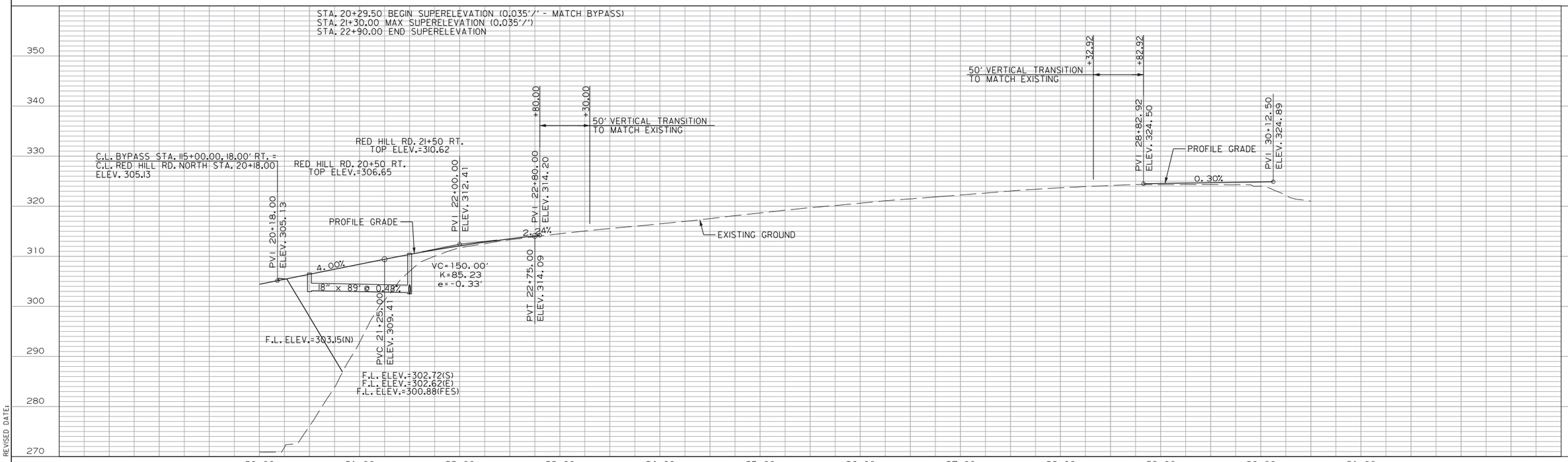
RED HILL RD. NORTH RT. SIDE PROFILE



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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	241	549
		PLAN AND PROFILE - RED HILL RD. SOUTH				

REMOVAL AND DISPOSAL OF FENCE
(STATIONING ALONG C.L. RED HILL RD. S.)

STA.	STA.	SIDE	UNIT
14+78	15+52	LT.	81 LIN. FT.

REMOVAL AND DISPOSAL OF GUARDRAIL

STA.	STA.	SIDE	LIN. FT.
15+42	16+91	LT.	162

C.L. RED HILL RD. S.
PI = 17+65.51
Δ = 89°18'48" RT.
D = 25°00'00"
T = 226.45'
L = 357.25'
PC = 15+39.06
PT = 18+96.31
e = 0.100'/'
Ls = 250'

C.L. RED HILL RD. SOUTH STA. 20+00.00 =
C.L. BYPASS STA. 141+50.00
∠ 90°00'00"

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RED HILL ROAD SOUTH

STA. 14+67.68 BEGIN SUPERELEVATION
STA. 17+17.68 MAX SUPERELEVATION (0.100'/')
STA. 18+03.00 MAX SUPERELEVATION (0.100'/')
STA. 19+70.50 END SUPERELEVATION (0.033'/' - MATCH BYPASS)

50' VERTICAL TRANSITION TO MATCH EXISTING

PVI 14+65.00 ELEV. 318.96
PVC 15+00.00 ELEV. 319.24
PVI 15+75.00 ELEV. 319.84
PVT 16+50.00 ELEV. 318.57
PVC 17+25.00 ELEV. 317.29
PVI 18+00.00 ELEV. 316.02
PVT 18+75.00 ELEV. 311.50
PVI 19+82.00 ELEV. 305.07

VC=150.00' K=60.00 e=-0.47'
VC=150.00' K=34.80 e=-0.81'

0.80% -1.70% -6.01%

PROFILE GRADE
EXISTING GROUND

C.L. BYPASS STA. 141+50.00, 18.00' RT. =
C.L. RED HILL RD. SOUTH STA. 19+82.00
ELEV. 305.07

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WORKSPACE: AHTD
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DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	242	549

PLAN AND PROFILE - 26TH STREET SOUTH

CONCRETE DITCH PAVING (TYPE B)

STA.	STA.	SIDE	"W"	SQ. YDS.
14+50	18+90	LT. = 457 LIN. FT.	6'-0"	305

STA. 12+98 IN PLACE
18"X30' C.M. PIPE CULVERT
PLUG AND ABANDON

STA. 114+10 CONSTRUCT
54" X 36' R.C. PIPE CULVERT
CLASS V (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 86 CFS DA = 16 ACRES
54" R.C. PIPE = 36 LIN. FT.
54" F.E.S. = 2 EA.

STA. 12+61 INSTALL
18" X 38' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPROACH = 35 CU. YDS.

C.L. 26TH ST. STA. 20+00.00 =
C.L. BYPASS STA. 182+55.00
Δ 80°00'00"

C.L. 26TH ST. S.
PI = 16+07.78
Δ = 10°23'48" RT.
D = 5°00'00"
T = 104.25'
L = 207.93'
PC = 15+03.53
PT = 17+11.46
e = 0.040'/'
Ls = 200'

STA. 13+53.53 BEGIN SUPERELEVATION
STA. 15+53.53 MAX SUPERELEVATION (0.040'/')
STA. 16+61.46 MAX SUPERELEVATION (0.040'/')
STA. 18+61+46 END SUPERELEVATION

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26TH STREET SOUTH

REFER TO SURVEY CONTROL DETAIL SHEETS
FOR HORIZONTAL AND VERTICAL CONTROL POINTS

C.L. BYPASS STA. 182+51.86, 18.00' RT. =
C.L. 26TH ST. SOUTH STA. 19+81.72
ELEV. 231.26

50' VERTICAL TRANSITION TO MATCH EXISTING

PVI 12+40.00 ELEV. 197.24
PVC 12+45.00 ELEV. 197.26
PVI 14+25.00 ELEV. 197.89
PVC 16+85.00 ELEV. 223.89
PVT 16+05.00 ELEV. 215.89
PVI 18+25.00 ELEV. 237.89
PVT 19+65.00 ELEV. 231.97
PVT 19+81.72 ELEV. 231.26

VC=360.00'
K=37.31
e=4.34'

VC=280.00'
K=19.68
e=-4.98'

PROFILE GRADE
EXISTING GROUND

0.35%
10.00%
0.30% LT. DITCH GRADE
0.30% RT. DITCH GRADE
1.43% LT. DITCH GRADE

+00.00 LT. 194.87
+00.00 RT. 193.94
+10.00 LT. 194.54
+10.00 RT. 194.27
+50.00 LT. 195.11

12+00 13+00 14+00 15+00 16+00 17+00 18+00 19+00 20+00

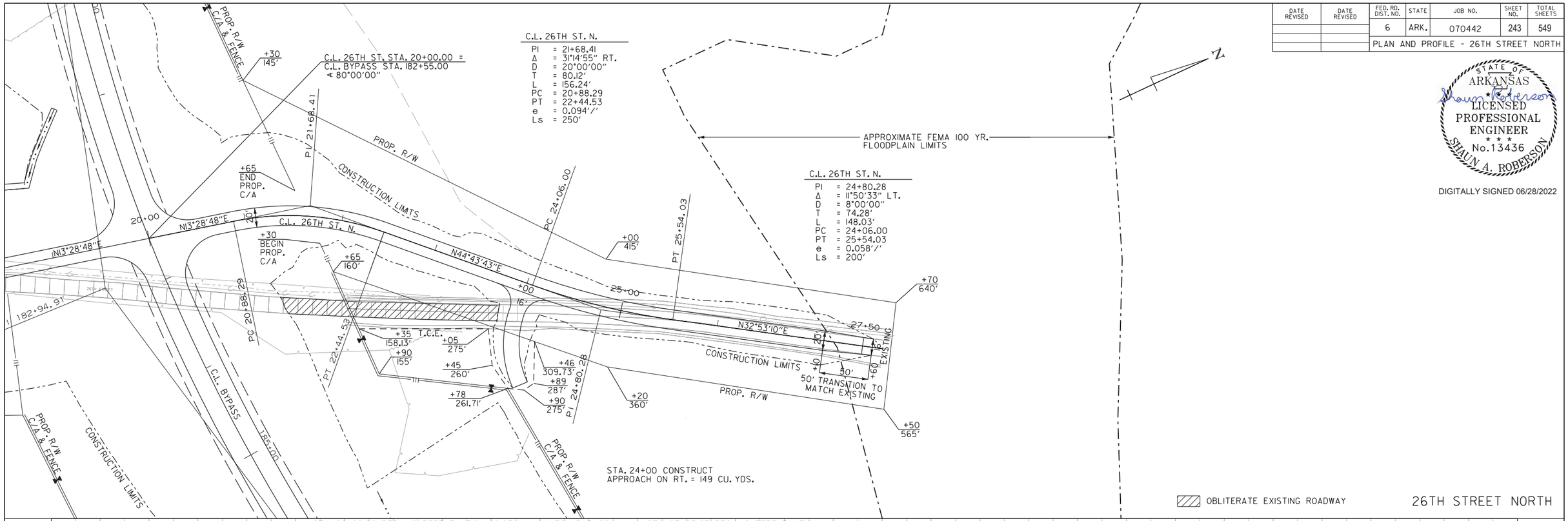
170 180 190 200 210 220 230 240 250 260

rnfortner 6/28/2022 10:35:44 AM
WORKSPACE: AHTD
L:\2017\170\7515 - AHTD Arkadelphia Bypass\Drawings\r070442_PP_2L_26TH South.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	243	549
		PLAN AND PROFILE - 26TH STREET NORTH				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

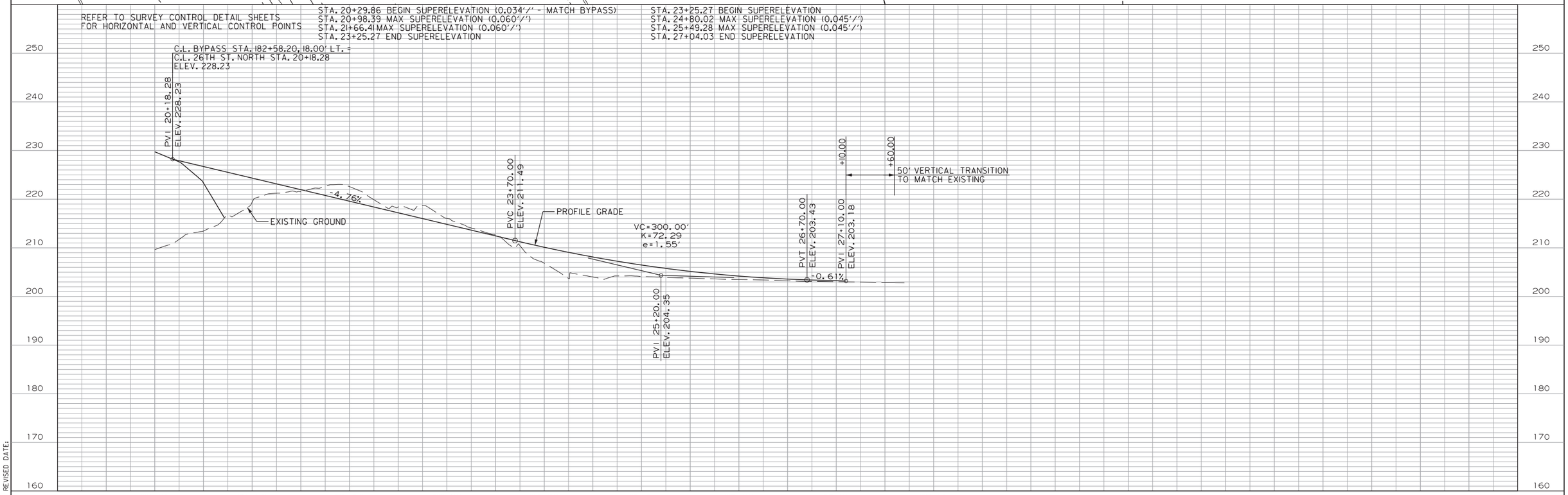
DIGITALLY SIGNED 06/28/2022



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL POINTS

STA. 20+29.86 BEGIN SUPERELEVATION (0.034'/' - MATCH BYPASS)
STA. 20+98.39 MAX SUPERELEVATION (0.060'/')
STA. 21+66.41 MAX SUPERELEVATION (0.060'/')
STA. 23+25.27 END SUPERELEVATION

STA. 23+25.27 BEGIN SUPERELEVATION
STA. 24+80.02 MAX SUPERELEVATION (0.045'/')
STA. 25+49.28 MAX SUPERELEVATION (0.045'/')
STA. 27+04.03 END SUPERELEVATION



rnfortner 6/28/2022 10:35:44 AM
WORKSPACE: AHTD
L:\20\17\07\15 - AHTD Arkadelphia Bypass\Drawings\r070442_PP_20_26TH North.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	244	549
		PLAN SHEET - WALNUT ST. & HWY. 67 CONN.				

STATE OF ARKANSAS
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C.L. HWY. 67 CONNECTOR
PI = 12+43.54
Δ = 5°46'40" LT.
D = 1°30'00"
T = 192.75'
L = 385.18'
PC = 10+50.79
PT = 14+35.97
e = NO SUPER
Ls = N/A

N

APPROXIMATE FEMA 100 YR. FLOODPLAIN LIMITS

CONSTRUCTION LIMITS

PROP. R/W

HWY. 67

EXIST. R/W

C.L. WALNUT ST.

C.L. HWY. 67 CONNECTOR STA. 10+00.00 = C.L. HWY. 67 STA. 118+60.07 ∢ 80°00'00"

C.L. WALNUT ST. STA. 10+00.00 = C.L. HWY. 67 STA. 118+57.64 ∢ 76°30'00"

BRIDGE NO. 19035 IN PLACE
31'-0" X 25'-4" BRIDGE CONSISTING OF A CONCRETE SUPERSTRUCTURE SUPPORTED BY A CONCRETE SUBSTRUCTURE. REMOVE AS EXISTING BRIDGE STRUCTURE (SITE NO. 2) = 1.00 LUMP SUM

STA. 12+74 CONSTRUCT
APPROACH ON LT. = 11 CU. YDS.

FENCING

STA.	STA.	SIDE	6' CHAIN LINK FENCE	14' GATE
11+23	12+18	LT.	109 LIN. FT.	1 EACH

REMOVAL AND DISPOSAL OF FENCE (STATIONING ALONG C.L. HWY. 67 CONNECTOR)

STA.	STA.	SIDE	UNIT
10+39	12+18	LT.	231 LIN. FT.
11+24	11+27	LT.	73 LIN. FT.

STA. 7+37 CONSTRUCT
APPROACH ON LT. = 8 CU. YDS.

STA. 8+31 CONSTRUCT
APPROACH ON LT. = 13 CU. YDS.

STA. 7+12 CONSTRUCT
DROP INLET ON LT. H=3'-6" W/ 8' EXT.
WITH 18"x84' PIPE OUTLET
TO DROP INLET AT STA. 8+00 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 84 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 84 LIN. FT.

STA. 8+00 CONSTRUCT
DROP INLET ON LT. H=3'-6" W/ 8' EXT.
WITH 18"x131' PIPE OUTLET
TO DROP INLET AT STA. 9+35 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 131 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 131 LIN. FT.

STA. 9+35 CONSTRUCT
DROP INLET ON LT. H=8'-0"
WITH 18"x33' PIPE OUTLET
TO PROP R.C. BOX
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 33 LIN. FT.

STA. 9+58 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 3.3 SQ. YD.

STA. 9+58 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 4.5 SQ. YD.

CONCRETE WALKS (TYPE SPECIAL)

STA.	STA.	SIDE	"W"	LIN. FT.	SQ. YD.
7+15	8+87	RT.	6'-0"	172	115

STA. 7+12 CONSTRUCT
DROP INLET ON RT. H=3'-6" W/ 8' EXT.
WITH 18"x84' PIPE OUTLET
TO DROP INLET AT STA. 8+00 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 84 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 84 LIN. FT.

STA. 8+00 CONSTRUCT
DROP INLET ON RT. H=3'-6" W/ 8' EXT.
WITH 18"x131' PIPE OUTLET
TO DROP INLET AT STA. 9+35 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 131 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 131 LIN. FT.

STA. 9+35 CONSTRUCT
DROP INLET ON RT. H=5'-3" W/ 4' EXT.
WITH 18"x27' PIPE OUTLET
TO DROP INLET AT STA. 9+35 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 27 LIN. FT.

STA. 11+30 CONSTRUCT
DROP INLET ON LT. H=9'-6"
WITH 18"x39' PIPE OUTLET
TO DROP INLET AT STA. 11+30 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 39 LIN. FT.

STA. 12+45 CONSTRUCT
DROP INLET ON LT. H=3'-6"
WITH 18"x110' PIPE OUTLET
TO DROP INLET AT STA. 11+30 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 110 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 110 LIN. FT.

STA. 11+30 CONSTRUCT
DROP INLET ON RT. H=9'-10" W/ 8' EXT.
WITH 18"x113' PIPE OUTLET
TO BOX CULVERT AT STA. 11+00 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 16 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 16 LIN. FT.

STA. 12+45 CONSTRUCT
DROP INLET ON RT. H=3'-6"
WITH 18"x111' PIPE OUTLET
TO DROP INLET AT STA. 11+30 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 111 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 111 LIN. FT.

STA. 11+00 CONSTRUCT RELIEF
QUINT. 6' X 4' X 160' R.C. BOX CULVERT
WITH 31 WINGS LT. AND RT.
Q50 = 95 CFS DA = 819 ACRES
SPAN = 33'-8"

STA. 11+66 CONSTRUCT
APPROACH ON RT. = 253 CU. YDS.

STA. 12+74 CONSTRUCT
APPROACH ON RT. = 36 CU. YDS.

WALNUT STREET/HWY. 67 CONNECTOR

rnfortner 6/28/2022 10:35:45 AM
WORKSPACE: AHTD
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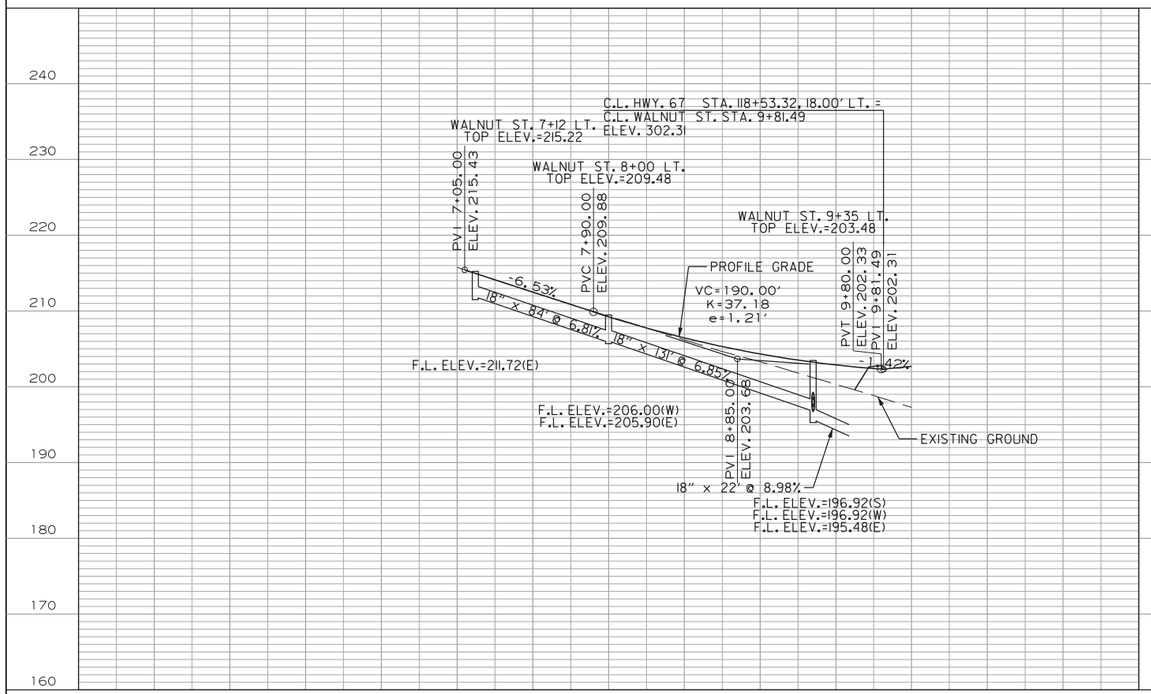
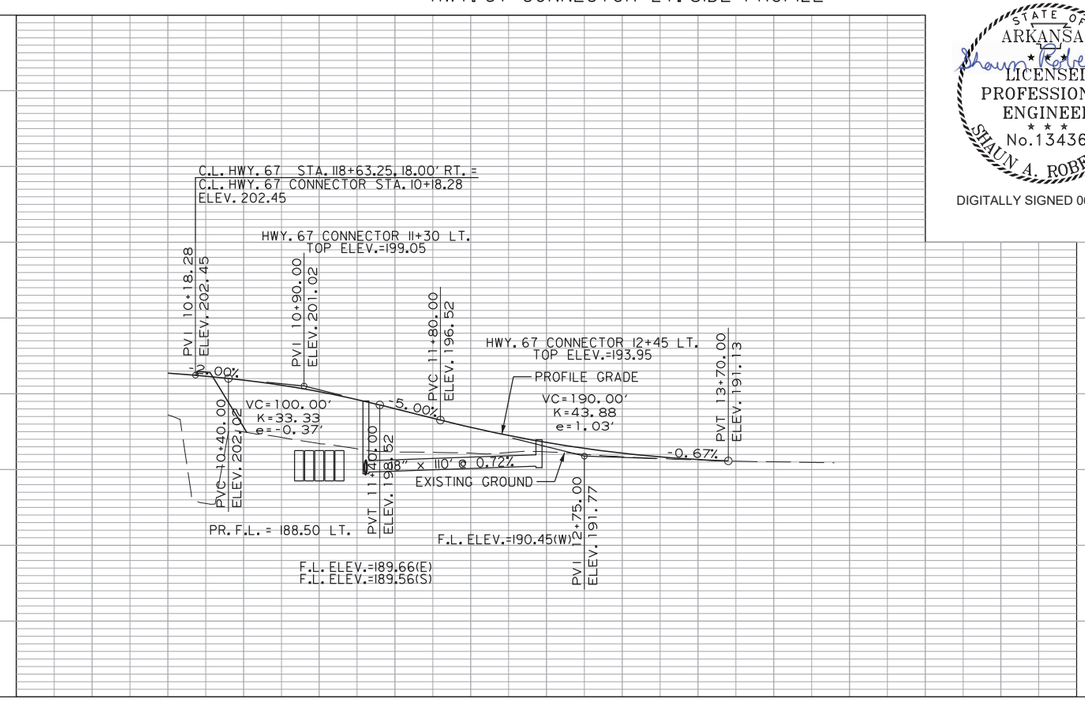
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	245	549
		PROFILE SHEET - WALNUT ST. & HWY. 67 CONN.				

WALNUT ST. LT. SIDE PROFILE



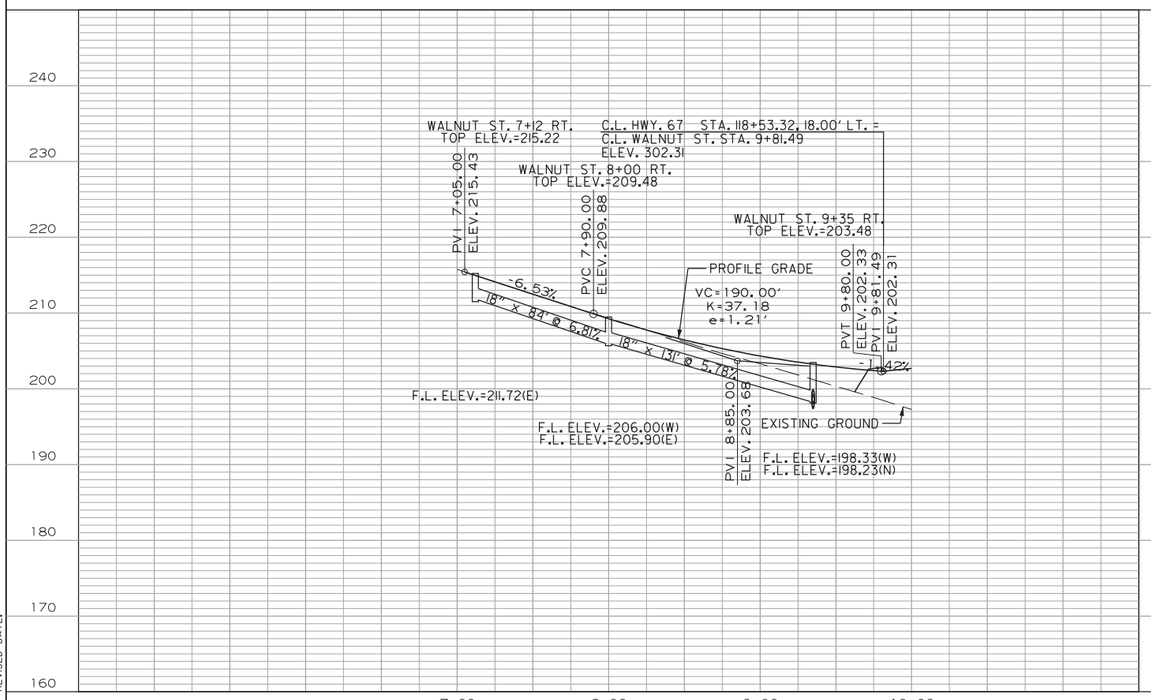
HWY. 67 CONNECTOR LT. SIDE PROFILE



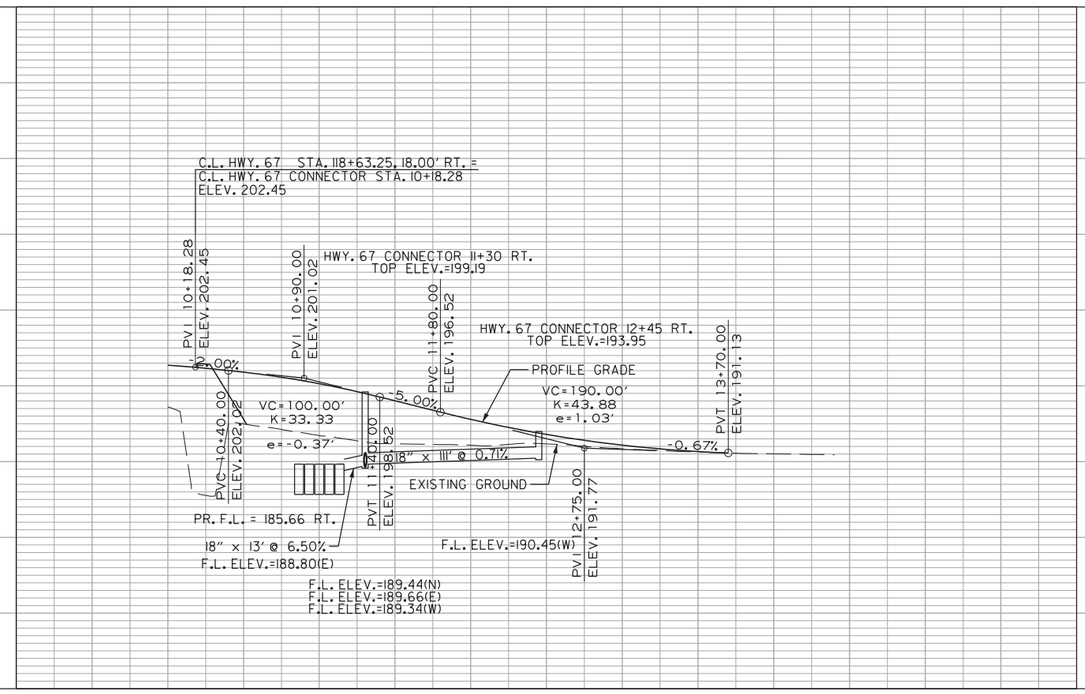
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON
DIGITALLY SIGNED 06/28/2022

REFER TO SURVEY CONTROL DETAIL SHEETS
FOR HORIZONTAL AND VERTICAL CONTROL POINTS

WALNUT ST. RT. SIDE PROFILE



HWY. 67 CONNECTOR RT. SIDE PROFILE



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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	246	549
		PLAN SHEET - CLAY ST. WEST AND EAST				

STATE OF ARKANSAS
Shaun A. Roberson
LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON

DIGITALLY SIGNED 06/28/2022

STA. 18+90 CONSTRUCT
DROP INLET ON LT. H=4'-0" W/ 8' EXT.
WITH 18"x56' PIPE OUTLET
TO DROP INLET AT STA. 19+50 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 56 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 56 LIN. FT.

STA. 19+50 CONSTRUCT
DROP INLET ON LT. H=8'-6" W/ 4' EXT.
WITH 36"x11' PIPE INLET FROM FES LT.
AND 36"x31' PIPE OUTLET
TO DROP INLET AT STA. 19+50 RT.
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 5'x3'
36" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 44 LIN. FT.
36" FES = 1EACH

STA. 20+50 CONSTRUCT
JUNCTION BOX ON LT. H=14'-3"
WITH 30"x12' PIPE INLET FROM FES LT.
AND 48"x36' PIPE OUTLET
TO DROP INLET AT STA. 20+50 RT.
TYPE ST JUNCTION BOX = 5'x5'
30" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 12 LIN. FT.
48" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 36 LIN. FT.
30" FES = 1EACH

STA. 20+83 CONSTRUCT
DROP INLET 37' LT. H=10'-2"
WITH 36"x10' PIPE OUTLET
TO DROP INLET AT STA. 20+83 LT.
AND CONNECT TO EX. R.C. PIPE
TYPE ST DROP INLET = 3'x5'
36" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 10 LIN. FT.
36" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 10 LIN. FT.

STA. 20+83 CONSTRUCT
DROP INLET ON LT. H=13'-2" W/ 4' EXT.
WITH 42"x28' PIPE OUTLET
TO DROP INLET AT STA. 20+50 LT.
TYPE C DROP INLET = 5'x5'
42" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 28 LIN. FT.
42" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 28 LIN. FT.

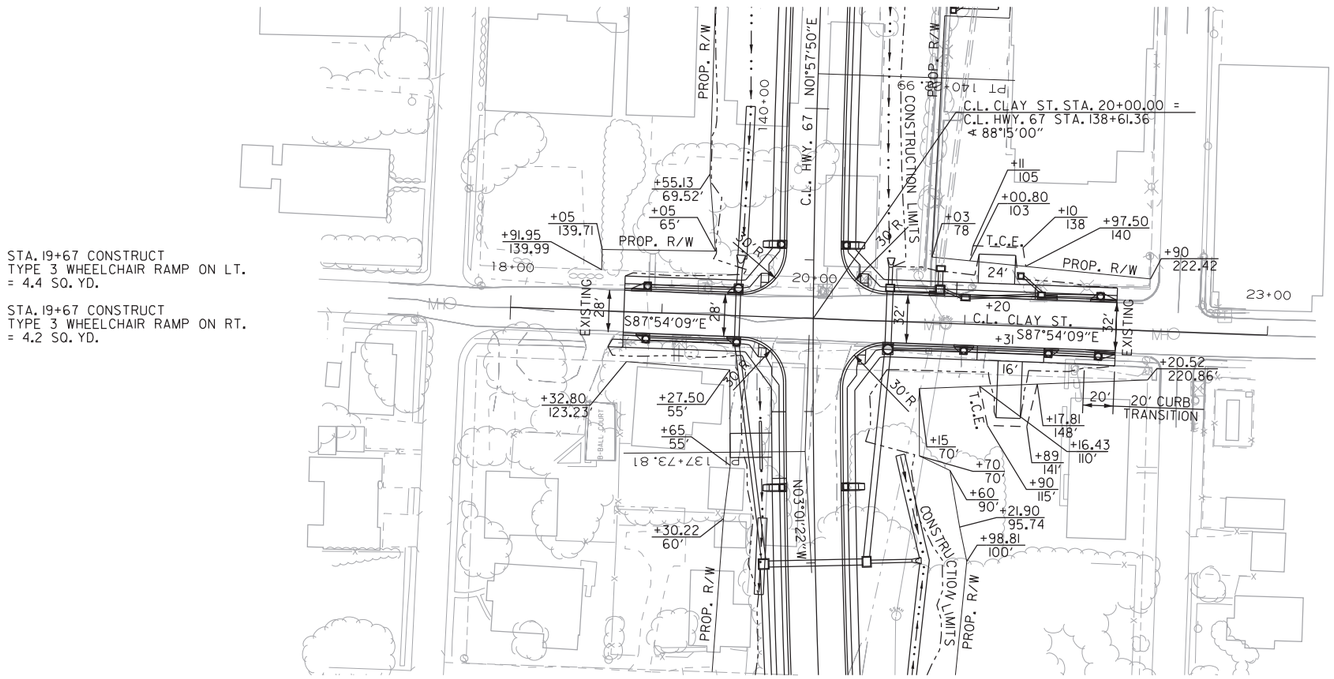
STA. 21+00 CONSTRUCT
DROP INLET 33' LT. H=5'-3"
WITH 18"x13' PIPE OUTLET
TO DROP INLET AT STA. 20+83 LT.
TYPE ST DROP INLET = 3'x5'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 13 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 13 LIN. FT.

STA. 21+36 CONSTRUCT
DROP INLET 33' LT. H=3'-0"
WITH 18"x16' PIPE OUTLET
TO DROP INLET AT STA. 21+50 LT.
TYPE ST DROP INLET = 3'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 16 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 16 LIN. FT.

STA. 21+50 CONSTRUCT
DROP INLET ON LT. H=4'-6" W/ 8' EXT.
WITH 18"x46' PIPE OUTLET
TO DROP INLET AT STA. 21+00 LT.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 46 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 46 LIN. FT.

STA. 21+89 CONSTRUCT
DROP INLET ON LT. H=4'-0" W/ 8' EXT.
WITH 18"x35' PIPE OUTLET
TO DROP INLET AT STA. 21+50 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 35 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 35 LIN. FT.

STA. 21+20 CONSTRUCT
APPROACH ON LT. = 5 CU. YDS.



C.L. HWY. 67

PI	= 137+73.81
Δ	= 4°59'12" RT.
D	= 1°00'00"
T	= 249.49'
L	= 498.67'
PC	= 135+24.32
PT	= 140+22.99
e	= NO SUPER
Ls	= N/A

STA. 19+67 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 4.4 SQ. YD.

STA. 19+67 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 4.2 SQ. YD.

STA. 20+33 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 4.2 SQ. YD.

STA. 20+33 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 4.4 SQ. YD.

STA. 21+31 CONSTRUCT
APPROACH ON RT. = 13 CU. YDS.

STA. 18+90 CONSTRUCT
DROP INLET ON RT. H=4'-0" W/ 4' EXT.
WITH 18"x56' PIPE OUTLET
TO DROP INLET AT STA. 19+50 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 56 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 56 LIN. FT.

STA. 19+50 CONSTRUCT
DROP INLET ON RT. H=8'-10" W/ 4' EXT.
WITH 36"x143' PIPE OUTLET
TO JUNCTION BOX AT
C.L. HWY. 67 STA. 137+00 LT.
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 5'x4'
36" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 143 LIN. FT.
36" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 143 LIN. FT.

STA. 20+50 CONSTRUCT
DROP INLET ON RT. H=14'-8"
WITH 48"x137' PIPE OUTLET
TO JUNCTION BOX AT
C.L. HWY. 67 STA. 137+00 RT.
TYPE MO DROP INLET = 6' DIA.
TYPE C DROP INLET = 6'x5'
48" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 137 LIN. FT.
48" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 137 LIN. FT.

STA. 21+00 CONSTRUCT
DROP INLET ON RT. H=5'-9"
W/ DBL. 4' EXT.
WITH 18"x45' PIPE OUTLET
TO DROP INLET AT STA. 20+50 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 45 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 45 LIN. FT.

STA. 21+56 CONSTRUCT
DROP INLET ON RT. H=4'-7" W/ 4' EXT.
WITH 18"x52' PIPE OUTLET
TO DROP INLET AT STA. 21+00 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 52 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 52 LIN. FT.

STA. 21+89 CONSTRUCT
DROP INLET ON RT. H=4'-0" W/ 8' EXT.
WITH 18"x29' PIPE OUTLET
TO DROP INLET AT STA. 21+56 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 29 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 29 LIN. FT.

CLAY ST.

rnfortner 6/28/2022 10:35:47 AM
WORKSPACE: AHTD
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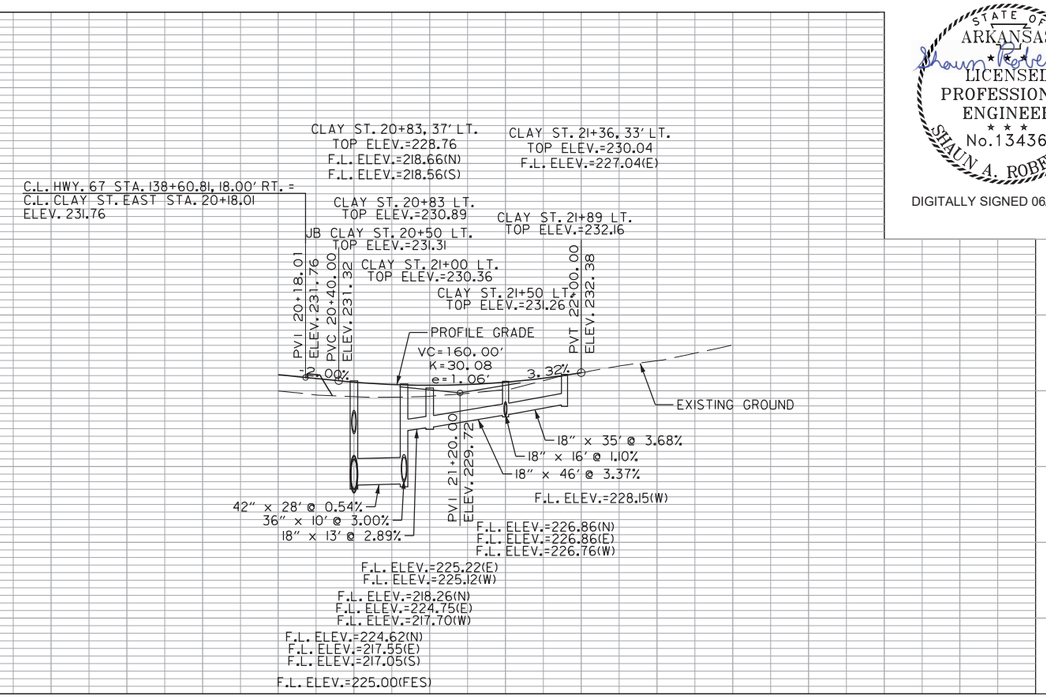
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	247	549
		PROFILE SHEET - CLAY ST. & MAIN ST.				

CLAY ST. WEST LT. SIDE PROFILE

CLAY ST. EAST LT. SIDE PROFILE



STATE OF ARKANSAS
Shaun A. Roberson
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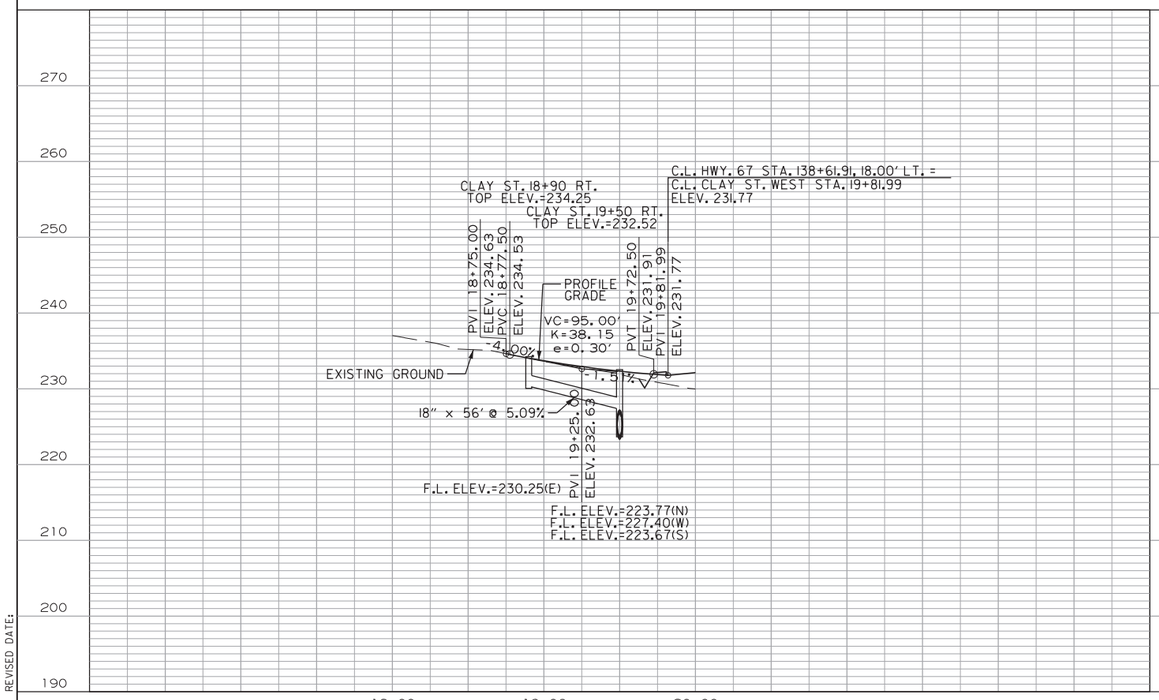
No.13436
SHAUN A. ROBERSON

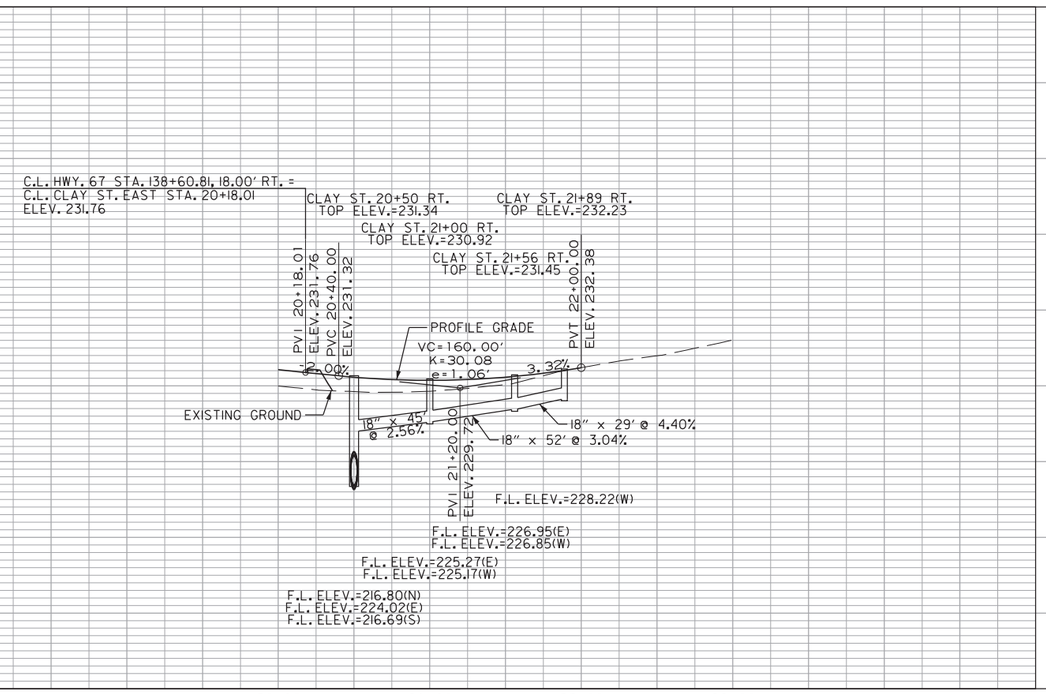
DIGITALLY SIGNED 06/28/2022

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL POINTS

CLAY ST. WEST RT. SIDE PROFILE



CLAY ST. EAST RT. SIDE PROFILE



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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	248	549
		PLAN SHEET - MAIN ST. WEST AND EAST				

STA. 29+00 CONSTRUCT
DROP INLET ON LT. H=4'-0" W/ 8' EXT.
WITH 18"x54' PIPE OUTLET
TO DROP INLET AT STA. 29+58 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 54 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 54 LIN. FT.

STA. 29+58 CONSTRUCT
DROP INLET ON LT. H=6'-5"
WITH 44"x27"x35' ARCH PIPE OUTLET
TO DROP INLET AT STA. 29+55 RT.
TYPE ST DROP INLET = 4'x5'
44"x27" R.C. ARCH PIPE (CLASS III)
(TYPE 3 BEDDING) = 35 LIN. FT.

STA. 30+45 CONSTRUCT
24" x 70' R.C. PIPE CULVERT
W/ FES LT. & RT.
24" R.C. PIPE (CLASS IV)
(TYPE 3 BEDDING) = 70 LIN FT.
24" FES = 2 EACH

STA. 31+05 CONSTRUCT
DROP INLET ON LT. H=9'-0" W/ 8' EXT.
WITH 36"x36' PIPE OUTLET
TO DROP INLET AT STA. 31+05 RT.
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 5'x4'
36" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 36 LIN. FT.

STA. 31+25 CONSTRUCT
DROP INLET 40' LT. H=3'-0"
WITH 18"x17' PIPE OUTLET
TO JUNCTION BOX AT STA. 31+30 LT.
TYPE ST DROP INLET = 3'x2'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 17 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 17 LIN. FT.

STA. 31+30 CONSTRUCT
JUNCTION BOX 20' LT. H=8'-0"
WITH 36"x21' PIPE OUTLET
TO DROP INLET AT STA. 31+05 LT.
TYPE ST DROP INLET = 4'x4'
36" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 21 LIN. FT.
36" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 21 LIN. FT.

STA. 31+30 CONSTRUCT
DROP INLET ON LT. H=6'-0"
WITH 18"x4' PIPE OUTLET
TO JUNCTION BOX AT STA. 31+30 LT.
TYPE ST DROP INLET = 3'x5'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 4 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 4 LIN. FT.

STA. 31+50 CONSTRUCT
DROP INLET 30' LT. H=3'-0"
WITH 18"x25' PIPE OUTLET
TO DROP INLET AT STA. 31+25, 40' LT.
TYPE ST DROP INLET = 3'x2'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 25 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 25 LIN. FT.

STA. 32+00 CONSTRUCT
DROP INLET ON LT. H=5'-2" W/ 4' EXT.
WITH 36"x66' PIPE OUTLET
TO JUNCTION BOX AT STA. 31+30 LT.
AND CONNECT TO EX. RC PIPE
TYPE C DROP INLET = 4'x6'
36" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 66 LIN. FT.
36" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 66 LIN. FT.

STATE OF ARKANSAS
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LICENSED PROFESSIONAL ENGINEER
No. 13436
SHAUN A. ROBERSON

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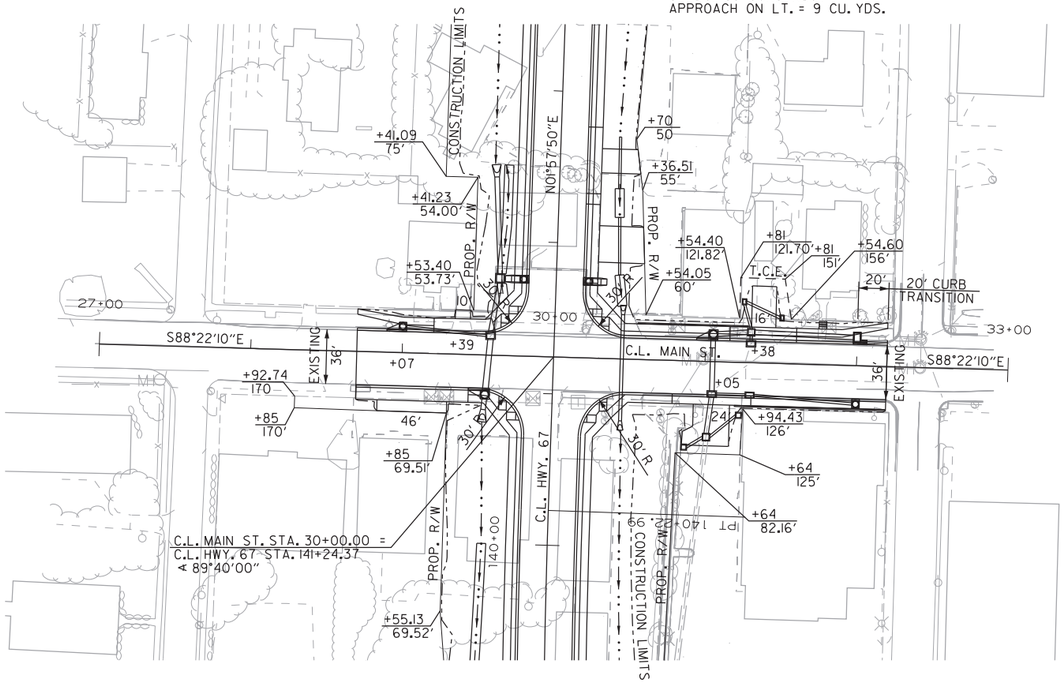
STA. 29+39 CONSTRUCT
APPROACH ON LT. = 1 CU. YD.

STA. 31+38 CONSTRUCT
APPROACH ON LT. = 9 CU. YDS.



STA. 29+67 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 4.3 SQ. YD.

STA. 29+67 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 4.3 SQ. YD.

STA. 30+34 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 4.2 SQ. YD.

STA. 30+34 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 4.2 SQ. YD.

N

C.L. HWY. 67

PI	= 137+73.81
Δ	= 4°59'12" RT.
D	= 1°00'00"
T	= 249.49'
L	= 498.67'
PC	= 135+24.32
PT	= 140+22.99
e	= NO SUPER
Ls	= N/A

CONCRETE WALKS (TYPE SPECIAL)

STA.	STA.	SIDE	"W"	LIN. FT.	SQ. YD.
30+55	31+28	LT.	5'-0"	73	41
31+20	32+20	RT.	5'-0"	100	56

STA. 29+07 CONSTRUCT
APPROACH ON RT. = 5 CU. YDS.

STA. 31+05 CONSTRUCT
APPROACH ON RT. = 13 CU. YDS.

STA. 29+55 CONSTRUCT
DROP INLET ON RT. H=7'-1" W/ 8' EXT.
WITH 36"x8' PIPE OUTLET
TO FES RT.
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 5'x5'
36" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 8 LIN. FT.
36" FES = 1 EACH

STA. 31+02 CONSTRUCT
JUNCTION BOX 50' RT. H=9'-10"
AND CONNECT TO EX. R.C. PIPE
TYPE ST JUNCTION BOX = 4'x4'

STA. 30+87 CONSTRUCT
DROP INLET 57' RT. H=3'-6"
WITH 18"x13' PIPE OUTLET
TO JUNCTION BOX AT STA. 31+02 RT.
TYPE ST DROP INLET = 3'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 13 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 13 LIN. FT.

STA. 31+05 CONSTRUCT
DROP INLET ON RT. H=9'-9"
WITH 36"x25' PIPE OUTLET
TO JUNCTION BOX AT STA. 31+02 RT.
TYPE ST DROP INLET = 3'x5'
36" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 25 LIN. FT.
36" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 25 LIN. FT.

STA. 31+23 CONSTRUCT
DROP INLET 36' RT. H=3'-6"
WITH 18"x23' PIPE OUTLET
TO JUNCTION BOX AT STA. 31+02 RT.
TYPE ST DROP INLET = 3'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 23 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 23 LIN. FT.

STA. 31+30 CONSTRUCT
DROP INLET ON RT. H=5'-1"
WITH 18"x20' PIPE OUTLET
TO DROP INLET AT STA. 31+05 RT.
TYPE ST DROP INLET = 3'x5'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 20 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 20 LIN. FT.

STA. 32+00 CONSTRUCT
DROP INLET ON RT. H=5'-0"
WITH 18"x66' PIPE OUTLET
TO DROP INLET AT STA. 31+30 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 66 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 66 LIN. FT.

MAIN ST.

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WORKSPACE: AHTD
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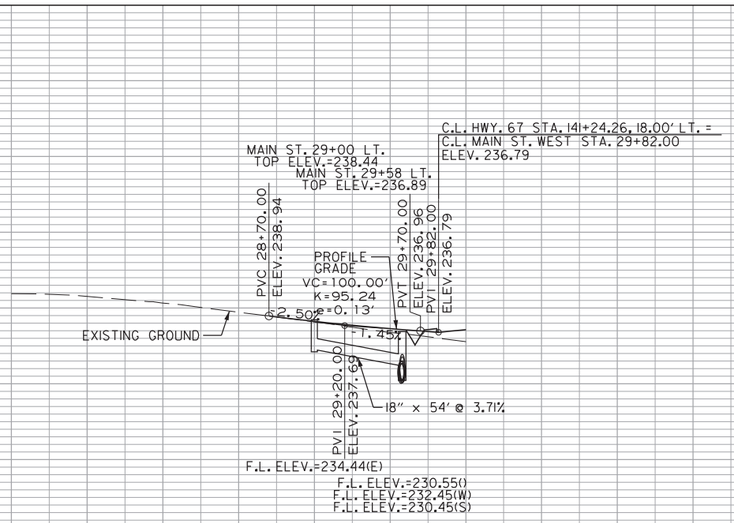
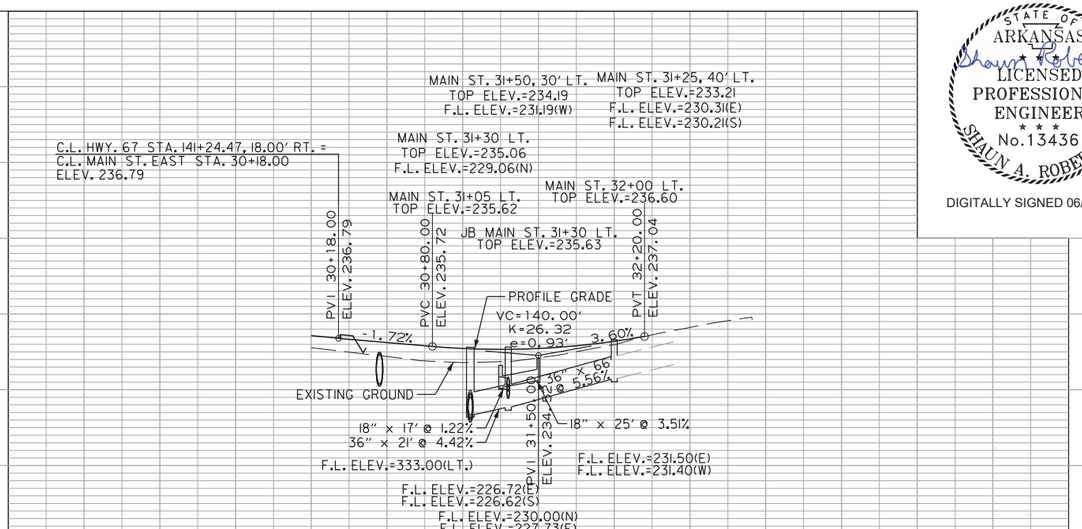
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	249	549
		PROF. SHEET - MAIN ST. EAST AND WEST				

MAIN ST. WEST LT. SIDE PROFILE



MAIN ST. EAST LT. SIDE PROFILE



STATE OF ARKANSAS
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SHAUN A. ROBERSON
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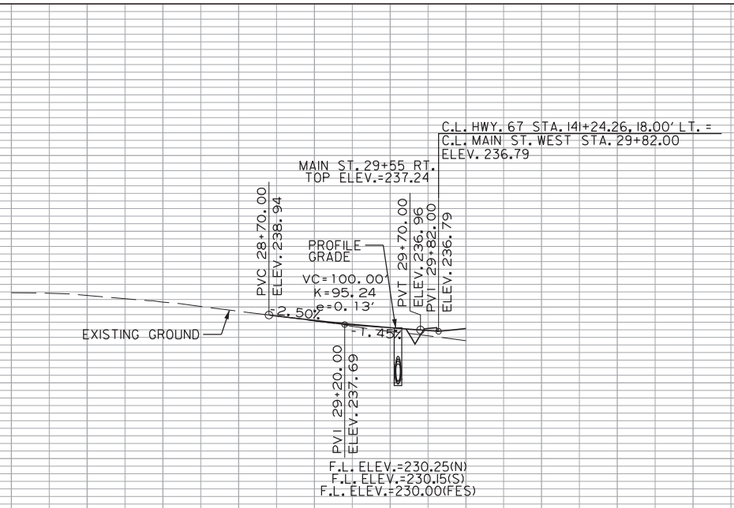
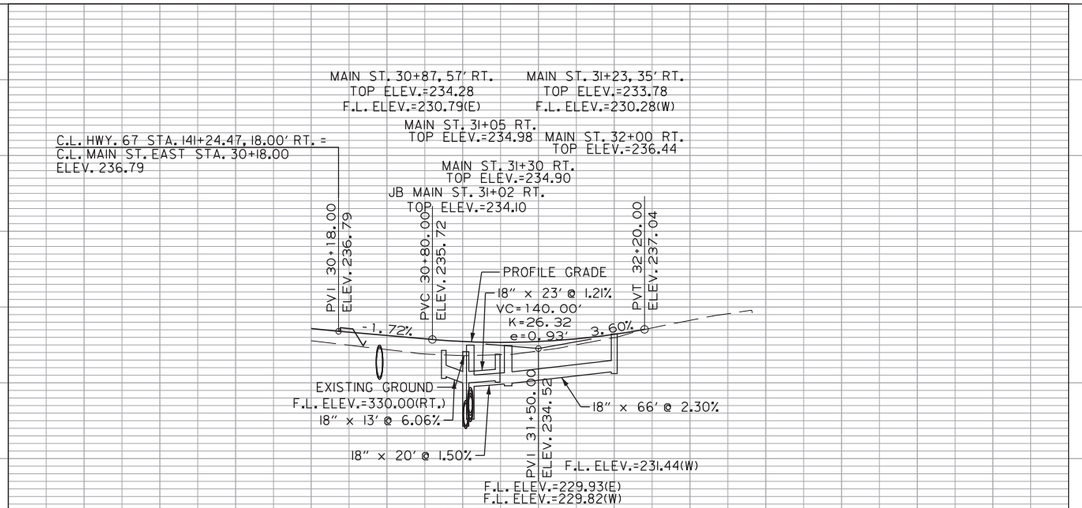
MAIN ST. WEST RT. SIDE PROFILE



MAIN ST. EAST RT. SIDE PROFILE



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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	250	549
		PLAN SHEET - CLINTON ST. EAST AND WEST				

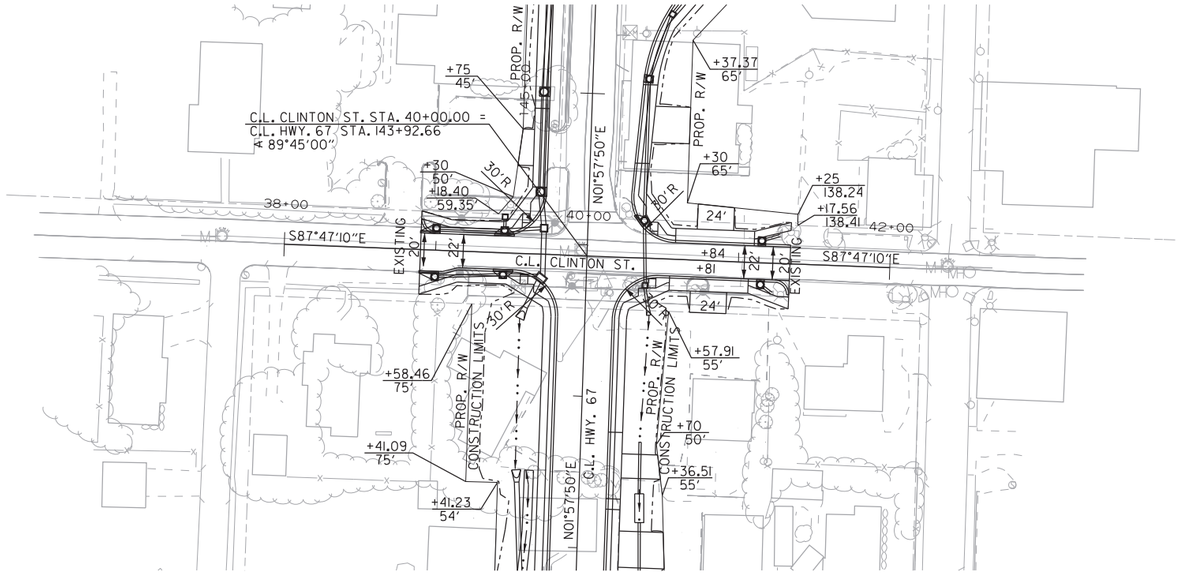
STA. 39+00 CONSTRUCT
DROP INLET ON LT. H=3'-6" W/ 8' EXT.
WITH 18"x41' PIPE OUTLET
TO DROP INLET AT STA. 39+45 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 41 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 41 LIN. FT.

STA. 39+45 CONSTRUCT
DROP INLET 24' LT. H=3'-0"
WITH 18"x5' PIPE OUTLET
TO DROP INLET AT STA. 39+45 LT.
TYPE ST DROP INLET = 3'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 5 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 5 LIN. FT.

STA. 39+45 CONSTRUCT
DROP INLET ON LT. H=4'-1"
W/ DBL. 4' EXT.
WITH 24"x22' PIPE OUTLET
TO JUNCTION BOX AT
C.L. HWY. 67 STA. 144+10 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
24" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 22 LIN. FT.
24" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 22 LIN. FT.

STA. 41+15 CONSTRUCT
DROP INLET ON LT. H=3'-5"
WITH 18"x11' PIPE OUTLET
CONNECT TO EX. R.C. PIPE
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 11 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 11 LIN. FT.

STA. 40+84 CONSTRUCT
APPROACH ON LT. = 6 CU. YDS.



STA. 39+53 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 4.5 SQ. YD.

STA. 39+53 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 3.7 SQ. YD.

STA. 40+43 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 4.2 SQ. YD.

STA. 40+43 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 3.6 SQ. YD.

STA. 40+81 CONSTRUCT
APPROACH ON RT. = 2 CU. YDS.

STA. 39+00 CONSTRUCT
DROP INLET ON RT. H=3'-6" W/ 8' EXT.
WITH 18"x41' PIPE OUTLET
TO DROP INLET AT STA. 39+45 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 41 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 41 LIN. FT.

STA. 39+45 CONSTRUCT
DROP INLET ON RT. H=3'-8"
W/ DBL. 4' EXT.
WITH 18"x21' PIPE OUTLET
TO DROP INLET AT
C.L. HWY. 67 STA. 143+77 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 21 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 21 LIN. FT.

STA. 41+15 CONSTRUCT
DROP INLET ON RT. H=3'-5"
WITH 18"x7' PIPE OUTLET
CONNECT TO EX. R.C. PIPE
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 7 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 7 LIN. FT.

N

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CLINTON ST.

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WORKSPACE: AHTD
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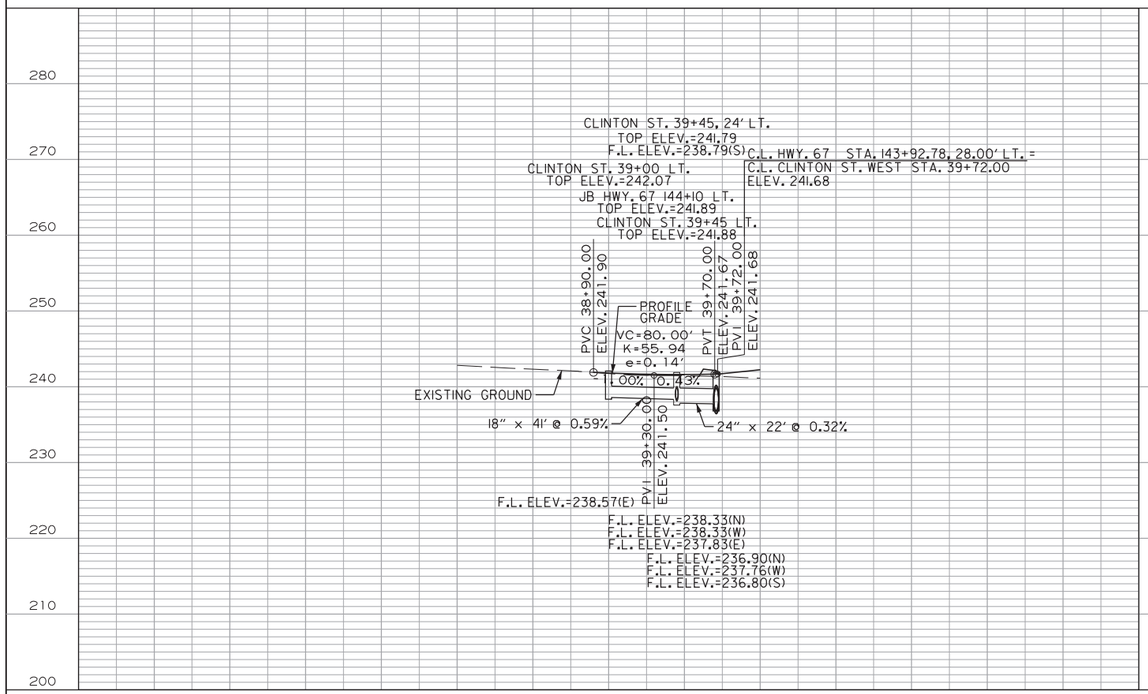
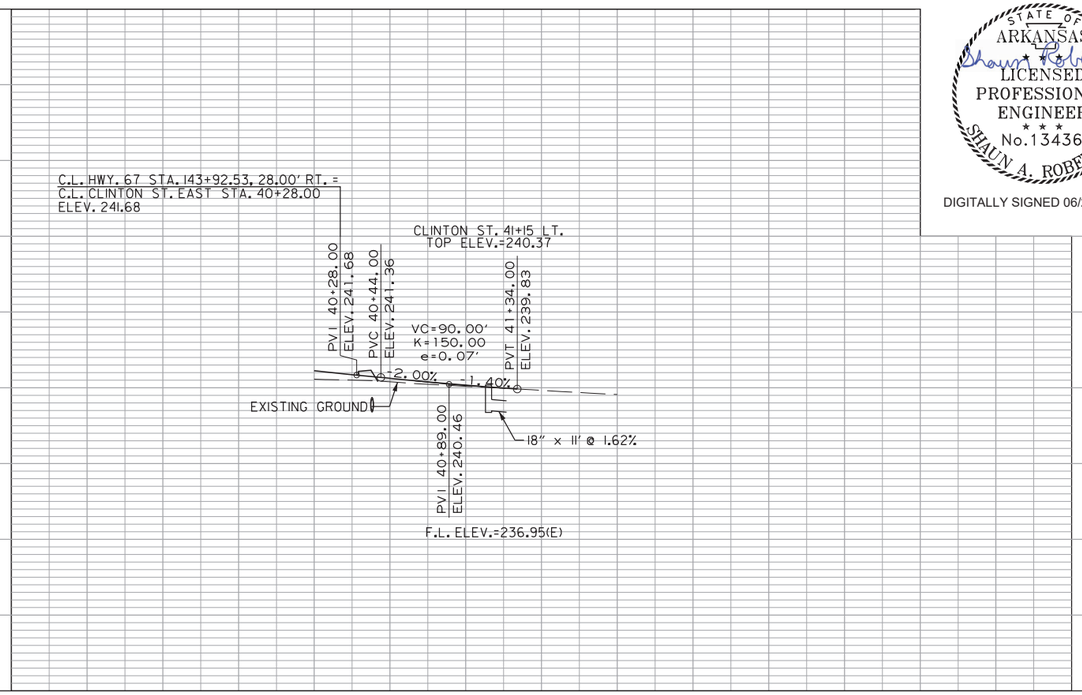
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	251	549
		PROF. SHEET - CLINTON ST. WEST AND EAST				

CLINTON ST. WEST LT. SIDE PROFILE



CLINTON ST. EAST LT. SIDE PROFILE



STATE OF ARKANSAS
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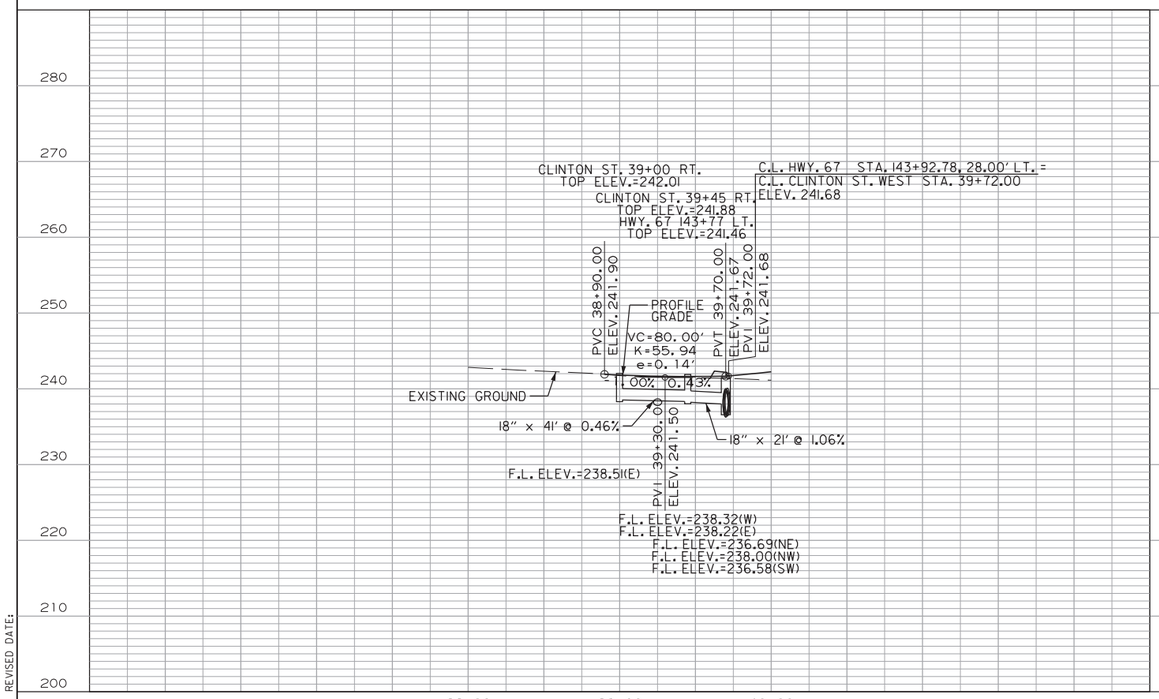
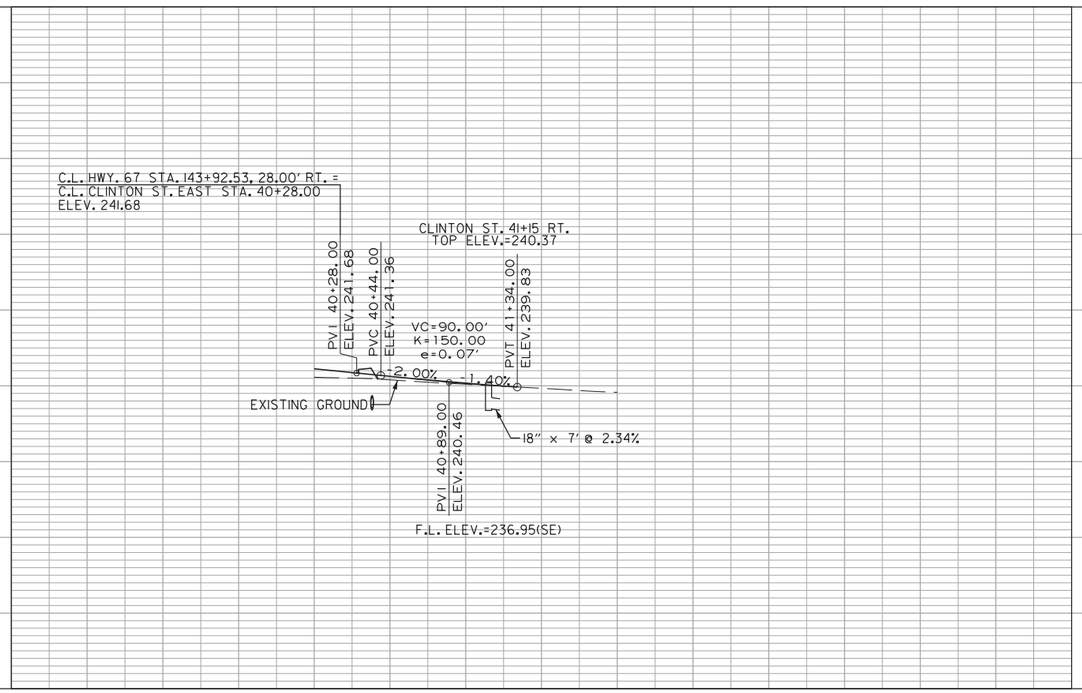
REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL POINTS

CLINTON ST. WEST RT. SIDE PROFILE



CLINTON ST. EAST RT. SIDE PROFILE



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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	252	549
		PLAN SHEET - CADDO ST. WEST AND EAST				

STA. 46+82 CONSTRUCT
DROP INLET ON LT. H=3'-6" W/ 8' EXT.
WITH 18"x68' PIPE OUTLET
TO DROP INLET AT STA. 47+54 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 68 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 68 LIN. FT.

STA. 47+54 CONSTRUCT
DROP INLET ON LT. H=3'-7" W/ 4' EXT.
WITH 18"x79' PIPE OUTLET
TO DROP INLET AT STA. 48+37 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 79 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 79 LIN. FT.

STA. 48+37 CONSTRUCT
DROP INLET ON LT. H=3'-7" W/ 8' EXT.
WITH 18"x52' PIPE OUTLET
TO JUNCTION BOX AT STA. 48+92 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 52 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 52 LIN. FT.

STA. 48+92 CONSTRUCT
DROP INLET 36' LT. H=3'-1"
WITH 18"x7' PIPE OUTLET
TO JUNCTION BOX AT STA. 48+92 LT.
TYPE ST DROP INLET = 4'x4'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 7 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 7 LIN. FT.

STA. 48+92 CONSTRUCT
JUNCTION BOX ON LT. H=4'-1"
WITH 18"x45' PIPE OUTLET
TO DROP INLET AT STA. 49+40 LT.
TYPE ST JUNCTION BOX = 3'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 45 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 45 LIN. FT.

STA. 49+40 CONSTRUCT
DROP INLET ON LT. H=5'-0" W/ 8' EXT.
WITH 24"x43' PIPE OUTLET
TO DROP INLET AT STA. 49+40 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
24" R.C. PIPE (CLASS IV)
(TYPE 3 BEDDING) = 43 LIN. FT.

STA. 51+00 CONSTRUCT
DROP INLET 45' LT. H=3'-0"
WITH 18"x10' PIPE OUTLET
TO DROP INLET AT STA. 51+00 LT.
TYPE ST DROP INLET = 3'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 10 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 10 LIN. FT.

STA. 51+00 CONSTRUCT
DROP INLET ON LT. H=4'-8"
WITH 18"x60' PIPE OUTLET
TO DROP INLET AT STA. 51+00 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 60 LIN. FT.

STA. 51+80 CONSTRUCT
DROP INLET ON LT. H=3'-5"
WITH 18"x76' PIPE OUTLET
TO DROP INLET AT STA. 51+00 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 76 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 76 LIN. FT.

STA. 52+27 CONSTRUCT
JUNCTION BOX 20' LT. H=6'-7"
CONNECT TO EX. RC PIPE
TYPE ST JUNCTION BOX = 5'x5'

STA. 52+27 CONSTRUCT
DROP INLET 36' LT. H=5'-6"
W/ DBL. 4' EXT.
WITH 18"x12' PIPE OUTLET
TO JUNCTION BOX AT STA. 52+27 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 12 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 12 LIN. FT.

STA. 52+50 CONSTRUCT
DROP INLET ON LT. H=4'-0"
W/ DBL. 4' EXT.
WITH 18"x15' PIPE OUTLET
TO JUNCTION BOX AT STA. 52+55 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 15 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 15 LIN. FT.

STA. 52+55 CONSTRUCT
JUNCTION BOX 19' LT. H=6'-6"
WITH 30"x25' PIPE OUTLET
TO JUNCTION BOX AT STA. 52+27 LT.
TYPE ST JUNCTION BOX = 4'x4'
30" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 25 LIN. FT.

STA. 52+80 CONSTRUCT
DROP INLET ON LT. H=4'-0"
W/ DBL. 4' EXT.
WITH 18"x21' PIPE OUTLET
TO JUNCTION BOX AT STA. 52+55 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 21 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 21 LIN. FT.

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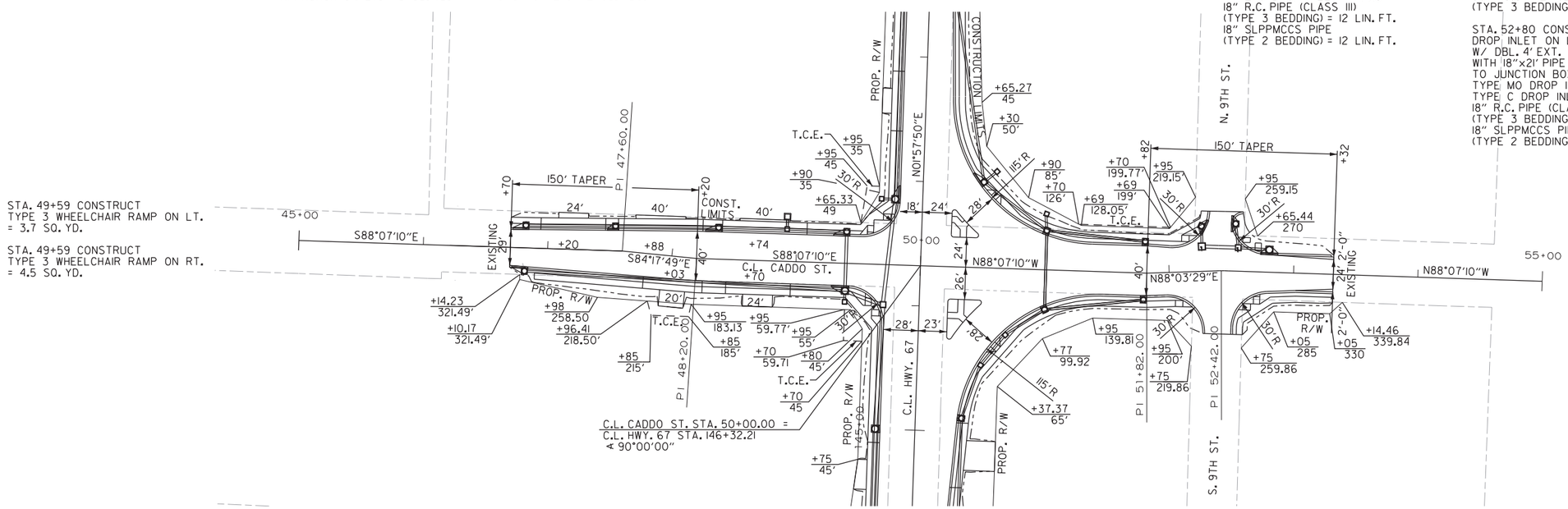
STA. 47+20 CONSTRUCT
APPROACH ON LT. = 5 CU. YD.

STA. 47+88 CONSTRUCT
APPROACH ON LT. = 2 CU. YDS.

STA. 48+74 CONSTRUCT
APPROACH ON LT. = 1 CU. YD.



STA. 49+59 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 3.7 SQ. YD.

STA. 49+59 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 4.5 SQ. YD.

STA. 52+14 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 5.7 SQ. YD.

STA. 52+30 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 5.3 SQ. YD.

STA. 52+57 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 3.5 SQ. YD.

STA. 52+58 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 4.5 SQ. YD.

STA. 52+71 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 3.7 SQ. YD.

STA. 52+71 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 3.9 SQ. YD.

STA. 48+03 CONSTRUCT
APPROACH ON RT. = 18 CU. YDS.

STA. 48+70 CONSTRUCT
APPROACH ON RT. = 3 CU. YDS.

STA. 46+82 CONSTRUCT
DROP INLET ON RT. H=3'-6" W/ 8' EXT.
WITH 18"x254' PIPE OUTLET
TO DROP INLET AT STA. 49+40 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 254 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 254 LIN. FT.

STA. 49+40 CONSTRUCT
DROP INLET 31' RT. H=3'-0"
WITH 18"x5' PIPE OUTLET
TO DROP INLET AT STA. 49+40 LT.
TYPE ST DROP INLET = 4'x4'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 5 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 5 LIN. FT.

STA. 49+40 CONSTRUCT
DROP INLET ON RT. H=6'-0" W/ 8' EXT.
WITH 30"x28' PIPE OUTLET
TO JUNCTION BOX AT
C.L. HWY. 67 STA. 146+00 LT.
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 5'x4'
30" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 28 LIN. FT.
30" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 28 LIN. FT.

STA. 51+00 CONSTRUCT
DROP INLET ON RT. H=5'-2"
WITH 18"x34' PIPE OUTLET
TO JUNCTION BOX AT
C.L. HWY. 67 STA. 145+79 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 34 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 34 LIN. FT.

STA. 51+80 CONSTRUCT
DROP INLET ON RT. H=4'-0"
WITH 18"x76' PIPE OUTLET
TO DROP INLET AT STA. 51+00 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 76 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 76 LIN. FT.

CADDO ST.

rnfortner 6/28/2022 10:35:51 AM
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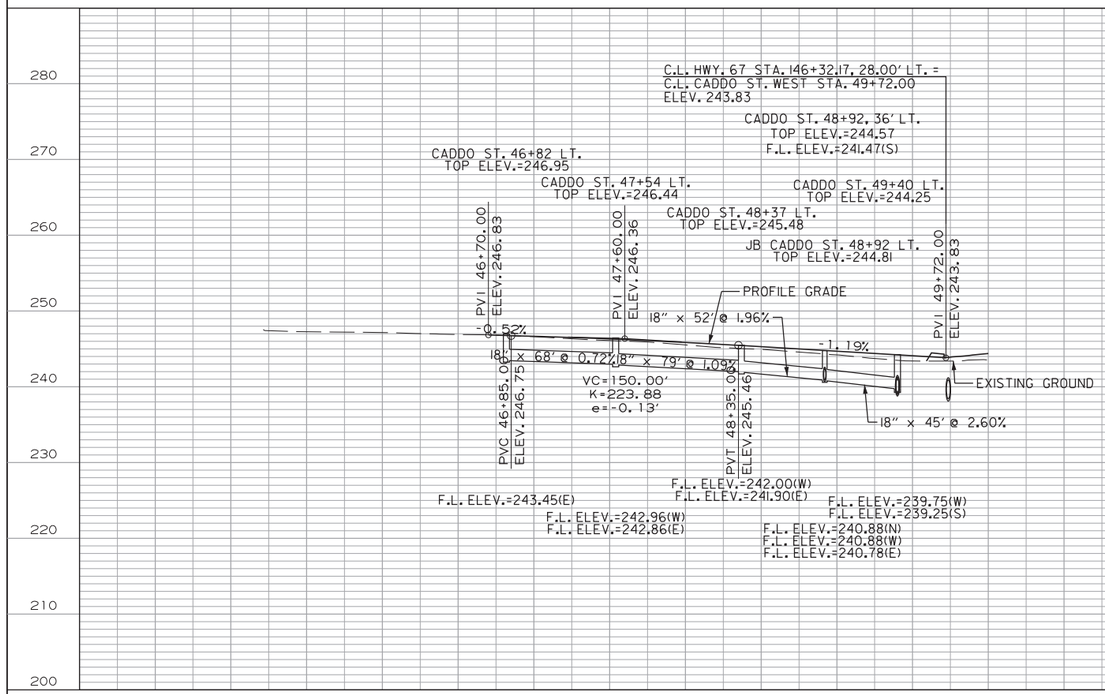
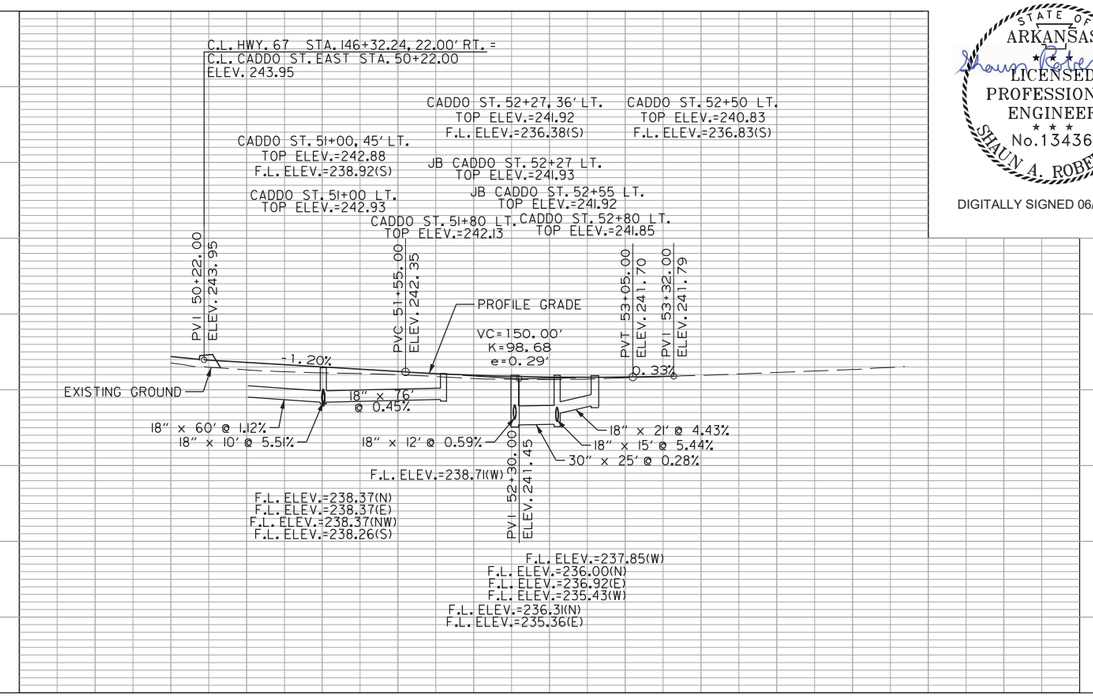
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	253	549
		PROF. SHEET - CADDO ST. EAST AND WEST				

CADDO ST. WEST LT. SIDE PROFILE



CADDO ST. EAST LT. SIDE PROFILE

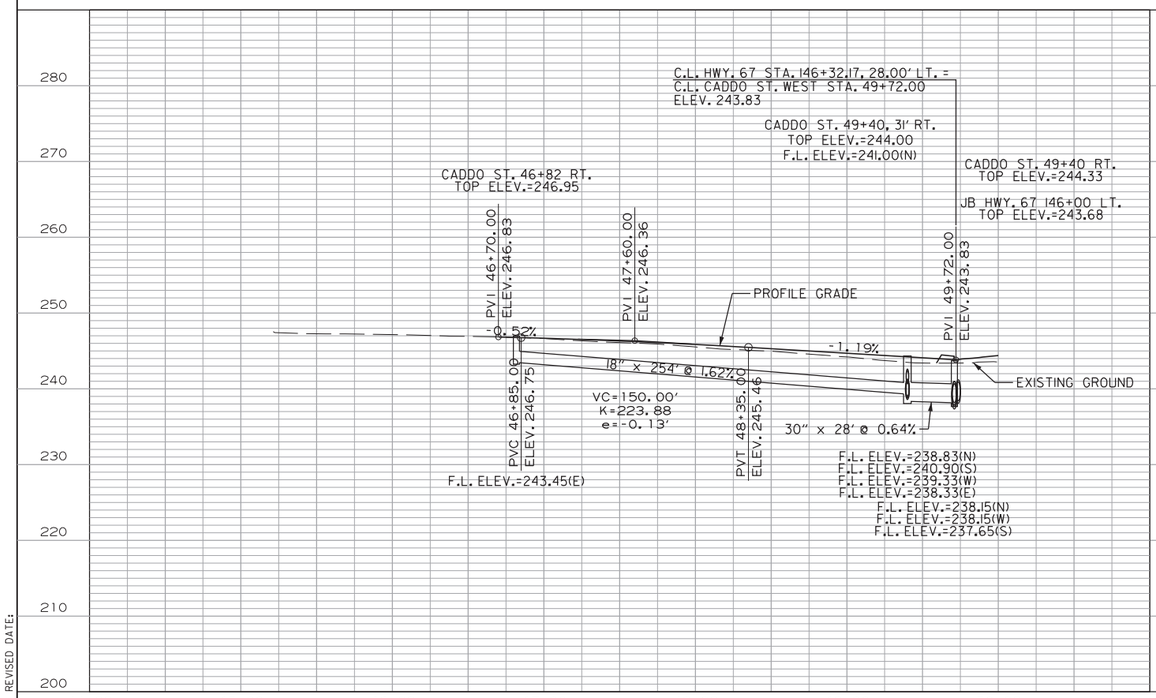


STATE OF ARKANSAS
Shaun Robertson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERTSON

DIGITALLY SIGNED 06/28/2022

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL POINTS

CADDO ST. WEST RT. SIDE PROFILE



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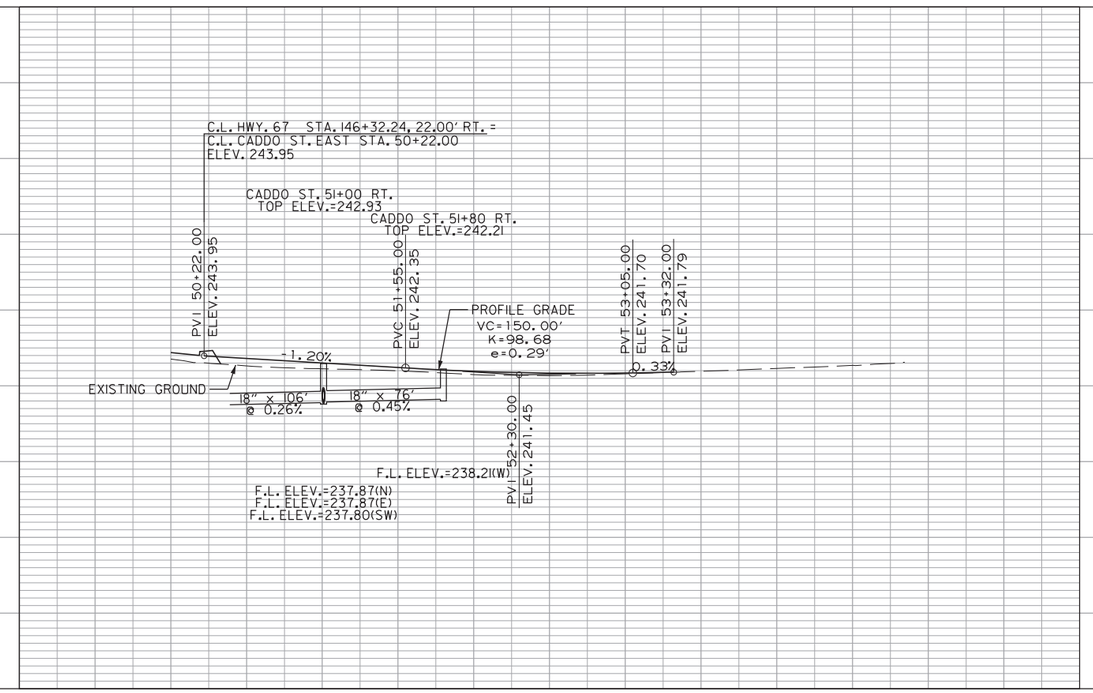

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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	254	549
		PLAN - HICKORY ST.				

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STATE OF ARKANSAS
Shaun A. Roberson
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

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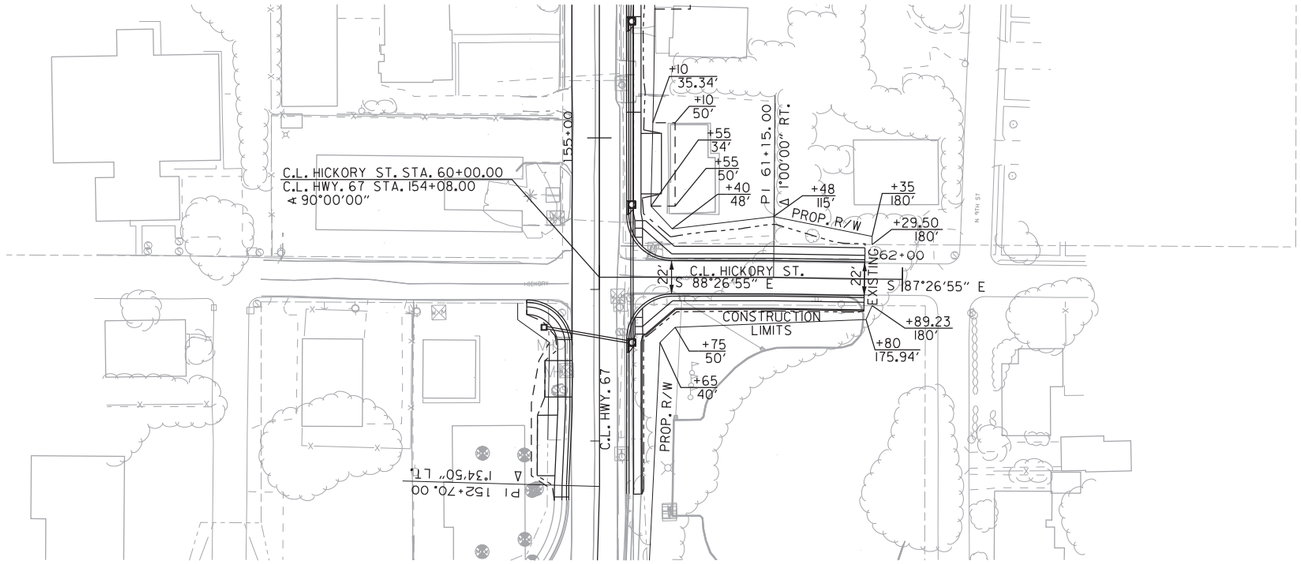

CONCRETE WALK TYPE SPECIAL

STA.	STA.	SIDE	"W"	SQ. YDS.
60+29	61+75	RT. = 146 LIN. FT.	5'-0"	85

HICKORY ST.

rnfortner 6/28/2022 10:35:53 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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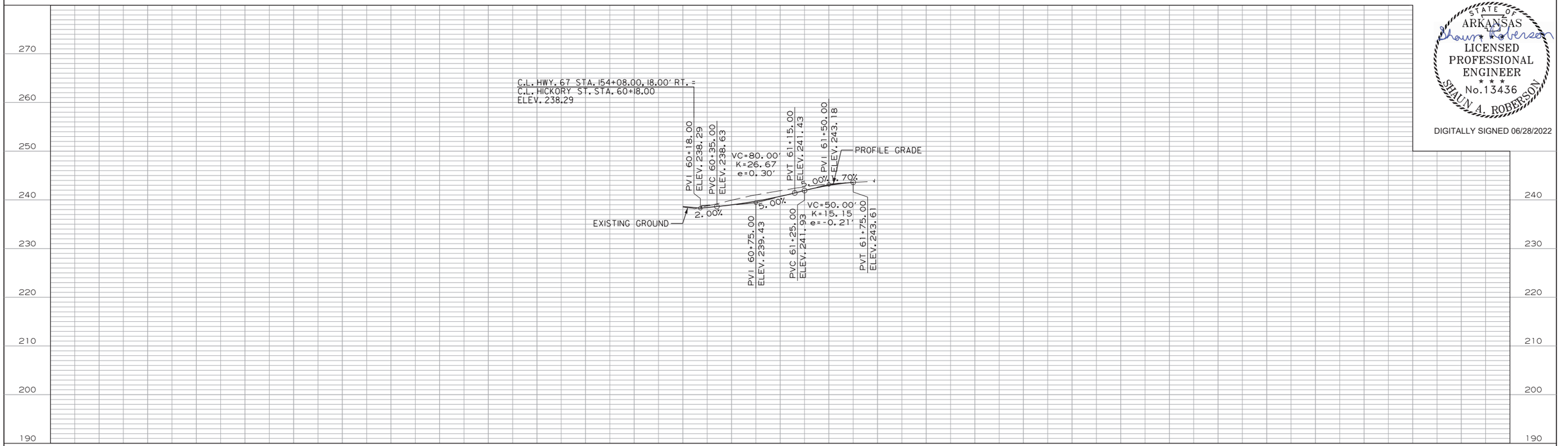
				PROFILE - HICKORY ST.				

HICKORY ST. LT. SIDE PROFILE



STATE OF ARKANSAS
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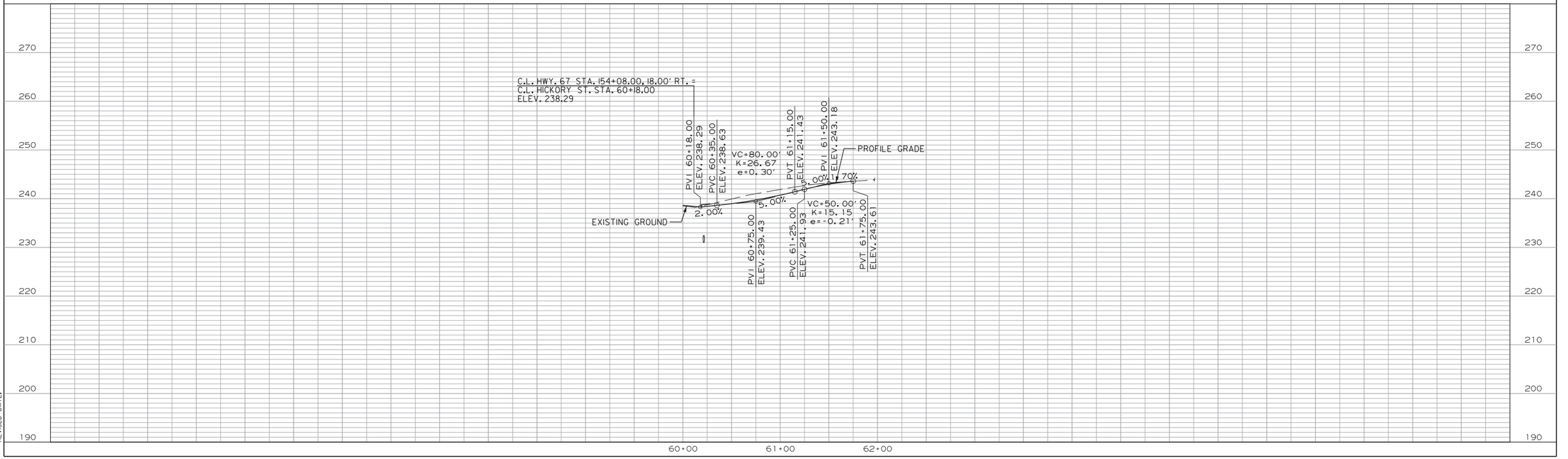
HICKORY ST. RT. SIDE PROFILE



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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	256	549
		PLAN - MCNUTT ST.				

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STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.13436
SHAUN A. ROBERSON

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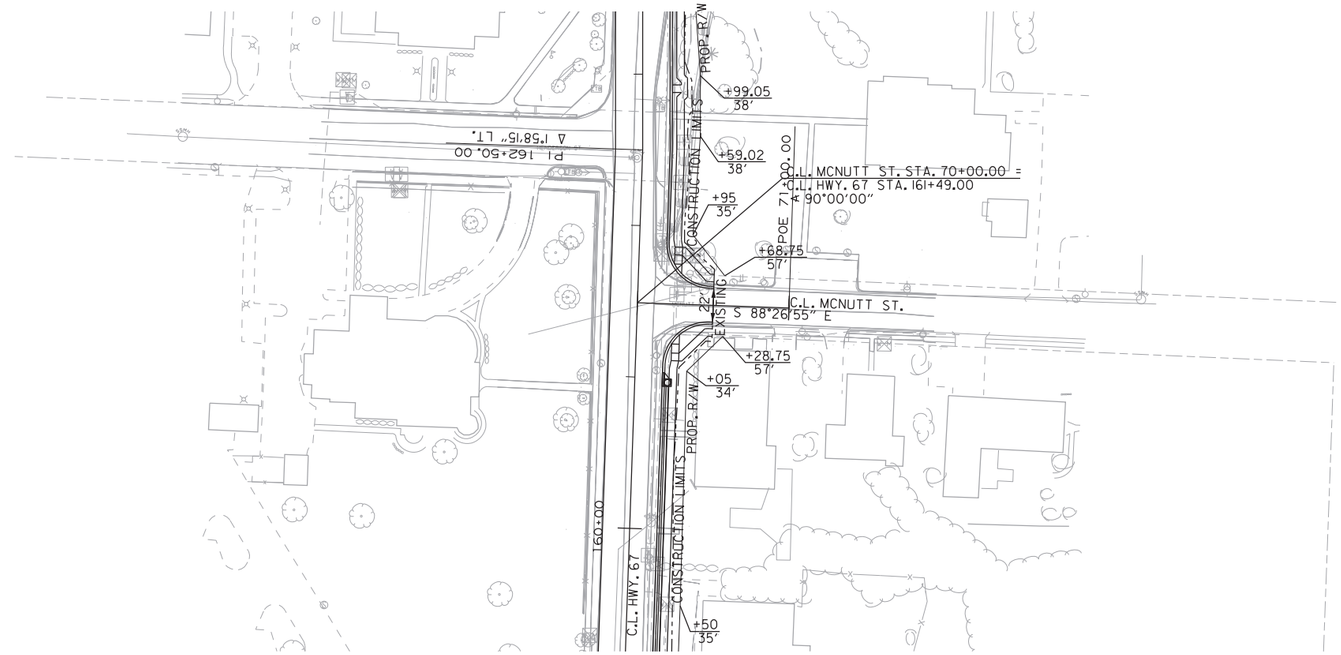

MCNUTT ST.

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WORKSPACE: AHTD
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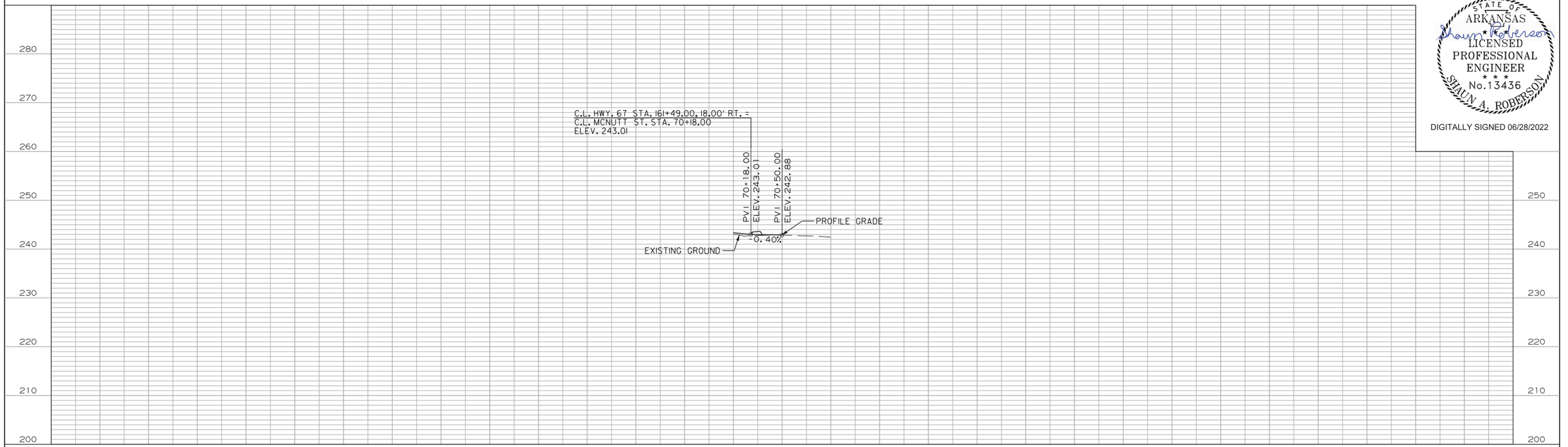
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	070442	257	549
				PROFILE - MCNUTT ST.				

MCNUTT ST. LT. SIDE PROFILE



STATE OF ARKANSAS
Shaun A. Roberson
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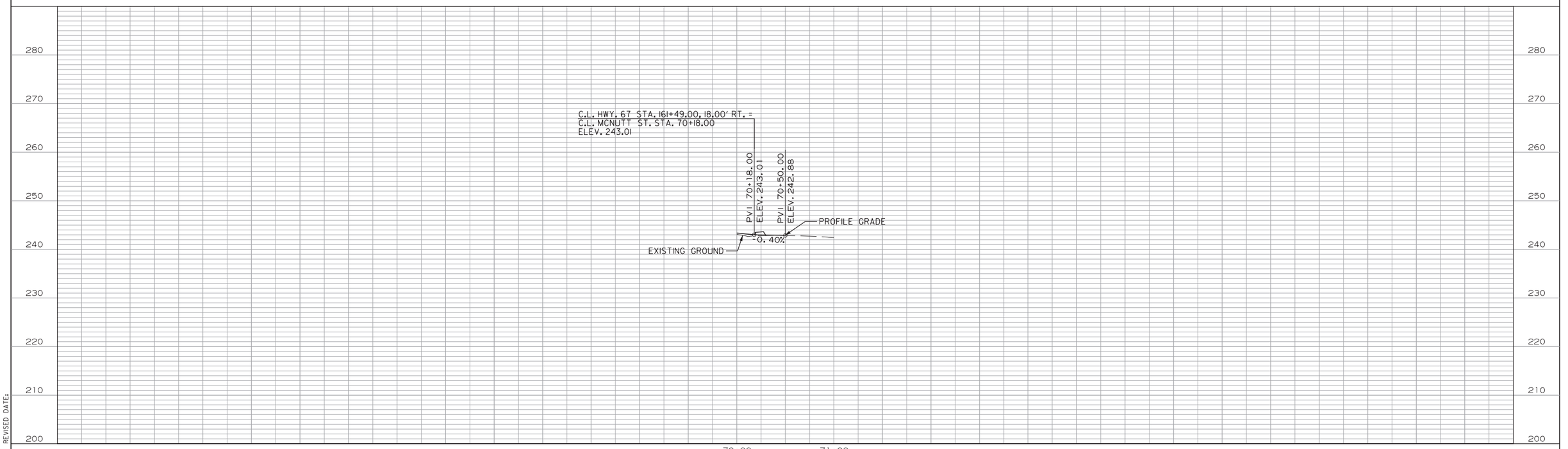
MCNUTT ST. RT. SIDE PROFILE



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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	258	549
		SUMMARY OF TRAFFIC SIGNAL QUANTITIES				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER

DIGITALLY SIGNED 06/28/2022

SUMMARY OF TRAFFIC SIGNAL QUANTITIES

ITEM NUMBER	ITEM	HWY. 51/PINE ST. AND PROFESSIONAL PARK DR.	HWY. 67/10TH ST. AND HWY. 67/CADDO ST.	HWY. 67/10TH ST. AND HENDERSON ST.	QUANTITY	UNIT
SP & 701	ACTUATED CONTROLLER TS2-TYPE 2 (8 PHASES)		2		2	EACH
SP & 701	SYSTEM LOCAL CONTROLLER TS2-TYPE 2 (8 PHASES)	1			1	EACH
SP	TRAFFIC SIGNAL CONTROLLER (MODIFICATION)			1	1	EACH
SP	ANTENNA SUPPORT (SHOE BASE, 35' HT.)	1			1	EACH
SP	LOCAL RADIO WITH ANTENNA	1			1	EACH
SP	ANTENNA CABLE (TYPE 6)	69			69	LIN. FT.
SP & 706	TRAFFIC SIGNAL HEAD, LED, (3 SECTION, 1 WAY)	8	18	7	33	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (4 SECTION, 1 WAY)	4	2		6	EACH
SP	RELOCATION OF TRAFFIC SIGNAL HEAD		8	1	9	EACH
SP & 707	COUNTDOWN PEDESTRIAN SIGNAL HEAD, LED	8	8	4	20	EACH
708	TRAFFIC SIGNAL CABLE (5C/14 A.W.G.)	2487	2451	785	5723	LIN. FT.
708	TRAFFIC SIGNAL CABLE (7C/14 A.W.G.)	253	1230	58	1541	LIN. FT.
708	TRAFFIC SIGNAL CABLE (12C/14 A.W.G.)			172	172	LIN. FT.
708	TRAFFIC SIGNAL CABLE (20C/14 A.W.G.)	619	623	172	1414	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., E.G.C.)	769	707	223	1699	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/12 A.W.G., E.G.C.)	210	210	55	475	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G.)	43	107		150	LIN. FT.
SP	ELECTRICAL CONDUCTORS FOR LUMINAIRES	829	836	224	1889	LIN. FT.
709	GALVANIZED STEEL CONDUIT (2")	20	35		55	LIN. FT.
709	GALVANIZED STEEL CONDUIT (3")		30		30	LIN. FT.
710	NON-METALLIC CONDUIT (2")	58	79		137	LIN. FT.
710	NON-METALLIC CONDUIT (3")	731	698	204	1633	LIN. FT.
SS & 711	CONCRETE PULL BOX (TYPE 2)	5	7	4	16	EACH
SS & 711	CONCRETE PULL BOX (TYPE 1 HD)		1		1	EACH
SS & 711	CONCRETE PULL BOX (TYPE 2 HD)	1		2	3	EACH
SS & 711	CONCRETE PULL BOX (TYPE 3 HD)	2	2		4	EACH
SS & 713	SPAN WIRE ASSEMBLY		1		1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (30')	1			1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (32')		1		1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (34')	1	1		2	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (36')	1			1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (38')	1	1		2	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (42')		1		1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (52'-32')			1	1	EACH
SP	LED LUMINAIRE ASSEMBLY	4	4	1	9	EACH
SS & 715	TRAFFIC SIGNAL PEDESTAL POLE WITH FOUNDATION	5	4	2	11	EACH
SP	SERVICE POINT ASSEMBLY (2 CIRCUITS)	1	1		2	EACH
SP	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT	0.25	0.50	0.25	1.00	LUMP SUM
716	TREATED WOOD POLE (CLASS 2, 45')		4		4	EACH
SP	18" STREET NAME SIGN	2	4	2	8	EACH
SP	30" STREET NAME SIGN	2			2	EACH
SP	VIDEO DETECTOR ROTATION		4	1	5	EACH
SP & 733	VIDEO DETECTOR (CLR)	8	10	3	21	EACH
733	VIDEO CABLE	1681	2228	444	4353	LIN. FT.
733	VIDEO MONITOR (CLR)	1	2		3	EACH
SP & 733	VIDEO PROCESSOR, EDGE CARD (2 CAMERA)	4	6	3	13	EACH
SP & 733	VEHICLE DETECTOR RACK (16 CHANNEL)	1	2		3	EACH

DATE: 6/20/2022 FILE NAME: t070442_SUMQ.dgn

LOCATION: HWY. 67 - HWY. 51 (ARKADELPHIA BYPASS)
CITY: ARKADELPHIA
COUNTY: CLARK
DISTRICT: 07 SCALE: N/A DRAWN BY: AS

rnfortner 6/28/2022 10:35:55 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	259	549
		TRAFFIC SIGNAL NOTES				

TRAFFIC SIGNAL NOTES:

1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE NFPA 70 (CURRENT EDITION) NATIONAL ELECTRICAL CODE, NFPA 101 (CURRENT EDITION) LIFE SAFETY CODE, STATE ELECTRICAL CODE AND LOCAL ELECTRICAL CODE.

2. EXTEND GREEN EQUIPMENT GROUNDING CONDUCTOR (E.G.C.) FROM GROUND BAR AT MAIN BREAKER TO CONTROL PANEL AND TO FIRST POLE. SOLIDLY BOND E.G.C. TO GROUND LUG OF CONTROL CABINET AND TO POLE GROUND. ENSURE THAT ONLY ONE NEUTRAL-TO-GROUND BOND EXISTS IN THE SYSTEM AND THAT IT IS AT THE MAIN BREAKER.

3. ELECTRICAL SERVICE SHALL BE PROVIDED BY THE CITY/COUNTY TO A SERVICE POLE WITH EXTERNAL RAINTIGHT BREAKER (MAIN BREAKER), GALVANIZED STEEL SERVICE RISER, METER LOOP (IF REQUIRED), AND WEATHERHEAD AT A MUTUALLY ACCEPTABLE POINT WITHIN THE RIGHT-OF-WAY. IF THE SERVICE POINT IS OVER 10 FEET FROM THE CONTROLLER, THE CONTRACTOR SHALL PROVIDE AND INSTALL A SEPARATE TWO CIRCUIT EXTERNAL BREAKER (SECONDARY BREAKER) ON OR NEAR THE TRAFFIC SIGNAL CONTROLLER CABINET AND SHALL INSTALL CONDUIT, ELECTRICAL SERVICE WIRE (2c/#6 A.W.G. USE RATED, WITH GROUND TYPICAL), AND PERFORM WIRING TO TAP INTO THE CITY'S/ COUNTY'S MAIN BREAKER AS PART OF THIS CONTRACT. CONDUIT IS PAID FOR AS A SEPARATE ITEM OF THIS CONTRACT. TWO CIRCUIT BREAKERS, CONSIDERED SUBSIDIARY TO THE CONTROL EQUIPMENT, ARE NEEDED WHERE STREET LIGHTING IS INCLUDED. AS PART OF THE SIGNAL INSTALLATION, STREET LIGHTING CIRCUIT (2c/#12 A.W.G. UF RATED, TYPICAL) SHALL BE KEPT FROM THE CIRCUIT SERVING THE TRAFFIC SIGNAL CONTROL EQUIPMENT FROM THE POINT OF TIE-IN AT THE SECONDARY BREAKER PROVIDED BY THE CONTRACTOR.

4. CONTRACTOR SHALL CONNECT A SEPARATE NEUTRAL FOR EACH LOAD SWITCH REPRESENTED ON EACH SIGNAL POLE.

5. TRAFFIC CONTROLLER CABINET AND LAYOUT SHALL BE SUCH THAT IT IS NOT NECESSARY TO SHUT DOWN POWER OR REMOVE LOAD SWITCHES IN ORDER TO EASILY TEST OR MODIFY DETECTOR INPUTS TO THE CONTROLLER.

6. CONTROLLER CABINET SHALL BE WIRED SUCH THAT DURING FLASH OPERATIONS POWER TO THE LOAD SWITCHES CANNOT BACKFEED TO LOAD SWITCH POWER BUSS.

7. ALL PARTS OF THIS INSTALLATION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, STANDARD DRAWINGS, AND WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.

8. CONDUIT INSTALLED UNDER ROADWAY SURFACES SHALL BE INSTALLED BY PUSHING OR BORING METHODS. IF THE ENGINEER DETERMINES THIS IS NOT FEASIBLE, THEN A TRENCHING METHOD AS SHOWN IN THE STANDARD DRAWINGS MAY BE USED.

9. TRAFFIC SIGNAL POLES SHALL BE GALVANIZED. BACKPLATES SHALL BE SUPPLIED FOR ALL SIGNAL HEADS.

10. PAVEMENT MARKINGS SHOWN FOR REFERENCE ONLY. SEE PERMANENT PAVEMENT MARKING DETAILS.

11. FOUNDATION FOR ALL POLES SHALL BE EXTENDED IF NECESSARY TO ACCOMMODATE THE REQUIREMENTS FOR SIGNAL HEAD CLEARANCE ABOVE ROADWAY ONLY AT LOCATIONS WHERE THE GROUND ELEVATION AT THE POLE IS BELOW THE ELEVATION OF THE ROADWAY (SEE NOTES ON STANDARD DRAWING). PAYMENT WILL BE INCLUDED IN SECTION 714 TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, CURRENT EDITION.

12. ALL CONCRETE PULL BOXES SHALL BE (TYPE 2 HD) UNLESS OTHERWISE INDICATED. ALL CONDUIT SHALL BE THREE (3") INCH DIAMETER UNLESS SPECIFIED ON PLANS.

13. CONTRACTOR SHALL NOTIFY ALL EXISTING UTILITY OWNERS BEFORE BEGINNING WORK ON THIS PROJECT.

14. LED LUMINAIRE ASSEMBLIES SHALL HAVE A BUG RATING OF U0.

15. HARDWARE INPUTS MAY BE DETERMINED BY SUPPLIER. EACH DETECTOR OUTPUT SHALL INPUT THE CONTROLLER THROUGH A SEPARATE INPUT UNLESS OTHERWISE NOTED AND BE PROGRAMMED TO ACTUATE THE ASSOCIATED PHASE. COMBINATION (COMB.) DETECTORS SHALL ALSO BE PROGRAMMED TO PROVIDE VEHICLE COUNT/OCCUPANCY DATA.

16. THE LOCAL RADIO WITH ANTENNA SHALL BE COMPATIBLE WITH THE EXISTING CLOSED LOOP COORDINATION SYSTEM IN THE CITY/COUNTY.

17. TO DETERMINE UTILITY CLEARANCES ABOVE THE TRAFFIC SIGNAL POLE, REFER TO THE POLE SCHEDULE FOR VERTICAL SHAFT HEIGHT. WHERE THE POLE SCHEDULE INDICATES THAT A LUMINAIRE ARM WILL BE USED, THIRTY-EIGHT (38') FEET SHOULD BE USED TO DETERMINE UTILITY CLEARANCE ABOVE THE LUMINAIRE ARM. WHERE THE POLE SCHEDULE INDICATES A TRAFFIC SIGNAL POLE WITHOUT A LUMINARE ARM, A HEIGHT OF TWENTY-ONE (21') FEET SHOULD BE USED TO DETERMINE UTILITY CLEARANCE ABOVE THE TRAFFIC SIGNAL MAST ARM. AN ADDITIONAL SIX (6') FEET SHOULD BE USED DIRECTLY ABOVE "VIDEO DETECTOR" AT LOCATIONS SHOWN ON THE SIGNAL PLANS.

18. THE DESIRABLE MINIMUM DISTANCE FROM THE FACE OF ROADWAY CURB OR SHOULDER EDGE TO THE FACE OF NON-BREAKAWAY POLE OR OBSTRUCTION IS SIX (6') FEET. REFER TO TRAFFIC SIGNAL PLANS FOR SPECIFIC LOCATION OF POLES, CONTROLLER AND ANY OTHER NON-BREAKAWAY OBSTRUCTIONS. REFER TO "DESIGN PARAMETERS, MINIMUM CLEAR ZONE DISTANCE" FOR MINIMUM DISTANCE FROM THE EDGE OF TRAVELED WAY TO THE FACE OF A NON-BREAKAWAY POLE OR OBSTRUCTION. TRAFFIC SIGNAL POLES OR ANY OTHER NON-BREAKAWAY OBSTRUCTION SHALL NOT BE INSTALLED WITHIN THE CLEAR ZONE.

19. AS DETERMINED BY THE ENGINEER, FOUNDATION EMBEDMENT MAY BE DECREASED BY A MAXIMUM OF TWO FEET IF COMPETENT ROCK IS ENCOUNTERED PRIOR TO ACHIEVING PLAN EMBEDMENT AND AT LEAST HALF OF THE REMAINING PLAN EMBEDMENT LENGTH IS KEYED INTO COMPETENT ROCK.

20. CONNECTION OF TRAFFIC SIGNAL DISPLAY TO FIELD WIRING SHALL UTILIZE AN APPROVED TERMINAL STRIP BEHIND HAND-HOLE COVER AT BASE OF POLE. TERMINAL STRIP SHALL PROVIDE PROTECTION TO PREVENT EXPOSURE TO THE PUBLIC IN THE EVENT THAT POLE COVER IS MISSING. PAYMENT FOR TERMINAL STRIPS SHALL BE INCLUDED IN ITEM 714 TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, CURRENT EDITION.

21. CONTROLLER CABINET LAYOUT AND ORIENTATION SHALL CONFORM TO IMSA STANDARDS.

22. ONE VIDEO PROGRAMMNG MODULE SHALL BE PROVDED FOR AIMING AND SETUP OF DETECTORS IF THE VIDEO SYSTEM CANNOT BE ADJUSTED THROUGH HARDWARE AND SOFTWARE PROVIDED BY ITEMS WITHIN THE JOB.

23. TRAFFIC SIGNAL CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER OR ASSIGNED DEPARTMENT PROJECT INSPECTOR EACH DAY PRIOR TO SIGNAL RELATED WORK. NO WORK ON TRAFFIC SIGNALS WILL BE ALLOWED OR APPROVED WITHOUT THIS PRIOR NOTIFICATION.

24. ALL STEEL POLES SHALL BE DESIGNED TO MEET THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, 4th EDITION (2001) WITH 2003 AND 2006 INTERIMS.

25. DOOR PANEL TEST PUSH BUTTONS SHALL ACTUATE INDICATED PHASES. DETECTOR ASSIGNMENTS AND/OR SIDE PANEL JUMPERS MAY REQUIRE MODIFICATION.

26. ALL SYSTEM DETECTOR RACKS AND ASSOCIATED EQUIPMENT SHALL BE PROTECTED BY THE MAIN CONTROLLER CABINET POWER SURGE PROTECTION.

27. IN PULL BOXES, POLE BASES, JUNCTION BOXES, AND CONTROLLER CABINETS, THE DIRECTION OF EACH CABLE RUN SHALL BE INDICATED BY ATTACHING A PERMANENT TAG OF RIGID PLASTIC OR NON-FERROUS METAL TO THE CONDUIT. TAGS SHALL BE EMBOSSED, STAMPED OR ENGRAVED WITH LETTERS 1/4" OR GREATER IN HEIGHT AND SECURED TO THE CONDUIT WITH NYLON OR PLASTIC TIES. IN INSTANCES WHERE THE CONDUIT OR CONDUIT ENTRANCES ARE NOT VISIBLE OR ACCESSIBLE, A DIRECTION TAG SHALL BE ATTACHED TO EACH CABLE.

28. THE CONTRACTOR SHALL PERFORM ALL WORK POSSIBLE THAT WILL MINIMIZE THE TIME THAT THE TRAFFIC SIGNAL IS OUT OF OPERATION. IF, IN THE OPINION OF THE ENGINEER, TRAFFIC CONDITIONS WARRANT, THE CONTRACTOR SHALL PROVIDE FLAGMEN TO DIRECT TRAFFIC WHILE THE TRAFFIC SIGNAL IS OUT OF OPERATION.

29. ALL NON-METALLIC CONDUIT RUNS SHALL HAVE BELL RING FITTINGS INSTALLED ON THE TERMINATING ENDS OF THE CONDUIT. THIS INCLUDES PULL BOXES, POLE BASES, AND TRAFFIC SIGNAL CABINETS.

30. ALL CONCRETE PULL BOXES SHALL BE SET ON A GRAVEL OR CRUSHED STONE BEDDING AS SPECIFIED IN SECTION 711, CONCRETE PULL BOX, OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 2014.

31. BEFORE FINAL ACCEPTANCE OF THE TRAFFIC SIGNAL, THE CONTRACTOR SHALL PROVIDE TWO (2) SETS OF LEDGER SIZE (11" X 17") AS-BUILT TRAFFIC SIGNAL PLANS TO THE MAINTENANCE AUTHORITY AND ARDOT.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER

DIGITALLY SIGNED 06/28/2022

DATE: 5/3/2022 FILE NAME: t070442_GN.dgn

LOCATION: HWY. 67 - HWY. 51 (ARKADELPHIA BYPASS)
CITY: ARKADELPHIA
COUNTY: CLARK
DISTRICT: 07 SCALE: N/A DRAWN BY: AS

rnfortner 6/28/2022 10:36:02 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	260	549
		TRAFFIC SIGNAL STREET NAME SIGNS				

STATE OF ARKANSAS
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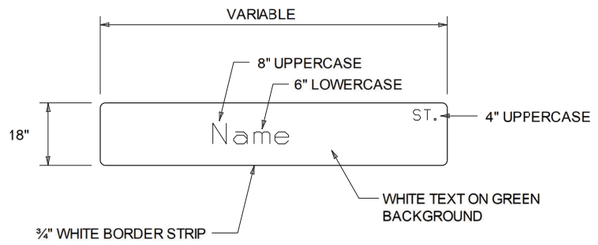
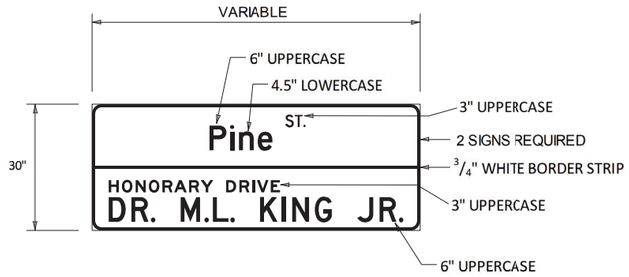
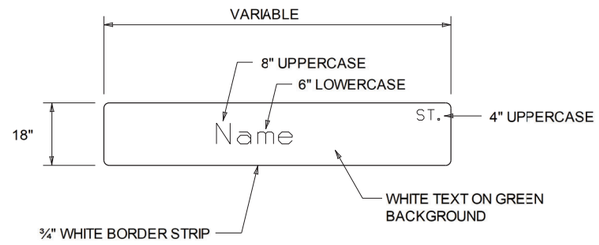
OVERHEAD STREET NAME MARKER STANDARD MAST ARM MOUNTED

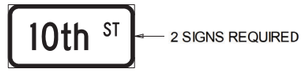
HWY. 51/PINE ST. AND PROFESSIONAL PARK DR. INTERSECTION



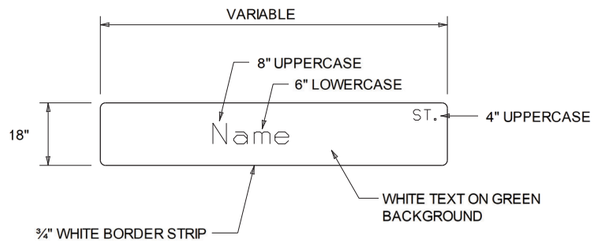


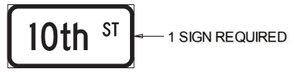
HWY. 67 (10TH ST.) AND HWY. 8 (CADDO ST.) INTERSECTION





HWY. 67 (10TH ST.) AND HWY. 8 (CADDO ST.) INTERSECTION





NOTES:

1. REFLECTIVE SHEETING SHALL COMPLY WITH ASTM 4956 TYPE 8 OR 9 REFLECTIVE SHEETING. SHEETING AND LEGEND SHALL BE APPLIED IN SUCH A MANNER TO PROVIDE WRINKLE AND BUBBLE FREE SURFACES. APPLICATION OF SHEETING IS CAUSE FOR REJECTION OF MATERIALS DUE TO WORKMANSHIP.
2. ALUMINUM SIGN BLANK SHALL BE ALLOY 6061-T6 OR 5052-H38. THE ALUMINUM SIGN SHALL BE ALSO ALODIZED. THE ALUMINUM SHEETING SHALL BE 0.100 INCH NOMINAL THICKNESS AND OF THE SIZE SHOWN WITH 1.5" CORNER RADII. PRIOR TO FABRICATION OF THE SIGNS, THE LAYOUT SHALL FIRST BE APPROVED BY AN AGENT OF THE CITY/ COUNTY.
3. WHEN CROSSROAD HAS TWO NAMES, THE SIGN FOR THE CROSSROAD TO THE LEFT MAY BE INSTALLED ON THE BACKSIDE OF THE MAST ARM ON THE NEARSIDE LEFT POLE. SEE STANDARD DRAWING SHEET FOR MORE INFORMATION FOR MOUNTING ON MAST ARM ASSEMBLY.
4. THE SERIES C 2000 STANDARD ALPHABET SHALL BE USED FOR ALL LETTERS.

DATE: 6/20/2022 FILE NAME: t070442_SNS.dgn

LOCATION: HWY. 67 - HWY. 51 (ARKADELPHIA BYPASS)
CITY: ARKADELPHIA
COUNTY: CLARK
DISTRICT: 07 SCALE: N/A DRAWN BY: HRH

rnfortner 6/28/2022 10:36:13 AM
WORKSPACE: AHTD
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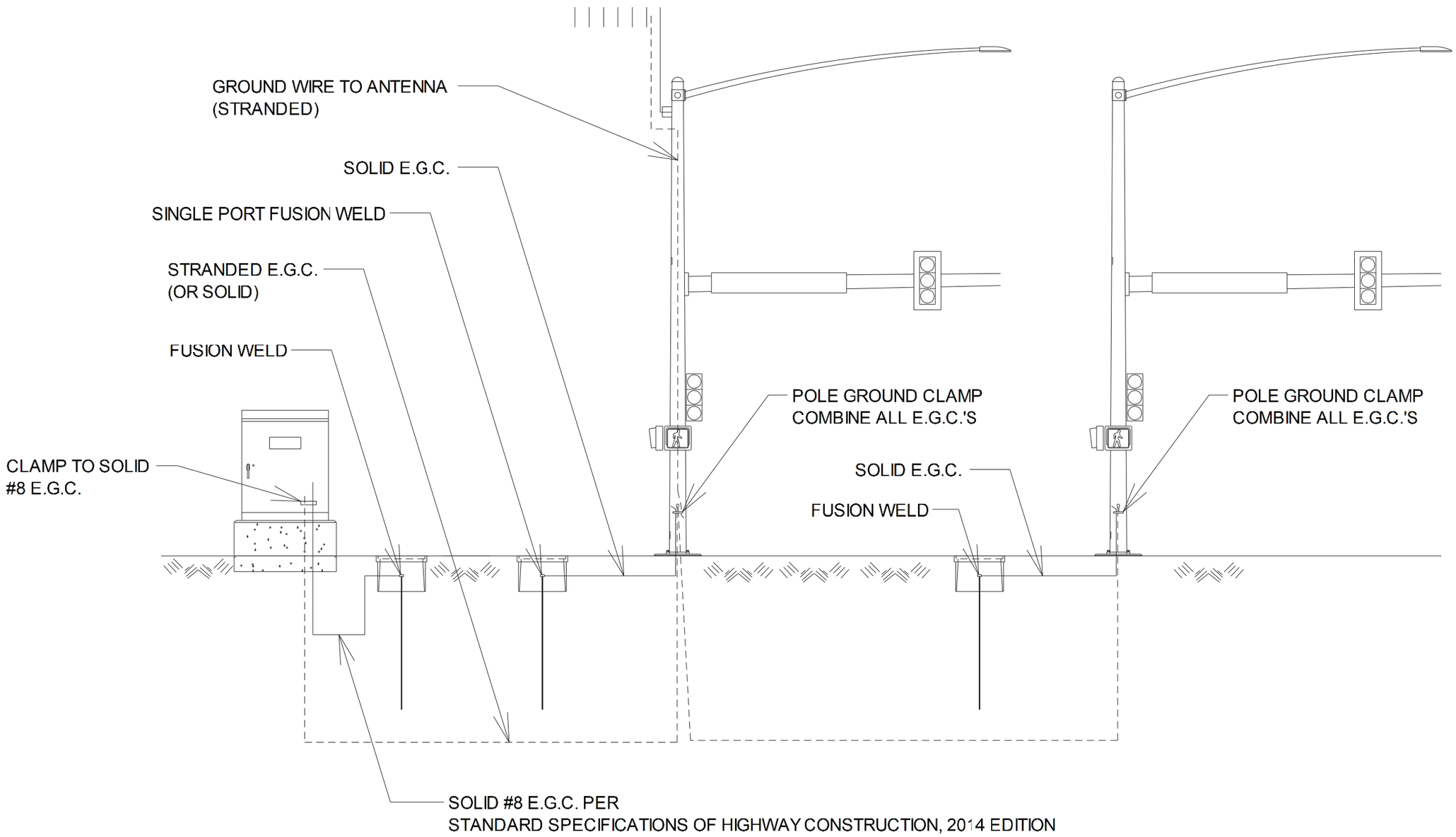
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	261	549
		GROUNDING ARRAY DETAIL				

GROUNDING ARRAY
SINGLE-PORT FUSION WELDS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER

DIGITALLY SIGNED 06/28/2022



DATE: 4/19/2022 FILE NAME: t070442_DTL1.dgn

LOCATION: HWY. 67 - HWY. 51 (ARKADELPHIA BYPASS)
CITY: ARKADELPHIA
COUNTY: CLARK
DISTRICT: 07 SCALE: N/A DRAWN BY: AS

rnfortner 6/28/2022 10:36:16 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	262	549
		TRAFFIC SIGNAL QUANTITIES -PROFESSIONAL PARK DR.				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER

DIGITALLY SIGNED 06/28/2022

PERMANENT TRAFFIC SIGNAL QUANTITIES

ITEM NUMBER	ITEM	QUANTITY	UNIT
SP & 701	SYSTEM LOCAL CONTROLLER TS2-TYPE 2 (8 PHASES)	1	EACH
SP	ANTENNA SUPPORT (SHOE BASE, 35' HT.)	1	EACH
SP	LOCAL RADIO WITH ANTENNA	1	EACH
SP	ANTENNA CABLE (TYPE 6)	69	LIN. FT.
SP & 706	TRAFFIC SIGNAL HEAD, LED, (3 SECTION, 1 WAY)	8	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (4 SECTION, 1 WAY)	4	EACH
SP & 707	COUNTDOWN PEDESTRIAN SIGNAL HEAD, LED	8	EACH
708	TRAFFIC SIGNAL CABLE (5C/14 A.W.G.)	2487	LIN. FT.
708	TRAFFIC SIGNAL CABLE (7C/14 A.W.G.)	253	LIN. FT.
708	TRAFFIC SIGNAL CABLE (20C/14 A.W.G.)	619	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., E.G.C.)	769	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/12 A.W.G., E.G.C.)	210	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G.)	43	LIN. FT.
SP	ELECTRICAL CONDUCTORS FOR LUMINAIRES	829	LIN. FT.
709	GALVANIZED STEEL CONDUIT (2")	20	LIN. FT.
710	NON-METALLIC CONDUIT (2")	58	LIN. FT.
710	NON-METALLIC CONDUIT (3")	731	LIN. FT.
SS & 711	CONCRETE PULL BOX (TYPE 2)	5	EACH
SS & 711	CONCRETE PULL BOX (TYPE 2 HD)	1	EACH
SS & 711	CONCRETE PULL BOX (TYPE 3 HD)	2	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (30')	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (34')	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (36')	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (38')	1	EACH
SP	LED LUMINAIRE ASSEMBLY	4	EACH
SS & 715	TRAFFIC SIGNAL PEDESTAL POLE WITH FOUNDATION	5	EACH
SP	SERVICE POINT ASSEMBLY (2 CIRCUITS)	1	EACH
SP	18" STREET NAME SIGN	2	EACH
SP	30" STREET NAME SIGN	2	EACH
SP & 733	VIDEO DETECTOR (CLR)	8	EACH
733	VIDEO CABLE	1681	LIN. FT.
733	VIDEO MONITOR (CLR)	1	EACH
SP & 733	VIDEO PROCESSOR, EDGE CARD (2 CAMERA)	4	EACH
SP & 733	VEHICLE DETECTOR RACK (16 CHANNEL)	1	EACH

(REFER TO PERMANENT TRAFFIC SIGNAL PLANS.)

EXISTING HWY. 51/PINE ST. AND PROFESSIONAL PARK DR. INTERSECTION
STAGE 2 TRAFFIC SIGNAL QUANTITIES

ITEM NUMBER	ITEM	QUANTITY	UNIT
SP	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT	0.25	LUMP SUM

STAGE 2:
REMOVE THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF HIGHWAY 51/PINE STREET AND PROFESSIONAL PARK DRIVE, WHEN THE EXISTING PROFESSIONAL PARK DRIVE IS RELOCATED TO ITS NEW LOCATION.
(REFER TO MAINTENANCE OF TRAFFIC DETAILS.)

DATE: 6/1/2022 FILE NAME: t070442_qtya.dgn

LOCATION: HWY. 51/PINE ST. AND PROFESSIONAL PARK DR.
CITY: ARKADELPHIA
COUNTY: CLARK
DISTRICT: 07 SCALE: N/A DRAWN BY: HRH

rnfortner 6/28/2022 10:36:17 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	263	549
		SIGNALIZATION PLAN SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER

DIGITALLY SIGNED 06/28/2022

N

PROFESSIONAL PARK DR.

12+00

EXISTING SIGNAL POLE TO BE REMOVED

EXISTING CONDUIT TO BE ABANDONED

EXISTING PULL BOX TO BE REMOVED

15+00

EXISTING CONDUIT TO BE ABANDONED

EXISTING SIGNAL POLE TO BE REMOVED

HWY. 51/PINE ST.

12+00

HWY. 51/PINE ST.

EXISTING CONDUIT TO BE ABANDONED

EXISTING PULL BOX TO BE REMOVED

EXISTING PULL BOX TO BE REMOVED

EXISTING CONDUIT TO BE ABANDONED

EXISTING CONDUIT TO BE ABANDONED

EXISTING PULL BOX TO BE REMOVED

EXISTING CONDUIT TO BE ABANDONED

EXISTING CONTROLLER TO BE REMOVED

EXISTING CONDUIT TO BE ABANDONED

EXISTING SERVICE POINT TO BE REMOVED

EXISTING CONDUIT TO BE ABANDONED

EXISTING PULL BOX TO BE REMOVED

RED HILL RD.

30+00

SCALE IN FEET
0 20 40 80

STAGE 2

LOCATION: HWY. 51/PINE ST. AND PROFESSIONAL PARK DR.
CITY: ARKADELPHIA
COUNTY: CLARK
DISTRICT: 07 SCALE: 1"=40' DRAWN BY: AS

DATE: 4/19/2022 FILE NAME: t070442_p02a_MOT_Stage 2.dgn

rnfortner 6/28/2022 10:36:27 AM
WORKSPACE: AHTD
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REVISED DATE:

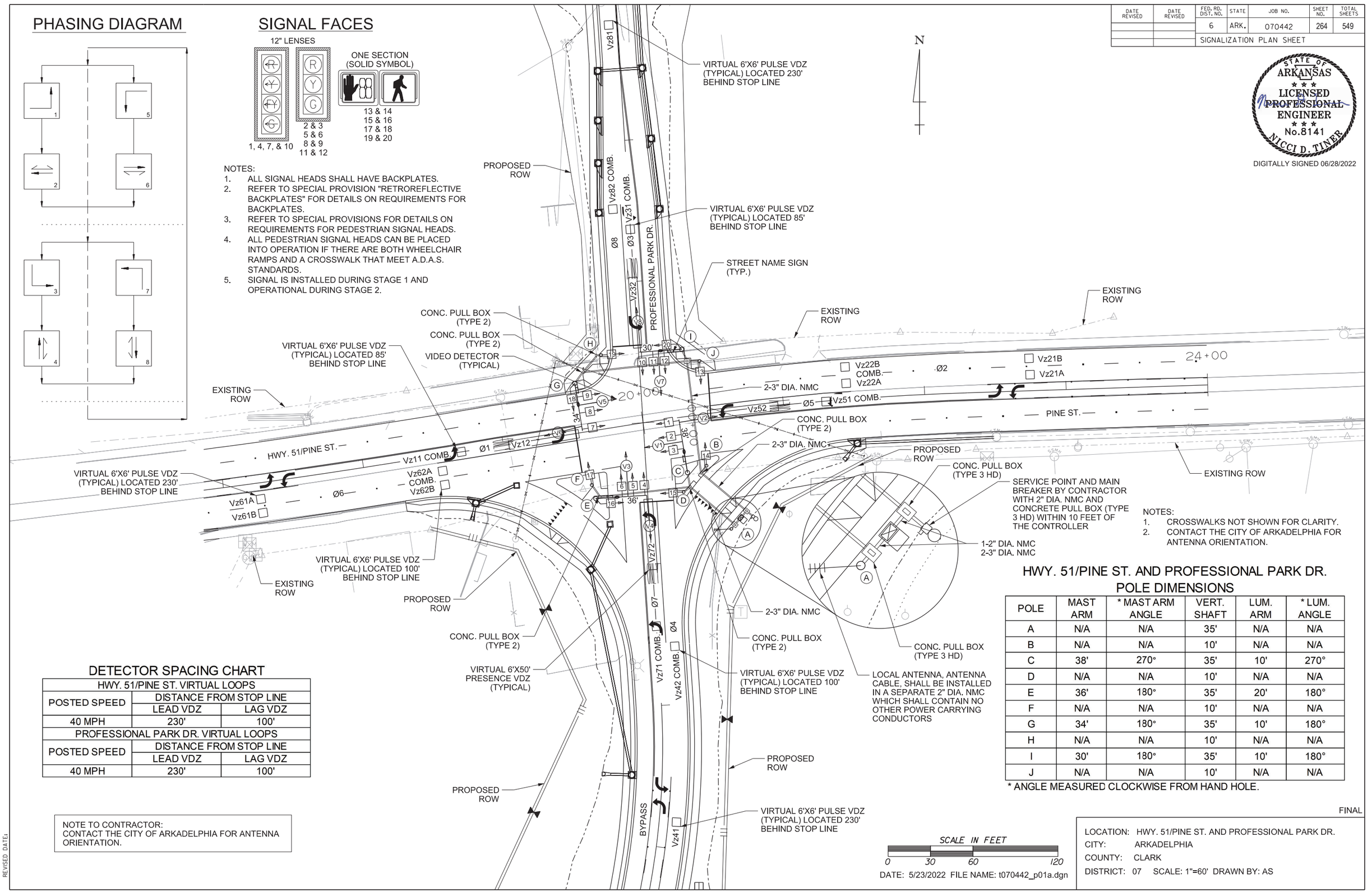
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	264	549
		SIGNALIZATION PLAN SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER
DIGITALLY SIGNED 06/28/2022

PHASING DIAGRAM

SIGNAL FACES

NOTES:
1. ALL SIGNAL HEADS SHALL HAVE BACKPLATES.
2. REFER TO SPECIAL PROVISION "RETROREFLECTIVE BACKPLATES" FOR DETAILS ON REQUIREMENTS FOR BACKPLATES.
3. REFER TO SPECIAL PROVISIONS FOR DETAILS ON REQUIREMENTS FOR PEDESTRIAN SIGNAL HEADS.
4. ALL PEDESTRIAN SIGNAL HEADS CAN BE PLACED INTO OPERATION IF THERE ARE BOTH WHEELCHAIR RAMPS AND A CROSSWALK THAT MEET A.D.A.S. STANDARDS.
5. SIGNAL IS INSTALLED DURING STAGE 1 AND OPERATIONAL DURING STAGE 2.



NOTES:
1. CROSSWALKS NOT SHOWN FOR CLARITY.
2. CONTACT THE CITY OF ARKADELPHIA FOR ANTENNA ORIENTATION.

HWY. 51/PINE ST. AND PROFESSIONAL PARK DR. POLE DIMENSIONS

POLE	MAST ARM	* MAST ARM ANGLE	VERT. SHAFT	LUM. ARM	* LUM. ANGLE
A	N/A	N/A	35'	N/A	N/A
B	N/A	N/A	10'	N/A	N/A
C	38'	270°	35'	10'	270°
D	N/A	N/A	10'	N/A	N/A
E	36'	180°	35'	20'	180°
F	N/A	N/A	10'	N/A	N/A
G	34'	180°	35'	10'	180°
H	N/A	N/A	10'	N/A	N/A
I	30'	180°	35'	10'	180°
J	N/A	N/A	10'	N/A	N/A

* ANGLE MEASURED CLOCKWISE FROM HAND HOLE.

DETECTOR SPACING CHART

HWY. 51/PINE ST. VIRTUAL LOOPS		
POSTED SPEED	DISTANCE FROM STOP LINE	
	LEAD VDZ	LAG VDZ
40 MPH	230'	100'
PROFESSIONAL PARK DR. VIRTUAL LOOPS		
POSTED SPEED	DISTANCE FROM STOP LINE	
	LEAD VDZ	LAG VDZ
40 MPH	230'	100'

NOTE TO CONTRACTOR:
CONTACT THE CITY OF ARKADELPHIA FOR ANTENNA ORIENTATION.

FINAL

LOCATION: HWY. 51/PINE ST. AND PROFESSIONAL PARK DR.
CITY: ARKADELPHIA
COUNTY: CLARK
DISTRICT: 07 SCALE: 1"=60' DRAWN BY: AS

DATE: 5/23/2022 FILE NAME: t070442_p01a.dgn

rnfortner 6/28/2022 10:36:28 AM
WORKSPACE: AHTD
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REVISED DATE:

HWY. 51/PINE ST. AND PROFESSIONAL PARK DR.
POLE LOCATIONS

POLE	LOCATION & STATION	OFFSET	X, Y COORDINATES
A	HWY. 51 - STA. 20+52.50	82.81' RT.	982715.00, 1842581.20
B	HWY. 51 - STA. 20+40.46	36.32' RT.	982697.48, 1842625.81
C	HWY. 51 - STA. 20+26.16	39.36' RT.	982684.01, 1842620.92
D	HWY. 51 - STA. 20+21.41	52.56' RT.	982681.26, 1842607.20
E	HWY. 51 - STA. 19+58.54	47.63' RT.	982619.28, 1842602.54
F	HWY. 51 - STA. 19+57.22	37.66' RT.	982616.39, 1842612.19
G	HWY. 51 - STA. 19+56.78	35.07' LT.	982604.45, 1842683.93
H	HWY. 51 - STA. 19+78.30	51.93' LT.	982623.02, 1842703.98
I	HWY. 51 - STA. 20+33.97	47.48' LT.	982679.92, 1842708.01
J	HWY. 51 - STA. 20+45.08	37.54' LT.	982692.48, 1842699.65

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	265	549
		SIGNALIZATION PLAN SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER
DIGITALLY SIGNED 06/28/2022

PROPOSED ROW
VIRTUAL 6'X6' PULSE VDZ (TYPICAL) LOCATED 85' BEHIND STOP LINE
STREET NAME SIGN (TYP.)
Vz51 LOCATED 85' BEHIND STOP LINE
EXISTING ROW
CONC. PULL BOX (TYPE 2)
VIDEO DETECTOR (TYP.)
Vz82 COMB.
Vz31 COMB.
Ø8
Ø3
Vz32
PROFESSIONAL PARK DR.
Vz22B
Vz22A
COMB.
Ø2
Vz21B
Vz21A
Vz51 COMB.
Ø5
Vz52
PINE ST.
2-3" DIA. NMC
HWY. 51/PINE ST.
Vz11 COMB.
Ø1
Vz12
Vz62A
COMB.
Vz62B
Ø6
Vz61A
Vz61B
VIRTUAL 6'X6' PULSE VDZ (TYPICAL) LOCATED 230' BEHIND STOP LINE
VIRTUAL 6'X6' PULSE VDZ (TYPICAL) LOCATED 100' BEHIND STOP LINE
CONC. PULL BOX (TYPE 2)
2-3" DIA. NMC
PROPOSED ROW
CONC. PULL BOX (TYPE 3)
SERVICE POINT AND MAIN BREAKER BY CONTRACTOR WITH 2" DIA. NMC AND CONCRETE PULL BOX (TYPE 3 HD) WITHIN 10 FEET OF THE CONTROLLER
1-2" DIA. NMC
2-3" DIA. NMC
CONC. PULL BOX (TYPE 3)
LOCAL ANTENNA, ANTENNA CABLE, SHALL BE INSTALLED IN A SEPARATE 2" DIA. NMC WHICH SHALL CONTAIN NO OTHER POWER CARRYING CONDUCTORS
CONC. PULL BOX (TYPE 2)
VIRTUAL 6'X50' PRESENCE VDZ (TYPICAL)
PROPOSED ROW
VIRTUAL 6'X6' PULSE VDZ (TYPICAL) LOCATED 100' BEHIND STOP LINE
EXISTING ROW
PROPOSED ROW
CONC. PULL BOX (TYPE 2)
PROPOSED ROW
BYPASS
Vz72
Ø7
Ø4
Vz71 COMB.
Vz42 COMB.
V1 V2 V3 V4 V5 V6 V7 V8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
A B C D E F G H I J
30' 38' 36' 34'
20+00

DESIGN PARAMETERS

POSTED SPEED LIMIT:
40 MPH NORTH AND SOUTH APPROACHES
40 MPH EAST AND WEST APPROACHES

NO BUS STOPS
NO RAILROAD TRACKS
NO EXISTING INTERCONNECTIONS
NO FIRE STATION
NO PARKING
NO SIGHT DISTANCE RESTRICTIONS

LOCATION OF STOP LINES SHOWN ON PERMANENT PAVEMENT MARKING DETAILS (SEE SEPARATE SHEET).

MINIMUM CLEAR ZONE DISTANCE
4 FEET BEHIND CURB

NOTES:
1. CROSSWALKS NOT SHOWN FOR CLARITY.
2. CONTACT THE CITY OF ARKADELPHIA FOR ANTENNA ORIENTATION.

SCALE IN FEET
0 20 40 80

DATE: 5/23/2022 FILE NAME: t070442_p02a.dgn

FINAL

LOCATION: HWY. 51/PINE ST. AND PROFESSIONAL PARK DR.
CITY: ARKADELPHIA
COUNTY: CLARK
DISTRICT: 07 SCALE: 1"=40' DRAWN BY: AS

rnfortner 6/28/2022 10:36:30 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	266	549
		SIGNALIZATION PLAN SHEET				

STATE OF ARKANSAS
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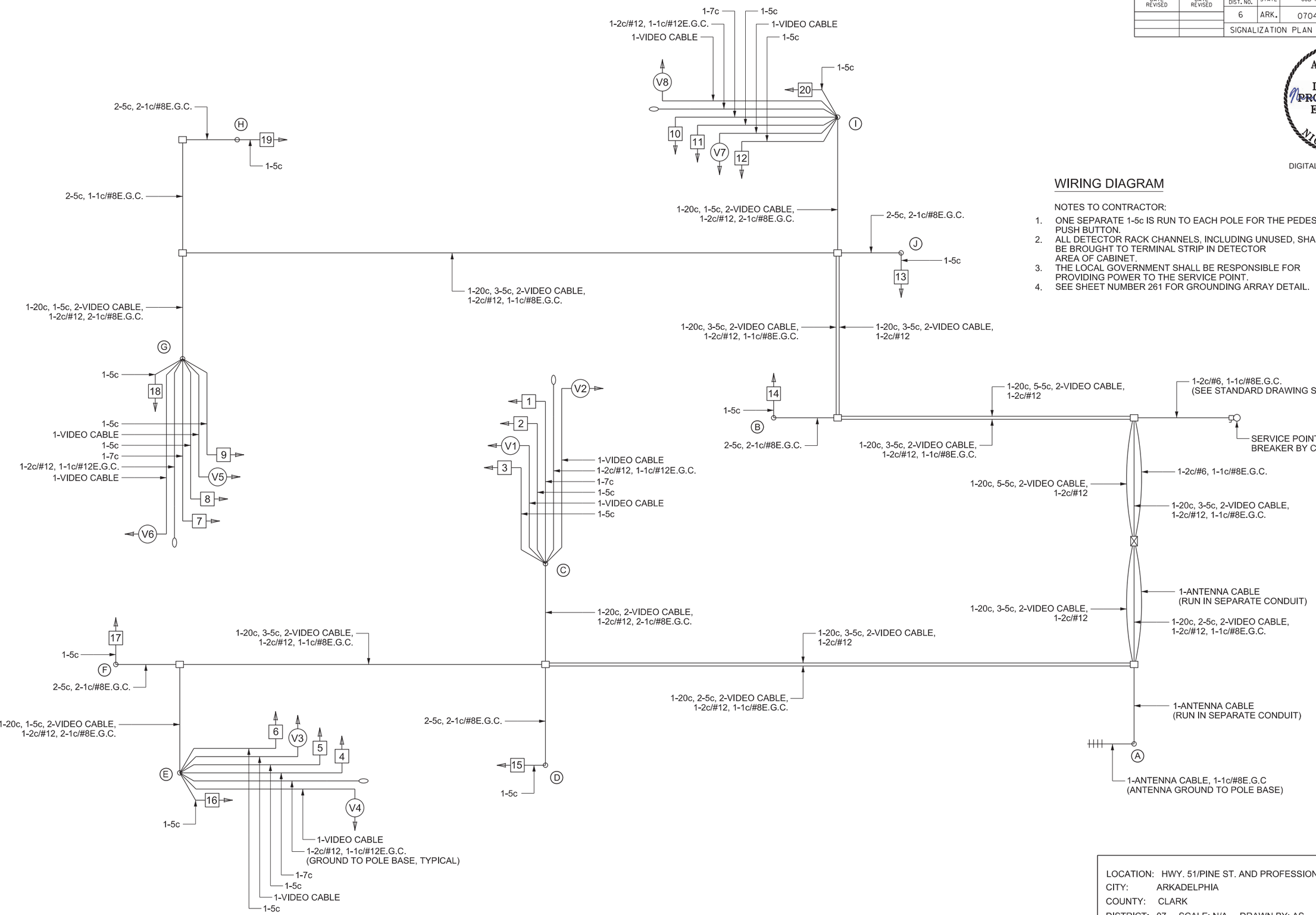

WIRING DIAGRAM

NOTES TO CONTRACTOR:

1. ONE SEPARATE 1-5c IS RUN TO EACH POLE FOR THE PEDESTRIAN PUSH BUTTON.
2. ALL DETECTOR RACK CHANNELS, INCLUDING UNUSED, SHALL BE BROUGHT TO TERMINAL STRIP IN DETECTOR AREA OF CABINET.
3. THE LOCAL GOVERNMENT SHALL BE RESPONSIBLE FOR PROVIDING POWER TO THE SERVICE POINT.
4. SEE SHEET NUMBER 261 FOR GROUNDING ARRAY DETAIL.

FINAL

LOCATION: HWY. 51/PINE ST. AND PROFESSIONAL PARK DR.
CITY: ARKADELPHIA
COUNTY: CLARK
DISTRICT: 07 SCALE: N/A DRAWN BY: AS

DATE: 5/23/2022 FILE NAME: t070442_p03a.dgn

rnfortner 6/28/2022 10:36:32 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	267	549
		SIGNALIZATION PLAN SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER

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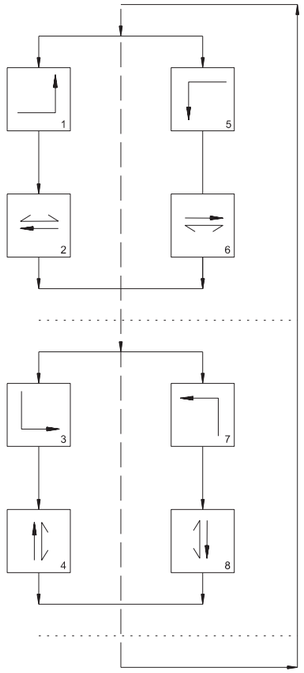
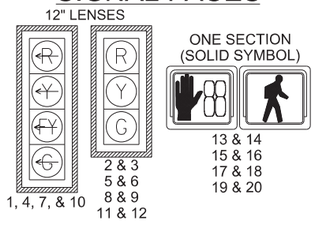
PHASING DIAGRAM

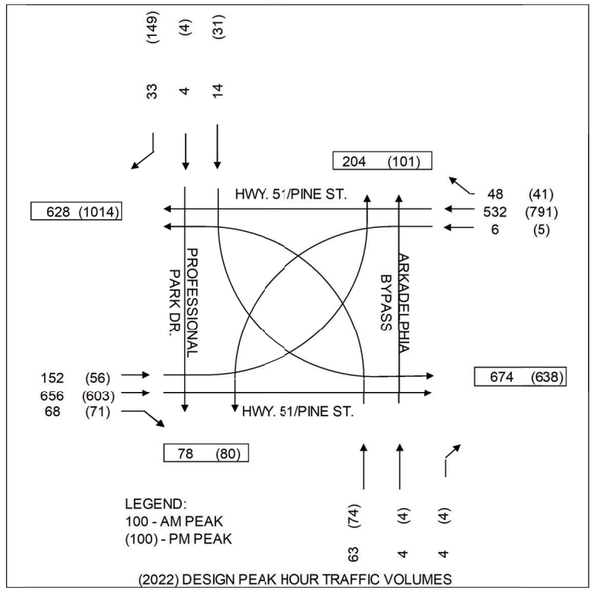


SIGNAL FACES



NOTES:
1. ALL SIGNAL HEADS SHALL HAVE BACKPLATES.
2. REFER TO SPECIAL PROVISION "RETROREFLECTIVE BACKPLATES" FOR DETAILS ON REQUIREMENTS FOR BACKPLATES.
3. REFER TO SPECIAL PROVISIONS FOR DETAILS ON REQUIREMENTS FOR PEDESTRIAN SIGNAL HEADS.
4. ALL PEDESTRIAN SIGNAL HEADS CAN BE PLACED INTO OPERATION IF THERE ARE BOTH WHEELCHAIR RAMPS AND A CROSSWALK THAT MEET A.D.A.S. STANDARDS.

TRAFFIC FLOW DIAGRAM



DETECTOR CHART

DETECTOR SYSTEM DESCRIPTION: JOB 070442											
HWY. 51/PINE ST. AND PROFESSIONAL PARK DR. DETECTOR ASSIGNMENTS				HARDWARE INPUTS BY SUPPLIER			PROGRAM ASSIGNMENTS LOCAL		MASTER SYSTEM DETECTOR NUMBERS	COMMENTS	TUBE LENGTHS
DET. ID #	LOCATION DIRECTION	TYPE	DET. #	CAB. TRM. #	AMP CHN. #	CON. IMP. #	PHS	SYSTEM DET. #			
Vz11	EB LEFT TURN FAR	COMB.			1	V9	1	1		CAMERA V1	37"
Vz12	EB LEFT TURN	LOCAL			2	V1	1			CAMERA V1	37"
Vz21 A&B	WB ADVANCE	LOCAL			5	V2	2			CAMERA V2	74"
Vz22 A&B	WB NEAR	COMB.			6	V10	2	2		CAMERA V5	37"
Vz31	SB LEFT TURN FAR	COMB.			9	V11	3	3		CAMERA V3	37"
Vz32	SB LEFT TURN	LOCAL			10	V3	3			CAMERA V3	37"
Vz41	NB ADVANCE	LOCAL			13	V4	4			CAMERA V4	74"
Vz42	NB NEAR	COMB.			14	V12	4	4		CAMERA V7	37"
Vz51	WB LEFT TURN FAR	COMB.			7	V13	5	5		CAMERA V5	37"
Vz52	WB LEFT TURN	LOCAL			8	V5	5			CAMERA V5	37"
Vz61 A&B	EB ADVANCE	LOCAL			3	V6	6			CAMERA V6	74"
Vz62 A&B	EB NEAR	COMB.			4	V14	6	6		CAMERA V1	37"
Vz71	NB LEFT TURN FAR	COMB.			15	V15	7	7		CAMERA V7	37"
Vz72	NB LEFT TURN	LOCAL			16	V7	7			CAMERA V7	37"
Vz81	SB ADVANCE	LOCAL			11	V8	8			CAMERA V8	74"
Vz82	SB NEAR	COMB.			12	V16	8	8		CAMERA V3	37"
PB2 A&B	PROF. PARK DR. N. LEG	PED.				P2	2				
PB4 A&B	HWY. 51 E. LEG	PED.				P4	4				
PB6 A&B	PROF. PARK DR. S. LEG	PED.				P6	6				
PB8 A&B	HWY. 51 W. LEG	PED.				P8	8				
					SPARE: NONE						

CONTROLLER INPUT ABBREVIATIONS:
V = VEHICLE INPUT
D = SYSTEM OR AUXILIARY INPUT
P = PEDESTRIAN INPUT

NOTE: "AMP CHN =" REFERS TO THE RACK OUTPUT POSITION.
THIS IS WIRED TO CONTROLLER INPUT DETECTOR NUMBER WHICH IS PROGRAMMED TO ACTUATE THE DESIGNATED PHASE.
EXAMPLE: V9 = SYSTEM DETECTOR 1, V10 = SYSTEM DETECTOR 2

INTERVAL CHART

SIGNAL FACES	HWY. 51/PINE ST. AND PROFESSIONAL PARK DR. 1+5	CLR.	1+6	CLR.	2+5	CLR.	2+6	CLR.	3+7	CLR.	3+8	CLR.	4+7	CLR.	4+8	CLR.	FLASH SEQUENCE
1	~~G~~	*	~~G~~	*	~~FY~~	***	~~FY~~	***	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~
2 & 3	R	R	G	**	R	R	G	**	R	R	R	R	R	R	R	R	R
4	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~G~~	*	~~G~~	*	~~FY~~	***	~~FY~~	***	~~R~~
5 & 6	R	R	R	R	R	R	R	R	R	R	G	**	R	R	G	**	R
7	~~G~~	*	~~FY~~	***	~~G~~	*	~~FY~~	***	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~
8 & 9	R	R	R	R	G	**	G	**	R	R	R	R	R	R	R	R	R
10	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~G~~	*	~~FY~~	***	~~G~~	*	~~FY~~	***	~~R~~
11 & 12	R	R	R	R	R	R	R	R	R	R	R	R	G	**	G	**	R
13 & 14	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	W	FDW	W	FDW	BLK
15 & 16	DW	DW	W	FDW	DW	DW	W	FDW	DW	DW	DW	DW	DW	DW	DW	DW	BLK
17 & 18	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	W	FDW	DW	DW	W	FDW	BLK
19 & 20	DW	DW	DW	DW	W	FDW	W	FDW	DW	DW	DW	DW	DW	DW	DW	FDW	BLK

* DENOTES GREEN OR YELLOW ARROW DEPENDING ON NEXT PHASE
** DENOTES GREEN OR YELLOW BALL DEPENDING ON NEXT PHASE
*** DENOTES FLASHING YELLOW ARROW OR YELLOW ARROW DEPENDING ON NEXT PHASE

FINAL

LOCATION: HWY. 51/PINE ST. AT PROFESSIONAL PARK DR.
CITY: ARKADELPHIA
COUNTY: CLARK
DISTRICT: 07 SCALE: N/A DRAWN BY: AS

DATE: 5/23/2022 FILE NAME: t070442_p04a.dgn

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REVISED DATE:

DIGITALLY SIGNED 06/28/2022

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	268	549
		TRAFFIC SIGNAL QUANTITIES - CADDO ST.				

STAGE 2 TRAFFIC SIGNAL QUANTITIES

ITEM NUMBER	ITEM	QUANTITY	UNIT
SP & 701	ACTUATED CONTROLLER TS2-TYPE 2 (8 PHASES)	1	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (3 SECTION, 1 WAY)	8	EACH
708	TRAFFIC SIGNAL CABLE (7C/14 A.W.G.)	971	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., E.G.C.)	59	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G.)	59	LIN. FT.
709	GALVANIZED STEEL CONDUIT (2")	15	LIN. FT.
709	GALVANIZED STEEL CONDUIT (3")	30	LIN. FT.
710	NON-METALLIC CONDUIT (2")	45	LIN. FT.
710	NON-METALLIC CONDUIT (3")	6	LIN. FT.
SS & 711	CONCRETE PULL BOX (TYPE 1 HD)	1	EACH
SS & 713	SPAN WIRE ASSEMBLY	1	EACH
SP	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT	0.25	LUMP SUM
716	TREATED WOOD POLE (CLASS 2, 45')	4	EACH
SP & 733	VIDEO DETECTOR (CLR)	4	EACH
733	VIDEO CABLE	935	LIN. FT.
733	VIDEO MONITOR (CLR)	1	EACH
SP & 733	VIDEO PROCESSOR, EDGE CARD (2 CAMERA)	2	EACH
SP & 733	VEHICLE DETECTOR RACK (16 CHANNEL)	1	EACH

STAGE 2 :
PERMANENT SERVICE POINT TO BE INSTALLED AND UTILIZED DURING STAGE CONSTRUCTION. INSTALL ALL TEMPORARY TRAFFIC SIGNAL EQUIPMENT AND REMOVE ALL EXISTING TRAFFIC SIGNAL EQUIPMENT.
MAINTAIN THIS TRAFFIC SIGNAL CONFIGURATION AS SHOWN ON THE STAGE 2 TRAFFIC SIGNAL PLANS.
(REFER TO MAINTENANCE OF TRAFFIC DETAILS.)

STAGE 3 TRAFFIC SIGNAL QUANTITIES

ITEM NUMBER	ITEM	QUANTITY	UNIT
SP	RELOCATION OF TRAFFIC SIGNAL HEAD	8	EACH
SP	VIDEO DETECTOR ROTATION	4	EACH

STAGE 3:
RELOCATE SIGNAL HEADS 19-26 AND ROTATE VIDEO DETECTORS V2, V4, V6, AND V8 TO ACCOMMODATE THE LANE SHIFTS.
MAINTAIN THIS TRAFFIC SIGNAL CONFIGURATION AS SHOWN ON THE STAGE 3 TRAFFIC SIGNAL PLANS.
(REFER TO MAINTENANCE OF TRAFFIC DETAILS.)

PERMANENT TRAFFIC SIGNAL QUANTITIES

ITEM NUMBER	ITEM	QUANTITY	UNIT
SP & 701	ACTUATED CONTROLLER TS2-TYPE 2 (8 PHASES)	1	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (3 SECTION, 1 WAY)	10	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (4 SECTION, 1 WAY)	2	EACH
SP & 707	COUNTDOWN PEDESTRIAN SIGNAL HEAD, LED	8	EACH
708	TRAFFIC SIGNAL CABLE (5C/14 A.W.G.)	2451	LIN. FT.
708	TRAFFIC SIGNAL CABLE (7C/14 A.W.G.)	259	LIN. FT.
708	TRAFFIC SIGNAL CABLE (20C/14 A.W.G.)	623	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., E.G.C.)	648	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/12 A.W.G., E.G.C.)	210	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G.)	48	LIN. FT.
SP	ELECTRICAL CONDUCTORS FOR LUMINAIRES	836	LIN. FT.
709	GALVANIZED STEEL CONDUIT (2")	20	LIN. FT.
710	NON-METALLIC CONDUIT (2")	34	LIN. FT.
710	NON-METALLIC CONDUIT (3")	692	LIN. FT.
SS & 711	CONCRETE PULL BOX (TYPE 2)	7	EACH
SS & 711	CONCRETE PULL BOX (TYPE 3 HD)	2	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND PCLE WITH FOUNDATION (32')	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND PCLE WITH FOUNDATION (34')	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND PCLE WITH FOUNDATION (38')	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND PCLE WITH FOUNDATION (42')	1	EACH
SP	LED LUMINAIRE ASSEMBLY	4	EACH
SS & 715	TRAFFIC SIGNAL PEDESTAL POLE WITH FOUNDATION	4	EACH
SP	SERVICE POINT ASSEMBLY (2 CIRCUITS)	1	EACH
SP	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT	0.25	LUMP SUM
SP	18" STREET NAME SIGN	4	EACH
SP & 733	VIDEO DETECTOR (CLR)	6	EACH
733	VIDEO CABLE	1293	LIN. FT.
733	VIDEO MONITOR (CLR)	1	EACH
SP & 733	VIDEO PROCESSOR, EDGE CARD (2 CAMERA)	4	EACH
SP & 733	VEHICLE DETECTOR RACK (16 CHANNEL)	1	EACH

PERMANENT TRAFFIC SIGNAL:
THE TEMPORARY TRAFFIC SIGNAL INSTALLATION SHALL REMAIN IN OPERATION UNTIL THE PERMANENT TRAFFIC SIGNAL IS COMPLETED AND OPERATIONAL. INSTALL THE PERMANENT TRAFFIC SIGNAL, MAINTAIN THE SERVICE POINT ASSEMBLY (2 CIRCUITS) THAT WAS INSTALLED IN THE STAGE 2 TEMPORARY TRAFFIC SIGNAL PLANS, AND REMOVE THE TEMPORARY TRAFFIC SIGNAL.
(REFER TO PERMANENT TRAFFIC SIGNAL PLANS.)

DATE: 5/24/2022 FILE NAME: t070442_qtyb.dgn

LOCATION: HWY. 67/10TH ST. AND HWY 51/CADDO ST.
CITY: ARKADELPHIA
COUNTY: CLARK
DISTRICT: 07 SCALE: N/A DRAWN BY: AS

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WORKSPACE: AHTD
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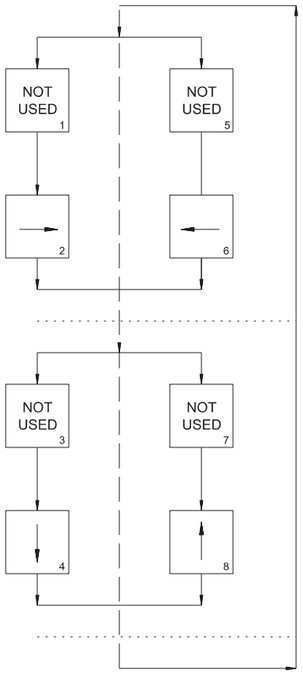
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	269	549
		SIGNALIZATION PLAN SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER
DIGITALLY SIGNED 06/28/2022

STAGES 2 & 3 - PHASING DIAGRAM

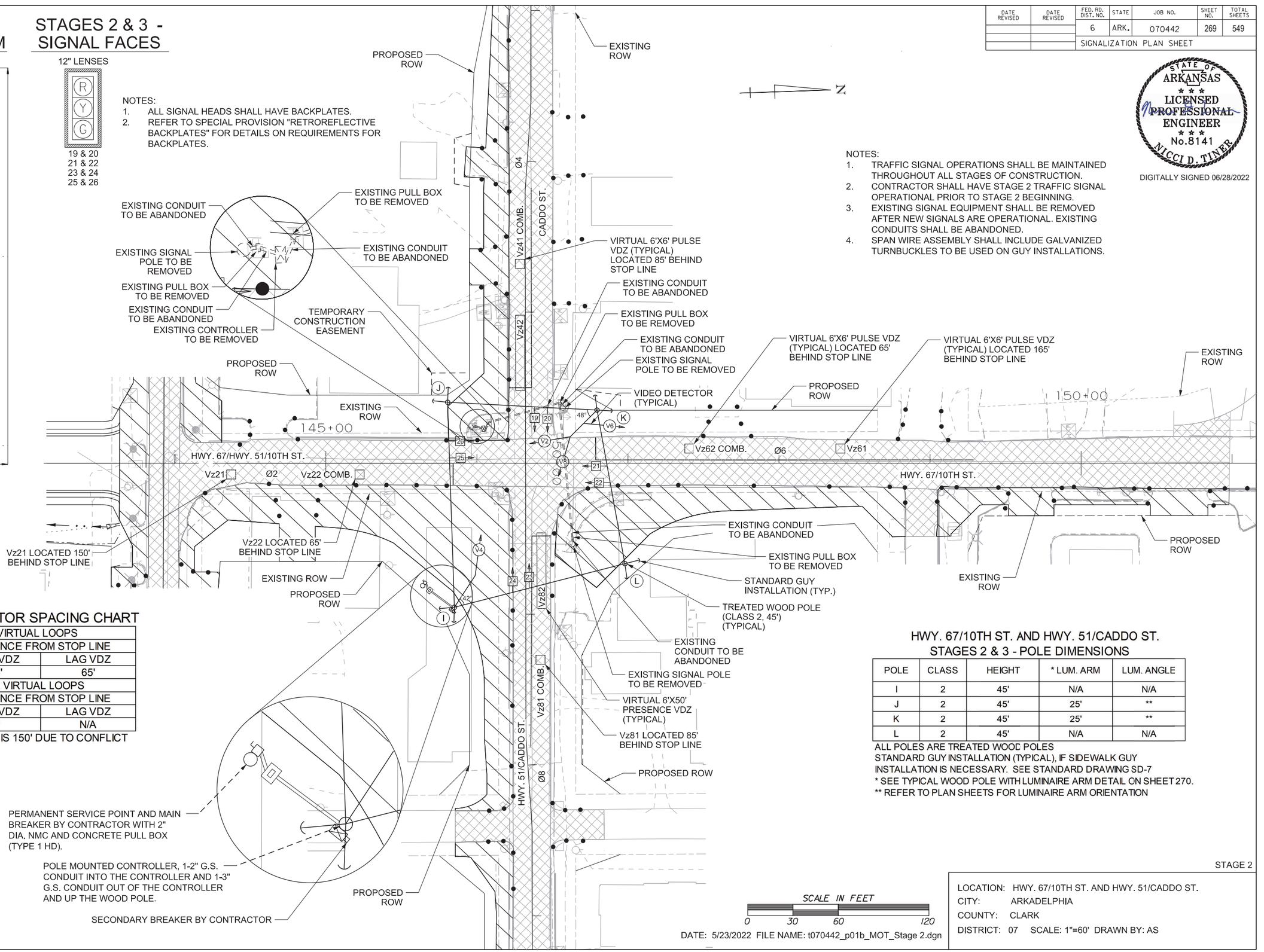


STAGES 2 & 3 - SIGNAL FACES

19 & 20
21 & 22
23 & 24
25 & 26

NOTES:
1. ALL SIGNAL HEADS SHALL HAVE BACKPLATES.
2. REFER TO SPECIAL PROVISION "RETROREFLECTIVE BACKPLATES" FOR DETAILS ON REQUIREMENTS FOR BACKPLATES.

NOTES:
1. TRAFFIC SIGNAL OPERATIONS SHALL BE MAINTAINED THROUGHOUT ALL STAGES OF CONSTRUCTION.
2. CONTRACTOR SHALL HAVE STAGE 2 TRAFFIC SIGNAL OPERATIONAL PRIOR TO STAGE 2 BEGINNING.
3. EXISTING SIGNAL EQUIPMENT SHALL BE REMOVED AFTER NEW SIGNALS ARE OPERATIONAL. EXISTING CONDUITS SHALL BE ABANDONED.
4. SPAN WIRE ASSEMBLY SHALL INCLUDE GALVANIZED TURNBUCKLES TO BE USED ON GUY INSTALLATIONS.



STAGES 2 & 3 - DETECTOR SPACING CHART

HWY. 67/10TH ST. VIRTUAL LOOPS		
POSTED SPEED	DISTANCE FROM STOP LINE	
	LEAD VDZ	LAG VDZ
30 MPH	165'	65'
HWY. 51/CADDO ST. VIRTUAL LOOPS		
POSTED SPEED	DISTANCE FROM STOP LINE	
	LEAD VDZ	LAG VDZ
30 MPH	85'	N/A

NOTE: Vz21 LEAD DISTANCE IS 150' DUE TO CONFLICT WITH INTERSECTION.

HWY. 67/10TH ST. AND HWY. 51/CADDO ST. STAGES 2 & 3 - POLE DIMENSIONS

POLE	CLASS	HEIGHT	* LUM. ARM	LUM. ANGLE
I	2	45'	N/A	N/A
J	2	45'	25'	**
K	2	45'	25'	**
L	2	45'	N/A	N/A

ALL POLES ARE TREATED WOOD POLES
STANDARD GUY INSTALLATION (TYPICAL), IF SIDEWALK GUY INSTALLATION IS NECESSARY. SEE STANDARD DRAWING SD-7
* SEE TYPICAL WOOD POLE WITH LUMINAIRE ARM DETAIL ON SHEET 270.
** REFER TO PLAN SHEETS FOR LUMINAIRE ARM ORIENTATION

SCALE IN FEET
0 30 60 120

DATE: 5/23/2022 FILE NAME: t070442_p01b_MOT_Stage 2.dgn

STAGE 2

LOCATION: HWY. 67/10TH ST. AND HWY. 51/CADDO ST.
CITY: ARKADELPHIA
COUNTY: CLARK
DISTRICT: 07 SCALE: 1"=60' DRAWN BY: AS

rnfortner 6/28/2022 10:36:48 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	270	549
		SIGNALIZATION PLAN SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8141
NICCI D. TINER

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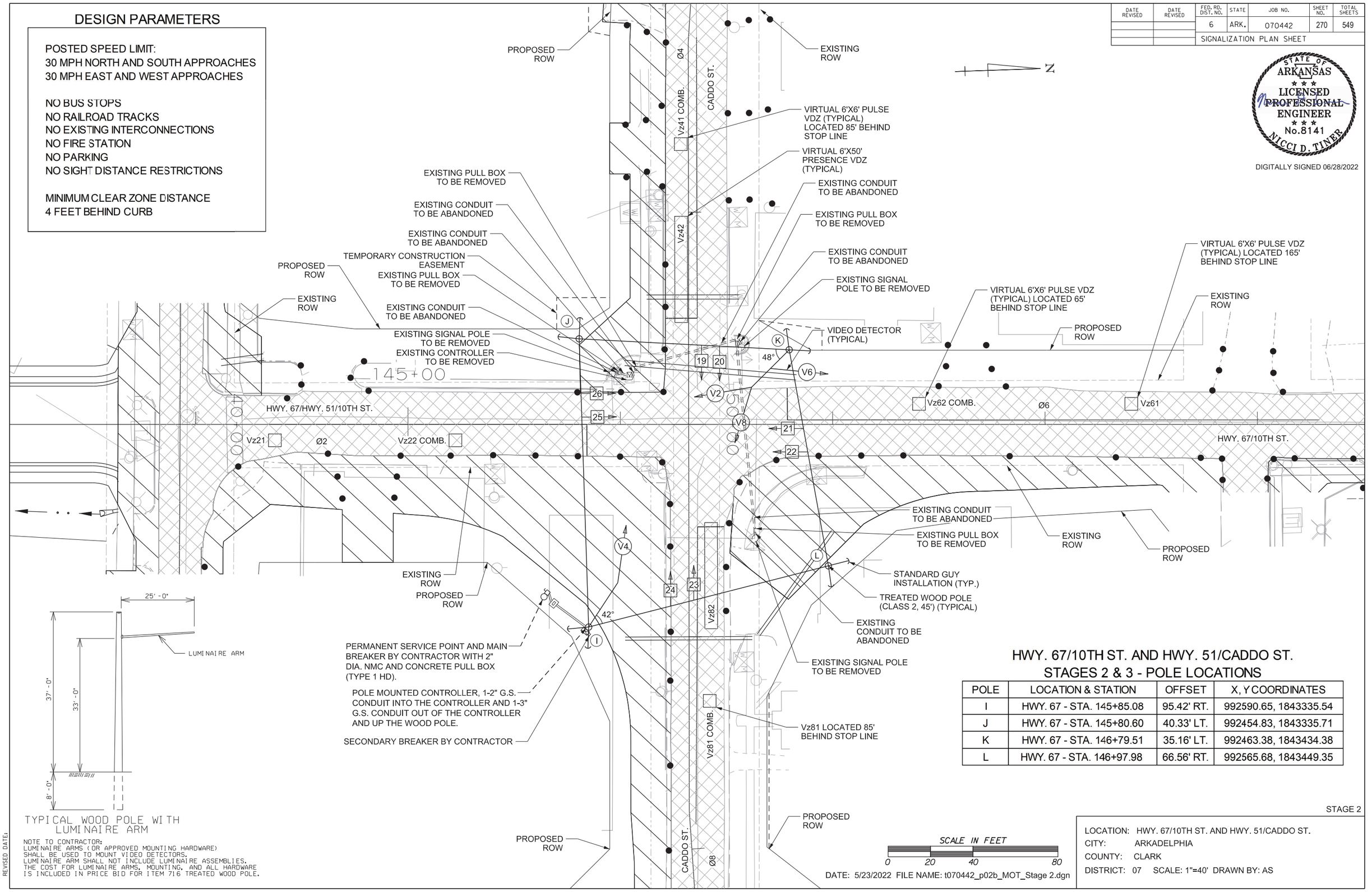
DESIGN PARAMETERS

POSTED SPEED LIMIT:
30 MPH NORTH AND SOUTH APPROACHES
30 MPH EAST AND WEST APPROACHES

NO BUS STOPS
NO RAILROAD TRACKS
NO EXISTING INTERCONNECTIONS
NO FIRE STATION
NO PARKING
NO SIGHT DISTANCE RESTRICTIONS

MINIMUM CLEAR ZONE DISTANCE
4 FEET BEHIND CURB



NOTE TO CONTRACTOR:
LUMINAIRE ARMS (OR APPROVED MOUNTING HARDWARE) SHALL BE USED TO MOUNT VIDEO DETECTORS.
LUMINAIRE ARM SHALL NOT INCLUDE LUMINAIRE ASSEMBLIES.
THE COST FOR LUMINAIRE ARMS, MOUNTING, AND ALL HARDWARE IS INCLUDED IN PRICE BID FOR ITEM 716 TREATED WOOD POLE.

HWY. 67/10TH ST. AND HWY. 51/CADDO ST.
STAGES 2 & 3 - POLE LOCATIONS

POLE	LOCATION & STATION	OFFSET	X, Y COORDINATES
I	HWY. 67 - STA. 145+85.08	95.42' RT.	992590.65, 1843335.54
J	HWY. 67 - STA. 145+80.60	40.33' LT.	992454.83, 1843335.71
K	HWY. 67 - STA. 146+79.51	35.16' LT.	992463.38, 1843434.38
L	HWY. 67 - STA. 146+97.98	66.56' RT.	992565.68, 1843449.35

STAGE 2

LOCATION: HWY. 67/10TH ST. AND HWY. 51/CADDO ST.
CITY: ARKADELPHIA
COUNTY: CLARK
DISTRICT: 07 SCALE: 1"=40' DRAWN BY: AS

DATE: 5/23/2022 FILE NAME: t070442_p02b_MOT_Stage 2.dgn

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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	271	549
		SIGNALIZATION PLAN SHEET				

STAGES 2 & 3 - WIRING DIAGRAM

NOTES TO CONTRACTOR:

1. ALL DETECTOR RACK CHANNELS, INCLUDING UNUSED, SHALL BE BROUGHT TO TERMINAL STRIP IN DETECTOR AREA OF CABINET.
2. THE LOCAL GOVERNMENT SHALL BE RESPONSIBLE FOR PROVIDING POWER TO THE SERVICE POINT.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER

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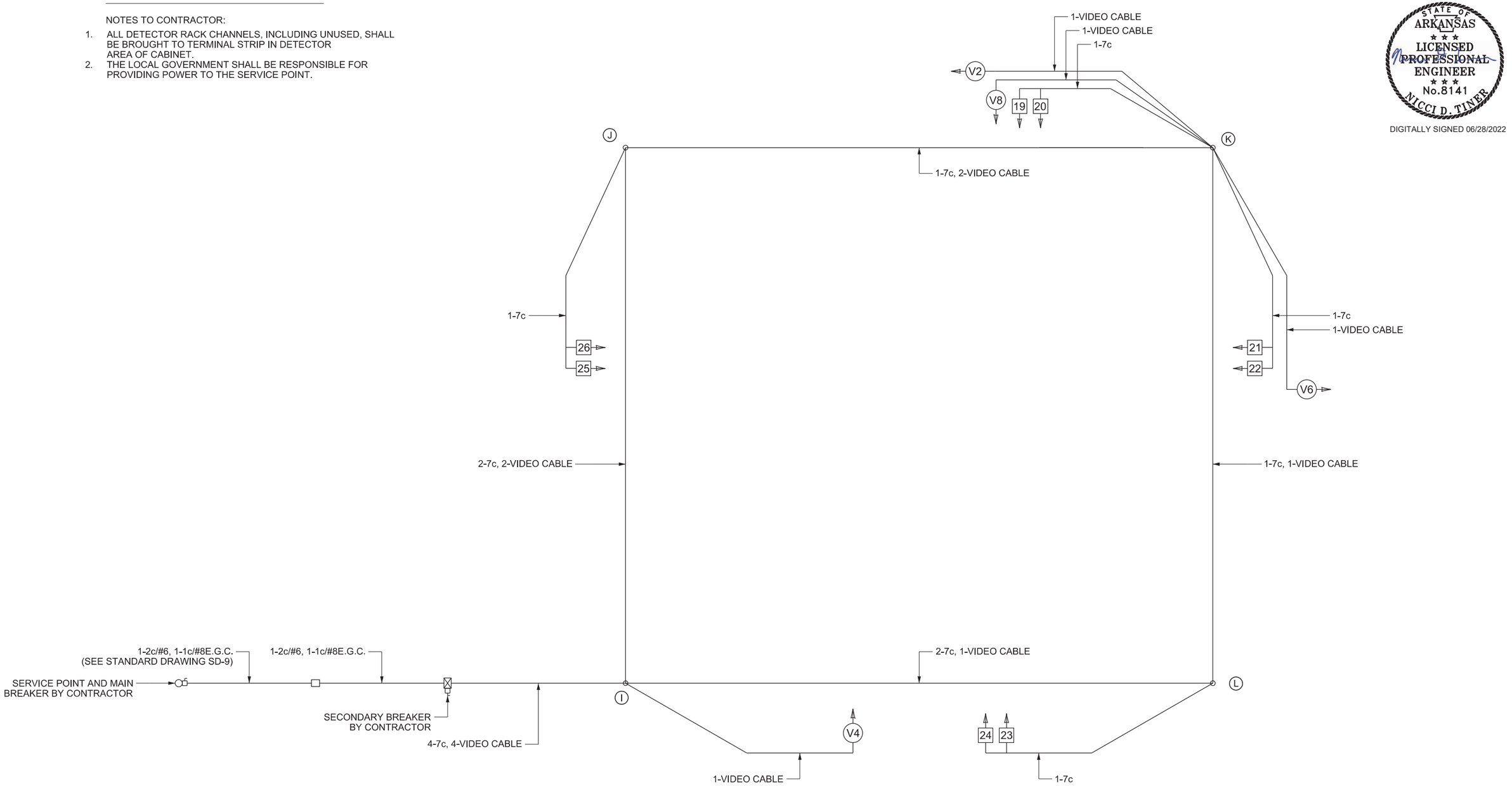

STAGES 2 & 3

LOCATION: HWY. 67/10TH ST. AND HWY. 51/CADDO ST.
CITY: ARKADELPHIA
COUNTY: CLARK
DISTRICT: 07 SCALE: N/A DRAWN BY: AS

DATE: 4/19/2022 FILE NAME: t070442_p03b_MOT_Stage 2.dgn

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WORKSPACE: AHTD
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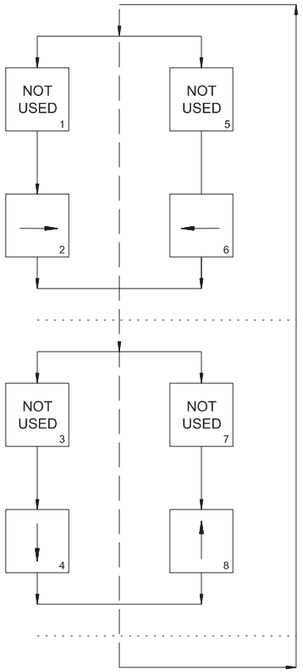
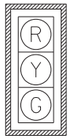
REVISED DATE:

STAGES 2 & 3 - PHASING DIAGRAM



STAGES 2 & 3 - SIGNAL FACES

12" LENSES



19 & 20
21 & 22
23 & 24
25 & 26

NOTES:
1. ALL SIGNAL HEADS SHALL HAVE BACKPLATES.
2. REFER TO SPECIAL PROVISION "RETROREFLECTIVE BACKPLATES" FOR DETAILS ON REQUIREMENTS FOR BACKPLATES.

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	272	549
		SIGNALIZATION PLAN SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
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STAGES 2 & 3 - DETECTOR CHART

DETECTOR SYSTEM DESCRIPTION: JOB 070442											
HWY. 67/10TH ST. AND HWY. 51/CADDO ST. DETECTOR ASSIGNMENTS				HARDWARE INPUTS BY SUPPLIER			PROGRAM ASSIGNMENTS			COMMENTS	TUBE LENGTHS
							LOCAL		MASTER SYSTEM DETECTOR NUMBERS		
DET. ID #	LOCATION DIRECTION	TYPE	DET. #	CAB. TRM. #	AMP CHN. #	CON. IMP. #	PHS	SYSTEM DET. #			
Vz21	NB ADVANCE	LOCAL			1	V2	2			CAMERA V2	23"
Vz22	NB NEAR	COMB.			2	V10	2	2		CAMERA V2	23"
Vz41	EB ADVANCE	COMB.			5	V12	4	4		CAMERA V4	23"
Vz42	EB NEAR	LOCAL			6	V4	4			CAMERA V4	23"
Vz61	SB ADVANCE	LOCAL			3	V6	6			CAMERA V6	23"
Vz62	SB NEAR	COMB.			4	V14	6	6		CAMERA V6	23"
Vz81	WB ADVANCE	COMB.			7	V16	8	8		CAMERA V8	23"
Vz82	WB NEAR	LOCAL			8	V8	8			CAMERA V8	23"
					SPARE: 9-16						

CONTROLLER INPUT ABBREVIATIONS:
V = VEHICLE INPUT
D = SYSTEM OR AUXILIARY INPUT
P = PEDESTRIAN INPUT

NOTE: "AMP CHN =" REFERS TO THE RACK OUTPUT POSITION.
THIS IS WIRED TO CONTROLLER INPUT DETECTOR NUMBER WHICH IS PROGRAMMED TO ACTUATE THE DESIGNATED PHASE.
EXAMPLE: V9 = SYSTEM DETECTOR 1, V10 = SYSTEM DETECTOR 2

STAGES 2 & 3 - INTERVAL CHART

SIGNAL FACES	HWY. 67/10TH ST. AND HWY. 51/CADDO ST. 2+6	CLR.	4+8	CLR.		FLASH SEQUENCE
19 & 20	R	R	G	Y		R
21 & 22	G	Y	R	R		R
23 & 24	R	R	G	Y		R
25 & 26	G	Y	R	R		R

STAGES 2 & 3

LOCATION: HWY. 67/10TH ST. AND HWY. 51/CADDO ST.
CITY: ARKADELPHIA
COUNTY: CLARK
DISTRICT: 07 SCALE: N/A DRAWN BY: AS

DATE: 4/19/2022 FILE NAME: t070442_p04b_MOT_Stage 2.dgn

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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	273	549
		SIGNALIZATION PLAN SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER
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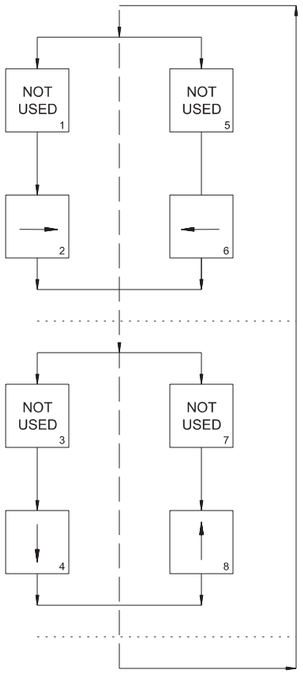
STAGES 2 & 3 - PHASING DIAGRAM



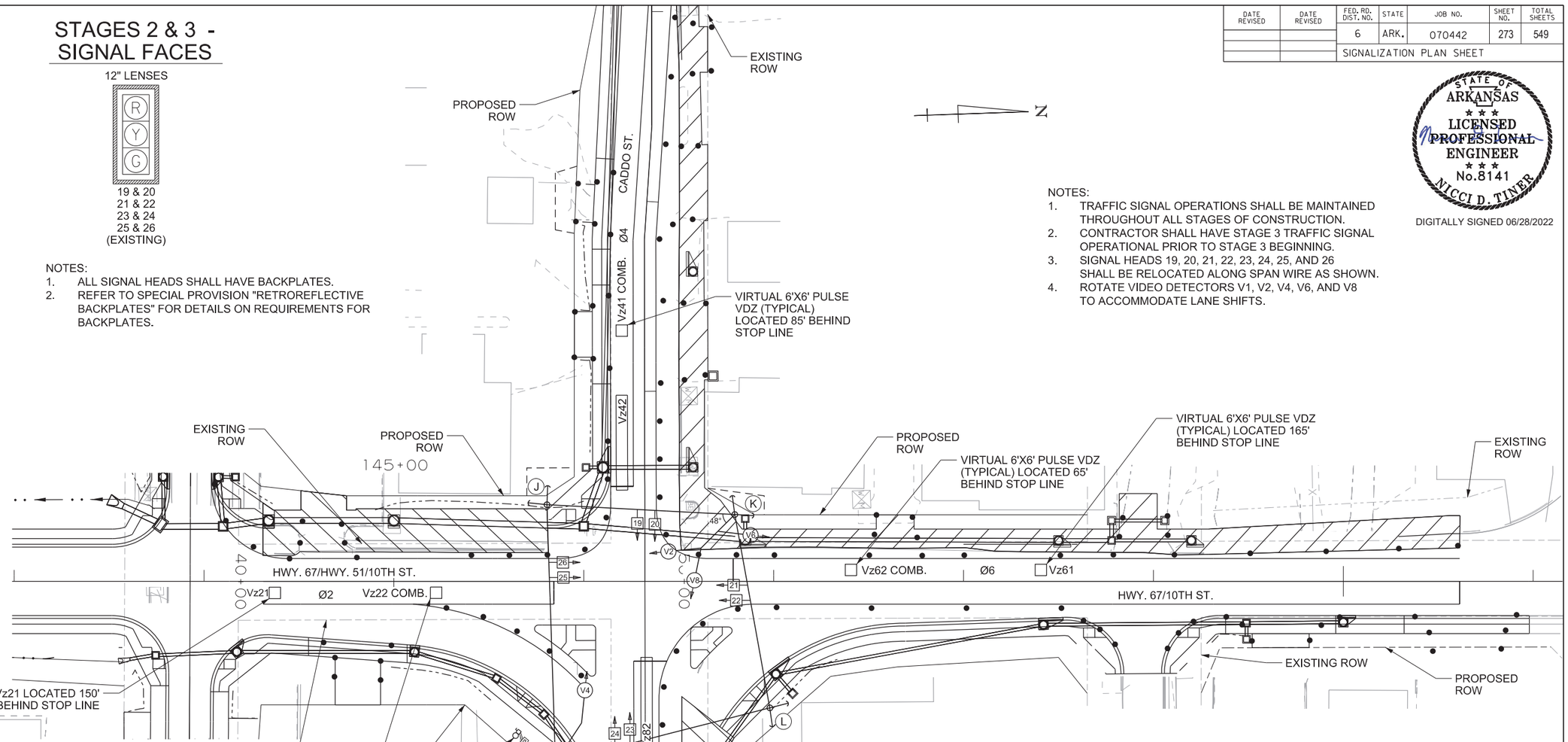
STAGES 2 & 3 - SIGNAL FACES

12" LENSES

19 & 20
21 & 22
23 & 24
25 & 26
(EXISTING)

NOTES:
1. ALL SIGNAL HEADS SHALL HAVE BACKPLATES.
2. REFER TO SPECIAL PROVISION "RETROREFLECTIVE BACKPLATES" FOR DETAILS ON REQUIREMENTS FOR BACKPLATES.

NOTES:
1. TRAFFIC SIGNAL OPERATIONS SHALL BE MAINTAINED THROUGHOUT ALL STAGES OF CONSTRUCTION.
2. CONTRACTOR SHALL HAVE STAGE 3 TRAFFIC SIGNAL OPERATIONAL PRIOR TO STAGE 3 BEGINNING.
3. SIGNAL HEADS 19, 20, 21, 22, 23, 24, 25, AND 26 SHALL BE RELOCATED ALONG SPAN WIRE AS SHOWN.
4. ROTATE VIDEO DETECTORS V1, V2, V4, V6, AND V8 TO ACCOMMODATE LANE SHIFTS.



STAGES 2 & 3 - DETECTOR SPACING CHART

HWY. 67/10TH ST. VIRTUAL LOOPS		
POSTED SPEED	DISTANCE FROM STOP LINE	
	LEAD VDZ	LAG VDZ
30 MPH	165'	65'
HWY. 51/CADDO ST. VIRTUAL LOOPS		
POSTED SPEED	DISTANCE FROM STOP LINE	
	LEAD VDZ	LAG VDZ
30 MPH	85'	N/A

NOTE: Vz21 LEAD DISTANCE IS 150' DUE TO CONFLICT WITH INTERSECTION.

HWY. 67/10TH ST. AND HWY. 51/CADDO ST. STAGES 2 & 3 - POLE DIMENSIONS

POLE	CLASS	HEIGHT	* LUM. ARM	LUM. ANGLE
I	2	45'	N/A	N/A
J	2	45'	25'	**
K	2	45'	25'	**
L	2	45'	N/A	N/A

ALL POLES ARE TREATED WOOD POLES
STANDARD GUY INSTALLATION (TYPICAL), IF SIDEWALK GUY INSTALLATION IS NECESSARY. SEE STANDARD DRAWING SD-7
* SEE TYPICAL WOOD POLE WITH LUMINAIRE ARM DETAIL ON SHEET 274.
** REFER TO PLAN SHEETS FOR LUMINAIRE ARM ORIENTATION

SCALE IN FEET
0 30 60 120

DATE: 5/23/2022 FILE NAME: t070442_p01b_MOT_Stage 3.dgn

STAGE 3

LOCATION: HWY. 67/10TH ST. AND HWY. 51/CADDO ST.
CITY: ARKADELPHIA
COUNTY: CLARK
DISTRICT: 07 SCALE: 1"=60' DRAWN BY: AS

rnforfner 6/28/2022 10:36:56 AM
WORKSPACE: AHTD
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REVISED DATE:

DESIGN PARAMETERS

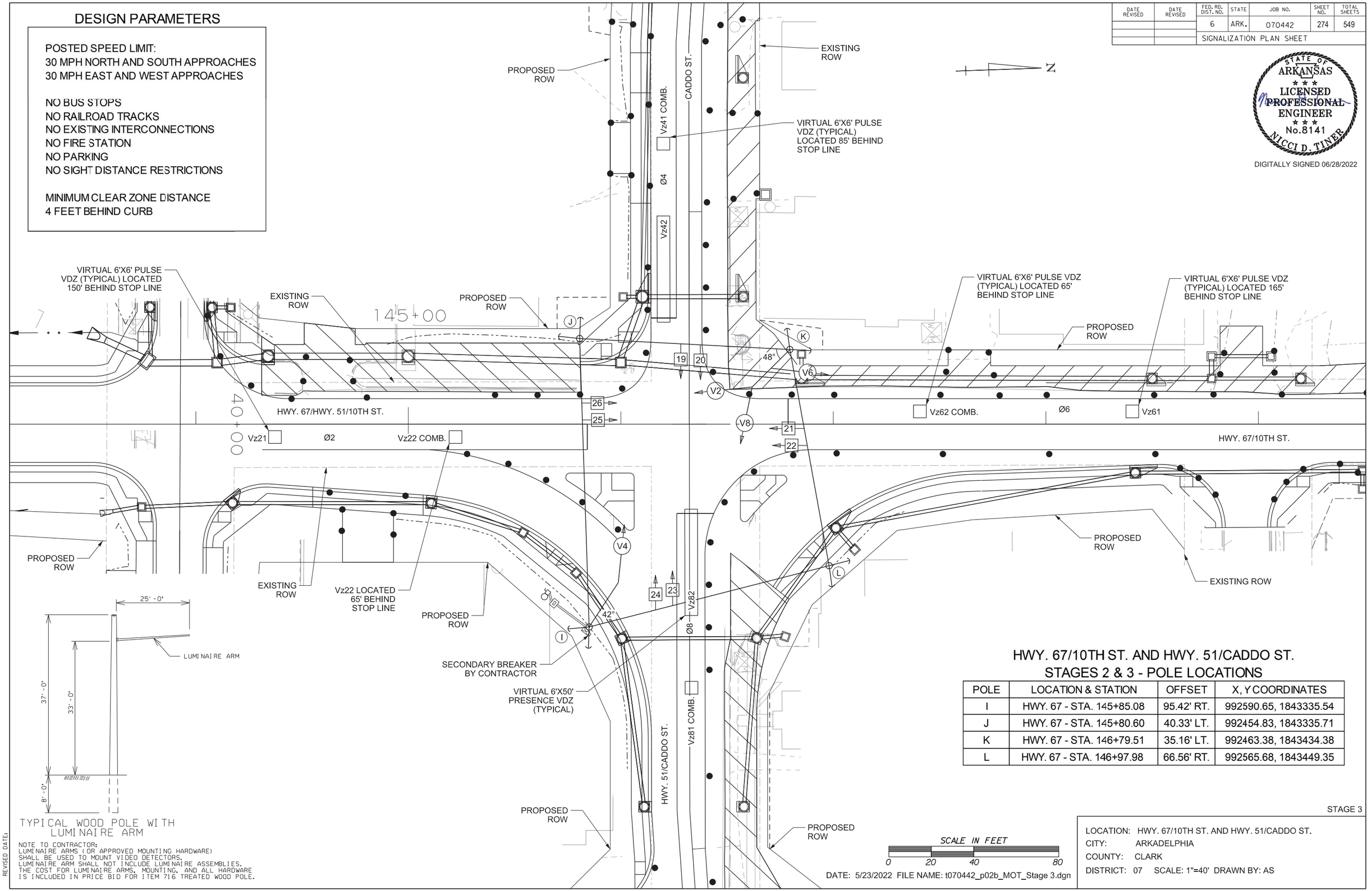
POSTED SPEED LIMIT:
30 MPH NORTH AND SOUTH APPROACHES
30 MPH EAST AND WEST APPROACHES

NO BUS STOPS
NO RAILROAD TRACKS
NO EXISTING INTERCONNECTIONS
NO FIRE STATION
NO PARKING
NO SIGHT DISTANCE RESTRICTIONS

MINIMUM CLEAR ZONE DISTANCE
4 FEET BEHIND CURB

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	274	549
		SIGNALIZATION PLAN SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER
DIGITALLY SIGNED 06/28/2022



TYPICAL WOOD POLE WITH LUMINAIRE ARM

NOTE TO CONTRACTOR:
LUMINAIRE ARMS (OR APPROVED MOUNTING HARDWARE) SHALL BE USED TO MOUNT VIDEO DETECTORS. LUMINAIRE ARM SHALL NOT INCLUDE LUMINAIRE ASSEMBLIES. THE COST FOR LUMINAIRE ARMS, MOUNTING, AND ALL HARDWARE IS INCLUDED IN PRICE BID FOR ITEM 716 TREATED WOOD POLE.

HWY. 67/10TH ST. AND HWY. 51/CADDO ST.
STAGES 2 & 3 - POLE LOCATIONS

POLE	LOCATION & STATION	OFFSET	X, Y COORDINATES
I	HWY. 67 - STA. 145+85.08	95.42' RT.	992590.65, 1843335.54
J	HWY. 67 - STA. 145+80.60	40.33' LT.	992454.83, 1843335.71
K	HWY. 67 - STA. 146+79.51	35.16' LT.	992463.38, 1843434.38
L	HWY. 67 - STA. 146+97.98	66.56' RT.	992565.68, 1843449.35

STAGE 3

SCALE IN FEET
0 20 40 80

DATE: 5/23/2022 FILE NAME: t070442_p02b_MOT_Stage 3.dgn

LOCATION: HWY. 67/10TH ST. AND HWY. 51/CADDO ST.
CITY: ARKADELPHIA
COUNTY: CLARK
DISTRICT: 07 SCALE: 1"=40' DRAWN BY: AS

rnfortner 6/28/2022 10:37:00 AM
WORKSPACE: AHTD
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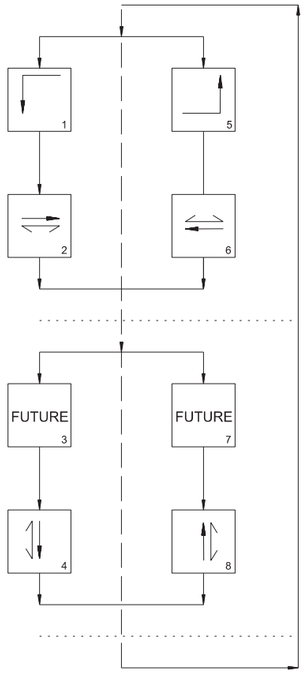
REVISED DATE:

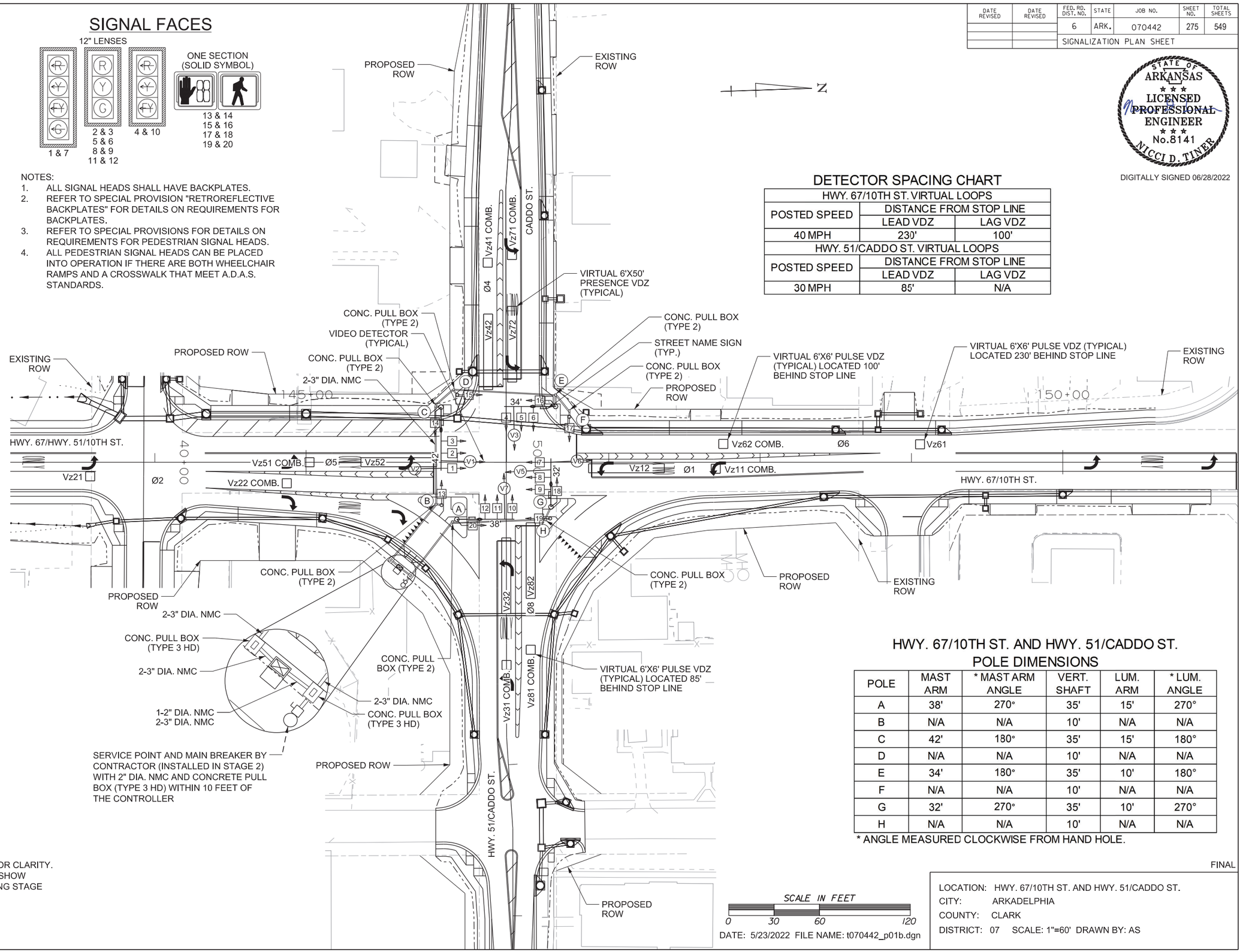
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	275	549
		SIGNALIZATION PLAN SHEET				

PHASING DIAGRAM



SIGNAL FACES

NOTES:
1. ALL SIGNAL HEADS SHALL HAVE BACKPLATES.
2. REFER TO SPECIAL PROVISION "RETROREFLECTIVE BACKPLATES" FOR DETAILS ON REQUIREMENTS FOR BACKPLATES.
3. REFER TO SPECIAL PROVISIONS FOR DETAILS ON REQUIREMENTS FOR PEDESTRIAN SIGNAL HEADS.
4. ALL PEDESTRIAN SIGNAL HEADS CAN BE PLACED INTO OPERATION IF THERE ARE BOTH WHEELCHAIR RAMPS AND A CROSSWALK THAT MEET A.D.A.S. STANDARDS.



DETECTOR SPACING CHART

HWY. 67/10TH ST. VIRTUAL LOOPS		
POSTED SPEED	DISTANCE FROM STOP LINE	
	LEAD VDZ	LAG VDZ
40 MPH	230'	100'
HWY. 51/CADDO ST. VIRTUAL LOOPS		
POSTED SPEED	DISTANCE FROM STOP LINE	
	LEAD VDZ	LAG VDZ
30 MPH	85'	N/A

HWY. 67/10TH ST. AND HWY. 51/CADDO ST. POLE DIMENSIONS

POLE	MAST ARM	* MAST ARM ANGLE	VERT. SHAFT	LUM. ARM	* LUM. ANGLE
A	38'	270°	35'	15'	270°
B	N/A	N/A	10'	N/A	N/A
C	42'	180°	35'	15'	180°
D	N/A	N/A	10'	N/A	N/A
E	34'	180°	35'	10'	180°
F	N/A	N/A	10'	N/A	N/A
G	32'	270°	35'	10'	270°
H	N/A	N/A	10'	N/A	N/A

* ANGLE MEASURED CLOCKWISE FROM HAND HOLE.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER
DIGITALLY SIGNED 06/28/2022

NOTES:
1. CROSSWALKS NOT SHOWN FOR CLARITY.
2. FINAL SIGNALIZATION PLANS SHOW EQUIPMENT INSTALLED DURING STAGE CONSTRUCTION.

SCALE IN FEET
0 30 60 120

DATE: 5/23/2022 FILE NAME: t070442_p01b.dgn

FINAL

LOCATION: HWY. 67/10TH ST. AND HWY. 51/CADDO ST.
CITY: ARKADELPHIA
COUNTY: CLARK
DISTRICT: 07 SCALE: 1"=60' DRAWN BY: AS

rnfortner 6/28/2022 10:37:02 AM
WORKSPACE: AHTD
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REVISED DATE:

HWY. 67/10TH ST. AND HWY. 51/CADDO ST.
POLE LOCATIONS

POLE	LOCATION & STATION	OFFSET	X, Y COORDINATES
A	HWY. 67 - STA. 145+99.62	37.75' RT.	992533.51, 1843352.04
B	HWY. 67 - STA. 145+89.45	28.29' RT.	992523.71, 1843342.20
C	HWY. 67 - STA. 145+89.17	36.43' LT.	992459.01, 1843344.14
D	HWY. 67 - STA. 146+00.01	44.55' LT.	992451.27, 1843355.25
E	HWY. 67 - STA. 146+64.82	36.89' LT.	992461.15, 1843419.76
F	HWY. 67 - STA. 146+73.95	29.92' LT.	992468.42, 1843428.65
G	HWY. 67 - STA. 146+61.80	29.50' RT.	992527.40, 1843414.47
H	HWY. 67 - STA. 146+61.26	37.16' RT.	992535.03, 1843413.66

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	276	549
		SIGNALIZATION PLAN SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER

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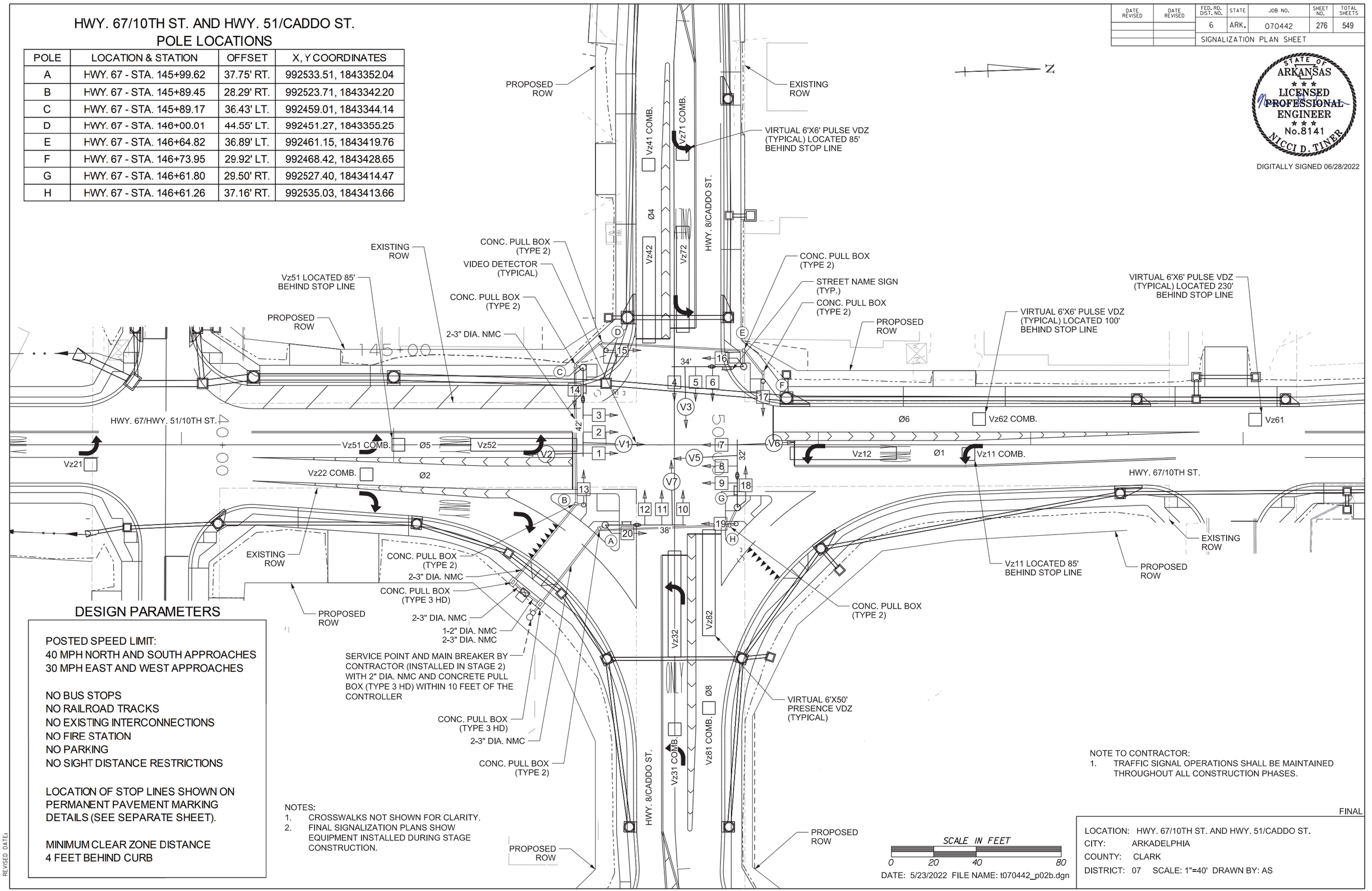

DESIGN PARAMETERS

POSTED SPEED LIMIT:
40 MPH NORTH AND SOUTH APPROACHES
30 MPH EAST AND WEST APPROACHES

NO BUS STOPS
NO RAILROAD TRACKS
NO EXISTING INTERCONNECTIONS
NO FIRE STATION
NO PARKING
NO SIGHT DISTANCE RESTRICTIONS

LOCATION OF STOP LINES SHOWN ON PERMANENT PAVEMENT MARKING DETAILS (SEE SEPARATE SHEET).

MINIMUM CLEAR ZONE DISTANCE
4 FEET BEHIND CURB

NOTES:
1. CROSSWALKS NOT SHOWN FOR CLARITY.
2. FINAL SIGNALIZATION PLANS SHOW EQUIPMENT INSTALLED DURING STAGE CONSTRUCTION.

NOTE TO CONTRACTOR:
1. TRAFFIC SIGNAL OPERATIONS SHALL BE MAINTAINED THROUGHOUT ALL CONSTRUCTION PHASES.

FINAL

SCALE IN FEET
0 20 40 80

DATE: 5/23/2022 FILE NAME: t070442_p02b.dgn

LOCATION: HWY. 67/10TH ST. AND HWY. 51/CADDO ST.
CITY: ARKADELPHIA
COUNTY: CLARK
DISTRICT: 07 SCALE: 1"=40' DRAWN BY: AS

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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	277	549
		SIGNALIZATION PLAN SHEET				

WIRING DIAGRAM

NOTES TO CONTRACTOR:

1. ONE SEPARATE 1-5c IS RUN TO EACH POLE FOR THE PEDESTRIAN PUSH BUTTON.
2. ALL DETECTOR RACK CHANNELS, INCLUDING UNUSED, SHALL BE BROUGHT TO TERMINAL STRIP IN DETECTOR AREA OF CABINET.
3. THE LOCAL GOVERNMENT SHALL BE RESPONSIBLE FOR PROVIDING POWER TO THE SERVICE POINT.
4. SEE SHEET NUMBER 261 FOR GROUNDING ARRAY DETAIL.

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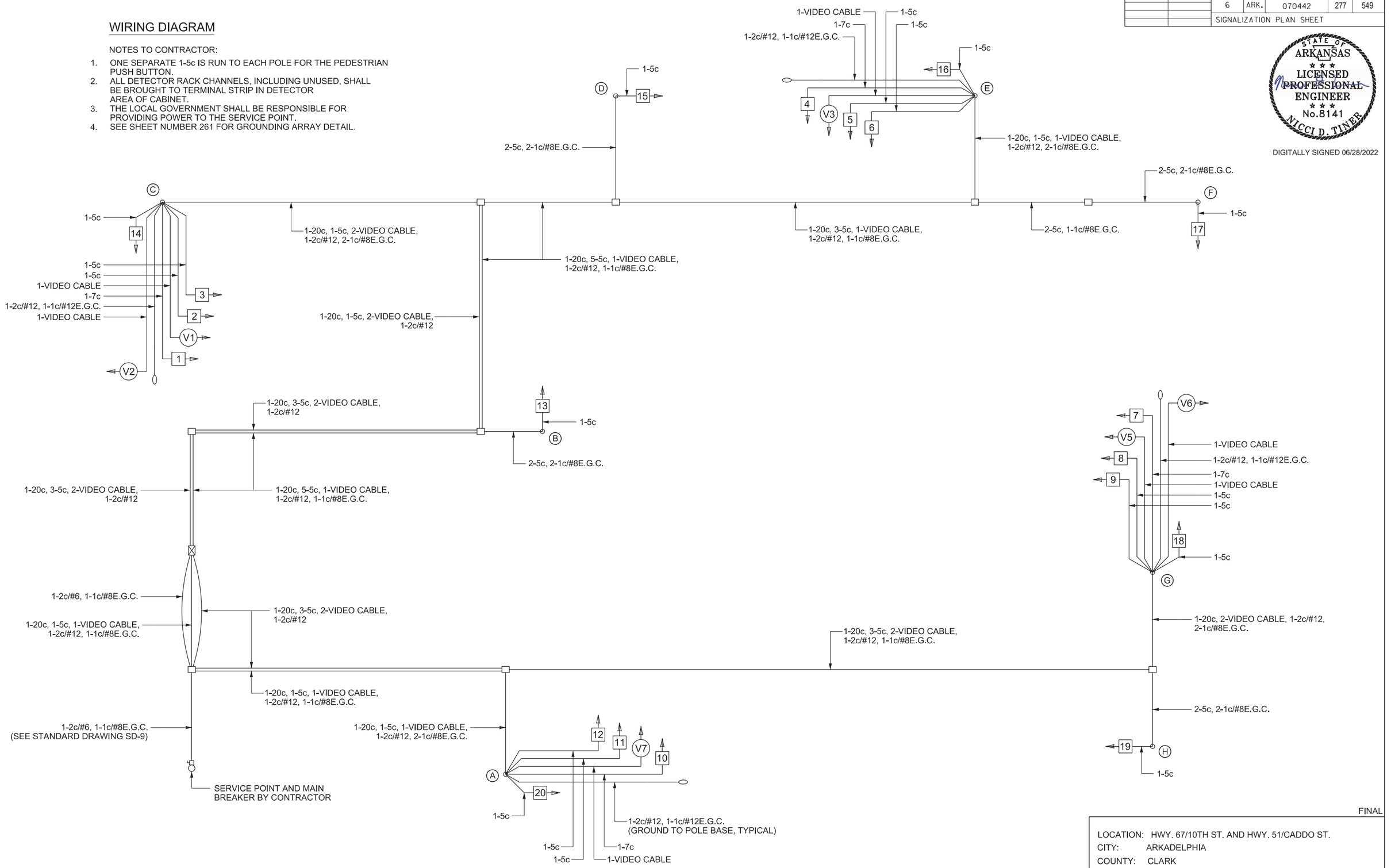

FINAL

LOCATION: HWY. 67/10TH ST. AND HWY. 51/CADDO ST.
CITY: ARKADELPHIA
COUNTY: CLARK
DISTRICT: 07 SCALE: N/A DRAWN BY: AS

DATE: 5/23/2022 FILE NAME: t070442_p03b.dgn

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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	278	549
		SIGNALIZATION PLAN SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER

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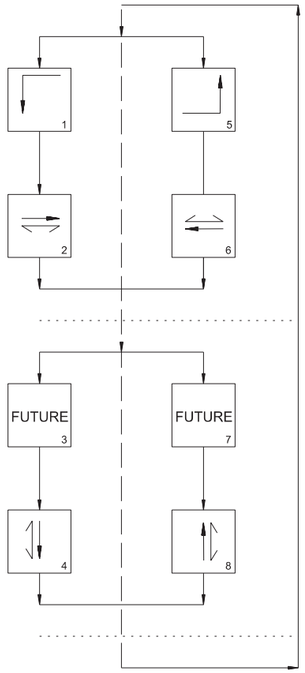
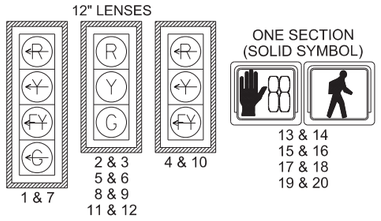
PHASING DIAGRAM

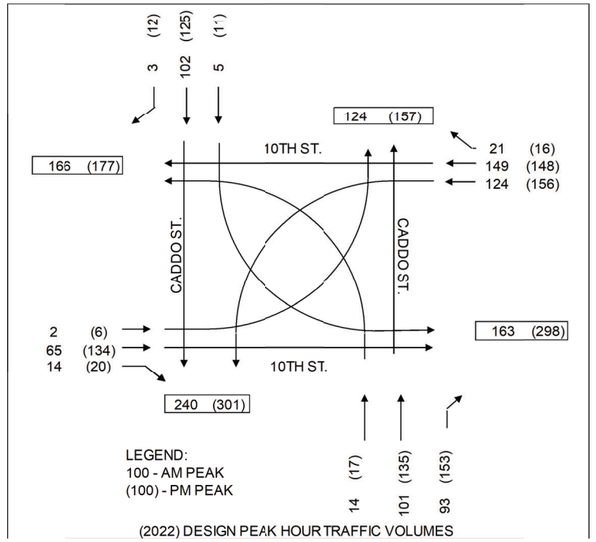


SIGNAL FACES



NOTES:
1. ALL SIGNAL HEADS SHALL HAVE BACKPLATES.
2. REFER TO SPECIAL PROVISION "RETROREFLECTIVE BACKPLATES" FOR DETAILS ON REQUIREMENTS FOR BACKPLATES.
3. REFER TO SPECIAL PROVISIONS FOR DETAILS ON REQUIREMENTS FOR PEDESTRIAN SIGNAL HEADS.
4. ALL PEDESTRIAN SIGNAL HEADS CAN BE PLACED INTO OPERATION IF THERE ARE BOTH WHEELCHAIR RAMPS AND A CROSSWALK THAT MEET A.D.A.S. STANDARDS.

TRAFFIC FLOW DIAGRAM



(2022) DESIGN PEAK HOUR TRAFFIC VOLUMES

DETECTOR CHART

DETECTOR SYSTEM DESCRIPTION: JOB 070442											
HWY. 67/10TH ST. AND HWY. 51/CADDO ST.				HARDWARE INPUTS BY SUPPLIER			PROGRAM ASSIGNMENTS			COMMENTS	TUBE LENGTHS
							LOCAL		MASTER SYSTEM DETECTOR NUMBERS		
DET. ID #	LOCATION DIRECTION	TYPE	DET. #	CAB. TRM. #	AMP CHN. #	CON. IMP. #	PHS	SYSTEM DET. #			
Vz11	SB LEFT TURN FAR	COMB.			1	V9	1	1		CAMERA V1	37"
Vz12	SB LEFT TURN	LOCAL			2	V1	1			CAMERA V1	37"
Vz21	NB ADVANCE	LOCAL			5	V2	2			CAMERA V2	74"
Vz22	NB NEAR	COMB.			6	V10	2	2		CAMERA V5	37"
Vz31	WB LEFT TURN FAR	COMB.			9	V11	8	3		CAMERA V3	37"
Vz32	WB LEFT TURN	LOCAL			10	V3	8			CAMERA V3	37"
Vz41	EB ADVANCE	COMB.			13	V12	4	4		CAMERA V7	37"
Vz42	EB NEAR	LOCAL			14	V4	4			CAMERA V7	37"
Vz51	NB LEFT TURN FAR	COMB.			7	V13	5	5		CAMERA V5	37"
Vz52	NB LEFT TURN	LOCAL			8	V5	5			CAMERA V5	37"
Vz61	SB ADVANCE	LOCAL			3	V6	6			CAMERA V6	74"
Vz62	SB NEAR	COMB.			4	V14	6	6		CAMERA V1	37"
Vz71	EB LEFT TURN FAR	COMB.			15	V15	4	7		CAMERA V7	37"
Vz72	EB LEFT TURN	LOCAL			16	V7	4			CAMERA V7	37"
Vz81	WB ADVANCE	COMB.			11	V16	8	8		CAMERA V3	37"
Vz82	WB NEAR	LOCAL			12	V8	8			CAMERA V3	37"
PB2 A&B	CADDO ST. E. LEG	PED.				P2	2				
PB4 A&B	HWY. 67 S. LEG	PED.				P4	4				
PB6 A&B	CADDO ST. W. LEG	PED.				P6	6				
PB8 A&B	HWY. 67 N. LEG	PED.				P8	8				
					SPARE: NONE						

CONTROLLER INPUT ABBREVIATIONS:
V = VEHICLE INPUT
D = SYSTEM OR AUXILIARY INPUT
P = PEDESTRIAN INPUT

NOTE: "AMP CHN =" REFERS TO THE RACK OUTPUT POSITION.
THIS IS WIRED TO CONTROLLER INPUT DETECTOR NUMBER WHICH IS PROGRAMMED TO ACTUATE THE DESIGNATED PHASE.
EXAMPLE: V9 = SYSTEM DETECTOR 1, V10 = SYSTEM DETECTOR 2

INTERVAL CHART

SIGNAL FACES	HWY. 67/10TH ST. AND HWY. 51/CADDO ST.											FLASH SEQUENCE
	1+5	CLR.	1+6	CLR.	2+5	CLR.	2+6	CLR.	4+8	CLR.		
1	~~G~~	*	~~G~~	*	~~FY~~	***	~~FY~~	***	~~R~~	~~R~~		~~R~~
2 & 3	R	R	G	**	R	R	G	**	R	R		R
4	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~FY~~	~~Y~~		~~R~~
5 & 6	R	R	R	R	R	R	R	R	G	**		R
7	~~G~~	*	~~FY~~	***	~~G~~	*	~~FY~~	***	~~R~~	~~R~~		~~R~~
8 & 9	R	R	R	R	G	**	G	**	R	R		R
10	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~FY~~	~~Y~~		~~R~~
11 & 12	R	R	R	R	R	R	R	R	G	**		R
13 & 14	DW	DW	DW	DW	DW	DW	DW	DW	W	FDW		BLK
15 & 16	DW	DW	W	FDW	DW	DW	W	FDW	DW	DW		BLK
17 & 18	DW	DW	DW	DW	DW	DW	DW	DW	W	FDW		BLK
19 & 20	DW	DW	DW	DW	W	FDW	W	FDW	DW	DW		BLK

* DENOTES GREEN OR YELLOW ARROW DEPENDING ON NEXT PHASE
** DENOTES GREEN OR YELLOW BALL DEPENDING ON NEXT PHASE
*** DENOTES FLASHING YELLOW ARROW OR YELLOW ARROW DEPENDING ON NEXT PHASE

FINAL

LOCATION: HWY. 67/10TH ST. AND HWY. 51/CADDO ST.
CITY: ARKADELPHIA
COUNTY: CLARK
DISTRICT: 07 SCALE: N/A DRAWN BY: AS

DATE: 5/23/2022 FILE NAME: t070442_p04b.dgn

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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	279	549
		TRAFFIC SIGNAL QUANTS. - HENDERSON ST.				

STATE OF ARKANSAS
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PERMANENT TRAFFIC SIGNAL QUANTITIES

ITEM NUMBER	ITEM	QUANTITY	UNIT
SP & 706	TRAFFIC SIGNAL HEAD, LED, (3 SECTION, 1 WAY)	7	EACH
SP	RELOCATION OF TRAFFIC SIGNAL HEAD	1	EACH
SP & 707	COUNTDOWN PEDESTRIAN SIGNAL HEAD, LED	4	EACH
708	TRAFFIC SIGNAL CABLE (5C/14 A.W.G.)	785	LIN. FT.
708	TRAFFIC SIGNAL CABLE (7C/14 A.W.G.)	58	LIN. FT.
708	TRAFFIC SIGNAL CABLE (12C/14 A.W.G.)	172	LIN. FT.
708	TRAFFIC SIGNAL CABLE (20C/14 A.W.G.)	172	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., E.G.C.)	223	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/12 A.W.G., E.G.C.)	55	LIN. FT.
SP	ELECTRICAL CONDUCTORS FOR LUMINAIRES	224	LIN. FT.
710	NON-METALLIC CONDUIT (3")	204	LIN. FT.
SS & 711	CONCRETE PULL BOX (TYPE 2)	4	EACH
SS & 711	CONCRETE PULL BOX (TYPE 2 HD)	2	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (52'-32')	1	EACH
SP	LED LUMINAIRE ASSEMBLY	1	EACH
SS & 715	TRAFFIC SIGNAL PEDESTAL POLE WITH FOUNDATION	2	EACH
SP	18" STREET NAME SIGN	2	EACH
SP	VIDEO DETECTOR ROTATION	1	EACH
SP & 733	VIDEO DETECTOR (CLR)	3	EACH
733	VIDEO CABLE	444	LIN. FT.
SP & 733	VIDEO PROCESSOR, EDGE CARD (2 CAMERA)	3	EACH

PERMANENT TRAFFIC SIGNAL:
SIGNAL HEAD 5 SHALL BE RELOCATED AND SIGNAL HEAD 3 SHALL BE INSTALLED ON ON MAST ARM E.
PEDESTRIAN POLE D AND PEDESTRIAN SIGNAL HEADS 10 & 11 SHALL BE INSTALLED.
VIDEO DETECTOR V2 SHALL BE ROTATED FROM IT'S STAGE 2 ALIGNMENT.
(REFER TO PERMANENT TRAFFIC SIGNAL PLANS.)

STAGE 2 TRAFFIC SIGNAL QUANTITIES

ITEM NUMBER	ITEM	QUANTITY	UNIT
SP	TRAFFIC SIGNAL CONTROLLER (MODIFICATION)	1	EACH
SP	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT	0.25	LUMP SUM

STAGE 2
PERMANENT TRAFFIC SIGNAL EXCLUDING POLE D AND PEDESTRIAN SIGNAL HEADS 10 & 11 WILL BE INSTALLED IN STAGE 2
MAINTAIN THIS TRAFFIC SIGNAL CONFIGURATION AS SHOWN ON THE STAGE 2 TRAFFIC SIGNAL PLANS.
(REFER TO MAINTENANCE OF TRAFFIC DETAILS.)

DATE: 5/24/2022 FILE NAME: t070442_qtyc.dgn

LOCATION: HWY. 67/10TH ST. AND HENDERSON ST.
CITY: ARKADELPHIA
COUNTY: CLARK
DISTRICT: 07 SCALE: N/A DRAWN BY: HRH

rnfortner 6/28/2022 10:37:12 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	280	549
		SIGNALIZATION PLAN SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
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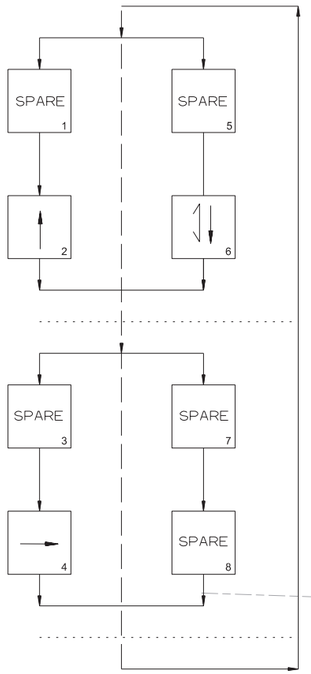
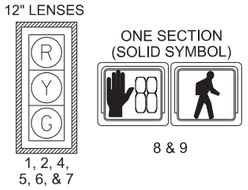
NICCI D. TINER

DIGITALLY SIGNED 06/28/2022

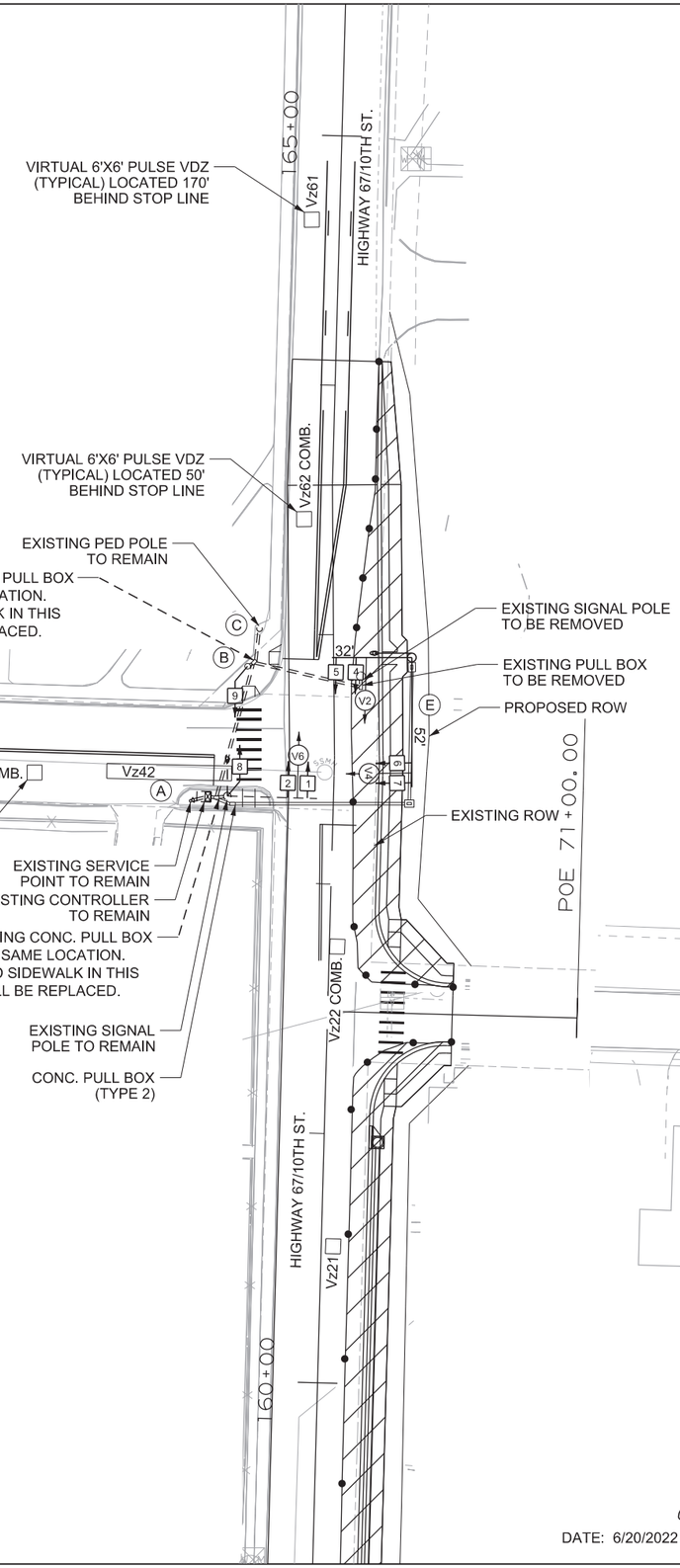
STAGE 2 - PHASING DIAGRAM



STAGE 2- SIGNAL FACES



NOTES:
1. ALL SIGNAL HEADS SHALL HAVE BACKPLATES.
2. REFER TO SPECIAL PROVISION "RETROREFLECTIVE BACKPLATES" FOR DETAILS ON REQUIREMENTS FOR BACKPLATES.
3. REFER TO SPECIAL PROVISIONS FOR DETAILS ON REQUIREMENTS FOR PEDESTRIAN SIGNAL HEADS.
4. ALL PEDESTRIAN SIGNAL HEADS CAN BE PLACED INTO OPERATION IF THERE ARE BOTH WHEELCHAIR RAMPS AND A CROSSWALK THAT MEET A.D.A.S. STANDARDS.
5. SIGNAL SHALL BE OPERATIONAL PRIOR TO STAGE 2 CONSTRUCTION.
6. ALL EXISTING SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS, VIDEO DETECTORS, AND EDGE CARDS SHALL BE REPLACED.



STAGE 2 - DETECTOR SPACING CHART

HIGHWAY 67/10TH ST.		
POSTED SPEED	DISTANCE FROM STOP LINE	
	LEAD VDZ	LAG VDZ
25 MPH	170'	50'
HENDERSON STREET		
POSTED SPEED	DISTANCE FROM STOP LINE	
	LEAD VDZ	LAG VDZ
25 MPH	80'	N/A

HWY. 67/10TH ST. AND HENDERSON ST. STAGE 2 - POLE DIMENSIONS

POLE	MAST ARM	* MAST ARM ANGLE	VERT. SHAFT	LUM. ARM	* LUM. ANGLE
A	EXISTING POLE TO REMAIN				
B	N/A	N/A	10'	N/A	N/A
C	EXISTING POLE TO REMAIN				
E	52'/32'	90°/180°	35'	15'	180°

* ANGLE MEASURED CLOCKWISE FROM HAND HOLE.

SCALE IN FEET
0 30 60 120

DATE: 6/20/2022 FILE NAME: t070442_p01c_MOT_Stage 2.dgn

STAGE 2

LOCATION: HWY. 67/10TH ST. AND HENDERSON ST.
CITY: ARKADELPHIA
COUNTY: CLARK
DISTRICT: 07 SCALE: 1"=60' DRAWN BY: HRH

rnfortner 6/28/2022 10:37:21 AM
WORKSPACE: AHTD
\\garverinc.local\data\Projects\2017\170715 - AHTD Arkadelphia Bypass\Drawings\t070442_p01c_MOT_Stage 2.dgn
REVISED DATE:

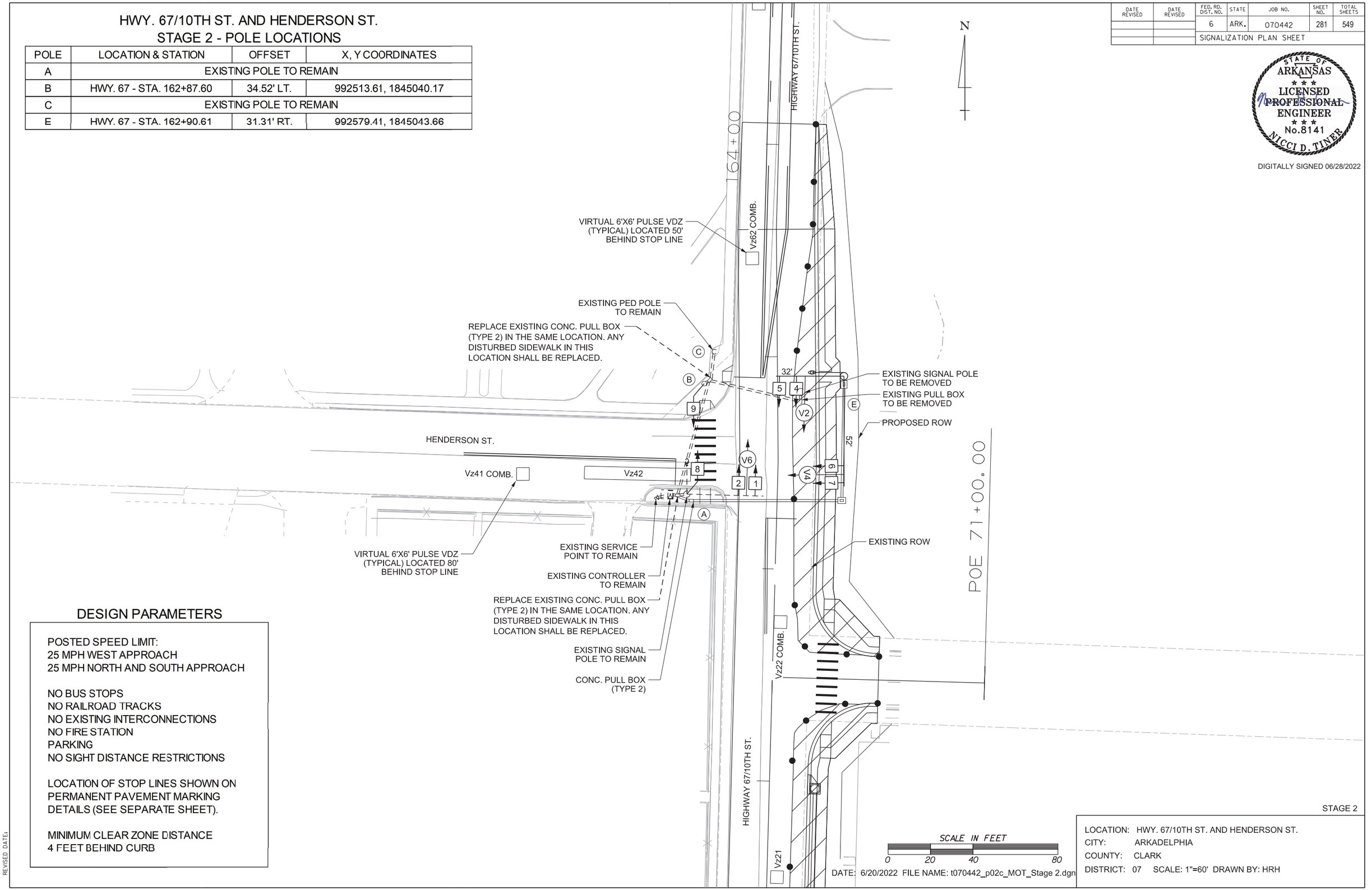
HWY. 67/10TH ST. AND HENDERSON ST.
STAGE 2 - POLE LOCATIONS

POLE	LOCATION & STATION	OFFSET	X, Y COORDINATES
A	EXISTING POLE TO REMAIN		
B	HWY. 67 - STA. 162+87.60	34.52' LT.	992513.61, 1845040.17
C	EXISTING POLE TO REMAIN		
E	HWY. 67 - STA. 162+90.61	31.31' RT.	992579.41, 1845043.66

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	281	549
		SIGNALIZATION PLAN SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER

DIGITALLY SIGNED 06/28/2022



DESIGN PARAMETERS

POSTED SPEED LIMIT:
25 MPH WEST APPROACH
25 MPH NORTH AND SOUTH APPROACH

NO BUS STOPS
NO RAILROAD TRACKS
NO EXISTING INTERCONNECTIONS
NO FIRE STATION
PARKING
NO SIGHT DISTANCE RESTRICTIONS

LOCATION OF STOP LINES SHOWN ON PERMANENT PAVEMENT MARKING DETAILS (SEE SEPARATE SHEET).

MINIMUM CLEAR ZONE DISTANCE
4 FEET BEHIND CURB

STAGE 2

LOCATION: HWY. 67/10TH ST. AND HENDERSON ST.
CITY: ARKADELPHIA
COUNTY: CLARK
DISTRICT: 07 SCALE: 1"=60' DRAWN BY: HRH

DATE: 6/20/2022 FILE NAME: t070442_p02c_MOT_Stage 2.dgn

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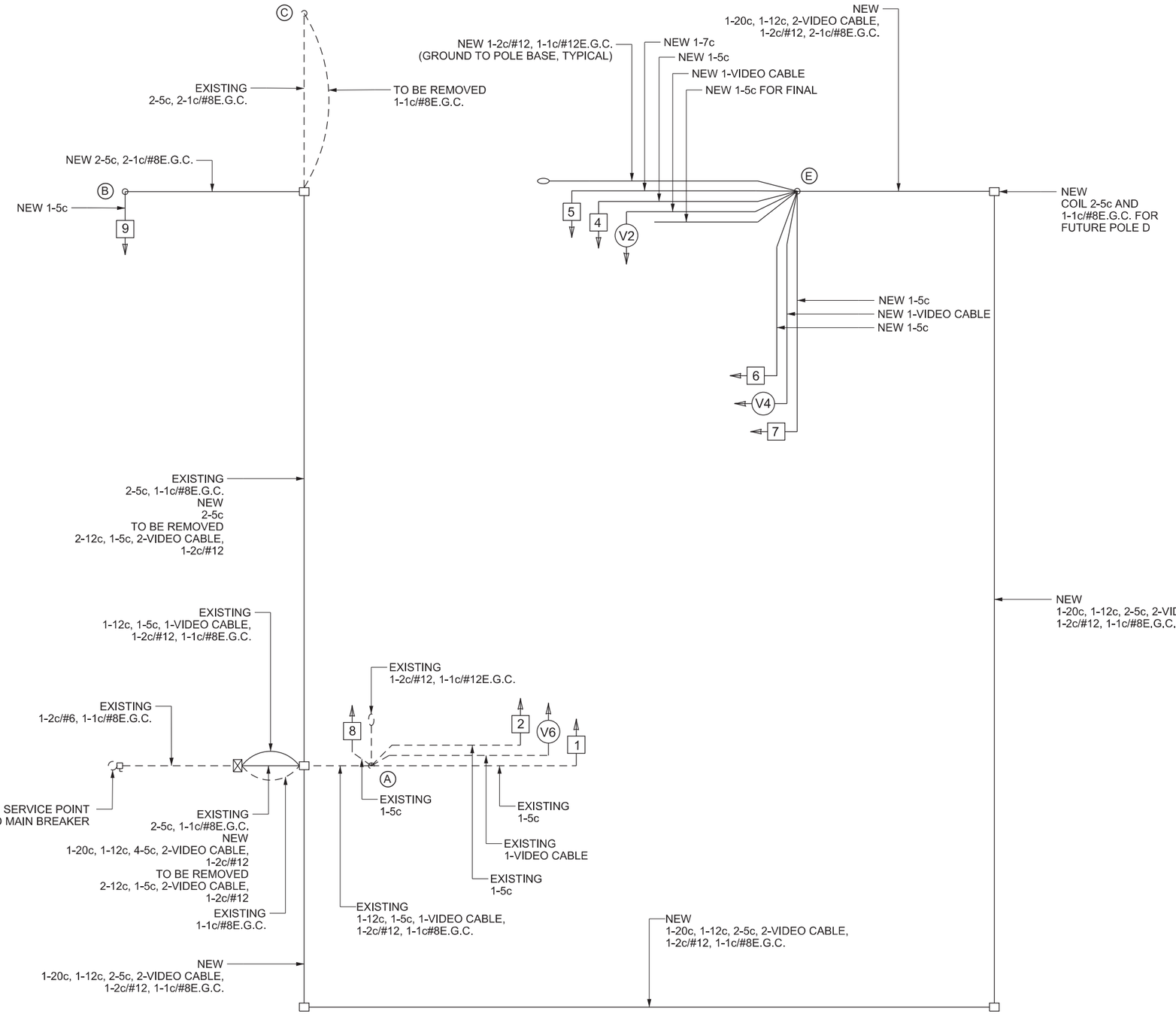
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	282	549
		SIGNALIZATION PLAN SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER

DIGITALLY SIGNED 06/28/2022



STAGE 2 - WIRING DIAGRAM

NOTES TO CONTRACTOR:

1. ONE SEPARATE 1-5c IS RUN TO EACH POLE FOR THE PEDESTRIAN PUSH BUTTON.
2. ALL DETECTOR RACK CHANNELS, INCLUDING UNUSED, SHALL BE BROUGHT TO TERMINAL STRIP IN DETECTOR AREA OF CABINET.
3. THE LOCAL GOVERNMENT SHALL BE RESPONSIBLE FOR PROVIDING POWER TO THE SERVICE POINT.
4. SEE SHEET NUMBER 261 FOR GROUNDING ARRAY DETAIL.
5. ALL UNUSED SIGNAL CABLE, VIDEO CABLE, AND ELECTRICAL CONDUCTORS SHALL BE REMOVED WITH EXISTING TWIN POLE.

STAGE 2

LOCATION: HWY. 67/10TH ST. AND HENDERSON ST.
CITY: ARKADELPHIA
COUNTY: CLARK
DISTRICT: 07 SCALE: N/A DRAWN BY: HRH

DATE: 5/20/2022 FILE NAME: t070442_p03c_MOT_Stage 2.dgn

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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	283	549
		SIGNALIZATION PLAN SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER

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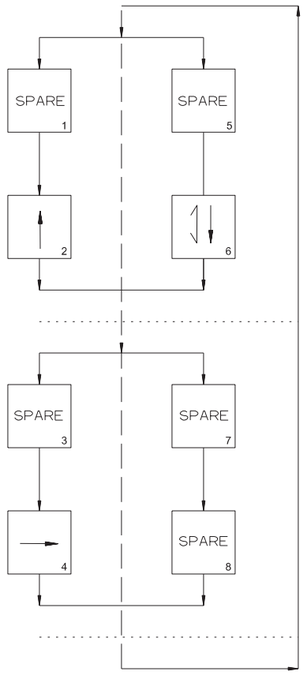
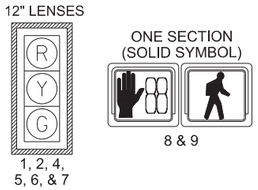
STAGE 2 - PHASING DIAGRAM



STAGE 2 - SIGNAL FACES



NOTES:
1. ALL SIGNAL HEADS SHALL HAVE BACKPLATES.
2. REFER TO SPECIAL PROVISION "RETROREFLECTIVE BACKPLATES" FOR DETAILS ON REQUIREMENTS FOR BACKPLATES.
3. REFER TO SPECIAL PROVISIONS FOR DETAILS ON REQUIREMENTS FOR PEDESTRIAN SIGNAL HEADS.
4. ALL PEDESTRIAN SIGNAL HEADS CAN BE PLACED INTO OPERATION IF THERE ARE BOTH WHEELCHAIR RAMPS AND A CROSSWALK THAT MEET A.D.A.S. STANDARDS.
5. SIGNAL SHALL BE OPERATIONAL PRIOR TO STAGE 2 CONSTRUCTION.
6. ALL EXISTING SIGANL HEADS, PEDESTRIAN SIGNAL HEADS, VIDEO DETECTORS, AND EDGE CARDS SHALL BE REPLACED.

STAGE 2 - DETECTOR CHART

DETECTOR SYSTEM DESCRIPTION: JOB 070442											
HWY. 67/10TH ST. AND HENDERSON ST. DETECTOR ASSIGNMENTS				HARDWARE INPUTS BY SUPPLIER			PROGRAM ASSIGNMENTS			COMMENTS	TUBE LENGTHS
							LOCAL		MASTER SYSTEM DETECTOR NUMBERS		
DET. ID #	LOCATION DIRECTION	TYPE	DET. #	CAB. TRM. #	AMP CHN. #	CON. IMP. #	PHS	SYSTEM DET. #			
Vz21	NB ADVANCE	LOCAL			5	V2	2			CAMERA V2	37"
Vz22	NB NEAR	COMB.			6	V10	2	2		CAMERA V2	37"
Vz41	EB ADVANCE	COMB.			13	V12	4	4		CAMERA V4	37"
Vz42	EB NEAR	LOCAL			14	V4	4			CAMERA V4	37"
Vz61	SB ADVANCE	LOCAL			3	V6	6			CAMERA V6	37"
Vz62	SB NEAR	COMB.			4	V14	6	6		CAMERA V6	37"
PB6 A&B	HENDERSON ST. W. LEG	PED.				P6	6				
					SPARE: 1, 2, 7, 8, 9,10, 11, 12, 15, 16						

CONTROLLER INPUT ABBREVIATIONS:
V = VEHICLE INPUT
D = SYSTEM OR AUXILIARY INPUT
P = PEDESTRIAN INPUT

NOTE: "AMP CHN =" REFERS TO THE RACK OUTPUT POSITION.
THIS IS WIRED TO CONTROLLER INPUT DETECTOR NUMBER WHICH IS PROGRAMMED TO ACTUATE THE DESIGNATED PHASE.
EXAMPLE: V9 = SYSTEM DETECTOR 1, V10 = SYSTEM DETECTOR 2

STAGE 2 - INTERVAL CHART

SIGNAL FACES	HWY. 67/10TH ST. AND HENDERSON ST. 2+6	CLR	4	CLR.		FLASH SEQUENCE
1 & 2	G	Y	R	R		R
4 & 5	G	Y	R	R		R
6 & 7	R	R	G	Y		R
8 & 9	W	FDW	DW	DW		B

STAGE 2

LOCATION: HWY. 67/10TH ST. AND HENDERSON ST.
CITY: ARKADELPHIA
COUNTY: CLARK
DISTRICT: 07 SCALE: N/A DRAWN BY: HRH

DATE: 5/20/2022 FILE NAME: t070442_p04c_MOT_Stage 2.dgn

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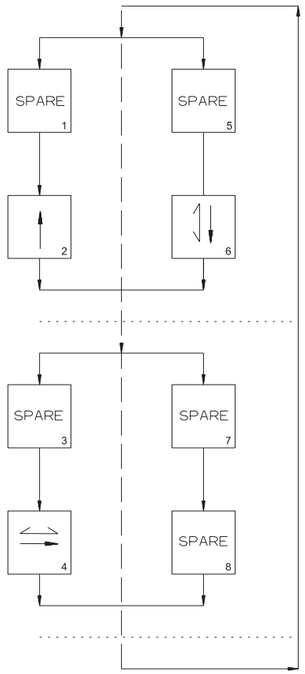
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	284	549
		SIGNALIZATION PLAN SHEET				

PHASING DIAGRAM



SIGNAL FACES

12" LENSES

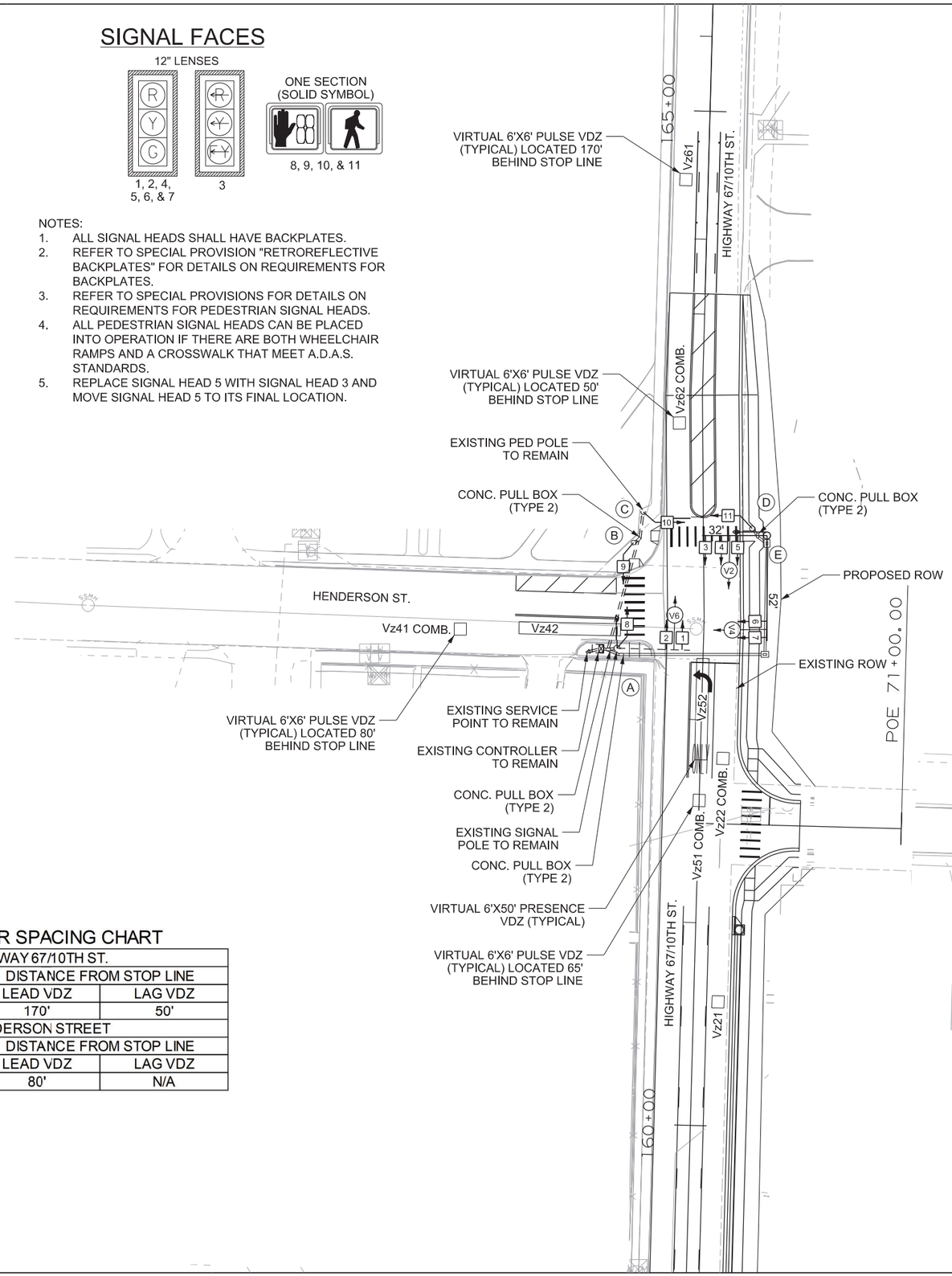
1, 2, 4, 5, 6, & 7

3

ONE SECTION (SOLID SYMBOL)

8, 9, 10, & 11

NOTES:
1. ALL SIGNAL HEADS SHALL HAVE BACKPLATES.
2. REFER TO SPECIAL PROVISION "RETROREFLECTIVE BACKPLATES" FOR DETAILS ON REQUIREMENTS FOR BACKPLATES.
3. REFER TO SPECIAL PROVISIONS FOR DETAILS ON REQUIREMENTS FOR PEDESTRIAN SIGNAL HEADS.
4. ALL PEDESTRIAN SIGNAL HEADS CAN BE PLACED INTO OPERATION IF THERE ARE BOTH WHEELCHAIR RAMPS AND A CROSSWALK THAT MEET A.D.A.S. STANDARDS.
5. REPLACE SIGNAL HEAD 5 WITH SIGNAL HEAD 3 AND MOVE SIGNAL HEAD 5 TO ITS FINAL LOCATION.



DETECTOR SPACING CHART

HIGHWAY 67/10TH ST.		
POSTED SPEED	DISTANCE FROM STOP LINE	
	LEAD VDZ	LAG VDZ
25 MPH	170'	50'
HENDERSON STREET		
POSTED SPEED	DISTANCE FROM STOP LINE	
	LEAD VDZ	LAG VDZ
25 MPH	80'	N/A

HWY. 67/10TH ST. AND HENDERSON ST. POLE DIMENSIONS

POLE	MAST ARM	* MAST ARM ANGLE	VERT. SHAFT	LUM. ARM	* LUM. ANGLE
A	EXISTING POLE TO REMAIN				
B	N/A	N/A	10'	N/A	N/A
C	EXISTING POLE TO REMAIN				
D	N/A	N/A	10'	N/A	N/A
E	52'/32'	90°/180°	35'	15'	180°

* ANGLE MEASURED CLOCKWISE FROM HAND HOLE.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER

DIGITALLY SIGNED 06/28/2022

SCALE IN FEET
0 30 60 120

DATE: 5/31/2022 FILE NAME: t070442_p01c.dgn

FINAL

LOCATION: HWY. 67/10TH ST. AND HENDERSON ST.
CITY: ARKADELPHIA
COUNTY: CLARK
DISTRICT: 07 SCALE: 1"=60' DRAWN BY: HRH

rnfortner 6/28/2022 10:37:28 AM
WORKSPACE: AHTD
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REVISED DATE:

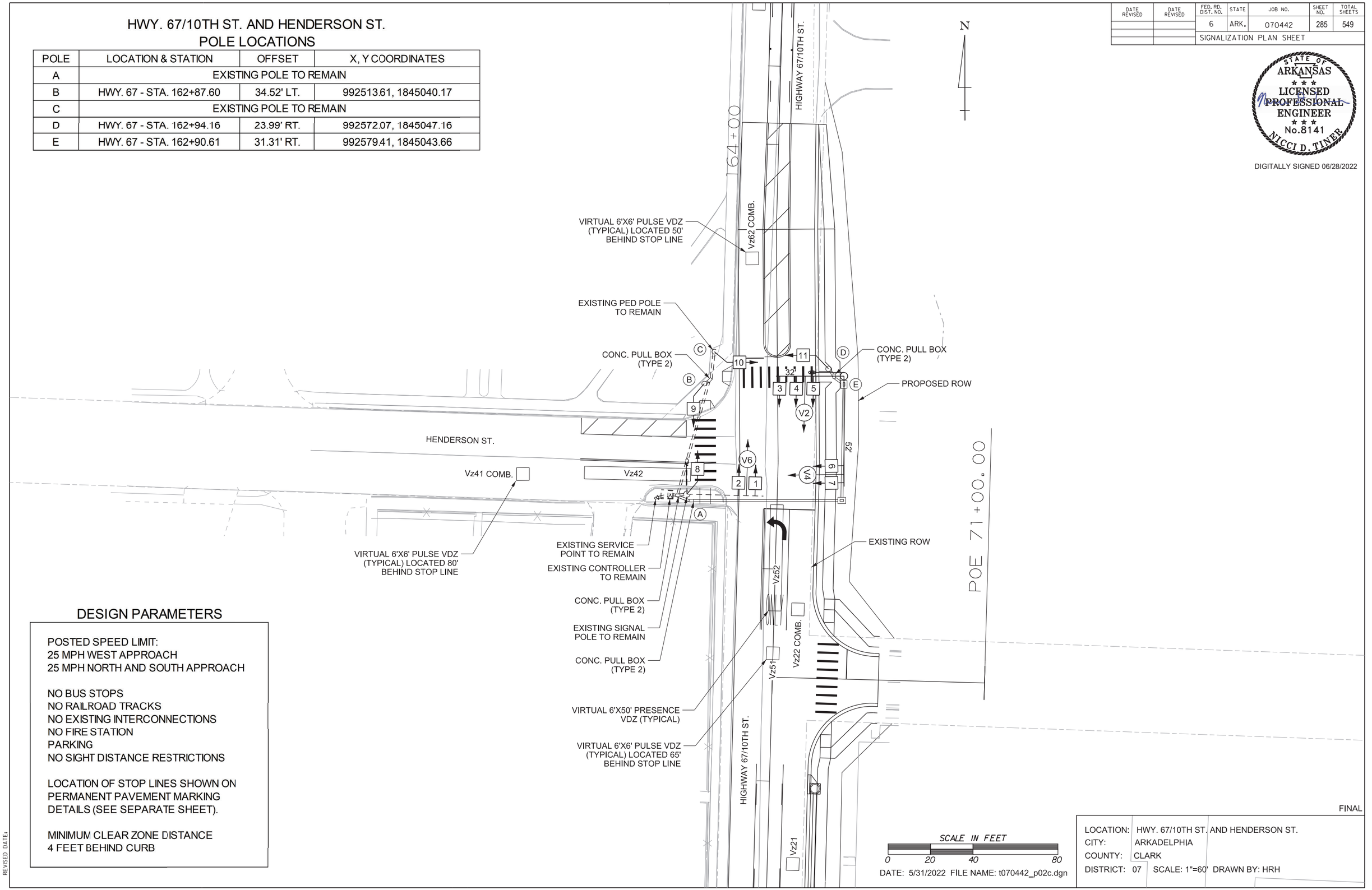
HWY. 67/10TH ST. AND HENDERSON ST.
POLE LOCATIONS

POLE	LOCATION & STATION	OFFSET	X, Y COORDINATES
A	EXISTING POLE TO REMAIN		
B	HWY. 67 - STA. 162+87.60	34.52' LT.	992513.61, 1845040.17
C	EXISTING POLE TO REMAIN		
D	HWY. 67 - STA. 162+94.16	23.99' RT.	992572.07, 1845047.16
E	HWY. 67 - STA. 162+90.61	31.31' RT.	992579.41, 1845043.66

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	285	549
		SIGNALIZATION PLAN SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER

DIGITALLY SIGNED 06/28/2022



DESIGN PARAMETERS

POSTED SPEED LIMIT:
25 MPH WEST APPROACH
25 MPH NORTH AND SOUTH APPROACH

NO BUS STOPS
NO RAILROAD TRACKS
NO EXISTING INTERCONNECTIONS
NO FIRE STATION
PARKING
NO SIGHT DISTANCE RESTRICTIONS

LOCATION OF STOP LINES SHOWN ON PERMANENT PAVEMENT MARKING DETAILS (SEE SEPARATE SHEET).

MINIMUM CLEAR ZONE DISTANCE
4 FEET BEHIND CURB

SCALE IN FEET
0 20 40 80

DATE: 5/31/2022 FILE NAME: t070442_p02c.dgn

FINAL

LOCATION:	HWY. 67/10TH ST. AND HENDERSON ST.
CITY:	ARKADELPHIA
COUNTY:	CLARK
DISTRICT:	07 SCALE: 1"=60' DRAWN BY: HRH

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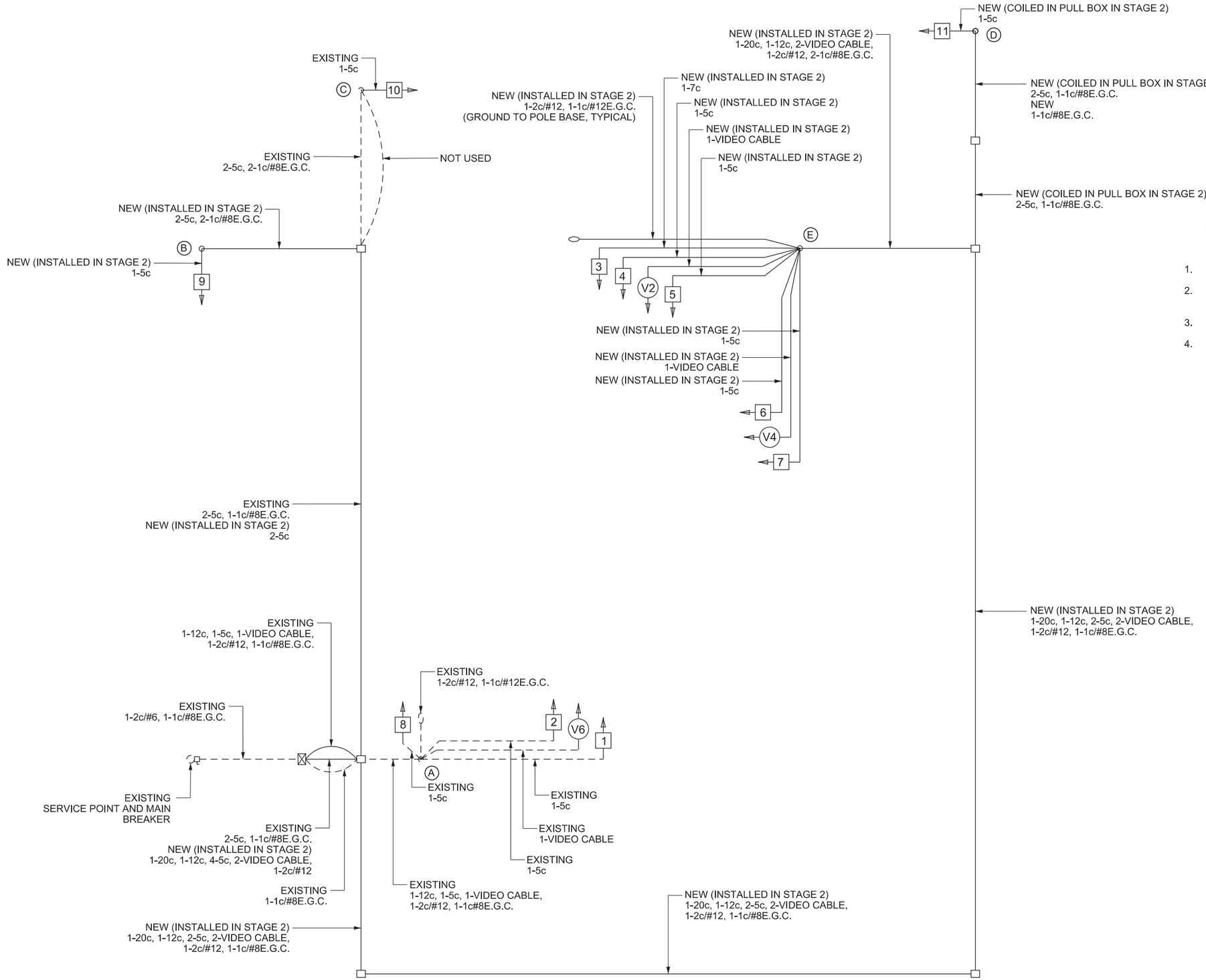
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	286	549
		SIGNALIZATION PLAN SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER

DIGITALLY SIGNED 06/28/2022



WIRING DIAGRAM

NOTES TO CONTRACTOR:

1. ONE SEPARATE 1-5c IS RUN TO EACH POLE FOR THE PEDESTRIAN PUSH BUTTON.
2. ALL DETECTOR RACK CHANNELS, INCLUDING UNUSED, SHALL BE BROUGHT TO TERMINAL STRIP IN DETECTOR AREA OF CABINET.
3. THE LOCAL GOVERNMENT SHALL BE RESPONSIBLE FOR PROVIDING POWER TO THE SERVICE POINT.
4. SEE SHEET NUMBER 261 FOR GROUNDING ARRAY DETAIL.

FINAL

LOCATION: HWY. 67/10TH ST. AND HENDERSON ST.
CITY: ARKADELPHIA
COUNTY: CLARK
DISTRICT: 07 SCALE: N/A DRAWN BY: HRH

DATE: 5/31/2022 FILE NAME: t070442_p03c.dgn

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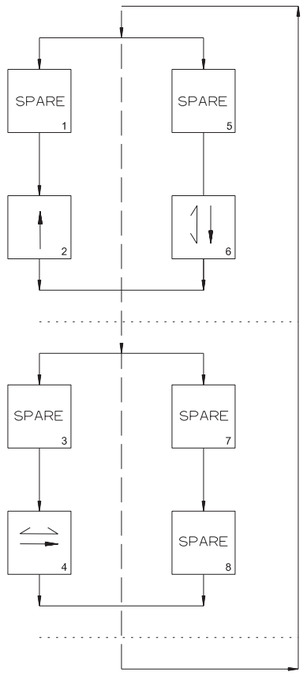
REVISED DATE:

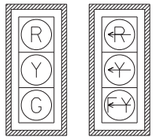
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	287	549
		SIGNALIZATION PLAN SHEET				

PHASING DIAGRAM



SIGNAL FACES

12" LENSES



1, 2, 4, 5, 6, & 7

3

ONE SECTION (SOLID SYMBOL)

8, 9, 10, & 11

NOTES:
1. ALL SIGNAL HEADS SHALL HAVE BACKPLATES.
2. REFER TO SPECIAL PROVISION "RETROREFLECTIVE BACKPLATES" FOR DETAILS ON REQUIREMENTS FOR BACKPLATES.
3. REFER TO SPECIAL PROVISIONS FOR DETAILS ON REQUIREMENTS FOR PEDESTRIAN SIGNAL HEADS.
4. ALL PEDESTRIAN SIGNAL HEADS CAN BE PLACED INTO OPERATION IF THERE ARE BOTH WHEELCHAIR RAMPS AND A CROSSWALK THAT MEET A.D.A.S. STANDARDS.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
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NICCI D. TINER

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DETECTOR CHART

DETECTOR SYSTEM DESCRIPTION: JOB 070442											
HWY. 67/10TH ST. AND HENDERSON ST. DETECTOR ASSIGNMENTS				HARDWARE INPUTS BY SUPPLIER			PROGRAM ASSIGNMENTS LOCAL		MASTER SYSTEM DETECTOR NUMBERS	COMMENTS	TUBE LENGTHS
DET. ID #	LOCATION DIRECTION	TYPE	DET. #	CAB. TRM. #	AMP CHN. #	CON. IMP. #	PHS	SYSTEM DET. #			
Vz21	NB ADVANCE	LOCAL			5	V2	2			CAMERA V2	37"
Vz22	NB NEAR	COMB.			6	V10	2	2		CAMERA V2	37"
Vz41	EB ADVANCE	COMB.			13	V12	4	4		CAMERA V4	37"
Vz42	EB NEAR	LOCAL			14	V4	4			CAMERA V4	37"
Vz51	NB LEFT TURN FAR	COMB.			7	V13	2	5		CAMERA V2	37"
Vz52	NB LEFT TURN	LOCAL			8	V5	2			CAMERA V2	37"
Vz61	SB ADVANCE	LOCAL			3	V6	6			CAMERA V6	37"
Vz62	SB NEAR	COMB.			4	V14	6	6		CAMERA V6	37"
PB4 A&B	HWY. 67/10TH ST. N. LEG	PED.				P4	4				
PB6 A&B	HENDERSON ST. W. LEG	PED.				P6	6				
					SPARE: 1, 2, 9,10, 11, 12, 15, 16						

CONTROLLER INPUT ABBREVIATIONS:
V = VEHICLE INPUT
D = SYSTEM OR AUXILIARY INPUT
P = PEDESTRIAN INPUT

NOTE: "AMP CHN =" REFERS TO THE RACK OUTPUT POSITION.
THIS IS WIRED TO CONTROLLER INPUT DETECTOR NUMBER WHICH IS PROGRAMMED TO ACTUATE THE DESIGNATED PHASE.
EXAMPLE: V9 = SYSTEM DETECTOR 1, V10 = SYSTEM DETECTOR 2

INTERVAL CHART

SIGNAL FACES	HWY. 67/10TH ST. AND HENDERSON ST. 2+6	CLR.	4	CLR.		FLASH SEQUENCE
1 & 2	G	Y	R	R		R
3	~~FY~~	~~Y~~	~~R~~	~~R~~		~~R~~
4 & 5	G	Y	R	R		R
6 & 7	R	R	G	Y		R
8 & 9	W	FDW	DW	DW		B
10 & 11	DW	DW	W	FDW		B

FINAL

LOCATION: HWY. 67/10TH ST. AND HENDERSON ST.
CITY: ARKADELPHIA
COUNTY: CLARK
DISTRICT: 07 SCALE: N/A DRAWN BY: HRH

DATE: 5/20/2022 FILE NAME: t070442_p04c.dgn

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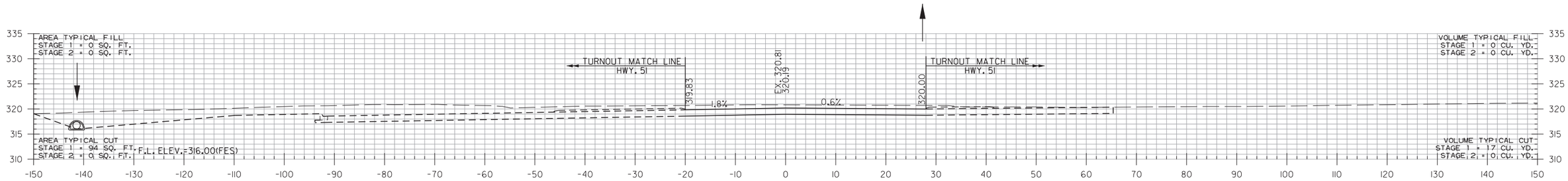
REVISED DATE:

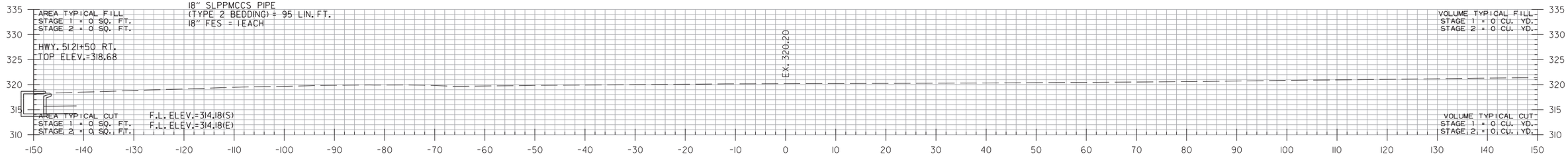
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	288	549
		CROSS SECTIONS				



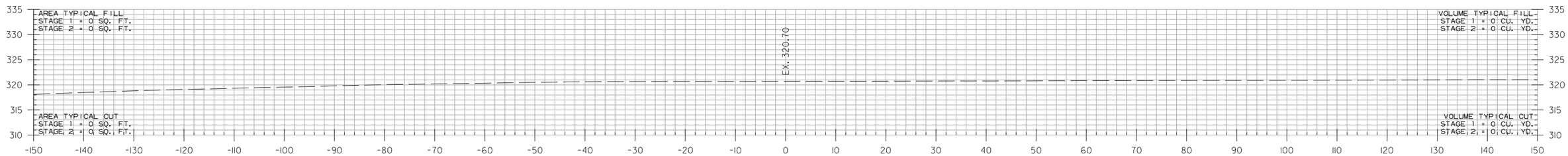
100+34.00

HWY. 51 STA. 21+50 CONSTRUCT
DROP INLET ON RT. H=4'-6"
WITH 18"x7' PIPE INLET FROM FES RT.
AND 18"x95' PIPE OUTLET
TO EXIST DROP INLET RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 102 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 95 LIN. FT.
18" FES = 1 EACH

STA. 100+27.88
BEGIN JOB 070442 (BYPASS)



100+24.00



100+00.00

BYPASS
STA. 100+00 TO STA. 100+34

rnfortner 6/28/2022 10:37:38 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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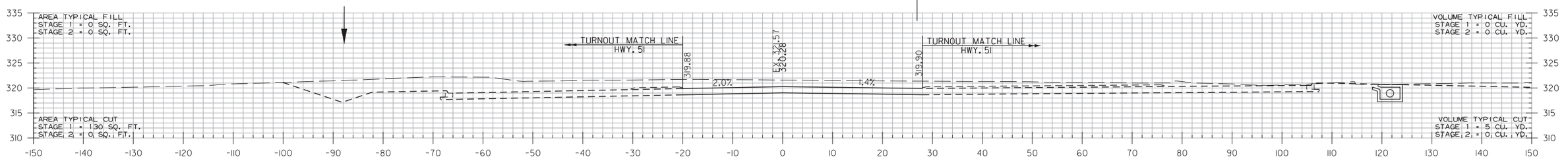
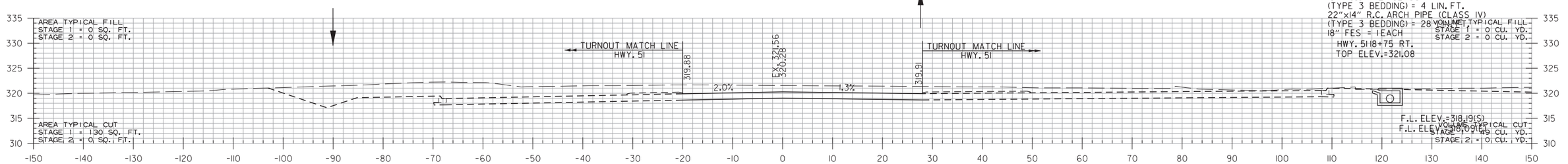
		CROSS SECTIONS				



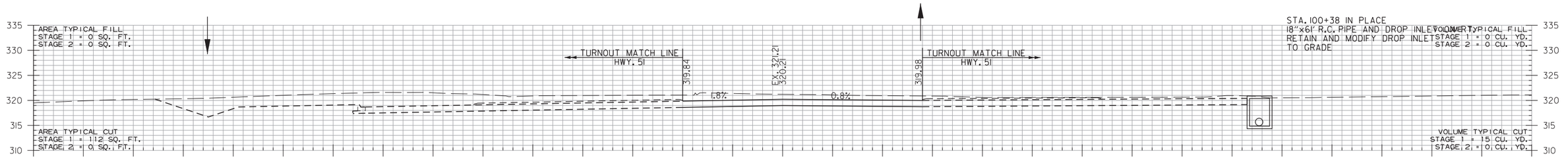
100+50.00

STA. 100+50.00 BEGIN SUPERELEVATION

HWY. 51 STA. 18+75 CONSTRUCT
DROP INLET ON RT. H=3'-0"
WITH 18"x4' PIPE INLET FROM FES RT.
AND 22"x14"x28' PIPE OUTLET
TO EXIST. DROP INLET
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 4 LIN. FT.
22"x14" R.C. ARCH PIPE (CLASS IV)
(TYPE 3 BEDDING) = 28 LIN. FT.
18" FES = 1 EACH
HWY. 51 18+75 RT.
TOP ELEV.=321.08



100+49.00

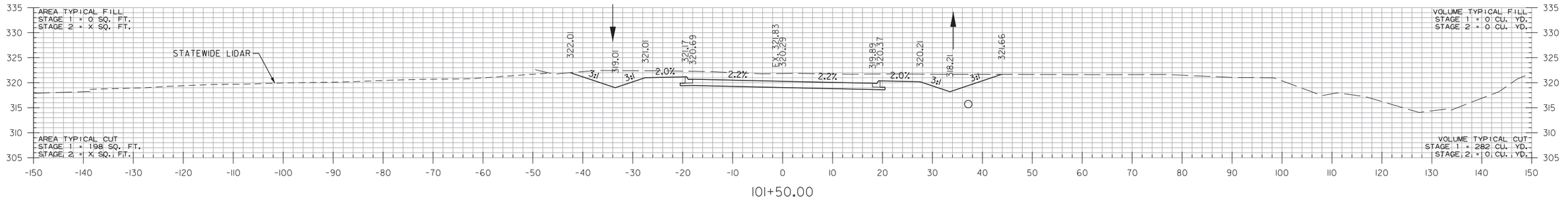


100+38.00

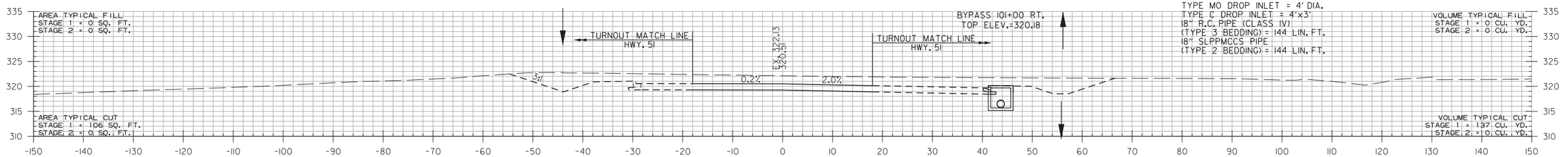
BYPASS
STA. 100+38 TO STA. 100+50

rnfortner 6/28/2022 10:37:38 AM
WORKSPACE: AHTD
L:\2017\170755 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

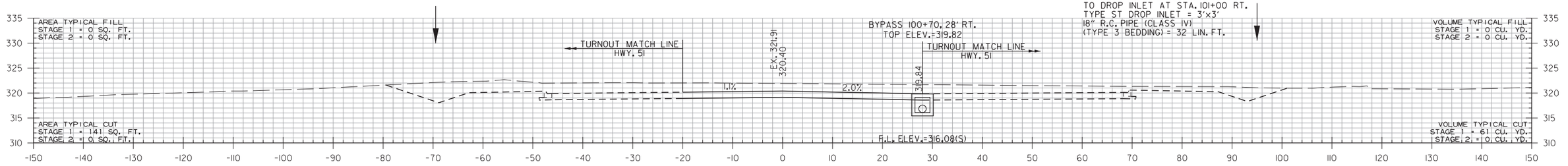
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	290	549
		CROSS SECTIONS				



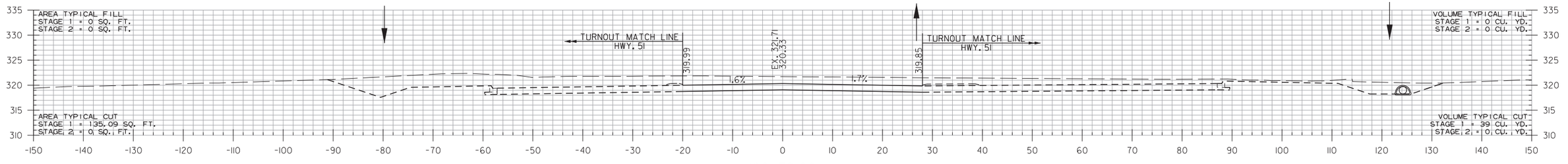
101+50.00



101+00.00



100+70.00

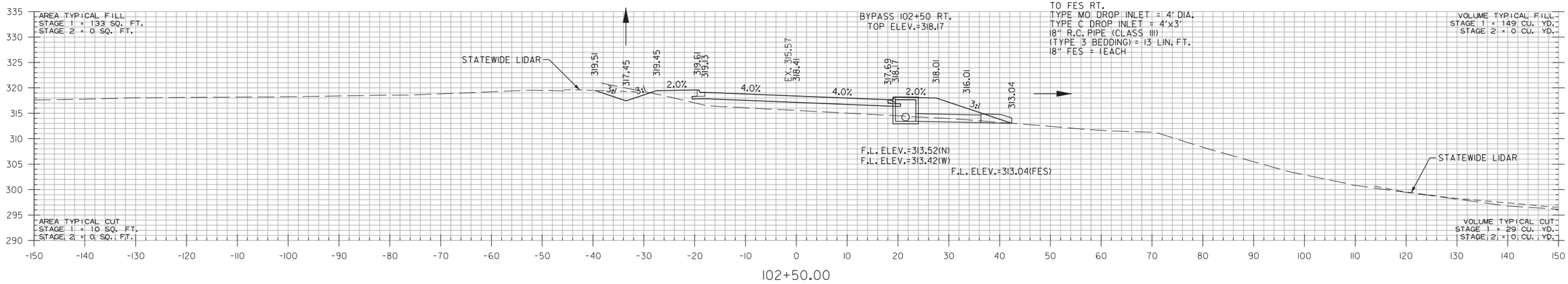


100+58.00

BYPASS
STA. 100+58 TO STA. 101+50

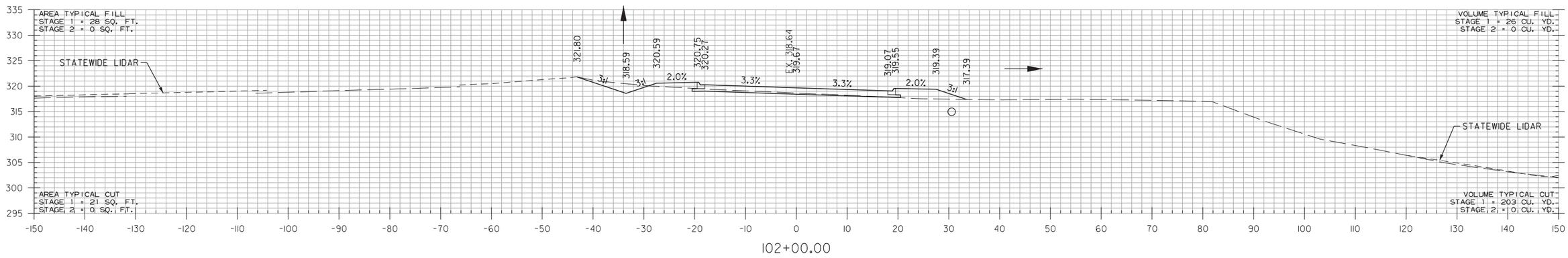
rnfortner 6/28/2022 10:37:38 AM
WORKSPACE: AHTD
L:\2017\170755 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	291	549
		CROSS SECTIONS				



102+50.00

STA. 102+30.00 MAX SUPERELEVATION (0.040'/')

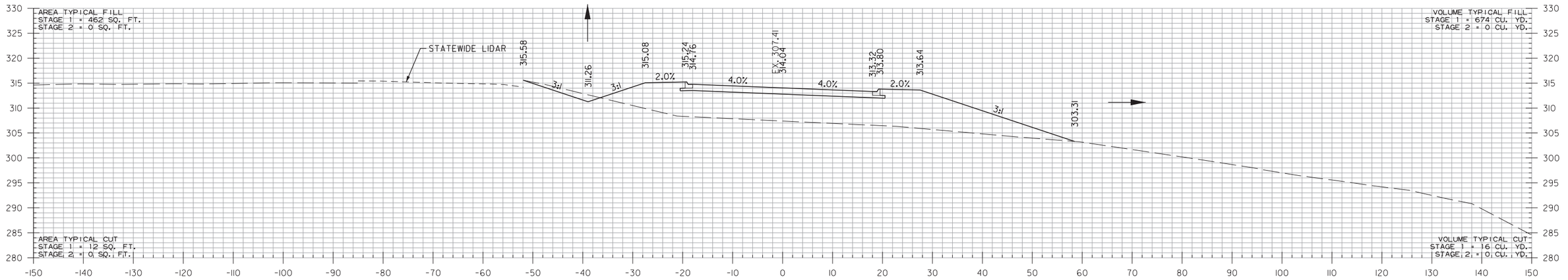


102+00.00

BYPASS
STA. 102+00 TO STA. 102+50

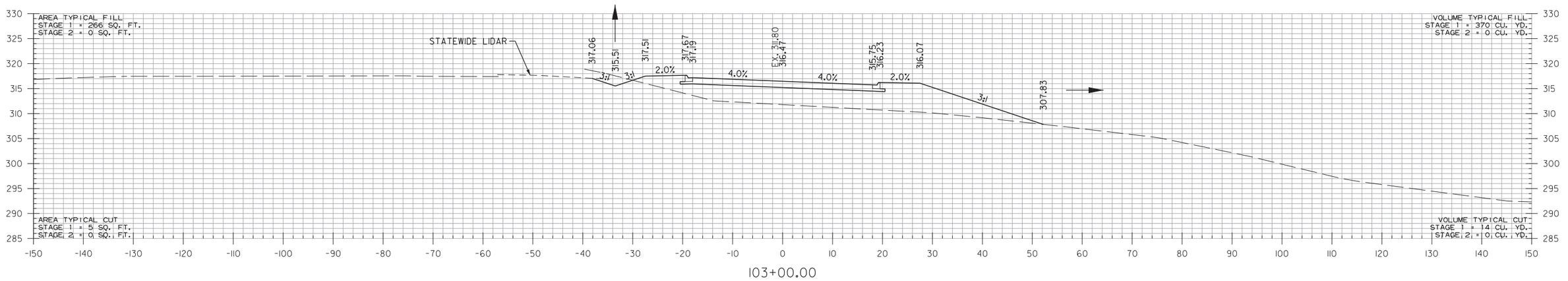
rnfortner 6/28/2022 10:37:38 AM
WORKSPACE: AHTD
L:\2017\170715 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	292	549
		CROSS SECTIONS				



103+50.00

STA. 103+20.00
BEGIN SP. DT. LT. -11.02%
ELEV. 314.57



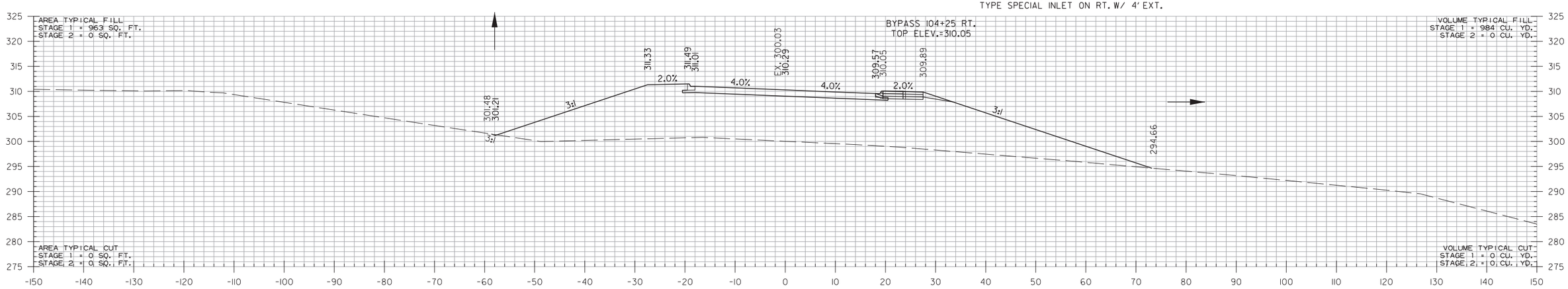
103+00.00

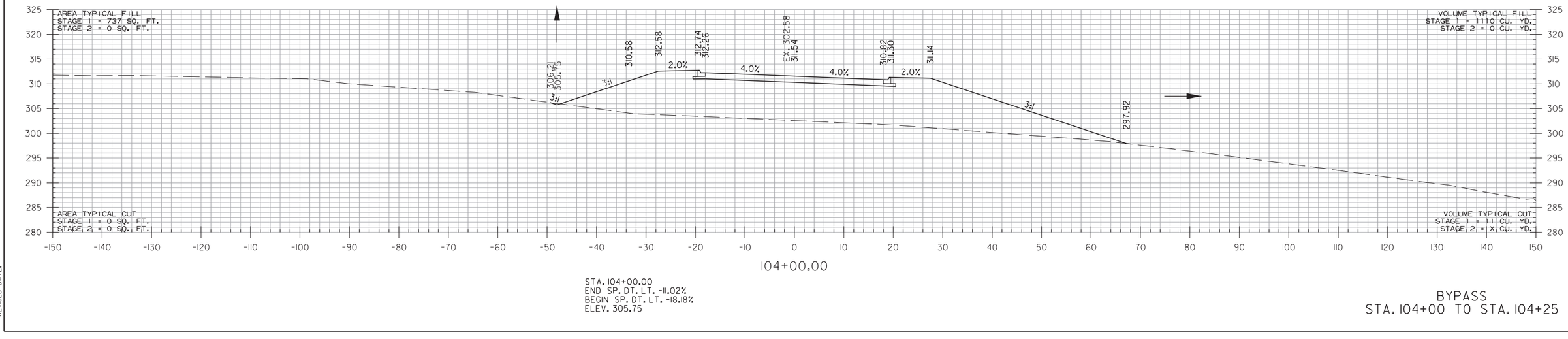
BYPASS
STA. 103+00 TO STA. 103+50

rnfortner 6/28/2022 10:37:39 AM
WORKSPACE: AHTD
L:\2017\170755 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	293	549
		CROSS SECTIONS				

STA. 104+25 CONSTRUCT
TYPE SPECIAL INLET ON RT. W/ 4' EXT.



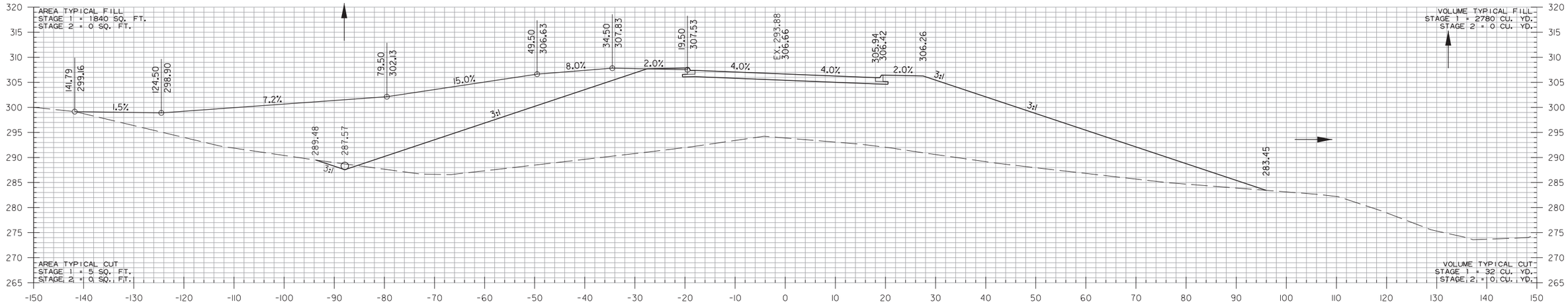


STA. 104+00.00
END SP. DT. LT. -11.02%
BEGIN SP. DT. LT. -18.18%
ELEV. 305.75

BYPASS
STA. 104+00 TO STA. 104+25

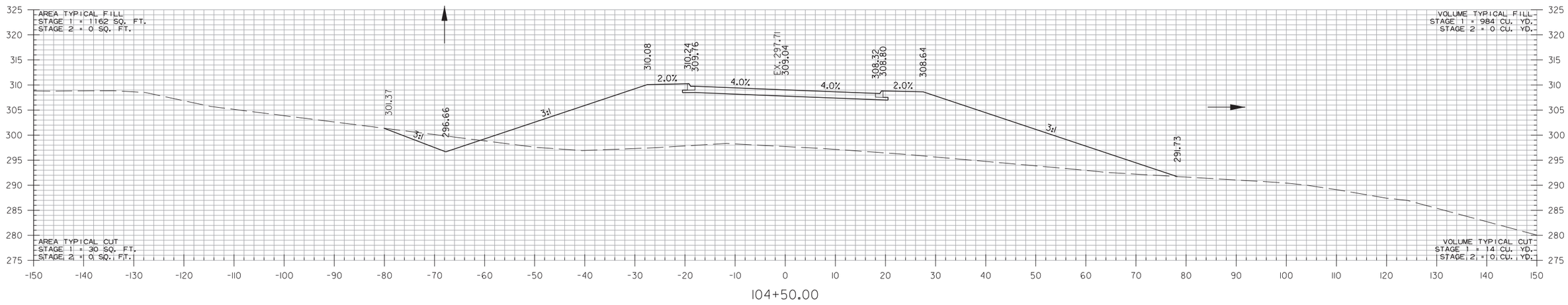
rnfortner 6/28/2022 10:37:39 AM
WORKSPACE: AHTD
L:\2017\170175 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	294	549
		CROSS SECTIONS				



STA. 105+00 INSTALL
18" X 124' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 537 CU. YDS.

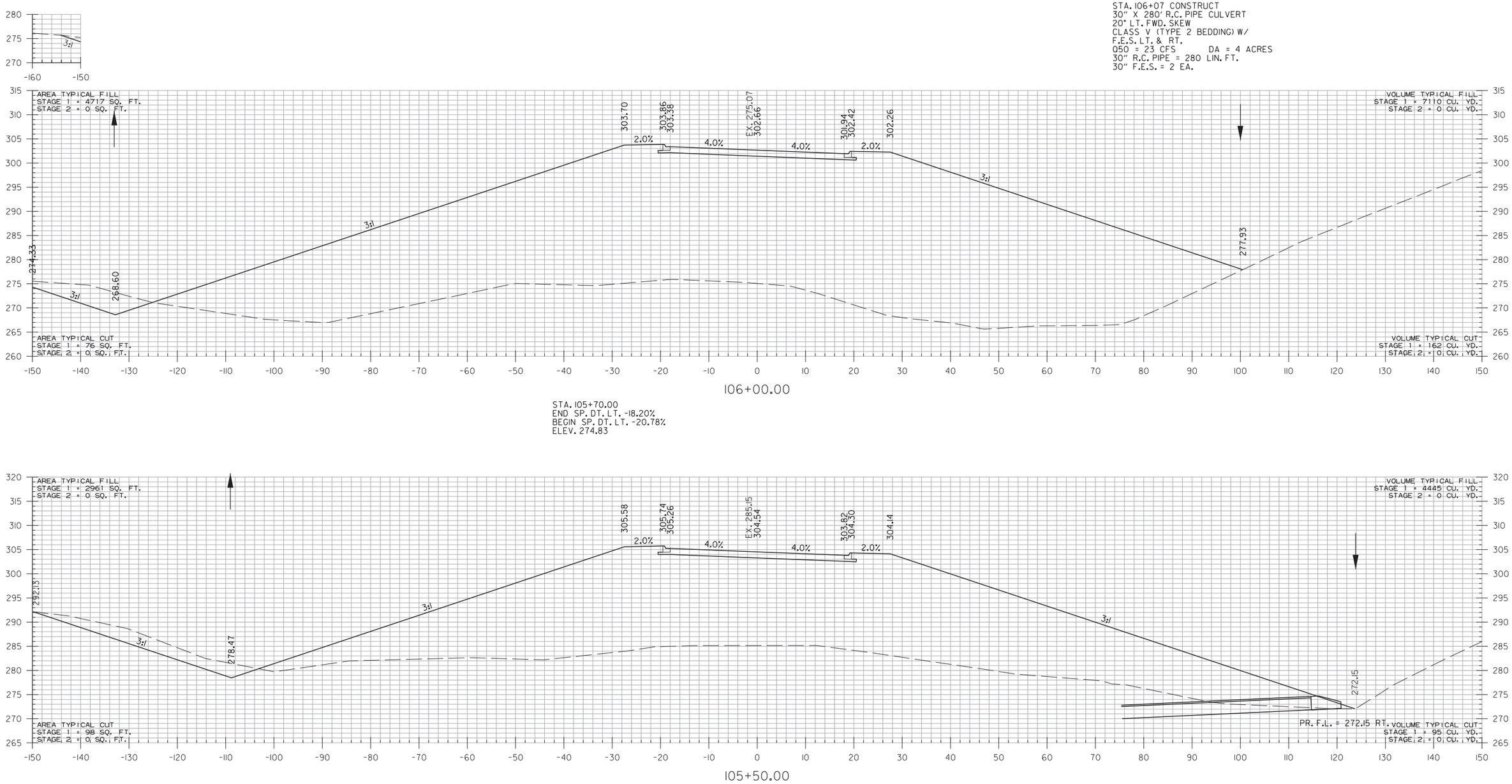
STA. 105+00.00
END SP. DT. LT. -18.18%
BEGIN SP. DT. LT. -18.20%
ELEV. 287.57



BYPASS
STA. 104+50 TO STA. 105+00

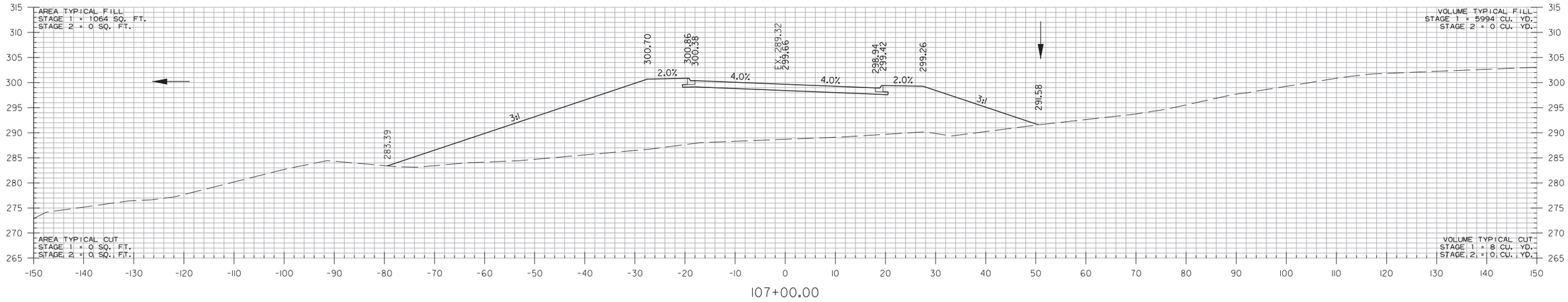
rnfortner 6/28/2022 10:37:39 AM
WORKSPACE: AHTD
L:\20\T\170\T515 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

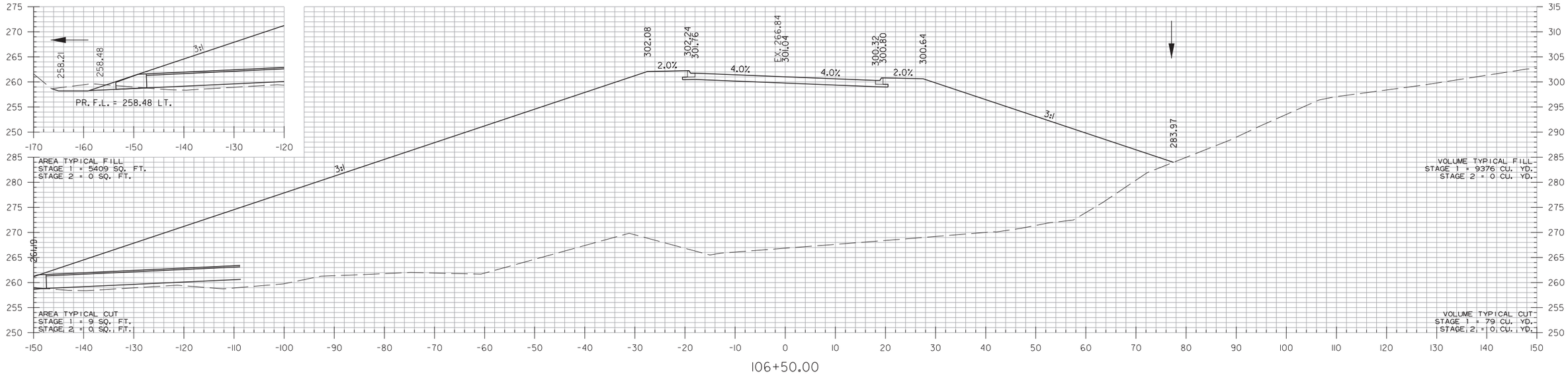
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	295	549
		CROSS SECTIONS				



rnfortner 6/28/2022 10:37:39 AM
WORKSPACE: AHTD
L:\2017\170755 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	296	549
		CROSS SECTIONS				



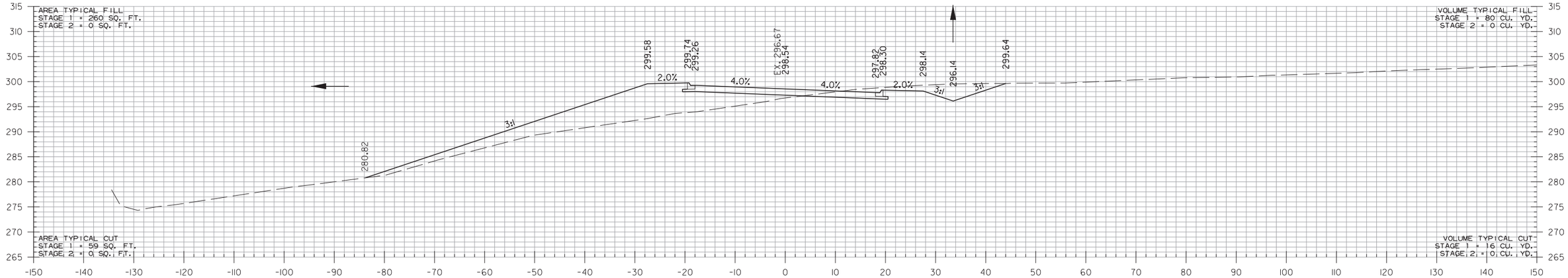


STA. 106+50.00
END SP. DT. LT. -20.78%
ELEV. 258.21

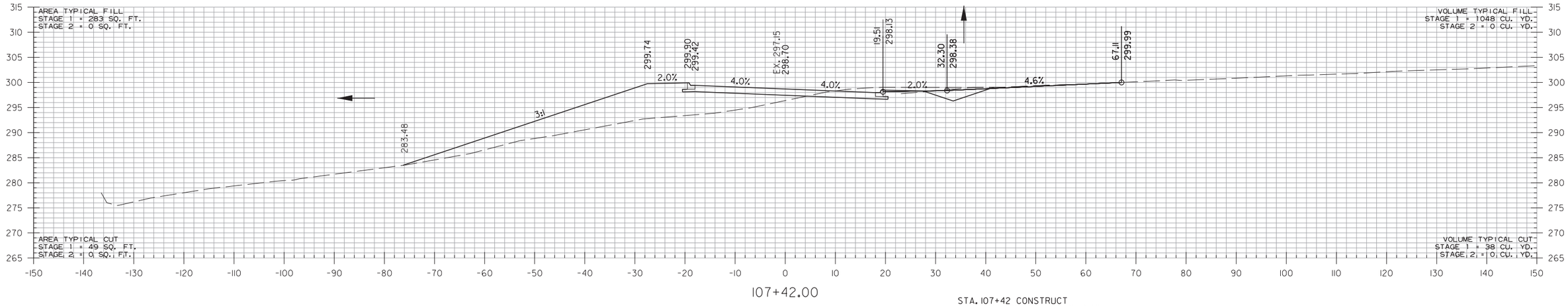
BYPASS
STA. 106+50 TO STA. 107+00

rnfortner 6/28/2022 10:37:39 AM
WORKSPACE: AHTD
L:\2017\170715 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	297	549
		CROSS SECTIONS				



107+50.00



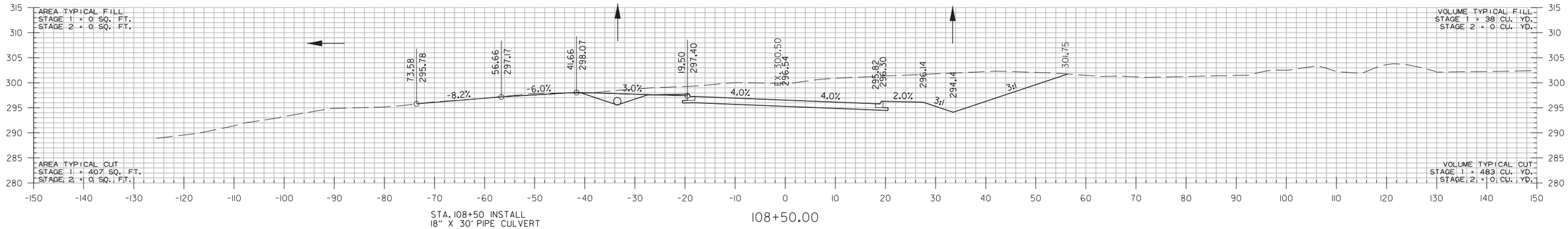
107+42.00

STA. 107+42 CONSTRUCT
APPROACH ON RT. = 18 CU. YDS.

BYPASS
STA. 107+42 TO STA. 107+50

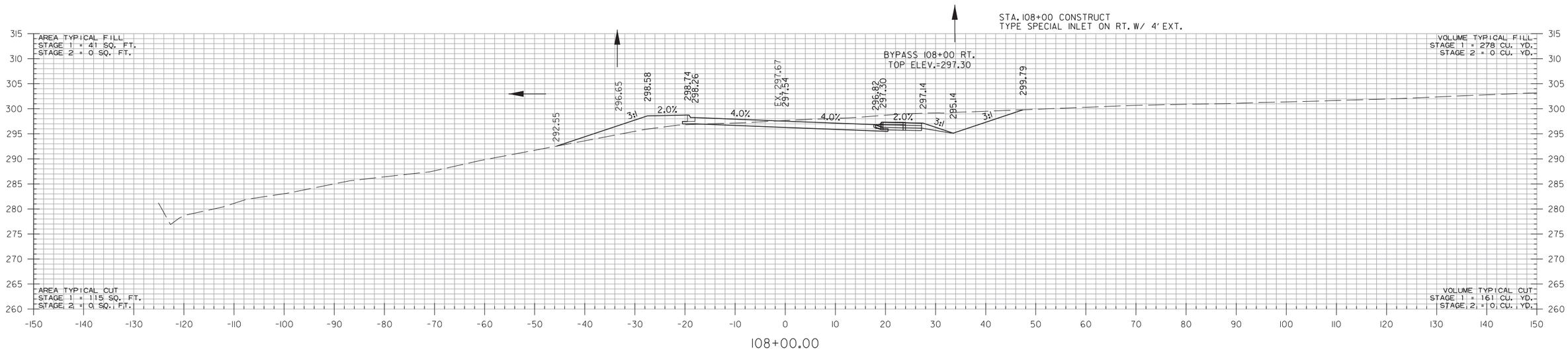
rnfortner 6/28/2022 10:37:40 AM
WORKSPACE: AHTD
L:\20IT\170I715 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	298	549
		CROSS SECTIONS				



STA. 108+50 INSTALL
18" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 13 CU. YDS.

108+50.00

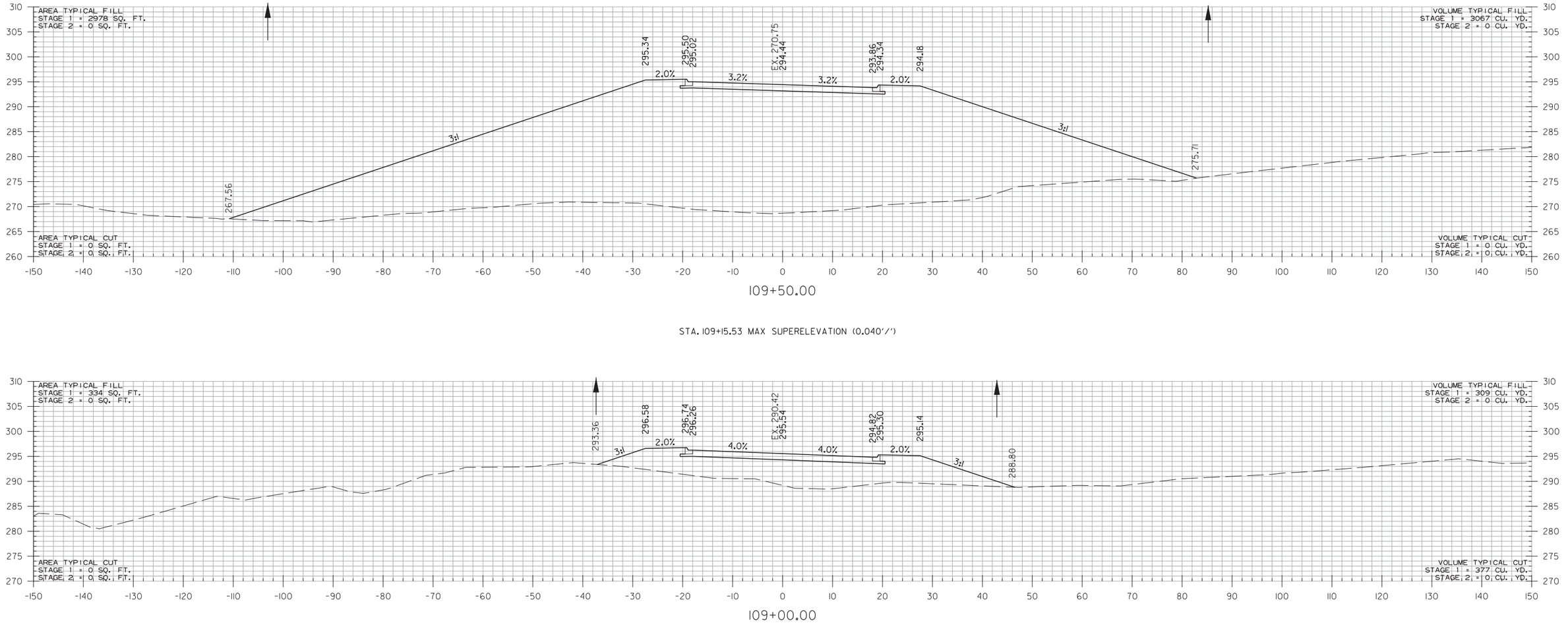


108+00.00

BYPASS
STA. 108+00 TO STA. 108+50

rnfortner 6/28/2022 10:37:40 AM
WORKSPACE: AHTD
L:\2017\170755 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	299	549
		CROSS SECTIONS				



rnfortner 6/28/2022 10:37:40 AM
WORKSPACE: AHTD
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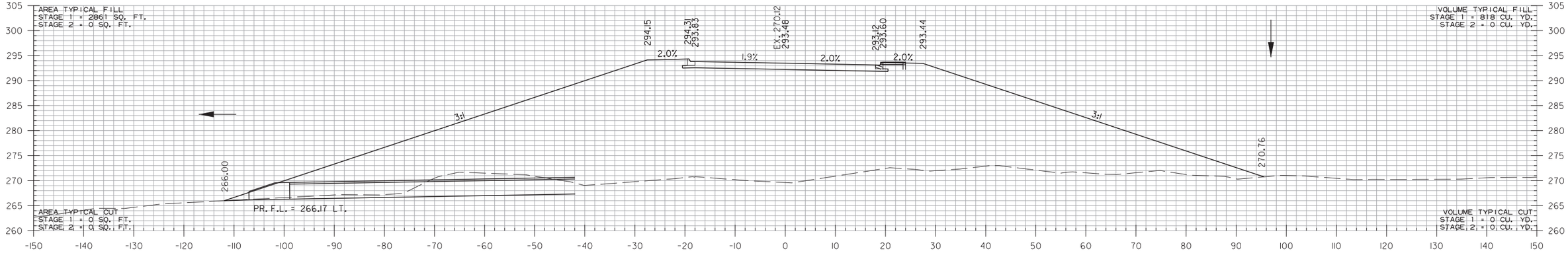
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	300	549
		CROSS SECTIONS				

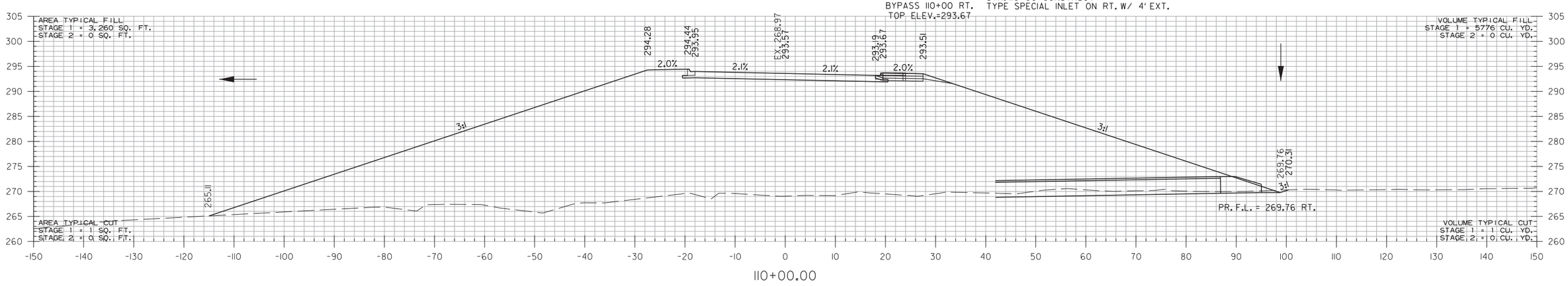


110+07.22

STA. 110+05 CONSTRUCT
36" X 186' R.C. PIPE CULVERT
2° LT. FWD. SKEW
CLASS IV (TYPE 2 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 44 CFS DA = 7 ACRES
36" R.C. PIPE = 186 LIN. FT.
36" F.E.S. = 2 EA.

BYPASS 110+00 RT. TOP ELEV.=293.67

STA. 110+00 CONSTRUCT
TYPE SPECIAL INLET ON RT. W/ 4' EXT.



110+00.00

STA. 110+00.00
BEGIN SP. DT. RT. 26.00%
ELEV. 269.75

BYPASS
STA. 110+00 TO STA. 110+07

rnfortner 6/28/2022 10:37:40 AM
WORKSPACE: AHTD
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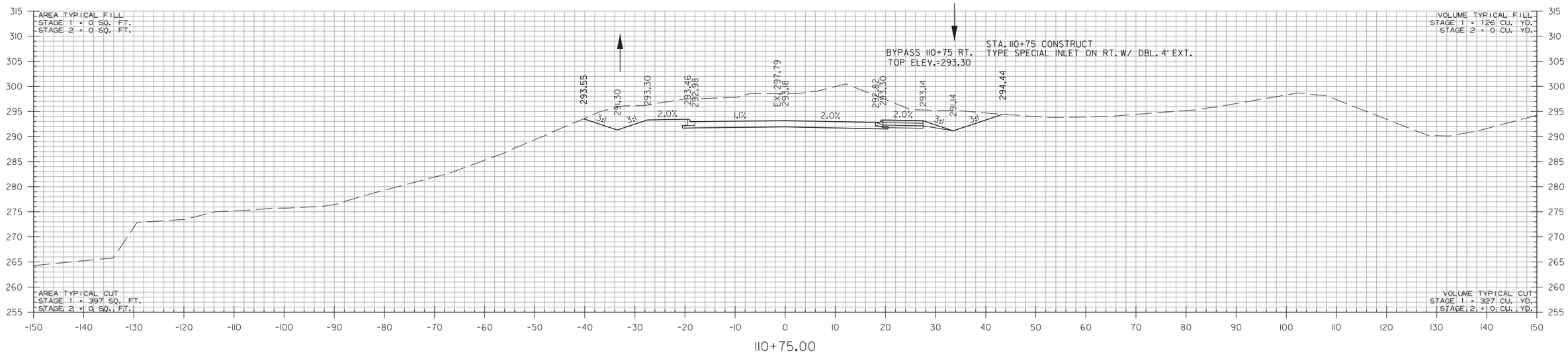
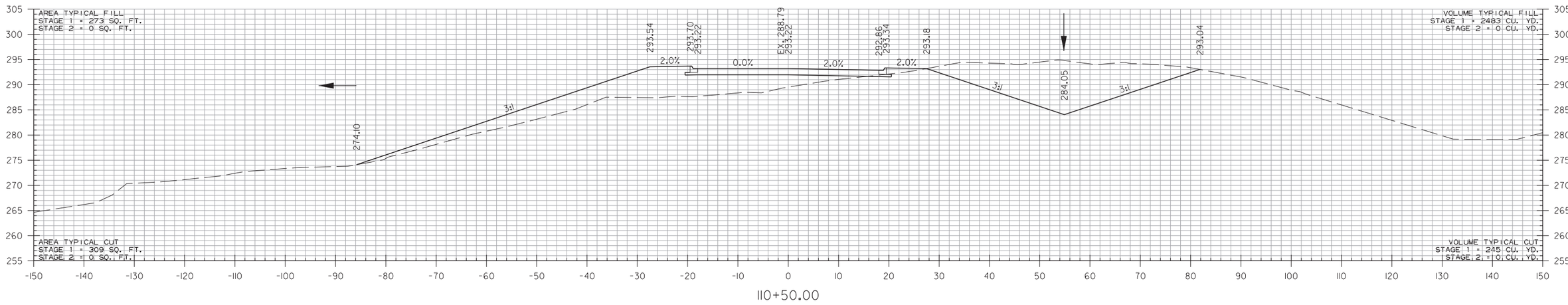
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	301	549
		CROSS SECTIONS				



110+75.00

STA. 110+75.00
END SP. DT. RT. 30.20%
ELEV. 291.14



110+50.00

STA. 110+30.00
END SP. DT. RT. 26.00%
BEGIN SP. DT. RT. 30.20%
ELEV. 277.55

BYPASS
STA. 110+50 TO STA. 110+75

rnfortner 6/28/2022 10:37:46 AM
WORKSPACE: AHTD
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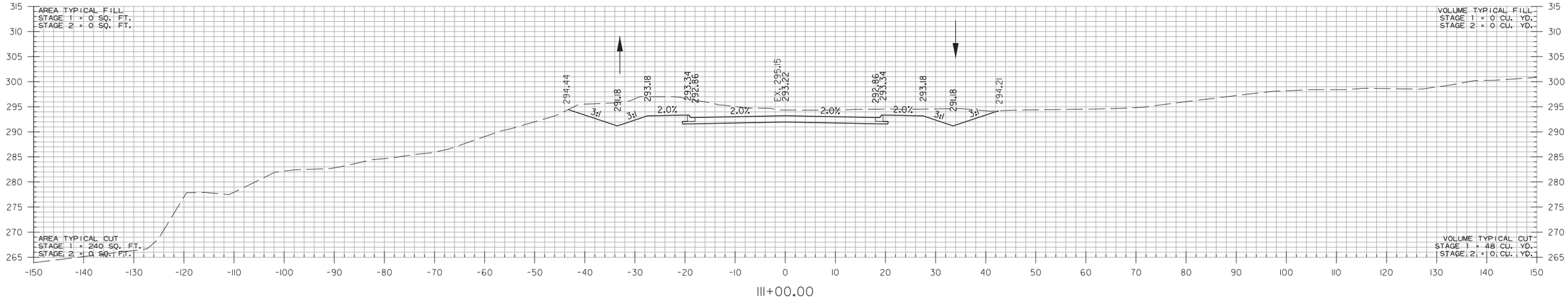
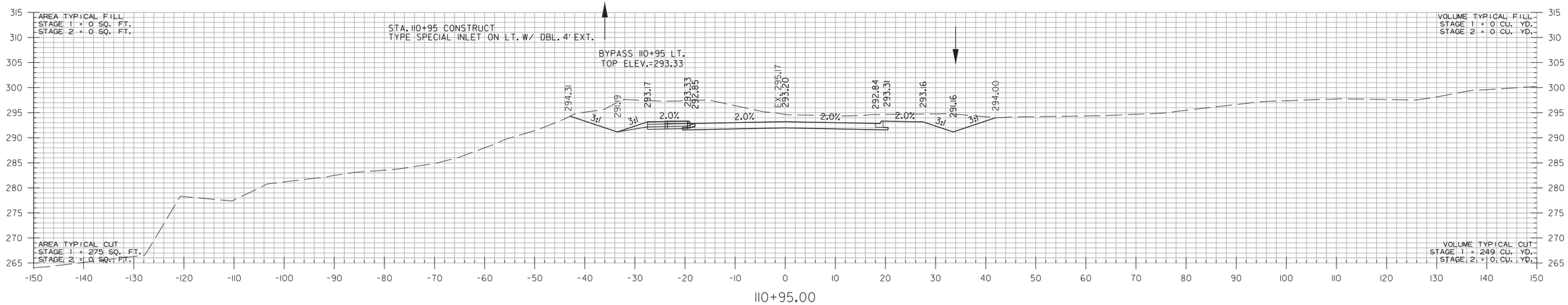
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	302	549
		CROSS SECTIONS				



111+00.00

STA. 110+95.53 END SUPERELEVATION

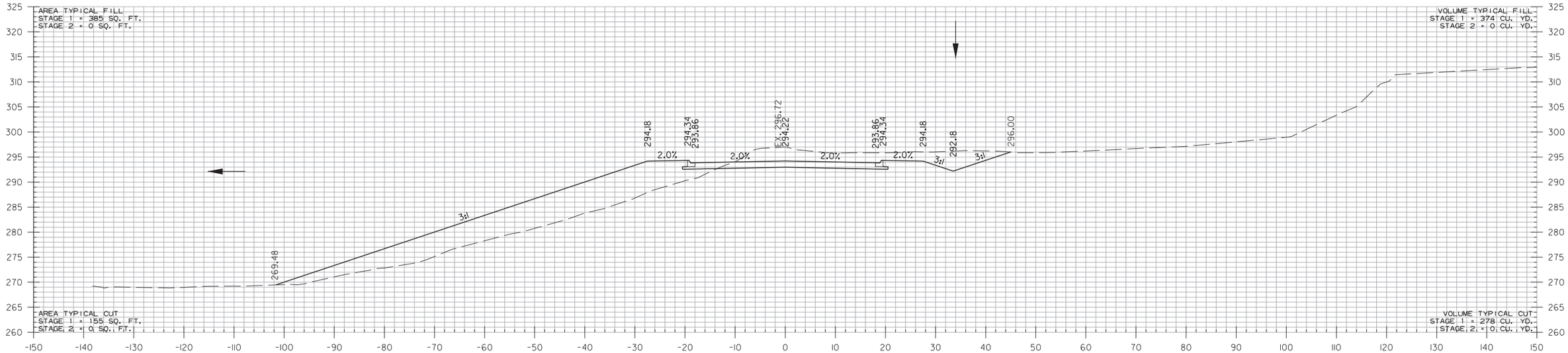


110+95.00

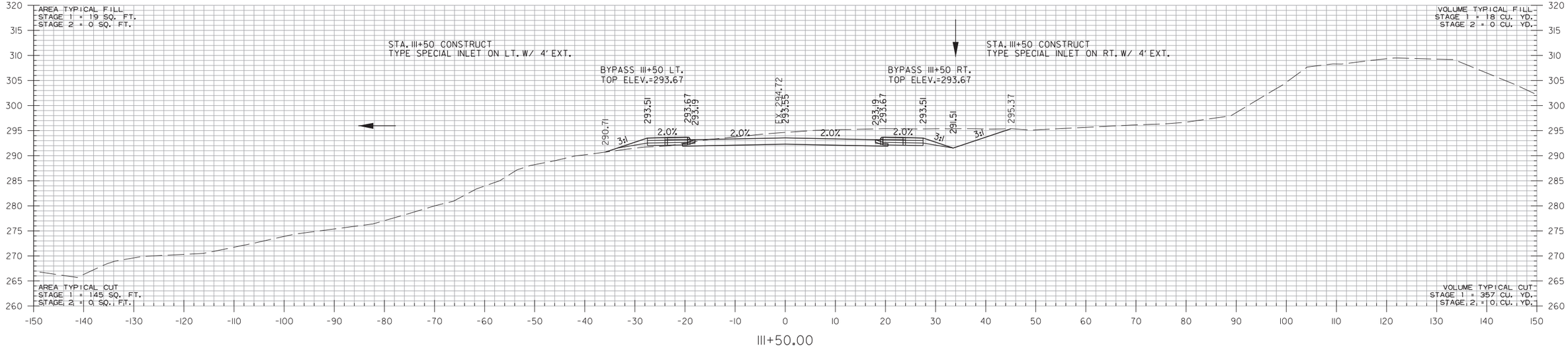
BYPASS
STA. 110+95 TO STA. 111+00

rnfortner 6/28/2022 10:37:46 AM
WORKSPACE: AHTD
L:\2017\170715 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	303	549
		CROSS SECTIONS				



112+00.00

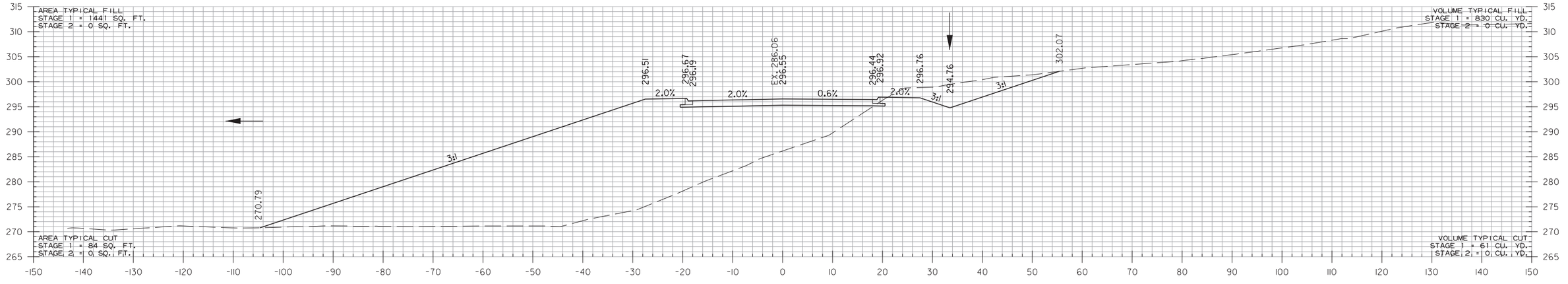


111+50.00

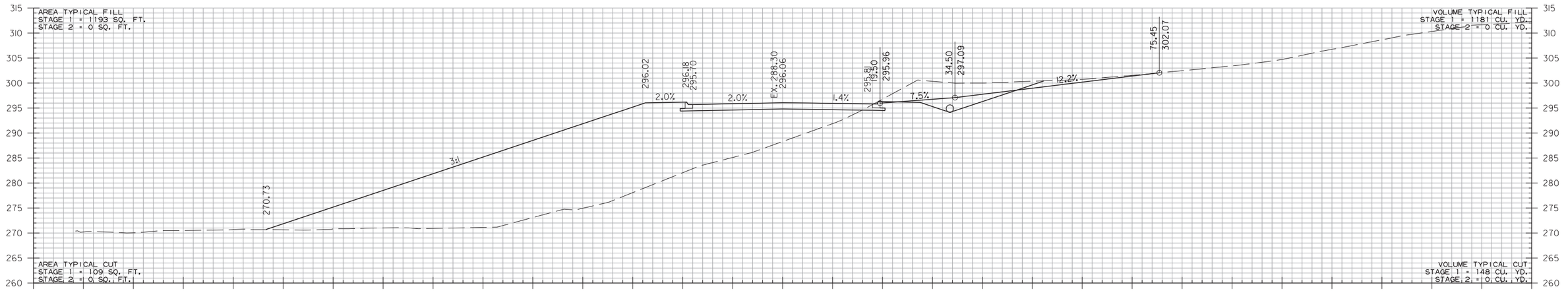
BYPASS
STA. 111+50 TO STA. 112+00

rnfortner 6/28/2022 10:37:47 AM
WORKSPACE: AHTD
L:\2017\701595 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	304	549
		CROSS SECTIONS				



113+00.00

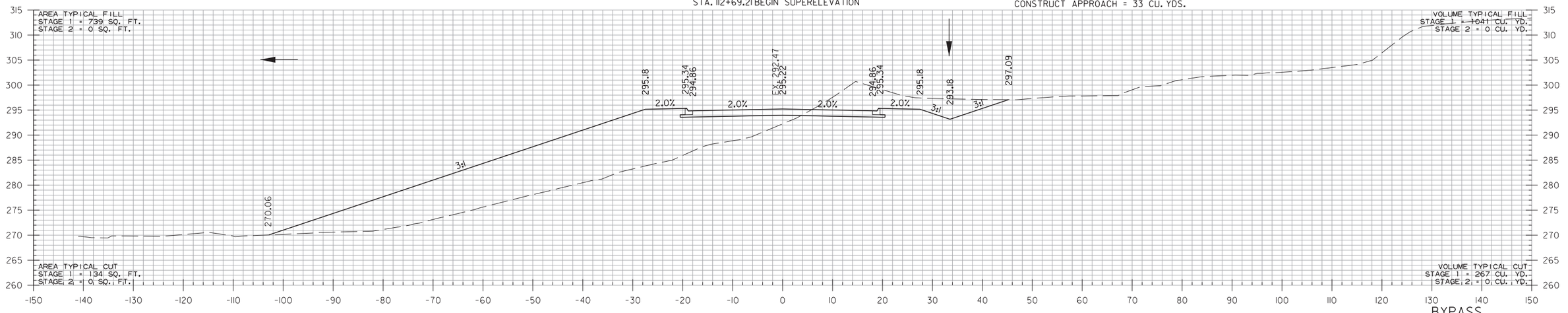


112+83.00

STA. 112+69.21 BEGIN SUPERELEVATION

STA. 112+83 INSTALL
18" X 44' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPROACH = 33 CU. YDS.

STA. 112+83 TO STA. 112+83



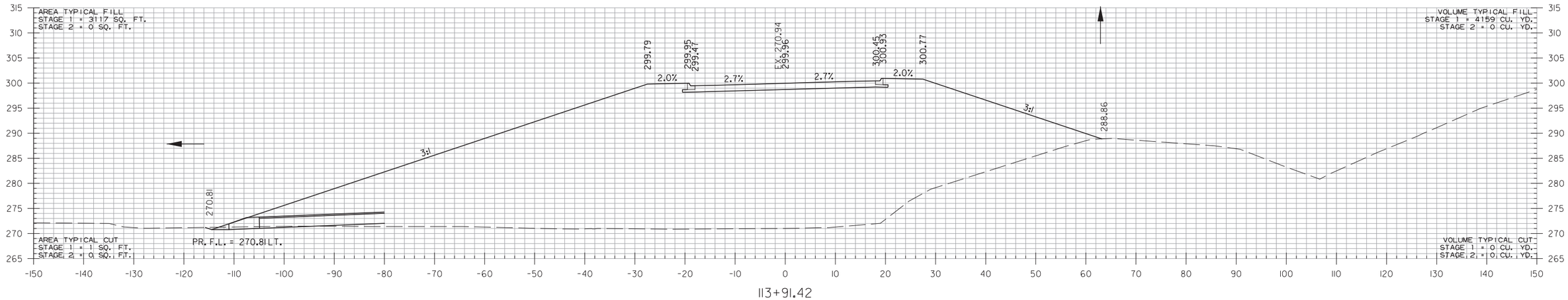
112+50.00

BYPASS
STA. 112+50 TO STA. 113+00

rnfortner 6/28/2022 10:37:47 AM
WORKSPACE: AHTD
L:\20IT\170I715 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

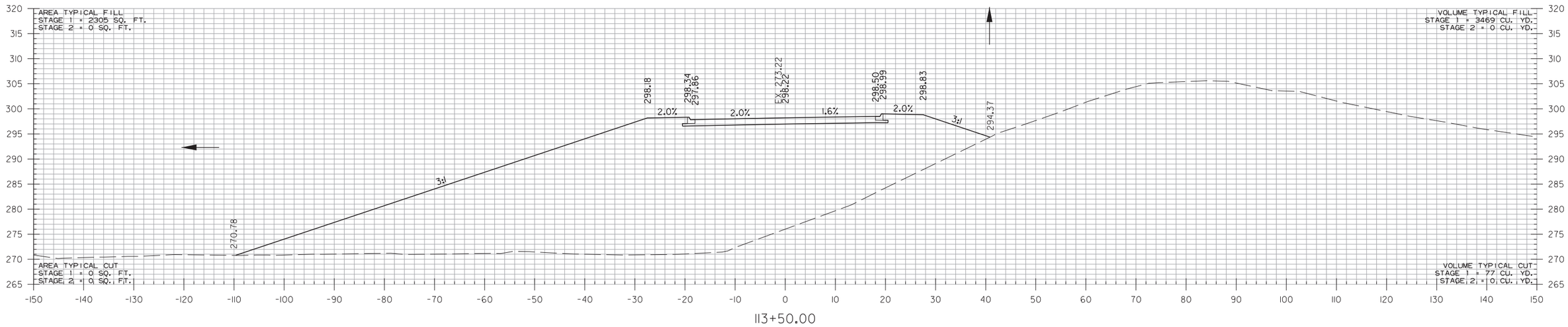
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	305	549
		CROSS SECTIONS				

STA. 113+97 CONSTRUCT
24" X 194' R.C. PIPE CULVERT
3° RT. FWD. SKEW
CLASS IV (TYPE 2 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 5 CFS DA = 1 ACRE
24" R.C. PIPE = 194 LIN. FT.
24" F.E.S. = 2 EA.



113+91.42

STA. 113+90.00
BEGIN SP. DT. LT. 2.00%
ELEV. 270.63

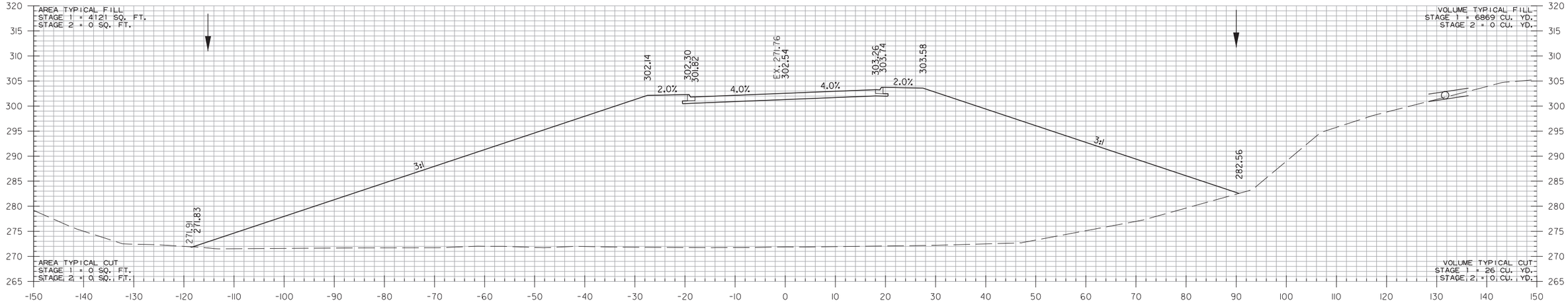


113+50.00

BYPASS
STA. 113+50 TO STA. 113+91

rnfortner 6/28/2022 10:37:47 AM
WORKSPACE: AHTD
L:\2017\170715\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

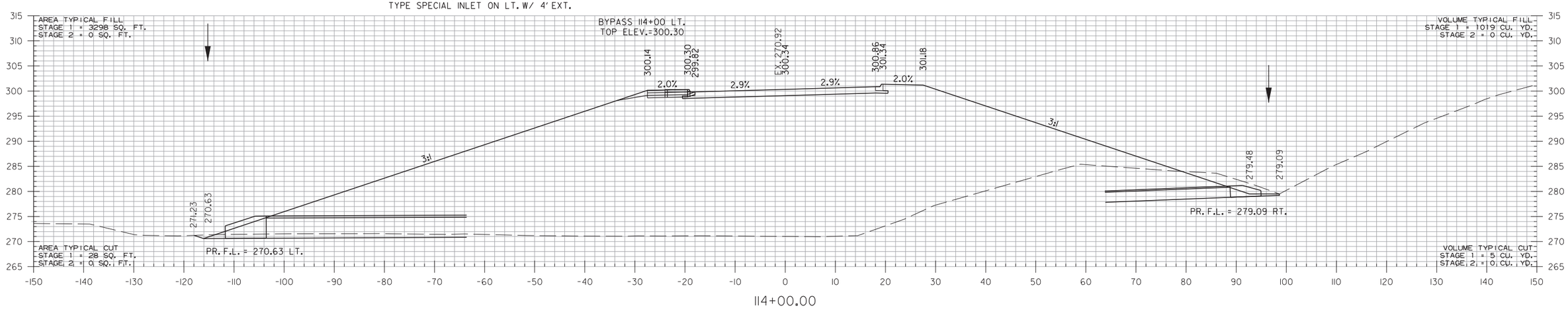
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	306	549
		CROSS SECTIONS				



114+50.00

STA. 114+49.21 MAX SUPERELEVATION (0.040'/')

STA. 114+00 CONSTRUCT
TYPE SPECIAL INLET ON LT. W/ 4' EXT.



114+00.00

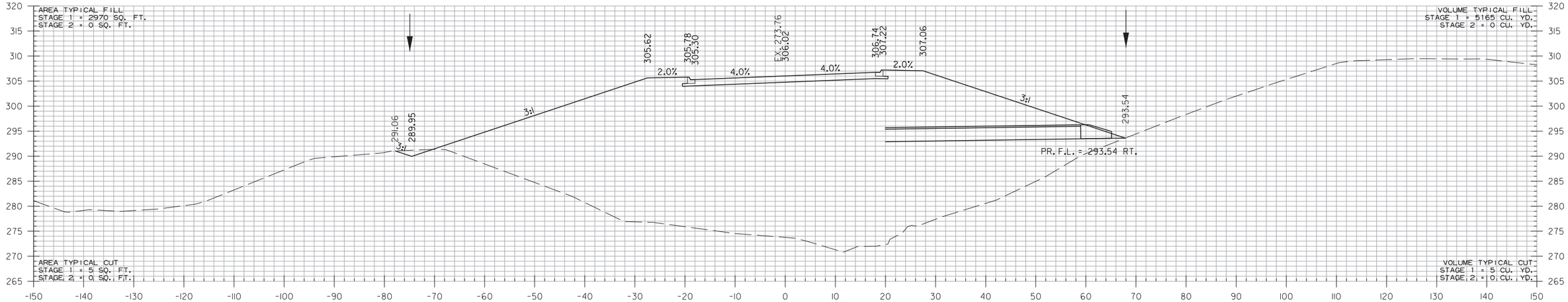
BYPASS
STA. 114+00 TO STA. 114+50

rnfortner 6/28/2022 10:37:47 AM
WORKSPACE: AHTD
L:\20IT\I70I715 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

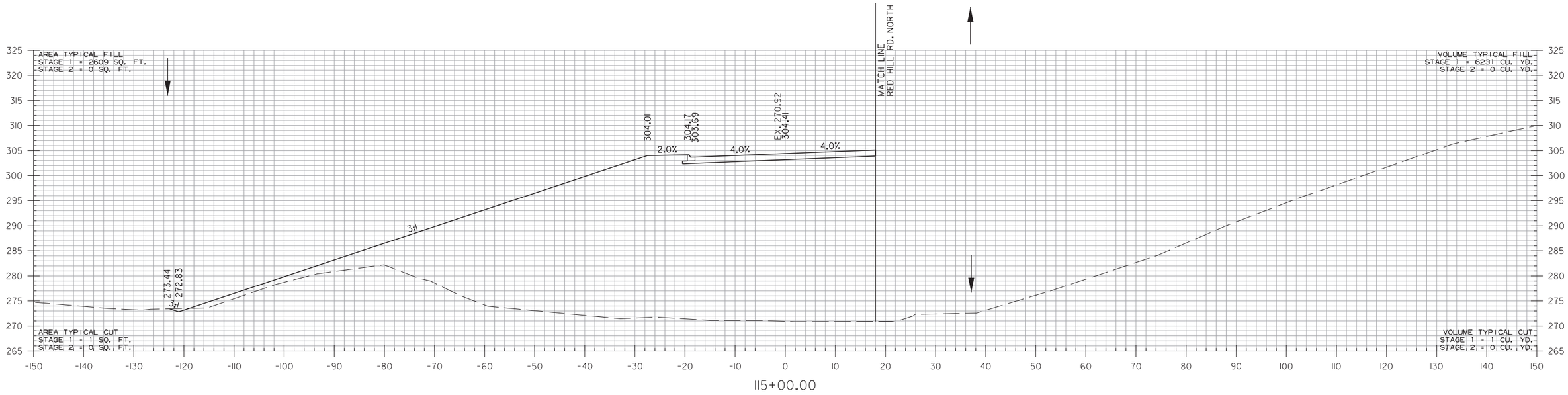
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	307	549
		CROSS SECTIONS				

STA. 115+88 IN PLACE
48" X 805' R.C. PIPE CULVERT
WITH HDWL. RT.
REMOVE HDWL. RT., PLUG & ABANDON 115'
& EXTEND 284' LT.
47° RT. FWD. SKEW
TO A COMPLETED LENGTH OF 974'
WITH FES RT.
050 = 82 CFS DA = 27 ACRES
48" R.C. PIPE = 284' LIN. FT.
48" F.E.S. = 1EA.

STA. 115+54 CONSTRUCT
30" X 120' R.C. PIPE CULVERT
4° LT. FWD. SKEW
CLASS III (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
050 = 23 CFS DA = 6 ACRE
30" R.C. PIPE = 120 LIN. FT.
30" F.E.S. = 2 EA.



115+50.00



115+00.00

STA. 115+00.00
END SP. DT. LT. 2.00%
BEGIN SP. DT. LT. 34.24%
ELEV. 272.83

BYPASS
STA. 115+00 TO STA. 115+50

rnfortner 6/28/2022 10:37:47 AM
WORKSPACE: AHTD
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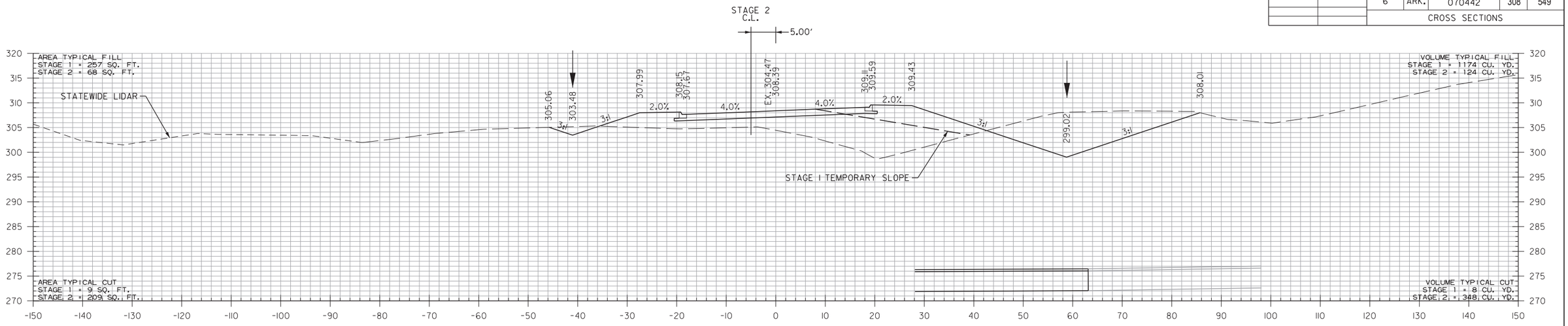
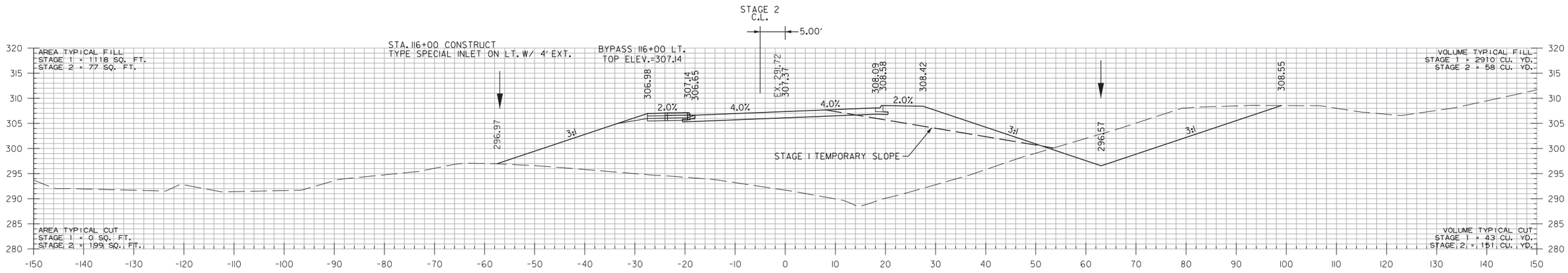
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	308	549
		CROSS SECTIONS				

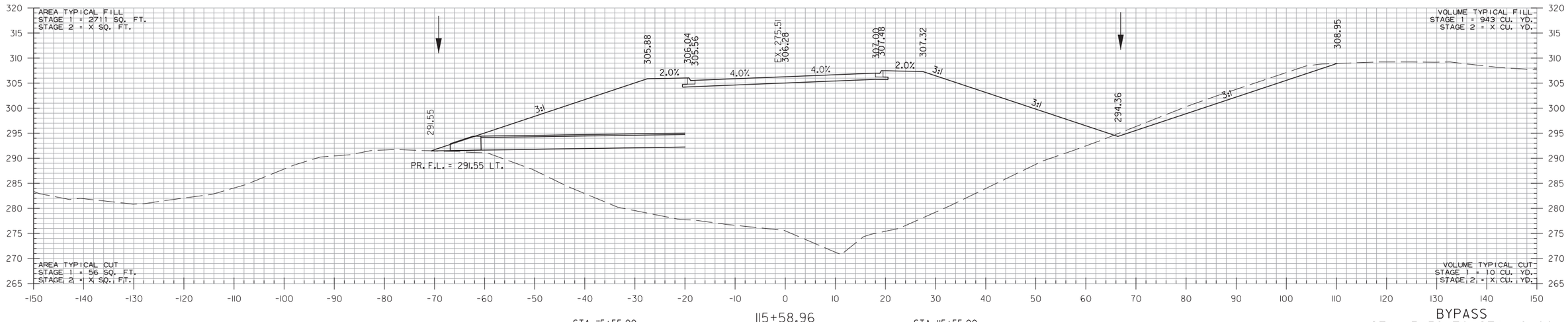


116+46.11



STA. 115+60.00
BEGIN SP. DT. LT. 13.23%
ELEV. 292.09

116+00.00



STA. 115+55.00
END SP. DT. LT. 34.24%
ELEV. 291.66

115+58.96

STA. 115+55.00
BEGIN SP. DT. RT. 5.31%
ELEV. 294.18

BYPASS
STA. 115+59 TO STA. 116+00

rnfortner 6/28/2022 10:37:48 AM
WORKSPACE: AHTD
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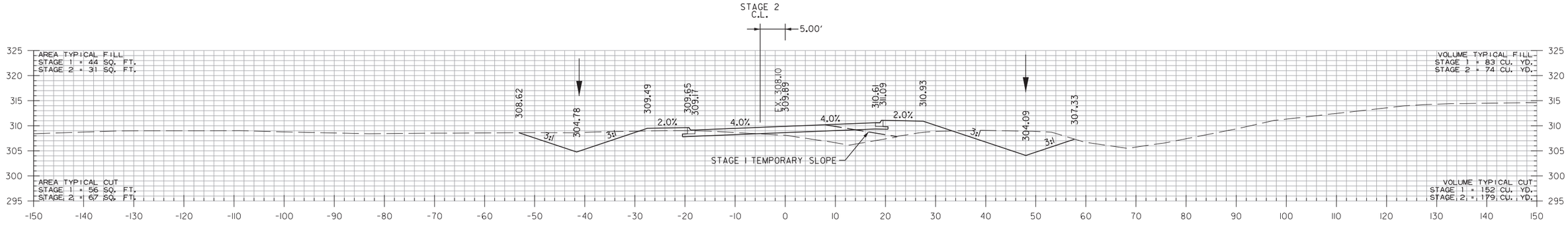
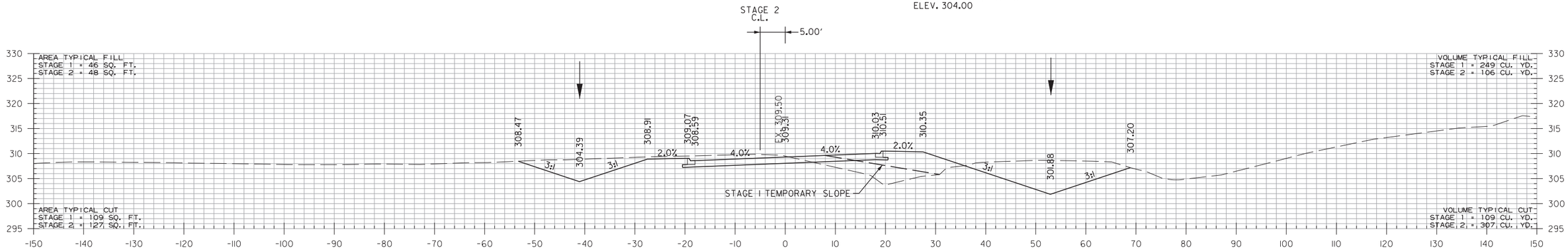
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	309	549
		CROSS SECTIONS				

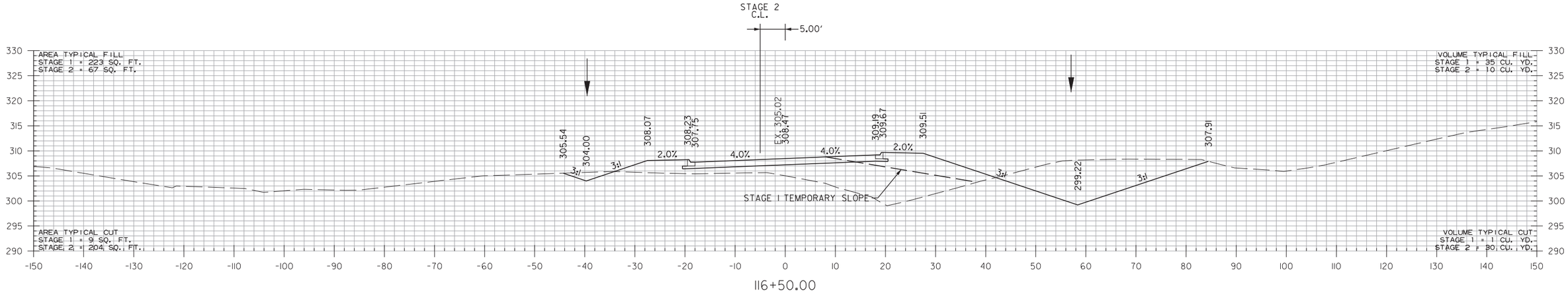


117+50.00

STA. 117+40.00
END SP. DT. RT. 5.31%
BEGIN SP. DT. RT. 0.93%
ELEV. 304.00



117+00.00



116+50.00

STA. 116+50.00
END SP. DT. LT. 13.23%
BEGIN SP. DT. LT. 0.78%
ELEV. 304.00

BYPASS
STA. 116+50 TO STA. 117+50

rnfortner 6/28/2022 10:37:48 AM
WORKSPACE: AHTD
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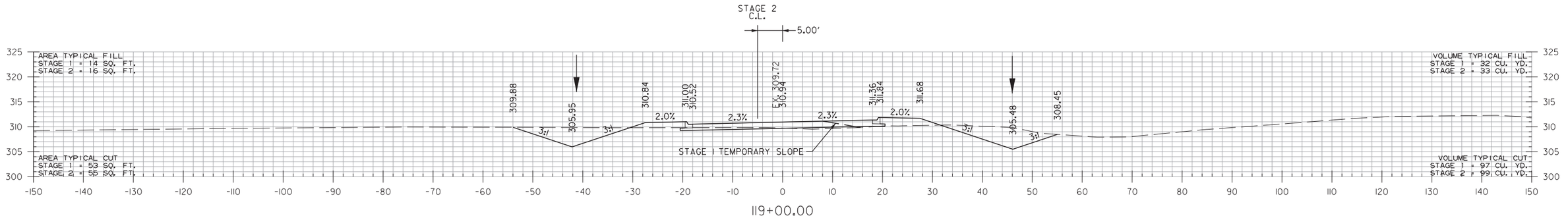
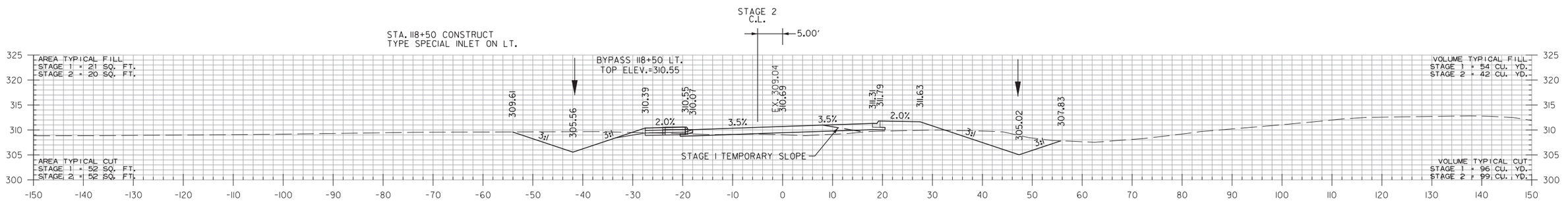
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	310	549
		CROSS SECTIONS				



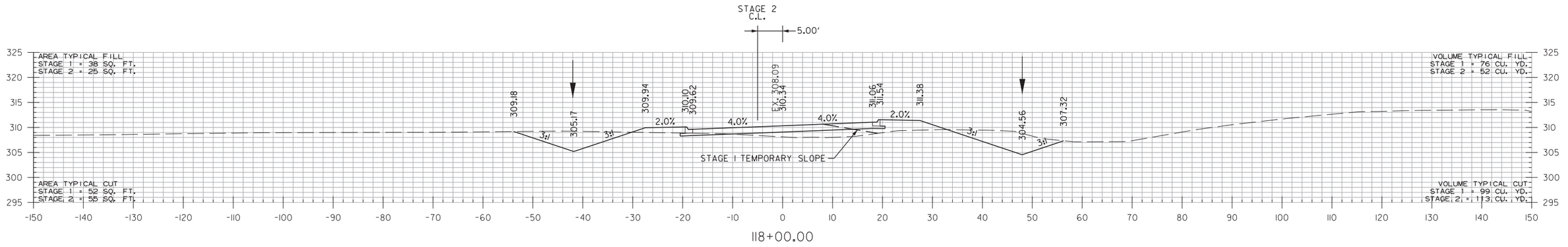
119+00.00

STA. 118+70.29 BEGIN 208' CURB TRANSITION



118+50.00

STA. 118+25.29 MAX SUPERELEVATION (0.040'/')



118+00.00

BYPASS
STA. 118+00 TO STA. 119+00

rnfortner 6/28/2022 10:37:48 AM
WORKSPACE: AHTD
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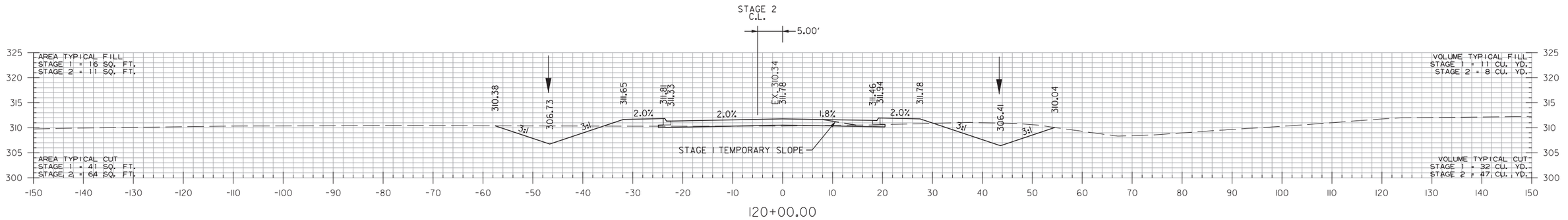
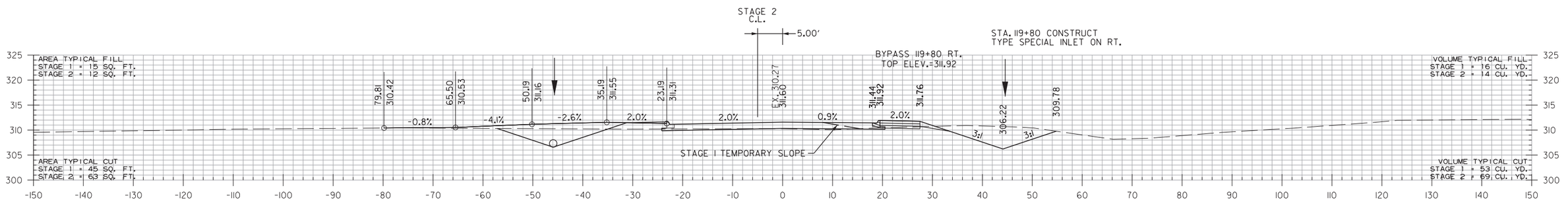
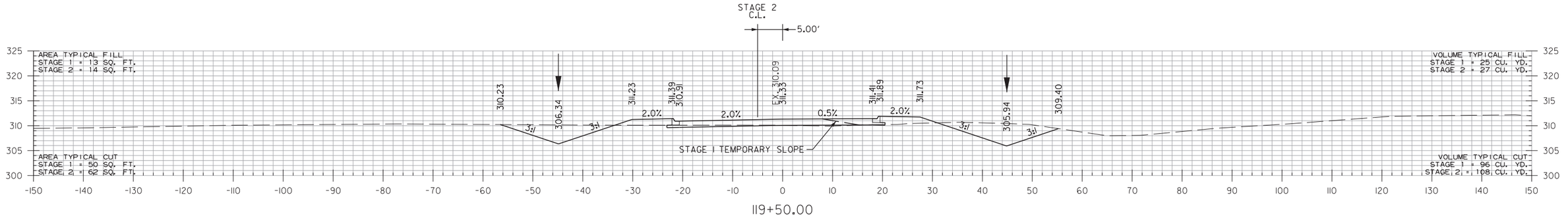
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	311	549
		CROSS SECTIONS				







BYPASS
STA. 119+50 TO STA. 120+00

rnfortner 6/28/2022 10:37:48 AM
WORKSPACE: AHTD
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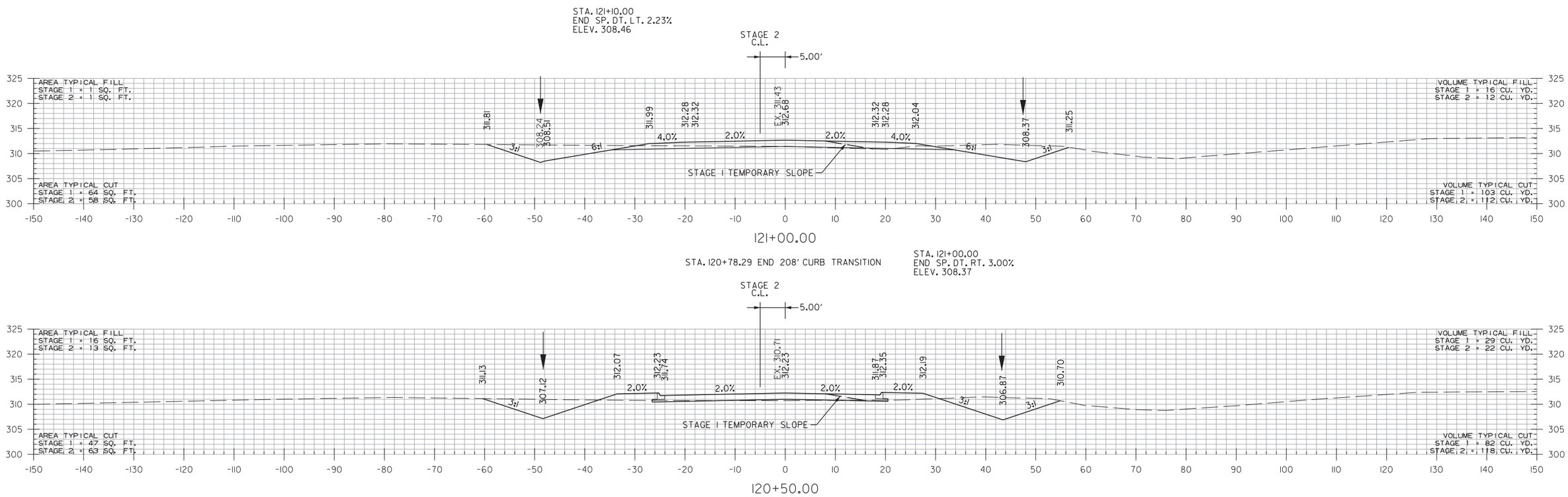
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	312	549
		CROSS SECTIONS				



BYPASS
STA. 120+50 TO STA. 121+00

rntortner 6/28/2022 10:37:49 AM
WORKSPACE: AHTD
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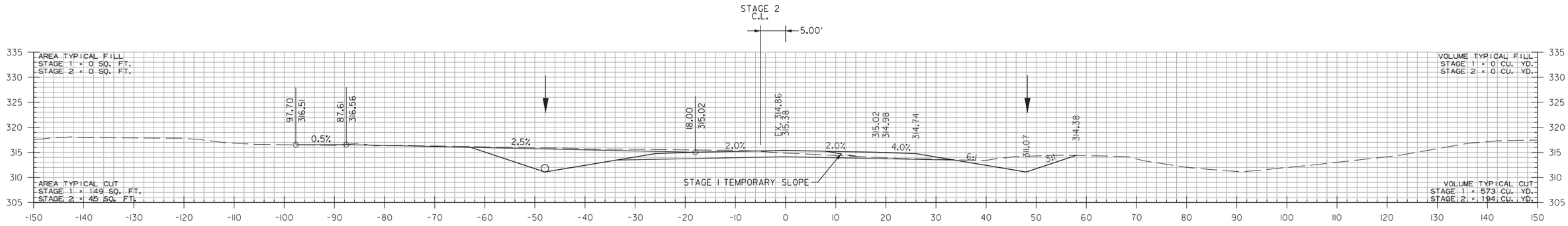
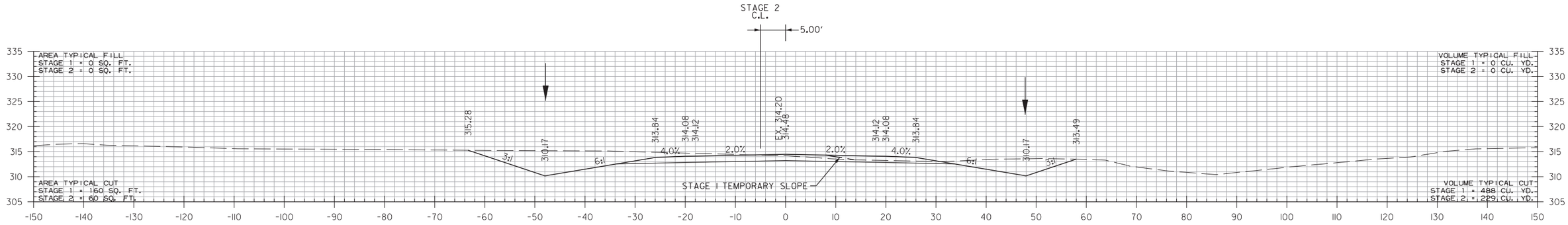
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	313	549
		CROSS SECTIONS				

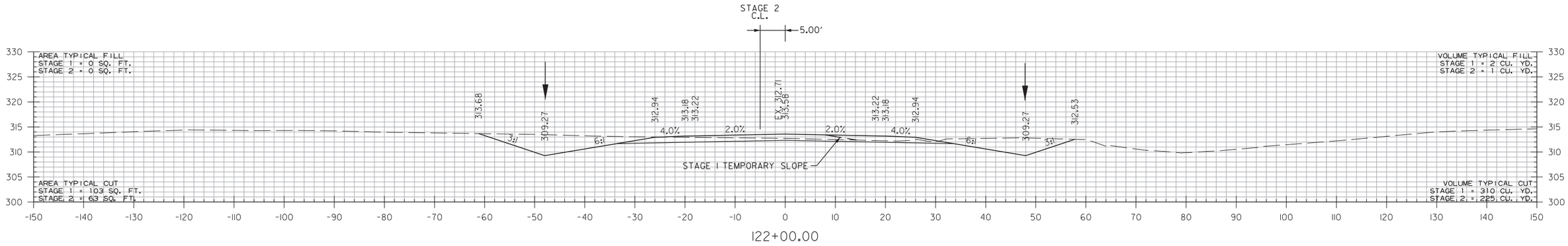


STA. 124+00 INSTALL
18" X 48' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 43 CU. YDS.

124+00.00



123+00.00



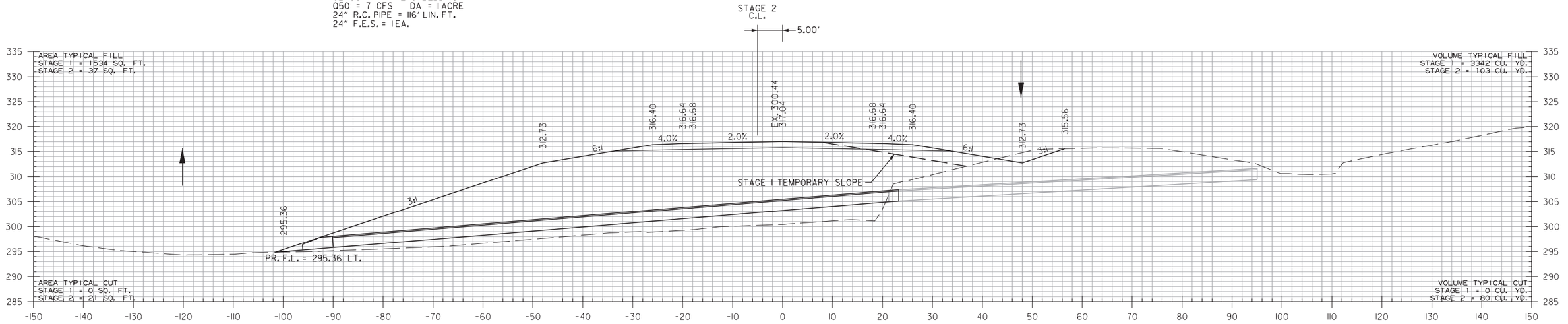
122+00.00

BYPASS
STA. 122+00 TO STA. 124+00

rnfortner 6/28/2022 10:37:49 AM
WORKSPACE: AHTD
L:\20\T\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

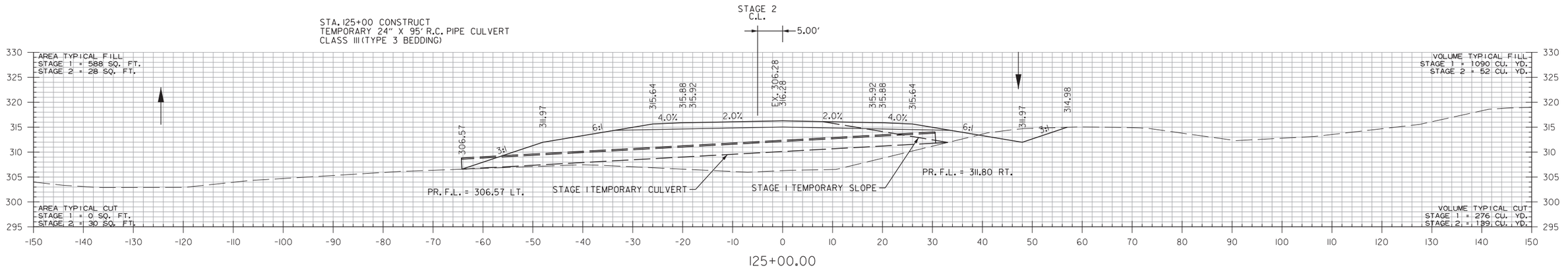
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	314	549
		CROSS SECTIONS				

STA. 125+85 IN PLACE
24" X 74' R.C. PIPE CULVERT
WITH HDWLS. LT. & RT.
REMOVE HDWL. LT. & EXTEND 112' LT.
TO A COMPLETED LENGTH OF 186'
WITH FES LT.
CLASS IV (TYPE 3 BEDDING)
Q50 = 7 CFS DA = 1 ACRE
24" R.C. PIPE = 116' LIN. FT.
24" F.E.S. = 1 EA.



125+85.00

STA. 125+00 CONSTRUCT
TEMPORARY 24" X 95' R.C. PIPE CULVERT
CLASS III (TYPE 3 BEDDING)



125+00.00

BYPASS
STA. 125+00 TO STA. 125+85

rnfortner 6/28/2022 10:37:49 AM
WORKSPACE: AHTD
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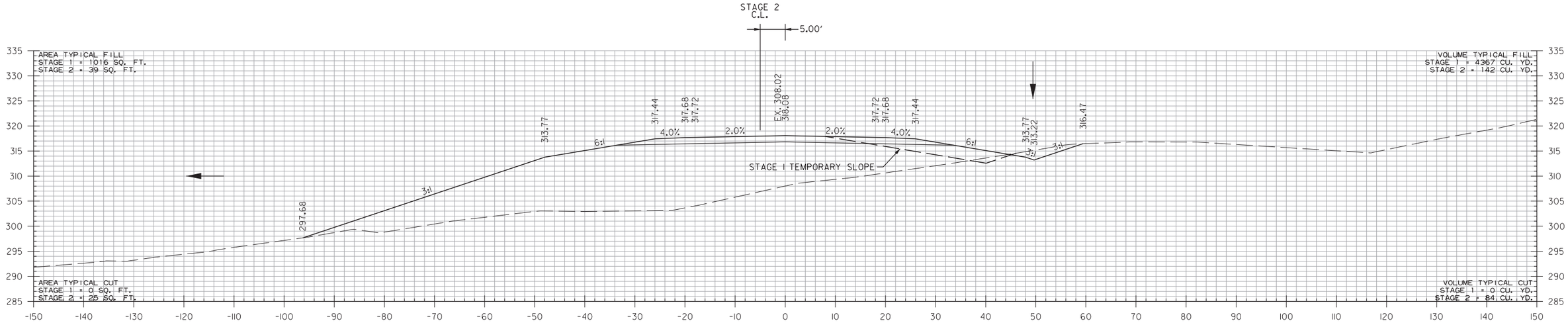
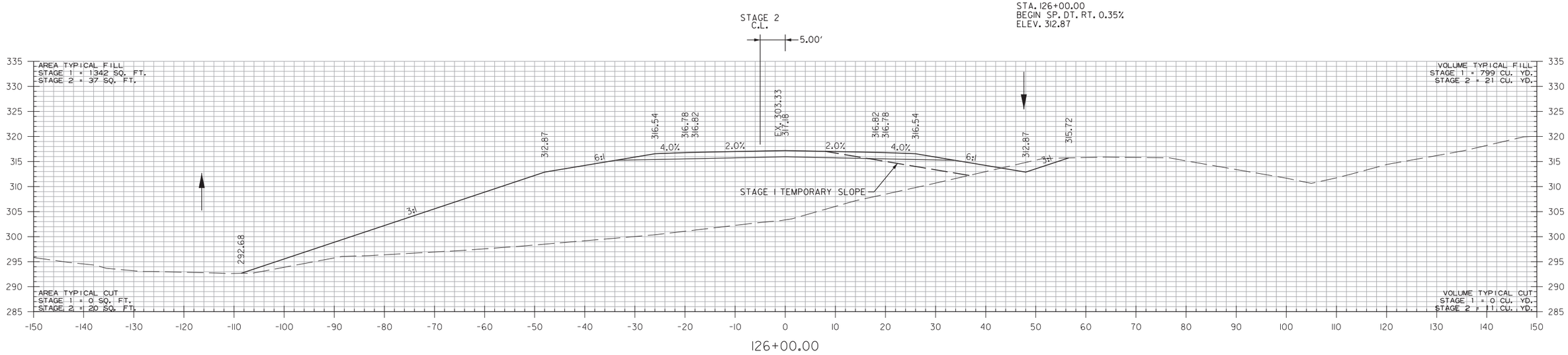
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	315	549
		CROSS SECTIONS				



127+00.00



126+00.00

BYPASS
STA. 126+00 TO STA. 127+00

rnfortner 6/28/2022 10:37:49 AM
WORKSPACE: AHTD
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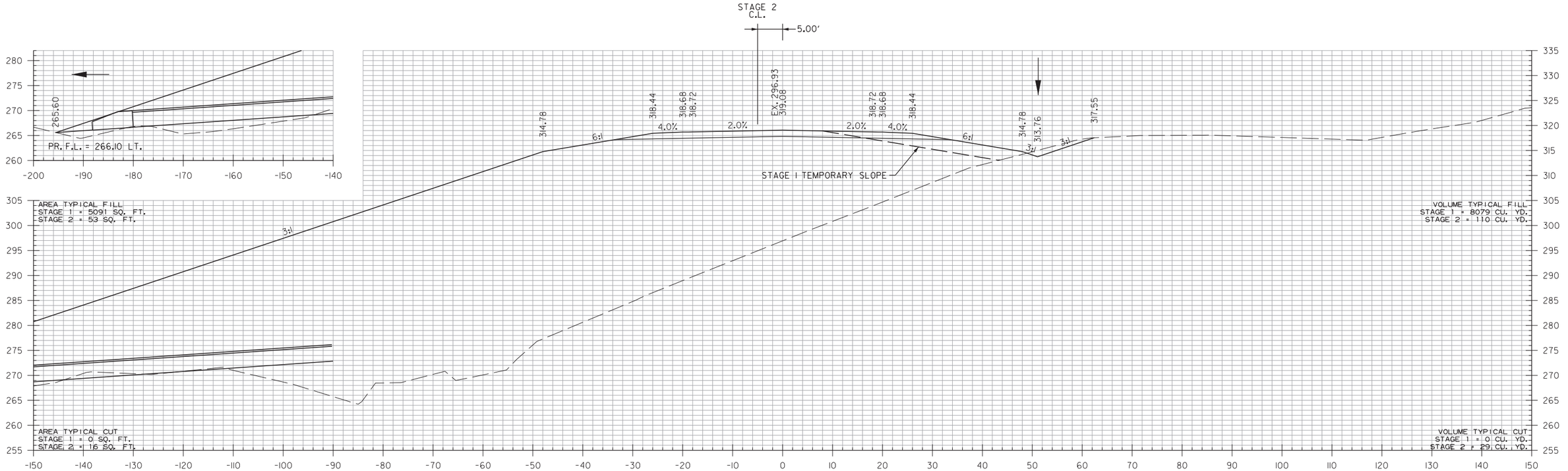
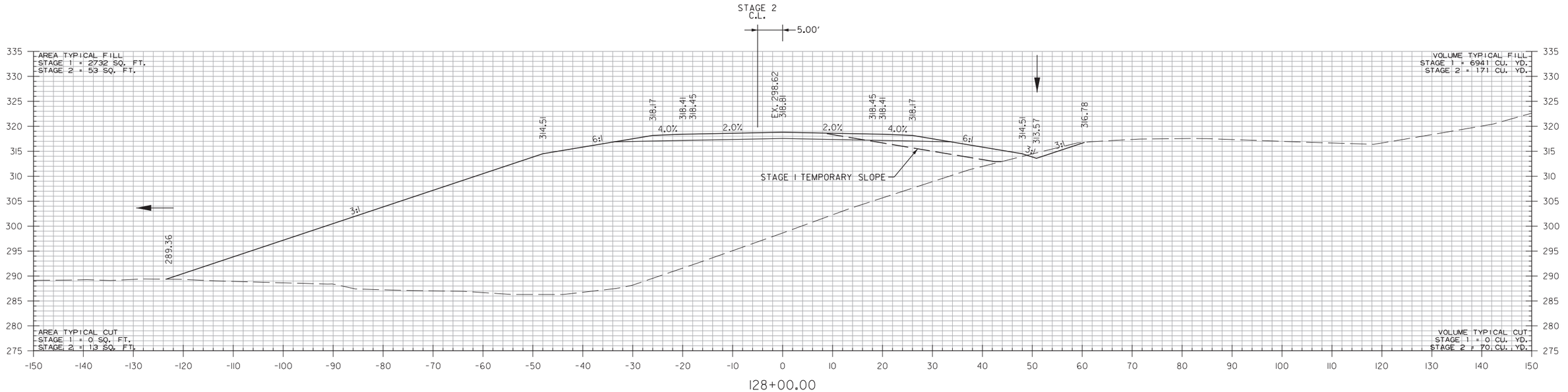
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	316	549
		CROSS SECTIONS				



128+55.77



128+00.00

BYPASS
STA. 128+00 TO STA. 128+56

rnfortner 6/28/2022 10:37:49 AM
WORKSPACE: AHTD
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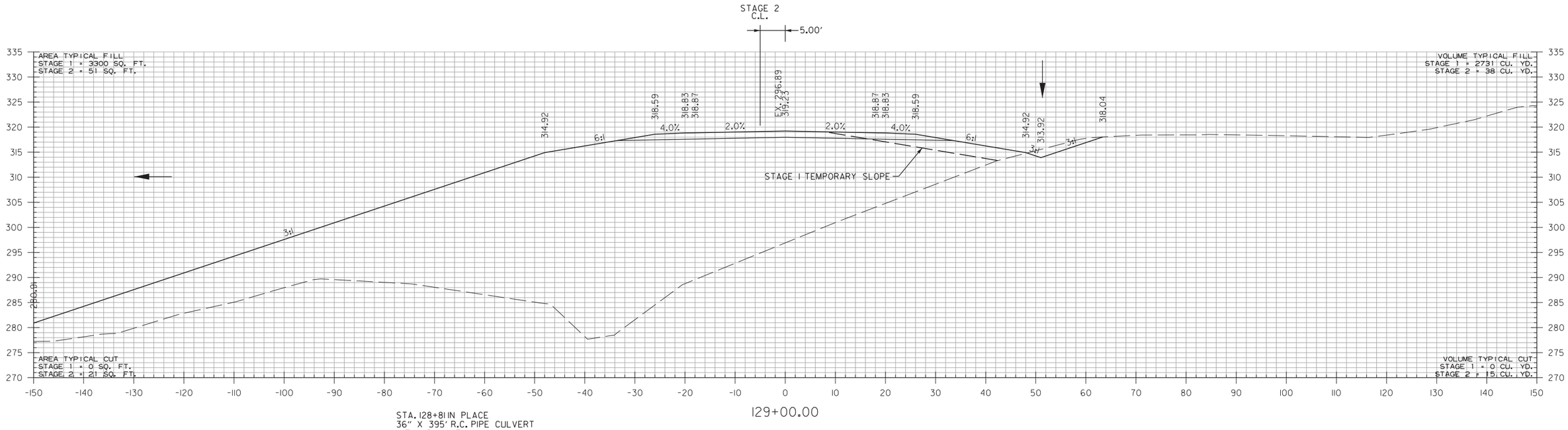
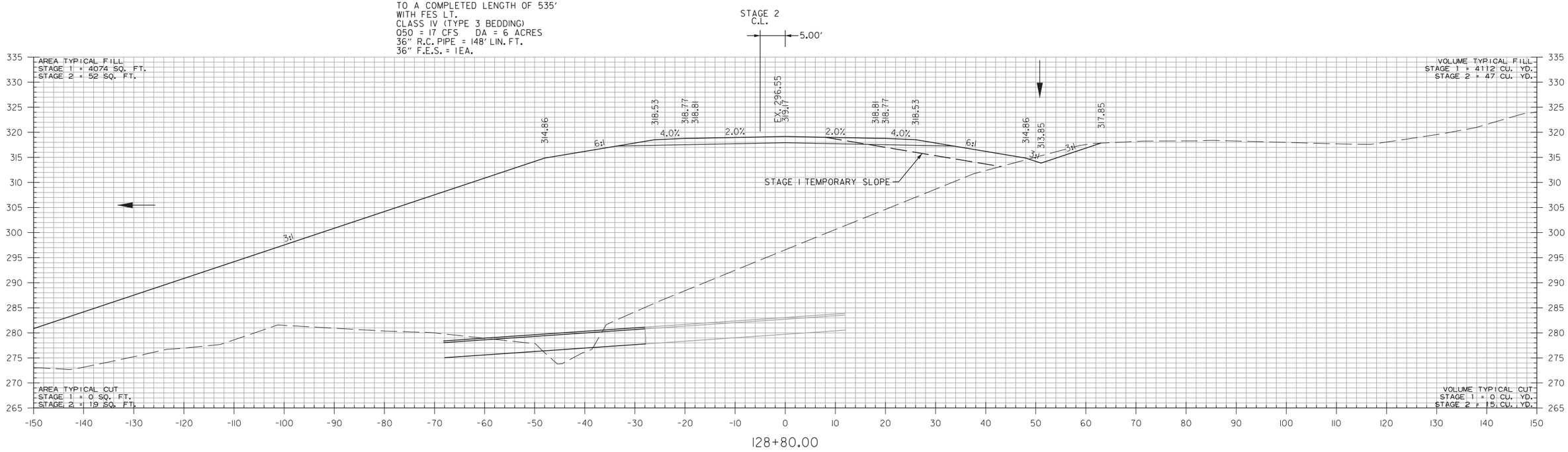
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	317	549
		CROSS SECTIONS				



STA. 128+81 IN PLACE
36" X 395' R.C. PIPE CULVERT
WITH HDWL. LT.
REMOVE HDWL. LT. & EXTEND 144' LT.
TO A COMPLETED LENGTH OF 535'
WITH FES LT.
CLASS IV (TYPE 3 BEDDING)
Q50 = 17 CFS DA = 6 ACRES
36" R.C. PIPE = 148' LIN. FT.
36" F.E.S. = 1EA.



BYPASS
STA. 128+80 TO STA. 129+00

rnfortner 6/28/2022 10:37:50 AM
WORKSPACE: AHTD
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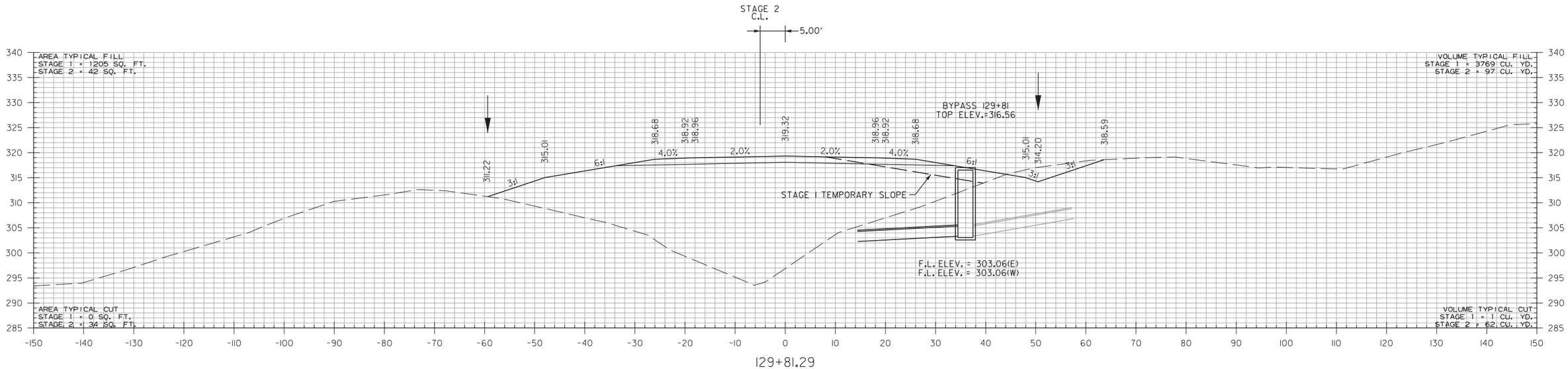
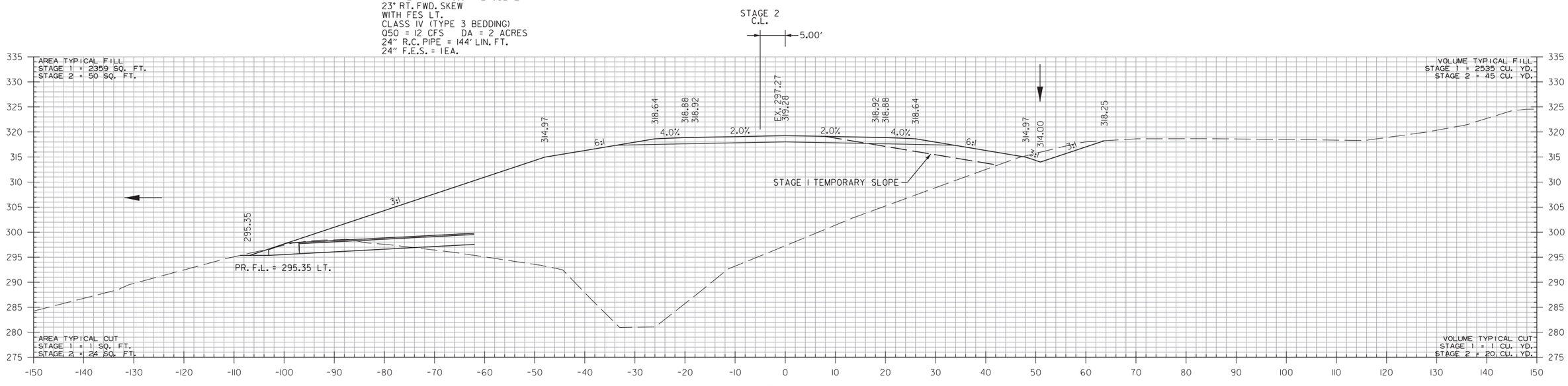
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	318	549
		CROSS SECTIONS				



129+81.29

STA. 129+67 IN PLACE
24" X 92' R.C. PIPE CULVERT
WITH HDWL. RT.
PLUG & ABANDON 34' RT.
CONSTRUCT TYPE E
JUNCTION BOX 36' RT. H=13'-6"
WITH 24"X144' R.C. PIPE CULVERT
23° RT. FWD. SKEW
WITH FES LT.
CLASS IV (TYPE 3 BEDDING)
Q50 = 12 CFS DA = 2 ACRES
24" R.C. PIPE = 144' LIN. FT.
24" F.E.S. = 1EA.



129+24.19

BYPASS
STA. 129+24 TO STA. 129+80

rnfortner 6/28/2022 10:37:50 AM
WORKSPACE: AHTD
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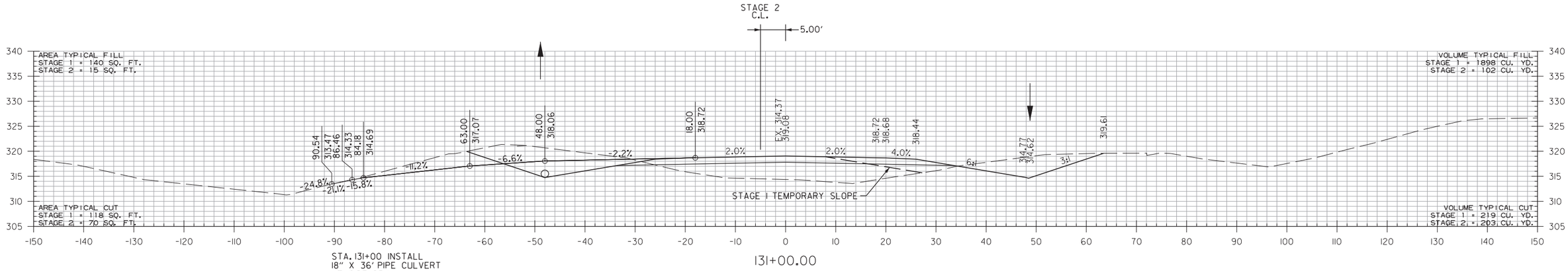
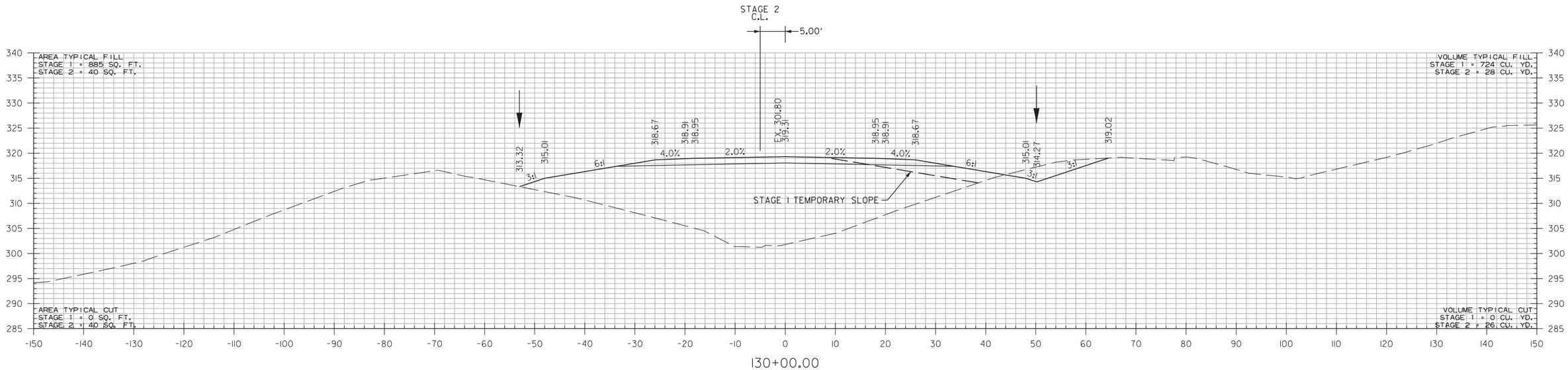
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	319	549
		CROSS SECTIONS				



STA. 131+00 INSTALL
18" X 36' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 129 CU. YDS.

131+00.00

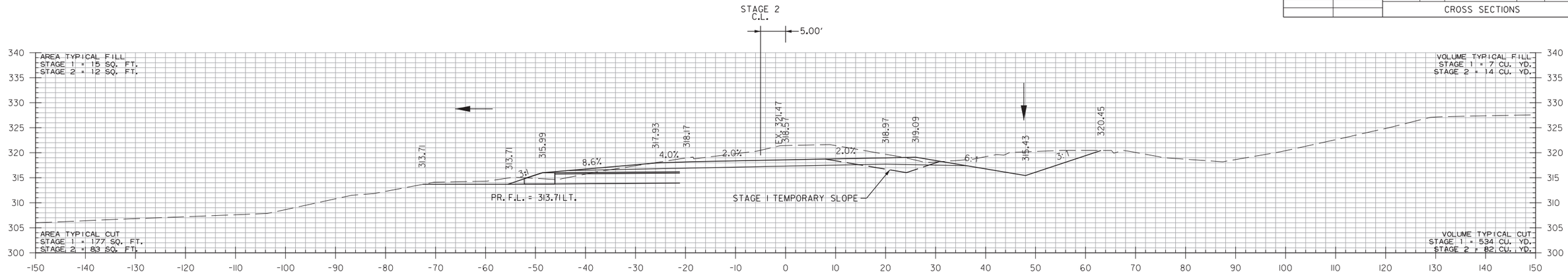


130+00.00

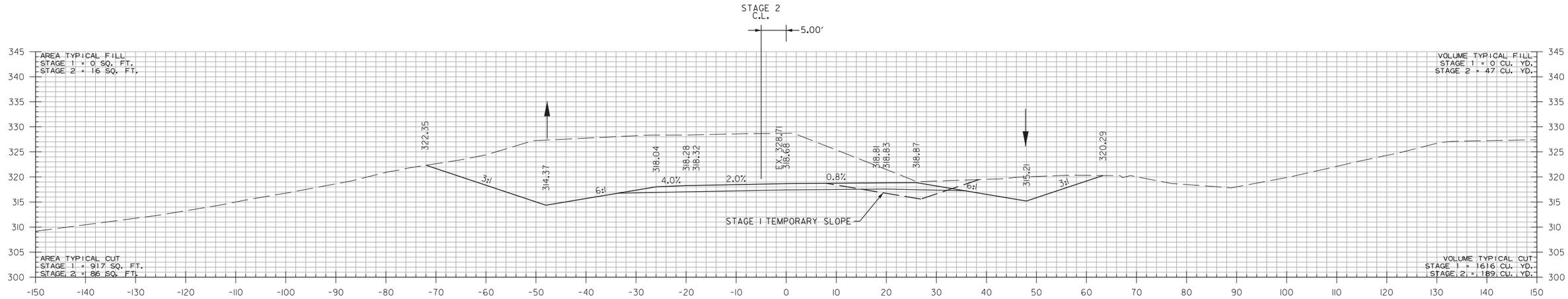
BYPASS
STA. 130+00 TO STA. 131+00

rnfortner 6/28/2022 10:37:50 AM
WORKSPACE: AHTD
L:\2017\170755 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	320	549
		CROSS SECTIONS				



132+26.37

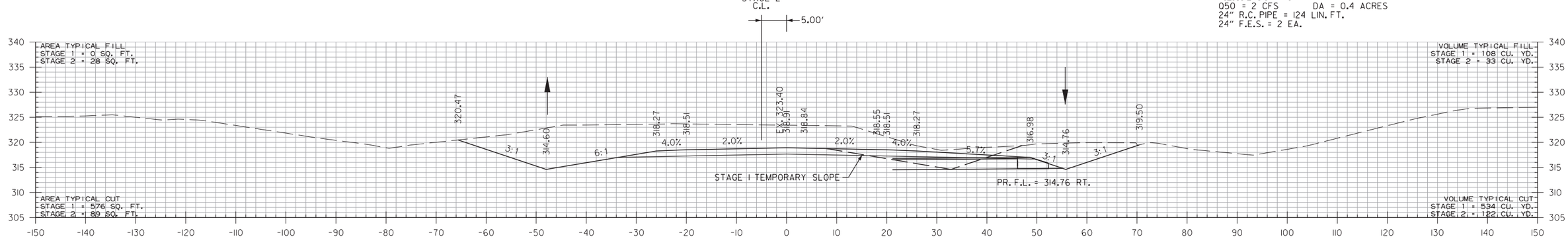


132+00.00

STA. 131+41.95 BEGIN SUPERELEVATION

STA. 131+50.00
END SP. DT. RT. 0.35%
ELEV. 314.79

STA. 131+84 CONSTRUCT
24" X 124' R.C. PIPE CULVERT
49° LT. FWD. SKEW
CLASS V (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 2 CFS DA = 0.4 ACRES
24" R.C. PIPE = 124 LIN. FT.
24" F.E.S. = 2 EA.



131+41.56

BYPASS
STA. 131+42 TO STA. 132+26

rnfortner 6/28/2022 10:37:50 AM
WORKSPACE: AHTD
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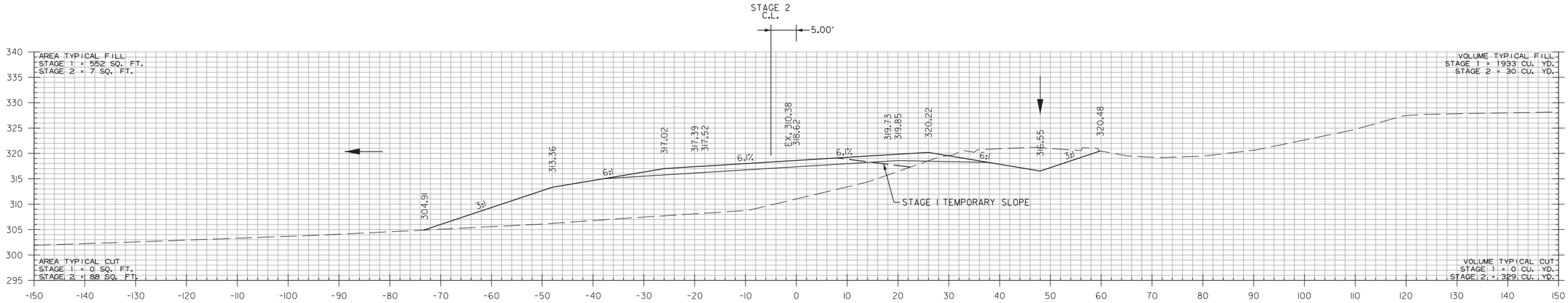
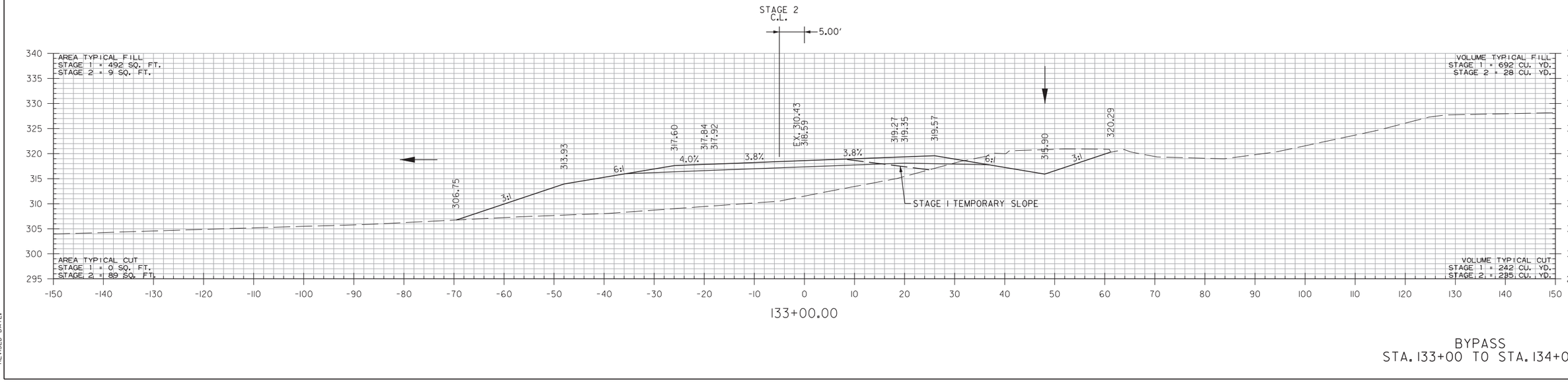
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	321	549
		CROSS SECTIONS				



134+00.00



133+00.00

BYPASS
STA. 133+00 TO STA. 134+00

rnfortner 6/28/2022 10:37:50 AM
WORKSPACE: AHTD
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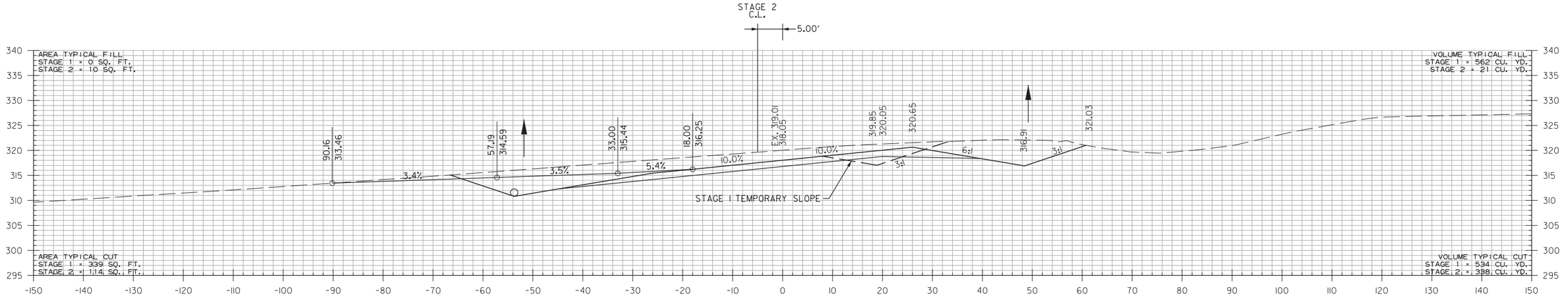
REVISED DATE:

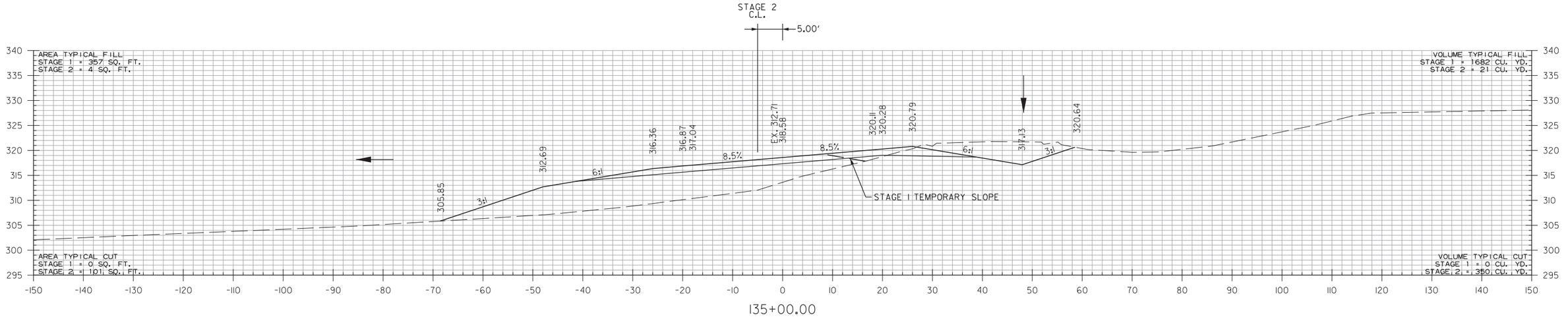
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	322	549
		CROSS SECTIONS				



135+85.00

STA. 135+85 INSTALL
18" X 58' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 143 CU. YDS.

STA. 135+61.95 MAX SUPERELEVATION (0.100'/')



135+00.00

BYPASS
STA. 135+00 TO STA. 135+85

rnfortner 6/28/2022 10:37:51 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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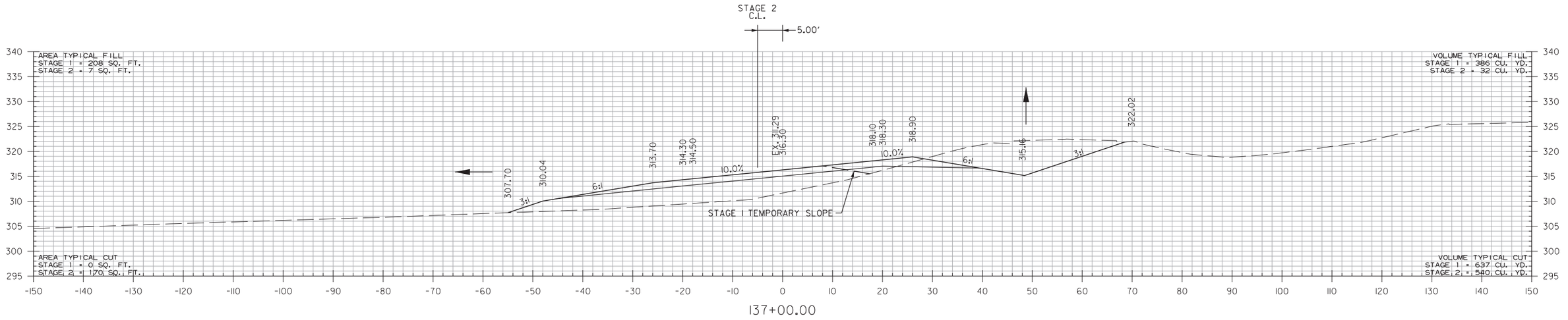
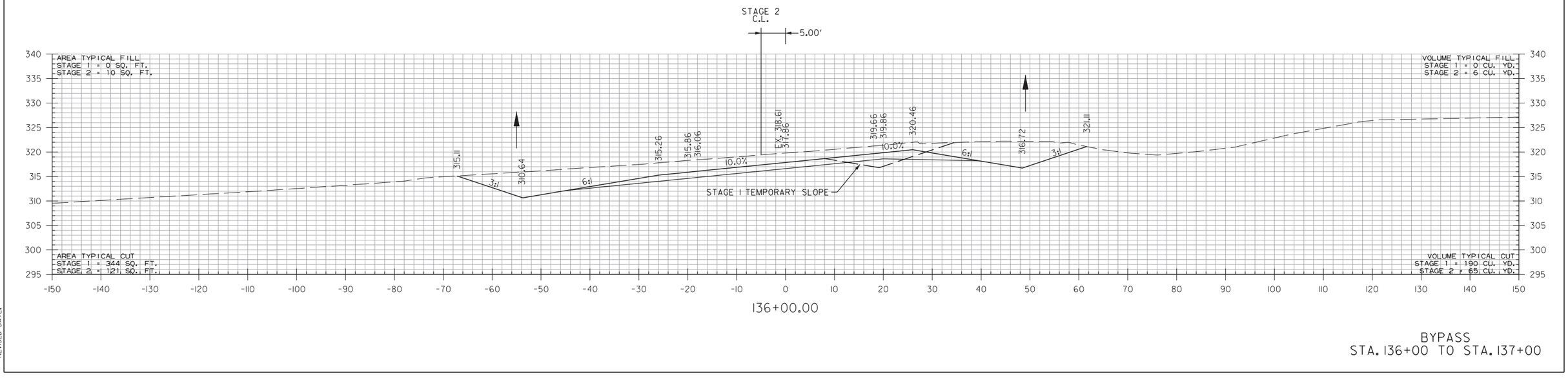
		CROSS SECTIONS				



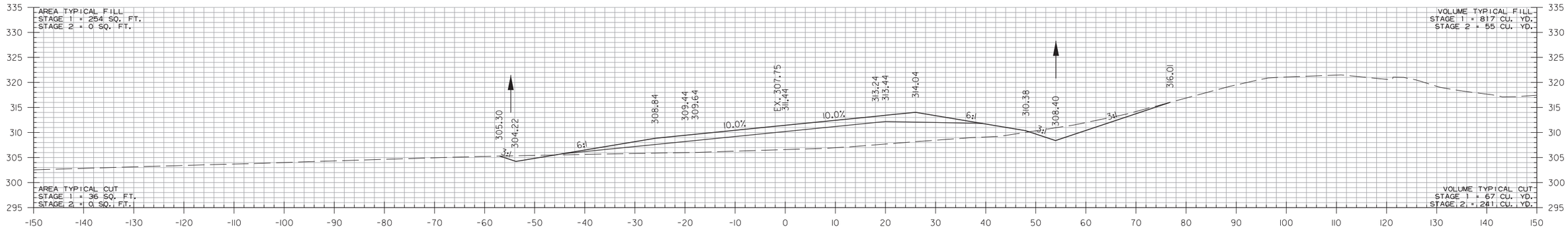


BYPASS
STA. 136+00 TO STA. 137+00

rnfortner 6/28/2022 10:37:51 AM
WORKSPACE: AHTD
L:\2017\170175 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

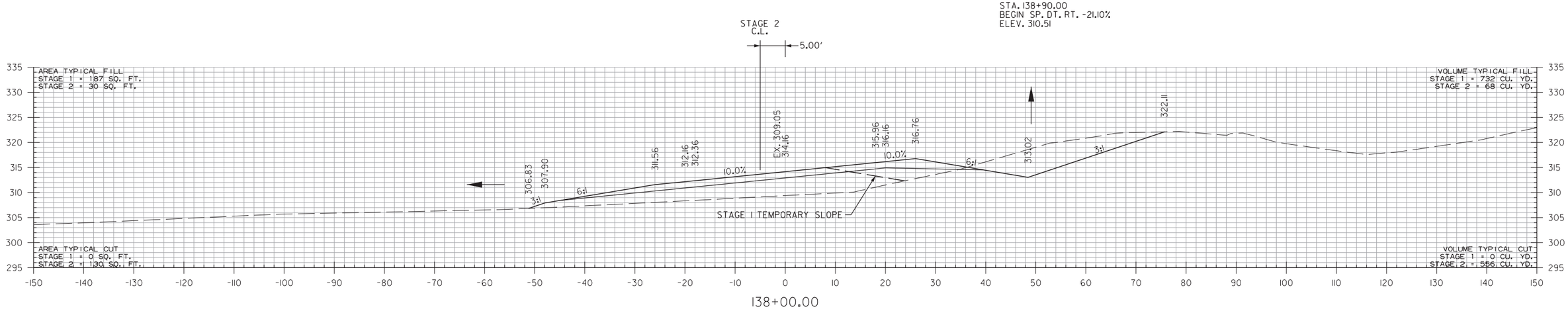
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	324	549
		CROSS SECTIONS				

STA. 139+50.00
END SP. DT. RT. -21.10%
BEGIN SP. DT. RT. -2.98%
ELEV. 297.85



139+00.00

STA. 138+90.00
BEGIN SP. DT. RT. -21.10%
ELEV. 310.51



138+00.00

BYPASS
STA. 138+00 TO STA. 139+00

rntortner 6/28/2022 10:37:51 AM
WORKSPACE: AHTD
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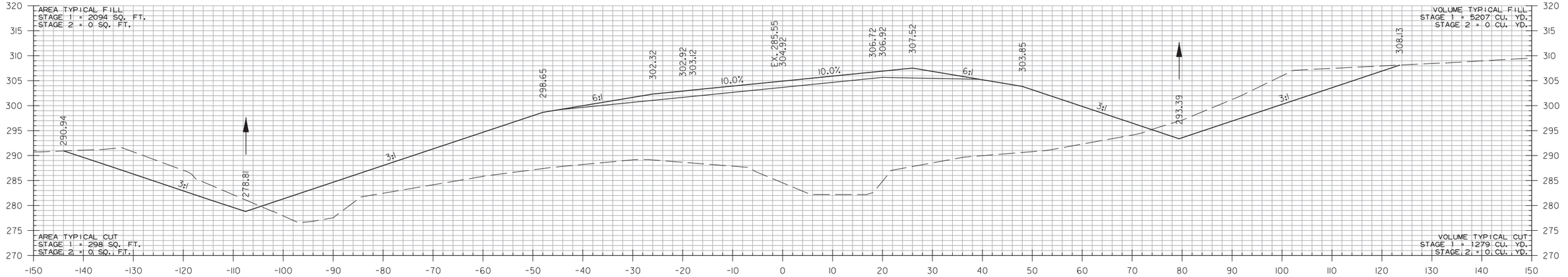
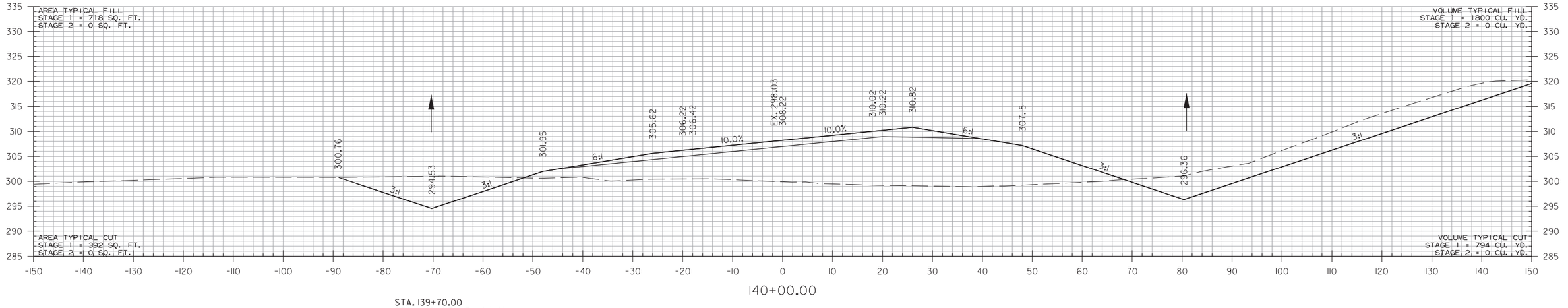
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	325	549
		CROSS SECTIONS				



STA. 140+20.00
END SP. DT. LT. -24.12%
BEGIN SP. DT. LT. -13.63%
ELEV. 289.71



STA. 139+70.00
BEGIN SP. DT. LT. -24.12%
ELEV. 301.77

BYPASS
STA. 140+00 TO STA. 141+00

rnfortner 6/28/2022 10:37:51 AM
WORKSPACE: AHTD
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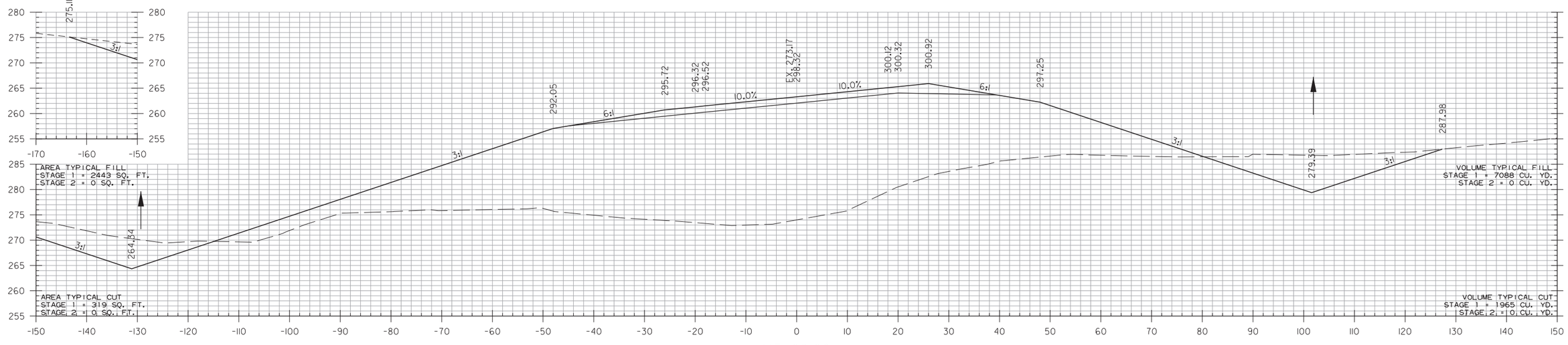
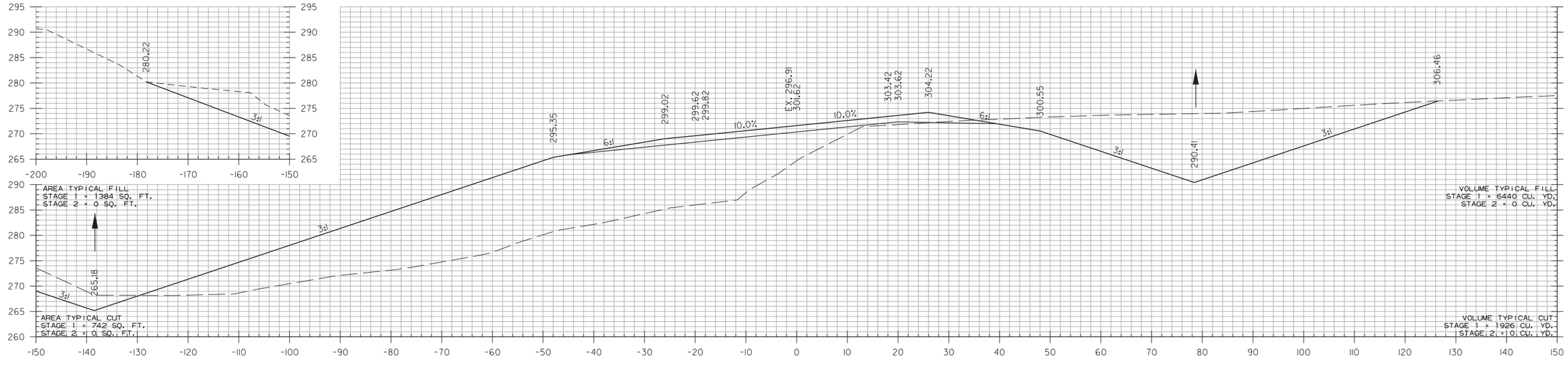
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	326	549
		CROSS SECTIONS				





STA. 142+00.00
END SP. DT. LT. -13.63%
BEG. SP. DT. LT. -0.84%
ELEV. 265.18

STA. 142+00.00
END SP. DT. RT. -2.98%
BEGIN SP. DT. RT. -11.02%
ELEV. 290.41

BYPASS
STA. 142+00 TO STA. 143+00

rnfortner 6/28/2022 10:37:52 AM
WORKSPACE: AHTD
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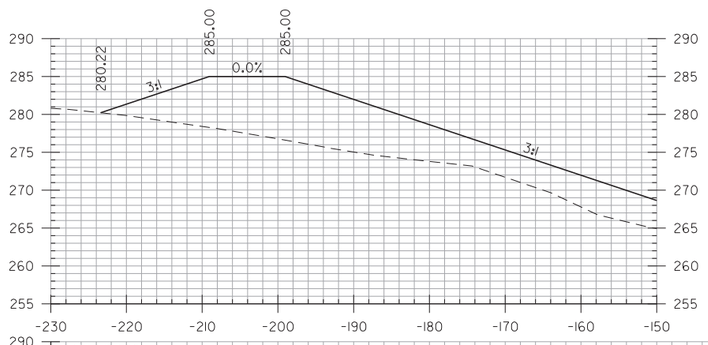
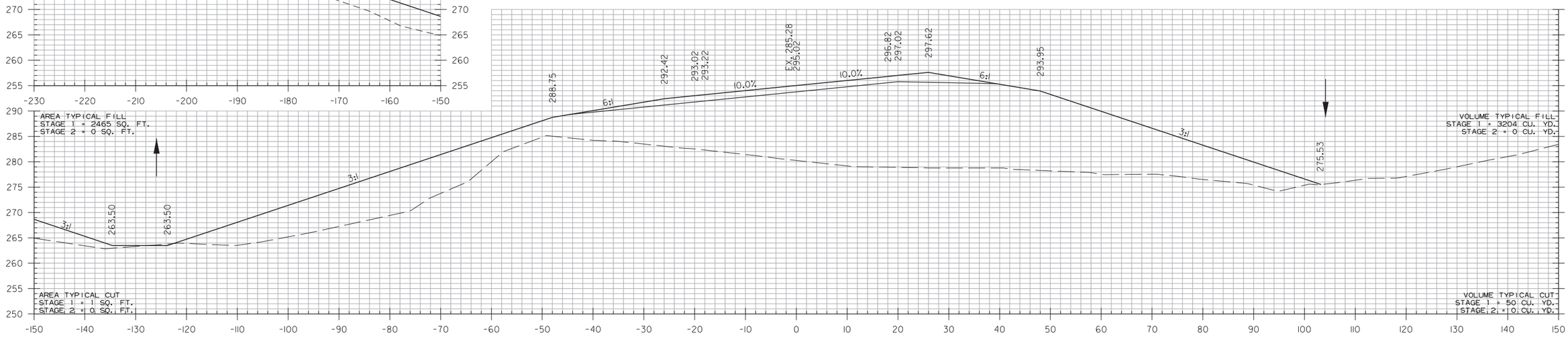
REVISED DATE:

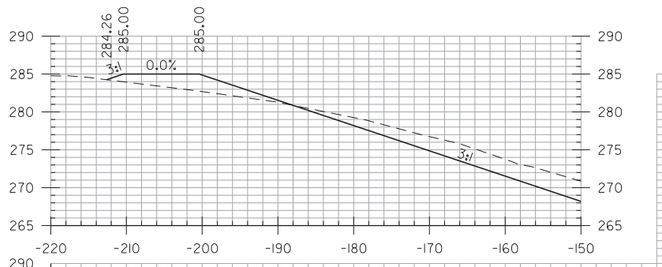
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	327	549
		CROSS SECTIONS				

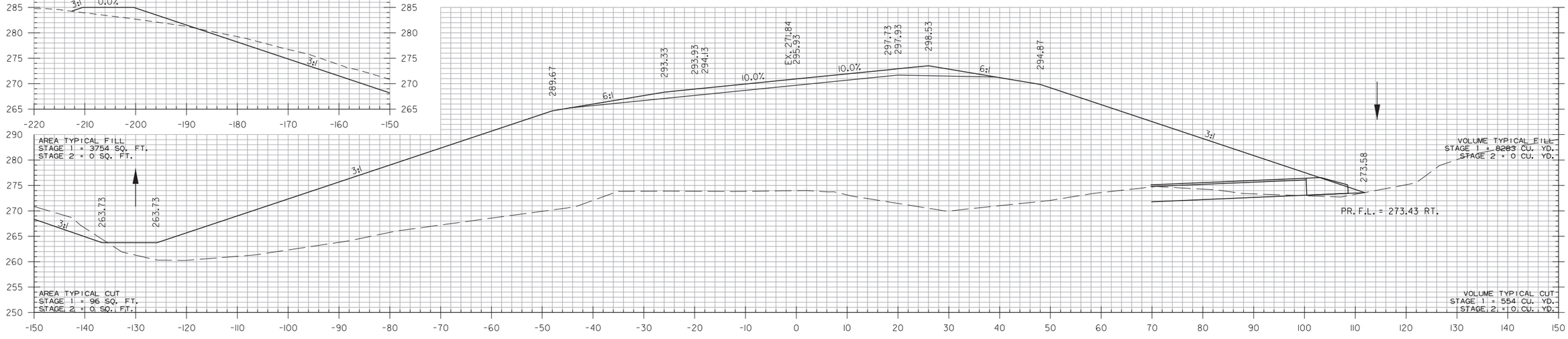




144+00.00

STA. 143+99 CONSTRUCT
36" X 216' R.C. PIPE CULVERT
15° LT. FWD. SKEW
CLASS V (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 28 CFS DA = 7 ACRES
36" R.C. PIPE = 216 LIN. FT.
36" F.E.S. = 2 EA.





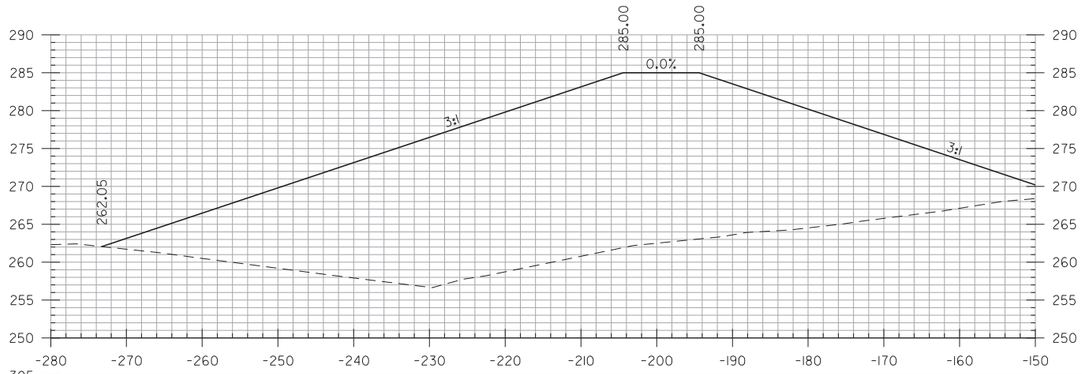
143+72.18

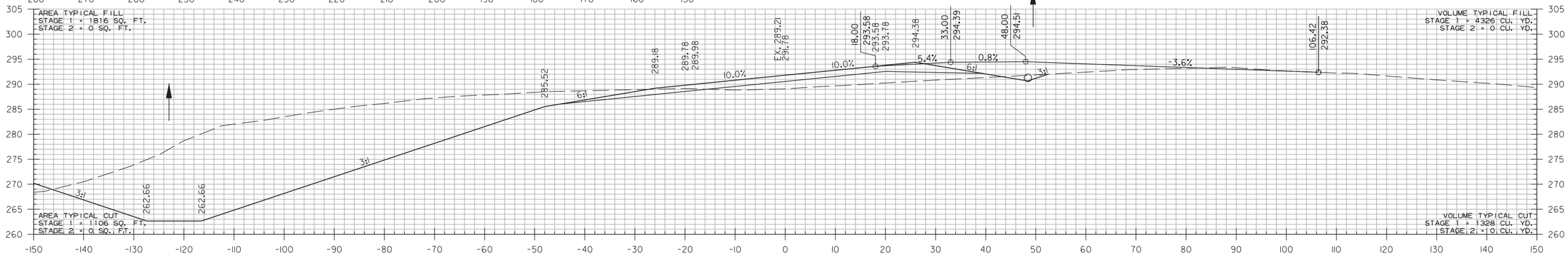
STA. 143+60.00
END SP. DT. RT. -11.02%
ELEV. 272.78

BYPASS
STA. 143+72 TO STA. 144+00

rntortner 6/28/2022 10:37:52 AM
WORKSPACE: AHTD
L:\2017\701515 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	328	549
		CROSS SECTIONS				

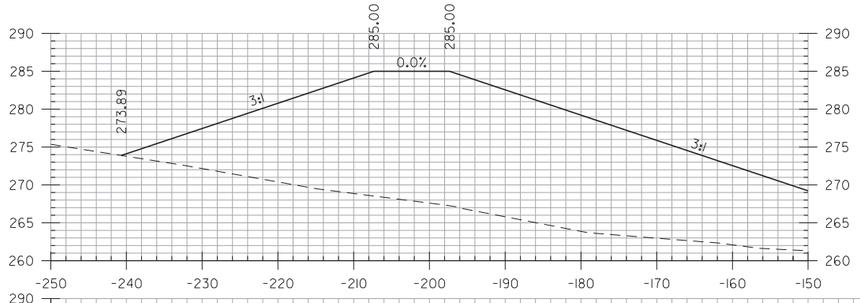


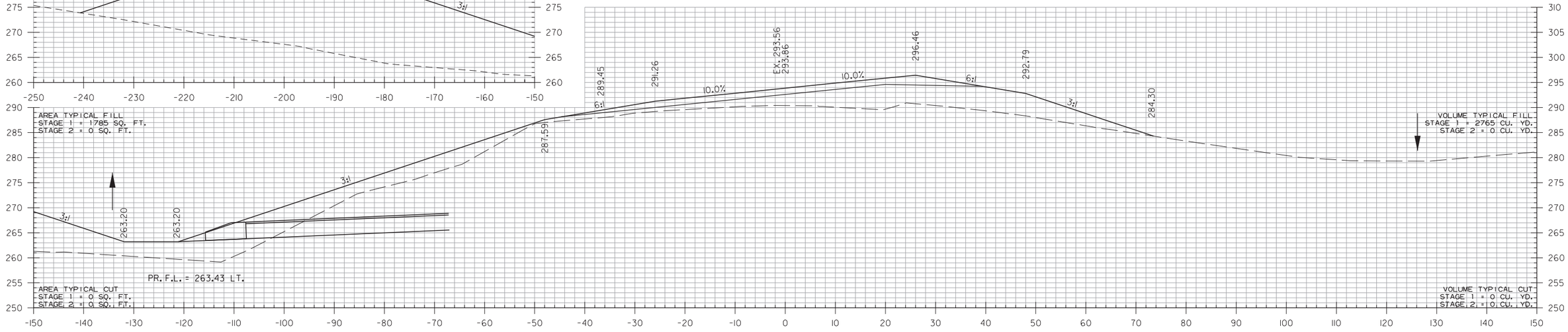


STA. 145+80.00
BEGIN SP. DT. RT. -8.12%
ELEV. 285.67

145+00.00

STA. 145+00 INSTALL
18" X 42' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPROACH = 54 CU. YDS.





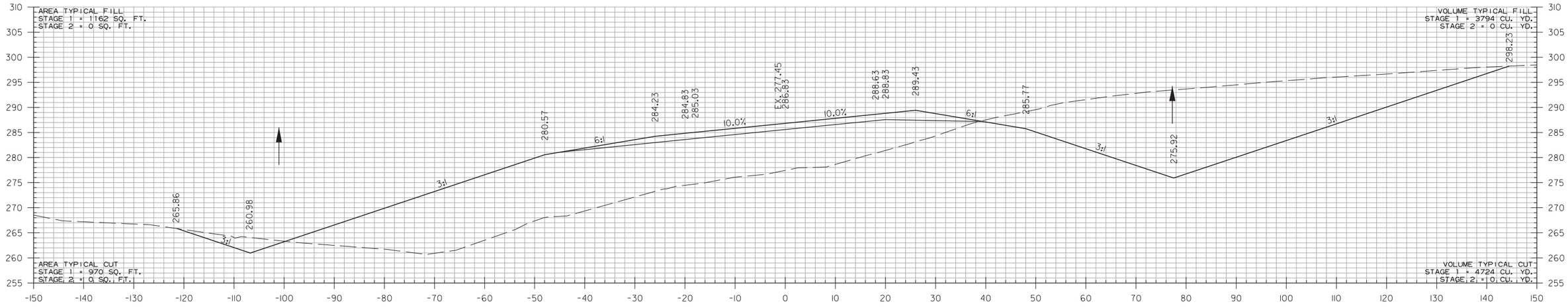
144+35.13

BYPASS
STA. 144+35 TO STA. 145+00

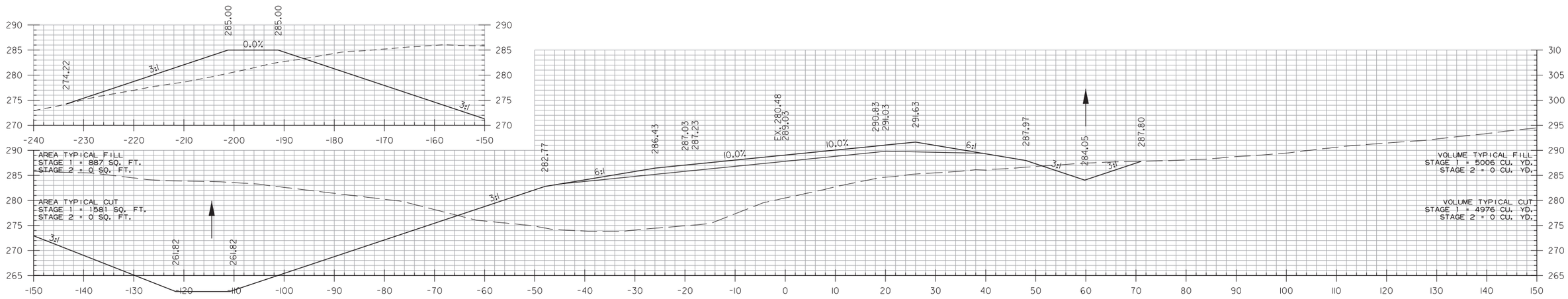
rnfortner 6/28/2022 10:37:52 AM
WORKSPACE: AHTD
L:\2017\701\505 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	329	549
		CROSS SECTIONS				

STA. 147+00.00
END SP. DT. LT. -0.84%
BEG. SP. DT. LT. -1.70%
ELEV. 260.98



147+00.00

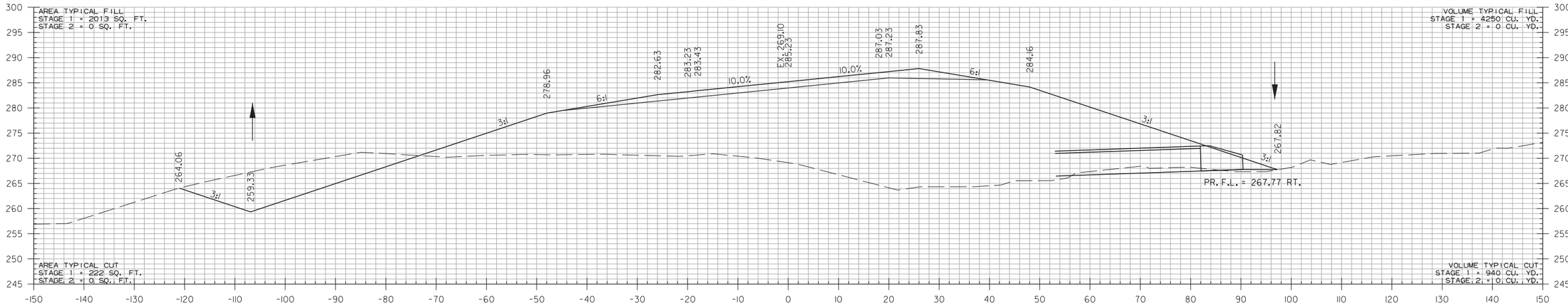


146+00.00

BYPASS
STA. 146+00 TO STA. 147+00

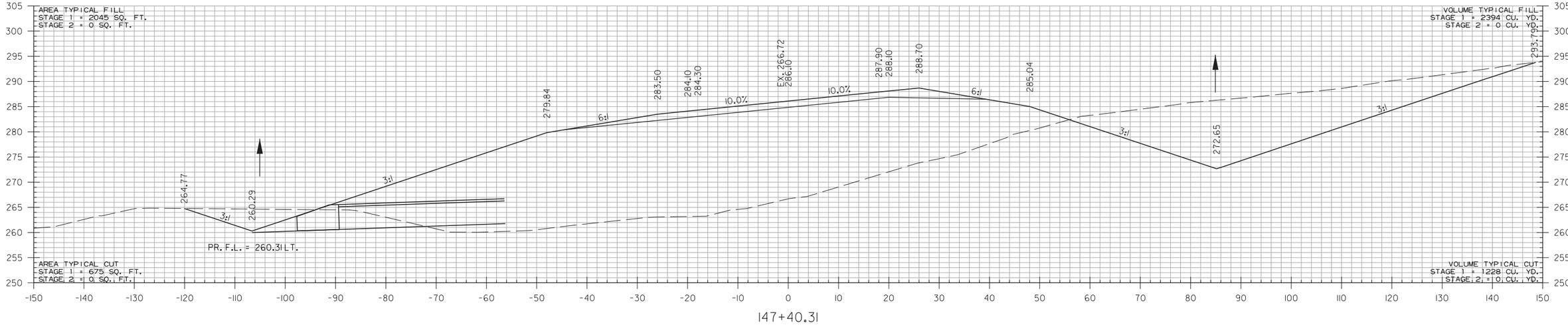
rnfortner 6/28/2022 10:37:52 AM
WORKSPACE: AHTD
L:\2017\170755 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	330	549
		CROSS SECTIONS				



147+96.87

STA. 147+73 CONSTRUCT
54" X 178' R.C. PIPE CULVERT
16° RT. FWD. SKEW
CLASS IV (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 54 CFS DA = 9 ACRES
54" R.C. PIPE = 178 LIN. FT.
54" F.E.S. = 2 EA.



147+40.31

BYPASS
STA. 147+40 TO STA. 147+97

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WORKSPACE: AHTD
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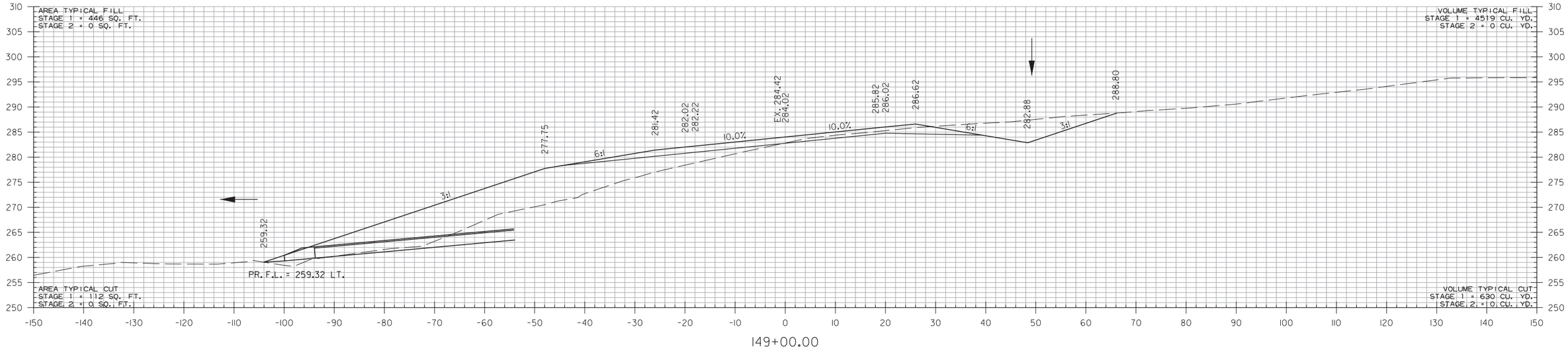
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	331	549
		CROSS SECTIONS				

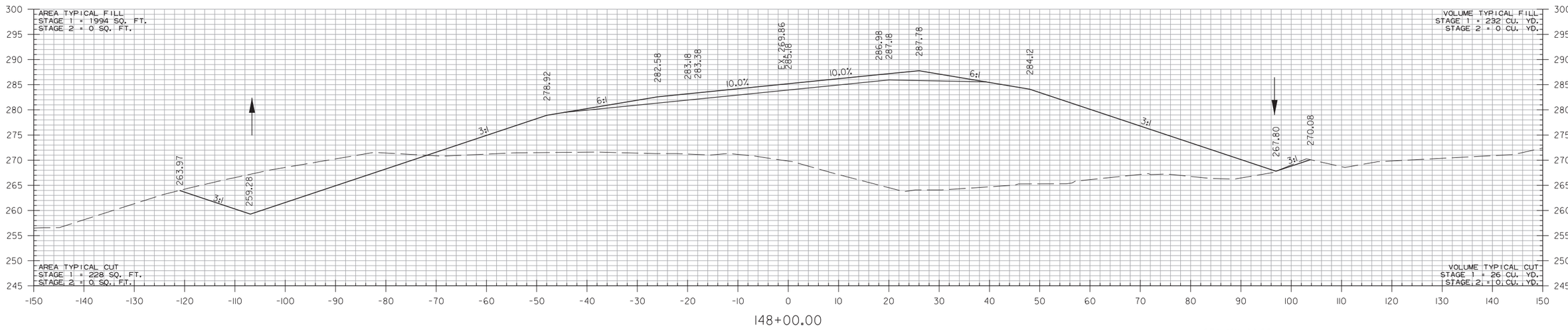
STA. 149+79 CONSTRUCT
24" X 186' R.C. PIPE CULVERT
36° RT. FWD. SKEW
CLASS III (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 15 CFS DA = 3 ACRES
24" R.C. PIPE = 186 LIN. FT.
24" F.E.S. = 2 EA.

STA. 149+50.00
BEGIN SP. DT. RT. -9.00%
ELEV. 282.30



149+00.00

STA. 148+90.00
END SP. DT. LT. -1.70%
ELEV. 257.75



148+00.00

STA. 148+00.00
END SP. DT. RT. -8.12%
ELEV. 267.80

BYPASS
STA. 148+00 TO STA. 149+00

rnfortner 6/28/2022 10:37:53 AM
WORKSPACE: AHTD
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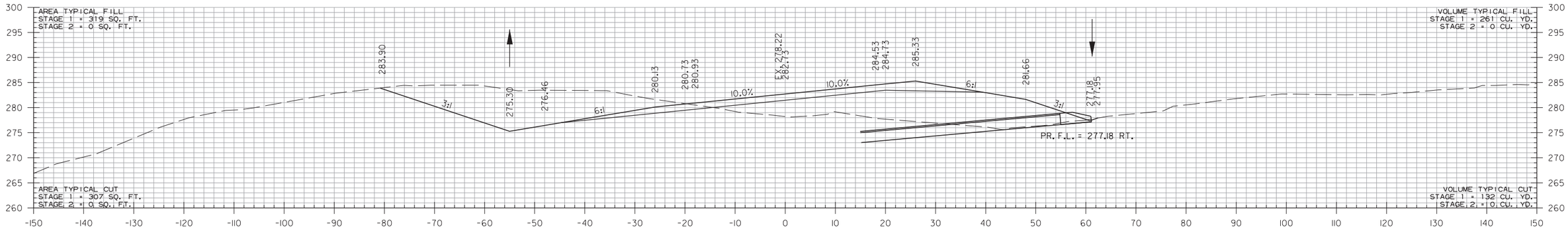
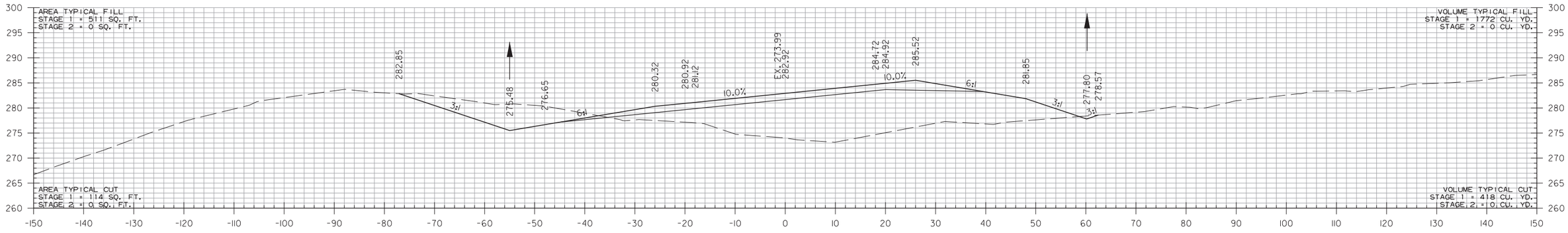
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	332	549
		CROSS SECTIONS				

STA. 150+20.00
END SP. DT. RT. -2.35%
ELEV. 277.33



150+16.97



150+00.00

STA. 150+00.00
END SP. DT. RT. -9.00%
BEGIN SP. DT. RT. -2.35%
ELEV. 277.80

BYPASS
STA. 150+00 TO STA. 150+17

rnfortner 6/28/2022 10:37:53 AM
WORKSPACE: AHTD
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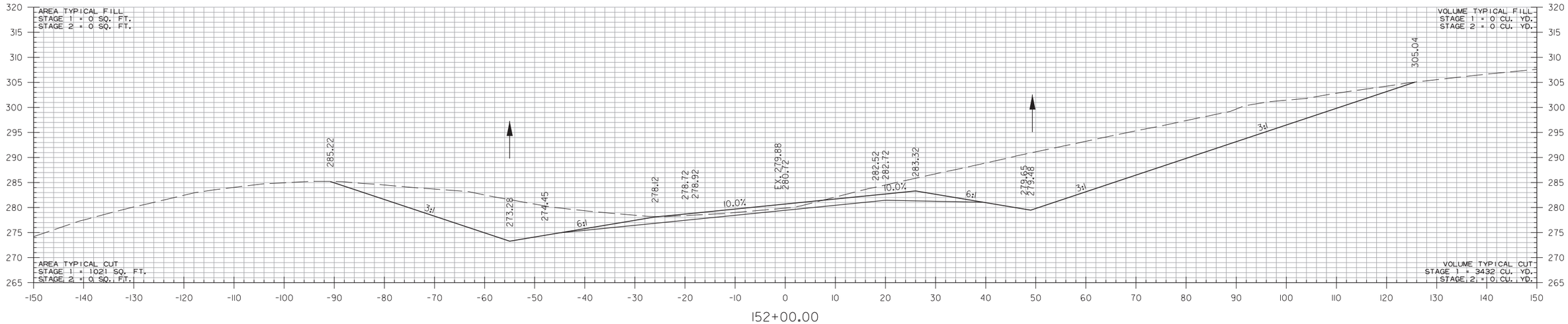
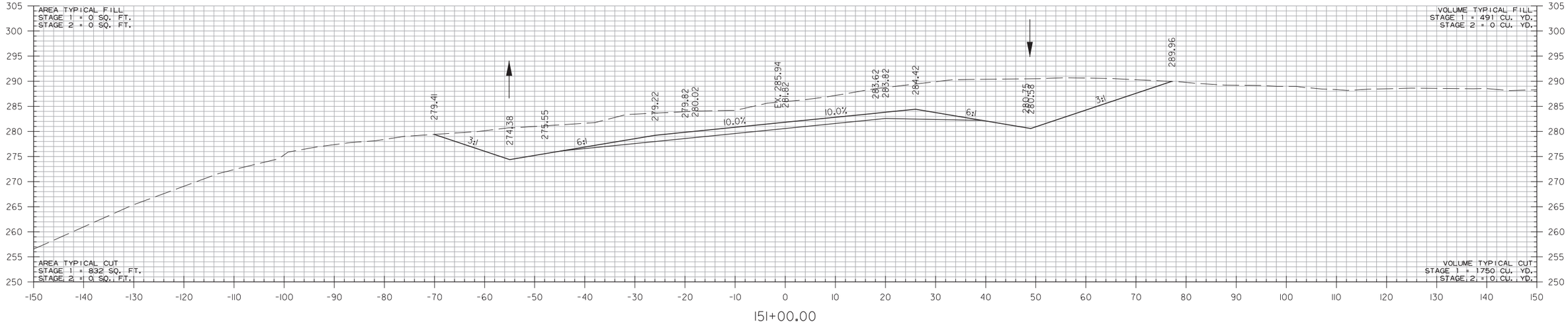
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	333	549
		CROSS SECTIONS				

STA. 152+40.00
BEGIN SP. DT. LT. 30.97%
ELEV. 272.84



152+00.00



151+00.00

BYPASS
STA. 151+00 TO STA. 152+00

rnfortner 6/28/2022 10:37:53 AM
WORKSPACE: AHTD
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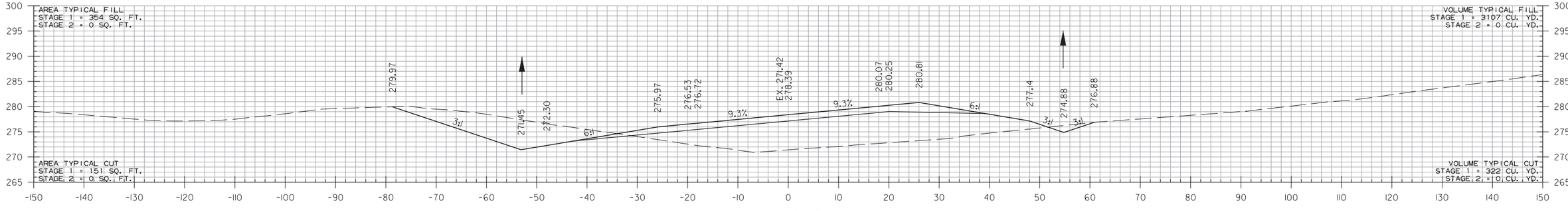
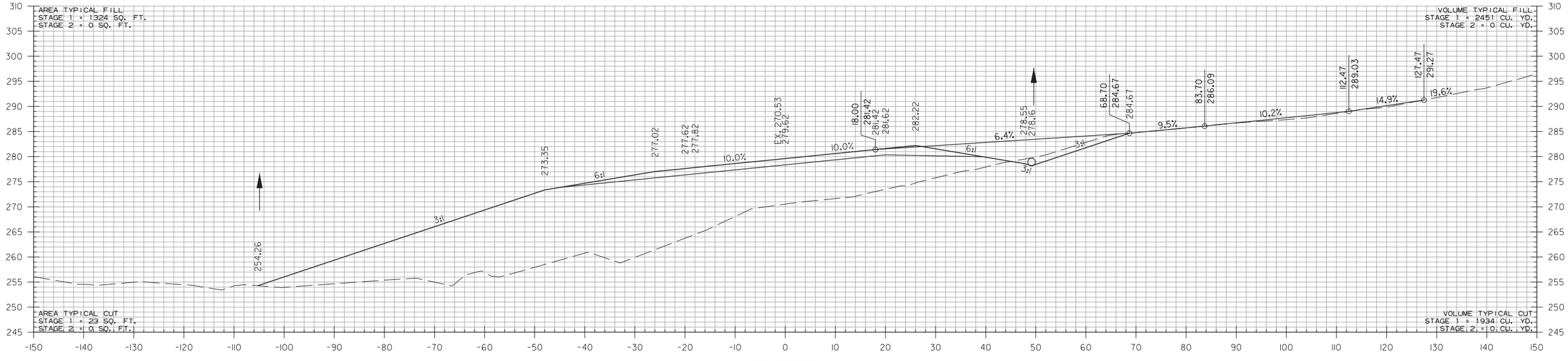
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	334	549
		CROSS SECTIONS				



STA. 153+70.96 MAX SUPERELEVATION (0.100'/')



STA. 153+00.00
END SP. DT. LT. 30.97%
ELEV. 254.26

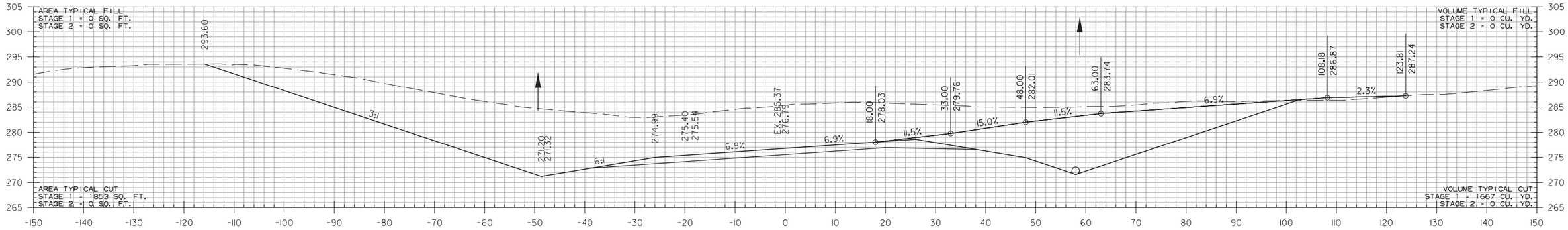
STA. 152+90.00
BEGIN SP. DT. RT. -3.28%
ELEV. 278.49

STA. 153+00 INSTALL
18" X 50' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPROACH = 85 CU. YDS.

BYPASS
STA. 153+00 TO STA. 154+00

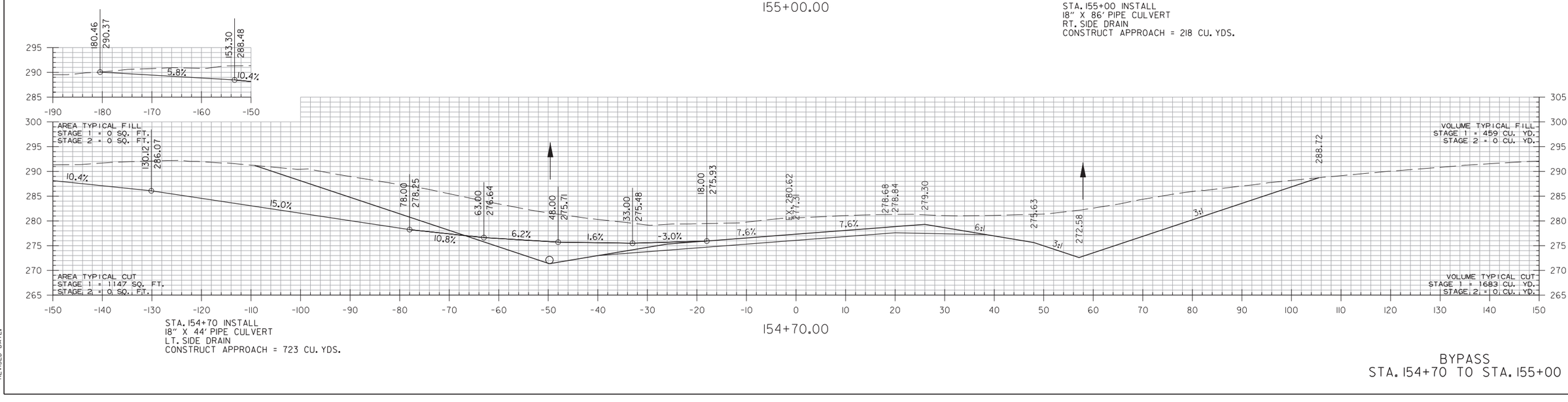
rnfortner 6/28/2022 10:37:53 AM
WORKSPACE: AHTD
L:\2017\170715 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	335	549
		CROSS SECTIONS				



155+00.00

STA. 155+00 INSTALL
18" X 86' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPROACH = 218 CU. YDS.



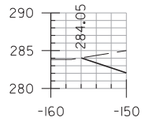
154+70.00

STA. 154+70 INSTALL
18" X 44' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 723 CU. YDS.

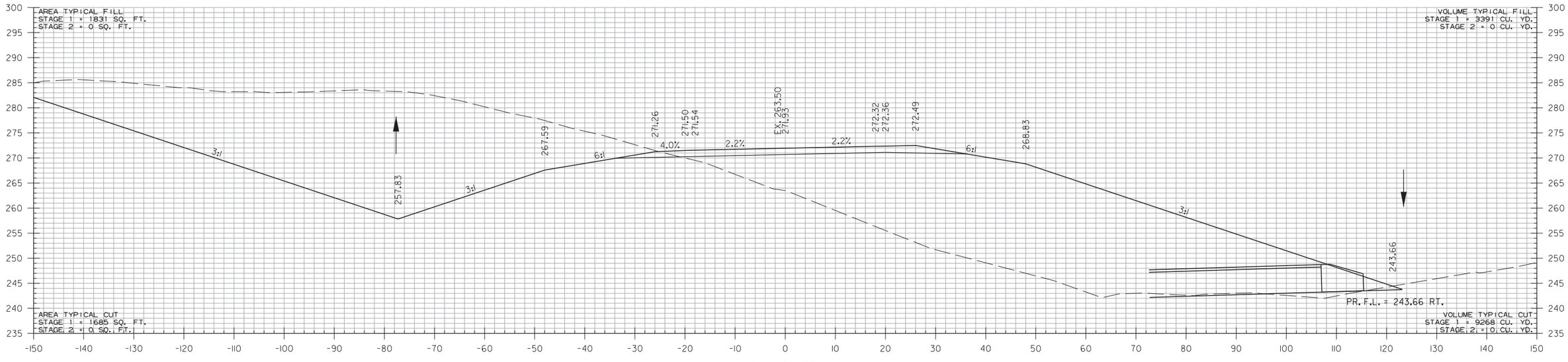
BYPASS
STA. 154+70 TO STA. 155+00

rnfortner 6/28/2022 10:37:53 AM
WORKSPACE: AHTD
L:\20\T\T0\T515 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	336	549
		CROSS SECTIONS				

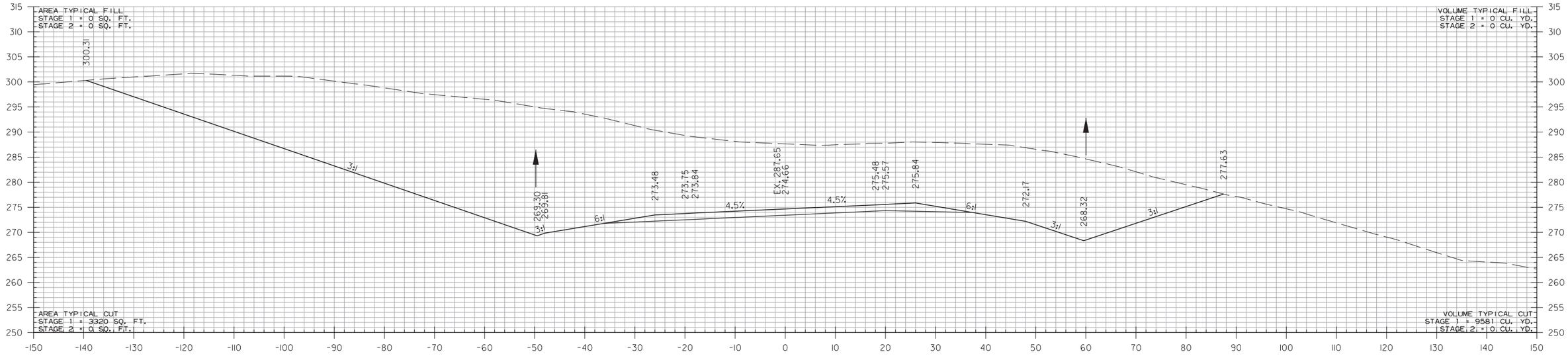


STA. 157+92 CONSTRUCT
60" X 284' R.C. PIPE CULVERT
39° LT. FWD. SKEW
CLASS V (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 81CFS DA = 15 ACRES
60" R.C. PIPE = 284 LIN. FT.
60" F.E.S. = 2 EA.



157+00.00

STA. 156+90.00
END SP. DT. RT. -27.30%
ELEV. 243.75



156+00.00

STA. 156+00.00
BEGIN SP. DT. LT. -11.98%
ELEV. 269.81

STA. 156+00.00
END SP. DT. RT. -3.28%
BEGIN SP. DT. RT. -27.30%
ELEV. 268.32

BYPASS
STA. 156+00 TO STA. 157+00

rnfortner 6/28/2022 10:37:54 AM
WORKSPACE: AHTD
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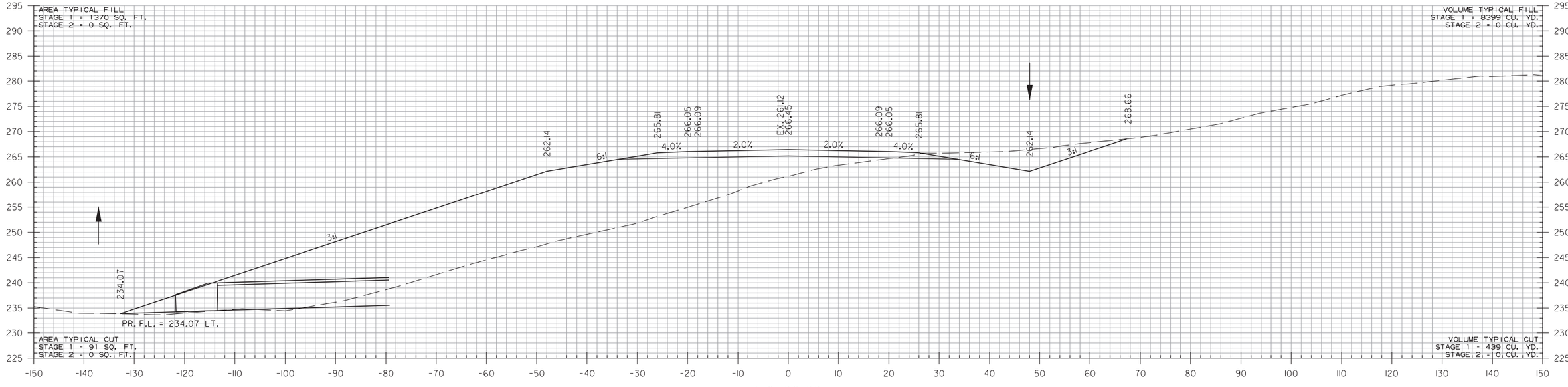
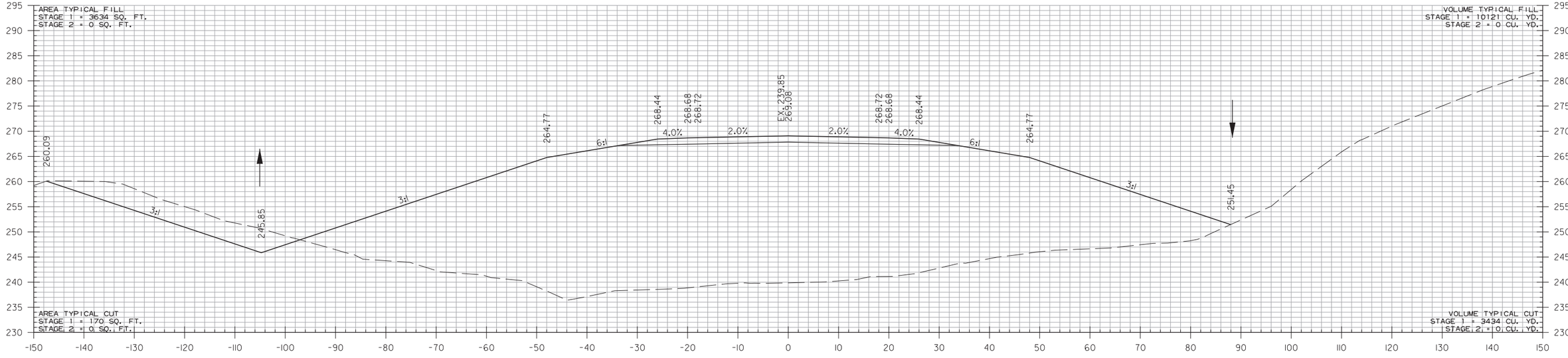
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	337	549
		CROSS SECTIONS				



158+90.62



158+00.00

STA. 157+90.96 END SUPERELEVATION

BYPASS
STA. 158+00 TO STA. 158+91

rnfortner 6/28/2022 10:37:54 AM
WORKSPACE: AHTD
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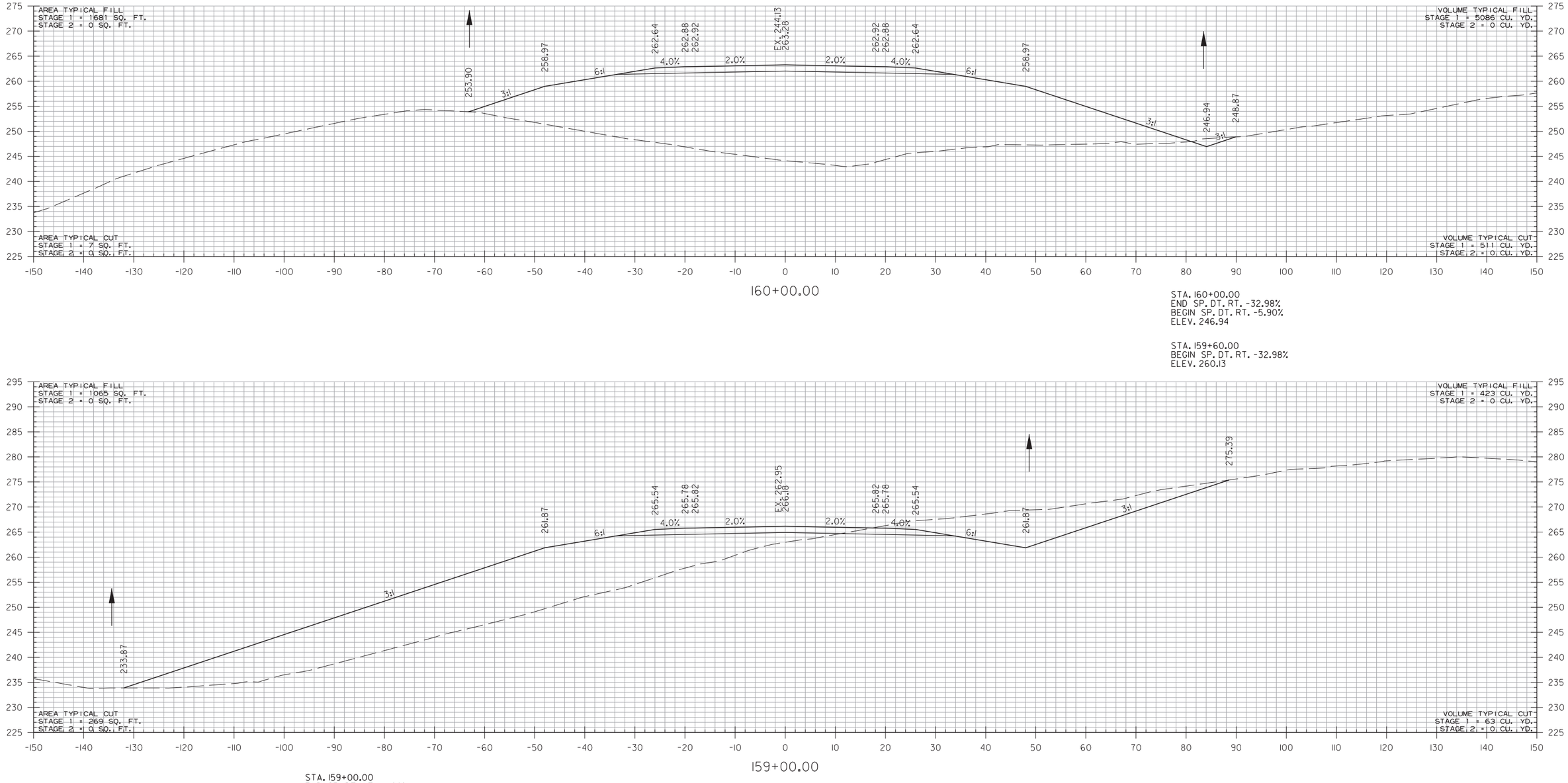
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	338	549
		CROSS SECTIONS				



BYPASS
STA. 159+00 TO STA. 160+00

rnfortner 6/28/2022 10:37:54 AM
WORKSPACE: AHTD
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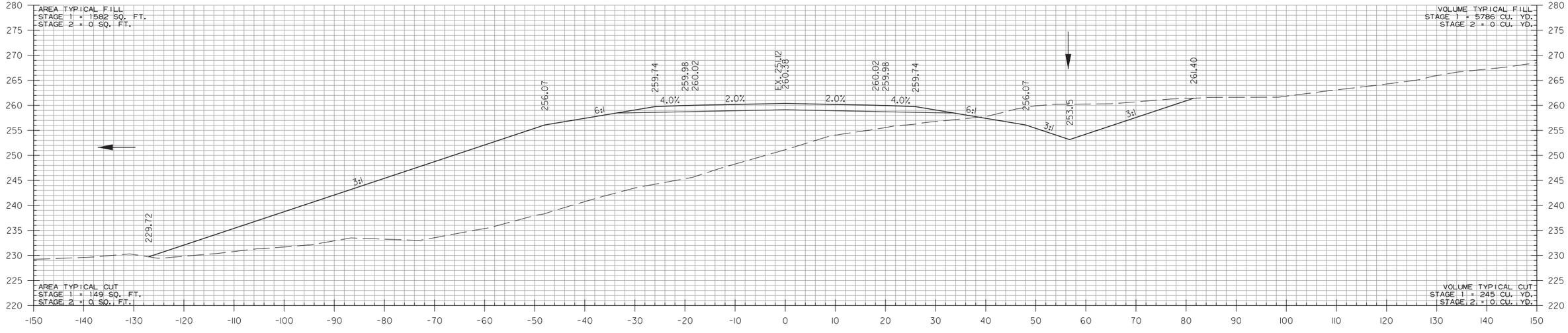
REVISED DATE:

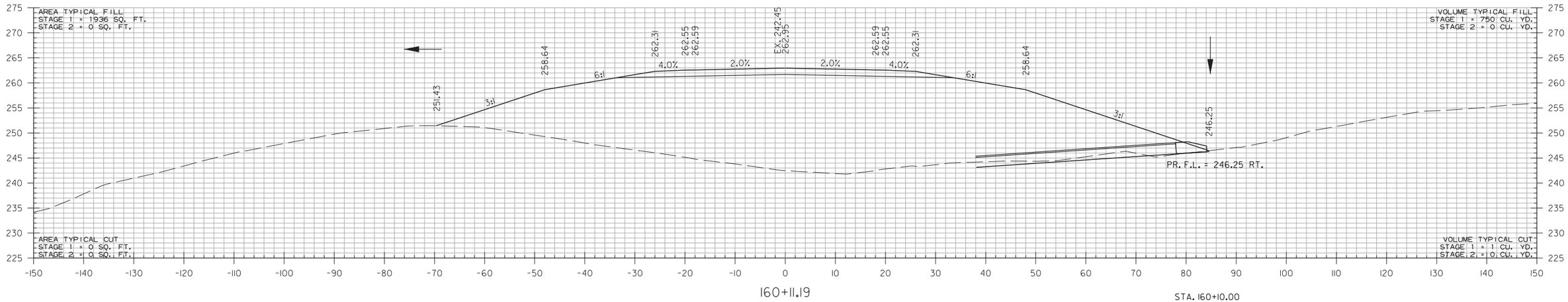
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	339	549
		CROSS SECTIONS				



161+00.00

STA. 160+51 CONSTRUCT
24" X 214' R.C. PIPE CULVERT
26° LT. FWD. SKEW
CLASS V (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 10 CFS DA = 2 ACRES
24" R.C. PIPE = 214 LIN. FT.
24" F.E.S. = 2 EA.

STA. 160+80.00
BEGIN SP. DT. RT. -17.49%
ELEV. 256.65



160+11.19

STA. 160+10.00
END SP. DT. RT. -5.90%
ELEV. 246.35

BYPASS
STA. 160+11 TO STA. 161+00

rnfortner 6/28/2022 10:37:54 AM
WORKSPACE: AHTD
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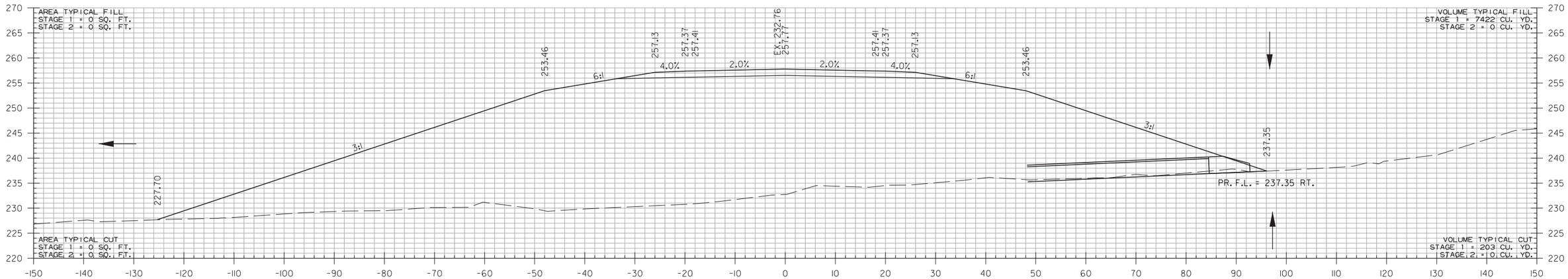
REVISED DATE:

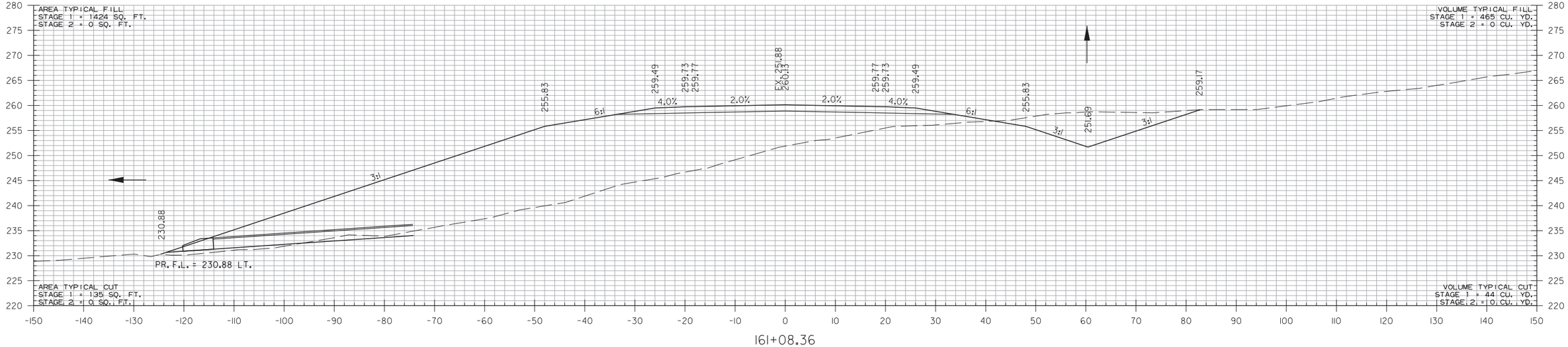
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	340	549
		CROSS SECTIONS				

STA. 161+93 CONSTRUCT
36" X 196' R.C. PIPE CULVERT
2° LT. FWD. SKEW
CLASS V (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 28 CFS DA = 5 ACRES
36" R.C. PIPE = 196 LIN. FT.
36" F.E.S. = 2 EA.

STA. 161+90.00
END SP. DT. RT. -17.49%
ELEV. 237.41



161+89.82



161+08.36

BYPASS
STA. 161+08 TO STA. 161+90

rnfortner 6/28/2022 10:37:54 AM
WORKSPACE: AHTD
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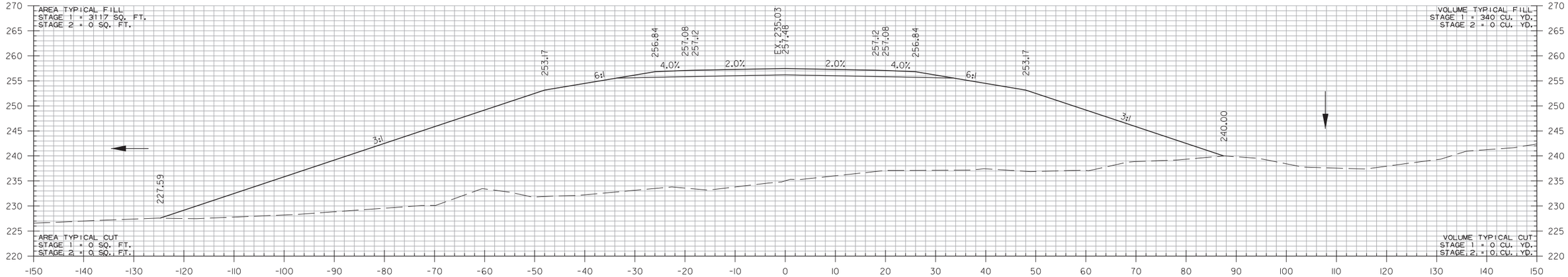
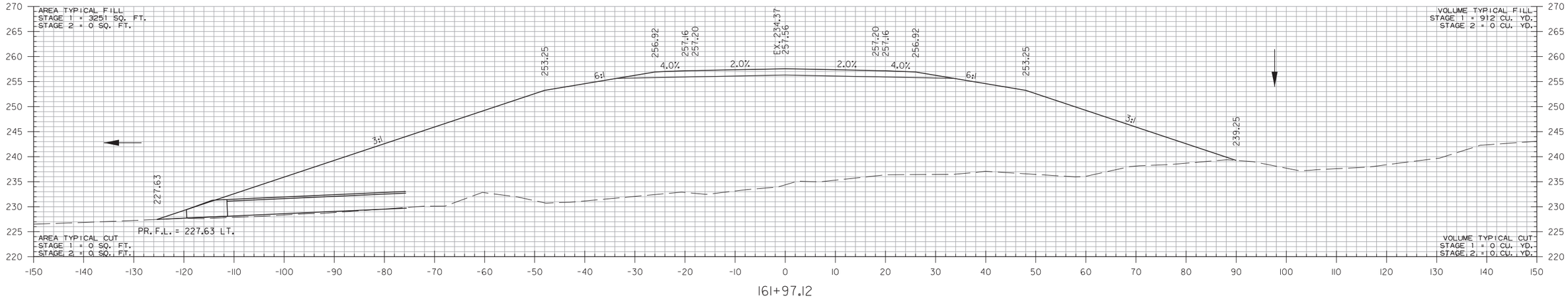
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	341	549
		CROSS SECTIONS				



162+00.00



161+97.12

BYPASS
STA. 161+97 TO STA. 162+00

rnfortner 6/28/2022 10:37:55 AM
WORKSPACE: AHTD
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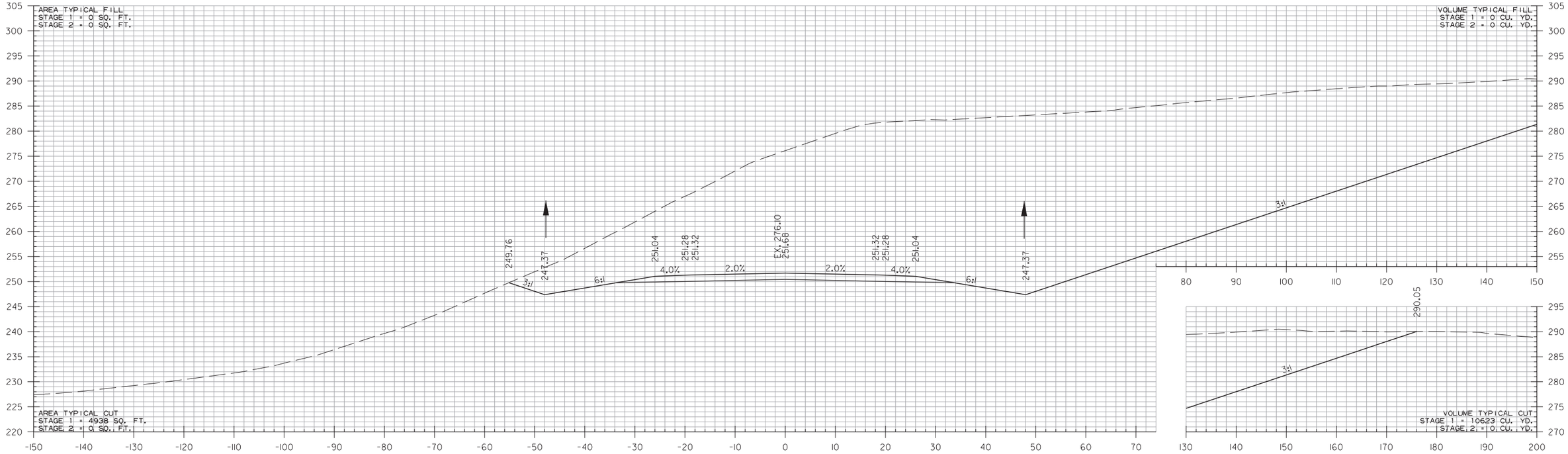
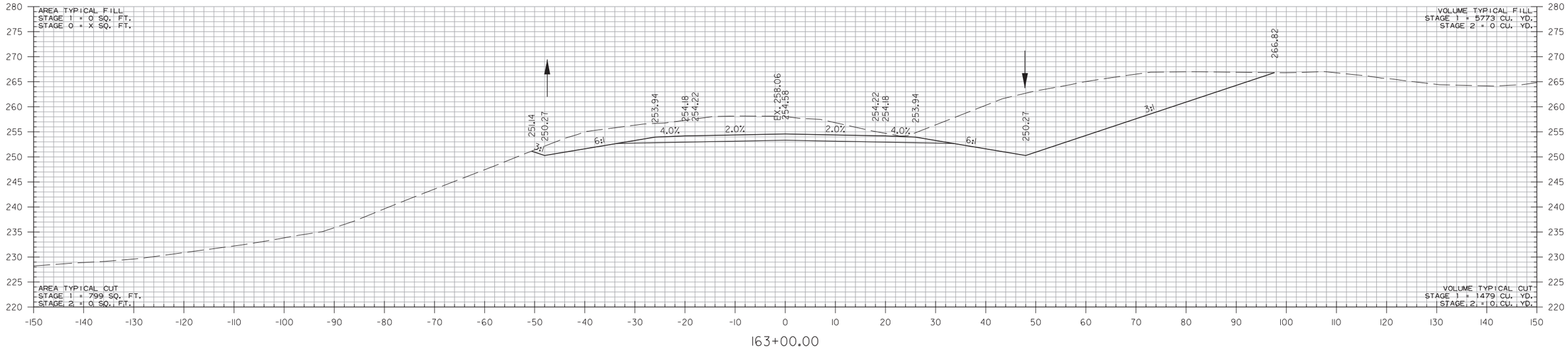
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	342	549
		CROSS SECTIONS				



164+00.00



163+00.00

BYPASS
STA. 163+00 TO STA. 164+00

rnfortner 6/28/2022 10:37:55 AM
WORKSPACE: AHTD
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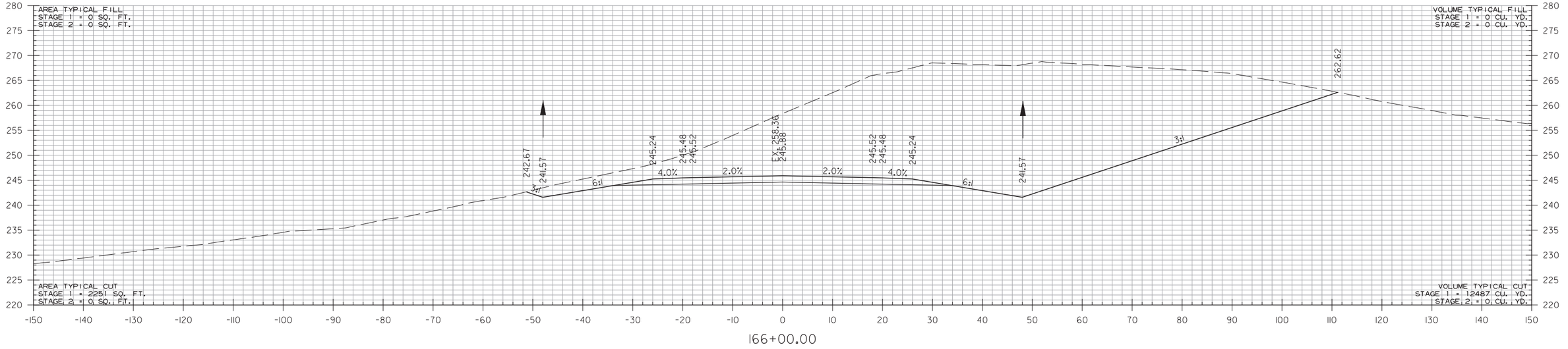
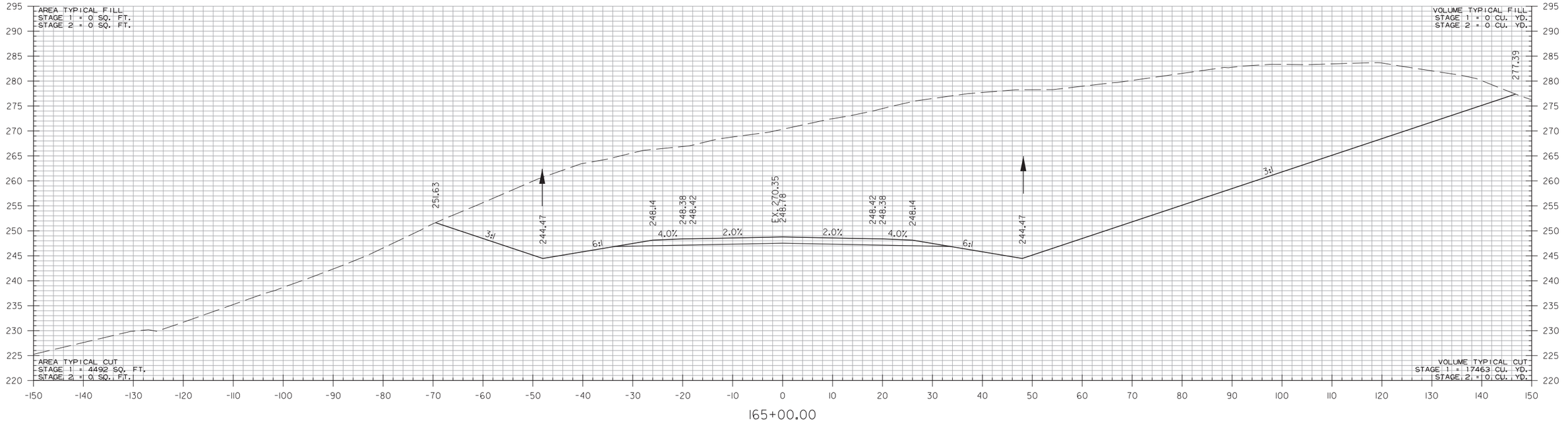
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	343	549
		CROSS SECTIONS				





BYPASS
STA. 165+00 TO STA. 166+00

rnfortner 6/28/2022 10:37:55 AM
WORKSPACE: AHTD
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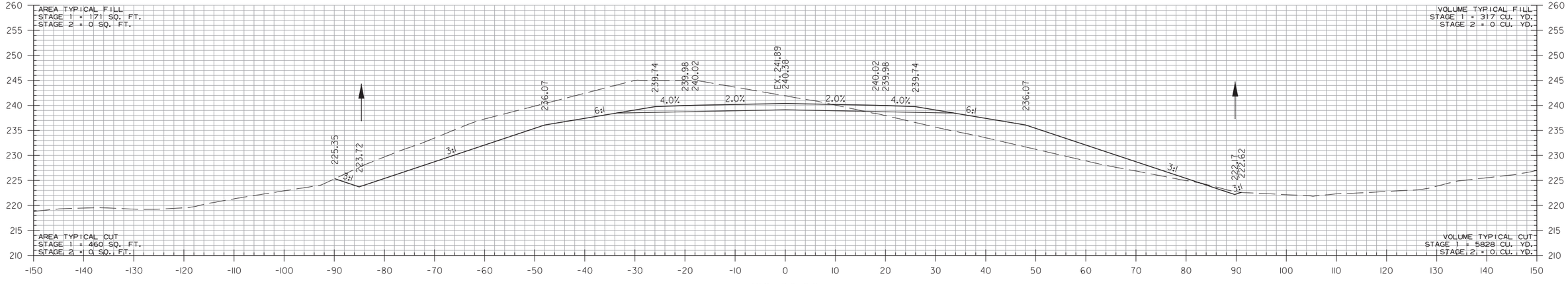
REVISED DATE:

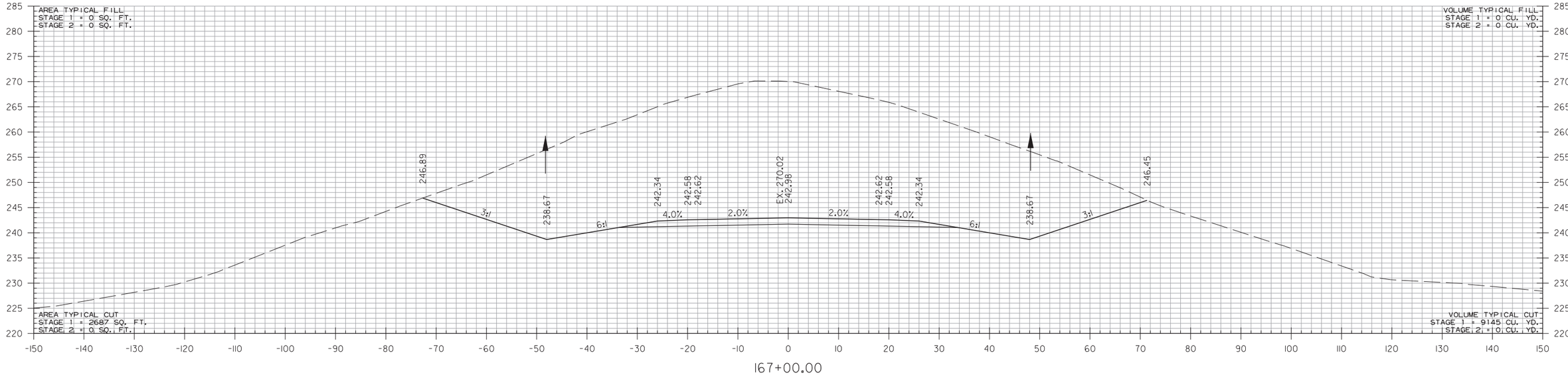
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	344	549
		CROSS SECTIONS				

STA. 168+25.00
END SP. DT. LT. -33.29%
BEGIN SP. DT. LT. -1.91%
ELEV. 215.40



STA. 167+60.00
BEGIN SP. DT. LT. -33.29%
ELEV. 237.04

STA. 167+50.00
BEGIN SP. DT. RT. -31.50%
ELEV. 237.92



BYPASS
STA. 167+00 TO STA. 168+00

rnfortner 6/28/2022 10:37:55 AM
WORKSPACE: AHTD
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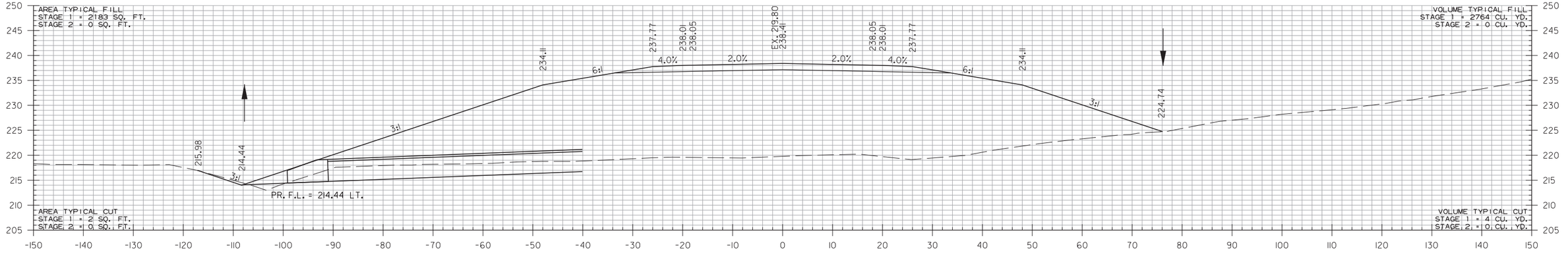
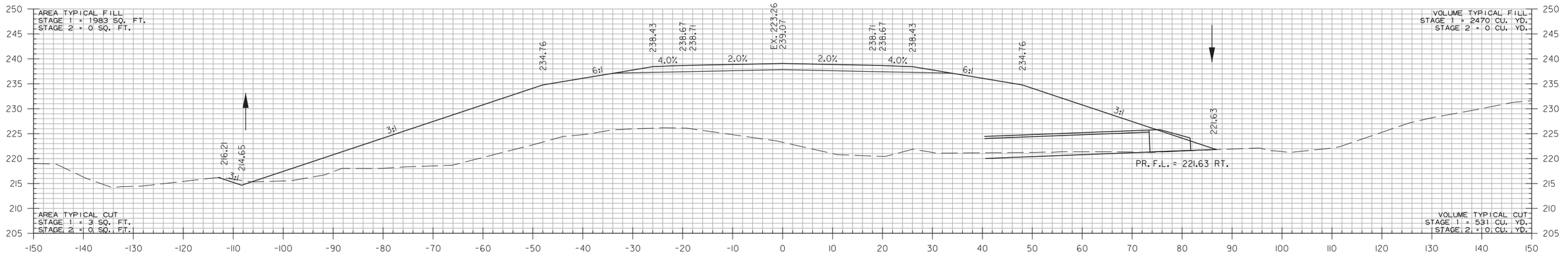
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	345	549
		CROSS SECTIONS				



168+97.76

STA. 168+78 CONSTRUCT
DBL. 48" X 168' R.C. PIPE CULVERT
12° LT. FWD. SKEW
CLASS IV (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 174 CFS DA = 34 ACRES
48" R.C. PIPE = 336 LIN. FT.
48" F.E.S. = 4 EA.



168+61.93

STA. 168+60.00
END SP. DT. RT. -0.53%
ELEV. 221.85

BYPASS
STA. 168+62 TO STA. 168+98

rnfortner 6/28/2022 10:37:55 AM
WORKSPACE: AHTD
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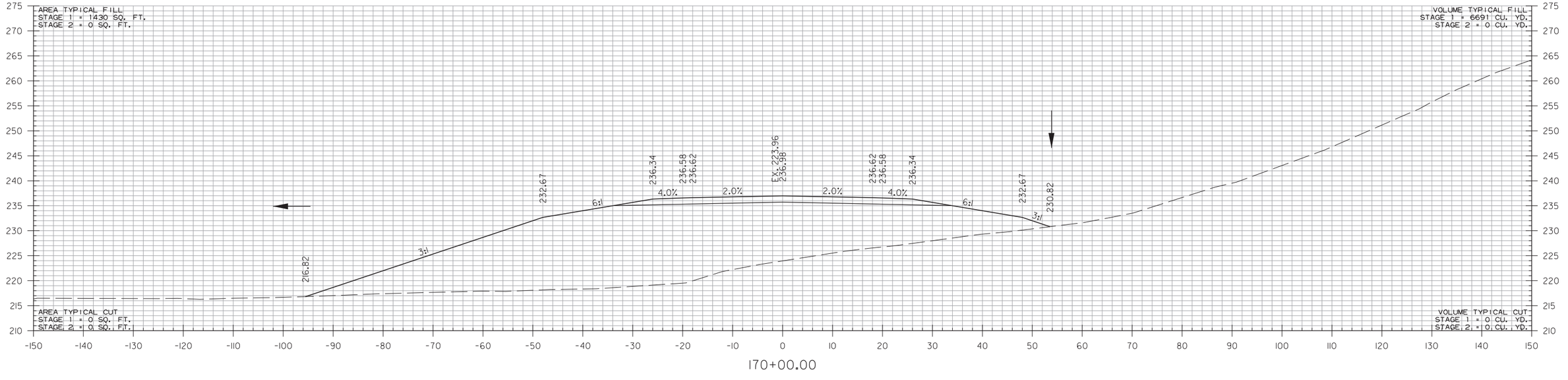
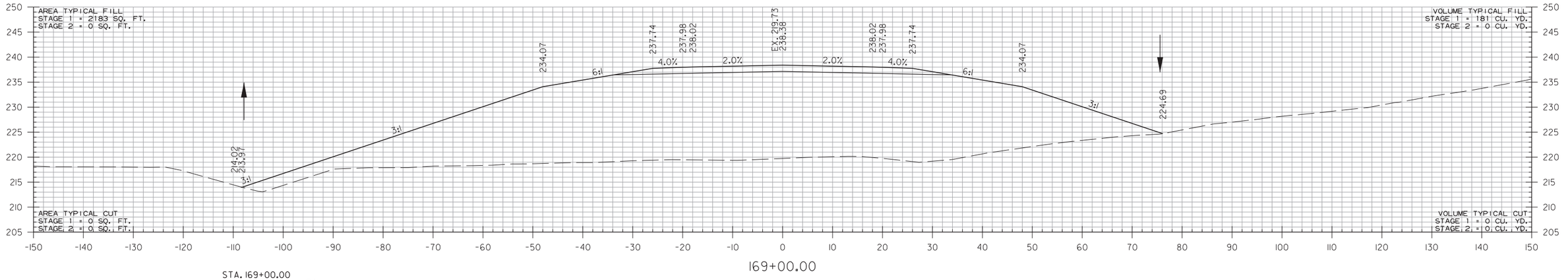
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	346	549
		CROSS SECTIONS				



170+00.00



169+00.00

STA. 169+00.00
END SP. DT. LT. -1.91%
ELEV. 213.97

BYPASS
STA. 169+00 TO STA. 170+00

rnfortner 6/28/2022 10:37:56 AM
WORKSPACE: AHTD
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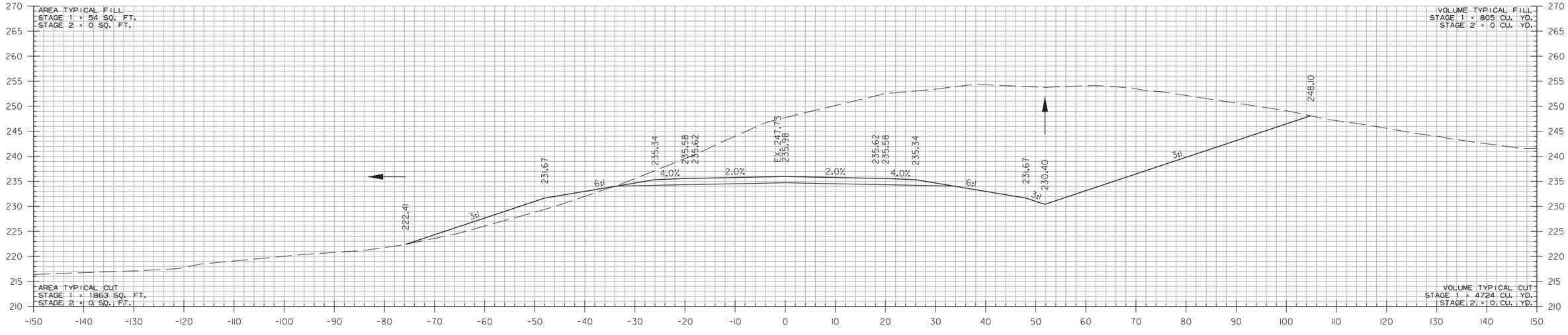
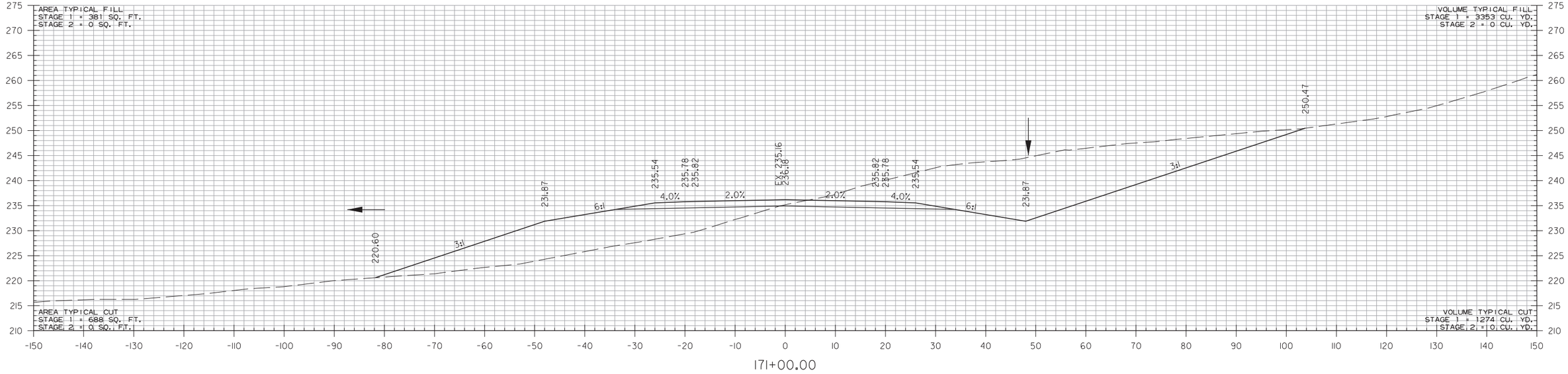
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	347	549
		CROSS SECTIONS				



172+00.00

STA. 171+80.00
BEGIN SP. DT. RT. -6.28%
ELEV. 231.66



171+00.00

BYPASS
STA. 171+00 TO STA. 172+00

rnfortner 6/28/2022 10:37:56 AM
WORKSPACE: AHTD
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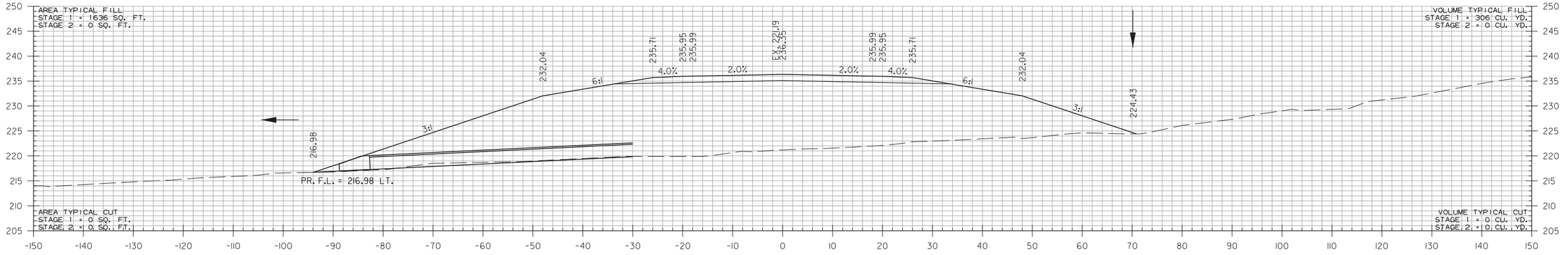
REVISED DATE:

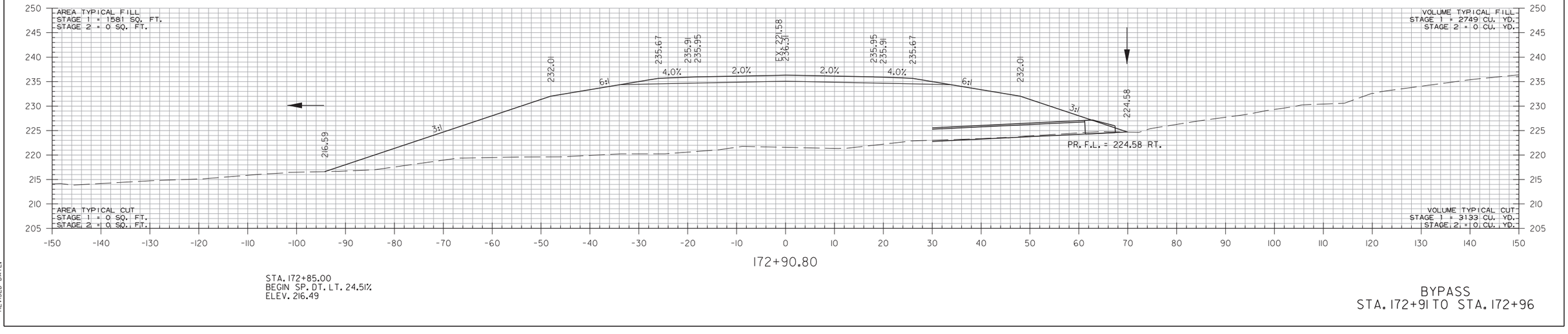
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	348	549
		CROSS SECTIONS				



172+95.94

STA. 172+92 CONSTRUCT
30" X 144' R.C. PIPE CULVERT
2° LT. FWD. SKEW
CLASS III (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 31 CFS DA = 7 ACRES
30" R.C. PIPE = 144 LIN. FT.
30" F.E.S. = 2 EA.

STA. 172+95.00
END SP. DT. RT. -6.28%
BEGIN SP. DT. RT. 9.64%
ELEV. 224.44



172+90.80

STA. 172+85.00
BEGIN SP. DT. LT. 24.51%
ELEV. 216.49

BYPASS
STA. 172+91 TO STA. 172+96

rnfortner 6/28/2022 10:37:56 AM
WORKSPACE: AHTD
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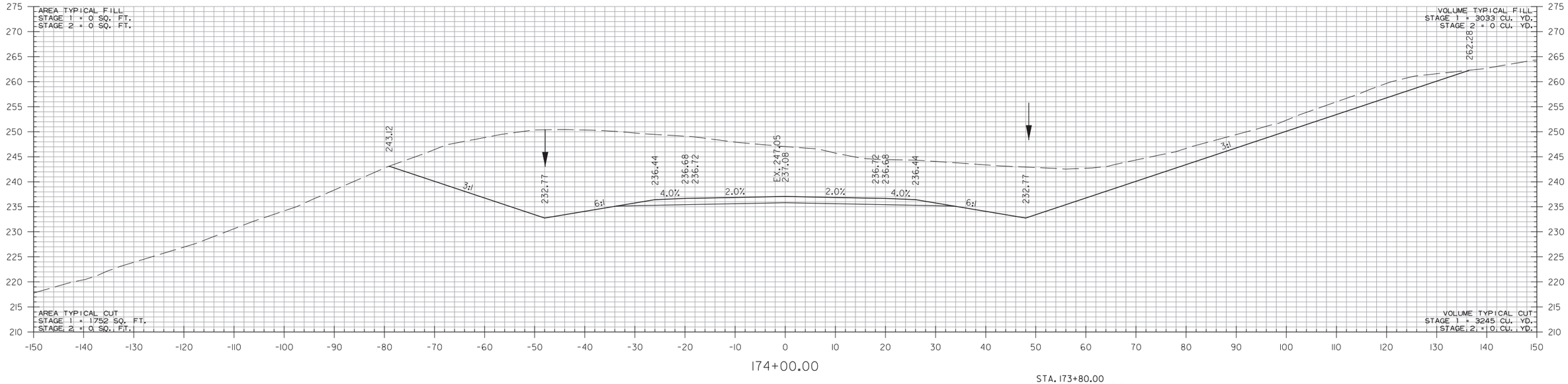
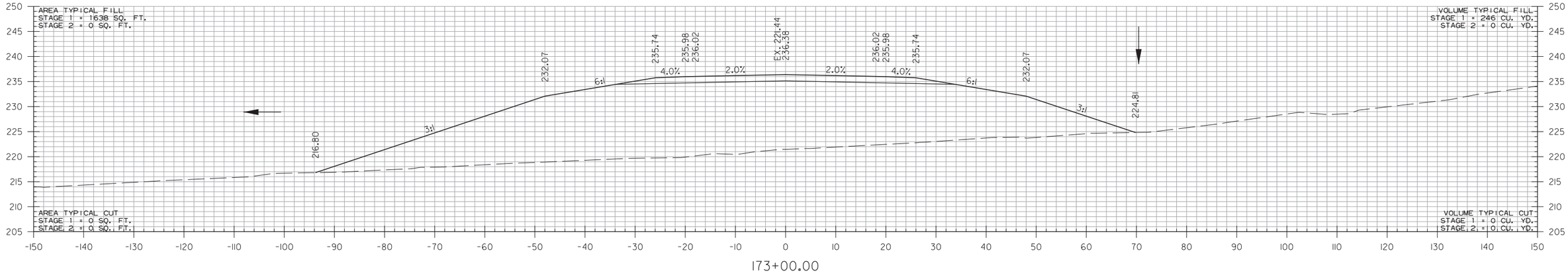
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	349	549
		CROSS SECTIONS				



STA. 173+80.00
END SP. DT. RT. 9.64%
ELEV. 232.63

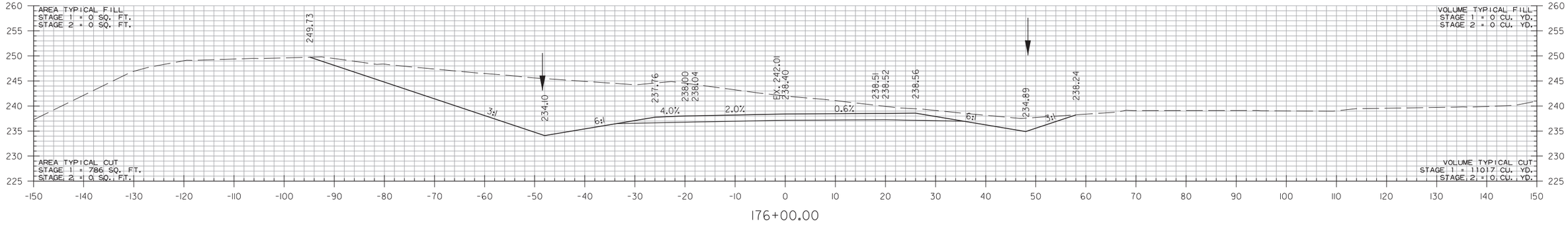
STA. 173+50.00
END SP. DT. LT. 24.51%
ELEV. 232.42



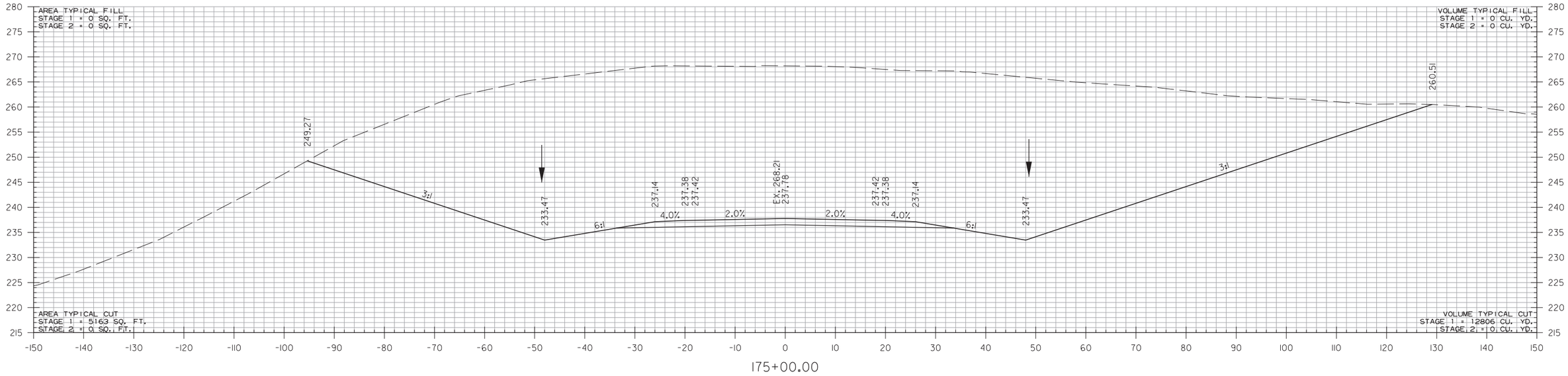
BYPASS
STA. 173+00 TO STA. 174+00

rnfortner 6/28/2022 10:37:56 AM
WORKSPACE: AHTD
L:\2017\170175 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	350	549
		CROSS SECTIONS				



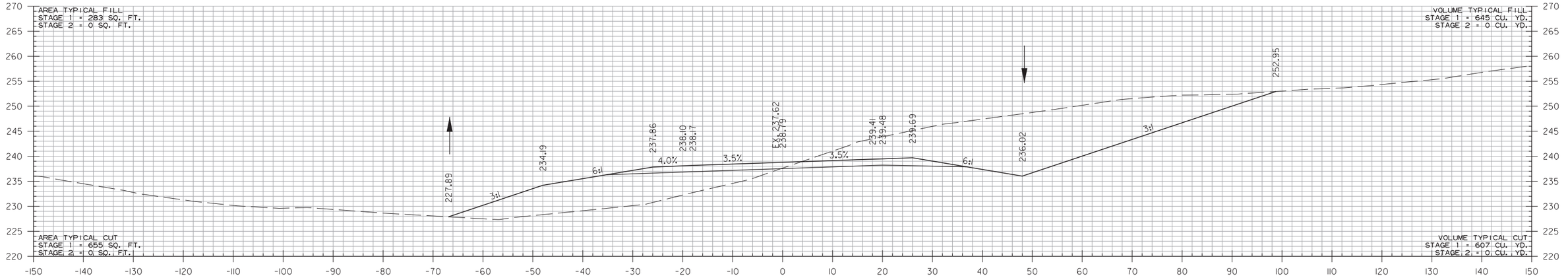
STA. 175+39.93 BEGIN SUPERELEVATION



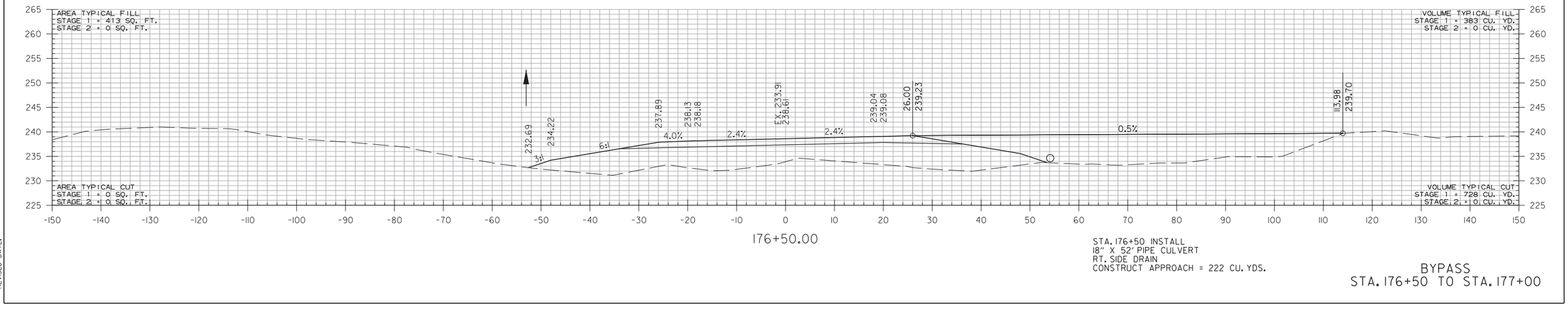
BYPASS
STA. 175+00 TO STA. 176+00

rnfortner 6/28/2022 10:37:56 AM
WORKSPACE: AHTD
L:\2017\170715 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	351	549
		CROSS SECTIONS				



177+00.00



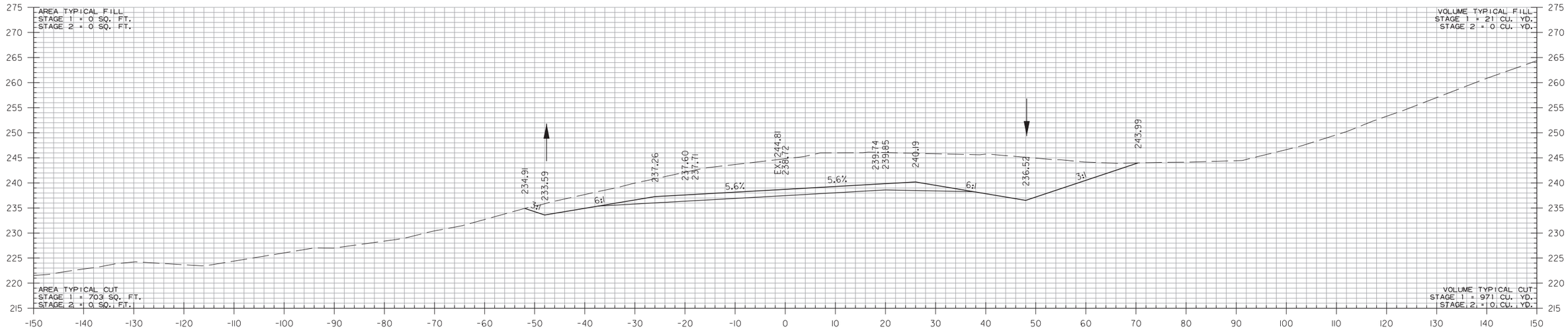
176+50.00

STA. 176+50 INSTALL
18" X 52' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPROACH = 222 CU. YDS.

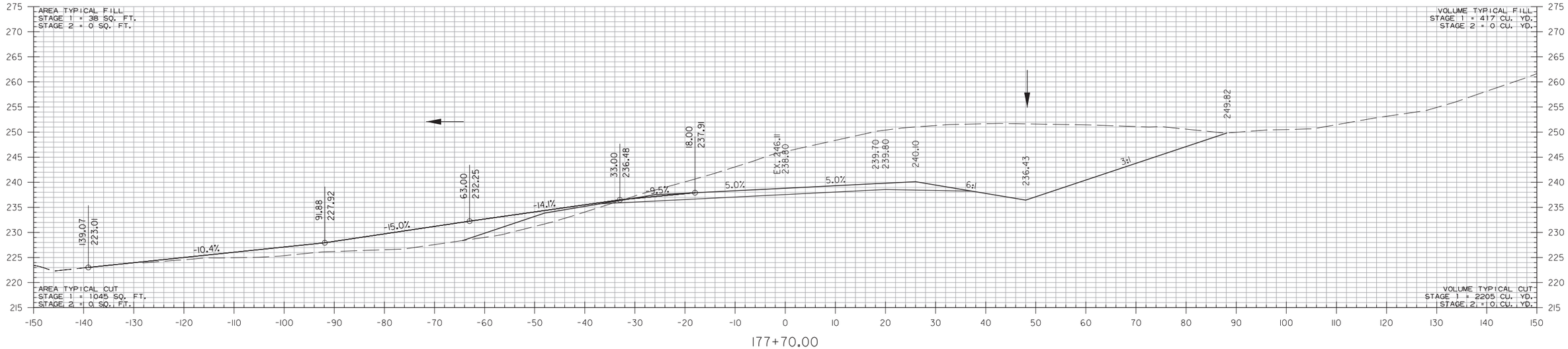
BYPASS
STA. 176+50 TO STA. 177+00

rnfortner 6/28/2022 10:37:57 AM
WORKSPACE: AHTD
L:\20\7\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	352	549
		CROSS SECTIONS				



178+00.00



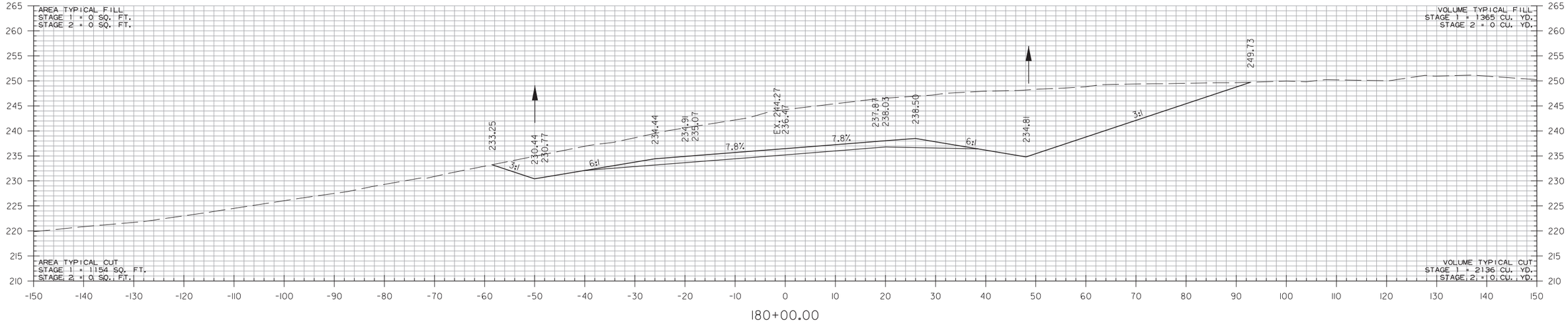
177+70.00

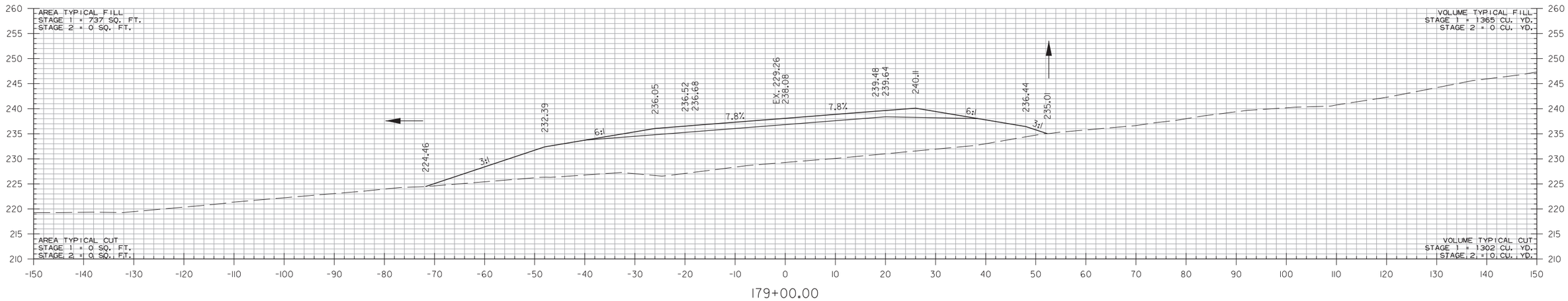
STA. 177+70 CONSTRUCT
APPROACH ON LT. = 76 CU. YDS.

BYPASS
STA. 177+70 TO STA. 178+00

rnfortner 6/28/2022 10:37:57 AM
WORKSPACE: AHTD
L:\2017\170\595 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	353	549
		CROSS SECTIONS				



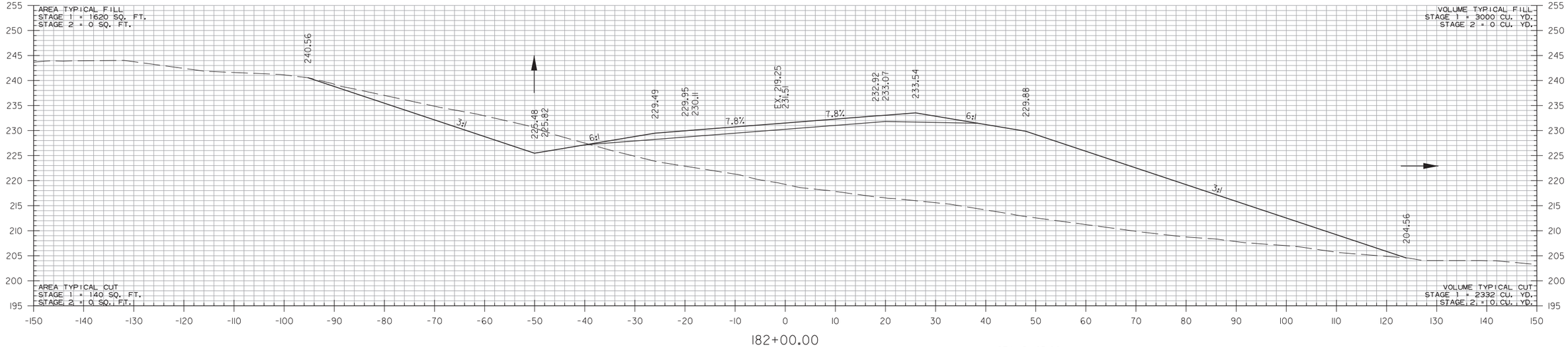


STA. 178+99.93 MAX SUPERELEVATION (0.078'/')

BYPASS
STA. 179+00 TO STA. 180+00

rnfortner 6/28/2022 10:37:57 AM
WORKSPACE: AHTD
L:\20\7\17017515 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

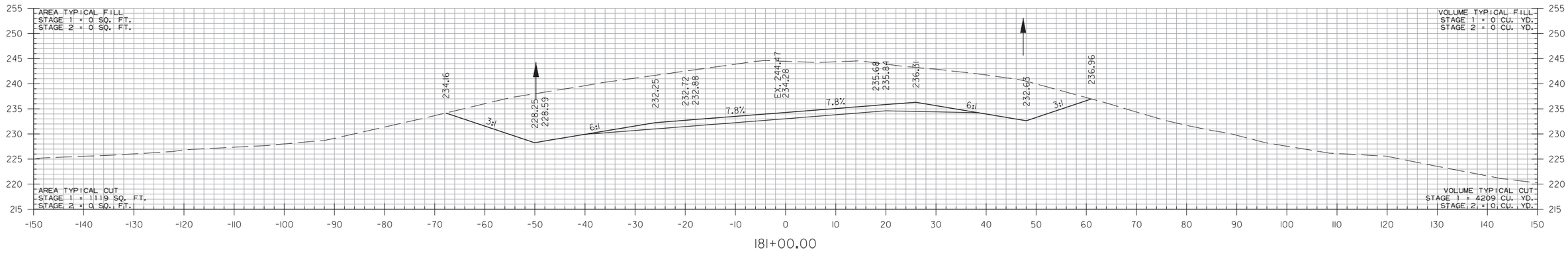
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	354	549
		CROSS SECTIONS				



STA. 181+65.00
END SP. DT. RT. -25.80%
ELEV. 213.55

STA. 181+40.00
END SP. DT. RT. -31.58%
BEGIN SP. DT. RT. -25.80%
ELEV. 220.00

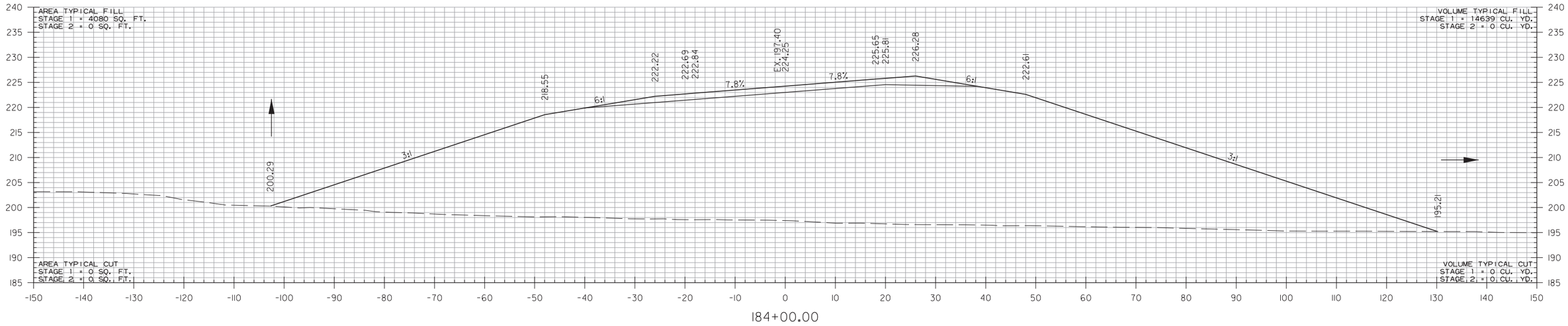
STA. 181+00.00
BEGIN SP. DT. RT. -31.58%
ELEV. 232.63



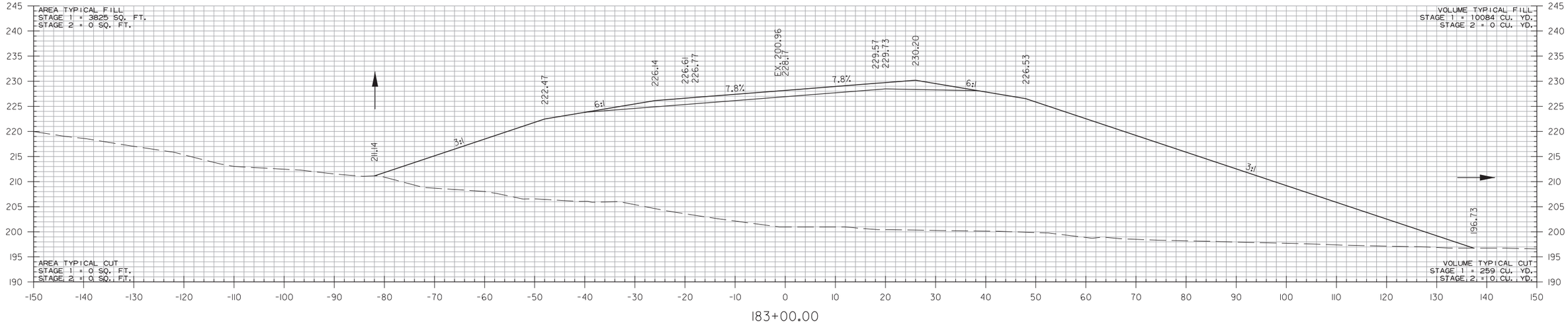
BYPASS
STA. 181+00 TO STA. 182+00

rnfortner 6/28/2022 10:37:57 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	355	549
		CROSS SECTIONS				



184+00.00

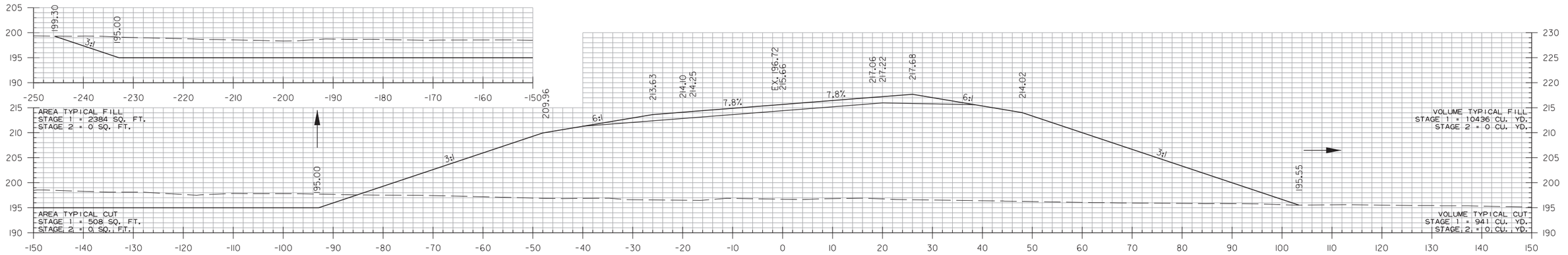


183+00.00

BYPASS
STA. 183+00 TO STA. 184+00

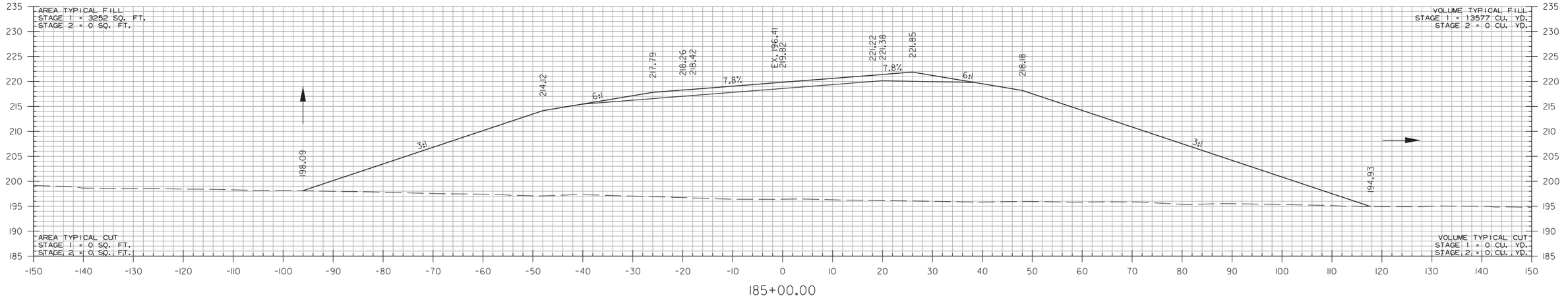
rnfortner 6/28/2022 10:37:57 AM
WORKSPACE: AHTD
L:\2017\170755 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	356	549
		CROSS SECTIONS				



186+00.00

STA. 186+00
BEGIN SP. DT. LT. -0.30%
140' FLAT BOTTOM
ELEV. 195.00

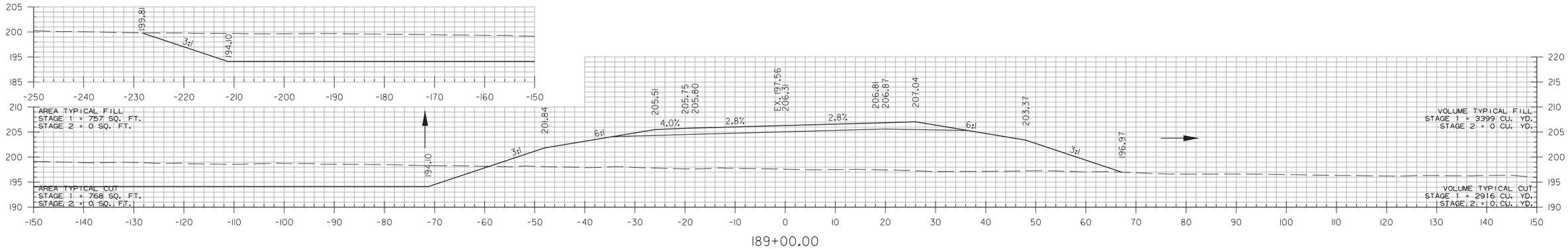


185+00.00

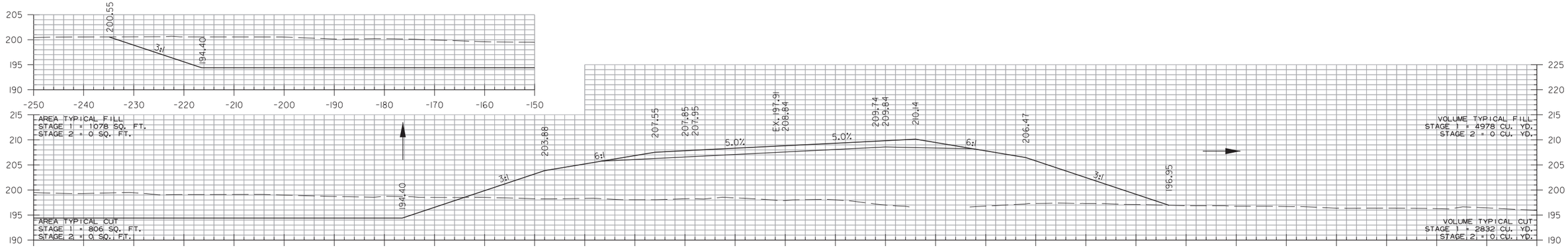
BYPASS
STA. 185+00 TO STA. 186+00

rnfortner 6/28/2022 10:37:58 AM
WORKSPACE: AHTD
L:\20\7\1701515 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

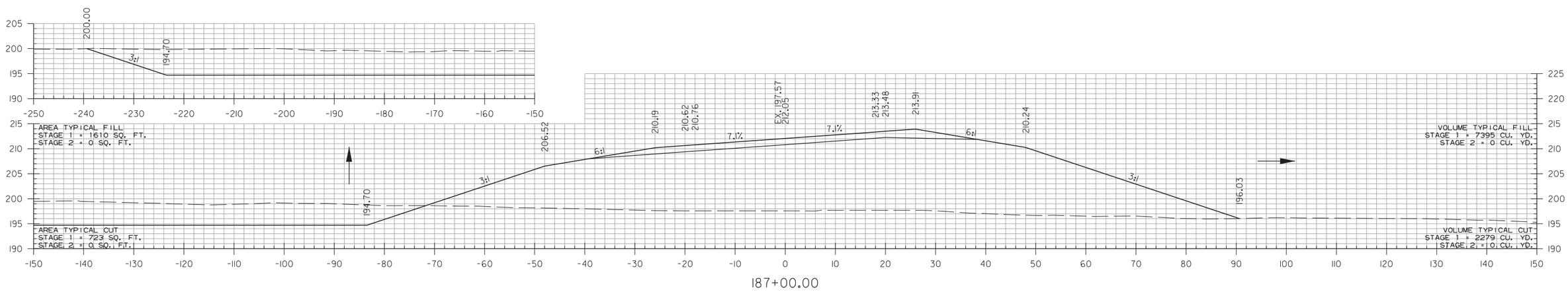
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	357	549
		CROSS SECTIONS				



189+00.00



188+00.00



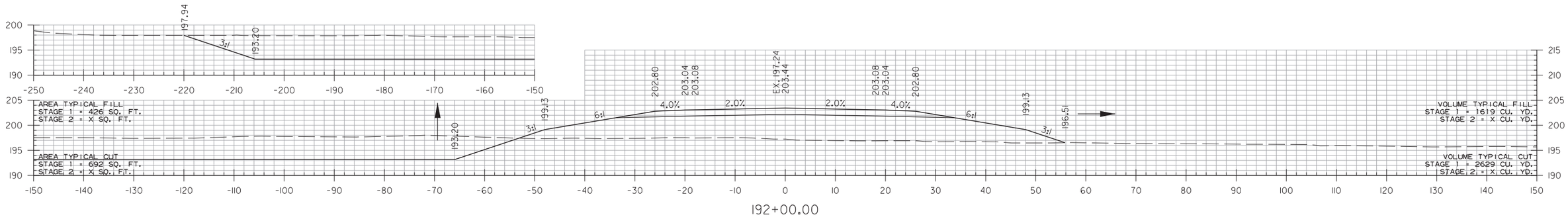
187+00.00

STA. 186+69.82 MAX SUPERELEVATION (0.078'/')

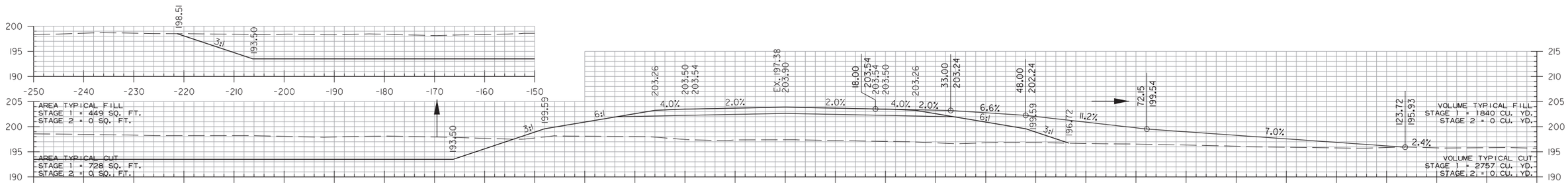
BYPASS
STA. 187+00 TO STA. 189+00

rntortner 6/28/2022 10:37:58 AM
WORKSPACE: AHTD
L:\2017\170755 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	358	549
		CROSS SECTIONS				



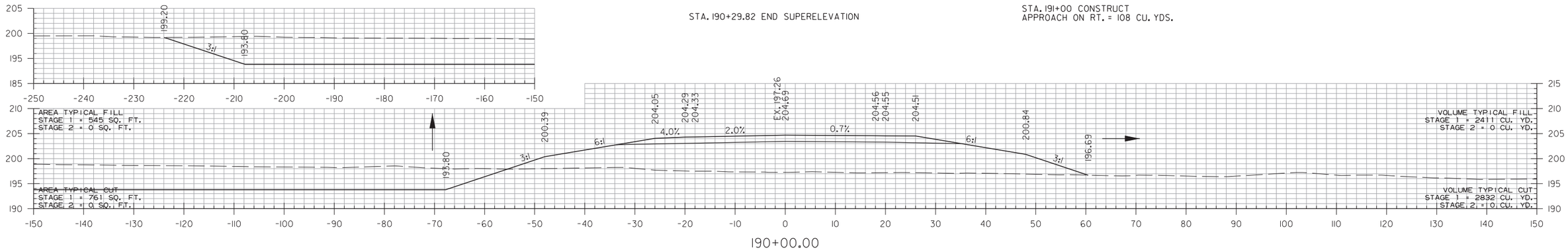
192+00.00



191+00.00

STA. 190+29.82 END SUPERELEVATION

STA. 191+00 CONSTRUCT
APPROACH ON RT. = 108 CU. YDS.

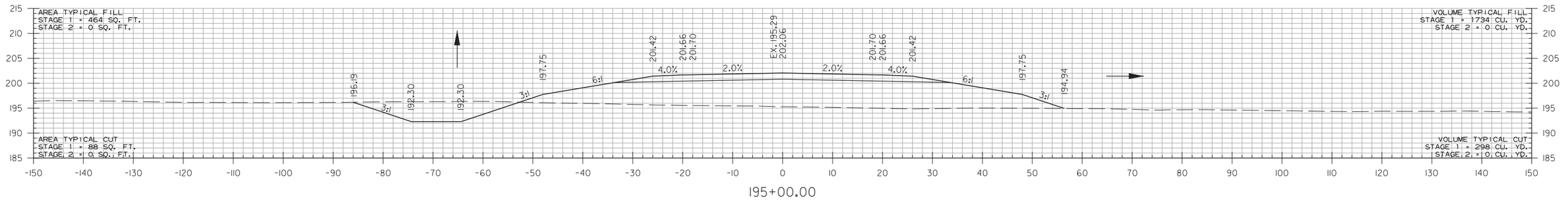


190+00.00

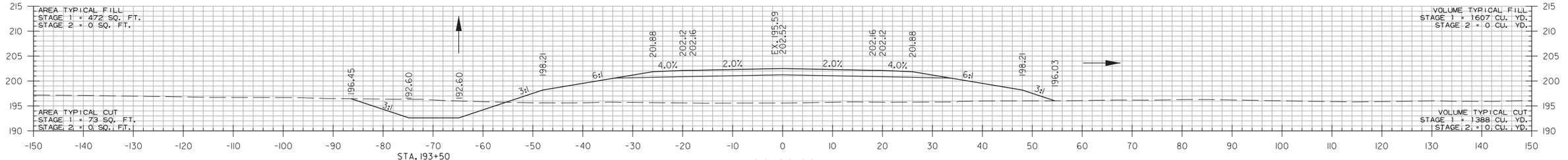
BYPASS
STA. 190+00 TO STA. 192+00

rnfortner
WORKSPACE: AHTD
L:\2017\170755 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:
6/28/2022 10:37:58 AM

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	359	549
		CROSS SECTIONS				

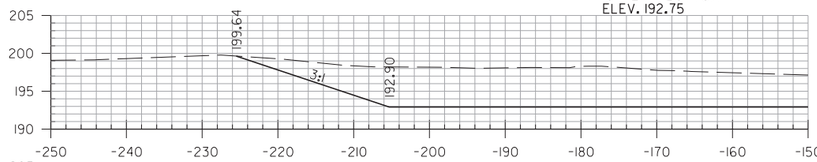


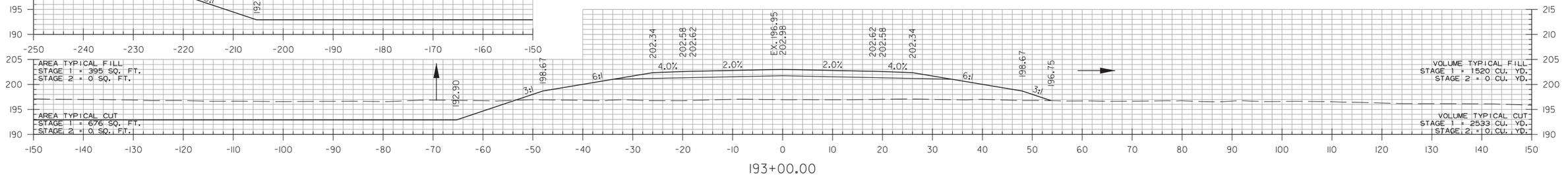
195+00.00



194+00.00

STA. 193+50
END SP. DT. LT. -0.30%
140' FLAT BOTTOM
BEGIN SP. DT. LT. -0.30%
10' FLAT BOTTOM
ELEV. 192.75



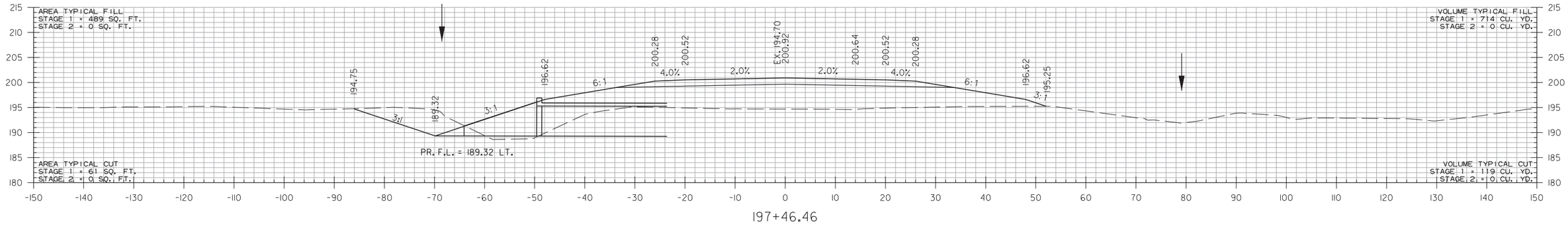


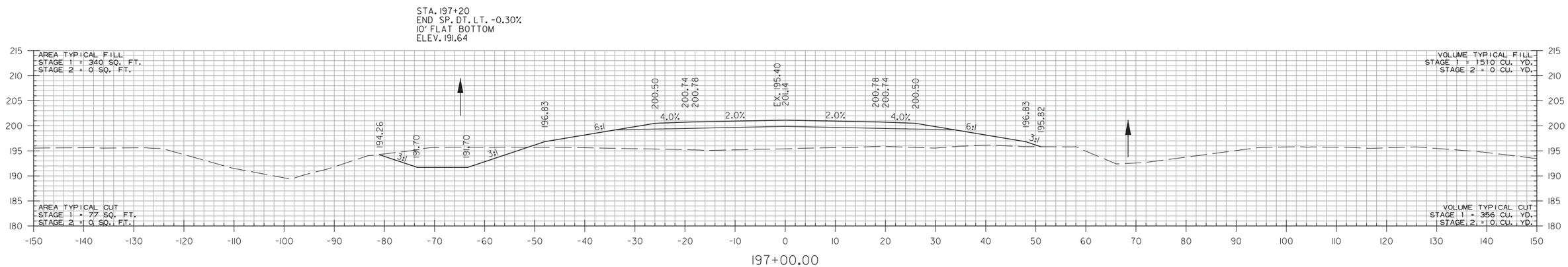
193+00.00

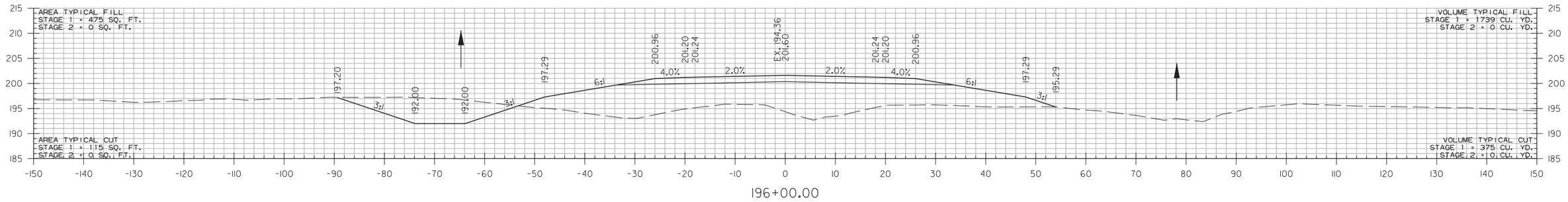
BYPASS
STA. 193+00 TO STA. 195+00

rnfortner 6/28/2022 10:37:58 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	360	549
		CROSS SECTIONS				



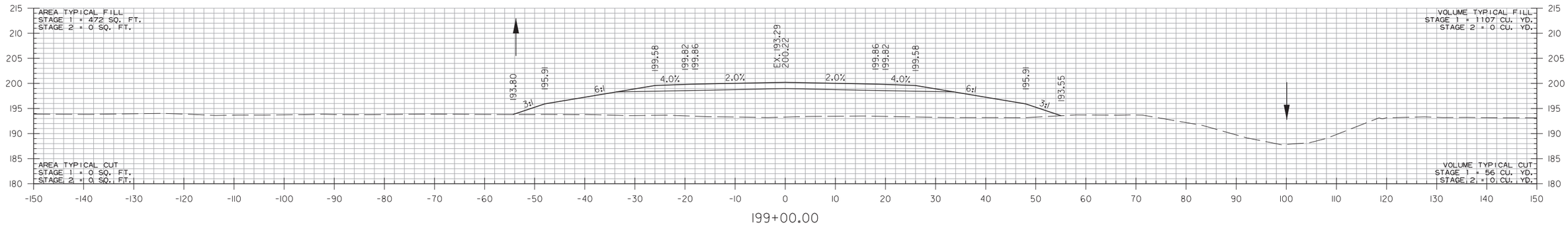


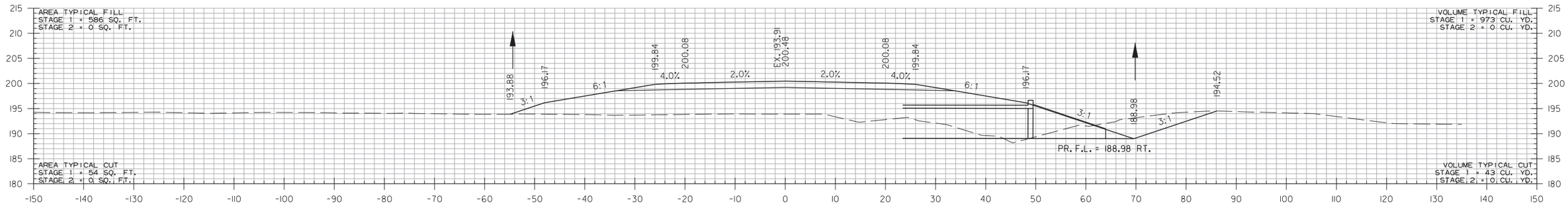


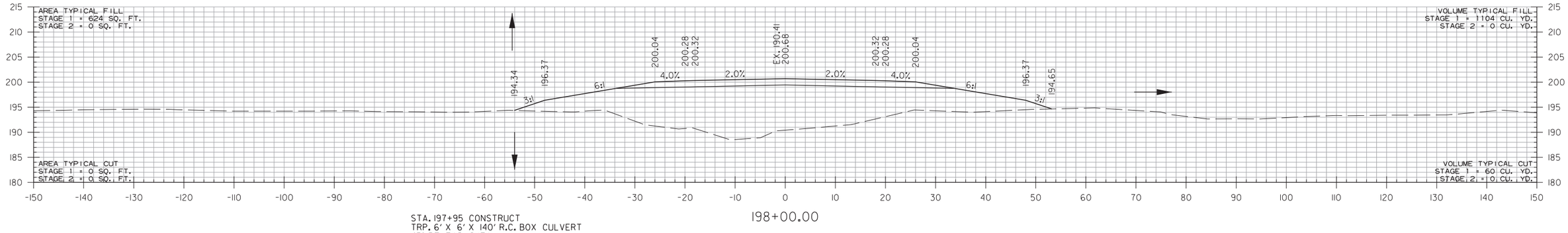
BYPASS
STA. 196+00 TO STA. 197+46

rnfortner 6/28/2022 10:37:59 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	361	549
		CROSS SECTIONS				





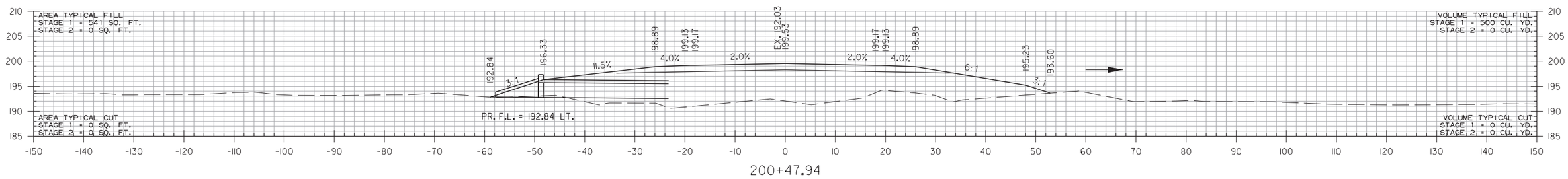


STA. 197+95 CONSTRUCT
TRP. 6' X 6' X 140' R.C. BOX CULVERT
45° RT. FWD. SKEW
WITH 3:1 WINGS LT. & RT.
Q50 = 513 CFS DA = 557 ACRES
SPAN = 20'-6"

BYPASS
STA. 198+00 TO STA. 199+00

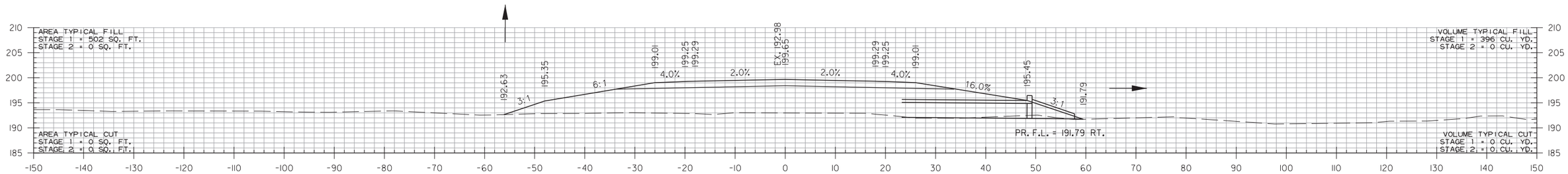
rnfortner 6/28/2022 10:37:59 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	362	549
		CROSS SECTIONS				

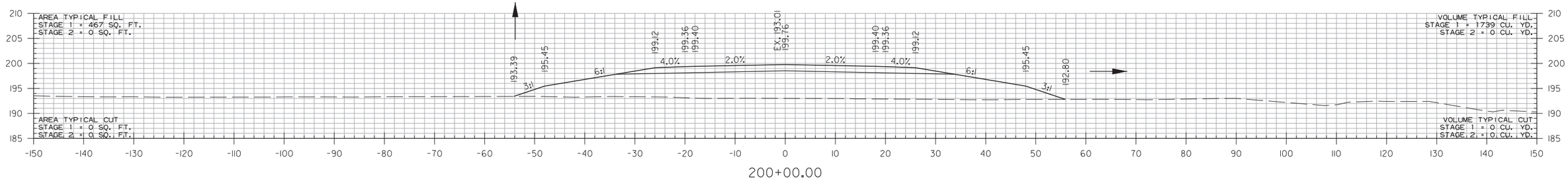


200+47.94

STA. 200+35 CONSTRUCT
4' X 3' X 102' R.C. BOX CULVERT
15° LT. FWD. SKEW
WITH 3:1 WINGS LT. & RT.
Q50 = 73 CFS DA = 23 ACRES
SPAN = 5'-0"



200+22.07

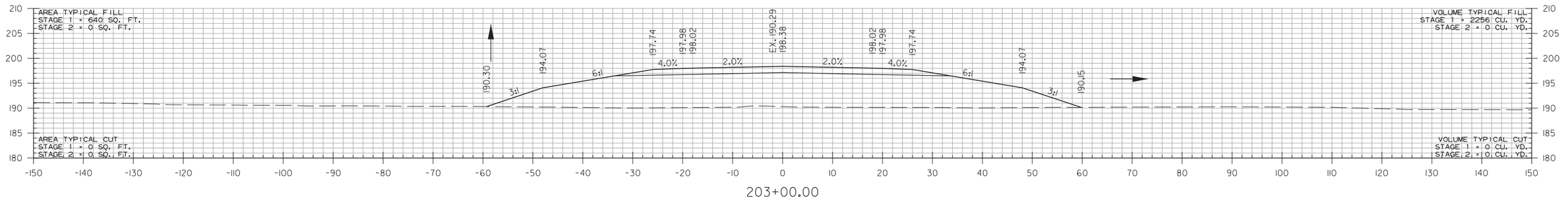


200+00.00

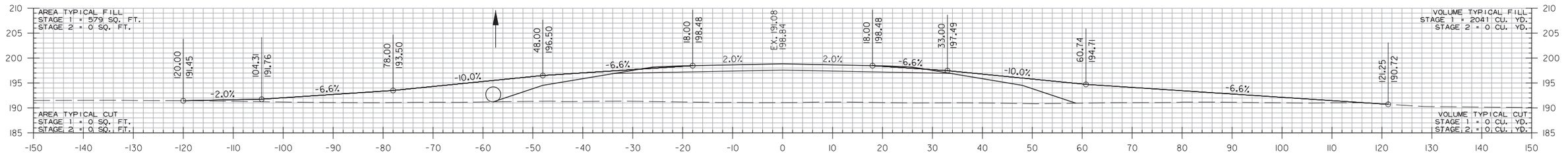
BYPASS
STA. 200+00 TO STA. 200+48

rnfortner 6/28/2022 10:37:59 AM
WORKSPACE: AHTD
L:\20\T\170\7515 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	363	549
		CROSS SECTIONS				



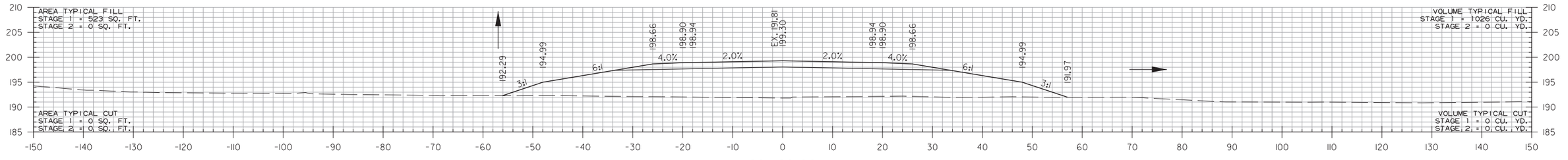
203+00.00



202+00.00

STA. 202+00 INSTALL
36" X 46' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 83 CU. YDS.

STA. 200+00 CONSTRUCT
APPROACH ON RT. = 75 CU. YDS.

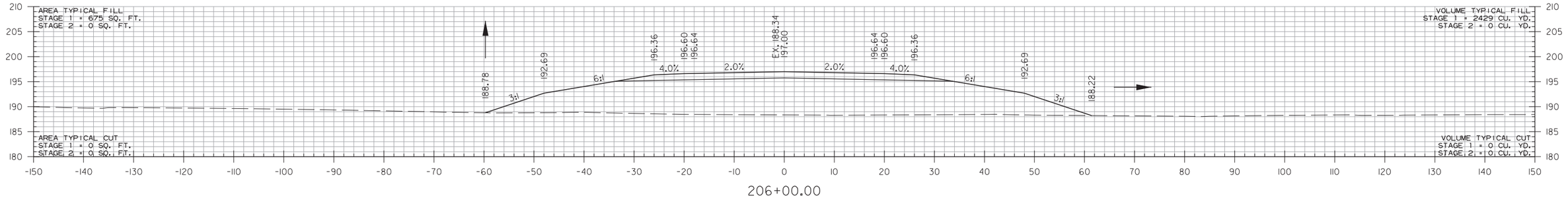


201+00.00

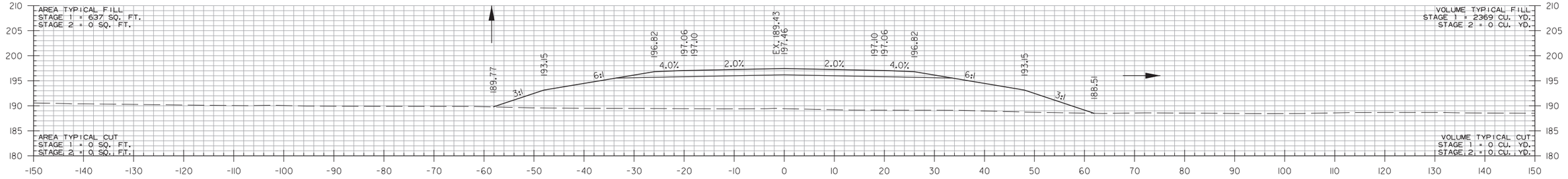
BYPASS
STA. 201+00 TO STA. 203+00

rnfortner 6/28/2022 10:37:59 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

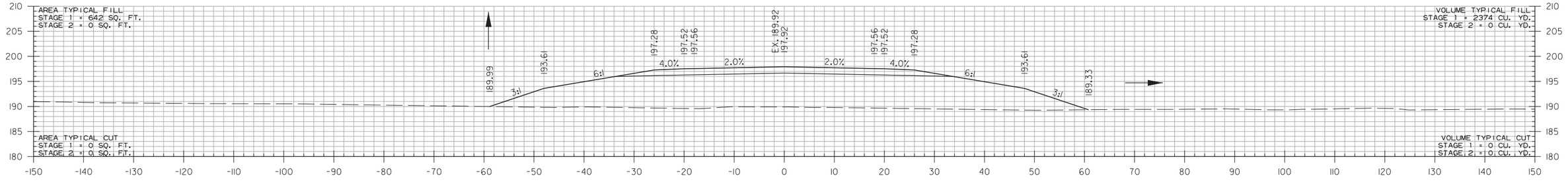
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	364	549
		CROSS SECTIONS				



206+00.00



205+00.00



204+00.00

BYPASS
STA. 204+00 TO STA. 206+00

rnfortner 6/28/2022 10:37:59 AM
WORKSPACE: AHTD
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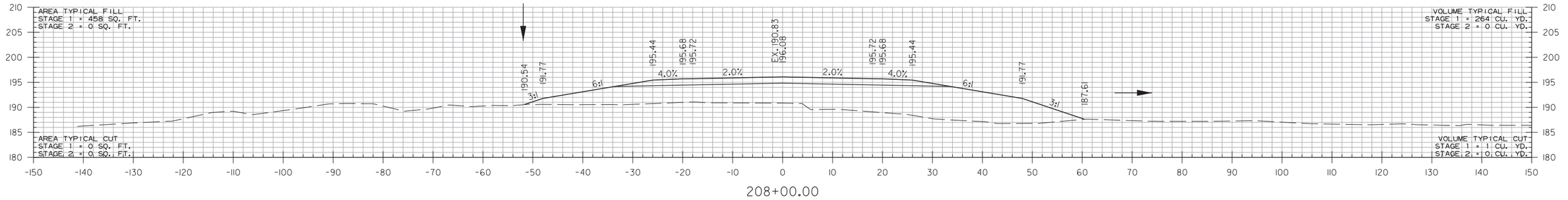
REVISED DATE:

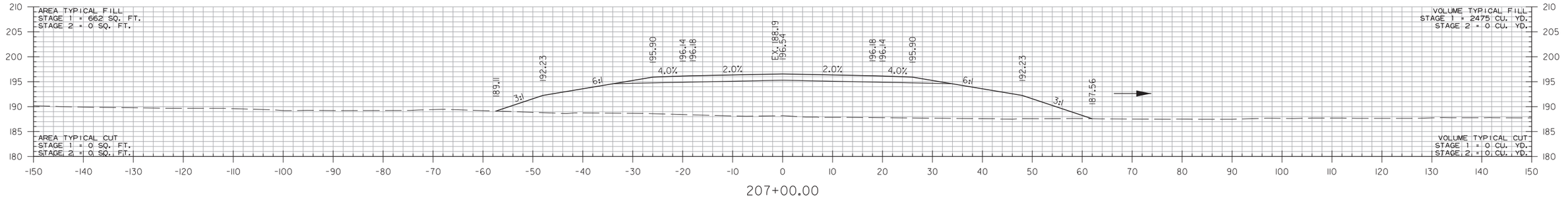
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	365	549
		CROSS SECTIONS				

STA. 208+10 CONSTRUCT
DBL. 48" X 108' R.C. PIPE CULVERT
25° RT. FWD. SKEW
CLASS IV (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 113 CFS DA = 47 ACRES
48" R.C. PIPE = 216 LIN. FT.
48" F.E.S. = 4 EA.



208+00.00

207+85.20



207+00.00

BYPASS
STA. 207+00 TO STA. 208+00

rnfortner 6/28/2022 10:38:00 AM
WORKSPACE: AHTD
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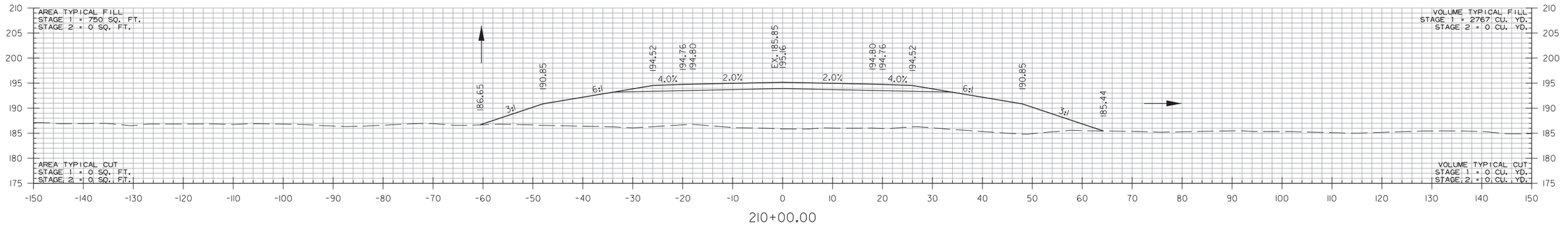
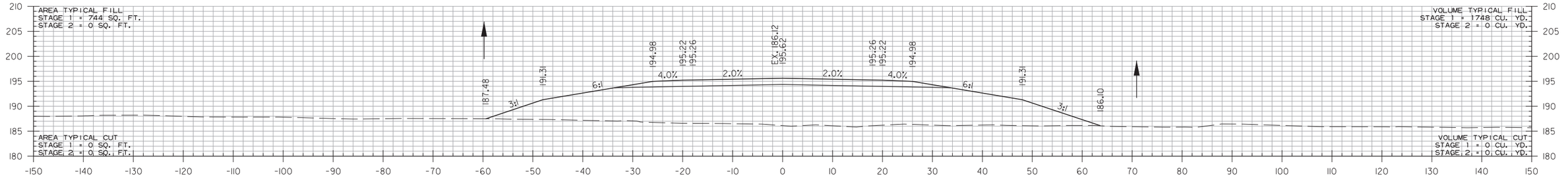
REVISED DATE:

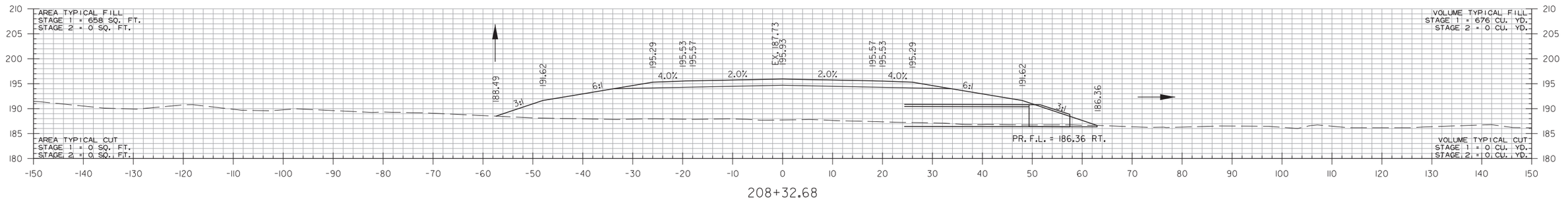
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	366	549
		CROSS SECTIONS				



210+00.00



209+00.00



208+32.68

BYPASS
STA. 208+33 TO STA. 210+00

rnfortner 6/28/2022 10:38:00 AM
WORKSPACE: AHTD
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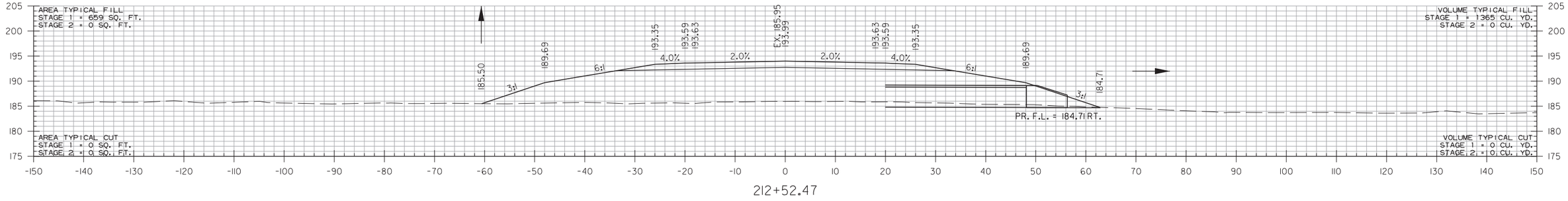
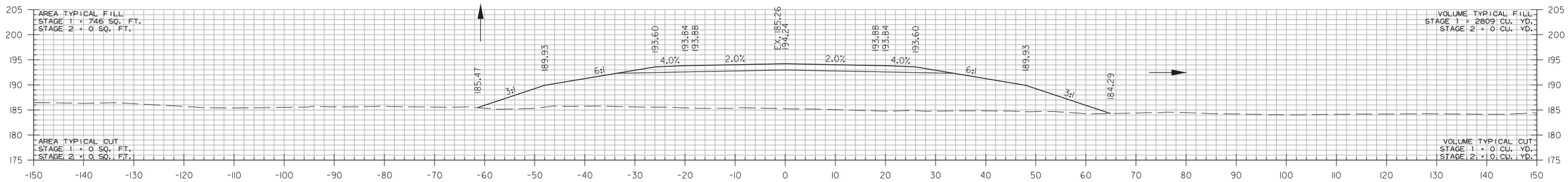
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	367	549
		CROSS SECTIONS				

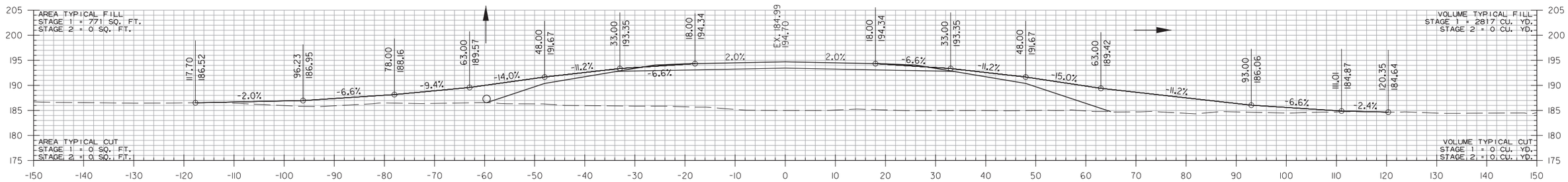
STA. 212+65 CONSTRUCT
DBL. 48" X 98' R.C. PIPE CULVERT
14° LT. FWD. SKEW
CLASS IV (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 98 CFS DA = 17 ACRES
48" R.C. PIPE = 196 LIN. FT.
48" F.E.S. = 4 EA.



212+52.47



212+00.00



211+00.00

STA. 211+00 INSTALL
18" X 40' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 57 CU. YDS.

STA. 211+00 CONSTRUCT
APPROACH ON RT. = 84 CU. YDS.

BYPASS
STA. 211+00 TO STA. 212+52

rnfortner 6/28/2022 10:38:00 AM
WORKSPACE: AHTD
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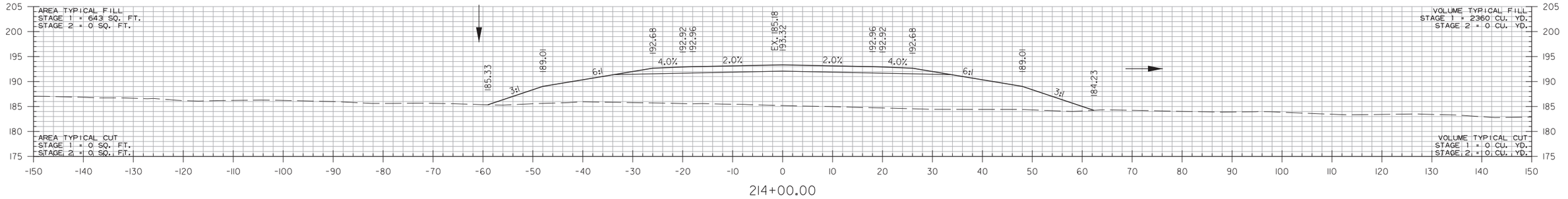
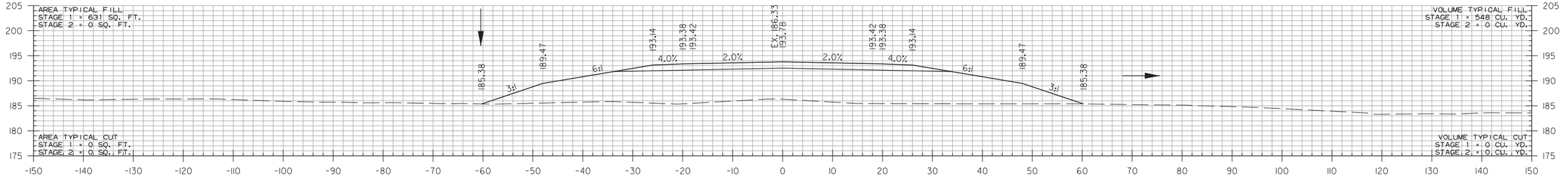
REVISED DATE:

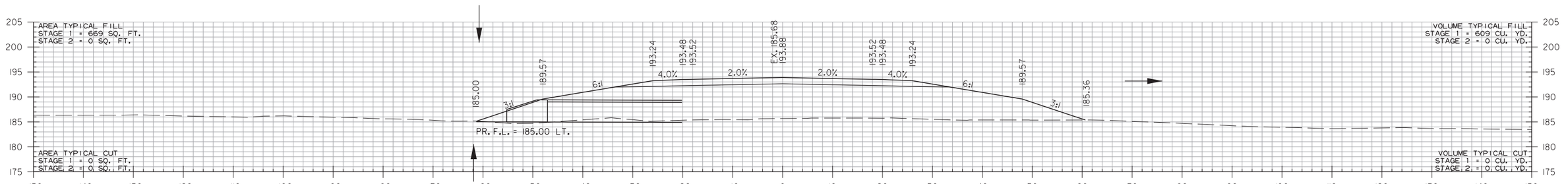
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	368	549
		CROSS SECTIONS				



214+00.00



213+00.00



212+77.23

BYPASS
STA. 212+77 TO STA. 214+00

rnfortner 6/28/2022 10:38:00 AM
WORKSPACE: AHTD
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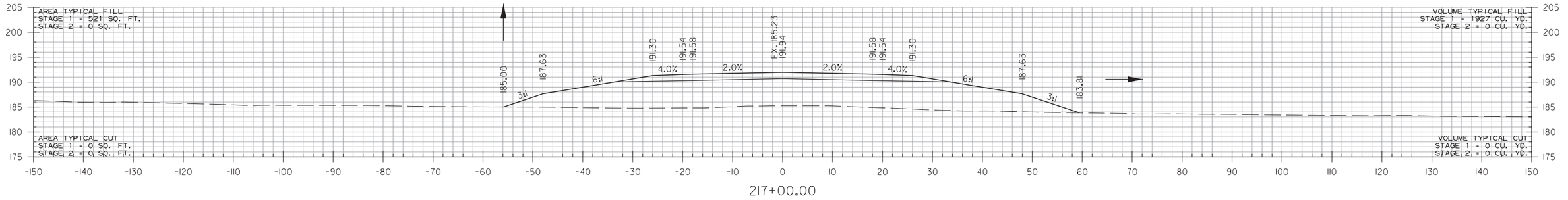
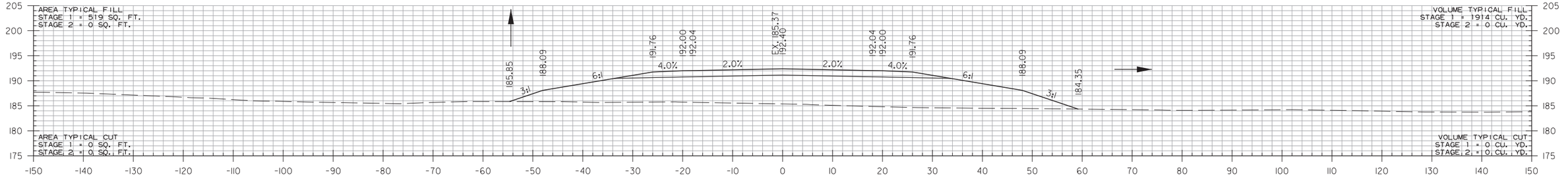
REVISED DATE:

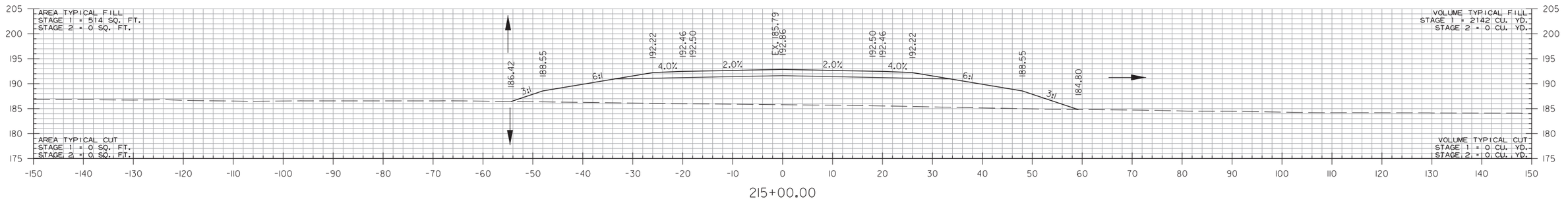
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	369	549
		CROSS SECTIONS				



217+00.00



216+00.00



215+00.00

BYPASS
STA. 215+00 TO STA. 217+00

rnfortner 6/28/2022 10:38:01 AM
WORKSPACE: AHTD
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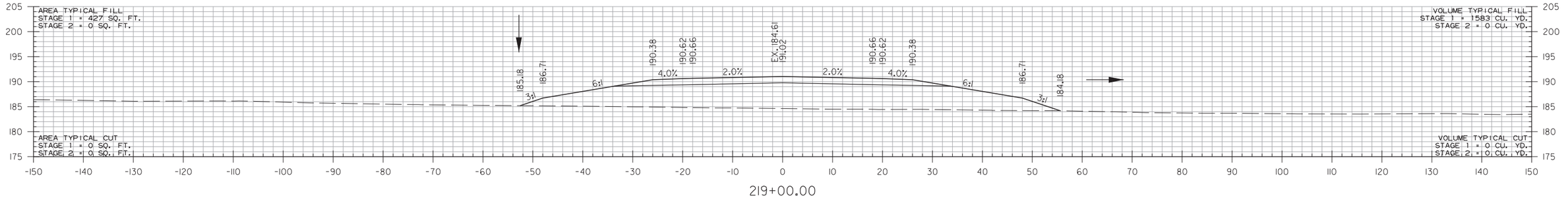
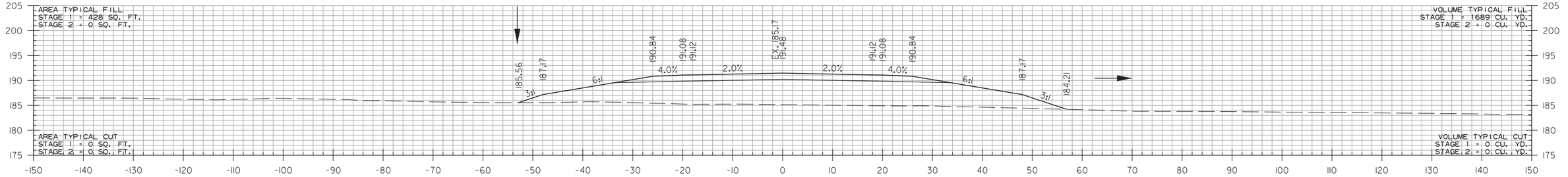
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	370	549
		CROSS SECTIONS				

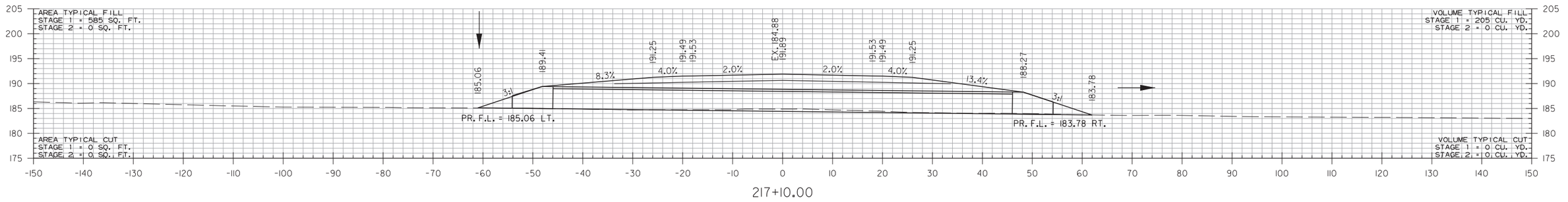


219+00.00



218+00.00

STA. 217+10 CONSTRUCT
DBL. 48" X 92' R.C. PIPE CULVERT
CLASS IV (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 106 CFS DA = 48 ACRES
48" R.C. PIPE = 184 LIN. FT.
48" F.E.S. = 4 EA.



217+10.00

BYPASS
STA. 217+10 TO STA. 219+00

rnfortner 6/28/2022 10:38:01 AM
WORKSPACE: AHTD
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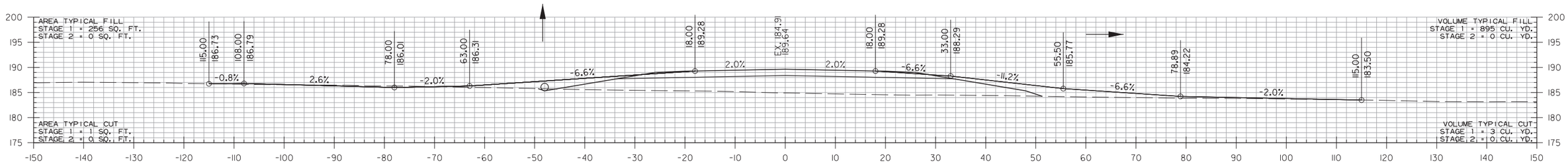
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	371	549
		CROSS SECTIONS				

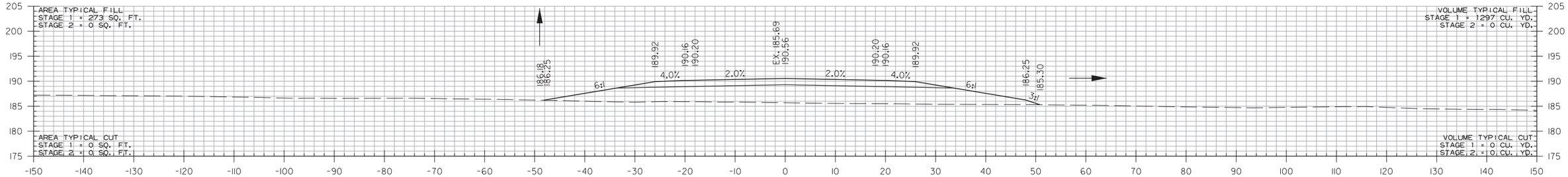


STA. 222+00 INSTALL
18" X 28' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 39 CU. YDS.

222+00.00

STA. 222+00 CONSTRUCT
APPROACH ON RT. = 30 CU. YDS.

221+00.00



220+00.00

BYPASS
STA. 220+00 TO STA. 222+00

rnfortner 6/28/2022 10:38:01 AM
WORKSPACE: AHTD
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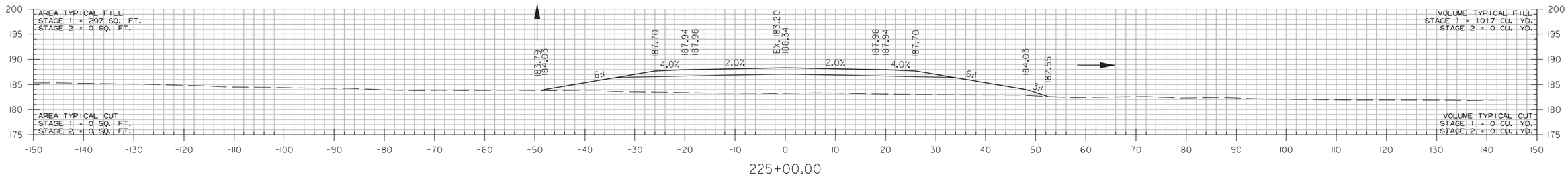
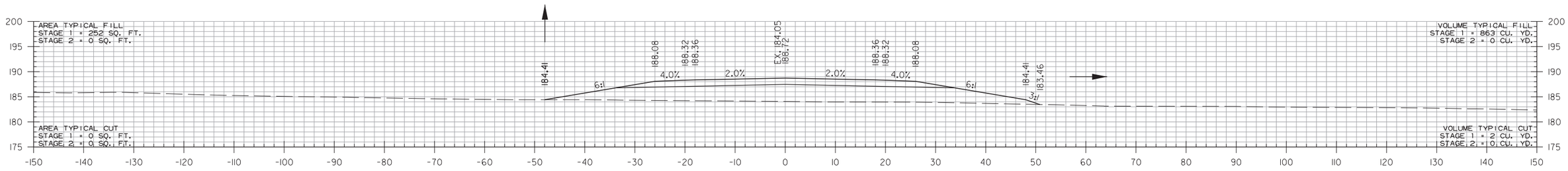
REVISED DATE:

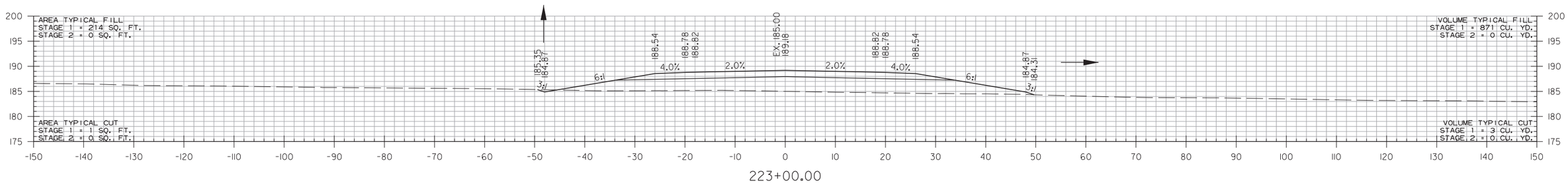
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	372	549
		CROSS SECTIONS				



225+00.00



224+00.00



223+00.00

BYPASS
STA. 223+00 TO STA. 225+00

rnfortner 6/28/2022 10:38:01 AM
WORKSPACE: AHTD
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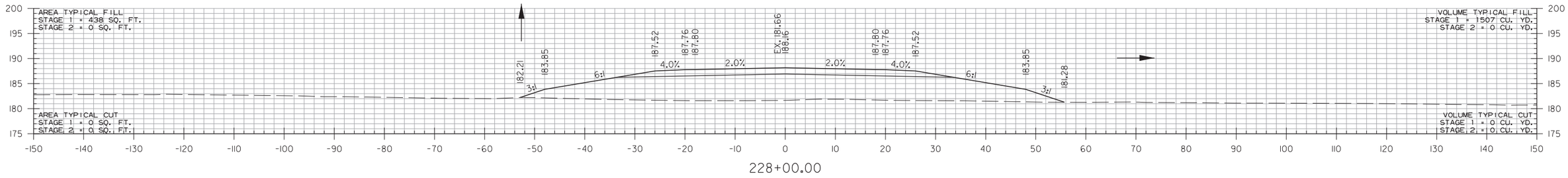
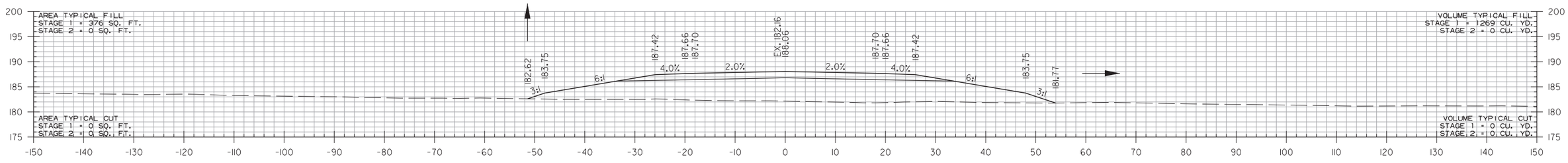
REVISED DATE:

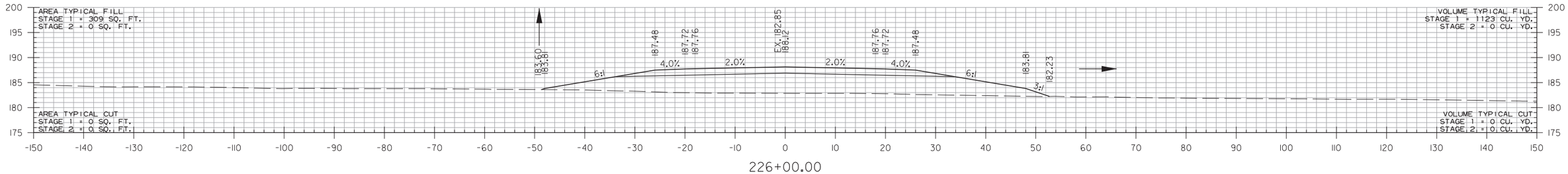
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	373	549
		CROSS SECTIONS				



228+00.00



227+00.00



226+00.00

BYPASS
STA. 226+00 TO STA. 228+00

rnfortner 6/28/2022 10:38:01 AM
WORKSPACE: AHTD
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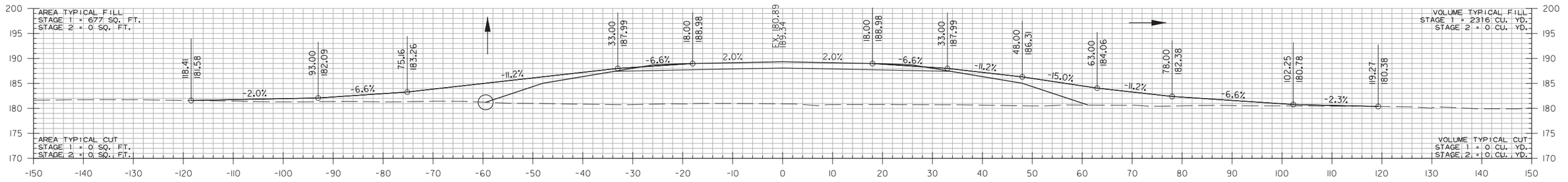
REVISED DATE:

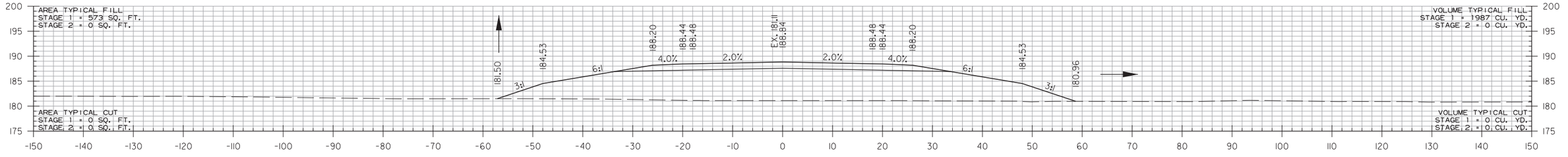
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	374	549
		CROSS SECTIONS				



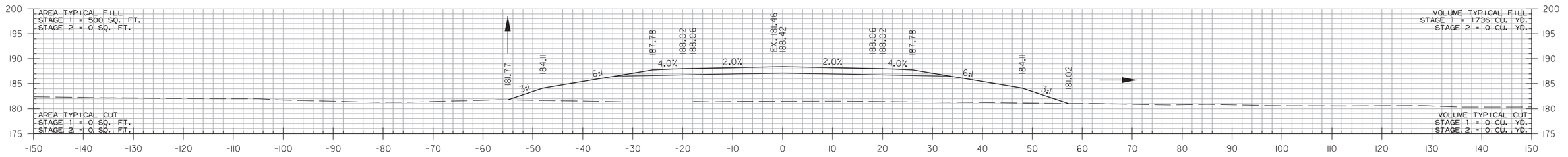
231+00.00

STA. 231+00 INSTALL
36" X 44' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 54 CU. YDS.

STA. 231+00 CONSTRUCT
APPROACH ON RT = 59 CU. YDS.



230+00.00



229+00.00

BYPASS
STA. 229+00 TO STA. 231+00

rnfortner 6/28/2022 10:38:02 AM
WORKSPACE: AHTD
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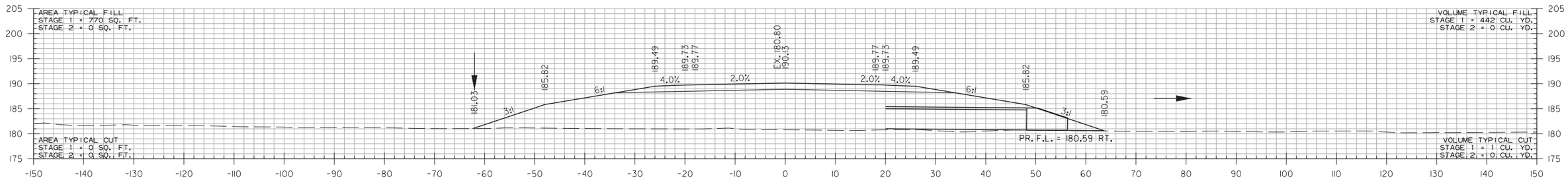
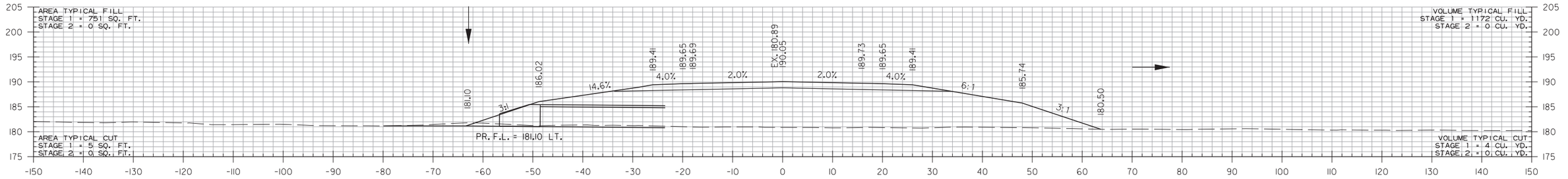
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	375	549
		CROSS SECTIONS				

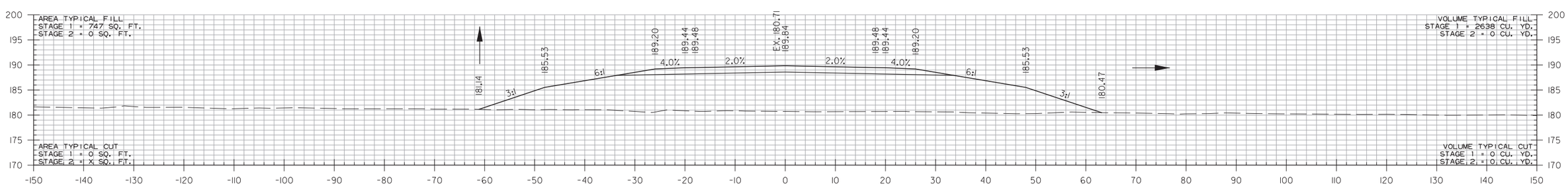


232+57.96

STA. 232+50 CONSTRUCT
DBL. 48" X 96' R.C. PIPE CULVERT
9° RT. FWD. SKEW
CLASS IV (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 141 CFS DA = 92 ACRES
48" R.C. PIPE = 192 LIN. FT.
48" F.E.S. = 4 EA.



232+42.26



232+00.00

BYPASS
STA. 232+00 TO STA. 232+58

rnfortner 6/28/2022 10:38:02 AM
WORKSPACE: AHTD
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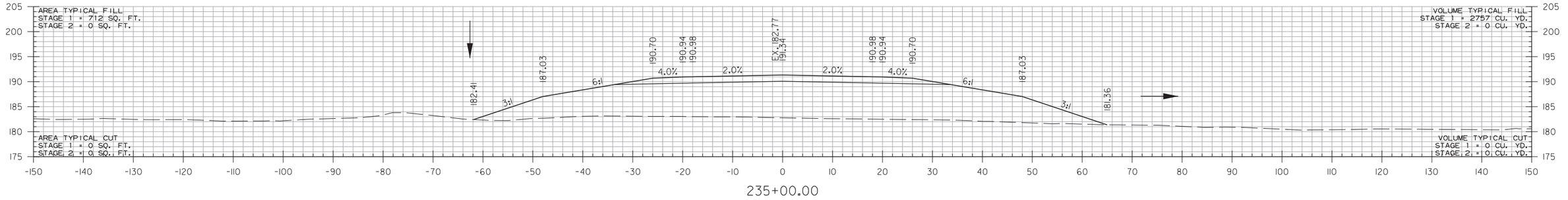
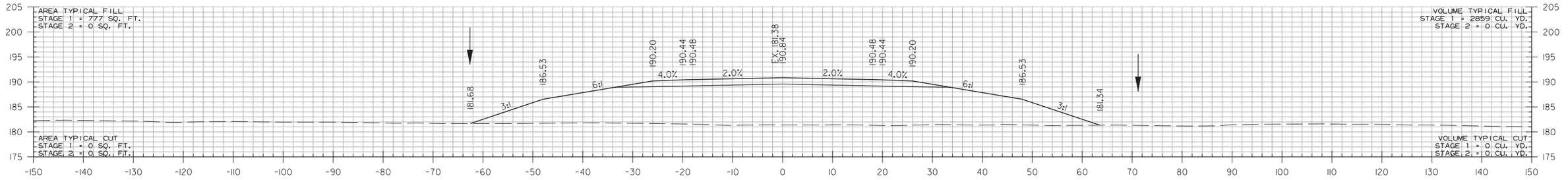
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	376	549
		CROSS SECTIONS				

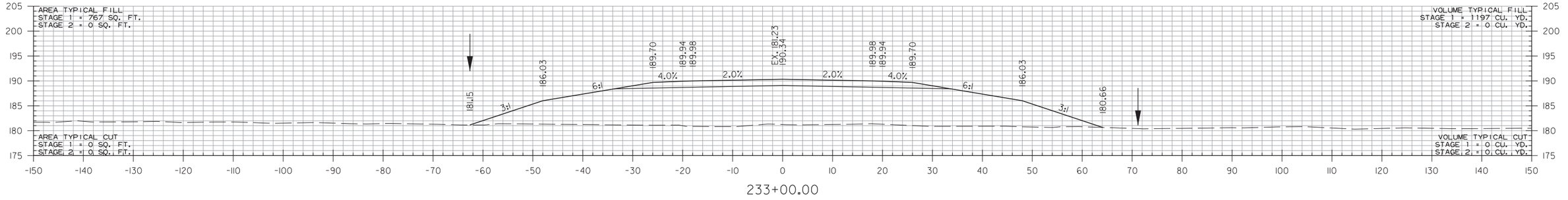
NOTE:
STA. 235+00 TO STA. 245+00 REMOVE AND DISPOSE OF ILLEGAL DUMP MATERIAL. REFER TO THE SP - REMOVAL AND DISPOSAL OF ILLEGAL DUMP, REMOVAL AND DISPOSAL QUANTITY BOX, AND EARTHWORK QUANTITY BOX FOR BACKFILL QUANTITY.



235+00.00



234+00.00



233+00.00

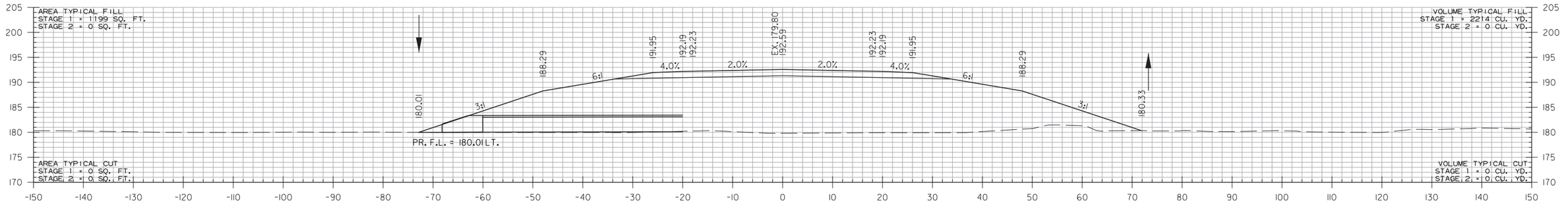
BYPASS
STA. 233+00 TO STA. 235+00

rnfortner 6/28/2022 10:38:02 AM
WORKSPACE: AHTD
L:\2017\170715 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

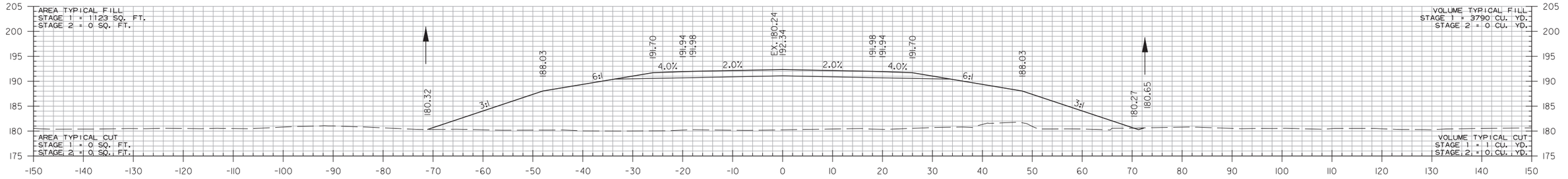
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	377	549
		CROSS SECTIONS				

NOTE:
STA. 235+00 TO STA. 245+00 REMOVE AND DISPOSE OF ILLEGAL DUMP MATERIAL. REFER TO THE SP - REMOVAL AND DISPOSAL OF ILLEGAL DUMP, REMOVAL AND DISPOSAL QUANTITY BOX, AND EARTHWORK QUANTITY BOX FOR BACKFILL QUANTITY.

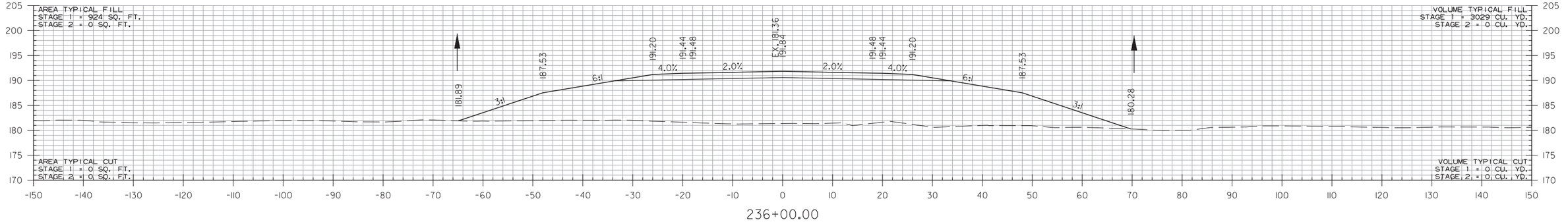
STA. 237+57 CONSTRUCT
36" X 120' R.C. PIPE CULVERT
5° RT. FWD. SKEW
CLASS III (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 36 CFS DA = 7 ACRES
36" R.C. PIPE = 120 LIN. FT.
36" F.E.S. = 2 EA.



237+51.50



237+00.00



236+00.00

BYPASS
STA. 236+00 TO STA. 237+52

rnfortner 6/28/2022 10:38:02 AM
WORKSPACE: AHTD
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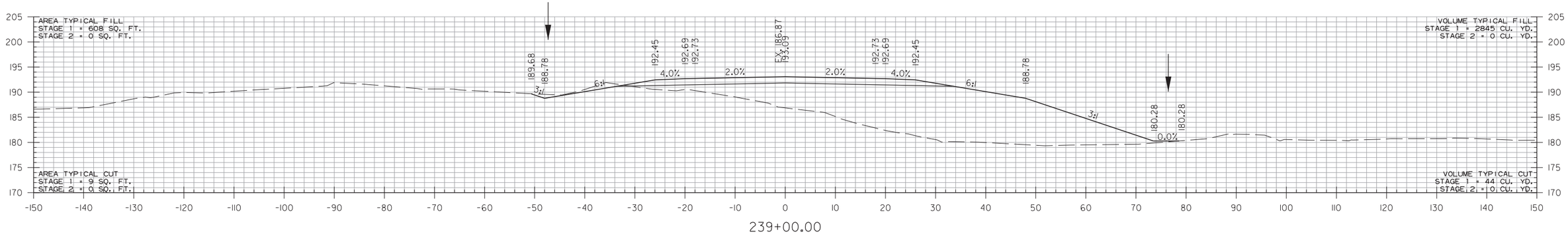
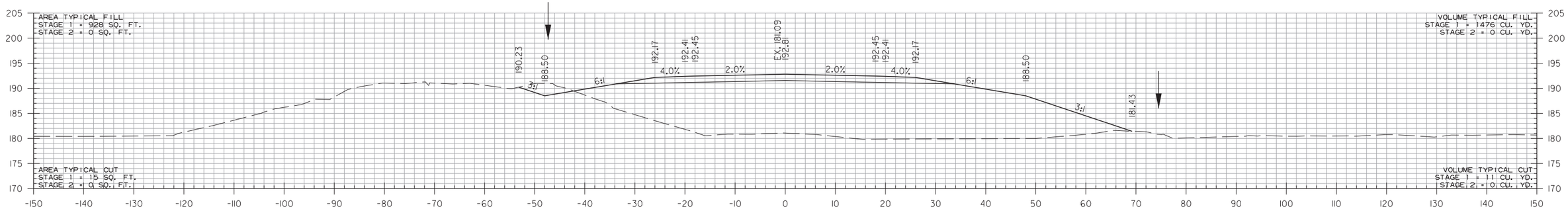
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	378	549
		CROSS SECTIONS				

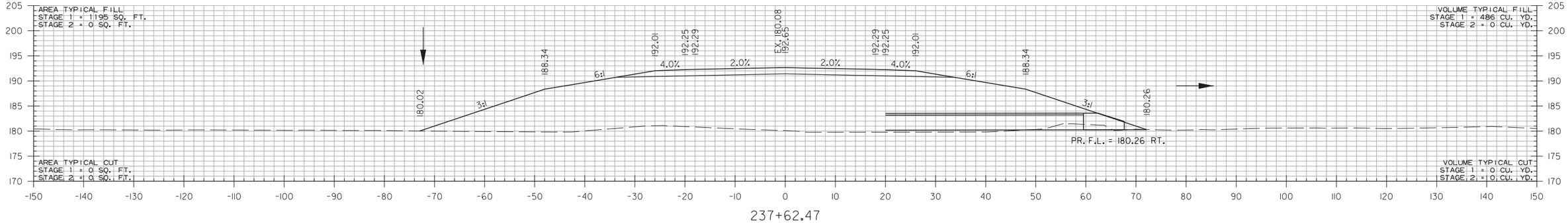
NOTE:
STA. 235+00 TO STA. 245+00 REMOVE AND DISPOSE OF ILLEGAL DUMP MATERIAL. REFER TO THE SP - REMOVAL AND DISPOSAL OF ILLEGAL DUMP, REMOVAL AND DISPOSAL QUANTITY BOX, AND EARTHWORK QUANTITY BOX FOR BACKFILL QUANTITY.



239+00.00



238+00.00



237+62.47

BYPASS
STA. 237+62 TO STA. 239+00

rnfortner 6/28/2022 10:38:03 AM
WORKSPACE: AHTD
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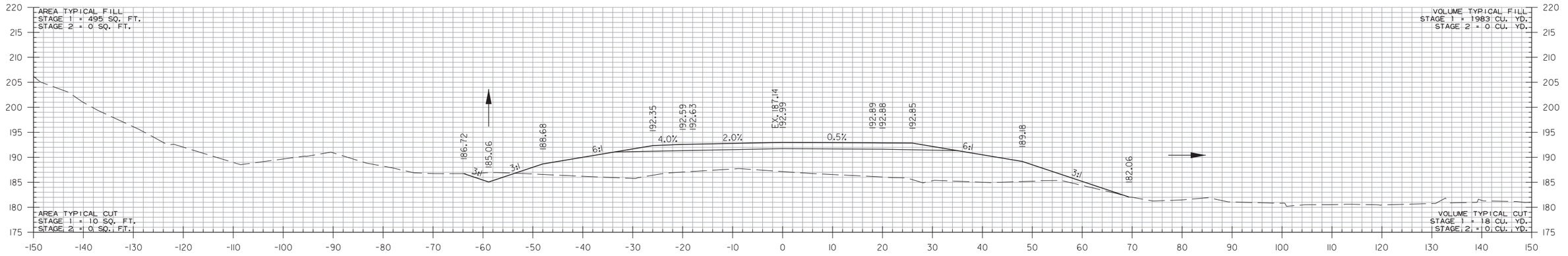
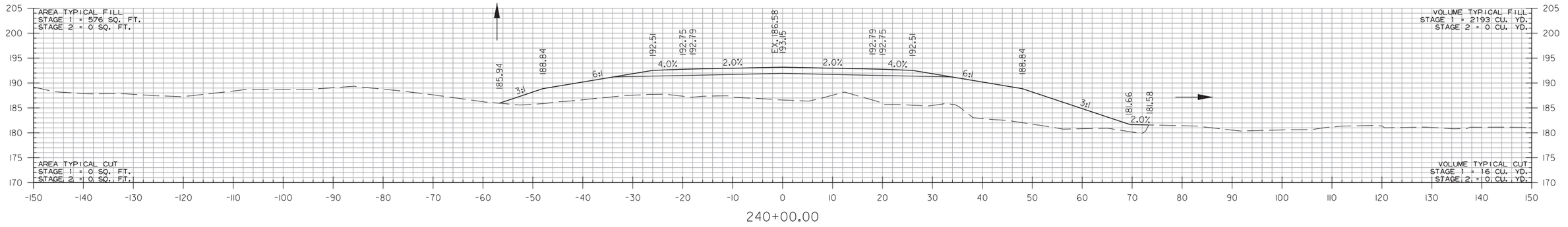
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	379	549
		CROSS SECTIONS				

NOTE:
STA. 235+00 TO STA. 245+00 REMOVE AND DISPOSE OF ILLEGAL DUMP MATERIAL. REFER TO THE SP - REMOVAL AND DISPOSAL OF ILLEGAL DUMP, REMOVAL AND DISPOSAL QUANTITY BOX, AND EARTHWORK QUANTITY BOX FOR BACKFILL QUANTITY.



STA. 240+10.00
BEGIN SP. DT. LT. -2.19%
ELEV. 187.03



STA. 240+66.32 BEGIN SUPERELEVATION

BYPASS
STA. 240+00 TO STA. 241+00

rnfortner 6/28/2022 10:38:03 AM
WORKSPACE: AHTD
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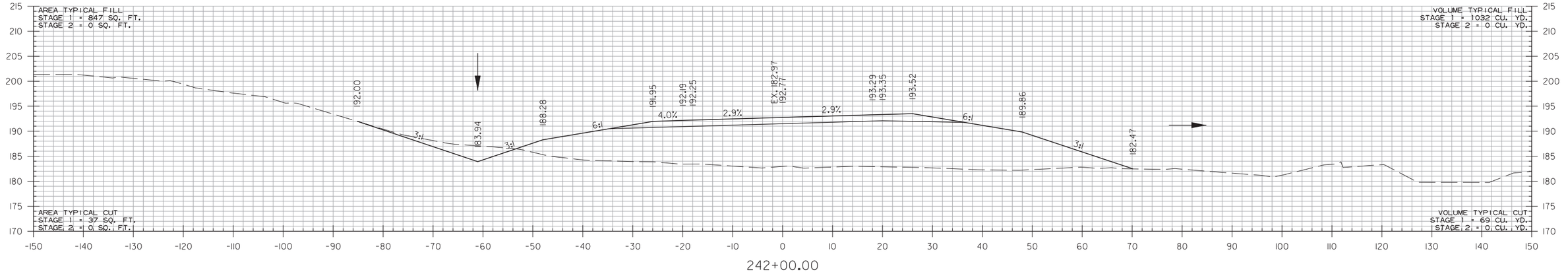
REVISED DATE:

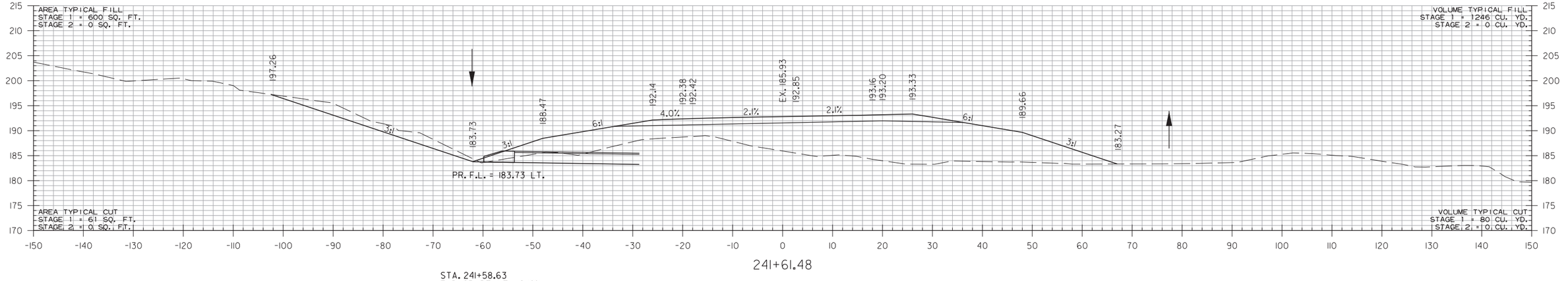
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	380	549
		CROSS SECTIONS				

NOTE:
STA. 235+00 TO STA. 245+00 REMOVE AND DISPOSE OF ILLEGAL DUMP MATERIAL. REFER TO THE SP - REMOVAL AND DISPOSAL OF ILLEGAL DUMP, REMOVAL AND DISPOSAL QUANTITY BOX, AND EARTHWORK QUANTITY BOX FOR BACKFILL QUANTITY.



242+00.00

STA. 241+87 CONSTRUCT
24" X 130' R.C. PIPE CULVERT
24° RT. FWD. SKEW
CLASS III (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 8 CFS DA = 1 ACRE
24" R.C. PIPE = 130 LIN. FT.
24" F.E.S. = 2 EA.



241+61.48

STA. 241+58.63
END SP. DT. LT. -2.19%
BEGIN SP. DT. LT. 0.39%
ELEV. 183.78

BYPASS
STA. 241+61 TO STA. 242+00

rnfortner 6/28/2022 10:38:03 AM
WORKSPACE: AHTD
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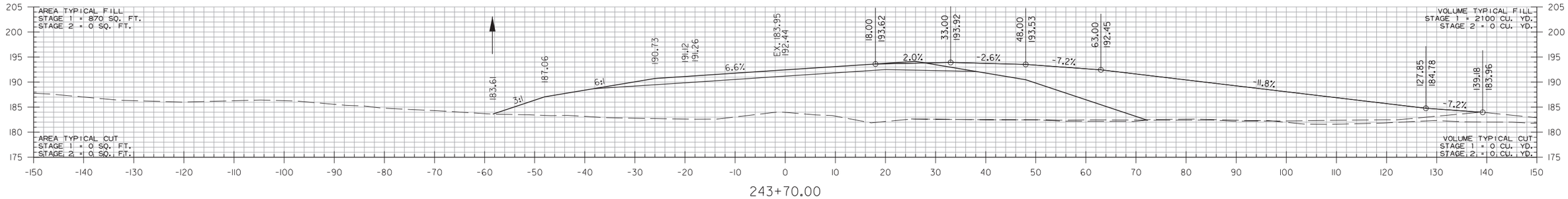
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	381	549
		CROSS SECTIONS				

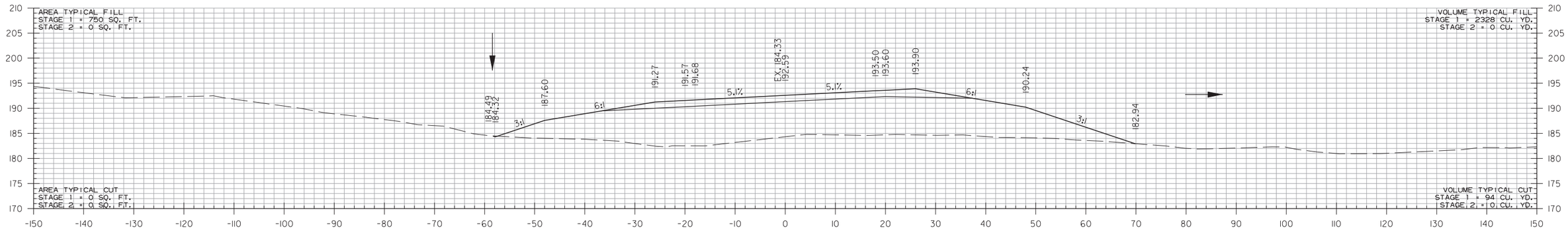
NOTE:
STA. 235+00 TO STA. 245+00 REMOVE AND DISPOSE OF ILLEGAL DUMP MATERIAL. REFER TO THE SP - REMOVAL AND DISPOSAL OF ILLEGAL DUMP, REMOVAL AND DISPOSAL QUANTITY BOX, AND EARTHWORK QUANTITY BOX FOR BACKFILL QUANTITY.



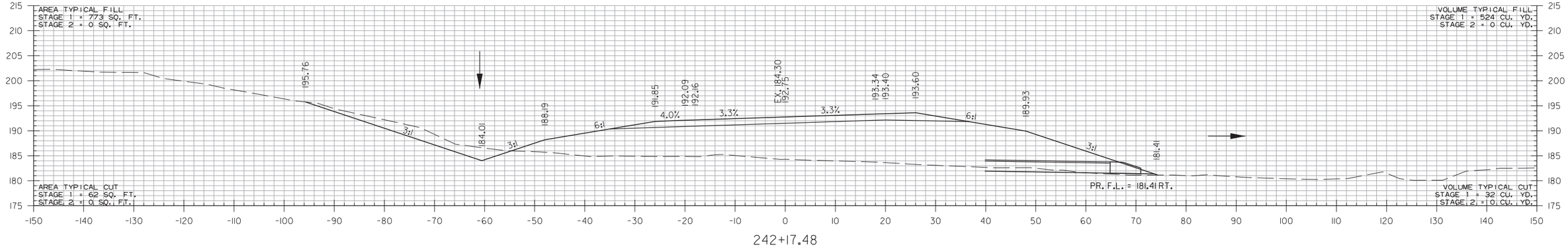
243+70.00

STA. 243+70 CONSTRUCT APPROACH ON RT. = 316 CU. YDS.

STA. 243+30.00
BEGIN SP. DT. LT. -2.19%
ELEV. 185.09



243+00.00



242+17.48

BYPASS
STA. 242+17 TO STA. 243+70

rnfortner 6/28/2022 10:38:03 AM
WORKSPACE: AHTD
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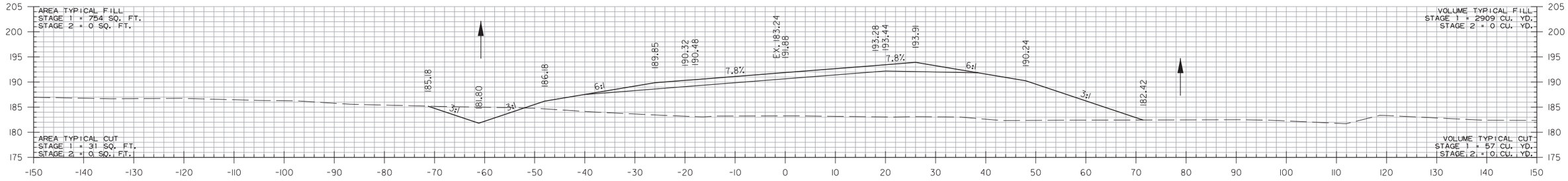
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	382	549
		CROSS SECTIONS				

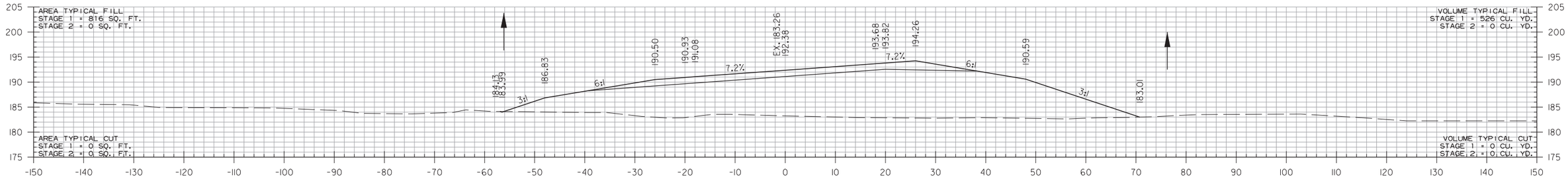
NOTE:
STA. 235+00 TO STA. 245+00 REMOVE AND DISPOSE OF ILLEGAL DUMP MATERIAL. REFER TO THE SP - REMOVAL AND DISPOSAL OF ILLEGAL DUMP, REMOVAL AND DISPOSAL QUANTITY BOX, AND EARTHWORK QUANTITY BOX FOR BACKFILL QUANTITY.



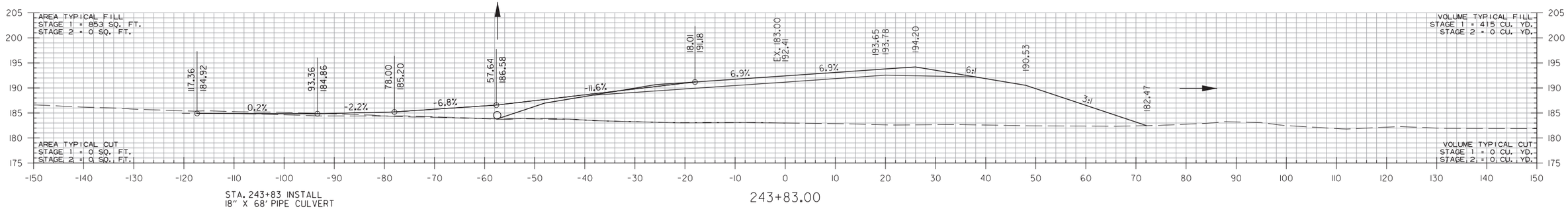
245+00.00

STA. 245+00.00
END SP. DT. LT. -2.19%
BEGIN SP. DT. LT. -0.37%
ELEV. 181.80

STA. 244+26.32 MAX SUPERELEVATION (0.078'/')



244+00.00



243+83.00

STA. 243+83 INSTALL
18" X 68' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 34 CU. YDS.

BYPASS
STA. 243+83 TO STA. 245+00

rnfortner 6/28/2022 10:38:03 AM
WORKSPACE: AHTD
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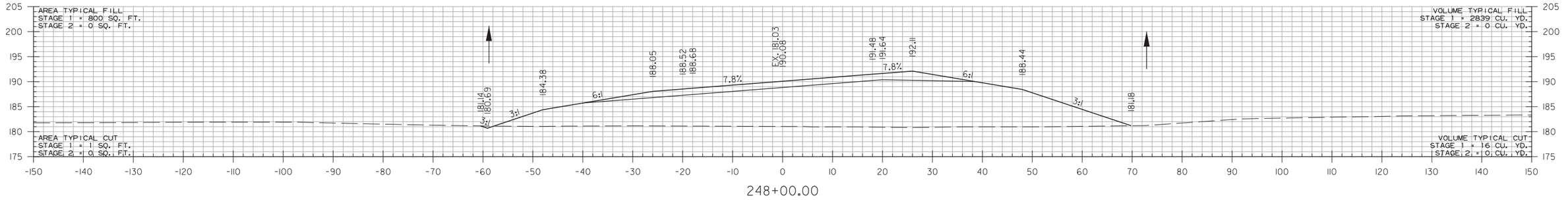
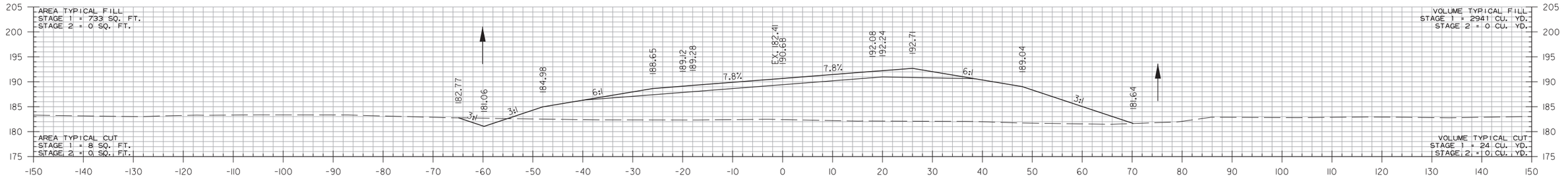
REVISED DATE:

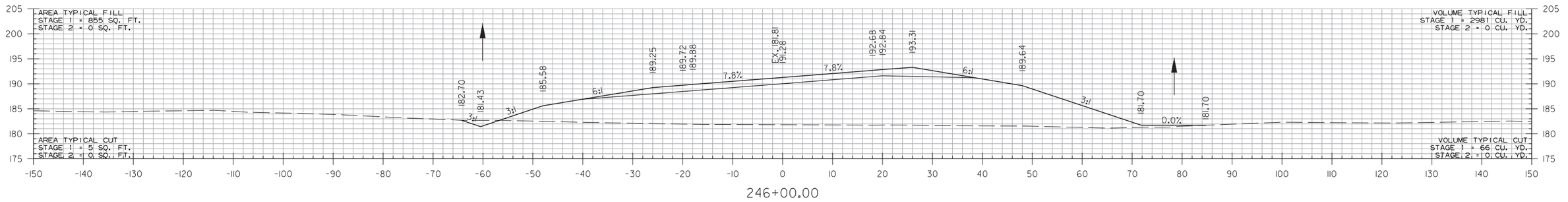
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	383	549
		CROSS SECTIONS				



248+00.00



247+00.00



246+00.00

BYPASS
STA. 246+00 TO STA. 248+00

rnfortner 6/28/2022 10:38:04 AM
WORKSPACE: AHTD
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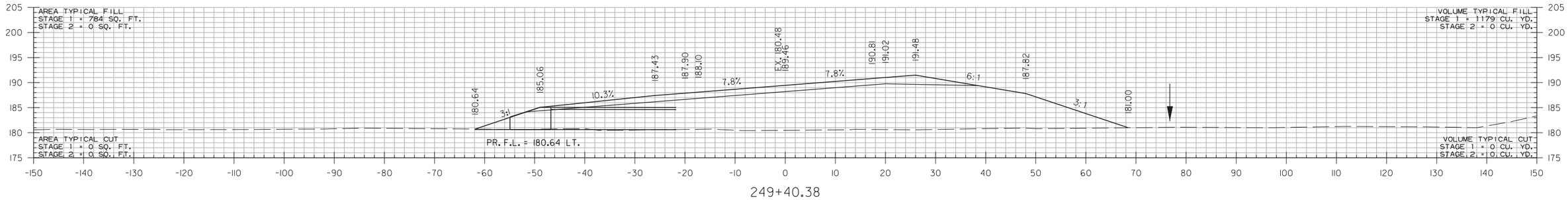
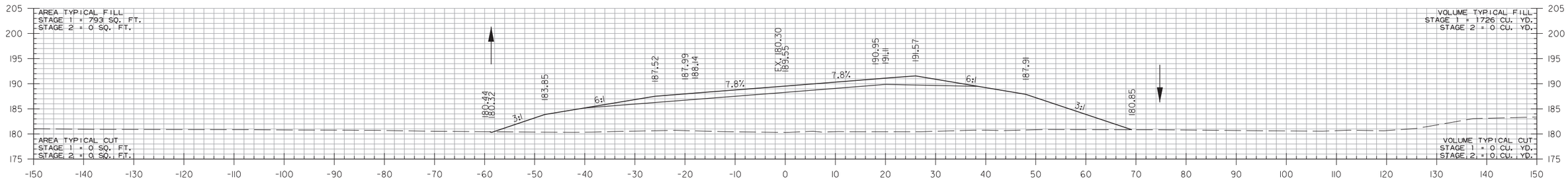
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	384	549
		CROSS SECTIONS				



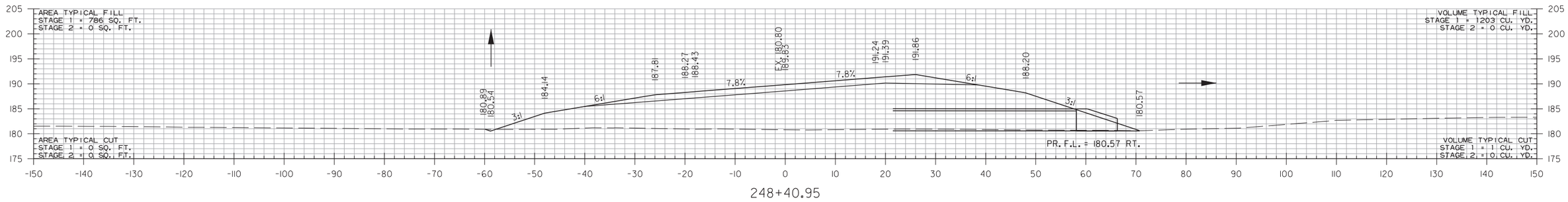
249+40.38

STA. 249+10.00
END SP. DT. LT. -0.37%
ELEV. 180.28



249+00.00

STA. 248+94 CONSTRUCT
DBL. 48" X 142' R.C. PIPE CULVERT
43° LT. FWD. SKEW
CLASS IV (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 130 CFS DA = 56 ACRES
48" R.C. PIPE = 284 LIN. FT.
48" F.E.S. = 4 EA.



248+40.95

BYPASS
STA. 248+41 TO STA. 249+40

rnfortner 6/28/2022 10:38:04 AM
WORKSPACE: AHTD
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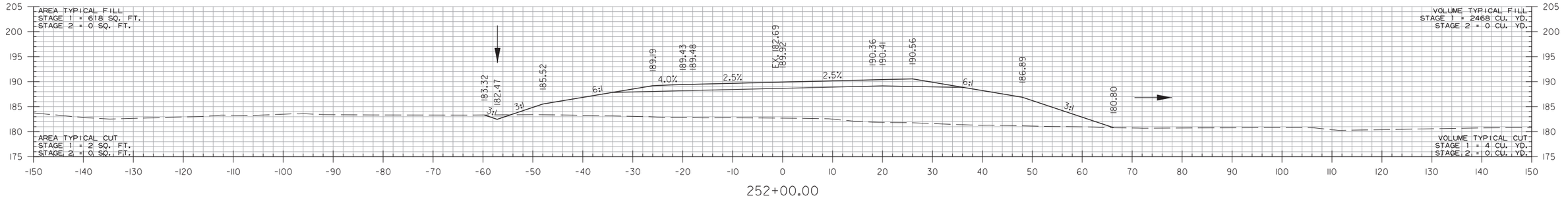
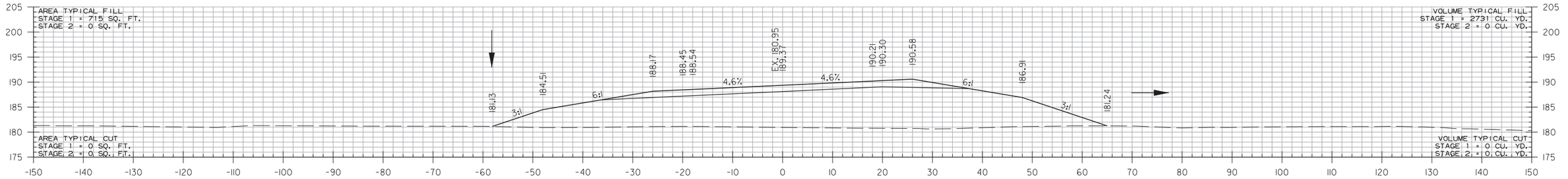
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	385	549
		CROSS SECTIONS				

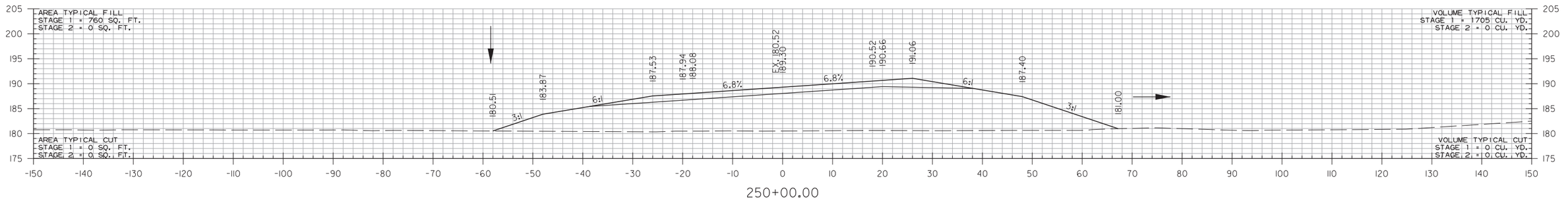


252+00.00

STA. 251+10.00
BEGIN SP. DT. LT. 1.50%
ELEV. 181.12



251+00.00



250+00.00

STA. 249+53.34 MAX SUPERELEVATION (0.078'/')

BYPASS
STA. 250+00 TO STA. 252+00

rnfortner 6/28/2022 10:38:04 AM
WORKSPACE: AHTD
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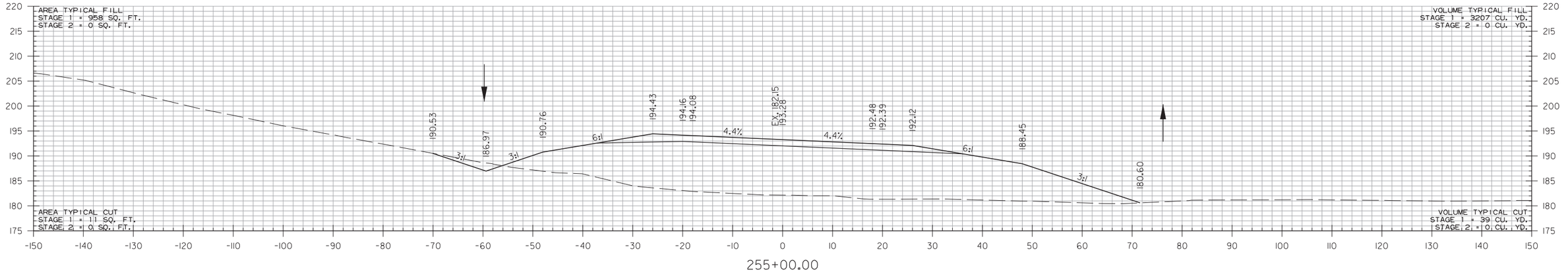
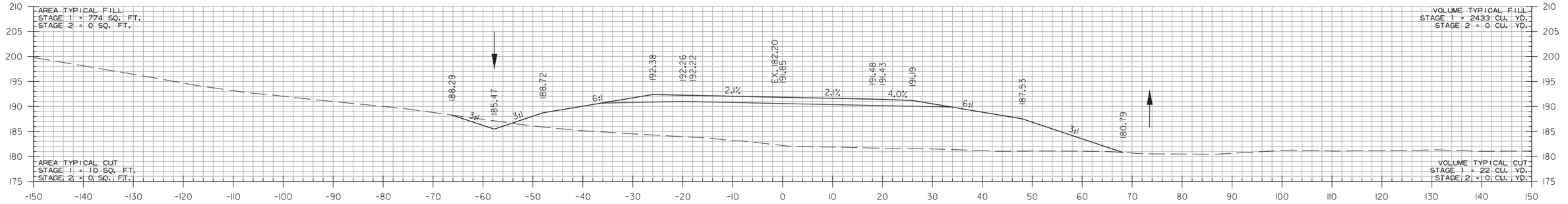
REVISED DATE:

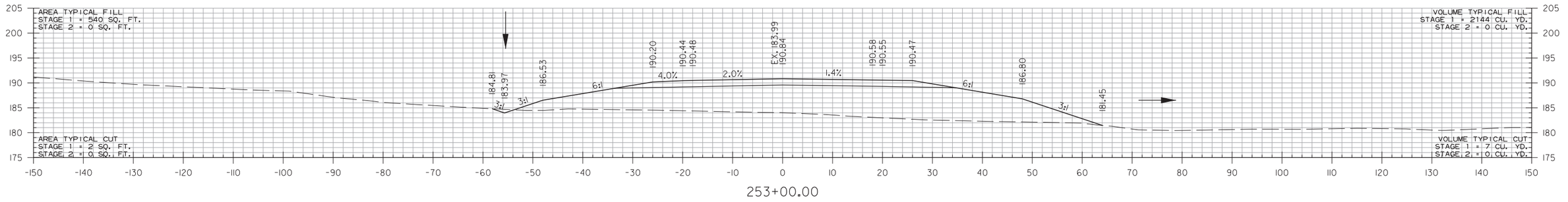
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	386	549
		CROSS SECTIONS				

STA. 255+00.00
END SP. DT. LT. 1.50%
BEGIN SP. DT. LT. 5.61%
ELEV. 186.97





STA. 253+13.35 BEGIN SUPERELEVATION
STA. 253+13.34 END SUPERELEVATION



BYPASS
STA. 253+00 TO STA. 255+00

rnfortner 6/28/2022 10:38:04 AM
WORKSPACE: AHTD
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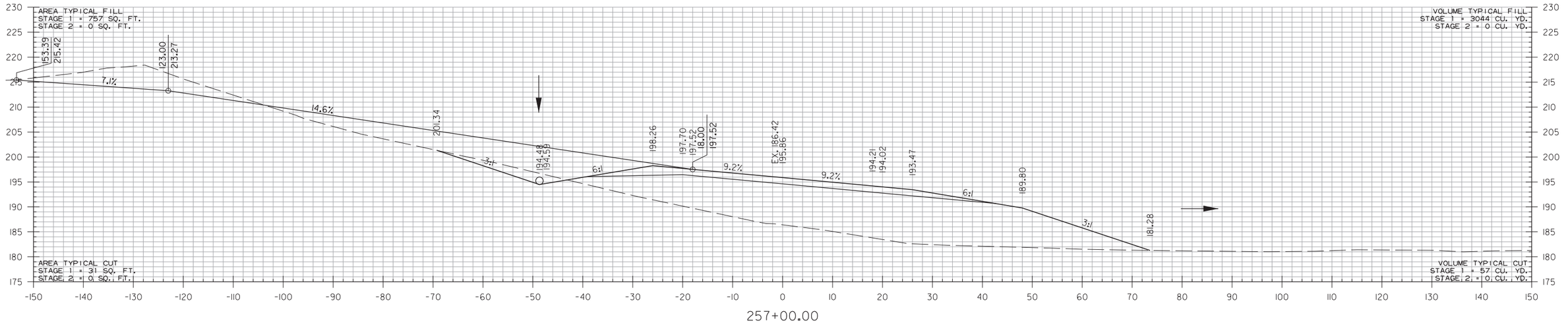
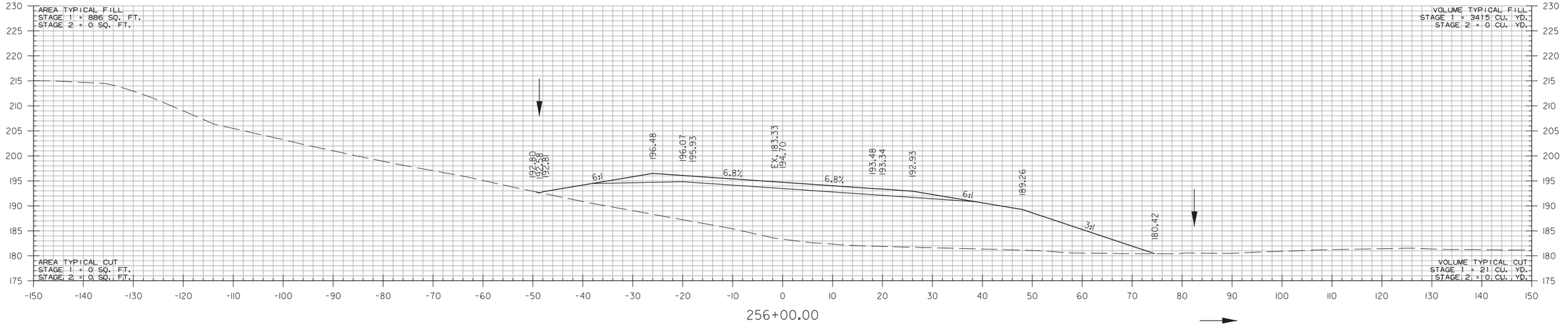
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	387	549
		CROSS SECTIONS				



STA. 257+00 INSTALL
18" X 64' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 303 CU. YDS.

STA. 256+20.00
END SP. DT. LT. 5.61%
ELEV. 193.70

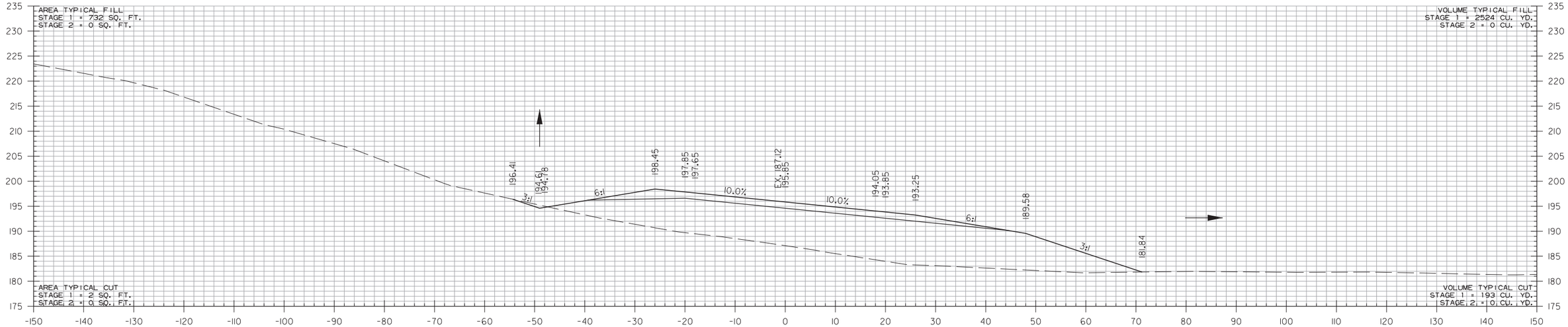


BYPASS
STA. 256+00 TO STA. 257+00

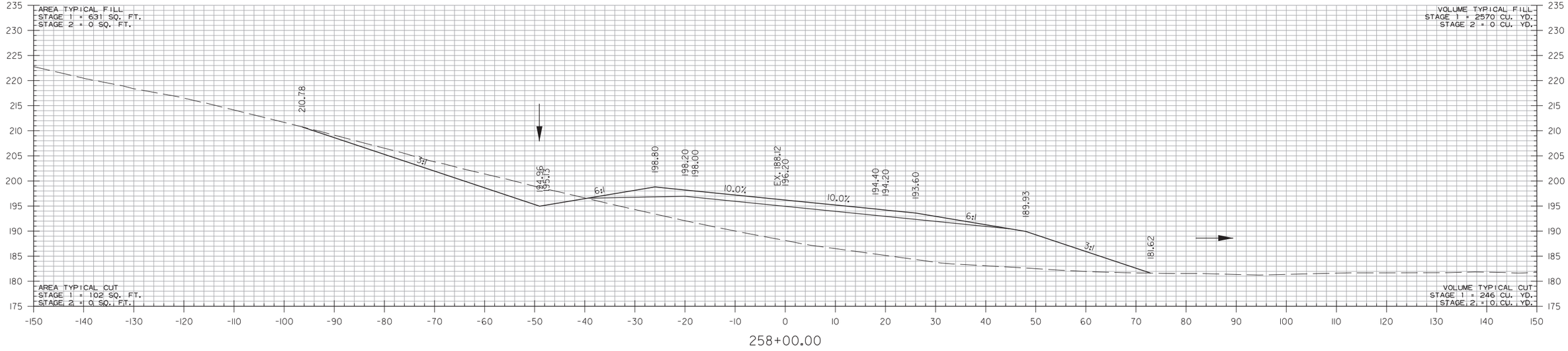
rnfortner 6/28/2022 10:38:04 AM
WORKSPACE: AHTD
L:\2017\170755 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	388	549
		CROSS SECTIONS				

STA. 259+10.00
BEGIN SP. DT. LT. -6.20%
ELEV. 194.55



259+00.00



258+00.00

STA. 257+33.34 MAX SUPERELEVATION (0.100'/')

BYPASS
STA. 258+00 TO STA. 259+00

rnfortner 6/28/2022 10:38:05 AM
WORKSPACE: AHTD
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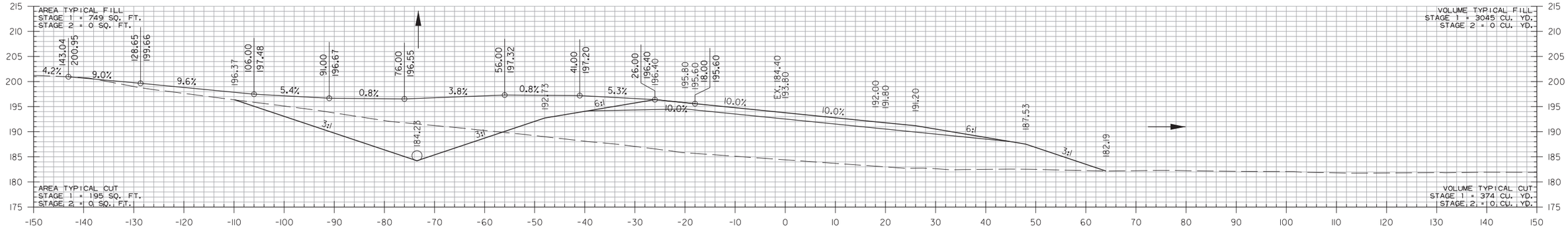
REVISED DATE:

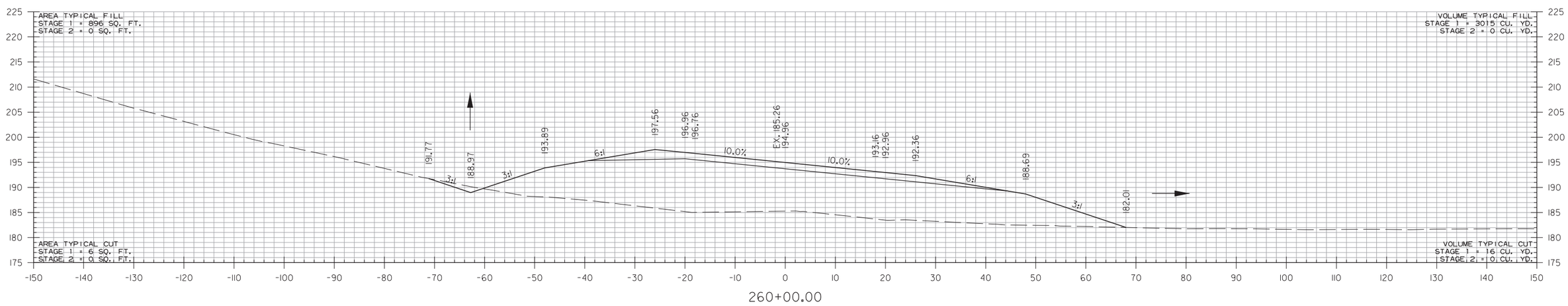
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	389	549
		CROSS SECTIONS				



261+00.00

STA. 261+00 INSTALL
18" X 88' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 345 CU. YDS.

STA. 260+75.00
END SP. DT. LT. -6.20%
BEGIN SP. DT. LT. -0.34%
ELEV. 184.32

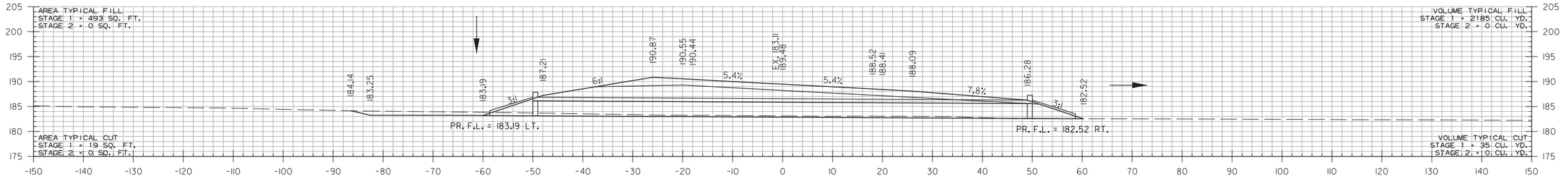


260+00.00

BYPASS
STA. 260+00 TO STA. 261+00

rnfortner 6/28/2022 10:38:05 AM
WORKSPACE: AHTD
L:\20\T\70\7515 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

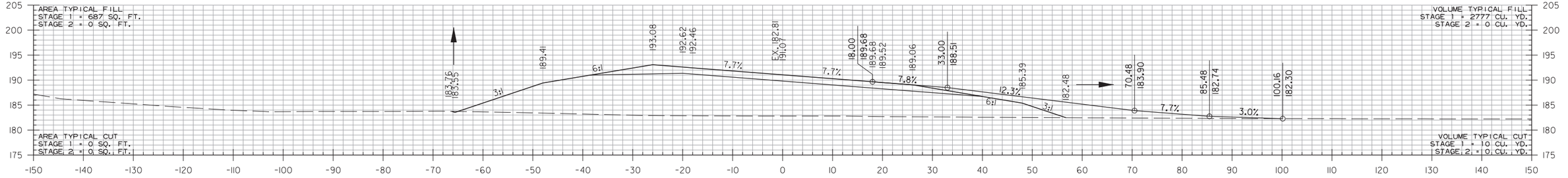
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	390	549
		CROSS SECTIONS				



264+00.00

STA. 263+87.03
END SP. DT. LT. -0.34%
ELEV. 183.25

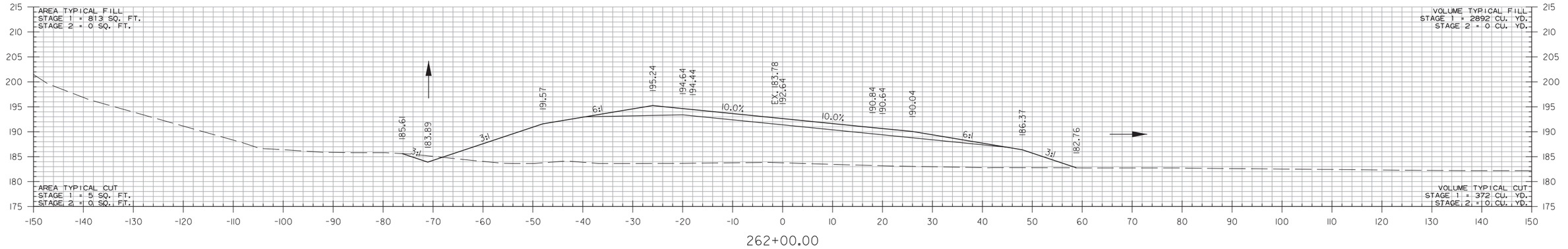
STA. 264+00 CONSTRUCT
SEXT. 6' X 3' X 100' R.C. BOX CULVERT
WITH 3:1 WINGS LT. & RT.
Q50 = 67 CFS DA = 22 ACRES
SPAN = 40'-4"



263+00.00

STA. 262+05.00 MAX SUPERELEVATION (0.100'/')

STA. 263+00 CONSTRUCT
APPROACH ON RT. = 37 CU. YDS.

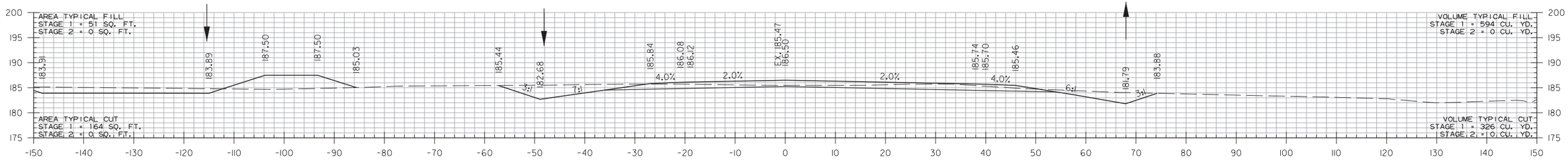


262+00.00

BYPASS
STA. 262+00 TO STA. 264+00

rnfortner 6/28/2022 10:38:05 AM
WORKSPACE: AHTD
L:\2017\170175 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

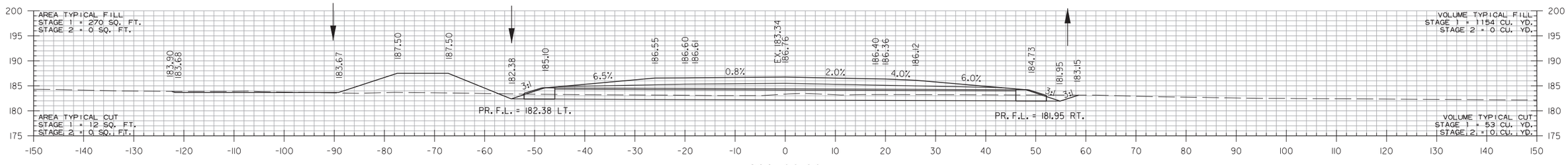
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	391	549
		CROSS SECTIONS				



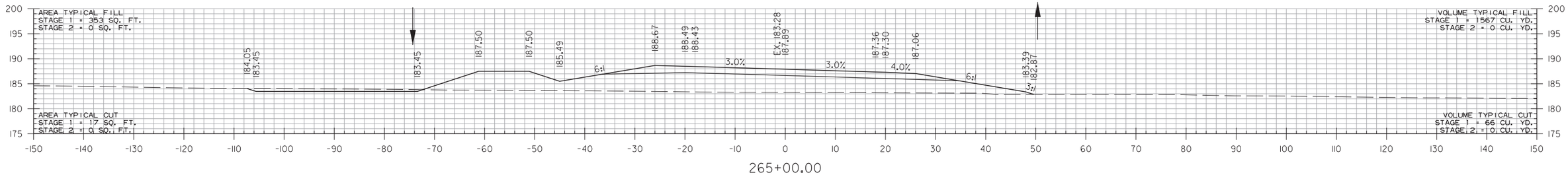
267+00.00

STA. 266+25.00 END SUPERELEVATION

STA. 266+00 CONSTRUCT
24" X 92' R.C. PIPE CULVERT
CLASS V (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 4 CFS DA = 1 ACRE
24" R.C. PIPE = 92 LIN. FT.
24" F.E.S. = 2 EA.



266+00.00



265+00.00

BYPASS
STA. 265+00 TO STA. 267+00

rnfortner 6/28/2022 10:38:05 AM
WORKSPACE: AHTD
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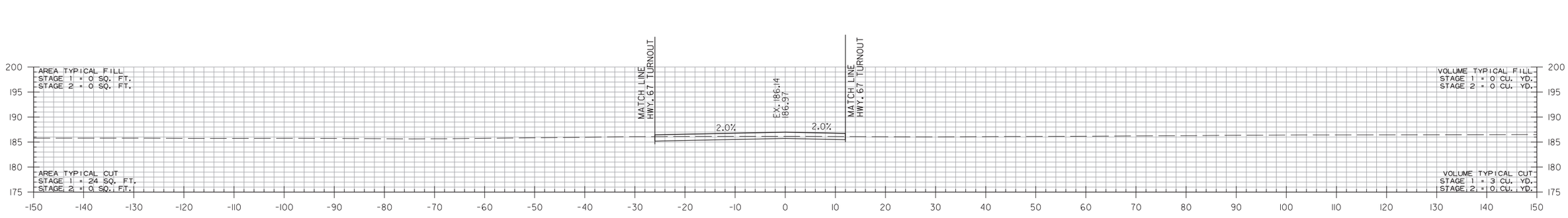
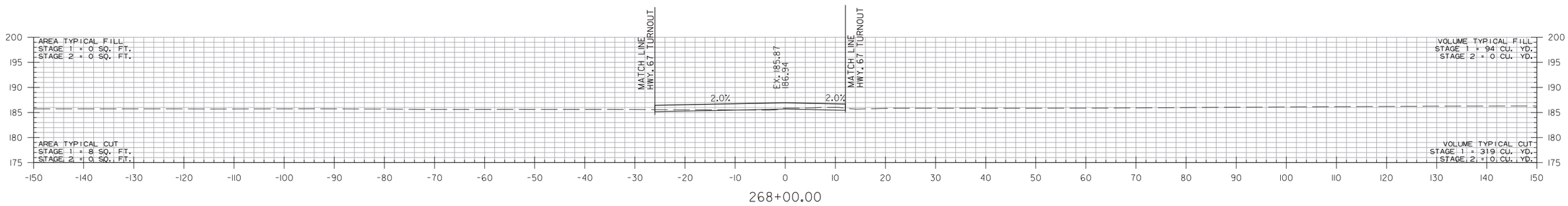
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	392	549
		CROSS SECTIONS				



268+05.79

STA. 268.05.79 END BYPASS

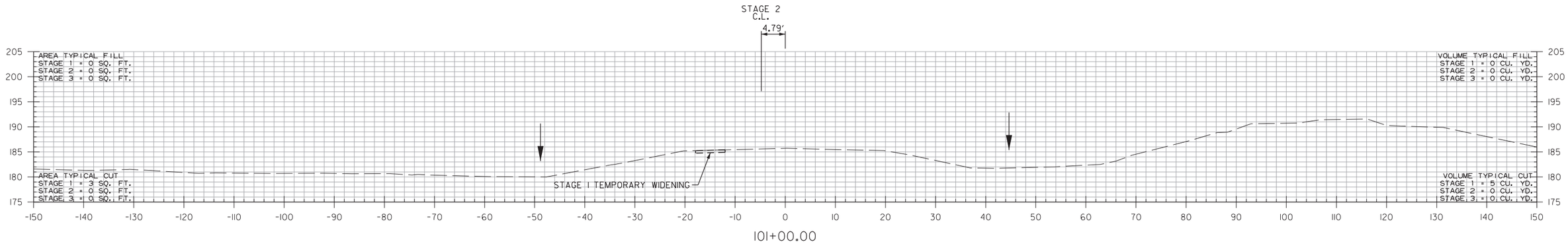


268+00.00

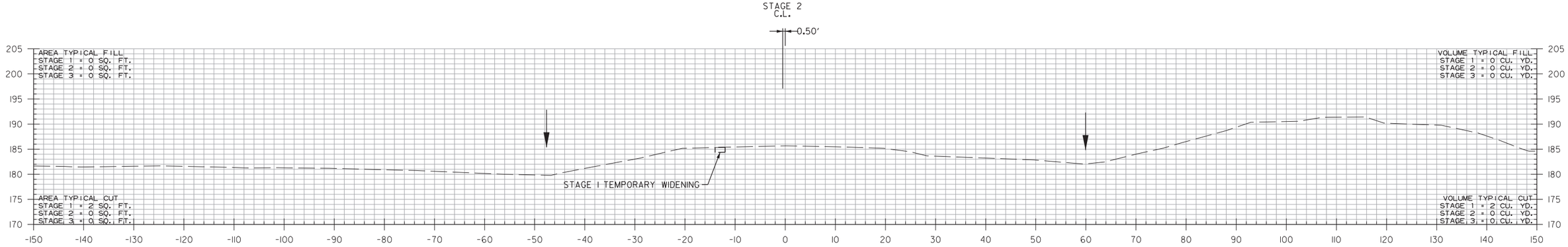
BYPASS
STA. 268+00 TO STA. 268+06

rnfortner 6/28/2022 10:38:05 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Bypass.dgn
REVISED DATE:

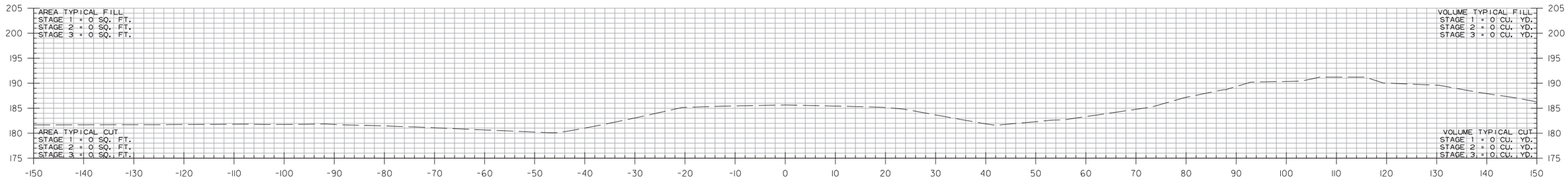
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	393	549
		CROSS SECTIONS				



101+00.00



100+50.00



100+00.00

HWY. 67
STA. 100+00 TO STA. 101+00

rnfortner 6/28/2022 10:38:06 AM
WORKSPACE: AHTD
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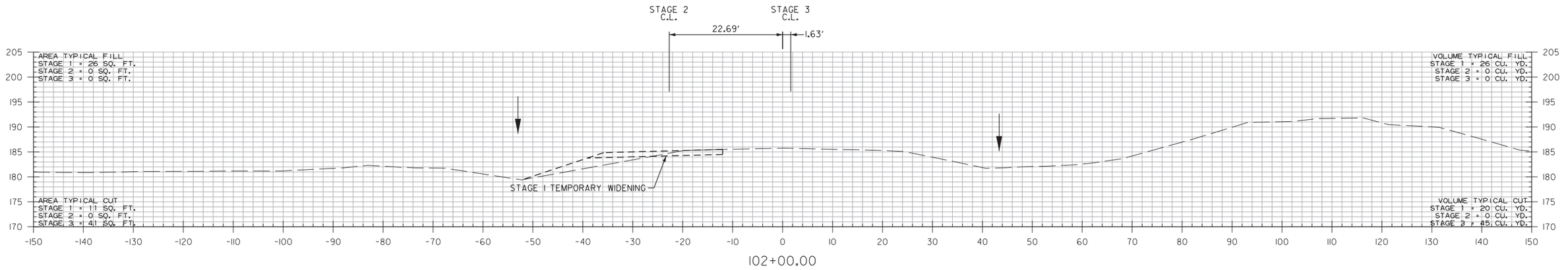
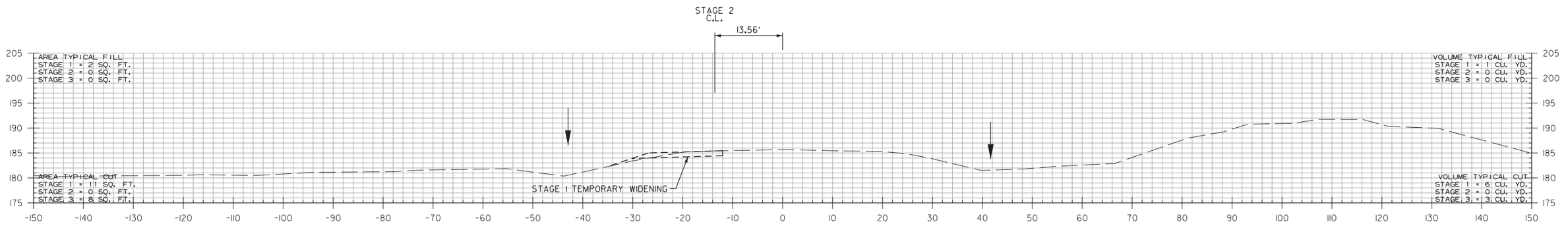
REVISED DATE:

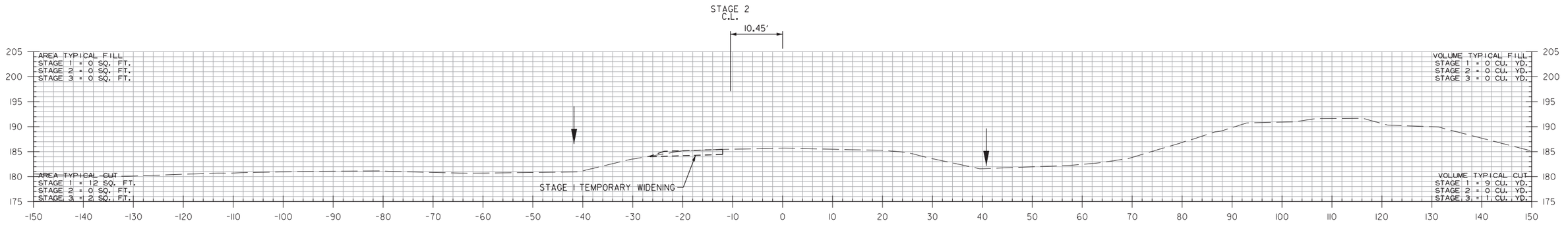
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	394	549
		CROSS SECTIONS				



102+00.00



101+50.00



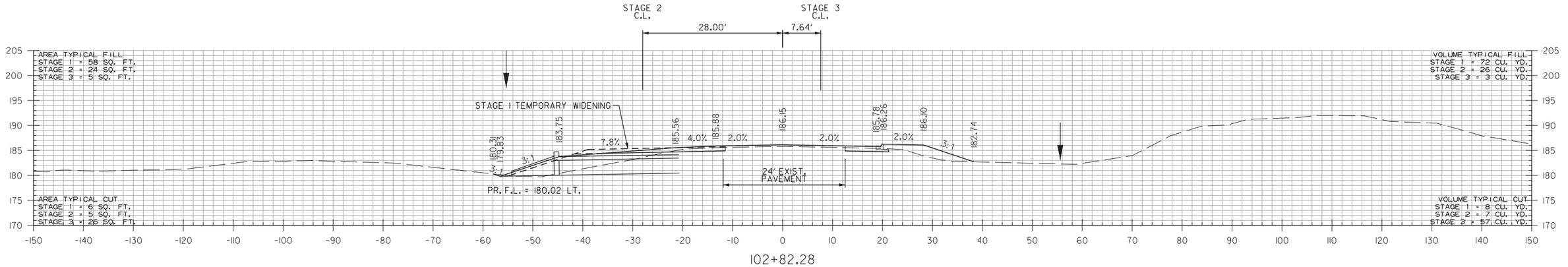
101+35.00

STA. 101+35.00 BEGIN 100' TRANSITION

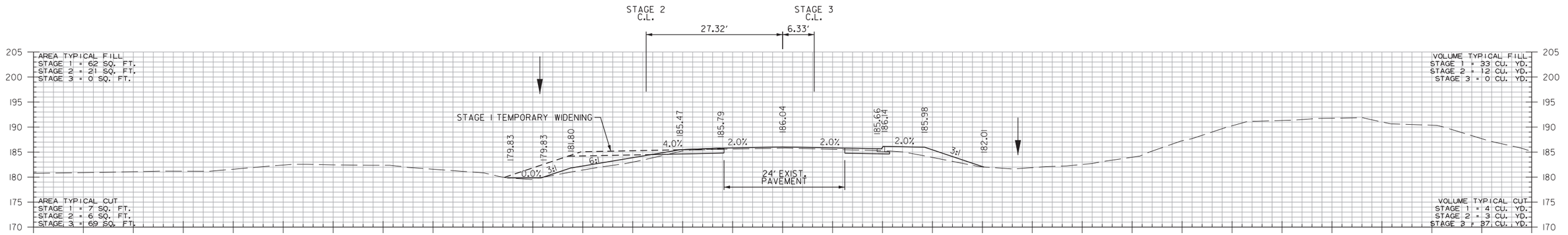
HWY. 67
STA. 101+35 TO STA. 102+00

rnfortner 6/28/2022 10:38:06 AM
WORKSPACE: AHTD
L:\20\T\170\7515 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy.67.dgn
REVISED DATE:

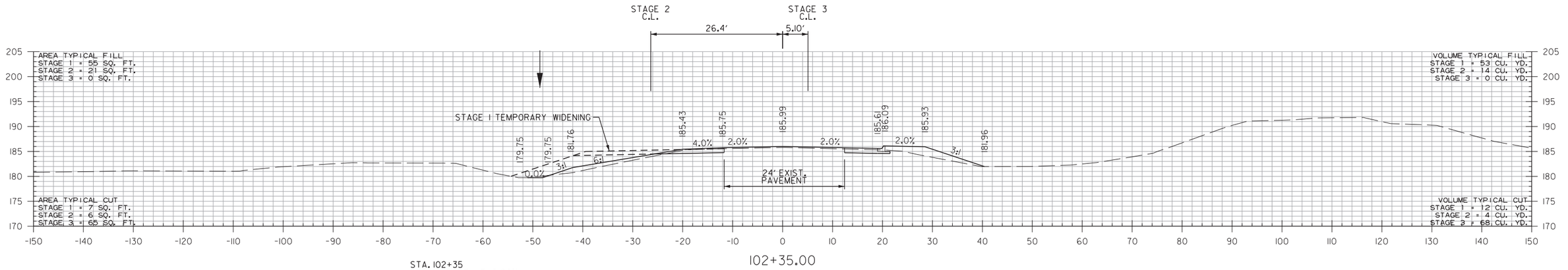
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	395	549
		CROSS SECTIONS				



102+82.28



102+50.00



102+35.00

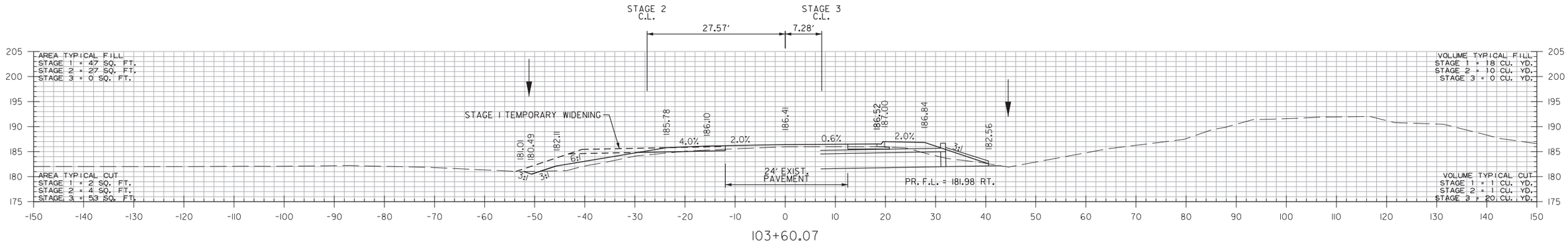
STA. 102+35
BEGIN SP. DT. LT. 0.60%
ELEV. 179.74

STA. 102+35.00 BEGIN HWY. 67

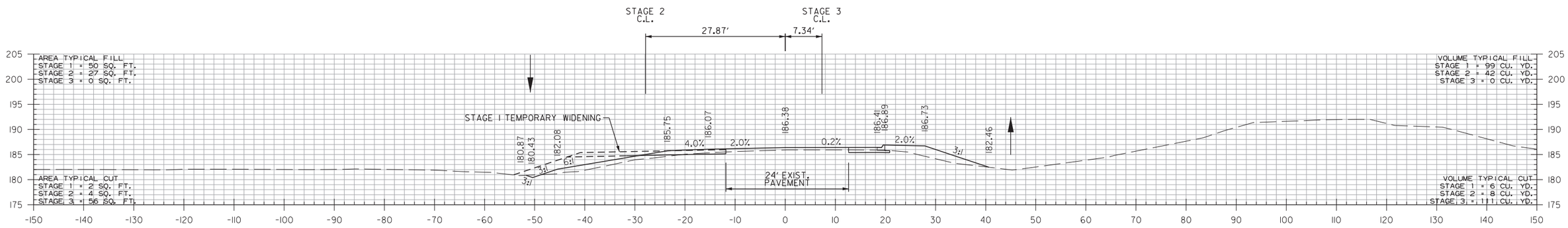
HWY. 67
STA. 102+35 TO STA. 102+82

rnfortner 6/28/2022 10:38:07 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy_67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	396	549
		CROSS SECTIONS				

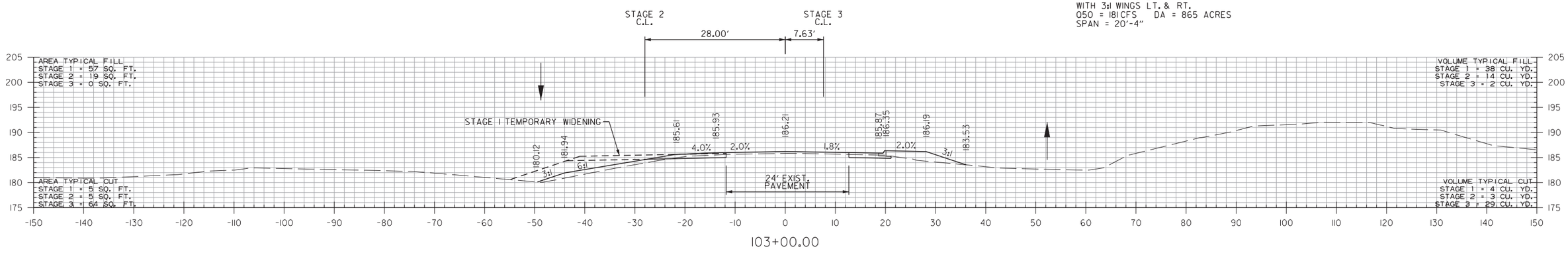


103+60.07



103+50.00

STA. 103+28 CONSTRUCT
TRP. 6' X 3' X 110' R.C. BOX CULVERT
45° RT. FWD. SKEW
WITH 3:1 WINGS LT. & RT.
Q50 = 181 CFS DA = 865 ACRES
SPAN = 20'-4"



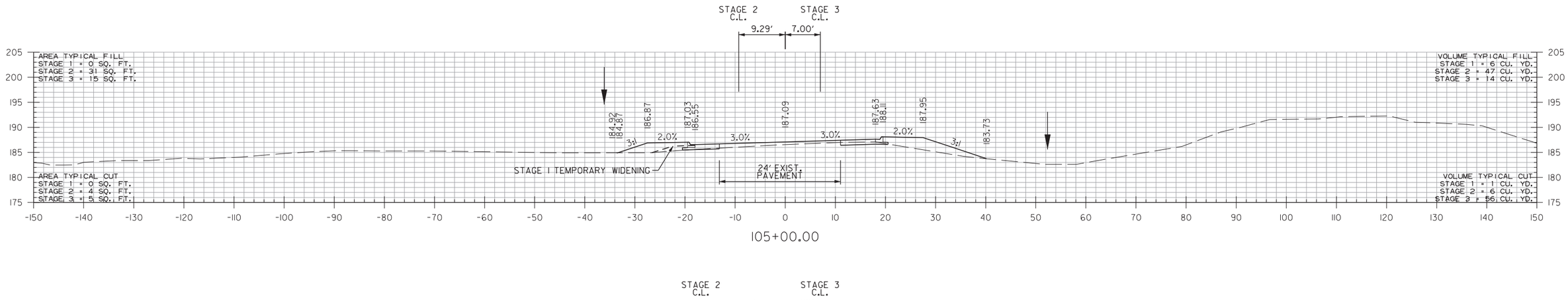
103+00.00

STA. 102+96.19 BEGIN SUPERELEVATION

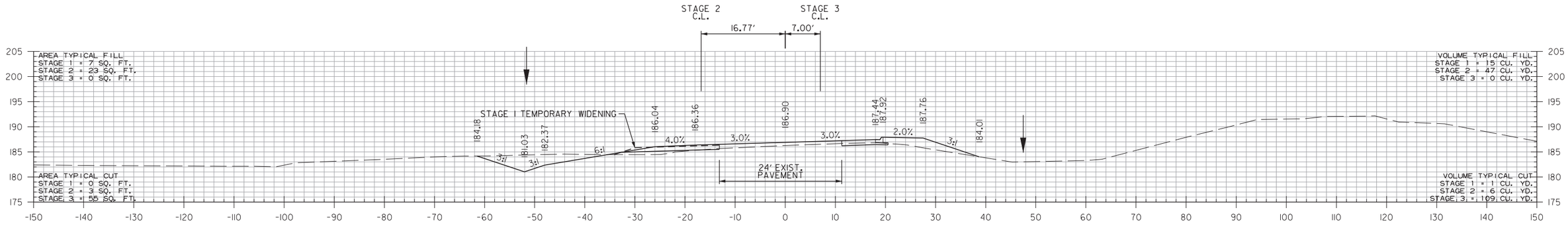
HWY. 67
STA. 103+00 TO STA. 103+60

rnfortner 6/28/2022 10:38:07 AM
WORKSPACE: AHTD
L:\201\170175 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy.67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	397	549
		CROSS SECTIONS				



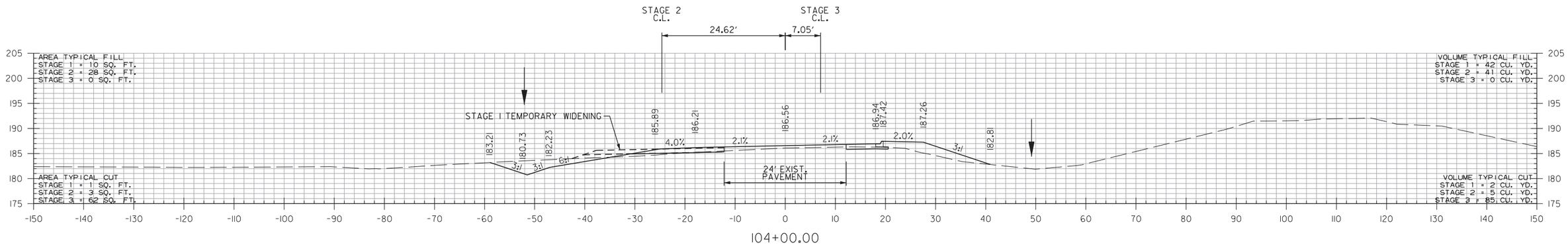
105+00.00



104+50.00

STA. 104+50
END SP. DT. LT. 0.60%
ELEV. 181.03

STA. 104+46.19 MAX SUPERELEVATION (0.030'/')



104+00.00

HWY. 67
STA. 104+00 TO STA. 105+00

rnfortner 6/28/2022 10:38:07 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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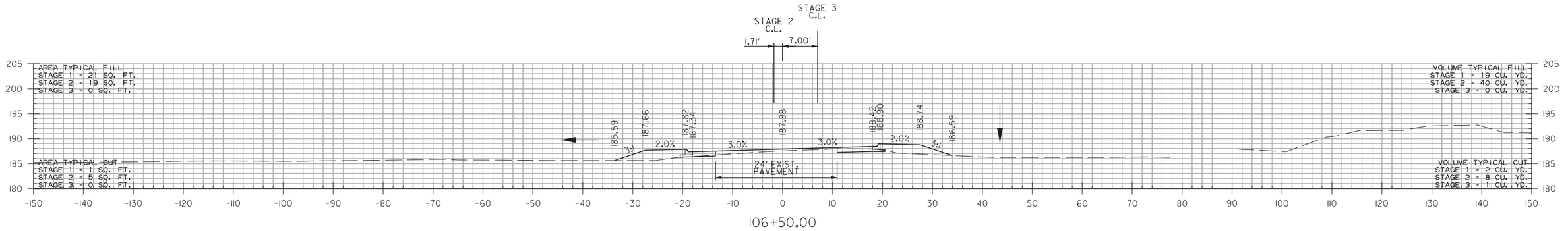
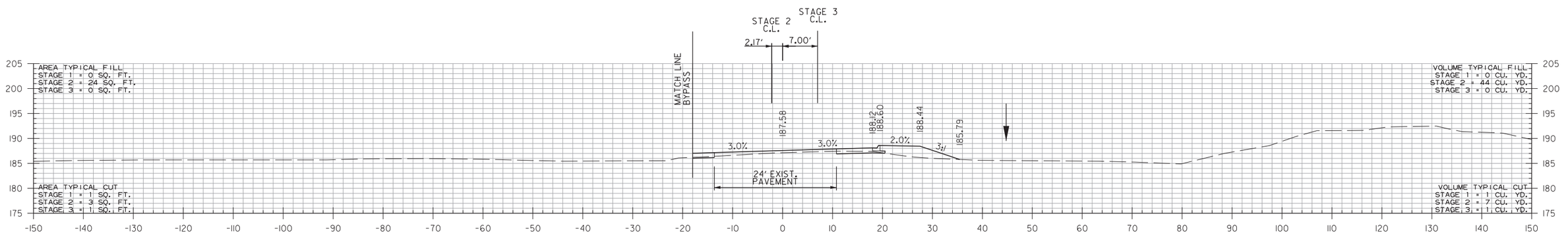
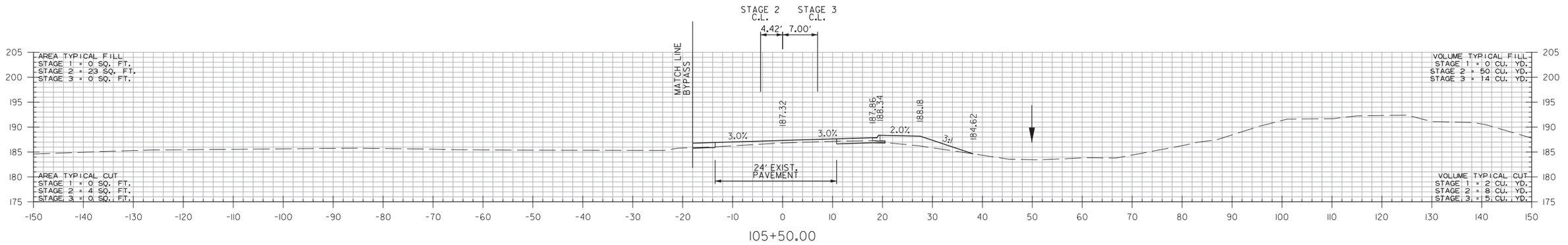
		CROSS SECTIONS				



106+50.00



106+00.00



105+50.00

HWY. 67
STA. 105+50 TO STA. 106+50

rnfortner 6/28/2022 10:38:07 AM
WORKSPACE: AHTD
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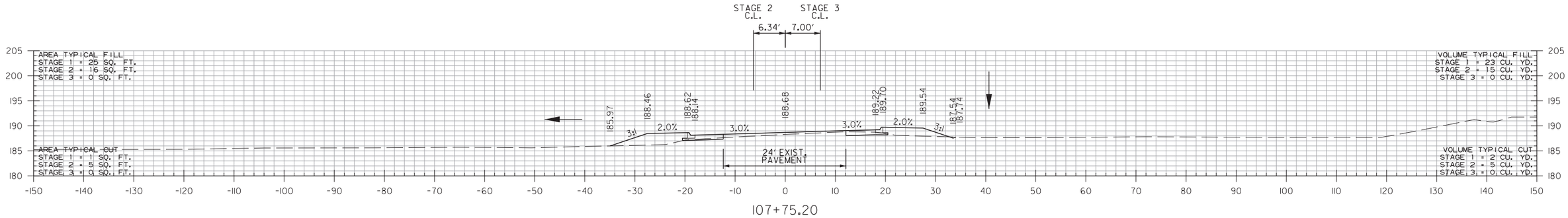
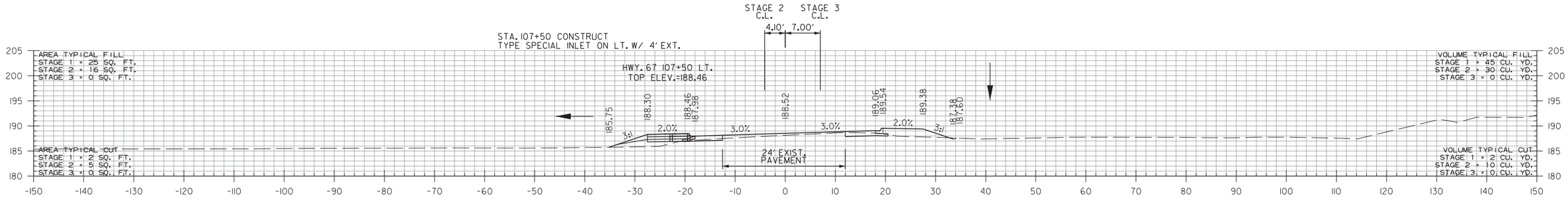
REVISED DATE:

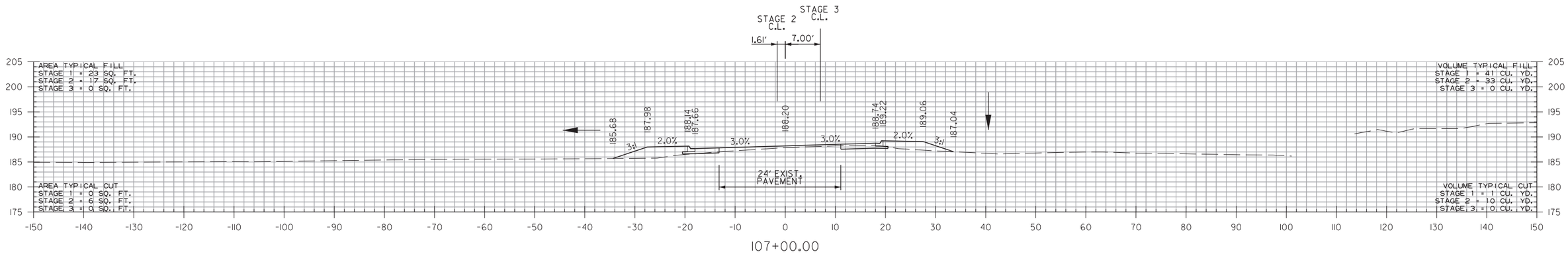
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	399	549
		CROSS SECTIONS				



107+75.20



107+50.00



107+00.00

HWY. 67
STA. 107+00 TO STA. 107+75

rnfortner 6/28/2022 10:38:07 AM
WORKSPACE: AHTD
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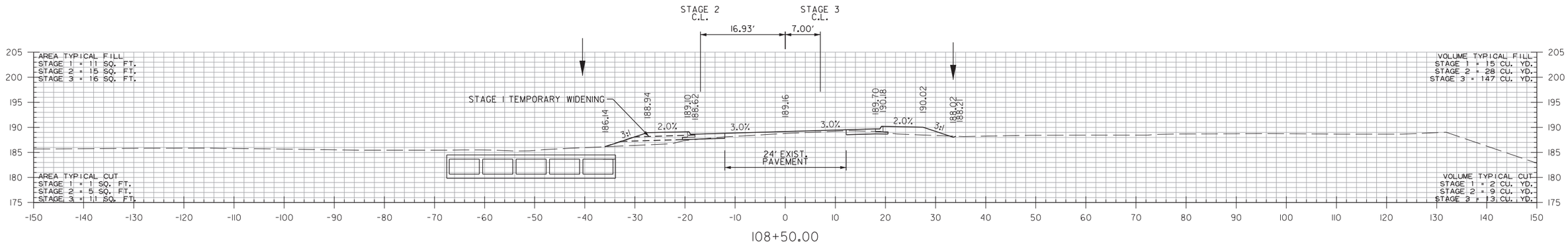
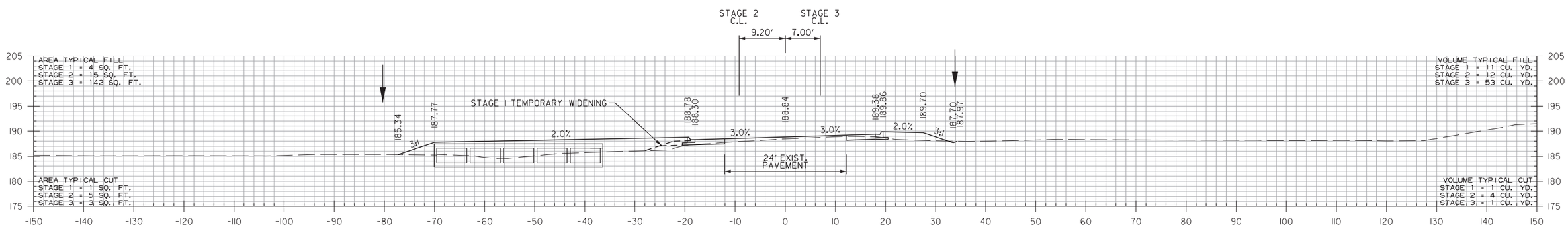
REVISED DATE:

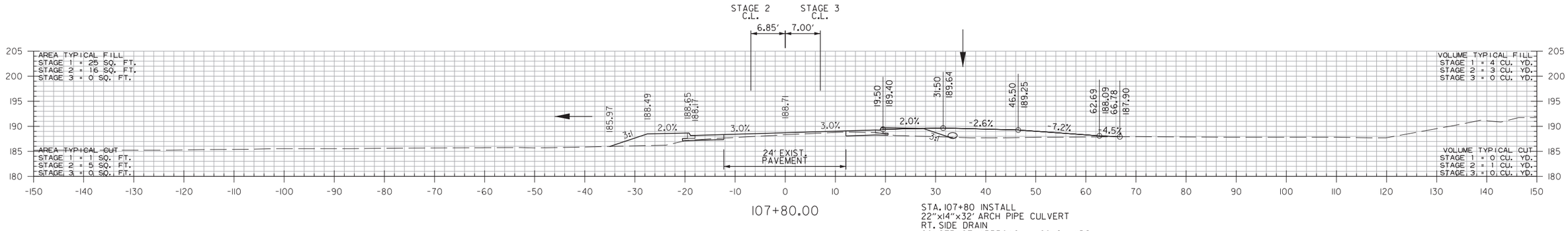
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	400	549
		CROSS SECTIONS				



108+50.00



108+00.00



107+80.00

STA. 107+80 INSTALL
22"x14"x32' ARCH PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPROACH = 28 CU. YDS.

HWY. 67
STA. 107+80 TO STA. 108+50

rnfortner 6/28/2022 10:38:08 AM
WORKSPACE: AHTD
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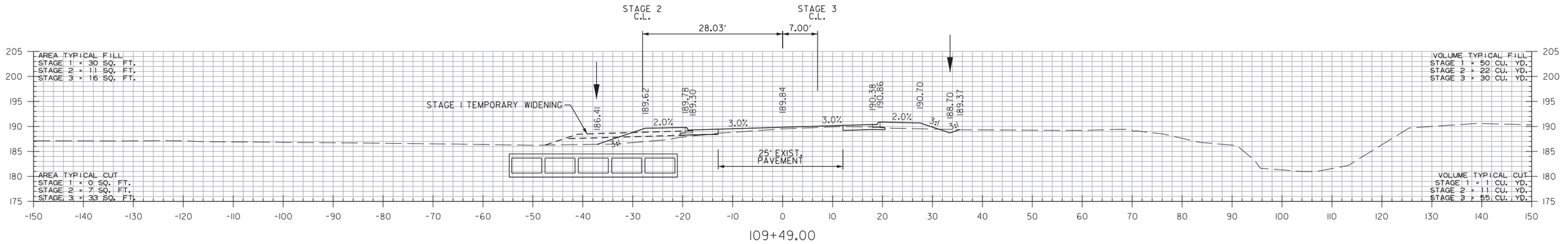
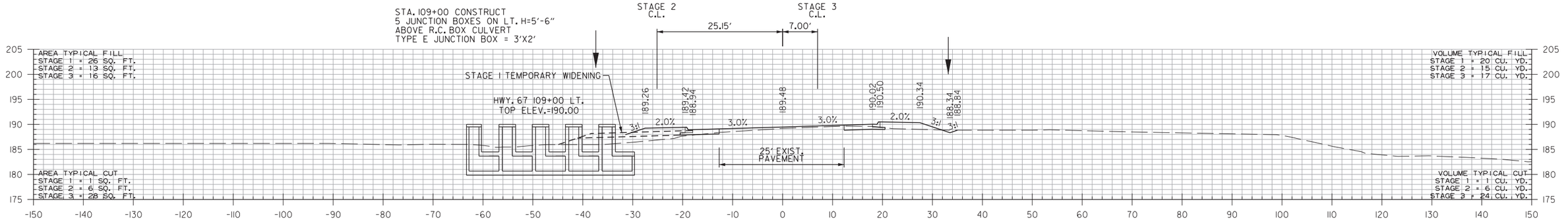
REVISED DATE:

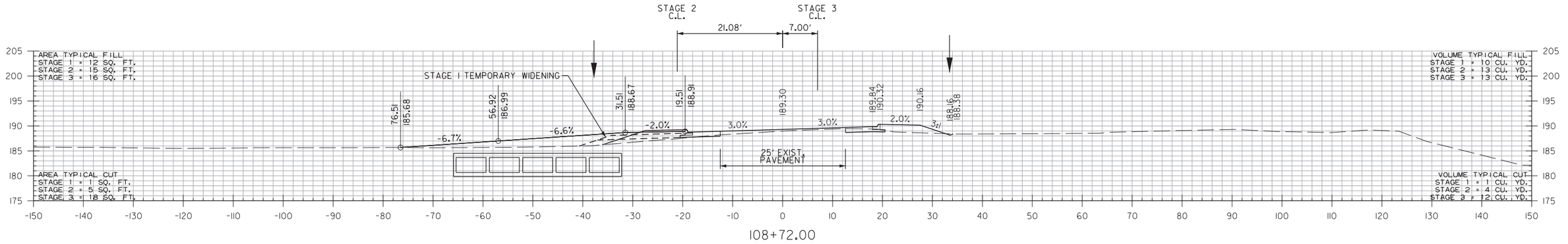
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	401	549
		CROSS SECTIONS				



109+49.00



109+00.00



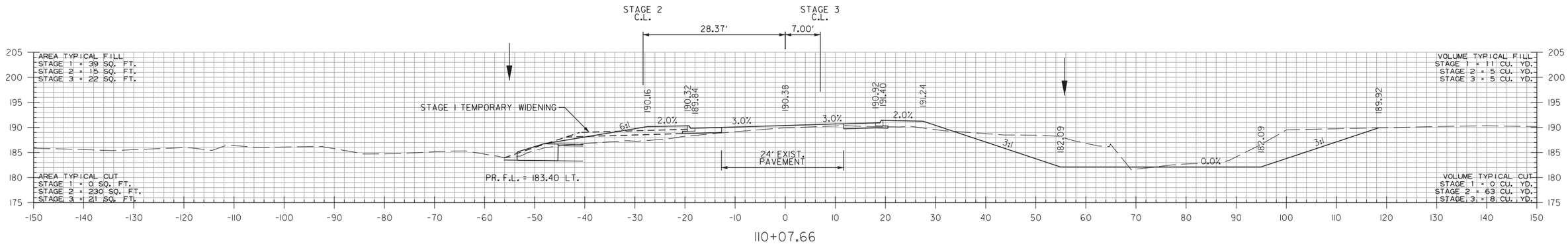
108+72.00

STA. 108+72 CONSTRUCT
APPROACH ON LT. = 41CU. YDS.

HWY. 67
STA. 108+72 TO STA. 109+49

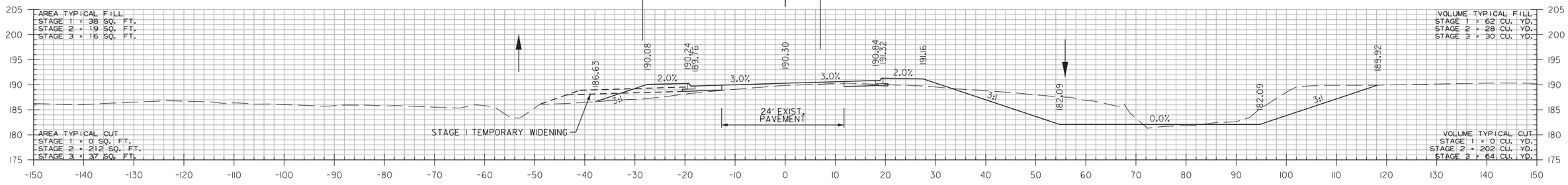
rnfortner 6/28/2022 10:38:16 AM
WORKSPACE: AHTD
L:\2017\170715 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy. 67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	402	549
		CROSS SECTIONS				



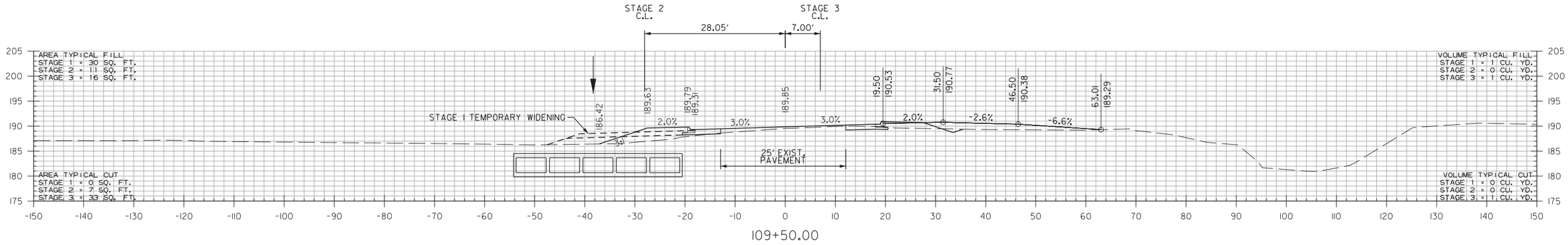
110+07.66

STA. 110+00 CONSTRUCT
QUINT. 6' X 3' X 284' R.C. BOX CULVERT
45° RT. FWD. SKEW
WITH 3:1 WINGS LT. & RT.
Q50 = 666 CFS DA = 863 ACRES
SPAN = 33'-8"



110+00.00

STA. 110+00
BEGIN SP. DT. RT. 0.06%
ELEV. 182.09



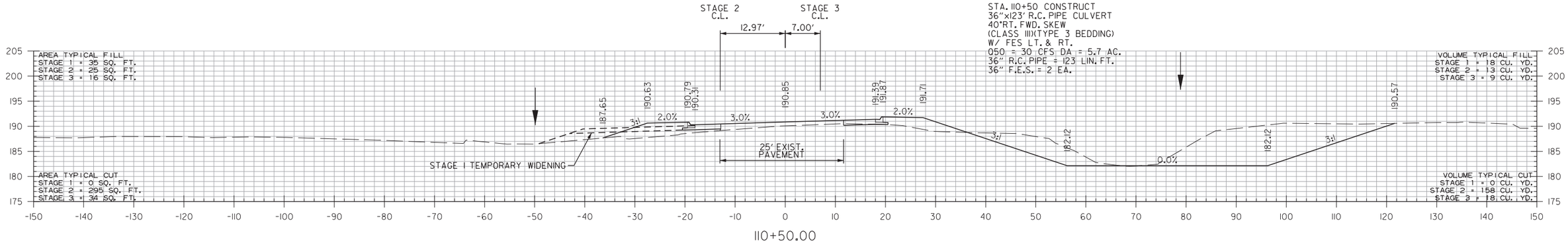
109+50.00

STA. 109+50 CONSTRUCT
APPROACH ON RT. = 17 CU. YDS.

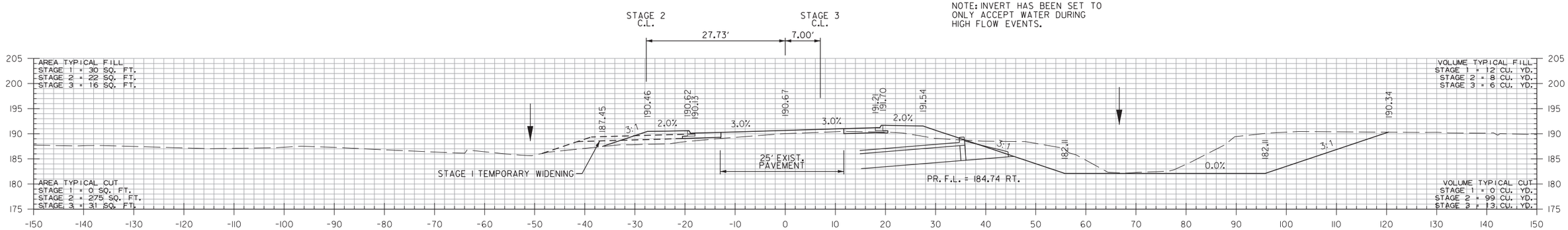
HWY. 67
STA. 109+50 TO STA. 110+08

rnfortner 6/28/2022 10:38:16 AM
WORKSPACE: AHTD
L:\20\T\70\7515 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy_67.dgn
REVISED DATE:

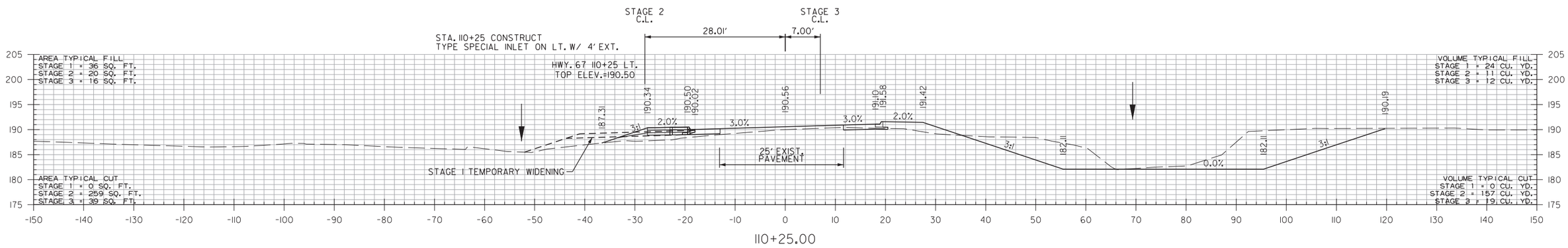
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	403	549
		CROSS SECTIONS				



110+50.00



110+35.12

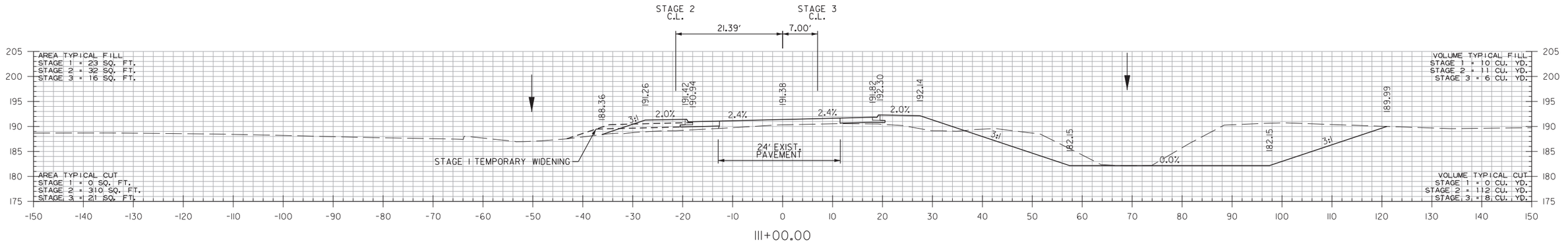


110+25.00

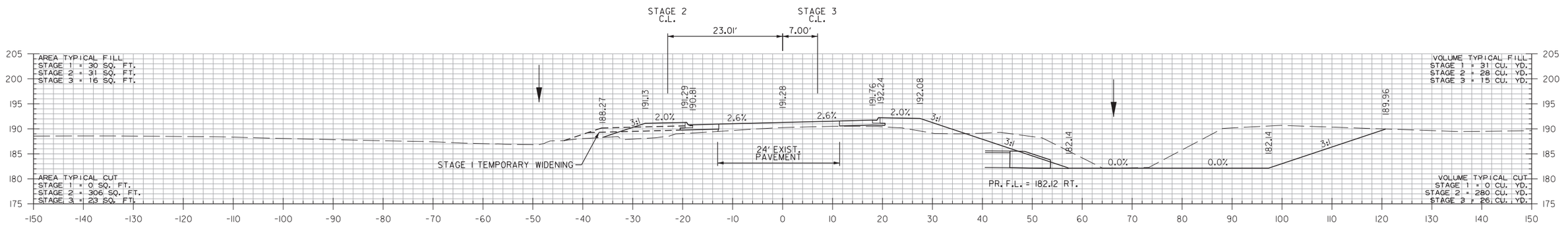
HWY. 67
STA. 110+25 TO STA. 110+50

rnfortner 6/28/2022 10:38:16 AM
WORKSPACE: AHTD
L:\201\1701515 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy.67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	404	549
		CROSS SECTIONS				

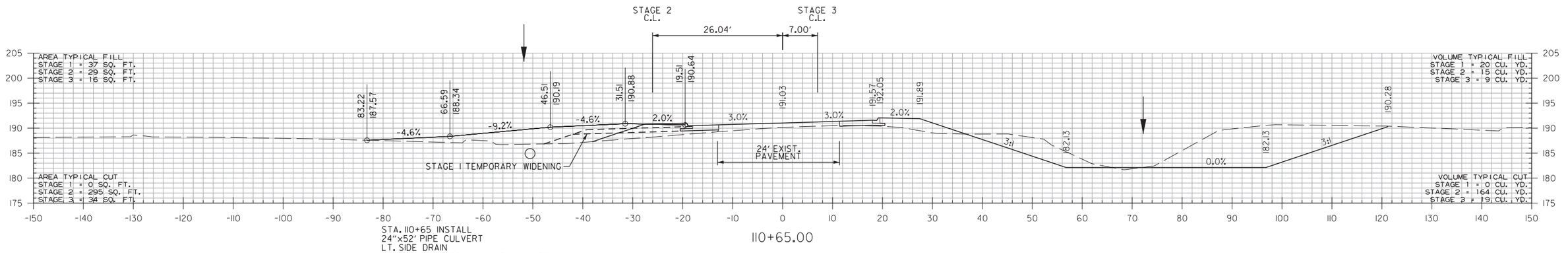


111+00.00



110+90.15

STA. 110+71.82 MAX SUPERELEVATION (0.030'/')



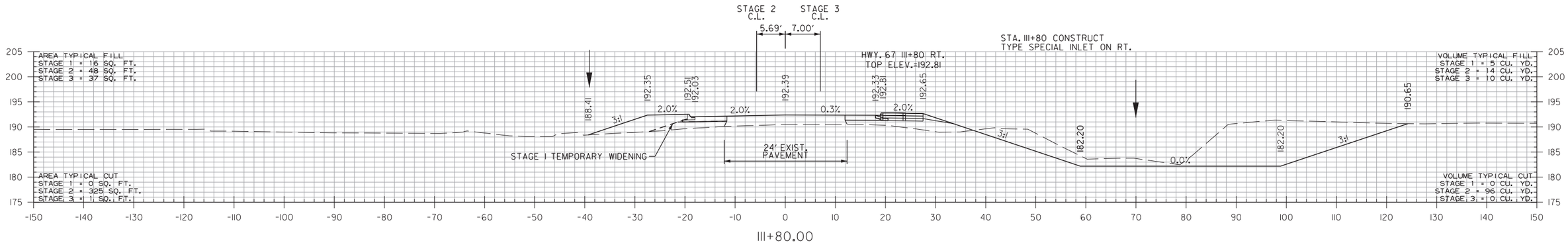
STA. 110+65 INSTALL
24"x52' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 78 CU. YDS.

110+65.00

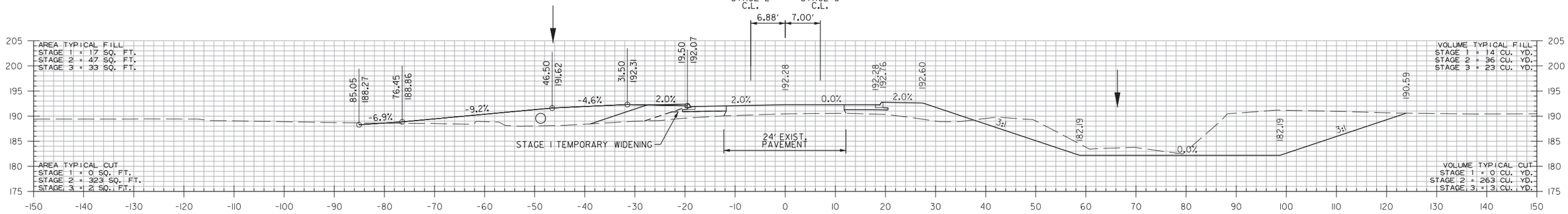
HWY. 67
STA. 110+65 TO STA. 111+00

rnfortner 6/28/2022 10:38:16 AM
WORKSPACE: AHTD
L:\201\170\7515 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy.67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	405	549
		CROSS SECTIONS				

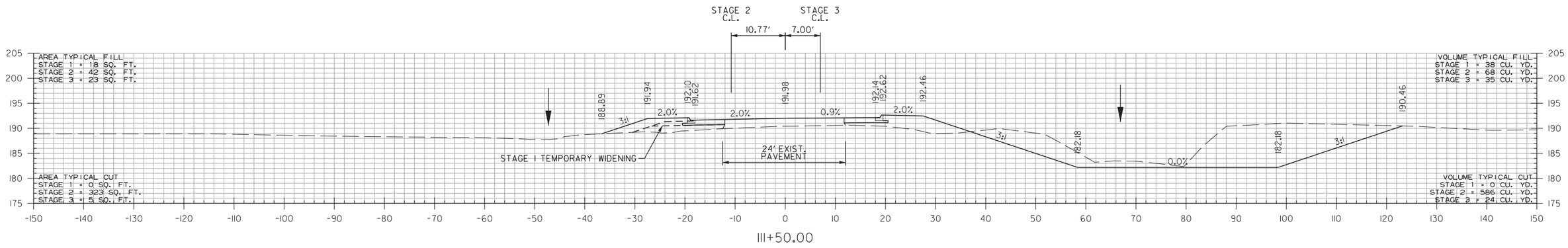


111+80.00



111+72.00

STA. 111+72 INSTALL
24"x47' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 90 CU. YDS.

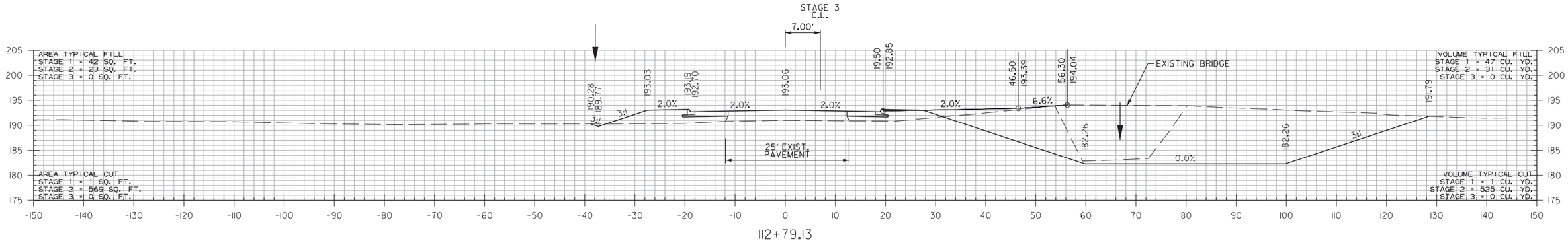


111+50.00

HWY. 67
STA. 111+50 TO STA. 111+80

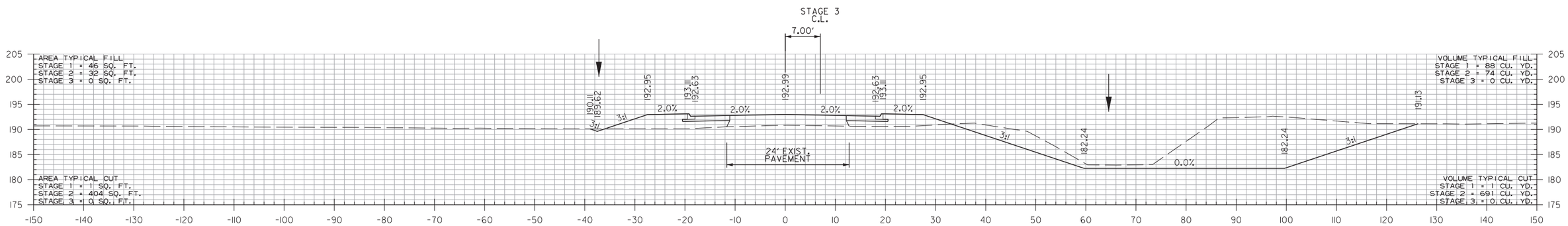
rnfortner 6/28/2022 10:38:17 AM
WORKSPACE: AHTD
L:\20\7\7017515 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy. 67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	406	549
		CROSS SECTIONS				



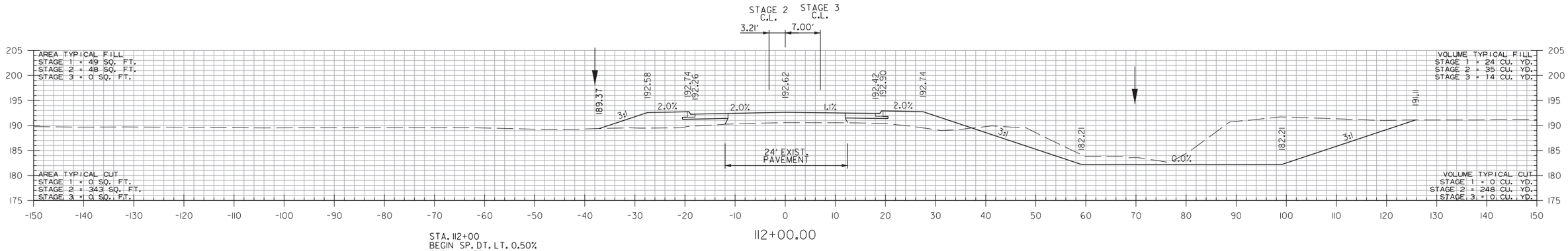
112+79.13

STA. 112+79 CONSTRUCT
APPROACH ON RT. = 9 CU. YDS.



112+50.00

STA. 112+21.82 END SUPERELEVATION



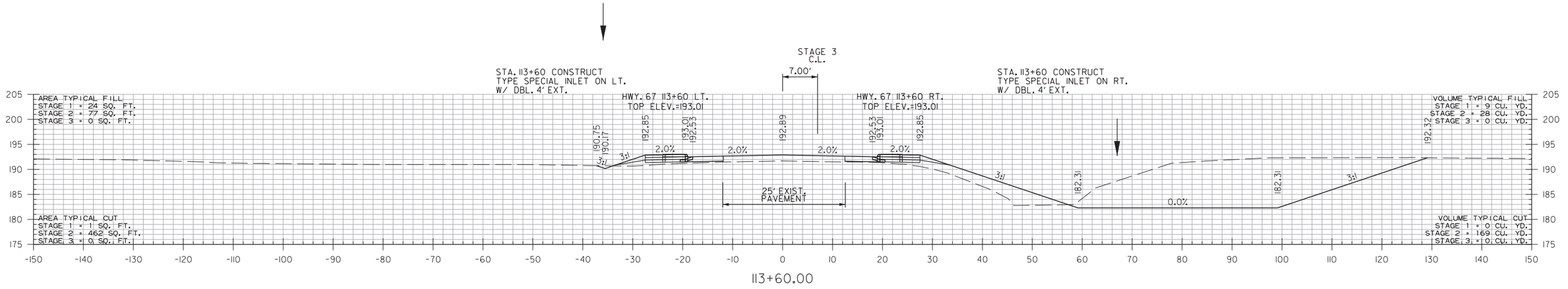
STA. 112+00
BEGIN SP. DT. LT. 0.50%
ELEV. 189.37

112+00.00

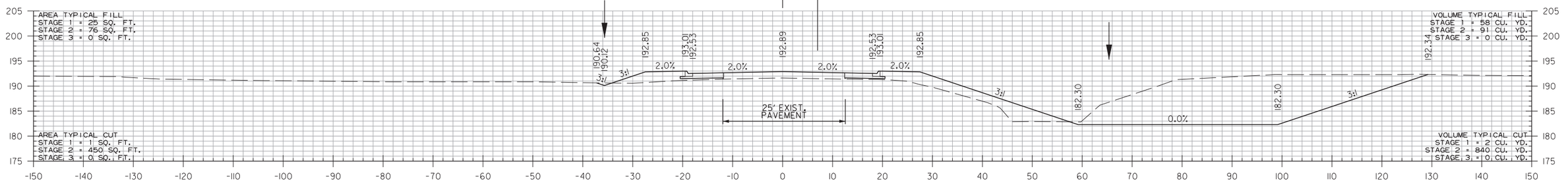
HWY. 67
STA. 112+00 TO STA. 112+79

rnfortner 6/28/2022 10:38:17 AM
WORKSPACE: AHTD
L:\201\170\7515 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy.67.dgn
REVISED DATE:

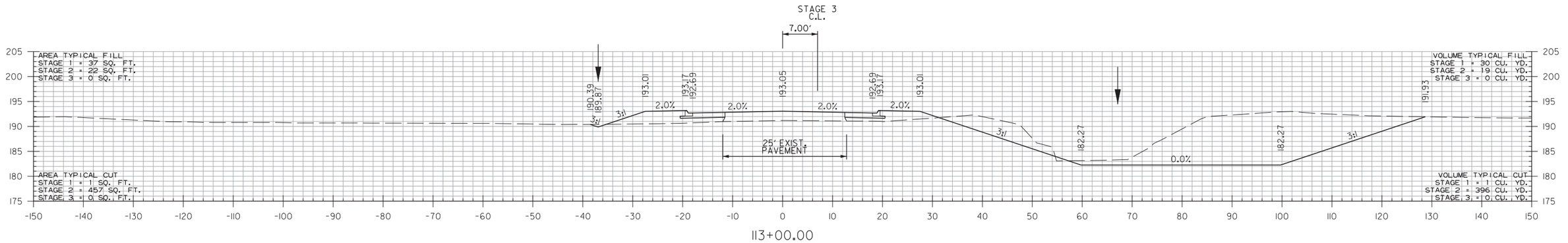
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	407	549
		CROSS SECTIONS				



113+60.00



113+50.00

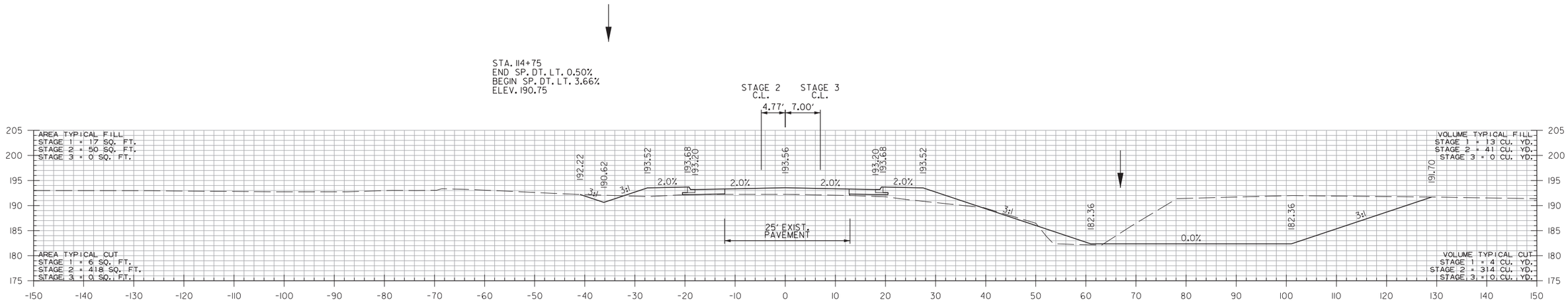


113+00.00

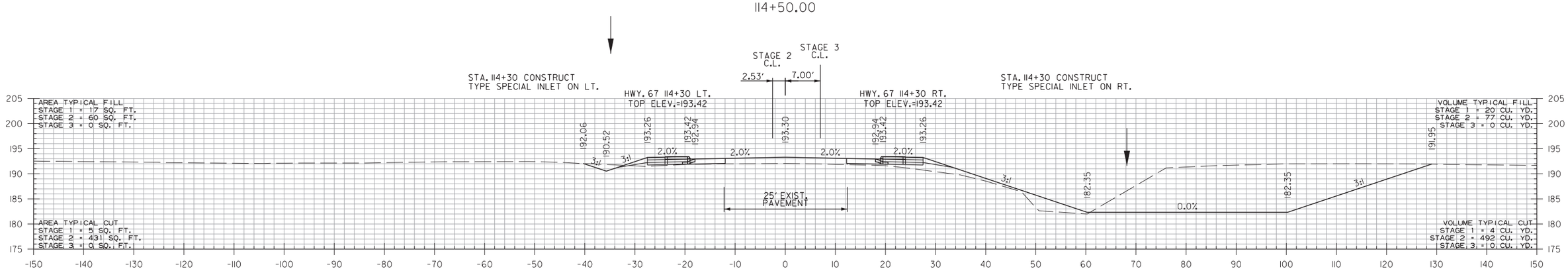
HWY. 67
STA. 113+00 TO STA. 113+60

rnfortner 6/28/2022 10:38:17 AM
WORKSPACE: AHTD
L:\201\170175 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy.67.dgn
REVISED DATE:

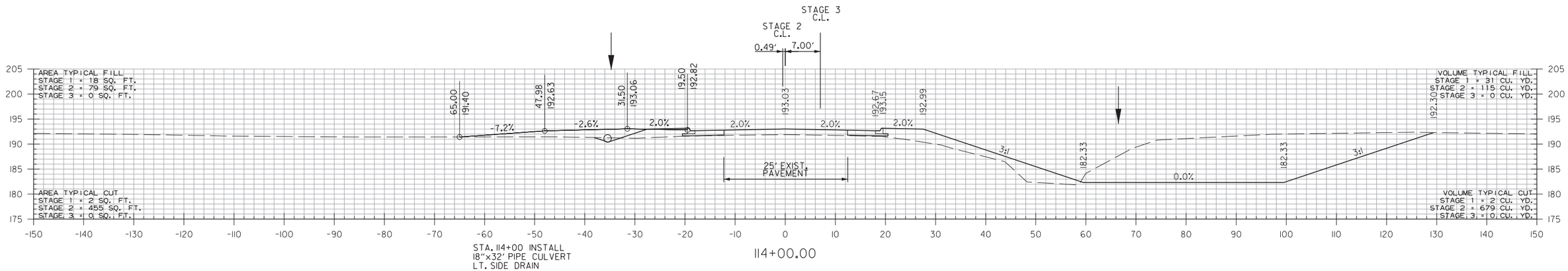
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	408	549
		CROSS SECTIONS				



114+50.00



114+30.00



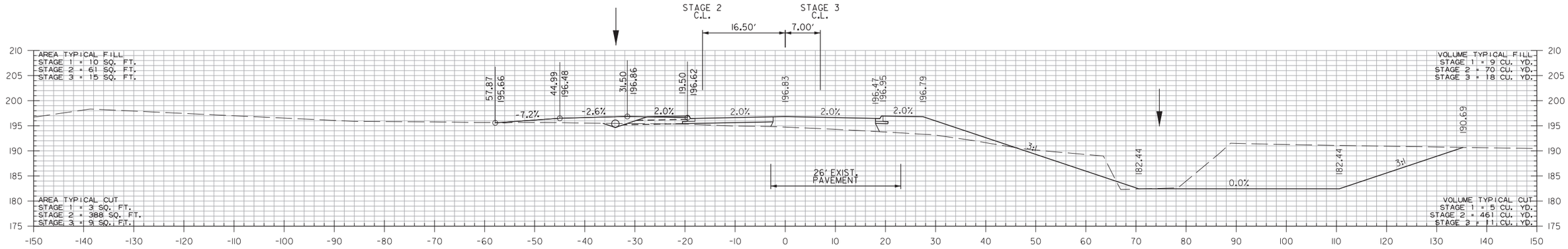
STA. 114+00 INSTALL
18"x32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 24 CU. YDS.

114+00.00

HWY. 67
STA. 114+00 TO STA. 114+50

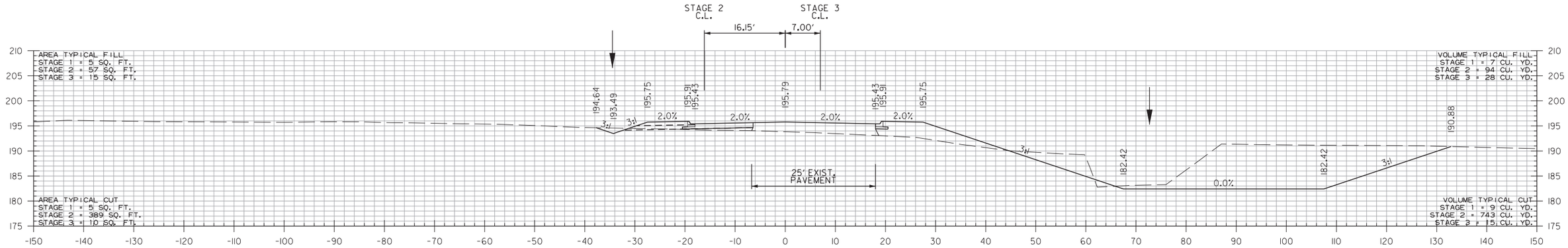
rnfortner 6/28/2022 10:38:17 AM
WORKSPACE: AHTD
L:\20\7\7\0\7\5\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy. 67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	409	549
		CROSS SECTIONS				

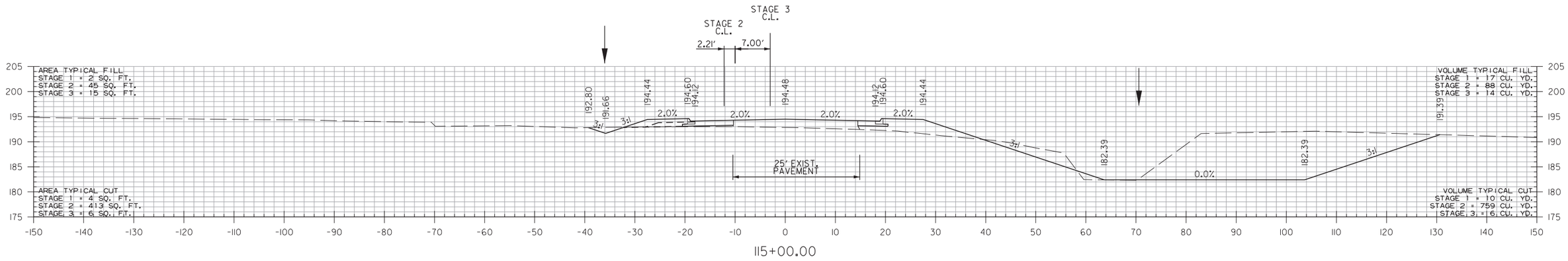


115+82.00

STA. 115+82 INTALL
18"x32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 14 CU. YDS.



115+50.00

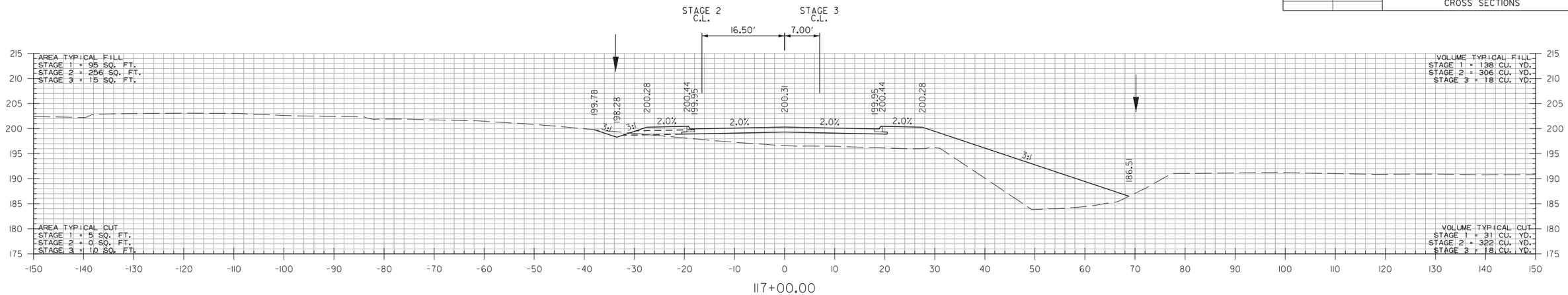


115+00.00

HWY. 67
STA. 115+00 TO STA. 115+82

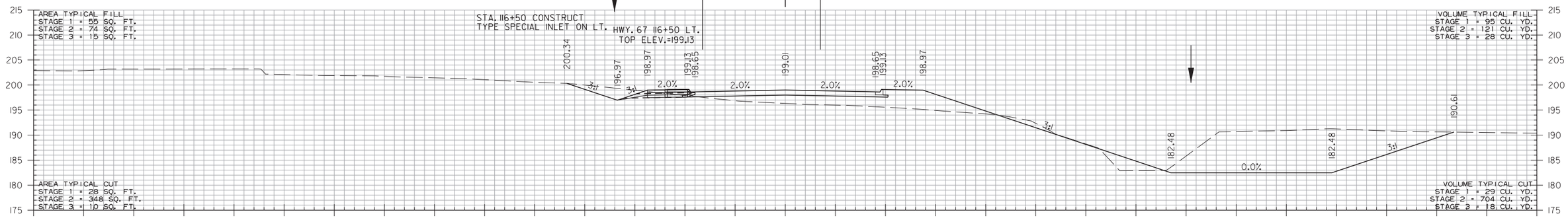
rnfortner 6/28/2022 10:38:17 AM
WORKSPACE: AHTD
L:\20\T\T01\T515 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy.67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	410	549
		CROSS SECTIONS				



117+00.00

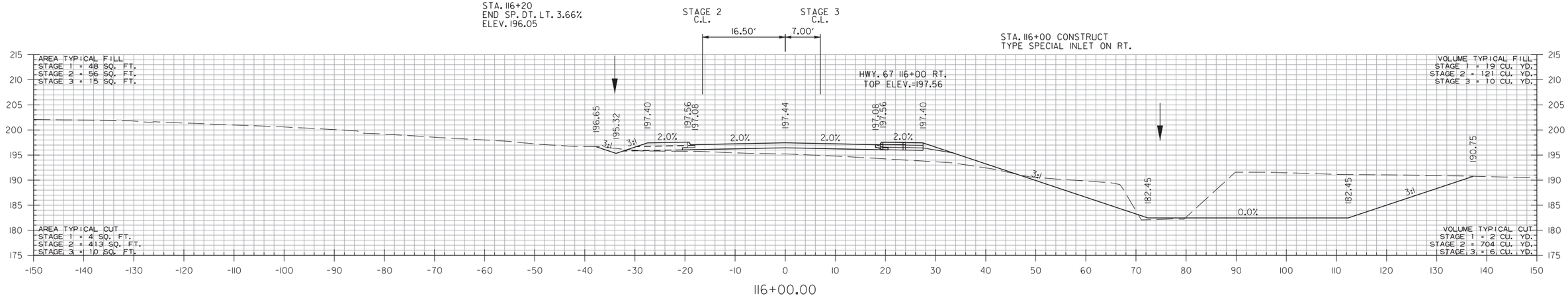
STA. 116+80
END SP. DT. RT. 0.06%
ELEV. 182.50



116+50.00

STA. 116+20
END SP. DT. LT. 3.66%
ELEV. 196.05

STA. 116+00 CONSTRUCT
TYPE SPECIAL INLET ON RT.

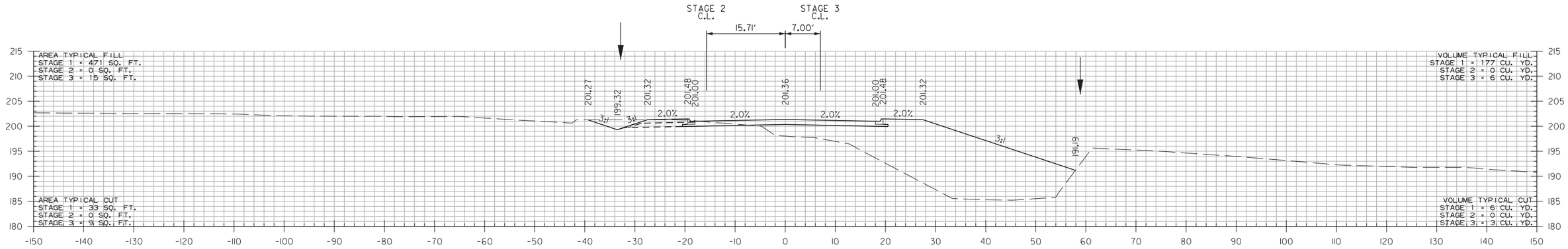


116+00.00

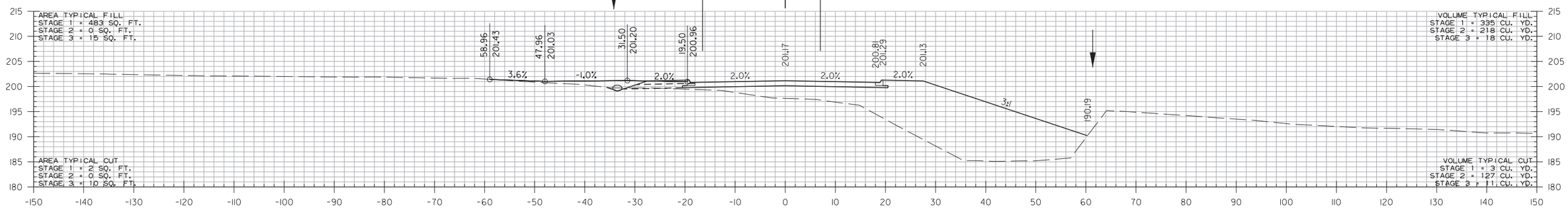
HWY. 67
STA. 116+00 TO STA. 117+00

rnfortner 6/28/2022 10:38:18 AM
WORKSPACE: AHTD
L:\2017\170175 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy_67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	411	549
		CROSS SECTIONS				

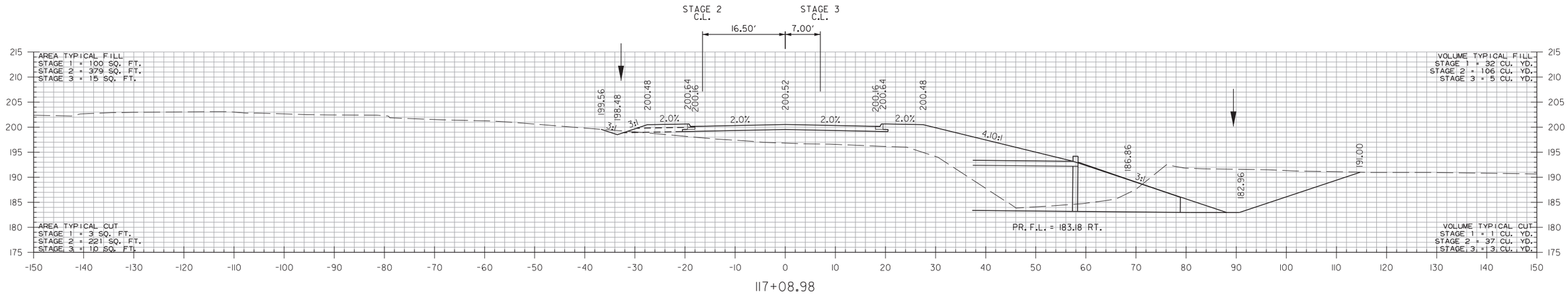


117+50.00



117+40.00

STA. 117+40 INSTALL
22"x14"x32' ARCH PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 13 CU. YDS.

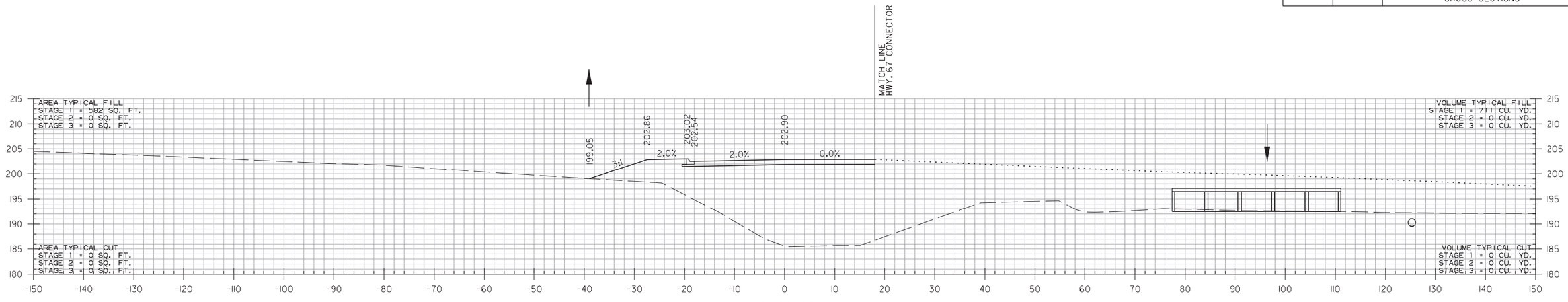


117+08.98

HWY. 67
STA. 117+09 TO STA. 117+50

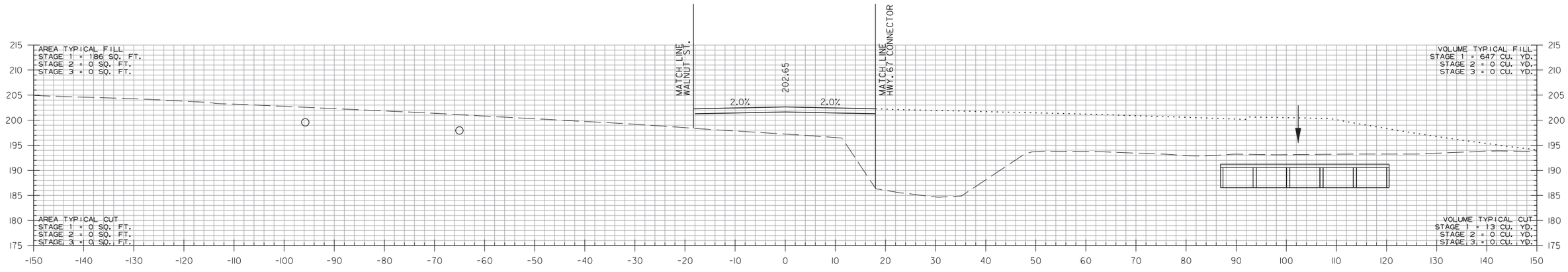
rnfortner 6/28/2022 10:38:18 AM
WORKSPACE: AHTD
L:\20\7\17017515 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy.67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	412	549
		CROSS SECTIONS				



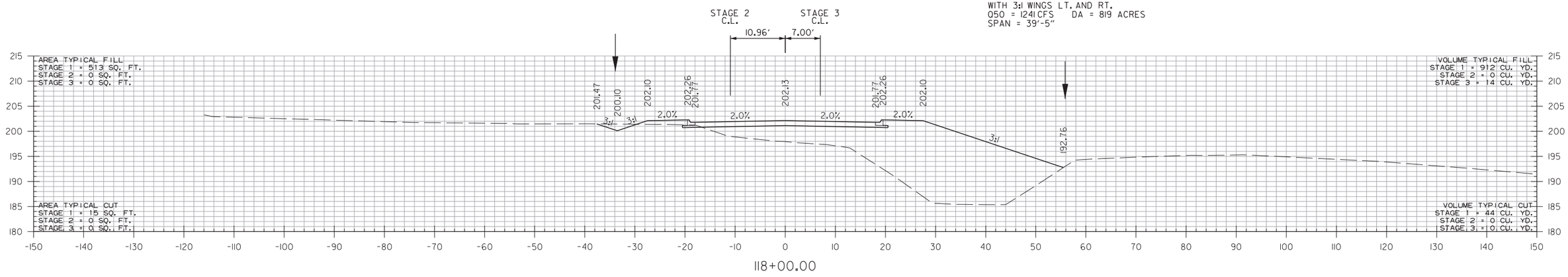
119+00.00

STA. 118+54.34 BEGIN SUPERELEVATION



118+50.00

STA. 118+40 CONSTRUCT
TRP. 12' X 9' X 288' R.C. BOX CULVERT
66° LT. FWD. SKEW
WITH 3:1 WINGS LT. AND RT.
Q50 = 1241 CFS DA = 819 ACRES
SPAN = 39'-5"

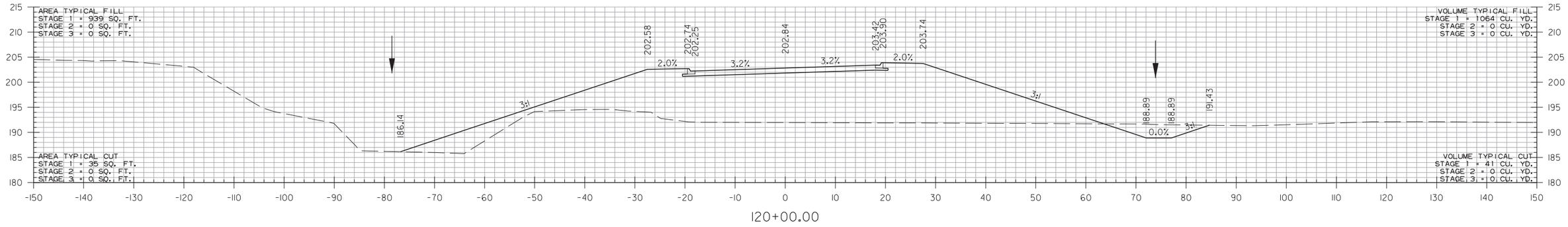


118+00.00

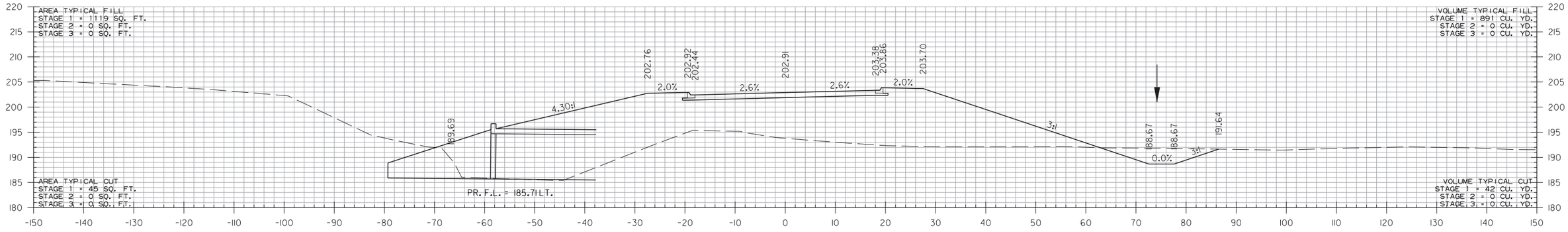
HWY. 67
STA. 118+00 TO STA. 119+00

rnfortner 6/28/2022 10:38:18 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy. 67.dgn
REVISED DATE:

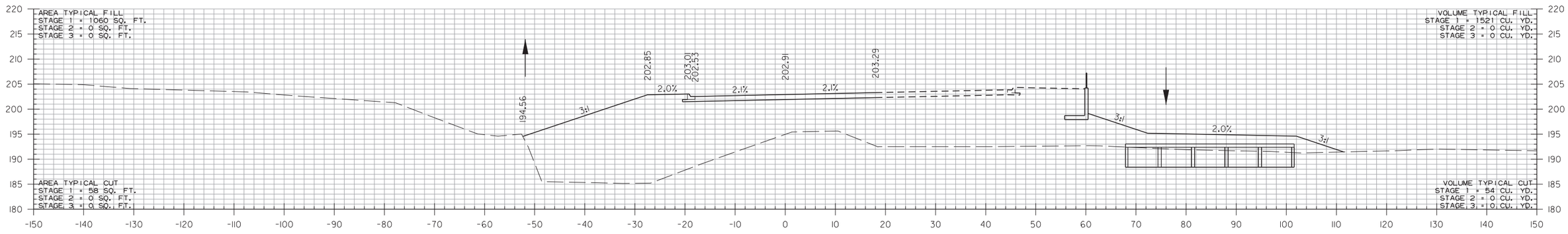
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	413	549
		CROSS SECTIONS				



120+00.00



119+72.08



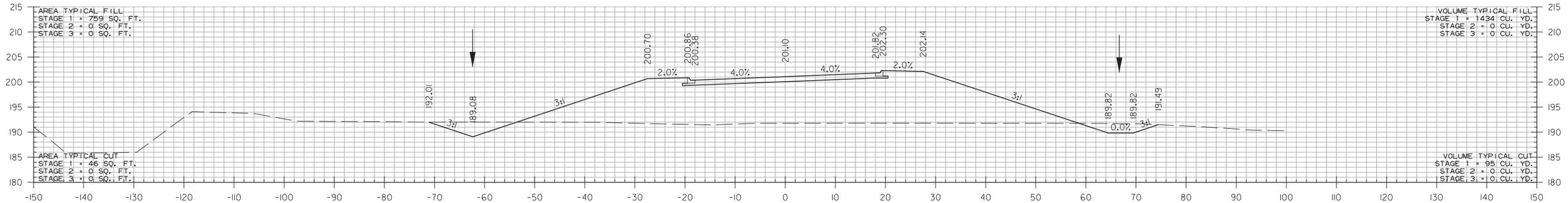
119+50.00

STA. 119+50
BEGIN SP. DT. RT. 0.79%
5' FLAT BOTTOM
ELEV. 188.50

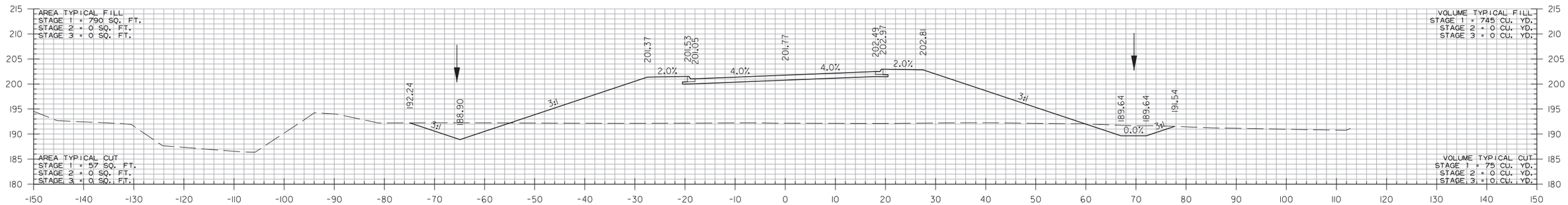
HWY. 67
STA. 119+50 TO STA. 120+00

rnfortner 6/28/2022 10:38:18 AM
WORKSPACE: AHTD
L:\20IT\170I715 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy. 67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	414	549
		CROSS SECTIONS				



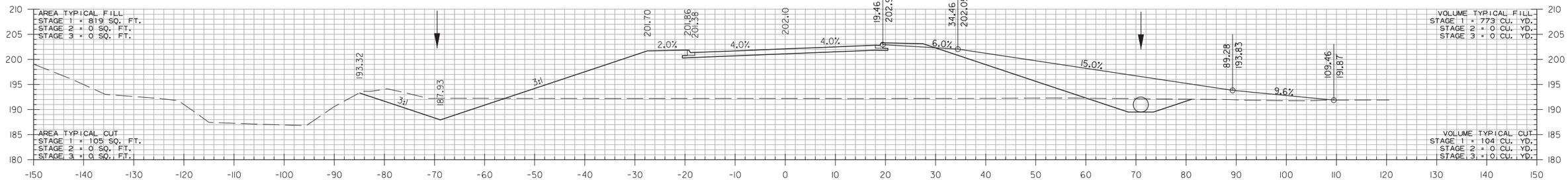
121+50.00



121+00.00

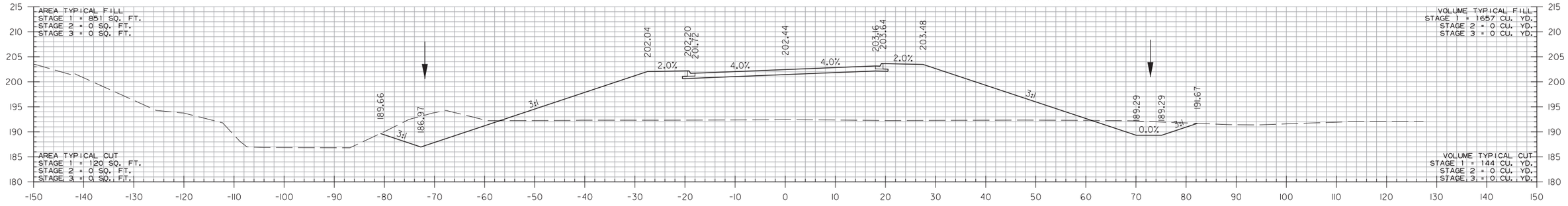
STA. 121+00
END SP. DT. LT. 3.87%
BEGIN SP. DT. LT. 0.37%
ELEV. 188.90

STA. 120+90
END SP. DT. RT. 0.79%
5' FLAT BOTTOM
BEGIN SP. DT. RT. 0.37%
5' FLAT BOTTOM
ELEV. 189.60



120+75.00

STA. 120+75 INSTALL
36"x70' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPROACH = 201 CU. YDS.



120+50.00

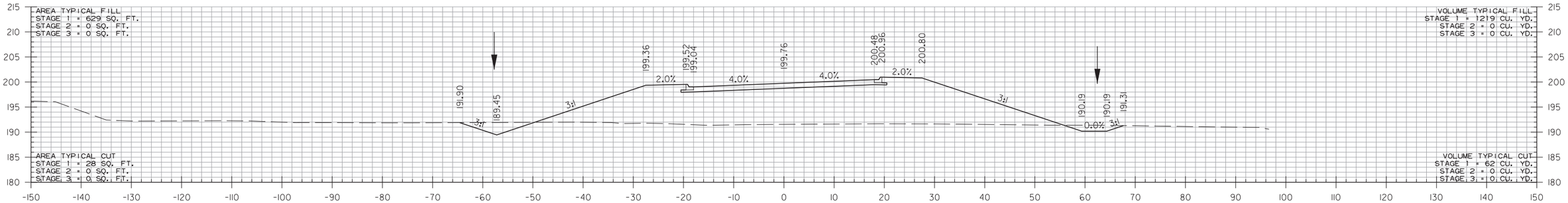
STA. 120+25
BEGIN SP. DT. LT. 3.87%
ELEV. 186.00

STA. 120+34.34 MAX SUPERELEVATION (0.040'/')

HWY. 67
STA. 120+50 TO STA. 121+50

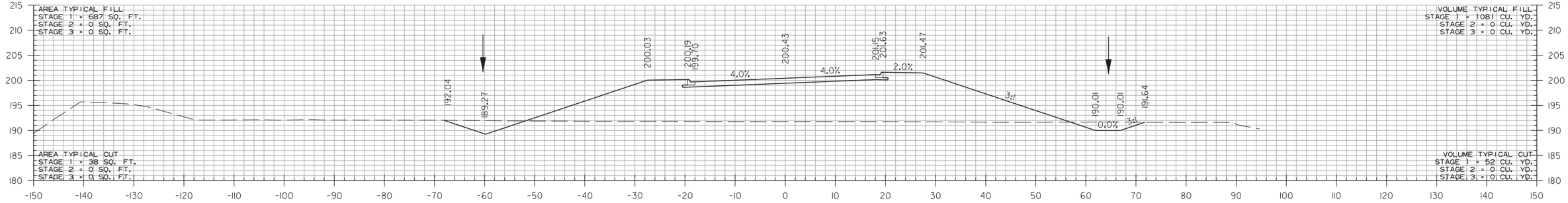
rntortner
WORKSPACE: AHTD
L:\2017\170755 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy. 67.dgn
6/28/2022 10:38:18 AM
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	415	549
		CROSS SECTIONS				



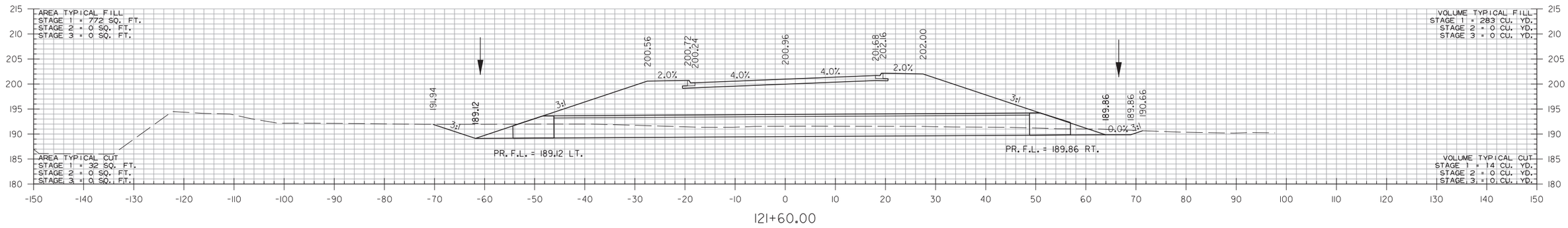
122+50.00

STA. 122+50
END SP. DT. LT. 0.37%
BEGIN SP. DT. LT. 0.61%
ELEV. 189.45



122+00.00

STA. 121+60 CONSTRUCT
DBL. 48"x96' R.C. PIPE CULVERT
(CLASS III)(TYPE 3 BEDDING)
W/ FES LT. & RT.
050 = 15 CFS DA = 2.3 AC.
48" R.C. PIPE = 192 LIN. FT.
48" F.E.S. = 4 EA.

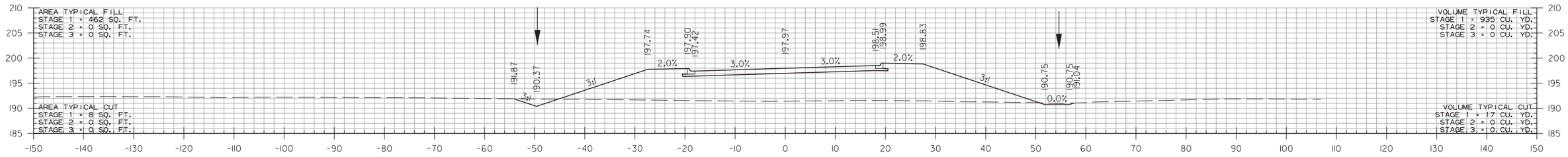


121+60.00

HWY. 67
STA. 121+60 TO STA. 122+50

rnfortner 6/28/2022 10:38:19 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy. 67.dgn
REVISED DATE:

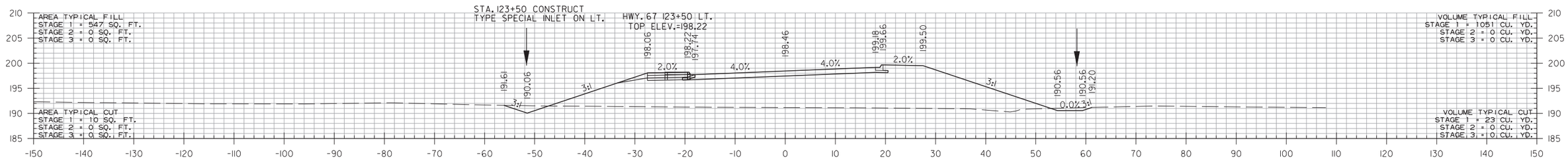
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	416	549
		CROSS SECTIONS				



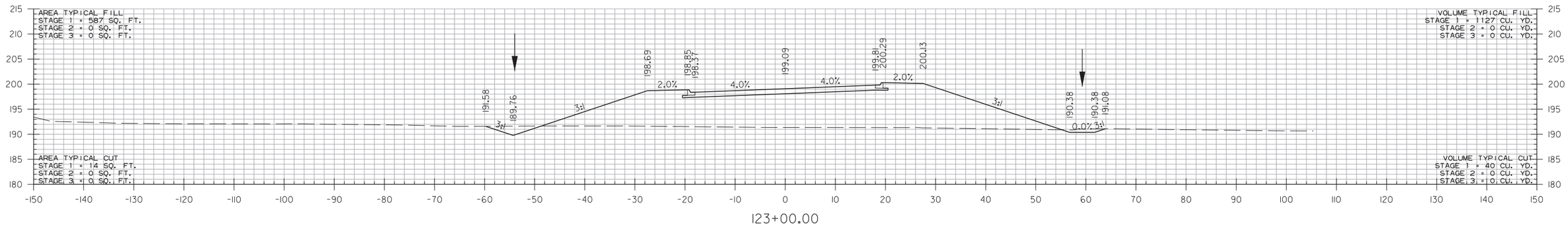
124+00.00

STA. 123+56.32 MAX SUPERELEVATION (0.040'/')

STA. 124+00
END SP. DT. RT. 0.37%
5' FLAT BOTTOM
BEGIN SP. DT. RT. 0.73%
5' FLAT BOTTOM
ELEV. 190.75



123+50.00

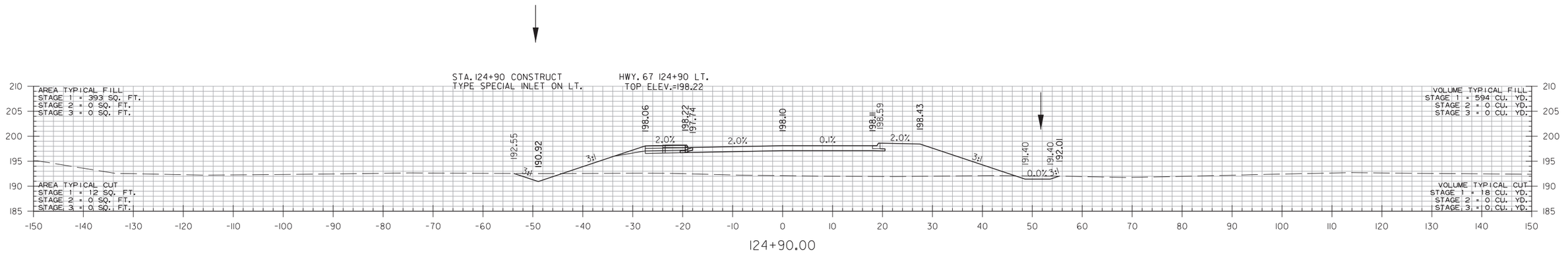


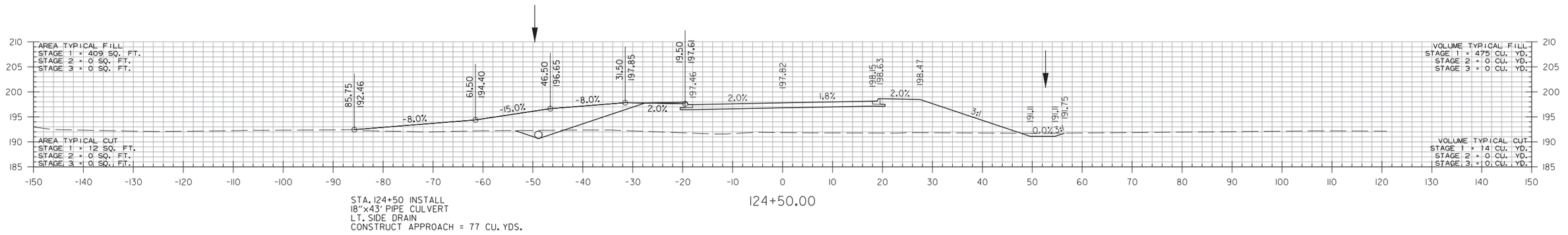
123+00.00

HWY. 67
STA. 123+00 TO STA. 124+00

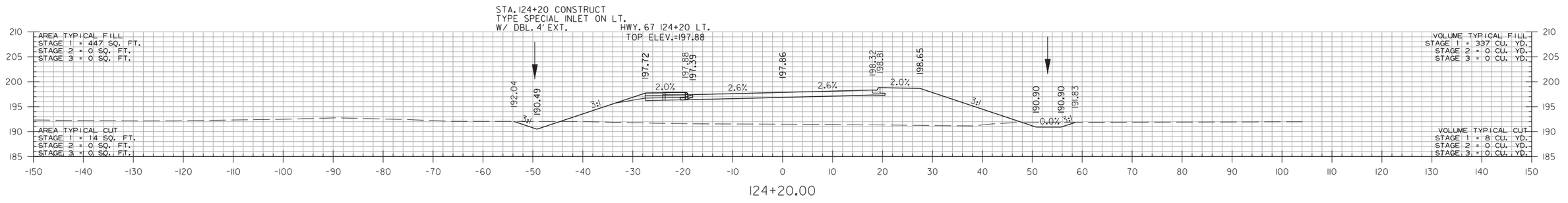
rnfortner 6/28/2022 10:38:19 AM
WORKSPACE: AHTD
L:\20IT\170I715 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy.67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	417	549
		CROSS SECTIONS				





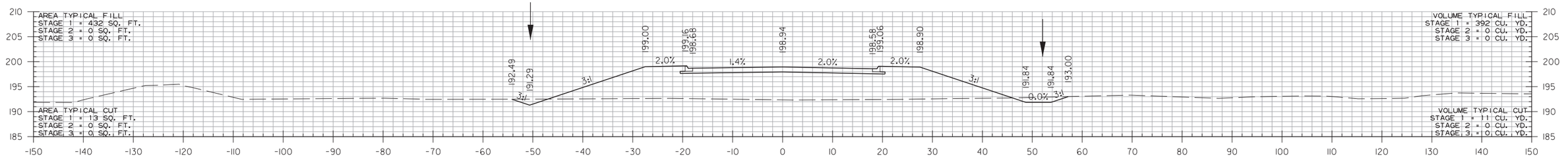
STA. 124+50 INSTALL
18"x43' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 77 CU. YDS.



HWY. 67
STA. 124+20 TO STA. 124+90

rnfortner 6/28/2022 10:38:19 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy. 67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	418	549
		CROSS SECTIONS				



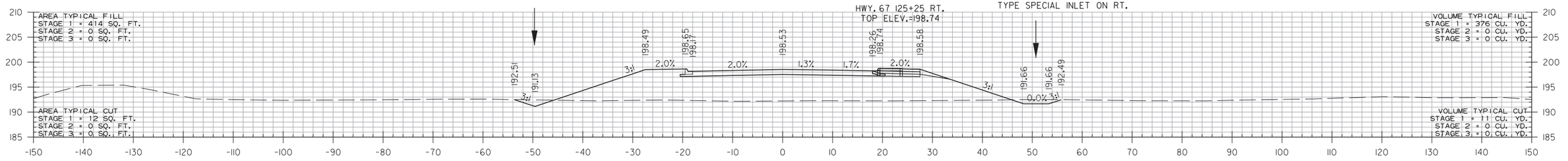
125+50.00

STA. 125+37.61 BEGIN SUPERELEVATION

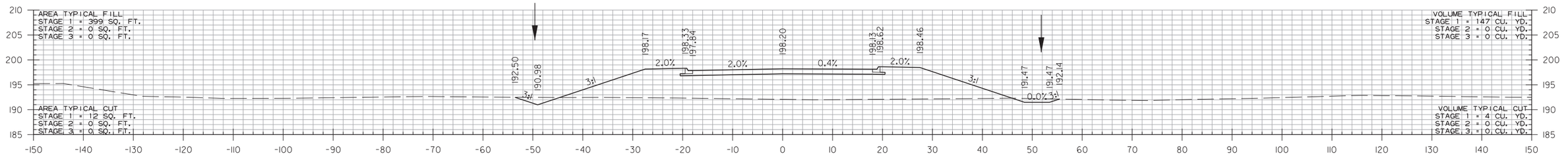
STA. 125+36.32 END SUPERELEVATION

HWY. 67 125+25 RT.
TOP ELEV.=198.74

STA. 125+25 CONSTRUCT
TYPE SPECIAL INLET ON RT.



125+25.00

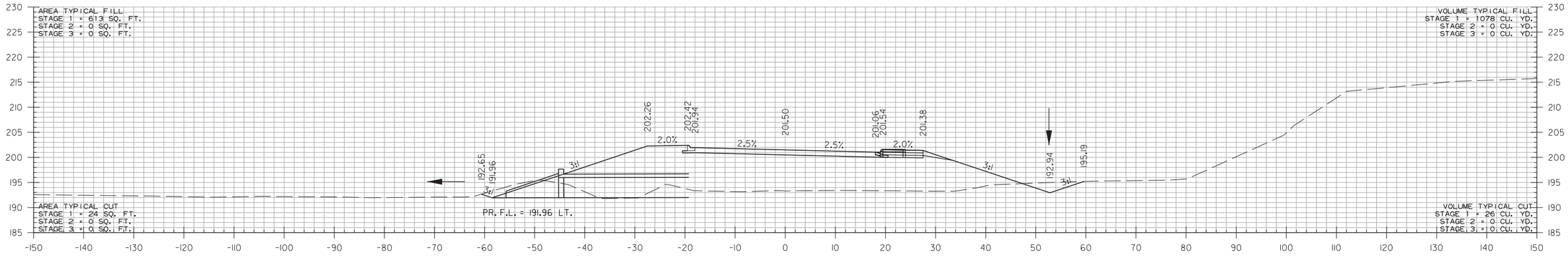


125+00.00

HWY. 67
STA. 125+00 TO STA. 125+50

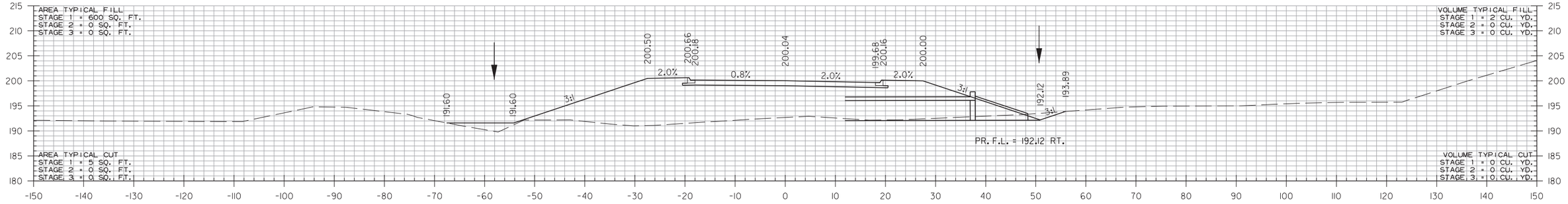
rnfortner 6/28/2022 10:38:19 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy. 67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	419	549
		CROSS SECTIONS				

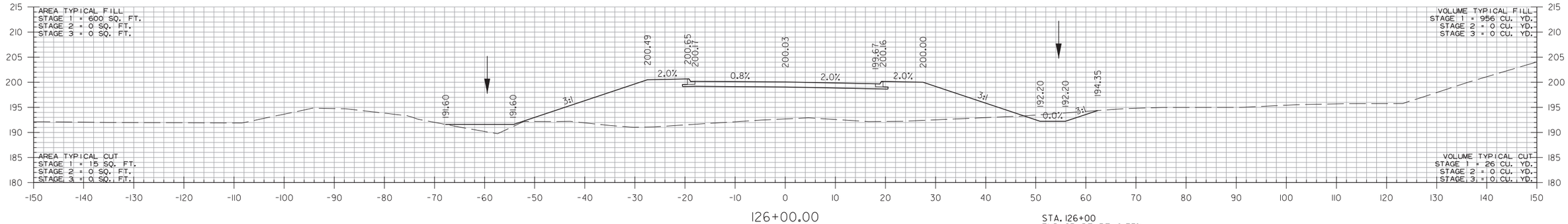


126+48.11

STA. 126+22 CONSTRUCT
QUINT. 6' X 4' X 96' R.C. BOX CULVERT
30° LT. FWD. SKEW
WITH 3:1 WINGS LT. AND RT.
Q50 = 347 CFS DA = 817 ACRES
SPAN = 33'-8"



126+00.11



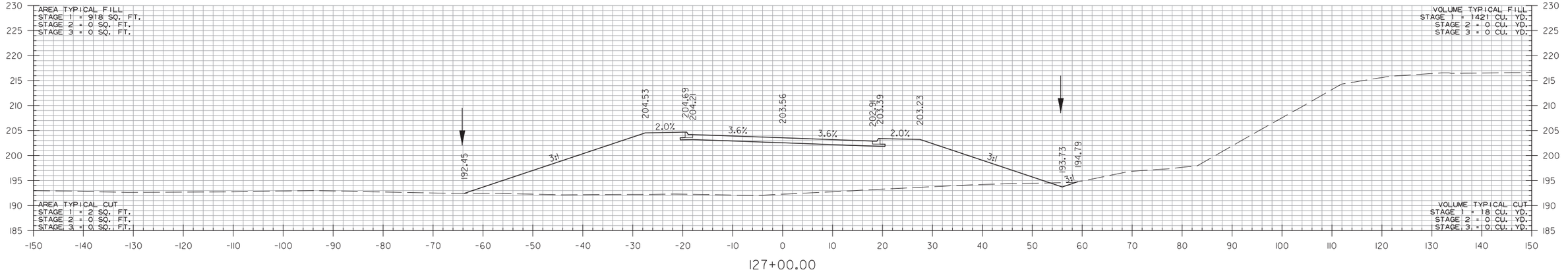
126+00.00

STA. 126+00
END SP. DT. RT. 0.73%
5' FLAT BOTTOM
BEGIN SP. DT. RT. 1.53%
5' FLAT BOTTOM
ELEV. 192.20

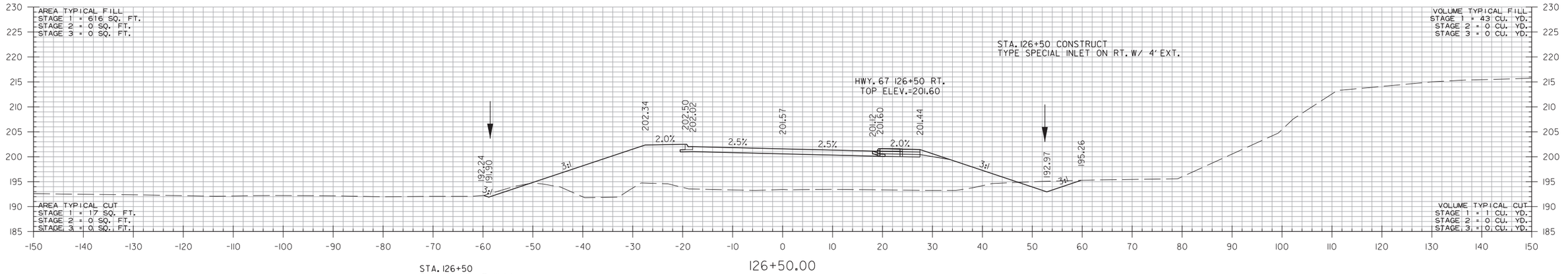
HWY. 67
STA. 126+00 TO STA. 126+48

rnfortner 6/28/2022 10:38:20 AM
WORKSPACE: AHTD
L:\2017\170715 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy.67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	420	549
		CROSS SECTIONS				



127+00.00



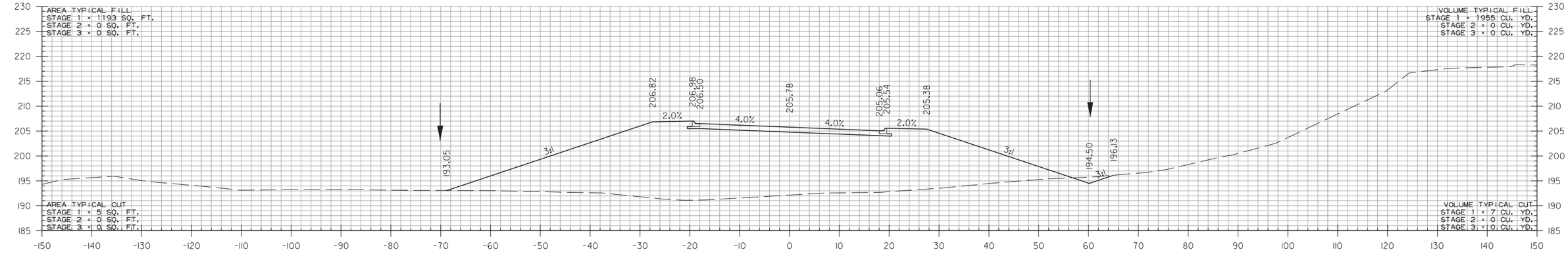
126+50.00

STA. 126+50
END SP. DT. LT. 0.61%
ELEV. 191.90

HWY. 67
STA. 126+50 TO STA. 127+00

rnfortner 6/28/2022 10:38:20 AM
WORKSPACE: AHTD
L:\201\170\7515 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy_67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	421	549
		CROSS SECTIONS				



127+50.00

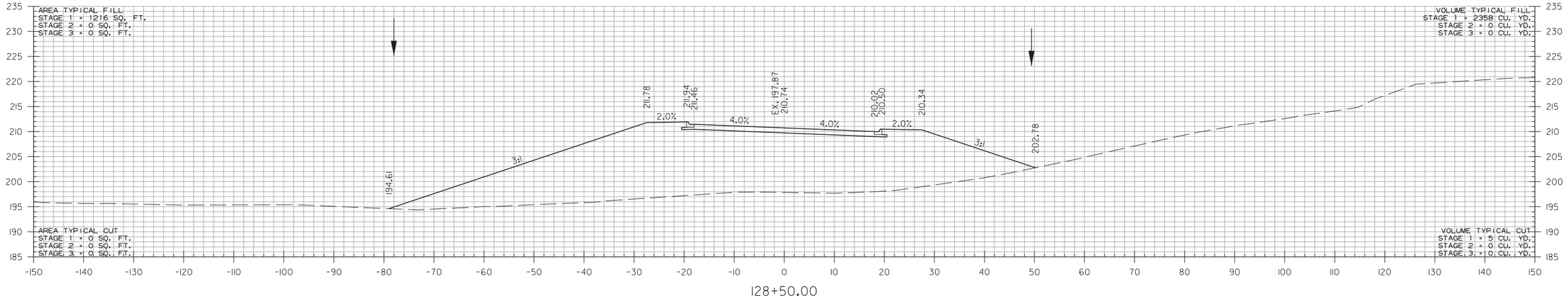
STA. 127+17.61 MAX SUPERELEVATION (0.040'/')

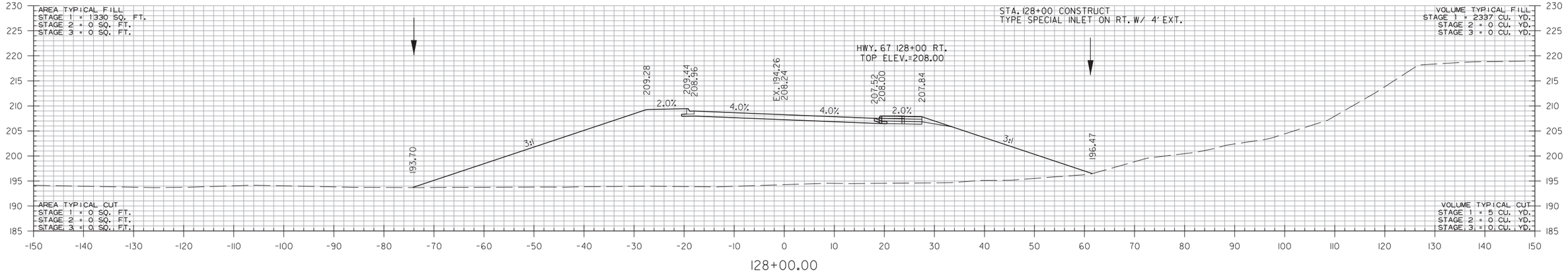
STA. 127+50
END SP. DT. RT. 1.53%
BEGIN SP. DT. RT. 9.06%
ELEV. 194.50

HWY. 67
STA. 127+50 TO STA. 127+50

rnfortner 6/28/2022 10:38:20 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy. 67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	422	549
		CROSS SECTIONS				

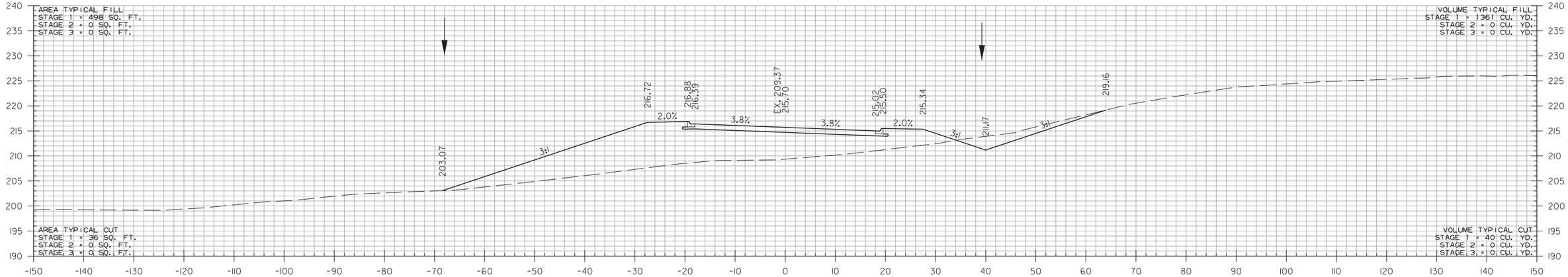




HWY. 67
STA. 128+00 TO STA. 128+50

rnfortner 6/28/2022 10:38:20 AM
WORKSPACE: AHTD
L:\2017\170175 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy_67.dgn
REVISED DATE:

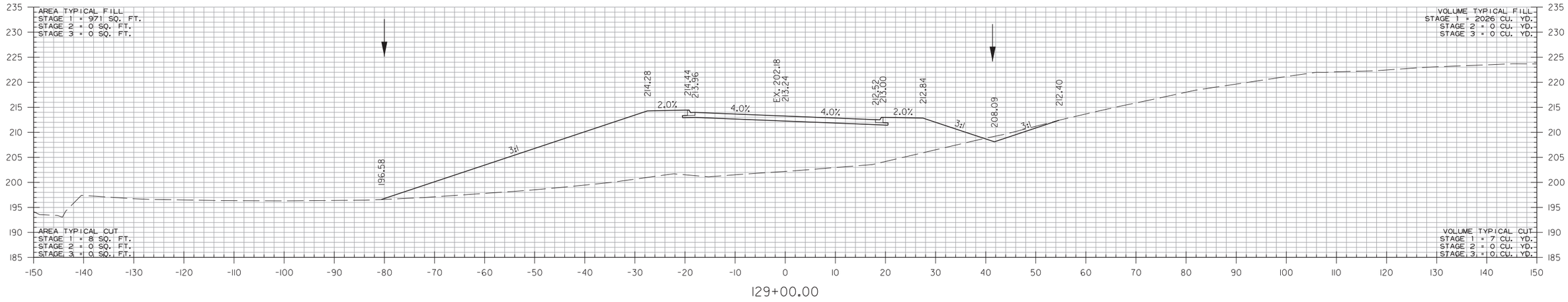
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	423	549
		CROSS SECTIONS				



129+50.00

STA. 129+42.24 MAX SUPERELEVATION (0.040'/')

STA. 129+10
END SP. DT. RT. 9.06%
BEGIN SP. DT. RT. 5.43%
ELEV. 209.00

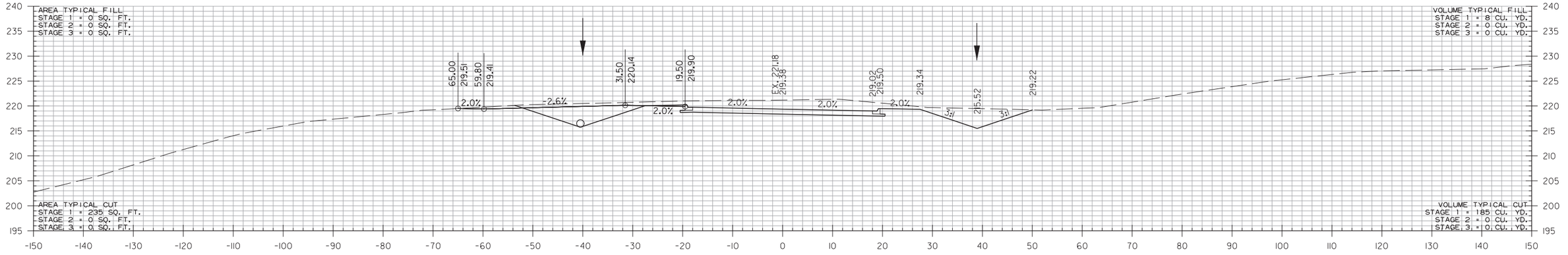


129+00.00

HWY. 67
STA. 129+00 TO STA. 129+50

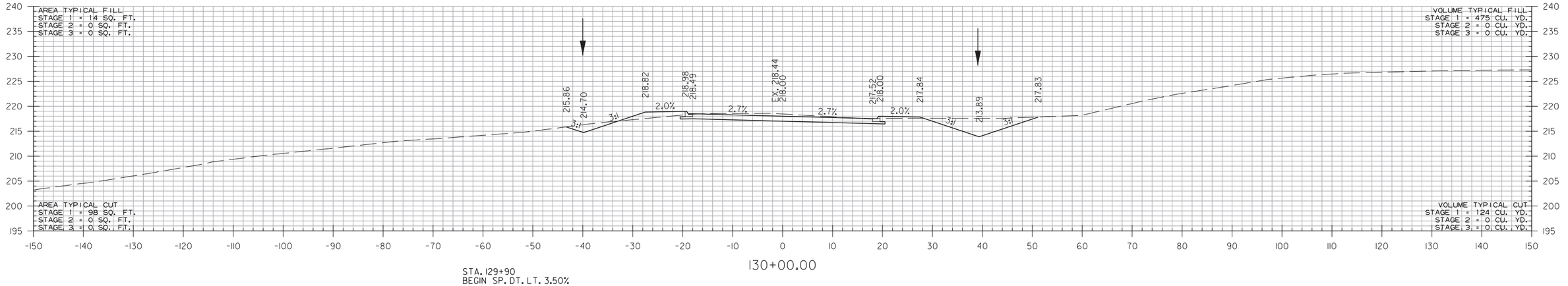
rnfortner 6/28/2022 10:38:20 AM
WORKSPACE: AHTD
L:\20IT\170I7515 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy.67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	424	549
		CROSS SECTIONS				



STA. 130+30 INSTALL
18"x38' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 37 CU. YDS.

130+30.00



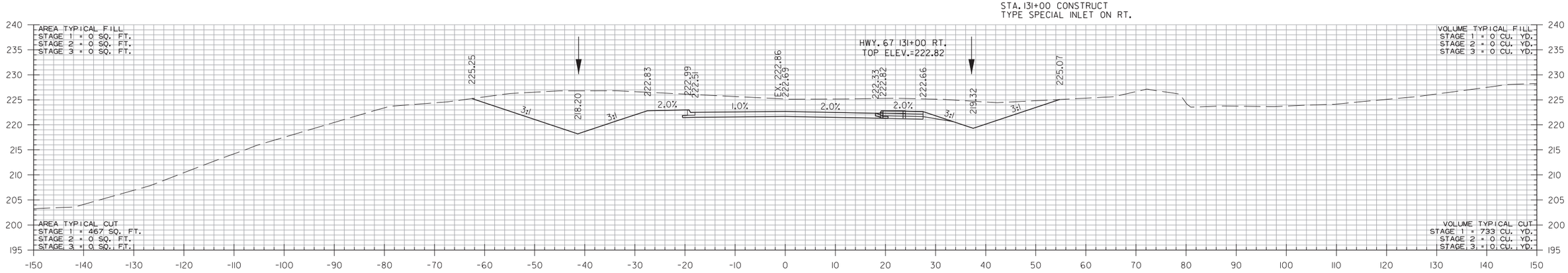
STA. 129+90
BEGIN SP. DT. LT. 3.50%
ELEV. 214.35

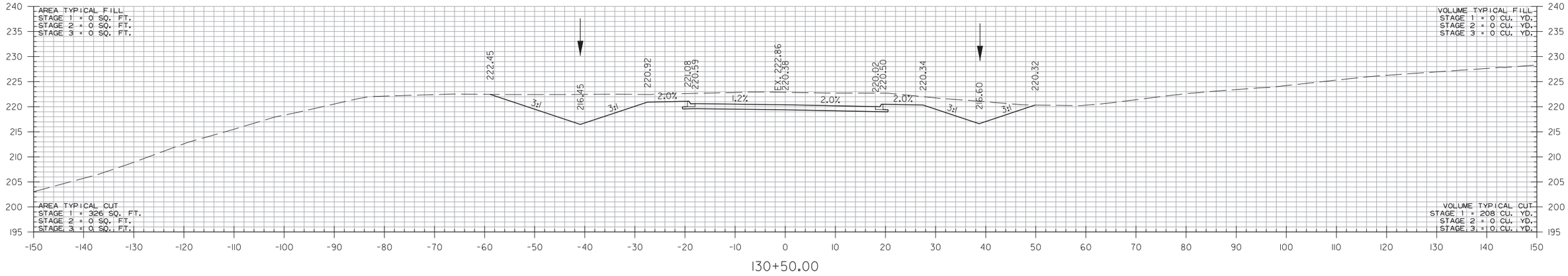
130+00.00

HWY. 67
STA. 130+00 TO STA. 130+30

rnfortner 6/28/2022 10:38:20 AM
WORKSPACE: AHTD
L:\2017\170175 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy_67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	425	549
		CROSS SECTIONS				

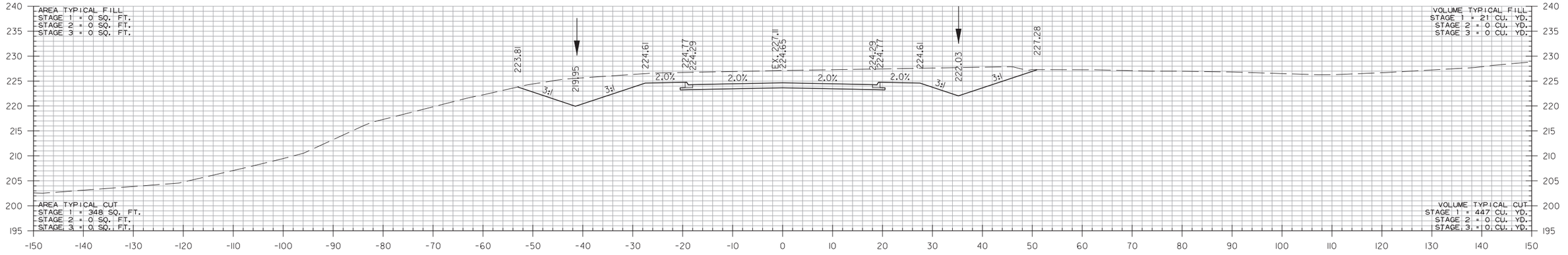




HWY. 67
STA. 130+50 TO STA. 131+00

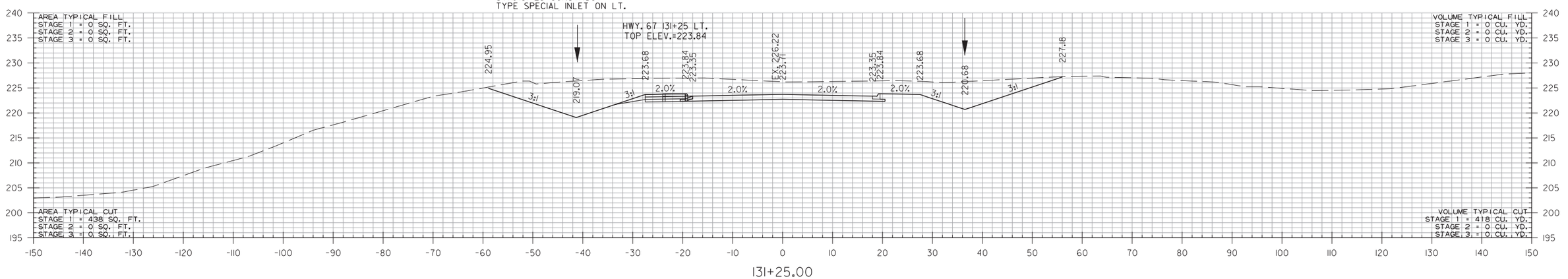
rnfortner 6/28/2022 10:38:21 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy. 67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	426	549
		CROSS SECTIONS				



131+50.00

STA. 131+25 CONSTRUCT
TYPE SPECIAL INLET ON LT.



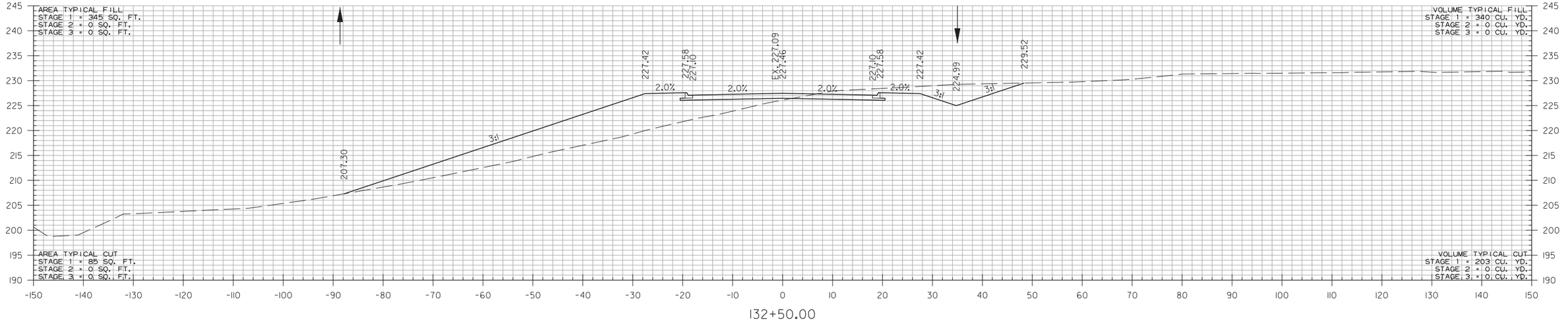
131+25.00

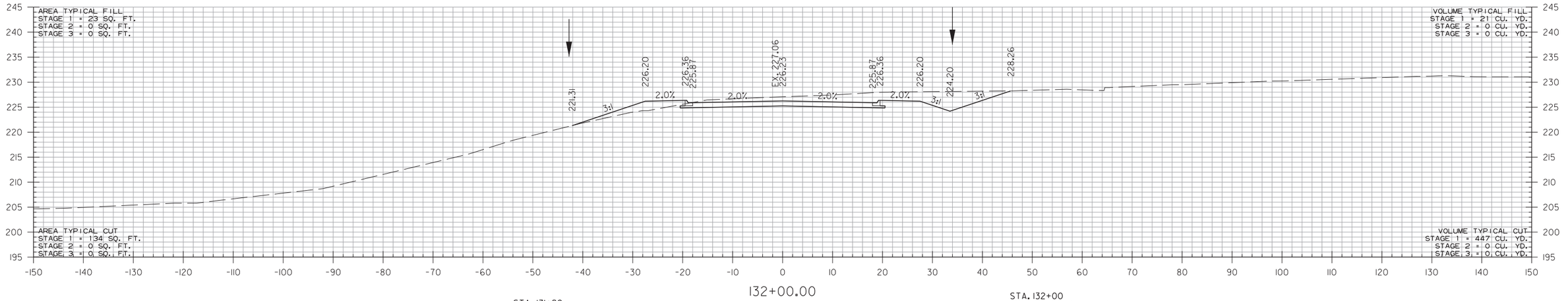
STA. 131+22.24 END SUPERELEVATION

HWY. 67
STA. 131+25 TO STA. 131+50

rnfortner 6/28/2022 10:38:21 AM
WORKSPACE: AHTD
L:\2017\170175 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy. 67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	427	549
		CROSS SECTIONS				





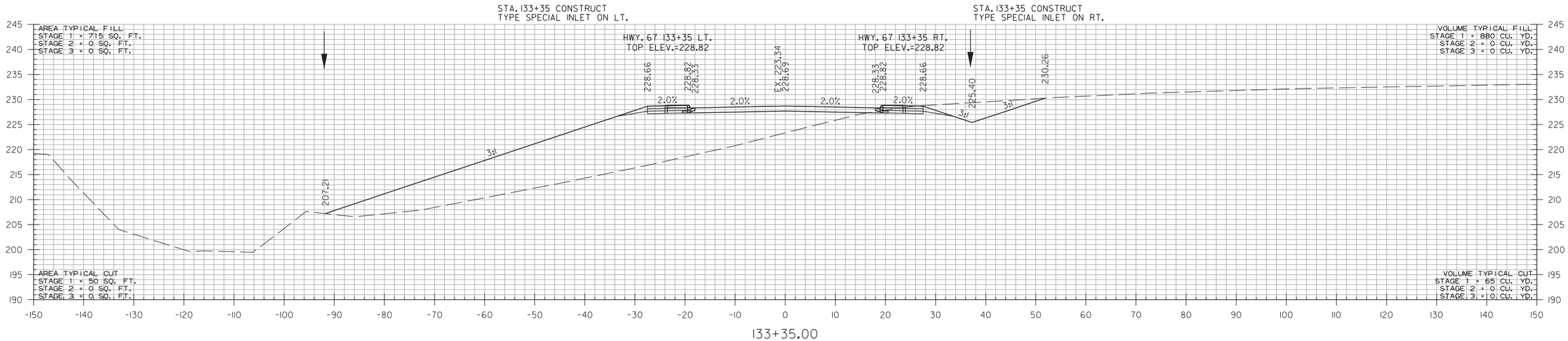
STA. 131+80
END SP. DT. LT. 3.50%
ELEV. 221.00

STA. 132+00
END SP. DT. RT. 5.43%
BEGIN SP. DT. RT. 0.48%
ELEV. 224.75

HWY. 67
STA. 132+00 TO STA. 132+50

rnfortner 6/28/2022 10:38:21 AM
WORKSPACE: AHTD
L:\20IT\170I715 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy.67.dgn
REVISED DATE:

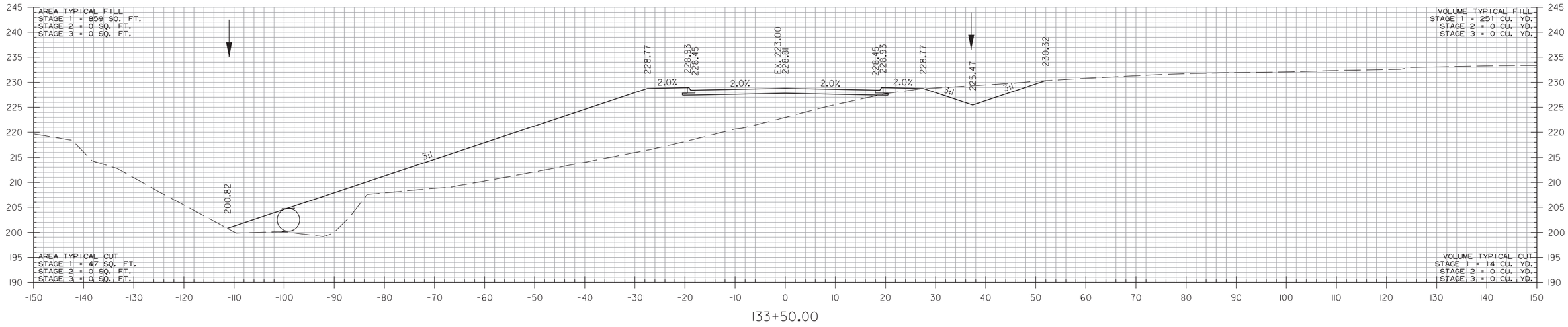
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	428	549
		CROSS SECTIONS				



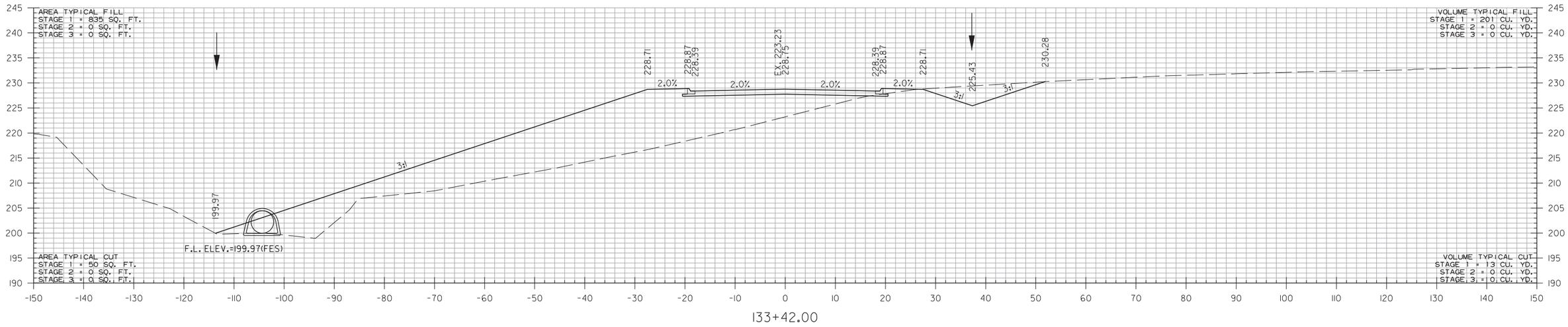
HWY. 67
STA. 133+00 TO STA. 133+35

rnfortner 6/28/2022 10:38:21 AM
WORKSPACE: AHTD
L:\2017\170715 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy. 67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	429	549
		CROSS SECTIONS				



133+50.00



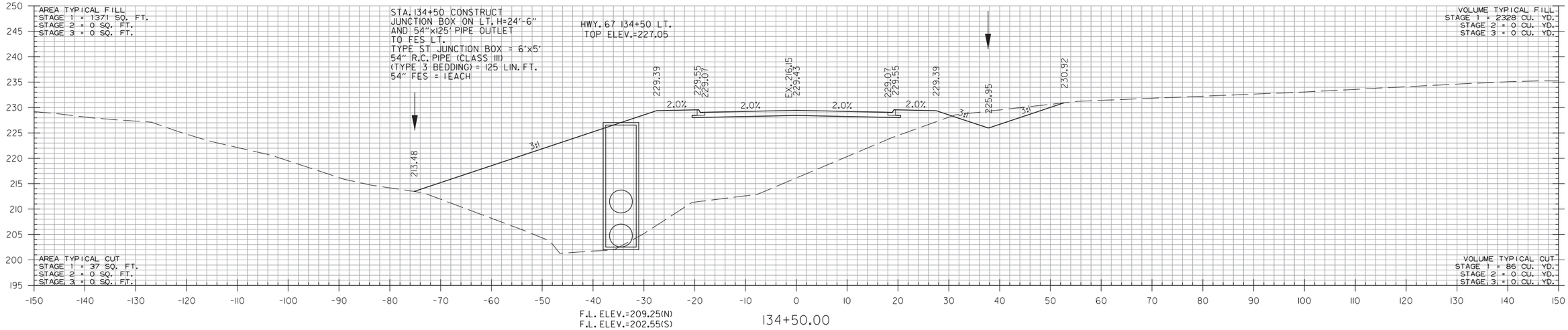
133+42.00

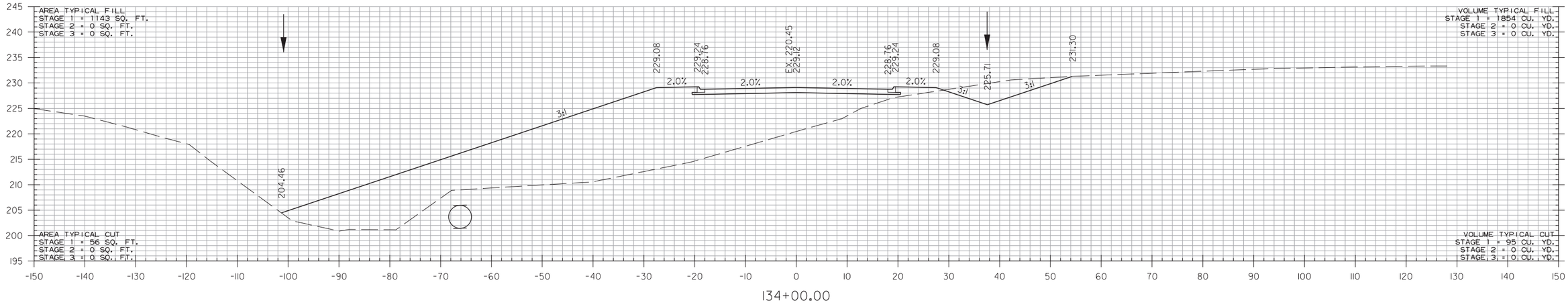
HWY. 67
STA. 133+42 TO STA. 133+50

rnfortner 6/28/2022 10:38:21 AM
WORKSPACE: AHTD
L:\2017\170715\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy. 67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	430	549
		CROSS SECTIONS				

STA. 134+60
END SP. DT. RT. 0.48%
BEGIN SP. DT. RT. -4.29%
ELEV. 226.00

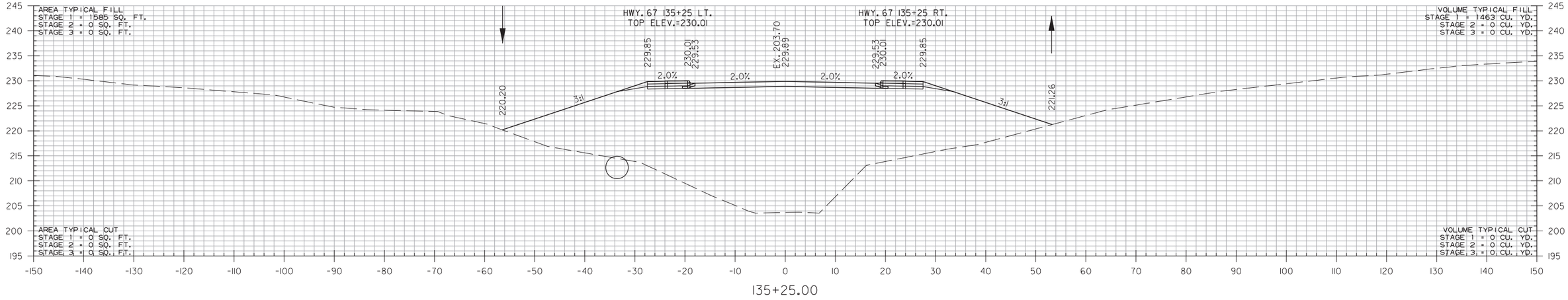


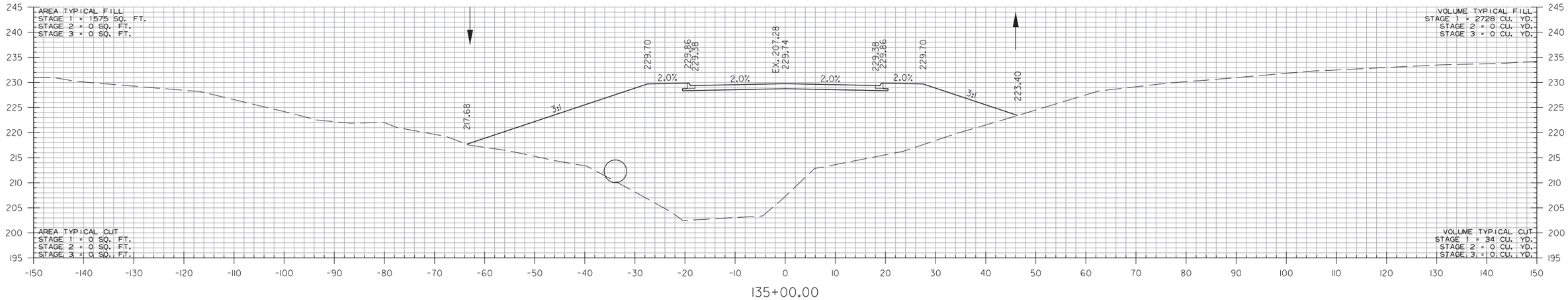


HWY. 67
STA. 134+00 TO STA. 134+50

rnfortner 6/28/2022 10:38:22 AM
WORKSPACE: AHTD
L:\20IT\170175 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy.67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	431	549
		CROSS SECTIONS				

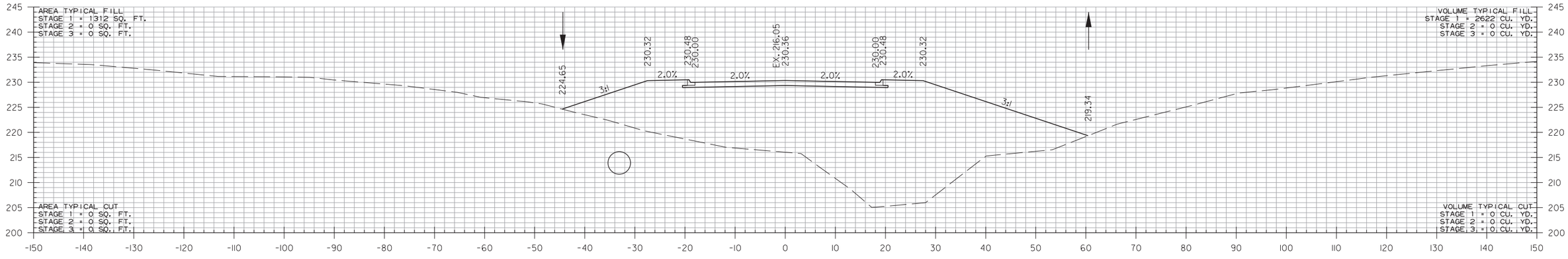




HWY. 67
STA. 135+00 TO STA. 135+25

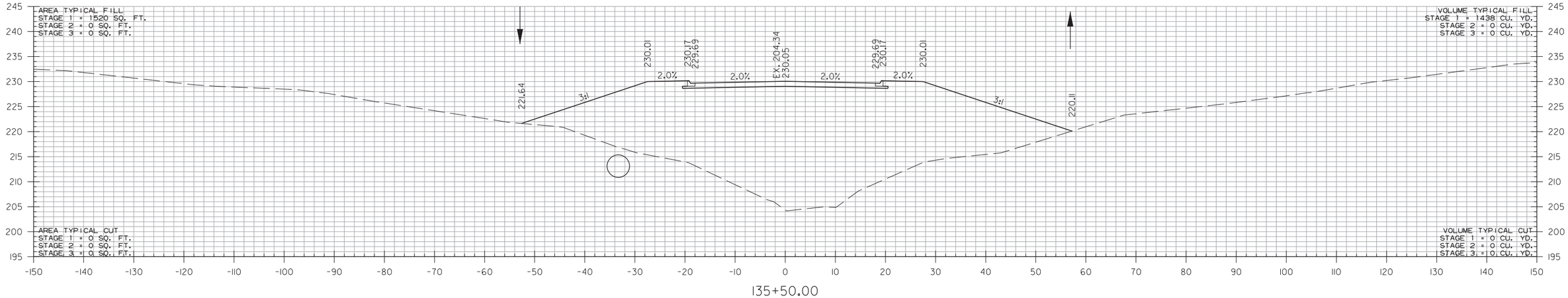
rnfortner 6/28/2022 10:38:22 AM
WORKSPACE: AHTD
L:\20IT\170I715 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy.67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	432	549
		CROSS SECTIONS				



136+00.00

STA. 136+00
END SP. DT. RT. -4.29%
BEGIN SP. DT. RT. -4.00%
ELEV. 220.00

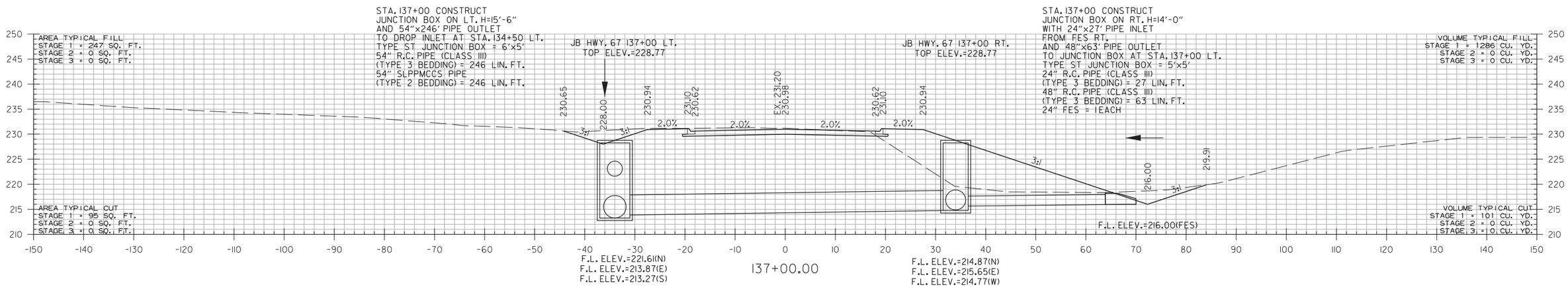


135+50.00

HWY. 67
STA. 135+50 TO STA. 136+00

rnfortner 6/28/2022 10:38:22 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy. 67.dgn
REVISED DATE:

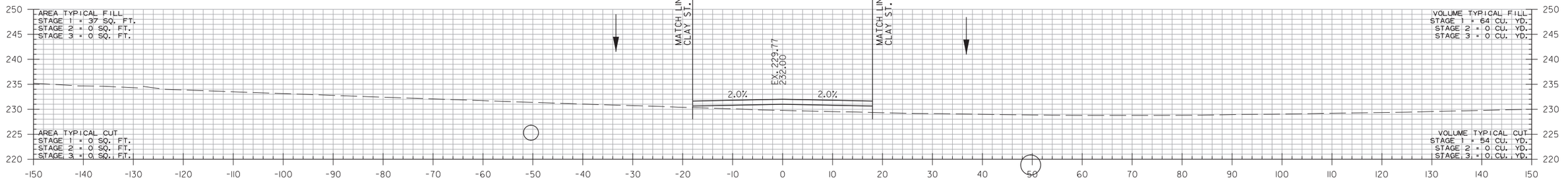
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	433	549
		CROSS SECTIONS				



HWY. 67
STA. 136+50 TO STA. 137+00

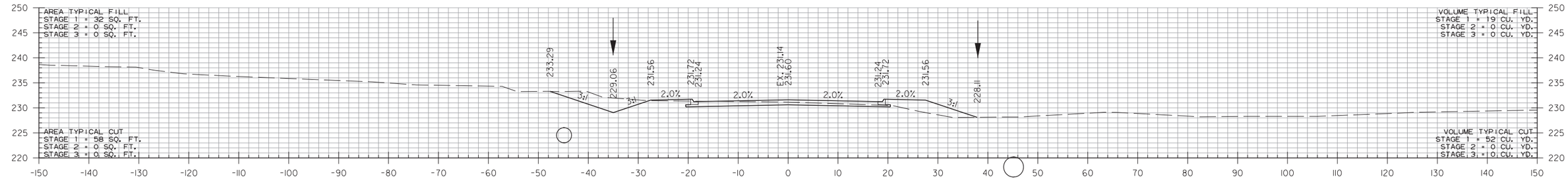
rnfortner 6/28/2022 10:38:22 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy. 67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	434	549
		CROSS SECTIONS				



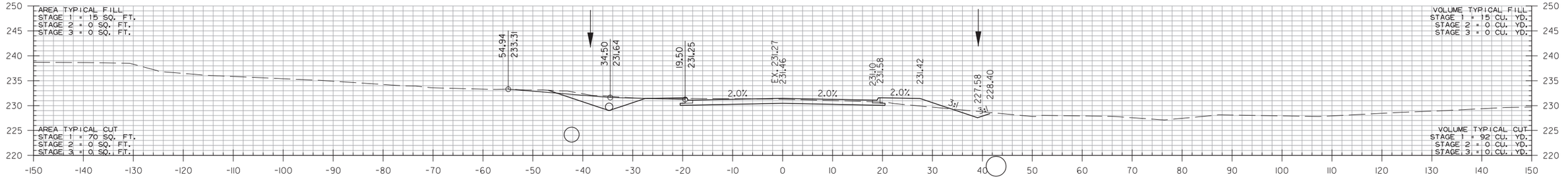
STA. 138+40
END SP. DT. LT. 0.23%
ELEV. 229.15

138+50.00



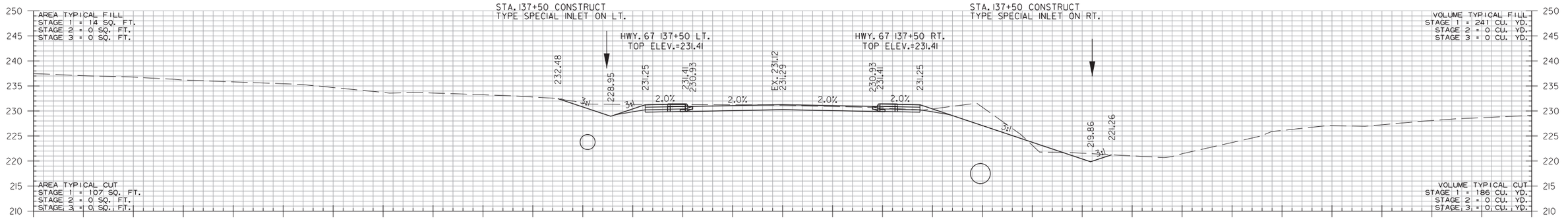
STA. 137+78 INSTALL
18" X 32' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 19 CU. YDS.

138+00.00



137+78.00

STA. 137+70
END SP. DT. RT. 7.71%
ELEV. 221.40



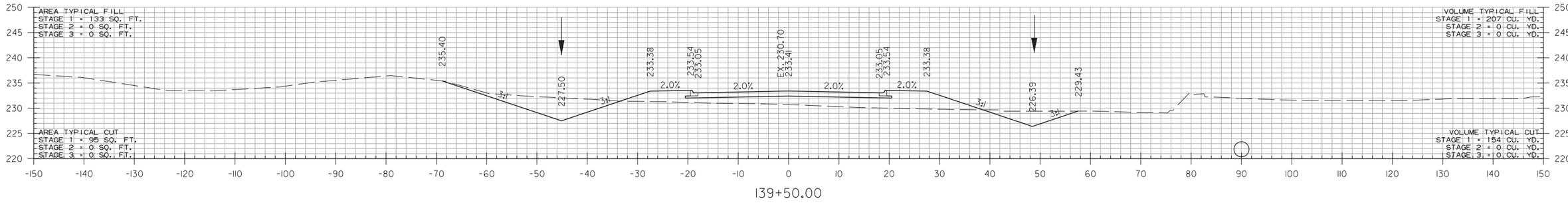
STA. 137+30
END SP. DT. LT. 3.00%
BEGIN SP. DT. LT. 0.23%
ELEV. 228.90

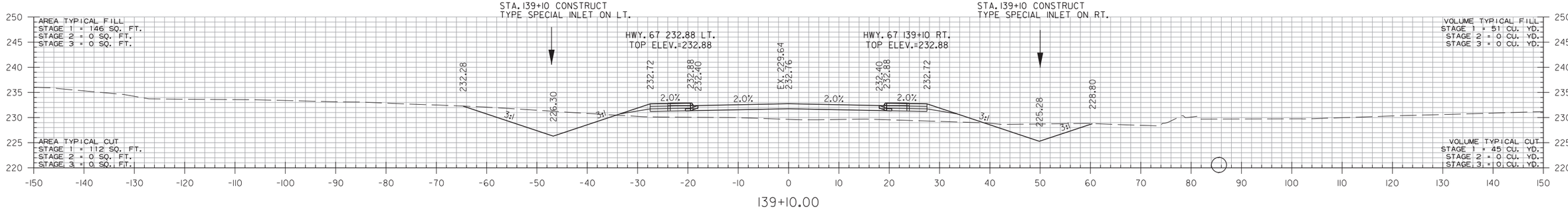
137+50.00

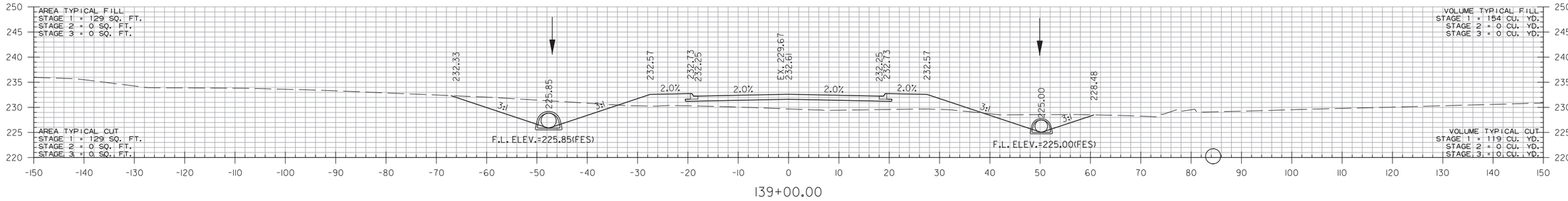
HWY. 67
STA. 137+50 TO STA. 138+50

rnfortner 6/28/2022 10:38:22 AM
WORKSPACE: AHTD
L:\20I7\I7015I5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy_67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	435	549
		CROSS SECTIONS				







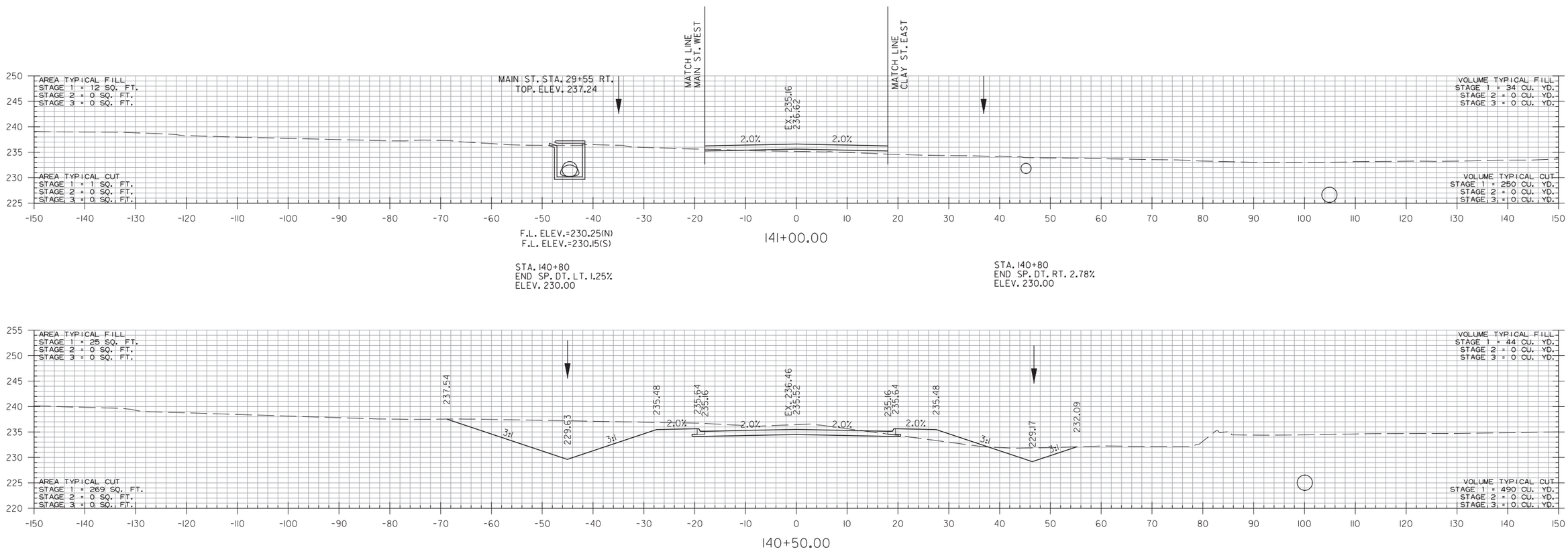
STA. 139+00
BEGIN SP. DT. LT. 3.00%
ELEV. 226.00

STA. 139+00
BEGIN SP. DT. RT. 2.78%
ELEV. 225.00

HWY. 67
STA. 139+00 TO STA. 139+50

rnfortner 6/28/2022 10:38:23 AM
WORKSPACE: AHTD
L:\20I7\I7015I5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy. 67.dgn
REVISED DATE:

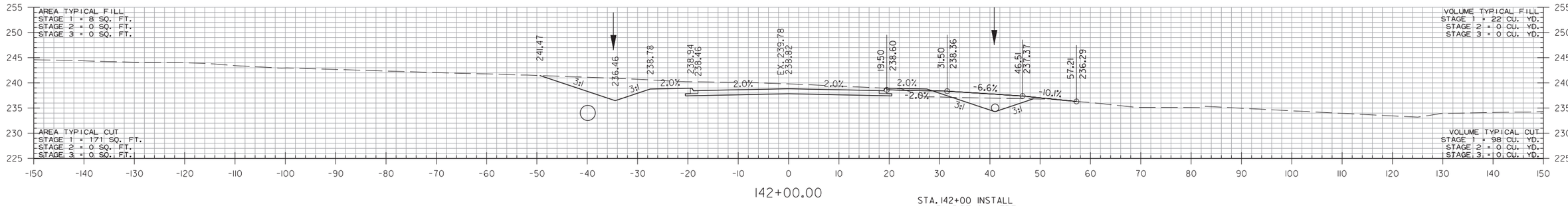
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	436	549
		CROSS SECTIONS				



HWY. 67
STA. 140+00 TO STA. 141+00

rnfortner 6/28/2022 10:38:23 AM
WORKSPACE: AHTD
L:\20\TV\170\7515 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy.67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	437	549
		CROSS SECTIONS				



142+00.00

STA. 141+75 CONSTRUCT
DROP INLET 37' LT. H=4'-9"
WITH 36"x65' PIPE INLET
FROM FES LT.
AND 36"x34' PIPE OUTLET
TO DROP INLET AT
C.L. MAIN ST. STA. 29+55 RT.
TYPE ST DROP INLET = 5'x5'
36" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 65 LIN. FT.
36" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 34 LIN. FT.
36" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 34 LIN. FT.
36" FES = 1EACH

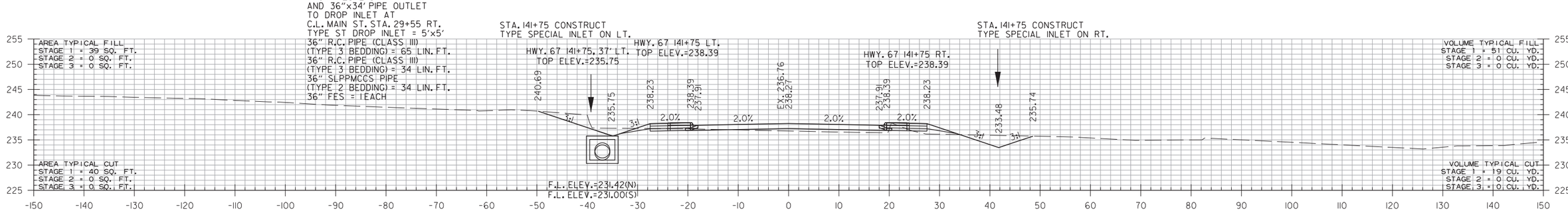
STA. 142+00 INSTALL
18"x38' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPROACH = 10 CU. YDS.

STA. 141+75 CONSTRUCT
TYPE SPECIAL INLET ON LT.

HWY. 67 141+75 LT.
HWY. 67 141+75, 37' LT. TOP ELEV.=238.39
TOP ELEV.=235.75

STA. 141+75 CONSTRUCT
TYPE SPECIAL INLET ON RT.

HWY. 67 141+75 RT.
TOP ELEV.=238.39

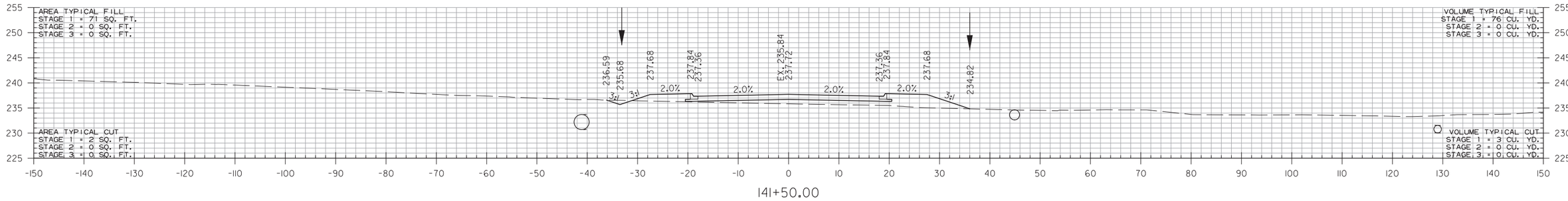


141+75.00

STA. 141+75
END SP. DT. LT. -3.25%
BEGIN SP. DT. LT. 4.85%
ELEV. 235.25

STA. 141+55
BEGIN SP. DT. LT. -3.25%
ELEV. 235.90

STA. 141+60
BEGIN SP. DT. RT. 3.18%
ELEV. 233.00



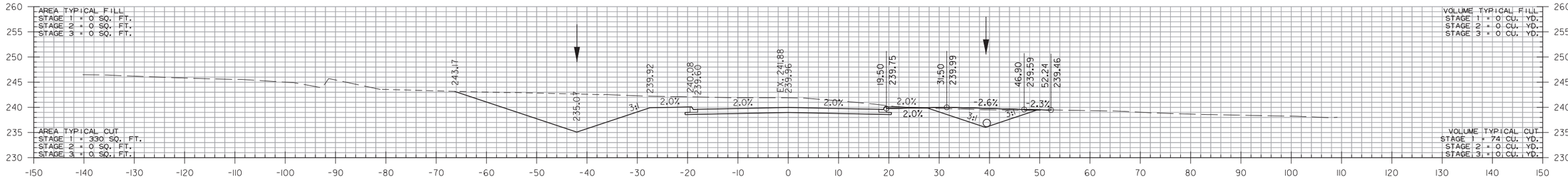
141+50.00

HWY. 67
STA. 141+50 TO STA. 142+00

rnfortner 6/28/2022 10:38:23 AM
WORKSPACE: AHTD
L:\20\T\170\7515 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy_67.dgn
REVISED DATE:

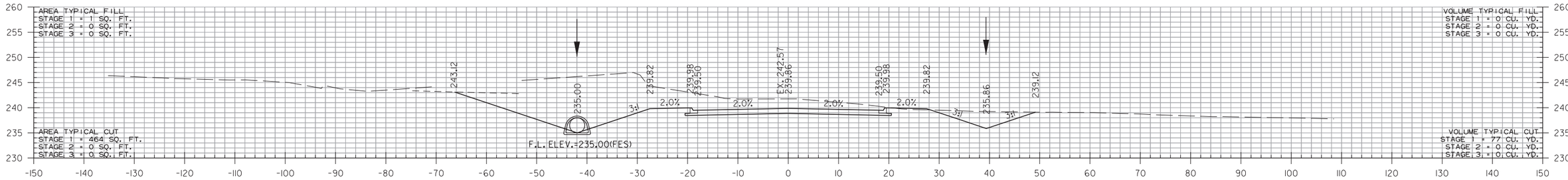
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	438	549
		CROSS SECTIONS				

STA. 142+70
END SP. DT. RT. 3.18%
BEGIN SP. DT. RT. 0.28%
ELEV. 236.50



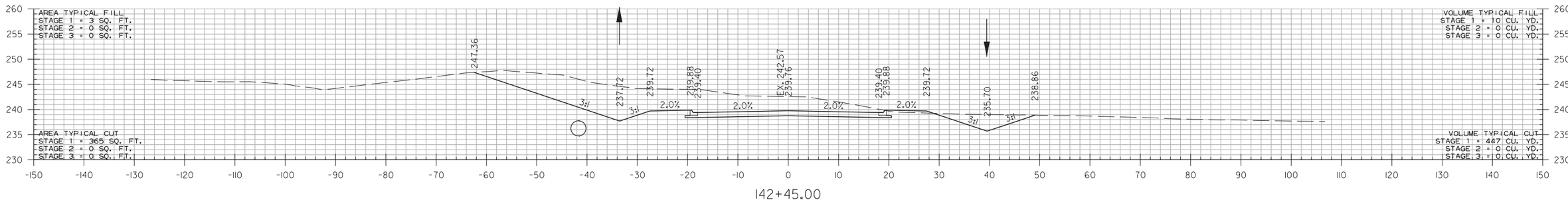
142+55.00

STA. 142+55 INSTALL
18"x34' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPROACH = 5 CU. YDS.



142+50.00

STA. 142+50
END SP. DT. LT. -34.00%
BEGIN SP. DT. LT. 1.36%
ELEV. 235.00



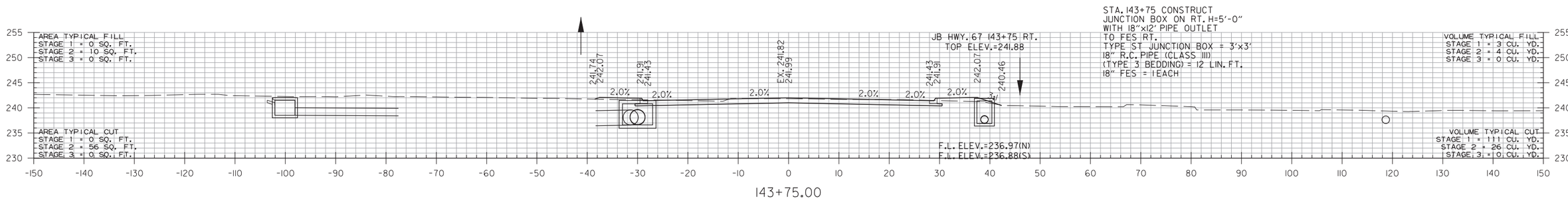
142+45.00

STA. 142+40
END SP. DT. LT. 4.85%
BEGIN SP. DT. LT. -34.00%
ELEV. 238.40

HWY. 67
STA. 142+45 TO STA. 142+55

rnfortner 6/28/2022 10:38:23 AM
WORKSPACE: AHTD
L:\2017\170715 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy. 67.dgn
REVISED DATE:

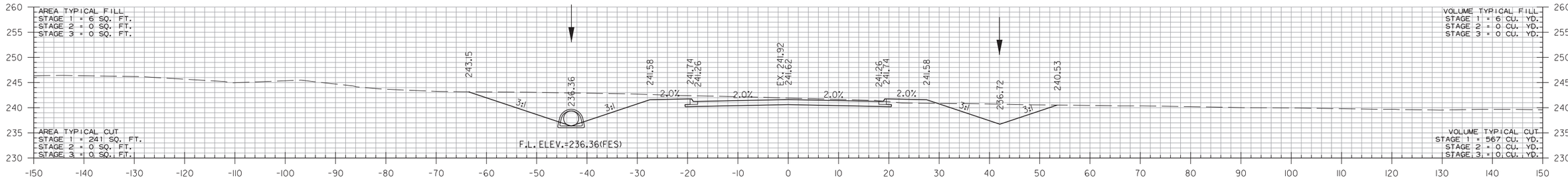
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	439	549
		CROSS SECTIONS				



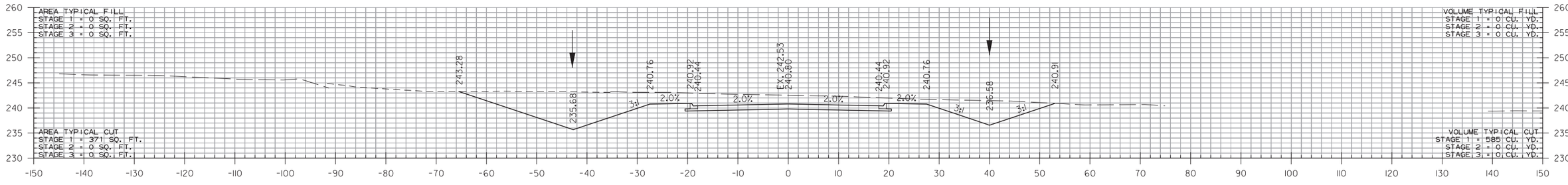
143+75.00

STA. 143+60
END SP. DT. LT. 1.36%
ELEV. 236.50

STA. 143+60
END SP. DT. RT. 0.28%
ELEV. 236.75



143+50.00

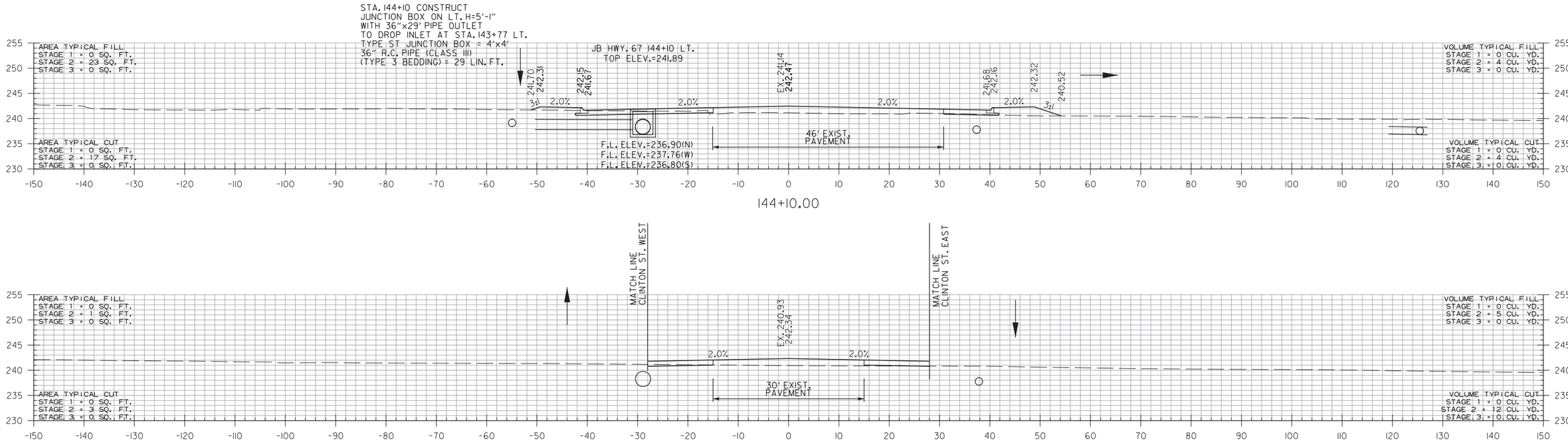


143+00.00

HWY. 67
STA. 143+00 TO STA. 143+75

rnfortner 6/28/2022 10:38:23 AM
WORKSPACE: AHTD
L:\2017\170755 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy. 67.dgn
REVISED DATE:

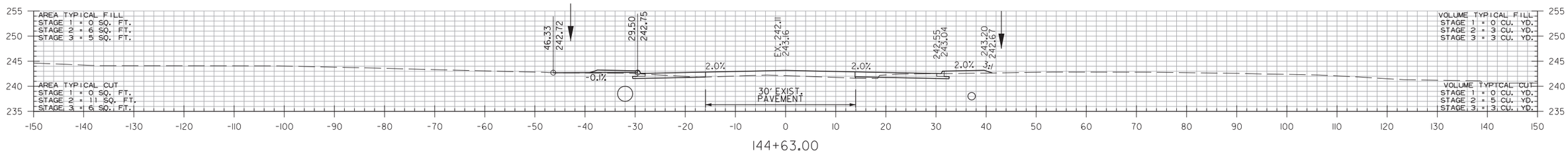
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	440	549
		CROSS SECTIONS				



HWY. 67
STA. 143+77 TO STA. 144+10

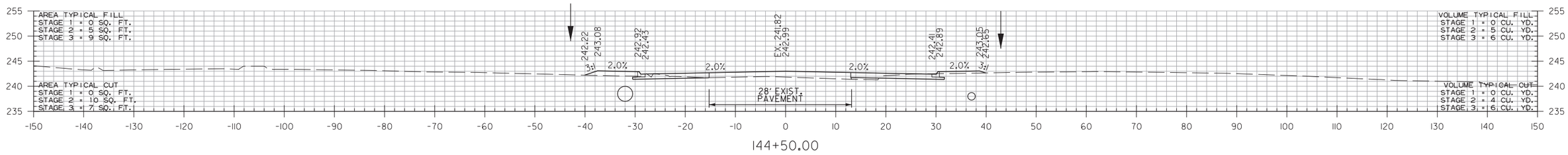
rnfortner 6/28/2022 10:38:24 AM
WORKSPACE: AHTD
L:\2017\170755 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy_67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	441	549
		CROSS SECTIONS				



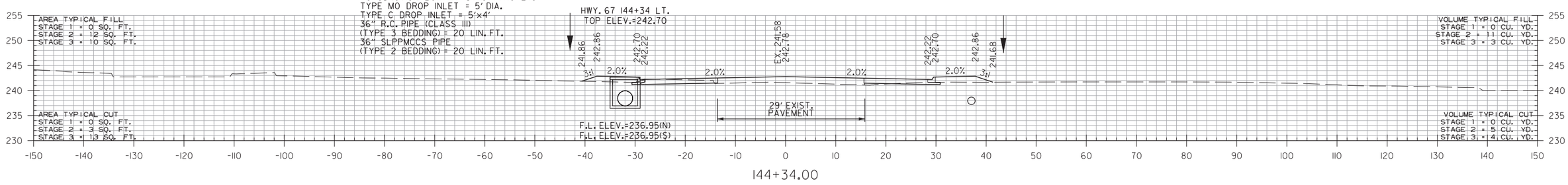
144+63.00

STA. 144+63 CONSTRUCT
APPROACH ON LT. = 3 CU. YDS.



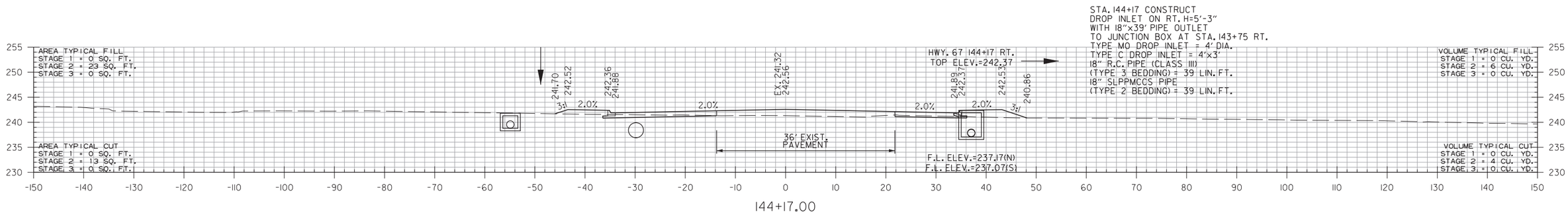
144+50.00

STA. 144+34 CONSTRUCT
DROP INLET ON LT. H=5'-9"
WITH 36"x20' PIPE OUTLET
TO JUNCTION BOX AT STA. 144+10 LT.
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 5'x4'
36" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 20 LIN. FT.
36" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 20 LIN. FT.



144+34.00

STA. 144+17 CONSTRUCT
DROP INLET ON RT. H=5'-3"
WITH 18"x39' PIPE OUTLET
TO JUNCTION BOX AT STA. 143+75 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 39 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 39 LIN. FT.

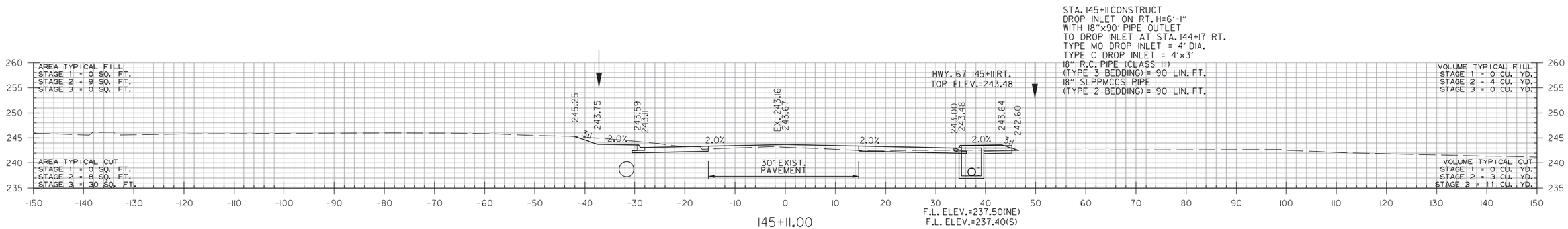


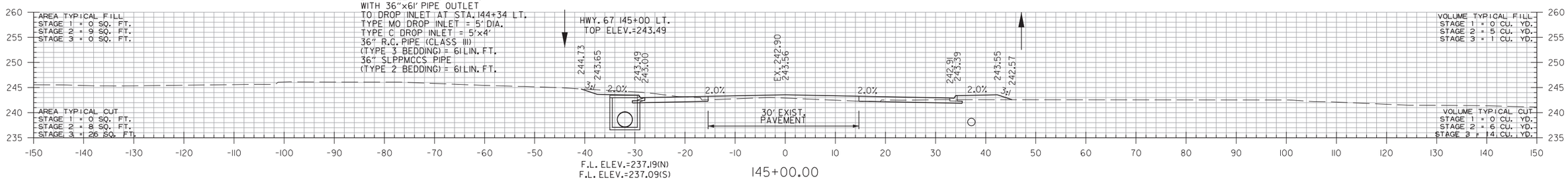
144+17.00

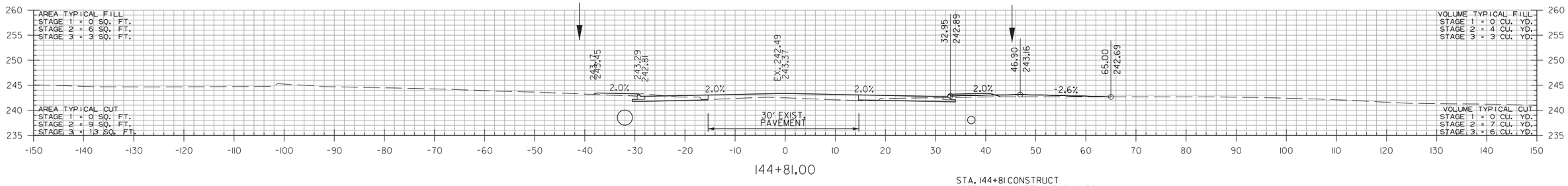
HWY. 67
STA. 144+17 TO STA. 144+63

rnfortner 6/28/2022 10:38:24 AM
WORKSPACE: AHTD
L:\201\170175 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy.67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	442	549
		CROSS SECTIONS				





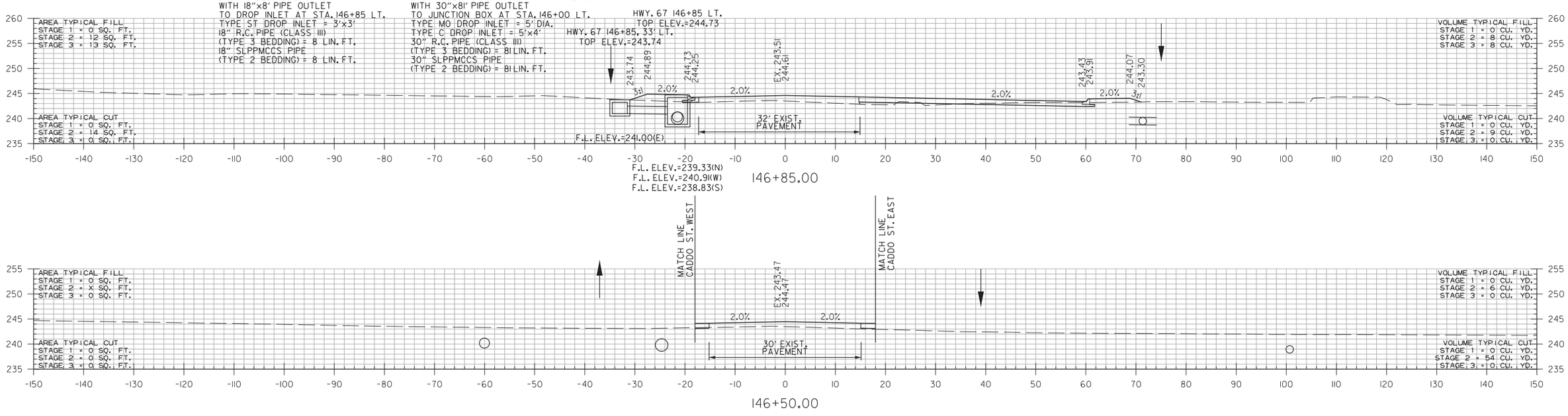


STA. 144+81 CONSTRUCT
APPROACH ON RT. = 5 CU. YDS.

HWY. 67
STA. 144+81 TO STA. 145+11

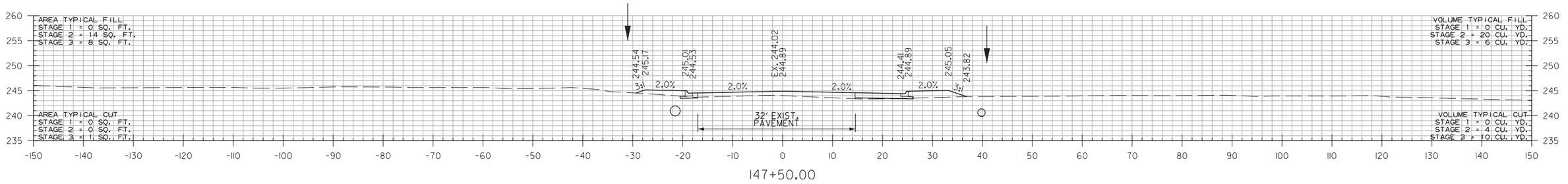
rnfortner 6/28/2022 10:38:24 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy. 67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	443	549
		CROSS SECTIONS				

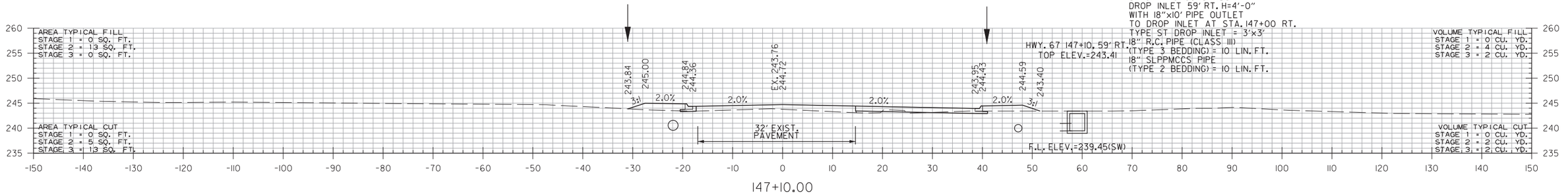


rnfortner 6/28/2022 10:38:24 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy. 67.dgn
REVISED DATE:

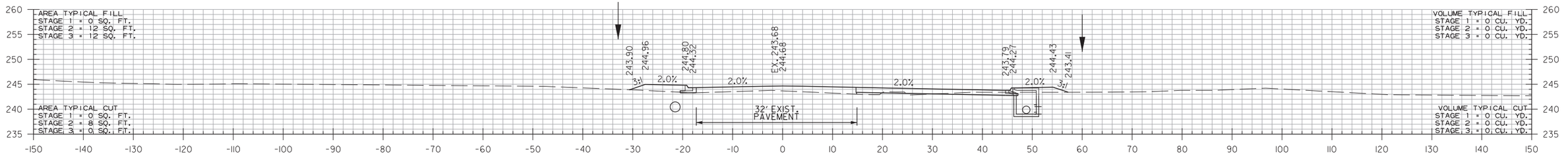
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	444	549
		CROSS SECTIONS				



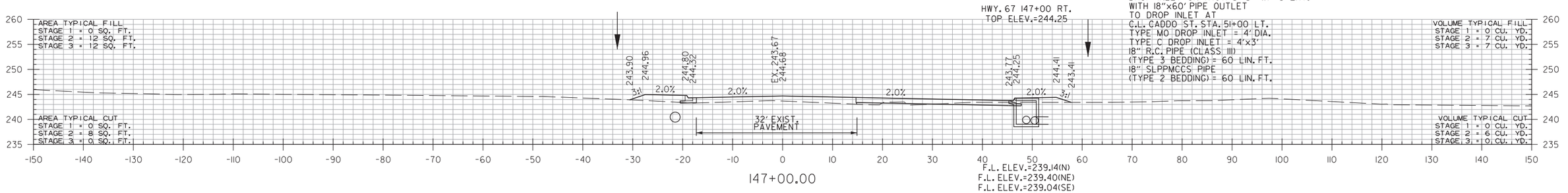
147+50.00



147+10.00



147+01.00

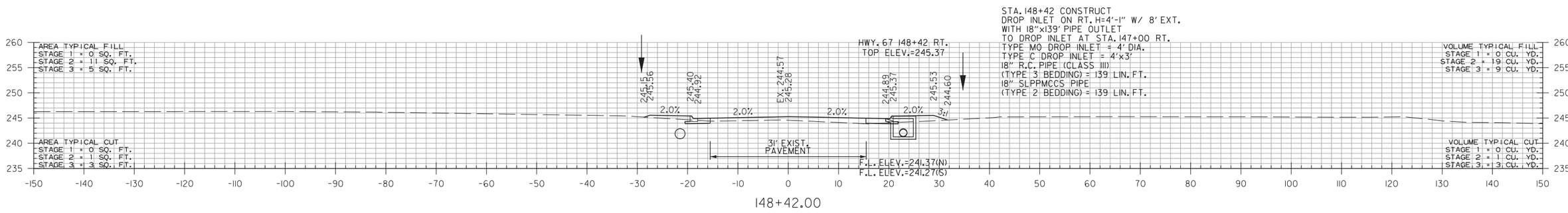


147+00.00

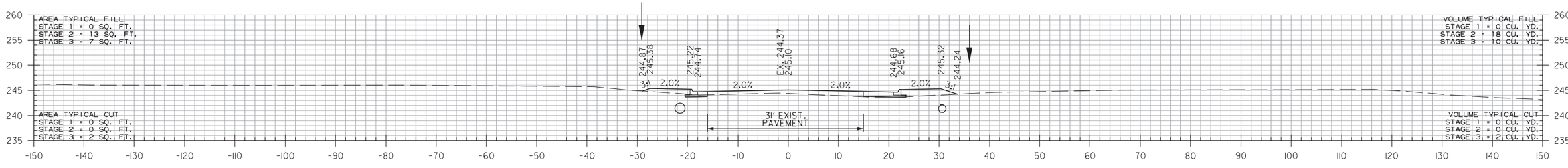
HWY. 67
STA. 147+00 TO STA. 147+50

rnfortner 6/28/2022 10:38:24 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy. 67.dgn
REVISED DATE:

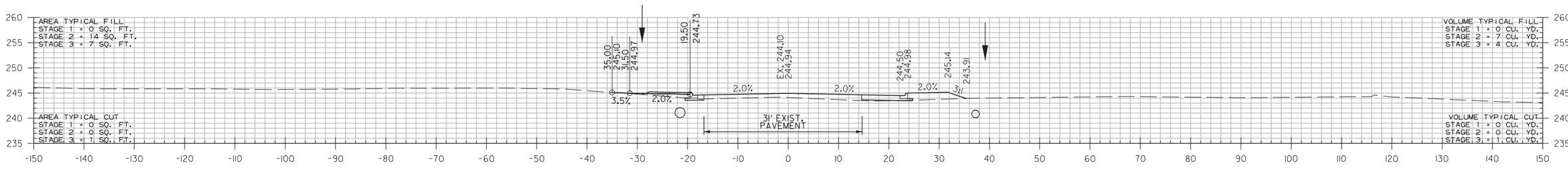
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	445	549
		CROSS SECTIONS				



148+42.00



148+00.00



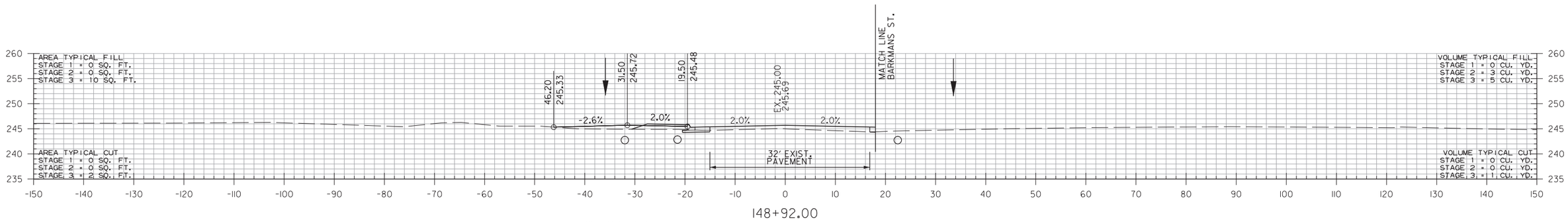
147+64.00

STA. 147+64 CONSTRUCT
APPROACH ON LT. = 2 CU. YDS.

HWY. 67
STA. 147+64 TO STA. 148+42

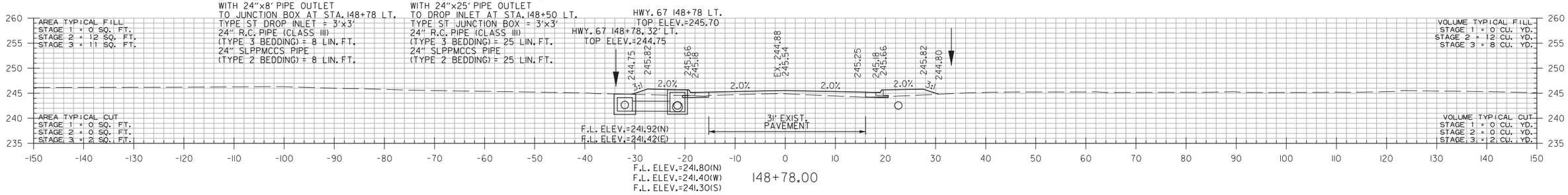
rnfortner 6/28/2022 10:38:25 AM
WORKSPACE: AHTD
L:\2017\170715 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy. 67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	446	549
		CROSS SECTIONS				

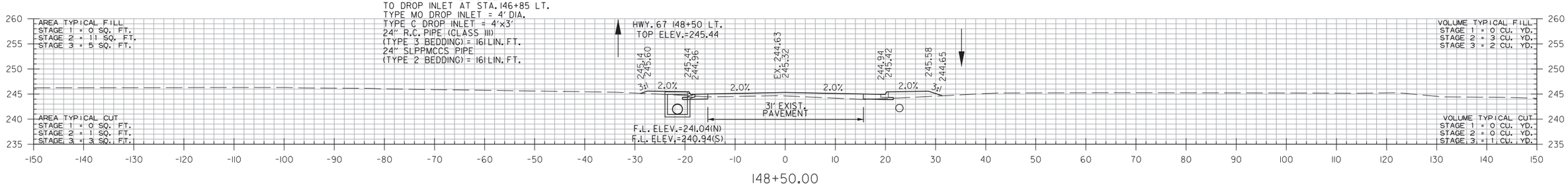


148+92.00

STA. 148+92 CONSTRUCT
APPROACH ON LT. = 3 CU. YDS.



148+78.00

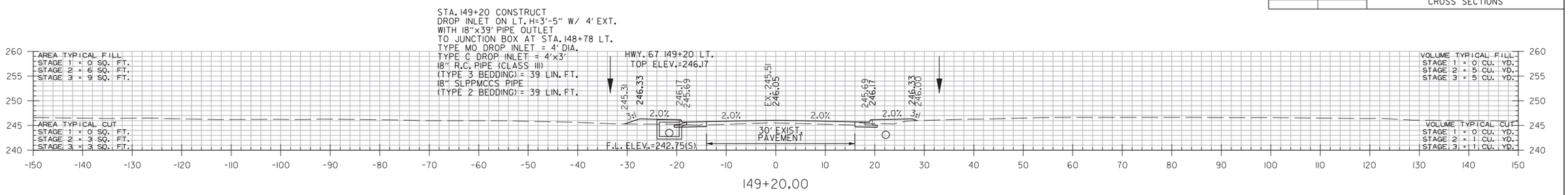


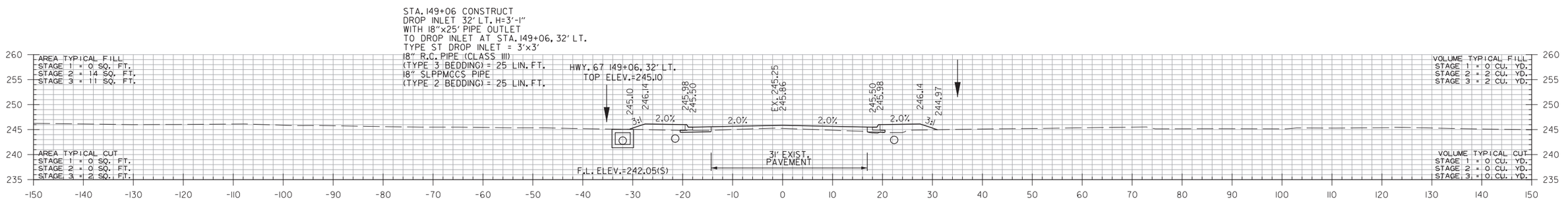
148+50.00

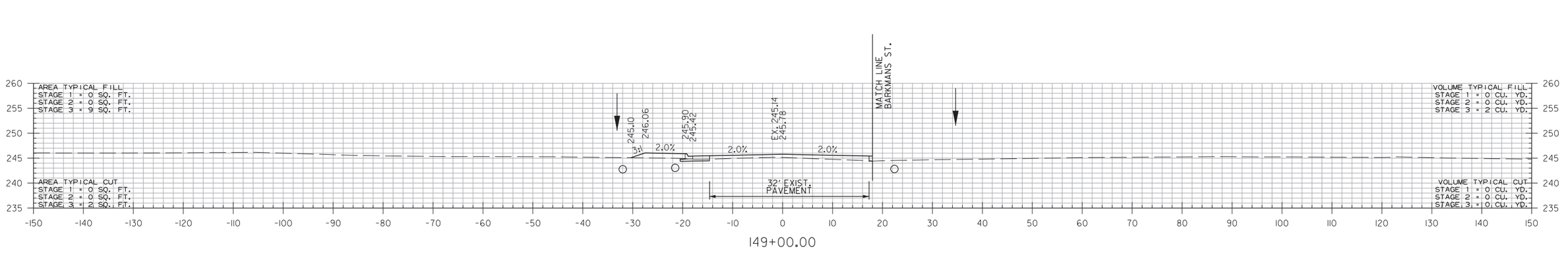
HWY. 67
STA. 148+50 TO STA. 148+92

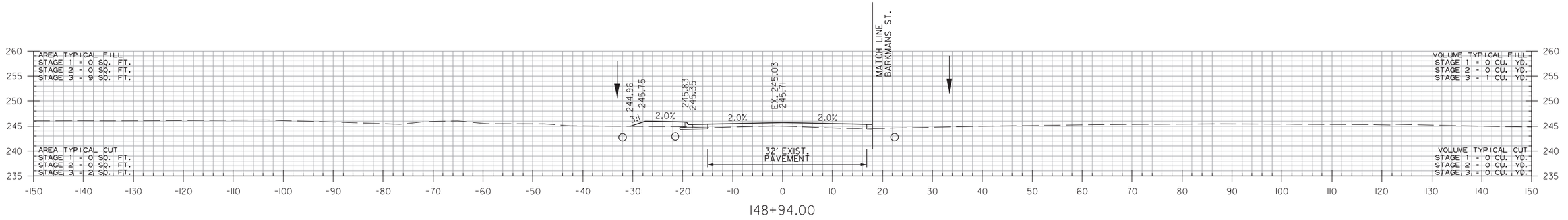
rnfortner 6/28/2022 10:38:25 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy. 67.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	447	549
		CROSS SECTIONS				





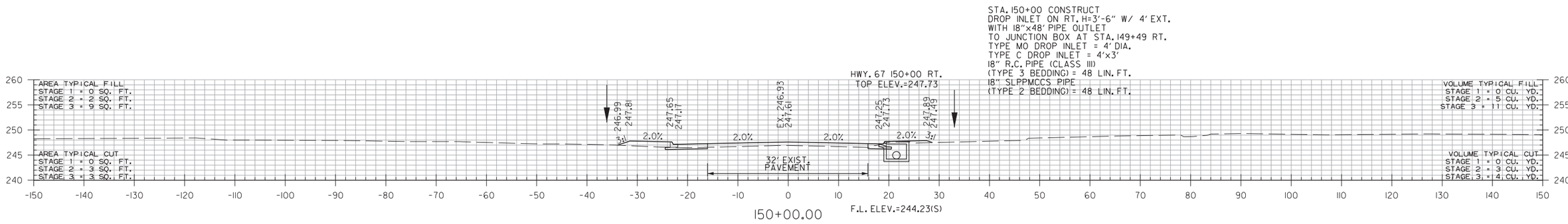


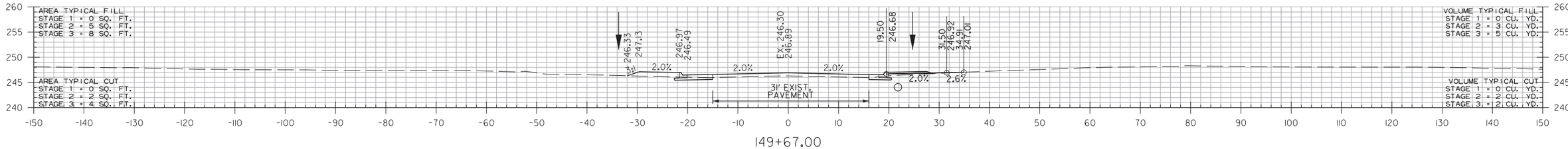


HWY. 67
STA. 148+94 TO STA. 149+20

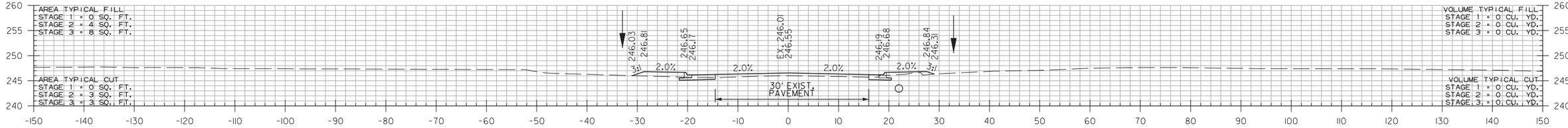
rnfortner 6/28/2022 10:38:25 AM
WORKSPACE: AHTD
L:\2017\1701715 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy.67.dgn
REVISED DATE:

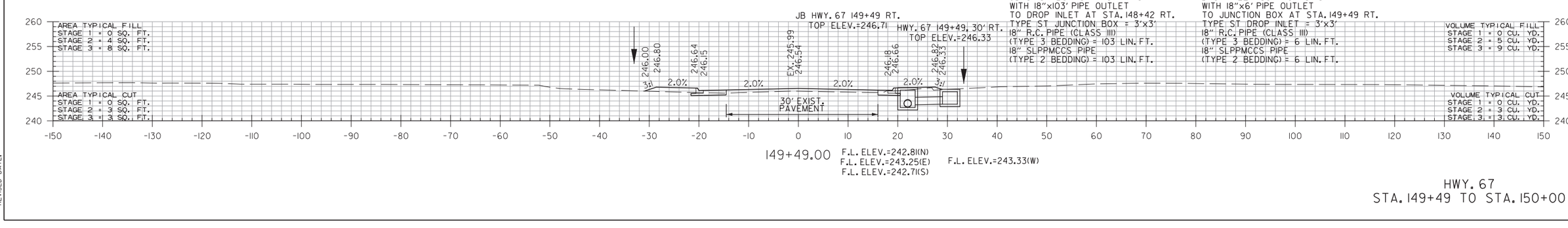
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	448	549
		CROSS SECTIONS				





STA. 149+67 CONSTRUCT
APPROACH ON RT. = 3 CU. YDS.

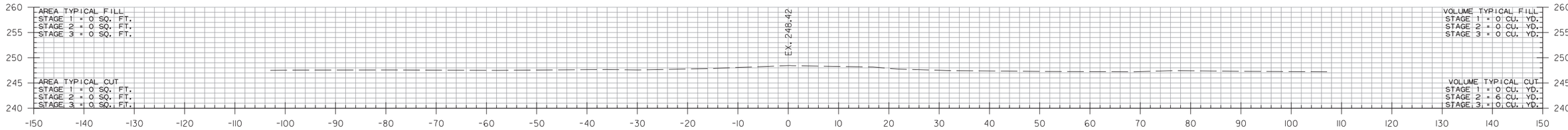




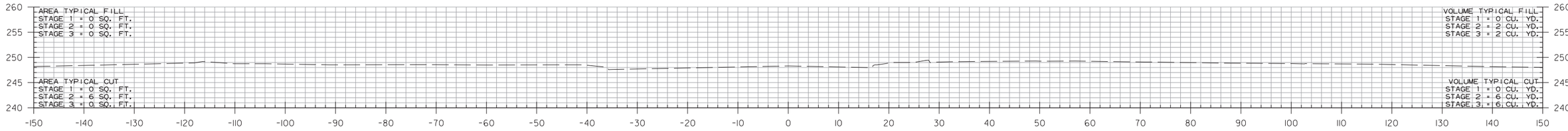
HWY. 67
STA. 149+49 TO STA. 150+00

rnfortner
WORKSPACE: AHTD
L:\2017\170715 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy. 67.dgn
6/28/2022 10:38:25 AM
REVISED DATE:

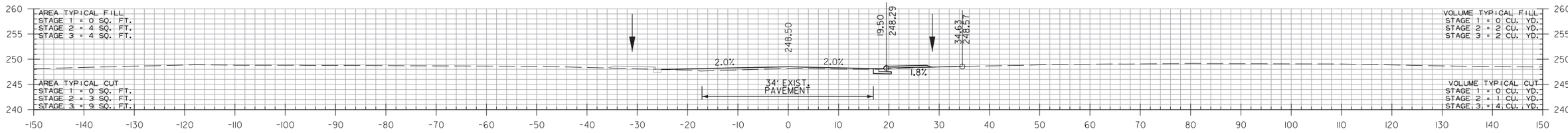
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	449	549
		CROSS SECTIONS				



151+50.00



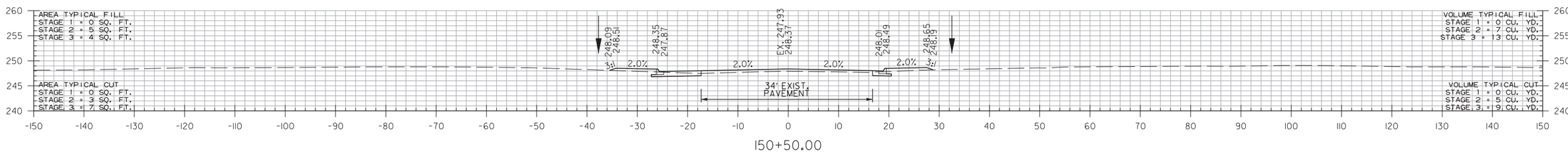
151+00.00



150+65.00

STA. 150+65 CONSTRUCT
APPROACH ON RT. = 10 CU. YDS.

STA. 150+61.42 TO STA. 152+65.48 TO BE
PARTIALLY CONSTRUCTED IN JOB 070439



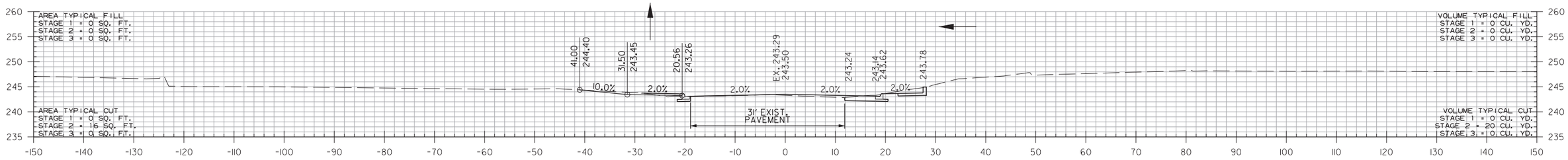
150+50.00

HWY. 67
STA. 150+50 TO STA. 151+50

rnfortner 6/28/2022 10:38:26 AM
WORKSPACE: AHTD
L:\20\T\T01T515 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy.67.dgn
REVISED DATE:

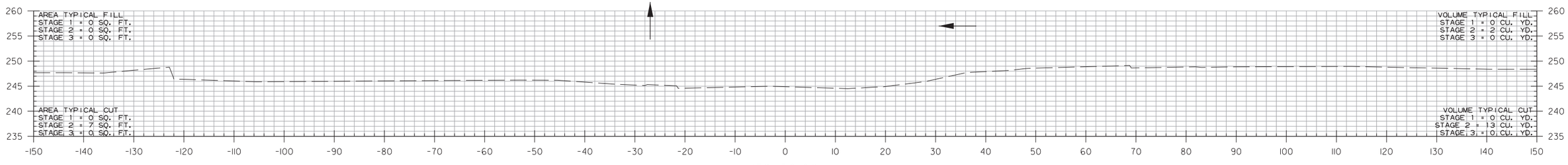
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	450	549
		CROSS SECTIONS				

STA. 152+97 CONSTRUCT
APPROACH ON LT. = 8 CU. YDS.

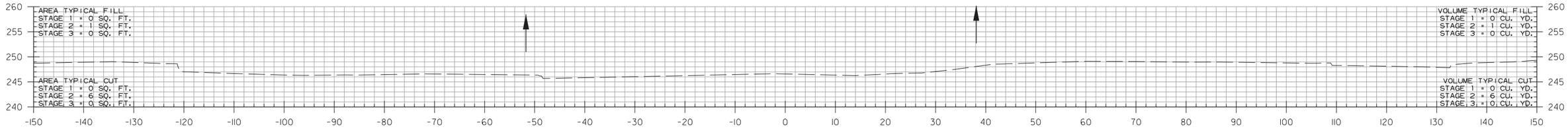


152+97.00

STA. 150+61.42 TO STA. 152+65.48 TO BE
PARTIALLY CONSTRUCTED IN JOB 070439



152+50.00

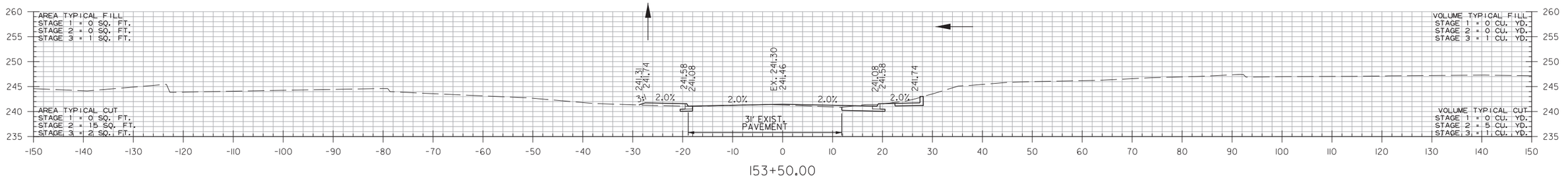


152+00.00

HWY. 67
STA. 152+00 TO STA. 152+97

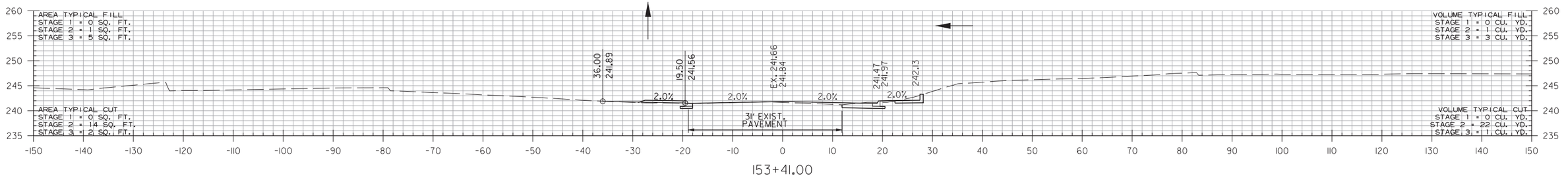
rnfortner 6/28/2022 10:38:26 AM
WORKSPACE: AHTD
L:\2017\170715 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy. 67 North Ext.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	451	549
		CROSS SECTIONS				

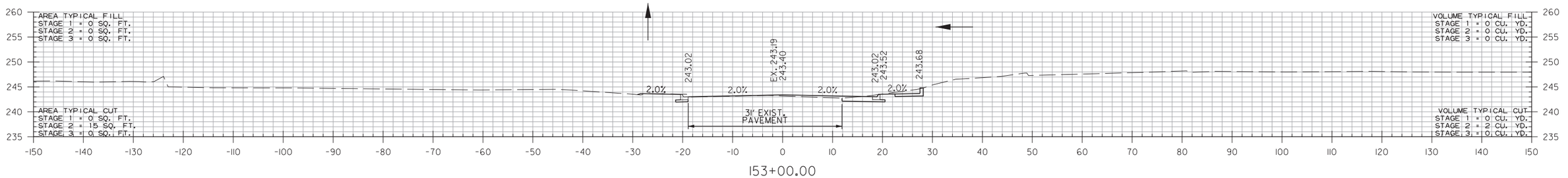


153+50.00

STA. 153+41 CONSTRUCT
APPROACH ON LT. = 2 CU. YDS.



153+41.00

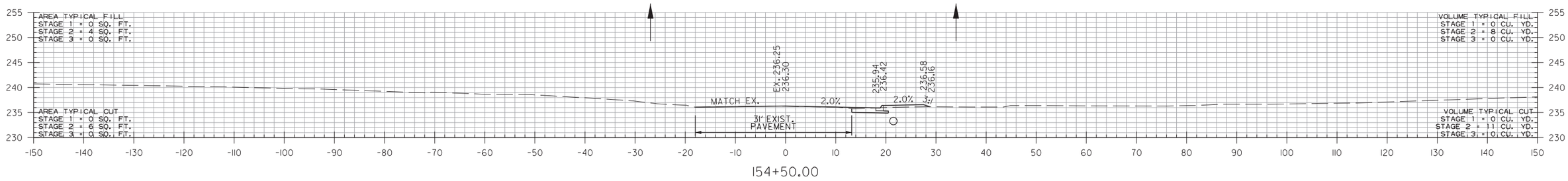


153+00.00

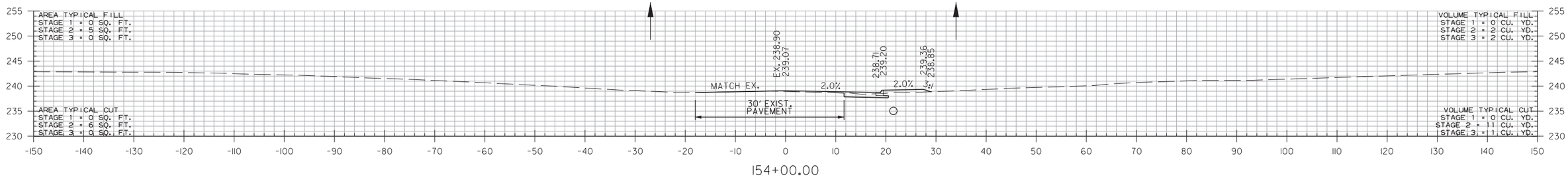
HWY. 67
STA. 153+00 TO STA. 153+50

rnfortner 6/28/2022 10:38:26 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy. 67 North Ext.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	452	549
		CROSS SECTIONS				

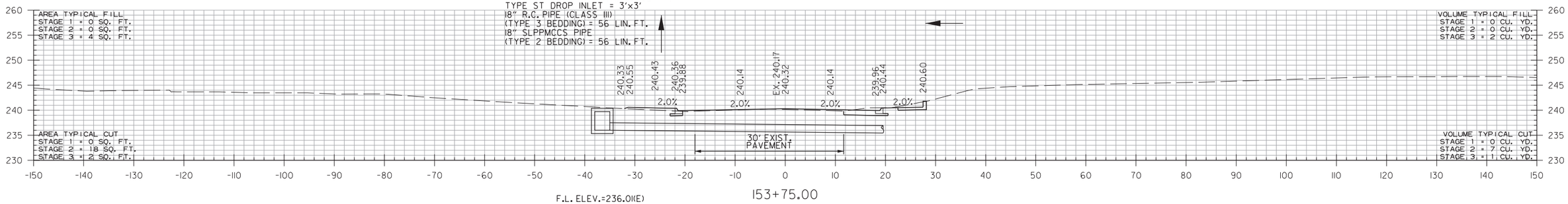


154+50.00



154+00.00

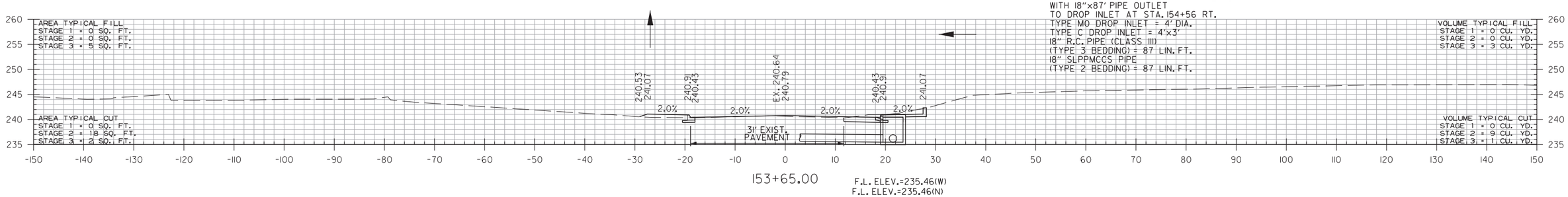
STA. 153+75 CONSTRUCT
DROP INLET ON LT. H=4'-5"
WITH 18"x56' PIPE OUTLET
TO DROP INLET AT STA. 153+65 RT.
TYPE ST DROP INLET = 3'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 56 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 56 LIN. FT.



F.L. ELEV.=236.01(E)

153+75.00

STA. 153+65 CONSTRUCT
DROP INLET ON RT. H=5'-3" W/ 4' EXT.
WITH 18"x87' PIPE OUTLET
TO DROP INLET AT STA. 154+56 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 87 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 87 LIN. FT.



153+65.00

F.L. ELEV.=235.46(W)
F.L. ELEV.=235.46(N)

HWY. 67
STA. 153+65 TO STA. 154+50

rnfortner 6/28/2022 10:38:27 AM
WORKSPACE: AHTD
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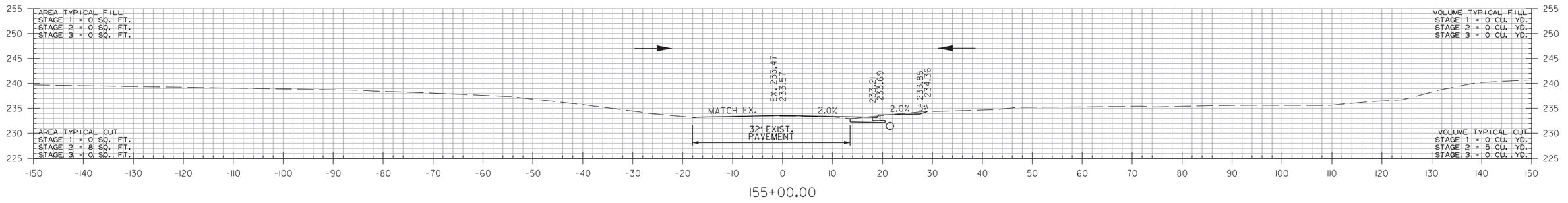
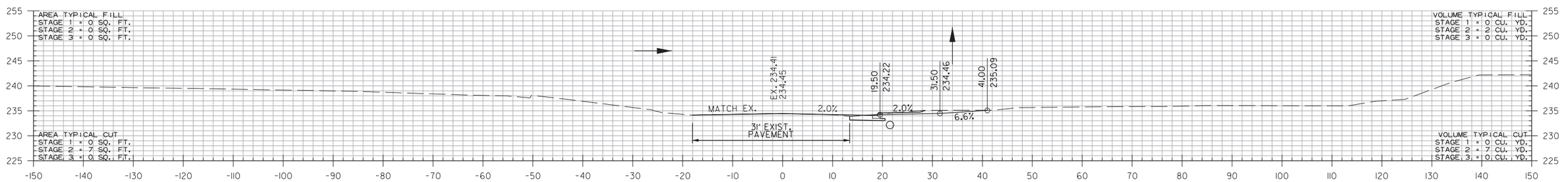
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	453	549
		CROSS SECTIONS				



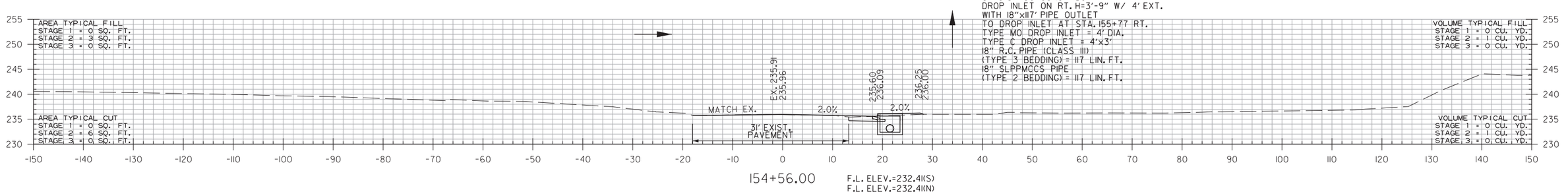
155+00.00

STA. 154+80 CONSTRUCT
APPROACH ON RT. = 14 CU. YDS.



154+83.00

STA. 154+56 CONSTRUCT
DROP INLET ON RT. H=3'-9" W/ 4' EXT.
WITH 18"x117' PIPE OUTLET
TO DROP INLET AT STA. 155+77 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 117 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 117 LIN. FT.



154+56.00

F.L. ELEV.=232.41(S)
F.L. ELEV.=232.41(N)

HWY. 67
STA. 154+56 TO STA. 155+00

rnfortner 6/28/2022 10:38:27 AM
WORKSPACE: AHTD
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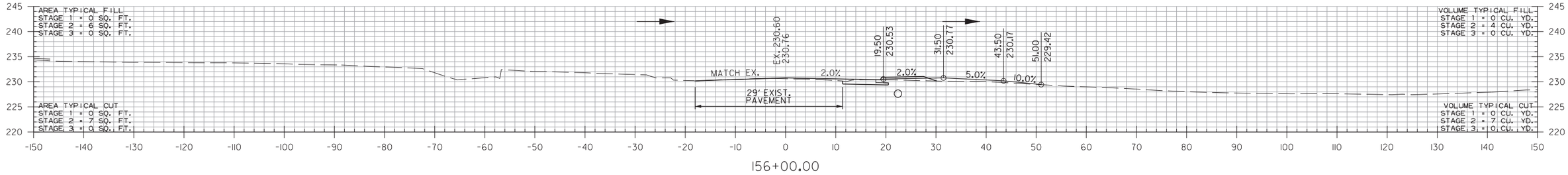
REVISED DATE:

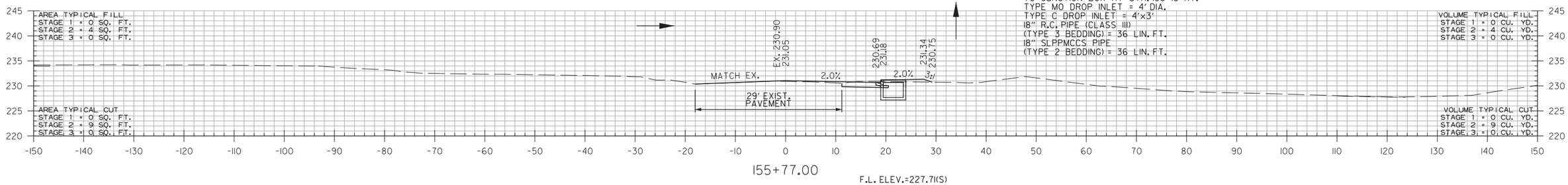
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	454	549
		CROSS SECTIONS				

STA. 156+02 CONSTRUCT
APPROACH ON RT. = 8 CU. YDS.



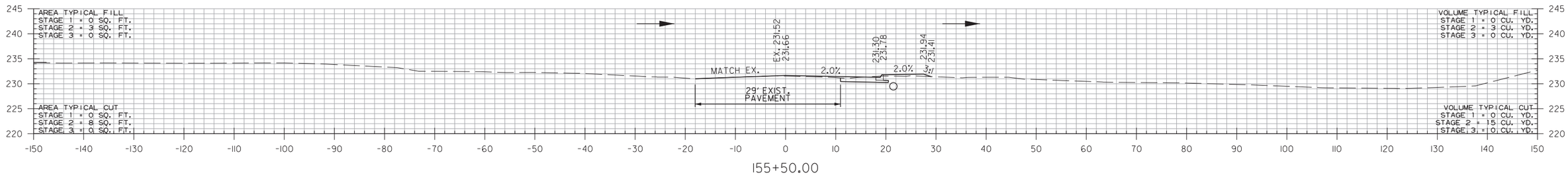
156+00.00

STA. 155+77 CONSTRUCT
DROP INLET ON RT. H=3'-6" W/ 4' EXT.
WITH 18"x36' PIPE OUTLET
TO JUNCTION BOX AT STA. 156+18 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 36 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 36 LIN. FT.



155+77.00

F.L. ELEV.=227.71(S)
F.L. ELEV.=227.71(N)

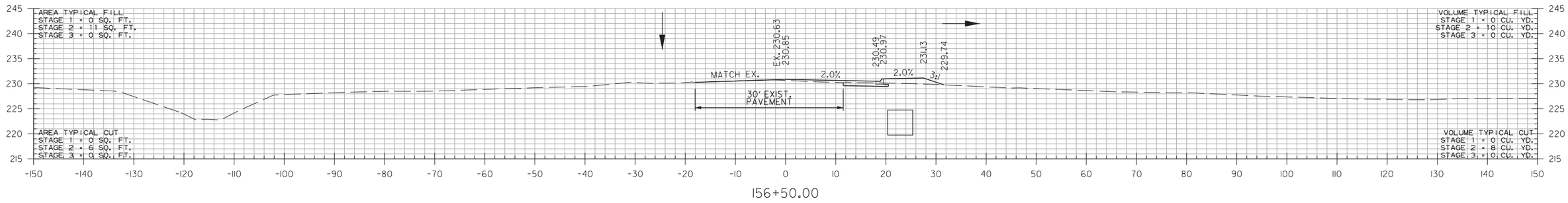


155+50.00

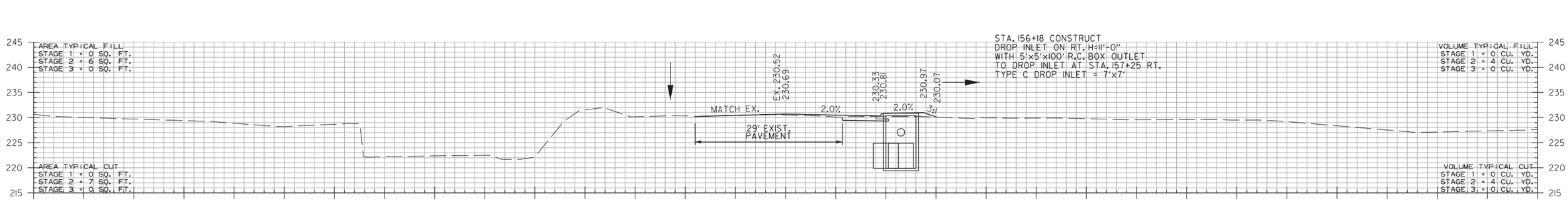
HWY. 67
STA. 155+50 TO STA. 156+00

rnfortner 6/28/2022 10:38:27 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy. 67 North Ext.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	455	549
		CROSS SECTIONS				



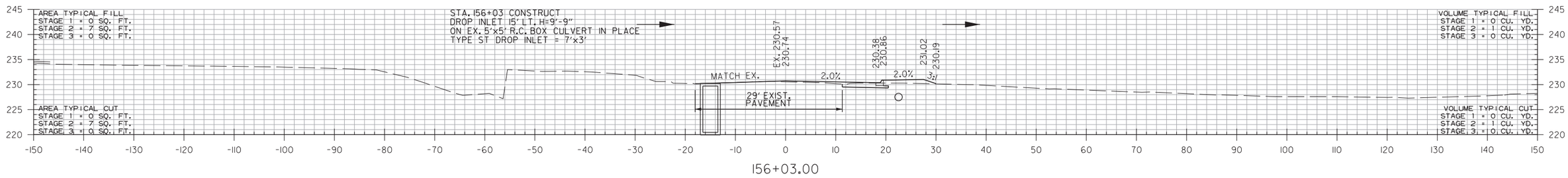
156+50.00



156+18.00

STA. 156+12 IN PLACE
5'x5' R.C. BOX CULVERT
RETAIN AND EXTEND 15' RT. TO
DROP INLET AT STA. 156+18 RT.

F.L. ELEV.=226.31(S)
F.L. ELEV.=219.89(W)
F.L. ELEV.=219.89(N)

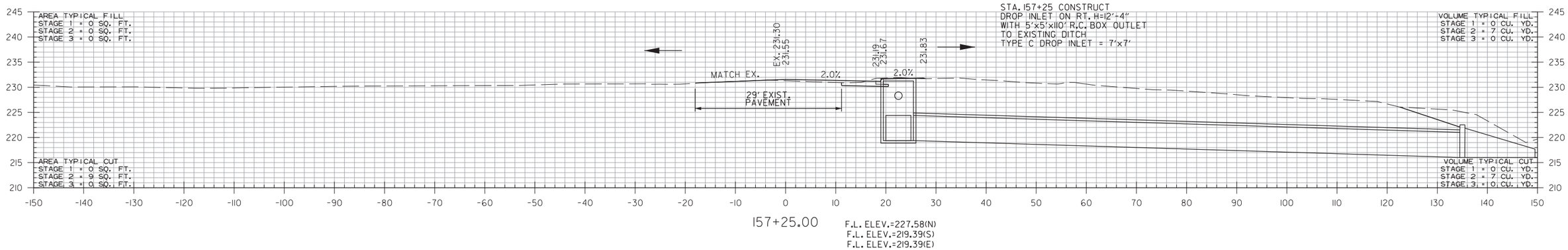


156+03.00

HWY. 67
STA. 156+03 TO STA. 156+50

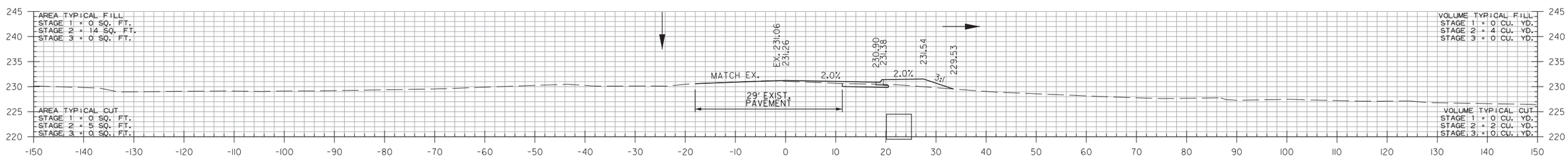
rnfortner 6/28/2022 10:38:27 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy. 67 North Ext.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	456	549
		CROSS SECTIONS				



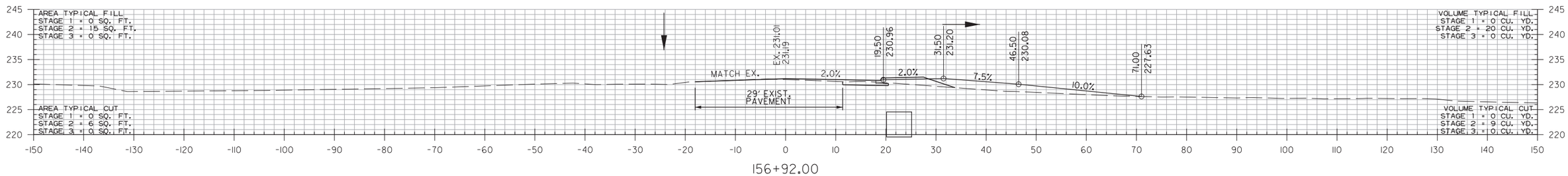
157+25.00

F.L. ELEV.=227.58(N)
F.L. ELEV.=219.39(S)
F.L. ELEV.=219.39(E)



157+00.00

STA. 156+92 CONSTRUCT
APPROACH ON RT. = 72 CU. YDS.

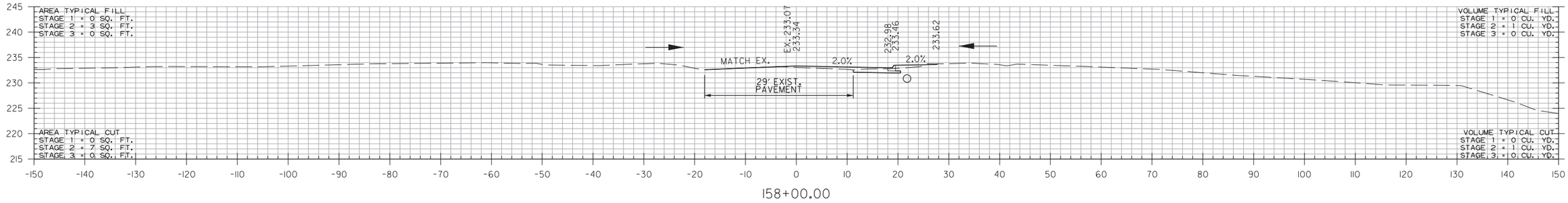


156+92.00

HWY. 67
STA. 156+92 TO STA. 157+25

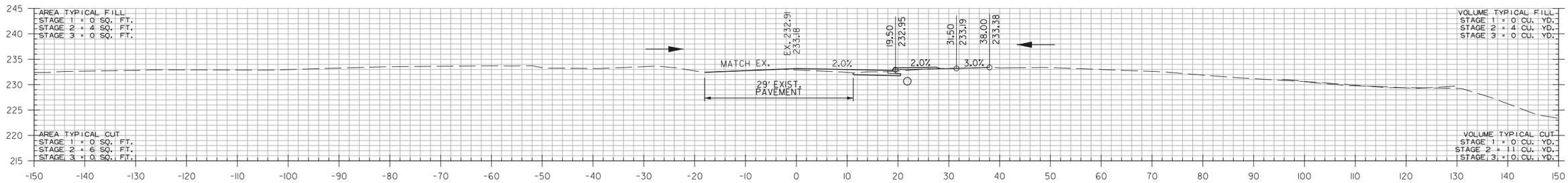
rnfortner 6/28/2022 10:38:27 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy. 67 North Ext.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	457	549
		CROSS SECTIONS				

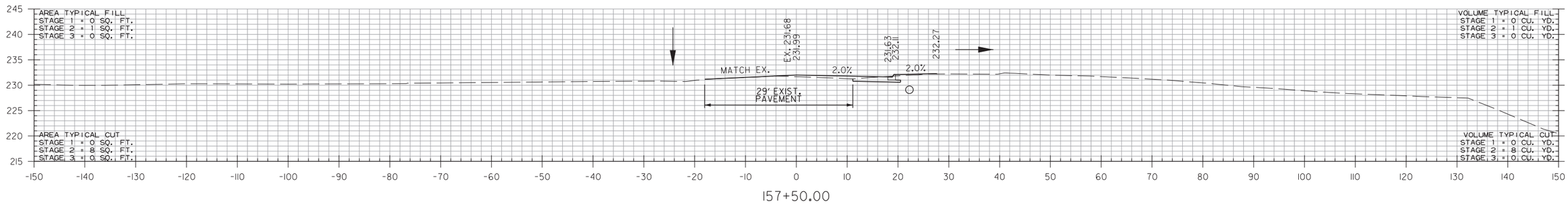


158+00.00

STA. 157+95 CONSTRUCT
APPROACH ON RT. = 1 CU. YD.



157+95.00



157+50.00

HWY. 67
STA. 157+50 TO STA. 158+00

rnfortner 6/28/2022 10:38:28 AM
WORKSPACE: AHTD
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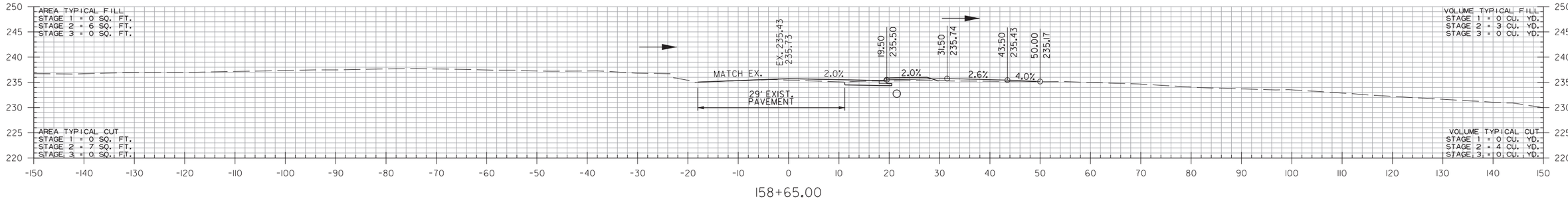
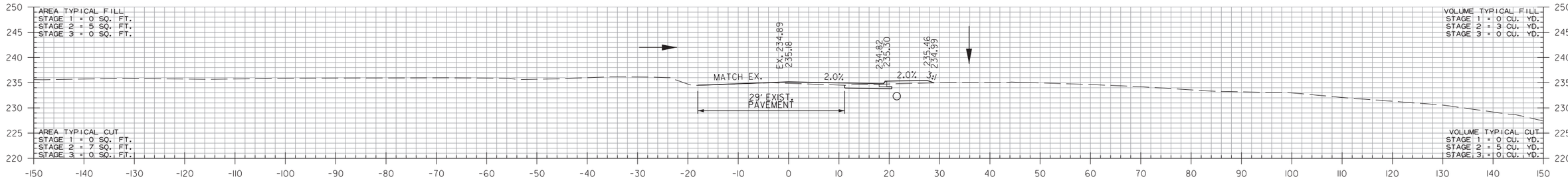
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	458	549
		CROSS SECTIONS				

STA. 158+65 CONSTRUCT
APPROACH ON RT. = 6 CU. YDS.

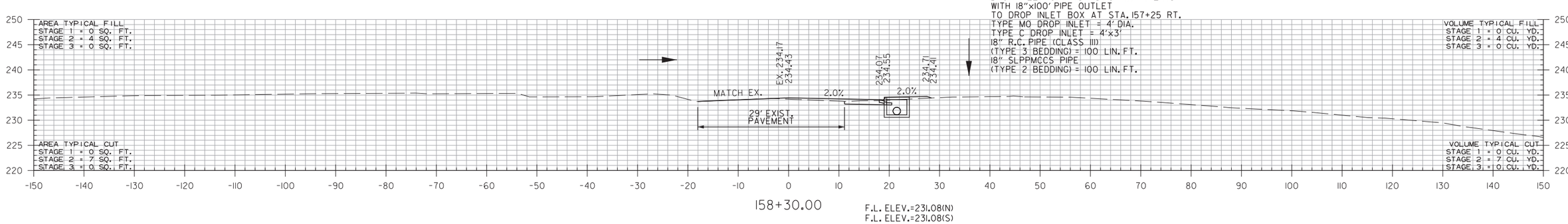


158+65.00



158+50.00

STA. 158+30 CONSTRUCT
DROP INLET ON RT. H=3'-6" W/ 4' EXT.
WITH 18"x100' PIPE OUTLET
TO DROP INLET BOX AT STA. 157+25 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 100 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 100 LIN. FT.



158+30.00

F.L. ELEV.=231.08(N)
F.L. ELEV.=231.08(S)

HWY. 67
STA. 158+30 TO STA. 158+65

rnfortner 6/28/2022 10:38:28 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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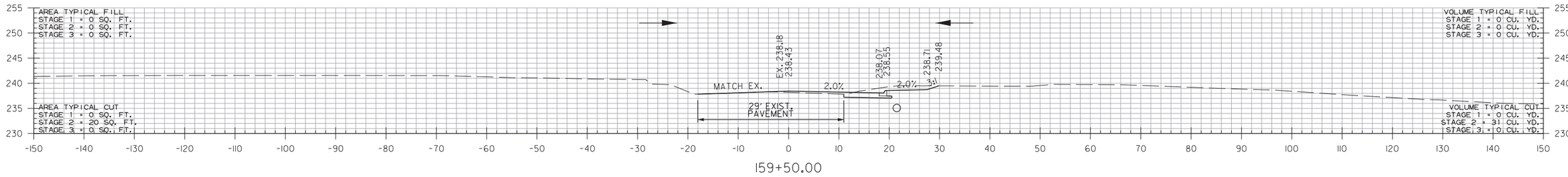
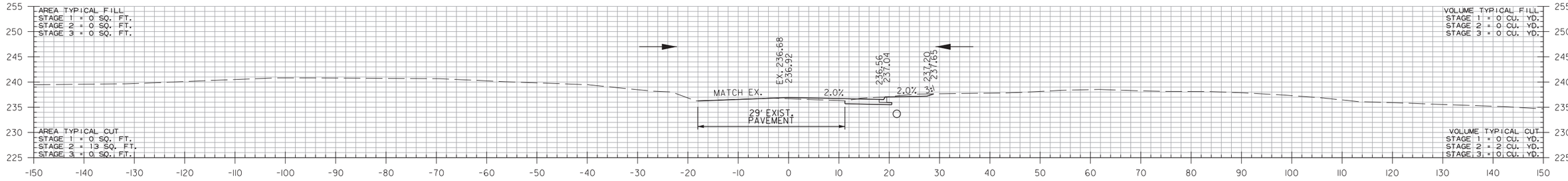
		CROSS SECTIONS				

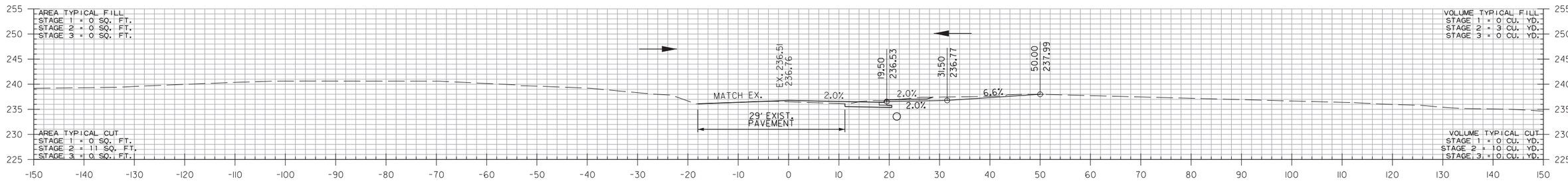


159+50.00



159+00.00

STA. 158+95 CONSTRUCT
APPROACH ON RT. = 9 CU. YDS.



158+95.00

HWY. 67
STA. 158+95 TO STA. 159+50

rnfortner 6/28/2022 10:38:28 AM
WORKSPACE: AHTD
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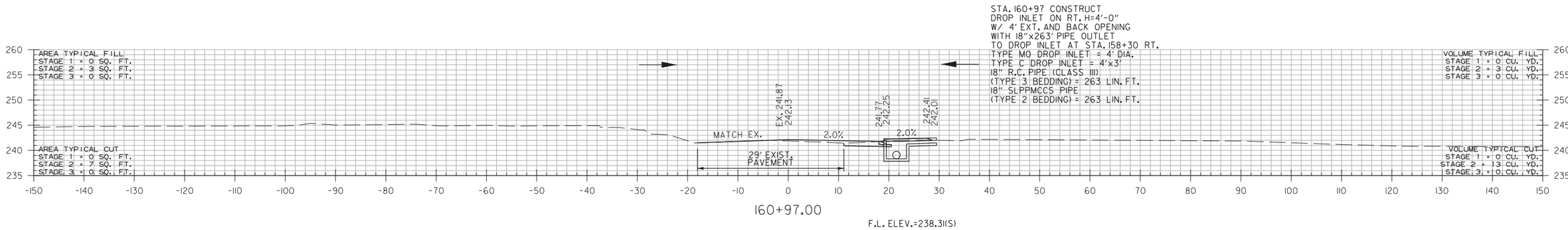
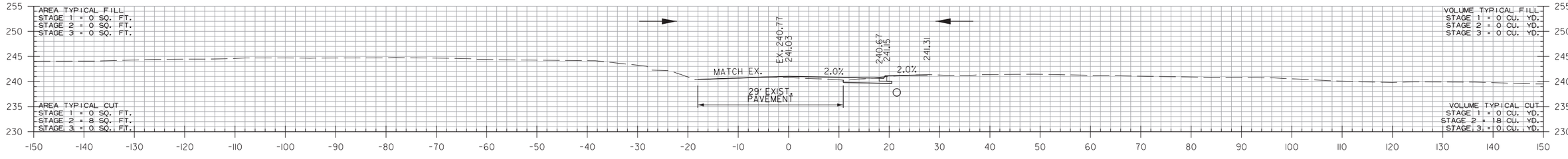
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	460	549
		CROSS SECTIONS				

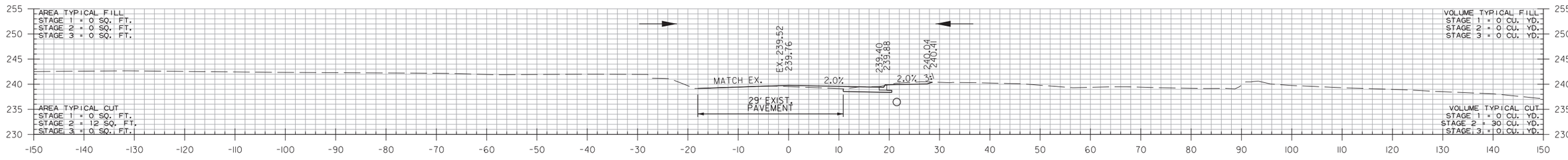


160+97.00

F.L. ELEV.=238.31(S)



160+50.00



160+00.00

HWY. 67
STA. 160+00 TO STA. 160+97

rnfortner 6/28/2022 10:38:28 AM
WORKSPACE: AHTD
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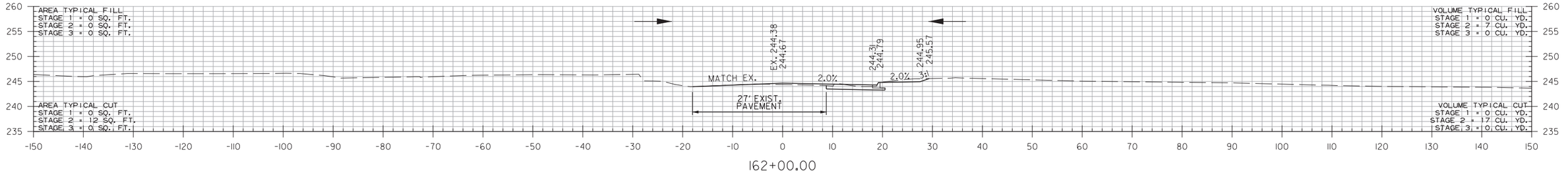
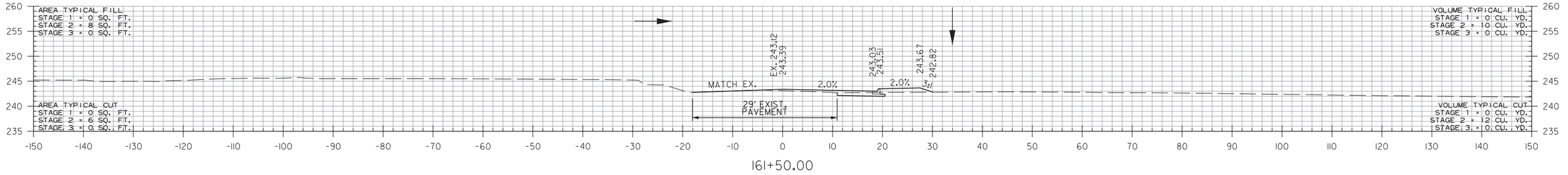
REVISED DATE:

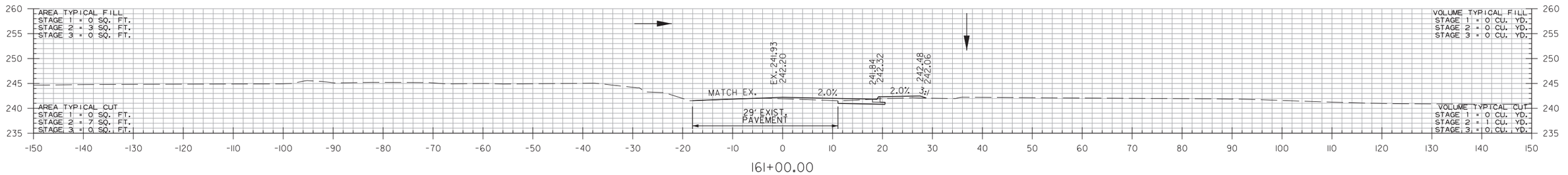
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	461	549
		CROSS SECTIONS				



162+00.00



161+50.00



161+00.00

HWY. 67
STA. 161+00 TO STA. 162+00

rnfortner 6/28/2022 10:38:28 AM
WORKSPACE: AHTD
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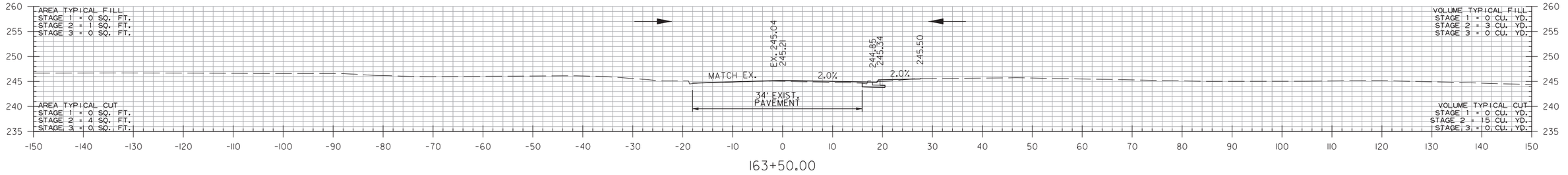
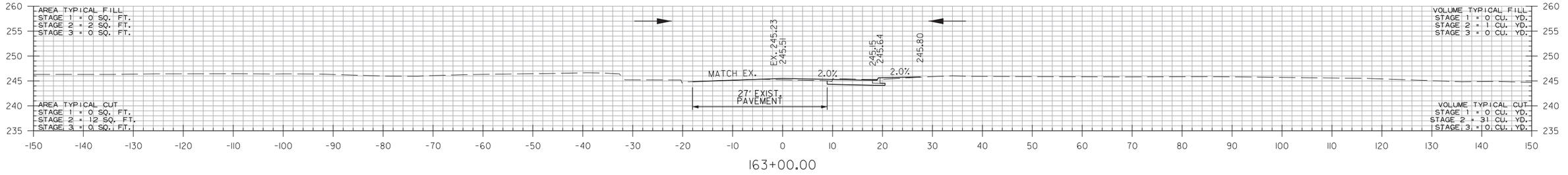
REVISED DATE:

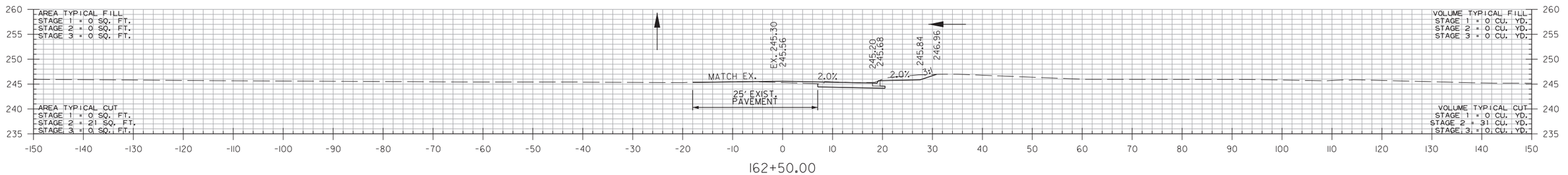
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	462	549
		CROSS SECTIONS				



163+50.00



163+00.00

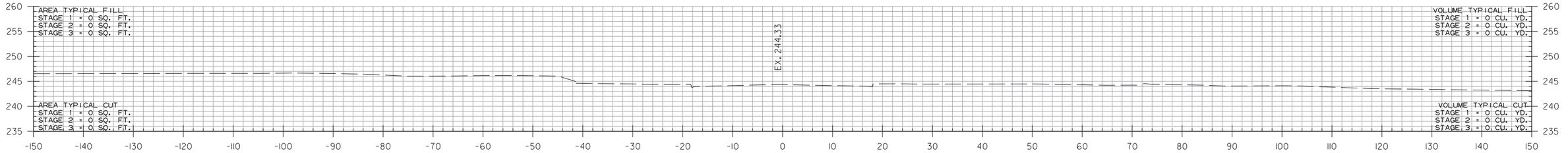


162+50.00

HWY. 67
STA. 162+50 TO STA. 163+50

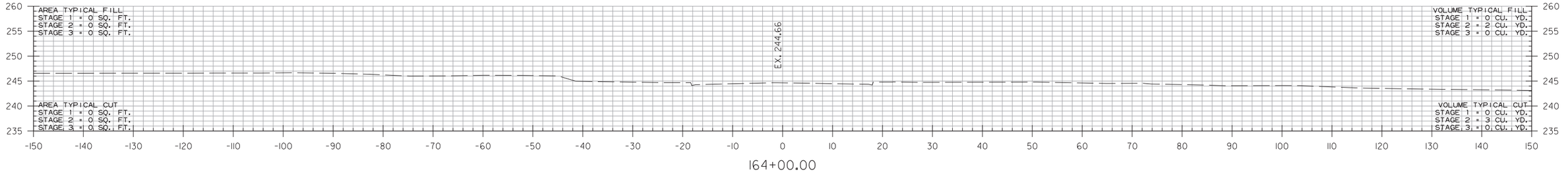
rnfortner 6/28/2022 10:38:28 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hwy.67 North Ext.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	463	549
		CROSS SECTIONS				



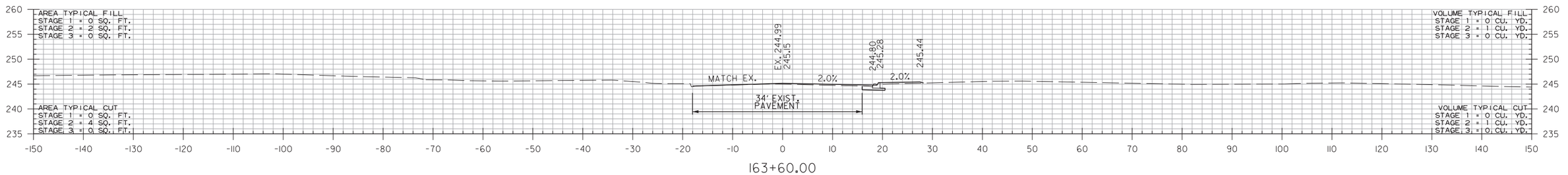
164+10.00

STA. 164+10.00 END 50' TRANSITION



164+00.00

STA. 163+60.00 END JOB 070442 (HWY. 67)



163+60.00

HWY. 67
STA. 163+60 TO STA. 164+10

rnfortner 6/28/2022 10:38:29 AM
WORKSPACE: AHTD
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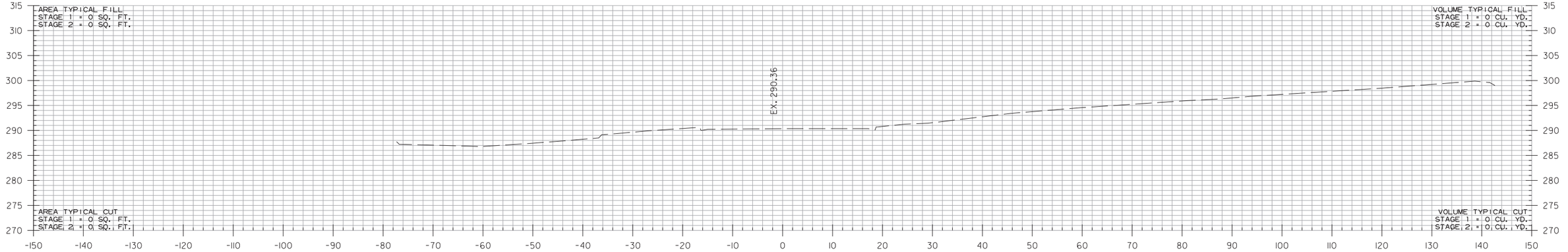
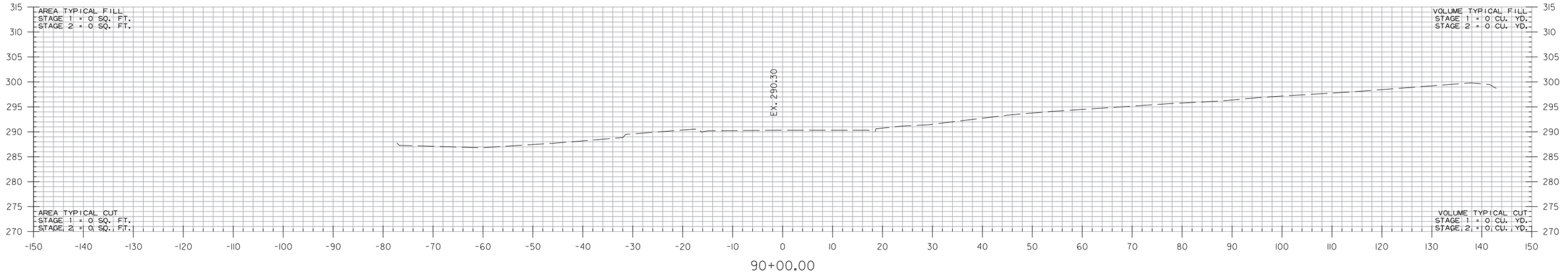
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	464	549
		CROSS SECTIONS				



90+03.00

STA. 90+03.00 BEGIN 52' CURB TRANSITION



90+00.00

PROFESSIONAL PARK DR.
STA. 90+00 TO STA. 90+03

rnfortner 6/28/2022 10:38:29 AM
WORKSPACE: AHTD
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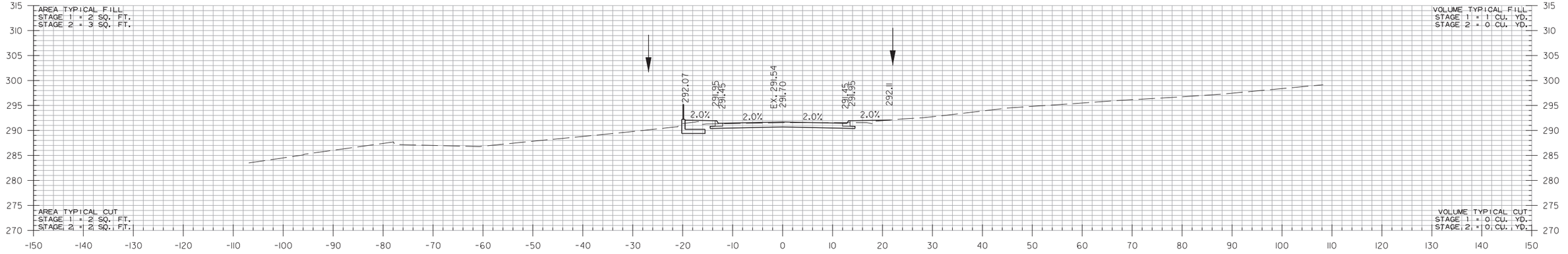
REVISED DATE:

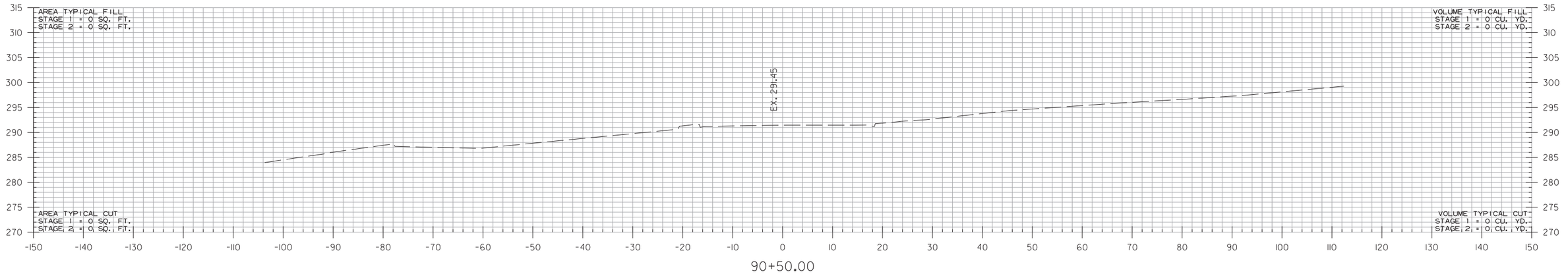
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	465	549
		CROSS SECTIONS				



90+55.00

STA. 90+55.00
BEGIN PROFESSIONAL PARK DR.

STA. 90+55.00 END 52' CURB TRANSITION



90+50.00

PROFESSIONAL PARK DR.
STA. 90+50 TO STA. 90+55

rnfortner 6/28/2022 10:38:29 AM
WORKSPACE: AHTD
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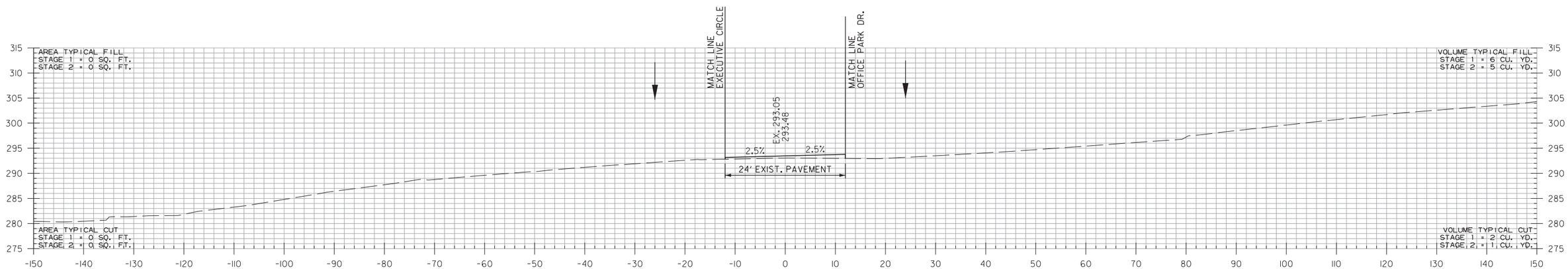
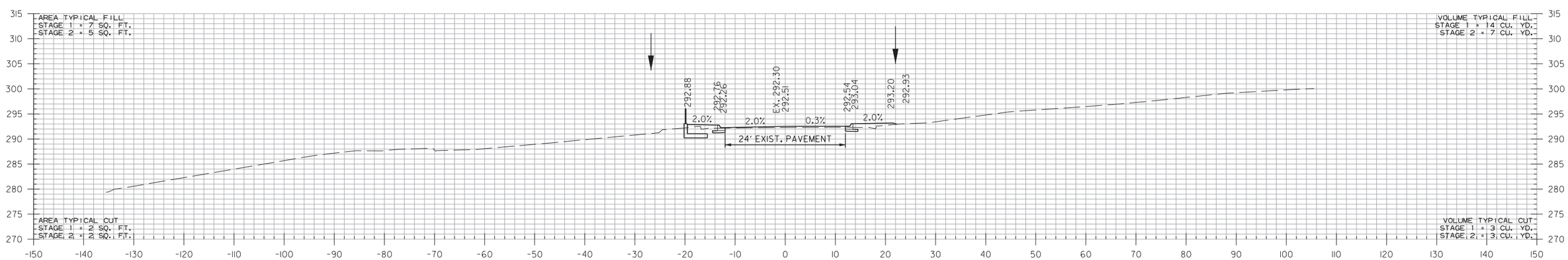
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	466	549
		CROSS SECTIONS				



91+50.00



91+00.00

STA. 90+56.06 BEGIN SUPERELEVATION

PROFESSIONAL PARK DR.
STA. 91+00 TO STA. 91+50

rnfortner 6/28/2022 10:38:30 AM
WORKSPACE: AHTD
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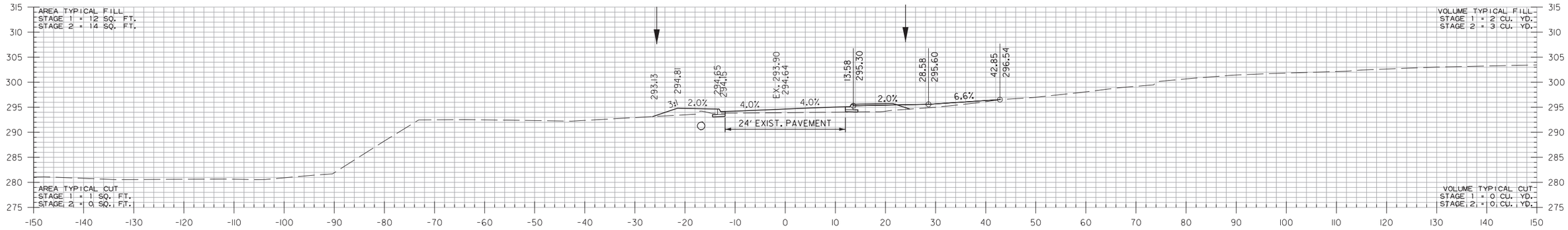
REVISED DATE:

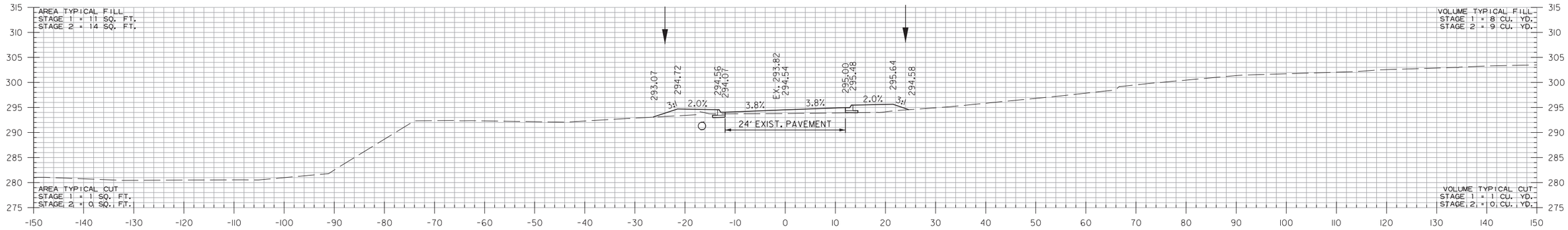
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	467	549
		CROSS SECTIONS				



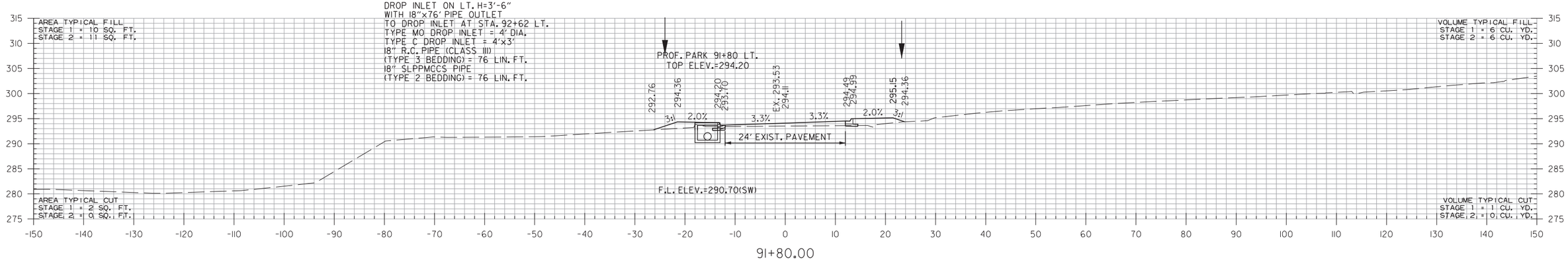
92+05.00

STA. 92+06.06 MAX SUPERELEVATION (0.040'/')

STA. 92+05 CONSTRUCT
APPROACH ON RT. = 4 CU. YDS.



92+00.00

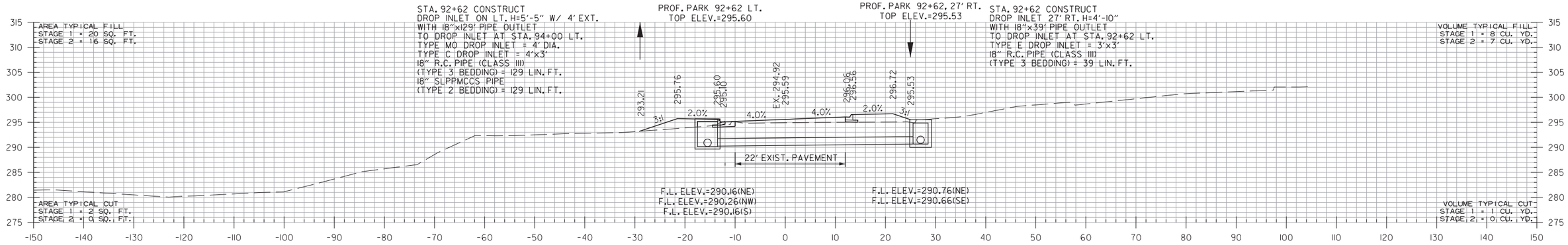


91+80.00

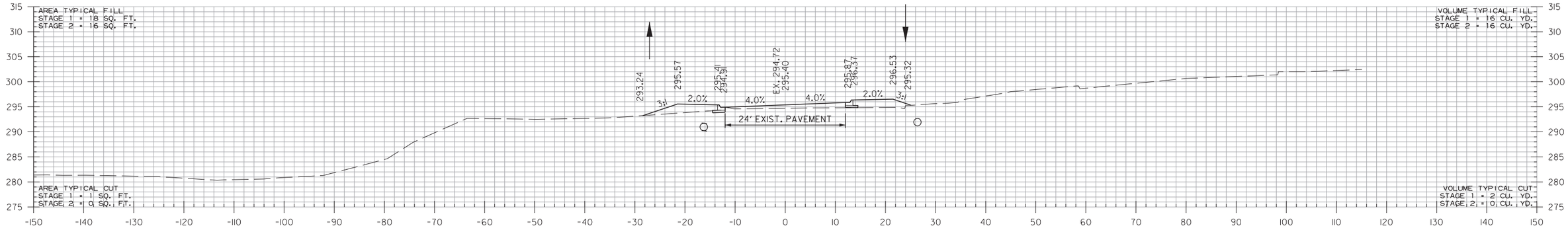
PROFESSIONAL PARK DR.
STA. 91+80 TO STA. 92+05

rnfortner 6/28/2022 10:38:30 AM
WORKSPACE: AHTD
L:\2017\170175 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_ProfessionalPark Dr.dgn
REVISED DATE:

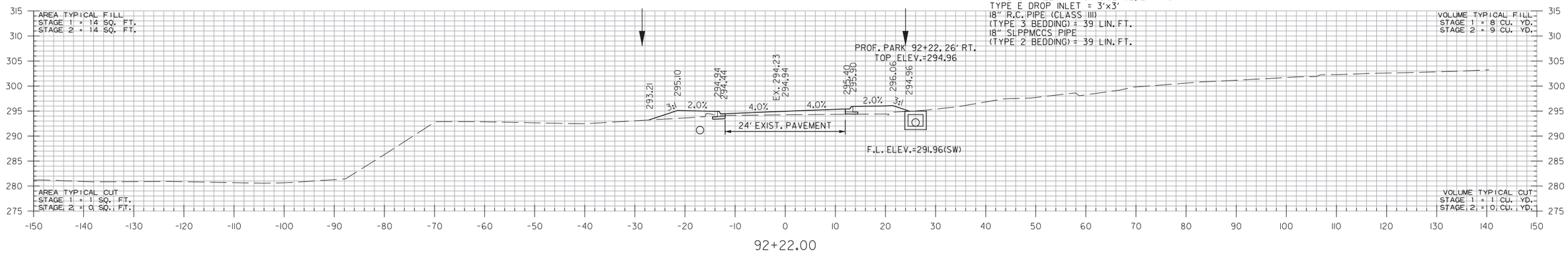
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	468	549
		CROSS SECTIONS				



92+62.00



92+50.00

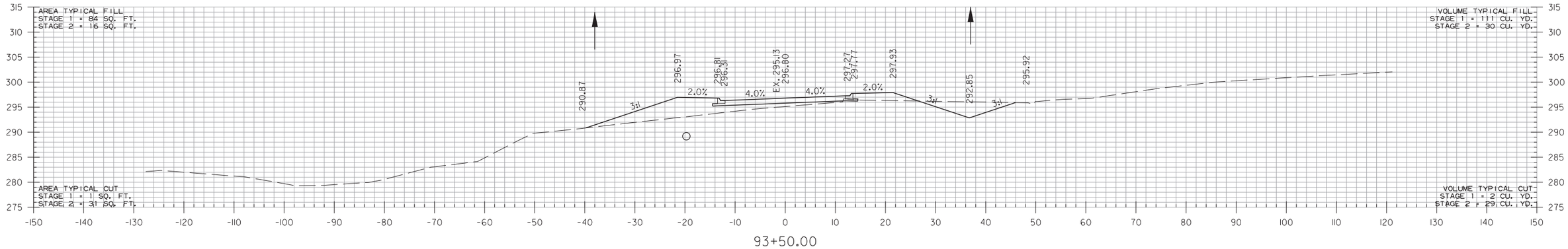


92+22.00

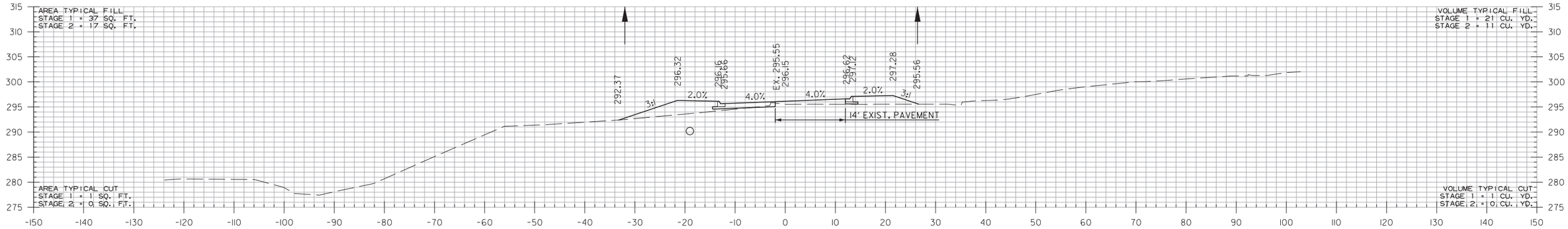
PROFESSIONAL PARK DR.
STA. 92+22 TO STA. 92+62

rnfortner 6/28/2022 10:38:30 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442.CX.ProfessionalPark Dr.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	469	549
		CROSS SECTIONS				

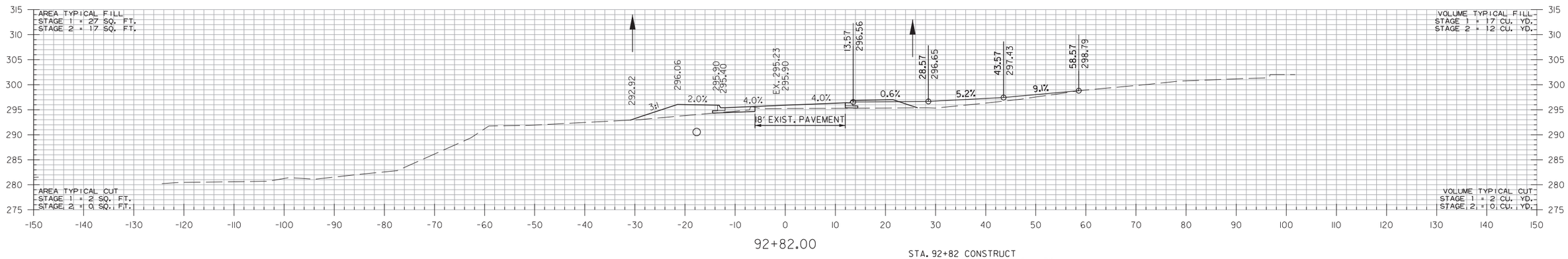


93+50.00



93+00.00

STA. 93+00.00
BEGIN SP. DT. RT. -5.70%
ELEV. 295.70



92+82.00

STA. 92+82 CONSTRUCT
APPROACH ON RT. = 8 CU. YDS.

PROFESSIONAL PARK DR.
STA. 92+82 TO STA. 93+50

rnfortner 6/28/2022 10:38:30 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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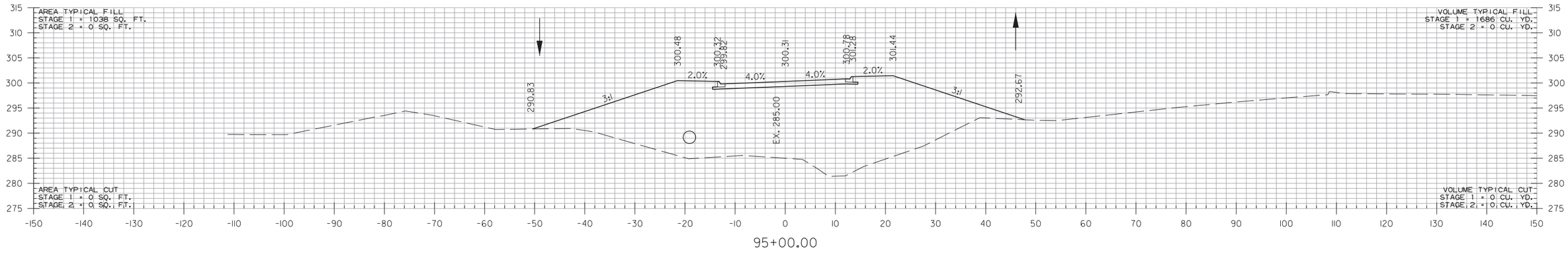
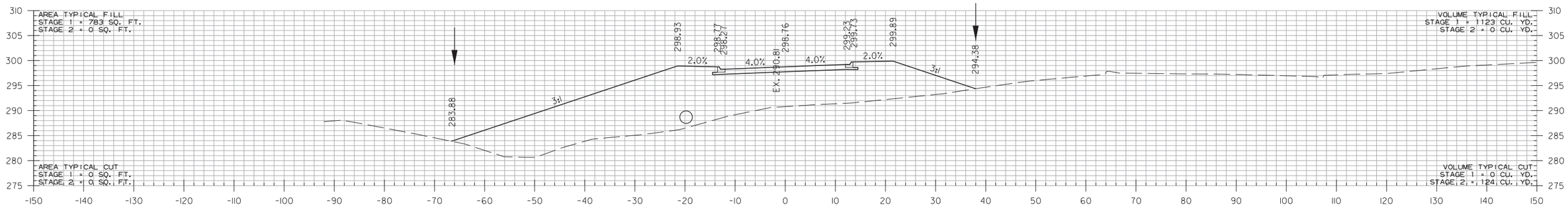
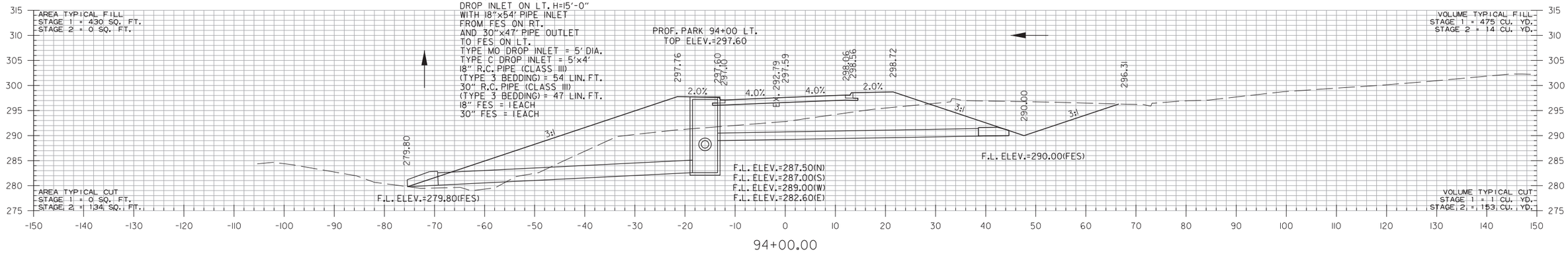
		CROSS SECTIONS				





STA. 94+45.00
END SP. DT. RT. 9.89%
ELEV. 290.00



STA. 94+00.00
END SP. DT. RT. -5.70%
BEGIN SP. DT. RT. 9.89%
ELEV. 290.00

PROFESSIONAL PARK DR.
STA. 94+00 TO STA. 95+00

rnfortner 6/28/2022 10:38:30 AM
WORKSPACE: AHTD
L:\2017\170175 - AHTD Arkadelphia Bypass\Drawings\r070442.CX.ProfessionalPark Dr.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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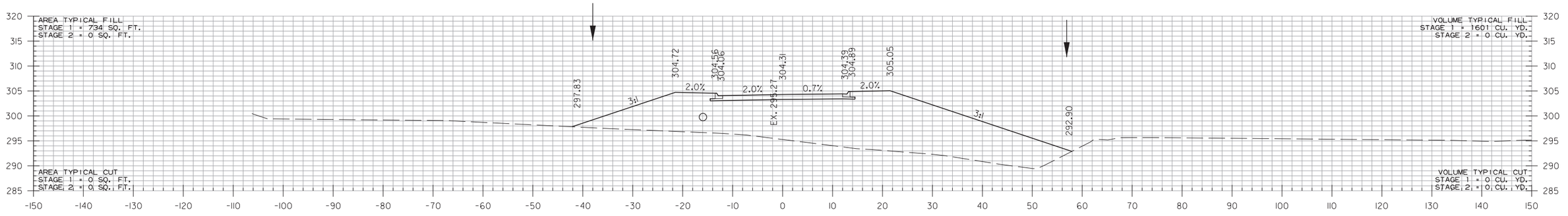
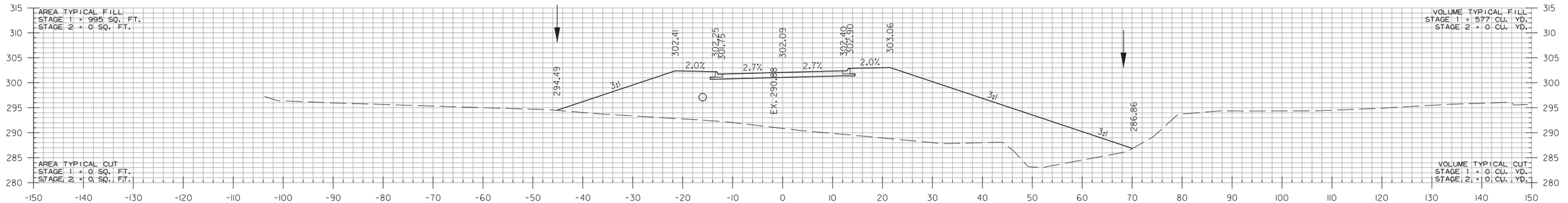
		CROSS SECTIONS				



96+00.00

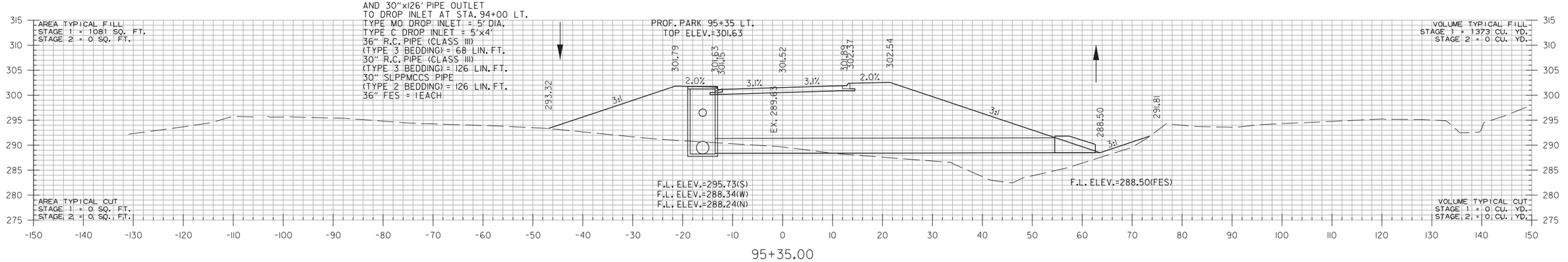
STA. 95+85.00
END SP. DT. RT. 8.60%
ELEV. 292.80



95+50.00

STA. 95+35 CONSTRUCT
DROP INLET ON LT. H=13'-5" W/ 4' EXT.
WITH 36"x68' PIPE INLET
FROM FES ON RT.
AND 30"x126' PIPE OUTLET
TO DROP INLET AT STA. 94+00 LT.
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 5'x4'
36" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 68 LIN. FT.
30" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 126 LIN. FT.
30" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 126 LIN. FT.
36" FES = 1EACH

PROF. PARK 95+35 LT.
TOP ELEV.=301.63



F.L. ELEV.=295.73(S)
F.L. ELEV.=288.34(W)
F.L. ELEV.=288.24(N)

F.L. ELEV.=288.50(FES)

95+35.00

STA. 95+01.37 MAX SUPERELEVATION (0.040'/')

STA. 95+20.00
BEGIN SP. DT. RT. -10.00%
ELEV. 290.00

STA. 95+35.00
END SP. DT. RT. -10.00%
BEGIN SP. DT. RT. 8.60%
ELEV. 288.50

PROFESSIONAL PARK DR.
STA. 95+35 TO STA. 96+00

rnfortner 6/28/2022 10:38:30 AM
WORKSPACE: AHTD
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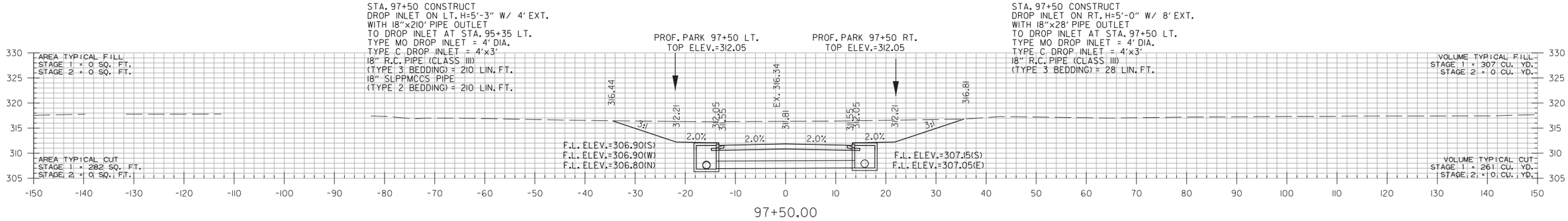
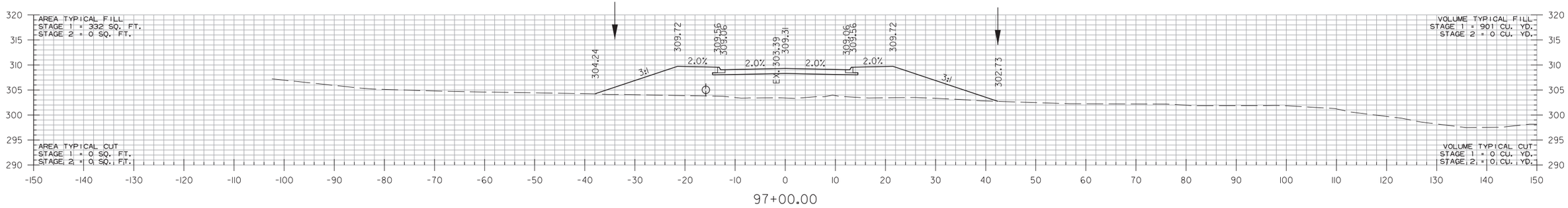
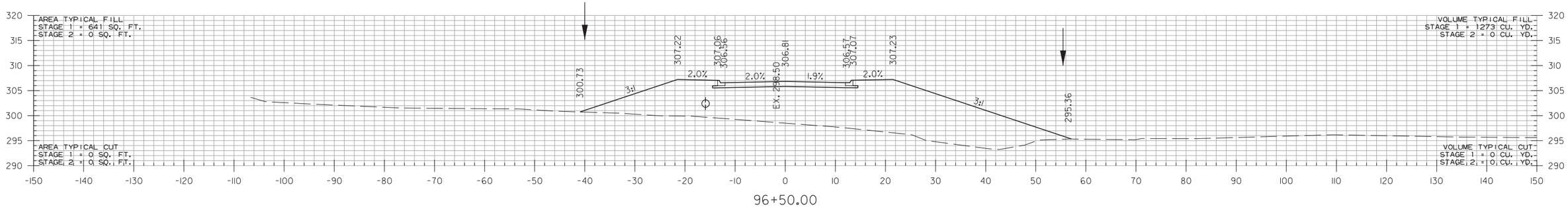
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	472	549
		CROSS SECTIONS				





STA. 96+51.37 END SUPERELEVATION



PROFESSIONAL PARK DR.
STA. 96+50 TO STA. 97+50

rnfortner 6/28/2022 10:38:31 AM
WORKSPACE: AHTD
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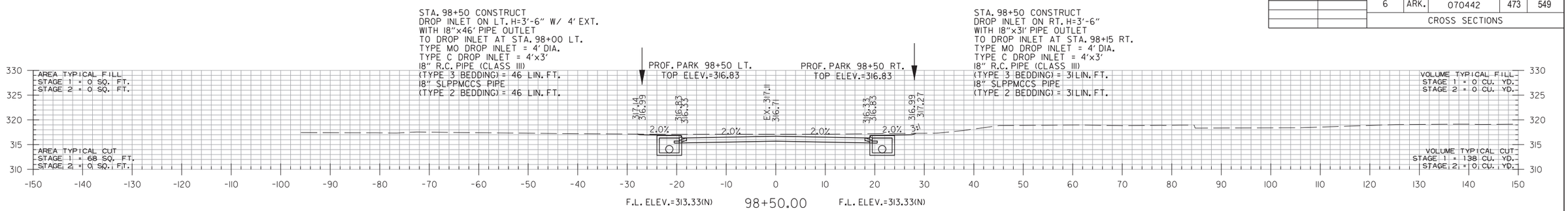
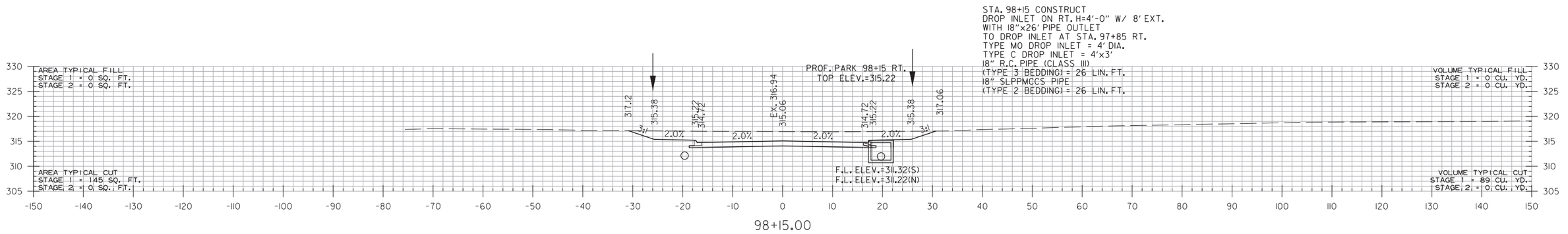
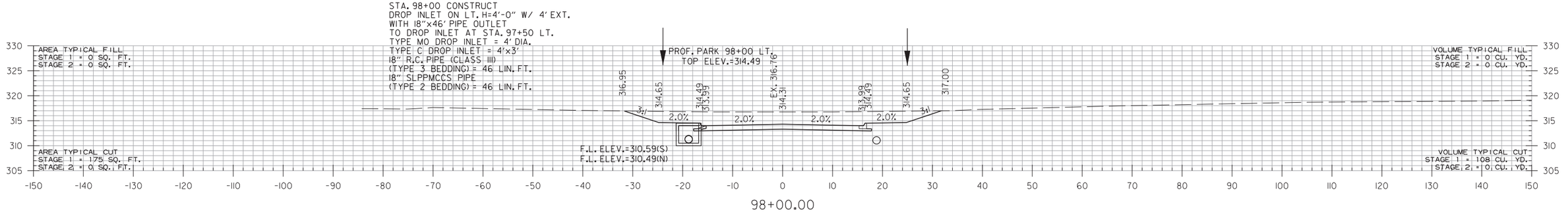
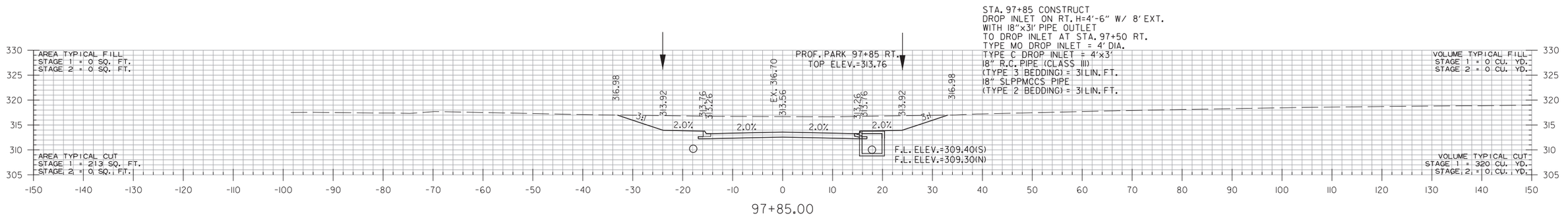
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	473	549
		CROSS SECTIONS				









PROFESSIONAL PARK DR.
STA. 97+85 TO STA. 98+50

rnfortner 6/28/2022 10:38:31 AM
WORKSPACE: AHTD
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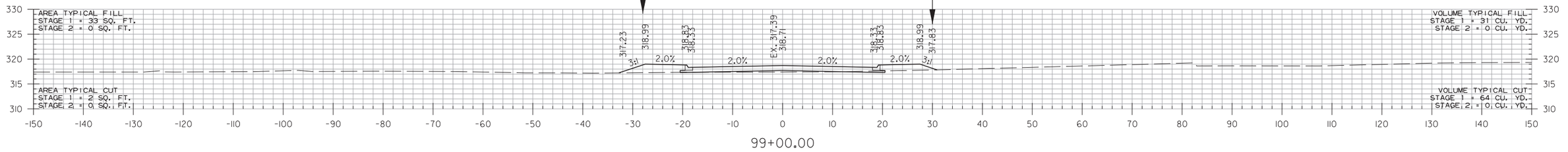
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	474	549
		CROSS SECTIONS				



PROFESSIONAL PARK DR.
STA. 99+00 TO STA. 99+50

rnfortner 6/28/2022 10:38:31 AM
WORKSPACE: AHTD
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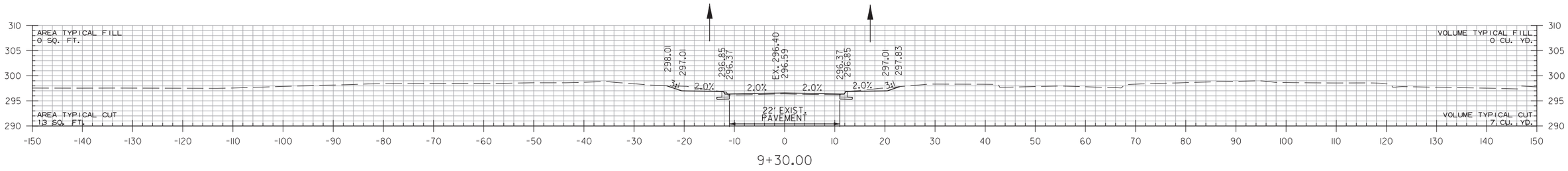
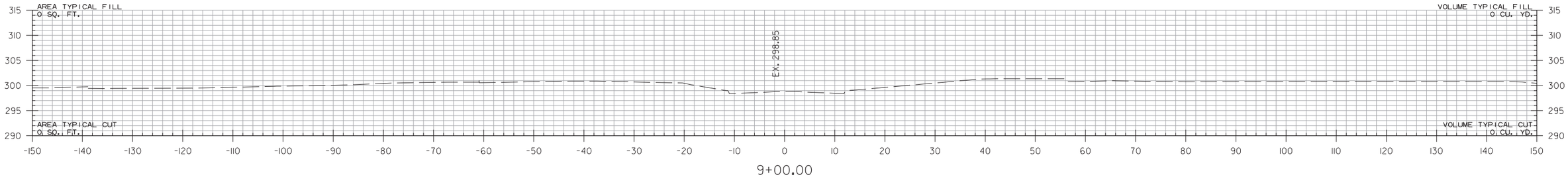
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	475	549
		CROSS SECTIONS				

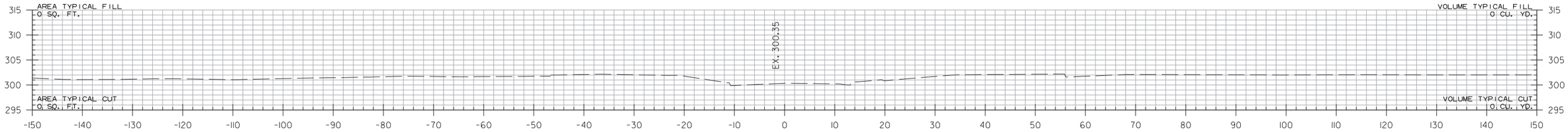


9+30.00

STA. 9+30.00
BEGIN OFFICE PARK DR.

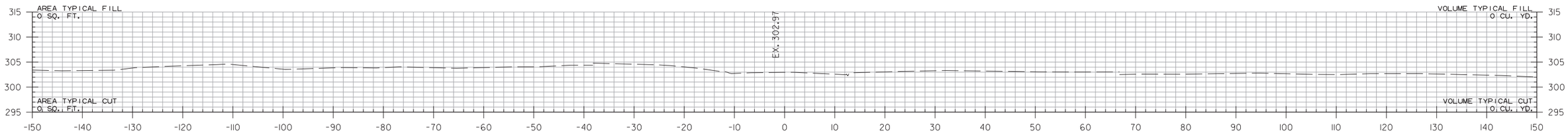


9+00.00



8+80.00

STA. 8+80.00 BEGIN 50' TRANSITION



8+50.00

OFFICE PARK DR.
STA. 8+50 TO STA. 9+30

rnfortner 6/28/2022 10:38:31 AM
WORKSPACE: AHTD
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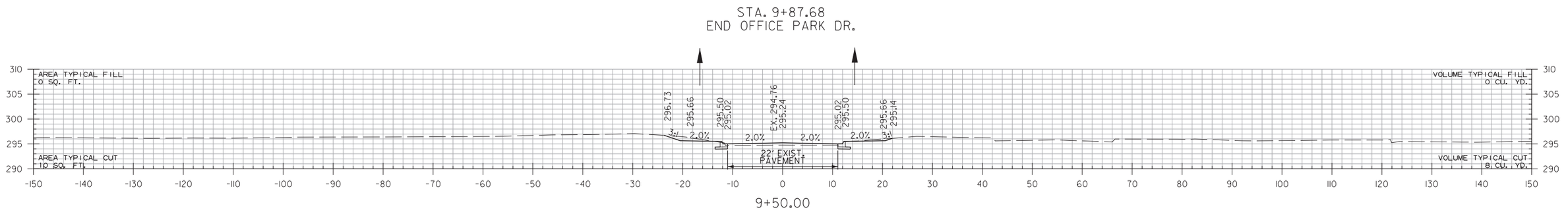
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	476	549
		CROSS SECTIONS				



OFFICE PARK DR.
STA. 9+50 TO STA. 9+50

rnfortner 6/28/2022 10:38:32 AM
WORKSPACE: AHTD
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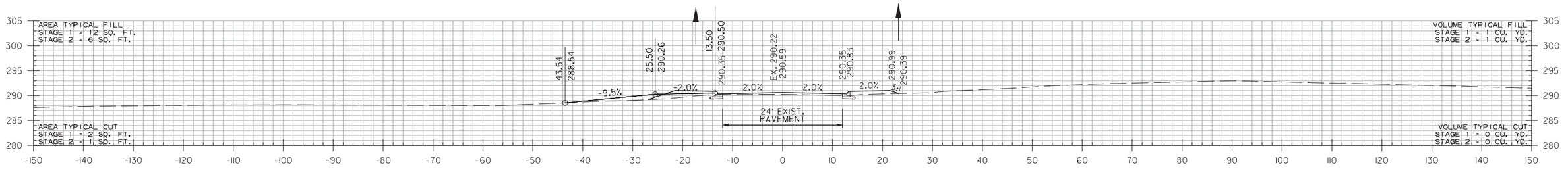
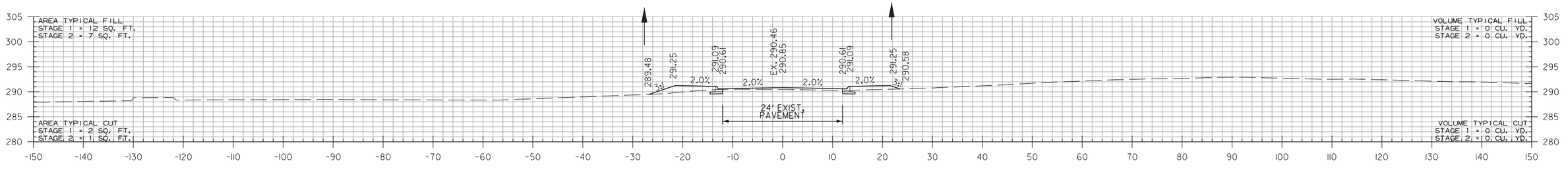
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	477	549
		CROSS SECTIONS				



10+53.00

STA. 10+53 CONSTRUCT
APPROACH ON LT. = 6 CU. YDS.



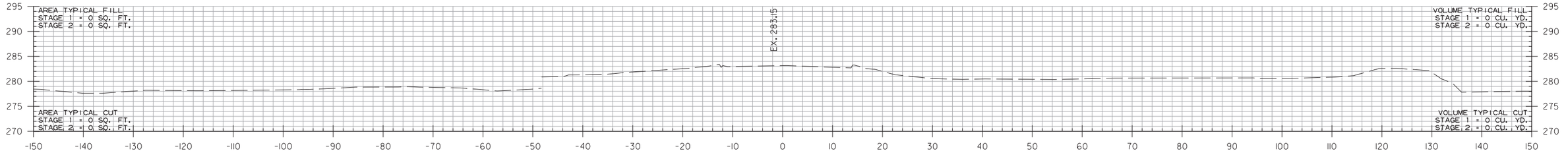
10+50.00

STA. 10+12.03
BEGIN EXECUTIVE CIRCLE

EXECUTIVE CIRCLE
STA. 10+00 TO STA. 10+53

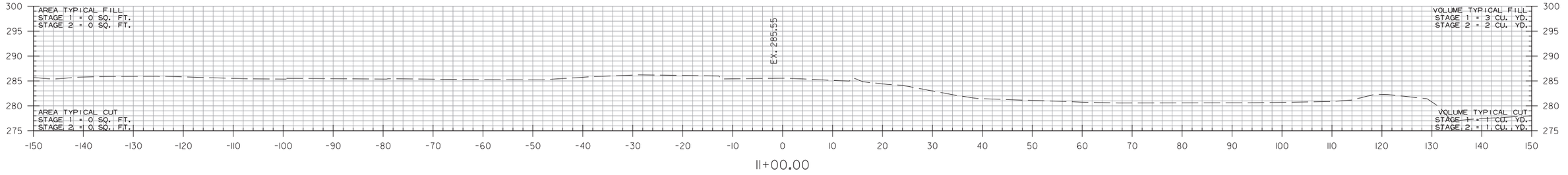
rnfortner 6/28/2022 10:38:32 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Executive Circle.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	478	549
		CROSS SECTIONS				

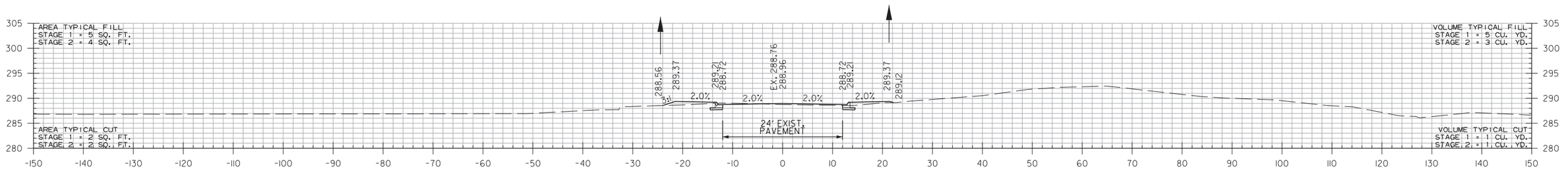


11+20.00

STA. 11+20.00 END 50' TRANSITION



11+00.00



10+70.00

STA. 10+70.00
END EXECUTIVE CIRCLE

EXECUTIVE CIRCLE
STA. 10+70 TO STA. 11+20

rnfortner 6/28/2022 10:38:32 AM
WORKSPACE: AHTD
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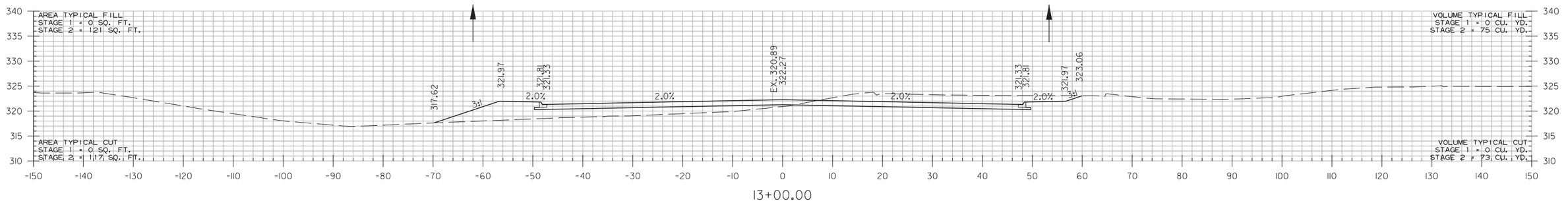
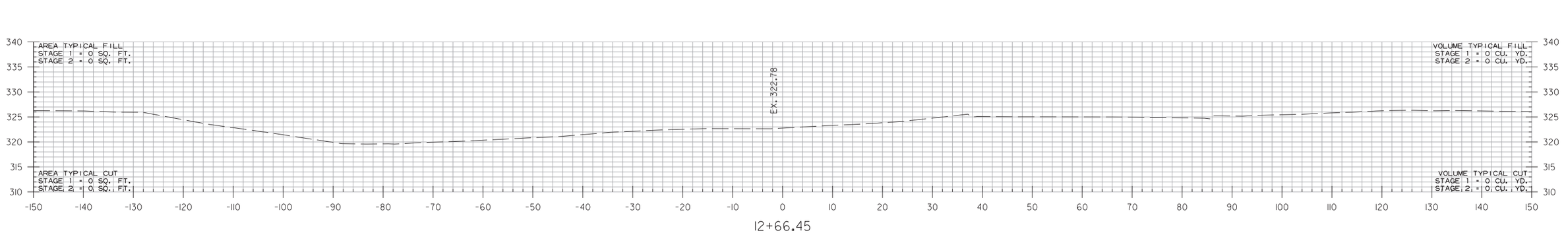
REVISED DATE:

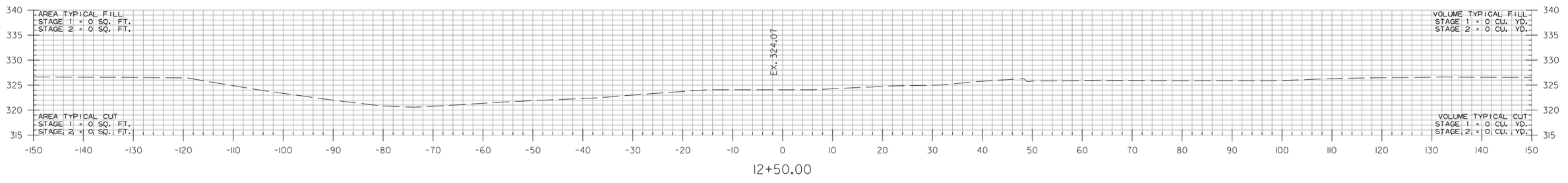
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	479	549
		CROSS SECTIONS				



13+00.00



12+66.45



12+50.00

PROFESSIONAL PARK CUL-DE-SAC
STA. 12+50 TO STA. 13+00

rnfortner 6/28/2022 10:38:32 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_ProfessionalPark Cul-de-sac.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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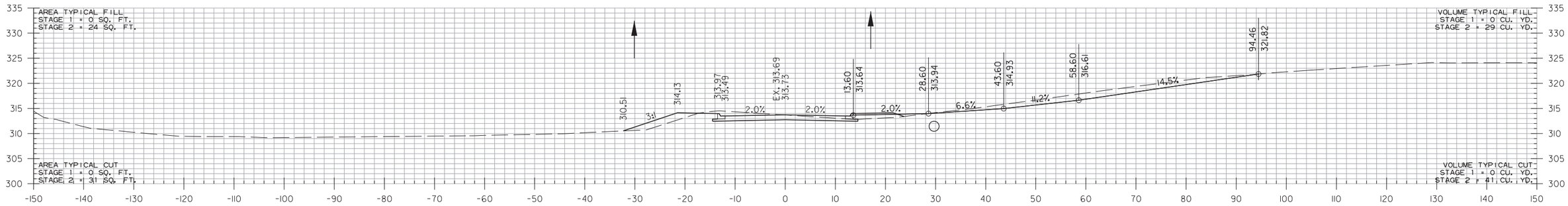
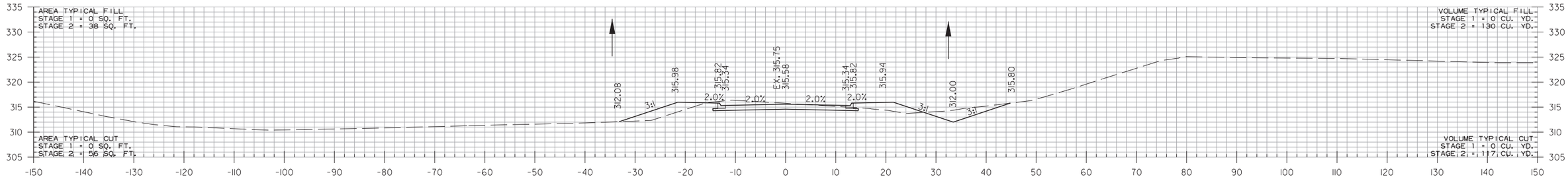
		CROSS SECTIONS				

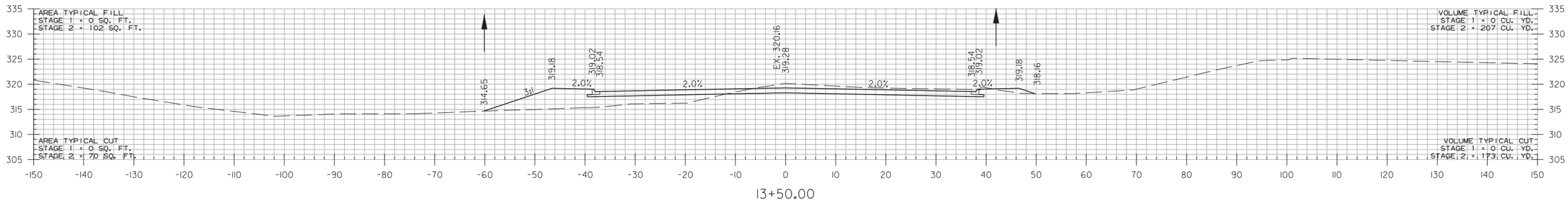


14+25.00

STA. 14+25 IN PLACE
18"X40' CM PIPE
RT. SIDE DRAIN
REMOVE AND INSTALL
18"x58' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPROACH = 102 CU. YDS.



14+00.00



13+50.00

PROFESSIONAL PARK CUL-DE-SAC
STA. 13+50 TO STA. 14+25

rnfortner 6/28/2022 10:38:33 AM
WORKSPACE: AHTD
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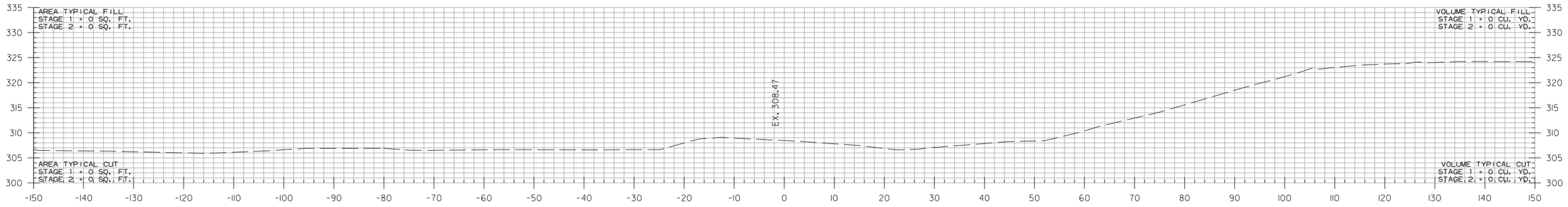
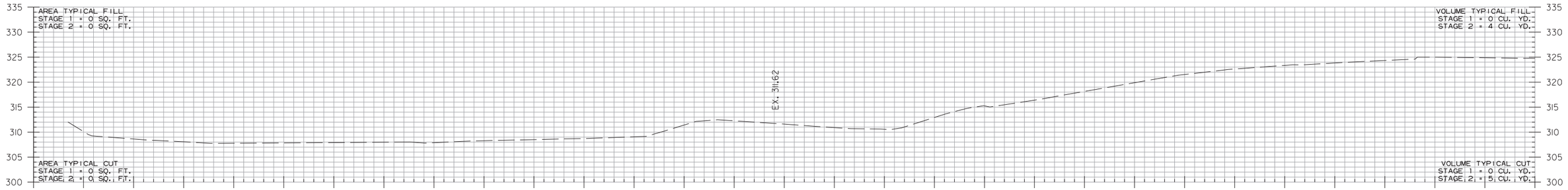
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	481	549
		CROSS SECTIONS				

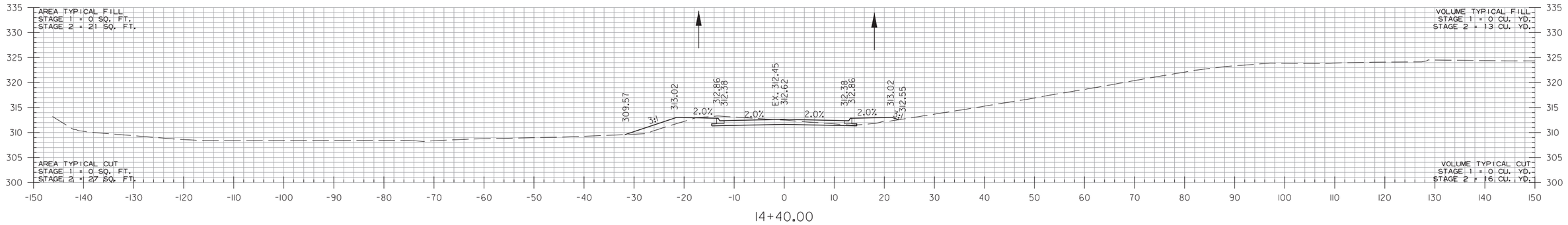


14+92.00

STA. 14+92.00 END 52' CURB TRANSITION



14+50.00



14+40.00

STA. 14+40.00 BEGIN 52' CURB TRANSITION

PROFESSIONAL PARK CUL-DE-SAC
STA. 14+40 TO STA. 14+92

rnfortner 6/28/2022 10:38:33 AM
WORKSPACE: AHTD
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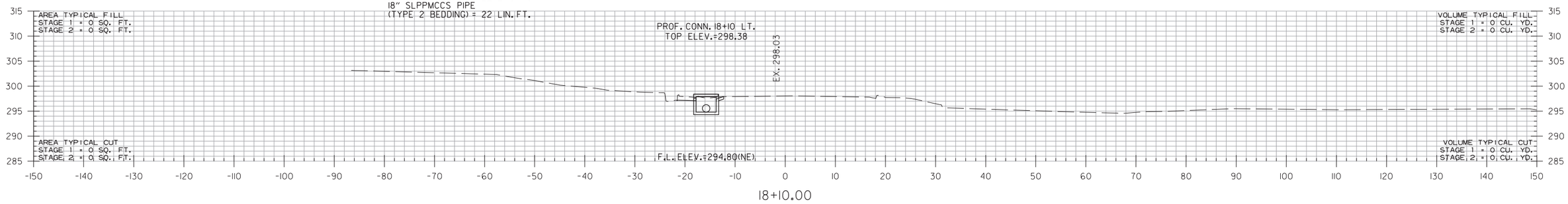
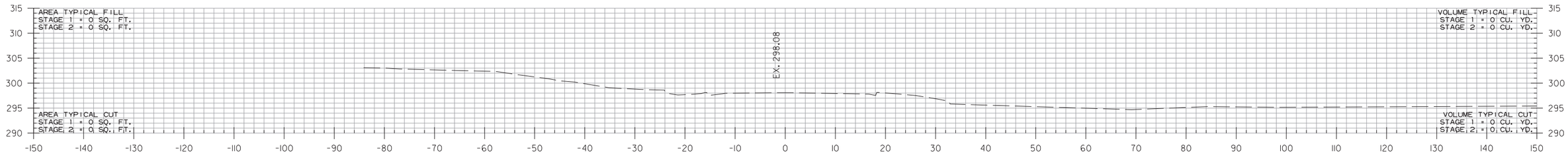
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	482	549
		CROSS SECTIONS				

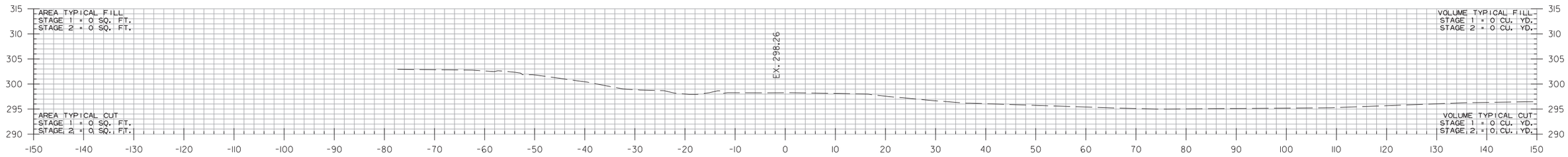
STA. 18+10 CONSTRUCT
DROP INLET ON LT. H=3'-7"
W/ DBL. 8' EXT. AND BACK OPENING
WITH 18"x22' PIPE OUTLET
TO DROP INLET AT STA. 18+35 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 22 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 22 LIN. FT.



18+10.00



18+00.00



17+73.00

STA. 17+73.00 BEGIN 52' CURB TRANSITION

PROFESSIONAL PARK CUL-DE-SAC
STA. 17+73 TO STA. 18+10

rnfortner 6/28/2022 10:38:33 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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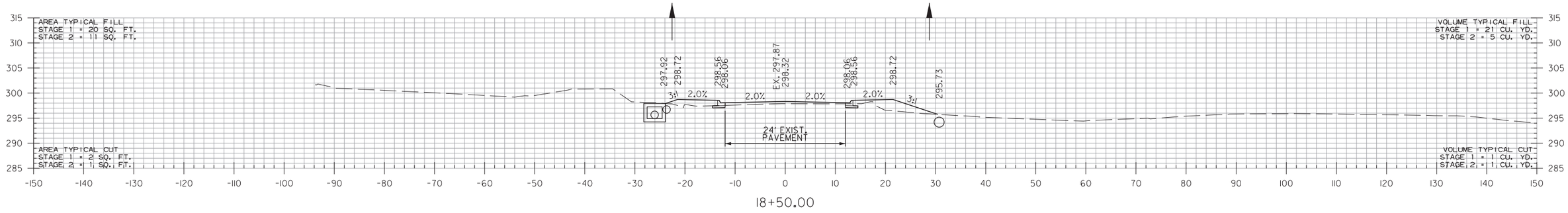
		CROSS SECTIONS				

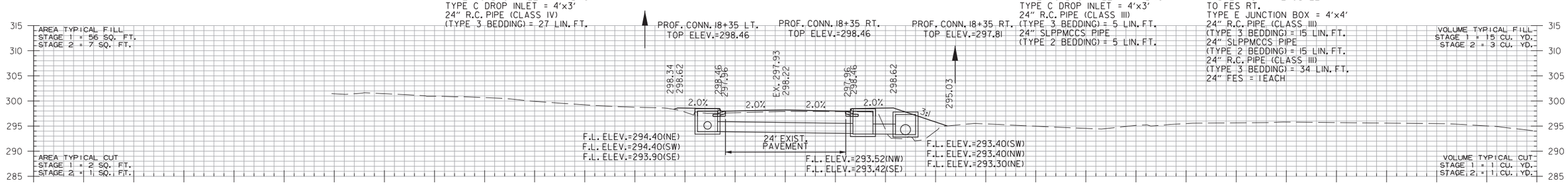


18+50.00

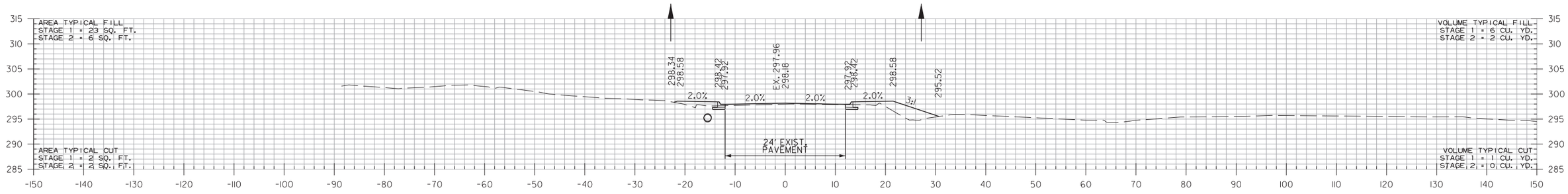
STA. 18+35 CONSTRUCT
DROP INLET ON LT. H=4'-7"
WITH 24"x27' PIPE OUTLET
TO DROP INLET AT STA. 18+35 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
24" R.C. PIPE (CLASS IV)
(TYPE 3 BEDDING) = 27 LIN. FT.

STA. 18+35 CONSTRUCT
DROP INLET ON RT. H=5'-0"
WITH 24"x5' PIPE OUTLET
TO JUNCTION BOX AT STA. 18+35 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
24" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 5 LIN. FT.

STA. 18+35 CONSTRUCT
JUNCTION BOX ON RT. H=4'-6"
WITH 24"x15' PIPE INLET
FROM EX. PIPE RT.
AND 24"x34' PIPE OUTLET
TO FES RT.
TYPE E JUNCTION BOX = 4'x4'
24" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 15 LIN. FT.
24" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 15 LIN. FT.
24" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 34 LIN. FT.
24" FES = 1EACH



18+35.00



18+25.00
STA. 18+25.00
BEGIN PROFESSIONAL PARK CUL-DE-SAC
STA. 18+25.00 END 52' CURB TRANSITION

PROFESSIONAL PARK CUL-DE-SAC
STA. 18+25 TO STA. 18+50

rnfortner 6/28/2022 10:38:33 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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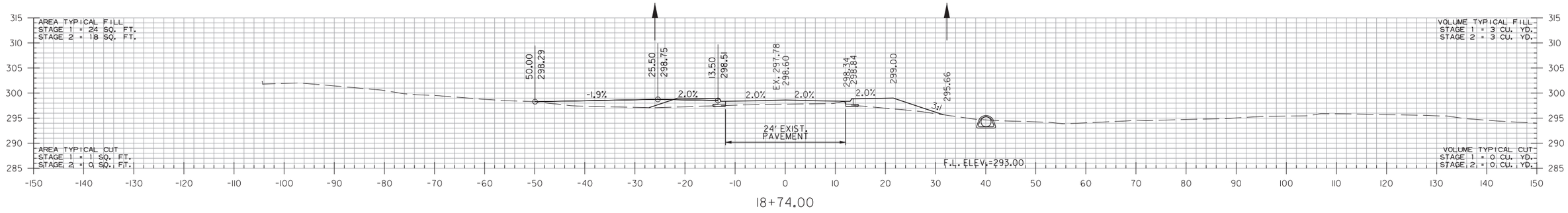
		CROSS SECTIONS				

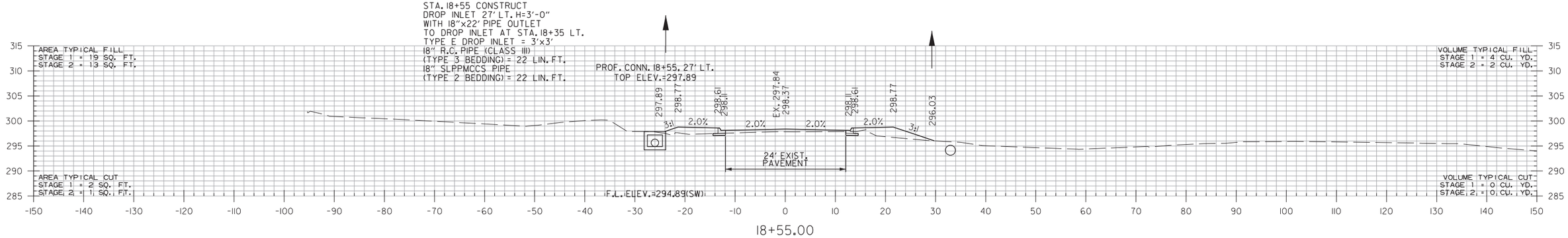


18+74.00

STA. 18+74 CONSTRUCT
APPROACH ON LT. = 14 CU. YDS.

18+70.00

STA. 18+55 CONSTRUCT
DROP INLET 27' LT. H=3'-0"
WITH 18"x22' PIPE OUTLET
TO DROP INLET AT STA. 18+35 LT.
TYPE E DROP INLET = 3'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 22 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 22 LIN. FT.



18+55.00

PROFESSIONAL PARK CUL-DE-SAC
STA. 18+55 TO STA. 18+74

rnfortner 6/28/2022 10:38:33 AM
WORKSPACE: AHTD
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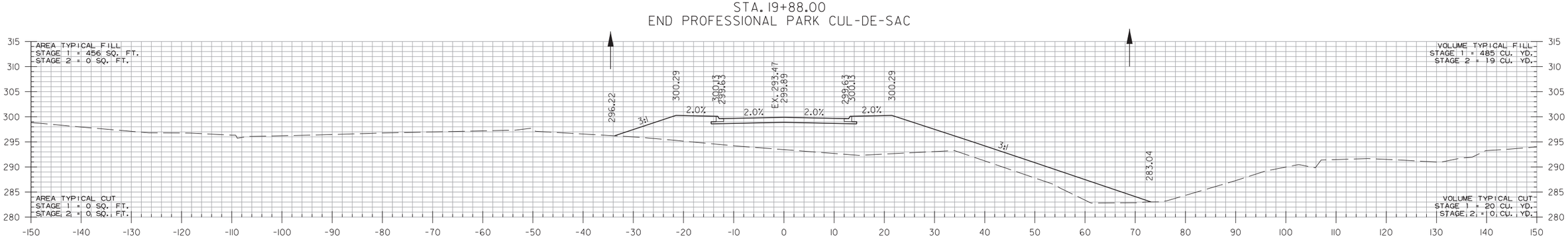
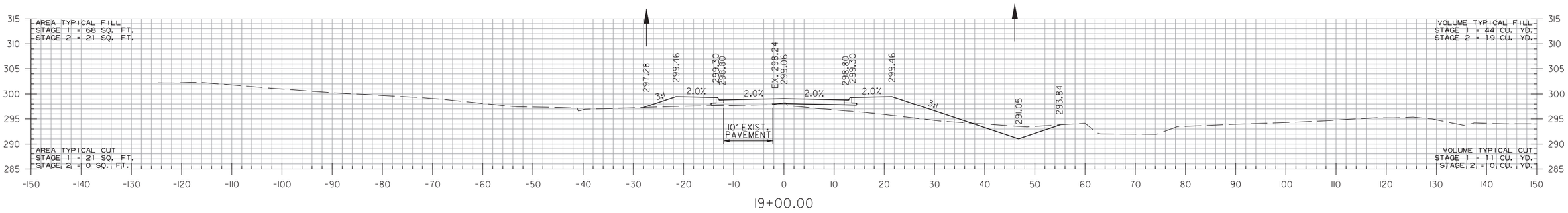
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	485	549
		CROSS SECTIONS				

STA. 19+88.00
END PROFESSIONAL PARK CUL-DE-SAC



19+50.00



19+00.00

PROFESSIONAL PARK CUL-DE-SAC
STA. 19+00 TO STA. 19+50

rnfortner 6/28/2022 10:38:34 AM
WORKSPACE: AHTD
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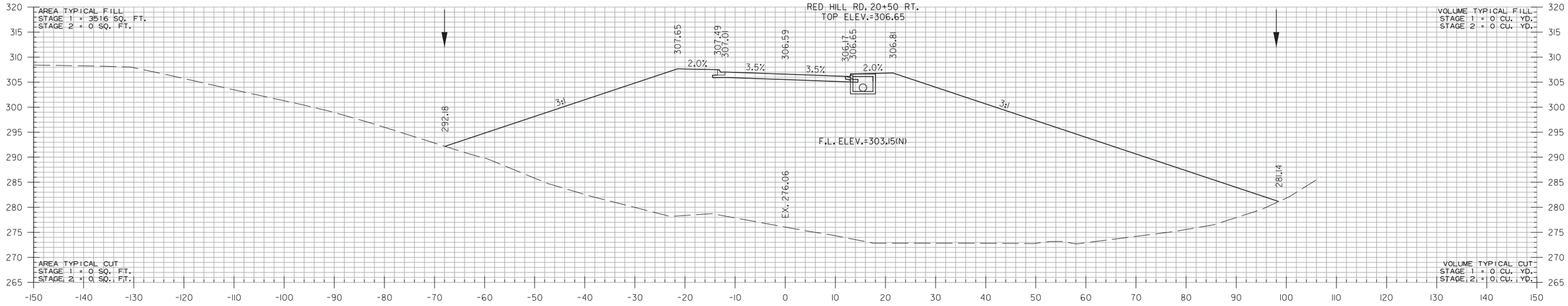
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	486	549
		CROSS SECTIONS				

STA. 20+50 CONSTRUCT
DROP INLET ON RT. H=3'-6"
WITH 18"x89' PIPE OUTLET
TO DROP INLET AT STA. 21+50 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 89 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 89 LIN. FT.



20+50.00

STA. 20+29.50 BEGIN SUPERELEVATION (0.035'/')

STA. 20+18.00 BEGIN RED HILL RD. NORTH

RED HILL RD. NORTH
STA. 20+50 TO STA. 20+50

rnfortner 6/28/2022 10:38:34 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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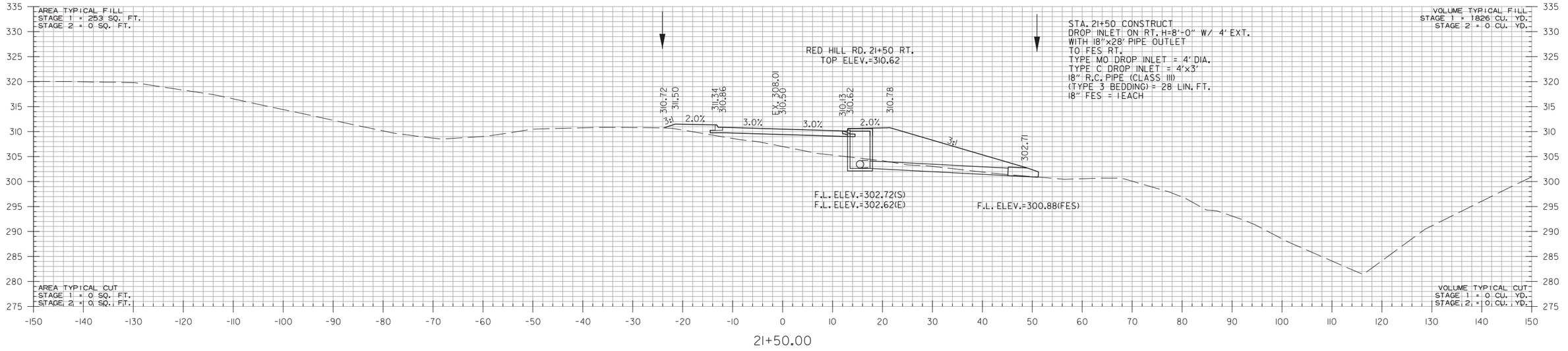
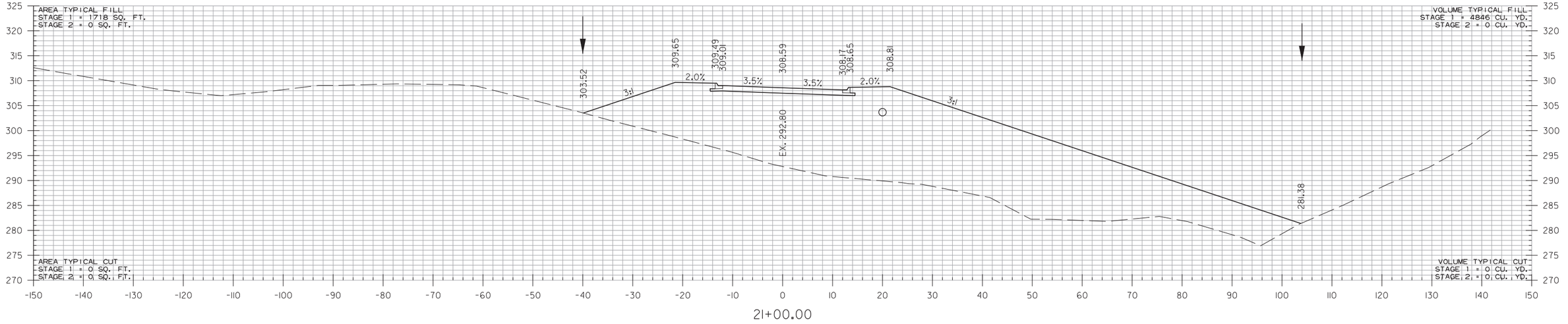
		CROSS SECTIONS				



21+50.00

STA. 21+30.00 MAX SUPERELEVATION (0.035'/')



21+00.00

RED HILL RD. NORTH
STA. 21+00 TO STA. 21+50

rnfortner 6/28/2022 10:38:34 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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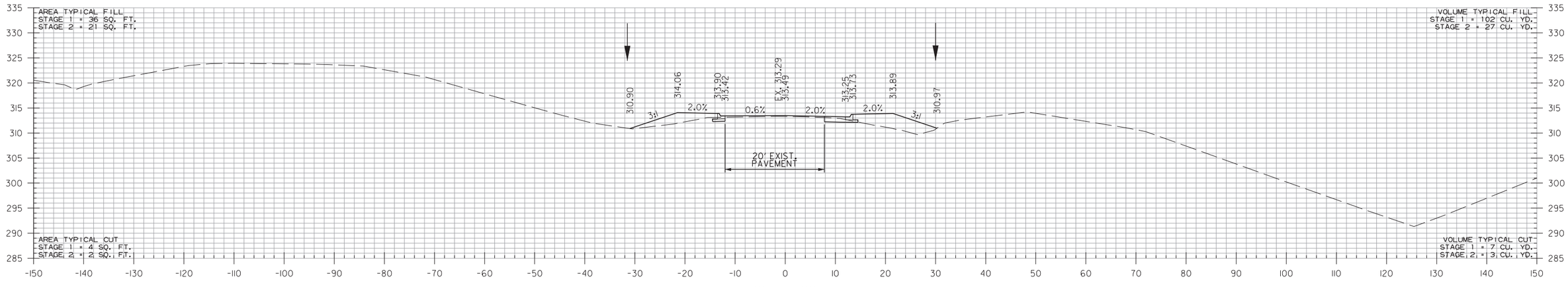
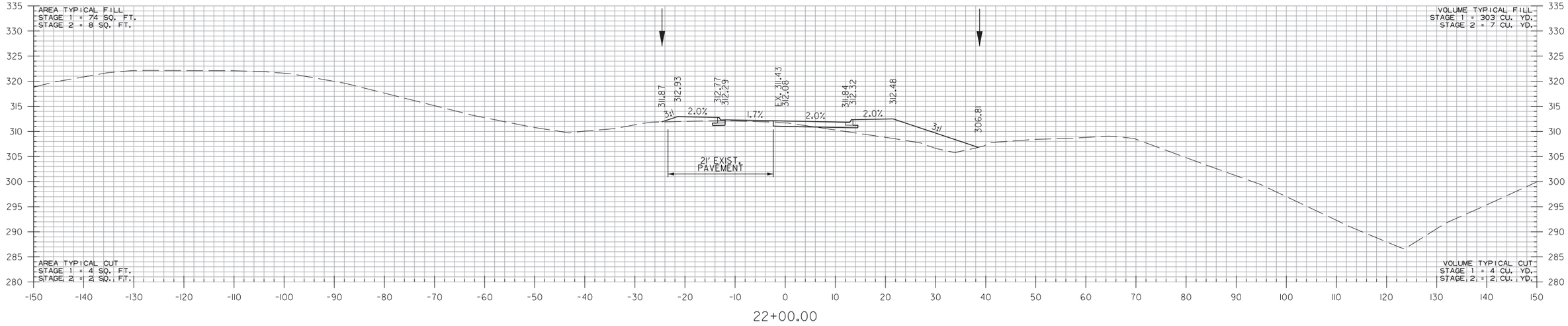
		CROSS SECTIONS				



22+50.00



22+00.00

RED HILL RD. NORTH
STA. 22+00 TO STA. 22+50

rnfortner 6/28/2022 10:38:34 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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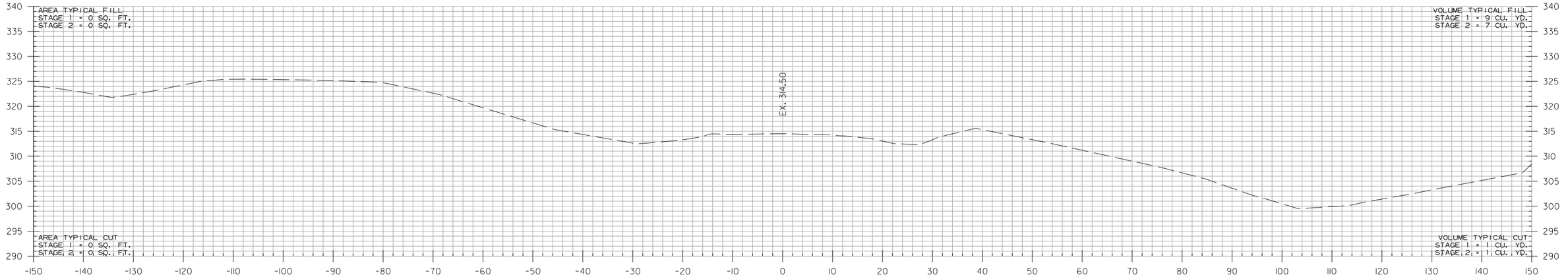
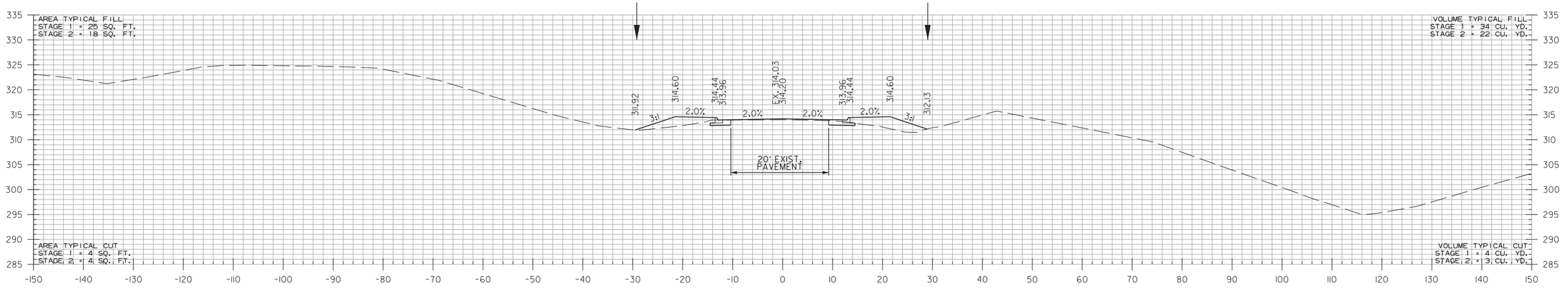
		CROSS SECTIONS				



23+00.00

STA. 22+90.00 END SUPERELEVATION



22+80.00

STA. 22+80.00 BEGIN 52' CURB TRANSITION

STA. 22+80.00 END RED HILL RD. NORTH

RED HILL RD. NORTH
STA. 22+80 TO STA. 23+00

rnfortner 6/28/2022 10:38:34 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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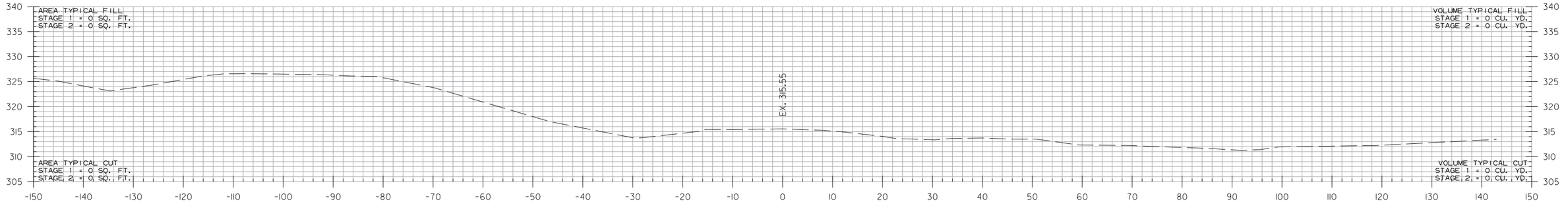
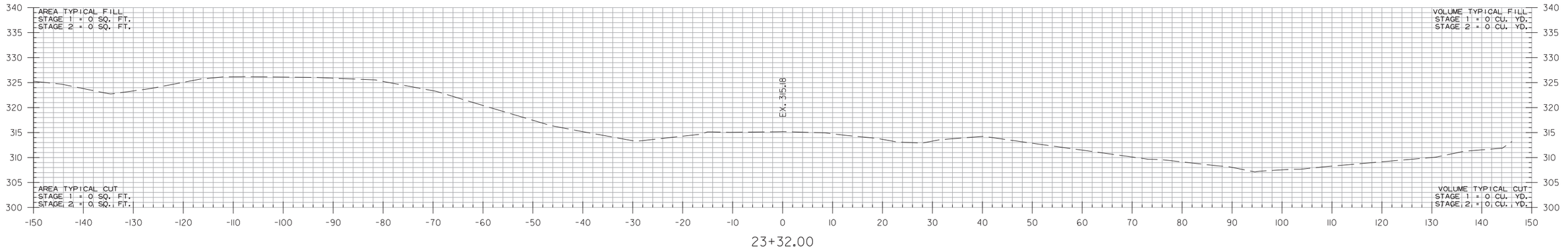


23+50.00



23+32.00

STA. 23+32.00 END 52' CURB TRANSITION

RED HILL RD. NORTH
STA. 23+32 TO STA. 23+50

rnfortner 6/28/2022 10:38:35 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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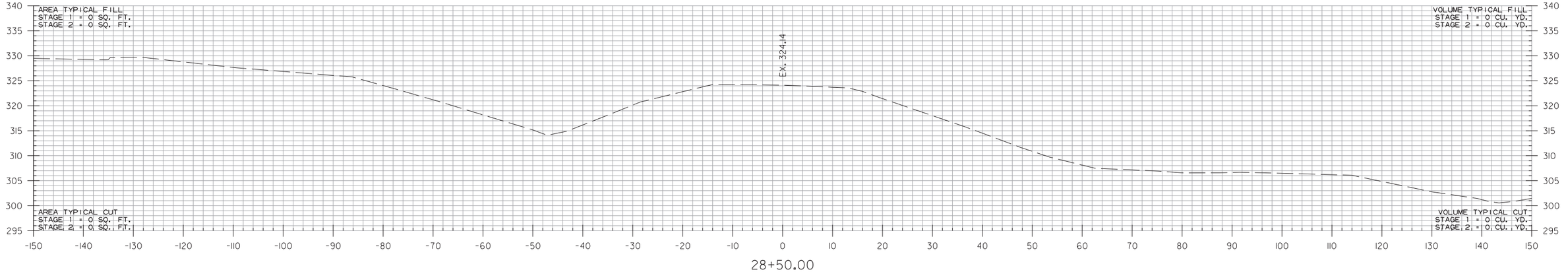
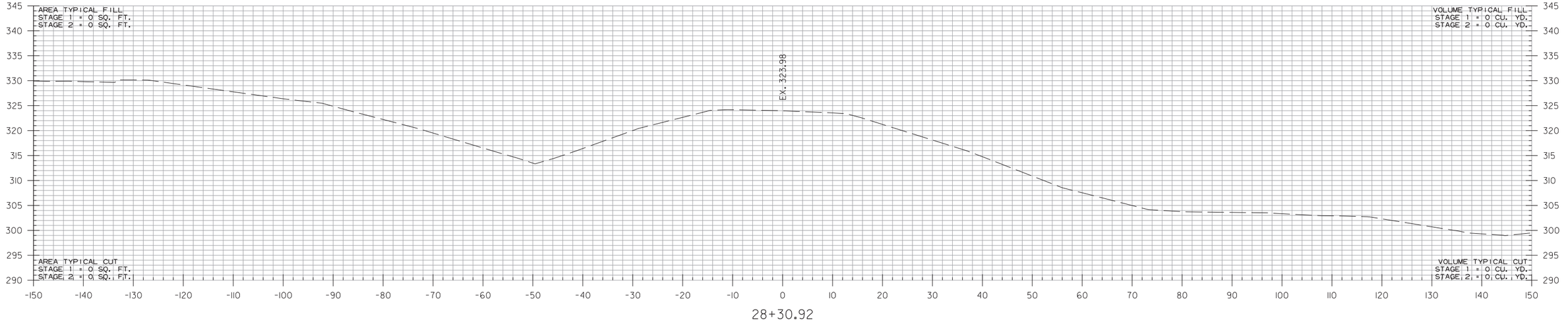


28+50.00



28+30.92

STA. 28+30.92 BEGIN 52' TRANSITION

RED HILL RD. NORTH
STA. 28+31 TO STA. 28+50

rnfortner 6/28/2022 10:38:35 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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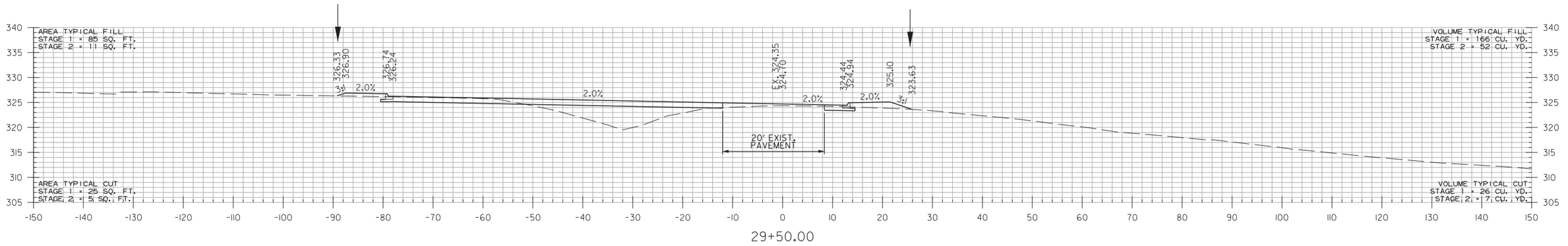
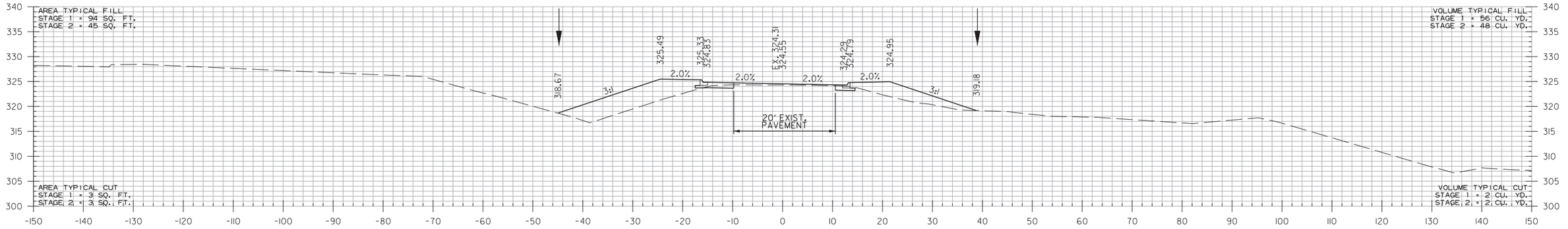
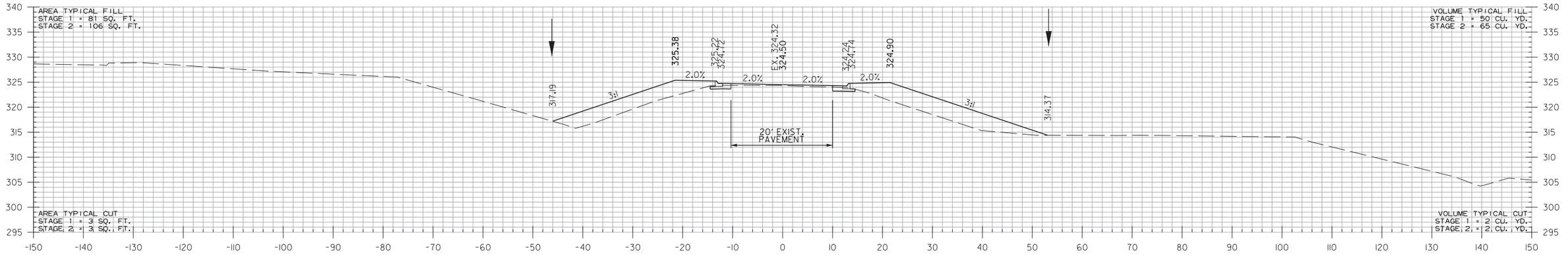
		CROSS SECTIONS				



29+50.00



29+00.00



28+82.92

STA. 28+30.92 END 52' TRANSITION

RED HILL RD. NORTH
STA. 28+83 TO STA. 29+50

rnfortner 6/28/2022 10:38:35 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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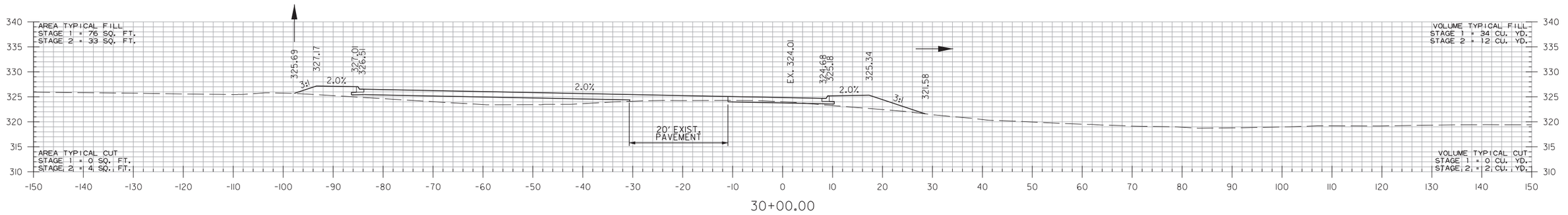
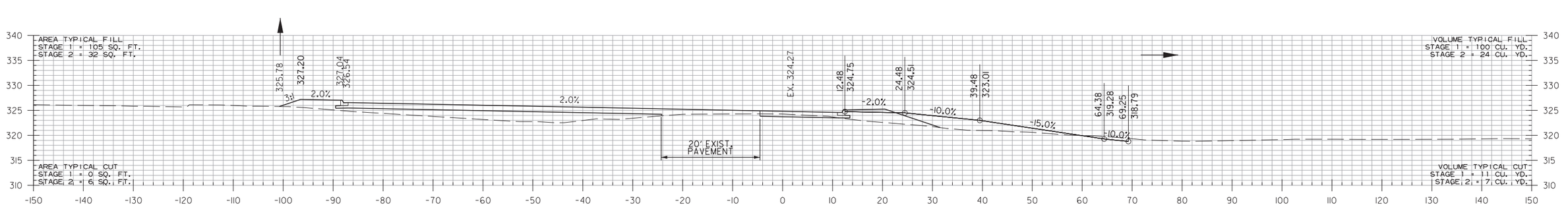
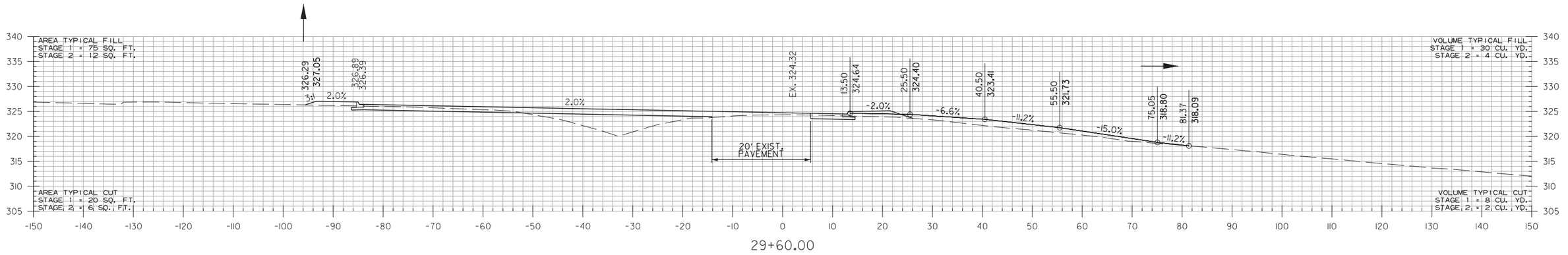




STA. 29+90 CONSTRUCT
APPROACH ON RT. = 55 CU. YDS.



STA. 29+60 CONSTRUCT
APPROACH ON RT. = 21 CU. YDS.

RED HILL RD. NORTH
STA. 29+60 TO STA. 30+00

rnfortner 6/28/2022 10:38:35 AM
WORKSPACE: AHTD
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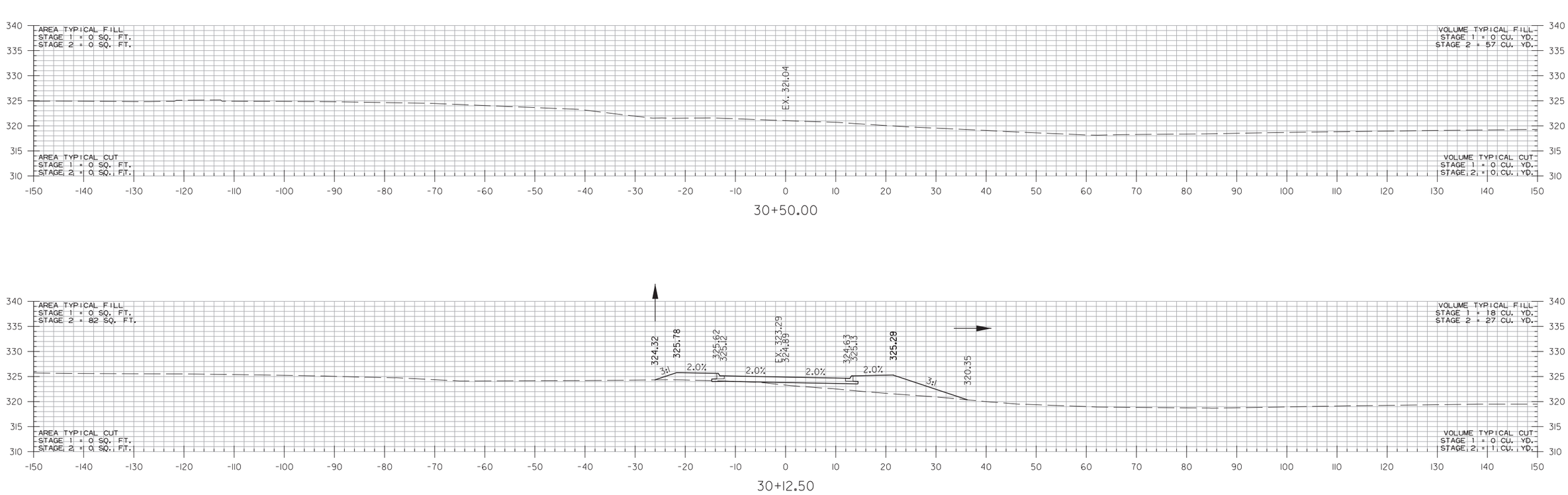
REVISED DATE:

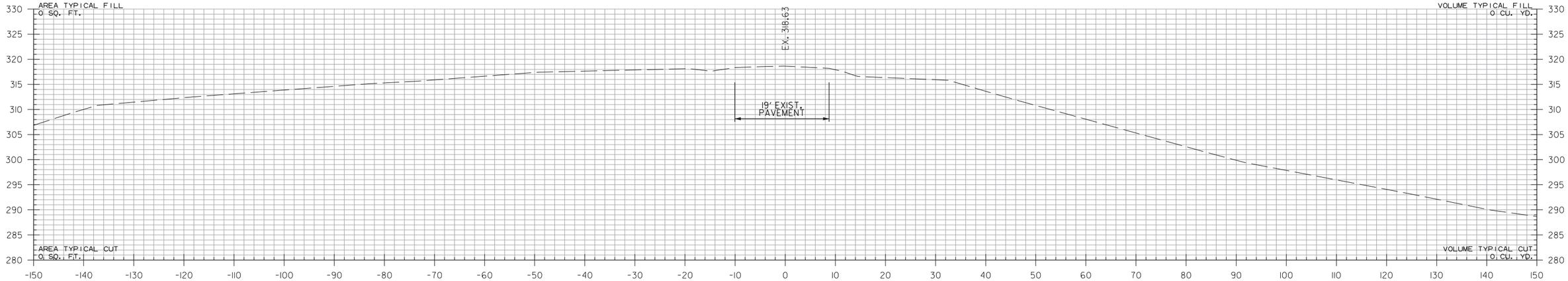
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	494	549
		CROSS SECTIONS				



RED HILL RD. NORTH
STA. 30+12 TO STA. 30+50

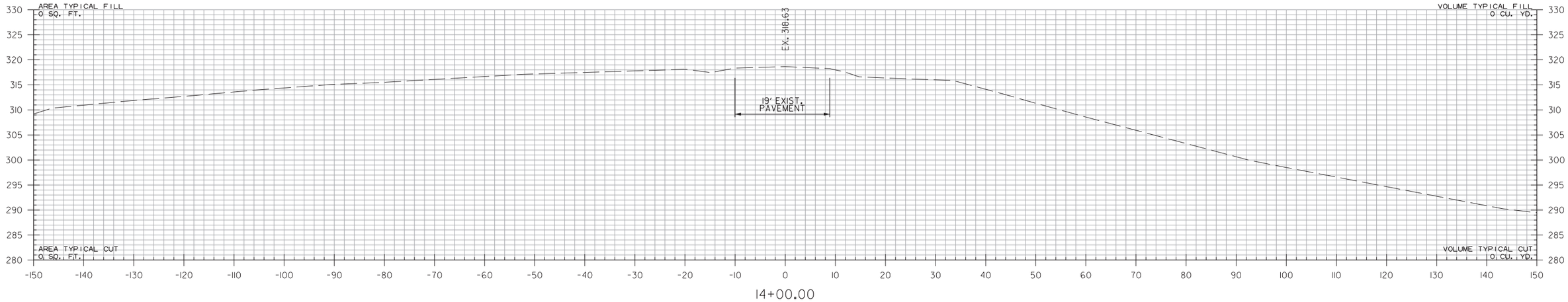
rnfortner 6/28/2022 10:38:35 AM
WORKSPACE: AHTD
L:\2017\170715 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Red Hill Rd. North.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	495	549
		CROSS SECTIONS				



14+15.00

STA. 14+15.00 BEGIN 50' TRANSITION

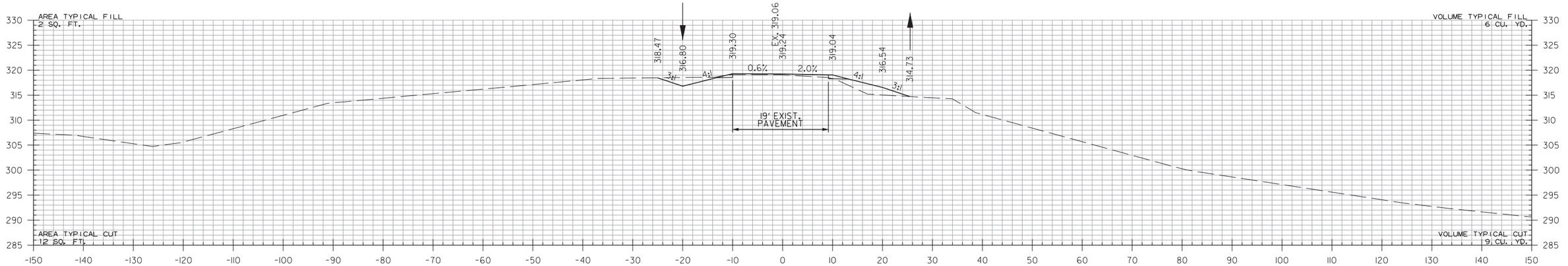


14+00.00

RED HILL RD. SOUTH
STA. 14+00 TO STA. 14+15

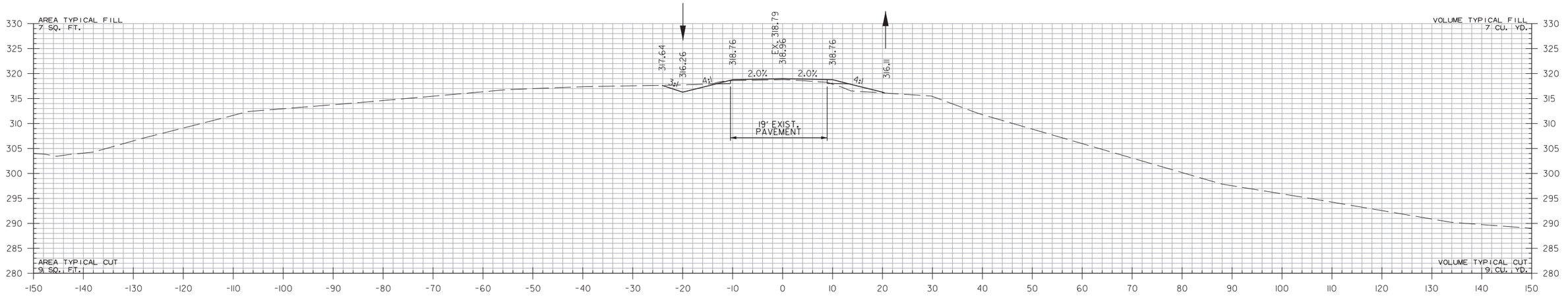
rnfortner 6/28/2022 10:38:36 AM
WORKSPACE: AHTD
L:\2017\170175\15 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Red HillRd. South.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	496	549
		CROSS SECTIONS				



15+00.00

STA. 14+67.68 BEGIN SUPERELEVATION



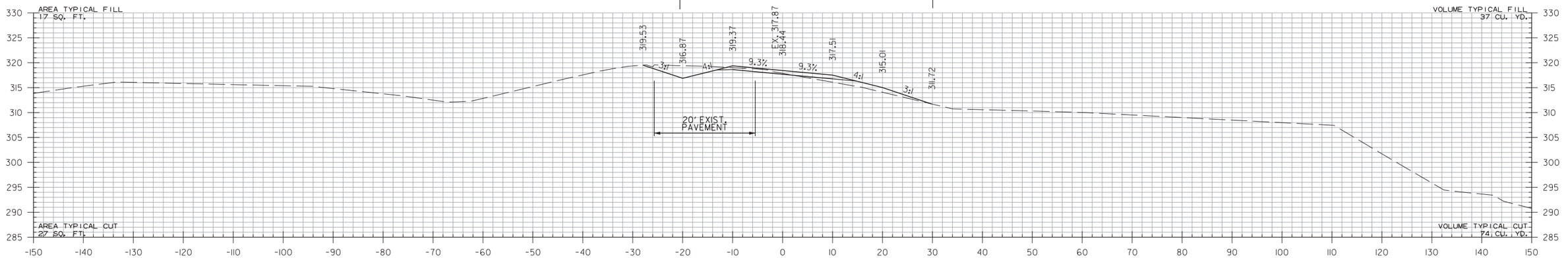
14+65.00

STA. 14+65.00
BEGIN RED HILL RD. SOUTH

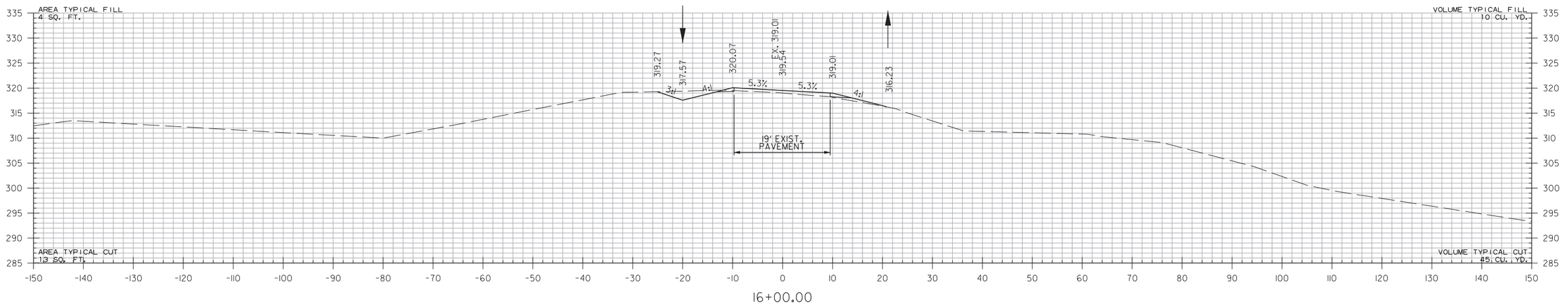
RED HILL RD. SOUTH
STA. 14+65 TO STA. 15+00

rnfortner 6/28/2022 10:38:36 AM
WORKSPACE: AHTD
L:\2017\17017515 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Red HillRd_South.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	497	549
		CROSS SECTIONS				



17+00.00



16+00.00

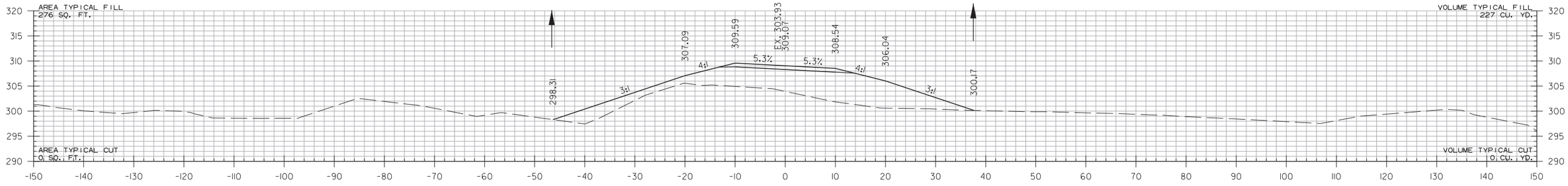
RED HILL RD. SOUTH
STA. 16+00 TO STA. 17+00

rnfortner 6/28/2022 10:38:36 AM
WORKSPACE: AHTD
L:\20IT\170I715 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Red Hill Rd. South.dgn
REVISED DATE:

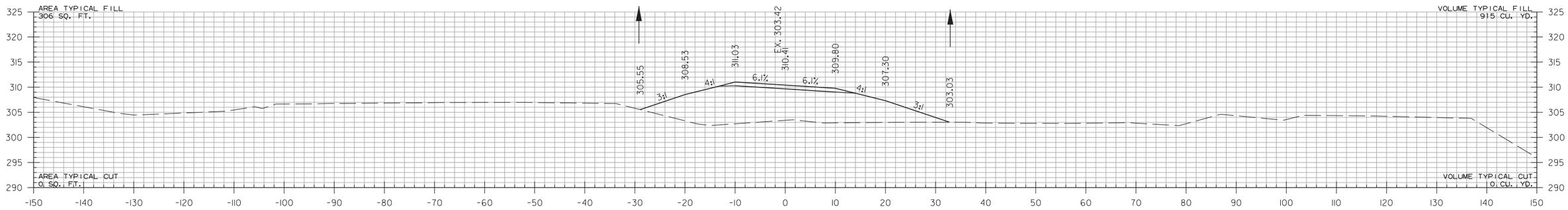
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	498	549
		CROSS SECTIONS				

STA. 19+82.00
END RED HILL RD. SOUTH

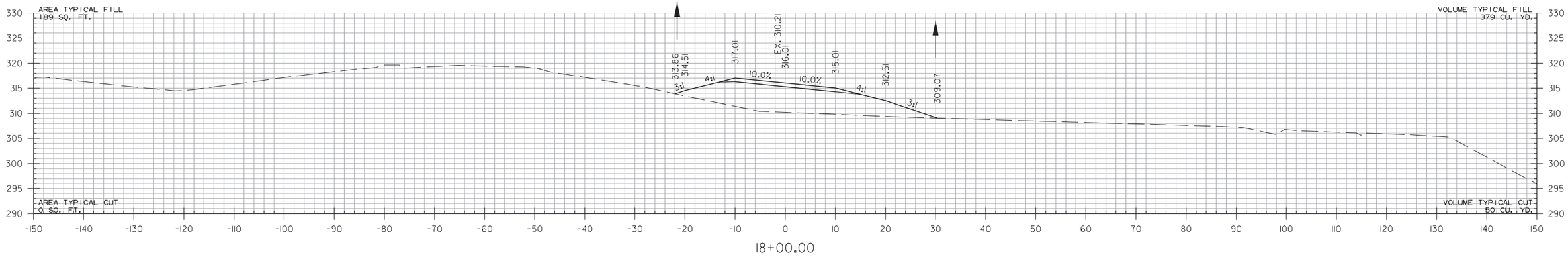
STA. 19+70.50 END SUPERELEVATION (0.033'/')



19+21.00



19+00.00



18+00.00

STA. 18+03.00 MAX SUPERELEVATION (0.100'/')
STA. 17+17.68 MAX SUPERELEVATION (0.100'/')

RED HILL RD. SOUTH
STA. 18+00 TO STA. 19+21

rnfortner 6/28/2022 10:38:36 AM
WORKSPACE: AHTD
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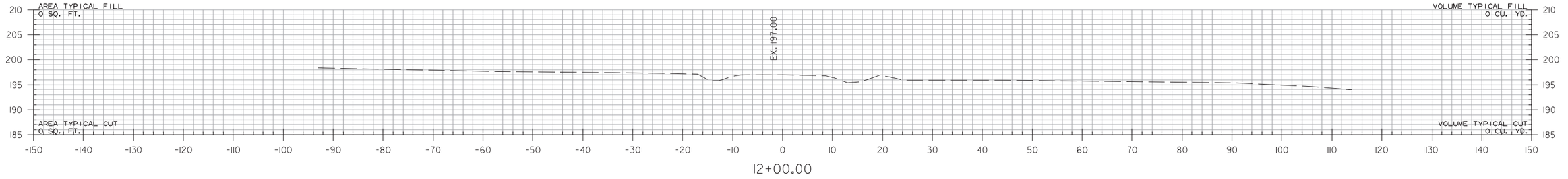
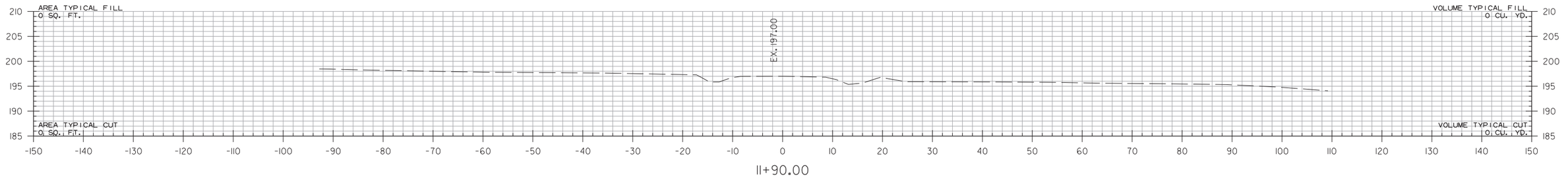
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	499	549
		CROSS SECTIONS				

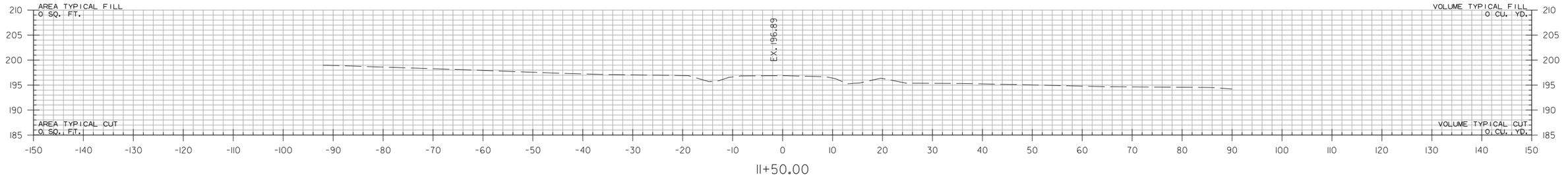


12+00.00



11+90.00

STA. 11+90.00 BEGIN 50' TRANSITION



11+50.00

26TH ST. SOUTH
STA. 11+50 TO STA. 12+00

rnfortner 6/28/2022 10:38:37 AM
WORKSPACE: AHTD
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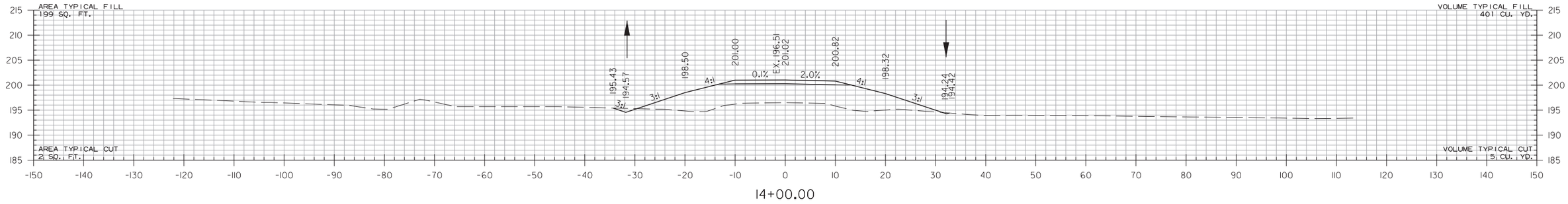
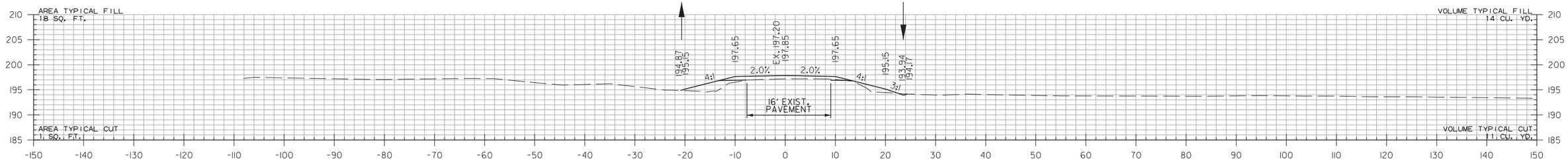
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	500	549
		CROSS SECTIONS				



14+00.00

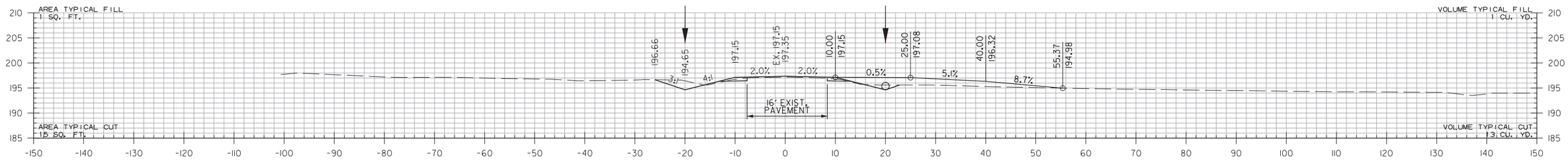
STA. 13+53.53 BEGIN SUPERELEVATION



13+00.00

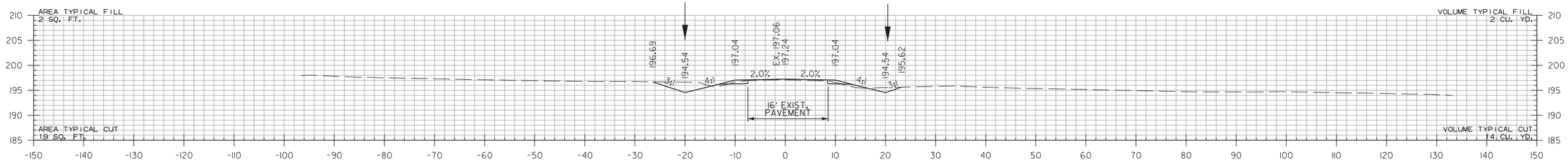
STA. 13+00.00
BEGIN SP. DT. LT. -0.30%
ELEV. 194.87

STA. 13+00.00
BEGIN SP. DT. RT. 0.30%
ELEV. 193.94



12+61.00

STA. 12+61 INSTALL
18" X 38' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPROACH = 35 CU. YDS.



12+40.00

STA. 12+40.00 BEGIN 26TH ST. SOUTH

26TH ST. SOUTH
STA. 12+40 TO STA. 14+00

rnfortner 6/28/2022 10:38:37 AM
WORKSPACE: AHTD
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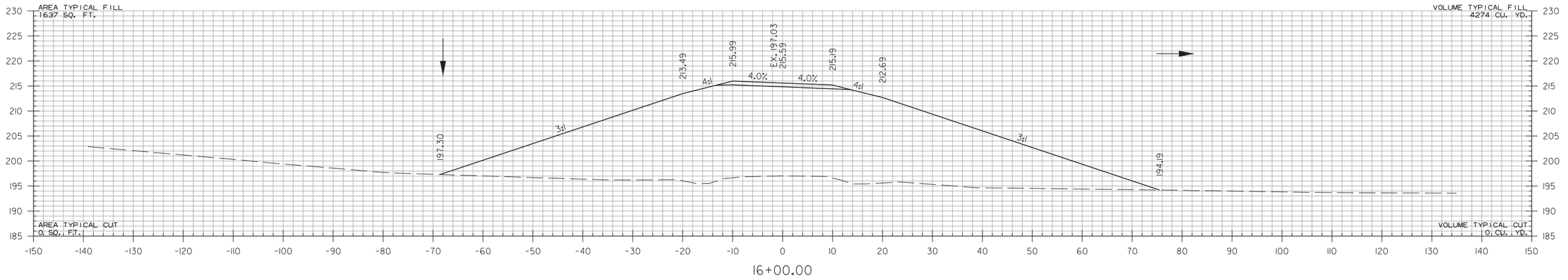
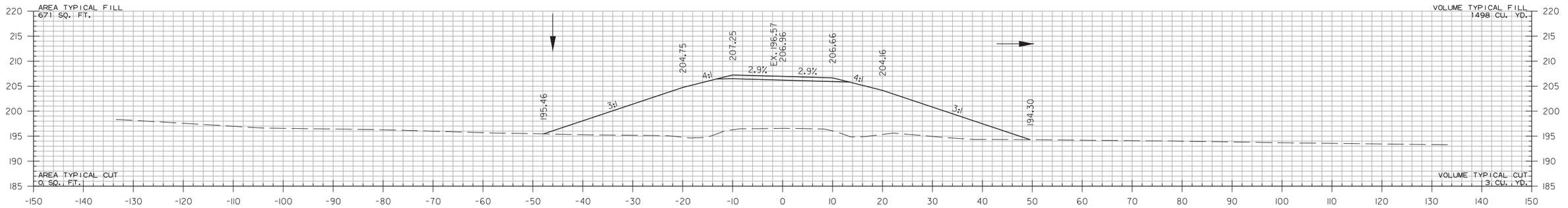
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	501	549
		CROSS SECTIONS				

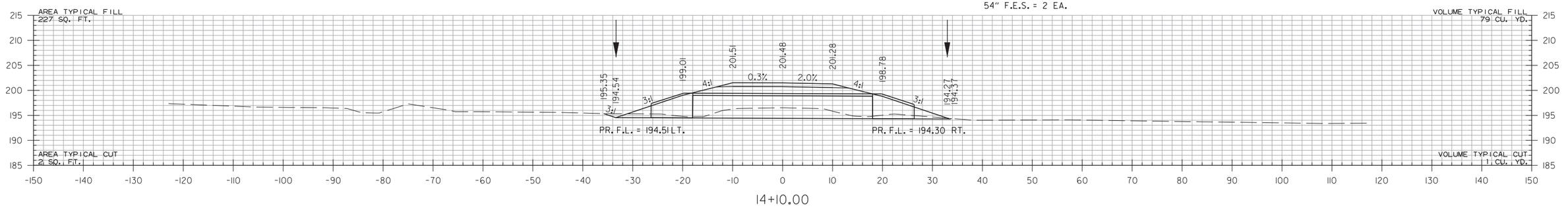


STA. 15+53.53 MAX SUPERELEVATION (0.040'/')



STA. 14+50.00
END SP. DT. LT. 1.43%
ELEV. 195.11

STA. 114+10 CONSTRUCT
54" X 36' R.C. PIPE CULVERT
CLASS V (TYPE 3 BEDDING) W/
F.E.S. LT. & RT.
Q50 = 86 CFS DA = 16 ACRES
54" R.C. PIPE = 36 LIN. FT.
54" F.E.S. = 2 EA.



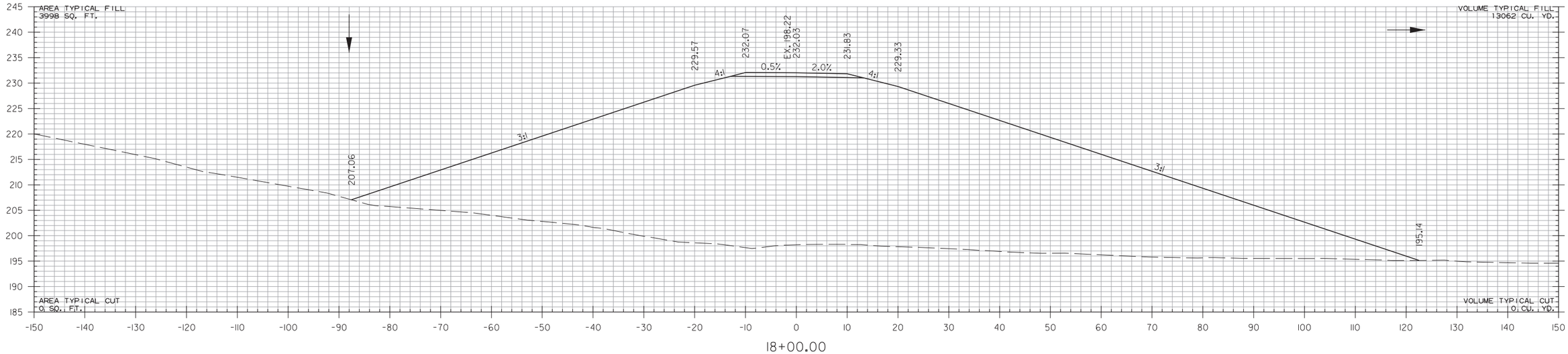
STA. 14+10.00
END SP. DT. LT. -0.30%
BEGIN SP. DT. LT. 1.43%
ELEV. 194.54

STA. 14+10.00
END SP. DT. RT. 0.30%
ELEV. 194.27

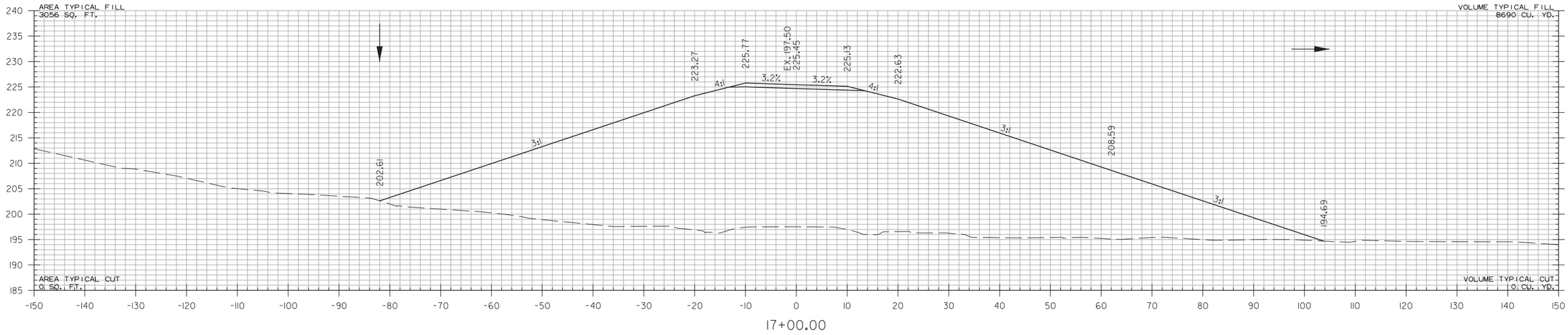
26TH ST. SOUTH
STA. 14+10 TO STA. 16+00

rnfortner 6/28/2022 10:38:41 AM
WORKSPACE: AHTD
L:\2017\170715 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_26th St. South.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	502	549
		CROSS SECTIONS				



18+00.00



17+00.00

STA. 16+61.46 MAX SUPERELEVATION (0.040'/')

26TH ST. SOUTH
STA. 17+00 TO STA. 18+00

rnfortner 6/28/2022 10:38:41 AM
WORKSPACE: AHTD
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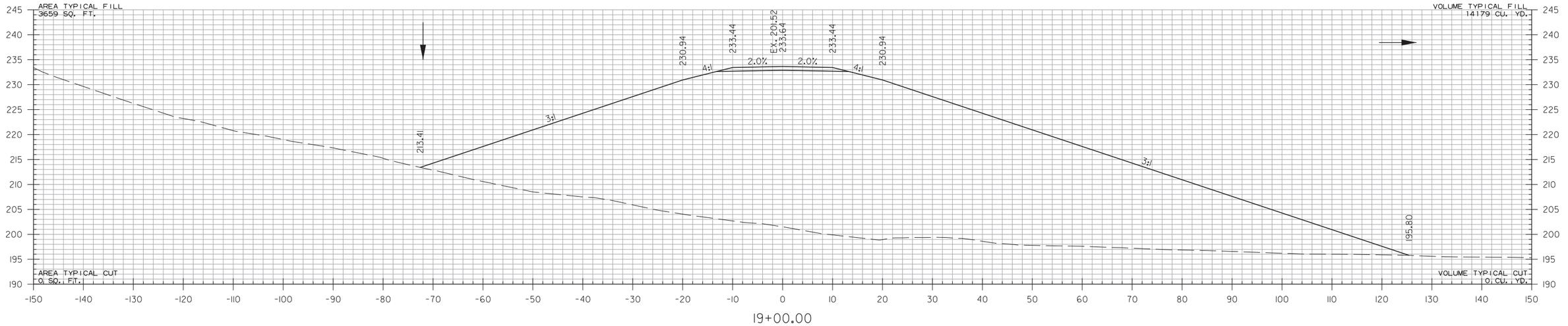
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	503	549
		CROSS SECTIONS				

STA. 19+81.72 END 26TH ST. SOUTH



19+00.00

STA. 18+61.46 END SUPERELEVATION

26TH ST. SOUTH
STA. 19+00 TO STA. 19+00

rnfortner 6/28/2022 10:38:41 AM
WORKSPACE: AHTD
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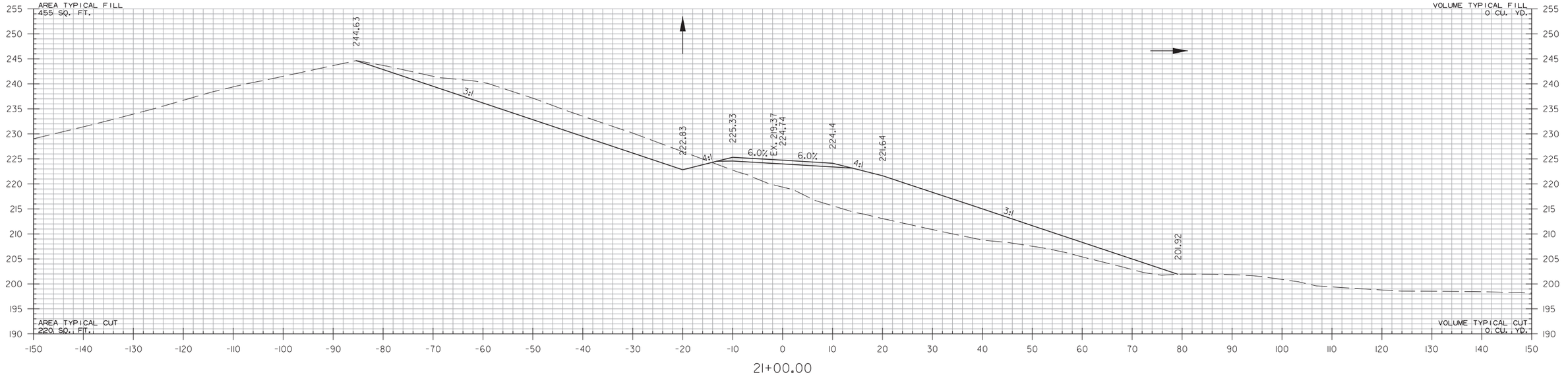
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	504	549
		CROSS SECTIONS				



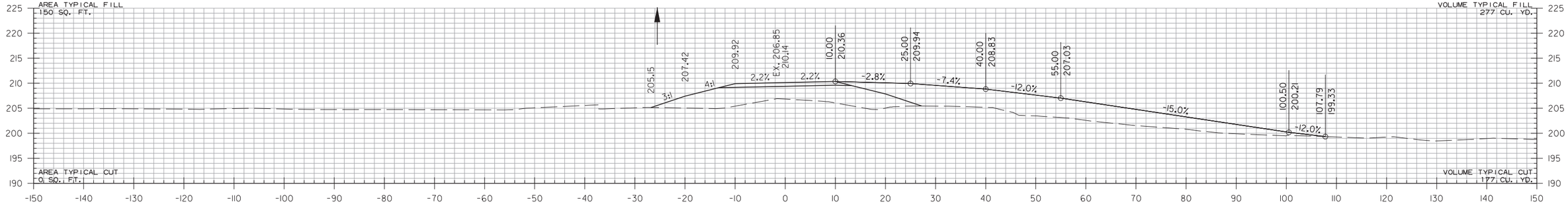
STA. 20+29.86 BEGIN SUPERELEVATION (0.034'/')

STA. 20+18.28 BEGIN 26TH ST. NORTH

26TH ST. NORTH
STA. 21+00 TO STA. 21+00

rnfortner 6/28/2022 10:38:42 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_26th St. North.dgn
REVISED DATE:

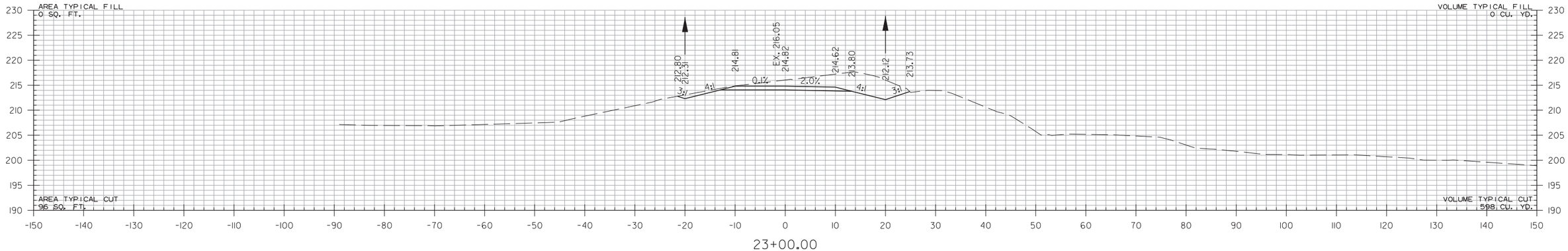
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	505	549
		CROSS SECTIONS				



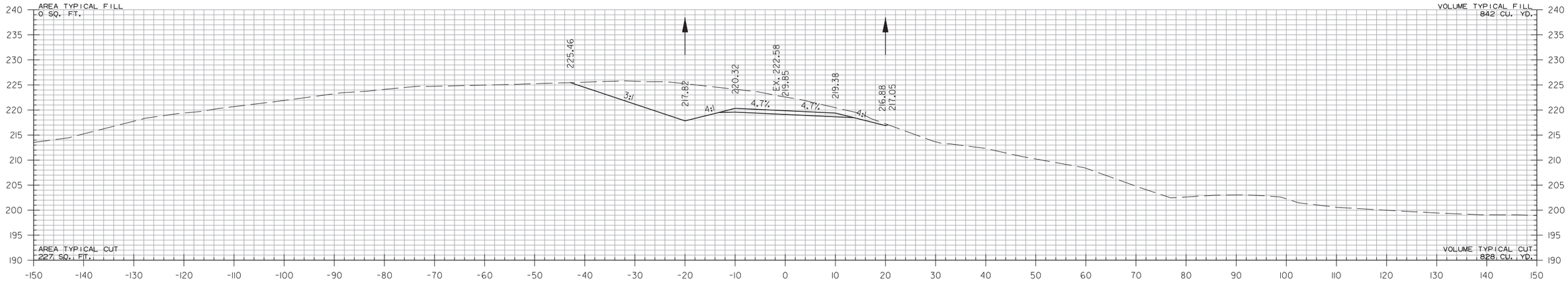
24+00.00

STA. 23+25.27 BEGIN SUPERELEVATION
STA. 23+25.27 END SUPERELEVATION

STA. 24+00 CONSTRUCT
APPROACH ON RT. = 149 CU. YDS.



23+00.00



22+00.00

STA. 21+66.41 MAX SUPERELEVATION (0.060'/')
STA. 20+98.39 MAX SUPERELEVATION (0.060'/')

26TH ST. NORTH
STA. 22+00 TO STA. 24+00

rnfortner 6/28/2022 10:38:42 AM
WORKSPACE: AHTD
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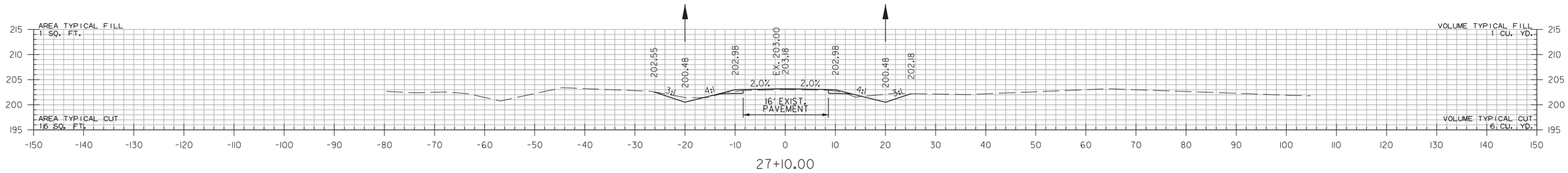
REVISED DATE:

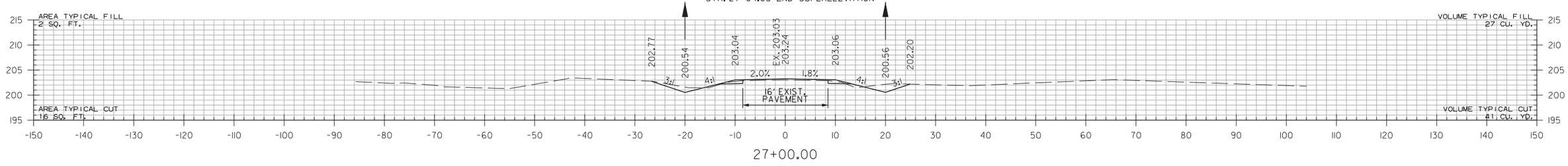
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	506	549
		CROSS SECTIONS				



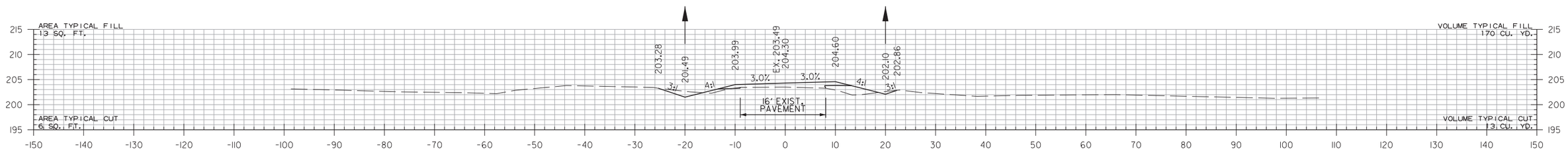
27+10.00

STA. 20+10.00 END 26TH ST. NORTH

STA. 27+04.03 END SUPERELEVATION

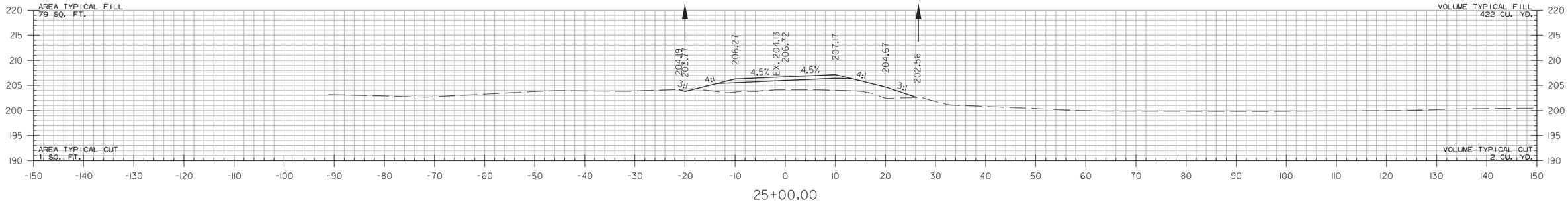


27+00.00



26+00.00

STA. 25+50.28 MAX SUPERELEVATION (0.045'/')



25+00.00

STA. 24+80.02 MAX SUPERELEVATION (0.045'/')

26TH ST. NORTH
STA. 25+00 TO STA. 27+10

rnfortner 6/28/2022 10:38:42 AM
WORKSPACE: AHTD
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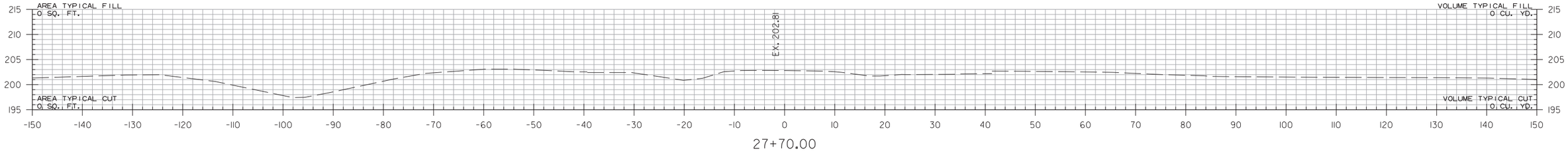
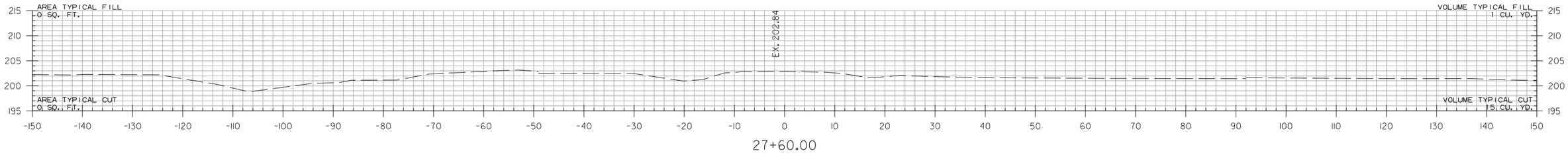
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	507	549
		CROSS SECTIONS				



27+70.00



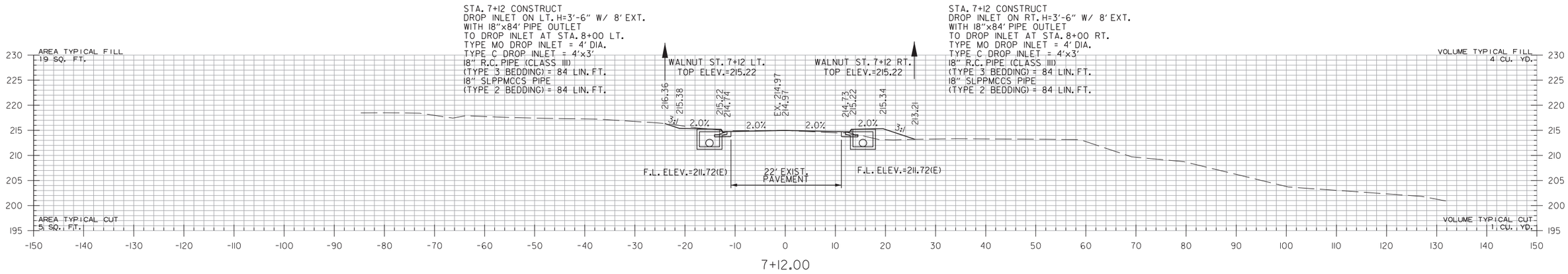
27+60.00

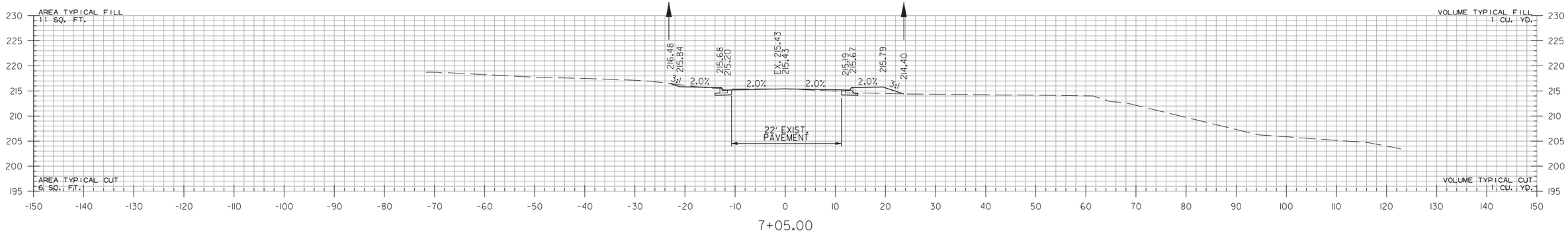
STA. 27+60.00 END 50' TRANSITION

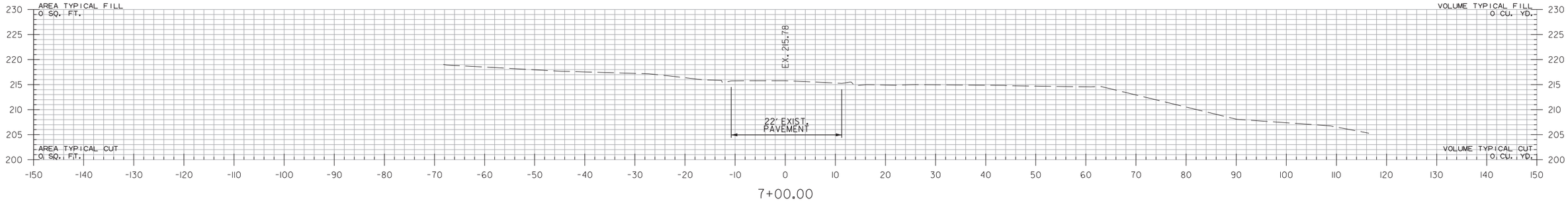
26TH ST. NORTH
STA. 27+60 TO STA. 27+70

rnfortner 6/28/2022 10:38:42 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_26th St_North.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	508	549
		CROSS SECTIONS				



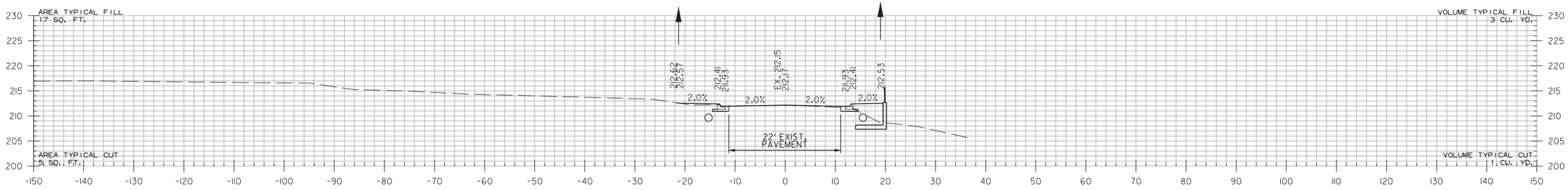




WALNUT ST.
STA. 7+00 TO STA. 7+12

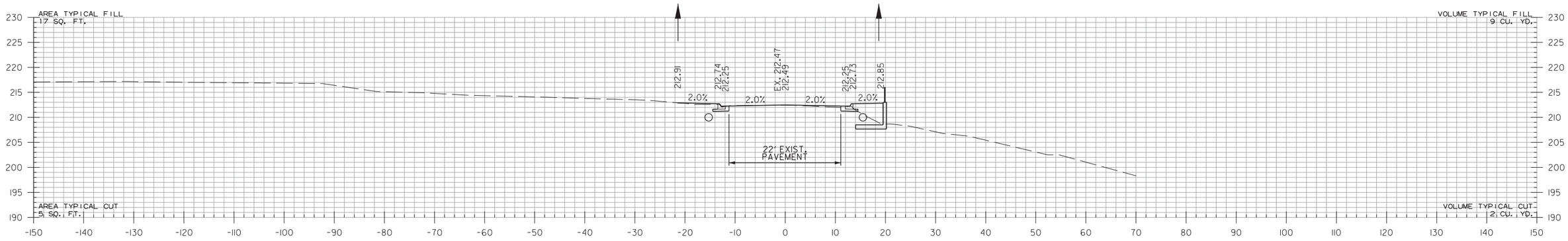
rnfortner 6/28/2022 10:38:42 AM
WORKSPACE: AHTD
L:\2017\170755 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Walnut St..dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	509	549
		CROSS SECTIONS				

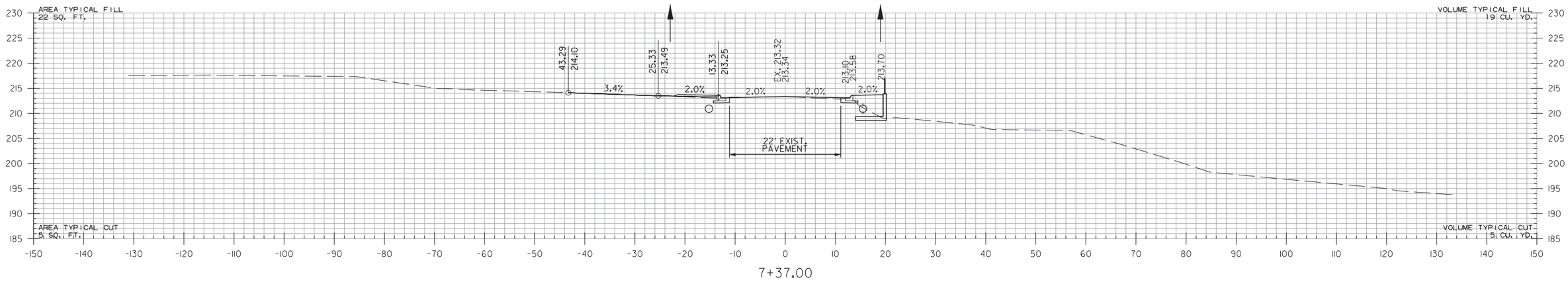


7+55.00

STA. 7+55.00 BEGIN WALNUT ST.



7+50.00



7+37.00

STA. 7+37 CONSTRUCT
APPROACH ON RT. = 8 CU. YDS.

WALNUT ST.
STA. 7+37 TO STA. 7+55

rnfortner 6/28/2022 10:38:43 AM
WORKSPACE: AHTD
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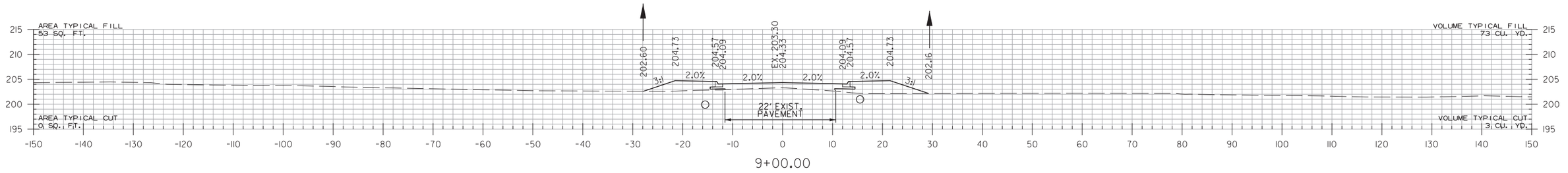
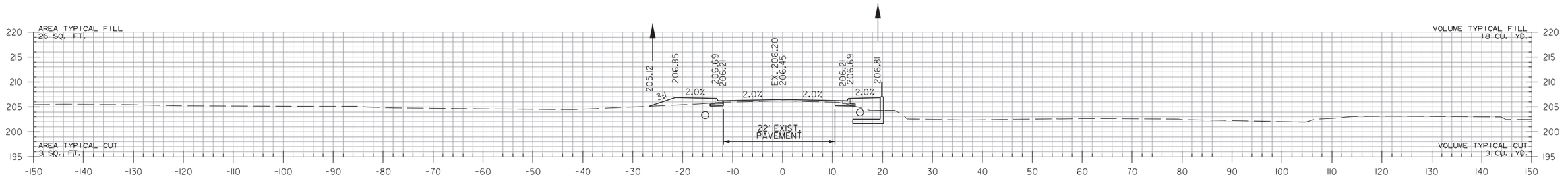
REVISED DATE:

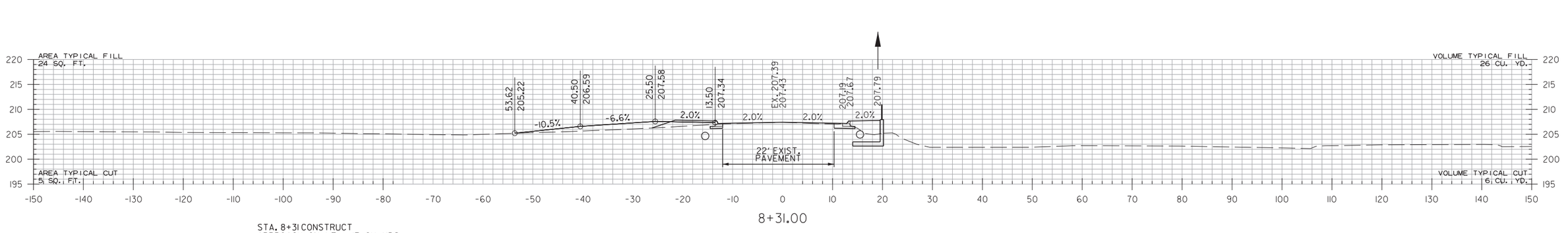
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	510	549
		CROSS SECTIONS				



9+00.00



8+50.00



8+31.00

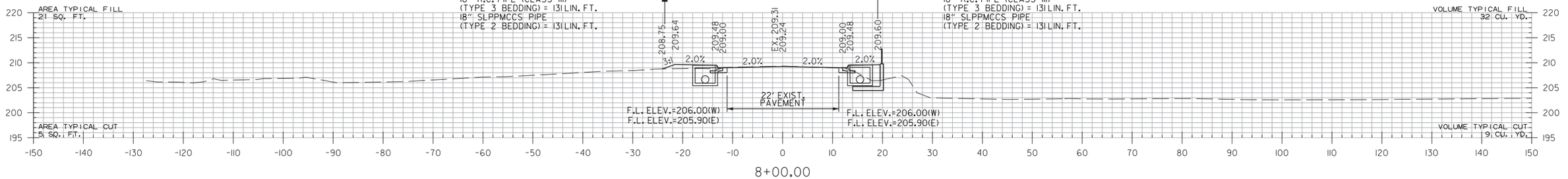
STA. 8+31 CONSTRUCT
APPROACH ON LT. = 13 CU. YDS.

STA. 8+00 CONSTRUCT
DROP INLET ON LT. H=3'-6" W/ 8' EXT.
WITH 18"x13' PIPE OUTLET
TO DROP INLET AT STA. 9+35 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 131 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 131 LIN. FT.

WALNUT ST. 8+00 LT.
TOP ELEV.=209.48

WALNUT ST. 8+00 RT.
TOP ELEV.=209.48

STA. 8+00 CONSTRUCT
DROP INLET ON RT. H=3'-6" W/ 8' EXT.
WITH 18"x13' PIPE OUTLET
TO DROP INLET AT STA. 9+35 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 131 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 131 LIN. FT.



8+00.00

WALNUT ST.
STA. 8+00 TO STA. 9+00

rnfortner 6/28/2022 10:38:43 AM
WORKSPACE: AHTD
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REVISED DATE:

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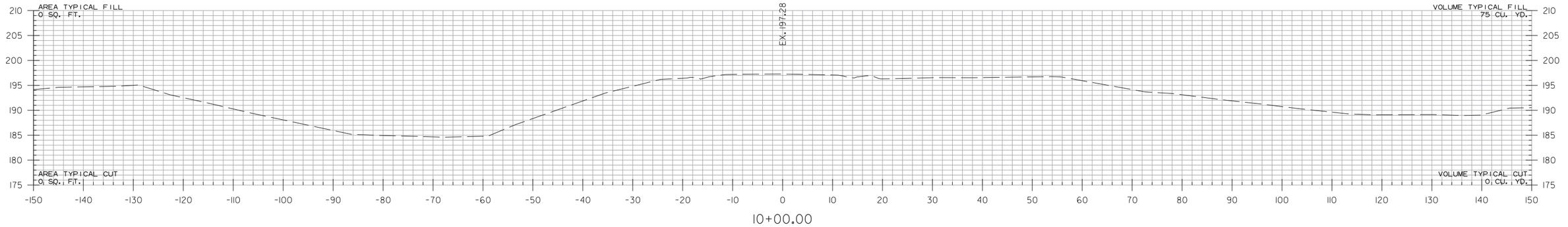
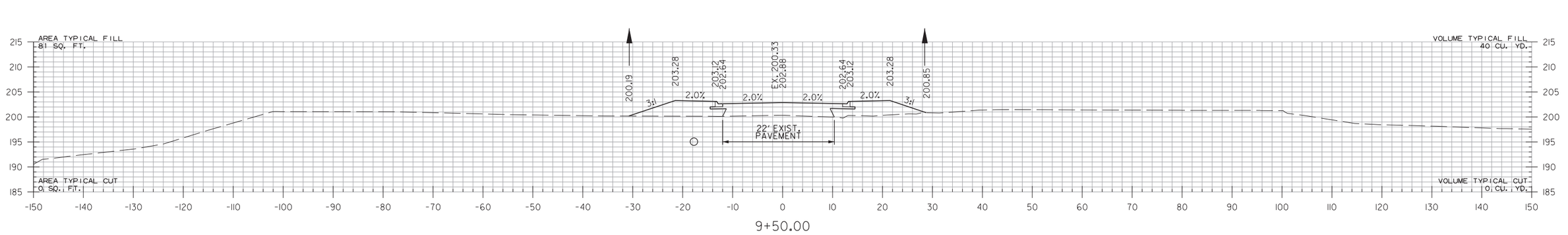
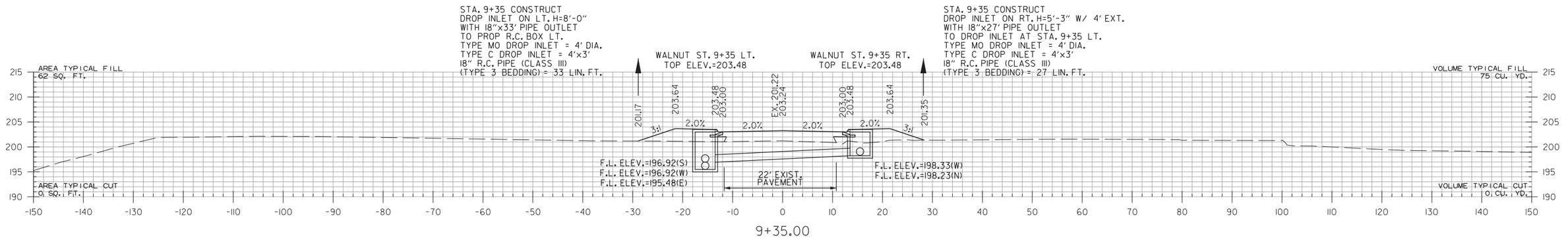
		CROSS SECTIONS				



STA. 9+81.49 END WALNUT ST.





WALNUT ST.
STA. 9+35 TO STA. 10+00

rnfortner 6/28/2022 10:38:43 AM
WORKSPACE: AHTD
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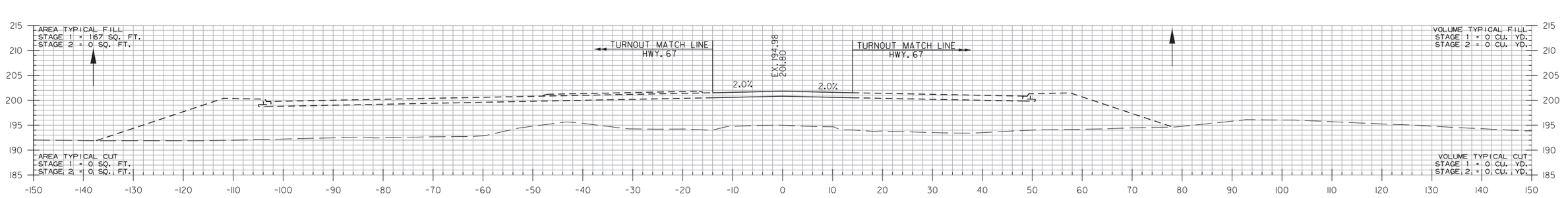
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	512	549
		CROSS SECTIONS				



10+50.00
STA. 10+18.28
BEGIN HWY. 67 CONNECTOR

HWY. 67 CONNECTOR
STA. 10+50 TO STA. 10+50

rnfortner 6/28/2022 10:38:43 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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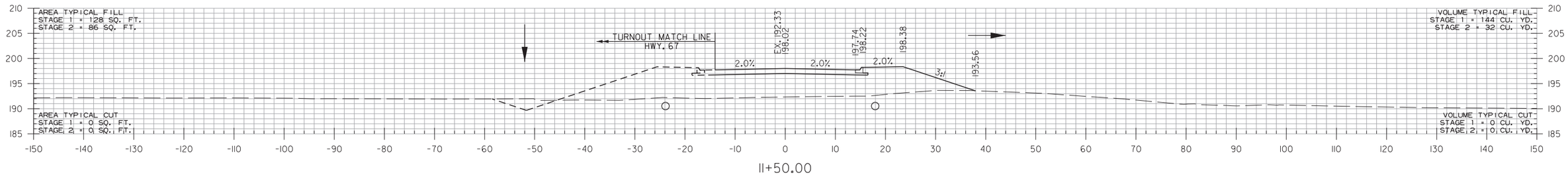
		CROSS SECTIONS				



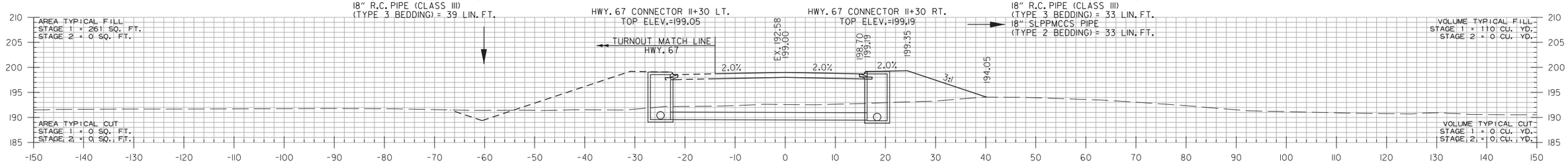
11+50.00

STA. 11+30 CONSTRUCT
DROP INLET ON LT. H=9'-6"
WITH 18"x39' PIPE OUTLET
TO DROP INLET AT STA. 11+30 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 39 LIN. FT.

STA. 11+30 CONSTRUCT
DROP INLET ON RT. H=9'-10" W/ 8' EXT.
WITH 18"x33' PIPE OUTLET
TO JUNCTION BOX AT STA. 10+95 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 33 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 33 LIN. FT.

HWY. 67 CONNECTOR 11+30 LT.
TOP ELEV.=199.05

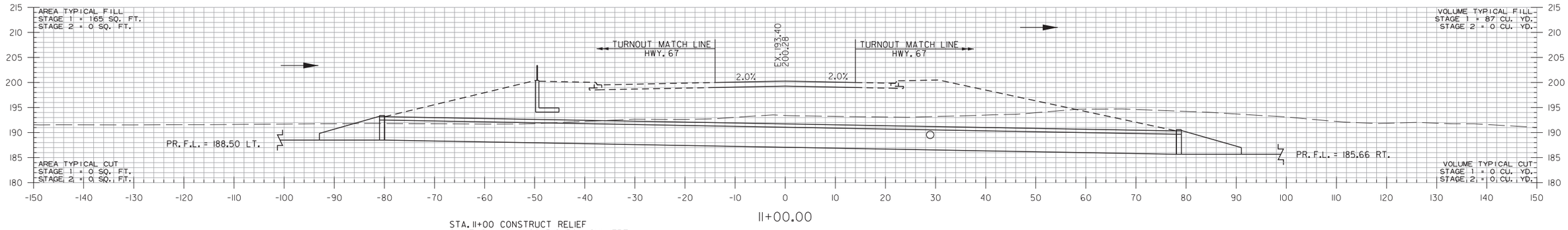
HWY. 67 CONNECTOR 11+30 RT.
TOP ELEV.=199.19



F.L. ELEV.=189.66(E)
F.L. ELEV.=189.56(S)

11+30.00

F.L. ELEV.=189.44(N)
F.L. ELEV.=189.66(E)
F.L. ELVE.=189.34(W)



11+00.00

STA. 11+00 CONSTRUCT RELIEF
QUINT. 6' X 4' X 160' R.C. BOX CULVERT
WITH 3:1 WINGS LT. AND RT.
Q50 = 95 CFS DA = 819 ACRES
SPAN = 33'-8"

HWY. 67 CONNECTOR
STA. 11+00 TO STA. 11+50

rnfortner 6/28/2022 10:38:44 AM
WORKSPACE: AHTD
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REVISED DATE:

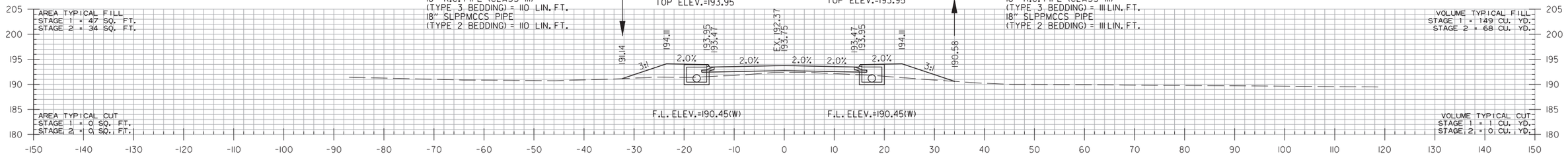
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	514	549
		CROSS SECTIONS				

STA. 12+45 CONSTRUCT
DROP INLET ON LT. H=3'-6"
WITH 18"x110' PIPE OUTLET
TO DROP INLET AT STA. 11+30 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 110 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 110 LIN. FT.

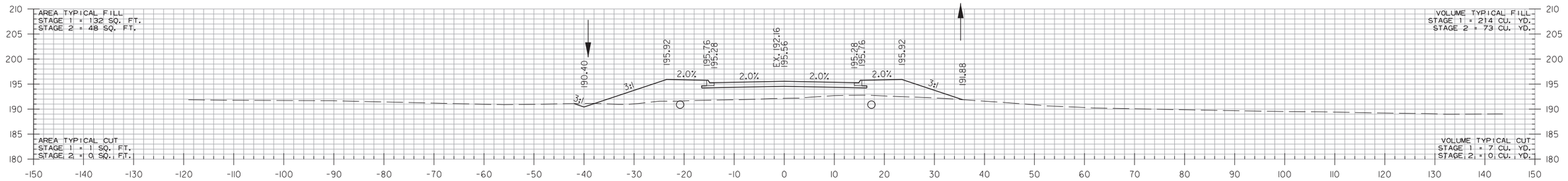
HWY. 67 CONNECTOR 12+45 LT.
TOP ELEV.=193.95

HWY. 67 CONNECTOR 12+45 RT.
TOP ELEV.=193.95

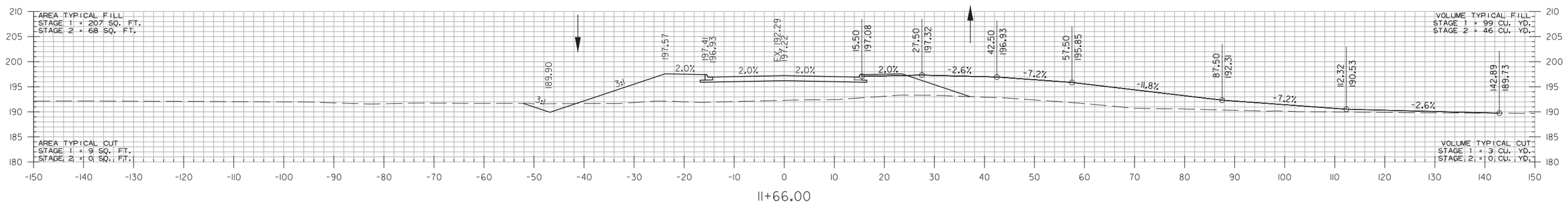
STA. 12+45 CONSTRUCT
DROP INLET ON RT. H=3'-6"
WITH 18"x111' PIPE OUTLET
TO DROP INLET AT STA. 11+30 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 111 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 111 LIN. FT.



12+45.00



12+00.00



11+66.00

STA. 11+66 CONSTRUCT
APPROACH ON RT. = 253 CU. YDS.

HWY. 67 CONNECTOR
STA. 11+66 TO STA. 12+45

rnfortner 6/28/2022 10:38:44 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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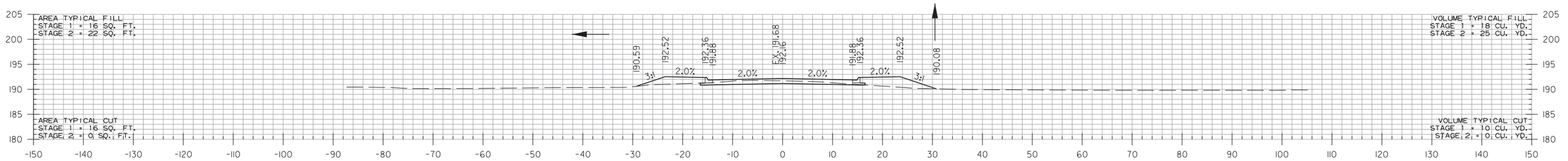
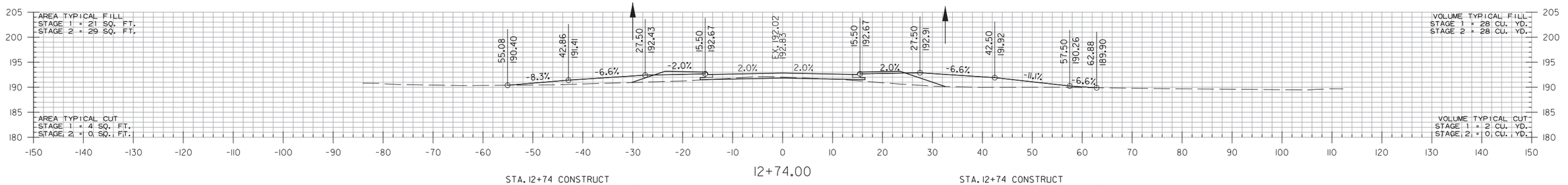
		CROSS SECTIONS				



13+00.00

STA. 13+00.00 END HWY. 67 CONNECTOR

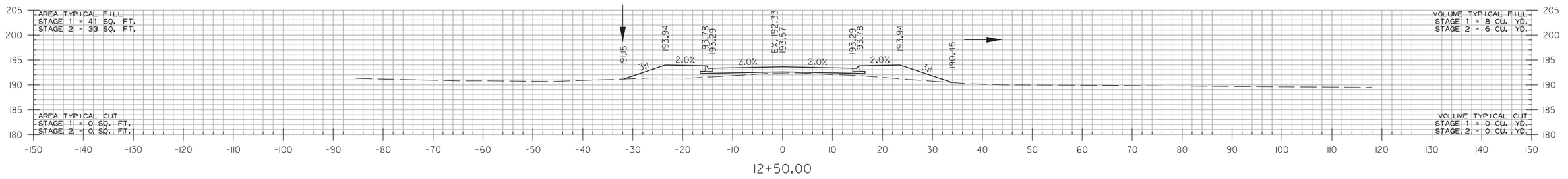
STA. 13+00.00 BEGIN 70' CURB TRANSITION



12+74.00

STA. 12+74 CONSTRUCT
APPROACH ON LT. = 11 CU. YDS.

STA. 12+74 CONSTRUCT
APPROACH ON RT. = 36 CU. YDS.



12+50.00

HWY. 67 CONNECTOR
STA. 12+50 TO STA. 13+00

rnfortner 6/28/2022 10:38:44 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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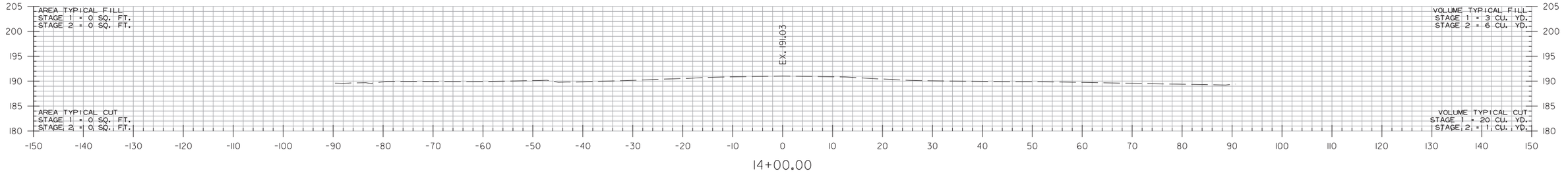
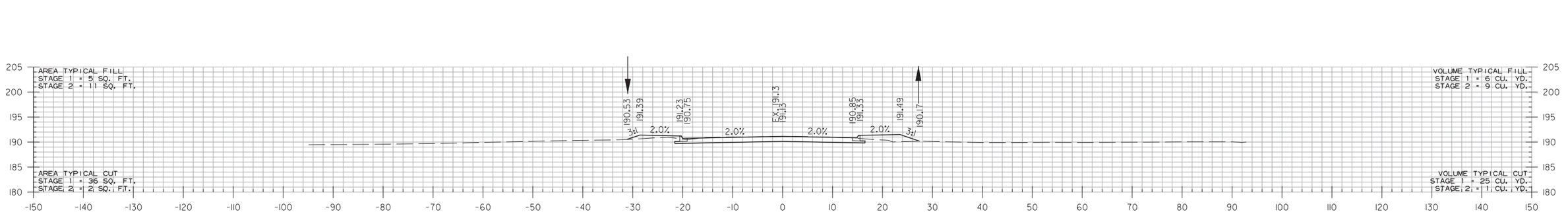
		CROSS SECTIONS				

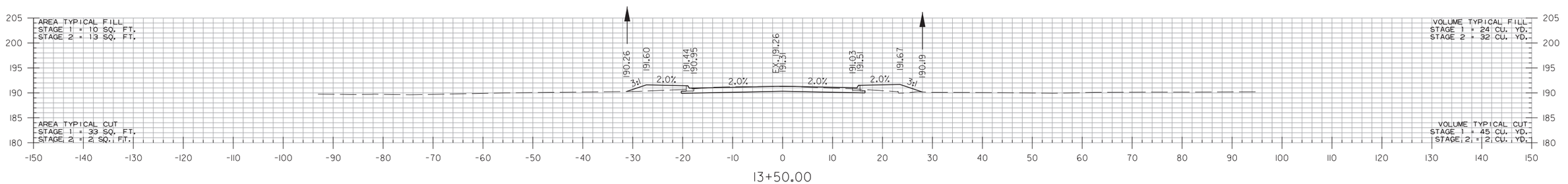


14+00.00



13+70.00

STA. 13+70.00 END 70' CURB TRANSITION



13+50.00

HWY. 67 CONNECTOR
STA. 13+50 TO STA. 14+00

rnfortner 6/28/2022 10:38:44 AM
WORKSPACE: AHTD
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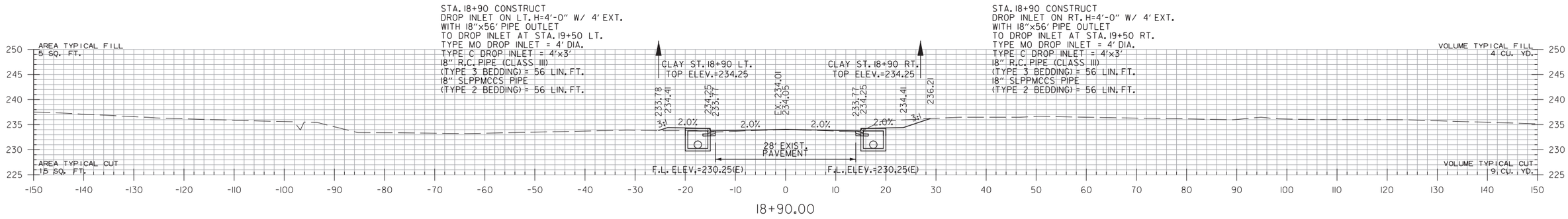
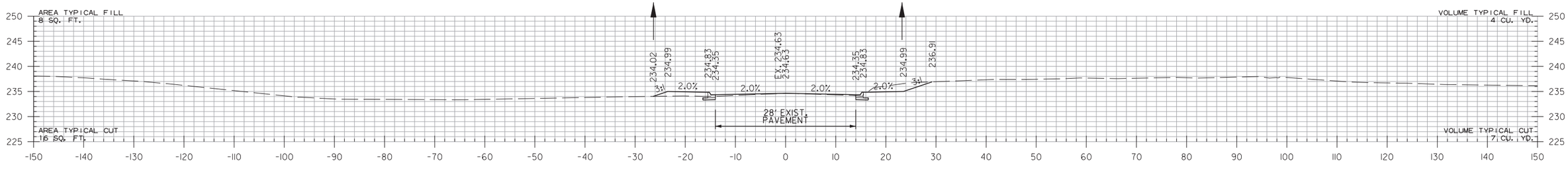
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	517	549
		CROSS SECTIONS				

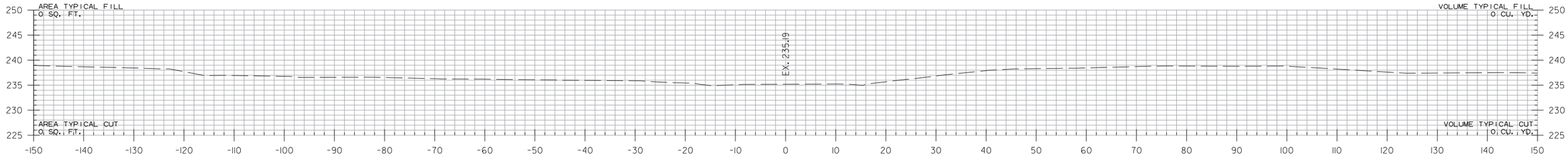


18+90.00



18+75.00

STA. 18+75.00 BEGIN CLAY ST. WEST



18+50.00

CLAY ST. WEST
STA. 18+50 TO STA. 18+90

rnfortner 6/28/2022 10:38:47 AM
WORKSPACE: AHTD
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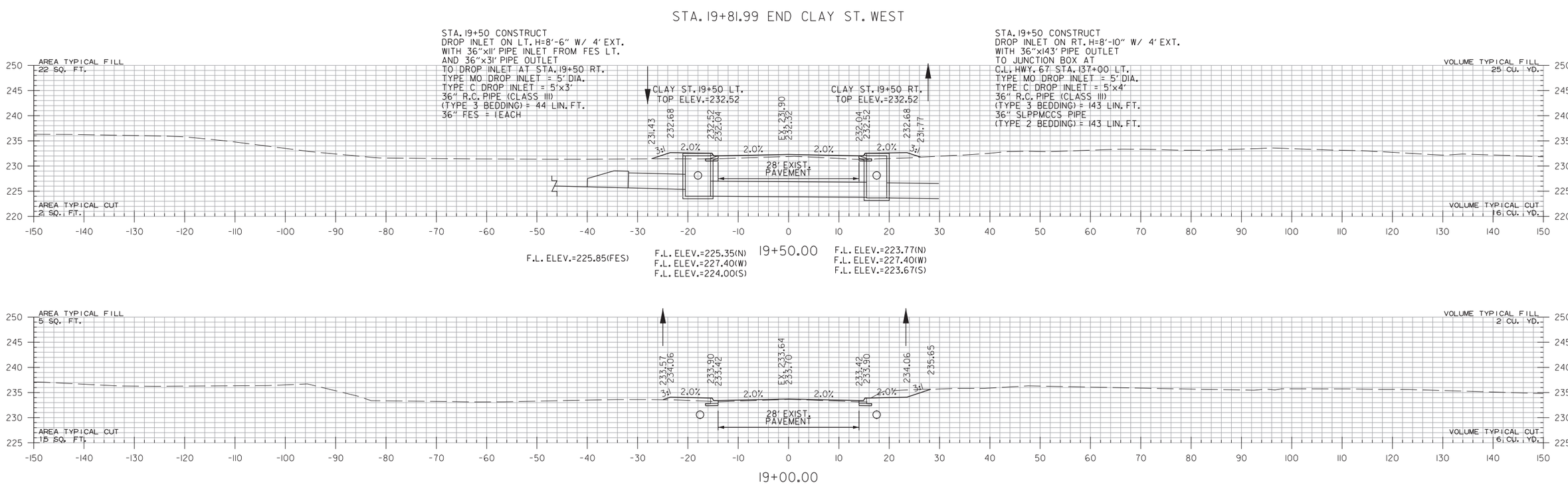
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	518	549
		CROSS SECTIONS				

STA. 19+81.99 END CLAY ST. WEST



CLAY ST. WEST
STA. 19+00 TO STA. 19+50

rnfortner 6/28/2022 10:38:47 AM
WORKSPACE: AHTD
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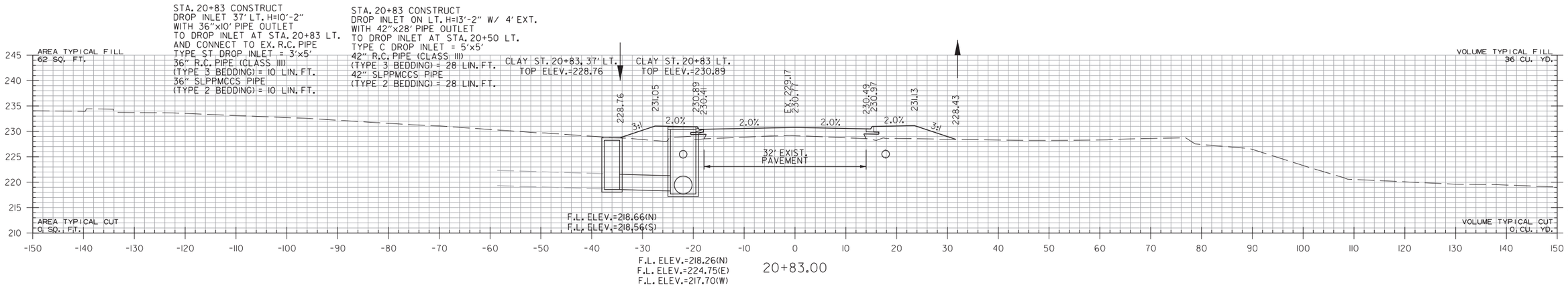
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	519	549
		CROSS SECTIONS				



STA. 20+18.01 BEGIN CLAY ST. EAST

CLAY ST. EAST
STA. 20+50 TO STA. 20+83

rnfortner 6/28/2022 10:38:48 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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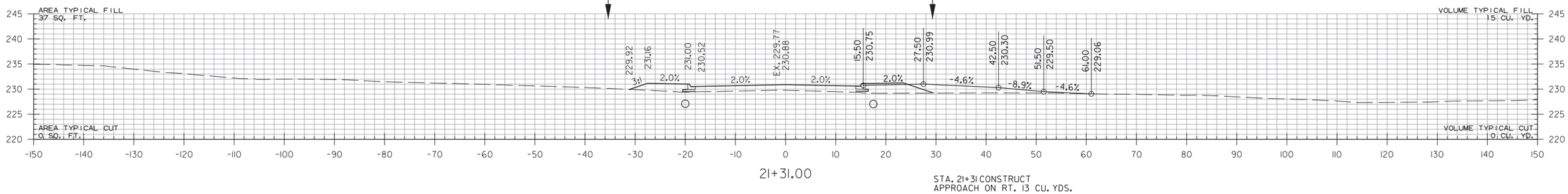
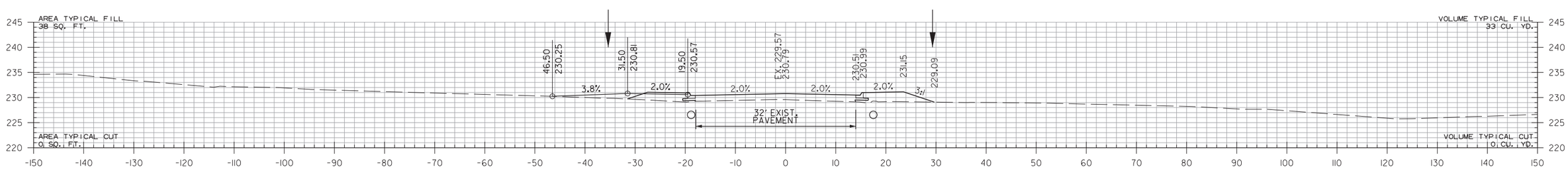
		CROSS SECTIONS				



21+31.00

STA. 21+31 CONSTRUCT
APPROACH ON RT. 13 CU. YDS.



21+20.00

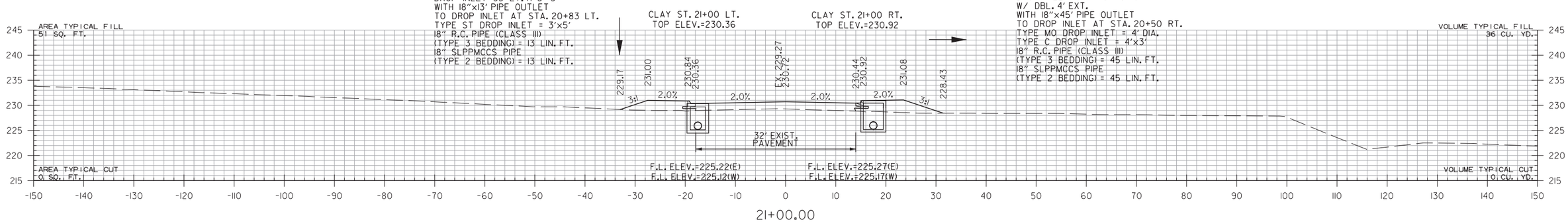
STA. 21+20 CONSTRUCT
APPROACH ON LT. = 5 CU. YDS.

STA. 21+00 CONSTRUCT
DROP INLET 33' LT. H=5'-3"
WITH 18"x13' PIPE OUTLET
TO DROP INLET AT STA. 20+83 LT.
TYPE ST DROP INLET = 3'x5'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 13 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 13 LIN. FT.

CLAY ST. 21+00 LT.
TOP ELEV.=230.36

CLAY ST. 21+00 RT.
TOP ELEV.=230.92

STA. 21+00 CONSTRUCT
DROP INLET ON RT. H=5'-9"
W/ DBL. 4' EXT.
WITH 18"x45' PIPE OUTLET
TO DROP INLET AT STA. 20+50 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 45 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 45 LIN. FT.



21+00.00

CLAY ST. EAST
STA. 21+00 TO STA. 21+31

rnfortner 6/28/2022 10:38:48 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Clay St. East.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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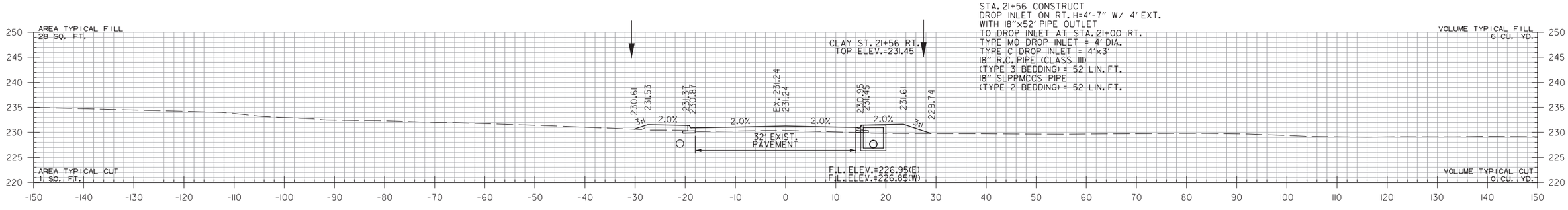
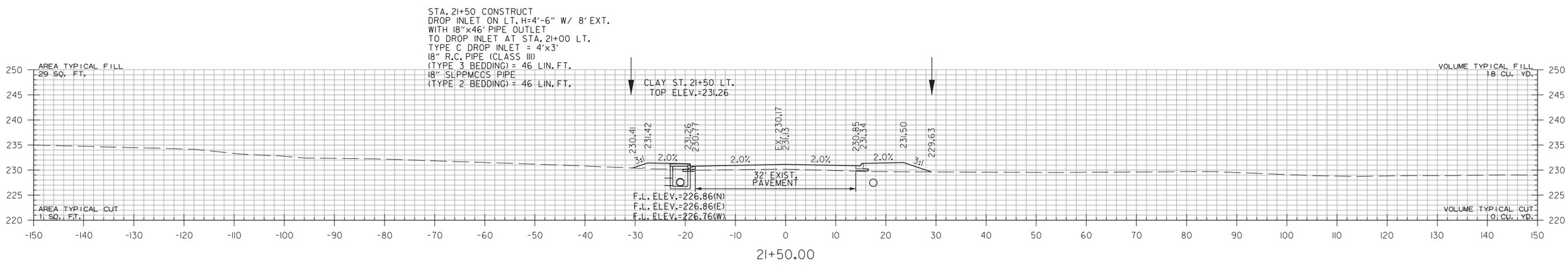
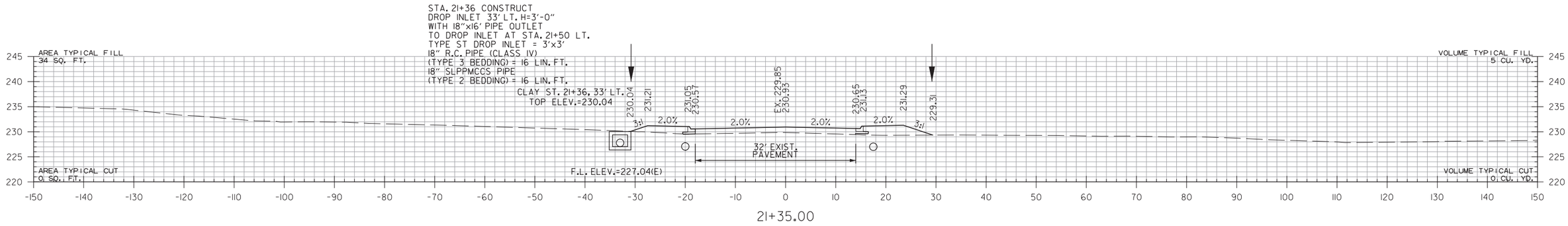
		CROSS SECTIONS				







CLAY ST. EAST
STA. 21+35 TO STA. 21+56

rnfortner 6/28/2022 10:38:48 AM
WORKSPACE: AHTD
L:\2017\1701755 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Clay St. East.dgn
REVISED DATE:

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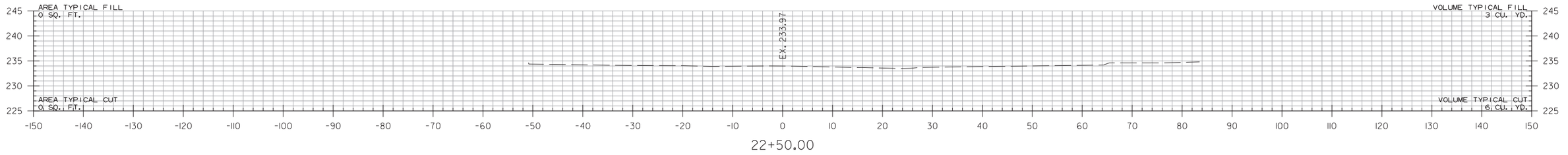
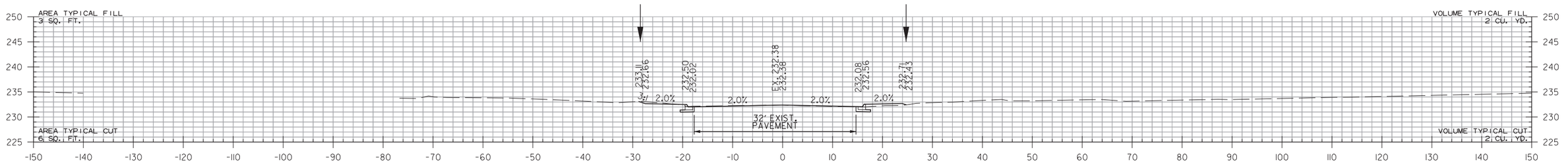
		CROSS SECTIONS				



22+50.00



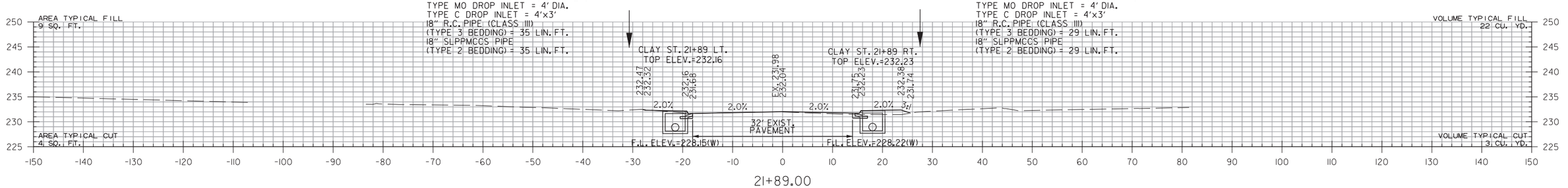
22+00.00

STA. 22+00.00 END CLAY ST. EAST

STA. 22+00.00 END 20' CURB TRANSITION

STA. 21+89 CONSTRUCT
DROP INLET ON LT. H=4'-0" W/ 8' EXT.
WITH 18"x35' PIPE OUTLET
TO DROP INLET AT STA. 21+50 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 35 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 35 LIN. FT.

STA. 21+89 CONSTRUCT
DROP INLET ON RT. H=4'-0" W/ 8' EXT.
WITH 18"x29' PIPE OUTLET
TO DROP INLET AT STA. 21+56 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 29 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 29 LIN. FT.



21+89.00

STA. 21+80.00 BEGIN 20' CURB TRANSITION

CLAY ST. EAST
STA. 21+89 TO STA. 22+50

rnfortner 6/28/2022 10:38:48 AM
WORKSPACE: AHTD
L:\2017\170175\5 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Clay St. East.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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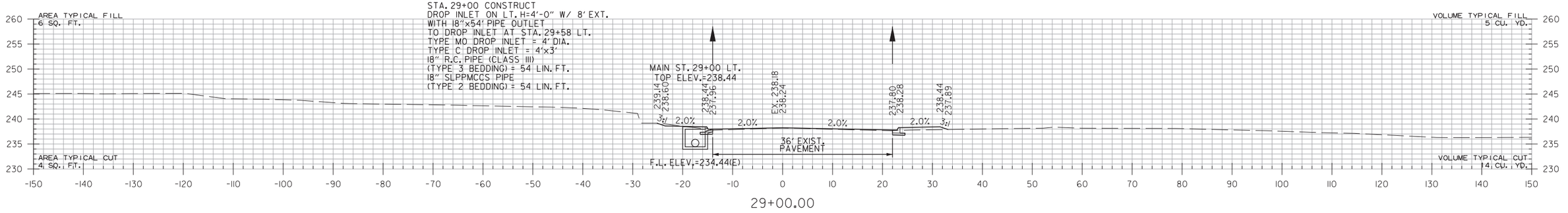
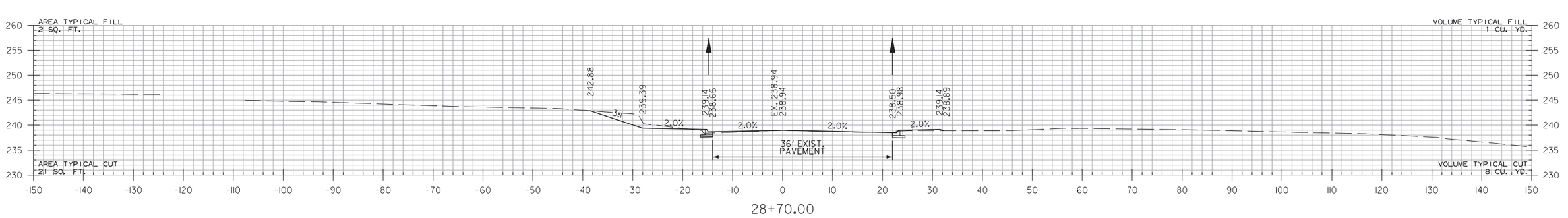
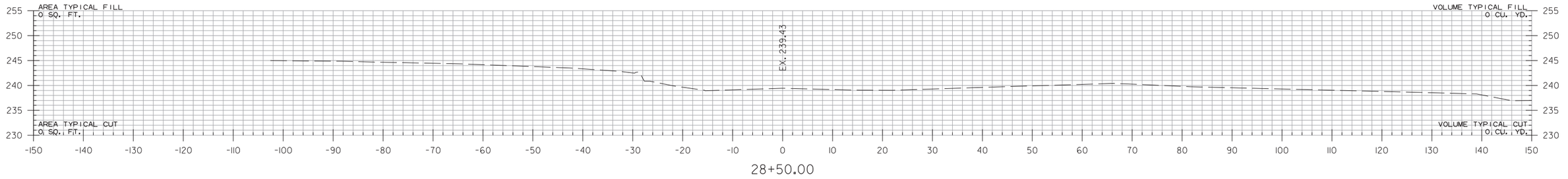




STA. 28+70.00 BEGIN MAIN ST. WEST



MAIN ST. WEST
STA. 28+50 TO STA. 29+00

rnfortner 6/28/2022 10:38:49 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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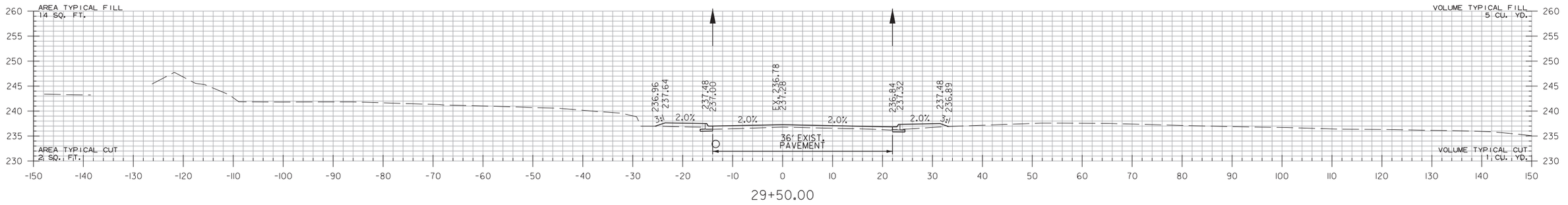
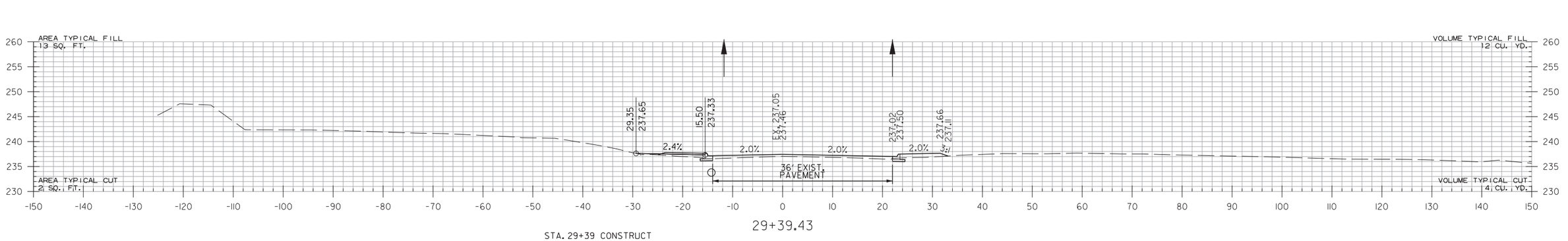
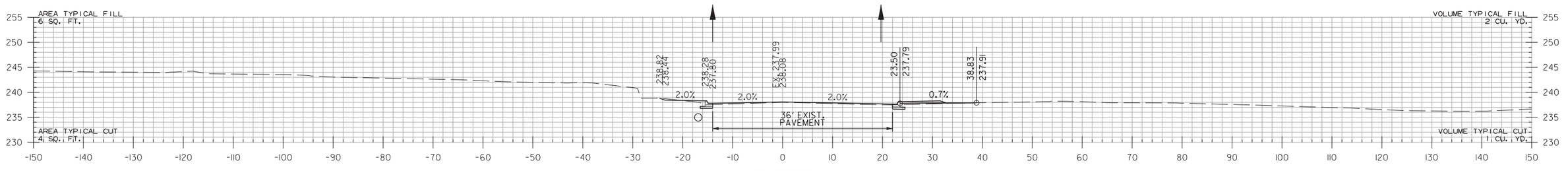


29+50.00



29+39.43

STA. 29+39 CONSTRUCT
APPROACH ON LT. = 1 CU. YDS.



29+07.26

STA. 29+07 CONSTRUCT
APPROACH ON LT. = 5 CU. YDS.

MAIN ST. WEST
STA. 29+07 TO STA. 29+50

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WORKSPACE: AHTD
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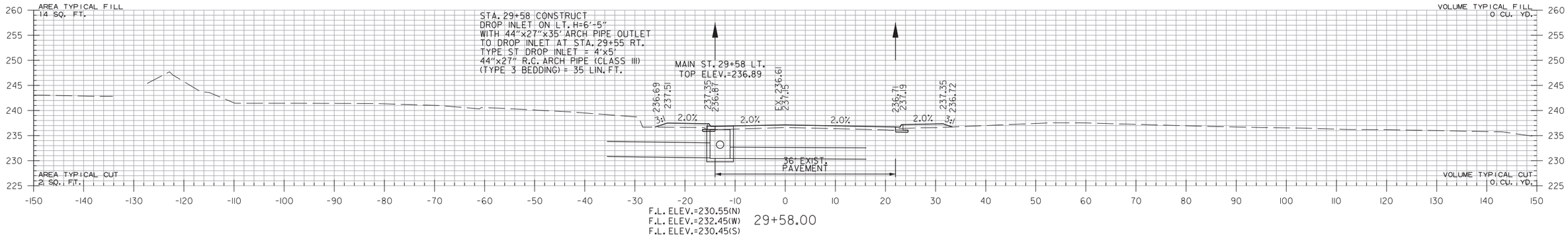
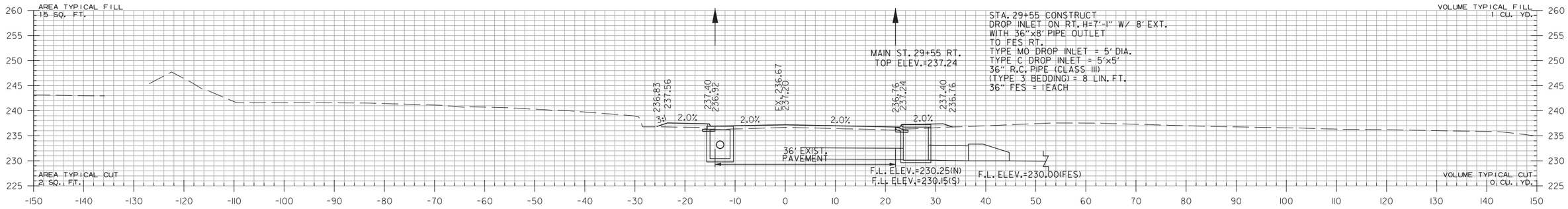
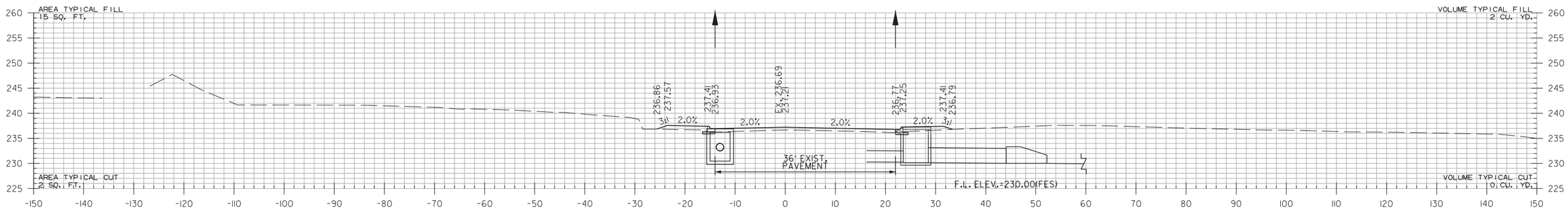
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	525	549
		CROSS SECTIONS				

STA. 29+82.00 END MAIN ST. WEST







MAIN ST. WEST
STA. 29+54 TO STA. 29+58

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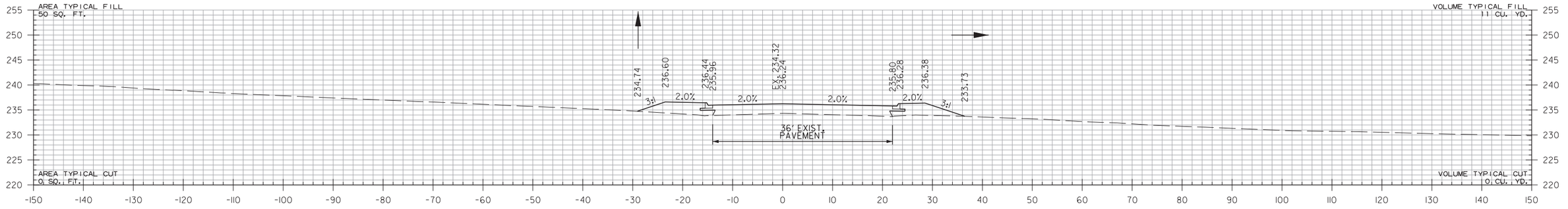
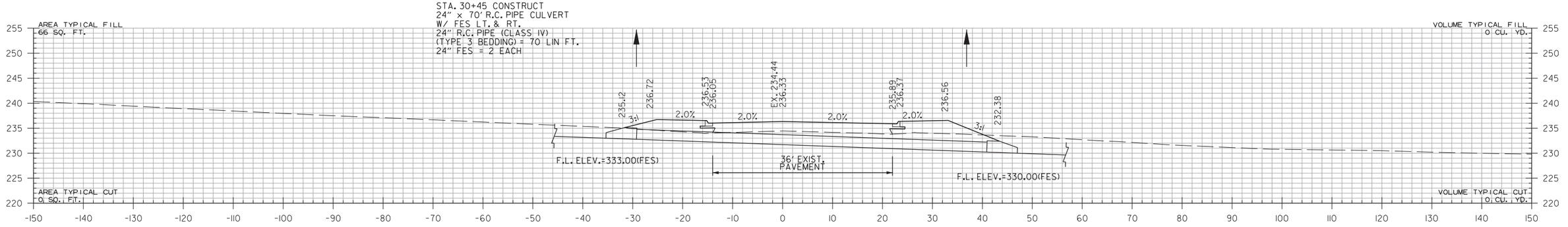


30+50.00

STA. 30+45 CONSTRUCT
24" x 70' R.C. PIPE CULVERT
W/ FES LT. & RT.
24" R.C. PIPE (CLASS IV)
(TYPE 3 BEDDING) = 70 LIN FT.
24" FES = 2 EACH



30+45.00

STA. 30+18.00 BEGIN MAIN ST. EAST

MAIN ST. EAST
STA. 30+45 TO STA. 30+50

rnfortner 6/28/2022 10:38:49 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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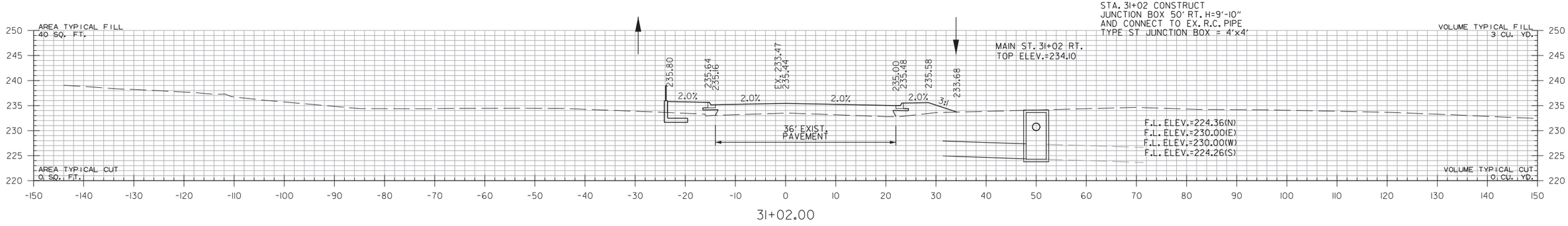

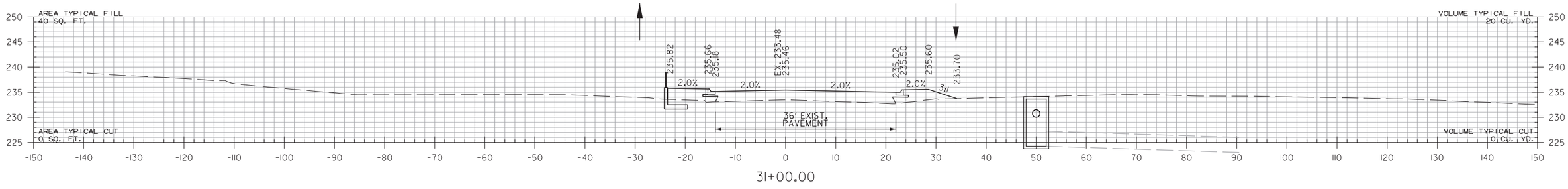

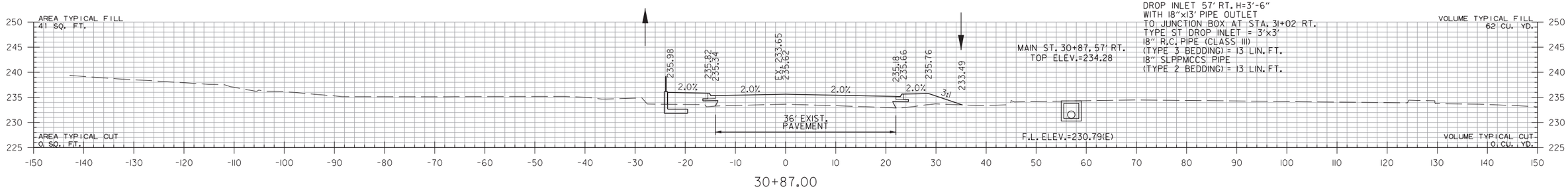

MAIN ST. EAST
STA. 30+87 TO STA. 31+02

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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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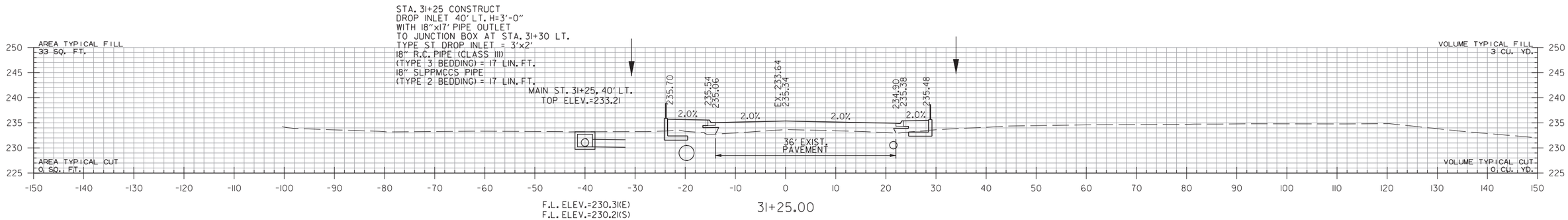

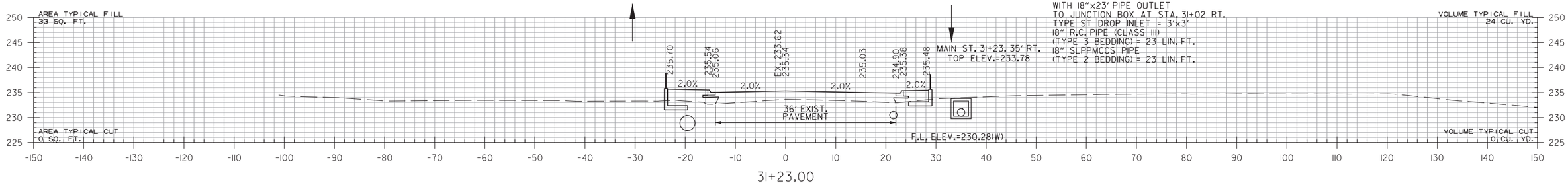

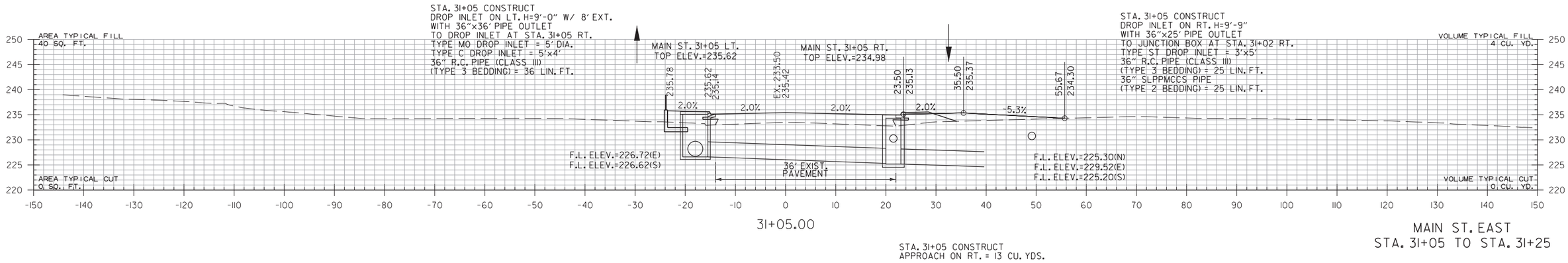

STA. 31+05 CONSTRUCT
APPROACH ON RT. = 13 CU. YDS.

MAIN ST. EAST
STA. 31+05 TO STA. 31+25

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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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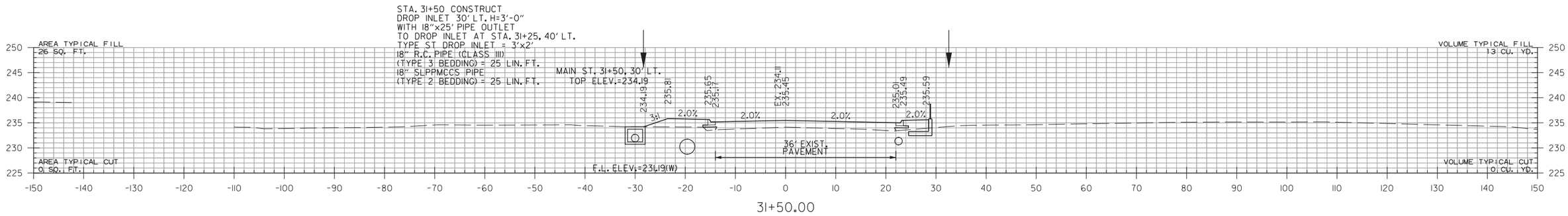
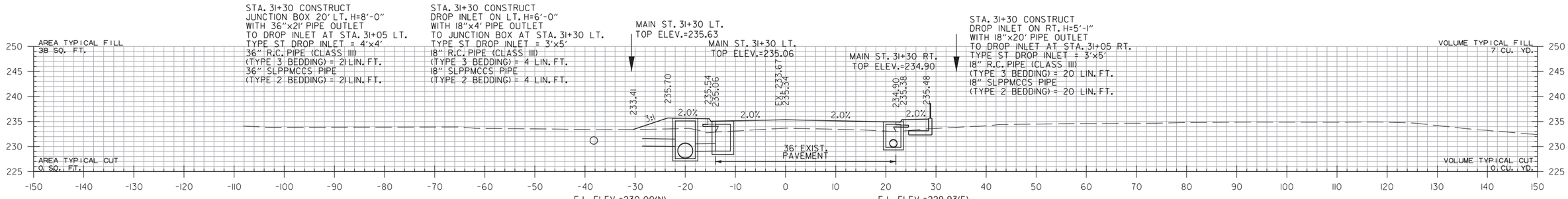


STA. 31+38 CONSTRUCT
APPROACH ON LT. = 9 CU. YDS.



MAIN ST. EAST
STA. 31+30 TO STA. 31+50

rnfortner 6/28/2022 10:38:50 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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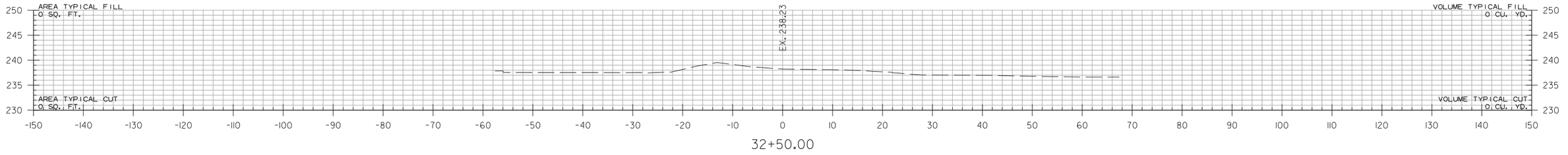
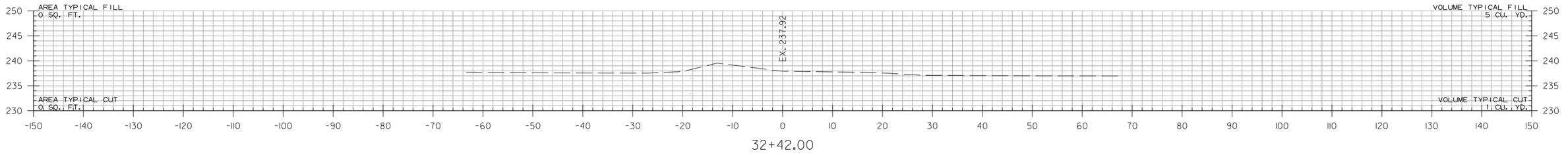
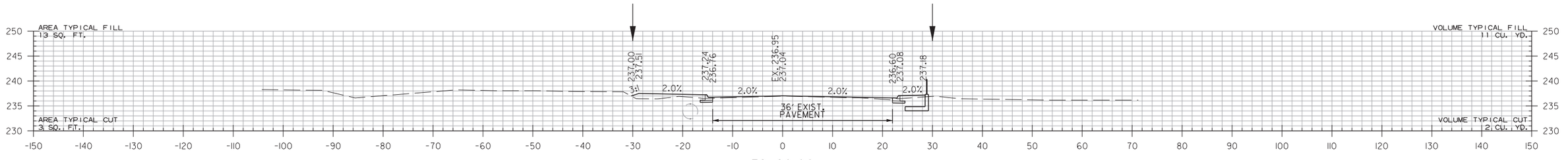
		CROSS SECTIONS				



32+50.00

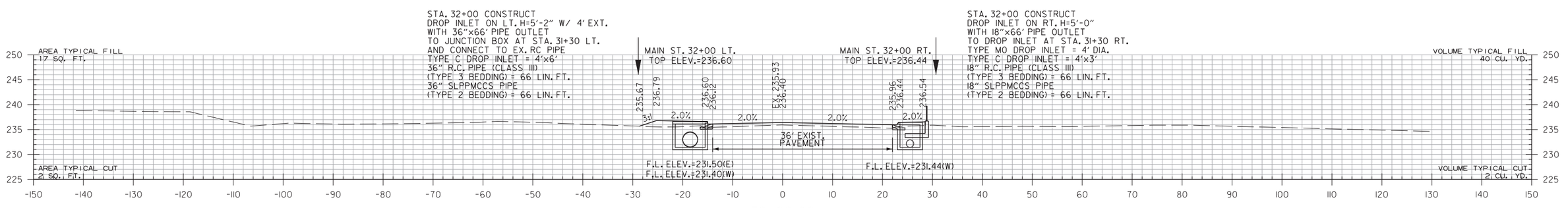


32+42.00



32+20.00

STA. 32+20.00 END 20' CURB TRANSITION



32+00.00

STA. 32+00.00 END MAIN ST. EAST

STA. 32+00.00 BEGIN 20' CURB TRANSITION

MAIN ST. EAST
STA. 32+00 TO STA. 32+50

rnfortner 6/28/2022 10:38:50 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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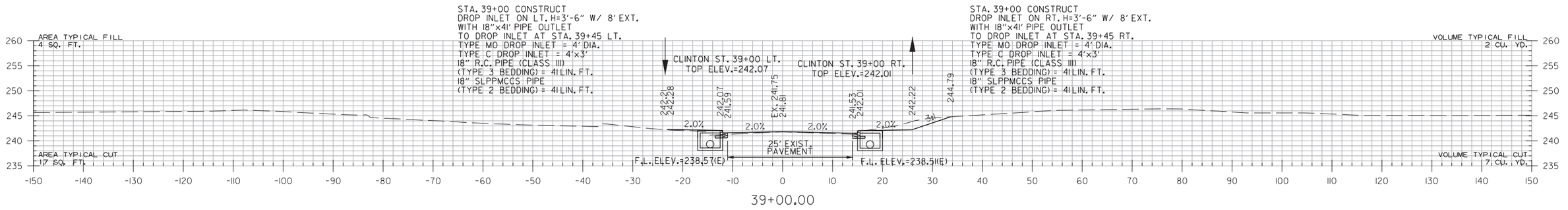

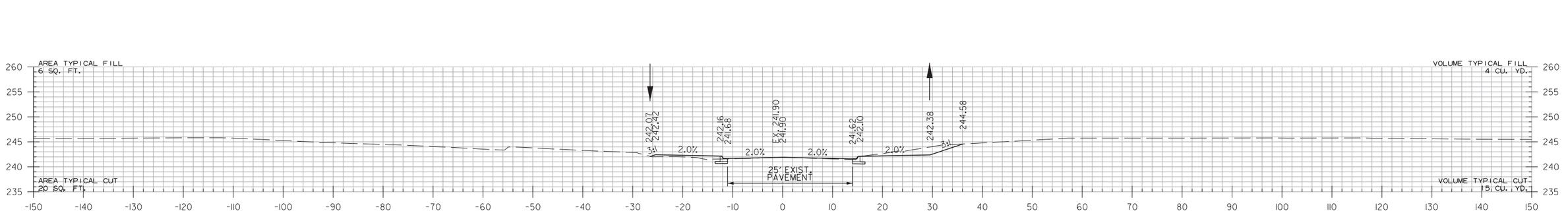

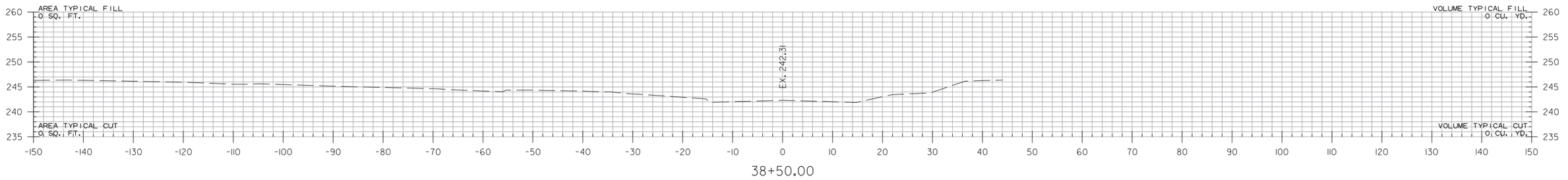

CLINTON ST. WEST
STA. 38+50 TO STA. 39+00

rnfortner 6/28/2022 10:38:50 AM
WORKSPACE: AHTD
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REVISED DATE:

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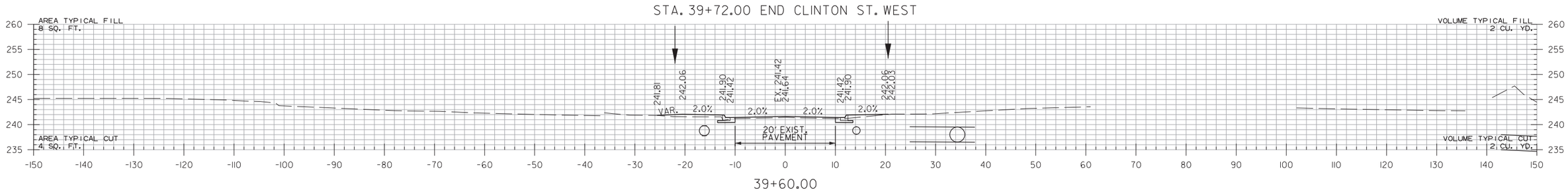
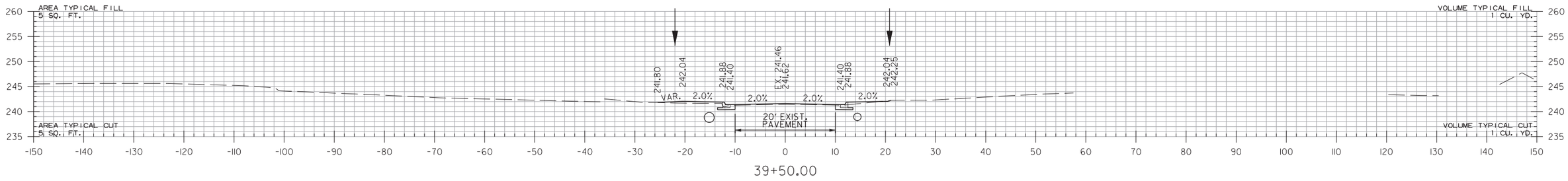


39+60.00

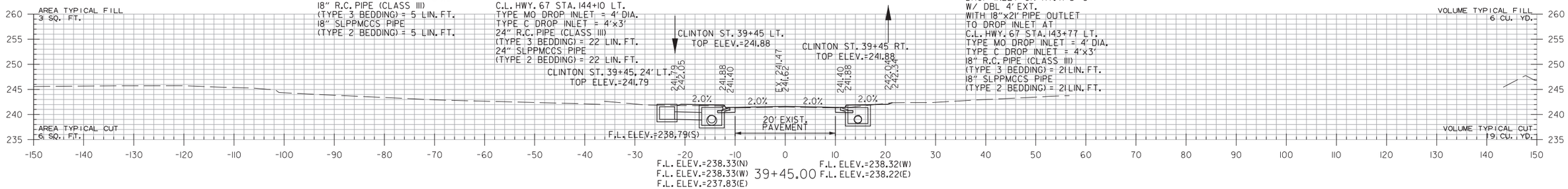


39+50.00

STA. 39+45 CONSTRUCT
DROP INLET 24' LT. H=3'-0"
WITH 18"x5' PIPE OUTLET
TO DROP INLET AT STA. 39+45 LT.
TYPE ST DROP INLET = 3'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 5 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 5 LIN. FT.

STA. 39+45 CONSTRUCT
DROP INLET ON LT. H=4'-1"
W/ DBL. 4' EXT.
WITH 24"x22' PIPE OUTLET
TO JUNCTION BOX AT
C.L. HWY. 67 STA. 144+10 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
24" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 22 LIN. FT.
24" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 22 LIN. FT.

STA. 39+45 CONSTRUCT
DROP INLET ON RT. H=3'-8"
W/ DBL 4' EXT.
WITH 18"x21' PIPE OUTLET
TO DROP INLET AT
C.L. HWY. 67 STA. 143+77 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 21 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 21 LIN. FT.



F.L. ELEV.=238.33(N)
F.L. ELEV.=238.33(W)
F.L. ELEV.=237.83(E)

39+45.00

F.L. ELEV.=238.32(W)
F.L. ELEV.=238.22(E)

CLINTON ST. WEST
STA. 39+45 TO STA. 39+60

rnfortner 6/28/2022 10:38:51 AM
WORKSPACE: AHTD
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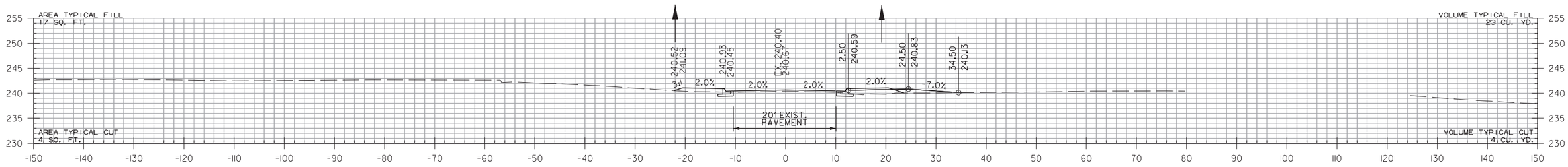
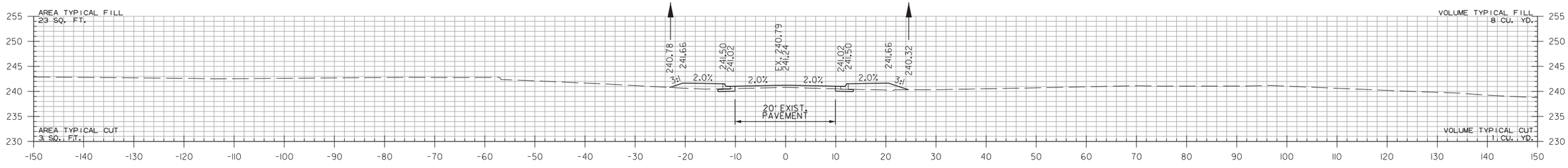
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	533	549
		CROSS SECTIONS				

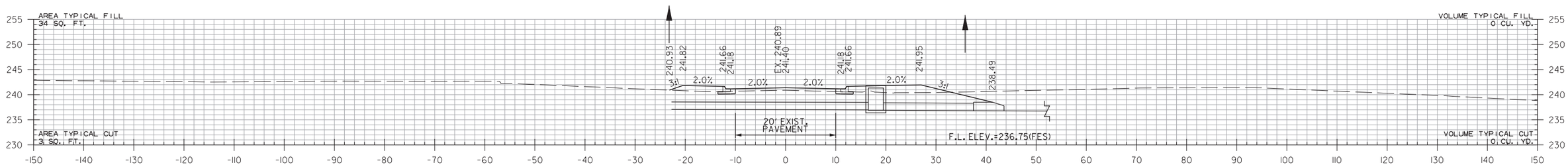


40+81.00

STA. 40+81 CONSTRUCT
APPROACH ON RT. 2 CU. YDS.



40+50.00



40+42.00

STA. 40+28.00 BEGIN CLINTON ST. EAST

CLINTON ST. EAST
STA. 40+42 TO STA. 40+81

rnfortner 6/28/2022 10:38:51 AM
WORKSPACE: AHTD
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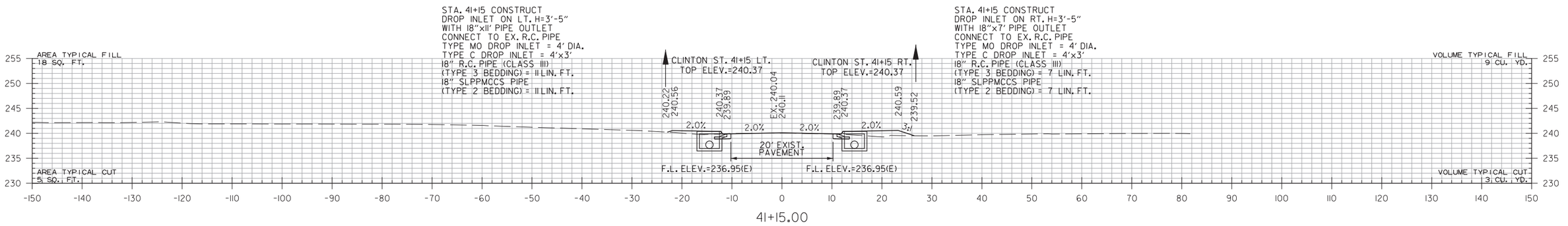
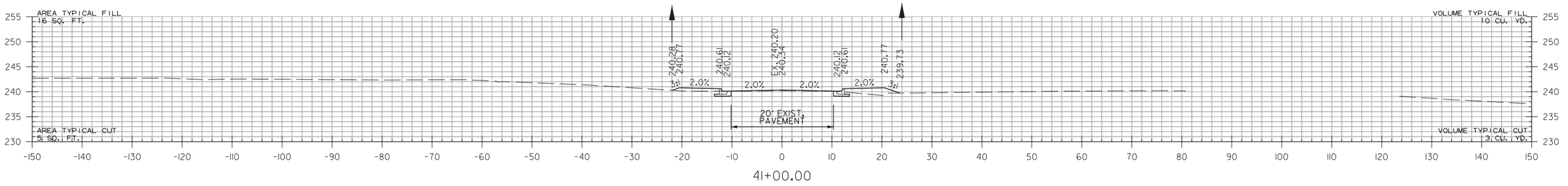
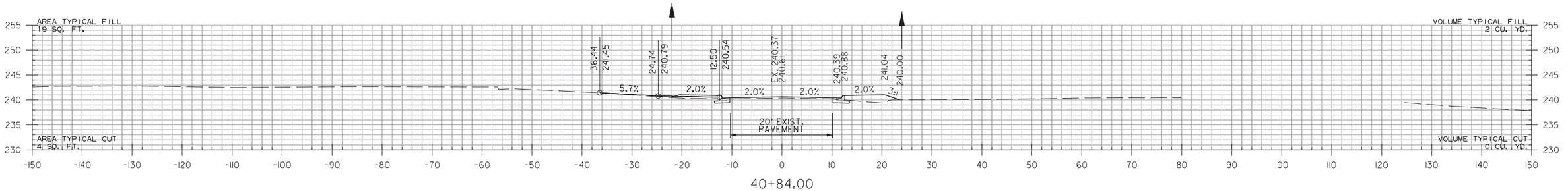
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	070442	534	549
		CROSS SECTIONS				



41+15.00



41+00.00



40+84.00

STA. 40+84 CONSTRUCT
APPROACH ON LT. = 6 CU. YDS.

CLINTON ST. EAST
STA. 40+84 TO STA. 41+15

rnfortner 6/28/2022 10:38:52 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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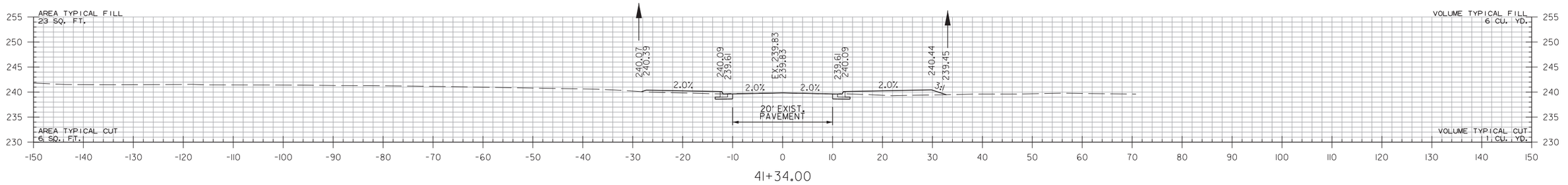
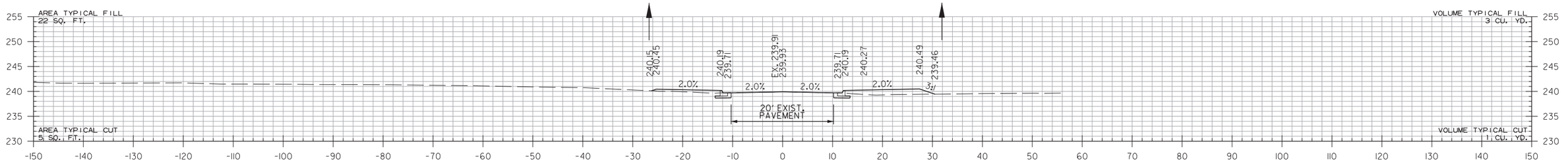
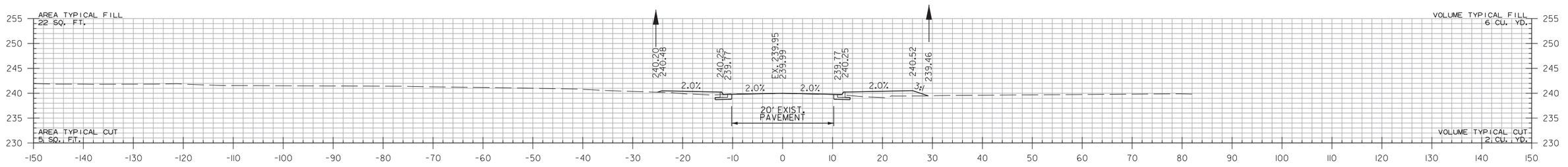
		CROSS SECTIONS				



41+34.00



41+27.00



41+23.00

CLINTON ST. EAST
STA. 41+23 TO STA. 41+34

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WORKSPACE: AHTD
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DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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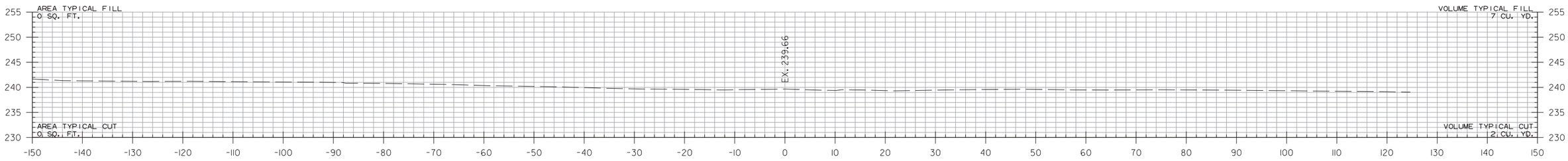
		CROSS SECTIONS				



41+50.00

STA. 41+34.00 END CLINTON ST. EAST

CLINTON ST. EAST
STA. 41+50 TO STA. 41+50

rnfortner 6/28/2022 10:38:52 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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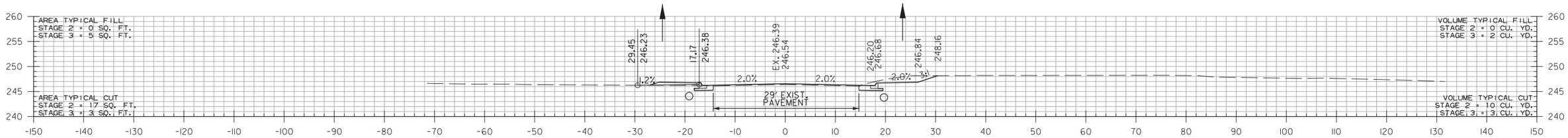
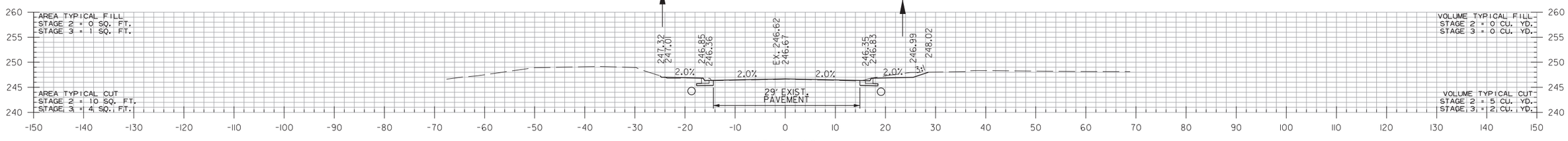


47+20.00

STA. 47+20 CONSTRUCT
APPROACH ON LT. = 5 CU. YDS.



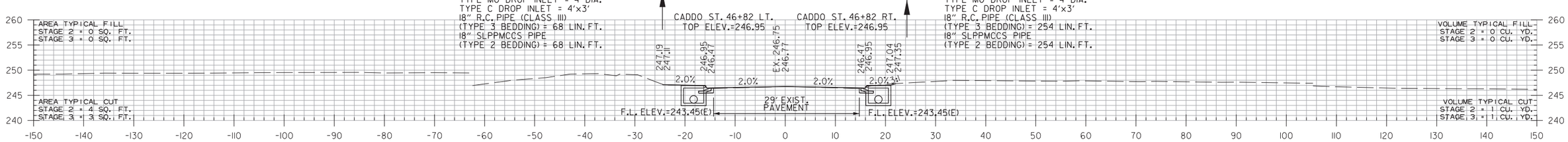
47+00.00

STA. 46+82 CONSTRUCT
DROP INLET ON LT. H=3'-6" W/ 8' EXT.
WITH 18"x68' PIPE OUTLET
TO DROP INLET AT STA. 47+54 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 68 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 68 LIN. FT.

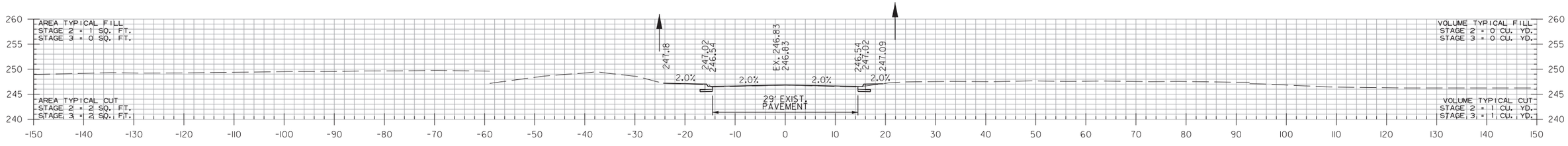
CADDO ST. 46+82 LT.
TOP ELEV.=246.95

CADDO ST. 46+82 RT.
TOP ELEV.=246.95

STA. 46+82 CONSTRUCT
DROP INLET ON RT. H=3'-6" W/ 8' EXT.
WITH 18"x254' PIPE OUTLET
TO DROP INLET AT STA. 49+40 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 254 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 254 LIN. FT.

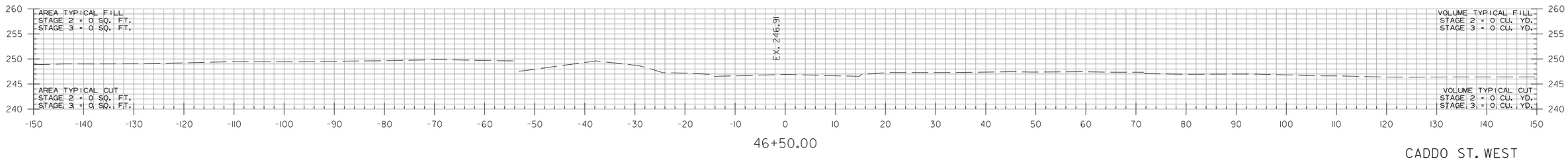


46+82.00



46+70.00

STA. 46+70.00
BEGIN CADDO ST. WEST



46+50.00

CADDO ST. WEST
STA. 46+50 TO STA. 47+20

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WORKSPACE: AHTD
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DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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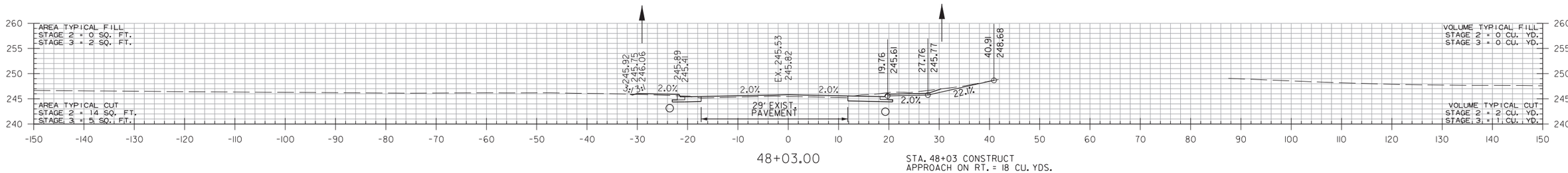
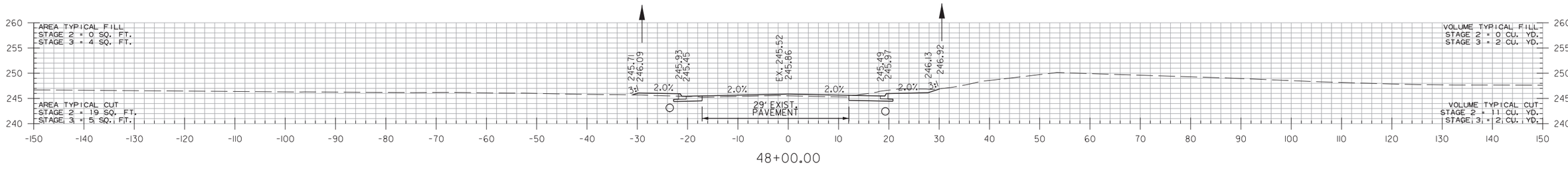
		CROSS SECTIONS				

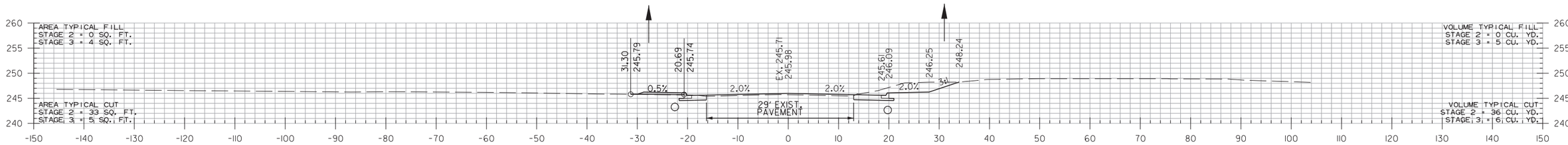


48+03.00

STA. 48+03 CONSTRUCT
APPROACH ON RT. = 18 CU. YDS.



48+00.00

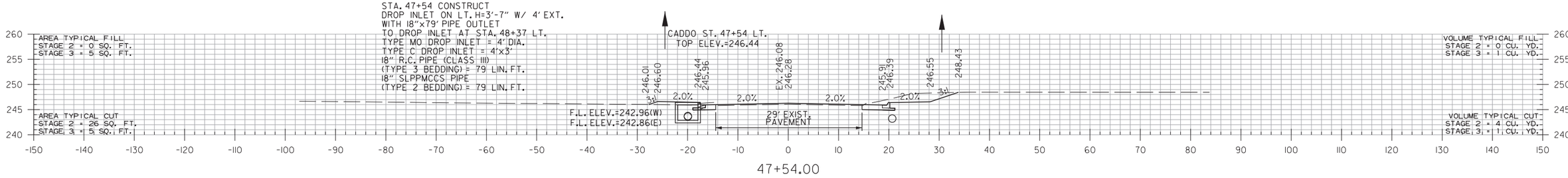


47+88.00

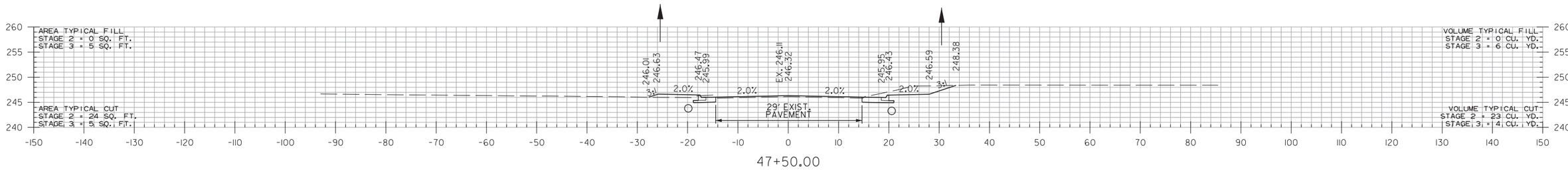
STA. 47+88 CONSTRUCT
APPROACH ON LT. = 2 CU. YDS.

STA. 47+54 CONSTRUCT
DROP INLET ON LT. H=3'-7" W/ 4' EXT.
WITH 18"x79' PIPE OUTLET
TO DROP INLET AT STA. 48+37 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 79 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 79 LIN. FT.

CADDO ST. 47+54 LT.
TOP ELEV.=246.44



47+54.00



47+50.00

CADDO ST. WEST
STA. 47+50 TO STA. 48+03

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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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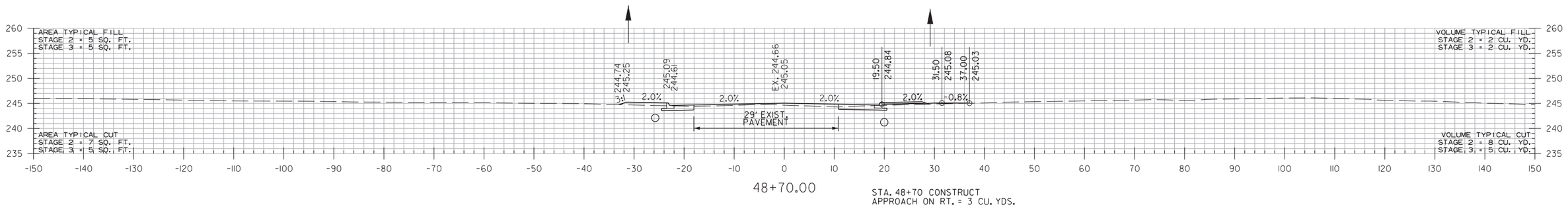
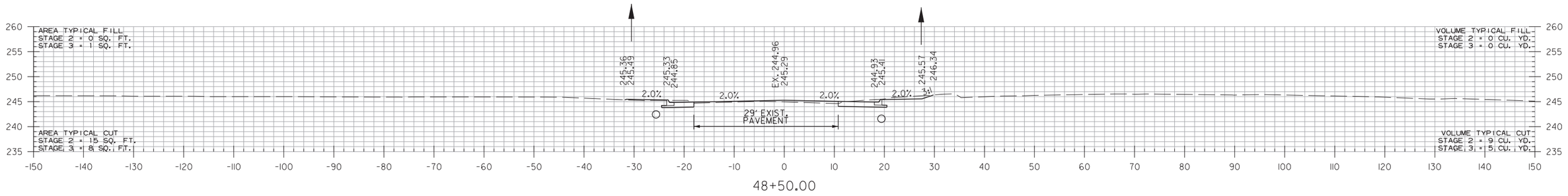
		CROSS SECTIONS				



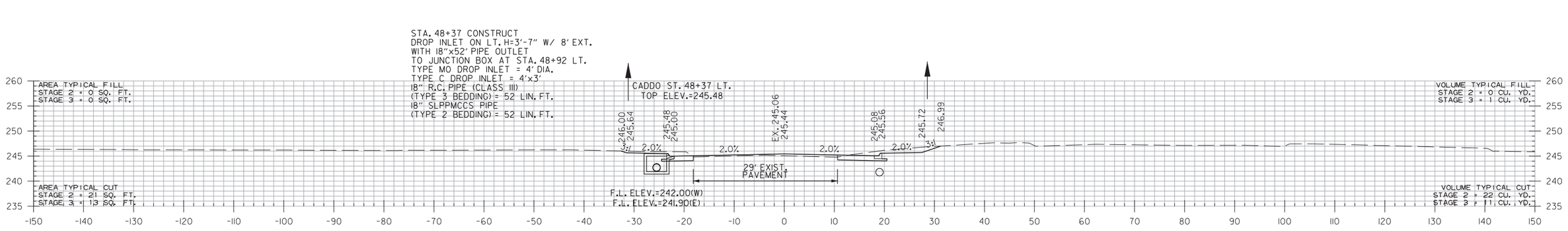
48+70.00

STA. 48+70 CONSTRUCT
APPROACH ON RT. = 3 CU. YDS.



48+50.00

STA. 48+37 CONSTRUCT
DROP INLET ON LT. H=3'-7" W/ 8' EXT.
WITH 18"x52' PIPE OUTLET
TO JUNCTION BOX AT STA. 48+92 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 52 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 52 LIN. FT.



48+37.00

CADDO ST. WEST
STA. 48+37 TO STA. 48+70

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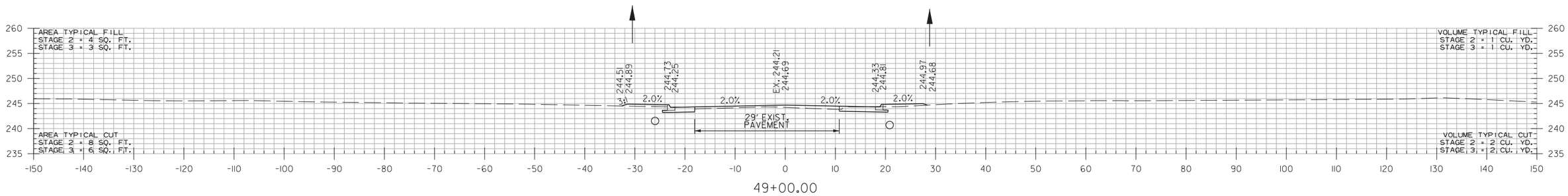
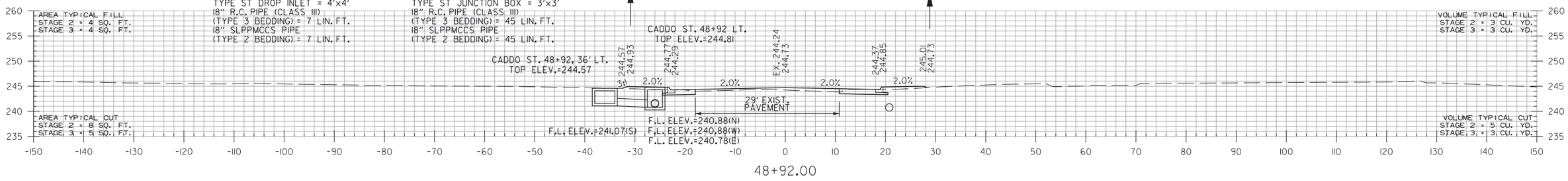
		CROSS SECTIONS				



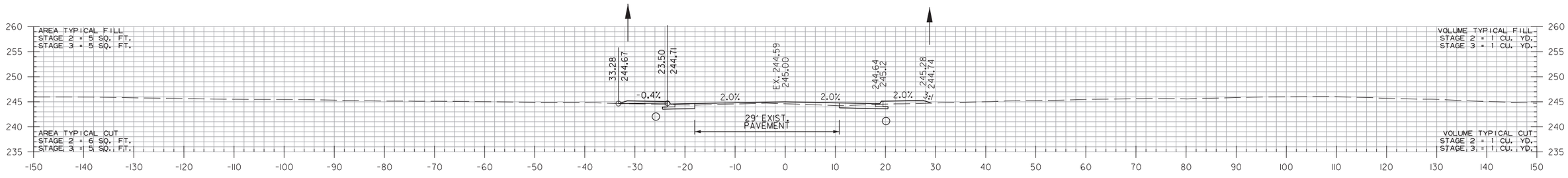
49+00.00

STA. 48+92 CONSTRUCT
DROP INLET 36' LT. H=3'-1"
WITH 18"x7' PIPE OUTLET
TO JUNCTION BOX AT STA. 48+92 LT.
TYPE ST DROP INLET = 4'x4'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 7 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 7 LIN. FT.

STA. 48+92 CONSTRUCT
JUNCTION BOX ON LT. H=4'-1"
WITH 18"x45' PIPE OUTLET
TO DROP INLET AT STA. 49+40 LT.
TYPE ST JUNCTION BOX = 3'x3'
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 45 LIN. FT.
18" SLPPMCCS PIPE
(TYPE 2 BEDDING) = 45 LIN. FT.



48+92.00



48+74.00

STA. 48+74 CONSTRUCT
APPROACH ON LT. = 1 CU. YDS.

CADDO ST. WEST
STA. 48+74 TO STA. 49+00

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DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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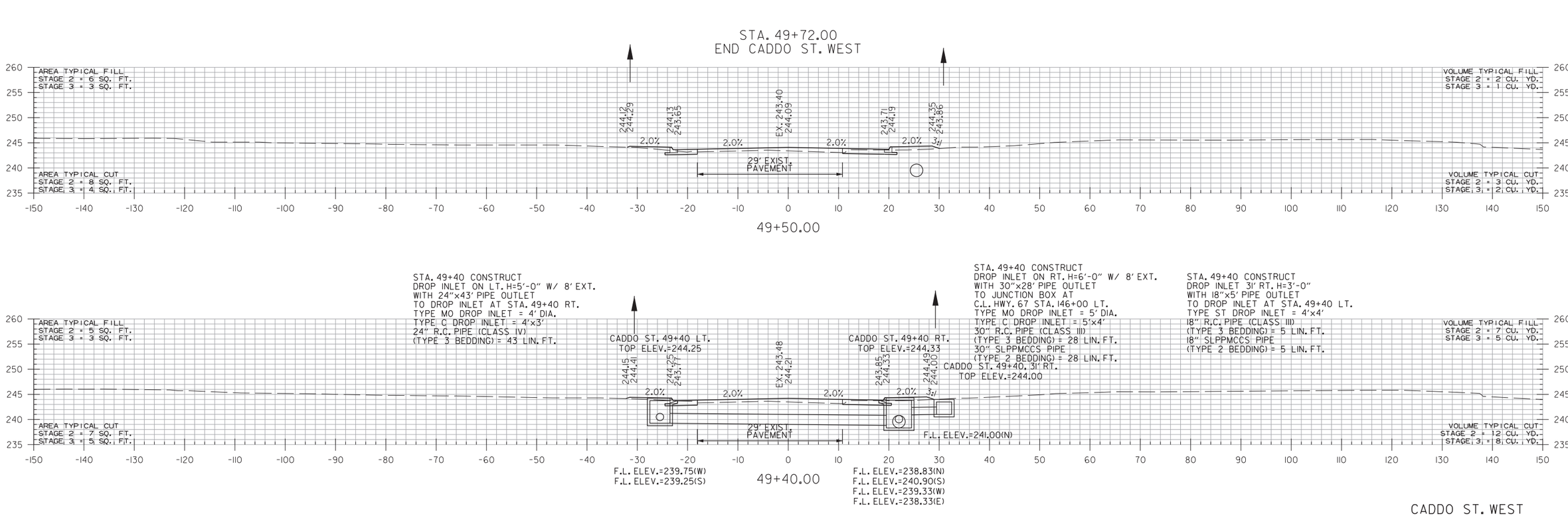

CADDO ST. WEST
STA. 49+40 TO STA. 49+50

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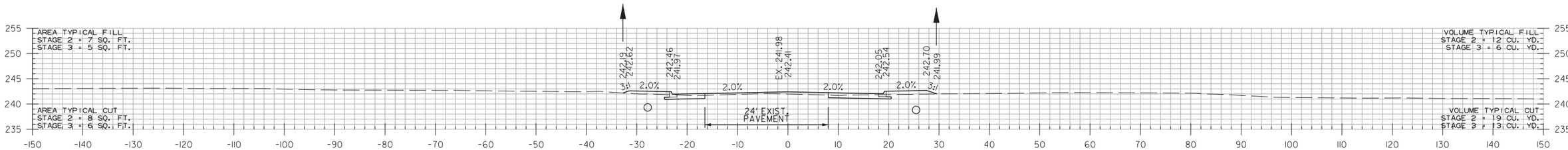
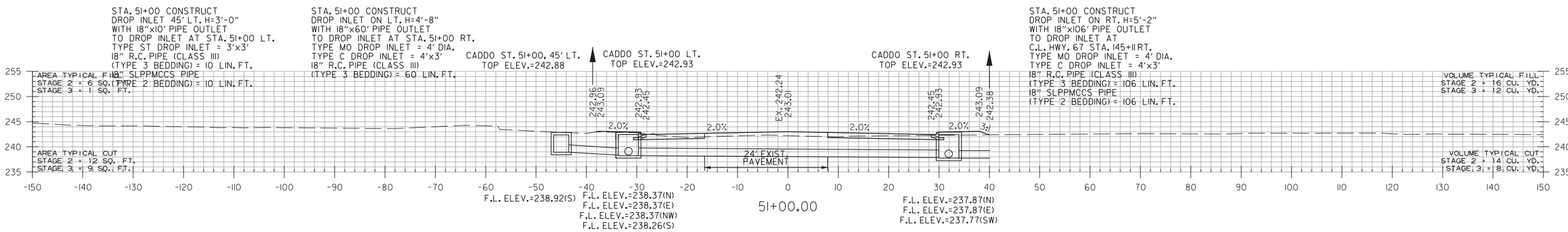
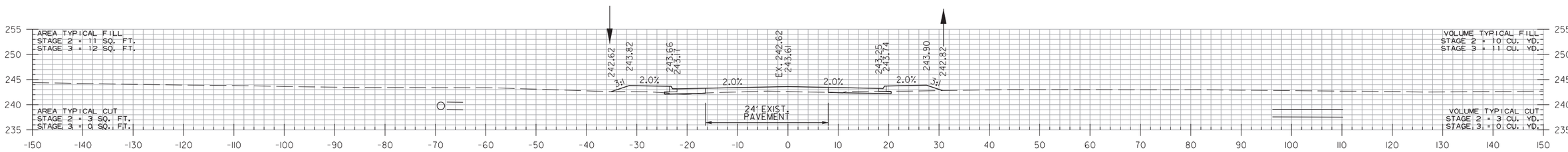
		CROSS SECTIONS				



51+50.00

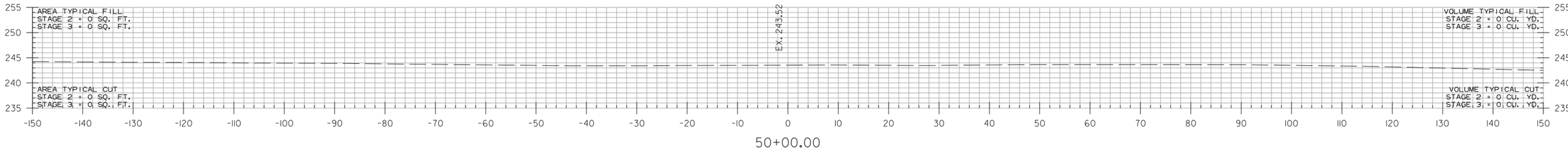


51+00.00



50+50.00

STA. 50+22.00
BEGIN CADDO ST. EAST



50+00.00

CADDO ST. EAST
STA. 50+00 TO STA. 51+50

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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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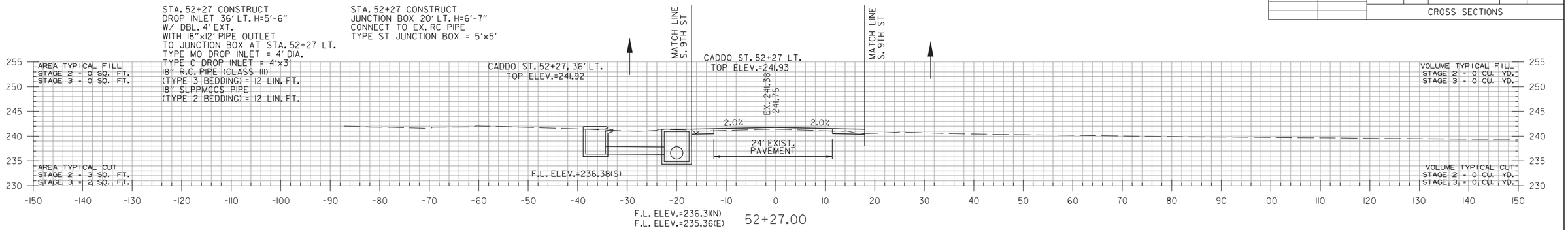

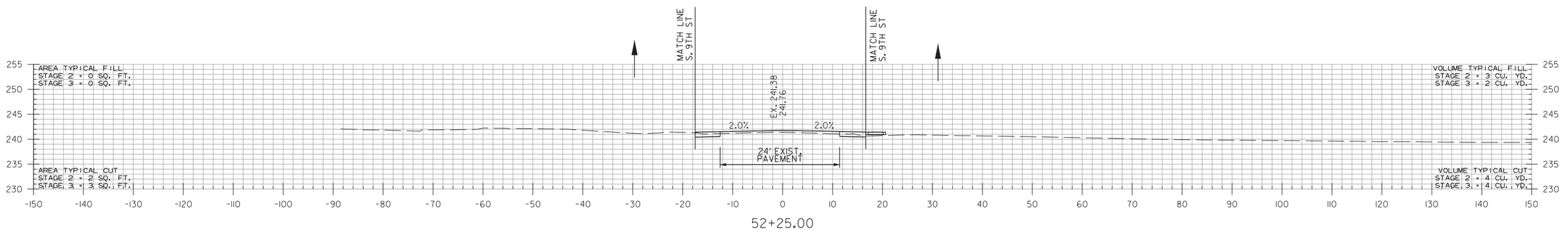

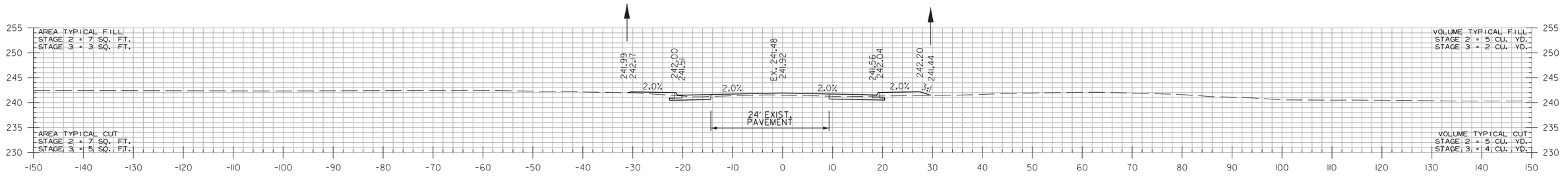

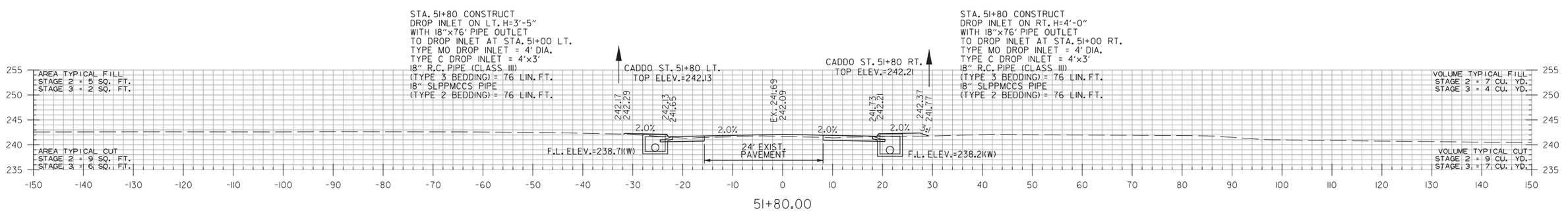

CADDO ST. EAST
STA. 51+80 TO STA. 52+27

rnfortner 6/28/2022 10:38:54 AM
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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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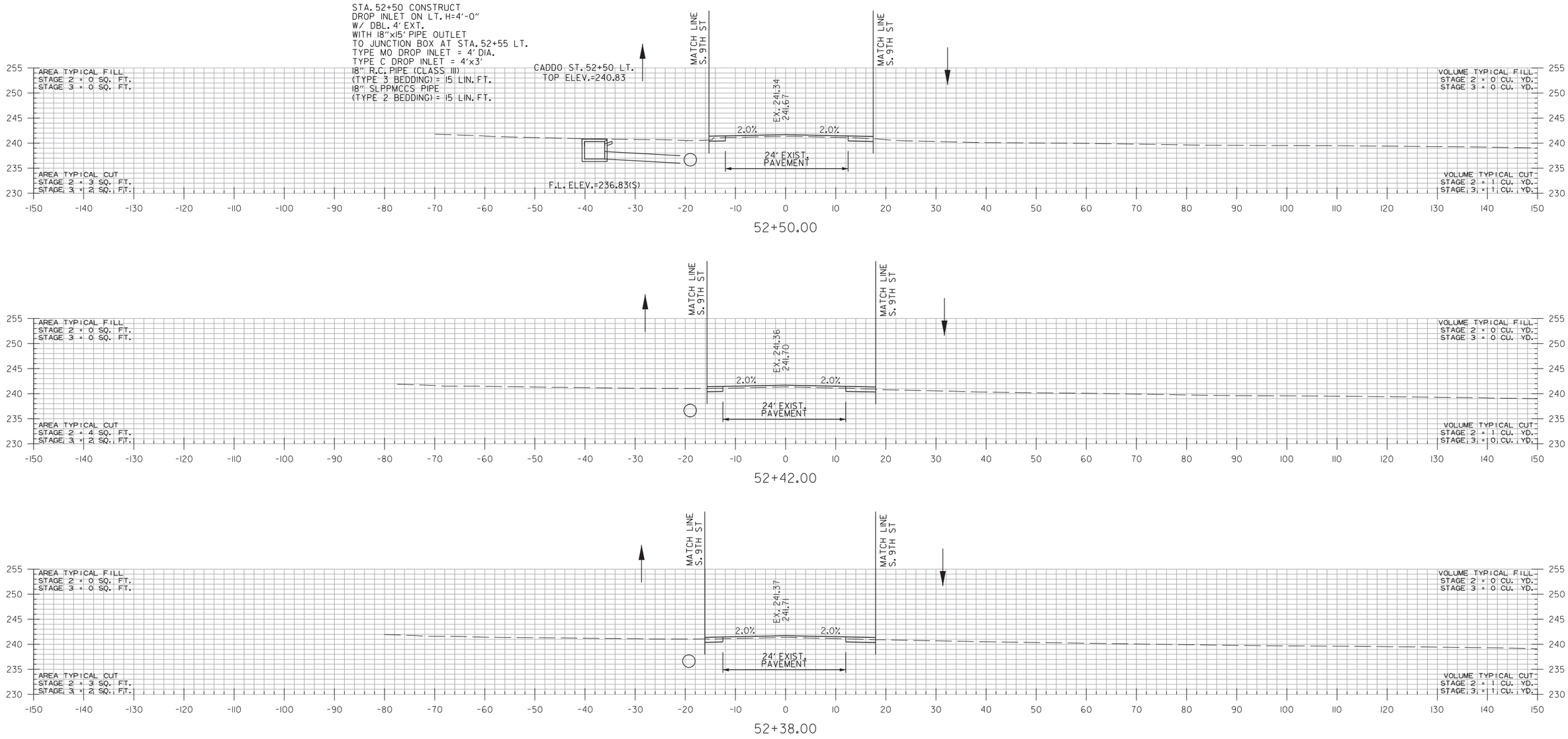
		CROSS SECTIONS				



CADDO ST. EAST
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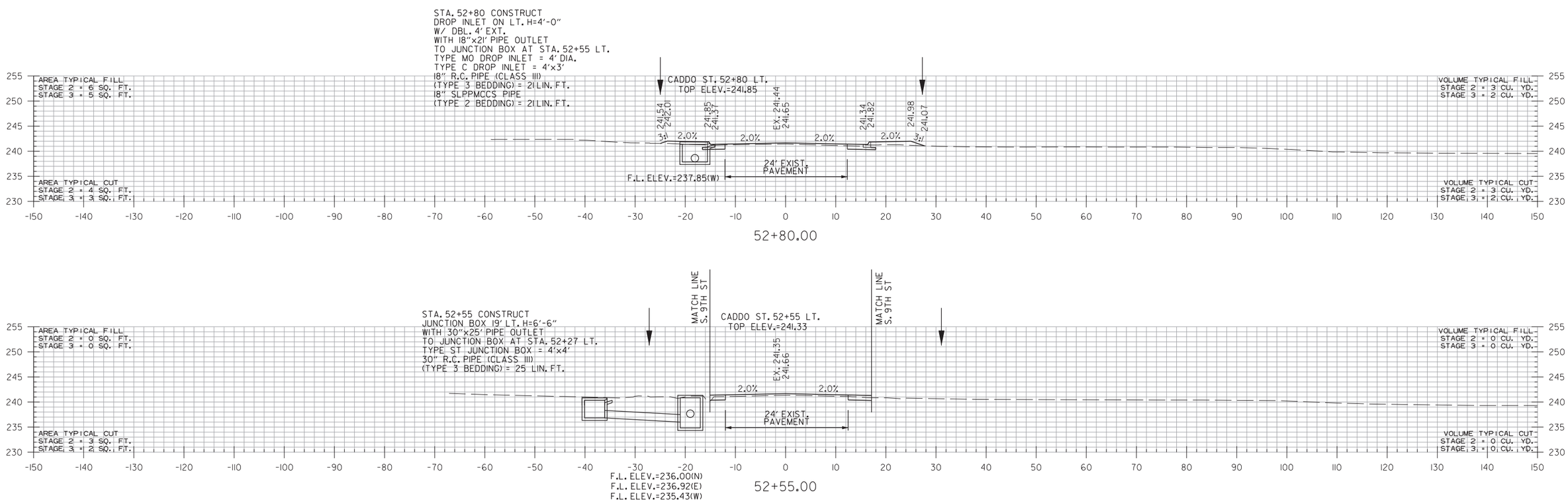

CADDO ST. EAST
STA. 52+52 TO STA. 52+80

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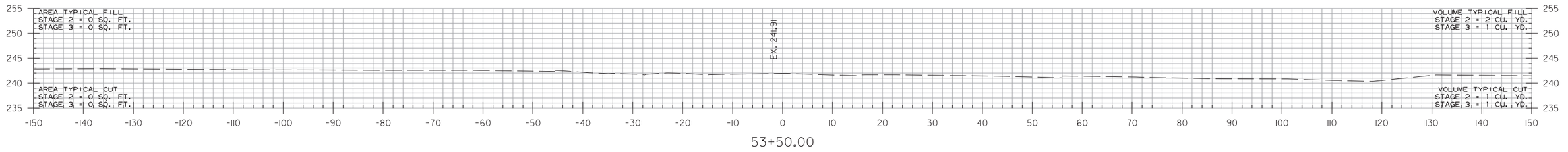
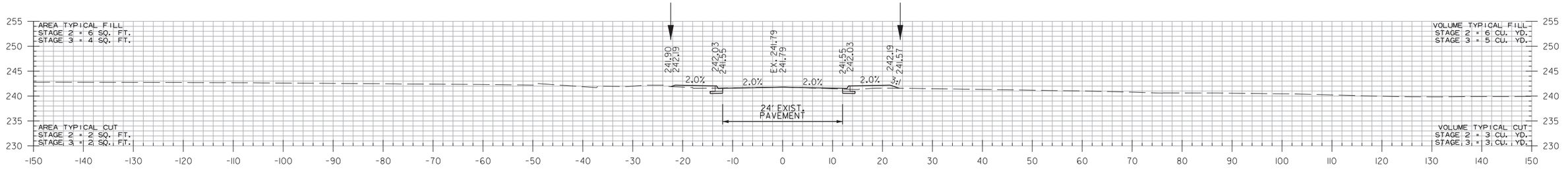
		CROSS SECTIONS				

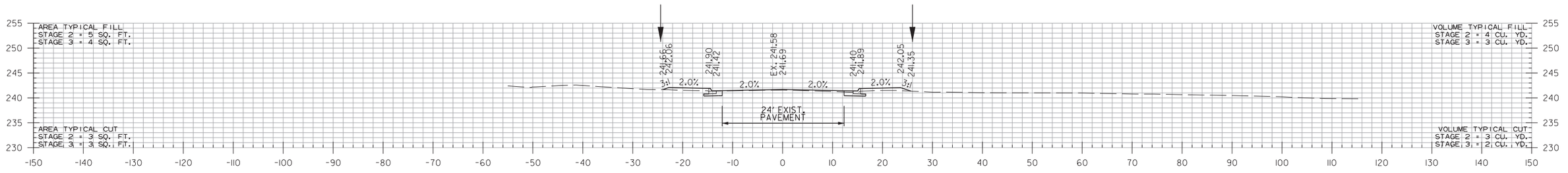


53+50.00



53+32.00

STA. 53+32.00
END CADDO ST. EAST



53+00.00

CADDO ST. EAST
STA. 53+00 TO STA. 53+50

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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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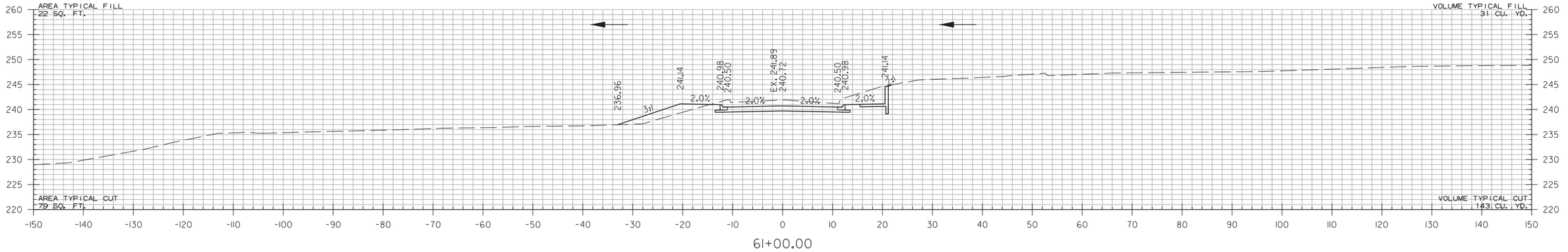
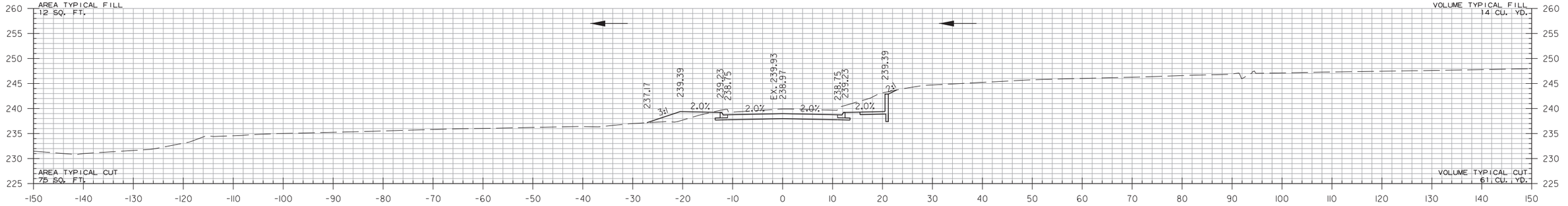
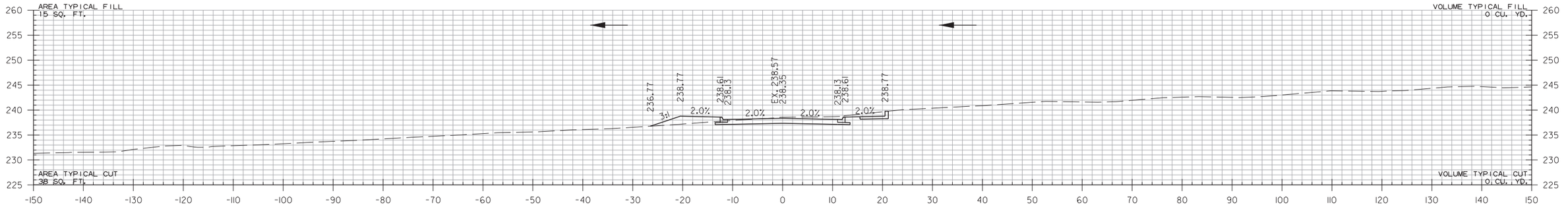
		CROSS SECTIONS				



61+00.00



60+50.00



60+21.00

STA. 60+18.00 BEGIN HICKORY ST.

HICKORY ST.
STA. 60+21 TO STA. 61+00

rnfortner 6/28/2022 10:38:55 AM
WORKSPACE: AHTD
L:\20\T\T0\T515 - AHTD Arkadelphia Bypass\Drawings\r070442_CX_Hickory St.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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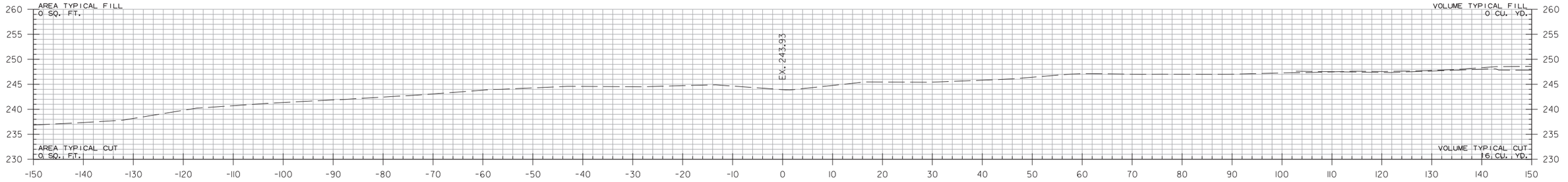
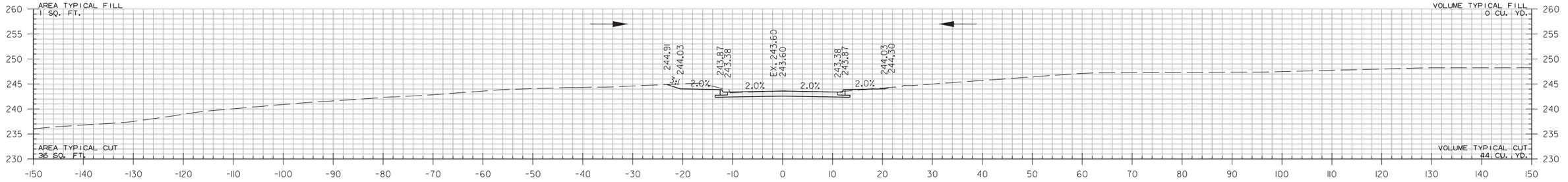
		CROSS SECTIONS				

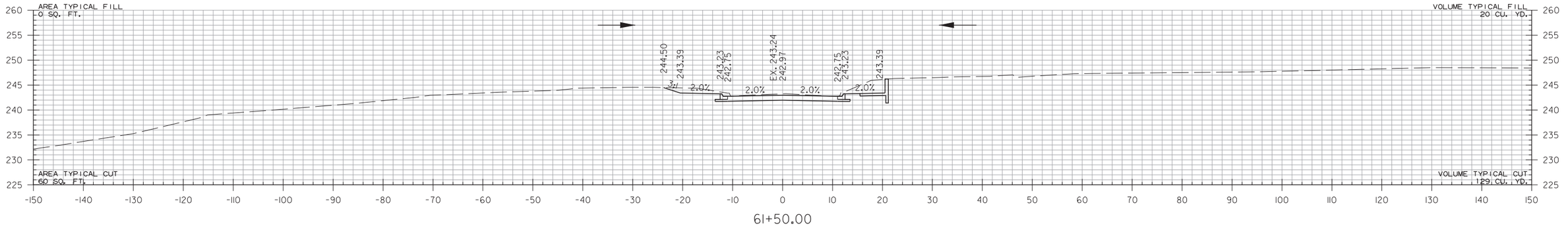


62+00.00



61+75.00

STA. 61+75.00 END HICKORY ST.



61+50.00

HICKORY ST.
STA. 61+50 TO STA. 62+00

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REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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		CROSS SECTIONS				

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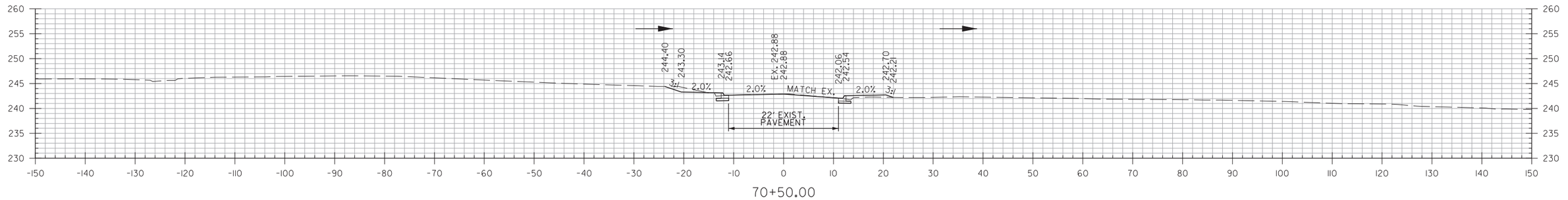
REVISED DATE:

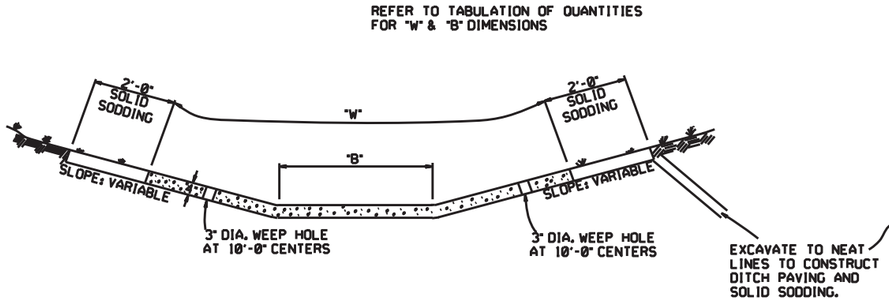
STA. 70+50.00 END MCNUTT ST.



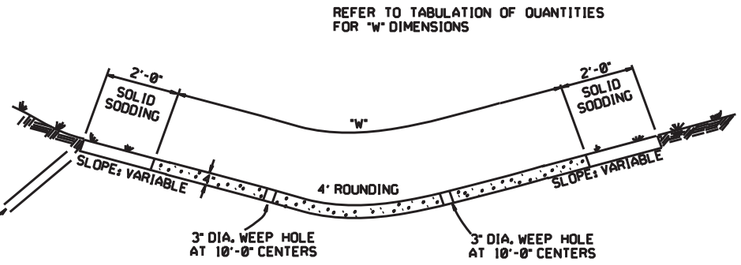
70+50.00

STA. 70+18.00 BEGIN MCNUTT ST.

MCNUTT ST.
STA. 70+50 TO STA. 70+50

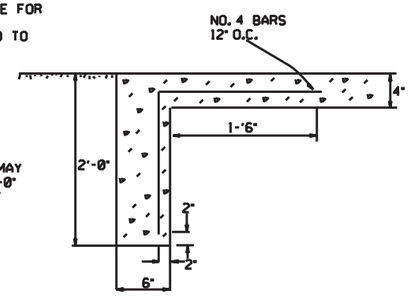


TYPE A



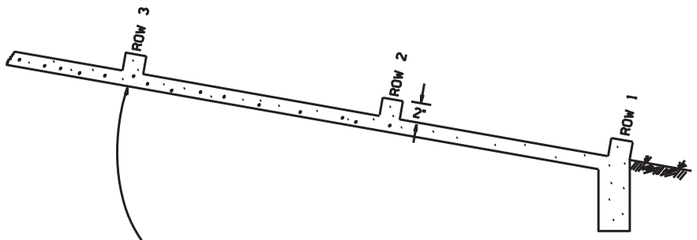
TYPE B

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



TOE WALL DETAIL FOR CONCRETE DITCH PAVING

TOE WALL DEPTH MAY BE ALTERED TO 1'-0" WHEN DIRECTED BY THE ENGINEER IN ROCK EXCAVATION



ENERGY DISSIPATORS
(NO SCALE)

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

GENERAL NOTES:

THE FULL WIDTH OF EACH SECTION SHALL BE POURED MONOLITHICALLY.

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

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

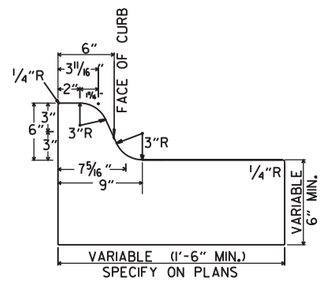
1" WIDE TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE DITCH PAVING AT 45° INTERVALS. THE SPACE SHALL BE FILLED WITH APPROVED JOINT FILLER COMPLYING WITH AASHTO M213.

DATE	REVISION	DATE FILM'D
12-8-16	CORRECTED ENERGY DISSIPATOR DRAWING AND NOTE	
11-17-10	ADDED GENERAL NOTE	
6-2-94	ADDED GENERAL NOTE ABOUT SOLID SODDING	
11-30-8	ELIMINATED MIN. ROWS OF ELEMENTS	111-30-89
7-15-88	REVISED DISSIPATOR NOTE	653-7-15-88
4-3-87	REVISED ENERGY DISSIPATOR	671-4-3-87
1-9-87	MODIFIED NOTE ON ENERGY DISS.	532-1-9-87
11-3-86	ADDED NOTE TO ENERGY DISS.	599-12-1-86
11-1-84	ENERGY DISSIPATOR DETAILS ADDED	508-11-1-84
11-1-84	EXCAVATION DETAILS ADDED TYPED A & B	
10-2-72	REVISED AND REDRAWN	508-10-2-72

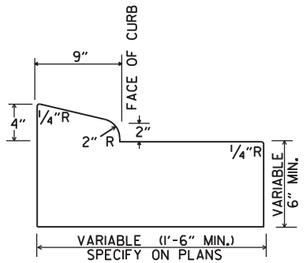
ARKANSAS STATE HIGHWAY COMMISSION

CONCRETE DITCH PAVING

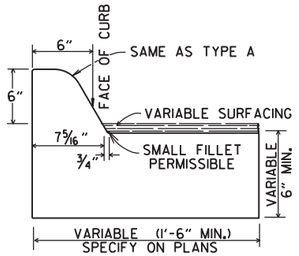
STANDARD DRAWING CDP-1



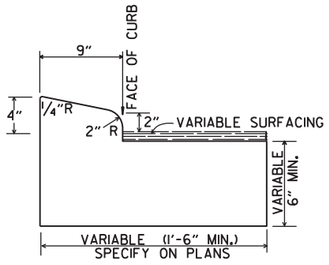
TYPE A



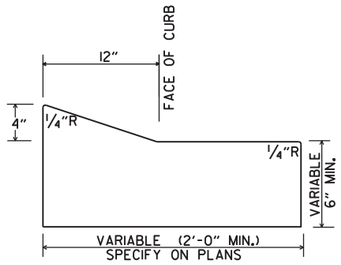
TYPE B-1



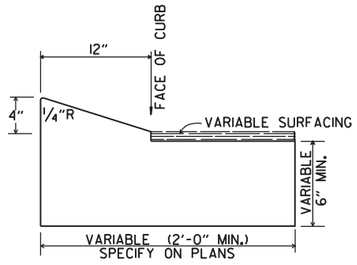
TYPE C



TYPE B-2

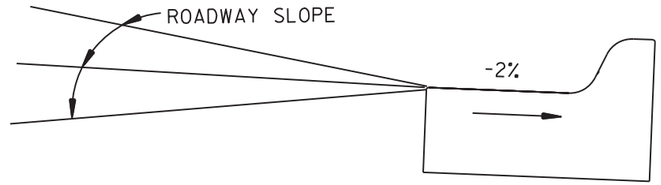


TYPE E-1



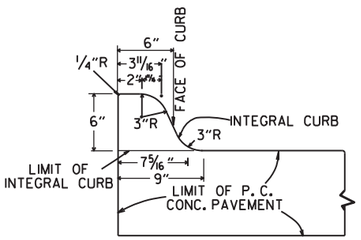
TYPE E-2

CONCRETE COMBINATION CURB AND GUTTER

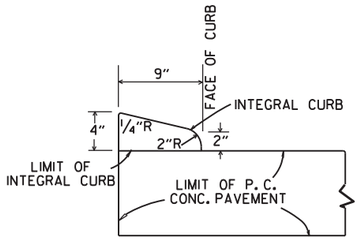


DETAIL OF GUTTER SLOPE

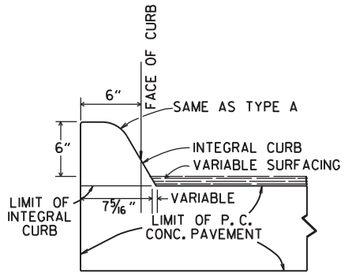
GUTTER SHALL BE CONSTRUCTED ON 2% SLOPE AWAY FROM ROADWAY, REGARDLESS OF ROADWAY SLOPE.



TYPE A

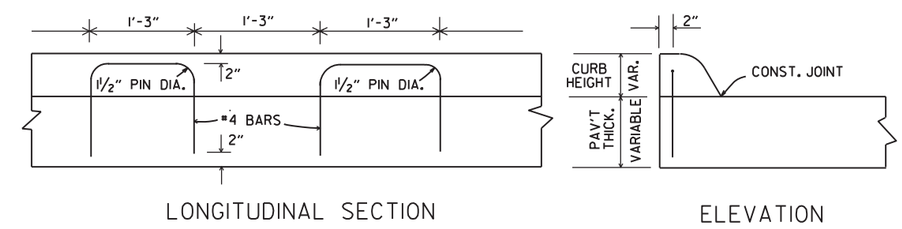


TYPE B



TYPE C

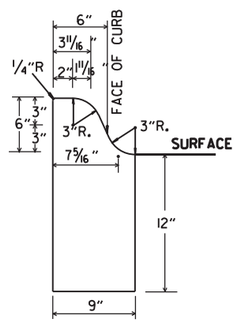
INTEGRAL CURB



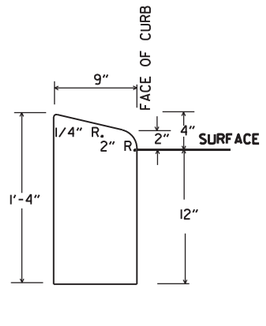
LONGITUDINAL SECTION

ELEVATION

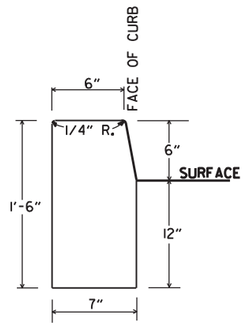
ALTERNATE CONSTRUCTION METHOD FOR INTEGRAL CURB



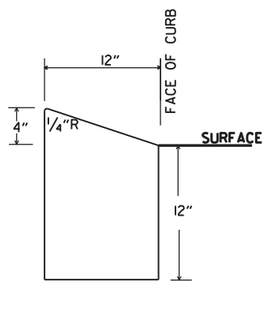
TYPE A



TYPE B

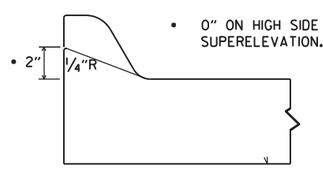


TYPE D



TYPE E

CONCRETE CURB



NOTE: USE MODIFIED CURB AS SPECIFIED ON STD. DR-1. COMPENSATION FOR MODIFIED CURB WILL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE TYPE OF CURB OR CURB AND GUTTER SPECIFIED.

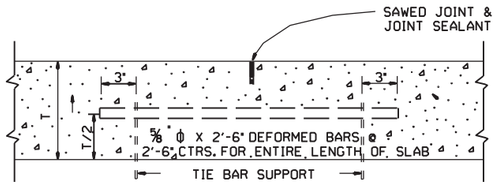
DETAILS OF MODIFIED CURB

DATE	REVISION	DATE FILMED
11-29-07	REVISED GUTTER SLOPE & MODIFIED CURB DETAILS	
11-10-05	ADDED DETAILS OF TYPE E CURBS	
11-16-01	REVISED CONCRETE CURB TYPE B	
11-18-98	REVISED MODIFIED CURB	
6-2-94	ADDED NOTE TO SPECIAL MODIFIED CURB	
8-5-93	CORRECTED GUTTER SLOPE	8-5-93
10-1-92	ADDED DETAILS OF GUTTER SLOPE	10-1-92
5-24-90	ADDED DETAILS OF MODIFIED CURB	5-24-90
11-30-89	VARIBLE DEPTH TYPE A & B I	11-30-89
7-15-88	REVISED MODIFIED CURB	630-7-15-88
11-1-73	REVISED MODIFIED CURB	500-11-1-73
10-2-72	REVISED AND REDRAWN	512-10-2-72

ARKANSAS STATE HIGHWAY COMMISSION

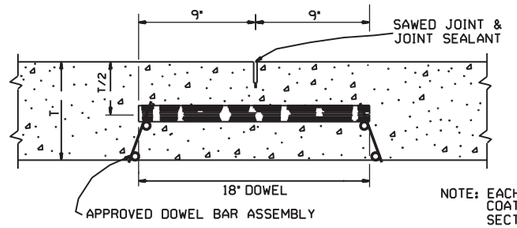
CURBING DETAILS

STANDARD DRAWING CG-1



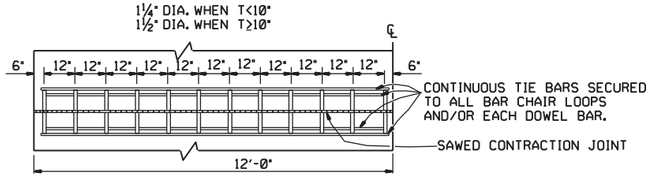
LONGITUDINAL JOINT

NOTE: THE TIE BAR SUPPORT SHOWN ABOVE MAY BE ELIMINATED IF OTHER APPROVED METHODS FOR PLACING AND SUPPORTING THE TIE BARS ARE PROVIDED.
TIE BARS SHALL BE 15" FROM TRANSVERSE JOINTS.



NOTE: EACH DOWEL TO BE COATED ACCORDING TO SECTION 502 OF THE STANDARD SPECIFICATIONS.

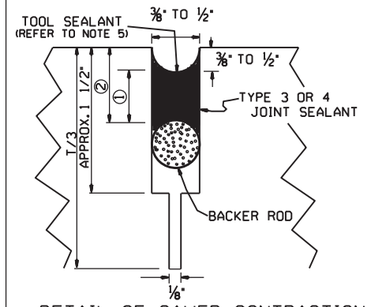
ROUND STEEL BAR DOWEL
1¼" DIA. WHEN T<10"
1½" DIA. WHEN T≥10"



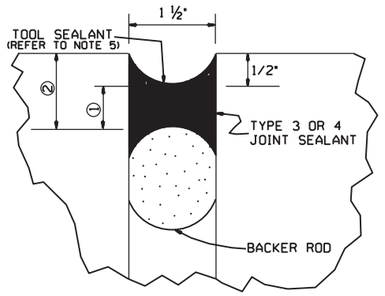
ONE-HALF 24' PAVEMENT
12 DOWELS
PLAN

NOTE: FOR 20' PAVEMENT USE 20 DOWELS @ 12" CTRS. WITH 6" SPACING FROM C.L. AND EDGE OF SLAB TO FIRST BAR.
FOR 15' PAVEMENT USE 15 DOWELS @ 12" CTRS. WITH 6" SPACING FROM C.L. AND EDGE OF SLAB TO FIRST BAR.
FOR 26' PAVEMENT USE 26 DOWELS @ 12" CTRS. WITH 6" SPACING FROM C.L. AND EDGE OF SLAB TO FIRST BAR.
FOR PAVEMENT WIDTHS OTHER THAN THOSE SHOWN ABOVE, USE DOWELS AT 12" CTRS. WITH 6" MAX. SPACING FROM C.L. TO FIRST BAR. DISTANCE FROM EDGE OF SLAB TO FIRST BAR SHALL BE ADJUSTED TO MAINTAIN 12" DOWEL BAR SPACING

CONTRACTION JOINT DETAILS



DETAIL OF SAWED CONTRACTION JOINT



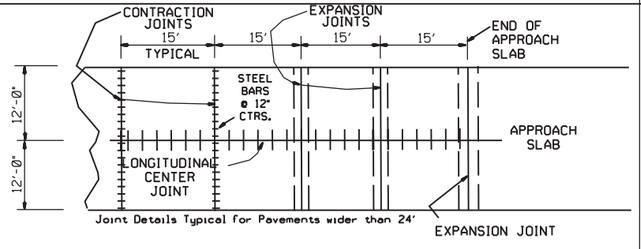
DETAIL OF EXPANSION JOINT

JOINT CONFIGURATION FOR TYPE 3 OR 4 JOINT SEALANT

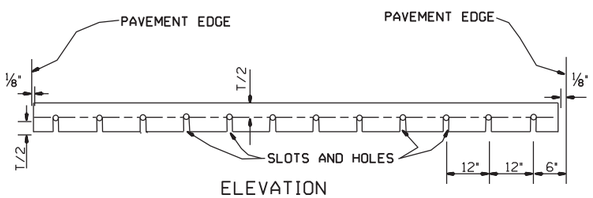
JOINT WIDTH	SEALANT THICKNESS ①	BACKER ROD DIAMETER	BACKER ROD PLACEMENT DEPTH ②
INCHES			
¼	¼	⅜	½
⅜	¼	½	½
½	¼	⅝	½
½	⅜	⅝	½
⅝	⅜	¾	⅝
¾	⅜	⅞	⅞
1 ½	¾	2	1 ¼

JOINT CONFIGURATION FOR TYPE 5 JOINT SEALANT

JOINT WIDTH	SEALANT THICKNESS ①	BACKER ROD DIAMETER	BACKER ROD PLACEMENT DEPTH ②
INCHES			
¼	½	⅜	¾
⅜	¾	½	1

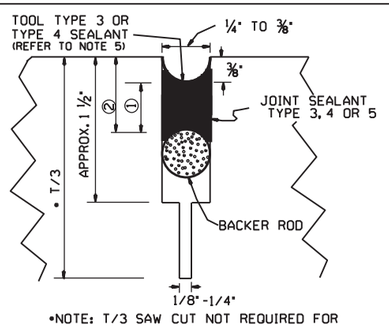


PLAN SHOWING EXPANSION JOINTS AT BRIDGE APPROACH SLABS



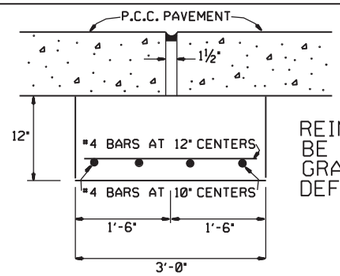
ELEVATION

NOTE: ALL DOWEL BARS SHALL CONFORM TO THE DETAILS FOR CONTRACTION JOINTS.



•NOTE: T/3 SAW CUT NOT REQUIRED FOR LONGITUDINAL CONSTRUCTION JOINT.

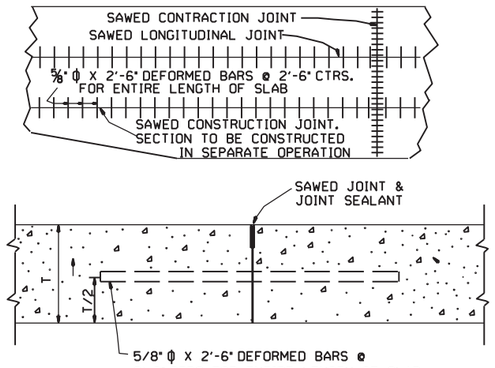
DETAIL OF SAWED LONGITUDINAL JOINT AND LONGITUDINAL CONSTRUCTION JOINT



REINFORCING SHALL BE GRADE 40 OR GRADE 60 DEFORMED BARS.

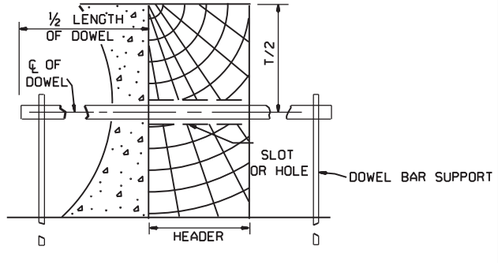
DETAIL OF JOINT SUPPORT FOR EXPANSION JOINTS

GENERAL NOTES
1. "T" DENOTES THICKNESS OF SLAB.
2. DOWEL BARS SHALL BE PLACED IN ACCORDANCE WITH THE DIMENSIONS SHOWN. A TOLERANCE OF PLUS OR MINUS ONE INCH WILL BE ALLOWED FOR THE VERTICAL AND LATERAL PLACEMENT AND A TOLERANCE OF PLUS OR MINUS ¼" WILL BE ALLOWED FOR THE TILT AND SKEW. DOWEL BARS SHALL BE FIELD COATED FOR A MINIMUM DISTANCE OF 2" GREATER THAN HALF THE LENGTH OF THE BAR WITH AN APPROVED GREASE AS A BOND BREAKER JUST PRIOR TO PLACEMENT OF CONCRETE.
3. THE EXPANSION JOINT SUPPORT MAY BE CONSTRUCTED WITH CLASS "A", "S" OR PAVING CONCRETE. PAYMENT FOR THE JOINT SUPPORT SHALL BE FOR THE CONTRACT UNIT PRICE BID FOR THE CLASS OF CONCRETE SPECIFIED IN THE PLANS. PAYMENT FOR ALL OTHER WORK AND MATERIALS REQUIRED FOR THE CONSTRUCTION OF THE JOINT SUPPORT SHALL BE INCLUDED IN THE PRICE BID FOR THE ABOVE ITEMS.
4. CONTRACTION JOINTS SHALL BE CONSTRUCTED ON 15' CENTERS.
5. TOOLING NOT REQUIRED FOR SELF-LEVELING SILICONE.
6. UNLESS OTHERWISE SPECIFIED IN THE PLANS, CONCRETE SHOULDERS SHALL BE CONSTRUCTED ACCORDING TO THE DETAILS SHOWN HEREON. CONTRACTION JOINTS SHALL MATCH CONTRACTION JOINTS IN THE LANES.
7. TIE WIRES IN DOWEL BAR ASSEMBLIES SHALL NOT BE CUT PRIOR TO PLACEMENT OF PAVING CONCRETE.



NOTE: TIE BARS SHALL BE 15" FROM TRANSVERSE JOINTS.

LONGITUDINAL CONSTRUCTION JOINT



SECTION

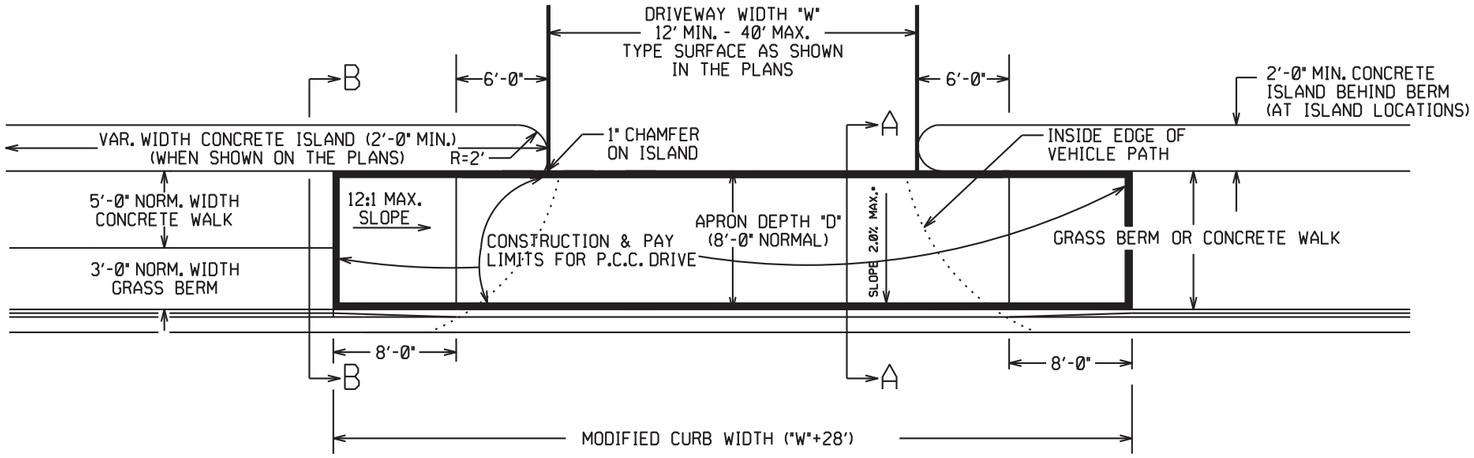
TRANSVERSE CONSTRUCTION JOINT

DATE	REVISION	DATE FILMED
11-07-19	REV. EXP. JOINT REF ON APP. SLAB	
5-25-06	ADDED GENERAL NOTE 7	
10-9-03	REMOVED TIE BAR COATING & REVISED GENERAL NOTES	
11-16-01	ADDED TOOL SEALANT AND NOTE 5; REVISED NOTE 3	
4-26-96	REVISED CONTRACTION JOINT NOTE	
11- 3-94	ADDED NOTE RE: REINF. BARS	
4- 1-93	REVISED DOWEL BARS & GEN. NOTES	4- 1-93
10- 1-92	REVISED DOWEL SPACING	10- 1-92
8- 15-91	ADDED SPAC FOR CONTR JTS & DEL KEYWAY	
05-24-90	REVISED TIE BAR, DOWEL & JOINT SIZE	
01-25-90	ADDED EXPANSION JOINT	01-25-90
11-30-89	CHANGED T/4+1 TO T/3+1	11-30-89
03-23-89	ALTERED SAWED JOINT & ADDED NOTE	512-03-23-89
07-15-88	REVISED AND REDRAWN	632-07-15-88

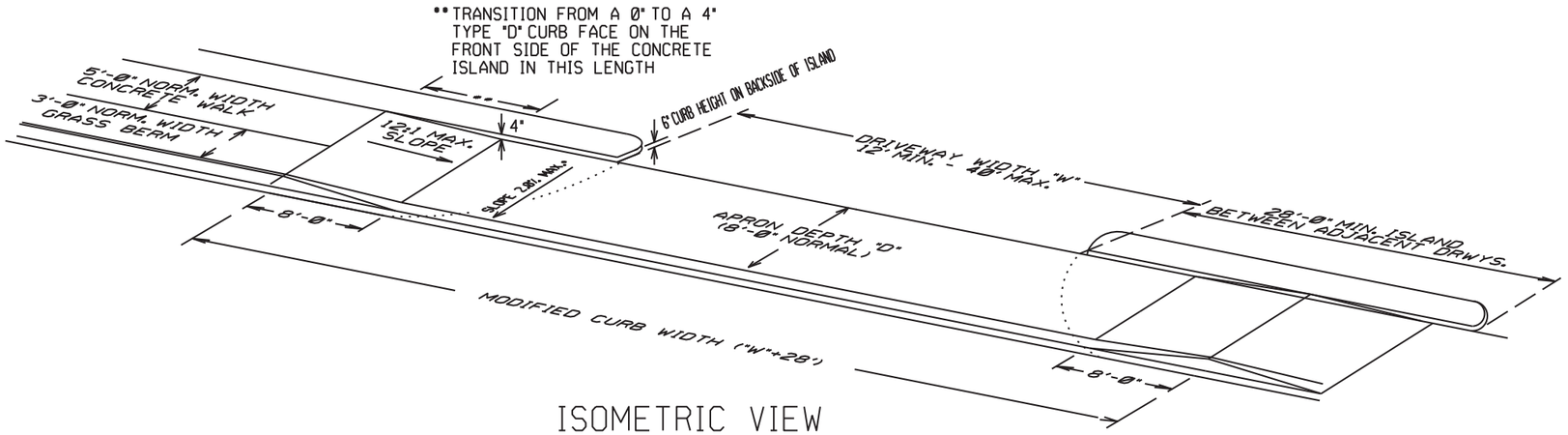
ARKANSAS STATE HIGHWAY COMMISSION

TRANSVERSE & LONGITUDINAL JOINTS FOR CONCRETE PAVEMENT (NON-REINFORCED)

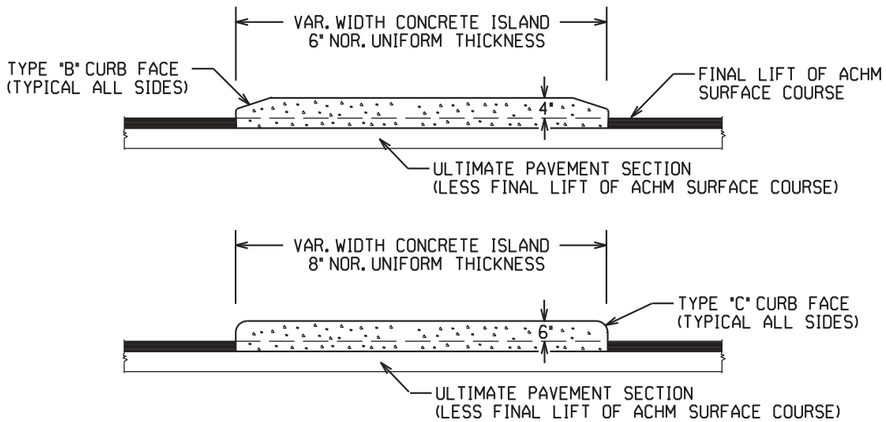
STANDARD DRAWING CPTJ - 6A



PLAN VIEW



ISOMETRIC VIEW

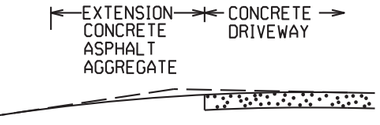


CURBED ISLANDS FOR CHANNELIZATION

CONCRETE ISLAND NOTES:

1. REFER TO PLANS FOR TYPE OF CURB FACE TO BE USED. NO DIRECT PAYMENT WILL BE MADE FOR THE CURB FACES SHOWN ON THE ISLAND DETAILS. PAYMENT FOR THE CURB FACE WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE ITEM "CONCRETE ISLAND".

2. TRANSVERSE EXPANSION JOINTS, NOT LESS THAN 1/2" WIDE, SHALL BE PLACED AT MINIMUM INTERVAL OF 45'. TRANSVERSE JOINT SHALL BE CONSTRUCTED USING A JOINT FILLER COMPLYING WITH AASHTO M213.



EXTENSION TYPICAL SECTIONS

1: CONCRETE - 6" P.C. CONCRETE DRIVEWAY

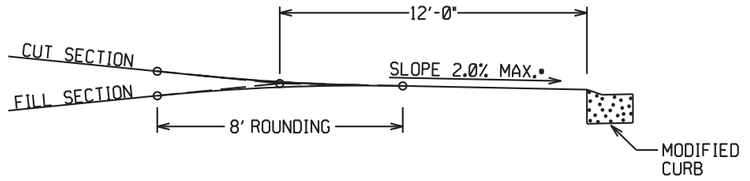
2: ASPHALT - 2" ACHM SURFACE COURSE (1/2")
4" ACHM BINDER COURSE (1") OR
4" ACHM BASE COURSE (1-1/2")

3: ASPHALT - 2" ACHM SURFACE COURSE (1/2")
7" AGGREGATE BASE COURSE

4: AGGREGATE - 6" AGGREGATE BASE COURSE

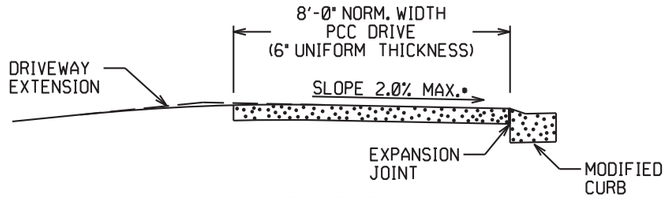
THE TYPE OF EXTENSION SHALL BE AS SHOWN IN THE PLANS. THE CONTRACTOR MAY, WITH THE APPROVAL OF THE ENGINEER, SUBSTITUTE A LOWER NUMBERED TYPE OF EXTENSION IN LIEU OF THE TYPE SPECIFIED IN THE PLANS, BUT AT NO ADDITIONAL COST TO THE DEPARTMENT.

DRIVEWAY EXTENSION DETAILS

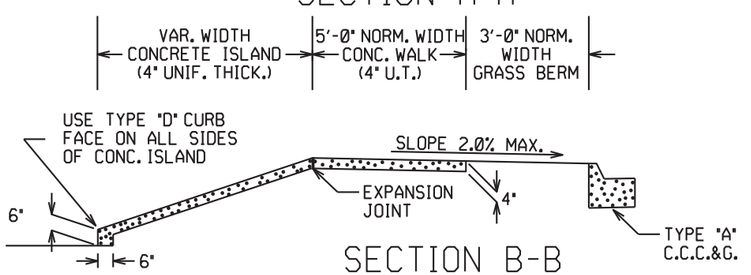


DRIVEWAY VERTICAL ALIGNMENT DETAILS

- NOTE: DRIVEWAYS MAY NOT BE SLOPED AWAY FROM THE ROADWAY UNLESS APPROVED BY THE ENGINEER.



SECTION A-A



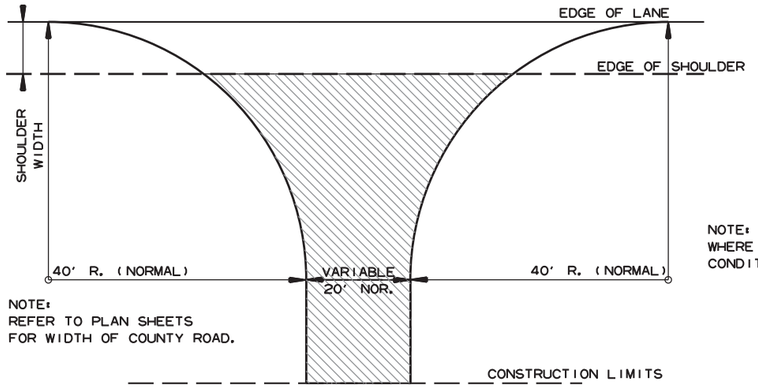
SECTION B-B
CURBED ISLAND BEHIND WALK

DATE REV	DATE FILMED	DESCRIPTION
5-19-22		REVISED ISLAND NOTES
11-07-19		REVISED WALK DETAILS
2-27-14		REVISED PLAN & ISOMETRIC VIEW
11-29-07		ADDED CHANNELIZATION ISLAND WITH TYPE C CURB FACE & REVISED DRIVEWAY SLOPE NOTE & VERTICAL ALIGNMENT DETAIL
11-10-05		REV. APRON SLOPE & DEPTH OF AGG. BASE.
8-22-02		ADDED ISLAND DETAILS & NOTES
3-30-00		REV. MOD. CURB WIDTH & TRANS. NOTE
11-19-98		REVISED NOTES
11-18-98		REDRAWN AND REISSUED

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DRIVEWAYS & ISLANDS

STANDARD DRAWING DR-1

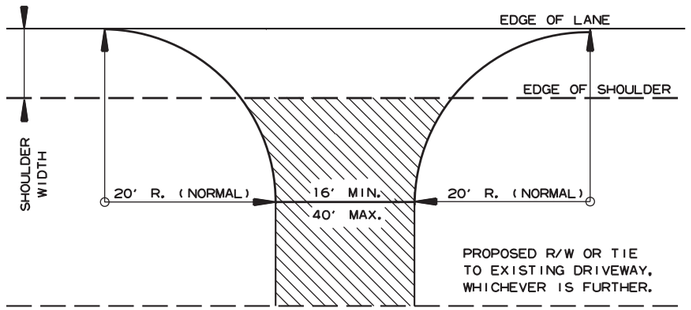


NOTE:
REFER TO PLAN SHEETS
FOR WIDTH OF COUNTY ROAD.

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

ACHM SURFACE COURSE (1/2")
(220 LBS. PER SQ. YD.) AND
AGGREGATE BASE COURSE (CLASS 7)
7" COMP. DEPTH, UNLESS OTHERWISE
SPECIFIED IN PLANS.

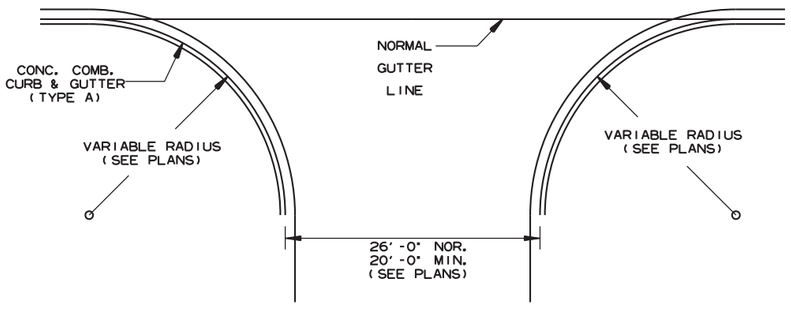
DETAIL FOR COUNTY ROAD TURNOUTS OPEN SHOULDER SECTION



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

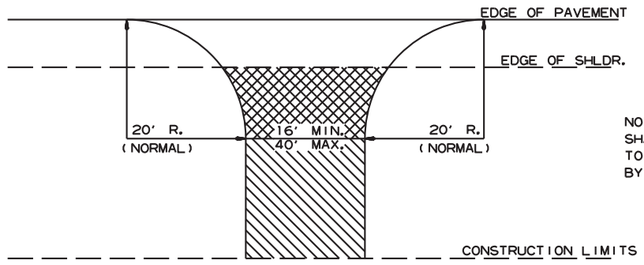
ACHM SURFACE COURSE (1/2")
(220 LBS. PER SQ. YD.) AND
AGGREGATE BASE COURSE (CLASS 7)
7" COMP. DEPTH IF ASPHALT OR
GRAVEL DRIVE EXISTING; OR 6"
CONCRETE IF CONCRETE DRIVE
EXISTING.

DETAIL FOR DRIVEWAY TURNOUTS OPEN SHOULDER SECTION (ARTERIALS)



NOTE:
PAVEMENT STRUCTURE FOR STATE HIGHWAYS, CITY STREETS,
& COUNTY ROADS TO BE SAME AS MAIN LANES.

DETAIL OF TURNOUTS, ASPHALT STREETS, COUNTY ROADS & STATE HIGHWAYS CURB & GUTTER SECTION



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

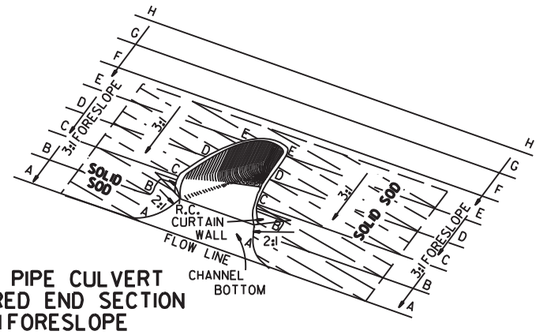
DETAIL FOR DRIVEWAY TURNOUTS (COLLECTORS)

DATE REV	DATE FILMED	DESCRIPTION
5-19-22		ISSUED

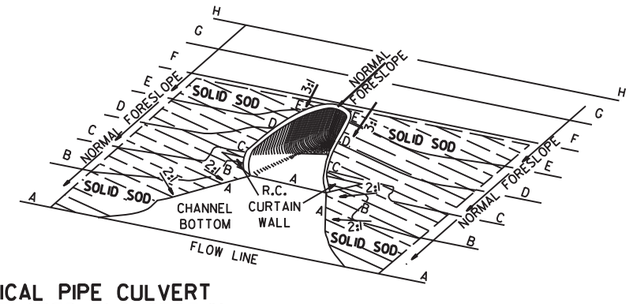
ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DRIVEWAYS & STREET TURNOUTS

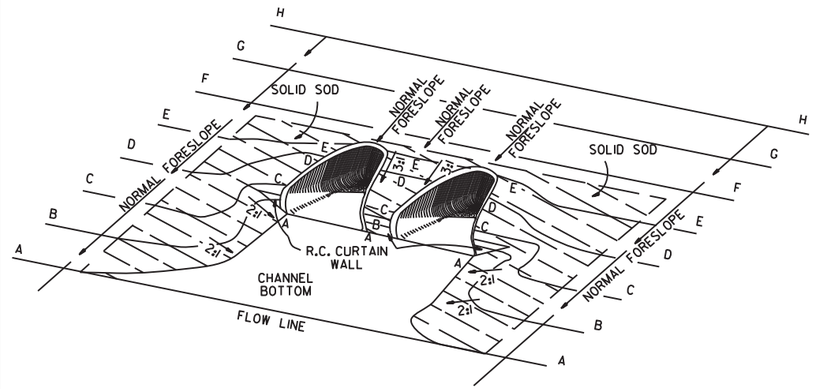
STANDARD DRAWING DR-2



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

R.C. CURTAIN WALL
DIMENSIONS & QUANTITIES

PIPE DIA.	H_1	L_1	L	L (DBL.)/2	SINGLE R.C.P.C.		DOUBLE R.C.P.C.	
					CONC.	REINF. STEEL	CONC.	REINF. STEEL
					CU. YDS.	LBS.	CU. YDS.	LBS.
18"	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.

REINFORCING STEEL SCHEDULE

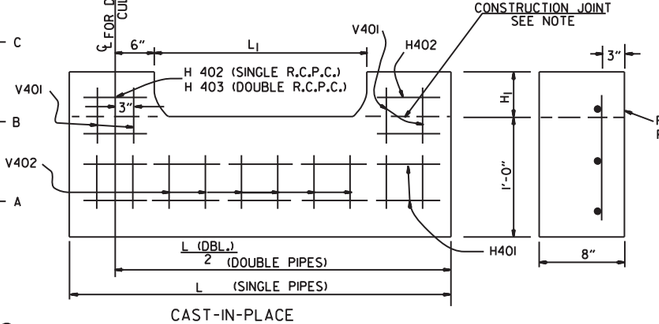
PIPE DIA.	SINGLE R.C. PIPE CULVERT								DOUBLE R.C. PIPE CULVERT											
	H401		H402		V401		V402		H401		H402		H403		V401		V402	
	L	NO.	L	NO.	L	NO.	L	NO.	L	NO.	L	NO.	L	NO.	L	NO.	L	NO.	L	NO.
18"	7'-8"	2	1'-11½"	4	1'-7½"	8	8"	8	12'-2"	2	1'-11½"	4	8"	2	1'-7½"	10	8"	14
24"	9'-2"	2	2'-2"	4	1'-8½"	10	8"	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.

PLAN VIEW
3:1 FORESLOPES

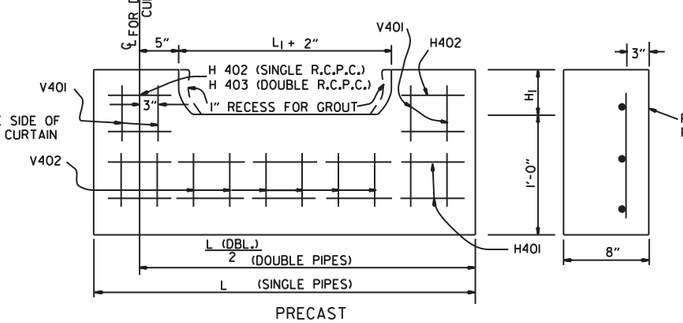
NOTE: THE CONFIGURATION OF CONTOURS WILL VARY WITH FORESLOPE VARIATIONS.

PLAN VIEW
FLATTENED FORESLOPES



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

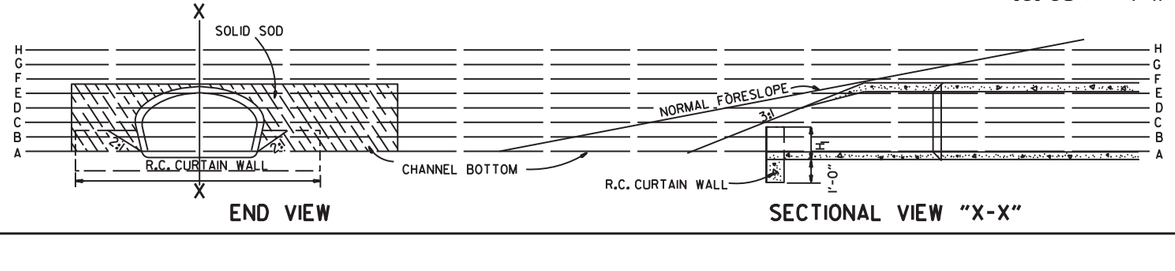
SOLID SODDING

PIPE DIA.	SINGLE R.C.P.C.			DOUBLE R.C.P.C.		
	3:1	4:1	6:1	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 x 3 W10 x W10 MAY BE USED IN LIEU OF REINFORCING BARS.



END VIEW

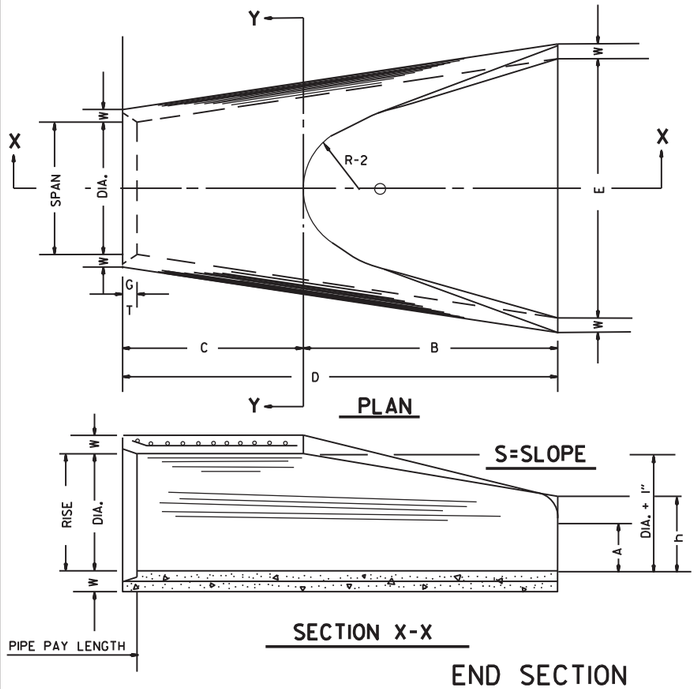
SECTIONAL VIEW "X-X"

DATE	REVISION	FILMED
10-18-96	ADDED NOTE TO SOLID SODDING	
10-12-95	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

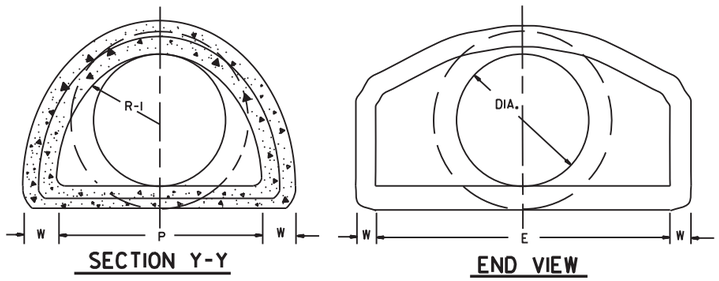
STANDARD DRAWING FES-1



END SECTION FOR REINFORCED CONCRETE PIPE CULVERTS

TABLE OF DIMENSIONS

DIA.	WALL	A	B	C	D	E	S	DIA. + I"	P	R-I	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"	33⅜"	16⅛"	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"	47⅛"	24⅝"	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'-10"	6'-6"	1'-10"	8'-4"	8'-0"	3:1	61"	72½"	36⅛"	24"	4"	9270	3'-5"
72"	7"	3'-10"	6'-6"	1'-10"	8'-4"	9'-0"	3:1	73"	77⅛"	38⅝"	24"	5"	13250	4'-6"

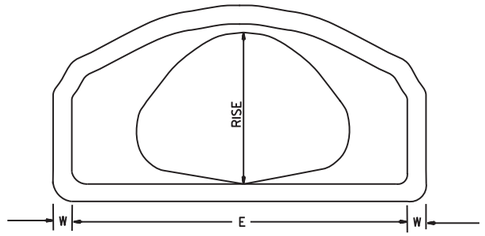


NOTE: TONGUE END ON UPSTREAM SECTION
GROOVE END ON DOWNSTREAM SECTION

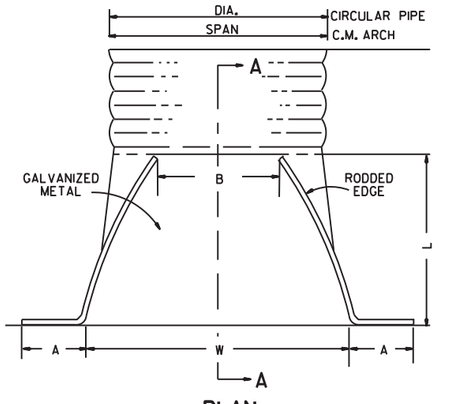
ARCH PIPE

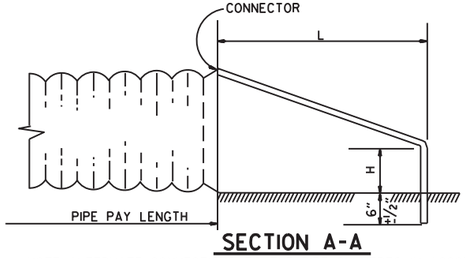
EQUIV. DIA.	• SPAN AASHTO M 206	• SPAN AHD NOMINAL	• RISE AASHTO M 206	• RISE AHD NOMINAL	W	A	B	C	D	E	P	R2	G-T	S
INCHES														
15	18	18	11	11	2"	4"	2'-0"	4'-0"	6'-0"	3'-0"	29"	12"	1½"	2½:1
18	22	22	13½	14	2½"	5"	2'-0"	4'-1"	6'-1"	3'-6"	32⅛"	13"	2½"	2½:1
21	26	26	15½	16	2¾"	7"	2'-3"	3'-10"	6'-1"	4'-0"	34⅛"	14"	2½"	2½:1
24	28½	29	18	18	3"	9"	2'-3"	3'-10"	6'-1"	5'-0"	36⅛"	15"	2½"	2½:1
30	36¼	36	22½	23	3½"	10"	3'-1"	3'-0½"	6'-1½"	6'-0"	47⅛"	20"	3"	2½:1
36	43¾	44	26⅝	27	4"	10½"	4'-0"	2'-1½"	6'-1½"	6'-6"	54⅜"	22"	3½"	2½:1
42	51⅛	51	31⅜	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"	70⅝"	24"	4¼"	2½:1
54	65	65	40	40	5½"	1'-7"	5'-3"	2'-11"	8'-2"	8'-6"	72⅛"	24"	4¾"	2¼:1
60	73	73	45	45	6"	1'-10"	5'-6"	2'-8"	8'-2"	9'-0"	77⅛"	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.

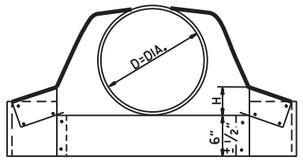


END VIEW
CONCRETE ARCH PIPE

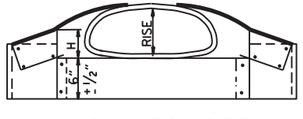




NOTE: ALTERNATE CONNECTIONS TO THE PIPE CULVERTS, IN ACCORDANCE WITH MANUFACTURER'S STANDARD PRACTICES, MAY BE MADE SUBJECT TO THE APPROVAL OF THE ENGINEER.



CIRCULAR PIPE



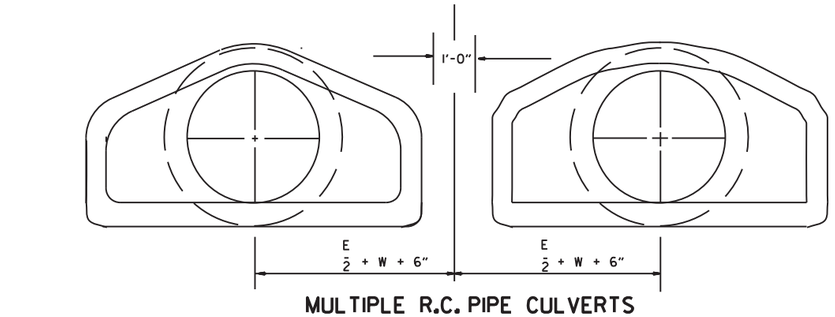
C.M. ARCH PIPE

CIRCULAR PIPE

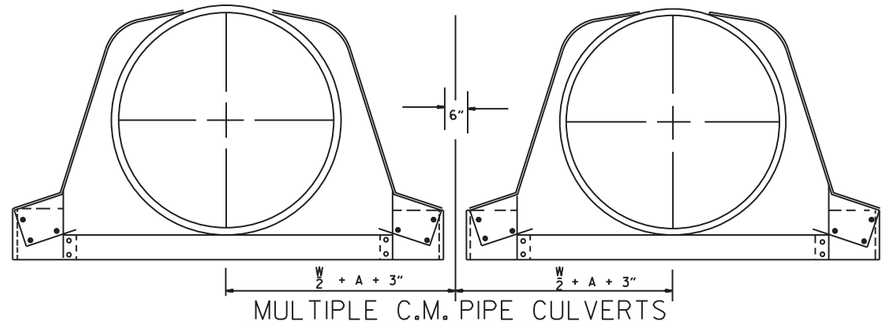
D. DIA.	GAUGE	A I" ±	B. MAX.	H I" ±	L 1½" ±	W 2" ±	S
		INCHES					
12	16	6	6	6	21	24	2½:1
15	16	7	8	6	26	30	2½:1
18	16	8	10	6	31	36	2½:1
21	16	9	12	6	36	42	2½:1
24	16	10	13	6	41	48	2½:1
30	14	12	16	8	51	60	2½:1
36	14	14	19	9	60	72	2½:1
42	12	16	22	11	69	84	2½:1
48	12	18	27	12	78	90	2½:1
54	12	18	30	12	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

EQUIV. DIA.	SPAN	RISE	A I" ±	B MAX.	H I" ±	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



MULTIPLE R.C. PIPE CULVERTS



MULTIPLE C.M. PIPE CULVERTS

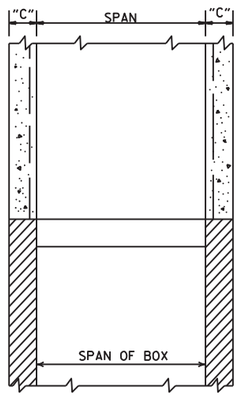
END SECTIONS FOR CORRUGATED METAL PIPE CULVERTS

DATE	REVISION	FILMED
10-18-96	REVISED ASTM REF. TO AASHTO	
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

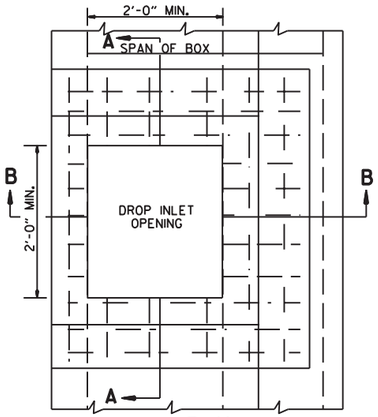
ARKANSAS STATE HIGHWAY COMMISSION

FLARED END SECTION

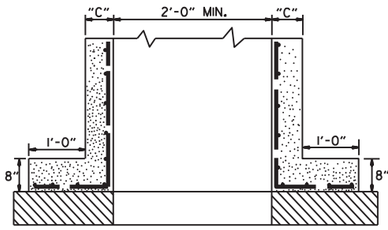
STANDARD DRAWING FES-2



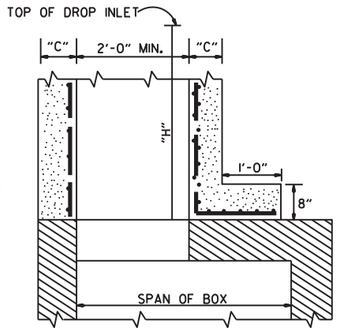
SECTION B-B



PLAN

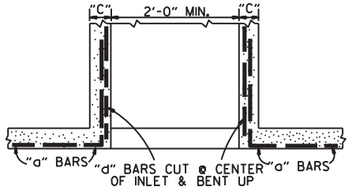


SECTION A-A

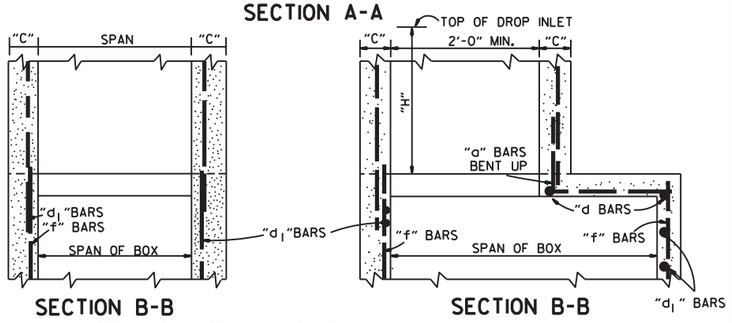


SECTION B-B

METHOD OF CONSTRUCTING DROP INLET ON EXISTING R.C. BOX CULVERT



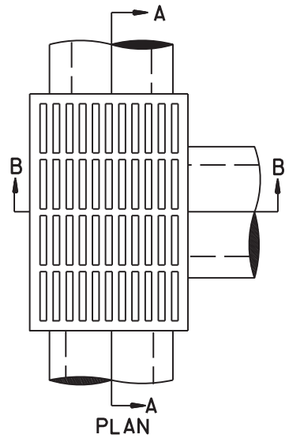
SECTION A-A



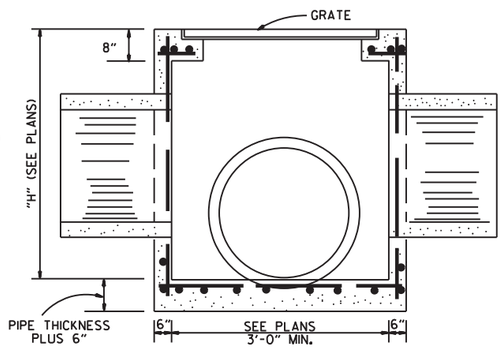
SECTION B-B SECTION B-B

METHOD OF CONSTRUCTING DROP INLET ON NEW R.C. BOX CULVERT

NOTE: "C" DIMENSIONS AND REINFORCING BAR SIZES, SHALL CONFORM TO THOSE SHOWN ON STANDARD DRAWING FOR DROP INLET.

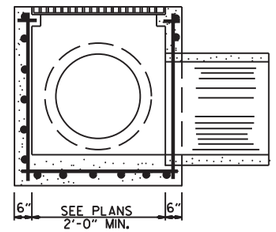


PLAN



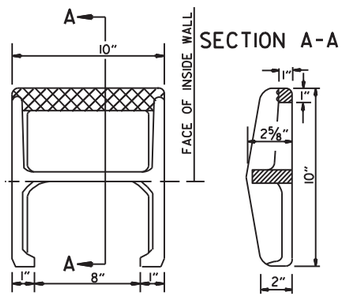
SECTION A-A

NOTE: REINF. BARS TO BE #4 BARS ON 6" CTRS. WITH 1½" MIN. COVER. THIS TYPE DROP INLET TO BE USED WHERE NOT SUBJECTED TO TRAFFIC.



SECTION B-B

DROP INLET (TYPE E)

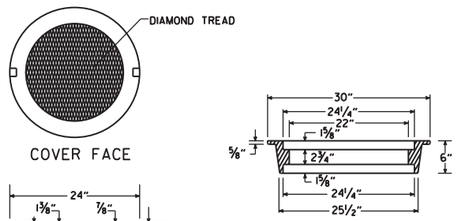


APPROX. WEIGHT = 11 LBS. (CAST IRON)

PLAN

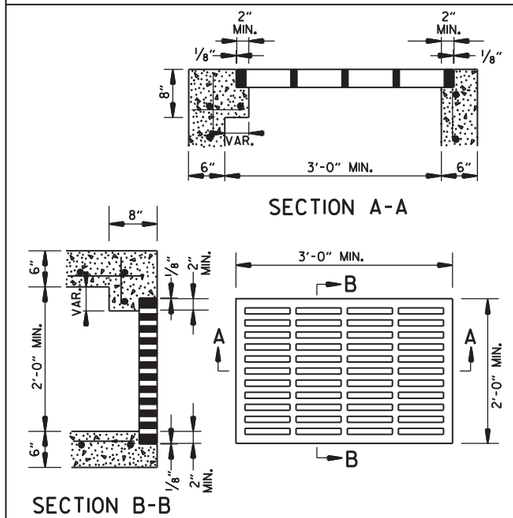
NOTE: THIS DETAIL IS TYPICAL. OTHERS MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER.

DETAIL OF STEP FOR DROP INLET



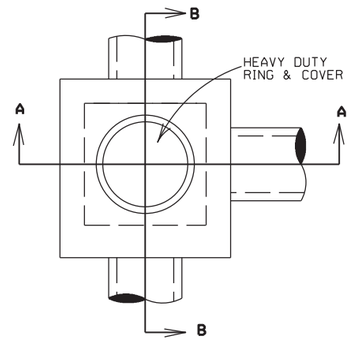
APPROXIMATE TOTAL WEIGHT = 333 LBS.

HEAVY DUTY RING & COVER

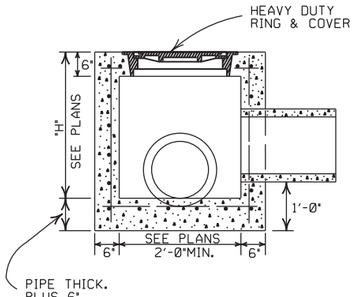


APPROXIMATE MINIMUM WATERWAY OPENING = 260 SQ. IN.

GRATE FOR TYPE E DROP INLET

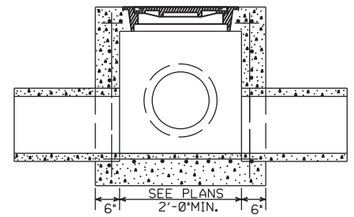


PLAN



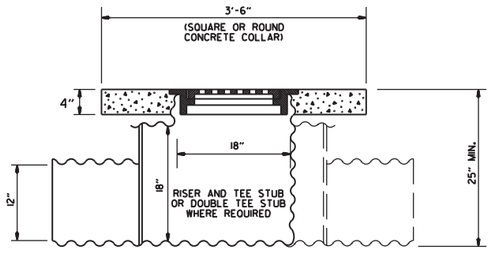
SECTION A-A

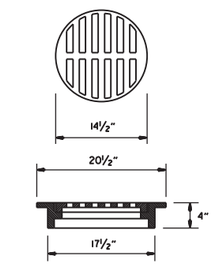
NOTE: REINF. BARS TO BE #4 BARS ON 6" CTRS. WITH 1½" MIN. COVER. THIS TYPE JUNCTION BOX TO BE USED WHERE NOT SUBJECTED TO TRAFFIC.



SECTION B-B

JUNCTION BOX (TYPE E)





DETAIL OF YARD DRAIN

GENERAL NOTES:

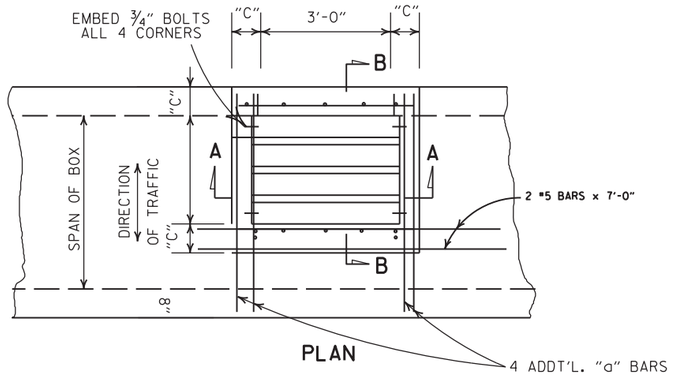
1. ALL EXPOSED CORNERS SHALL BE ¾" CHAMFERED.
2. STEPS SHALL BE INSTALLED ON 16" CENTERS ON ALL INLETS 4'-0" HIGH OR OVER, OR AS APPROVED BY THE ENGINEER.
3. EXPANSION JOINT MATERIAL SHALL BE ¾" PREFORMED FIBER.
4. GRATE OR GRATE AND FRAME SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M 105 CLASS 35B. GRATE MAY BE USED WITHOUT FRAME.
5. GRATE AND FRAME SHALL NOT BE PAINTED.
6. GRATE SHALL BE BICYCLE SAFE.
7. HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON TOP.
8. HEAVY DUTY RING AND COVER SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M105 CLASS 35B & AASHTO M306.
9. HEAVY DUTY RING AND COVER SHALL NOT BE PAINTED.
10. DIMENSIONS SHOWN FOR RING AND COVER ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR CASTINGS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR CASTING DESIGNS MAY BE MADE BY REFERRING TO PREVIOUSLY APPROVED DRAWINGS.

DATE REV.	REVISION	DATE FILMED
11-16-01	ADDED NOTE 10	
1-12-00	REVISED HEAVY DUTY RING & COVER	
7-02-98	CHANGED GRATE DETAIL. DELETED DI(TYPE D), REPLACED RING & COVER W/HEAVY DUTY RING & COVER, ADDED JUNCTION BOX (TYPE E)	
6-26-97	ADDED DIMENSION TO TYPE IV-A	
10-18-96	ADDED DETAIL OF YARD DRAIN	
8-15-91	DELETE TYPE IV GRATE	
7-15-88	REVISED STEP DETAIL	
5-20-83	REVISED DETAILS OF GRATES (TYPE IV & IV-A)	
2-4-83	ADDED GENERAL NOTE NO. 4	
3-2-81	ADDED TYPE IV-A GRATE	
5-22-74	DELETED INLET (TYPE F) & GRATE (TYPE III)	
10-2-72	REVISED AND REDRAWN	

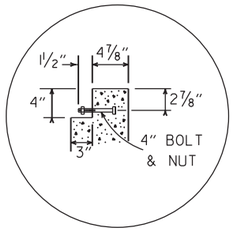
ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DROP INLETS & JUNCTION BOXES

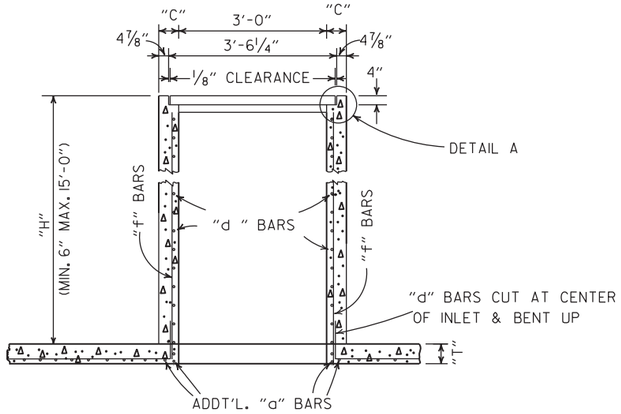
STANDARD DRAWING FPC-9



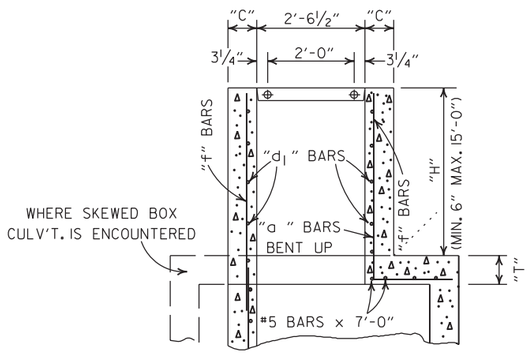
PLAN



DETAIL A



SECTION A-A

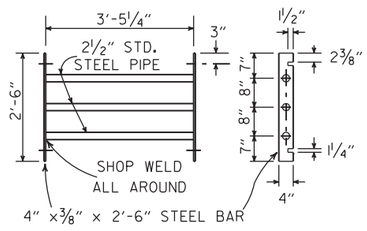


SECTION B-B

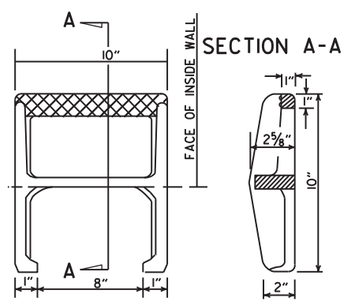
NOTE: ADDT'L.REINF. STEEL TO BE INCLUDED IN UNIT PRICE BID PER TYPE "TM" D.I.

DIMENSIONS & REINF. BARS FOR D.I. TO BE THE SAME AS THOSE SHOWN ON APPLICABLE STD. BARREL DRAWING FOR R.C. BOX CULVERTS.

DROP INLET TYPE "TM"
FOR REINFORCED CONC. BOX CULVERTS



GRATE DETAIL



APPROX. WEIGHT = 11 LBS. (CAST IRON)

PLAN

NOTE: THIS DETAIL IS TYPICAL. OTHERS MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER.

DETAIL OF STEP FOR DROP INLET

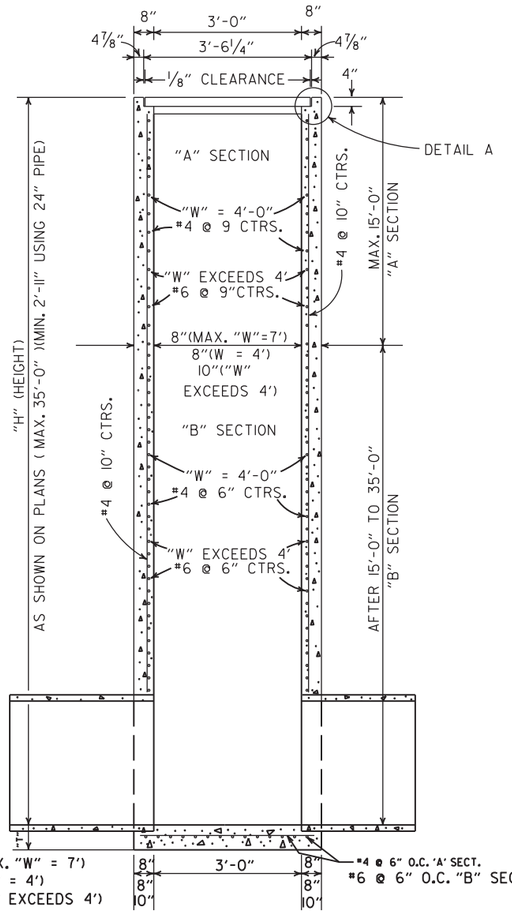
GENERAL NOTES:

1. STEEL PIPE FOR GRATES AND BOLTS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 807. BOLTS SHALL CONFORM TO ONE OF THE FOLLOWING: ASTM A193, GRADE B8 CLASS 1 OR 2, ASTM A307 OR AASHTO M 164.
2. STEEL PIPE FOR GRATES SHALL BE "STANDARD WEIGHT" PIPE CONFORMING TO ASTM A53 NATIONAL STANDARD PIPE.
3. BOLTS, NUTS, WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M 232 OR AASHTO M 298, CLASS 40 OR 50.
4. ALL EXPOSED CORNERS TO HAVE ¾" CHAMFER.
5. ALL #4 AND #5 REINFORCING BARS TO HAVE 1½" COVER. LARGER SIZES TO HAVE 2" COVER.
6. THE COMPLETE PIPE GRATE SHALL BE PAINTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

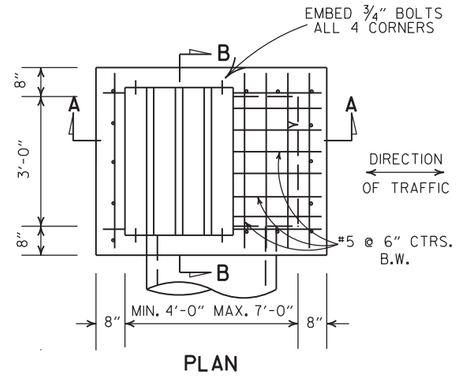
TABLE OF "W" DIMENSIONS

I.D. PIPE	SKEW OF CROSS DRAIN		
	STRAIGHT	30°	45°
	"W"	"W"	"W"
24"	4'-0"	4'-0"	4'-0"
30"	4'-0"	4'-0"	4'-5"
36"	4'-0"	4'-3"	5'-3"
42"	4'-3"	4'-11"	6'-1"
48"	4'-10"	5'-7"	6'-11"

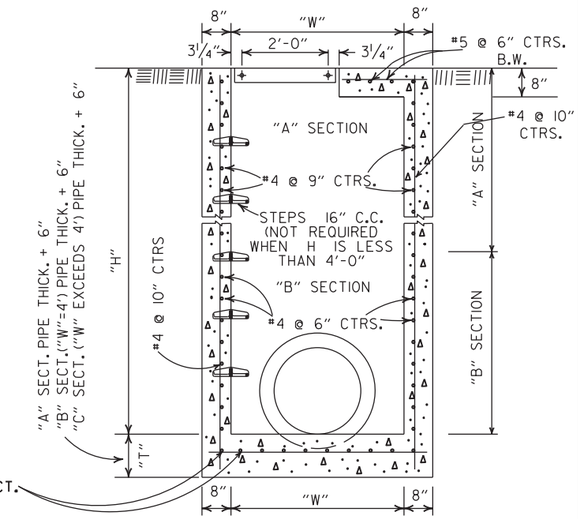
NOTE: DIMENSIONS SHOWN ABOVE ARE FOR PIPES INTERSECTING DROP INLET ON ONE SIDE ONLY. FOR SKEWED PIPES INTERSECTING BOTH SIDES OF DROP INLET, "W" WILL NEED TO BE INCREASED OR AXIS OF INTERSECTING PIPES WILL NEED TO BE SHIFTED.



SECTION B-B



PLAN



SECTION A-A

DROP INLET(TYPE RM)

REVISED		DATE FILMED
8-22-02	ADDED & REVISED DIMENSION TO SECTION A-A	
1-12-00	CORRECTED DIMENSION ON SECTION B-B	
11-06-97	ADDED DIMENSION TO SECTION A-A	
10-18-96	REVISED ASTM REF. TO AASHTO AND ADDED NOTE TO TABLE OF "W" DIMENSIONS	
10-1-92	ADDED DIRECTION OF TRAFFIC	10-1-92
8-15-91	ADDED NOTE ABOUT PAINTING OF GRATE	8-15-91
11-30-89	ALTERED DETAIL A	11-30-89
7-15-88	REVISED STEP DETAIL, TM & RM D.I. & GRATE DETAIL	719-7-15-88
10-2-72	REVISED AND REDRAWN	542-10-2-72

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DROP INLETS

STANDARD DRAWING FPC-9D

4'-0" LENGTH DROP INLET

PIPE SIZE	MIN. WIDTH	HEIGHT 5'-0" CLASS A CONC. CU. YDS.	HEIGHT 5'-0" REINF. STEEL POUNDS	PLUS OR MINUS PER LIN. FT. OF HEIGHT CLASS A CONC. CU. YDS.	PLUS OR MINUS PER LIN. FT. OF HEIGHT REINF. STEEL POUNDS
18"	2'-6"	1.77	156	0.28	22
24"	2'-6"	1.79	156	0.28	22
30"	3'-2"	2.39	205	0.30	26
36"	3'-8"	2.63	236	0.32	28
42"	4'-4"	2.95	250	0.34	30
48"	4'-10"	3.21	265	0.36	32

NOTE: QUANTITIES ARE APPROXIMATE AND ARE SHOWN FOR BIDDER INFORMATION ONLY.

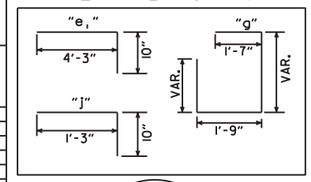
DROP INLET EXTENSION

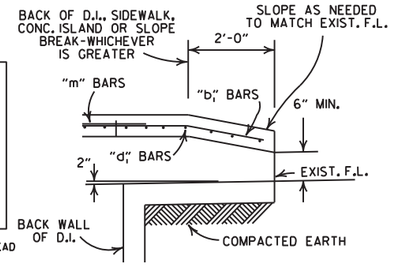
4'-0" CLASS A CONC. CU. YDS.	4'-0" REINF. STEEL POUNDS	8'-0" CLASS A CONC. CU. YDS.	8'-0" REINF. STEEL POUNDS
0.58	38	0.87	72
DEDUCT FROM QUANTITY COMPUTED FOR EACH EXTENSION ADDED.			
0.04	3		

DEDUCT FROM QUANTITY COMPUTED FOR EACH PIPE ENTERING INLET

INSIDE DIA. PIPE	CLASS A CONC.	REINF. STEEL
INCHES	CU. YDS.	POUNDS
18	0.05	2
24	0.09	3
30	0.13	4
42	0.24	8

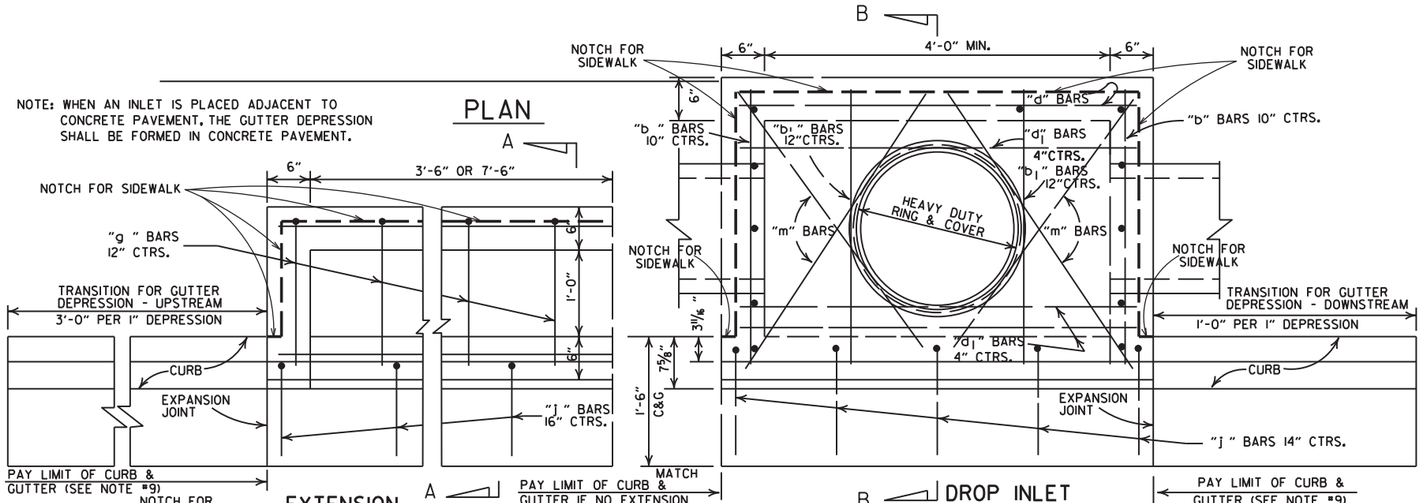
BAR DIAMETER

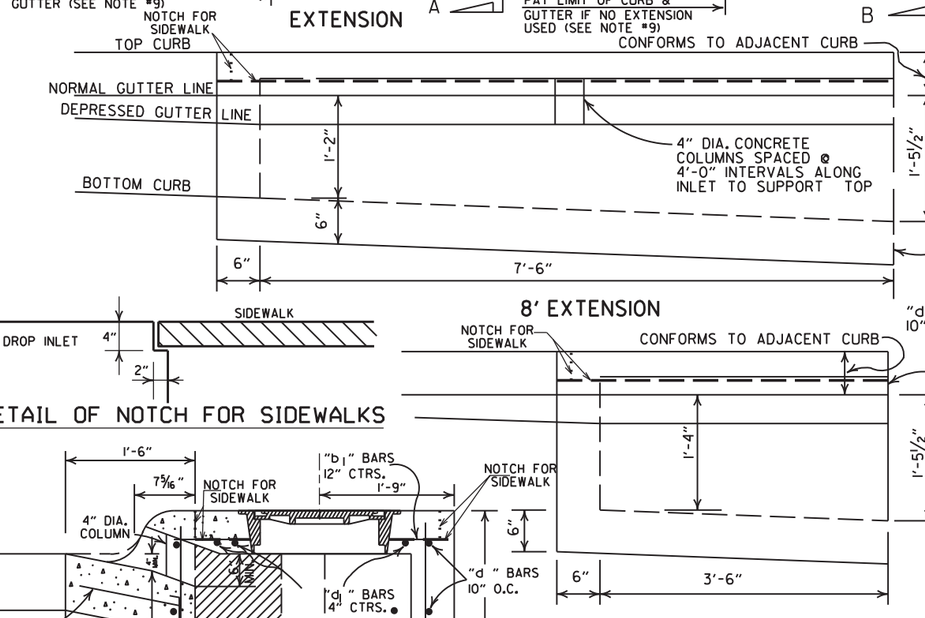


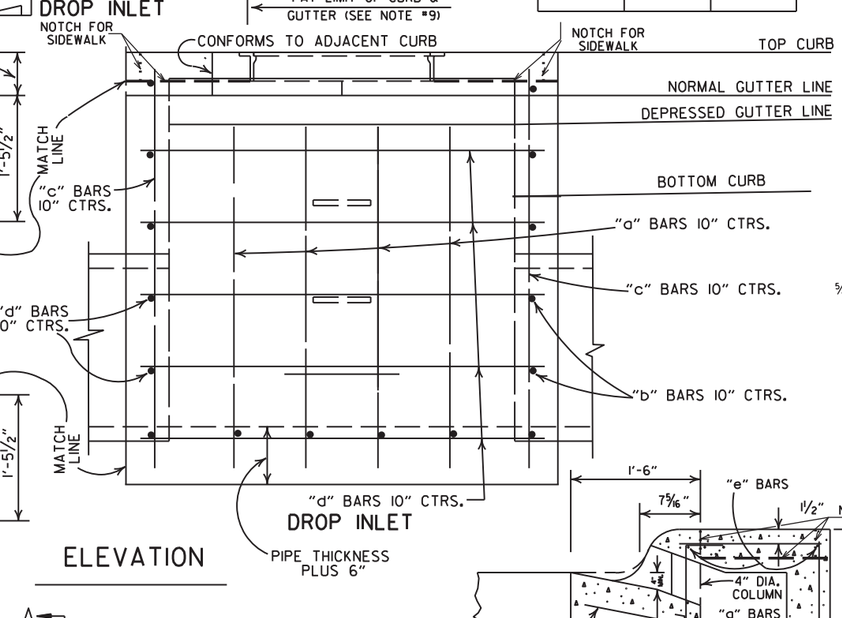


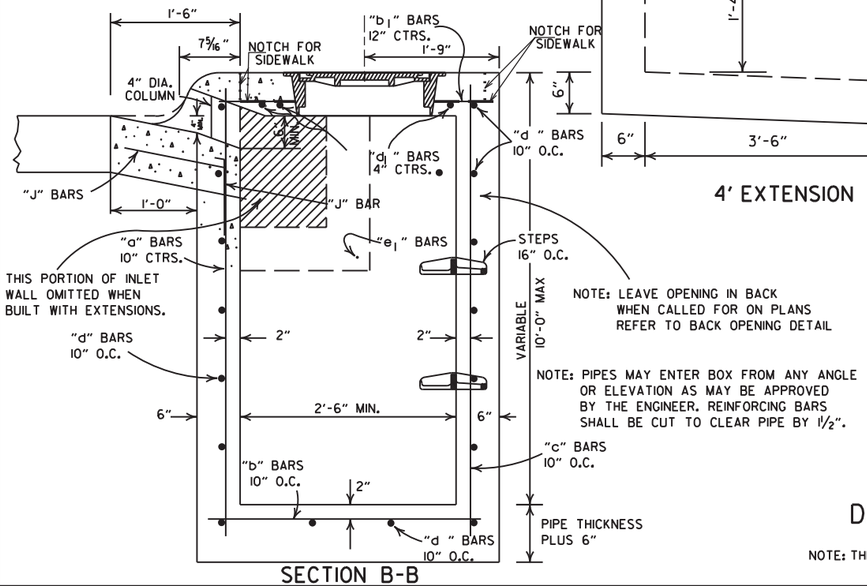
BACK OPENING

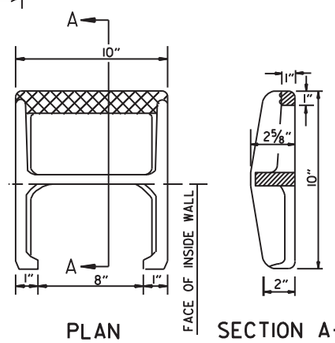
WHEN OPENING IN BACK IS CALLED FOR ON PLANS EXTEND OPENING AS SHOWN IN DETAIL. PAYMENT TO BE INCLUDED IN PRICE BID FOR DROP INLET (TYPE C).

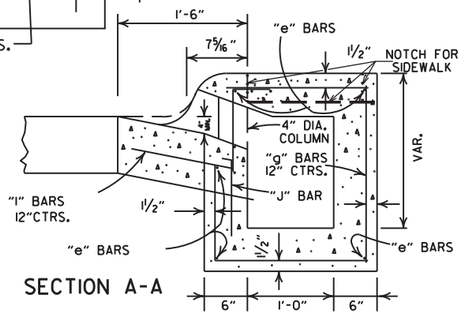


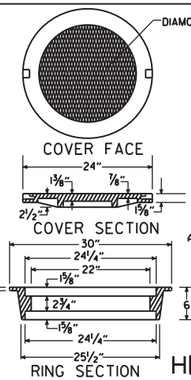












APPROXIMATE TOTAL WEIGHT = 333 LBS.

HEAVY DUTY RING & COVER

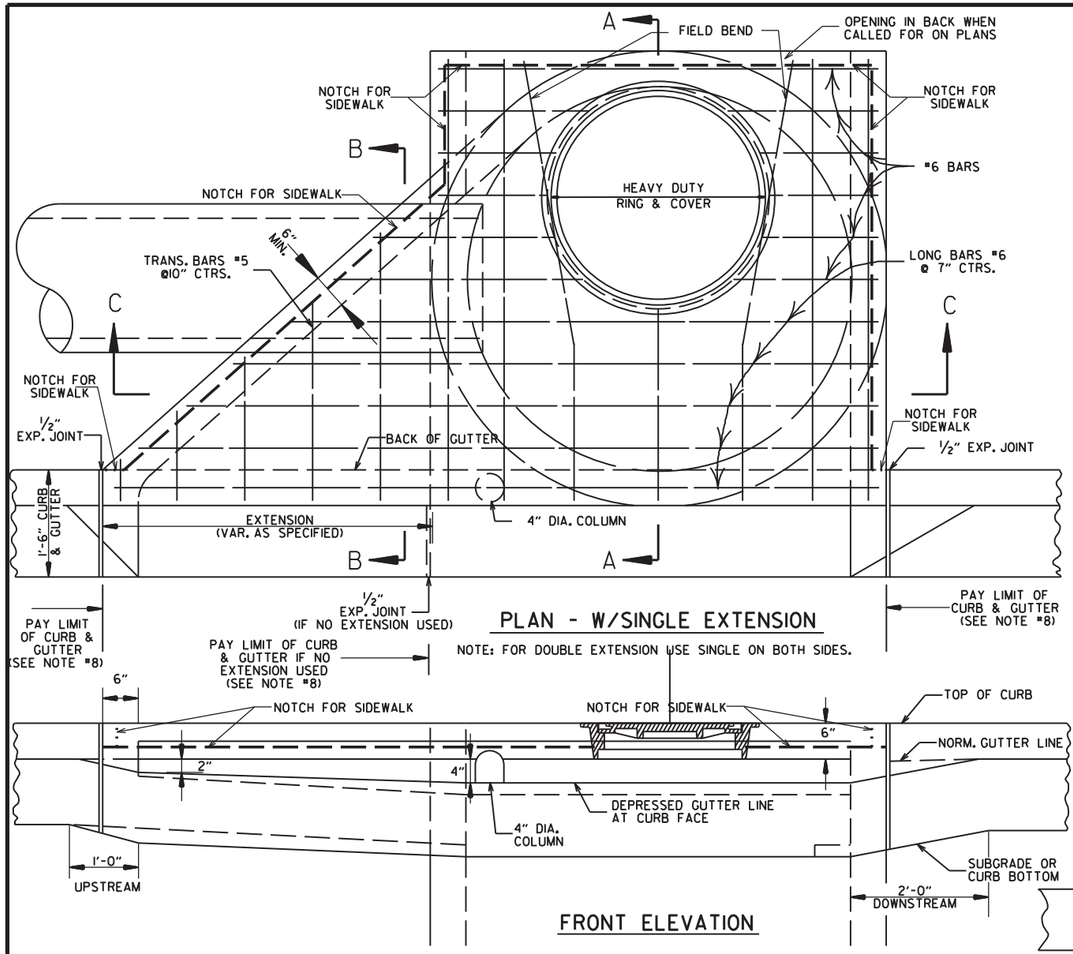
GENERAL NOTES:
1. ALL EXPOSED CORNERS TO HAVE ¾" CHAMFER.
2. STEPS SHALL BE INSTALLED IN ALL INLETS 4'-0" HIGH AND OVER OF AS APPROVED BY THE ENGINEER.
3. ALL REINF. BARS SHALL BE #4 AND HAVE 1½" COVER.
4. DROP INLETS AND EXTENSION ON CURVED SECTIONS SHALL CONFORM TO THE CURVATURE OF THE CURB.
5. THIS DROP INLET MAY BE CONSTRUCTED ON NEW OR EXISTING R.C. BOX CULVERT AS SHOWN ON F.P.C.-9.
6. WHEN PLANS CALL FOR DROP INLET OVER 10'-0" HIGH, FLOOR AND WALLS SHALL BE CONSTRUCTED AS SHOWN FOR TYPE "RM" DROP INLET (FPC-9D).
7. HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON TOP.
8. DURING CONSTRUCTION OF THE ROADWAY THE CONTRACTOR SHALL MAINTAIN DRAINAGE INTO OR AROUND THE DROP INLET AS APPROVED BY THE ENGINEER.
9. PAYMENT FOR CURB AND/OR CURB AND GUTTER WITHIN THE LIMITS OF DROP INLETS AND DROP INLET EXTENSIONS SHALL BE CONSIDERED INCLUDED IN PAYMENT MADE FOR DROP INLETS AND/OR DROP INLET EXTENSIONS.
10. HEAVY DUTY RING AND COVER SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M105 CLASS 35B & AASHTO M306.
11. HEAVY DUTY RING AND COVER SHALL NOT BE PAINTED.
12. 4"×2" NOTCH SHALL BE FORMED IN ALL DROP INLETS TO SUPPORT SIDEWALK CONSTRUCTION. REFER TO DETAIL OF NOTCH FOR SIDEWALKS.
13. DIMENSIONS SHOWN FOR RING AND COVER ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR CASTINGS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR CASTING DESIGNS MAY BE MADE BY REFERRING TO PREVIOUSLY APPROVED DRAWINGS.

DATE REV.	REVISION	DATE FILMED
8-22-02	ADDED PAY LIMIT CURB NOTES TO SECTIONS A-A & B-B	
11-16-01	ADDED NOTE 13; REVISED SECTION B-B	
1-12-00	CORRECTED DIMENSION ON SECTION B-B & REVISED RING & COVER	
5-13-99	ADDED DETAIL OF NOTCH FOR SIDEWALKS	
7-02-98	REPLACED RING & COVER W/HEAVY DUTY RING & COVER ADDED NOTES 9,10,&11	
10-18-96	CORRECTED SPELLING	
4-26-96	ADDED NOTE 8 & REVISED (4')(8') EXTENSION TITLES	10-18-96
4-1-93	REVISED BACK OPENING & NOTE	
8-15-91	DELETE TYPE IV GRATE	
7-15-88	REVISED STEP DETAIL	
5-20-83	REVISED DETAILS OF GRATES (TYPE IV & IV-A)	
2-4-83	ADDED GENERAL NOTE NO. 4	
3-2-81	ADDED TYPE IV-A GRATE	
5-22-74	DELETED INLET (TYPE F) & GRATE (TYPE III)	
10-2-72	REVISED AND REDRAWN	

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DROP INLETS (TYPE C)

STANDARD DRAWING FPC-9E

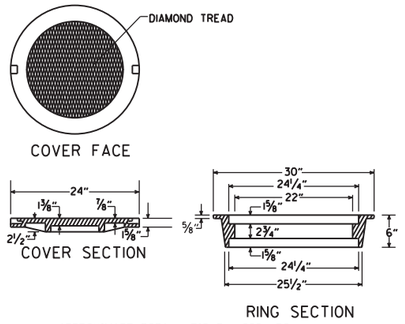


PLAN - W/SINGLE EXTENSION

NOTE: FOR DOUBLE EXTENSION USE SINGLE ON BOTH SIDES.

FRONT ELEVATION

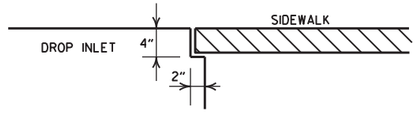
SECTION C-C



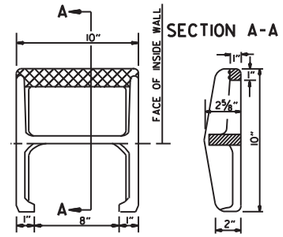
APPROXIMATE TOTAL WEIGHT = 333 LBS.

HEAVY DUTY RING & COVER

1. HEAVY DUTY RING AND COVER SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M105 CLASS 35B & AASHTO M306.
2. HEAVY DUTY RING AND COVER SHALL NOT BE PAINTED.
3. HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON TOP.



DETAIL OF NOTCH FOR SIDEWALKS

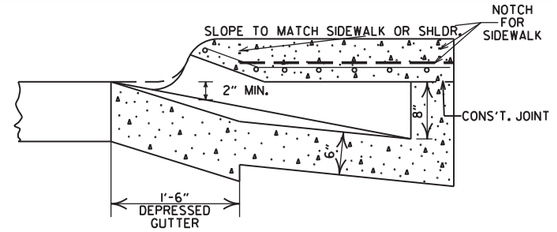


APPROX. WEIGHT = 11 LBS. (CAST IRON)

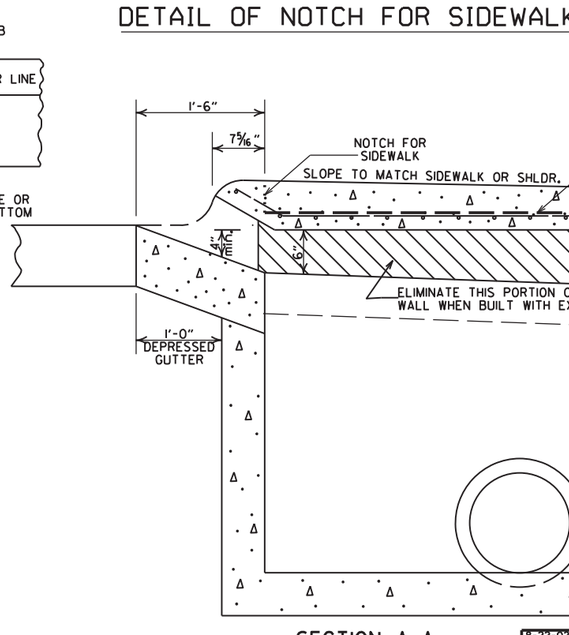
PLAN

NOTE: THIS DETAIL IS TYPICAL. OTHERS MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER.

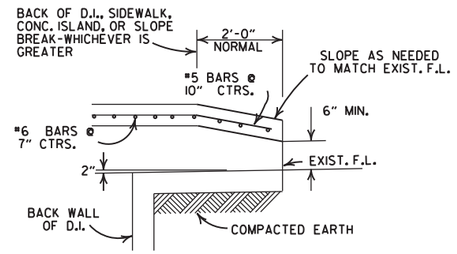
DETAIL OF STEP FOR DROP INLET



SECTION B-B



SECTION A-A



BACK OPENING

WHEN OPENING IN BACK IS CALLED FOR ON PLANS EXTEND OPENING AS SHOWN IN DETAIL. PAYMENT TO BE INCLUDED IN PRICE BID FOR DROP INLET (TYPE MO).

GENERAL NOTES:

1. ALL EXPOSED CORNERS TO HAVE 3/4" CHAMFER.
2. STEPS SHALL BE INSTALLED IN ALL INLETS 4'-0" HIGH AND OVER OR AS DIRECTED BY THE ENGINEER.
3. ALL REINFORCING BARS SHALL BE GRADE 60 AND HAVE MIN. 1 1/2" COVER.
4. DROP INLETS AND EXTENSION ON CURVED SECTIONS SHALL CONFORM TO THE CURVATURE OF THE CURB.
5. 4" DIA. COLUMNS SPACED AT MAX. 4'-0" INTERVALS SHALL BE INSTALLED ALONG INLET AND EXTENSION TO SUPPORT TOP.
6. BASE AND INLET WALLS SHALL BE CAST MONOLITHICALLY.
7. THE THROAT SHALL BE CAST INTEGRALLY WITH THE GUTTER.
8. PAYMENT FOR CURB AND/OR CURB AND GUTTER WITHIN THE LIMITS OF DROP INLETS AND DROP INLET EXTENSIONS SHALL BE CONSIDERED INCLUDED IN PAYMENT MADE FOR DROP INLETS AND/OR DROP INLET EXTENSIONS.
9. PIPES MAY ENTER DROP INLET FROM ANY ANGLE OR ELEVATION AS MAY BE APPROVED BY THE ENGINEER.
10. APPROPRIATE SIZE TYPE C DROP INLETS MAY BE SUBSTITUTED FOR TYPE MO DROP INLETS AS APPROVED BY THE ENGINEER. PAYMENT TO BE AS DROP INLET (TYPE MO).
11. DURING CONSTRUCTION OF THE ROADWAY THE CONTRACTOR SHALL MAINTAIN DRAINAGE INTO OR AROUND THE DROP INLET AS APPROVED BY THE ENGINEER.
12. 4"x2" NOTCH SHALL BE FORMED IN ALL DROP INLETS TO SUPPORT SIDEWALK CONSTRUCTION. REFER TO DETAIL OF NOTCH FOR SIDEWALKS.
13. DIMENSIONS SHOWN FOR RING AND COVER ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR CASTINGS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR CASTING DESIGNS MAY BE MADE BY REFERRING TO PREVIOUSLY APPROVED DRAWINGS.

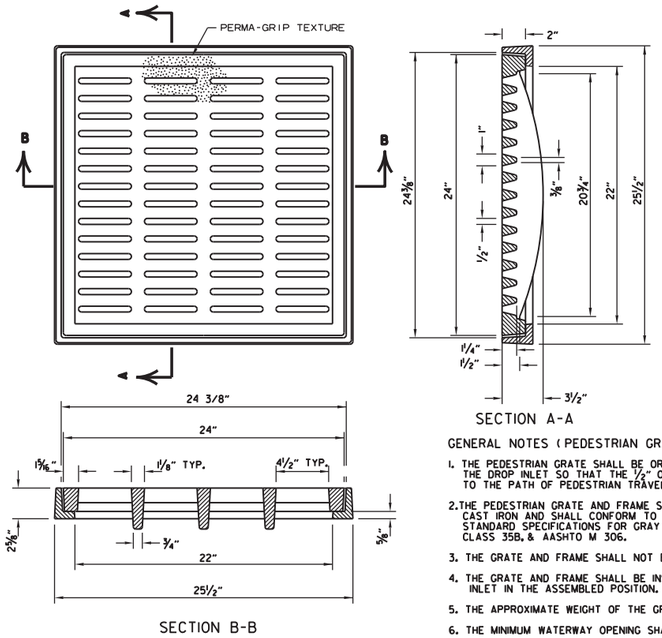
DIA. OF D.I.	DIA. OF OUTLET PIPE	MINIMUM WALL THICKNESS	
		CAST IN PLACE	PRECAST
4' I.D.	12" THRU 27"	6"	5"
5' I.D.	30" THRU 42"	8"	6"
6' I.D.	48" THRU 54"	8"	7"

DATE	REVISIONS	DATE FILMED
8-22-02	ADDED PAY LIMIT CURB NOTES TO SECTIONS A-A & B-B	
11-16-01	ADDED NOTE 13	
1-12-00	REVISED HEAVY DUTY RING & COVER	
5-13-99	ADDED NOTCH DETAIL FOR SIDEWALKS	
7-02-98	REP. NOTE 8, REM. PLAN DET., REV. PICTURE FOR NEW RING & COVER, ADDED HEAVY DUTY RING & COVER AND DETAIL OF STEP FOR DROP INLET	
4-26-96	ADDED NOTE 11, ADJ. OPENING DIMENSION	
10-12-95	CORRECTED #6 BAR SPACING	
7-20-95	CORRECTED DIAMETER OF D.I. IN BOX	
4-27-95	TYPE C TO MO (OPEN, BACK DETAIL)	
11-3-94	REVISED GENERAL NOTES	11-3-94
4-1-93	REV. BACK OPEN. DETAIL & NOTE	4-1-93
8-15-91	REVISED NOTES 11,12 & ADDED BK.OPEN DETAIL	8-15-91
11-30-89	ADDED NOTE NO. 12	11-30-89
5-23-89	ADDED NOTE & MINIMUM WALL THICKNESS	513-5-23-89
7-15-88	ADDED EXTEND NOTE TO SECTION A-A	629-7-15-88
1-14-87	MODIFIED WALL THICKNESS	783-1-14-87
6-12-87	ISSUED	4-6-12-87

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DROP INLET (TYPE MO)

STANDARD DRAWING FPC-9M



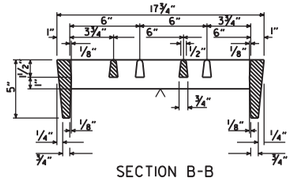
SECTION B-B

SECTION A-A

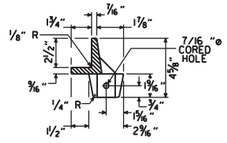
GENERAL NOTES (PEDESTRIAN GRATE & FRAME)

1. THE PEDESTRIAN GRATE SHALL BE ORIENTED IN THE TOP OF THE DROP INLET SO THAT THE 1/2" OPENINGS ARE PERPENDICULAR TO THE PATH OF PEDESTRIAN TRAVEL.
2. THE PEDESTRIAN GRATE AND FRAME SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M 105, CLASS 35B, & AASHTO M 306.
3. THE GRATE AND FRAME SHALL NOT BE PAINTED.
4. THE GRATE AND FRAME SHALL BE INSTALLED IN THE DROP INLET IN THE ASSEMBLED POSITION.
5. THE APPROXIMATE WEIGHT OF THE GRATE AND FRAME SHALL BE 211 LBS.
6. THE MINIMUM WATERWAY OPENING SHALL BE 122 SQ. IN.

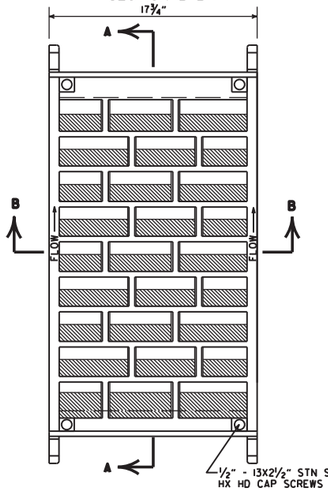
DETAILS OF PEDESTRIAN GRATE AND FRAME

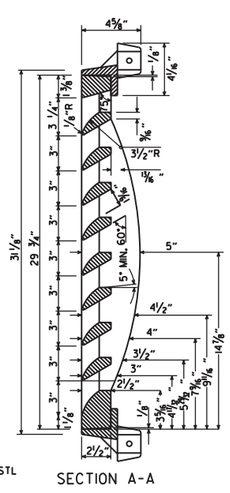


SECTION B-B



SECTION THRU FRAME



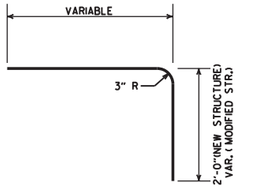


SECTION A-A

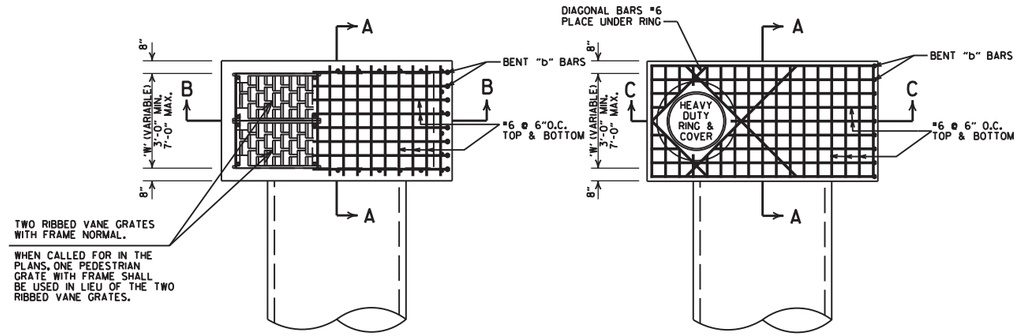
DETAILS OF RIBBED VANE GRATE AND FRAME

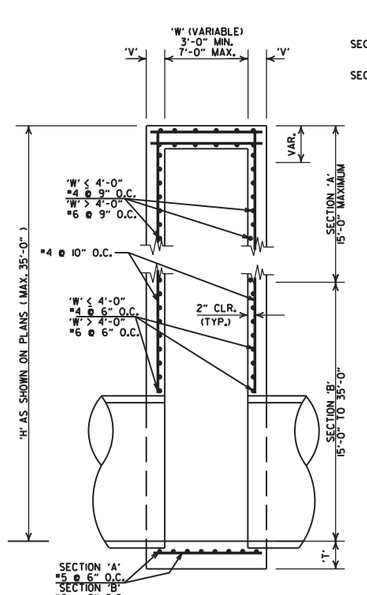
GENERAL NOTES (RIBBED VANE GRATE & FRAME)

1. RIBBED VANE GRATE AND FRAME SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M 105, CLASS 35B, & AASHTO M 306.
2. GRATE AND FRAME SHALL NOT BE PAINTED.
3. GRATE AND FRAME SHALL BE INSTALLED IN DROP INLET IN ASSEMBLED POSITION.
4. APPROXIMATE WEIGHT OF GRATE SHALL BE 170 LBS.

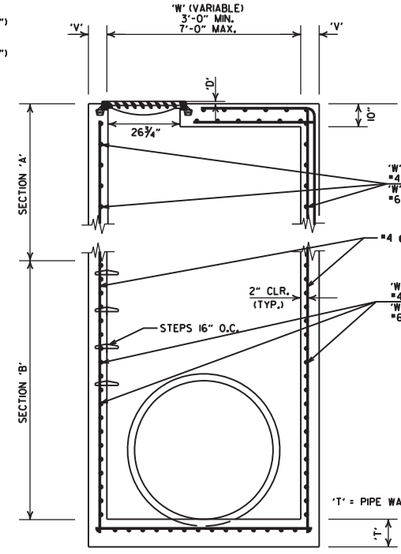


DETAIL OF BENT "b" BAR

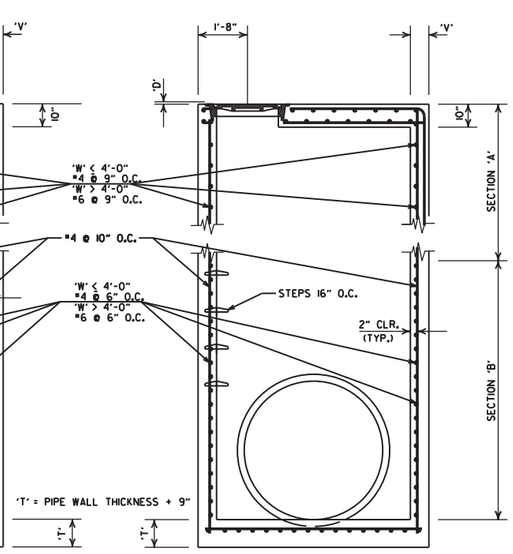




SECTION A-A

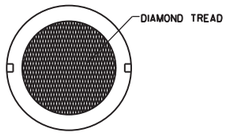


SECTION B-B

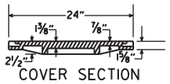


SECTION C-C

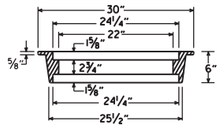
DETAILS OF DROP INLET (TYPE ST)



COVER FACE



COVER SECTION



RING SECTION

HEAVY DUTY RING & COVER

APPROXIMATE TOTAL WEIGHT = 333 LBS.

DETAILS OF JUNCTION BOX (TYPE ST)

GENERAL NOTES (TYPE ST DROP INLET & JUNCTION BOX)

1. THE 'D' DIMENSION SHALL MATCH THE FINAL LIFT OF ACHM SURFACE COURSE SHOWN IN THE PLANS WHEN ASPHALT PAVING SURROUNDS THE GRATE OR RING COVER, AND SHALL BE 0" AT OTHER INSTALLATIONS.
2. THE STEPS SHALL BE OMITTED WHERE 'H' IS LESS THAN 4'-0".
3. ALL EXPOSED CORNERS ARE TO HAVE A 3/4" CHAMFER.

GENERAL NOTES (HEAVY DUTY RING & COVER):

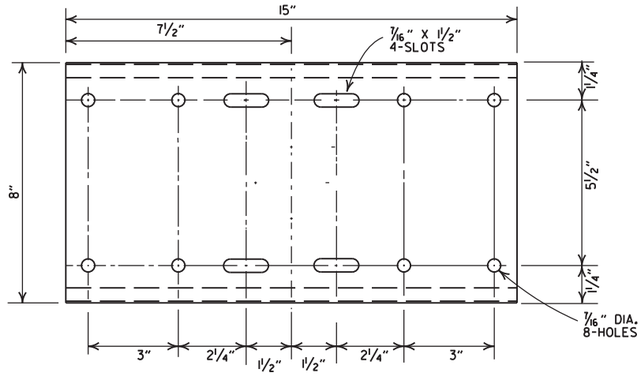
1. HEAVY DUTY RING AND COVER SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M 105, CLASS 35B, & AASHTO M 306.
2. HEAVY DUTY RING AND COVER SHALL NOT BE PAINTED.
3. HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON TOP.
4. DIMENSIONS SHOWN FOR RING AND COVER ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR CASTINGS WITH THE APPROVAL OF THE ENGINEER, REQUESTING APPROVAL FOR CASTING DESIGNS MAY BE MADE BY REFERRING TO PREVIOUSLY APPROVED DRAWINGS.

DATE REVISED	DATE FILMED	DESCRIPTION
7-26-12		REMOVED NOTE 4, REVISED 'T', REVISED BOTTOM SLAB REBAR FOR SECTION 'A', SHOWED REBAR CLEARANCE IN SECTIONS
11-16-01		ADDED NOTE 4
1-12-00		REVISED HEAVY DUTY RING & COVER
5-13-99		ADDED PEDESTRIAN FRAME & GRATE
7-02-98		REMOVED NOTE 5, REV. DIMENSIONS, ADDED HEAVY DUTY RING & COVER ADDED AASHTO REF. REVISED GRATE
10-18-96		REVISED ASTM REF. TO AASHTO
10-1-92		REVISED & REISSUED
8-15-91	8-15-91	REVISED & REISSUED

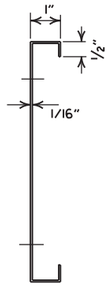
ARKANSAS STATE HIGHWAY COMMISSION

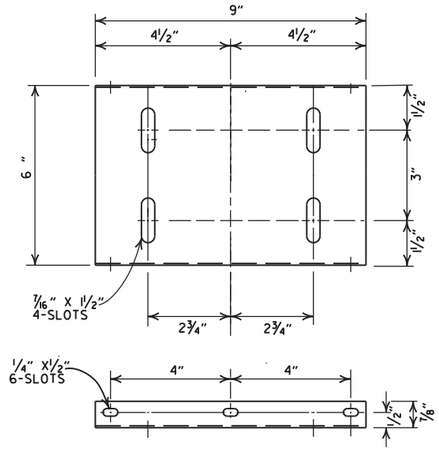
DETAILS OF DROP INLET & JUNCTION BOX (TYPE ST)

STANDARD DRAWING FPC-9S

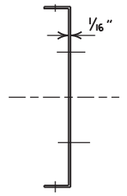


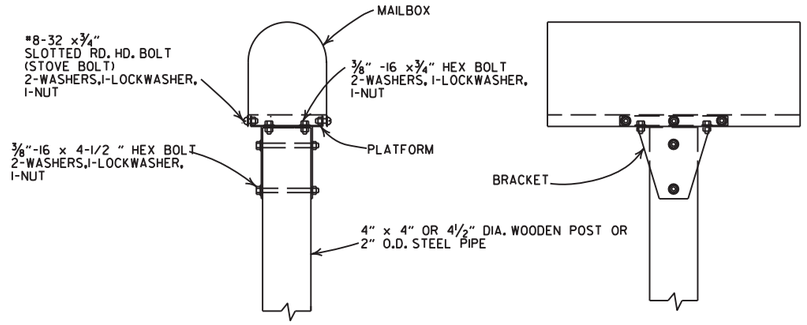
SHELF



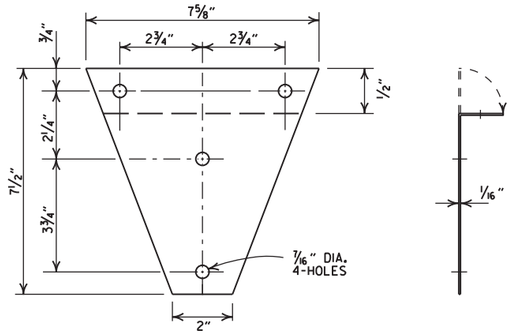


PLATFORM

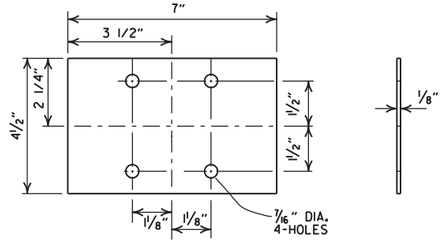




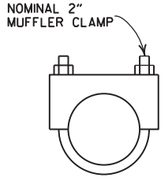
SINGLE INSTALLATION



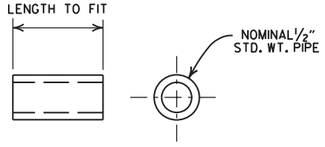
BRACKET



ANTI-TWIST PLATE



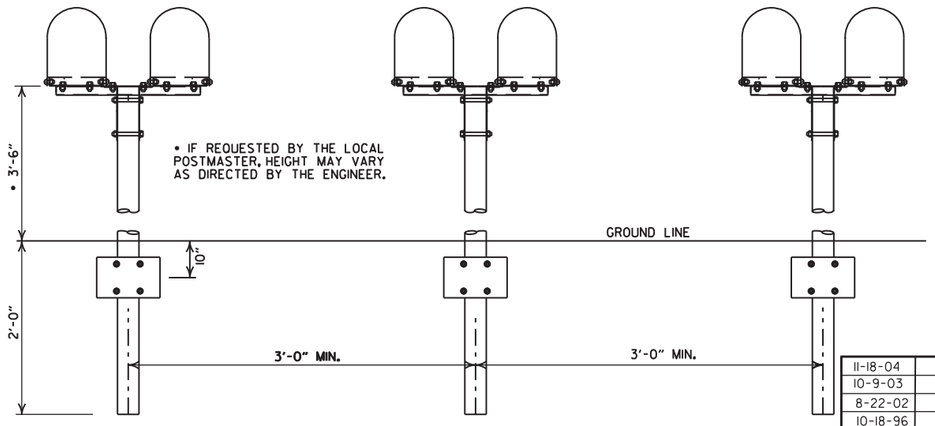
CLAMP



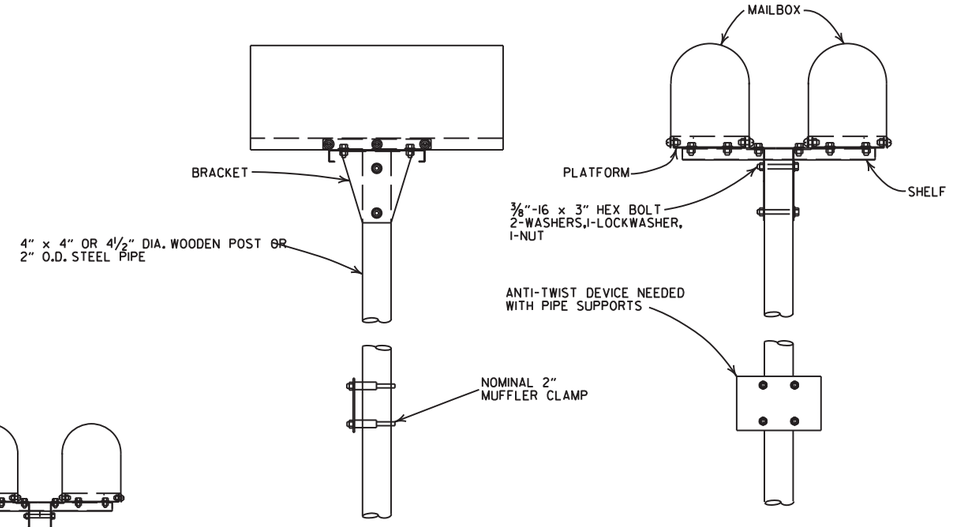
SPACER

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 OF ¾" THICK AND SHALL BE ASSEMBLED WITH BOLTS OF THE APPROPRIATE LENGTH WITH SIX 8 X ¾" 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 ARDOT QUALIFIED PRODUCTS LIST FOR MAILBOX SUPPORTS.



SPACING FOR MULTIPLE POST INSTALLATION



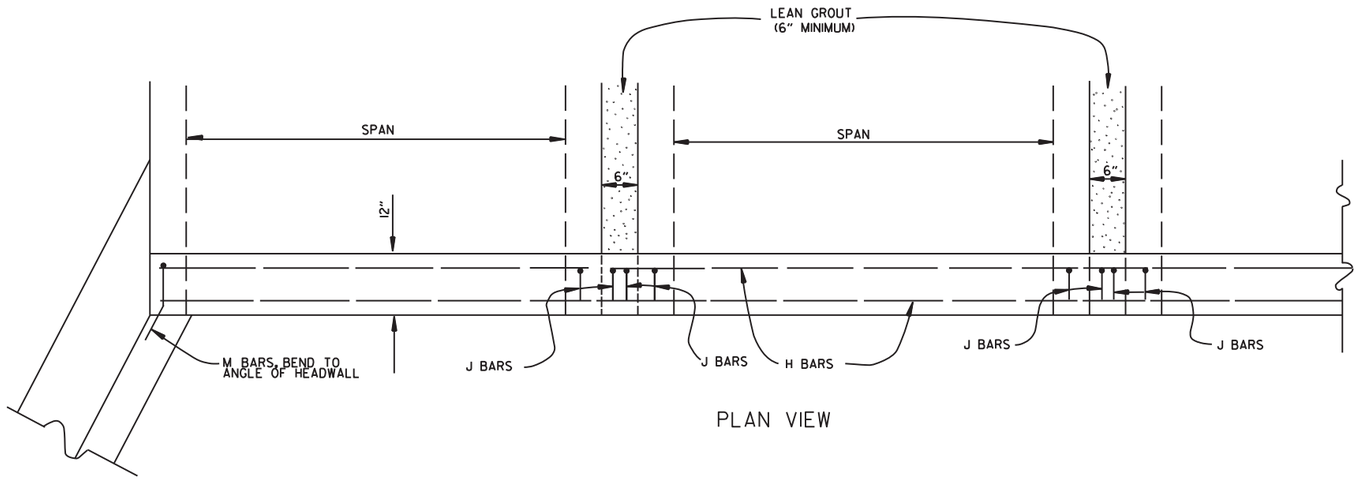
DOUBLE INSTALLATION

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	20-7-15-88	ISSUED

ARKANSAS STATE HIGHWAY COMMISSION

MAILBOX DETAILS

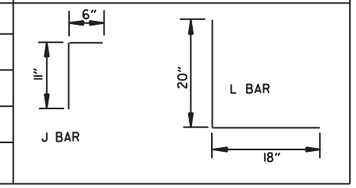
STANDARD DRAWING MB-1



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.

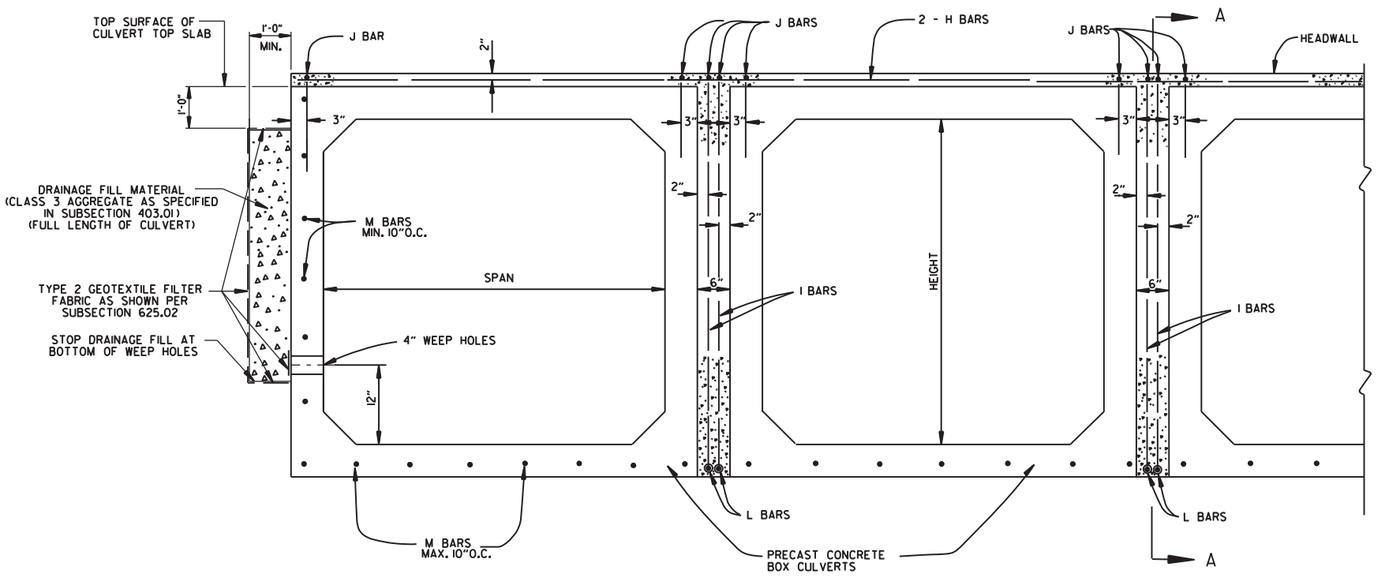
THE MEMBRANE WATERPROOFING WILL BE REQUIRED ON THE TOP EXTERNAL JOINT AND SHALL EXTEND 1 FOOT DOWN THE SIDES OF THE CULVERT.

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.

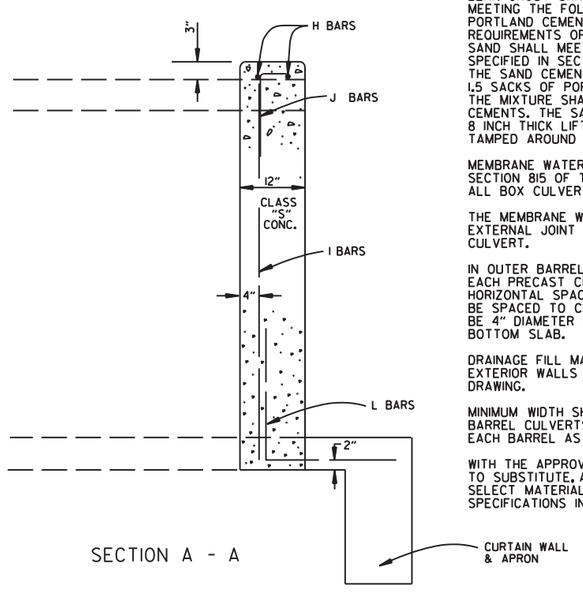
DRAINAGE FILL MATERIAL WITH GEOTEXTILE FABRIC IS REQUIRED AT THE EXTERIOR WALLS OF THE ASSEMBLED CULVERT, SEE DETAILS ON THIS DRAWING.

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	ARDOT NOMINAL	AASHTO M 206	ARDOT 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	87⅛	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.

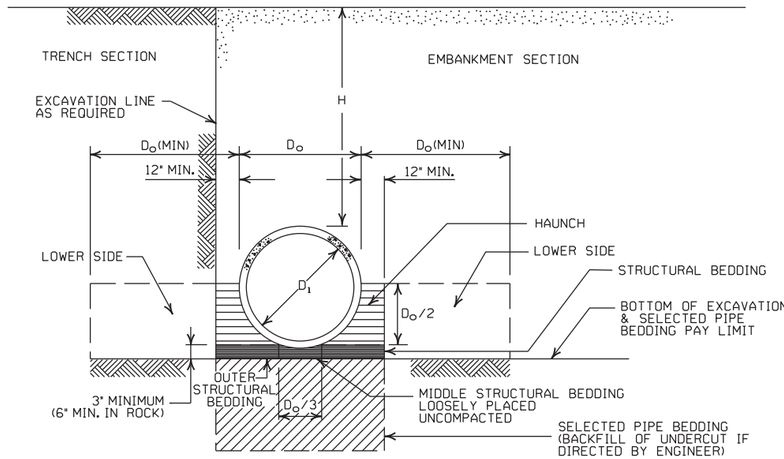
- LEGEND -

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 DEPARTMENT OF TRANSPORTATION 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.)	MAX. HEIGHT OF FILL, "H" (FT.)	MIN. THICKNESS REQUIRED INCHES	① MIN. HEIGHT OF FILL, "H" (FT.)	MAX. HEIGHT OF FILL, "H" (FT.)
				INSTALLATION TYPE 1	INSTALLATION TYPE 1		INSTALLATION TYPE 1	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.

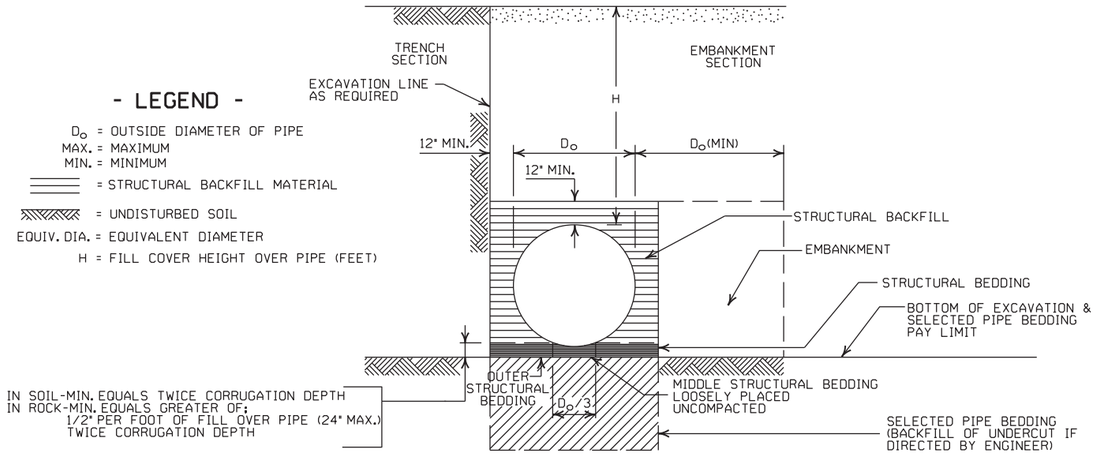
NOTE: STRUCTURAL BACKFILL AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF METAL PIPE.

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			
ZINC COATED	UNCOATED	ALUMINUM	
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 DEPARTMENT OF TRANSPORTATION 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.

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 TRENCH WIDTH BASED ON FILL HEIGHT "H"

PIPE DIAMETER	TRENCH WIDTH (FEET)	
	"H" < 10'-0"	"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"

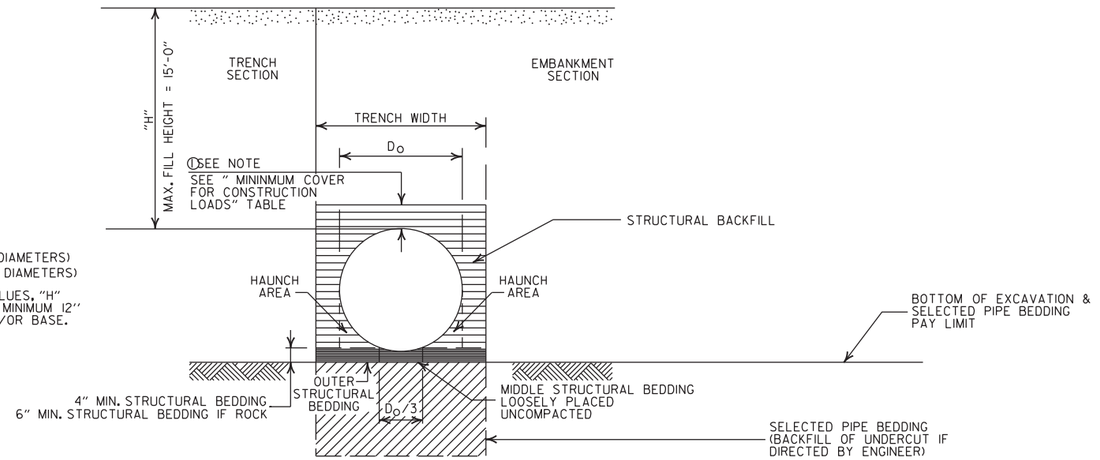
①NOTE:
18" MIN. (18" - 30" DIAMETERS)
24" MIN. (36" - 48" DIAMETERS)

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

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.



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 AASHTO M294, TYPE S. INSTALLATION SHALL CONFORM 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.)
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	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"	"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

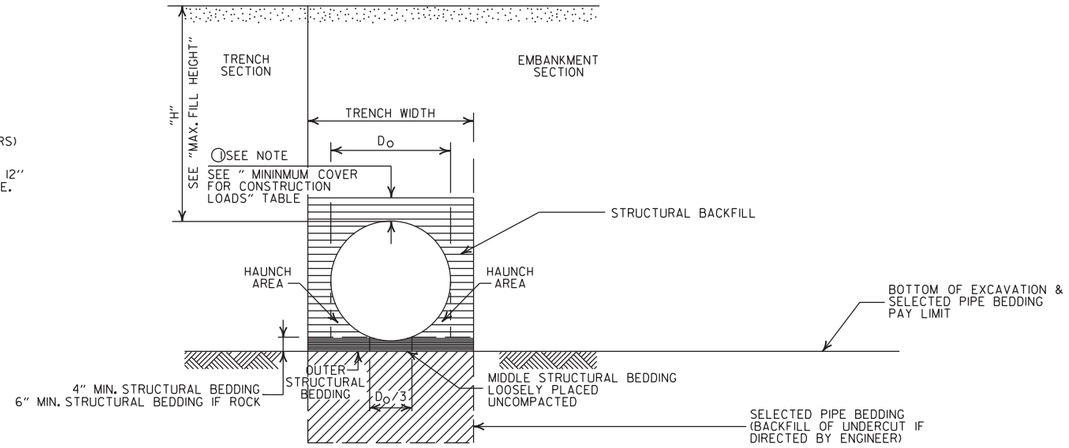
PIPE DIAMETER	"H"
18"	45'-0"
24"	45'-0"
30"	40'-0"
36"	40'-0"

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 CONFORM TO JOB SPECIAL PROVISION "PLASTIC PIPE" AND SECTION 606 OF THE STANDARD SPECIFICATIONS 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

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

*SM3 WILL NOT BE ALLOWED.

** STRUCTURAL BEDDING MATERIAL SHALL HAVE A MAXIMUM PARTICLE SIZE OF 1INCH. 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 POLYPROPYLENE PIPE.

MULTIPLE INSTALLATION OF POLYPROPYLENE 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"
60"	5'-0"

MINIMUM TRENCH WIDTH BASED ON FILL HEIGHT "H"

PIPE DIAMETER	TRENCH WIDTH (FEET)	
	"H" < 10'-0"	"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"
60"	10'-0"	15'-0"

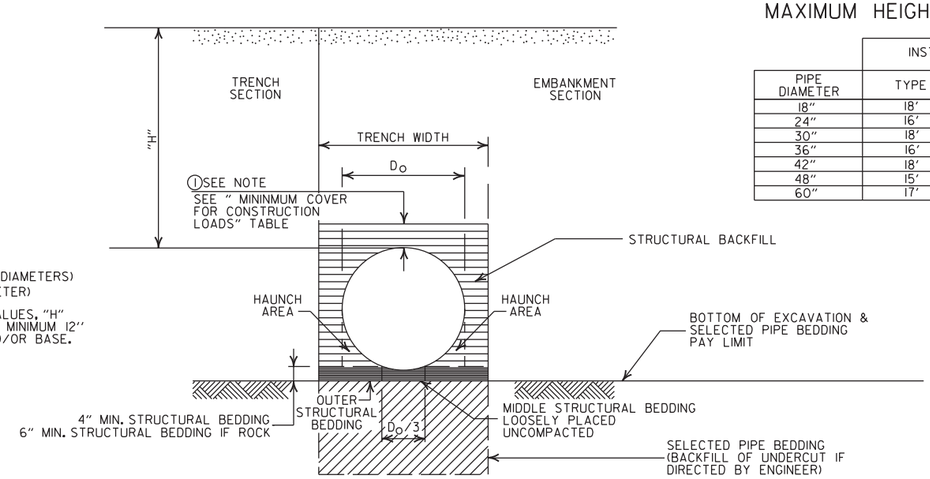
①NOTE:
12" MIN. (18" - 42" DIAMETERS)
24" MIN. (60" DIAMETER)

MINIMUM COVER VALUES, "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)	110.0-150.0 (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.



MAXIMUM HEIGHT OF FILL "H"

PIPE DIAMETER	INSTALLATION TYPE	
	TYPE 1	TYPE 2
18"	18'	14'
24"	16'	12'
30"	18'	14'
36"	16'	12'
42"	18'	13'
48"	15'	11'
60"	17'	12'

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 AASHTO M330, TYPE S, INSTALLATION SHALL CONFORM 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, SIXTH EDITION (2012) WITH 2013 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. POLYPROPYLENE PIPES OF DIAMETERS OTHER THAN SHOWN WILL NOT BE ALLOWED.
9. JOINTS FOR POLYPROPYLENE PIPE SHALL MEET THE REQUIREMENTS FOR SOIL TIGHTNESS AS SPECIFIED IN SECTION 26.4.2.4 AND 30.4.2 OF THE AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS 3RD EDITION (2010) WITH 2012 INTERIMS. 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

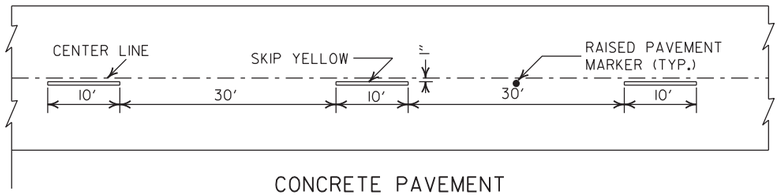
DATE	REVISION	DATE FILMED
02-27-20	REVISED	
11-07-19	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

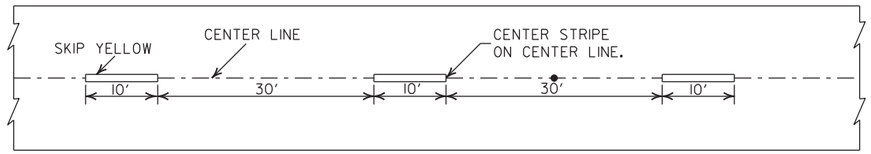
PLASTIC PIPE CULVERT (POLYPROPYLENE)

STANDARD DRAWING PCP-3

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.

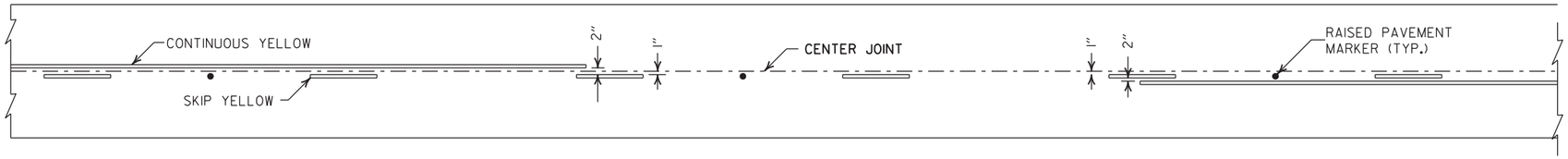


CONCRETE PAVEMENT

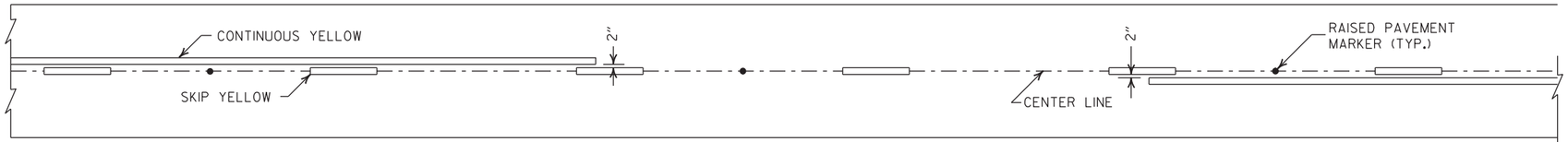


ASPHALT PAVEMENT

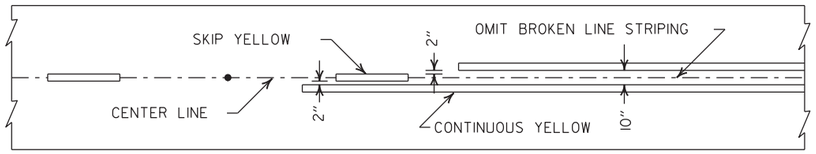
BROKEN LINE STRIPING



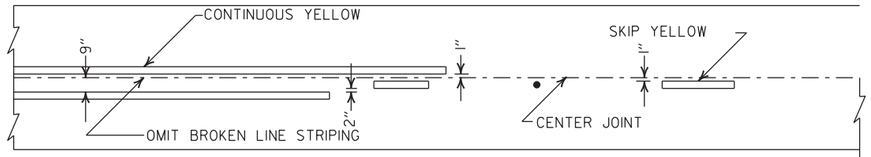
SOLID LINE STRIPING ON CONCRETE PAVEMENT



SOLID LINE STRIPING ON ASPHALT PAVEMENT

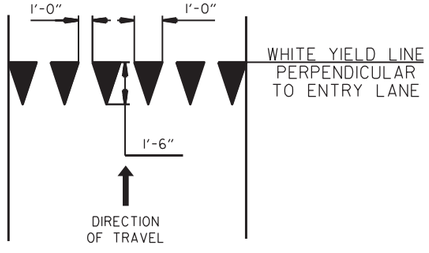


ASPHALT PAVEMENT

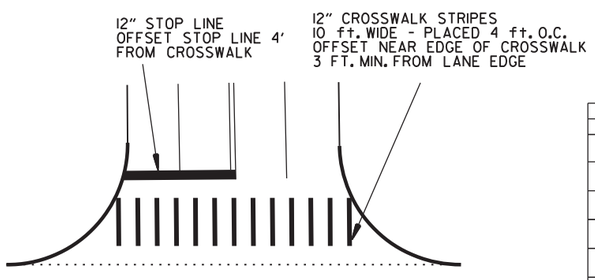


CONCRETE PAVEMENT

STRIPING AT ADJACENT NO PASSING LANES

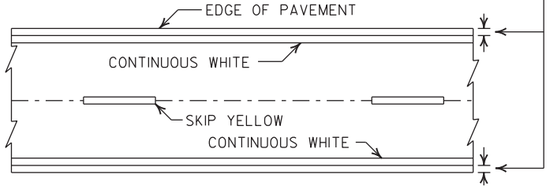


YIELD LINE DETAIL



CROSSWALK AND STOP LINE DETAILS

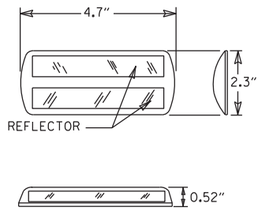
2" FOR ASPHALT OR CONCRETE PAVEMENT
6" FOR BITUMINOUS SURFACE TREATMENT



PAVEMENT EDGE LINE MARKING

NOTE:
THE RED LENS OF THE TYPE II R.P.M. SHALL FACE THE INCORRECT TRAFFIC MOVEMENT.

TYPE II
RED/CLEAR OR
YELLOW/YELLOW



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 ARDOT QUALIFIED PRODUCTS LIST.

DETAIL OF STANDARD RAISED PAVEMENT MARKERS

DATE	REVISION	FILMED
2-27-20	REVISED STOP LINE DETAILS	
6-1-17	ADDED YIELD LINE DETAIL	
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

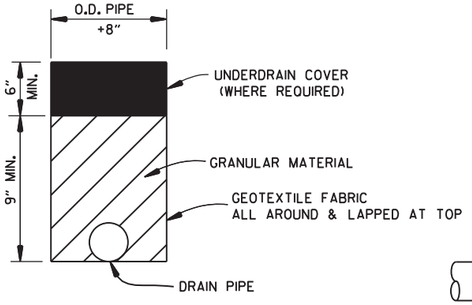
PAVEMENT MARKING DETAILS

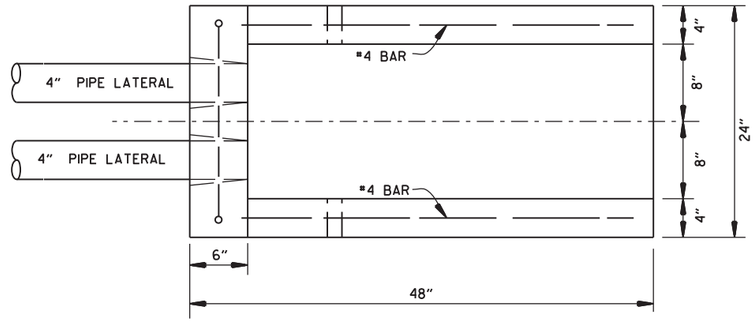
STANDARD DRAWING PM-1

NOTE:

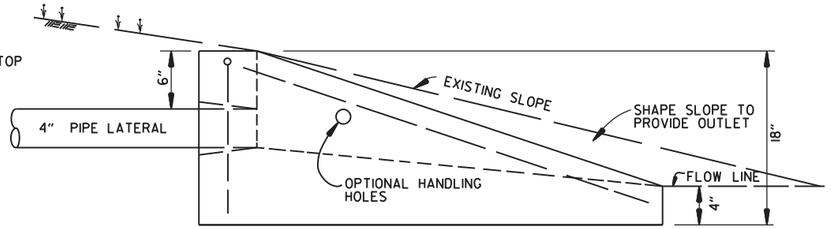
1. UNLESS OTHERWISE SPECIFIED ON THE PLANS, THE UNDERDRAIN COVER SHALL BE THOROUGHLY COMPACTED EARTH AND SHALL BE SUBSIDIARY TO PIPE UNDERDRAIN.

2. GRANULAR MATERIAL SHALL BE WRAPPED WITH GEOTEXTILE FABRIC. LAP FABRIC 12" OR THE WIDTH OF THE TRENCH AT THE TOP.

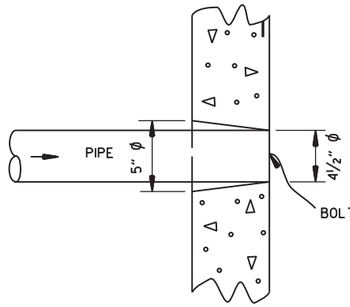




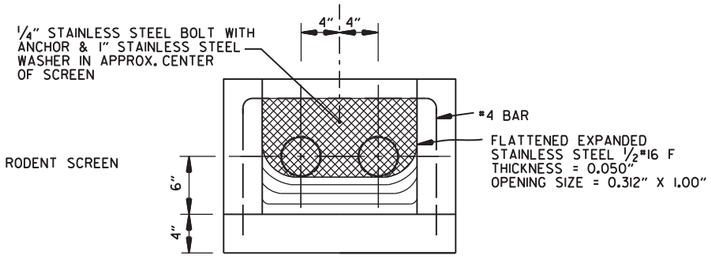
PLAN VIEW



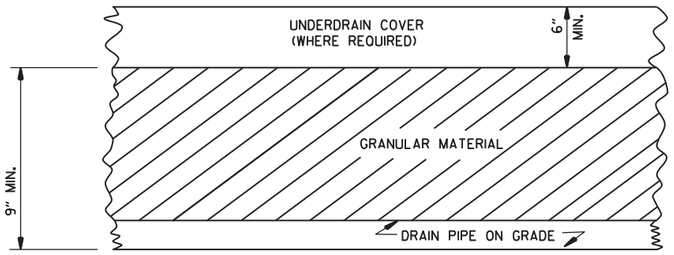
SIDE VIEW



DETAIL OF HOLE FOR 4" PIPE

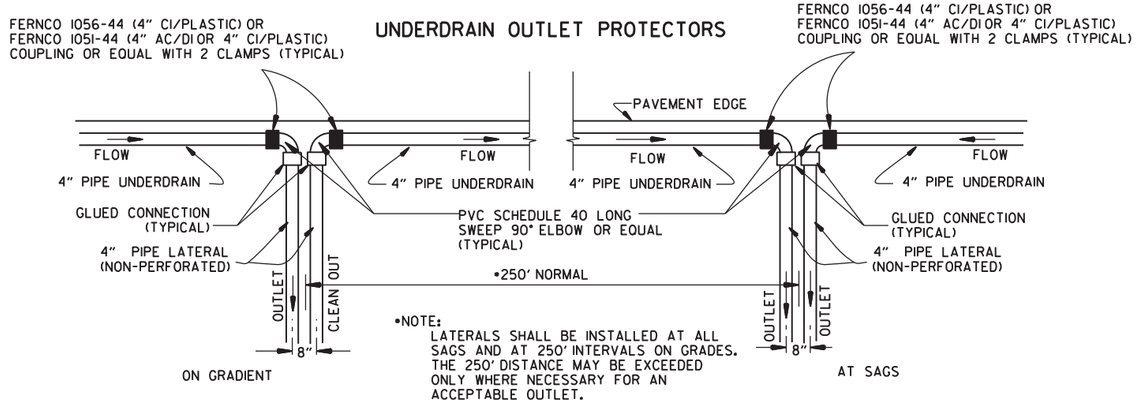


FRONT VIEW
(DETAIL OF RODENT SCREEN)



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.

NOTES FOR PIPE UNDERDRAINS

1. GEOTEXTILE FABRIC SHALL MEET THE REQUIREMENTS OF SECTION 625 FOR TYPE 1. PAYMENT FOR GEOTEXTILE FABRIC AND GRANULAR FILTER MATERIAL SHALL BE INCLUDED IN THE PRICE BID PER LIN. FT. FOR "4" PIPE UNDERDRAINS" IN ACCORDANCE WITH SECTION 611 OF THE STANDARD SPECIFICATIONS.

2. 4" NON-PERFORATED SCHEDULE 40 PVC PIPE LATERALS WITH OUTLET PROTECTORS SHALL BE INSTALLED AS SHOWN HEREON. LATERALS WILL BE MEASURED AND PAID FOR AS "4" PIPE UNDERDRAINS." UNDERDRAIN OUTLET PROTECTORS WILL BE MEASURED AND PAID FOR BY THE UNIT IN ACCORDANCE WITH SECTION 611 OF THE STANDARD SPECIFICATIONS.

3. EXISTING 4" PIPE UNDERDRAINS MAY BE CONNECTED TO PROPOSED DROP INLETS OR EXTENDED WHERE DIRECTED BY THE ENGINEER. PAYMENT FOR CONNECTING TO DROP INLETS SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR "4" PIPE UNDERDRAINS."

4. THE LOCATION OF ALL LATERALS SHALL BE MARKED WITH 4" X 12" PERMANENT PAVEMENT MARKING TAPE (TYPE III WHITE) AT THE OUTSIDE EDGE OF THE SHOULDER, PLACED TRANSVERSE TO TRAFFIC. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS.

5. PAYMENT FOR THE RODENT SCREEN SHALL BE INCLUDED IN THE PRICE BID PER EACH FOR "UNDERDRAIN OUTLET PROTECTORS."

6. ANY EXISTING UNDERDRAINS THAT INTERFERE WITH INSTALLATION OF THE NEW UNDERDRAIN SYSTEM SHALL BE REMOVED AND DISPOSED OF AS DIRECTED BY THE ENGINEER. PAYMENT WILL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS. EXISTING UNDERDRAIN OUTLET PROTECTORS SHALL BE REMOVED UNDER THE ITEM "REMOVAL AND DISPOSAL OF UNDERDRAIN OUTLET PROTECTORS."

7. AT LOCATIONS WHERE A SINGLE LATERAL IS USED THE CONTRACTOR SHALL HAVE THE FOLLOWING OPTIONS: 1. INSTALL OUTLET PROTECTOR AS SHOWN ON STANDARD DRAWING PU-1 AND GROUT THE UNUSED HOLE OR 2. INSTALL AN OUTLET PROTECTOR WITH A SINGLE HOLE.

DATE	REVISION	DATE FILMED
12-8-16	ADDED NOTES FOR PIPE UNDERDRAINS, REVISED RODENT SCREEN DETAIL AND NOTES, REMOVED NOTE 1 FOR GRANULAR MATERIAL, ADDED NOTE FOR GEOTEXTILE FABRIC	
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

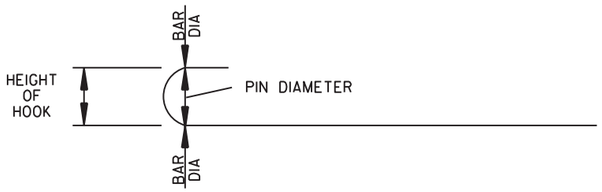
DETAILS OF PIPE UNDERDRAIN

STANDARD DRAWING PU-1

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

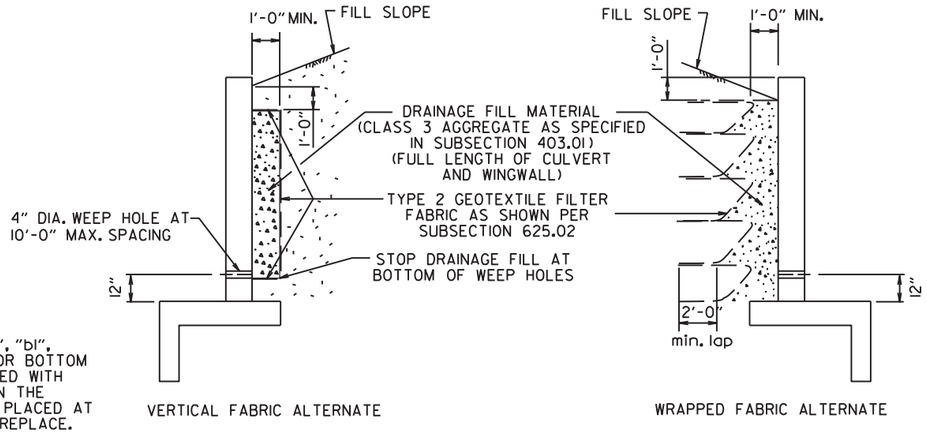
THE HOOKED BARS SHALL BE PLACED IN THE BOTTOM OF THE TOP SLAB AND THE TOP OF THE BOTTOM SLAB. THE STRAIGHT BARS SHALL BE PLACED IN THE TOP OF THE TOP SLAB AND THE BOTTOM OF THE BOTTOM SLAB. SEE TABLE BELOW FOR LENGTHS OF REPLACEMENT HOOKED AND STRAIGHT BARS.

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.

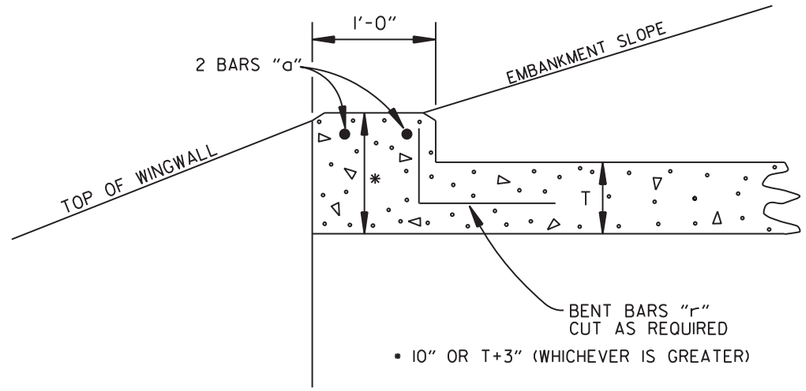
MEMBRANE WATERPROOFING SHALL BE APPLIED TO ALL CONSTRUCTION JOINTS IN THE TOP SLAB AND THE SIDEWALLS OF R.C. BOX CULVERTS AS DIRECTED BY THE ENGINEER. NO PAYMENT SHALL BE MADE FOR THIS ITEM, BUT PAYMENT WILL BE CONSIDERED TO BE INCLUDED IN THE VARIOUS ITEMS BID FOR THE R.C. BOX CULVERT.

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.

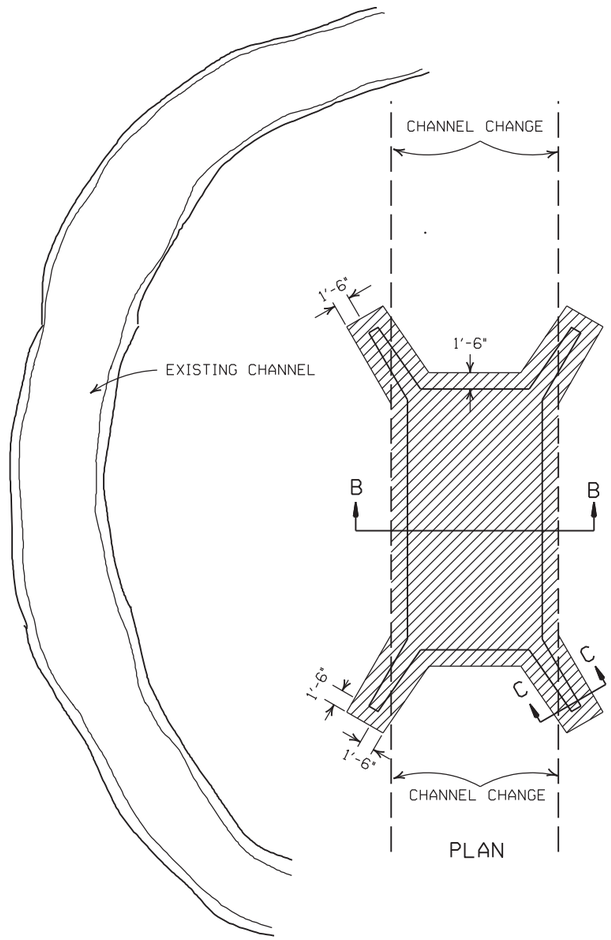
R.C. BOX CULVERT HEADWALL MODIFICATIONS

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

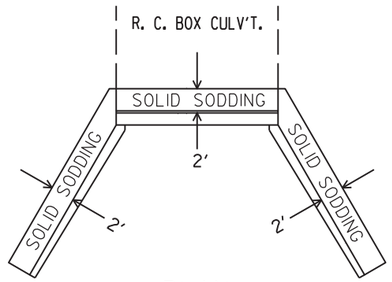
REINFORCED CONCRETE BOX CULVERT DETAILS

STANDARD DRAWING RCB-1



PLAN

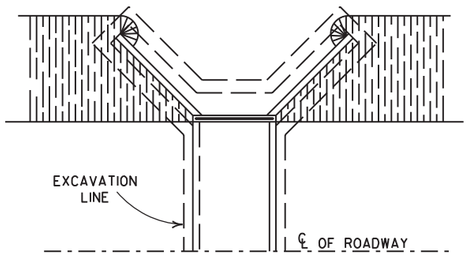
SOLID SODDING



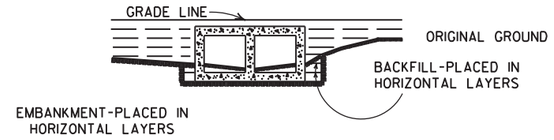
PLAN

PARTIAL SECTION SHOWING SOLID SODDING AT HEADWALLS AND WING WALLS

NOTE: LENGTH MEASURED ALONG THE CENTER OF 2' STRIP OF SOLID SODDING.

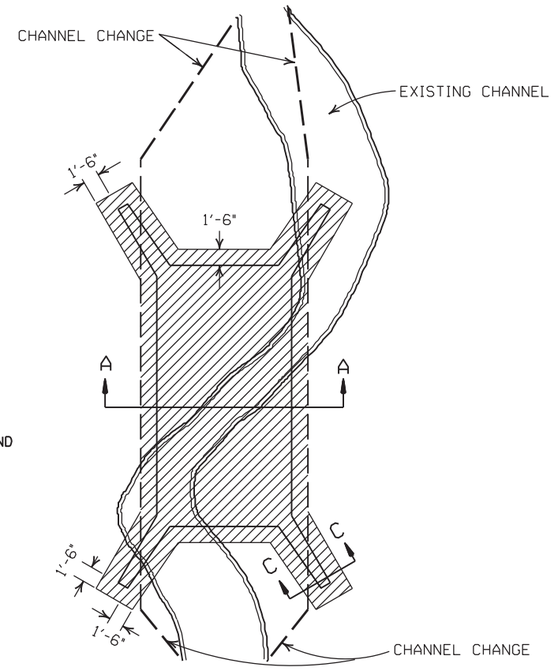


PLAN

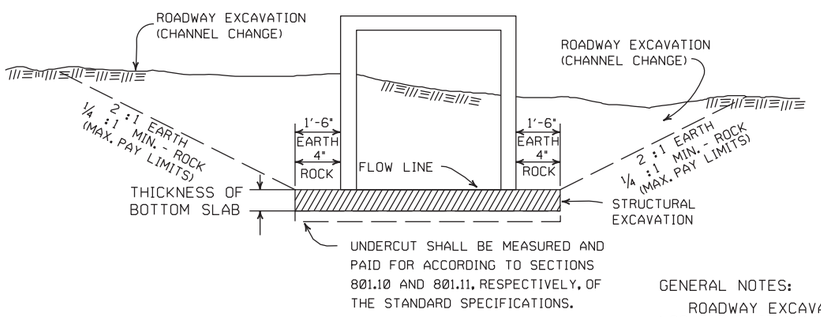


LONGITUDINAL SECTION

BACKFILL DETAILS FOR BOX CULVERT

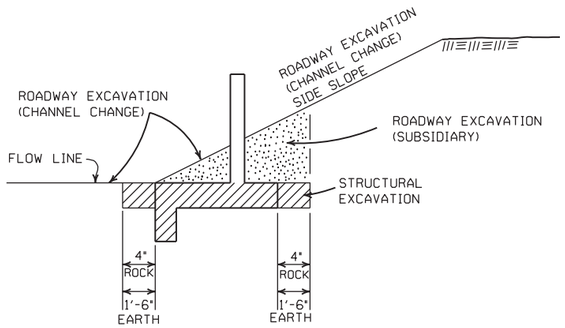


PLAN

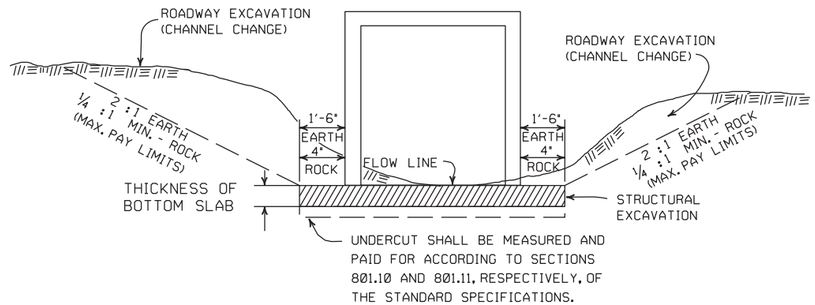


SECTION B-B

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.

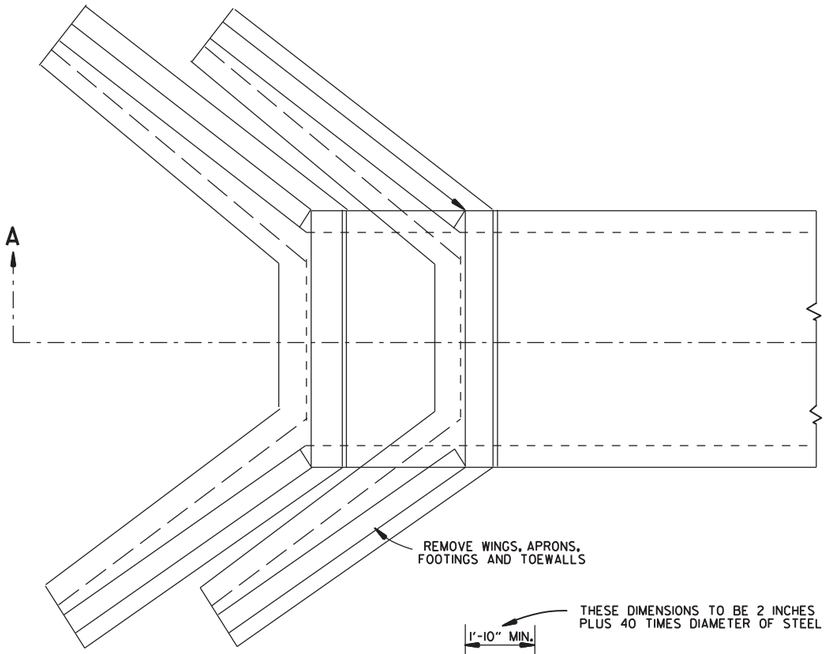
ROADWAY EXCAVATION SHOWN IN SECTION C-C ABOVE AS SUBSIDIARY WILL NOT BE MEASURED OR PAID FOR DIRECTLY, BUT PAYMENT WILL BE CONSIDERED TO BE INCLUDED IN THE VARIOUS ITEMS OF EXCAVATION.

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	674-1-4-83
	AND ADDED MAXIMUM PAY	
	LIMIT NOTES.	
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

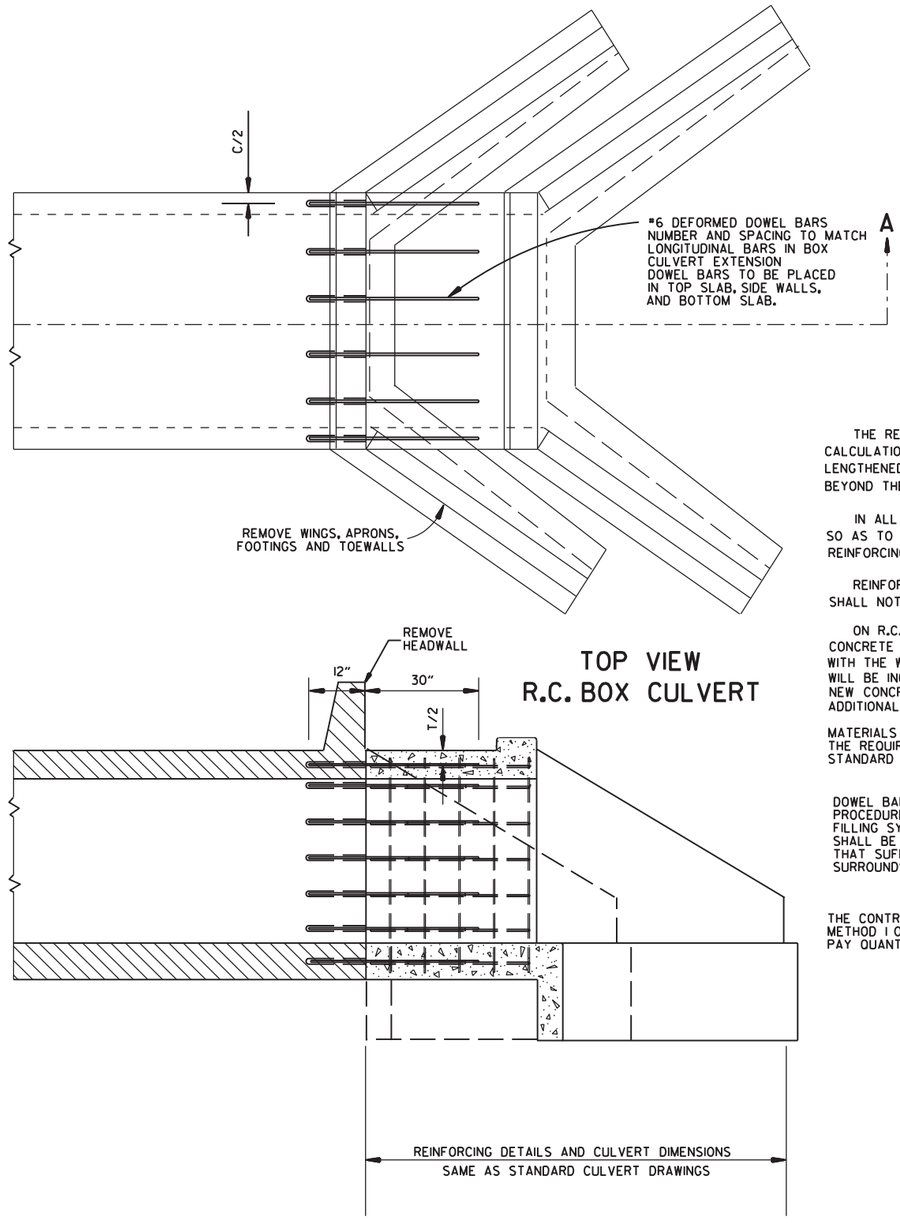
STANDARD DRAWING RCB-2



TOP VIEW
R.C. BOX CULVERT

SECTION A-A

METHOD 1



TOP VIEW
R.C. BOX CULVERT

SECTION A-A

METHOD 2

GENERAL NOTES

	USE FOR METHOD
THE RESIDENT ENGINEER WILL MAKE INDIVIDUAL CALCULATIONS OF QUANTITIES FOR EACH STRUCTURE LENGTHENED, MAKING NO ALLOWANCE FOR OVERBREAKAGE BEYOND THE LINES INDICATED.	1
IN ALL INSTANCES CONCRETE SHALL BE REMOVED SO AS TO PERMIT FULL 40 DIAMETER SPLICE OF REINFORCING STEEL.	1
REINFORCING STEEL REMOVED FROM EXISTING STRUCTURE SHALL NOT BE REUSED IN CONSTRUCTING EXTENSION.	1&2
ON R.C. BOX CULVERTS THAT HAVE AN EXISTING CONCRETE APRON; THE CONCRETE APRON SHALL BE REMOVED WITH THE WINGS. THE COST OF REMOVING ALL OLD CONCRETE WILL BE INCLUDED IN THE PRICE BID PER CUBIC YARD FOR NEW CONCRETE OF THE CLASS SPECIFIED AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.	1&2
MATERIALS FOR SECURING DOWEL BARS SHALL MEET THE REQUIREMENTS OF SECTION 507.02 OF THE STANDARD SPECIFICATIONS.	2
DOWEL BARS SHALL BE INSTALLED AS FOLLOWS: THE DRILLING PROCEDURE SHALL BE APPROVED BY THE ENGINEER, THE FILLING SYSTEM SHALL BE APPROVED BY THE ENGINEER, AND SHALL BE AN INJECTION-TYPE SYSTEM WHICH WILL INSURE THAT SUFFICIENT MATERIAL IS INJECTED SO IT COMPLETELY SURROUNDS THE BARS AND FILLS THE HOLES.	2
THE CONTRACTOR SHALL HAVE THE OPTION OF USING EITHER METHOD 1 OR METHOD 2. REGARDLESS OF WHICH METHOD IS USED, PAY QUANTITIES WILL BE CALCULATED BASED ON METHOD 1.	1&2

NOTE:
NO PART OF THIS STANDARD IS TO BE USED FOR ANY DETAILS RELATIVE TO NEW CONSTRUCTION.

SEE STANDARD DRAWING LISTED IN TABULATION OF STRUCTURES FOR ALL NEW CONSTRUCTION DETAILS.

DATE	REVISION	DATE FILM
10-12-95	CHANGED DRAWING # FROM 144-A	
4-1-93	ADDED GENERAL NOTE	
10-1-92	ADDED ALT. METHOD OF EXTENSION	
11-30-89	REDRAWN	
1-4-83	ELIMINATED CONCRETE CLASS	
12-20-56	RETRACED	

ARKANSAS STATE HIGHWAY COMMISSION

METHOD OF EXTENDING EXISTING R.C. BOX CULVERTS

STANDARD DRAWING RCB-3

MINIMUM STRUCTURAL REQUIREMENTS:

DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, 4TH EDITION (2001) WITH 2003 AND 2006 INTERIMS.

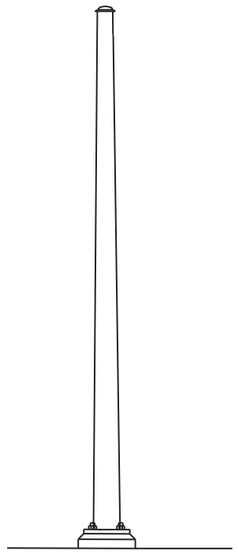
USE FATIGUE CATEGORY II.

CONSTRUCTION SPECIFICATIONS: STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION) WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.

BASE WIND SPEED: 90 MPH

STEEL MEMBERS CONSIDERED MAIN LOAD CARRYING MEMBERS WITH A THICKNESS GREATER THAN ½" SHALL MEET THE LONGITUDINAL CHARPY V-NOTCH TEST SPECIFIED IN SUBSECTION 807.05 OF THE STANDARD SPECIFICATIONS.

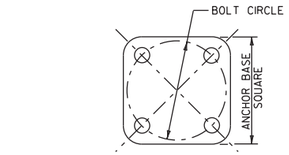
THE GROUND ROD SHALL BE FUSION WELDED TO A IC/#8 A.W.G. SOLID COPPER GROUND WIRE. ATTACHMENT TO THE PRIMARY GROUND MAY BE BY AN APPROVED CLAMP. THE ROD IS TO BE LOCATED IN THE CONCRETE PULL BOX PAID FOR SEPARATELY AS SHOWN ON THE PLANS.



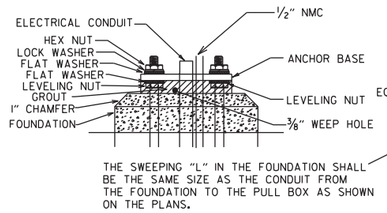
ANTENNA POLE

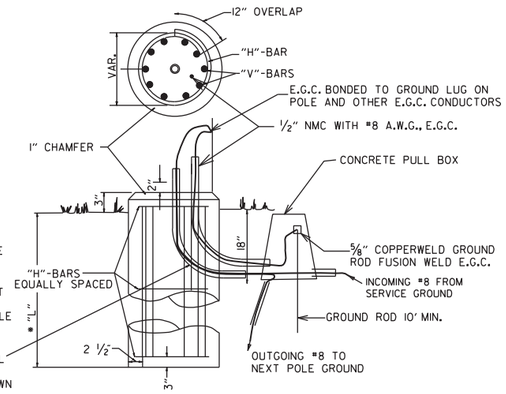
NOTE:

COMMUNICATION CABLE SHIELD SHALL BE TIED TO THE GROUND AT ONE ONE POINT (MASTER CABINET). THE SHIELD SHALL BE MAINTAINED CONTINUOUS (THROUGH ALL SPLICES). PLEASE REFER TO TESTING PROCEDURES IN SPECIAL PROVISIONS.



ANCHOR BASE





TYPICAL FOUNDATION DETAILS

POLE FOUNDATION MINIMUM DIMENSIONS AND STEEL REINFORCING.

POLE HEIGHT	FOUNDATION DIAMETER	DEPTH "L"	VERTICAL	HORIZONTAL	TIE SPACING
20.0'	30"	5'-6"	12-#7	#4	5 SP @ 12"
25.0'	30"	6'-0"	12-#7	#4	6 SP @ 11"
30.0'	30"	6'-6"	12-#7	#4	6 SP @ 12"
35.0'	30"	7'-0"	12-#7	#4	7 SP @ 11"
40.0'	30"	7'-6"	12-#7	#4	7 SP @ 12"
45.0'	36"	8'-6"	13-#8	#4	8 SP @ 12"
50.0'	36"	9'-6"	13-#8	#4	9 SP @ 12"
55.0'	36"	10'-0"	13-#8	#4	10 SP @ 11"
60.0'	36"	10'-6"	13-#8	#4	10 SP @ 12"
65.0'	36"	11'-0"	13-#8	#4	12 SP @ 10 ½"
70.0'	36"	11'-6"	13-#8	#4	11 SP @ 12"
75.0'	42"	13'-0"	18-#8	#4	14 SP @ 10 ½"
80.0'	42"	13'-6"	18-#8	#4	13 SP @ 12"
85.0'	42"	14'-6"	18-#8	#4	14 SP @ 12"
90.0'	42"	15'-0"	18-#8	#4	18 SP @ 9 ½"

ALL CONCRETE SHALL BE CLASS "S" WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH F'C=3500 PSI. CONCRETE SHALL BE POURED IN THE DRY AND ALL EXPOSED CORNERS CHAMFERED ¾" UNLESS NOTED OTHERWISE.

ALL REINFORCING STEEL SHALL CONFORM TO AASHTO M31 OR M53, GRADE 40 (YIELD STRENGTH=40,000 PSI).

PROVIDE 3" CLEAR TIES. DETAIL 3" TO FIRST TIE AT TOP OF SHAFT.

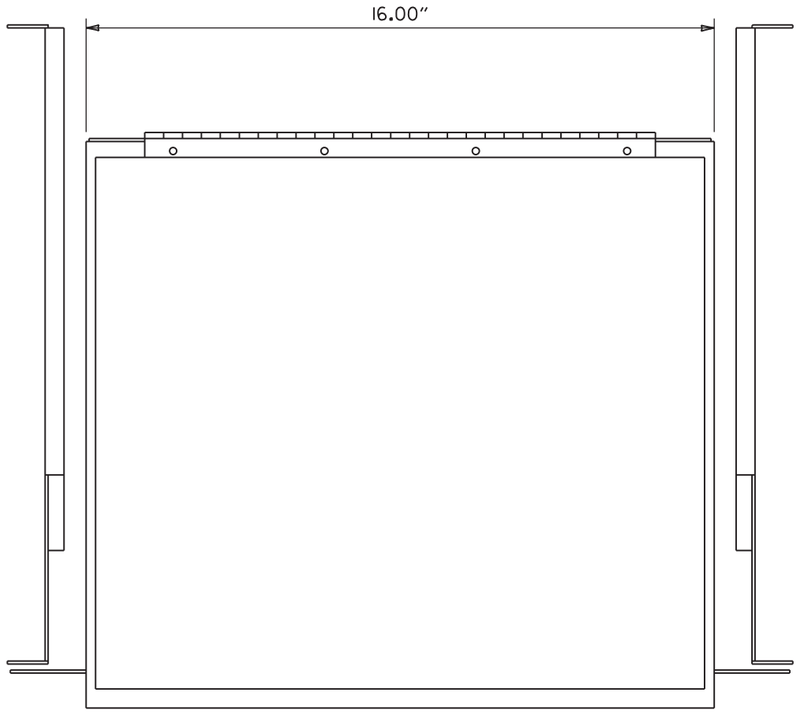
DATE	REVISION	FILMED
11-16-17	REVISED NOTES	
02-27-14	REVISED NOTES.	
09-12-13	ISSUED AS STANDARD DRAWING	
05-21-09	REVISED GROUNDING	
07-31-08	REVISED GROUNDING	
04-18-08	REVISED AASHTO NOTES	
04-17-08	REVISED TO 2001 AASHTO STANDARDS	
09-06-00	ISSUED	

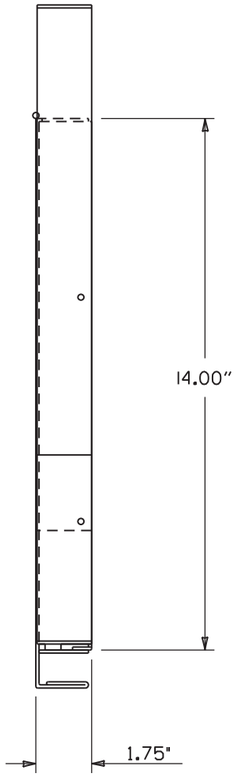
ARKANSAS STATE HIGHWAY COMMISSION

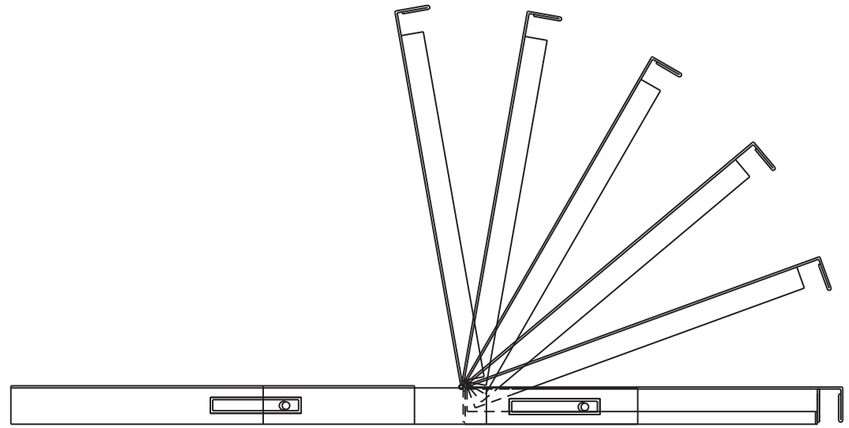
ANTENNA POLE

STANDARD DRAWING SD-1

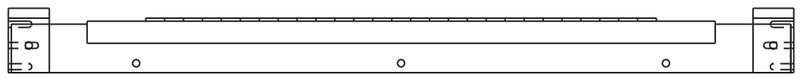
DRAWER PLAN VIEW



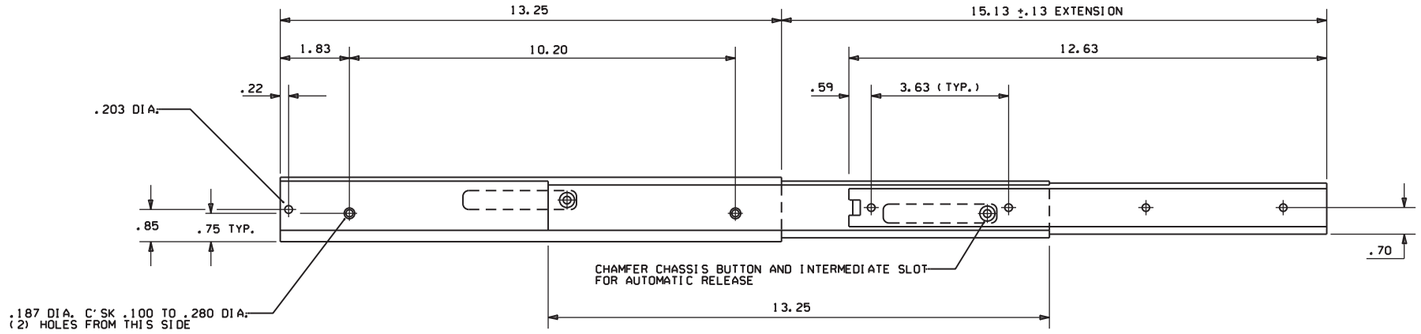




NOTES:
1. RIGHT HAND SLIDE SHOWN, LEFT SLIDE OPPOSITE.
2. GENERAL DEVICES (CC3002-99-0102) OR EQUAL AND CONTAINS (1) RIGHT HAND SLIDE ASSEMBLY, (1) LEFT HAND SLIDE ASSEMBLY.
3. ALL HARDWARE NECESSARY TO FASTEN SLIDE ASSEMBLY TO UNDERSIDE OF CONTROLLER SHELF SHALL BE INCLUDED.



FRONT VIEW



RIGHT SIDE ASSEMBLY

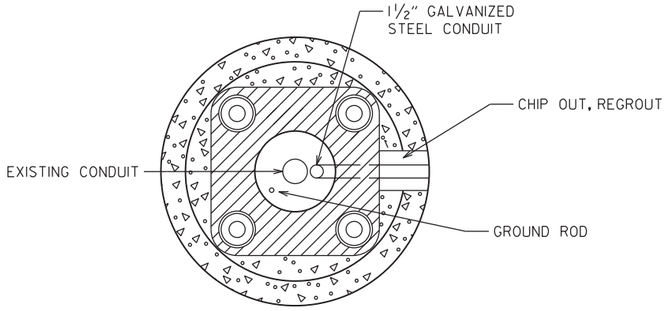
DATE	REVISION	DATE FILM
9-12-13	ISSUED AS STANDARD DRAWING	
6-15-05	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

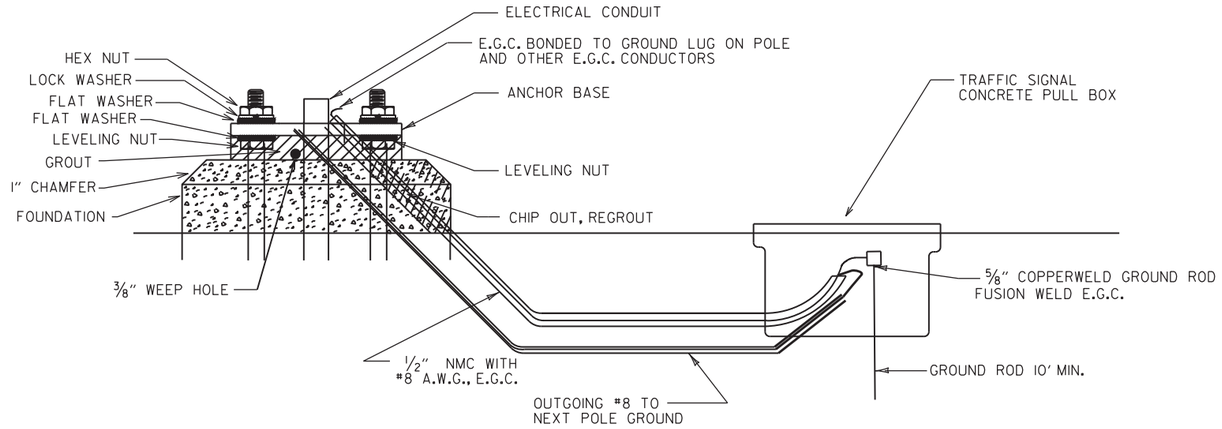
CONTROLLER CABINET UTILITY DRAWER

STANDARD DRAWING SD-5

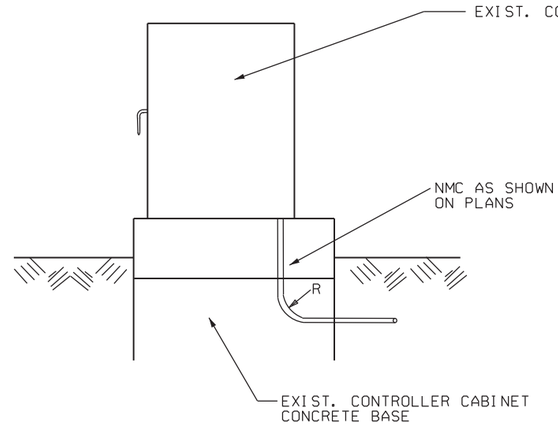
CONDUIT ENTRY TO EXISTING POLE BASE



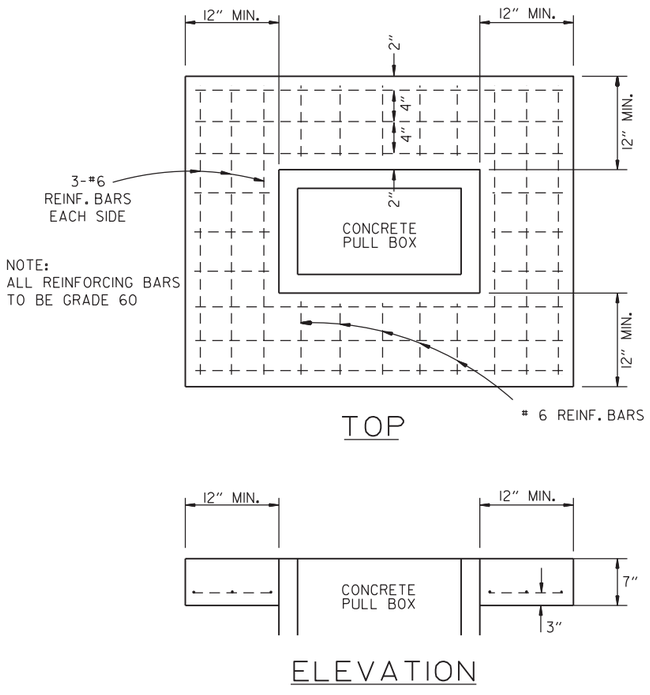
ANCHOR BASE



CONDUIT ENTRY TO EXISTING CONTROLLER CABINET



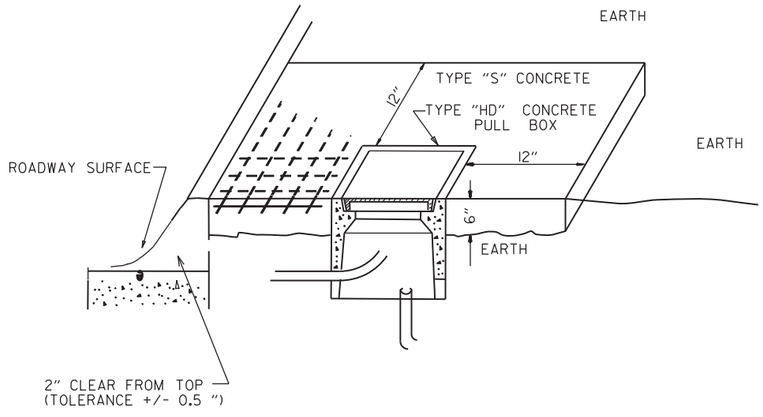
NOTE: ENTRY TO CABINET SHALL BE THROUGH A CUT IN THE BASE SUFFICIENT TO PROVIDE ADEQUATE CONDUIT RADIUS FOR ITEM.



TOP

ELEVATION

TYPE "HD" CONCRETE PULL BOX DETAIL



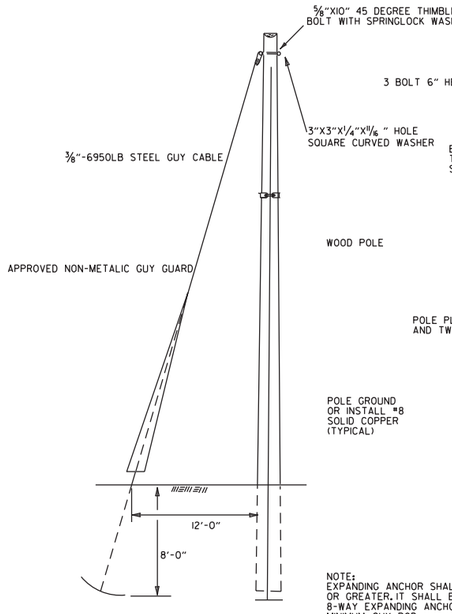
NOTE:
ALL TYPE 1AND TYPE 2 HD CONCRETE PULL BOXES ARE INSTALLED WITH AN APRON OF CONCRETE 12" WIDE AND 7" IN DEPTH. ALL PAYMENT SHALL BE INCLUDED IN THE PRICE OF THE TYPE HD CONCRETE PULL BOX. THE CONCRETE PULL BOX SHALL BE INSTALLED FLUSH TO SURROUNDING GRADE UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER. THE CONCRETE SHALL BE CLASS "S". THREE #6 REINFORCING BARS IN THE APRON ON ALL SIDES OF THE CONCRETE PULL BOX IS REQUIRED IN CONCRETE.

DATE	REVISION	FILMED
11-16-17	REVISED NOTES	
09-02-15	REVISED PULL BOX DEPTH	
09-12-13	ISSUED AS STANDARD DRAWING	
05-21-09	REVISED GROUNDING	
07-31-08	ADDED & REVISED CONDUIT ENTRY	
06-23-04	REVISED CLEARANCE AT CURB ENTRY	
01-04-02	ADDED REINFORCING TO BOX APRON	
07-02-01	REVISED	
12-27-99	REVISED NOTES	
11-18-98	ISSUED	

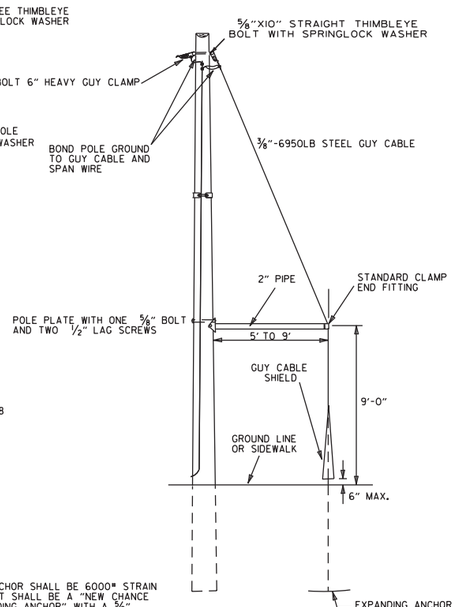
ARKANSAS STATE HIGHWAY COMMISSION

HEAVY DUTY PULL BOX

STANDARD DRAWING SD-6



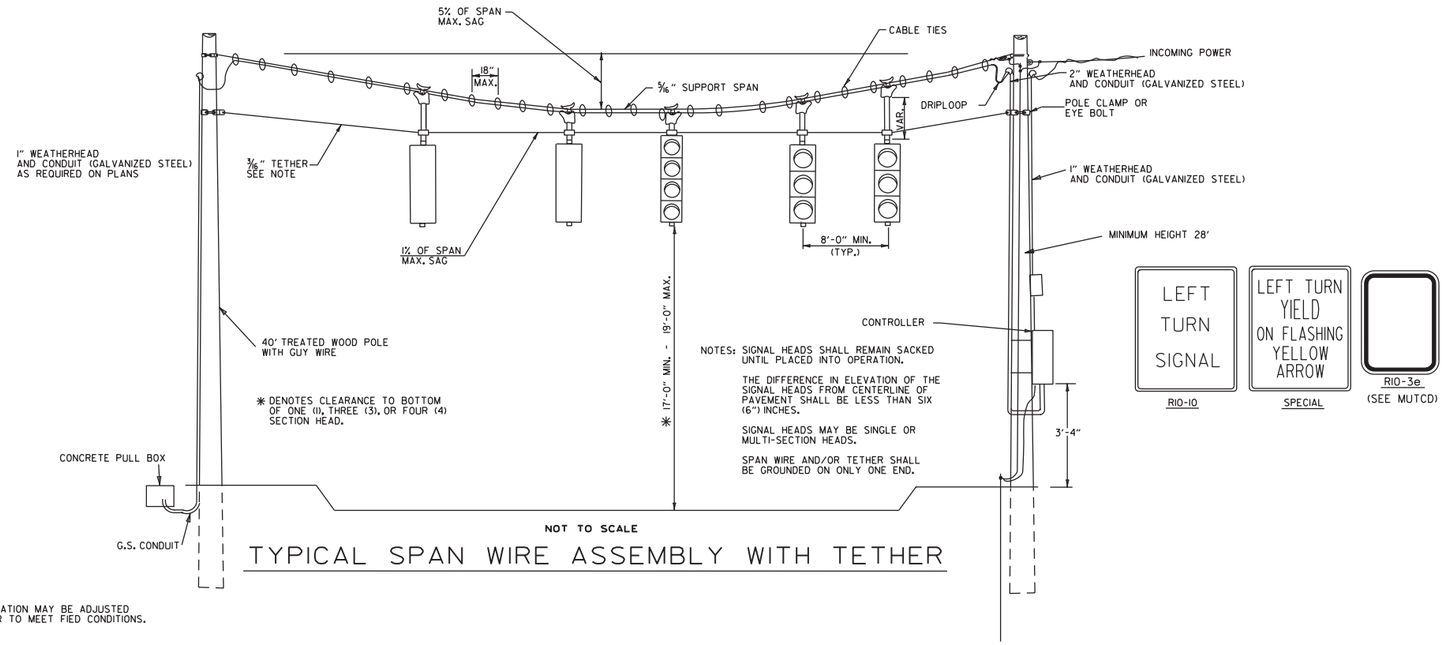
STANDARD GUY INSTALLATION



NOTE:
EXPANDING ANCHOR SHALL BE 6000# STRAIN OR GREATER. IT SHALL BE A "NEW CHANCE 8-WAY EXPANDING ANCHOR", WITH A ⅝" MINIMUM GUY ROD.

SIDEWALK GUY INSTALLATION

NOTE:
CONDUIT INSTALLATION MAY BE ADJUSTED BY THE ENGINEER TO MEET FIED CONDITIONS.



NOT TO SCALE

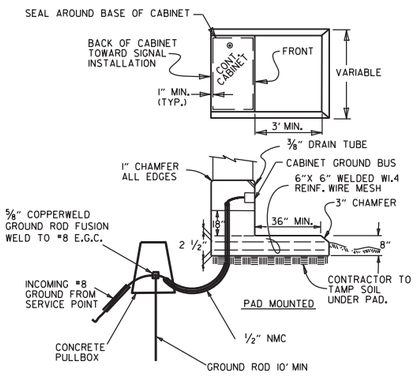
TYPICAL SPAN WIRE ASSEMBLY WITH TETHER

NOTES:
SPAN WIRE POLES SHALL BE MOUNTED A MINIMUM OF FOUR (4') FEET BEHIND CURB OR SHOULDER.

SPAN WIRE ASSEMBLIES WILL REQUIRE TETHER UNLESS OTHERWISE NOTED ON PLAN SHEETS.

CABLE TIES SHALL BE SUITABLE FOR OUTSIDE USE (BLACK).

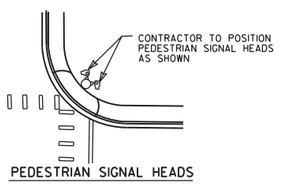
THE CONTROLLER POWER SUPPLY GROUND BUSS SHALL BE BONDED TO THE FOUNDATION GROUND ROD WITH A #8 A.W.G. SOLID COPPER WIRE. ON EXISTING FOUNDATIONS WITH NO GROUND ROD, CONTRACTOR SHALL INSTALL A 10' X ⅝" COPPERWELD GROUND ROD.



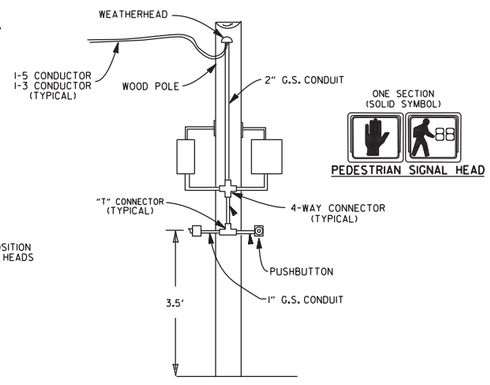
CONCRETE BASE MOUNTED CABINET DETAILS

CABINET NOTE:

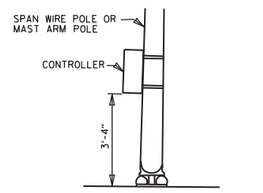
UNLESS OTHERWISE DIRECTED BY THE ENGINEER, CABINET ORIENTATION SHALL BE SUCH THAT THE BACK OF THE CABINET IS PARALLEL TO THE STREET AND POSITIONED TO ALLOW VISIBILITY OF THE SIGNAL DISPLAY WHILE OBSERVING THE CONTROLLER FRONT PANEL.



PEDESTRIAN SIGNAL HEADS



WOODEN POLE INSTALLATION OF PED HEADS



SPAN WIRE SUPPORT POLE AND MAST ARM POLE MOUNTED

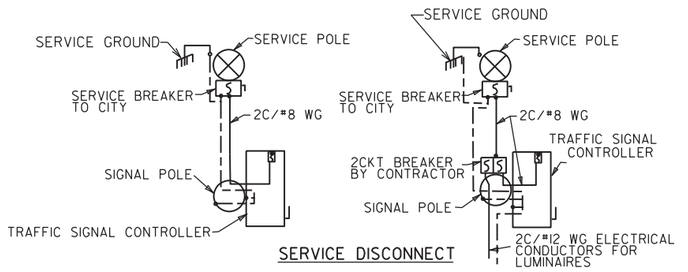
MINIMUM STRUCTURAL REQUIREMENTS:

DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, 4TH EDITION (2001) WITH 2003 AND 2006 INTERIMS.

CONSTRUCTION SPECIFICATIONS: STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION) WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.

BASE WIND SPEED: 90 MPH

STEEL MEMBERS CONSIDERED MAIN LOAD CARRYING MEMBERS WITH THICKNESS GREATER THAN ½" SHALL MEET THE LONGITUDINAL CHARPY V-NOTCH TEST SPECIFIED IN SUBSECTION 807.05 OF THE STANDARD SPECIFICATIONS.



SERVICE DISCONNECT

NO LUMINAIRE WITH LUMINAIRE

NOTE: ELECTRICAL GROUND CONDUCTOR IS BONDED TO ALL METAL ENCLOSURES

NOTES:

EACH ITEM "TRAFFIC SIGNAL HEAD (4 SEC., 1-WAY)" SHALL INCLUDE A SPECIAL SIGN AS SHOWN, ATTACHED TO THE MAST ARM OR SPAN ASSEMBLY 12" TO THE RIGHT OF THE SIGNAL HEAD UNLESS REMOVED WITHIN SIGNAL PLAN NOTES.

EACH ITEM "TRAFFIC SIGNAL HEAD (3 SEC., 1-WAY)", TO BE USED AS A LEFT TURN INDICATION ONLY, SHALL INCLUDE A SIGN (R10-10) AS SHOWN, ATTACHED TO THE MAST ARM OR SPAN ASSEMBLY 12" TO THE RIGHT OF THE SIGNAL HEAD.

ALL SIGN BLANK SHALL BE CONSTRUCTED OF ALUMINUM ALLOY (ASTM DESIGNATION B-209, ALLOY 5052-H38) WITH A THICKNESS OF 0.100 INCH.

ALL SIGN FACE SHALL BE CONSTRUCTED OF HIGH INTENSITY SHEETING (TYPE III) WITH SILKSCREEN LEGEND AND BORDER.

SIGNAL OPERATION NOTES:

FLASHING OPERATION - PRIOR TO NORMAL OPERATION, SIGNAL SHALL BE FLASHED FOR A PERIOD OF 3 TO 5 WORK DAYS. SIGNAL SHALL BE PLACED IN OPERATION ONLY ON A REGULAR WORK DAY, EXCEPT FRIDAY.

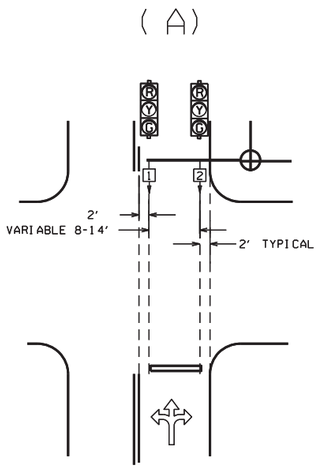
THE CONTRACTOR MAY BE REQUIRED TO ALTER THE FLASHING DISPLAY DURING THE TEMPORARY FLASH PERIOD. AT THE TIME THE INTERSECTION IS PLACED IN PERMANENT OPERATION, THE FLASH SEQUENCE SHALL THEN BE RETURNED TO THAT INDICATED ON THE PLAN SHEETS. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR THESE ALTERATIONS IN FLASH SEQUENCE.

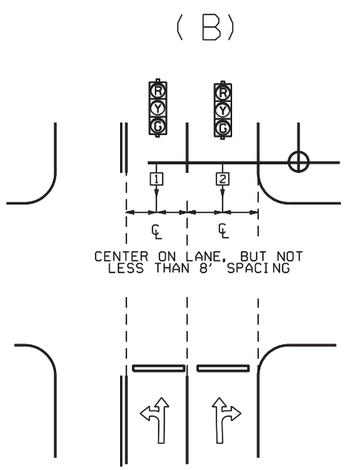
DATE	REVISION	FILMED
11-16-17	REVISED NOTES, ADDED SPAN WIRE SUPPORT POLE DETAIL, ADDED PEDESTRIAN SIGNAL HEAD DETAIL	
02-27-14	REVISED NOTES.	
09-12-13	ISSUED AS STANDARD DRAWING	
07-21-11	REVISED PEDESTRIAN SIGN & GROUNDING	
04-17-08	REVISED TO 2001 AASHTO STANDARDS	
10-12-04	REV. CABINET ORIENTATION & SIGNAL OPERATION	
05-22-02	REV. TYP. SPAN WIRE ASSEMBLY	
12-27-99	REVISED	
11-18-98	REVISION TO NOTES	
11-21-95	ISSUED	

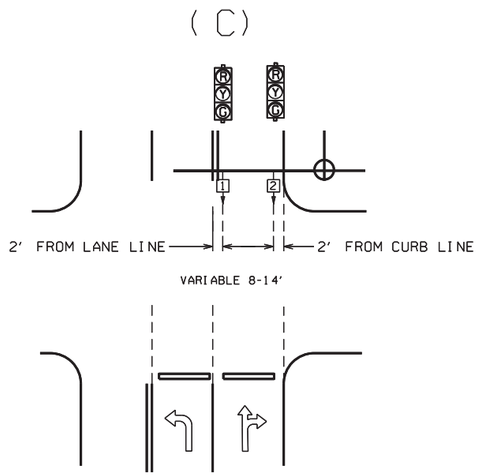
ARKANSAS STATE HIGHWAY COMMISSION

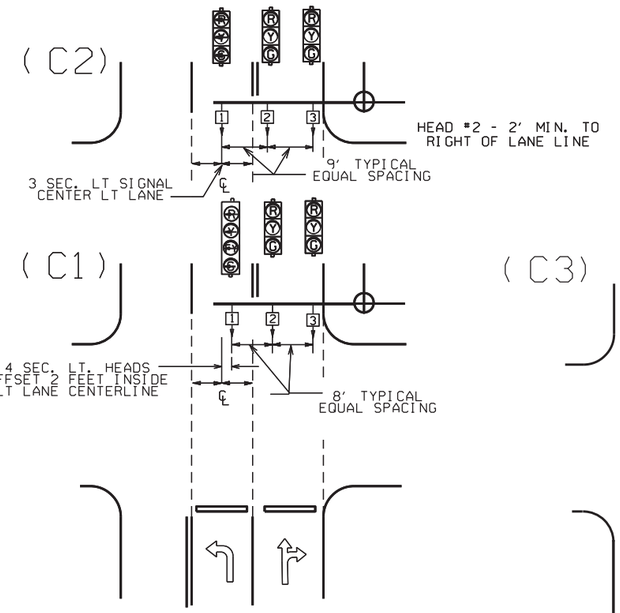
SPAN WIRE ASSEMBLY WOOD POLE

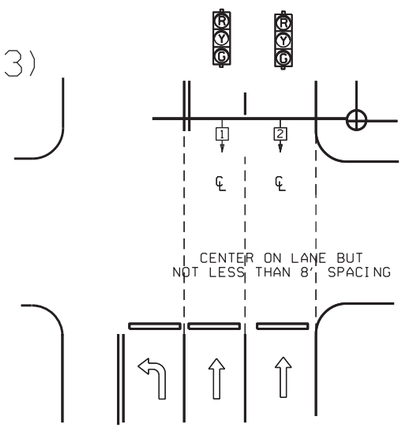
STANDARD DRAWING SD-7

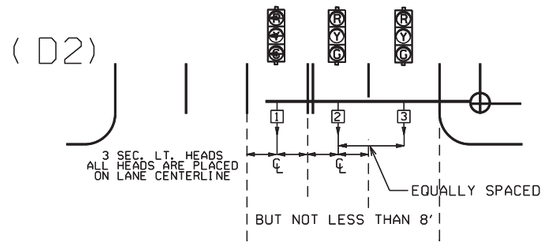


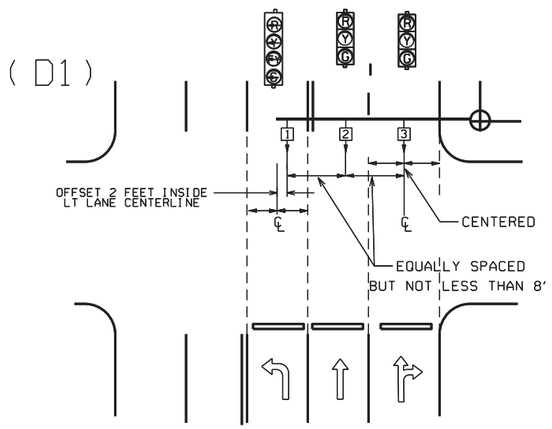




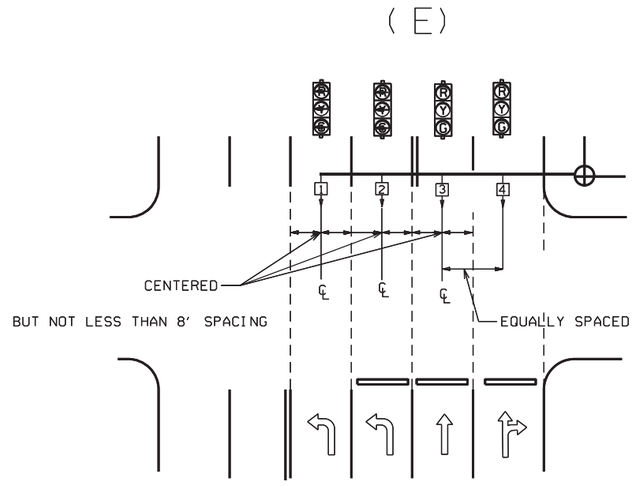








NOTE: WHERE LEFT TURN HEAD (HEAD 1 ON D1 AND D2) IS NOT CALLED FOR ON PLANS, MAST ARM LENGTH MAY STILL BE ALLOWED FOR FUTURE INSTALLATION. HEADS FOR THROUGH MOVEMENTS SHALL STILL BE ALIGNED WITH THROUGH LANES AS SHOWN ON DETAILS.



℄ = CENTER OF LANE FROM APPROACH SIDE

GENERAL NOTES:

1. FOUR SECTION "PROTECTED/PERMISSIVE" LEFT TURN HEADS SHOULD BE PLACED A MINIMUM OF TWO (2') FEET TO THE RIGHT OF THE CENTERLINE OF THE APPROACHING LEFT TURN LANE.

2. THREE SECTION "PROTECTED" LEFT TURN HEADS SHOULD BE PLACED ON THE CENTERLINE OF THE APPROACHING LEFT TURN LANE.

3. WHEN IT IS NECESSARY TO PLACE POLES OTHER THAN AS SHOWN ON PLAN SHEET(S) RESULTING IN MAST ARM EXTENDING MORE THAN TWO FEET PAST (TO THE LEFT OF) THE CENTERLINE OF THE APPROACHING LEFT TURN LANE, MAST ARM SHALL BE CUT TO APPROPRIATE LENGTH AS DETERMINED BY THE ENGINEER, AND A NEW END CAP PROVIDED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THIS PRIOR TO INSTALLING THE MAST ARM IF ADDITIONAL COMPENSATION IS REQUIRED.

4. SIGNAL HEAD SPACING SHALL, IN NO CASE, BE LESS THAN EIGHT (8') FEET BETWEEN HEADS ON CENTER, MEASURED HORIZONTALLY PERPENDICULAR TO THE APPROACH.

5. ALL SIGNAL HEADS SHOWN ON THIS DETAIL SHEET SHALL BE LOCATED ACCORDING TO THE DIMENSIONS SHOWN IN RELATION TO THE APPROACH SIDE OF THE INTERSECTION.

6. MAXIMUM MOUNTING HEIGHT OF SIGNAL FACES LOCATED BETWEEN 40 FEET AND 53 FEET FROM STOP BAR SHALL BE IN ACCORDANCE WITH FIGURE 4D-5 OF 2009 MUTCD.

DATE	REVISION	DATE FILM
12-8-16	REVISED NOTE 6	
9-12-13	ISSUED AS STANDARD DRAWING	
3-11-10	2009 MUTCD	
12-9-99	ISSUED	

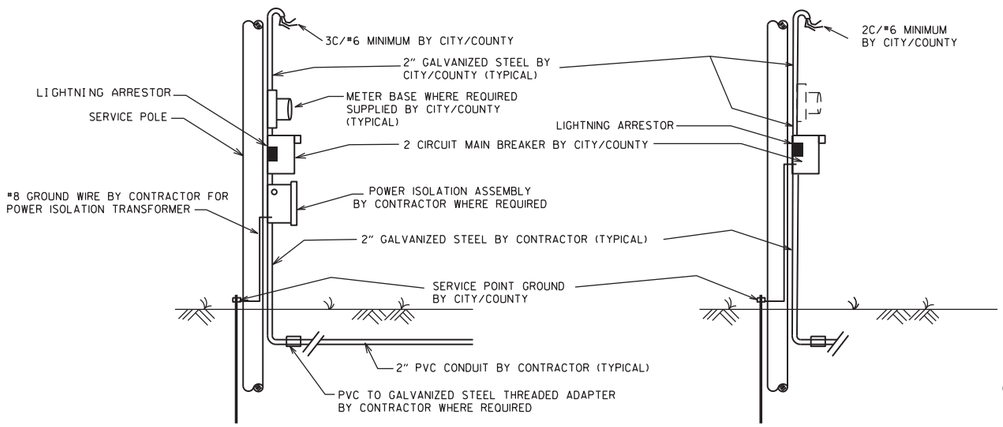
ARKANSAS STATE HIGHWAY COMMISSION

SIGNAL HEAD PLACEMENT

STANDARD DRAWING SD-8

MAIN BREAKER NOT NEAR CONTROLLER CABINET SECONDARY REQUIRED

WITH POWER ISOLATION ASSEMBLY



WITHOUT POWER ISOLATION ASSEMBLY

NOTES TO CONTRACTOR AND AGENCY RESPONSIBLE FOR MAINTENANCE OF THE INTERSECTION (CITY/COUNTY):

ELECTRICAL SERVICE TYPICALLY FALLS INTO TWO CATEGORIES:
MAIN BREAKER NEAR CONTROLLER CABINET; AND MAIN BREAKER NOT NEAR CONTROLLER CABINET. THE CONTRACTOR'S AND THE CITY'S/COUNTY'S RESPONSIBILITY VARIES ACCORDINGLY AS INDICATED ON THESE DETAILS.

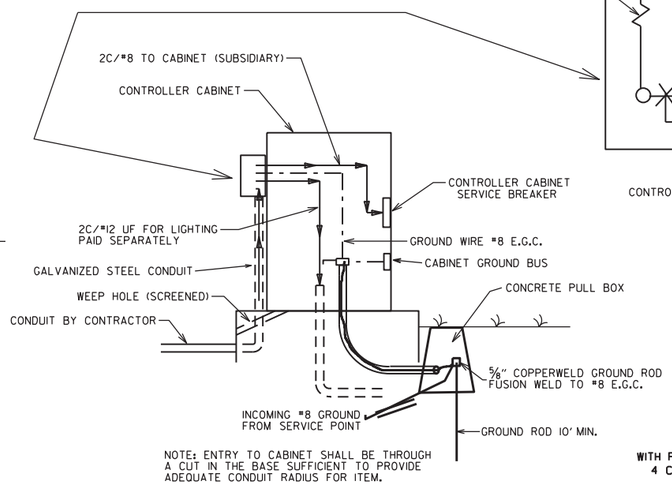
ALL SITUATIONS:
ELECTRICAL SERVICE SHALL BE PROVIDED BY THE CITY/COUNTY TO A SERVICE POLE WITH EXTERNAL RAINTIGHT BREAKER (MAIN BREAKER) AT A MUTUALLY ACCEPTABLE POINT WITHIN THE RIGHT-OF-WAY. SERVICE POINT INCLUDES GALVANIZED STEEL CONDUIT TO A POINT 18" BELOW GROUND LINE, TWO CIRCUIT MAIN BREAKER, LIGHTNING ARRESTOR, POWER ISOLATION ASSEMBLY WHERE REQUIRED, METER LOOP IF REQUIRED BY LOCAL UTILITY COMPANY, ELECTRICAL CONDUCTORS AND WEATHERHEAD. WHERE STREET LIGHTING IS INCLUDED AS PART OF SIGNAL INSTALLATION STREET LIGHTING CIRCUIT (2C/#12 A.W.G. UF RATED, TYPICAL) SHALL BE KEPT SEPARATE FROM THE CIRCUIT SERVING TRAFFIC SIGNAL. SERVICE WIRE AND WIRING FROM THE CONTROLLER TO MAIN BREAKER IS PROVIDED BY THE CONTRACTOR AS A PART OF THIS CONTRACT. WIRE AND WIRING FROM MAIN BREAKER, AND CONNECTION TO THE UTILITY IS THE RESPONSIBILITY OF THE CITY/COUNTY.

MAIN BREAKER NOT NEAR CONTROLLER CABINET:
THE MAIN BREAKER ASSEMBLY, GALVANIZED STEEL CONDUIT. WEATHERHEAD AND WIRE ABOVE MAIN BREAKER AND CONNECTION TO THE UTILITY SHALL BE PROVIDED BY CITY/COUNTY. CONTRACTOR SHALL PROVIDE AS PART OF CONTRACT SECONDARY BREAKER, CONDUIT, WIRE AND WIRING TO THE MAIN BREAKER.

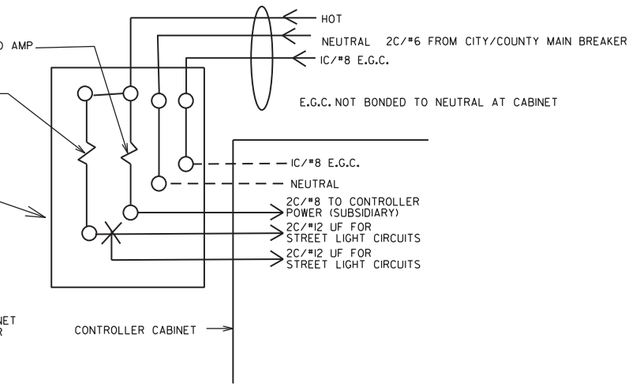
MAIN BREAKER NEAR CONTROLLER CABINET:
ALL COMPONENTS OF THE SERVICE POINT WITH THE EXCEPTION OF THE WIRE AND WIRING ABOVE THE MAIN BREAKER IS FURNISHED AND INSTALLED BY THE CONTRACTOR. WIRING FROM MAIN BREAKER INCLUDING CONNECTION TO THE UTILITY, IS THE RESPONSIBILITY OF THE CITY/COUNTY. IF METER LOOP IS REQUIRED, METER BASE AND HARDWARE IS PROVIDED BY THE CITY/COUNTY AND INSTALLED BY THE CONTRACTOR.

GROUND ROD - A 10' X 5/8" GROUND ROD SHALL BE INSTALLED IN THE CONCRETE PULL BOX FOR EACH POLE AND THE CONTROLLER. PAYMENT FOR THE GROUND ROD AND 1/2" NMC SHALL BE INCLUDED IN ITEM 701. THE CONCRETE PULL BOX AND CONDUCTOR BOX SHALL BE PAID FOR SEPARATELY.

SECONDARY BREAKER BY CONTRACTOR (SUBSIDIARY)



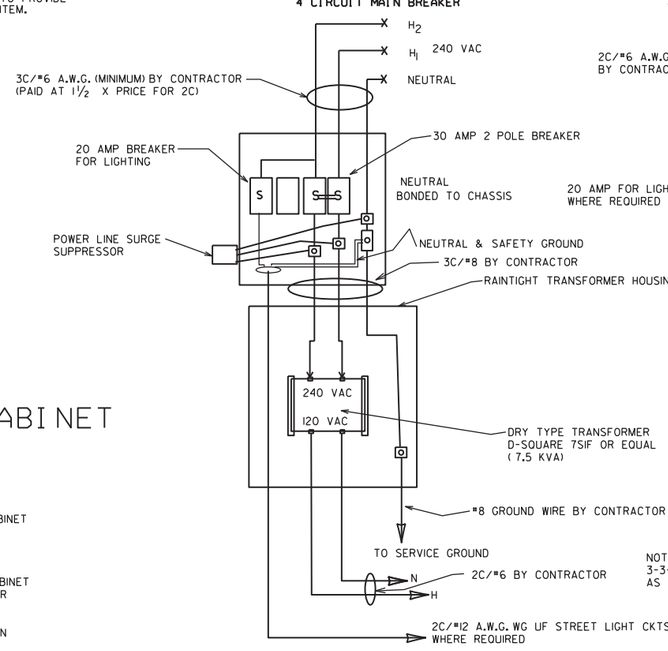
NOTE: ENTRY TO CABINET SHALL BE THROUGH A CUT IN THE BASE SUFFICIENT TO PROVIDE ADEQUATE CONDUIT RADIUS FOR ITEM.



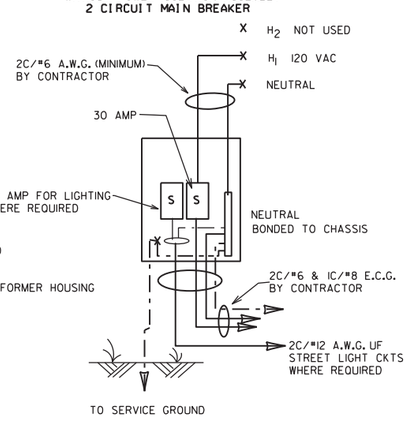
MAIN BREAKER WIRING (TYPICAL)

SERVICE GROUND IS TYPICALLY TIED TO NEUTRAL AT THE MAIN BREAKER. AS SUCH, CONTROLLER GROUND IS NOT TIED TO NEUTRAL AT SECONDARY BREAKER OR IN CONTROLLER CABINET.

WITH POWER ISOLATION ASSEMBLY
4 CIRCUIT MAIN BREAKER

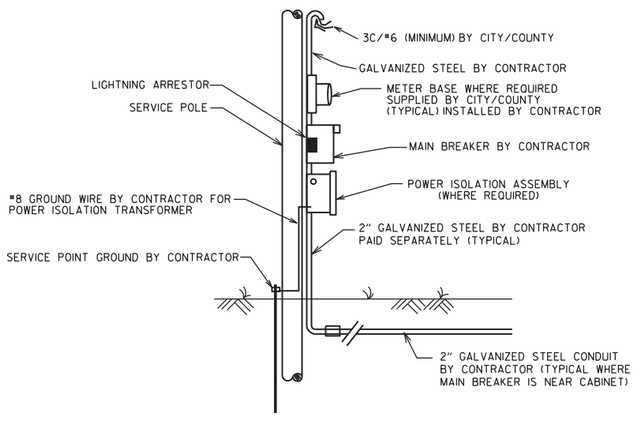


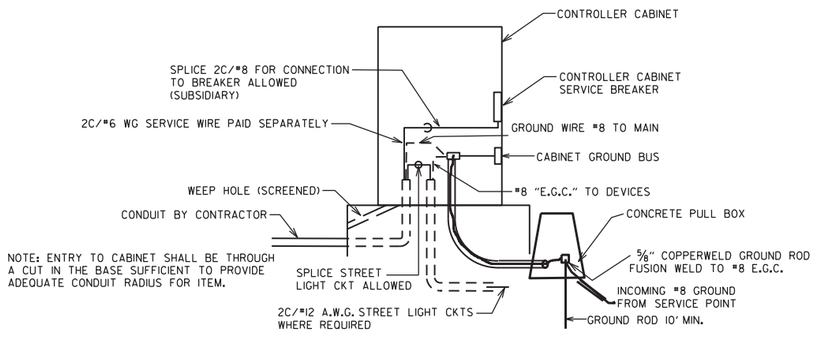
WITHOUT POWER ISOLATION ASSEMBLY
2 CIRCUIT MAIN BREAKER



NOTE: ELECTRICAL GROUND CONDUCTOR (E.C.G.) ADDED 3-3-2003, CONSISTING OF A IC/#8 A.W.G. CU GREEN WIRE AS PER NATIONAL ELECT. CODES.

MAIN BREAKER NEAR CONTROLLER CABINET SECONDARY NOT REQUIRED





NOTE: ENTRY TO CABINET SHALL BE THROUGH A CUT IN THE BASE SUFFICIENT TO PROVIDE ADEQUATE CONDUIT RADIUS FOR ITEM.

DATE	REVISION	FILMED
11-07-19	REVISED	
11-16-17	REVISED NOTES	
09-12-13	ISSUED AS STANDARD DRAWING	
04-18-13	ADDED LIGHTNING ARRESTOR	
05-21-09	REVISED GROUNDING	
07-31-08	REVISED GROUNDING	
03-03-03	ADDED EGC NOTE	
09-26-01	REVISED	
12-27-99	REVISED	
07-28-99	REVISED	
02-05-99	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

SERVICE POINT

STANDARD DRAWING SD-9

NOTES:
PEDESTRIAN AND TRAFFIC SIGNAL HEAD SIGNS:
EACH ITEM "TRAFFIC SIGNAL HEAD (4 SEC., 1-WAY)" SHALL INCLUDE A SPECIAL SIGN AS SHOWN, ATTACHED TO THE MAST ARM OR SPAN ASSEMBLY 12" TO THE RIGHT OF THE SIGNAL HEAD UNLESS REMOVED WITHIN THE SIGNAL PLAN NOTES.

EACH ITEM "TRAFFIC SIGNAL HEAD (3 SEC., 1-WAY)" TO BE USED AS A LEFT TURN INDICATION ONLY SHALL INCLUDE A SIGN (R10-10) AS SHOWN, ATTACHED TO THE MAST ARM OR SPAN ASSEMBLY 12" TO THE RIGHT OF THE SIGNAL HEAD.

EACH PEDESTRIAN PUSHBUTTON SHALL HAVE ONE R10-3E SIGN ATTACHED TO THE POLE ABOVE THE BUTTON. ALL SIGNS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 723 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

ALL SIGN BLANKS SHALL BE CONSTRUCTED OF ALUMINUM ALLOY (ASTM DESIGNATION B-209. ALLOY 5052-H38) WITH THICKNESS OF 0.100 INCH.

GENERAL NOTES:
1. MAST ARM POLES SHALL BE MOUNTED A MINIMUM OF FOUR (4') FEET BEHIND CURB OR SHOULDER.

2. OCTAGONAL POLES AND ARMS MEETING THE REQUIREMENTS OF THE PLANS SPECIFICATIONS CAN BE INSTALLED IN LIEU OF ROUND. ALL POLES AND ARMS IN A JOB MUST BE THE SAME SHAPE.

3. MINIMUM STRUCTURAL REQUIREMENTS:
DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, 4TH EDITION (2001) WITH 2003 AND 2006 INTERIMS.

USE FATIGUE CATEGORY I FOR ALL STRUCTURES ON ROUTES WHERE THE SPEED LIMIT IS 65 MPH AND GREATER AT THE STRUCTURE LOCATION AND ON ROUTES WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH WITH AN MAST ARM OF 60' OR LONGER.

USE FATIGUE CATEGORY II FOR ALL STRUCTURES ON ROUTES WHERE THE SPEED LIMIT IS LESS THAN 65 MPH AND GREATER THAN 45 MPH WITH MAST ARMS LESS THAN 60' AND ON ROUTES WHERE THE SPEED LIMITS OF 45 MPH AND LESS WITH AN MAST ARM OF 60' OR LONGER.

USE FATIGUE CATEGORY III FOR ALL STRUCTURES WHERE THE SPEED LIMIT IS 45 MPH AND LESS AND MAST ARMS LESS THAN 60'.

CONSTRUCTION SPECIFICATIONS:
STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION) WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.

BASE WIND SPEED: 90 MPH.

STEEL MEMBERS CONSIDERED MAIN LOAD CARRYING MEMBERS WITH A THICKNESS GREATER THAN ½" SHALL MEET THE LONGITUDINAL CHARPY V-NOTCH TEST SPECIFIED IN SUBSECTION 807.05 OF THE STANDARD SPECIFICATIONS.

DEAD LOAD: AS A MINIMUM, DESIGN SHALL BE BASED ON THE FIXED ATTACHMENTS SHOWN BELOW OR AS MODIFIED IN THE PLANS.

ALL SIGNAL HEADS TO BE ONE WAY, TWELVE (12") INCH AND HAVE FIVE (5") INCH BACK PLATES:

SIGNAL HEADS AT THE END OF MAST ARM - ONE 4 SEC., 85 LB., 14.5 SQ. FT., ONE SIGN MOUNTED 3 FEET FROM SIGNAL HEAD (2'-0" X 2'-6"; 20 LB.) REMAINING SIGNAL HEADS SPACED AT 8 FT. (3 SEC., 56 LB., 8.3 SQ. FT.):
DESIGN TO ACCOMMODATE:
2 SIGNAL HEADS FOR MAST ARMS 10 FT. TO 16 FT.
3 SIGNAL HEADS FOR MAST ARMS 18 FT. TO 24 FT.
4 SIGNAL HEADS FOR MAST ARMS OVER 26 FT.

STREET NAME SIGN - 72" X 18", 36 LB., MOUNTED SUCH THAT OUTSIDE EDGE IS NOT GREATER THAT 12 FT. FROM POLE. DEPENDING UPON POSITION OF SIGNAL HEAD ADJACENT TO POLE, SIGN MAY OVERLAP POLE SHAFT.
ROADWAY LUMINAIRES (WHERE REQUIRED ON PLAN SHEET) - VARIABLE ARM LENGTH (MAX. WT. 75 LB., 3.3 SQ. FT.)
PEDESTRIAN SIGNALS - TWO 1 SEC., 12 INCH MOUNTED 8 FT. FROM BASE OF POLE. POST MOUNTED 3 SEC. SIGNAL HEAD AT 10 FT. ON SIDE OF POLE.

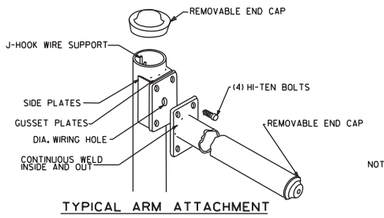
4. POLE/MAST ARM CAP - POLE AND MAST ARM CAPS SHALL BE PROVIDED, FABRICATED OF EITHER STEEL OR CAST ALUMINUM.

5. HAND HOLE - HAND HOLES SHALL BE 4 IN. X 6 IN. FOR STANDARD, AND 3 IN. X 5 IN. FOR PED POLES. MINIMUM PLACED APPROXIMATELY 12 INCHES FROM BASE, AND SHALL BE FIXED WITH A BOLT DOWN COVER. A VACCUM FORMED ABS COVER IS AN ACCEPTABLE ALTERNATE TO STEEL. POLES GREATER THAN 21 FT. IN HEIGHT (FOR ROADWAY LUMINAIRE ATTACHMENT) SHALL INCLUDED A HAND HOLE WITHIN 12 INCHES OF MAST ARM(S) ATTACHMENT(S).

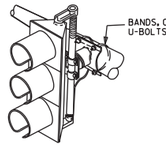
6. POLE/MAST ARM TAPER SLOPE - AVERAGE TAPER OF SIGNAL MAST ARMS AND POLE SHAFT SHALL BE 0.125 TO 0.15 INCHES PER FOOT.

MAST ARM CENTERLINE ANGLE AT ATTACHMENT POINT WITH POLE SHALL MAINTAIN NOT LESS THAN 0.5 DEGREES OR MORE THAN 4 DEGREES POSITIVE SLOPE WITH A LINE PERPENDICULAR TO THE POLE CENTERLINE. THE MAST ARM SHALL MAINTAIN A POSITIVE SLOPE AFTER IT IS PLACED UNDER LOAD.

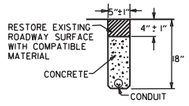
7. NUT COVERS - EACH POLE SHALL INCLUDE A BOLT DOWN NUT COVER FOR EACH ANCHOR BOLT.



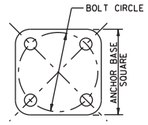
TYPICAL ARM ATTACHMENT



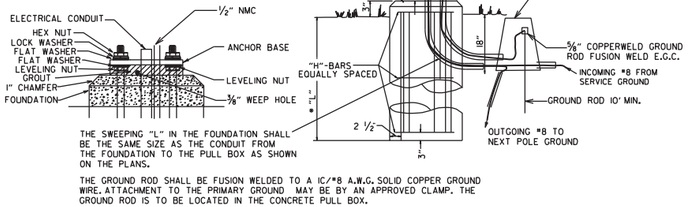
NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.



TRENCHING DETAIL
(FOR SAW CUT TRENCH IN ROADWAY)



ANCHOR BASE



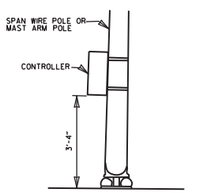
THE SWEEPING "L" IN THE FOUNDATION SHALL BE THE SAME SIZE AS THE CONDUIT FROM THE FOUNDATION TO THE PULL BOX AS SHOWN ON THE PLANS.

THE GROUND ROD SHALL BE FUSION WELDED TO A 1C/#8 A.W.G. SOLID COPPER GROUND WIRE. ATTACHMENT TO THE PRIMARY GROUND MAY BE BY AN APPROVED CLAMP. THE GROUND ROD IS TO BE LOCATED IN THE CONCRETE PULL BOX.

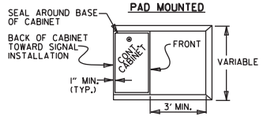
TYPICAL FOUNDATION DETAILS

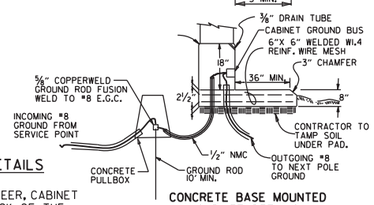
POLE FOUNDATION MINIMUM DIMENSIONS AND STEEL REINFORCING. ALL REINFORCING STEEL SHALL BE GRADE 40 MIN.

ARM LENGTH	FOUNDATION DIAMETER	DEPTH "L"*	STEEL		
			VERTICAL	HORIZONTAL	O.C.
PED	30"	7'-0"	12-#7 (6'-6")	10-#4	8.44"
2' TO 12'	30"	10'-6"	12-#7 (10'-0")	15-#4	8.42"
OVER 12' TO 20'	30"	11'-6"	12-#7 (11'-0")	16-#4	8.66"
OVER 20' TO 35'	36"	12'-6"	13-#8 (12'-0")	17-#4	8.88"
OVER 35' TO 50'	36"	13'-6"	13-#8 (13'-0")	19-#4	8.56"
OVER 50' TO 72'	42"	14'-6"	18-#8 (14'-0")	20-#4	8.74"
TWINS TO 20'	30"	16'-0"	12-#6 (15'-6")	22-#4	8.76"
TWINS OVER 20' TO 44'	36"	16'-0"	13-#8 (15'-6")	22-#4	8.76"
TWINS OVER 44' TO 50'	42"	16'-0"	18-#8 (15'-6")	22-#4	8.76"
TWINS OVER 50' TO 72'	42"	16'-6"	18-#8 (16'-0")	23-#4	8.64"



SPAN WIRE SUPPORT POLE AND MAST ARM POLE MOUNTED





CONCRETE BASE MOUNTED CABINET DETAILS

CONTROLLER CABINET MOUNTING DETAILS

NOTE:
UNLESS OTHERWISE DIRECTED BY THE ENGINEER, CABINET ORIENTATION SHALL BE SUCH THAT THE BACK OF THE CABINET IS PARALLEL TO THE STREET AND POSITIONED TO ALLOW VISIBILITY OF THE SIGNAL DISPLAY WHILE OBSERVING THE CONTROLLER FRONT PANEL.

8. GROUND ROD - A 10' X ⅝" GROUND ROD SHALL BE INSTALLED IN THE CONCRETE PULL BOX FOR EACH POLE AND THE CONTROLLER. PAYMENT FOR THE GROUND ROD AND ½" NMC SHALL BE INCLUDED IN ITEM 714 FOR SIGNAL POLES AND ITEM 701 FOR THE CONTROLLER. THE CONCRETE PULL BOX AND CONDUCTOR BOX SHALL BE PAID SEPERATELY.

9. POLE BASE/FOUNDATION - ANCHOR BOLTS SHALL INCLUDE AS A MINIMUM, ONE LEVELING NUT, TWO FLAT WASHERS, ONE LOCK WASHER, AND ONE HEX NUT. PERIMETER OF ANCHOR BASE SHALL BE GROUTED WITH A ¼" WEEP HOLE. ALL CONCRETE SHALL BE CLASS "S" OR GREATER.

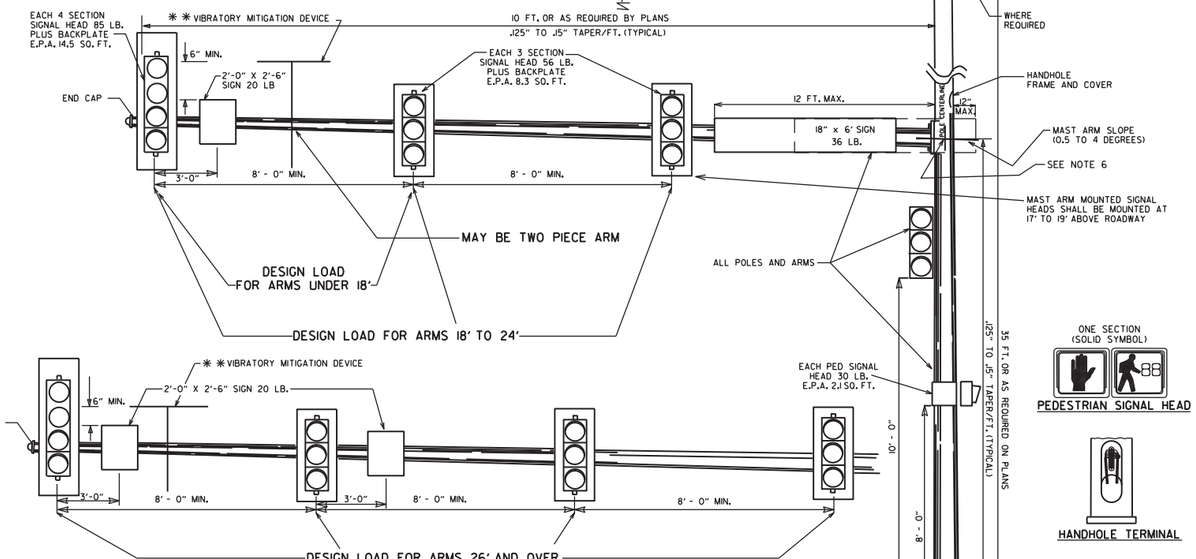
10. CONCRETE - ALL CONCRETE FOR CONTROLLER CABINET AND POLE FOUNDATIONS SHALL BE CLASS "S" OR GREATER.

11. PEDESTRIAN PHASES - PEDESTRIAN MOVEMENTS SHALL BE PUSH BUTTON ACTUATED AND CONCURRENTLY TIMED, UNLESS OTHERWISE INDICATED ON THE PLAN SHEET(S). FURNISHING AND INSTALLING PEDESTRIAN PUSH SWITCH SHALL BE CONSIDERED SUBSIDIARY TO THE ITEM 707 PEDESTRIAN SIGNAL HEAD.

* WHEN THE GROUND ELEVATION AT THE POLE IS LOWER THAN THE ROADWAY ELEVATION, THE LENGTH OF FOUNDATION ABOVE THE GROUND MAY BE INCREASED TO PROVIDE THE REQUIRED SIGNAL HEAD CLEARANCE ABOVE THE ROADWAY. WHEN THE REQUIRED LENGTH OF FOUNDATION ABOVE THE GROUND IS 18" OR LESS, NO INCREASE IN DEPTH "L" WILL BE REQUIRED. WHEN THE REQUIRED LENGTH OF FOUNDATION ABOVE THE GROUND IS 5'-6" OR LESS, INCREASE DEPTH "L" BY 1'-0". FOR LENGTHS GREATER THAN 5'-6", DEPTH "L" SHALL BE ADJUSTED AS DIRECTED BY THE ENGINEER. LONGITUDINAL REINFORCING, AS SHOWN IN THE TABLE, SHALL BE PROVIDED FOR THE LENGTH OF THE EXTENDED SHAFT AND #4 TIES SHALL BE PROVIDED AT A SPACING NOT TO EXCEED 9" ON CENTERS. PAYMENT WILL BE IN ACCORDANCE WITH SECTION 714 TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION OF THE STANDARD SPECIFICATIONS.

** IN LIEU OF DESIGNING THE STRUCTURE TO RESIST PERIODIC GALLOPING, A VIBRATORY MITIGATION DEVICE MAY BE PROVIDED BY THE POLE MANIFACTURER. THE VIBRATORY MITIGATION DEVICE SHALL BE AN ANTI-GALLOPING PANEL CONSISTING OF A 60" X 16" X 0.125" SIGN BLANK MOUNTED NEAR THE END OF THE MAST ARM NOT TO EXCEED ONE QUARTER OF THE LENGTH OF THE MAST ARM FROM THE END OF THE MAST ARM WITH THE LONG AXIS OF THE PANEL COLLINEAR WITH THE LONG AXIS OF THE MAST ARM. THE PANEL SHOULD BE MOUNTED AT SUCH THE HEIGHT AS TO PROVIDE AT LEAST 6" CLEAR FROM THE TOP OF ANY SIGNAL ASSEMBLY OF SIGN PANEL LOCATED ON THE MAST ARM WITHIN THE LENGTH OF THE ANTI-GALLOPING PANEL.

TRUCK-INDUCED GUST LOADS SHALL BE EXCLUDED FOR FATIGUE DESIGN FOR ALL STRUCTURES EXCEPT MAST ARMS MOUNTED OVER FACILITIES WITH POSTED SPEEDS OF 65 MPH OR GREATER AT THE LOCATION OF THE STRUCTURE.

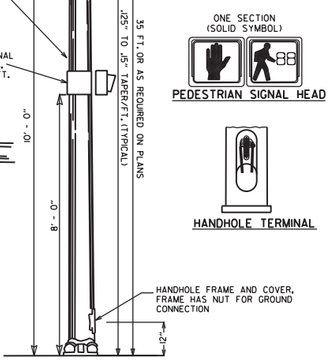


SIGNAL OPERATION NOTES:

FLASHING OPERATION - PRIOR TO NORMAL OPERATION, SIGNAL SHALL BE FLASHED FOR A PERIOD OF 3 TO 5 WORK DAYS OR AS DIRECTED BY THE ENGINEER. SIGNAL SHALL BE PLACED IN OPERATION ONLY ON A REGULAR WORK DAY, EXCEPT FRIDAY.

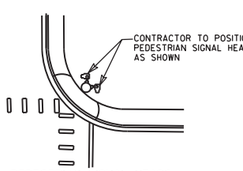
THE CONTRACTOR MAY BE REQUIRED TO ALTER THE FLASHING DISPLAY DURING THE TEMPORARY FLASH PERIOD. AT THE TIME THE INTERSECTION IS PLACED IN PERMANENT OPERATION, THE FLASH SEQUENCE SHALL THEN BE RETURNED TO THAT INDICATED ON THE PLAN SHEETS. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR THESE ALTERATION IN FLASH SEQUENCE.

SPECIAL NOTE: 90 MPH WIND ZONE DESIGN, SEE NOTE 3. MINIMUM STRUCTURAL REQUIREMENTS.

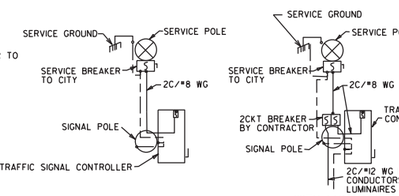


PEDESTRIAN SIGNAL HEAD

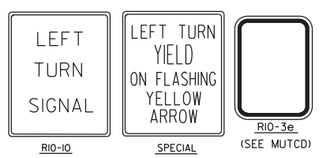
HANDHOLE TERMINAL



PEDESTRIAN SIGNAL HEADS



SERVICE DISCONNECT
NOTE: ELECTRICAL GROUND CONDUCTOR IS BONDED TO ALL METAL ENCLOSURES



R10-10 SPECIAL R10-3e (SEE MUTCD)

DATE	REVISION	FILMED
11-16-17	REVISED NOTES, ADDED PEDESTRIAN SIGNAL HEAD DETAIL, ADDED HANDHOLE TERMINAL DETAIL, ADDED TRENCHING DETAIL	
02-27-14	REVISED NOTES.	
09-12-13	ISSUED AS STANDARD DRAWING	
12-08-16	REVISED NOTES	
02-27-14	REVISED NOTES	
09-12-13	ISSUED AS STANDARD DRAWING	
07-21-11	REVISED VMD, SIGNAL HEADS	
05-21-09	REVISED GROUNDING	
07-31-08	REVISED GROUNDING	
04-25-08	ADDED VIBRATORY MITIGATION DEVICE & NOTES	
04-18-08	REVISED AASHTO NOTES	
04-17-08	REVISED TO 2001 AASHTO STANDARDS	
10-12-04	REVISED CABINET ORIENTATION	
06-23-04	REVISED	
05-11-04	REV. NOTE 3/AASHTO REQUIREMENTS	
06-11-01	REV. NOTES & POLE MAST ARM SLOPE	
04-11-01	REVISED POLE TAPERS	
04-25-00	REV. NOTES & SIGNAL HEAD PLACEMENT	
11-22-99	REVISED FOUNDATION DETAILS	
11-17-98	REVISED DETAILS AND NOTES	
11-21-95	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

STEEL POLE WITH MAST ARM

STANDARD DRAWING SD-11

SUPERELEVATION TABLE FOR TWO - WAY TRAFFIC

DEGREE OF CURVE	30 MPH			35 MPH			40 MPH			45 MPH			50 MPH			55 MPH			60 MPH			65 MPH			70 MPH			75 MPH		
	e	Ls (FT)		e	Ls (FT)		e	Ls (FT)		e	Ls (FT)		e	Ls (FT)		e	Ls (FT)		e	Ls (FT)		e	Ls (FT)		e	Ls (FT)		e	Ls (FT)	
		MINIMUM	DESIRABLE		MINIMUM	DESIRABLE		MINIMUM	DESIRABLE		MINIMUM	DESIRABLE		MINIMUM	DESIRABLE		MINIMUM	DESIRABLE		MINIMUM	DESIRABLE		MINIMUM	DESIRABLE		MINIMUM	DESIRABLE		MINIMUM	DESIRABLE
0° 15'	NC			NC			NC			NC			NC			NC			NC			NC			NC			NC		
0° 30'	NC			NC			NC			NC			NC			NC			RC	96		RC	96		RC	96		0.022	101	
0° 45'	NC			NC			NC			NC			RC	96		RC	96		0.024	106		0.026	110		0.030	120		0.032	125	
1° 00'	NC			NC			NC			RC	90		0.022	101		0.026	110		0.030	120		0.034	130		0.038	139		0.042	149	300
1° 15'	NC			NC			RC	84		0.022	95		0.028	115		0.032	125		0.038	139		0.042	149		0.046	158	300	0.052	173	
1° 30'	NC			RC	78		0.022	88		0.028	108		0.032	125		0.038	139		0.044	154		0.050	168	300	0.056	182		0.062	197	
1° 45'	RC	72		RC	78		0.026	97		0.030	113		0.036	134		0.044	154		0.050	168		0.056	182		0.064	202		0.070	216	
2° 00'	RC	72		0.024	86		0.028	101		0.034	122		0.042	149		0.048	163		0.056	182		0.064	202		0.070	216		0.080	240	
2° 15'	RC	72		0.026	90		0.032	109		0.038	131		0.046	158		0.054	178	300	0.062	197		0.070	216		0.078	235	350	0.088	259	350
2° 30'	0.022	75		0.028	94		0.034	113		0.042	140		0.050	168		0.058	187		0.068	211		0.076	230		0.086	254		0.096	278	
2° 45'	0.024	79		0.030	98		0.038	122		0.046	149	200	0.054	178	250	0.064	202		0.072	221		0.082	245		0.092	269		0.100	288	400
3° 00'	0.026	83		0.034	105		0.040	126		0.050	158		0.058	187		0.068	211		0.078	235		0.088	259		0.098	283	400	D MAX = 2° 45'		
3° 15'	0.028	86		0.036	109		0.044	134		0.052	162		0.062	197		0.072	221		0.082	245		0.092	269		0.100	288				
3° 30'	0.030	90		0.038	113		0.046	139	200	0.056	171		0.066	206		0.076	230		0.086	254		0.096	278	350	D MAX = 3° 30'					
3° 45'	0.032	93		0.040	117		0.050	147		0.058	176		0.070	216		0.080	240		0.090	264		0.098	283							
4° 00'	0.034	97		0.042	121	200	0.052	151		0.062	185		0.072	221		0.084	250		0.094	274	350	0.100	288		D MAX = 4° 15'						
4° 15'	0.036	100		0.044	125		0.054	155		0.064	189		0.076	230		0.086	254	350	0.096	278										
4° 30'	0.036	100		0.046	129		0.056	160		0.068	198		0.078	235		0.090	264		0.098	283										
4° 45'	0.038	104	200	0.048	133		0.060	168		0.070	203	250	0.082	245		0.092	269		0.100	288										
5° 00'	0.040	108		0.050	137		0.062	172		0.072	207		0.084	250		0.094	274		D MAX = 5° 15'										
5° 30'	0.044	115		0.054	144		0.066	181		0.078	221		0.088	259	300	0.098	283												
6° 00'	0.046	119		0.058	152		0.070	189		0.082	230		0.092	269		0.100	288												
6° 30'	0.050	126		0.062	160		0.074	198	250	0.086	239		0.096	278		D MAX = 6° 30'														
7° 00'	0.052	130		0.064	164		0.078	206		0.090	248		0.098	283																
7° 30'	0.054	133		0.068	172		0.080	210		0.092	252	300	0.100	288																
8° 00'	0.058	140		0.070	176		0.084	219		0.094	257		D MAX = 8° 25'																	
8° 30'	0.060	144		0.072	179		0.086	223	250	0.096	261																			
9° 00'	0.062	148		0.076	187		0.088	227		0.098	266																			
9° 30'	0.064	151		0.078	191		0.092	235		0.100	270																			
10° 00'	0.066	155		0.080	195		0.094	240		D MAX = 10° 30'																				
11° 00'	0.070	162		0.084	203		0.096	244																						
12° 00'	0.074	169		0.088	211	250	0.098	248																						
13° 00'	0.076	173		0.090	215		0.100	252	300																					
14° 00'	0.080	180		0.094	222		D MAX = 13° 45'																							
15° 00'	0.082	184		0.096	226																									
16° 00'	0.086	191		0.098	230																									
17° 00'	0.088	194		0.100	234																									
18° 00'	0.090	198	250	D MAX = 19° 30'																										
19° 00'	0.092	202																												
20° 00'	0.094	205																												
21° 00'	0.096	209																												
22° 00'	0.096	209																												
23° 00'	0.098	212																												
24° 00'	0.098	212																												
25° 00'	0.100	216																												
D MAX = 28° 30'																														

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.)

GENERAL NOTES

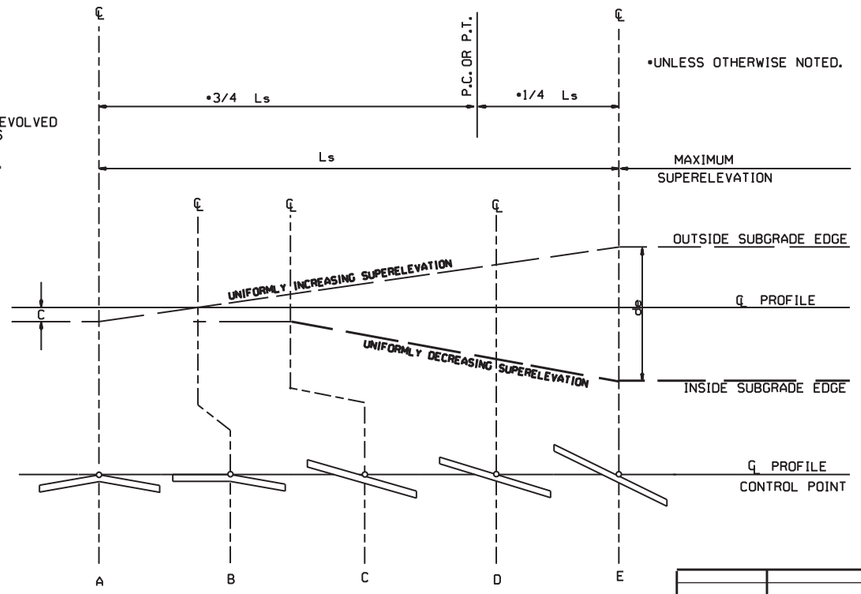
1. ON PAVEMENT WITH TWO-WAY TRAFFIC, THE SUPERELEVATION SHALL BE REVOLVED ON THE INSIDE PAVEMENT EDGE UNLESS OTHERWISE NOTED ON THE PLANS
2. SUPERELEVATION VALUES SHOWN ON THE CROSS SECTIONS ARE VALUES (+) OR (-) TO BE ADDED TO OR SUBTRACTED FROM THE POINT OF CONTROL.
3. LENGTHS FOR L MAY BE ROUNDED 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%

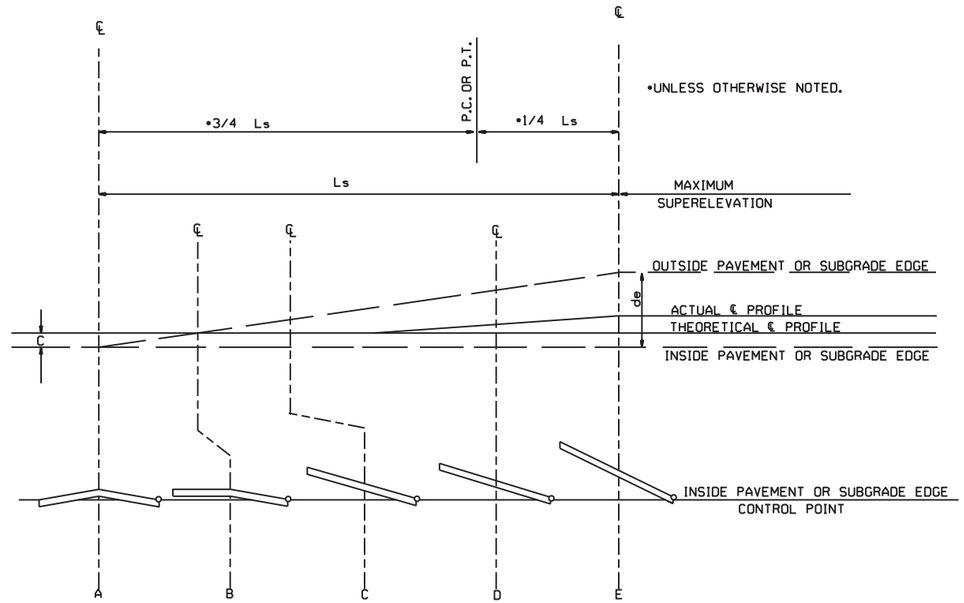
NOTE: MAINTAIN NORMAL CROWN ON INSIDE UNTIL SUPERELEVATION EXCEEDS 2C.

RATE OF SUPERELEVATION SHALL BE COMPUTED ON STRAIGHT LINE METHOD USING APPLICABLE Ls.

SUPERELEVATION FORMULA = $\frac{Lde}{Ls}$



STANDARD METHOD WHEN SUPERELEVATION REVOLVES AROUND CENTER LINE



STANDARD METHOD WHEN SUPERELEVATION REVOLVES AROUND INNER SUBGRADE POINT OR INNER PAVEMENT EDGE

NOTE: MAINTAIN NORMAL CROWN ON INSIDE UNTIL SUPERELEVATION EXCEEDS 2C.

DATE	REVISION	DATE FILLMED
11-07-19	REVISED SUPERELEVATION TABLE	
10-18-96	ADDED FORMULA	
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

SUPERELEVATION TABLE FOR TWO - WAY TRAFFIC (4% MAXIMUM)

DEGREE OF CURVE	30 MPH e	30 MPH Ls (FT) MINIMUM	30 MPH Ls (FT) DESIRABLE
0° 15'	NC		
0° 30'			
0° 45'			
1° 00'			
1° 15'			
1° 30'			
1° 45'			
2° 00'			
2° 15'	RC	72	100
2° 30'			
2° 45'			
3° 00'			
3° 15'	0.022	75	
3° 30'			
3° 45'	0.024	79	
4° 00'			
4° 15'			
4° 30'			
4° 45'	0.026	83	
5° 00'			
5° 30'			
6° 00'	0.028	86	125
6° 30'			
7° 00'			
7° 30'	0.030	90	
8° 00'			
8° 30'	0.032	93	
9° 00'			
9° 30'			
10° 00'	0.034	97	
10° 30'			
11° 00'			
11° 30'			
12° 00'	0.036	100	
12° 30'			
13° 00'			
13° 30'			
14° 00'	0.038	104	
14° 30'			
15° 00'			
15° 30'			
16° 00'			
16° 30'	0.040	108	150

D MAX = 22° 45'

DEGREE OF CURVE	35 MPH e	35 MPH Ls (FT) MINIMUM	35 MPH Ls (FT) DESIRABLE
0° 15'	NC		
0° 30'			
0° 45'			
1° 00'			
1° 15'			
1° 30'			
1° 45'	RC	78	100
2° 00'			
2° 15'			
2° 30'	0.022	82	
2° 45'	0.024	86	
3° 00'			
3° 15'			
3° 30'	0.026	90	
3° 45'			
4° 00'			
4° 15'	0.028	94	125
4° 30'			
4° 45'			
5° 00'	0.030	98	
5° 30'			
6° 00'	0.032	101	
6° 30'			
7° 00'	0.034	105	
7° 30'			
8° 00'			
8° 30'	0.036	109	
9° 00'			150
9° 30'			
10° 00'	0.038	113	
10° 30'			
11° 00'			
11° 30'	0.040	117	

D MAX = 15° 15'

DEGREE OF CURVE	40 MPH e	40 MPH Ls (FT) MINIMUM	40 MPH Ls (FT) DESIRABLE
0° 15'	NC		
0° 30'			
0° 45'			
1° 00'			
1° 15'	RC	84	100
1° 30'			
1° 45'			
2° 00'	0.022	88	
2° 15'	0.024	92	
2° 30'	0.026	97	
2° 45'			
3° 00'	0.028	101	125
3° 15'			
3° 30'			
3° 45'	0.030	105	
4° 00'			
4° 15'	0.032	109	
4° 30'			
4° 45'			
5° 00'	0.034	113	
5° 30'			150
6° 00'	0.036	118	
6° 30'			
7° 00'	0.038	122	
7° 30'			
8° 00'	0.040	126	

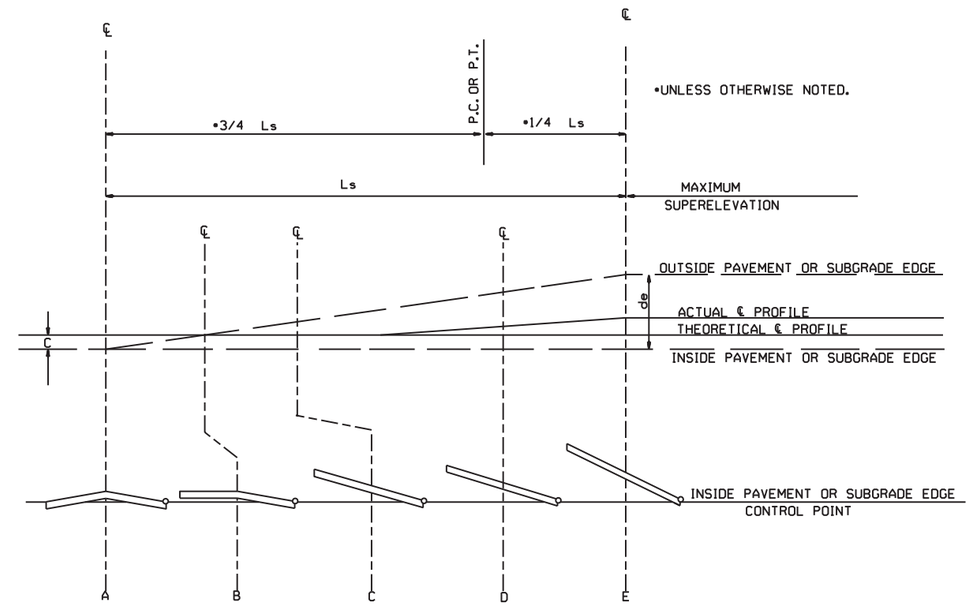
D MAX = 10° 30'

DEGREE OF CURVE	45 MPH e	45 MPH Ls (FT) MINIMUM	45 MPH Ls (FT) DESIRABLE
0° 15'	NC		
0° 30'			
0° 45'			
1° 00'	RC	90	125
1° 15'			
1° 30'	0.022	95	
1° 45'	0.024	99	
2° 00'	0.026	104	
2° 15'			
2° 30'	0.028	108	150
2° 45'	0.030	113	
3° 00'			
3° 15'	0.032	117	
3° 30'			
3° 45'	0.034	122	
4° 00'			
4° 15'	0.036	126	
4° 30'			
4° 45'	0.038	131	
5° 00'			
5° 30'	0.040	135	
6° 00'			

D MAX = 8° 00'

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.)



STANDARD METHOD WHEN SUPERELEVATION REVOLVES AROUND INNER SUBGRADE POINT OR INNER PAVEMENT EDGE

NOTE: MAINTAIN NORMAL CROWN ON INSIDE UNTIL SUPERELEVATION EXCEEDS 2C.

SUPERELEVATION FORMULA = $\frac{Lde}{Ls}$

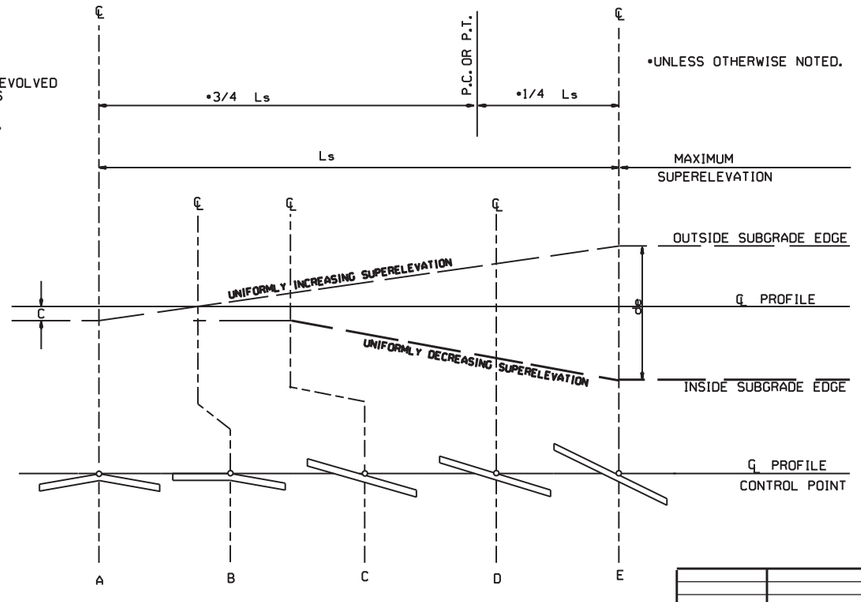
GENERAL NOTES

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%

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

11-07-19	ISSUED	
DATE	REVISION	DATE FILMED

ARKANSAS STATE HIGHWAY COMMISSION

TABLES AND METHOD OF SUPERELEVATION FOR TWO-WAY TRAFFIC (4% MAXIMUM)

STANDARD DRAWING SE-3

R1-1
30"X30"

W1-3
30"X30"
(LT. OR RT.)

W1-8
18"X24"

W2-5
30"X30"

W3-1
36"X36"

W5-1
36"X36"

M6-3
21"X15"

R1-2
36"X36"X36"

W1-4
30"X30"
(LT. or RT.)

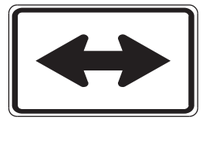
W2-1
30"X30"

S1-1
36"X36"

W3-2
36"X36"

County
Route Marker
M1-6
24"X24"

NOTE: REFLECTORIZED YELLOW LEGEND (COUNTY NAME, ROUTE LETTER & NUMBER) & BORDER ON A BLUE BACKGROUND.



M6-4
21"X15"

R2-1
24"X30"

W1-5
30"X30"
(LT. or RT.)

W2-2
30"X30"

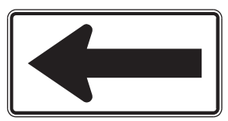
W5-2
36"X36"

W8-3
36"X36"

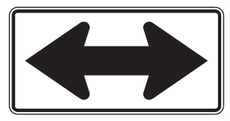
R1-3P
18"X6"

M6-5
21"X15"

W1-1
30"X30"
(LT. or RT.)



W1-6
48"X24"



W1-7
48"X24"

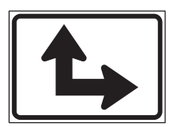
W2-3
30"X30"
(LT. or RT.)

W5-3
36"X36"

W13-1P
18"X18"

M6-1
21"X15"

NOTE: ALL M6 SIGNS TO BE MADE WITH REFLECTORIZED YELLOW ARROW & BORDER WITH BLUE BACKGROUND.

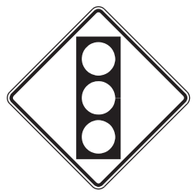


M6-6
21"X15"

W1-2
30"X30"
(LT. or RT.)

W2-4
30"X30"

W10-1
36" DIAMETER

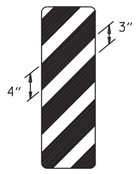


W3-3
36"X36"

M6-2
21"X15"

S4-3P
24"X8"

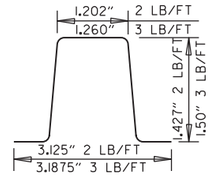
S4-2P
24"X10"



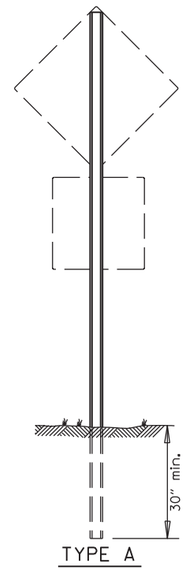
OM-3
12"X36"
(LT. or RT.)

MINIMUM DIMENSIONS SHOWN

SUPPORT SECTION

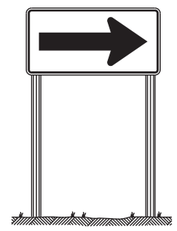


(U-CHANNEL)
STANDARD SUPPORT
ASSEMBLIES

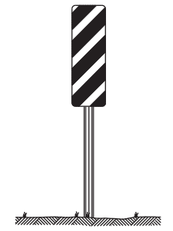


TYPE A

NOTE: LENGTH OF SIGN POSTS SHALL BE DETERMINED SO AS TO PROVIDE FOR MINIMUM VERTICAL CLEARANCES AS CALLED FOR IN THE SPECIFICATIONS PLUS A MINIMUM VERTICAL PENETRATION OF 30" IN THE SOIL.



TYPE B



TYPE C

MINIMUM WEIGHT

TYPE A & B = 3 LBS./FT.
TYPE C = 2 LBS./FT.

STANDARD HIGHWAY SIGNS

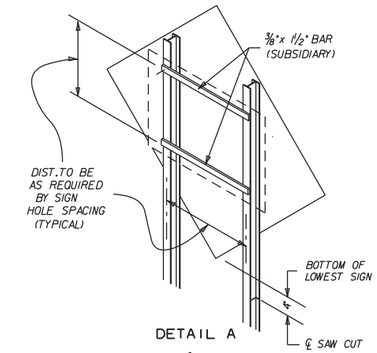
DATE	REVISION	DATE FILMED
9-12-13	DELETED JOB NO. BLOCK; REVISED RI-3 TO RI-3P	
4-17-08	REVISED SIGN DESIGNATION - W3-1 & W3-2	
4-10-03	REVISED W5-2, W8-3, OM-3; ADDED WI-8	
1-5-81	REDRAWN	960-1-15-81
9-15-78	ADDED WI4-3	877-9-15-78
9-2-76	POST WT.	623-9-3-76
5-3-76	STEEL POST WT. FROM 2#-3#; ADDED S4-2 & S4-3	504-5-3-76
8-12-74	REV. HT. TYPE "C" ASSEMBLY	500-8-21-74
12-21-72	ADDED M6-2,3,4,5,6	500-12-21-72
12-1-72	ISSUED	562-12-1-72

SUPPORT ASSEMBLIES

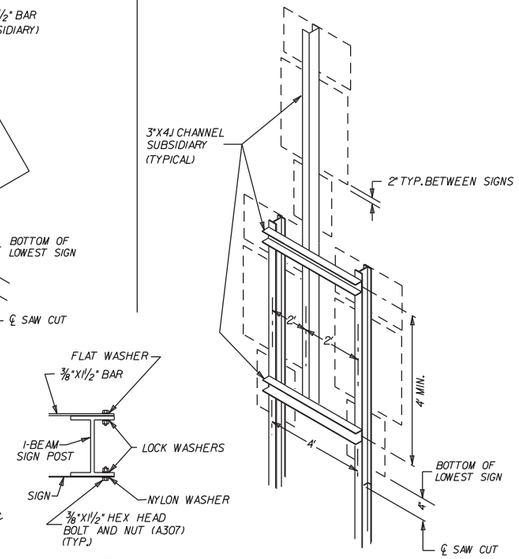
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD HIGHWAY SIGNS
AND SUPPORT ASSEMBLIES

STANDARD DRAWING SHS-1

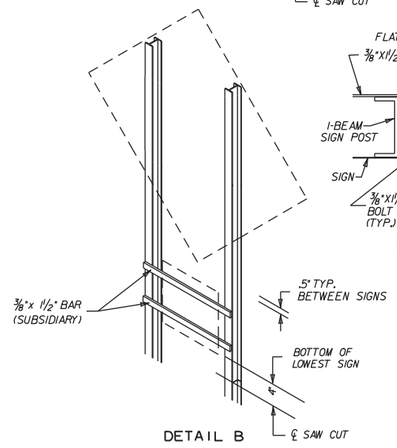


DETAIL A

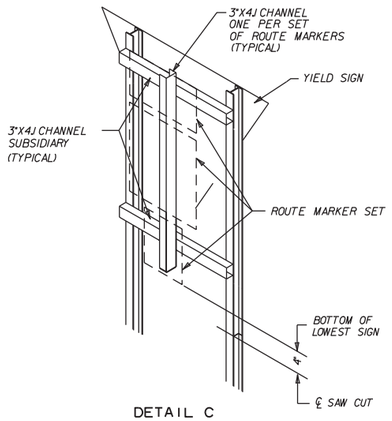


DETAIL D

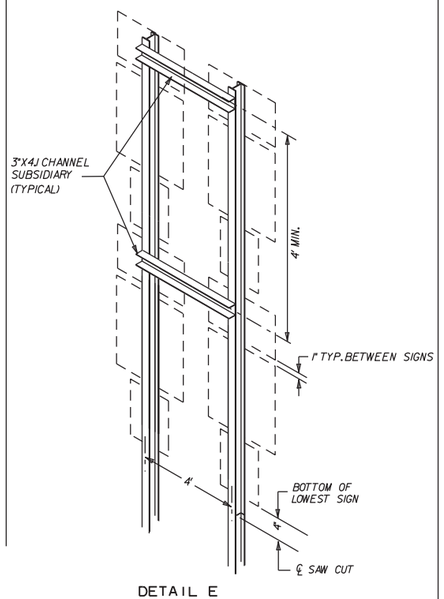
DETAIL F



DETAIL B



DETAIL C



DETAIL E

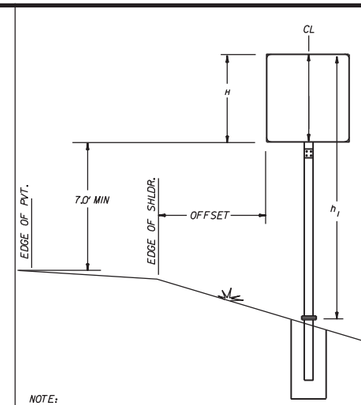
NOTE

ALL ADDITIONAL MOUNTING HARDWARE, BOLTS, NUTS, CHANNELS AND BAR STRAPS REQUIRED TO MOUNT SECONDARY SIGNS WILL BE CONSIDERED TO BE SUPPLEMENTAL TO THE MAIN SIGN SUPPORT SPECIFIED. PAYMENT WILL BE CONSIDERED SUBSIDIARY TO THE MAIN SUPPORT.

THE GALVANIZED STEEL CHANNEL AND BAR SUPPORTS MAY BE ASTM A-36.

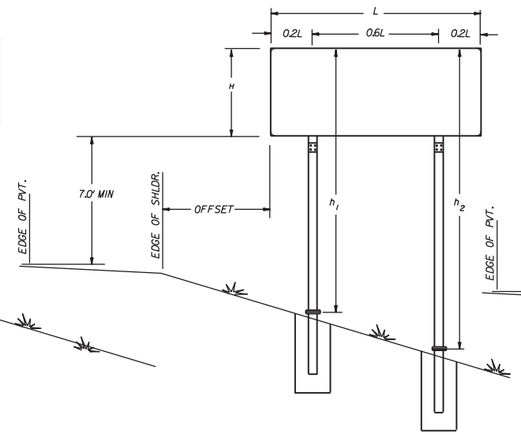
REFER TO THE P.C. RUTLEDGE FORMULA ON PAGE 58 OF THE AASHTO PUBLICATION "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS.

ALL BOLT HOLES SHALL BE 1/8" DIA. UNLESS OTHERWISE SHOWN.

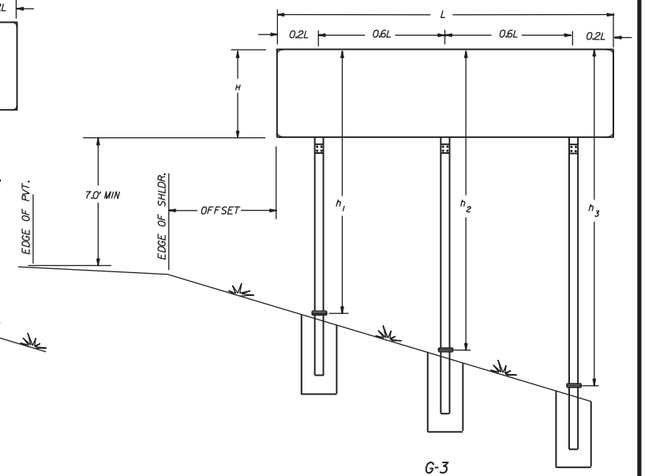


NOTE:
THE OFFSET WILL BE A MINIMUM OF 10' FROM THE EDGE OF PAVED SURFACE OR AS DIRECTED BY THE ENGINEER.

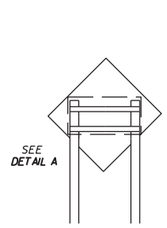
G-1



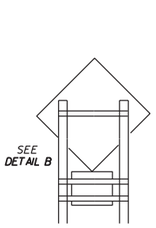
G-2



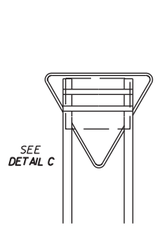
G-3



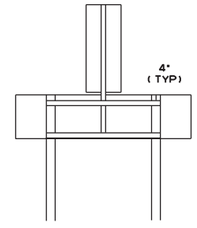
G2-1



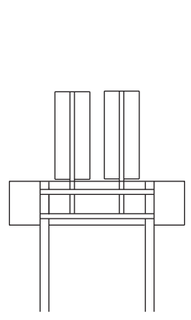
G2-2



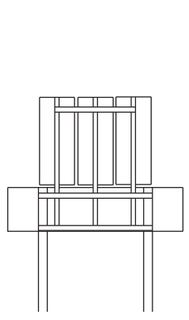
G2-3



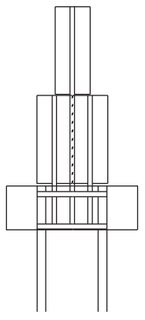
G2-4



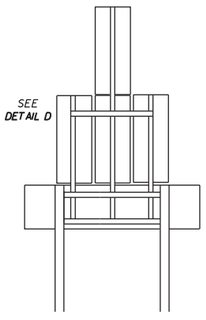
G2-5



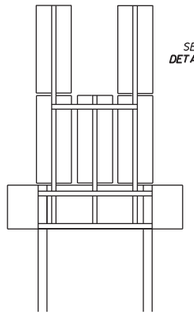
G2-6



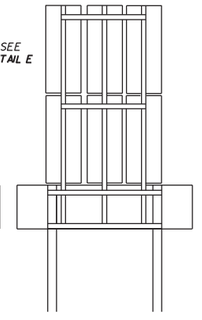
G2-7



G2-8



G2-9



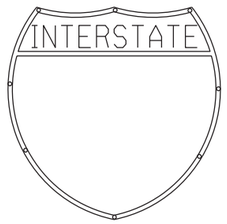
G2-10

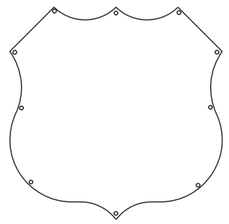
			ARKANSAS STATE HIGHWAY COMMISSION
			DETAIL OF BREAKAWAY SIGN SUPPORTS FOR STANDARD SIGNS
9-12-13	ISSUED		STANDARD DRAWING SHS-4
DATE	REVISION	FILMED	

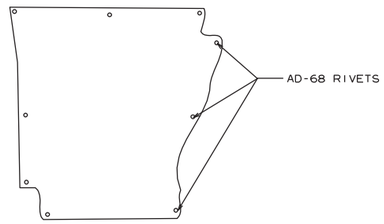
THE CONTRACTOR SHALL DRILL AND POP-RIVET LEGEND, SHIELDS, ARROWS, OR OTHER COPY AS SHOWN.

MOUNTING DETAILS FOR DEMOUNTABLE LEGEND ON GUIDE SIGNS

DIRECT APPLIED BORDER







DIRECT APPLIED BORDER

AD-68 RIVETS

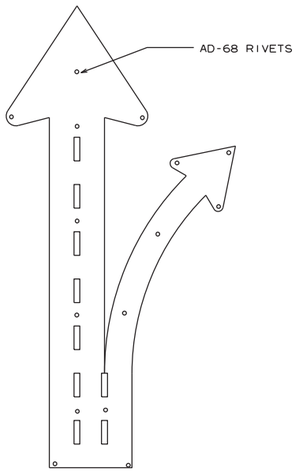
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

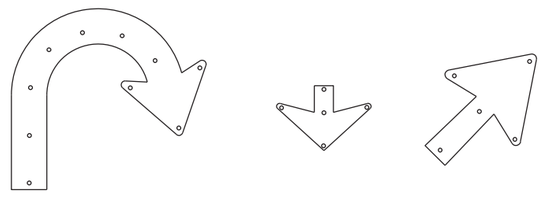
AD-68 RIVETS

a b c d e f g h i j k l m n o p q r s t u v w x y z

AD-68 RIVETS

0 1 2 3 4 5 6 7 8 9 1/4 1/2 3/4





NOTES:

LEGEND ON GUIDE SIGNS ON THE MAIN LANES SHALL BE DEMOUNTABLE LEGEND.
LEGEND ON GUIDE SIGNS ON CROSS ROADS AND RAMPS SHALL BE DIRECT APPLIED.
THE DEMOUNTABLE AND DIRECT APPLIED LEGENDS SHALL BE TYPE IX SHEETING.

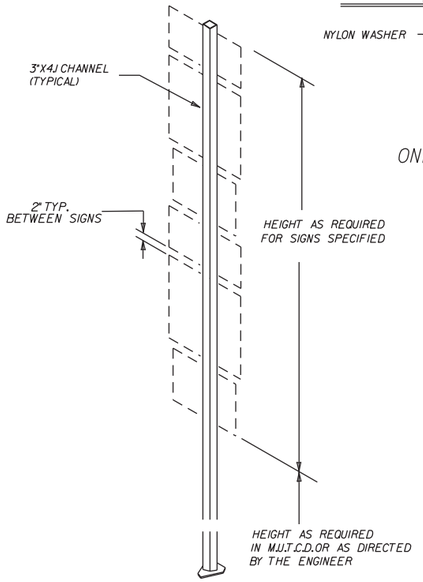
THE BACKGROUND ON ALL GUIDE SIGNS AND STANDARD SIGNS SHALL BE CONSTRUCTED USING TYPE III SHEETING.

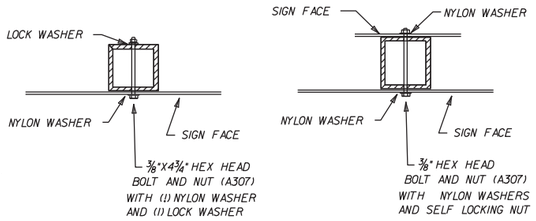
TYPE IX SHEETING FOR BORDER, LEGEND, SHIELDS, ARROWS, OR OTHER COPY SHALL BE ORIENTED VERTICALLY AS PER MANUFACTURERS' DATUM MARKS, ORIENTATION MARKS, OR OTHER RECOMMENDATIONS.

SIGN LEGEND, SHIELDS, ARROWS OR OTHER COPY SHALL BE APPLIED WITH RIVETS ONLY.

NO OTHER METHOD OF APPLYING CHARACTERS IS ALLOWED.

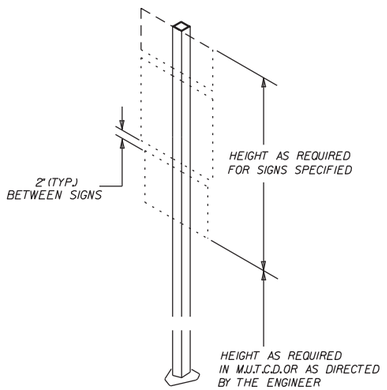
			ARKANSAS STATE HIGHWAY COMMISSION
			MOUNTING DETAILS FOR DEMOUNTABLE LEGEND ON GUIDE SIGNS
9-12-13	ISSUED		STANDARD DRAWING SHS-6
DATE	REVISION	FILMED	





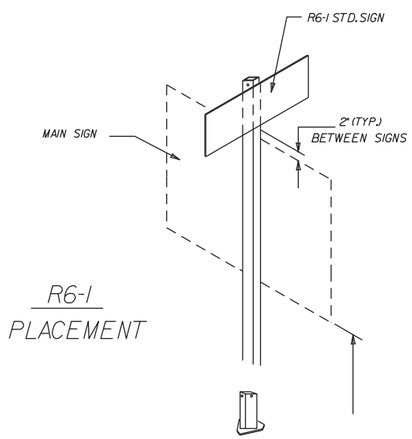
CHANNEL SHALL BE FULL LENGTH OF RECTANGULAR AND SQUARE SIGNS AND SHALL EXTEND 1½" BEYOND BOLT HOLES ON DIAMOND OR IRREGULAR SHAPED SIGNS.

MOUNTING HARDWARE

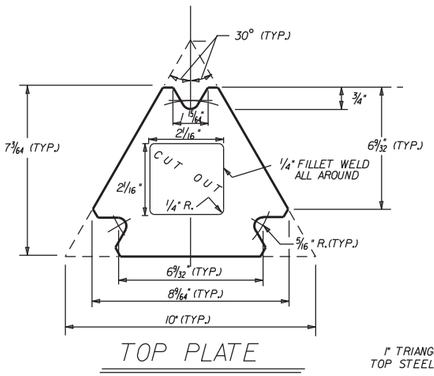


TYPE-I

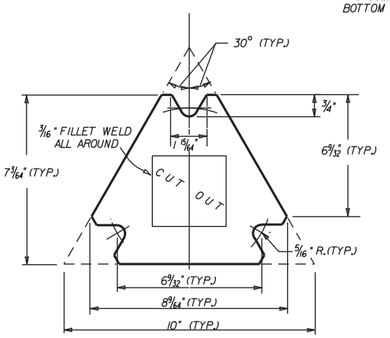
BASIS OF ESTIMATE
APPROX. 100 lbs STEEL



R6-1 PLACEMENT



TOP PLATE



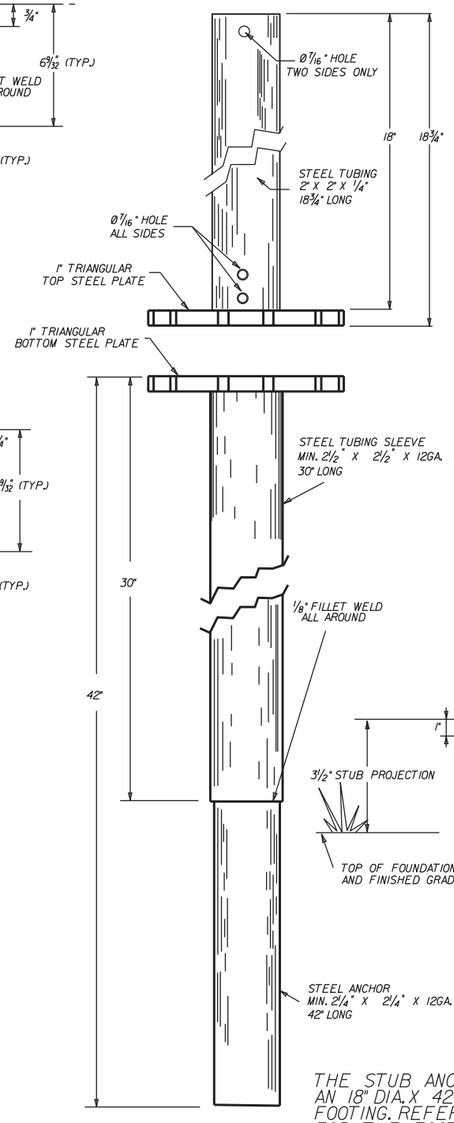
BOTTOM PLATE

GENERAL NOTES:

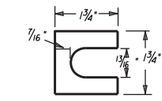
THE TOP PLATE OF TRIANGULAR SLIP BASES SHALL HAVE THE SAME EXTERIOR DIMENSIONS AS THE BOTTOM PLATE.

INSIDE DIAMETER OF THE SIGN POST SHALL BE CUT THROUGH THE CENTER OF THE TOP PLATE WITH THE HOLE EDGE BEVELED AS SHOWN. THE BEVEL END SHALL BE TANGENT TO THE BOLT HOLE . ANY MISALIGNMENT SHALL BE REMOVED BY GRINDING . FACE OF BEVEL SHALL BE FINISHED TO A MINIMUM SMOOTHNESS OF 1•500 .

OTHER MASH COMPLIANT BREAKAWAY SIGN SUPPORTS THAT HAVE THE SAME TOP PLATE DIMENSIONS AND SUPPORT 2¼" X 2¼" SQUARE TUBE SIGN POSTS MAY BE SUBSTITUTED AS APPROVED BY THE ENGINEER.

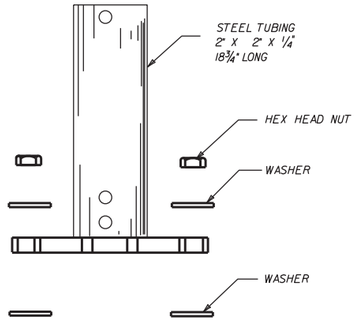


THE STUB ANCHOR SHALL BE SET IN AN 18" DIA. X 42" DEEP CONCRETE FOOTING. REFER TO STD. DRWG. SHS-3 FOR THE FOOTING DETAILS.

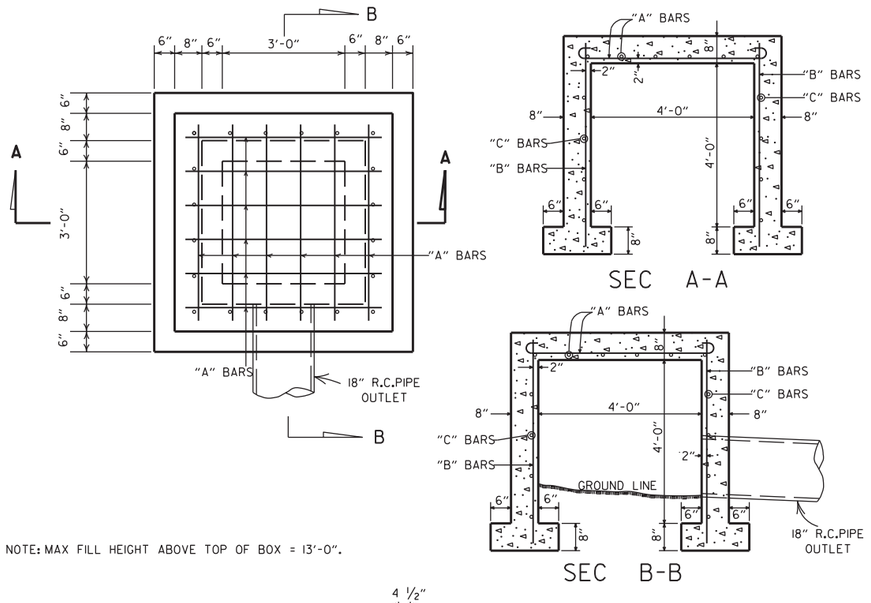


FURNISH (2) .012" THICK AND (2) .032" THICK SHIMS PER POST

SHIM DETAIL



			ARKANSAS STATE HIGHWAY COMMISSION
			DETAIL OF OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS
9-12-13	ISSUED		STANDARD DRAWING SHS-7
DATE	REVISION	FILMED	

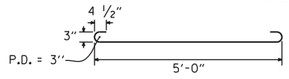


NOTE: MAX FILL HEIGHT ABOVE TOP OF BOX = 13'-0".

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



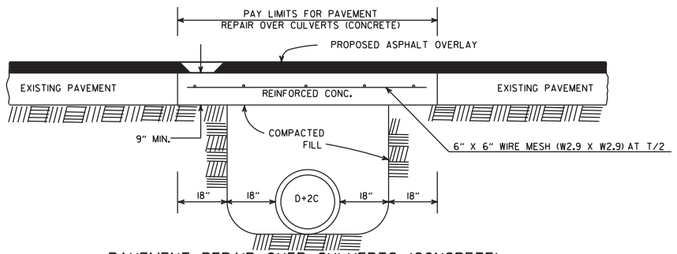
QUANTITIES

CONCRETE 3.31 CU. YDS.
REINFORCING STEEL 168 LB.

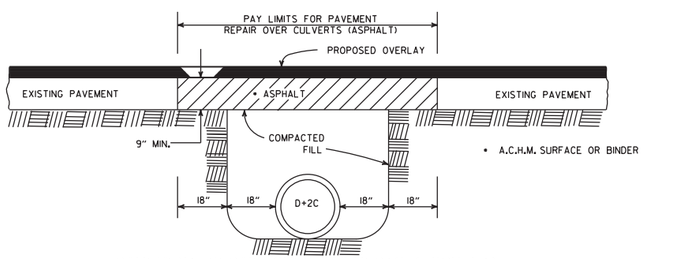
GENERAL NOTE:

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



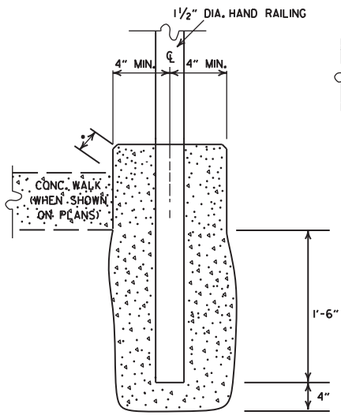
PAVEMENT REPAIR OVER CULVERTS (CONCRETE)



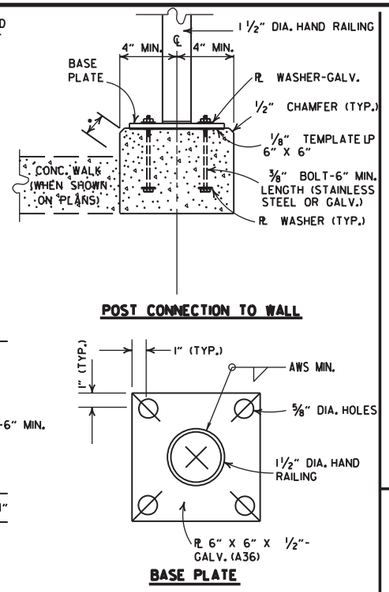
PAVEMENT REPAIR OVER CULVERTS (ASPHALT)

DETAIL SHOWING REPAIR OF EXISTING PAVEMENT AT CULVERT INSTALLATIONS

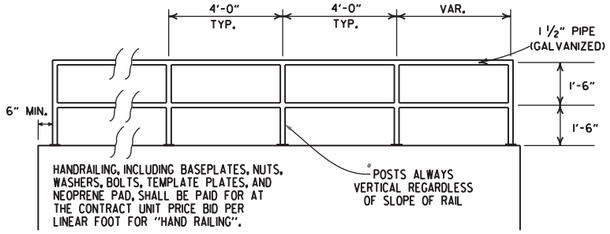
• A 2" MIN. HIGH CURB IS REQUIRED WHEN CONCRETE WALK IS ADJACENT TO THE HAND RAILING. PAYMENT FOR CURB SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR CONCRETE WALKS.



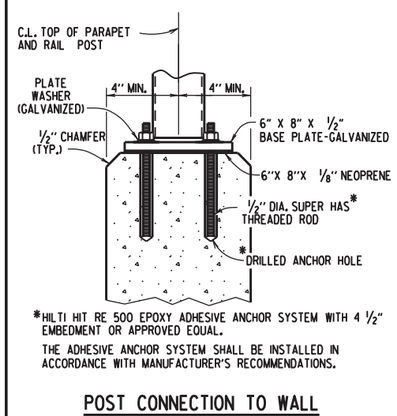
DETAIL OF HAND RAILING SET IN CONCRETE



POST CONNECTION DETAILS



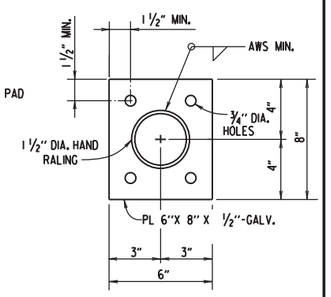
HAND RAILING SHALL CONFORM TO SECTION 633.



*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.

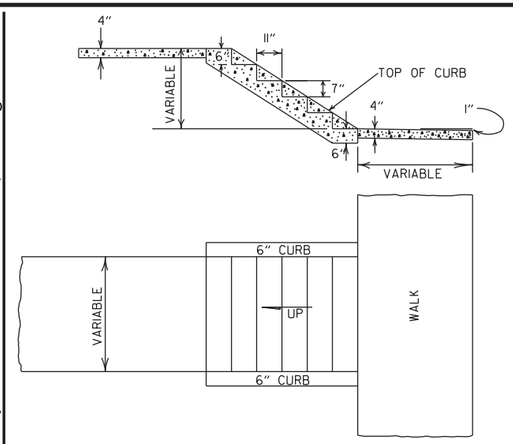
POST CONNECTION TO WALL



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.

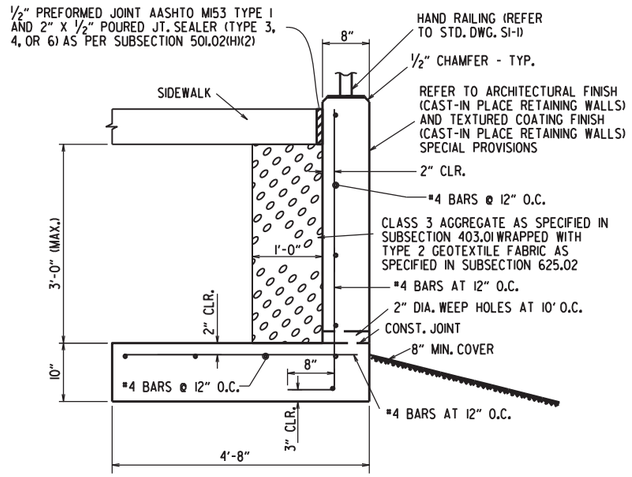
DETAILS OF CONCRETE STEPS & WALKS

DATE	REVISION	DATE FILMED
10-25-18	REVISED DETAIL SHOWING REPAIR OF EXISTING PAVEMENT AT CULVERT INSTALLATIONS	
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

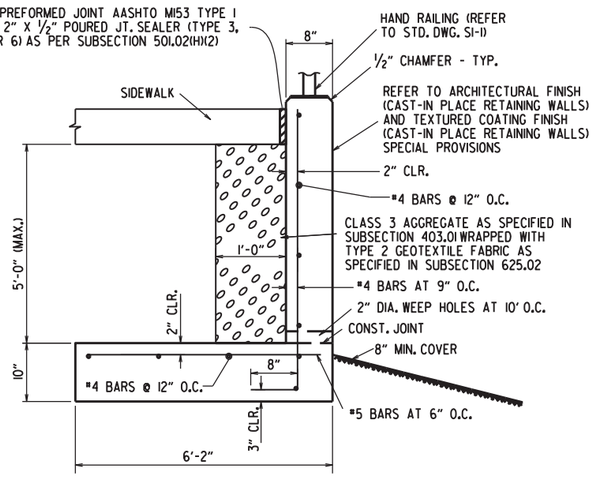
DETAILS OF SPECIAL ITEMS

STANDARD DRAWING SI-1



CONCRETE WALK (TYPE SPECIAL) DETAIL MAX HEIGHT 3'-0"

N.T.S.



CONCRETE WALK (TYPE SPECIAL) DETAIL MAX HEIGHT 5'-0"

N.T.S.

GENERAL NOTES

CONSTRUCTION SPECIFICATIONS: ARKANSAS DEPARTMENT OF TRANSPORTATION 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.

DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SIXTH EDITION (2012).

LIVE LOAD: LIVE LOAD SURCHARGE IS NOT INCLUDED IN THE DESIGN OF THESE WALLS. VEHICULAR LIVE LOAD SHALL NOT BE ALLOWED WITHIN A DISTANCE EQUAL TO ONE-HALF THE HEIGHT OF THE WALL.

CONCRETE: CONCRETE SHALL BE POURED IN THE DRY AND ALL EXPOSED CORNERS TO BE CHAMFERED ½". ALL CONCRETE SHALL BE CLASS S WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH F'C = 3,500 PSI. A CLASS 2 SURFACE FINISH SHALL BE USED ON ALL SURFACES OF THE CONCRETE UNLESS OTHERWISE NOTED. REFER TO ARCHITECTURAL FINISH (CAST-IN PLACE RETAINING WALLS) AND TEXTURED COATING FINISH (CAST-IN PLACE RETAINING WALLS) SPECIAL PROVISIONS.

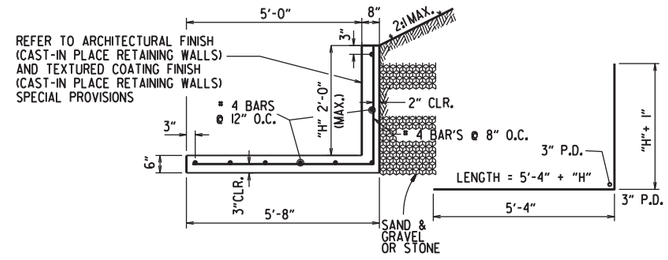
REINFORCING STEEL: ALL REINFORCING STEEL SHALL CONFORM TO AASHTO M31 ORM53, GRADE 60.

FOUNDATIONS FOR FOOTINGS SHALL BE PREPARED IN ACCORDANCE WITH SUBSECTION 801.04. BACKFILL FOR RETAINING WALLS SHALL BE IN ACCORDANCE WITH SUBSECTION 801.08.

WATERPROOF MEMBRANE (TYPE C), WATERSTOPS, PREFORMED JOINTS, PREFORMED JOINT FILLER, WEEP HOLES, CLASS 3 AGGREGATE, REINF. STEEL, CONCRETE, & GEOTEXTILE FABRIC SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED SUBSIDIARY TO CONCRETE WALKS (TYPE SPECIAL).

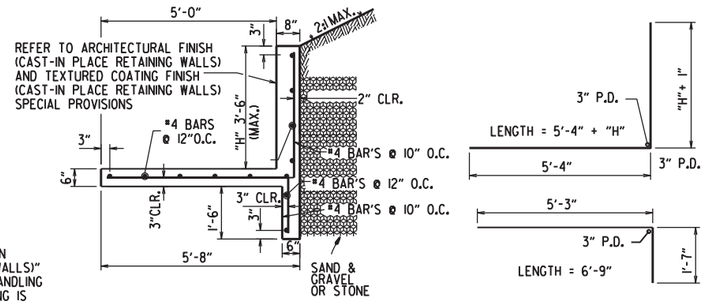
JOINTS IN THE WALL SHALL MATCH TYPE AND SPACING OF THE JOINTS IN THE WALK.

THESE DETAILS ARE NOT INTENDED FOR USE ALONG STREAMS OR DITCHES WITHOUT CONSIDERATION FOR SCOUR.



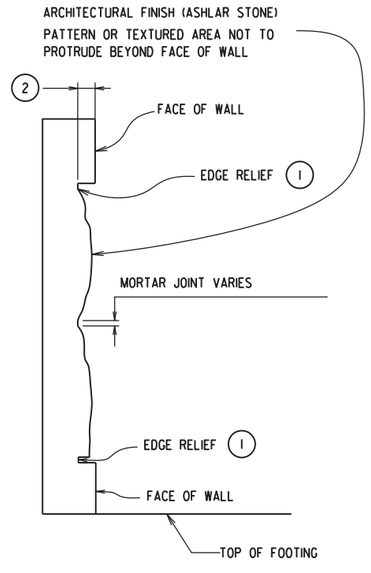
CONCRETE WALK (TYPE SPECIAL) DETAILS MAX HEIGHT 2'-0"

N.T.S.



CONCRETE WALK (TYPE SPECIAL) DETAILS MAX HEIGHT 3'-6"

N.T.S.

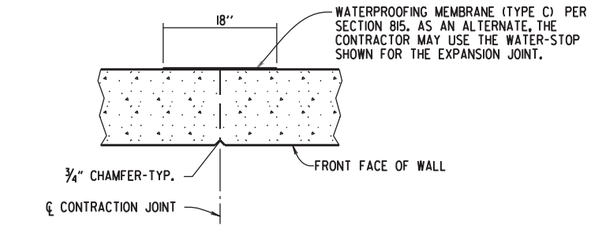


ARCHITECTURAL FINISH DETAILS

N.T.S.

(1) PROVIDE EDGE RELIEF AROUND PERIMETER OF TEXTURE. EDGE RELIEF DIMENSIONS SHALL MATCH MANUFACTURERS EDGE DISTANCE.

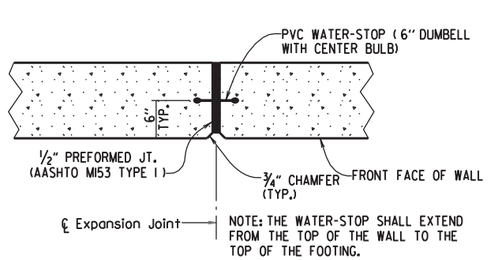
(2) DEPTH OF ASHLAR STONE PATTERN APPROX. 1⅝". SEE SP "ARCHITECTURAL FINISH (CAST-IN PLACE RETAINING WALLS)".



TYPICAL CONTRACTION JOINT DETAIL

N.T.S.

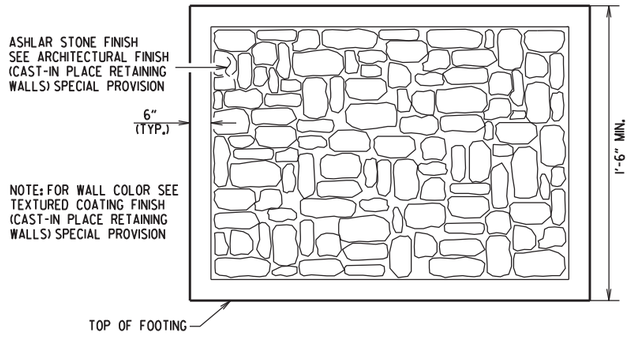
NOTE: 20'-0" MAX. SPACING BETWEEN CONTRACTION JOINTS. HORIZONTAL REINFORCEMENT SHALL BE CONTINUOUS THROUGH CONTRACTION JOINTS.



TYPICAL EXPANSION JOINT DETAIL

N.T.S.

NOTE: 60'-0" MAX. SPACING BETWEEN EXPANSION JOINTS. HORIZONTAL REINFORCING SHALL STOP 2" FROM ℄ EXPANSION JOINT.



ASHLAR STONE FINISH DETAIL

NOTES:

WALL PATTERN SHALL BE APPLIED TO THE EXPOSED SURFACES OF WALL IN ACCORDANCE WITH SP "ARCHITECTURAL FINISH (CAST-IN PLACE RETAINING WALLS)" AND AS SHOWN IN THE PLANS. CARE SHALL BE TAKEN WITH FORM LINER HANDLING AND INSTALLATION TO ENSURE AESTHETIC QUALITY OF THE WALL TEXTURING IS MAINTAINED. WHERE FORM LINER PANELS REQUIRE MODIFICATION TO CONFORM TO THE LOCATION, DIMENSIONS AND LINES SHOWN IN THE PLANS, THE CONTRACTOR SHALL PROVIDE EDGE RELIEF MATCHING THAT OF THE UNALTERED FORM LINER. PAYMENT FOR WALL TEXTURING SHALL BE IN ACCORDANCE WITH SP "ARCHITECTURAL FINISH (CAST-IN PLACE RETAINING WALLS)".

NO ADJUSTMENTS WILL BE MADE IN CONCRETE VOLUME DUE TO THE USE OF "ARCHITECTURAL FINISH". CLASS "S" CONCRETE SHALL BE MEASURED IN ACCORDANCE WITH SUBSECTION 802.24(A). CARE SHALL BE TAKEN IN PLACING CONCRETE TO AVOID SEGREGATION AND TO ELIMINATE FLOW LINES.

CLASS 3 TEXTURED COATING FINISH SHALL BE APPLIED TO WALL SURFACES AS SPECIFIED IN SP "TEXTURED COATING FINISH (CAST-IN PLACE RETAINING WALLS)" AND IN ACCORDANCE WITH SUBSECTION 802.19(B)(3).

DATE	REVISION	DATE FILMED
11-05-20	REVISED GENERAL NOTES	
5-14-20	DRAWING ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

CONCRETE WALK (TYPE SPECIAL)

STANDARD DRAWING SI - 3

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"

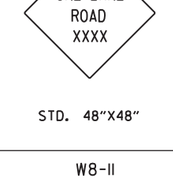
R4-1

STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

R4-2

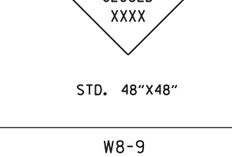
STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

R5-1



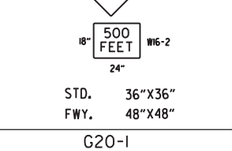
STD. 30"X30"
EXPWY. 36"X36"
SPECIAL 48"X48"

RII-2



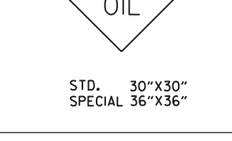
48"X30"

RII-3A



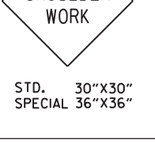
60"X30"

RII-4



60"X30"

W21-5a

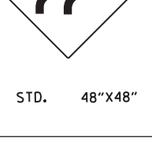


STD. 36"X36"
FWY. 48"X48"

WI-1

STD. 36"X36"
FWY. 48"X48"

WI-2

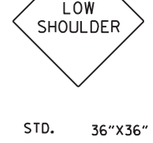


STD. 36"X36"
FWY. 48"X48"

WI-3

STD. 48"X48"

WI-4



STD. 48"X48"

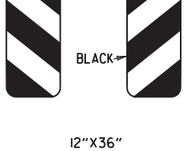
WI-6

STD. 48"X24"
SPECIAL 60"X30"

WI-8

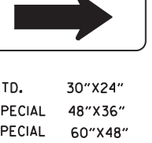
STD. 18"X24"
SPECIAL 24"X30"
EXPWY. 30"X36"
FWY. 36"X48"

W3-1



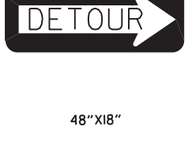
STD. 36"X36"
SPECIAL 48"X48"

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"

WI3-1

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"

WI-4b

STD. 48"X48"

R56-1

STD. 18"X18"

W8-11

STD. 36"X36"
FWY. 48"X48"

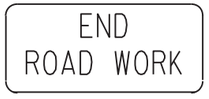
W8-9

STD. 36"X36"
FWY. 48"X48"

G20-1

60"X24"

G20-2



48"X24"

OM-3L OM-3R

12"X36"

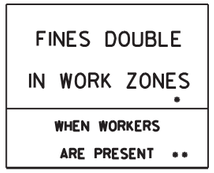
M4-9

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.

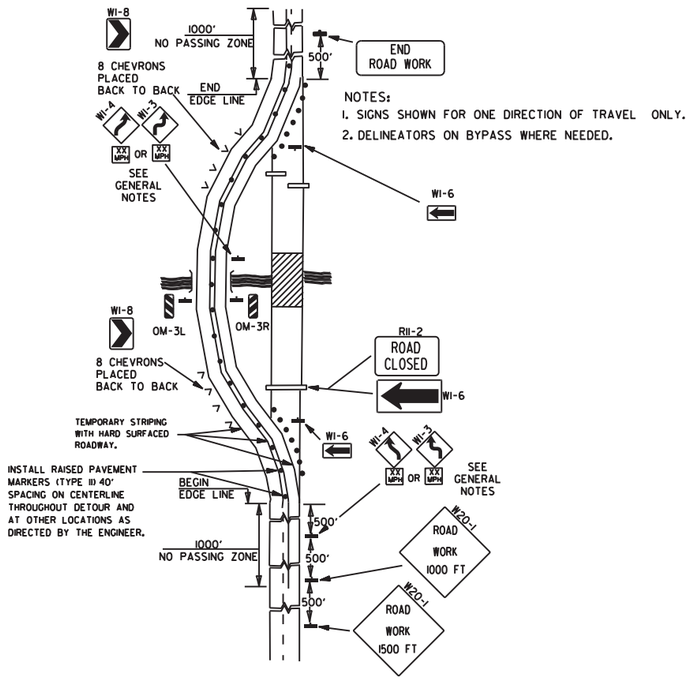
• NOTE: SUPPORTS FOR SIGNS, BARRICADES, AND VERTICAL PANELS THAT ARE DIFFERENT FROM THE REQUIREMENTS SHOWN IN NOTES 4 & 5, BUT MEET THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH), WILL BE ACCEPTED. COMPLIANCE WITH THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) IS REQUIRED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

DATE	REVISION	FILMED
11-07-19	REVISED FOR MASH	
4-13-17	DELETED RSP-1 & ADDED W21-5a	
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

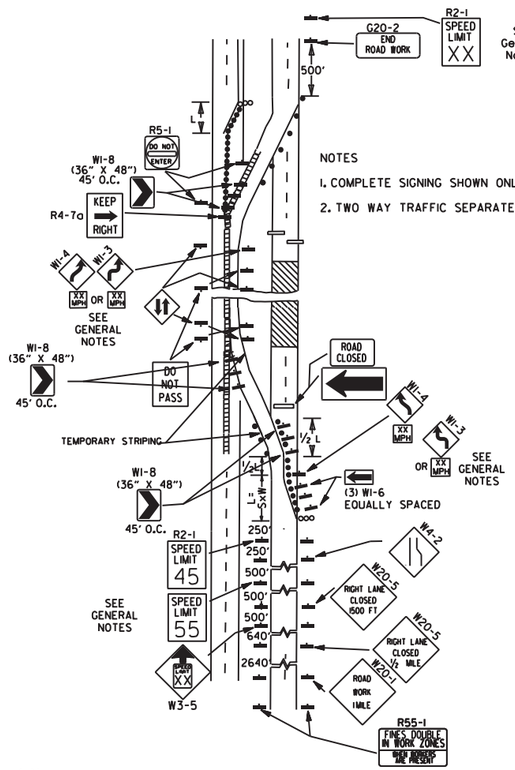
STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

STANDARD DRAWING TC-1



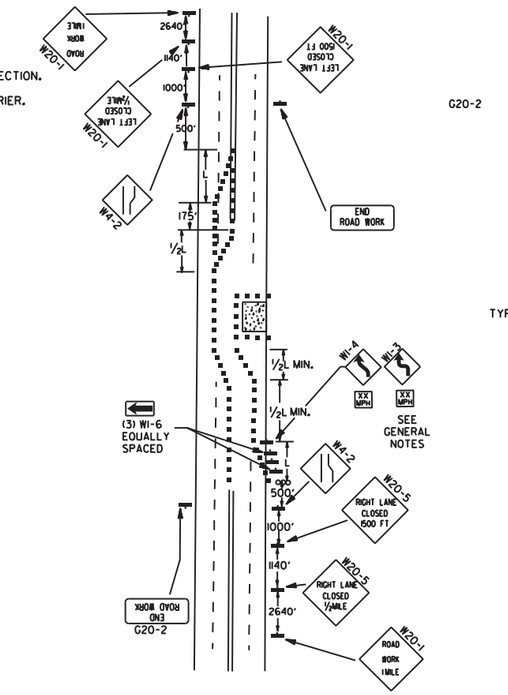
NOTES:
1. SIGNS SHOWN FOR ONE DIRECTION OF TRAVEL ONLY.
2. DELINEATORS ON BYPASS WHERE NEEDED.

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

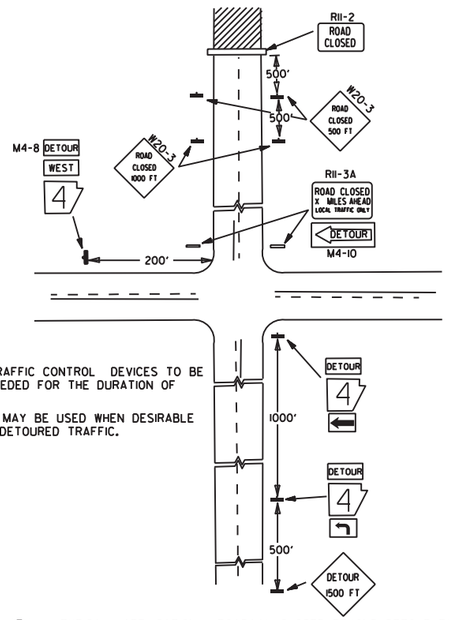


NOTES
1. COMPLETE SIGNING SHOWN ONLY IN CROSSOVER DIRECTION.
2. TWO WAY TRAFFIC SEPARATED WITH POSITIVE BARRIER.

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

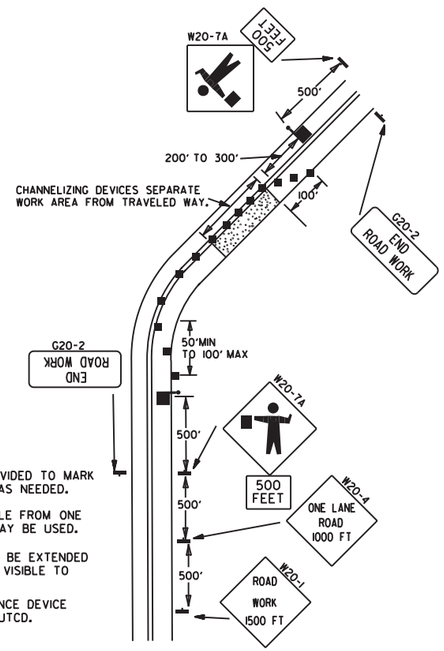


(C) TYPICAL APPLICATION - 4-LANE UNDIVIDED ROADWAY WHERE HALF OF THE ROADWAY IS CLOSED.



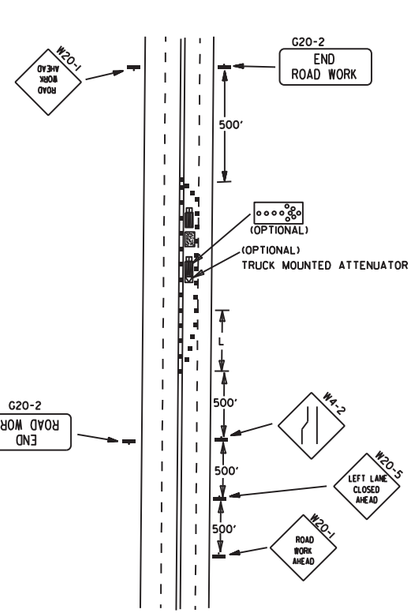
NOTES:
1. REGULATORY TRAFFIC CONTROL DEVICES TO BE MODIFIED AS NEEDED FOR THE DURATION OF THE DETOUR.
2. STREET NAMES MAY BE USED WHEN DESIRABLE FOR DIRECTING DETOURED TRAFFIC.

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

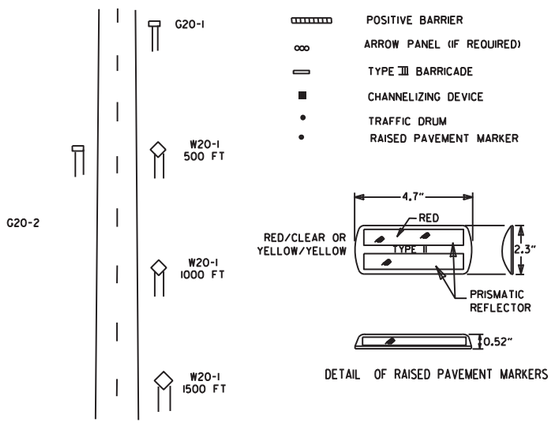


NOTES:
1. FLOOD LIGHTS SHOULD BE PROVIDED TO MARK FLAGGER STATIONS AT NIGHT AS NEEDED.
2. IF ENTIRE WORK AREA IS VISIBLE FROM ONE STATION, A SINGLE FLAGGER MAY BE USED.
3. CHANNELIZING DEVICES ARE TO BE EXTENDED TO A POINT WHERE THEY ARE VISIBLE TO APPROACHING TRAFFIC.
4. AUTOMATED FLAGGER ASSISTANCE 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.



DETAIL OF RAISED PAVEMENT MARKERS

TYPICAL ADVANCE WARNING SIGN PLACEMENT

TAPER FORMULAE:

L=SXW FOR SPEEDS OF 45MPH OR MORE.

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

WHERE:

L= MINIMUM LENGTH OF TAPER.

S= NUMERICAL VALUE OF POSTED SPEED LIMIT PRIOR TO WORK OR 85TH PERCENTILE SPEED.

W= WIDTH OF OFFSET.

GENERAL NOTES:

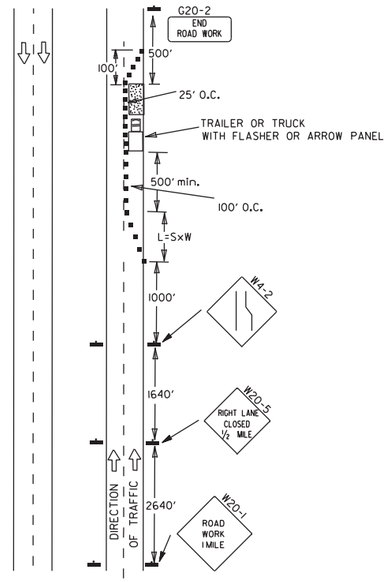
1. THE MAINTENANCE DIVISION SHALL CONDUCT A BALL BANK STUDY TO DETERMINE THE ADVISORY SPEED LIMIT PRIOR TO OPENING TO TRAFFIC. THE ADVISORY SPEED WILL BE POSTED ON W1-3 OR W1-4 CURVE WARNING SIGNS. USE W1-4 WHEN SPEED IS GREATER THAN 30MPH AND W1-3 WHEN 30MPH OR LESS
2. WHEN THE EXISTING SPEED LIMIT 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. PAYMENT FOR TRAFFIC DRUMS SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR VARIOUS TRAILER MOUNTED DEVICES.
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 ARDOT QUALIFIED PRODUCTS LIST.
9. ALL TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANGEABLE MESSAGE SIGNS SHALL MEET THE REQUIREMENTS OF THE MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).

DATE	REVISION	FILMED
05-20-21	REVISED NOTE 7	
11-07-19	REVISED NOTE 1, ADDED NOTE 9	
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	
3-11-10	ADDED (AFAD)	
11-20-08	REVISED SIGN DESIGNATIONS	
11-18-04	ADDED GENERAL NOTE	
10-18-96	ADDED R55-1	
4-26-96	CORRECTED (G) 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	

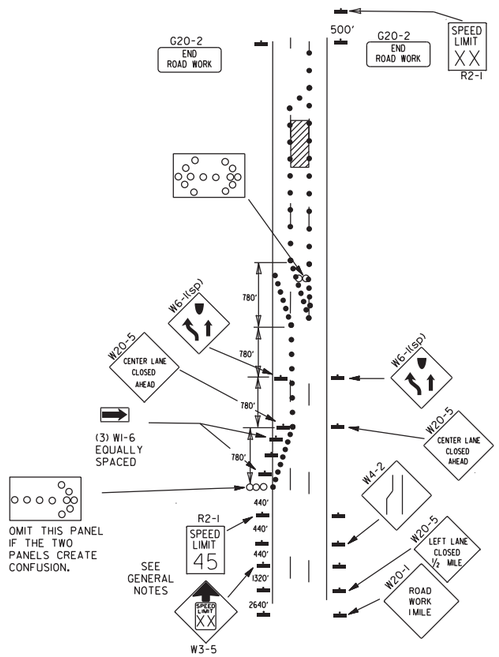
ARKANSAS STATE HIGHWAY COMMISSION

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.



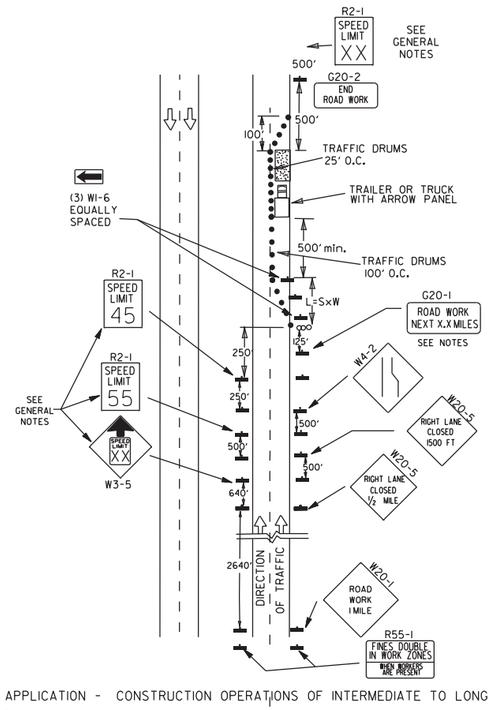
(B) TYPICAL APPLICATION - 3-LANE ONEWAY ROADWAY WHERE CENTER LANE IS CLOSED.

KEY:

- ooo ARROW PANEL (IF REQUIRED)
- ■ CHANNELIZING DEVICE
- ● TRAFFIC DRUM

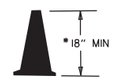
GENERAL NOTES:

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 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. 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 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. PAYMENT FOR TRAFFIC DRUMS SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR VARIOUS TRAILER MOUNTED DEVICES.
11. ALL TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANGEABLE MESSAGE SIGNS SHALL MEET THE REQUIREMENTS OF THE MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).



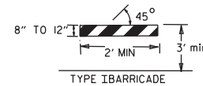
(C) TYPICAL APPLICATION - CONSTRUCTION OPERATIONS OF INTERMEDIATE TO LONG TERM DURATION ON A 4-LANE DIVIDED ROADWAY WHERE HALF OF THE ROADWAY IS CLOSED.

CHANNELIZING DEVICES



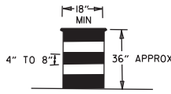
* WHEN CONES ARE USED ON FREEWAYS AND MULTI-LANE HIGHWAYS, THEY SHALL BE 28" MIN. DURING HOURS OF DARKNESS, 28" CONES SHALL BE USED ON ALL ROADWAYS, AND SHALL BE REFLECTORIZED IN ACCORDANCE WITH THE M.U.T.C.D.

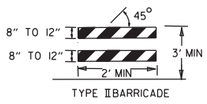
CONES



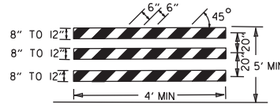
TYPE I BARRICADE

PLASTIC DRUM



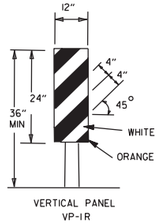


TYPE II BARRICADE



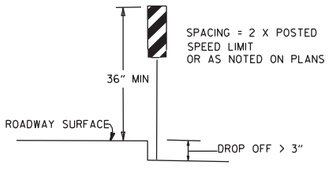
TYPE III BARRICADE

NOTE:
FOR ALL ROAD CLOSURES, THE TYPE III BARRICADES SHALL BE OF SUFFICIENT LENGTH TO EXTEND ACROSS ENTIRE ROADWAY.

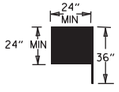


VERTICAL PANEL
VP-1R

VERTICAL PANEL PLACEMENT



FLAG



FLAG SHALL BE OF GOOD GRADE RED MATERIAL

TRAFFIC CONTROL DEVICES

NON-INTERSTATE

VERTICAL DIFFERENTIAL	LOCATION	TRAFFIC CONTROL	
		≤ 45 MPH	> 45 MPH
≤ 1"	CENTERLINE	W8-11	W8-11
> 1" ≤ 3"	CENTERLINE	W8-11 AND CENTERLINE LANE STRIPING	W8-11 AND CENTERLINE LANE STRIPING
> 3"	CENTERLINE	STANDARD LANE CLOSURE[6]	STANDARD LANE CLOSURE[6]
≤ 3"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-9 AND TRAFFIC DRUMS[1]	W8-9 AND TRAFFIC DRUMS[1]
> 3" ≤ 6"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS[1]	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS[1]
> 6" ≤ 18"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS[1]	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS[2]
> 18" ≤ 24"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS[1]	A STABILIZED WEDGE, W8-17, EDGE LINE STRIPING AND TRAFFIC DRUMS[3]
> 24"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	PRECAST CONCRETE BARRIER[4] & EDGE LINES	PRECAST CONCRETE BARRIER[4] & EDGE LINES

INTERSTATE

VERTICAL DIFFERENTIAL	LOCATION	TRAFFIC CONTROL
≤ 3"	CENTERLINE	W8-11 AND LANE STRIPING
≤ 3"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-9, EDGE LINE STRIPING, AND TRAFFIC DRUMS[2]
> 3" ≤ 6"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS[2]
> 6"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	PRECAST CONCRETE BARRIER & EDGE LINES

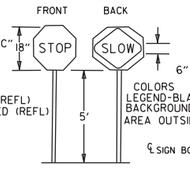
INTERSTATE AND NON-INTERSTATE

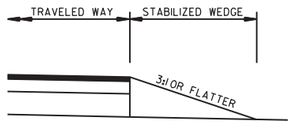
FORESLOPE	HEIGHT	TRAFFIC CONTROL
1:1	> 2 FT	PRECAST CONCRETE BARRIER
2:1	≤ 5 FT	TRAFFIC DRUMS
2:1	> 5 FT	PRECAST CONCRETE BARRIER
Flatter than 2:1	N/A	TRAFFIC DRUMS

GENERAL NOTES:

1. WHEN THE SHOULDER AREA IS USED AS PART OF THE TRAVELED LANE AND THERE IS INSUFFICIENT WIDTH TO PLACE TRAFFIC DRUMS ON THE REMAINING SHOULDER WIDTH, THEN VERTICAL PANELS SHALL BE USED.
2. WHEN THERE IS INSUFFICIENT WIDTH TO PLACE TRAFFIC DRUMS ON THE REMAINING SHOULDER WIDTH, A STABILIZED WEDGE SHALL BE USED.
3. PRECAST CONCRETE BARRIER WALL CAN BE USED IN LIEU OF A STABILIZED WEDGE, W8-17 SIGN, EDGE LINE STRIPING, AND TRAFFIC DRUMS, IF AND WHERE DIRECTED BY THE ENGINEER.
4. A STABILIZED WEDGE, W8-17 SIGN, EDGE LINE STRIPING, AND TRAFFIC DRUMS CAN BE USED IN LIEU OF PRECAST CONCRETE BARRIER WALL, IF AND WHERE DIRECTED BY THE ENGINEER.
5. W21-5, W21-5a, AND/OR W21-5b SIGNS SHALL BE USED WHERE THE ROADWAY IS UNOBSTRUCTED IF AND WHERE DIRECTED BY THE ENGINEER.
6. TIME LIMITATIONS MUST CONFORM TO SECTION 603 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION).

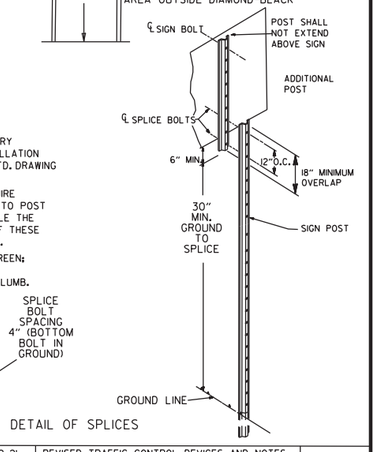
STOP SLOW PADDLE





STABILIZED WEDGE

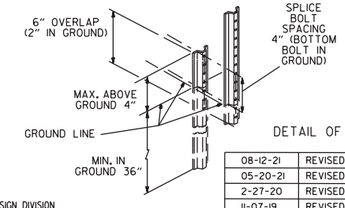
NOTE:
MATERIALS FOR THE STABILIZED WEDGE SHALL MEET THE REQUIREMENTS PROVIDED IN SECTION 603.02 OF THE STANDARD SPECIFICATIONS.



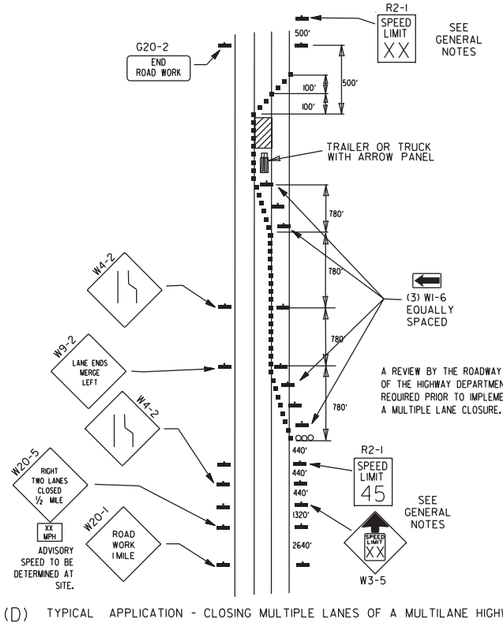
NOTES: USE SPLICES ONLY WHEN NECESSARY FOR INSTALLATION. TYPICAL INSTALLATION SHOULD HAVE NO SPLICES (SEE STD. DRAWING NO. SHS-21)

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.



DETAIL OF SPLICES



A REVIEW BY THE ROADWAY DESIGN DIVISION OF THE HIGHWAY DEPARTMENT WILL BE REQUIRED PRIOR TO IMPLEMENTING A MULTIPLE LANE CLOSURE.

(D) TYPICAL APPLICATION - CLOSING MULTIPLE LANES OF A MULTILANE HIGHWAY.

DATE	REVISION	FILMED
08-12-21	REVISED TRAFFIC CONTROL DEVICES AND NOTES	
05-20-21	REVISED NOTE 10	
2-27-20	REVISED TRAFFIC CONTROL DEVICES DETAILS	
11-07-19	REVISED NOTE 9, ADDED NOTE 11	
7-25-19	REVISED TRAFFIC CONTROL DEVICES DETAILS	
9-2-15	REVISED NOTE 2 & REPLACED R2-5A WITH W3-5	
10-15-09	ADDED REFERENCE TO MASH	
11-20-08	REVISED SIGN DESIGNATIONS	
11-18-04	ADDED NOTE	
10-1-98	ADDED NOTE	
4-03-97	ADDED (SP) TO W6-1& REVISED TRAFFIC CONTROL DEVICES NOTE	
10-18-96	ADDED R55-1	
10-12-95	MOVED UPPER SPLICE	
6-8-95	REVISED SPLICE DETAIL, TEXT	6-8-95
2-2-95	REVISED PER PART VI, MUTCD, SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	

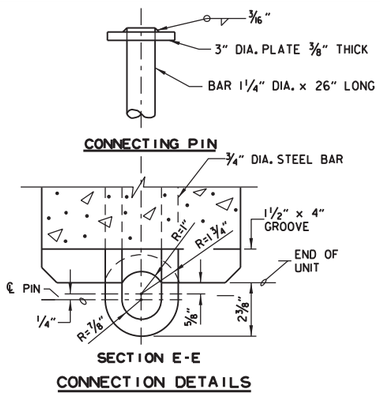
ARKANSAS STATE HIGHWAY COMMISSION

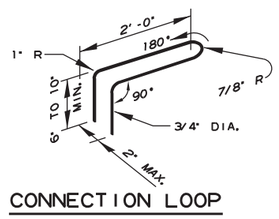
STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

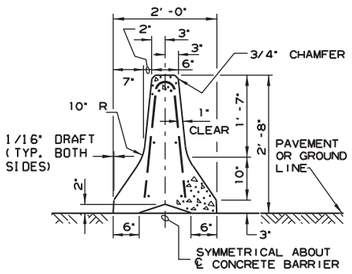
STANDARD DRAWING TC-3

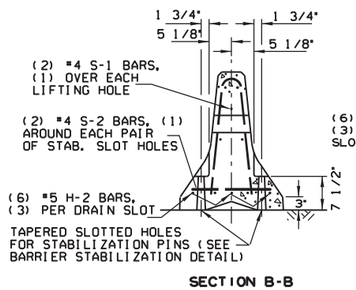
REINFORCING BAR TABLE PER BARRIER UNIT

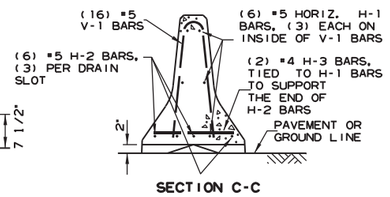
MARK	LOCATION	BAR SIZE	(NO. BARS)	SKETCH
H-1	HORIZONTAL IN BARRIER TIED INSIDE V-1 BARS	#5	(6)	19'-3"
H-2	CENTERED ABOVE DRAIN SLOTS LONG. & TRANSVERSELY	#5	(6)	6'-6"
H-3	TIED ABOVE H-1 BARS TO SUPPORT H-2. TIED TO V-1	#4	(2)	1'-6"
S-1	OVER LIFT HOLES	#4	(2)	2'-5", LIFTING HOLE, 90°, 3 3/8" R
S-2	HORIZ. AROUND SLOTS BETWEEN V-1'S @ DRAIN SLOTS	#4	(2)	1 1/2" R, SLOTS, 7", 1'-6", 1" MIN. CLEAR TO BAR; 5'-1" BAR W/(4) 1 1/2" R BENDS & MIN. 1'-0" OVERLAP
V-1	VERTICAL IN BARRIER(3) EACH END & (2) AT EACH DRAIN SLOTS	#5	(16)	TOTAL LENGTH 4'-9", 2 3/16" R, 12°, 9 1/2", 2'-1 3/8", 4 3/8"

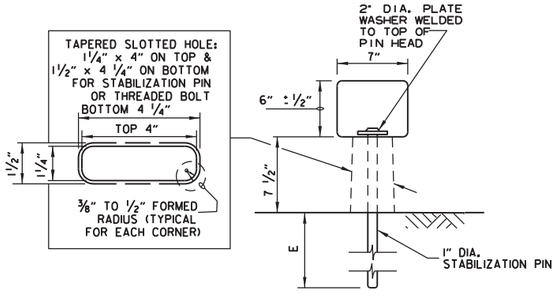


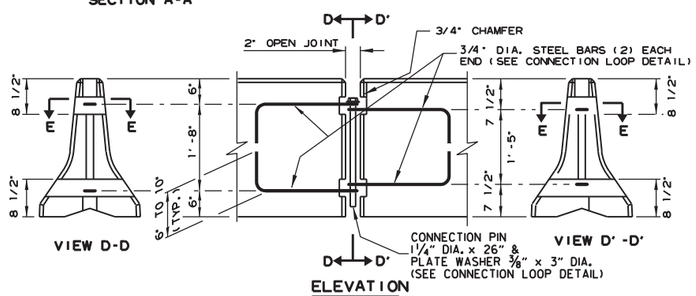


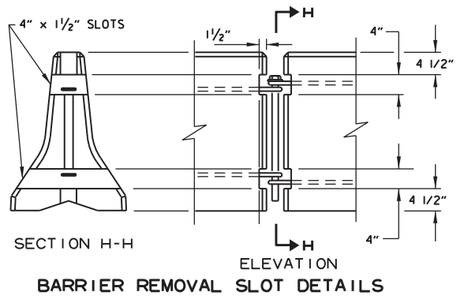


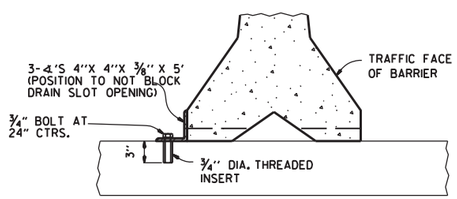




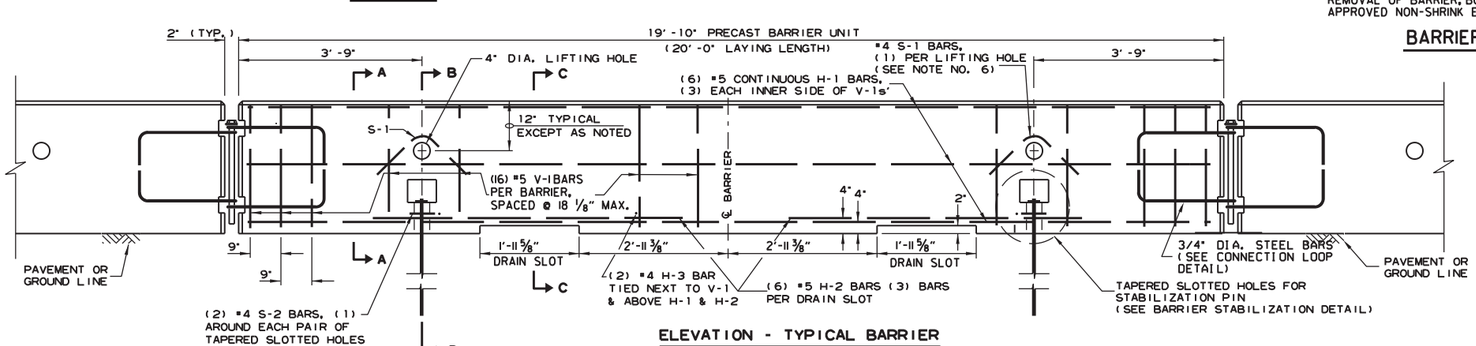








NOTE: " THREADED INSERTS SHALL BE CAST IN PLACE FOR ALL NEW BRIDGE DECKS AND DRILLED AND GROUTED FOR EXISTING BRIDGE DECKS. INSERTS SHALL HAVE A MINIMUM ULTIMATE LOAD CAPACITY OF 8000 LBS. IN TENSION. AFTER REMOVAL OF BARRIER, BOLTS, AND ANGLES, THE INSERTS SHALL BE FILLED WITH APPROVED NON-SHRINK EPOXY.



MASS: 3.9 tons PER PANEL

GENERAL NOTES

1. THE CONTRACTOR SHALL FURNISH THE PRECAST CONCRETE BARRIER UNITS AND SHALL BE RESPONSIBLE FOR THE MANUFACTURE, SHIPMENT, STORAGE, PLACEMENT AND REMOVAL. AT THE COMPLETION OF THE PROJECT, THE PRECAST UNITS WILL REMAIN THE PROPERTY OF THE CONTRACTOR.

2. MATERIALS SHALL MEET THE FOLLOWING MINIMUM REQUIREMENTS:
   CONCRETE: 2500 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
   REINFORCING STEEL: AASHTO M 31 OR M 53, GRADE 60
   STRUCTURAL STEEL: AASHTO-M270 GRADE 36 SHALL BE USED FOR THE CONNECTION PIN, CONNECTION LOOPS, AND STABILIZATION PINS. A ONE PIECE PIN WITH A 3" ROUNDED TOP MAY BE USED IN PLACE OF THE DETAILED CONNECTION PIN.
   DELINEATORS: DELINEATORS SHALL BE MOUNTED AT 10' SPACING ON TOP OF PRECAST BARRIER.

   IN APPLICATIONS WHERE BARRIER WALL IS WITHIN 6 FEET OF A TRAFFIC LANE, ADDITIONAL DELINEATORS SHALL BE PLACED ON THE BARRIER AT 10' SPACING APPROXIMATELY ONE (1) FOOT FROM THE TOP OF THE BARRIER. DELINEATORS SHALL BE ON THE ARDOT QUALIFIED PRODUCTS LIST FOR CONSTRUCTION CONCRETE BARRIER MARKERS.
   DELINEATOR COLOR SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
   PAYMENT FOR DELINEATORS SHALL BE CONSIDERED INCLUDED IN THE PRICE BID PER LIN. FT. FOR "FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER". THE CONTRACTOR SHALL CERTIFY TO THE ENGINEER THAT THE MATERIAL AND THE DESIGN USED IN THE PRECAST BARRIER UNITS MEETS THE REQUIREMENTS AS SHOWN ON THIS STANDARD DRAWING.

3. OTHER PRECAST CONCRETE BARRIERS THAT HAVE BEEN CRASH TESTED AND APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION TO MEET THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) WILL BE ACCEPTED IN LIEU OF THE BARRIER SHOWN. DRAIN SLOTS SHALL BE PROVIDED AS NEEDED OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH A CERTIFICATION OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) COMPLIANCE FOR ANY OTHER TYPES OF PRECAST BARRIER TO BE USED. THE CERTIFICATION SHALL STATE THAT THE PRECAST CONCRETE BARRIER MEETS THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH). MIXING OF SHAPES WILL NOT BE ALLOWED IN A CONTINUOUS LINE OF UNITS.

4. DOWEL HOLES IN PAVEMENT OR BRIDGE SLABS THAT ARE TO REMAIN IN PLACE SHALL BE FILLED. HOLES IN CONCRETE PAVEMENT AND BRIDGE SLABS SHALL BE FILLED WITH AN APPROVED NON-SHRINK EPOXY GROUT. HOLES IN ASPHALT PAVEMENT SHALL BE FILLED WITH AN APPROVED ASPHALT JOINT FILLER. PAYMENT FOR DRILLING AND FILLING HOLES TO BE INCLUDED IN THE PRICE FOR VARIOUS BARRIER ITEMS.

5. ATTACH UNITS TO ROADWAY SURFACE WITH STABILIZATION PINS AND TO DECK SLABS USING BOLTS WHEN REQUIRED.

6. A 4" WHITE PVC SLEEVE MAY BE USED TO FORM THE LIFTING HOLE AND IF USED THE SLEEVE IS TO BE LEFT IN PLACE.

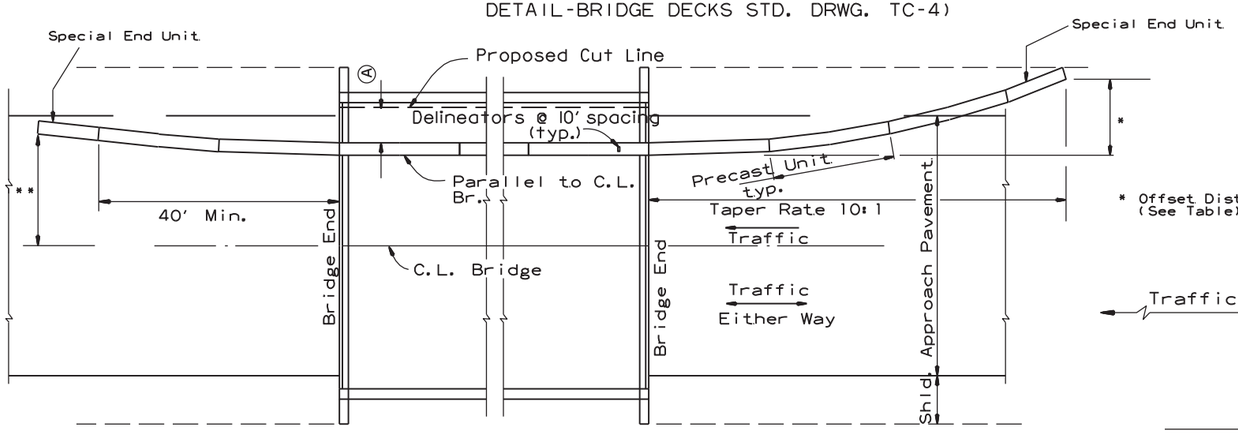
DATE	REVISION	FILMED
11-07-19	REVISED NOTE 3	
2-27-14	REVISED BARRIER STABILIZATION DETAIL	
10-15-09	ADDED REFERENCE TO MASH	
8-5-09	REV. NOTE 3 CONCERNING DRAIN SLOTS	
11-29-07	REVISED NOTE 3	
5-25-06	DELETED GENERAL NOTE 7	
11-18-04	REVISED BARRIER STABILIZATION DETAIL BRIDGE DECKS	
4-10-03	REVISED GENERAL NOTE 2	
8-22-02	ISSUED NEW DRAWING	

ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION - TEMPORARY PRECAST BARRIER

STANDARD DRAWING TC-4

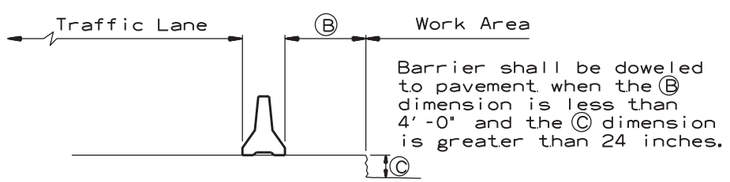
Ⓐ 4 feet or greater preferred. If less than 4 feet, Precast Units shall be connected to slab (SEE BARRIER STABILIZATION DETAIL-BRIDGE DECKS STD. DRWG. TC-4)



BARRIER PLACEMENT ALONG BRIDGE WITH OFFSET

No Scale

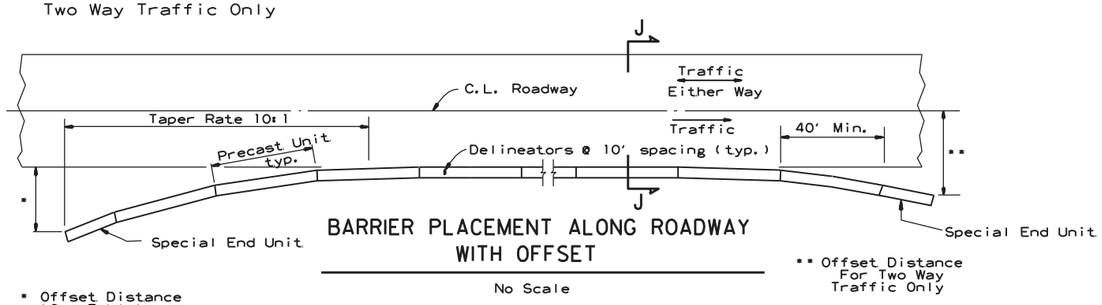
** Offset Distance for Two Way Traffic Only



Barrier shall be doweled to pavement when the Ⓑ dimension is less than 4'-0" and the Ⓒ dimension is greater than 24 inches.

SECTION J-J

No Scale



BARRIER PLACEMENT ALONG ROADWAY WITH OFFSET

No Scale

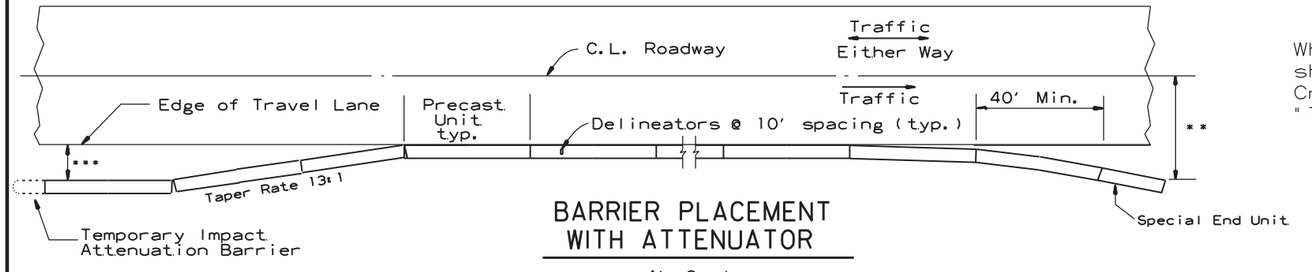
** Offset Distance For Two Way Traffic Only

* Offset Distance (See Table)

Offset Distance Table

Speed (MPH)	Offset Distance (FT.)
≤ 45	12
> 45	18

If offset distance is not attainable, then see "Barrier Placement With Attenuator" Detail shown below.

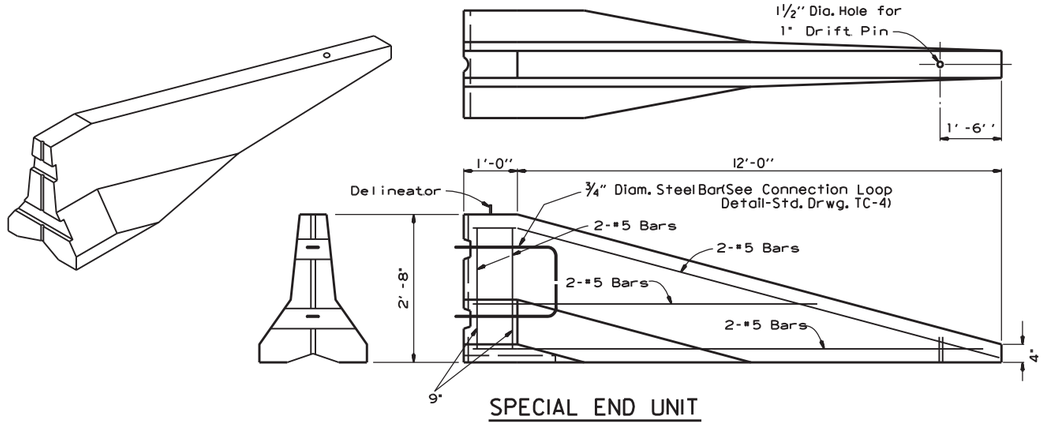


BARRIER PLACEMENT WITH ATTENUATOR

No Scale

*** Min. 3'-0" From Edge of Travel Lane to Nearest Edge of Attenuator

** Offset Distance For Two Way Traffic Only



SPECIAL END UNIT

No Scale

General Notes

When shown on the Plans, the ends of the Temporary Precast Concrete Barrier shall be protected with a Manual For Assessing Safety Hardware (MASH) approved Crash Cushion. Payment for Crash Cushions shall be made under the item of "Temporary Impact Attenuation Barrier."

DATE	REVISION	FILMED
11-07-19	REVISED NOTE	
10-15-09	ADDED REFERENCE TO MASH	
5-25-06	REVISED BARRIER PLACEMENT	
8-22-02	ISSUED NEW DRAWING	

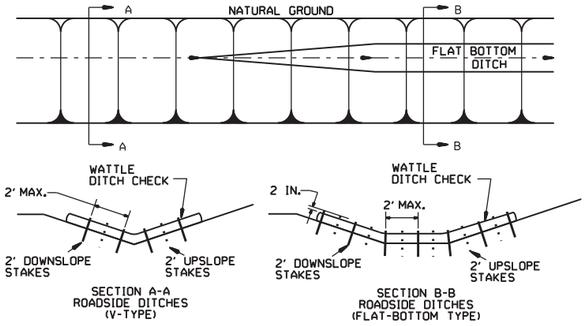
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION - TEMPORARY PRECAST BARRIER

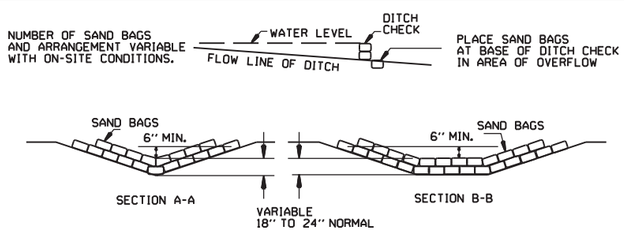
STANDARD DRAWING TC-5

GENERAL NOTES

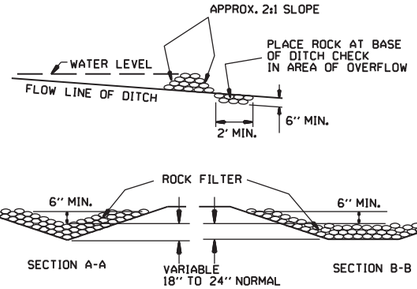
INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.



WATTLE DITCH CHECK (E-1)



SAND BAG DITCH CHECK (E-5)

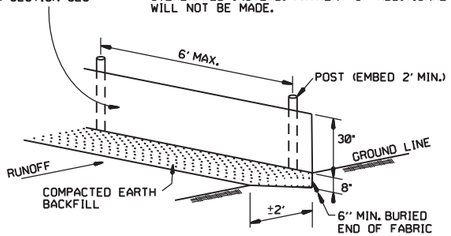


ROCK DITCH CHECK (E-6)

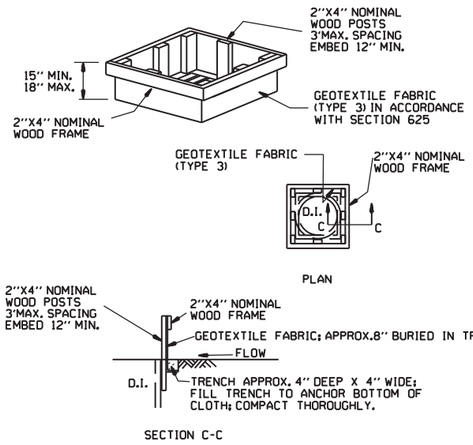
GENERAL NOTES

GEOTEXTILE FABRIC (TYPE 4) IN ACCORDANCE WITH SECTION 625

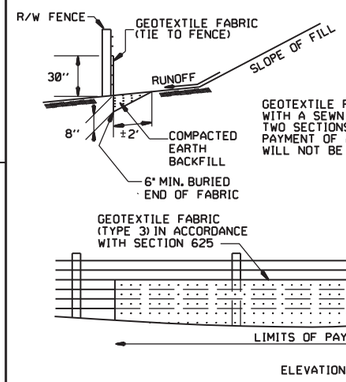
GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.



SILT FENCE (E-11)

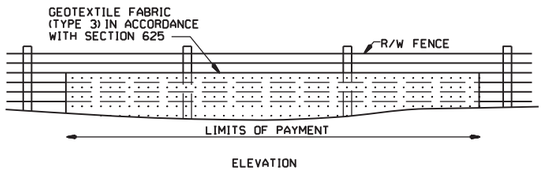


DROP INLET SILT FENCE (E-7)



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.



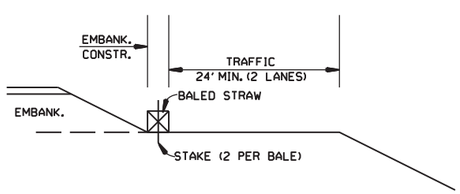
SILT FENCE ON R/W FENCE (E-4)

GENERAL NOTES

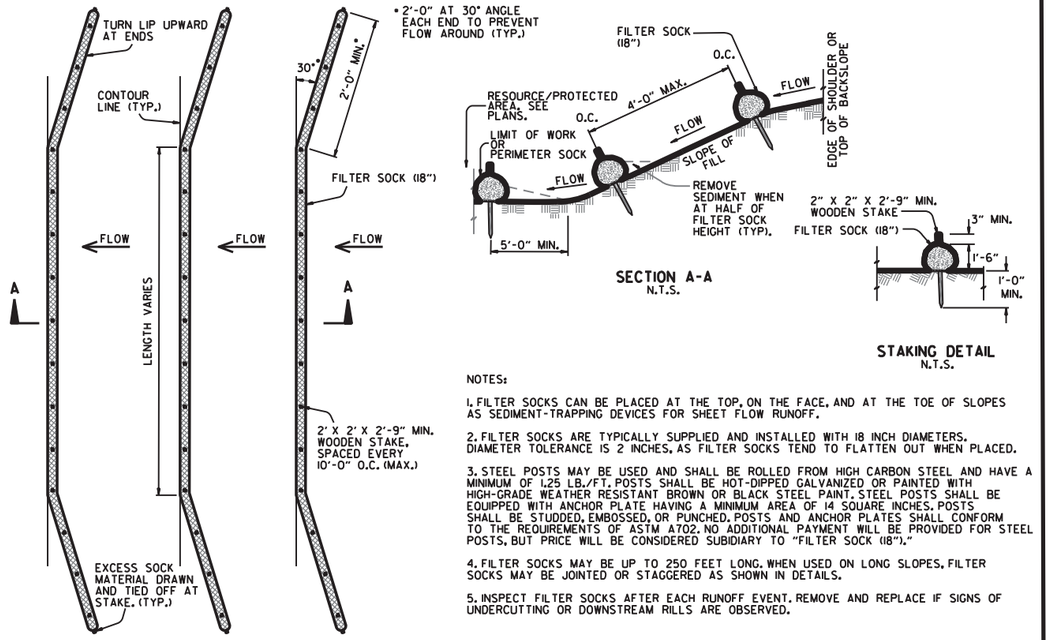
1. STRAW BALES SHALL BE INSTALLED SO THAT THE BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES. THE BALES SHALL BE A MINIMUM OF 30 INCHES IN LENGTH.

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)



NOTES:

1. FILTER SOCKS CAN BE PLACED AT THE TOP, ON THE FACE, AND AT THE TOE OF SLOPES AS SEDIMENT-TRAPPING DEVICES FOR SHEET FLOW RUNOFF.

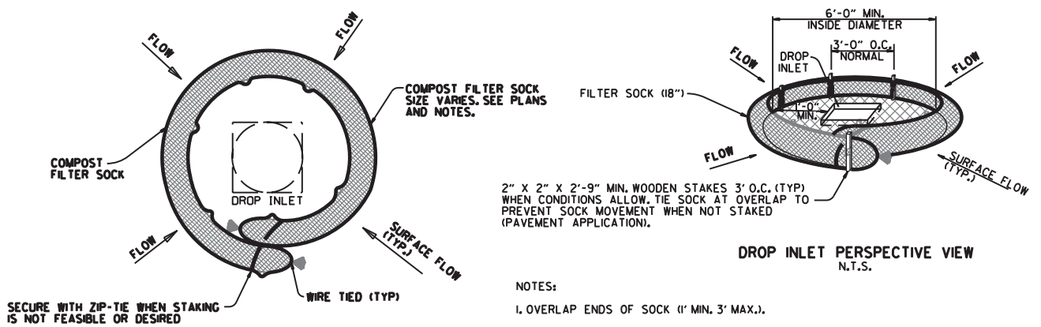
2. FILTER SOCKS ARE TYPICALLY SUPPLIED AND INSTALLED WITH 18 INCH DIAMETERS. DIAMETER TOLERANCE IS 2 INCHES, AS FILTER SOCKS TEND TO FLATTEN OUT WHEN PLACED.

3. STEEL POSTS MAY BE USED AND SHALL BE ROLLED FROM HIGH CARBON STEEL AND HAVE A MINIMUM OF 1.25 LB./FT. POSTS SHALL BE HOT-DIPPED GALVANIZED OR PAINTED WITH HIGH-GRADE WEATHER RESISTANT BROWN OR BLACK STEEL PAINT. STEEL POSTS SHALL BE EQUIPPED WITH ANCHOR PLATE HAVING A MINIMUM AREA OF 14 SQUARE INCHES. POSTS SHALL BE STUDDED, EMBOSSED, OR PUNCHED. POSTS AND ANCHOR PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A702. NO ADDITIONAL PAYMENT WILL BE PROVIDED FOR STEEL POSTS, BUT PRICE WILL BE CONSIDERED SUBIDIARY TO "FILTER SOCK (18")."

4. FILTER SOCKS MAY BE UP TO 250 FEET LONG. WHEN USED ON LONG SLOPES, FILTER SOCKS MAY BE JOINTED OR STAGGERED AS SHOWN IN DETAILS.

5. INSPECT FILTER SOCKS AFTER EACH RUNOFF EVENT. REMOVE AND REPLACE IF SIGNS OF UNDERCUTTING OR DOWNSTREAM RILLS ARE OBSERVED.

FILTER SOCK ALONG SLOPE (E-3)



NOTES:

1. OVERLAP ENDS OF SOCK (1' MIN. 3' MAX.).

2. USE 18" DIA. SOCK IN NON-TRAFFIC AREAS OR AREAS WHERE SAFETY IS NOT A CONCERN.

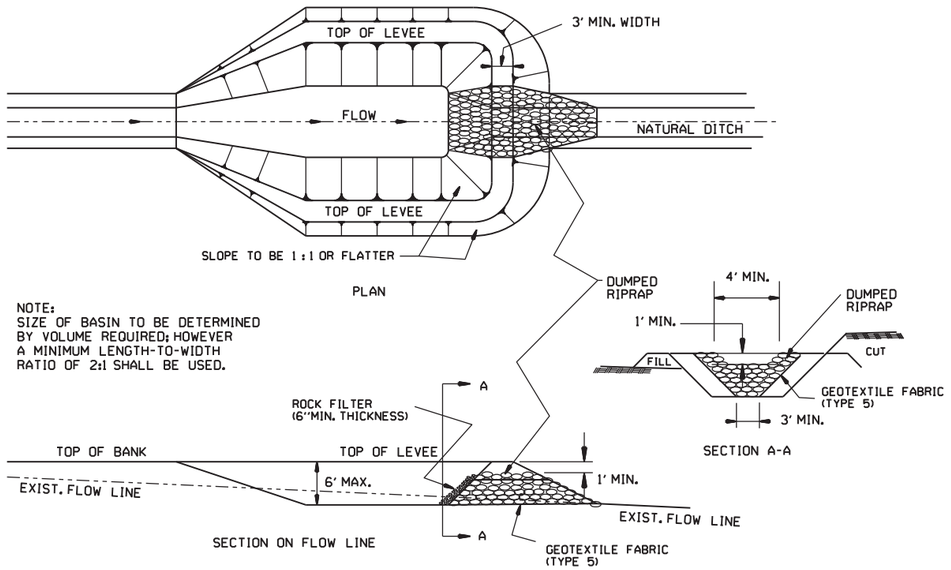
COMPOST FILTER SOCK DROP INLET PROTECTION (E-13)

DATE	REVISION	FILMED
11-16-17	ADDED FILTER SOCK E-3 AND E-13	
12-15-11	DELETED BALED STRAW DITCH CHECK & ADDED WATTLE DITCH CHECK	
11-18-98	ADDED NOTES	
07-02-98	ADDED BALED STRAW FILTER BARRIER (E-2)	
07-20-95	REVISED SILT FENCE E-4 AND E-11	7-20-95
07-15-94	REV. E-4 & E-11 MIN. 13" BURIED END OF FABRIC	
06-02-94	REVISED E-1,4,7 & 11; DELETED E-2 & 3	6-2-94
04-01-93	REDRAWN	
10-01-92	REDRAWN	
08-02-76	ISSUED R.D.M.	298-7-28-76

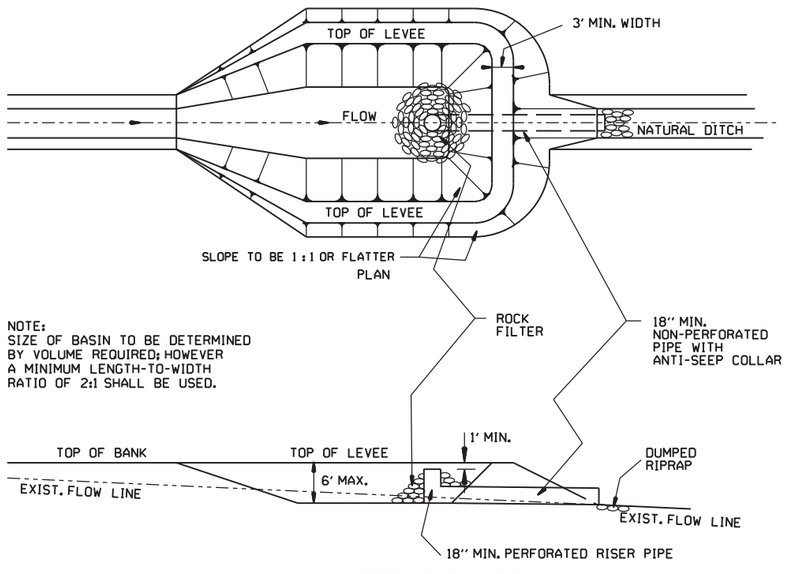
ARKANSAS STATE HIGHWAY COMMISSION

TEMPORARY EROSION CONTROL DEVICES

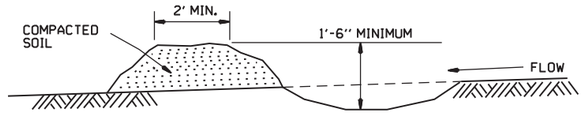
STANDARD DRAWING TEC-1



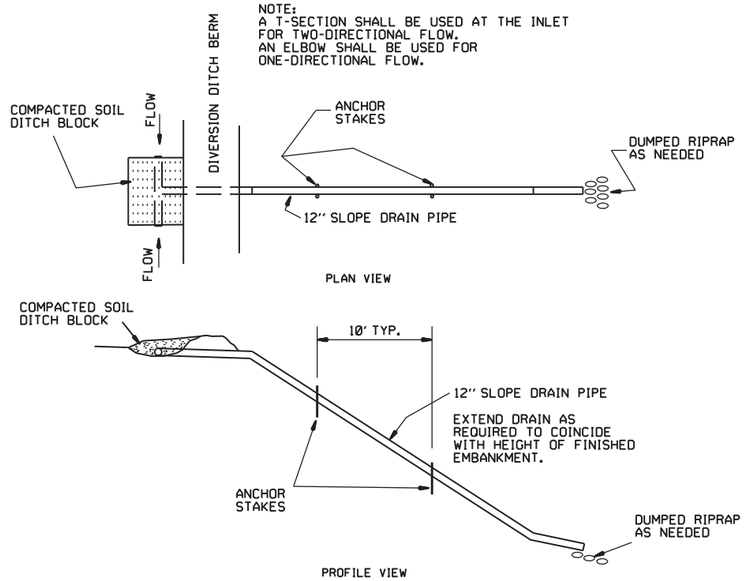
SEDIMENT BASIN WITH RIPRAP OUTLET (E-9)



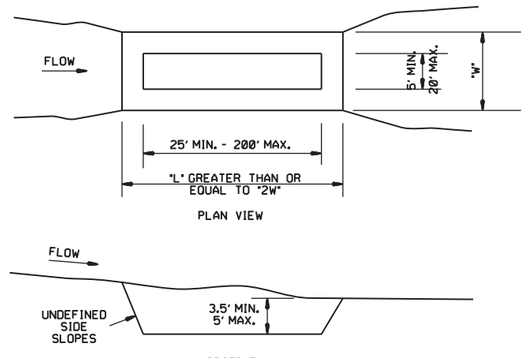
SEDIMENT BASIN WITH PIPE OUTLET (E-10)



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

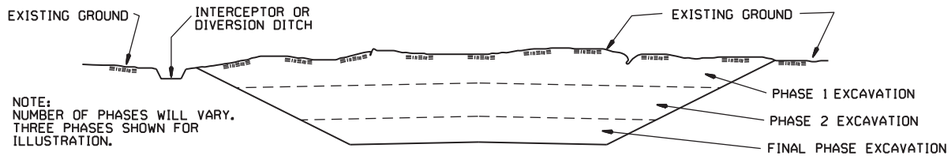
CLEARING AND GRUBBING

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

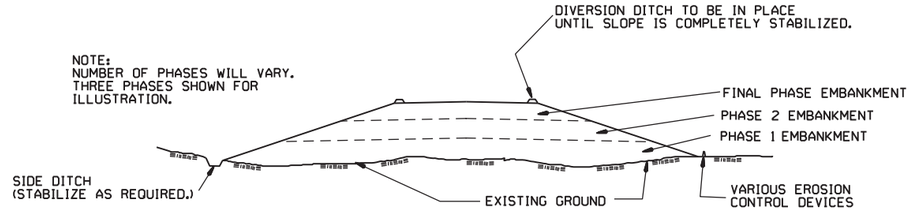
1. EXCAVATE AND STABILIZE INTERCEPTOR AND/OR DIVERSION DITCHES.

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.

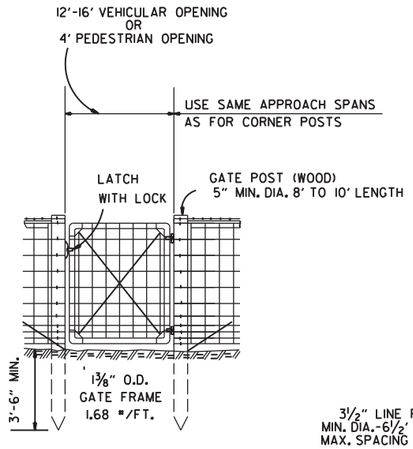
4. PLACE FINAL PHASE OF EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING. PLACE DIVERSION DITCHES AND SLOPE DRAINS AND MAINTAIN UNTIL ENTIRE SLOPE IS STABILIZED.

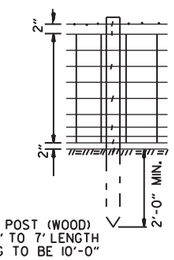
DATE	REVISION	FILMED
11-03-94	CORRECTED SPELLING	
6-2-94	Drawn & Issued	6-2-94

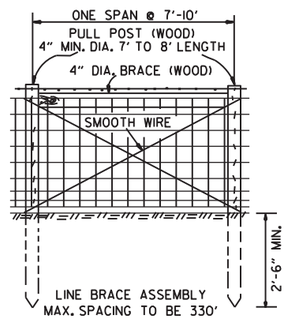
ARKANSAS STATE HIGHWAY COMMISSION

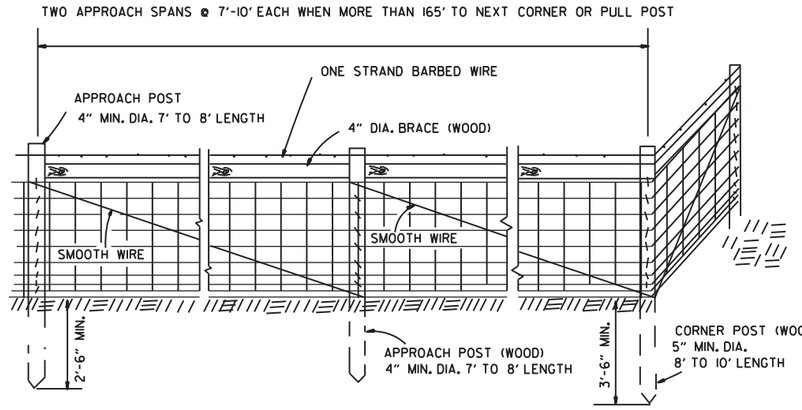
TEMPORARY EROSION CONTROL DEVICES

STANDARD DRAWING TEC-3



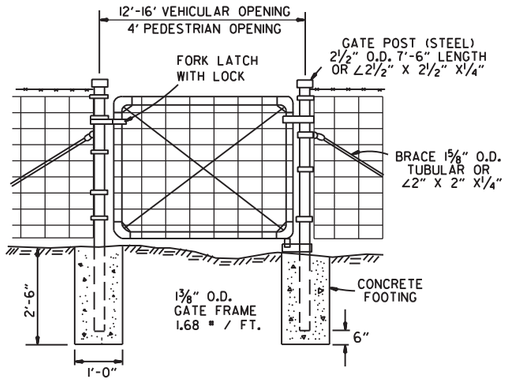


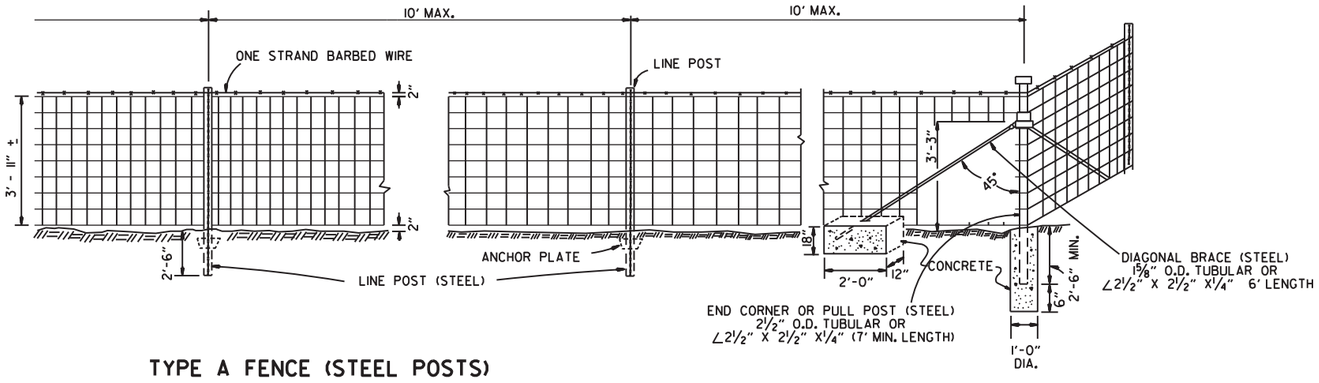




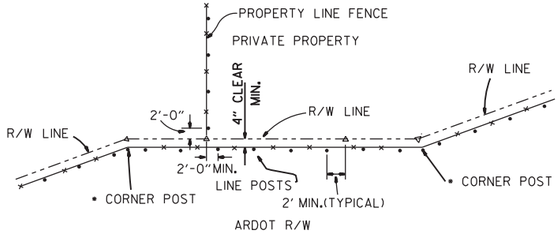
NOTE: STAPLE AT LEAST TOP, BOTTOM AND ALTERNATE WIRES OF WOVEN FABRIC FOR WOOD LINE POSTS.

TYPE A FENCE (WOOD POSTS)





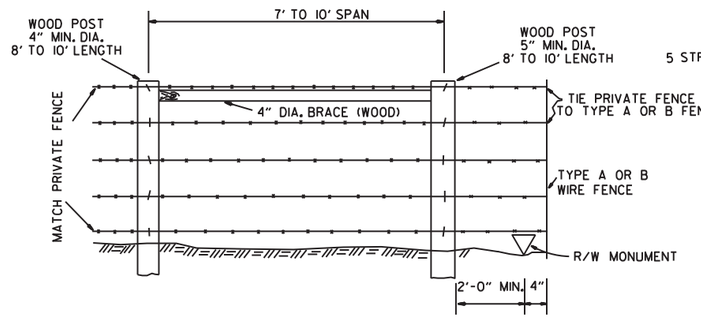
TYPE A FENCE (STEEL POSTS)



•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.

△ - R/W MONUMENTS
• - FENCE POSTS

RIGHT-OF-WAY FENCE LOCATION

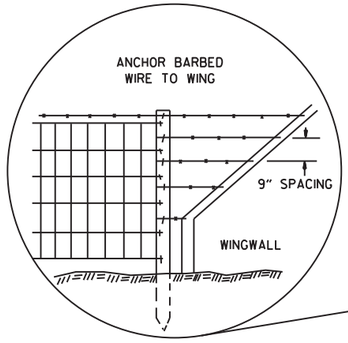


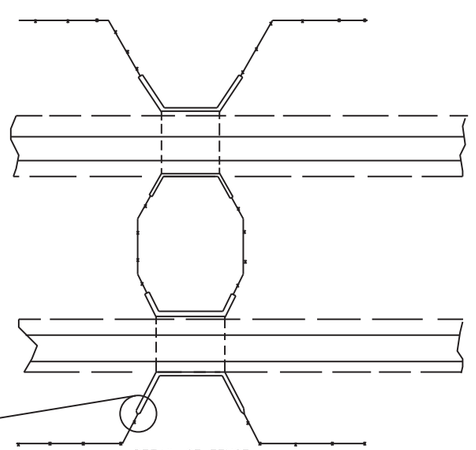
WHERE EXISTING PRIVATE FENCE CONSISTS OF STEEL POSTS, USE END POST ASSEMBLY AS SHOWN WITH TYPE A FENCE OR OTHER END POST ASSEMBLY AS APPROVED BY THE ENGINEER.

PRIVATE FENCE TERMINAL INSTALLATION

SPACING AND SIZE OF POSTS FOR TYPE B FENCE SHALL BE THE SAME AS TYPE A FENCE.

TYPE B FENCE





DETAIL OF FENCE CONSTRUCTION AT LARGE CULVERTS (5' IN HEIGHT AND OVER)

GENERAL NOTES:

STEEL LINE POSTS SHALL BE GALVANIZED, 7 FT. IN LENGTH.

TUBULAR END, CORNER, PULL, OR DIAGONAL BRACES MUST CONFORM TO THE DIMENSIONS AND WEIGHTS SPECIFIED ON STANDARD DRAWING WF-3 (CHAIN LINK).

THE CONTRACTOR SHALL FURNISH AT LEAST 25% OF WOOD LINE POSTS OF 7' LENGTHS IN ORDER TO PROVIDE SUFFICIENT SET IN SOFT GROUND OR SMALL DEPRESSIONS.

GATE HINGES AND LATCHES WITH LOCKS TO BE OF A TYPE APPROVED BY THE ENGINEER. DRIVEWAY GATES, EITHER SINGLE 12' OR 16' OR DOUBLE 6' TO 8' OPENINGS 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 BY MAINTENANCE EQUIPMENT. LOCATION OF GATES TO BE SHOWN ON THE 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 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 SUFFIEICNT, THE FENCE SHALL BE TERMINATED WITH CROSS CONNECTIONS AND END POSTS ADJACENT TO THE BRIDGE ABUTMENTS OR CULVERT WINGWALLS.

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.

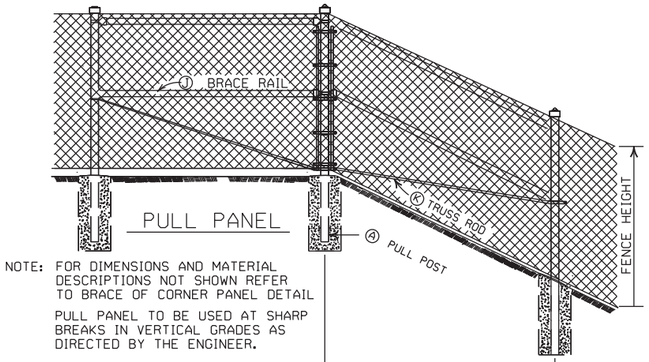
SPLICE FOR BARBED WIRE BETWEEN PULL POST ASSEMBLY SHALL BE BY THE "EYE METHOD": AS DESCRIBED AS FOLLOWS: THE ENDS OF THE BARBED WIRE SHALL BE BENT TO FORM A LOOP. THE LOOPS SHALL BE CONNECTED. AFTER THE LOOPS ARE CONNECTED THE ENDS OF THE WIRE SHALL BE WRAPPED AROUND THE PROJECTING WIRE A MINIMUM OF 4 TIMES FOR EACH WIRE LOOP.

DATE	REVISION	DATE FILMED
8-22-02	REVISED GENERAL NOTES	
10-18-96	REVISED ASTM REF. TO AASHTO	
11-22-95	REVISED R-O-W LOCATION DETAIL	
6-2-94	ADDED CORNER POST NOTE	6-2-94
8-5-93	REVISED R-O-W LOCATION DETAIL	8-5-93
10-1-92	ADDED STAPLE NOTE	
8-2-90	REV'D PULL POST LENGTH	
11-30-89	DELETED CLASS CONC.	
7-15-88	ADDED SPLICE NOTES	
7-15-88	ADDED HEIGHT DIMENSION	
4-3-87	REVISED VARIOUS NOTES	
	AND GENERAL NOTES	
11-1-84	MAX. POST SPACING	
1-4-83	MIN. DIA. LINE POST	
10-2-72	REVISED & REDRAWN	

ARKANSAS STATE HIGHWAY COMMISSION

WIRE FENCE
TYPE A AND B

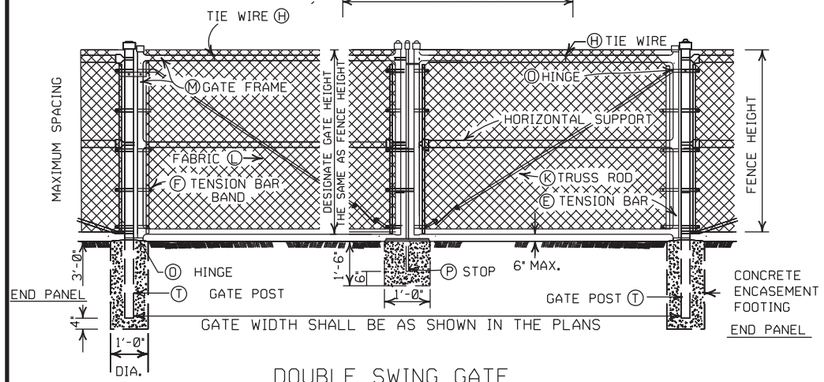
STANDARD DRAWING WF-1



PULL PANEL

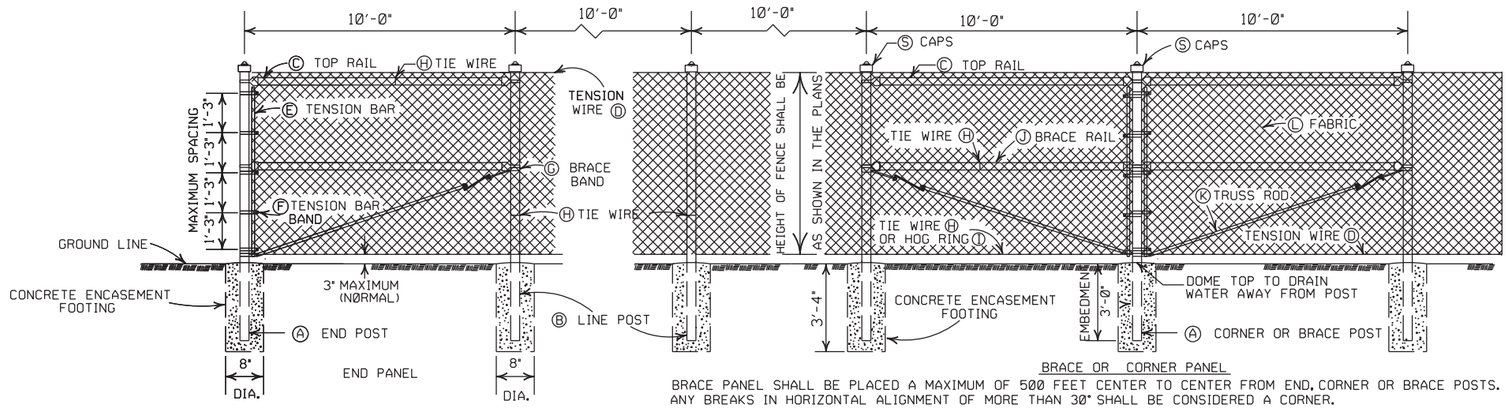
NOTE: FOR DIMENSIONS AND MATERIAL DESCRIPTIONS NOT SHOWN REFER TO BRACE OF CORNER PANEL DETAIL

PULL PANEL TO BE USED AT SHARP BREAKS IN VERTICAL GRADES AS DIRECTED BY THE ENGINEER.



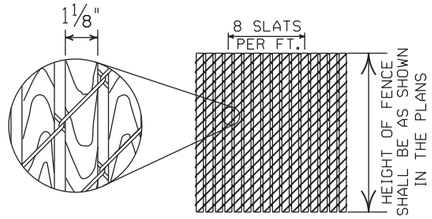
DOUBLE SWING GATE

POST SPACING DETAIL



BRACE OR CORNER PANEL

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

(WHERE APPLICABLE)

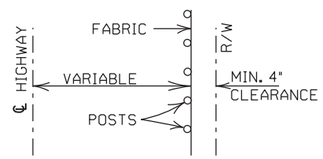
HEIGHT OF FENCE FABRIC	(A) END, PULL, CORNER OR BRACE POST	(B) LINE POSTS		(C) TOP RAIL			(D) TENSION WIRE		(E) TENSION BAR		(F) TENSION BAR BAND			(G) BRACE BAND	
		SIZE	TIE SPACING	SIZE	TIE SPACING	MIN. LENGTH	SIZE	TIE SPACING	SIZE	LENGTH	SIZE	BOLT SIZE	SPACING	SIZE	BOLT SIZE
6' AND LESS	2½" O.D.	2" 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 3/16" X ¾"	MIN. OF 2" LESS THAN FABRIC HEIGHT	MIN. OF ¾" X 0.074	5/16" X 1¼"	1 BAND AT TOP AND BOTTOM 15" MAX. INTERVAL BETWEEN BANDS	MIN. OF ¾" X 0.105	5/16" 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		(K) TRUSS ROD	(L) FABRIC			(M) GATE FRAME		(N) HORIZONTAL SUPPORT		(O) HINGE TYPE	(T) GATE POST	
			SIZE	TIE SPACING		SIZE	MESH	SELVAGE	SIZE	TIE SPACING	SIZE	TIE SPACING	180° SWING	GATE WIDTH 12' AND LESS	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 5/16" 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.



INSTALLATION MAY BE MODIFIED AS SHOWN IN THE PLANS

TYPICAL INSTALLATION DIAGRAM

POSTS AND RAILS

SIZE O.D.	GRADE 1 AND ALUMINUM ALLOY				GRADE 2		
	O.D. INCHES	WALL THICKNESS	LBS. PER LINEAR FT. STEEL	LBS. PER LINEAR FT. ALUMINUM	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

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.

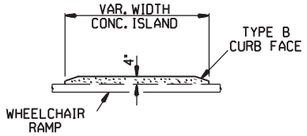
EXCAVATION FOR POSTS: IN OTHER THAN ROCK SHALL BE OF THE DIMENSIONS INDICATED. IF ROCK IS ENCOUNTERED BEFORE REACHING THE REQUIRED DEPTH, THE EXCAVATION SHALL BE CONTINUED TO THE DEPTH INDICATED OR 1'-6" INTO THE ROCK, WHICHEVER IS LESS, AND SHALL BE A MINIMUM OF 8 INCHES IN DIAMETER.

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

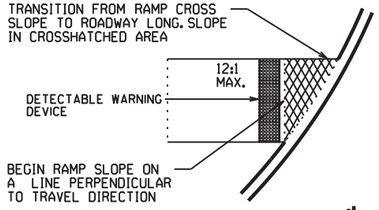
ARKANSAS STATE HIGHWAY COMMISSION

CHAIN LINK FENCE

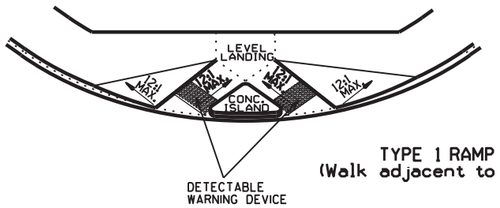
STANDARD DRAWING WF-3



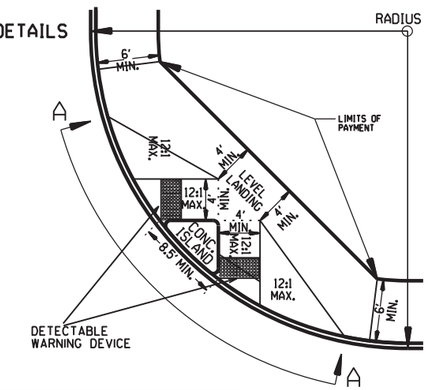
CONCRETE ISLAND DETAIL



SLOPE TRANSITION DETAILS



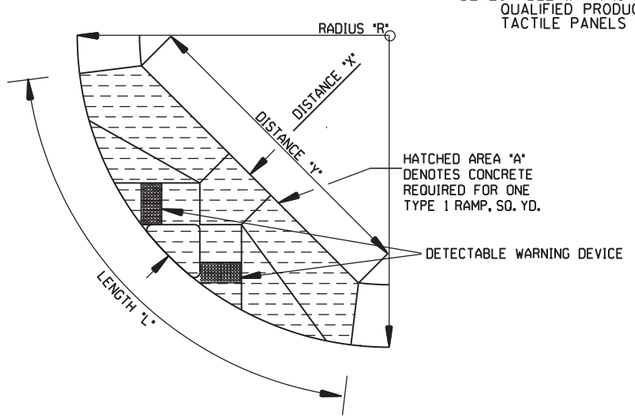
TYPE 1 RAMP
(Walk adjacent to curb)



SECTION A-A

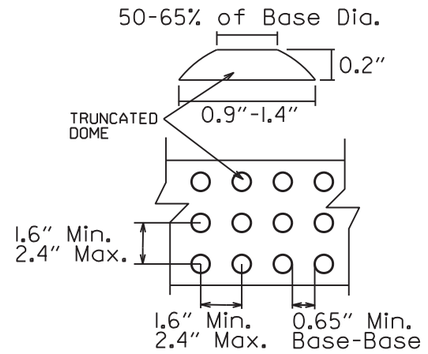
TYPE 1 RAMP DIMENSIONS AND QUANTITIES

RADIUS "R" FEET	DISTANCE "X" FEET	DISTANCE "Y" FEET	LENGTH "L" FEET	RAMP AREA "A" SQ. YD.
15	11.67	18.82	32.18	26.21
20	11.52	22.28	35.46	30.07
25	11.43	26.60	38.77	33.80
30	11.37	30.26	40.93	36.90
35	11.33	33.51	43.11	39.77
40	11.30	36.45	45.26	42.45
45	11.27	39.16	47.34	44.97
50	11.25	41.69	49.36	47.35
55	11.24	44.07	51.31	49.63
60	11.22	46.33	53.21	51.80



GENERAL NOTES FOR DETECTABLE WARNING DEVICES

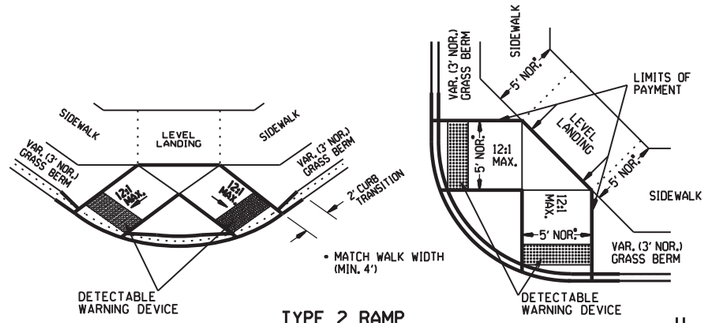
THE DETECTABLE WARNING DEVICE SHALL BE LOCATED SO THAT THE NEAREST EDGE OF THE DEVICE IS 6 TO 8 INCHES FROM THE FACE OF THE CURB.
TRUNCATED DOMES IN THE DETECTABLE WARNING SURFACE SHALL MEET THE REQUIREMENTS OF THE GEOMETRIC CONFIGURATION SHOWN.
DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES.
DETECTABLE WARNING DEVICE SHALL BE 24 INCHES IN THE DIRECTION OF TRAVEL AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE.
DETECTABLE WARNING DEVICE SHALL BE ON THE ARDOT QUALIFIED PRODUCTS LIST FOR CAST-IN-PLACE TACTILE PANELS (ADA DETECTABLE WARNING).



DETECTABLE WARNING DEVICE DETAIL

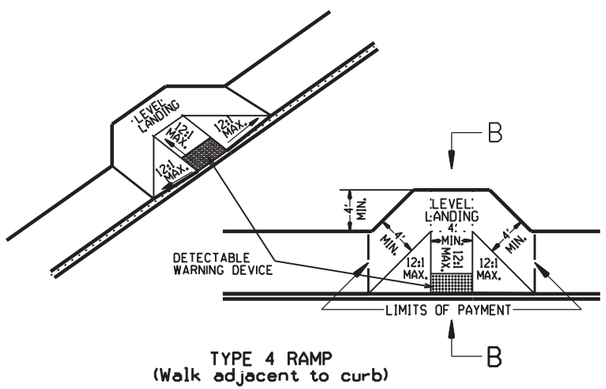
GENERAL NOTES:

IN NEW CONSTRUCTION, UNLESS OTHERWISE INDICATED ON THE PLANS, WHEELCHAIR RAMPS ARE TO BE PROVIDED AT ALL CORNERS OF CURBED STREET INTERSECTIONS AND MID-BLOCK CROSSWALK LOCATIONS.
IN ALTERATIONS WHEELCHAIR RAMPS ARE TO BE PROVIDED AT CURBED STREET INTERSECTIONS WITH PEDESTRIAN TRAFFIC AND MID-BLOCK CROSSWALK LOCATIONS.
THE LENGTH OF THE RAMP SHALL BE SUCH THAT THE SLOPE DOES NOT EXCEED 12:1. THE SURFACE TEXTURE OF THE RAMP SHALL CONFORM TO A CLASS 6 FINISH ACCORDING TO SECTION 802.19.
THE NORMAL GUTTER GRADE SHALL BE MAINTAINED THROUGH THE AREA OF THE RAMP.
ALL PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION.
THE MINIMUM THICKNESS OF THE RAMP, WALK, & LANDING SHALL BE 4".
THE MINIMUM WIDTH OF THE RAMPS SHALL BE THE WALK WIDTH OR 36", WHICHEVER IS GREATER.
RAMPS SHALL BE MODIFIED AS NECESSARY TO INSURE THAT THEY ARE PARALLEL TO A LINE DRAWN FROM THE CENTER OF ONE RAMP TO THE CENTER OF THE RAMP ON THE OPPOSITE SIDE OF THE INTERSECTION.
THE DIMENSIONS AND QUANTITIES SHOWN ON THIS DRAWING ARE FOR A 90° INTERSECTION ONLY. DIMENSIONS AND QUANTITIES FOR SKEWED INTERSECTIONS WILL VARY, AND ARE TO BE DETERMINED BY THE ENGINEER.

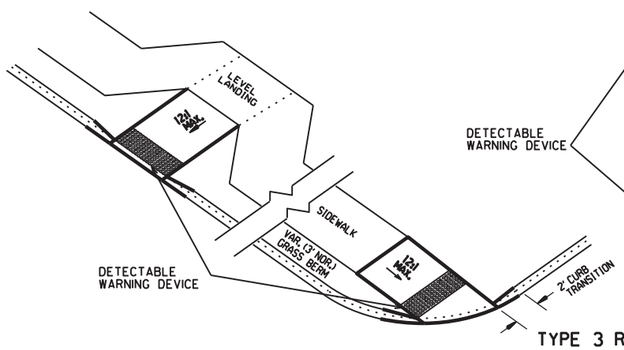


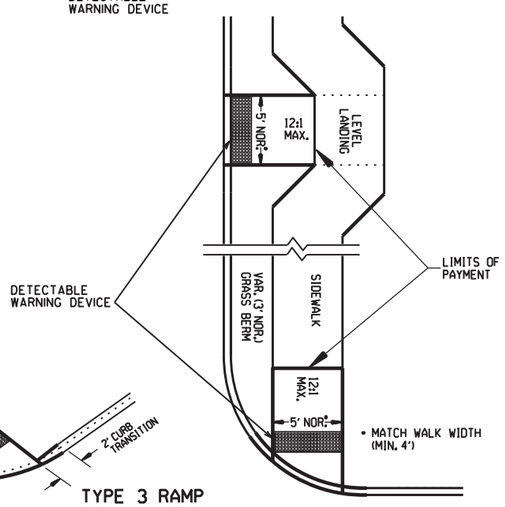
TYPE 2 RAMP

NOTE:
THE CROSS SLOPE OF THE RAMPS, LEVEL LANDINGS, AND SIDEWALKS SHALL NOT EXCEED 2.0% UNLESS REQUIRED TO MATCH STREET LONGTITUDINAL GRADE.

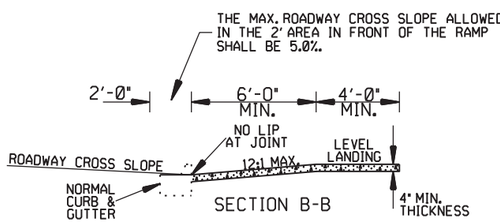


TYPE 4 RAMP
(Walk adjacent to curb)





TYPE 3 RAMP



SECTION B-B

RAMP SELECTION CRITERIA

FIRST CHOICE	TYPE 1	CORNER LOCATIONS WITH THE WALK ADJACENT TO THE CURB (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 2	CORNER LOCATIONS WITH THE WALK OFFSET FROM THE CURB A DISTANCE INSUFFICIENT TO ALLOW THE REQUIRED RAMP SLOPE (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 3	CORNER LOCATIONS WITH THE WALK OFFSET FROM THE CURB A DISTANCE SUFFICIENT TO ALLOW THE REQUIRED RAMP SLOPE (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 4	TANGENT LOCATIONS (BOTH NEW CONSTRUCTION AND ALTERATIONS).
SECOND CHOICE	TYPE 5	TANGENT LOCATIONS (ALTERATIONS ONLY).
THIRD CHOICE	TYPE 6	CORNER LOCATIONS (ALTERATIONS ONLY). THIS RAMP MAY BE USED ONLY IF THE TYPE 5 RAMPS CANNOT BE PLACED AT THE ENDS OF THE RADIUS.
FOURTH CHOICE		IF SITE CONSTRAINTS PREVENT THE CONSTRUCTION OF ANY OF THE TYPES LISTED, THEN AND ONLY THEN CAN THE 12:1 MAX. SLOPE ON THE RAMP BE EXCEEDED TO PROVIDE ACCESS TO THE STREET LEVEL (ALTERATIONS ONLY). THE SLOPE CAN BE STEEPENED TO A 10:1 MAX. FOR A MAX. LENGTH OF 5' OR A 8:1 MAX. FOR A MAX. LENGTH OF 2'. SLOPES STEEPER THAN 8:1 ARE NOT ALLOWED UNDER ANY CIRCUMSTANCES.

NOTE: IN ALTERATIONS, THE SELECTION OF THE TYPE OF WHEELCHAIR RAMP TO BE CONSTRUCTED SHALL BE BASED ON THE AMOUNT OF RIGHT-OF-WAY AVAILABLE, AND ON THE PRESENCE OF OTHER SITE CONSTRAINTS (UTILITIES, BUILDINGS, ETC.). THE TABLE ABOVE LISTS THE ORDER IN WHICH THE RAMPS ARE TO BE CONSIDERED.

AN ALTERATION IS DEFINED AS A PROJECT THAT CHANGES OR AFFECTS THE USE OF A PEDESTRIAN PATHWAY (OVERLAYS, SIGNALIZATION PROJECTS, ETC.) BUT DOES NOT REQUIRE THE PURCHASE OF ADDITIONAL RIGHT-OF-WAY. ALL PROJECTS THAT REQUIRE THE PURCHASE OF ADDITIONAL RIGHT-OF-WAY WILL USUALLY BE CONSIDERED NEW CONSTRUCTION FOR THE PURPOSES OF THE CHART ABOVE.

DATE	REVISION	DATE FILM
11-10-05	REVISED TO NEW SIDEWALK POLICY	
10-9-03	REVISED GEN. NOTES & ADDED NOTE	
4-10-03	REV. DETECTABLE WARNING DEVICES	
8-22-02	ADD DETECTABLE WARNING DEVICES	
3-30-00	ADD.SLOPE TRANS. & REV. ISL. DIMS.	
11-18-98	REVISED NOTES	
8-12-98	REVISED TEXTURE	
7-02-98	REDRAWN & REISSUED	
10-18-96	CORRECTED DIMENSIONS	10-18-96
5-24-90	FROM8#TO12#MAX.SLOPES	5-24-90
7-15-88	ADJUSTED MAX. SLOPE	652-7-15-88
7-14-88	INCLUD."CONC. ISLD."IN PAY ITEM	------
6-02-76	ISSUED-P.M.D.	299-7-28-76

ARKANSAS STATE HIGHWAY COMMISSION

WHEELCHAIR RAMPS NEW CONSTRUCTION AND ALTERATIONS

STANDARD DRAWING WR-1