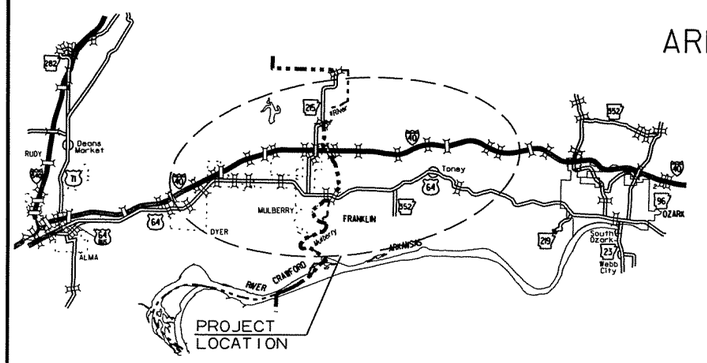
"A FULLY CONTROLLED ACCESS FACILITY"

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
CONSTRUCTION PLANS FOR STATE HIGHWAY

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	1	75
				(2)	DYER - CRAVENS CREEK (S)			



VICINITY MAP

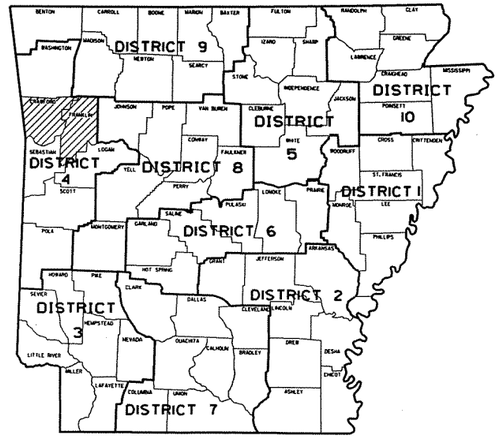
DYER-CRAVENS CREEK (S)

CRAWFORD & FRANKLIN COUNTIES

ROUTE 40 SECTIONS 11 & 12

FEDERAL AID PROJ. BIM-B40-0(211) & HSIP-40-1(264)17

JOB BB0403



ARK. HWY. DIST. NO. 4

BRIDGE DATA

1. STA. 1638+38.70 BR. END
EXISTING 190' BRIDGE NO. A5113
40'-0" CLEAR ROADWAY
STA. 1640+28.70 BR. END
REHABILITATE BRIDGE DECK-HYDRODEMOLITION

2. STA. 1638+87.02 BR. END
EXISTING 190' BRIDGE NO. B5113
40'-0" CLEAR ROADWAY
STA. 1640+77.02 BR. END
REHABILITATE BRIDGE DECK-HYDRODEMOLITION

3. STA. 1664+07.04 BR. END
EXISTING 208' BRIDGE NO. A5114
40'-0" CLEAR ROADWAY
STA. 1666+15.04 BR. END
REHABILITATE BRIDGE DECK-HYDRODEMOLITION

4. STA. 1664+53.48 BR. END
EXISTING 208' BRIDGE NO. B5114
40'-0" CLEAR ROADWAY
STA. 1666+61.48 BR. END
REHABILITATE BRIDGE DECK-HYDRODEMOLITION

5. STA. 1356+90.88 BR. END
EXISTING 172' BRIDGE NO. A5110
40'-0" CLEAR ROADWAY
STA. 1358+62.88 BR. END
REHABILITATE BRIDGE DECK-HYDRODEMOLITION

EXCEPTIONS TO JOB BB0403 (BRIDGES)

1. STA. 1179+94.62 BR. END
318.00' BRIDGE NO. A6820
40'-0" CLEAR ROADWAY
STA. 1183+12.62 BR. END

2. STA. 1179+46.12 BR. END
318.00' BRIDGE NO. B6820
40'-0" CLEAR ROADWAY
STA. 1182+64.12 BR. END

3. STA. 1292+83.15 BR. END
486.00' BRIDGE NO. A5109
40'-0" CLEAR ROADWAY
STA. 1297+69.15 BR. END

4. STA. 1292+83.15 BR. END
486.00' BRIDGE NO. B5109
40'-0" CLEAR ROADWAY
STA. 1297+69.15 BR. END

5. STA. 1356+02.88 BR. END
172.00' BRIDGE NO. B5110
40'-0" CLEAR ROADWAY
STA. 1357+74.88 BR. END

6. STA. 1508+03.66 BR. END
135.00' BRIDGE NO. A5111
40'-0" CLEAR ROADWAY
STA. 1509+38.66 BR. END

7. STA. 1507+49.64 BR. END
135.00' BRIDGE NO. B5111
40'-0" CLEAR ROADWAY
STA. 1508+84.99 BR. END

TOTAL LENGTH OF EXCEPTIONS
939.00' MEASURED ALONG CENTERLINE

STRUCTURES OVER 20'-0" SPAN

1. STA. 914+00 IN PLACE
DBL. 10' X 8' X 250' R.C. BOX CULV'T.
TYPE "K" DROP INLET IN MEDIAN
6' X 6' X H = 4'-0"
45° RT. FWD. SKEW
D.A. = 831 AC., C = 1.0
RETAIN

2. STA. 999+10 IN PLACE
DBL. 10' X 10' X 314' R.C. BOX CULV'T.
TYPE "K" DROP INLET IN MEDIAN
5' X 5' X H = 10'-0"
45° RT. FWD. SKEW
D.A. = 966 AC., C = 1.0
SPAN 32.06'
RETAIN

3. STA. 1045+59 IN PLACE
DBL. 10' x 10' x 300' R.C. BOX CULVERT
RETAIN

4. STA. 1125+22 IN PLACE
TYPE "T" DROP INLET
H = 0'-6"
DBL. 10' x 6' x 234' R.C. BOX CULVERT
RETAIN

5. STA. 1244+42 IN PLACE
DBL. 10' X 8' X 208' R.C. BOX CULV'T.
TYPE "T" DROP INLET IN MEDIAN
H = 2'-0"
30° RT. FWD. SKEW
D.A. = 1050 AC., C = 0.8
RETAIN

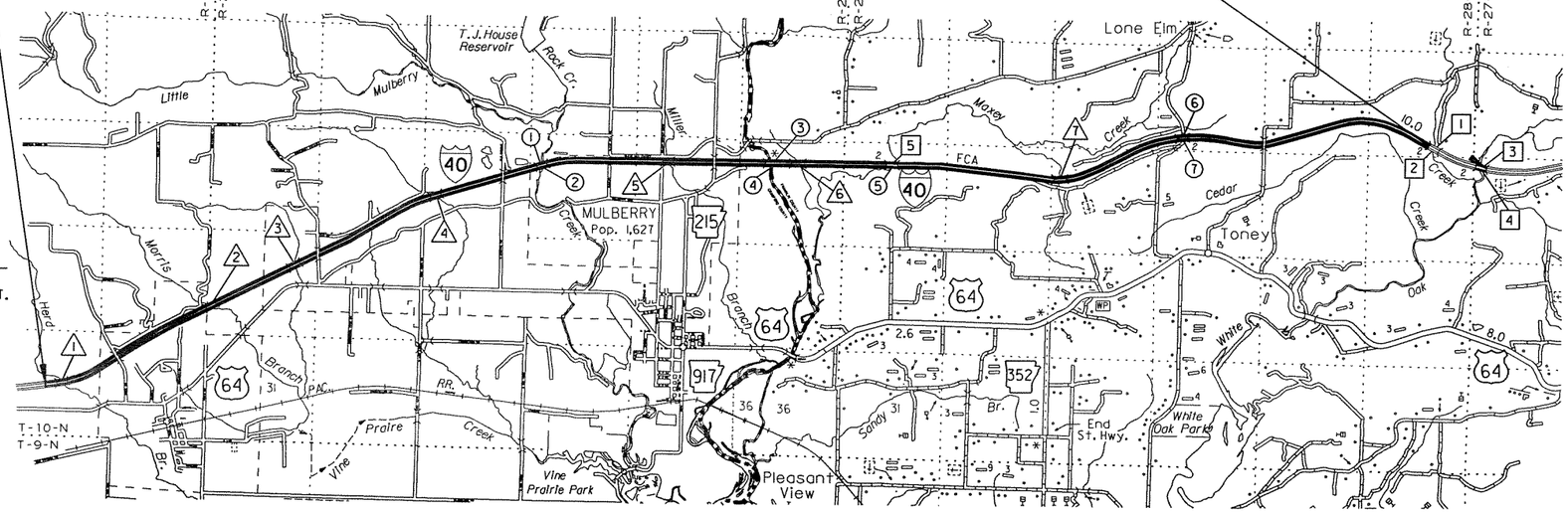
6. STA. 1310+76 IN PLACE
DBL. 10'X6'X263' R.C. BOX CULV'T.
30° RT. FWD. SKEW WITH
TYPE "T" DROP INLET IN MEDIAN
2'-6" X 3'-0" X H = 8'-0"
D.A. = 541 AC.
RETAIN

7. STA. 1442+71 IN PLACE
DBL. 12' X 8' X 415' R.C. BOX CULV'T.
TYPE "T" DROP INLET IN MEDIAN
2'-6" X 3'-0" X H = 2'-6"
D.A. = 693 AC.
RETAIN

STA. 897+35.95
BEGIN JOB BB0403
(LOG MILE 17.0)

STA. 1638+50.52
END JOB BB0403
(LOG MILE 31.0)

0 1/4 1/2 1 MILE
BAR SCALE



DESIGN TRAFFIC DATA

DESIGN YEAR	2033
2013 ADT	30,000
2033 ADT	40,000
2033 DHV	4,400
DIRECTIONAL DISTRIBUTION	0.60
TRUCKS	36%
DESIGN SPEED	70 MPH

APPROVED

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 6917
FRANK VOZEL

1/10/13

DEPUTY DIRECTOR AND CHIEF ENGINEER

BEGINNING OF PROJECT	MID POINT OF PROJECT	END OF PROJECT
LATITUDE = N 35° 29' 50"	LATITUDE = N 35° 31' 41"	LATITUDE = N 35° 31' 47"
LONGITUDE = W 94° 09' 46"	LONGITUDE = W 94° 02' 30"	LONGITUDE = W 93° 55' 30"

LENGTH OF PROJECT CALCULATED ALONG C.L.

GROSS LENGTH OF PROJECT	74144.57	FEET OR	14.043	MILES
NET " " ROADWAY	72605.57	"	13.751	"
NET " " BRIDGES	570.00	"	0.108	"
NET " " PROJECT	73175.57	"	13.859	"

P.E. BB0403
NON-PART.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
02/19/13				6	ARK.			
				JOB NO.		BB0403	2	75

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

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

2-19-13

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2	INDEX OF SHEETS, GOVERNING SPECIFICATIONS, AND GENERAL NOTES			
3	TYPICAL SECTIONS OF IMPROVEMENT			
4 - 7	SPECIAL DETAILS			
8 - 13	MAINTENANCE OF TRAFFIC			
14 - 16	QUANTITIES			
17	SCHEDULE OF BRIDGE QUANTITIES	A5110, A&B5113, A&B5114	53506	
18	SUMMARY OF QUANTITIES AND REVISIONS			
19 - 46	PLAN SHEETS			
47	DETAILS OF VERY EARLY STRENGTH LATEX MODIFIED CONCRETE OVERLAY (SHEET 1 OF 2)	A5110, A&B5113, A&B5114	53507	
48	DETAILS OF VERY EARLY STRENGTH LATEX MODIFIED CONCRETE OVERLAY (SHEET 2 OF 2)	A5110, A&B5113, A&B5114	53508	
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56	DETAILS OF SUPER STRUCTURE (SHEET 2) - FOR INFORMATION ONLY	A&B5113	53516	
57	DETAILS OF SUPER STRUCTURE (SHEET 3) - FOR INFORMATION ONLY	A&B5113	53517	
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GENERAL NOTES

1. ANY EQUIPMENT OR APPURTENANCE THAT INTERFERES WITH THE PROPOSED CONSTRUCTION AND WHICH MAY BE THE PROPERTY OF UTILITY SERVICE ORGANIZATIONS SHALL BE MOVED BY THE OWNERS UNLESS OTHERWISE PROVIDED.

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

3. ALL TREES THAT DO NOT DIRECTLY INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE SPARED AS DIRECTED BY THE ENGINEER. CARE AND DISCRETION SHALL BE USED TO INSURE THAT ALL TREES NOT TO BE REMOVED SHALL BE HARMED AS LITTLE AS POSSIBLE DURING THE CONSTRUCTION OPERATIONS.

4. ALL FLEXIBLE BASE AND ASPHALTIC PAVEMENTS REMOVED SHALL BE PAID FOR UNDER THE ITEM NO. 210 - UNCLASSIFIED EXCAVATION.

5. ANY REQUIRED EROSION CONTROL MEASURES FROM WASTING MATERIALS SHALL BE AT THE CONTRACTOR'S EXPENSE.

6. THE EXISTING ASPHALT PAVEMENT TO BE REMOVED FROM THE REMAINING PAVEMENT SHALL BE SEPARATED BY SAWING ALONG A NEAT LINE. AFTER SAWING, THE PAVEMENT TO BE REMOVED SHALL BE CAREFULLY REMOVED IN A MANNER THAT WILL NOT DAMAGE THE PAVEMENT THAT IS TO REMAIN. ANY DAMAGE OF THE ASPHALT PAVEMENT THAT IS TO REMAIN IN PLACE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

GOVERNING SPECIFICATIONS

ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 2003, AND THE FOLLOWING SPECIAL PROVISIONS AND SUPPLEMENTAL SPECIFICATIONS:

NUMBER	TITLE
ERRATA	ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS
FHWA-1273	REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS
FHWA-1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - NOTICE TO CONTRACTORS
FHWA-1273	SUPPLEMENT - SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES (23 U.S.C. 140)
FHWA-1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - GOALS AND TIMETABLES
FHWA-1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - FEDERAL STANDARDS
FHWA-1273	SUPPLEMENT - POSTERS AND NOTICES REQUIRED FOR FEDERAL-AID PROJECTS
FHWA-1273	SUPPLEMENT - WAGE RATE DETERMINATION
100-2	MANUAL FOR ASSESSING SAFETY HARDWARE (MASH)
102-1	BIDDING REQUIREMENTS AND CONDITIONS
103-1	DETERMINATION OF DBE PARTICIPATION
105-1	CONSTRUCTION CONTROL MARKINGS
105-2	EQUIPMENT AND MATERIAL STORAGE ON BRIDGE STRUCTURES
105-3	CONTROL OF WORK
107-1	WORKER VISIBILITY
108-1	LIQUIDATED DAMAGES
110-1	PROTECTION OF WATER QUALITY AND WETLANDS
303-1	AGGREGATE BASE COURSE
404-1	PRODUCTION VERIFICATION OF ASPHALT CONCRETE HOT MIX
404-2	DESIGN AND QUALITY CONTROL OF ASPHALT MIXTURES
409-1	MINERAL AGGREGATES
410-3	DENSITY TESTING FOR ACHM LEVELING COURSES AND BOND BREAKERS
600-1	WATER FOR VEGETATION
603-1	MAINTENANCE OF TRAFFIC
604-1	RETROREFLECTIVE SHEETING FOR TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
604-2	INSPECTION OF TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
718-2	REFLECTORIZED PAINT PAVEMENT MARKINGS
804-1	INSTALLATION OF DOWEL BARS AND TIE BARS
JOB BB0403	BRIDGE DECK REPAIR
JOB BB0403	BROADBAND INTERNET SERVICE FOR ASPHALT CONCRETE PLANT
JOB BB0403	BROADBAND INTERNET SERVICE FOR FIELD OFFICE
JOB BB0403	CONCRETE DITCH PAVING
JOB BB0403	GOALS FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION
JOB BB0403	HIGH PERFORMANCE PAVEMENT MARKING
JOB BB0403	HYDRODEMOLITION
JOB BB0403	INTERNET BIDDING
JOB BB0403	OFF-SITE RESTRAINING CONDITIONS FOR AMERICAN BURYING BEETLE
JOB BB0403	MAINTENANCE OF TRAFFIC
JOB BB0403	MANAGEMENT OF HYDRODEMOLITION WASTEWATER
JOB BB0403	NESTING SITES OF MIGRATORY BIRDS
JOB BB0403	PARTNERING REQUIREMENTS
JOB BB0403	SEQUENCE OF CONSTRUCTION
JOB BB0403	SILICONE JOINT SEALANT
JOB BB0403	SITE USE (A + C METHOD)
JOB BB0403	STORM WATER POLLUTION PREVENTION PLAN
JOB BB0403	SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS
JOB BB0403	TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
JOB BB0403	TRIANGULAR SILT DIKE
JOB BB0403	UNDERDRAIN FLUSHING AND REHABILITATION
JOB BB0403	UTILITY ADJUSTMENTS
JOB BB0403	VALUE ENGINEERING
JOB BB0403	VERY EARLY STRENGTH LATEX MODIFIED CONCRETE OVERLAY
JOB BB0403	WARM MIX ASPHALT
JOB BB0403	WATER POLLUTION CONTROL
JOB BB0403	WATTLES
JOB BB0403	WIRE ROPE SAFETY FENCE MAINTENANCE MATERIALS
JOB BB0403	WIRE ROPE SAFETY FENCE (WRSF) SPECIFICATIONS
JOB BB0403	WRSF TRAINING WORKSHOP

2/19/2013

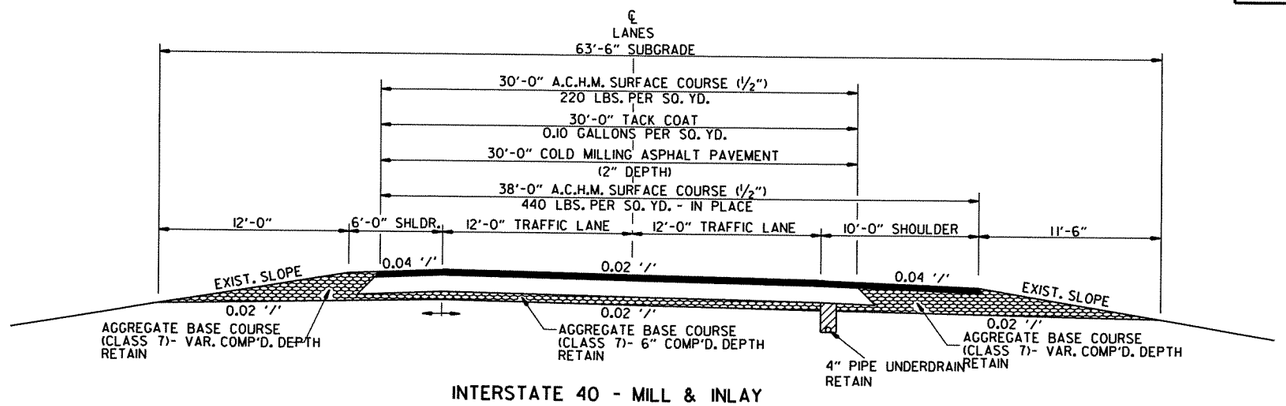
RBB0403.DGN

INDEX OF SHEETS, GOVERNING SPECIFICATIONS, & GENERAL NOTES

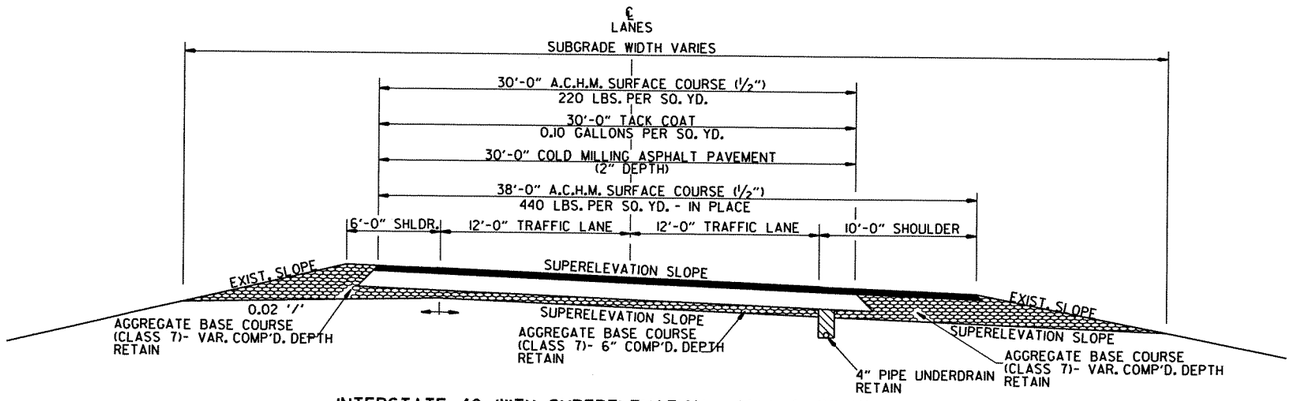
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	3	75

(2) TYPICAL SECTIONS OF IMPROVEMENT

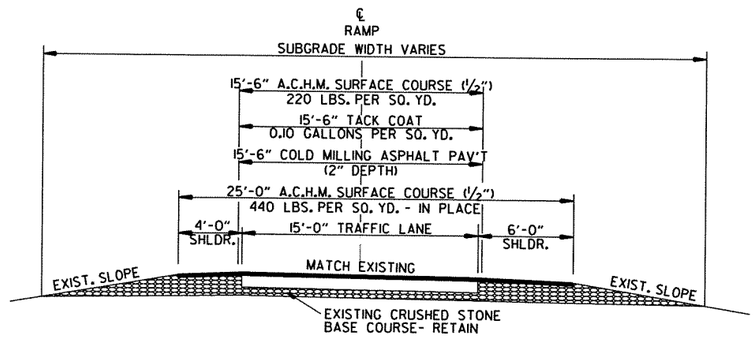
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-16-13



INTERSTATE 40 - MILL & INLAY
(SHOWN IN DIRECTION OF TRAFFIC)



INTERSTATE 40 WITH SUPERELEVATION - MILL & INLAY
(SHOWN IN DIRECTION OF TRAFFIC)



TYPICAL RAMP - MILL & INLAY
(SHOWN IN DIRECTION OF TRAFFIC)

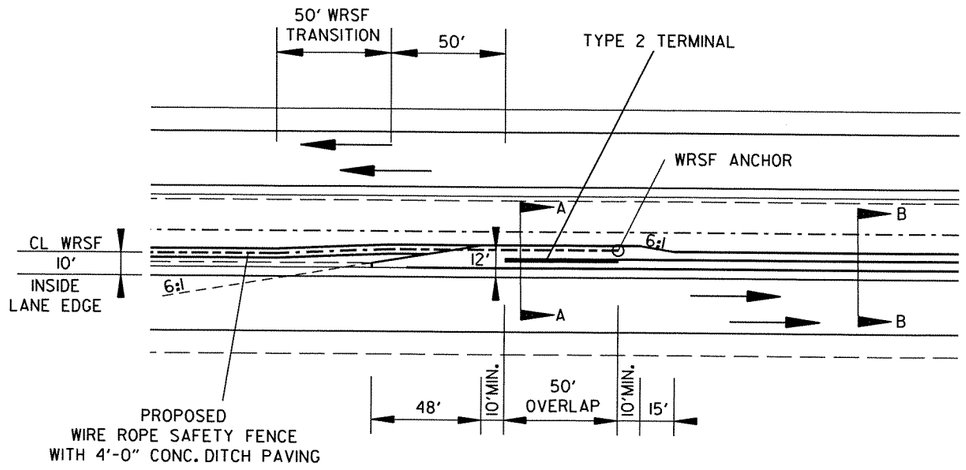
1/14/2013

RBB0403.DGN

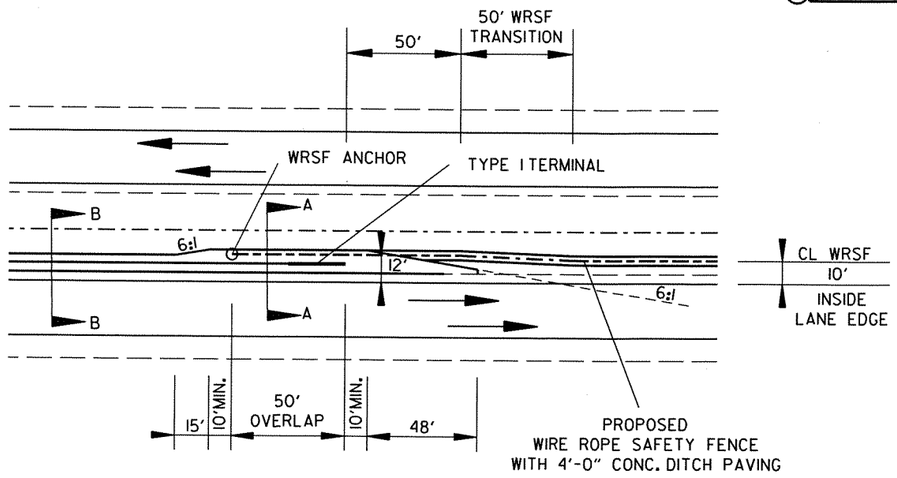
TYPICAL SECTIONS OF IMPROVEMENT

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	4	75

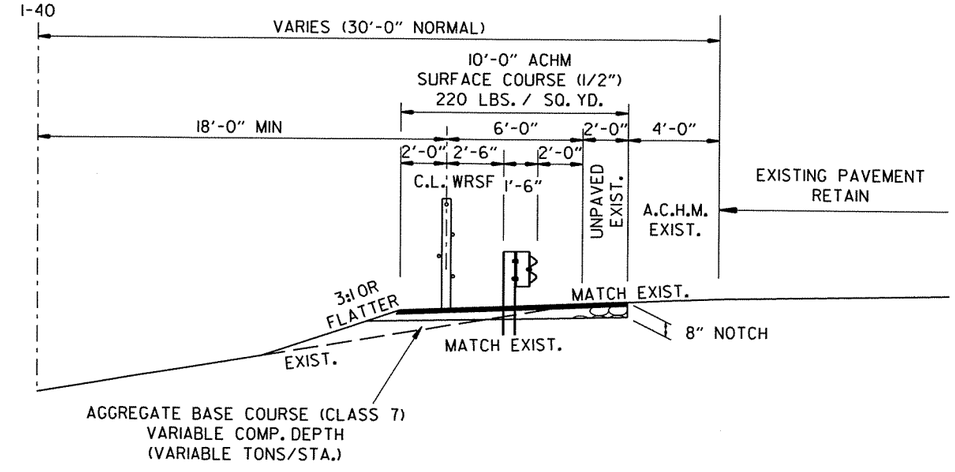
(2) SPECIAL DETAILS



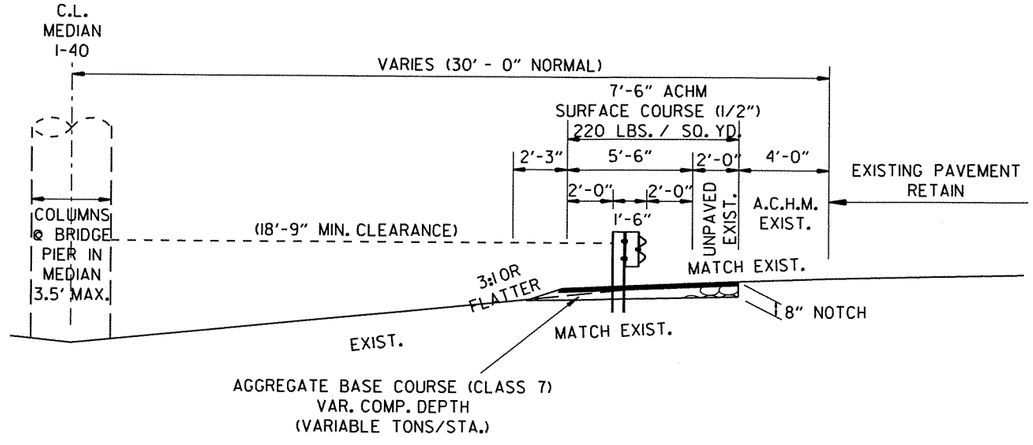
WRSF AND GUARDRAIL APPROACH
FOR OVERPASS



WRSF AND GUARDRAIL DEPARTURE
FOR OVERPASS



SECTION A-A



SECTION B-B

DETAILS OF SHOULDER WIDENING FOR GUARDRAIL
AND OVERLAPS WITH ENDS OF WIRE ROPE SAFETY FENCE

1/14/2013

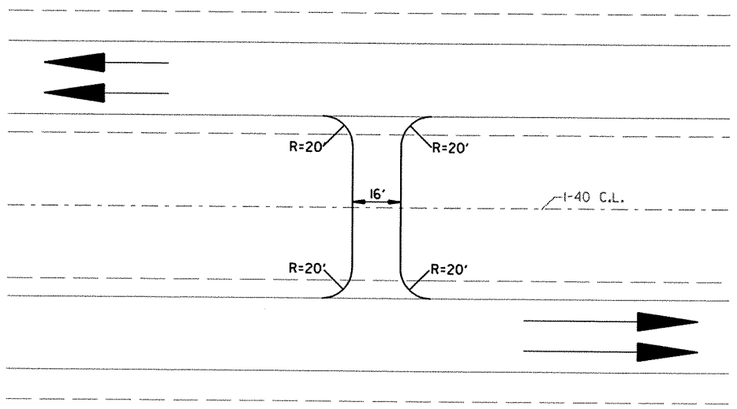
RBB0403.DGN

SPECIAL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	5	75

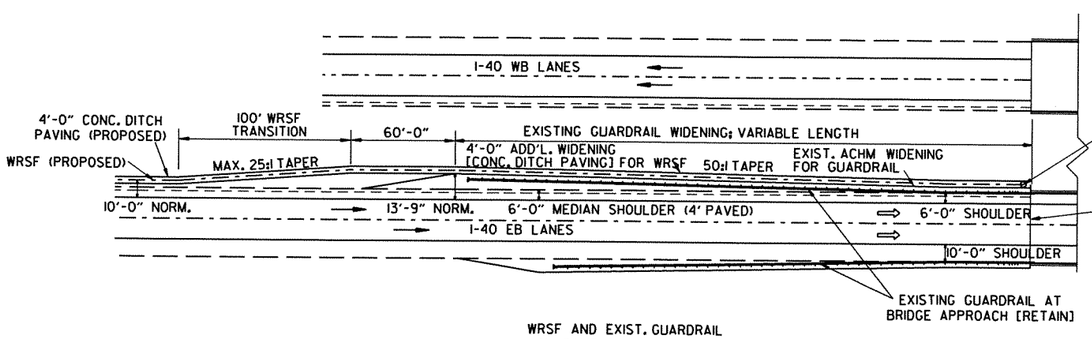
(2) SPECIAL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-16-13

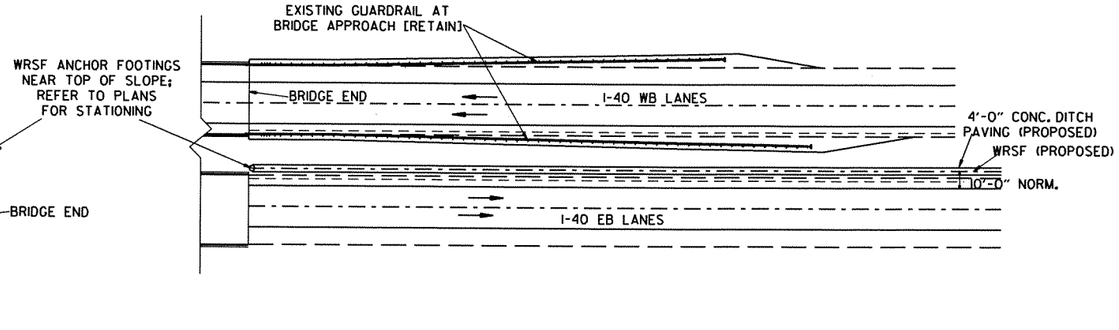


DETAIL OF PAVED MEDIAN CROSSING

NOTE:
MEDIAN CROSSING TO BE CONSTRUCTED OF AGGREGATE BASE COURSE (CLASS 7)- 7" COMPACTED DEPTH & ACHM SURFACE COURSE (1½")- 220 LBS. PER SQ. YD.



WRSF AND EXIST. GUARDRAIL ON SAME SIDE OF MEDIAN



WRSF AND EXIST. GUARDRAIL ON OPPOSITE SIDES OF MEDIAN

DETAIL OF WIRE ROPE SAFETY FENCE AT EXISTING BRIDGE ENDS

REFER TO PLANS FOR RELATIVE PLACEMENT OF GUARDRAIL AND WIRE ROPE SAFETY FENCE AT EACH BRIDGE END

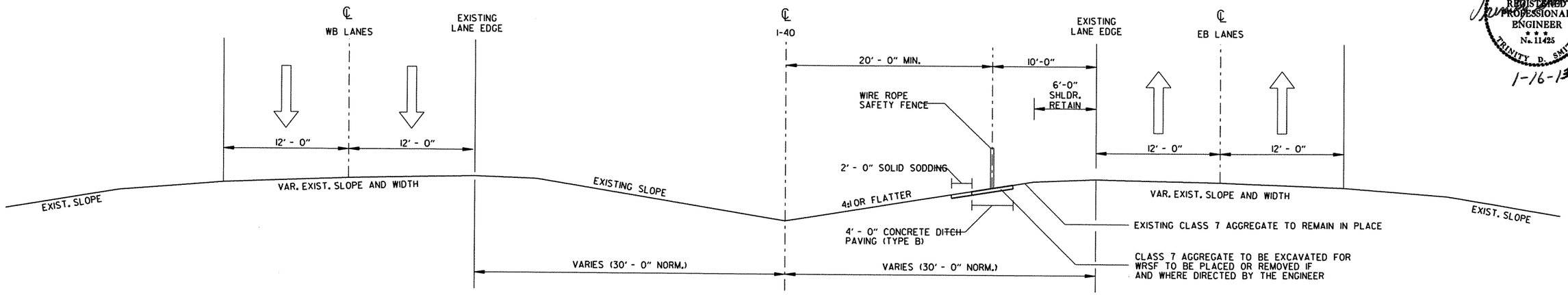
1/14/2013

RBB0403.DGN

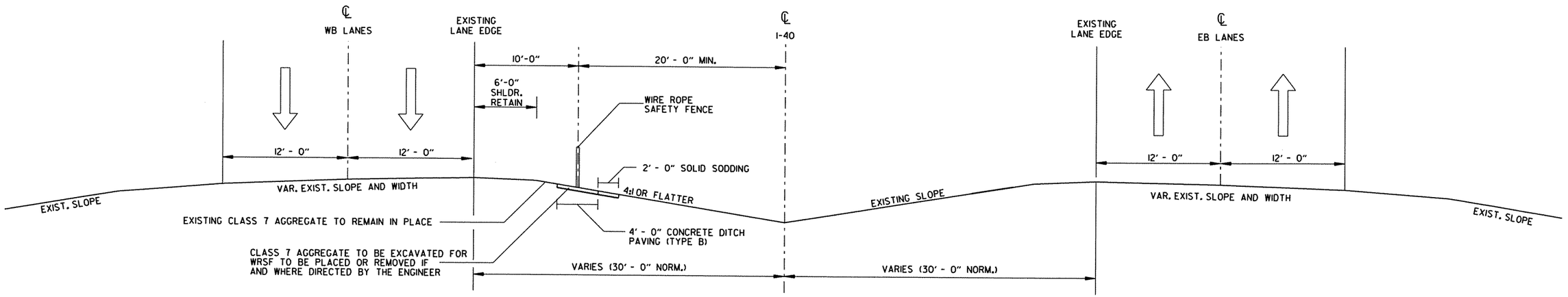
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	6	75

(2) SPECIAL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-16-13



TYPICAL SECTION OF IMPROVEMENT
FOR WIRE ROPE SAFETY FENCE RIGHT OF CENTERLINE



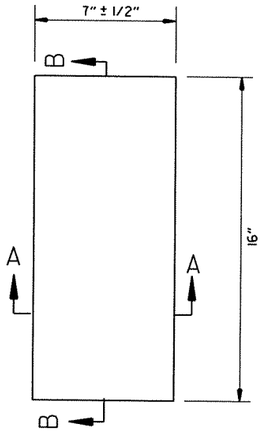
TYPICAL SECTION OF IMPROVEMENT
FOR WIRE ROPE SAFETY FENCE LEFT OF CENTERLINE

1/14/2013

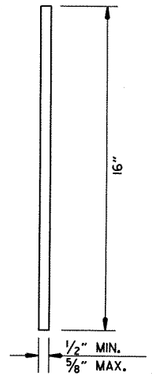
RBB0403.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
02/21/13				6	ARK.			
				JOB NO.		BB0403	6A	75

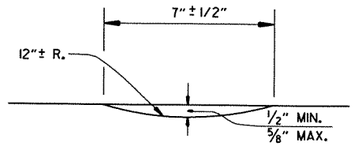
(2) SPECIAL DETAILS



PLAN

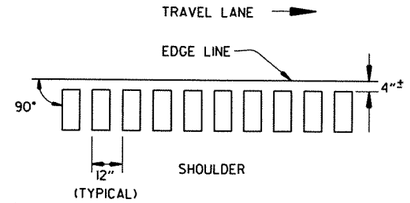


SECTION B-B

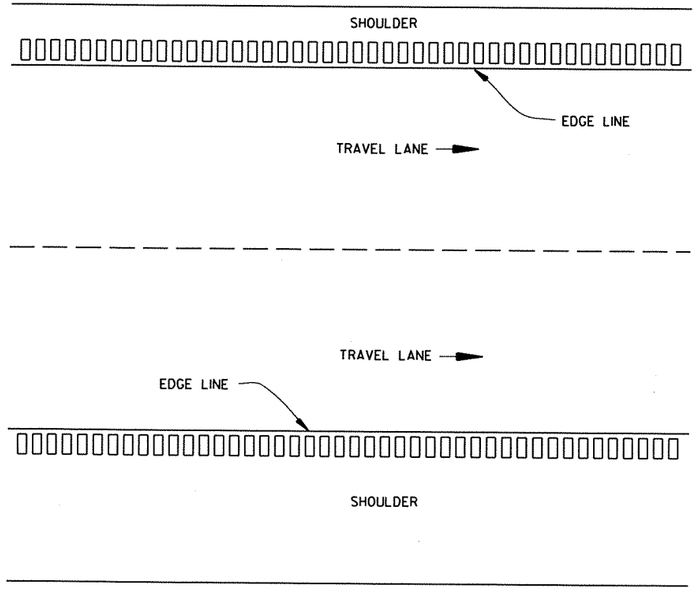


SECTION A-A

DETAILS OF RUMBLE STRIPS



LOCATION PLAN OF RUMBLE STRIPS
LEFT OR RIGHT SHOULDER



PLAN VIEW

NOTES:

1. ALIGNMENT OF RUMBLE STRIPS SHALL GENERALLY BE STRAIGHT AND OFFSET APPROXIMATELY 4" FROM THE OUTER EDGE OF THE EDGE LINE. THIS OFFSET MAY BE ADJUSTED TO ACCOMMODATE VARIATIONS IN THE EDGE LINE.
2. THE 1/2" DEPTH SHALL GENERALLY APPLY FOR THE ENTIRE 16" LENGTH. SOME VARIATION TO SUIT SHOULDER SLOPE BREAKS MAY BE NECESSARY.
3. RUMBLE STRIPS SHALL NOT BE INSTALLED ON BRIDGE DECKS, APPROACH SLABS, OR ACROSS TRANSVERSE JOINTS OF CONCRETE SHOULDERS.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-21-13

2/21/2013

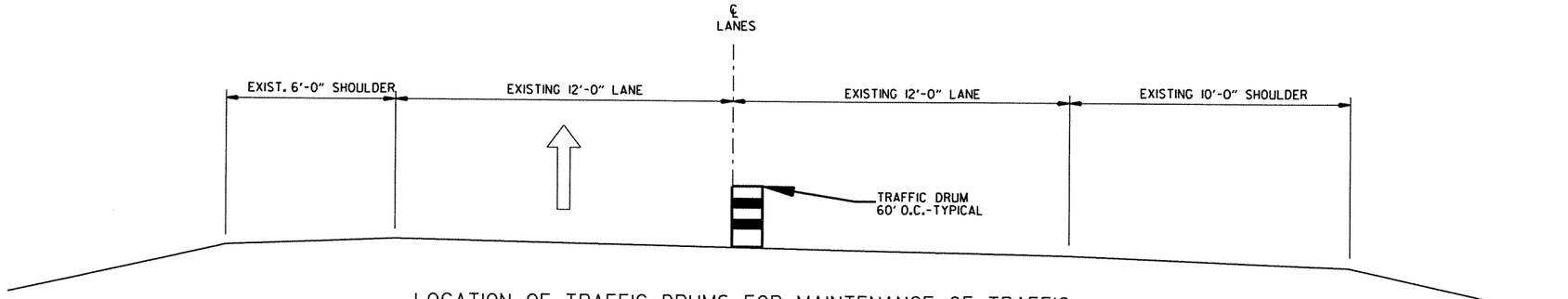
RBB0403.DGN

SPECIAL DETAILS

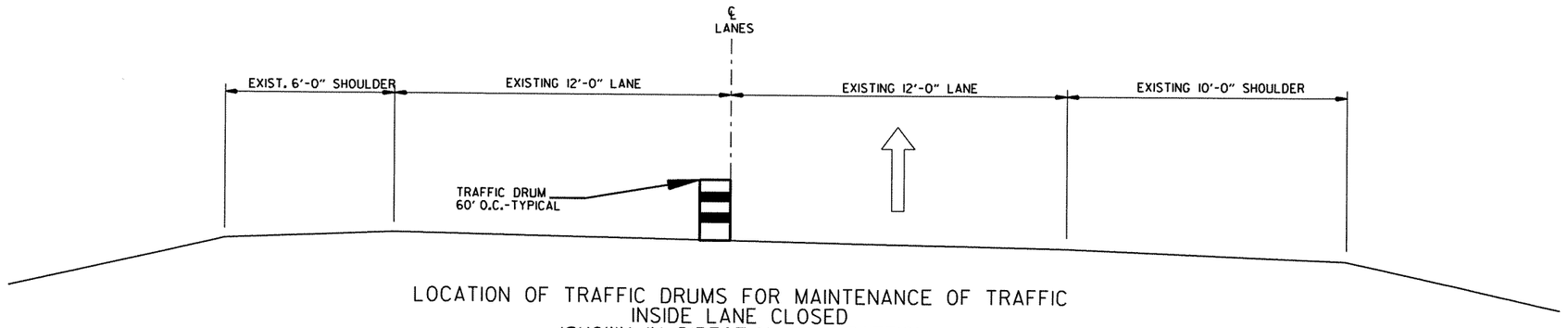
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	7	75

(2) SPECIAL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-16-13



LOCATION OF TRAFFIC DRUMS FOR MAINTENANCE OF TRAFFIC
OUTSIDE LANE CLOSED
(SHOWN IN DIRECTION OF TRAFFIC)



LOCATION OF TRAFFIC DRUMS FOR MAINTENANCE OF TRAFFIC
INSIDE LANE CLOSED
(SHOWN IN DIRECTION OF TRAFFIC)

1/14/2013

RBB0403.DGN

SPECIAL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
02-19-13				6	ARK.			
				JOB NO.		B80403	8	75

(2) MAINTENANCE OF TRAFFIC

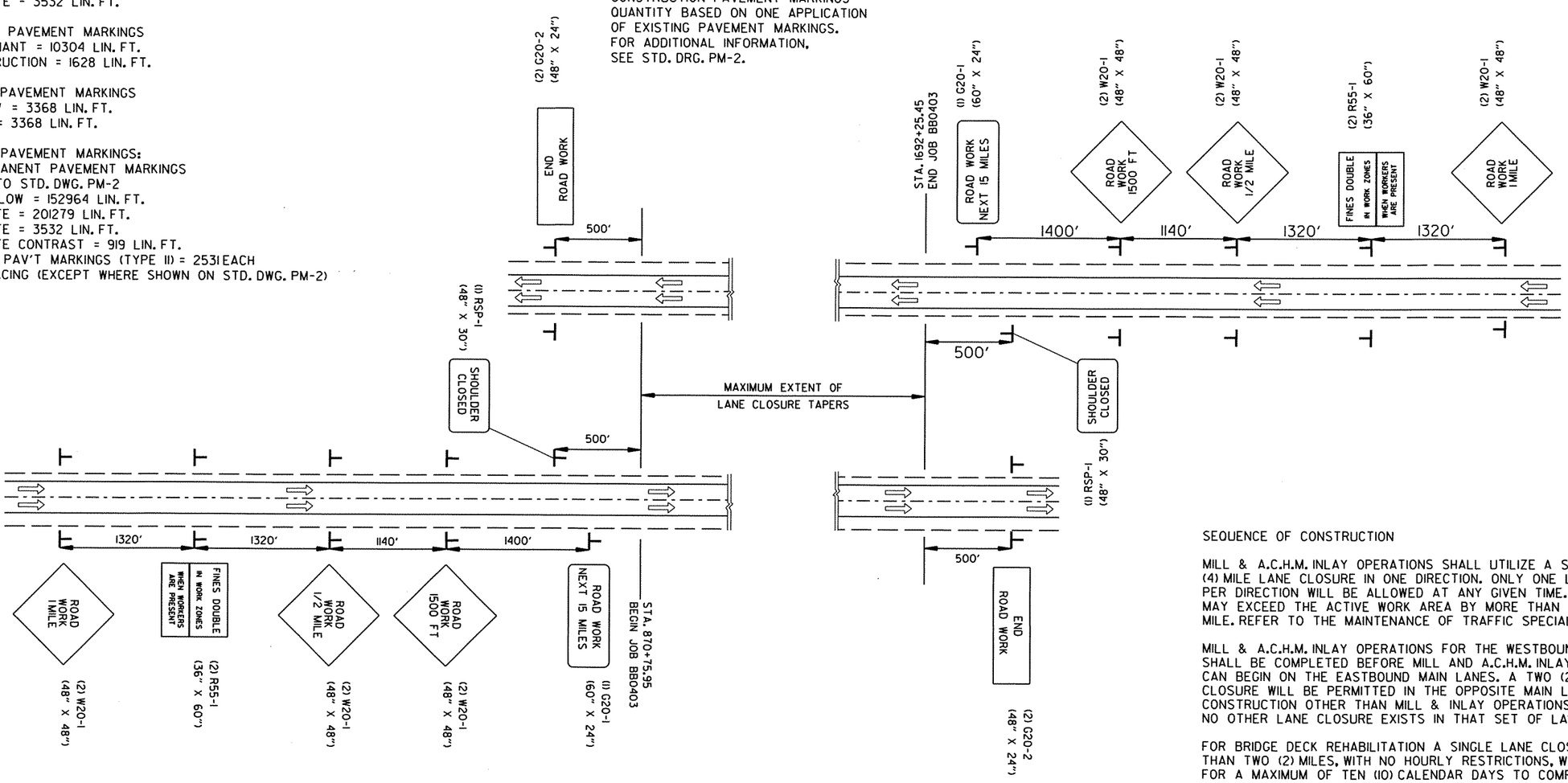
CONSTRUCTION PAVEMENT MARKINGS:
APPLY CONSTRUCTION PAVEMENT MARKINGS
ACCORDING TO STD. DWG. PM-2
- 4" YELLOW - 152964 LIN. FT.
- 4" WHITE - 202198 LIN. FT.
- 8" WHITE - 3532 LIN. FT.

REMOVAL OF PAVEMENT MARKINGS
- PERMENANT = 10304 LIN. FT.
- CONSTRUCTION = 1628 LIN. FT.

REMOVABLE PAVEMENT MARKINGS
- YELLOW = 3368 LIN. FT.
- WHITE = 3368 LIN. FT.

PERMANENT PAVEMENT MARKINGS:
APPLY PERMANENT PAVEMENT MARKINGS
ACCORDING TO STD. DWG. PM-2
- 4" YELLOW = 152964 LIN. FT.
- 4" WHITE = 201279 LIN. FT.
- 8" WHITE = 3532 LIN. FT.
- 4" WHITE CONTRAST = 919 LIN. FT.
- RAISED PAV'T MARKINGS (TYPE II) = 2531EACH
- 80' SPACING (EXCEPT WHERE SHOWN ON STD. DWG. PM-2)

NOTE:
CONSTRUCTION PAVEMENT MARKINGS QUANTITY BASED ON ONE APPLICATION OF EXISTING PAVEMENT MARKINGS. FOR ADDITIONAL INFORMATION, SEE STD. DRG. PM-2.



SEQUENCE OF CONSTRUCTION

MILL & A.C.H.M. INLAY OPERATIONS SHALL UTILIZE A SINGLE FOUR (4) MILE LANE CLOSURE IN ONE DIRECTION. ONLY ONE LANE CLOSURE PER DIRECTION WILL BE ALLOWED AT ANY GIVEN TIME. NO LANE CLOSURE MAY EXCEED THE ACTIVE WORK AREA BY MORE THAN ONE QUARTER (1/4) MILE. REFER TO THE MAINTENANCE OF TRAFFIC SPECIAL PROVISION.

MILL & A.C.H.M. INLAY OPERATIONS FOR THE WESTBOUND MAIN LANES SHALL BE COMPLETED BEFORE MILL AND A.C.H.M. INLAY OPERATIONS CAN BEGIN ON THE EASTBOUND MAIN LANES. A TWO (2) MILE LANE CLOSURE WILL BE PERMITTED IN THE OPPOSITE MAIN LANES FOR CONSTRUCTION OTHER THAN MILL & INLAY OPERATIONS AS LONG AS NO OTHER LANE CLOSURE EXISTS IN THAT SET OF LANES.

FOR BRIDGE DECK REHABILITATION A SINGLE LANE CLOSURE OF NO MORE THAN TWO (2) MILES, WITH NO HOURLY RESTRICTIONS, WILL BE PERMITTED FOR A MAXIMUM OF TEN (10) CALENDAR DAYS TO COMPLETE EACH BRIDGE DECK. BRIDGE DECK REHABILITATION OPERATIONS MAY BEGIN WHEN MILL & INLAY OPERATIONS FOR A SET OF LANES HAS BEEN COMPLETED. ONLY ONE LANE CLOSURE PER SET OF MAIN LANES WILL BE ALLOWED AND SHALL NOT EXCEED THE ACTIVE WORK AREA BY MORE THAN ONE QUARTER (1/4) MILE. PRECAST CONCRETE BARRIER WALL WILL BE PROVIDED FOR BRIDGE DECK REHABILITATION AS SHOWN IN THE PLANS. REFER TO THE MAINTENANCE OF TRAFFIC SPECIAL PROVISION.

THE WESTBOUND MAIN LANE BRIDGES ARE TO BE COMPLETED BEFORE EASTBOUND MAIN LANE BRIDGE DECK REHABILITATION BEGINS. WHILE BRIDGE DECK OPERATIONS ARE UNDERWAY IN ONE DIRECTION, A TWO (2) MILE LANE CLOSURE WILL BE PERMITTED IN THE OPPOSITE MAIN LANES FOR CONSTRUCTION ACTIVITIES OTHER THAN BRIDGE DECK REHABILITATION, AS LONG AS NO OTHER LANE CLOSURE EXISTS IN THAT SET OF LANES. AS THE CONTRACTOR PROCEEDS WITH BRIDGE DECK REHABILITATION IN THE EASTBOUND LANES, BRIDGE DECK GROOVING WILL BE PERMITTED ON THE WESTBOUND LANES BRIDGES UTILIZING THE PERMITTED SINGLE TWO (2) MILE LANE CLOSURE.

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MAINTENANCE OF TRAFFIC ADVANCE SIGNS AT JOB ENDS

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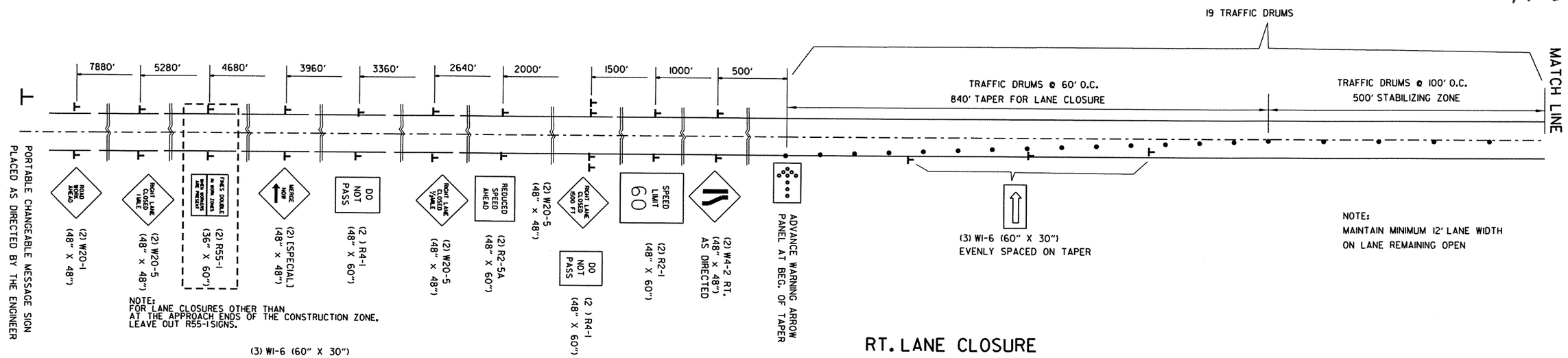
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	9	75

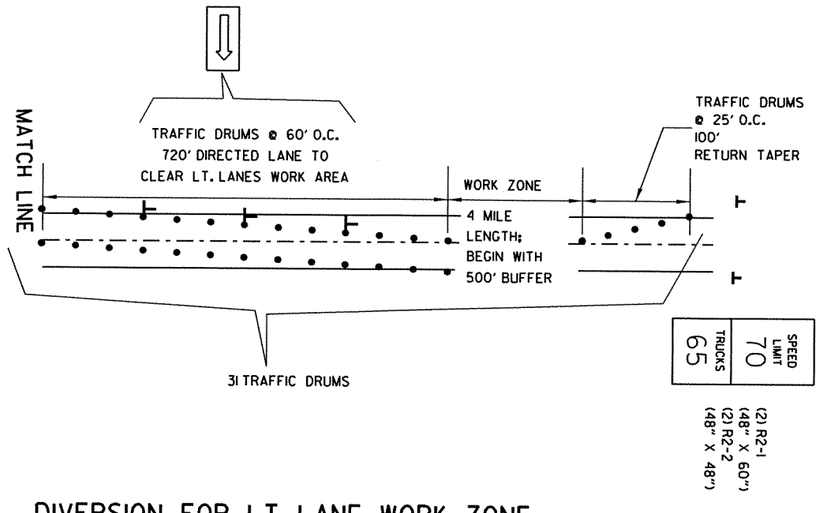
(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-16-13



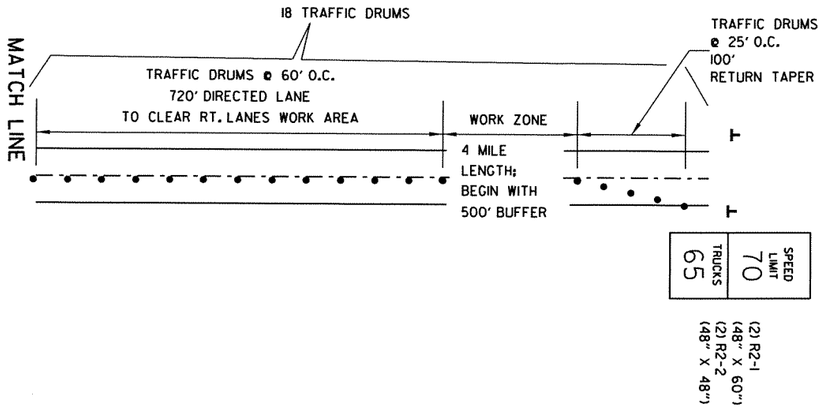
RT. LANE CLOSURE

1 SET OF THIS NEEDED FOR JOB BB0403.



DIVERSION FOR LT. LANE WORK ZONE

1 SET OF THIS NEEDED FOR JOB BB0403



DIVERSION FOR RT. LANE WORK ZONE

1 SET OF THIS NEEDED FOR JOB BB0403

1/14/2013

RBB0403.DGN

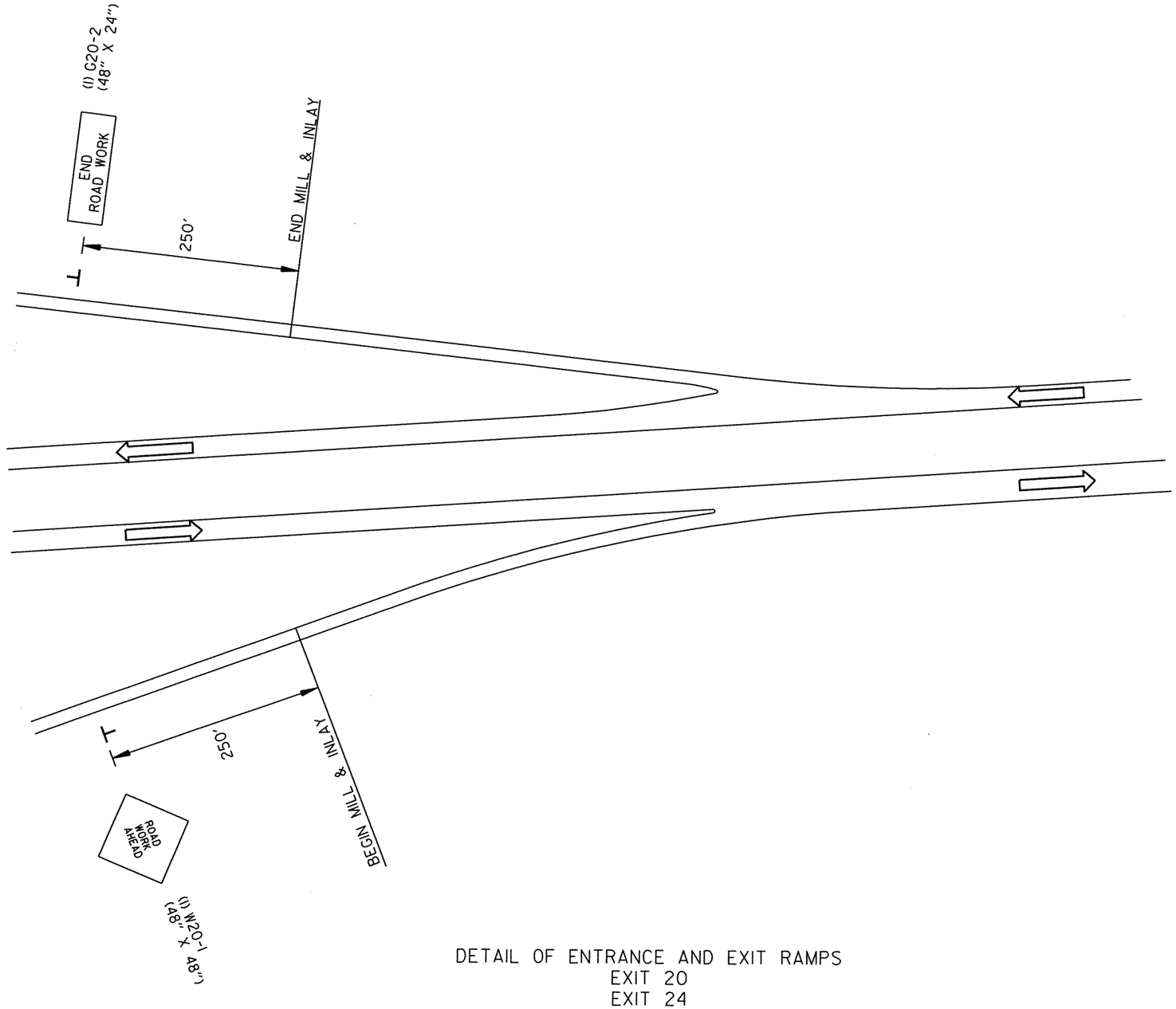
MAINTENANCE OF TRAFFIC WORK ZONE - LANE CLOSURE

ADVANCE WARNING SIGNS FOR ENTRANCE AND EXIT RAMPS
ROAD WORK AHEAD (4) = 64 SQ. FT.
END ROAD WORK (4) = 32 SQ. FT.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	10	75

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-16-13



DETAIL OF ENTRANCE AND EXIT RAMPS
EXIT 20
EXIT 24

1/14/2013
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MAINTENANCE OF TRAFFIC
DETAIL OF RAMPS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	11	75

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
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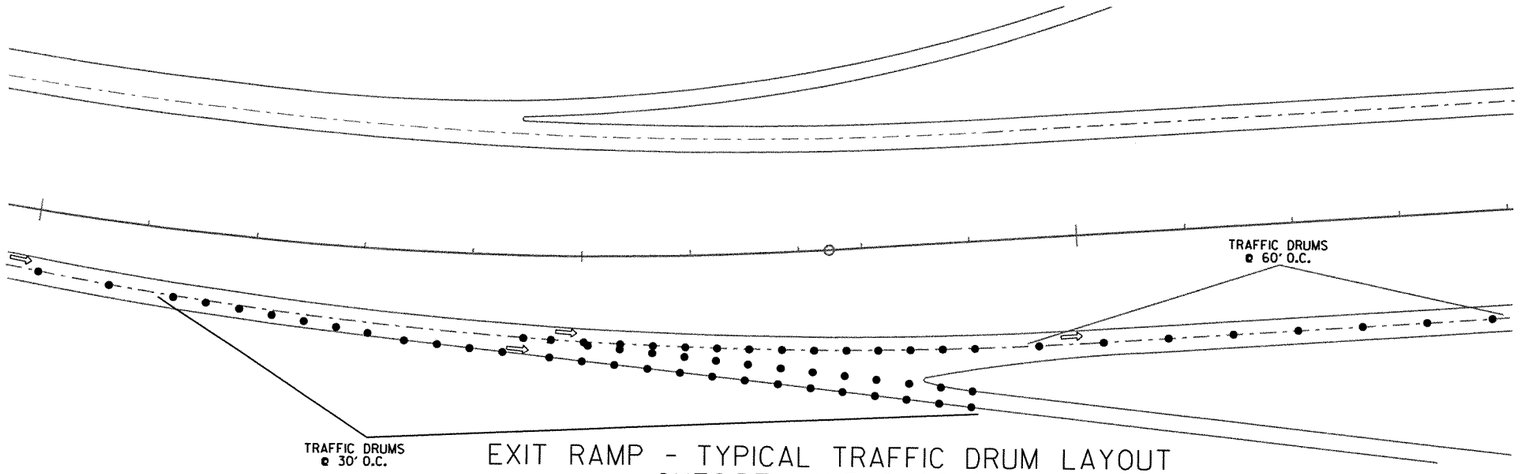
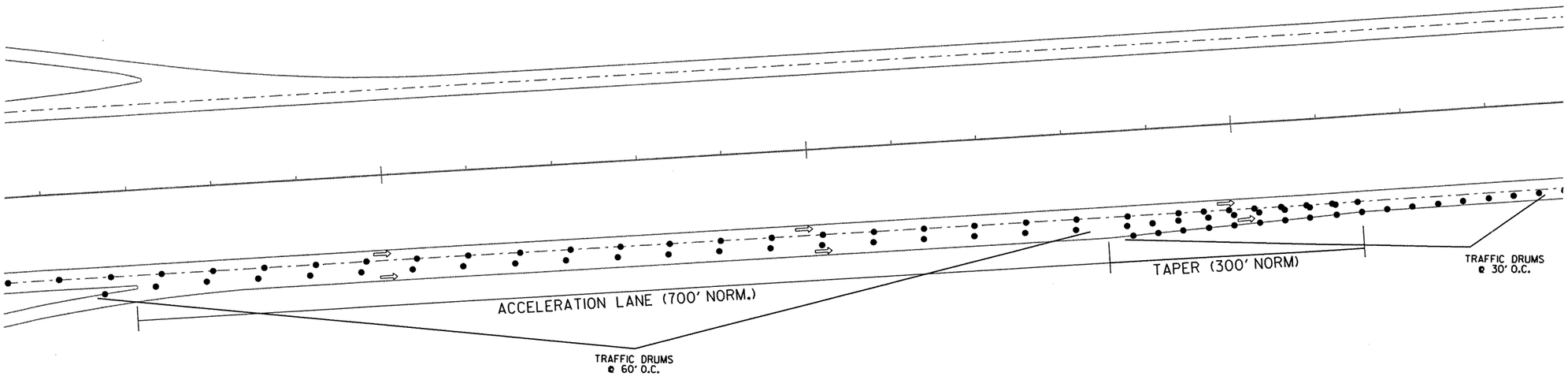
1-16-13



EXIT RAMP - TYPICAL TRAFFIC DRUM LAYOUT
OUTSIDE LANE CLOSURE



ENTRANCE RAMP - TYPICAL TRAFFIC DRUM LAYOUT
OUTSIDE LANE CLOSURE

EXIT 20:
EASTBOUND EXIT = 24 TRAFFIC DRUMS
EASTBOUND ENTRANCE = 37 TRAFFIC DRUMS

WESTBOUND EXIT = 24 TRAFFIC DRUMS
WESTBOUND ENTRANCE = 37 TRAFFIC DRUMS

EXIT 24:
EASTBOUND EXIT = 24 TRAFFIC DRUMS
EASTBOUND ENTRANCE = 37 TRAFFIC DRUMS

WESTBOUND EXIT = 24 TRAFFIC DRUMS
WESTBOUND ENTRANCE = 37 TRAFFIC DRUMS

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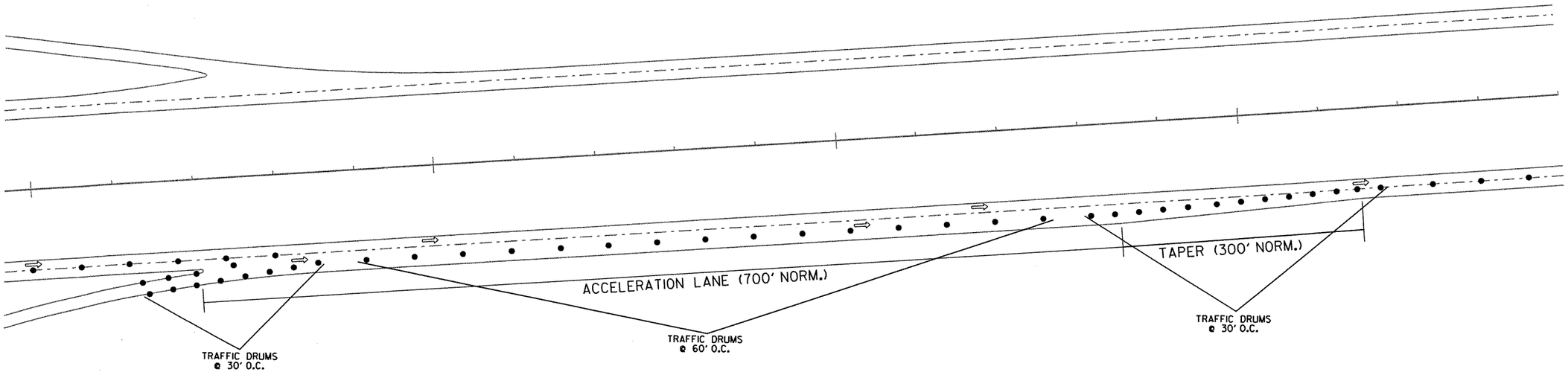
MAINTENANCE OF TRAFFIC
DETAIL OF RAMPS WITH LANE CLOSURE

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	12	75

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-16-13



ENTRANCE RAMP - TYPICAL TRAFFIC DRUM LAYOUT
ACCELERATION LANE CLOSURE

EXIT 20:
EASTBOUND ENTRANCE = 24 TRAFFIC DRUMS

WESTBOUND ENTRANCE = 24 TRAFFIC DRUMS

EXIT 24:
EASTBOUND ENTRANCE = 24 TRAFFIC DRUMS

WESTBOUND ENTRANCE = 24 TRAFFIC DRUMS

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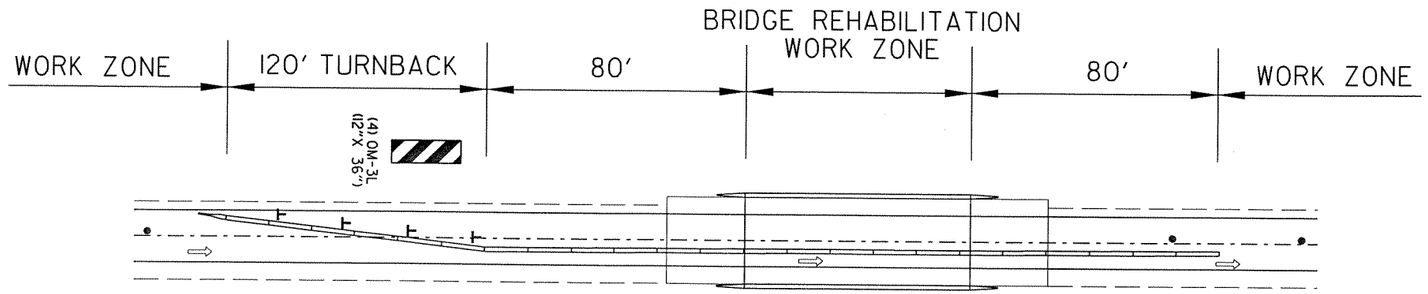
MAINTENANCE OF TRAFFIC
DETAIL OF RAMPS WITH LANE CLOSURE

PRECAST CONCRETE BARRIER WALL (5 LOCATIONS - 10 INSTALLATIONS)
(1) FURNISH AND INSTALL = 513 LIN. FT.
(9) RELOCATE = 513 LIN. FT. (PER INSTALLATION)

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	13	75

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-16-13

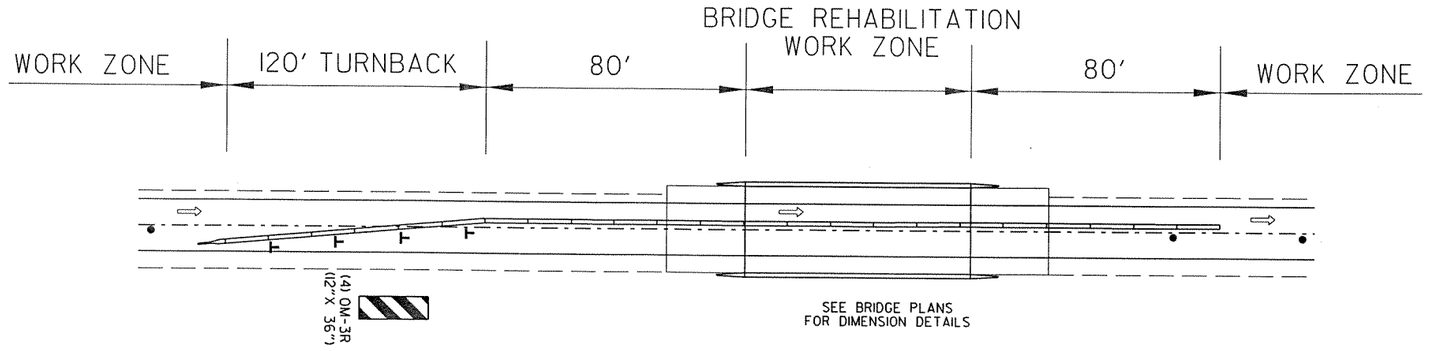


REFER TO STANDARD DRAWING TC-5
FOR DETAILS OF PLACEMENT OF P.C.C.B. TURNBACKS.

SEE BRIDGE PLANS
FOR DIMENSION DETAILS

DIVERSION FOR LT. LANE BRIDGE DECK REHABILITATION

1 SET OF THIS NEEDED FOR JOB BB0403.



REFER TO STANDARD DRAWING TC-5
FOR DETAILS OF PLACEMENT OF P.C.C.B. TURNBACKS.

SEE BRIDGE PLANS
FOR DIMENSION DETAILS

DIVERSION FOR RT. LANE BRIDGE DECK REHABILITATION

1 SET OF THIS NEEDED FOR JOB BB0403.

NOTE:
BRIDGE DECK REHABILITATION CAN BE PERFORMED FOLLOWING THE COMPLETION OF MAIN LANE MILL & INLAY OPERATIONS. REFER TO SHEET 9 FOR DETAIL OF TRAFFIC SHIFT USING TRAFFIC DRUMS. REFER TO SHEET 8 FOR SEQUENCE OF CONSTRUCTION DETAILS.

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MAINTENANCE OF TRAFFIC DETAILS
WORK ZONE - BRIDGE DECK REHABILITATION

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		880403	14	75

(2) QUANTITIES

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-16-13

EARTHWORK

	STATION	LOCATION / DESCRIPTION	UNCLASSIFIED EXCAVATION	COMPACTED EMBANKMENT
			CU. YD.	
*	1371+45	MEDIAN CROSSOVER (REMOVAL)	115	
*	1392+23	MEDIAN CROSSOVER	300	500
	TOTALS:		415	500

* QUANTITY ESTIMATED.
SEE SECTION 104.03 OF THE STD. SPECS.
NOTE: EARTHWORK QUANTITIES SHOWN ABOVE SHALL BE PAID AS PLAN QUANTITY.

CONSTRUCTION PAVEMENT MARKINGS AND PERMANENT PAVEMENT MARKINGS

DESCRIPTION	ENTIRE JOB	REMOVAL OF PERMANENT PAVEMENT MARKINGS	CONSTRUCTION PAVEMENT MARKINGS	REMOVABLE CONSTRUCTION PAVEMENT MARKINGS	REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS	RAISED PAVEMENT MARKERS	HIGH PERFORMANCE CONTRAST PAVEMENT MARKING	HIGH PERFORMANCE PAVEMENT MARKING		
						TYPE II (WHITE/RED)	4"	4"		8"
	LIN. FT. - EACH	LIN. FT.		LIN. FT.		EACH	WHITE LIN. FT.	YELLOW	WHITE	WHITE
REMOVAL OF PERMANENT PAVEMENT MARKINGS	10304	10304								
CONSTRUCTION PAVEMENT MARKINGS	358694		358694							
REMOVEABLE CONSTRUCTION PAVEMENT MARKINGS	6736			6736						
REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS	1628				1628					
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED)	2531					2531				
HIGH PERFORMANCE CONTRAST PAVEMENT MARKING WHITE (4")	919						919			
HIGH PERFORMANCE PAVEMENT MARKING YELLOW (4")	152964							152964		
HIGH PERFORMANCE PAVEMENT MARKING WHITE (4")	201279								201279	
HIGH PERFORMANCE PAVEMENT MARKING WHITE (8")	3532									3532
TOTALS:		10304	358694	6736	1628	2531	919	152964	201279	3532

NOTE: THIS IS A HIGH TRAFFIC VOLUME ROAD AS DEFINED IN SECTION 604.03, STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, 2003 EDITION.

ADVANCE WARNING SIGNS AND DEVICES

SIGN NUMBER	DESCRIPTION	SIGN SIZE	ENTIRE PROJECT	MAXIMUM NUMBER REQUIRED	TOTAL SIGNS REQUIRED		TRAFFIC DRUMS	ADVANCED WARNING ARROW PANEL	PORTABLE CHANGEABLE MESSAGE SIGN	FRUNISHING & INSTALLING PRECAST CONCRETE BARRIER	RELOCATING PRECAST CONCRETE BARRIER
			LIN. FT. - EACH		NO.	SQ. FT.	EACH	DAY	WEEK	LIN. FT.	LIN. FT.
W20-1	ROAD WORK 1500 FT.	48"x48"	4	4	4	64.0					
W20-1	ROAD WORK 1/2 MILE FT.	48"x48"	4	4	4	64.0					
W20-1	ROAD WORK 1 MILE FT.	48"x48"	4	4	4	64.0					
W20-1	ROAD WORK AHEAD	48"x48"	8	8	8	128.0					
G20-2	END ROAD WORK	48"x24"	8	8	8	64.0					
G20-1	ROAD WORK NEXT XX.X MILES	60"x24"	2	2	2	20.0					
W20-5	RIGHT LANE CLOSED 1 MILE	48"x48"	4	4	4	64.0					
W20-5	RIGHT LANE CLOSED 1/2 MILE	48"x48"	4	4	4	64.0					
W20-5	RIGHT LANE CLOSED 1500 FT	48"x48"	4	4	4	64.0					
R55-1	FINES DOUBLE IN WORK ZONES	36"x60"	4	4	4	60.0					
SPECIAL	MERGE NOW W/ARROW	48"x48"	4	4	4	64.0					
R2-5A	REDUCED SPEED AHEAD	48"x60"	4	4	4	80.0					
W1-6	LARGE ARROW	48"x24"	9	9	9	72.0					
R1-2	YIELD	60"x60"x60"	2	2	2	21.7					
R4-1	DO NOT PASS	24"x30"	8	8	8	160.0					
R2-1	SPEED LIMIT 60 MPH	48"x60"	4	4	4	80.0					
R2-1	SPEED LIMIT 70 MPH	48"x60"	4	4	4	80.0					
R2-2	TRUCK SPEED LIMIT 65 MPH	48"x60"	4	4	4	80.0					
RSP-1	SHOULDER CLOSED	48"x30"	2	2	2	20.0					
W4-2 RT	MERGE RIGHT	48"x48"	4	4	4	64.0					
OM-3L	OBJECT MARKER	12"x36"	4	4	4	12.0					
OM-3R	OBJECT MARKER	12"x36"	4	4	4	12.0					
	TRAFFIC DRUMS		737	737			737				
	ADVANCE WARNING ARROW PANEL		2	2				140			
	PORTABLE CHANGEABLE MESSAGE SIGN		6	6					120		
	FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER		513	513						513	
	RELOCATING PRECAST CONCRETE BARRIER		4617	4617							4617
TOTALS:						1401.7	737	140	120	513	4617

NOTE: THIS IS A HIGH TRAFFIC VOLUME ROAD AS DEFINED IN SECTION 604.03, STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, 2003 EDITION.

FLUSHING UNDERDRAIN

STA.	STA.	LOCATION	LIN. FT.
897+36	1179+46	RIGHT MAIN LANES	28210
1182+64	1292+83	RIGHT MAIN LANES	11019
1297+69	1356+02	RIGHT MAIN LANES	5833
1357+78	1507+50	RIGHT MAIN LANES	14972
1508+85	1638+87	RIGHT MAIN LANES	13002
897+36	1179+95	LEFT MAIN LANES	28259
1183+12	1292+83	LEFT MAIN LANES	10971
1297+69	1356+91	LEFT MAIN LANES	5922
1358+66	1508+04	LEFT MAIN LANES	14938
1509+36	1638+39	LEFT MAIN LANES	12903
TOTAL:			146029

1/15/2013

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	15	75

(2) QUANTITIES

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

1-16-13

COLD MILLING ASPHALT PAVEMENT

STATION	STATION	LOCATION	AVG. WIDTH	COLD MILLING ASPHALT PAVEMENT
			FEET	SQ. YD.
		MAIN LANES		
897+36	1039+14	RIGHT MAIN LANES	30.0	47260.0
1039+14	1046+04	RIGHT MAIN LANES	VAR.	3246.6
1046+04	1067+94	RIGHT MAIN LANES	30.0	7300.0
1067+94	1077+94	RIGHT MAIN LANES	VAR.	4459.9
1077+94	1179+10	RIGHT MAIN LANES	30.0	33720.0
1183+01	1248+98	RIGHT MAIN LANES	30.0	21990.0
1248+98	1255+92	RIGHT MAIN LANES	VAR.	3212.6
1255+92	1281+05	RIGHT MAIN LANES	30.0	8376.7
1281+05	1291+05	RIGHT MAIN LANES	VAR.	4488.5
1291+05	1292+47	RIGHT MAIN LANES	30.0	473.3
1298+06	1355+66	RIGHT MAIN LANES	30.0	19200.0
1358+11	1507+13	RIGHT MAIN LANES	30.0	49673.3
1509+21	1638+51	RIGHT MAIN LANES	30.0	43100.0
897+36	1039+50	LEFT MAIN LANES	30.0	47380.0
1039+50	1049+50	LEFT MAIN LANES	VAR.	4478.2
1049+50	1072+53	LEFT MAIN LANES	30.0	7676.7
1072+53	1078+65	LEFT MAIN LANES	VAR.	2742.2
1078+65	1179+58	LEFT MAIN LANES	30.0	33643.3
1183+49	1244+92	LEFT MAIN LANES	30.0	20476.7
1244+92	1254+92	LEFT MAIN LANES	VAR.	4488.6
1254+92	1283+92	LEFT MAIN LANES	30.0	9666.7
1283+92	1291+16	LEFT MAIN LANES	VAR.	3317.6
1291+16	1292+47	LEFT MAIN LANES	30.0	436.7
1298+06	1356+54	LEFT MAIN LANES	30.0	19493.3
1358+99	1508+40	LEFT MAIN LANES	30.0	49803.3
1510+48	1638+02	LEFT MAIN LANES	30.0	42513.3
		INTERCHANGE RAMPS		
1044+21	1049+71	GEORGIA RIDGE DR. INTERCHANGE (EXIT 20) RAMP 1	15.5	947.2
1062+45	1067+95	GEORGIA RIDGE DR. INTERCHANGE (EXIT 20) RAMP 2	15.5	947.2
1068+86	1074+36	GEORGIA RIDGE DR. INTERCHANGE (EXIT 20) RAMP 3	15.5	947.2
1049+49	1054+99	GEORGIA RIDGE DR. INTERCHANGE (EXIT 20) RAMP 4	15.5	947.2
1254+10	1259+60	N. MAIN ST. INTERCHANGE (EXIT 24) RAMP 1	15.5	947.2
1275+56	1281+06	N. MAIN ST. INTERCHANGE (EXIT 24) RAMP 2	15.5	947.2
1280+25	1285+75	N. MAIN ST. INTERCHANGE (EXIT 24) RAMP 3	15.5	947.2
1254+90	1260+40	N. MAIN ST. INTERCHANGE (EXIT 24) RAMP 4	15.5	947.2
TOTAL:				500195.10

NOTE: AVERAGE MILLING DEPTH 2". ALL MATERIAL GENERATED IN THE COLD MILLING PROCESS SHALL BECOME THE RESPONSIBILITY OF THE CONTRACTOR.

WIRE ROPE SAFETY FENCE

STATION	STATION	LOCATION	WIRE ROPE SAFETY FENCE	* WRSF ANCHOR	WRSF MAINTENANCE MATERIALS
			LIN. FT.	EACH	LUMP SUM
896+35.95	944+24.99	RIGHT OF LEFT MAIN LANES	4789.04	2	
945+75.04	1056+29.01	LEFT OF RIGHT MAIN LANES	11053.97	2	
1060+29.01	1157+08.51	LEFT OF RIGHT MAIN LANES	9679.50	2	
1161+08.51	1179+49.55	LEFT OF RIGHT MAIN LANES	1841.04	2	
1179+46.12	1264+70.50	LEFT OF RIGHT MAIN LANES	8524.38	2	
1268+70.50	1292+72.15	LEFT OF RIGHT MAIN LANES	2401.65	2	
1297+78.72	1356+17.30	LEFT OF RIGHT MAIN LANES	5838.58	2	
1358+08.75	1378+83.91	LEFT OF RIGHT MAIN LANES	2075.16	2	
ENTIRE	PROJECT				1.00
TOTALS:			46203.32	16	1.00

* SHOWN FOR INFORMATION ONLY.

CONCRETE DITCH PAVING

STATION	STATION	LOCATION	LENGTH	WIDTH	CONC. DITCH PAVING (TYPE B)	SOLID SODDING	WATER
			LIN. FT.	FEET	SQ. YD.	SQ. YD.	M. GAL.
896+35.95	944+24.99	RIGHT OF LEFT MAIN LANES	4789.04	4	2128.46	1064.23	13.41
945+75.04	1056+29.01	LEFT OF RIGHT MAIN LANES	11053.97	4	4912.88	2456.44	30.95
1060+29.01	1157+08.51	LEFT OF RIGHT MAIN LANES	9679.50	4	4302.00	2151.00	27.10
1161+08.51	1179+49.55	LEFT OF RIGHT MAIN LANES	1841.04	4	818.24	409.12	5.15
1179+46.12	1264+70.50	LEFT OF RIGHT MAIN LANES	8524.38	4	3788.61	1894.31	23.87
1268+70.50	1292+72.15	LEFT OF RIGHT MAIN LANES	2401.65	4	1067.40	533.70	6.72
1297+78.72	1356+17.30	LEFT OF RIGHT MAIN LANES	5838.58	4	2594.92	1297.46	16.35
1358+08.75	1378+83.91	LEFT OF RIGHT MAIN LANES	2075.16	4	922.29	461.15	5.81
TOTALS:					20534.80	10267.41	129.36

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

EROSION CONTROL

STATION	STATION	LOCATION	PERMANENT EROSION CONTROL					TEMPORARY EROSION CONTROL		
			SEEDING	LIME	MULCH COVER	WATER	SECOND SEEDING APPLICATION	WATTLE (20") (E-1)	TRIANGULAR SILT DIKE	*SEDIMENT REMOVAL & DISPOSAL
			ACRE	TON	ACRE	M.GAL.	ACRE	LIN. FT.	LIN. FT.	CU. YD.
ENTIRE	PROJECT	MAIN LANES	10.58	21.16	10.58	1079.2	10.58		1525	146
*ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.			2.65	5.30	2.65	270.3	2.65	810	400	15
TOTALS:			13.23	26.46	13.23	1349.5	13.23	810	1925	161

BASIS OF ESTIMATE:
LIME .....2 TONS / ACRE OF SEEDING
WATER.....102.0 M.G. / ACRE OF SEEDING
TRIANGULAR SILT DIKE.....25 LIN. FT. / DITCH CHECK
WATTLE DITCH CHECKS.....9 FEET / 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 ARE ESTIMATED.
SEE SECTION 104.03 OF THE STD. SPECS.

GUARDRAIL

STATION	STATION	LOCATION	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE 2)	TERMINAL ANCHOR POST (TYPE 1)
			LIN. FT.	EACH	
941+24.98	946+24.98	LEFT OF RIGHT MAIN LANES	450	1	1
943+74.99	948+74.99	RIGHT OF LEFT MAIN LANES	450	1	1
1055+79.01	1060+79.01	LEFT OF RIGHT MAIN LANES	450	1	1
1057+45.86	1062+45.86	RIGHT OF LEFT MAIN LANES	450	1	1
1156+58.51	1161+58.51	LEFT OF RIGHT MAIN LANES	450	1	1
1159+08.51	1164+08.51	RIGHT OF LEFT MAIN LANES	450	1	1
1264+20.50	1269+20.50	LEFT OF RIGHT MAIN LANES	450	1	1
1266+70.51	1271+70.51	RIGHT OF LEFT MAIN LANES	450	1	1
TOTALS:			3600	8	8

1/14/2013

RBB0403.DGN

QUANTITIES

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	16	75

(2) QUANTITIES

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-16-13

BASE AND SURFACING

STATION	STATION	LOCATION	LENGTH	AGGREGATE BASE COURSE (CLASS 7)		TACK COAT				ACHM SURFACE COURSE (1/2")			
				TON / STATION	TON	AVG. WIDTH	SQ.YD.	GALLONS / SQ.YD.	GALLON	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 76-22
			FEET			FEET				FEET			TON
MAIN LANES													
897+36	1039+14	RIGHT MAIN LANES	14178.0			30.0	47260.0	0.10	4726.0	30.0	47260.0	220.0	5198.6
1039+14	1046+04	RIGHT MAIN LANES	690.0			VAR.	3246.6	0.10	324.7	VAR.	3246.6	220.0	357.1
1046+04	1067+94	RIGHT MAIN LANES	2190.0			30.0	7300.0	0.10	730.0	30.0	7300.0	220.0	803.0
1067+94	1077+94	RIGHT MAIN LANES	1000.0			VAR.	4459.9	0.10	446.0	VAR.	4459.9	220.0	490.6
1077+94	1179+10	RIGHT MAIN LANES	10116.0			30.0	33720.0	0.10	3372.0	30.0	33720.0	220.0	3709.2
1183+01	1248+98	RIGHT MAIN LANES	6597.0			30.0	21990.0	0.10	2199.0	30.0	21990.0	220.0	2418.9
1248+98	1255+92	RIGHT MAIN LANES	694.0			VAR.	3212.6	0.10	321.3	VAR.	3212.6	220.0	353.4
1255+92	1281+05	RIGHT MAIN LANES	2513.0			30.0	8376.7	0.10	837.7	30.0	8376.7	220.0	921.4
1281+05	1291+05	RIGHT MAIN LANES	1000.0			VAR.	4488.5	0.10	448.9	VAR.	4488.5	220.0	493.7
1291+05	1292+47	RIGHT MAIN LANES	142.0			30.0	473.3	0.10	47.3	30.0	473.3	220.0	52.1
1298+06	1355+66	RIGHT MAIN LANES	5760.0			30.0	19200.0	0.10	1920.0	30.0	19200.0	220.0	2112.0
1358+11	1507+13	RIGHT MAIN LANES	14902.0			30.0	49673.3	0.10	4967.3	30.0	49673.3	220.0	5464.1
1509+21	1638+51	RIGHT MAIN LANES	12930.0			30.0	43100.0	0.10	4310.0	30.0	43100.0	220.0	4741.0
897+36	1039+50	LEFT MAIN LANES	14214.0			30.0	47380.0	0.10	4738.0	30.0	47380.0	220.0	5211.8
1039+50	1049+50	LEFT MAIN LANES	1000.0			VAR.	4478.2	0.10	447.8	VAR.	4478.2	220.0	492.6
1049+50	1072+53	LEFT MAIN LANES	2303.0			30.0	7676.7	0.10	767.7	30.0	7676.7	220.0	844.4
1072+53	1078+65	LEFT MAIN LANES	612.0			VAR.	2742.2	0.10	274.2	VAR.	2742.2	220.0	301.6
1078+65	1179+58	LEFT MAIN LANES	10093.0			30.0	33643.3	0.10	3364.3	30.0	33643.3	220.0	3700.8
1183+49	1244+92	LEFT MAIN LANES	6143.0			30.0	20476.7	0.10	2047.7	30.0	20476.7	220.0	2252.4
1244+92	1254+92	LEFT MAIN LANES	1000.0			VAR.	4488.6	0.10	448.9	VAR.	4488.6	220.0	493.7
1254+92	1283+92	LEFT MAIN LANES	2900.0			30.0	9666.7	0.10	966.7	30.0	9666.7	220.0	1063.3
1283+92	1291+16	LEFT MAIN LANES	724.0			VAR.	3317.6	0.10	331.8	VAR.	3317.6	220.0	364.9
1291+16	1292+47	LEFT MAIN LANES	131.0			30.0	436.7	0.10	43.7	30.0	436.7	220.0	48.0
1298+06	1356+54	LEFT MAIN LANES	5848.0			30.0	19493.3	0.10	1949.3	30.0	19493.3	220.0	2144.3
1358+99	1508+40	LEFT MAIN LANES	14941.0			30.0	49803.3	0.10	4980.3	30.0	49803.3	220.0	5478.4
1510+48	1638+02	LEFT MAIN LANES	12754.0			30.0	42513.3	0.10	4251.3	30.0	42513.3	220.0	4676.5
ADDITIONAL FOR RAMPS													
1044+21	1049+71	GEORGIA RIDGE DR. INTERCHANGE (EXIT 20) RAMP 1	550.0			15.5	947.2	0.10	94.7	15.5	947.2	220.0	104.2
1062+45	1067+95	GEORGIA RIDGE DR. INTERCHANGE (EXIT 20) RAMP 2	550.0			15.5	947.2	0.10	94.7	15.5	947.2	220.0	104.2
1068+86	1074+36	GEORGIA RIDGE DR. INTERCHANGE (EXIT 20) RAMP 3	550.0			15.5	947.2	0.10	94.7	15.5	947.2	220.0	104.2
1049+49	1054+99	GEORGIA RIDGE DR. INTERCHANGE (EXIT 20) RAMP 4	550.0			15.5	947.2	0.10	94.7	15.5	947.2	220.0	104.2
1254+10	1259+60	N. MAIN ST. INTERCHANGE (EXIT 24) RAMP 1	550.0			15.5	947.2	0.10	94.7	15.5	947.2	220.0	104.2
1275+56	1281+06	N. MAIN ST. INTERCHANGE (EXIT 24) RAMP 2	550.0			15.5	947.2	0.10	94.7	15.5	947.2	220.0	104.2
1280+25	1285+75	N. MAIN ST. INTERCHANGE (EXIT 24) RAMP 3	550.0			15.5	947.2	0.10	94.7	15.5	947.2	220.0	104.2
1254+90	1260+40	N. MAIN ST. INTERCHANGE (EXIT 24) RAMP 4	550.0			15.5	947.2	0.10	94.7	15.5	947.2	220.0	104.2
ADDITIONAL FOR WIDENING FOR GUARDRAIL													
940+67	946+83	LEFT OF RIGHT MAIN LANES	616.0	161.40	994.2					VAR.	501.0	220.0	55.1
943+17	949+33	RIGHT OF LEFT MAIN LANES	616.0	161.40	994.2					VAR.	501.0	220.0	55.1
1055+21	1061+37	LEFT OF RIGHT MAIN LANES	616.0	173.51	1068.8					VAR.	530.5	220.0	58.4
1056+88	1063+04	RIGHT OF LEFT MAIN LANES	616.0	157.62	970.9					VAR.	473.0	220.0	52.0
1156+01	1162+17	LEFT OF RIGHT MAIN LANES	616.0	173.51	1068.8					VAR.	530.5	220.0	58.4
1158+51	1164+67	RIGHT OF LEFT MAIN LANES	616.0	157.62	970.9					VAR.	473.0	220.0	52.0
1263+63	1269+79	LEFT OF RIGHT MAIN LANES	616.0	173.51	1068.8					VAR.	530.5	220.0	58.4
1266+13	1272+29	RIGHT OF LEFT MAIN LANES	616.0	157.62	970.9					VAR.	473.0	220.0	52.0
ADDITIONAL FOR MEDIAN CROSSOVER													
1392+23		MAIN LANES	20.0	VAR.	199.2					VAR.	272.8	220.0	30.0
TOTALS:					**8306.7**		500195.1		**50019.5**		504480.4		**55492.8**

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2").....94.3% MIN. AGGR.....5.7% ASPHALT BINDER
MAXIMUM NUMBER OF GYRATIONS = 205 FOR PG 76-22

RUMBLE STRIPS IN ASPHALT SHOULDERS

STATION	STATION	LOCATION	* RUMBLE STRIPS IN ASPHALT SHOULDERS
			LIN.FT.
897+36	1044+21	RIGHT OF RIGHT MAIN LANES	14685
1045+39	1067+94	RIGHT OF RIGHT MAIN LANES	2255
1067+96	1178+97	RIGHT OF RIGHT MAIN LANES	11101
1182+93	1254+09	RIGHT OF RIGHT MAIN LANES	7116
1255+26	1281+05	RIGHT OF RIGHT MAIN LANES	2579
1281+07	1292+47	RIGHT OF RIGHT MAIN LANES	1140
1298+05	1355+43	RIGHT OF RIGHT MAIN LANES	5738
1358+00	1507+13	RIGHT OF RIGHT MAIN LANES	14913
1509+22	1638+51	RIGHT OF RIGHT MAIN LANES	12929
897+36	1179+17	LEFT OF RIGHT MAIN LANES	28181
1183+11	1292+47	LEFT OF RIGHT MAIN LANES	10936
1298+05	1355+79	LEFT OF RIGHT MAIN LANES	5774
1358+31	1507+13	LEFT OF RIGHT MAIN LANES	14882
1509+22	1638+51	LEFT OF RIGHT MAIN LANES	12929
897+36	1179+48	RIGHT OF LEFT MAIN LANES	28212
1183+42	1292+47	RIGHT OF LEFT MAIN LANES	10905
1298+05	1356+36	RIGHT OF LEFT MAIN LANES	5831
1358+88	1507+68	RIGHT OF LEFT MAIN LANES	14880
1509+72	1638+03	RIGHT OF LEFT MAIN LANES	12831
897+36	1049+48	LEFT OF LEFT MAIN LANES	15212
1049+50	1073+19	LEFT OF LEFT MAIN LANES	2369
1074+37	1179+65	LEFT OF LEFT MAIN LANES	10528
1183+61	1254+90	LEFT OF LEFT MAIN LANES	7129
1254+92	1284+59	LEFT OF LEFT MAIN LANES	2967
1285+76	1292+47	LEFT OF LEFT MAIN LANES	671
1298+05	1356+67	LEFT OF LEFT MAIN LANES	5862
1359+23	1507+68	LEFT OF LEFT MAIN LANES	14845
1509+72	1638+02	LEFT OF LEFT MAIN LANES	12830
TOTAL:			**290230**

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

REMOVAL AND DISPOSAL OF IMPACT ATTENUATION BARRIERS

STATION	LOCATION	EACH
945+00	RIDGE RD. OVERPASS	2
1058+61	GEORGIA RIDGE DR. OVERPASS	2
1160+39	OLD GRAPHIC ST. OVERPASS	2
1267+96	N. MAIN ST. OVERPASS	2
TOTAL:		**8**

1/14/2013

RBB0403.DGN

QUANTITIES

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.		BB0403	17	75
				(1) A5110, A5113 - QUANTITIES - 53506				
				B5113, A5114, B5114				

SCHEDULE OF BRIDGE QUANTITIES - JOB BB0403

LOG MILE	UNIT OF STRUCTURE	ITEM NO.	802	803	SS & 804	SP JOB BB0403	SP JOB BB0403	SP JOB BB0403	SP JOB BB0403	SP JOB BB0403
		ITEM	GROOVING	CLASS 3 PROTECTIVE SURFACE TREATMENT	REINFORCING STEEL - BRIDGE (GRADE 60)	HYDRODEMOLITION	BRIDGE DECK REPAIR	VERY EARLY STRENGTH LATEX MODIFIED CONCRETE OVERLAY (1½" THICK)	VERY EARLY STRENGTH LATEX MODIFIED CONCRETE (VARIABLE DEPTH)	SILICONE JOINT SEALANT
		UNIT	SQ. YD.	LIN. FT.	LBS.	SQ. YD.	SQ. FT.	SQ. YD.	CU. YD.	LIN. FT.
25.69	EXISTING BRIDGE NO. A5110		680	340	500	736.4	994	738.0	10.3	114
31.03	EXISTING BRIDGE NO. A5113		754	377	500	816.8	1,103	818.6	11.3	85
31.04	EXISTING BRIDGE NO. B5113		754	377	500	816.8	1,103	818.6	11.3	85
31.51	EXISTING BRIDGE NO. A5114		820	410	500	888.5	1,200	890.4	12.3	85
31.52	EXISTING BRIDGE NO. B5114		820	410	500	888.5	1,200	890.4	12.3	85
	TOTALS FOR JOB NO. BB0403		3,828	1,914	2,500 (1)	4,147.0	5,600 (1)	4,156.0	57.5 (1)	454

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

JIM TRIBO
DESIGN SECTION SUPERVISOR

STATE OF ARKANSAS
Carl J. Fuselier
REGISTERED PROFESSIONAL ENGINEER
No. 7510
1/7/13
CARL J. FUSELIER

BRIDGE ENGINEER

SCHEDULE OF BRIDGE QUANTITIES
DYER - CRAVENS CREEK (S)
CRAWFORD AND FRANKLIN COUNTIES

ROUTE 40 SEC. 11 & 12

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: MRE DATE: 12/17/12 FILENAME: bbb0403_ql.dgn
CHECKED BY: GWD DATE: 1/7/13 SCALE: NO SCALE
DESIGNED BY: — DATE: —

BRIDGE NO. A5110, A5113, B5113 A5114, B5114 DRAWING NO. 53506

PRINT DATE: 07-JAN-2013

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
02-19-13				6	ARK.			
02-21-13				JOB NO.		BB0403	18	75

(2) SUMMARY OF QUANTITIES AND REVISIONS

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

2-21-13

SUMMARY OF QUANTITIES

	ITEM NUMBER	ITEM		QUANTITY	UNIT
	202	REMOVAL AND DISPOSAL OF IMPACT ATTENUATION BARRIER		8	EACH
	210	UNCLASSIFIED EXCAVATION		415	CU. YD.
	210	COMPACTED EMBANKMENT		500	CU. YD.
	SS & 303	AGGREGATE BASE COURSE (CLASS 7)		8307	TON
	401	TACK COAT		50020	GAL.
	SP, SS, & 407	MINERAL AGGREGATE IN ACHM SURFACE COURSE (1/2")		52330	TON
	SP, SS, & 407	ASPHALT BINDER (PG 76-22) IN ACHM SURFACE COURSE (1/2")		3163	TON
	412	COLD MILLING ASPHALT PAVEMENT		500195	SQ. YD.
	601	MOBILIZATION		1.00	LUMP SUM
	SP & 602	FURNISHING FIELD OFFICE		1.00	EACH
	SP, SS, & 603	MAINTENANCE OF TRAFFIC		1.00	LUMP SUM
	SS & 604	SIGNS		1402	SQ. FT.
	SS & 604	TRAFFIC DRUMS		737	EACH
	SS & 604	FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER		513	LIN. FT.
	SS & 604	RELOCATING PRECAST CONCRETE BARRIER		4617	LIN. FT.
	SS & 604	CONSTRUCTION PAVEMENT MARKINGS		358694	LIN. FT.
	604	REMOVABLE CONSTRUCTION PAVEMENT MARKINGS		6736	LIN. FT.
	604	REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS		1628	LIN. FT.
	604	REMOVAL OF PERMANENT PAVEMENT MARKINGS		10304	LIN. FT.
	SS & 604	ADVANCE WARNING ARROW PANEL		140	DAY
	SP, SS, & 604	PORTABLE CHANGEABLE MESSAGE SIGN		120	WEEK
	SP & 605	CONCRETE DITCH PAVING (TYPE B)		20535	SQ. YD.
	SS & 617	GUARDRAIL (TYPE A)		3600	LIN. FT.
	SS & 617	TERMINAL ANCHOR POSTS (TYPE 1)		8	EACH
	SS & 617	GUARDRAIL TERMINAL (TYPE 2)		8	EACH
	620	LIME		26	TON
	620	SEEDING		13.23	ACRE
	620	MULCH COVER		13.23	ACRE
	SS & 620	WATER		1478.9	M.GAL.
	621	SEDIMENT REMOVAL AND DISPOSAL		161	CU. YD.
	623	SECOND SEEDING APPLICATION		13.23	ACRE
	624	SOLID SODDING		10267	SQ. YD.
	635	ROADWAY CONSTRUCTION CONTROL		1.00	LUMP SUM
	642	RUMBLE STRIPS IN ASPHALT SHOULDERS		290230	LIN. FT.
*	SP & 719	INVERTED PROFILE THERMOPLASTIC PAVEMENT MARKING WHITE (4")	(ALTERNATE NO. 1)	201279	LIN. FT.
*	SP	HIGH PERFORMANCE MARKING TAPE WHITE (4")	(ALTERNATE NO. 2)	201279	LIN. FT.
*	SP & 719	INVERTED PROFILE THERMOPLASTIC PAVEMENT MARKING WHITE (8")	(ALTERNATE NO. 1)	3532	LIN. FT.
*	SP	HIGH PERFORMANCE MARKING TAPE WHITE (8")	(ALTERNATE NO. 2)	3532	LIN. FT.
*	SP & 719	INVERTED PROFILE THERMOPLASTIC CONTRAST PAVEMENT MARKING WHITE (4")	(ALTERNATE NO. 1)	919	LIN. FT.
*	SP	HIGH PERFORMANCE CONTRAST MARKING TAPE WHITE (4")	(ALTERNATE NO. 2)	919	LIN. FT.
*	SP & 719	INVERTED PROFILE THERMOPLASTIC PAVEMENT MARKING YELLOW (4")	(ALTERNATE NO. 1)	152964	LIN. FT.
*	SP	HIGH PERFORMANCE MARKING TAPE YELLOW (4")	(ALTERNATE NO. 2)	152964	LIN. FT.
	721	RAISED PAVEMENT MARKERS (TYPE II)		2531	EACH
	SP	FLUSHING UNDERDRAIN		146029	LIN. FT.
	SP	TRIANGULAR SILT DIKE		1925	LIN. FT.
	SP	WATTLE (20")		810	LIN. FT.
	SP	WIRE ROPE SAFETY FENCE		46203	LIN. FT.
	SP	WIRE ROPE SAFETY FENCE MAINTENANCE MATERIALS		1.00	LUMP SUM
		STRUCTURES OVER 20' SPAN			
	636	BRIDGE CONSTRUCTION CONTROL		1.00	LUMP SUM
	802	GROOVING		3828	SQ. YD.
	803	CLASS 3 PROTECTIVE SURFACE TREATMENT		1914	LIN. FT.
	SS & 804	REINFORCING STEEL-BRIDGE (GRADE 60)		2500	POUND
	SP	BRIDGE DECK REPAIR		5600	SQ. FT.
	SP	HYDRODEMOLITION		4147.0	SQ. YD.
	SP	SILICONE JOINT SEALANT		454	LIN. FT.
	SP	VERY EARLY STRENGTH LATEX MODIFIED CONCRETE OVERLAY (1 1/2" THICK)		4156.0	SQ. YD.
	SP	VERY EARLY STRENGTH LATEX MODIFIED CONCRETE (VARIABLE DEPTH)		57.5	CU. YD.

* DENOTES ALTERNATE BID ITEMS

REVISION BOX

DATE	REVISION	SHEET NUMBER
2/19/2013	REVISED SEQUENCE OF CONSTRUCTION NOTE. DELETED "SUPPLEMENT - TRAINING PROGRAM - JOBBB0403"	2, 8, 18
2/21/2013	ADDED SHEET 6A TO SPECIAL DETAILS	6A, 18

2/19/2013

RBB0403.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	19	75

(2) PLAN SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-16-13

STA. 901+00 IN PLACE
TYPE "H" DROP INLET IN MEDIAN
4' X 6' X H = 4'-0" WITH
24" X 84' PIPE OUTLET
RETAIN

EXIST. C OF A & R/W

STA. 896+35.95
BEGIN WIRE ROPE SAFETY FENCE

STA. 897+35.95
BEGIN JOB BB0403
BEGIN MILL & INLAY

N 85°29'58" E

STA. 907+00 IN PLACE
TYPE "H" DROP INLET IN MEDIAN
4' X 6' X H = 4'-0" WITH
24" X 84' PIPE OUTLET
RETAIN

PC909+06.02

895 900 905 910

CENTERLINE
PI = 922+41.09
Δ = 26°14'00" LT.
D = 1°00'00.00"
T = 1335.07'
L = 2623.34'
PC = 909+06.02
PT = 935+29.35

EXIST. C OF A & R/W

TEMPORARY EROSION CONTROL REVISIONS

DATE OF REVISION	REVISION

LEGEND

△△△△ TRIANGULAR SILT DIKE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

EXIST. C OF A & R/W

WIRE ROPE SAFETY FENCE
& CONCRETE DITCH PAVING

910 915 920 925

STA. 914+00 IN PLACE
DBL. 10' X 8' X 250' R.C. BOX CULV'T.
TYPE "K" DROP INLET IN MEDIAN
6' X 6' X H = 4'-0"
45° RT. FWD. SKEW
D.A. = 831 AC., C = 1.0
RETAIN

STA. 918+68 IN PLACE
5' X 5' X 178' R.C. BOX CULV'T.
D.A. = 65 AC., C = 1.0
RETAIN

CENTERLINE
PI = 922+41.09
Δ = 26°14'00" LT.
D = 1°00'00.00"
T = 1335.07'
L = 2623.34'
PC = 909+06.02
PT = 935+29.35

PI922+41.09

STA. 922+00 IN PLACE
TYPE "H" DROP INLET IN MEDIAN
4' X 6' X H = 4'-0" WITH
24" X 86' PIPE OUTLET
RETAIN

1/15/2013

RBB0403.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		B80403	20	75

(2) PLAN SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-16-13

STA. 929+00 IN PLACE
DBL. 6' X 8' X 226' R.C. BOX CULV'T.
TYPE "K" DROP INLET IN MEDIAN
6' X 6' X H = 5'-0"
30° LT. FWD. SKEW
D.A. = 383 AC., C = 1.0
RETAIN

STA. 934+00 IN PLACE
TYPE "H" DROP INLET IN MEDIAN
4' X 6' X H = 4'-0" WITH
24" X 86' PIPE OUTLET
RETAIN

CENTERLINE
PI = 922+41.09
Δ = 26°14'00" LT.
D = 1°00'00.00"
T = 1335.07'
L = 2623.34'
PC = 909+06.02
PT = 935+29.35

EXIST. C OF A & R/W

925 930 935 940

N 59°15'58" E

PT 935+29.35

WIRE ROPE SAFETY FENCE & CONCRETE DITCH PAVING

EXIST. C OF A & R/W

TEMPORARY EROSION CONTROL REVISIONS

DATE OF REVISION	REVISION

LEGEND

△△△△ TRIANGULAR SILT DIKE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

STA.	STA.	SIDE	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE 1)	GUARDRAIL TERMINAL (TYPE 2)
941+24.98	946+24.98	R.M.L. - LT.	450 LIN. FT.	1EA.	1EA.
943+74.99	948+74.99	L.M.L. - RT.	450 LIN. FT.	1EA.	1EA.

EXIST. C OF A & R/W

REMOVAL AND DISPOSAL OF IMPACT ATTENUATION BARRIER
STA. 945+00 C.L. OF I-40 = 2 EACH

STA. 944+24.99
END WIRE ROPE SAFETY FENCE

940 945 950 955

N 59°15'58" E

STA. 943+00 IN PLACE
TYPE "H" DROP INLET IN MEDIAN
4' X 6' X H = 5'-0" WITH
30" X 76' PIPE INLET
30" X 92' PIPE OUTLET
D.A. = 8 AC., C = 1.0
RETAIN

STA. 945+75.04
BEGIN WIRE ROPE SAFETY FENCE

STA. 948+00 IN PLACE
TYPE "H" DROP INLET IN MEDIAN
6' X 6' X H = 10'-0" WITH
48" X 90' PIPE INLET
48" X 110' PIPE OUTLET
D.A. = 22 AC., C = 1.0
RETAIN

STA. 954+70 IN PLACE
TYPE "H" DROP INLET IN MEDIAN
6' X 6' X H = 6'-0" WITH
48" X 78' PIPE INLET
48" X 86' PIPE OUTLET
D.A. = 22 AC., C = 1.0
RETAIN

EXIST. C OF A & R/W

1/15/2013

RBB0403.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	21	75

(2) PLAN SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-16-13

STA. 958+52 IN PLACE
TYPE "H" DROP INLET IN MEDIAN
6' X 6' X H = 9'-3" WITH
48" X 96' PIPE INLET
48" X 122' PIPE OUTLET
30° RT. FWD. SKEW
D.A. = 23 AC., C = 1.0
RETAIN

STA. 966+00 IN PLACE
TYPE "H" DROP INLET IN MEDIAN
4' X 6' X H = 4'-0" WITH
24" X 74' PIPE OUTLET
RETAIN

955 — N 59°15'58" E — 960 — 965 — 970

PI 970+01.73

WIRE ROPE SAFETY FENCE
& CONCRETE DITCH PAVING

PC 963+91.74

EXIST. C OF A & R/W

CENTERLINE
PI = 970+01.73
Δ = 6°05' 39.1" RT.
D = 0°30' 00.0"
T = 609.99'
L = 1218.84'
PC = 963+91.74
PT = 976+10.57

TEMPORARY EROSION CONTROL REVISIONS

DATE OF REVISION	REVISION

LEGEND

△△△△ TRIANGULAR SILT DIKE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

970 — 975 — 980 — N 65°21'37" E — 985

PT 976+10.57

WIRE ROPE SAFETY FENCE
& CONCRETE DITCH PAVING

CENTERLINE
PI = 970+01.73
Δ = 6°05' 39.1" RT.
D = 0°30' 00.0"
T = 609.99'
L = 1218.84'
PC = 963+91.74
PT = 976+10.57

STA. 974+05 IN PLACE
6' X 6' X 212' R.C. BOX CULV'T.
TYPE "K" DROP INLET IN MEDIAN
6' X 6' X H = 5'-0"
12° RT. FWD. SKEW
D.A. = 102 AC., C = 1.0
RETAIN

STA. 980+10 IN PLACE
TYPE "H" DROP INLET IN MEDIAN
6' X 6' X H = 5'-0" WITH
36" X 80' PIPE INLET
36" X 76' PIPE OUTLET
D.A. = 12 AC., C = 1.0
RETAIN

EXIST. C OF A & R/W

1/15/2013

RBB0403.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	22	75

(2) PLAN SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-16-13

STA. 987+30 IN PLACE
TYPE "H" DROP INLET IN MEDIAN
6' X 6' X H = 6'-3" WITH
48" X 76' PIPE INLET
48" X 80' PIPE OUTLET
D.A. = 25 AC., C = 1.0
RETAIN

STA. 994+10 IN PLACE
TYPE "H" DROP INLET IN MEDIAN
4' X 6' X H = 4'-6" WITH
24" X 82' PIPE OUTLET
RETAIN

STA. 999+10 IN PLACE
DBL. 10' X 10' X 314' R.C. BOX CULV'T.
TYPE "K" DROP INLET IN MEDIAN
5' X 5' X H = 10'-0"
45° RT. FWD. SKEW
D.A. = 966 AC., C = 1.0
SPAN 32.06'
RETAIN

EXIST. C OF A & R/W

N

985 — 990 — N 65°21'37" E — 995 — 1000

WIRE ROPE SAFETY FENCE
& CONCRETE DITCH PAVING

EXIST. C OF A & R/W

TEMPORARY EROSION CONTROL REVISIONS

DATE OF REVISION	REVISION

LEGEND

△△△△ TRIANGULAR SILT DIKE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

EXIST. C OF A & R/W

N

1000 — N 65°21'37" E — 1005 — 1010 — 1015

STA. 1004+60 IN PLACE
TYPE "H" DROP INLET IN MEDIAN
6' X 6' X H = 13'-0" WITH
36" X 94' PIPE INLET
36" X 150' PIPE OUTLET
30° LT. FWD. SKEW
"L" HEADWALL ON LT.
D.A. = 13 AC., C = 1.0
RETAIN

WIRE ROPE SAFETY FENCE
& CONCRETE DITCH PAVING

STA. 1012+91 IN PLACE
TYPE "H" DROP INLET IN MEDIAN
6' X 6' X H = 10'-0" WITH
42" X 94' PIPE INLET
42" X 106' PIPE OUTLET
30° LT. FWD. SKEW
D.A. = 20 AC., C = 1.0
JUNCTION BOX LT. WITH
18" x 24' STUB INLET
RETAIN

EXIST. C OF A & R/W

STA. 1008+58 IN PLACE
TYPE "H" DROP INLET IN MEDIAN
4' X 6' X H = 4'-0" WITH
24" X 78' PIPE OUTLET
RETAIN

STA. 1009+97 IN PLACE
4' X 6' X 242' R.C. BOX CULV'T.
D.A. = 64 AC., C = 1.0
RETAIN

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	23	75

(2) PLAN SHEETS

EXIST. C OF A & R/W

STA. 1017+54 IN PLACE
TYPE "H" DROP INLET TO LEFT
5' X 6' X H = 6'-0" WITH
36" X 66' PIPE INLET
TYPE "H" DROP INLET IN MEDIAN
5' X 6' X H = 6'-0" WITH
36" X 90' PIPE INLET
36" X 116' PIPE OUTLET
D.A. = 12 AC., C = 1.0
RETAIN

STA. 1021+09 IN PLACE
TYPE "H" DROP INLET TO LEFT
4' X 6' X H = 5'-0" WITH
24" X 102' PIPE INLET
TYPE "H" DROP INLET IN MEDIAN
4' X 6' X H = 4'-6" WITH
24" X 90' PIPE INLET
24" X 80' PIPE OUTLET
RETAIN

N

1015 1020 1025 N 65°21'37" E 1030

WIRE ROPE SAFETY FENCE
& CONCRETE DITCH PAVING

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-16-13

TEMPORARY EROSION CONTROL REVISIONS

DATE OF REVISION	REVISION

LEGEND

△△△△ TRIANGULAR SILT DIKE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

EXIST. C OF A & R/W

N

1030 N 65°21'37" E 1035 1040 1045

WIRE ROPE SAFETY FENCE
& CONCRETE DITCH PAVING

STA. 1029+75 IN PLACE
TYPE "H" DROP INLET TO LEFT
5' x 6' x H = 6' - 3" WITH
36" x 100' PIPE INLET
TYPE "H" DROP INLET IN MEDIAN
5' x 6' x H = 6' - 9" WITH
36" x 90' PIPE INLET
36" x 86' PIPE OUTLET W/STEEL GRATE ASSEMBLY
RETAIN

STA. 1035+10 IN PLACE
TYPE "H" DROP INLET IN MEDIAN
4' x 6' x H = 4' - 6" WITH
24" x 84' PIPE OUTLET W/STEEL GRATE ASSEMBLY
RETAIN

STA. 1040+09 IN PLACE
TYPE "H" DROP INLET IN MEDIAN
4' x 6' x H = 4' - 0" WITH
18" x 170' PIPE OUTLET
RETAIN

STA. 1045+09 IN PLACE
TYPE "H" DROP INLET IN MEDIAN
4' x 6' x H = 4' - 6" WITH
18" x 202' PIPE OUTLET
RETAIN

1/15/2013

RBB0403.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	24	75
				(2) PLAN SHEETS				

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-16-13

EXIST. C OF A & R/W

RAMP 4

STA. 1057+00 IN PLACE
TYPE "K" DROP INLET IN MEDIAN
4' x 6' X H= 4' - 0" WITH
4' x 4' x 156' R.C. BOX CULV'T
RETAIN

STA.	STA.	SIDE	GUARDRAIL (TYPE A)	THRIE BEAM GUARDRAIL TERMINAL	GUARDRAIL TERMINAL (TYPE 2)
1055+79.01	1060+79.01	R.M.L. - LT.	450 LIN. FT.	1EA.	1EA.
1057+45.86	1062+45.86	L.M.L. - RT.	450 LIN. FT.	1EA.	1EA.

REMOVAL AND DISPOSAL OF IMPACT ATTENUATION BARRIER
STA. 1058+61 C.L. OF I-40 = 2 EACH

1045 — N 65°21'37" E — 1050 — 1055 — 1060

STA. 1051+09 IN PLACE
TYPE "H" DROP INLET IN MEDIAN
4' x 6' x H = 4' - 0" WITH
24" x 88' PIPE OUTLET
RETAIN

STA. 1056+29.01
END WIRE ROPE SAFETY FENCE

RAMP 1

STA. 1045+59 IN PLACE
DBL. 10' x 10' x 300' R.C. BOX CULVERT
RETAIN

LEGEND

△△△△ TRIANGULAR SILT DIKE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

TEMPORARY EROSION CONTROL REVISIONS

DATE OF REVISION	REVISION

RAMP 3

1060 — 1065 — N 65°21'37" E — 1070 — 1075

STA. 1060+29.01
BEGIN WIRE ROPE SAFETY FENCE

STA. 1064+09 IN PLACE
TYPE "H" DROP INLET IN MEDIAN
4' x 6' x H = 4' - 0" WITH
24" x 84' PIPE OUTLET
RETAIN

RAMP 2

EXIST. C OF A & R/W

STA. 1068+10 IN PLACE
TYPE "H" DROP INLET IN MEDIAN
4' x 6' x H = 5' - 0" WITH
30" x 88' PIPE OUTLET
RETAIN

STA. 1074+24 IN PLACE
TYPE "K" DROP INLET IN MEDIAN
4' x 6' x H = 1' - 0"
8' x 6' x 212' R.C. BOX CULVERT
RETAIN

I-40

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RBB0403.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	25	75

(2) PLAN SHEETS

CENTERLINE
PI = 1080+09.34
Δ = 4°15'58.90" LT.
D = 0°30'00"
T = 426.83
L = 853.27
PC = 1075+82.51
PT = 1084+35.78

STA. 1083+34.107' LEFT
4' x 6' R.C. BOX CULVERT IN PLACE (M.L.)
4' x 6' R.C. BOX CULVERT IN PLACE (FRNT. RD)
4' x 6' x 52' R.C. BOX EXTENSION
18" x 32' R.C. STUB INLETS
W/STEEL GRATE ASSEMBLY (TYPE 2)
RETAIN

STA. 1088+49 IN PLACE
42" x 294' PIPE OUTLET
4° LT. FWD. SKEW
RETAIN

STATE OF ARKANSAS
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TRINITY D. SMITH
1-16-13

PC 1075+82.51
PT 1084+35.78
PI 1080+09.34
1075
1080
1085
1090
N 61°05'39" E

WIRE ROPE SAFETY FENCE
& CONCRETE DITCH PAVING

EXIST. C OF A & R/W

TEMPORARY EROSION CONTROL REVISIONS

DATE OF REVISION	REVISION

LEGEND

△△△△ TRIANGULAR SILT DIKE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

WESTBOUND LANES CENTERLINE
PI = 1114+47.85
Δ = 14°30'00.1" RT.
D = 0°39'54.0"
T = 1096.08'
L = 2180.45'
PC = 1103+51.77
PT = 1125+32.22

PC 1103+51.77
1105
1090
N 61°05'39" E
1095
1100
1105
PC 1092+55.85

WIRE ROPE SAFETY FENCE
& CONCRETE DITCH PAVING

EXIST. C OF A & R/W

CENTERLINE
PI = 1114+42.53
Δ = 14°30'00" RT.
D = 0°20'00"
T = 2186.68'
L = 4350.00'
PC = 1092+55.85
PT = 1136+05.84

STA. 1090+94 IN PLACE
TYPE "T" DROP INLET
H = 6' - 0"
DBL. 6' x 3' x 279' R.C. BOX CULVERT
45° LT. FWD. SKEW
RETAIN

STA. 1098+09 IN PLACE
TYPE "S" DROP INLET IN MEDIAN
H = 4' - 10"
24" x 82" PIPE OUTLET
RETAIN

1/15/2013
RBB0403.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		B80403	26	75

(2) PLAN SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
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STA. 1111+08 RT. IN PLACE
24' x 120" R.C. PIPE CULVERT
30° RT. FWD. SKEW
RETAIN

STA. 1111+91 RT. IN PLACE
24' x 120" R.C. PIPE CULVERT
30° RT. FWD. SKEW
RETAIN

WESTBOUND LANES CENTERLINE
PI = 1114+47.85
Δ = 14°30' 00.1" RT.
D = 0°39' 54.0"
T = 1096.08'
L = 2180.45'
PC = 1103+51.77
PT = 1125+32.22

PI 1114+47.85

PI 1114+42.53

CENTERLINE
PI = 1114+42.53
Δ = 14°30' 00" RT.
D = 0°20' 00"
T = 2186.68'
L = 4350.00'
PC = 1092+55.85
PT = 1136+05.84

1105 1110 1115 1120

WIRE ROPE SAFETY FENCE
& CONCRETE DITCH PAVING

STA. 1118+99 RT. IN PLACE
24" x 120' R.C. PIPE CULVERT
RETAIN

TEMPORAY EROSION CONTROL REVISIONS

DATE OF REVISION	REVISION

LEGEND

△△△△ TRIANGULAR SILT DIKE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

WESTBOUND LANES CENTERLINE
PI = 1114+47.85
Δ = 14°30' 00.1" RT.
D = 0°39' 54.0"
T = 1096.08'
L = 2180.45'
PC = 1103+51.77
PT = 1125+32.22

PT 1125+32.22 BACK =
STA. 1125+44.04 AHD.

1120 1125 1130 1135

CENTERLINE
PI = 1114+42.53
Δ = 14°30' 00" RT.
D = 0°20' 00"
T = 2186.68'
L = 4350.00'
PC = 1092+55.85
PT = 1136+05.84

STA. 1125+22 IN PLACE
TYPE "T" DROP INLET
H = 0' - 6"
DBL. 10' x 6' x 234' R.C. BOX CULVERT
RETAIN

STA. 1128+97 RT. IN PLACE
24" x 64' R.C. PIPE CULVERT
W/STEEL GRATE ASSEMBLY (LT. & RT.)
RETAIN

WIRE ROPE SAFETY FENCE
& CONCRETE DITCH PAVING

EXIST. C OF A & R/W

1/15/2013

RBB0403.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	27	75

(2) PLAN SHEETS

STA. 1137+72 IN PLACE
TYPE "T" DROP INLET
H = 0' - 6"
10' x 6' x 172' R.C. BOX CULVERT
RETAIN

EXIST. C OF A & R/W

STATE OF ARKANSAS
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TRINITY D. SMITH
1-16-13

1135 — 1140 — N 75°35'39" E — 1145 — 1150

PT 1136+05.84

WIRE ROPE SAFETY FENCE
& CONCRETE DITCH PAVING

TEMPORARY EROSION CONTROL REVISIONS

DATE OF REVISION	REVISION

EXIST. C OF A & R/W

LEGEND

△△△△ TRIANGULAR SILT DIKE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

STA.	STA.	SIDE	GUARDRAIL (TYPE A)	THRIE BEAM GUARDRAIL TERMINAL	GUARDRAIL TERMINAL (TYPE 2)
1156+58.51	1161+58.51	R.M.L. - LT.	450 LIN. FT.	1 EA.	1 EA.
1159+08.51	1164+08.51	L.M.L. - RT.	450 LIN. FT.	1 EA.	1 EA.

EXIST. C OF A & R/W

REMOVAL AND DISPOSAL OF IMPACT ATTENUATION BARRIER
STA. 1160+39 C.L. OF I-40 = 2 EACH

1150 — 1155 — 1160 — N 75°35'39" E — 1165

STA. 1150+98 RT. IN PLACE
24" x 72' R.C. PIPE CULVERT
STEEL GRATE ASSEMBLY (LT.)
RETAIN

STA. 1156+98 IN PLACE
TYPE "T" DROP INLET
H = 0' - 6"
DBL 4' x 4' x 173'
15° LT. FWD. SKEW

STA. 1157+08.51
END WIRE ROPE SAFETY FENCE

STA. 1161+08.51
BEGIN WIRE ROPE SAFETY FENCE

STA. 1163+98 IN PLACE
TYPE "R" DROP INLET
H = 2' - 10"
24" x 82' R.C. PIPE OUTLET
RETAIN

EXIST. C OF A & R/W

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I-40

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	28	75

(2) PLAN SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-16-13

STA. 1170+98 IN PLACE
24" x 94' R.C. PIPE INLET
TYPE "R" DROP INLET
H = 3' - 0"
24" x 98' R.C. PIPE OUTLET
30° RT. FWD SKEW
RETAIN

STA. 1175+98 IN PLACE
TYPE "R" DROP INLET
H = 2' - 10"
24" x 98' R.C. PIPE OUTLET
RETAIN

EXIST. C OF A & R/W

1165 — N 75°35'39" E — 1170 — 1175 — 1180

STA. 1179+57.58
END WIRE ROPE SAFETY FENCE

BR. END STA. 1179+46.12

EXIST. C OF A & R/W

TEMPORARY EROSION CONTROL REVISIONS

DATE OF REVISION	REVISION

LEGEND

△△△△ TRIANGULAR SILT DIKE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

NOTE: BRIDGE NO. A6820 & B6820 ARE EXCEPTIONS TO JOB BB0403

EXIST. C OF A & R/W

PI 1191+72.25

BR. END STA. 1179+94.62

BR. END STA. 1183+12.62

BR. NO. A6820

1180 — N 75°35'39" E — 1185 — 1190 — 1195

BR. NO. B6820

PC 1184+32.17

STA. 1182+78.53
BEGIN WIRE ROPE SAFETY FENCE

BR. END STA. 1182+64.12

LITTLE MULBERRY CREEK

CENTERLINE
PI = 1191+72.25
Δ = 16°39'24.0" RT.
D = 1°08'00.0"
T = 740.07'
L = 1469.71'
PC = 1184+32.17
PT = 1199+01.88

EXIST. C OF A & R/W

STA. 1185+98 IN PLACE
TYPE "R" DROP INLET
H = 3' - 6"
24" x 84' R.C. PIPE INLET
RETAIN

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	29	75

(2) PLAN SHEETS

STA. 1195+97 IN PLACE
TYPE "R" DROP INLET
H = 6' - 3"
24" x 82' R.C. PIPE OUTLET
RETAIN

STA. 1201+22 IN PLACE
30" x 258' R.C. PIPE INLET
30° RT. FWD. SKEW
RETAIN

STA. 1205+42 IN PLACE
TYPE "R" DROP INLET
H = 2' - 10"
24" x 92' R.C. PIPE INLET
RETAIN

EXIST. C OF A & R/W

CENTERLINE
PI = 1191+72.25
Δ = 16°39' 24.0" RT.
D = 1°08' 00.0"
T = 740.07'
L = 1469.71'
PC = 1184+32.17
PT = 1199+01.88

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No. 11425
TRINITY D. SMITH
1-16-13

N

1195 | 1200 | 1205 | 1210

S 87°44'57" E

PT 1199+01.88

WIRE ROPE SAFETY FENCE
& CONCRETE DITCH PAVING

EXIST. C OF A & R/W

TEMPORARY EROSION CONTROL REVISIONS

DATE OF REVISION	REVISION

LEGEND

△△△△ TRIANGULAR SILT DIKE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

EXIST. R/W

EXIST. C OF A

N

1210 | 1215 | 1220 | 1225

S 87°44'57" E

WIRE ROPE SAFETY FENCE
& CONCRETE DITCH PAVING

STA. 1210+92 RT. IN PLACE
24" x 68' R.C. PIPE CULVERT
STEEL GRATE ASSEMBLY (LT. & RT.)
RETAIN

EXIST. C OF A & R/W

STA. 1220+02 IN PLACE
36" x 204' R.C. PIPE CULVERT
45° RT. FWD SKEW
STEEL GRATE ASSEMBLY (LT. & RT.)
RETAIN

STA. 1222+42 IN PLACE
42" x 84' R.C. PIPE INLET
TYPE "R" DROP INLET
R = 4' - 6"
42" x 88' R.C. PIPE OUTLET
RETAIN

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RBB0403.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		B80403	30	75

(2) PLAN SHEETS

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1-16-13

EXIST. R/W

EXIST. C OF A

STA. 1237+42 IN PLACE
30" x 80' R.C. PIPE INLET
TYPE "R" DROP INLET IN MEDIAN
3' x 4' x H = 3' - 4"
30" x 74' R.C. PIPE OUTLET
STEEL GRATE ASSEMBLY (LT. & RT.)
RETAIN

1225 — S 87°44'57" E — 1230 — 1235 — 1240

WIRE ROPE SAFETY FENCE
& CONCRETE DITCH PAVING

EXIST. C OF A & R/W

N

TEMPORARY EROSION CONTROL REVISIONS

DATE OF REVISION	REVISION

LEGEND

△△△△ TRIANGULAR SILT DIKE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

EXIST. R/W

SLATE HILL CUTOFF

EXIST. C OF A

1240 — 1245 — S 87°44'57" E — 1250 — 1255

WIRE ROPE SAFETY FENCE
& CONCRETE DITCH PAVING

N

EXIST. C OF A & R/W

STA. 1244+42 IN PLACE
DBL. 10' X 8' X 208' R.C. BOX CULV'T.
TYPE "T" DROP INLET IN MEDIAN
H = 2'-0"
30° RT. FWD. SKEW
D.A. = 1050 AC., C = 0.8
RETAIN

STA. 1248+92 IN PLACE
TYPE "R" DROP INLET IN MEDIAN
H = 2'-10"
24" X 84' R.C. PIPE CULV'T.
RETAIN

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		880403	31	75

(2) PLAN SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-16-13

STA.	STA.	SIDE	GUARDRAIL (TYPE A)	THRIE BEAM GUARDRAIL TERMINAL	GUARDRAIL TERMINAL (TYPE 2)
1264+20.50	1269+20.50	R.M.L. - LT.	450 LIN. FT.	1EA.	1EA.
1266+70.51	1271+70.51	L.M.L. - RT.	450 LIN. FT.	1EA.	1EA.

REMOVAL AND DISPOSAL OF IMPACT ATTENUATION BARRIER
STA. 1267+96 C.L. OF I-40 = 2 EACH

EXIST. R/W
EXIST. C OF A
RAMP 4
N
1255
S 87°44'57" E
1260
1265
1270
STA. 1264+70.50
END WIRE ROPE SAFETY FENCE
STA. 1268+70.50
BEGIN WIRE ROPE SAFETY FENCE
STA. 1262+92 IN PLACE
TYPE "R" DROP INLET IN MEDIAN
H = 3'-10"
36" X 84' R.C. PIPE INLET &
36" X 76' R.C. PIPE OUTLET
RETAIN
EXIST. C OF A & R/W
RAMP 1
STA. 1256+57 IN PLACE
TYPE "R" DROP INLET IN MEDIAN
H = 2'-10"
24" X 82' R.C. PIPE INLET &
24" X 94' R.C. PIPE OUTLE
30° LT. FWD. SKEW
RETAIN

TEMPORARY EROSION CONTROL REVISIONS

DATE OF REVISION	REVISION

LEGEND

△△△△ TRIANGULAR SILT DIKE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

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RBB0403.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	32	75

(2) PLAN SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-16-13

LEGEND

△△△△ TRIANGULAR SILT DIKE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

EXIST. R/W

RAMP 3

EXIST. C OF A

EXIST. C OF A & R/W

1270 | 1275 | S 87°44'57" E | 1280 | 1285

WIRE ROPE SAFETY FENCE & CONCRETE DITCH PAVING

STA. 1273+92 IN PLACE
24" X 62' R.C. PIPE CULV'T.
TYPE "R" DROP INLET H = 3' - 0"
STEEL GRATE ASSMBLY (RT.)
RETAIN

TEMPORARY EROSION CONTROL REVISIONS

DATE OF REVISION	REVISION

EXIST. R/W

EXIST. C OF A

RAMP 2

STA. 1280+67 IN PLACE
TYPE "R" DROP INLET IN MEDIAN
H = 4'-0" WITH
36" X 78' R.C. PIPE INLET WITH
36" X 114' R.C. PIPE OUTLET
RETAIN

N

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	33	75

(2) PLAN SHEETS

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STA. 1285+92 IN PLACE
TYPE "R" DROP INLET IN MEDIAN
H = 2'-3" WITH
18" X 116' PIPE OUTLET
RETAIN

STA. 1290+92 IN PLACE
TYPE "R" DROP INLET H 2' - 3"
18" x 134' R.C. PIPE OUTLET
RETAIN

NOTE: BRIDGE NO. A5109 & B5109 ARE EXCEPTIONS TO JOB BB0403

EXIST. C OF A & R/W

MULBERRY RIVER

BR. END 1292+83.15

BR. END STA. 1297+69.15

BR. NO. A5109

1285 S 87°44'57" E 1290 1295 1300

BR. NO. B5109

STA. 1292+73.15
END WIRE ROPE SAFETY FENCE

BR. END STA. 1292+83.15

CRAWFORD CO. FRANKLIN CO.

STA. 1297+78.72
BEGIN WIRE ROPE SAFETY FENCE

BR. END STA. 1297+69.15

TEMPORARY EROSION CONTROL REVISIONS

DATE OF REVISION	REVISION

LEGEND

△△△△ TRIANGULAR SILT DIKE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

EXIST. C OF A & R/W

1300 1305 S 87°44'57" E 1310 1315

WIRE ROPE SAFETY FENCE
& CONCRETE DITCH PAVING

Sta. 1302+42 In Place
Drop Inlet in Median
3'-0" x 5'-3" x H = 12'-6" with
36" x 172' R.C. Pipe Inlet &
36" x 164' R.C. Pipe Outlet
45° Rt. Fwd. Skew
D.A. = 14 Ac., C = 0.8
RETAIN

STA. 1310+76 IN PLACE
DBL. 10'X6'X263' R.C. BOX CULV'T.
30° RT. FWD. SKEW WITH
TYPE "T" DROP INLET IN MEDIAN
2'-6" X 3'-0" X H = 8'-0"
D.A. = 541 AC.
RETAIN

EXIST. C OF A & R/W

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	34	75

(2) PLAN SHEETS

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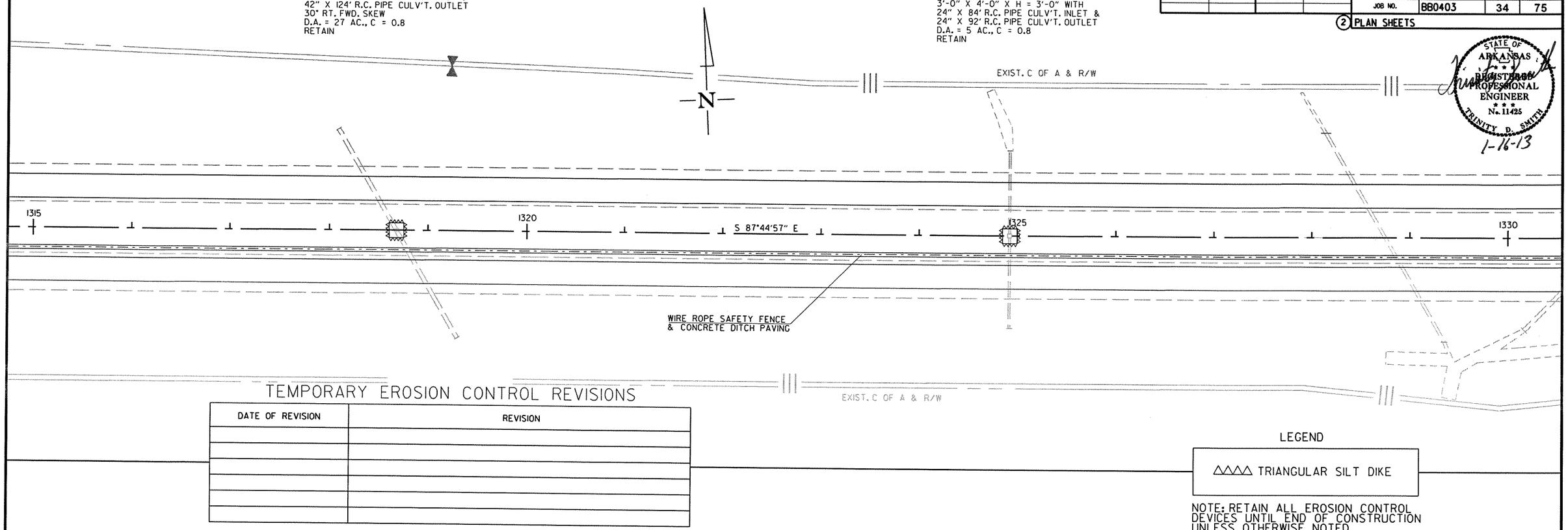
STA. 1318+68 IN PLACE
TYPE "R" DROP INLET IN MEDIAN
3'-0" X 4'-11" X H = 7'-9" WITH
42" X 116' R.C. PIPE CULV'T. INLET &
42" X 124' R.C. PIPE CULV'T. OUTLET
30° RT. FWD. SKEW
D.A. = 27 AC., C = 0.8
RETAIN

STA. 1324+92 IN PLACE
TYPE "R" DROP INLET IN MEDIAN
3'-0" X 4'-0" X H = 3'-0" WITH
24" X 84' R.C. PIPE CULV'T. INLET &
24" X 92' R.C. PIPE CULV'T. OUTLET
D.A. = 5 AC., C = 0.8
RETAIN



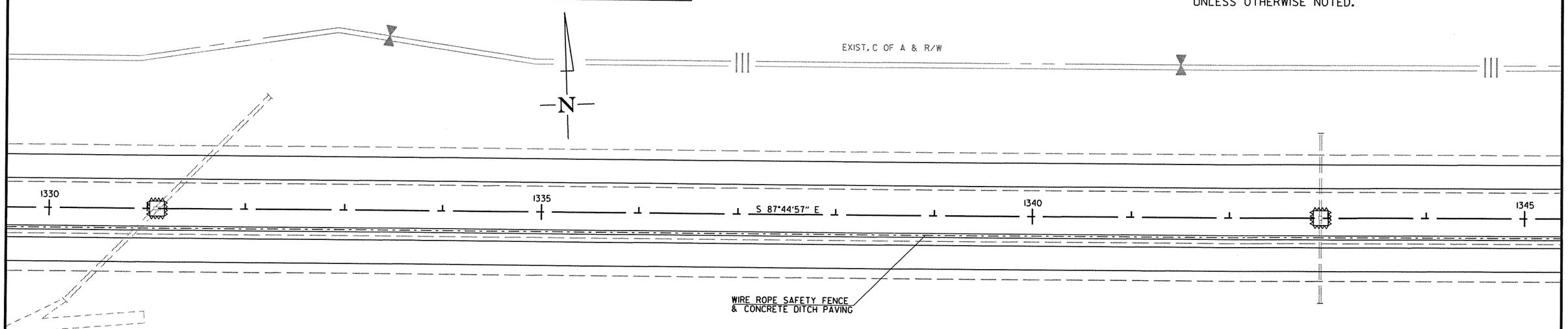
TEMPORARY EROSION CONTROL REVISIONS

DATE OF REVISION	REVISION

LEGEND

△△△△ TRIANGULAR SILT DIKE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.



STA. 1331+10 IN PLACE
TYPE "R" DROP INLET IN MEDIAN
3'-0" X 6'-11" X H = 9'-0" WITH
48" X 160' R.C. PIPE CULV'T. INLET &
48" X 132' R.C. PIPE CULV'T. OUTLET
45° LT. FWD. SKEW
D.A. = 39 AC., C = 0.8
RETAIN

STA. 1342+92 IN PLACE
TYPE "R" DROP INLET IN MEDIAN
3'-0" X 4'-0" X H = 3'-0" WITH
24" X 84' R.C. PIPE CULV'T. INLET &
24" X 84' R.C. PIPE CULV'T. OUTLET
D.A. = 5 AC., C = 0.8
RETAIN

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				6	ARK.			
				JOB NO.		BB0403	35	75

(2) PLAN SHEETS

STA. 1348+39 IN PLACE
TYPE "R" DROP INLET IN MEDIAN
3'-0" X 4'-0" X H = 3'-0" WITH
24" X 84' R.C. PIPE CULV'T. INLET &
24" X 88' R.C. PIPE CULV'T. OUTLET
D.A. = 5 AC., C = 0.8
RETAIN

STA. 1352+92 IN PLACE
TYPE "R" DROP INLET IN MEDIAN
3'-0" X 4'-0" X H = 7'-0" WITH
24" X 104' R.C. PIPE CULV'T. OUTLET
RETAIN

EXIST. C OF A & R/W

STA. 1356+90.88 BR. END
EXISTING 172' BRIDGE NO. A5110
40'-0" CLEAR ROADWAY
STA. 1358+62.88 BR. END
REHABILITATE BRIDGE DECK-
HYDRODEMOLITION

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REGISTERED PROFESSIONAL ENGINEER
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TRINITY D. SMITH
1-16-13

MAXEY CREEK

BR. END STA. 1356+90.88

BR. END STA. 1358+62.88

BR. NO A5110

1345 1350 S 87°44'57" E 1355 1360

BR. NO. B5110

STA. 1356+17.30
END WIRE ROPE SAFETY FENCE

BR. END STA. 1356+02.55

STA. 1358+08.75
BEGIN WIRE ROPE SAFETY FENCE

BR. END STA. 1357+74.55

STA. 1359+50 IN PLACE
TYPE "R" DROP INLET IN MEDIAN
3'-0" X 4'-0" X H = 6'-0" WITH
24" X 104' R.C. PIPE CULV'T. OUTLET
RETAIN

NOTE: BRIDGE NO. B5110 IS
AN EXCEPTION TO JOB BB0403

EXIST. C OF A & R/W

TEMPORARY EROSION CONTROL REVISIONS

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LEGEND

△△△△ TRIANGULAR SILT DIKE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

EXIST. C OF A & R/W

1360 1365 S 87°44'57" E 1370 1375

WIRE ROPE SAFETY FENCE
& CONCRETE DITCH PAVING

STA. 1365+92 IN PLACE
TYPE "R" DROP INLET IN MEDIAN
3'-0" X 4'-0" X H = 3'-0" WITH
24" X 88' R.C. PIPE CULV'T. OUTLET
RETAIN

STA. 1371+45 IN PLACE
PAVED MEDIAN CROSSOVER
REMOVE

PC 1372+88.00

CENTERLINE
PI = 1379+15.22
Δ = 6°15'57.4" RT.
D = 0°30'00.0"
T = 627.22'
L = 1253.19'
PC = 1372+88.00
PT = 1385+41.19

STA. 1371+92 IN PLACE
TYPE "R" DROP INLET IN MEDIAN
3'-0" X 4'-0" X H = 3'-0" WITH
24" X 84' R.C. PIPE CULV'T. OUTLET
RETAIN

EXIST. C OF A & R/W

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	36	75

(2) PLAN SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
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STA. 1377+26 IN PLACE
TYPE "R" DROP INLET IN MEDIAN
3'-0" X 6'-11" X H = 6'-6" WITH
48" X 136' R.C. PIPE CULV'T. INLET &
48" X 160' R.C. PIPE CULV'T. OUTLET
45° LT. FWD. SKEW
D.A. = 39 AC., C = 0.8
RETAIN

STA. 1380+23 IN PLACE
36" X 124' R.C. PIPE CULV'T.
30° RT. FWD. SKEW
D.A. = 16 AC., C = 0.8
RETAIN

STA. 1380+92 IN PLACE
36" X 124' R.C. PIPE CULV'T.
30° RT. FWD. SKEW
D.A. = 16 AC., C = 0.8
RETAIN

EXIST. C OF A & R/W

PI 1379+15.22

PC 1380+15.73

PI 1386+45.29

WESTBOUND CENTERLINE
PI = 1386+45.29
Δ = 6°15'59.0" RT.
D = 0°29'53.4"
T = 629.56'
L = 1257.87'
PC = 1380+15.73
PT = 1392+73.60

1375 1380 1385 1390

1385 S 81°29'00" E 1390

STA. 1378+83.91
END WIRE ROPE SAFETY FENCE

CENTERLINE
PI = 1379+15.22
Δ = 6°15'57.4" RT.
D = 0°30'00.0"
T = 627.22'
L = 1253.19'
PC = 1372+88.00
PT = 1385+41.19

PT 1385+41.19

TEMPORARY EROSION CONTROL REVISIONS

DATE OF REVISION	REVISION

LEGEND

△△△△ TRIANGULAR SILT DIKE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

EXIST. C OF A & R/W

EXIST. C OF A & R/W

WESTBOUND CENTERLINE
PI = 1386+45.29
Δ = 6°15'59.0" RT.
D = 0°29'53.4"
T = 629.56'
L = 1257.87'
PC = 1380+15.73
PT = 1392+73.60

1390

PT 1392+73.60 BACK =
STA. 1392+68.28 AHD

STA. 1392+90 IN PLACE
30" X 88' R.C. PIPE CULV'T.
D.A. = 7 AC., C = 0.8
RETAIN

STA. 1396+90 IN PLACE
24" X 96' R.C. PIPE CULV'T.
D.A. = 5 AC., C = 0.8
RETAIN

1390 1395 S 81°29'00" E 1400 1405

STA. 1392+23 - CONSTRUCT
PAVED MEDIAN CROSSOVER

STA. 1392+90 IN PLACE
30" X 88' R.C. PIPE CULV'T.
D.A. = 7 AC., C = 0.8
RETAIN

STA. 1396+66 IN PLACE
24" X 104' R.C. PIPE CULV'T.
D.A. = 5 AC., C = 0.8
RETAIN

EXIST. C OF A & R/W

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				6	ARK.			
				JOB NO.		BB0403	37	75

(2) PLAN SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-16-13

STA. 1405+90 IN PLACE
24" X 88' R.C. PIPE CULV'T.
D.A. = 5 AC., C = 0.8
RETAIN

STA. 1409+89 IN PLACE
24" X 88' R.C. PIPE CULV'T.
D.A. = 4 AC., C = 0.8
RETAIN

EXIST. C OF A & R/W

N

1405 1410 S 81°29'00" E 1415 1420

STA. 1405+70 IN PLACE
24" X 88' R.C. PIPE CULV'T.
D.A. = 5 AC., C = 0.8
RETAIN

STA. 1409+90 IN PLACE
24" X 88' R.C. PIPE CULV'T.
D.A. = 4 AC., C = 0.8
RETAIN

TEMPORARY EROSION CONTROL REVISIONS

DATE OF REVISION	REVISION

LEGEND

△△△△ TRIANGULAR SILT DIKE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

EXIST. C OF A & R/W

EXIST. C OF A & R/W

STA. 1422+90 IN PLACE
36" X 88' R.C. PIPE CULV'T.
D.A. = 15 AC., C = 0.8
RETAIN

STA. 1426+90 IN PLACE
30" X 88' R.C. PIPE CULV'T.
D.A. = 7 AC., C = 0.8
RETAIN

N

1420 1425 S 81°29'00" E 1430 1435

STA. 1422+90 IN PLACE
36" X 88' R.C. PIPE CULV'T.
D.A. = 15 AC., C = 0.8
RETAIN

STA. 1426+90 IN PLACE
30" X 88' R.C. PIPE CULV'T.
D.A. = 7 AC., C = 0.8
RETAIN

EXIST. C OF A & R/W

EXIST. C OF A & R/W

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RBB0403.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	38	75

(2) PLAN SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-16-13

STA. 1436+36 IN PLACE
24" X 88' R.C. PIPE CULV'T.
D.A. = 4 AC., C = 0.8
RETAIN

PC 1435+66.32

STA. 1436+36 IN PLACE
24" X 104' R.C. PIPE CULV'T.
D.A. = 4 AC., C = 0.8
RETAIN

PC 1438+08.01

STA. 1442+71 IN PLACE
DBL. 12' X 8' X 415' R.C. BOX CULV'T.
TYPE "T" DROP INLET IN MEDIAN
2'-6" X 3'-0" X H = 2'-6"
D.A. = 693 AC.
RETAIN

STA. 1446+16 IN PLACE
42" X 232' R.C. PIPE CULV'T.
30° RT. FWD. SKEW
D.A. = 21 AC., C = 0.8
RETAIN

WESTBOUND CENTERLINE
PI = 1447+45.67
Δ = 34°18'59.8" LT.
D = 1°30'00.0"
T = 1179.35'
L = 2287.77'
PC = 1435+66.32
PT = 1458+54.09

CENTERLINE
PI = 1449+74.92
Δ = 34°19'00.4" LT.
D = 1°30'57.6"
T = 1166.91'
L = 2263.64'
PC = 1438+08.01
PT = 1460+71.65

PI 1447+45.67

EXIST. C OF A & R/W

1435 1440 1445 1450

TEMPORARY EROSION CONTROL REVISIONS

DATE OF REVISION	REVISION

WESTBOUND CENTERLINE
PI = 1447+45.67
Δ = 34°18'59.8" LT.
D = 1°30'00.0"
T = 1179.35'
L = 2287.77'
PC = 1435+66.32
PT = 1458+54.09

STA. 1454+73 IN PLACE
24" X 88' R.C. PIPE CULV'T.
RETAIN

CENTERLINE
PI = 1449+74.92
Δ = 34°19'00.4" LT.
D = 1°30'57.6"
T = 1166.91'
L = 2263.64'
PC = 1438+08.01
PT = 1460+71.65

PT 1458+54.09 BACK =
STA. 1459+96.55 AHD

PT 1460+71.65

STA. 1459+61 IN PLACE
24" X 88' R.C. PIPE CULV'T.
D.A. = 5 AC., C = 0.8
RETAIN

STA. 1464+15 IN PLACE
24' X 88' R.C. PIPE CULV'T.
D.A. = 5 AC., C = 0.8
RETAIN

N 64°12'00" E

1450 1455 1460 1465

LEGEND

△△△△ TRIANGULAR SILT DIKE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

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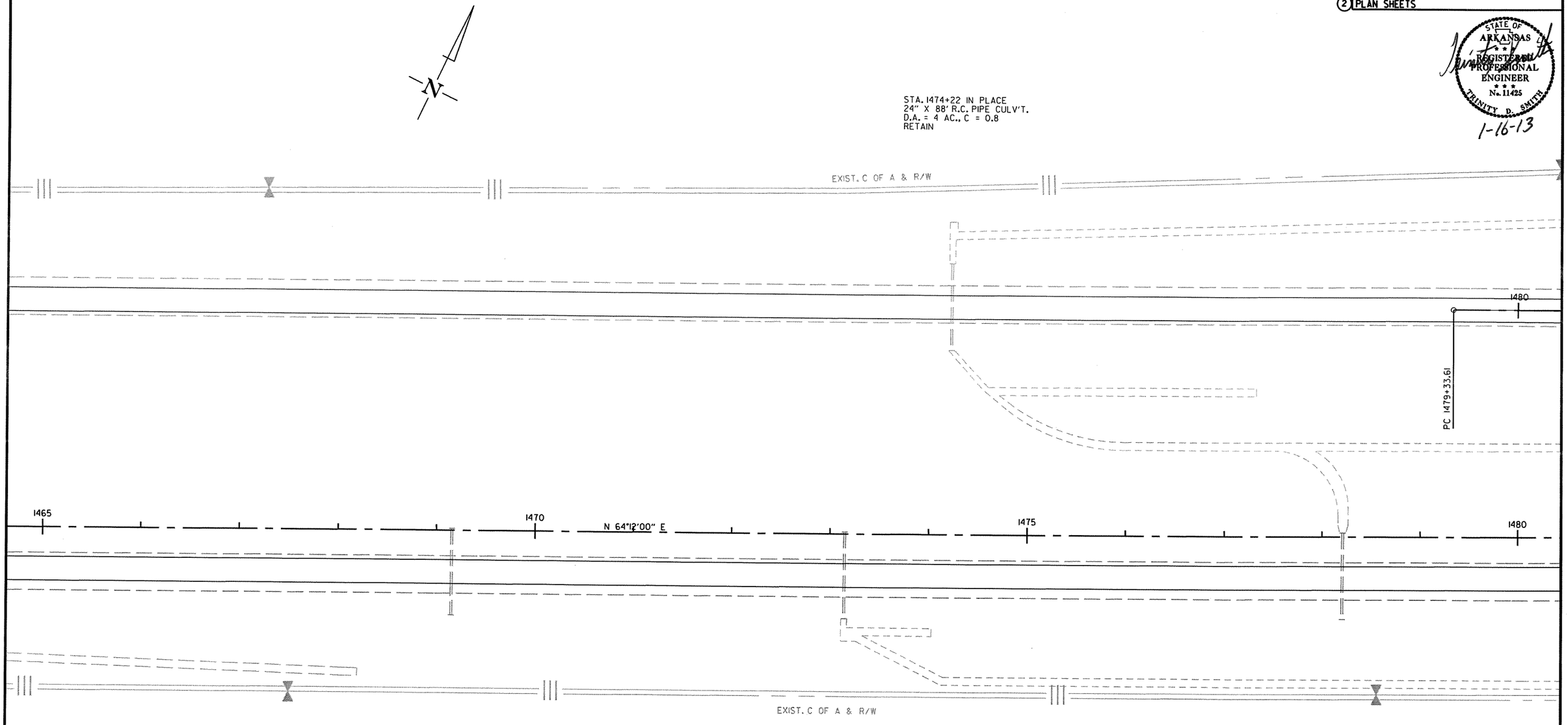
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	39	75

(2) PLAN SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-16-13



TEMPORARY EROSION CONTROL REVISIONS

DATE OF REVISION	REVISION

LEGEND

△△△△ TRIANGULAR SILT DIKE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

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RBB0403.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	40	75
				(2) PLAN SHEETS				

STATE OF ARKANSAS
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TRINITY D. SMITH
1-16-13

STA. 1482+18 IN PLACE
30" X 156' R.C. PIPE CULV'T.
D.A. = 9 AC., C = 0.8
RETAIN

EXIST. C OF A & R/W

WESTBOUND CENTERLINE
PI = 1504+55.38
Δ = 37°52'59.9" RT.
D = 0°45'00.0"
T = 2621.77'
L = 5051.11'
PC = 1479+33.61
PT = 1529+84.72

STA. 1486+27 IN PLACE
24" X 152' R.C. PIPE CULV'T.
30° RT. FWD. SKEW
D.A. = 4 AC., C = 0.8
RETAIN

CENTERLINE
PI = 1506+18.12
Δ = 37°53'00.3" RT.
D = 0°47'42.0"
T = 2473.38'
L = 4765.21'
PC = 1481+44.75
PT = 1529+09.96

STA. 1492+46 IN PLACE
30" X 152' R.C. PIPE CULV'T.
D.A. = 8 AC., C = 0.8
RETAIN

STA. 1482+14 IN PLACE
24" X 88' R.C. PIPE CULV'T.
D.A. = 6 AC., C = 0.8
RETAIN

PC 1481+44.75

STA. 1487+92 IN PLACE
24" X 100' R.C. PIPE CULV'T.
30° RT. FWD. SKEW
D.A. = 4 AC., C = 0.8
RETAIN

TEMPORARY EROSION CONTROL REVISIONS

DATE OF REVISION	REVISION

LEGEND

△△△△ TRIANGULAR SILT DIKE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

NOTE: BRIDGE NO. A5111 & B5111 ARE EXCEPTIONS TO JOB BB0403

BR. END STA. 1508+03.66

BR. NO. A5111

BR. END STA. 1509+38.66

LONE ELM RD.

BR. NO. B5111

BR. END STA. 1507+49.64

BR. END STA. 1508+84.64

CENTERLINE
PI = 1506+18.12
Δ = 37°53'00.3" RT.
D = 0°47'42.0"
T = 2473.38'
L = 4765.21'
PC = 1481+44.75
PT = 1529+09.96

WESTBOUND CENTERLINE
PI = 1504+55.38
Δ = 37°52'59.9" RT.
D = 0°45'00.0"
T = 2621.77'
L = 5051.11'
PC = 1479+33.61
PT = 1529+84.72

STA. 1507+04 IN PLACE
8' X 4' X 508' R.C. BOX CULV'T.
TYPE "T" DROP INLET 55.5' LT. OF MEDIAN
3'-0" X 2'-6" X H = 5'-3"
13° LT. FWD. SKEW
D.A. = 42 AC.
RETAIN

1480 1485 1490 1495 1500 1505 1510

I-40

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				6	ARK.			
				JOB NO.		BB0403	41	75

(2) PLAN SHEETS

WESTBOUND CENTERLINE
PI = 1504+55.38
Δ = 37°52'59.9" RT.
D = 0°45'00.0"
T = 2621.77'
L = 5051.11'
PC = 1479+33.61
PT = 1529+84.72

STA. 1512+12 IN PLACE
TYPE "R" DROP INLET 69.5' RT. OF MEDIAN
3'-0" X 4'-0" X H = 3'-6" WITH
24" X 196' R.C. PIPE INLET &
30" X 220' R.C. PIPE OUTLET
D.A. = 6 AC., C = 0.8
RETAIN

STA. 1518+00 IN PLACE
TYPE "R" DROP INLET 82.5' LT. OF MEDIAN
3'-0" X 4'-0" X H = 13'-6" WITH
24" X 188' R.C. PIPE INLET &
30" X 196' R.C. PIPE OUTLET
D.A. = 4 AC., C = 1.0
RETAIN

STA. 1521+99 IN PLACE
30" X 148' R.C. PIPE CULV'T.
D.A. = 10 AC., C = 0.8
RETAIN

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CENTERLINE
PI = 1506+18.12
Δ = 37°53'00.3" RT.
D = 0°47'42.0"
T = 2473.38'
L = 4765.21'
PC = 1481+44.75
PT = 1529+09.96

1510 1515 1520 1525

1510 1515 1520

TEMPORARY EROSION CONTROL REVISIONS

DATE OF REVISION	REVISION

LEGEND

△△△△ TRIANGULAR SILT DIKE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

WESTBOUND CENTERLINE
PI = 1504+55.38
Δ = 37°52'59.9" RT.
D = 0°45'00.0"
T = 2621.77'
L = 5051.11'
PC = 1479+33.61
PT = 1529+84.72

CENTERLINE
PI = 1506+18.12
Δ = 37°53'00.3" RT.
D = 0°47'42.0"
T = 2473.38'
L = 4765.21'
PC = 1481+44.75
PT = 1529+09.96

STA. 1528+47 IN PLACE
24" X 192' R.C. PIPE CULV'T.
D.A. = 4 AC., C = 0.8
RETAIN

PT 1529+84.72 BACK =
STA. 1528+68.42 AHD

STA. 1532+53 IN PLACE
30" X 216' R.C. PIPE CULV'T.
30° RT. FWD. SKEW
D.A. = 8 AC., C = 0.8
RETAIN

PC 1538+22.55

1525 1530 1535

S 77°55'00" E

STA. 1527+35 IN PLACE
24" X 88' R.C. PIPE CULV'T.
D.A. = 3 AC., C = 0.8
RETAIN

PT 1529+09.96

STA. 1532+89 IN PLACE
24" X 88' R.C. PIPE CULV'T.
D.A. = 4 AC., C = 0.8
RETAIN

CENTERLINE
PI = 1547+11.53
Δ = 26°29'52.0" LT.
D = 1°31'03.0"
T = 888.97'
L = 1746.15'
PC = 1538+22.55
PT = 1555+68.70

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RBB0403.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		B80403	42	75

(2) PLAN SHEETS

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PC 1542+07.57

STA. 1546+16 IN PLACE
42" X 104' R.C. PIPE CULV'T.
D.A. = 24.6 AC., C = 0.8
RETAIN

WESTBOUND CENTERLINE
PI = 1548+82.14
Δ = 26°30'00" LT.
D = 2°00'00.0"
T = 674.57'
L = 1325.00'
PC = 1542+07.57
PT = 1555+32.57

EXIST. C OF A & R/W

PLEASANT VIEW RD.

PI 1548+82.14

STA. 1554+23 IN PLACE
TYPE "R" DROP INLET IN MEDIAN
3'-0" X 4'-0" X H = 3'-0" WITH
24" X 96' R.C. PIPE CULV'T.
RETAIN

1540 1545 1545 1550 1550

PI 1547+11.53

STA. 1546+21 IN PLACE
42' X 88' R.C. PIPE CULV'T.
D.A. = 24.6 AC., C = 0.8
RETAIN

CENTERLINE
PI = 1547+11.53
Δ = 26°29'52.0" LT.
D = 1°31'03.0"
T = 888.97'
L = 1746.15'
PC = 1538+22.55
PT = 1555+68.70

TEMPORARY EROSION CONTROL REVISIONS

DATE OF REVISION	REVISION

LEGEND

△△△△ TRIANGULAR SILT DIKE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

EXIST. C OF A & R/W

WESTBOUND CENTERLINE
PI = 1548+82.14
Δ = 26°30'00" LT.
D = 2°00'00.0"
T = 674.57'
L = 1325.00'
PC = 1542+07.57
PT = 1555+32.57

1555 1555 1560 N 75°35'08" E 1565 1570 N

PT 1555+32.57 BACK =
STA. 1555+58.73 AHD

PT 1555+68.70

CENTERLINE
PI = 1547+11.53
Δ = 26°29'52.0" LT.
D = 1°31'03.0"
T = 888.97'
L = 1746.15'
PC = 1538+22.55
PT = 1555+68.70

STA. 1560+59 IN PLACE
42" X 240' R.C. PIPE CULV'T.
30° RT. FWD. SKEW
D.A. = 21.4 AC., C = 0.8
RETAIN

STA. 1563+55 IN PLACE
TYPE "R" DROP INLET IN MEDIAN
3'-0" X 4'-0" X H = 3'-0" WITH
24" X 108' R.C. PIPE INLET &
24" X 112' R.C. PIPE OUTLET
30° RT. FWD. SKEW
D.A. = 4.2 AC., C = 0.8
RETAIN

EXIST. C OF A & R/W

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	43	75

(2) PLAN SHEETS

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STA. 1570+41 IN PLACE
TYPE "R" DROP INLET IN MEDIAN
3'-0" X 4'-0" X H = 3'-0" WITH
30" X 112' R.C. PIPE INLET &
30" X 100' R.C. PIPE OUTLET
30° RT. FWD. SKEW
D.A. = 10.7 AC., C = 0.8
RETAIN

STA. 1576+51 IN PLACE
5' X 4' X 221' R.C. BOX CULV'T. WITH
TYPE "T" DROP INLET IN MEDIAN
3'-0" X 2'-6" X H = 3'-8"
D.A. = 62.7 AC.
RETAIN

STA. 1580+56 IN PLACE
TYPE "R" DROP INLET IN MEDIAN
3'-0" X 4'-0" X H = 3'-6" WITH
24" X 104' R.C. PIPE INLET &
24" X 88' R.C. PIPE OUTLET
D.A. = 2.2 AC., C = 0.8
RETAIN

EXIST. C OF A & R/W

1570 N 75°35'08" E 1575 1580 1585

PC 1585+42.36

EXIST. C OF A & R/W

TEMPORARY EROSION CONTROL REVISIONS

DATE OF REVISION	REVISION

LEGEND

△△△△ TRIANGULAR SILT DIKE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

WESTBOUND CENTERLINE
PI = 1606+77.11
Δ = 45°06'59.9" RT.
D = 1°30'00.0"
T = 1586.74'
L = 3007.78'
PC = 1590+90.37
PT = 1620+98.15

EXIST. C OF A & R/W

1585 1590 1595 1600

PC 1590+90.37

1595 1600

PC 1585+42.36

STA. 1585+27 IN PLACE
TYPE "R" DROP INLET IN MEDIAN
3'-0" X 4'-3" X H = 10'-4" WITH
42" X 124' R.C. PIPE INLET &
42" X 112' R.C. PIPE OUTLET
D.A. = 24.8 AC., C = 0.8
RETAIN

STA. 1588+94 IN PLACE
TYPE "R" DROP INLET IN MEDIAN
3'-0" X 4'-0" X H = 10'-2" WITH
48" X 108' R.C. PIPE INLET &
48" X 144' R.C. PIPE OUTLET
D.A. = 32 AC., C = 0.8
RETAIN

CENTERLINE
PI = 1605+49.07
Δ = 45°06'51.5" RT.
D = 1°11'09.6"
T = 2006.72'
L = 3803.90'
PC = 1585+42.36
PT = 1623+46.26

EXIST. C OF A & R/W

STA. 1596+92 IN PLACE
42" X 96' R.C. PIPE CULV'T.
D.A. = 24.9 AC., C = 0.8
RETAIN

STA. 1597+07 IN PLACE
42" X 88' R.C. PIPE CULV'T.
D.A. = 24.9 AC., C = 0.8
RETAIN

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	44	75

(2) PLAN SHEETS

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STA. 1605+47 IN PLACE
24" X 88' R.C. PIPE CULV'T.
RETAIN

STA. 1611+72 IN PLACE
24" X 88' R.C. PIPE CULV'T.
RETAIN

WESTBOUND CENTERLINE
PI = 1606+77.11
Δ = 45°06'59.9" RT.
D = 1°30'00.0"
T = 1586.74'
L = 3007.78'
PC = 1590+90.37
PT = 1620+98.15

STA. 1604+88 IN PLACE
30" X 88' R.C. PIPE CULV'T.
RETAIN

CENTERLINE
PI = 1605+49.07
Δ = 45°06'51.5" RT.
D = 1°11'09.6"
T = 2006.72'
L = 3803.90'
PC = 1585+42.36
PT = 1623+46.26

STA. 1611+00 IN PLACE
30" X 88' R.C. PIPE CULV'T.
RETAIN

TEMPORARY EROSION CONTROL REVISIONS

DATE OF REVISION	REVISION

LEGEND

△△△△ TRIANGULAR SILT DIKE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

STA. 1617+47 IN PLACE
24" X 88' R.C. PIPE CULV'T.
RETAIN

STA. 1624+31 IN PLACE
24" X 88' R.C. PIPE CULV'T.
RETAIN

WESTBOUND CENTERLINE
PI = 1606+77.11
Δ = 45°06'59.9" RT.
D = 1°30'00.0"
T = 1586.74'
L = 3007.78'
PC = 1590+90.37
PT = 1620+98.15

PT 1620+98.15 BACK =
STA. 1619+92.53

STA. 1624+28 IN PLACE
24" X 88' R.C. PIPE CULV'T.
RETAIN

PT 1623+46.26

STA. 1616+50 IN PLACE
30" X 88' R.C. PIPE CULV'T.
RETAIN

CENTERLINE
PI = 1605+49.07
Δ = 45°06'51.5" RT.
D = 1°11'09.6"
T = 2006.72'
L = 3803.90'
PC = 1585+42.36
PT = 1623+46.26

S 59°18'01" E

EXIST. C OF A & R/W

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	45	75

(2) PLAN SHEETS

STATE OF ARKANSAS
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No. 11425
TRINITY D. SMITH
1-16-13

EXIST. C OF A & R/W

STA. 1638+38.70 BR. END
EXISTING 190' BRIDGE NO. A5113
40' CLEAR ROADWAY
STA. 1640+28.70 BR. END
REHABILITATE BRIDGE DECK-
HYDRODEMOLITION

BR. END STA. 1638+38.70

CREEK

BR. END STA. 1640+28.70

BR. NO. A5113

STA. 1638+50.52
END JOB BB0403
END MILL & INLAY

STA. 1638+28 IN PLACE
TYPE "R" DROP INLET IN MEDIAN
3'-0" X 4'-0" X H = 10'-2" WITH
24' X 176' R.C. PIPE CULV'T.
RETAIN

STA. 1638+87.02 BR. END
EXISTING 190' BRIDGE NO. B5113
40' CLEAR ROADWAY
STA. 1640+77.02 BR. END
REHABILITATE BRIDGE DECK-
HYDRODEMOLITION

PC 1643+65.89

1630

S 59°18'01" E

1635

1640

BR. NO. B5113

STA. 1631+28 IN PLACE
24" X 92' R.C. PIPE CULV'T.
RETAIN

BR. END STA. 1640+77.02

BR. END STA. 1638+87.02

CRAVENS

STA. 1641+28 IN PLACE
TYPE "R" DROP INLET IN MEDIAN
3'-0" X 4'-0" X H = 4'-0" WITH
24" X 160' R.C. PIPE CULV'T.
RETAIN

TEMPORARY EROSION CONTROL REVISIONS

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LEGEND

△△△△ TRIANGULAR SILT DIKE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

PC 1645+41.04

STA. 1650+42 IN PLACE
24' X 88' R.C. PIPE CULV'T.
D.A. = 5 AC., C = 0.8
RETAIN

1650

1655

1660

WEST BOUND CENTERLINE
PI = 1674+00.21
Δ = 41°04'59.9" LT.
D = 0°45'03.2"
T = 2859.17'
L = 5471.21'
PC = 1645+41.04
PT = 1700+12.25

1645

1650

1655

STA. 1649+37 IN PLACE
24' X 88' R.C. PIPE CULV'T.
D.A. = 5 AC., C = 0.8
RETAIN

EXIST. C OF A & R/W

CENTERLINE
PI = 1672+12.92
Δ = 41°04'59.6" LT.
D = 0°45'14.8"
T = 2847.03'
L = 5447.98'
PC = 1643+65.89
PT = 1698+13.87

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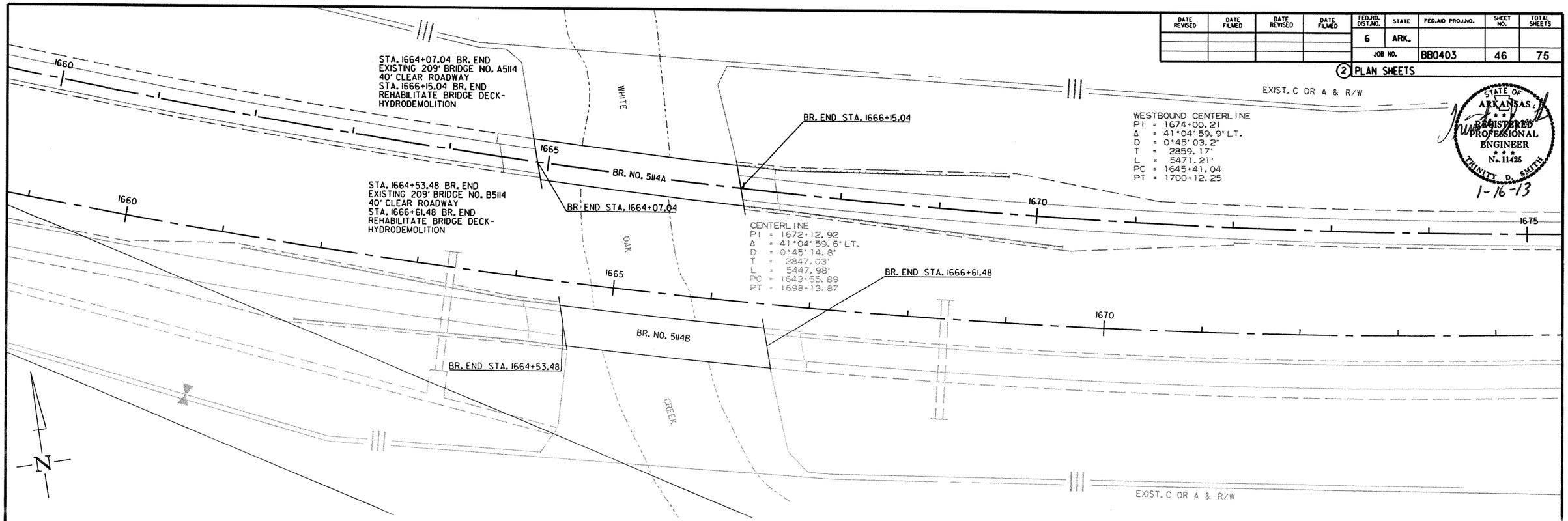
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0403	46	75

(2) PLAN SHEETS



STATE OF ARKANSAS
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No. 11425
TRINITY D. SMITH
1-16-13

TEMPORARY EROSION CONTROL REVISIONS

DATE OF REVISION	REVISION

LEGEND

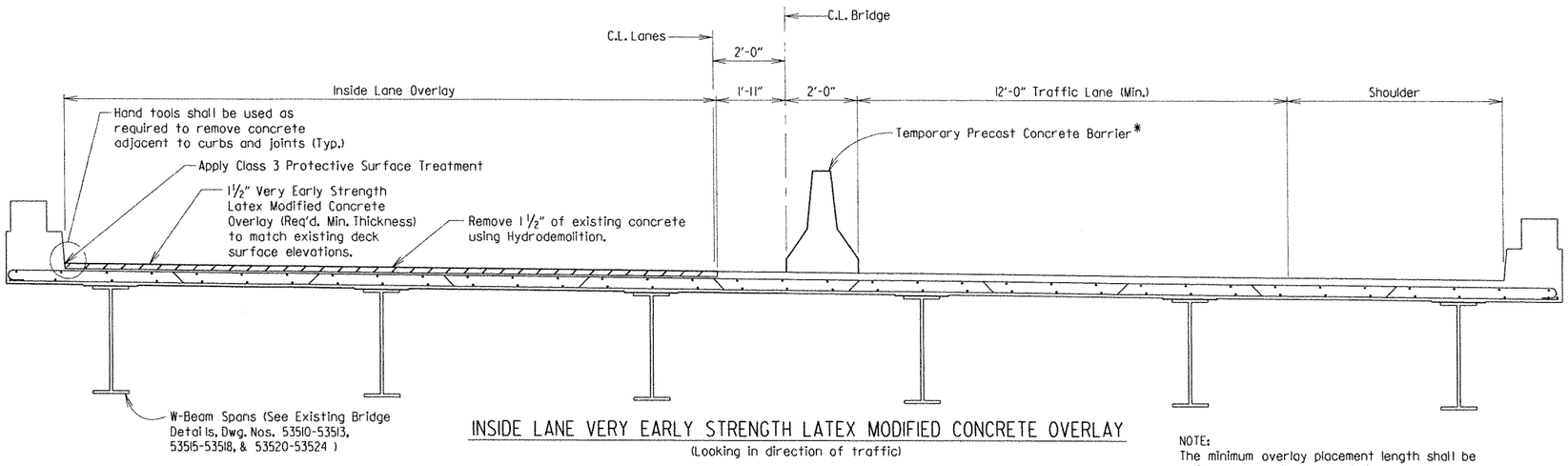
△△△△ TRIANGULAR SILT DIKE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

RBB0403.DGN 1/15/2013

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.		BB0403	47	75

(1) A5110, A&B5113- VESLMC OVERLAY -53507
A&B5114

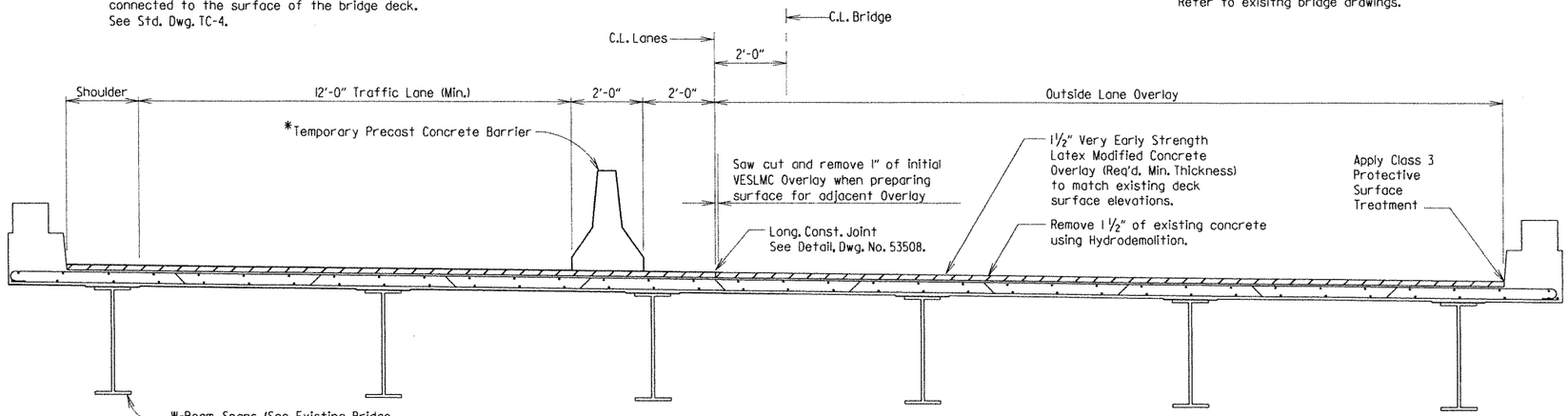


INSIDE LANE VERY EARLY STRENGTH LATEX MODIFIED CONCRETE OVERLAY

(Looking in direction of traffic)

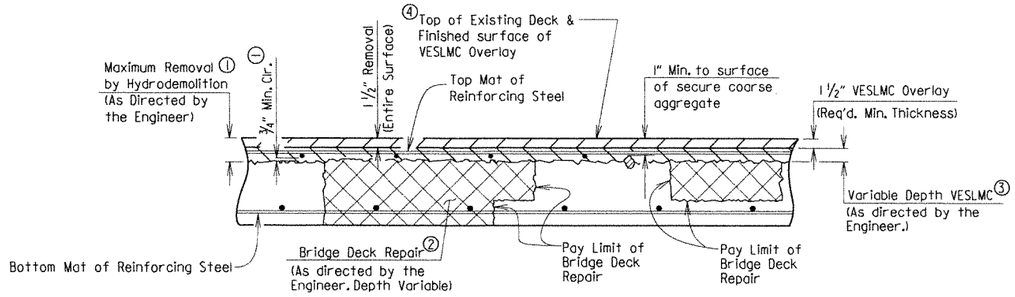
NOTE:
The minimum overlay placement length shall be a fullspan on simple span bridges and to an existing slab joint on continuous unit bridges. Refer to exisitng bridge drawings.

*Temporary Precast Concrete Barrier shall not be connected to the surface of the bridge deck. See Std. Dwg. TC-4.



OUTSIDE LANE VERY EARLY STRENGTH LATEX MODIFIED CONCRETE OVERLAY

(Looking in direction of traffic)



DETAILS OF HYDRODEMOLITION AND LATEX MODIFIED CONCRETE OVERLAY

① 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.

② Areas requiring additional repair, as determined by the Engineer, shall be repaired in accordance with the Job Special Provision "Bridge Deck Repair".

③ Depth Varies to achieve minimum clearance below top mat of reinforcing steel

④ Finished Surface of VESLMC Overlay shall match existing concrete deck surfaces unless increase is required to maintain minimum required VESLMC Overlay thickness and a minimum of 1½" cover to reinforcing steel.

GENERAL NOTES:
CONSTRUCTION SPECIFICATIONS: Arkansas State Highway Commission Standard Specifications for Highway Construction, Edition of 2003, with applicable special provisions and Supplemental Specifications. Unless otherwise noted in the plans Section and Subsection refer to the Standard Specifications.

Drawing shows details and dimensions of existing structures based on the original bridge plans. 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.

The operation or placement of vehicles, equipment and, or materials on the subject bridges shall be subject to the provisions of SS-105-2 "Equipment and Material Storage on Bridge Structures". 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.

HYDRODEMOLITION: The designated area of the existing bridge deck shall receive hydrodemolition in accordance with the Job Special Provision "Hydrodemolition" to a planned depth of 1½" below the existing bridge deck surface. Deteriorated concrete below this depth shall be removed up to the limits detailed and at the direction of the Engineer. These areas shall be measured by the square yard and shall be paid for at the unit price bid for the item SP Job BB0403 "Hydrodemolition."

Prior to hydrodemolition, cold milling of any existing asphalt for its full depth and the concrete deck to a maximum depth of 1" will be allowed unless there will be a conflict with 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 SP Job BB0403 "Bridge Deck Repair".

VERY EARLY STRENGTH LATEX MODIFIED CONCRETE OVERLAY: The designated area of the existing bridge deck shall receive a Very Early Strength Latex Modified Concrete (VESLMC) Overlay to a planned depth of 1½" below the existing bridge deck surface, in accordance with the Job Special Provision "Very Early Strength 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 SP Job BB0403 "Very Early Strength 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 VESLMC concurrent to the placement of the 1½" VESLMC Overlay. This area shall be measured and paid for as SP Job BB0403 "Very Early Strength Latex Modified Concrete (Variable Depth)" at the unit price bid for the item.

BRIDGE DECK: The VESLMC Overlay surface 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 Special Provision "Very Early Strength Latex Modified Concrete Overlay".

PROTECTIVE SURFACE TREATMENT : The longitudinal joint between the VESLMC 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 Special Provision "Very Early Strength Latex Modified Concrete Overlay".

STATE OF ARKANSAS
Carl J. Fusellier
REGISTERED PROFESSIONAL ENGINEER
No. 7510
1/7/13
CARL J. FUSELLIER

BRIDGE ENGINEER

SHEET 1 OF 2
DETAILS OF VERY EARLY STRENGTH LATEX MODIFIED CONCRETE OVERLAY

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: SWP DATE: 12/21/12
CHECKED BY: JGT DATE: 12/21/12
DESIGNED BY: JGT DATE: 12/12

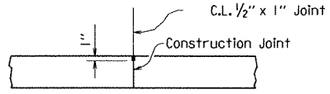
FILENAME: bb0403_concoverlay.dgn
SCALE: NO SCALE

BRIDGE NO. A5110, A&B5113 A&B5114 DRAWING NO. 53507

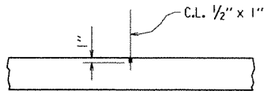
PRINT DATE: 07-JAN-2013

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.		BB0403	48	75

(1) A5110, A&B5113- VESLMC OVERLAY -53508
A&B5114



Use ½" X 1" Type 3, 4 or 6 Joint Sealer. See subsections 501.02 (h) and 501.05 (j). Backer Rod shall not be installed. Joint Sealer shall be measured and paid for as VESLMC Overlay. Sealant must be gray or other color similar to concrete.

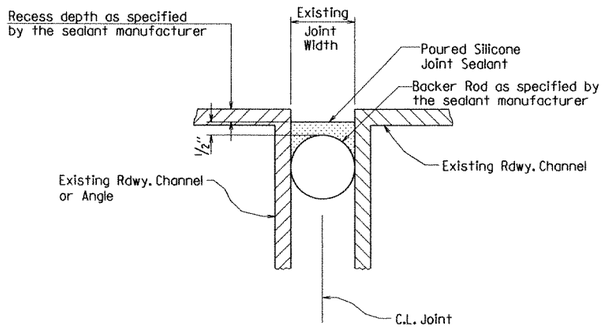


Use ½" X 1" Type 3, 4 or 6 Joint Sealer. See subsections 501.02 (h) and 501.05 (j). Backer rod shall not be installed. Joint Sealer shall be measured and paid for as VESLMC Overlay. Slab joints shall extend to the outside edge of the deck slab. Slab joints shall be placed at all pouring sequence construction joints and are required at existing slab joint locations.

Slab joints and 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.

LONGITUDINAL OVERLAY CONSTRUCTION JOINT DETAIL
No Scale

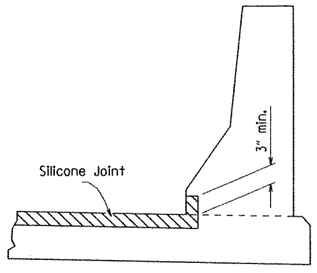
OVERLAY JOINT DETAIL
No Scale



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

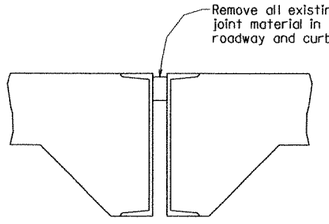
Existing Joint Seal shall be completely removed, backer rods placed, and Silicone Joint Sealant installed across the entire width of the bridge deck in accordance with these details and Manufacturer's instructions. Removal of existing Joint Seal will not be paid for directly, but shall be considered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

POURED SILICONE JOINT SEAL DETAILS
TYPE B JOINT REHABILITATION
No Scale

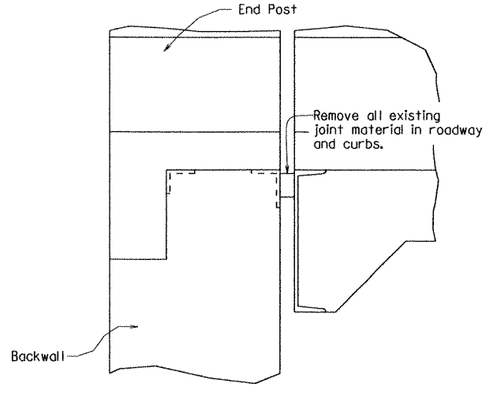


Note: Vertical joints may require forming. The clearance from deck surface to joint material shall be maintained.

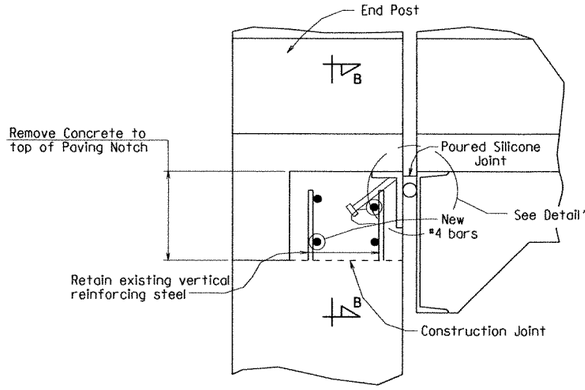
JOINT SEAL PLACEMENT AT CURB
No Scale



REMOVAL DETAILS AT INT. BENTS
TYPE B JOINT REHABILITATION
Scale: 1½" = 1'-0"

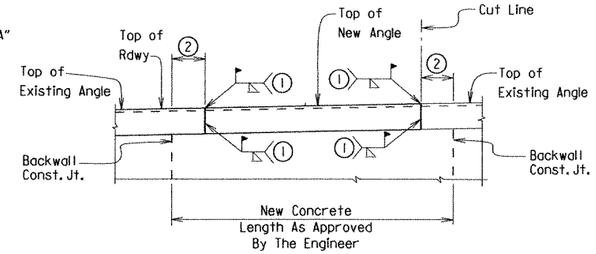


REMOVAL DETAILS AT END BENTS
TYPE B JOINT REHABILITATION
No Scale



DETAILS OF BACKWALL REPAIR
No Scale

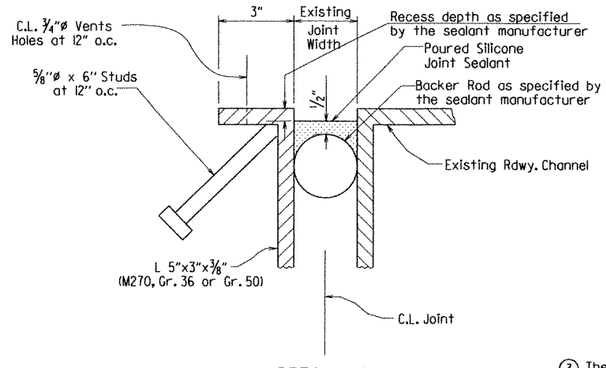
*Note: Designated reinforcing steel to be retained shall be cleaned of all concrete and laitance. Care shall be exercised to prevent damage to the reinforcing during removal of existing concrete. Replacement of any damaged reinforcing steel shall be the responsibility of the Contractor.



VIEW B-B
No Scale

(1) Grind Flush

(2) Chip concrete away from existing angle to provide clearance to weld new angle



DETAIL "A"
No Scale

Quantities shown are per foot of repair and are for information only.

Structural Steel (lb.)	Reinforcing Steel (lb.)	Class S(AE) Concrete (cu. yd.)
10.4	2.67	0.34

APPROXIMATE QUANTITES FOR BACKWALL REPAIR (3)

(3) The Contractor shall make measurements at the locations designated by the Engineer for Backwall Repair prior to beginning work on the Bridge. Replacement concrete shall be Class S or S(AE) or VESLMC. Reinforcing Steel shall conform to Section 804. Concrete shall be measured and paid for as "Very Early Strength Latex Modified Concrete (Variable Depth)". Structural Steel, Labor, Tools and Equipment shall not be paid for directly but shall be considered subsidiary to the item "Silicone Joint Sealant".

STATE OF ARKANSAS
Carl J. Fuselier
REGISTERED PROFESSIONAL ENGINEER
No. 7510
CARL J. FUSELIER

BRIDGE ENGINEER

SHEET 2 OF 2
DETAILS OF VERY EARLY STRENGTH LATEX MODIFIED CONCRETE OVERLAY

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: SWP DATE: 12/21/12
CHECKED BY: JGT DATE: 12/21/12
DESIGNED BY: JGT DATE: 12/12

FILENAME: bb0403_concoverlay.dgn
SCALE: NO SCALE

BRIDGE NO. A5110, A&B5113 A&B5114 DRAWING NO. 53508

PRINT DATE: 07-JAN-2013

FED. ROAD NO.	STATE	FOR. AID PROJ.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.			49	75
JOB NO.	BB0403				
①	A5110 - LAYOUT - 53509				

GENERAL NOTES

Bench Mark - "N1R" 24' Elm ... Sta. 1353+85, El. 410.50

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

All piling at end bents to be treated steel bearing piles driven to a bearing capacity of 40 tons per pile after the embankment is in place. Piling to be driven with an approved air, steam or diesel hammer. Order lengths shown; cut-off or build-up, if necessary, shall be used for in accordance with the standard specification.

Footings shall be set a minimum of 1'-0" into material designated as shale. Rock excavations shall be made to neat lines of concrete footings. Care shall be exercised to avoid shattering of rock faces by excessive blast. Concrete in footings shall be poured in the dry trench against excavated surfaces of rock.
For Channel Change details, see Drawing No. 14363
In general, all construction joints in piers shall be provided with keys not less than 12" high covering the middle third of both dimensions.

For End Bent details see Drwg. No. 14364 & 14365
For Interior Bent details see Drwg. No. 14366
For Cantilever Beam details see Drwg. No. 14369
For Superstructure details see Drwg. No. 14367 through 14370.

SPECIFICATIONS: Arkansas State Highway Commission Standard Specifications for Highway Construction, Edition of 1962, the 1966 Supplemental Specifications thereto and applicable Special Provisions.
DESIGN SPECIFICATIONS: AASHO 1961
Design Live Load: HS 20-44 and special Interstate Loading of two 24,000 lb. axles 4'-0" on centers.
Unit Stresses: Class "A" Concrete (f_c = 1350) 900 psi
Class "S" Concrete (f_c = 1000) 1,200 psi
Reinforcing Steel 20,000 psi
Structural Steel 20,000 psi
Foundation Pressure 10,000 psf (Bent 2)

PLAN

Note: Guard Fence to be attached to turnour posts. (Future) See Std. Drwgs. GR-1 & GR-9 & Roadway Plans.

Note: Vertical dimensions on the bridge are at center line of deck to low side top of cap and bent height. Elevation of bottom int. bent footings are to low footing.

LEGEND
A - Firm Brown Sandy Clay.
B - Med. Firm Brown Sandy clay - marl.
C - Comp. clay gravel & Small boulds.
D - Hard blue Shale.
E - Firm clay gravel & ... U.
F - Comp. clay & Rock bound.

ELEVATION
(Eastbound Structure)
BR. 5110 B

ELEVATION
(Northbound Structure)
BR. 5110 A

Approx. 3.9 Mi. to Intersection with State Highway No. 23

Approx. 1.6 Mi. to Intersection with State Highway No. 215

FOR INFORMATION ONLY

LAYOUT OF DUAL BRIDGE
OVER MAXEY CREEK
HWY 215 - LONELM
FRANKLIN COUNTY

PREPARED BY
BRIGHTON ENGINEERING COMPANY

INT. ROUTE 40 SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

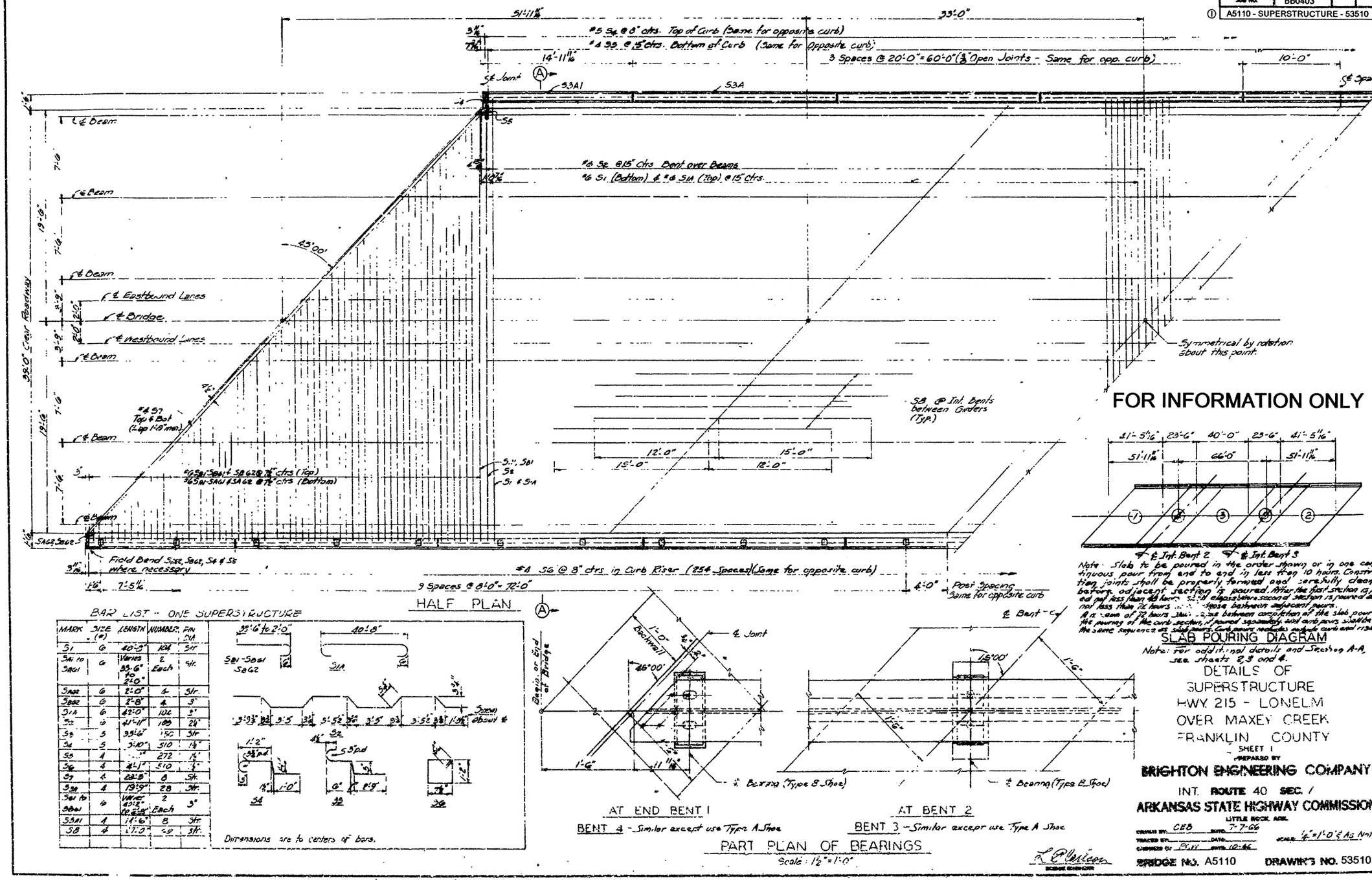
DRAWN BY: DK DATE: 3-66
TRACED BY: DATE:
CHECKED BY: FGW DATE: 3-66
SCALE: 1"=20'

L. S. Neilson
BRIDGE ENGINEER

BRIDGE NO. A5110 DRAWING NO. 53509

FED. ROAD NO.	STATE	FED. AID PROJ.	PROJECT NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			50	75
JOB NO.	BB0403				

① A5110 - SUPERSTRUCTURE - 53510



BAR LIST - ONE SUPERSTRUCTURE

MARK	SIZE (#)	LENGTH	NUMBER	FIN DIA
S1	6	40'-3"	104	3½"
S1A to S8A1	6	Varies 35'-6" to 21'-0"	2 Each	4½"
S8A2	6	21'-0"	4	5½"
S8B2	6	7'-8"	4	3"
S1A	6	42'-0"	102	5"
S2	6	41'-11"	189	24"
S3	5	33'-6"	150	3½"
S4	5	3'-10"	510	1½"
S5	4	"	272	1½"
S6	4	21'-1"	510	5"
S7	4	22'-8"	8	5½"
S8	4	19'-9"	28	3½"
S8A1 to S8A1	6	Varies 40'-8" to 23'-6"	2 Each	5"
S8A1	4	11'-6"	8	5½"
S8	4	11'-0"	48	5½"

Dimensions are to centers of bars.

DETAILS OF SUPERSTRUCTURE
HWY. 215 - LONELM
OVER MAXEY CREEK
FRANKLIN COUNTY
SHEET 1

PREPARED BY
BRIGHTON ENGINEERING COMPANY

INT. **ROUTE** 40 **SEC.** 1
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

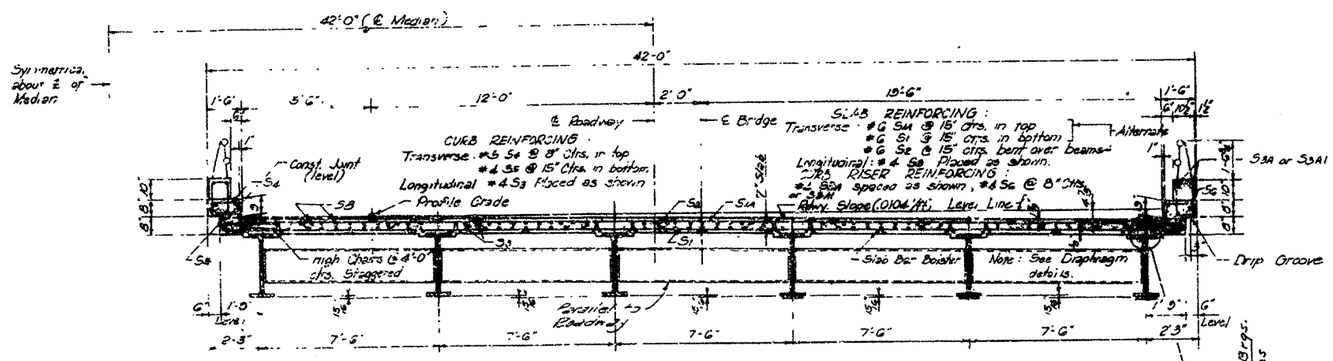
DESIGNED BY: CEB DATE: 7-7-66
TRACED BY: DATE:
CHECKED BY: BWV DATE: 10-66
SCALE: 1/2" = 1'-0" & As Noted

BRIDGE NO. A5110 **DRAWING NO.** 53510

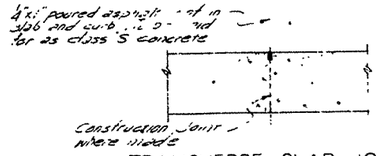
FOR INFORMATION ONLY

FED. ROAD NO.	STATE	FED. AID PROJ.	FINANCIAL PROJ. NO.	SHEET NO.	TOTAL SHEETS
8	ARK.			51	75
JOB NO.	BB0403				

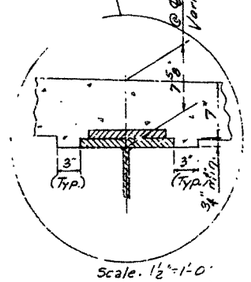
① A5110 - SUPERSTRUCTURE - 53511



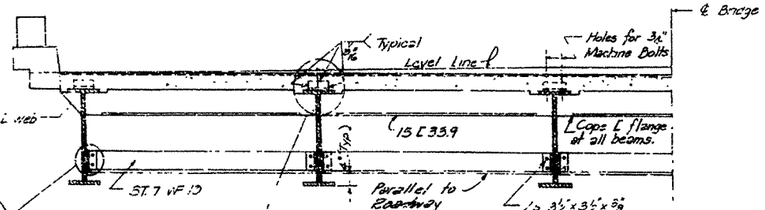
SECTION A-A
Scale 3/8"=1'-0"
(Bridge S110 B shown)
(Bridge S110 A opp. hand)
(See Sheet 5)



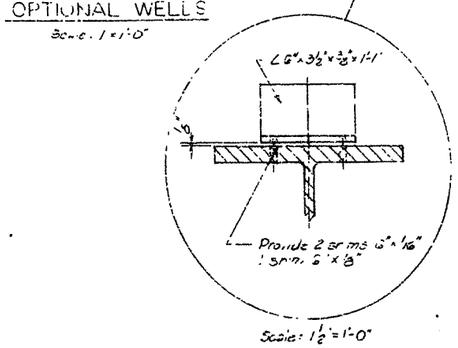
TRANSVERSE SLAB JOINT



Scale: 1½"=1'-0"

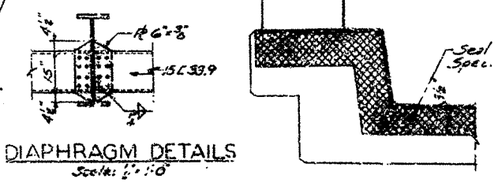


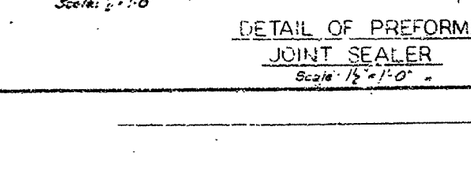
HALF SECTION AT EXPANSION DEVICE
Roadway Channel - 15 C 33.9
Connecting 2 - 6"x3½"x⅜"x1'-1"



Scale: 1½"=1'-0"

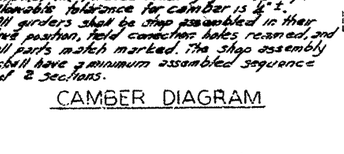
OPTIONAL WELLS
Scale: 1"=1'-0"





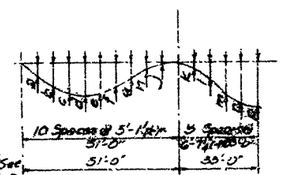
DETAIL OF PREFORMED JOINT SEALER
Scale: 1½"=1'-0"

DIAPHRAGM DETAILS
Scale: ½"=1'-0"

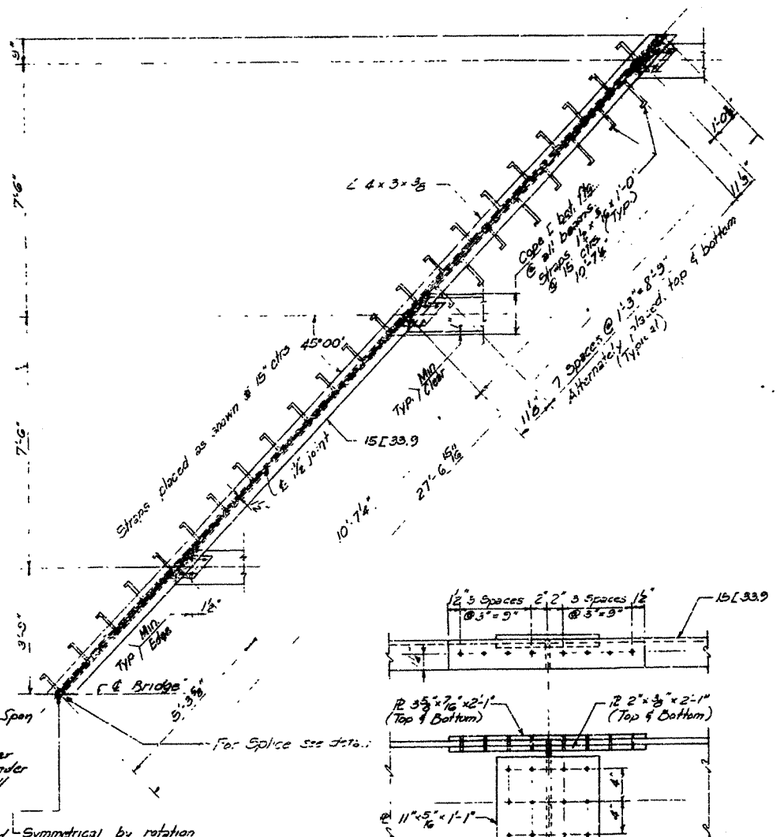


Brms are to be fabricated with the camber shown. All girders shall be cambered such that under total dead load the top of the girder webs will parallel the finished roadway grade, except allowable tolerance for camber is ¼" ±. All girders shall be shop assembled in their true position, field connection holes reamed, and all parts match marked. The shop assembly shall have a minimum assembled sequence of 2 sections.

CAMBER DIAGRAM

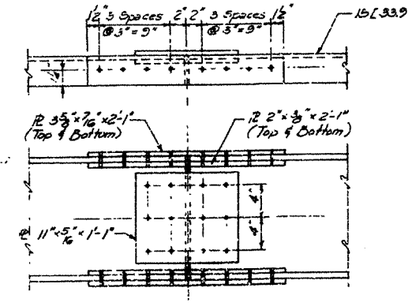


D.L. DEFLECTION DIAGRAM
(See Table)



EXPANSION DEVICE DETAILS

TABLE OF DEFLECTIONS				
Point	Steel Deflection	Conc. Deflection Int. Beam	Conc. Deflection Ext. Beam	V.C. Correction
a	—	1/16 in.	1/8 in.	
b	—	3/16 in.	1/8 in.	- 1/32 in.
c	1/16 in.	3/16 in.	3/16 in.	- 1/16
d	1/16 in.	1/4 in.	1/4 in.	- 1/16
e	1/16 in.	5/16 in.	5/16 in.	- 1/16
f	—	5/16 in.	5/16 in.	- 1/16
g	—	3/8 in.	3/8 in.	- 1/32
h	—	1/16 in.	1/16 in.	
j	—	—	—	
k	—	1/16 in.	1/16 in.	- 1/32
l	—	3/16 in.	1/8 in.	- 1/16
m	1/16 in.	3/16 in.	1/4 in.	- 3/32
n	1/16 in.	3/8 in.	5/16 in.	- 1/8
p	1/16 in.	3/8 in.	3/8 in.	- 1/8



DETAILS OF SPLICE
EXPANSION DEVICE
Scale: 1½"=1'-0"

DETAILS OF SUPERSTRUCTURE
HWY. 215 - LONELM
OVER MAXEY CREEK
FRANKLIN COUNTY

SHEET 2
PREPARED BY
SRIGHTON ENGINEERING COMPANY
INT. ROUTE 40 SEC. 1
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

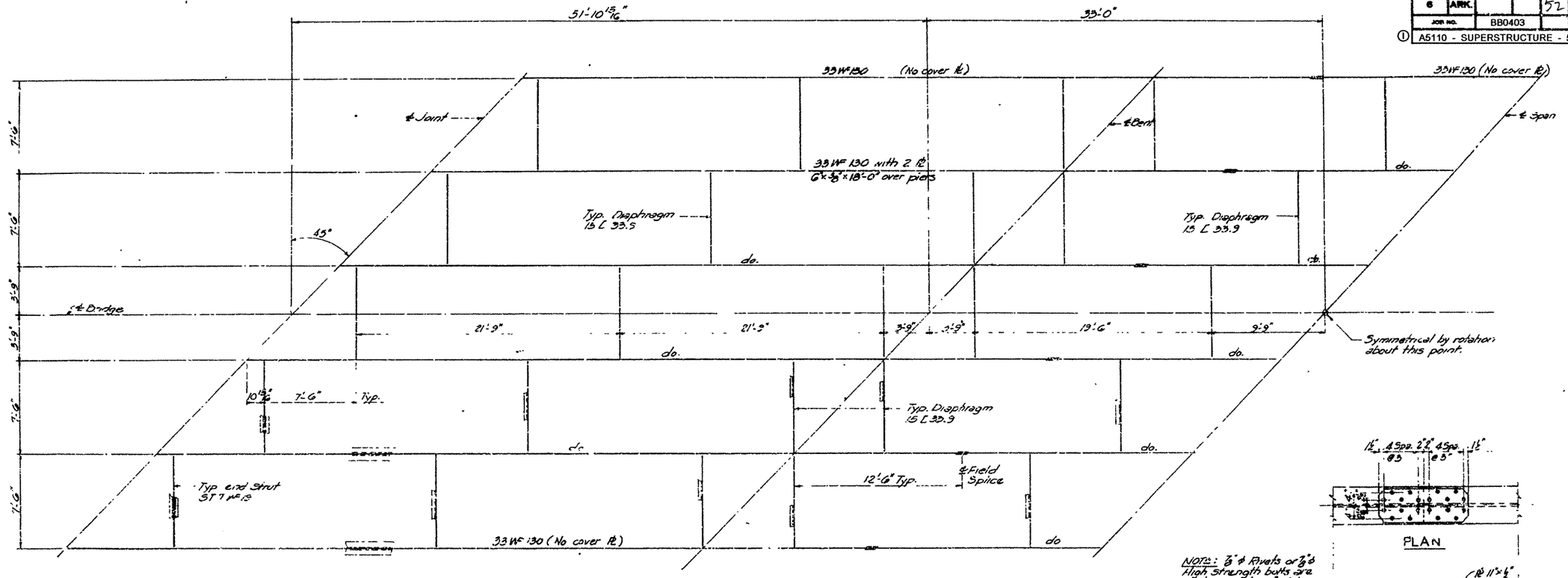
DESIGN BY: JSM DATE: 7-6-66
TRACED BY: DATE:
CHECKED BY: CLM DATE: 7-8-66
SCALE: 1½"=1'-0" & as noted

L. P. Nelson
BRIDGE ENGINEER

BRIDGE NO. A5110 DRAWING NO. 53511

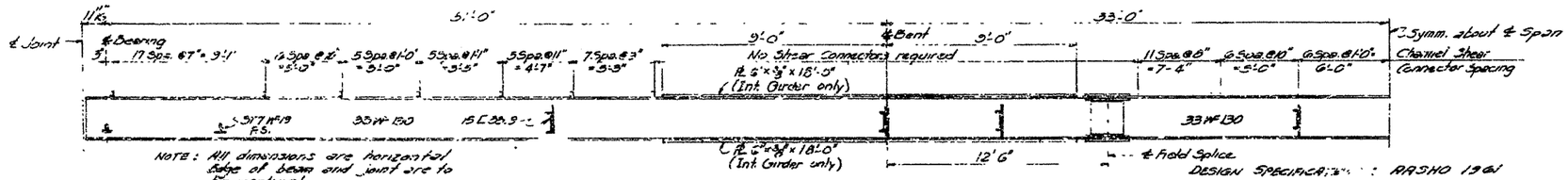
FED. ROAD DIST. NO.	STATE	FED. AID PROJ.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.			52	75
JOB NO.	BB0403				

① A5110 - SUPERSTRUCTURE - 53512



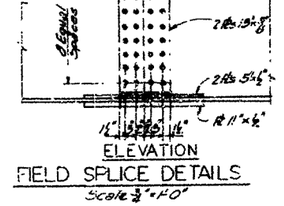
FRAMING PLAN 51' SPAN

HALF FRAMING PLAN 66' SPAN



NOTE: All dimensions are horizontal. Edge of beam and joint are to be vertical.

HALF BEAM ELEVATION



FIELD SPLICE DETAILS

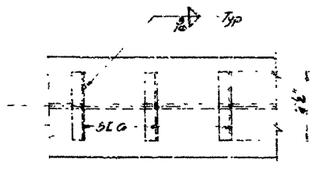
Scale: 3/4"=1'0"

NOTE: 7/8" ϕ Rivets or 7/8" ϕ High Strength bolts are to be used in field splice connections. (Open holes are 15/16" ϕ.)

DESIGN SPECIFICATIONS: AASHO 1961

LIVE LOADING: H S 20 (AASHO 1961) and Special Interstate Loading of 2-24,000 Lb. axles spaced 4'-0" on centers.

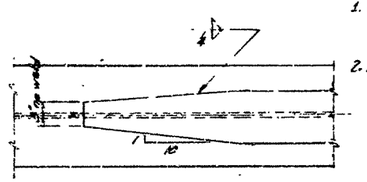
	Int. Beam	Ext. Beam
1. Dead Load (Type "A" Rail)		
a. To W	206 #/ft.	63.2 #/ft.
b. To composite	130 #/ft.	130 #/ft.
2. Live Load to each composite Beam	1.3636 wk/lin.	1.2766 wk/lin.



DETAILS OF SHEAR CONNECTORS

Scale: 1 1/2"=1'0"

NOTE: Stud shear connectors, granular flux filled, solid Nelweld or equal may be used in place of the channels shown at the following ratios: 3/4" diameter stud in place of 1.62 inches of channel, 7/8" diameter stud in place of 2.52 inches of channel. The studs shall be 4" long and automatically end welded to the beam flanges in accordance with the recommendations of the manufacturer. Channel sections will be used as basis for measurement of structural steel in shear connectors.



DETAILS OF COVER PLATES

Scale: 1 1/2"=1'0"

All beams shall be shop assembled in their true position and connection holes reamed. All parts match marked. The shop assembly shall have an assembly sequence of two sections.

FOR INFORMATION ONLY

DETAILS OF SUPERSTRUCTURE
HWY. 215 - LONELM
OVER MAXEY CREEK
FRANKLIN COUNTY

SHEET 3

PREPARED BY
BRIGHTON ENGINEERING COMPANY
LITTLE ROCK, ARK.

INT. ROUTE 40 SEC. 1
ARKANSAS STATE HIGHWAY COMMISSION

DRAWN BY: CEB DATE: 7-6-66
TRACED BY: DATE:
CHECKED BY: RWL DATE: 10-'66
SCALE: 1/4"=1'0" & As Noted

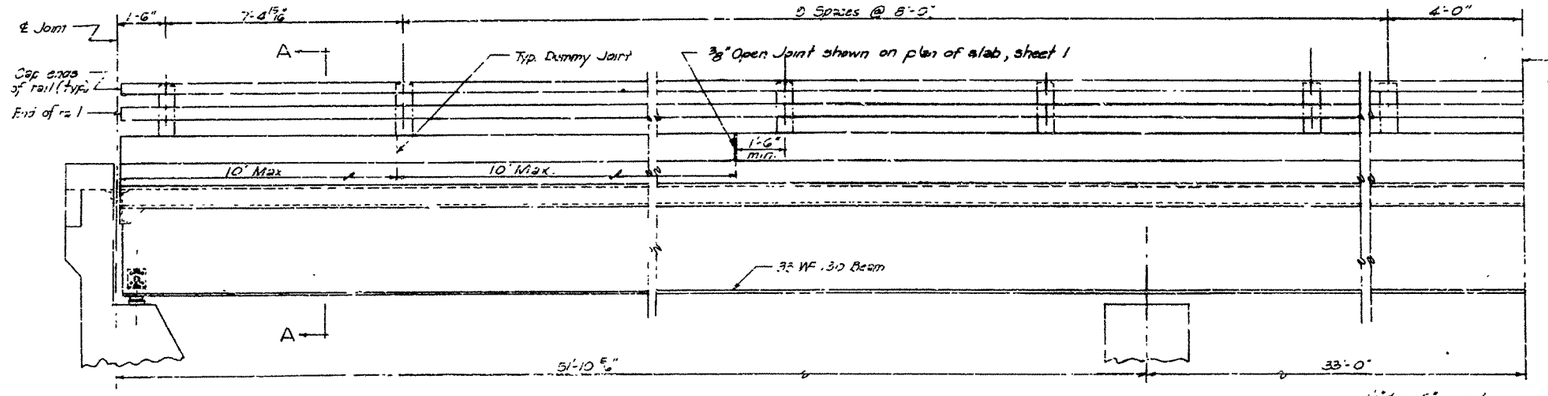
BRIDGE ENGINEER

BRIDGE NO. A5110 DRAWING NO. 53512

PROJ. ACCOUNT NO.	DISTRICT	FED. AID PROJ.	FEDERAL SHEET NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			53	75
JOB NO.	BB0403				

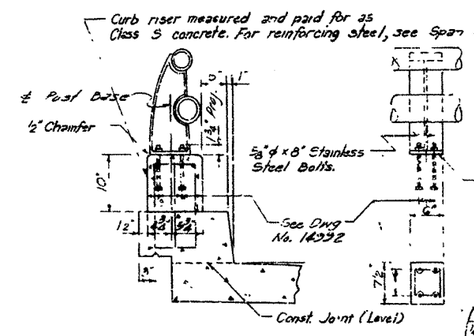
(1) A5110 - SUPERSTRUCTURE - 53513

FOR INFORMATION ONLY



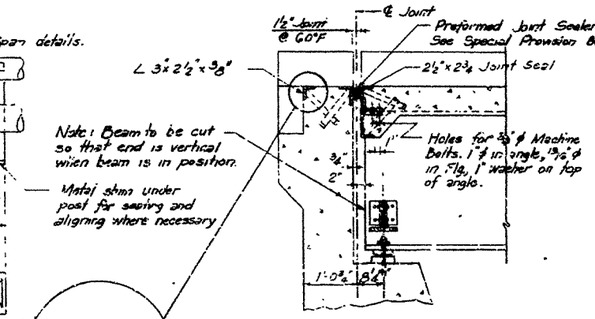
ELEVATION TYPE 'A' RAILING

Scale: 1/2"=1'-0"



DETAILS OF TYPE 'A' RAILING

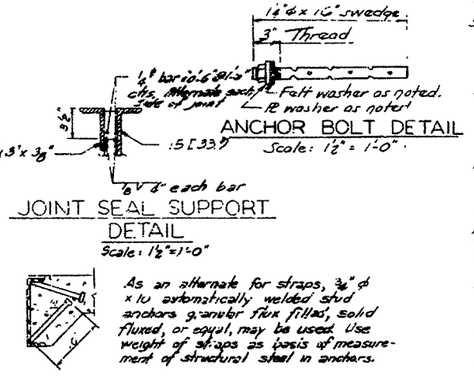
Scale: 1"=1'-0"



JOINT AT END BENT

Scale: 3/4"=1'-0"

Note: End bent 1 drawn. End bent 4 similar except use Type A shoe



ANCHOR BOLT DETAIL

Scale: 1½"=1'-0"

As an alternate for straps, 3/4" ϕ x 10 automatically welded stud anchors granular flux filled, solid fluxed, or equal, may be used. Use weight of straps as basis of measurement of structural steel in anchors.

ALTERNATE ANCHOR DETAIL

Scale: 1"=1'-0"

GENERAL NOTES

All concrete to be Class S A, exposed corners to be chamfered 3/4" unless otherwise noted.

Field connections to be riveted or bolted with high strength bolts.

Rivets: 3/4" ϕ, Open holes 13/16" ϕ except [illegible] otherwise noted.

Structural shapes of equal or greater [illegible]th may be substituted for shapes shown, but payment will be made on the basis of shapes shown or those actually used, whichever is less.

All welded connections to be 5/16" fillet shop welds except as noted. All welding shall conform to the American Welding Society Standard Specifications for Welded Highway and Railway Bridges, current edition.

Shop Paint All structural steel, except surfaces in contact with concrete, shall be given one coat of red lead and raw linseed oil before shipment.

Field Paint: First coat-red lead tinted with lamp black. Second coat-aluminum paint.

No shop paint shall be applied to top flanges or edges of top flanges of beams and shear connectors or at points of welded or bolted splices including splice plates.

Finish surfaces to receive one shop coat of white lead and linseed oil.

All metal bearing and roadway expansion devices to be paid for as "Structural Steel in Beam Spans." Bearings shall be finally seated in accordance with Sec. 806.54, including alternate, of the Std. Specs. This work and material are to be considered to be subsidiary to the item "Structural Steel in Beam Spans" and will not be paid for directly.

All steel shall be ASTM A-36 unless otherwise noted.

Anchor bolts shall be galvanized to conform to ASTM Specification, Designation A153.

Reinforcing steel to be deformed bars of intermediate or hard grade. The reinforcing steel is to be accurately located in the forms and firmly held in place by steel wire supports, sufficient in number and size to prevent displacement during the course of construction. The wire supports will not be paid for directly, but will be considered subsidiary to the item of "Reinforcing Steel."

Shop lists and bending diagrams of reinforcing steel, including wire supports, shall be submitted and approval secured before fabrication is begun.

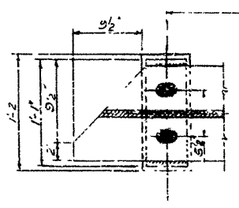
All chamfers on concrete riser for rail are to be 1/2".

Shop drawings showing details of railing shall be submitted and approval secured before fabrication is begun.

For details of Bridge Railing, see Dwg. No. 14992 as shown on Bridge layout.

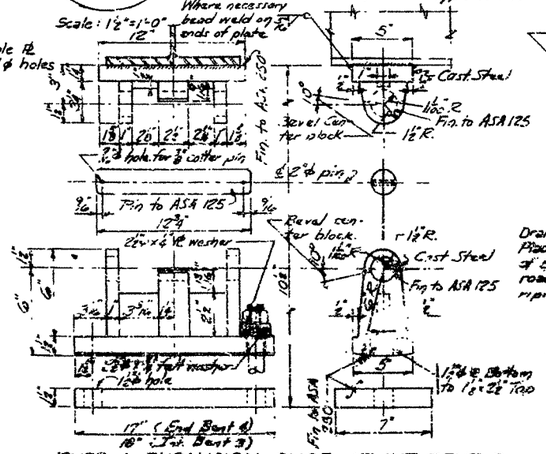
This drawing shows general features of design only. Shop drawings shall be made in accordance with the Specifications, submitted and approval secured before fabrication is begun.

SPECIFICATIONS: Arkansas State Highway Commission Standard Specifications for Highway Construction Edition of 1959, the 1966 Supplement and Specifications thereto and applicable Special Provisions

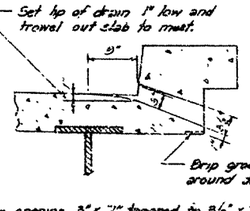


TYPE 'B' EXPANSION SHOE AT END BENT 1

Scale: 1½"=1'-0"



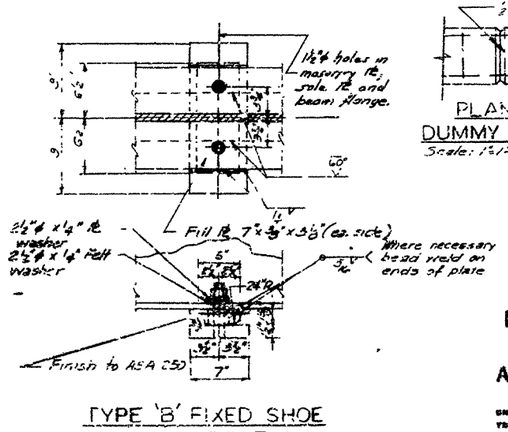
TYPE A EXPANSION SHOE AT INT. BENT 3 AND END BENT 4



Drain opening 3"x 7" tapered to 5½"x 7½". Place at approx. 20' centers at low side of crowned roadway & each side of crowned roadway. Do not place drains over dumped riprap.

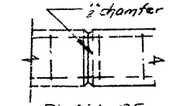
SECTION THRU DRAIN

Scale: 1"=1'-0"



TYPE 'B' FIXED SHOE AT INT. BENT 2

Scale: 1½"=1'-0"



PLAN OF DUMMY JOINT

Scale: 1½"=1'-0"

PLAN OF OPEN JOINT

Scale: 1½"=1'-0"

DETAILS OF SUPERSTRUCTURE
HWY. 215 - LONELM
OVER MAXEY CREEK
FRANKLIN COUNTY

SHEET 4

PREPARED BY

BRIGHTON ENGINEERING COMPANY

INT. ROUTE 40 SEC. 1

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY JAM DATE 7-7-66
TRACED BY DATE
CHECKED BY PEW DATE 10-66
SCALE As Noted

BRIDGE NO. A5110 DRAWING NO. 53513

				54	75
e	ARK.				
JOB NO.	BB0403				

A&B5113 - LAYOUT - 53514

Note: For Right-of-way see Roadway Plans

N

Note: Guard fence to be attached to turnout posts (Typ.) See Std. Drngs. GR8, GR9 & Roadway Plans.

9-37' Piles 10 BP 42

Total length of bridge 30'-6"

56'-6" 79'-6" 56'-6"

56'-6", 79'-6", 56'-6" Continuous Composite M Beam Unit

Metal Bridge railing Type A

9-39' Piles 10 BP 42

Natural Ground Line

El 433.7

El 433.20

El 431.06

Pt. 50 Lt. of ℄ Sta. 1633+10

Pt. 50 Rt. of ℄ Sta. 1633+10

BENT 1 BENT 2 BENT 3

BENT 1 BENT 2 BENT 3

BRIDGE 5113A ELEVATION

Drainage Area = 85 Sq.mi. C = 1.0

Total length of bridge 190'-1½"

56'-6" 79'-6" 56'-6"

56'-6", 79'-6", 56'-6" Continuous Composite M Beam Unit

Metal Bridge railing (Type A)

9-28' Piles 10 BP 42

9-21' Piles 10 BP 42

El 433.00

El 433.06

El 433.100

El 428.87

El 428.87

Pt. 50 Lt. of ℄ Sta. 1640+40

Pt. 50 Rt. of ℄ Sta. 1640+40

BENT 1 BENT 2 BENT 3 BENT 4

BENT 4

8.91%

80' V.C.

-0.24%

P.I. Sta. 1636+40.2

P.G. El. 433.78

Finished Grade

BENT 4

-3.00%

100' V.C.

-0.72%

P.I. Sta. 1632+50.2

P.G. El. 430.87

Finished Grade

Note: Verticle dimension on the above are at ℄ of deck and ℄ of bent to low side top of cap and bent height.

Top of ground elevation at test holes does not agree with original ground line because site had to be cleared before sound was were taken.

BRIDGE 5113B ELEVATION

Drainage Area = 85 Sq.mi. C = 1.0

Note: Use Type 2 Approach Slabs & gutters this end of both bridges. See Roadway Plans for Guardrail.

Note: Use Type 3 approach slabs & gutters this end of both bridges. For details see standard 1698 A. See Roadway Plans for Guardrail.

GENERAL NOTES

T.B.M. "1(M-1) 'NIP' 8" Post Oak 2' Rt. Sta. 1637+40. El. 423.31. (℄ Survey).

All concrete to be Class S except for bent footings, necks of columns, which shall be Class A.

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

All piling in one bent to be of same type and length. Piling to be driven with an approved pile hammer of a rated energy designated as not less than the energy figure after the embankment is in place. Piling to be driven to a bearing capacity of 30 tons per pile and to the material designated as rock on the boring logs. Tips of piling may be reinforced or shod with standard cast steel shoes. Pile lengths shown are estimated only, actual lengths will be determined by driving to refusal as directed by the Engineer. Cutoff or build up, if necessary, shall be performed in accordance with Standard Specifications.

Footings shall be set a minimum of 1'-0" into rock. Rock excavations shall be made to the lines of concrete footings. Care shall be exercised in blasting of rock faces by excessive charges of explosives. Concrete in footings shall be placed against solid rock. Forms will not be required for the sides of footings where solid rock is encountered to the full height of the footing. Where solid rock is not encountered, forms shall be provided to the full height of the footing. Where solid rock is not encountered, forms shall be provided to the full height of the footing. Where solid rock is not encountered, forms shall be provided to the full height of the footing.

In general, all construction joints in piers shall be provided with keys not less than 12" high covering the middle third of both dimensions.

For End Pier details see Dwg. No. 14391 & 14392.
For Interior Bent details see Dwg. No. 14393.
For Composite Beam details see Dwg. No. 14396.
For Superstructure details see Dwg. No. 14394, 14395, 14396 & 14397.
For Bridge Railing details see Dwg. No. 14398.

SPECIFICATIONS: Arkansas State Highway Commission Standard Specifications for Highway Construction, edition of 1962, the Data Supplements & Special Provisions.

Design Specifications: AASHO 1961

Design Live Load: M 18-36 with Special Interstate Loading of the 24,000 lb. axles, 6'-0" centers.

Unit Stresses: fc = 1350 psi; fs = 20,000 psi; n = 10; Concrete in Bent Caps: 0.36 f'c = 1,350 psi (max. allowable pressure); Class A Concrete (n=8): 0.40 f'c = 1,600 psi.

LEGEND

A - Sand, Clay.
B - Loose broken sandstone.
C - Hard sandstone, thin layers
D - Hard sandstone 50% black shale.
E - Hard sandstone.
F - Hard sandstone 50% black shale.
G - Hard sandstone 80% black shale.
H - Shale of any color.
I - Hard lime stone.
J - Hard sandstone and black shale.
K - Hard sandstone.
L - Sand, loam.
M - Soft shale.
N - Hard sandstone and 50% black shale.
O - Hard sandstone and 30% black shale.
P - Hard sandstone and black shale.
Q - Hard sandstone and black shale.
R - Hard sandstone and shale.
S - Hard sandstone and shale.

FOR INFORMATION ONLY

LAYOUT OF DUAL BRIDGE OVER CRAVENS CREEK
LONELM - JCT. HWY. 23
FRANKLIN COUNTY

PREPARED BY:
BRIGHTON ENGINEERING COMPANY

INT. ROUTE 40 SEC. 1
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DESIGN BY: JLM DATE: 1-64
TRACED BY: DATE:
CHECKED BY: FWH DATE: 1-64
SCALE: 1" = 50'

BRIDGE NO. A&B5113 DRAWING NO. 53514

BRIDGE ENGINEER

FED ROAD NO.	STATE	CNB A.B. PROJ.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.			55	75
JOB NO	BB0403				

(1) A&B5113 - SUPERSTRUCTURE - 53515

57'-2½"

51'-9"

#5 5-#8 @ 8" ctrs. Top of Curb (281 Spaces) (Same for opposite Curb)

#4 55 @ 15" ctrs. Bottom of Curb (150 Spaces) (Same for opposite Curb)

11 Spaces @ 7'-9" = 85'-3" (Post Spacing - Same for opposite Curb)

℄ Front

3½"

2%

1'-6"

7'-2½"

Salisbury

1'-0" Clear Slab ℄ to ℄ of Rail

Bridge Rail (Type 4) (Both Sides) (2 Spaces)

℄ Roadway

℄ Bridge

℄ Expansion Joints

℄ Bearing

℄ Beam

15'-0"

#4 S7 — Top & Bottom (1 spc @ 8" ctrs.)

7½"

12½"

7'-6"

℄ Bearing

S4 & SBA

S2

S1 & S1A

S6

#6 S2 @ 15" ctrs, Bent up over Beams (70 Spaces)

#6 S1 (Bottom) & #6 S1A (Top) @ 15" ctrs. (70 Spaces)

6'-6"

13'-6"

12'-6"

16'-6"

S5 @ 2'-0" Centers between Girders (Typ)

19'-0⅞"

S3A

19'-1"

S3A

19'-1"

S3A

24'-6"

S3A1

12'-5"

S3A1

3" Open Joints (Same for opposite Curb)

#4 5 @ 8" ctrs. in Curb Riser (Same for opposite Curb) (281 Spaces)

3½"

Ⓐ

Ⓐ

½" poured asphalt joint in slab and curb. To be paid for as class S concrete

Construction joint where made

TRANSVERSE SLAB JOINT

Note:

Mix design of the finishing machine concrete by means of plans to be used on the surface shall be prohibited for 10 hrs. after finishing the pour.

Symmetrical by rotation about this point

Note:

For additional details ℄ Section A-A, see Dwg. 14329.

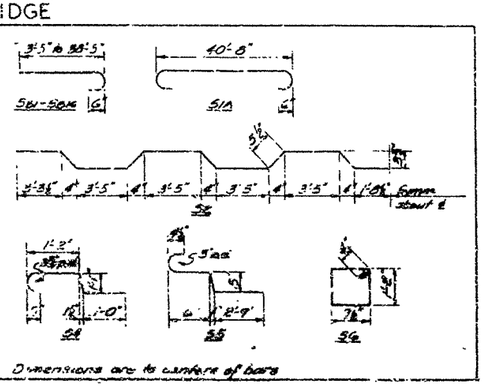
S2

S1 & S1A

℄ Bridge

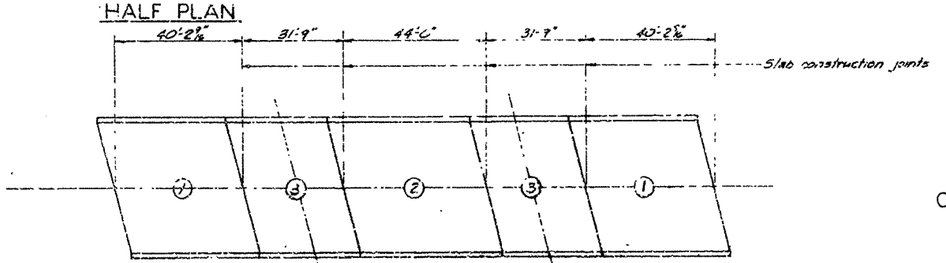
BAR LIST - ONE BRIDGE

MARK	SIZE (#)	LENGTH	WEIGHT	QTY DIA.
S1	6	40'-8"	141	Str.
S4A to S4AG	6	Varies 3'-5" to 38'-5"	2 each	Str.
S1A	6	42'-1"	141	3"
S2	6	41'-10"	142	2½"
S3	5	39'-5"	450	Str.
S3A	4	19'-1"	28	Str.
S3A1	4	24'-3"	12	Str.
S4	5	3'-10"	3	1½"
S5	4	4'-4"	30	1½"
S6	4	6'-2"	5	1½"
S7	4	8'-4"	2	1½"
S4A to S4AG	6	Varies 3'-5" to 38'-5"	2 each	3"
S3	3	39'-5"	60	Str.



Dimensions are to centers of bars

HALF PLAN



SLAB POURING SEQUENCE

Slab is to be poured in the order shown or in any continuous pour from end to end in less than 10 hours. Construction joints shall be made by forming and carefully cleaning before each section is poured. After the first section is poured not less than 48 hours shall elapse before the second section is poured and not less than 72 hours shall elapse between second pours. In no case of 72 hours shall elapse between completion of the slab pour and the forming of the curb section if poured separately, and curb pours shall be in the same sequence as slab pours. Curb pours include across curb and pours.

FOR INFORMATION ONLY

DETAILS OF SUPERSTRUCTURE
LONELM - JCT. HWY. 23
OVER CRAVENS CREEK
FRANKLIN COUNTY

Sheet 1 of 1 Sheets

DESIGNED BY BRIGHTON ENGINEERING COMPANY

INT. ROUTE 40 SEC. 1

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

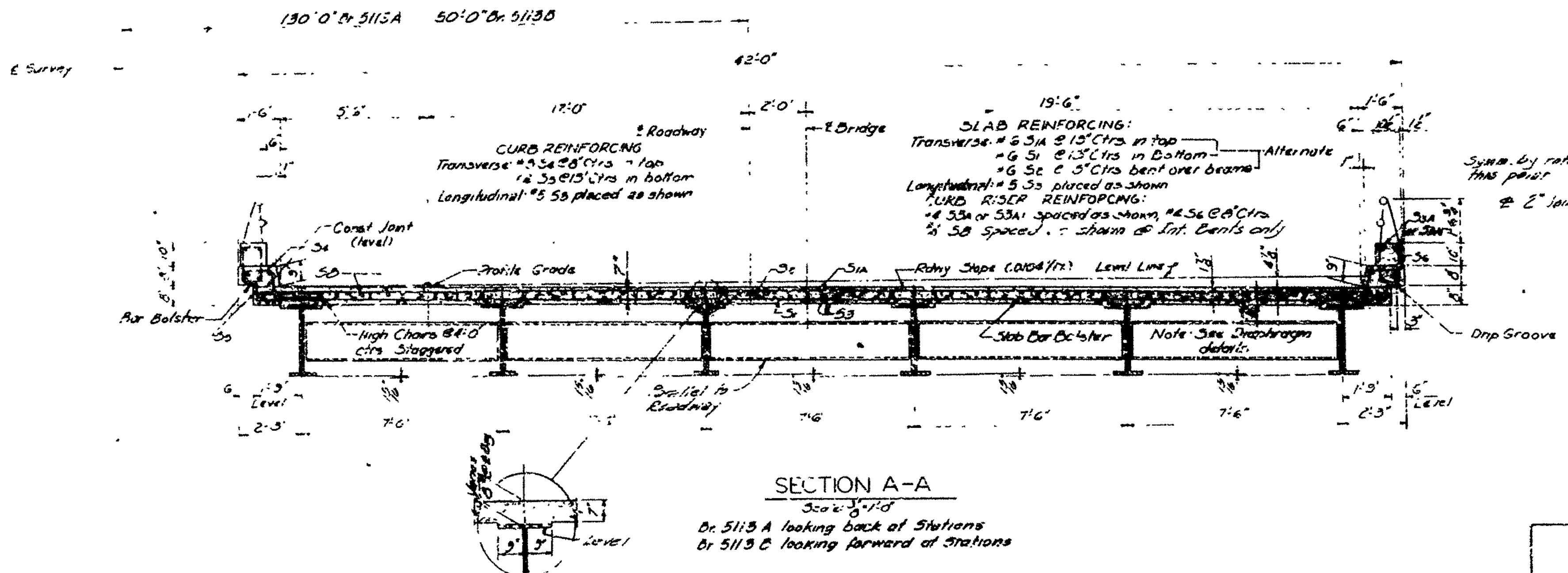
DRAWN BY JMM DATE 12-56
TRACED BY DATE
CHECKED BY S.M.K. DATE 11-56

SCALE 6"=1'-0" & 3/8" = 1'-0"

BRIDGE NO. A&B5113 DRAWING NO. 53515

FED. ROAD NO.	STATE	FED. AID PROJ.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.			56	75
JOB NO.		BB0403			

① A&B5113 - SUPERSTRUCTURE - 53516

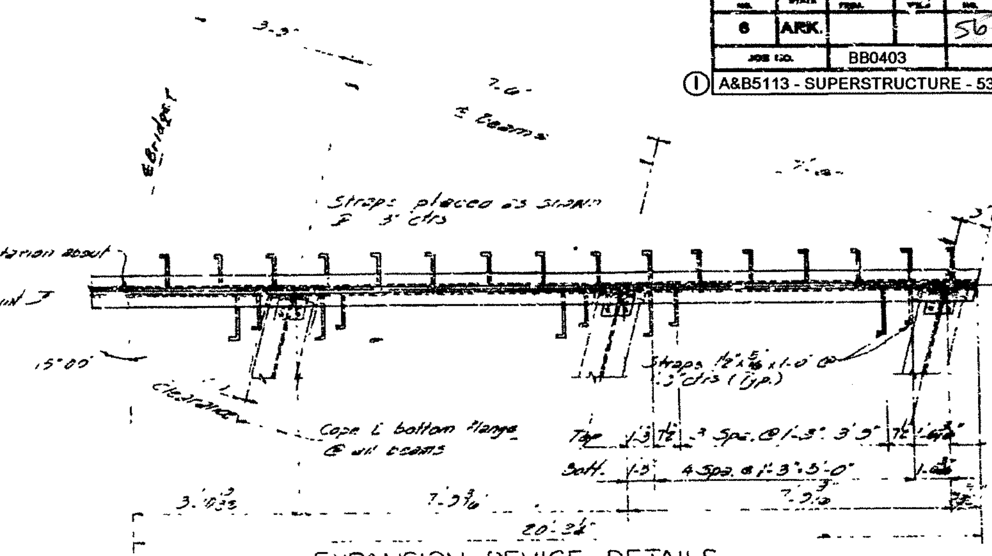


SECTION A-A

Scale: $\frac{1}{2}$"=1'-0"

Br. 5113 A looking back at Stations

Br. 5113 B looking forward at Stations



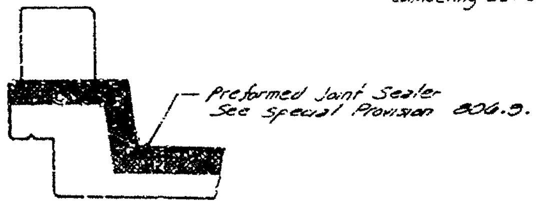
EXPANSION DEVICE DETAILS

Scale: $\frac{3}{4}$"=1'-0"

Expansion Device

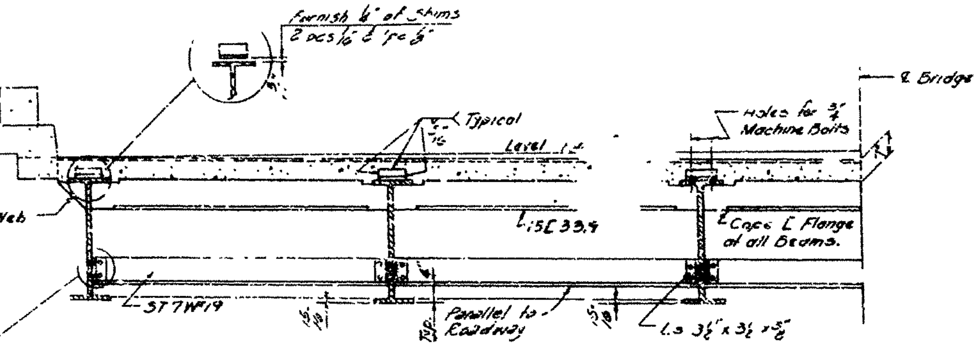
Roadway Channel: 15[33.9

Connecting Ls - 6"x3$\frac{1}{2}$"x$\frac{3}{8}$"



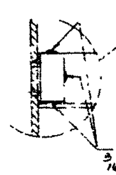
DETAIL OF PREFORMED JOINT SEALER

Scale: 1"=1'-0"



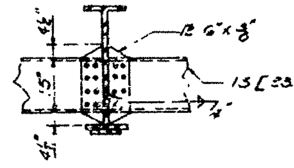
HALF SECTION AT EXPANSION DEVICE

Scale: $\frac{1}{2}$"=1'-0"



OPTIONAL WELDS

Scale: 1"=1'-0"



DIAPHRAGM DETAILS

Scale: $\frac{3}{4}$"=1'-0"

DESIGN SPECIFICATIONS: AASHO 1961

LIVE LOAD:

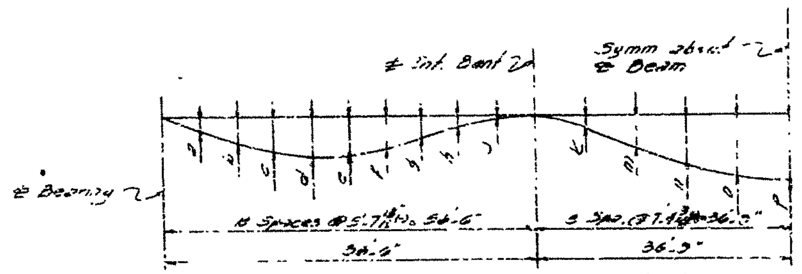
HS20 (AASHO 1961) and special interstate loading of 2-24,000 lb. axles spaced at 4'-0" on centers.

	Interior Beam	Exterior Beam
1. Dead Load per ft. (Type A Rail)		
a. To Wf	612 lb.	637 lb.
b. To Composite	150 lb.	190 lb.
2. Live Load to each composite beam	1.360 wheel + Imp.	1.266 wheel + Imp.

FOR INFORMATION ONLY

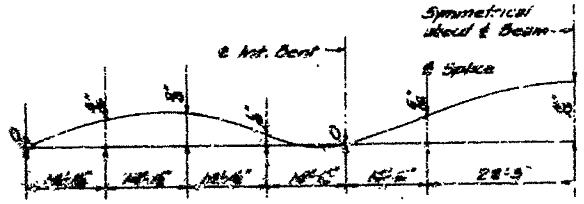
TABLE OF DEFLECTIONS

Point	Steel Deflection	Conc. Deflection Ext. Beam	Conc. Deflection Int. Beam
a	[illegible]	[illegible]	[illegible]
b	0.033	0.047	[illegible]
c	0.048	[illegible]	[illegible]
d	[illegible]	[illegible]	[illegible]
e	[illegible]	[illegible]	[illegible]
f	[illegible]	0.080	[illegible]
g	[illegible]	[illegible]	[illegible]
h	[illegible]	[illegible]	[illegible]
j	—	[illegible]	[illegible]
k	[illegible]	[illegible]	[illegible]
m	[illegible]	[illegible]	[illegible]
n	[illegible]	[illegible]	[illegible]
o	[illegible]	[illegible]	[illegible]
p	[illegible]	[illegible]	[illegible]



D.L. DEFLECTION DIAGRAM

(See Table)



CAMBER DIAGRAM

[illegible]

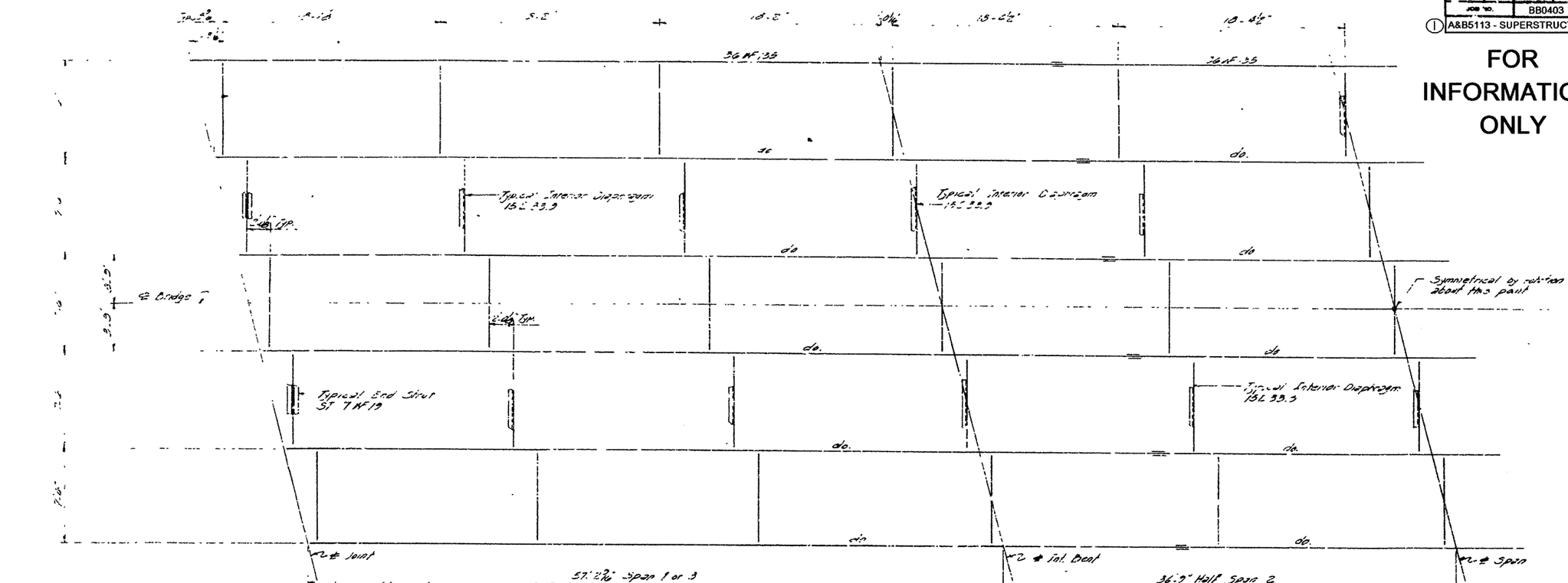
DETAILS OF
SUPERSTRUCTURE
LONELM - JCT. HWY. 23
OVER CRAVENS CREEK
FRANKLIN COUNTY
PREPARED BY
BRIGHTON ENGINEERING COMPANY
ROUTE 40 SEC. 1
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

BRIDGE NO. A&B5113 DRAWING NO. 53516

FED. ROAD DIV.	STATE	FED. AID PROJ.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.			57	75
JOB NO.	BB0403				

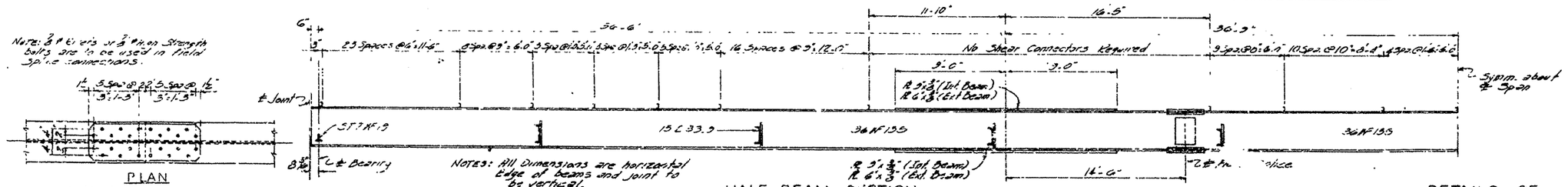
1 A&B5113 - SUPERSTRUCTURE - 53517

FOR INFORMATION ONLY



FRAMING PLAN 55'-6" SPAN

HALF FRAMING PLAN 73'-6" SPAN



DETAILS OF SUPERSTRUCTURE
LONELM - JCT. HWY 23
OVER CRAVENS CREEK
FRANKLIN COUNTY
Sheet 3

PREPARED BY
BRIGHTON ENGINEERING COMPANY

INT. ROUTE 40 SEC.

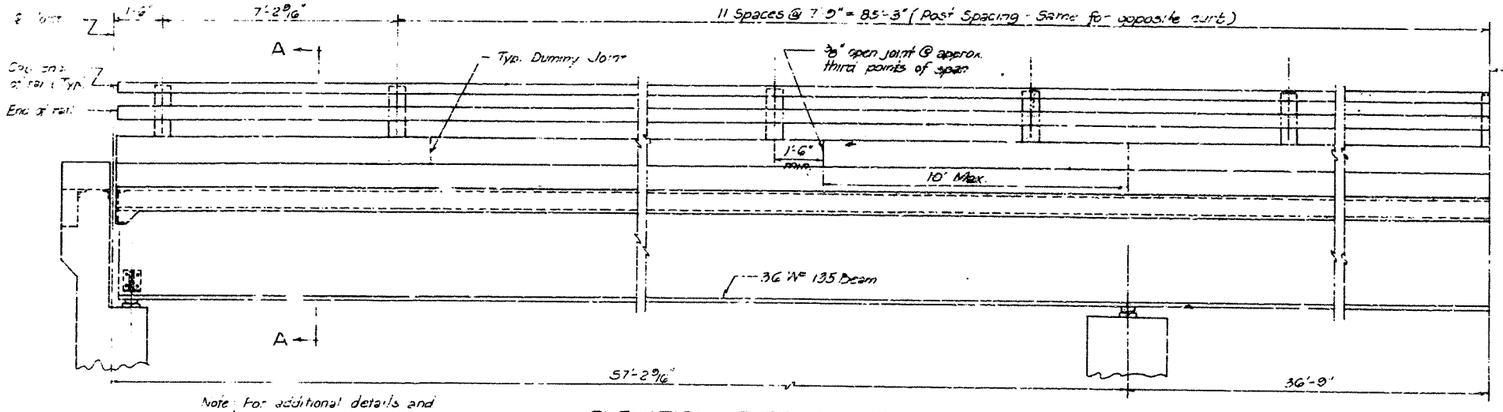
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

BRIDGE NO. A&B5113 **DRAWING NO.** 53517

FED. ROAD NO.	STATE	FED. AID PROJ.	SHEET NO.	TOTAL SHEETS
6	ARK.		58	75
JOB NO.	BB0403			

(1) A&B5113 - SUPERSTRUCTURE - 53518



Note: For additional details and Section A-A, see Dwg. 14339.

ELEVATION TYPE A RAILING

Scale: 1/2" = 1'-0"

GENERAL NOTES

All concrete to be Class S. All exposed corners to be chamfered 3/4" unless otherwise noted.

Field connections to be riveted or bolted with high strength bolts.

Rivets: 7/8" ϕ Open holes 15/16" ϕ except at beam splices. At beam splices use 7/8" ϕ rivets; open holes 15/16" ϕ.

Structural Shapes of equal or greater strength may be substituted for shapes shown, but payment will be made on the basis of the shapes shown or those actually used, whichever is less.

All welded connections to be 5/16" fillet shop welds, except as noted. All welding shall conform to the American Welding Society "Standard Specifications for Welded Highway and Railway Bridges", current edition.

Shop Paint: All structural steel, except surfaces in contact with concrete, shall be given one coat of red lead and raw linseed oil before shipment.

Field Paint. First coat-red lead tinted with lamp black. Second coat-aluminum paint.

No shop paint shall be applied to top flanges or reinforcing top flanges of floor beams and stringers at all points of welded or bolted splices including splice plates.

Finish surfaces to receive one shop coat of white lead-oil finish.

All metal bearing and roadway expansion devices to be used for the "Structural Steel in Beam Spans" bearings shall be fitted and set in accordance with "AASHTO" including allocate, all the other bearings and expansion devices are to be in accordance to the manufacturer's instructions. Bearings for Beam Spans and Spans shall not be painted.

All steel shall be ASTM A-36, unless otherwise noted.

Anchor bolts shall be galvanized to conform to ASTM Specifications, Designation A153.

Reinforcing steel to be deformed bars of intermediate or hard grade. The reinforcing steel is to be accurately located in the forms and firmly held in place by steel wire supports, sufficient in number and size to prevent displacement during the course of construction. The wire supports will not be paid for directly, but will be considered subsidiary to the item of "Reinforcing Steel".

Shop lists and bending diagrams of reinforcing steel, including wire supports, shall be submitted and approved before fabrication is begun.

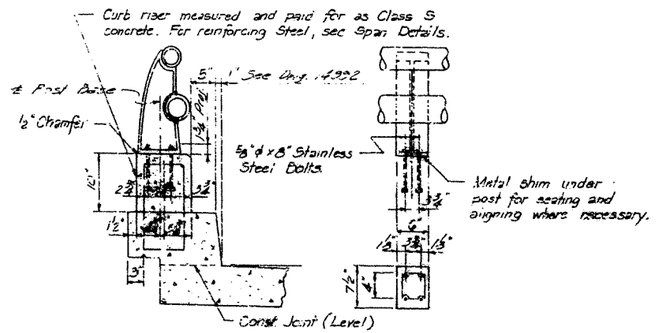
All elevations in concrete rivet for rail are to be ℄.

Shop drawings showing details of railing shall be submitted and approval secured before fabrication is begun.

For details of Bridge Railing, see Dwg. No. 14398 as shown on Bridge Layout.

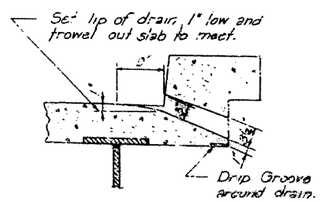
This structure shall conform to the requirements of the current Standard Specifications for Highway Construction, Edition of 1989, the 1990 Supplemental Specifications thereto and applicable Special Provisions.

SPECIFICATIONS: Arkansas State Highway Commission Standard Specifications for Highway Construction Edition of 1989, the 1990 Supplemental Specifications thereto and applicable Special Provisions.



DETAILS OF TYPE 'A' RAILING

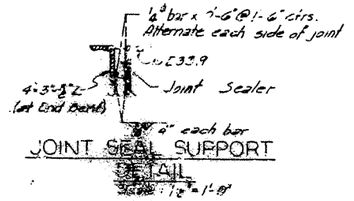
Scale: 1" = 1'-0"



Drain opening 3"x7" tapered to 3 5/8"x7 5/8". Place at approx. 20' centers on low side of sloped roadway. Drains shall be placed on the exterior fascia beam directly over the downhill roadway.

SECTION THRU DRAIN

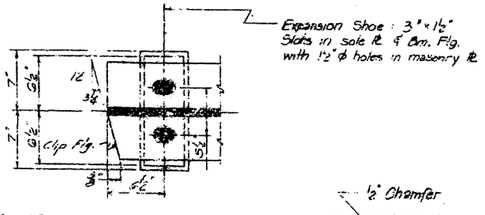
Scale: 1" = 1'-0"

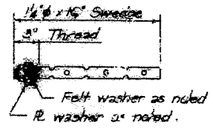


As an alternate for straps, 3/4" ϕ x 18" subsequently welded steel anchors (elbows) then filled, solid flights of auger may be used. Use weight of shapes as basis of measurement of structural steel in anchors.

ALTERNATE ANCHOR DETAIL

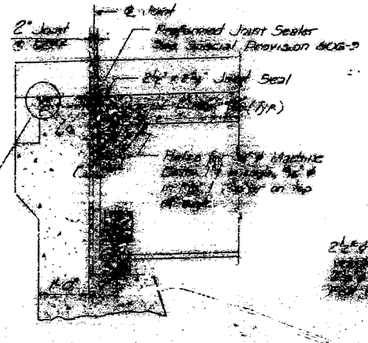
Scale: 1" = 1'-0"

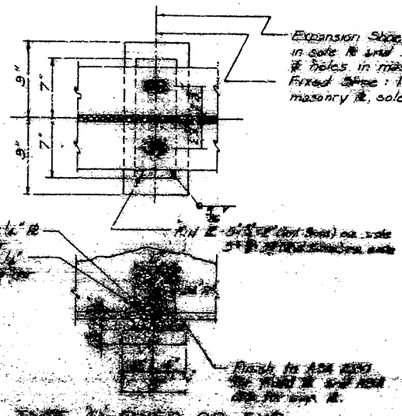


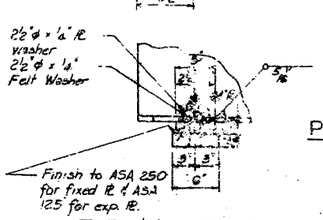


ANCHOR BOLT DETAIL

Scale: 1 1/2" = 1'-0"

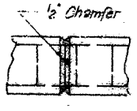






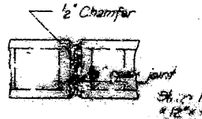
TYPE 'B' EXPANSION SHOE AT END BENTS

Scale: 1 1/2" = 1'-0"



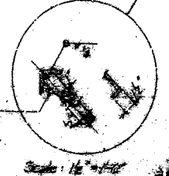
PLAN OF DUMMY JOINT

Scale: 1" = 1'-0"



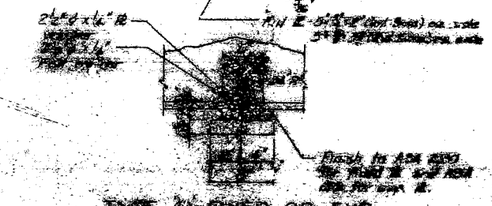
PLAN OF OPEN JOINT

Scale: 1" = 1'-0"



Scale: 1 1/2" = 1'-0"

JOINT AT END BENT



TYPE 'B' FIXED OR EXP. SHOE AT INT. BENTS

FOR INFORMATION ONLY

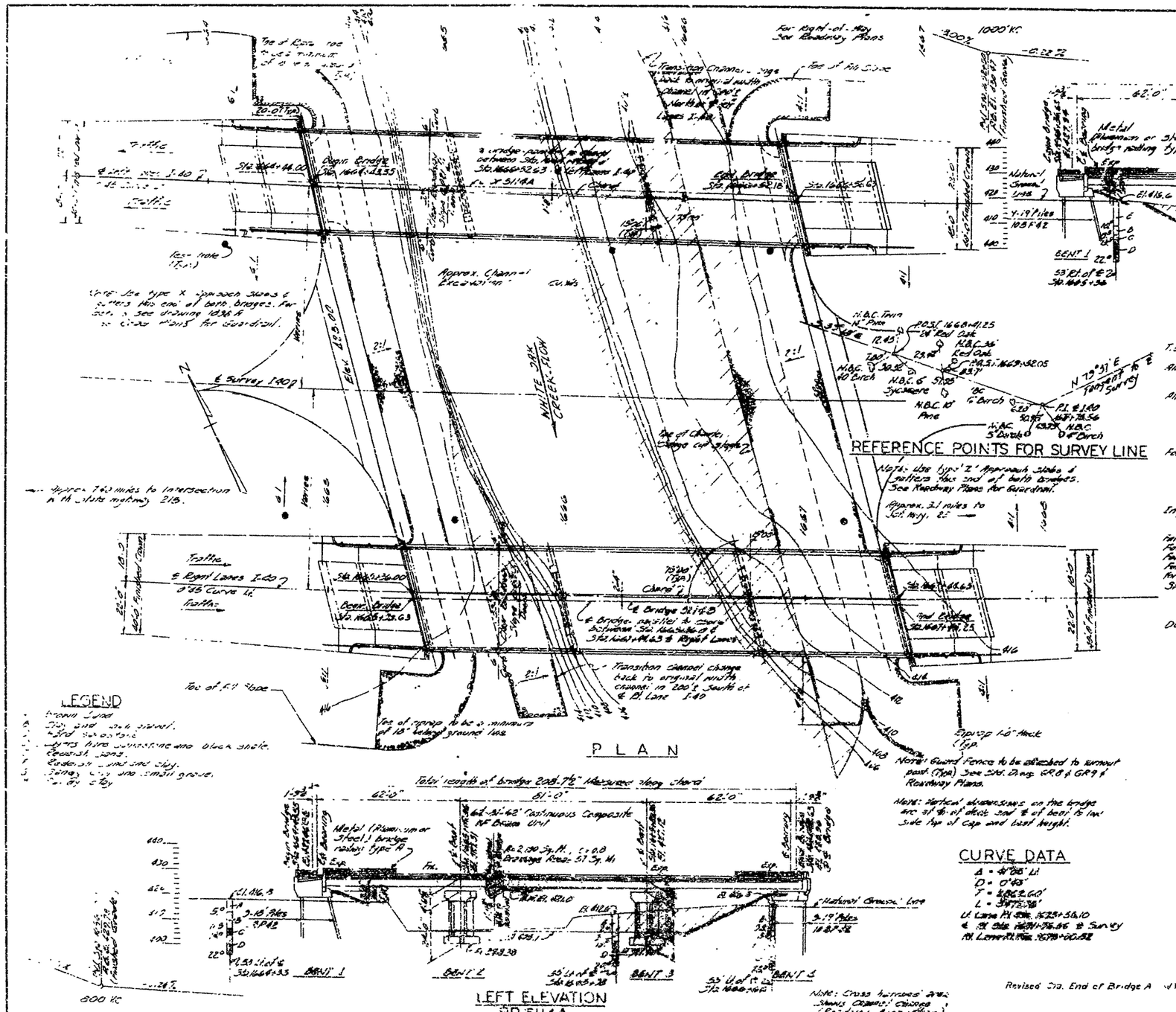
DETAILS OF SUPERSTRUCTURE
LON-ELM - JCT HWY 23
OVER CREEKING CREEK
FRANKLIN COUNTY

BRIGHTON ENGINEERING COMPANY

BRIDGE NO. A&B5113 DRAWING NO. 53518

STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
ARK.			59	75
JOB NO.	BB0403			

A&B5114 - LAYOUT - 53519


Top of Rock
Traffic
Begin Bridge
Sta. 1666+23.35
Sta. 1666+44.00
Approx. Channel Excavation
Elev. 413.00
WHITE OAK CREEK FLOW
Approx. 7.63 miles to intersection with (State Highway) 215.
Traffic
℄ Right Lanes 1:40
0°35' Curve Lt.
Traffic
Sta. 1666+36.00
Begin Bridge
Sta. 1666+29.63
Top of Fill Slope
Top of Ramp to be a minimum of 18" below ground line
Sta. 1666+68.63
End Bridge
Sta. 1667+06.25
Sta. 1667+13.88
Transition channel change back to original width channel in 200's South of ℄ Bridge
℄ Bridge - parallel & offset between Sta. 1666+68.63 & Sta. 1667+06.25 & Right Lane
Sta. 1666+32.63
℄ Bridge
Sta. 1666+50.16
Sta. 1666+67.69
Sta. 1667+05.22
Sta. 1667+23.75
Sta. 1667+42.28
Sta. 1667+60.81
Sta. 1667+79.34
Sta. 1667+97.87
Sta. 1668+16.40
Sta. 1668+34.93
Sta. 1668+53.46
Sta. 1668+71.99
Sta. 1668+90.52
Sta. 1669+09.05
Sta. 1669+27.58
Sta. 1669+46.11
Sta. 1669+64.64
Sta. 1669+83.17
Sta. 1670+01.70
Sta. 1670+20.23
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Sta. 1670+57.29
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Sta. 1670+94.35
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Sta. 1671+68.47
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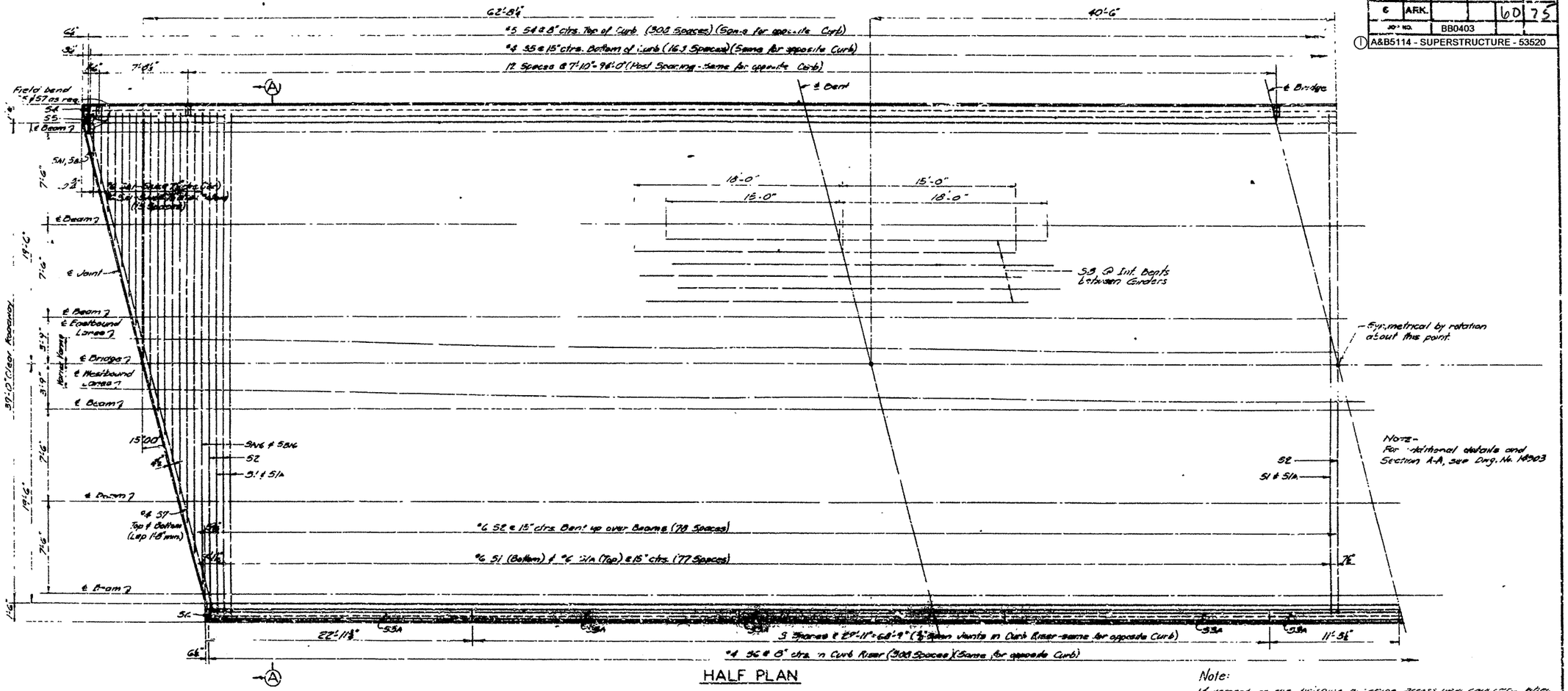
Sta. 1890+89.46
Sta. 1891+07.99
Sta. 1891+26.52
Sta. 1891+45.05
Sta. 1891+63.58
Sta. 1891+82.11
Sta. 1892+00.64
Sta. 1892+19.17
Sta. 1892+37.70
Sta. 1892+56.23
Sta. 1892+74.76
Sta. 1892+93.29
Sta. 1893+11.82
Sta. 1893+30.35
Sta. 1893+48.88
Sta. 1893+67.41
Sta. 1893+85.94
Sta. 1894+04.47
Sta. 1894+23.00
Sta. 1894+41.53
Sta. 1894+60.06
Sta. 1894+78.59
Sta. 1894+97.12
Sta. 1895+15.65
Sta. 1895+34.18
Sta. 1895+52.71
Sta. 1895+71.24
Sta. 1895+89.77
Sta. 1896+08.30
Sta. 1896+26.83
Sta. 1896+45.36
Sta. 1896+63.89
Sta. 1896+82.42
Sta. 1897+00.95
Sta. 1897+19.48
Sta. 1897+38.01
Sta. 1897+56.54
Sta. 1897+75.07
Sta. 1897+93.60
Sta. 1898+12.13
Sta. 1898+30.66
Sta. 1898+49.19
Sta. 1898+67.72
Sta. 1898+86.25
Sta. 1899+04.78
Sta. 1899+23.31
Sta. 1899+41.84
Sta. 1899+60.37
Sta. 1899+78.90
Sta. 1899+97.43
Sta. 1900+15.96
Sta. 1900+34.49
Sta. 1900+53.02
Sta. 1900+71.55
Sta. 1900+90.08
Sta. 1901+08.61
Sta. 1901+27.14
Sta. 1901+45.67
Sta. 1901+64.20
Sta. 1901+82.73
Sta. 1902+01.26
Sta. 1902+19.79
Sta. 1902+38.32
Sta. 1902+56.85
Sta. 1902+75.38
Sta. 1902+93.91
Sta. 1903+12.44
Sta. 1903+30.97
Sta. 1903+49.50
Sta. 1903+68.03
Sta. 1903+86.56
Sta. 1904+05.09
Sta. 1904+23.62
Sta. 1904+42.15
Sta. 1904+60.68
Sta. 1904+79.21
Sta. 1904+97.74
Sta. 1905+16.27
Sta. 1905+34.80
Sta. 1905+53.33
Sta.

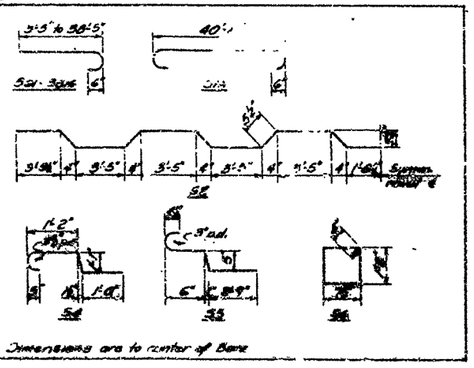
FED. ROAD NO.	STATE	FED. AID Proj.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS IN THIS SET
6	ARK.			60	75
JOB NO.	BB0403				

1 A&B5114 - SUPERSTRUCTURE - 53520

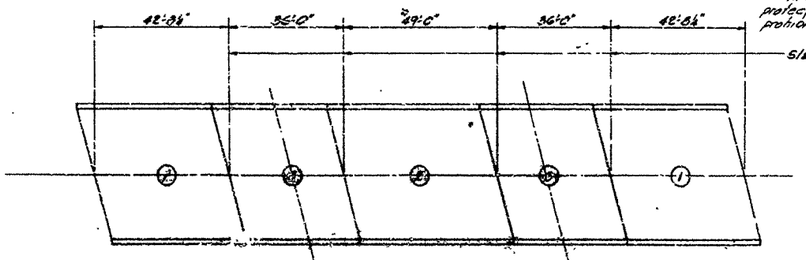


BAR LIST (For One Bridge Deck)

MARK	SIZE (#)	LENGTH	NUMBER	WGT. EACH
S1	6	40'-8"	156	511#
S4 to S4A	6	Varies 31'-5" to 38'-5"	2 Each	511#
S1A	6	42'-1"	156	527#
S2	6	41'-10"	157	527#
S3	5	36'-1"	540	511#
S3A	4	25'-8"	36	34#
S4	5	31'-11"	248	196#
S5	4	21'-8"	330	177#
S4A	4	19'-2"	618	316#
S7	6	22'-10"	8	55#
S4 to S5	6	Varies 4'-1" to 11'-4"	2 Each	34#
S6	4	33'-0"	60	31#.



HALF PLAN



SLAB POURING SEQUENCE

Slab is to be poured in the order noted as 1st, 2nd, 3rd, etc. Pouring must be continuous from end to end of each span of slab. Construction joints shall be perpendicular to longitudinal centerline of bridge unless otherwise approved. After the first section is poured the keys shall be given a light belting the second section is poured and not less than 24 hours later. Timber approach guards, if required, shall be placed before pouring slab. Ends of the slab over abutments shall be poured before the wingwalls, and curb pours shall be the last operation on each span. Curb pours must be made before curb is cured.

Note:

Movement of the finishing machine across new concrete when protected by means of planking placed on the surface shall be prohibited for 72 hours after finishing the pour.

FOR INFORMATION ONLY

DETAILS OF
SUPERSTRUCTURE
LONELM – JCT. HWY. 23
OVER WHITE OAK CREEK
FRANKLIN COUNTY

Sheet 1

PREPARED BY
BRIGHTON ENGINEERING COMPANY

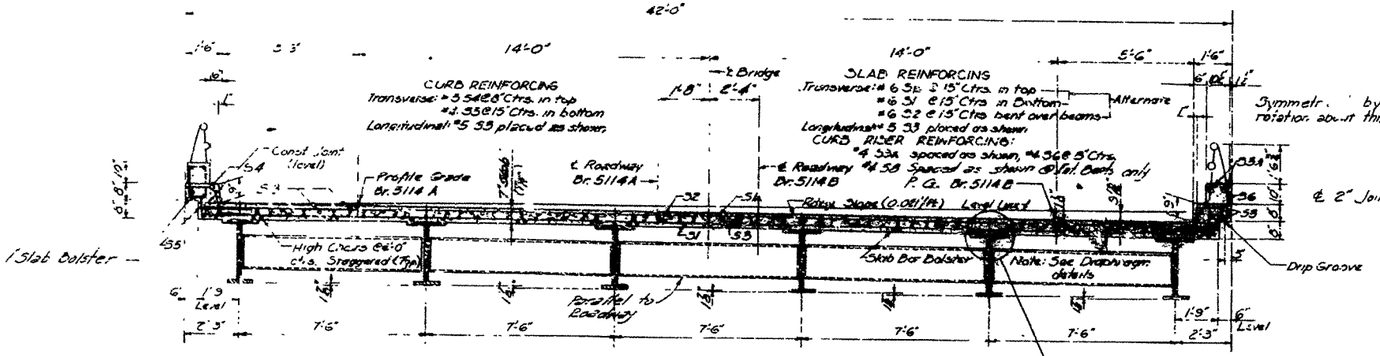
INT. ROUTE 40 SEC. 1
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: WWH DATE: 10-66 SCALE: 3/8"=1'-0"
TRACED BY: DATE:
CHECKED BY: S.R.K. DATE: 11-66

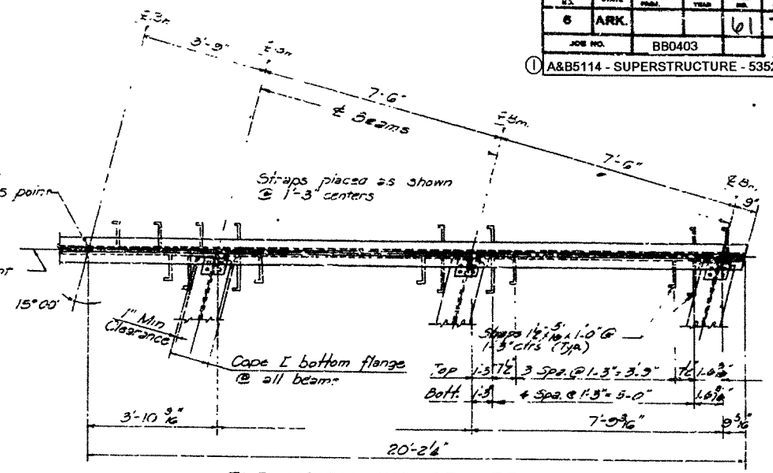
BRIDGE NO. A&B5114 DRAWING NO. 53520

FED. ROAD D.S.	STATE	FED. AID PROJ.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.			61	75
JOB NO.		BB0403			

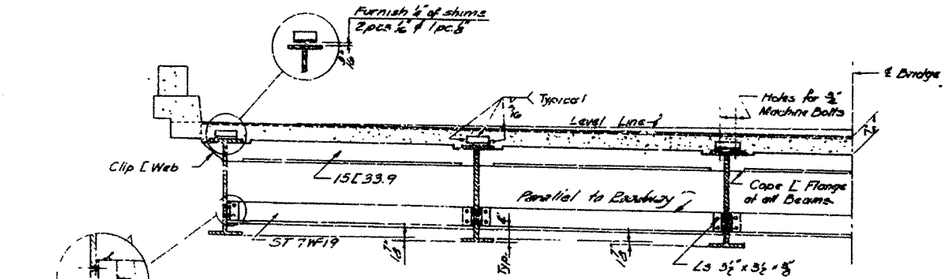
(I) A&B5114 - SUPERSTRUCTURE - 53521



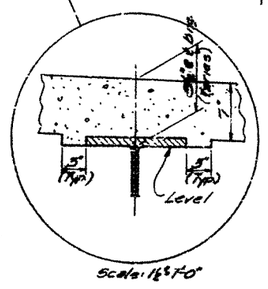
SECTION A-A
Scale: 3/8"=1'-0"
BR. 5114 A LOOKING BACK AT STATIONS
BR. 5114 B LOOKING BACK AT STATIONS

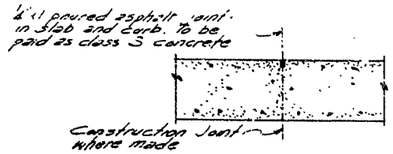


EXPANSION DEVICE DETAILS
Scale: 1/2"=1'-0"
Roadway Channel 15 C 33.9
Connecting Ls: 5"x3 1/2"x 3/8"



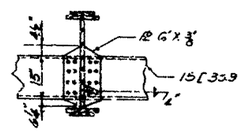
HALF SECTION AT EXPANSION DEVICE
Scale: 1/2"=1'-0"



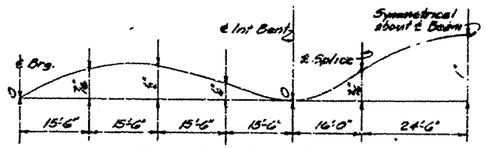


TRANSVERSE SLAB JOINT

OPTIONAL WELDS
Scale 1"=1'-0"

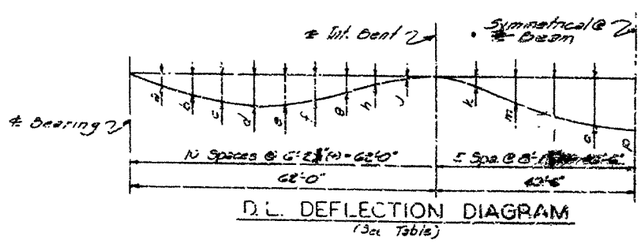


DIAPHRAGM DETAILS
Scale: 1/2"=1'-0"



CAMBER DIAGRAM

Beams are to be fabricated with the camber shown. All girders shall be cambered such that under total dead load the top of girder webs will parallel the finished roadway grade, except allowable tolerance for camber is 1/4". All girders shall be shop assembled in their true position, field connection holes reamed, and all parts match marked. The shop assembly shall have a minimum assembled sequence of 2 sections.



D.L. DEFLECTION DIAGRAM
(See Table)

TABLE OF DEFLECTIONS

Point	Steel Deflection	Conc. Deflection	Total Deflection
a	[illegible]	[illegible]	[illegible]
b	[illegible]	[illegible]	[illegible]
c	[illegible]	[illegible]	[illegible]
d	[illegible]	[illegible]	[illegible]
e	[illegible]	[illegible]	[illegible]
f	[illegible]	[illegible]	[illegible]
g	[illegible]	[illegible]	[illegible]
h	[illegible]	[illegible]	[illegible]
j	-	[illegible]	[illegible]
k	[illegible]	[illegible]	[illegible]
m	[illegible]	[illegible]	[illegible]
n	[illegible]	[illegible]	[illegible]
p	[illegible]	[illegible]	[illegible]
q	[illegible]	[illegible]	[illegible]
r	[illegible]	[illegible]	.079"

DESIGN SPECIFICATIONS: AASHO 1961
Live Load: H 20 (AASHO [illegible]) and Special Interstate Loading of [illegible] lbs on [illegible] axles @ 4'-0" ctrs.

1. Dead Load per Foot (Type [illegible] rail)

	Int. Beam	Ext. Beam
a. To 3/4" with construction joint	878 lbs.	687 lbs.
b. To composite with construction joint	190 lbs.	190 lbs.

2. Live Load to each carrier: 1,363# with I Imp. 1,772# with Imp.

FOR INFORMATION ONLY

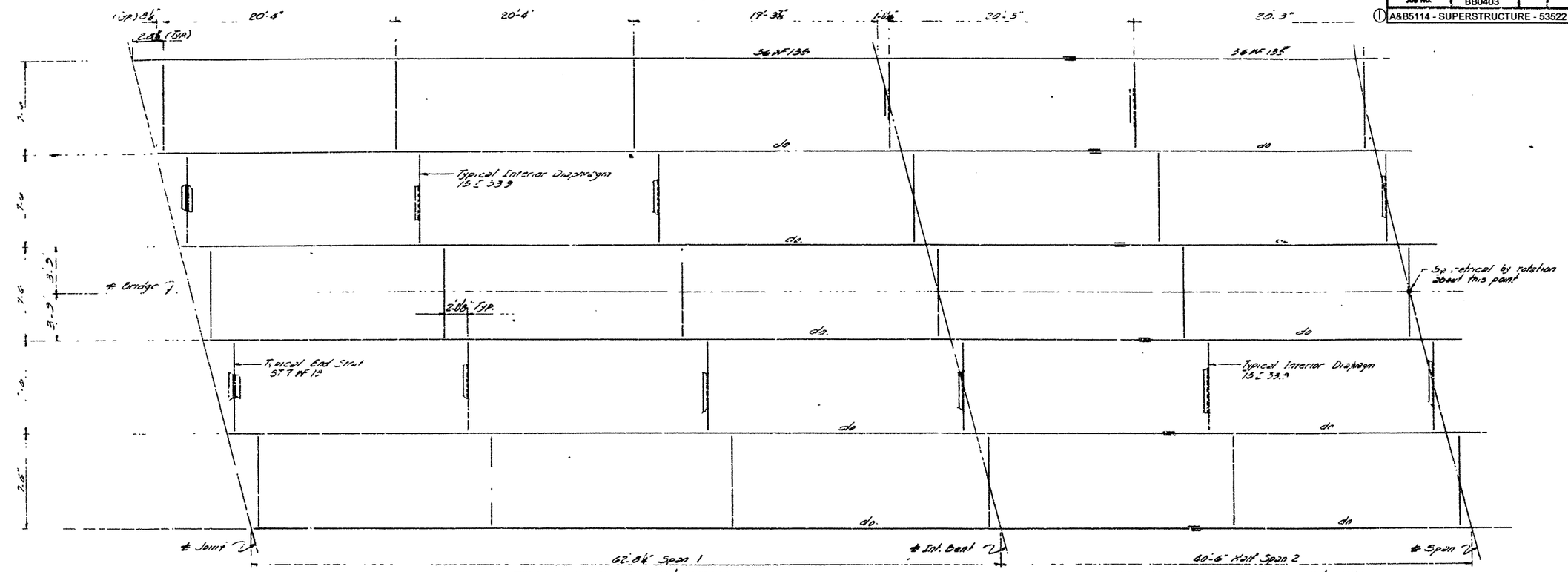
DETAILS OF SUPERSTRUCTURE
LONELM - JCT. HWY. 23
OVER WHITE OAK CREEK
FRANKLIN COUNTY
Sheet 2
PREPARED BY
BRIGHTON ENGINEERING COMPANY
INT. ROUTE 40 SEC. 1
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: FDS DATE: 10-28
TRACED BY: DATE:
CHECKED BY: SM&K DATE: 11-66
SCALE: As Noted

BRIDGE NO. A&B5114 **DRAWING NO.** 53521

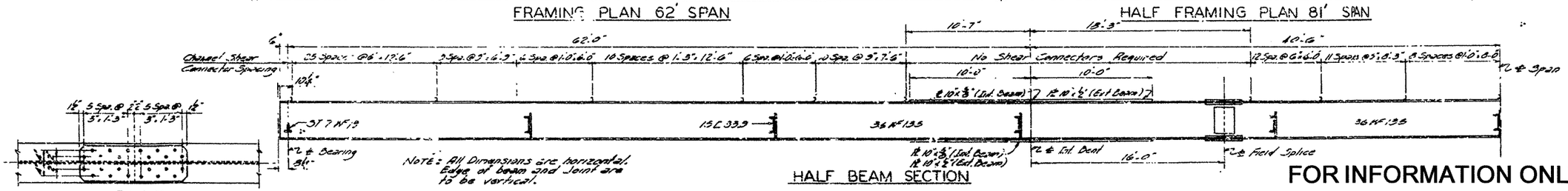
FED. ROAD DIV.	STATE	FED. AID PROJ.	TOTAL SHEETS	SHEET NO.	TOTAL SHEETS IN SET
6	ARK.			62	75
JOB NO.	BB0403				

1 A&B5114 - SUPERSTRUCTURE - 53522



FRAMING PLAN 62' SPAN

HALF FRAMING PLAN 81' SPAN



PLAN

ELEVATION

FIELD SPLICE DETAILS

Scale: ½"=1'-0"

See Dwg. 14668 for additional panel plate for Splice

Note: All Dimensions are horizontal. Edge of beam and Joint are to be vertical.

HALF BEAM SECTION

Note:
Stud Shear connectors, granular flux filled, solid ½ rod or equal may be used in place of channels shown on the following ratios: ¾ diameter stud in place of 1.82 inches of channel. ⅞ diameter stud in place of 2.52 inches of channel. The stud shall be 4" long and automatically and welded to the beam flanges in accordance with the recommendations of the manufacturer.
Channel sections will be used as basis for measurement of the stud shear connectors.

DETAILS OF SHEAR CONNECTORS

Scale: 1½"=1'-0"

All beams shall be shop assembled in their true position, trial connection holes reamed, and all parts match marked. The assembly shall have an assembly sequence of two sections.

DETAILS OF COVER PLATES

Scale: 1½"=1'-0"

Note: Magnetic Particle inspection of cover plate welds.

FOR INFORMATION ONLY

DETAILS OF SUPERSTRUCTURE
LINELM - JCT. HWY 23
OVER WHITE OAK CREEK
FRANKLIN COUNTY
Sheet 3

PREPARED BY
BRIGHTON ENGINEERING COMPANY

INT. ROUTE 40 SEC. 1
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

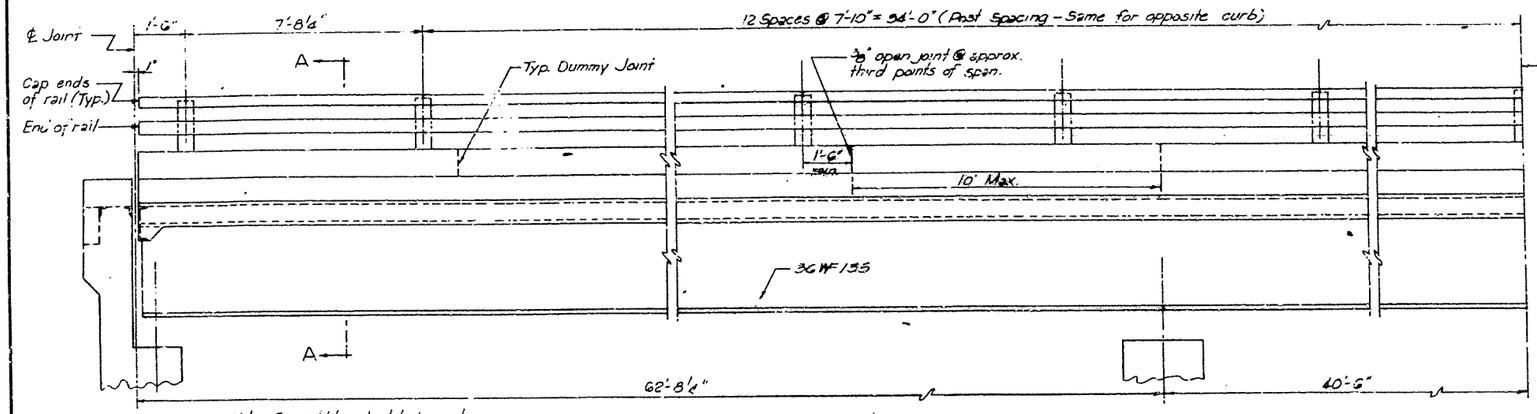
DESIGN BY [illegible] DATE 6-10-66
TRACED BY [illegible]
CHECKED BY [illegible] DATE 11-1-66

SCALE 1"=1'-0" if As Noted

BRIDGE NO. A&B5114 DRAWING NO. 53522

FED. ROAD NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.			63	75
JOB NO.	BB0403				

(1) A&B5114 - SUPERSTRUCTURE - 53523



Note: For additional details and Section A-A see Dwg. 14403

ELEVATION TYPE A RAILING

Scale: ½" = 1'-0"

GENERAL NOTES

All concrete to be Class S. All exposed corners to be chamfered ¾" unless otherwise noted.

Field connections to be riveted or bolted with high strength bolts. Rivets: ¾" ϕ, open holes: 13/16" ϕ, except at beam splices. At beam splices use ⅞" ϕ rivets, open holes 15/16" ϕ.

Structural Shapes of equal or greater strength may be substituted for shapes shown, but payment will be made on the basis of the shapes shown, or those actually used, whichever is less.

All welded connections to be 5/16" fillet shop welds, except as noted. All welding shall conform to the American Welding Society Standard Specifications for Welded Highway and Railway Bridges, current edition.

Shop Paint: All structural steel, except surfaces in contact with concrete, shall be given one coat of red lead and raw linseed oil before shipment.

Field Paint: First coat - red lead tinted with lamp black. Second coat - Aluminum paint.

No shop paint shall be applied to top flanges or edges of top flanges of beams and shear connectors or to panels of metal or bolted splices including splice plates.

Finished surfaces to receive one shop coat of white lead paint and linseed oil.

All metal bearing and roadway expansion devices to be paid for as "Structural Steel in Beam Spans." Bearings shall be finally settled in accordance with Sec. 806.34, including alternate, of the Std. Specs. This work and all other work to be considered to be subsidiary to the item "Structural Steel in Beam Spans" and will not be paid for separately.

All steel shall be ASTM A-36, unless otherwise noted.

Anchor Bolts shall be galvanized to conform to ASTM Specifications, Designation A-325.

Reinforcing steel to be deformed bars of intermediate or hard grade. The reinforcing steel is to be accurately located in the forms and firmly held in place by steel wire supports, sufficient in number and size to prevent displacement during the course of construction. The wire supports will not be paid for directly, but will be considered subsidiary to the item of "Reinforcing Steel."

Shop lists and bending diagrams of reinforcing steel, including bar supports, shall be submitted and approval secured before fabrication is begun.

All chamfers on concrete inner rail are to be ½".

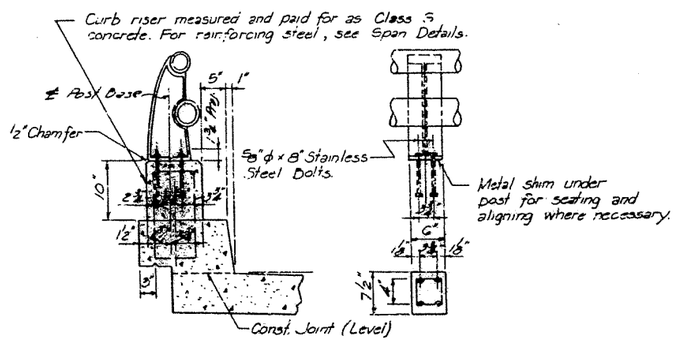
Shop drawings showing details of railing shall be submitted and approval secured before fabrication is begun.

For details of Bridge Railing, See Dwg. No. 14092 as shown on Bridge Layout.

These drawings show general features of design only. Shop drawings shall be made in accordance with the Specifications, submitted and approved before fabrication is begun.

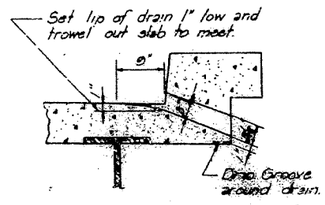
In case of discrepancy Special Provisions shall apply.

SPECIFICATIONS: Arkansas State Highway Commission Standard Specifications for Highway Construction Edition of 1968, the 1968 Supplemental Specifications thereto and applicable Special Provisions.



DETAILS OF TYPE 'A' RAILING

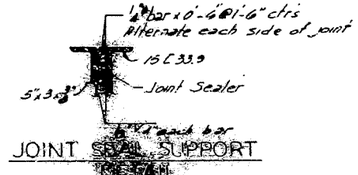
Scale: 1" = 1'-0"



Drain openings 5"x2" located to 3½"x7½". Place at approx. 20' centers on low side of sloped roadways and location shall be placed over champfer "valley."

SECTION THRU DRAIN

Scale: 1" = 1'-0"

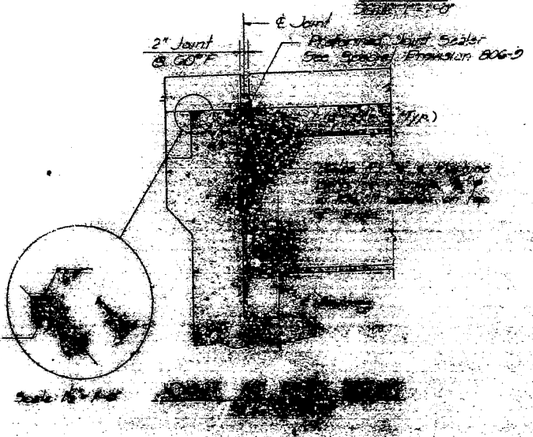


JOINT SEAL SUPPORT DETAIL

Scale: ½" = 1'-0"

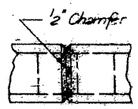
ALTERNATE ANCHOR DETAIL

Scale: 1" = 1'-0"



DETAIL OF PREFORMED JOINT SEALER

Scale: 1" = 1'-0"



PLAN OF DUMMY JOINT

Scale: 1" = 1'-0"

PLAN OF OPEN JOINT

Scale: 1" = 1'-0"

FOR INFORMATION ONLY

DETAILS OF SUPERSTRUCTURE LONELM — JCT. HWY. 23 OVER WHITE OAK CREEK FRANKLIN COUNTY

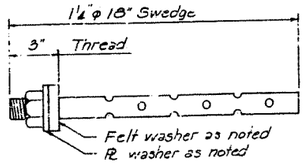
BRIGHTON ENGINEERING COMPANY

ARKANSAS STATE HIGHWAY COMMISSION

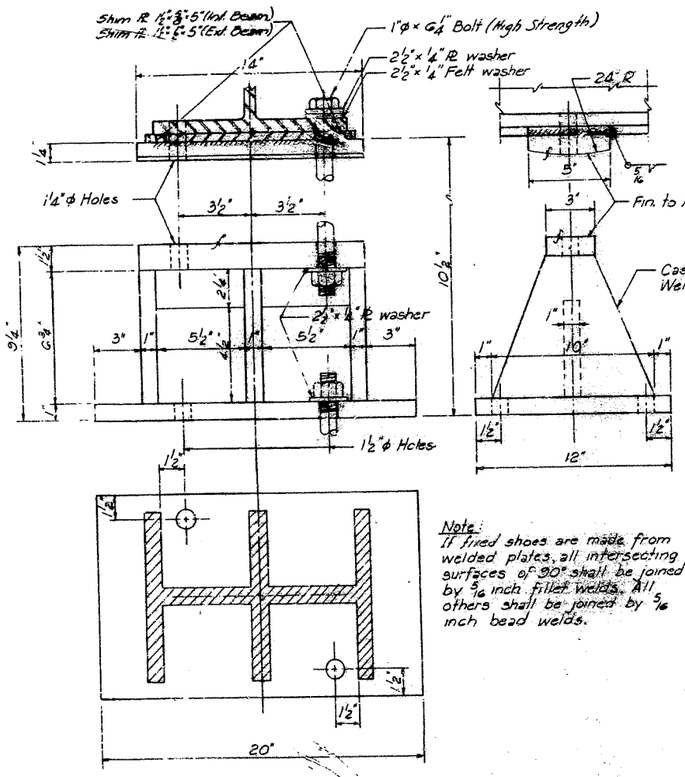
BRIDGE NO. A&B5114 DRAWING NO. 53523

FED. ROAD NO.	STATE	FED. AID PROJ.	FEDERAL FUND	SHEET NO.	TOTAL SHEETS
6	ARK.			64	75
JOB NO.		BB0403			

(1) A&B5114 - SUPERSTRUCTURE - 53524

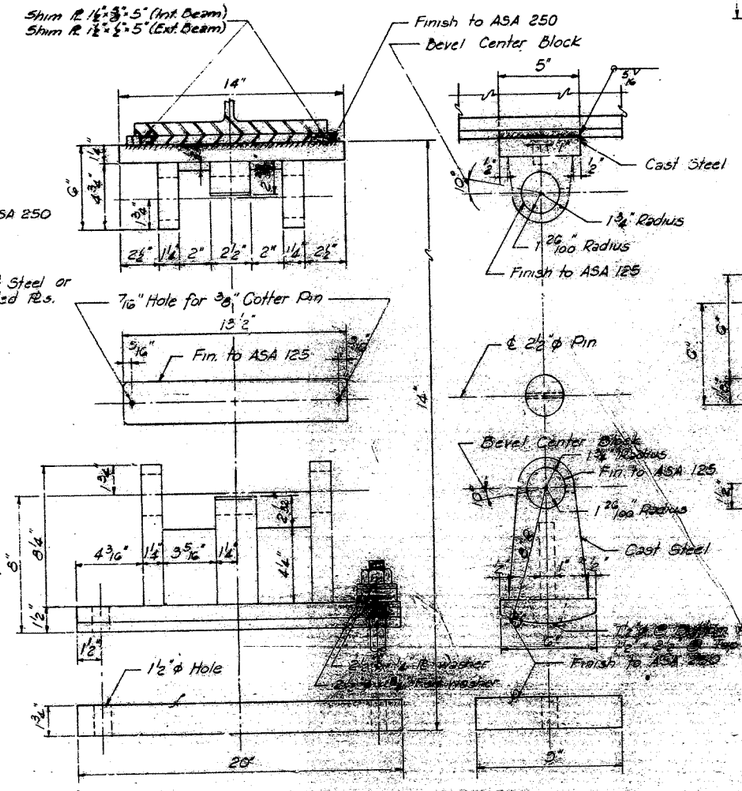


ANCHOR BOLT DETAIL



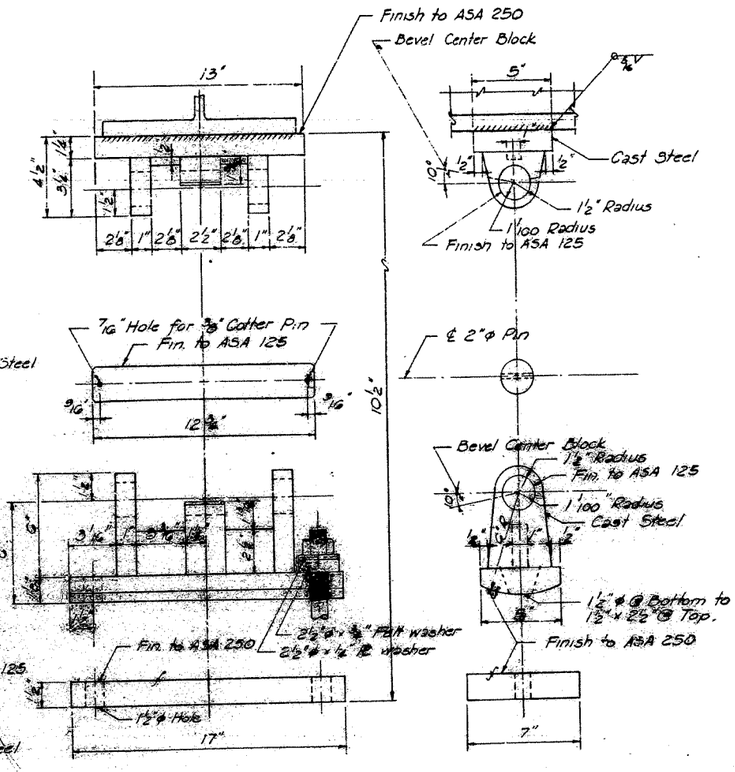
Note:
If fixed shoes are made from welded plates, all intersecting surfaces of 90° shall be joined by 5/16 inch fillet welds. All others shall be joined by 5/16 inch bead welds.

TYPE 'A' FIXED SHOE
AT INT. BENT 2



TYPE 'A' EXPANSION SHOE
AT INT. BENT 3

All shoe material shall be Carbon Steel, showing plates for expansion shoes shall be ASTM A-36.
All [illegible] shall be [illegible] ASTM A325 Type 1.
Rockers shall be [illegible]
[illegible]



TYPE 'A' EXPANSION SHOE
AT END BENTS 1 & 4

FOR INFORMATION ONLY

DETAILS OF
SUPERSTRUCTURE
LONELM – JCT. HWY 23
OVER WHITE OAK CREEK
FRANKLIN COUNTY

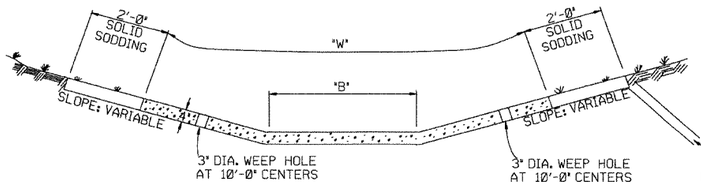
BRIGHTON ENGINEERING COMPANY

ARKANSAS STATE HIGHWAY COMMISSION

3"=1'-0"

BRIDGE NO. A&B5114 DRAWING NO. 53524

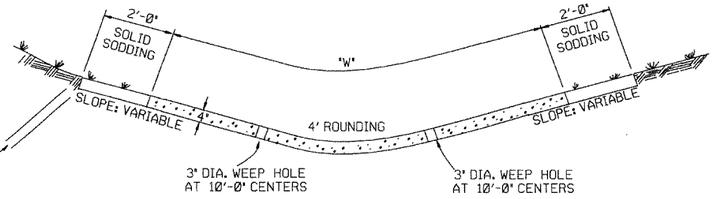
REFER TO TABULATION OF QUANTITIES FOR "W" & "B" DIMENSIONS



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

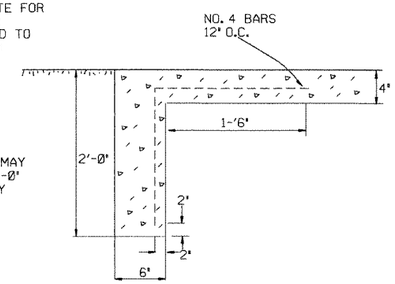
TYPE A

REFER TO TABULATION OF QUANTITIES FOR "W" DIMENSIONS



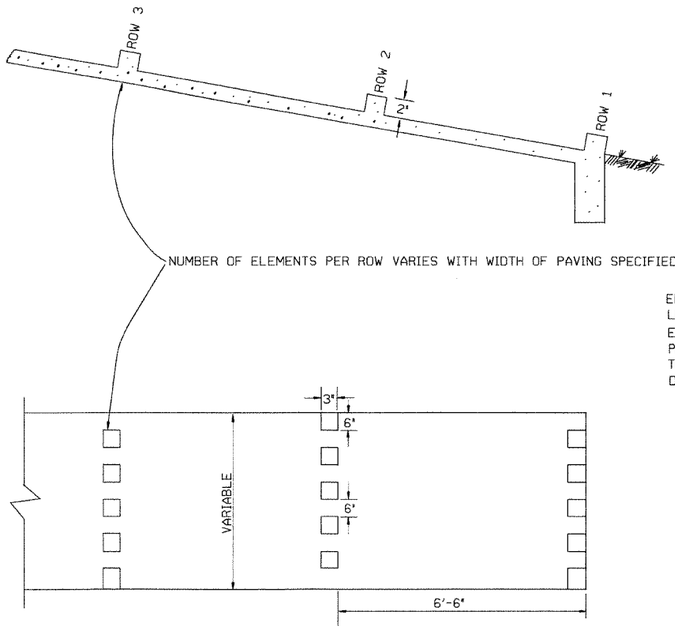
TYPE B

THE STEEL AND ADDITIONAL CONCRETE FOR THE WALLS SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID FOR "CONCRETE DITCH PAVING."



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

TOE WALL DETAIL FOR CONCRETE DITCH PAVING



ENERGY DISSIPATORS
(NO SCALE)

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

GENERAL NOTES:

THE FULL WIDTH OF EACH SECTION SHALL BE POURED MONOLITHICALLY.

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

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

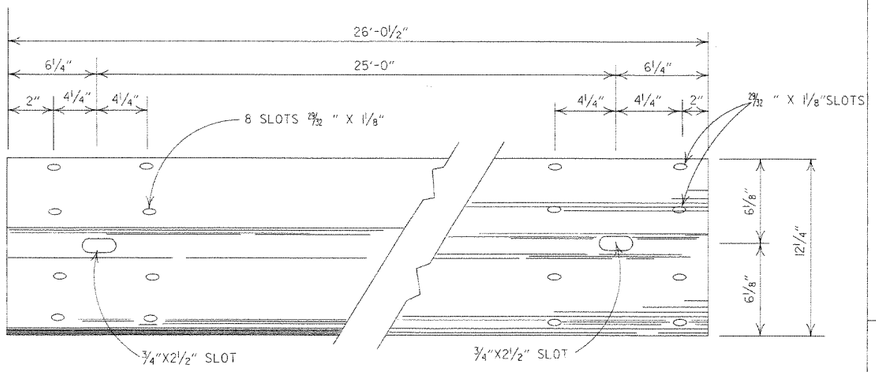
1" WIDE TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE DITCH PAVING AT 45' INTERVALS. THE SPACE SHALL BE FILLED WITH APPROVED JOINT FILLER COMPLYING WITH AASHTO M213.

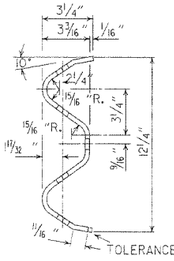
DATE	REVISION	DATE FILM'D
11-17-10	ADDED GENERAL NOTE	
6-2-94	ADDED GENERAL NOTE ABOUT SOLID SODDING	
11-30-8	ELIMINATED MIN. ROWS OF ELEMENTS	111-30-89
7-15-88	REVISED DISSIPATOR NOTE	653-7-15-88
4-3-87	REVISED ENERGY DISSIPATOR	671-4-3-87
1-9-87	MODIFIED NOTE ON ENERGY DISS.	532-1-9-87
11-3-86	ADDED NOTE TO ENERGY DISS.	599-12-1-86
11-1-84	ENERGY DISSIPATOR DETAILS ADDED	508-11-1-84
11-1-84	EXCAVATION DETAILS ADDED TYPED A & B	
10-2-72	REVISED AND REDRAWN	508-10-2-72

ARKANSAS STATE HIGHWAY COMMISSION

CONCRETE DITCH PAVING

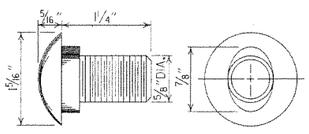
STANDARD DRAWING CDP-1



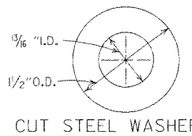


DETAILS OF W-BEAM GUARD RAIL

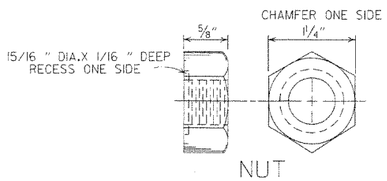
RAIL SECTION OF CLOSELY SIMILAR DIMENSIONS AND COMPARABLE STRENGTH MAY BE SUBSTITUTED IF APPROVED BY THE ENGINEER.



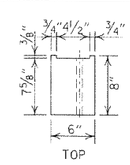
SPLICE BOLT
POST BOLT - SAME EXCEPT LENGTH



CUT STEEL WASHER

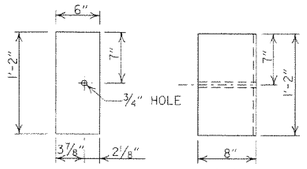


NUT

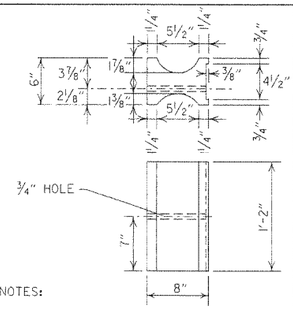


TOP

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



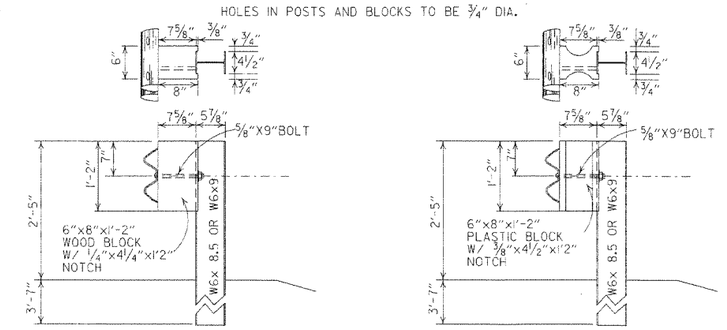
WOOD BLOCKOUT
(W-BEAM)



NOTES:
1. SIMILAR SHAPED PLASTIC BLOCKOUTS MAY BE USED AS LONG AS THEY MEET NCHRP-350 TEST LEVEL 3 SPECIFICATIONS OR REQUIREMENTS FOR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).
2. DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCES.

PLASTIC BLOCKOUT
(W-BEAM)

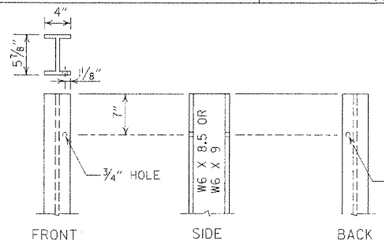
HOLES IN POSTS AND BLOCKS TO BE ¾" DIA.



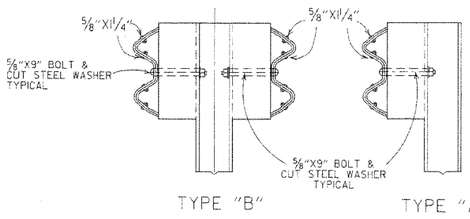
WOOD BLOCKOUT CONNECTIONS

PLASTIC BLOCKOUT CONNECTIONS

DETAILS OF STEEL LINE POST CONNECTIONS
(W-BEAM)



STEEL POST



TYPE "B" TYPE "A"

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 GUARD RAIL CONTINUES, THE INTERMEDIATE SECTIONS SHALL HAVE A POST SPACING OF 6'-3" UNLESS OTHERWISE NOTED.

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

USE W-BEAM GUARD RAIL COMPONENTS OF SAME MATERIAL FOR ENTIRE JOB. FOR EXTENSIONS OR MODIFICATION OF EXISTING GUARD RAIL, W-BEAM GUARD RAIL 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# (1400 f) OR NO. 1 1350 f SOUTHERN PINE.

CONTRACTOR SHALL HAVE THE OPTION OF USING WOOD BLOCKOUTS FOR W-BEAM GUARD RAIL OR PLASTIC BLOCKOUTS, AS LONG AS BLOCKOUT USED MEETS NCHRP-350 TEST LEVEL 3 SPECIFICATIONS OR REQUIREMENTS FOR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) FOR W-BEAM GUARD RAIL.

HOLES IN POSTS AND BLOCKS TO BE ¾" DIA.

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

WOOD BLOCKOUT CONNECTIONS

PLASTIC BLOCKOUT CONNECTIONS

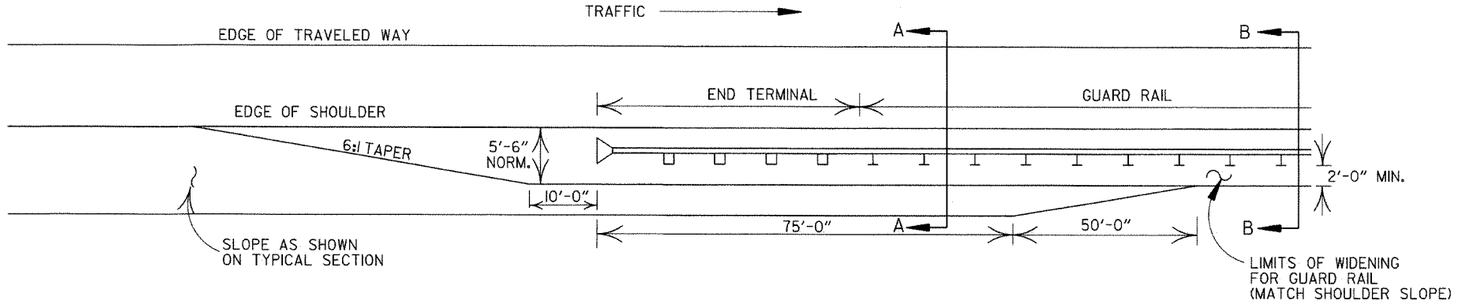
DETAILS OF WOOD LINE POST CONNECTIONS
(W-BEAM)

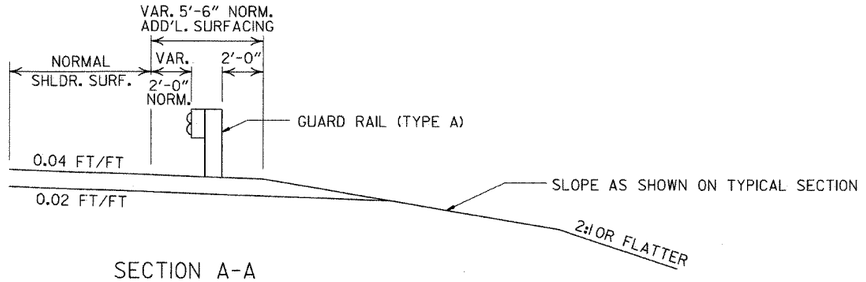
DATE	REVISION	DATE FILM
7-14-10	RAISED HEIGHT OF GUARD RAIL 1"	
10-15-09	ADDED REFERENCE TO MASH	
4-10-03	REVISED GENERAL NOTES	
8-22-02	REVISED DIMENSION ON WOOD & PLASTIC BLOCKOUT CONNECTIONS & ON STEEL POST	
11-16-01	REVISED WOOD BLOCKOUT & DETAILS OF WOOD LINE POST CONNECTIONS	
3-30-00	REMOVED GUARD RAIL AT BRIDGE ENDS	
1-12-00	ADDED PLASTIC BLOCKOUT	
8-12-98	REV. BLOCKOUTS TO WOOD, DELETED CONC. POST & REV. GENERAL NOTE, DELETED DET. OF GUARD RAIL 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	
4-3-97	REMOVED "LAP IN DIRECTION OF TRAFFIC" NOTE & PLACED ARROWS ON WASHERS	
10-18-96	REVISED WOOD POST NOTE	
6-2-94	ADDED ALT. STEEL POST SIZE	
8-5-93	REVISED STEEL POST SIZE	8-5-93
10-1-92	REDRAWN & REVISED	10-1-92
8-15-91	REVISED WASHER NOTE	8-15-91
8-2-90	REV. GEN. NOTE & DEPHT OF ANC. POST IN ROCK	8-2-90
7-15-88	REVISED SECTION 3 & GENERAL NOTES	
3-4-88	REV. ANCHOR POST, ELEV. NOTES & POST IN ROCK	780-3-4-88
10-30-87	REVISED WOOD LINE POST DETAIL	546-10-30-87
10-9-87	REDRAWN & REVISED	802-10-9-87

ARKANSAS STATE HIGHWAY COMMISSION

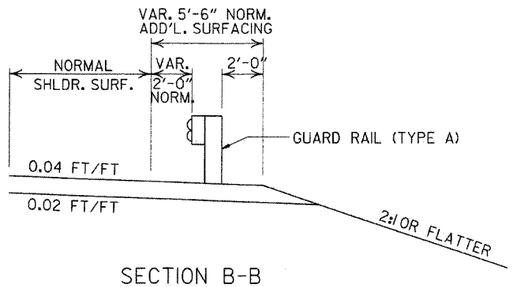
GUARD RAIL DETAILS

STANDARD DRAWING GR-8





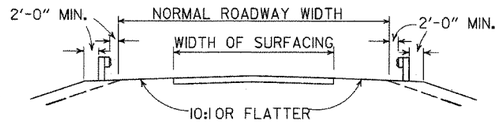
SECTION A-A



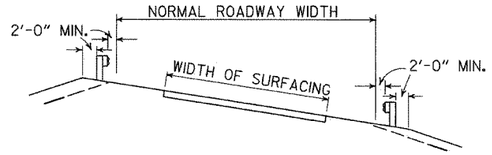
SECTION B-B

DETAILS OF WIDENING FOR GUARD RAIL

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

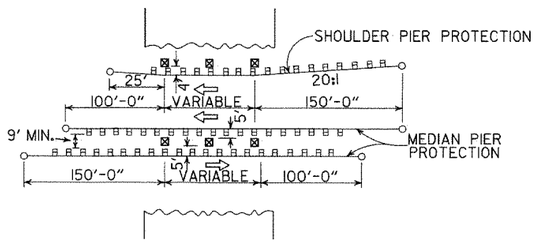


SECTION ON TANGENT



SECTION ON CURVE

DETAILS SHOWING POSITION OF GUARD RAIL ON HIGHWAY



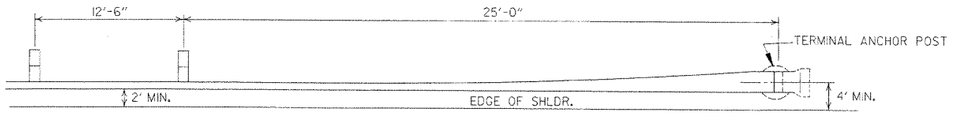
METHOD OF INSTALLATION OF GUARD RAIL AT FIXED OBSTACLE

DATE	REVISION	DATE FILM
4-17-08	MINOR REVISION	
11-10-05	DRAWN	

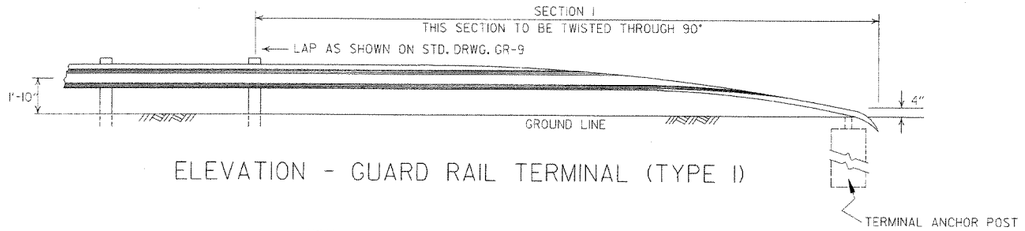
ARKANSAS STATE HIGHWAY COMMISSION

GUARD RAIL DETAILS

STANDARD DRAWING GR-9A

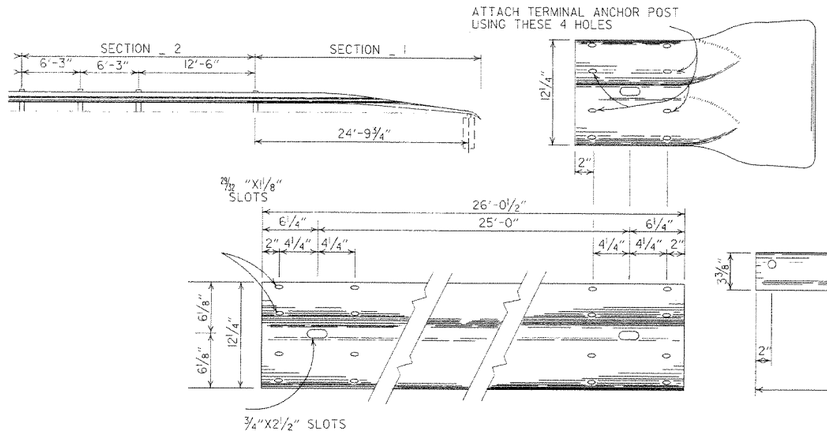


PLAN - GUARD RAIL TERMINAL (TYPE I)



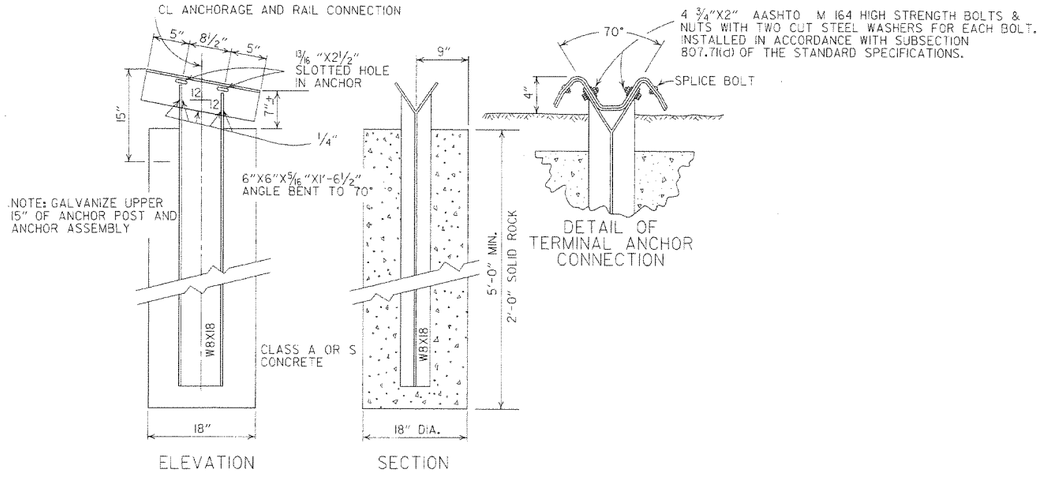
ELEVATION - GUARD RAIL TERMINAL (TYPE I)

NOTE:
SECTIONS 1 AND 2 OF GUARD RAIL TERMINAL SHALL BE PAID FOR AT THE PRICE BID PER LINEAR FOOT OF THE TYPE OF GUARD RAIL SPECIFIED.



SECTION 1

TERMINAL SECTION



NOTE: RAIL MEMBERS MAY BE BOLTED TO ANGLE AT TERMINAL ANCHOR AND THE TWO ASSEMBLIES POSITIONED TO PROPER ALIGNMENT PRIOR TO PLACING CONCRETE AROUND 8 WF 17 POST IF CONTRACTOR SO DESIRES.

DETAIL OF TERMINAL ANCHOR POST (TYPE I)

DATE	REVISION	DATE FILM
7-14-10	RAISED HEIGHT OF GUARD RAIL 1"	
6-26-97	REVISED LAP NOTE	
10-18-96	REVISED ASTM REF. TO AASHTO	
11-3-94	DIMENSION TERMINAL DETAIL	
11-11-92	ADDED NOTE FOR PAYMENT	11-11-92
10-1-92	DRAWN & ISSUED	10-1-92

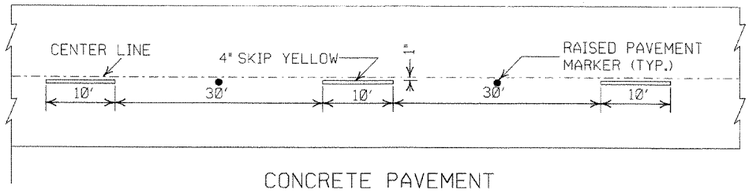
ARKANSAS STATE HIGHWAY COMMISSION

GUARD RAIL DETAILS

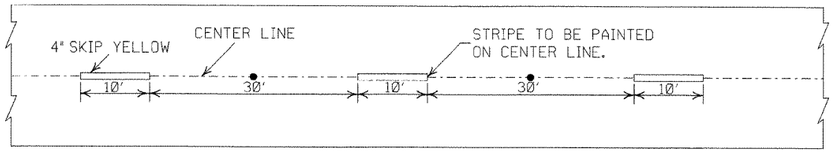
STANDARD DRAWING GRT-1

NOTES:

1. ALL LINES SHALL HAVE A WIDTH OF 4 INCHES.
2. THE THICKNESS AND RATE OF PAINT APPLICATION SHALL BE AS SPECIFIED IN SECTION 718 OF THE STANDARD SPECIFICATIONS.
3. THIS DRAWING SHALL BE USED IN CONJUNCTION WITH THE LATEST REVISED ADDITION OF THE 'MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.'
4. RAISED PAVEMENT MARKERS SHALL BE CENTERED BETWEEN SKIP LINES ON 40 FEET SPACING UNLESS OTHERWISE SHOWN ON THE PLANS.

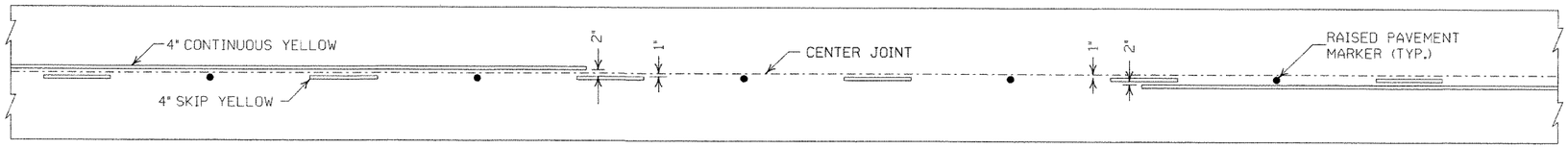


CONCRETE PAVEMENT

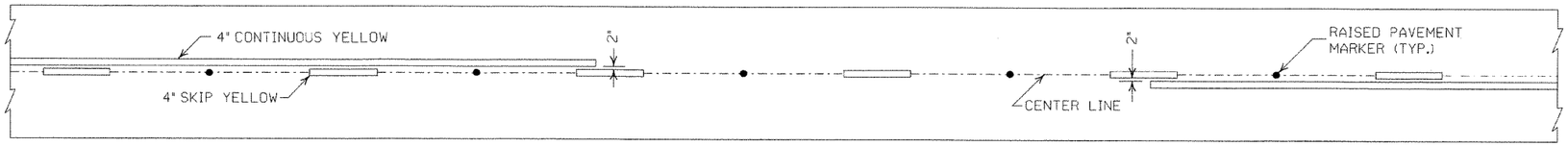


ASPHALT PAVEMENT

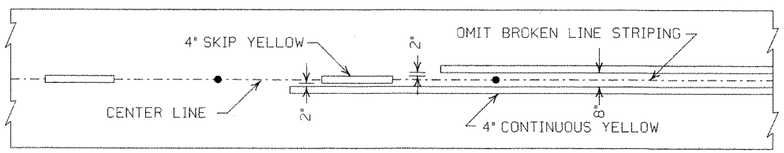
BROKEN LINE STRIPING



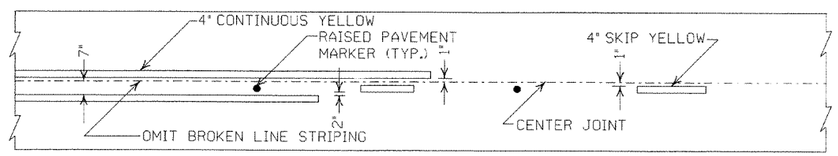
SOLID LINE STRIPING ON CONCRETE PAVEMENT



SOLID LINE STRIPING ON ASPHALT PAVEMENT



ASPHALT PAVEMENT



CONCRETE PAVEMENT

GENERAL NOTES:

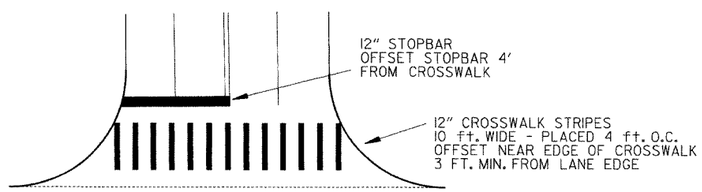
THIS DRAWING SHOULD BE CONSIDERED AS TYPICAL ONLY AND THE FINAL LOCATION OF THE STRIPING AND RAISED PAVEMENT MARKERS SHALL BE DETERMINED BY THE ENGINEER.

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

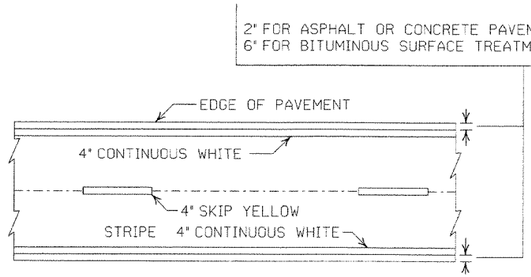
NOTE:

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 AHTD QUALIFIED PRODUCTS LIST.

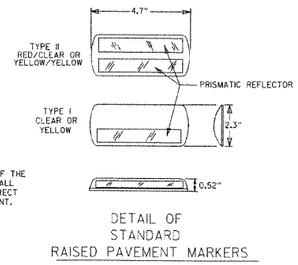
STRIPING AT ADJACENT NO PASSING LANES



CROSSWALK AND STOPBAR DETAILS



PAVEMENT EDGE LINE MARKING



DETAIL OF STANDARD RAISED PAVEMENT MARKERS

DATE	REVISION	
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
DATE	REVISION	FILMED

ARKANSAS STATE HIGHWAY COMMISSION

PAVEMENT MARKING DETAILS

STANDARD DRAWING PM-1

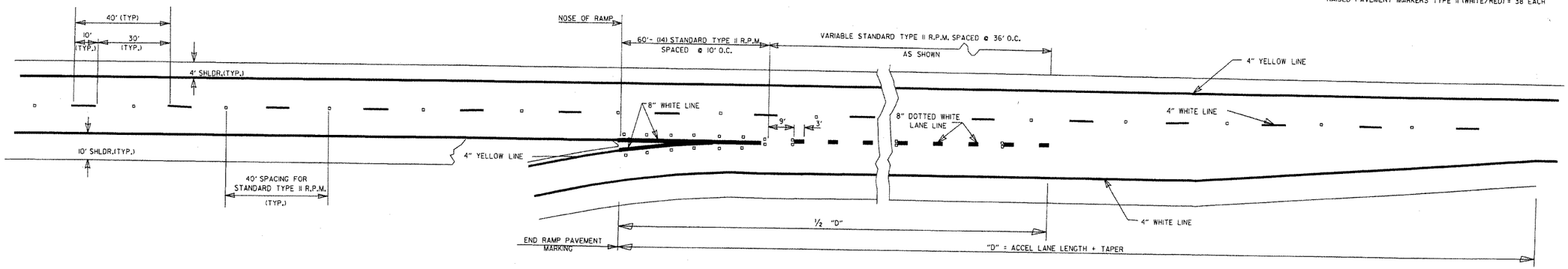
PAVEMENT MARKING QUANTITIES
(BASED ON 700' ACCEL. LANE + 300' TAPER)

ENTRANCE RAMP

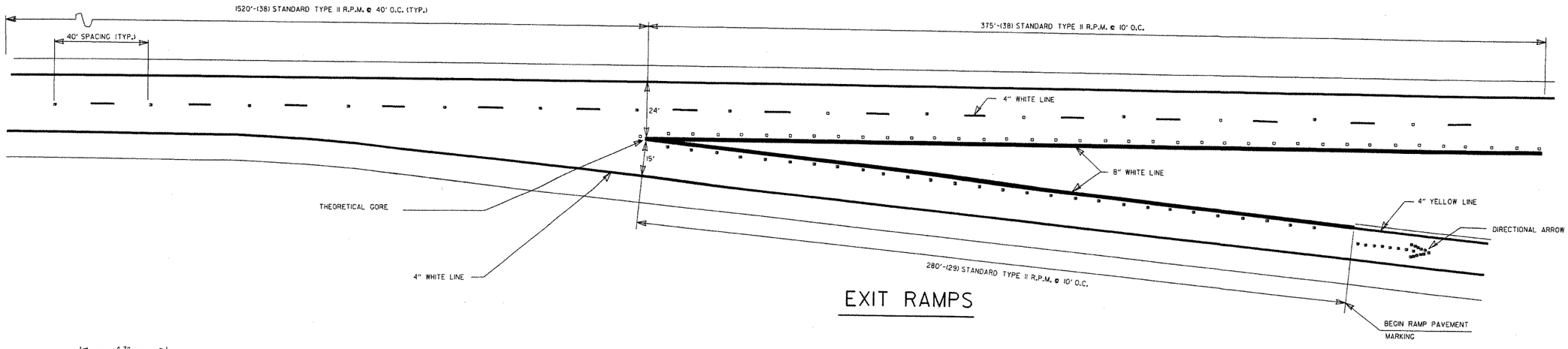
8" WHITE = 228 LIN. FT.
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED) = 38 EACH

EXIT RAMP

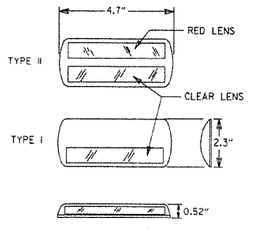
4" WHITE = 280 LIN. FT.
8" WHITE = 655 LIN. FT.
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED) = 38 EACH
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED) = 48 EACH
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED) = 38 EACH



ENTRANCE RAMPS

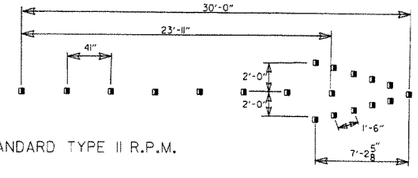


EXIT RAMPS



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 AHTD QUALIFIED PRODUCTS LIST.

DATE	REVISION	FILMED
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

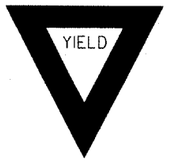
PERMANENT PAVEMENT MARKING ON ACCESS CONTROLLED ROADWAYS

STANDARD DRAWING PM-2

R1-1

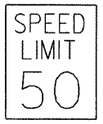
STANDARD 30"X30"
EXPRESSWAY 36"X36"
SPECIAL 48"X48"

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"

R2-5A

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

R2-5C

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

R4-1

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

R4-2

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

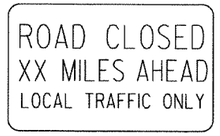
R5-1

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

R11-2

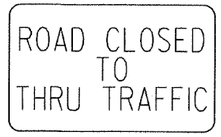
48"X30"

R11-3A



60"X30"

R11-4

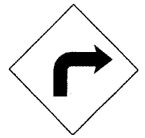


60"X30"

RSP-1

48"X30"

W1-1



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

W1-2

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

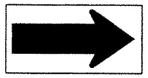
W1-3

STD. 48"X48"

W1-4

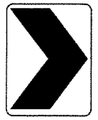
STD. 48"X48"

W1-6



STD. 48"X24"
SPECIAL 60"X30"

W1-8



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

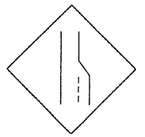
W3-1

STD. 36"X36"
SPECIAL 48"X48"

W3-2

STD. 36"X36"
SPECIAL 48"X48"

W4-2



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

W5-1

STD. 36"X36"
SPECIAL 48"X48"

W6-3

EXPWY. 36"X36"
SPECIAL 48"X48"

W8-7

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

W9-2

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

W13-1

STD. 24"X24"

W20-1

STD. 48"X48"

W20-2

STD. 48"X48"

W20-3

STD. 48"X48"

W20-4

STD. 48"X48"

W20-5

STD. 48"X48"

W20-7a

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

W21-2

STD. 30"X30"
SPECIAL 36"X36"

W21-5

STD. 30"X30"
SPECIAL 36"X36"

W24-1

STD. 36"X36"

W1-4b

STD. 48"X48"

R56-1

STD. 18"X18"

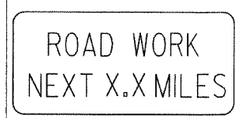
W8-11

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

W8-9

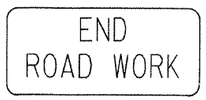
STD. 36"X36"
FWY. 48"X48"

G20-1



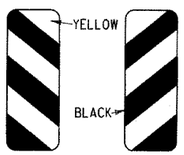
60"X24"

G20-2



48"X24"

OM-3L OM-3R



12"X36"

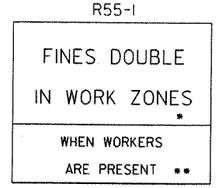
M4-9

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

M4-10

48"X18"

R55-1



36"X60"

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

ADVANCE DISTANCES
(XXXX)

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

GENERAL NOTES:

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

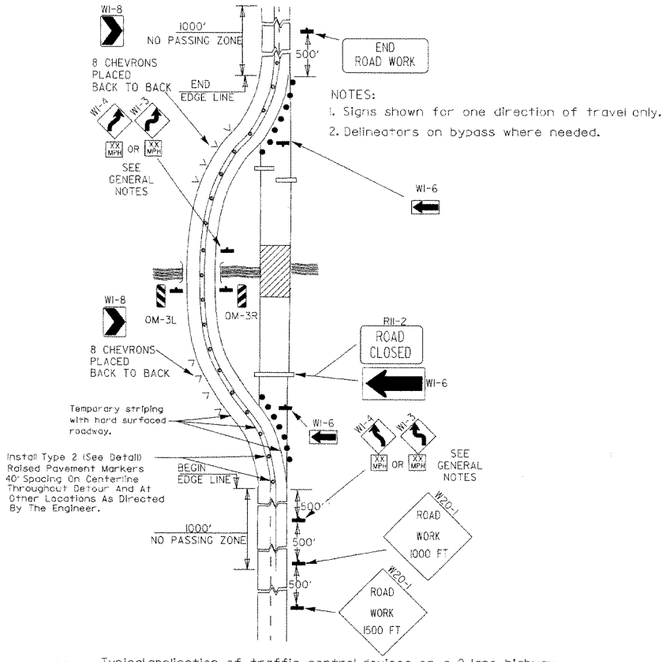
- NOTE: SUPPORTS FOR SIGNS, BARRICADES, AND VERTICAL PANELS THAT ARE DIFFERENT FROM THE REQUIREMENTS SHOWN IN NOTES 4 & 5, BUT MEET THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH), WILL BE ACCEPTED. COMPLIANCE WITH THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) IS REQUIRED FOR ALL PROJECTS.

DATE	REVISION	FILMED
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	

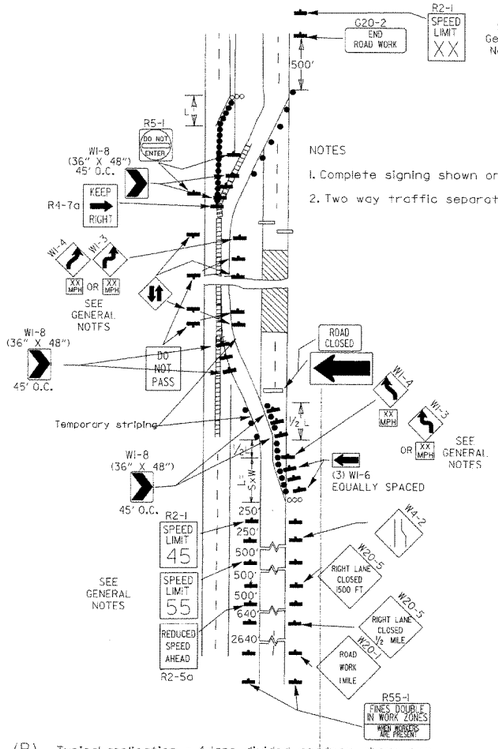
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

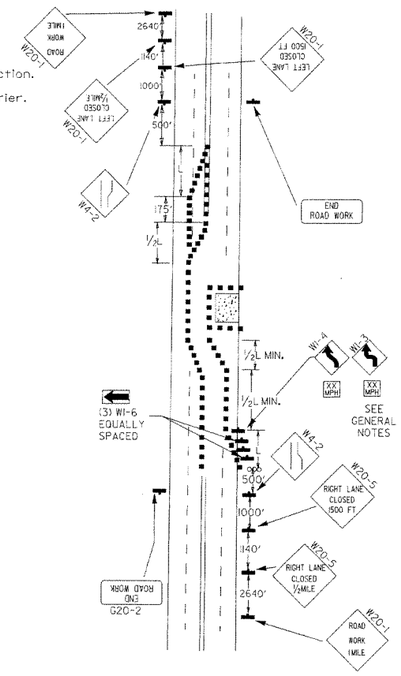
STANDARD DRAWING TC-1



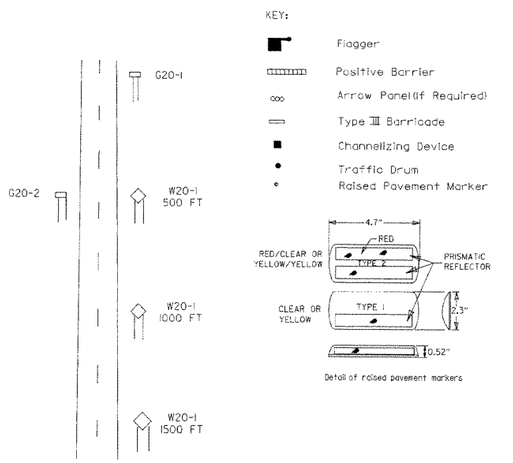
(A) Typical application of traffic control devices on a 2-lane highway where the entire roadway is closed and a bypass detour is provided.



(B) Typical application - 4-lane divided roadway where one roadway is closed.



(C) Typical application - 4-lane undivided roadway where half of the roadway is closed.



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:

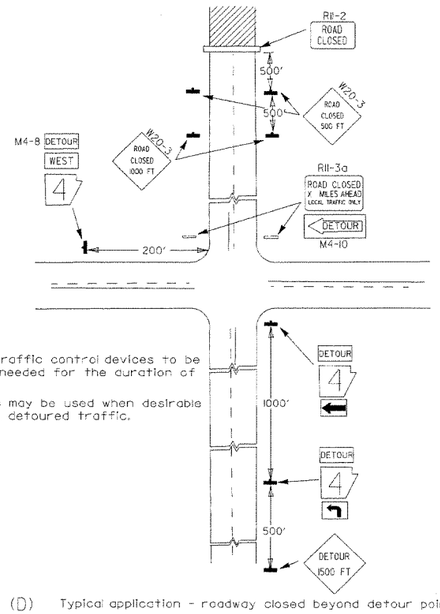
L= Minimum length of taper.

S= Numerical value of posted speed limit prior to work or 85th percentile speed.

W= Width of offset.

GENERAL NOTES:

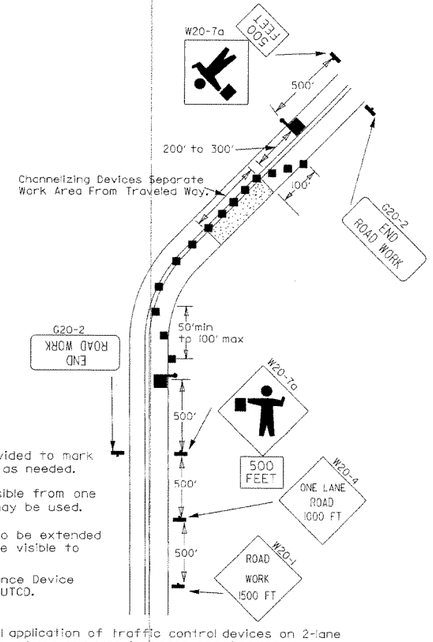
1. Advisory speed posted on WI-3 or WI-4 curve warning signs to be determined at site. Use WI-4 when speed is greater than 30mph and WI-3 when 30mph or less.
2. When the existing speed limit is 55mph and the plans require a speed limit of 45mph, the R2-1(55) shall be omitted and the R2-5A shall be installed 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.



(D) Typical application - roadway closed beyond detour point.

NOTES:

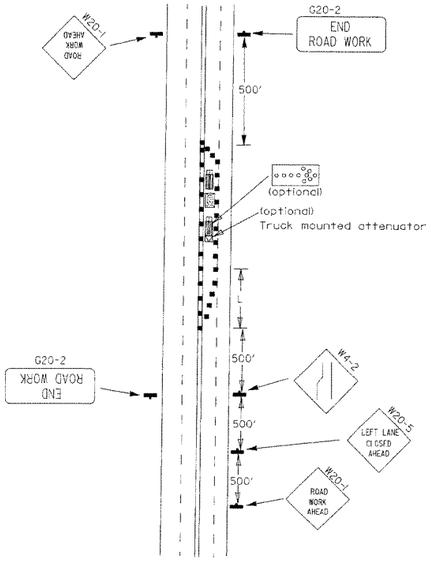
1. Regulatory traffic control devices to be modified as needed for the duration of the detour.
2. Street names may be used when desirable for directing detoured traffic.



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.



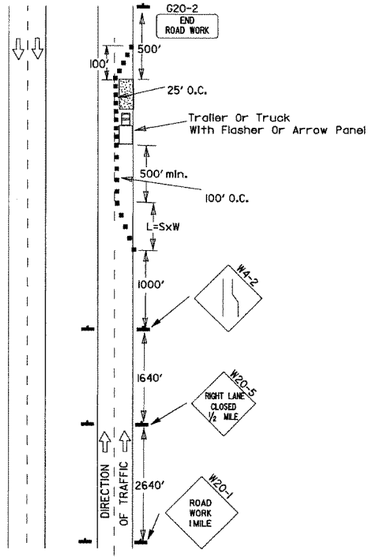
(F) Typical application - 4-lane undivided roadway with inside lane closed.

DATE	REVISION	FILMED
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 WI-4A	6-8-95
2-2-95	REVISED PER PART VI, MUTCD, SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	

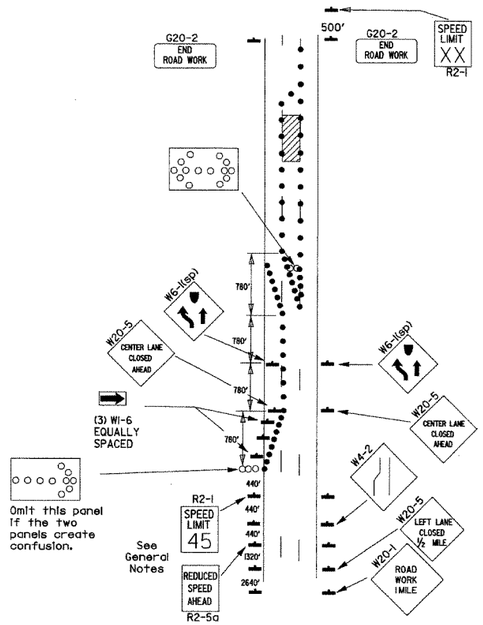
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

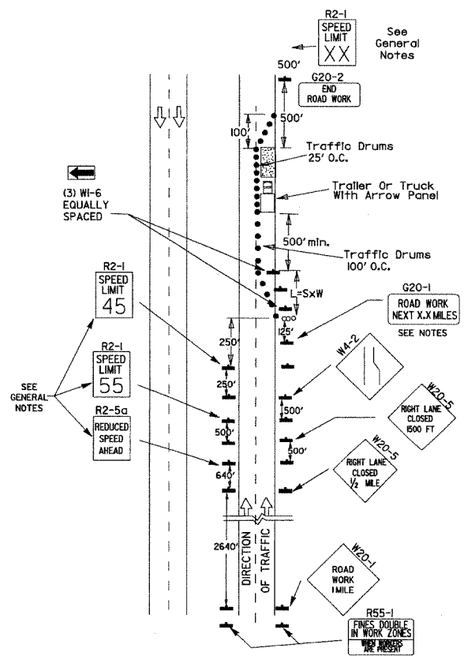
STANDARD DRAWING TC 2



(A) Typical application - daytime maintenance operations of short duration on a 4-lane divided roadway where half of the roadway is closed.



(B) Typical application - 3-lane oneway roadway where center lane is closed.



(C) Typical application - construction operations of intermediate to long term duration on a 4-lane divided roadway where half of the roadway is closed.

KEY:

○○○ Arrow Panel (if Required)

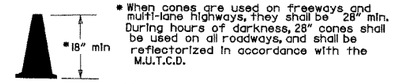
■ Channelizing Device

● Traffic drum

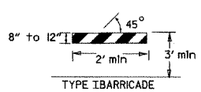
GENERAL NOTES:

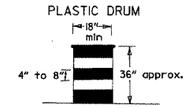
1. A speed limit reduction may be implemented ONLY when designated in the plan or when recommended by the Roadway Design Division.
2. When the existing speed limit is 55mph and the plans require a speed limit of 45mph, the R2-1(55) shall be omitted and the R2-5A shall be installed at that location. Additional R2-1 45mph speed limit signs shall be installed at a maximum of 1 mile intervals. At the end of the work area a R2-1(XX) shall be installed to match original speed limit.
3. When the existing speed limit is 65mph and the plans require a speed limit of 55mph, the R2-1(45) shall be omitted. Additional R2-1 55mph speed limit signs shall be installed at a maximum of 1 mile intervals. At the end of the work area a R2-1(XX) shall be installed to match original speed limit.
4. The maximum spacing between channelizing devices in a taper should be approximately equal in feet to the speed limit. Beyond the taper, maximum spacing shall be two times the speed limit or as directed by the Engineer.
5. Warning lights and/or flags may be mounted to signs or channelizing devices at night as needed.
6. Pavement markings no longer applicable which might create confusion in the minds of vehicle operators shall be removed or obliterated as soon as practicable.
7. The G20-1 sign will be required on jobs of over two miles in length. When the lane closure is not at the beginning of the project, the G20-1 sign shall be erected 125' in advance of the job limit. Additional W20-1 (1 MILE) signs are not required in advance of lane closures that begin inside the project limits.
8. Flaggers shall use STOP/SLOW paddles for controlling traffic through work zones. Flags may be used only for emergency situations.
9. All plastic drums and cones shall meet the requirements of NCHRP-350 or Manual For Assessing Safety Hardware (MASH).
10. Trailer mounted devices such as arrow panels and portable changeable message signs shall be delineated by affixing conspicuity material in a continuous line on the face of the trailer. When placed on or adjacent to the shoulder and not behind a positive barrier, these devices shall be delineated by placing five (5) traffic drums, equally spaced along the traffic side of the device.

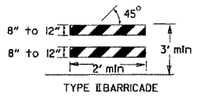
Channelizing devices

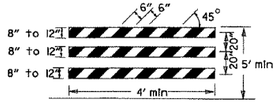


* When cones are used on freeways and multi-lane highways, they shall be 28" min. During hours of darkness, 28" cones shall be used on all roadways, and shall be reflectorized in accordance with the M.U.T.C.D.

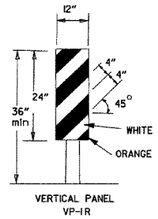


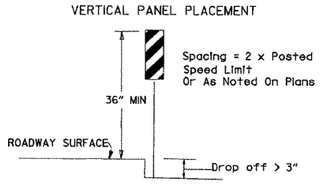






NOTE:
For all road closures, the Type III barricades shall be of sufficient length to extend across entire roadway.



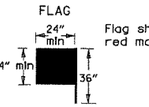


TRAFFIC CONTROL DEVICES
FOR
VERTICAL PAVEMENT DIFFERENTIALS

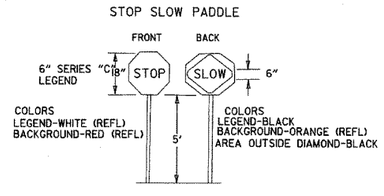
VERTICAL DIFFERENTIAL	LOCATIONS	TRAFFIC CONTROL
1" to 3"	Centerline, lane lines	W8-11
1" to 3"	Edge of shoulder	W8-9
Greater than 3"	Lane lines	Standard lane closure required
Greater than 3"	Edge of traveled lane	*RSP-1 and vertical panels, drums or concrete barrier
Greater than 3"	Edge of shoulder	*Vertical panels, drums or concrete barrier

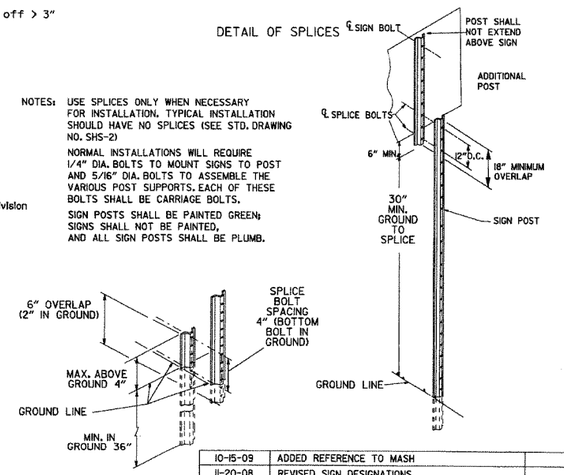
* When shown on the plans concrete barrier will be used.

When the shoulder area is used as part of the traveled lane and there is insufficient width to place drums on the remaining shoulder width, then vertical panels shall be used.



Flag shall be of good grade red material

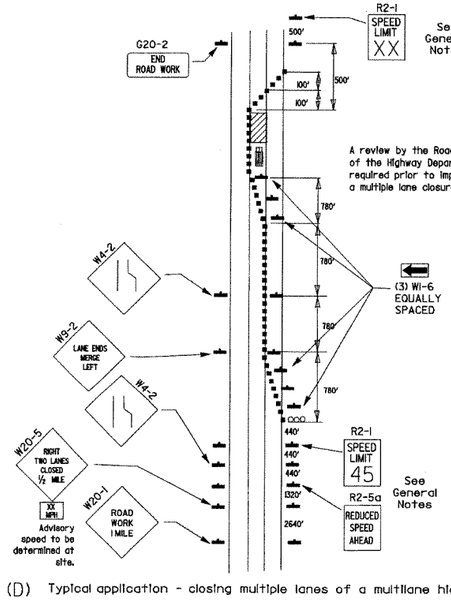




NOTES: USE SPLICES ONLY WHEN NECESSARY FOR INSTALLATION. TYPICAL INSTALLATION SHOULD HAVE NO SPLICES (SEE STD. DRAWING NO. SHS-2)

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

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



(D) Typical application - closing multiple lanes of a multilane highway.

DATE	REVISION	FILMED
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	

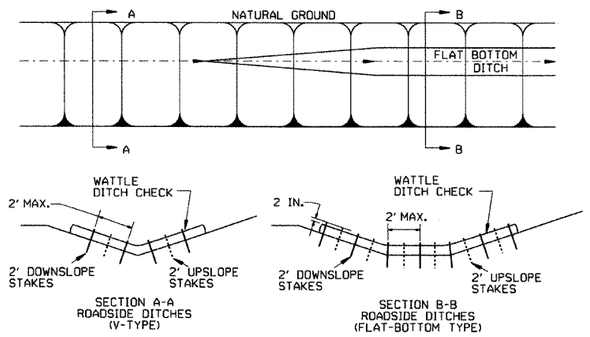
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

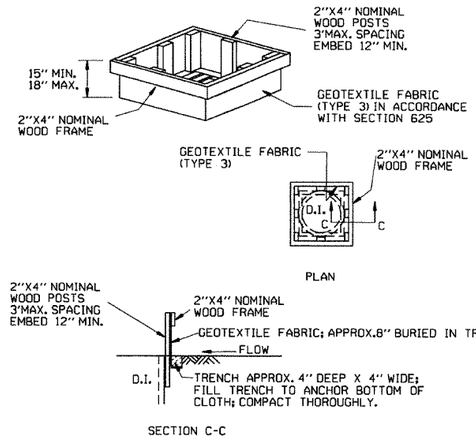
STANDARD DRAWING TC-3

GENERAL NOTES

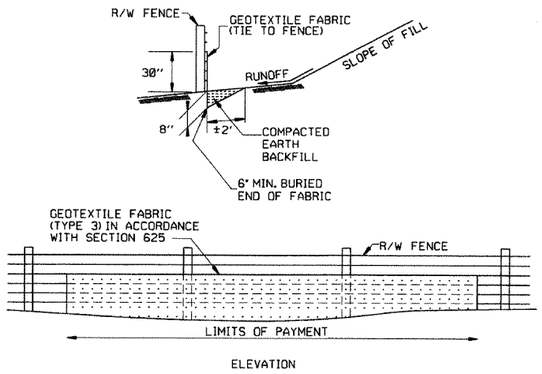
INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.



WATTLE DITCH CHECK (E-1)



DROP INLET SILT FENCE (E-7)



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

GENERAL NOTES

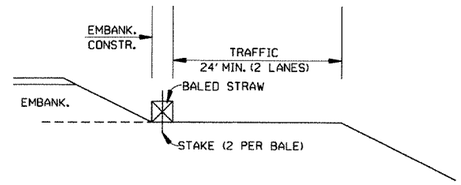
GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST, OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.

GENERAL NOTES

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

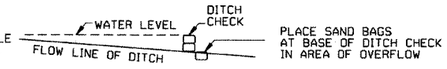
2. NO GAPS SHALL BE LEFT BETWEEN BALES.

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

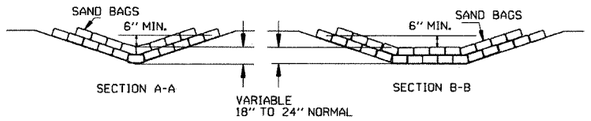


BALED STRAW FILTER BARRIER (E-2)

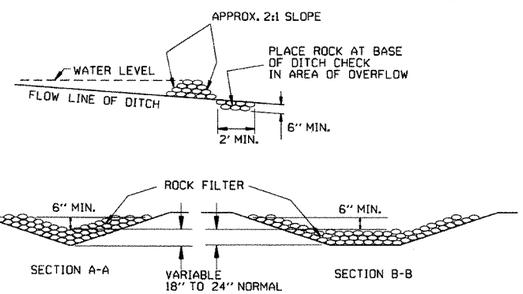
NUMBER OF SAND BAGS AND ARRANGEMENT VARIABLE WITH ON-SITE CONDITIONS.



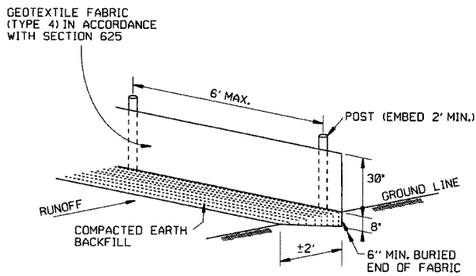
PLACE SAND BAGS AT BASE OF DITCH CHECK IN AREA OF OVERFLOW



SAND BAG DITCH CHECK (E-5)



ROCK DITCH CHECK (E-6)



SILT FENCE (E-11)

GENERAL NOTES

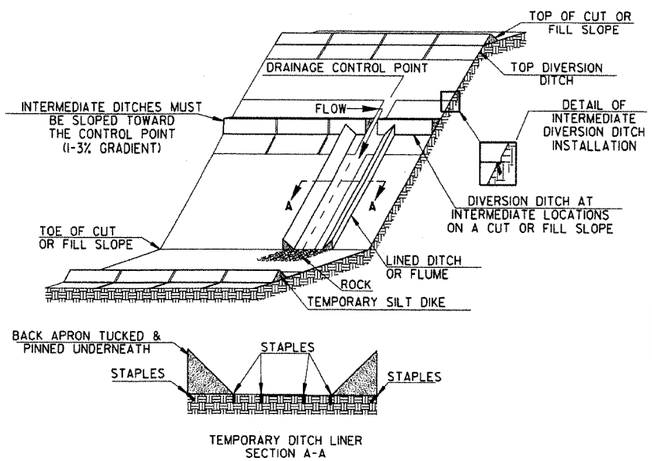
GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.

DATE	REVISION	FILMED
12-15-11	DELETED BALED STRAW DITCH CHECK & ADDED WATTLE DITCH CHECK	
11-18-98	ADDED NOTES	
7-02-98	ADDED BALED STRAW FILTER BARRIER (E-2)	
7-20-95	REVISED SILT FENCE E-4 AND E-11	7-20-95
7-15-94	REV. E-4 & E-11 MIN. 13" BURIED END OF FABRIC	
6-2-94	REVISED E-1,4,7 & 11; DELETED E-2 & 3	6-2-94
4-1-93	REDRAWN	
10-1-92	REDRAWN	
8-2-76	ISSUED R.D.M.	298-7-28-76

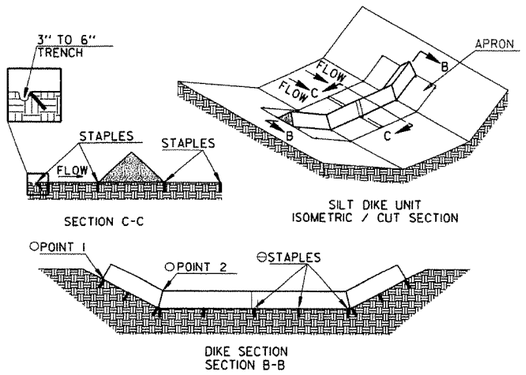
ARKANSAS STATE HIGHWAY COMMISSION

TEMPORARY EROSION CONTROL DEVICES

STANDARD DRAWING TEC-1



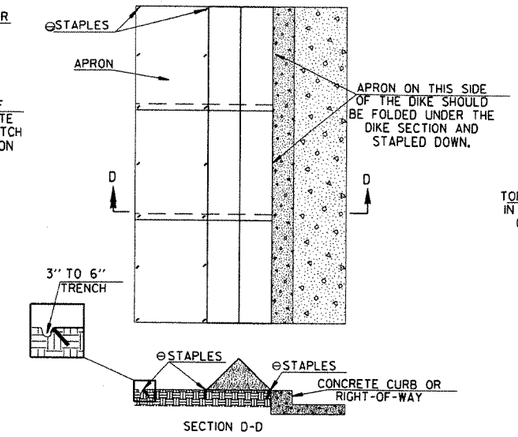
TRIANGULAR SILT DIKE INSTALLATION
FOR
DIVERSION DITCH AND/OR DITCH LINER



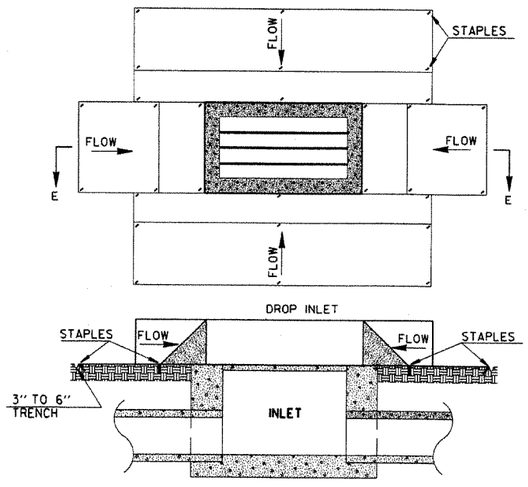
TRIANGULAR SILT DIKE INSTALLATION
FOR
ROADWAY DITCH OR DRAINAGE DITCH

○ POINT "1" MUST BE HIGHER THAN POINT "2" TO ENSURE THAT WATER FLOWS OVER THE DIKE AND NOT AROUND THE ENDS.

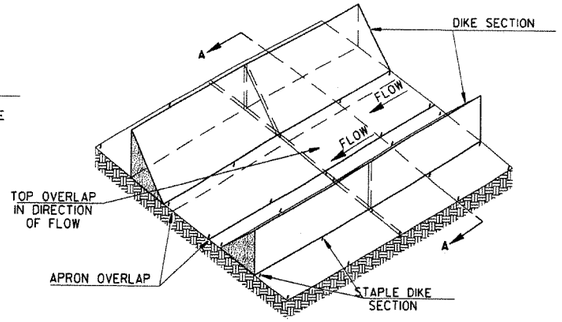
⊖ STAPLES SHALL BE PLACED WHERE THE UNITS OVERLAP AND IN THE CENTER OF THE UNIT AS SHOWN ON THE DIAGRAM.



TRIANGULAR SILT DIKE INSTALLATION
FOR
CONTINUOUS BARRIER



TRIANGULAR SILT DIKE INSTALLATION
FOR
DROP INLETS



TRIANGULAR SILT DIKE INSTALLATION
FOR
TEMPORARY DITCH LINER

GENERAL NOTES

1. THIS WORK SHALL CONSIST OF FURNISHING, INSTALLING, AND MAINTAINING THE TRIANGULAR SILT DIKE. THE DIKES SHALL BE USED AS A CONTINUOUS LINE BARRIER AT THE TOE OF SLOPE OR ACROSS THE ROADWAY DITCH TO CONTAIN SEDIMENT AND MINIMIZE EROSION, OR AS DIRECTED BY THE ENGINEER. THESE DIKES SHALL BE INSTALLED AND LOCATED AS SOON AS CONSTRUCTION WILL ALLOW OR AS DIRECTED BY THE ENGINEER.

2. TRIANGULAR SILT DIKE SHALL BE TRIANGULAR SHAPED HAVING A HEIGHT OF AT LEAST 8" TO 10" IN THE CENTER WITH EQUAL SIDES AND A 16" TO 20" BASE. THE TRIANGULAR SHAPED INNER MATERIAL SHALL BE URETHANE FOAM. THE OUTER COVER SHALL BE A WOVEN GEOTEXTILE FABRIC PLACED AROUND THE INNER MATERIAL & ALLOWED TO EXTEND BEYOND BOTH SIDES OF THE TRIANGLE 24" TO 36". THIS FABRIC SHOULD BE MILDEW RESISTANT, ROT-PROOF AND RESISTANT TO HEAT AND ULTRAVIOLET RADIATION MEETING REQUIREMENTS FOR SEDIMENT CONTROL IN AASHTO M288. THE DIKES SHALL BE ATTACHED TO THE GROUND WITH WIRE STAPLES. THE STAPLES SHALL BE NO. 11 GAUGE WIRE AND BE AT LEAST 6" TO 8" LONG. STAPLES SHALL BE PLACED AS SHOWN ON THESE DETAILS.

   THE CONTRACTOR SHALL INSPECT ALL DIKES AFTER EACH RAINFALL EVENT OF AT LEAST 0.5" OR GREATER. ANY DEFICIENCIES OR DAMAGE SHALL BE REPAIRED BY THE CONTRACTOR. ACCUMULATED SILT OR DEBRIS SHALL BE REMOVED AND RELOCATED AS DIRECTED BY THE ENGINEER. IF THE DIKES ARE DAMAGED OR INADVERTENTLY MOVED DURING THE SILT REMOVAL PROCESS, THE CONTRACTOR SHALL IMMEDIATELY REPLACE AFTER DAMAGE OCCURS.

3. ACCEPTED TRIANGULAR SILT DIKE, MEASURED AS PROVIDED ABOVE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID FOR TRIANGULAR SILT DIKE. PRICE BID WILL INCLUDE THE COST OF FURNISHING THE DIKES, INSTALLING, MAINTAINING AND REMOVAL WHEN DIRECTED BY THE ENGINEER.

SYMBOLOGY
SYMBOL TO BE USED TO DENOTE DEVICE ON PLANS

NOTE: SILT DIKE SHOULD ONLY BE USED FOR DROP INLETS IN SUMP LOCATIONS.

DATE	REVISION	FILMED
7-26-12	REVISED GENERAL NOTE 2.	
12-15-11	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

TEMPORARY EROSION CONTROL DEVICES

STANDARD DRAWING TEC-4