DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061748	1	33
		MILL CREEK STR. & APPRS. (S)				

ARKANSAS DEPARTMENT OF TRANSPORTATION
CONSTRUCTION PLANS FOR STATE HIGHWAY

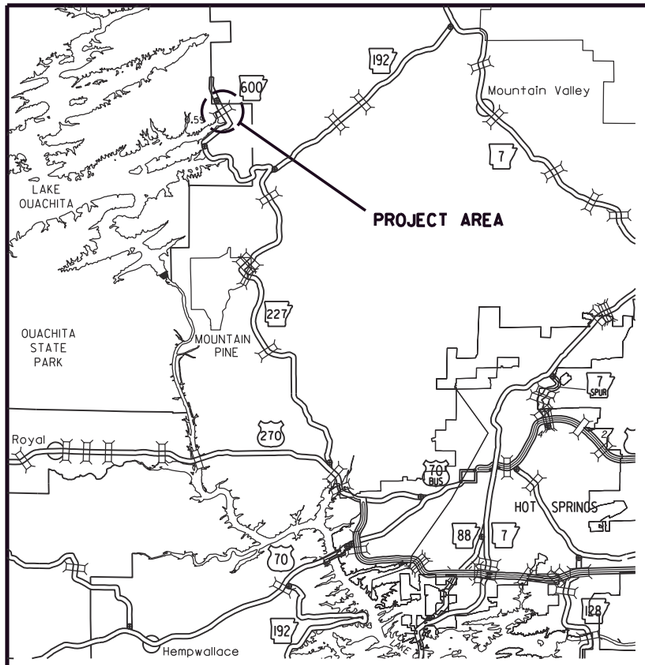
MILL CREEK
STR. & APPRS. (S)

GARLAND COUNTY
ROUTE 600 SECTION 21

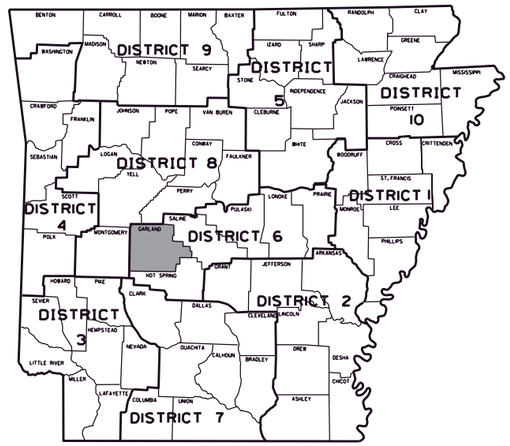
FED. AID PROJ. BFPO-0026(47)

JOB 061748

NOT TO SCALE



VICINITY MAP



ARK. HWY. DIST. NO. 6

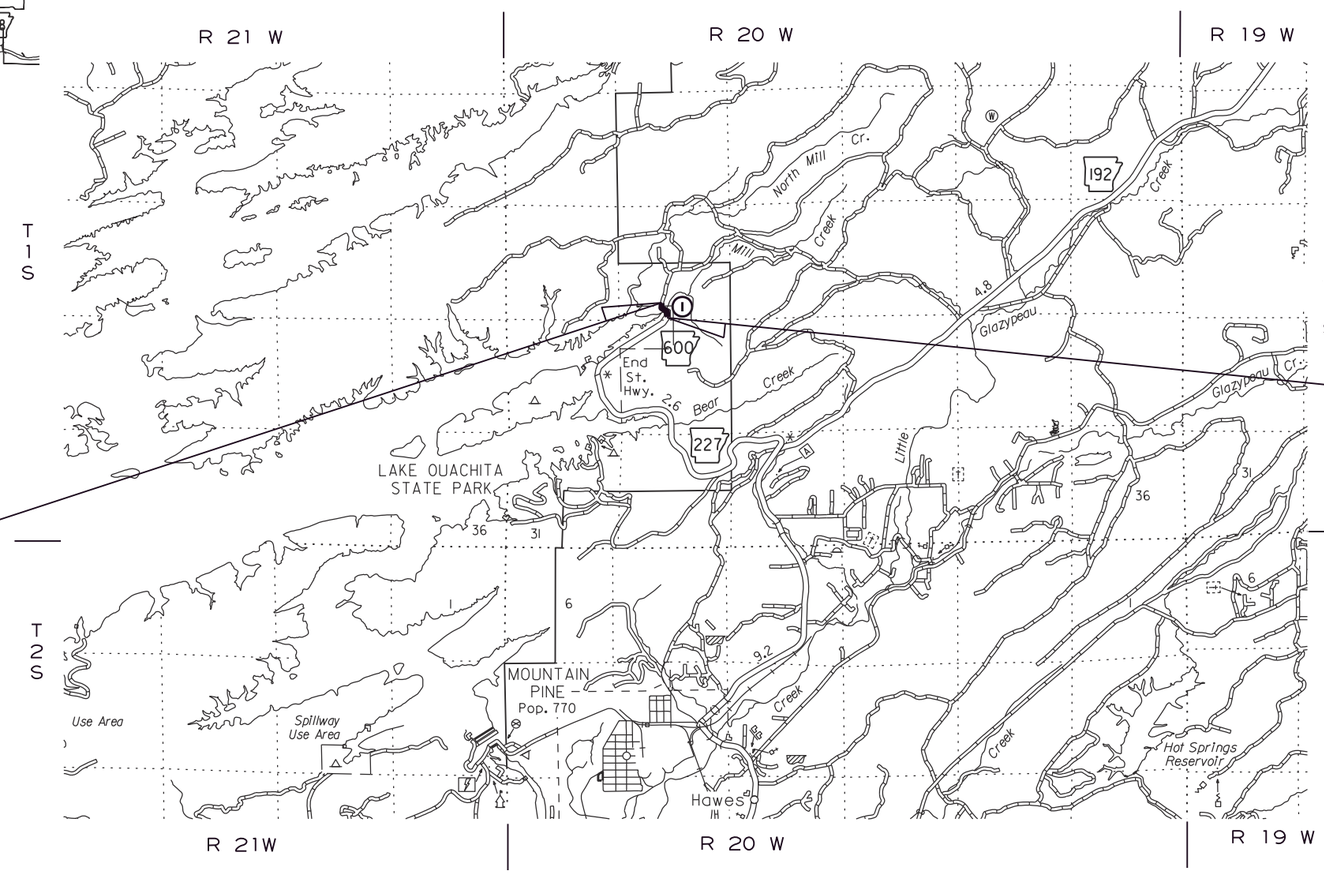
DESIGN TRAFFIC DATA

DESIGN YEAR	2046
2026 ADT	120
2046 ADT	140
2046 DHV	15
DIRECTIONAL DISTRIBUTION	0.60
TRUCKS	3%
DESIGN SPEED	20 MPH

BRIDGE DATA

① STA. 104+00.00 - BRIDGE END
BRIDGE NO. 07717
105'-0" CONT. R.C. SLAB UNIT
(35', 35', 35')
26'-0" CLEAR ROADWAY
105'-0" BRIDGE LENGTH
STA. 105+05.00 - BRIDGE END

STA. 103+75.00
BEGIN JOB 061748
LOG MILE 0.59



STA. 105+25.00
END JOB 061748

	BEGIN PROJECT	MID-POINT OF PROJECT	END PROJECT
LATITUDE	N 34°37' 36"	N 34°37' 36"	N 34°37' 36"
LONGITUDE	W 93°09' 59"	W 93°09' 58"	W 93°09' 58"

LENGTH OF PROJECT CALCULATED ALONG C.L.

GROSS LENGTH OF PROJECT	150.00	FEET	OR	0.028	MILES
NET " " ROADWAY	45.00	"	"	0.008	"
NET " " BRIDGES	105.00	"	"	0.020	"
NET " " PROJECT	150.00	"	"	0.028	"

APPROVED

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 12547
JESSIE XU JONES

Date: 2026.05.04 08:20:36-05'00'

CHIEF ENGINEER - PRECONSTRUCTION

tw39665 8/19/2022
R061748.DGN 8/19/2022

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061748	2	33
		INDEX OF SHEETS AND STANDARD DRAWINGS				

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15158
DAVID WILLIAM BAKER, IV

Digitally Signed 05/01/2026

INDEX OF SHEETS

BRIDGE STANDARD DRAWINGS

DRWG.NO.	TITLE	DATE
55000	STANDARD DETAILS FOR EMBANKMENT CONSTRUCTION AND BACKFILL AT BRIDGE ENDS	02-27-14
55001	STANDARD DETAILS FOR DUMPED RIPRAP AND FILTER BLANKET AND COMPUTING EXCAVATION FOR STRUCTURES	02-27-14
55010	STANDARD DETAILS FOR TYPE D BRIDGE NAME PLATE	01-28-25
55020	STANDARD DETAILS FOR STEEL H-PILES AND PILE ENCASEMENTS	03-24-16
55030F	STANDARD DETAILS FOR TYPE F APPROACH GUTTERS	04-08-21

ROADWAY STANDARD DRAWINGS

DRWG.NO.	TITLE	DATE
CDP-1	CONCRETE DITCH PAVING	12-08-16
GR-6	GUARDRAIL DETAILS	05-19-22
GR-8	GUARDRAIL DETAILS	11-07-19
GR-9	GUARDRAIL DETAILS	11-07-19
GR-10	GUARDRAIL DETAILS	11-07-19
GR-11	GUARDRAIL DETAILS	11-07-19
GR-12	GUARDRAIL DETAILS	05-14-20
PM-1	PAVEMENT MARKING DETAILS	04-09-26
PU-1	DETAILS OF PIPE UNDERDRAIN	12-08-16
SE-2	TABLES AND METHOD OF SUPERELEVATION FOR TWO-WAY TRAFFIC	11-07-19
TC-1	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	08-14-25
TC-2	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	08-14-25
TC-3	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	08-14-25
TEC-1	TEMPORARY EROSION CONTROL DEVICES	11-16-17
TEC-3	TEMPORARY EROSION CONTROL DEVICES	11-03-94

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061748	3	33
		GOVERNING SPECIFICATIONS & GENERAL NOTES				

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15158
DAVID WILLIAM BAKER, IV

GOVERNING SPECIFICATIONS

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

NUMBER	TITLE
ERRATA_____	ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS
FHWA-1273___	REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS
FHWA-1273___	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - NOTICE TO CONTRACTORS
FHWA-1273___	SUPPLEMENT - SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES (23 U.S.C. 140)
FHWA-1273___	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - GOALS AND TIMETABLES
FHWA-1273___	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - FEDERAL STANDARDS
FHWA-1273___	SUPPLEMENT - POSTERS AND NOTICES REQUIRED FOR FEDERAL-AID PROJECTS
FHWA-1273___	SUPPLEMENT - WAGE RATE DETERMINATION
100-3_____	CONTRACTOR'S LICENSE
100-4_____	DEPARTMENT NAME CHANGE
102-2_____	ISSUANCE OF PROPOSALS
102-3_____	PREQUALIFICATION OF BIDDERS
103-2_____	CONTACT INFORMATION FOR MOTORIST DAMAGE CLAIMS
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
307-2_____	CEMENT TREATED BASE COURSE
308-2_____	CEMENT STABILIZED CRUSHED STONE BASE COURSE
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
409-2_____	ASPHALT LABORATORY FACILITY
410-1_____	CONSTRUCTION REQUIREMENTS AND ACCEPTANCE OF ASPHALT CONCRETE PLANT MIX COURSES
410-2_____	DEVICES FOR MEASURING DENSITY FOR ROLLING PATTERNS
410-4_____	EVALUATION OF ACHM SUBLOT REPLACEMENT MATERIAL
416-1_____	RECYCLED ASPHALT PAVEMENT
501-3_____	PORTLAND CEMENT CONCRETE PAVEMENT
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
617-1_____	GUARDRAIL TERMINAL (TYPE 2)
617-2_____	GUARDRAIL DELINEATORS
620-1_____	MULCH COVER
621-1_____	FILTER SOCKS
800-1_____	STRUCTURES
802-3_____	CONCRETE FOR STRUCTURES
802-5_____	CONCRETE FOR STRUCTURES
804-2_____	REINFORCING STEEL FOR STRUCTURES
JOB 061748__	ARCHITECTURAL FINISH
JOB 061748__	BIDDING REQUIREMENTS AND CONDITIONS
JOB 061748__	BROADBAND INTERNET SERVICE FOR FIELD OFFICE
JOB 061748__	BUY AMERICA - CONSTRUCTION MATERIALS
JOB 061748__	CARGO PREFERENCE ACT REQUIREMENTS
JOB 061748__	CLASS C FLY ASH IN PORTLAND CEMENT CONCRETE PAVEMENT AND CLASS S(AE) CONCRETE
JOB 061748__	COLD MILLING – COUNTY PROPERTY
JOB 061748__	CONCRETE BRIDGE DECK CURING AND SURFACE TREATMENT RESTRICTIONS
JOB 061748__	DESIGN AND QUALITY CONTROL ASPHALT MIXTURES
JOB 061748__	DOCUMENTATION OF PAYMENTS MADE - PROMPT PAYMENT (SIGNET)
JOB 061748__	DOCUMENTATION OF PAYMENTS MADE TO DISADVANTAGED BUSINESS ENTERPRISES
JOB 061748__	DRIVEN PILING BY METHOD A
JOB 061748__	LIQUIDATED DAMAGES PROCEDURE FOR BID LETTINGS
JOB 061748__	MAINTENANCE OF TRAFFIC
JOB 061748__	MANDATORY ELECTRONIC CONTRACT
JOB 061748__	MANDATORY ELECTRONIC DOCUMENT SUBMITTAL
JOB 061748__	NESTING SITES OF MIGRATORY BIRDS
JOB 061748__	OFF-SITE RESTRAINING CONDITIONS FOR INDIANA AND NORTHERN LONG-EARED BATS
JOB 061748__	PARTNERING REQUIREMENTS
JOB 061748__	PRICE ADJUSTMENT FOR ASPHALT BINDER
JOB 061748__	PRICE ADJUSTMENT FOR FUEL
JOB 061748__	PRIME CONTRACTOR PERFORMANCE EVALUATION
JOB 061748__	PROHIBITION OF CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT
JOB 061748__	REMOVING AND REPLACING TOPSOIL
JOB 061748__	SECTION 404 NATIONWIDE 14 PERMIT REQUIREMENTS
JOB 061748__	SOIL STABILIZATION
JOB 061748__	SPECIAL SEEDING REQUIREMENTS
JOB 061748__	STAINING CONCRETE SURFACES
JOB 061748__	STORM WATER POLLUTION PREVENTION PLAN
JOB 061748__	SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS
JOB 061748__	UTILITY ADJUSTMENTS
JOB 061748__	VALUE ENGINEERING
JOB 061748__	VEGETATED BUFFER ZONE
JOB 061748__	VENDOR REGISTRATION REQUIREMENT
JOB 061748__	WARM MIX ASPHALT
JOB 061748__	WATER POLLUTION CONTROL
JOB 061748__	WELLHEAD PROTECTION

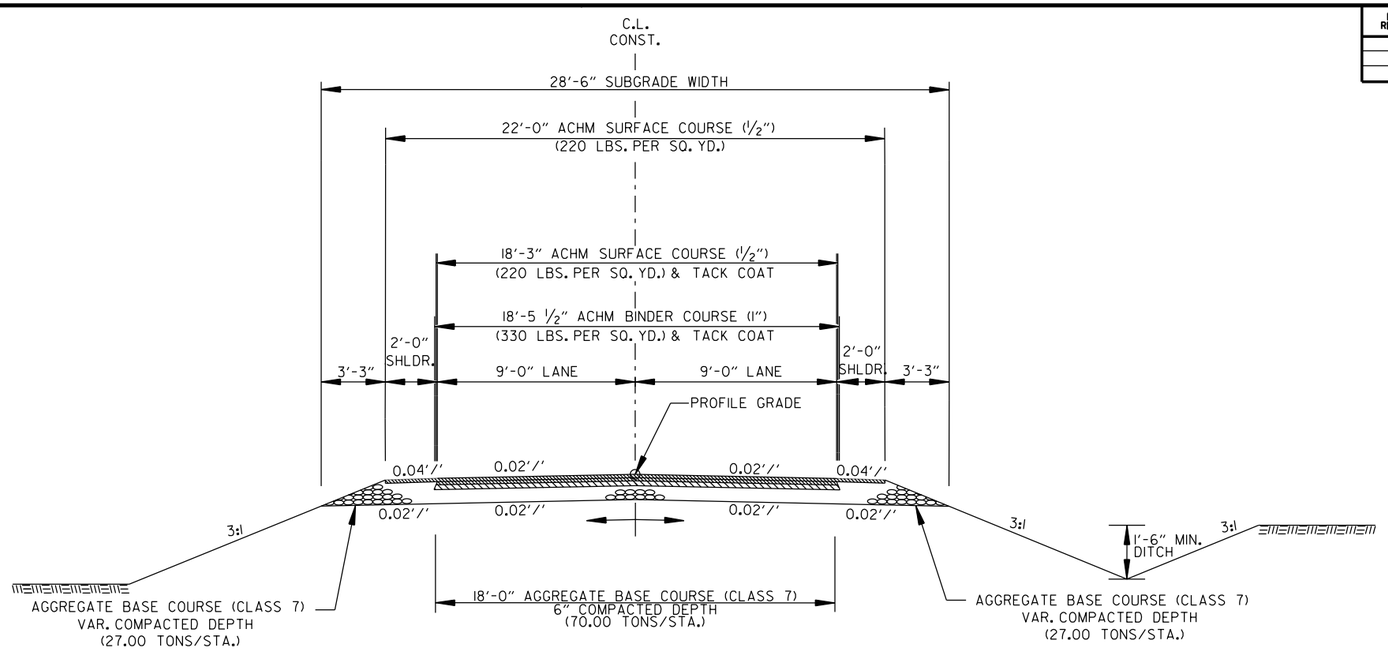
GENERAL NOTES

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.

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061748	4	33
		TYPICAL SECTIONS OF IMPROVEMENT				

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15158
DAVID WILLIAM BAKER, IV

Digitally Signed 05/01/2026



FULL DEPTH SECTION
STA. 103+83.11 - STA. 104+00.00

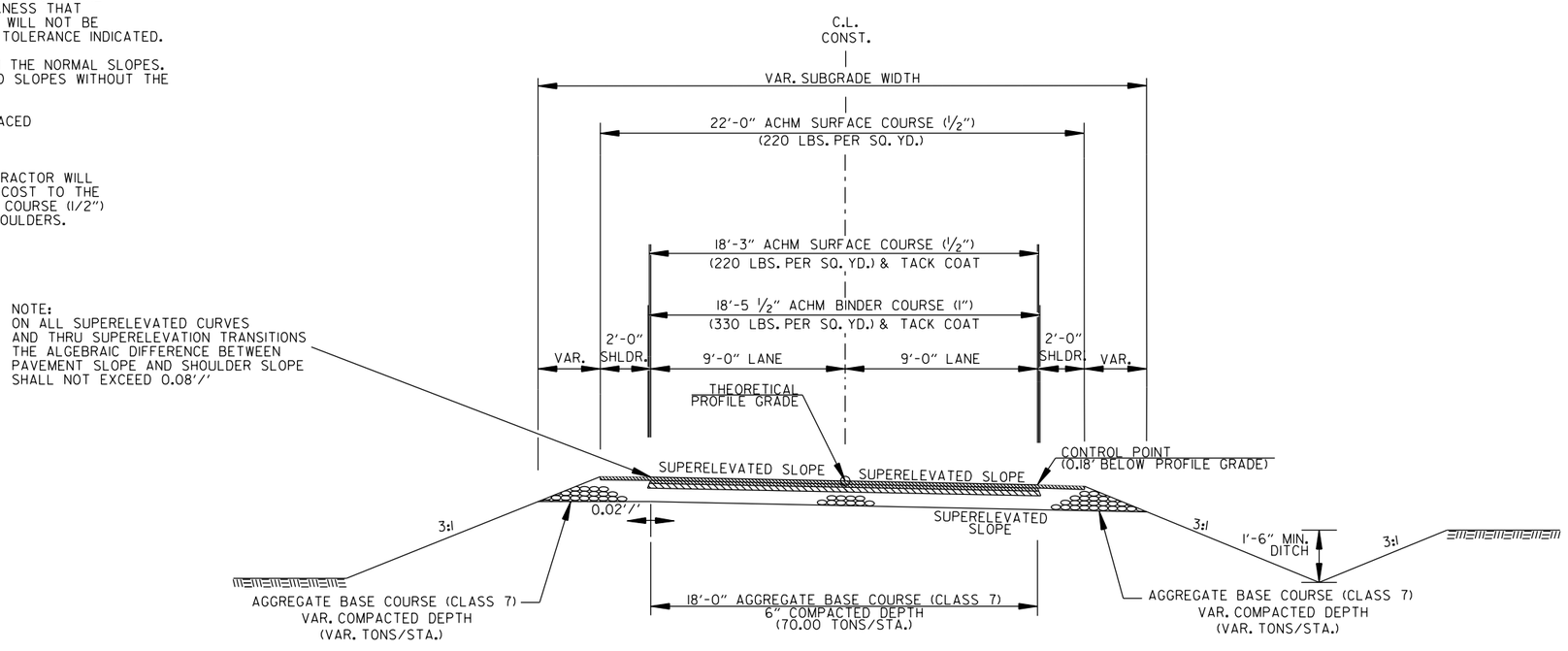
NOTES:

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

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

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

WITH THE APPROVAL OF THE ENGINEER, THE CONTRACTOR WILL BE ALLOWED TO SUBSTITUTE, AT NO ADDITIONAL COST TO THE DEPARTMENT, THE FIRST LIFT OF ACHM SURFACE COURSE (1/2") IN LIEU OF AGGREGATE BASE COURSE ON THE SHOULDERS.



FULL DEPTH SECTION (SUPERELEVATED RT.*)
STA. 105+05.00 - STA. 105+25.00

*REVERSE SUPERELEVATION
STA. 103+75.00 - STA. 103+83.11

TYPICAL SECTIONS OF IMPROVEMENT

tw39665 5/27/2025
BAKER (2).CEL MicroStation v8.11.9.578

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061748	5	33
		SPECIAL DETAILS				

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15158
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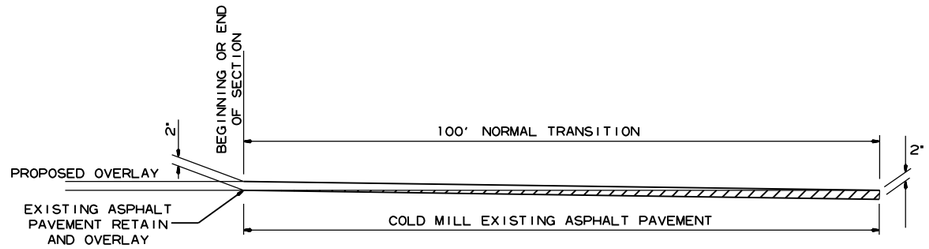
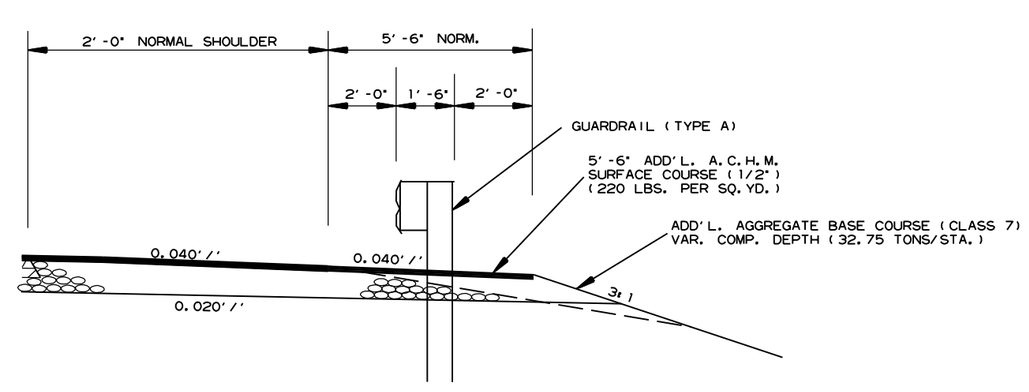


DETAIL FOR TRANSITIONS



WIDENING FOR GUARDRAIL

tw39665 5/27/2025
BAKER (2).CEL MicroStation v8.11.9.578

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061748	6	33
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15158
DAVID WILLIAM BAKER, IV
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CLEARING & GRUBBING:

ROCK DITCH CHECK (E-6)
(2 LOCATIONS = 6 CU. YDS.)

SILT FENCE (E-11)
(2 LOCATIONS = 615 LIN. FT.)

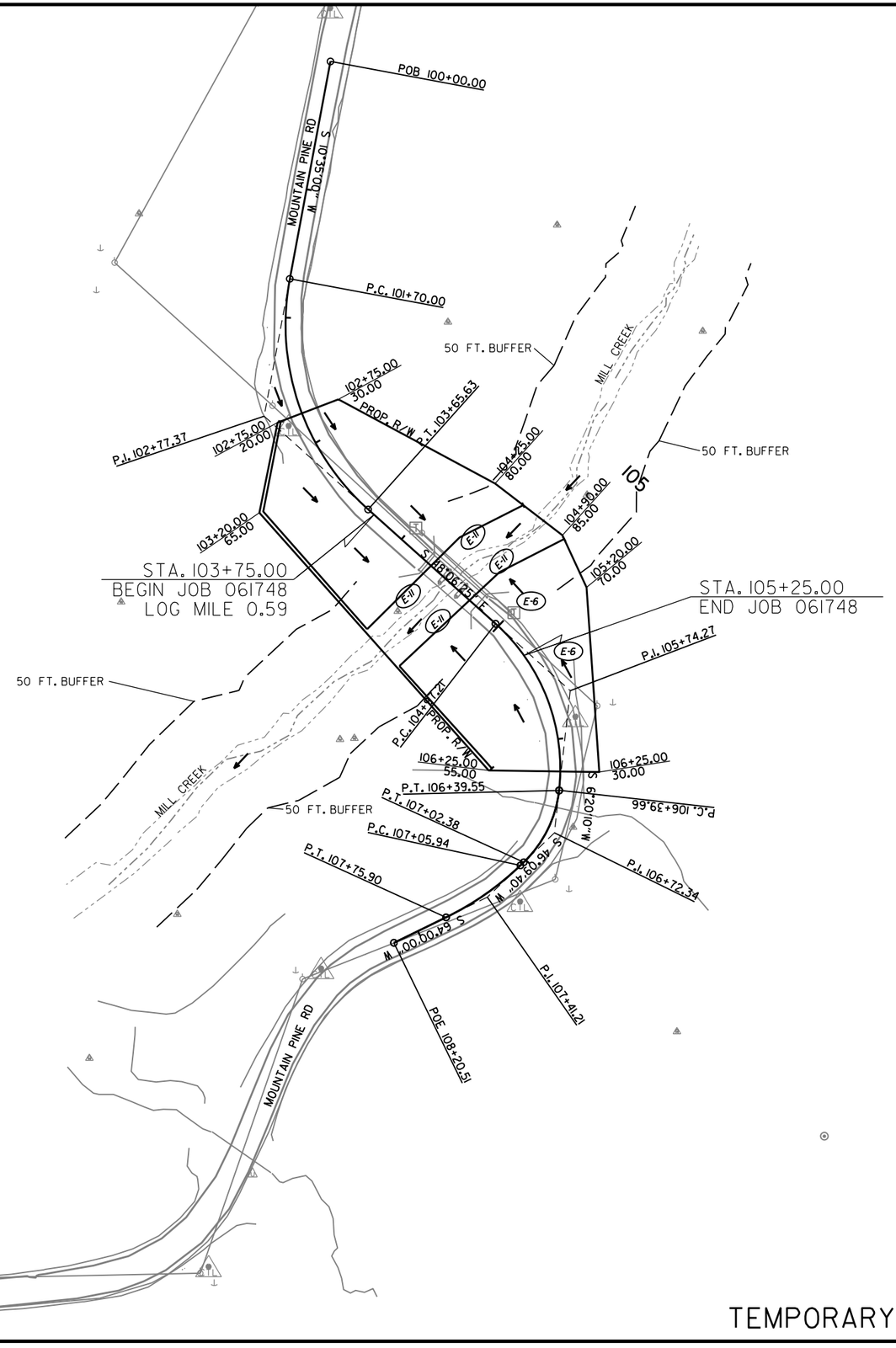
LEGEND

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

NOTE: PERIMETER CONTROLS SHALL BE PLACED AS CLEARING AND GRUBBING OPERATIONS ARE STARTED. RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

REVISIONS

DATE OF REVISION	REVISION



CLEARING AND GRUBBING
TEMPORARY EROSION CONTROL DETAILS

tw39665 5/27/2025
BAKER (2).CEL MicroStation v8.11.9.578

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061748	7	33
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15158
DAVID WILLIAM BAKER, IV
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STAGE I:

ROCK DITCH CHECK (E-6)
(I LOCATIONS = 3 CU. YDS.)

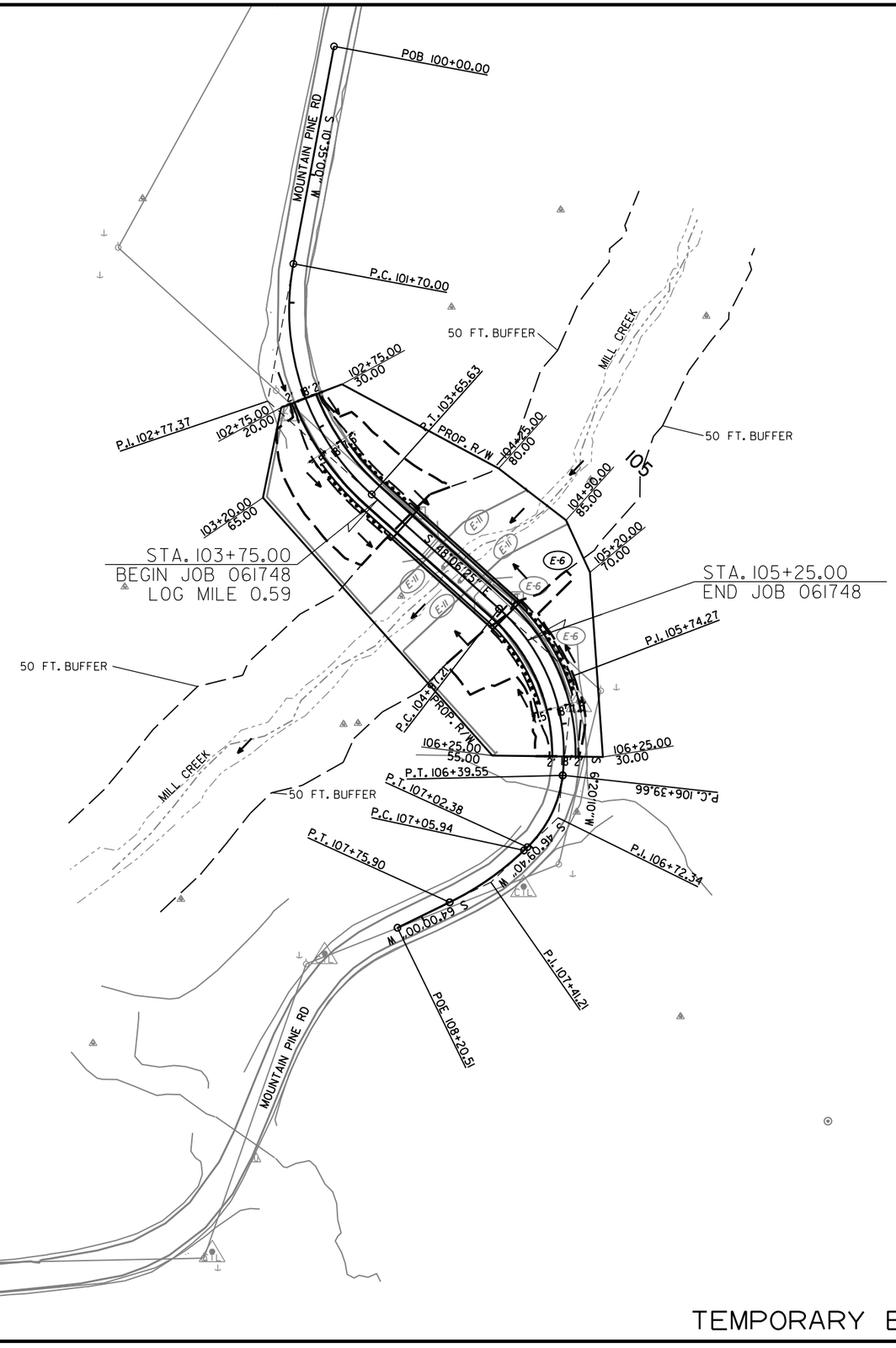
LEGEND

E-6 = ROCK DITCH CHECK
E-II = SILT FENCE

NOTE: PERIMETER CONTROLS SHALL BE PLACED AS CLEARING AND GRUBBING OPERATIONS ARE STARTED. RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

REVISIONS

DATE OF REVISION	REVISION



STAGE 1
TEMPORARY EROSION CONTROL DETAILS

tw39665 5/27/2025
BAKER (2).CEL MicroStation v8.11.9.578

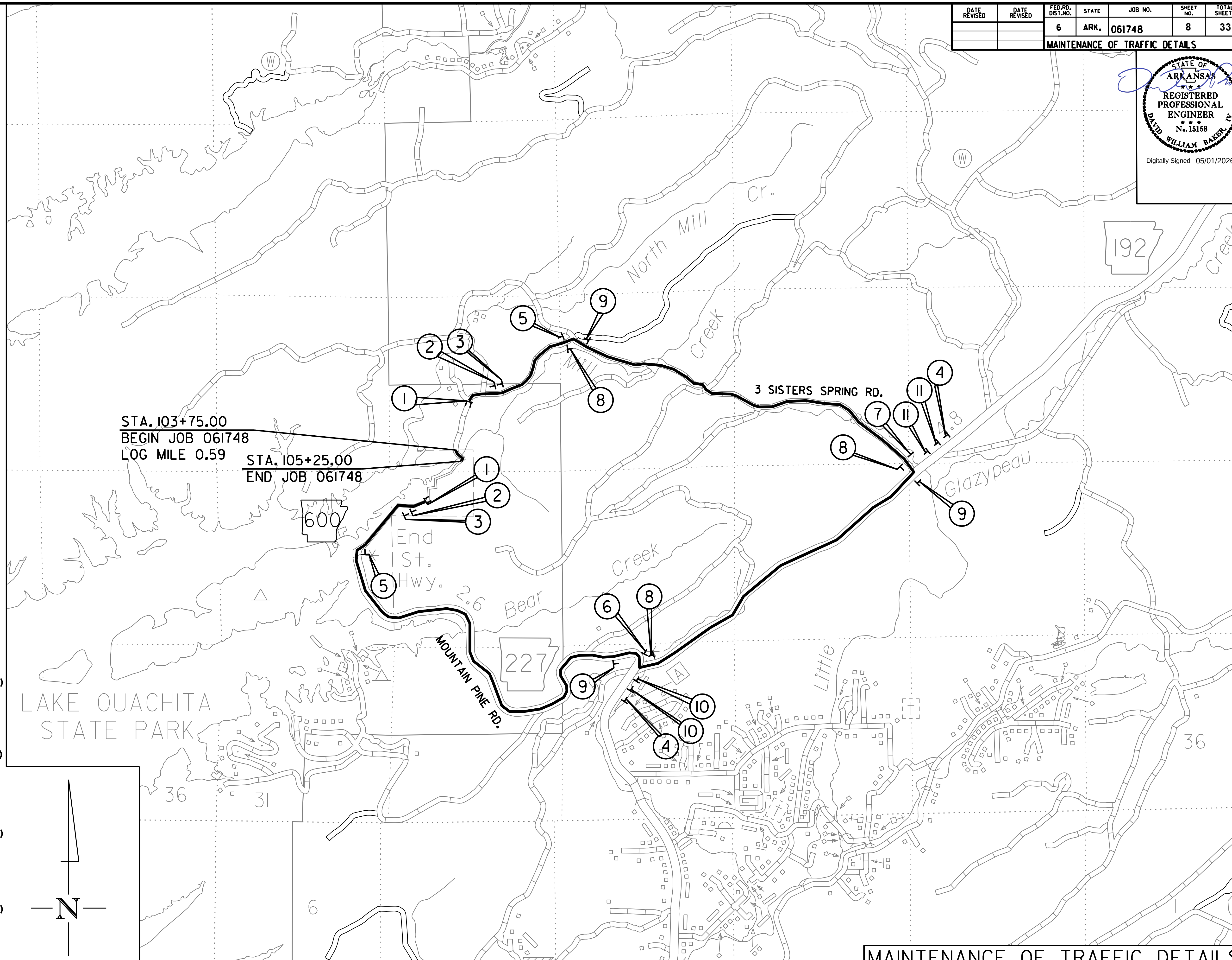
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061748	8	33

MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 15158 DAVID WILLIAM BAKER, IV

Digitally Signed 05/01/2026

No.	Sign	Description
1	ROAD CLOSED	(1) R11-2 (48" X 30"); 8' BARR. TYP. III LT.; 8' BARR. TYP. III RT.
2	ROAD CLOSED 500 FT	(1) W20-3 (48" X 48")
3	ROAD CLOSED 1000 FT	(1) W20-3 (48" X 48")
4	DETOUR 1500 FT	(1) W20-2 (48" X 48")
5	ROAD CLOSED 0.50 MILES AHEAD LOCAL TRAFFIC ONLY	(1) R11-3A (60" X 30")
6	ROAD CLOSED 3.00 MILES AHEAD LOCAL TRAFFIC ONLY; DETOUR	(1) R11-3A (60" X 30"); (1) M4-10R (48" X 18")
7	ROAD CLOSED 3.00 MILES AHEAD LOCAL TRAFFIC ONLY	(1) R11-3A (60" X 30")
8	3 SISTERS SPRING RD. DETOUR	(1) M4-9R (MODIFIED) (30" X 24")
9	MOUNTAIN PINE RD. DETOUR	(1) M4-9L (MODIFIED) (30" X 24")
10	MOUNTAIN PINE RD. DETOUR	(1) M4-9R (MODIFIED) (30" X 24")
11	MOUNTAIN PINE RD. DETOUR	(1) M4-9S (MODIFIED) (30" X 24")



MAINTENANCE OF TRAFFIC DETAILS

tw39665 5/27/2025 BAKER (2).CEL MicroStation v8.11.9.578

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061748	9	33
		PERMANENT PAVEMENT MARKING DETAILS				

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15158
DAVID WILLIAM BAKER, IV

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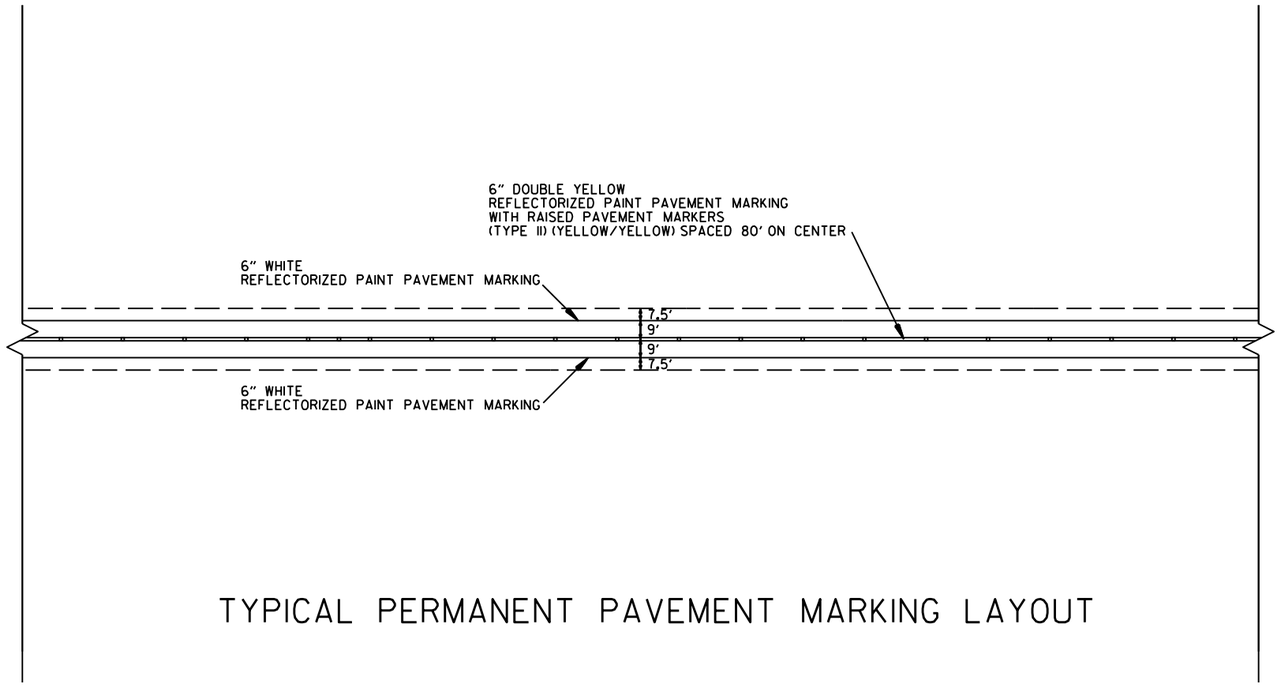

TYPICAL PERMANENT PAVEMENT MARKING LAYOUT

PERMANENT PAVEMENT MARKINGS:

REFLECTORIZED PAINT PAVEMENT MARKING WHITE (6") = 700 LIN. FT.
REFLECTORIZED PAINT PAVEMENT MARKING YELLOW (6") = 700 LIN. FT.
RAISED PAVEMENT MARKERS TYPE II (YELLOW/YELLOW) = 5 EACH

tw39665 5/27/2025
BAKER (2).CEL MicroStation v8.11.9.578

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061748	10	33
		QUANTITIES				

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15158
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ADVANCE WARNING SIGNS AND DEVICES

SIGN NUMBER	DESCRIPTION	SIGN SIZE	ENTIRE PROJECT	MAXIMUM NUMBER REQUIRED	TOTAL SIGNS REQUIRED		BARRICADES (TYPE III)	
							RIGHT	LEFT
			LIN. FT. - EACH		NO.	SQ. FT.	LIN. FT.	
W20-2	DETOUR 1500 FT.	48"x48"	1	1	1	16.0		
W20-3	ROAD CLOSED 500 FT.	48"x48"	2	2	2	32.0		
W20-3	ROAD CLOSED 1000 FT.	48"x48"	2	2	2	32.0		
R11-2	ROAD CLOSED	48"x30"	2	2	2	20.0		
R11-3A	ROAD CLOSED AHEAD	60"x30"	4	4	4	50.0		
M4-9R	DETOUR	30"x24"	5	5	5	25.0		
M4-9L	DETOUR	30"x24"	3	3	3	15.0		
M4-9S	DETOUR	30"x24"	2	2	2	10.0		
M4-10R	DETOUR ARROW	48"x18"	1	1	1	6.0		
	TYPE III BARRICADE-RT. (8')		2	2			16	
	TYPE III BARRICADE-LT. (8')		2	2				16
TOTALS:						**206.0**	**16**	**16**

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

PERMANENT PAVEMENT MARKINGS

DESCRIPTION	ENTIRE PROJECT	RAISED PAVEMENT MARKERS	REFLECTORIZED PAINT PAVEMENT MARKING	
		TYPE II	6"	
		(YELLOW/YELLOW)	WHITE	YELLOW
	LIN. FT. - EACH	EACH	LIN. FT.	
RAISED PAVEMENT MARKERS TYPE II (YELLOW/YELLOW)	5	5		
REFLECTORIZED PAINT PAVEMENT MARKING WHITE (6")	700		700	
REFLECTORIZED PAINT PAVEMENT MARKING YELLOW (6")	700			700
TOTALS:		**5**	**700**	**700**

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

CLEARING AND GRUBBING

STATION	STATION	LOCATION	CLEARING	GRUBBING
			STATION	
103+00	106+00	HWY. 600 - LT. & RT.	3	3
TOTALS:			**3**	**3**

REMOVAL AND DISPOSAL OF ITEMS

STATION	STATION	LOCATION	SIGN FOUNDATIONS	SIGNS
			EACH	EACH
105+16	105+16	MAIN LANES - RT.	2	1
105+59	105+59	MAIN LANES - RT.	1	1
105+75	105+75	MAIN LANES - LT. & RT.	2	1
TOTALS:			**5**	**3**

tw39665 5/27/2025
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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061748	11	33
		QUANTITIES				

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15158
DAVID WILLIAM BAKER, IV

Digitally Signed 05/01/2026

REMOVING AND REPLACING TOPSOIL

STATION	STATION	LOCATION / DESCRIPTION	*REMOVING AND REPLACING TOPSOIL
			CU. YD.
102+75	104+00	HWY. 600 LT. & RT.	60
105+05	106+25	HWY. 600 LT. & RT.	30
TOTAL:			**90**

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

GUARDRAIL

STATION	STATION	LOCATION	THRIE BEAM GUARDRAIL TERMINAL	GUARDRAIL TERMINAL (TYPE 2)
			EACH	
103+23.25	103+92.00	RT. SIDE	1	1
103+23.25	103+92.00	LT. SIDE	1	1
105+13.00	105+81.75	RT. SIDE	1	1
105+13.00	105+81.75	LT. SIDE	1	1
TOTALS:			**4**	**4**

COLD MILLING ASPHALT PAVEMENT

STATION	STATION	LOCATION	AVG. WIDTH	COLD MILLING ASPHALT PAVEMENT
			FEET	SQ. YD.
102+75.00	103+75.00	MAIN LANES	18.00	200.00
105+25.00	106+25.00	MAIN LANES	18.00	200.00
TOTAL:				**400.00**

NOTE: COORDINATE COLD MILLING STOCKPILE LOCATIONS WITH DISTRICT ENGINEER.
STOCKPILE LOCATIONS SHALL BE NO FARTHER THAN FIVE MILES FROM EACH SITE.

ACHM PATCHING OF EXISTING ROADWAY

DESCRIPTION	TON
ENTIRE PROJECT - TO BE USED IF AND WHERE	5
DIRECTED BY THE ENGINEER	
TOTAL:	**5**

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

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.
104+70.00	105+00.00	MAIN LANES - LT.	30.00	6.00	20.00	13.33	0.17
TOTALS:					**20.00**	**13.33**	**0.17**

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

APPROACH GUTTERS

STATION	STATION	LOCATION	APPROACH GUTTER (TYPE F)	REINFORCING STEEL-RDWY. (GR. 60)
			CU.YD.	POUND
103+65.00	104+00.00	LT. & RT. SIDES	4.20	210
105+05.00	105+40.00	LT. & RT. SIDES	4.20	210
TOTALS:			**8.40**	**420**

NOTE: USE T =13" FOR 2' SHOULDER.

SOIL STABILIZATION

STATION	STATION	LOCATION / DESCRIPTION	SOIL STABILIZATION
			TON
ENTIRE	PROJECT	TO BE USED IF AND WHERE	50
		DIRECTED BY THE ENGINEER	
TOTAL:			**50**

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

EARTHWORK

STATION	STATION	LOCATION / DESCRIPTION	UNCLASSIFIED EXCAVATION	COMPACTED EMBANKMENT
			CU. YD.	
ENTIRE	PROJECT	MAIN LANES	160	900
TOTALS:			**160**	**900**

NOTE: EARTHWORK QUANTITIES SHALL BE PAID AS PLAN QUANTITY.

4" PIPE UNDERDRAIN

STATION	STATION	LOCATIONS	4" PIPE UNDERDRAINS	UNDERDRAIN OUTLET PROTECTORS
			LIN. FT.	EACH
* ENTIRE PROJECT TO BE USED IF AND			100	2
WHERE DIRECTED BY THE ENGINEER				
TOTALS:			**100**	**2**

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

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061748	12	33
		QUANTITIES				

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15158
DAVID WILLIAM BAKER, IV

Digitally Signed 05/01/2026

BENCH MARKS

STATION	LOCATION	BENCH MARKS
		EACH
104+00	BRIDGE END	1
TOTAL:		1

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

EROSION CONTROL

STATION	STATION	LOCATION	PERMANENT EROSION CONTROL					TEMPORARY EROSION CONTROL						
			SPECIAL SEEDING	LIME	SPECIAL MULCH COVER	WATER	SPECIAL SECOND SEEDING APPLICATION	SPECIAL TEMPORARY SEEDING	SPECIAL MULCH COVER	WATER	FILTER SOCK (18") (E-3)	ROCK DITCH CHECKS (E-6)	SILT FENCE (E-11)	*SEDIMENT REMOVAL & DISPOSAL
			ACRE	TON	ACRE	M.GAL.	ACRE	ACRE	ACRE	M.GAL.	LIN. FT.	CU.YD.	LIN. FT.	CU. YD.
ENTIRE	PROJECT	HWY. 600 LT. & RT. - ALL STAGES	0.31	0.62	0.31	31.6	0.31	0.31	0.31	6.3		6	615	35
*ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.			0.08	0.16	0.08	8.2	0.08	0.08	0.08	1.6	200	3	100	11
TOTALS:			0.39	0.78	0.39	39.8	0.39	0.39	0.39	7.9	200	9	715	46

BASIS OF ESTIMATE:
LIME .....2 TONS / ACRE OF SPECIAL SEEDING
WATER.....102.0 M.G. / ACRE OF SPECIAL SEEDING
WATER.....20.4 M.G. / ACRE OF SPECIAL TEMPORARY SEEDING
ROCK DITCH CHECKS.....3 CU.YD./LOCATION

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

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.

BASE AND SURFACING

STATION	STATION	LOCATION	LENGTH	AGGREGATE BASE COURSE (CLASS 7)		TACK COAT							ACHM BINDER COURSE (1")				ACHM SURFACE COURSE (1/2")							
				TON / STATION	TON	(0.05 GAL. PER SQ. YD.) TOTAL WID.	SQ.YD.	GALLON	(0.17 GAL. PER SQ. YD.) 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 64-22	TOTAL PG 64-22
			FEET			FEET			FEET				FEET			TON	FEET			TON	FEET			TON	TON
MAIN LANES																								
102+75.00	103+75.00	HWY. 600-TRANSITION	100.00	54.00	54.00				18.00	200.00	34.00	34.00									22.00	244.44	220.00	26.89	26.89
103+75.00	104+00.00	HWY. 600-FULL DEPTH	25.00	124.00	31.00	36.71	101.97	5.10				5.10	18.46	51.28	330.00	8.46	18.25	50.69	220.00	5.58	22.00	61.11	220.00	6.72	12.30
105+05.00	105+25.00	HWY. 600-FULL DEPTH	20.00	124.00	24.80	36.71	81.58	4.08				4.08	18.46	41.02	330.00	6.77	18.25	40.56	220.00	4.46	22.00	48.89	220.00	5.38	9.84
105+25.00	106+25.00	HWY. 600-TRANSITION	100.00	54.00	54.00				18.00	200.00	34.00	34.00									22.00	244.44	220.00	26.89	26.89
ADDITIONAL FOR GUARDRAIL WIDENING																									
102+80.25	103+13.25	HWY. 600-GUARDRAIL WIDENING LT. & RT. (TAPER)	33.00	32.75	10.81																5.50	20.17	220.00	2.22	2.22
103+13.25	103+92.00	HWY. 600-GUARDRAIL WIDENING LT. & RT.	78.75	65.50	51.58																11.00	96.25	220.00	10.59	10.59
105+13.00	105+91.75	HWY. 600-GUARDRAIL WIDENING LT. & RT.	78.75	65.50	51.58																11.00	96.25	220.00	10.59	10.59
105+91.75	106+24.75	HWY. 600-GUARDRAIL WIDENING LT. & RT. (TAPER)	33.00	32.75	10.81																5.50	20.17	220.00	2.22	2.22
ADDITIONAL FOR SUPERELEVATION																									
102+75.00	103+83.11	HWY. 600-SUPERELEVATION TRANSITION	108.11	4.38	4.74																				
105+05.00	105+94.77	HWY. 600-SUPERELEVATION TRANSITION	89.77	4.38	3.93																				
105+94.77	106+25.00	HWY. 600-MAX SUPERELEVATION	30.23	8.75	2.65																				
TOTALS:					299.90		183.55	9.18		400.00	68.00	77.18		92.30		15.23		91.25		10.04		831.72		91.50	101.54

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2").....94.2% MIN. AGGR.....5.8% ASPHALT BINDER
ACHM BINDER COURSE (1").....95.3% MIN. AGGR.....4.7% ASPHALT BINDER
TACK COAT QUANTITIES WERE CALCULATED USING THE EMULSIFIED ASPHALT RATES. REFER TO SS-400-1 FOR THE RESIDUAL ASPHALT APPLICATION RATES.

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061748	13	33
		07717 - QUANTITIES - 69437				

SCHEDULE OF BRIDGE QUANTITIES - JOB NO. 061748

BRIDGE NO.	NAME PLATE TITLE	UNIT OF STRUCTURE	ITEM NO.	205	801	SS & 802	SP, SS, & 802	SP & 803	SS & 804	SS & 804	SS & 805	SS & 805	812	SS & 816	SS & 816	SP JOB 061748	SP JOB 061748
			ITEM	REMOVAL OF EXISTING BRIDGE STRUCTURE (SITE NO. _)	UNCLASSIFIED EXCAVATION FOR STRUCTURES - BRIDGE	CLASS S CONCRETE - BRIDGE	CLASS S(AE) CONCRETE - BRIDGE	CLASS 2 PROTECTIVE SURFACE TREATMENT	REINFORCING STEEL - BRIDGE (GRADE 60)	EPOXY COATED REINFORCING STEEL (GRADE 60)	STEEL PILING (HP 12X53) ②	PREBORING ③	BRIDGE NAME PLATE (TYPE D)	FILTER BLANKET	DUMPED RIPRAP	ARCHITECTURAL FINISH	STAINING CONCRETE SURFACES
			UNIT	LUMP SUM	CU. YD.	CU. YD.	CU. YD.	SQ. YD.	LB.	LB.	LIN. FT.	LIN. FT.	EACH	SQ. YD.	CU. YD.	SQ. FT.	SQ. FT.
0717	HIGHWAY 600 OVER MILL CREEK	BENT 1			27	22.51			2,476	16,018	100	95	1	256	143	16	123
		BENT 2			80	42.22			7,394	408							
		BENT 3			104	42.22			7,394	408							
		BENT 4			22	22.45			2,476	16,018	100	95		468	258	16	123
		105'-0" CONTINUOUS R.C. SLAB UNIT					242.90	303.4		59,288						1,740	2,125
		EXISTING BRIDGE NO. 19840		1													
TOTALS FOR JOB NO. 061748					① 233	129.40	242.90	303.4	19,740	92,140	200	190	1	724	401	1,772	2,371

THOMAS GERARD
DESIGN SECTION SUPERVISOR

①Includes approx. 118 cubic yards of rock excavation.

②All steel piling shall be Grade 50 and shall have approved driving points, which will not be paid for directly, but will be considered subsidiary to the item "Steel Piling (HP 12x53)". All piles shall conform to Standard Drawing No. 55020.

③The quantities shown are for estimating and bidding purposes only. Actual quantities will be determined in the field.

TYPE F APPROACH GUTTER QUANTITIES - PER BRIDGE END

(For information only)

APPROACH GUTTER	
Reinforcing Steel (lbs.)	Concrete (cu. yds.)
210	4.20

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS
5/1/26

Ellis, Rick
BRIDGE ENGINEER

SCHEDULE OF BRIDGE QUANTITIES
HWY. 600 OVER MILL CREEK
MILL CREEK STR. & APPRS. (S)
GARLAND COUNTY

ROUTE 600 SEC. 21

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: AMB DATE: 02/23/2026 FILENAME: b061748-q1.dgn
CHECKED BY: RD DATE: 03/03/2026 SCALE: No Scale
DESIGNED BY: DATE:

BRIDGE NO. 07717 DRAWING NO. 69437

PRNT DATE: 4/23/2026

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
6-2-2026		6	ARK.	061748	14	33
		SUMMARY OF QUANTITIES AND REVISIONS				

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15158
DAVID WILLIAM BAKER, IV

SUMMARY OF QUANTITIES

ITEM NUMBER	ITEM	QUANTITY	UNIT
201	CLEARING	3	STATION
201	GRUBBING	3	STATION
202	REMOVAL AND DISPOSAL OF SIGN FOUNDATIONS	5	EACH
202	REMOVAL AND DISPOSAL OF SIGNS	3	EACH
SP, SS, & 210	UNCLASSIFIED EXCAVATION	160	CU. YD.
SP & 210	COMPACTED EMBANKMENT	900	CU. YD.
SP	REMOVING AND REPLACING TOPSOIL	90	CU. YD.
SP & 210	SOIL STABILIZATION	50	TON
SP, SS, & 303	AGGREGATE BASE COURSE (CLASS 7)	300	TON
SS & 401	TACK COAT	77	GAL.
SP, SS, & 406	MINERAL AGGREGATE IN ACHM BINDER COURSE (1")	14	TON
SP, SS, & 406	ASPHALT BINDER (PG 64-22) IN ACHM BINDER COURSE (1")	1	TON
SP, SS, & 407	MINERAL AGGREGATE IN ACHM SURFACE COURSE (1/2")	96	TON
SP, SS, & 407	ASPHALT BINDER (PG 64-22) IN ACHM SURFACE COURSE (1/2")	6	TON
SP & 412	COLD MILLING ASPHALT PAVEMENT	400	SQ. YD.
SP, SS, & 415	ACHM PATCHING OF EXISTING ROADWAY	5	TON
SP, SS, & 504	APPROACH GUTTERS	8.40	CU. YD.
601	MOBILIZATION	1.00	LUMP SUM
SP & 602	FURNISHING FIELD OFFICE	1	EACH
SP, SS, & 603	MAINTENANCE OF TRAFFIC	1.00	LUMP SUM
SS & 604	SIGNS	206	SQ. FT.
SS & 604	BARRICADES	32	LIN. FT.
SP, SS, & 605	CONCRETE DITCH PAVING (TYPE B)	20	SQ. YD.
SS & 611	4" PIPE UNDERDRAINS	100	LIN. FT.
SS & 611	UNDERDRAIN OUTLET PROTECTORS	2	EACH
SS & 617	GUARDRAIL TERMINAL (TYPE 2)	4	EACH
SS & 617	THRIE BEAM GUARDRAIL TERMINAL	4	EACH
620	LIME	1	TON
SP & 620	SPECIAL SEEDING	0.39	ACRE
SP, SS, & 620	SPECIAL MULCH COVER	0.78	ACRE
620	WATER	47.9	M. GAL.
SP & 621	SPECIAL TEMPORARY SEEDING	0.39	ACRE
621	SILT FENCE	715	LIN. FT.
621	SEDIMENT REMOVAL AND DISPOSAL	46	CU. YD.
621	ROCK DITCH CHECKS	9	CU. YD.
SS & 621	FILTER SOCK (18")	200	LIN. FT.
SP & 623	SPECIAL SECOND SEEDING APPLICATION	0.39	ACRE
624	SOLID SODDING	13	SQ. YD.
635	ROADWAY CONSTRUCTION CONTROL	1.00	LUMP SUM
718	REFLECTORIZED PAINT PAVEMENT MARKING WHITE (6")	700	LIN. FT.
718	REFLECTORIZED PAINT PAVEMENT MARKING YELLOW (6")	700	LIN. FT.
721	RAISED PAVEMENT MARKERS (TYPE II)	5	EACH
SS & 804	REINFORCING STEEL-ROADWAY (GRADE 60)	420	POUND
	STRUCTURES OVER 20' SPAN		
205	REMOVAL OF EXISTING BRIDGE STRUCTURE (SITE NO. 1)	1.00	LUMP SUM
636	BRIDGE CONSTRUCTION CONTROL	1.00	LUMP SUM
801	UNCLASSIFIED EXCAVATION FOR STRUCTURES-BRIDGE	233	CU. YD.
SS & 802	CLASS S CONCRETE-BRIDGE	129.40	CU. YD.
SP, SS, & 802	CLASS S(AE) CONCRETE-BRIDGE	242.90	CU. YD.
SP	ARCHITECTURAL FINISH	1772	SQ. FT.
SP	STAINING CONCRETE SURFACES	2371	SQ. FT.
SP & 803	CLASS 2 PROTECTIVE SURFACE TREATMENT	303.40	SQ. YD.
SS & 804	REINFORCING STEEL-BRIDGE (GRADE 60)	19720	POUND
SS & 804	EPOXY COATED REINFORCING STEEL (GRADE 60)	92140	POUND
SS & 805	STEEL PILING (HP 12X53)	200	LIN. FT.
SS & 805	PREBORING	190	LIN. FT.
812	BRIDGE NAME PLATE (TYPE D)	1.00	EACH
SS & 816	FILTER BLANKET	724	SQ. YD.
SS & 816	DUMPED RIPRAP	401	CU. YD.

REVISIONS

DATE	REVISION	SHEET NUMBER
6/2/2026	Revised the Standard Details for Type D Bridge Name Plate	14

lw39665 5/27/2025
BAKER (2).CEL MicroStation v8.11.9.578

SUMMARY OF QUANTITIES AND REVISIONS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061748	15	33
		SURVEY CONTROL DETAILS				

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15158
DAVID WILLIAM BAKER, IV

Digitally Signed 05/01/2026

SURVEY CONTROL COORDINATES

Project Name: s061748
Date: 1/14/2022
Coordinate System: ARKANSAS STATE PLANE – SOUTH ZONE BASED ON GPS CONTROL,260038 – 260038A
PROJECTED TO GROUND.
Units: U.S. SURVEY FOOT

Point Name	Northing	Easting	Elev	Feature	Description
1	2028484.4532	961619.9430	676.03	CTL	ARDOT STD. MON. STAMPED PN:1
2	2028100.4307	961460.7019	639.09	CTL	ARDOT STD. MON. STAMPED PN:2
3	2027779.2012	961428.7546	597.81	CTL	ARDOT STD. MON. STAMPED PN:3
4	2027555.6938	961649.1417	596.16	CTL	ARDOT STD. MON. STAMPED PN:4
5	2027413.5976	961606.6220	598.32	CTL	ARDOT STD. MON. STAMPED PN:5
6	2027362.0833	961453.6980	610.50	CTL	ARDOT STD. MON. STAMPED PN:6
7	2027132.9542	961367.2407	606.44	CTL	ARDOT STD. MON. STAMPED PN:7
8	2027117.7571	961121.7884	616.53	CTL	ARDOT STD. MON. STAMPED PN:8
9	2027033.9347	960838.2088	600.26	CTL	ARDOT STD. MON. STAMPED PN:9
100	2028651.8024	961569.8561	695.62	GPS	ARDOT GPS #260038
101	2029483.3595	961965.9859	647.88	GPS	ARDOT GPS #260038A

*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 0.9999462422 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 s061748gi.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 – 0302–SOUTH ZONE
DETERMINED FROM GPS CONTROL POINTS: 260038 – 260038A
CONVERGENCE ANGLE: 0°39'10.55" LEFT AT PN:3 LT:N34°37'37.05" LG:W93°09'59.73"
GRID AZIMUTH = ASTRONOMICAL AZIMUTH – CONVERGENCE ANGLE.

HWY. 600

POINT NO.	TYPE	STATION	NORTHING	EASTING
8000	POB	100+00.00	2028059.2055	961460.8529
8001	PC	101+70.00	2027892.0974	961429.6298
8002	PI	102+77.37	2027786.5498	961409.9088
8003	PT	103+65.63	2027787.0821	961489.8374
8004	PC	104+97.21	2027626.9917	961587.7826
8005	PI	105+74.27	2027575.5393	961645.1412
8006	PT	106+39.55	2027498.9558	961636.6374
8007	PC	106+39.66	2027498.8430	961636.6249
8008	PI	106+72.34	2027466.3577	961633.0177
8009	PT	107+02.38	2027443.7191	961609.4424
8010	PC	107+05.94	2027441.2492	961606.8703
8011	PI	107+41.21	2027416.8245	961581.4351
8012	PT	107+75.90	2027401.3659	961549.7404
8013	POE	108+21.00	2027381.8094	961509.6435

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061748	16	33
		SURVEY CONTROL DETAILS				

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
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DAVID WILLIAM BAKER, IV

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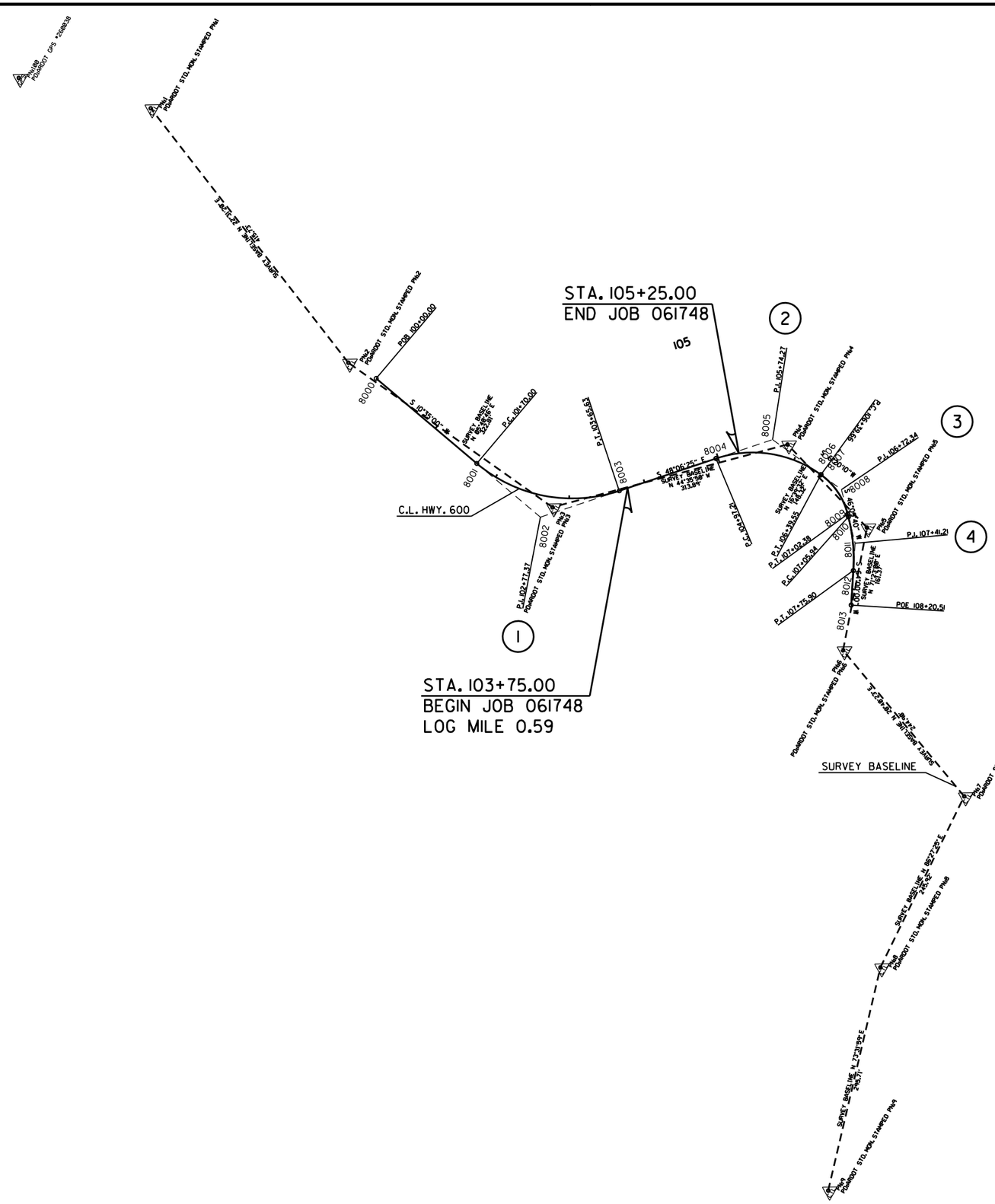


1 HWY. 600
PI = 102+77.37
Δ = 58°41'25" LT.
D = 30°00'00"
T = 107.37'
L = 195.63'
PC = 101+70.00
PT = 103+65.63
e = 0.074'/'
Ls = 200'

2 HWY. 600
PI = 105+74.27
Δ = 54°26'35" RT.
D = 38°15'00"
T = 77.06'
L = 142.34'
PC = 104+97.21
PT = 106+39.55
e = 0.082'/'
Ls = 200'

3 HWY. 600
PI = 106+72.34
Δ = 39°49'30" RT.
D = 63°30'00"
T = 32.68'
L = 62.72'
PC = 106+39.66
PT = 107+02.38
FOR INFORMATION ONLY

4 HWY. 600
PI = 107+41.21
Δ = 17°50'20" RT.
D = 25°30'00"
T = 35.27'
L = 69.96'
PC = 107+05.94
PT = 107+75.90
FOR INFORMATION ONLY

lw39665 5/27/2025
BAKER (2).CEL MicroStation v8.11.9.578

SURVEY CONTROL DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061748	17	33

PLAN AND PROFILE SHEETS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 15158 DAVID WILLIAM BAKER, IV

Digitally Signed 05/01/2026

(1) HWY. 600
PI = 102+77.37
Δ = 58°41'25" LT.
D = 30°00'00"
T = 107.37'
L = 195.63'
PC = 101+70.00
PT = 103+65.63
e = 0.074'/'
Ls = 200'

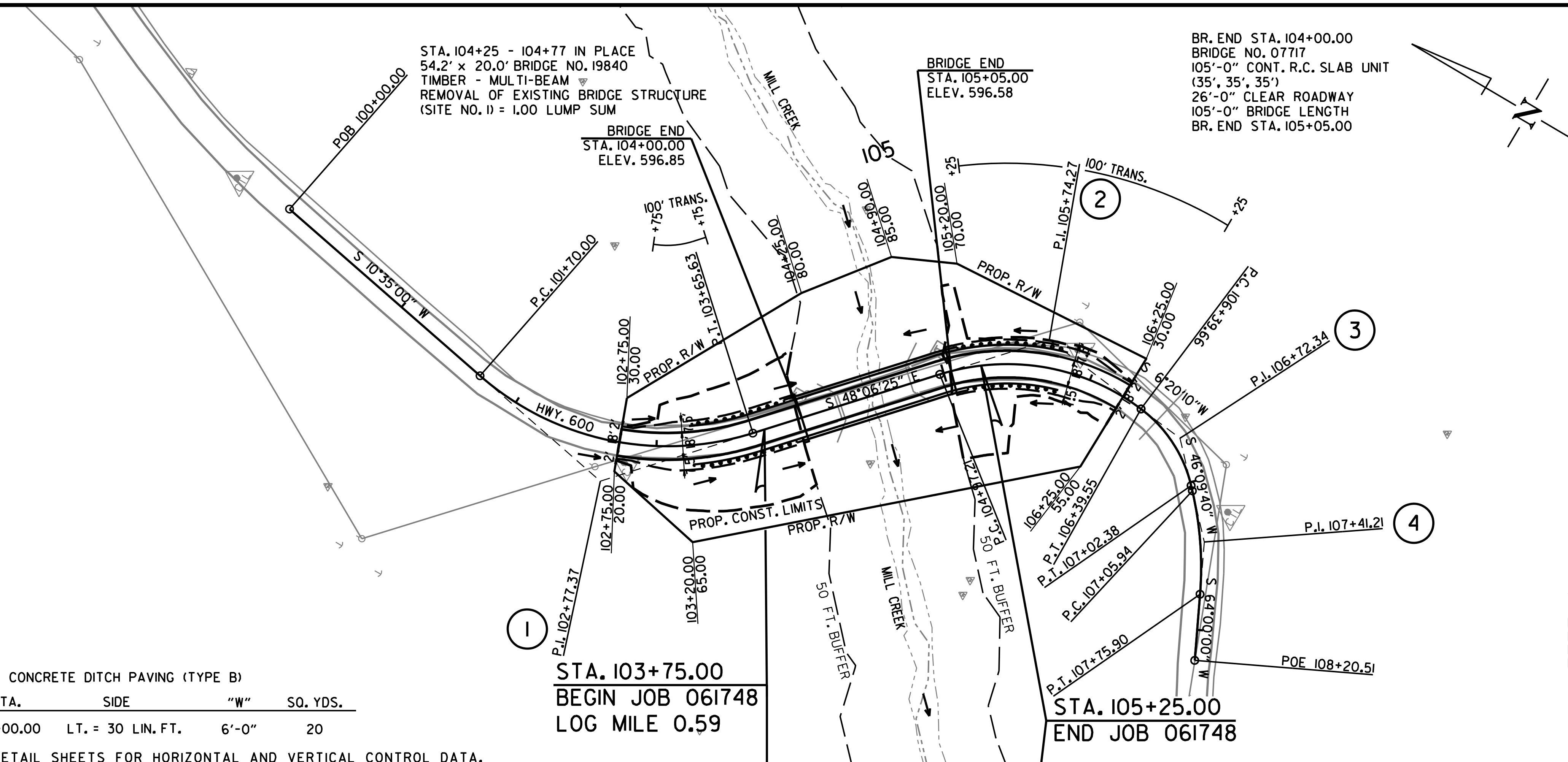
(2) HWY. 600
PI = 105+74.27
Δ = 54°26'35" RT.
D = 38°15'00"
T = 77.06'
L = 142.34'
PC = 104+97.21
PT = 106+39.55
e = 0.082'/'
Ls = 200'

(3) HWY. 600
PI = 106+72.34
Δ = 39°49'30" RT.
D = 63°30'00"
T = 32.68'
L = 62.72'
PC = 106+39.66
PT = 107+02.38
FOR INFORMATION ONLY

(4) HWY. 600
PI = 107+41.21
Δ = 17°50'20" RT.
D = 25°30'00"
T = 35.27'
L = 69.96'
PC = 107+05.94
PT = 107+75.90
FOR INFORMATION ONLY

STA. 104+25 - 104+77 IN PLACE
54.2' x 20.0' BRIDGE NO. 19840
TIMBER - MULTI-BEAM
REMOVAL OF EXISTING BRIDGE STRUCTURE
(SITE NO. 1) = 1.00 LUMP SUM

BR. END STA. 104+00.00
BRIDGE NO. 07717
105'-0" CONT. R.C. SLAB UNIT
(35', 35', 35')
26'-0" CLEAR ROADWAY
105'-0" BRIDGE LENGTH
BR. END STA. 105+05.00



GUARDRAIL

STA.	STA.	SIDE	GUARDRAIL TERMINAL (TYPE 2) EACH	THRIE BEAM GUARDRAIL TERMINAL EACH
103+23.25	103+92.00	RT.	1	1
103+23.25	103+92.00	LT.	1	1
105+13.00	105+81.75	RT.	1	1
105+13.00	105+81.75	LT.	1	1

CONCRETE DITCH PAVING (TYPE B)

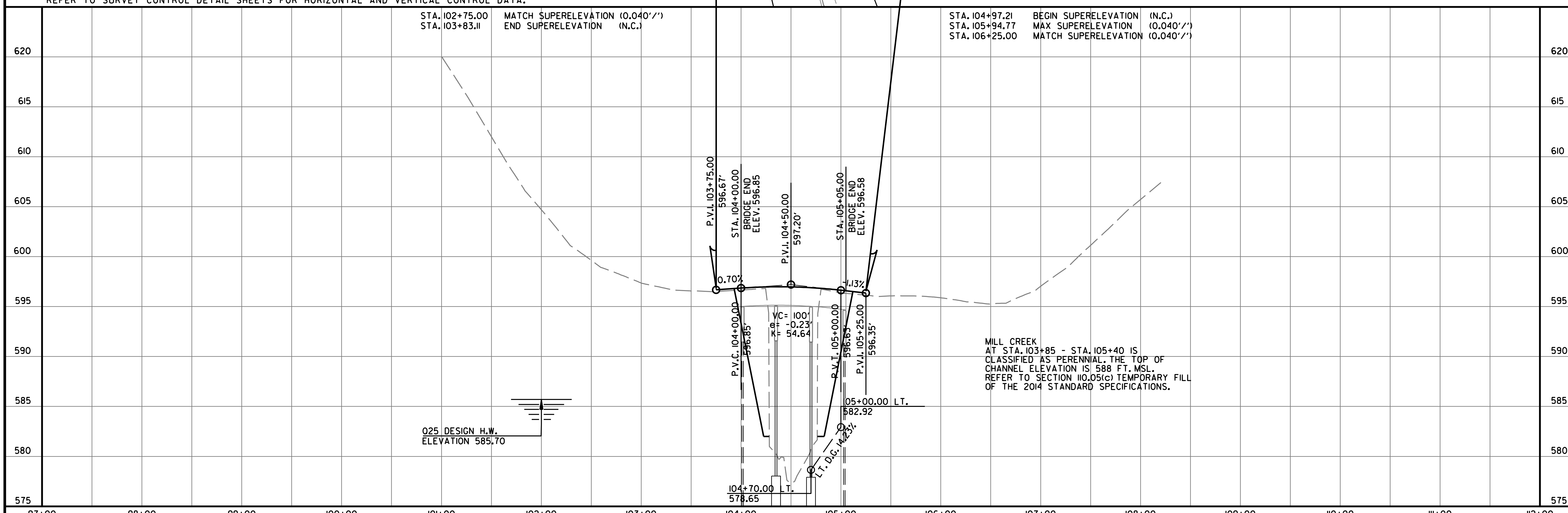
STA.	STA.	SIDE	"W"	SQ. YDS.
104+70.00	105+00.00	LT. = 30 LIN. FT.	6'-0"	20

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

HWY. 600

STA. 102+75.00 MATCH SUPERELEVATION (0.040'/')
STA. 103+83.11 END SUPERELEVATION (N.C.)

STA. 104+97.21 BEGIN SUPERELEVATION (N.C.)
STA. 105+94.77 MAX SUPERELEVATION (0.040'/')
STA. 106+25.00 MATCH SUPERELEVATION (0.040'/')



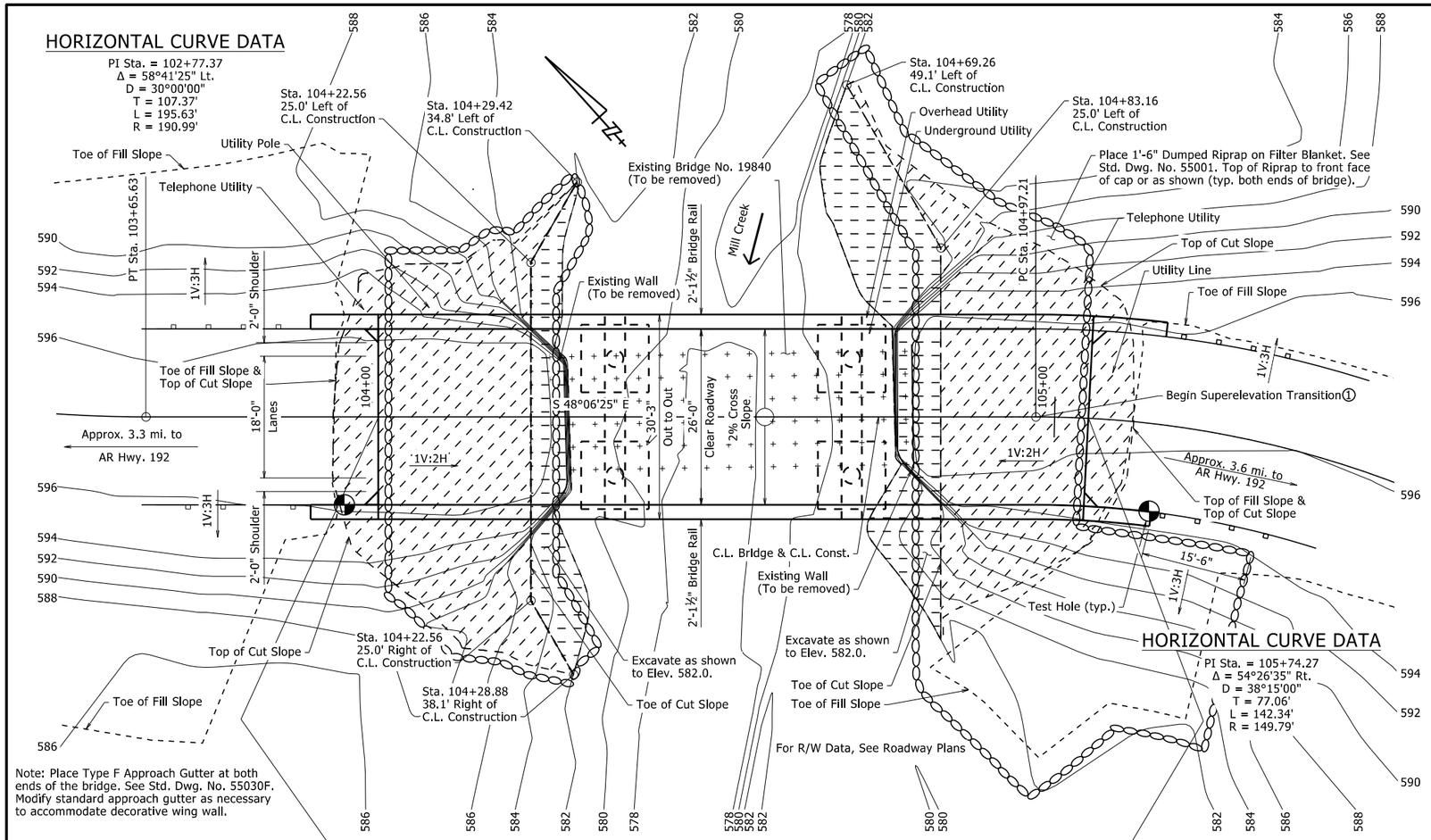
MILL CREEK
AT STA. 103+85 - STA. 105+40 IS
CLASSIFIED AS PERENNIAL. THE TOP OF
CHANNEL ELEVATION IS 588 FT. MSL.
REFER TO SECTION 110.05(c) TEMPORARY FILL
OF THE 2014 STANDARD SPECIFICATIONS.

8/19/2022
tw39665
R061748.DGN

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061748	18	33
		07717 - LAYOUT - 69438				

HORIZONTAL CURVE DATA

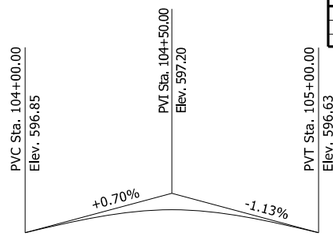
PI Sta. = 102+77.37
Δ = 58°41'25" Lt.
D = 30°00'00"
T = 107.37'
L = 195.63'
R = 190.99'



PLAN

HORIZONTAL CURVE DATA

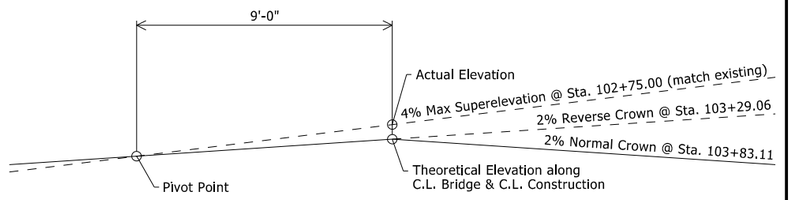
PI Sta. = 105+74.27
Δ = 54°26'35" Rt.
D = 38°15'00"
T = 77.06'
L = 142.34'
R = 149.79'



Length of Curve = 100.00 ft.

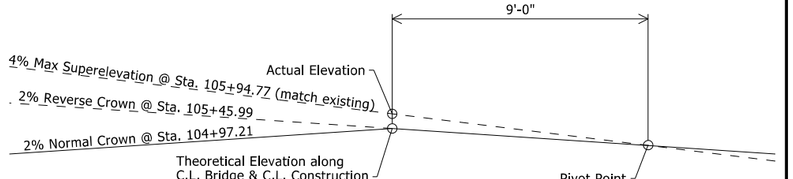
VERTICAL ALIGNMENT DATA

Theoretical Elevation Along C.L. Construction
No Scale



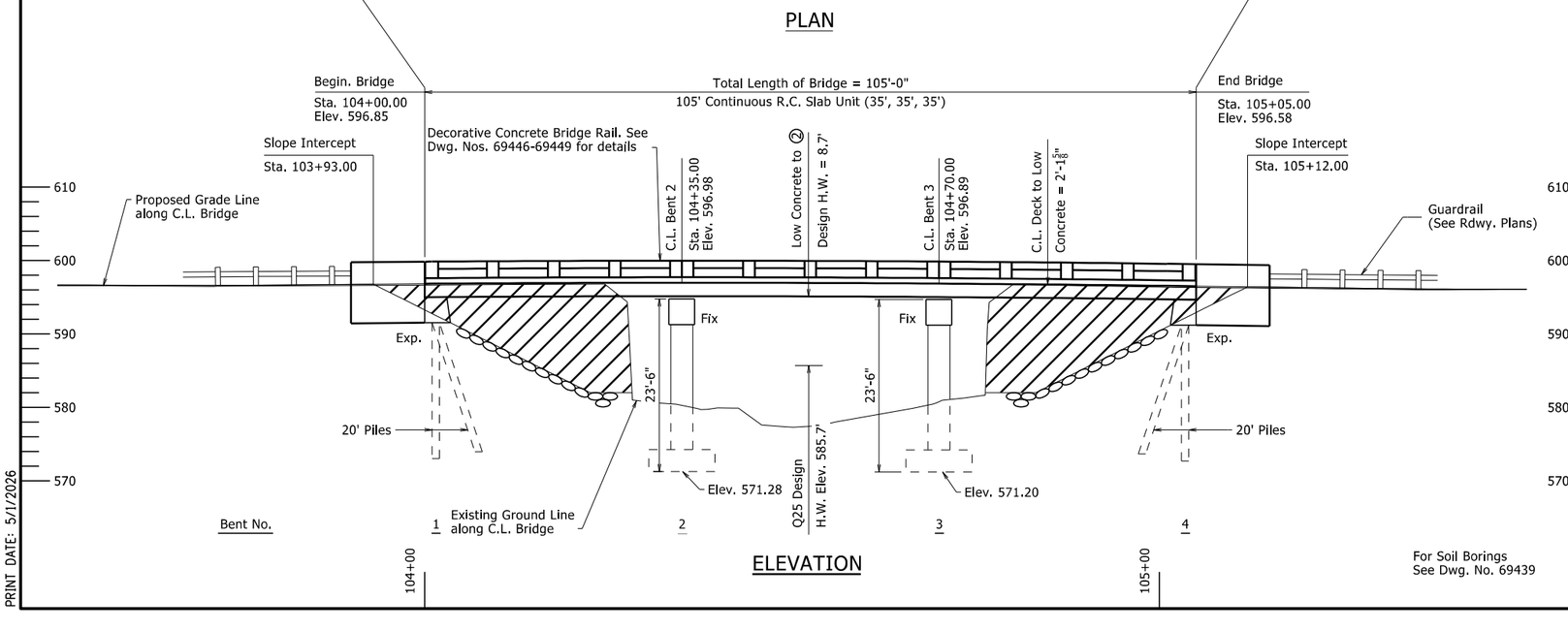
SUPERELEVATION TRANSITION SKETCH A

LOOKING AHEAD
No Scale



SUPERELEVATION TRANSITION SKETCH B

LOOKING AHEAD
No Scale



ELEVATION

For Soil Borings
See Dwg. No. 69439

Notes:
Stations shown are along C.L. Construction. Elevation shown between Station 103+83.11 and Station 104+97.21 are theoretical working point elevations at C.L. Bridge. Any vertical dimension reference to C.L. Deck is based on theoretical working point elevation at C.L. Bridge. See "SUPERELEVATION TRANSITION SKETCH A" and "SUPERELEVATION TRANSITION SKETCH B". Elevations shown after Station 105+45.99 are actual top of deck elevations at C.L. Bridge. Any vertical dimension referenced to C.L. Deck is based on actual top of deck elevation at C.L. Bridge. See "Rounding Detail" on Dwg. No. 69445 for additional information.

The Contractor shall excavate the existing embankment as shown to Elev. 582.0. Approx 756 cu. yds. of unclassified excavation.

① See "SUPERELEVATION TRANSITION SKETCH B".

② See "HYDRAULIC DATA" on Dwg. No. 69439.

At and after Sta. 104+97.21, C.L. Bridge and C.L. Construction are located on a 38°15'00" Curve Rt. All longitudinal lines of the bridge, rail, and approach gutters shall be constructed on curves concentric with C.L. Bridge and C.L. Construction. End Bridge is a line radial to C.L. Construction.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 9235
5/1/26
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 1 OF 2
LAYOUT OF BRIDGE
HWY. 600 OVER MILL CREEK
MILL CREEK STR. & APPRS. (S)
GARLAND COUNTY

ROUTE 600 SEC. 21

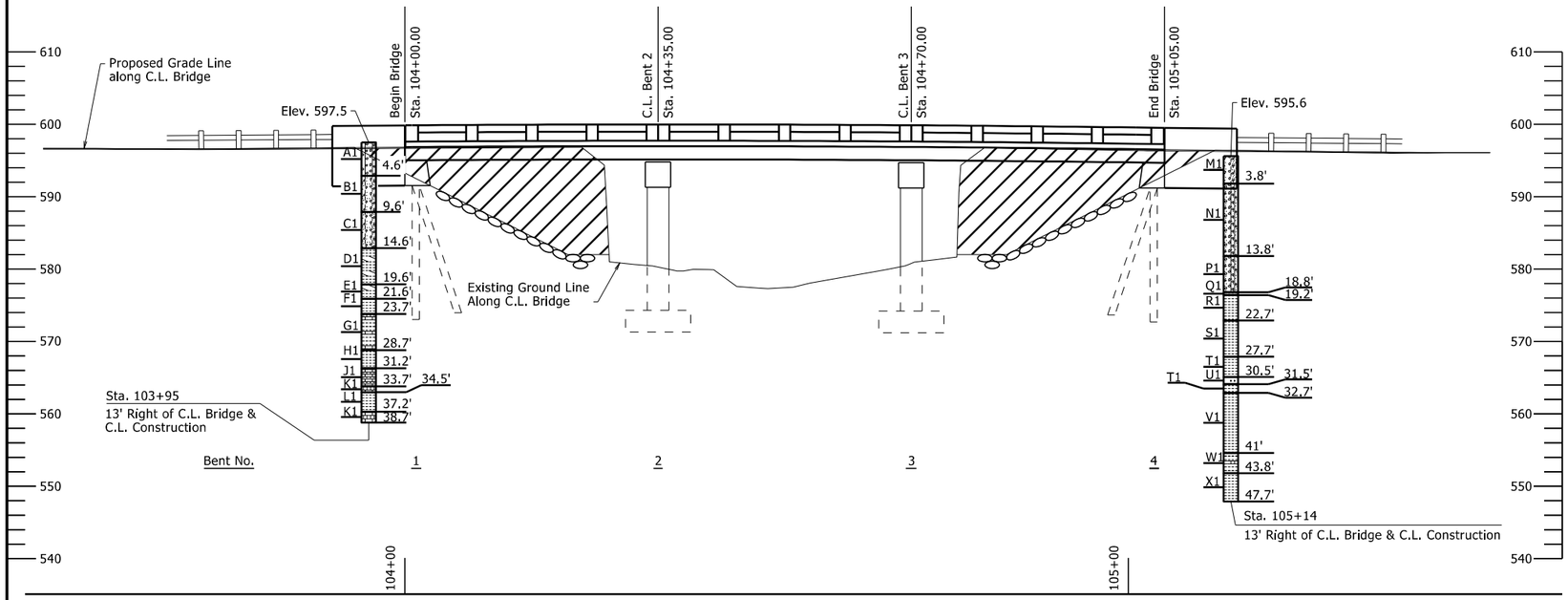
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: PRP/RD DATE: 11/11/2022 FILENAME: b061748_l1.dgn
CHECKED BY: BAB DATE: 11/28/2022 SCALE: 1" = 10'-0"
DESIGNED BY: PRP DATE: 10/2022

BRIDGE NO. 07717 DRAWING NO. 69438

PRINT DATE: 5/1/2026

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061748	19	33
		07717 - LAYOUT - 69439				



BORING LEGEND

A1-Moist, Medium Dense, Brown Gravel with Silt
B1-Moist, Loose, Brown Silty Gravel with Sand
C1-Moist, Medium Dense, Brown Gravel with Silt and Sand
D1-SHALE - Highly Weathered, Soft, Brown and Gray
E1-SHALE - Highly Weathered, Very Soft, Dark Gray
F1-SHALE - Weathered, Medium Hard, Dark Gray
G1-SHALE WITH FREQUENT LIMESTONE LAYERS - Slightly Weathered, Medium Hard (Limestone-Hard), Frequent Quartz Veins, Steeply Dipping, Dark Gray
H1-SHALE WITH OCCASIONAL LIMESTONE LAYERS - Unweathered, Hard, Occasional Quartz Veins, Steeply Dipping, Dark Gray
J1-LIMESTONE INTERBEDDED WITH SHALE - Unweathered, Hard, Occasional Quartz Veins, Steeply Dipping, Dark Gray
K1-LIMESTONE - Unweathered, Hard, Occasional Quartz Veins, Steeply Dipping, Gray
L1-CALCAREOUS SHALE - Unweathered, Hard, Occasional Quartz Veins, Steeply Dipping, Dark Gray
M1-Wet, Very Loose, Reddish Brown and Gray Silty Sand with Gravel
N1-Moist, Very Loose, Brown and Gray Shale Fragments with Sandy Silt
P1-Moist, Loose, Brown and Gray Shale Fragments with Sandy Silt
Q1-SHALE - Weathered, Medium Hard, Black
R1-CALCAREOUS SHALE - Slightly Weathered, Hard, Occasional Calcite Partings and Seams, Steeply Dipping, Dark Gray
S1-CALCAREOUS SHALE - Slightly Weathered, Hard, Frequent Calcite Seams, Occasional Quartz Veins, Steeply Dipping, Dark Gray
T1-CALCAREOUS SHALE - Unweathered, Hard, Frequent Calcite Seams, Occasional Quartz Veins, Steeply Dipping, Dark Gray
U1-QUARTZ VEIN
V1-CALCAREOUS SHALE - Unweathered, Hard, Frequent Calcite Seams, Steeply Dipping, Dark Gray
W1-CALCAREOUS SHALE WITH FREQUENT LIMESTONE LAYERS - Unweathered, Hard, Frequent Calcite Seams, Steeply Dipping, Dark Gray
X1-CALCAREOUS SHALE - Unweathered, Hard, Frequent Calcite Seams, Frequent Quartz Veins (up to 0.4ft thick), Steeply Dipping, Dark Gray

ELEVATION OF SOIL BORINGS

"N" VALUES

Sta. 103+95 - 13' Right of C.L. Construction
2.6- 3.6,N=11
5.1- 6.1,N=7
7.6- 8.6,N=10
10.1- 11.1,N=14
15.1- 16.1,N=37
20.1- 21.1,N=29
22.1- 22.3,N=60(2")

Sta. 105+14 - 13' Right of C.L. Construction
2.2- 3.2,N=2
4.3- 5.3,N=2
6.9- 7.9,N=2
9.3- 10.3,N=3
14.3- 15.3,N=9
18.8- 19.2,N=60(5")

HYDRAULIC DATA

FLOOD DESCRIPTION	FREQUENCY	TOTAL DISCHARGE	NATURAL ① WATER SURFACE ELEVATION	WATER SURFACE ELEV. WITH BACKWATER
	YEARS	CFS	FEET	FEET
Design	25	1520	584.6	585.7
Base	100	2300	585.8	587.2
Extreme	500	3410	587.2	589.0
Overtopping	>500			

① Unconstricted water surface elevation without structure or roadway approaches.

Q100 backwater elevation for existing structure = 586.8 ft
Proposed Low Bridge Chord elevation = 594.38 ft @ Sta. 105+05.00
Drainage Area = 1.43 square miles
Historical H.W. Elev. = N/A

GENERAL NOTES

BENCHMARK: Vertical Control Data are shown on the Survey Control Data Sheets.

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, Ninth Edition (2020).

LIVE LOADING: HL-93

SEISMIC ZONE: 1 SD1: 0.114 SITE CLASS: C

SEISMIC OPERATIONAL CLASSIFICATION: OTHER

MATERIALS AND STRENGTHS:

Class S(AE) Concrete (superstructure)	f 'c = 4,000 psi
Class S Concrete (substructure)	f 'c = 3,500 psi
Reinforcing Steel (AASHTO M 31 or M 322, Type A)	fy = 60,000 psi
Structural Steel (ASTM A709, Gr. 50)	Fy = 50,000 psi

BORING LOGS: Boring logs may be obtained from the Construction Contract Development Section of the Program Management Division.

STEEL PILING: All piling shall be HP 12x53 (Grade 50) and shall be driven with an approved single-acting diesel hammer to a minimum nominal driving resistance of 141 tons per pile. All piling shall be driven into the material designated as slightly weathered, medium hard to hard shale on the boring legend. The nominal driving resistance shall be determined by the FHWA Modified Gates Formula. See Special Provision Job No. 061748 "Driven Piling by Method A" for additional information. Minimum penetration shall be 10' below natural ground for all piles in Bents 1 and 4. Piling in end bents shall be driven after embankment to bottom of cap is in place. Lengths of piling shown are for estimating quantities and for use in determining payments for cut-off and build-up in accordance with Section 805. The Contractor shall use approved steel H-Pile driving points on all piles.

SPREAD FOOTINGS: Footings shall be set a minimum of 2' into material designated as slightly weathered, medium hard to hard shale on the boring legend. The top of the footings at Bents 2 and 3 shall be set a minimum 2' below the channel bottom as determined by the lowest channel elevation within the footprint of the footing. Foundations for the footings shall be prepared in accordance with Subsection 801.04. Rock excavations shall be made to neat lines of the concrete footings. Care shall be exercised to avoid shattering of rock faces by excessive blasting. Concrete in footings shall be poured directly against excavated surfaces of rock. Excavations shall be backfilled and compacted to the level of the existing ground in accordance with Subsection 801.08.

PREBORING: Preboring is required for all piles at Bents 1 and 4 The depth of preboring shall be to a depth sufficient to provide the specified minimum penetration and to a minimum 3' depth into material designated as slightly weathered, medium hard to hard shale on the boring legend, whichever is lower. The actual size and depth of preboring shall be determined in the field by the Engineer. The Contractor shall be responsible for keeping prebored holes free of debris prior to driving piles and backfilling which may require the use of temporary casings or other approved methods. After driving is completed, the prebored hole shall be backfilled with Class S Concrete to the top of the rock and the remaining length backfilled in accordance with Subsection 805.08(a). Any related cost for backfilling and temporary casing will not be paid for directly, but shall be considered subsidiary to the item "Preboring".

BRIDGE DECK: The concrete bridge deck shall be given a tine finish as specified for final finishing in Subsection 802.19 for Class 5 Tined Bridge Roadway Surface Finish.

STAINING CONCRETE SURFACES: A concrete penetrating stain shall be applied to bridge surfaces as specified in Special Provision Job No. 061748 "Staining Concrete Surfaces". The concrete penetrating stain shall not be applied on surfaces where Class 2 Protective Surface Treatment is applied. The color of the stain(s) shall be as specified in Special Provision Job No. 061748 "Staining Concrete Surfaces".

PROTECTIVE SURFACE TREATMENT: Class 2 Protective Surface Treatment shall be applied to the roadway surface in accordance with Section 803. It shall not be applied to the wings, railings, or curbs.

DETAIL DRAWINGS:	DRAWING NO(S).
End Bents	69440-69441
Intermediate Bents	69442-69443
105' Continuous R.C. Slab Unit	69444-69445
Decorative Concrete Bridge Railing	69446-69449
Steel H-Piling	55020
Type F Approach Gutters	55030F

EXISTING BRIDGE: Existing Bridge No. 19840 (Log Mile 0.54) is 20.0' wide (18.4' clear roadway) and 54.2' long and consists of a timber deck on timber girder spans (3 spans total) supported by concrete columns on concrete footings. The existing bridge is located on the same alignment of the proposed new bridge. Plans of the existing structure, if available, may be obtained upon request to the Construction Contract Development Section of the Program Management Division.

REMOVAL: Before construction of the new bridge, the Contractor shall remove existing Bridge No. 19840, including its wing walls and remnant formwork, in accordance with Section 205. All material from the existing bridge shall become the property of the Contractor.

MAINTENANCE OF TRAFFIC: The road will be closed during the construction of this project.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 9235
5/1/26
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 2 OF 2
LAYOUT OF BRIDGE
HWY. 600 OVER MILL CREEK
MILL CREEK STR. & APPRS. (S)
GARLAND COUNTY

ROUTE 600 SEC. 21

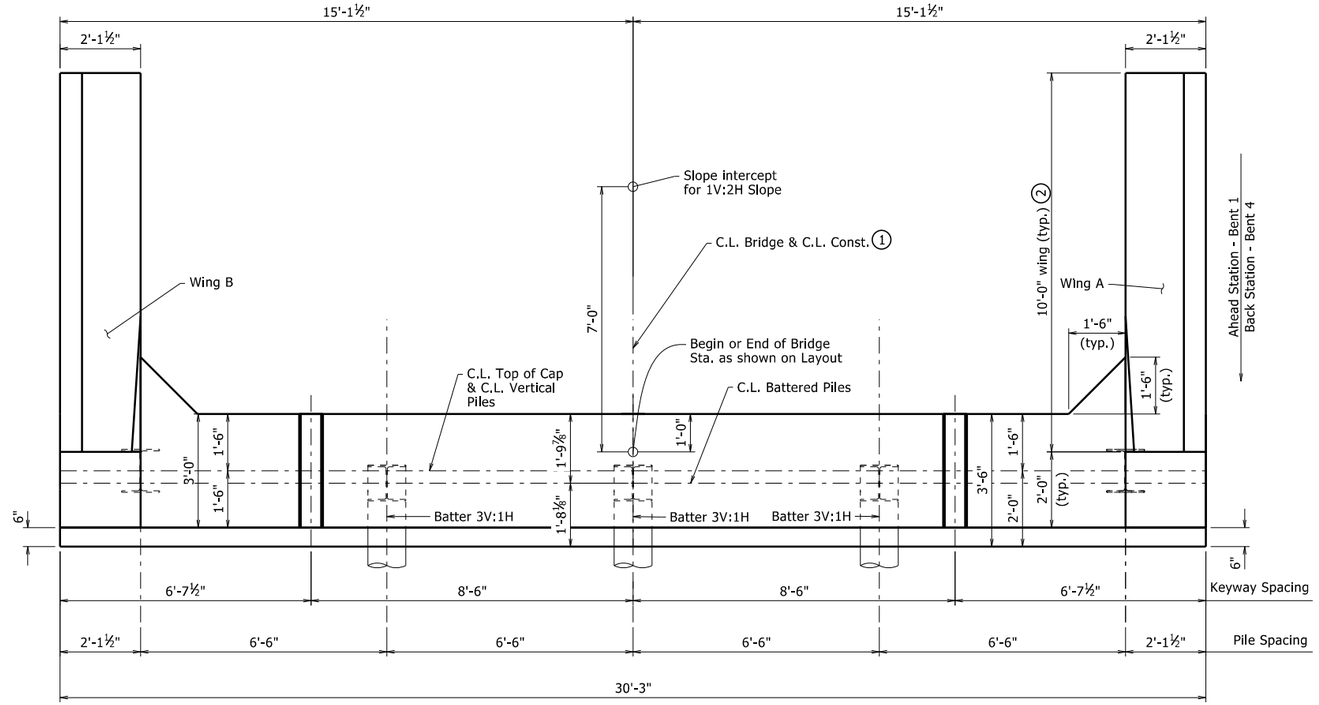
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: PRP/RD DATE: 11/11/2022 FILENAME: b061748_l1.dgn
CHECKED BY: BAB DATE: 11/28/2022 SCALE: 1" = 10'-0"
DESIGNED BY: PRP DATE: 10/2022

BRIDGE NO. 07717 DRAWING NO. 69439

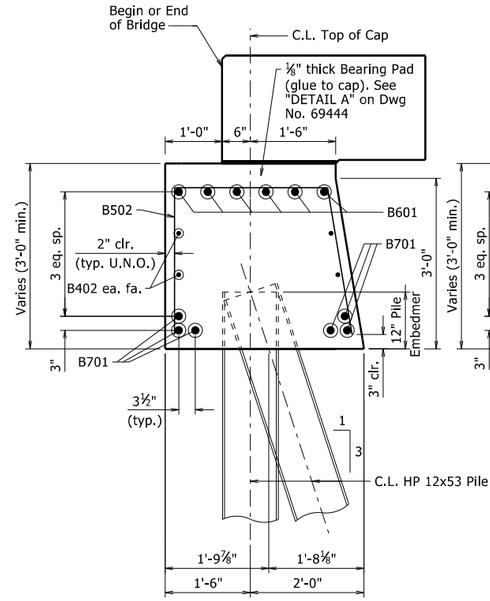
PRINT DATE: 5/1/2026

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061748	20	33
		07717 - END BENTS - 69440				



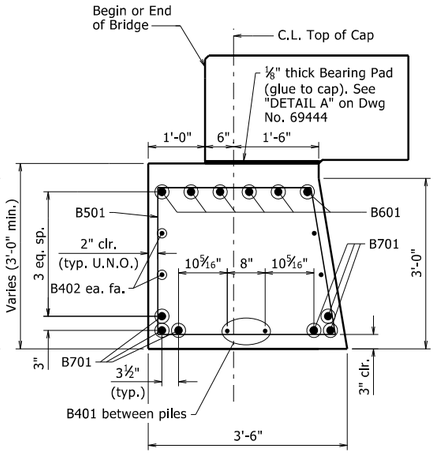
PLAN

½" = 1'-0"



SECTION B-B

¾" = 1'-0"



SECTION C-C

¾" = 1'-0"

NOTES:

All concrete shall be Class "S" with a minimum 28 day compressive strength f'c = 3,500 psi. Concrete shall be poured in the dry and all exposed corners to be chamfered ¾" unless otherwise noted.

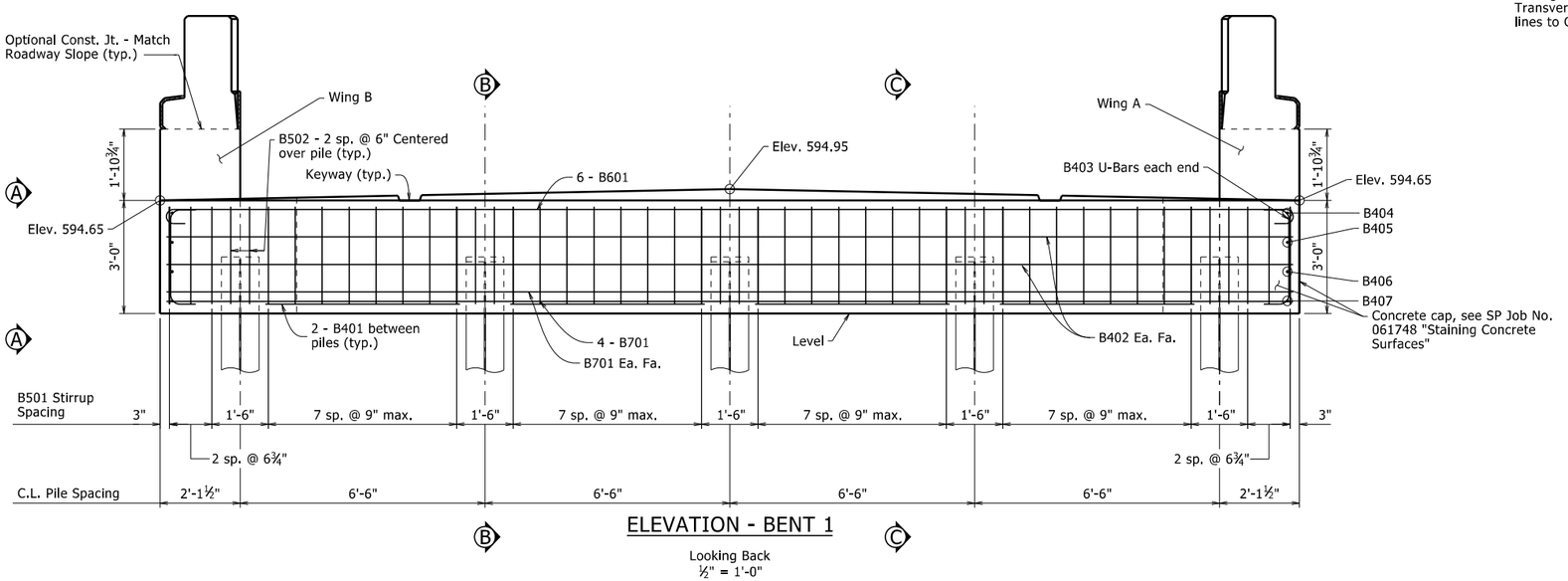
All reinforcing steel shall be Grade 60 (yield strength = 60,000 psi) conforming to AASHTO M 31 or M 322, Type A, with mill test reports.

All piling shall conform to ASTM A709, Grade 50. See Std. Dwg. No. 55020 for additional details.

For additional information, see Layout.

(1) Bent 4 is constructed along a radial line to C.L. Const. at End Bridge. C.L. Const. is on a 38° 15' 00" Curve Right. For additional information, see Layout.

(2) All longitudinal lines on the wing and rail within the limits of horizontal curves shall be on curves concentric to C.L. Const. & C.L. Bridge. Adjustment to longitudinal bar lengths may be required. Transverse reinforcing shall be placed on radial lines to C.L. Bridge.

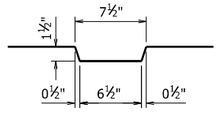


ELEVATION - BENT 1

Looking Back

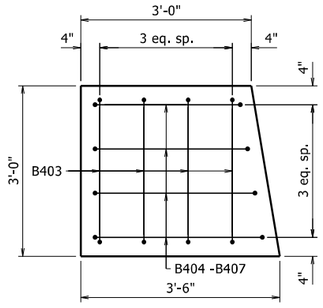
½" = 1'-0"

For "ELEVATION - BENT 4", see Dwg. No. 69441



DETAIL OF KEYWAY

1½" = 1'-0"



VIEW A-A

¾" = 1'-0"

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 9235
5/1/26
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 1 OF 2
DETAILS OF END BENTS

ROUTE SEC.

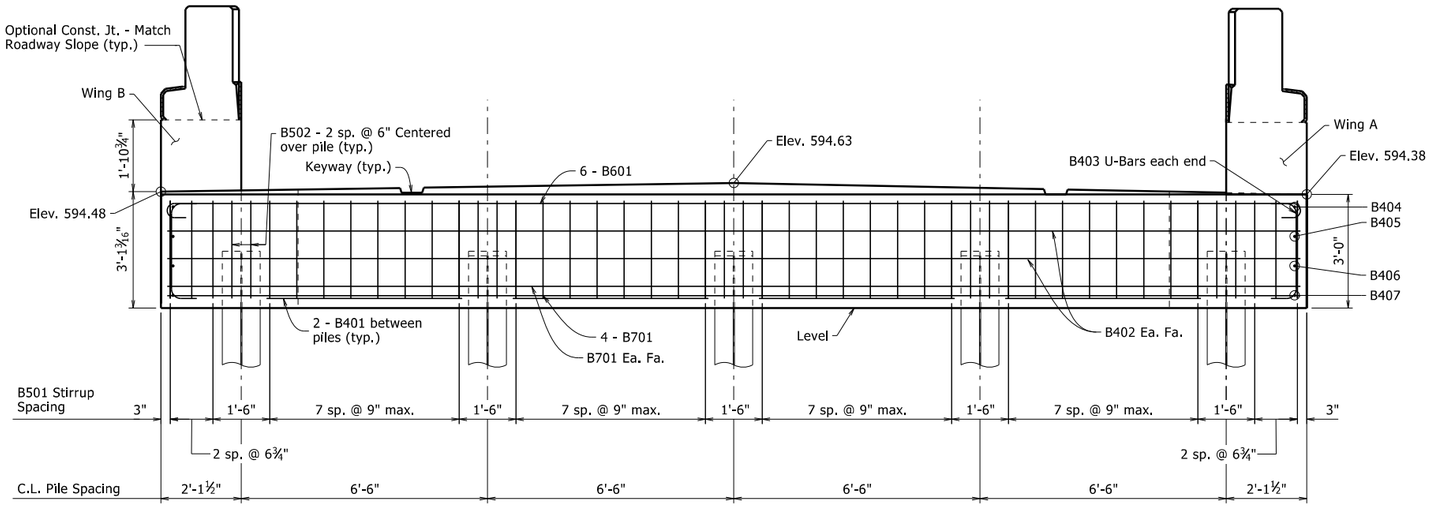
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: CPK DATE: 12/11/2025 FILENAME: b061748_b1.dgn
CHECKED BY: RD DATE: 12/15/2025 SCALE: As Noted
DESIGNED BY: RD DATE: 11/2025

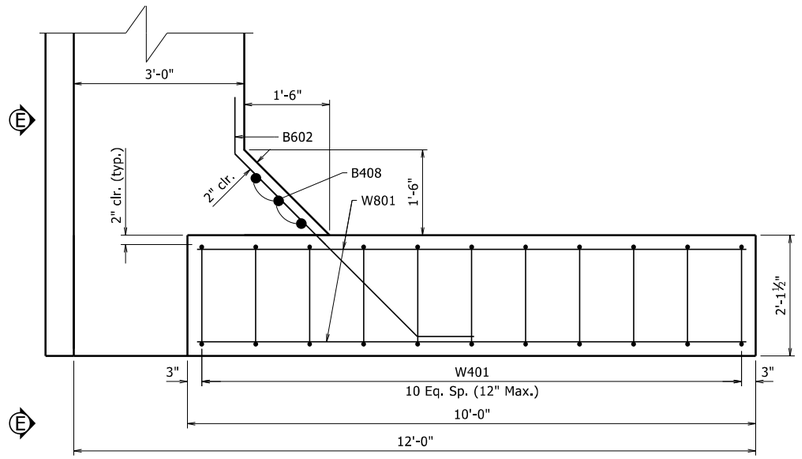
BRIDGE NO. 07717 DRAWING NO. 69440

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061748	21	33
		07717 - END BENTS - 69441				

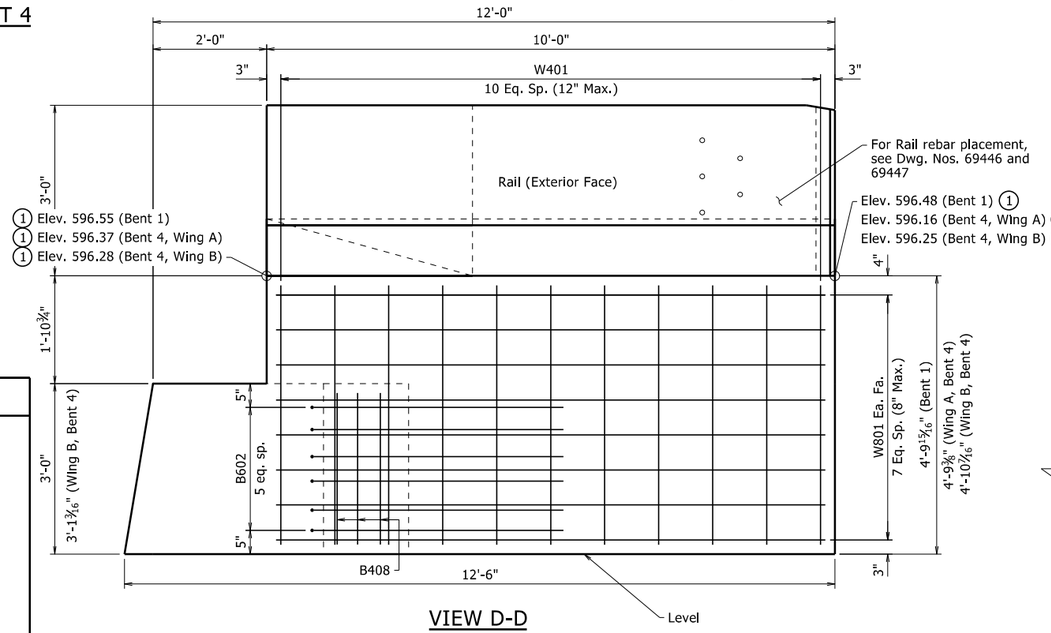


ELEVATION - BENT 4

Looking Foward
½" = 1'-0"

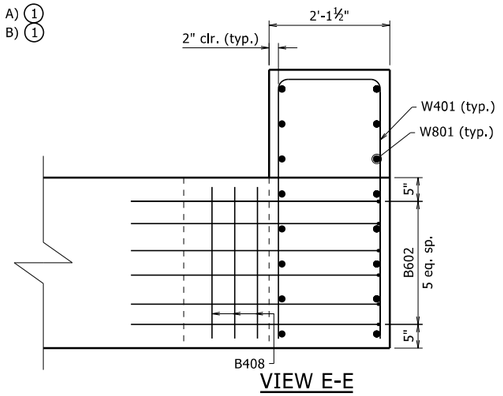


PLAN OF WING



VIEW D-D

(1) Elevations measured at outside face of wing.

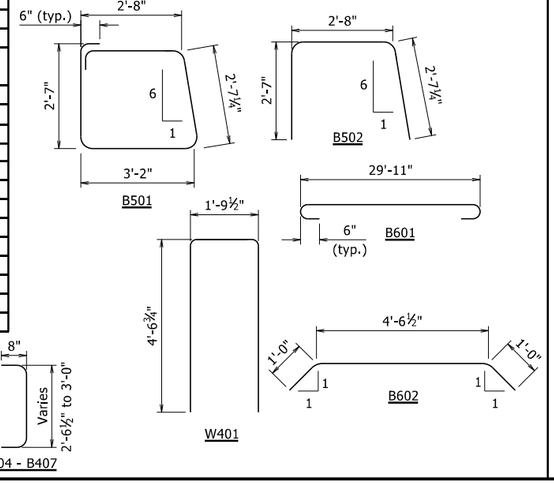


VIEW E-E

BAR LIST - PER BENT

	No. Req'd	Length	Pin Dia.
B401	8	5'-5"	Str.
B402	4	29'-11"	Str.
B403	8	3'-6"	3"
B404 - B407	2 ea.	3'-6½" - 3'-11"	3"
B408	6	2'-8"	Str.
B501	38	11'-5"	2½"
B502	10	7'-8"	2½"
B601	6	31'-3"	4½"
B602	12	6'-6½"	4½"
B701	6	29'-11"	Str.
W401	22	10'-6"	2"
W801	32	9'-8"	Str.

Bending Diagrams
(Dimensions are out to out of bars)



PRINT DATE: 5/1/2026

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 9235
5/1/26
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 2 OF 2
DETAILS OF END BENTS

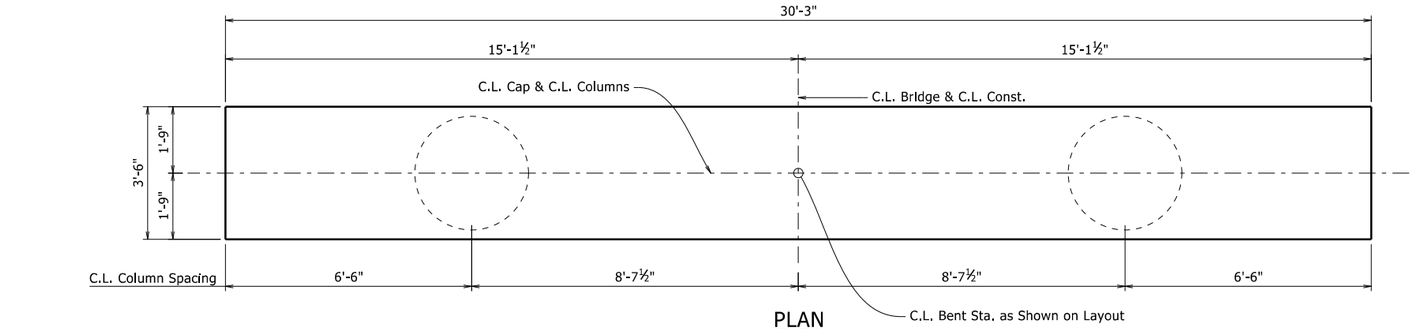
ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

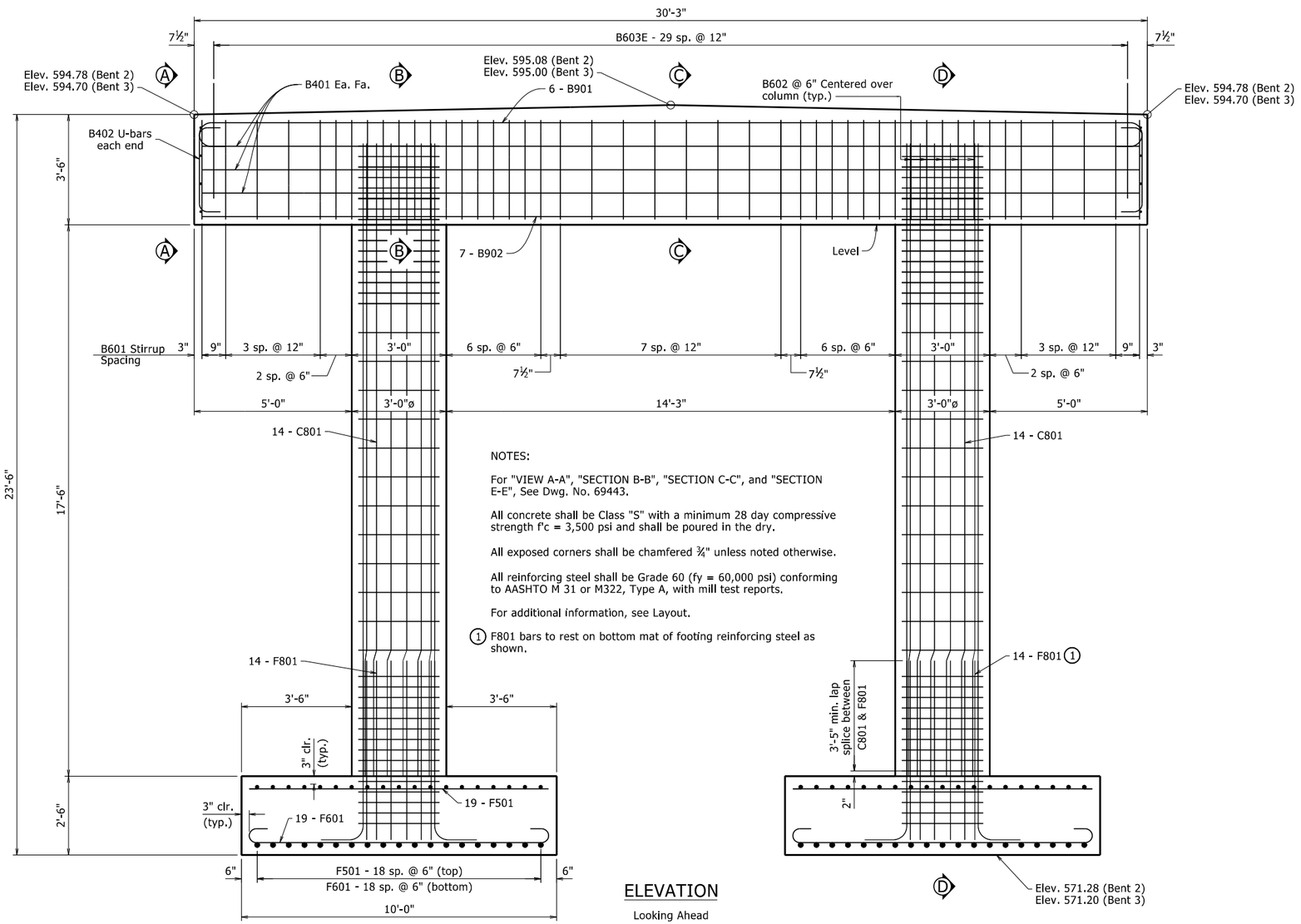
DRAWN BY: CPK DATE: 12/11/2025 FILENAME: b061748_b1.dgn
CHECKED BY: RD DATE: 12/15/2025 SCALE: ¾" = 1'-0" U.N.O.
DESIGNED BY: RD DATE: 11/2025

BRIDGE NO. 07717 DRAWING NO. 69441

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061748	22	33
		07717 - INTERMEDIATE BENTS - 69442				



PLAN



NOTES:

For "VIEW A-A", "SECTION B-B", "SECTION C-C", and "SECTION E-E", See Dwg. No. 69443.

All concrete shall be Class "S" with a minimum 28 day compressive strength f'c = 3,500 psi and shall be poured in the dry.

All exposed corners shall be chamfered ¾" unless noted otherwise.

All reinforcing steel shall be Grade 60 (fy = 60,000 psi) conforming to AASHTO M 31 or M322, Type A, with mill test reports.

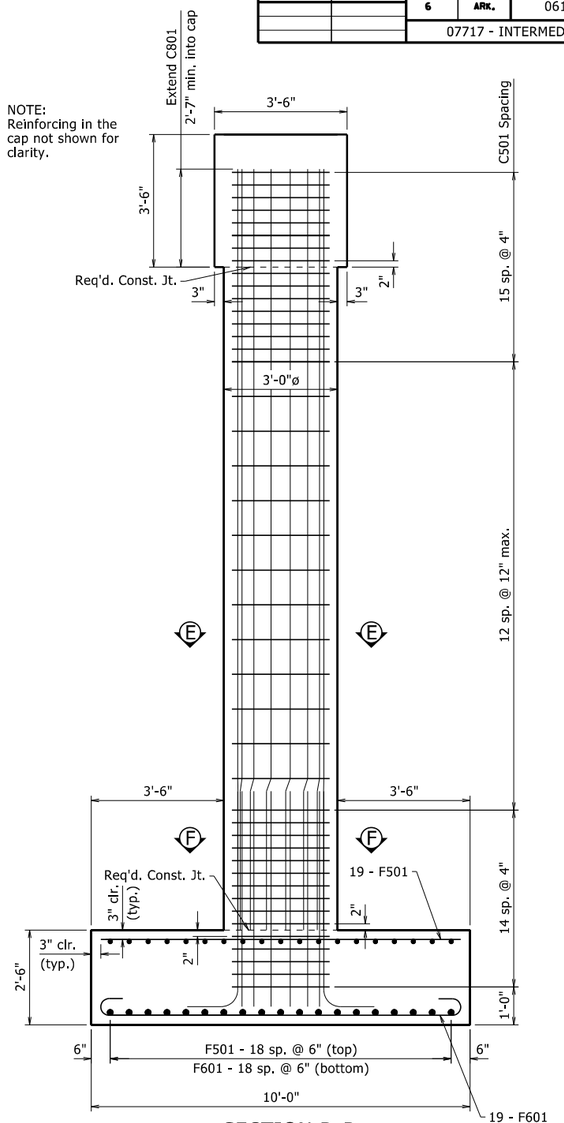
For additional information, see Layout.

(1) F801 bars to rest on bottom mat of footing reinforcing steel as shown.

ELEVATION

Looking Ahead

NOTE:
Reinforcing in the cap not shown for clarity.



SECTION D-D

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 9235
5/1/26
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 1 OF 2
DETAILS OF INTERMEDIATE BENTS

ROUTE SEC.

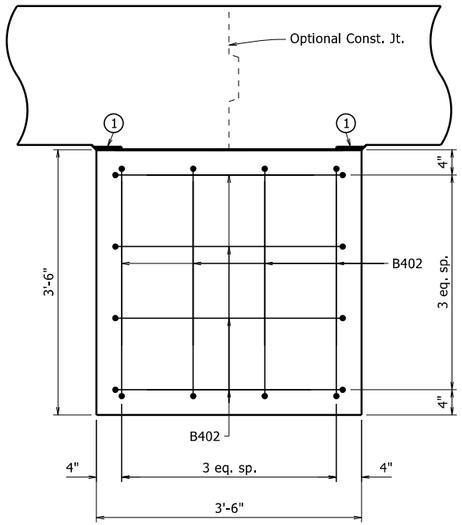
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: CPK DATE: 12/11/2025
CHECKED BY: RD DATE: 12/15/2025
DESIGNED BY: RD DATE: 11/2025
FILENAME: b061748_b2.dgn
SCALE: ½" = 1'-0"

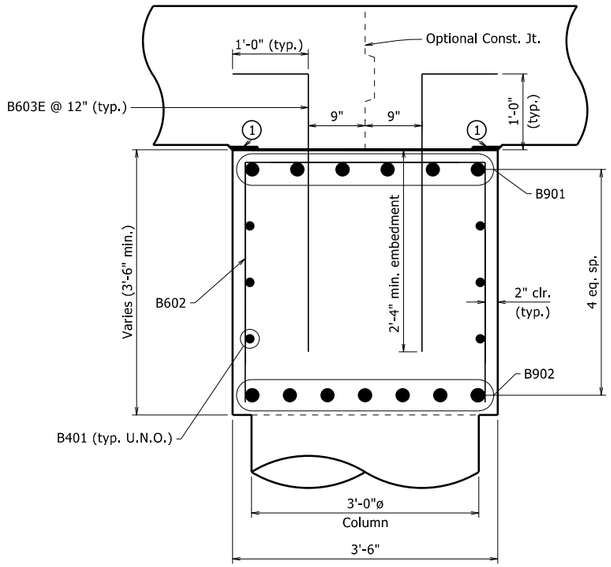
BRIDGE NO. 07717
DRAWING NO. 69442

PRINT DATE: 5/1/2026

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061748	23	33
		07717 - INTERMEDIATE BENTS - 69443				



VIEW A-A



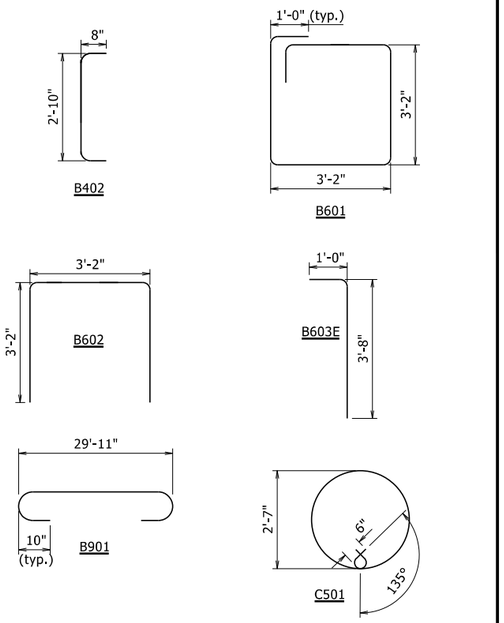
SECTION B-B

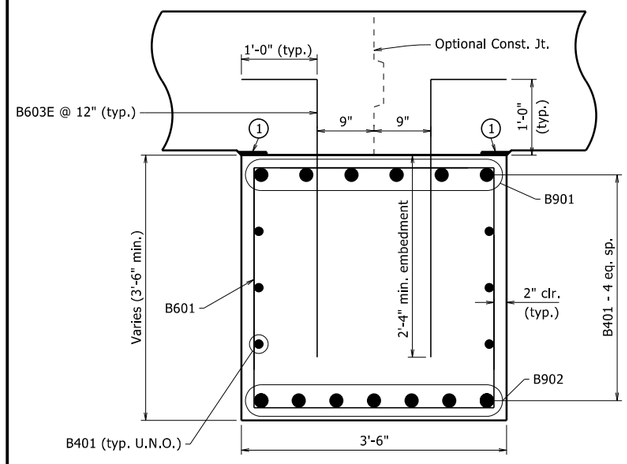
BAR LIST - PER BENT

	No. Req'd	Length	Pin Dia.
B401	6	29'-9"	Str.
B402	16	4'-0"	3"
B601	36	13'-10"	4½"
B602	10	9'-2"	4½"
B603E	60	4'-6"	4½"
B901	6	32'-3"	9"
B902	7	29'-9"	Str.
C501	84	9'-6"	3¾"
C801	28	20'-1"	Str.
F501	76	9'-4"	Str.
F601	76	10'-10"	4½"
F801	28	9'-0"	6"

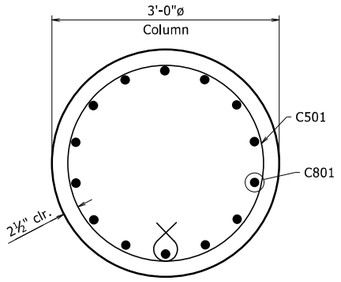
Bars with the "E" suffix are to be epoxy coated.

Bending Diagrams
(Dimensions are out to out of bars)

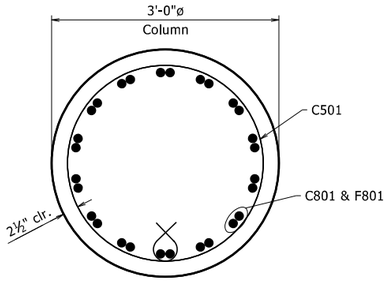




SECTION C-C



SECTION E-E



SECTION F-F

① ⅛" x 4" Bearing Pad (glue to cap).
See "DETAIL A" on Dwg. No. 69444.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 9235
5/1/26
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 2 OF 2
DETAILS OF INTERMEDIATE BENTS

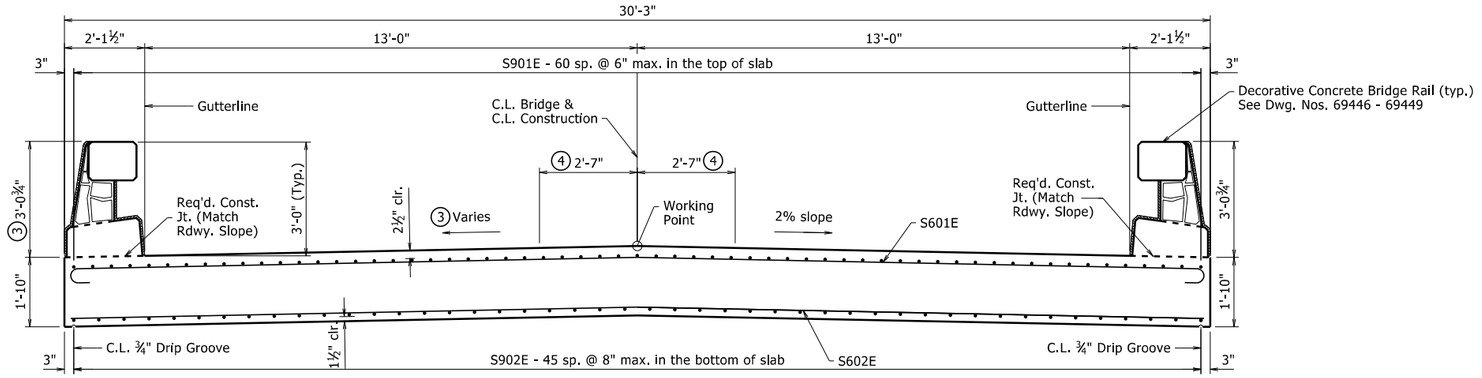
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: CPK DATE: 12/11/2025 FILENAME: b061748_b2.dgn
CHECKED BY: RD DATE: 12/15/2025 SCALE: ½" = 1'-0"
DESIGNED BY: RD DATE: 11/2025

BRIDGE NO. 07717 DRAWING NO. 69443

PRINT DATE: 5/1/2026

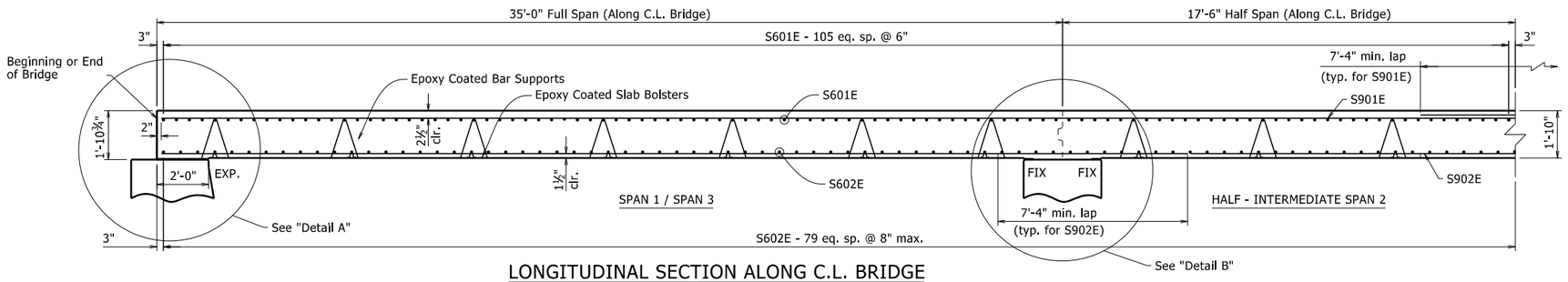
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061748	24	33
		07717 - SPAN DETAILS - 69444				



TYP. SECTION THROUGH ROADWAY

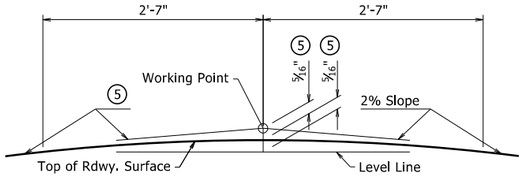
½" = 1'-0"
Looking Ahead

NOTE: Class 2 Protective Surface Treatment shall be applied to the Roadway Surface only.



LONGITUDINAL SECTION ALONG C.L. BRIDGE

⅜" = 1'-0"



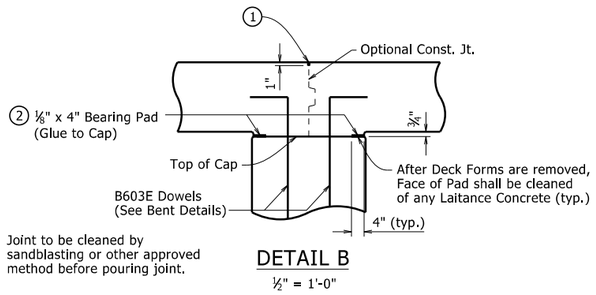
ROUNDING DETAIL

No Scale
Looking Ahead

NOTE:
Working Point matches Theoretical Roadway Grade.

Left side varies from a 2% Grade starting at Station 104+97.21 to a 1.36% Grade at the End of Bridge, Station 105+05.00.

(5) Varies from 5/16" to 0" from Station 104+97.21 to Reverse Crown at Station 105+45.99.



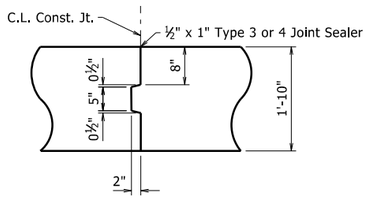
DETAIL B

½" = 1'-0"

BAR LIST

MARK	NO. REQ'D.	LENGTH	P.D.	Bending Diagram
S601E	210	31' - 3"	4½"	29'-11" / 6" / S601E
S602E	159	29' - 11"	Str.	
S901E	122	56' - 5"	Str.	
S902E	138	40' - 3"	Str.	

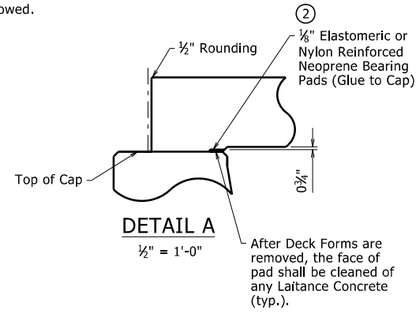
Bars with an "E" suffix are to be Epoxy Coated.
Dimensions are out-to-out of bars.



DECK SLAB CONST. JT. DETAIL

¾" = 1'-0"

NOTE:
Bar positions and clearances from the forms shall be maintained by means of stays, ties, hangers, or other approved devices per Subsection 804.06. Placement of slab bolsters or hi-chairs with full-length lower runners directly on removable deck forms will not be allowed.



DETAIL A

½" = 1'-0"

(1) ½" x 1" Type 3 or 4 Joint Sealer. See Subsections 501.02(h) and 501.05(j). Backer Rod filler will not be required. Joint Sealer shall be measured and paid for as "Class S(AE) Concrete - Bridge." Slab joints shall extend to the outside edge of the deck slab and shall align with open joints at the front face of the concrete bridge rail. Slab Joints shall be installed before the falsework is removed and before the concrete bridge railing is poured. If slab joints are to be sawed, they shall be sawed as soon as the concrete has sufficiently set to allow sawing of the joint without damage to the slab. Slab Joints shall be placed at all pouring sequence construction joints and required slab joint locations. Slab joints shall align with railing open joints. The joint sealer shall extend across the deck from gutterline to gutterline. Seal color shall be gray or other similar to concrete.

(2) The ⅛" bearing pad shall be an unreinforced pad meeting the requirements of Section 808, or shall be nylon reinforced neoprene meeting the requirements of Subsection 807.20. The pad shall be furnished in one piece for the required width and full length of the bearing and glued to the bent cap with an adhesive approved by the Engineer. Pads and adhesive will not be paid for directly, but will be considered subsidiary to the item "Class S(AE) Concrete-Bridge."

(3) Varies after station 104+97.21. For more information, see "SUPERELEVATION TRANSITION SKETCH B" on Dwg. No. 69438

(4) See "ROUNDING DETAIL"

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 9235
5/1/26
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 1 OF 2
DETAILS OF 105'-0" CONTINUOUS R.C. SLAB UNIT

ROUTE SEC.

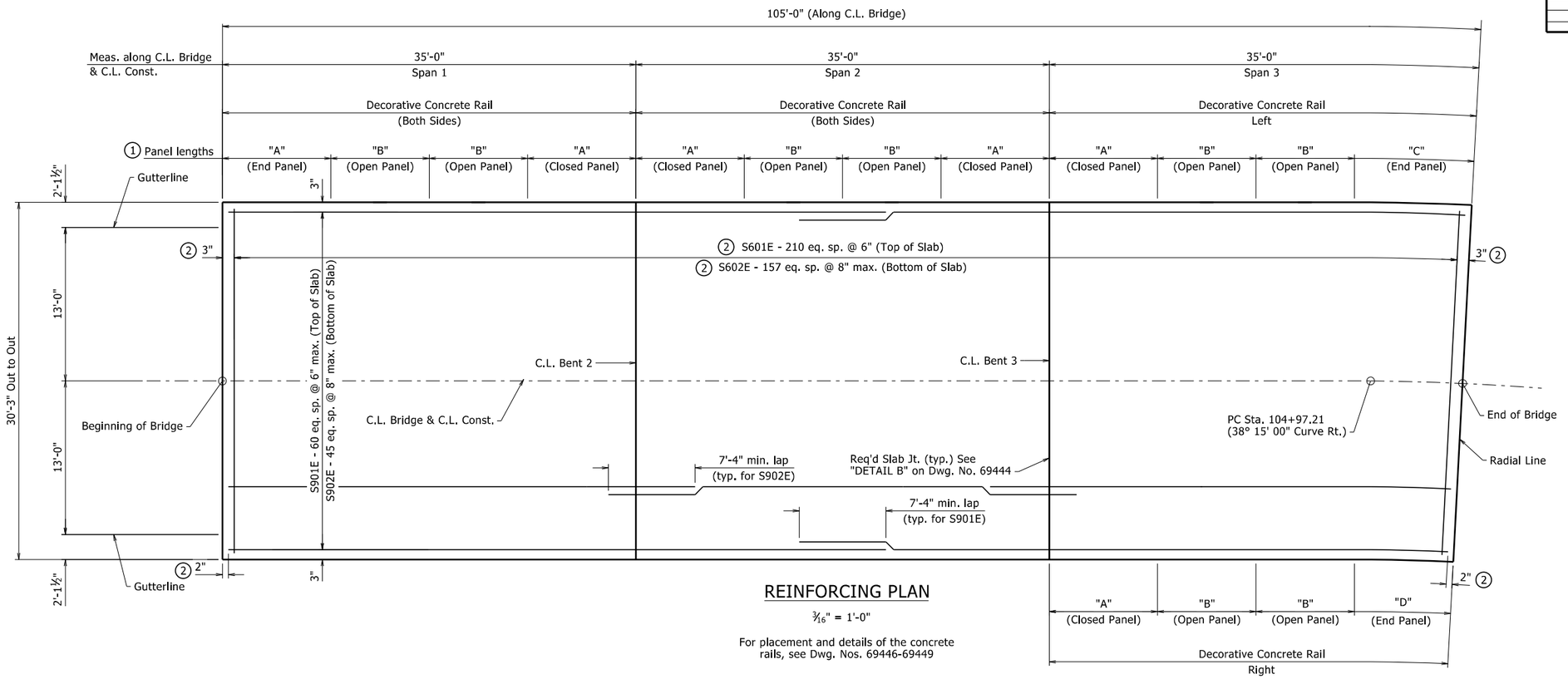
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: CPK DATE: 09/05/2025 FILENAME: b061748_s1.dgn
CHECKED BY: JSQ DATE: 11/19/2025 SCALE: As Noted
DESIGNED BY: RD DATE: 08/21/2025

BRIDGE NO. 07717 DRAWING NO. 69444

PRINT DATE: 5/1/2026

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061748	25	33
		07717 - SPAN DETAILS - 69445				



1 See "TABLE OF VARIABLES" on DWG. No. 69446. Panel lengths "A", "C", and "D" are measured at the gutterline from C.L. Rail Joint to C.L. Post. Panel length "B" is measured at the gutterline from C.L. Post to C.L. Post.

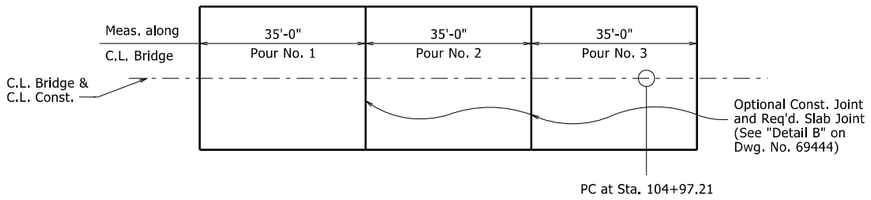
2 Measured along the C.L. of Bridge.

NOTE:
Railing, posts, and open drains are not shown for clarity.

REINFORCING PLAN

3/16" = 1'-0"

For placement and details of the concrete rails, see Dwg. Nos. 69446-69449



The Contractor may pour the entire bridge slab unit at once or may elect to form and pour the slab unit in three separate parts according to the pouring sequence shown. No part of the falsework for the entire unit shall be removed until all of the concrete in the slab has been placed and cured. Before removal of falsework begins, both the time and strength requirements of Subsection 802.15 must be met. If the entire bridge slab unit is not poured at once, all pours shall begin at one end of the span and proceed to the opposite end of the span in sequence from one end of the bridge to the other. 72 hours shall elapse between the end of a pour and the start of the next pour. 72 hours shall elapse before completion of deck pour and start of railing pour. Movement of the finishing machine across new concrete shall be on planks placed on the surface and shall be prohibited for 72 hours after finishing the pour.The Contractor must obtain approval from the Engineer for any deviation from the pouring sequence shown and for any railing pours made before the entire bridge slab has been poured.

Concrete in the bridge superstructure shall be placed and consolidated for the entire pour before any concrete has taken its initial set. This may require the use of a retarding agent.

POURING SEQUENCE FOR CONTINUOUS R.C. SLAB UNITS

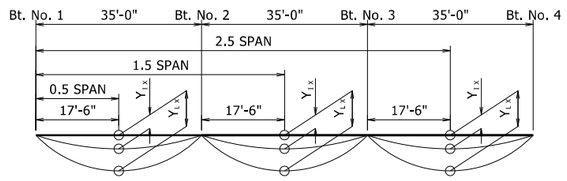
No Scale

NOTES:

All concrete shall be Class S(AE) with a minimum 28 day compressive strength f'c = 4,000 psi. Concrete shall be poured in the dry and all exposed corners shall be chamfered ¾" unless otherwise noted.

All reinforcing steel shall be Grade 60 conforming to AASHTO M 31 or M 322, Type A, with mill test reports and shall be epoxy coated. The reinforcing steel is to be accurately located in the forms and firmly held in place by steel wire supports, sufficient in number and size to prevent displacement during the course of construction. The wire supports will not be paid for directly, but will be considered subsidiary to the item "Epoxy Coated Reinforcing Steel (Grade 60)."

After Sta. 104+97.21, longitudinal lines of concrete bridge deck, railing, and longitudinal reinforcing bars are curved and concentric to a 38° 15' 00" curve right which is located along the centerline of bridge. Transverse reinforcing bars are placed on radial lines. Spacing shown for transverse reinforcing bars is measured along centerline of bridge. For additional information, see Layout.



DEAD LOAD DEFECTION DIAGRAM

No Scale

Camber for dead load deflection ± ¼" tolerance. Deflections shown are from a chord from C.L. bent to C.L. bent. Vertical alignment corrections are not included.

DEAD LOAD DEFLECTIONS

SPANS	IMMEDIATE DEFLECTIONS	LONG-TERM DEFLECTIONS
X	Y_{1X}	Y_{LX}
0.5	0.141"	0.422"
1.5	0.011"	0.032"
2.5	0.141"	0.422"

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 9235
5/1/26
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 2 OF 2
DETAILS OF 105'-0"
CONTINUOUS R.C. SLAB UNIT

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

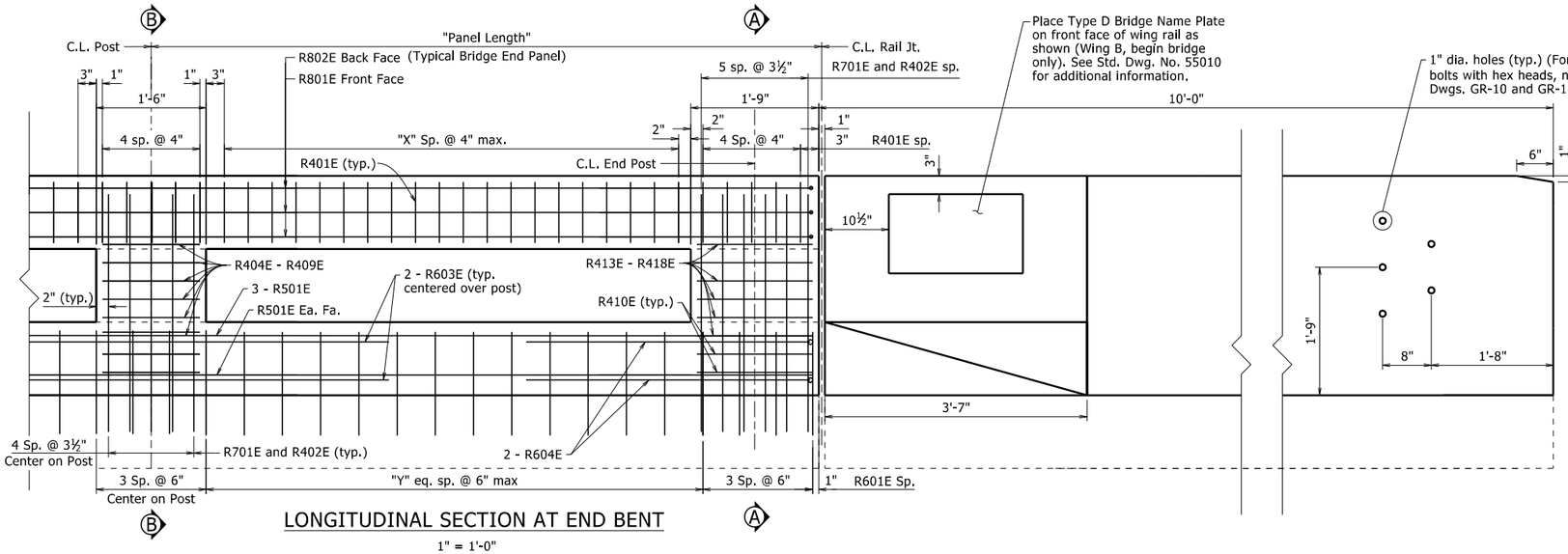
LITTLE ROCK, ARK.

DRAWN BY: CPK DATE: 09/05/2025 FILENAME: b061748_s1.dgn
CHECKED BY: JSQ DATE: 11/19/2025 SCALE: As Noted
DESIGNED BY: RD DATE: 08/21/2025

BRIDGE NO. 07717 DRAWING NO. 69445

PRINT DATE: 5/1/2026

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061748	26	33
		07717 - RAILING DETAIL - 69446				

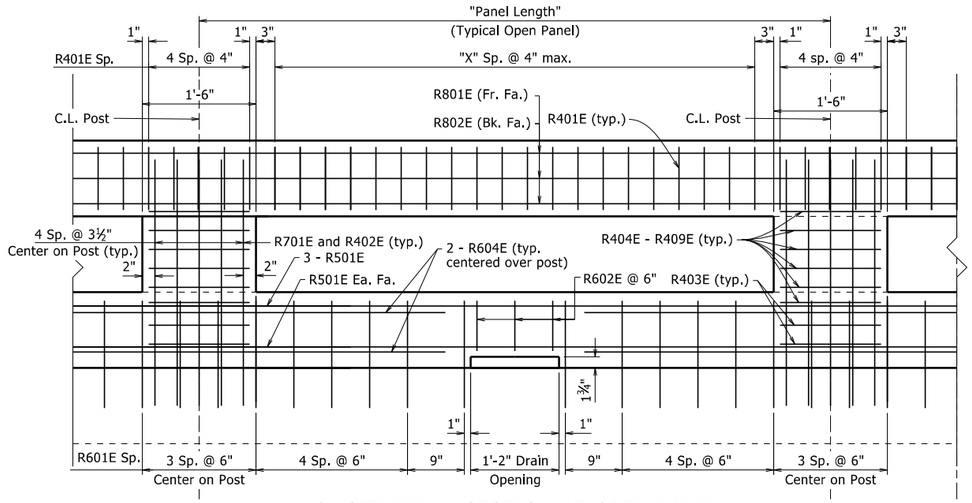


LONGITUDINAL SECTION AT END BENT

1" = 1'-0"

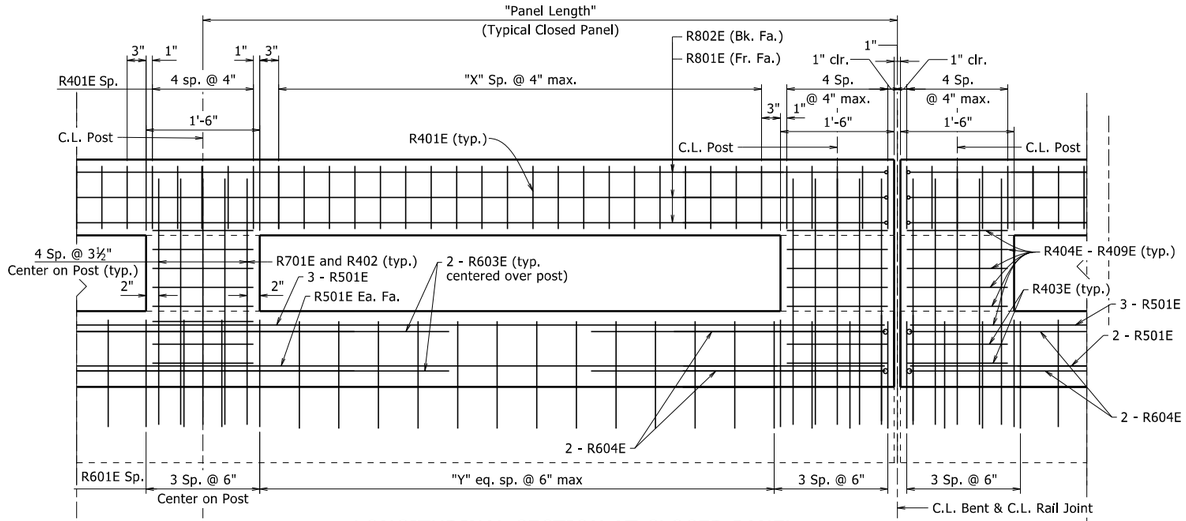
TABLE OF VARIABLES

Panel	"Panel Length"	"X"	"Y"
"A"	9'-2"	20	14
"B"	8'-4"	19	-
"C"	9'-10⅛"	21	18
"D"	8'-4⅝"	17	13



LONGITUDINAL SECTION AT OPEN PANEL

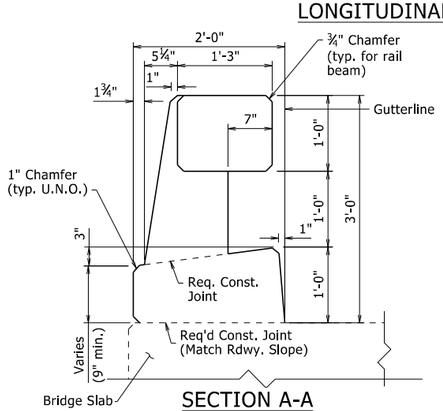
1" = 1'-0"



LONGITUDINAL SECTION AT CLOSED PANEL

(Shown at Intermediate Bent)

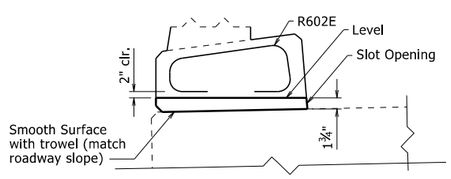
1" = 1'-0"



SECTION A-A

Structural Core Dimensions Shown

1" = 1'-0"



DECK DRAIN DETAIL

1" = 1'-0"

GENERAL NOTES

Details shown without architectural finish. See Dwg. No. 69448 for additional details.

For Rail Bar List, and Wing & Rail Bar Lists, see Dwg. No. 69449.

For location of open panels, see Dwg. No. 69445. Drain openings can only be placed at midpoints between post.

For "SECTION B-B" See Dwg. No. 69447.

"Panel Length" is measured along gutterline.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 9235
5/1/26
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 1 OF 4
DETAILS OF
DECORATIVE CONCRETE
BRIDGE RAILING

ARKANSAS STATE HIGHWAY COMMISSION

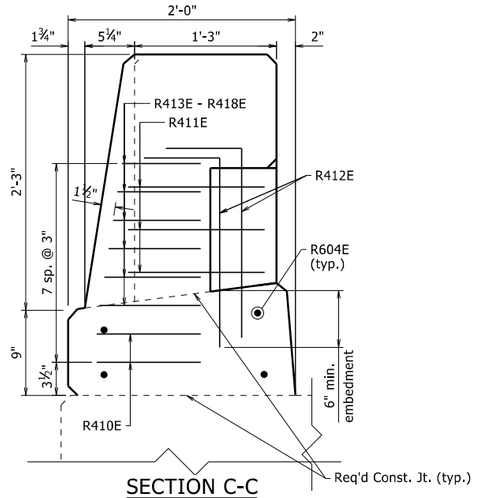
LITTLE ROCK, ARK.

DRAWN BY: CPK DATE: 02/26/25 FILENAME: b061748_r1.dgn
CHECKED BY: RD DATE: 03/03/26 SCALE: As Noted
DESIGNED BY: RD DATE: 02/03/25

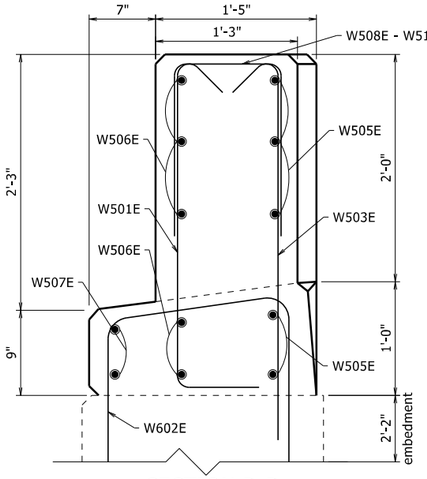
BRIDGE NO. 07717 DRAWING NO. 69446

PRINT DATE: 5/1/2026

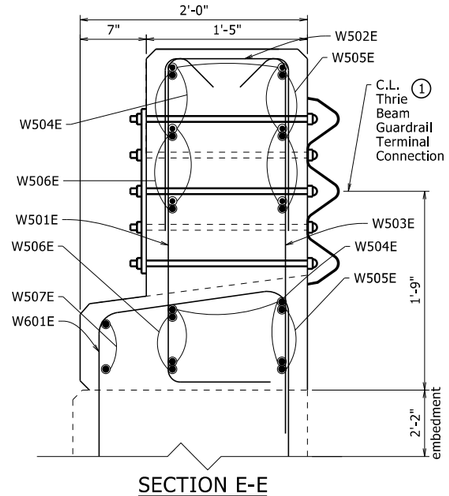
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061748	27	33
		07717 - RAILING DETAIL - 69447				



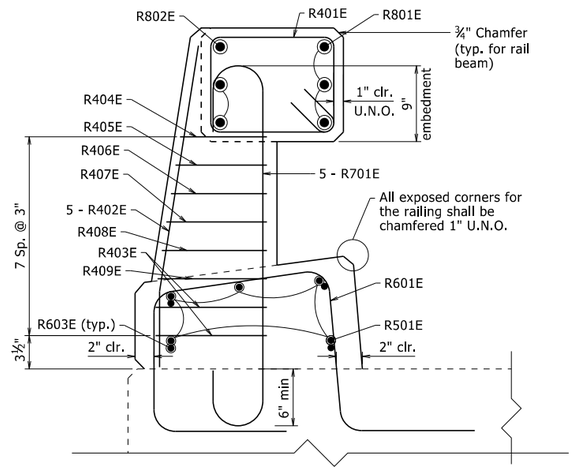
SECTION C-C
1½" = 1'-0"



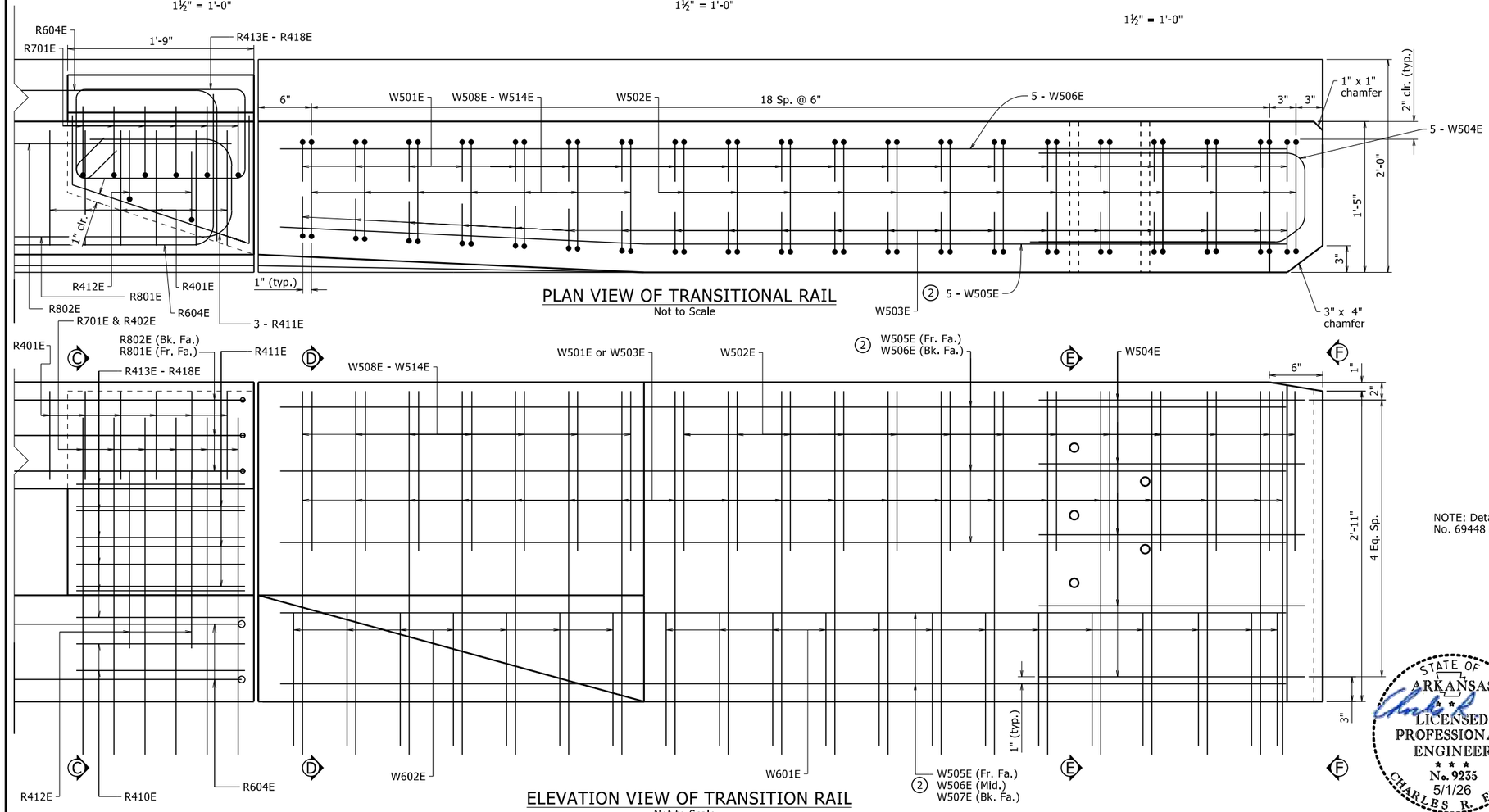
SECTION D-D
1½" = 1'-0"



SECTION E-E
1½" = 1'-0"

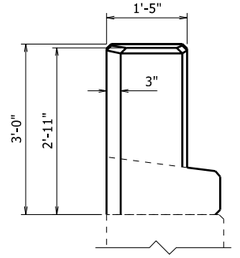


SECTION B-B
1½" = 1'-0"



PLAN VIEW OF TRANSITIONAL RAIL
Not to Scale

ELEVATION VIEW OF TRANSITION RAIL
Not to Scale



VIEW F-F
¾" = 1'-0"

(1) 1" ø formed holes for ⅞" ø bolts. See Standard Drawings GR-10 and GR-12 for additional information.

(2) Field bend front leg of W505E bars as required to maintain minimum 2½" front face clearance within limits of taper

NOTE: Details shown without architectural finish. Structural Core Dimensions shown. See Dwg. No. 69448 for additional details.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 9235
5/1/26
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 2 OF 4
DETAILS OF
DECORATIVE CONCRETE
BRIDGE RAILING

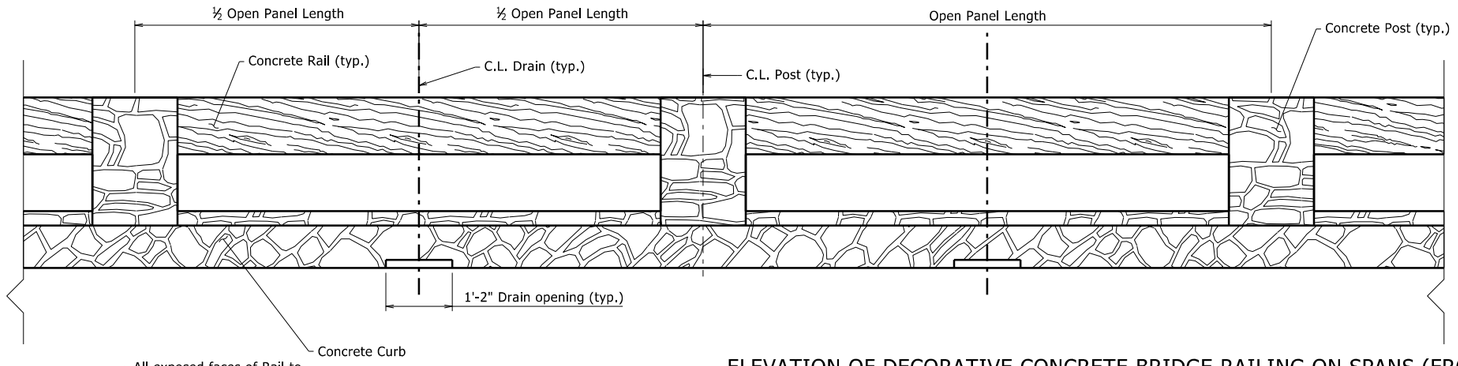
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY:	CPK	DATE:	02/26/25	FILENAME:	b061748_r1.dgn
CHECKED BY:	RD	DATE:	03/03/26	SCALE:	As Noted
DESIGNED BY:	RD	DATE:	02/03/25		

BRIDGE NO. 07717 DRAWING NO. 69447

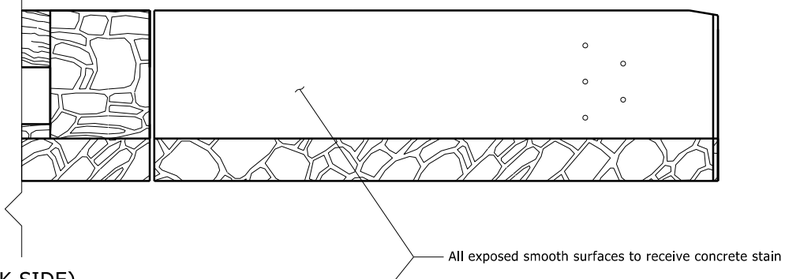
PRINT DATE: 5/1/2026

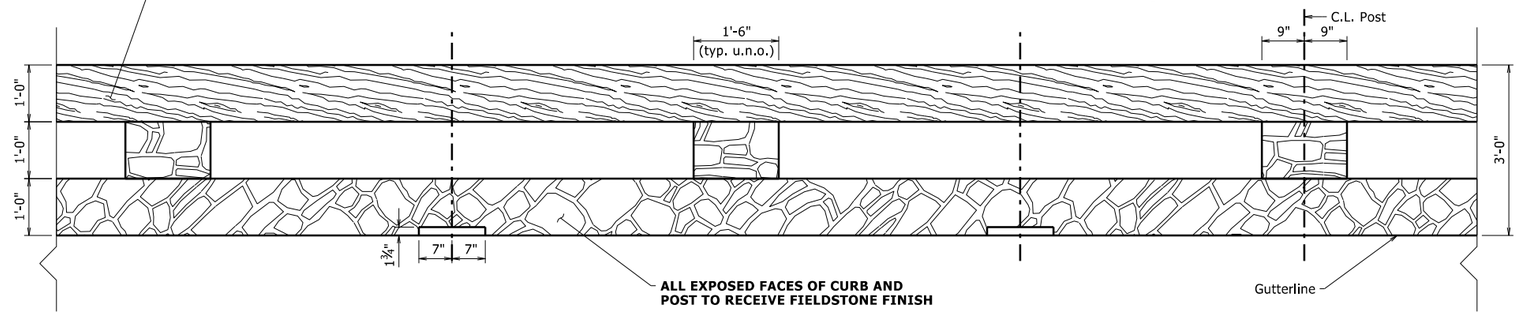
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061748	28	33
		07717 - RAILING DETAIL - 69448				



ELEVATION OF DECORATIVE CONCRETE BRIDGE RAILING ON SPANS (FROM BACK SIDE)

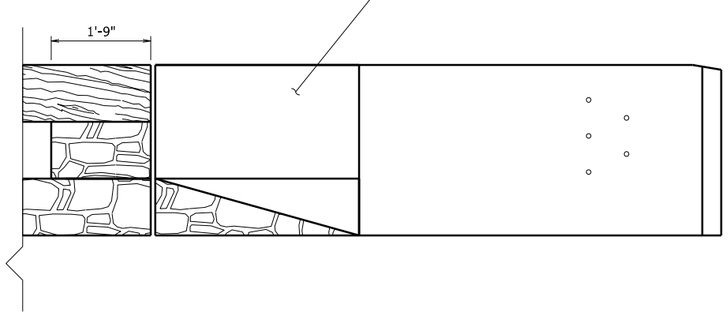
½" = 1'-0"

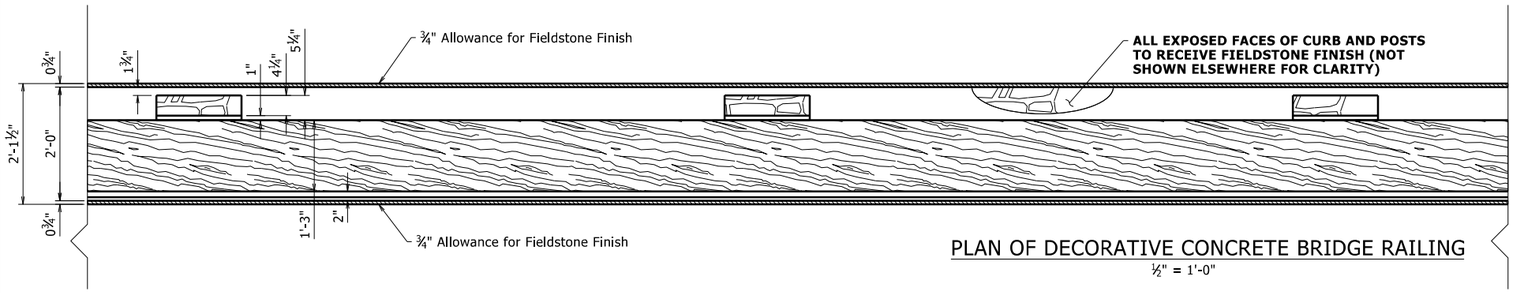




ELEVATION OF DECORATIVE CONCRETE BRIDGE RAILING ON SPANS (FROM TRAFFIC SIDE)

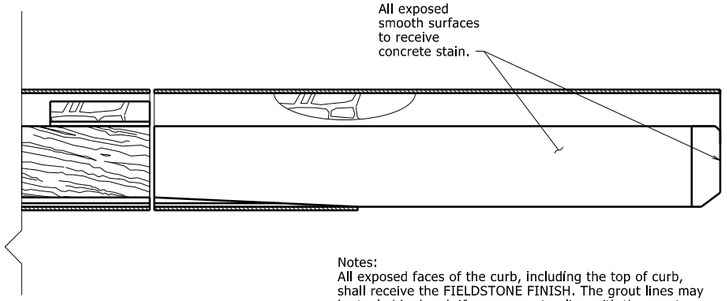
½" = 1'-0"





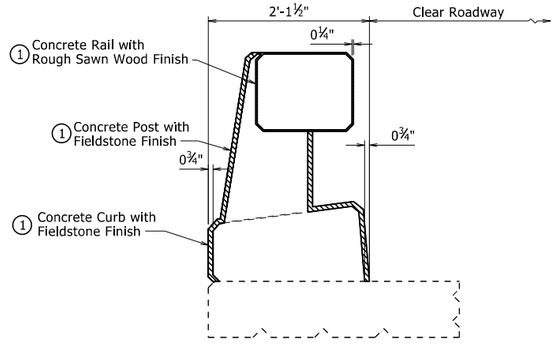
PLAN OF DECORATIVE CONCRETE BRIDGE RAILING

½" = 1'-0"



Notes:
All exposed faces of the curb, including the top of curb, shall receive the FIELDSTONE FINISH. The grout lines may be tooled by hand, if necessary, to align with the grout lines on the front and back faces of the curb.

All smooth surfaces and the rough sawn faces will receive staining treatment, as per SP Job No. 061748 "Architectural Finish" and SP Job No. 061748 "Staining Concrete Surfaces".



TYPICAL ARCHITECTURAL FINISH SECTION

1½" = 1'-0"

(1) For additional details, see Special Provision "ARCHITECTURAL FINISH" and Special Provision "STAINING CONCRETE SURFACES"

PRINT DATE: 5/1/2026

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 9235
5/1/26
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 3 OF 4
DETAILS OF
DECORATIVE CONCRETE
BRIDGE RAILING

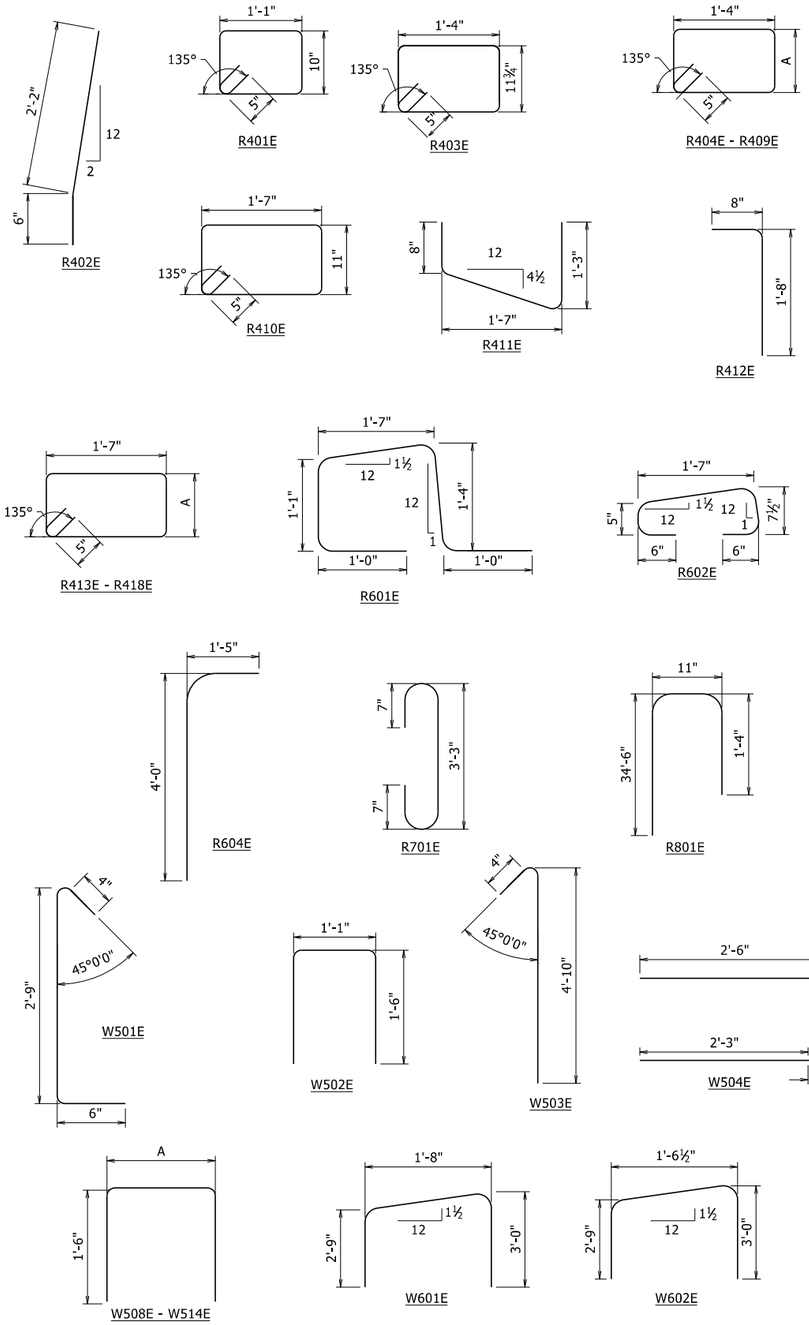
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: CPK DATE: 02/26/25 FILENAME: b061748_r1.dgn
CHECKED BY: RD DATE: 03/03/26 SCALE: As Noted
DESIGNED BY: RD DATE: 02/03/25

BRIDGE NO. 07717 DRAWING NO. 69448

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061748	29	33
		07717 - RAILING DETAIL - 69449				

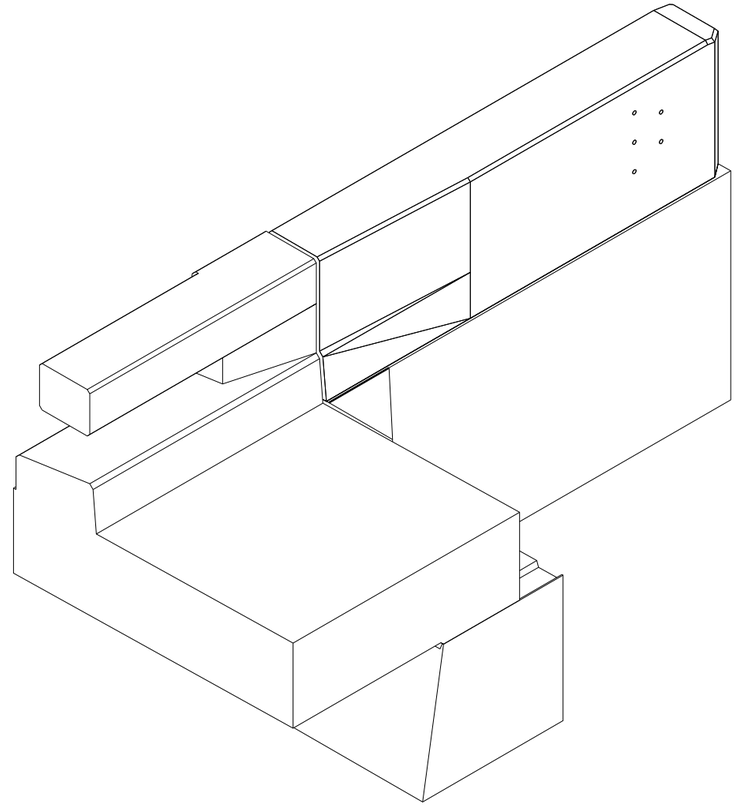
BENDING DIAGRAM



NOTE: Bar dimensions are out-to-out. Bars with an "E" suffix are to be epoxy coated.

MARK	NO. REQ.	LENGTH	"A"	PIN DIA.
R401E	640	4'-4"	-	2"
R402E	154	2'-8"	-	3"
R403E	52	5'-0"	-	2"
R404E - R409E	26 ea.	4'-8" - 5'-1"	8¾" - 11⅛"	2"
R410E	8	5'-6"	-	2"
R411E	12	3'-4"	-	3"
R412E	8	2'-3"	-	3"
R413E - R418E	4 ea.	5'-2" - 5'-7"	8¾" - 11⅛"	2"
R501E	30	34'-8"	-	Str.
R601E	399	5'-5"	-	4½"
R602E	36	4'-0"	-	4½"
R603E	72	6'-6"	-	Str.
R604E	48	5'-4"	-	4½"
R701E	154	4'-11"	-	5¼"
R801E	18	36'-4"	-	6"
R802E	18	34'-6"	-	Str.
W501E	80	3'-4"	-	2½"
W502E	52	3'-10"	-	2½"
W503E	80	5'-1"	-	2½"
W504E	20	5'-9"	-	2½"
W505E	20	9'-7"	-	Str.
W506E	20	9'-5"	-	Str.
W507E	8	9'-8"	-	Str.
W508E - W514E	4 ea.	3'-8¾" - 3'-10⅜"	11¼" - 1'-⅞"	2½"
W601E	52	7'-1"	-	4½"
W602E	28	6'-11½"	-	4½"

Min. Bar Lap Length #5 Bars: 2'-9"
Min. Bar Lap Length #8 Bars: 6'-0"



ISOMETRIC VIEW OF END POST WITH GUARDRAIL CONNECTION

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 9235
5/1/26
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 4 OF 4
DETAILS OF
DECORATIVE CONCRETE
BRIDGE RAILING

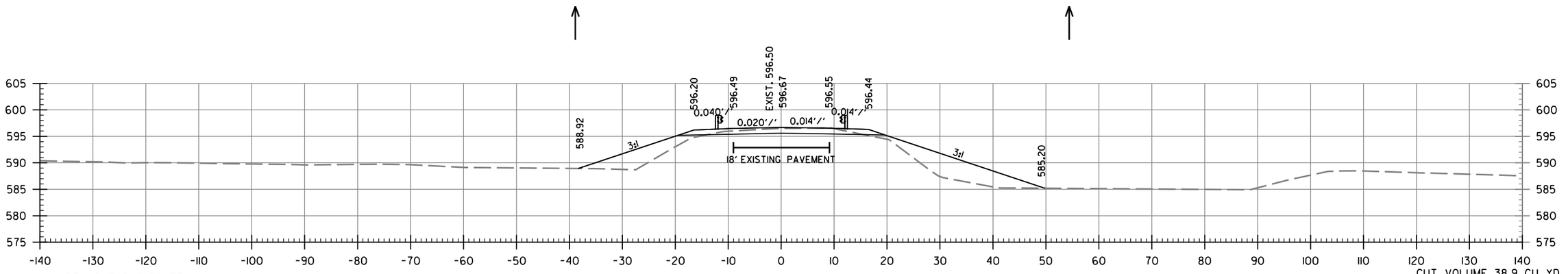
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: CPK DATE: 12/10/2025
CHECKED BY: RD DATE: 03/03/26
DESIGNED BY: RD DATE: 02/03/25
FILENAME: b061748_r1.dgn
SCALE:

BRIDGE NO. 07717
DRAWING NO. 69449

PRINT DATE: 5/1/2026

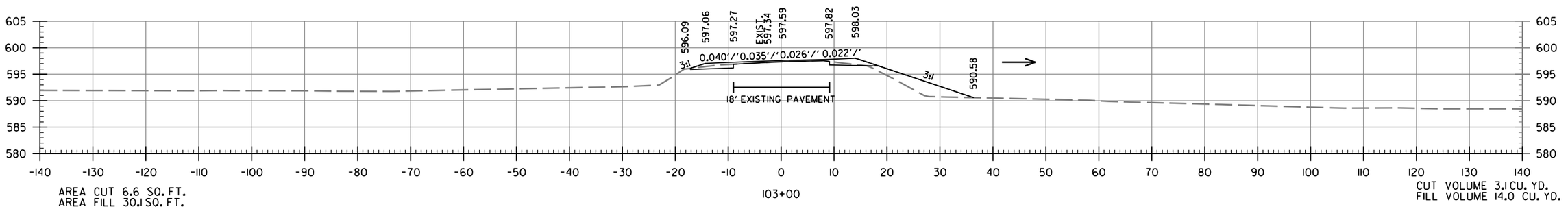
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061748	30	33
		CROSS SECTIONS				



AREA CUT 21.4 SQ. FT.
AREA FILL 127.3 SQ. FT.

103+75
END 100' TRANSITION &
BEGIN JOB 061748

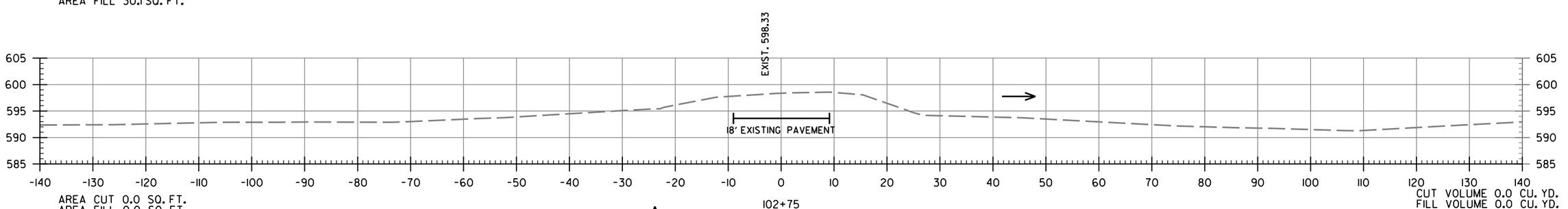
CUT VOLUME 38.9 CU. YD.
FILL VOLUME 218.6 CU. YD.



AREA CUT 6.6 SQ. FT.
AREA FILL 30.1 SQ. FT.

103+00

CUT VOLUME 3.1 CU. YD.
FILL VOLUME 14.0 CU. YD.



AREA CUT 0.0 SQ. FT.
AREA FILL 0.0 SQ. FT.

102+75
BEGIN 100' TRANSITION

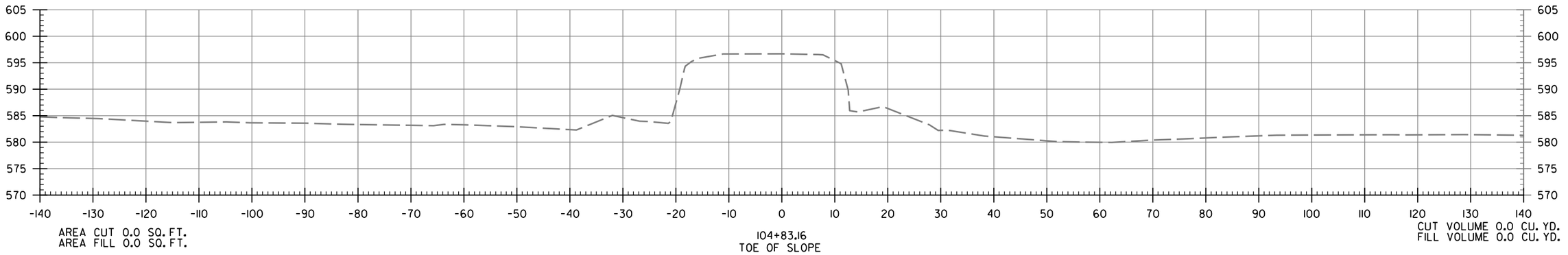
CUT VOLUME 0.0 CU. YD.
FILL VOLUME 0.0 CU. YD.

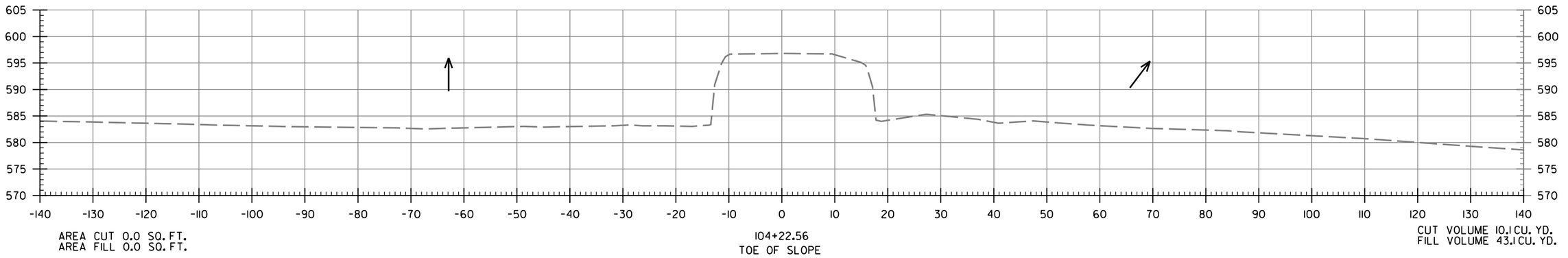
HWY. 600

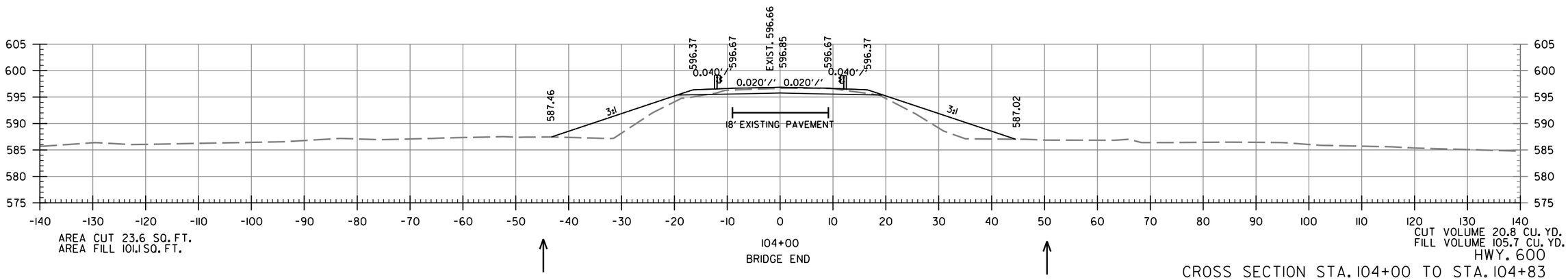
CROSS SECTION STA. 102+75 TO STA. 103+75

tw39665 10/27/2022
R061748.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061748	31	33
		CROSS SECTIONS				





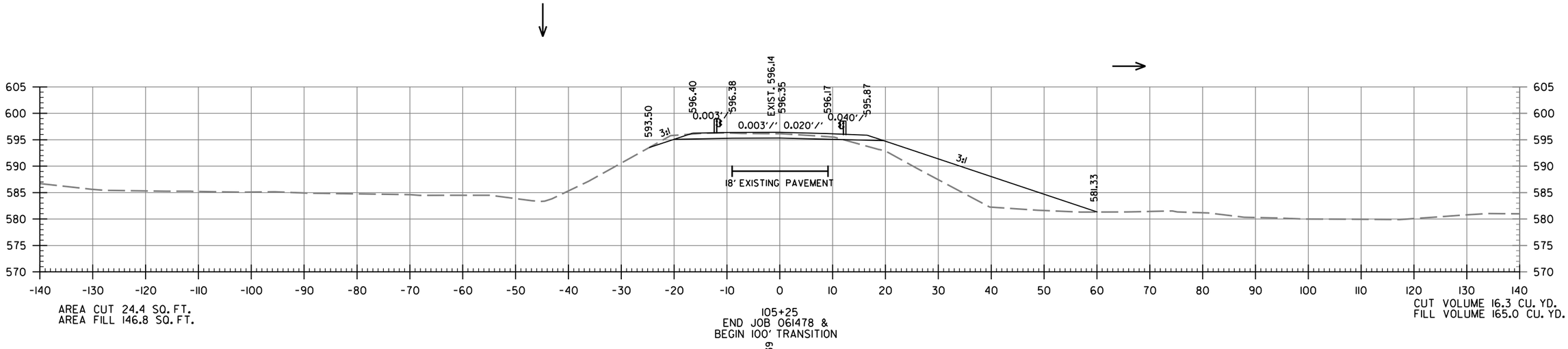


HWY. 600

CROSS SECTION STA. 104+00 TO STA. 104+83

tw39665 10/27/2022
R061748.DGN

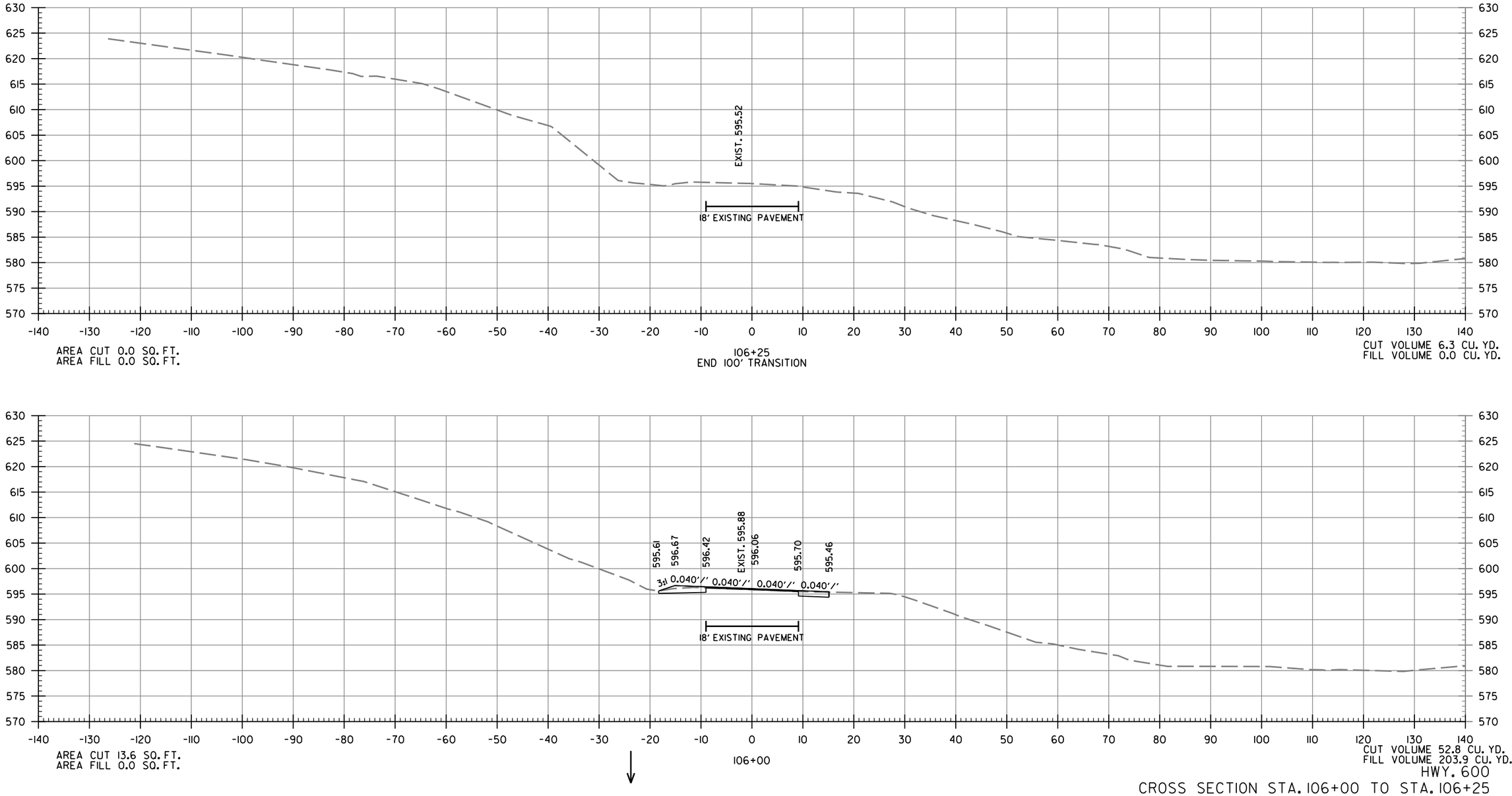
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061748	32	33
		CROSS SECTIONS				



CROSS SECTION STA. 105+05 TO STA. 105+25

lw39665 10/27/2022
R061748.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061748	33	33
		CROSS SECTIONS				



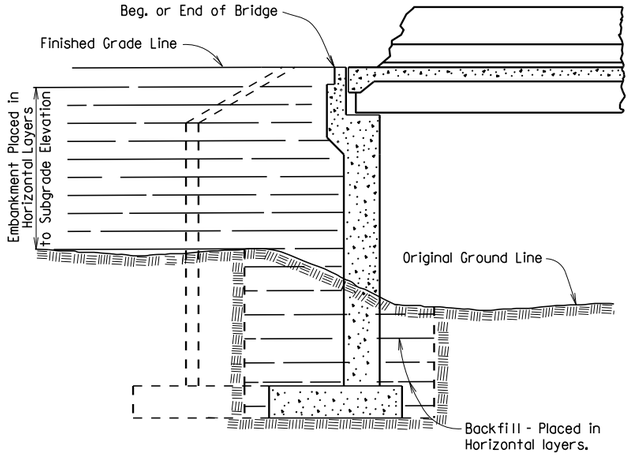
HWY. 600

CROSS SECTION STA. 106+00 TO STA. 106+25

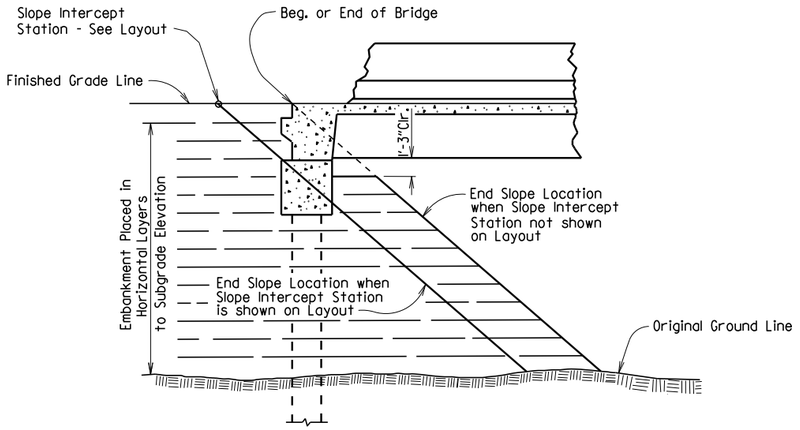
lw39665 10/27/2022
R061748.DGN

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

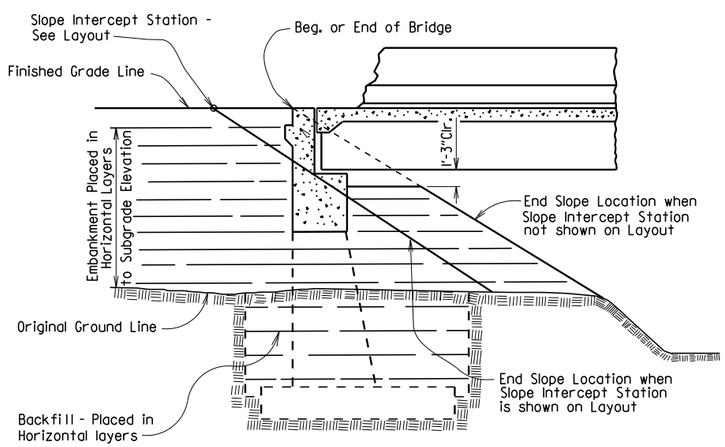
1 EMBANKMENT & BACKFILL 55000



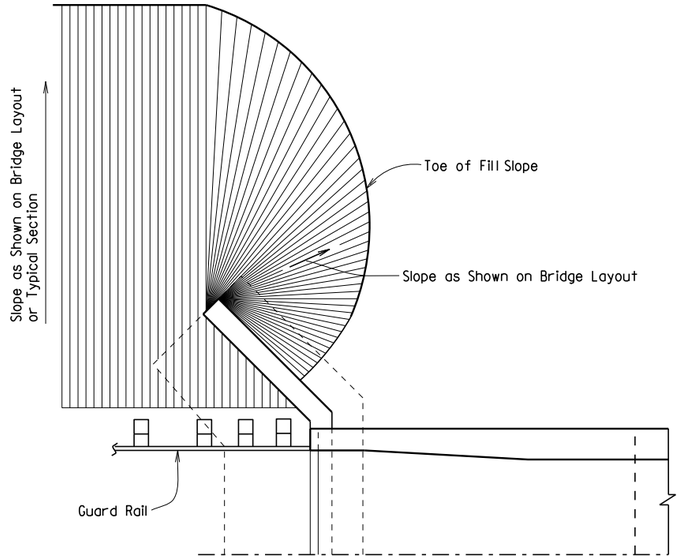
EMBANKMENT CONSTRUCTION AND FOOTING BACKFILL AT VERTICAL WALL ABUTMENTS



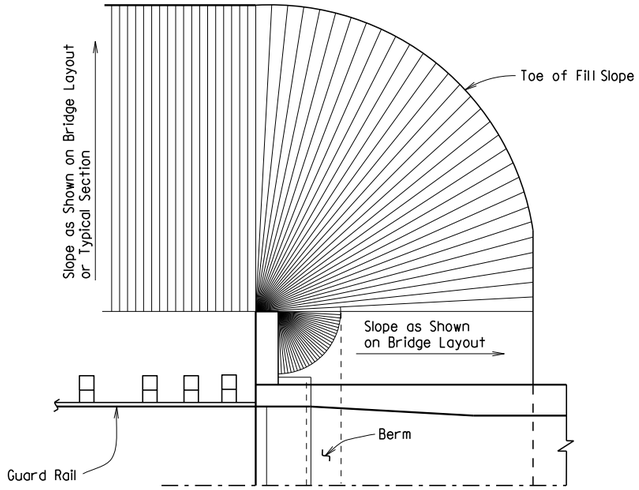
EMBANKMENT CONSTRUCTION AT SPILL-THROUGH PILE END BENTS



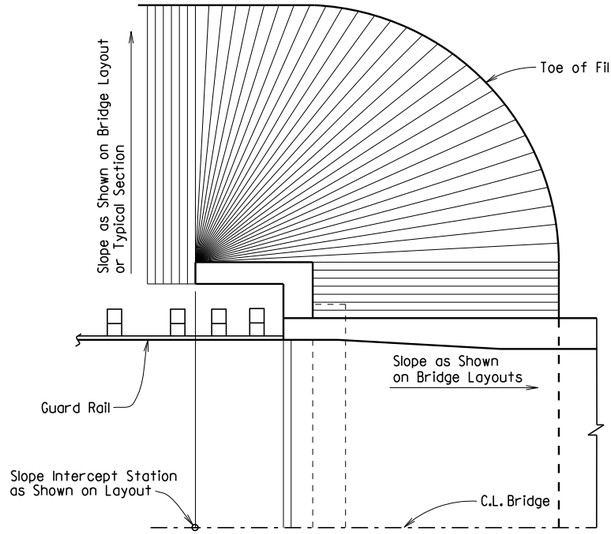
EMBANKMENT CONSTRUCTION AND FOOTING BACKFILL AT SPILL-THROUGH END BENTS



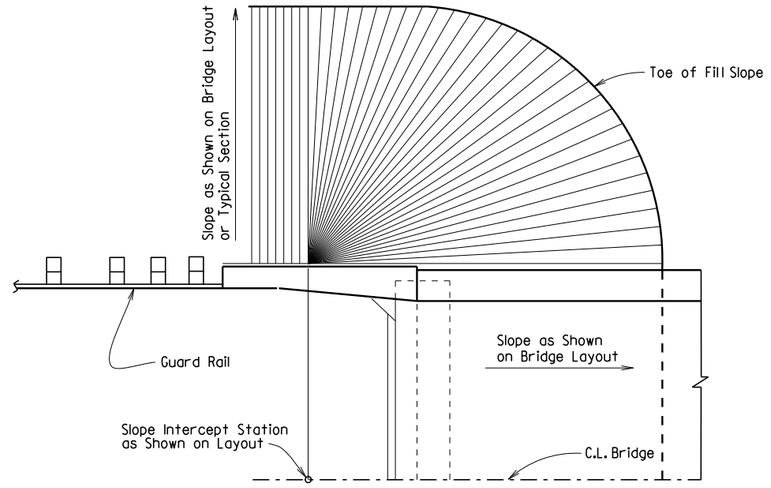
VERTICAL WALL ABUTMENTS



SPILL-THROUGH END BENTS WITH STUB WING



SPILL-THROUGH END BENTS WITH TURNBACK WING



SPILL-THROUGH END BENTS WITH TRANSITION WING

METHOD OF DETERMINING FILL SLOPE LOCATION AT BRIDGE ENDS

GENERAL NOTES

The Bridge End Embankment shall be defined as a section of embankment, not less than 20 feet long adjacent to the bridge end, together with the side slopes and slopes under the bridge end including around the end of wingwalls. Embankment adjacent to structures shall be constructed in 6 inch horizontal layers (loose measure) and compacted by the use of mechanical equipment to the satisfaction of the Engineer. Refer to Subsections 210.09, 210.10 and 801.08 for construction requirements.

STANDARD DETAILS FOR EMBANKMENT CONSTRUCTION AND BACKFILL AT BRIDGE ENDS

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: KDH DATE: 2-27-2014 FILENAME: b55000.dgn

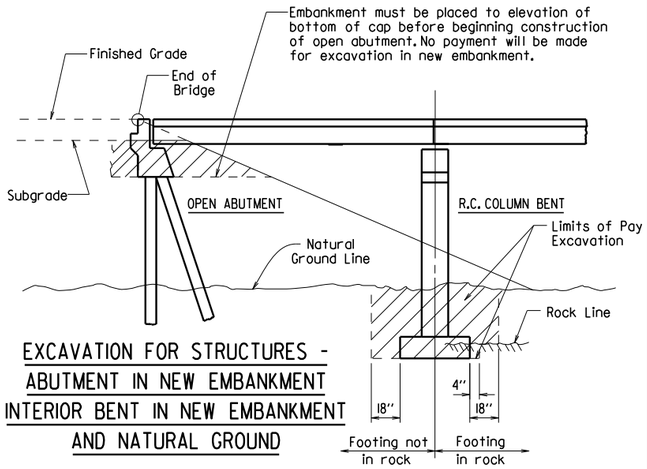
CHECKED BY: BEF DATE: 2-27-2014 SCALE: NO SCALE

DESIGNED BY: STD. DATE: -

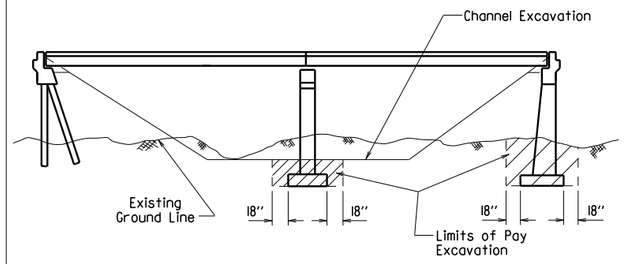
DRAWING NO. 55000

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

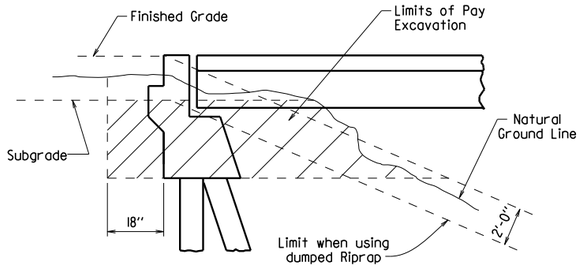
1 RIPRAP & EXCAV. 55001



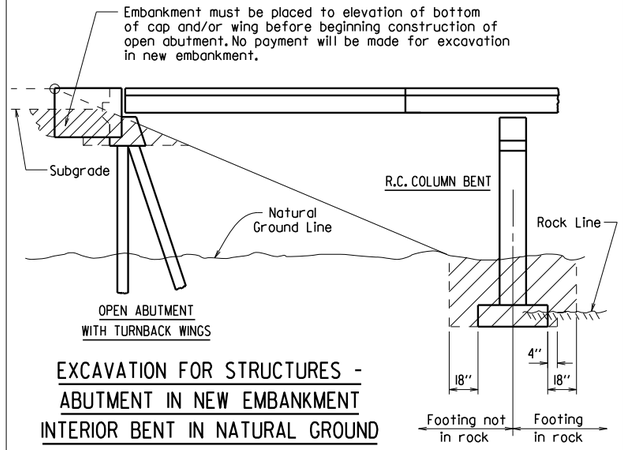
EXCAVATION FOR STRUCTURES - ABUTMENT IN NEW EMBANKMENT INTERIOR BENT IN NEW EMBANKMENT AND NATURAL GROUND



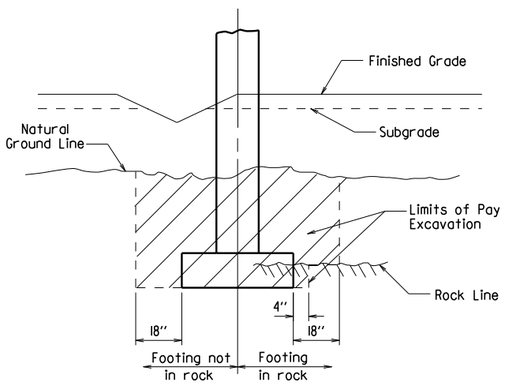
EXCAVATION FOR STRUCTURES - BRIDGE LOCATION WITH DESIGNATED CHANNEL CHANGE



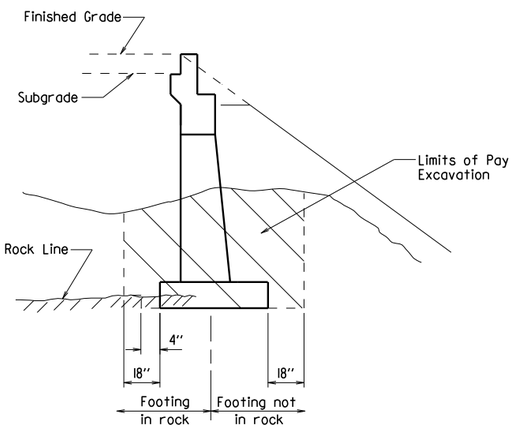
EXCAVATION FOR STRUCTURES - ABUTMENT IN NATURAL GROUND



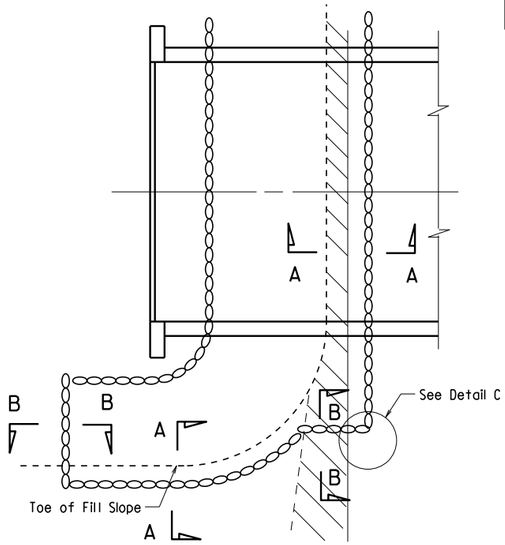
EXCAVATION FOR STRUCTURES - ABUTMENT IN NEW EMBANKMENT INTERIOR BENT IN NATURAL GROUND



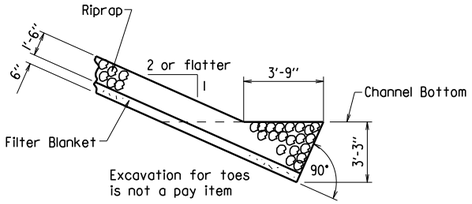
EXCAVATION FOR STRUCTURES - BENT IN ROADWAY FILL SECTION AND NATURAL GROUND



EXCAVATION FOR STRUCTURES - ABUTMENT IN NATURAL GROUND AND NEW EMBANKMENT

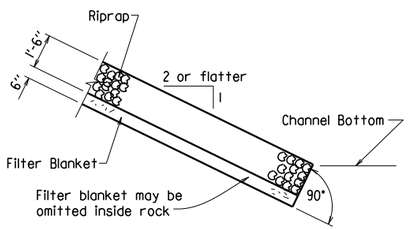


PLAN OF DUMPED RIPRAP



SECTION A-A

(Toe Excavation in Soil)



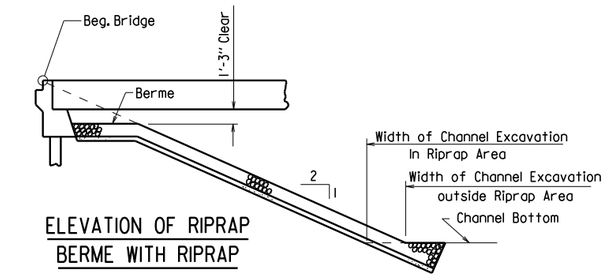
SECTION A-A

(Toe Excavation in Rock)

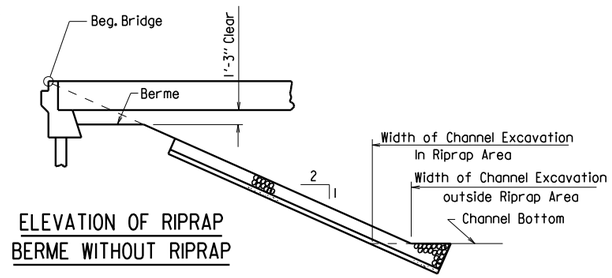
Note : Use this type of toe when rock is encountered which is in a stable condition.

Note : In lieu of an aggregate filter blanket, a synthetic fiber geotextile fabric complying with the requirements of Subsection 816.02(e) may be used.

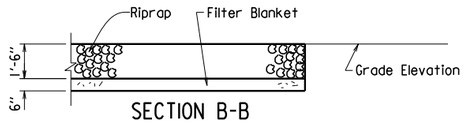
Note : Details for computing excavation for structures are included for information as to how plan quantities were calculated and for use when adjusting quantities when changing footing elevation.



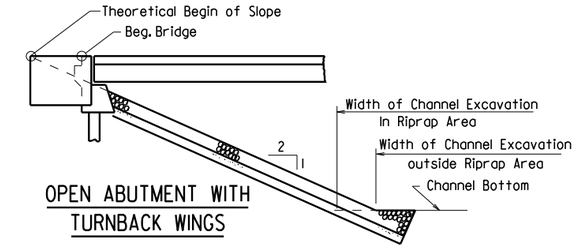
ELEVATION OF RIPRAP BERME WITH RIPRAP



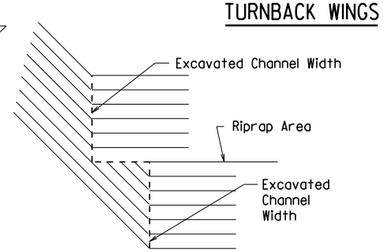
ELEVATION OF RIPRAP BERME WITHOUT RIPRAP



SECTION B-B



OPEN ABUTMENT WITH TURNBACK WINGS



DETAIL C

STANDARD DETAILS FOR DUMPED RIPRAP AND FILTER BLANKET AND COMPUTING EXCAVATION FOR STRUCTURES

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: KDH DATE: 2-27-2014 FILENAME: b55001.dgn

CHECKED BY: BEF DATE: 2-27-2014 SCALE: NO SCALE

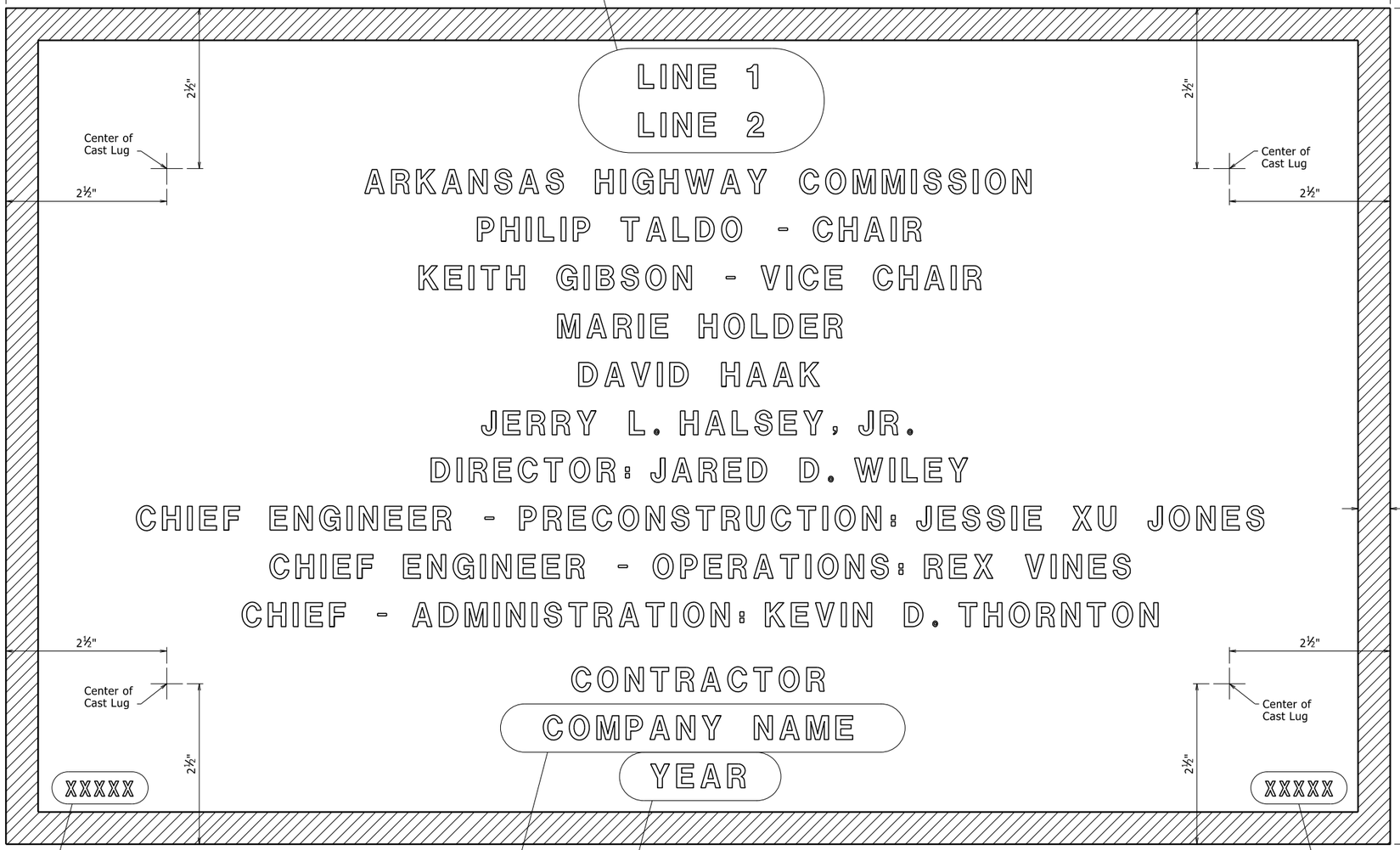
DESIGNED BY: STD. DATE:

DRAWING NO. 55001

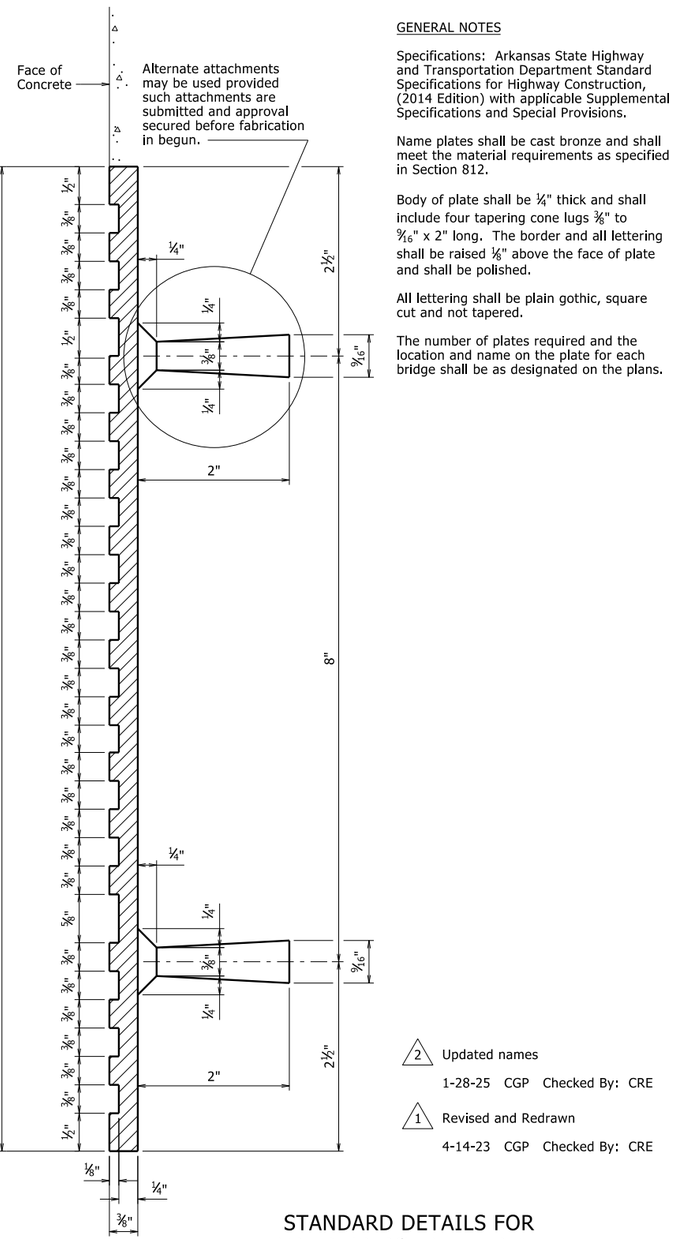
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
4-14-23		6	ARK.			
1-28-25		TYPE D NAME PLATE - 55010				

The name of the bridge as shown on the plans shall be placed on Lines 1 & 2 using ⅛" raised letters and numerals ⅜" high.

	Example 1	Example 2	Example 3	Example 4
Line 1	RED RIVER	SOUTHERN RAILROAD	SALINE RIVER	HIGHWAY 5
Line 2	RELIEF	OVERPASS		



TYPICAL BRIDGE NAME PLATE



GENERAL NOTES

Specifications: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction, (2014 Edition) with applicable Supplemental Specifications and Special Provisions.

Name plates shall be cast bronze and shall meet the material requirements as specified in Section 812.

Body of plate shall be ¼" thick and shall include four tapering cone lugs ⅜" to 9/16" x 2" long. The border and all lettering shall be raised ⅛" above the face of plate and shall be polished.

All lettering shall be plain gothic, square cut and not tapered.

The number of plates required and the location and name on the plate for each bridge shall be as designated on the plans.

2 Updated names
1-28-25 CGP Checked By: CRE

1 Revised and Redrawn
4-14-23 CGP Checked By: CRE

STANDARD DETAILS FOR
TYPE D BRIDGE NAME PLATE

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: KDH DATE: 2-27-2014 FILENAME: b55010.dgn
CHECKED BY: BEF DATE: 2-27-2014 SCALE: NO SCALE
DESIGNED BY: STD. DATE:

DRAWING NO. 55010

PRINT DATE: 1/28/2025

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3/24/16				6	ARK.			
				JOB NO.				
				①		STEEL H-PILES		55020

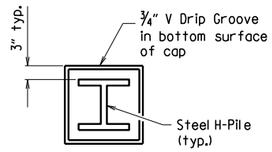
GENERAL NOTES FOR STEEL H-PILES:

Steel H-Piles shall conform to AASHTO M 270, Grade 36 or greater.

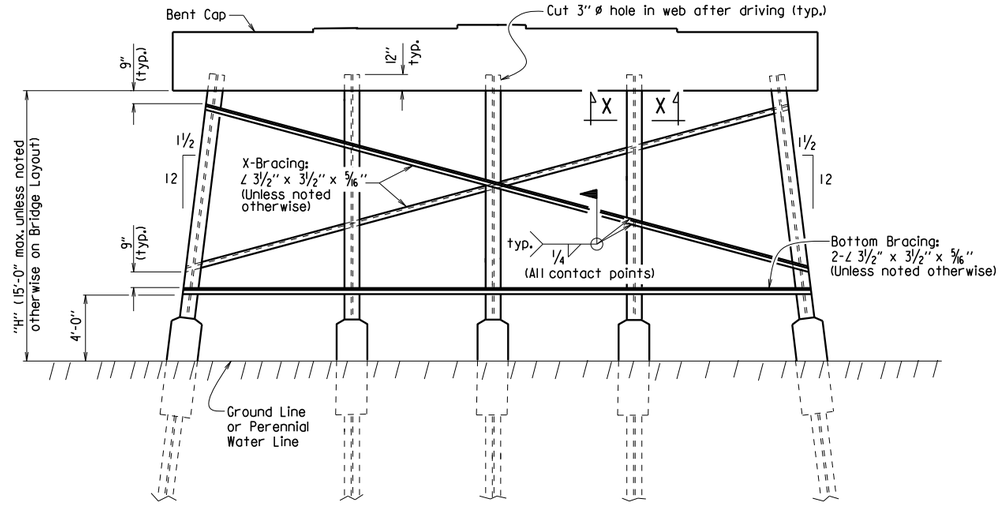
See Bridge Layout and Bent Details for pile size, estimated length, spacing, pile anchorage (if required) and for driving information.

Steel H-Piles that extend above the ground and are not protected by pile encasement shall be painted in accordance with Subsection 805.02.

Brackets, lugs, cap plates, pile tips, driving points, pile painting, splicing and welding shall not be paid for directly, but shall be considered subsidiary to the item "Steel Piling".



VIEW X-X



Notes:
All bracing shall be cut and welded in the field. Each brace shall be furnished in one piece. Payment shall be made under Item 807.

Unless noted otherwise, omit X-Bracing when "H" is less than 8 feet.

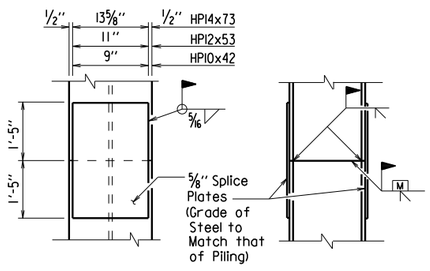
Omit X-Bracing and Bottom Bracing when "H" is 5 feet or less.

When required on the Bridge Layout sheet, pile encasements shall be constructed. See Notes and Details for H-Pile Encasements.

Omit all bracing (and V-groove in cap) when pile encasement is extended to bottom of bent cap.

TYPICAL DETAILS OF H-PILE TRESTLE INTERMEDIATE BENT

(Shown with Partial Height Encasement)



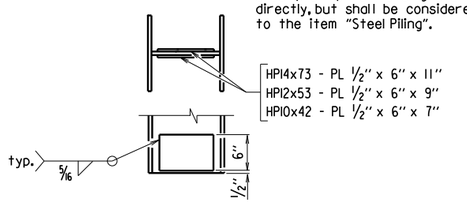
The Contractor may for his own convenience and at his own expense provide as many as three splices per pile. Minimum spacing between splices shall be 5 feet.

TYPICAL SPLICE DETAILS

⚠ H-pile splicers manufactured by Associated Pile and Fitting Corporation, LB Foster Piling, Skyline Steel or equivalent may be used in lieu of the "Typical Splice Details" shown. H-pile splicers shall match the same grade of steel specified for the piling and shall be welded to the pile with a 5/16" fillet weld around the entire perimeter of the splice. Flanges shall be welded with a complete penetration groove weld complying with AASHTO/AWS Joint Designation B-U4a or B-U4b. All welding shall conform to Subsection 807.26 of the AHTD Standard Specifcations for Highway Construction (2014 Edition).

Notes:
Steel pile tip reinforcing not required when approved H-Pile driving points are used.

Steel pile tip reinforcing shall not be paid for directly, but shall be considered subsidiary to the item "Steel Piling".



REINFORCING DETAIL FOR STEEL H-PILE TIP

GENERAL NOTES FOR H-PILE ENCASEMENTS:

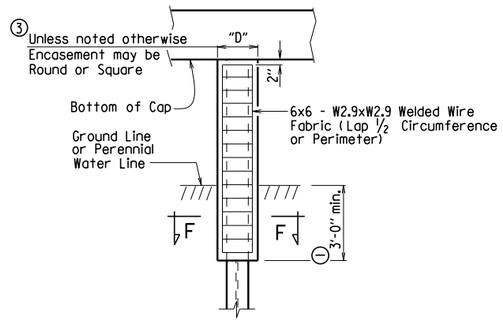
⚠ See Bridge Layout for additional notes, any pile encasement restrictions and required location of pile encasements.

All concrete shall be Class S with a minimum 28-day compressive strength, f'c = 3,500 psi. If concrete cannot be placed in the dry, Seal Concrete may be used from top to bottom of encasement.

Reinforcing steel shall be Grade 60 conforming to AASHTO M 31 or M 322, Type A.

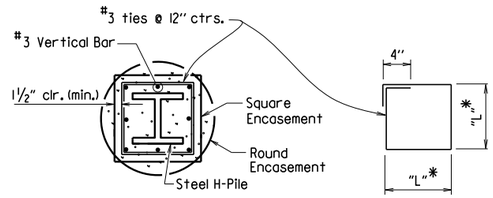
Welded Wire Fabric shall conform to AASHTO M 55 or M 221. Galvanized Corrugated Steel Pipe shall conform to AASHTO M 36 and M 218.

Concrete, welded wire fabric or reinforcing steel and galvanized pipe shall not be paid for directly, but shall be considered subsidiary to the item "Pile Encasement".



PILE ENCASEMENT DETAIL FOR STEEL H-PILES

④ (Shown with Encasement to Bottom of Cap)

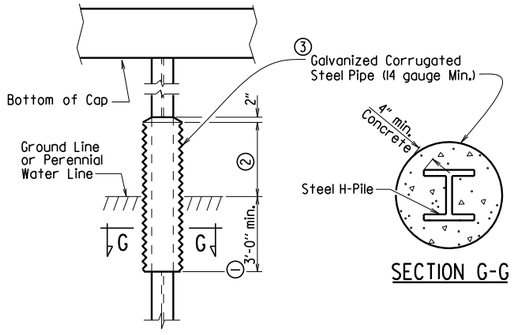


SECTION F-F

*Measured out-to-out of bar.

TABLE OF VARIABLES FOR PILE ENCASEMENT

Pile Size	"D" Square Encsmt.	"D" Round Encsmt.	"L"*
HPI0x42	1'-7"	2'-0"	1'-4"
HPI2x53	1'-8"	2'-2"	1'-5"
HPI4x73	1'-11"	2'-6"	1'-8"



SECTION G-G

① Unless otherwise noted on Bridge Layout.

② 3'-0" minimum or as shown on Bridge Layout.

③ Encasement dimensions shall be sized to maintain a minimum concrete cover of 4" from the H-Pile. Reinforcement shall be sized to provide a minimum concrete cover of 1½" and a minimum clearance of 1¼" from the pile.

④ Alternate pile encasement, when not extended to bottom of cap, shall have 2" concrete taper for water runoff as shown in the Partial Height Encasement detail.

ALTERNATE PILE ENCASEMENT DETAIL FOR STEEL H-PILES

(Shown with Partial Height Encasement)

⚠ Added alternate method of splicing H-piles and revised pile encasement note.
3/24/2016 AMS

This document was originally issued and sealed by Charles R. Ellis, PE No. 9235, on March 24, 2016. This copy is not a signed and sealed document.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS

BRIDGE ENGINEER

STANDARD DETAILS FOR STEEL H-PILES AND PILE ENCASEMENTS

ARKANSAS STATE HIGHWAY COMMISSION

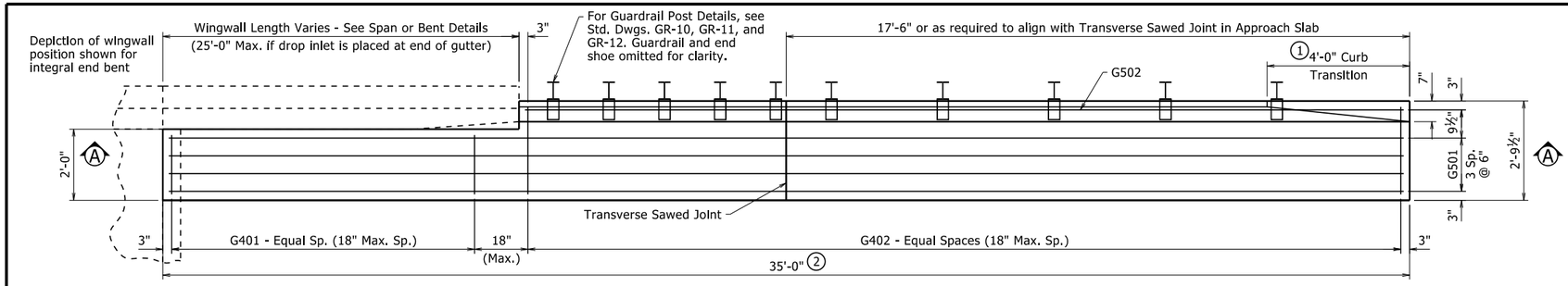
LITTLE ROCK, ARK.

DRAWN BY: A.M.S. DATE: 2/27/2014 FILENAME: b55020.dgn
CHECKED BY: B.E.F. DATE: 2/27/2014 SCALE: NO SCALE
DESIGNED BY: STD. DATE: —

DRAWING NO. 55020

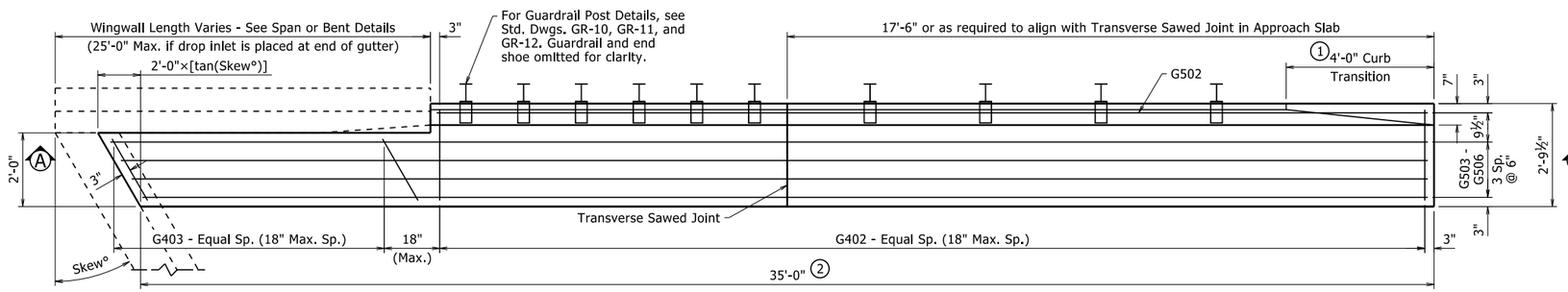
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.				

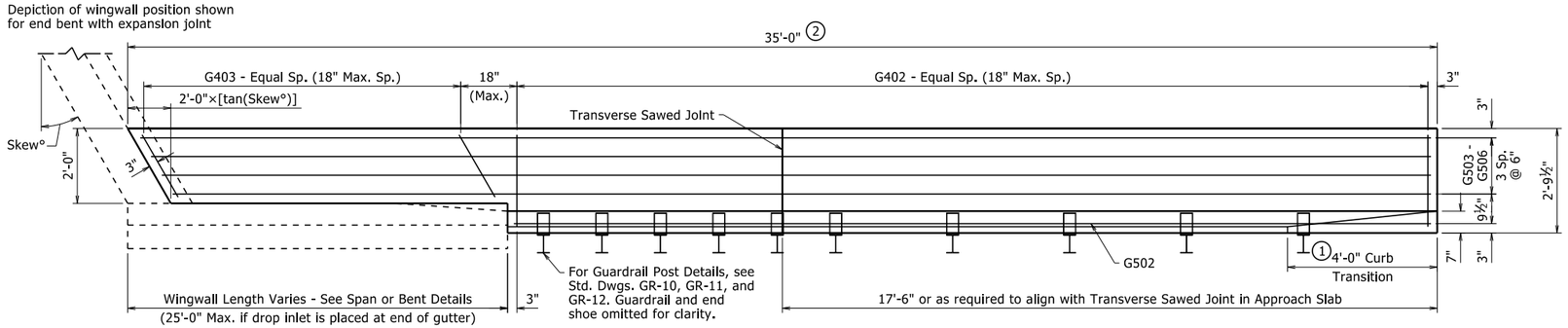
(1) Type F Approach Gutters - 55030F



HALF PLAN OF APPROACH GUTTERS FOR SQUARE END BENT

½" = 1'-0"





PLAN OF SKEWED APPROACH GUTTERS FOR SKEWED END BENT

½" = 1'-0"

QUANTITIES FOR ONE APPROACH GUTTER

(For Information Only)

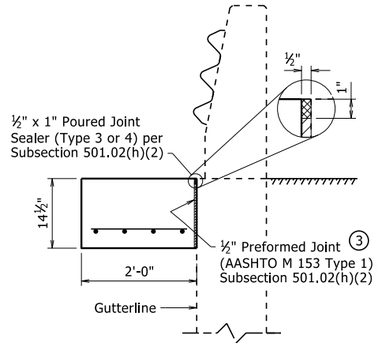
Reinforcing Steel (Lbs.)	Concrete (Cu. Yds.)
210	4.20

Quantities are based on one gutter for a square, integral end bent and a wingwall length of 10'-0"

BAR LIST FOR ONE APPROACH GUTTER

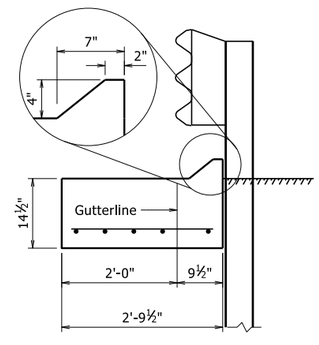
	Mark	No. Req'd.	Length
Square End Bent	G401	(4)	1'-8"
	G402	(4)	2'-5½"
	G501	4	34'-8"
	G502	1	(4)
Skewed End Bent	G402	(4)	2'-5½"
	G403	(4)	(4)
	G502	1	(4)
	G503 - G506	1 ea.	(4)

(4) Varies with Skew and/or Wingwall Length



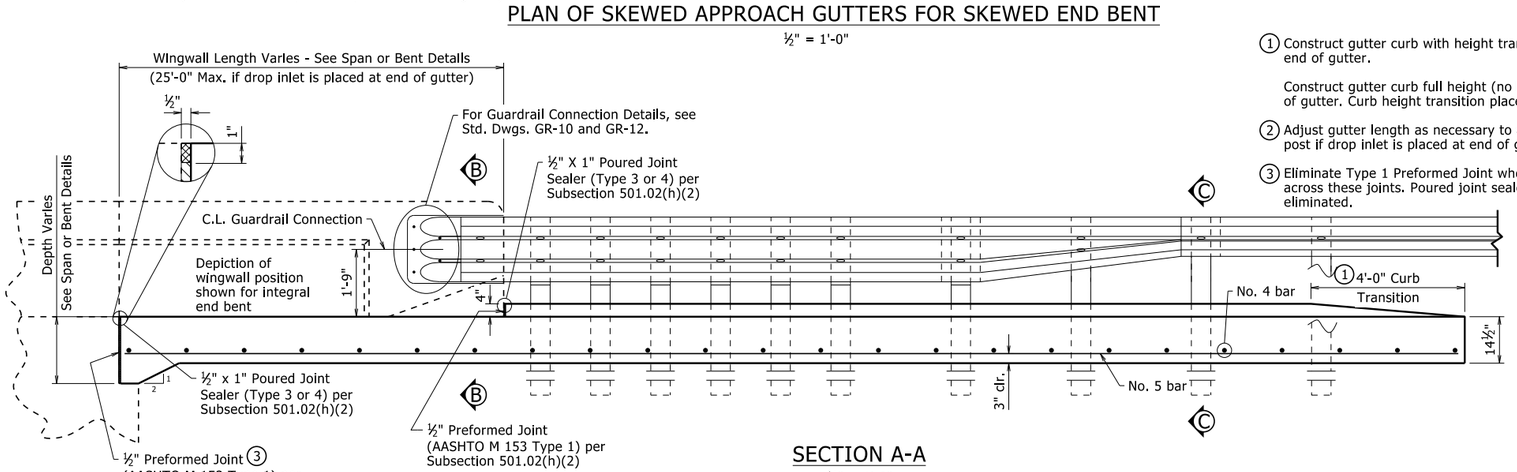
SECTION B-B

¾" = 1'-0"



SECTION C-C

¾" = 1'-0"



SECTION A-A

½" = 1'-0"

(Approach Gutter for Square End Bent Shown)

(1) Construct gutter curb with height transition as shown if drop inlet is not placed at end of gutter.

Construct gutter curb full height (no height transition) if drop inlet is placed at end of gutter. Curb height transition placed on drop inlet.

(2) Adjust gutter length as necessary to avoid outlet pipe interference with guardrail post if drop inlet is placed at end of gutter.

(3) Eliminate Type 1 Preformed Joint when bridge details show reinforcing dowels across these joints. Poured joint sealer is required, however, backer rod shall be eliminated.

GENERAL NOTES

All concrete shall be Class S(AE) with a minimum 28 day compressive strength f'c = 4,000 psi and shall be poured in the dry.

All reinforcing steel shall be Grade 60 (yield strength = 60,000 psi) conforming to AASHTO M 31 or M 322, Type A, with mill test reports.

Approach Gutters will be measured and paid for in accordance with Section 504.

All longitudinal lines within the limits of horizontal curves shall be on curves concentric to C.L. Bridge. Adjustment to longitudinal bar lengths may be required. Transverse reinforcing shall be placed on radial lines to C.L. Bridge.

Scales shown are for 22"x34" drawings. When using 11"x17" drawings, reduce scale by one half.

STANDARD DETAILS FOR TYPE F APPROACH GUTTERS

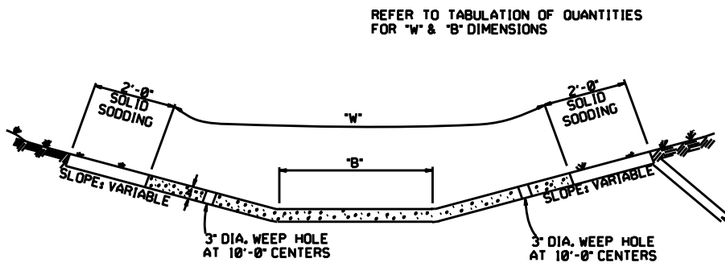
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY:	NAC	DATE:	4-8-2021	FILENAME:	b55030f.dgn
CHECKED BY:	LJB	DATE:	4-8-2021	SCALE:	AS NOTED
DESIGNED BY:	STD	DATE:	-		

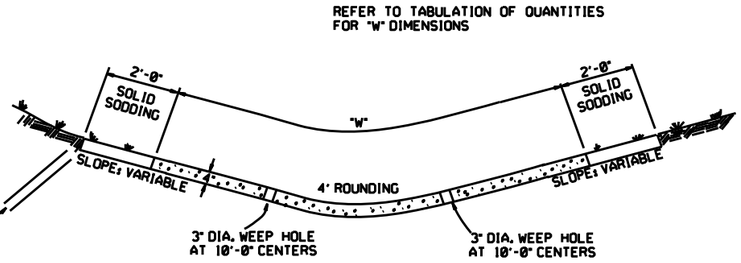
DRAWING NO. 55030F

PRINT DATE: 4/9/2021



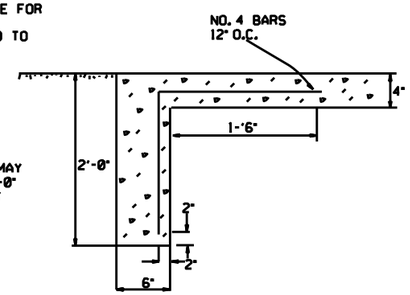
TYPE A

EXCAVATE TO NEAT LINES TO CONSTRUCT DITCH PAVING AND SOLID SODDING.



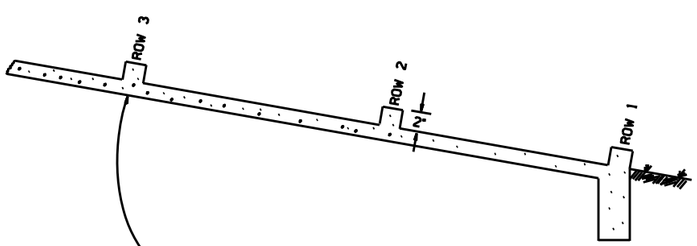
TYPE B

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."



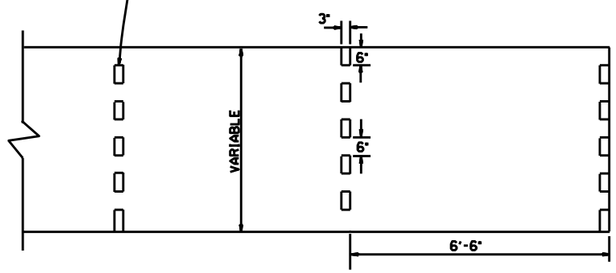
TOE WALL DEPTH MAY BE ALTERED TO 1'-0" WHEN DIRECTED BY THE ENGINEER IN ROCK EXCAVATION

TOE WALL DETAIL FOR CONCRETE DITCH PAVING



NUMBER OF ELEMENTS PER ROW VARIES WITH WIDTH OF PAVING SPECIFIED

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



ENERGY DISSIPATORS
(NO SCALE)

GENERAL NOTES:

THE FULL WIDTH OF EACH SECTION SHALL BE POURED MONOLITHICALLY.

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

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

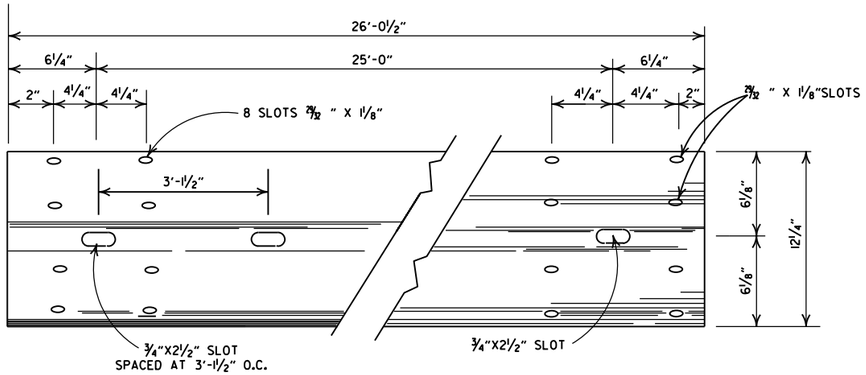
1" WIDE TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE DITCH PAVING AT 45° INTERVALS. THE SPACE SHALL BE FILLED WITH APPROVED JOINT FILLER COMPLYING WITH AASHTO M213.

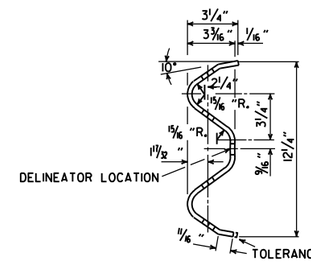
DATE	REVISION	DATE FILM'D
12-8-16	CORRECTED ENERGY DISSIPATOR DRAWING AND NOTE	
11-17-10	ADDED GENERAL NOTE	
6-2-94	ADDED GENERAL NOTE ABOUT SOLID SODDING	
11-30-8	ELIMINATED MIN. ROWS OF ELEMENTS	111-30-89
7-15-88	REVISED DISSIPATOR NOTE	653-7-15-88
4-3-87	REVISED ENERGY DISSIPATOR	671-4-3-87
1-9-87	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

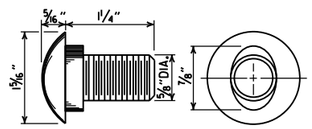
STANDARD DRAWING CDP-1



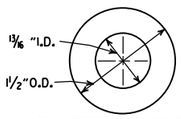


DETAILS OF W-BEAM GUARDRAIL

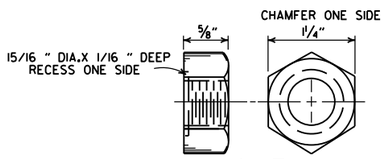
RAIL SECTION OF CLOSELY SIMILAR DIMENSIONS AND COMPARABLE STRENGTH MAY BE SUBSTITUTED IF APPROVED BY THE ENGINEER.



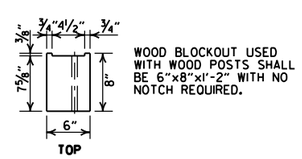
SPLICE BOLT
POST BOLT - SAME EXCEPT LENGTH



CUT STEEL WASHER

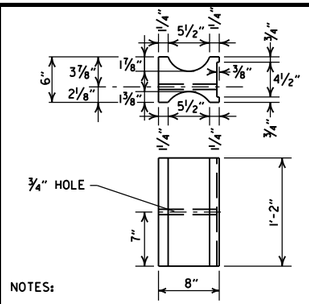


NUT



WOOD BLOCKOUT USED WITH WOOD POSTS SHALL BE 6"x8"x1'-2" WITH NO NOTCH REQUIRED.

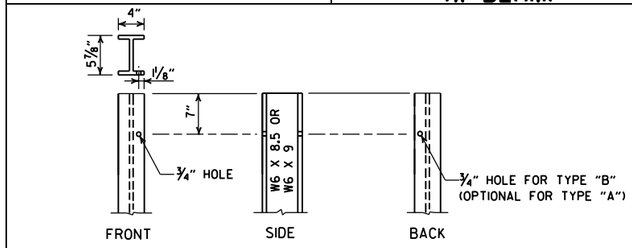
WOOD BLOCKOUT (W-BEAM)



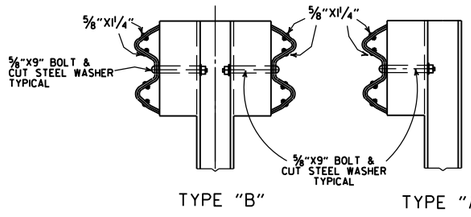
NOTES:

1. SIMILAR SHAPED PLASTIC BLOCKOUTS MAY BE USED AS LONG AS THEY MEET REQUIREMENTS FOR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).
2. DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCES.

PLASTIC BLOCKOUT (W-BEAM)



STEEL POST



DETAILS OF STEEL LINE POST CONNECTIONS (W-BEAM)

-GENERAL NOTES-

ALL BOLTS SHALL BE SUFFICIENT LENGTH TO EXTEND THROUGH THE FULL THICKNESS OF THE NUT AND NO MORE THAN ¾" BEYOND IT.

WHERE W-BEAM GUARDRAIL CONTINUES, THE INTERMEDIATE SECTIONS SHALL HAVE A POST SPACING OF 6'-3" UNLESS OTHERWISE NOTED.

W-BEAM GUARDRAIL REPRESENTING INTERMEDIATE SECTIONS WILL BE MEASURED ALONG THE ROADWAY FACE FROM CENTERLINE OF POST TO CENTERLINE OF POST.

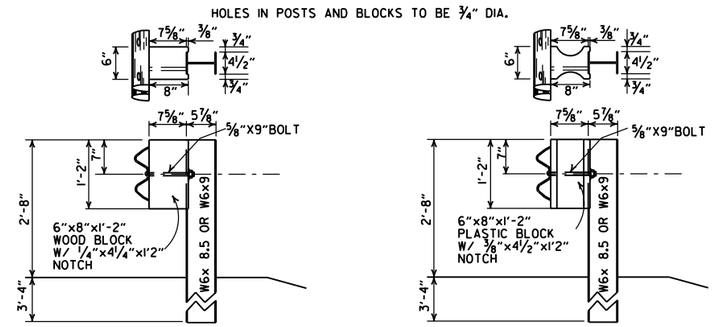
USE W-BEAM GUARDRAIL COMPONENTS OF SAME MATERIAL FOR ENTIRE JOB. FOR EXTENSIONS OR MODIFICATION OF EXISTING GUARDRAIL, W-BEAM GUARDRAIL COMPONENTS OF THE SAME TYPE AS THOSE EXISTING SHALL BE USED.

ANY BACKFILLING UNDER OR AROUND POST SHALL BE DAMP SAND THOROUGHLY TAMPED IN PLACE.

WOOD POSTS & WOOD BLOCKS SHALL BE EITHER DENSE NO. 1 STRUCTURAL OR BETTER 9.7 f (1400 f) OR NO. 1 1350 f SOUTHERN PINE.

CONTRACTOR SHALL HAVE THE OPTION OF USING WOOD BLOCKOUTS FOR W-BEAM GUARDRAIL OR PLASTIC BLOCKOUTS, AS LONG AS BLOCKOUT USED MEETS REQUIREMENTS FOR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) FOR W-BEAM GUARDRAIL.

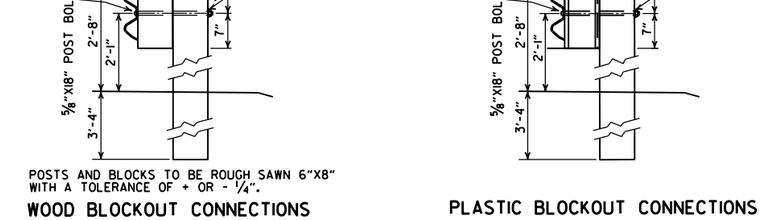
DELINEATORS SHALL BE MOUNTED AT 37.5' SPACING ON THE FRONT FACE OF THE GUARDRAIL. SPACING MAY BE REDUCED IN CURVES, AS DIRECTED BY THE ENGINEER. COLOR SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR DELINEATORS SHALL BE CONSIDERED INCLUDED IN THE PRICE BID PER LIN. FT. FOR GUARDRAIL.



WOOD BLOCKOUT CONNECTIONS

PLASTIC BLOCKOUT CONNECTIONS

DETAILS OF STEEL LINE POST CONNECTIONS (W-BEAM)



POSTS AND BLOCKS TO BE ROUGH SAWN 6"X8" WITH A TOLERANCE OF + OR - ¼".

WOOD BLOCKOUT CONNECTIONS

PLASTIC BLOCKOUT CONNECTIONS

DETAILS OF WOOD LINE POST CONNECTIONS (W-BEAM)

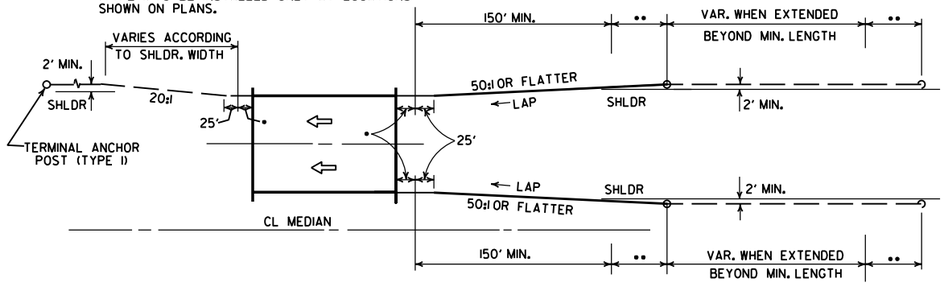
DATE	REVISION	FILMED
05-19-22	REVISED GENERAL NOTES, ADDED DELINEATOR LOCATION.	
11-07-19	RENUMBERED AND RENAMED	
11-16-17	REVISED GENERAL NOTES AND RAISED GUARDRAIL HEIGHT 3"	
07-14-10	RAISED HEIGHT OF GUARDRAIL 1"	
10-15-09	ADDED REFERENCE TO MASH	
04-10-03	REVISED GENERAL NOTES	
08-22-02	REVISED DIMENSION ON WOOD & PLASTIC BLOCKOUT CONNECTIONS & STEEL POST	
11-16-01	REVISED WOOD BLOCKOUT & DETAILS OF WOOD LINE POST CONNECTIONS	
03-30-00	REMOVED GUARDRAIL AT BRIDGE ENDS	
01-12-00	ADDED PLASTIC BLOCKOUT	
08-12-98	REV. BLOCKOUTS TO WOOD, DELETED CONC. POST & REV. GENERAL NOTE, DELETED DET. OF GUARDRAIL REPLACE. BEHIND CURB & DET. OF POST PLACE. IN SOLID ROCK, & ADDED DETAILS OF STEEL LINE POST CONN. REMOVED BACK-UP PLATE, REVISED HOLES IN STEEL POLES	
04-03-97	REMOVED "LAP IN DIRECTION OF TRAFFIC" NOTE & PLACED ARROWS ON WASHERS	
10-18-96	REVISED WOOD POST NOTE	
06-02-94	ADDED ALT. STEEL POST SIZE	
08-05-93	REVISED STEEL POST SIZE	8-5-93
10-01-92	REDRAWN & REVISED	10-1-92
08-15-91	REVISED WASHER NOTE	8-15-91
08-02-90	REV. GEN. NOTE & DEPTH OF ANC. POST IN ROCK	8-2-90
07-15-88	REVISED SECTION 3 & GENERAL NOTES	
03-04-88	REV. ANCHOR POST, ELEV. NOTES & POST IN ROCK	780-3-4-88
10-30-87	REVISED WOOD LINE POST DETAIL	546-10-30-87
10-09-87	REDRAWN & REVISED	802-10-9-87

ARKANSAS STATE HIGHWAY COMMISSION

GUARDRAIL DETAILS

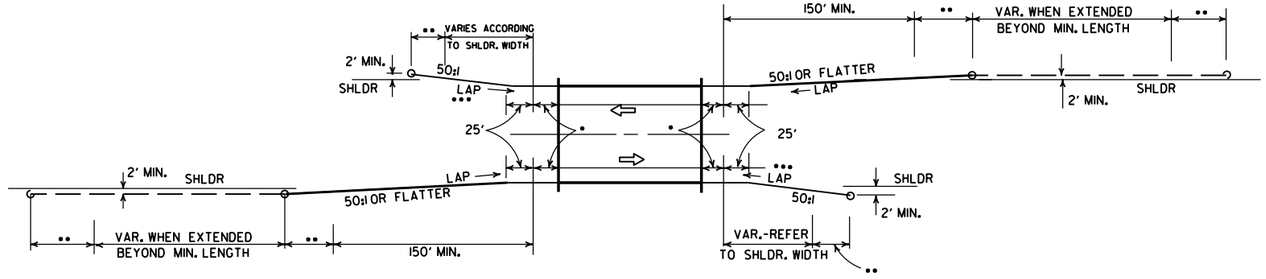
STANDARD DRAWING GR-6

NOTE: GUARDRAIL WITH GUARDRAIL TERMINAL (TYPE 1) TO BE INSTALLED ONLY AT LOCATIONS SHOWN ON PLANS.



ONE-WAY TRAFFIC

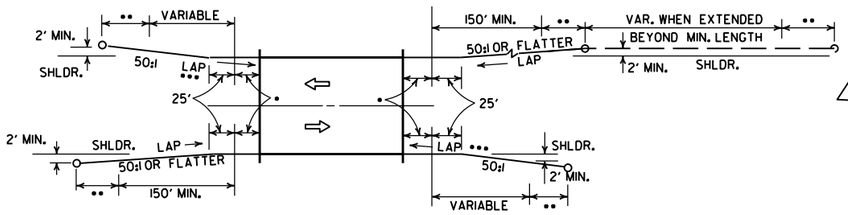
••• LAP OF GUARDRAIL SHALL BE AS SHOWN FOR A DISTANCE OF UP TO 200'. CHANGE TO LAP IN DIRECTION OF TRAVEL.



TWO-WAY TRAFFIC

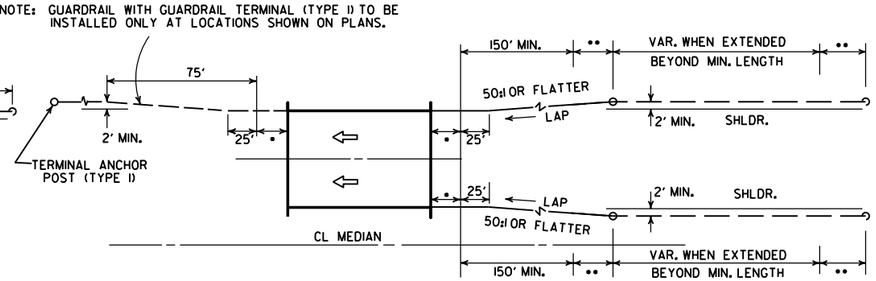
METHODS OF INSTALLATION OF GUARDRAIL AT LESS THAN FULL SHOULDER WIDTH BRIDGES USING GUARDRAIL TERMINAL (TYPE 2)

••• LAP OF GUARDRAIL SHALL BE AS SHOWN FOR A DISTANCE OF UP TO 200'. CHANGE TO LAP IN DIRECTION OF TRAVEL.



TWO-WAY TRAFFIC

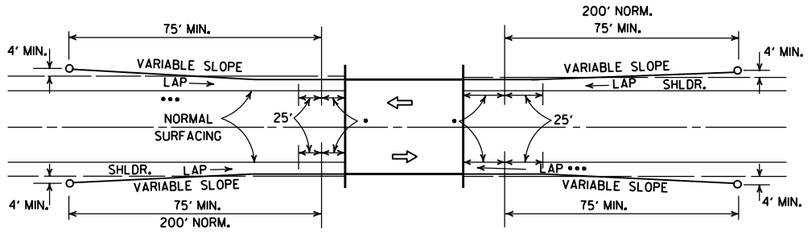
NOTE: GUARDRAIL WITH GUARDRAIL TERMINAL (TYPE 1) TO BE INSTALLED ONLY AT LOCATIONS SHOWN ON PLANS.



ONE-WAY TRAFFIC

METHOD OF INSTALLATION OF GUARDRAIL AT FULL SHOULDER WIDTH BRIDGES USING GUARDRAIL TERMINAL (TYPE 2)

••• LAP OF GUARDRAIL SHALL BE AS SHOWN FOR A DISTANCE OF UP TO 200'. CHANGE TO LAP IN DIRECTION OF TRAVEL.



METHOD OF INSTALLATION OF GUARDRAIL USING GUARDRAIL TERMINAL (TYPE 1) (FULL SHOULDER WIDTH OR LESS BRIDGES)

LEGEND

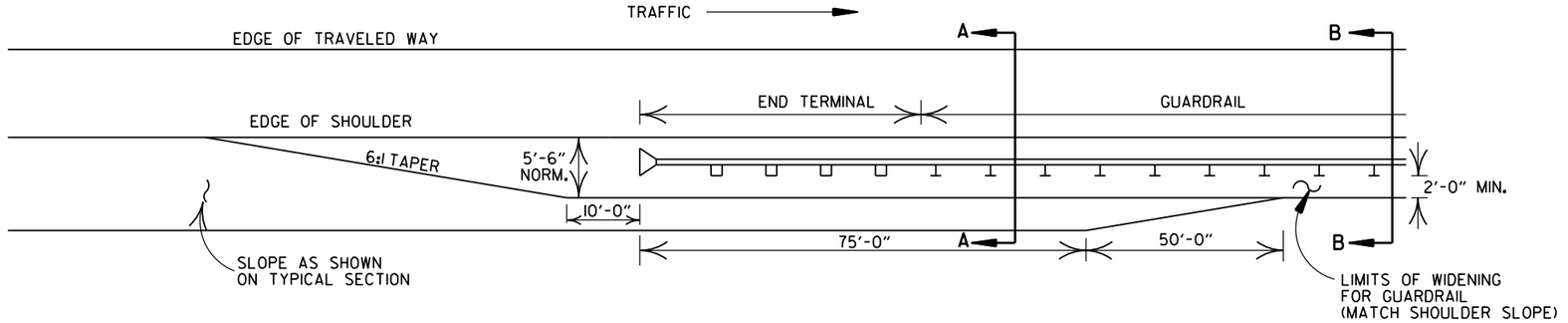
- • THRIE BEAM GUARDRAIL TERMINAL
- •• GUARDRAIL TERMINAL (TYPE 2)

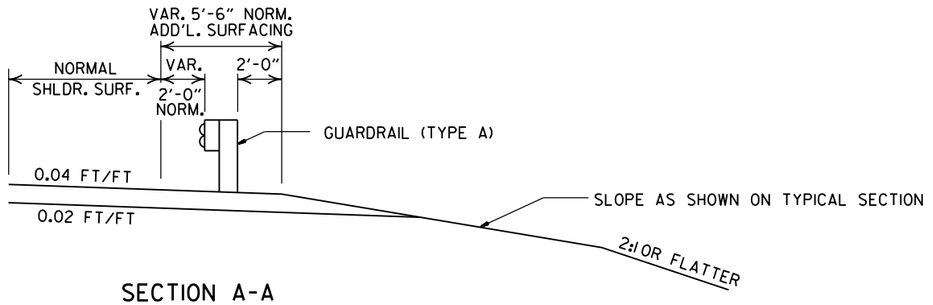
DATE	REVISION	DATE FILM
11-07-19	RENUMBERED AND RENAMED	
4-17-08	REVISED LAYOUTS	
11-10-05	REMOVED GUARDRAIL NOTES AND DETAILS	
11-16-01	DELETED NOTE-METHOD OF INSTALLATION OF GUARDRAIL USING GUARDRAIL TERM. (TY. 1)	
1-12-00	ADDED CONSTRUCTION NOTE	1-12-00
6-26-97	REVISED LAYOUT	
10-1-92	REDRAWN & REVISED	10-1-92
	ADDED NOTE	
10-9-87	REDRAWN & REVISED	

ARKANSAS STATE HIGHWAY COMMISSION

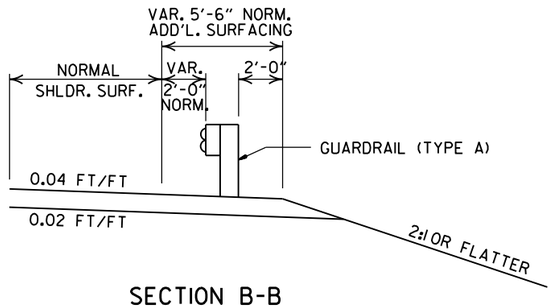
GUARDRAIL DETAILS

STANDARD DRAWING GR-8



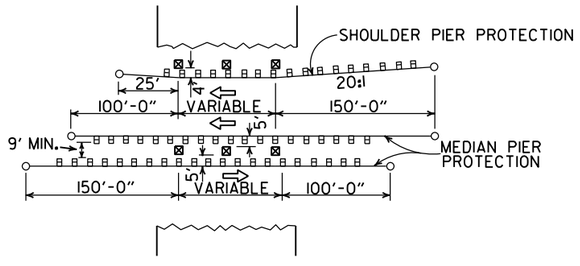


SECTION A-A



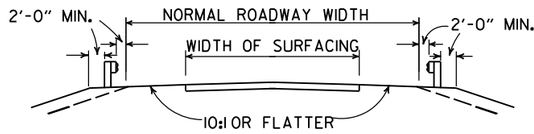
SECTION B-B

DETAILS OF WIDENING FOR GUARDRAIL

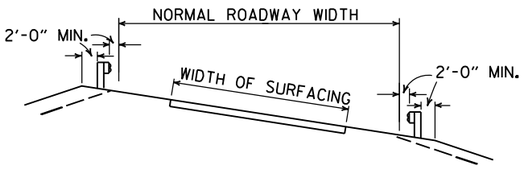


METHOD OF INSTALLATION OF GUARDRAIL AT FIXED OBSTACLE

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



SECTION ON TANGENT



SECTION ON CURVE

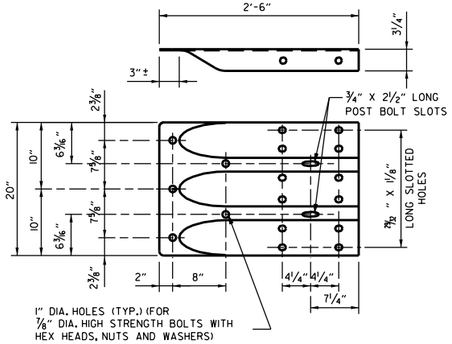
DETAILS SHOWING POSITION OF GUARDRAIL ON HIGHWAY

DATE	REVISION	DATE FILM
11-07-19	RENUMBERED AND RENAMED	
4-17-08	MINOR REVISION	
11-10-05	DRAWN	

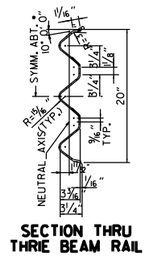
ARKANSAS STATE HIGHWAY COMMISSION

GUARDRAIL DETAILS

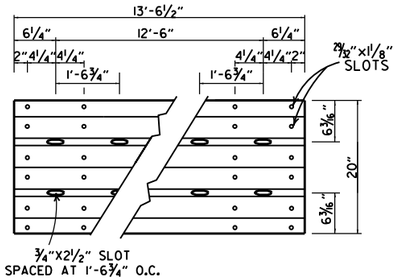
STANDARD DRAWING GR-9



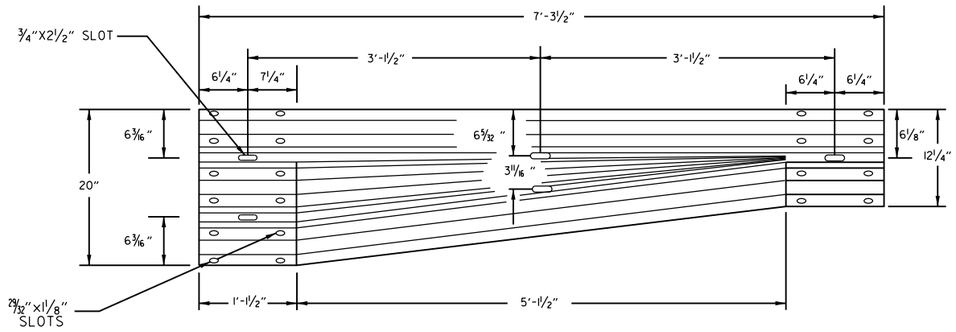
SPECIAL END SHOE



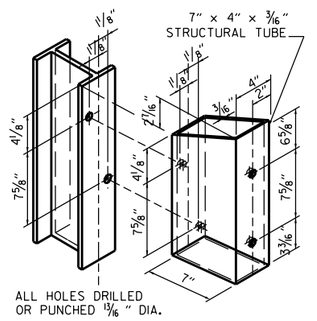
SECTION THRU THRIE BEAM RAIL



THRIE BEAM RAIL

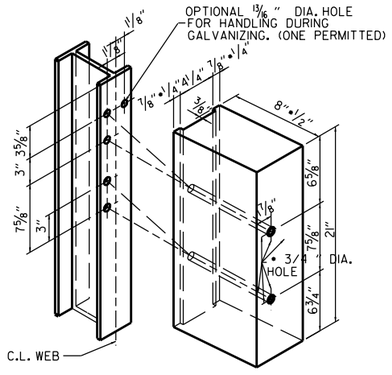


TRANSITION SECTION



ATTACH BLOCKOUT TO POST USING ⅝" DIA. HEX HEAD BOLTS WITH 1½" O.D. CUT STEEL WASHERS AND NUT.

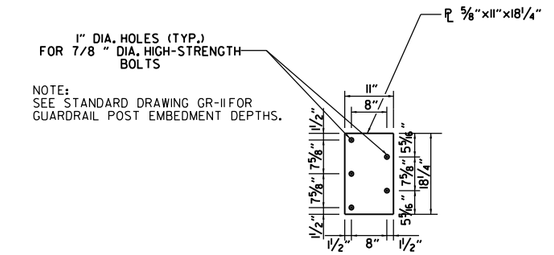
STRUCTURAL STEEL TUBING BLOCKOUT DETAIL



ALL HOLES 13/16" DIAMETER EXCEPT AS NOTED

HOLE PUNCHING DETAIL FOR STEEL POST & WOOD OR PLASTIC BLOCKOUTS

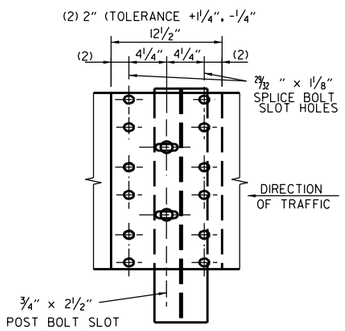
NOTE: BLOCKS SHALL BE THE SAME TYPE THROUGHOUT THE PROJECT LIMITS.



NOTE:
SEE STANDARD DRAWING GR-11 FOR GUARDRAIL POST EMBEDMENT DEPTHS.

CONNECTOR PLATE

CONNECTOR PLATE SHALL BE AASHTO M270, GR. 36 AND SHALL BE GALVANIZED AFTER FABRICATION. GALVANIZING SHALL CONFORM TO SUBSECTION 807.19 OF THE STANDARD SPECIFICATIONS. CONNECTOR PLATE TO BE BOLTED TO SPECIAL END SHOE USING ⅞" DIA. HIGH STRENGTH BOLTS, WITH THE HEADS PLACED ON THE TRAFFIC FACE. WASHERS SHALL BE USED UNDER THE HEAD AND NUT. BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AND SHALL CONFORM TO SUBSECTION 807.06.



THRIE BEAM RAIL SPLICE AT POST

GENERAL NOTES:

THE THRIE BEAM RAIL, SPECIAL END SHOE, AND THE TRANSITION SECTION SHALL BE MADE OF STEEL AND SHALL BE 12 GAGE. ZINC COATING SHALL BE TYPE 1.

RAIL POSTS SHALL BE SET PERPENDICULAR TO THE ROADWAY PROFILE GRADE AND VERTICALLY IN CROSS SECTION.

ALL BOLTS SHALL BE SUFFICIENT LENGTH TO EXTEND THROUGH THE FULL THICKNESS OF THE NUT AND NO MORE THAN 3"4" BEYOND IT.

ALL LAP SPLICES, INCLUDING SPECIAL END SHOES, SHALL BE MADE IN THE DIRECTION SHOWN ON STANDARD DRAWINGS GR-8 & GR-13.

REFER TO STD. DRWG. GR-11 FOR POST DETAILS.

USE THRIE BEAM GUARDRAIL COMPONENTS OF SAME MATERIAL FOR ENTIRE JOB.

THRIE BEAM POSTS SHALL BE SAME MATERIAL AS W-BEAM POSTS FOR ENTIRE JOB.

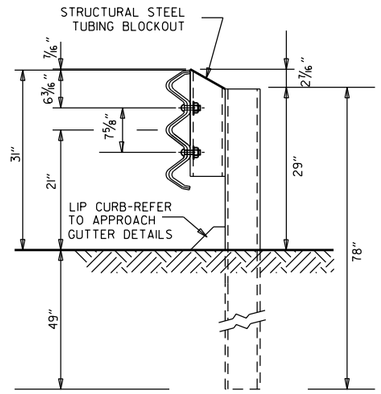
WOOD POSTS & WOOD BLOCKS SHALL BE EITHER DENSE NO. 1 STRUCTURAL OR BETTER 9.7 f (1400 f) OR NO. 1 1350 f SOUTHERN PINE.

DATE	REVISION	FILMED
11-07-19	RENAMED AND REVISED REFERENCES	
11-16-17	REVISED TRANSITION SECTION, GUARD RAIL HEIGHT, AND GENERAL NOTES; MOVED THRIE BEAM GUARD RAIL CONNECTIONS AT BRIDGES ENDS TO STD. DRWG. GR-12	
07-14-10	RAISED HEIGHT OF W-BEAM 1"	
11-29-07	ADDED PLASTIC BLOCKOUTS	
11-10-05	ADDED NOTE FOR ATTACHING STEEL BLOCKOUT	
11-18-04	REVISED GENERAL NOTES	
10-9-03	REVISED GENERAL NOTES	
04-10-03	REVISED GENERAL NOTES	
08-22-02	REVISED NOTE (2)	
06-29-00	MOVED DIMENSION LINES	
05-18-00	ADDED NOTE	
03-30-00	DRAWN & ISSUED	

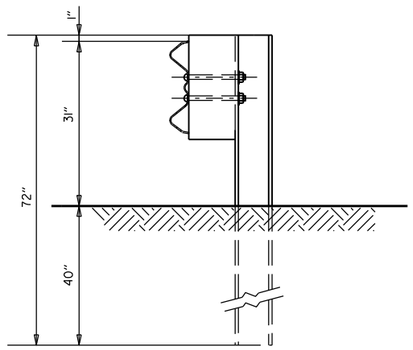
ARKANSAS STATE HIGHWAY COMMISSION

GUARDRAIL DETAILS

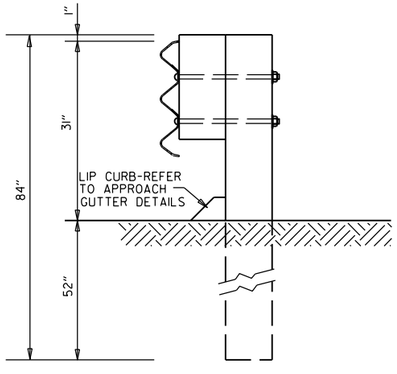
STANDARD DRAWING GR-10



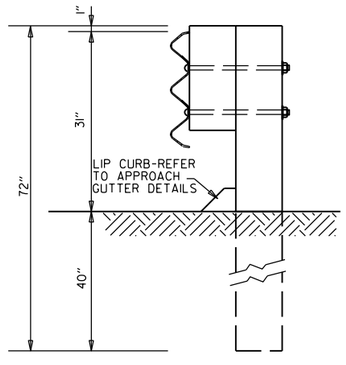
THRIE BEAM RAIL WITH STEEL TUBING BLOCKOUT
AND STEEL POST
POSTS 1-7



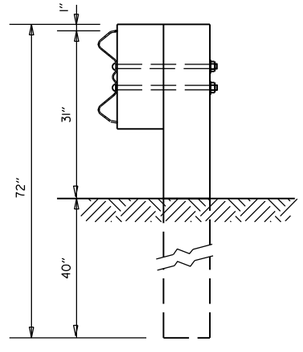
W-BEAM TO THRIE BEAM TRANSITION RAIL
WITH WOOD OR PLASTIC BLOCKOUT AND STEEL POST
POST 8



THRIE BEAM RAIL
WITH WOOD OR PLASTIC
BLOCKOUTS & WOOD POSTS
POSTS 1-6



THRIE BEAM RAIL
WITH WOOD OR PLASTIC
BLOCKOUT & WOOD POST
POST 7



W-BEAM TO THRIE BEAM
TRANSITION RAIL WITH WOOD OR
PLASTIC BLOCKOUT & WOOD POST
POST 8

GENERAL NOTES:

RAIL POSTS SHALL BE SET PERPENDICULAR TO THE ROADWAY PROFILE GRADE AND VERTICALLY IN CROSS SECTION.

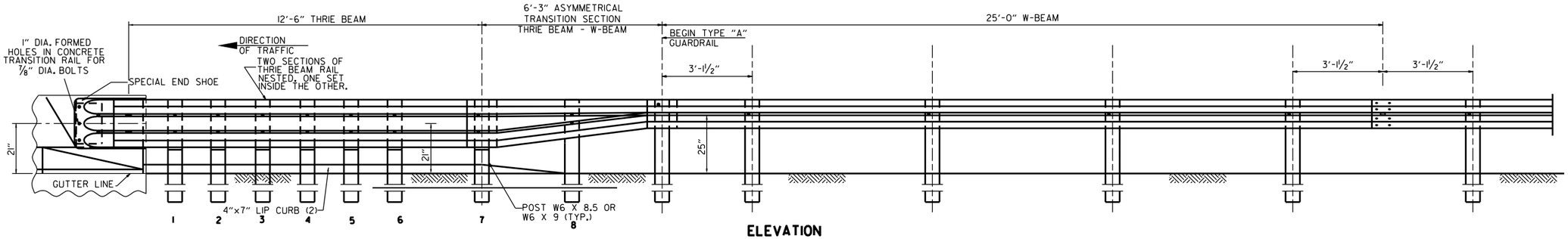
WOOD POSTS & WOOD BLOCKS SHALL BE EITHER DENSE NO. 1STRUCTURAL OR BETTER 9.7f (1400 f) OR NO. 1 1350 f SOUTHERN PINE.

DATE	REVISION	FILMED
11-07-19	RENAMED	
11-16-17	REVISED GUARDRAIL HEIGHT, CHANGED STD. DWG. NUMBER FROM GR-10A TO GR-11	
07-14-10	REVISED POST 8 DIMENSIONS	
11-29-07	ADDED PLASTIC BLOCKOUTS	
08-22-02	REVISED LIP CURB NOTE	
03-30-00	DRAWN & ISSUED	

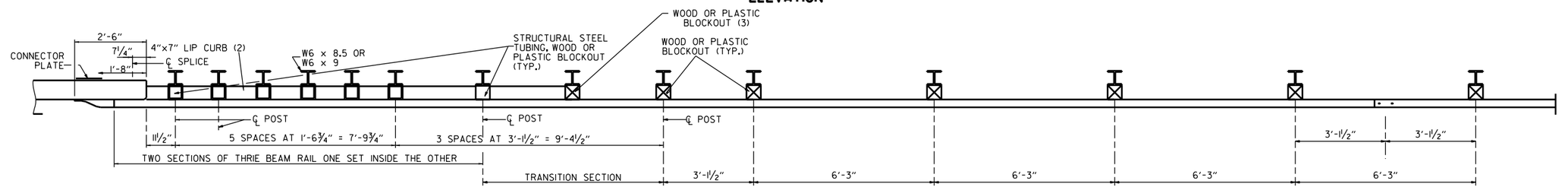
ARKANSAS STATE HIGHWAY COMMISSION

GUARDRAIL DETAILS

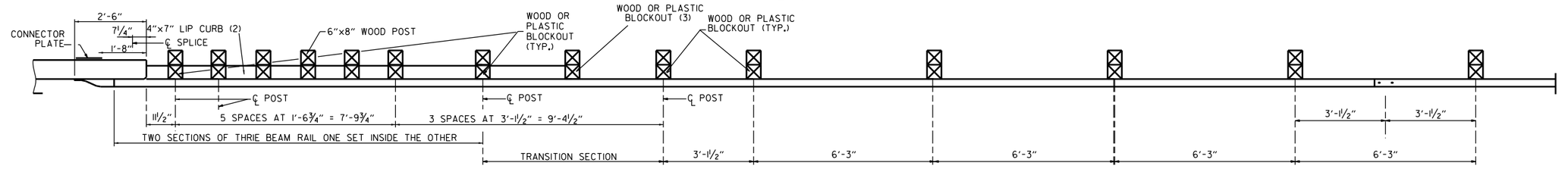
STANDARD DRAWING GR-11



ELEVATION



PLAN



PLAN

(1) VERIFY BOLT SPACING FROM RAIL TRANSITION PRODUCER.
(2) REFER TO APPROACH GUTTER DETAILS.
(3) LENGTH OF BLOCKOUT ON POST 8 TO BE MODIFIED TO FIT RAIL WIDTH.

THRIE BEAM GUARDRAIL CONNECTION AT BRIDGE ENDS

GENERAL NOTES:

THE THRIE BEAM RAIL, SPECIAL END SHOE, AND THE TRANSITION SECTION SHALL BE MADE OF STEEL AND SHALL BE 12 GAGE. ZINC COATING SHALL BE TYPE I.

RAIL POSTS SHALL BE SET PERPENDICULAR TO THE ROADWAY PROFILE GRADE AND VERTICALLY IN CROSS SECTION.

ALL BOLTS SHALL BE SUFFICIENT LENGTH TO EXTEND THROUGH THE FULL THICKNESS OF THE NUT AND NO MORE THAN 3/4" BEYOND IT.

ALL LAP SPLICES, INCLUDING SPECIAL END SHOES, SHALL BE MADE IN THE DIRECTION SHOWN ON STANDARD DRAWINGS GR-8 & GR-13.

REFER TO STD. DRWG. GR-11 FOR POST DETAILS.

USE THRIE BEAM GUARDRAIL COMPONENTS OF SAME MATERIAL FOR ENTIRE JOB.

THRIE BEAM POSTS SHALL BE SAME MATERIAL AS W-BEAM POSTS FOR ENTIRE JOB.

POSTS SHALL NOT BE PLACED AT SPLICE LOCATIONS ALONG W-BEAM RAILS.

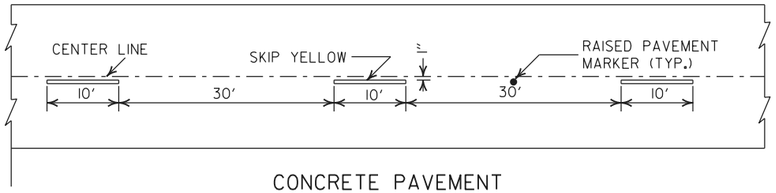
WOOD POSTS & WOOD BLOCKS SHALL BE EITHER DENSE NO. 1 STRUCTURAL OR BETTER 9.7f (1400 f) OR NO. 1 1350 f SOUTHERN PINE.

DATE	REVISION	FILMED
05-14-20	REVISED NOTES	
11-07-19	RENAMED & REVISED REFERENCES	
11-16-17	RE-DRAWN FROM STD. DWG. GR-10 & ISSUED	

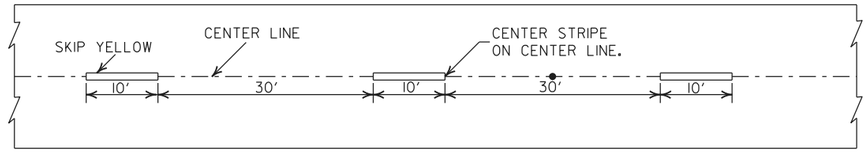
ARKANSAS STATE HIGHWAY COMMISSION

GUARDRAIL DETAILS

STANDARD DRAWING GR-12



CONCRETE PAVEMENT

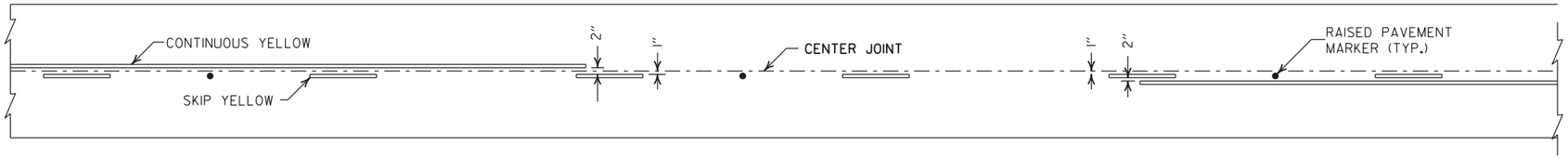


ASPHALT PAVEMENT

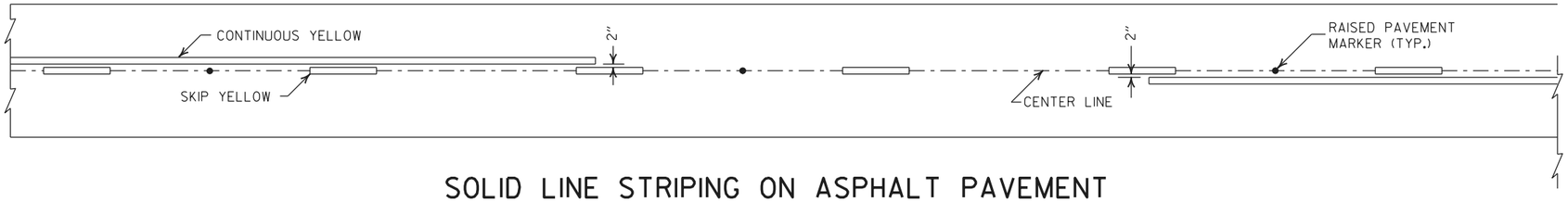
BROKEN LINE STRIPING

NOTES:

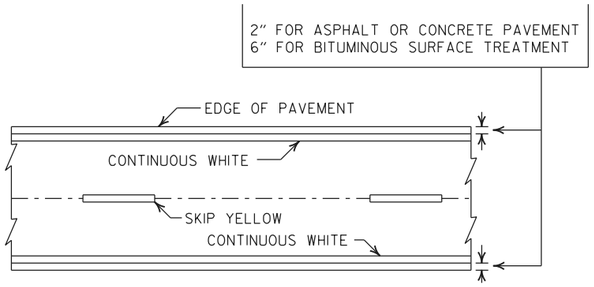
1. REFER TO THE STRIPING DETAILS FOR PAVEMENT MARKING LINE WIDTHS.
2. THIS DRAWING SHALL BE USED IN CONJUNCTION WITH THE LATEST REVISED ADDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."
3. RAISED PAVEMENT MARKERS SHALL BE PLACED ON AN 80 FEET SPACING UNLESS OTHERWISE SHOWN IN THE PLANS.



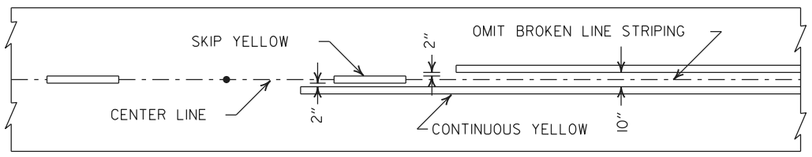
SOLID LINE STRIPING ON CONCRETE PAVEMENT



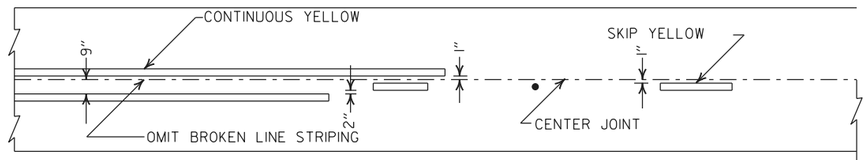
SOLID LINE STRIPING ON ASPHALT PAVEMENT



PAVEMENT EDGE LINE MARKING

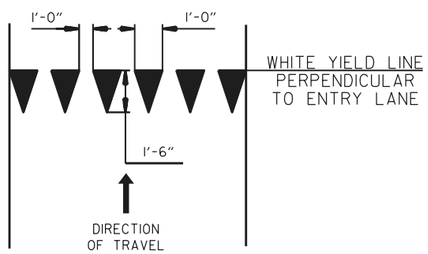


ASPHALT PAVEMENT

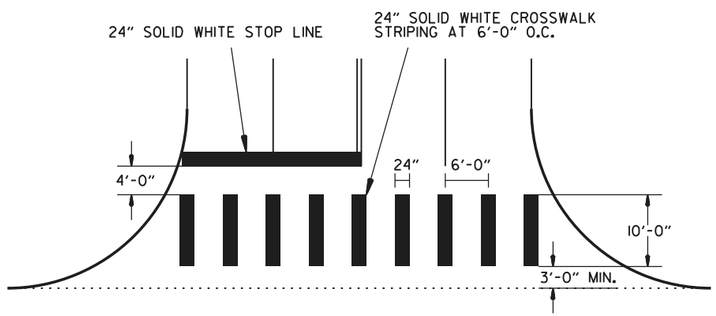


CONCRETE PAVEMENT

STRIPING AT ADJACENT NO PASSING LANES



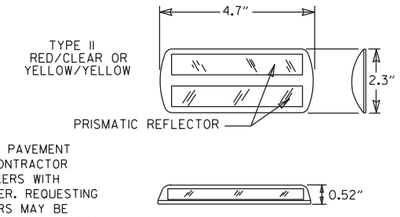
YIELD LINE DETAIL



CROSSWALK AND STOP LINE DETAILS

NOTE:
THE RED LENS OF THE TYPE II R.P.M. SHALL FACE THE INCORRECT TRAFFIC MOVEMENT.

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	REV	DESCRIPTION
04-09-26		REV. CROSSWALK & STOP LINE DETAILS
02-27-20		REV. STOP LINE DETAILS
06-01-17		ADDED YIELD LINE DETAIL
05-12-16		REVISED LINE WIDTHS, SPACING, & NOTES
09-12-13		REVISED DETAIL OF STANDARD RAISED PAVEMENT MARKERS

ARKANSAS STATE HIGHWAY COMMISSION

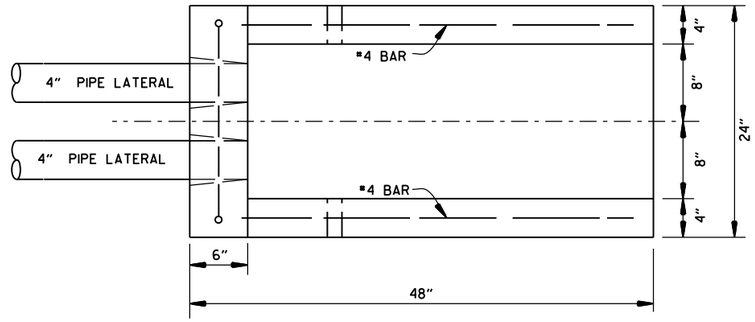
PAVEMENT MARKING DETAILS

DATE EFFECTIVE 04-09-2026 | STANDARD DRAWING | PM-1

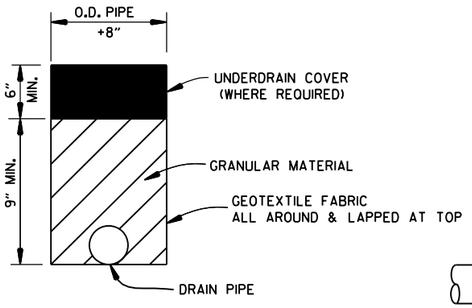
NOTE:

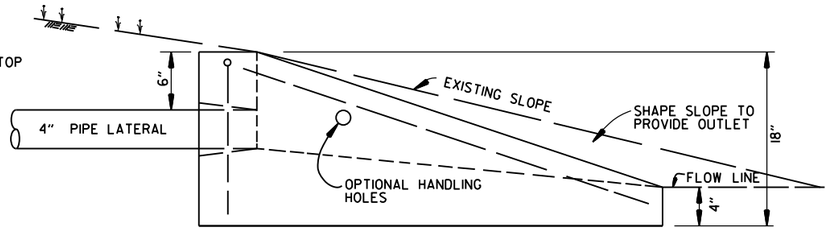
1. UNLESS OTHERWISE SPECIFIED ON THE PLANS, THE UNDERDRAIN COVER SHALL BE THOROUGHLY COMPACTED EARTH AND SHALL BE SUBSIDIARY TO PIPE UNDERDRAIN.

2. GRANULAR MATERIAL SHALL BE WRAPPED WITH GEOTEXTILE FABRIC. LAP FABRIC 12" OR THE WIDTH OF THE TRENCH AT THE TOP.

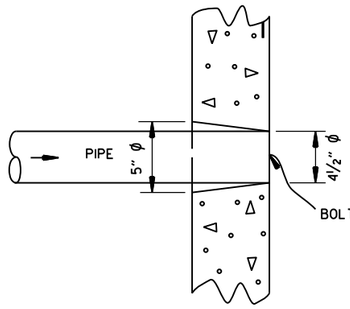


PLAN VIEW

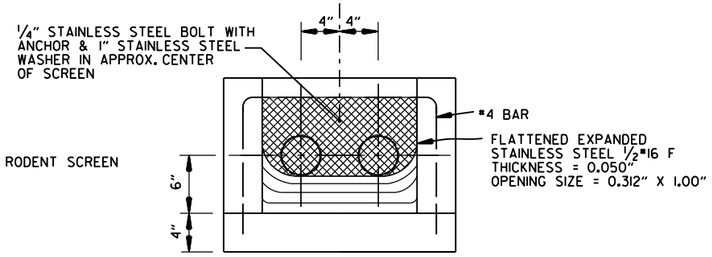




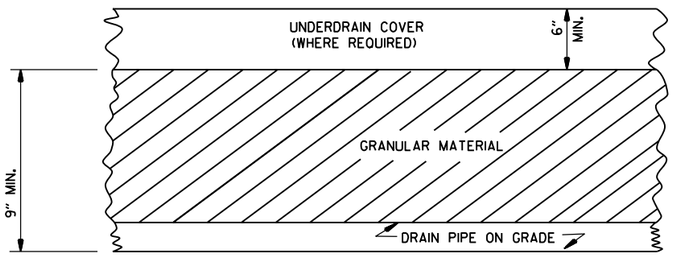
SIDE VIEW



DETAIL OF HOLE FOR 4" PIPE

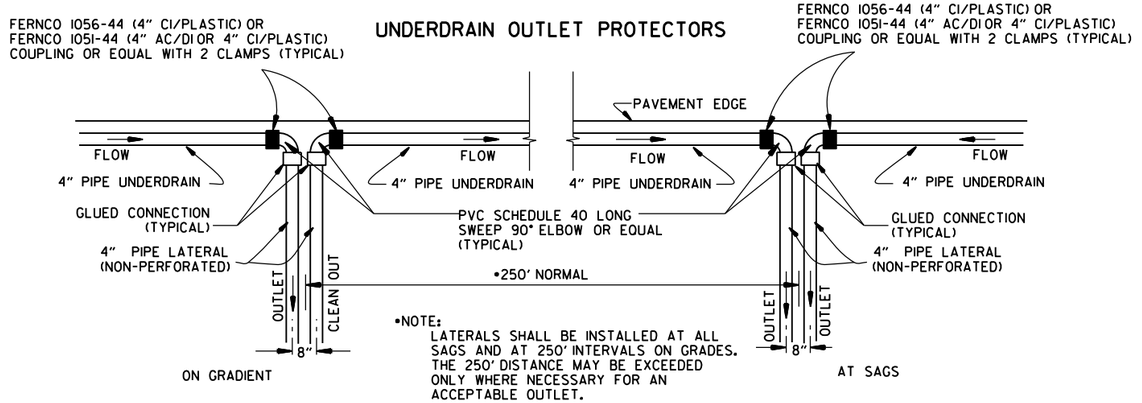


FRONT VIEW
(DETAIL OF RODENT SCREEN)



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 I. 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

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	300	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		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	300	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		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	250	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							
4° 15'	0.036	100		0.044	125		0.054	155		0.064	189		0.076	230		0.086	254	350	0.096	278		D MAX = 4° 15'								
4° 30'	0.036	100	200	0.046	129		0.056	160		0.068	198		0.078	235		0.090	264		0.098	283										
4° 45'	0.038	104		0.048	133		0.060	168		0.070	203		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	250	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'

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%

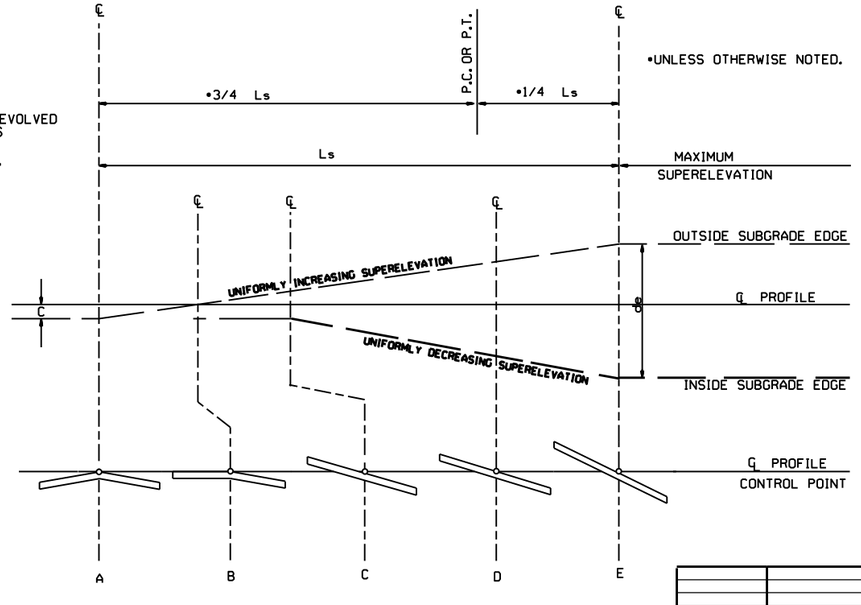
NOTE: MAINTAIN NORMAL CROWN ON INSIDE UNTIL SUPERELEVATION EXCEEDS 2C.

RATE OF SUPERELEVATION SHALL BE COMPUTED ON STRAIGHT LINE METHOD USING APPLICABLE Ls.

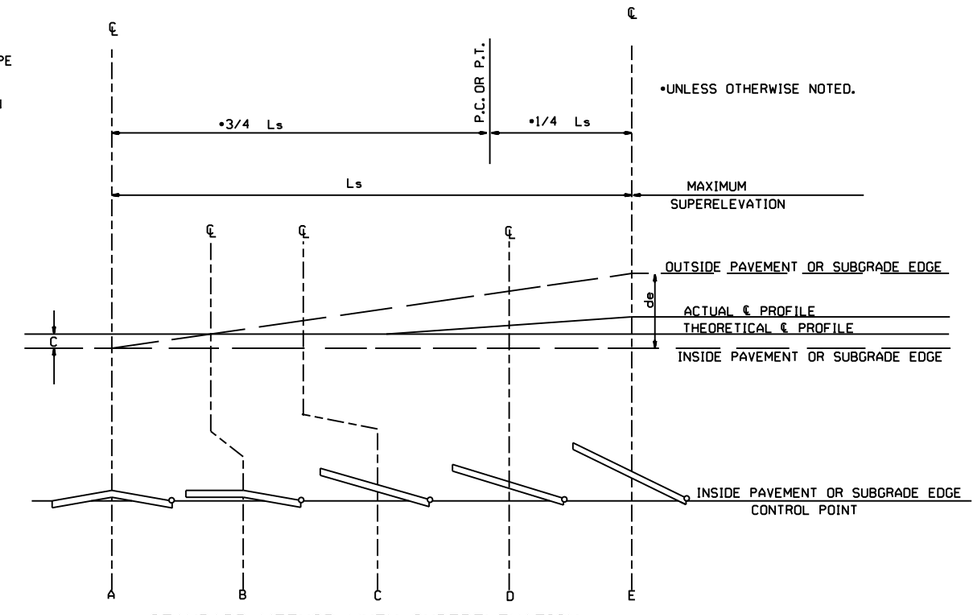
SUPERELEVATION FORMULA = $\frac{Lde}{Ls}$

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 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 FILMED
11-07-19	REVISED SUPERELEVATION TABLE	
10-18-96	ADDED FORMULA	
01-09-87	ISSUED	534-1-9-87

ARKANSAS STATE HIGHWAY COMMISSION

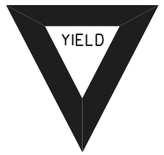
TABLES AND METHOD OF SUPERELEVATION FOR TWO-WAY TRAFFIC

STANDARD DRAWING SE-2

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"

R2-6aP

48"X36"

*USE 6" C LETTERS
**USE 4" D LETTERS

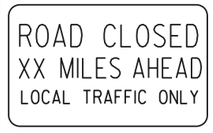
R5-1

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"

R2-11

36"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"

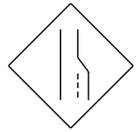
W3-1

STD. 36"X36"
SPECIAL 48"X48"

W3-2

STD. 36"X36"
SPECIAL 48"X48"

W4-2



STD. 36"X36"
FWY. 48"X48"

R56-1

STD. 18"X18"

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"

W8-11

STD. 36"X36"
FWY. 48"X48"

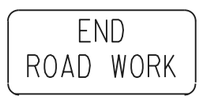
W8-9

STD. 36"X36"
FWY. 48"X48"

G20-1

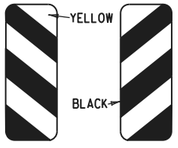
60"X24"

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"

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. R2-6aP PLAQUES SHALL BE MOUNTED BELOW AN APPLICABLE ADVANCE WARNING SIGN THAT IS LOCATED AT LEAST 1500' BUT NOT MORE THAN 1 MILE IN ADVANCE OF THE WORK ZONE. IF A SPEED LIMIT REDUCTION IS IN EFFECT, THE PLAQUE SHALL BE PLACED A MINIMUM OF 500' IN ADVANCE OF THE W3-5 "REDUCED SPEED AHEAD" SIGN. R2-11 SIGNS SHALL BE INSTALLED AT OR NEAR THE DOWNSTREAM END OF THE WORK ZONE. SEE STANDARD DRAWINGS TC-2, TC-3, AND TC-6 FOR TYPICAL PLACEMENT LOCATIONS.

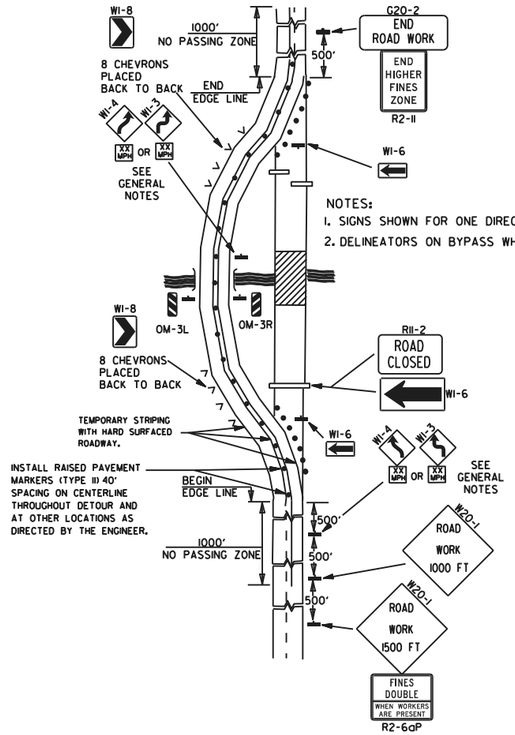
• NOTE: SUPPORTS FOR SIGNS, BARRICADES, AND VERTICAL PANELS THAT ARE DIFFERENT FROM THE REQUIREMENTS SHOWN IN NOTES 4 & 5, BUT MEET THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH), WILL BE ACCEPTED. COMPLIANCE WITH THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) IS REQUIRED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

DATE REV	DESCRIPTION
08-14-25	REPLACED R55-1 WITH R2-6aP, ADDED R2-11 & REVISED NOTE 10
11-07-19	REVISED FOR MASH
04-13-17	DELETED RSP-1 & ADDED W21-5a
09-02-15	REVISED REDUCED SPEED LIMIT AHEAD SIGNS REVISED ROAD WORK NEXT XX MILES
12-15-11	REVISED W24-1

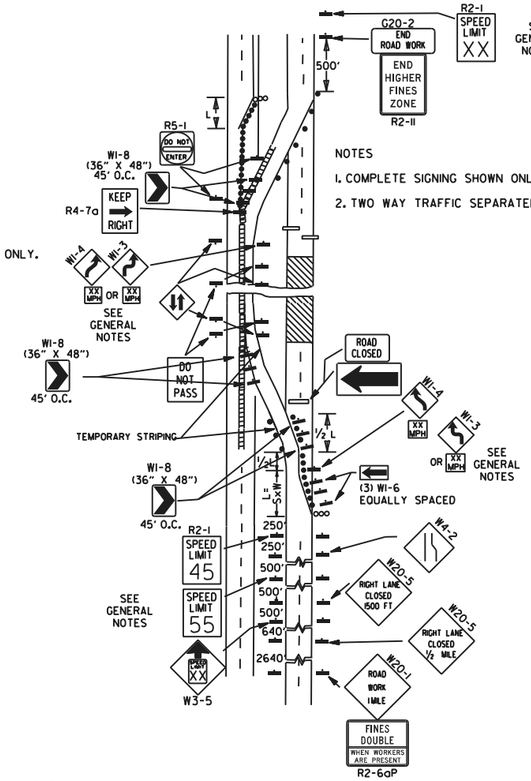
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

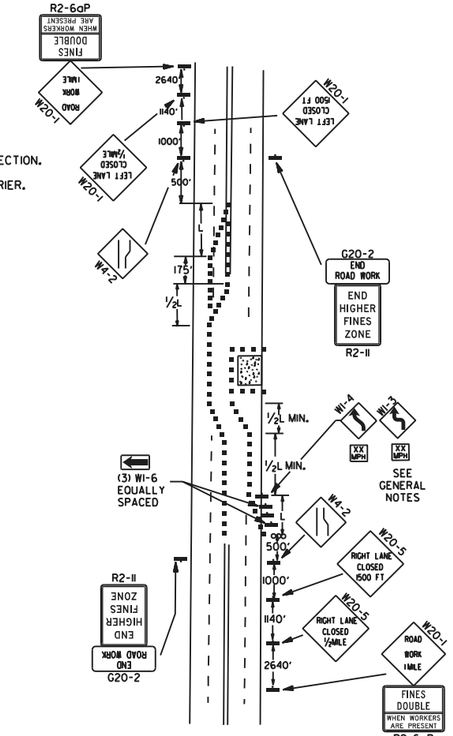
DATE EFFECTIVE 08-14-2025 | STANDARD DRAWING | TC-1



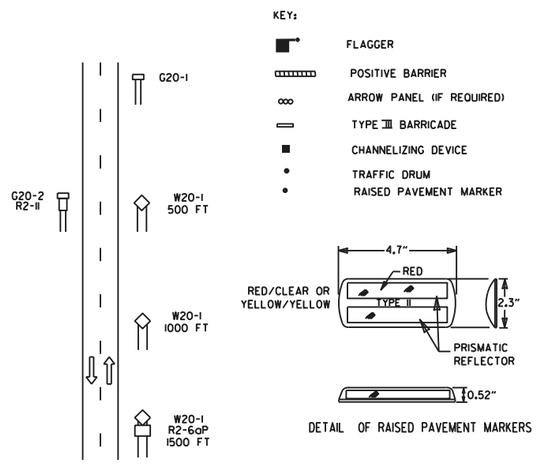
(A) TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES ON A 2-LANE HIGHWAY WHERE THE ENTIRE ROADWAY IS CLOSED AND A BYPASS DETOUR IS PROVIDED.



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



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



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:

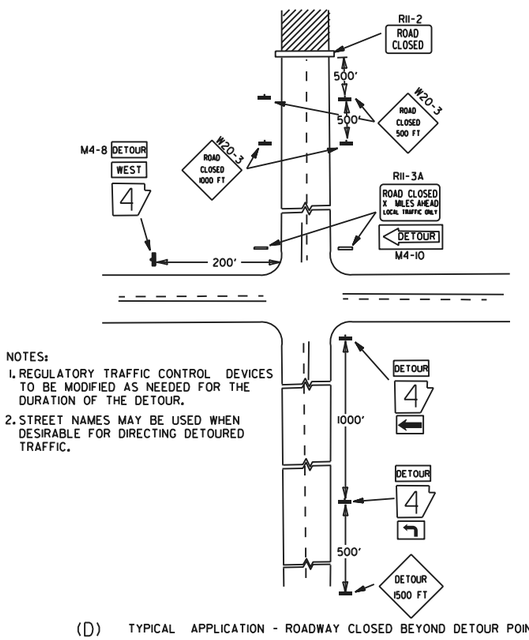
L= MINIMUM LENGTH OF TAPER.

S= NUMERICAL VALUE OF POSTED SPEED LIMIT PRIOR TO WORK OR 85TH PERCENTILE SPEED.

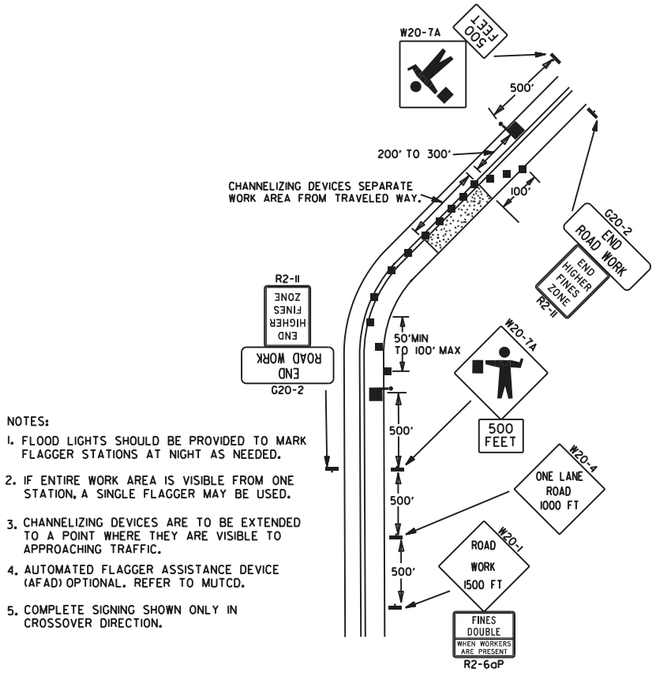
W= WIDTH OF OFFSET.

GENERAL NOTES:

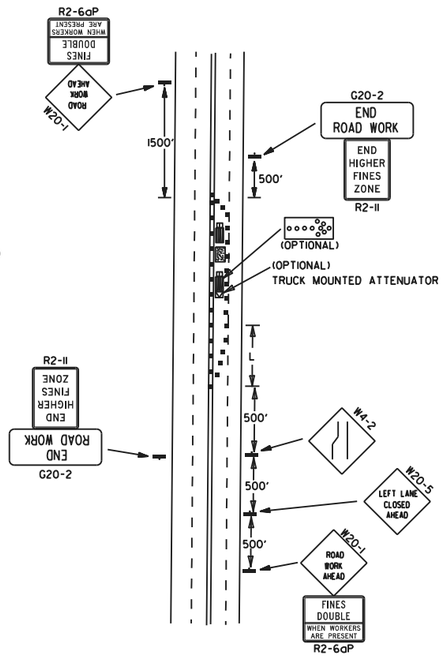
1. THE MAINTENANCE DIVISION SHALL CONDUCT A BALL BANK STUDY TO DETERMINE THE ADVISORY SPEED LIMIT PRIOR TO OPENING TO TRAFFIC. THE ADVISORY SPEED WILL BE POSTED ON W1-3 OR W1-4 CURVE WARNING SIGNS. USE W1-4 WHEN SPEED IS GREATER THAN 30MPH AND W1-3 WHEN 30MPH OR LESS
2. WHEN THE EXISTING SPEED LIMIT 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).



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



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



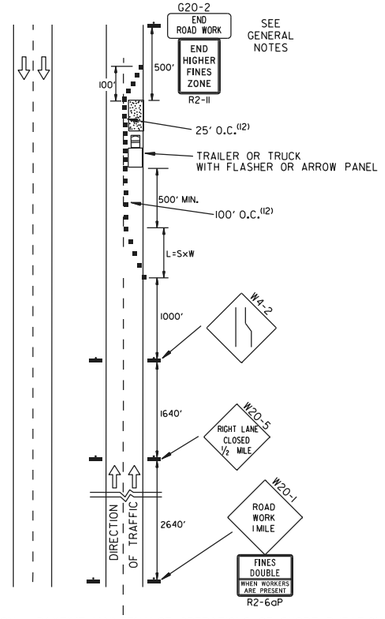
(F) TYPICAL APPLICATION - 4-LANE UNDIVIDED ROADWAY WITH INSIDE LANE CLOSED.

DATE REV	DESCRIPTION
08-14-25	ADDED R2-6aP AND R2-11
05-20-21	REVISED NOTE 7
11-07-19	REVISED NOTE 1. ADDED NOTE 9
09-02-15	REVISED NOTE 2, ADDED NOTE 8, REVISED DRAWING (AT & REPLACED R2-5A WITH W3-5
09-12-13	REVISED DETAIL OF RAISED PAVEMENT MARKINGS

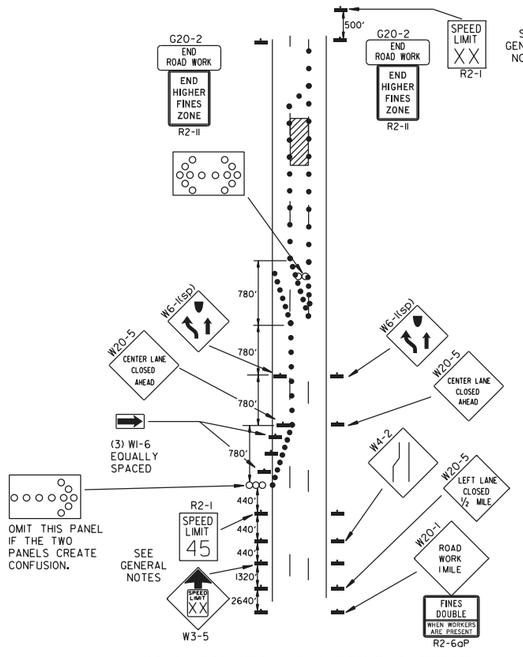
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

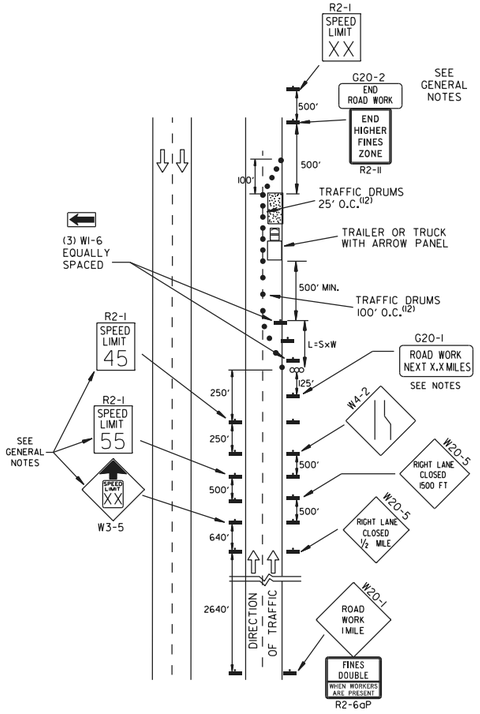
DATE EFFECTIVE	STANDARD DRAWING	TC-2
08-14-2025		



(A) TYPICAL APPLICATION - DAYTIME MAINTENANCE OPERATIONS OF SHORT DURATION ON A 4-LANE DIVIDED ROADWAY WHERE HALF OF THE ROADWAY IS CLOSED.



(B) TYPICAL APPLICATION - 3-LANE ONEWAY ROADWAY WHERE CENTER LANE IS CLOSED.



(C) TYPICAL APPLICATION - CONSTRUCTION OPERATIONS OF INTERMEDIATE TO LONG TERM DURATION ON A 4-LANE DIVIDED ROADWAY WHERE HALF OF THE ROADWAY IS CLOSED.

KEY:

○○○ ARROW PANEL (IF REQUIRED)

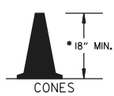
■ CHANNELIZING DEVICE

● TRAFFIC DRUM

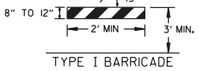
GENERAL NOTES:

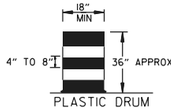
1. A SPEED LIMIT REDUCTION MAY BE IMPLEMENTED ONLY WHEN DESIGNATED IN THE PLAN OR WHEN RECOMMENDED BY THE ROADWAY DESIGN DIVISION.
2. WHEN THE EXISTING SPEED LIMIT IS 55MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 45MPH, THE R2-I(55) SHALL BE OMITTED AND THE W3-5 SHALL BE INSTALLED AT THAT LOCATION. ADDITIONAL R2-I 45MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-I(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-I(45) SHALL BE OMITTED. ADDITIONAL R2-I 55MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-I(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 SHOULD BE INSTALLED 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. THE DISTANCE DISPLAYED ON THE G20-1 SIGN SHALL BE STATED TO THE NEAREST WHOLE MILE.
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).
12. ONLY WHERE SPACE RESTRICTIONS DO NOT ALLOW FOR TRAFFIC DRUMS, TUBULAR MARKERS MAY BE USED AT 50' O.C. IN STABILIZATION ZONES AND AT 10' O.C. DIRECTLY ADJACENT TO CONSTRUCTION OPERATIONS AND AT EXIT TAPERS. TUBULAR MARKERS SHALL BE STABILIZED WITH WEIGHTED BASES IN ACCORDANCE WITH THE M.U.T.C.D.

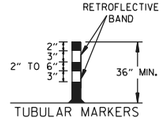
CHANNELIZING DEVICES

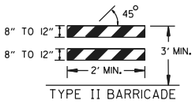


* WHEN CONES ARE USED ON FREEWAYS AND MULTI-LANE HIGHWAYS, THEY SHALL BE 28" MIN. DURING HOURS OF DARKNESS, 28" CONES SHALL BE USED ON ALL ROADWAYS, AND SHALL BE REFLECTORIZED IN ACCORDANCE WITH THE M.U.T.C.D.

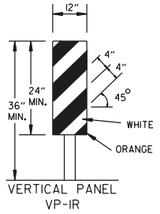


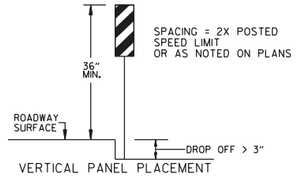


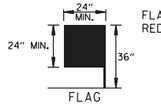




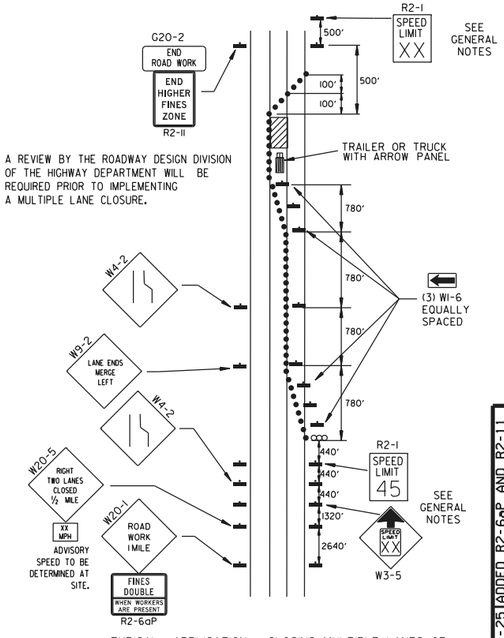
NOTE:
FOR ALL ROAD CLOSURES, THE TYPE III BARRICADES SHALL BE OF SUFFICIENT LENGTH TO EXTEND ACROSS ENTIRE ROADWAY.







FLAG SHALL BE OF GOOD GRADE RED MATERIAL



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.

TRAFFIC CONTROL DEVICES

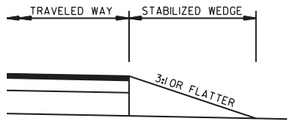
NON-INTERSTATE			
VERTICAL DIFFERENTIAL	LOCATION	TRAFFIC CONTROL	
		≤ 45 MPH	> 45 MPH
≤ 1"	CENTERLINE	W8-11	W8-11
> 1" ≤ 3"	CENTERLINE	W8-11 AND CENTERLINE LANE STRIPING	W8-11 AND CENTERLINE LANE STRIPING
> 3"	CENTERLINE	STANDARD LANE CLOSURE[6]	STANDARD LANE CLOSURE[6]
≤ 3"	EDGE OF TRAVELED LANE OR 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

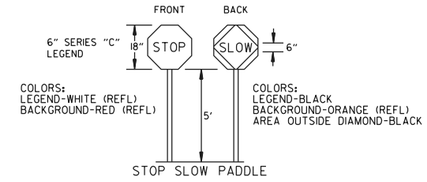
INTERSTATE AND NON-INTERSTATE		
FORESLOPE	HEIGHT	TRAFFIC CONTROL
1:1	> 2 FT	PRECAST CONCRETE BARRIER
2:1	≤ 5 FT	TRAFFIC DRUMS
2:1	> 5 FT	PRECAST CONCRETE BARRIER
Flatter than 2:1	N/A	TRAFFIC DRUMS

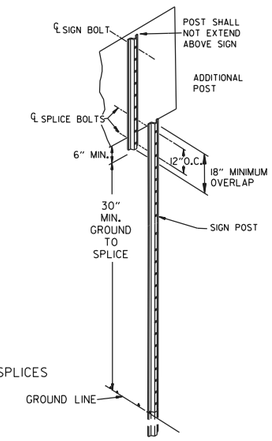
GENERAL NOTES:

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).



NOTE:
MATERIALS FOR THE STABILIZED WEDGE SHALL MEET THE REQUIREMENTS PROVIDED IN SECTION 603.02 OF THE STANDARD SPECIFICATIONS.

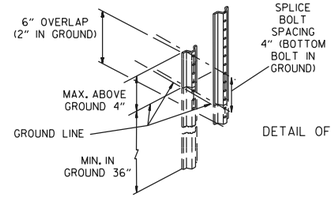




NOTES:
USE SPLICES ONLY WHEN NECESSARY FOR INSTALLATION. TYPICAL INSTALLATION SHOULD HAVE NO SPLICES (SEE STD. DRAWING NO. SHS-2)

NORMAL INSTALLATIONS WILL REQUIRE 1/4" DIA. BOLTS TO MOUNT SIGNS TO POST AND 5/16" DIA. BOLTS TO ASSEMBLE THE VARIOUS POST SUPPORTS. EACH OF THESE BOLTS SHALL BE CARRIAGE BOLTS.

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



DATE REV	DESCRIPTION
08-14-25	ADDED R2-6aP AND R2-11
05-22-25	REVISED TRAFFIC CONTROL DEVICES AND NOTES. ADDED NOTE 12.
08-12-21	REVISED TRAFFIC CONTROL DEVICES AND NOTES
05-20-21	REVISED NOTE 10
02-27-20	REVISED TRAFFIC CONTROL DEVICES DETAILS

ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

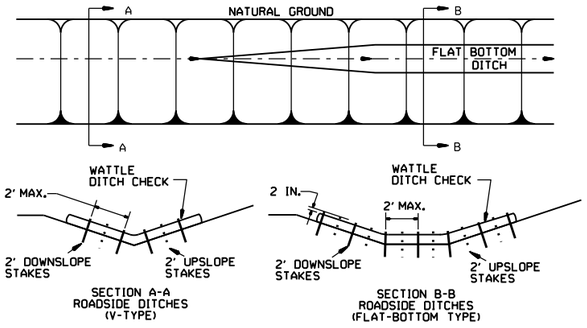
DATE EFFECTIVE 08-14-2025

STANDARD DRAWING

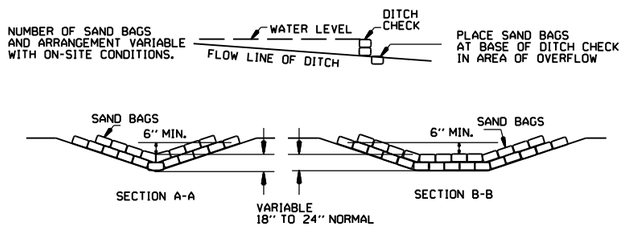
TC-3

GENERAL NOTES

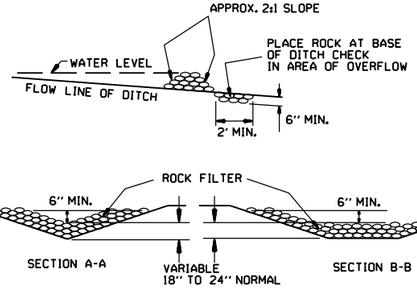
INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.



WATTLE DITCH CHECK (E-1)



SAND BAG DITCH CHECK (E-5)

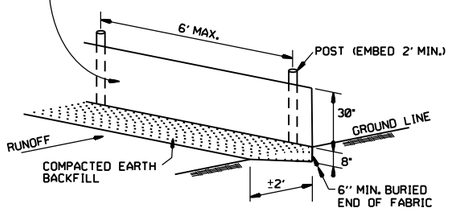


ROCK DITCH CHECK (E-6)

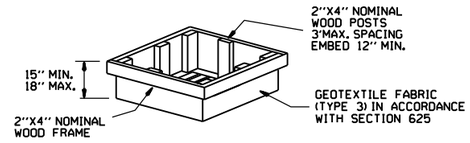
GENERAL NOTES

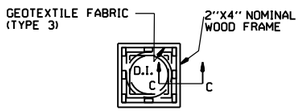
GEOTEXTILE FABRIC (TYPE 4) IN ACCORDANCE WITH SECTION 625

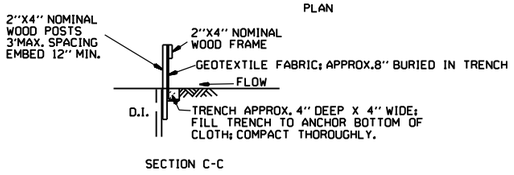
GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.



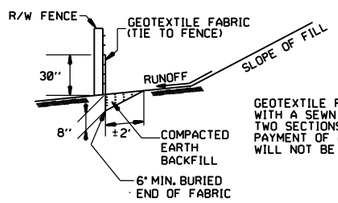
SILT FENCE (E-11)





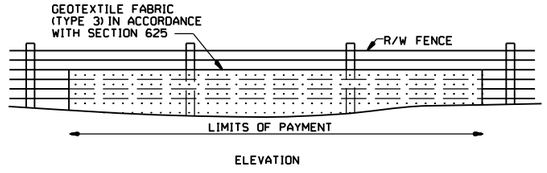


DROP INLET SILT FENCE (E-7)



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.



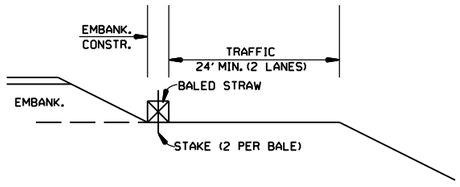
SILT FENCE ON R/W FENCE (E-4)

GENERAL NOTES

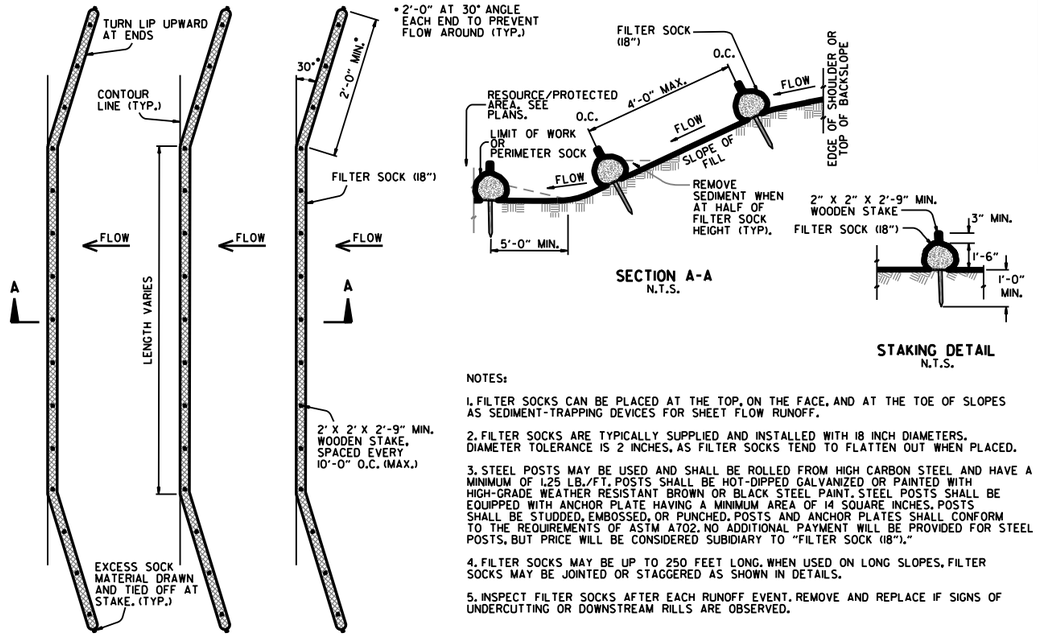
1. STRAW BALES SHALL BE INSTALLED SO THAT THE BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES. THE BALES SHALL BE A MINIMUM OF 30 INCHES IN LENGTH.

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.

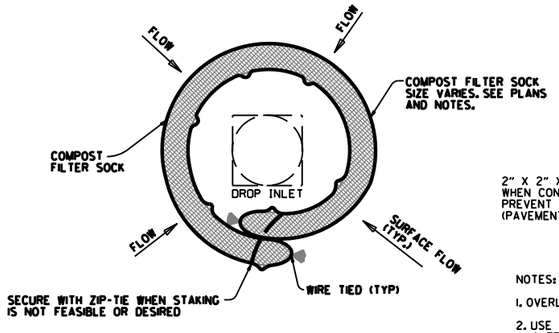
2. FILTER SOCKS ARE TYPICALLY SUPPLIED AND INSTALLED WITH 18 INCH DIAMETERS. DIAMETER TOLERANCE IS 2 INCHES, AS FILTER SOCKS TEND TO FLATTEN OUT WHEN PLACED.

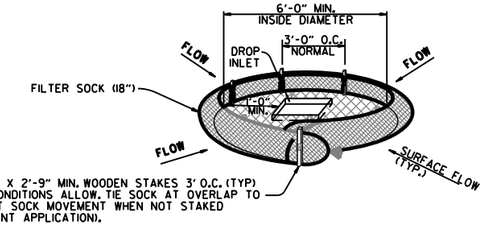
3. STEEL POSTS MAY BE USED AND SHALL BE ROLLED FROM HIGH CARBON STEEL AND HAVE A MINIMUM OF 1.25 LB./FT. POSTS SHALL BE HOT-DIPPED GALVANIZED OR PAINTED WITH HIGH-GRADE WEATHER RESISTANT BROWN OR BLACK STEEL PAINT. STEEL POSTS SHALL BE EQUIPPED WITH ANCHOR PLATE HAVING A MINIMUM AREA OF 14 SQUARE INCHES. 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

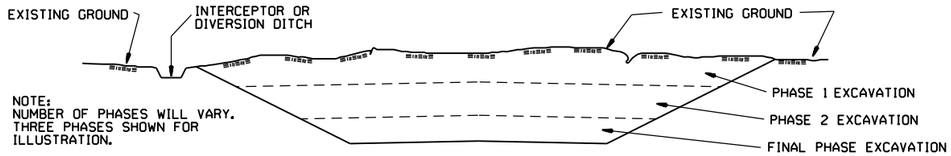
STANDARD DRAWING TEC-1

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



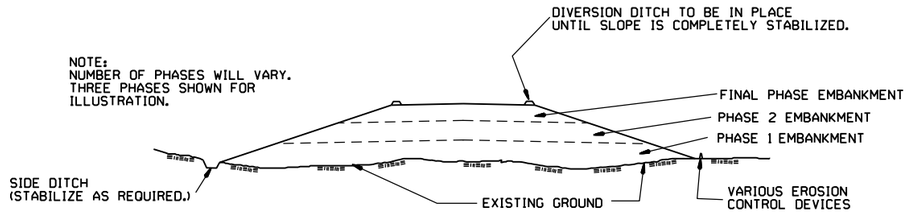
GENERAL NOTE

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.

11-03-94	CORRECTED SPELLING	
6-2-94	Drawn & Issued	6-2-94
DATE	REVISION	FILMED

ARKANSAS STATE HIGHWAY COMMISSION

TEMPORARY EROSION CONTROL DEVICES

STANDARD DRAWING TEC-3