DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012362	1	30
		CONWAY - NORTH LITTLE ROCK (S)				

" A FULLY CONTROLLED ACCESS FACILITY "

ARKANSAS DEPARTMENT OF TRANSPORTATION
CONSTRUCTION PLANS

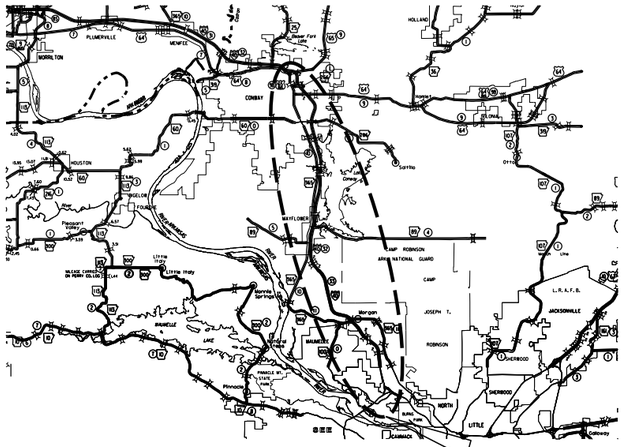
CONWAY-NORTH LITTLE ROCK (S)

FAULKNER & PULASKI COUNTIES

ROUTE I-40 SECTIONS 32 & 33

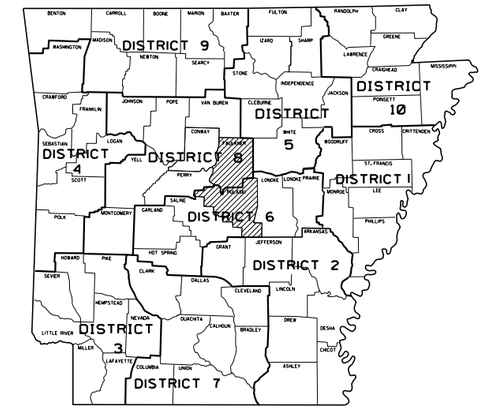
JOB 012362

FED. AID PROJ. NHFP-0403(141)



VICINITY MAP

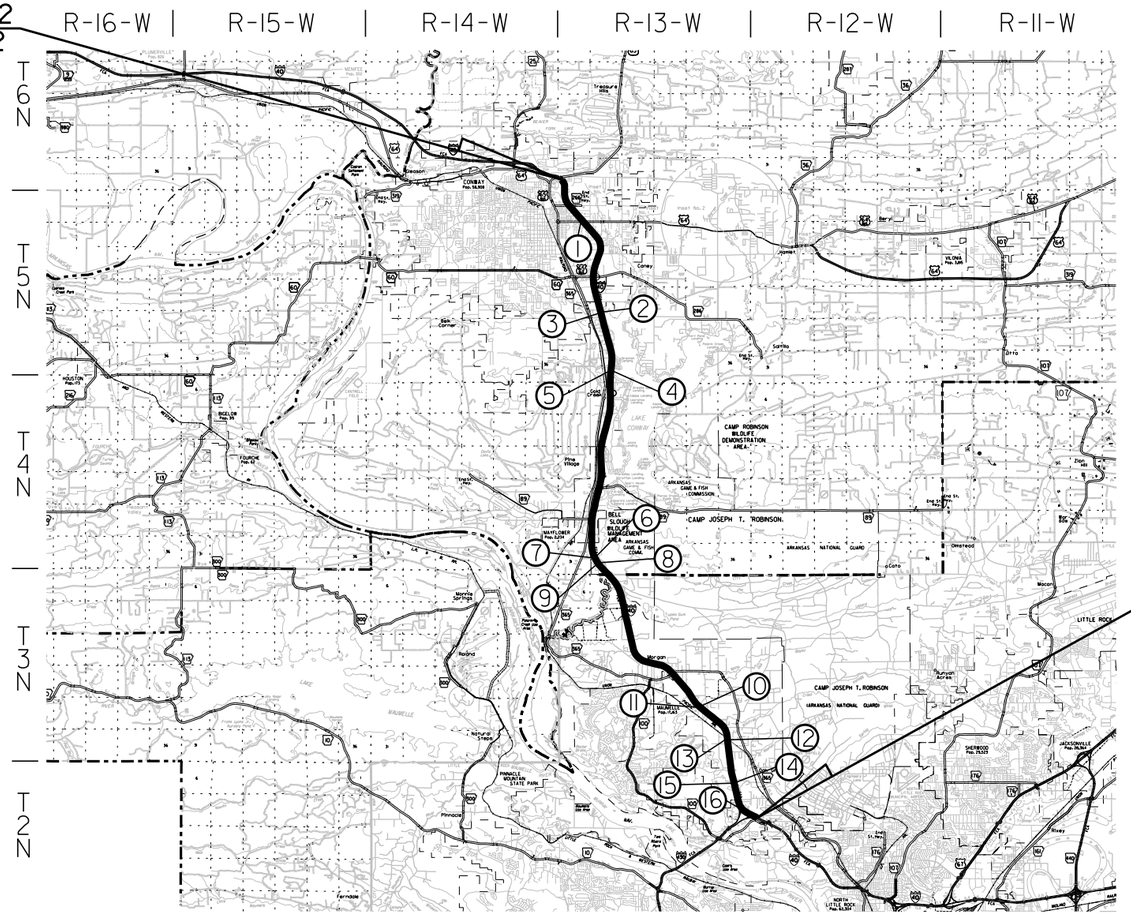
NOT TO SCALE



ARKANSAS HIGHWAY DISTRICT 6 & 8

BEGIN JOB 012362
LOG MILE 125.262

PROJECT LOCATION



END JOB 012362
LOG MILE 147.915

BRIDGE CONSTRUCTION DATA

① LOG MILE 126.672
419'-11" BRIDGE LENGTH
126'-0" CLEAR ROADWAY
BR. NO. 07226
LOG MILE 126.751
RETAIN & POLYMER OVERLAY

②&③ LOG MILE 129.791
98'-0" BRIDGE LENGTH
56'-0" CLEAR ROADWAY
BR. NO. A6883 & B6883
LOG MILE 129.810
RETAIN & POLYMER OVERLAY

④&⑤ LOG MILE 131.601
226'-0" BRIDGE LENGTH
56'-0" CLEAR ROADWAY
BRIDGE NO. A6884 & B6884
LOG MILE 131.644
RETAIN & POLYMER OVERLAY

⑥ LOG MILE 137.562
90'-1 1/8" BRIDGE LENGTH
56'-0" CLEAR ROADWAY
BRIDGE NO. A3696
LOG MILE 137.579
RETAIN & POLYMER OVERLAY

⑦ LOG MILE 137.562
89'-10 11/16" BRIDGE LENGTH
56'-0" CLEAR ROADWAY
BRIDGE NO. B3696
LOG MILE 137.579
RETAIN & POLYMER OVERLAY

⑧ LOG MILE 137.735
317'-6 7/8" BRIDGE LENGTH
56'-0" CLEAR ROADWAY
BRIDGE NO. A3667
LOG MILE 137.795
RETAIN & POLYMER OVERLAY

⑨ LOG MILE 137.735
316'-10 1/8" BRIDGE LENGTH
56'-0" CLEAR ROADWAY
BRIDGE NO. B3667
LOG MILE 137.795
RETAIN & POLYMER OVERLAY

⑩&⑪ LOG MILE 143.601
150'-0" BRIDGE LENGTH
56'-0" CLEAR ROADWAY
BRIDGE NO. A3230 & B3230
LOG MILE 143.629
RETAIN, REMOVE UTBWC & INSTALL POLYMER OVERLAY

⑫ LOG MILE 144.919
423'-2 1/8" BRIDGE LENGTH
56'-0" CLEAR ROADWAY
BRIDGE NO. A3232
LOG MILE 144.999
RETAIN & POLYMER OVERLAY

⑬ LOG MILE 144.903
423'-2 1/8" BRIDGE LENGTH
56'-0" CLEAR ROADWAY
BRIDGE NO. B3232
LOG MILE 144.983
RETAIN & POLYMER OVERLAY

⑯ LOG MILE 0.239
591'-1" BRIDGE LENGTH
25'-0" CLEAR ROADWAY
BRIDGE NO. 05325
LOG MILE 0.351
RETAIN & HYDRODEMOLITION WITH LATEX MODIFIED OVERLAY (NOT INCLUDED IN PROJECT-LENGTH DATA)

PROJECT EXCEPTIONS: 601.00 FT. = 0.114 MILES

EXCEPTION NOTE: UNLESS OTHERWISE NOTED IN THE PLANS, ALL BRIDGE AND ROADWAY CONSTRUCTION ALONG I-40 EXCLUDES APPROACH SLAB REHABILITATION = 511 LIN. FT.

⑭&⑮ LOG MILE 146.362
90'-0" BRIDGE LENGTH
64'-0" CLEAR ROADWAY
BRIDGE NO. A3233 & B3233
LOG MILE 146.379
RETAIN

LENGTH COMPUTED ALONG I-40 C.L. OF MEDIAN			
GROSS LENGTH OF PROJECT	119,607.84 FEET	22.653	MILES
NET LENGTH OF ROADWAY	117282.55 FEET	22.213	MILES
NET LENGTH OF BRIDGES	1724.29 FEET	0.327	MILES
NET LENGTH OF PROJECT	119006.84 FEET	22.539	MILES

	BEGIN OF PROJECT	MID-POINT OF PROJECT	END PROJECT
LATITUDE	N 35°06'35"	N 34° 57' 51"	N 34°49'07"
LONGITUDE	W 92°25'60"	W 92° 23' 01"	W 92°20'02"

CERTIFICATE OF AUTHORIZATION
MICHAEL BAKER INTERNATIONAL INC
No. 1126
ARKANSAS - ENGINEER

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.18633
LANDON K. MILLER

10/3/2022

landon.miller@mbakerintl.com\dms93584\R012362_01_C0_01.dgn
10/3/2022 4:05:09 PM
LandonMiller
WORKSPACE: ARDOT
c:\users\landon.miller\appdata\local\bentley\projectwise\workingdir\mb-us-pw.bentley.com_mb-us-pw-06\landon.miller@mbakerintl.com
REVISED DATE: $$REVDATE$$

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012362	2	30
		INDEX OF SHEETS AND STANDARD DRAWINGS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 18633
LANDON K. MILLER
10/3/2022

INDEX OF SHEETS

SHEET NO.	TITLE	BRIDGE NO.	DRWG.NO.
1	TITLE SHEET		
2	INDEX OF SHEETS AND STANDARD DRAWINGS		
3	GOVERNING SPECIFICATIONS AND GENERAL NOTES		
4 - 6	TYPICAL SECTIONS OF IMPROVEMENT		
7 - 8	SPECIAL DETAILS		
9 - 23	MAINTENANCE OF TRAFFIC DETAILS		
24	PERMANENT PAVEMENT MARKING DETAILS		
25 - 27	QUANTITIES		
28	SCHEDULE OF BRIDGE QUANTITIES	ALL BRIDGES	65717
29	SUMMARY OF QUANTITIES AND REVISIONS		
30	BRIDGE PRESERVATION DATA TABLE - DISTRICTS 6 & 8	ALL BRIDGES	65718

BRIDGE STANDARD DRAWINGS

DRWG.NO.	TITLE	DATE
55036	STANDARD DETAILS FOR TYPE 'AT' APPROACH GUTTERS (BRIDGES WITH 6" CURBS & TYPE A, B, C, D OR E RAILING)	11-07-19
55060	STANDARD DETAILS FOR HYDRODEMOLITION AND LMC OVERLAY SLAB ON BEAM/GIRDER BRIDGES	06-25-20
55064	STANDARD DETAILS FOR JOINT REPAIRS & MODIFICATION	11-07-19

ROADWAY STANDARD DRAWINGS

DRWG.NO.	TITLE	DATE
GR-6	GUARDRAIL DETAILS	05-19-22
GR-7	GUARDRAIL DETAILS	11-07-19
GR-8	GUARDRAIL DETAILS	11-07-19
GR-9	GUARDRAIL DETAILS	11-07-19
GR-10	GUARDRAIL DETAILS	11-07-19
GR-11	GUARDRAIL DETAILS	11-07-19
GR-12	GUARDRAIL DETAILS	05-14-20
PM-1	PAVEMENT MARKING DETAILS	02-27-20
PM-2	PERMANENT PAVEMENT MARKING ON ACCESS CONTROLLED ROADWAYS	05-14-20
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
TEC-1	TEMPORARY EROSION CONTROL DEVICES	11-16-17

LandonMiller 10/3/2022 4:05:16 PM
WORKSPACE: ARDOT
C:\Users\landon.miller\appdata\local\bentley\projectwise\workingdir\mb-us-pw.bentley.com_mb-us-pw-06\landon.miller@mbakerintl.com\dms93584\R012362_02_IND_001.dgn
REVISED DATE: $$REVDATE$$

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
10-10-2022		6	ARK.	012362	3	30
11-1-2022		GOVERNING SPECIFICATIONS AND GENERAL NOTES				

GOVERNING SPECIFICATIONS

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

NUMBER **TITLE**

ERRATA_____ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS
FHWA-1273__REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS
FHWA-1273__SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - NOTICE TO CONTRACTORS
FHWA-1273__SUPPLEMENT - SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES (23 U.S.C. 140)
FHWA-1273__SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - GOALS AND TIMETABLES
FHWA-1273__SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - FEDERAL STANDARDS
FHWA-1273__SUPPLEMENT - POSTERS AND NOTICES REQUIRED FOR FEDERAL-AID PROJECTS
FHWA-1273__SUPPLEMENT - TRAINING PROGRAM - JOB 012362
FHWA-1273__SUPPLEMENT - WAGE RATE DETERMINATION
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
210-1_____UNCLASSIFIED EXCAVATION
303-1_____AGGREGATE BASE COURSE
306-1_____QUALITY CONTROL AND ACCEPTANCE
307-1_____CEMENT
308-1_____CEMENT
400-1_____TACK COATS
400-4_____DESIGN AND QUALITY CONTROL OF ASPHALT MIXTURES
400-5_____PERCENT AIR VOIDS FOR ACHM MIX DESIGNS
400-6_____LIQUID ANTI-STRIP ADDITIVE
400-7_____TRACKLESS TACK
404-3_____DESIGN OF ASPHALT MIXTURES
410-1_____CONSTRUCTION REQUIREMENTS AND ACCEPTANCE OF ASPHALT CONCRETE PLANT MIX COURSES
410-2_____DEVICES FOR MEASURING DENSITY FOR ROLLING PATTERNS
410-4_____EVALUATION OF ACHM SUBLOT REPLACEMENT MATERIAL
501-2_____CEMENT
510-1_____GRINDING PORTLAND CEMENT CONCRETE PAVEMENT
600-2_____INCIDENTAL CONSTRUCTION
603-1_____LANE CLOSURE NOTIFICATION
604-1_____RETROREFLECTIVE SHEETING FOR TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
604-3_____TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES (MASH)
617-1_____GUARDRAIL TERMINAL (TYPE 2)
620-1_____MULCH COVER
621-1_____FILTER SOCKS
800-1_____STRUCTURES
802-4_____CEMENT
804-2_____REINFORCING STEEL FOR STRUCTURES
JOB 012362__ASSESSMENT OF WORKING DAYS – MAINTENANCE OF TRAFFIC
JOB 012362__BIDDING REQUIREMENTS AND CONDITIONS
JOB 012362__BRIDGE DECK REPAIR FOR LATEX MODIFIED CONCRETE OVERLAYS
JOB 012362__BRIDGE DECK REPAIR FOR POLYMER OVERLAYS
JOB 012362__BROADBAND INTERNET SERVICE FOR ASPHALT CONCRETE PLANT
JOB 012362__BROADBAND INTERNET SERVICE FOR FIELD OFFICE
JOB 012362__CARGO PREFERENCE ACT REQUIREMENTS
JOB 012362__COLD MILLING – MILL AND INLAY
JOB 012362__CONCRETE BRIDGE DECK CURING AND SURFACE TREATMENT RESTRICTIONS
JOB 012362__CONSTRUCTION PROJECT INFORMATION SIGN
JOB 012362__COORDINATION OF WORK
JOB 012362__DISADVANTAGED BUSINESS ENTERPRISE BIDDER'S RESPONSIBILITIES
JOB 012362__ENHANCED THERMOPLASTIC PAVEMENT MARKING
JOB 012362__EPOXY POLYMER CONCRETE (EPC) OVERLAY
JOB 012362__FLEXIBLE BEGINNING OF WORK – CALENDAR DAY CONTRACT
JOB 012362__GOALS FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION
JOB 012362__HYDRODEMOLITION - CLASS 1
JOB 012362__INSURANCE, CONSTRUCTION, AND FLAGGING REQUIREMENTS ON RAILROAD PROPERTY (UPRR)
JOB 012362__JOINT REHABILITATION FOR BRIDGE DECKS
JOB 012362__LIQUIDATED DAMAGES PROCEDURE FOR BID LETTINGS
JOB 012362__LONGITUDINAL JOINT DENSITIES FOR ACHM SURFACE COURSES
JOB 012362__MAINTENANCE OF TRAFFIC
JOB 012362__MANDATORY ELECTRONIC CONTRACT
JOB 012362__MANDATORY ELECTRONIC DOCUMENT SUBMITTAL
JOB 012362__PARTNERING REQUIREMENTS
JOB 012362__PERCENT WITHIN LIMITS
JOB 012362__POLYMER OVERLAY
JOB 012362__PORTABLE TRAFFIC SIGNAL SYSTEM
JOB 012362__PRICE ADJUSTMENT FOR ASPHALT BINDER
JOB 012362__PRICE ADJUSTMENT FOR FUEL
JOB 012362__PROHIBITION OF CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT
JOB 012362__REINFORCEMENT MAT FOR ASPHALT PAVEMENT
JOB 012362__RESTRICTIONS ON THE USE OF RECYCLED ASPHALT PAVEMENT MATERIAL
JOB 012362__SITE USE (A+C METHOD) – CALENDAR DAY CONTRACT
JOB 012362__SPECIAL SAFETY REQUIREMENTS FOR BRIDGES
JOB 012362__SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS
JOB 012362__TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
JOB 012362__ULTRATHIN BONDED WEARING COURSE
JOB 012362__UTILITY ADJUSTMENTS
JOB 012362__VALUE ENGINEERING
JOB 012362__VERY EARLY STRENGTH LATEX MODIFIED CONCRETE OVERLAY
JOB 012362__WARM MIX ASPHALT
JOB 012362__WATER POLLUTION CONTROL

GENERAL NOTES

1. ALL LAND MONUMENTS LOCATED WITHIN THE CONSTRUCTION AREA SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 107.12 OF THE STANDARD SPECIFICATIONS.
2. ALL TREES THAT DO NOT DIRECTLY INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE SPARED AS DIRECTED BY THE ENGINEER. CARE AND DISCRETION SHALL BE USED TO ENSURE THAT ALL TREES NOT TO BE REMOVED SHALL BE HARMED AS LITTLE AS POSSIBLE DURING THE CONSTRUCTION OPERATIONS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A FENCE TO CONTROL LIVESTOCK IN AREAS WHERE PASTURES ARE SEVERED. WIRE FENCE MAY BE CONSTRUCTED INITIALLY, OR IN LIEU THEREOF, THE CONTRACTOR AT HIS OWN EXPENSE, MAY ELECT TO PROVIDE TEMPORARY FENCING SUITABLE TO CONTAIN LIVESTOCK.
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. ALL FLEXIBLE BASE AND ASPHALTIC PAVEMENTS REMOVED SHALL BE PAID FOR UNDER THE ITEM NO. 210 - UNCLASSIFIED EXCAVATION.
6. STRINGLINE WILL BE USED TO MAINTAIN A UNIFORM HORIZONTAL ALIGNMENT.
7. THE CONTRACTOR SHALL FURNISH AND MAINTAIN STD. W8-1 "BUMP" SIGNS (30" X 30") WITH BLACK LEGEND ON ORANGE BACKGROUND AT ALL TRANSVERSE JOINTS EXPOSED TO TRAFFIC.
8. THE CONTRACTOR SHALL FURNISH AND MAINTAIN STD. W8-11 "UNEVEN LANES" SIGNS (48" X 48") WITH BLACK LEGEND ON ORANGE BACKGROUND AT ALL LONGITUDINAL JOINTS DURING MILLING AND PAVING OPERATIONS.
9. MATERIAL GENERATED FROM COLD MILLING OPERATIONS SHALL REMAIN THE PROPERTY OF THE DEPARTMENT AND SHALL BE TRANSPORTED TO AND STOCKPILED AT THE LOCATION(S) SPECIFIED ON THE PROJECT MAP. NO DIRECT PAYMENT WILL BE MADE FOR LOADING, HAULING, AND STOCKPILING OF EXCESS MILLING MATERIAL; PAYMENT WILL BE CONSIDERED INCLUDED IN THE PRICE BID FOR COLD MILLING ASPHALT PAVEMENT. COLD MILLING SHALL BE STOCKPILED IN A TRAPEZOIDAL SHAPE, OR AS DIRECTED BY THE ENGINEER, WHICH CAN BE EASILY MEASURED.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.18633
LANDON K. MILLER
11-4-2022

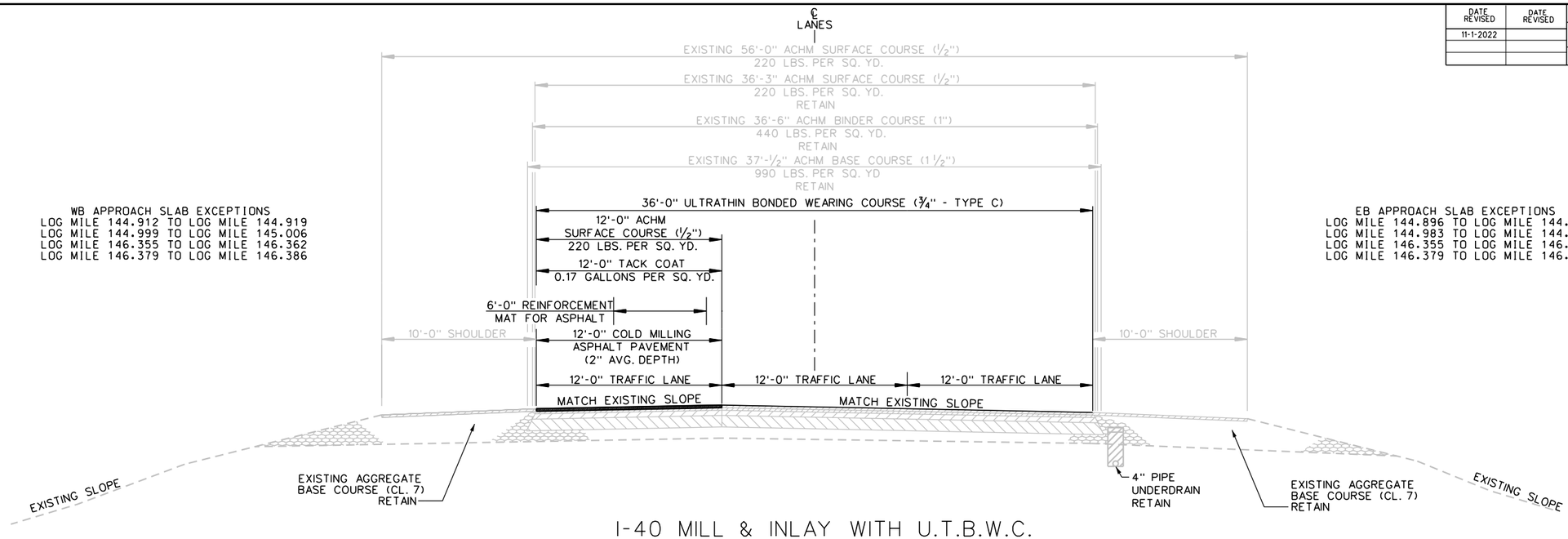
Jason.Toney 11/4/2022 2:52:02 PM
WORKSPACE: ARDOT_
c:\users\public\mbpw16\dms93584\R012362_03_GN_001.dgn
REVISED DATE: $$REVDATE$$

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
11-1-2022		6	ARK.	012362	4	30
		TYPICAL SECTIONS OF IMPROVEMENT				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.18633
LANDON K. MILLER
11-1-2022

WB APPROACH SLAB EXCEPTIONS
LOG MILE 144.912 TO LOG MILE 144.919
LOG MILE 144.999 TO LOG MILE 145.006
LOG MILE 146.355 TO LOG MILE 146.362
LOG MILE 146.379 TO LOG MILE 146.386

EB APPROACH SLAB EXCEPTIONS
LOG MILE 144.896 TO LOG MILE 144.903
LOG MILE 144.983 TO LOG MILE 144.990
LOG MILE 146.355 TO LOG MILE 146.362
LOG MILE 146.379 TO LOG MILE 146.386



I-40 MILL & INLAY WITH U.T.B.W.C.
(SHOWN IN DIRECTION OF TRAFFIC)

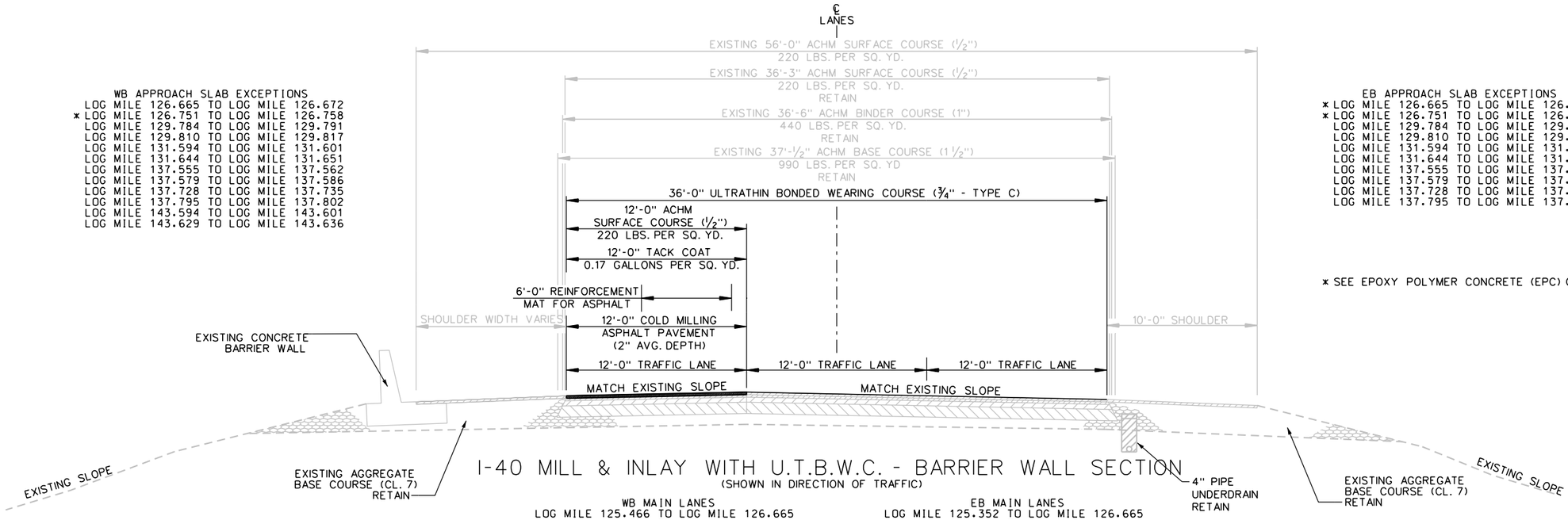
WB MAIN LANES
LOG MILE 132.683 TO LOG MILE 134.107
LOG MILE 142.243 TO LOG MILE 143.259
LOG MILE 143.921 TO LOG MILE 144.912
LOG MILE 145.006 TO LOG MILE 146.355
LOG MILE 146.386 TO LOG MILE 147.265

EB MAIN LANES
LOG MILE 132.683 TO LOG MILE 134.107
LOG MILE 138.059 TO LOG MILE 138.800
LOG MILE 142.243 TO LOG MILE 143.160
LOG MILE 144.160 TO LOG MILE 144.896
LOG MILE 144.990 TO LOG MILE 146.355
LOG MILE 146.386 TO LOG MILE 147.133

WB APPROACH SLAB EXCEPTIONS
LOG MILE 126.665 TO LOG MILE 126.672
* LOG MILE 126.751 TO LOG MILE 126.758
LOG MILE 129.784 TO LOG MILE 129.791
LOG MILE 129.810 TO LOG MILE 129.817
LOG MILE 131.594 TO LOG MILE 131.601
LOG MILE 131.644 TO LOG MILE 131.651
LOG MILE 137.555 TO LOG MILE 137.562
LOG MILE 137.579 TO LOG MILE 137.586
LOG MILE 137.728 TO LOG MILE 137.735
LOG MILE 137.795 TO LOG MILE 137.802
LOG MILE 143.594 TO LOG MILE 143.601
LOG MILE 143.629 TO LOG MILE 143.636

EB APPROACH SLAB EXCEPTIONS
* LOG MILE 126.665 TO LOG MILE 126.672
* LOG MILE 126.751 TO LOG MILE 126.758
LOG MILE 129.784 TO LOG MILE 129.791
LOG MILE 129.810 TO LOG MILE 129.817
LOG MILE 131.594 TO LOG MILE 131.601
LOG MILE 131.644 TO LOG MILE 131.651
LOG MILE 137.555 TO LOG MILE 137.562
LOG MILE 137.579 TO LOG MILE 137.586
LOG MILE 137.728 TO LOG MILE 137.735
LOG MILE 137.795 TO LOG MILE 137.802

* SEE EPOXY POLYMER CONCRETE (EPC) OVERLAY QUANTITIES



I-40 MILL & INLAY WITH U.T.B.W.C. - BARRIER WALL SECTION
(SHOWN IN DIRECTION OF TRAFFIC)

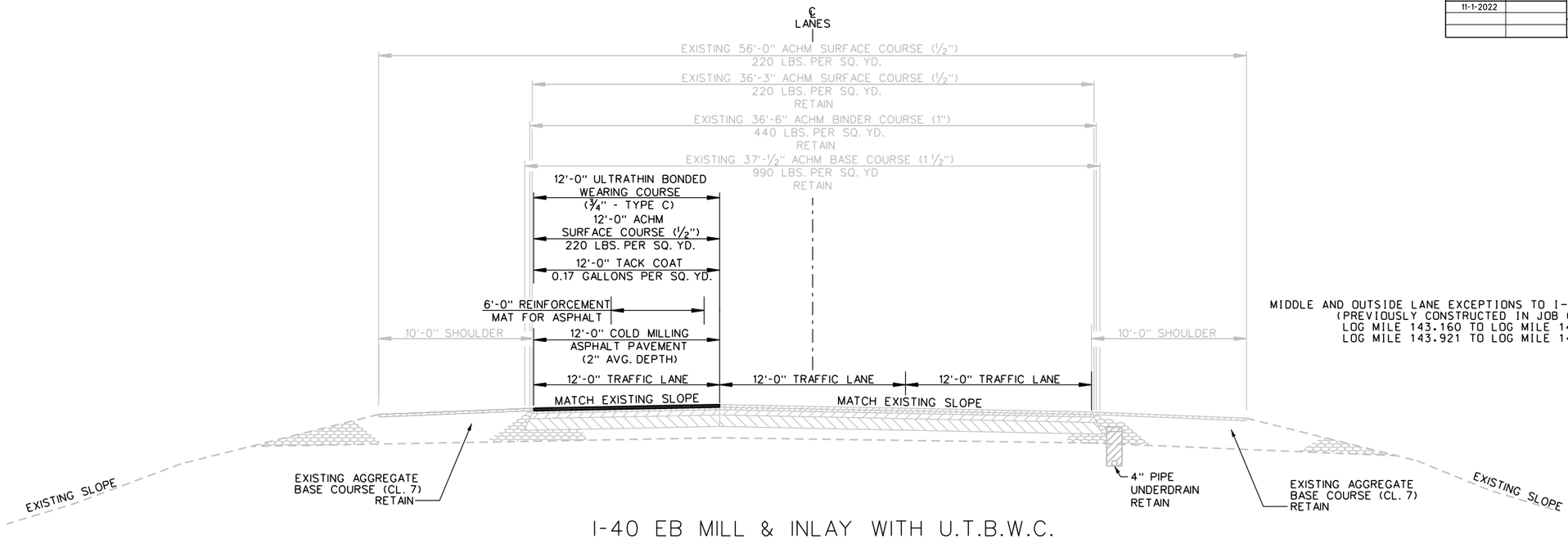
WB MAIN LANES
LOG MILE 125.466 TO LOG MILE 126.665
LOG MILE 126.758 TO LOG MILE 129.784
LOG MILE 129.817 TO LOG MILE 131.594
LOG MILE 131.651 TO LOG MILE 132.683
LOG MILE 134.107 TO LOG MILE 137.555
LOG MILE 137.586 TO LOG MILE 137.728
LOG MILE 137.802 TO LOG MILE 142.243
LOG MILE 143.259 TO LOG MILE 143.594
LOG MILE 143.636 TO LOG MILE 143.921

EB MAIN LANES
LOG MILE 125.352 TO LOG MILE 126.665
LOG MILE 126.758 TO LOG MILE 129.784
LOG MILE 129.817 TO LOG MILE 131.594
LOG MILE 131.651 TO LOG MILE 132.683
LOG MILE 134.107 TO LOG MILE 137.555
LOG MILE 137.586 TO LOG MILE 137.728
LOG MILE 137.802 TO LOG MILE 138.059
LOG MILE 138.800 TO LOG MILE 142.243

TYPICAL SECTIONS OF IMPROVEMENT

London.Miller 11/1/2022 7:35:30 PM
WORKSPACE: ARDOT
c:\users\public\mbpw\6\dms93584\R012362_04_TS_001.dgn
REVISED DATE: $$REVDATE$$

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
11-1-2022		6	ARK.	012362	5	30
		TYPICAL SECTIONS OF IMPROVEMENT				

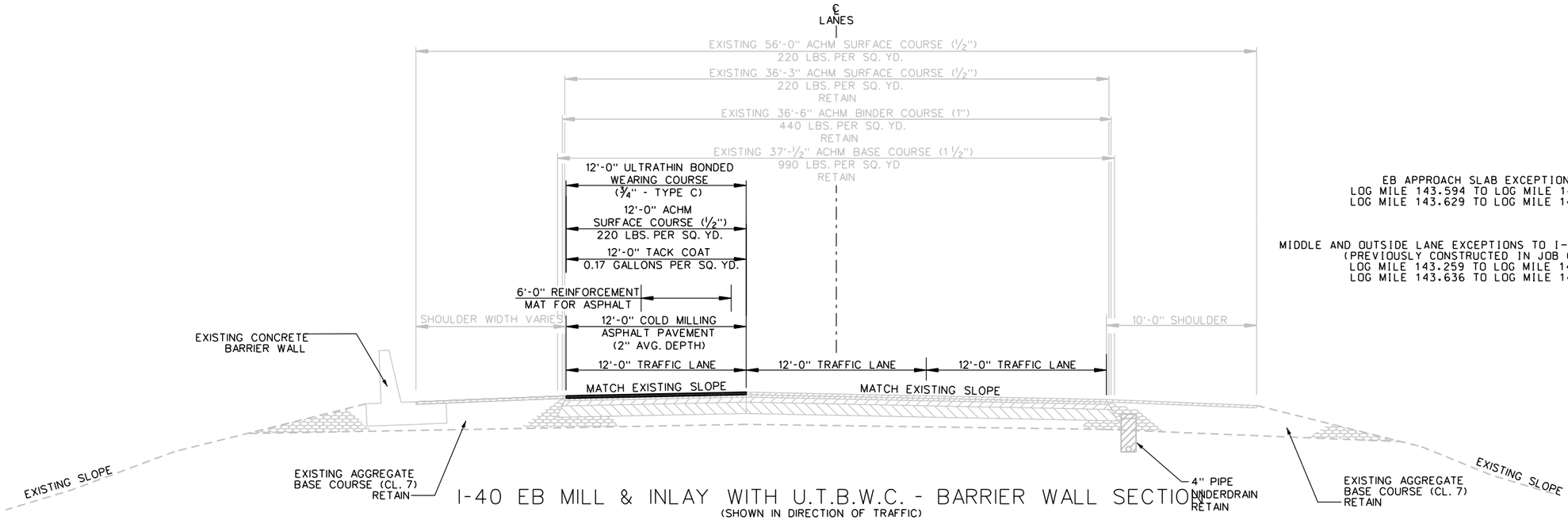


I-40 EB MILL & INLAY WITH U.T.B.W.C.
(SHOWN IN DIRECTION OF TRAFFIC)

EB MAIN LANES
LOG MILE 143.160 TO LOG MILE 143.259
LOG MILE 143.921 TO LOG MILE 144.160

MIDDLE AND OUTSIDE LANE EXCEPTIONS TO I-40 EB U.T.B.W.C.
(PREVIOUSLY CONSTRUCTED IN JOB 012361)
LOG MILE 143.160 TO LOG MILE 143.259
LOG MILE 143.921 TO LOG MILE 144.160

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.18633
LANDON K. MILLER
11-1-2022



I-40 EB MILL & INLAY WITH U.T.B.W.C. - BARRIER WALL SECTION
(SHOWN IN DIRECTION OF TRAFFIC)

EB MAIN LANES
LOG MILE 143.259 TO LOG MILE 143.594
LOG MILE 143.636 TO LOG MILE 143.921

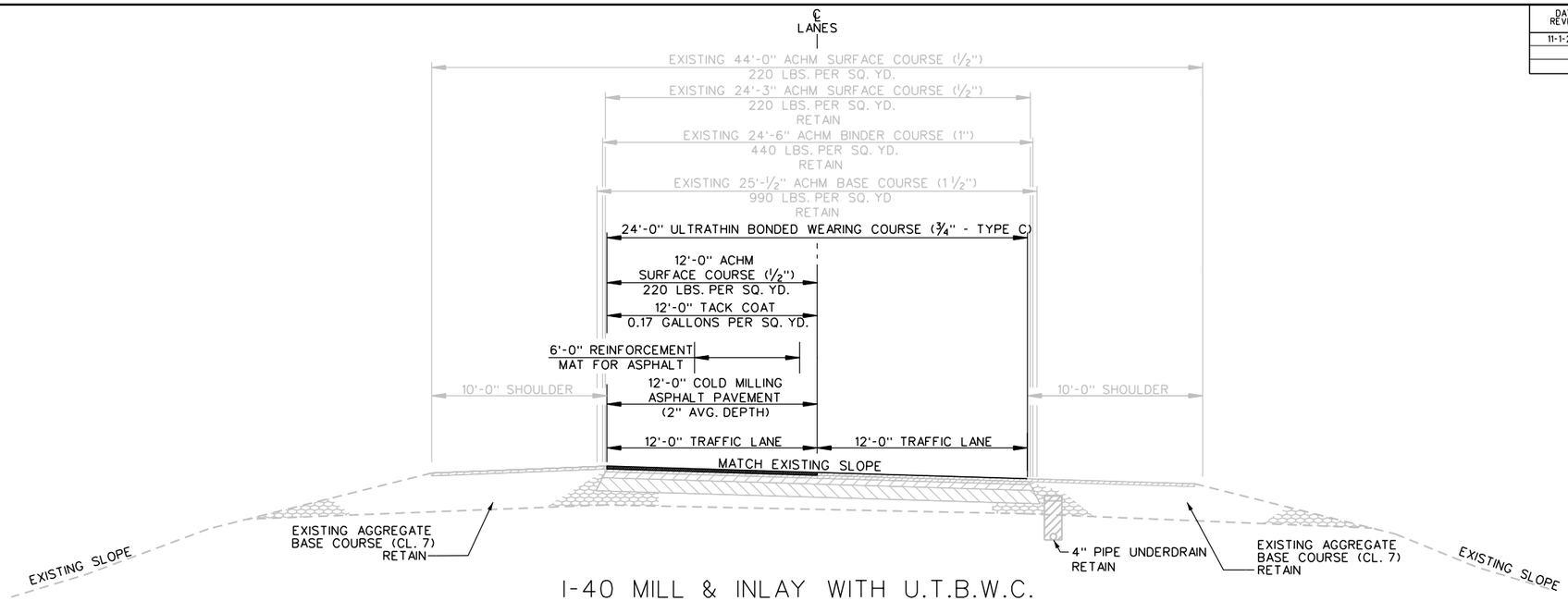
EB APPROACH SLAB EXCEPTIONS
LOG MILE 143.594 TO LOG MILE 143.601
LOG MILE 143.629 TO LOG MILE 143.636

MIDDLE AND OUTSIDE LANE EXCEPTIONS TO I-40 EB U.T.B.W.C.
(PREVIOUSLY CONSTRUCTED IN JOB 012361)
LOG MILE 143.259 TO LOG MILE 143.594
LOG MILE 143.636 TO LOG MILE 143.921

TYPICAL SECTIONS OF IMPROVEMENT

London.Miller 11/1/2022 7:35:31 PM
WORKSPACE: ARDOT
c:\users\public\mbpw\6\dms93584\R012362_04_TS_001.dgn
REVISED DATE: $$REVDATE$$

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
11-1-2022		6	ARK.	012362	6	30
		TYPICAL SECTIONS OF IMPROVEMENT				

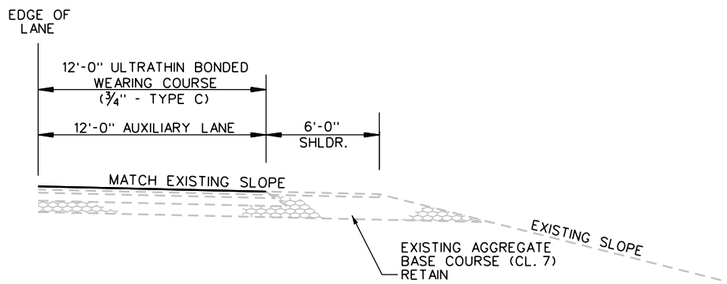


I-40 MILL & INLAY WITH U.T.B.W.C.

(SHOWN IN DIRECTION OF TRAFFIC)

WB MAIN LANES
LOG MILE 125.262 TO LOG MILE 125.466
LOG MILE 147.265 TO LOG MILE 147.725

EB MAIN LANES
LOG MILE 125.262 TO LOG MILE 125.352
LOG MILE 147.133 TO LOG MILE 147.915

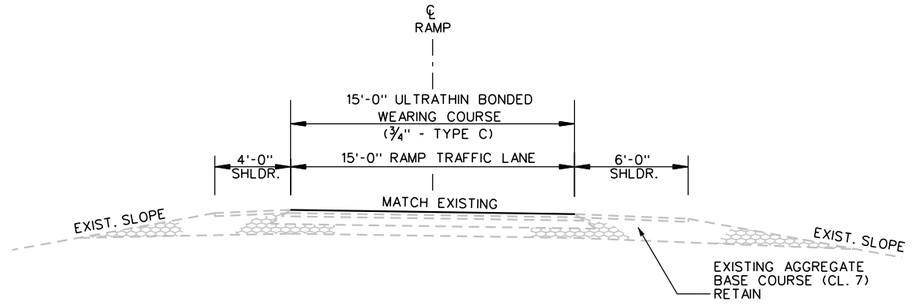


AUXILIARY LANE - U.T.B.W.C.

(SHOWN IN DIRECTION OF TRAFFIC)

WB AUXILIARY LANES
LOG MILE 126.242 TO LOG MILE 126.396
LOG MILE 128.020 TO LOG MILE 128.190
LOG MILE 132.135 TO LOG MILE 132.381
LOG MILE 133.214 TO LOG MILE 133.346
LOG MILE 133.779 TO LOG MILE 133.873
LOG MILE 134.998 TO LOG MILE 135.168
LOG MILE 141.938 TO LOG MILE 142.073
LOG MILE 145.531 TO LOG MILE 145.710
LOG MILE 146.259 TO LOG MILE 146.355
LOG MILE 146.386 TO LOG MILE 147.265
LOG MILE 147.265 TO LOG MILE 147.436

EB AUXILIARY LANES
LOG MILE 127.040 TO LOG MILE 127.262
LOG MILE 129.039 TO LOG MILE 129.209
LOG MILE 131.886 TO LOG MILE 131.983
LOG MILE 132.381 TO LOG MILE 132.570
LOG MILE 133.308 TO LOG MILE 133.419
LOG MILE 133.873 TO LOG MILE 134.013
LOG MILE 135.585 TO LOG MILE 135.773
LOG MILE 136.284 TO LOG MILE 136.601
LOG MILE 142.471 TO LOG MILE 142.634
LOG MILE 145.588 TO LOG MILE 145.653
LOG MILE 146.278 TO LOG MILE 146.355
LOG MILE 146.386 TO LOG MILE 147.133



TYPICAL RAMP - U.T.B.W.C.

(SHOWN IN DIRECTION OF TRAFFIC)

WB RAMPS
LOG MILE 125.352 TO LOG MILE 125.466
LOG MILE 126.396 TO LOG MILE 126.510
LOG MILE 126.869 TO LOG MILE 127.040
LOG MILE 128.190 TO LOG MILE 128.285
LOG MILE 128.944 TO LOG MILE 129.039
LOG MILE 132.381 TO LOG MILE 132.400
LOG MILE 132.626 TO LOG MILE 132.702
LOG MILE 133.346 TO LOG MILE 133.476
LOG MILE 133.703 TO LOG MILE 133.779
LOG MILE 135.168 TO LOG MILE 135.282
LOG MILE 135.510 TO LOG MILE 135.621
LOG MILE 142.073 TO LOG MILE 142.149
LOG MILE 142.490 TO LOG MILE 142.577
LOG MILE 145.710 TO LOG MILE 145.729
LOG MILE 146.259 TO LOG MILE 146.326
LOG MILE 147.436 TO LOG MILE 147.511

EB RAMPS
LOG MILE 125.262 TO LOG MILE 125.328
LOG MILE 126.396 TO LOG MILE 126.566
LOG MILE 127.002 TO LOG MILE 127.040
LOG MILE 128.395 TO LOG MILE 128.490
LOG MILE 128.963 TO LOG MILE 129.039
LOG MILE 131.983 TO LOG MILE 132.059
LOG MILE 132.343 TO LOG MILE 132.381
LOG MILE 133.419 TO LOG MILE 133.495
LOG MILE 133.779 TO LOG MILE 133.873
LOG MILE 135.073 TO LOG MILE 135.263
LOG MILE 135.510 TO LOG MILE 135.585
LOG MILE 136.227 TO LOG MILE 136.284
LOG MILE 142.052 TO LOG MILE 142.149
LOG MILE 142.414 TO LOG MILE 142.471
LOG MILE 145.653 TO LOG MILE 145.729
LOG MILE 146.183 TO LOG MILE 146.278
LOG MILE 147.517 TO LOG MILE 147.650
LOG MILE 147.839 TO LOG MILE 147.915

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.18633
LANDON K. MILLER
11-1-2022

TYPICAL SECTIONS OF IMPROVEMENT

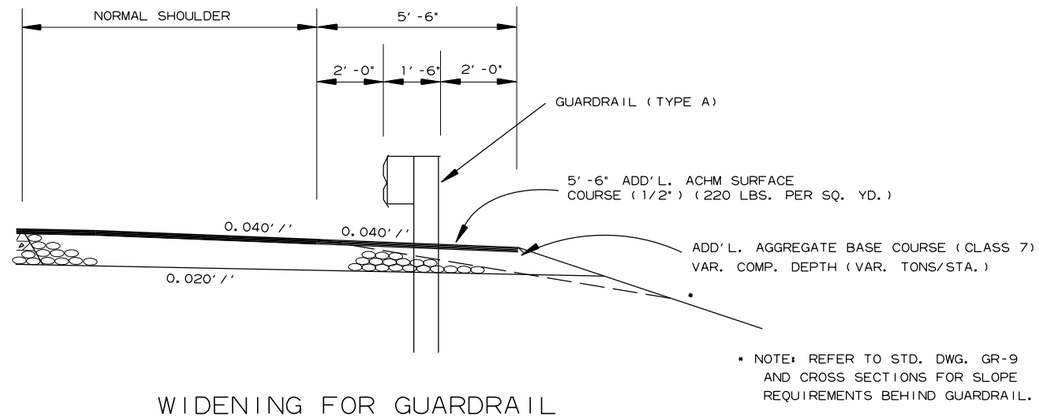
London.Miller 11/1/2022 7:35:31 PM
WORKSPACE: ARDOT
c:\users\public\mbpw\6\dms93584\R012362_04_TS_001.dgn
REVISED DATE: $$REVDATE$$

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
10-17-22		6	ARK.	012362	7	30
		SPECIAL DETAILS				

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

CONSTRUCTION PROJECT INFORMATION SIGN

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.18633
LANDON K. MILLER
10-17-2022



WIDENING FOR GUARDRAIL

LondonMiller 10/17/2022 5:10:20 PM
WORKSPACE: ARDOT
G:\users\public\mbldwk6\dms93584\R012362_05_SD_001.dgn
REVISED DATE: $$REVDATE$$

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012362	8	30
		SPECIAL DETAILS				

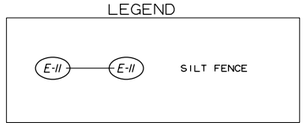
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.18633
LANDON K. MILLER
10/3/2022

JOINT CONFIGURATION FOR TYPE 3 & 4 JOINT SEALANT

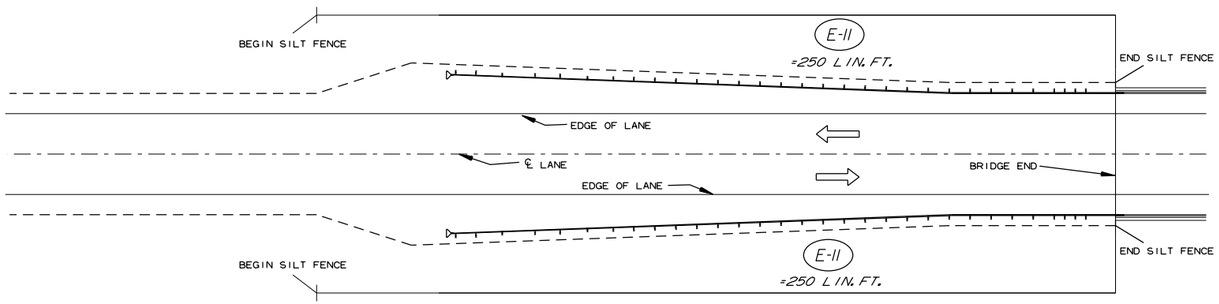
JOINT WIDTH	SEALANT THICKNESS ①	BACKER ROD DIAMETER	BACKER ROD PLACEMENT DEPTH ②
	INCHES		
1/4	1/4	3/8	1/2
3/8	1/4	1/2	1/2
1/2	1/4	5/8	1/2
5/8	5/16	3/4	9/16
3/4	3/8	7/8	7/8
4/8	7/16	1	11/16
1	1/2	1 1/4	3/4
1 TO 1 1/2	1/2	1 1/4 *	3/4

NOTE: JOINTS GREATER THAN 1 1/2" IN WIDTH SHALL BE SEALED WITH TYPE 5 JOINT SEALANT.

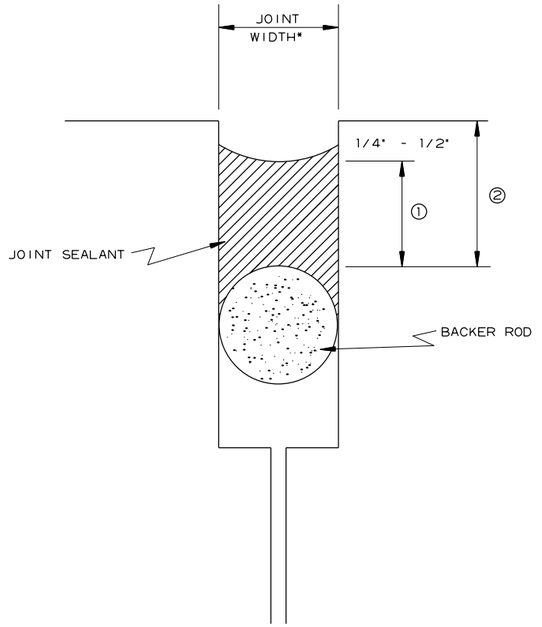
LEGEND



NOTE: PERIMETER CONTROLS SHALL BE PLACED AS CLEARING AND GRUBBING OPERATIONS ARE STARTED. MAINTAIN ALL EROSION CONTROL DEVICES UNTIL THE END OF THE JOB, UNLESS OTHERWISE SPECIFIED.



TYPICAL SILT FENCE INSTALLATION FOR WIDENING FOR GUARDRAIL AT END OF BRIDGE 05325



DETAILS OF TYPE A OR TYPE B JOINT REHABILITATION

* CONTRACTION JOINTS SHALL BE SAWED TO MIN. WIDTH OF 3/8". WARPING & LONGITUDINAL JOINTS SHALL BE SAWED TO MIN. WIDTH OF EXISTING WIDTH +1/8" (1/16" ON EACH SIDE).

SPECIAL DETAILS

London.Miller 10/3/2022 4:43:51 PM
WORKSPACE: ARDOT
C:\Users\london.miller\appdata\local\bentley\projectwise\workingdir\mb-us-pw.bentley.com_mb-us-pw-06\london.miller@mbakerintl.com\dms93584\R012362_05_SD_002.dgn
REVISED DATE: $$REVDATE$$

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012362	9	30
		MAINTENANCE OF TRAFFIC DETAILS				

NOTES:

1) **DETOUR:** I-430 SOUTH RAMP (EXIT 147) CLOSED OFF OF I-40: I-40 WESTBOUND TRAFFIC, PAST THE I-30/I-40 NORTH LITTLE ROCK INTERCHANGE, WILL FOLLOW DETOUR TO EXIT 146, WHITE OAK CROSSING. TRAFFIC WILL CROSS THE OVERPASS AND USE THE I-40 EASTBOUND ENTRANCE RAMP TO PROCEED TO I-430 SOUTH.

2) EXACT PLACEMENT OF SIGNS SHALL BE DETERMINED IN THE FIELD IF AND WHERE DIRECTED BY THE ENGINEER.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.18633
LANDON K. MILLER
10/3/2022

PORTABLE CHANGEABLE MESSAGE SIGN
"I-430 SOUTH RAMP CLOSED
I-30 WESTBOUND TRAFFIC TO BENTON, TEXARKANA
USE EXIT 6 TO I-440 WEST"

* SEE DETAIL OF PORTABLE TRAFFIC SIGNAL SYSTEM

* PORTABLE TRAFFIC SIGNAL SYSTEM - ACTUATED

EXIT 146
WHITE OAK CROSSING
MAUMELLE

DETOUR

BRIDGE NO. 05325
HYDRODEMOLITION WITH
LATEX MODIFIED OVERLAY

DETOUR SOUTH INTERSTATE 430

EXIT 146 DETOUR INTERSTATE 430 SOUTH

DETOUR INTERSTATE 430 SOUTH

EXIT CLOSED

EXIT 147 (CLOSED)
I-430 SOUTH
TEXARKANA

END PROJECT

PORTABLE CHANGEABLE MESSAGE SIGN
"EXIT 147 CLOSED USE EXIT 146"

PORTABLE CHANGEABLE MESSAGE SIGN
"I-430 SOUTH RAMP CLOSED USE ALTERNATE DETOUR ROUTE"

PORTABLE CHANGEABLE MESSAGE SIGN
"I-430 SOUTH RAMP CLOSED OFF OF I-40
USE ALTERNATE DETOUR ROUTE"

PORTABLE CHANGEABLE MESSAGE SIGN
"I-430 SOUTH RAMP CLOSED
I-30 WESTBOUND TRAFFIC TO BENTON, TEXARKANA
USE EXIT 159 TO I-440 WEST"

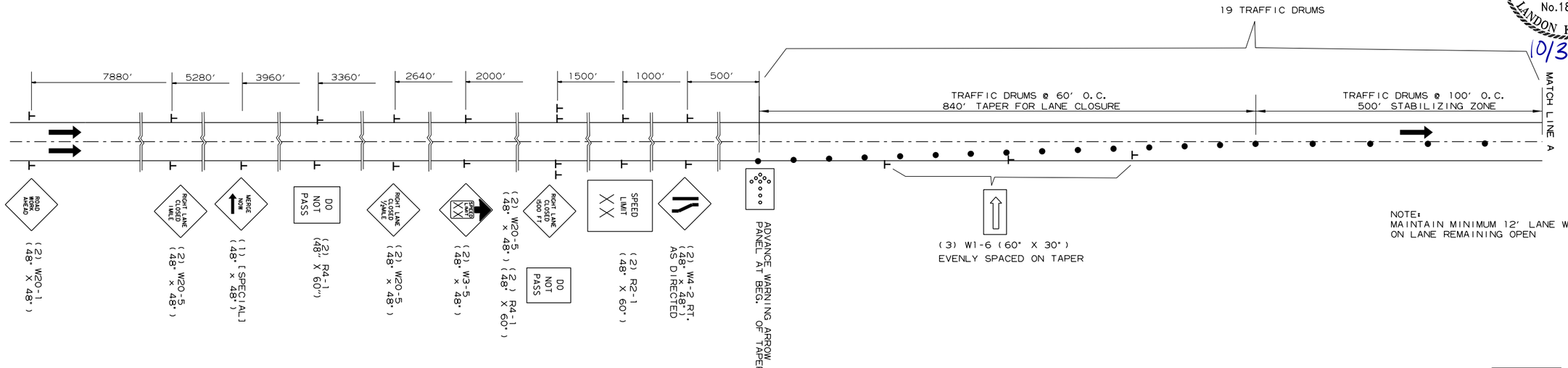
I-30 WEST TO TEXARKANA

STAGE 4
DETOUR PLAN FOR I-430 RAMP CONSTRUCTION
MAINTENANCE OF TRAFFIC DETAILS

London.Miller 10/3/2022 4:4h08 PM
WORKSPACE: ARDOT
C:\Users\london.miller\appdata\local\bentley\projectwise\workingdir\mb-us-pw.bentley.com_mb-us-pw-06\london.miller@mbakerintl.com\dms93584\R012362_06_M01_001.dgn
REVISED DATE: $$REVDATE$$

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012362	10	30
		MAINTENANCE OF TRAFFIC DETAILS				

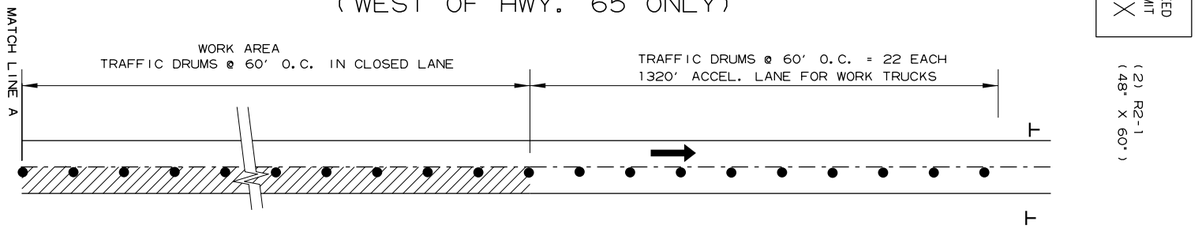
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.18633
LANDON K. MILLER
10/3/2022



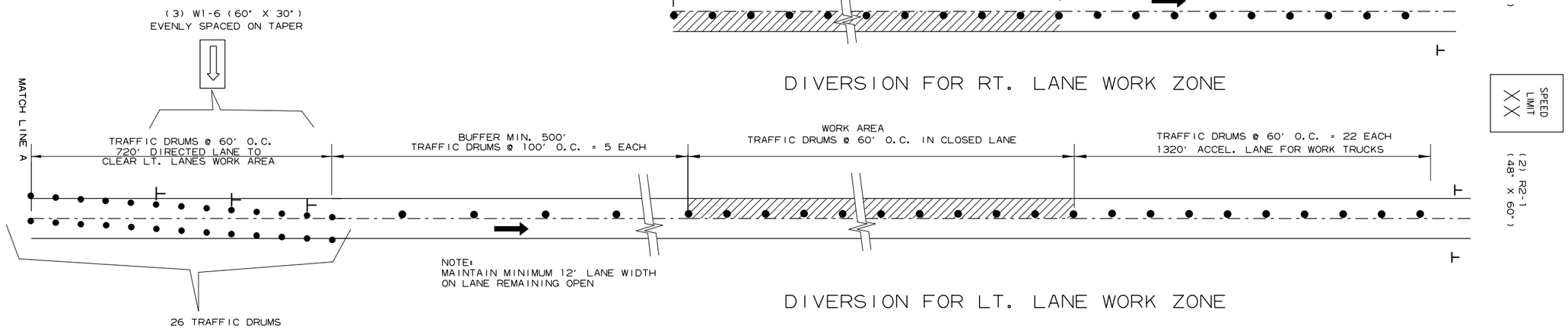
PORTABLE CHANGEABLE MESSAGE SIGN
TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

SPEED LIMIT SIGNS ARE ALSO PROVIDED FOR PLACEMENT PAST ENTRANCE RAMPS WITHIN THE WORK ZONE IF AND WHERE DIRECTED BY THE ENGINEER.

EAST BOUND RT. LANE CLOSURE
(WEST OF HWY. 65 ONLY)



DIVERSION FOR RT. LANE WORK ZONE



DIVERSION FOR LT. LANE WORK ZONE

ADVANCE SIGNS AND EAST BOUND LANE CLOSURES
(WEST OF HWY. 65 ONLY)
ALL STAGES

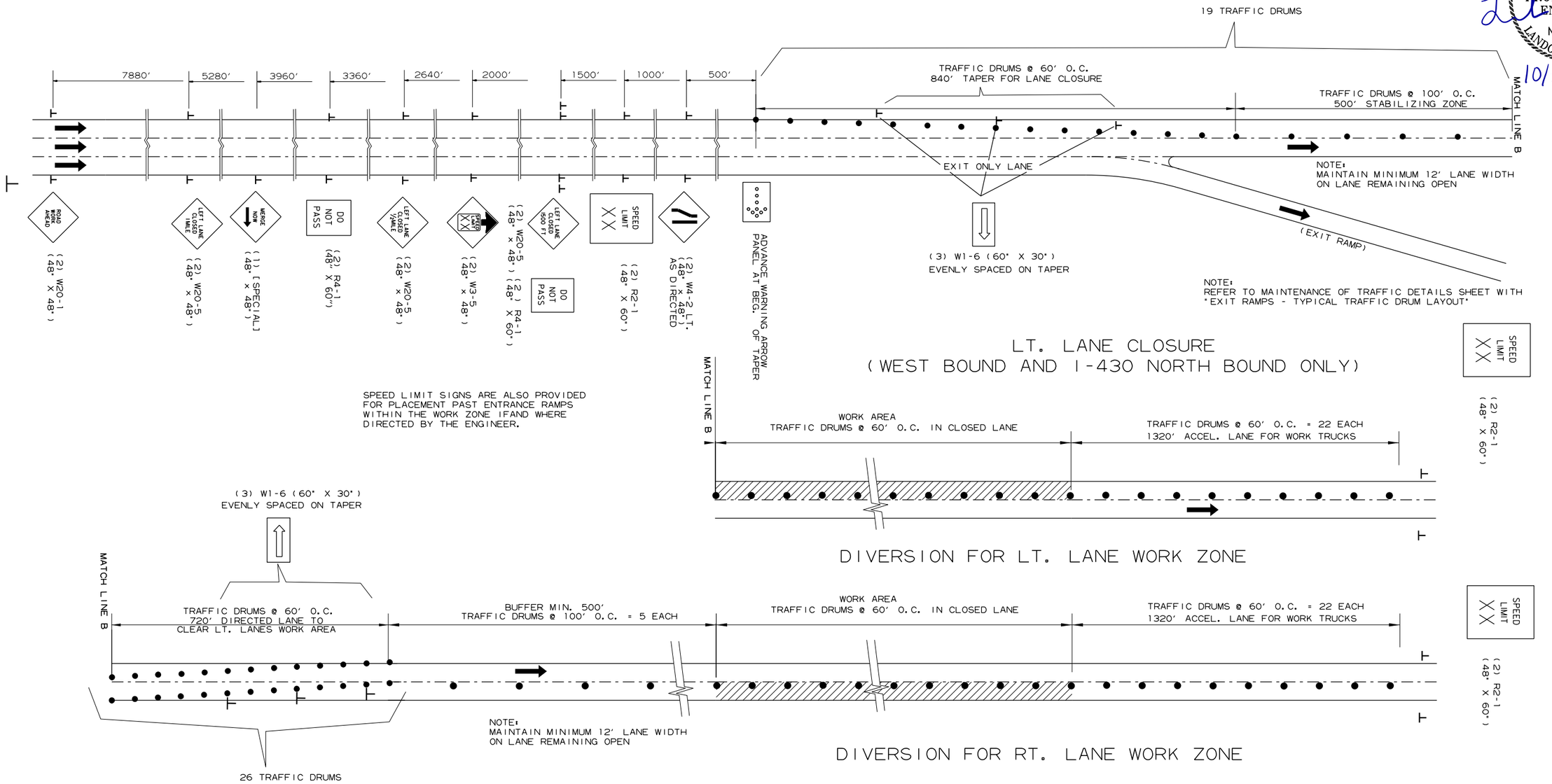
ALL STAGES
LANE CLOSURE
MAINTENANCE OF TRAFFIC DETAILS

LondonMiller 10/3/2022 4:05:33 PM
WORKSPACE: ARDOT
c:\users\londonmiller\appdata\local\bentley\projectwise\workingdir\mb-us-pw.bentley.com_mb-us-pw-06\londonmiller@mbakerintl.com\d0356e93\262602_MOT_20220928.dgn
REVISED DATE: $$REVDATE$$

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012362	11	30
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.18633
LANDON K. MILLER
10/3/2022

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



LT. LANE CLOSURE
(WEST BOUND AND I-430 NORTH BOUND ONLY)

SPEED LIMIT XX
(2) R2-1 (48″ X 60″)

SPEED LIMIT SIGNS ARE ALSO PROVIDED FOR PLACEMENT PAST ENTRANCE RAMPS WITHIN THE WORK ZONE IFAND WHERE DIRECTED BY THE ENGINEER.

DIVERSION FOR LT. LANE WORK ZONE

DIVERSION FOR RT. LANE WORK ZONE

SPEED LIMIT XX
(2) R2-1 (48″ X 60″)

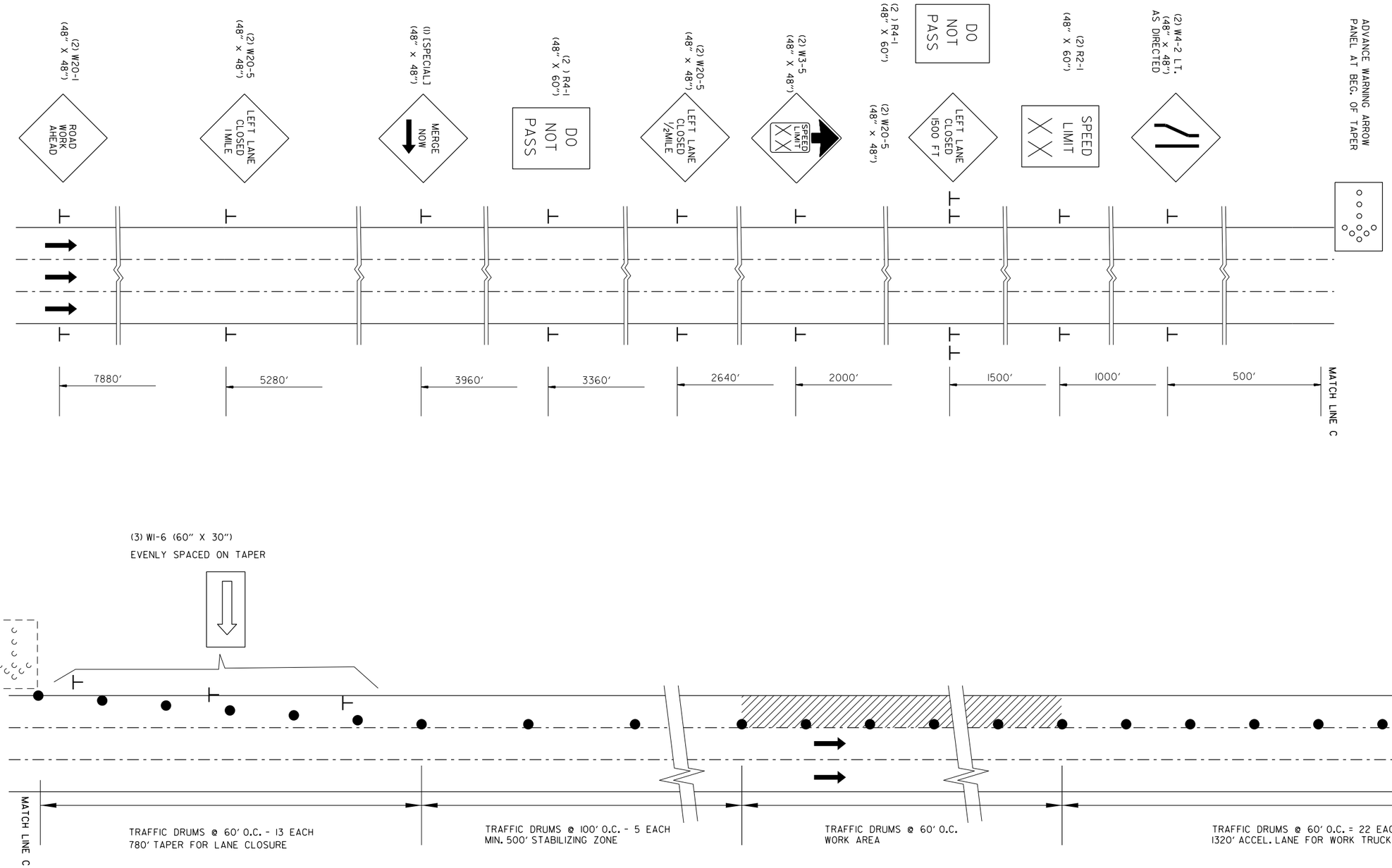
ADVANCE SIGNS AND LANE CLOSURES
ALL STAGES

ALL STAGES
LANE CLOSURE
MAINTENANCE OF TRAFFIC DETAILS

LandonMiller 10/3/2022 4:05:34 PM
WORKSPACE: ARDOT
c:\users\landon.miller\appdata\local\bentley\projectwise\workingdir\mb-us-pw.bentley.com_mb-us-pw-06\landon.miller@mbakerintl.com\dms935841\R012362_06_MOT_002.dgn
REVISED DATE: $$REVDATE$$

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012362	12	30
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.18633
LANDON K. MILLER
10/3/2022



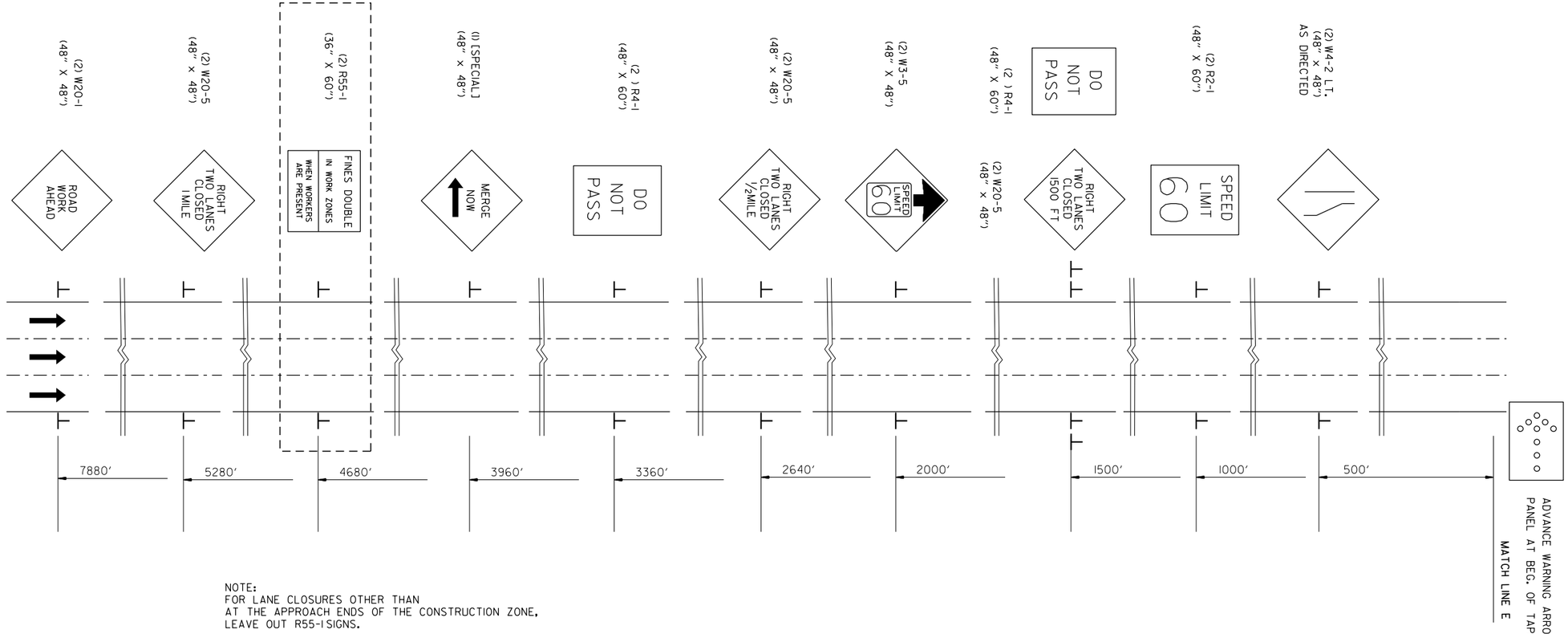
ADVANCE WARNING SIGNS AND TYPICAL TRAFFIC DRUM LAYOUT FOR INSIDE LANE CLOSURES STAGE I

STAGE I
LANE CLOSURE
MAINTENANCE OF TRAFFIC DETAILS

LandonMiller 10/3/2022 4:05:34 PM
WORKSPACE: ARDOT
C:\Users\landon.miller\appdata\local\bentley\projectwise\workingdir\mb-us-pw.bentley.com_mb-us-pw-06\landon.miller@mbakerintl.com\dms93584\R012362_06_MOT_002.dgn
REVISED DATE: $$REVDATE$$

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012362	13	30
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.18633
LANDON K. MILLER
10/3/2022



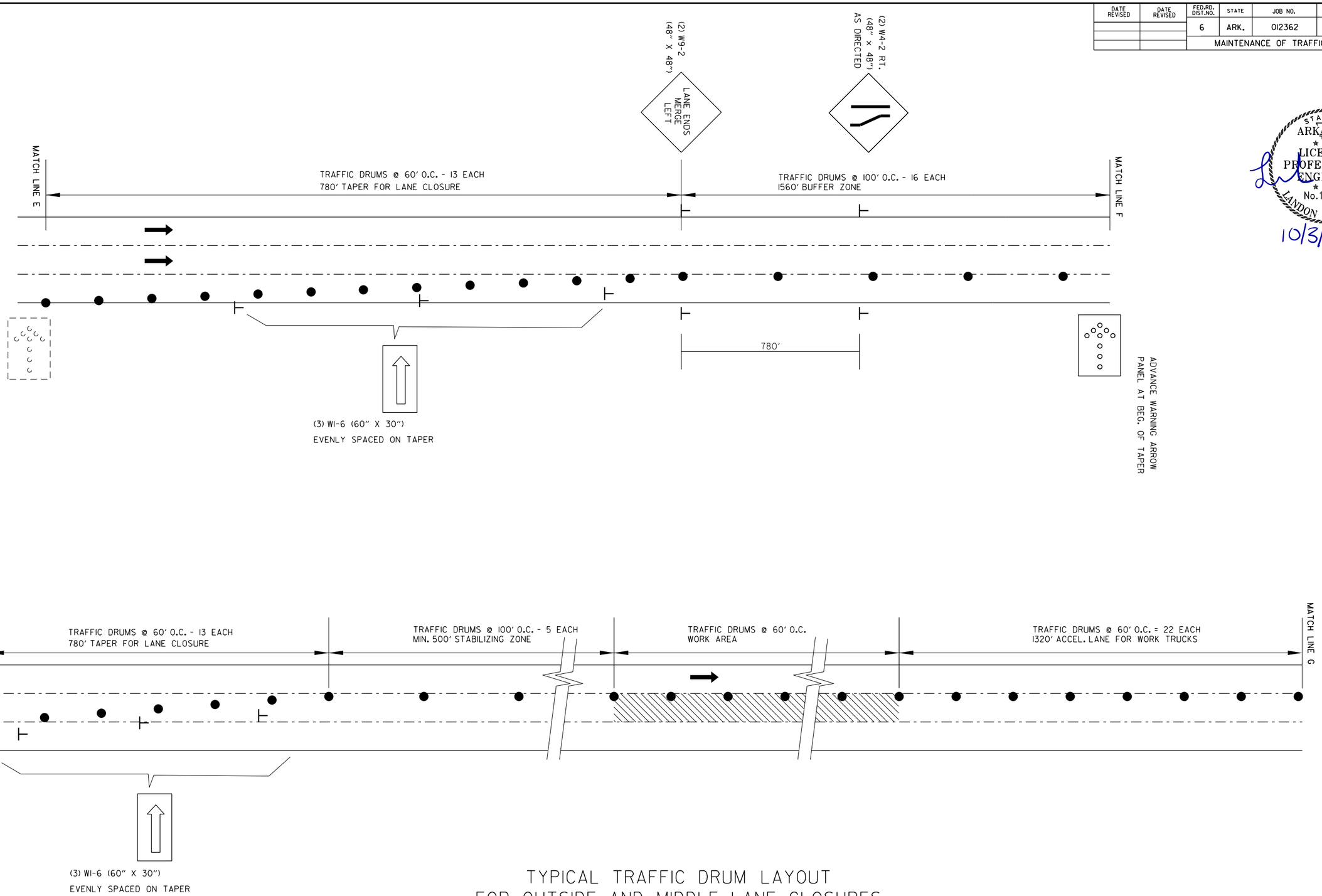
NOTE:
FOR LANE CLOSURES OTHER THAN
AT THE APPROACH ENDS OF THE CONSTRUCTION ZONE,
LEAVE OUT R55-1 SIGNS.

ADVANCE WARNING SIGNS
FOR OUTSIDE AND MIDDLE LANE CLOSURES
STAGE 2

STAGE 2
LANE CLOSURE
MAINTENANCE OF TRAFFIC DETAILS

London.Miller 10/3/2022 4:05:34 PM
WORKSPACE: ARDOT
C:\Users\london.miller\appdata\local\bentley\projectwise\workingdir\mb-us-pw.bentley.com_mb-us-pw-06\london.miller@mbakerintl.com\dms93584\R012362_06_MOT_002.dgn
REVISED DATE: $$REVDATE$$

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012362	14	30
		MAINTENANCE OF TRAFFIC DETAILS				



STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.18633
LANDON K. MILLER
10/3/2022

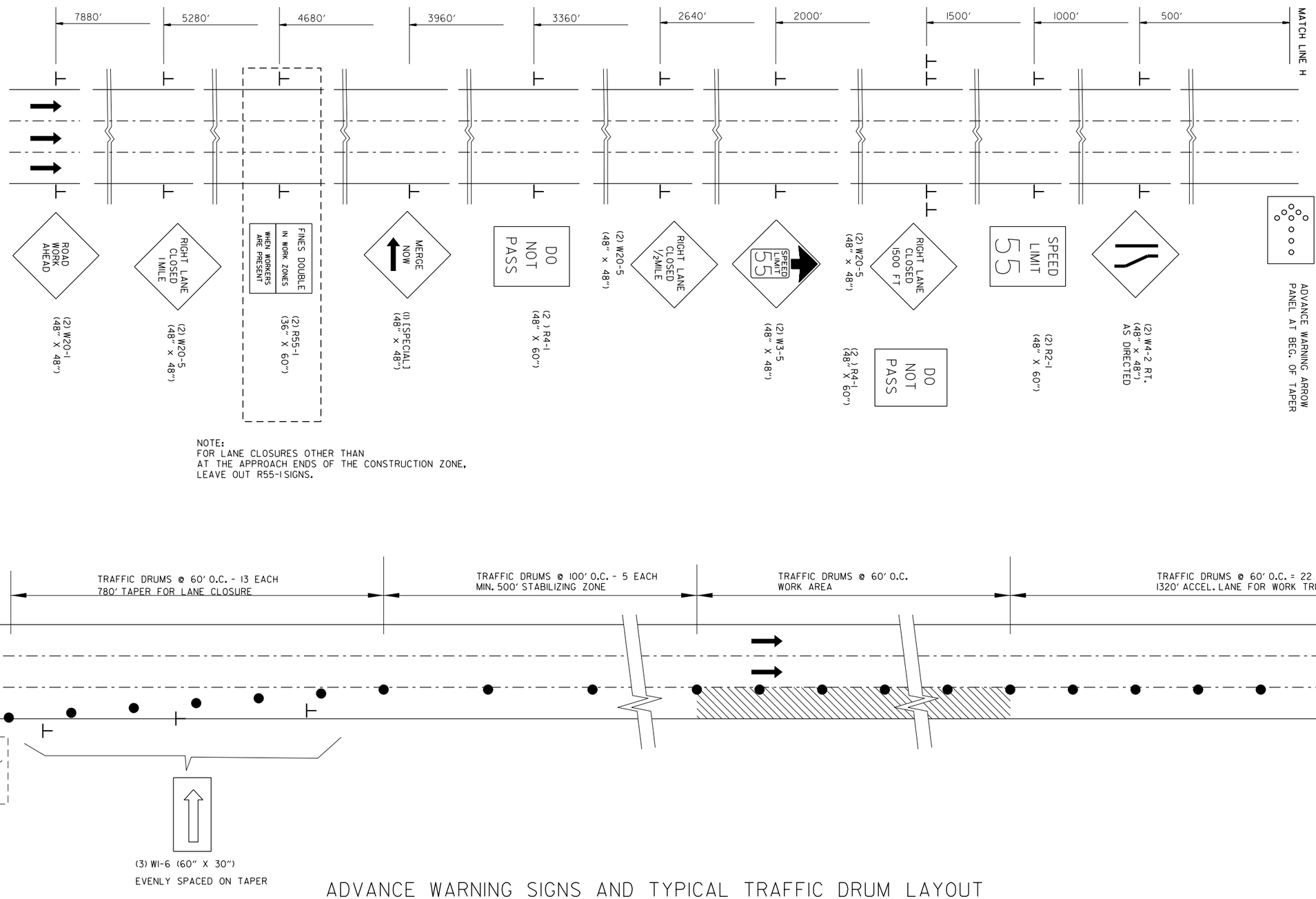
TYPICAL TRAFFIC DRUM LAYOUT FOR OUTSIDE AND MIDDLE LANE CLOSURES STAGE 2

STAGE 2
LANE CLOSURE
MAINTENANCE OF TRAFFIC DETAILS

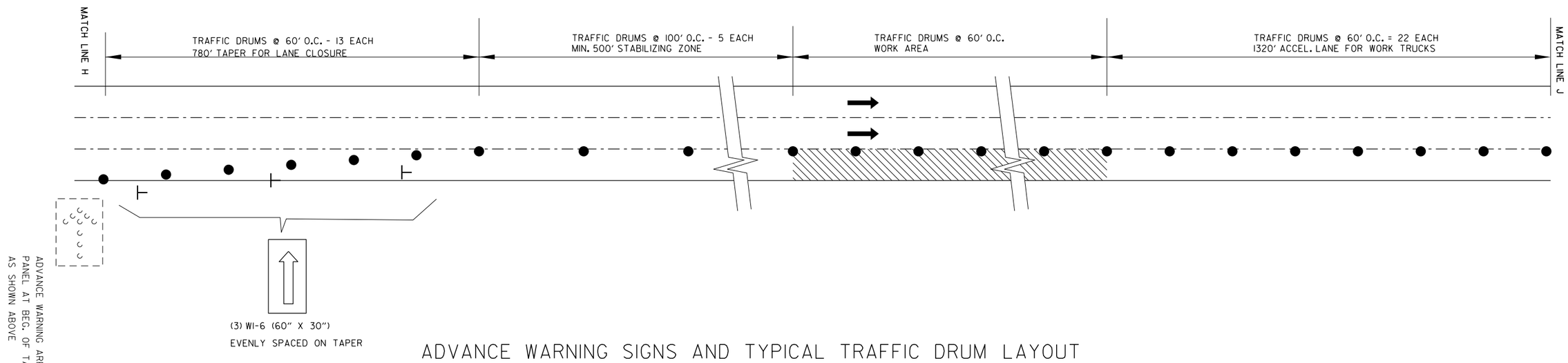
Landon.Miller 10/3/2022 4:05:34 PM
WORKSPACE: ARDOT
C:\Users\landon.miller\appdata\local\bentley\projectwise\workingdir\mb-us-pw.bentley.com.mb-us-pw-06\landon.miller@mbakerintl.com\dms93584\R012362_06_MOT_002.dgn
REVISED DATE: $$REVDATE$$

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012362	15	30
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.18633
LANDON K. MILLER
10/3/2022



NOTE:
FOR LANE CLOSURES OTHER THAN
AT THE APPROACH ENDS OF THE CONSTRUCTION ZONE,
LEAVE OUT R55-1 SIGNS.

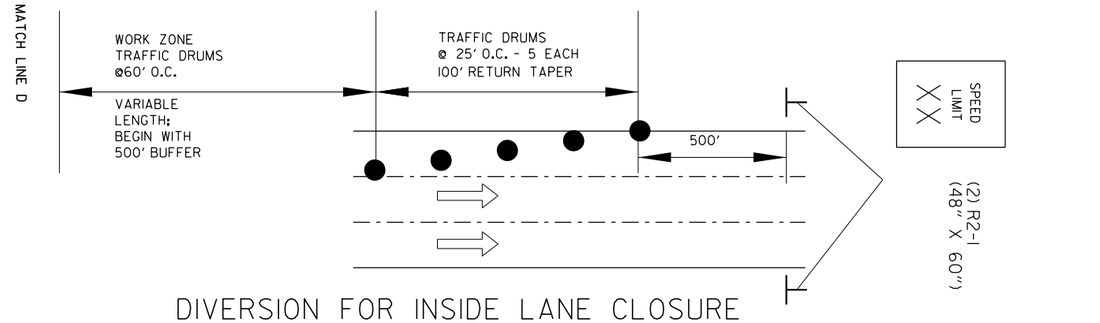


ADVANCE WARNING SIGNS AND TYPICAL TRAFFIC DRUM LAYOUT FOR OUTSIDE LANE CLOSURES STAGE 3

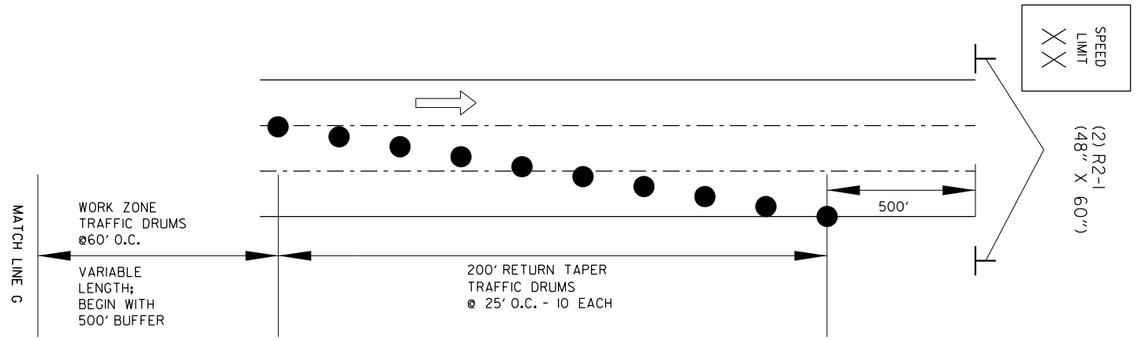
STAGE 3
LANE CLOSURE
MAINTENANCE OF TRAFFIC DETAILS

LandonMiller 10/3/2022 4:05:35 PM
WORKSPACE: ARDOT
C:\Users\landon.miller\appdata\local\bentley\projectwise\workingdir\mb-us-pw.bentley.com.mb-us-pw-06\landon.miller@mbakerintl.com\dms93584\R012362_06_MOT_002.dgn
REVISED DATE: $$REVDATE$$

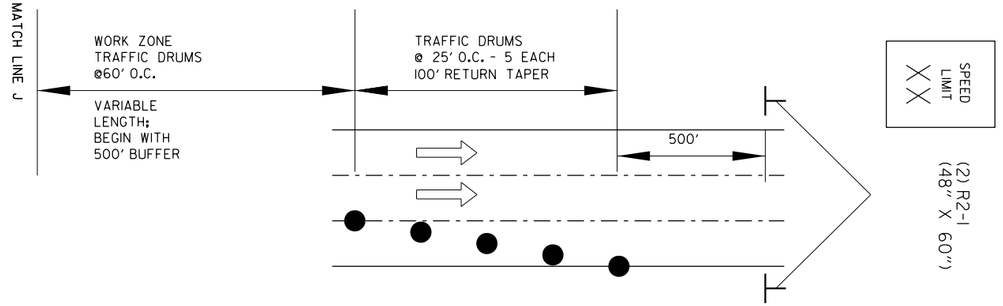
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012362	16	30
		MAINTENANCE OF TRAFFIC DETAILS				



DIVERSION FOR INSIDE LANE CLOSURE
STAGE 1



DIVERSION FOR OUTSIDE AND MIDDLE LANE CLOSURE
STAGE 2



DIVERSION FOR OUTSIDE LANE CLOSURE
STAGE 3

TYPICAL TRAFFIC DRUM LAYOUT
FOR DIVERSION OF LANE CLOSURES

ALL STAGES
DIVERSION OF LANE CLOSURE
MAINTENANCE OF TRAFFIC DETAILS

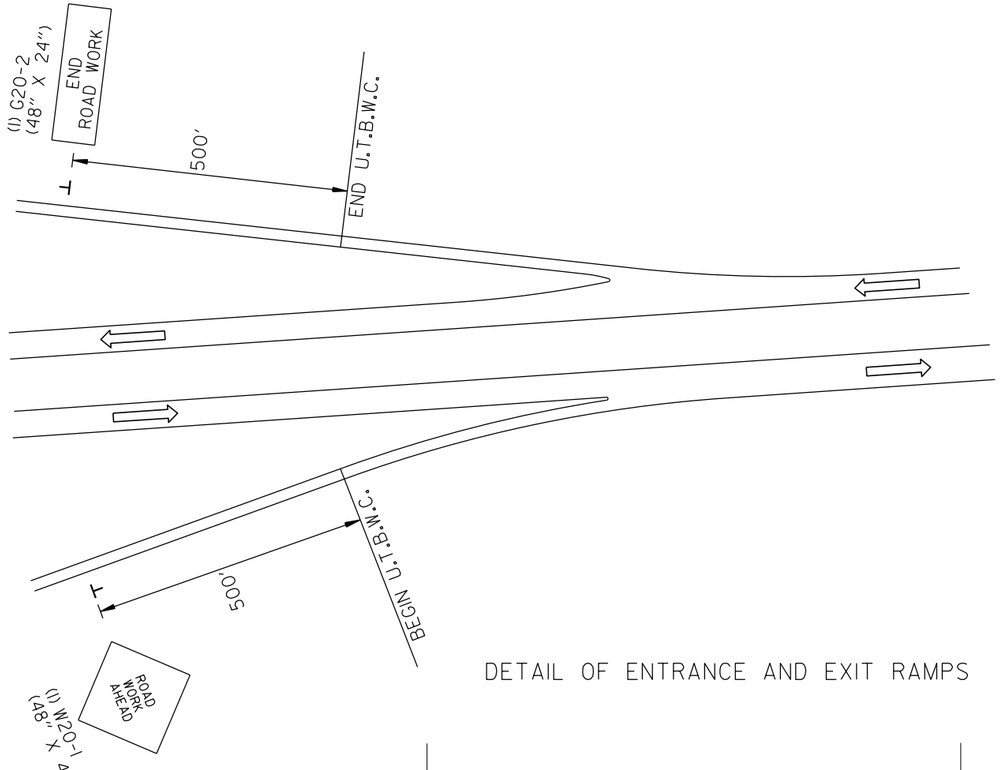
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.18633
LANDON K. MILLER
10/3/2022

LandonMiller 10/3/2022 4:05:35 PM
WORKSPACE: ARDOT
C:\users\landon.miller\appdata\local\bentley\projectwise\workingdir\mb-us-pw.bentley.com_mb-us-pw-06\landon.miller@mbakerintl.com\
REVISED DATE: $$REVDATE$$
er-int1.com\dms93584\R012362_06_MOT_002.dgn

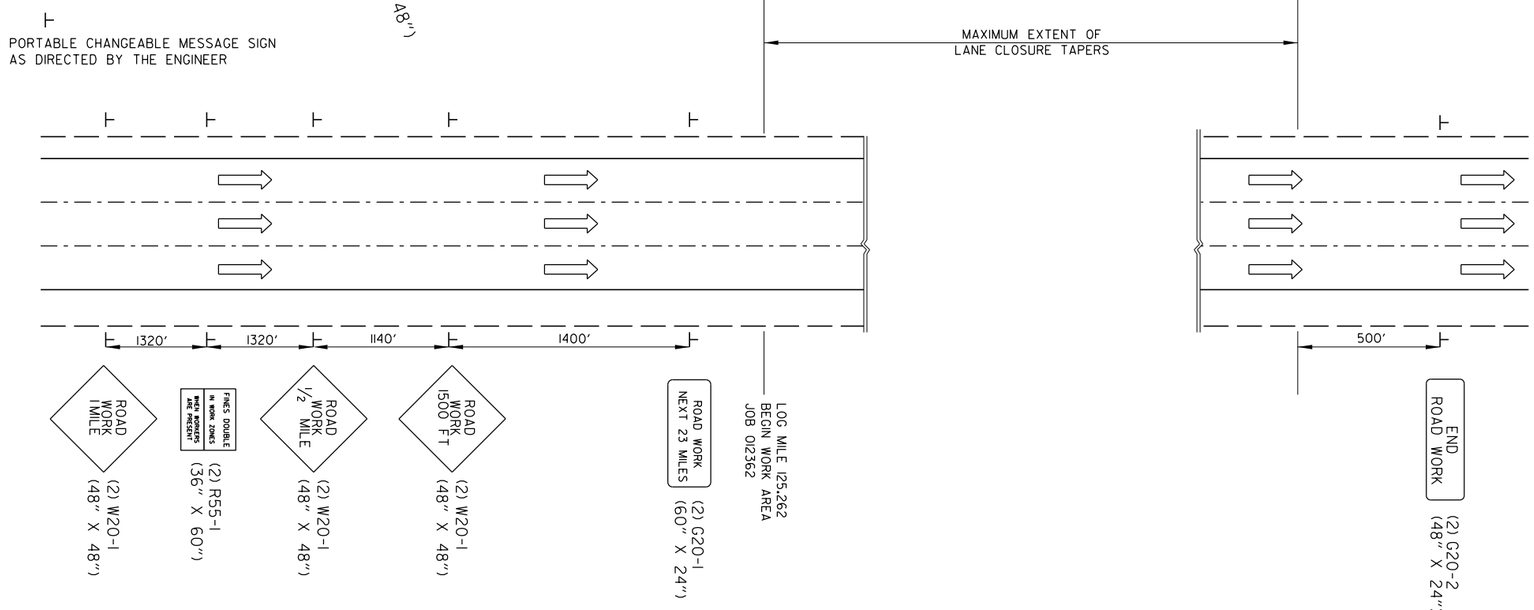
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012362	17	30
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.18633
LANDON K. MILLER

10/3/2022



DETAIL OF ENTRANCE AND EXIT RAMPS



NOTE: THESE SIGNS MAY BE TEMPORARILY REPLACED BY SOME OF THE ADVANCE SIGNS FOR LANE CLOSURES WHILE WORK IS UNDER WAY IN THESE AREAS.

NOTE: CONSTRUCTION PAVEMENT MARKINGS QUANTITY BASED ON ONE APPLICATION OF EXISTING PAVEMENT MARKINGS.

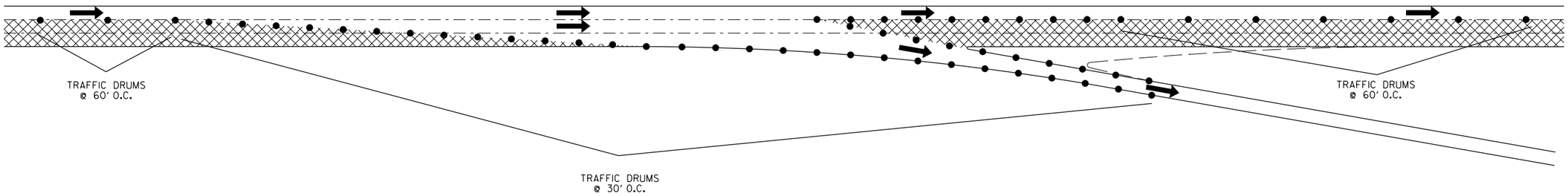
ADVANCE WARNING SIGNS AT BEGINNING AND END OF JOB 012362
ALL STAGES

ALL STAGES
ADVANCE WARNING SIGNS
MAINTENANCE OF TRAFFIC DETAILS

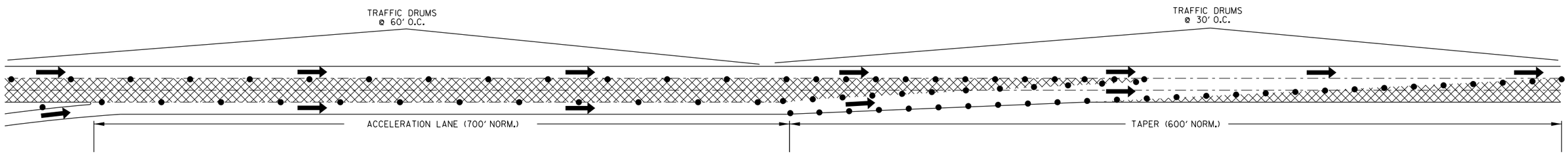
LandonMiller 10/3/2022 4:05:35 PM
WORKSPACE: ARDOT
c:\users\landon.miller\appdata\local\bentley\projectwise\workingdir\mb-us-pw.bentley.com_mb-us-pw-06\landon.miller@mbakerintl.com\dms93584\R012362_06_MOT_002.dgn
REVISED DATE: $$REVDATE$$

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012362	18	30
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.18633
LANDON K. MILLER
10/3/2022



EXIT RAMP - TYPICAL TRAFFIC DRUM LAYOUT
MIDDLE AND OUTSIDE LANE CLOSURE
STAGE 2

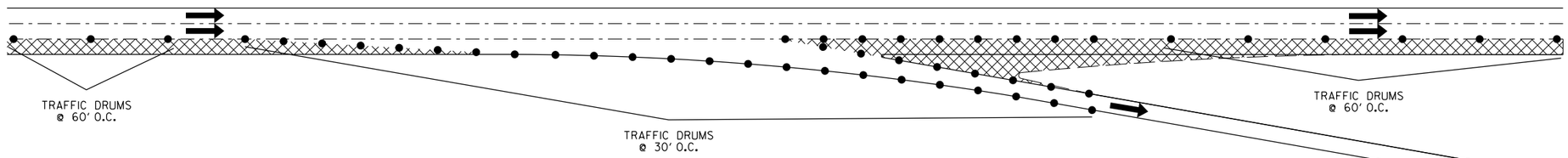


ENTRANCE RAMP - TYPICAL TRAFFIC DRUM LAYOUT
MIDDLE AND OUTSIDE LANE CLOSURE
STAGE 2

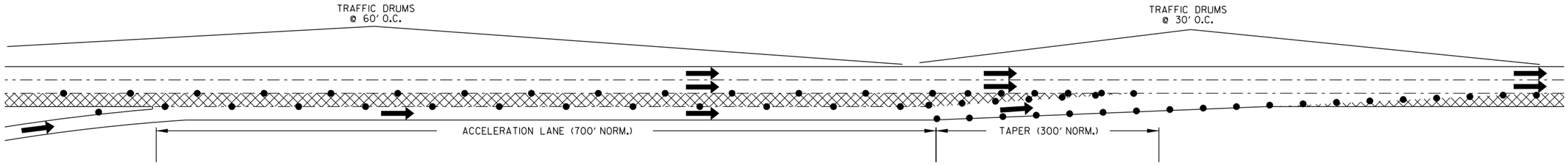
DETAIL OF RAMPS WITH LANE CLOSURE
MAINTENANCE OF TRAFFIC DETAILS

LandonMiller 10/3/2022 4:05:35 PM
WORKSPACE: ARDOT
C:\Users\landon.miller\appdata\local\bentley\projectwise\workingdir\mb-us-pw.bentley.com.mb-us-pw-06\landon.miller@mbakerintl.com\
REVISED DATE: $$REVDATE$$

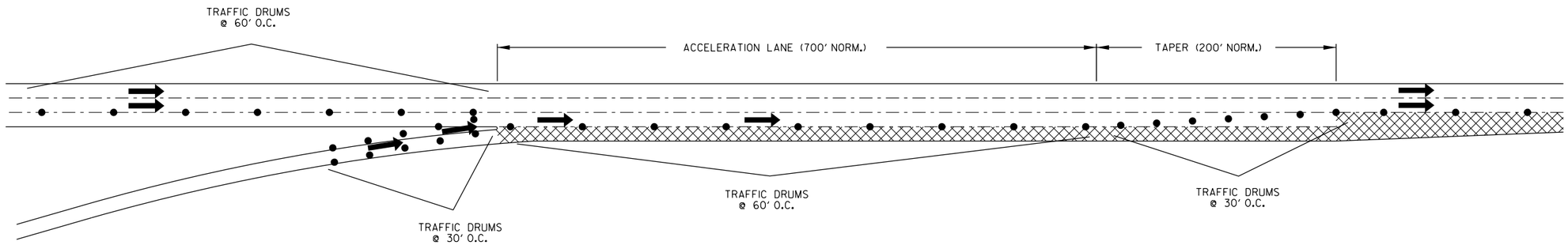
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012362	19	30
		MAINTENANCE OF TRAFFIC DETAILS				



EXIT RAMP - TYPICAL TRAFFIC DRUM LAYOUT
OUTSIDE LANE CLOSURE
STAGE 3



ENTRANCE RAMP - TYPICAL TRAFFIC DRUM LAYOUT
OUTSIDE LANE CLOSURE
STAGE 3



ENTRANCE RAMP - TYPICAL TRAFFIC DRUM LAYOUT
ACCELERATION LANE CLOSURE
STAGE 3

DETAIL OF RAMPS WITH LANE CLOSURE
MAINTENANCE OF TRAFFIC DETAILS

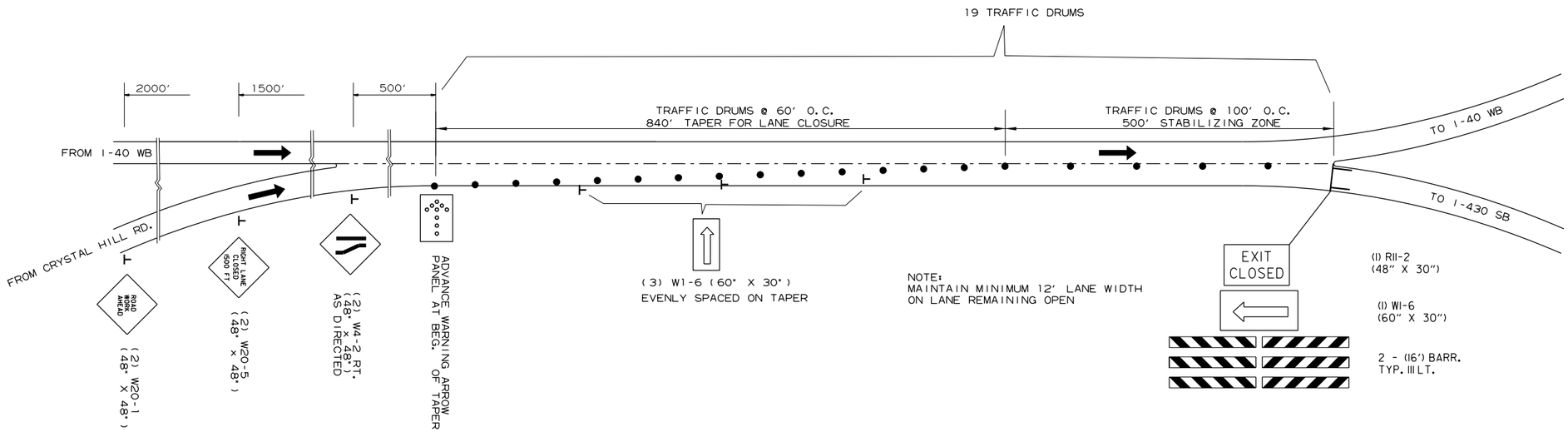
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.18633
LANDON K. MILLER
10/3/2022

London.Miller 10/3/2022 4:05:36 PM
WORKSPACE: ARDOT
C:\Users\london.miller\appdata\local\bentley\projectwise\workingdir\mb-us-pw.bentley.com_mb-us-pw-06\london.miller@mbakerintl.com\dms93584\R012362_06_MOT_002.dgn
REVISED DATE: $$REVDATE$$

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012362	20	30
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.18633
LANDON K. MILLER
10/3/2022

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



ADVANCE WARNING SIGNS FOR I-40 WB TO I-430 SB RAMP CLOSURE
STAGE 4

STAGE 4
DETAIL OF PORTABLE TRAFFIC SIGNAL SYSTEM
I-40 & WHITE OAK CROSSING
MAINTENANCE OF TRAFFIC DETAILS

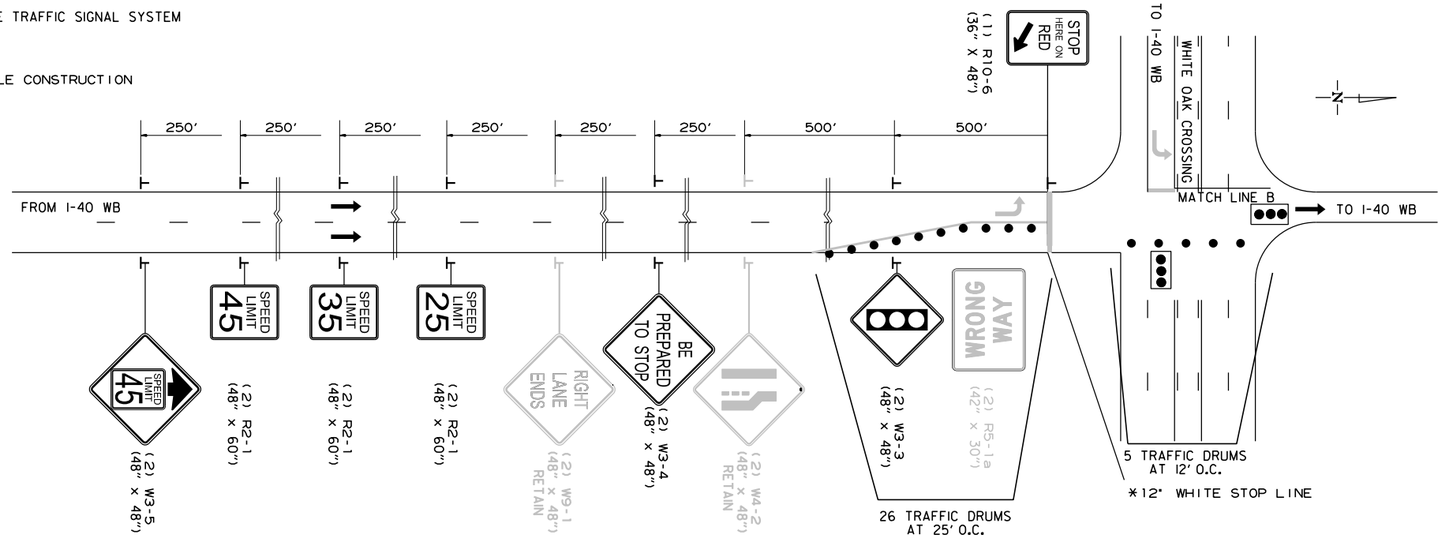
LondonMiller 10/3/2022 4:05:36 PM
WORKSPACE: ARDOT
C:\Users\londonmiller\appdata\local\bentley\projectwise\workingdir\mb-us-pw.bentley.com_mb-us-pw-06\londonmiller@mbakerintl.com\dms93584\R012362_06_MOT_002.dgn
REVISED DATE: $$PREVDATE$$

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012362	21	30
		MAINTENANCE OF TRAFFIC DETAILS				

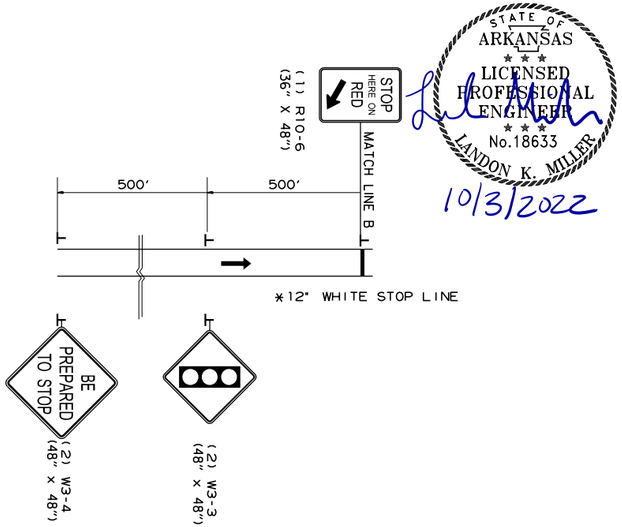
LEGEND

- TEMPORARY TRAFFIC SIGN
- TRAFFIC FLOW ARROWS
- PORTABLE TRAFFIC SIGNAL SYSTEM

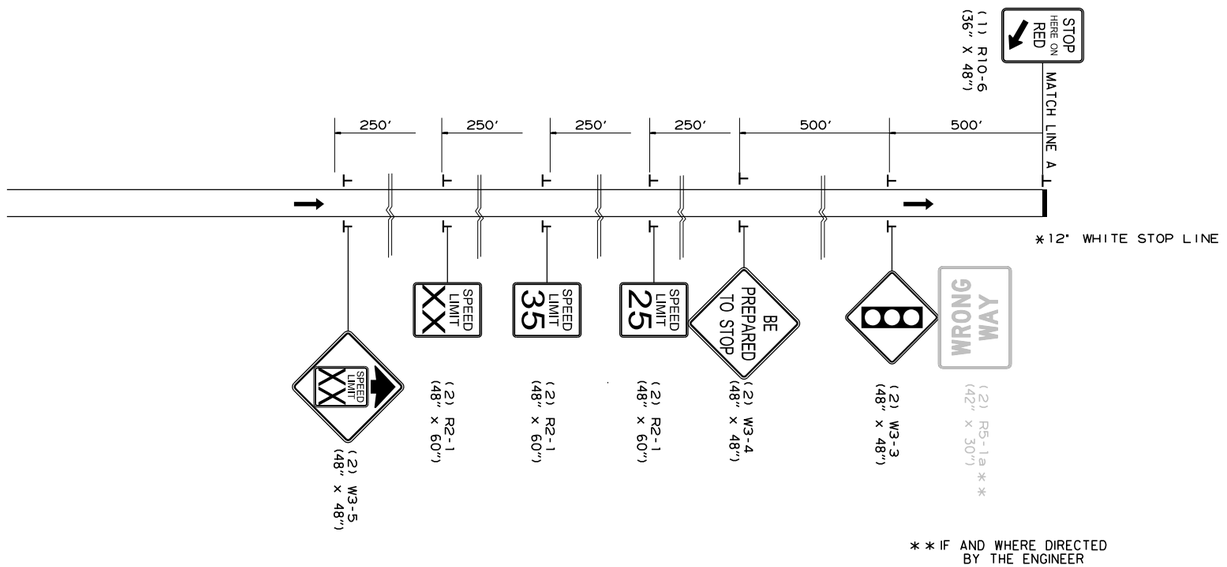
*PAID FOR AS REMOVABLE CONSTRUCTION PAVEMENT MARKINGS



DETAIL OF PORTABLE TRAFFIC SIGNAL SYSTEM FROM I-40 WB TO WHITE OAK CROSSING

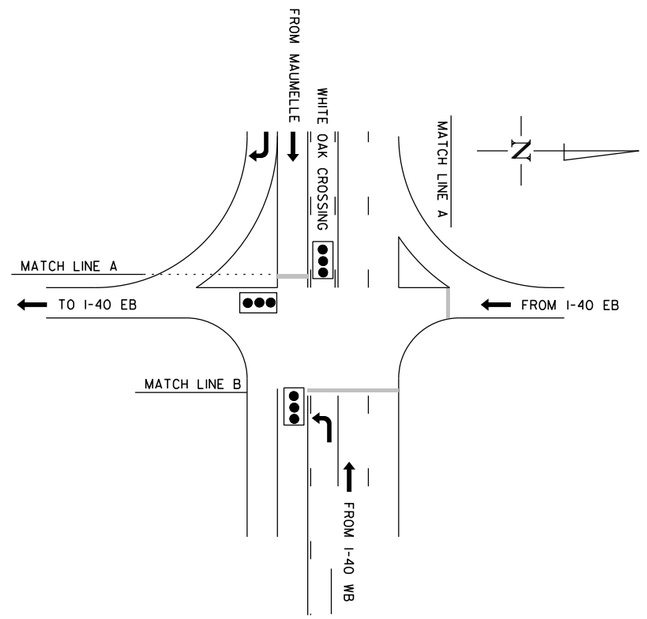


STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.18633
LANDON K. MILLER
10/3/2022



** IF AND WHERE DIRECTED BY THE ENGINEER

DETAIL OF PORTABLE TRAFFIC SIGNAL SYSTEM
AT I-40 & WHITE OAK CROSSING INTERCHANGE



STAGE 4
DETAIL OF PORTABLE TRAFFIC SIGNAL SYSTEM
I-40 & WHITE OAK CROSSING
MAINTENANCE OF TRAFFIC DETAILS

LandonMiller 10/3/2022 4:05:36 PM
WORKSPACE: ARDOT
C:\Users\landon.miller\appdata\local\bentley\projectwise\workingdir\mb-us-pw.bentley.com_mb-us-pw-06\landon.miller@mbakerintl.com\
REVISED DATE: $$REVDATE$$
012362_06_MOT_002.dgn

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
11-1-2022		6	ARK.	012362	22	30
		MAINTENANCE OF TRAFFIC DETAILS				

SEQUENCE OF CONSTRUCTION

STAGE 1:
INSTALL ADVANCE WARNING SIGNS AND DEVICES FOR THE INSIDE LANE CLOSURE AS SHOWN IN THE STAGE 1 MAINTENANCE OF TRAFFIC DETAILS.

MILL AND INLAY THE INSIDE LANE AND INSTALL THE GEOTEXTILE FABRIC (TYPE SPECIAL). CONSTRUCT THE ULTRA THIN BONDED WEARING COURSE OVER THE INSIDE LANE AFTER COMPLETING THE MILL AND INLAY CONSTRUCTION.

CONSTRUCT THE POLYMER OVERLAY ON THE INSIDE LANE OF ALL BRIDGES WITHIN EACH OF THE 4 MILE SECTIONS OF CONSTRUCTION.

SHIFT ADVANCE WARNING SIGNS AS CONSTRUCTION PROGRESSES.

STAGE 2:
INSTALL ADVANCE WARNING SIGNS AND DEVICES FOR THE MIDDLE AND OUTSIDE LANE CLOSURE AS SHOWN IN THE STAGE 2 MAINTENANCE OF TRAFFIC DETAILS.

SHIFT TRAFFIC ONTO THE NEWLY CONSTRUCTED INSIDE LANE. CONSTRUCT THE ULTRA THIN BONDED WEARING COURSE OVER THE MIDDLE LANE.

STAGE ENTRANCE AND EXIT RAMPS AS SHOWN IN THE STAGE 2 MAINTENANCE OF TRAFFIC DETAILS. ACCELERATION LANES SHOULD ALTERNATE BETWEEN THE MIDDLE AND OUTSIDE LANES TO AVOID CONSTRUCTION AREAS.

CONSTRUCT THE POLYMER OVERLAY ON THE MIDDLE LANE OF ALL BRIDGES WITHIN EACH OF THE 4 MILE SECTIONS OF CONSTRUCTION.

SHIFT ADVANCE WARNING SIGNS AS CONSTRUCTION PROGRESSES.

STAGE 3:
INSTALL ADVANCE WARNING SIGNS AND DEVICES FOR THE OUTSIDE LANE CLOSURE AS SHOWN IN THE STAGE 3 MAINTENANCE OF TRAFFIC DETAILS. SHIFT TRAFFIC ONTO THE MIDDLE AND INSIDE LANES.

CONSTRUCT THE ULTRA THIN BONDED WEARING COURSE OVER THE OUTSIDE LANE, ACCELERATION LANES, AND ENTRANCE/EXIT RAMPS.

STAGE ENTRANCE AND EXIT RAMPS AS SHOWN IN THE STAGE 3 MAINTENANCE OF TRAFFIC DETAILS.

CONSTRUCT THE POLYMER OVERLAY ON THE OUTSIDE AND AUXILIARY LANES OF ALL BRIDGES WITHIN EACH OF THE 4 MILE SECTIONS OF CONSTRUCTION.

SHIFT ADVANCE WARNING SIGNS AS CONSTRUCTION PROGRESSES.

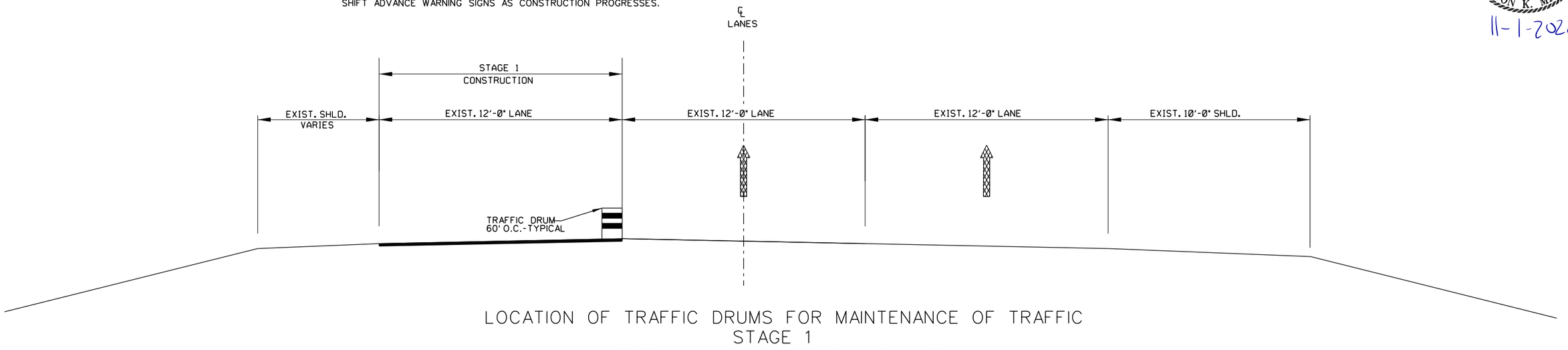
STAGE 4:

INSTALL ADVANCE WARNING, PORTABLE TRAFFIC SIGNAL SYSTEMS, AND DETOUR SIGNS FOR THE HYDRODEMOLITION OF BRIDGE NO. 05325 AS SHOWN IN THE DETOUR PLAN FOR I-430 MAINTENANCE OF TRAFFIC DETAILS.

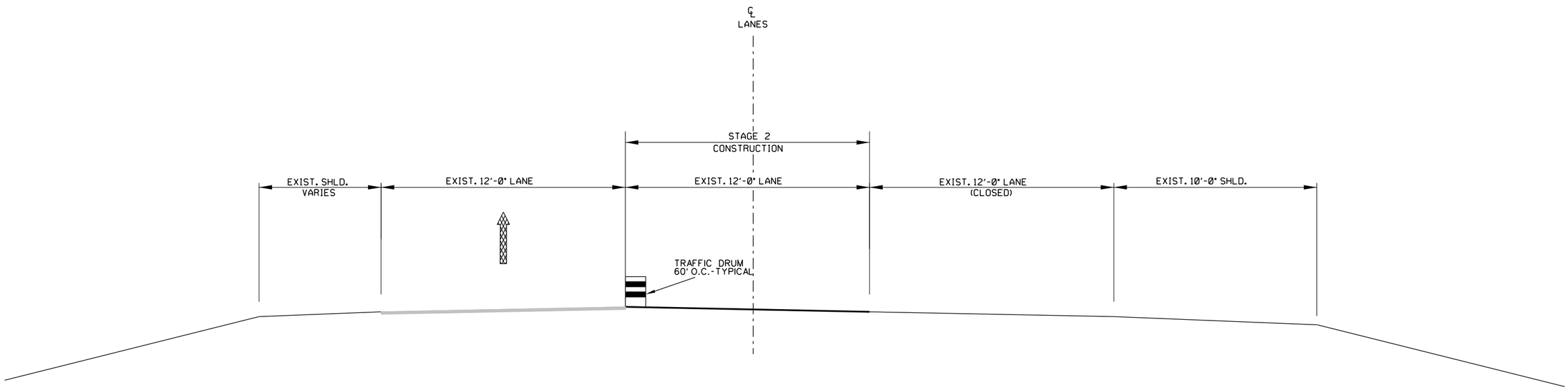
CLOSE THE RAMP FROM I-40 WESTBOUND TO I-430 SOUTHBOUND AND CONSTRUCTION THE HYDRODEMOLITION WITH LATEX MODIFIED OVERLAY ON BRIDGE NO. 05325.

NOTE: STAGES 1, 2, & 3 CONSTRUCTION SHOULD BE COMPLETED IN BOTH THE EASTBOUND AND WESTBOUND DIRECTIONS PRIOR TO STAGE 4 CONSTRUCTION OPERATIONS BEGINNING.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 18633
LANDON K. MILLER
11-1-2022



LOCATION OF TRAFFIC DRUMS FOR MAINTENANCE OF TRAFFIC
STAGE 1
(SHOWN IN DIRECTION OF TRAFFIC)



LOCATION OF TRAFFIC DRUMS FOR MAINTENANCE OF TRAFFIC
STAGE 2
(SHOWN IN DIRECTION OF TRAFFIC)

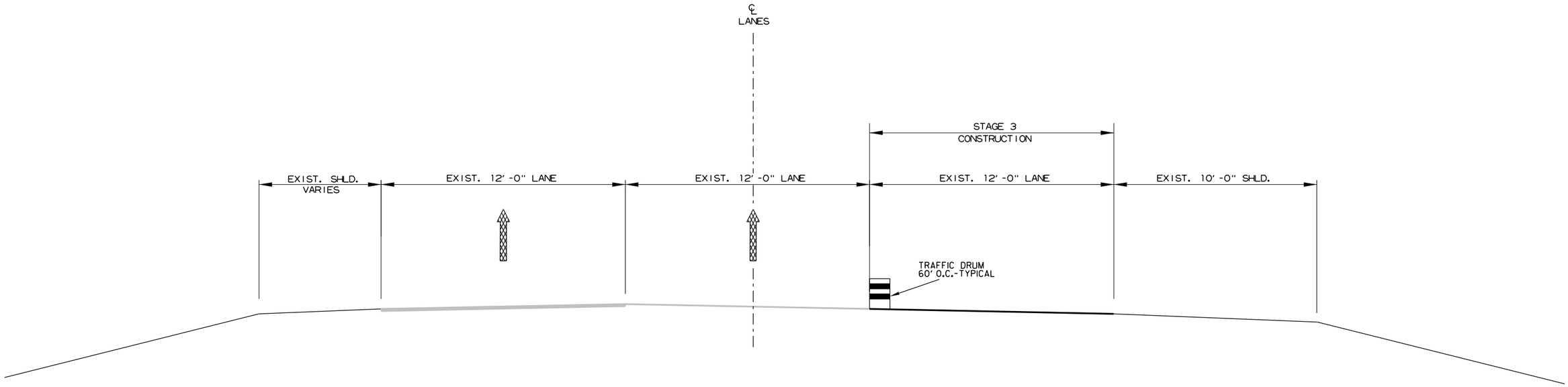
TYPICAL SECTIONS
MAINTENANCE OF TRAFFIC DETAILS

London.Miller 11/1/2022 7:35:33 PM
WORKSPACE: ARDOT
c:\users\public\mbipw16\dms93584\R012362_06_MOT_003.dgn
REVISED DATE: $$REVDATE$$

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012362	23	30
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.18633
LANDON K. MILLER

10/3/2022



LOCATION OF TRAFFIC DRUMS FOR MAINTENANCE OF TRAFFIC
STAGE 3
(SHOWN IN DIRECTION OF TRAFFIC)

TYPICAL SECTIONS
MAINTENANCE OF TRAFFIC DETAILS

LandonMiller 10/3/2022 4:05:38 PM
WORKSPACE: ARDOT
C:\Users\landon.miller\appdata\local\bentley\projectwise\workingdir\mb-us-pw.bentley.com_mb-us-pw-06\landon.miller@mbakerintl.com\dms93584\R012362_06_MOT_003.dgn
REVISED DATE: $$REVDATE$$

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012362	24	30
		PERMANENT PAVEMENT MARKINGS				

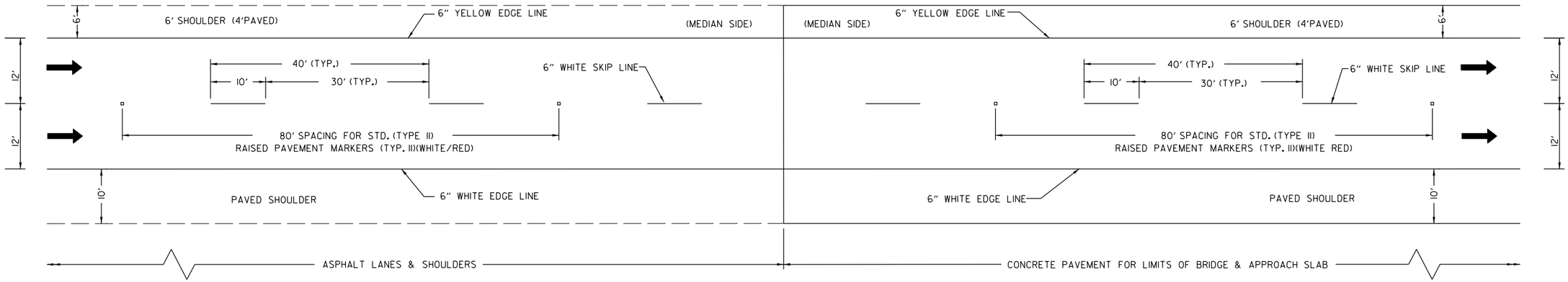
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.18633
LANDON K. MILLER
10/3/2022

ASPHALT ROADWAY

SKIP LINE - ENHANCED THERMOPLASTIC PAVEMENT MARKING
EDGE LINES - ENHANCED THERMOPLASTIC PAVEMENT MARKING
REFER TO SPECIAL PROVISION - ENHANCED THERMOPLASTIC PAVEMENT MARKING

CONCRETE BRIDGE

SKIP LINE - ENHANCED THERMOPLASTIC PAVEMENT MARKING
EDGE LINES - ENHANCED THERMOPLASTIC PAVEMENT MARKING
REFER TO SPECIAL PROVISION - ENHANCED THERMOPLASTIC PAVEMENT MARKING



PERMANENT PAVEMENT MARKING DETAILS

SEE STANDARD DRAWINGS PM-1 AND PM-2
FOR ADDITIONAL INFORMATION

PERMANENT PAVEMENT MARKING DETAILS

London.Miller 10/3/2022 4:05:39 PM
WORKSPACE: ARDOT
C:\Users\london.miller\appdata\local\bentley\projectwise\workingdir\mb-us-pw.bentley.com_mb-us-pw-06\london.miller@mbakerintl.com\dms93584\R012362_07_PM_001.dgn
REVISED DATE: $$REVDATE$$

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
10-17-22		6	ARK.	012362	25	30
11-1-22		QUANTITIES				

ADVANCE WARNING SIGNS AND DEVICES

SIGN NUMBER	DESCRIPTION	SIGN SIZE	STAGE 1	STAGE 2	STAGE 3	STAGE 4	MAXIMUM NUMBER REQUIRED	TOTAL SIGNS REQUIRED		CONSTRUCTION PROJECT INFORMATION SIGN UPDATE	TRAFFIC DRUMS	BARRICADES (TYPE III)		* ADVANCE WARNING ARROW PANEL	* PORTABLE CHANGEABLE MESSAGE SIGN	PORTABLE TRAFFIC SIGNAL SYSTEM - ACTUATED
												RIGHT	LEFT			
			LIN. FT. - EACH					NO.	SQ. FT.	EACH		LIN. FT.		DAY	WEEK	
W20-1	ROAD WORK 1500 FT.	48"x48"	6	6	6	4	6	6	96.0							
W20-1	ROAD WORK 1 MILE	48"x48"	4	4	4	4	4	4	64.0							
W20-1	ROAD WORK 1/2 MILE	48"x48"	4	4	4	4	4	4	64.0							
W20-1	ROAD WORK AHEAD	48"x48"	25	25	25		25	25	400.0							
W20-5	RIGHT LANE CLOSED 1500 FT.	48"x48"	2	2	4		4	4	64.0							
W20-5	RIGHT LANE CLOSED 1/2 MILE	48"x48"	2	2	4		4	4	64.0							
W20-5	RIGHT LANE CLOSED 1 MILE	48"x48"	2	2	4		4	4	64.0							
W20-5	LEFT LANE CLOSED 1500 FT.	48"x48"	6	4	4		6	6	96.0							
W20-5	LEFT LANE CLOSED 1/2 MILE	48"x48"	6	4	4		6	6	96.0							
W20-5	LEFT LANE CLOSED 1 MILE	48"x48"	6	4	4		6	6	96.0							
W20-5a	2 RIGHT LANES CLOSED 1500 FT.	48"x48"		4			4	4	64.0							
W20-5a	2 RIGHT LANES CLOSED 1/2 MILE	48"x48"		4			4	4	64.0							
W20-5a	2 RIGHT LANES CLOSED 1 MILE	48"x48"		4			4	4	64.0							
G20-2	END ROAD WORK	48"x24"	19	19	19	3	19	19	152.0							
G20-1	ROAD WORK NEXT 23 MILES	60"x24"	6	6	6		6	6	60.0							
R10-6	STOP HERE ON RED	24"X36"				5	5	5	30.0							
R55-1	FINES DOUBLE IN WORK ZONES	36"x60"	6	6	6	4	6	6	90.0							
W3-3	SIGNAL AHEAD	48"x48"				5	5	5	80.0							
W3-4	BE PREPARED TO STOP	48"x48"				5	5	5	80.0							
W3-5	SPEED REDUCTION	48"x48"	6	6	6	3	6	6	96.0							
R2-1	SPEED LIMIT XX MPH	48"x60"	10	10	10	9	10	10	200.0							
W4-2RT	RIGHT LANE ENDS	48"x48"	2	8	4		8	8	128.0							
W4-2LT	LEFT LANE ENDS	48"x48"	6	4	4		6	6	96.0							
E5-2a	EXIT CLOSED	48"x36"				1	1	1	12.0							
M1-1	INTERSTATE ROUTE SIGN (3 DIGITS)	30"x24"	2	2	2	2	2	2	10.0							
M3-3	CARDINAL DIRECTION SOUTH	24"x12"	2	2	2		2	2	4.0							
M4-8	DETOUR	24"x12"	2	2	2	2	2	2	4.0							
M6-1	DIRECTIONAL ARROW	21"x15"	2	2	2	2	2	2	4.4							
W1-6	LARGE ARROW	60"x30"	18	18	18	2	18	18	225.0							
R4-1	DO NOT PASS	24"x30"	12	12	12		12	12	60.0							
W9-2	LANE ENDS MERGE LEFT	48"x48"		4			4	4	64.0							
SPECIAL	DETOUR I-430 SOUTH	102"x138"				2	2	2	195.5							
SPECIAL	MERGE NOW RIGHT	48"x48"	3	2	2		3	3	48.0							
SPECIAL	MERGE NOW LEFT	48"x48"	1	2	2		2	2	32.0							
SPECIAL	CONSTRUCTION PROJECT INFORMATION SIGN	48"X96"	2	2	2	2	2	2	64.0							
SPECIAL	CONSTRUCTION PROJECT INFORMATION SIGN UPDATE									10						
	TRAFFIC DRUMS		930	1166	1100	30	1166				1166					
	TYPE III BARRICADE-RT. (16')					1	1					16				
	TYPE III BARRICADE-LT. (16')					1	1						16			
	ADVANCE WARNING ARROW PANEL		225	225	225	14	689							689		
	PORTABLE CHANGEABLE MESSAGE SIGN		45	45	45	10	145								145	
	PORTABLE TRAFFIC SIGNAL SYSTEM - ACTUATED					5										5
TOTALS:									**3030.9**	**10**	**1166**	**16**	**16**	**689**	**145**	**5**

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

NOTE: THE QUANTITY OF TRAFFIC DRUMS PROVIDED IS FOR ONE SIDE OF THE ROADWAY FOR FOUR (4) MILES OF THE PROJECT. HOWEVER, THE INSTALLATION OF TRAFFIC DRUMS SHALL NEVER EXCEED THE ACTUAL WORK AREA BY MORE THAN 1/4 MILE, UNLESS APPROVED BY THE ENGINEER.

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

CONSTRUCTION PAVEMENT MARKINGS AND PERMANENT PAVEMENT MARKINGS

DESCRIPTION	STAGE 1	STAGE 2	STAGE 3	END OF JOB	REMOVAL OF PERMANENT PAVEMENT MARKINGS	CONSTRUCTION PAVEMENT MARKINGS	REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS	REMOVABLE CONSTRUCTION PAVEMENT MARKINGS	RAISED PAVEMENT MARKERS	ENHANCED THERMOPLASTIC PAVEMENT MARKING			THERMOPLASTIC PAVEMENT MARKING
									TYPE II	6"		12"	12"
									(WHITE/RED)	WHITE	YELLOW	WHITE	WHITE
	LIN. FT. - EACH				LIN. FT.		LIN. FT.		EACH	LIN. FT.			
REMOVAL OF PERMANENT PAVEMENT MARKINGS			6200		6200								
CONSTRUCTION PAVEMENT MARKINGS	598040	59804	239216			897060							
REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS			6200				6200						
REMOVABLE CONSTRUCTION PAVEMENT MARKINGS	2155	431	1724					4310					
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED)				9800					9800				
ENHANCED THERMOPLASTIC PAVEMENT MARKING WHITE (6")				366212						366212			
ENHANCED THERMOPLASTIC PAVEMENT MARKING YELLOW (6")				239216							239216		
ENHANCED THERMOPLASTIC PAVEMENT MARKING WHITE (12")				2445								2445	
THERMOPLASTIC PAVEMENT MARKING WHITE (12")				5550									5550
TOTALS:					**6200**	**897060**	**6200**	**4310**	**9800**	**366212**	**239216**	**2445**	**5550**

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

NOTE: THE CONSTRUCTION PAVEMENT MARKINGS AND THE PERMANENT PAVEMENT MARKINGS SHALL MATCH THE EXISTING PAVEMENT MARKINGS.

GUARDRAIL

LOG MILE	LOG MILE	LOCATION	GUARDRAIL (TYPE A)	THRIE BEAM GUARDRAIL TERMINAL	GUARDRAIL TERMINAL (TYPE 2)
			LIN. FT.	EACH	
137.519	137.570	BRIDGE B3696 - RT. OF I-40 EB	200	1	1
137.600	137.651	BRIDGE A3696 - LT. OF I-40 WB	200	1	1
137.699	137.750	BRIDGE B3667 - RT. OF I-40 EB	200	1	1
137.800	137.851	BRIDGE A3667 - LT. OF I-40 WB	200	1	1
0.198	0.239	BRIDGE 05325 - BEGIN LT.	150	1	1
0.198	0.239	BRIDGE 05325 - BEGIN RT.	150	1	1
TOTALS:			**1100**	**6**	**6**

REMOVAL AND DISPOSAL OF ITEMS

LOG MILE	LOG MILE	LOCATION	GUARDRAIL
			LIN. FT.
137.519	137.570	BRIDGE B3696 - RT. OF I-40 EB	268.75
137.600	137.651	BRIDGE A3696 - LT. OF I-40 WB	268.75
137.699	137.750	BRIDGE B3667 - RT. OF I-40 EB	268.75
137.800	137.851	BRIDGE A3667 - LT. OF I-40 WB	268.75
0.198	0.239	BRIDGE 05325 - BEGIN LT.	218.75
0.198	0.239	BRIDGE 05325 - BEGIN RT.	218.75
TOTALS:			**1512.50**

NOTE: THE QUANTITY SHOWN ABOVE FOR THE REMOVAL AND DISPOSAL OF GUARDRAIL SHALL INCLUDE THE REMOVAL AND DISPOSAL OF ALL GUARDRAIL TERMINALS AND TERMINAL ANCHOR POSTS.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.18633
LANDON K. MILLER
11-4-2022

Jason.Toney 11/4/2022 2:52:04 PM
WORKSPACE: ARDOT
C:\Users\public.ymbjw\6\dms93584\R012362_08_QTY.dgn
REVISED DATE: $$REVDATE$$

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
11-1-2022		6	ARK.	012362	26	30
		QUANTITIES				

ULTRATHIN BONDED WEARING COURSE (BOX 1 OF 2)

LOG MILE	LOG MILE	LOCATION	TOTAL LENGTH	AVG. WIDTH	ULTRATHIN BONDED WEARING COURSE (3/4" - TYPE C)
			FEET	FEET	SQ. YD.
MAIN LANES					
125.262	125.352	I-40 EB	475.20	24.00	1267.20
125.262	125.466	I-40 WB	1077.12	24.00	2872.32
125.352	126.665	I-40 EB	6932.64	36.00	27730.56
125.466	126.665	I-40 WB	6330.72	36.00	25322.88
126.758	129.784	I-40 EB	15977.28	36.00	63909.12
126.758	129.784	I-40 WB	15977.28	36.00	63909.12
129.817	131.594	I-40 EB	9382.56	36.00	37530.24
129.817	131.594	I-40 WB	9382.56	36.00	37530.24
131.651	137.555	I-40 EB	31173.12	36.00	124692.48
131.651	137.555	I-40 WB	31173.12	36.00	124692.48
137.586	137.728	I-40 EB	749.76	36.00	2999.04
137.586	137.728	I-40 WB	749.76	36.00	2999.04
137.802	143.160	I-40 EB	28290.24	36.00	113160.96
143.160	143.594	I-40 EB	2291.52	12.00	3055.36
137.802	143.594	I-40 WB	30581.76	36.00	122327.04
143.636	144.160	I-40 EB	2766.72	12.00	3688.96
144.160	144.896	I-40 EB	3886.08	36.00	15544.32
143.636	144.912	I-40 WB	6737.28	36.00	26949.12
144.990	146.355	I-40 EB	7207.20	36.00	28828.80
145.006	146.355	I-40 WB	7122.72	36.00	28490.88
146.386	147.133	I-40 EB	3944.16	36.00	15776.64
146.386	147.265	I-40 WB	4641.12	36.00	18564.48
147.133	147.915	I-40 EB	4128.96	24.00	11010.56
147.265	147.725	I-40 WB	2428.80	24.00	6476.80
AUXILARY LANES					
126.242	126.396	I-40 WB	813.12	12.00	1084.16
127.040	127.262	I-40 EB	1172.16	12.00	1562.88
128.020	128.190	I-40 WB	897.60	12.00	1196.80
129.039	129.209	I-40 EB	897.60	12.00	1196.80
131.886	131.983	I-40 EB	512.16	12.00	682.88
132.135	132.381	I-40 WB	1298.88	12.00	1731.84
132.381	132.570	I-40 EB	997.92	12.00	1330.56
133.214	133.346	I-40 WB	696.96	12.00	929.28
133.308	133.419	I-40 EB	586.08	12.00	781.44
133.779	133.873	I-40 WB	496.32	12.00	661.76
133.873	134.013	I-40 EB	739.20	12.00	985.60
134.998	135.168	I-40 WB	897.60	12.00	1196.80
135.585	135.773	I-40 EB	992.64	12.00	1323.52
136.284	136.601	I-40 EB	1673.76	12.00	2231.68
141.938	142.073	I-40 WB	712.80	12.00	950.40
142.471	142.634	I-40 EB	860.64	12.00	1147.52
145.531	145.710	I-40 WB	945.12	12.00	1260.16
145.588	145.653	I-40 EB	343.20	12.00	457.60
146.278	146.355	I-40 EB	406.56	12.00	542.08
146.259	146.355	I-40 WB	506.88	12.00	675.84
146.386	147.133	I-40 EB	3944.16	12.00	5258.88
146.386	147.265	I-40 WB	4641.12	12.00	6188.16
147.265	147.436	I-40 WB	902.88	12.00	1203.84
ENTRANCE AND EXIT RAMPS					
125.262	125.328	I-40 EB ENTRANCE RAMP	348.48	15.00	580.80
125.352	125.466	I-40 WB EXIT RAMP	601.92	15.00	1003.20
126.396	126.510	I-40 WB ENTRANCE RAMP	601.92	15.00	1003.20
126.396	126.566	I-40 EB EXIT RAMP	897.60	15.00	1496.00
126.869	127.040	I-40 WB EXIT RAMP	902.88	15.00	1504.80
127.002	127.040	I-40 EB ENTRANCE RAMP	200.64	15.00	334.40
128.190	128.285	I-40 WB ENTRANCE RAMP	501.60	15.00	836.00
128.395	128.490	I-40 EB EXIT RAMP	501.60	15.00	836.00
128.944	129.039	I-40 WB EXIT RAMP	501.60	15.00	836.00
128.963	129.039	I-40 EB ENTRANCE RAMP	401.28	15.00	668.80
131.983	132.059	I-40 EB EXIT RAMP	401.28	15.00	668.80
132.343	132.381	I-40 EB ENTRANCE RAMP	200.64	15.00	334.40
132.381	132.400	I-40 WB ENTRANCE RAMP	100.32	15.00	167.20
132.626	132.702	I-40 WB EXIT RAMP	401.28	15.00	668.80
133.346	133.476	I-40 WB ENTRANCE RAMP	686.40	15.00	1144.00
133.419	133.495	I-40 EB EXIT RAMP	401.28	15.00	668.80
133.703	133.779	I-40 WB EXIT RAMP	401.28	15.00	668.80
133.779	133.873	I-40 EB ENTRANCE RAMP	496.32	15.00	827.20
135.073	135.263	I-40 EB EXIT RAMP	1003.20	15.00	1672.00
135.168	135.282	I-40 WB ENTRANCE RAMP	601.92	15.00	1003.20
135.510	135.585	I-40 EB ENTRANCE RAMP	396.00	15.00	660.00
135.510	135.621	I-40 WB EXIT RAMP	586.08	15.00	976.80
136.227	136.284	I-40 EB ENTRANCE RAMP	300.96	15.00	501.60
142.052	142.149	I-40 EB EXIT RAMP	512.16	15.00	853.60
142.073	142.149	I-40 WB ENTRANCE RAMP	401.28	15.00	668.80
142.414	142.471	I-40 EB ENTRANCE RAMP	300.96	15.00	501.60
142.490	142.577	I-40 WB EXIT RAMP	459.36	15.00	765.60
145.653	145.729	I-40 EB EXIT RAMP	401.28	15.00	668.80
145.710	145.729	I-40 WB ENTRANCE RAMP	100.32	15.00	167.20
146.183	146.278	I-40 EB ENTRANCE RAMP	501.60	15.00	836.00
146.259	146.326	I-40 WB EXIT RAMP	353.76	12.00	471.68
147.436	147.511	I-40 WB ENTRANCE RAMP	396.00	15.00	660.00
147.517	147.650	I-40 EB EXIT RAMP	702.24	15.00	1170.40
147.839	147.915	I-40 EB ENTRANCE RAMP	401.28	15.00	668.80
SUBTOTAL (BOX 1 OF 2) :			**275309.76**		**970402.40**

NOTE: ACHM SURFACE COURSE TO BE USED FOR LEVELING MAIN LANES AS DIRECTED BY THE ENGINEER.

EROSION CONTROL

STATION	STATION	LOCATION	PERMANENT EROSION CONTROL								
			SEEDING	LIME	MULCH COVER	WATER	SECOND SEEDING APPLICATION	ROCK DITCH CHECKS (E-6)	SILT FENCE (E-11)	FILTER SOCK (12") (E-13)	*SEDIMENT REMOVAL & DISPOSAL
			ACRE	TON	ACRE	M.GAL.	ACRE	CU.YD.	LIN. FT.	LIN. FT.	CU. YD.
*ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.			0.05	1.00	0.05	5.1	0.05	1000	500	1000	19
TOTALS:			**0.05**	**1.00**	**0.05**	**5.1**	**0.05**	**1000**	**500**	**1000**	**19**

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

NOTE: THE TEMPORARY EROSION CONTROL DEVICES SHOWN ABOVE AND ON THE PLANS SHALL BE INSTALLED IN SUCH A SEQUENCE AS TO DETER EROSION AND SEDIMENTATION ON U.S. WATERWAYS AS EXPLAINED BY THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT.

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

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.18633
LANDON K. MILLER
11-1-2022

GRINDING PORTLAND CEMENT CONCRETE PAVEMENT

LOG MILE	LOG MILE	LOCATION	WIDTH	LENGTH	GRINDING PORTLAND CEMENT CONCRETE PAVEMENT
			FEET	FEET	SQ. YD.
126.66	126.67	I-40 EB-BRIDGE 07226 WEST APPROACH O.S. SHLDR	10.00	22	24.44
126.66	126.67	I-40 EB-BRIDGE 07226 WEST APPROACH O.S. LN.	12.00	22	29.33
126.66	126.67	I-40 EB-BRIDGE 07226 WEST APPROACH CTR. LN.	12.00	26	34.67
126.66	126.67	I-40 EB-BRIDGE 07226 WEST APPROACH I.S. LN.	12.00	32	42.67
126.66	126.67	I-40 EB-BRIDGE 07226 WEST APPROACH I.S. SHLDR	18.00	23	46.00
TOTALS:					**177.11**

ULTRATHIN BONDED WEARING COURSE (BOX 2 OF 2)

LOG MILE	LOG MILE	LOCATION	TOTAL LENGTH	AVG. WIDTH	ULTRATHIN BONDED WEARING COURSE (3/4" - TYPE C)
			FEET	FEET	SQ. YD.
MAIN LANES					
COLLECTOR / DISTRIBUTOR LANES					
128.285	128.433	I-40 WB	781.44	22.50	1953.60
128.433	128.509	I-40 WB	401.28	15.00	668.80
128.433	128.603	I-40 WB	897.60	15.00	1496.00
128.584	128.603	I-40 WB	100.32	15.00	167.20
128.603	128.717	I-40 WB	601.92	26.00	1738.88
128.603	128.774	I-40 EB	902.88	15.00	1504.80
128.717	128.736	I-40 WB	100.32	15.00	167.20
128.717	128.831	I-40 WB	601.92	15.00	1003.20
128.774	128.850	I-40 EB	401.28	24.00	1070.08
128.812	128.831	I-40 WB	100.32	15.00	167.20
128.831	128.868	I-40 WB	195.36	22.50	488.40
128.850	128.944	I-40 EB	496.32	19.50	1075.36
128.868	128.944	I-40 WB	401.28	15.00	668.80
SUBTOTAL (BOX 1 OF 2) :			**275309.76**		**970402.40**
SUBTOTAL (BOX 2 OF 2) :			**5982.24**		**12169.52**
TOTAL:			**281292.00**		**982571.92**

NOTE: ACHM SURFACE COURSE TO BE USED FOR LEVELING MAIN LANES AS DIRECTED BY THE ENGINEER.

REINFORCEMENT MAT FOR ASPHALT PAVEMENT

LOG MILE	LOG MILE	LOCATION	AVG. WIDTH	TOTAL LENGTH	REINFORCEMENT MAT FOR ASPHALT PAVEMENT
			FEET	FEET	SQ. YD.
125.262	126.665	I-40 EB - INSIDE	6.00	7407.84	4938.56
125.262	126.665	I-40 WB - INSIDE	6.00	7407.84	4938.56
126.758	129.784	I-40 EB - INSIDE	6.00	15977.28	10651.52
126.758	129.784	I-40 WB - INSIDE	6.00	15977.28	10651.52
129.817	131.594	I-40 EB - INSIDE	6.00	9382.56	6255.04
129.817	131.594	I-40 WB - INSIDE	6.00	9382.56	6255.04
131.651	137.555	I-40 EB - INSIDE	6.00	31173.12	20782.08
131.651	137.555	I-40 WB - INSIDE	6.00	31173.12	20782.08
137.586	137.728	I-40 EB - INSIDE	6.00	749.76	499.84
137.586	137.728	I-40 WB - INSIDE	6.00	749.76	499.84
137.802	143.594	I-40 EB - INSIDE	6.00	30581.76	20387.84
137.802	143.594	I-40 WB - INSIDE	6.00	30581.76	20387.84
143.636	144.896	I-40 EB - INSIDE	6.00	6652.80	4435.20
143.636	144.912	I-40 WB - INSIDE	6.00	6737.28	4491.52
144.990	146.355	I-40 EB - INSIDE	6.00	7207.20	4804.80
145.006	146.355	I-40 WB - INSIDE	6.00	7122.72	4748.48
146.386	147.915	I-40 EB - INSIDE	6.00	8073.12	5382.08
* ENTIRE	PROJECT	TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER	6.00	45267.55	30178.37
TOTAL:					**181070.21**

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

EPOXY POLYMER CONCRETE (EPC) OVERLAY-APPROACH SLABS

LOG MILE	LOG MILE	LOCATION	WIDTH	LENGTH	FURNISH EPOXY POLYMER CONCRETE MATERIAL	PLACE EPOXY POLYMER CONCRETE OVERLAY
			FEET	FEET	CUBIC FOOT	SQ. YD.
126.75	126.76	I-40 EB-BRIDGE 07226 EAST APPROACH O.S. SHLDR	4.00	33	11.00	14.67
126.75	126.76	I-40 EB-BRIDGE 07226 EAST APPROACH O.S. LN.	12.00	64	64.00	85.33
126.75	126.76	I-40 EB-BRIDGE 07226 EAST APPROACH CTR. LN.	12.00	53	53.00	70.67
126.75	126.76	I-40 EB-BRIDGE 07226 EAST APPROACH I.S. LN.	12.00	47	47.00	62.67
126.75	126.76	I-40 EB-BRIDGE 07226 EAST APPROACH I.S. SHLDR	4.00	61	20.33	27.11
126.75	126.76	I-40 WB-BRIDGE 07226 EAST APPROACH O.S. SHLDR	4.00	42	14.00	18.67
126.75	126.76	I-40 WB-BRIDGE 07226 EAST APPROACH O.S. LN.	12.00	43	43.00	57.33
126.75	126.76	I-40 WB-BRIDGE 07226 EAST APPROACH CTR. LN.	12.00	52	52.00	69.33
126.75	126.76	I-40 WB-BRIDGE 07226 EAST APPROACH I.S. LN.	12.00	65	65.00	86.67
126.75	126.76	I-40 WB-BRIDGE 07226 EAST APPROACH I.S. SHLDR	4.00	44	14.67	19.56
TOTALS:					**384.00**	**512.01**

NOTE: QUANTITY BASED ON ESTIMATED AVERAGE DEPTH OF 1"

NOTE: EPC OVERLAY TO BE COMPLETED PRIOR TO POLYMER OVERLAY OF APPROACH SLAB

APPROACH GUTTERS

LOG MILE	LOG MILE	LOCATION	APPROACH GUTTER (TYPE AT)	REINFORCING STEEL-RDWY. (GR. 60)	AGGREGATE BASE CRS. (CLASS 7)
			CU.YD.	POUND	TON
0.232	0.239	BRIDGE 05325 - BEGIN LT.	9.40	831	5.68
0.232	0.239	BRIDGE 05325 - BEGIN RT.	12.70	1087	8.52
TOTALS:			**22.10**	**1918**	**14.20**

EARTHWORK

STATION	STATION	LOCATION / DESCRIPTION	UNCLASSIFIED EXCAVATION	COMPACTED EMBANKMENT
			CU. YD.	
ENTIRE	PROJECT	BRIDGE 05325 - BEGIN LT.	38	475
ENTIRE	PROJECT	BRIDGE 05325 - BEGIN RT.	38	475
TOTALS:			**76**	**950**

NOTE: EARTHWORK QUANTITIES SHALL BE PAID AS PLAN QUANTITY.

ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC

LOCATION	TON	TACK COAT
		GALLON
ENTIRE PROJECT - TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER	556	1112
TOTALS:	**556**	**1112**

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

ACHM PATCHING OF EXISTING ROADWAY

DESCRIPTION	TON
* ENTIRE PROJECT - TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER	1700
TOTAL:	**1700**

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

QUANTITIES

London.Miller 11/1/2022 7:35:35 PM
WORKSPACE: ARDOT
c:\users\public\mbpw\6\dms93584\R012362_08_QTY.dgn
REVISED DATE: $$REVDAT$$

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012362	27	30
		QUANTITIES				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.18633
LANDON K. MILLER
10/3/2022

BASE AND SURFACING

LOG MILE	LOG MILE	LOCATION	LENGTH	AGGREGATE BASE COURSE (CLASS 7)		TACK COAT			ACHM SURFACE COURSE (1/2")			
						(0.17 GAL. PER SQ. YD.)						
				TON / STATION	TON	TOTAL WID.	SQ.YD.	GALLON	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 76-22
			FEET			FEET			FEET			TON
INSIDE LANES												
125.262	126.665	I-40 EB INSIDE	7407.84			12.00	9877.12	1679.11	12.00	9877.12	220.00	1086.48
125.262	126.665	I-40 WB INSIDE	7407.84			12.00	9877.12	1679.11	12.00	9877.12	220.00	1086.48
126.758	129.784	I-40 EB INSIDE	15977.28			12.00	21303.04	3621.52	12.00	21303.04	220.00	2343.33
126.758	129.784	I-40 WB INSIDE	15977.28			12.00	21303.04	3621.52	12.00	21303.04	220.00	2343.33
129.817	131.594	I-40 EB INSIDE	9382.56			12.00	12510.08	2126.71	12.00	12510.08	220.00	1376.11
129.817	131.594	I-40 WB INSIDE	9382.56			12.00	12510.08	2126.71	12.00	12510.08	220.00	1376.11
131.651	137.555	I-40 EB INSIDE	31173.12			12.00	41564.16	7065.91	12.00	41564.16	220.00	4572.06
131.651	137.555	I-40 WB INSIDE	31173.12			12.00	41564.16	7065.91	12.00	41564.16	220.00	4572.06
137.586	137.728	I-40 EB INSIDE	749.76			12.00	999.68	169.95	12.00	999.68	220.00	109.96
137.586	137.728	I-40 WB INSIDE	749.76			12.00	999.68	169.95	12.00	999.68	220.00	109.96
137.802	143.594	I-40 EB INSIDE	30581.76			12.00	40775.68	6931.87	12.00	40775.68	220.00	4485.32
137.802	143.594	I-40 WB INSIDE	30581.76			12.00	40775.68	6931.87	12.00	40775.68	220.00	4485.32
143.636	144.896	I-40 EB INSIDE	6652.80			12.00	8870.40	1507.97	12.00	8870.40	220.00	975.74
143.636	144.912	I-40 WB INSIDE	6737.28			12.00	8983.04	1527.12	12.00	8983.04	220.00	988.13
144.990	146.355	I-40 EB INSIDE	7207.20			12.00	9609.60	1633.63	12.00	9609.60	220.00	1057.06
145.006	146.355	I-40 WB INSIDE	7122.72			12.00	9496.96	1614.48	12.00	9496.96	220.00	1044.67
146.386	147.915	I-40 EB INSIDE	8073.12			12.00	10764.16	1829.91	12.00	10764.16	220.00	1184.06
146.386	147.725	I-40 WB INSIDE	7069.92			12.00	9426.56	1602.52	12.00	9426.56	220.00	1036.92
ADDITIONAL FOR CENTER & OUTSIDE LANES												
136.230	136.260	I-40 WB OUTSIDE	150.00			12.00	200.00	34.00	12.00	200.00	220.00	22.00
137.140	137.150	I-40 WB OUTSIDE	50.00			12.00	66.67	11.33	12.00	66.67	220.00	7.33
137.190	137.200	I-40 WB CENTER	50.00			12.00	66.67	11.33	12.00	66.67	220.00	7.33
137.570	137.590	I-40 WB CENTER & OUTSIDE	100.00			24.00	266.67	45.33	24.00	266.67	220.00	29.33
137.620	137.740	I-40 WB CENTER	634.00			12.00	845.33	143.71	12.00	845.33	220.00	92.99
137.740	137.760	I-40 WB CENTER	100.00			12.00	133.33	22.67	12.00	133.33	220.00	14.67
137.830	137.890	I-40 WB CENTER	317.00			12.00	422.67	71.85	12.00	422.67	220.00	46.49
137.950	137.990	I-40 WB CENTER & OUTSIDE	200.00			24.00	533.33	90.67	24.00	533.33	220.00	58.67
138.060	138.070	I-40 WB CENTER & OUTSIDE	50.00			24.00	133.33	22.67	24.00	133.33	220.00	14.67
125.750	125.800	I-40 EB CENTER	264.00			12.00	352.00	59.84	12.00	352.00	440.00	77.44
126.800	126.810	I-40 EB CENTER & OUTSIDE	50.00			24.00	133.33	22.67	24.00	133.33	220.00	14.67
127.010	127.030	I-40 EB CENTER & OUTSIDE	100.00			24.00	266.67	45.33	24.00	266.67	220.00	29.33
128.900	129.000	I-40 EB CENTER	528.00			12.00	704.00	119.68	12.00	704.00	220.00	77.44
129.750	129.810	I-40 EB CENTER & OUTSIDE	317.00			24.00	845.33	143.71	24.00	845.33	220.00	92.99
129.840	129.920	I-40 EB CENTER & OUTSIDE	422.00			24.00	1125.33	191.31	24.00	1125.33	220.00	123.79
130.270	130.290	I-40 EB CENTER	100.00			12.00	133.33	22.67	12.00	133.33	220.00	14.67
131.560	131.610	I-40 EB CENTER & OUTSIDE	264.00			24.00	704.00	119.68	24.00	704.00	220.00	77.44
131.670	131.690	I-40 EB CENTER & OUTSIDE	100.00			24.00	266.67	45.33	24.00	266.67	220.00	29.33
131.690	131.750	I-40 EB CENTER	317.00			12.00	422.67	71.85	12.00	422.67	220.00	46.49
134.380	134.430	I-40 EB CENTER	264.00			12.00	352.00	59.84	12.00	352.00	220.00	38.72
136.600	136.620	I-40 EB CENTER & OUTSIDE	100.00			24.00	266.67	45.33	24.00	266.67	220.00	29.33
137.060	137.070	I-40 EB CENTER & OUTSIDE	50.00			24.00	133.33	22.67	24.00	133.33	220.00	14.67
137.110	137.120	I-40 EB CENTER	50.00			12.00	66.67	11.33	12.00	66.67	220.00	7.33
137.440	137.450	I-40 EB CENTER	50.00			12.00	66.67	11.33	12.00	66.67	220.00	7.33
137.610	137.620	I-40 EB CENTER	50.00			12.00	66.67	11.33	12.00	66.67	220.00	7.33
137.830	137.840	I-40 EB CENTER & OUTSIDE	50.00			24.00	133.33	22.67	24.00	133.33	220.00	14.67
137.990	138.140	I-40 EB CENTER & OUTSIDE	792.00			24.00	2112.00	359.04	24.00	2112.00	220.00	232.32
ADDITIONAL FOR GUARDRAIL WIDENING AT BRIDGE 05325												
0.189	0.239	BRIDGE 05325 - BEGIN LT.	264.00	35.75	94.38				5.50	161.33	220.00	17.75
0.189	0.239	BRIDGE 05325 - BEGIN RT.	264.00	35.75	94.38				5.50	161.33	220.00	17.75
ADDITIONAL FOR LEVELING												
* TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER			117210.00			12.00	156280.00	26567.60	12.00	156280.00	VAR.	8595.40
TOTALS:					**188.76**		**478308.91**	**81312.54**		**478631.57**		**44092.77**

* NOTE: QUANTITY ESTIMATED.

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2").....94.6% MIN. AGGR.....5.4% ASPHALT BINDER
MAXIMUM NUMBER OF GYRATIONS = 205 FOR PG 76-22
TACK COAT QUANTITIES WERE CALCULATED USING THE EMULSIFIED ASPHALT RATES. REFER TO SS-400-1 FOR THE RESIDUAL ASPHALT APPLICATION RATES.

COLD MILLING ASPHALT PAVEMENT

LOG MILE	LOG MILE	LOCATION	AVG. WIDTH	TOTAL LENGTH	COLD MILLING ASPHALT PAVEMENT
			FEET	FEET	SQ. YD.
125.262	126.665	I-40 EB - INSIDE	12.00	7407.84	9877.12
125.262	126.665	I-40 WB - INSIDE	12.00	7407.84	9877.12
126.758	129.784	I-40 EB - INSIDE	12.00	15977.28	21303.04
126.758	129.784	I-40 WB - INSIDE	12.00	15977.28	21303.04
129.817	131.594	I-40 EB - INSIDE	12.00	9382.56	12510.08
129.817	131.594	I-40 WB - INSIDE	12.00	9382.56	12510.08
131.651	137.555	I-40 EB - INSIDE	12.00	31173.12	41564.16
131.651	137.555	I-40 WB - INSIDE	12.00	31173.12	41564.16
137.586	137.728	I-40 EB - INSIDE	12.00	749.76	999.68
137.586	137.728	I-40 WB - INSIDE	12.00	749.76	999.68
137.802	143.594	I-40 EB - INSIDE	12.00	30581.76	40775.68
137.802	143.594	I-40 WB - INSIDE	12.00	30581.76	40775.68
** 143.601	143.629	I-40 EB - BRIDGE B3230	36.00	150.00	600.00
143.636	144.896	I-40 EB - INSIDE	12.00	6652.80	8870.40
143.636	144.912	I-40 WB - INSIDE	12.00	6737.28	8983.04
144.990	146.355	I-40 EB - INSIDE	12.00	7207.20	9609.60
145.006	146.355	I-40 WB - INSIDE	12.00	7122.72	9496.96
146.386	147.915	I-40 EB - INSIDE	12.00	8073.12	10764.16
146.386	147.725	I-40 WB - INSIDE	12.00	7069.92	9426.56
ADDITIONAL FOR CENTER & OUTSIDE LANES					
136.230	136.260	I-40 WB - OUTSIDE	12.00	150.00	200.00
137.140	137.150	I-40 WB - OUTSIDE	12.00	50.00	66.67
137.190	137.200	I-40 WB - CENTER	12.00	50.00	66.67
137.570	137.590	I-40 WB - CENTER AND OUTSIDE	24.00	100.00	266.67
137.620	137.740	I-40 WB - CENTER	12.00	634.00	845.33
137.740	137.760	I-40 WB - CENTER	12.00	100.00	133.33
137.830	137.890	I-40 WB - CENTER	12.00	317.00	422.67
137.950	137.990	I-40 WB - CENTER AND OUTSIDE	24.00	200.00	533.33
138.060	138.070	I-40 WB - CENTER AND OUTSIDE	24.00	50.00	133.33
125.750	125.800	I-40 EB - CENTER	12.00	264.00	352.00
126.800	126.810	I-40 EB - CENTER AND OUTSIE	24.00	50.00	133.33
127.010	127.030	I-40 EB - CENTER AND OUTSIE	24.00	100.00	266.67
128.90	129.00	I-40 EB - CENTER	12.00	528.00	704.00
129.750	129.810	I-40 EB - CENTER AND OUTSIE	24.00	317.00	845.33
129.840	129.920	I-40 EB - CENTER AND OUTSIE	24.00	422.00	1125.33
130.270	130.290	I-40 EB - CENTER	12.00	100.00	133.33
131.560	131.610	I-40 EB - CENTER AND OUTSIE	24.00	264.00	704.00
131.670	131.690	I-40 EB - CENTER AND OUTSIE	24.00	100.00	266.67
131.690	131.750	I-40 EB - CENTER	12.00	317.00	422.67
134.380	134.430	I-40 EB - CENTER	12.00	264.00	352.00
136.60	136.620	I-40 EB - CENTER AND OUTSIDE	24.00	100.00	266.67
137.060	137.070	I-40 EB - CENTER AND OUTSIDE	24.00	50.00	133.33
137.110	137.120	I-40 EB - CENTER	12.00	50.00	66.67
137.440	137.450	I-40 EB - CENTER	12.00	50.00	66.67
137.610	137.620	I-40 EB - CENTER	12.00	50.00	66.67
137.830	137.840	I-40 EB - CENTER AND OUTSIDE	24.00	50.00	133.33
137.990	138.140	I-40 EB - CENTER AND OUTSIDE	24.00	792.00	2112.00
TOTAL:					**322628.91**

* NOTE: QUANTITY ESTIMATED.
** NOTE: AVERAGE MILLING DEPTH 5/8".
NOTE: AVERAGE MILLING DEPTH 2".

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

LandonMiller 10/3/2022 4:05:42 PM
WORKSPACE: ARDOT
C:\Users\landon.miller\appdata\local\Bentley\projectwise\workingdir\mb-us-pw.bentley.com_mb-us-pw-06\landon.miller@mbakerintl.com\dms93584\R012362_08_QTY.dgn
REVISED DATE: $$REVDATE$$

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012362	28	30
		DISTRICTS 6 & 8 BRIDGES - QUANTITIES - 65717				

Note:
Site Nos. 14 & 15 are project exceptions. See Roadway plans for additional information.

SCHEDULE OF BRIDGE QUANTITIES - JOB. NO. 012362

DISTRICT	SITE NO.	COUNTY	ROUTE	SECTION	LOG MILE	BRIDGE NO.	SP & 509 JOINT REHABILITATION (TYPE A) LIN. FT.	SS & 802 GROOVING SQ. YD.	SP & 803 CLASS 3 PROTECTIVE SURFACE TREATMENT LIN. FT.	SS & 804 REINFORCING STEEL-BRIDGE (GRADE 60) POUND	SS & 804 EPOXY COATED REINFORCING STEEL (GRADE 60) POUND	SS & 809 SILICONE JOINT SEALANT LIN. FT.	821 MODIFICATION OF EXISTING BRIDGE STRUCTURE (BRIDGE NO._____) LUMP SUM	SP JOB 012362 BRIDGE DECK REPAIR FOR POLYMER OVERLAYS SQ. FT.	SP JOB 012362 POLYMER OVERLAY SQ. YD.	SP JOB 012362 BRIDGE DECK REPAIR FOR LATEX MODIFIED CONCRETE OVERLAYS SQ. FT.	SP JOB 012362 HYDRODEMOLITION - CLASS 1 SQ. YD.	SP JOB 012362 VERY EARLY STRENGTH LATEX MODIFIED CONCRETE OVERLAY (1 1/2" THICK) SQ. YD.
8	1	FAULKNER	I-40	32	126.672	07226 ①					2,240		1 ⑥	2,627.1	5,838.0			
	2	FAULKNER	I-40	32	129.791	A6883 ①	112				240			274.4	609.8			
	3	FAULKNER	I-40	32	129.791	B6883 ①	112				240			274.4	609.8			
	4	FAULKNER	I-40	32	131.601	A6884 ①	224				540			632.8	1,406.3			
	5	FAULKNER	I-40	32	131.601	B6884 ①	224				540			632.8	1,406.3			
	6	FAULKNER	I-40	32	137.562	A3696 ①	224				220			252.3	560.6			
	7	FAULKNER	I-40	32	137,562	B3696 ①	224				220			251,7	559,4			
	8	FAULKNER	I-40	32	137.735	A3667 ①					760	119 ⑤		883.1	1,962.3			
	9	FAULKNER	I-40	32	137.735	B3667 ①					750	119 ⑤		881.0	1,957.8			
TOTALS FOR DISTRICT 8							1,120				5,750	238		6,709.6	14,910.3			
6	10	PULASKI	I-40	33	143,601	A3230 ①②	336				360			420,0	933,4			
	11	PULASKI	I-40	33	143.601	B3230 ③	336				360			420,0	933.4			
	12	PULASKI	I-40	33	144.919	A3232 ①					1,000	166 ⑤		1,176.0	2,613.4			
	13	PULASKI	I-40	33	144.903	B3232 ①					1,000	166 ⑤		1,176.0	2,613.4			
	16	PULASKI	I-430	21	0.239	05325 ①		1,456.0	1,192	1,270						1,490	1,655	1,655
TOTALS FOR DISTRICT 6							672	1,456.0	1,192	1,270	2,720	332		3,192.0	7,093.6	1,490	1,655	1,655
TOTALS FOR JOB 012362							1,792	1,456.0	1,192	1,270 ④	8,470 ④	570		9,901.6 ④	22,003.9	1,490 ④	1,655	1,655

①EXISTING BRIDGE DECK HAS NO ASPHALT OVERLAY.

②EXISTING BRIDGE DECK HAS SPALLS FILLED WITH ASPHALT.

③EXISTING BRIDGE DECK OVERLAYED WITH ULTRATHIN BONDED WEARING COURSE.

④QUANTITY SHOWN IS FOR ESTIMATING AND BIDDING PURPOSES ONLY. ACTUAL QUANTITY, IF ANY, WILL BE DETERMINED IN THE FIELD.

⑤EXISTING BRIDGE HAS FILLED JOINTS TO BE REMOVED AND REPLACED WITH POURED SILICONE JOINTS.

⑥MODIFICATION OF EXISTING BRIDGE STRUCTURE INCLUDES REMOVAL AND REPLACEMENT OF NEOPRENE STRIP SEAL JOINT MATERIAL. SEE STD. DWG. NO. 55064.

REFERENCE TABLE

BRIDGE NO.	EXISTING DWG. NO(S).
07226	52185
A6883	52225
B6883	52226
A6884	52235
B6884	52236
A3696	38764
B3696	38771
A3667	38778
B3667	38791
A3230	37022
B3230	37023
A3232	37036 & 37038
B3232	37037 & 37038
05325	17383, 17388-17393

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.20113
ETHAN R. B. BAKER
10-3-22

BRIDGE ENGINEER
PRINT DATE: 10/3/2022

SCHEDULE OF BRIDGE QUANTITIES
CONWAY - NORTH LITTLE ROCK (S)
FAULKNER & PULASKI COUNTIES
ROUTE I-40 SECTION 32 & 33
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: DGL DATE: 04/2022 FILENAME: B012362_Q1.DGN
CHECKED BY: ERBB DATE: 05/2022 SCALE: NONE
DESIGNED BY: MKL DATE: 04/2022

BRIDGE NO. DISTRICTS 6 & 8 BRIDGES DRAWING NO. 65717

LandonMiller 10/3/2022 4:05:44 PM
WORKSPACE: ARDOT
c:\users\landon.miller\appdata\local\bentley\projectwise\workingdir\mb-us-pw.bentley.com.mb-us-pw-06\landon.miller@mbakerintl.com\dms93563\B012362_Q1.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
10-10-2022		6	ARK.	012362	29	30
10-17-2022		SUMMARY OF QUANTITIES AND REVISIONS				
11-1-2022						

SUMMARY OF QUANTITIES

ITEM NUMBER	ITEM	QUANTITY	UNIT
202	REMOVAL AND DISPOSAL OF GUARDRAIL	1513	LIN. FT.
SP, SS, & 210	UNCLASSIFIED EXCAVATION	76	CU. YD.
SP & 210	COMPACTED EMBANKMENT	950	CU. YD.
SP, SS, & 303	AGGREGATE BASE COURSE (CLASS 7)	203	TON
SS & 401	TACK COAT	82425	GAL.
SP, SS, & 407	MINERAL AGGREGATE IN ACHM SURFACE COURSE (1/2")	41712	TON
SP, SS, & 407	ASPHALT BINDER (PG 76-22) IN ACHM SURFACE COURSE (1/2")	2381	TON
SP	ULTRATHIN BONDED WEARING COURSE (3/4"-TYPE C)	982572	SQ. YD.
SP & 412	COLD MILLING ASPHALT PAVEMENT	322629	SQ. YD.
SP, SS, & 414	ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC	556	TON
SP, SS, & 415	ACHM PATCHING OF EXISTING ROADWAY	1700	TON
SP, SS, & 504	APPROACH GUTTERS	22.10	CU. YD.
SP, SS, & 510	GRINDING PORTLAND CEMENT CONCRETE PAVEMENT	177.11	SQ. YD.
601	MOBILIZATION	1.00	LUMP SUM
SP & 602	FURNISHING FIELD OFFICE	1	EACH
SP, SS, & 603	MAINTENANCE OF TRAFFIC	1.00	LUMP SUM
SP, SS, & 604	SIGNS	3031	SQ. FT.
SP, SS, & 604	CONSTRUCTION PROJECT INFORMATION SIGN UPDATE	10	EACH
SS & 604	BARRICADES	32	LIN. FT.
SS & 604	TRAFFIC DRUMS	1166	EACH
604	CONSTRUCTION PAVEMENT MARKINGS	897060	LIN. FT.
604	REMOVABLE CONSTRUCTION PAVEMENT MARKINGS	4310	LIN. FT.
604	REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS	6200	LIN. FT.
604	REMOVAL OF PERMANENT PAVEMENT MARKINGS	6200	LIN. FT.
SS & 604	ADVANCE WARNING ARROW PANEL	689	DAY
SP, SS, & 604	PORTABLE CHANGEABLE MESSAGE SIGN	145	WEEK
SS & 617	GUARDRAIL (TYPE A)	1100	LIN. FT.
SS & 617	GUARDRAIL TERMINAL (TYPE 2)	6	EACH
SS & 617	THRIE BEAM GUARDRAIL TERMINAL	6	EACH
620	LIME	1	TON
620	SEEDING	0.05	ACRE
SS & 620	MULCH COVER	0.05	ACRE
620	WATER	5.1	M. GAL.
621	SILT FENCE	500	LIN. FT.
621	SEDIMENT REMOVAL AND DISPOSAL	19	CU. YD.
621	ROCK DITCH CHECKS	1000	CU. YD.
SS & 621	FILTER SOCK (12")	1000	LIN. FT.
623	SECOND SEEDING APPLICATION	0.05	ACRE
635	ROADWAY CONSTRUCTION CONTROL	1.00	LUMP SUM
SP	PORTABLE TRAFFIC SIGNAL SYSTEM - ACTUATED	5	WEEK
719	THERMOPLASTIC PAVEMENT MARKING WHITE (12")	5550	LIN. FT.
SP	ENHANCED THERMOPLASTIC PAVEMENT MARKING WHITE (6")	366212	LIN. FT.
SP	ENHANCED THERMOPLASTIC PAVEMENT MARKING WHITE (12")	2445	LIN. FT.
SP	ENHANCED THERMOPLASTIC PAVEMENT MARKING YELLOW (6")	239216	LIN. FT.
721	RAISED PAVEMENT MARKERS (TYPE II)	9800	EACH
SS & 804	REINFORCING STEEL-ROADWAY (GRADE 60)	1918	POUND
SP	REINFORCEMENT MAT FOR ASPHALT PAVEMENT	181070	SQ. YD.
SP	FURNISH EPOXY POLYMER CONCRETE MATERIAL	384.00	CU. FT.
SP	PLACE EPOXY POLYMER CONCRETE OVERLAY	512.01	SQ. YD.
	STRUCTURES OVER 20' SPAN		
SP & 509	JOINT REHABILITATION (TYPE A)	1792	LIN. FT.
636	BRIDGE CONSTRUCTION CONTROL	1.00	LUMP SUM
SS & 802	GROOVING	1456.0	SQ. YD.
SP & 803	CLASS 3 PROTECTIVE SURFACE TREATMENT	1192	LIN. FT.
SS & 804	REINFORCING STEEL-BRIDGE (GRADE 60)	1270	POUND
SS & 804	EPOXY COATED REINFORCING STEEL (GRADE 60)	8470	POUND
SS & 809	SILICONE JOINT SEALANT	570	LIN. FT.
SP	VERY EARLY STRENGTH LATEX MODIFIED CONCRETE OVERLAY (1 1/2" THICK)	1655	SQ. YD.
SP	HYDRODEMOLITION - CLASS 1	1655	SQ. YD.
821	MODIFICATION OF EXISTING BRIDGE STRUCTURE (BRIDGE NO. 07226)	1.00	LUMP SUM
SP	BRIDGE DECK REPAIR FOR LATEX MODIFIED CONCRETE OVERLAYS	1490	SQ. FT.
SP	BRIDGE DECK REPAIR FOR POLYMER OVERLAYS	9901.6	SQ. FT.
SP	POLYMER OVERLAY	22003.9	SQ. YD.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.18633
LANDON K. MILLER
11-4-2022

REVISIONS

DATE	REVISION	SHEET NUMBER
10-10-2022	ADDED FLEXIBLE BEGINNING OF WORK - CALENDAR DAY CONTRACT SPECIAL PROVISION. UPDATED THE "ULTRATHIN BONDED WEARING COURSE" SPECIAL PROVISION.	3 & 29
10-17-2022	REMOVED SECTION DETAIL FOR GUARDRAIL SPECIAL DETAIL. REVISED GUARDRAIL (TYPE A) AND GUARDRAIL TERMINAL (TYPE 2) QUANTITIES.	7, 25, & 29
11-1-2022	UPDATED THE SEQUENCE OF CONSTRUCTION NOTES FROM "2 MILE SECTIONS OF CONSTRUCTION" TO "4 MILE SECTIONS OF CONSTRUCTION." UPDATED THE ULTRATHIN BONDED WEARING COURSE QUANTITY TO INCLUDE ALL OF THE COLLECTOR/DISTRIBUTOR ROADS AND QUANTITY TOTALS. UPDATED THE WIDTH OF REINFORCING MAT FOR ASPHALT PAVEMENT FROM 12'-0" WIDE TO 6'-0" WIDE. UPDATED THE QUANTITY FOR REINFORCING MAT FOR ASPHALT PAVEMENT AND REMOVED THE NOTE "QUANTITY ASSUMES TWO LAYERS OF REINFORCEMENT MAT AT TWELVE FEET WIDE." ADDED REMOVAL & DISPOSAL OF GUARDRAIL QUANTITIES. REMOVED "UNDERDRAIN INSPECTION, FLUSHING, AND REHABILITATION" SPECIAL PROVISION. REMOVED 4" PIPE UNDERDRAIN QUANTITIES	3, 4, 5, 6, 22, 25, 26 & 29

Jason.Toney 11/4/2022 2:52:04 PM
WORKSPACE: ARDOT
c:\Users\public\mblpw\67\dms93584\R012362_08_QTY.dgn
REVISED DATE: $$REVDATE$$

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012362	30	30
		DISTRICTS 6 & 8 BRIDGES - BRIDGE DATA - 65718				

BRIDGE PRESERVATION DATA TABLE
(DISTRICT 8)

CURRENT CONST. CONTRACT SITE NO.	BRIDGE NO.	ORIGINAL CONTRACT NO.	COUNTY	ROUTE	SECTION	SUPERSTRUCTURE TYPE (FOR HYDRODEMOLITION SITES)	DECK TREATMENT TYPE	DECK TREATMENT STD. DWG.	GRADE RAISE NEEDED FOR LMC OVERLAY?	THRIE-BEAM GUARDRAIL CONNECTION PRESENT?	APP. GUTTER TYPE/ STD. DRAWING	BRIDGE JOINT TREATMENT STD. DRAWING	BRIDGE JOINT TREATMENT LOCATION
1	07226	080388	FAULKNER	I-40	32	N/A	POLYMER OVERLAY	N/A	N/A	YES	N/A	55064	BENTS 1 & 4
2	A6883	080388	FAULKNER	I-40	32	N/A	POLYMER OVERLAY	N/A	N/A	YES	N/A	NO STD. DWG. - USE TYPE A JOINT REHAB AND SP. SEE ROADWAY SPECIAL DETAILS.	BENTS A1 & A4
3	B6883	080388	FAULKNER	I-40	32	N/A	POLYMER OVERLAY	N/A	N/A	YES	N/A	NO STD. DWG. - USE TYPE A JOINT REHAB AND SP. SEE ROADWAY SPECIAL DETAILS.	BENTS B1 & B4
4	A6884	080388	FAULKNER	I-40	32	N/A	POLYMER OVERLAY	N/A	N/A	YES	N/A	NO STD. DWG. - USE TYPE A JOINT REHAB AND SP. SEE ROADWAY SPECIAL DETAILS.	BENTS A1, A3, A6, & A8
5	B6884	080388	FAULKNER	I-40	32	N/A	POLYMER OVERLAY	N/A	N/A	YES	N/A	NO STD. DWG. - USE TYPE A JOINT REHAB AND SP. SEE ROADWAY SPECIAL DETAILS.	BENTS B1, B3, B6, & B8
6	A3696	001765	FAULKNER	I-40	32	N/A	POLYMER OVERLAY	N/A	N/A	NO	NONE - DRILL NEW THRIE-BEAM INTO EXISTING TRANSITION RAIL	NO STD. DWG. - USE TYPE A JOINT REHAB AND SP. SEE ROADWAY SPECIAL DETAILS.	BENTS 1, 2, 3, & 4
7	B3696	001765	FAULKNER	I-40	32	N/A	POLYMER OVERLAY	N/A	N/A	NO	NONE - DRILL NEW THRIE-BEAM INTO EXISTING TRANSITION RAIL	NO STD. DWG. - USE TYPE A JOINT REHAB AND SP. SEE ROADWAY SPECIAL DETAILS.	BENTS 1, 2, 3, & 4
8	A3667	001765	FAULKNER	I-40	32	N/A	POLYMER OVERLAY	N/A	N/A	NO	NONE - DRILL NEW THRIE-BEAM INTO EXISTING TRANSITION RAIL	55064	BENTS 1 & 8
9	B3667	001765	FAULKNER	I-40	32	N/A	POLYMER OVERLAY	N/A	N/A	NO	NONE - DRILL NEW THRIE-BEAM INTO EXISTING TRANSITION RAIL	55064	BENTS 1 & 8

BRIDGE PRESERVATION DATA TABLE
(DISTRICT 6)

CURRENT CONST. CONTRACT SITE NO.	BRIDGE NO.	ORIGINAL CONTRACT NO.	COUNTY	ROUTE	SECTION	SUPERSTRUCTURE TYPE (FOR HYDRODEMOLITION SITES)	DECK TREATMENT TYPE	DECK TREATMENT STD. DWG.	GRADE RAISE NEEDED FOR LMC OVERLAY?	THRIE-BEAM GUARDRAIL CONNECTION PRESENT?	APP. GUTTER TYPE/ STD. DRAWING	BRIDGE JOINT TREATMENT STD. DRAWING	BRIDGE JOINT TREATMENT LOCATION
10	A3230	060592	PULASKI	I-40	33	N/A	POLYMER OVERLAY	N/A	N/A	YES	N/A	NO STD. DWG. - USE TYPE A JOINT REHAB AND SP. SEE ROADWAY SPECIAL DETAILS.	BENTS 1 - 6
11	B3230	060592	PULASKI	I-40	33	N/A	POLYMER OVERLAY	N/A	N/A	YES	N/A	NO STD. DWG. - USE TYPE A JOINT REHAB AND SP. SEE ROADWAY SPECIAL DETAILS.	BENTS 1 - 6
12	A3232	060592	PULASKI	I-40	33	N/A	POLYMER OVERLAY	N/A	N/A	YES	N/A	55064	ABUTMENTS 1 & 2
13	B3232	060592	PULASKI	I-40	33	N/A	POLYMER OVERLAY	N/A	N/A	YES	N/A	55064	ABUTMENTS 1 & 2
16	05325	6855	PULASKI	I-430	21	STEEL I-BEAM	HYDRODEMOLITION & LMC OVERLAY	55060	NO	NO	AT/55036 AT BEGIN BRIDGE ONLY	N/A	N/A

Note:
Site Nos. 14 & 15 are project exceptions. See Roadway plans for additional information.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.20113
ETHAN R. B. BAKER
10-3-22

BRIDGE ENGINEER
PRINT DATE: 10/3/2022

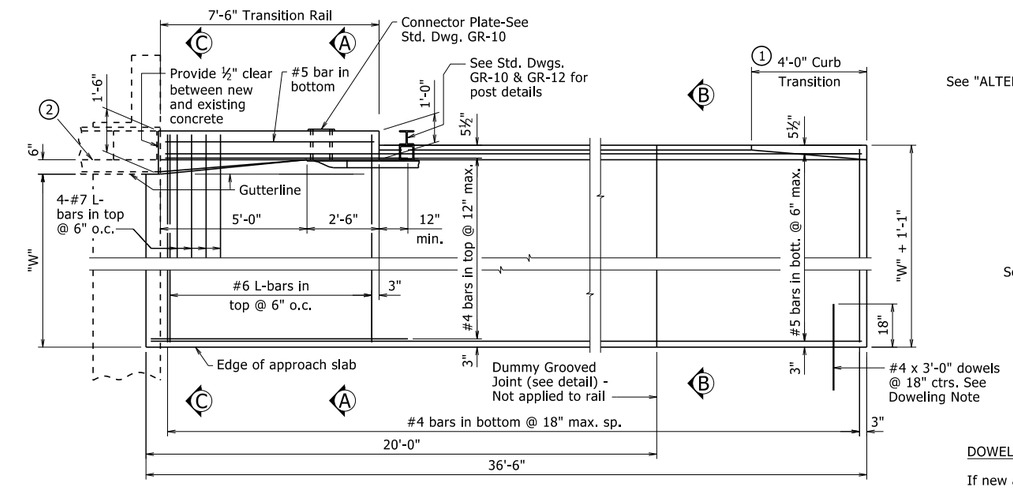
BRIDGE PRESERVATION DATA TABLE
DISTRICTS 6 & 8
ROUTE I-40 SECTION 32 & 33
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: DGL DATE: 04/2022 FILENAME: B012362_DT6,8.DGN
CHECKED BY: ERBB DATE: 05/2022 SCALE: NONE
DESIGNED BY: MKL DATE: 04/2022

BRIDGE NO. DISTRICTS 6 & 8 BRIDGES DRAWING NO. 65718

LandonMiller 10/3/2022 4:05:47 PM
WORKSPACE: ARDOT
c:\users\landon.miller\appdata\local\bentley\projectwise\workingdir\mb-us-pw.bentley.com_mb-us-pw-06\landon.miller@mbakerintl.com\dms93563\B012362_DT6,8.dgn
REVISED DATE:

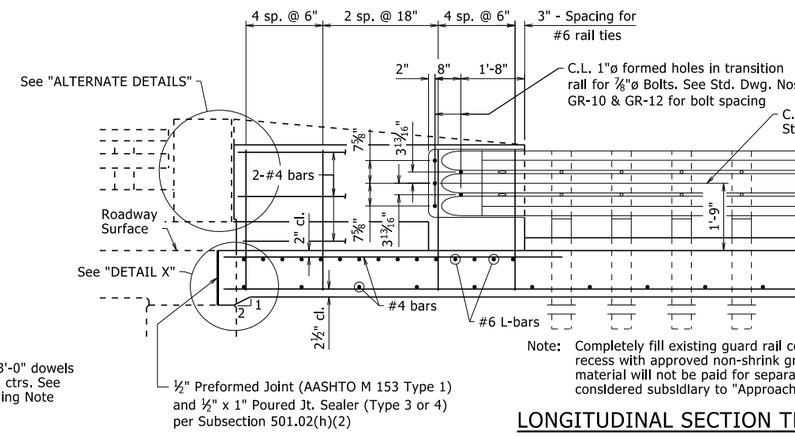
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11/7/19				6	ARK.			
				JOB NO.				
				1	- TYPE AT GUTTERS - 55036			

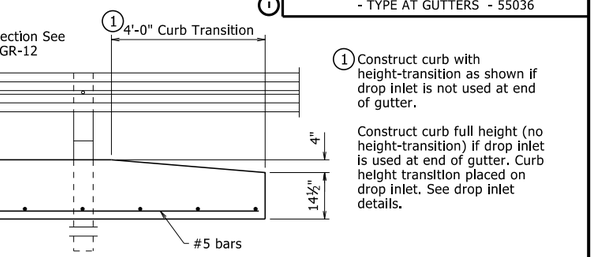


PLAN - SQUARE BRIDGES

⅜" = 1'-0"

(2) Front face of concrete wall (Type A Rail) or front face of metal pipe or tubing (Types B, C, D or E Rail).





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

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

Note: Completely fill existing guard rail connection recess with approved non-shrink grout. Work and material will not be paid for separately but will be considered subsidiary to "Approach Gutters".

LONGITUDINAL SECTION THRU GUTTER

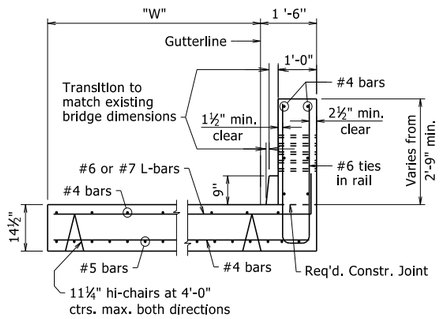
½" = 1'-0"

DOWELING NOTES

If new approach slab is used: Place dowels into approach slab using 18" embedment.

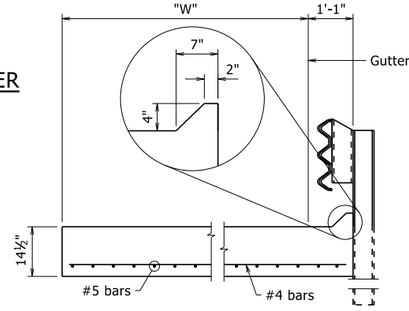
If existing approach slab is retained: Dowels shall be drilled and grouted 18" into existing slab. At the Contractor's option, existing dowels may be retained, cleaned and incorporated into new gutters. Work for drilling and grouting, or retaining and cleaning will not be paid for separately but will be considered subsidiary to "Approach Gutters".

Dowel bars, if required, will not be paid for separately, but will be considered subsidiary to other pay items.



SECTION A-A

½" = 1'-0"



SECTION B-B

½" = 1'-0"

SECTION C-C

At End of Transition Rail

½" = 1'-0"

GENERAL NOTES

Concrete shall be Class S or S(AE) or mixture used for Portland Cement Concrete Pavement.

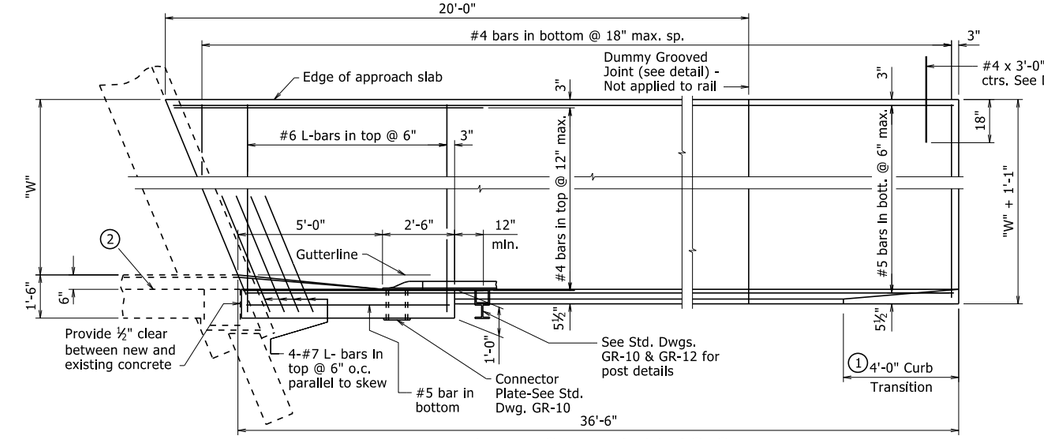
Reinforcing steel shall be Grade 60 (fy = 60,000 psi.) conforming to AASHTO M 31 or M 322, Type A, with mill test reports. Fabricate bar lengths to provide 2" minimum cover at each end.

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

Preformed Joint and Poured Joint Sealer included in the item "Approach Gutters".

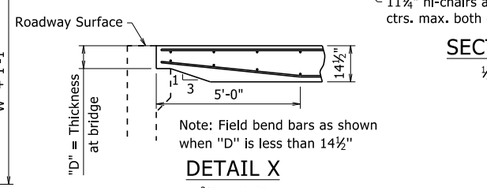
All longitudinal lines within the limits of horizontal curves shall be on curves concentric to C.L. Bridge. Adjustment to longitudinal bar lengths may be required. Transverse reinforcing shall be placed on radial lines to C.L. Bridge.

When this Standard Drawing is used as a retrofit for an existing bridge and an existing drop inlet is located within the Plan of the approach gutter, adjust the reinforcing as needed to facilitate construction of the approach gutter, unless otherwise noted.



PLAN - SKEWED BRIDGES

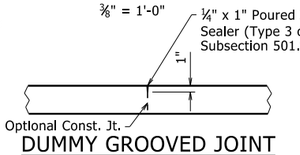
⅜" = 1'-0"



Note: Field bend bars as shown when "D" is less than 14½"

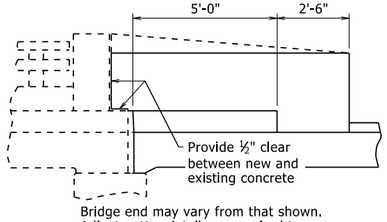
DETAIL X

⅜" = 1'-0"



DUMMY GROOVED JOINT

No Scale

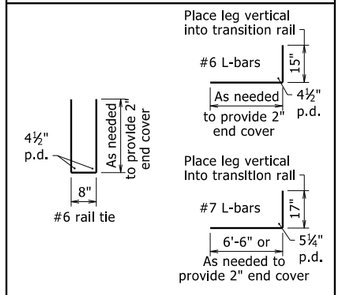


Bridge end may vary from that shown. Adjust gutter details as required to provide similar railing transition.

ALTERNATE DETAILS

NO SCALE

BENDING DIAGRAMS



Dimensions are out to out of bars.

(1) Revised and Redrawn. By: TMG
Checked By: CRE 11/7/2019

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

BRIDGE ENGINEER

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.

APPROX. QUANTITIES FOR ONE SQUARE 36'-6" APPROACH GUTTER

(For Information Only)

Concrete (cu. yd.)	("W" x 1.65) + 2.80
Reinforcing Steel (lb.)	("W" x 128.1) + 318.5

Variables: Units of "W" are in feet.

"W" = Distance from gutterline to edge of shoulder or edge of approach slab. "W" shall not be less than 3'-0" unless approach gutter is doweled into an approach slab or concrete pavement.

STANDARD DETAILS FOR TYPE 'AT' APPROACH GUTTERS (BRIDGES WITH 6" CURBS & TYPE A, B, C, D OR E RAILING)

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY:	KDH	DATE:	2/27/2014	FILENAME:	b55036.dgn
CHECKED BY:	KWY	DATE:	2/27/2014	SCALE:	AS NOTED
DESIGNED BY:	STD.	DATE:	-		

DRAWING NO. 55036

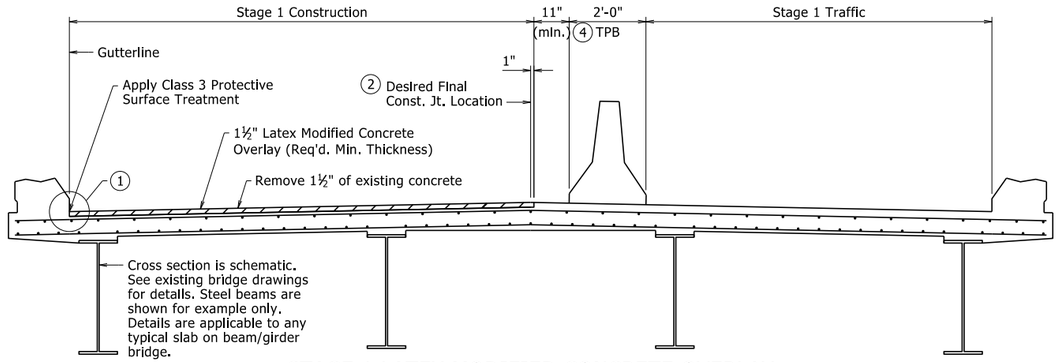
PRINT DATE: 11/20/2019

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			

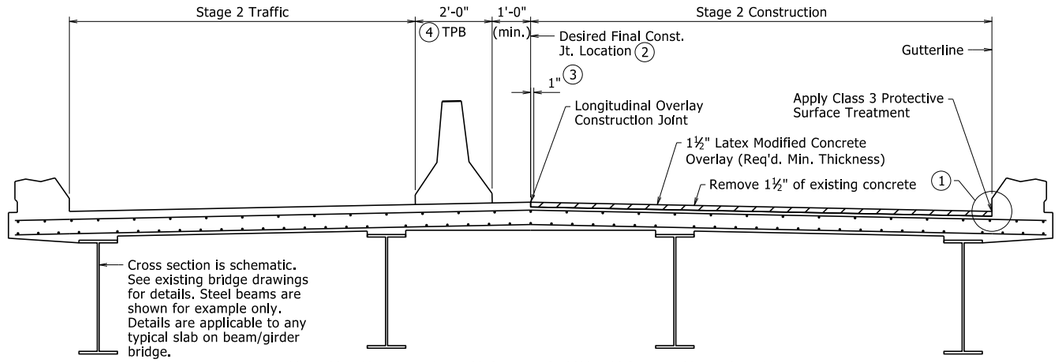
Stages of construction and traffic refer to Bridge Rehabilitation Work Zones as shown in Maintenance of Traffic Details. Numbering is shown for general purposes. See Roadway Plans for specific sequencing.

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.

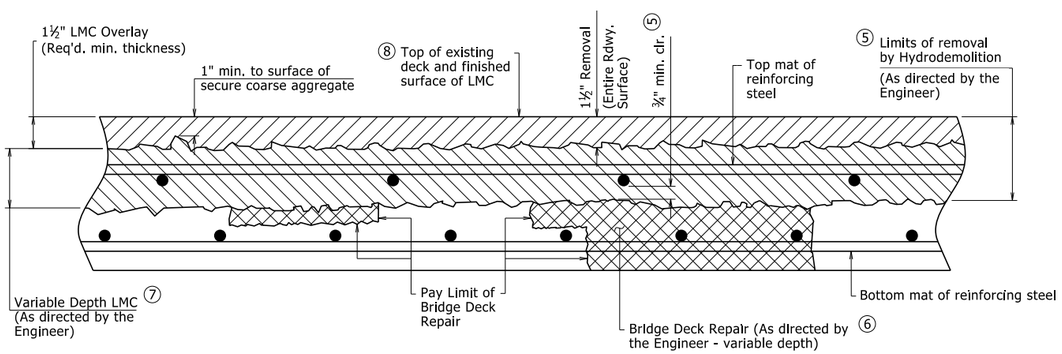
NOTE: Details shown are typical for staged construction. When full width rehabilitation of a bridge deck is possible, adjust hydrodemolition and latex modified concrete overlay operations and details accordingly.



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.

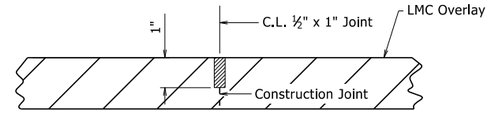
⑧ Finished surface of LMC Overlay shall match existing concrete deck surfaces unless increase is required to maintain minimum required LMC Overlay thickness and a minimum of 1½" cover to reinforcing steel and shear connectors.

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.

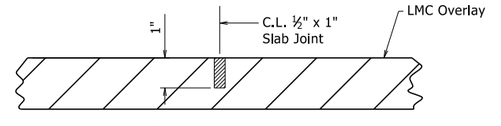
④ For staged construction, Temporary Precast Barrier (TPB) shall not be connected to the surface of the bridge deck. See Std. Dwg. TC-4 for additional details. Plastic drums shall be used in lieu of concrete barriers where shown in the Roadway Plans, see Std. Dwg. TC-3 for additional details.



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

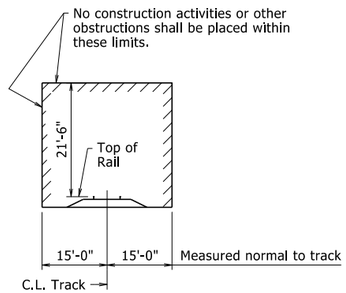
For Staged Construction



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

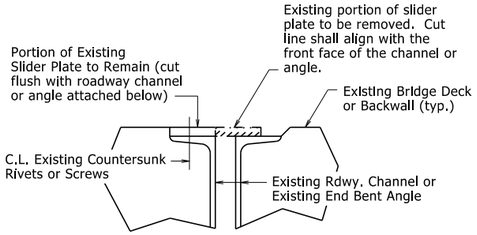
LITTLE ROCK, ARK.

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

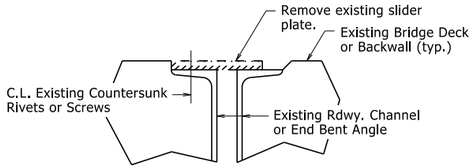
PRINT DATE: 3/22/2021

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			



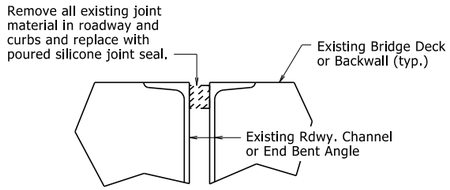
REMOVAL DETAILS AT EXISTING SLIDER PLATE JOINTS

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.



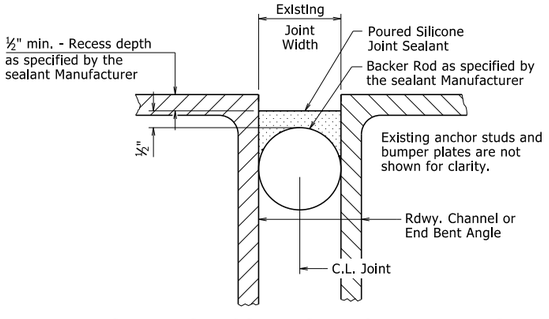
REMOVAL DETAILS AT EXISTING SLIDER PLATE JOINTS WITH GRADE RAISE

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".



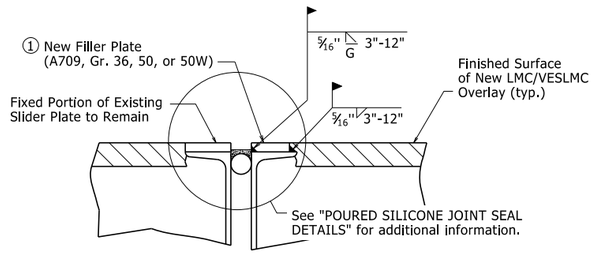
POURED SILICONE JOINT SEAL DETAILS

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".

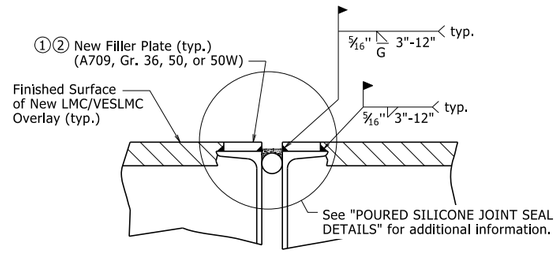
Backer rods shall be extended beyond the length of the poured joint in the initial joint repair area so that the two pieces can be properly spliced together prior to installing sealant for the adjacent joint repair. Manufacturer's recommendations shall be followed to prevent sealant leakage during repair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

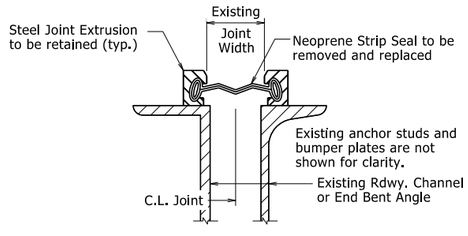


JOINT MODIFICATION WITH GRADE RAISE

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.



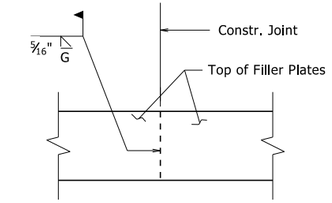
STRIP SEAL JOINT DETAILS

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.

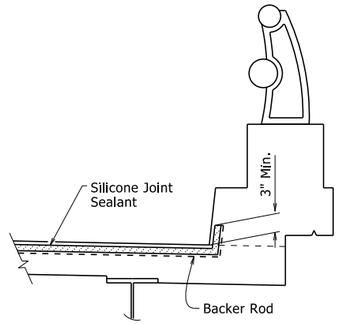
Removal and replacement of the existing neoprene strip seal joint material will require the removal of the parapet slider plates, where present. Parapet slider plates removed for this work shall be reinstalled after installation of the new neoprene strip seal joint material.

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. _)".

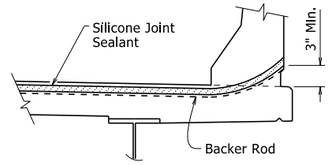


PLAN VIEW OF FILLER PLATE

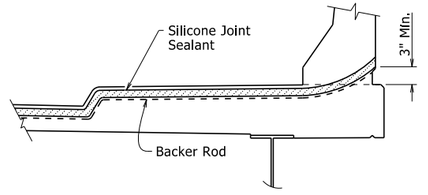


SILICONE JOINT SEAL PLACEMENT AT CURB

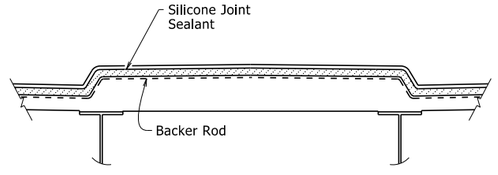
Vertical joints may require forming. The clearance from deck surface to joint material shall be maintained.



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

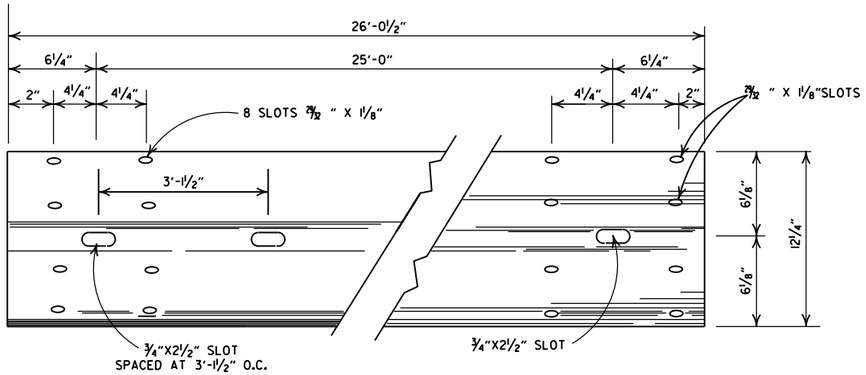
ARKANSAS STATE HIGHWAY COMMISSION

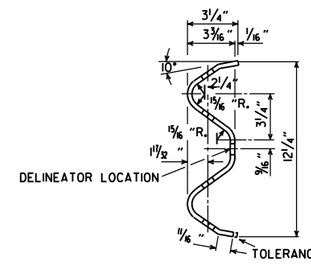
LITTLE ROCK, ARK.

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

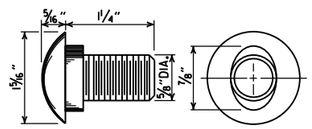
PRINT DATE: 11/4/2020



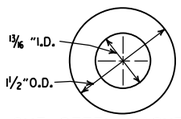


DETAILS OF W-BEAM GUARDRAIL

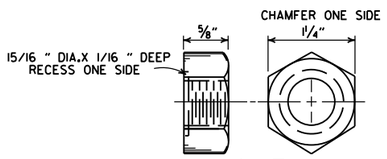
RAIL SECTION OF CLOSELY SIMILAR DIMENSIONS AND COMPARABLE STRENGTH MAY BE SUBSTITUTED IF APPROVED BY THE ENGINEER.



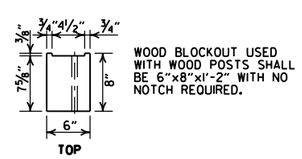
SPLICE BOLT
POST BOLT - SAME EXCEPT LENGTH



CUT STEEL WASHER

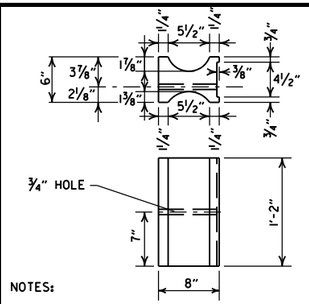


NUT



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

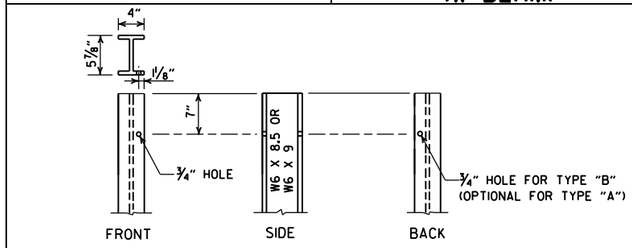
WOOD BLOCKOUT (W-BEAM)



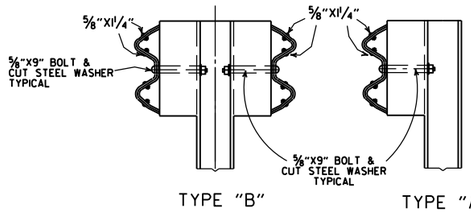
NOTES:

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

PLASTIC BLOCKOUT (W-BEAM)



STEEL POST



DETAILS OF STEEL LINE POST CONNECTIONS (W-BEAM)

-GENERAL NOTES-

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

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

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

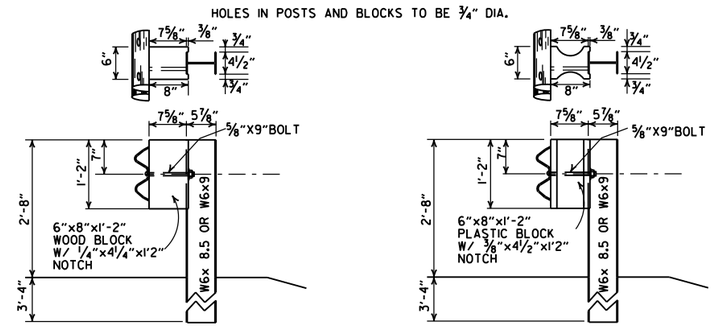
USE W-BEAM GUARDRAIL COMPONENTS OF SAME MATERIAL FOR ENTIRE JOB. FOR EXTENSIONS OR MODIFICATION OF EXISTING GUARDRAIL, W-BEAM GUARDRAIL COMPONENTS OF THE SAME TYPE AS THOSE EXISTING SHALL BE USED.

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

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

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

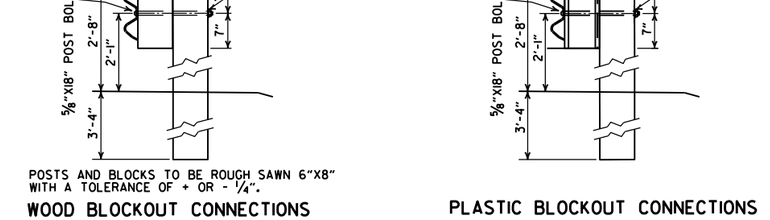
DELINEATORS SHALL BE MOUNTED AT 37.5' SPACING ON THE FRONT FACE OF THE GUARDRAIL. SPACING MAY BE REDUCED IN CURVES, AS DIRECTED BY THE ENGINEER. COLOR SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR DELINEATORS SHALL BE CONSIDERED INCLUDED IN THE PRICE BID PER LIN.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



WOOD BLOCKOUT CONNECTIONS

PLASTIC BLOCKOUT CONNECTIONS

DETAILS OF STEEL LINE POST CONNECTIONS (W-BEAM)



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

WOOD BLOCKOUT CONNECTIONS

PLASTIC BLOCKOUT CONNECTIONS

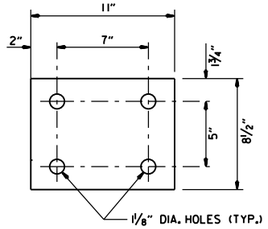
DETAILS OF WOOD LINE POST CONNECTIONS (W-BEAM)

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

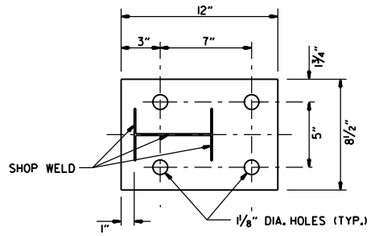
ARKANSAS STATE HIGHWAY COMMISSION

GUARDRAIL DETAILS

STANDARD DRAWING GR-6

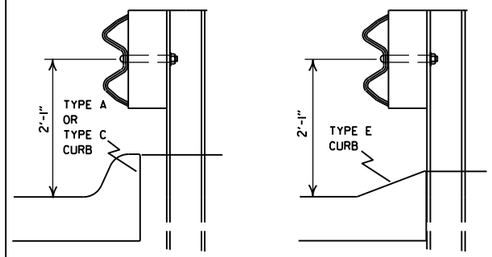


WASHER PLATE



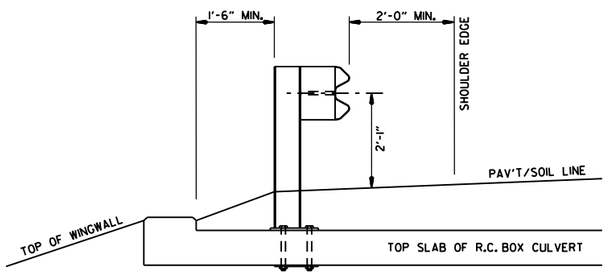
BASE PLATE

Note: Bolts, nuts, washers and plates shall be galvanized in accordance with Section 807 of the Standard Specifications.

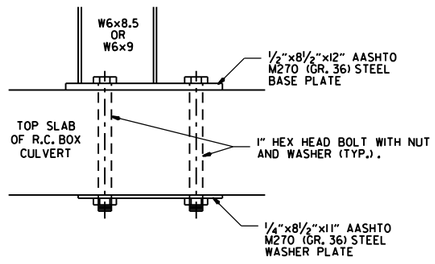


DETAIL OF GUARDRAIL PLACEMENT BEHIND CURB (W-BEAM)

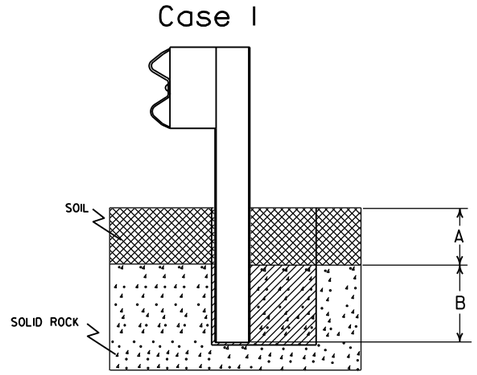
FOR DESIGN SPEEDS OF 50 MPH OR LESS ALL CURB FACES, AS SHOWN ON STD. DRWG. CG-1, MAY BE USED. FOR DESIGN SPEEDS OF 55 MPH OR MORE TYPE "E" CURB FACE SHALL BE USED.

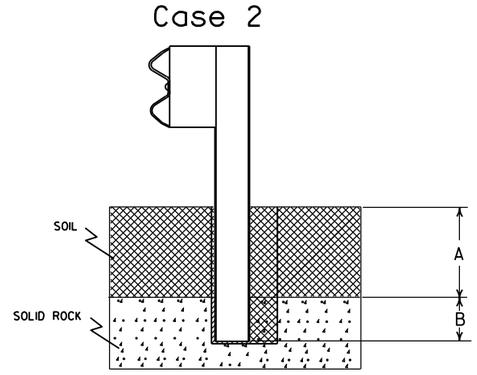


SECTION A-A



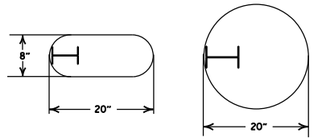
DETAIL OF CONNECTION

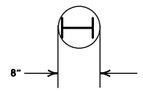




Plan View Steel Posts

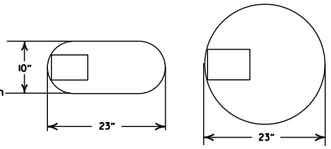
Either hole configuration acceptable

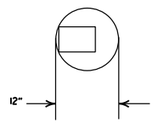




Plan View Wood Posts

Either hole configuration acceptable





Notes: For overlying soil depths (A) ranging from 0 to 18", the depth of required drilling (B) is equal to 24".

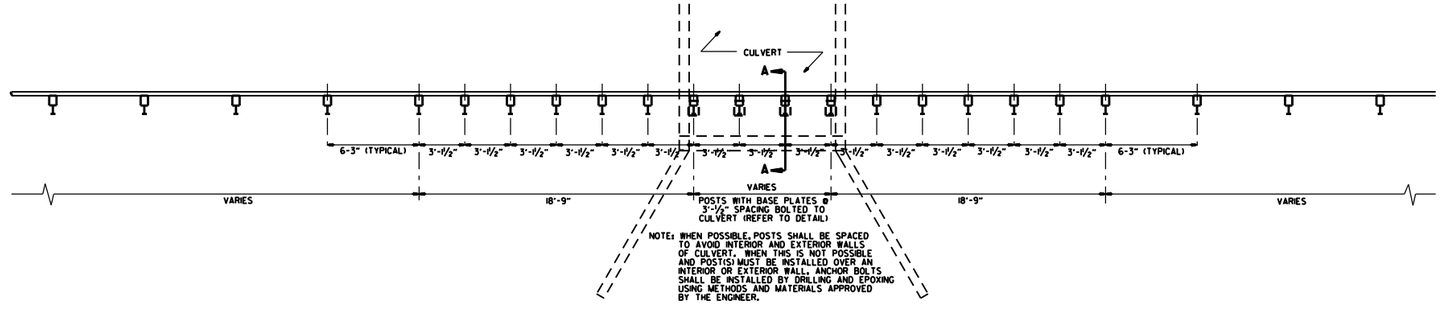
Zone A:
Backfill according to Section 617.03(a).

Zone B:
Backfill hole in 6" lifts with material meeting the requirements of Section 802.02(c) - Alternate gradation. Compact to 95% maximum dry density per ASTM D-698.

Notes: For overlying soil depths (A) ranging from 18" to 44", the depth of required drilling (B) is equal to either 12" or 44" minus the depth of soil whichever is less.

Zone A & B:
Backfill according to Section 617.03(a).

DETAIL OF POST PLACEMENT IN SOLID ROCK (W-BEAM)



PLAN LAYOUT OF TYPE A GUARDRAIL AT LOW-FILL CULVERTS

NOTE: THIS DETAIL IS TO BE USED ONLY WHEN THE COVER OVER THE CULVERT DOES NOT PERMIT FULL EMBEDMENT OF GUARDRAIL POSTS AS SHOWN ON STD. DWG. GR-6.

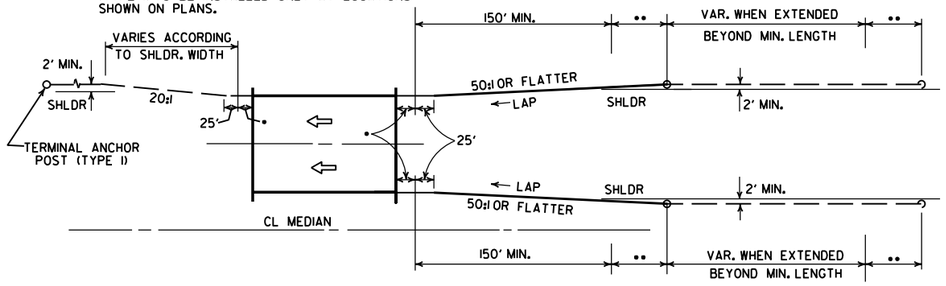
DATE	REVISION	FILMED
11-07-19	RENUMBERED, RENAMED, REVISED REFERENCE	
11-16-17	REVISED GUARDRAIL HEIGHT	
07-14-10	RAISED HEIGHT OF GUARDRAIL 1"	
04-12-07	REVISED DETAIL OF GUARDRAIL PLACEMENT BEHIND CURB	
11-10-05	ADDED GUARDRAIL PLACEMENT BEHIND CURB; REVISED DETAIL OF CONNECTION	
11-18-04	REVISED POST PLACEMENT IN ROCK & CULVERT CONNECTION DETAILS. ADDED DETAIL FOR GUARDRAIL PLACEMENT AT LOW-FILL CULVERTS	
03-30-00	REMOVED CONCRETE INSERT ANCHOR	
08-12-98	CHANGED STEEL SPACER BLOCK TO WOOD BLOCKOUT, ADDED DET. OF GUARDRAIL CONNECTION TO R.C. BOX CULV'T., DELETED DET. OF STEEL LINE POST CONN. & ADDED DET. OF GUARDRAIL PLACE. BEHIND CURB & DET. OF POSTPLACE. IN SOLID ROCK	
04-03-96	PLACED ARROWS AT CUT STEEL WASHERS	4-3-96
10-18-96	REV. ASTM REF. TO AASHTO	
11-22-95	ADDED OPTIONAL HOLES	
06-02-94	REVISED ALTERNATE POST SIZE	
08-05-93	REVISED STEEL POST SIZE	
10-01-92	REDRAWN & REVISED	10-1-92
08-02-90	DEL. WASHER ON ANCHOR ASSEMBLY	8-2-90
07-15-88	CONFORMED TO 1988 SPECS	
03-04-88	REVISED ANCHOR NOTE	
10-30-87	REVISED ANCHOR ASSEMBLY	712-10-30-87
10-30-87	REVISED PLACEMENT BEHIND CURB	547-10-30-87
10-09-87	REDRAWN & REVISED	803-10-9-87

ARKANSAS STATE HIGHWAY COMMISSION

GUARDRAIL DETAILS

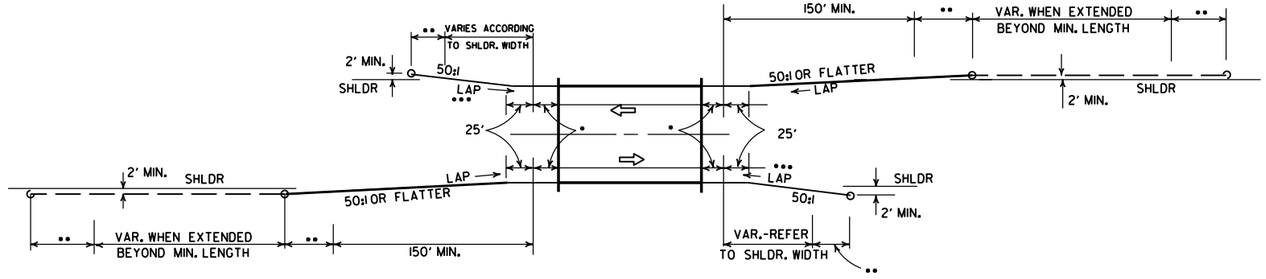
STANDARD DRAWING GR-7

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



ONE-WAY TRAFFIC

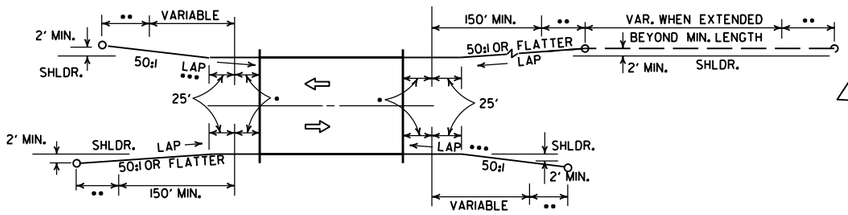
••• LAP OF GUARDRAIL SHALL BE AS SHOWN FOR A DISTANCE OF UP TO 200'. CHANGE TO LAP IN DIRECTION OF TRAVEL.



TWO-WAY TRAFFIC

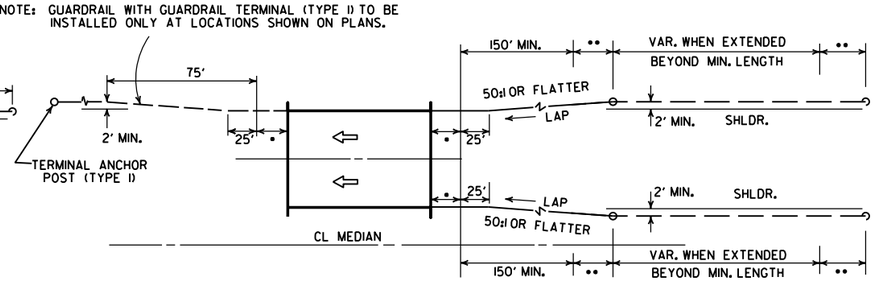
METHODS OF INSTALLATION OF GUARDRAIL AT LESS THAN FULL SHOULDER WIDTH BRIDGES USING GUARDRAIL TERMINAL (TYPE 2)

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



TWO-WAY TRAFFIC

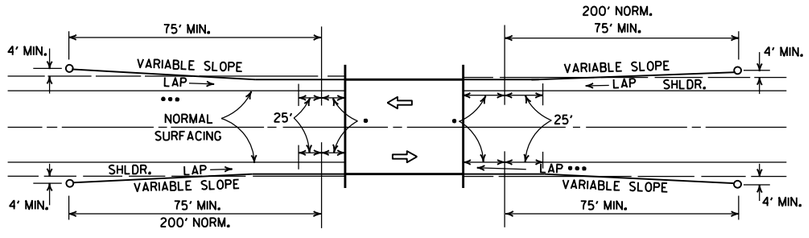
NOTE: GUARDRAIL WITH GUARDRAIL TERMINAL (TYPE 1) TO BE INSTALLED ONLY AT LOCATIONS SHOWN ON PLANS.



ONE-WAY TRAFFIC

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

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



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

LEGEND

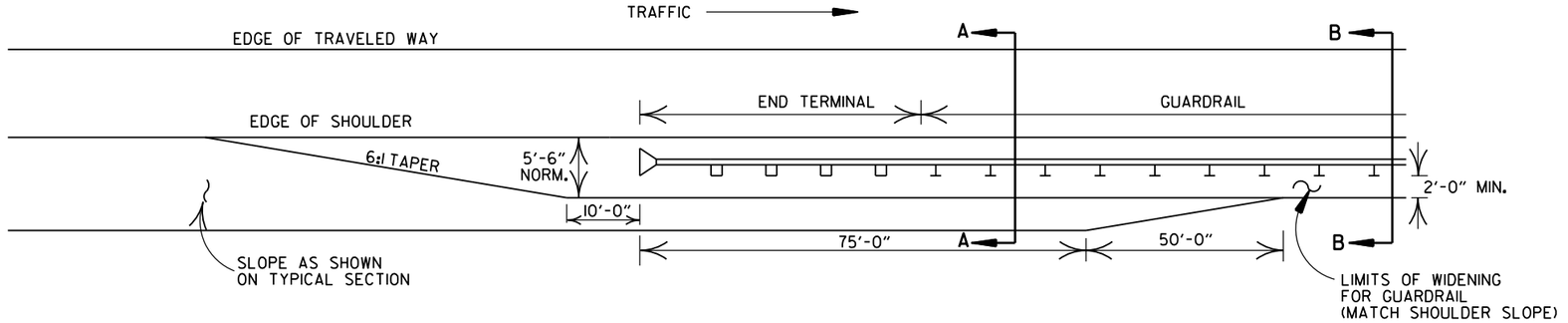
- • THRIE BEAM GUARDRAIL TERMINAL
- •• GUARDRAIL TERMINAL (TYPE 2)

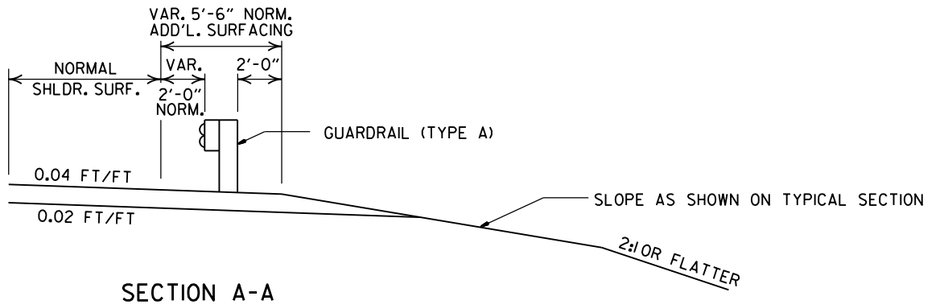
DATE	REVISION	DATE FILM
11-07-19	RENUMBERED AND RENAMED	
4-17-08	REVISED LAYOUTS	
11-10-05	REMOVED GUARDRAIL NOTES AND DETAILS	
11-16-01	DELETED NOTE-METHOD OF INSTALLATION OF GUARDRAIL USING GUARDRAIL TERM. (TY. 1)	
1-12-00	ADDED CONSTRUCTION NOTE	1-12-00
6-26-97	REVISED LAYOUT	
10-1-92	REDRAWN & REVISED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

ARKANSAS STATE HIGHWAY COMMISSION

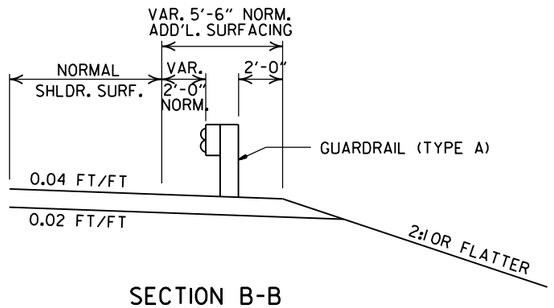
GUARDRAIL DETAILS

STANDARD DRAWING GR-8



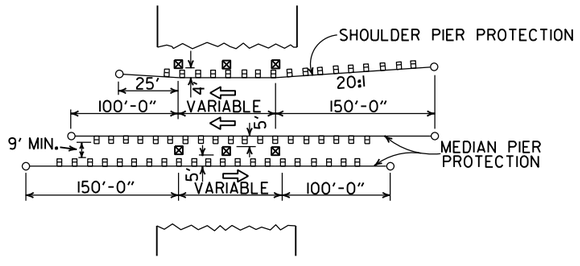


SECTION A-A



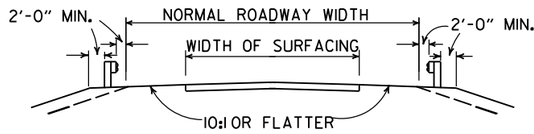
SECTION B-B

DETAILS OF WIDENING FOR GUARDRAIL

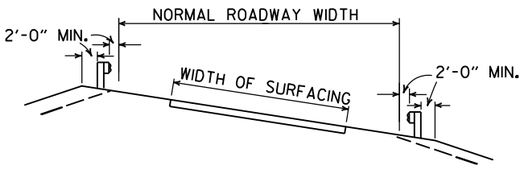


METHOD OF INSTALLATION OF GUARDRAIL AT FIXED OBSTACLE

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



SECTION ON TANGENT



SECTION ON CURVE

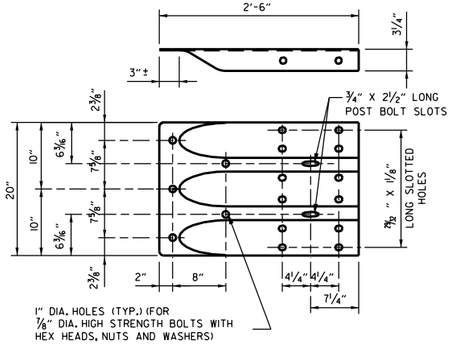
DETAILS SHOWING POSITION OF GUARDRAIL ON HIGHWAY

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

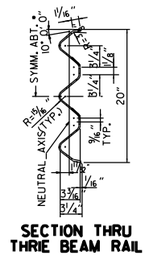
ARKANSAS STATE HIGHWAY COMMISSION

GUARDRAIL DETAILS

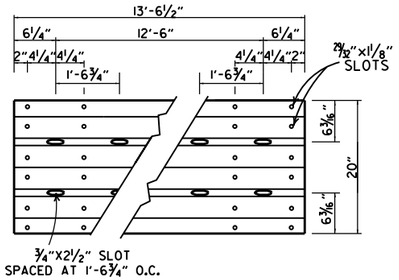
STANDARD DRAWING GR-9



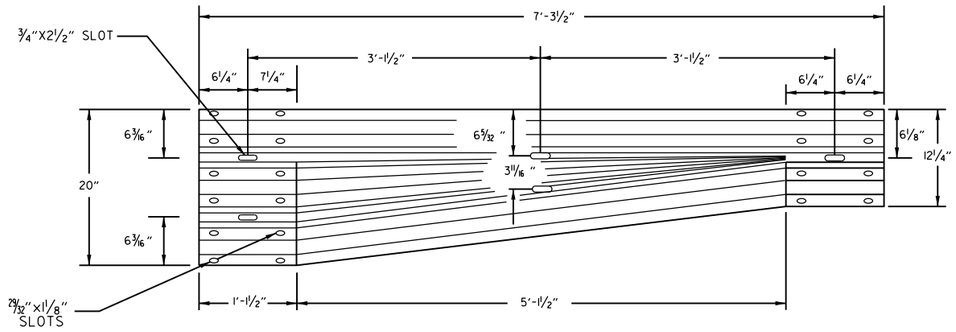
SPECIAL END SHOE



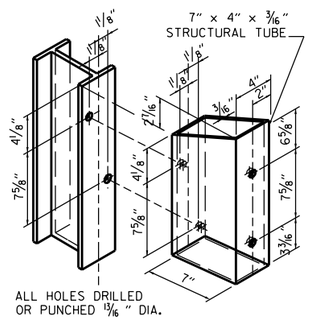
SECTION THRU THRIE BEAM RAIL



THRIE BEAM RAIL

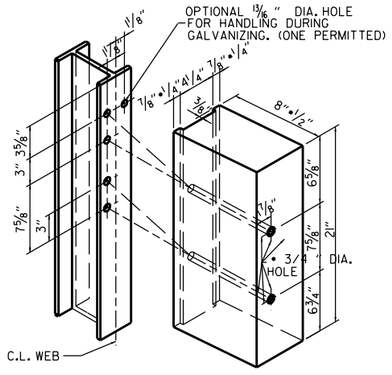


TRANSITION SECTION



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

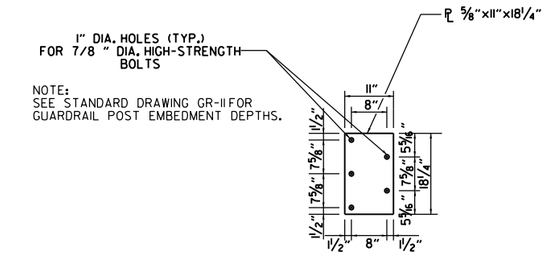
STRUCTURAL STEEL TUBING BLOCKOUT DETAIL



ALL HOLES 13/16" DIAMETER EXCEPT AS NOTED

HOLE PUNCHING DETAIL FOR STEEL POST & WOOD OR PLASTIC BLOCKOUTS

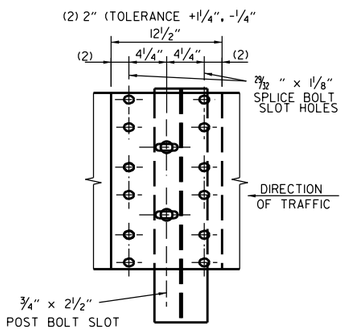
NOTE: BLOCKS SHALL BE THE SAME TYPE THROUGHOUT THE PROJECT LIMITS.



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

CONNECTOR PLATE

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



THRIE BEAM RAIL SPLICE AT POST

GENERAL NOTES:

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

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

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

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

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

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

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

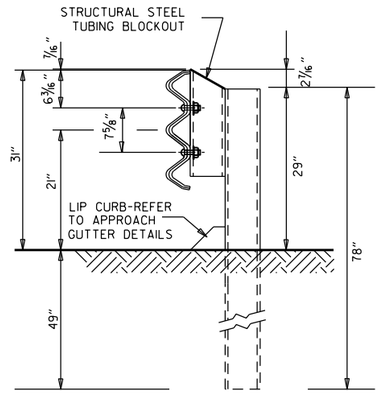
WOOD POSTS & WOOD BLOCKS SHALL BE EITHER DENSE NO. 1 STRUCTURAL OR BETTER 9.7 f (1400 f) OR NO. 1 1350 f SOUTHERN PINE.

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

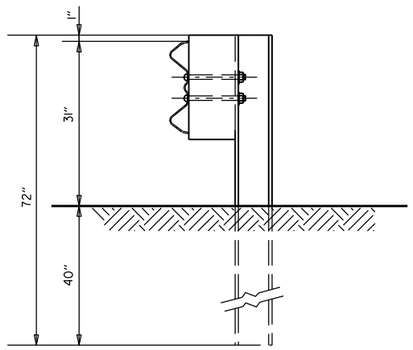
ARKANSAS STATE HIGHWAY COMMISSION

GUARDRAIL DETAILS

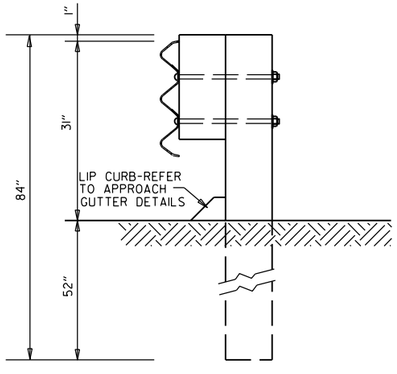
STANDARD DRAWING GR-10



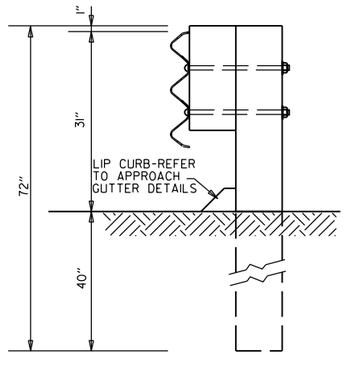
THRIE BEAM RAIL WITH STEEL TUBING BLOCKOUT
AND STEEL POST
POSTS 1-7



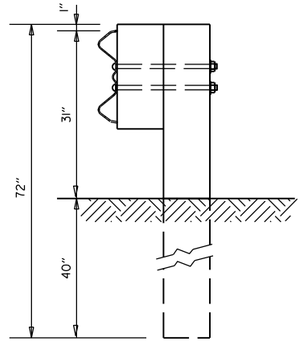
W-BEAM TO THRIE BEAM TRANSITION RAIL
WITH WOOD OR PLASTIC BLOCKOUT AND STEEL POST
POST 8



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



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



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

GENERAL NOTES:

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

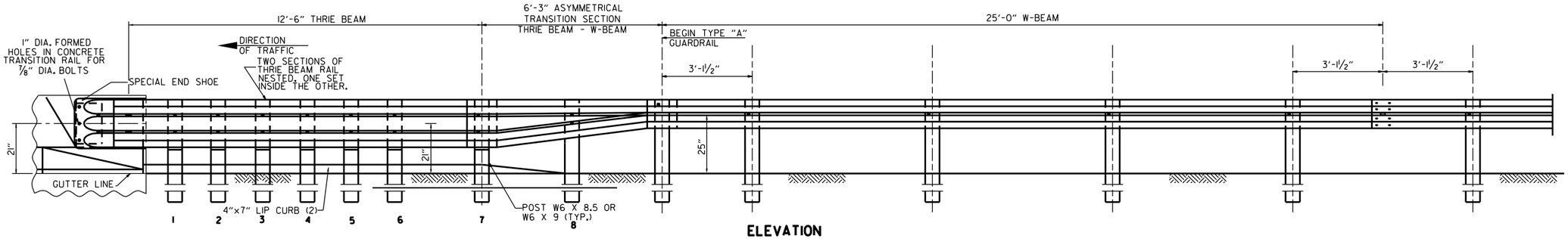
WOOD POSTS & WOOD BLOCKS SHALL BE EITHER DENSE NO. 1STRUCTURAL OR BETTER 9.7f (1400 f) OR NO. 1 1350 f SOUTHERN PINE.

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

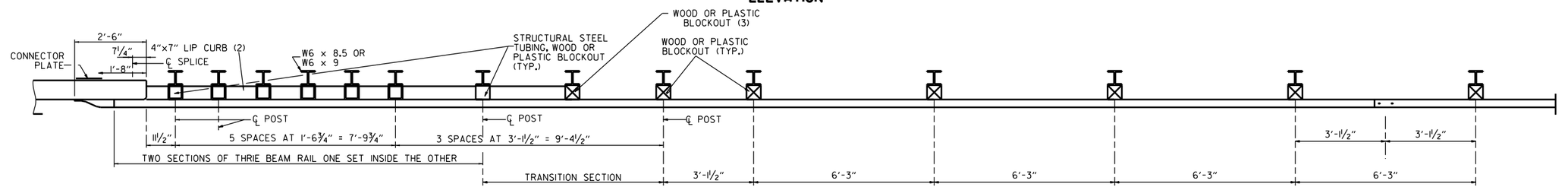
ARKANSAS STATE HIGHWAY COMMISSION

GUARDRAIL DETAILS

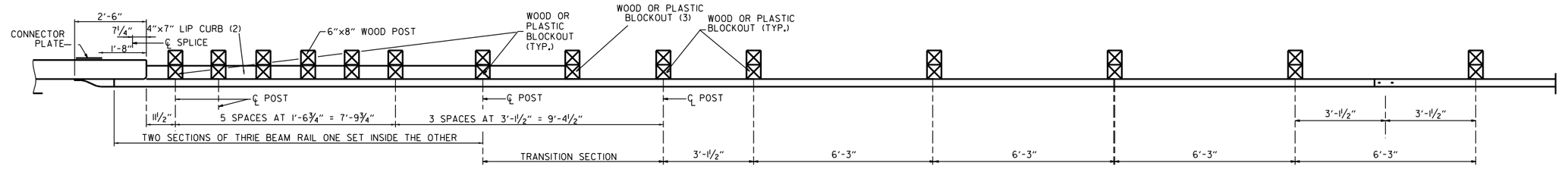
STANDARD DRAWING GR-11



ELEVATION



PLAN



PLAN

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

THRIE BEAM GUARDRAIL CONNECTION AT BRIDGE ENDS

GENERAL NOTES:

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

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

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

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

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

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

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

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

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

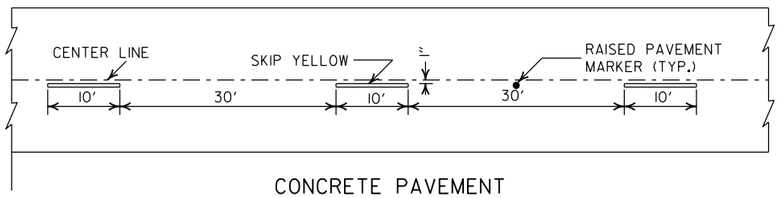
DATE	REVISION	FILMED
05-14-20	REVISED NOTES	
11-07-19	RENAMED & REVISED REFERENCES	
11-16-17	RE-DRAWN FROM STD. DWG. GR-10 & ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

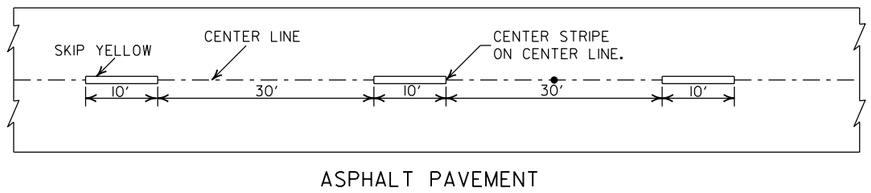
GUARDRAIL DETAILS

STANDARD DRAWING GR-12

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.

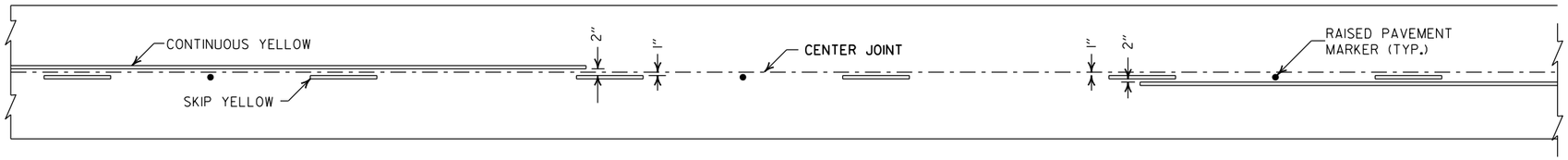


CONCRETE PAVEMENT

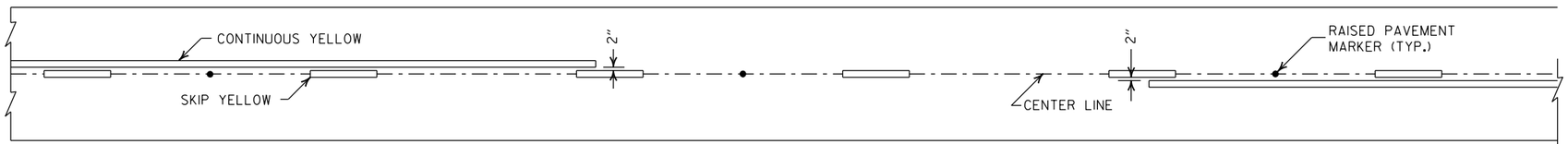


ASPHALT PAVEMENT

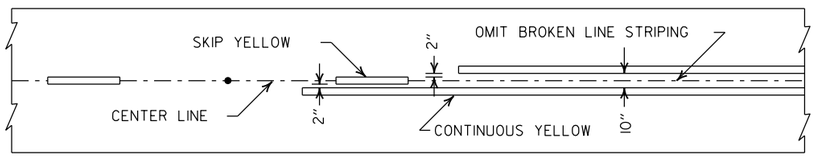
BROKEN LINE STRIPING



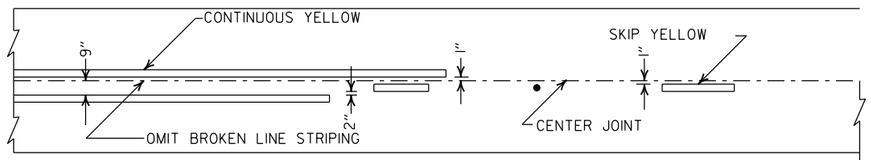
SOLID LINE STRIPING ON CONCRETE PAVEMENT



SOLID LINE STRIPING ON ASPHALT PAVEMENT

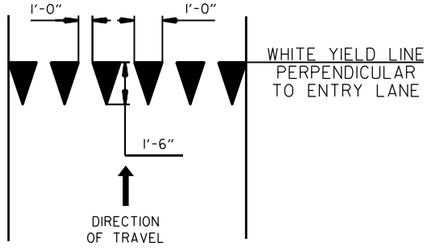


ASPHALT PAVEMENT

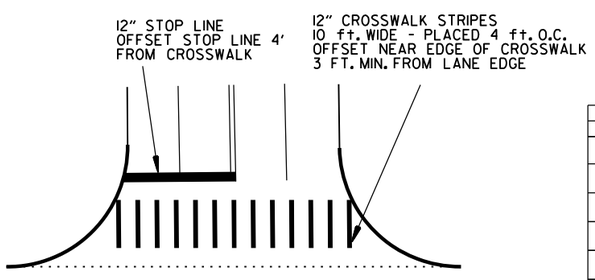


CONCRETE PAVEMENT

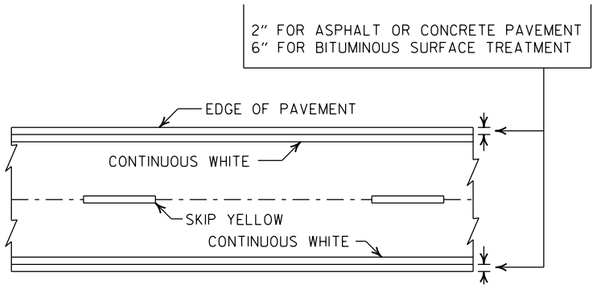
STRIPING AT ADJACENT NO PASSING LANES



YIELD LINE DETAIL



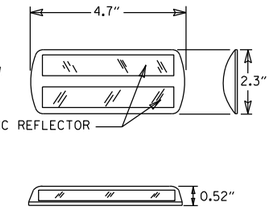
CROSSWALK AND STOP LINE DETAILS



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

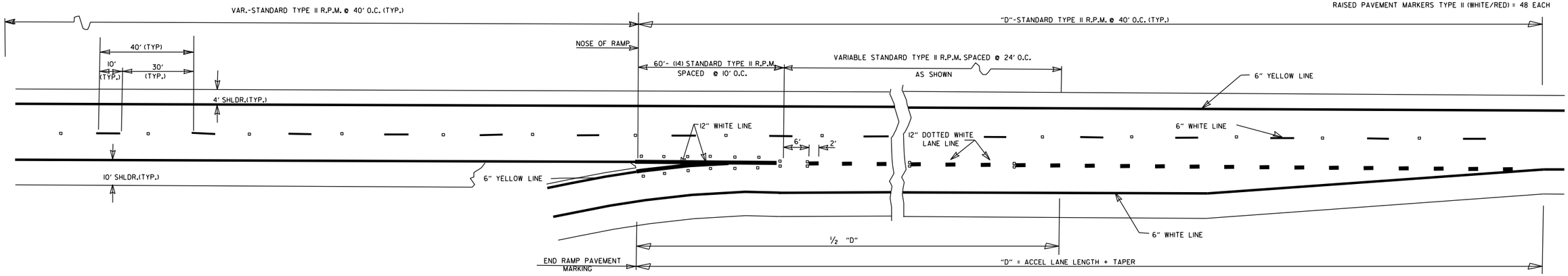
PAVEMENT MARKING QUANTITIES
(BASED ON 700' ACCEL. LANE + 300' TAPER)

ENTRANCE RAMP

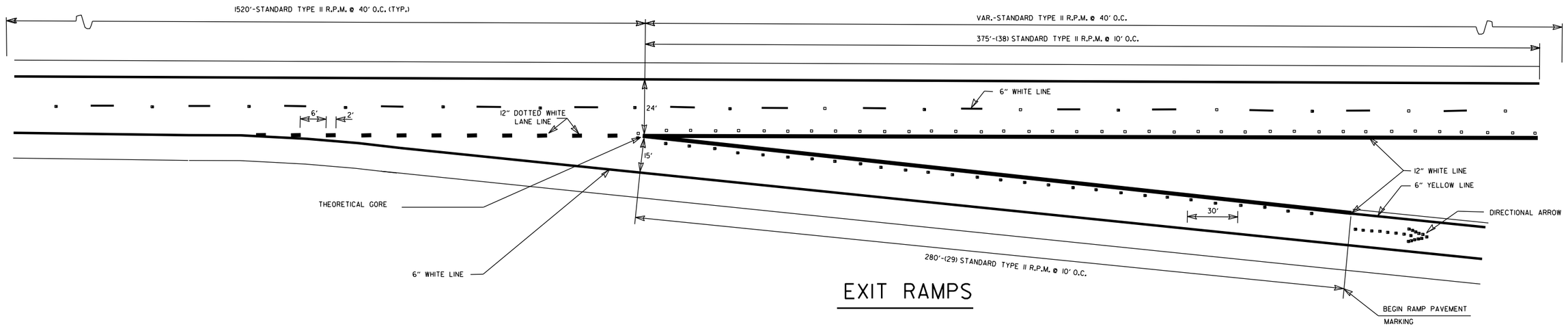
12" WHITE = 370 LIN. FT.
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED) = 38 EACH

EXIT RAMP

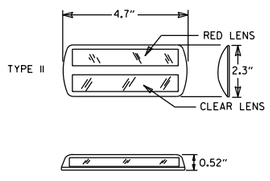
6" WHITE = 280 LIN. FT.
12" WHITE = 815 LIN. FT.
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED) = 38 EACH
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED) = 48 EACH



ENTRANCE RAMPS

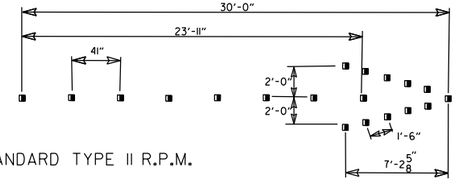


EXIT RAMPS



DETAIL OF
STANDARD
RAISED PAVEMENT MARKERS

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



(19) STANDARD TYPE II R.P.M.

DIRECTIONAL ARROWS

GENERAL NOTES:

THIS DRAWING SHOULD BE CONSIDERED AS TYPICAL ONLY AND THE FINAL LOCATION OF THE STRIPING AND PAVEMENT MARKERS SHALL BE DETERMINED BY THE ENGINEER.

THIS DRAWING SHOULD BE USED IN CONJUNCTION WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST REVISION.

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.

DATE	REVISION	FILMED
05-14-20	REMOVED CROSSHATCH MARKINGS ON EXIT RAMPS	
11-07-19	REVISED DOTTED PAV'T MARKINGS; ADDED CROSSHATCH MARKINGS ON EXIT RAMPS	
12-8-16	REVISED RAISED PAV'T MARKERS FOR 80' SPACING; REVISED WIDTH OF STRIPING	
9-12-13	REVISED DETAIL OF STANDARD RAISED PAVEMENT MARKERS	
7-26-12	REVISED RPM NOTATION	
12-15-11	REVISED RPMs ACCORDING TO LATEST POLICY	
11-17-10	REMOVED PLOWABLE PAVEMENT MARKERS	
6-3-10	REVISED PER 2009 MUTCD	
11-18-04	REVISED NOTES	
8-22-02	ADDED & REVISED NOTES; REV. ENTRANCE & EXIT RAMPS	
5-18-00	REMOVED HASHMARKS	
7-02-98	CHANGED TYPES TO ROMAN NUMERALS	
4-26-96	ADDED DIMENSIONS & QUANTITIES; REVISED LANE WIDTH ON EXIT RAMP	
2-2-95	PLACED IN USE	2-2-95

ARKANSAS STATE HIGHWAY COMMISSION

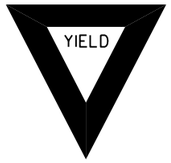
PAVEMENT MARKING DETAILS ON ACCESS CONTROLLED ROADWAYS

STANDARD DRAWING PM-2

R1-1

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

R1-2



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

R2-1

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

W3-5

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

W3-5a

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

R4-1

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

R4-2

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

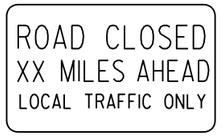
R5-1

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"

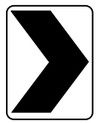
WI-4

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"

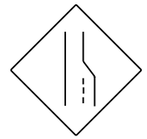
W3-1

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"

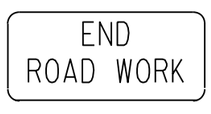
W8-9

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

G20-1

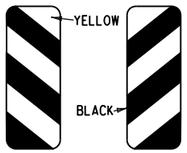
60"X24"

G20-2



48"X24"

OM-3L OM-3R



12"X36"

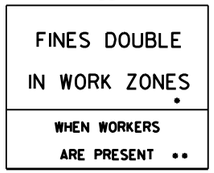
M4-9

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.

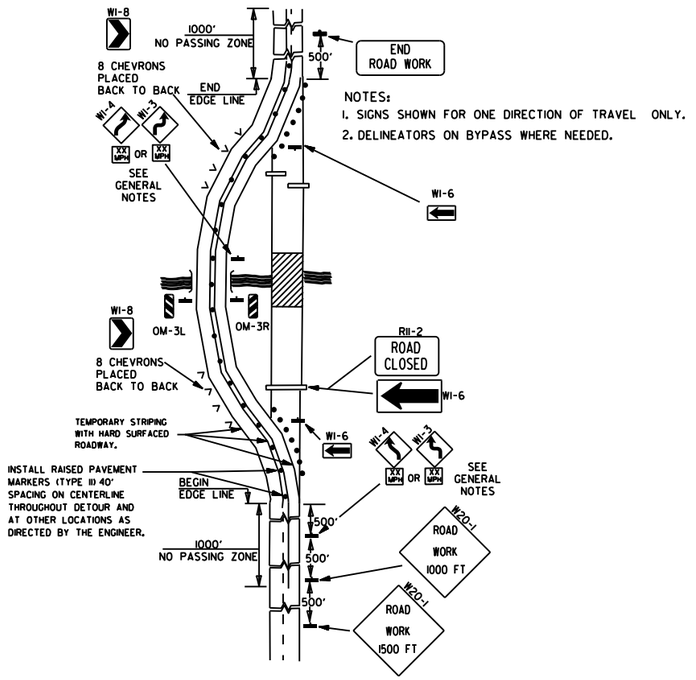
• NOTE: SUPPORTS FOR SIGNS, BARRICADES, AND VERTICAL PANELS THAT ARE DIFFERENT FROM THE REQUIREMENTS SHOWN IN NOTES 4 & 5, BUT MEET THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH), WILL BE ACCEPTED. COMPLIANCE WITH THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) IS REQUIRED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

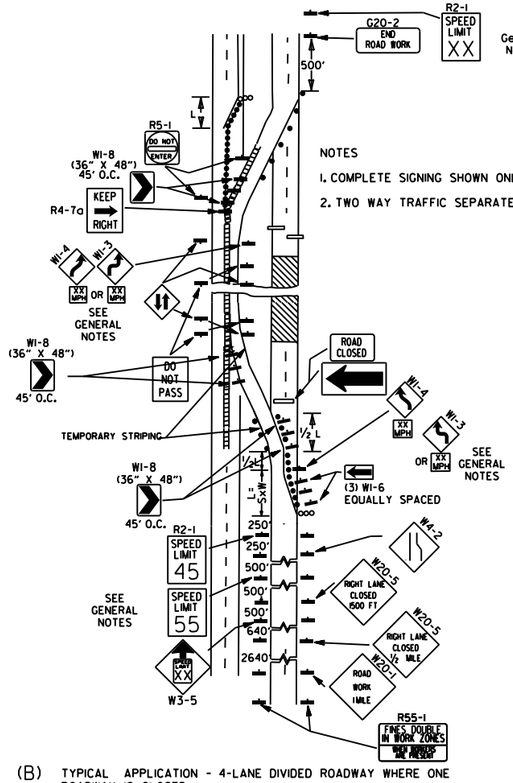
STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

STANDARD DRAWING TC-1



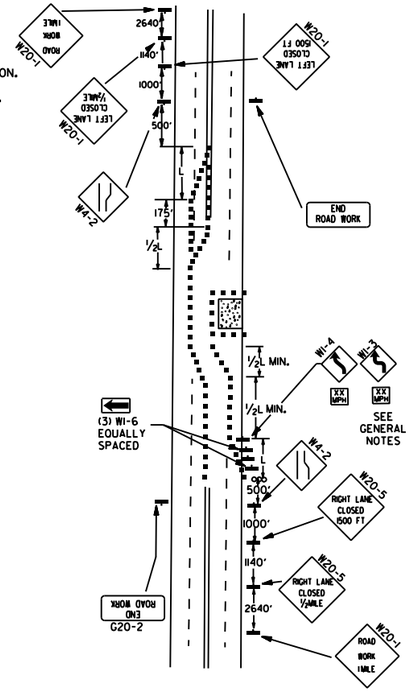
NOTES:
1. SIGNS SHOWN FOR ONE DIRECTION OF TRAVEL ONLY.
2. DELINEATORS ON BYPASS WHERE NEEDED.

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

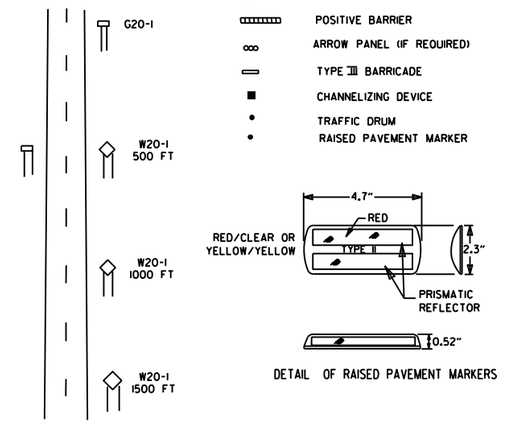


NOTES
1. COMPLETE SIGNING SHOWN ONLY IN CROSSOVER DIRECTION.
2. TWO WAY TRAFFIC SEPARATED WITH POSITIVE BARRIER.

(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:

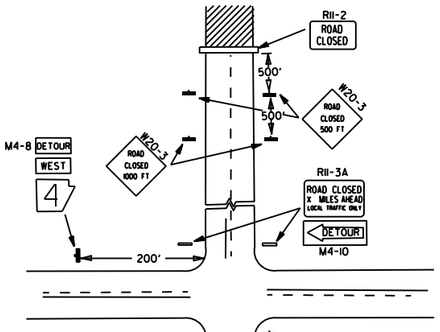
L=SXW FOR SPEEDS OF 45MPH OR MORE.

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

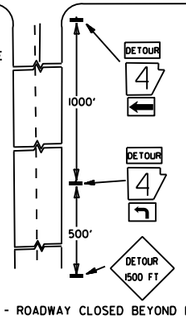
WHERE:
L= MINIMUM LENGTH OF TAPER.
S= NUMERICAL VALUE OF POSTED SPEED LIMIT PRIOR TO WORK OR 85TH PERCENTILE SPEED.
W= WIDTH OF OFFSET.

GENERAL NOTES:

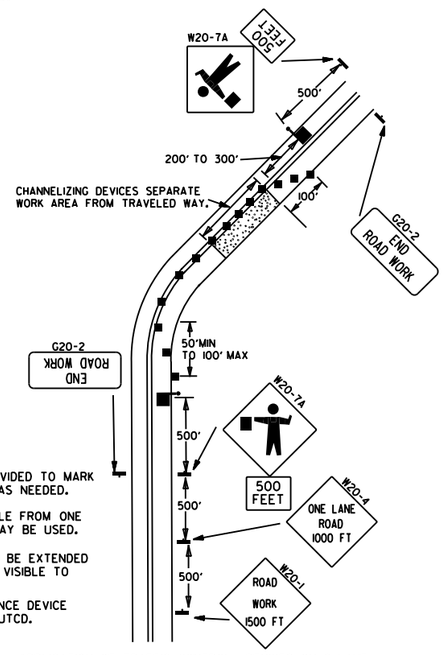
1. THE MAINTENANCE DIVISION SHALL CONDUCT A BALL BANK STUDY TO DETERMINE THE ADVISORY SPEED LIMIT PRIOR TO OPENING TO TRAFFIC. THE ADVISORY SPEED WILL BE POSTED ON W1-3 OR W1-4 CURVE WARNING SIGNS. USE W1-4 WHEN SPEED IS GREATER THAN 30MPH AND W1-3 WHEN 30MPH OR LESS
2. WHEN THE EXISTING SPEED LIMIT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

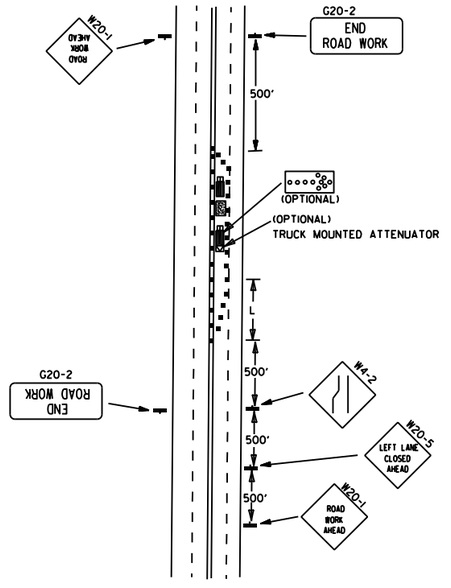


(D) TYPICAL APPLICATION - ROADWAY CLOSED BEYOND DETOUR POINT.



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.



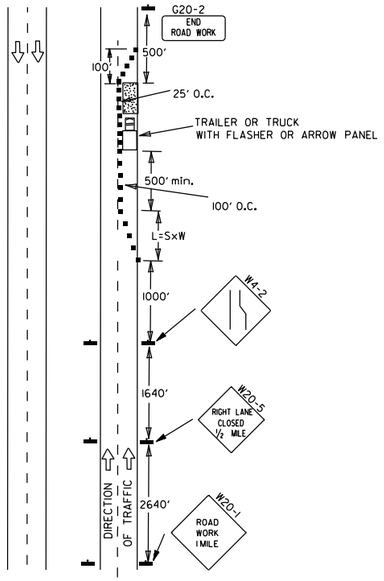
(F) TYPICAL APPLICATION - 4-LANE UNDIVIDED ROADWAY WITH INSIDE LANE CLOSED.

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	

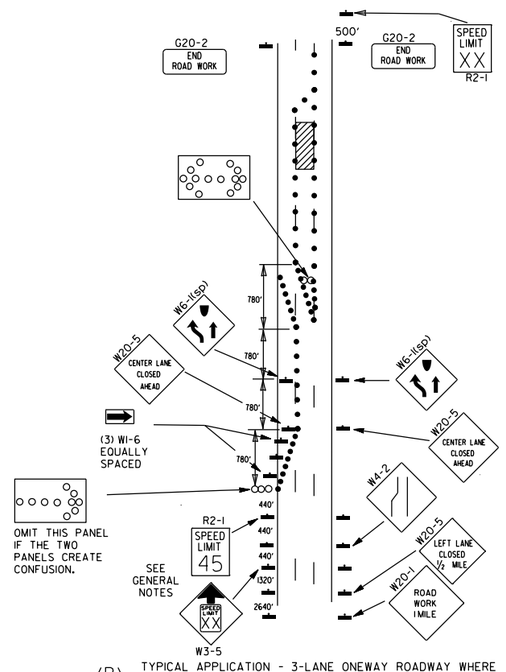
ARKANSAS STATE HIGHWAY COMMISSION

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.



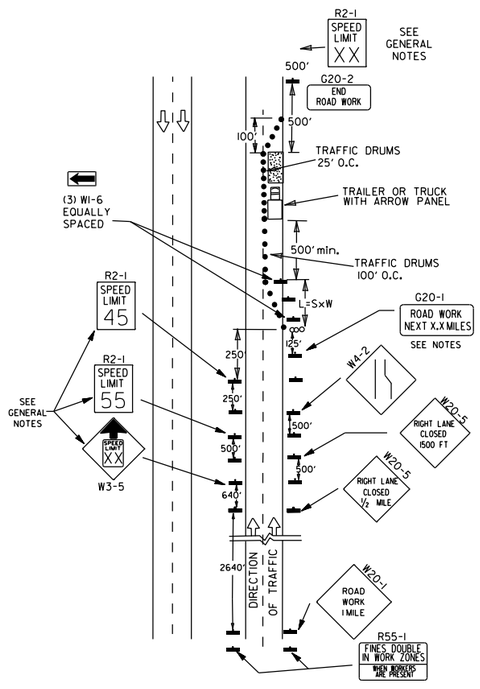
(B) TYPICAL APPLICATION - 3-LANE ONEWAY ROADWAY WHERE CENTER LANE IS CLOSED.

KEY:

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

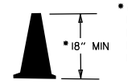
GENERAL NOTES:

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).



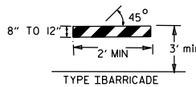
(C) TYPICAL APPLICATION - CONSTRUCTION OPERATIONS OF INTERMEDIATE TO LONG TERM DURATION ON A 4-LANE DIVIDED ROADWAY WHERE HALF OF THE ROADWAY IS CLOSED.

CHANNELIZING DEVICES



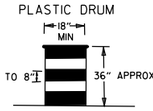
* WHEN CONES ARE USED ON FREEWAYS AND MULTI-LANE HIGHWAYS, THEY SHALL BE 28" MIN. DURING HOURS OF DARKNESS, 28" CONES SHALL BE USED ON ALL ROADWAYS, AND SHALL BE REFLECTORIZED IN ACCORDANCE WITH THE M.U.T.C.D.

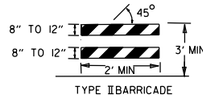
CONES



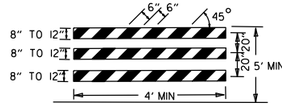
TYPE I BARRICADE

PLASTIC DRUM



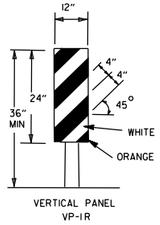


TYPE II BARRICADE



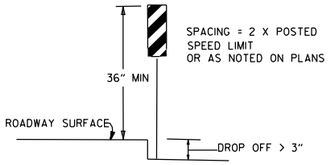
TYPE III BARRICADE

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

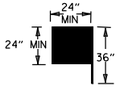


VERTICAL PANEL VP-1R

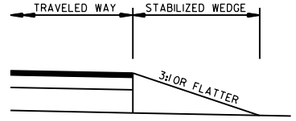
VERTICAL PANEL PLACEMENT



FLAG



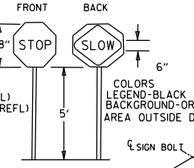
FLAG SHALL BE OF GOOD GRADE RED MATERIAL

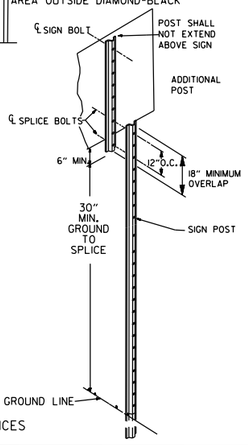


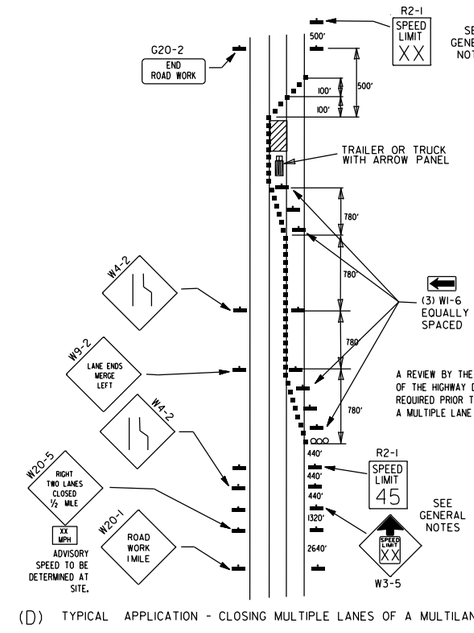
STABILIZED WEDGE

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

STOP SLOW PADDLE







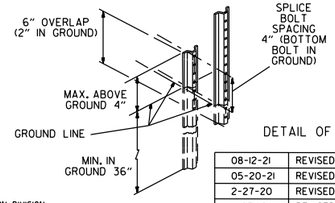
A REVIEW BY THE ROADWAY DESIGN DIVISION OF THE HIGHWAY DEPARTMENT WILL BE REQUIRED PRIOR TO IMPLEMENTING A MULTIPLE LANE CLOSURE.

(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	

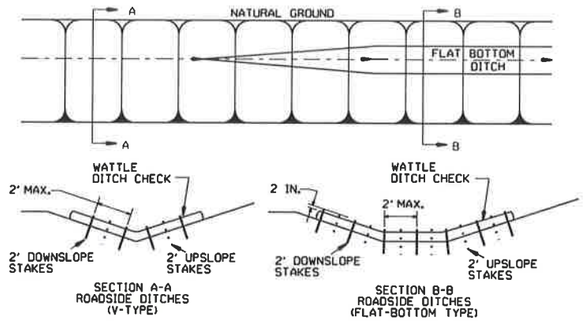
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

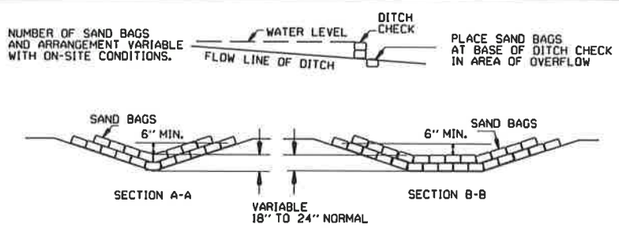
STANDARD DRAWING TC-3

GENERAL NOTES

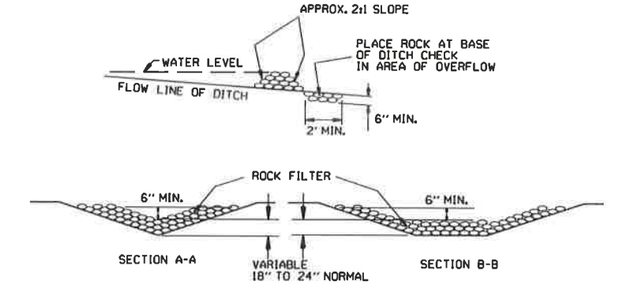
INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.



WATTLE DITCH CHECK (E-1)



SAND BAG DITCH CHECK (E-5)

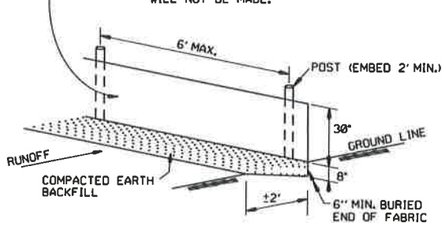


ROCK DITCH CHECK (E-6)

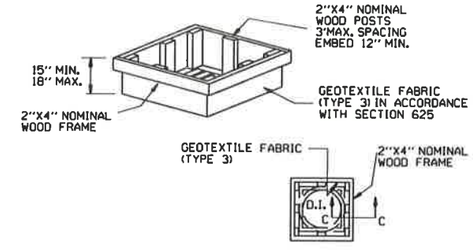
GENERAL NOTES

GEOTEXTILE FABRIC (TYPE 4) IN ACCORDANCE WITH SECTION 625

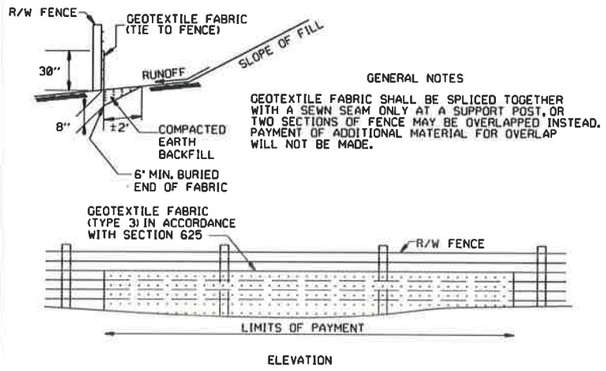
GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.



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.

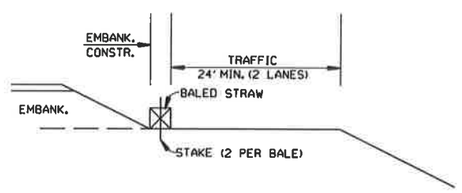
SILT FENCE ON R/W FENCE (E-4)

GENERAL NOTES

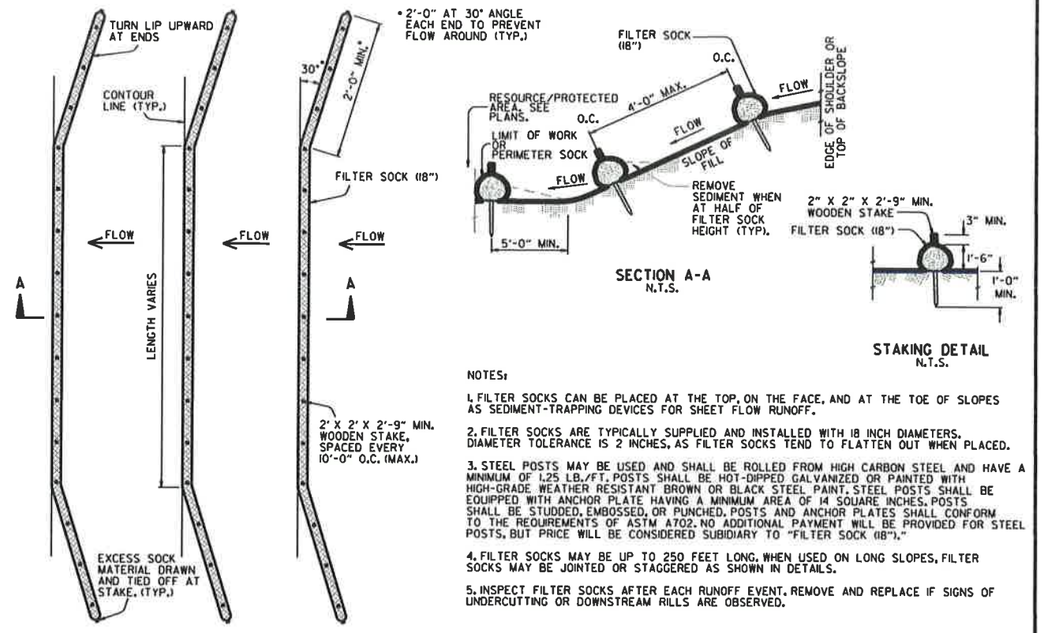
1. STRAW BALES SHALL BE INSTALLED SO THAT THE BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES. THE BALES SHALL BE A MINIMUM OF 30 INCHES IN LENGTH.

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.

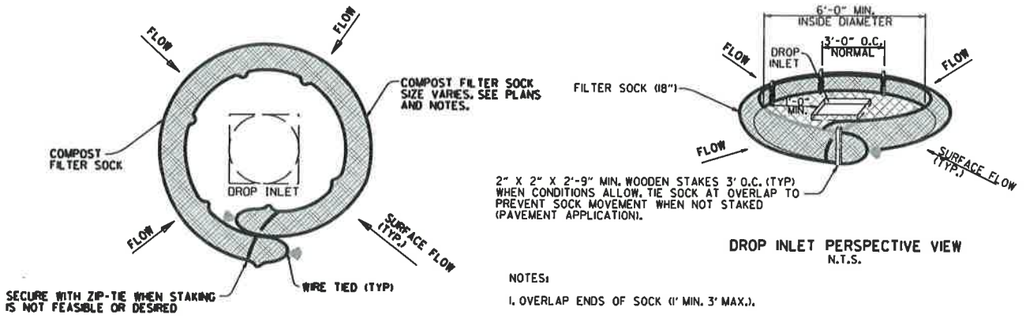
2. FILTER SOCKS ARE TYPICALLY SUPPLIED AND INSTALLED WITH 18 INCH DIAMETERS. DIAMETER TOLERANCE IS 2 INCHES, AS FILTER SOCKS TEND TO FLATTEN OUT WHEN PLACED.

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