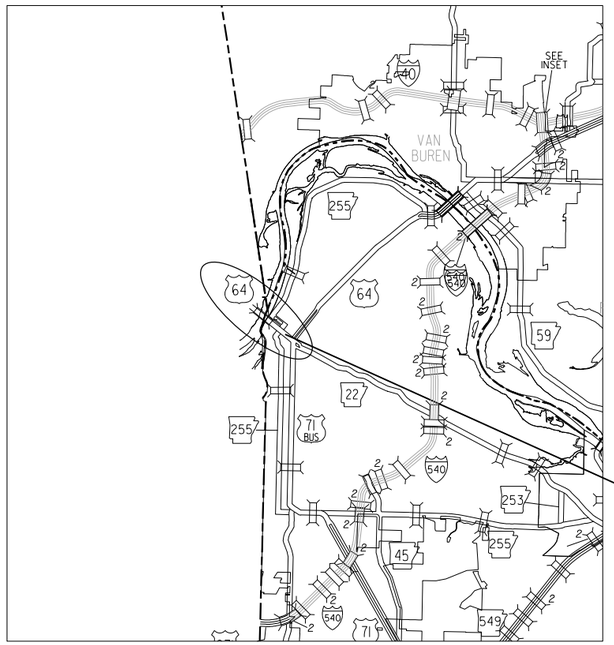
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040898	1	33
		HWY. 64 ARKANSAS RIVER BRIDGE DECK REHAB. (S)				
②						

ARKANSAS DEPARTMENT OF TRANSPORTATION
CONSTRUCTION PLANS FOR STATE HIGHWAY

HWY. 64 ARKANSAS RIVER BRIDGE DECK REHAB. (S)

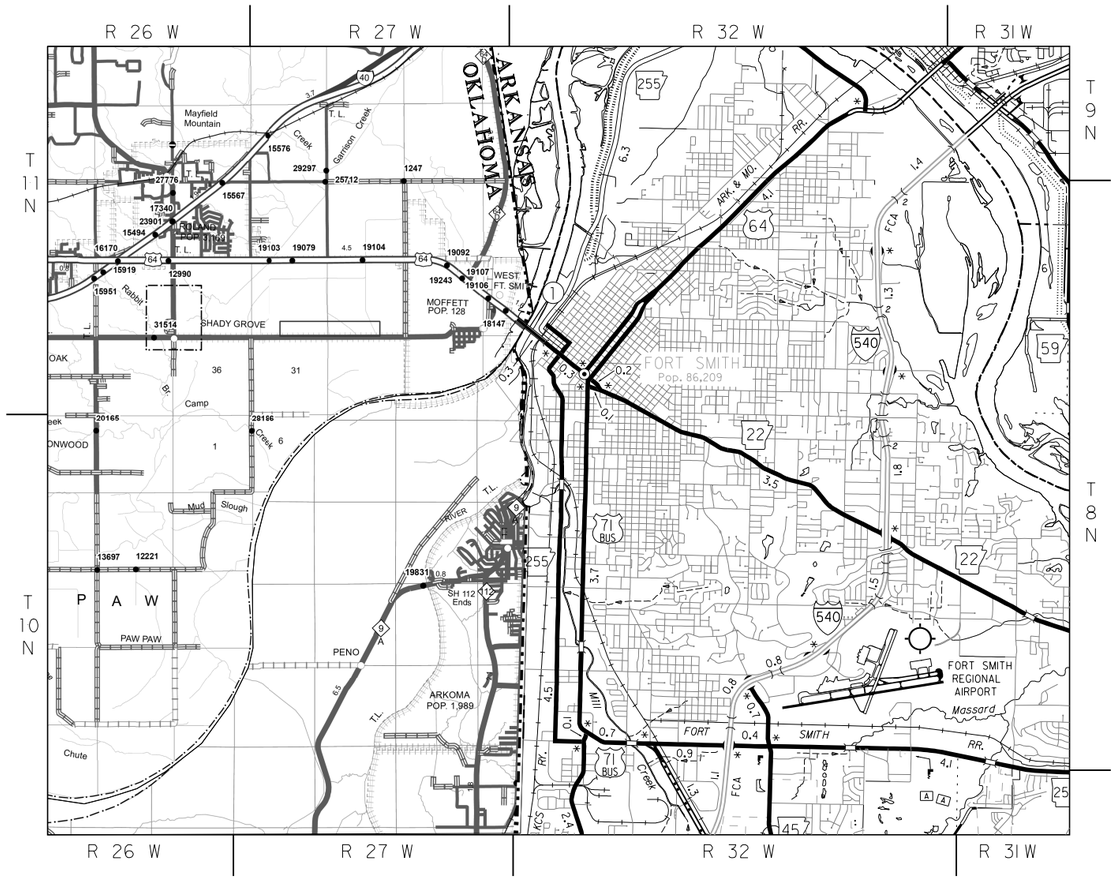
SEBASTIAN COUNTY
ROUTE 64 SECTION 0
JOB 040898
FED. AID PROJ. HIPFCS-C0VD(6)

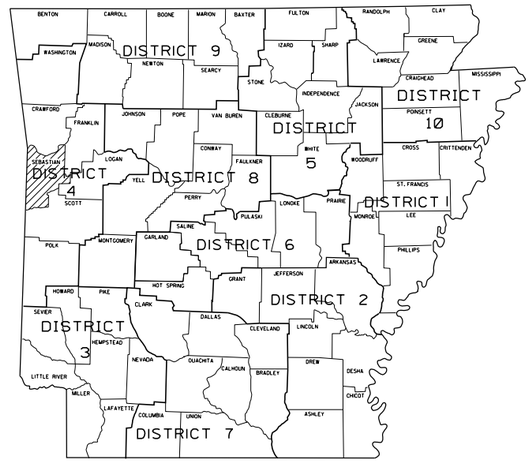


VICINITY MAP

PROJECT LOCATION

NOT TO SCALE





ARKANSAS HWY. DIST. 4

BRIDGE CONSTRUCTION DATA

① HWY. 64, SEC. 0
LOG MILE 0.001
HWY. 64 OVER ARKANSAS RIVER
3087'-0" TOTAL LENGTH
28'-0", 28'-0" CLEAR ROADWAY
BRIDGE NO. 05275

OKLAHOMA PROJECT REFERENCE DATA
SEQUOYAH COUNTY, OKLAHOMA
PROJECT NUMBER: STP-268N(097)PM
JOB PIECE NO.: 34671(04)
NBI NO.: 18147
STRUCTURE NO.: 6810 2148X

PROJECT COORDINATES

LATITUDE	N 35°23'43"
LONGITUDE	W 92°26'14"

GROSS LENGTH OF PROJECT	3737.50	FEET OR	0.708	MILES
NET " " ROADWAY	650.50	" "	0.123	MILES
NET " " BRIDGES	3087.00	" "	0.585	MILES
NET " " PROJECT	3737.50	" "	0.708	MILES

GARVER LLC CERTIFICATE OF AUTHORIZATION No. 766 ARKANSAS–ENGINEER

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No. 14994 DUSTIN L. TACKETT

Digitally Signed 01/25/2023

WBCallaway 1/25/2023 5:51:18 PM
WORKSPACE: AHTD
L:\2021\21T0026 - ARDOT 040898 AR River Bridge Deck Rehab\Drawings\r040898_TL_OLDGN
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040898	2	33
②		INDEX OF SHEETS AND STANDARD DRAWINGS				

STATE OF ARKANSAS
Dustin L. Tackett
LICENSED PROFESSIONAL ENGINEER
No.14994
DUSTIN L. TACKETT
Digitally Signed 01/25/2023

INDEX OF SHEETS

BRIDGE STANDARD DRAWINGS

DRWG.NO.	TITLE	DATE
55007	STANDARD DETAILS FOR STEEL BRIDGE STRUCTURES	02-11-16
55009	STANDARD DETAILS FOR NEOPRENE STRIP SEAL JOINTS	02-11-16
55060	STANDARD DETAILS FOR HYDRODEMOLITION AND LMC OVERLAY SLAB ON BEAM/GIRDER BRIDGES	06-25-20
55064	STANDARD DETAILS FOR JONT REPAIRS & MODIFICATION	11-07-19
55065	STANDARD DETAILS FOR BACKWALL REPAIRS	11-07-19

ROADWAY STANDARD DRAWINGS

DRWG.NO.	TITLE	DATE
CPTJ-6A	TRANSVERSE & LONGITUDINAL JOINTS FOR CONCRETE PAVEMENT (NON-REINFORCED)	11-07-19
PM-1	PAVEMENT MARKING DETAILS	02-27-20
TC-1	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	11-07-19
TC-2	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	05-20-21
TC-3	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	08-12-21
TC-4	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION-TEMPORARY PRECAST BARRIER	11-07-19
TC-5	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION-TEMPORARY PRECAST BARRIER	11-07-19
TEC-1	TEMPORARY EROSION CONTROL DEVICES	11-16-17

WBCallaway 1/25/2023 5:53:58 PM
WORKSPACE: AHTD
L:\2021\21T0026 - ARDOT 040898 AR River Bridge Deck Rehab\Drawings\r040898_IDX_01.DGN
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
2/23/2023		6	ARK.	040898	3	33
②		GOVERNING SPECIFICATIONS AND GENERAL NOTES				

STATE OF ARKANSAS
Dustin L. Tackett
LICENSED PROFESSIONAL ENGINEER
No.14994
DUSTIN L. TACKETT

Digitally Signed 02/23/2023

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
FHWA-1273___	SUPPLEMENT - TRAINING PROGRAM JOB 040898
100-3_____	CONTRACTOR'S LICENSE
100-4_____	DEPARTMENT NAME CHANGE
102-2_____	ISSUANCE OF PROPOSALS
105-4_____	MAINTENANCE DURING CONSTRUCTION
107-2_____	RESTRAINING CONDITIONS
108-1_____	LIQUIDATED DAMAGES
108-2_____	WORK ALLOWED PRIOR TO ISSUANCE OF WORK ORDER
303-1_____	AGGREGATE BASE COURSE
306-1_____	QUALITY CONTROL AND ACCEPTANCE
307-1_____	CEMENT
308-1_____	CEMENT
400-1_____	TACK COATS
400-4_____	DESIGN AND QUALITY CONTROL OF ASPHALT MIXTURES
400-5_____	PERCENT AIR VOIDS FOR ACHM MIX DESIGNS
400-6_____	LIQUID ANTI-STRIP ADDITIVE
400-7_____	TRACKLESS TACK
404-3_____	DESIGN OF ASPHALT MIXTURES
410-1_____	CONSTRUCTION REQUIREMENTS AND ACCEPTANCE OF ASPHALT CONCRETE PLANT MIX COURSES
410-4_____	EVALUATION OF ACHM SUBLOT REPLACEMENT MATERIAL
501-2_____	CEMENT
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)
621-1_____	FILTER SOCKS
800-1_____	STRUCTURES
802-4_____	CEMENT
804-2_____	REINFORCING STEEL FOR STRUCTURES
JOB 040898___	BIDDING REQUIREMENTS AND CONDITIONS
JOB 040898___	BRIDGE DECK REPAIR FOR LATEX MODIFIED CONCRETE OVERLAYS
JOB 040898___	BROADBAND INTERNET SERVICE FOR ASPHALT CONCRETE PLANT
JOB 040898___	BUY AMERICA - CONSTRUCTION MATERIALS
JOB 040898___	CARGO PREFERENCE ACT REQUIREMENTS
JOB 040898___	CLASS C FLY ASH IN PORTLAND CEMENT CONCRETE PAVEMENT AND CLASS S(AE) CONCRETE
JOB 040898___	CONCRETE BRIDGE DECK CURING AND SURFACE TREATMENT RESTRICTIONS
JOB 040898___	CONCRETE REPAIRS
JOB 040898___	CONSTRUCTION IN SPECIAL FLOOD HAZARD AREAS
JOB 040898___	DETAILS FOR RIVER TRAFFIC SAFETY
JOB 040898___	DISADVANTAGED BUSINESS ENTERPRISE BIDDER'S RESPONSIBILITIES
JOB 040898___	ESTABLISHING CONTRACT TIME – WORKING DAY CONTRACT
JOB 040898___	GOALS FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION
JOB 040898___	HYDRODEMOLITION - CLASS 1
JOB 040898___	INSURANCE, CONSTRUCTION, AND FLAGGING REQUIREMENTS ON RAILROAD PROPERTY (A&M)
JOB 040898___	INSURANCE, CONSTRUCTION, AND FLAGGING REQUIREMENTS ON RAILROAD PROPERTY (FSR)
JOB 040898___	LATEX MODIFIED CONCRETE OVERLAY
JOB 040898___	LIQUIDATED DAMAGES PROCEDURE FOR BID LETTINGS
JOB 040898___	MANDATORY ELECTRONIC CONTRACT
JOB 040898___	MANDATORY ELECTRONIC DOCUMENT SUBMITTAL
JOB 040898___	PARTNERING REQUIREMENTS
JOB 040898___	PCC PAVEMENT SURFACE SMOOTHNESS (IRI)
JOB 040898___	PRICE ADJUSTMENT FOR FUEL
JOB 040898___	PROHIBITION OF CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT
JOB 040898___	REACTIVE AGGREGATE TESTING
JOB 040898___	SPECIAL SAFETY REQUIREMENTS FOR BRIDGES
JOB 040898___	SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS
JOB 040898___	TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
JOB 040898___	TUBULAR MARKERS
JOB 040898___	VALUE ENGINEERING
JOB 040898___	WARM MIX ASPHALT

GENERAL NOTES

1. ALL PIPE LINES, POWER, TELEPHONE, AND TELEGRAPH LINES TO BE MOVED OR LOWERED BY THE RESPECTIVE OWNERS AS PER AGREEMENT WITH SUCH OWNERS.

2. 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.

3. ALL LAND MONUMENTS LOCATED WITHIN THE CONSTRUCTION AREA SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 107.12 OF THE STANDARD SPECIFICATIONS.

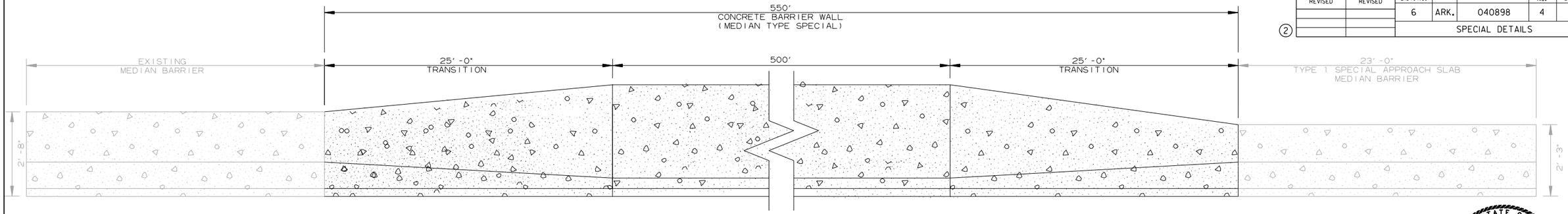
4. THE SEQUENCE AS SHOWN ON THE MAINTENANCE OF TRAFFIC PLANS IS A GENERAL OUTLINE FOR THE CONSTRUCTION OF THIS PROJECT, AND IN NO WAY IS IT INTENDED TO COVER EVERY ITEM IN THE PROJECT. ITEMS NOT CRITICAL TO THE CONSTRUCTION SEQUENCE MAY BE CONSTRUCTED IN ANY STAGE AS APPROVED BY THE RESIDENT ENGINEER.

5. BRIDGE ANALYSIS SHALL BE REQUIRED PER SECTION 105.14 OF THE STANDARD SPECIFICATIONS

6. THE ENGINEER MAY REQUIRE THE CONTRACTOR TO MODIFY THEIR SCHEDULE, DURING WORK, WHEN SPECIAL EVENTS OR OCCURENCES MAY CAUSE TRAFFIC TO BECOME CONGESTED.

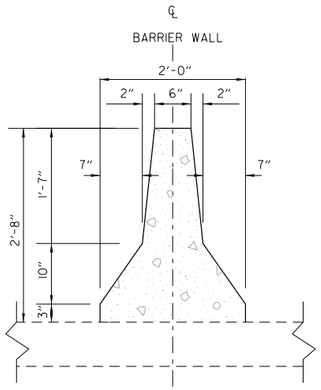
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040898	4	33
		SPECIAL DETAILS				

(2)

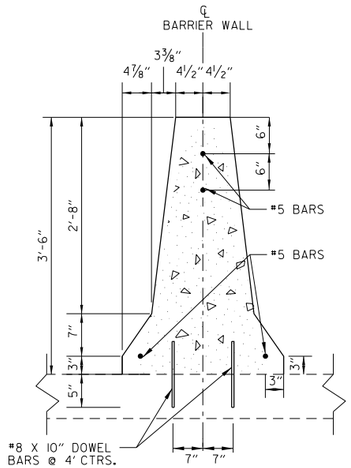


DETAIL FOR BARRIER WALL REPLACEMENT AND TRANSITION

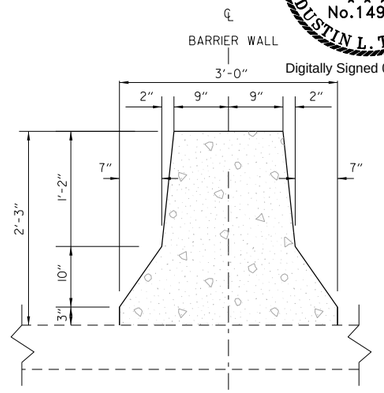
STATE OF ARKANSAS
Dustin L. Tackett
LICENSED PROFESSIONAL ENGINEER
No.14994
DUSTIN L. TACKETT
Digitally Signed 01/25/2023



EXISTING MEDIAN BARRIER



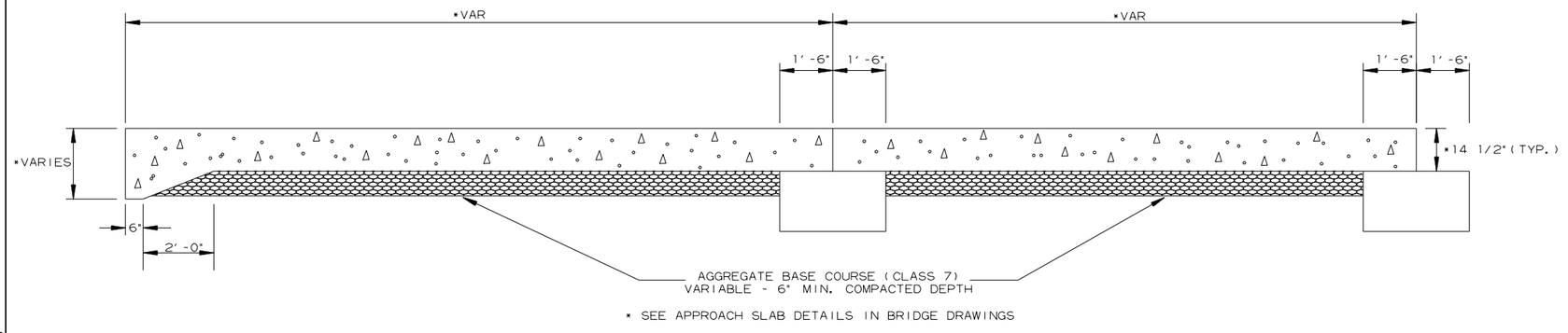
CONCRETE BARRIER WALL
(MEDIAN TYPE SPECIAL)
WITH DOWEL PLACEMENT



TYPE I SPECIAL APPROACH
SLAB MEDIAN BARRIER

GENERAL NOTES FOR CONCRETE BARRIER WALLS

1. ALL BARRIER WALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 631 OF THE STANDARD SPECIFICATIONS, 2014 EDITION.
2. CONTRACTION JOINTS REQUIRED AT 15'-0" MAXIMUM SPACING.
3. ALL CONTRACTION JOINTS TO BE FORMED IN FRESH CONCRETE ON TOP AND IN SIDES OF BARRIER WALL.
4. JOINTS IN PCCB WALL SHOULD ALIGN WITH PCCP JOINTS.
5. CONTRACTION JOINTS ARE NOT PERMITTED AT THE DOWEL BAR LOCATIONS.
6. ALL EXPOSED EDGES OF CONCRETE BARRIER WALL SHALL HAVE A ¾" CHAMFER.
7. SPACING BETWEEN EXPANSION JOINTS SHALL NOT EXCEED 400 FT FOR BARRIER TYPES MEDIAN A, MEDIAN B, AND SIDE A OR 120 FT FOR BARRIER TYPES MEDIAN C, SIDE D, AND SIDE E. EXPANSION JOINTS SHALL BE FORMED USING 1" PREFORMED JOINT FILLER. CONTINUOUS REINFORCEMENT SHALL BE CUT 2" CLEAR OF EXPANSION JOINTS.
8. MAINTAIN 2" CLEARANCE ON ALL REINFORCMENT.
9. BARRIER REINFORCING BARS ANCHORED INTO EXISTING CONCRETE PAVEMENT SHALL BE INSTALLED AND SECURED ACCORDING TO 804.06 USING AN APPROVED ANCHORING SYSTEM FROM QPL.



* SEE APPROACH SLAB DETAILS IN BRIDGE DRAWINGS

SECTION OF APPROACH SLAB

WBCallaway 1/25/2023 5:54:18 PM
WORKSPACE: AHTD
L:\2021\21T0026 - ARDOT 040898 AR River Bridge Deck Rehab\Drawings\r040898.SD.DGN
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040898	5	33
		MAINTENANCE OF TRAFFIC DETAILS				
②						

STATE OF ARKANSAS
Dustin L. Tackett
LICENSED PROFESSIONAL ENGINEER
No.14994
DUSTIN L. TACKETT
Digitally Signed 01/25/2023

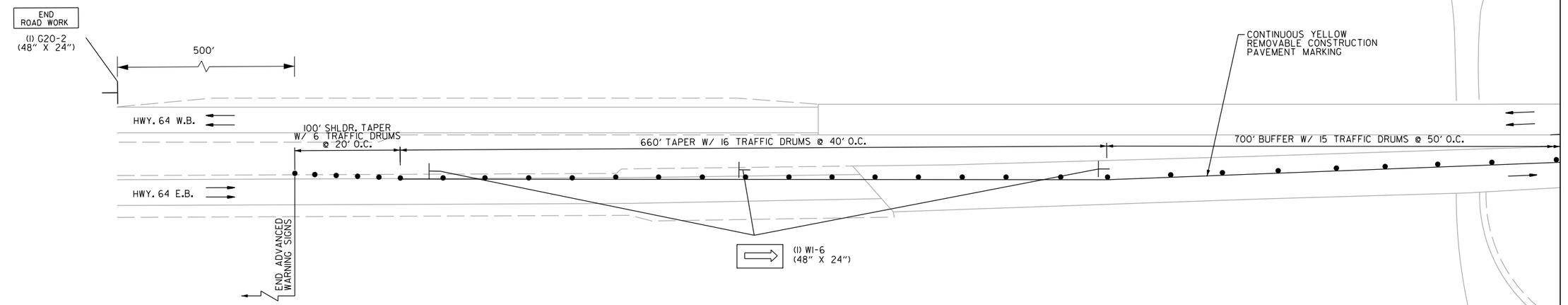
TRAFFIC (ALL STAGES)

TRAFFIC DRUM (ALL STAGES)

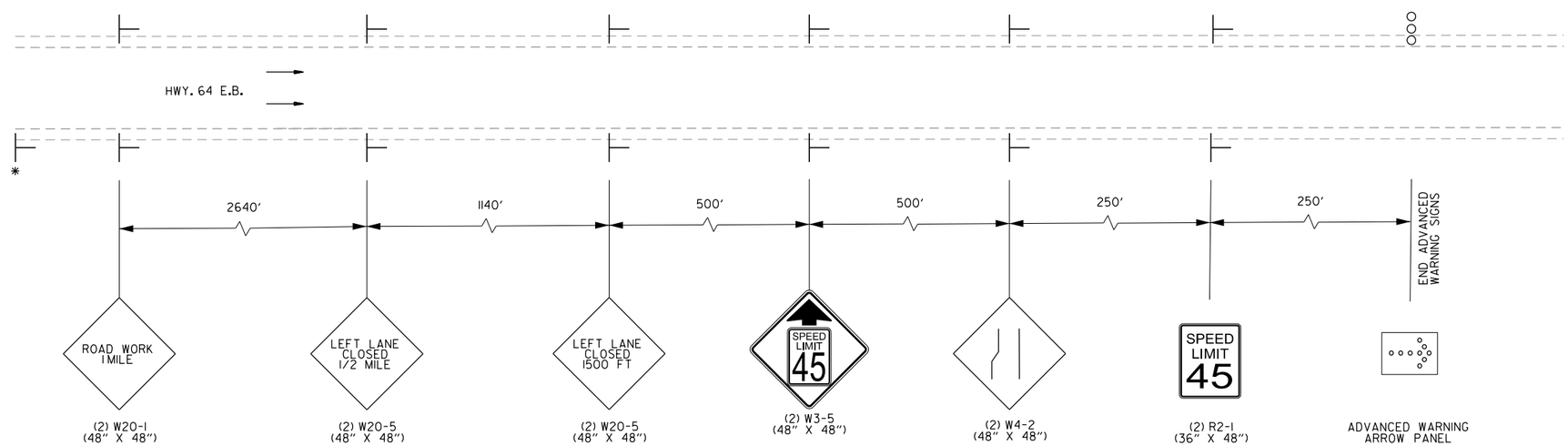
CONSTRUCTION NOTES (ALL STAGES)

1) MAINTAIN TRAFFIC ON EXISTING ALIGNMENT.
2) INSTALL ADVANCED WARNING SIGNS AND CHANNELIZING DEVICES.
3) SHIFT HWY. 64 E.B. TRAFFIC TO OUTSIDE LANE.

N



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



MAINTENANCE OF TRAFFIC DETAILS
BEGIN JOB - ALL STAGES

WBCalloway 1/25/2023 5:54:21PM
WORKSPACE: AHTD
L:\2021\21T0026 - ARDOT 040898 AR River Bridge Deck Rehab\Drawings\r040898_MOT_01.DGN
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040898	6	33
		MAINTENANCE OF TRAFFIC DETAILS				

(2)

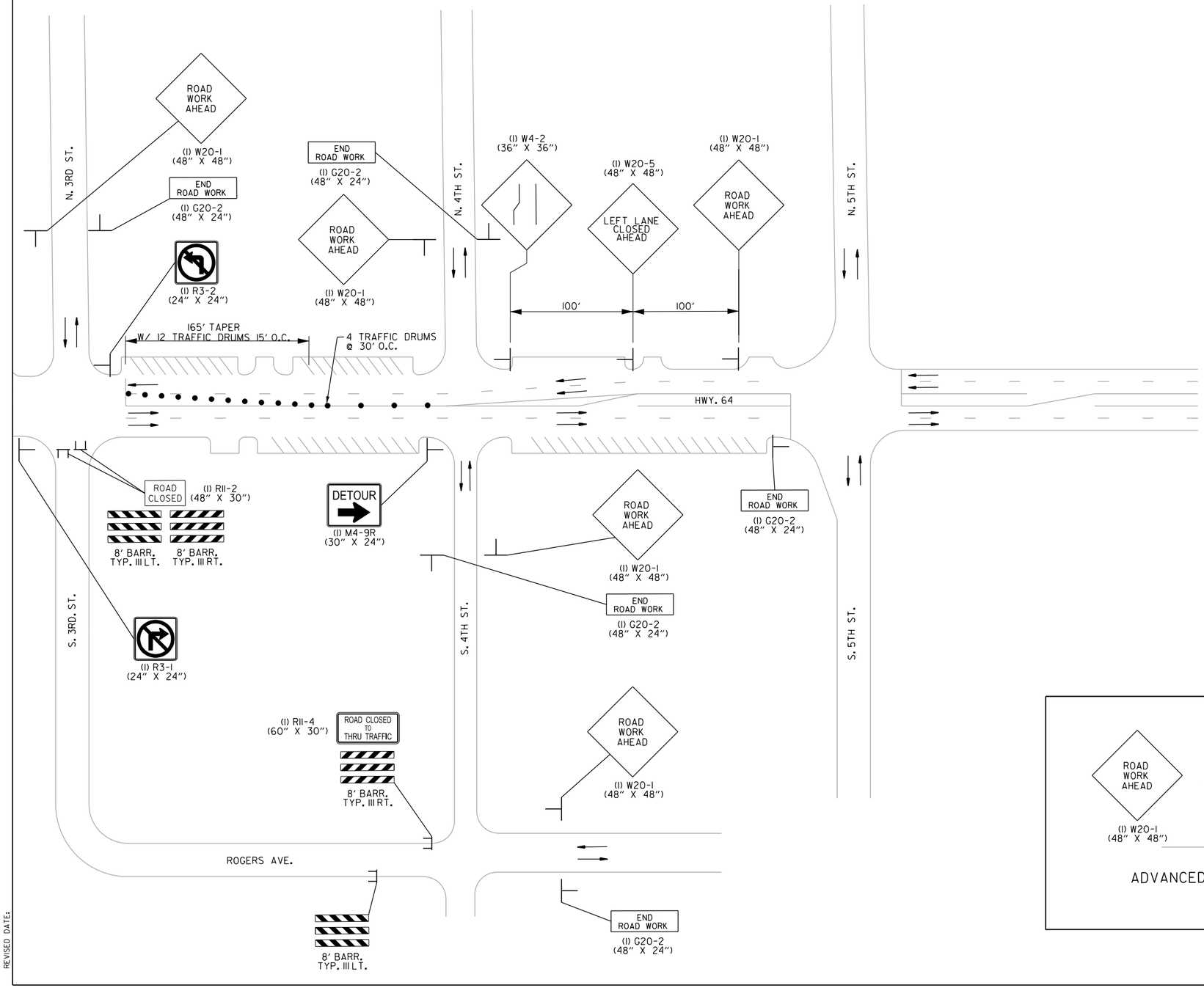
STATE OF ARKANSAS
Dustin L. Tackett
LICENSED PROFESSIONAL ENGINEER
No.14994
DUSTIN L. TACKETT
Digitally Signed 01/25/2023

CONSTRUCTION NOTES (ALL STAGES)

TRAFFIC (ALL STAGES)

TRAFFIC DRUM (ALL STAGES)

1) MAINTAIN TRAFFIC ON EXISTING ALIGNMENT.
2) INSTALL ADVANCED WARNING SIGNS AND CHANNELIZING DEVICES.
3) SHIFT HWY. 64 W.B. TRAFFIC TO OUTSIDE LANE.



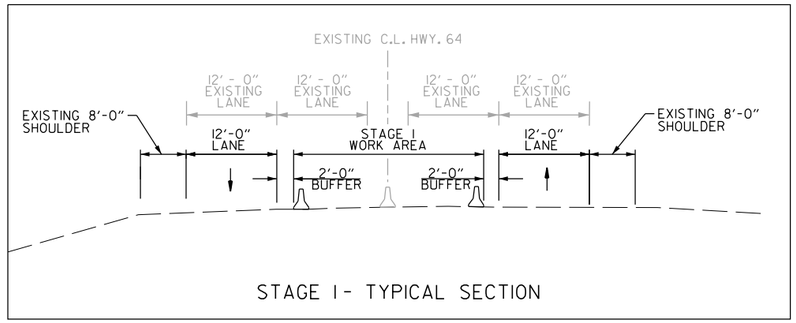
ADVANCED WARNING - SIDE ROADS
(ALL STAGES)

MAINTENANCE OF TRAFFIC DETAILS
END JOB - ALL STAGES

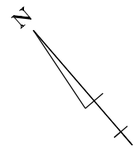
WBCalloway 1/25/2023 5:54:22 PM
WORKSPACE: AHTD
L:\2021\21T0026 - ARDOT 040898 AR River Bridge Deck Rehab\Drawings\r-040898_MOT_02.DGN
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040898	7	33
		MAINTENANCE OF TRAFFIC DETAILS				

(2)



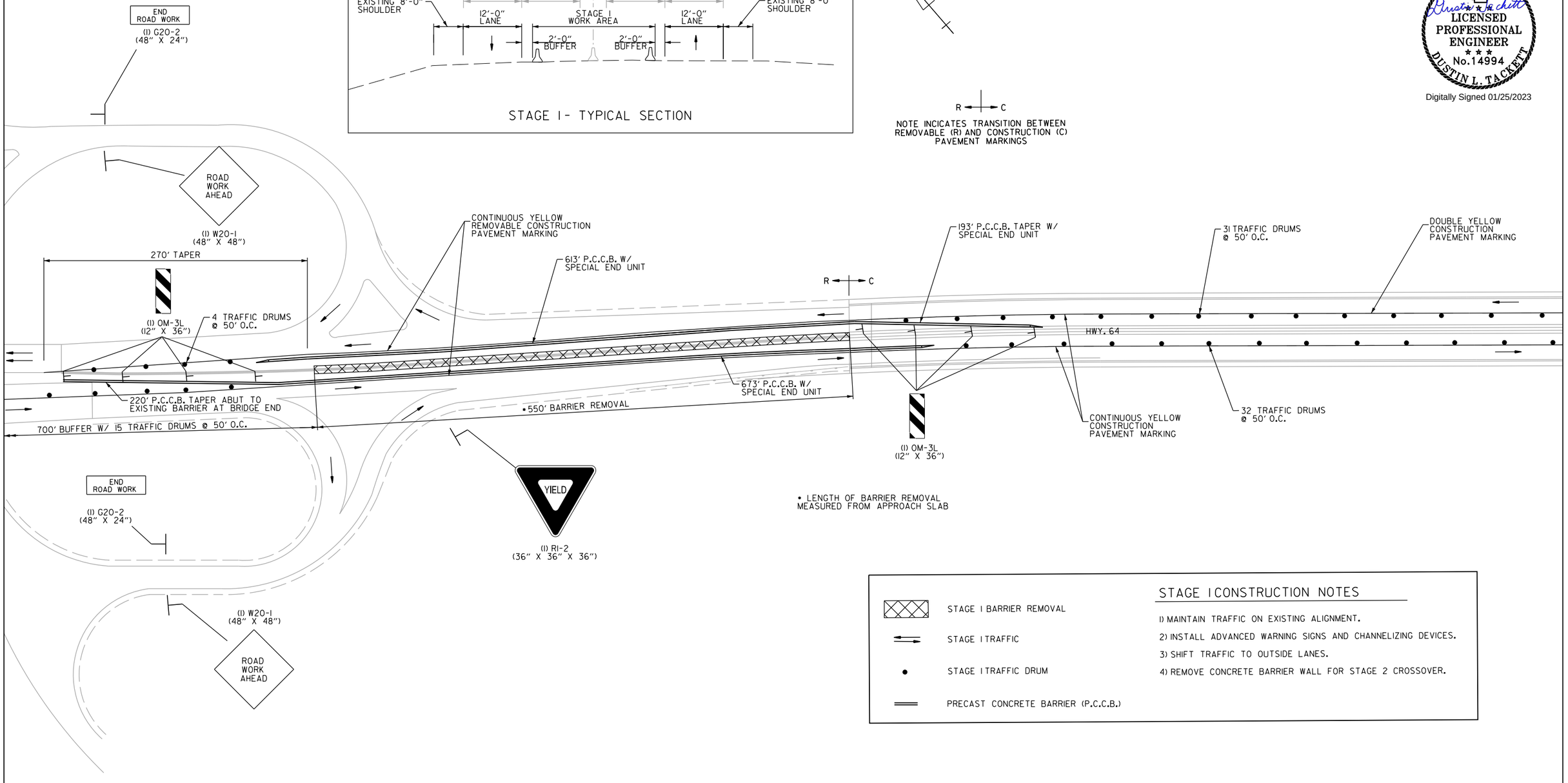
STAGE I- TYPICAL SECTION



R ← → C

NOTE INCICATES TRANSITION BETWEEN REMOVABLE (R) AND CONSTRUCTION (C) PAVEMENT MARKINGS

STATE OF ARKANSAS
Dustin L. Tackett
LICENSED PROFESSIONAL ENGINEER
No.14994
DUSTIN L. TACKETT
Digitally Signed 01/25/2023



• LENGTH OF BARRIER REMOVAL MEASURED FROM APPROACH SLAB

STAGE I BARRIER REMOVAL

STAGE I TRAFFIC

STAGE I TRAFFIC DRUM

PRECAST CONCRETE BARRIER (P.C.C.B.)

STAGE I CONSTRUCTION NOTES

1) MAINTAIN TRAFFIC ON EXISTING ALIGNMENT.
2) INSTALL ADVANCED WARNING SIGNS AND CHANNELIZING DEVICES.
3) SHIFT TRAFFIC TO OUTSIDE LANES.
4) REMOVE CONCRETE BARRIER WALL FOR STAGE 2 CROSSOVER.

NOTE
SEE MAINTENANCE OF TRAFFIC DETAILS BEGIN JOB - ALL STAGES FOR ADVANCED WARNING, LANE CLOSURES, AND ASSOCIATED TEMPORARY TRAFFIC CONTROL DEVICES ON THE HWY. 64 (OKLAHOMA) APPROACH.

MAINTENANCE OF TRAFFIC DETAILS
STAGE I

WBCalloway 1/25/2023 5:54:22 PM
WORKSPACE: AHTD
L:\202\2T0026 - ARDOT 040898 AR River Bridge Deck Rehab\Drawings\r-040898_MOT_03.DGN
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040898	8	33
		MAINTENANCE OF TRAFFIC DETAILS				
②						

STAGE I CONSTRUCTION NOTES

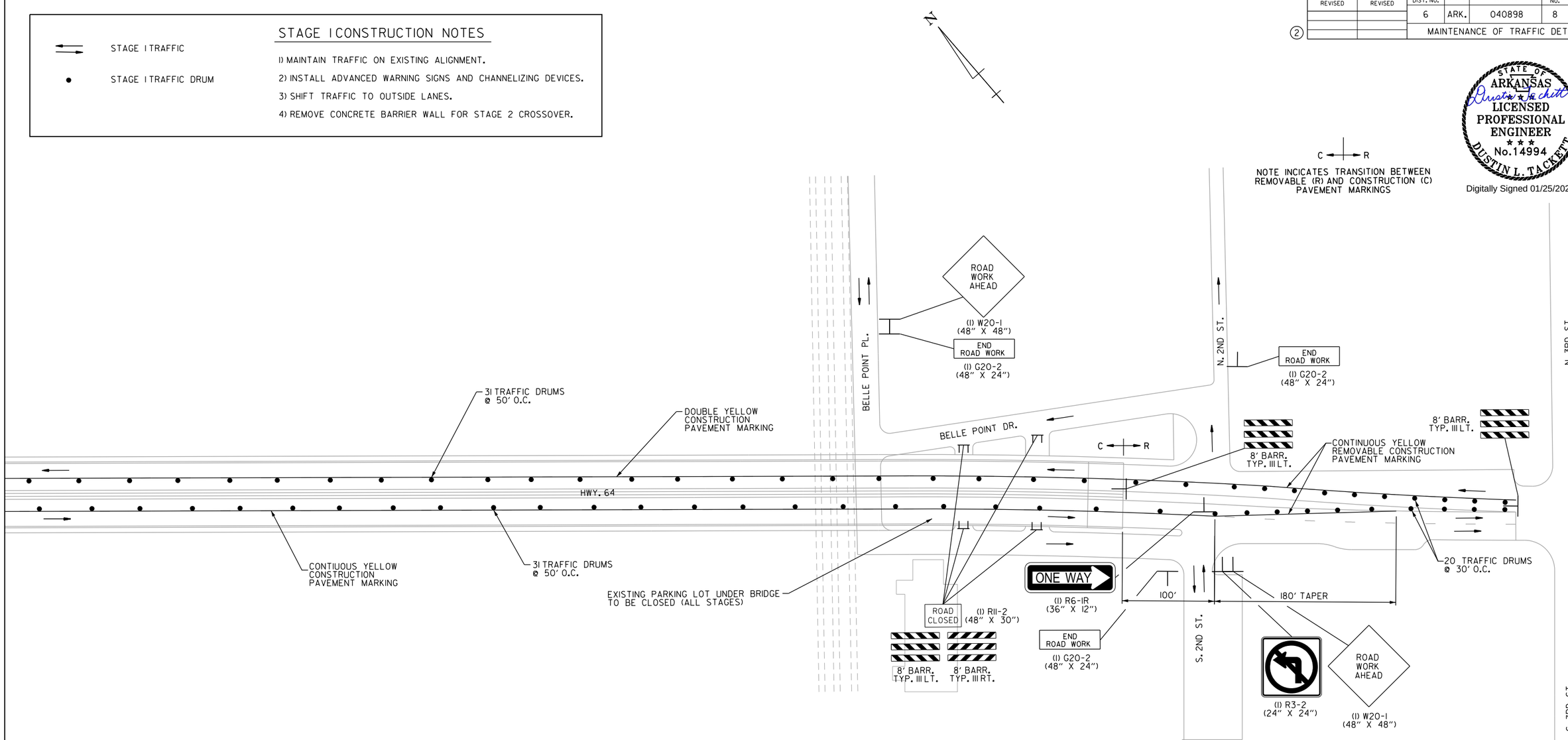
STAGE I TRAFFIC

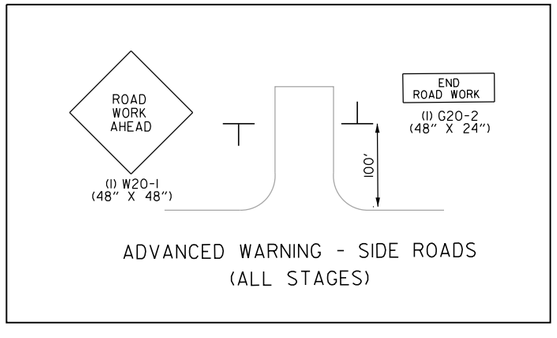
STAGE I TRAFFIC DRUM

1) MAINTAIN TRAFFIC ON EXISTING ALIGNMENT.
2) INSTALL ADVANCED WARNING SIGNS AND CHANNELIZING DEVICES.
3) SHIFT TRAFFIC TO OUTSIDE LANES.
4) REMOVE CONCRETE BARRIER WALL FOR STAGE 2 CROSSOVER.

STATE OF ARKANSAS
Dustin Tackett
LICENSED PROFESSIONAL ENGINEER
No.14994
DUSTIN L. TACKETT
Digitally Signed 01/25/2023

C ← → R
NOTE INCICATES TRANSITION BETWEEN REMOVABLE (R) AND CONSTRUCTION (C) PAVEMENT MARKINGS





ADVANCED WARNING - SIDE ROADS
(ALL STAGES)

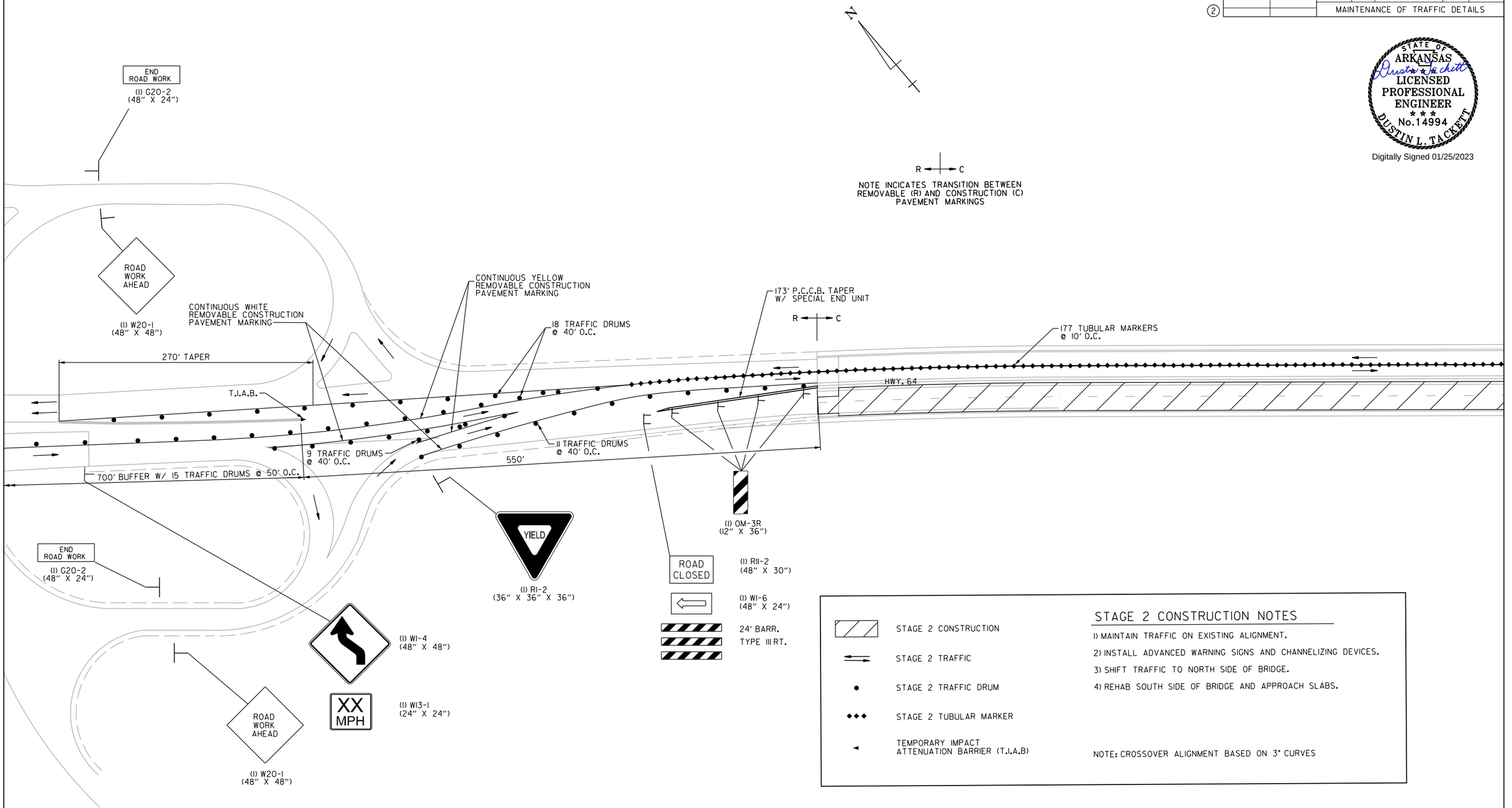
NOTE
SEE MAINTENANCE OF TRAFFIC DETAILS END JOB - ALL STAGES FOR ADVANCED WARNING, CLOSURES, DETOURS, AND ASSOCIATED TEMPORARY TRAFFIC CONTROL DEVICES ON THE HWY. 64 (GARRISON AVE.), 3RD ST., AND 4TH ST. APPROACHES.

MAINTENANCE OF TRAFFIC DETAILS
STAGE I

WBCallaway 1/25/2023 5:54:22 PM
WORKSPACE: AHTD
L:\2021\21T0I026 - ARDOT 040898 AR River Bridge Deck Rehab\Drawings\r040898_MOT_04.DGN
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040898	9	33
		MAINTENANCE OF TRAFFIC DETAILS				
②						

STATE OF ARKANSAS
Dustin L. Tackett
LICENSED PROFESSIONAL ENGINEER
No.14994
DUSTIN L. TACKETT
Digitally Signed 01/25/2023



STAGE 2 CONSTRUCTION

STAGE 2 TRAFFIC

STAGE 2 TRAFFIC DRUM

STAGE 2 TUBULAR MARKER

TEMPORARY IMPACT ATTENUATION BARRIER (T.I.A.B)

STAGE 2 CONSTRUCTION NOTES

1) MAINTAIN TRAFFIC ON EXISTING ALIGNMENT.
2) INSTALL ADVANCED WARNING SIGNS AND CHANNELIZING DEVICES.
3) SHIFT TRAFFIC TO NORTH SIDE OF BRIDGE.
4) REHAB SOUTH SIDE OF BRIDGE AND APPROACH SLABS.

NOTE: CROSSOVER ALIGNMENT BASED ON 3° CURVES

NOTE
SEE MAINTENANCE OF TRAFFIC DETAILS BEGIN JOB - ALL STAGES FOR ADVANCED WARNING, LANE CLOSURES, AND ASSOCIATED TEMPORARY TRAFFIC CONTROL DEVICES ON THE HWY. 64 (OKLAHOMA) APPROACH.

MAINTENANCE OF TRAFFIC DETAILS
STAGE 2

WBCalloway 1/25/2023 5:54:23 PM
WORKSPACE: AHTD
L:\2021\21T0026 - ARDOT 040898 AR River Bridge Deck Rehab\Drawings\r040898_MOT_05.DGN
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040898	10	33
		MAINTENANCE OF TRAFFIC DETAILS				
②						

STAGE 2 CONSTRUCTION

STAGE 2 TRAFFIC

STAGE 2 TRAFFIC DRUM

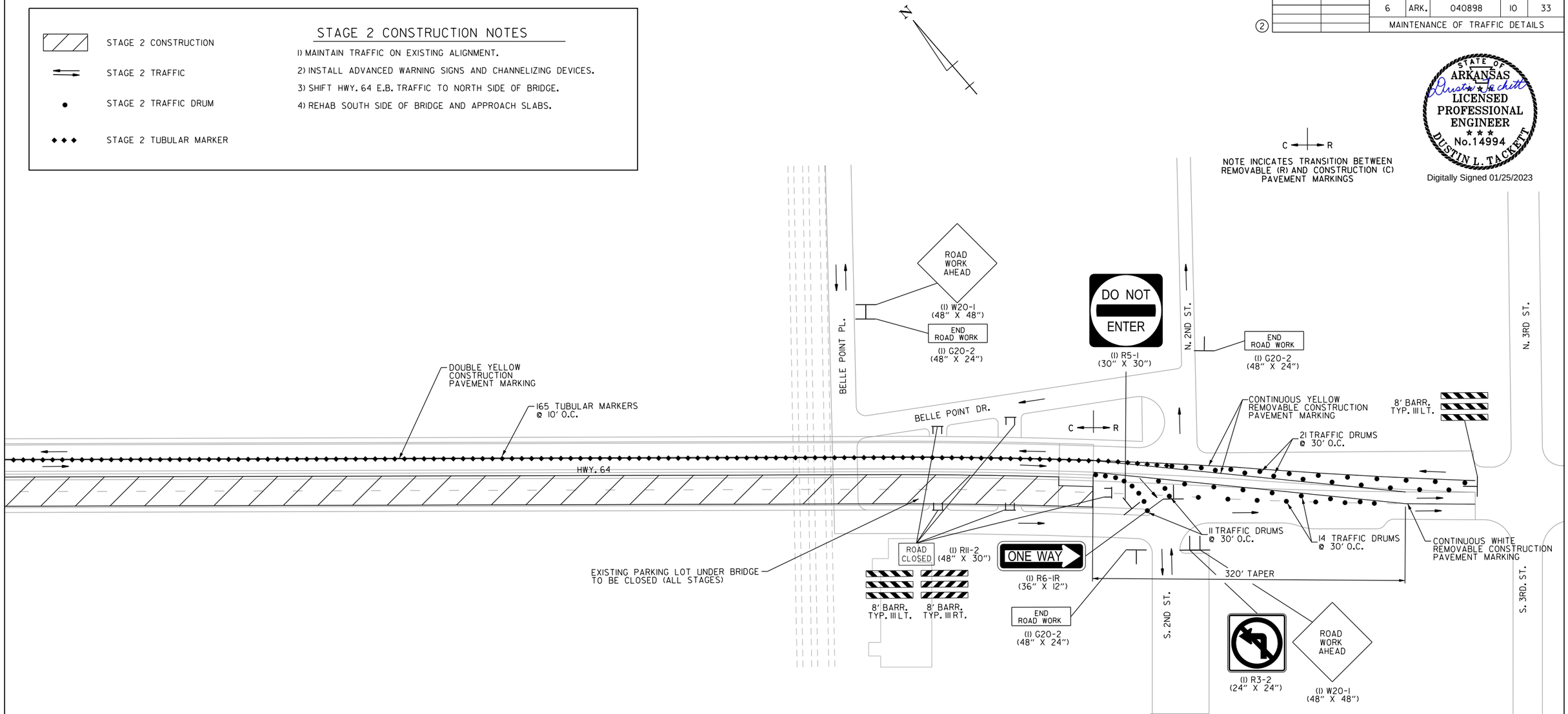
STAGE 2 TUBULAR MARKER

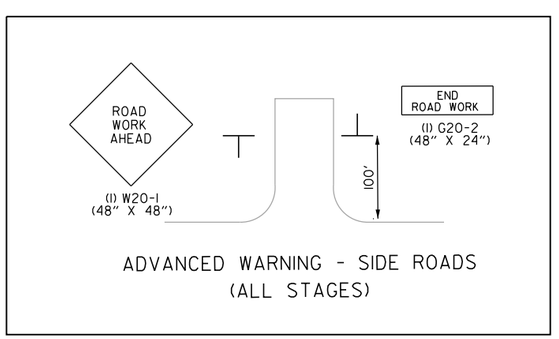
STAGE 2 CONSTRUCTION NOTES

1) MAINTAIN TRAFFIC ON EXISTING ALIGNMENT.
2) INSTALL ADVANCED WARNING SIGNS AND CHANNELIZING DEVICES.
3) SHIFT HWY. 64 E.B. TRAFFIC TO NORTH SIDE OF BRIDGE.
4) REHAB SOUTH SIDE OF BRIDGE AND APPROACH SLABS.

STATE OF ARKANSAS
Dustin L. Tackett
LICENSED PROFESSIONAL ENGINEER
No.14994
DUSTIN L. TACKETT
Digitally Signed 01/25/2023

C R
NOTE INCICATES TRANSITION BETWEEN REMOVABLE (R) AND CONSTRUCTION (C) PAVEMENT MARKINGS





ADVANCED WARNING - SIDE ROADS
(ALL STAGES)

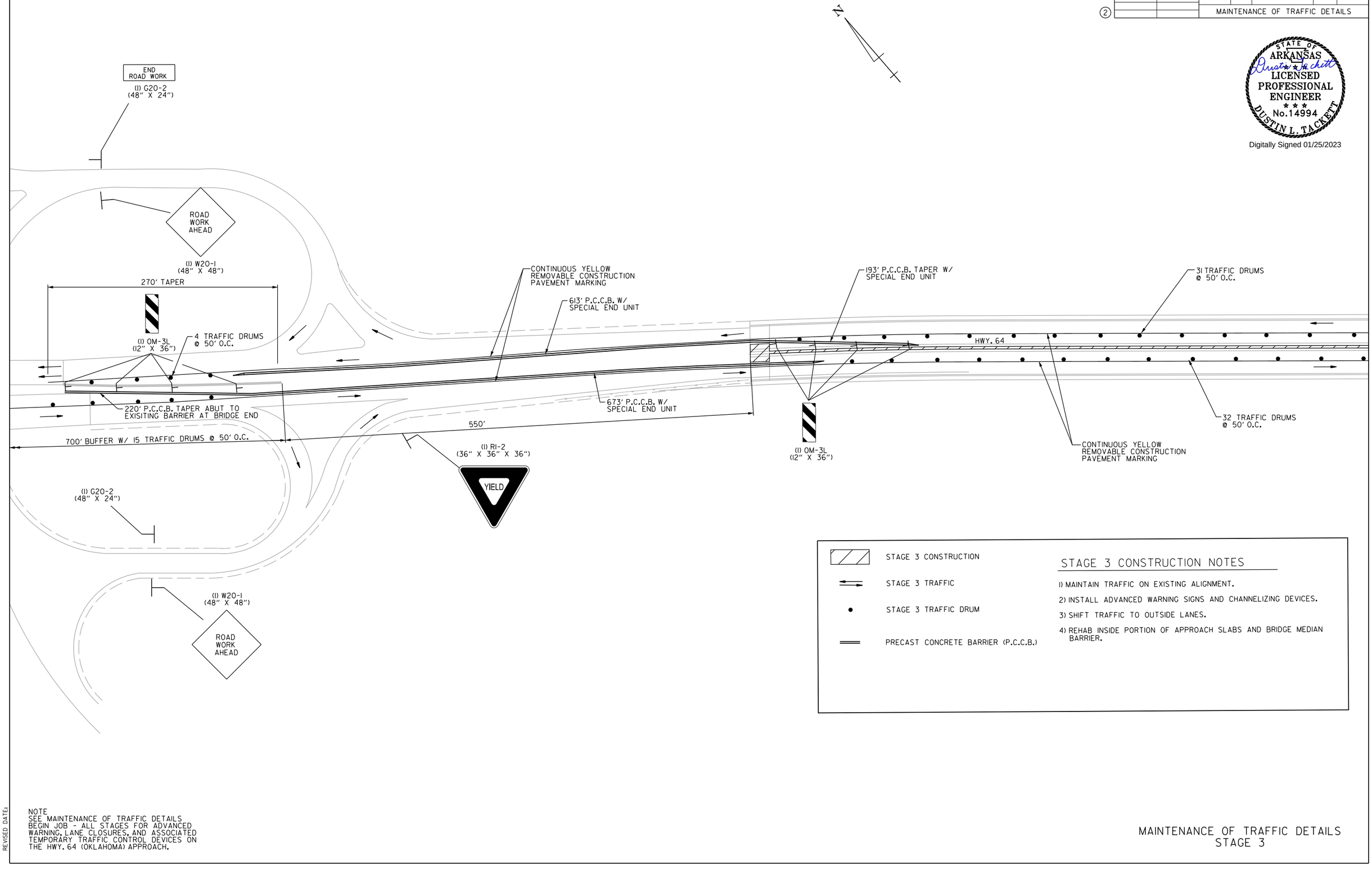
NOTE
SEE MAINTENANCE OF TRAFFIC DETAILS END JOB - ALL STAGES FOR ADVANCED WARNING, CLOSURES, DETOURS, AND ASSOCIATED TEMPORARY TRAFFIC CONTROL DEVICES ON THE HWY. 64 (GARRISON AVE.), 3RD ST., AND 4TH ST. APPROACHES.

MAINTENANCE OF TRAFFIC DETAILS
STAGE 2

WBCalloway 1/25/2023 5:54:23 PM
WORKSPACE: AHTD
L:\202\2IT0I026 - ARDOT 040898 AR River Bridge Deck Rehab\Drawings\r040898_MOT_06.DGN
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040898	11	33
②		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
Dustin L. Tackett
LICENSED PROFESSIONAL ENGINEER
No.14994
DUSTIN L. TACKETT
Digitally Signed 01/25/2023



STAGE 3 CONSTRUCTION

STAGE 3 TRAFFIC

STAGE 3 TRAFFIC DRUM

PRECAST CONCRETE BARRIER (P.C.C.B.)

STAGE 3 CONSTRUCTION NOTES

1) MAINTAIN TRAFFIC ON EXISTING ALIGNMENT.
2) INSTALL ADVANCED WARNING SIGNS AND CHANNELIZING DEVICES.
3) SHIFT TRAFFIC TO OUTSIDE LANES.
4) REHAB INSIDE PORTION OF APPROACH SLABS AND BRIDGE MEDIAN BARRIER.

NOTE
SEE MAINTENANCE OF TRAFFIC DETAILS BEGIN JOB - ALL STAGES FOR ADVANCED WARNING, LANE CLOSURES, AND ASSOCIATED TEMPORARY TRAFFIC CONTROL DEVICES ON THE HWY. 64 (OKLAHOMA) APPROACH.

MAINTENANCE OF TRAFFIC DETAILS
STAGE 3

WBCallaway 1/25/2023 5:54:23 PM
WORKSPACE: AHTD
L:\202\2IT0I026 - ARDOT 040898 AR River Bridge Deck Rehab\Drawings\r040898_MOT_07.DGN
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040898	12	33
		MAINTENANCE OF TRAFFIC DETAILS				
②						

STATE OF ARKANSAS
Dustin L. Tackett
LICENSED PROFESSIONAL ENGINEER
No.14994
DUSTIN L. TACKETT
Digitally Signed 01/25/2023

STAGE 3 CONSTRUCTION

STAGE 3 TRAFFIC

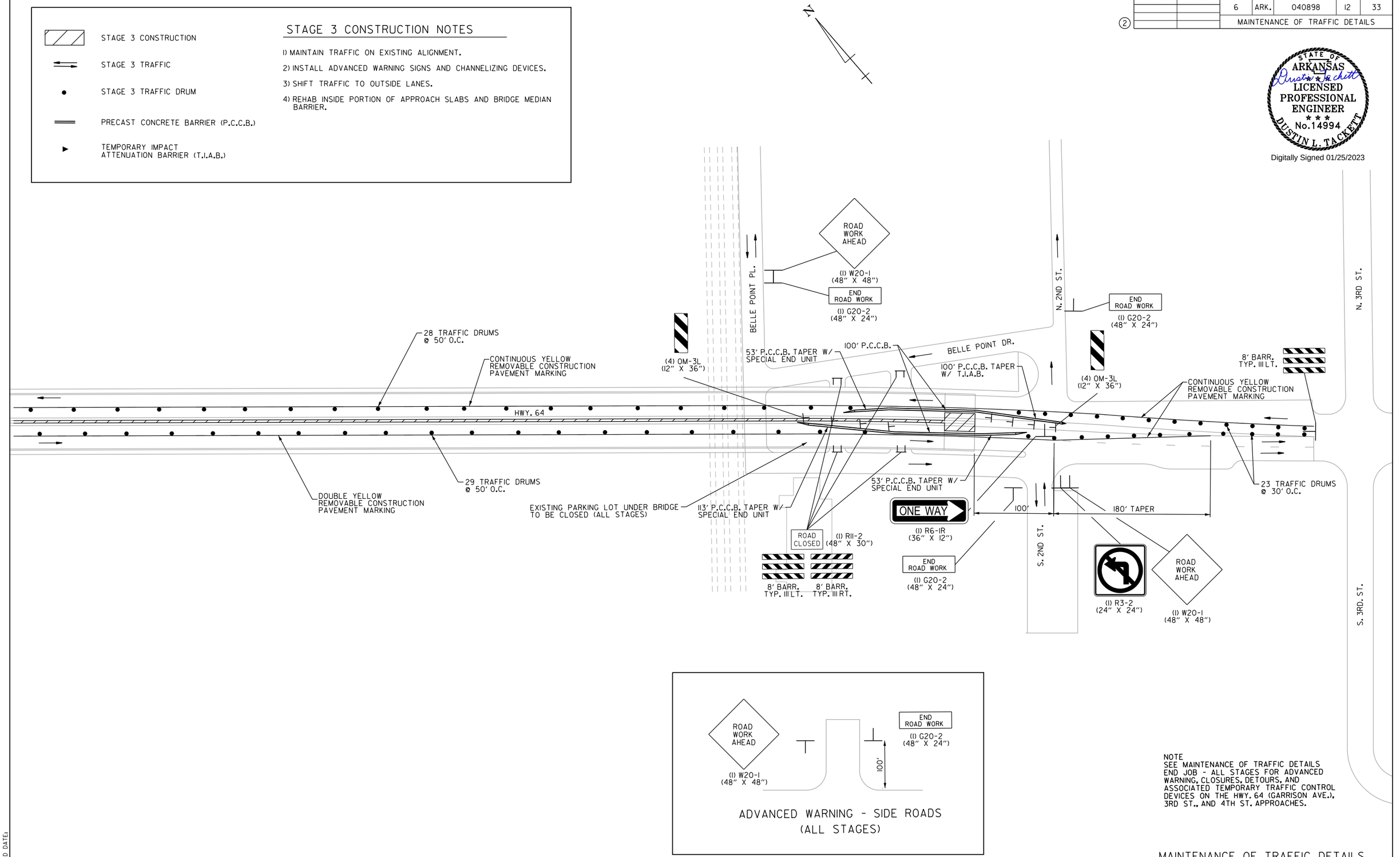
STAGE 3 TRAFFIC DRUM

PRECAST CONCRETE BARRIER (P.C.C.B.)

TEMPORARY IMPACT ATTENUATION BARRIER (T.I.A.B.)

STAGE 3 CONSTRUCTION NOTES

1) MAINTAIN TRAFFIC ON EXISTING ALIGNMENT.
2) INSTALL ADVANCED WARNING SIGNS AND CHANNELIZING DEVICES.
3) SHIFT TRAFFIC TO OUTSIDE LANES.
4) REHAB INSIDE PORTION OF APPROACH SLABS AND BRIDGE MEDIAN BARRIER.



ADVANCED WARNING - SIDE ROADS
(ALL STAGES)

NOTE
SEE MAINTENANCE OF TRAFFIC DETAILS END JOB - ALL STAGES FOR ADVANCED WARNING, CLOSURES, DETOURS, AND ASSOCIATED TEMPORARY TRAFFIC CONTROL DEVICES ON THE HWY. 64 (GARRISON AVE.), 3RD ST., AND 4TH ST. APPROACHES.

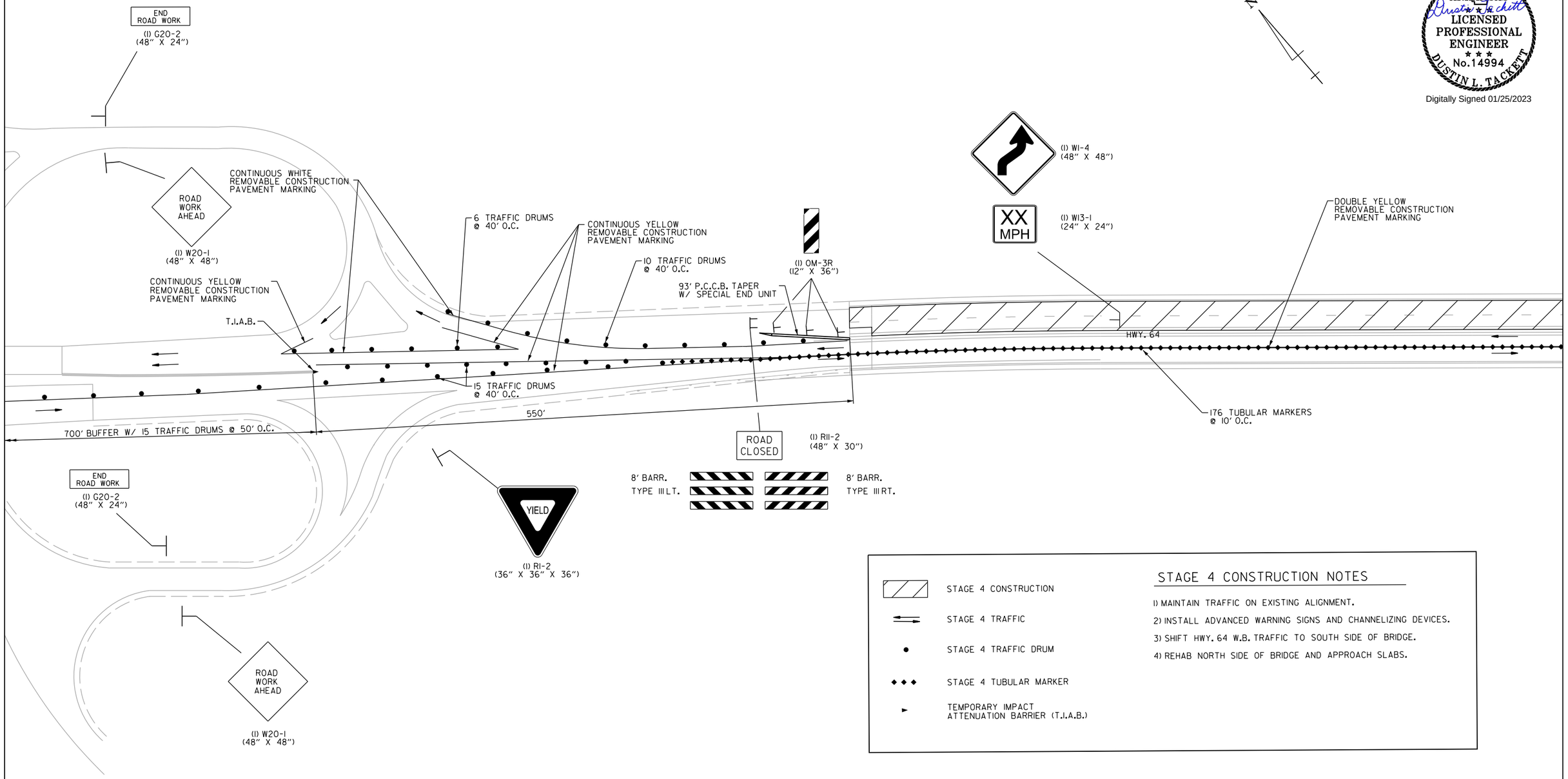
MAINTENANCE OF TRAFFIC DETAILS
STAGE 3

WBCalloway 1/25/2023 5:54:23 PM
WORKSPACE: AHTD
L:\2021\21T0026 - ARDOT 040898 AR River Bridge Deck Rehab\Drawings\r040898_MOT_08.DGN
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040898	13	33
		MAINTENANCE OF TRAFFIC DETAILS				

②

STATE OF ARKANSAS
Dustin L. Tackett
LICENSED PROFESSIONAL ENGINEER
No.14994
DUSTIN L. TACKETT
Digitally Signed 01/25/2023



STAGE 4 CONSTRUCTION

STAGE 4 TRAFFIC

STAGE 4 TRAFFIC DRUM

STAGE 4 TUBULAR MARKER

TEMPORARY IMPACT ATTENUATION BARRIER (T.I.A.B.)

STAGE 4 CONSTRUCTION NOTES

1) MAINTAIN TRAFFIC ON EXISTING ALIGNMENT.
2) INSTALL ADVANCED WARNING SIGNS AND CHANNELIZING DEVICES.
3) SHIFT HWY. 64 W.B. TRAFFIC TO SOUTH SIDE OF BRIDGE.
4) REHAB NORTH SIDE OF BRIDGE AND APPROACH SLABS.

NOTE
SEE MAINTENANCE OF TRAFFIC DETAILS BEGIN JOB - ALL STAGES FOR ADVANCED WARNING, LANE CLOSURES, AND ASSOCIATED TEMPORARY TRAFFIC CONTROL DEVICES ON THE HWY. 64 (OKLAHOMA) APPROACH.

MAINTENANCE OF TRAFFIC DETAILS
STAGE 4

WBCallaway 1/25/2023 5:54:24 PM
WORKSPACE: AHTD
L:\2021\21T0026 - ARDOT 040898 AR River Bridge Deck Rehab\Drawings\r040898.MOT.09.DGN
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040898	14	33
		MAINTENANCE OF TRAFFIC DETAILS				

(2)

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.14994
DUSTIN L. TACKETT
Digitally Signed 01/25/2023

STAGE 4 CONSTRUCTION

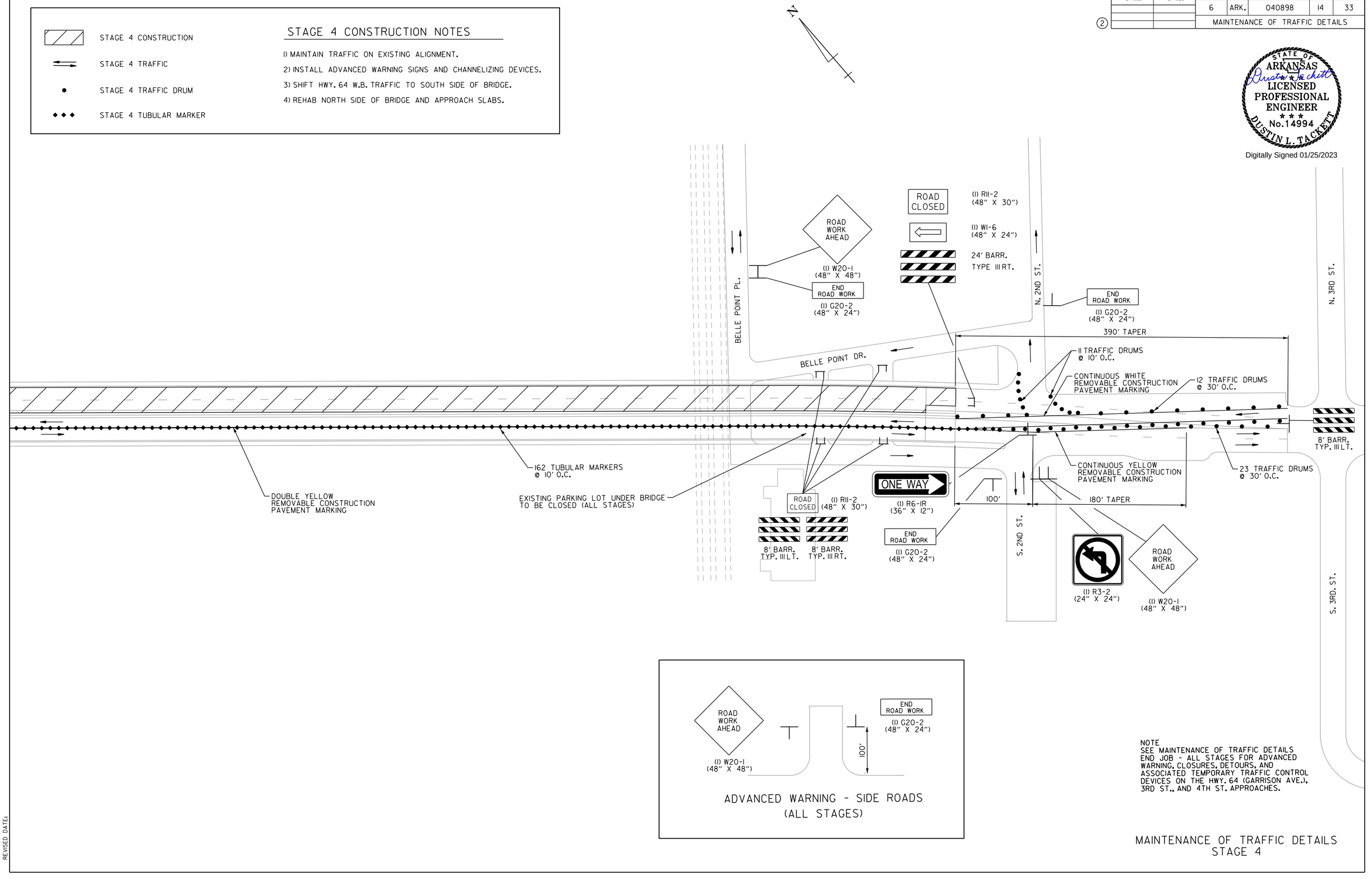
STAGE 4 TRAFFIC

STAGE 4 TRAFFIC DRUM

STAGE 4 TUBULAR MARKER

STAGE 4 CONSTRUCTION NOTES

1) MAINTAIN TRAFFIC ON EXISTING ALIGNMENT.
2) INSTALL ADVANCED WARNING SIGNS AND CHANNELIZING DEVICES.
3) SHIFT HWY. 64 W.B. TRAFFIC TO SOUTH SIDE OF BRIDGE.
4) REHAB NORTH SIDE OF BRIDGE AND APPROACH SLABS.



ADVANCED WARNING - SIDE ROADS
(ALL STAGES)

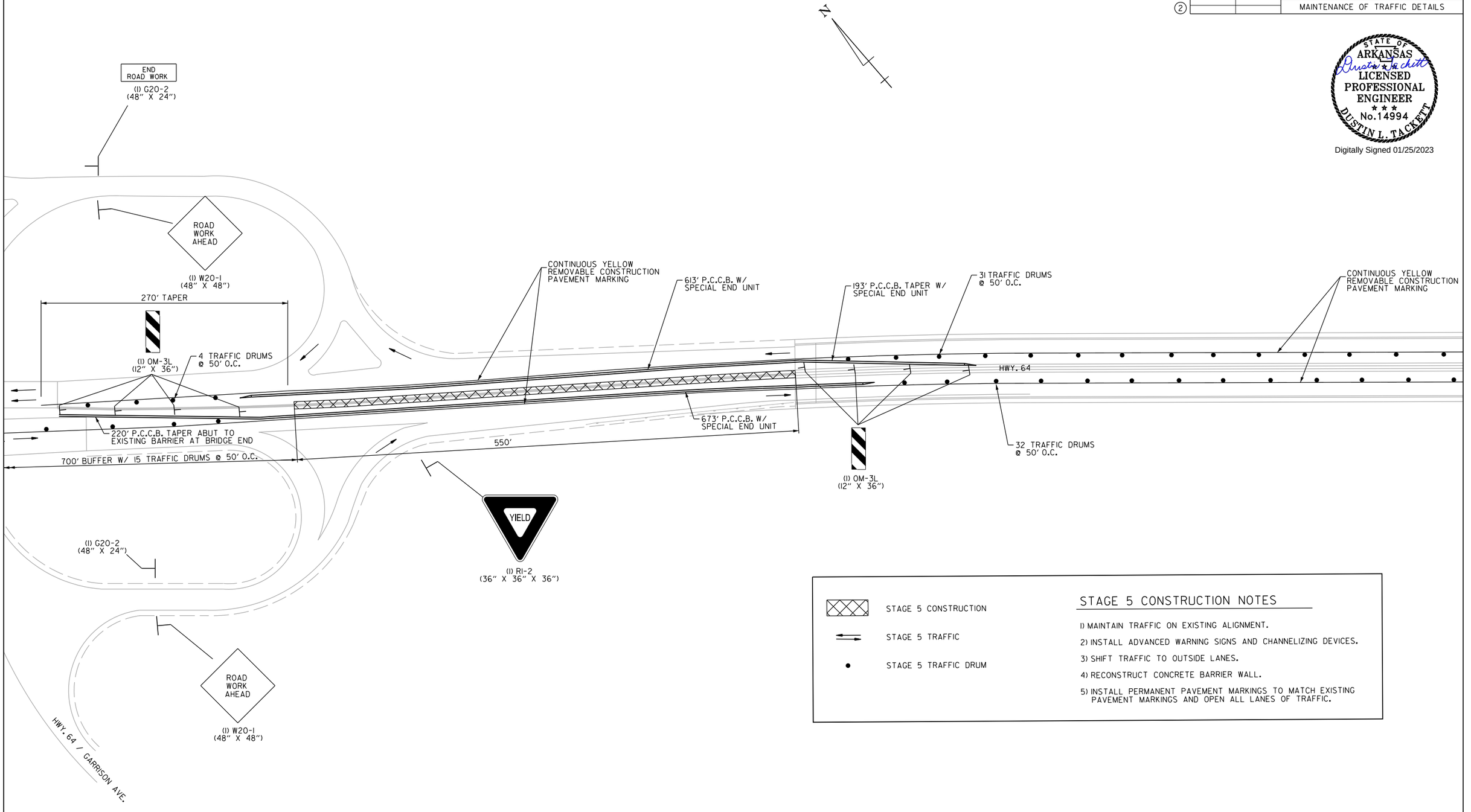
NOTE
SEE MAINTENANCE OF TRAFFIC DETAILS END JOB - ALL STAGES FOR ADVANCED WARNING, CLOSURES, DETOURS, AND ASSOCIATED TEMPORARY TRAFFIC CONTROL DEVICES ON THE HWY. 64 (GARRISON AVE.), 3RD ST., AND 4TH ST. APPROACHES.

MAINTENANCE OF TRAFFIC DETAILS
STAGE 4

WBCalloway 1/25/2023 5:54:24 PM
WORKSPACE: AHTD
L:\2021\21T0I026 - ARDOT 040898 AR River Bridge Deck Rehab\Drawings\r040898_MOT_10.DGN
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040898	15	33
②		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
DUSTIN L. TACKETT
LICENSED PROFESSIONAL ENGINEER
No. 14994
Digitally Signed 01/25/2023



STAGE 5 CONSTRUCTION

STAGE 5 TRAFFIC

STAGE 5 TRAFFIC DRUM

STAGE 5 CONSTRUCTION NOTES

1) MAINTAIN TRAFFIC ON EXISTING ALIGNMENT.
2) INSTALL ADVANCED WARNING SIGNS AND CHANNELIZING DEVICES.
3) SHIFT TRAFFIC TO OUTSIDE LANES.
4) RECONSTRUCT CONCRETE BARRIER WALL.
5) INSTALL PERMANENT PAVEMENT MARKINGS TO MATCH EXISTING PAVEMENT MARKINGS AND OPEN ALL LANES OF TRAFFIC.

NOTE
SEE MAINTENANCE OF TRAFFIC DETAILS BEGIN JOB - ALL STAGES FOR ADVANCED WARNING, LANE CLOSURES, AND ASSOCIATED TEMPORARY TRAFFIC CONTROL DEVICES ON THE HWY. 64 (OKLAHOMA) APPROACH.

MAINTENANCE OF TRAFFIC DETAILS
STAGE 5

WBCalloway 1/25/2023 5:54:24 PM
WORKSPACE: AHTD
L:\202\2T0026 - ARDOT 040898 AR River Bridge Deck Rehab\Drawings\r-040898_MOT_ILDGN
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040898	16	33
		MAINTENANCE OF TRAFFIC DETAILS				

(2)

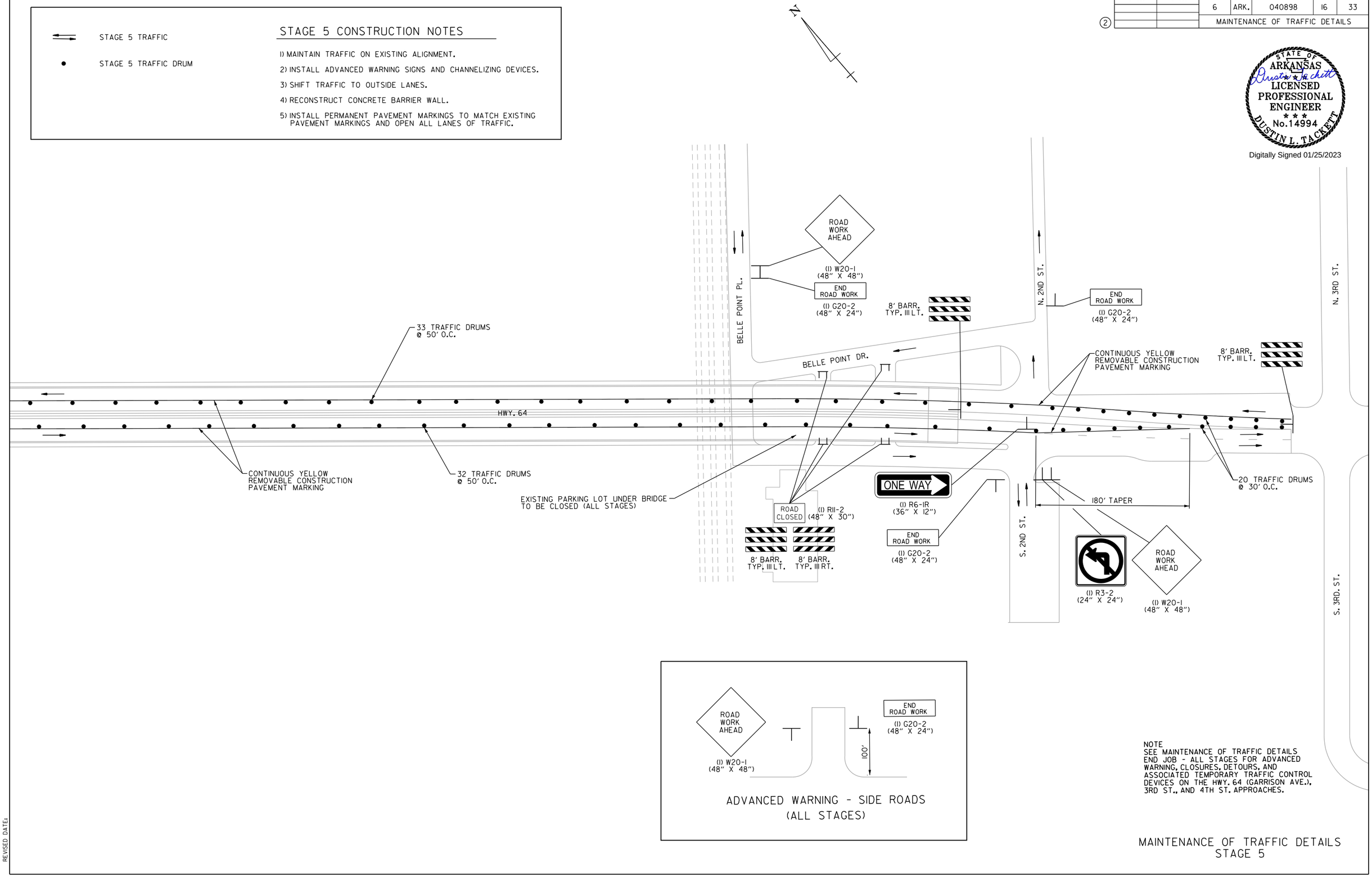
STAGE 5 TRAFFIC

STAGE 5 TRAFFIC DRUM

STAGE 5 CONSTRUCTION NOTES

1) MAINTAIN TRAFFIC ON EXISTING ALIGNMENT.
2) INSTALL ADVANCED WARNING SIGNS AND CHANNELIZING DEVICES.
3) SHIFT TRAFFIC TO OUTSIDE LANES.
4) RECONSTRUCT CONCRETE BARRIER WALL.
5) INSTALL PERMANENT PAVEMENT MARKINGS TO MATCH EXISTING PAVEMENT MARKINGS AND OPEN ALL LANES OF TRAFFIC.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.14994
DUSTIN L. TACKETT
Digitally Signed 01/25/2023



ADVANCED WARNING - SIDE ROADS
(ALL STAGES)

NOTE
SEE MAINTENANCE OF TRAFFIC DETAILS END JOB - ALL STAGES FOR ADVANCED WARNING, CLOSURES, DETOURS, AND ASSOCIATED TEMPORARY TRAFFIC CONTROL DEVICES ON THE HWY. 64 (GARRISON AVE.), 3RD ST., AND 4TH ST. APPROACHES.

MAINTENANCE OF TRAFFIC DETAILS
STAGE 5

WBCalloway 1/25/2023 5:54:24 PM
WORKSPACE: AHTD
L:\2021\21T0102G - ARDOT 040898 AR River Bridge Deck Rehab\Drawings\r040898_MOT_12.DGN
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040898	17	33
②		QUANTITIES				

STATE OF ARKANSAS
Dustin L. Tackett
LICENSED PROFESSIONAL ENGINEER
No.14994
DUSTIN L. TACKETT
Digitally Signed 01/25/2023

CONSTRUCTION PAVEMENT MARKINGS AND PERMANENT PAVEMENT MARKINGS

DESCRIPTION	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	END OF JOB	REMOVAL OF PERMANENT PAVEMENT MARKINGS	CONSTRUCTION PAVEMENT MARKINGS	REMOVABLE CONSTRUCTION PAVEMENT MARKINGS	RAISED PAVEMENT MARKERS		THERMOPLASTIC PAVEMENT MARKING		
										TYPE II		6"		8"
										(WHITE/RED)	(YELLOW/YELLOW)	WHITE	YELLOW	YELLOW
	LIN. FT. - EACH						LIN. FT.			EACH		LIN. FT.		
REMOVAL OF PERMANENT PAVEMENT MARKINGS	9145	3164					12309							
CONSTRUCTION PAVEMENT MARKINGS	9422							9422						
REMOVABLE CONSTRUCTION PAVEMENT MARKINGS	3298	1910	3922	8842	8209				26181					
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED)						123				123				
RAISED PAVEMENT MARKERS TYPE II (YELLOW/YELLOW)						9					9			
THERMOPLASTIC PAVEMENT MARKING WHITE (6")						12548						12548		
THERMOPLASTIC PAVEMENT MARKING YELLOW (6")						9614							9614	
THERMOPLASTIC PAVEMENT MARKING YELLOW (8")						78								78
TOTALS:							**12309**	**9422**	**26181**	**123**	**9**	**12548**	**9614**	**78**

NOTE: THIS IS A HIGH VOLUME ROAD AS DEFINED IN SECTION 604.03 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION

THE PERMANENT PAVEMENT MARKINGS SHALL MATCH THE EXISTING PAVEMENT MARKINGS.

ADVANCE WARNING SIGNS AND DEVICES

SIGN NUMBER	DESCRIPTION	SIGN SIZE	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	MAXIMUM NUMBER REQUIRED	TOTAL SIGNS REQUIRED		TRAFFIC DRUMS	TUBULAR MARKERS	TYPE III BARRICADE		FURNISHING & INSTALLING PRECAST CONC. BARRIER	RELOCATING PRECAST CONCRETE BARRIER	TEMPORARY IMPACT ATTENUATION BARRIER	TEMP. IMPACT ATTEN.BARR. (REPAIR)	*ADVANCED WARNING ARROW PANEL	*PORTABLE CHANGEABLE MESSAGE SIGN
													LEFT	RIGHT						
			LIN. FT. - EACH						NO.	SQ. FT.	EACH		LIN. FT.		LIN. FT.		EACH		DAY	WEEK
G20-2	END ROAD WORK	48"x24"	11	11	11	11	11	11	11	88.00										
M4-9R	DETOUR	30"x24"	1	1	1	1	1	1	1	5.00										
OM-3L	OBJECT MARKER	12"x36"	8	4	16	3	8	16	16	48.00										
R1-2	YIELD	36"x36"x36"	1	1	1	1	1	1	1	4.50										
R2-1	SPEED LIMIT 45	36"x48"	2	2	2	2	2	2	2	24.00										
R3-1	LEFT TURN ONLY	24"x24"	1	1	1	1	1	1	1	4.00										
R3-2	RIGHT TURN ONLY	24"x24"	2	2	2	2	2	2	2	8.00										
R5-1	DO NOT ENTER	30"x30"		1				1	1	6.25										
R6-1R	ONE WAY	36"x12"	1	1	1	1	1	1	1	3.00										
R11-2	ROAD CLOSED	48"x30"	3	4	3	5	3	5	5	50.00										
R11-4	ROAD CLOSED TO THRU TRAFFIC	60"x30"	1	1	1	1	1	1	1	12.50										
W13-1	ADVISORY SPEED PLAQUE	24"x24"		1		1		1	1	4.00										
W20-1	ROAD WORK AHEAD	48"x48"	9	9	9	9	9	9	9	144.00										
W20-1	ROAD WORK 1 MILE	48"x48"	2	2	2	2	2	2	2	32.00										
W20-1	LEFT LANE CLOSED 1/2 MILE	48"x48"	2	2	2	2	2	2	2	32.00										
W20-5	LEFT LANE CLOSED AHEAD	48"x48"	1	1	1	1	1	1	1	16.00										
W20-5	LEFT LANE CLOSED 1500 FT	48"x48"	2	2	2	2	2	2	2	32.00										
W1-6	ONE-DIRECTION LARGE ARROW	48"x24"	3	4	3	4	3	4	4	32.00										
W1-4	TRAFFIC SHIFT ARROW	48"x48"		1		1		1	1	16.00										
W3-5	SPEED LIMIT AHEAD 45	48"x48"	2	2	2	2	2	2	2	32.00										
W4-2	LEFT LANE ENDS	36"x36"	1	1	1	1	1	1	1	9.00										
W4-2	LEFT LANE ENDS	48"x48"	2	2	2	2	2	2	2	32.00										
	TRAFFIC DRUMS		182	137	200	130	205	205			205									
	TUBULAR MARKERS			342		338		342				342								
	TYPE III BARRICADE-LT. (8')		5	4	4	5	4	5					40							
	TYPE III BARRICADE-RT. (8')		3	3	3	4	4	4						32						
	TYPE III BARRICADE-RT. (24')			1		1		1						24						
	FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER		1699		519			2218							2218					
	RELOCATING PRECAST CONCRETE BARRIER			173	1699	93	1699	3664								3664				
	TEMPORARY IMPACT ATTENUATION BARRIER			1	2	1		2									2			
	TEMPORARY IMPACT ATTENUATION BARRIER (REPAIR)			1	2	1		2										2		
	ADVANCED WARNING ARROW PANEL		1	1	1	1	1	1											120	
	PORTABLE CHANGEABLE MESSAGE SIGN		1	1	1	1	1	1												18
TOTALS:										**634.25**	**205**	**342**	**40**	**56**	**2218**	**3664**	**2**	**2**	**120**	**18**

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

NOTE: TUBULAR MARKERS THAT ARE PLACED ON NEW CONSTRUCTION MAY NOT BE BOLTED TO THE NEW PAVEMNET OR PLACED IN A WAY THAT WILL DAMAGE NEWLY CONSTRUCTED PAVEMENT. UPON REMOVAL OF TUBULAR MARKERS, NEWLY CONSTUCTED CONCRETE PAVEMENT SHOULD BE REASONABLY FREE OF BITUMEN AND/OR EPOXY ADHESIVE, AS APPROVED BY THE ENGINEER.

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

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040898	18	33
		QUANTITIES				
②						

STATE OF ARKANSAS
Dustin Tackett
LICENSED PROFESSIONAL ENGINEER
No.14994
DUSTIN L. TACKETT
Digitally Signed 01/25/2023

CONCRETE BARRIER WALL

LOCATION	MEDIAN TYPE SPECIAL
	LIN. FT.
HWY. 64 MEDIAN	550
TOTAL:	**550**

BASE AND SURFACING

LOCATION	LENGTH	PORTLAND CEMENT CONCRETE PAVEMENT (9" UNIFORM THICKNESS)	
		AVG. WIDTH	SQ. YD.
	FEET	FEET	
HWY. 64 MEDIAN	550.00	8.00	488.89
TOTAL:			**488.89**

ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC

LOCATION	TON	TACK COAT
		GALLON
ENTIRE PROJECT - TO BE USED IF AND WHERE	20	38
DIRECTED BY THE ENGINEER.		
TOTALS:	**20**	**38**

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

REMOVAL AND DISPOSAL OF ITEMS

LOCATION	CONCRETE PAVEMENT	APPROACH SLABS	CONCRETE MEDIAN BARRIER
	SQ. YD.	EACH	LIN. FT.
HWY. 64 MEDIAN	490		550
HWY. 64		2	
TOTALS:	**490**	**2**	**550**

APPROACH SLABS

LOCATION	APPROACH SLABS (TYPE 1 SPECIAL)	APPROACH SLABS (TYPE 2 SPECIAL)	REINFORCING STEEL-RDWY. (GR. 60)	AGGREGATE BASE CRS. (CLASS 7)
	CU. YD.	CU. YD.	POUND	TON
WEST END OF BRIDGE	75.75		9422	59.33
EAST END OF BRIDGE		139.43	17177	103.28
TOTALS:	**75.75**	**139.43**	**26599**	**162.61**

EROSION CONTROL

LOCATION	TEMPORARY EROSION CONTROL FILTER SOCK (18") (E-13)
	LIN. FT.
*ENTIRE PROJECT TO BE USED IF AND WHERE BY THE ENGINEER	500
TOTAL:	**500**

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

WBCallaway 1/25/2023 5:54:34 PM
WORKSPACE: AHTD
L:\2021\21T0026 - ARDOT 040898 AR River Bridge Deck Rehab\Drawings\r040898_QTY Copy.DGN
REVISED DATE:

DATE REVISED	DATE REVISED	FED. ROAD DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040898	19	33
		05275		QUANTITIES		65802

SCHEDULE OF BRIDGE QUANTITIES - JOB NO. 040898

LOG MILE HWY. 64	UNIT OF STRUCTURE	ITEM NO.	SS & 802	803	803	SS & 804	SS & 809	821	SP JOB 040898	SP JOB 040898	SP JOB 040898	SP JOB 040898	SP JOB 040898	SP JOB 040898	SP JOB 040898
		ITEM	GROOVING	CLASS 1 PROTECTIVE SURFACE TREATMENT	CLASS 3 PROTECTIVE SURFACE TREATMENT	REINFORCING STEEL-BRIDGE (GRADE 60)	ARMORED JOINT WITH NEOPRENE STRIP SEAL	MODIFICATION OF EXISTING BRIDGE STRUCTURE (BRIDGE NO. _) (3)	RIVER TRAFFIC SAFETY	HYDRODEMOLITION - CLASS 1	BRIDGE DECK REPAIR FOR LATEX MODIFIED CONCRETE OVERLAYS	LATEX MODIFIED CONCRETE OVERLAY (1½" THICK)	LATEX MODIFIED CONCRETE OVERLAY (VARIABLE DEPTH)	SPALL REPAIR	SURFACE PATCHING
		UNIT	SQUARE YD.	GALLON	LINEAR FOOT	POUND	LINEAR FOOT	LUMP SUM	LUMP SUM	SQUARE YARD	SQUARE FT.	SQUARE YARD	CUBIC YARD	SQUARE FOOT	SQUARE FOOT
0.001	EXISTING BRIDGE NO. 05275 (4)(5)(7)		18,360.6	408.5	12,336	15,617	128	1	1	20,417	18,373	20,417	284	1,050	1050
TOTALS FOR JOB NO. 040898			(2) 18,360.6	(2) 408.5	12,336	(1) 15,617	(6) 128	1	1	(2) 20,417	(1) 18,373	(2) 20,417	(1) 284	(1) 1,050	(1) 1,050

(1) The quantity shown is for estimating and bidding purposes only. Actual quantity, if any, will be determined in the field.

(2) Includes portion of existing approach slab at Begin Bridge.

(3) Modification of Existing Bridge Structure includes modification of backwalls, cleaning the existing finger joint(s) and drain(s), and modification of parapet concrete for parapet slider PL replacement.

(4) Existing bridge deck has no asphalt overlay.

(5) Existing bridge deck has spalls filled with asphalt.

(6) Existing bridge has slider plate joints at East and West Abutments to be partially removed and replaced with armored joint with neoprene strip seal. Limits of replacement shall include the driving surface with no work occuring in the sidewalk location.

(7) Remove and dispose of existing approach slabs at both ends of bridge and replace with Type 1 & 2 Special Approach Slabs at both ends of bridge. See Dwg. No. 65809-65814 and roadway plans for additional information.

REFERENCE TABLE

BRIDGE	EXISTING DRAWING NUMBERS	APPLICABLE STANDARD DRAWING NOS.
05275	16101, 16102, 16109 - 16160 & 16162	55007, 55009, 55060, 55064 and 55065

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.16458
JOEL E. SKINNER

Digitally Signed 01/25/2023

BRIDGE ENGINEER

SCHEDULE OF BRIDGE QUANTITIES
HWY. 64 ARKANSAS RIVER BRIDGE DECK REHAB. (S)
SEBASTIAN COUNTY

ROUTE 64 SEC. 0

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: CWT DATE: SEPT. 2022 FILENAME: b040898_Q1.dgn
CHECKED BY: JES DATE: SEPT. 2022 SCALE: No Scale
DESIGNED BY: MAS DATE: SEPT. 2022

BRIDGE NO. 05275 DRAWING NO. 65802

JESkinner 1/25/2023 1:45:01 PM
WORKSPACE: ARDOT Bridge (2019)
L:\2021\21T01026 - ARDOT 040898 AR River Bridge Deck Rehab\Drawings\b040898_S001-QT.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
2/23/2023		6	ARK.	040898	20	33
②		SUMMARY OF QUANTITIES AND REVISIONS				

Digitally Signed 02/23/2023

SUMMARY OF QUANTITIES

ITEM NUMBER	ITEM	QUANTITY	UNIT
202	REMOVAL AND DISPOSAL OF CONCRETE PAVEMENT	490	SQ. YD.
202	REMOVAL AND DISPOSAL OF APPROACH SLABS	2	EACH
202	REMOVAL AND DISPOSAL OF CONCRETE MEDIAN BARRIER	550	LIN. FT.
SP, SS, & 303	AGGREGATE BASE COURSE (CLASS 7)	163	TON
SS & 401	TACK COAT	38	GAL.
SP, SS, & 414	ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC	20	TON
SP, SS, & 501	PORTLAND CEMENT CONCRETE PAVEMENT (9" UNIFORM THICKNESS)	489	SQ. YD.
SP, SS, & 504	APPROACH SLABS	215.18	CU. YD.
601	MOBILIZATION	1.00	LUMP SUM
SS & 603	MAINTENANCE OF TRAFFIC	1.00	LUMP SUM
SS & 604	SIGNS	634	SQ. FT.
SS & 604	BARRICADES	96	LIN. FT.
SS & 604	TRAFFIC DRUMS	205	EACH
SS & 604	FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER	2218	LIN. FT.
SS & 604	RELOCATING PRECAST CONCRETE BARRIER	3664	LIN. FT.
604	CONSTRUCTION PAVEMENT MARKINGS	9422	LIN. FT.
SP, SS, & 604	TUBULAR MARKERS	342	EACH
604	REMOVABLE CONSTRUCTION PAVEMENT MARKINGS	26181	LIN. FT.
604	REMOVAL OF PERMANENT PAVEMENT MARKINGS	12309	LIN. FT.
SS & 604	ADVANCE WARNING ARROW PANEL	120	DAY
SP, SS, & 604	PORTABLE CHANGEABLE MESSAGE SIGN	18	WEEK
SS & 621	FILTER SOCK (18")	500	LIN. FT.
SS & 631	CONCRETE BARRIER WALL (MEDIAN TYPE SPECIAL)	550	LIN. FT.
635	ROADWAY CONSTRUCTION CONTROL	1.00	LUMP SUM
719	THERMOPLASTIC PAVEMENT MARKING WHITE (6")	12548	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING YELLOW (6")	9614	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING YELLOW (8")	78	LIN. FT.
721	RAISED PAVEMENT MARKERS (TYPE II)	132	EACH
SS & 731	TEMPORARY IMPACT ATTENUATION BARRIER	2	EACH
SS & 731	TEMPORARY IMPACT ATTENUATION BARRIER (REPAIR)	2	EACH
SS & 804	REINFORCING STEEL-ROADWAY (GRADE 60)	26599	POUND
	STRUCTURES OVER 20' SPAN		
SS & 802	GROOVING	18360.6	SQ. YD.
SP	SURFACE PATCHING	1050	SQ. FT.
SP	SPALL REPAIR	1050	SQ. FT.
803	CLASS 1 PROTECTIVE SURFACE TREATMENT	408.5	GAL.
803	CLASS 3 PROTECTIVE SURFACE TREATMENT	12336	LIN. FT.
SS & 804	REINFORCING STEEL-BRIDGE (GRADE 60)	15617	POUND
SS & 809	ARMORED JOINT WITH NEOPRENE STRIP SEAL	128	LIN. FT.
SP	HYDRODEMOLITION - CLASS 1	20417	SQ. YD.
821	MODIFICATION OF EXISTING BRIDGE STRUCTURE (BRIDGE NO. 05275)	1.00	LUMP SUM
SP	BRIDGE DECK REPAIR FOR LATEX MODIFIED CONCRETE OVERLAYS	18373	SQ. FT.
SP	LATEX MODIFIED CONCRETE OVERLAY (1 1/2" THICK)	20417	SQ. YD.
SP	LATEX MODIFIED CONCRETE (VARIABLE DEPTH)	284	CU. YD.
SP	RIVER TRAFFIC SAFETY	1.00	LUMP SUM

REVISIONS

DATE	REVISION	SHEET NUMBER
2/23/2023	ADDED "FHWA-1273 SUPPLEMENT - TRAINING PROGRAM JOB 040898" TO GOVERNING SPECIFICATIONS	3, 20

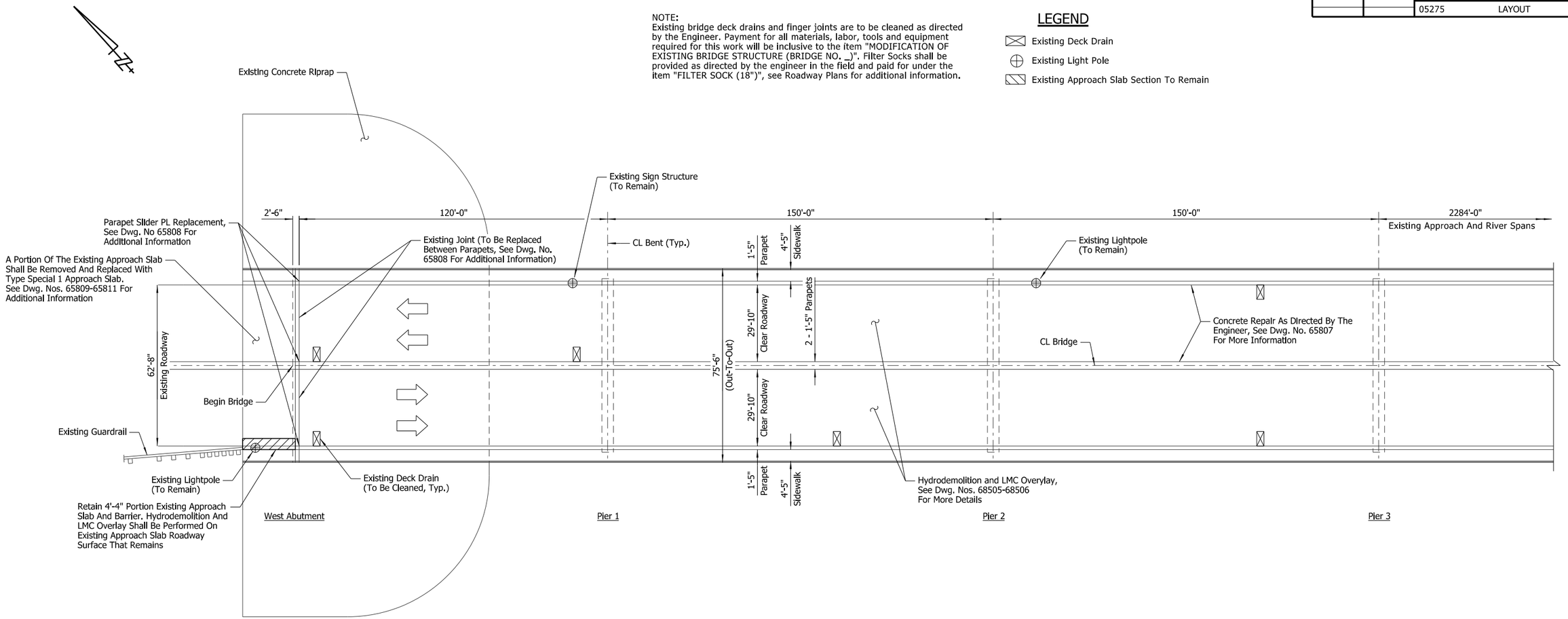
HBVinson 2/23/2023 2:32:20 PM
WORKSPACE: AHTD
L:\202\21T0026 - ARDOT 040898 AR River Bridge Deck Rehab\Drawings\r040898_QTY.DGN
REVISED DATE:

DATE REVISED	DATE REVISED	FED. ROAD DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040898	21	33
		05275		LAYOUT		65803

NOTE:
Existing bridge deck drains and finger joints are to be cleaned as directed by the Engineer. Payment for all materials, labor, tools and equipment required for this work will be inclusive to the item "MODIFICATION OF EXISTING BRIDGE STRUCTURE (BRIDGE NO. _)". Filter Socks shall be provided as directed by the engineer in the field and paid for under the item "FILTER SOCK (18")", see Roadway Plans for additional information.

LEGEND

- Existing Deck Drain
- Existing Light Pole
- Existing Approach Slab Section To Remain



PLAN
Scale: 1" = 20'-0"

GENERAL NOTES:

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications For Highway Construction (2014 Edition) with applicable Supplemental Specifications And Special Provisions. Unless otherwise noted In the plans, Section and Subsection numbers refer to The Standard Construction Specifications.

REMODELING OF THE EXISTING BRIDGE: The proposed work consists of verification of the existing bridge geometry; removal of the existing approach slabs and transition rails; removal of existing joint armor; installation of new joint armor; construction of new backwall above the paving notch; installation of new armored joint with neoprene strip seal at each abutment; and construction of new approach slabs. For additional requirements in conducting the work, see Section 821. The cost associated with the removal and disposal of portions of the existing bridge shall be included in the item "MODIFICATION OF EXISTING BRIDGE STRUCTURE (BRIDGE NO. 05275)".

VERIFICATION: Except as noted, components of the existing bridge are to be retained and joined to the proposed work. The information and dimensions shown are based on existing bridge plans. The Contractor is to adhere strictly to the requirements for verification of the geometry of the existing bridge and its relationship to the proposed work, as described in Subsection 821.02, and make necessary adjustments to fit the proposed work to the existing structure. Payment for this work shall be considered subsidiary to the pay item "MODIFICATION OF EXISTING (BRIDGE NO. 05275)".

REMOVAL AND SALVAGE: Unless noted otherwise, all material removed from the existing bridge under item 821 shall be disposed of per Section 205. All material from the existing bridge shall become property of the Contractor.

MAINTENANCE OF TRAFFIC: See Roadway Plans

DETAIL DRAWINGS:	DRAWING NO(S):
Staged Construction	65805-65806
Concrete Repairs	65807
Joint Details	65808, 55009 & 55064
Backwall and Parapet Details	65808A & 55065
Approach Slabs	65809-65814
Details For Steel Bridge Structures	55007
Details For Hydro. And Lmc Ov. On Beam/Gir. Bridges	55060

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.16458
JOEL E. SKINNER
Digitally Signed 01/25/2023
BRIDGE ENGINEER

SHEET 1 OF 2
LAYOUT OF BRIDGE
U.S. HIGHWAY 64 OVER ARKANSAS RIVER
HWY. 64 ARKANSAS RIVER BRIDGE DECK REHAB. (S)
SEBASTIAN COUNTY
ROUTE 64 SEC. 0
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: AUG. 2022 FILENAME: b040898_L1.dgn
CHECKED BY: JES DATE: SEPT. 2022 SCALE: As Shown
DESIGNED BY: MAS DATE: AUG. 2022
BRIDGE NO. 05275 DRAWING NO. 65803

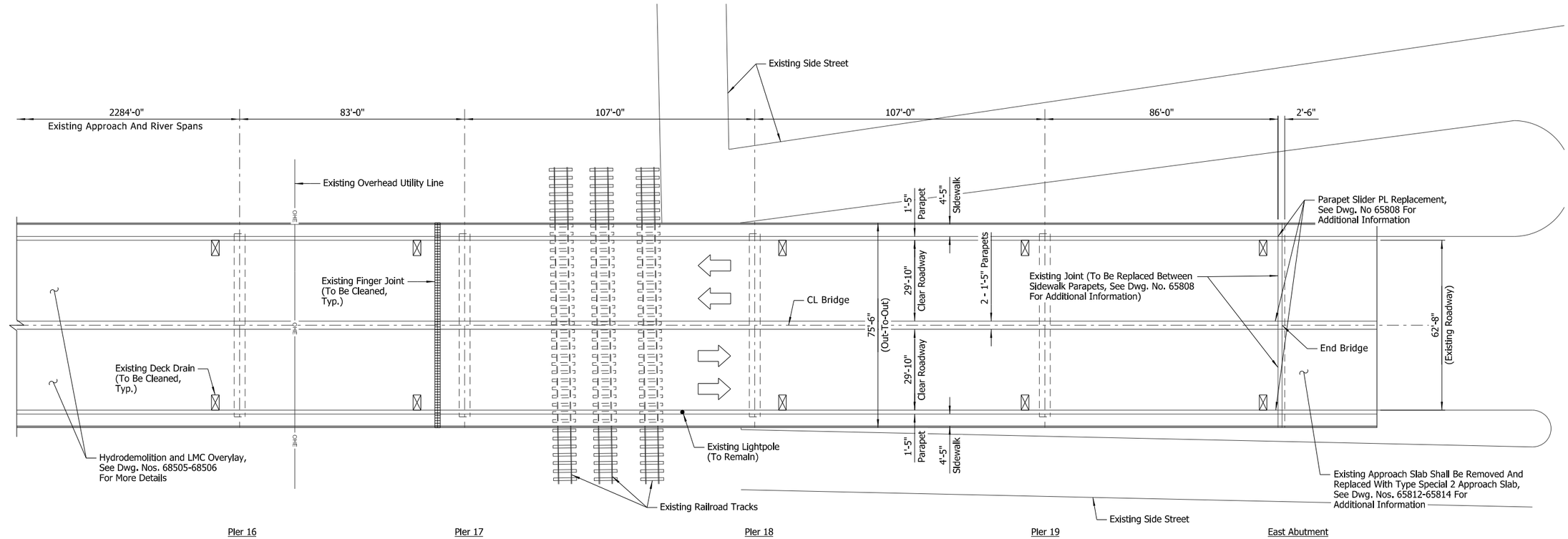
JESkinner 1/25/2023 1:45:02 PM
WORKSPACE: ARDOT Bridge (2019)
L:\2021\21T0126 - ARDOT 040898 AR River Bridge Deck Rehab\Drawings\b040898_S101-LO.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. ROAD DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040898	22	33
		05275		LAYOUT		65804

NOTE:
Existing bridge deck drains and finger joints are to be cleaned as directed by the Engineer. Payment for all materials, labor, tools and equipment required for this work will be inclusive to the item "MODIFICATION OF EXISTING BRIDGE STRUCTURE (BRIDGE NO. _)". Filter Socks shall be provided as directed by the engineer in the field and paid for under the item "FILTER SOCK (18")", see Roadway Plans for additional information.

LEGEND

- Existing Deck Drain
- Existing Light Pole
- Existing Finger Joint



PLAN

Scale: 1" = 20'-0"

JESkinner 1/25/2023 1:45:02 PM
WORKSPACE: ARDOT Bridge (2019)
L:\2021\21T01026 - ARDOT 040898 AR River Bridge Deck Rehab\Drawings\b040898_S102-LO.dgn
REVISED DATE:

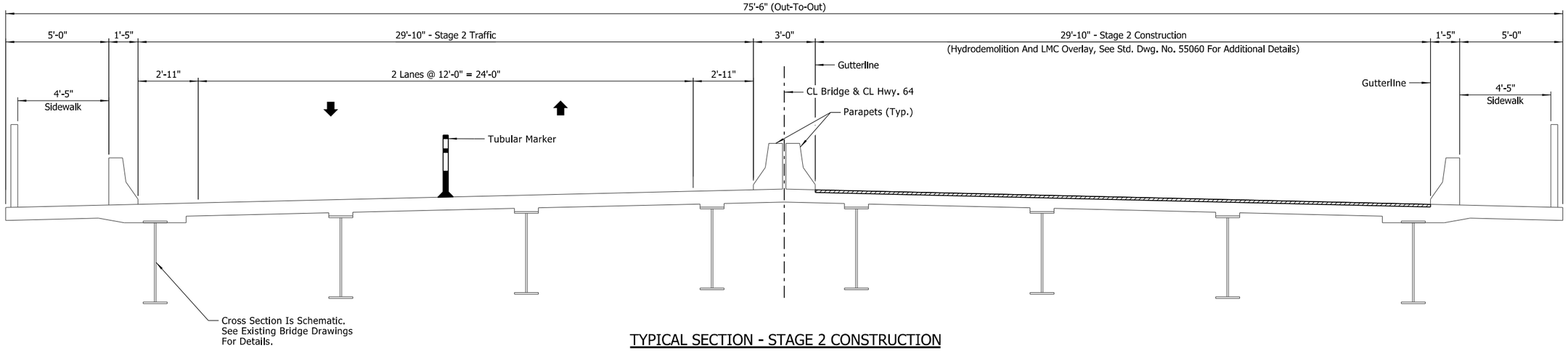
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.16458
JOEL E. SKINNER
Digitally Signed 01/25/2023
BRIDGE ENGINEER

SHEET 2 OF 2
LAYOUT OF BRIDGE
U.S. HIGHWAY 64 OVER ARKANSAS RIVER
HWY. 64 ARKANSAS RIVER BRIDGE DECK REHAB. (S)
SEBASTIAN COUNTY
ROUTE 64 SEC. 0
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: AUG. 2022 FILENAME: b040898_L2.dgn
CHECKED BY: JES DATE: SEPT. 2022 SCALE: As Shown
DESIGNED BY: MAS DATE: AUG. 2022
BRIDGE NO. 05275 DRAWING NO. 65804

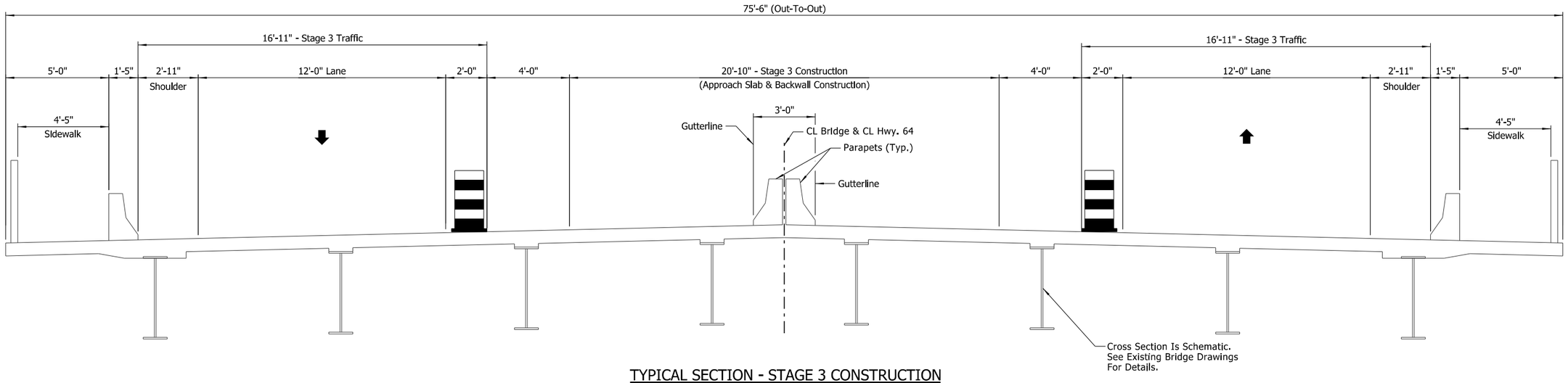
DATE REVISED	DATE REVISED	FED. ROAD DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040898	23	33
		05275	STAGED CONSTRUCTION			65805

NOTE:
Details which relate to Maintenance of Traffic are shown on Bridge Plans for Information only. See Roadway Plans for Maintainance of Traffic.



TYPICAL SECTION - STAGE 2 CONSTRUCTION

(Looking Ahead)
Scale: ⅜" = 1'-0"



TYPICAL SECTION - STAGE 3 CONSTRUCTION

(Looking Ahead)
Scale: ⅜" = 1'-0"

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.16458
JOEL E. SKINNER

Digitally Signed 01/25/2023

BRIDGE ENGINEER

SHEET 1 OF 2
DETAILS OF STAGED CONSTRUCTION
U.S. HIGHWAY 64 OVER ARKANSAS RIVER
HWY. 64 ARKANSAS RIVER BRIDGE DECK REHAB. (S)
SEBASTIAN COUNTY

ROUTE 64 SEC. 0

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

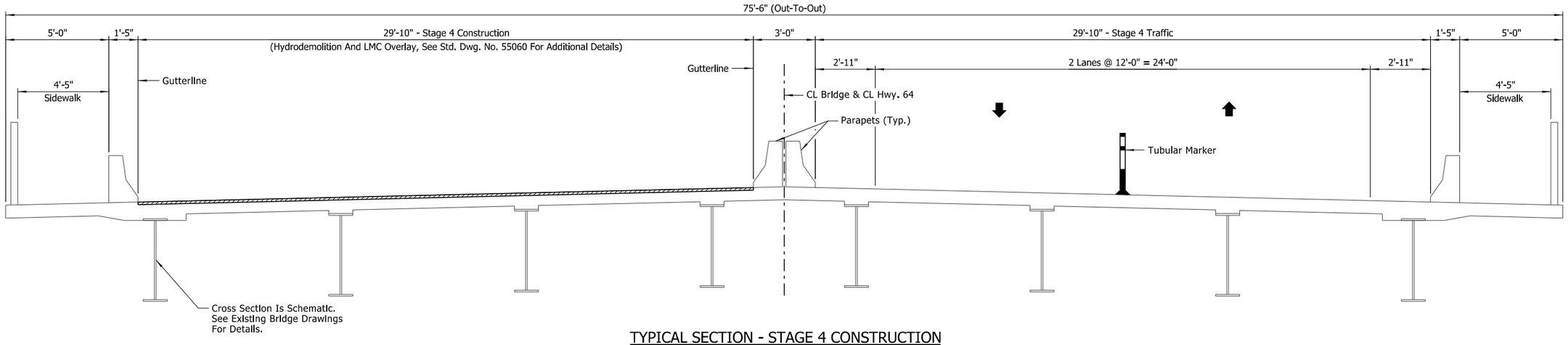
DRAWN BY: HEW DATE: AUG. 2022 FILENAME: b040898_SC1.dgn
CHECKED BY: JES DATE: SEPT. 2022 SCALE: As Shown
DESIGNED BY: MAS DATE: AUG. 2022

BRIDGE NO. 05275 DRAWING NO. 65805

JESkinner 1/25/2023 1:45:03 PM
WORKSPACE: ARDOT Bridge (2019)
L:\2021\21T01026 - ARDOT 040898 AR River Bridge Deck Rehab\Drawings\b040898_S111-SC.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. ROAD DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040898	24	33
		05275	STAGED CONSTRUCTION			65806

NOTE:
Details which relate to Maintenance of Traffic
are shown on Bridge Plans for Information only.
See Roadway Plans for Maintainance of Traffic.



TYPICAL SECTION - STAGE 4 CONSTRUCTION

(Looking Ahead)
Scale: ⅜" = 1'-0"

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.16458
JOEL E. SKINNER

Digitally Signed 01/25/2023

BRIDGE ENGINEER

SHEET 2 OF 2
DETAILS OF STAGED CONSTRUCTION
U.S. HIGHWAY 64 OVER ARKANSAS RIVER
HWY. 64 ARKANSAS RIVER BRIDGE DECK REHAB. (S)
SEBASTIAN COUNTY

ROUTE 64 SEC. 0

ARKANSAS STATE HIGHWAY COMMISSION

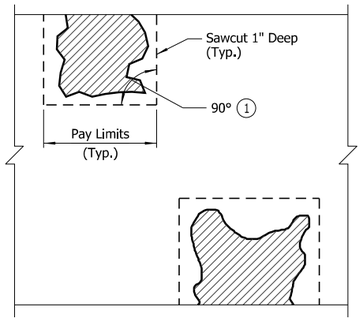
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: AUG. 2022 FILENAME: b040898_SC2.dgn
CHECKED BY: JES DATE: SEPT. 2022 SCALE: As Shown
DESIGNED BY: MAS DATE: AUG. 2022

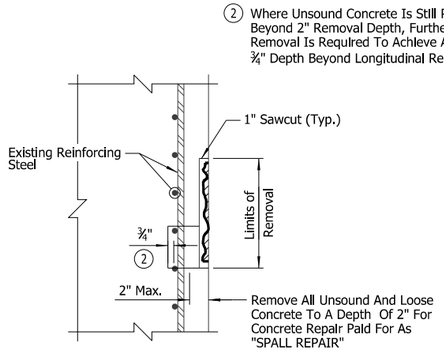
BRIDGE NO. 05275 DRAWING NO. 65806

JESkinner 1/25/2023 1:45:03 PM
WORKSPACE: ARDOT Bridge (2019)
L:\2021\21T0106 - ARDOT 040898 AR River Bridge Deck Rehab\Drawings\b040898_S112-SC.dgn
REVISED DATE:

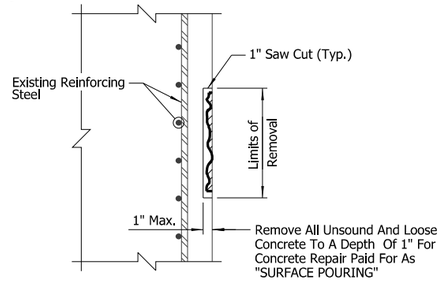
DATE REVISED	DATE REVISED	FED. ROAD DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040898	25	33
		05275		CONCRETE REPAIR		65807



SAWCUT DETAIL



SPALL REPAIR DETAILS



SURFACE PATCH DETAILS

CONCRETE REPAIR NOTES:

Concrete repairs shall be performed in accordance with Special Provision "CONCRETE REPAIRS".

Limits shown are not exact areas and locations but are representative of potential spall repair areas to be encountered. The final limits and locations shall be determined by the Engineer.

Concrete repairs shall consist of removing all unsatisfactory concrete described as follows: any loose, delaminated, unsound, severely spalled or deteriorated concrete and replaced with an approved material listed in Special Provision "CONCRETE REPAIRS".

Sawcut around all damaged areas as shown on the "SAWCUT DETAIL". Exercise caution during the sawcutting operation. Any reinforcement damaged during the sawcutting will be replaced at the Contractor's expense.

Concrete repairs shall be paid for under the item "SURFACE PATCHING" when the depth of repair is 1" or less.

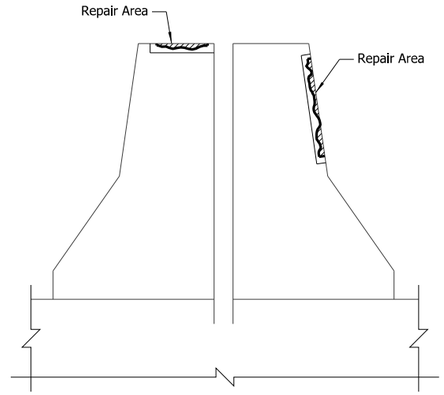
Concrete repairs shall be paid for under the item "SPALL REPAIR" when the depth of repair exceeds 1". The minimum depth of spall repair shall extend to the face of transverse reinforcing steel in the cap or to sound concrete. The exposed reinforcing steel shall be blast cleaned prior to applying the concrete mortar.

The surface of the concrete for surface patching and spall repair shall be prepared in accordance with the repair mortar Manufacturer's recommendations.

Areas to be repaired under the item "SURFACE PATCHING" shall utilize "RAPID SET MORTAR MIX" manufactured by CTS Cement. The Contractor may submit an alternate product for review and approval.

Areas to be repaired under the item "SPALL REPAIR" shall utilize either "RAPID SET MORTAR MIX" or "RAPID SET CONCRETE MIX" manufactured by CTS Cement. The appropriate product shall be determined by the actual depth of repair encountered. The Contractor may submit an alternate product for approval.

After all concrete repairs are completed, the repaired concrete surfaces shall receive a Class 2 protective surface treatment. The cost of Class 2 treatment shall be included in the item "SURFACE PATCHING" or "SPALL REPAIR".



MEDIAN BARRIER CONCRETE REPAIR DETAIL

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.16458
JOEL E. SKINNER

Digitally Signed 01/25/2023

BRIDGE ENGINEER

CONCRETE REPAIR DETAILS

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

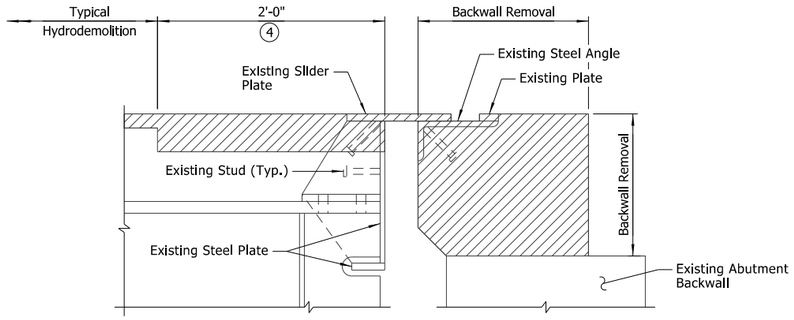
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: AUG. 2022 FILENAME: b040898_CRP.dgn
CHECKED BY: JES DATE: SEPT. 2022 SCALE: No Scale
DESIGNED BY: MAS DATE: AUG. 2022

BRIDGE NO. 05275 DRAWING NO. 65807

JESkinner 1/25/2023 1:45:03 PM
WORKSPACE: ARDOT Bridge (2019)
L:\2021\21T01026 - ARDOT 040898 AR River Bridge Deck Rehab\Drawings\b040898_S201-SD.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. ROAD DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040898	26	33
		05275		JOINT REPAIR		65808

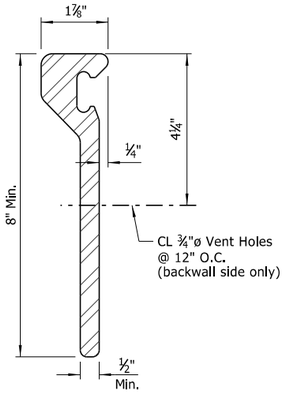


Removal Area

New Concrete Area

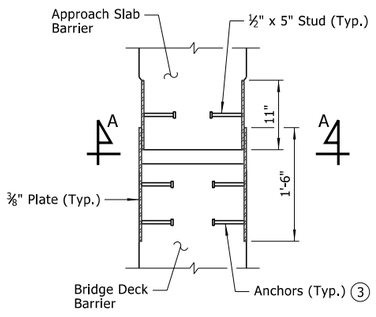
EXISTING EXPANSION JOINT - DEMOLITION

Scale: 1½" = 1'-0"



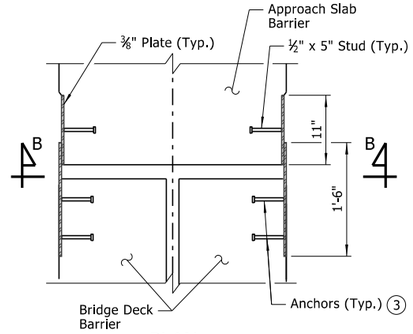
STRIP EXTRUSION DETAIL

No Scale



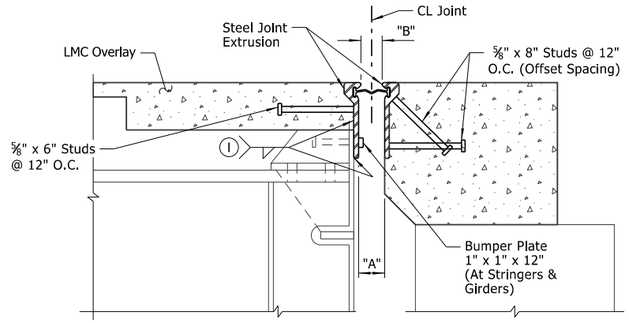
PLAN

(Shown At Parapet)
Scale: 1" = 1'-0"



PLAN

(Shown At Median Barrier)
Scale: 1" = 1'-0"



STRIP SEAL EXPANSION JOINT - CONSTRUCTION

Scale: 1½" = 1'-0"

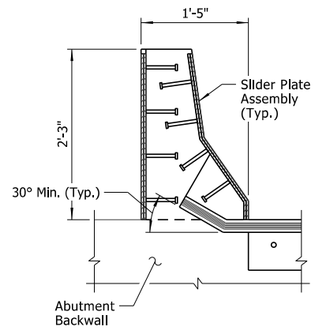
1 See "WELD TABLE" on Std. Dwg. No. 55007 for min. weld size.

3 The method of attachment of the slider plate assembly shall allow for removal to provide for future replacement of the neoprene seal. Anchors will not be paid for directly but will be considered subsidiary to "ARMORED JOINT WITH NEOPRENE STRIP SEAL".

Method of installation and fabrication shall be determined by the Manufacturer.

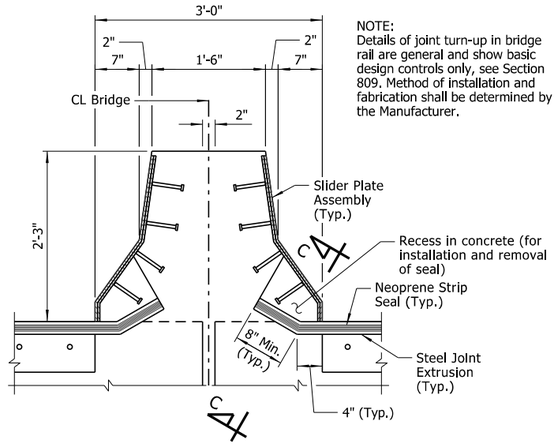
4 Removal Depth = ¾" minimum below top mat of reinforcement or 4", whichever is greater, and as directed by the Engineer.

5 Width of opening in parapet to allow for removal or repair of joint



SECTION A-A

Scale: 1" = 1'-0"

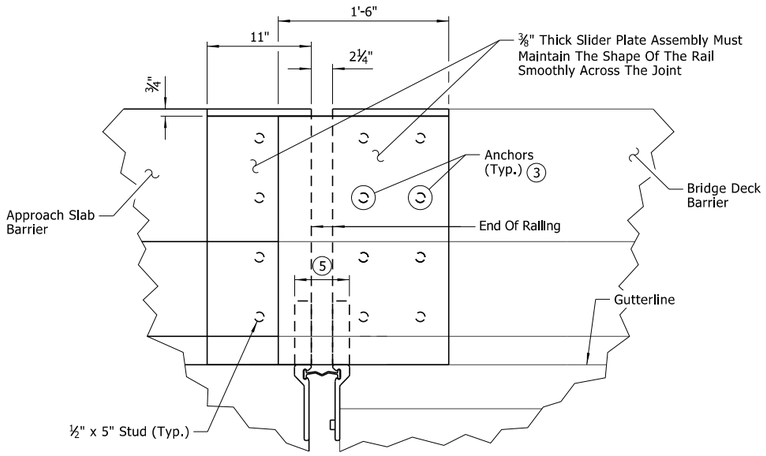


SECTION B-B

Scale: 1" = 1'-0"

NOTE:
Details of joint turn-up in bridge rail are general and show basic design controls only, see Section 809. Method of installation and fabrication shall be determined by the Manufacturer.

NOTE:
For "SECTION C-C", see Std. Dwg. 55009.



SLIDER PLATE REPLACEMENT DETAIL

(Shown At Median Barrier, Parapet Similar)
Scale: 1½" = 1'-0"

GENERAL NOTES

The steel extrusion material (DS Brown SSPA or approved equal) and neoprene strip seal material (DS Brown L2-400 or approved equal) and installation shall be in accordance with Section 809.

The expansion device shall provide a movement rating as shwon in the "STRIP SEAL JOINT DATA" table. The expansion joint shall be capable of sealing the deck surface and bridge rail area to prevent moisture and other contaminents from descending through the joint.

Unless noted otherwise, all structural steel shall be ASTM A709, Gr. 50W, and all exposed surfaces shall be cleaned in accordance with Subsection 807.84(e).

Details of the proposed slider plate assembly shall be submitted to and approved by the Engineer prior to fabrication of any structural steel at the expansion device.

Parapet slider plates and structural steel completely embedded in concrete shall conform to ASTM A709, Gr. 36, 50 or 50W steel. The surfaces of the slider plates which will not be in contact with the concrete shall be cleaned and painted in accordance with Section 638, or as directed by the Engineer. Painting shall not be paid for directly but will be considered subsidiary to "ARMORED JOINT WITH NEOPRENE STRIP SEAL".

Payment for all materials, expansion joint, armor, slider plates, anchors, studs, labor, tools, and equipment required for replacement of slider plates shall be included in the unit price item "ARMORED JOINT WITH NEOPRENE STRIP SEAL".

For backwall repair details, see Dwg. No. 65808A.

For additional information, see Std. Dwg. No. 55009 and 55064.

The Contractor shall check measurements in the field and make any adjustments necessary to fit the new work to the existing structure.

STRIP SEAL JOINT DATA

Abutment	Movement Rating	"A" Width Perpendicular To Joint At 24 Hour Average Temperature 2 Of:			"B" Width Perpendicular To Joint At 24 Hour Average Temperature 2 Of:		
		40°F	60°F	80°F	40°F	60°F	80°F
West	4"	3 3/16"	2 3/4"	2 5/16"	2 1/16"	2 1/4"	1 13/16"
East	4"	3 1/16"	2 3/4"	2 7/16"	2 9/16"	2 1/4"	1 15/16"

2 The temperature used to set the joint opening shall be the approximate average air temperature during the 24 hour period immediately before the bolts are tightened. The Engineer shall establish the temperature.

Interpolation of the table may be necessary. Installation is limited to 40°F min. and 80°F max. The temperature limitations of the lubricant-adhesive Manufacturer shall be observed.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.16458
JOEL E. SKINNER

Digitally Signed 01/25/2023

BRIDGE ENGINEER

JOINT AND SLIDER PLATE DETAILS

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

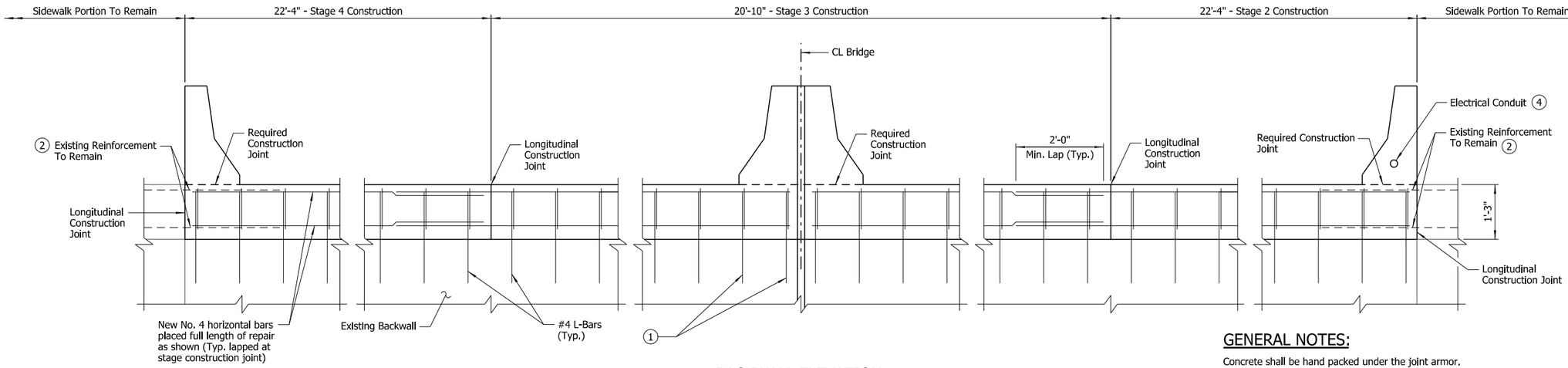
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: SEPT. 2022 FILENAME: b040898_JR.dgn
CHECKED BY: JES DATE: SEPT. 2022 SCALE: As Shown
DESIGNED BY: MAS DATE: SEPT. 2022

BRIDGE NO. 05275 DRAWING NO. 65808

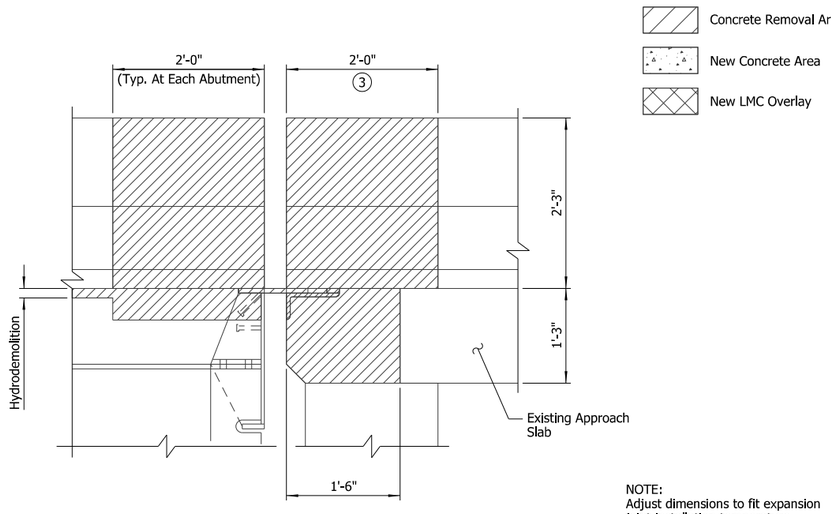
JESkinner 1/25/2023 1:45:04 PM
WORKSPACE: ARDOT Bridge (2019)
L:\2021\21T01026 - ARDOT 040898 AR River Bridge Deck Rehab\Drawings\b040898_S202-SD.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. ROAD DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040898	27	33
		05275		BACKWALL REPAIR		65808A



BACKWALL ELEVATION

(Shown for East Abutment, West Abutment Is Similar)
Scale: ¾" = 1'-0"



Concrete Removal Area

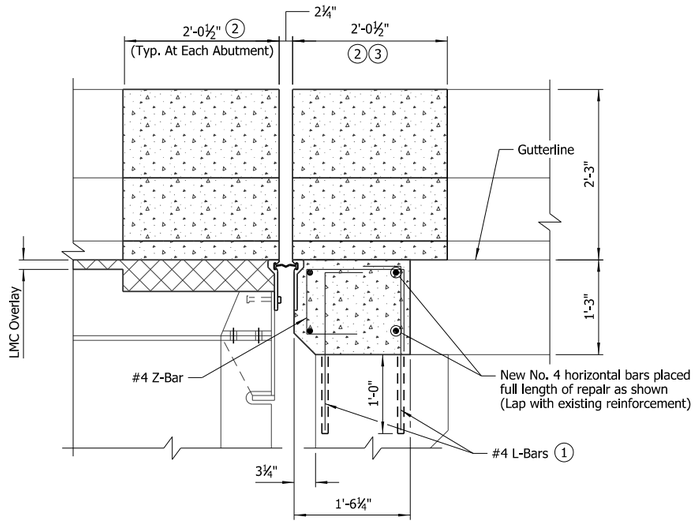
New Concrete Area

New LMC Overlay

NOTE:
Adjust dimensions to fit expansion joint installation temperature.

BACKWALL AND BARRIER - DEMOLITION

Scale: 1" = 1'-0"



BACKWALL AND BARRIER - CONSTRUCTION

Scale: 1" = 1'-0"

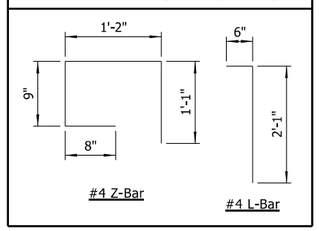
(1) Grout new No. 4 vertical bars into drilled holes spaced to avoid existing reinforcing steel (12" O.C. max.). Grout shall be an approved non-shrink grout or resin anchoring system listed on the QPL. Hole diameter and installation procedures shall be as required by the grout manufacturer. Modify the embedment depth shown if required by the manufacturer's recommendations.

(2) Existing longitudinal reinforcement to be incorporated into new work shall be cleaned and retained. Any existing reinforcement to be incorporated that is damaged shall be replaced by dowel bars drilled and grouted into place at the Contractor's expense and approved by the Engineer.

(3) Bridge parapet removal and replacement for the limits shown apply to the West Abutment Southwest corner only. The parapet and median barrier will be replaced for the entire length of the approach slab at all other locations. For additional details, see Dwg. Nos. 65809 and 65812.

(4) Special care shall be taken when removing existing concrete to not damage existing electrical conduit. Any damage shall be repaired at the Contractor's expense.

BAR BENDING DIAGRAMS



NOTE:
Dimensions of bars are out-to-out.

GENERAL NOTES:

Concrete shall be hand packed under the joint armor.

Special care shall be taken to properly and thoroughly consolidate the concrete in the vicinity of the expansion joint device in the backwall, see Subsection 802.09(a)(3).

For approach slab median barrier and parapet reinforcement details, see Dwg. Nos. 65809-65814.

Bar positions and clearances from the forms shall be maintained by means of stays, ties, hangers and other approved devices sufficient in size and number to prevent displacement during construction, per Subsection 804.06.

Payment for all materials, reinforcement, labor, tools and equipment for backwall repairs and barrier repair on bridge deck will not be measured separately but will be considered included in the item "MODIFICATION OF EXISTING BRIDGE STRUCTURE (BRIDGE NO. 05275)". Barrier work located on approach slab shall be included in the item "APPROACH SLABS".

For new strip seal expansion joint and slider plate assembly notes and details, see Dwg. No. 65808.

Make adjustments as necessary to match the top surface of the finished LMC Overlay on the adjacent bridge deck and the adjacent roadway surface.

Replacement concrete at abutment backwall shall be High Early Strength Portland Cement Concrete Pavement per Subsection 501.08 or Latex Modified Concrete used in the bridge deck ($f'c$ = 4,000 psi). Reinforcing Steel shall conform to Section 804.

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

Class 1 Protective Surface Treatment shall be applied to the top of backwall and the roadway face and top of new barrier and parapets.

The Contractor shall make check measurements in the field and make any adjustments necessary to fit the new work to the existing structure.

For additional information, see Std. Dwg. No. 55065.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.16458
JOEL E. SKINNER

Digitally Signed 01/25/2023

BRIDGE ENGINEER

BACKWALL AND PARAPET REPAIR DETAILS

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

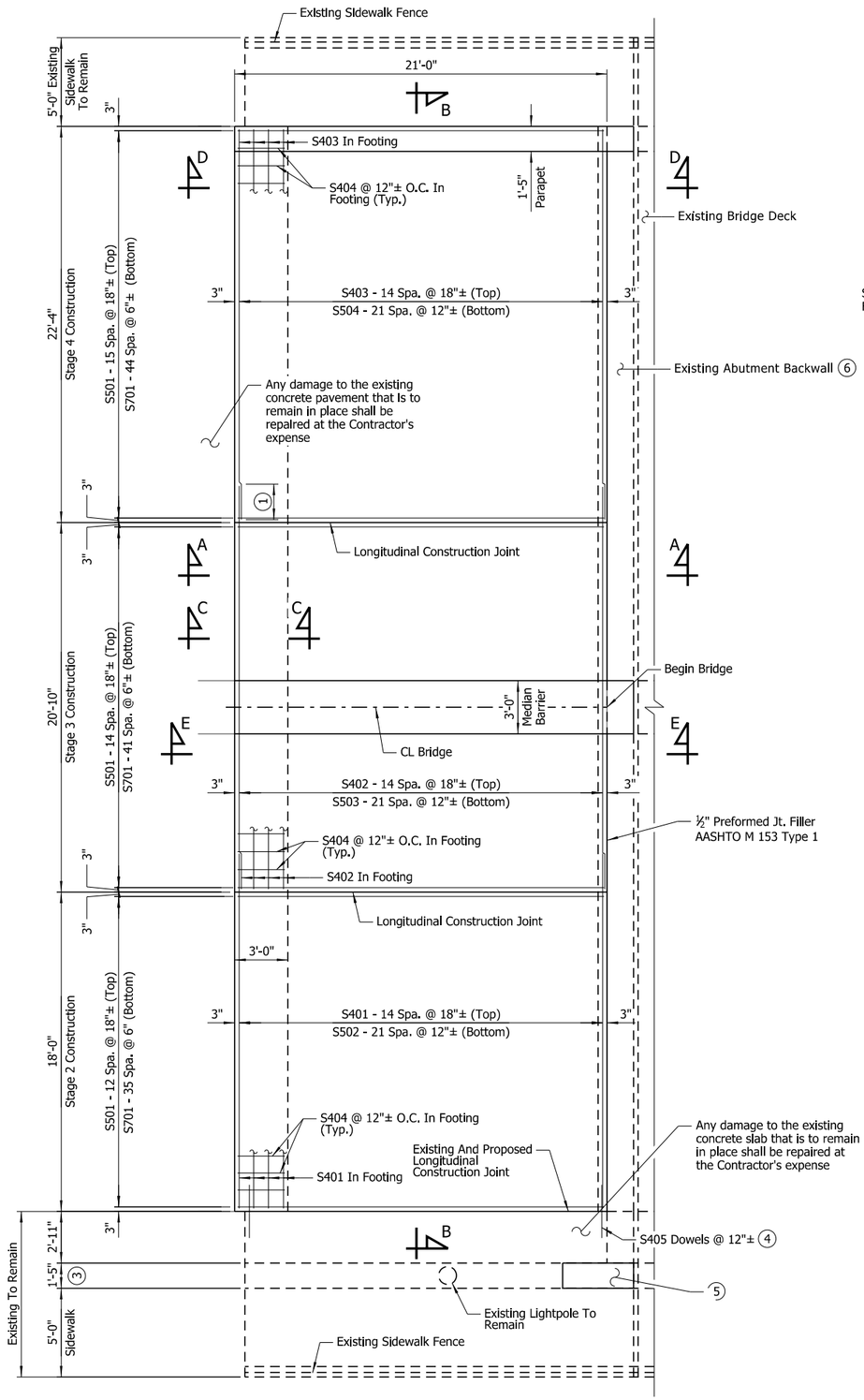
LITTLE ROCK, ARK.

DRAWN BY:	HEW	DATE:	DEC. 2022	FILENAME:	b040898_BWR.dgn
CHECKED BY:	JES	DATE:	DEC. 2022	SCALE:	As Shown
DESIGNED BY:	MAS	DATE:	DEC. 2022		

BRIDGE NO. 05275 DRAWING NO. 65808A

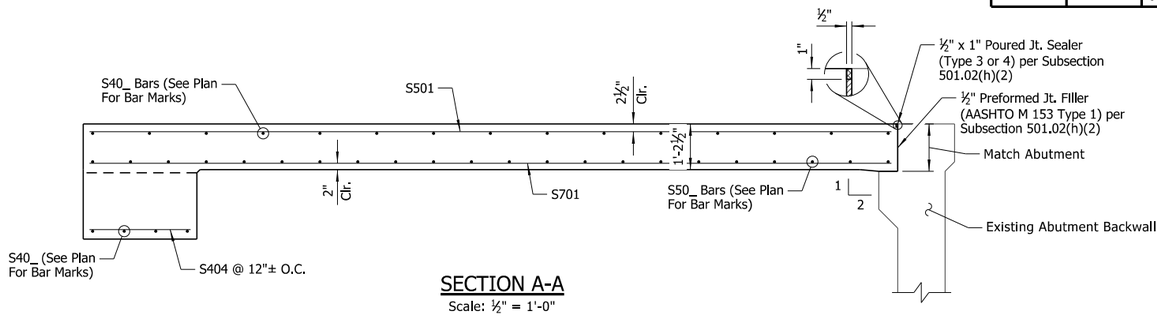
JESkinner 1/25/2023 1:45:05 PM
WORKSPACE: ARDOT Bridge (2019)
L:\2021\21T01026 - ARDOT 040898 AR River Bridge Deck Rehab\Drawings\b040898_S203-SID.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. ROAD DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040898	28	33
		05275		APPROACH SLAB		65809



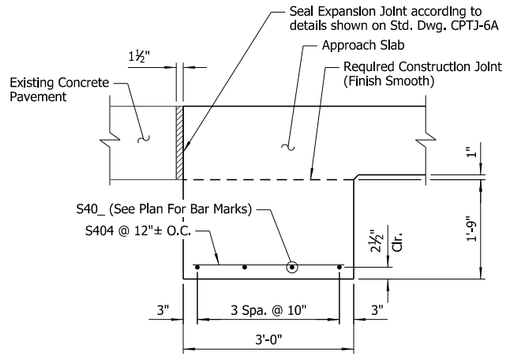
PLAN - TYPE 1 SPECIAL APPROACH SLAB

(Shown For Begin Bridge)
Scale: ¼" = 1'-0"



SECTION A-A

Scale: ½" = 1'-0"



SECTION C-C

Scale: ¾" = 1'-0"

NOTES:
For "SECTION B-B", see Dwg. No. 65811.

For "VIEW D-D" & "VIEW E-E", see Dwg. No. 65810.

GENERAL NOTES:

The surface finish for the Approach Slab shall match that used on the bridge deck.

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

Bar positions and clearances from the forms shall be maintained by means of stays, ties, hangers or other approved devices sufficient in size and number to prevent displacement during construction, per Subsection 804.06.

The Contractor shall make check measurements in the field and make any adjustments necessary to fit the new work to the existing structure.

QUANTITIES
(FOR INFORMATION ONLY)

TYPE	Concrete (Cu. Yds.)	Reinforcing Steel (Lbs.)
Type 1 Special	75.75 (2)	9,422

(2) Includes 3.97 Cu. Yds. for the median barrier and 2.03 Cu. Yds. for the parapet. For details of the median barrier, parapet, and bar list associated with the median barrier and parapets, see Dwg. No. 65810.

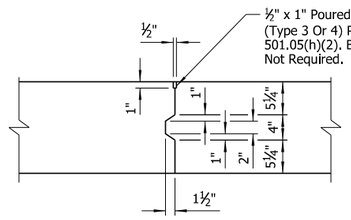
(1) 2'-0" Min. Lap (Typ.)

(3) Existing Parapet

(4) Dowels shall be drilled and grouted 18" into existing slab. At the Contractor's option, 24" of existing reinforcement may be retained, cleaned and incorporated into new slabs. Work for drilling and grouting, will not be paid for separately but will be considered subsidiary to "Approach Slabs".

(5) Parapet removal and replacement area. For notes and details, see Dwg. No. 65808A.

(6) For backwall repair details, see Dwg. No. 65808A.



DETAILS OF LONGITUDINAL CONSTRUCTION JOINT

Scale: 1" = 1'-0"

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.16458
JOEL E. SKINNER

Digitally Signed 01/25/2023

BRIDGE ENGINEER

SHEET 1 OF 3
TYPE 1 SPECIAL APPROACH SLAB

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: SEPT. 2022 FILENAME: b040898_AS1.dgn
CHECKED BY: JES DATE: SEPT. 2022 SCALE: As Shown
DESIGNED BY: MAS DATE: SEPT. 2022

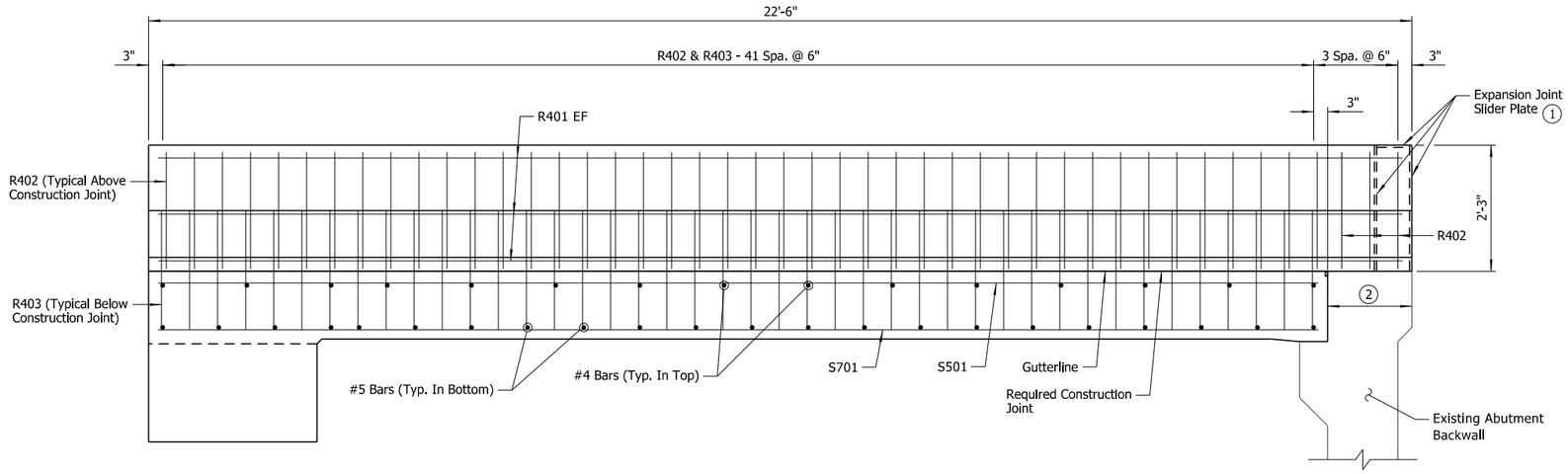
BRIDGE NO. 05275 DRAWING NO. 65809

JESkinner 1/25/2023 1:45:05 PM
WORKSPACE: ARDOT Bridge (2019)
L:\2021\21T01026 - ARDOT 040898 AR River Bridge Deck Rehab\Drawings\b040898_S301-AS.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. ROAD DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040898	29	33
		05275		APPROACH SLAB		65810

LEGEND

EF = Each Face

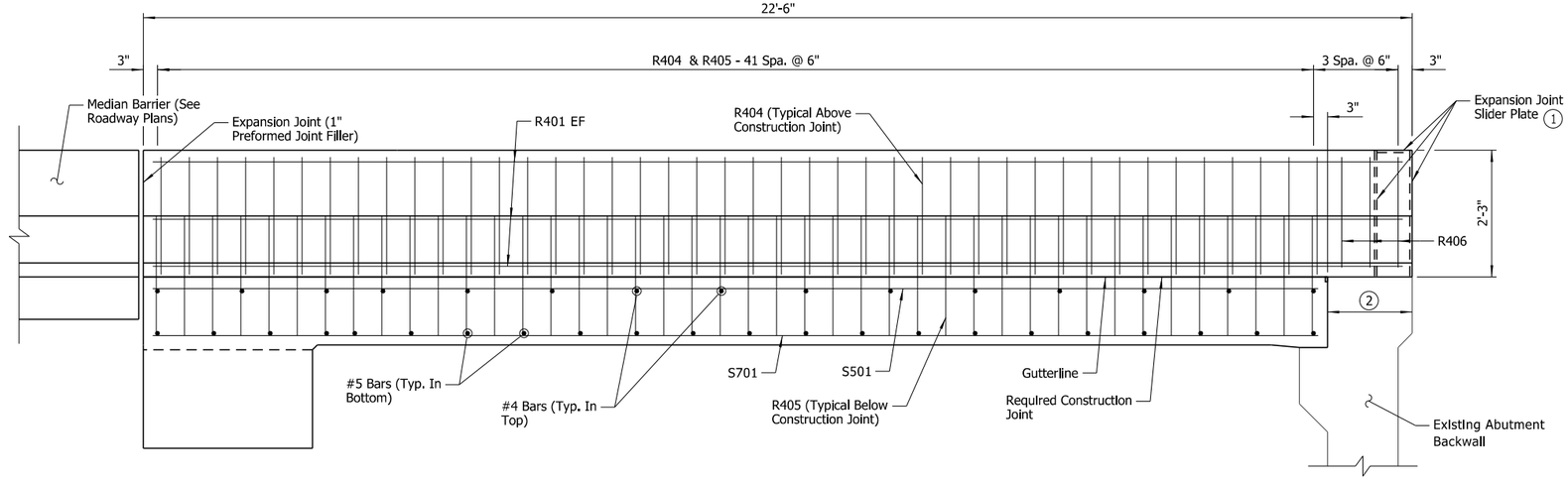


VIEW D-D

Scale: ¾" = 1'-0"

(1) For additional information of slider plate, see Dwg. No. 65808.

(2) Extension of Concrete Rail from Approach Slab over Backwall. Provide 3 Layers of Roofing Felt Matertial (Bond Breaker) Between Backwall and Concrete Rail



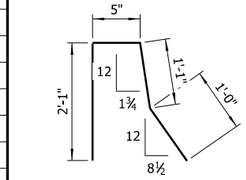
VIEW E-E

Scale: ¾" = 1'-0"

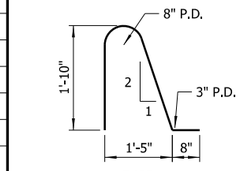
BAR LIST			
Mark	No. Req'd.	Length	Pin Dia.
R401	12	22'-2"	Str.
R402	45	4'-4½"	3"
R403	42	4'-10"	3", 8"
R404	42	5'-4"	2"
R405	42	7'-1½"	2"
R406	3	7'-7"	2"
S401	19	20'-0"	Str.
S402	19	22'-10"	Str.
S403	19	22'-0"	Str.
S404	64	2'-8"	Str.
S405	22	3'-0"	Str.
S501	44	20'-8"	Str.
S502	22	20'-0"	Str.
S503	22	22'-10"	Str.
S504	22	22'-0"	Str.
S701	123	20'-8"	Str.

NOTE:
Dimensions of bars are out-to-out.

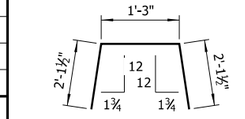
BAR BENDING DIAGRAMS



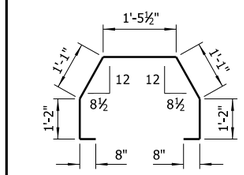
R402



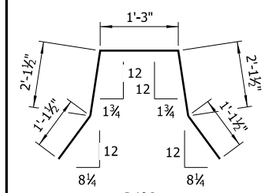
R403



R404



R405



R406

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.16458
JOEL E. SKINNER

Digitally Signed 01/25/2023

BRIDGE ENGINEER

SHEET 2 OF 3
TYPE 1 SPECIAL APPROACH SLAB

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

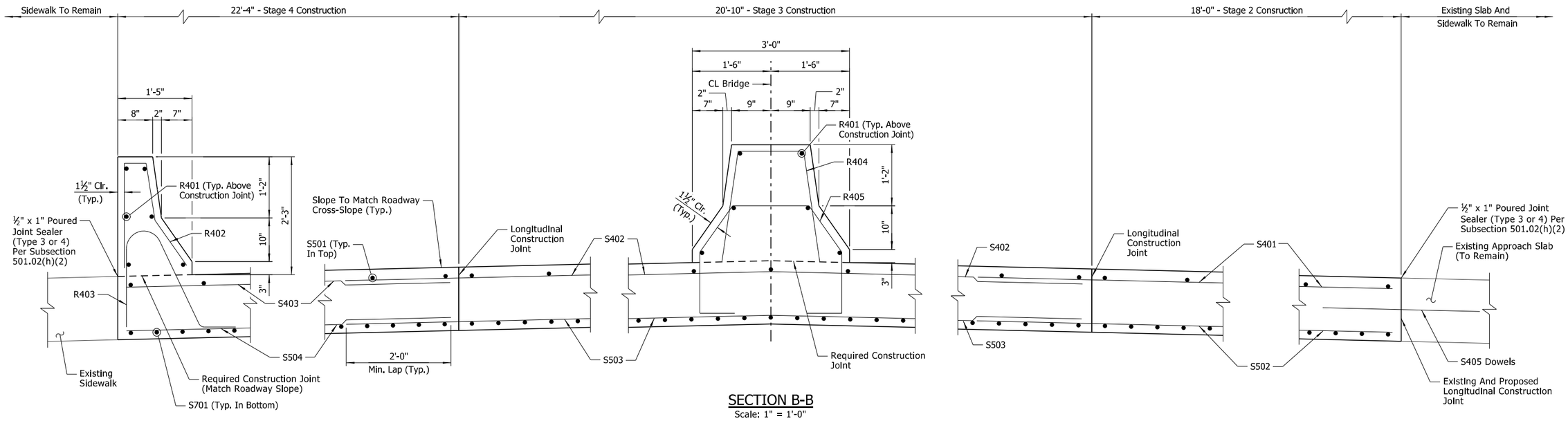
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: SEPT. 2022 FILENAME: b040898_AS2.dgn
CHECKED BY: JES DATE: SEPT. 2022 SCALE: As Shown
DESIGNED BY: MAS DATE: SEPT. 2022

BRIDGE NO. 05275 DRAWING NO. 65810

JESkinner 1/25/2023 1:45:06 PM
WORKSPACE: ARDOT Bridge (2019)
L:\2021\21T01026 - ARDOT 040898 AR River Bridge Deck Rehab\Drawings\b040898_S302-AS.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. ROAD DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040898	30	33
		05275		APPROACH SLAB		65811



SECTION B-B
Scale: 1" = 1'-0"

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.16458
JOEL E. SKINNER

Digitally Signed 01/25/2023

BRIDGE ENGINEER

SHEET 3 OF 3
TYPE 1 SPECIAL APPROACH SLAB

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

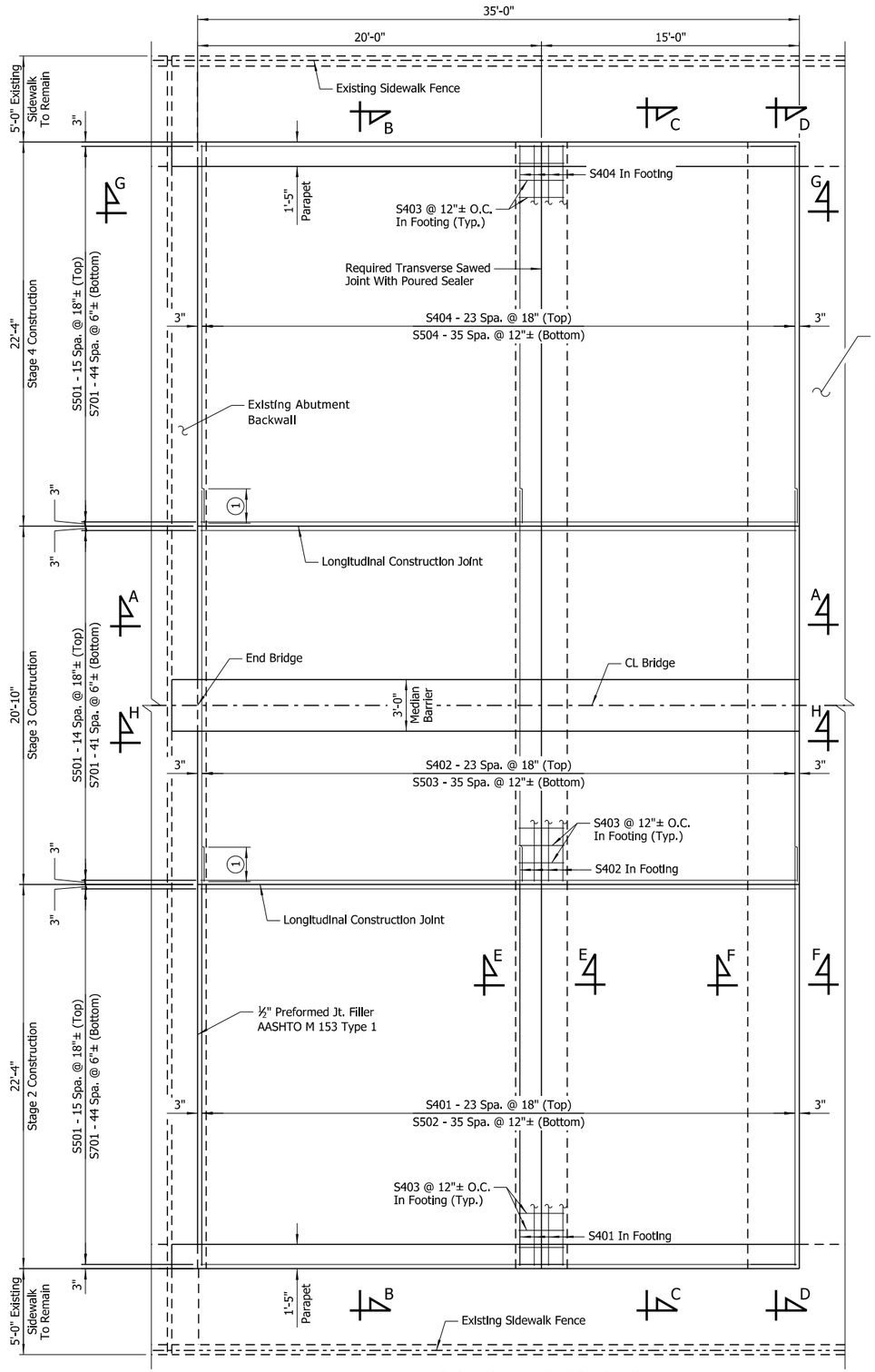
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: SEPT. 2022 FILENAME: b040898_AS3.dgn
CHECKED BY: JES DATE: SEPT. 2022 SCALE: As Shown
DESIGNED BY: MAS DATE: SEPT. 2022

BRIDGE NO. 05275 DRAWING NO. 65811

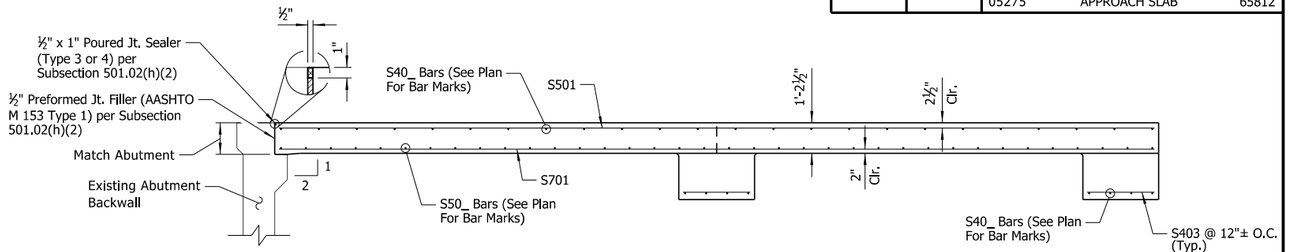
JESkinner 1/25/2023 1:45:06 PM
WORKSPACE: ARDOT Bridge (2019)
L:\2021\21T01026 - ARDOT 040898 AR River Bridge Deck Rehab\Drawings\b040898_S303-455.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. ROAD DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040898	31	33
		05275		APPROACH SLAB		65812



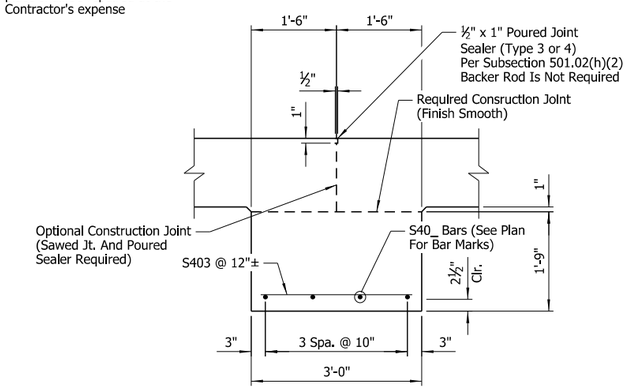
PLAN - TYPE 2 SPECIAL APPROACH SLAB

(Shown For End Bridge)
Scale: ¼" = 1'-0"



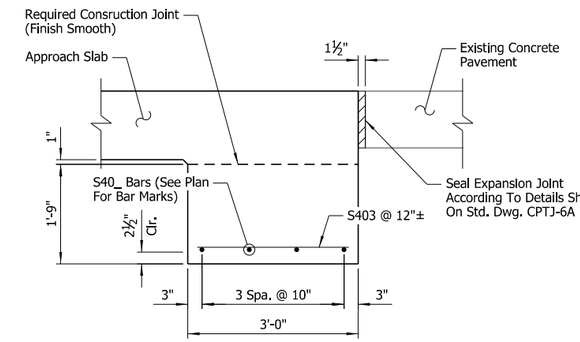
SECTION A-A

Scale: ⅓" = 1'-0"



SECTION E-E

Scale: ¾" = 1'-0"



SECTION F-F

Scale: ¾" = 1'-0"

① 2'-0" Min. Lap

NOTES:
For "SECTION B-B", "VIEW G-G", "VIEW H-H", "BAR LIST" & "BAR BENDING DIAGRAMS", see Dwg. No. 65813.

For "SECTION C-C" & "SECTION D-D", see Dwg. No. 65814.

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 M31 or M 322, Type A, with mill test reports.

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

The surface finish for Approach Slabs shall match that used on the Bridge deck.

Bar positions and clearances from the forms shall be maintained by means of stays, ties, hangers or other approved devices sufficient in size and number to prevent displacement during construction, per Subsection 804.06.

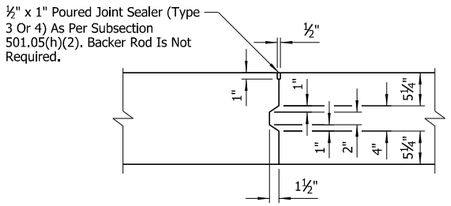
The Contractor shall make check measurements in the field and make any adjustments necessary to fit the new work to the existing structure.

QUANTITIES (FOR INFORMATION ONLY)		
TYPE	Concrete (Cu. Yds.)	Reinforcing Steel (Lbs.)
Type 2 Special	139.43 ②	17,177

② Includes 5.12 Cu. Yds. for the median barrier and 4.97 Cu. Yds. for each parapet. For details of the median barrier, parapets, and bar list associated with the median barrier and parapets, see Dwg. No. 65813.

NOTES:
For SECTION B-B see Dwg. No. 65813.

For SECTION C-C and SECTION D-D see Dwg. No. 65814.



DETAILS OF LONGITUDINAL CONSTRUCTION JOINT

Scale: 1" = 1'-0"

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.16458
JOEL E. SKINNER

Digitally Signed 01/25/2023
BRIDGE ENGINEER

SHEET 1 OF 3
TYPE 2 SPECIAL APPROACH SLAB

ROUTE SEC.

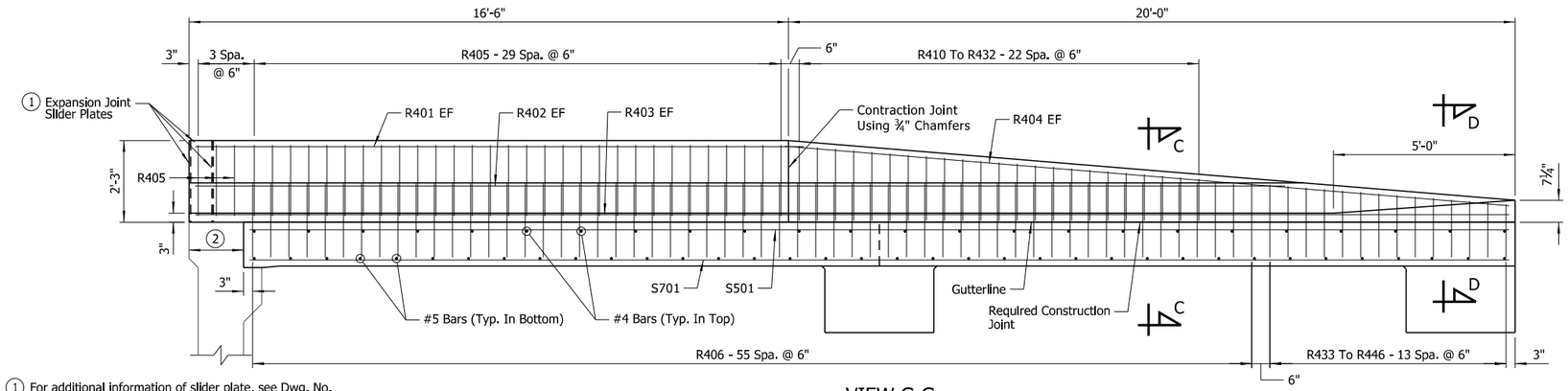
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: SEPT. 2022 FILENAME: b040898_AS4.dgn
CHECKED BY: JES DATE: SEPT. 2022 SCALE: As Shown
DESIGNED BY: MAS DATE: SEPT. 2022

BRIDGE NO. 05275 DRAWING NO. 65812

JEShiner 1/25/2023 1:45:07 PM
WORKSPACE: ARDOT Bridge (2019)
L:\2021\21T01026 - ARDOT 040898 AR River Bridge Deck Rehab\Drawings\b040898_S311-45.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. ROAD DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040898	32	33
		05275		APPROACH SLAB		65813

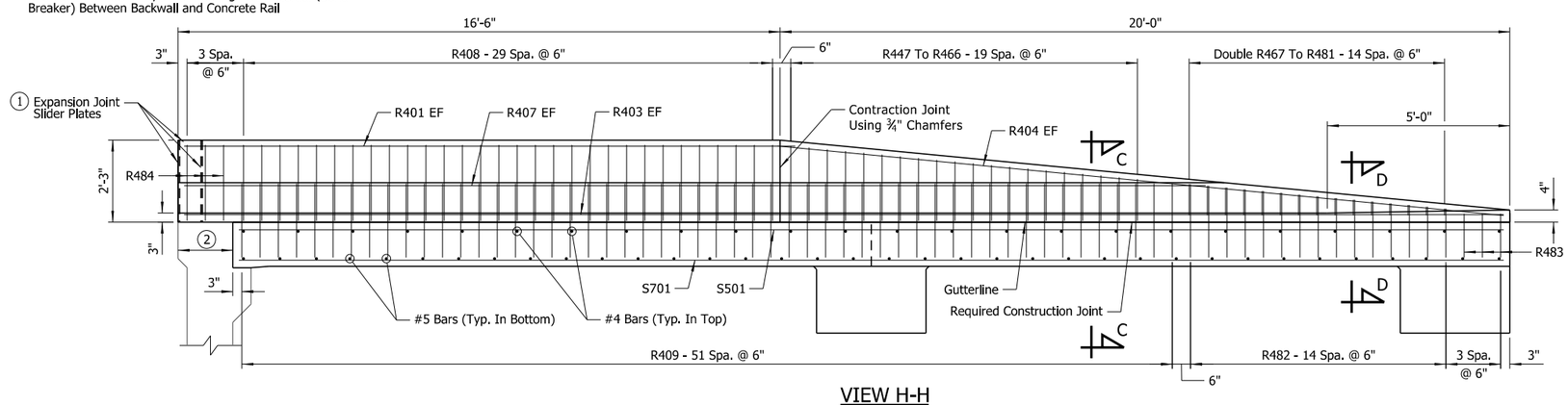


VIEW G-G

Scale: ½" = 1'-0"

1 For additional information of slider plate, see Dwg. No. 65808.

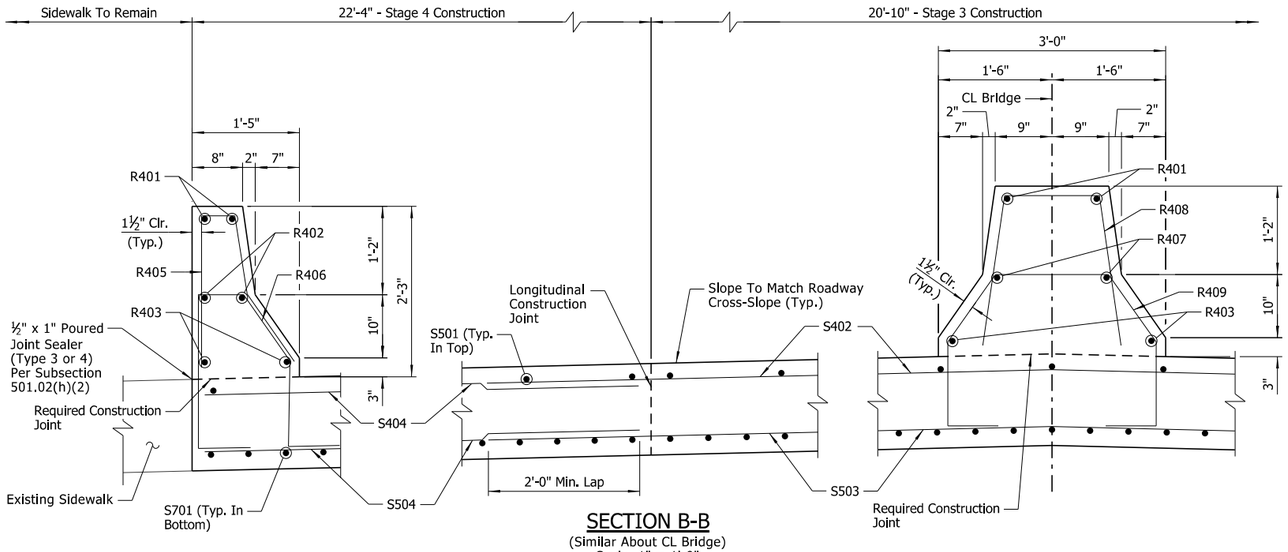
2 Extension of Concrete Rail from Approach Slab over Backwall. Provide 3 Layers of Roofing Felt Matertial (Bond Breaker) Between Backwall and Concrete Rail



VIEW H-H

Scale: ½" = 1'-0"

NOTE:
For "SECTION C-C" and "SECTION D-D", see Dwg. No. 65814.



SECTION B-B

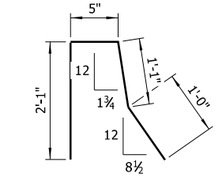
(Similar About CL Bridge)

Scale: 1" = 1'-0"

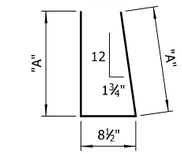
BAR LIST

Mark	No. Req'd.	Length	"A"	"B"	Pin. Dia.
R401	6	16'-9"			Str.
R402	4	30'-0"			Str.
R403	6	36'-2"			Str.
R404	6	20'-0"			Str.
R405	66	4'-4½"			3"
R406	112	6'-0"			2"
R407	2	28'-0"			Str.
R408	30	5'-4"			2"
R409	52	7'-1½"			2"
R410 To R432	2 Ea.	4'-8½" To 2'-10½"	2'-1" To 1'-2"		2"
R433 To R446	2 Ea.	5'-3" To 3'-11"	2'-0½" To 1'-5½"	2'-2½" To 1'-5½"	2"
R447 To R466	1 Ea.	4'-11" To 3'-6"	1'-11" To 1'-1"	1'-3" To 1'-6"	2"
R467 To R481	2 Ea.	2'-8" To 1'-11"	1'-0" To 3"		2"
R482	15	6'-9"			2"
R483	3	8'-3"			2"
R484	3	7'-7"			2"
S401	32	24'-4"			Str.
S402	32	22'-10"			Str.
S403	134	2'-8"			Str.
S404	32	22'-0"			Str.
S501	47	34'-8"			Str.
S502	36	24'-4"			Str.
S503	36	22'-10"			Str.
S504	36	22'-0"			Str.
S701	132	34'-8"			Str.

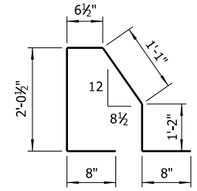
BAR BENDING DIAGRAMS



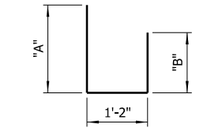
R405



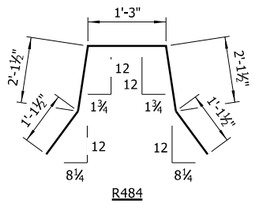
R410 To R432



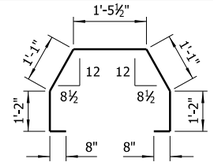
R406



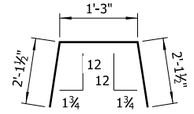
R433 To R446



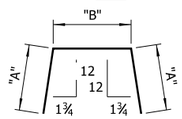
R484



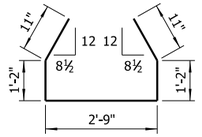
R409



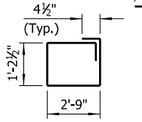
R408



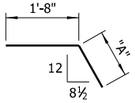
R447 To R466



R482



R483



R467 To R481

NOTE:
Dimensions of bars are out-to-out.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.16458
JOEL E. SKINNER

Digitally Signed 01/25/2023

BRIDGE ENGINEER

SHEET 2 OF 3
TYPE 2 SPECIAL APPROACH SLAB

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

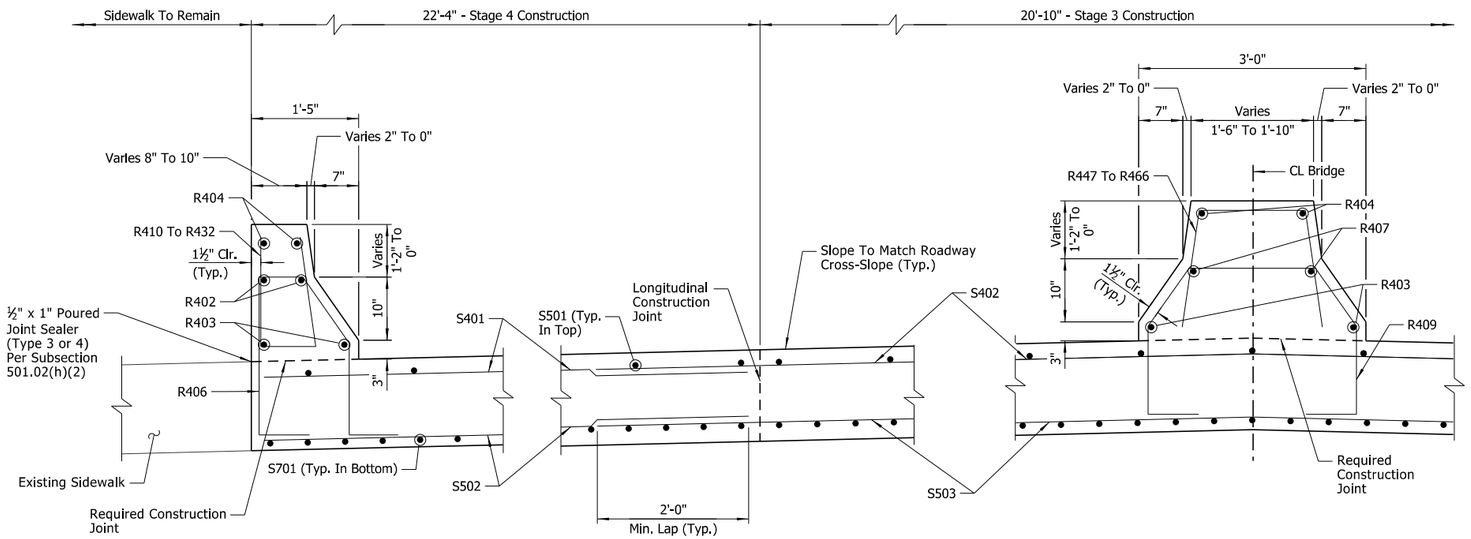
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: SEPT. 2022 FILENAME: b040898_AS5.dgn
CHECKED BY: JES DATE: SEPT. 2022 SCALE: As Shown
DESIGNED BY: MAS DATE: SEPT. 2022

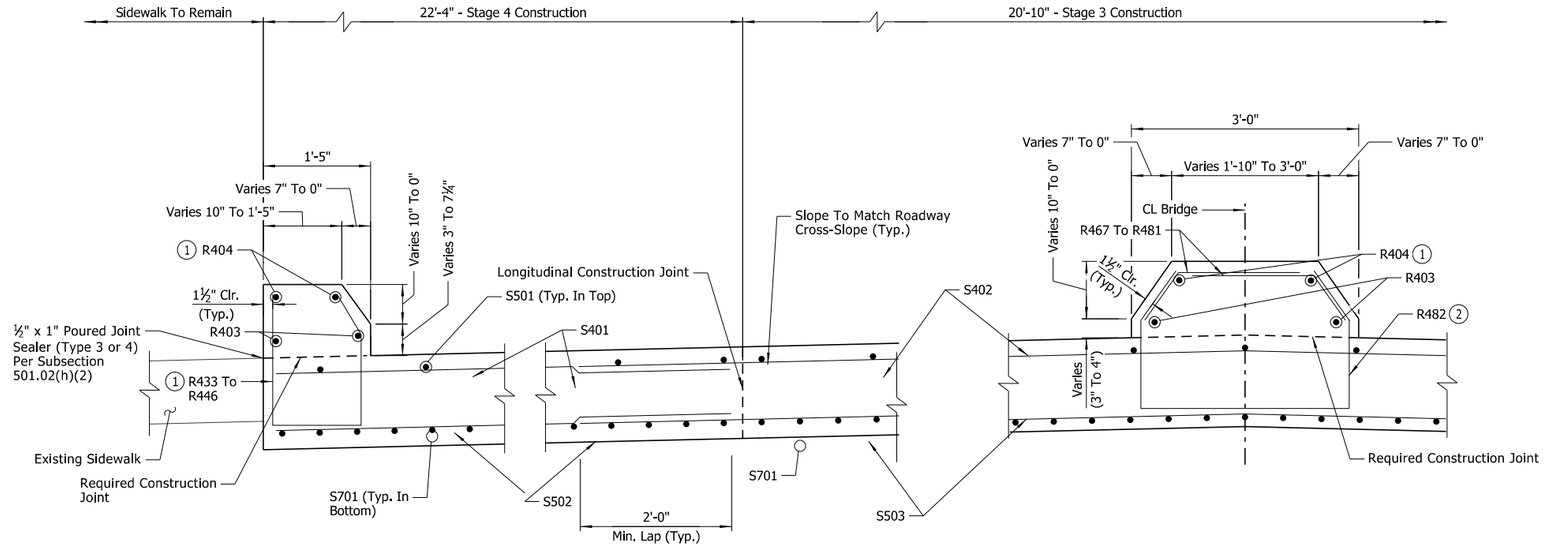
BRIDGE NO. 05275 DRAWING NO. 65813

JESkinner 1/25/2023 1:45:07 PM
WORKSPACE: ARDOT Bridge (2019)
L:\2021\21T01026 - ARDOT 040898 AR River Bridge Deck Rehab\Drawings\b040898_S312-45.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. ROAD DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040898	33	33
		05275		APPROACH SLAB		65814



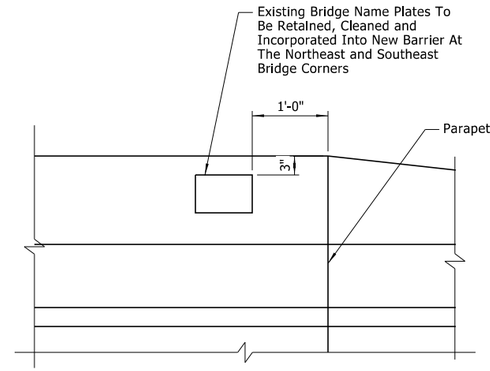
SECTION C-C
(Similar About CL Bridge)
Scale: 1" = 1'-0"



SECTION D-D
(Similar About CL Bridge)
Scale: 1" = 1'-0"

1 Field Bend As Needed

2 Field Trim As Needed



NAME PLATE DETAIL
(Shown At Northeast Corner, Southeast Corner Similar)
NO SCALE

NOTE:
No seperate payment will be made for this work, but shall be considered subsidiary to the item "Approach Slabs".

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.16458
JOEL E. SKINNER

Digitally Signed 01/25/2023

BRIDGE ENGINEER

SHEET 3 OF 3
TYPE 2 SPECIAL APPROACH SLAB

ROUTE SEC.

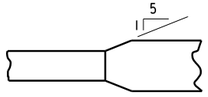
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: SEPT. 2022 FILENAME: b040898_AS6.dgn
CHECKED BY: JES DATE: SEPT. 2022 SCALE: As Shown
DESIGNED BY: MAS DATE: SEPT. 2022

BRIDGE NO. 05275 DRAWING NO. 65814

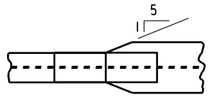
JESkinner 1/25/2023 1:45:08 PM
WORKSPACE: ARDOT Bridge (2019)
L:\2021\21T0126 - ARDOT 040898 AR River Bridge Deck Rehab\Drawings\b040898_S313-AS.dgn
REVISED DATE:

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	STEEL BRIDGE STRUCTURES 55007			

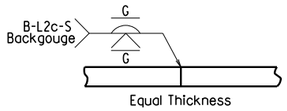


Plan-Unequal Width (Flg.)

FLANGE SPLICE

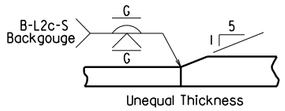


FLANGE SPLICE AT UNEQUAL BOTTOM FLANGE WIDTHS



Equal Thickness

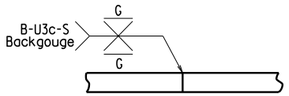
WEB & FLANGE SPLICE



Unequal Thickness

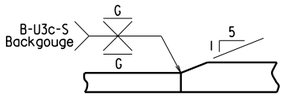
FLANGE SPLICE

(Use when Base Metal Thickness is Equal to or Less than 2")



Equal Thickness

WEB & FLANGE SPLICE

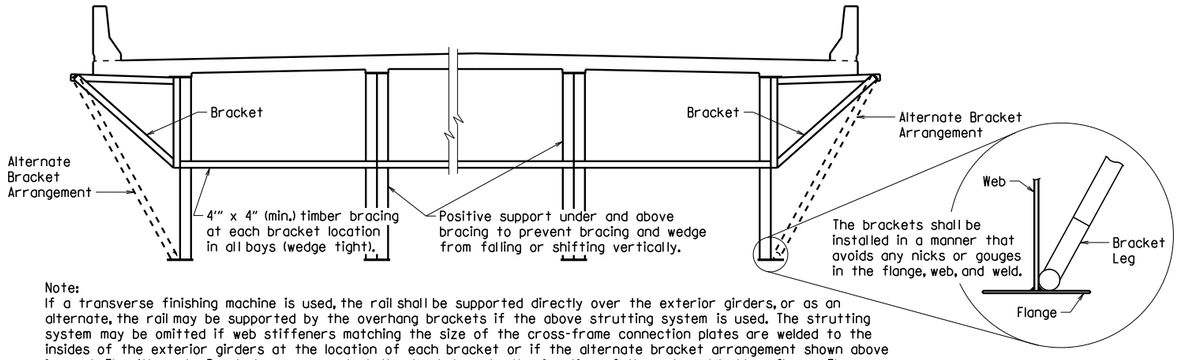


Unequal Thickness

FLANGE SPLICE

(Use when Base Metal Thickness is Greater than 2")

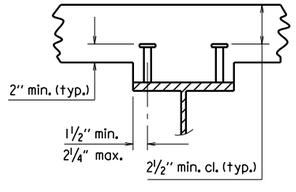
DETAILS OF WELDED SPLICES FOR PLATE GIRDERS



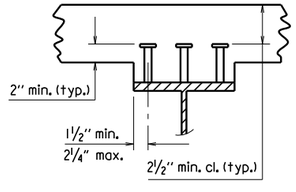
Note:
If a transverse finishing machine is used, the rail shall be supported directly over the exterior girders, or as an alternate, the rail may be supported by the overhang brackets if the above strutting system is used. The strutting system may be omitted if web stiffeners matching the size of the cross-frame connection plates are welded to the insides of the exterior girders at the location of each bracket or if the alternate bracket arrangement shown above is used. The Alternate Bracket arrangement shall extend down to the junction of the web and bottom flange. The stiffener shall conform to the details for cross frame connection plates shown on the plans. No direct payment will be made for brackets, timber bracing, supports, or welded stiffeners. Payment shall be subsidiary to "Structural Steel in Plate Girder Spans (___)".

SCREED RAIL SUPPORT FOR PLATE GIRDERS

(USE WHEN WEB DEPTHS ARE 48" OR GREATER)



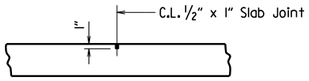
2 STUDS PER ROW



3 STUDS PER ROW

Stud Shear Connectors shall be automatically end welded to the beam or girder flange in accordance with the recommendations of the Manufacturer. See plan details for number and size.

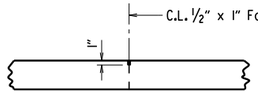
SHEAR CONNECTOR DETAIL



Use 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 parapet. Slab joints shall be installed before the parapet 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. The joint sealer shall extend across the deck from gutterline to gutterline.

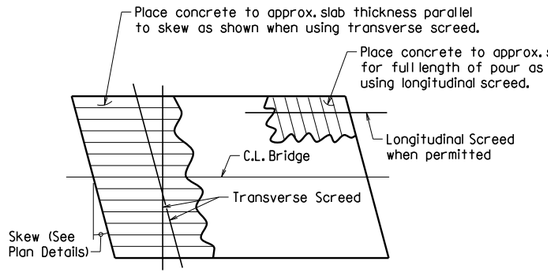
ADDITIONAL NOTES IF SIDEWALKS OR RAISED MEDIANS ARE REQUIRED:
Slab Joints shall be installed before the sidewalk or raised median is poured. After installation of the joint in the sidewalk or raised median and prior to pouring the parapet rail, the joint sealer shall be placed extending across the deck slab from gutterline to gutterline and acrosss the top of the sidwalk or raised median to the edge of the slab. No joint sealer shall be placed on the deck slab under the sidewalk or raised median.

TRANSVERSE SLAB JOINT DETAIL



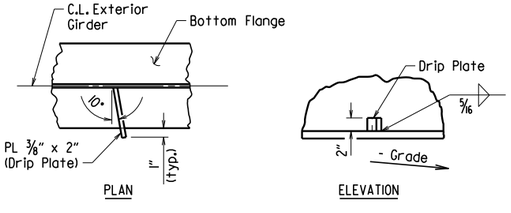
Use ½" x 1" Type 3 or 4 Joint Sealer. See Subsections 501.02(h) and 501.05(j). Backer Rod filler will not be required. Joint sealer shall be measured and paid for as Class S(AE) Concrete-Bridge. This joint shall be formed. Seal color shall be gray or other color similar to concrete.

LONGITUDINAL CONSTRUCTION JOINT



Note: At the Contractor's option, the transverse screed may be placed parallel to the skew or perpendicular to C. L. Bridge.

CONCRETE PLACEMENT PROCEDURE FOR BRIDGES WITH SKEW



PLAN

ELEVATION

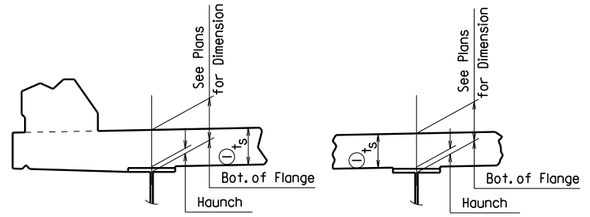
Drip Plate to be welded to the outer side of the bottom flange of the exterior girders.

Locate drip plate 5'-0" from C.L. Bearing on high side of each Bent, unless otherwise noted in the plans.

BOTTOM FLANGE DRIP PLATE

(USE WHEN WEB DEPTHS ARE 54" OR GREATER AND UNIT OR SPAN IS NOT IN LEVEL GRADE)

t_s = slab thickness. See "Typical Roadway Section" in the plans.



EXTERIOR BEAM OR GIRDER

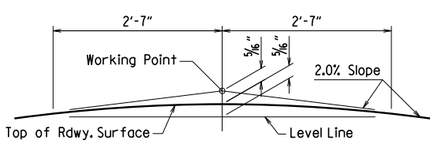
INTERIOR BEAM OR GIRDER

① Tolerance when removable deck forming is used is + ½", - ¼". Haunch forming is required and shall be adjusted to maintain slab thickness tolerance.

NOTES:
Haunch dimension may vary within the following limits to maintain the grade and slab thickness tolerance: Minimum occurs when top flange contacts bottom reinforcing steel; Maximum = top flange thickness plus 1¾" unless otherwise noted in the plans. No increase in concrete and structural steel quantities will be made to maintain tolerances.

Tolerances shown are applicable only when removable deck forming is used. See Std. Dwg. No. 55005 for tolerances when permanent steel deck forms are used. Payment for concrete shall be based on removable deck forming.

ADJUSTMENT FOR SLAB THICKNESS TOLERANCE



NOTE: Working Point matches Theoretical Roadway Grade.

ROUNDING DETAIL

BRIDGES IN NORMAL CROWN

WELD TABLE

Material Thickness of Thicker Part Joined (Inches)	Minimum Size of Fillet Weld (Inches)	Single Pass Weld Must Be Used
To ¾" Inclusive	¼"	
Over ¾"	⅝"	

NOTE: When a fillet weld size, as shown on the plans, is larger than the minimum, the first pass shall be that specified for minimum size of fillet weld.

SECTION AND SUBSECTION REFER TO THE ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (2014 EDITION).

THESE DETAILS ARE APPLICABLE UNLESS OTHERWISE SHOWN IN THE PLAN DETAILS, SPECIAL PROVISIONS, OR SUPPLEMENTAL SPECIFICATIONS.

STANDARD DETAILS FOR STEEL BRIDGE STRUCTURES

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: JYP DATE: 2/11/2016 FILENAME: b55007.dgn

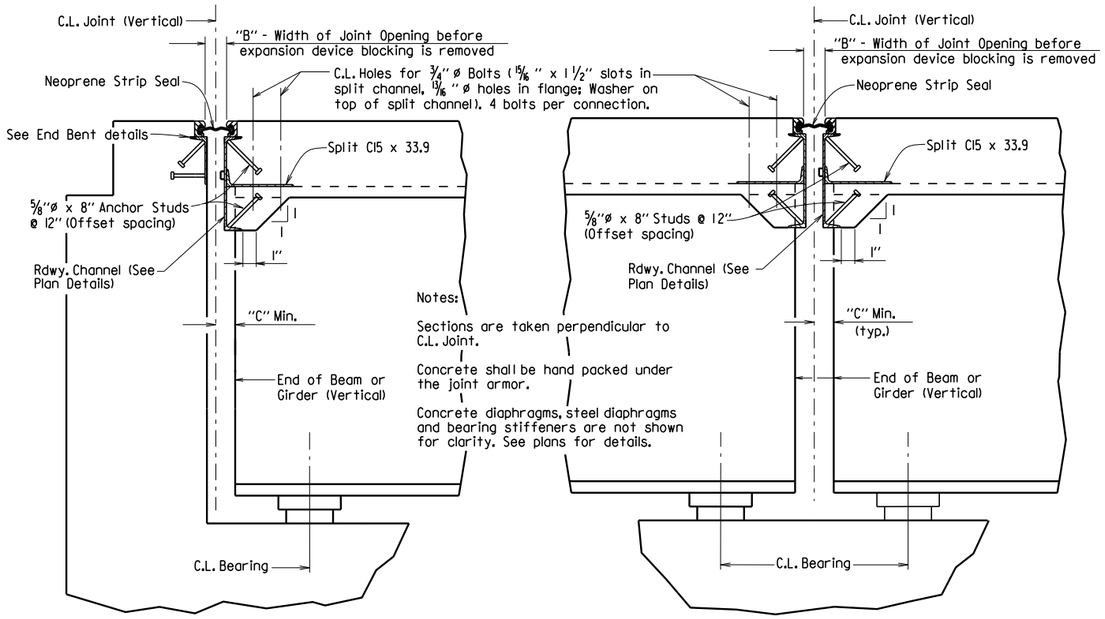
CHECKED BY: AMS DATE: 2/11/2016 SCALE: No Scale

DESIGNED BY: STD. DATE: —

DRAWING NO. 55007

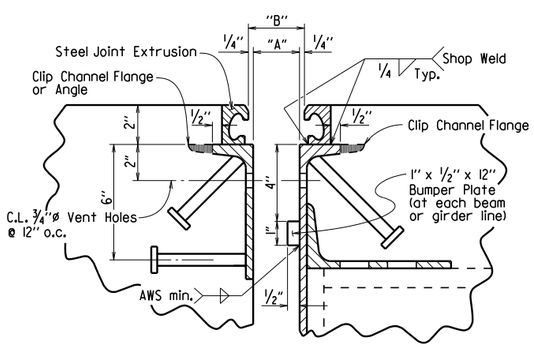
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.				

1 STRIP SEAL JOINT 55009



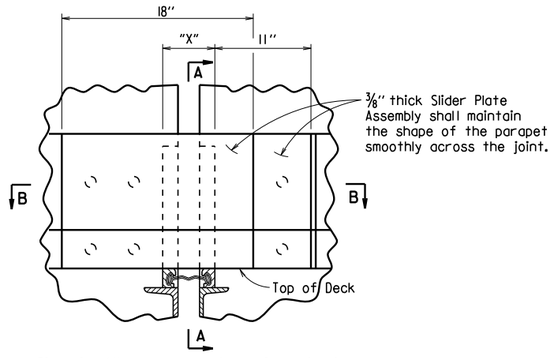
SECTION THRU JOINT AT END BENT

SECTION THRU JOINT AT INTERMEDIATE BENT



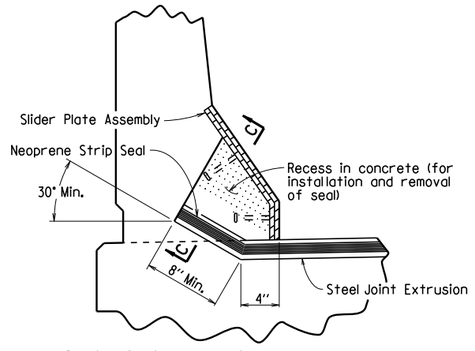
DETAIL OF STRIP SEAL JOINT

Detail shown at End Bent,
Details similar at Intermediate Bent



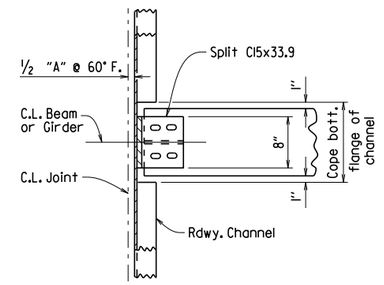
Dimension "X" equals the width of opening in parapet to allow for removal or repair of joint.

DETAIL OF PARAPET SLIDER PLATES



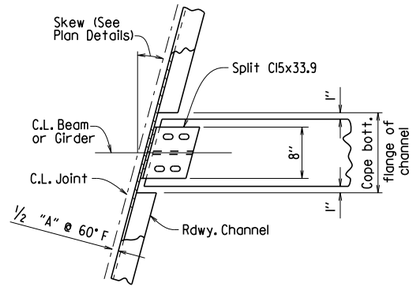
Details of Joint turn-up in parapet are general and show basic design controls only. See plan details for joint installation at sidewalks.

SECTION A-A



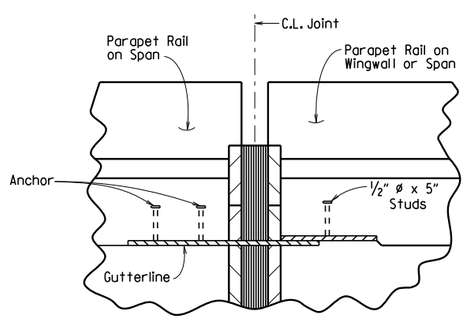
CHANNEL CONNECTION DETAIL

BENTS WITHOUT SKEW



CHANNEL CONNECTION DETAIL

BENTS WITH SKEW

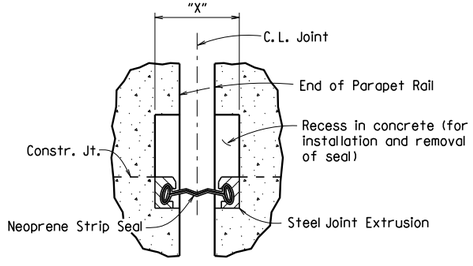


The method of attachment of the slider plate assembly shall allow for removal to provide for future replacement of the neoprene seal. Anchors shall not be paid for directly, but shall be considered subsidiary to the item "Armored Joint with Neoprene Strip Seal".

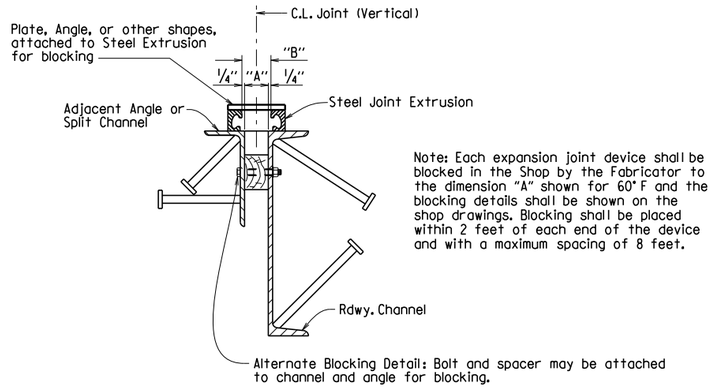
Method of installation and fabrication shall be determined by the Manufacturer.

SECTION B-B

BENTS WITHOUT SKEW SHOWN



SECTION C-C



Note: Each expansion joint device shall be blocked in the Shop by the Fabricator to the dimension "A" shown for 60° F and the blocking details shall be shown on the shop drawings. Blocking shall be placed within 2 feet of each end of the device and with a maximum spacing of 8 feet.

DETAILS FOR BLOCKING EXPANSION JOINT DEVICE

EXPANSION DEVICE INSTALLATION AT END BENTS:

The Contractor may elect to install the expansion device using one of the following two alternatives:

1) The concrete span pour adjacent to joint shall be placed before the end bent backwall is placed. After the end bent backwall forms are in place and the beams or girders erected, the blocked expansion device shall be installed and adjusted for grade. All connection bolts shall be fully tightened prior to placing the deck concrete adjacent to the bent. Immediately prior to pouring the backwall concrete, the blocking shall be removed, and the opening adjusted for temperature and grade.

2) The backwall shall be poured to the optional construction joint after beams or girders are erected. The blocked expansion device shall be installed and adjusted for grade. All connection bolts shall be fully tightened prior to placing the deck concrete adjacent to the bent. Immediately prior to pouring the remainder of the backwall concrete, the blocking shall be removed and the opening adjusted for temperature and grade.

EXPANSION DEVICE INSTALLATION AT INTERMEDIATE BENTS:

After all beams or girders on each side of the joint are erected the blocked expansion device shall be installed and adjusted for grade. Deck concrete shall be placed for the entire unit or span on one side of the joint before deck concrete on the other side is placed. Connection bolts for the first side to have deck concrete placed shall be completely bolted. Bolts on the other side shall be loosely installed so that thermal and rotational movements will not be restricted during concrete placement on the first side.

Connection bolts on the second side shall remain loose until the concrete pour adjacent to the joint is to be placed. Immediately prior to pouring the span concrete on the second side, the blocking shall be removed, the joint adjusted for temperature and grade, and the connection bolts tightened.

GENERAL NOTES FOR NEOPRENE STRIP SEAL JOINTS:

The steel extrusion and neoprene strip seal material and installation shall be in accordance with Section 809.

The expansion device shall provide for the movement rating(s) shown in the "TABLE OF STRIP SEAL JOINT DATA" in the plan details. The expansion joint shall be capable of sealing the deck surface and parapet area to prevent moisture and other contaminants from descending through the joint.

Details of proposed slider plate assembly shall be submitted to the Engineer for approval prior to the fabrication of any structural steel at the expansion device.

All structural steel shall conform to AASHTO M 270, Grade 50W and all exposed surfaces shall be cleaned in accordance with Subsection 807.84(e). The parapet slider plates and structural steel completely embedded in concrete shall conform to AASHTO M 270, Grade 36, 50 or 50W steel. Unless otherwise noted in the plans, all exposed surfaces of the parapet slider plates shall be cleaned and painted in accordance with Section 638. Painting shall not be paid for directly and structural steel completely embedded in concrete need not be painted. Payment for structural steel shall be as specified in the plans.

SECTION AND SUBSECTION REFER TO THE ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (2014 EDITION).

THESE DETAILS ARE APPLICABLE UNLESS OTHERWISE SHOWN IN THE PLAN DETAILS, SPECIAL PROVISIONS, OR SUPPLEMENTAL SPECIFICATIONS. SEE "TABLE OF STRIP SEAL JOINT DATA" IN PLAN DETAILS FOR VARIABLES "A", "B", AND "C".

STANDARD DETAILS FOR NEOPRENE STRIP SEAL JOINTS

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: L.J.B. DATE: 2/11/2016 FILENAME: b55009.dgn
CHECKED BY: A.M.S. DATE: 2/11/2016 SCALE: No Scale
DESIGNED BY: STD. DATE: —

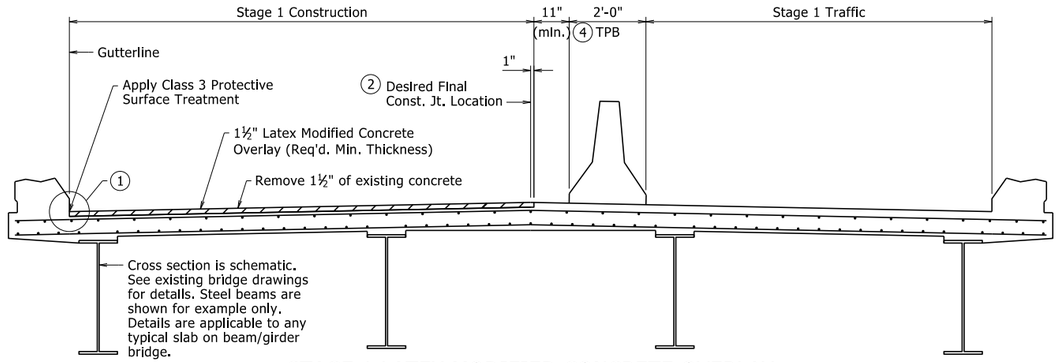
DRAWING NO. 55009

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
1/9/2020				6	ARK.			
6/25/2020				JOB NO.				
				①	HYDRO/LMC OVERLAY - 55060			

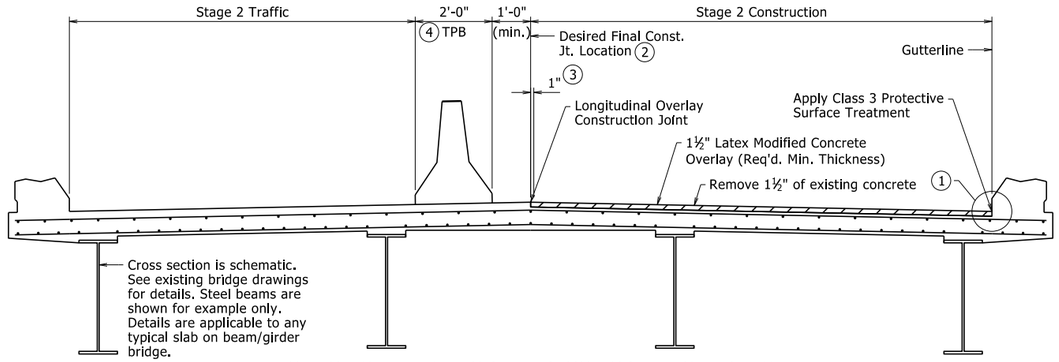
Stages of construction and traffic refer to Bridge Rehabilitation Work Zones as shown in Maintenance of Traffic Details. Numbering is shown for general purposes. See Roadway Plans for specific sequencing.

The minimum overlay placement length shall be a span length on simple span bridges and to an existing slab joint on continuous span bridges, unless otherwise approved by the Engineer. Refer to existing bridge drawings.

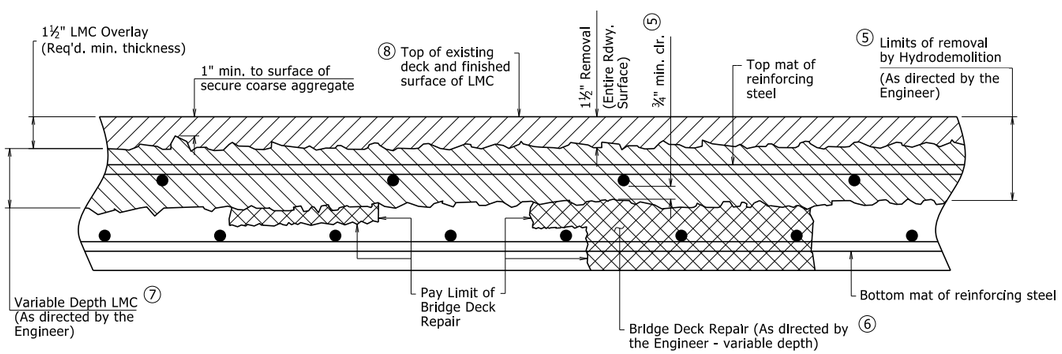
NOTE: Details shown are typical for staged construction. When full width rehabilitation of a bridge deck is possible, adjust hydrodemolition and latex modified concrete overlay operations and details accordingly.



STAGE 1 LATEX MODIFIED CONCRETE OVERLAY



STAGE 2 LATEX MODIFIED CONCRETE OVERLAY



DETAILS OF HYDRODEMOLITION AND LATEX MODIFIED CONCRETE OVERLAY

⚠1 ⑤ Removal of unsound concrete beyond 1½" below the original surface shall be at the direction of the Engineer. If the bond between existing concrete and the top mat of reinforcing steel is destroyed, then the concrete shall be removed to a minimum of ¾" clearance below the bar. This removal shall be subsidiary to the item Job SP "Hydrodemolition - Class _".

⑥ Areas requiring additional repair, as determined by the Engineer, shall be repaired in accordance with the Job SP "Bridge Deck Repair for Latex Modified Concrete Overlays".

⑦ Depth varies to achieve minimum clearance below top mat of reinforcing steel, where required.

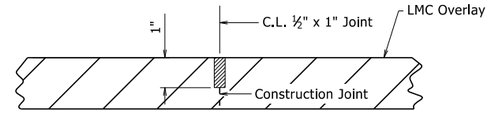
⑧ Finished surface of LMC Overlay shall match existing concrete deck surfaces unless increase is required to maintain minimum required LMC Overlay thickness and a minimum of 1½" cover to reinforcing steel and shear connectors.

① Hand tools shall be used as required to remove concrete adjacent to curbs, rails, and armored expansion joints.

② For staged construction, the final construction joint location shall be established by the Engineer to satisfy MOT and construction requirements. The desired location is at the C.L. Bridge, C.L. Lane, or Edge of Lane, but in no case shall be positioned in the line of a wheel path.

③ For staged construction, saw cut and remove 1" of initial Latex Modified Concrete Overlay when preparing surface for adjacent overlay.

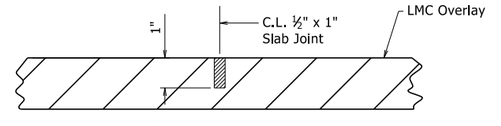
④ For staged construction, Temporary Precast Barrier (TPB) shall not be connected to the surface of the bridge deck. See Std. Dwg. TC-4 for additional details. Plastic drums shall be used in lieu of concrete barriers where shown in the Roadway Plans, see Std. Dwg. TC-3 for additional details.



Use ½" x 1" Type 3 or 4 Joint Sealer. See Subsections 501.02(h) and 501.05(j). Backer Rod will not be required. Joint Sealer shall be measured and paid for as LMC Overlay. Longitudinal construction joints shall be sawed as soon as the concrete has sufficiently set to allow sawing of the joint without damage to the overlay. Seal color shall be gray or other color similar to concrete.

LONGITUDINAL OVERLAY CONSTRUCTION JOINT DETAIL

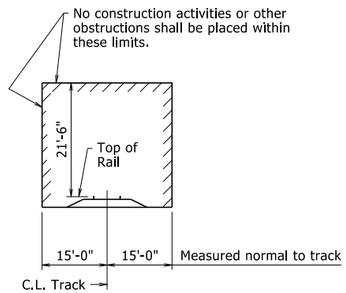
For Staged Construction



Use ½" x 1" Type 3 or 4 Joint Sealer. See Subsections 501.02(h) and 501.05(j). Backer Rod will not be required. Joint Sealer shall be measured and paid for as LMC Overlay. Slab joints shall extend from gutterline to gutterline. Slab joints shall be sawed as soon as the concrete has sufficiently set to allow sawing of the joint without damage to the overlay. Slab joints shall be placed at all pouring sequence construction joints and are required at existing slab joint locations. Pouring sequence construction joints shall align between stages of construction. The joint sealer shall extend across the deck from gutterline to gutterline. Seal color shall be gray or other color similar to concrete.

TRANSVERSE OVERLAY JOINT DETAIL

For Continuous Span Bridges



MINIMUM CONSTRUCTION CLEARANCE ENVELOPE

See Job SP "Insurance, Construction, and Flagging Requirements on Railroad Property" for additional railroad construction requirements.

GENERAL NOTES:

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

Details shown are schematic. The Contractor shall make check measurements in the field and make any adjustments necessary to meet the required clearances and fit the new work to the existing structure(s).

The operation or placement of vehicles, equipment, and/or materials on the subject bridge(s) necessary for the completion of this work shall be evaluated in accordance with Subsection 105.14. Certifications of the adequacy of all components for the anticipated loads shall address the capacity of the existing structure at all phases of this work.

Where applicable, construction activities for the existing bridge(s) over roadways and railroads shall be in accordance with the Job SP "Special Safety Requirements for Bridges" and as shown in "Minimum Construction Clearance Envelope".

⚠1 HYDRODEMOLITION: The entire roadway surface of the existing bridge deck and approach slabs and gutters, as applicable, shall receive hydrodemolition in accordance with the Job SP "Hydrodemolition - Class _" to a planned depth of 1½" below the existing bridge deck surface. Deteriorated concrete in the bridge deck below this depth shall be removed at the direction of the Engineer and up to the limits detailed. These areas shall be measured by the square yard and shall be paid for at the unit price bid for the item Job SP "Hydrodemolition - Class _". Prior to hydrodemolition, cold milling of the concrete deck to a maximum depth of 1" will be allowed unless there will be a conflict with the existing reinforcing steel.

BRIDGE DECK REPAIR: After hydrodemolition, the deck surface shall be sounded and any areas of unsound, delaminated, or otherwise deteriorated concrete shall be removed at the direction of the Engineer and in accordance with Job SP "Bridge Deck Repair for Latex Modified Concrete Overlays".

LATEX MODIFIED CONCRETE OVERLAY: The entire area of the hydrodemolition shall receive a Latex Modified Concrete (LMC) Overlay to a planned depth of 1½" below the existing bridge deck surface in accordance with Job SP "Latex Modified Concrete Overlay". These areas shall be measured by the square yard and shall be paid for at the unit price bid for the item Job SP "Latex Modified Concrete Overlay (1½" Thick)". Areas of the existing bridge deck removed at the direction of the Engineer to a depth greater than 1½" below the existing bridge deck surface shall be filled with LMC concurrent to the placement of the 1½" LMC Overlay. This area shall be measured and paid for in accordance with Job SP "Latex Modified Concrete Overlay".

GROOVED FINISH: The LMC Overlay surface of the bridge deck and approach slabs and gutters, as applicable, shall be given a grooved finish as specified for final finishing in Subsection 802.19 for Class 7 Grooved Bridge Roadway Surface Finish and in accordance with Job SP "Latex Modified Concrete Overlay".

PROTECTIVE SURFACE TREATMENT: The longitudinal joint between the LMC Overlay and the adjacent existing concrete curb or rail shall be given a Class 3 Protective Surface Treatment as specified in Section 803 and in accordance with Job SP "Latex Modified Concrete Overlay". The roadway surface of the completed LMC Overlay shall be given a Class 1 Protective Surface Treatment as specified in Section 803.

⚠2 JOINT REHABILITATION: After the placement of the LMC Overlay and if shown in the plans, the existing armored joints shall be given a poured silicone joint sealant as specified in Section 809 and as shown in "Poured Silicone Joint Seal Details" on Standard Drawing No. 55064, and the existing unarmored joints shall be given a Type A Joint Rehabilitation as specified in Section 509 and Job SP "Joint Rehabilitation for Bridge Decks". Backwall repair, if shown in the plans or as directed by the Engineer, shall be completed prior to installation of the joint sealant.

If shown in the plans, the existing neoprene strip seal shall be removed and replaced. See "Strip Seal Joint Details" on Standard Drawing No. 55064.

NOTE: When "Very Early Strength Latex Modified Concrete Overlay (1½" Thick)" is shown in the plans for a particular bridge, all reference to "Latex Modified Concrete Overlay" and "LMC" on this sheet shall be considered synonymous with "Very Early Strength Latex Modified Concrete Overlay" and "VESLMC" for that bridge. See Job SP "Very Early Strength Latex Modified Concrete Overlay" for additional information.

⚠1 Modified Hydrodemolition SP reference to include "- Class _". By: KWY, Checked by: SWP; 1/9/2020.

⚠2 Modified Joint Rehabilitation to include unarmored joints. By: KWY, Checked by: SWP; 6/25/2020.

This document was originally issued and sealed by Charles R. Ellis, PE No. 9235, on November 7, 2019. This copy is not a signed and sealed document.

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

BRIDGE ENGINEER

STANDARD DETAILS FOR HYDRODEMOLITION AND LMC OVERLAY SLAB ON BEAM/GIRDER BRIDGES

ARKANSAS STATE HIGHWAY COMMISSION

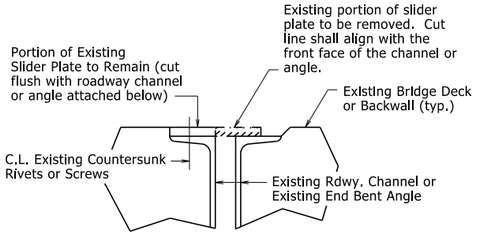
LITTLE ROCK, ARK.

DRAWN BY:	KWY	DATE:	11/7/2019	FILENAME:	b55060.dgn
CHECKED BY:	SWP	DATE:	11/7/2019	SCALE:	None
DESIGNED BY:	STD.	DATE:	-------		

DRAWING NO. 55060

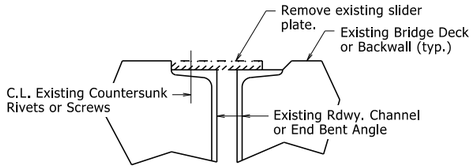
PRINT DATE: 3/22/2021

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	JOINT REPAIR - 55064			



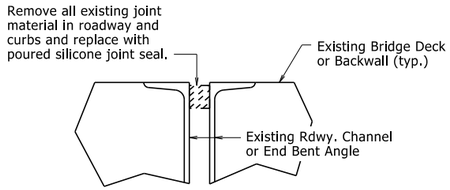
REMOVAL DETAILS AT EXISTING SLIDER PLATE JOINTS

At the direction of the Engineer, the portion of existing slider plate shown shall be removed and replaced with a new plate as shown in "SLIDER PLATE JOINT MODIFICATION". The portion of existing slider plate shall be removed and disposed of in accordance with Section 821. The cut face shall be ground square and flush with the face of the existing angle or channel. Removal and disposal of existing slider plate material will not be paid for directly, but shall be considered subsidiary to the item "Silicone Joint Sealant". Properly functioning slider plates need not be modified.



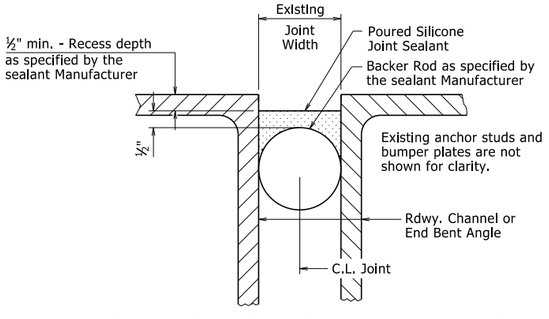
REMOVAL DETAILS AT EXISTING SLIDER PLATE JOINTS WITH GRADE RAISE

The existing slider plate shown shall be removed and replaced with new plates as shown in "JOINT MODIFICATION WITH GRADE RAISE". The existing slider plate shall be removed and disposed of in accordance with Section 821. Removal and disposal of existing slider plate material will not be paid for directly, but shall be considered subsidiary to the item "Silicone Joint Sealant".



REMOVAL DETAILS AT EXISTING FILLED JOINTS

The existing joint material shall be removed and disposed of in accordance with Section 821. Removal and disposal of existing joint material will not be paid for directly, but shall be considered subsidiary to the Item "Silicone Joint Sealant".



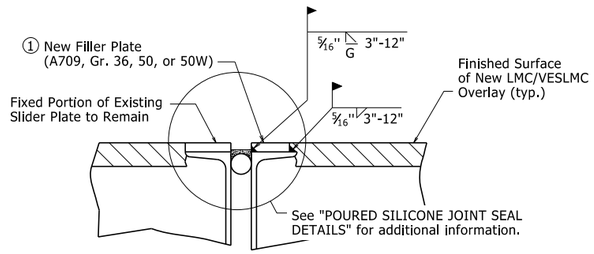
POURED SILICONE JOINT SEAL DETAILS

Existing Joint Seal shall be completely removed, backer rods placed, and Silicone Joint Sealant installed across the entire width of the bridge deck in accordance with these details, Section 809, and the Manufacturer's recommendations. Removal of existing Joint Seal will not be paid for directly, but shall be considered incidental to the item "Silicone Joint Sealant".

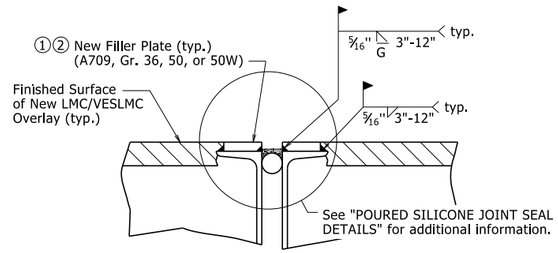
Backer rods shall be extended beyond the length of the poured joint in the initial joint repair area so that the two pieces can be properly spliced together prior to installing sealant for the adjacent joint repair. Manufacturer's recommendations shall be followed to prevent sealant leakage during repair work.

Backer rods shall be appropriately sized and set to the depth shown in the Manufacturer's literature based on the joint width at the time of sealing. Except as noted, do not install more backer rod than can be sealed in the same day. The Contractor shall verify separation of the backer rod from the joint material after joint material has set.

Backer rod shall be notched or otherwise fit around any existing seal supports or bumper plates to maintain its proper depth as defined above.



SLIDER PLATE JOINT MODIFICATION

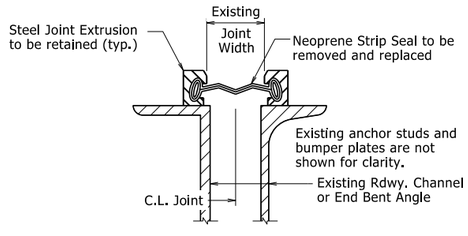


JOINT MODIFICATION WITH GRADE RAISE

① New field attached plates atop existing roadway channels or angles are required. The plate thickness shall be adjusted as necessary to match surface of finished surface of LMC/VESLMC Overlay and the width shall be ⅜" less than the existing channel flange or angle width to allow for fillet weld as shown.

All new Structural Steel shall be ASTM A709 (Gr. 36, 50, or 50W). The surfaces not in contact with concrete shall be cleaned and painted in accordance with Section 638. Only one coat of paint is required and shall be applied in the fabricator's shop. Grade 50W steel shall not be painted, but shall be cleaned in accordance with Subsection 807.84(e). Structural Steel and Painting will not be paid for directly, but shall be subsidiary to the item "Silicone Joint Sealant".

② Details shown are for an expansion joint where two bridge units meet. Eliminate filler plate on backwall and proceed with backwall repair in accordance with "BACKWALL REPAIR REMOVAL DETAIL" and "BACKWALL REPAIR INSTALLATION DETAIL" at end bents for bridge decks with grade raise, see Standard Drawing Number 55065.



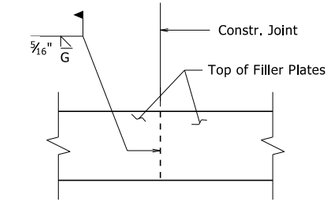
STRIP SEAL JOINT DETAILS

Existing neoprene strip seal joint material shall be completely removed and new neoprene strip seal joint material shall be installed across the entire width of the steel extrusions in accordance with these details, Section 809, and the Manufacturer's recommendations. Prior to installing the new joint material, the Contractor shall clean the steel extrusion at the Engineer's direction and in accordance with the new strip seal joint material Manufacturer's recommendations.

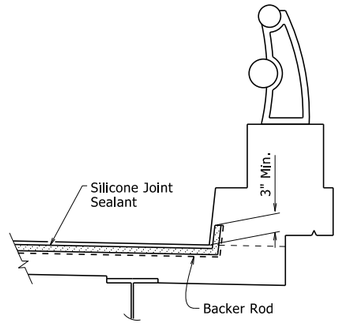
Removal and replacement of the existing neoprene strip seal joint material will require the removal of the parapet slider plates, where present. Parapet slider plates removed for this work shall be reinstalled after installation of the new neoprene strip seal joint material.

The new neoprene strip seal joint material shall provide a movement rating of four inches. The repaired expansion joint shall be capable of sealing the deck surface and parapet area to prevent moisture and other contaminants from descending through the joint.

All work and material associated with removing the existing joint material, cleaning the extrusions, removal and reinstallation of parapet slider plates, and installation of new joint material shall be paid for under the item "Modification of Existing Bridge Structure (Bridge No. _)".

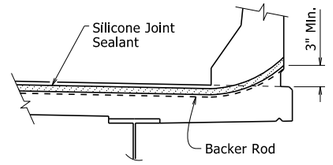


PLAN VIEW OF FILLER PLATE

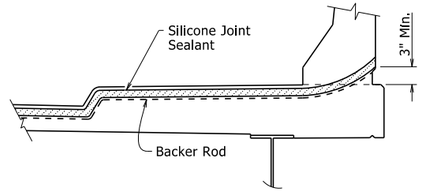


SILICONE JOINT SEAL PLACEMENT AT CURB

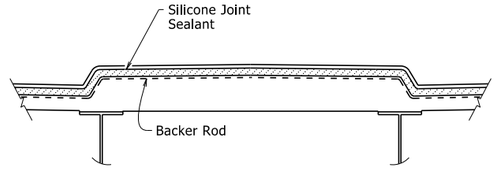
Vertical joints may require forming. The clearance from deck surface to joint material shall be maintained.



SILICONE JOINT SEAL PLACEMENT AT RAIL



SILICONE JOINT SEAL PLACEMENT AT SIDEWALK



SILICONE JOINT SEAL PLACEMENT AT MEDIAN

This document was originally issued and sealed by Charles R. Ellis, PE No. 9235, on November 7, 2019. This copy is not a signed and sealed document.

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

BRIDGE ENGINEER

STANDARD DETAILS FOR JOINT REPAIRS & MODIFICATIONS

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

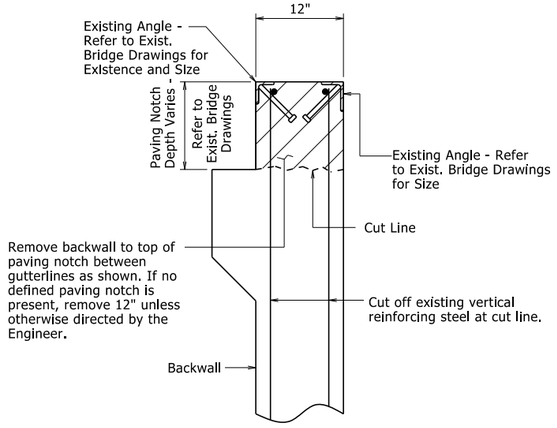
DRAWN BY: KWY DATE: 11/7/2019 FILENAME: b55064.dgn
CHECKED BY: SWP DATE: 11/7/2019 SCALE: None
DESIGNED BY: STD. DATE: -------

DRAWING NO. 55064

PRINT DATE: 11/4/2020

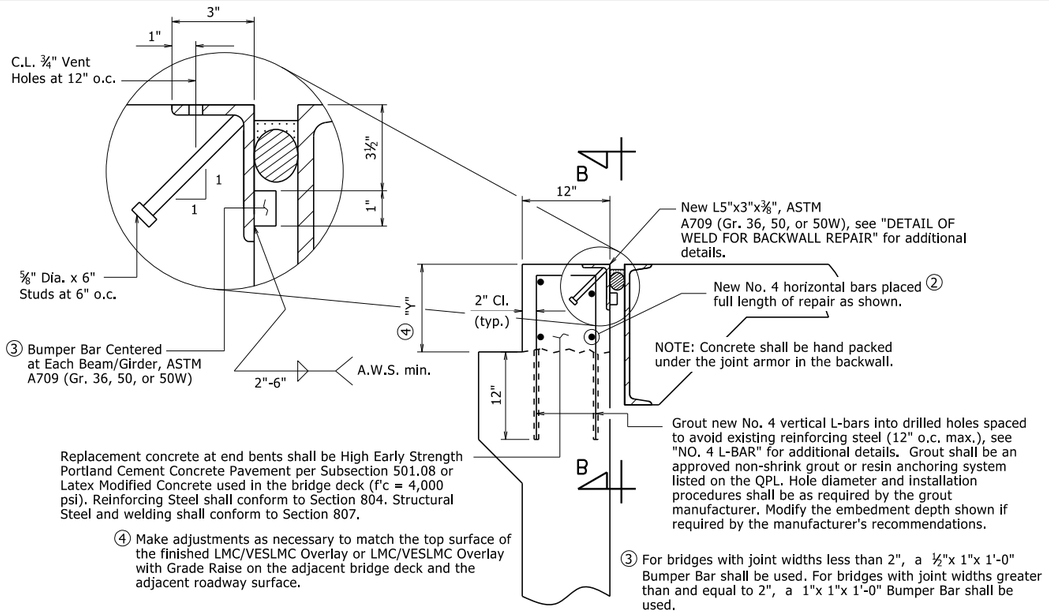
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.				

1 BACKWALL REPAIR - 55065



BACKWALL REPAIR REMOVAL DETAIL

The portion of the backwall above the paving bracket as shown shall be removed and disposed of in accordance with Section 821. Payment for all materials, labor, tools, and equipment required for this work will be inclusive to the item "Modification of Existing Bridge Structure (Bridge No. _)".



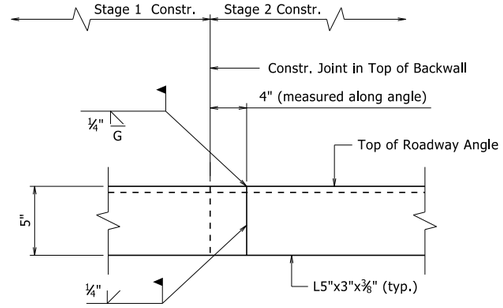
Replacement concrete at end bents shall be High Early Strength Portland Cement Concrete Pavement per Subsection 501.08 or Latex Modified Concrete used in the bridge deck (f'c = 4,000 psi). Reinforcing Steel shall conform to Section 804. Structural Steel and welding shall conform to Section 807.

④ Make adjustments as necessary to match the top surface of the finished LMC/VESLMC Overlay or LMC/VESLMC Overlay with Grade Raise on the adjacent bridge deck and the adjacent roadway surface.

③ For bridges with joint widths less than 2", a ½"x 1"x 1'-0" Bumper Bar shall be used. For bridges with joint widths greater than and equal to 2", a 1"x 1"x 1'-0" Bumper Bar shall be used.

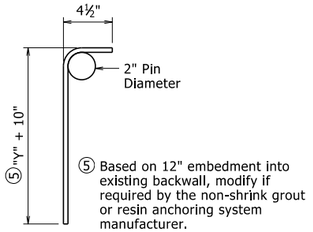
BACKWALL REPAIR INSTALLATION DETAIL

The portion of the backwall above the paving bracket shall be reconstructed as shown. Payment for all materials, labor, tools, and equipment required for this work will be inclusive to the item "Modification of Existing Bridge Structure (Bridge No. _)". Details shown for LMC/VESLMC Overlay without grade raise; details similar for LMC/VESLMC Overlay with grade raise.

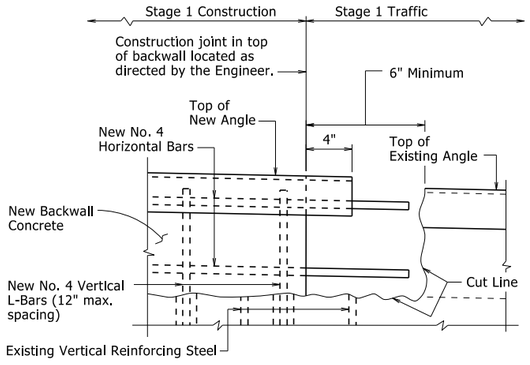


NOTE: All welding shall be done after the Stage 1 concrete pour and prior to the Stage 2 concrete pour.

① DETAIL OF WELD FOR BACKWALL REPAIR

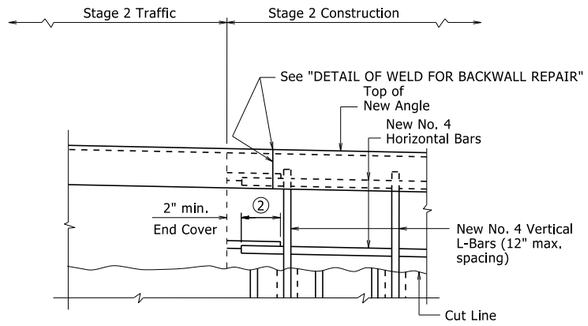


NO. 4 L-BAR



① VIEW B-B, STAGE 1

Details shown for LMC/VESLMC Overlay with grade raise; details similar for LMC /VESLMC Overlay without grade raise.



① VIEW B-B, STAGE 2

① Details shown are typical for staged construction. When full width rehabilitation of a bridge deck is possible, eliminate construction joint shown and perform the backwall repair in one operation for full repair width.

② The 32 bar diameter minimum lap per Subsection 804.07 may be waived if this requirement cannot be met due to construction conditions. In this situation, the lap length shall be maximized as much as practical.

This document was originally issued and sealed by Charles R. Ellis, PE No. 9235, on November 7, 2019. This copy is not a signed and sealed document.

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

BRIDGE ENGINEER

STANDARD DETAILS FOR BACKWALL REPAIRS

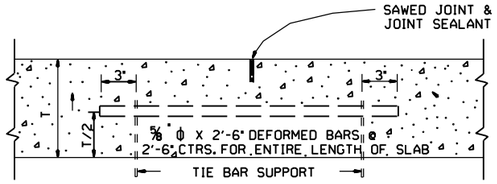
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: KWY DATE: 11/7/2019
CHECKED BY: SWP DATE: 11/7/2019
DESIGNED BY: STD. DATE: -------
FILENAME: b55065.dgn
SCALE: None

DRAWING NO. 55065

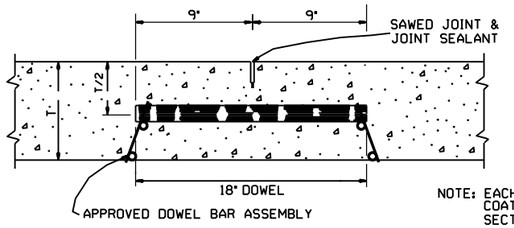
PRINT DATE: 11/4/2020



LONGITUDINAL JOINT

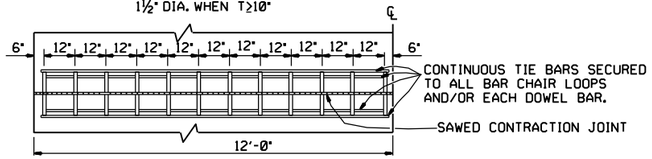
NOTE: THE TIE BAR SUPPORT SHOWN ABOVE MAY BE ELIMINATED IF OTHER APPROVED METHODS FOR PLACING AND SUPPORTING THE TIE BARS ARE PROVIDED.

TIE BARS SHALL BE 15" FROM TRANSVERSE JOINTS.



NOTE: EACH DOWEL TO BE COATED ACCORDING TO SECTION 502 OF THE STANDARD SPECIFICATIONS.

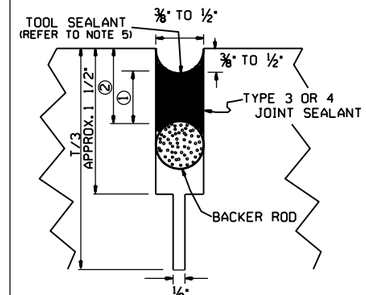
ROUND STEEL BAR DOWEL
1¼" DIA. WHEN T<10"
1½" DIA. WHEN T≥10"



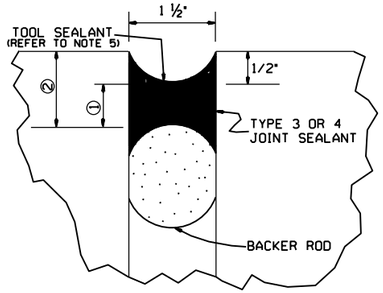
ONE-HALF 24' PAVEMENT
12 DOWELS
PLAN

NOTE: FOR 20' PAVEMENT USE 20 DOWELS @ 12" CTRS. WITH 6" SPACING FROM C.L. AND EDGE OF SLAB TO FIRST BAR. FOR 15' PAVEMENT USE 15 DOWELS @ 12" CTRS. WITH 6" SPACING FROM C.L. AND EDGE OF SLAB TO FIRST BAR. FOR 26' PAVEMENT USE 26 DOWELS @ 12" CTRS. WITH 6" SPACING FROM C.L. AND EDGE OF SLAB TO FIRST BAR. FOR PAVEMENT WIDTHS OTHER THAN THOSE SHOWN ABOVE, USE DOWELS AT 12" CTRS. WITH 6" MAX. SPACING FROM C.L. TO FIRST BAR. DISTANCE FROM EDGE OF SLAB TO FIRST BAR SHALL BE ADJUSTED TO MAINTAIN 12" DOWEL BAR SPACING

CONTRACTION JOINT DETAILS



DETAIL OF SAWED CONTRACTION JOINT



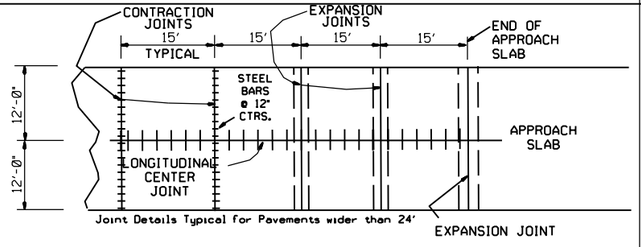
DETAIL OF EXPANSION JOINT

JOINT CONFIGURATION FOR TYPE 3 OR 4 JOINT SEALANT

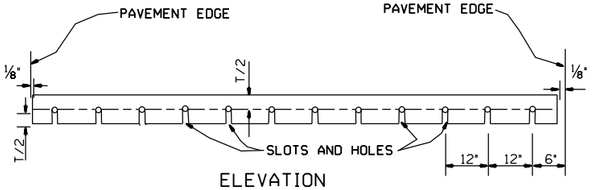
JOINT WIDTH	SEALANT THICKNESS ①	BACKER ROD DIAMETER	BACKER ROD PLACEMENT DEPTH ②
INCHES			
¼	¼	⅜	½
⅜	¼	½	½
½	¼	⅝	½
⅝	⅜	¾	⅝
¾	⅜	⅞	⅝
1 ½	¾	2	1 ¼

JOINT CONFIGURATION FOR TYPE 5 JOINT SEALANT

JOINT WIDTH	SEALANT THICKNESS ①	BACKER ROD DIAMETER	BACKER ROD PLACEMENT DEPTH ②
INCHES			
¼	½	⅜	¾
⅜	¾	½	1

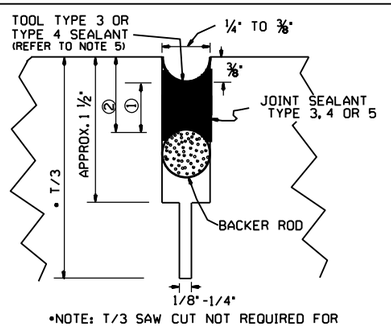


PLAN SHOWING EXPANSION JOINTS AT BRIDGE APPROACH SLABS



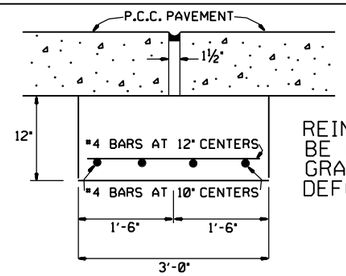
ELEVATION

NOTE: ALL DOWEL BARS SHALL CONFORM TO THE DETAILS FOR CONTRACTION JOINTS.



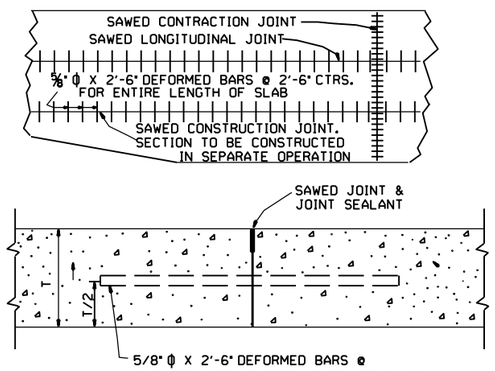
•NOTE: T/3 SAW CUT NOT REQUIRED FOR LONGITUDINAL CONSTRUCTION JOINT.

DETAIL OF SAWED LONGITUDINAL JOINT AND LONGITUDINAL CONSTRUCTION JOINT



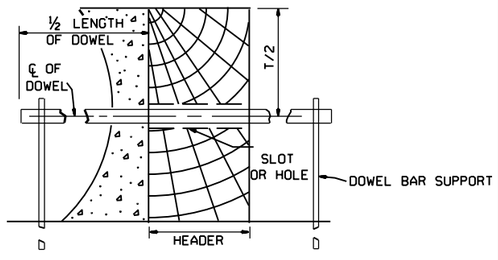
REINFORCING SHALL BE GRADE 40 OR GRADE 60 DEFORMED BARS.

DETAIL OF JOINT SUPPORT FOR EXPANSION JOINTS



NOTE: TIE BARS SHALL BE 15" FROM TRANSVERSE JOINTS.

LONGITUDINAL CONSTRUCTION JOINT



SECTION

TRANSVERSE CONSTRUCTION JOINT

GENERAL NOTES

1. "T" DENOTES THICKNESS OF SLAB.
2. DOWEL BARS SHALL BE PLACED IN ACCORDANCE WITH THE DIMENSIONS SHOWN. A TOLERANCE OF PLUS OR MINUS ONE INCH WILL BE ALLOWED FOR THE VERTICAL AND LATERAL PLACEMENT AND A TOLERANCE OF PLUS OR MINUS ¼" WILL BE ALLOWED FOR THE TILT AND SKEW. DOWEL BARS SHALL BE FIELD COATED FOR A MINIMUM DISTANCE OF 2" GREATER THAN HALF THE LENGTH OF THE BAR WITH AN APPROVED GREASE AS A BOND BREAKER JUST PRIOR TO PLACEMENT OF CONCRETE.
3. THE EXPANSION JOINT SUPPORT MAY BE CONSTRUCTED WITH CLASS "A", "S" OR PAVING CONCRETE. PAYMENT FOR THE JOINT SUPPORT SHALL BE FOR THE CONTRACT UNIT PRICE BID FOR THE CLASS OF CONCRETE SPECIFIED IN THE PLANS. PAYMENT FOR ALL OTHER WORK AND MATERIALS REQUIRED FOR THE CONSTRUCTION OF THE JOINT SUPPORT SHALL BE INCLUDED IN THE PRICE BID FOR THE ABOVE ITEMS.
4. CONTRACTION JOINTS SHALL BE CONSTRUCTED ON 15' CENTERS.
5. TOOLING NOT REQUIRED FOR SELF-LEVELING SILICONE.
6. UNLESS OTHERWISE SPECIFIED IN THE PLANS, CONCRETE SHOULDERS SHALL BE CONSTRUCTED ACCORDING TO THE DETAILS SHOWN HEREON. CONTRACTION JOINTS SHALL MATCH CONTRACTION JOINTS IN THE LANES.
7. TIE WIRES IN DOWEL BAR ASSEMBLIES SHALL NOT BE CUT PRIOR TO PLACEMENT OF PAVING CONCRETE.

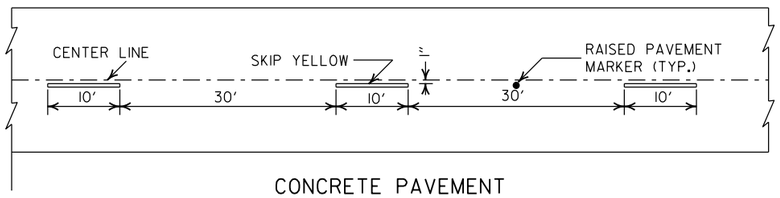
DATE	REVISION	DATE FILMED
11-07-19	REV. EXP. JOINT REF ON APP. SLAB	
5-25-06	ADDED GENERAL NOTE 7	
10-9-03	REMOVED TIE BAR COATING & REVISED GENERAL NOTES	
11-16-01	ADDED TOOL SEALANT AND NOTE 5; REVISED NOTE 3	
4-26-96	REVISED CONTRACTION JOINT NOTE	
11- 3-94	ADDED NOTE RE: REINF. BARS	
4- 1-93	REVISED DOWEL BARS & GEN. NOTES	4- 1-93
10- 1-92	REVISED DOWEL SPACING	10- 1-92
8- 15-91	ADDED SPAC FOR CONTR JTS & DEL KEYWAY	
05-24-90	REVISED TIE BAR, DOWEL & JOINT SIZE	
01-25-90	ADDED EXPANSION JOINT	01-25-90
11-30-89	CHANGED T/4+1 TO T/3+1	11-30-89
03-23-89	ALTERED SAWED JOINT & ADDED NOTE	512-03-23-89
07-15-88	REVISED AND REDRAWN	632-07-15-88

ARKANSAS STATE HIGHWAY COMMISSION

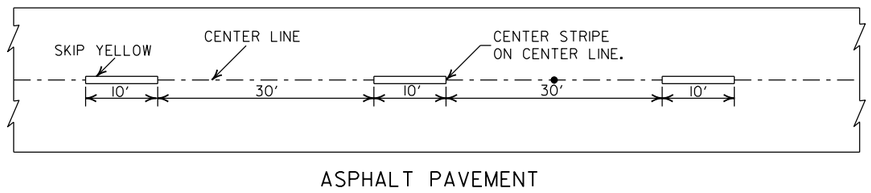
TRANSVERSE & LONGITUDINAL JOINTS FOR CONCRETE PAVEMENT (NON-REINFORCED)

STANDARD DRAWING CPTJ - 6A

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

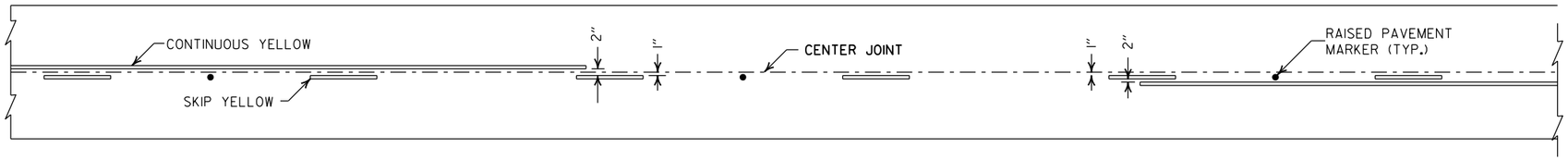


CONCRETE PAVEMENT

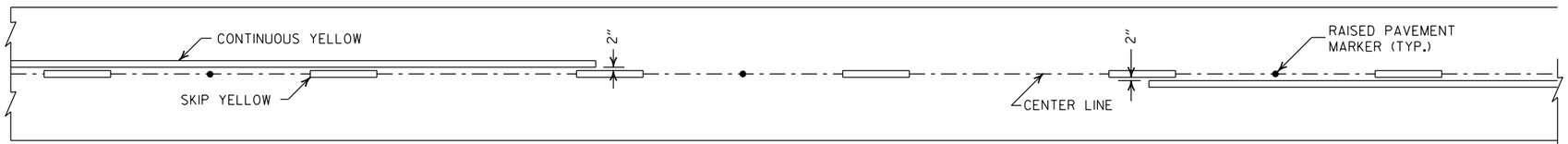


ASPHALT PAVEMENT

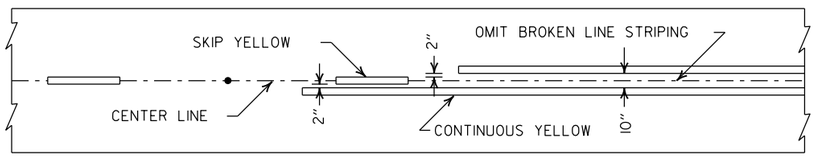
BROKEN LINE STRIPING



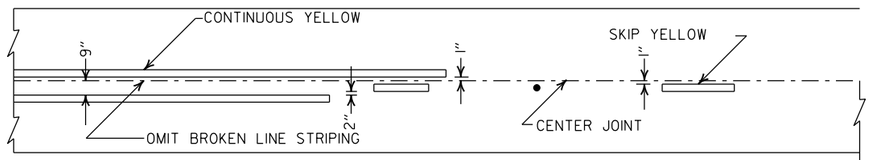
SOLID LINE STRIPING ON CONCRETE PAVEMENT



SOLID LINE STRIPING ON ASPHALT PAVEMENT

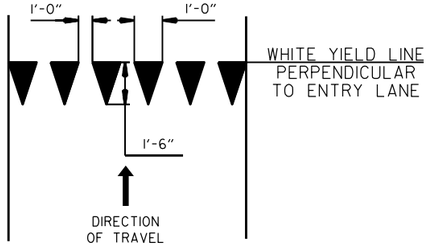


ASPHALT PAVEMENT

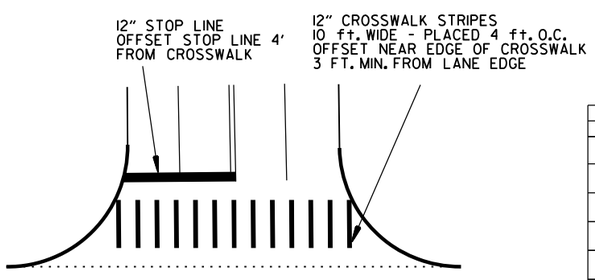


CONCRETE PAVEMENT

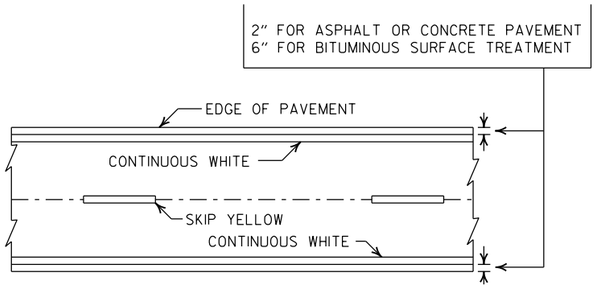
STRIPING AT ADJACENT NO PASSING LANES



YIELD LINE DETAIL



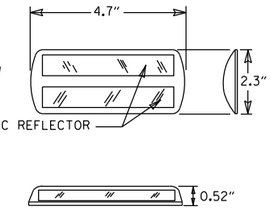
CROSSWALK AND STOP LINE DETAILS



PAVEMENT EDGE LINE MARKING

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

TYPE II
RED/CLEAR OR YELLOW/YELLOW



NOTE:
DIMENSIONS SHOWN FOR RAISED PAVEMENT MARKERS ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR MARKERS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR SIMILAR MARKERS MAY BE MADE BY REFERRING TO THE ARDOT QUALIFIED PRODUCTS LIST.

DETAIL OF STANDARD RAISED PAVEMENT MARKERS

DATE	REVISION	FILMED
2-27-20	REVISED STOP LINE DETAILS	
6-1-17	ADDED YIELD LINE DETAIL	
5-12-16	REVISED LINE WIDTHS, SPACING, & NOTES	
9-12-13	REVISED DETAIL OF STANDARD RAISED PAVEMENT MARKERS	
11-17-10	REVISED GENERAL NOTES & REMOVED PLOWABLE PVMT MRKRS	
11-18-04	REVISED NOTE 2 & GENERAL NOTES	
8-22-02	ADDED CROSSWALK & STOPBAR DTLS.	
7-02-98	ADDED DETAILS OF STD. RAISED PAV'T. MARKERS	
4-26-96	REV. NOTES 3&4; ADDED R.P.M.	
9-30-80	DRAWN	1-9-30-80

ARKANSAS STATE HIGHWAY COMMISSION

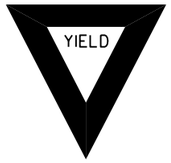
PAVEMENT MARKING DETAILS

STANDARD DRAWING PM-1

R1-1

STANDARD 30"X30"
EXPRESSWAY 36"X36"
SPECIAL 48"X48"

R1-2



STD. 36"X36"X36"
EXPWY. 48"X48"X48"
FWY. 60"X60"X60"

R2-1

STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

W3-5

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

W3-5a

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

R4-1

STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

R4-2

STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

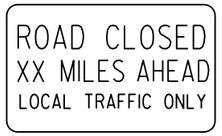
R5-1

STD. 30"X30"
EXPWY. 36"X36"
SPECIAL 48"X48"

RII-2

48"X30"

RII-3A



60"X30"

RII-4

60"X30"

W21-5a

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

WI-1

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

WI-2

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

WI-3

STD. 48"X48"

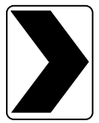
WI-4

STD. 48"X48"

WI-6

STD. 48"X24"
SPECIAL 60"X30"

WI-8



STD. 18"X24"
SPECIAL 24"X30"
EXPWY. 30"X36"
FWY. 36"X48"

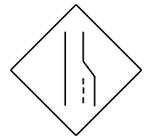
W3-1

STD. 36"X36"
SPECIAL 48"X48"

W3-2

STD. 36"X36"
SPECIAL 48"X48"

W4-2



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

W5-1

STD. 36"X36"
SPECIAL 48"X48"

W6-3

EXPWY. 36"X36"
SPECIAL 48"X48"

W8-7

EXPWY. 36"X36"
FWY. 48"X48"

W9-2

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

WI3-1

STD. 24"X24"

W20-1

STD. 48"X48"

W20-2

STD. 48"X48"

W20-3

STD. 48"X48"

W20-4

STD. 48"X48"

W20-5

STD. 48"X48"

W20-7a

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

W21-2

STD. 30"X30"
SPECIAL 36"X36"

W21-5

STD. 30"X30"
SPECIAL 36"X36"

W24-1

STD. 36"X36"

WI-4b

STD. 48"X48"

R56-1

STD. 18"X18"

W8-11

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

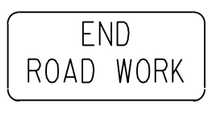
W8-9

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

G20-1

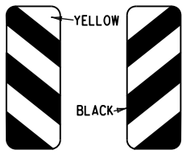
60"X24"

G20-2



48"X24"

OM-3L OM-3R



12"X36"

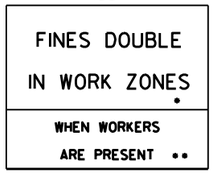
M4-9

STD. 30"X24"
SPECIAL 48"X36"
SPECIAL 60"X48"

M4-10

48"X18"

R55-1



36"X60"

• USE 6" C LETTERS
•• USE 4" D LETTERS

ADVANCE DISTANCES
(XXXX)

500 FT	½ MILE
1000 FT	¾ MILE
1500 FT	1 MILE AHEAD

GENERAL NOTES:

1. ALL TRAFFIC CONTROL DEVICES USED ON ROAD CONSTRUCTION SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION, AND TO THE STANDARD HIGHWAY SIGNS, LATEST EDITION, OR AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION.
2. TRAFFIC CONTROL DEVICES SHALL BE SET UP JUST BEFORE THE START OF CONSTRUCTION OPERATIONS AND SHALL BE PROPERLY MAINTAINED DURING THE TIME SUCH CONDITIONS EXIST. THEY SHALL REMAIN IN PLACE ONLY AS LONG AS NEEDED AND REMOVED THEREAFTER.
3. EXISTING SIGNS AND CONSTRUCTION SIGNS SHALL BE KEPT IN PROPER POSITION, AND BE CLEAN AND LEGIBLE AT ALL TIMES. SIGNS THAT DO NOT APPLY TO EXISTING CONDITIONS SHALL BE REMOVED. SIGNS THAT ARE DAMAGED, DEFACED, OR THAT ACCUMULATE DIRT DURING CONSTRUCTION SHALL BE CLEANED, REPAIRED, OR REPLACED.
- 4. SIGNS ARE USUALLY MOUNTED ON A SINGLE POST, ALTHOUGH THOSE WIDER THAN 36" OR LARGER THAN 10 SQ. FT. SHALL BE MOUNTED ON TWO POSTS OR ABOVE A TYPE III BARRICADE.
- 5. SIGN POSTS DIRECT BURIED IN SOIL SHALL BE 2 LB. MINIMUM CHANNEL POST OR 4"x4" WOOD POSTS. CHANNEL POSTS SHALL BE PAINTED GREEN. WOOD POSTS SHALL BE PAINTED WHITE. ALL POSTS SHALL BE NEATLY CONSTRUCTED, AND SHALL BE REPLUMBED, CLEANED, OR REPAIRED AS NEEDED FOR THE DURATION OF THE JOB. THERE SHALL NOT BE MORE THAN 2 POSTS IN A 7' PATH FOR WOOD OR CHANNEL POSTS. ANY CHANNEL POST SPLICE SHALL BE IN ACCORDANCE WITH STANDARD DRAWING TC-3.
6. POST MOUNTED SIGNS IN RURAL AREAS SHALL BE CONSTRUCTED WITH THE NEAR EDGE OF THE SIGN FROM 6 TO 12 FEET FROM THE PAVEMENT EDGE. SIGNS IN URBAN AREAS AND BARRICADE MOUNTED SIGNS SHALL BE MOUNTED A MINIMUM OF 2 FEET FROM THE PAVEMENT EDGE.
7. ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN URBAN AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE. ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN RURAL AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE, EXCEPT A MINIMUM OF 6' SHALL BE USED WHEN MOUNTING AN ADVISORY SIGN BELOW A WARNING SIGN. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR INTERMEDIATE TERM STATIONARY WORK CONDITIONS. THE SIGNS MINIMUM MOUNTING HEIGHT SHALL BE 5'. RETROREFLECTIVE DEVICES SHALL BE USED. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR SHORT-TERM, SHORT DURATION, AND MOBILE CONDITIONS. THEY SHALL BE NO LESS THAN ONE (1) FOOT ABOVE THE TRAVELED WAY. LONG-TERM STATIONARY SIGNS SHALL BE DIRECT BURIED IN SOIL, UNLESS CONDITIONS NECESSITATE THE USE OF PORTABLE SIGNS, OR AS APPROVED BY THE ENGINEER. CONCRETE PADS, CONCRETE OR ROCK BALLAST, OR OTHER SOLID MATERIALS SHALL NOT BE UTILIZED WITH PORTABLE SIGN SUPPORTS.
8. FLAGGERS SHALL USE REFLECTORIZED STOP-SLOW PADDLES. FLAGS MAY BE USED ONLY FOR EMERGENCY SITUATIONS.
9. MOST OF THE SIGNS SHOWN ARE ORIENTED TO THE RIGHT. HOWEVER, THIS DOES NOT PRECLUDE THE USE OF MIRROR IMAGES OF THESE SIGNS WHERE THE REVERSE ORIENTATION MIGHT BETTER CONVEY TO MOTORISTS THE PROPER DIRECTION OF MOVEMENT.
10. R55-1 SIGNS SHALL BE PLACED AT LEAST 1500' BUT NOT MORE THAN 1 MILE IN ADVANCE OF THE WORK ZONE. IF A SPEED LIMIT REDUCTION IS IN EFFECT, THE SIGN SHALL BE PLACED A MINIMUM OF 500' IN ADVANCE OF THE "REDUCED SPEED AHEAD" SIGN.

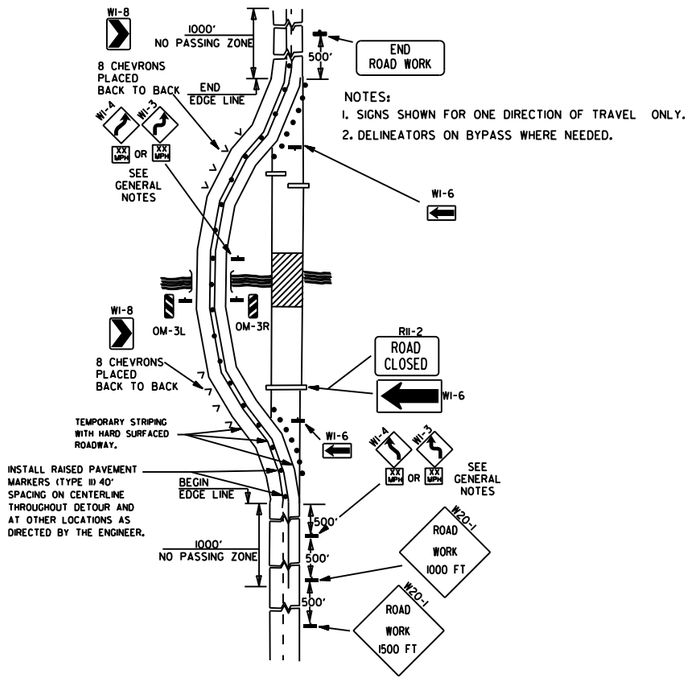
• NOTE: SUPPORTS FOR SIGNS, BARRICADES, AND VERTICAL PANELS THAT ARE DIFFERENT FROM THE REQUIREMENTS SHOWN IN NOTES 4 & 5, BUT MEET THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH), WILL BE ACCEPTED. COMPLIANCE WITH THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) IS REQUIRED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

DATE	REVISION	FILMED
11-07-19	REVISED FOR MASH	
4-13-17	DELETED RSP-1 & ADDED W21-5a	
9-2-15	REVISED REDUCED SPEED LIMIT AHEAD SIGNS REVISED ROAD WORK NEXT XX MILES	
12-15-11	REVISED W24-1	
11-17-10	DELETED W8-9a & ADDED W8-9	
10-15-09	ADDED REFERENCE TO MASH & ADDED SIGN W24-1	
4-17-08	REVISED SIGN DESIGNATIONS	
11-18-04	REVISED NOTES	
10-9-03	REVISED NOTE 1	
11-16-01	REVISED NOTE 7	
9-28-00	REVISED NOTE	
11-18-98	ADDED NOTE	
6-26-97	REVISED NOTE 5	
4-03-97	REVISED NOTE 5	
10-18-96	ADDED CONTROLLED ACCESS HWY. SIGN & TO NOTE 7	
10-12-95	ADDED R55-1	
6-8-95	REVISED TO CORRECT SIGN ILLUSTRATIONS	6-8-95
2-2-95	REVISED PER PART VI, MUTCD SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	

ARKANSAS STATE HIGHWAY COMMISSION

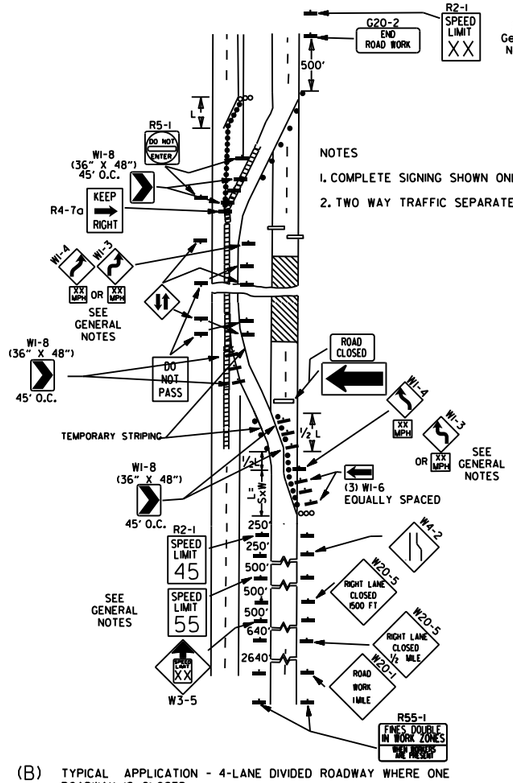
STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

STANDARD DRAWING TC-1



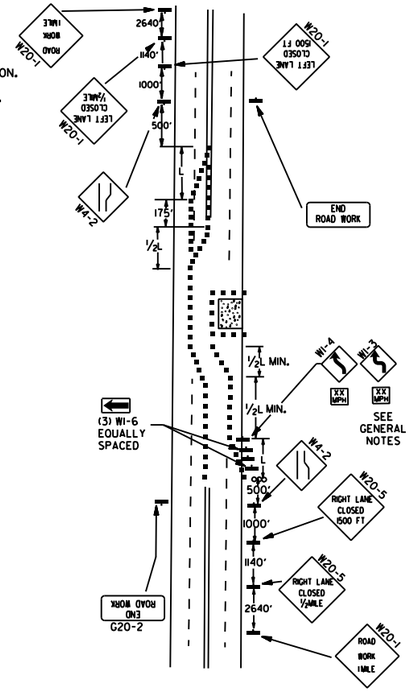
NOTES:
1. SIGNS SHOWN FOR ONE DIRECTION OF TRAVEL ONLY.
2. DELINEATORS ON BYPASS WHERE NEEDED.

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

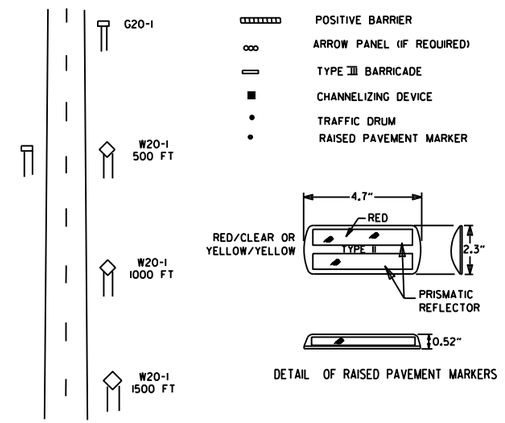


NOTES
1. COMPLETE SIGNING SHOWN ONLY IN CROSSOVER DIRECTION.
2. TWO WAY TRAFFIC SEPARATED WITH POSITIVE BARRIER.

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



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



DETAIL OF RAISED PAVEMENT MARKERS

TYPICAL ADVANCE WARNING SIGN PLACEMENT

TAPER FORMULAE:

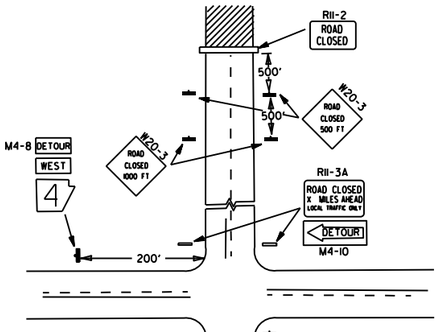
L=SXW FOR SPEEDS OF 45MPH OR MORE.

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

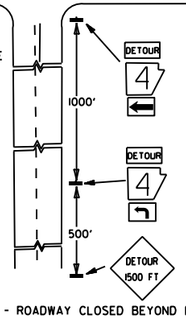
WHERE:
L= MINIMUM LENGTH OF TAPER.
S= NUMERICAL VALUE OF POSTED SPEED LIMIT PRIOR TO WORK OR 85TH PERCENTILE SPEED.
W= WIDTH OF OFFSET.

GENERAL NOTES:

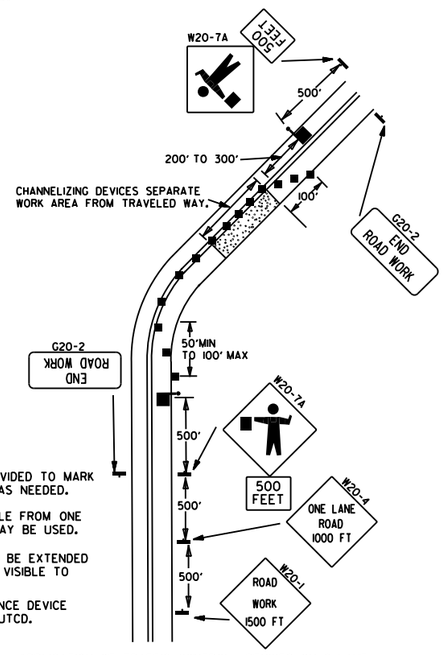
1. THE MAINTENANCE DIVISION SHALL CONDUCT A BALL BANK STUDY TO DETERMINE THE ADVISORY SPEED LIMIT PRIOR TO OPENING TO TRAFFIC. THE ADVISORY SPEED WILL BE POSTED ON W1-3 OR W1-4 CURVE WARNING SIGNS. USE W1-4 WHEN SPEED IS GREATER THAN 30MPH AND W1-3 WHEN 30MPH OR LESS
2. WHEN THE EXISTING SPEED LIMIT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



NOTES:
1. REGULATORY TRAFFIC CONTROL DEVICES TO BE MODIFIED AS NEEDED FOR THE DURATION OF THE DETOUR.
2. STREET NAMES MAY BE USED WHEN DESIRABLE FOR DIRECTING DETOURED TRAFFIC.

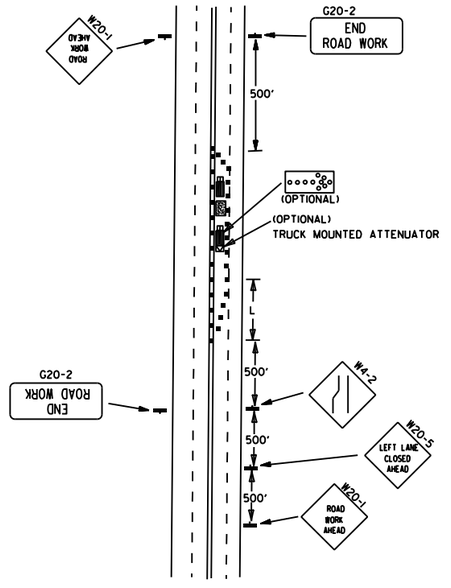


(D) TYPICAL APPLICATION - ROADWAY CLOSED BEYOND DETOUR POINT.



NOTES:
1. FLOOD LIGHTS SHOULD BE PROVIDED TO MARK FLAGGER STATIONS AT NIGHT AS NEEDED.
2. IF ENTIRE WORK AREA IS VISIBLE FROM ONE STATION, A SINGLE FLAGGER MAY BE USED.
3. CHANNELIZING DEVICES ARE TO BE EXTENDED TO A POINT WHERE THEY ARE VISIBLE TO APPROACHING TRAFFIC.
4. AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD) OPTIONAL. REFER TO MUTCD.

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



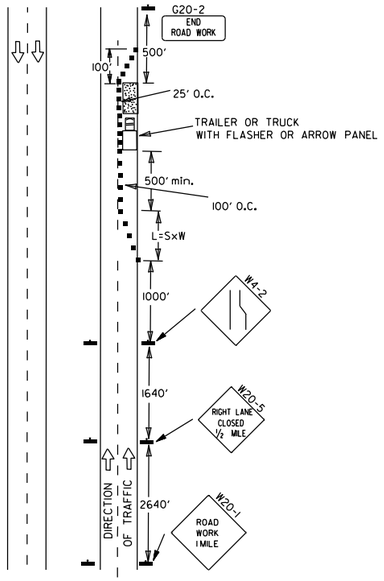
(F) TYPICAL APPLICATION - 4-LANE UNDIVIDED ROADWAY WITH INSIDE LANE CLOSED.

DATE	REVISION	FILMED
05-20-21	REVISED NOTE 7	
11-07-19	REVISED NOTE 1, ADDED NOTE 9	
9-2-15	REVISED NOTE 2, ADDED NOTE 8, REVISED DRAWING (A) & REPLACED R2-5A WITH W3-5	
9-12-13	REVISED DETAIL OF RAISED PAVEMENT MARKERS	
3-11-10	ADDED (AFAD)	
11-20-08	REVISED SIGN DESIGNATIONS	
11-18-04	ADDED GENERAL NOTE	
10-18-96	ADDED R55-1	
4-26-96	CORRECTED (a) BEHIND G20-2	
6-8-95	CORRECTED SIGN IDENT. ON W1-4A	6-8-95
2-2-95	REVISED PER PART VI, MUTCD, SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	

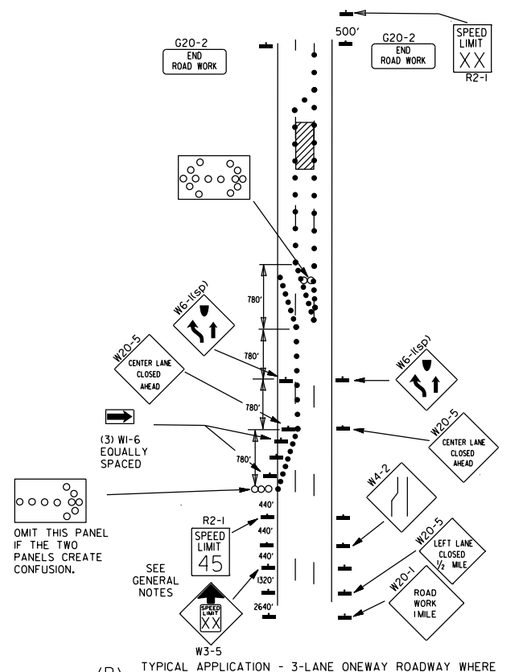
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

STANDARD DRAWING TC-2



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



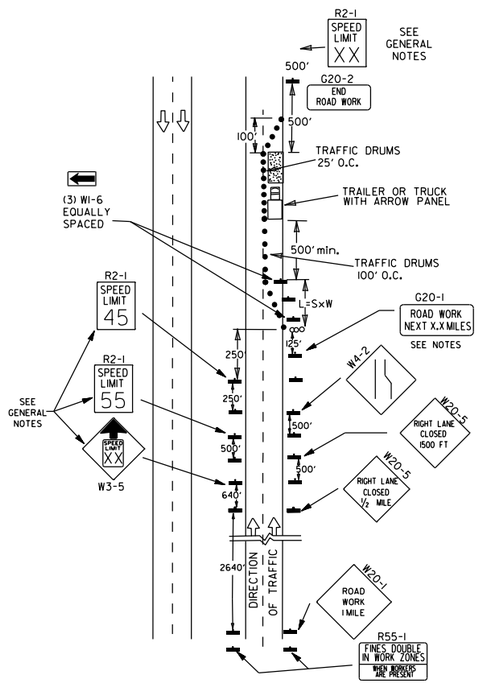
(B) TYPICAL APPLICATION - 3-LANE ONEWAY ROADWAY WHERE CENTER LANE IS CLOSED.

KEY:

- ARROW PANEL (IF REQUIRED)
- ■ CHANNELIZING DEVICE
- ● TRAFFIC DRUM

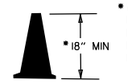
GENERAL NOTES:

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 R2-1(55) SHALL BE OMITTED AND THE W3-5 SHALL BE INSTALLED AT THAT LOCATION. ADDITIONAL R2-1 45MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
3. WHEN THE EXISTING SPEED LIMIT IS 65MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 55MPH, THE R2-1(45) SHALL BE OMITTED. ADDITIONAL R2-1 55MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS, AT THE END OF THE WORK AREA A R2-1(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
4. THE MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES IN A TAPER SHOULD BE APPROXIMATELY EQUAL IN FEET TO THE SPEED LIMIT. BEYOND THE TAPER, MAXIMUM SPACING SHALL BE TWO TIMES THE SPEED LIMIT OR AS DIRECTED BY THE ENGINEER.
5. WARNING LIGHTS AND/OR FLAGS MAY BE MOUNTED TO SIGNS OR CHANNELIZING DEVICES AT NIGHT AS NEEDED.
6. PAVEMENT MARKINGS NO LONGER APPLICABLE WHICH MIGHT CREATE CONFUSION IN THE MINDS OF VEHICLE OPERATORS SHALL BE REMOVED OR OBLITERATED AS SOON AS PRACTICABLE.
7. THE G20-1 SIGN WILL BE REQUIRED ON JOBS OF OVER TWO MILES IN LENGTH. WHEN THE LANE CLOSURE IS NOT AT THE BEGINNING OF THE PROJECT, THE G20-1 SIGN SHALL BE ERECTED 125' IN ADVANCE OF THE JOB LIMIT. ADDITIONAL W20-1 (1 MILE) SIGNS ARE NOT REQUIRED IN ADVANCE OF LANE CLOSURES THAT BEGIN INSIDE THE PROJECT LIMITS.
8. FLAGGERS SHALL USE STOP/SLOW PADDLES FOR CONTROLLING TRAFFIC THROUGH WORK ZONES. FLAGS MAY BE USED ONLY FOR EMERGENCY SITUATIONS.
9. ALL PLASTIC DRUMS AND CONES SHALL MEET THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).
10. TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE DELINEATED BY AFFIXING CONSPICUITY MATERIAL IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER. WHEN PLACED ON OR ADJACENT TO THE SHOULDER AND NOT BEHIND A POSITIVE BARRIER, THESE DEVICES SHALL BE DELINEATED BY PLACING FIVE (5) TRAFFIC DRUMS, EQUALLY SPACED ALONG THE TRAFFIC SIDE OF THE DEVICE. PAYMENT FOR TRAFFIC DRUMS SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR VARIOUS TRAILER MOUNTED DEVICES.
11. ALL TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANGEABLE MESSAGE SIGNS SHALL MEET THE REQUIREMENTS OF THE MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).



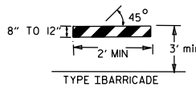
(C) TYPICAL APPLICATION - CONSTRUCTION OPERATIONS OF INTERMEDIATE TO LONG TERM DURATION ON A 4-LANE DIVIDED ROADWAY WHERE HALF OF THE ROADWAY IS CLOSED.

CHANNELIZING DEVICES



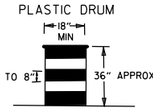
* WHEN CONES ARE USED ON FREEWAYS AND MULTI-LANE HIGHWAYS, THEY SHALL BE 28" MIN. DURING HOURS OF DARKNESS, 28" CONES SHALL BE USED ON ALL ROADWAYS, AND SHALL BE REFLECTORIZED IN ACCORDANCE WITH THE M.U.T.C.D.

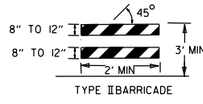
CONES



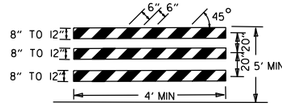
TYPE I BARRICADE

PLASTIC DRUM



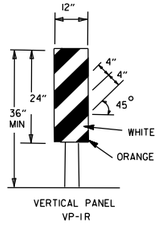


TYPE II BARRICADE



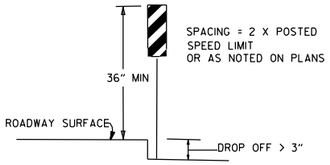
TYPE III BARRICADE

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

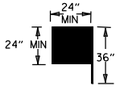


VERTICAL PANEL VP-1R

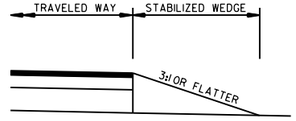
VERTICAL PANEL PLACEMENT



FLAG



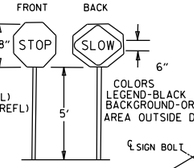
FLAG SHALL BE OF GOOD GRADE RED MATERIAL

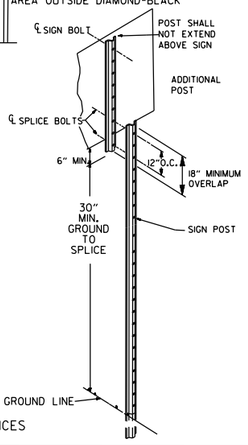


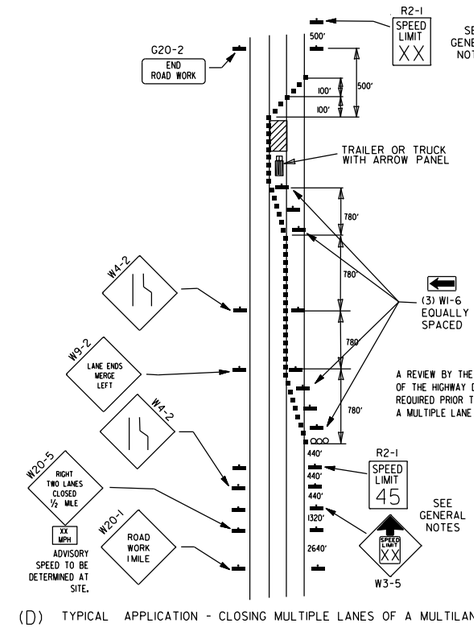
STABILIZED WEDGE

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

STOP SLOW PADDLE







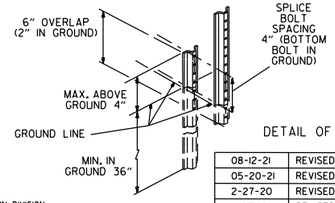
A REVIEW BY THE ROADWAY DESIGN DIVISION OF THE HIGHWAY DEPARTMENT WILL BE REQUIRED PRIOR TO IMPLEMENTING A MULTIPLE LANE CLOSURE.

(D) TYPICAL APPLICATION - CLOSING MULTIPLE LANES OF A MULTILANE HIGHWAY.

NOTES: USE SPLICES ONLY WHEN NECESSARY FOR INSTALLATION. TYPICAL INSTALLATION SHOULD HAVE NO SPLICES (SEE STD. DRAWING NO. SHS-21)

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

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



DETAIL OF SPLICES

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).

DATE	REVISION	FILMED
08-12-21	REVISED TRAFFIC CONTROL DEVICES AND NOTES	
05-20-21	REVISED NOTE 10	
2-27-20	REVISED TRAFFIC CONTROL DEVICES DETAILS	
11-07-19	REVISED NOTE 9, ADDED NOTE 11	
7-25-19	REVISED TRAFFIC CONTROL DEVICES DETAILS	
9-2-15	REVISED NOTE 2 & REPLACED R2-5A WITH W3-5	
10-15-09	ADDED REFERENCE TO MASH	
11-20-08	REVISED SIGN DESIGNATIONS	
11-18-04	ADDED NOTE	
10-1-98	ADDED NOTE	
4-03-97	ADDED (SP) TO W6-1& REVISED TRAFFIC CONTROL DEVICES NOTE	
10-18-96	ADDED R55-1	
10-12-95	MOVED UPPER SPLICE	
6-8-95	REVISED SPLICE DETAIL, TEXT	6-8-95
2-2-95	REVISED PER PART VI, MUTCD, SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	

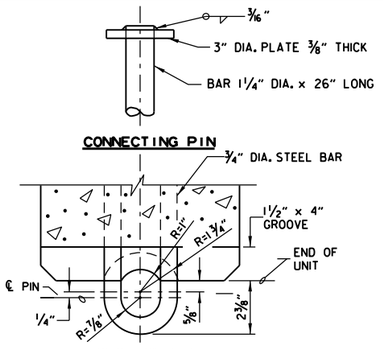
ARKANSAS STATE HIGHWAY COMMISSION

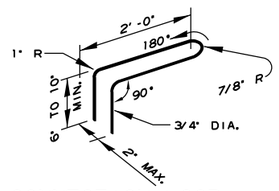
STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

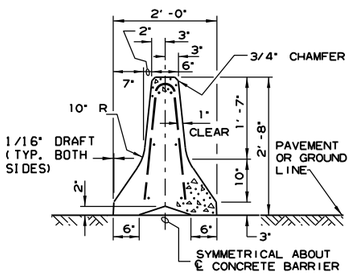
STANDARD DRAWING TC-3

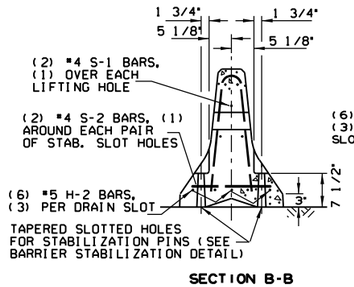
REINFORCING BAR TABLE PER BARRIER UNIT

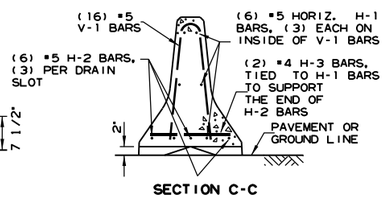
MARK	LOCATION	BAR SIZE	(NO. BARS)	SKETCH
H-1	HORIZONTAL IN BARRIER TIED INSIDE V-1 BARS	#5	(6)	19'-3"
H-2	CENTERED ABOVE DRAIN SLOTS LONG. & TRANSVERSELY	#5	(6)	6'-6"
H-3	TIED ABOVE H-1 BARS TO SUPPORT H-2, TIED TO V-1	#4	(2)	1'-6"
S-1	OVER LIFT HOLES	#4	(2)	2'-5", LIFTING HOLE, 90°, 3 3/8" R
S-2	HORIZ. AROUND SLOTS BETWEEN V-1'S @ DRAIN SLOTS	#4	(2)	1 1/2" R, SLOTS, 7", 1'-6", 1" MIN. CLEAR TO BAR; 5'-1" BAR W/(4) 1 1/2" R BENDS & MIN. 1'-0" OVERLAP
V-1	VERTICAL IN BARRIER(3) EACH END & (2) AT EACH DRAIN SLOTS	#5	(16)	TOTAL LENGTH 4'-9"; 2 3/16" R; 12°; 1 1/2"; 9"; 2'-1 3/8"; 4 3/8"

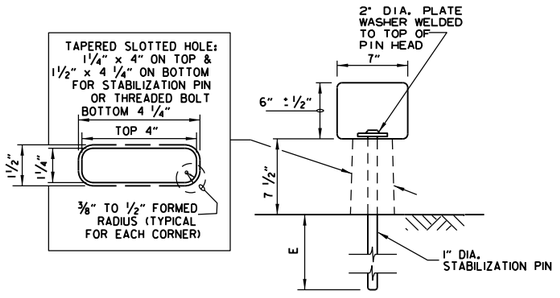




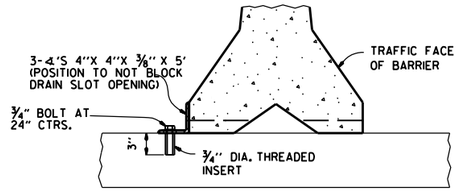






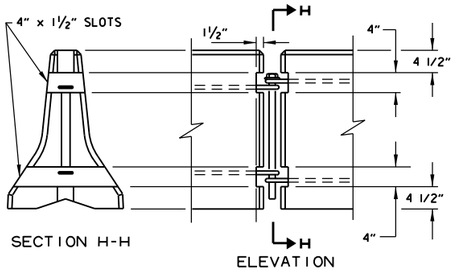


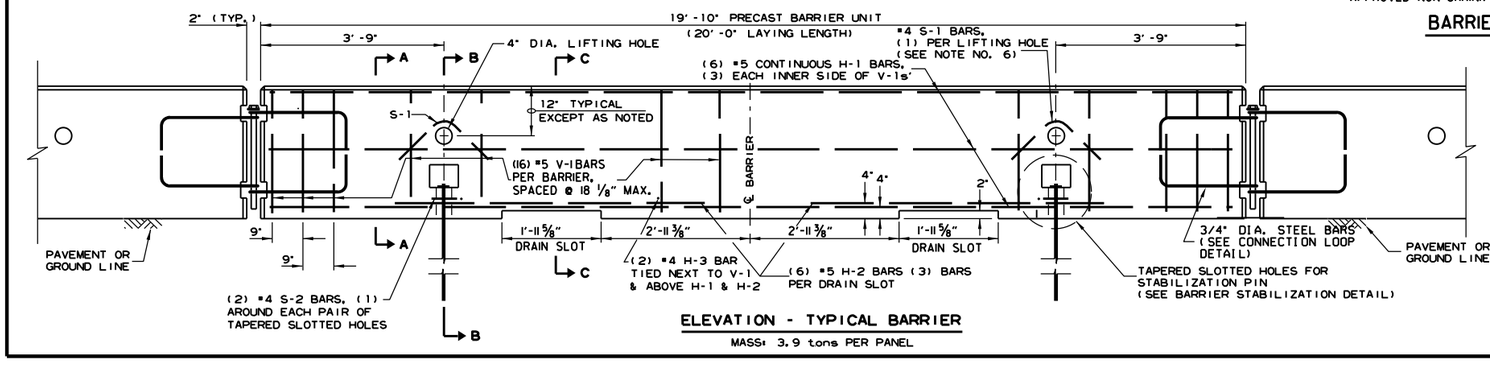
Ⓔ 4" - CONCRETE PAVEMENT
8" - ASPHALT PAVEMENT
12" - SHOULDER AREAS



NOTE: " THREADED INSERTS SHALL BE CAST IN PLACE FOR ALL NEW BRIDGE DECKS AND DRILLED AND GROUTED FOR EXISTING BRIDGE DECKS. INSERTS SHALL HAVE A MINIMUM ULTIMATE LOAD CAPACITY OF 8000 LBS. IN TENSION. AFTER REMOVAL OF BARRIER, BOLTS, AND ANGLES, THE INSERTS SHALL BE FILLED WITH APPROVED NON-SHRINK EPOXY.

BARRIER STABILIZATION DETAIL
BRIDGE DECKS





MASS: 3.9 tons PER PANEL

GENERAL NOTES

1. THE CONTRACTOR SHALL FURNISH THE PRECAST CONCRETE BARRIER UNITS AND SHALL BE RESPONSIBLE FOR THE MANUFACTURE, SHIPMENT, STORAGE, PLACEMENT AND REMOVAL. AT THE COMPLETION OF THE PROJECT, THE PRECAST UNITS WILL REMAIN THE PROPERTY OF THE CONTRACTOR.

2. MATERIALS SHALL MEET THE FOLLOWING MINIMUM REQUIREMENTS:
   CONCRETE: 2500 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
   REINFORCING STEEL: AASHTO M 31 OR M 53, GRADE 60
   STRUCTURAL STEEL: AASHTO-M270 GRADE 36 SHALL BE USED FOR THE CONNECTION PIN, CONNECTION LOOPS, AND STABILIZATION PINS. A ONE PIECE PIN WITH A 3" ROUNDED TOP MAY BE USED IN PLACE OF THE DETAILED CONNECTION PIN.
   DELINEATORS: DELINEATORS SHALL BE MOUNTED AT 10' SPACING ON TOP OF PRECAST BARRIER.

   IN APPLICATIONS WHERE BARRIER WALL IS WITHIN 6 FEET OF A TRAFFIC LANE, ADDITIONAL DELINEATORS SHALL BE PLACED ON THE BARRIER AT 10' SPACING APPROXIMATELY ONE (1) FOOT FROM THE TOP OF THE BARRIER. DELINEATORS SHALL BE ON THE ARDOT QUALIFIED PRODUCTS LIST FOR CONSTRUCTION CONCRETE BARRIER MARKERS.
   DELINEATOR COLOR SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
   PAYMENT FOR DELINEATORS SHALL BE CONSIDERED INCLUDED IN THE PRICE BID PER LIN. FT. FOR "FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER". THE CONTRACTOR SHALL CERTIFY TO THE ENGINEER THAT THE MATERIAL AND THE DESIGN USED IN THE PRECAST BARRIER UNITS MEETS THE REQUIREMENTS AS SHOWN ON THIS STANDARD DRAWING.

3. OTHER PRECAST CONCRETE BARRIERS THAT HAVE BEEN CRASH TESTED AND APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION TO MEET THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) WILL BE ACCEPTED IN LIEU OF THE BARRIER SHOWN. DRAIN SLOTS SHALL BE PROVIDED AS NEEDED OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH A CERTIFICATION OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) COMPLIANCE FOR ANY OTHER TYPES OF PRECAST BARRIER TO BE USED. THE CERTIFICATION SHALL STATE THAT THE PRECAST CONCRETE BARRIER MEETS THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH). MIXING OF SHAPES WILL NOT BE ALLOWED IN A CONTINUOUS LINE OF UNITS.

4. DOWEL HOLES IN PAVEMENT OR BRIDGE SLABS THAT ARE TO REMAIN IN PLACE SHALL BE FILLED. HOLES IN CONCRETE PAVEMENT AND BRIDGE SLABS SHALL BE FILLED WITH AN APPROVED NON-SHRINK EPOXY GROUT. HOLES IN ASPHALT PAVEMENT SHALL BE FILLED WITH AN APPROVED ASPHALT JOINT FILLER. PAYMENT FOR DRILLING AND FILLING HOLES TO BE INCLUDED IN THE PRICE FOR VARIOUS BARRIER ITEMS.

5. ATTACH UNITS TO ROADWAY SURFACE WITH STABILIZATION PINS AND TO DECK SLABS USING BOLTS WHEN REQUIRED.

6. A 4" WHITE PVC SLEEVE MAY BE USED TO FORM THE LIFTING HOLE AND IF USED THE SLEEVE IS TO BE LEFT IN PLACE.

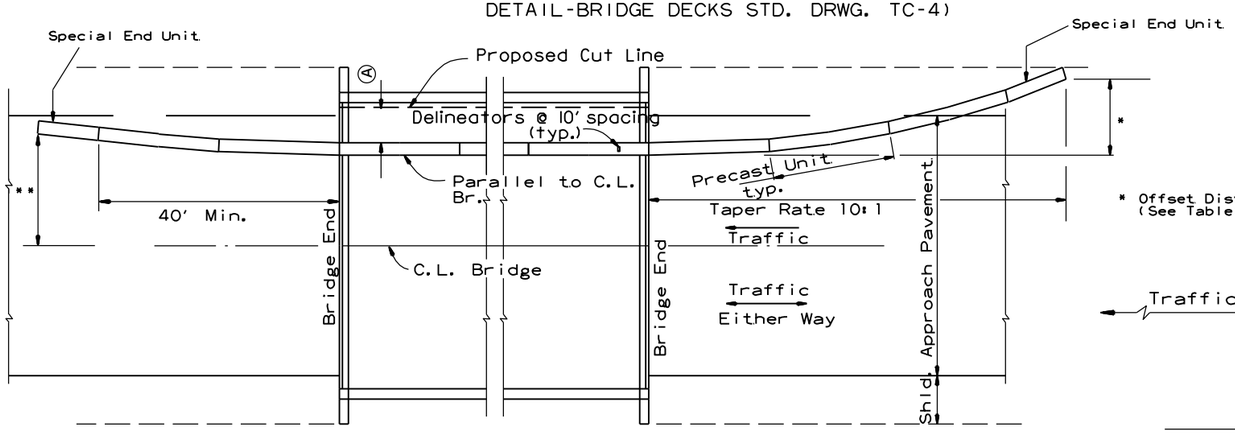
DATE	REVISION	FILMED
11-07-19	REVISED NOTE 3	
2-27-14	REVISED BARRIER STABILIZATION DETAIL	
10-15-09	ADDED REFERENCE TO WASH	
8-5-09	REV. NOTE 3 CONCERNING DRAIN SLOTS	
11-29-07	REVISED NOTE 3	
5-25-06	DELETED GENERAL NOTE 7	
11-18-04	REVISED BARRIER STABILIZATION DETAIL BRIDGE DECKS	
4-10-03	REVISED GENERAL NOTE 2	
8-22-02	ISSUED NEW DRAWING	

ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION - TEMPORARY PRECAST BARRIER

STANDARD DRAWING TC-4

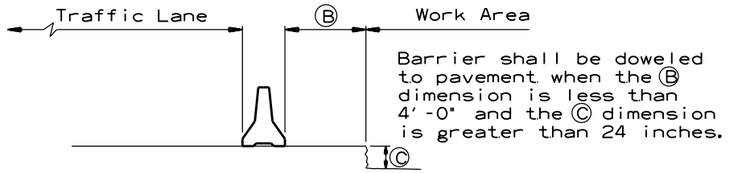
Ⓐ 4 feet or greater preferred. If less than 4 feet, Precast Units shall be connected to slab (SEE BARRIER STABILIZATION DETAIL-BRIDGE DECKS STD. DRWG. TC-4)



BARRIER PLACEMENT ALONG BRIDGE WITH OFFSET

No Scale

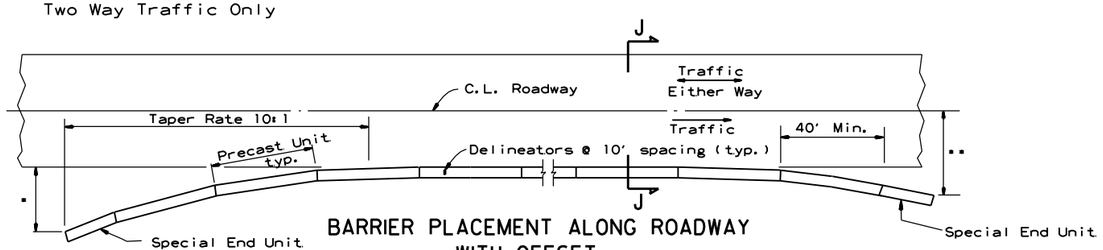
** Offset Distance for Two Way Traffic Only



Barrier shall be doweled to pavement when the Ⓑ dimension is less than 4'-0" and the Ⓒ dimension is greater than 24 inches.

SECTION J-J

No Scale



BARRIER PLACEMENT ALONG ROADWAY WITH OFFSET

No Scale

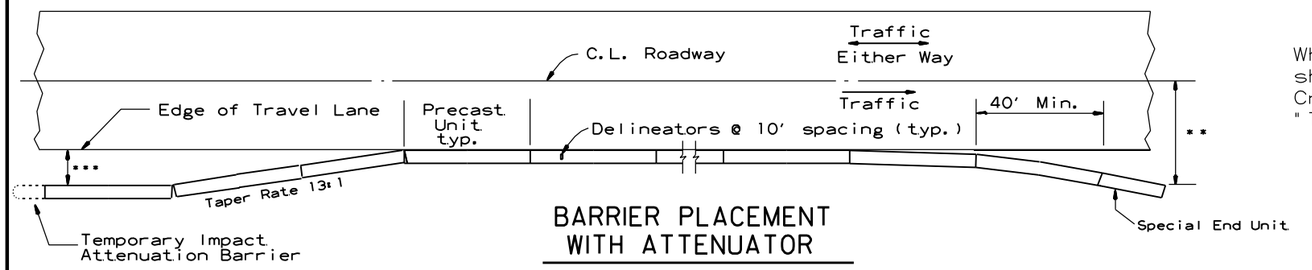
** Offset Distance For Two Way Traffic Only

* Offset Distance (See Table)

Offset Distance Table

Speed (MPH)	Offset Distance (FT.)
≤ 45	12
> 45	18

If offset distance is not attainable, then see "Barrier Placement With Attenuator" Detail shown below.

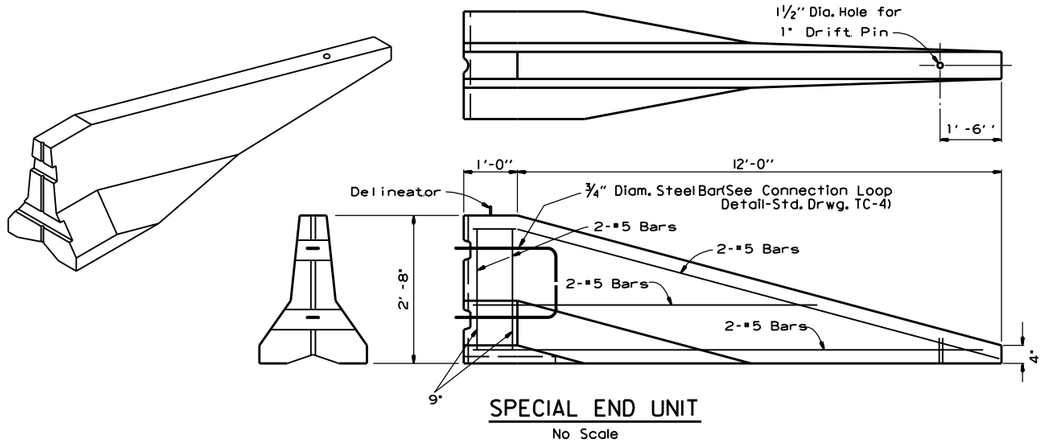


BARRIER PLACEMENT WITH ATTENUATOR

No Scale

*** Min. 3'-0" From Edge of Travel Lane to Nearest Edge of Attenuator

** Offset Distance For Two Way Traffic Only



SPECIAL END UNIT

No Scale

General Notes

When shown on the Plans, the ends of the Temporary Precast Concrete Barrier shall be protected with a Manual For Assessing Safety Hardware (MASH) approved Crash Cushion. Payment for Crash Cushions shall be made under the item of "Temporary Impact Attenuation Barrier."

DATE	REVISION	FILMED
11-07-19	REVISED NOTE	
10-15-09	ADDED REFERENCE TO MASH	
5-25-06	REVISED BARRIER PLACEMENT	
8-22-02	ISSUED NEW DRAWING	

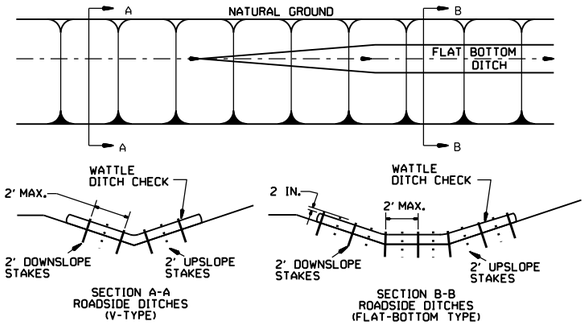
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION - TEMPORARY PRECAST BARRIER

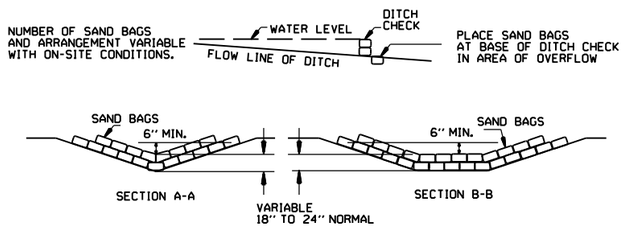
STANDARD DRAWING TC-5

GENERAL NOTES

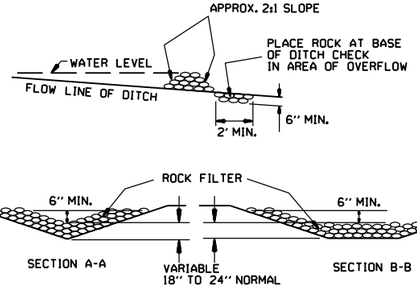
INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.



WATTLE DITCH CHECK (E-1)



SAND BAG DITCH CHECK (E-5)

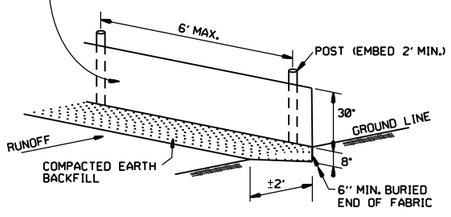


ROCK DITCH CHECK (E-6)

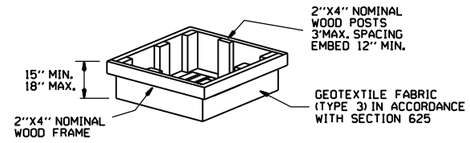
GENERAL NOTES

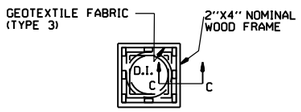
GEOTEXTILE FABRIC (TYPE 4) IN ACCORDANCE WITH SECTION 625

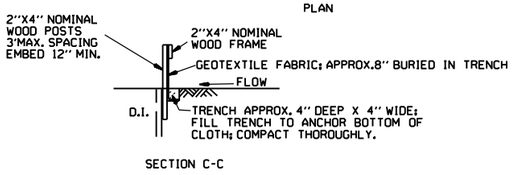
GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.



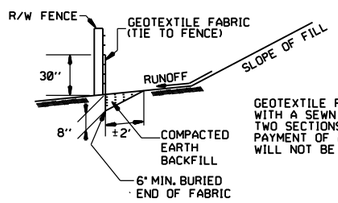
SILT FENCE (E-11)





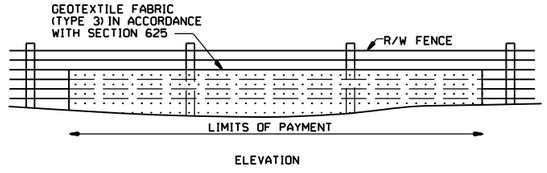


DROP INLET SILT FENCE (E-7)



GENERAL NOTES

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



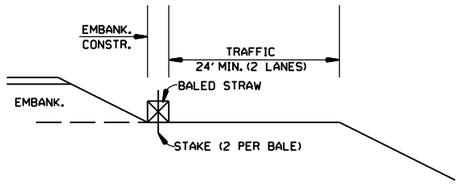
SILT FENCE ON R/W FENCE (E-4)

GENERAL NOTES

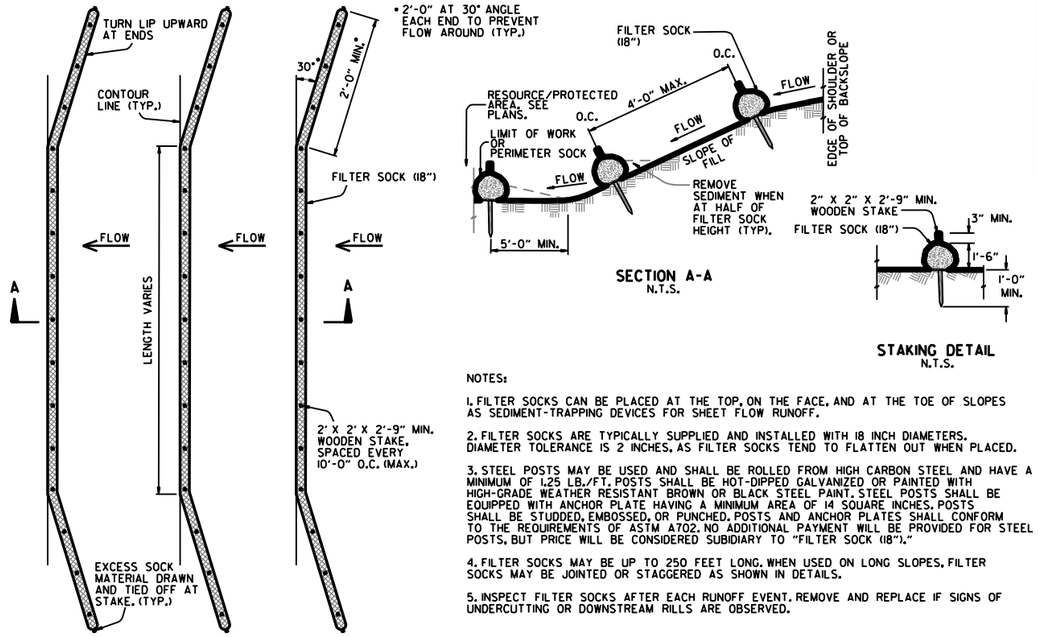
1. STRAW BALES SHALL BE INSTALLED SO THAT THE BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES. THE BALES SHALL BE A MINIMUM OF 30 INCHES IN LENGTH.

2. NO GAPS SHALL BE LEFT BETWEEN BALES.

3. BALED STRAW FILTER BARRIERS COMPLETED AND ACCEPTED WILL BE MEASURED BY THE BALE IN PLACE AS AUTHORIZED BY THE ENGINEER AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER BALE FOR BALED STRAW DITCH CHECKS.



BALED STRAW FILTER BARRIER (E-2)



NOTES:

1. FILTER SOCKS CAN BE PLACED AT THE TOP, ON THE FACE, AND AT THE TOE OF SLOPES AS SEDIMENT-TRAPPING DEVICES FOR SHEET FLOW RUNOFF.

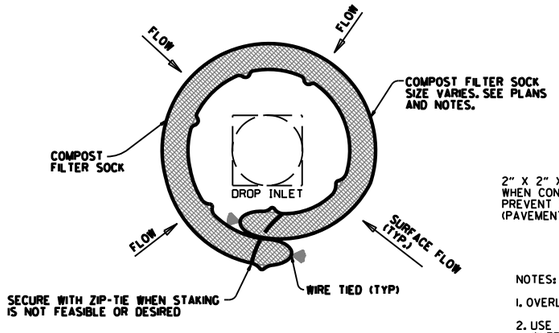
2. FILTER SOCKS ARE TYPICALLY SUPPLIED AND INSTALLED WITH 18 INCH DIAMETERS. DIAMETER TOLERANCE IS 2 INCHES, AS FILTER SOCKS TEND TO FLATTEN OUT WHEN PLACED.

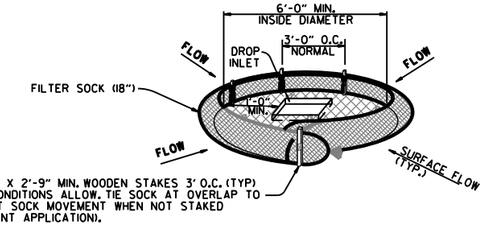
3. STEEL POSTS MAY BE USED AND SHALL BE ROLLED FROM HIGH CARBON STEEL AND HAVE A MINIMUM OF 1.25 LB./FT. POSTS SHALL BE HOT-DIPPED GALVANIZED OR PAINTED WITH HIGH-GRADE WEATHER RESISTANT BROWN OR BLACK STEEL PAINT. STEEL POSTS SHALL BE EQUIPPED WITH ANCHOR PLATE HAVING A MINIMUM AREA OF 14 SQUARE INCHES. POSTS SHALL BE STUDDED, EMBOSSED, OR PUNCHED. POSTS AND ANCHOR PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A702. NO ADDITIONAL PAYMENT WILL BE PROVIDED FOR STEEL POSTS, BUT PRICE WILL BE CONSIDERED SUBIDIARY TO "FILTER SOCK (18")."

4. FILTER SOCKS MAY BE UP TO 250 FEET LONG. WHEN USED ON LONG SLOPES, FILTER SOCKS MAY BE JOINTED OR STAGGERED AS SHOWN IN DETAILS.

5. INSPECT FILTER SOCKS AFTER EACH RUNOFF EVENT. REMOVE AND REPLACE IF SIGNS OF UNDERCUTTING OR DOWNSTREAM RILLS ARE OBSERVED.

FILTER SOCK ALONG SLOPE (E-3)





NOTES:

1. OVERLAP ENDS OF SOCK (1' MIN. 3' MAX.).

2. USE 18" DIA. SOCK IN NON-TRAFFIC AREAS OR AREAS WHERE SAFETY IS NOT A CONCERN.

COMPOST FILTER SOCK DROP INLET PROTECTION (E-13)

DATE	REVISION	FILMED
11-16-17	ADDED FILTER SOCK E-3 AND E-13	
12-15-11	DELETED BALED STRAW DITCH CHECK & ADDED WATTLE DITCH CHECK	
11-18-98	ADDED NOTES	
07-02-98	ADDED BALED STRAW FILTER BARRIER (E-2)	
07-20-95	REVISED SILT FENCE E-4 AND E-11	7-20-95
07-15-94	REV. E-4 & E-11 MIN. 13" BURIED END OF FABRIC	
06-02-94	REVISED E-1,4,7 & 11; DELETED E-2 & 3	6-2-94
04-01-93	REDRAWN	
10-01-92	REDRAWN	
08-02-76	ISSUED R.D.M.	298-7-28-76

ARKANSAS STATE HIGHWAY COMMISSION

TEMPORARY EROSION CONTROL DEVICES

STANDARD DRAWING TEC-1