"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.		080388	1	452

(2) HWY. 65-EAST (WIDENING) (F)

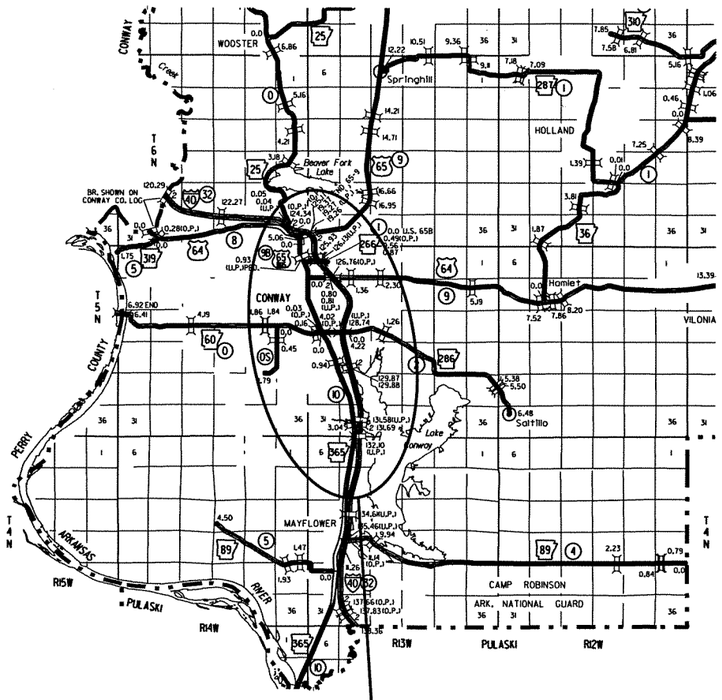
HWY. 65-EAST (WIDENING) (F)

FAULKNER COUNTY

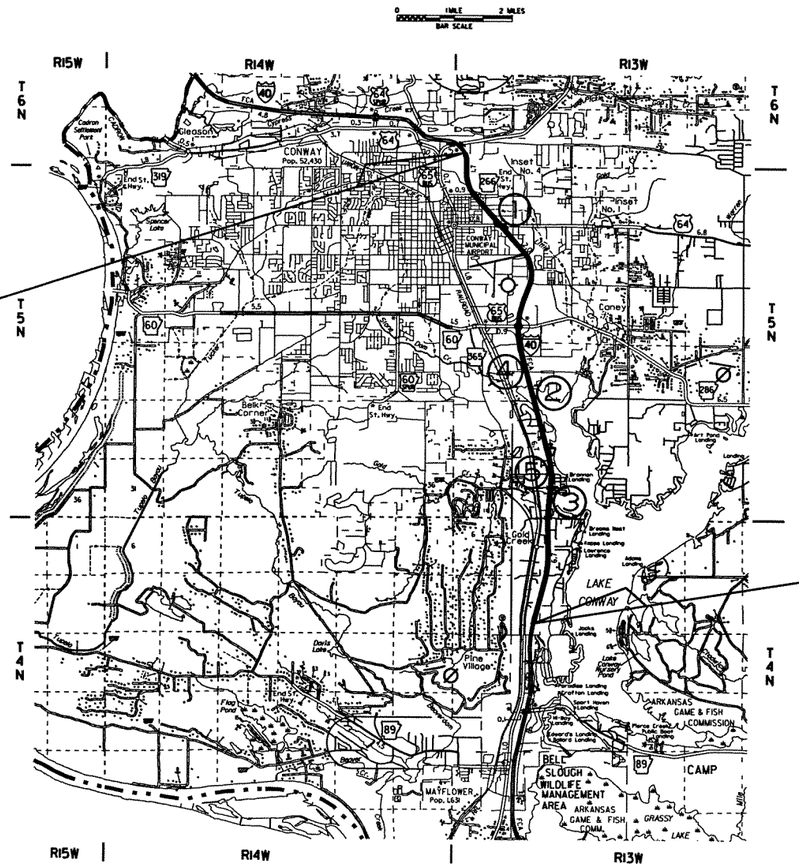
ROUTE 40 SECTION 32

JOB 080388

FED. AID PROJ.
NH-IMD-40-3(125)129

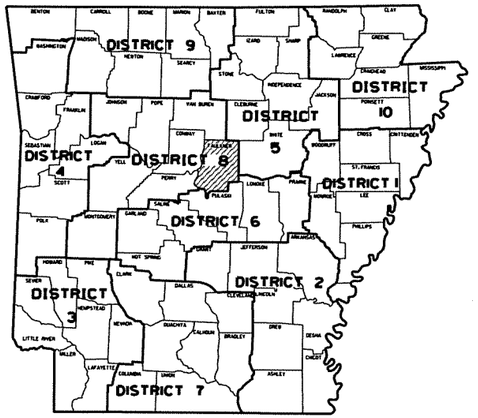


PROJECT LOCATION



STA. 7085+40.86
BEGIN JOB 080388
LOG MILE 125.18

STA. 7490+00
END JOB 080388
LOG MILE 133.39



ARK. HWY. DIST. NO. 8

BRIDGE DATA

(1) BR. END STA. 7168+20.54
BRIDGE NO. 07226
417'-0" CONTINUOUS COMPOSITE PLATE GIRDER UNIT
(115'-187'-115') UNIT
126'-0" CLEAR ROADWAY
419'-11" BRIDGE LENGTH
BR. END STA. 7172+40.46

(2) BR. END STA. 7330+36.00
BRIDGE NO. A6883
98'-0" CONTINUOUS R.C. SLAB SPAN UNIT
UNIT (34', 30', 34')
56'-0" CLEAR ROADWAY
98'-0" BRIDGE LENGTH
BR. END STA. 7331+34.00

BR. END STA. 7330+20.00
BRIDGE NO. B6883
98'-0" CONTINUOUS R.C. SLAB SPAN UNIT
UNIT (34', 30', 34')
56'-0" CLEAR ROADWAY
98'-0" BRIDGE LENGTH
BR. END STA. 7331+18.00

(3) BR. END STA. 7400+43.00
BRIDGE NO. A6884
226'-0" CONTINUOUS R.C. SLAB SPAN UNIT
UNIT (34', 34', 30', 30', 34', 34')
56'-0" CLEAR ROADWAY
226'-0" BRIDGE LENGTH
BR. END STA. 7402+69.00

BR. END STA. 7400+31.00
BRIDGE NO. B6884
226'-0" CONTINUOUS R.C. SLAB SPAN UNIT
UNIT (34', 34', 30', 30', 30', 34', 34')
56'-0" CLEAR ROADWAY
226'-0" BRIDGE LENGTH
BR. END STA. 7402+57.00

BEGINNING OF PROJECT
LATITUDE = N 35°06'41.7"
LONGITUDE = W 92°26'05.3"

MID POINT OF PROJECT
LATITUDE = N 35°03'24.6"
LONGITUDE = W 92°24'58.6"

END OF PROJECT
LATITUDE = N 35°00'00.4"
LONGITUDE = W 92°24'45.2"

CENTERLINE MEDIAN EQUATIONS
(4) STA. 7330+00.00 BK. = STA. 7327+07.60 AHD.
(5) STA. 7421+29.76 BK. = STA. 7395+62.24 AHD.

GROSS LENGTH OF PROJECT	43319.06	FEET OR	8.204	MILES
NET " " ROADWAY	42575.14	" "	8.063	"
NET " " BRIDGES	743.92	" "	0.141	"
NET " " PROJECT	43319.06	" "	8.204	"

P.E. 012119
NON-PART.

• DESIGN TRAFFIC DATA •

DESIGN YEAR	2031
2011 ADT	60000
2031 ADT	84000
2031 DHV	9240
TRUCKS	20%
DESIGN SPEED	70 MPH

N

APPROVED

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 3917
FRANK VOZEL

10/31/11

DEPUTY DIRECTOR AND CHIEF ENGINEER

R080388.DGN 10/24/11

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

10-28-11

STATE OF ARKANSAS DARRELL D. RUSSELL REGISTERED PROFESSIONAL ENGINEER 14765

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED./AID DIST./NO.	STATE	FED./AID PROJ./NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	080388	2	452

(2) INDEX OF SHEETS

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				6	ARK.			
				JOB NO.		080388	3	452

(2) GOVERNING SPECIFICATIONS AND GENERAL NOTES

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
NO. 7605
MICHAEL D. PUGETT
10-28-11

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__ FHWA-1273 REVISIONS
FHWA-1273__ REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS
FHWA-1273__ SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - NOTICE TO CONTRACTORS
FHWA-1273__ SUPPLEMENT - SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES (23 U.S.C. 140)
FHWA-1273__ SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - GOALS AND TIMETABLES
FHWA-1273__ SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - FEDERAL STANDARDS
FHWA-1273__ SUPPLEMENT - TRAINING PROGRAM - JOB 080388
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)
103-1_____ DETERMINATION OF DBE PARTICIPATION
105-1_____ CONSTRUCTION CONTROL MARKINGS
105-2_____ EQUIPMENT AND MATERIAL STORAGE ON BRIDGE STRUCTURES
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
409-1_____ MINERAL AGGREGATES
410-3_____ DENSITY TESTING FOR ACHM LEVELING COURSES AND BOND BREAKERS
411-1_____ ASPHALT CONCRETE COLD PLANT MIX
600-1_____ WATER FOR VEGETATION
603-1_____ MAINTENANCE OF TRAFFIC
604-1_____ RETROREFLECTIVE SHEETING FOR TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
606-2_____ PIPE CULVERTS
718-2_____ REFLECTORIZED PAINT PAVEMENT MARKINGS
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JOB 080388 _✓_ ANTENNA SUPPORT WITH CAMERA
JOB 080388 _✓_ APPROACH SLABS AND GUTTERS
JOB 080388 _✓_ ARCHITECTURAL FINISH
JOB 080388 _✓_ ARMORED JOINT WITH NEOPRENE STRIP SEAL
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JOB 080388 _✓_ CONSTRUCTION IN SPECIAL FLOOD HAZARD AREAS
JOB 080388 _✓_ DETAILS FOR BOATER SAFETY ON LAKE CONWAY
JOB 080388 _✓_ DRILLED SHAFT FOUNDATIONS
JOB 080388 _✓_ DUMPED RIPRAP (GROUTED)
JOB 080388 _✓_ EXTENSION FOR PIPE CULVERTS
JOB 080388 _✓_ GOALS FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION
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JOB 080388 _✓_ INTERNET BIDDING
JOB 080388 _✓_ MAINTENANCE OF TRAFFIC
JOB 080388 _✓_ MOBILE SPEED NOTIFICATION SYSTEM
JOB 080388 _✓_ NESTING SITES OF MIGRATORY BIRDS
JOB 080388 _✓_ OVERHEAD VARIABLE MESSAGE SIGN ASSEMBLY
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JOB 080388 _✓_ RUMBLE STRIP REMOVAL
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JOB 080388 _✓_ ZEBRA MUSSEL CONTAINMENT

GENERAL NOTES

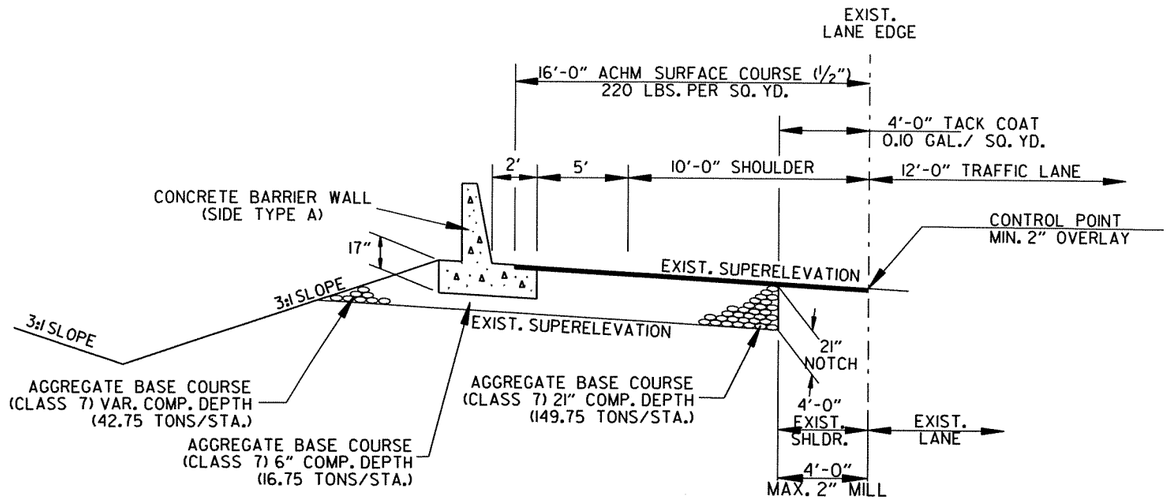
1. GRADE LINE DENOTES FINISHED GRADE WHERE SHOWN ON PLANS.
2. ALL PIPE LINES, POWER, TELEPHONE AND TELEGRAPH LINES TO BE MOVED OR LOWERED BY THE RESPECTIVE OWNERS AS PER AGREEMENT WITH SUCH OWNERS.
3. ANY EQUIPMENT OR APPURTENANCE THAT INTERFERES WITH THE PROPOSED CONSTRUCTION AND WHICH MAY BE THE PROPERTY OF UTILITY SERVICE ORGANIZATIONS SHALL BE MOVED BY THE OWNERS UNLESS OTHERWISE PROVIDED.
4. ALL LAND MONUMENTS LOCATED WITHIN THE CONSTRUCTION AREA SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 107.12 OF THE STANDARD SPECIFICATIONS.
5. 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.
6. ALL FLEXIBLE BASE AND ASPHALTIC PAVEMENTS REMOVED SHALL BE PAID FOR UNDER THE ITEM NO. 210 - UNCLASSIFIED EXCAVATION.
7. 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.

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				6	ARK.			
				JOB NO.		080388	4	452

(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11



INTERSTATE 40 OPEN SHOULDER SUPERELEVATED
SHOWN IN DIRECTION OF TRAVEL

STA. 7085+40.86 - STA. 7094+60 (EASTBOUND LANES)

NOTES:

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

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

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

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

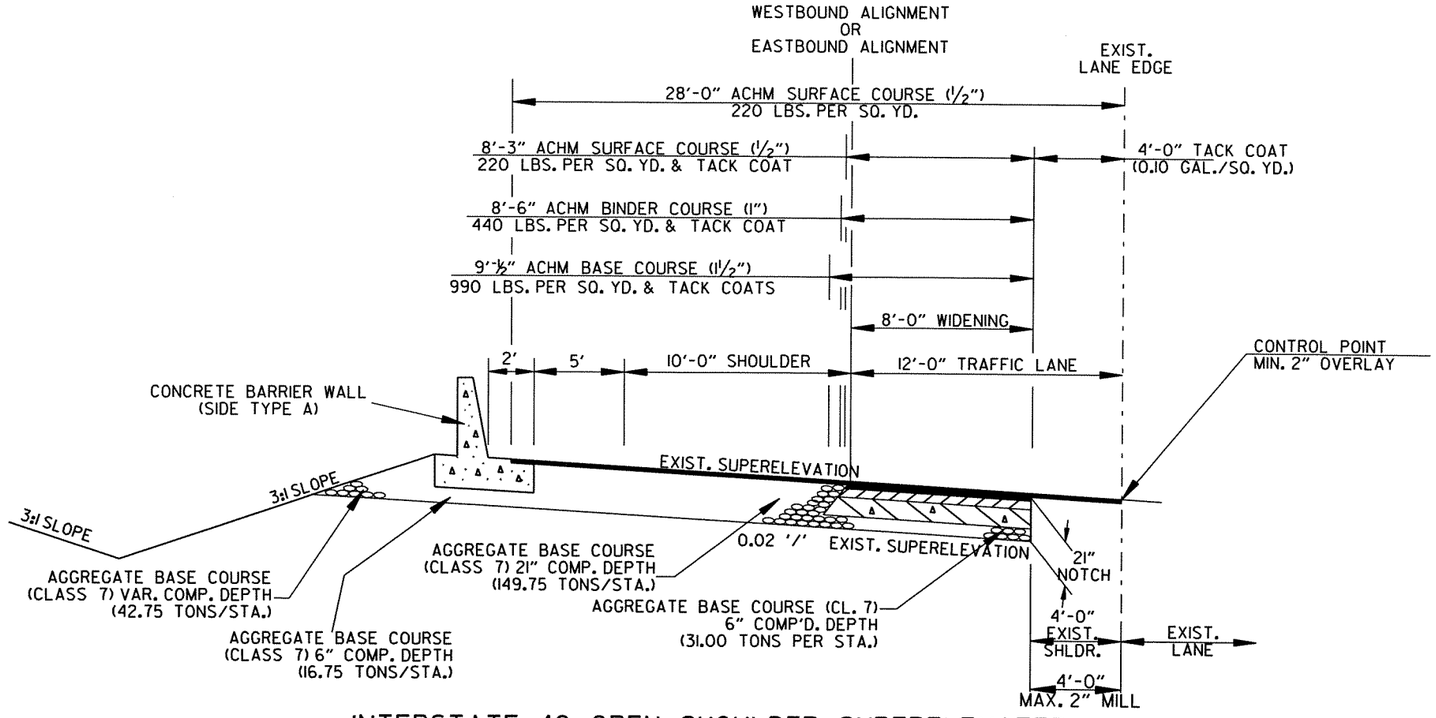
R080388.DGN 10/25/2011

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.		080388	5	452

(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
12760
MICHAEL D. FUGETT
10-28-11



INTERSTATE 40 OPEN SHOULDER SUPERELEVATED
SHOWN IN DIRECTION OF TRAVEL

STA. 7094+60 - STA. 7102+67 (EASTBOUND AND WESTBOUND LANES)

NOTES:

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

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

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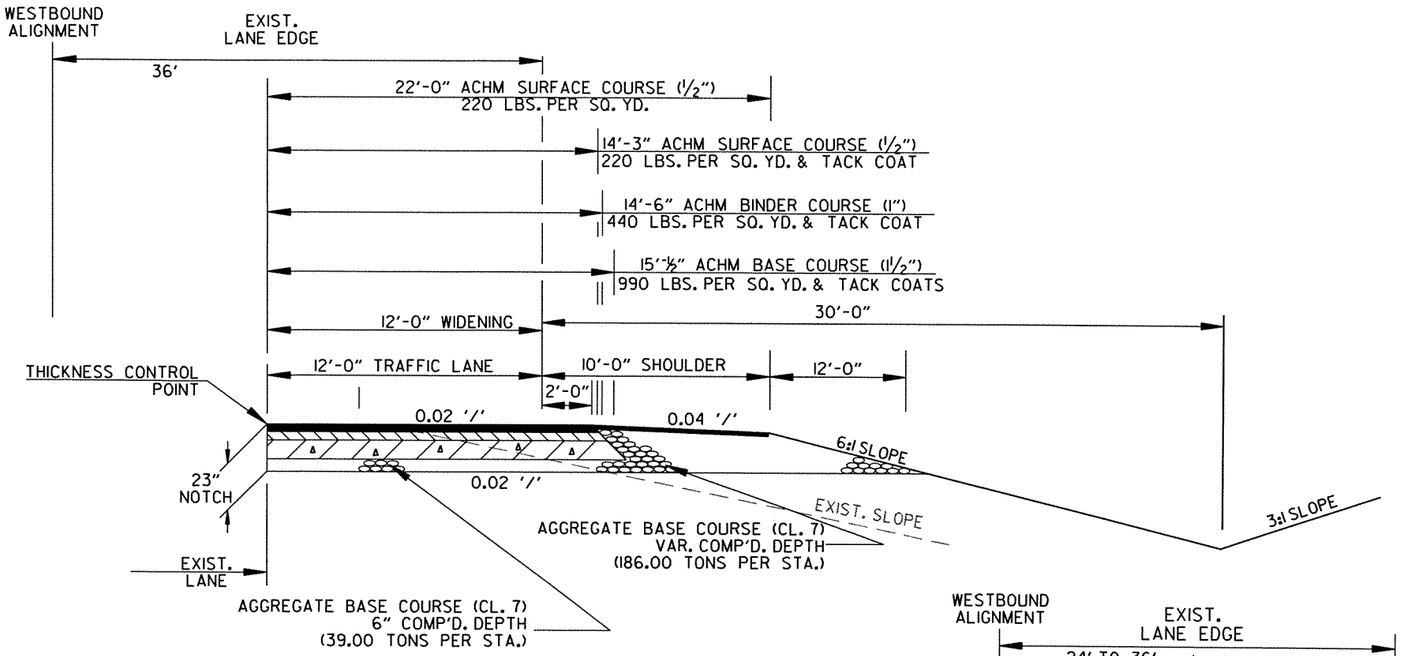
R080388.DGN 10/25/2011

TYPICAL SECTIONS OF IMPROVEMENT

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(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
NO. 7605
MICHAEL D. FUGETT
10-28-11



INTERSTATE 40 OPEN SHOULDER
SHOWN IN DIRECTION OF TRAVEL

STA. 7104+65 - STA. 7122+60 (WESTBOUND LANES)

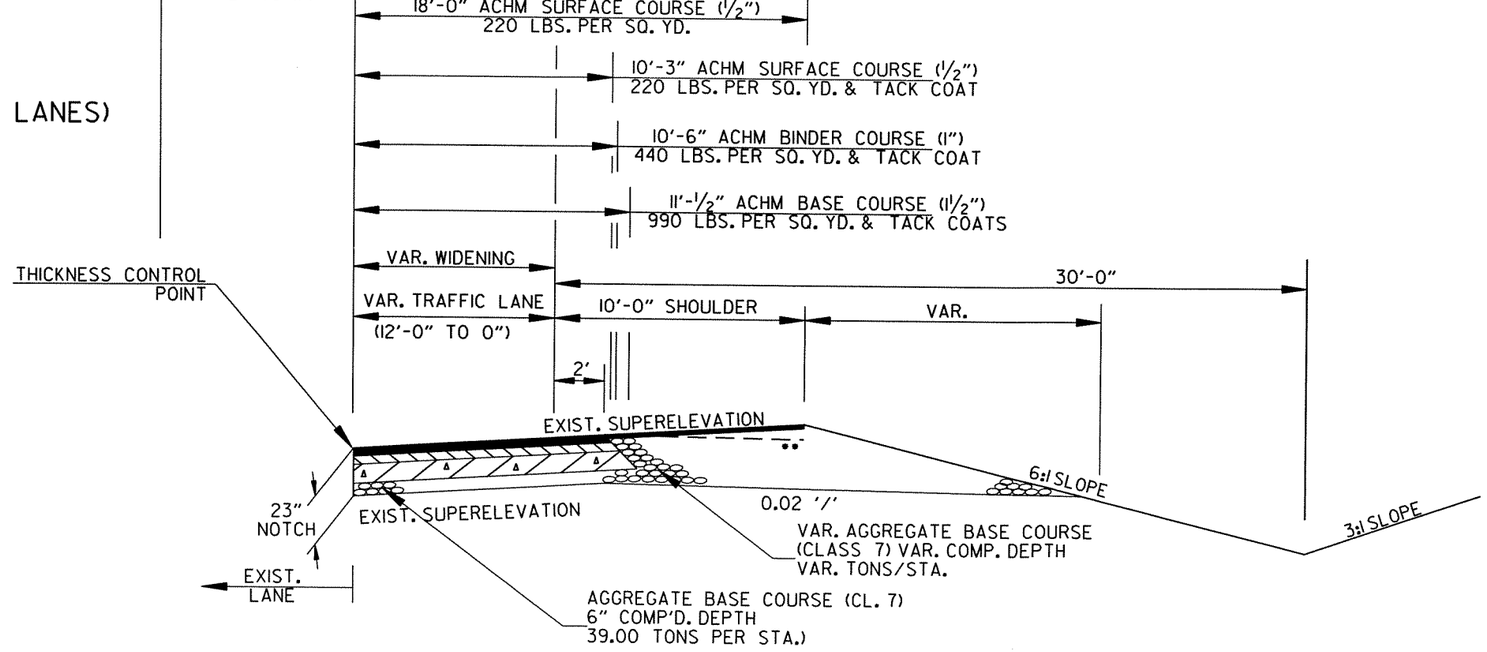
NOTES:

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

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••ON ALL SUPERELEVATED CURVES AND THROUGH SUPERELEVATION TRANSITIONS, THE ALGEBRAIC DIFFERENCE BETWEEN PAVEMENT SLOPE AND SHOULDER SHALL NOT EXCEED 0.08%.

INTERSTATE 40
OPEN SHOULDER - SUPERELEVATED

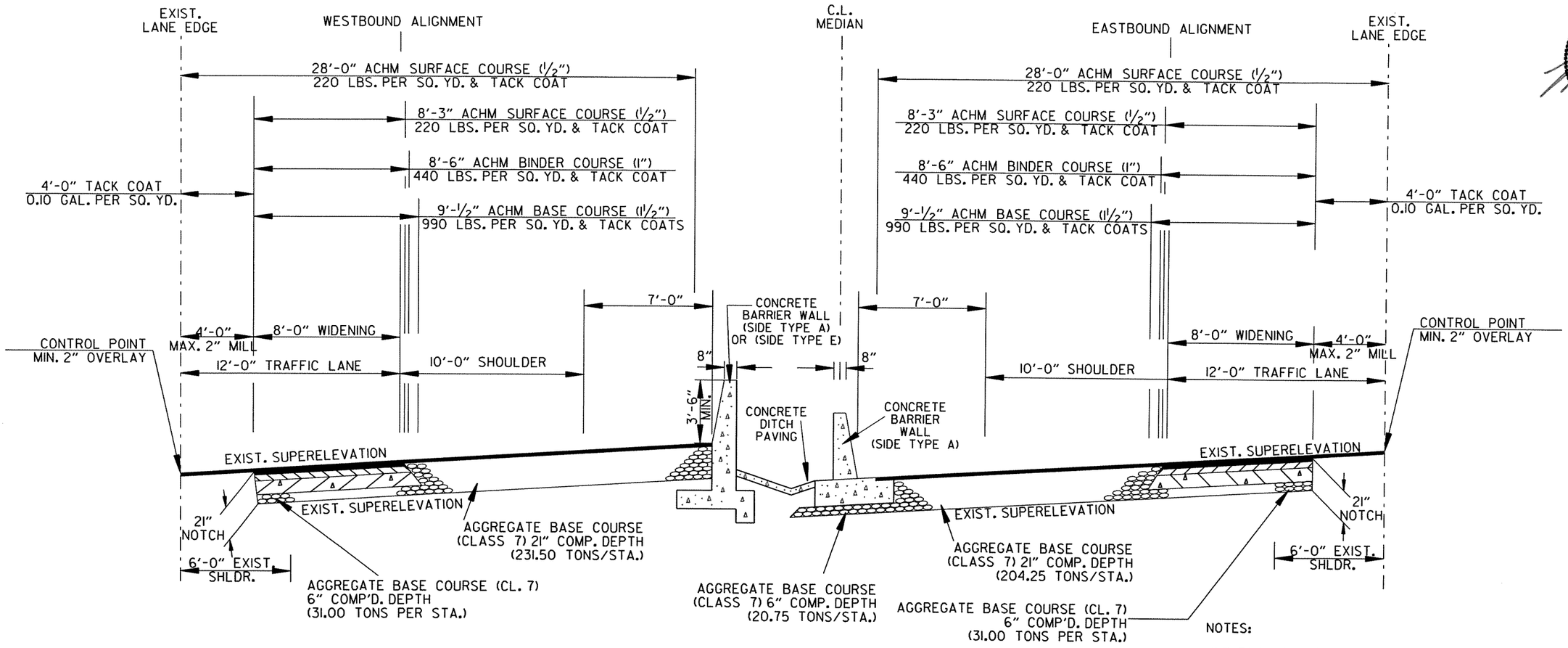
STA. 7094+60 - STA. 7102+35 (WESTBOUND LANES)

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				6	ARK.			
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(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11



INTERSTATE 40 NOTCH AND WIDEN SUPERELEVATED

STA. 7102+67 - STA. 7124+60

NOTES:

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

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

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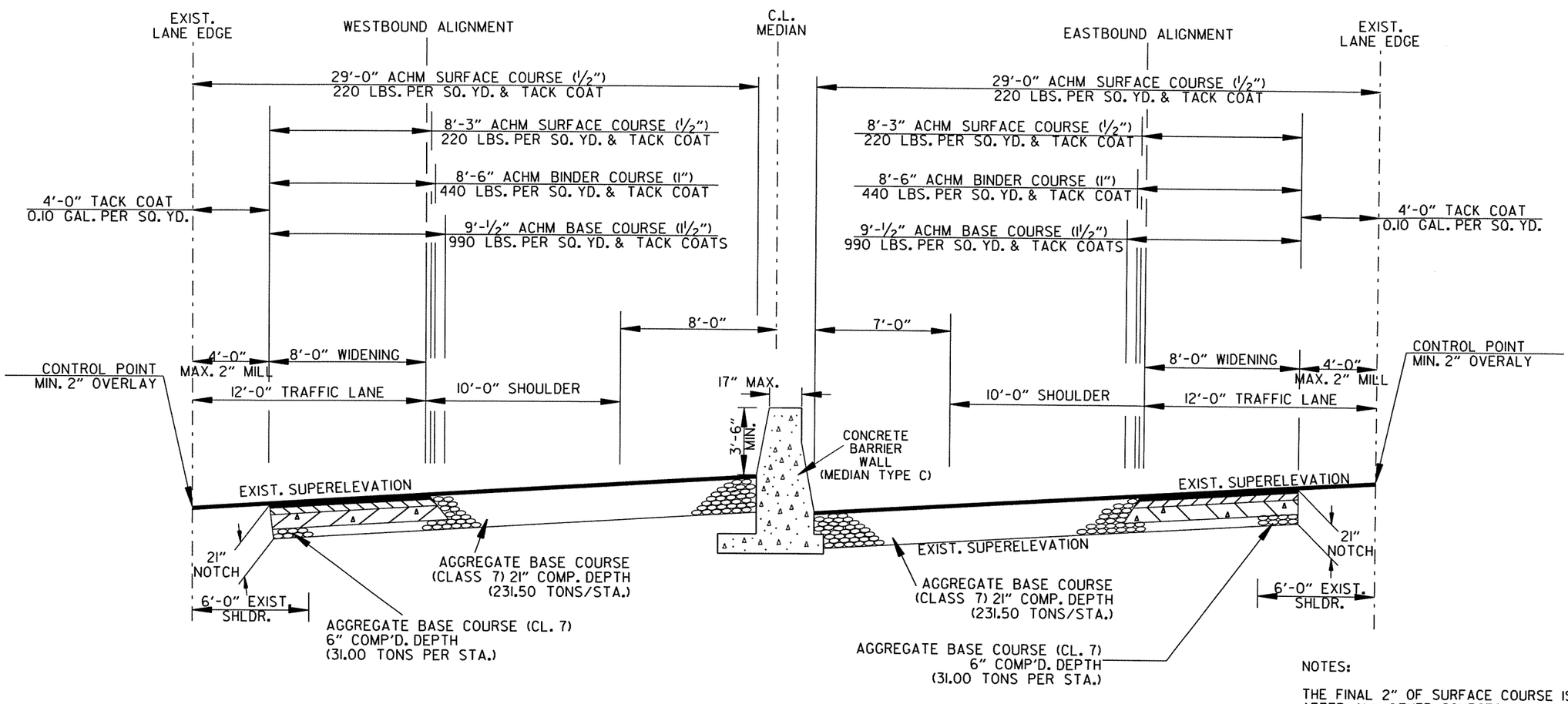
R080388.DGN 10/7/11

TYPICAL SECTIONS OF IMPROVEMENT

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				6	ARK.			
				JOB NO.		080388	8	452

(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11



NOTES:

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

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INTERSTATE 40 NOTCH AND WIDEN SUPERELEVATED

STA. 7124+60 - STA. 7134+40

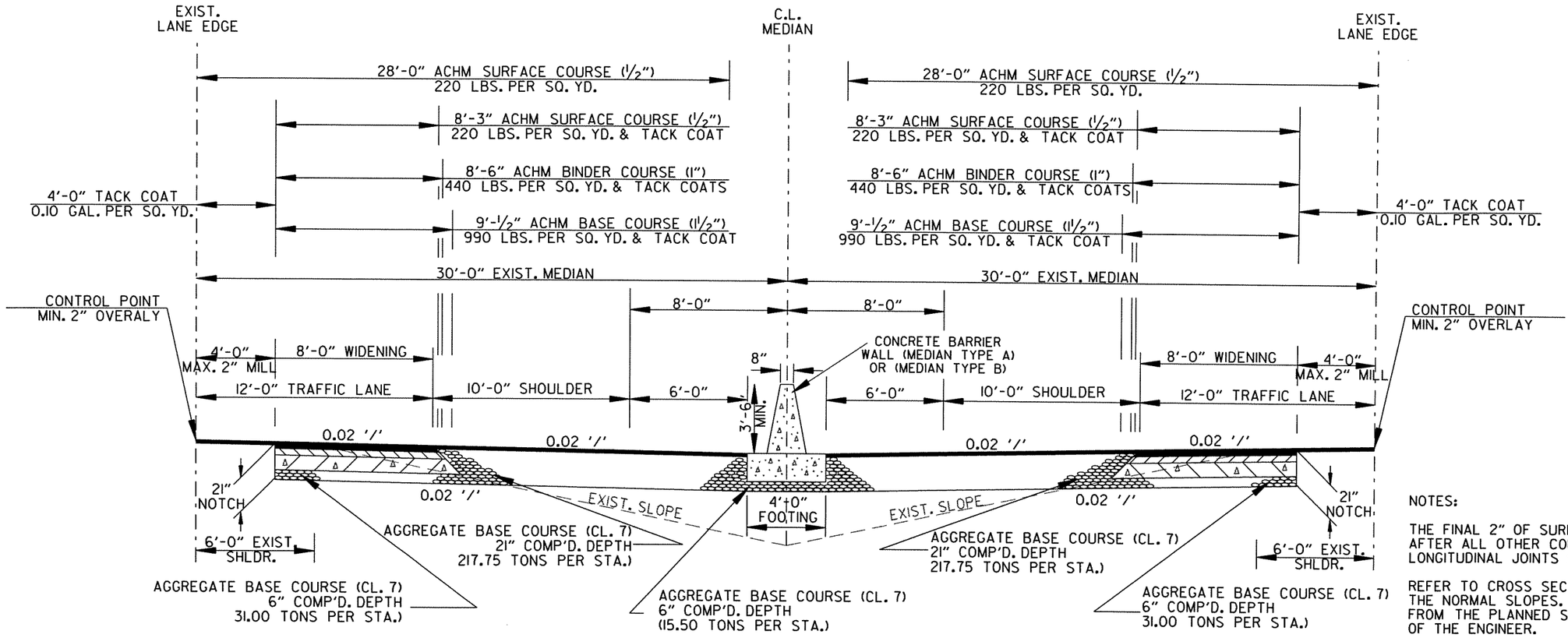
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TYPICAL SECTIONS OF IMPROVEMENT

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(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
NO. 7605
MICHAEL D. FUGETT
10-28-11



INTERSTATE 40 NOTCH AND WIDEN

STA. 7134+40.00 - STA. 7145+00.00
STA. 7195+00.00 - STA. 7200+50.00
STA. 7236+75.70 - STA. 7244+00.00
STA. 7293+00.00 - STA. 7330+00.00
STA. 7335+09.50 - STA. 7393+75.00
STA. 7415+50.00 - STA. 7419+00.00
STA. 7411+00.00 - STA. 7457+35.00

NOTES:

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

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

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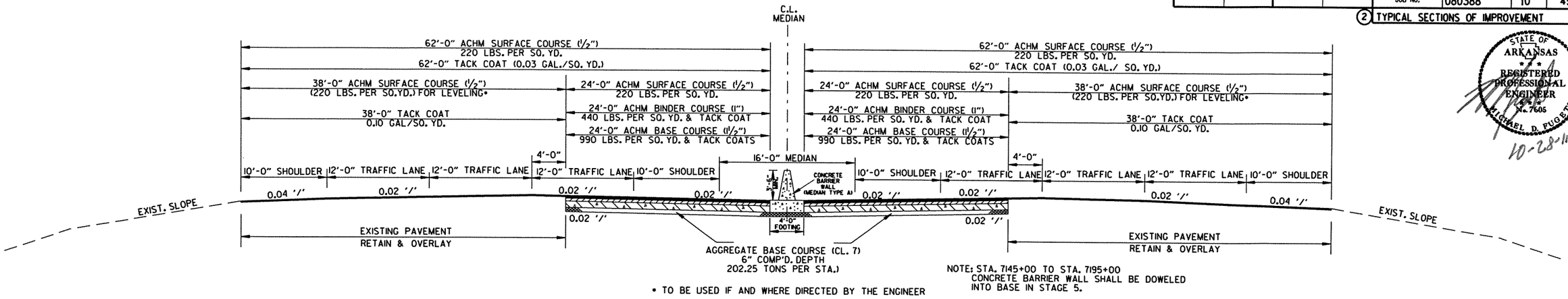
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TYPICAL SECTIONS OF IMPROVEMENT

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(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11

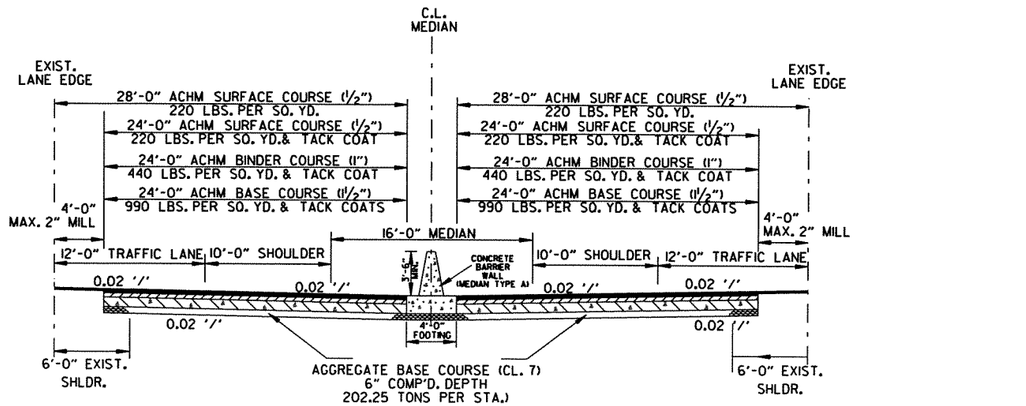


* TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

NOTE: STA. 7145+00 TO STA. 7195+00
CONCRETE BARRIER WALL SHALL BE DOWELED
INTO BASE IN STAGE 5.

INTERSTATE 40 NOTCH

STA. 7157+17.04 - STA. 7159+81.00
STA. 7182+39.00 - STA. 7185+20.44
STA. 7327+08.00 - STA. 7335+09.50
STA. 7397+18.00 - STA. 7407+10.10



NOTE: STA. 7145+00 TO STA. 7195+00
CONCRETE BARRIER WALL SHALL BE DOWELED
INTO BASE IN STAGE 5.

INTERSTATE 40 NOTCH

STA. 7145+00 - STA. 7157+17.04
STA. 7185+20.44 - STA. 7195+00
STA. 7326+00 - STA. 7330+00.00
STA. 7339+00 - STA. 7339+00
STA. 7419+00 - STA. 7421+29.76
STA. 7395+62.24 - STA. 7397+18
STA. 7407+10.10 - STA. 7411+00

NOTES:

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

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

ASPHALT FOR LEVELING OF EXISTING PAVEMENT SHALL BE PLACED ONLY IF AND WHERE DIRECTED BY THE ENGINEER.CALCULATIONS FOR THE AMOUNT OF LEVELING AND/OR LEVELING OPERATIONS SHALL BE PERFORMED BEFORE CONSTRUCTING NOTCH AND WIDENING.

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

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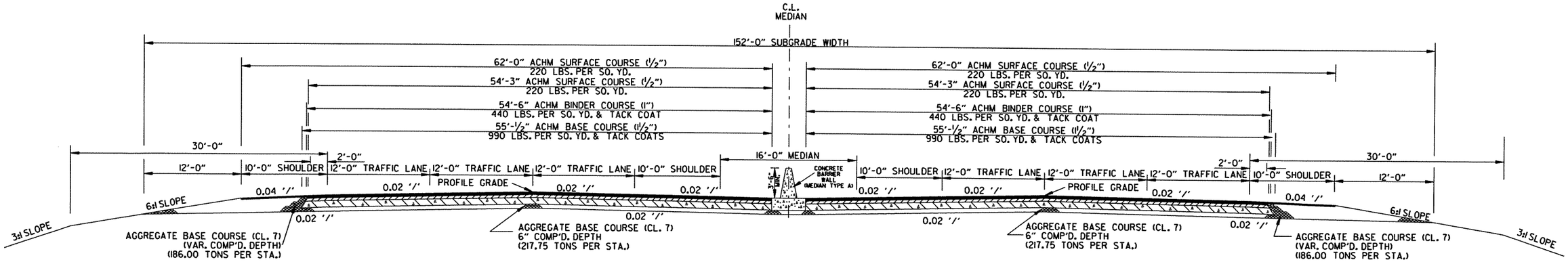
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TYPICAL SECTIONS OF IMPROVEMENT

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(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11



INTERSTATE 40 FULL DEPTH

STA. 7159+81.00 - STA. 7182+39.00

NOTE: STA. 7145+00 TO STA. 7195+00
CONCRETE BARRIER WALL SHALL BE DOWELED
INTO BASE IN STAGE 5.

NOTES:

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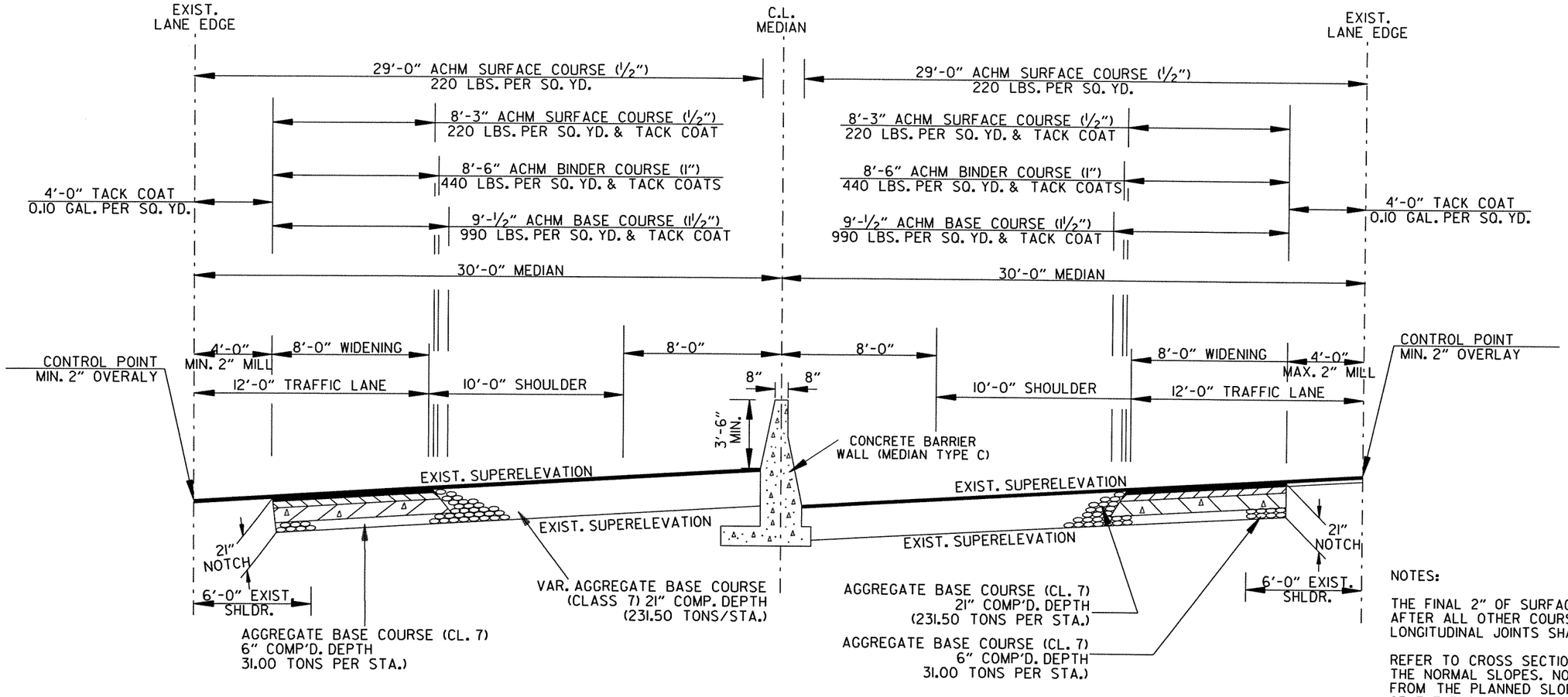
TYPICAL SECTIONS OF IMPROVEMENT

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(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11



INTERSTATE 40 NOTCH AND WIDEN SUPERELEVATED

STA. 7200+50 - STA. 7236+75.70
STA. 7244+00 - STA. 7293+00
STA. 7393+75 - STA. 7415+50

NOTES:

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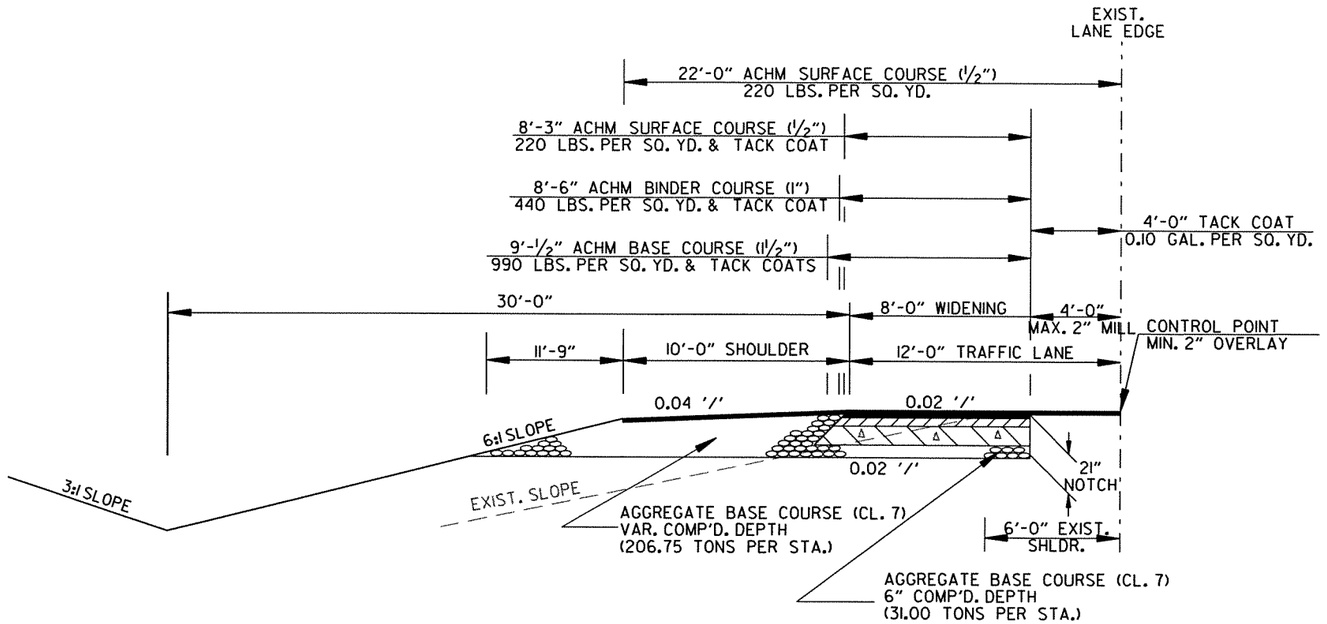
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(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11



INTERSTATE 40 OPEN SHOULDER
SHOWN IN DIRECTION OF TRAVEL

STA. 7483+00 - STA. 7490+00.00

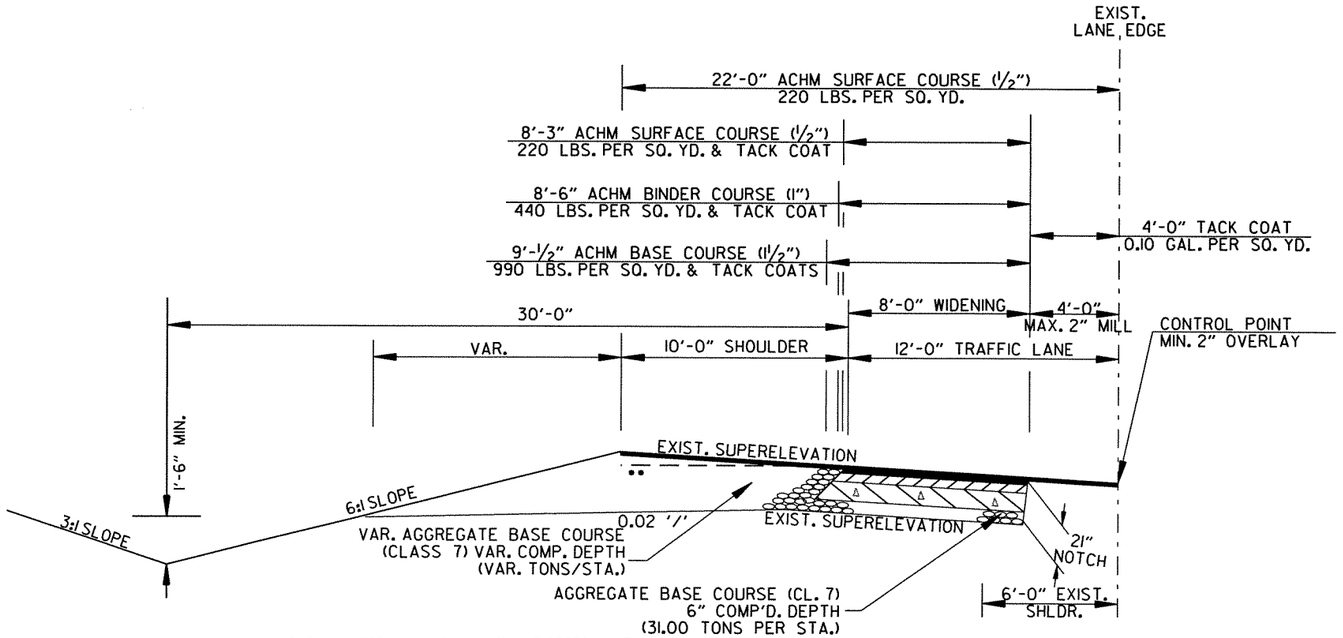
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INTERSTATE 40 OPEN SHOULDER SUPERELEVATED
SHOWN IN DIRECTION OF TRAVEL

STA. 7457+35 - STA. 7483+00

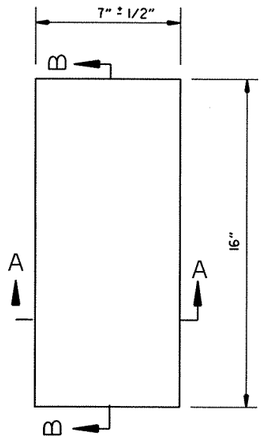
••ON ALL SUPERELEVATED CURVES AND THROUGH SUPERELEVATION TRANSITIONS, THE ALGEBRAIC DIFFERENCE BETWEEN PAVEMENT SLOPE AND SHOULDER SHALL NOT EXCEED 0.08%.

TYPICAL SECTIONS OF IMPROVEMENT

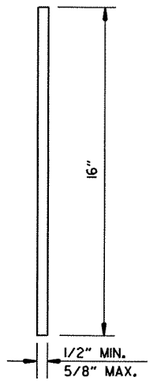
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				JOB NO.		080388	14	452

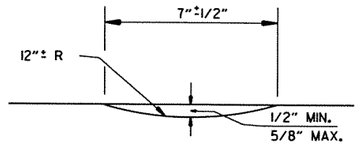
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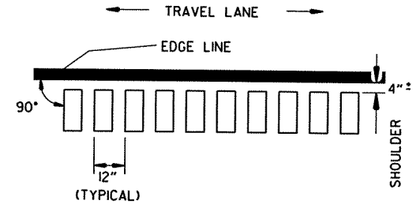
PLAN



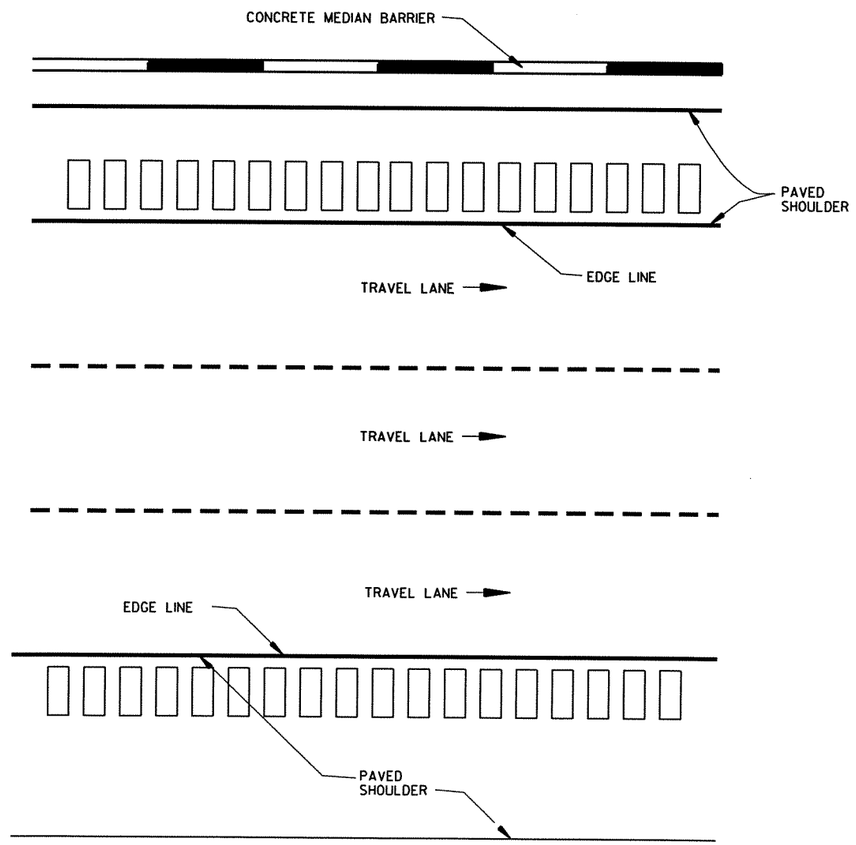
SECTION B-B



SECTION A-A



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 AS WELL AS TO AVOID EXISTING LONGITUDINAL JOINTS.
2. THE ½" DEPTH SHALL GENERALLY APPLY FOR THE ENTIRE 16" LENGTH. SOME VARIATION TO SUIT SHOULDER SLOPE BREAKS MAY BE NECESSARY.

DETAILS OF RUMBLE STRIPS

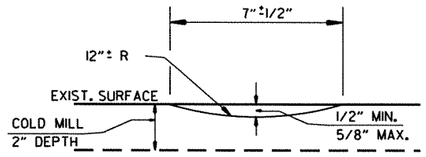
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11

R080388.DGN 10/25/2011

SPECIAL DETAILS

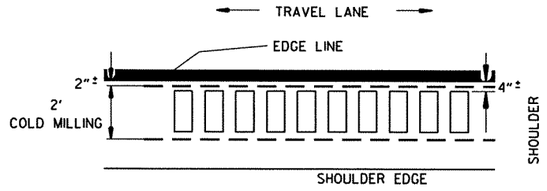
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				JOB NO.		080388	15	452

(2) SPECIAL DETAILS

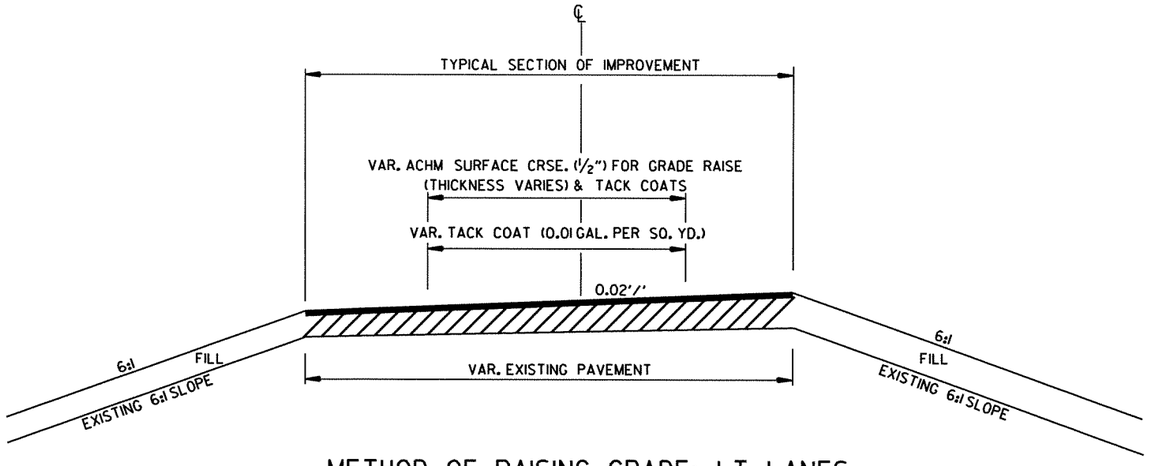


2' STRIP TO BE FILLED WITH
ACHM SURFACE COURSE (1/2")
220 LBS. PER SQ. YD.
2'-0" TACK COAT 0.10 GAL. PER SQ. YD.

DETAILS OF RUMBLE STRIP REMOVAL



LOCATION PLAN OF RUMBLE STRIPS TO BE REMOVED LEFT OR RIGHT SHOULDER



METHOD OF RAISING GRADE: LT. LANES

REVERSE FOR RT. LANES

NOTES:
(1) THIS DETAIL TO BE USED ONLY IF AND WHERE DIRECTED BY THE ENGINEER.
(2) QUANTITIES FOR METHOD OF GRADE RAISE USING ASPHALT WERE CALCULATED ON THIS PROJECT AT LOCATIONS WHERE THE DISTANCE BETWEEN THE EXISTING ASPHALT ROADWAY AND THE PROPOSED SUBGRADE WAS ONE FOOT OR LESS.
(3) IN LOCATIONS WHERE THE DISTANCE BETWEEN THE PROPOSED SUBGRADE AND THE EXISTING ASPHALT ROADWAY IS MORE THAN ONE FOOT, SCARIFICATION OF THE EXISTING ASPHALT ROADWAY WILL BE REQUIRED AS STATED IN SECTION 210, SUBSECTION 210.09 OF THE STANDARD SPECIFICATIONS, EDITION OF 2003.

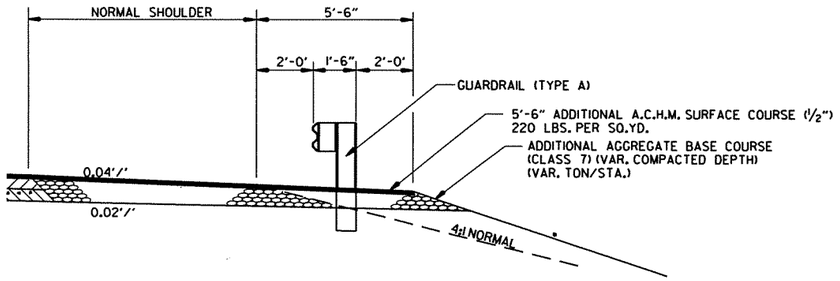
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. PUGETT
10-28-11

R080388.DGN 10/25/2011

SPECIAL DETAILS

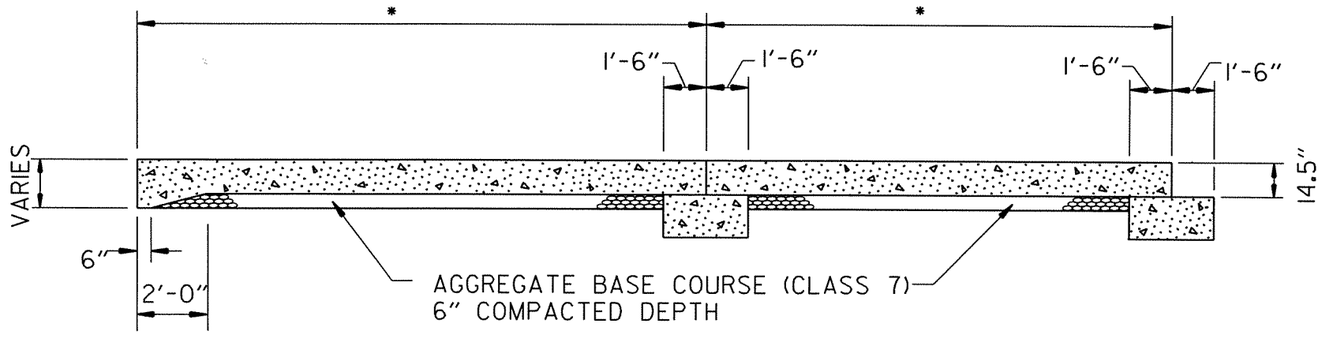
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(2) SPECIAL DETAILS



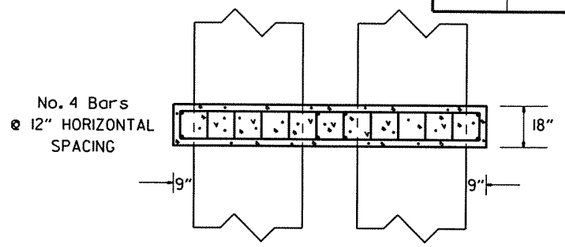
WIDENING FOR GUARDRAIL DETAIL

• NOTE: REFER TO STD. DWG GR-9A AND CROSS SECTIONS FOR SLOPE REQUIREMENTS BEHIND GUARDRAIL.



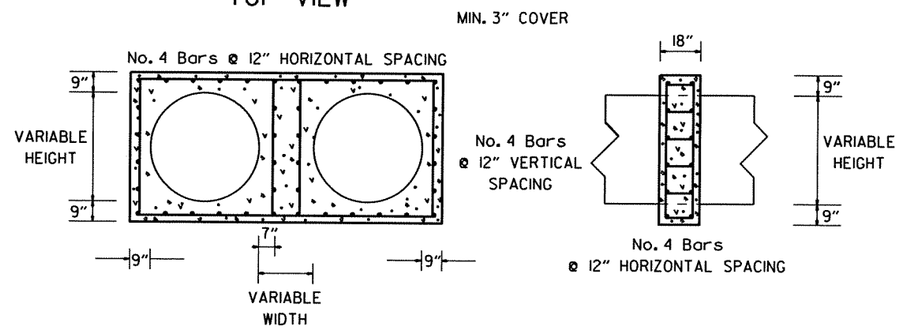
* REFER TO BRIDGE DRAWINGS

SECTION OF APPROACH SLAB



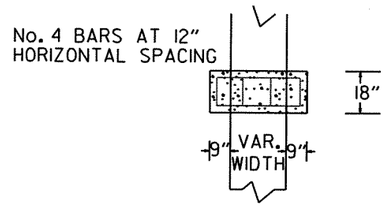
NOTE: PIPE COLLAR TO BE UTILIZED AS APPROVED BY THE ENGINEER.

TOP VIEW



FRONT VIEW SIDE VIEW

PIPE EXTENSION
REINFORCED CONCRETE COLLAR DETAIL



TOP VIEW

FRONT VIEW SIDE VIEW

PIPE EXTENSION
REINFORCED CONCRETE COLLAR DETAIL

SPECIAL DETAILS

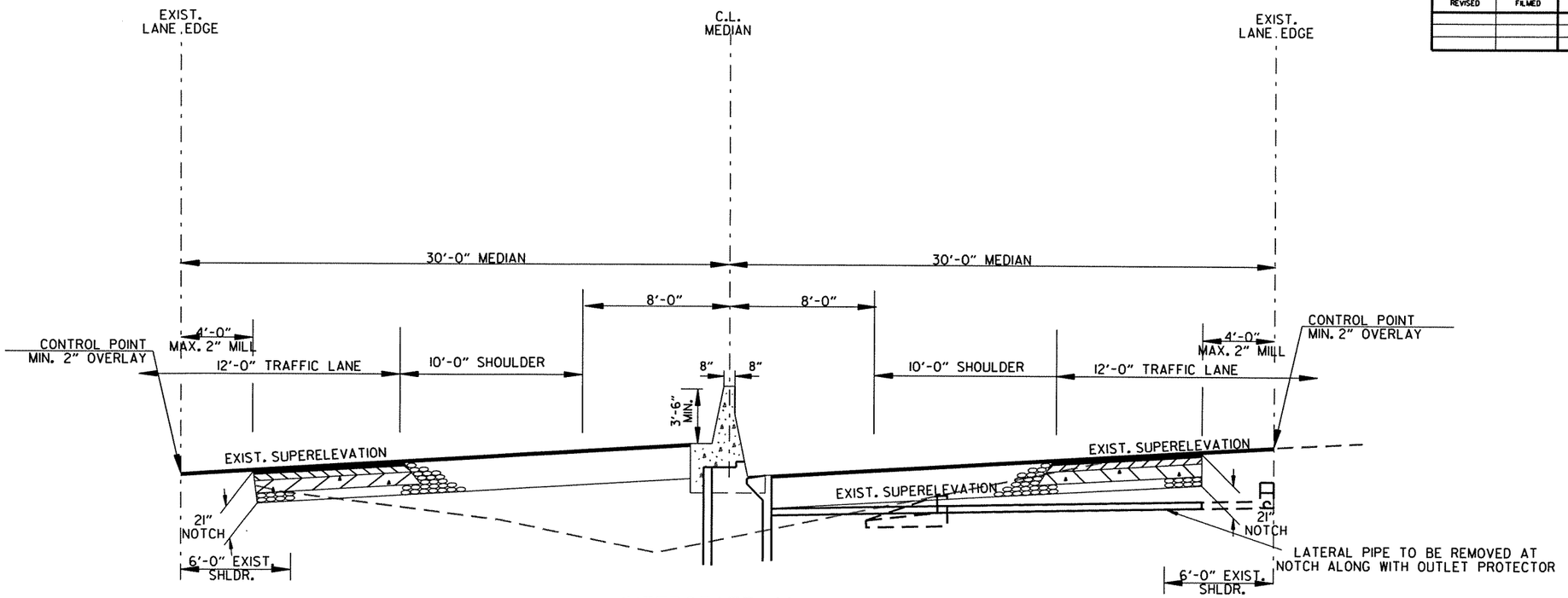
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. PUGETT
10-28-11

R080388.DGN 10/25/2011

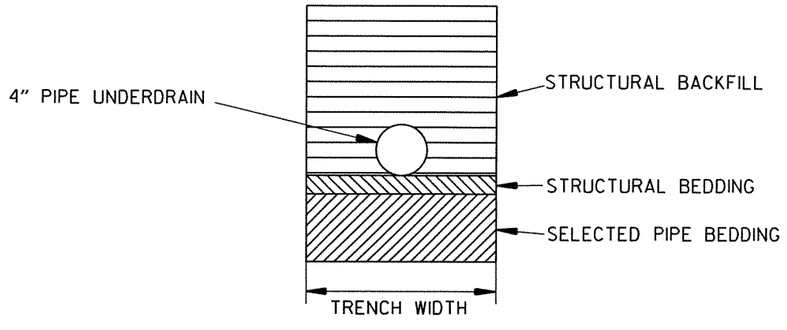
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(2) SPECIAL DETAILS

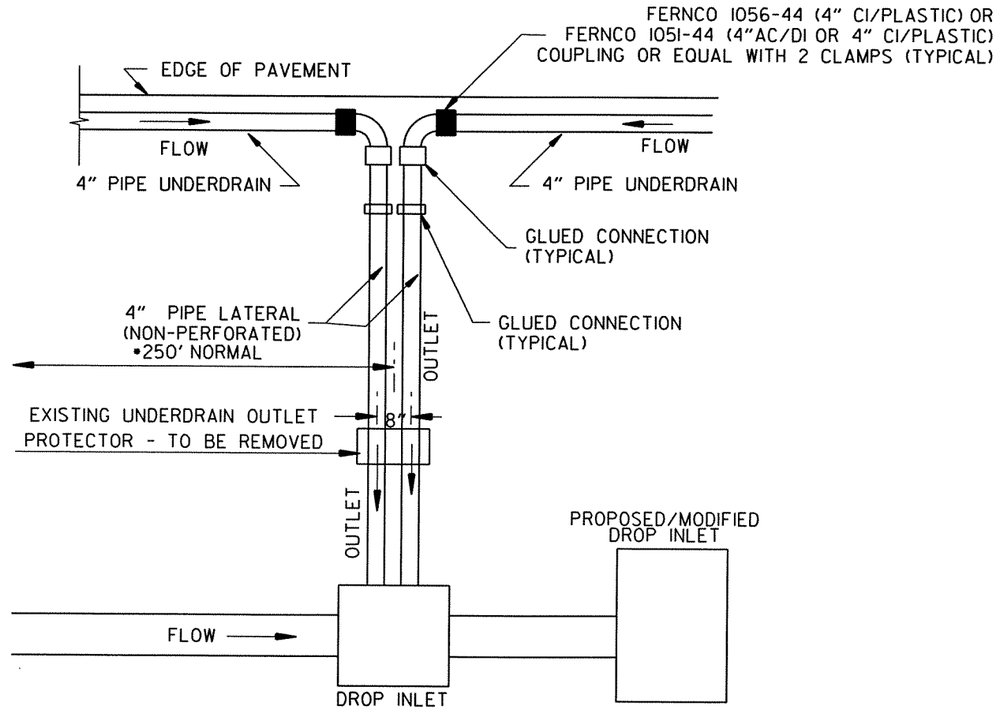
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
14760
MICHAEL D. PUGETT
10-28-11



INTERSTATE 40
NOTCH AND WIDEN
SUPERELEVATED



FOR ADDITIONAL DETAILS
REFER TO STD. DRWG. PCP-2



SPECIAL DETAILS

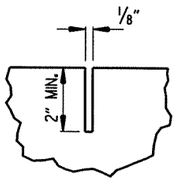
R080388.DGN 10/25/2011

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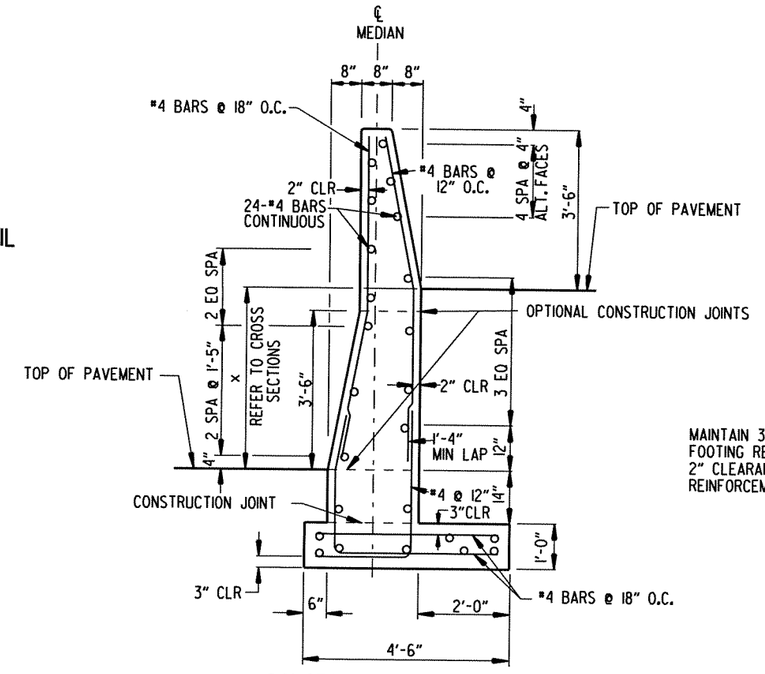
(2) SPECIAL DETAILS

General Notes for Concrete Barrier Walls

1. ALL BARRIER WALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 631 OF THE STANDARD SPECIFICATIONS, 2003 EDITION.
2. CONTRACTION JOINTS REQUIRED @ 15'-0" MAXIMUM SPACING FOR BARRIER TYPES MEDIAN A & B. A 30'-0" MAXIMUM SPACING IS REQUIRED FOR TYPE MEDIAN C.
3. ALL CONTRACTION JOINTS TO BE FORMED IN FRESH CONCRETE ON TOP AND IN SIDES OF BARRIER WALL.
4. DOWEL BARS FOR BARRIER TYPES MEDIAN A & B WILL NOT BE REQUIRED IF BARRIER AND MINIMUM 4' WIDE BASE ARE CAST AS A COMPLETE UNIT.
5. ALL EXPOSED EDGES OF CONCRETE BARRIER WALL SHALL HAVE A ¾" CHAMFER.
6. THE DESIGN OF BARRIER WALL TYPES MEDIAN C IS BASED ON A MINIMUM FOUNDATION BEARING CAPACITY OF ONE TON PER SQUARE FOOT. UNSTABLE FOUNDATION MATERIAL SHALL BE REMOVED AND REPLACED TO PROVIDE A FIRM FOUNDATION AS DIRECTED BY THE ENGINEER.
7. SPACING BETWEEN EXPANSION JOINTS SHALL NOT EXCEED 400 FT FOR BARRIER TYPES MEDIAN A & B OR 120 FT FOR BARRIER TYPES MEDIAN C. EXPANSION JOINTS SHALL BE FORMED USING 1" PREFORMED JOINT FILLER. CONTINUOUS REINFORCEMENT SHALL BE CUT 2" CLEAR OF EXPANSION JOINTS.
8. DRAINAGE OPENINGS TO BE CONSTRUCTED EVERY 100' O.C. AND AT SAGS AND ADJACENT TO DROP INLETS. DOWEL BARS SHALL NOT BE PLACED WITHING 3" OF DRAINAGE OPENINGS.

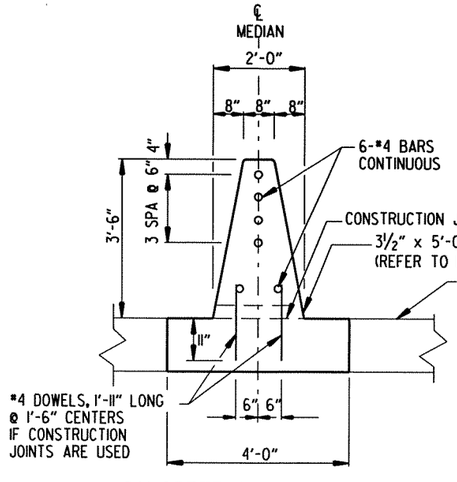


CONTRACTION JOINT DETAIL

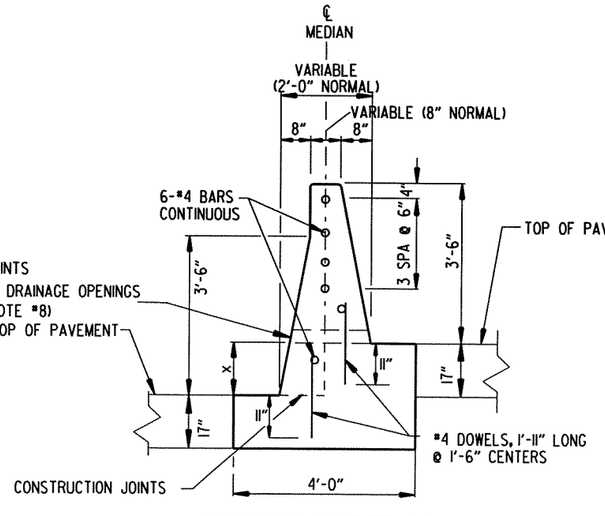


CONCRETE BARRIER WALL
(MEDIAN TYPE C)
x = 1'-0" to 5'-0" MAX

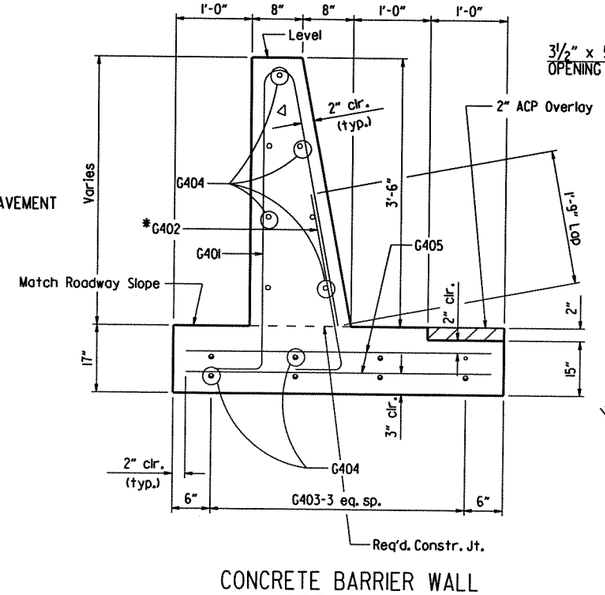
MAINTAIN 3" CLEARANCE ON ALL FOOTING REINFORCEMENT AND 2" CLEARANCE ON ALL OTHER REINFORCEMENT.



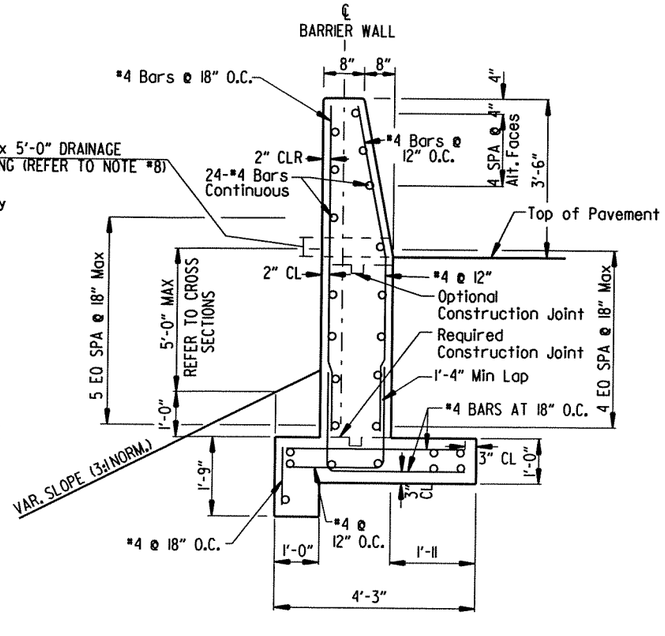
CONCRETE BARRIER WALL
(MEDIAN TYPE A)



CONCRETE BARRIER WALL
(MEDIAN TYPE B)
x = 0'-0" to 1'-0" MAX



CONCRETE BARRIER WALL
(SIDE TYPE A)



CONCRETE BARRIER WALL
(SIDE TYPE E)

* Omit G402 bars in locations of drop inlets. Omit G401, G402 & G403 bars in locations of drainage openings.

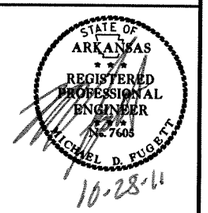
SPECIAL DETAILS

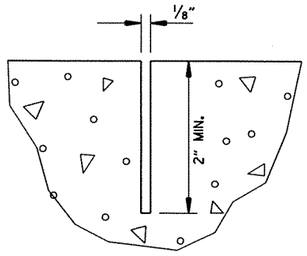
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
SC 7605
MICHAEL D. FUGETT
10-28-11

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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
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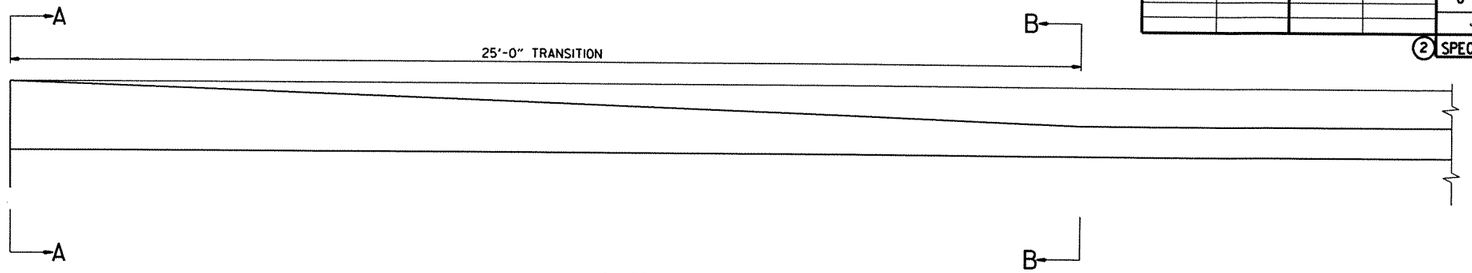
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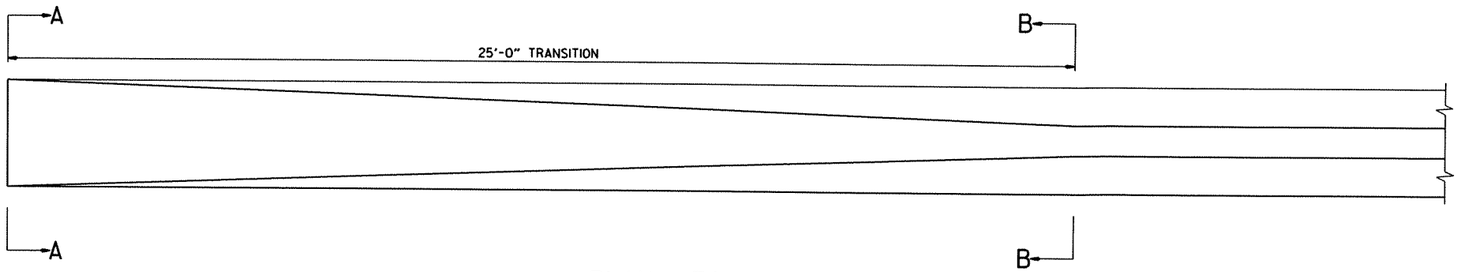
CONTRACTION JOINT DETAIL

NOTES FOR MEDIAN BARRIER:
1. ALL EXPOSED EDGES SHALL HAVE 3/4" CHAMFERS.
2. CONTRACTION JOINTS SHALL BE CONSTRUCTED AT 15'-0" MAXIMUM SPACING IN TOP AND SIDES OF MEDIAN BARRIER AND SHALL BE FORMED IN FRESH CONCRETE.
3. CONTRACTION JOINTS ARE NOT PERMITTED AT THE DOWEL BAR LOCATIONS.
4. ALL REINFORCING BARS SHALL HAVE 2" MINIMUM COVER.
5. DOWEL BARS WILL NOT BE REQUIRED IF BARRIER AND BASE ARE CAST AS A COMPLETE UNIT.
6. BARRIER TRANSITIONS WILL BE MEASURED AND PAID FOR AS "CONCRETE BARRIER WALL (MEDIAN TYPE A)".
7. DRAINAGE OPENINGS TO BE CONSTRUCTED ADJACENT TO DROP INLETS. DOWEL BARS SHALL NOT BE PLACED WITHIN 3" OF DRAINAGE OPENINGS.



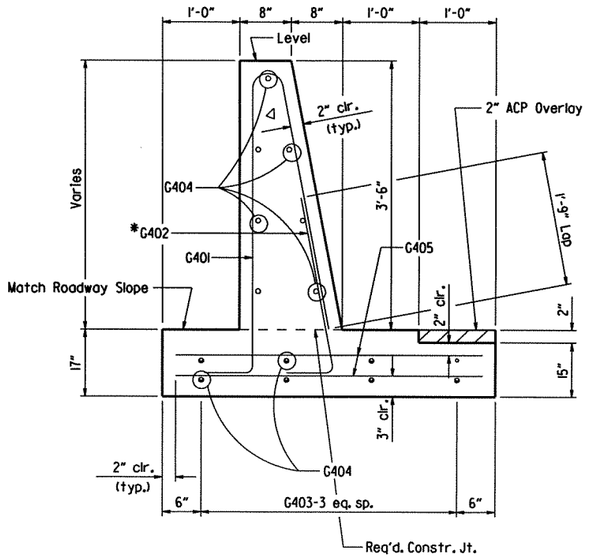
PLAN VIEW
CONCRETE BARRIER WALL (SIDE TYPE A) TRANSITION

NOTE: TRANSITION TO BE CONSTRUCTED AT BEGINNING AND END OF BARRIER WALL.



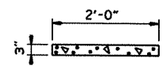
PLAN VIEW
CONCRETE BARRIER WALL (MEDIAN TYPE A) TRANSITION

NOTE: TRANSITION TO BE CONSTRUCTED AT BEGINNING AND END OF BARRIER WALL.

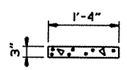


CONCRETE BARRIER WALL (SIDE TYPE A)
(SECTION B-B)

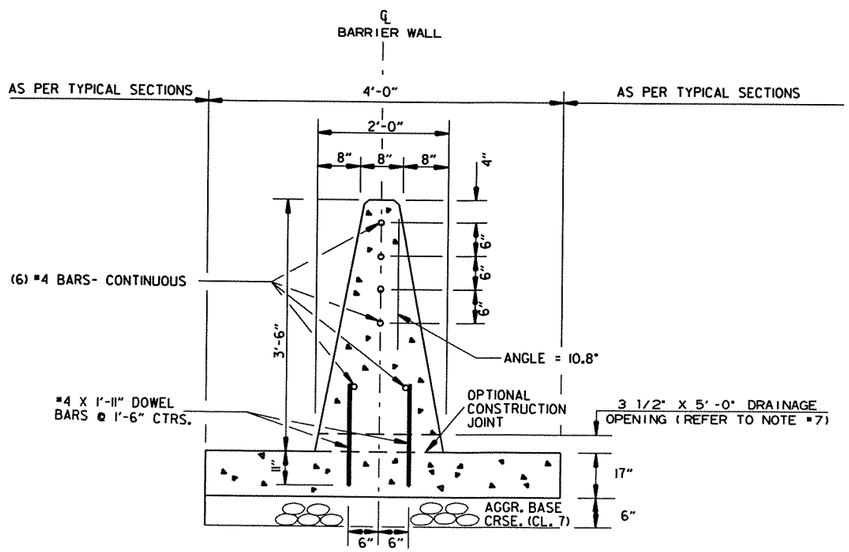
* Omit G402 bars in locations of drop inlets. Omit G401, G402 & G403 bars in locations of drainage openings.



CONCRETE BARRIER WALL
(MEDIAN TYPE A)
(SECTION A-A)



CONCRETE BARRIER WALL
(SIDE TYPE A)
(SECTION A-A)



CONCRETE BARRIER WALL (MEDIAN TYPE A)
(SECTION B-B)

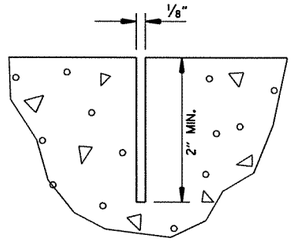
R080388.DGN 10/25/2011

SPECIAL DETAILS

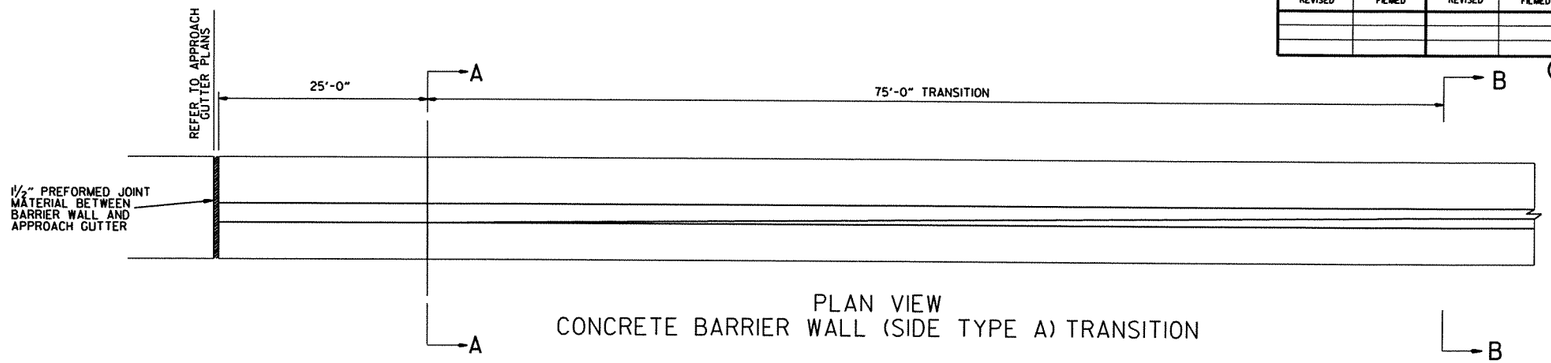
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(2) SPECIAL DETAILS



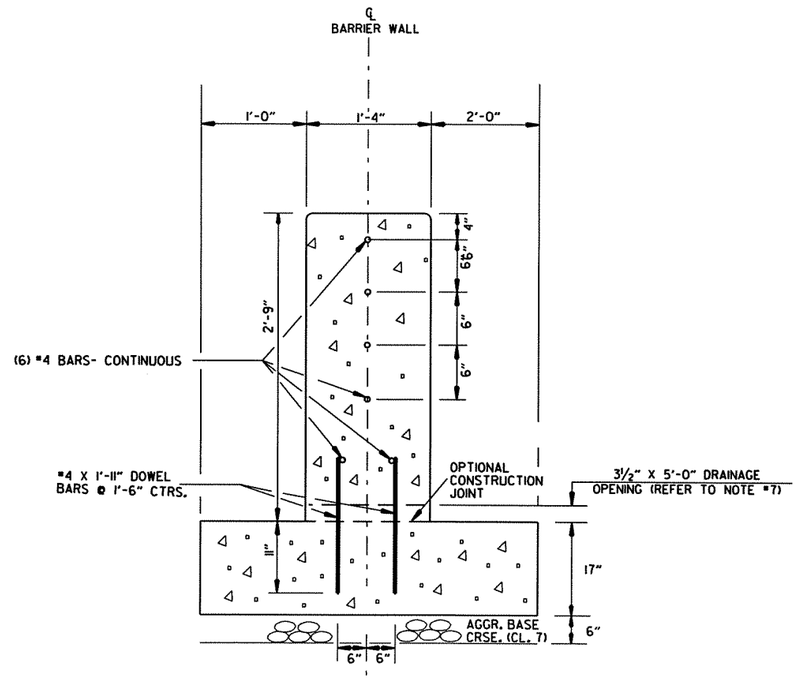


CONTRACTION JOINT DETAIL

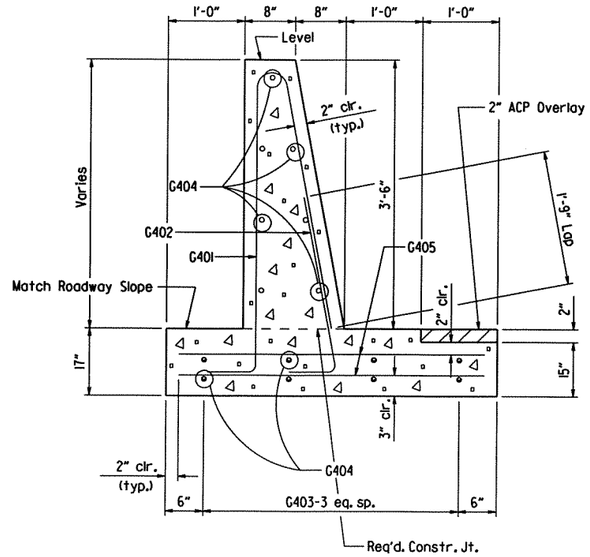


PLAN VIEW
CONCRETE BARRIER WALL (SIDE TYPE A) TRANSITION

NOTES FOR MEDIAN BARRIER:
1. ALL EXPOSED EDGES SHALL HAVE ¾" CHAMFERS.
2. CONTRACTION JOINTS SHALL BE CONSTRUCTED AT 15'-0" MAXIMUM SPACING IN TOP AND SIDES OF MEDIAN BARRIER AND SHALL BE FORMED IN FRESH CONCRETE.
3. CONTRACTION JOINTS ARE NOT PERMITTED AT THE DOWEL BAR LOCATIONS.
4. ALL REINFORCING BARS SHALL HAVE 2" MINIMUM COVER.
5. DOWEL BARS WILL NOT BE REQUIRED IF BARRIER AND BASE ARE CAST AS A COMPLETE UNIT.
6. DRAINAGE OPENINGS TO BE CONSTRUCTED ADJACENT TO DROP INLETS. DOWEL BARS SHALL NOT BE PLACED WITHIN 3" OF DRAINAGE OPENINGS.



CONCRETE BARRIER WALL (MEDIAN TYPE A)
(SECTION A-A)



CONCRETE BARRIER WALL (SIDE TYPE A)
(SECTION B-B)

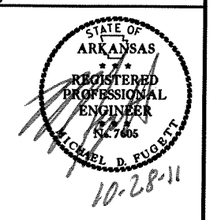
CONCRETE BARRIER WALL (SIDE TYPE A) TRANSITION
FOR HWY. 65 APPROACH GUTTER

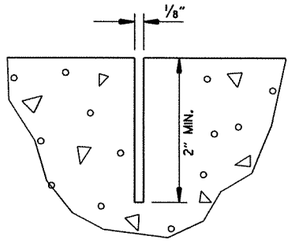
SPECIAL DETAILS

R080388.DGN 10/25/2011

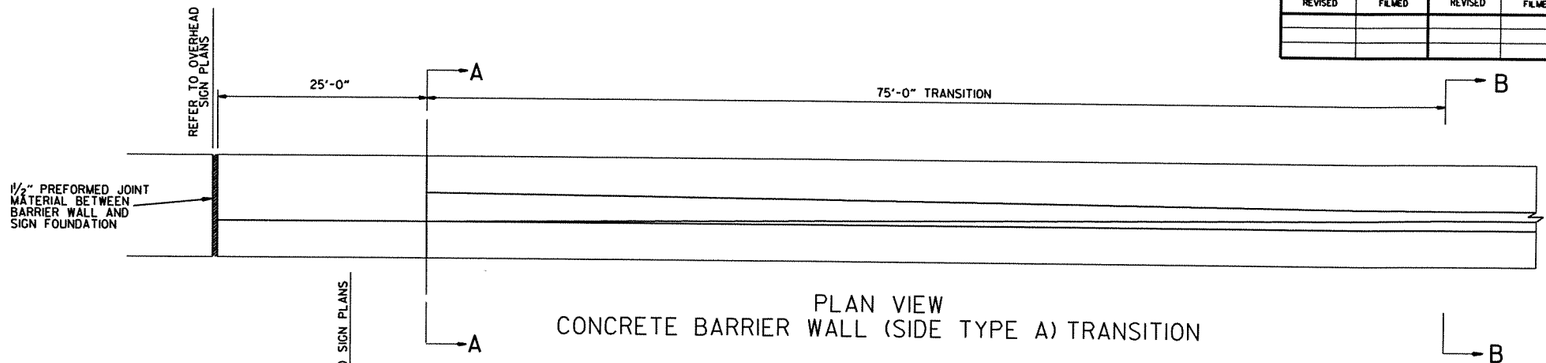
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(2) SPECIAL DETAILS



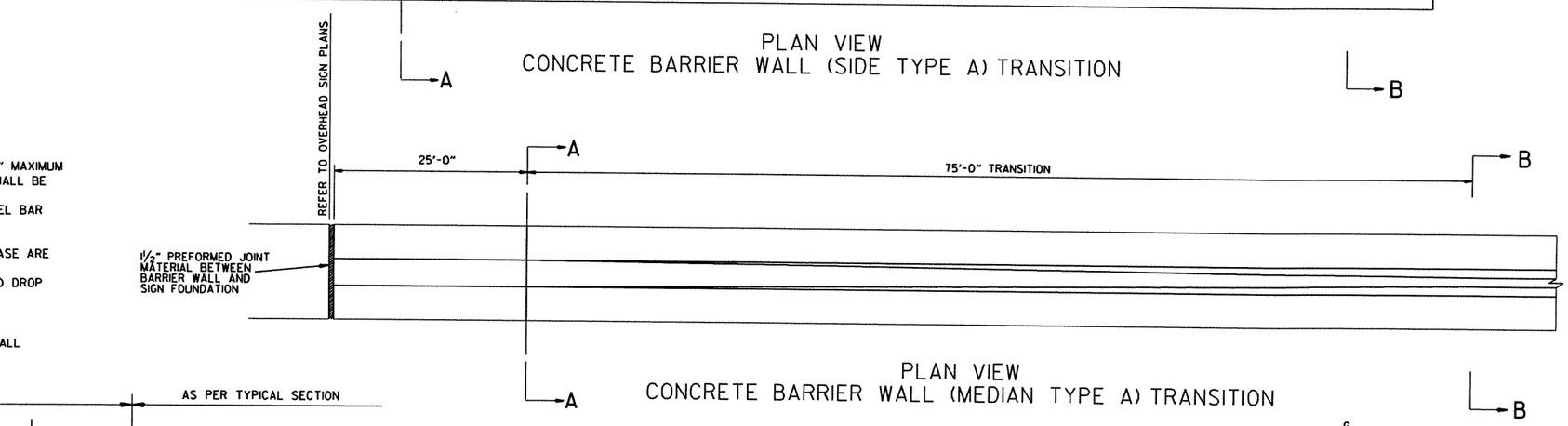


CONTRACTION JOINT DETAIL

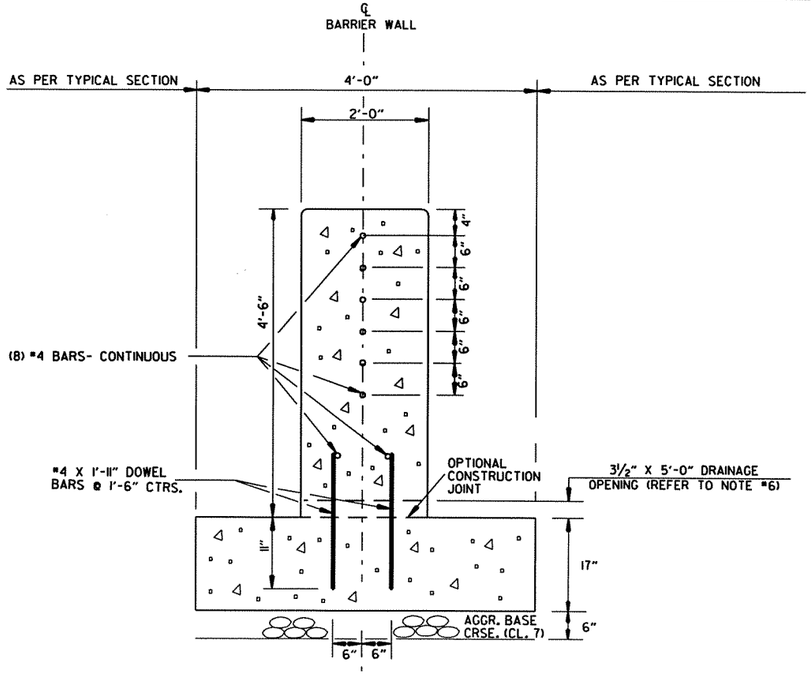


PLAN VIEW
CONCRETE BARRIER WALL (SIDE TYPE A) TRANSITION

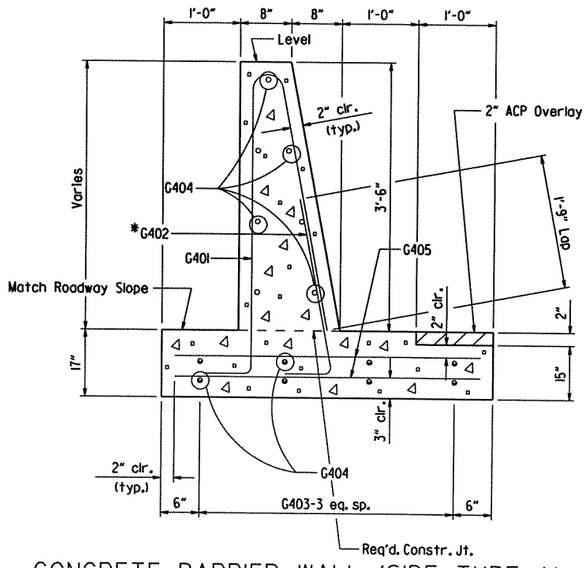
NOTES FOR MEDIAN BARRIER:
1. ALL EXPOSED EDGES SHALL HAVE ¾" CHAMFERS.
2. CONTRACTION JOINTS SHALL BE CONSTRUCTED AT 15'-0" MAXIMUM SPACING IN TOP AND SIDES OF MEDIAN BARRIER AND SHALL BE FORMED IN FRESH CONCRETE.
3. CONTRACTION JOINTS ARE NOT PERMITTED AT THE DOWEL BAR LOCATIONS.
4. ALL REINFORCING BARS SHALL HAVE 2" MINIMUM COVER.
5. DOWEL BARS WILL NOT BE REQUIRED IF BARRIER AND BASE ARE CAST AS A COMPLETE UNIT.
6. DRAINAGE OPENINGS TO BE CONSTRUCTED ADJACENT TO DROP INLETS. DOWEL BARS SHALL NOT BE PLACED WITHIN 3" OF DRAINAGE OPENINGS.



PLAN VIEW
CONCRETE BARRIER WALL (MEDIAN TYPE A) TRANSITION

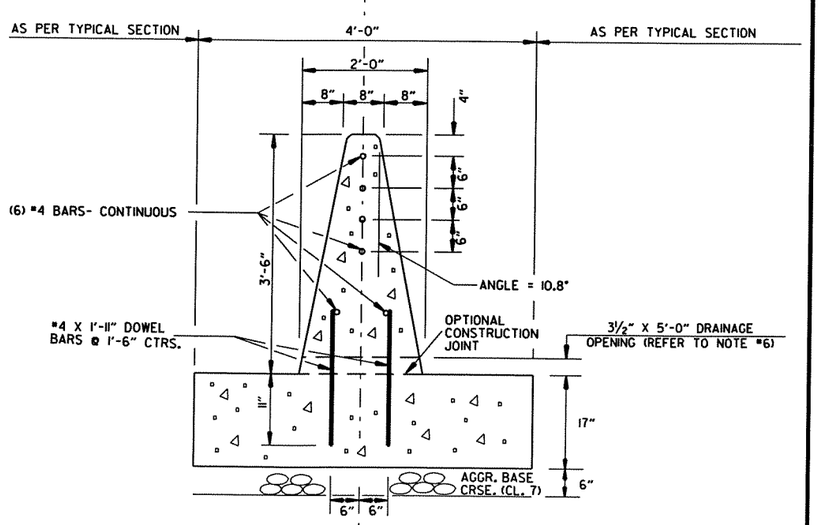


CONCRETE BARRIER WALL (MEDIAN TYPE A)
(SECTION A-A)



CONCRETE BARRIER WALL (SIDE TYPE A)
(SECTION B-B)

*Omit G402 bars in locations of drop inlets. Omit G401, G402 & G403 bars in locations of drainage openings.



CONCRETE BARRIER WALL (MEDIAN TYPE A)
(SECTION B-B)

CONCRETE BARRIER WALL (MEDIAN TYPE A) AND (SIDE TYPE A) TRANSITION
FOR OVERHEAD SIGN STRUCTURE

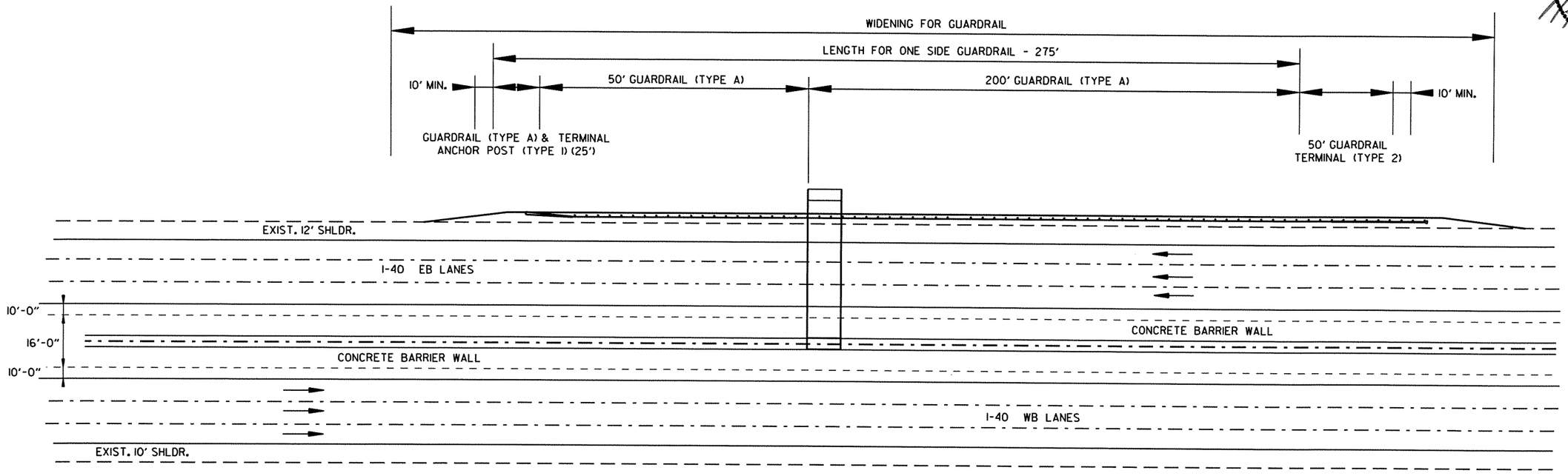
SPECIAL DETAILS

R080388.DGN 10/25/2011

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.		080388	22	452

(2) SPECIAL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
14760
MICHAEL D. FUGETT
10-28-11



GUARDRAIL INSTALLATION FOR OVERHEAD SIGNS

DIMENSIONS ARE TYPICAL BOTH DIRECTIONS

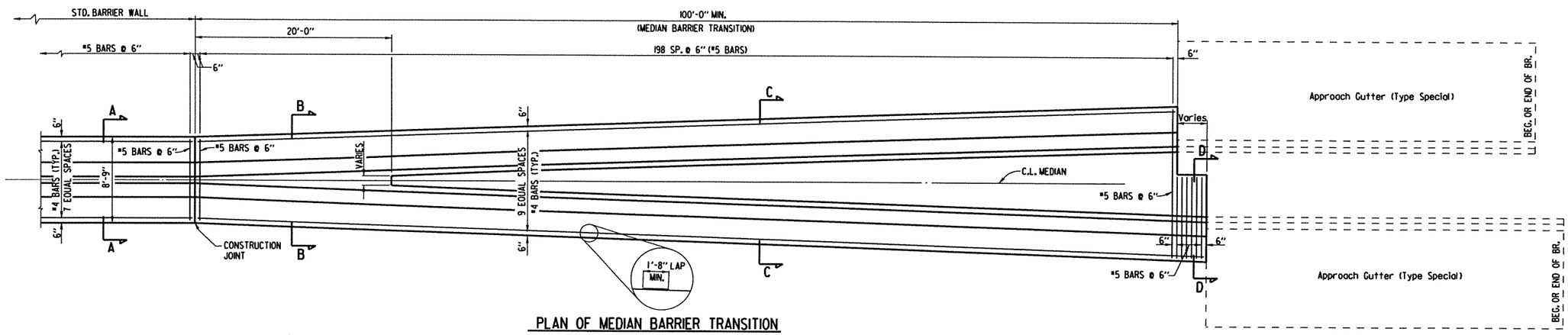
R080388.DGN 10/25/2011

SPECIAL DETAILS

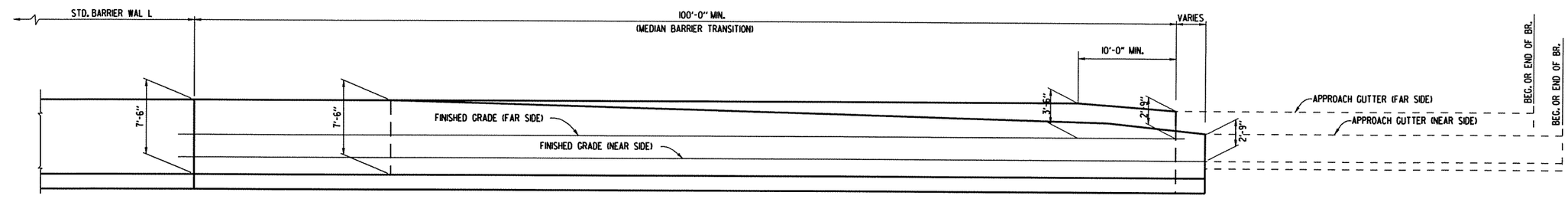
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				6	ARK.			
				JOB NO.		080388	23	452

(2) SPECIAL DETAILS

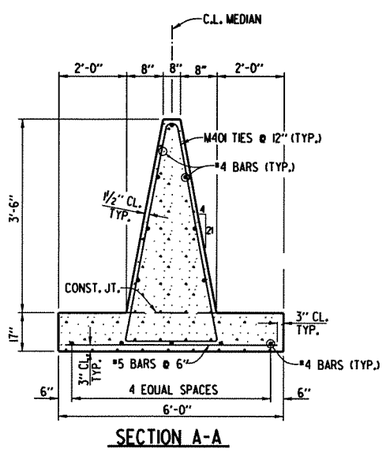
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 17605
MICHAEL D. FUGETT
10-28-11



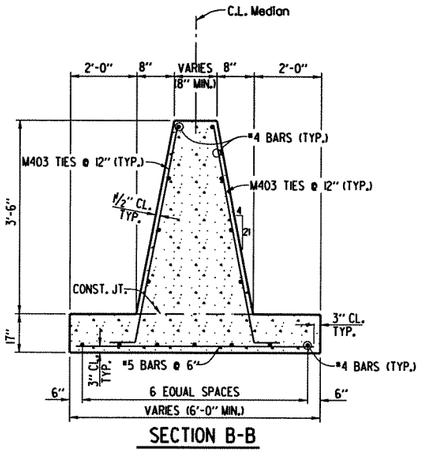
PLAN OF MEDIAN BARRIER TRANSITION



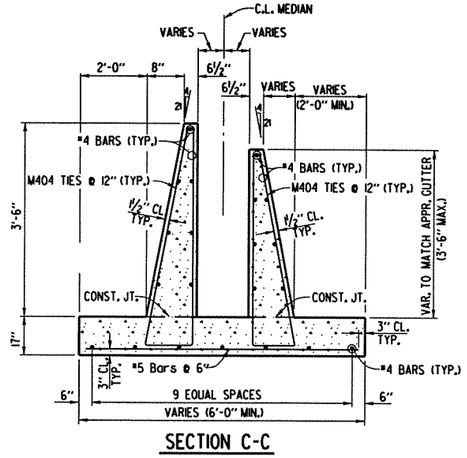
ELEVATION OF MEDIAN BARRIER TRANSITION



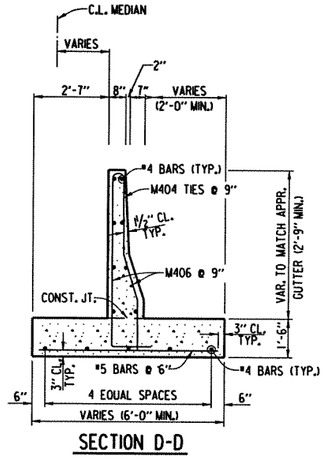
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

NOTES:

1. ALL EXPOSED EDGES OF THE CONCRETE BARRIER WALL SHALL HAVE A ¾" CHAMFER.
2. CONSTRUCT ½" WIDE JOINTS THROUGH WALL STEM AT 60' SPACING.
3. CONSTRUCTION JOINTS ARE PERMITTED AT 20' MINIMUM SPACING IN WALL STEM AND FOOTING AS APPROVED BY THE ENGINEER.
4. MAINTAIN A 2" JOINT BETWEEN THE CONCRETE BARRIER WALL AND APPROACH GUTTERS.
5. MEDIAN BARRIER TRANSITIONS SHALL BE MEASURED AND PAID FOR AS CONCRETE BARRIER WALL (MEDIAN TYPE A) OR (MEDIAN TYPE B) FOR SINGLE WALL AND CONCRETE BARRIER WALL (SIDE TYPE A) FOR DOUBLE WALL.

DETAILS OF CONCRETE BARRIER WALL (MEDIAN TYPE SPECIAL)

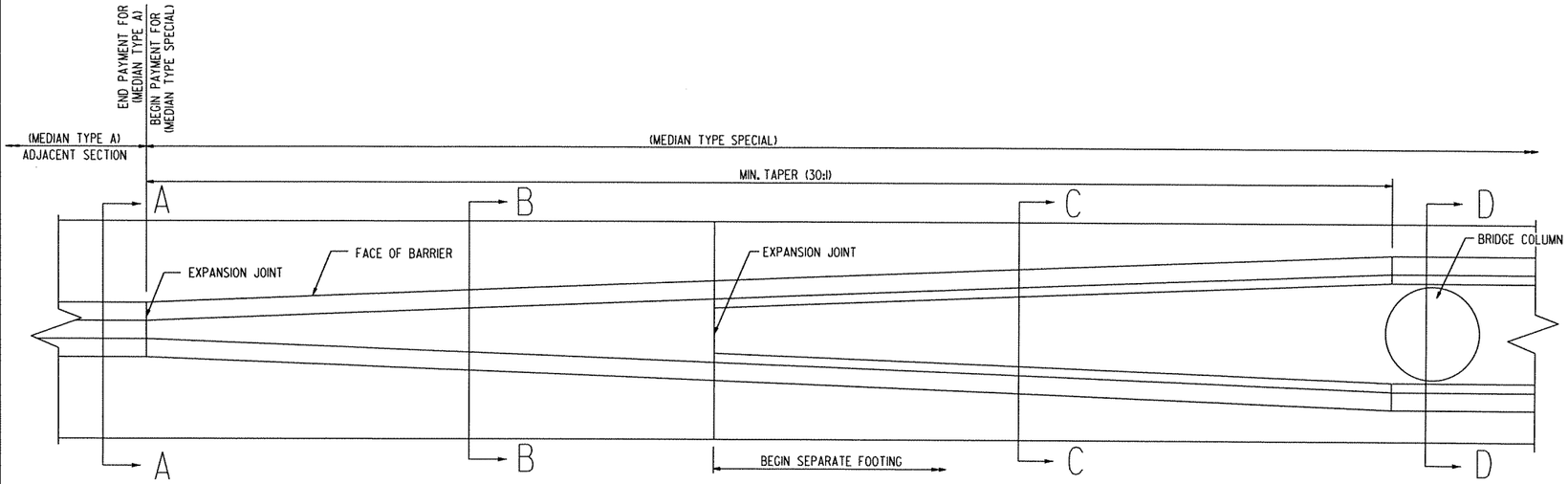
R080388.DGN 10/25/2011

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.		080388	24	452

(2) SPECIAL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
NO. 7646
MICHAEL D. PUGETT
10-28-11

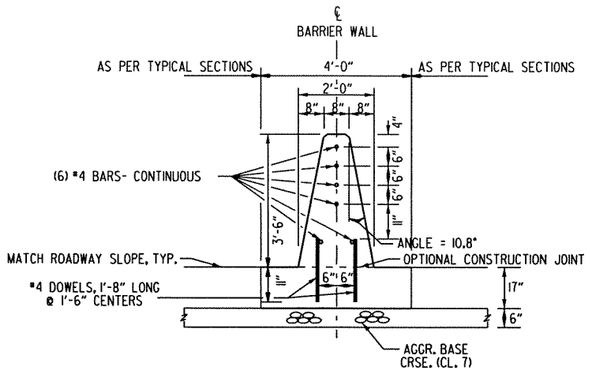


GENERAL NOTES FOR CONCRETE BARRIER WALLS

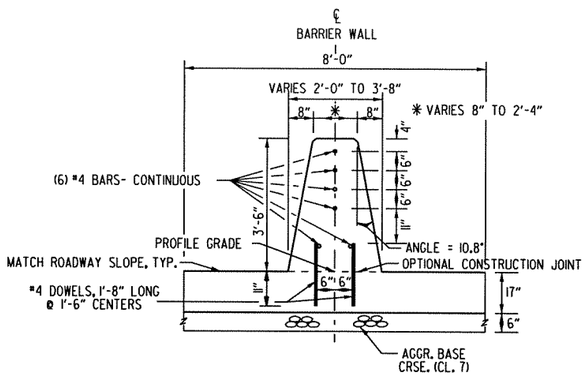
1. ALL BARRIER WALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 631OF THE STANDARD SPECIFICATIONS, 2003 EDITION.
2. CONTRACTION JOINTS REQUIRED @ 15'-0" MAXIMUM SPACING FOR BARRIER SECTION AA & BB. A 30'-0" MAXIMUM SPACING IS REQUIRED FOR BARRIER SECTION CC. CONTRACTION JOINTS ARE NOT PERMITTED AT THE DOWEL BAR LOCATIONS.
3. ALL CONTRACTION JOINTS TO BE FORMED IN FRESH CONCRETE ON TOP AND IN SIDES OF BARRIER WALL.
4. DOWEL BARS FOR BARRIER SECTION AA & BB WILL NOT BE REQUIRED IF BARRIER AND MINIMUM 8' WIDE BASE ARE CAST AS A COMPLETE UNIT.
5. ALL EXPOSED EDGES OF CONCRETE BARRIER WALL SHALL HAVE A ¾" CHAMFER.
6. SPACING BETWEEN EXPANSION JOINTS SHALL NOT EXCEED 400 FT. FOR BARRIER. EXPANSION JOINTS SHALL BE FORMED USING 1" PREFORMED JOINT FILLER. CONTINUOUS REINFORCEMENT SHALL BE CUT 2" CLEAR OF EXPANSION JOINTS.
7. MAINTAIN 3" CLEARANCE ON ALL FOOTING REINFORCEMENT AND 2" CLEARANCE ON ALL OTHER REINFORCEMENT.
8. DRAINAGE OPENINGS TO BE CONSTRUCTED AS DIRECTED BY THE ENGINEER.

CONCRETE BARRIER WALL

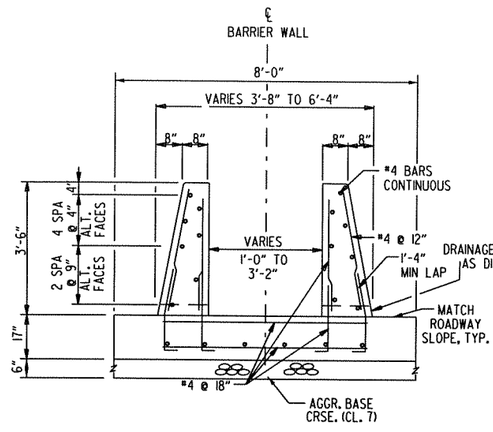
NOTE: TRANSITION FOR SOUTH SIDE SHOWN. NORTH SIDE TRANSITION IS IDENTICAL.



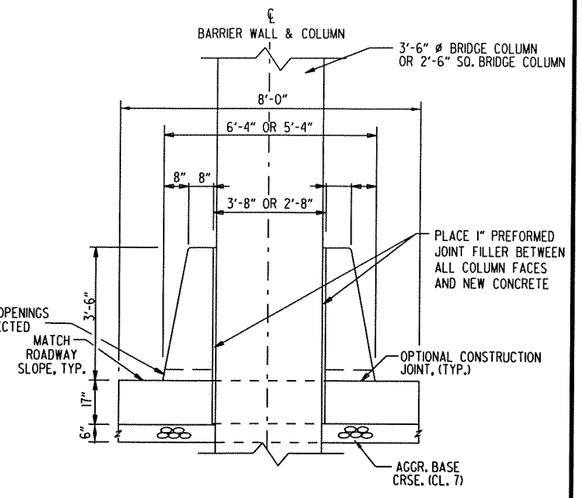
SECTION A-A



SECTION B-B

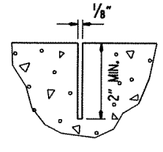


SECTION C-C



SECTION D-D

SEE SECTION C-C FOR REINFORCEMENT



CONTRACTION JOINT DETAIL

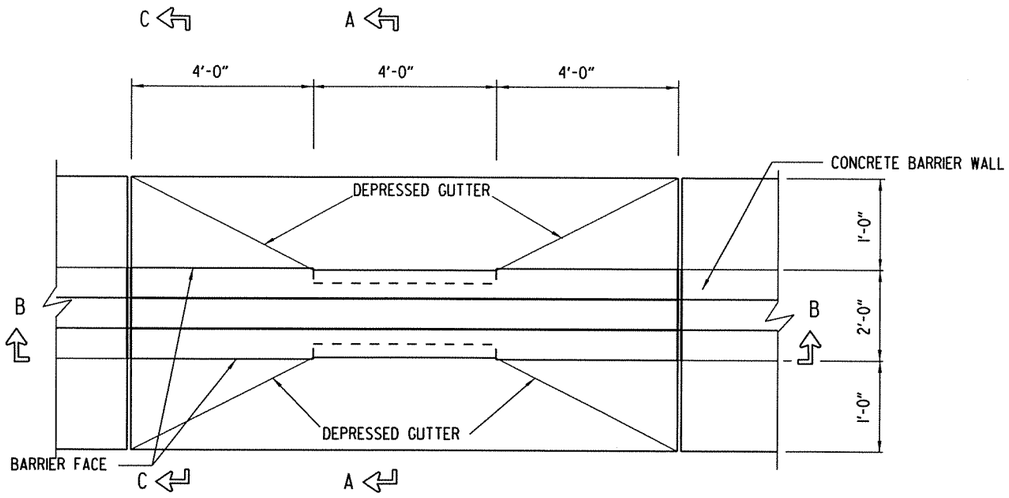
R080388.DGN 10/25/2011

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.		080388	25	452

(2) SPECIAL DETAILS

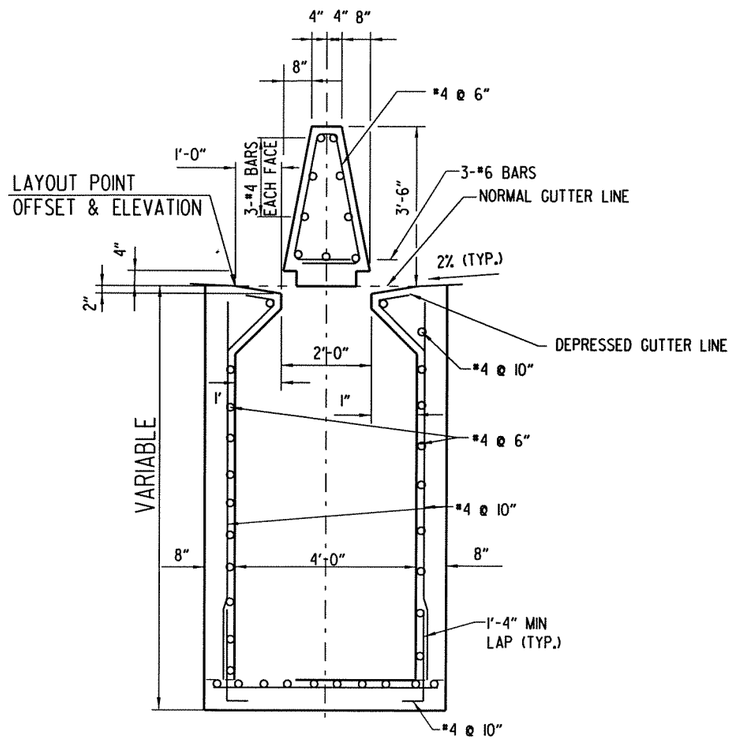
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
12760
MICHAEL D. FUGETT
10-28-11



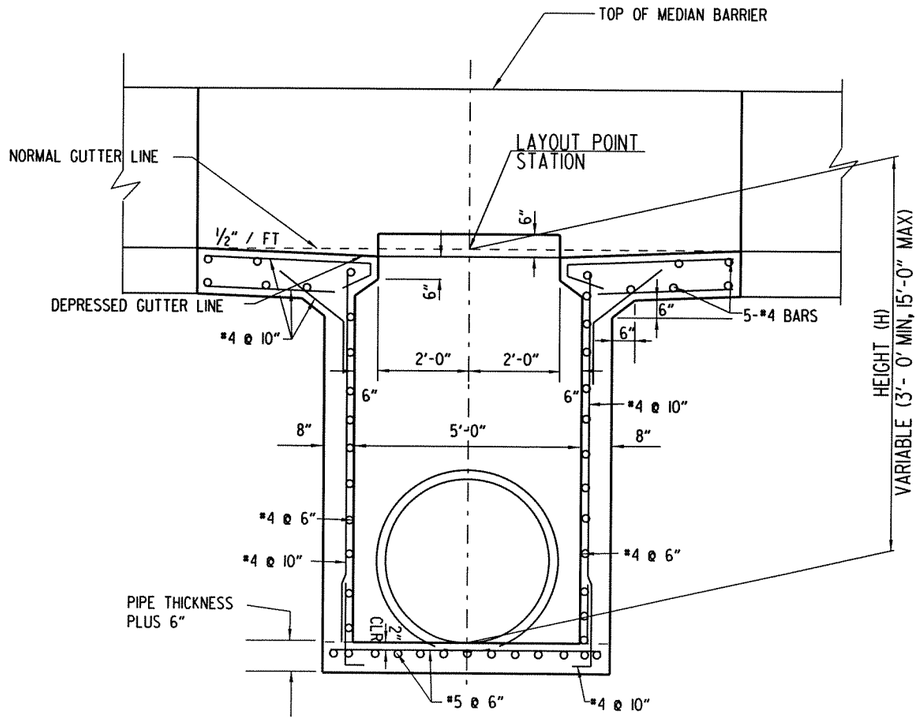
DROP INLET (TYPE SP-1)

General Notes for Concrete Barrier Walls

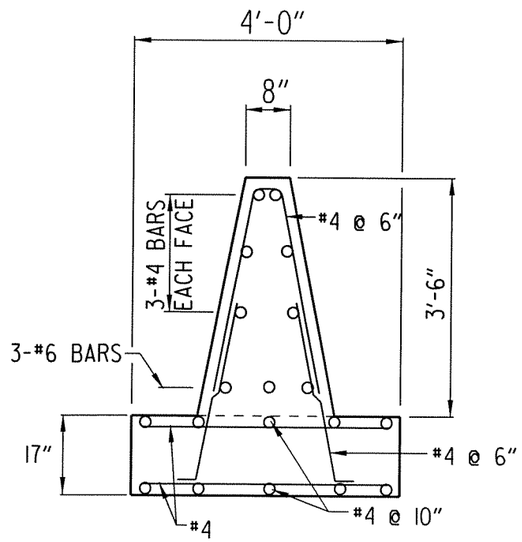
1. ALL BARRIER WALLS & INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 631 OF THE STANDARD SPECIFICATIONS, 2003 EDITION.
2. ALL EXPOSED EDGES OF CONCRETE BARRIER WALL SHALL HAVE A ¾" CHAMFER.
3. EXPANSION JOINTS SHALL BE FORMED USING 1" PREFORMED JOINT FILLER. REINFORCEMENT SHALL BE CUT 2" CLEAR OF EXPANSION JOINTS.
4. MAINTAIN A MINIMUM 3" CLEARANCE ON ALL FOOTING REINFORCEMENT AND 2" CLEARANCE ON ALL OTHER REINFORCEMENT.



SECTION A-A



SECTION B-B



SECTION C-C

DROP INLET (TYPE SPECIAL 1)

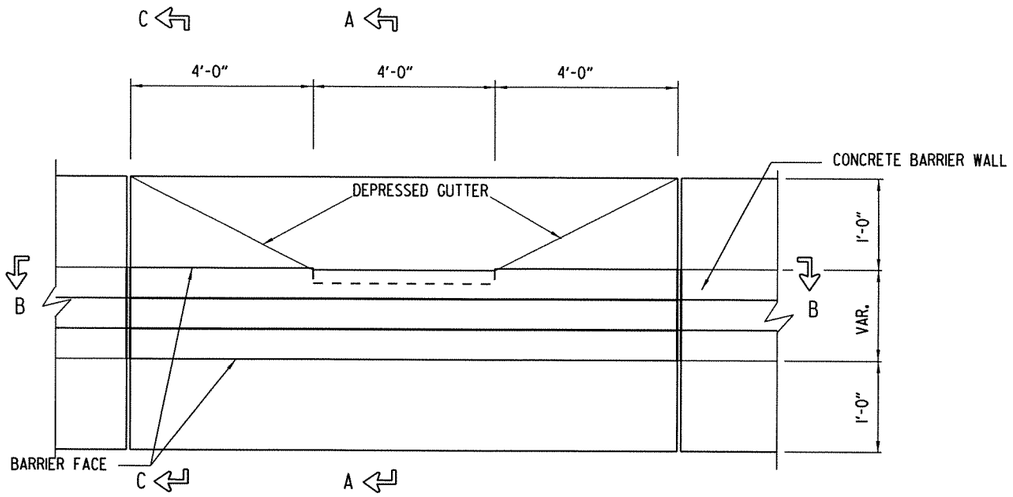
R080388.DGN 10/25/2011

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.		080388	26	452

(2) SPECIAL DETAILS

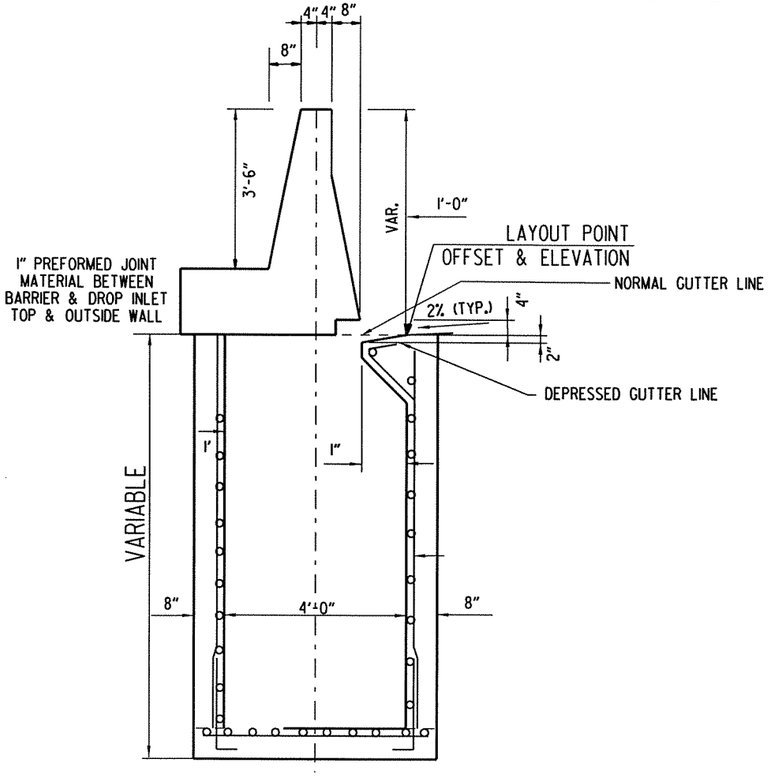
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7685
MICHAEL D. FUGETT
10-28-11



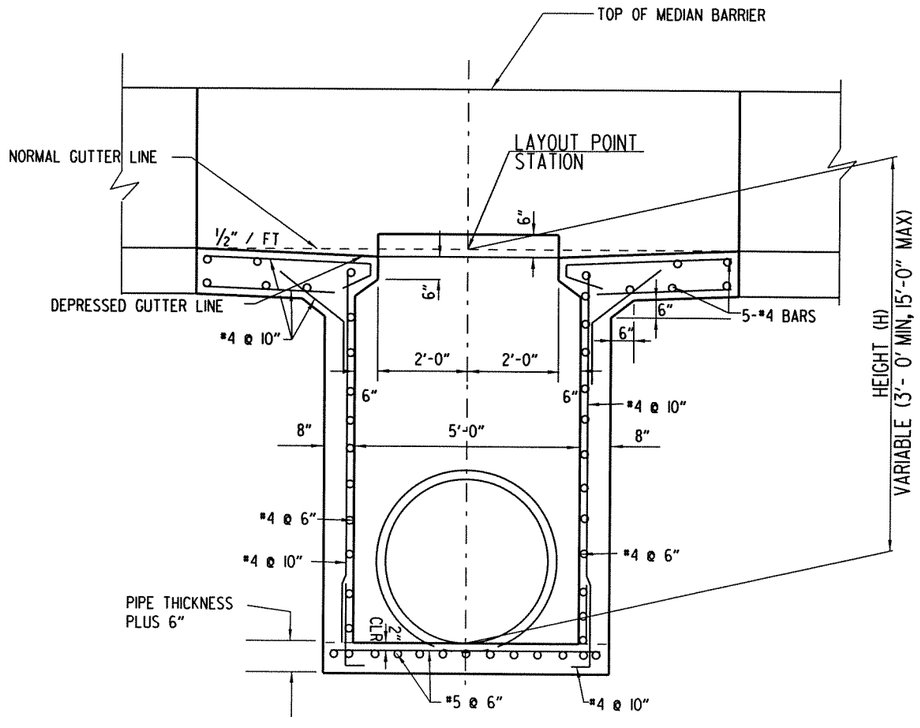
DROP INLET (TYPE SP-2)

General Notes for Concrete Barrier Walls

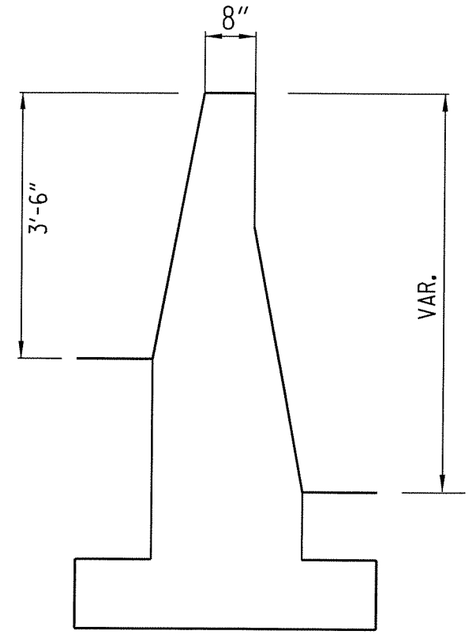
1. ALL BARRIER WALLS & INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 631 OF THE STANDARD SPECIFICATIONS, 2003 EDITION.
2. ALL EXPOSED EDGES OF CONCRETE BARRIER WALL SHALL HAVE A ¾" CHAMFER.
3. EXPANSION JOINTS SHALL BE FORMED USING 1" PREFORMED JOINT FILLER. REINFORCEMENT SHALL BE CUT 2" CLEAR OF EXPANSION JOINTS.
4. MAINTAIN A MINIMUM 3" CLEARANCE ON ALL FOOTING REINFORCEMENT AND 2" CLEARANCE ON ALL OTHER REINFORCEMENT.



SECTION A-A



SECTION B-B



SECTION C-C

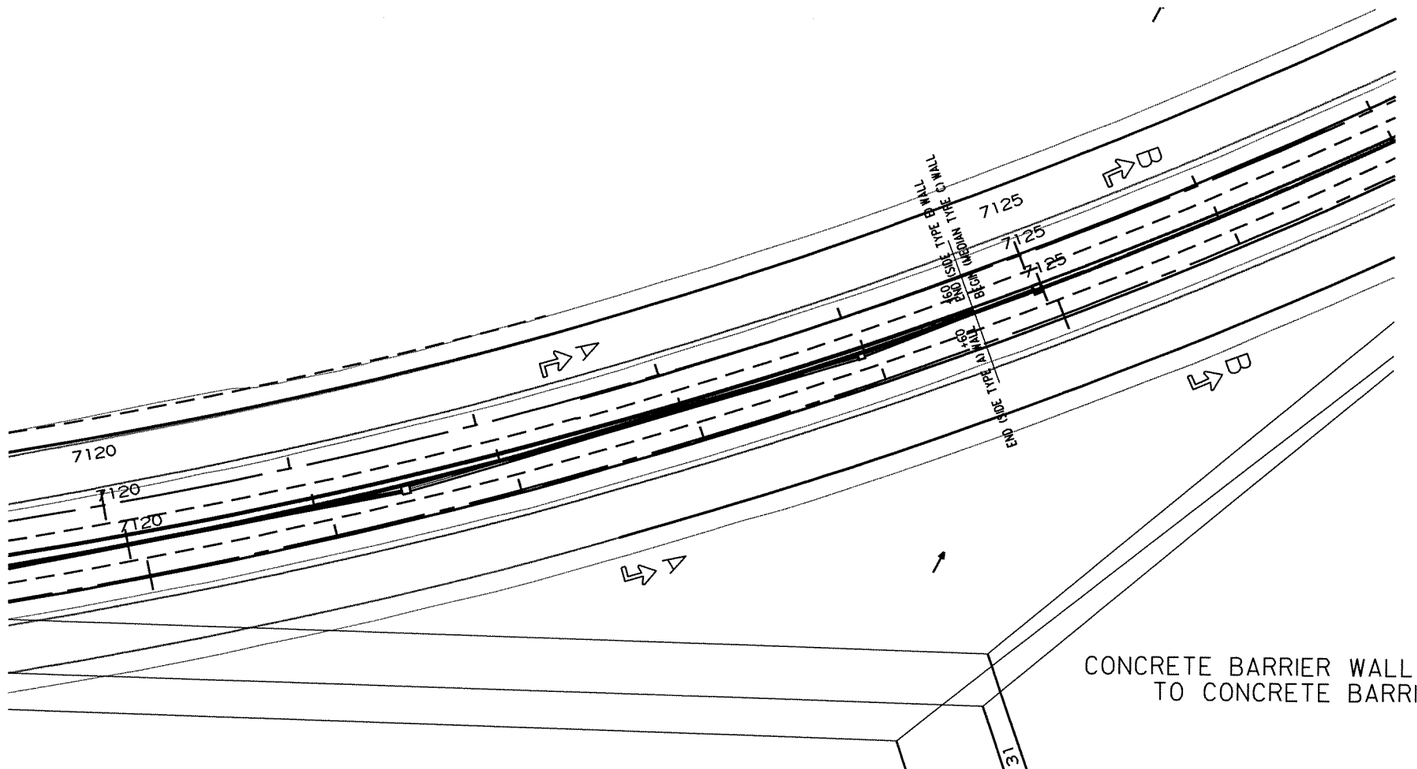
DROP INLET (TYPE SPECIAL 2)

SPECIAL DETAILS

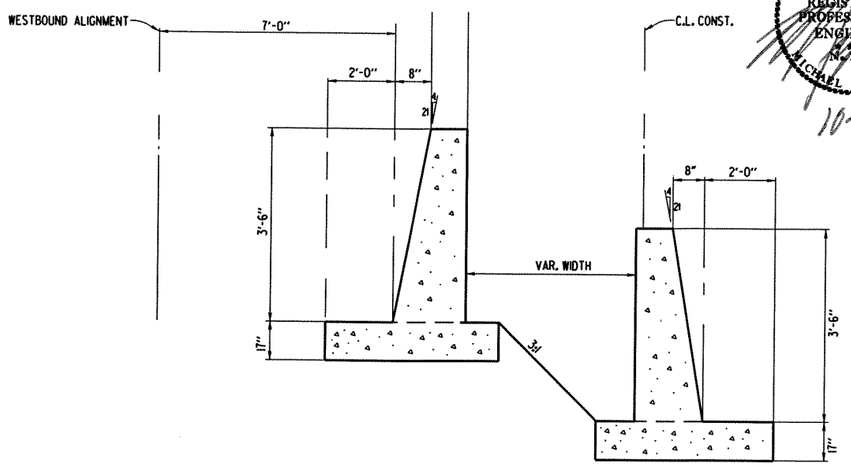
R080388.DGN 10/25/2011

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.		080388	27	452

(2) SPECIAL DETAILS

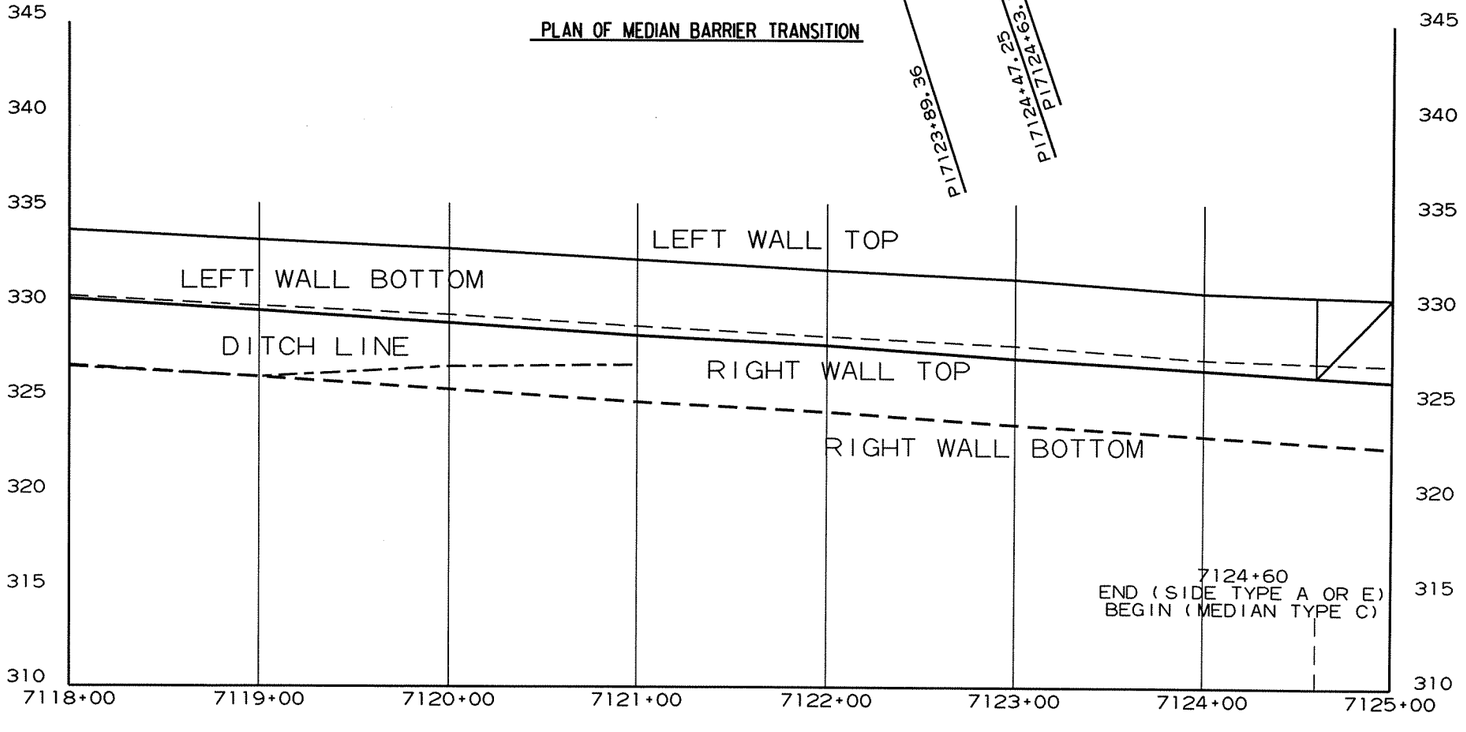


PLAN OF MEDIAN BARRIER TRANSITION

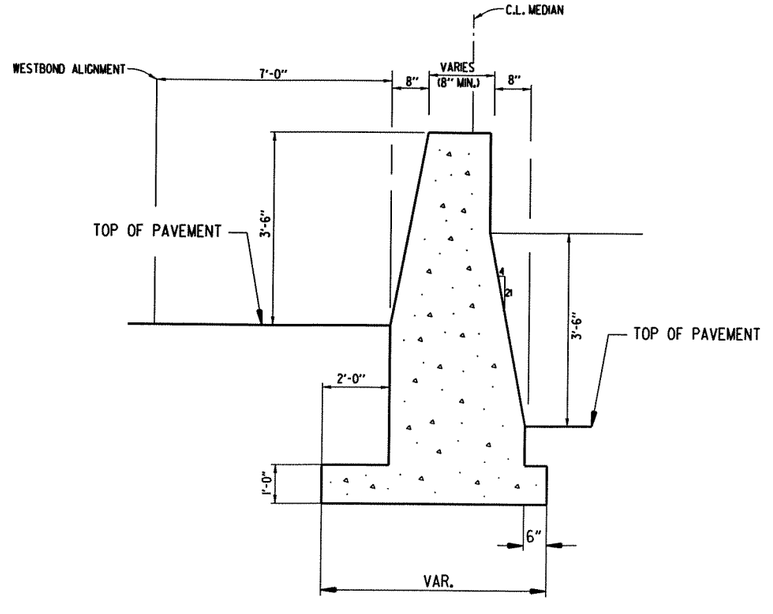


SECTION A-A

CONCRETE BARRIER WALL (SIDE TYPE A & E) TRANSITION
TO CONCRETE BARRIER WALL (MEDIAN TYPE C)



ELEVATION OF MEDIAN BARRIER TRANSITION



SECTION B-B

SPECIAL DETAILS

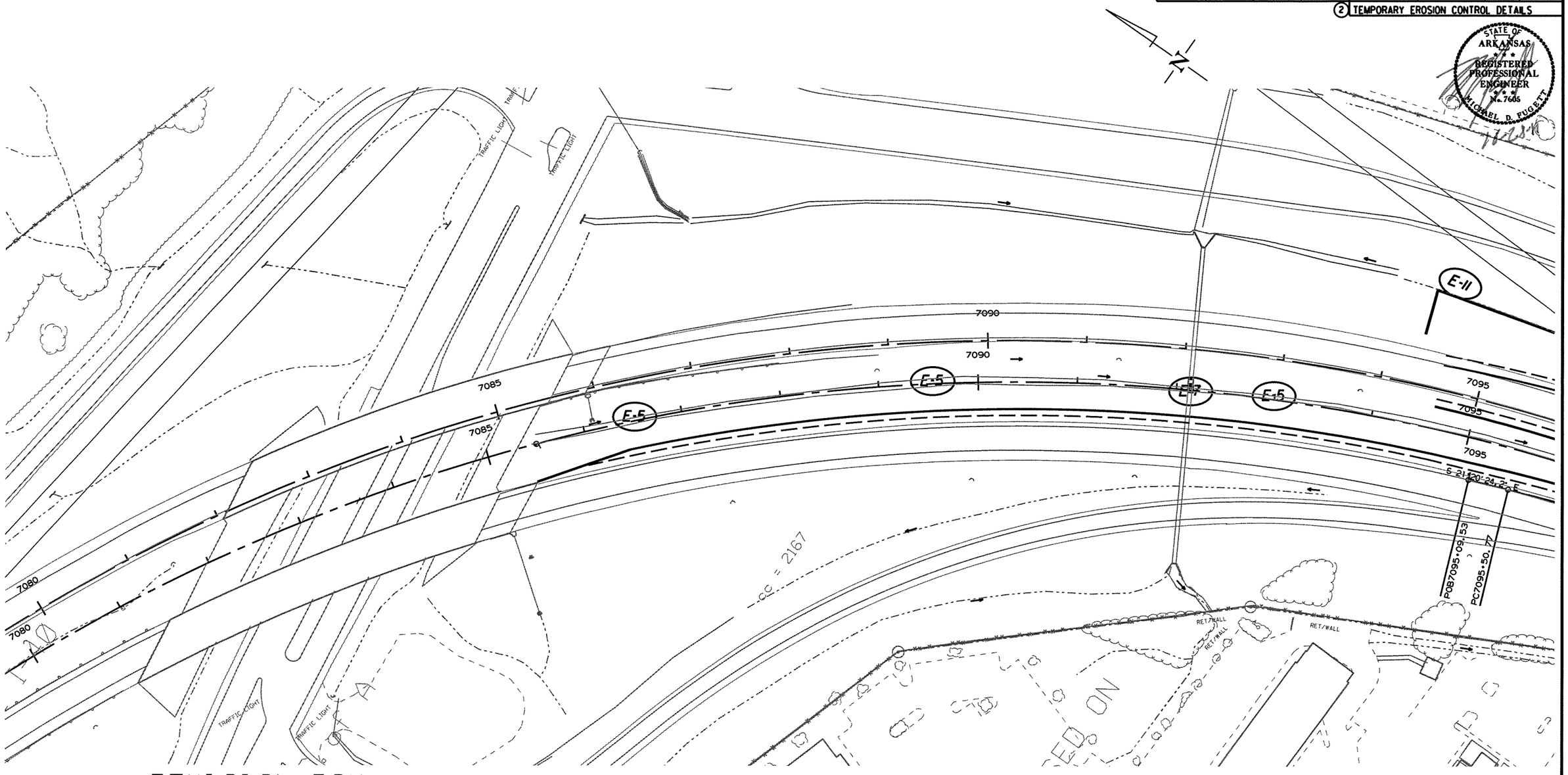
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11

R080388.DGN 10/25/2011

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.		080388	28	452

(2) TEMPORARY EROSION CONTROL DETAILS

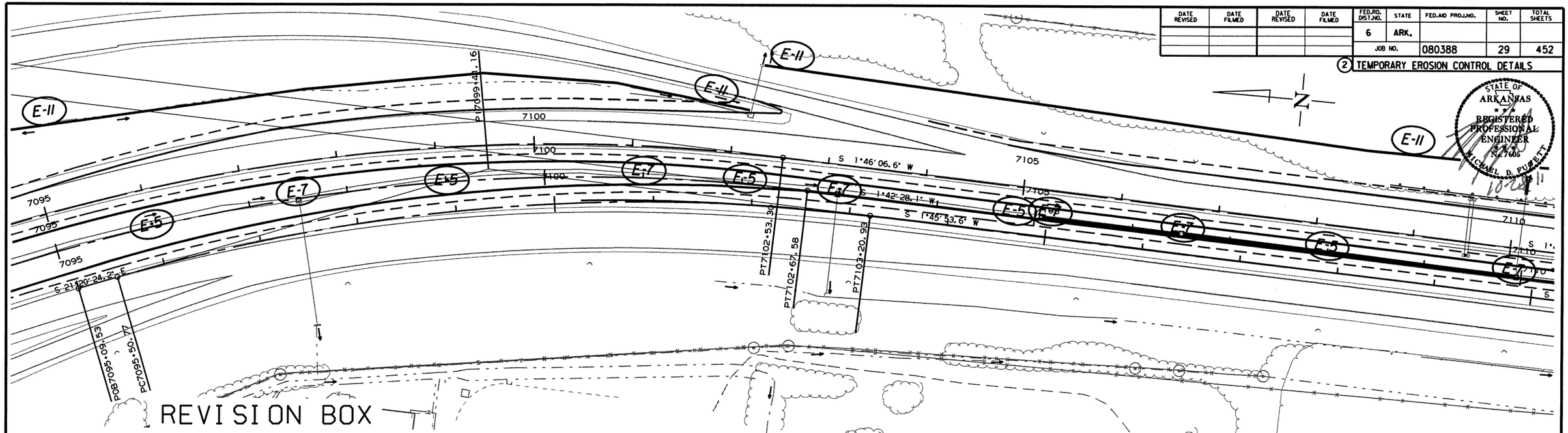
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT


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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
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				JOB NO.		080388	29	452

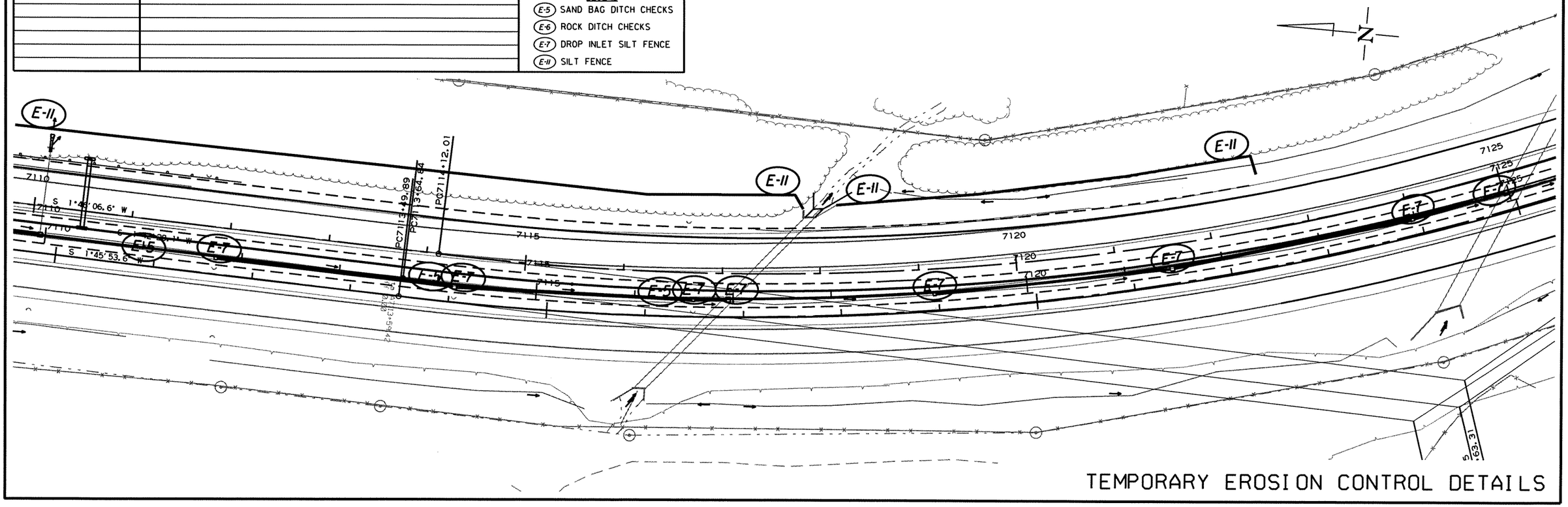
(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
MICHAEL D. PUGETT



DATE	REVISION

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



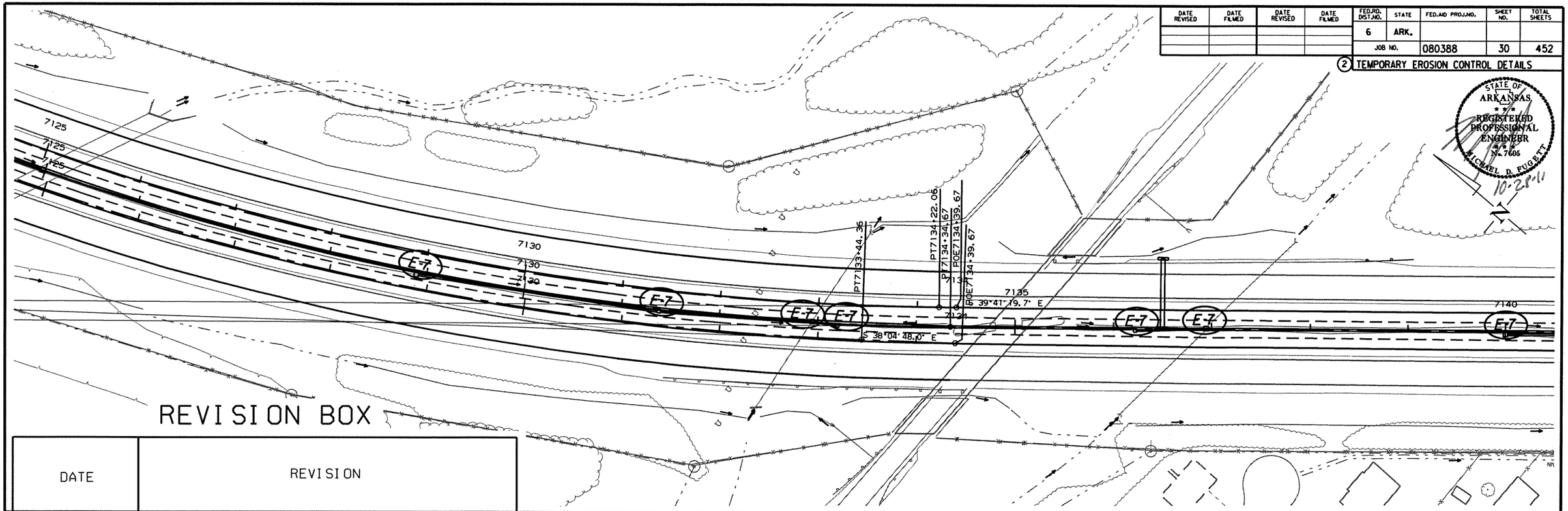
TEMPORARY EROSION CONTROL DETAILS

R080388.DGN 8/24/2011

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		080388	30	452

(2) TEMPORARY EROSION CONTROL DETAILS

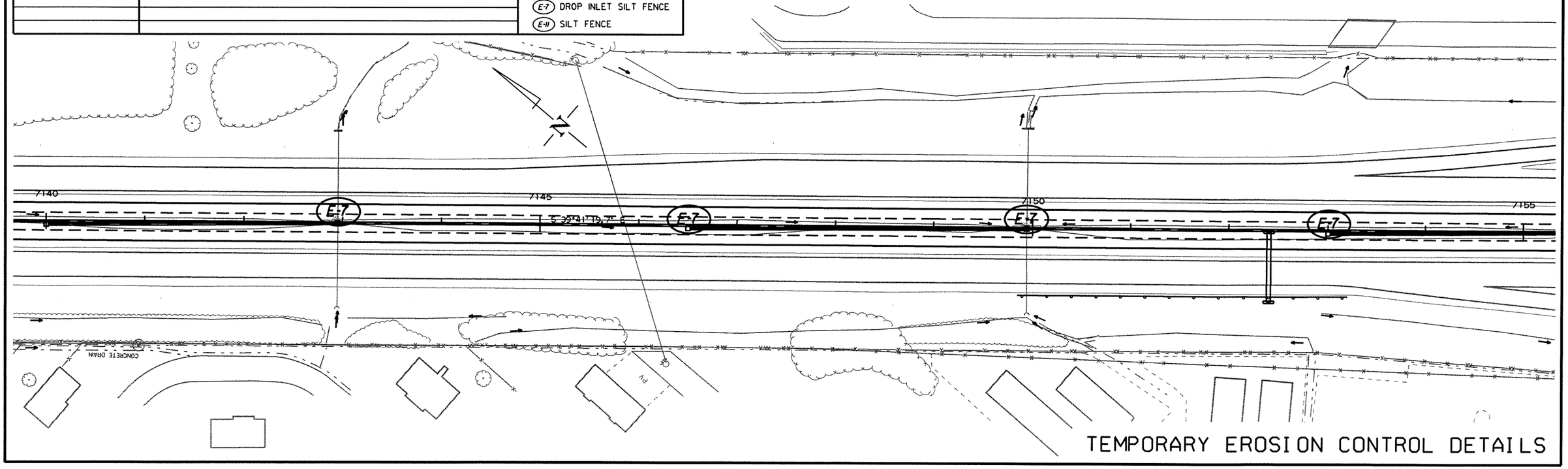
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11



REVISION BOX

DATE	REVISION

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



TEMPORARY EROSION CONTROL DETAILS

R080388.DGN 8/24/2011

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.		080388	31	452

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT

7155 7160 7165 7170

S 29° 41' 19.7" E

E-11 E-7

REVISION BOX

DATE	REVISION

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

7170 7175 7180 7185

E-11 E-7

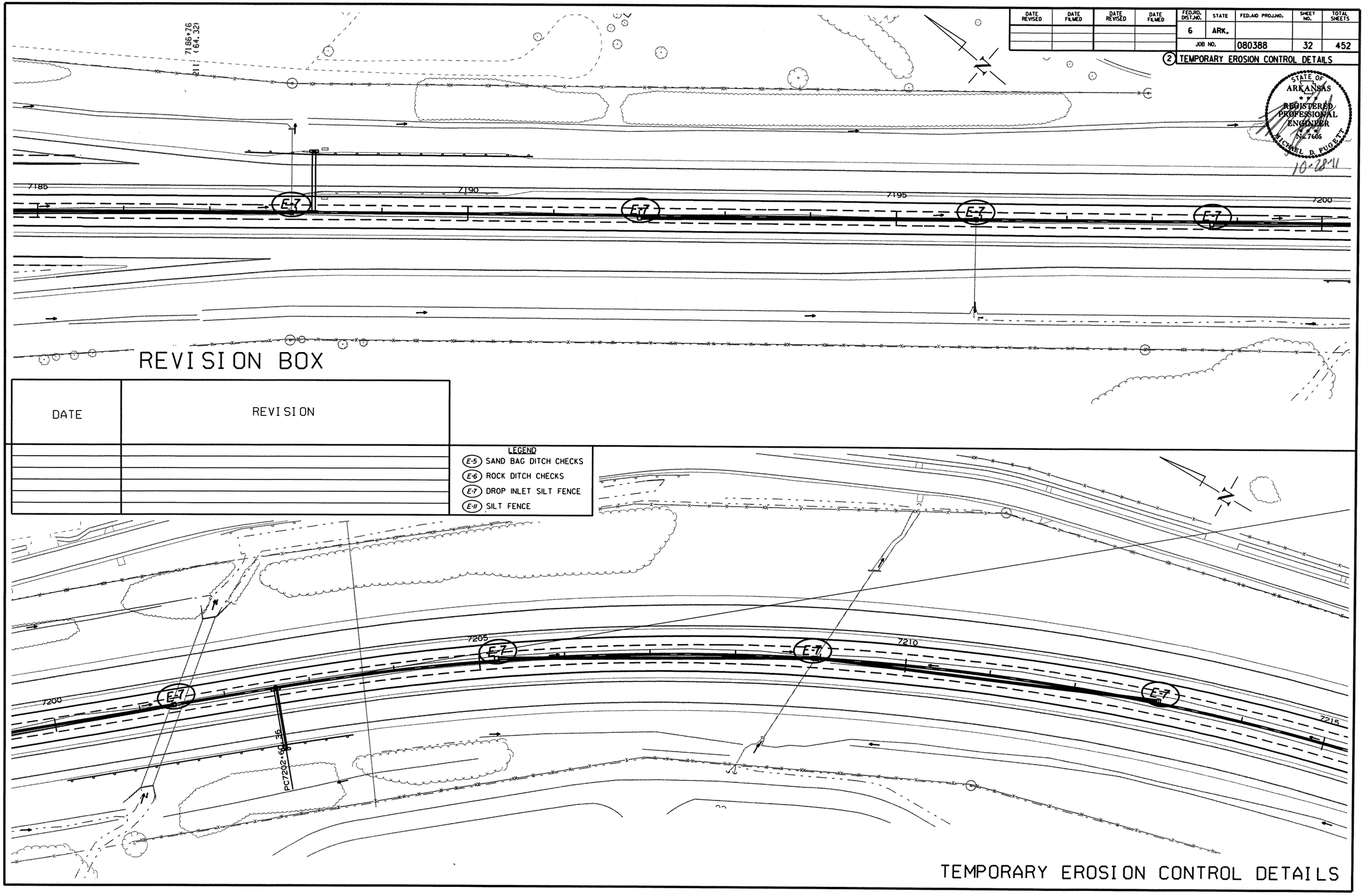
TEMPORARY EROSION CONTROL DETAILS

R080388.DGN 8/24/2011

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.		080388	32	452

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
12760
MICHAEL D. FUGETT
10-28-11



REVISION BOX

DATE	REVISION

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

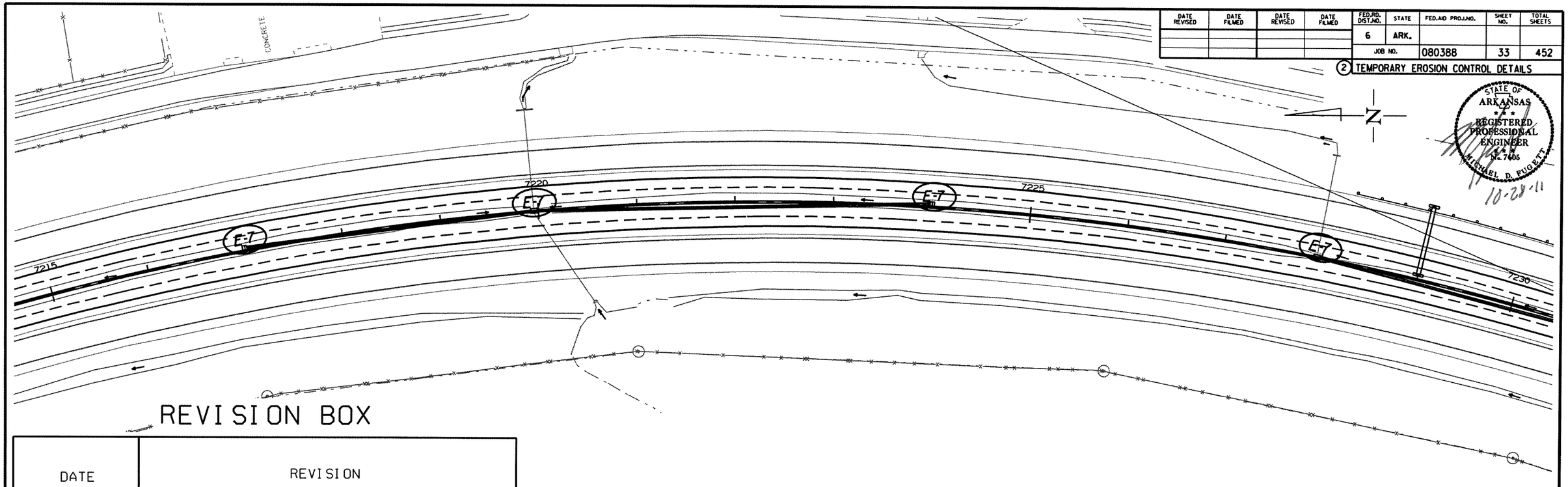
R080388.DGN 8/24/2011

TEMPORARY EROSION CONTROL 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.		080388	33	452

(2) TEMPORARY EROSION CONTROL DETAILS

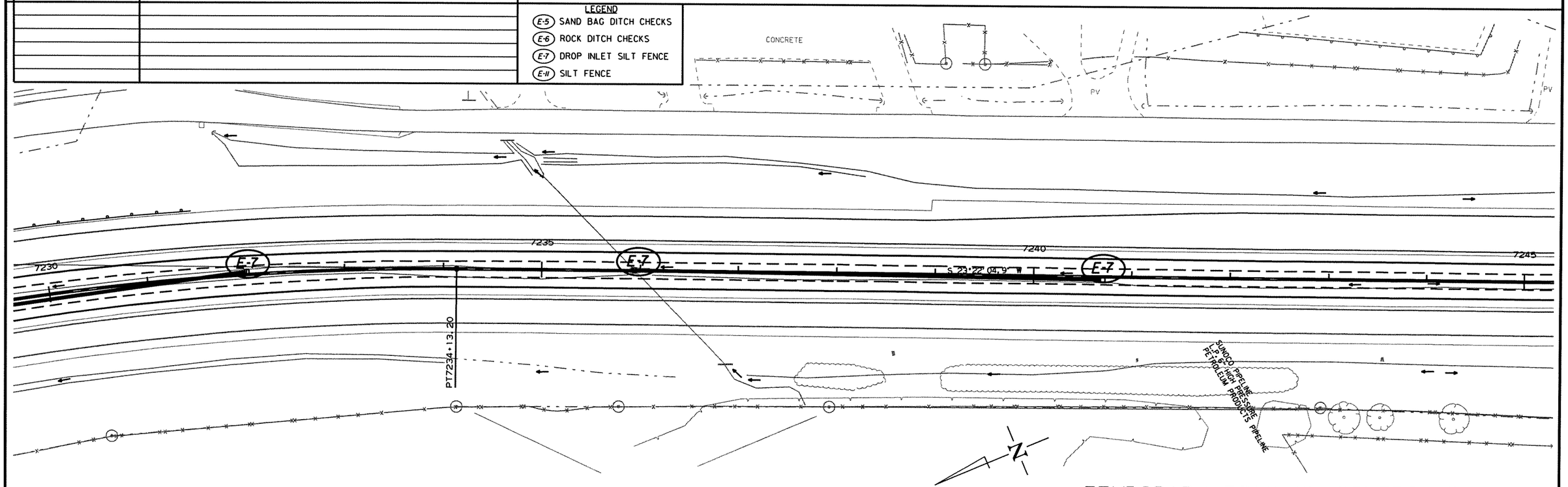
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7405
MICHAEL D. FUGETT
10-28-11



REVISION BOX

DATE	REVISION

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



TEMPORARY EROSION CONTROL DETAILS

R080388.DGN 8/24/2011

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.		080388	34	452

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-26-11

PC 7246+74.42

REVISION BOX

DATE	REVISION

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

Pedunton

TEMPORARY EROSION CONTROL DETAILS

R080388.DGN 8/24/2011

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.		080388	35	452

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11

REVISION BOX

DATE	REVISION

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

7275 7280 7285 7290 7295 7300 7305

PI 7295+58.15

S 13°15'35.8" E

POND

N

TEMPORARY EROSION CONTROL DETAILS

R080388.DGN 8/24/2011

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.		080388	36	452

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
12705
MICHAEL D. FUGETT
10-28-11

7305 7310 7315 7320

S 13°15'35.8" E

E-7 E-7 E-7 E-7

REVISION BOX

DATE	REVISION

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

7320 7325 7327 8040 8042 7330

S 13°15'35.8" E

E-7 E-7 E-7

E-11 E-11 E-11 E-11 E-11 E-11

166°44'52"

166°45'27"

Eqn 7330+00.00
Eqn 7327+07.60

TY-END OF WATER 7/5/11

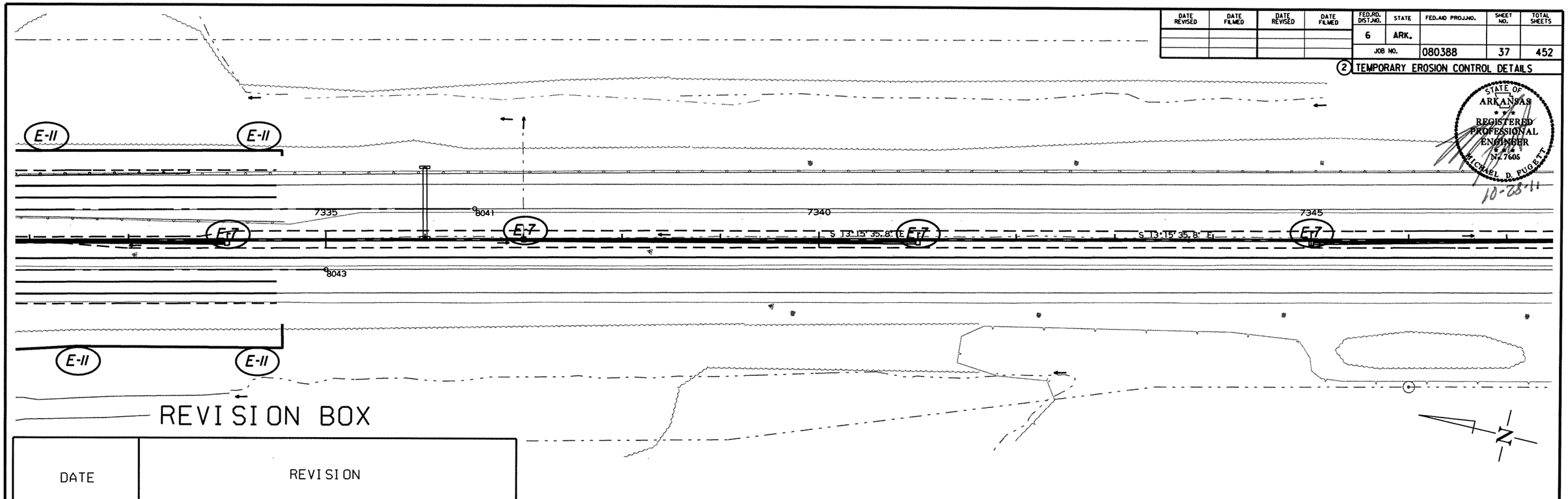
TEMPORARY EROSION CONTROL DETAILS

R080388.DGN 8/24/2011

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.		080388	37	452

(2) TEMPORARY EROSION CONTROL DETAILS

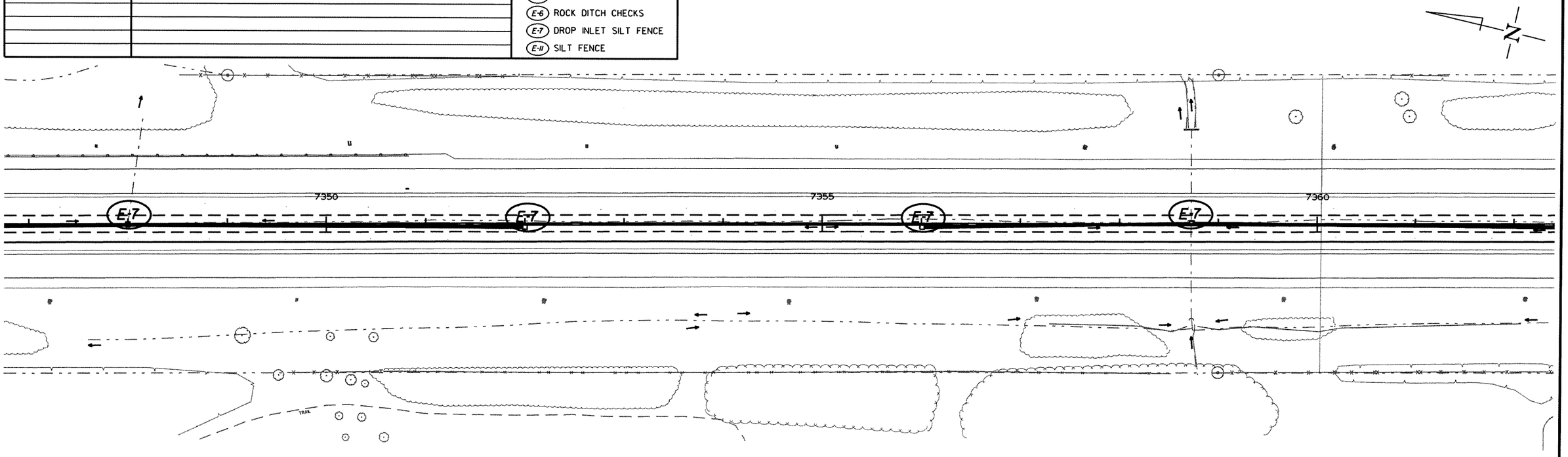
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
NO. 7605
MICHAEL D. RUGGETT
10-28-11



REVISION BOX

DATE	REVISION

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



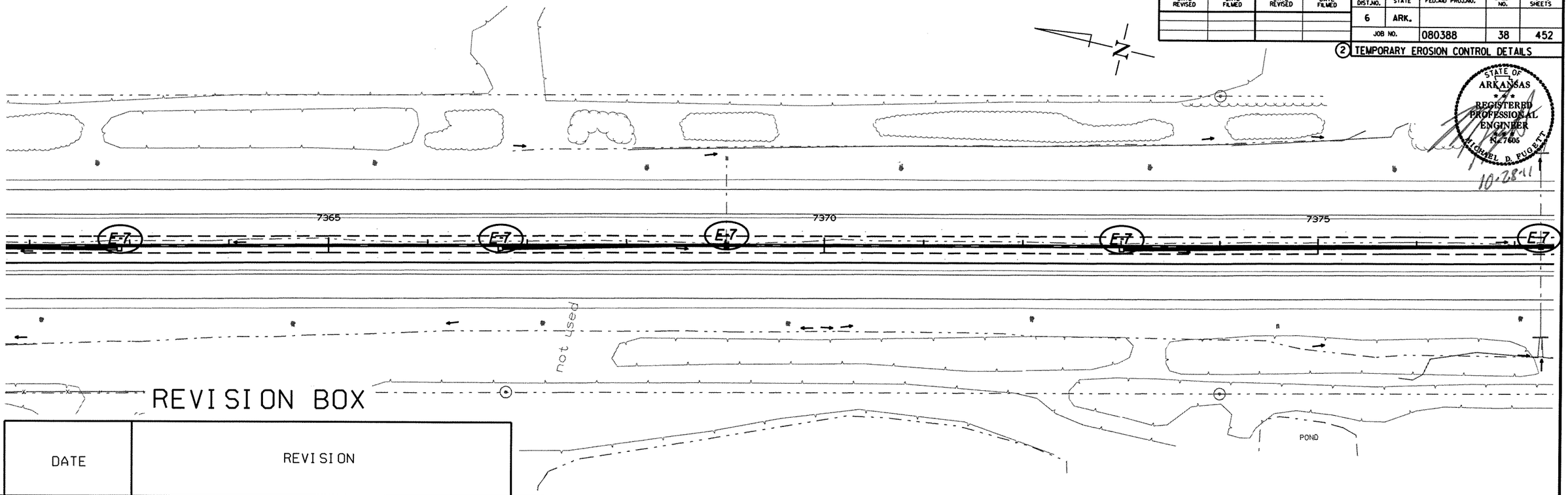
R080388.DGN 8/24/2011

TEMPORARY EROSION CONTROL 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.		080388	38	452

(2) TEMPORARY EROSION CONTROL DETAILS

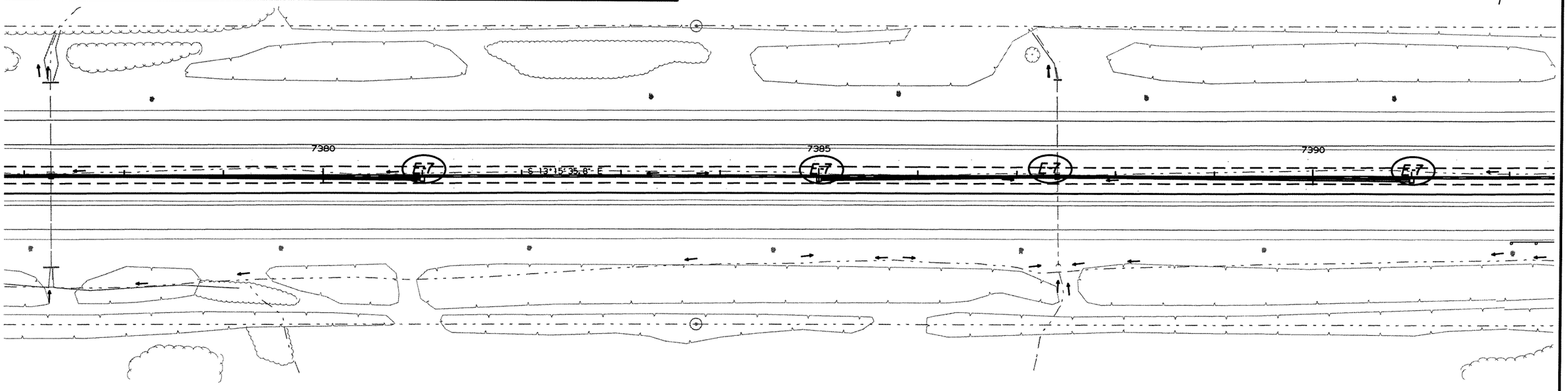
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
R.E.7605
MICHAEL D. FUGETT
10-28-11



REVISION BOX

DATE	REVISION

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



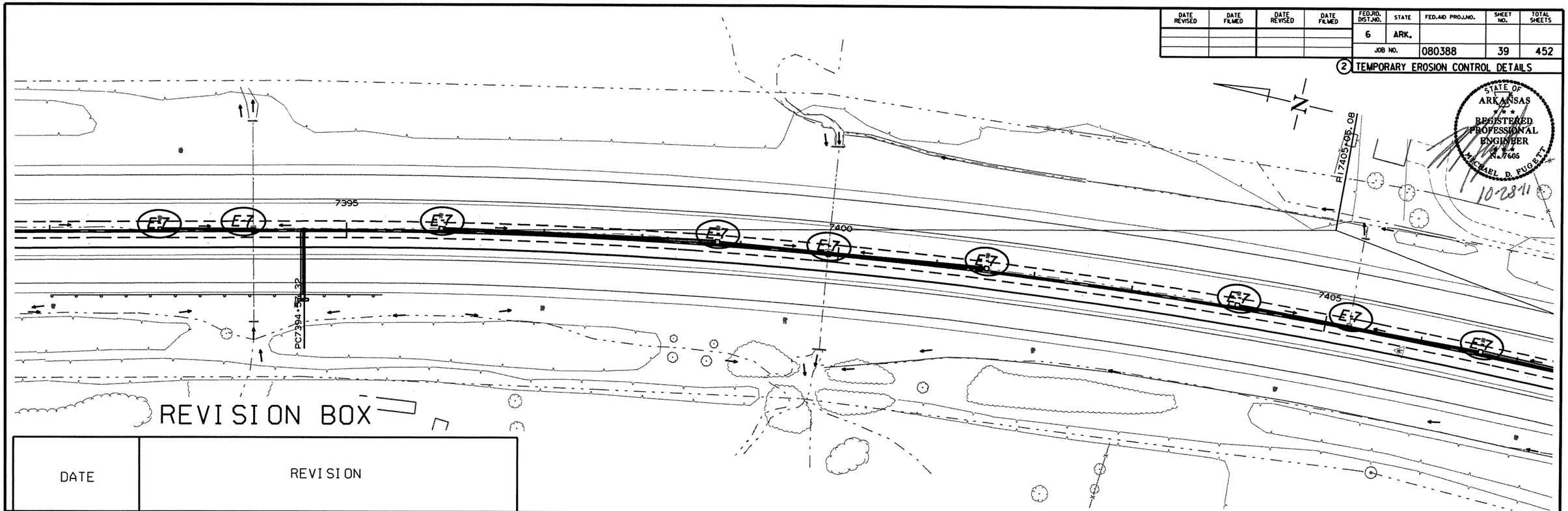
TEMPORARY EROSION CONTROL DETAILS

R080388.DGN 8/24/2011

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.		080388	39	452

(2) TEMPORARY EROSION CONTROL DETAILS

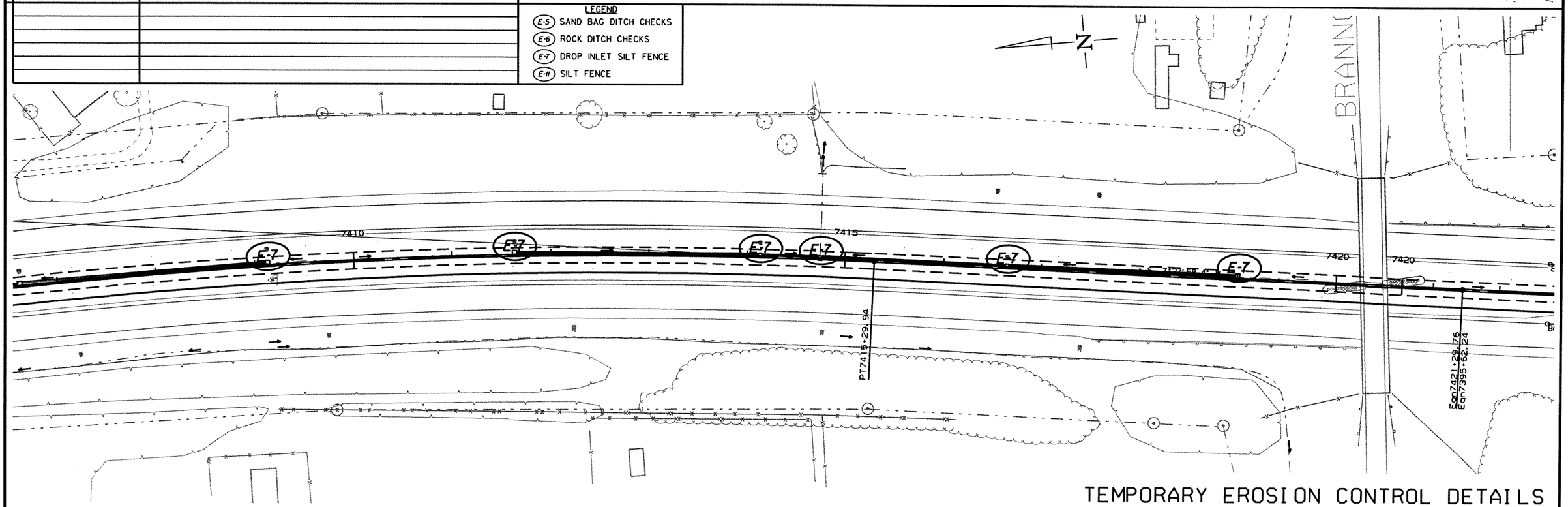
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11



REVISION BOX

DATE	REVISION

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



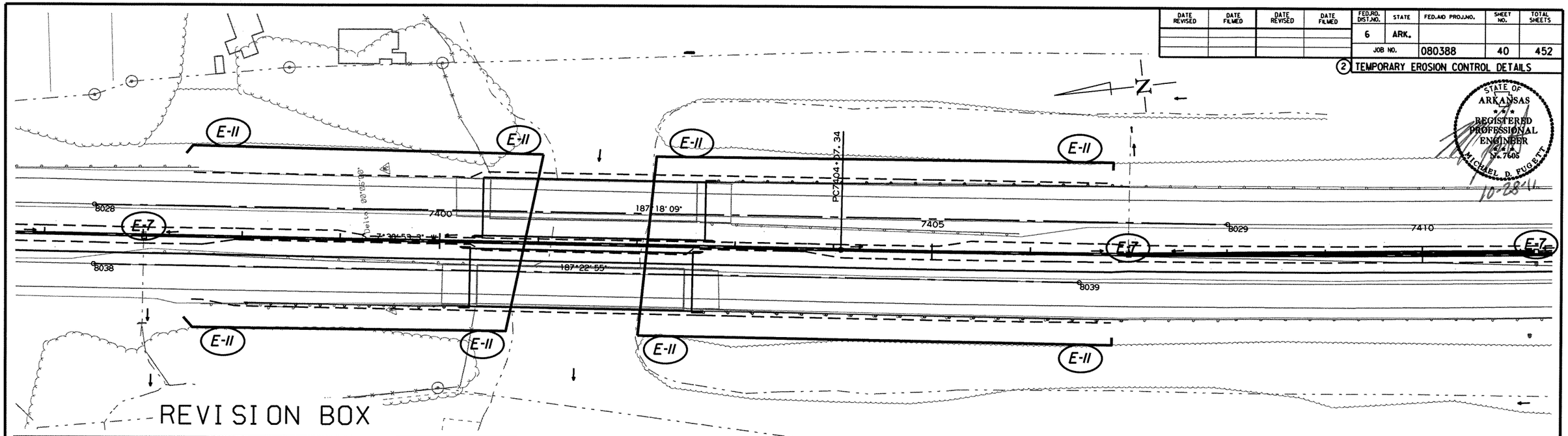
TEMPORARY EROSION CONTROL DETAILS

R080388.DGN 8/24/2011

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.		080388	40	452

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11

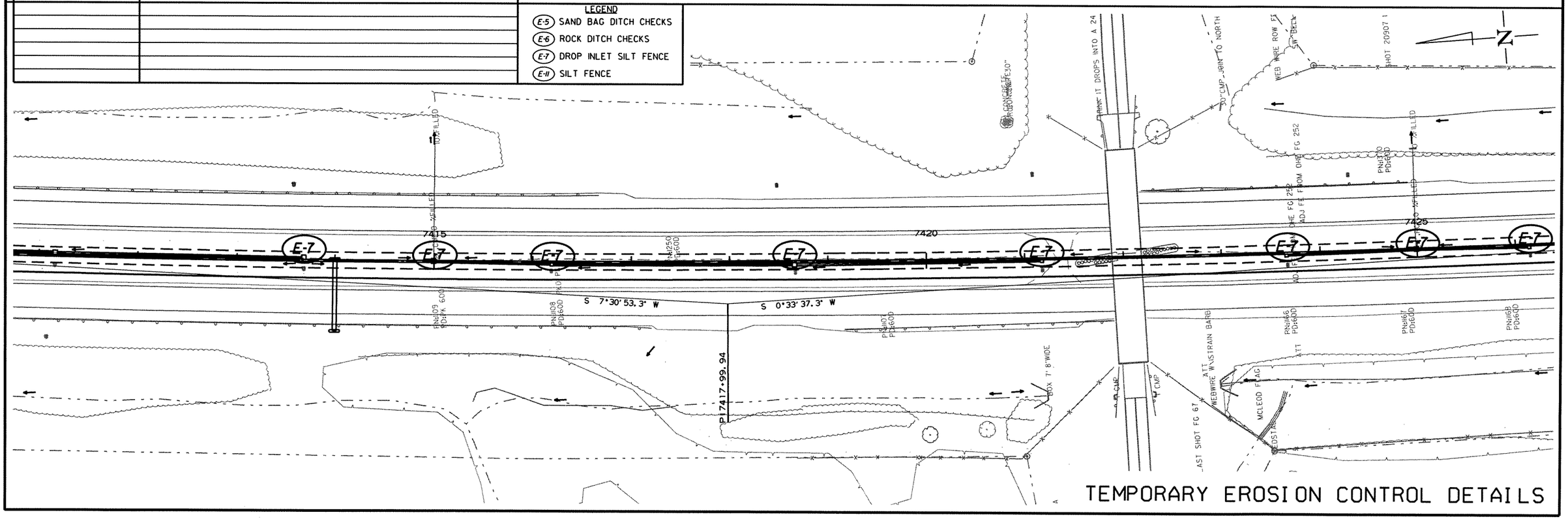


REVISION BOX

DATE	REVISION

LEGEND

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



TEMPORARY EROSION CONTROL DETAILS

R080388.DGN 8/24/2011

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.		080388	41	452

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11

REVISION BOX

DATE	REVISION

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

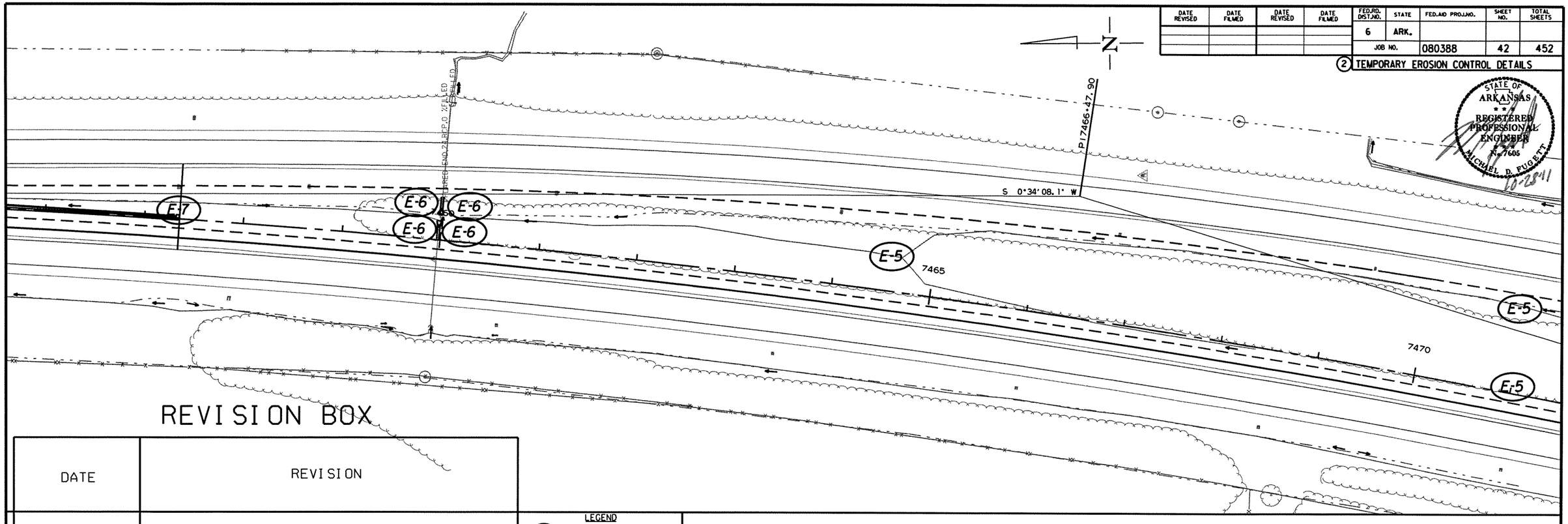
TEMPORARY EROSION CONTROL DETAILS

R080388.DGN 8/24/2011

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.		080388	42	452

(2) TEMPORARY EROSION CONTROL DETAILS

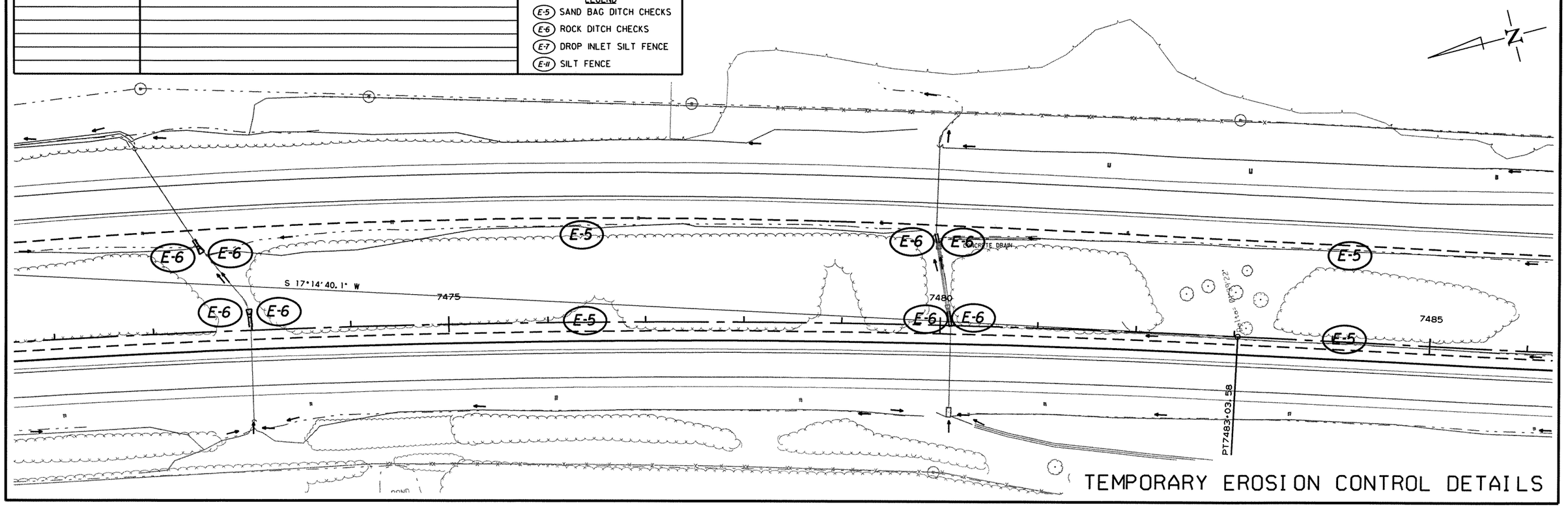
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. PUGETT
10-28-11



REVISION BOX

DATE	REVISION

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



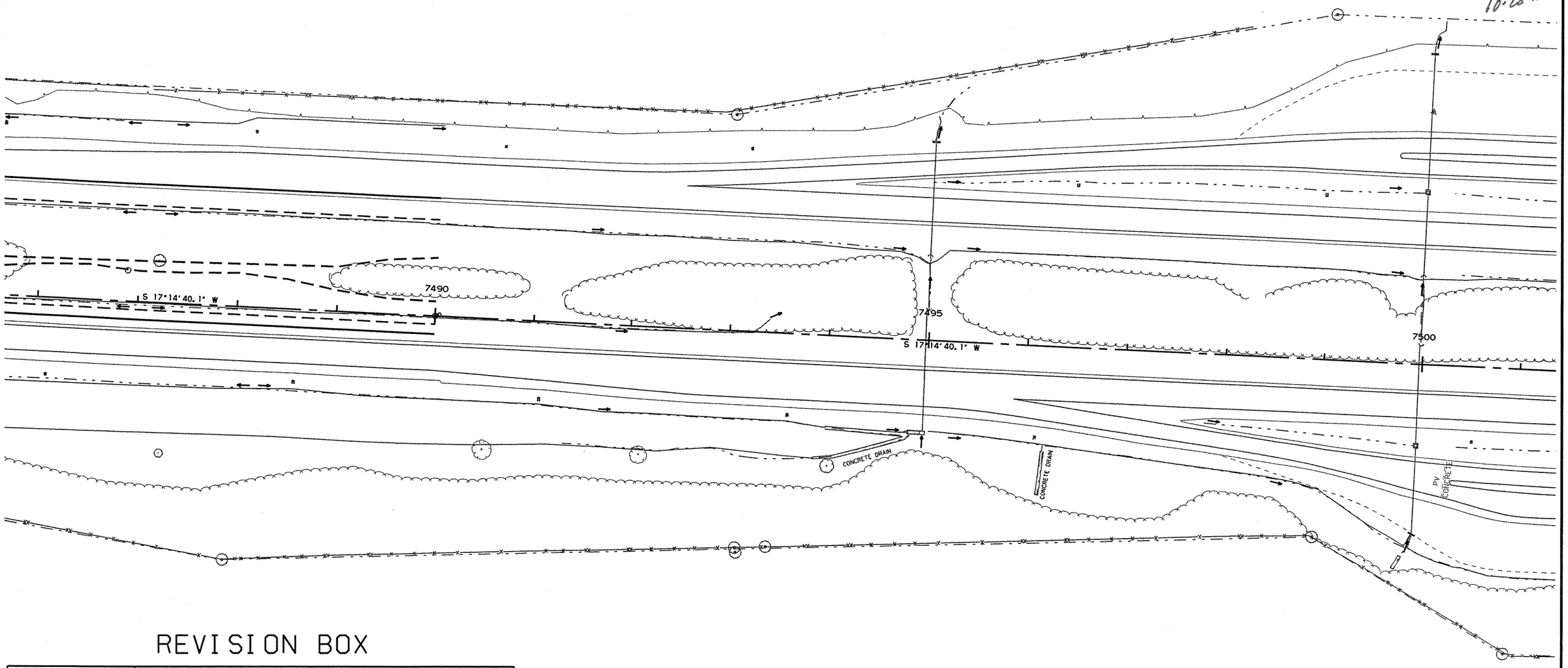
TEMPORARY EROSION CONTROL DETAILS

R080388.DGN 8/24/2011

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.		080388	43	452

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11



REVISION BOX

DATE	REVISION

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

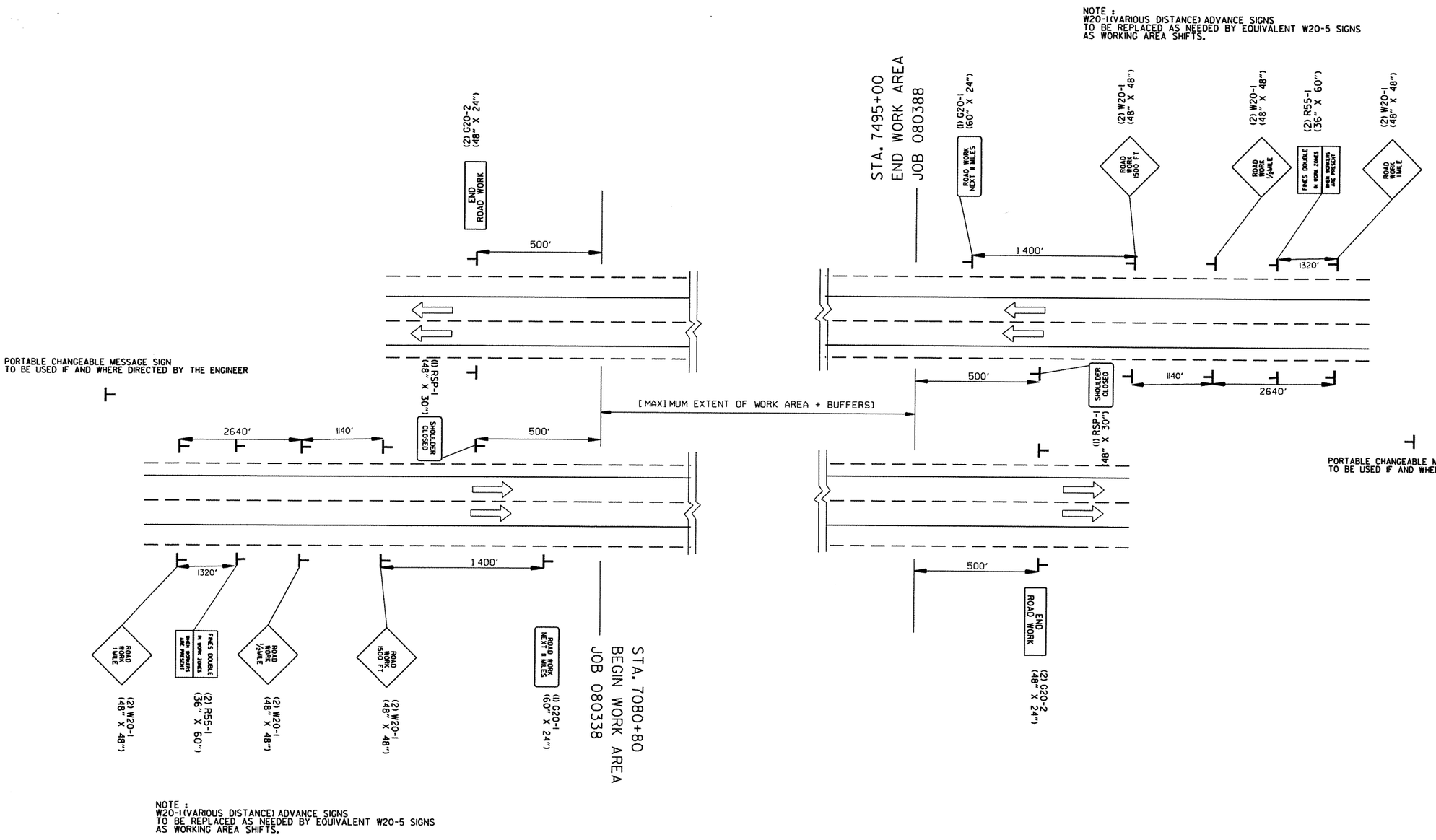
TEMPORARY EROSION CONTROL DETAILS

R080388.DGN 8/24/2011

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.		080388	44	452

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11



ADVANCE SIGNS AT BEGINNING AND END OF JOB
ALL STAGES

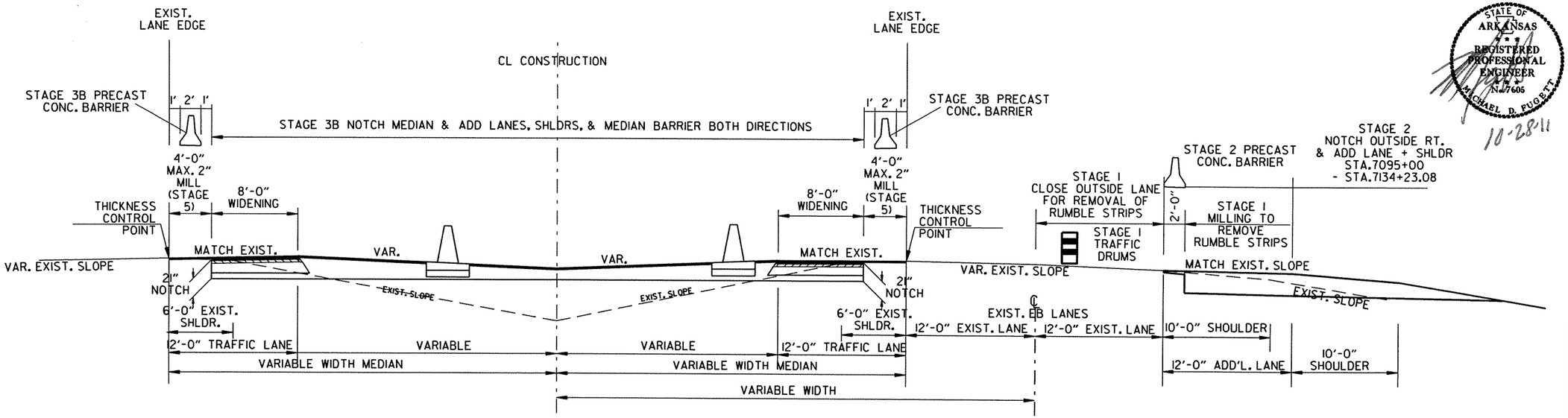
MAINTENANCE OF TRAFFIC
ADVANCE SIGNS AT JOB ENDS

r080388_mot.dgn MOT pages 8/29/2011

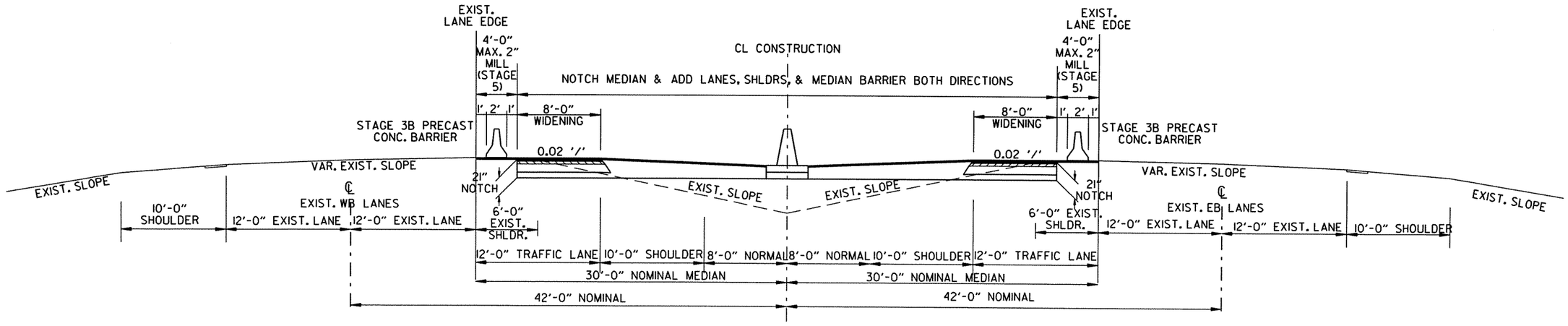
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	45	452

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 17605
MICHAEL D. PUGETT
10-28-11



DETAIL OF MEDIAN AND NB OUTSIDE SHOULDER
STA. 7085+00 - STA. 7134+39.67
STAGES 1, 2, & 3B



DETAIL OF STAGE 3 MEDIAN CONSTRUCTION BETWEEN BRIDGES

WESTBOUND LANES STAGE 3B
STA.7134+39.670 - STA.7145+00
STA.7195+00 - STA.7328+00
STA.7334+00 - STA.7398+00
STA.7405+00 - SA.7497+35

EASTBOUND LANES STAGE 3B
STA.7134+39.67 - STA.7145+00
STA.7195+00 - STA.7328+00
STA.7334+00 - STA.7398+20
STA.7405+00 - STA.7497+35

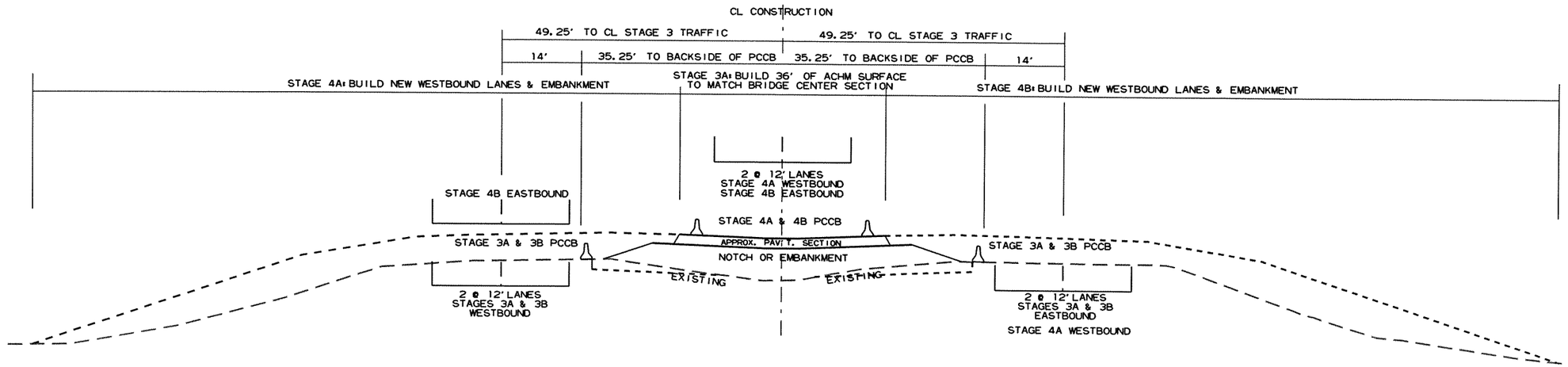
MAINTENANCE OF TRAFFIC DETAILS OF MEDIAN AND OUTSIDE SHOULDERS

r080388_mot.dgn MOT pages 10/25/2011

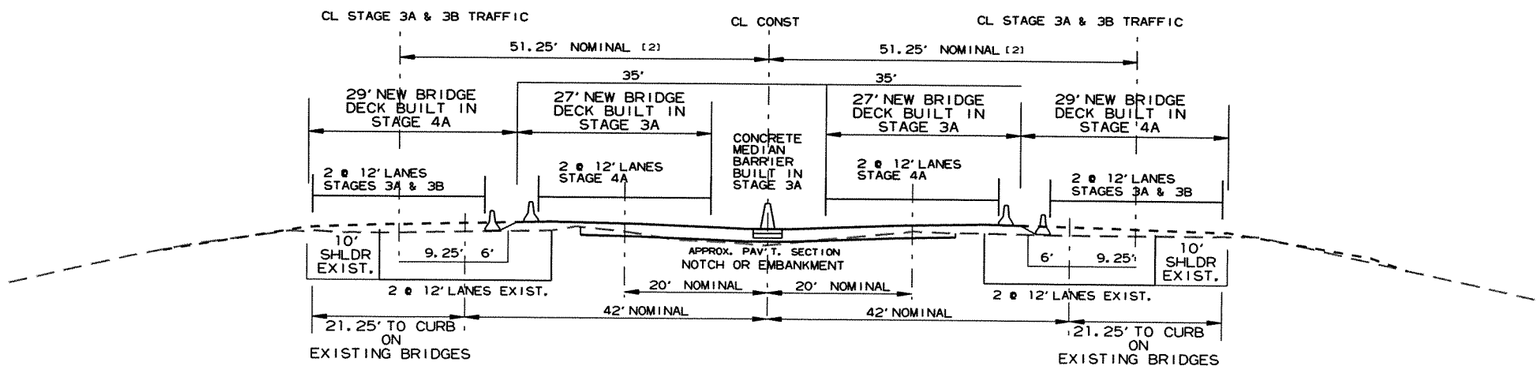
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	46	452

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7685
MICHAEL D. FUGETT
10-28-11



STAGE CONSTRUCTION AT HWY. 64 OVERPASS APPROACHES
STA. 7145+00 - STA. 7195+00
STAGES 3A THRU 4B



GOLD CREEK & STONE DAM CREEK BRIDGES & APPROACHES

STA. 7328+00 - STA. 7334+00
STA. 7398+00 - STA. 7405+00

STAGES 3A THRU 4B

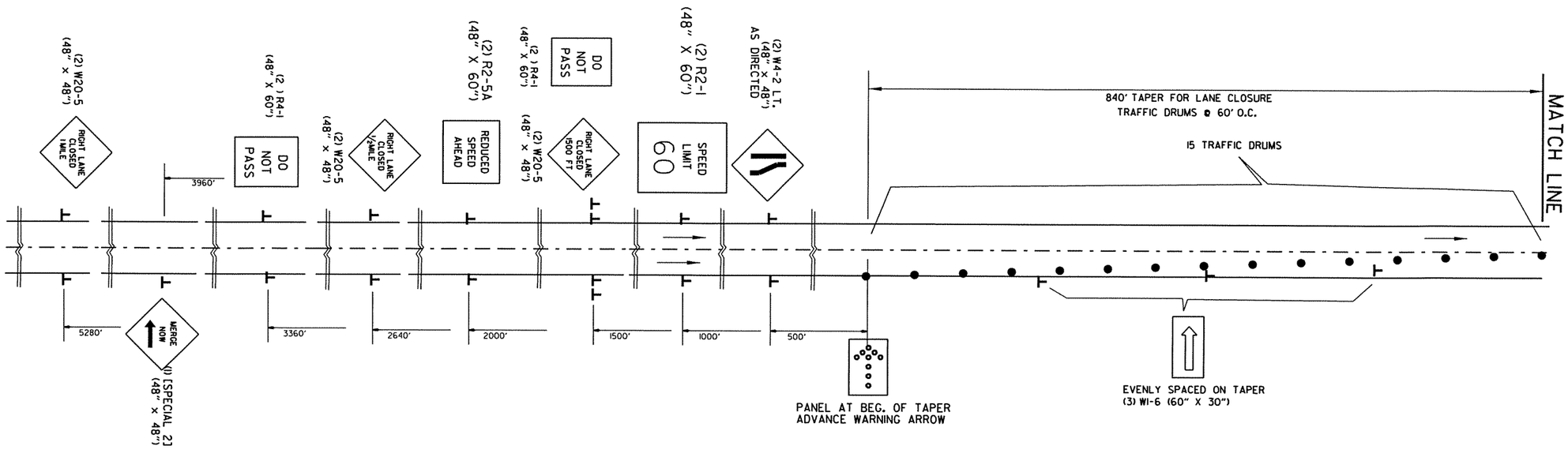
MAINTENANCE OF TRAFFIC SEQUENCE OF CONSTRUCTION AT BRIDGE APPROACHES STATES 3A THRU 4B

r080388_mot.dgn MDT pages 10/25/2011

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.		080388	47	452

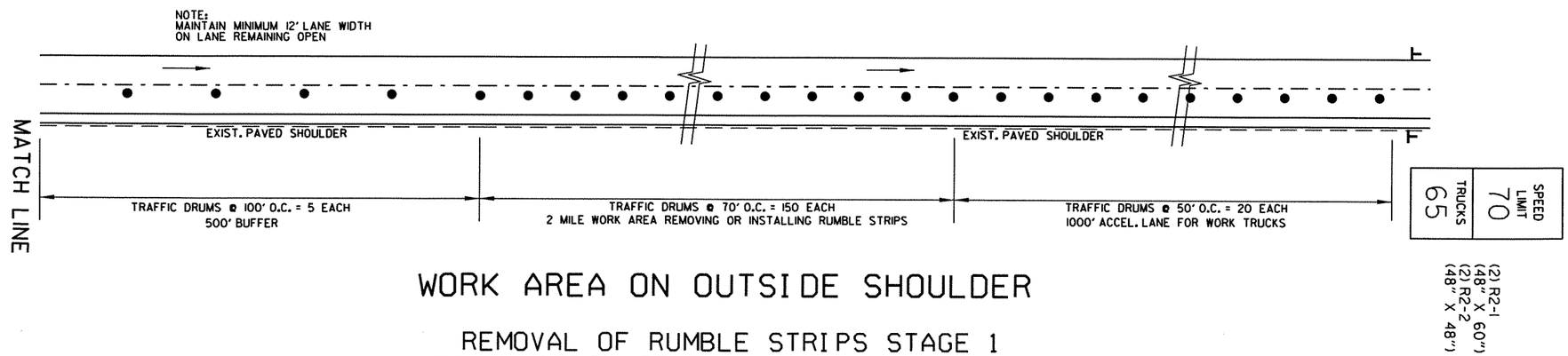
(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7506
MICHAEL D. FUGETT
10-28-11



LANE CLOSURE FOR WORK ON OUTSIDE SHOULDERS

NOTE:
QUANTITIES GIVEN ARE FOR ONE WORK AREA IN EACH DIRECTION AT THE SAME TIME.



WORK AREA ON OUTSIDE SHOULDER

REMOVAL OF RUMBLE STRIPS STAGE 1
INSTALLATION OF RUMBLE STRIPS STAGE 6

STAGE I OPERATIONS

CLOSE OUTSIDE LANES AND
REMOVE RUMBLE STRIPS WHERE SHOWN ON PLANS.

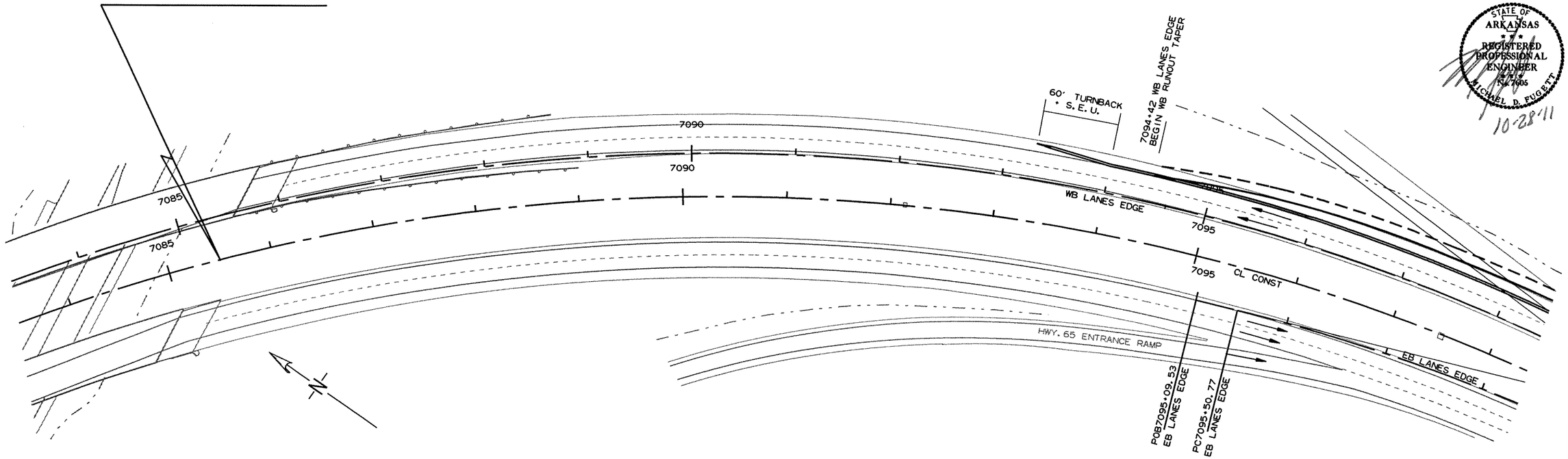
MAINTENANCE OF TRAFFIC
OUTSIDE-LANE CLOSURE STAGES 1 & 6

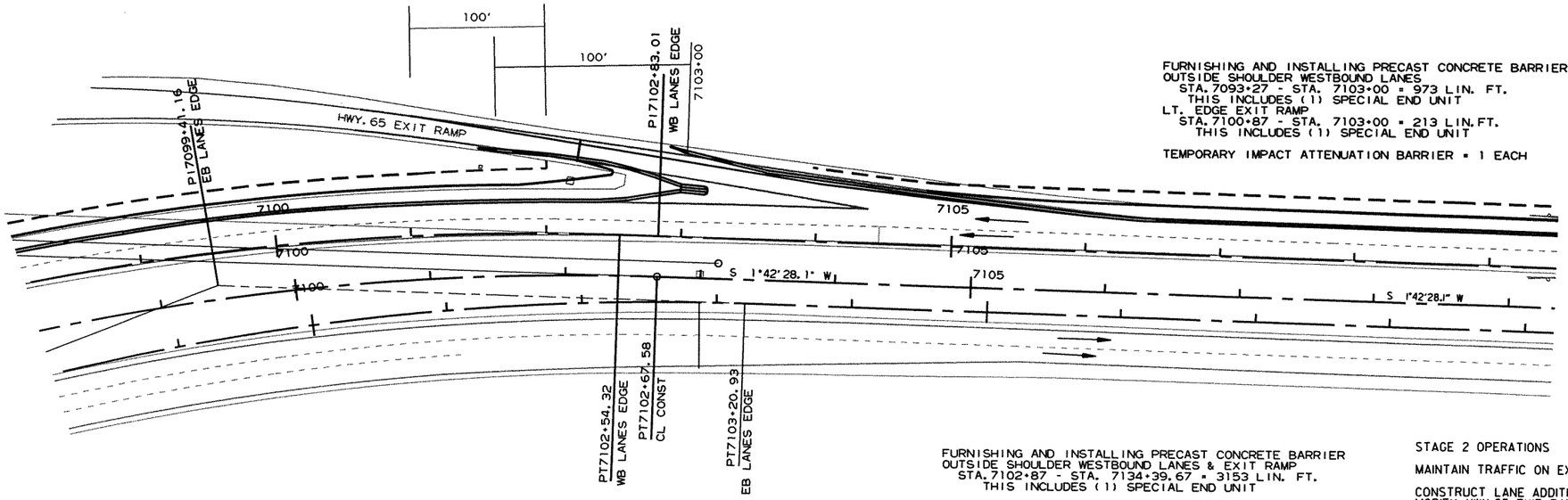
r080388_mot.dgn MOT pages 10/26/2011

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.		080388	48	452

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11





FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER
OUTSIDE SHOULDER WESTBOUND LANES
STA. 7093+27 - STA. 7103+00 = 973 LIN. FT.
THIS INCLUDES (1) SPECIAL END UNIT
LT. EDGE EXIT RAMP
STA. 7100+87 - STA. 7103+00 = 213 LIN. FT.
THIS INCLUDES (1) SPECIAL END UNIT

TEMPORARY IMPACT ATTENUATION BARRIER = 1 EACH

FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER
OUTSIDE SHOULDER WESTBOUND LANES & EXIT RAMP
STA. 7102+87 - STA. 7134+39.67 = 3153 LIN. FT.
THIS INCLUDES (1) SPECIAL END UNIT

STRIPING SYMBOLISM:
UNDISTURBED EXISTING STRIPING - - - - - - - -
NEW SKIP LINE — — — — — — — —
NEW SOLID LINE ————————

STAGE 2 OPERATIONS

MAINTAIN TRAFFIC ON EXISTING LANES

CONSTRUCT LANE ADDITION ON OUTSIDE OF WESTBOUND LANES
MODIFY HWY.65 EXIT RAMP TURNOUT

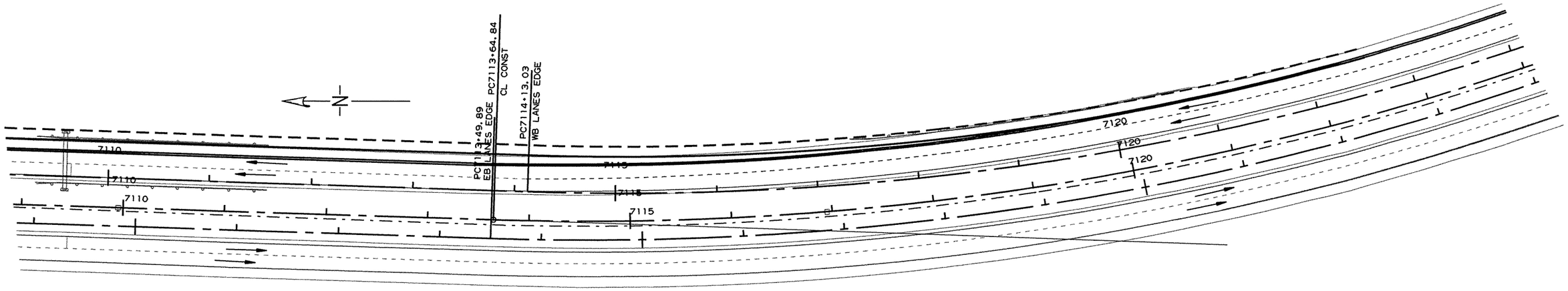
MAINTENANCE OF TRAFFIC STAGE 2

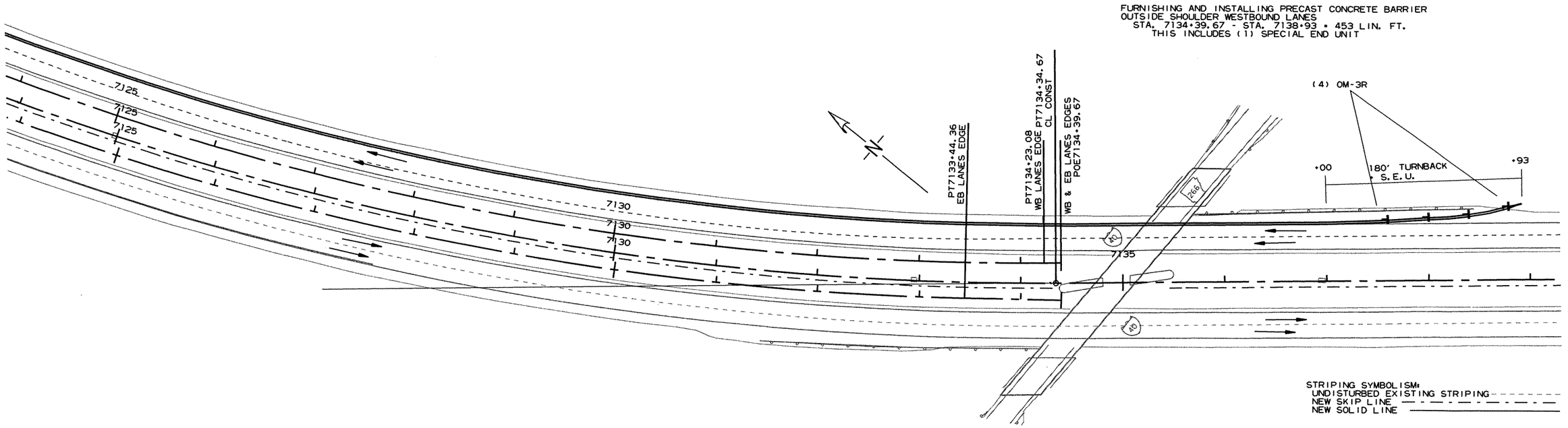
r080388_mot.dgn MOT pages 10/26/2011

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.		080388	49	452

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11





MAINTENANCE OF TRAFFIC STAGE 2

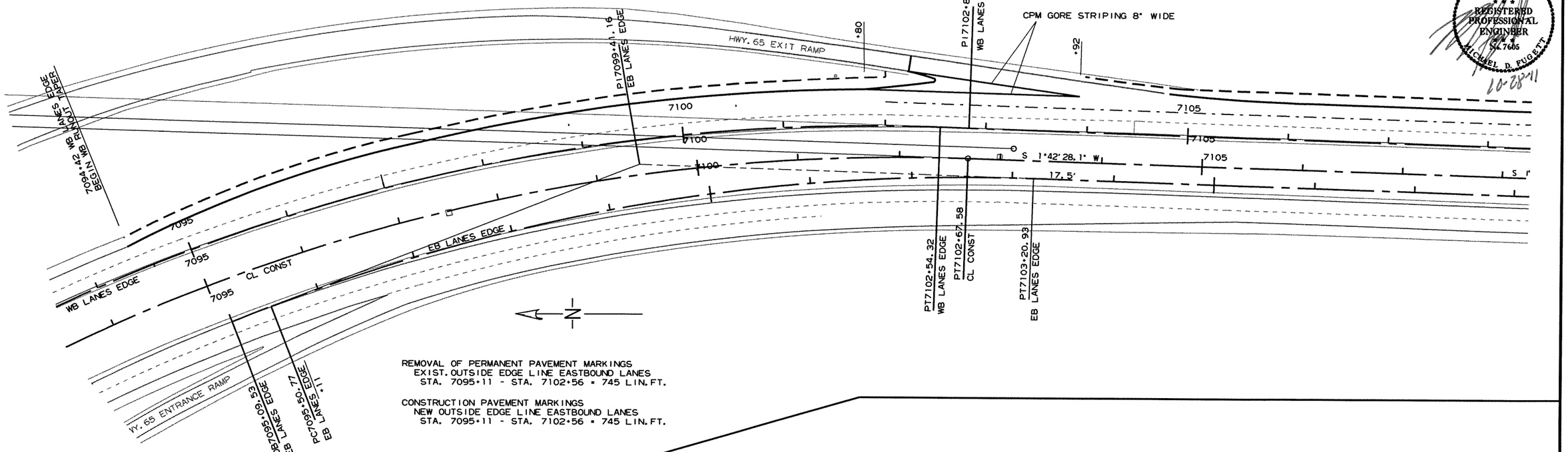
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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	50	452

(2) MAINTENANCE OF TRAFFIC

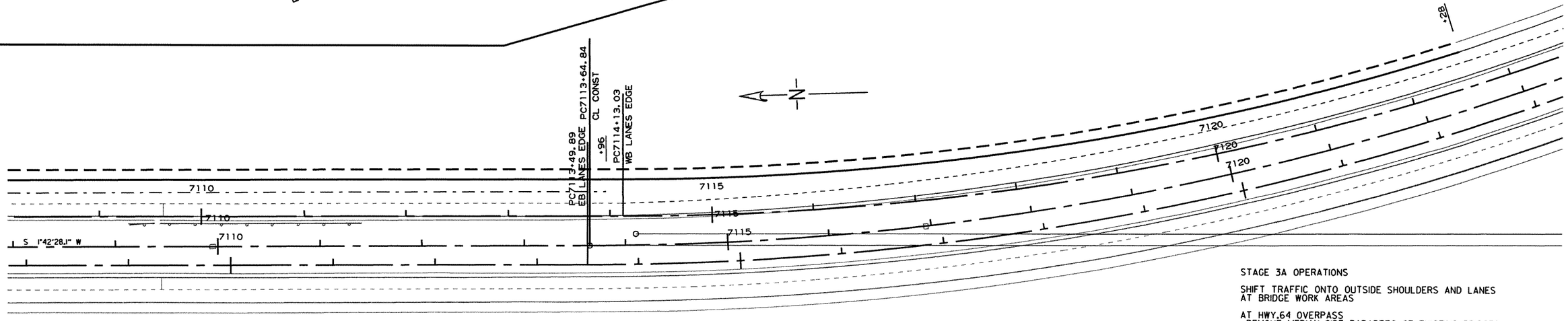
REMOVAL OF PERMANENT PAVEMENT MARKINGS
EXIST. OUTSIDE EDGE LINE WESTBOUND LANES
STA. 7094+42 - STA. 7104+38 = 1216 LIN. FT.
STA. 7104+80 - STA. 7134+39.67 = 2960 LIN. FT.

CONSTRUCTION PAVEMENT MARKINGS
EXIT RAMP GORE WESTBOUND LANES
WB LANES EDGE STA. 7101+80 - STA. 7103+92 = 387 LIN. FT.
OUTSIDE EDGE LINE WESTBOUND LANES
WB LANES EDGE STA. 7094+42 - STA. 7101+80 = 738 LIN. FT.
WB LANES EDGE STA. 7104+80 - STA. 7134+39.97 = 2960 LIN. FT.
SKIP LANE DIVIDER OUTSIDE LANE
WB LANES EDGE STA. 7102+00 - STA. 7113+96 = 300 LIN. FT.



REMOVAL OF PERMANENT PAVEMENT MARKINGS
EXIST. OUTSIDE EDGE LINE EASTBOUND LANES
STA. 7095+11 - STA. 7102+56 = 745 LIN. FT.

CONSTRUCTION PAVEMENT MARKINGS
NEW OUTSIDE EDGE LINE EASTBOUND LANES
STA. 7095+11 - STA. 7102+56 = 745 LIN. FT.



STAGE 3A OPERATIONS

SHIFT TRAFFIC ONTO OUTSIDE SHOULDERS AND LANES AT BRIDGE WORK AREAS

AT HWY.64 OVERPASS
REMOVE MEDIAN-SIDE PARAPETS OF EXISTING BRIDGES
CONSTRUCT CENTER PORTION OF NEW BRIDGE
RAISE GRADE ON APPROACHES IN MEDIAN;
CONSTRUCT FULL-DEPTH PAVEMENT FOR THESE SHOULDERS

AT STONE DAM AND GOLD CREEKS
REMOVE MEDIAN-SIDE PARAPETS OF EXISTING BRIDGES
CONSTRUCT INSIDE LANES AND SHOULDERS OF NEW BRIDGES
RAISE GRADE TO MATCH NEW BRIDGE ELEVATIONS;
CONSTRUCT FULL-DEPTH PAVEMENT FOR THESE SHOULDERS

STRIPING SYMBOLISM:
UNDISTURBED EXISTING STRIPING - - - - - - - -
NEW SKIP LINE — · — · — · —
NEW SOLID LINE ————————

MAINTENANCE OF TRAFFIC
STAGE 3A HWY. 64 OVERPASS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11

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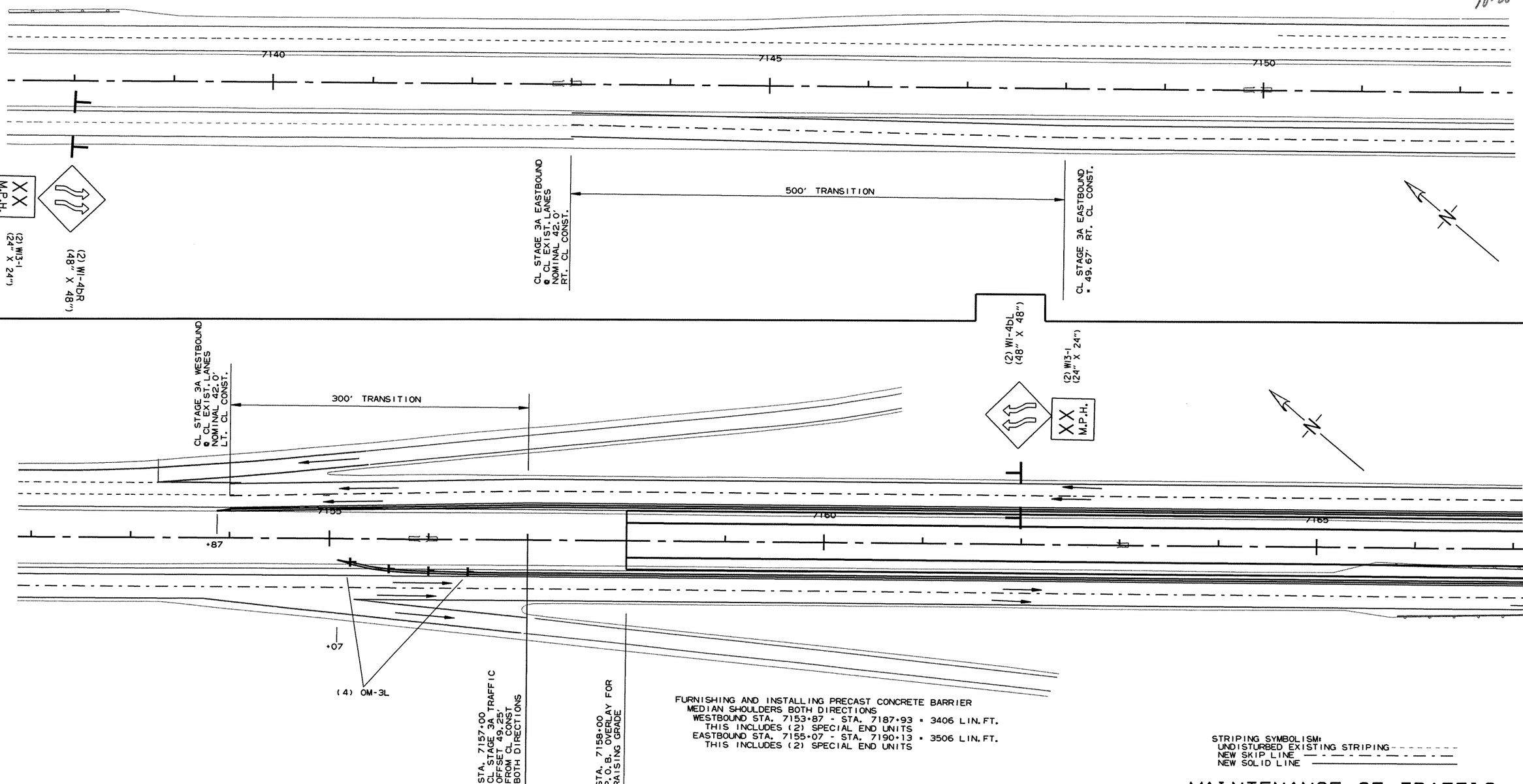
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	51	452

(2) MAINTENANCE OF TRAFFIC

REMOVAL OF PERMANENT PAVEMENT MARKINGS
OUTSIDE EDGE LINES + SKIP LANE DIVIDERS BOTH DIRECTIONS
EASTBOUND STA. 7143+00 - STA. 7198+00 = 6875 LIN. FT.
WESTBOUND STA. 7154+00 - STA. 7190+00 = 4500 LIN. FT.

REMOVABLE CONSTRUCTION PAVEMENT MARKINGS
LT. & RT. EDGE LINES + SKIP LANE DIVIDERS BOTH DIRECTIONS
EASTBOUND STA. 7143+00 - STA. 7198+00 = 12375 LIN. FT.
WESTBOUND STA. 7154+00 - STA. 7190+00 = 8100 LIN. FT.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
14760
MICHAEL D. FUGETT
10-28-11



FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER
MEDIAN SHOULDERS BOTH DIRECTIONS
WESTBOUND STA. 7153+87 - STA. 7187+93 = 3406 LIN. FT.
THIS INCLUDES (2) SPECIAL END UNITS
EASTBOUND STA. 7155+07 - STA. 7190+13 = 3506 LIN. FT.
THIS INCLUDES (2) SPECIAL END UNITS

STRIPING SYMBOLISM:
UNDISTURBED EXISTING STRIPING
NEW SKIP LINE
NEW SOLID LINE

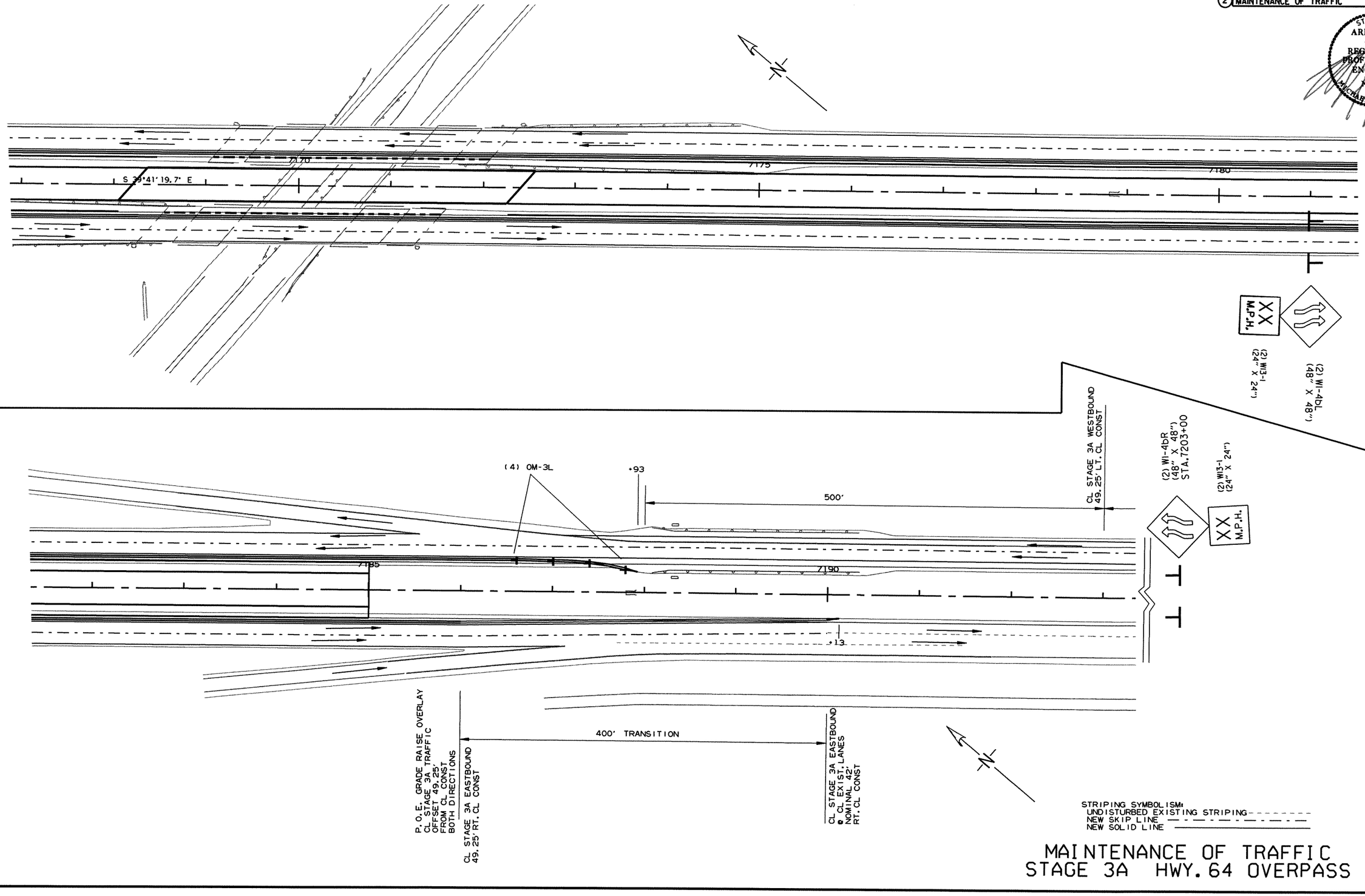
MAINTENANCE OF TRAFFIC
STAGE 3A HWY. 64 OVERPASS

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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.		080388	52	452

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
12760
MICHAEL D. FUGETT
10-28-11



STRIPING SYMBOLISM:
UNDISTURBED EXISTING STRIPING
NEW SKIP LINE
NEW SOLID LINE

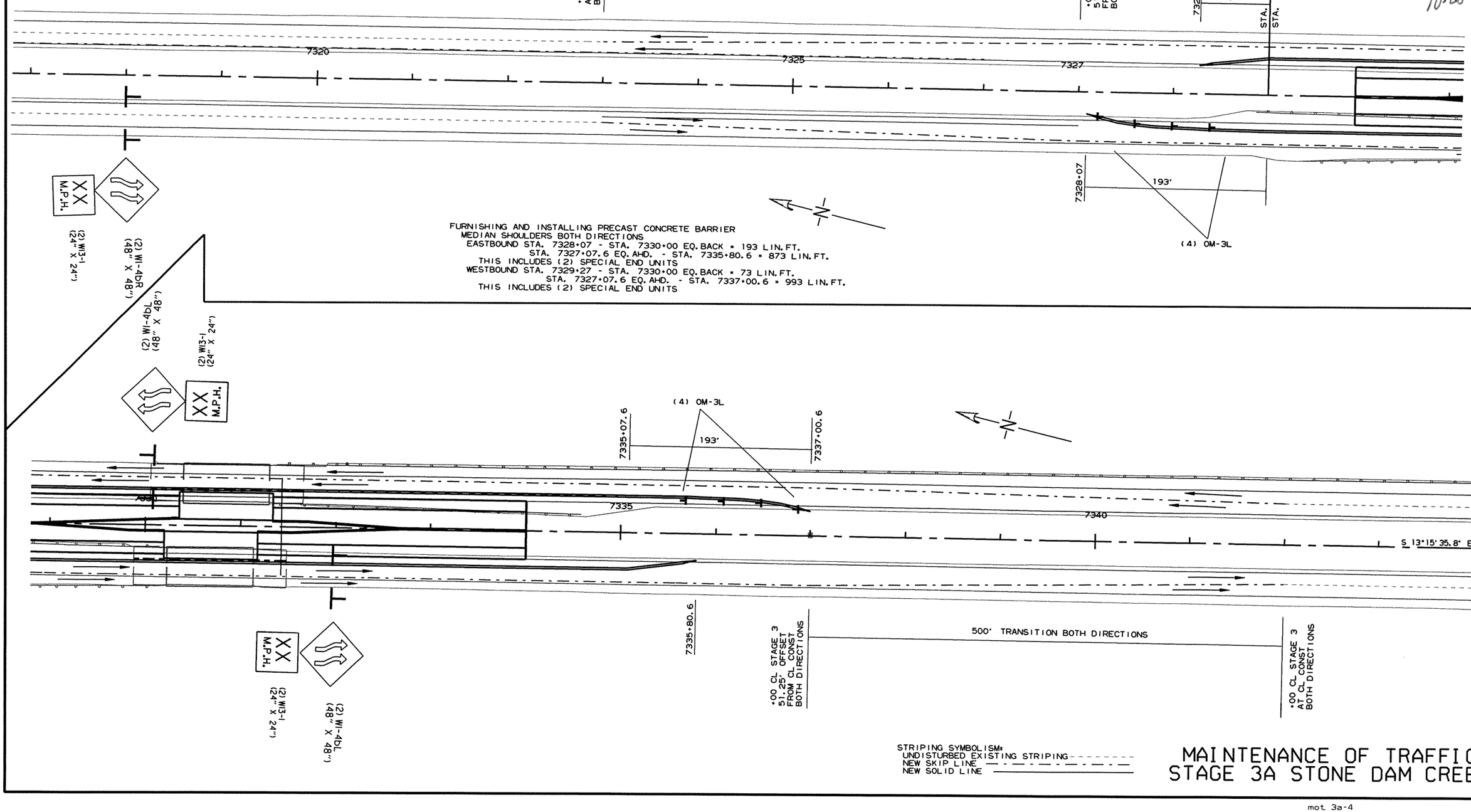
MAINTENANCE OF TRAFFIC
STAGE 3A HWY. 64 OVERPASS

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				6	ARK.			
				JOB NO.		080388	53	452

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. PUGETT
10-28-11



FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER
MEDIAN SHOULDERS BOTH DIRECTIONS
EASTBOUND STA. 7328+07 - STA. 7330+00 EQ. BACK = 193 LIN. FT.
STA. 7327+07.6 EQ. AHD. - STA. 7335+80.6 = 873 LIN. FT.
THIS INCLUDES (2) SPECIAL END UNITS
WESTBOUND STA. 7329+27 - STA. 7330+00 EQ. BACK = 73 LIN. FT.
STA. 7327+07.6 EQ. AHD. - STA. 7337+00.6 = 993 LIN. FT.
THIS INCLUDES (2) SPECIAL END UNITS

STRIPING SYMBOLISM:
UNDISTURBED EXISTING STRIPING
NEW SKIP LINE
NEW SOLID LINE

MAINTENANCE OF TRAFFIC STAGE 3A STONE DAM CREEK

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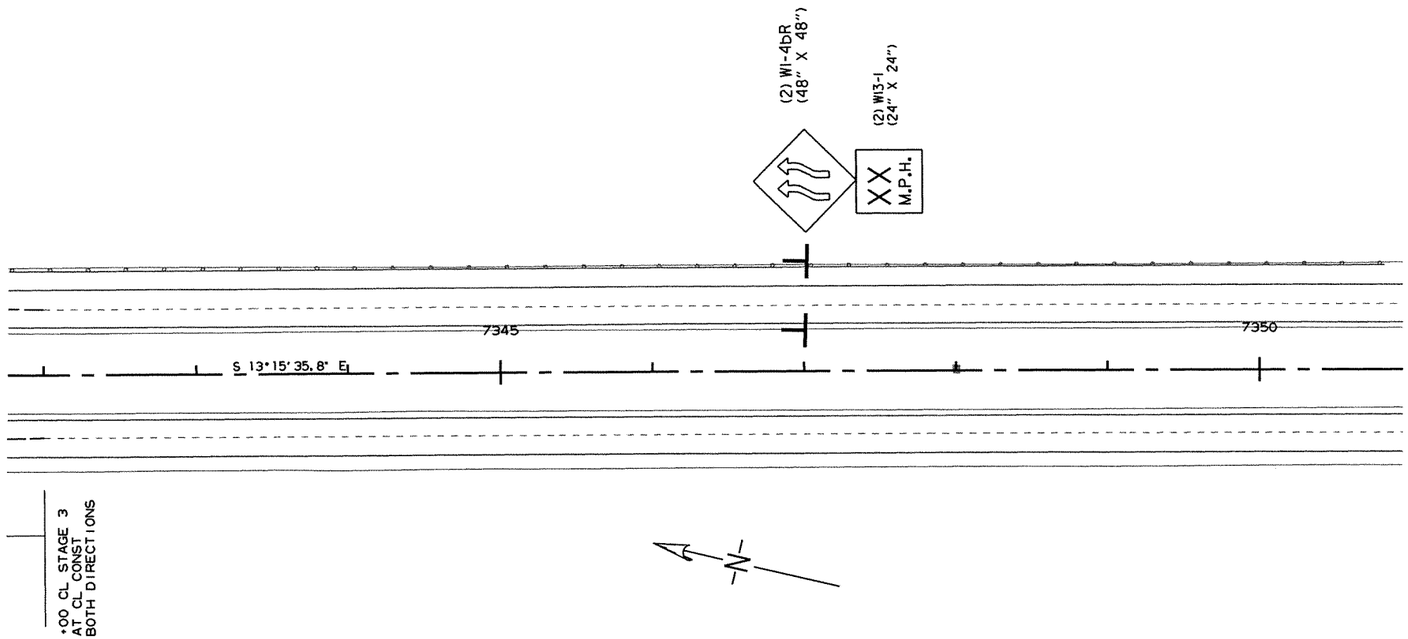
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				6	ARK.			
				JOB NO.		080388	54	452

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
14276
MICHAEL D. FUGETT
10-28-11

REMOVAL OF PERMANENT PAVEMENT MARKINGS
OUTSIDE EDGE LINES + SKIP LANE DIVIDERS BOTH DIRECTIONS
STA. 7323+00 THROUGH THE EQUATION TO STA. 7342+00 = 5481 LIN. FT.

REMOVABLE CONSTRUCTION PAVEMENT MARKINGS
LT & RT. EDGE LINES + SKIP LANE DIVIDERS BOTH DIRECTIONS
STA. 7323+00 THROUGH THE EQUATION TO STA. 7342+00 = 9866 LIN. FT.



STRIPING SYMBOLISM:
UNDISTURBED EXISTING STRIPING
NEW SKIP LINE
NEW SOLID LINE

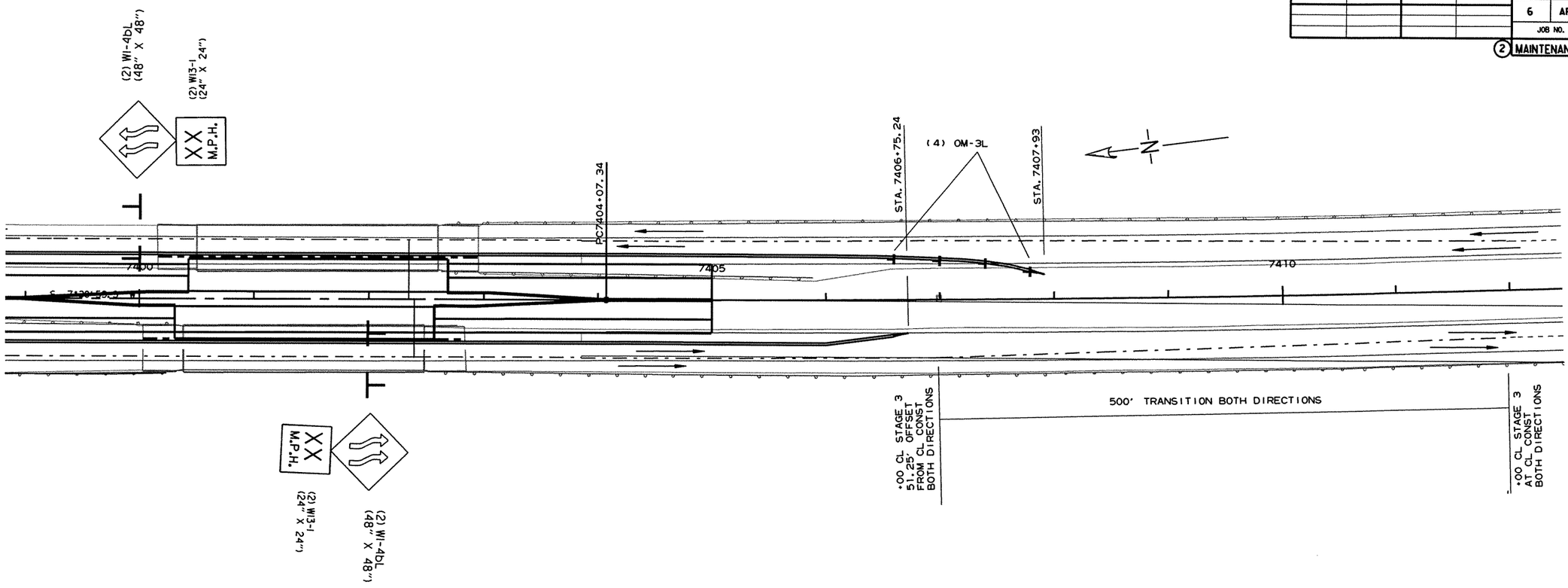
MAINTENANCE OF TRAFFIC STAGE 3A GOLD CREEK

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				JOB NO.		080388	55	452

(2) MAINTENANCE OF TRAFFIC

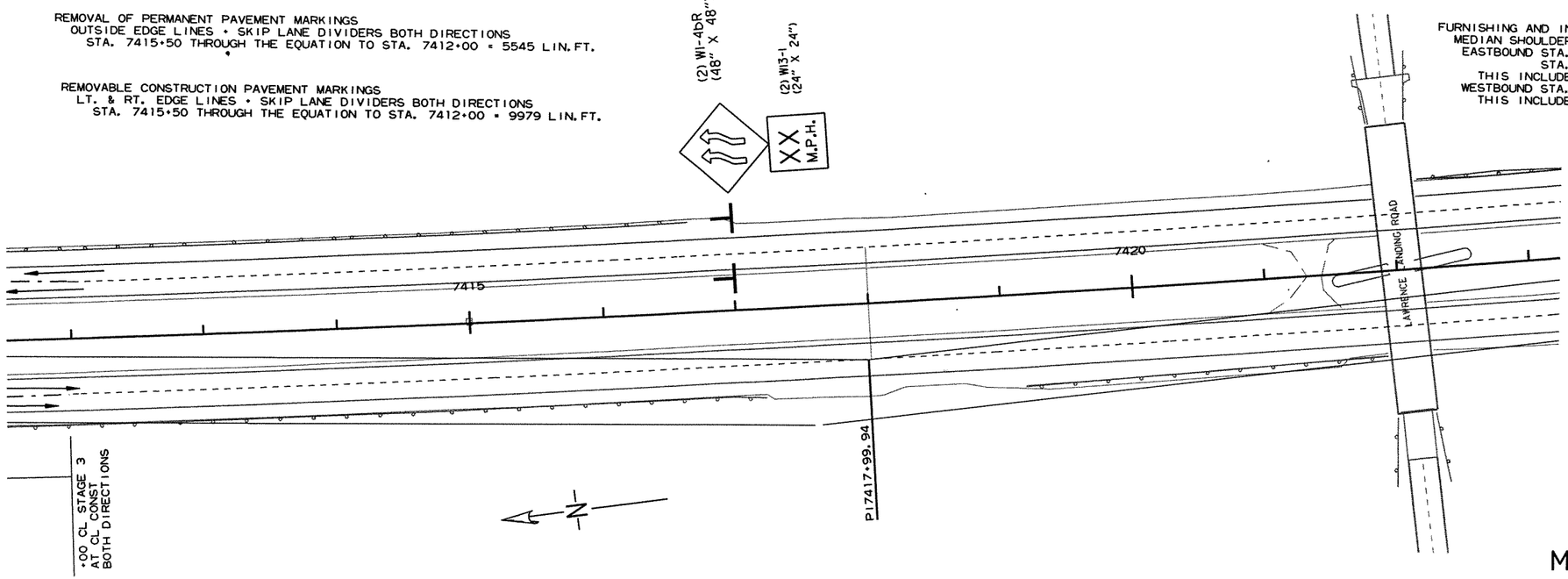
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
12767
MICHAEL D. FUGETT
10-28-11



REMOVAL OF PERMANENT PAVEMENT MARKINGS
OUTSIDE EDGE LINES • SKIP LANE DIVIDERS BOTH DIRECTIONS
STA. 7415+50 THROUGH THE EQUATION TO STA. 7412+00 = 5545 LIN. FT.

REMOVABLE CONSTRUCTION PAVEMENT MARKINGS
LT. & RT. EDGE LINES • SKIP LANE DIVIDERS BOTH DIRECTIONS
STA. 7415+50 THROUGH THE EQUATION TO STA. 7412+00 = 9979 LIN. FT.

FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER
MEDIAN SHOULDERS BOTH DIRECTIONS
EASTBOUND STA. 7420+56.76 - STA. 7421+29.76 EQ. BK. = 73 LIN. FT.
STA. 7395+62.24 EQ. AHD. - STA. 7406+75.24 = 1113 LIN. FT.
THIS INCLUDES (2) SPECIAL END UNITS
WESTBOUND STA. 7396+27 - STA. 7407+93 = 1166 LIN. FT.
THIS INCLUDES (2) SPECIAL END UNITS



STRIPING SYMBOLISM:
UNDISTURBED EXISTING STRIPING
NEW SKIP LINE
NEW SOLID LINE

MAINTENANCE OF TRAFFIC STAGE 3A GOLD CREEK

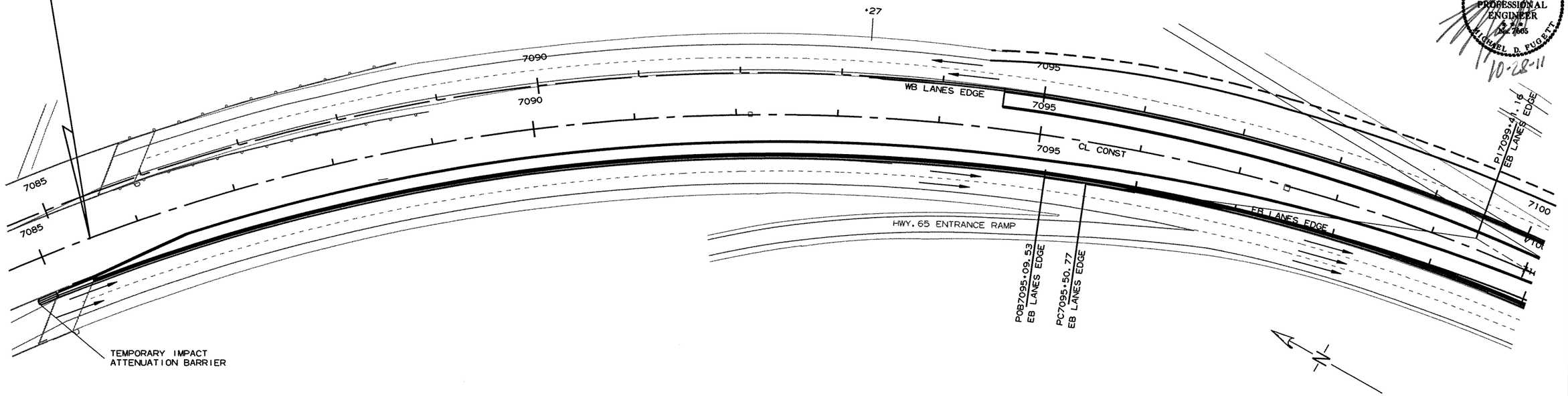
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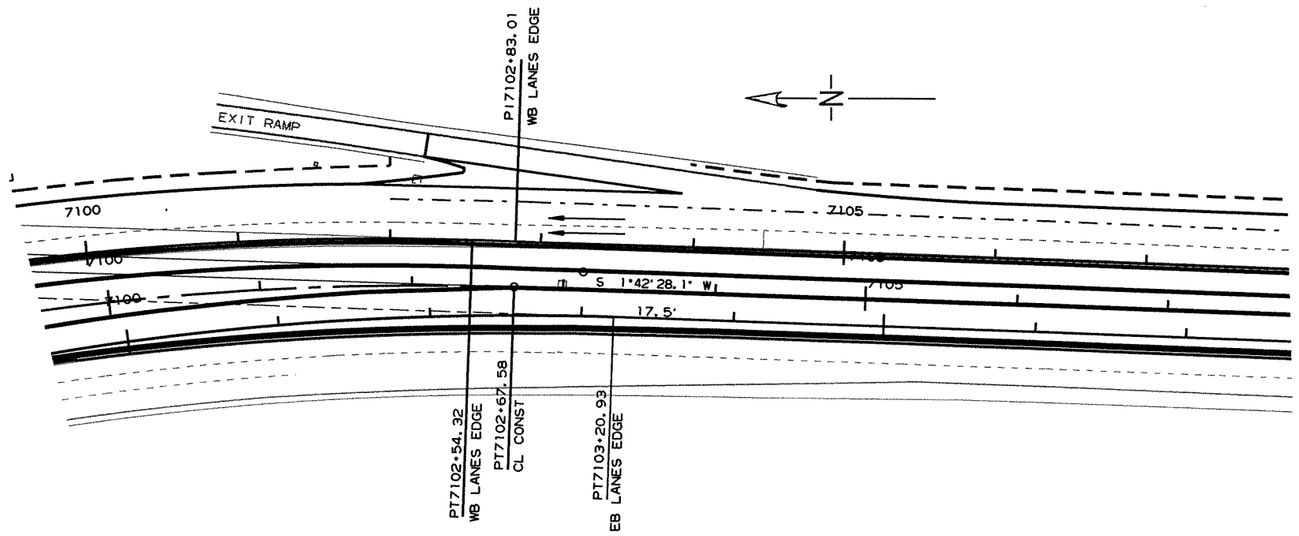
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				6	ARK.			
				JOB NO.		080388	56	452

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11

STA. 7085+50
BEGIN JOB 080388





PRECAST CONCRETE BARRIER ON MEDIAN SHOULDERS BOTH DIRECTIONS
RELOCATING PRECAST CONCRETE BARRIER
EASTBOUND LANES STA. 7085+00 - STA. 7105+60 = 2060 LIN. FT.
WESTBOUND LANES STA. 7093+27 - STA. 7129+80 = 3580 LIN. FT.
THIS INCLUDES (2) SPECIAL END UNITS
FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER
EASTBOUND LANES STA. 7105+60 - STA. 7155+20 = 4960 LIN. FT.
WESTBOUND LANES STA. 7129+80 - STA. 7154+00 = 2520 LIN. FT.

TEMPORARY IMPACT ATTENUATION BARRIER = 1 EACH

STAGE 3B OPERATIONS

RETAIN TRAFFIC ON STAGE 3A PATHS

REPLACE APPROACH GUTTER AT HWY. 65 OVERPASS MEDIAN SHOULDER

NOTCH MEDIAN SHOULDERS AND ADD NEW LANES AND CONCRETE MEDIAN BARRIERS BOTH DIRECTIONS WHERE SHOWN ON PLANS

STRIPING SYMBOLISM:
UNDISTURBED EXISTING STRIPING - - - - - - - -
NEW SKIP LINE — — — — — — — —
NEW SOLID LINE ————————

MAINTENANCE OF TRAFFIC STAGE 3B HWY. 65 EXIT

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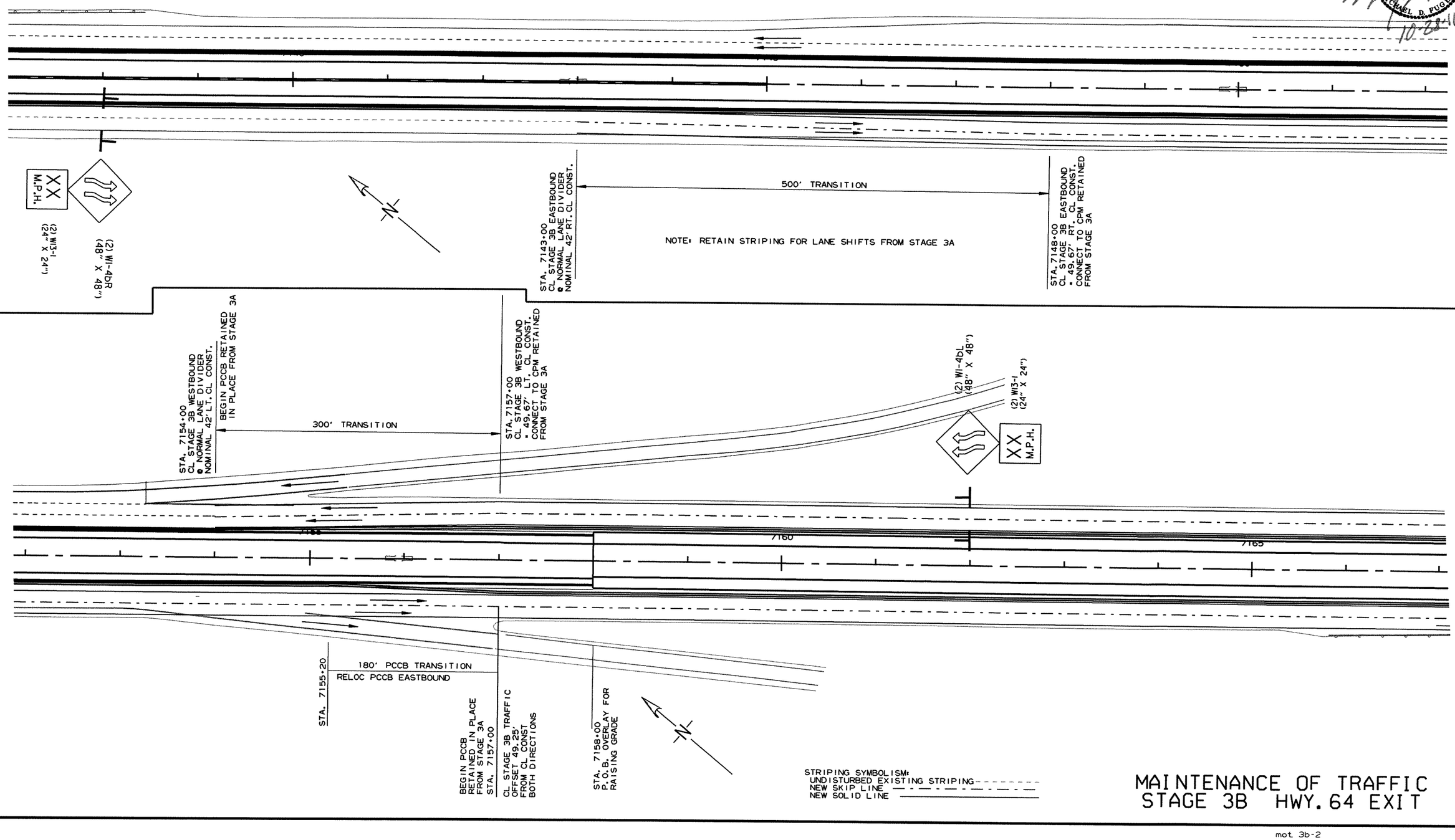
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				6	ARK.			
				JOB NO.		080388	57	452

(2) MAINTENANCE OF TRAFFIC

PRECAST CONCRETE BARRIER ON MEDIAN SHOULDERS BOTH DIRECTIONS
RELOCATING PRECAST CONCRETE BARRIER
EASTBOUND LANES STA. 7155+20 - STA. 7157+00 = 180 LIN. FT.
WESTBOUND LANES STA. 7186+00 - STA. 7187+80 = 180 LIN. FT.

FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER
EASTBOUND LANES STA. 7190+00 - STA. 7328+20 = 13820 LIN. FT.
WESTBOUND LANES STA. 7187+80 - STA. 7329+40 = 14160 LIN. FT.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
MICHAEL D. FUGETT
10-28-11



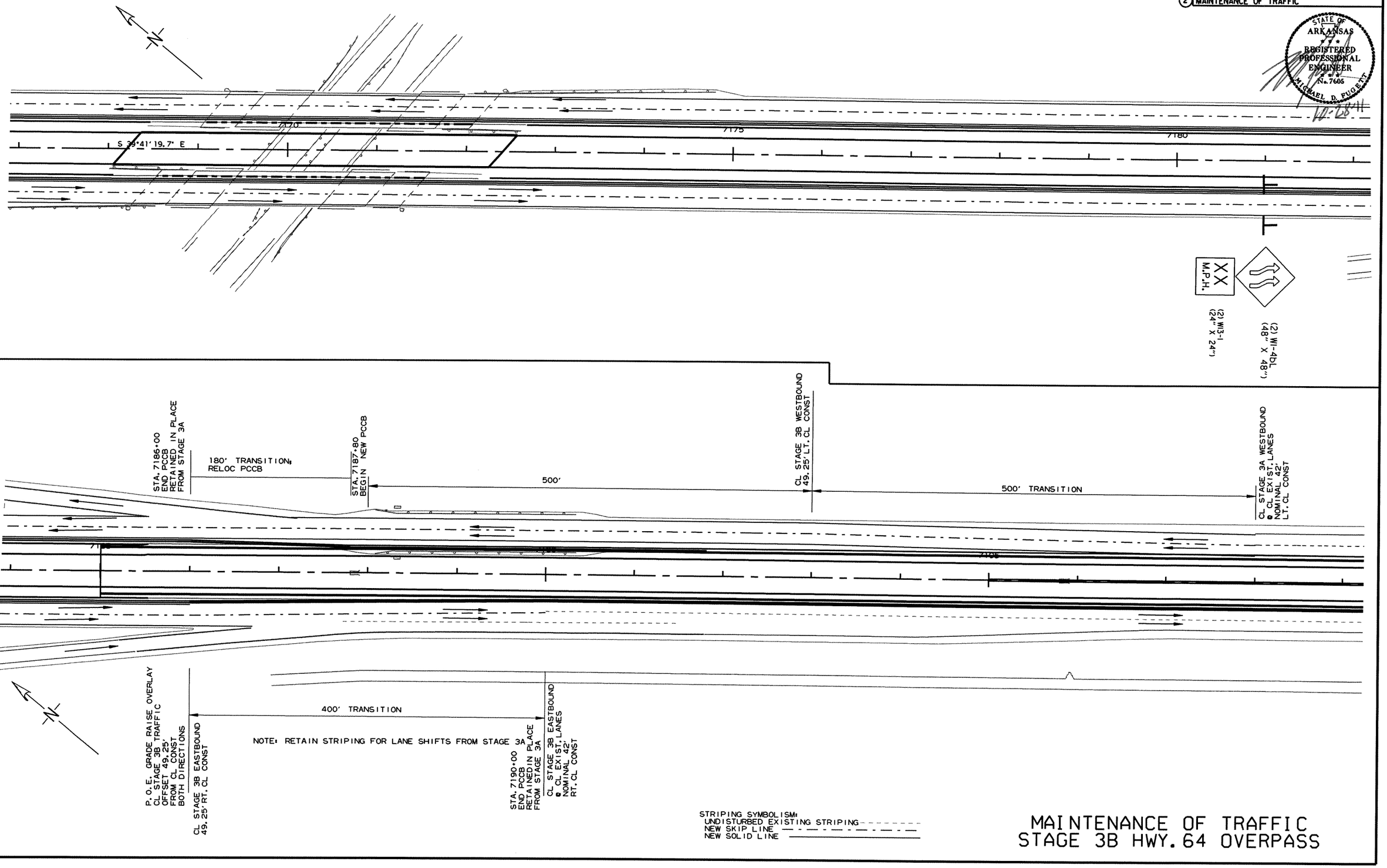
MAINTENANCE OF TRAFFIC STAGE 3B HWY. 64 EXIT

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				6	ARK.			
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(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT



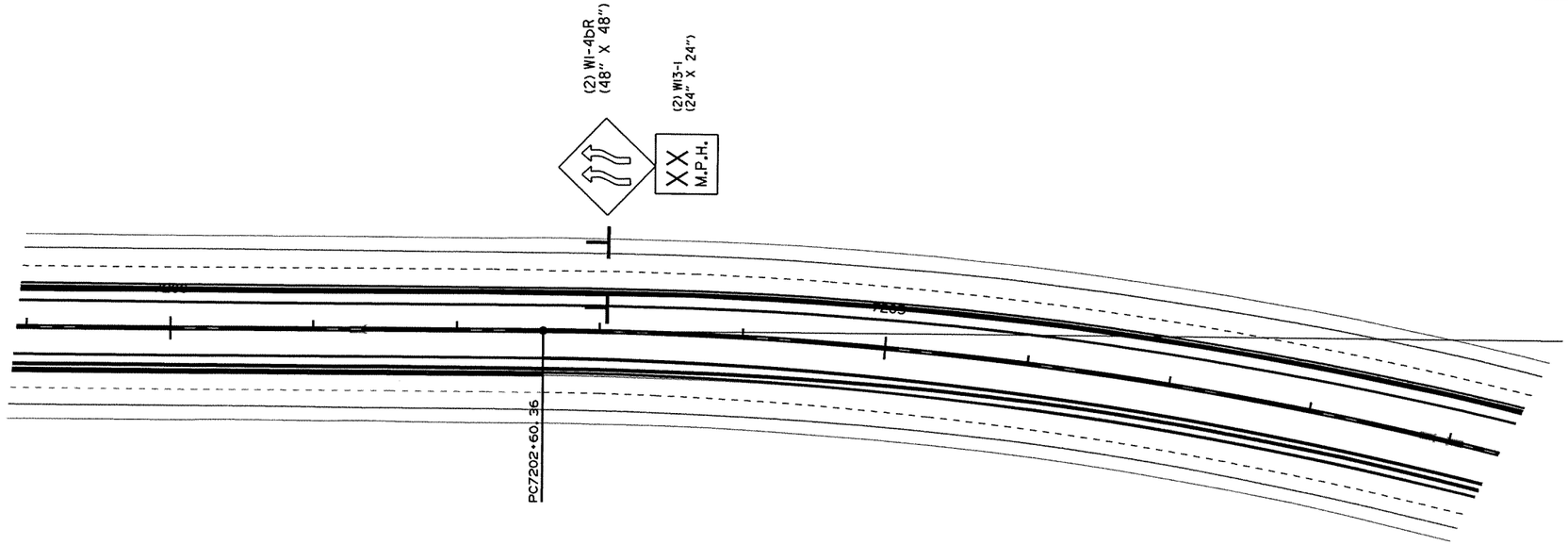
MAINTENANCE OF TRAFFIC
STAGE 3B HWY. 64 OVERPASS

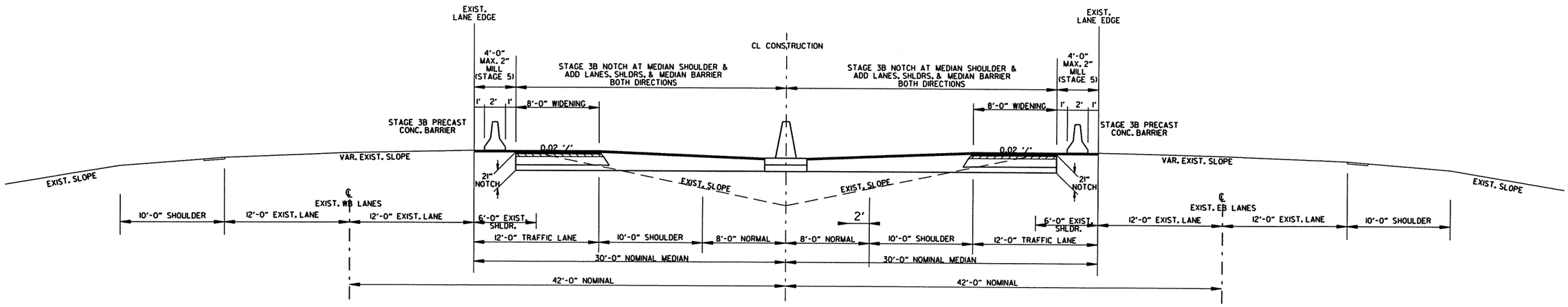
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				6	ARK.			
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(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11





STAGE 3B CONSTRUCTION

STA. 7209+00 - STA. 7319+00
STA. 7417+00 - STA. 7450+00

MAINTENANCE OF TRAFFIC STAGE 3B

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				6	ARK.			
				JOB NO.		080388	60	452

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11

+00 CL STAGE 3 AT CL CONST BOTH DIRECTIONS

NOTE: RETAIN STRIPING FOR LANE SHIFTS FROM STAGE 3A
500' TRANSITION BOTH DIRECTIONS

+00 CL STAGE 3 51.25' OFFSET FROM CL CONST BOTH DIRECTIONS

STA. 7329+40 END NEW PCCB

RELOC 60' PCCB WEST-BOUND

STA. 7330+00.000 BK. = STA. 7327+07.600 AHD.
BEGIN PCCB RETAINED IN PLACE FROM STAGE 3A

XX M.P.H.
(2) W13-1 (24" X 24")

(2) W1-4bR (48" X 48")

(2) W1-4bL (48" X 48")

(2) W13-1 (24" X 24")

XX M.P.H.

STONE DAM CREEK

END NEW PCCB STA. 7328+20

RELOC 180' PCCB EASTBOUND

STA. 7330+00
BEGIN PCCB RETAINED IN PLACE FROM STAGE 3A

END PCCB RETAINED IN PLACE FROM STAGE 3A STA. 7335+00

RELOC 180' PCCB WESTBOUND

STA. 7336+80

7330

7335

7340

XX M.P.H.
(2) W13-1 (24" X 24")

(2) W1-4bL (48" X 48")

END PCCB RETAINED IN PLACE FROM STAGE 3A STA. 7335+00

RELOC 60' PCCB EASTBOUND

STA. 7335+60

+00 CL STAGE 3 51.25' OFFSET FROM CL CONST BOTH DIRECTIONS

500' TRANSITION BOTH DIRECTIONS

NOTE: RETAIN STRIPING FOR LANE SHIFTS FROM STAGE 3A

+00 CL STAGE 3 AT CL CONST BOTH DIRECTIONS

(2) W1-4bR (48" X 48")

(2) W13-1 (24" X 24")

XX M.P.H.

7340

S 13°15'35.8" E

PRECAST CONCRETE BARRIER ON MEDIAN SHOULDERS BOTH DIRECTIONS
RELOCATING PRECAST CONCRETE BARRIER
EASTBOUND LANES STA. 7328+20 - STA. 7330+00 = 180 LIN. FT.
WESTBOUND LANES STA. 7329+40 - STA. 7330+00 = 60 LIN. FT.
EASTBOUND LANES STA. 7335+00 - STA. 7335+60 = 60 LIN. FT.
WESTBOUND LANES STA. 7335+00 - STA. 7336+80 = 180 LIN. FT.

FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER
EASTBOUND LANES STA. 7335+60 - STA. 7420+69.76 = 8500 LIN. FT.
WESTBOUND LANES STA. 7336+80 - STA. 7396+40 = 5960 LIN. FT.

MAINTENANCE OF TRAFFIC STAGE 3B STONE DAM CREEK

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				6	ARK.			
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(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
M. 7605
MICHAEL D. FUGETT
10-28-11

S 7°27'58.4" W

7396+40 RELOC 60' PCCB WESTBOUND

7397+00 BEGIN RETAIN PCCB IN PLACE FROM STAGE 3A

BRINSON ANDREWS ROAD

PT 7415+29.94

•50 CL STAGE 3 AT CL CONST BOTH DIRECTIONS

500' TRANSITION BOTH DIRECTIONS

•50 CL STAGE 3 51.25' OFFSET FROM CL CONST BOTH DIRECTIONS

7420+69.76

STA. 7421+29.76 BK. = STA. 7395+62.24 AHD.

60'

120'

180' RELOC PCCB EASTBOUND

7396+82.24 BEGIN RETAIN PCCB IN PLACE FROM STAGE 3A

XX M.P.H.

(2) W3-1 (24" X 24")

(2) W1-4DR (48" X 48")

(2) W1-4DL (48" X 48")

GOLD CREEK

N

7400

7405

PC 7404+07.34

STA 7406+00 END RETAIN PCCB IN PLACE FROM STAGE 3A

RELOC 180' PCCB WESTBOUND

7407+80

STA 7406+00 END RETAIN PCCB IN PLACE FROM STAGE 3A

RELOC 60' PCCB EASTBOUND

7406+60

•00 CL STAGE 3 OFFSET 51.25' FROM CL CONST BOTH DIRECTIONS

500' TRANSITION BOTH DIRECTIONS

•00 CL STAGE 3 AT CL CONST BOTH DIRECTIONS

NOTE: RETAIN STRIPING FOR LANE SHIFTS FROM STAGE 3A

•00 CL STAGE 3 AT CL CONST BOTH DIRECTIONS

PRECAST CONCRETE BARRIER ON MEDIAN SHOULDERS BOTH DIRECTIONS
RELOCATING PRECAST CONCRETE BARRIER
EASTBOUND LANES STA. 7420+69.76 THRU EQUATION - STA. 7396+82.24 = 180 LIN. FT.
WESTBOUND LANES STA. 7396+40 - STA. 7397+00 = 60 LIN. FT.
EASTBOUND LANES STA. 7406+00 - STA. 7406+60 = 60 LIN. FT.
WESTBOUND LANES STA. 7406+00 - STA. 7407+80 = 180 LIN. FT.

FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER
EASTBOUND LANES STA. 7406+60 - STA. 7491+73 = 8500 LIN. FT.
WESTBOUND LANES STA. 7407+80 - STA. 7493+93 = 8600 LIN. FT.

STRIPING SYMBOLISM:
UNDISTURBED EXISTING STRIPING
NEW SKIP LINE
NEW SOLID LINE

MAINTENANCE OF TRAFFIC STAGE 3B GOLD CREEK

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				6	ARK.			
				JOB NO.		080388	62	452

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11

PRECAST CONCRETE BARRIER

S 0°34'08.1" W

P17448+53.36

PC7449+68.47

7455

7460

P17466+47.90

7465

PRECAST CONCRETE BARRIER

7470

7475

PRECAST CONCRETE BARRIER

7480

PT7483+03.58

STRIPING SYMBOLISM:
UNDISTURBED EXISTING STRIPING
NEW SKIP LINE
NEW SOLID LINE

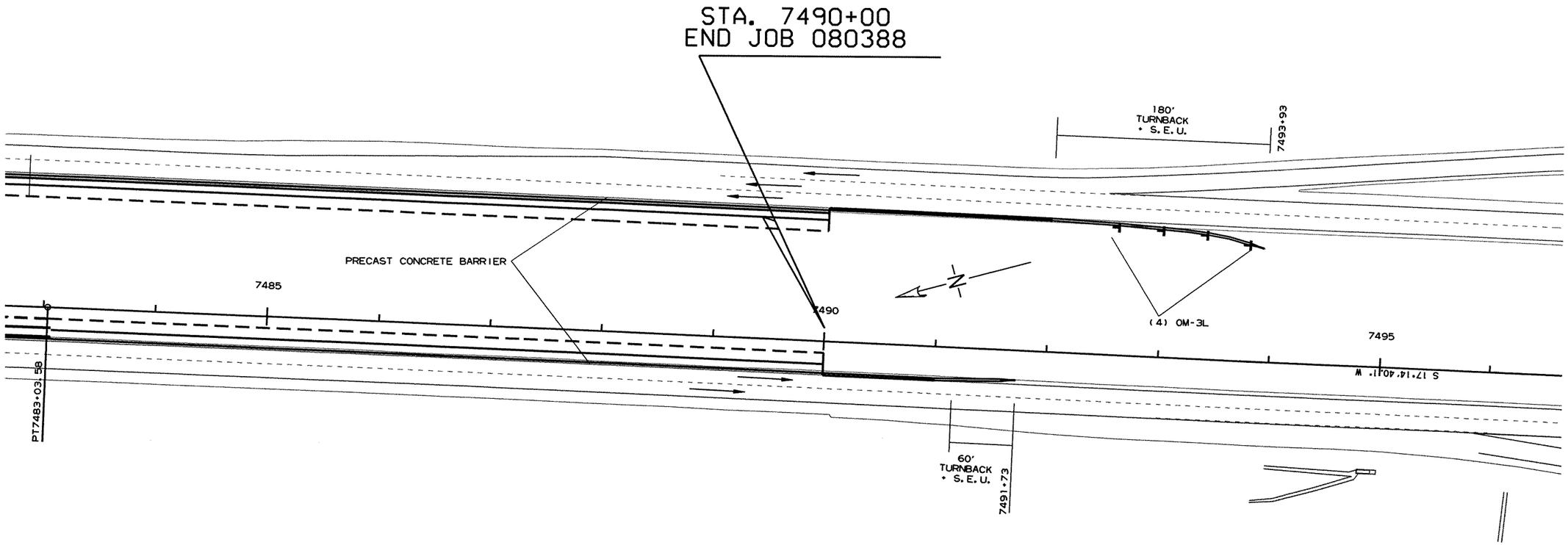
MAINTENANCE OF TRAFFIC STAGE 3B

r080388_mot.dgn MDT pages 9/6/2011

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.		080388	63	452

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
NO. 7605
MICHAEL D. FUGETT
10-28-11



PRECAST CONCRETE BARRIER ON MEDIAN SHOULDERS BOTH DIRECTIONS
RELOCATING PRECAST CONCRETE BARRIER
SPECIAL END UNITS AT STA. 7491+73 EB AND STA. 7493+93 WB = 26 LIN. FT.

STRIPING SYMBOLISM:
UNDISTURBED EXISTING STRIPING
NEW SKIP LINE
NEW SOLID LINE

MAINTENANCE OF TRAFFIC STAGE 3B

r080388_mot.dgn MOT pages 9/6/2011

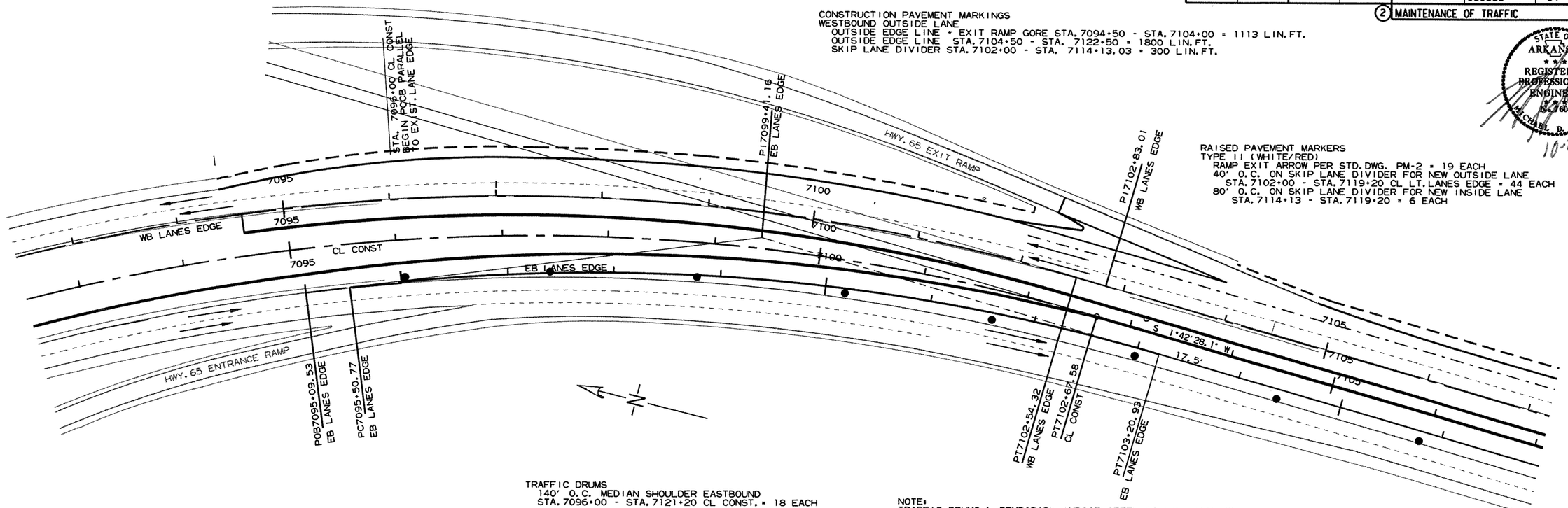
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	64	452

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
MICHAEL D. PUGETT
10-28-11

CONSTRUCTION PAVEMENT MARKINGS
WESTBOUND OUTSIDE LANE
OUTSIDE EDGE LINE - EXIT RAMP GORE STA. 7094+50 - STA. 7104+00 = 1113 LIN. FT.
OUTSIDE EDGE LINE STA. 7104+50 - STA. 7122+50 = 1800 LIN. FT.
SKIP LANE DIVIDER STA. 7102+00 - STA. 7114+13.03 = 300 LIN. FT.

RAISED PAVEMENT MARKERS
TYPE II (WHITE/RED)
RAMP EXIT ARROW PER STD. DWG. PM-2 = 19 EACH
40' O.C. ON SKIP LANE DIVIDER FOR NEW OUTSIDE LANE
STA. 7102+00 - STA. 7119+20 CL LT. LANES EDGE = 44 EACH
80' O.C. ON SKIP LANE DIVIDER FOR NEW INSIDE LANE
STA. 7114+13 - STA. 7119+20 = 6 EACH



TRAFFIC DRUMS
140' O.C. MEDIAN SHOULDER EASTBOUND
STA. 7096+00 - STA. 7121+20 CL CONST. = 18 EACH

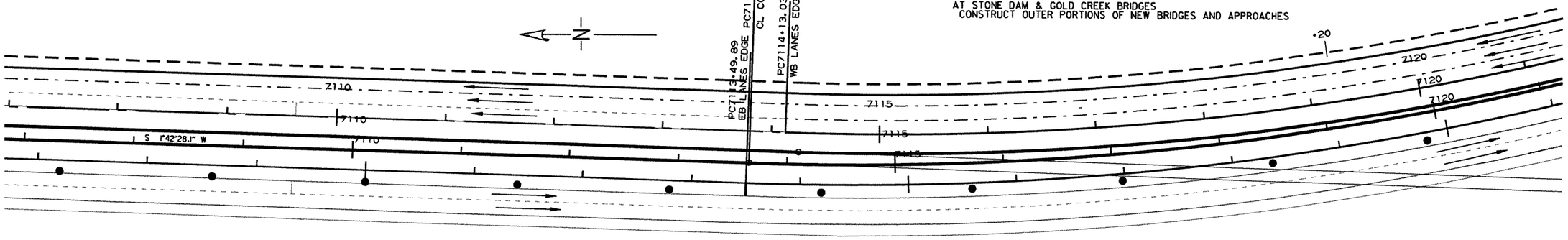
NOTE:
TRAFFIC DRUMS & TEMPORARY IMPACT ATTENUATION BARRIERS USED IN THIS STAGE ARE TO BE RETAINED IN STAGE 4B FROM THE BEGINNING OF THE JOB TO THE HWY. 266 OVERPASS.

STAGE 4A OPERATIONS

SHIFT WESTBOUND TRAFFIC ONTO OVERPASS MEDIAN AT HWY. 64
SHIFT BOTH DIRECTIONS TRAFFIC ONTO NEW PORTIONS OF STONE DAM & GOLD CREEK BRIDGES
BETWEEN BRIDGES RETURN TRAFFIC TO THE TWO ORIGINAL LANES
USE TRAFFIC DRUMS TO CLOSE OFF UNUSED NEW LANES

AT HWY. 64 OVERPASS
CONSTRUCT WESTBOUND LANES AND APPROACHES FOR NEW OVERPASS

AT STONE DAM & GOLD CREEK BRIDGES
CONSTRUCT OUTER PORTIONS OF NEW BRIDGES AND APPROACHES



STRIPING SYMBOLISM:
UNDISTURBED EXISTING STRIPING - - - - - - - -
NEW SKIP LINE — — — — — — —
NEW SOLID LINE ————————

MAINTENANCE OF TRAFFIC STAGE 4A

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				6	ARK.			
				JOB NO.		080388	65	452

(2) MAINTENANCE OF TRAFFIC

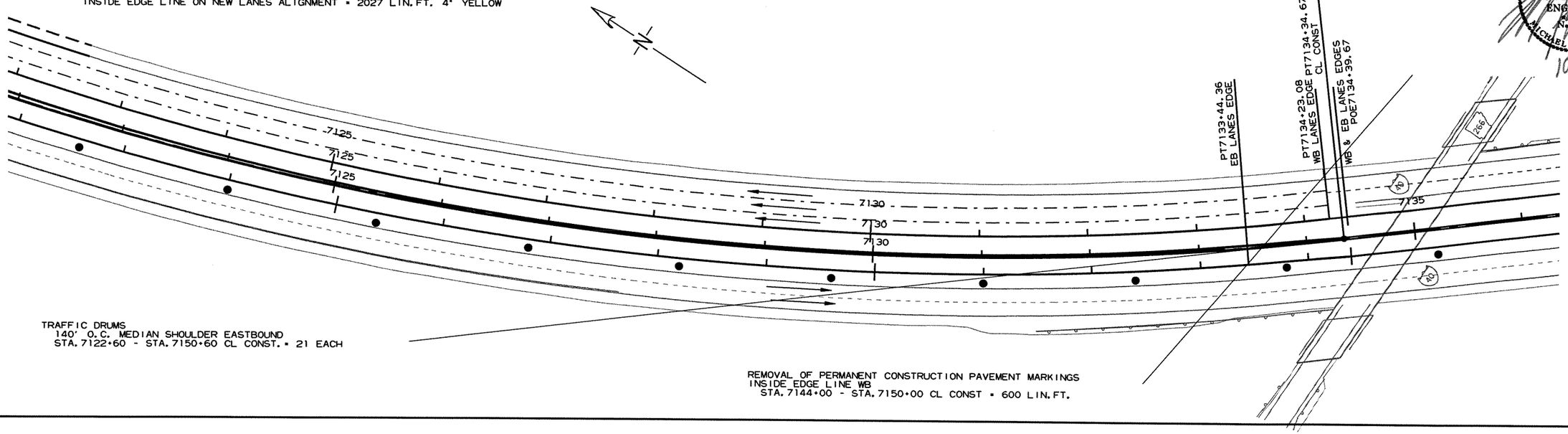
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 27605
MICHAEL D. FUGETT
10-28-11

WESTBOUND LANES STRIPING
STA. 7114+13.03 - STA. 7134+39.67

REMOVAL OF PERMANENT PAVEMENT MARKINGS
BOTH ORIGINAL SKIP LANE DIVIDERS + INSIDE EDGE LINE = 3060 LIN. FT.

HIGH PERFORMANCE PAVEMENT MARKINGS
BOTH SKIP LANE DIVIDERS = 1020 LIN. FT. 4" WHITE
INSIDE EDGE LINE ON NEW LANES ALIGNMENT = 2027 LIN. FT. 4" YELLOW

RAISED PAVEMENT MARKERS
TYPE II (WHITE/RED)
80' O.C. ON BOTH SKIP LANE DIVIDERS
STA. 7119+20 - STA. 7134+40 = 38 EACH



TRAFFIC DRUMS
140' O.C. MEDIAN SHOULDER EASTBOUND
STA. 7122+60 - STA. 7150+60 CL CONST. = 21 EACH

REMOVAL OF PERMANENT CONSTRUCTION PAVEMENT MARKINGS
INSIDE EDGE LINE WB
STA. 7144+00 - STA. 7150+00 CL CONST = 600 LIN. FT.

WESTBOUND LANES STRIPING
STA. 7134+39.67 - STA. 7144+00

REMOVAL OF PERMANENT PAVEMENT MARKINGS
FORMER INSIDE EDGE LINE = 960 LIN. FT.

HIGH PERFORMANCE PAVEMENT MARKINGS
SKIP LANE DIVIDER FOR NEW INSIDE LANE = 240 LIN. FT. 4" WHITE
INSIDE EDGE LINE FOR NEW INSIDE LANE = 960 LIN. FT. 4" YELLOW

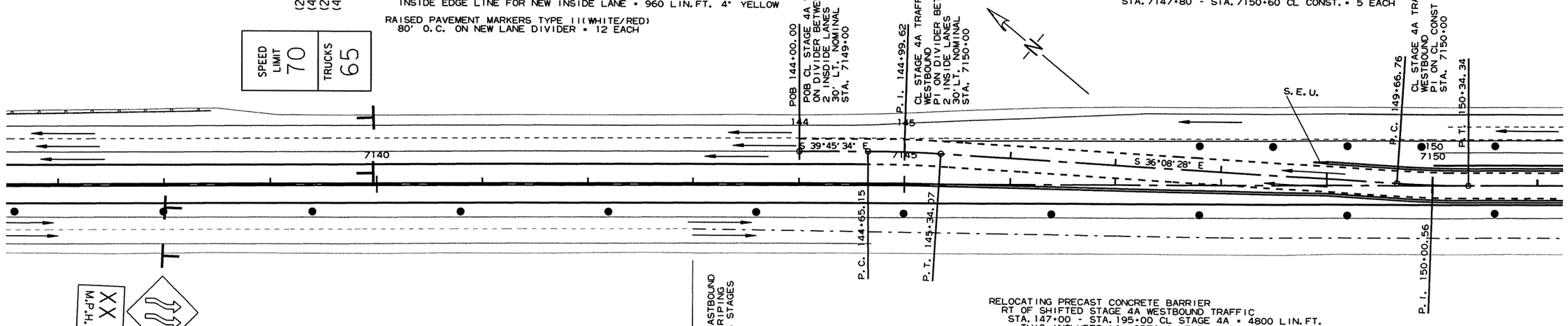
RAISED PAVEMENT MARKERS TYPE II(WHITE/RED)
80' O.C. ON NEW LANE DIVIDER = 12 EACH

(2) R2-1 (48" X 60")
(2) R2-2 (48" X 48")

SPEED LIMIT 70
TRUCKS 65

REMOVABLE CONSTRUCTION PAVEMENT MARKINGS
INSIDE EDGE LINE WB ENTRANCE RAMP
STA. 144+89 - STA. 153+28 CL STAGE 4A = 829 LIN. FT.

TRAFFIC DRUMS
70' O.C. AT WESTBOUND ENTRANCE RAMP
STA. 7147+80 - STA. 7150+60 CL CONST. = 5 EACH



STA. 7143+00
CL STAGE 4A EASTBOUND
REMAINING ALL STRIPING
FROM PREVIOUS STAGES

RELOCATING PRECAST CONCRETE BARRIER
RT. OF STAGE 4A TRAFFIC SHIFT
CL CONST STA. 7145+00 - STA. 7149+00 = 400 LIN. FT.

RELOCATING PRECAST CONCRETE BARRIER
RT OF SHIFTED STAGE 4A WESTBOUND TRAFFIC
STA. 147+00 - STA. 195+00 CL STAGE 4A = 4800 LIN. FT.
THIS INCLUDES (1) SPECIAL END UNIT
LT. OF SHIFTED STAGE 4A WESTBOUND TRAFFIC
STA. 148+87 - STA. 188+20 CL STAGE 4A = 3933 LIN. FT.
THIS INCLUDES (1) SPECIAL END UNIT

XX M.P.H.
(2) W13-1 (24" X 24")

(2) W1-4bR (48" X 48")

STRIPING SYMBOLISM:
UNDISTURBED EXISTING STRIPING
NEW SKIP LINE
NEW SOLID LINE

MAINTENANCE OF TRAFFIC STAGE 4A

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				6	ARK.			
				JOB NO.		080388	66	452

(2) MAINTENANCE OF TRAFFIC

TRAFFIC DRUMS
70' O.C. AT WESTBOUND ENTRANCE RAMP
STA. 7151+30 - STA. 7153+40 CL CONST. = 4 EACH

(2) W1-4bR (48" X 48")

(2) W13-1 (24" X 24")

XX M.P.H.

REMOVABLE CONSTRUCTION PAVEMENT MARKINGS
LT.&RT. EDGE LINES + SOLID LANE DIVIDER
SHIFTED WESTBOUND TRAFFIC
STA. 144+00 - STA. 196+01 CL STAGE 4A = 15603 LIN. FT.

RAISED PAVEMENT MARKERS TYPE II(WHITE/RED)
80' O.C. ON SOLID LANE DIVIDER = 65 EACH

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11

+28

155
7155

160
7160

165
7165

SPECIAL END UNIT

TRAFFIC DRUMS
140' O.C. CLOSING-OFF NEW INSIDE LANES EASTBOUND
STA. 7152+00 - STA. 7155+00 CL CONST. = 3 EACH

RELOCATING PRECAST CONCRETE BARRIER
LT OF EASTBOUND TRAFFIC
TURNBACK + SPECIAL END UNIT CONNECT AT STA. 7157+00
TO PCCB RETAINED FROM STAGE 3B
STA. 7155+07 - STA. 7157+00 = 193 LIN. FT.

STA. 7157+00
CL STAGE 4A EASTBOUND
RETAIN ALL STRIPING
FROM PREVIOUS STAGES

STA. 7158+00
P.O.B. OVERLAY FOR
RAISING GRADE

170
7170

175
7175

180
7180

S 39°41'19.7" E

S 39°41'20" E

XX M.P.H.

(2) W13-1 (24" X 24")

(2) W1-4bL (48" X 48")

STRIPING SYMBOLISM:
UNDISTURBED EXISTING STRIPING
NEW SKIP LINE
NEW SOLID LINE

MAINTENANCE OF TRAFFIC STAGE 4A

r080388_MOT 4A.dgn 10/25/2011

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				JOB NO.		080388	67	452

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 17605
MICHAEL D. FUGETT
10-28-11

RELOCATING PRECAST CONCRETE BARRIER
LT. OF WESTBOUND EXIT RAMP
STA. 7185+67 - STA. 7188+20 CL CONST = 253 LIN. FT.
THIS INCLUDES (1) SPECIAL END UNIT

TEMPORARY IMPACT ATTENUATION BARRIER = 1 EACH

REMOVABLE CONSTRUCTION PAVEMENT MARKINGS
INSIDE EDGE LINE FOR WESTBOUND EXIT RAMP
STA. 7186+00 - STA. 7195+00 CL CONST = 900 LIN. FT.
SOLID LANE DIVIDER STA. 7196+00 - STA. 7198+00 = 200 LIN. FT.

SPECIAL END UNIT

STA. 7185+80

STA. 7186+00 BEGIN EXIT-ONLY-LANE DIVIDER

60' +180' + S.E.U.

STA. 7188+20

TEMPORARY IMPACT ATTENUATION BARRIER

STA. 7190+00 CL STAGE 4A TRAFFIC WESTBOUND P.I. ON CL CONST

P.C. 189+69.59

P.T. 190+32.12

185
7185

190
7190

S 42°58' 18" E

P.O.E. GRADE RAISE OVERLAY CL STAGE 3B TRAFFIC OFFSET 49.25' FROM CL CONST BOTH DIRECTIONS

STA. 7186+00 CL STAGE 4A EASTBOUND RETAIN ALL STRIPING FROM PREVIOUS STAGES

STA. 7190+00 CL STAGE 4A EASTBOUND END RETAINED STRIPING FROM PREVIOUS STAGES; RESUME UNDISTURBED EXISTING STRIPING

P.I. 190+00.86

+73

SPECIAL END UNIT

P.I. 195+01.34

STA. 7195+00 CL STAGE 4A TRAFFIC WESTBOUND P.I. ON DIVIDER BETWEEN 2 INSIDE LANES 30' LT. NOMINAL

195
7195

196

S 40°51' 56" E

P.C. 194+81.28

P.T. 195+21.40

RELOCATING PRECAST CONCRETE BARRIER
LT. OF EASTBOUND TRAFFIC
STA. 7190+00 - STA. 7190+73 CL CONST = 73 LIN. FT.
THIS INCLUDES (1) SPECIAL END UNIT

PORTABLE CHANGEABLE MESSAGE SIGN
"RT. LANE EXIT ONLY"
"LT. & CENTER LANES THRU TRAFFIC"

TRAFFIC DRUMS
70' O.C. RT. OF SHIFTED WESTBOUND STAGE 4A
STA. 193+00 - STA. 196+00 CL STAGE 4A = 5 EACH

(2) R2-1 (48" X 60")

SPEED LIMIT 60

(2) W1-4DL (48" X 48")

(2) W13-1 (24" X 24")

XX M.P.H.

STA. 7198+00 CL STAGE 4A WESTBOUND END EXIT-ONLY-LANE DIVIDER
CONNECT TO UNDISTURBED STRIPING ON EXISTING LANES

POE 196+01.36 POE CL STAGE 4A WESTBOUND ON DIVIDER BETWEEN 2 INSIDE LANES 30' LT. NOMINAL STA. 7196+00

196

51' 56" E

7200

7205

7210

PC 7202+60.36

TRAFFIC DRUMS
140' O.C. CLOSING OFF NEW INSIDE LANES EASTBOUND
STA. 7191+00 - STA. 7209+20 CL CONST. = 14 EACH
140' O.C. ON INSIDE SHOULDER & LANE SHIFT WESTBOUND
STA. 7196+00 - STA. 7209+20 = 10 EACH

REMOVAL OF PERMANENT PAVEMENT MARKINGS
INSIDE EDGE LINE ORIGINAL LANES WESTBOUND
STA. 7188+00 - STA. 7207+00 = 1900 LIN. FT.

REMOVABLE CONSTRUCTION PAVEMENT MARKINGS
INSIDE EDGE LINE NEW INSIDE LANE
STA. 7196+00 - STA. 7207+00 = 1100 LIN. FT.

STRIPING SYMBOLISM:
UNDISTURBED EXISTING STRIPING
NEW SKIP LINE
NEW SOLID LINE

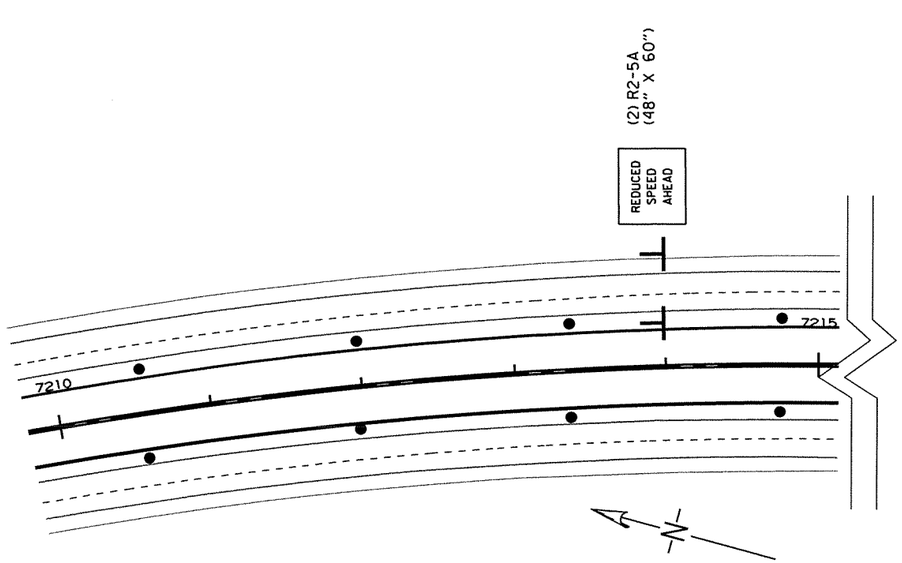
MAINTENANCE OF TRAFFIC STAGE 4A

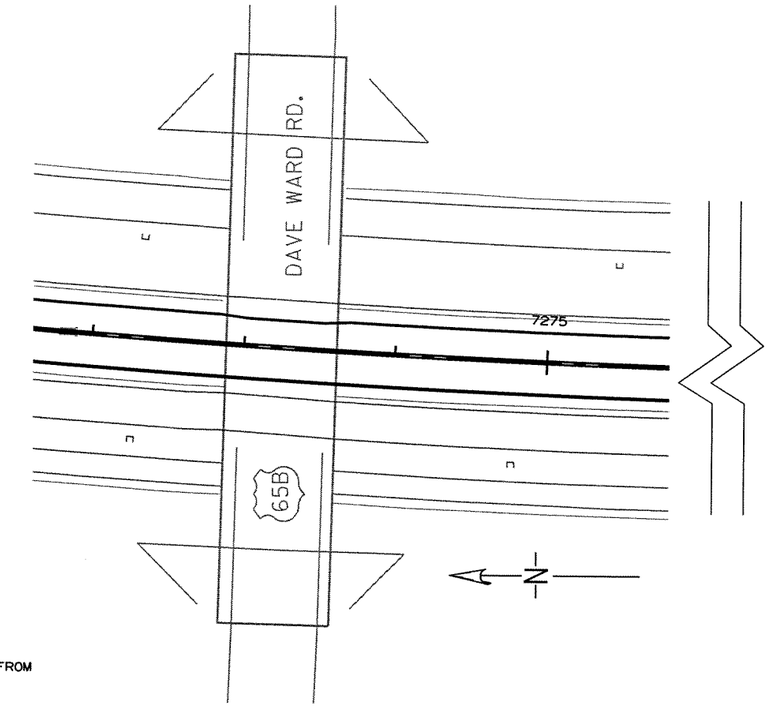
r080388_MOT 4A.dgn 10/25/2011

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				6	ARK.			
				JOB NO.		080388	68	452

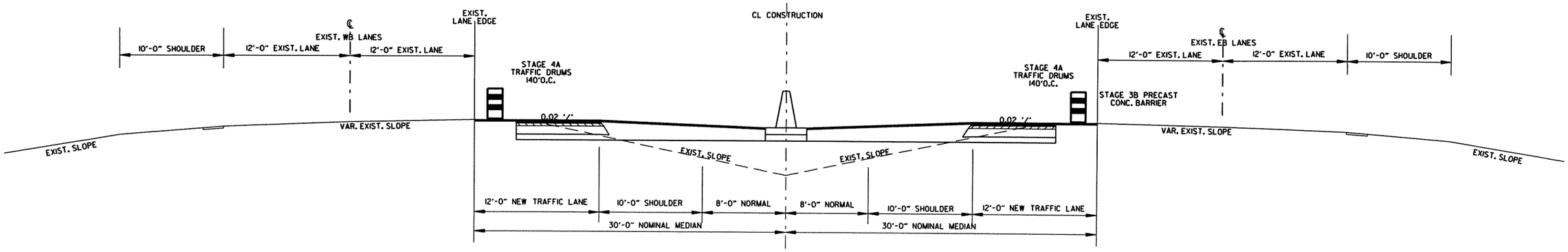
(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11





NOTE:
TRAFFIC DRUMS, TRAFFIC CONTROL SIGNS, & TEMPORARY IMPACT ATTENUATION BARRIERS USED IN THIS STAGE ARE TO BE RETAINED IN STAGE 4B FROM STA. 7218+00 TO THE END OF THE JOB.



STAGE 4A TRAFFIC DRUMS CLOSING NEW LANES

HWY. 65 TO STONE DAM CREEK
STA. 7210+00 - STA. 7327+00 = 170 EACH

STONE DAM CREEK TO GOLD CREEK
STA. 7338+00 - STA. 7419+20 = 118 EACH

GOLD CREEK TO END OF JOB
STA. 7410+00 - STA. 7491+20 = 118 EACH

STRIPING SYMBOLISM:
UNDISTURBED EXISTING STRIPING - - - - - - - -
NEW SKIP LINE — - — - — - —
NEW SOLID LINE ————————

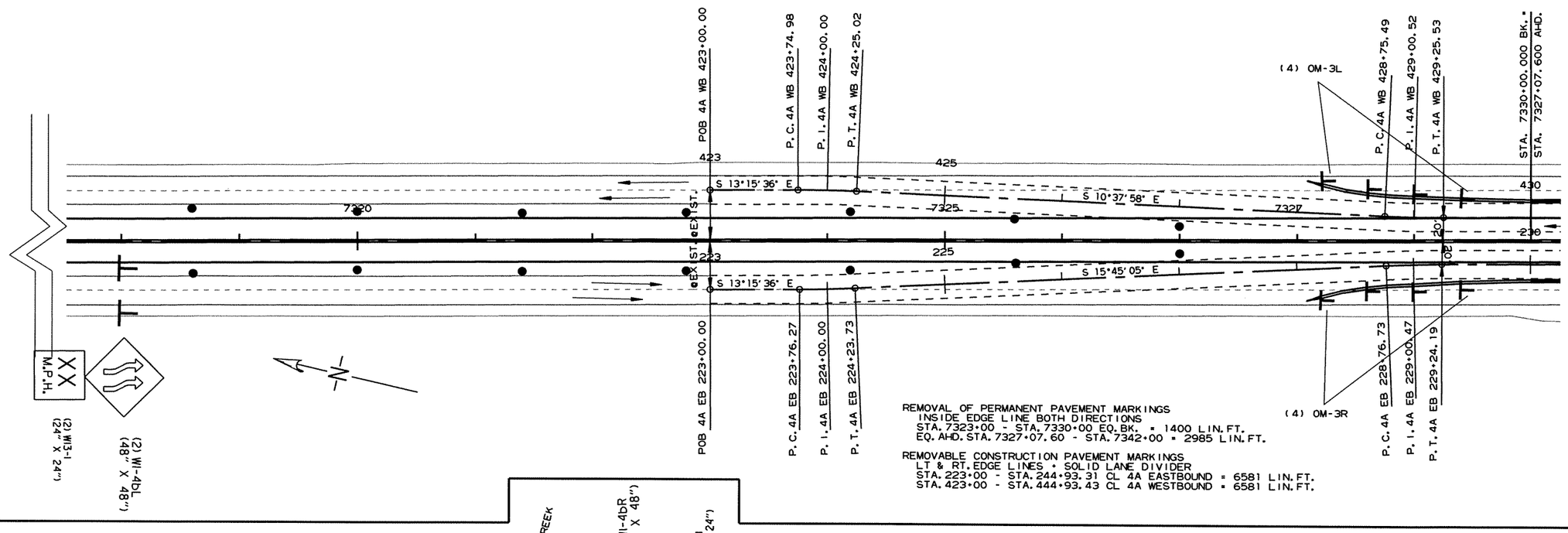
MAINTENANCE OF TRAFFIC STAGE 4A

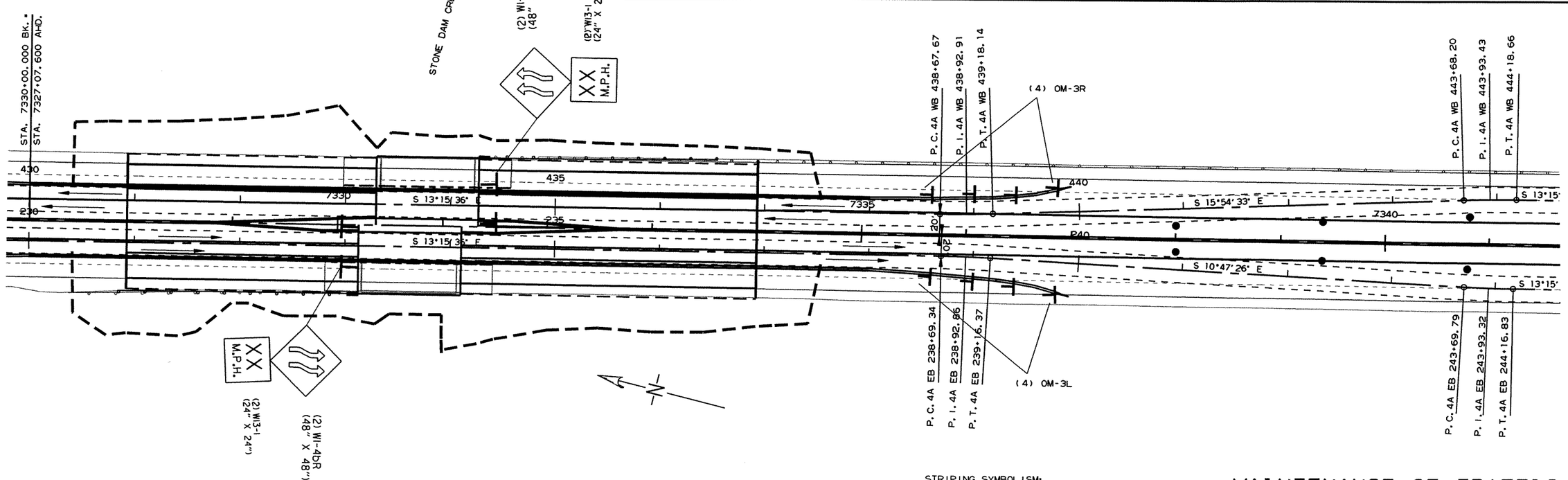
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(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
* * *
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11





REMOVAL OF PERMANENT PAVEMENT MARKINGS
INSIDE EDGE LINE BOTH DIRECTIONS
STA. 7323+00 - STA. 7330+00 EQ. BK. = 1400 LIN. FT.
EQ. AHD. STA. 7327+07.60 - STA. 7342+00 = 2985 LIN. FT.

REMOVABLE CONSTRUCTION PAVEMENT MARKINGS
LT & RT. EDGE LINES + SOLID LANE DIVIDER
STA. 223+00 - STA. 244+93.31 CL 4A EASTBOUND = 6581 LIN. FT.
STA. 423+00 - STA. 444+93.43 CL 4A WESTBOUND = 6581 LIN. FT.

STRIPING SYMBOLISM
UNDISTURBED EXISTING STRIPING
NEW SKIP LINE
NEW SOLID LINE

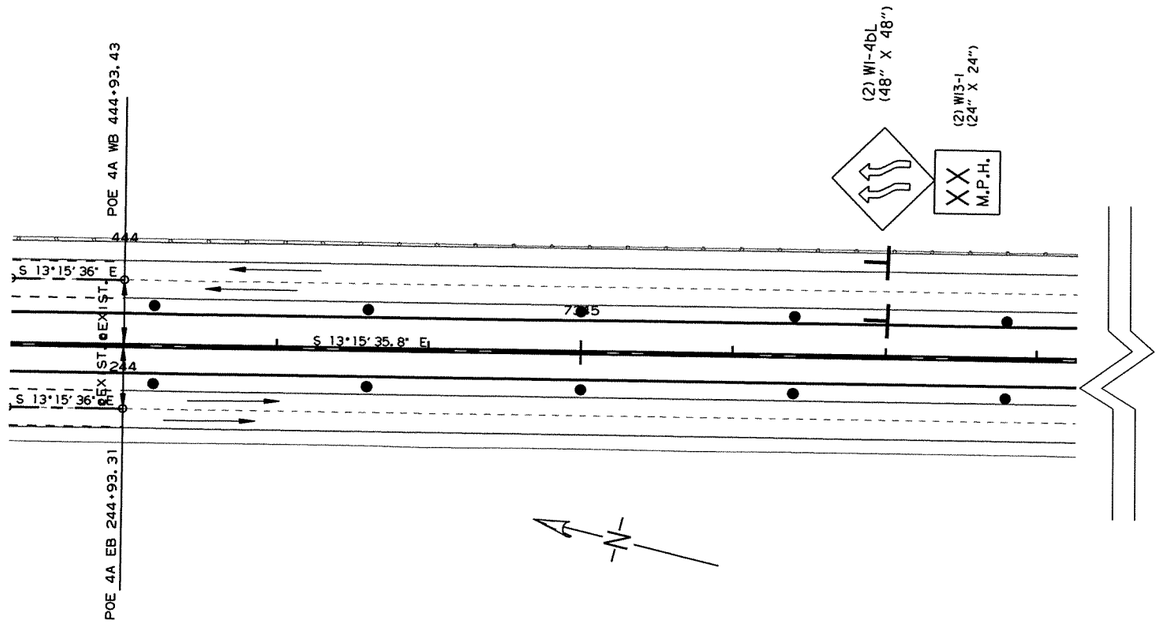
MAINTENANCE OF TRAFFIC STAGE 4A

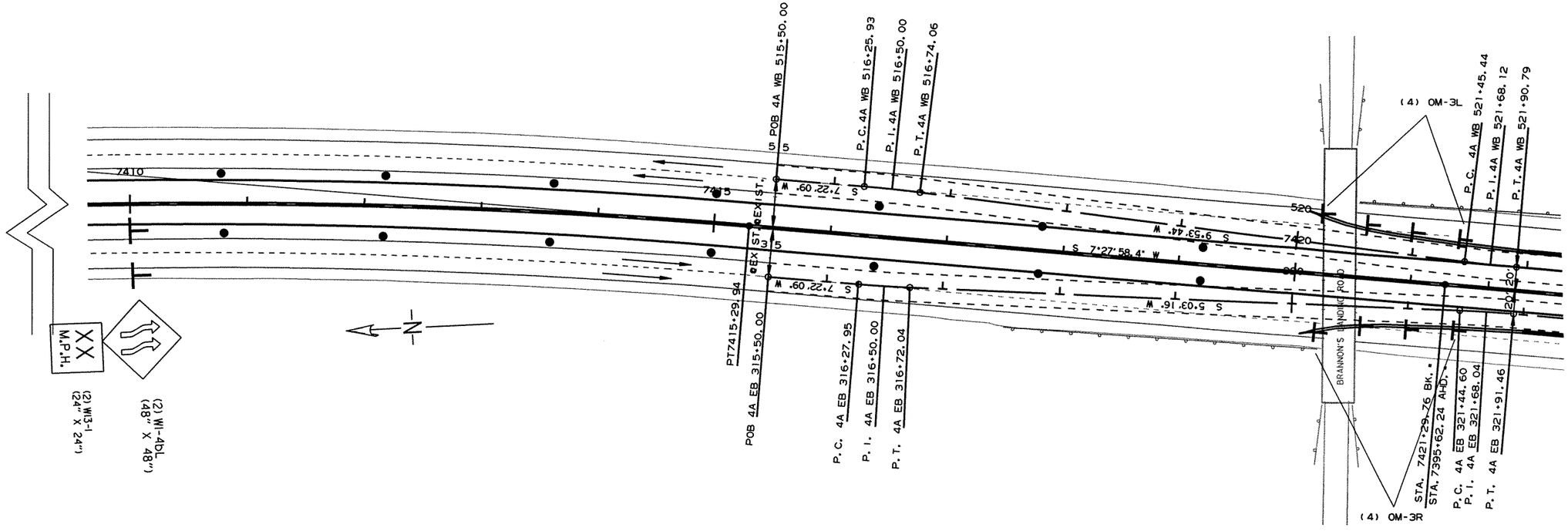
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				JOB NO.		080388	70	452

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. PUGETT
10-25-11





STRIPING SYMBOLISM:
UNDISTURBED EXISTING STRIPING
NEW SKIP LINE
NEW SOLID LINE

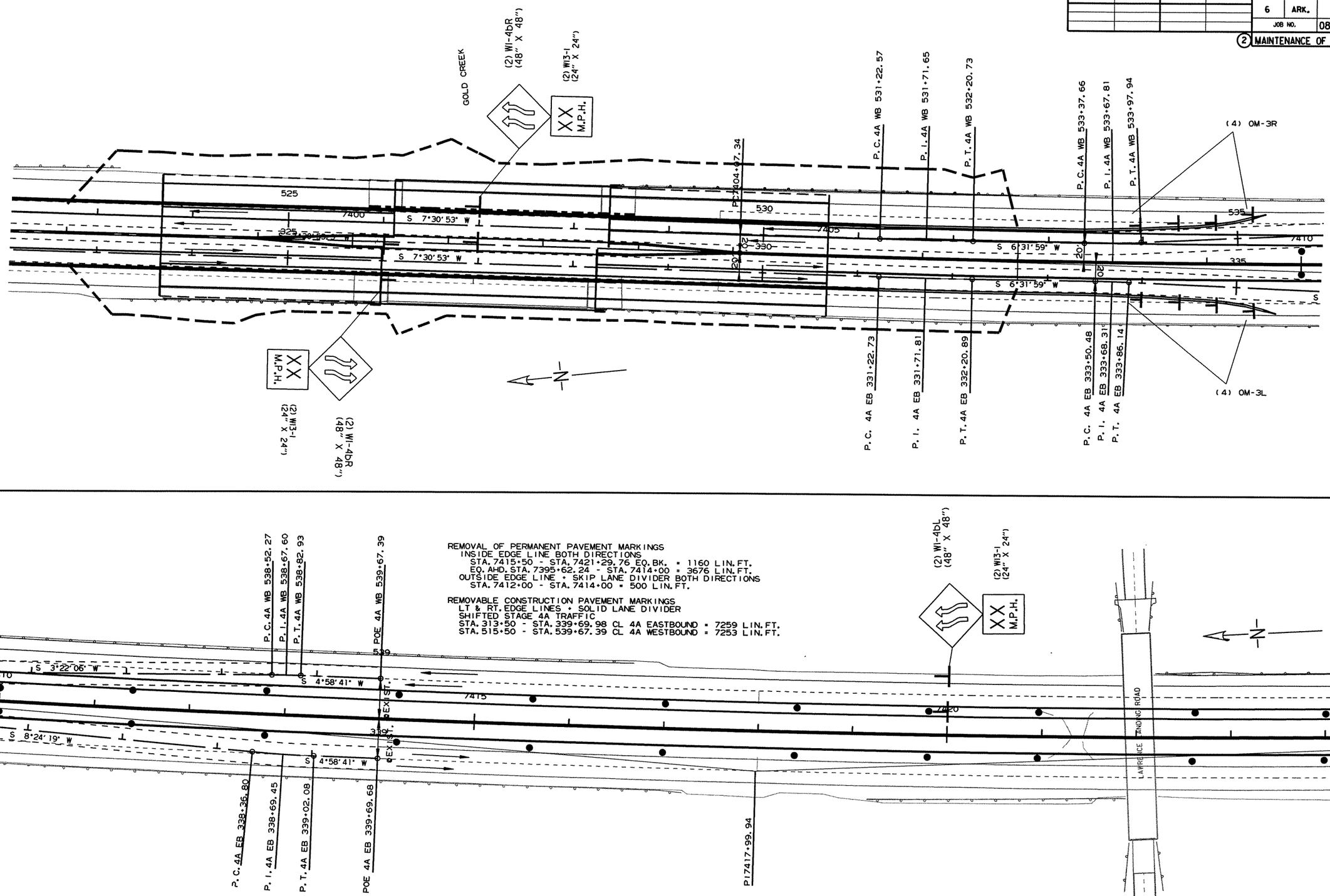
MAINTENANCE OF TRAFFIC STAGE 4A

r080388_MOT 4A.dgn 10/25/2011

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				6	ARK.			
				JOB NO.		080388	71	452

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
MICHAEL D. FUGETT
10-28-11



REMOVAL OF PERMANENT PAVEMENT MARKINGS
INSIDE EDGE LINE BOTH DIRECTIONS
STA. 7415+50 - STA. 7421+29.76 EQ.BK. = 1160 LIN.FT.
EQ. AHD. STA. 7395+62.24 - STA. 7414+00 = 3676 LIN.FT.
OUTSIDE EDGE LINE + SKIP LANE DIVIDER BOTH DIRECTIONS
STA. 7412+00 - STA. 7414+00 = 500 LIN.FT.

REMOVABLE CONSTRUCTION PAVEMENT MARKINGS
LT & RT. EDGE LINES + SOLID LANE DIVIDER
SHIFTED STAGE 4A TRAFFIC
STA. 313+50 - STA. 339+69.98 CL 4A EASTBOUND = 7259 LIN.FT.
STA. 515+50 - STA. 539+67.39 CL 4A WESTBOUND = 7253 LIN.FT.

STRIPING SYMBOLISM:
UNDISTURBED EXISTING STRIPING
NEW SKIP LINE
NEW SOLID LINE

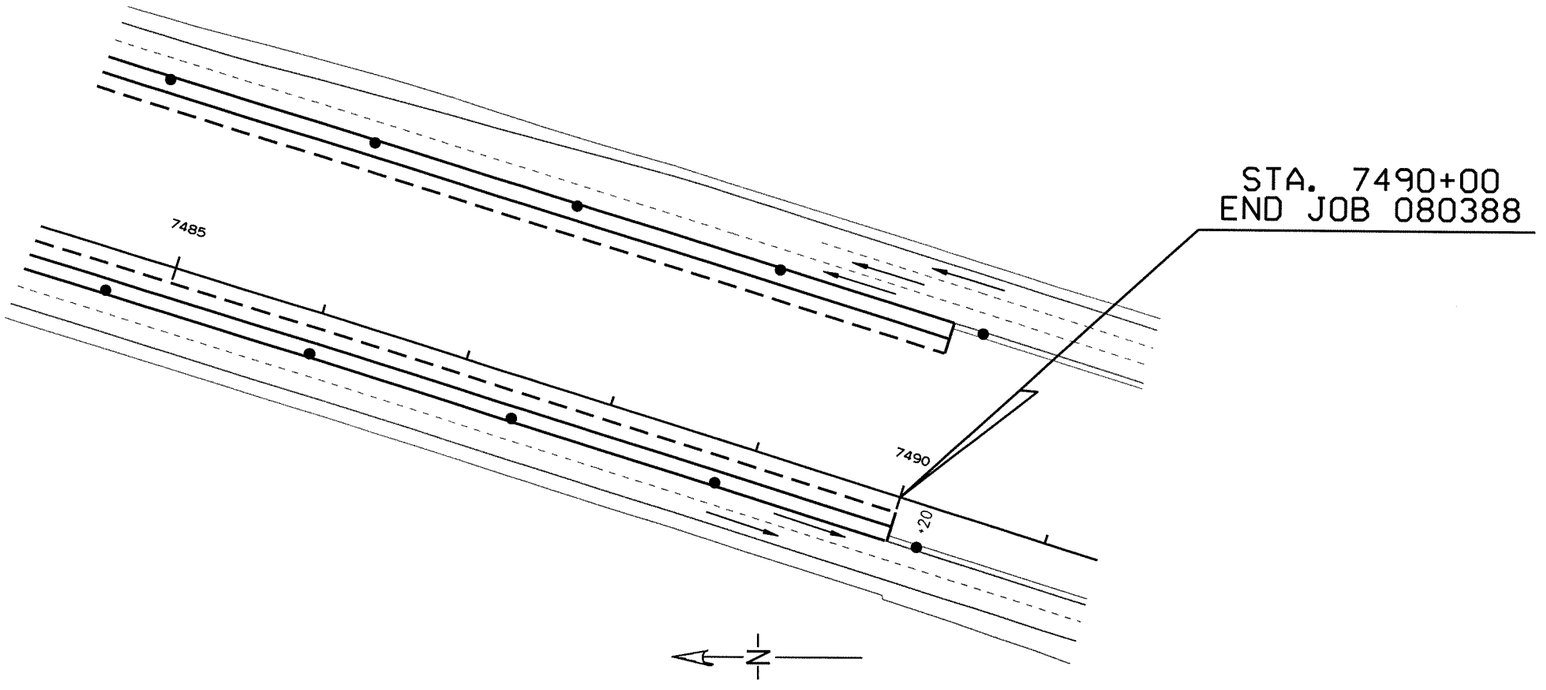
MAINTENANCE OF TRAFFIC STAGE 4A

r080388_MOT 4A.dgn 10/26/2011

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				JOB NO.		080388	72	452

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
14760
MICHAEL D. FUGETT
10-28-11



STRIPING SYMBOLISM:
UNDISTURBED EXISTING STRIPING - - - - - - - -
NEW SKIP LINE — - — - — - — - —
NEW SOLID LINE ————————

MAINTENANCE OF TRAFFIC STAGE 4A

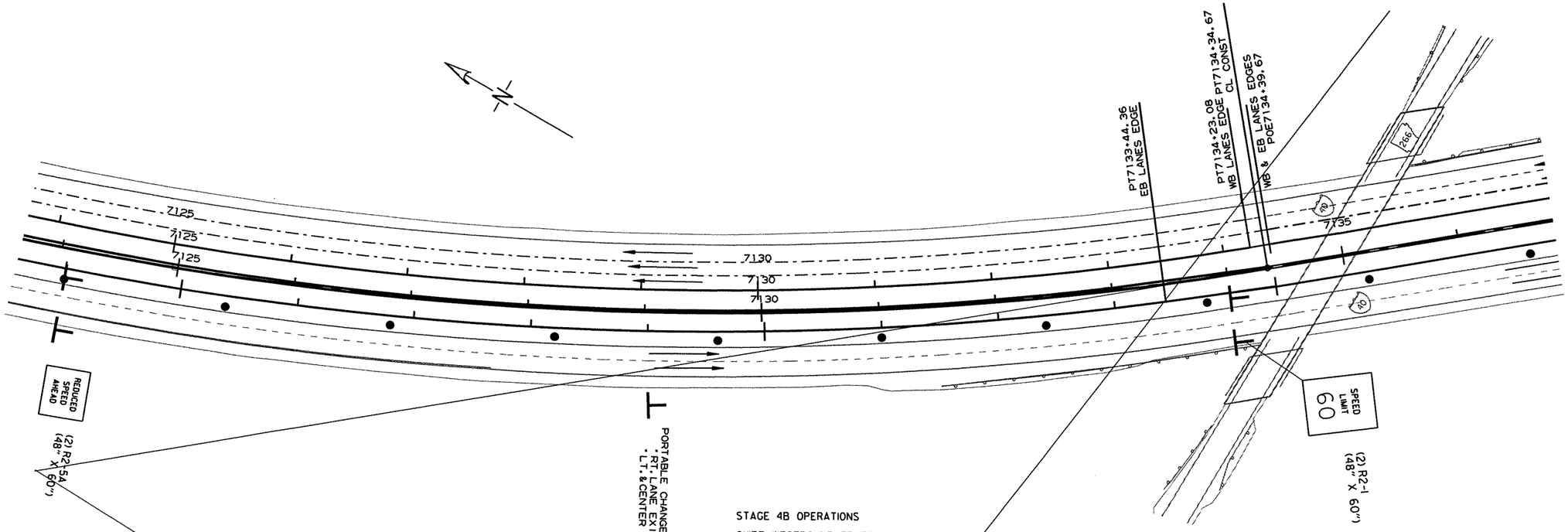
r080388_MOT 4A.dgn 10/26/2011

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				6	ARK.			
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(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
12260
MICHAEL D. FUGETT
10-28-11

NOTE:
TRAFFIC DRUMS USED IN THIS STAGE ARE RETAINED FROM STAGE 4A FROM THE BEGINNING OF THE JOB TO THE HWY. 266 OVERPASS.



STAGE 4B OPERATIONS

SHIFT WESTBOUND TRAFFIC AT HWY. 64 OVERPASS BACK TO ORIGINAL 2 LANES
SHIFT EASTBOUND TRAFFIC ONTO OVERPASS MEDIAN AT HWY. 64
RETAIN OTHER TRAFFIC PATHS FROM STAGE 4A

AT HWY. 64 OVERPASS
CONSTRUCT EASTBOUND LANES AND APPROACHES FOR NEW OVERPASS

AT STONE DAM AND GOLD CREEK BRIDGES
FINISH CONSTRUCTING OUTER LANES OF NEW BRIDGES
RETURN TRAFFIC THROUGH THESE AREAS TO TWO ORIGINAL LANES

STRIPING SYMBOLISM:
UNDISTURBED EXISTING STRIPING
NEW SKIP LINE
NEW SOLID LINE

MAINTENANCE OF TRAFFIC
STAGE 4B HWY. 65 EXIT

r080388_MOT_4B.dgn 10/26/2011

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				6	ARK.			
				JOB NO.		080388	74	452

(2) MAINTENANCE OF TRAFFIC

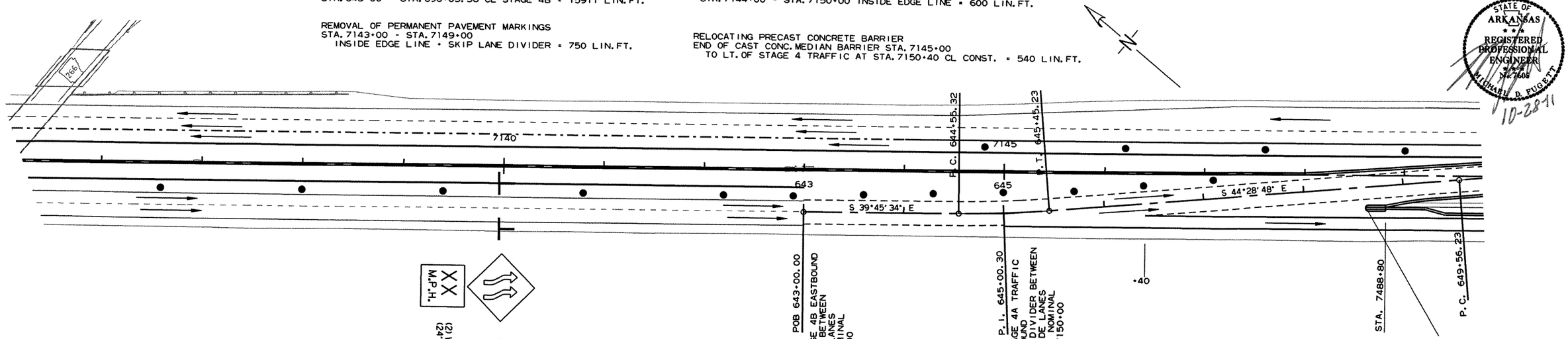
STAGE 4B SHIFTED EASTBOUND TRAFFIC
REMOVABLE CONSTRUCTION PAVEMENT MARKINGS
LT. & RT. EDGE LINES + SOLID LANE DIVIDER
STA. 643+00 - STA. 696+03.56 CL STAGE 4B = 15911 LIN. FT.

REMOVAL OF PERMANENT PAVEMENT MARKINGS
STA. 7143+00 - STA. 7149+00
INSIDE EDGE LINE + SKIP LANE DIVIDER = 750 LIN. FT.

STAGE 4B WESTBOUND STRIPING
REMOVABLE CONSTRUCTION PAVEMENT MARKINGS
STA. 7144+00 - STA. 7150+00 INSIDE EDGE LINE = 600 LIN. FT.

RELOCATING PRECAST CONCRETE BARRIER
END OF CAST CONC. MEDIAN BARRIER STA. 7145+00
TO LT. OF STAGE 4 TRAFFIC AT STA. 7150+40 CL CONST. = 540 LIN. FT.

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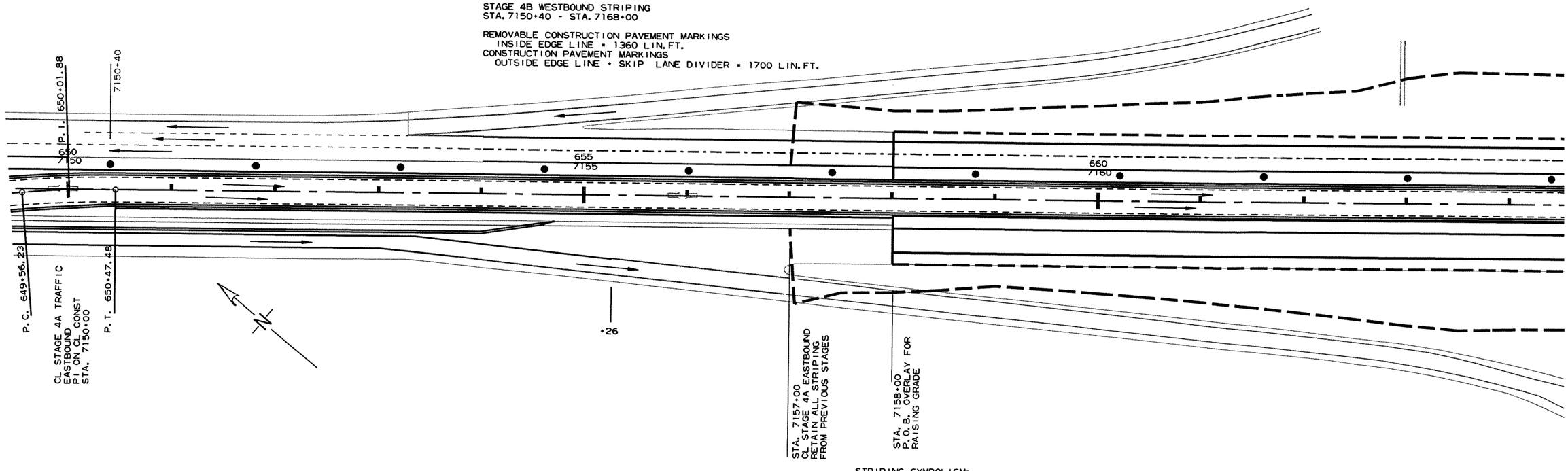


RELOCATING PRECAST CONCRETE BARRIER
RT. OF STAGE 4 TRAFFIC
STA. 7148+80 - STA. 7150+40 CL CONST. = 160 LIN. FT.
LT. OF EASTBOUND EXIT RAMP
STA. 7148+80 - STA. 7154+73 CL CONST. = 583 LIN. FT.

TEMPORARY IMPACT ATTENUATION BARRIER = 1 EACH

STAGE 4B WESTBOUND STRIPING
STA. 7150+40 - STA. 7168+00

REMOVABLE CONSTRUCTION PAVEMENT MARKINGS
INSIDE EDGE LINE = 1360 LIN. FT.
CONSTRUCTION PAVEMENT MARKINGS
OUTSIDE EDGE LINE + SKIP LANE DIVIDER = 1700 LIN. FT.



STRIPING SYMBOLISM:
UNDISTURBED EXISTING STRIPING
NEW SKIP LINE
NEW SOLID LINE

MAINTENANCE OF TRAFFIC
STAGE 4B HWY. 65 EXIT

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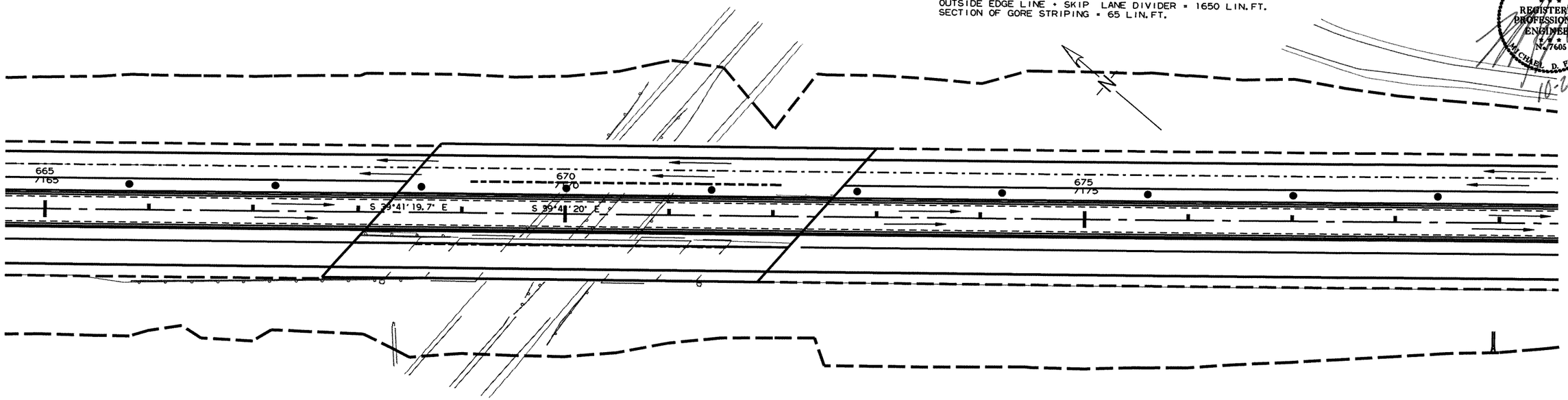
(2) MAINTENANCE OF TRAFFIC

STAGE 4B WESTBOUND STRIPING
REMOVABLE CONSTRUCTION PAVEMENT MARKINGS
STA. 7168+00 - 7173+00
LT.& RT EDGE LINES + SKIP LANE DIVIDER = 1125 LIN. FT.

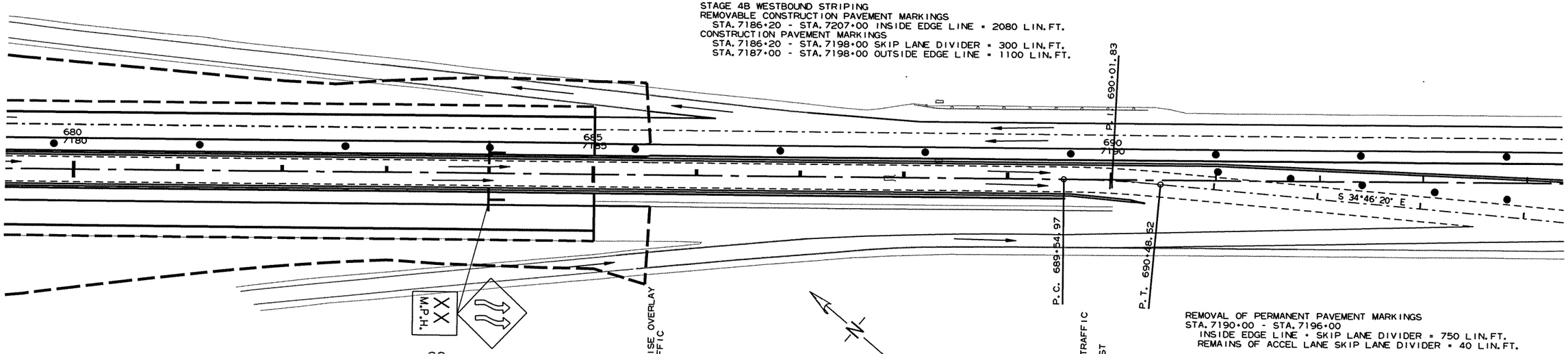
STAGE 4B WESTBOUND STRIPING
STA. 7173+00 - STA. 7186+20

REMOVABLE CONSTRUCTION PAVEMENT MARKINGS
INSIDE EDGE LINE = 1360 LIN. FT.
CONSTRUCTION PAVEMENT MARKINGS
OUTSIDE EDGE LINE + SKIP LANE DIVIDER = 1650 LIN. FT.
SECTION OF GORE STRIPING = 65 LIN. FT.

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STAGE 4B WESTBOUND STRIPING
REMOVABLE CONSTRUCTION PAVEMENT MARKINGS
STA. 7186+20 - STA. 7207+00 INSIDE EDGE LINE = 2080 LIN. FT.
CONSTRUCTION PAVEMENT MARKINGS
STA. 7186+20 - STA. 7198+00 SKIP LANE DIVIDER = 300 LIN. FT.
STA. 7187+00 - STA. 7198+00 OUTSIDE EDGE LINE = 1100 LIN. FT.



RELOCATING PRECAST CONCRETE BARRIER
RT. OF STAGE 4 TRAFFIC
STA. 7189+60 - STA. 7190+33 = 73 LIN. FT.
THIS INCLUDES (1) SPECIAL END UNIT
STA. 7180+00 LT. OF STAGE 4 TRAFFIC TO
STA. 7195+00 ON CL CONST. = 1500 LIN. FT.

P.O.E. GRADE RAISE OVERLAY
CL STAGE 3B TRAFFIC
OFFSET 49.25'
FROM CL CONST
BOTH DIRECTIONS

REMOVABLE CONSTRUCTION PAVEMENT MARKINGS
LT. EDGE LINE EASTBOUND EXIT RAMP
STA. 7187+00 - STA. 7190+00 CL CONST. = 300 LIN. FT.

STRIPING SYMBOLISM:
UNDISTURBED EXISTING STRIPING
NEW SKIP LINE
NEW SOLID LINE

STA. 7190+00
CL STAGE 4B TRAFFIC
EASTBOUND
PI ON CL CONST

REMOVAL OF PERMANENT PAVEMENT MARKINGS
STA. 7190+00 - STA. 7196+00
INSIDE EDGE LINE + SKIP LANE DIVIDER = 750 LIN. FT.
REMAINS OF ACCEL LANE SKIP LANE DIVIDER = 40 LIN. FT.

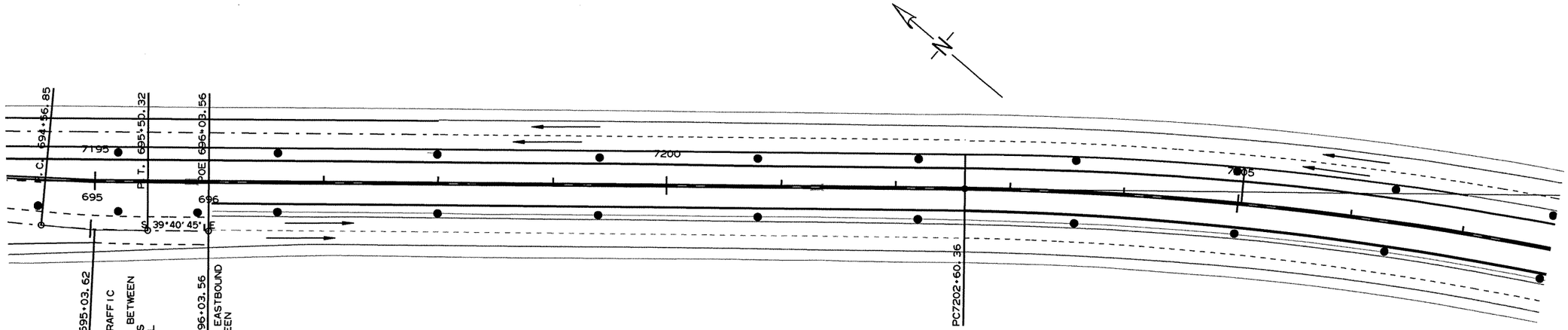
MAINTENANCE OF TRAFFIC
STAGE 4B HWY. 65 EXIT

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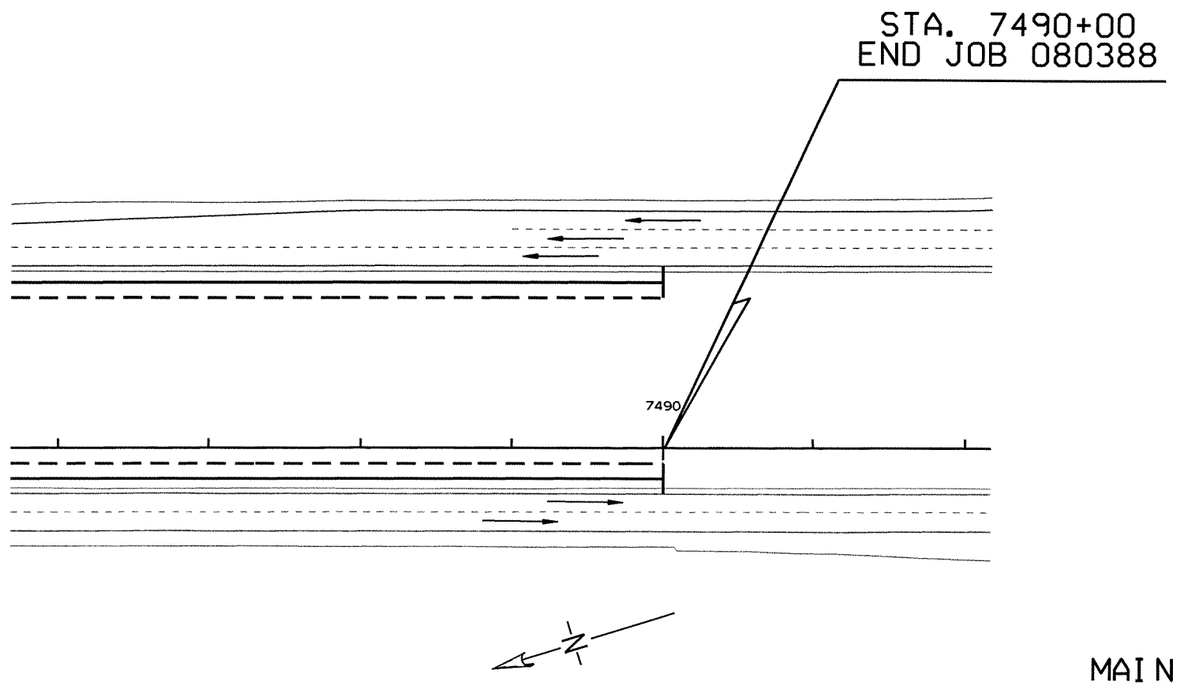
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(2) MAINTENANCE OF TRAFFIC

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NOTE:
TRAFFIC DRUMS & TRAFFIC CONTROL SIGNS
USED IN THIS STAGE ARE RETAINED FROM STAGE 4A
FROM STA. 7218+00 TO THE END OF THE JOB.



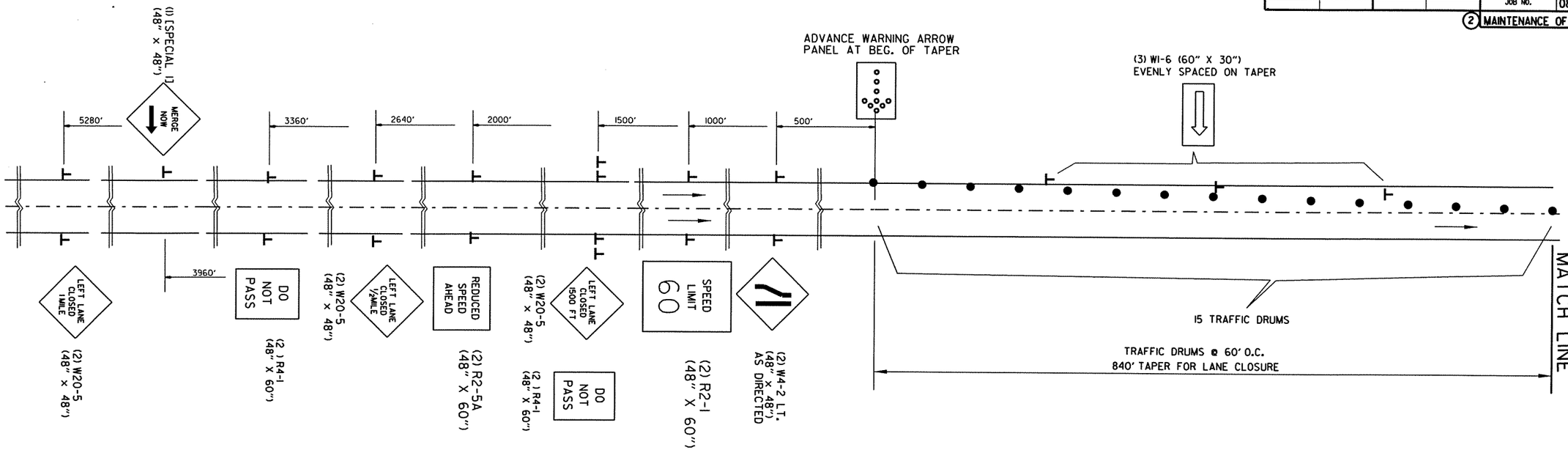
MAINTENANCE OF TRAFFIC STAGE 4B HWY. 65 EXIT

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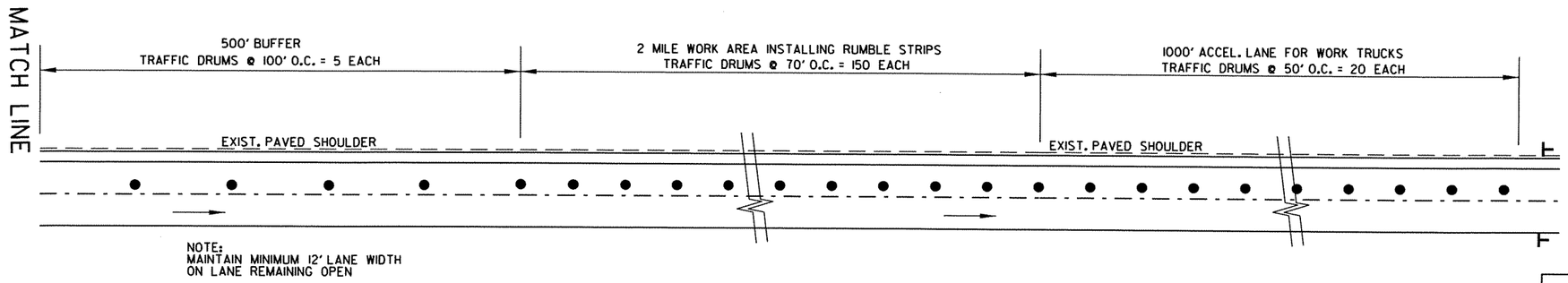
(2) MAINTENANCE OF TRAFFIC

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LANE CLOSURE FOR WORK ON INSIDE SHOULDERS

NOTE:
QUANTITIES GIVEN ARE FOR ONE WORK AREA IN EACH DIRECTION AT THE SAME TIME.



WORK AREA ON INSIDE SHOULDER

MAINTENANCE OF TRAFFIC
MOVING INSIDE-LANE CLOSURE STAGE 5

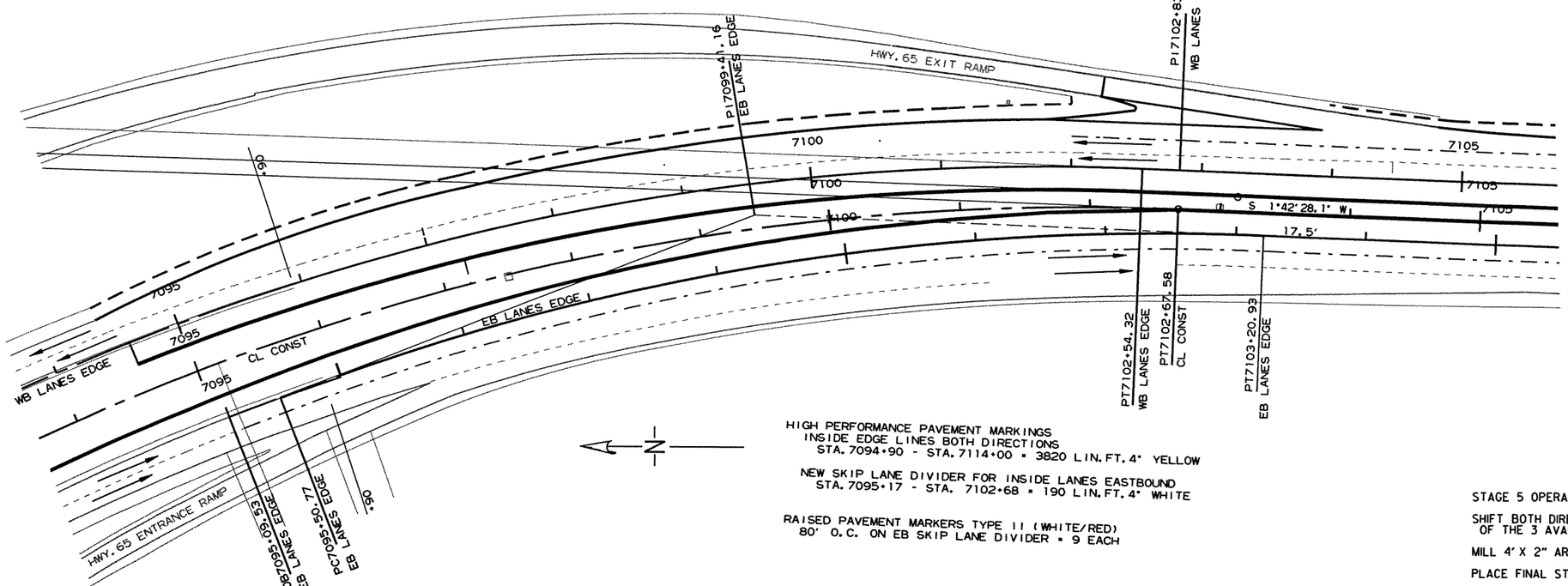
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(2) MAINTENANCE OF TRAFFIC

REMOVAL OF PERMANENT PAVEMENT MARKINGS
INSIDE EDGE LINES BOTH DIRECTIONS
STA. 7094+90 - STA. 7114+00 = 3820 LIN. FT.

ORIGINAL SKIP LANE DIVIDER FOR INSIDE LANES EASTBOUND
STA. 7095+17 - STA. 7102+68 = 190 LIN. FT.



HIGH PERFORMANCE PAVEMENT MARKINGS
INSIDE EDGE LINES BOTH DIRECTIONS
STA. 7094+90 - STA. 7114+00 = 3820 LIN. FT. 4" YELLOW

NEW SKIP LANE DIVIDER FOR INSIDE LANES EASTBOUND
STA. 7095+17 - STA. 7102+68 = 190 LIN. FT. 4" WHITE

RAISED PAVEMENT MARKERS TYPE II (WHITE/RED)
80' O.C. ON EB SKIP LANE DIVIDER = 9 EACH

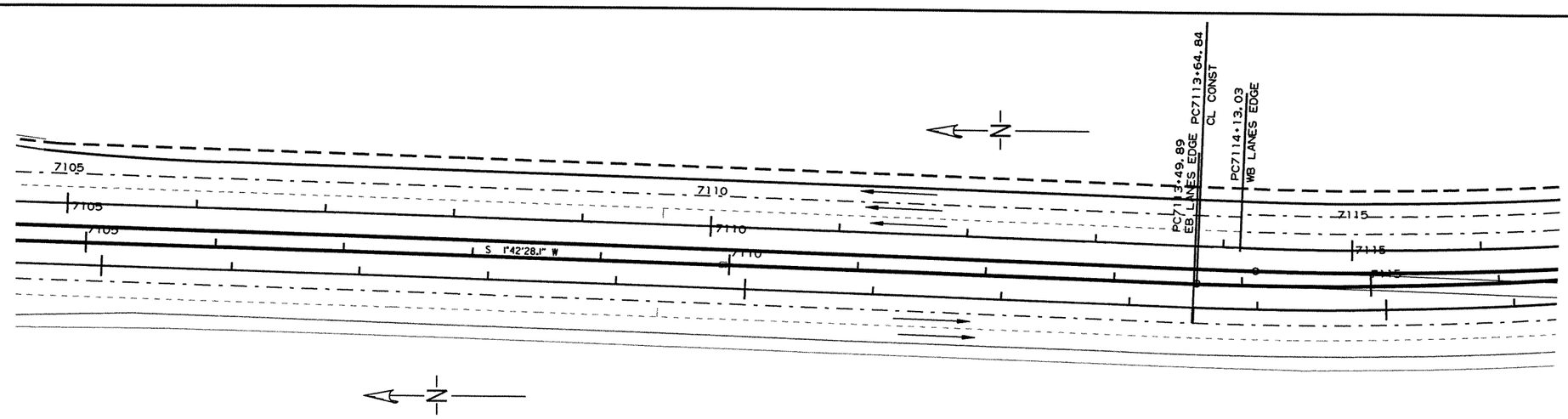
STAGE 5 OPERATIONS

SHIFT BOTH DIRECTIONS OF TRAFFIC ONTO TWO OUTER LANES OF THE 3 AVAILABLE

MILL 4' X 2" AREA ON ORIGINAL INSIDE SHOULDERS

PLACE FINAL STRIPING WHERE SHOWN

INSTALL RUMBLE STRIPS ON INSIDE SHOULDERS
PLACE FINAL STRIPING ON NEW INSIDE LANES BOTH DIRECTIONS



STRIPING SYMBOLISM:
UNDISTURBED EXISTING STRIPING
NEW SKIP LINE
NEW SOLID LINE

MAINTENANCE OF TRAFFIC STAGE 5

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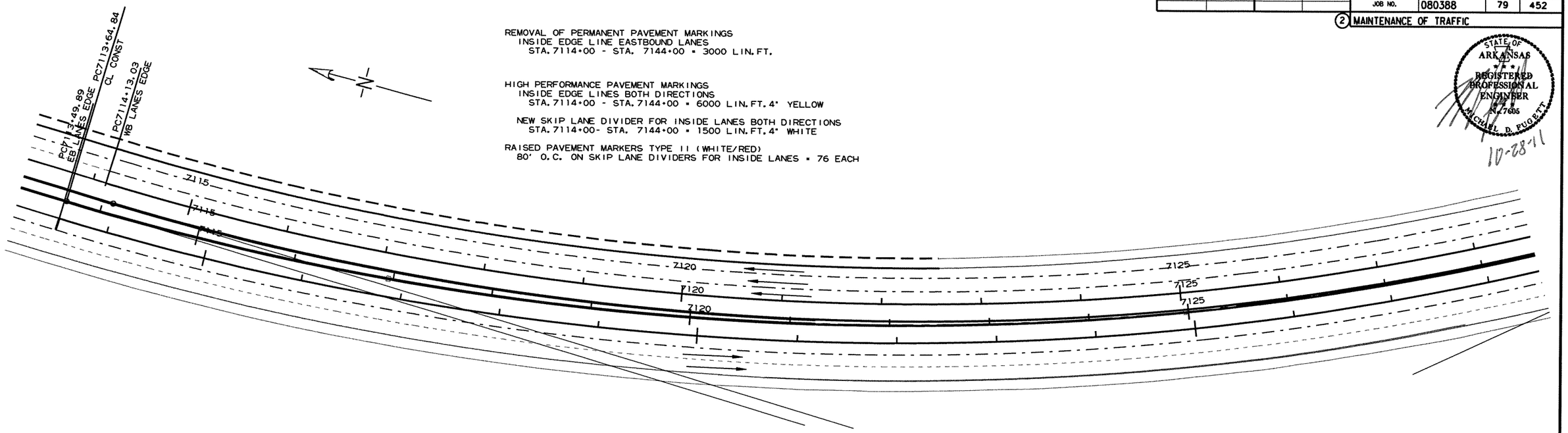
(2) MAINTENANCE OF TRAFFIC

REMOVAL OF PERMANENT PAVEMENT MARKINGS
INSIDE EDGE LINE EASTBOUND LANES
STA. 7114+00 - STA. 7144+00 = 3000 LIN. FT.

HIGH PERFORMANCE PAVEMENT MARKINGS
INSIDE EDGE LINES BOTH DIRECTIONS
STA. 7114+00 - STA. 7144+00 = 6000 LIN. FT. 4" YELLOW

NEW SKIP LANE DIVIDER FOR INSIDE LANES BOTH DIRECTIONS
STA. 7114+00- STA. 7144+00 = 1500 LIN. FT. 4" WHITE

RAISED PAVEMENT MARKERS TYPE II (WHITE/RED)
80' O.C. ON SKIP LANE DIVIDERS FOR INSIDE LANES = 76 EACH



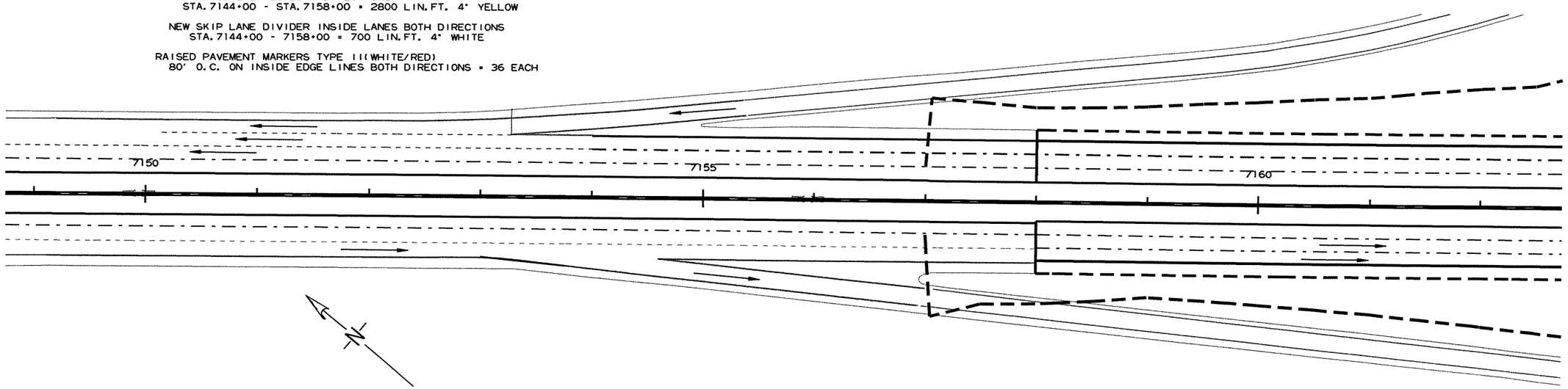
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REMOVAL OF PERMANENT PAVEMENT MARKINGS
INSIDE EDGE LINES
WESTBOUND LANES STA. 7150+00 - STA. 7154+00 = 400 LIN. FT.

HIGH PERFORMANCE PAVEMENT MARKINGS
INSIDE EDGE LINES BOTH DIRECTIONS
STA. 7144+00 - STA. 7158+00 = 2800 LIN. FT. 4" YELLOW

NEW SKIP LANE DIVIDER INSIDE LANES BOTH DIRECTIONS
STA. 7144+00 - 7158+00 = 700 LIN. FT. 4" WHITE

RAISED PAVEMENT MARKERS TYPE II(WHITE/RED)
80' O.C. ON INSIDE EDGE LINES BOTH DIRECTIONS = 36 EACH



STRIPING SYMBOLISM:
UNDISTURBED EXISTING STRIPING
NEW SKIP LINE
NEW SOLID LINE

MAINTENANCE OF TRAFFIC STAGE 5

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(2) MAINTENANCE OF TRAFFIC

5A: RETAIN TRAFFIC ON STAGE 4B TRAFFIC PATHS
STA. 7158+00 - STA. 7185+00

HIGH PERFORMANCE PAVEMENT MARKINGS
OUTSIDE EDGE LINE EASTBOUND LANES = 2700 LIN. FT. 4" WHITE
BOTH SKIP LANE DIVIDERS EASTBOUND LANES ON ACHM SURFACE = 1190 LIN. FT. 4" WHITE
INSIDE EDGE LINE WESTBOUND LANES = 2700 LIN. FT. 4" YELLOW
SKIP LANE DIVIDER FOR WESTBOUND INNER LANE ON ACHM SURFACE = 590 LIN. FT. 4" WHITE

HIGH PERFORMANCE CONTRAST PAVEMENT MARKINGS
BOTH SKIP LANE DIVIDERS EASTBOUND ON PCC SURFACE = 160 LIN. FT. [WHITE]
SKIP LANE DIVIDER FOR WESTBOUND INNER LANE ON PCC SURFACE = 80 LIN. FT. [WHITE]

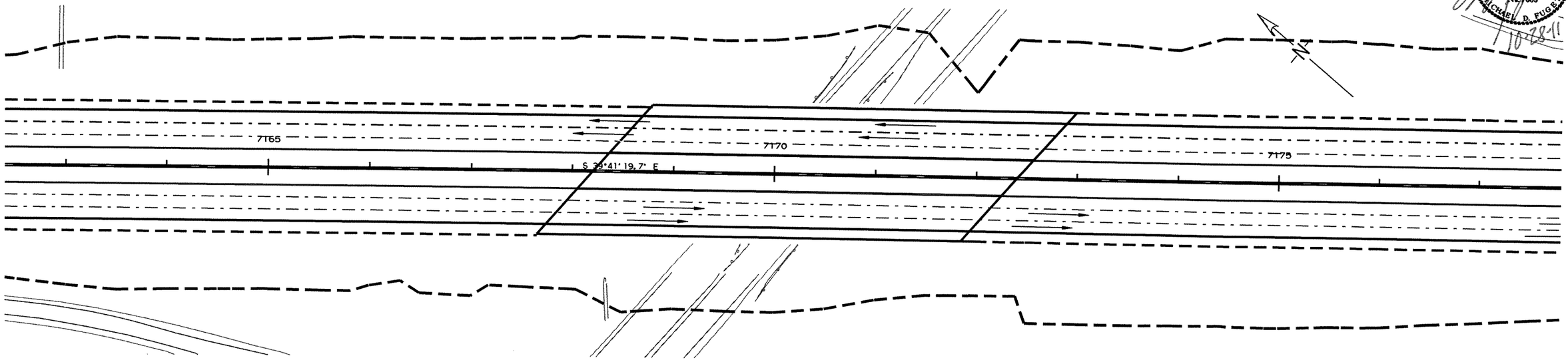
5B: SHIFT TRAFFIC TO 2 OUTER LANES BOTH DIRECTIONS
STA. 7158+00 - STA. 7185+00

HIGH PERFORMANCE PAVEMENT MARKINGS
INSIDE EDGE LINE EASTBOUND LANES = 2700 LIN. FT. 4" YELLOW
OUTSIDE EDGE LINE WESTBOUND LANES = 2700 LIN. FT. 4" WHITE
SKIP LANE DIVIDER FOR WESTBOUND OUTER LANE ON ACHM SURFACE = 590 LIN. FT. 4" WHITE

HIGH PERFORMANCE CONTRAST PAVEMENT MARKINGS
SKIP LANE DIVIDER FOR WESTBOUND OUTER LANE ON PCC SURFACE = 80 LIN. FT. [WHITE]

RAISED PAVEMENT MARKERS TYPE II (WHITE/RED)
80' O.C. ON ALL SKIP LANE DIVIDERS THIS SECTION = 136 EACH

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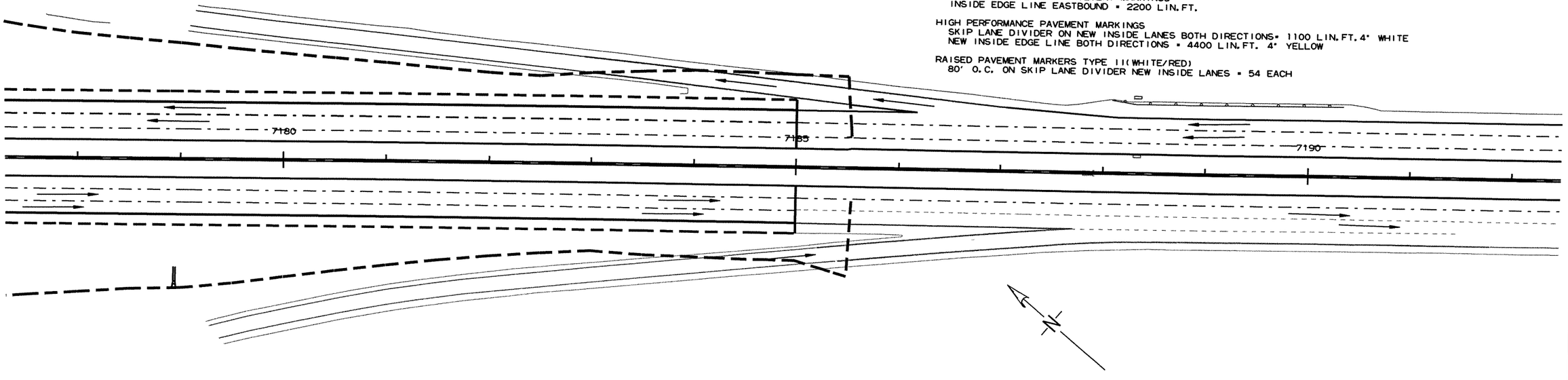


STA. 7185+00 - STA. 7207+00

REMOVAL OF PERMANENT PAVEMENT MARKINGS
INSIDE EDGE LINE EASTBOUND = 2200 LIN. FT.

HIGH PERFORMANCE PAVEMENT MARKINGS
SKIP LANE DIVIDER ON NEW INSIDE LANES BOTH DIRECTIONS= 1100 LIN. FT. 4" WHITE
NEW INSIDE EDGE LINE BOTH DIRECTIONS = 4400 LIN. FT. 4" YELLOW

RAISED PAVEMENT MARKERS TYPE II (WHITE/RED)
80' O.C. ON SKIP LANE DIVIDER NEW INSIDE LANES = 54 EACH



STRIPING SYMBOLISM:
UNDISTURBED EXISTING STRIPING
NEW SKIP LINE
NEW SOLID LINE

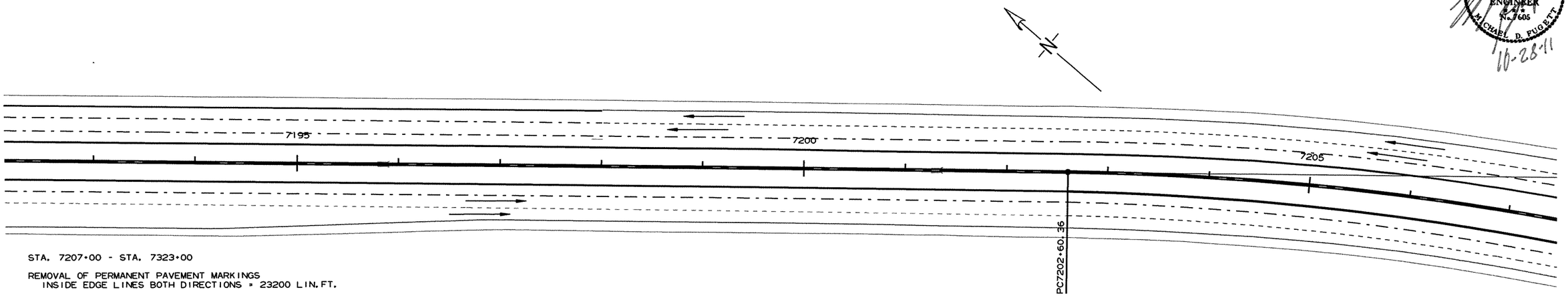
MAINTENANCE OF TRAFFIC STAGE 5

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(2) MAINTENANCE OF TRAFFIC

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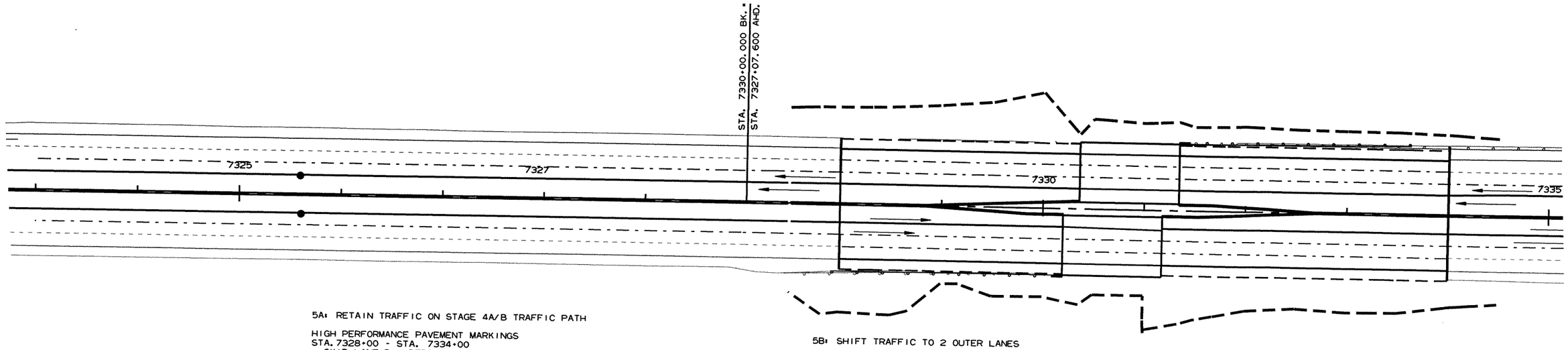


STA. 7207+00 - STA. 7323+00

REMOVAL OF PERMANENT PAVEMENT MARKINGS
INSIDE EDGE LINES BOTH DIRECTIONS = 23200 LIN.FT.

HIGH PERFORMANCE PAVEMENT MARKINGS
INSIDE EDGE LINES NEW LANES BOTH DIRECTIONS = 23200 LIN.FT. 4" YELLOW
SKIP LANE DIVIDERS NEW INSIDE LANES BOTH DIRECTIONS = 5800 LIN.FT. 4" WHITE

RAISED PAVEMENT MARKERS TYPE II (WHITE/RED)
80' O.C. ON SKIP LANE DIVIDERS = 290 EACH



5A: RETAIN TRAFFIC ON STAGE 4A/B TRAFFIC PATH

HIGH PERFORMANCE PAVEMENT MARKINGS
STA. 7328+00 - STA. 7334+00
SKIP LANE DIVIDERS OUTSIDE LANES BOTH DIRECTIONS = 300 LIN.FT. 4" WHITE
OUTSIDE EDGE LINES BOTH DIRECTIONS = 1200 LIN.FT. 4" WHITE

5B: SHIFT TRAFFIC TO 2 OUTER LANES

HIGH PERFORMANCE PAVEMENT MARKINGS
STA. 7323+00 - STA. 7342+00
INSIDE EDGE LINES BOTH DIRECTIONS = 3800 LIN.FT. 4" YELLOW
SKIP LANE DIVIDER FOR NEW INSIDE LANE
BOTH DIRECTIONS ON ACHM SURFACE = 750 LIN.FT. 4" WHITE

HIGH PERFORMANCE CONTRAST PAVEMENT MARKINGS
SKIP LANE DIVIDERS NEW INSIDE LANES ON BRIDGE DECKS
BOTH DIRECTIONS = 50 LIN.FT. (WHITE)

RAISED PAVEMENT MARKERS TYPE II (WHITE/RED)
80' O.C. ON ALL NEW SKIP LANE DIVIDERS = 78 EACH

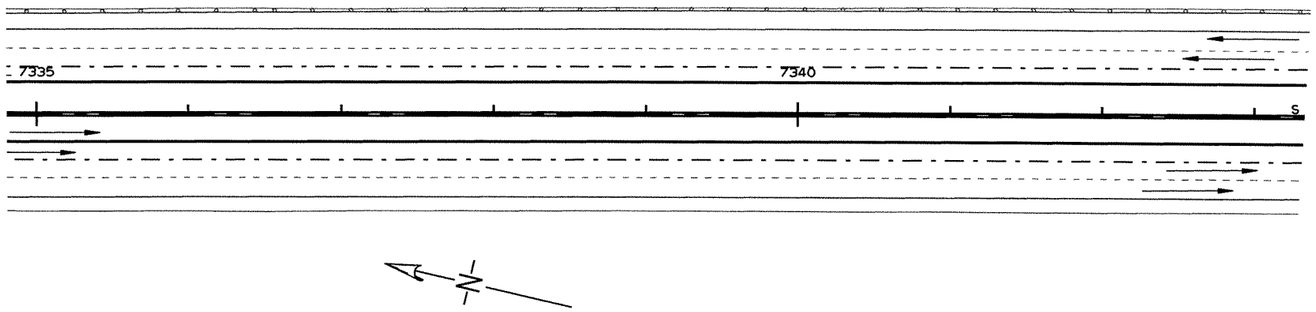
MAINTENANCE OF TRAFFIC STAGE 5

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(2) MAINTENANCE OF TRAFFIC

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STA. 7342+00 - STA. 7415+00

REMOVAL OF PERMANENT PAVEMENT MARKINGS
INSIDE EDGE LINES BOTH DIRECTIONS = 14600 LIN. FT.

HIGH PERFORMANCE PAVEMENT MARKINGS
INSIDE EDGE LINES NEW LANES BOTH DIRECTIONS = 14600 LIN. FT. 4" YELLOW
SKIP LANE DIVIDERS NEW INSIDE LANES BOTH DIRECTIONS = 3650 LIN. FT.

RAISED PAVEMENT MARKERS TYPE II (WHITE/RED)
80' O.C. ON SKIP LANE DIVIDERS = 182 EACH

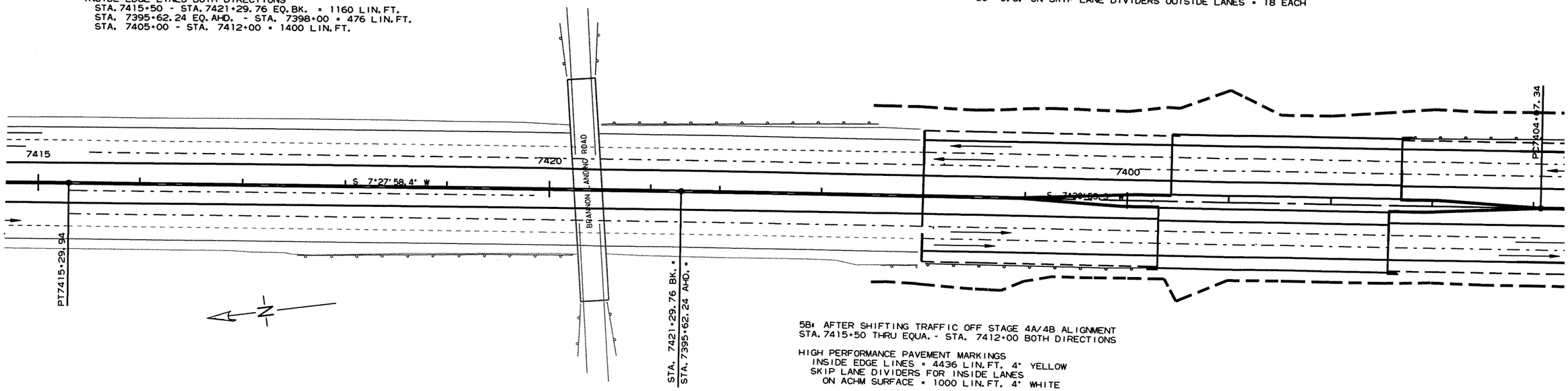
5A: BEFORE SHIFTING TRAFFIC OFF STAGE 4A/4B ALIGNMENT
STA. 7398+00 - STA. 7405+00 BOTH DIRECTIONS

HIGH PERFORMANCE PAVEMENT MARKINGS
OUTSIDE EDGE LINES = 1400 LIN. FT. 4" WHITE
SKIP LANE DIVIDERS FOR OUTSIDE LANES
ON ACHM SURFACE = 240 LIN. FT. 4" WHITE

HIGH PERFORMANCE CONTRAST PAVEMENT MARKINGS
SKIP LANE DIVIDERS FOR OUTSIDE LANES
ON PCC SURFACE = 100 LIN. FT. 4" WHITE

RAISED PAVEMENT MARKERS TYPE II (WHITE/RED)
80' O.C. ON SKIP LANE DIVIDERS OUTSIDE LANES = 18 EACH

REMOVAL OF PERMANENT PAVEMENT MARKINGS
INSIDE EDGE LINES BOTH DIRECTIONS
STA. 7415+50 - STA. 7421+29.76 EQ. BK. = 1160 LIN. FT.
STA. 7395+62.24 EQ. AHD. - STA. 7398+00 = 476 LIN. FT.
STA. 7405+00 - STA. 7412+00 = 1400 LIN. FT.



5B: AFTER SHIFTING TRAFFIC OFF STAGE 4A/4B ALIGNMENT
STA. 7415+50 THRU EQUA. - STA. 7412+00 BOTH DIRECTIONS

HIGH PERFORMANCE PAVEMENT MARKINGS
INSIDE EDGE LINES = 4436 LIN. FT. 4" YELLOW
SKIP LANE DIVIDERS FOR INSIDE LANES
ON ACHM SURFACE = 1000 LIN. FT. 4" WHITE

HIGH PERFORMANCE CONTRAST PAVEMENT MARKINGS
SKIP LANE DIVIDERS FOR INSIDE LANES
ON PCC SURFACE = 120 LIN. FT. 4" WHITE

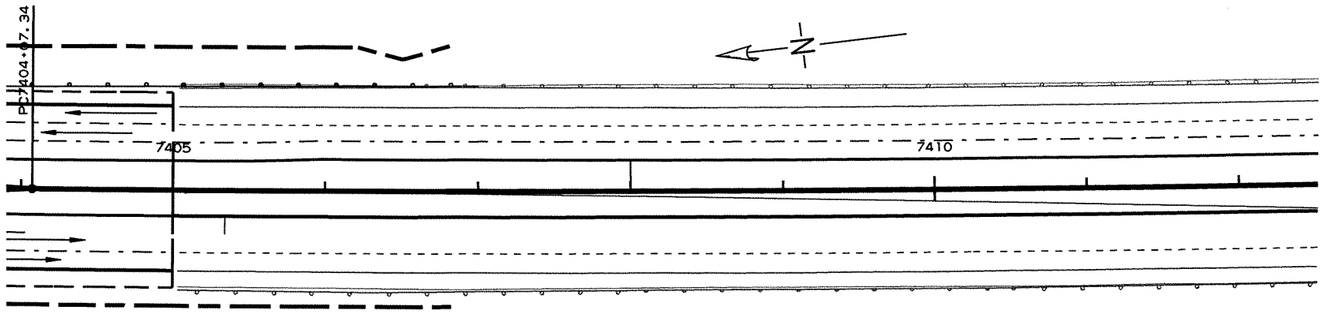
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED)
80' O.C. ON SKIP LANE DIVIDER INSIDE LANES = 56 EACH

MAINTENANCE OF TRAFFIC STAGE 5

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				JOB NO.		080388	83	452

(2) MAINTENANCE OF TRAFFIC



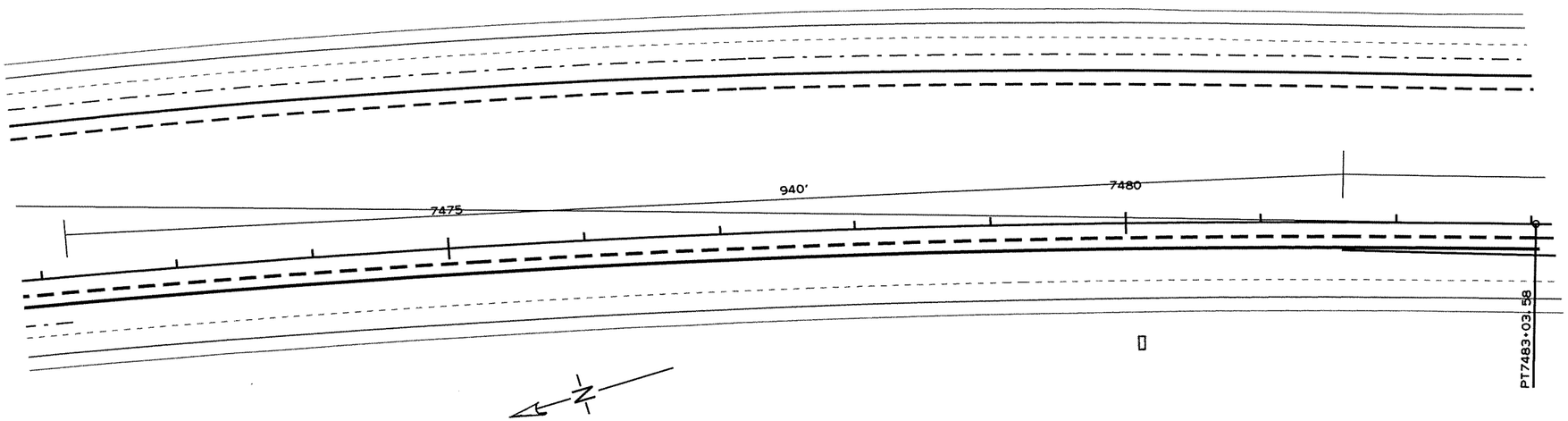
STA. 7412+00 - STA. 7490+00

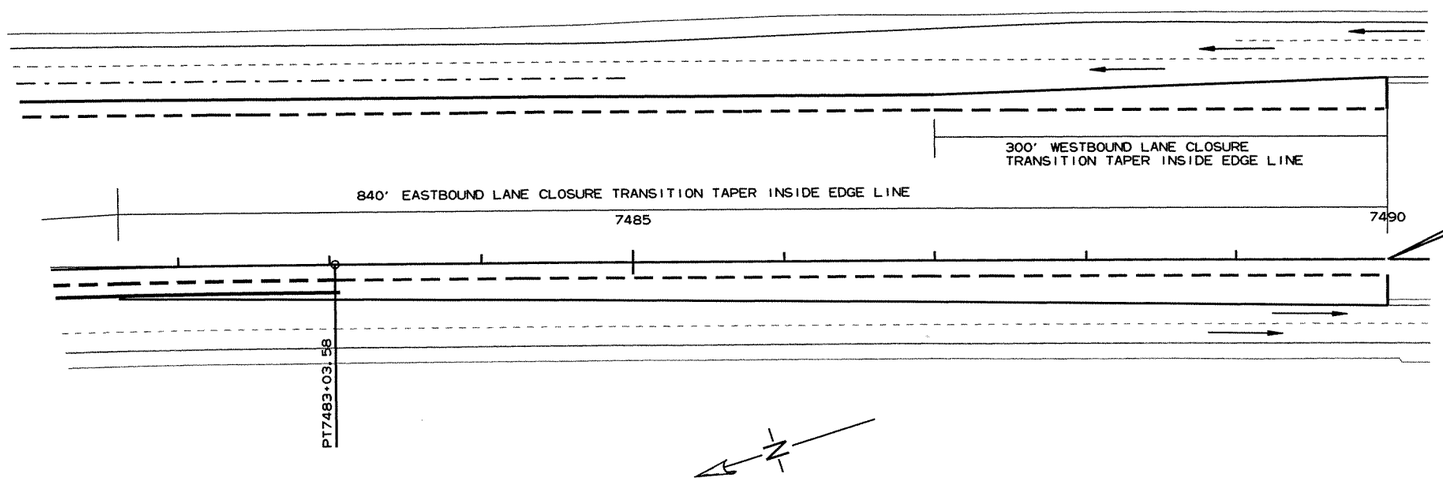
REMOVAL OF PERMANENT PAVEMENT MARKINGS
INSIDE EDGE LINES BOTH DIRECTIONS = 15600 LIN.FT.

HIGH PERFORMANCE PAVEMENT MARKINGS
INSIDE EDGE LINES NEW LANES BOTH DIRECTIONS = 15600 LIN.FT. 4" YELLOW
SKIP LANE DIVIDER NEW EASTBOUND INSIDE LANE
STA.7412+00 - STA. 7472+20 = 1500 LIN.FT. 4" WHITE
SKIP LANE DIVIDER NEW WESTBOUND INSIDE LANE
STA.7412+00 - STA. 7485+00 = 1820 LIN.FT. 4" WHITE

RAISED PAVEMENT MARKERS TYPE II (WHITE/RED)
80' O.C. ON NEW SKIP LANE DIVIDERS = 166 EACH

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
14476
MICHAEL D. FUGETT
10-28-11





STA. 7490+00
END JOB 080388

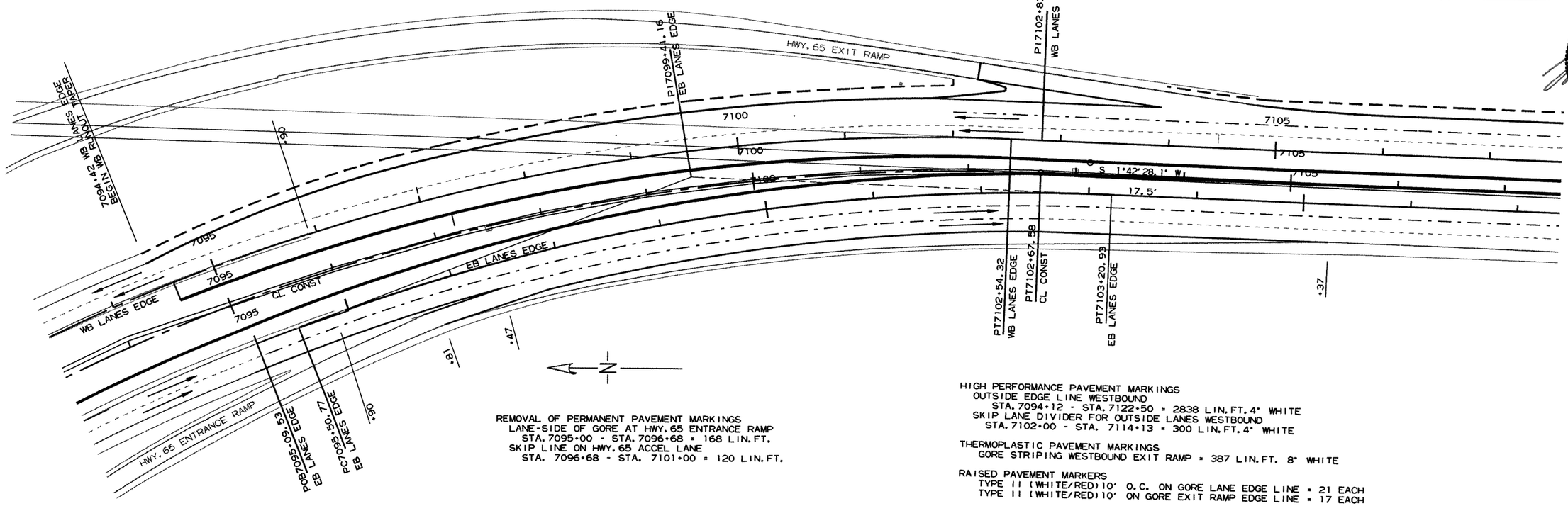
MAINTENANCE OF TRAFFIC
STAGE 5

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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.		080388	84	452

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11



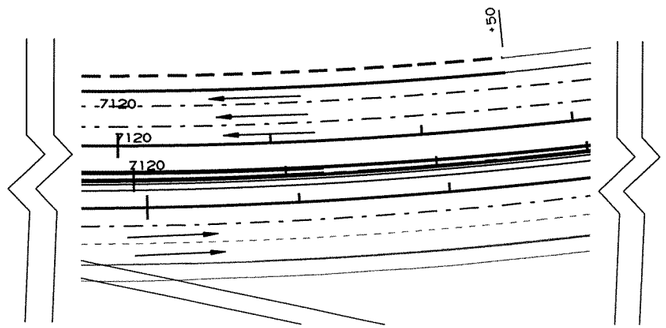
REMOVAL OF PERMANENT PAVEMENT MARKINGS
LANE-SIDE OF GORE AT HWY. 65 ENTRANCE RAMP
STA. 7095+00 - STA. 7096+68 = 168 LIN. FT.
SKIP LINE ON HWY. 65 ACCEL LANE
STA. 7096+68 - STA. 7101+00 = 120 LIN. FT.

HIGH PERFORMANCE PAVEMENT MARKINGS
OUTSIDE EDGE LINE WESTBOUND
STA. 7094+12 - STA. 7122+50 = 2838 LIN. FT. 4" WHITE
SKIP LANE DIVIDER FOR OUTSIDE LANES WESTBOUND
STA. 7102+00 - STA. 7114+13 = 300 LIN. FT. 4" WHITE

THERMOPLASTIC PAVEMENT MARKINGS
GORE STRIPING WESTBOUND EXIT RAMP = 387 LIN. FT. 8" WHITE

RAISED PAVEMENT MARKERS
TYPE II (WHITE/RED) 10' O.C. ON GORE LANE EDGE LINE = 21 EACH
TYPE II (WHITE/RED) 10' ON GORE EXIT RAMP EDGE LINE = 17 EACH

REFER ALSO TO STANDARD DRAWING PM-2



PERMANENT PAVEMENT MARKINGS

THERMOPLASTIC PAVEMENT MARKINGS
GORE EDGE LINES EASTBOUND ENTRANCE RAMP
STA. 7095+00 - STA. 7097+47 = 320 LIN. FT. 8" WHITE

HIGH PERFORMANCE PAVEMENT MARKING
SKIP LANE DIVIDER EASTBOUND STA. 7097+47 - STA. 7102+68 = 130 LIN. FT. 4" WHITE
OUTSIDE EDGE LINE EASTBOUND STA. 7096+81 - STA. 7105+37 = 856 LIN. FT. 4" WHITE

RAISED PAVEMENT MARKERS
TYPE II (WHITE/RED) 10' O.C. ON NEW GORE EDGE LINES = 34 EACH
TYPE II (WHITE/RED) 40' O.C. ON NEW SKIP LANE DIVIDER = 14 EACH
REFER ALSO TO STANDARD DRAWING PM-1

STAGE 6 OPERATIONS

SHIFT BOTH DIRECTIONS OF TRAFFIC ONTO TWO INNER LANES OF THE 3 AVAILABLE

INSTALL RUMBLE STRIPS ON OUTSIDE SHOULDERS
PLACE FINAL STRIPING ON OUTSIDE LANES BOTH DIRECTIONS WHERE SHOWN ON PLANS

MAINTENANCE OF TRAFFIC STAGE 6

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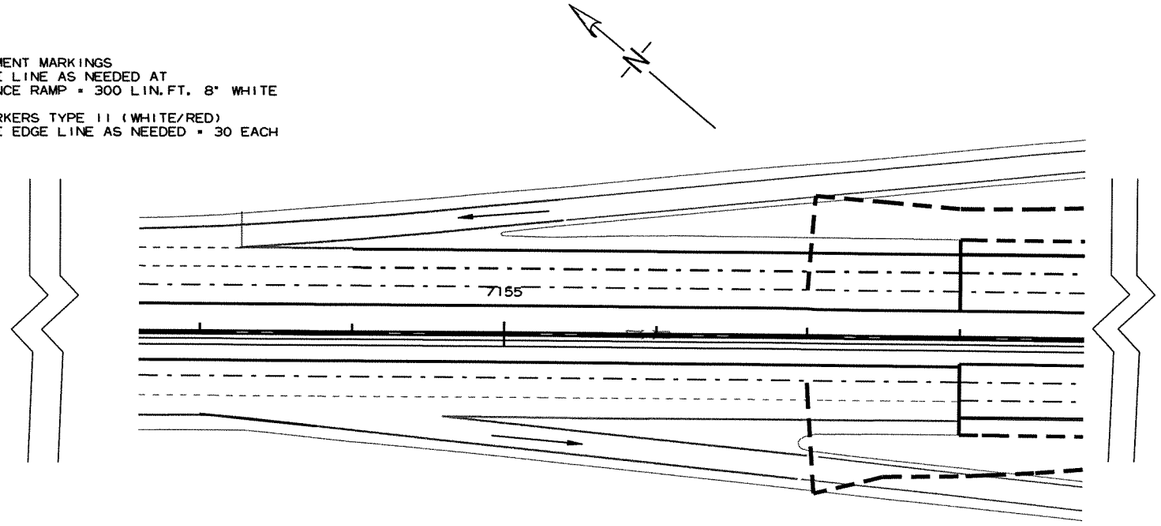
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	85	452

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11

THERMOPLASTIC PAVEMENT MARKINGS
REPLACE GORE EDGE LINE AS NEEDED AT
WESTBOUND ENTRANCE RAMP = 300 LIN.FT. 8" WHITE

RAISED PAVEMENT MARKERS TYPE II (WHITE/RED)
10' O.C. ON GORE EDGE LINE AS NEEDED = 30 EACH



HIGH PERFORMANCE PERMANENT PAVEMENT MARKINGS
WESTBOUND LANES STA. 7154+00 - STA. 7158+00
OUTSIDE EDGE LINE = 400 LIN.FT. 4" WHITE
OUTSIDE LANE SKIP LANE DIVIDER = 100 LIN.FT. 4" WHITE

RAISED PAVEMENT MARKERS TYPE II (WHITE/RED)
80' O.C. ON SKIP LANE DIVIDER = 5 EACH

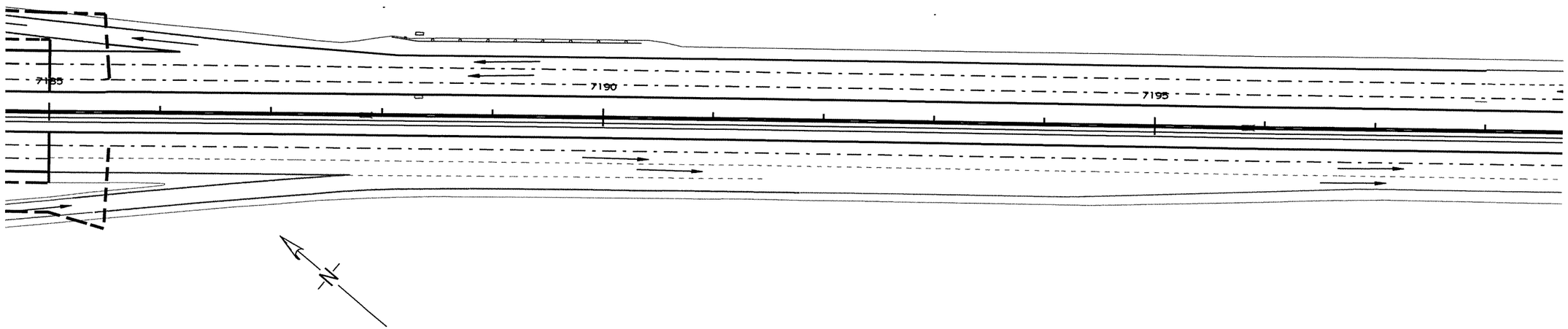
THERMOPLASTIC PAVEMENT MARKINGS
REPLACE GORE EDGE LINE AS NEEDED AT
WESTBOUND EXIT RAMP = 200 LIN.FT. 8" WHITE

RAISED PAVEMENT MARKERS TYPE II (WHITE/RED)
80' O.C. ON WESTBOUND EXIT = 19 EACH
10' O.C. ON GORE EDGE LINE AS NEEDED = 20 EACH

REFER ALSO TO STANDARD DRAWING PM-2

HIGH PERFORMANCE PERMANENT PAVEMENT MARKINGS
WESTBOUND LANES STA. 7185+00 - STA. 7198+00
OUTSIDE EDGE LINE = 1300 LIN.FT. 4" WHITE
OUTSIDE LANE SKIP LANE DIVIDER = 330 LIN.FT. 4" WHITE

RAISED PAVEMENT MARKERS TYPE II (WHITE/RED)
80' O.C. ON SKIP LANE DIVIDER = 16 EACH



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MAINTENANCE OF TRAFFIC STAGE 6

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				6	ARK.			
				JOB NO.		080388	86	452

(2) QUANTITY SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
NO. 17605
MICHAEL D. FUGETT
10-28-11

ADVANCE WARNING SIGNS AND DEVICES

SIGN NUMBER	DESCRIPTION	SIGN SIZE	STAGES								MAXIMUM NUMBER REQUIRED	TOTAL SIGNS REQUIRED		TRAFFIC DRUMS	ADVANCE WARNING ARROW PANEL	PORTABLE CHANGEABLE MESSAGE SIGN	FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER	RELOCATING PRECAST CONCRETE BARRIER	TEMPORARY IMPACT ATTENUATION BARRIER	TEMPORARY IMPACT ATTENUATION BARRIER (REPAIR)
			STAGE 1	STAGE 2	STAGE 3A	STAGE 3B	STAGE 4A	STAGE 4B	STAGE 5	STAGE 6										
			SQ. FT.-LIN.FT.-EACH									NO.	SQ. FT.	EACH	DAY	WEEK	LIN.FT.			EACH
W20-1	ROAD WORK 1 MILE	48"x48"	4	4	4	4	4	4	4	4		4	64.0							
W20-1	ROAD WORK 1/2 MILE	48"x48"	4	4	4	4	4	4	4	4		4	64.0							
W20-1	ROAD WORK 1500 FT.	48"x48"	4	4	4	4	4	4	4	4		4	64.0							
G20-1	ROAD WORK NEXT 11 MILES	60"x24"	2	2	2	2	2	2	2	2		2	20.0							
R55-1	FINES DOUBLE IN WORK ZONES	36"x60"	4	4	4	4	4	4	4	4		4	60.0							
RSP-1	SHOULDER CLOSED	48"x30"	2	2	2	2	2	2	2	2		2	20.0							
G20-2	END ROAD WORK	48"x24"	4	4	4	4	4	4	4	4		4	32.0							
SPECIAL 2	MERGE LEFT NOW + ARROW	48"x48"	2							2		2	16.0							
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 FEET	48"x48"	4							4		4	64.0							
W4-2R	RIGHT LANE CLOSING GRAPHIC	48"x48"	4							4		4	64.0							
R4-1	DO NOT PASS	24"x30"	8						8	8		8	40.0							
R2-5A	REDUCED SPEED AHEAD	48"x60"	4				2	2	4	4		4	80.0							
R2-1	SPEED LIMIT 60 MPH	48"x60"	4				2	2	4	4		4	80.0							
W1-6	LARGER ARROW	30"x60"	6						6	6		6	72.0							
R2-1	SPEED LIMIT 70 MPH	48"x60"	4				2	2	4	4		4	80.0							
R2-2	TRUCKS SPEED LIMIT 65 MPH	48"x60"	4				2	2	4	4		4	80.0							
W1-4BR	REVERSE CURVE RT.	48"x48"		14		12	12	10				14	224.0							
W1-4BL	REVERSE CURVE LT.	48"x48"		12		12	12	10				12	192.0							
W13-1	SPEED LIMIT (ADVISORY)	24"x24"		26		24	24	20				26	104.0							
SPECIAL 1	MERGE RIGHT NOW + ARROW	48"x48"							2			2	32.0							
W20-5	LEFT LANE CLOSED 1 MILE	48"x48"							4			4	64.0							
W20-5	LEFT LANE CLOSED 1/2 MILE	48"x48"							4			4	64.0							
W20-5	LEFT LANE CLOSED 1500 FEET	48"x48"							4			4	64.0							
W4-2R	LEFT LANE CLOSING GRAPHIC	48"x48"							4			4	64.0							
W1-6	LARGE ARROW	48"x24"																		
OM-3R	OBJECT MARKER	12"x36"		4								16	48.0							
OM-3L	OBJECT MARKER	12"x36"			24	4	20	16				24	72.0							
** SPECIAL 3	WARNING! BRIDGE CONSTRUCTION! FOLLOW MARKED NAVIGATION CHANNEL	60"x36"			2	2	2	2				2	60.0							
** SPECIAL 4	WARNING! BRIDGE CONSTRUCTION! NAVIGATION CHANNEL CLOSED	60"x36"			2	2	2	2				2	60.0							
	TRAFFIC DRUMS		380				486	424	380	380	486			486						
	ADVANCE WARNING ARROW PANEL		2						2	2	2				180					
	PORTABLE CHANGEABLE MESSAGE SIGN		2	2	2	2	3	3	2	2	3					226				
	FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER			4792	10396	67020					82208						82208			
	RELOCATING PRECAST CONCRETE BARRIER					6600	9652	2856			19108							19108		
	TEMPORARY IMPACT ATTENUATION BARRIER			1			1	1			1								1	
	TEMPORARY IMPACT ATTENUATION BARRIER (REPAIR)										1									1
TOTALS												2076		486	180	226	82208	19108	1	1

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

** SIGNS ARE DESCRIBED IN SP "DETAILS FOR BOATER SAFETY ON LAKE CONWAY"

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				6	ARK.			
				JOB NO.		080388	87	452

(2) QUANTITY SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11

CONSTRUCTION PAVEMENT MARKINGS

DESCRIPTION	STAGES								END OF JOB	MAXIMUM NUMBER REQUIRED	REMOVAL OF PERMANENT PAVEMENT MARKINGS	CONSTRUCTION PAVEMENT MARKINGS	REMOVABLE CONSTRUCTION PAVEMENT MARKINGS	RAISED PAVEMENT MARKERS
	STAGE 1	STAGE 2	STAGE 3A	STAGE 3B	STAGE 4A	STAGE 4B	STAGE 5	STAGE 6						TYPE II (WHITE/RED)
	SQ. FT.-LIN.FT.-EACH										LIN.FT.			EACH
REMOVAL OF PERMANENT PAVEMENT MARKINGS			27322		16241	1540	66046	288		111437	111437			
CONSTRUCTION PAVEMENT MARKINGS			5130		3213	3115				11458		11458		
REMOVABLE CONSTRUCTION PAVEMENT MARKINGS			40620		46306	10116				97042			97042	
RAISED PAVEMENT MARKERS (TYPE II) (WHITE/RED)					165					165				165
TOTALS											111437	11458	97042	165

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

PERMANENT PAVEMENT MARKINGS

DESCRIPTION	STAGES								MAXIMUM NUMBER REQUIRED	RAISED PAVEMENT MARKERS	HIGH PERFORMANCE PAVEMENT MARKINGS (4")		THERMOPLASTIC PAVEMENT MARKINGS (8") WHITE	HIGH PERFORMANCE CONTRAST PAVEMENT MARKINGS (4") WHITE
	STAGE 1	STAGE 2	STAGE 3A	STAGE 3B	STAGE 4A	STAGE 4B	STAGE 5	STAGE 6		TYPE II (WHITE/RED)	WHITE	YELLOW		
	SQ. FT.-LIN.FT.-EACH									EACH	LIN.FT.			
RAISED PAVEMENT MARKERS (TYPE II) (WHITE/RED)							1101	176	1277	1277				
HIGH PERFORMANCE PAVEMENT MARKINGS-WHITE(4")					1260		28920	6254	36434		36434			
HIGH PERFORMANCE PAVEMENT MARKINGS-YELLOW(4")					2987		84056		87043			87043		
THERMOPLASTIC PAVEMENT MARKINGS-WHITE (8")								1207	1207				1207	
HIGH PERFORMANCE CONTRAST PAVEMENT MARKINGS-WHITE(4")							590		590					590
TOTALS										1277	36434	87043	1207	590

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

MOBILE SPEED NOTIFICATION SYSTEM

LOCATION	EACH
ENTIRE PROJECT	
AS DIRECTED BY	2
THE ENGINEER	
TOTAL:	**2**

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				6	ARK.			
				JOB NO.		080388	88	452

(2) QUANTITY SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11

REMOVAL AND DISPOSAL OF ITEMS

STATION	STATION	LOCATION	DROP INLETS	GUARDRAIL	APPROACH SLAB AND GUTTERS	APPROACH GUTTER	CONCRETE DITCH PAVING	OVERHEAD SIGN STRUCTURES	PIER PROTECTION	IMPACT ATTENUATION BARRIER
			EACH	LIN.FT.	EACH	EACH	SQ. YD.	EACH	LIN. FT.	EACH
7085+04	7085+41	NORTHEAST CORNER BRIDGE				1				
7092+14		MEDIAN	1							
7097+50		MEDIAN	1							
7103+00		MEDIAN	1							
7109+14	7111+44	RT. OF LEFT MAIN LANES		230						
7109+14	7111+44	LT. OF LEFT MAIN LANES		230						
7109+41		LEFT MAIN LANES						1		
7109+95		MEDIAN	1							
7134+81	7135+06	MEDIAN							50	2
7142+95		CDP IN MEDIAN					8.9			
7149+94		CDP IN MEDIAN					8.9			
7155+95		CDP IN MEDIAN					8.9			
7162+95		CDP IN MEDIAN					4.4			
7165+69	7168+89	RT. OF CENTER MEDIAN		325						
7165+78	7168+60	RT. OF RIGHT MAIN LANES		300						
7168+55	7168+82	RIGHT MAIN LANES			1					
7169+17	7169+55	LEFT MAIN LANES			1					
7171+05	7171+44	RIGHT MAIN LANES			1					
7171+79	7172+17	LEFT MAIN LANES			1					
7171+73	7174+93	LT. OF CENTER MEDIAN		325						
7172+09	7174+86	LT. OF LEFT MAIN LANES		300						
7178+95		CDP IN MEDIAN					4.4			
7187+95		CDP IN MEDIAN					4.4			
7188+00	7190+30	RT. OF LEFT MAIN LANES		230						
7188+00	7190+30	LT. OF LEFT MAIN LANES		230						
7188+33		LEFT MAIN LANES						1		
7195+95		CDP IN MEDIAN					4.4			
7201+44		CDP IN MEDIAN					4.4			
7208+95		CDP IN MEDIAN					8.9			
7219+95		CDP IN MEDIAN					4.4			
7227+95		CDP IN MEDIAN					4.4			
7235+95		CDP IN MEDIAN					4.4			
7249+92		CDP IN MEDIAN					4.4			
7254+90		CDP IN MEDIAN					4.4			
7260+95		CDP IN MEDIAN					4.4			
7266+95		CDP IN MEDIAN					4.4			
7271+95		CDP IN MEDIAN					4.4			
7272+70	7273+83	MEDIAN							124	2
7276+95		CDP IN MEDIAN					4.4			
7283+50		CDP IN MEDIAN					4.4			
7288+95		CDP IN MEDIAN					4.4			
7327+00	7330+25	LT. OF RIGHT MAIN LANES		325						
7327+50	7330+25	RT. OF RIGHT MAIN LANES		275						
7329+88	7330+24	RIGHT MAIN LANES			1					
7331+14	7331+50	RIGHT MAIN LANES			1					
7330+06	7330+42	LEFT MAIN LANES			1					
7331+30	7331+65	LEFT MAIN LANES			1					
7331+30	7334+60	RT. OF LEFT MAIN LANES		330						
7331+30	7335+00	LT. OF LEFT MAIN LANES		370						
7420+28	7420+47	MEDIAN							38	2
7397+13	7400+38	LT. OF RIGHT MAIN LANES		325						
7397+63	7400+38	RT. OF RIGHT MAIN LANES		275						
7400+03	7400+38	RIGHT MAIN LANES			1					
7402+49	7402+84	RIGHT MAIN LANES			1					
7402+49	7407+00	RT. OF RIGHT MAIN LANES		451						
7400+16	7400+50	LEFT MAIN LANES			1					
7402+60	7202+95	LEFT MAIN LANES			1					
7402+60	7405+85	RT. OF LEFT MAIN LANES		325						
7402+60	7407+00	LT. OF LEFT MAIN LANES		440						
7421+94	7422+15	MEDIAN							42	2
7479+95		RT. OF LEFT MAIN LANES					8.9			
7480+11		LT. OF RIGHT MAIN LANES					11.6			
TOTALS:			4	5286	12	1	126.5	2	254	8

CONCRETE DITCH PAVING

STATION	STATION	LOCATION	LENGTH	"W"	CONC. DITCH PAVING (TYPE B)	SOLID SODDING	WATER
			LIN. FT.	FEET	SQ. YD.	SQ. YD.	M. GAL.
7101+00	7102+68	MEDIAN	168.00	10.7	199.73	74.67	0.94
7102+68	7113+65	MEDIAN	1097.00	10.8	1316.40	487.56	6.14
7113+65	7121+25	MEDIAN	760.00	5	422.22	337.78	4.26
7479+95		RT. OF LEFT MAIN LANES	10.00	4	4.44	4.44	0.06
7480+11		LT. OF RIGHT MAIN LANES	10.00	4	4.44	4.44	0.06
TOTALS:					1947.23	908.89	11.46

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

EARTHWORK

STATION	STATION	LOCATION / DESCRIPTION	UNCLASSIFIED EXCAVATION	COMPACTED EMBANKMENT	* SOIL STABILIZATION
			CU. YD.		TON
7085+00.00	7168+20.54	MAIN LANES	10613	43615	
7172+40.46	7330+36.00	MAIN LANES	15085	55492	
7331+31.00	7400+43.00	MAIN LANES	9331	11829	
7402+57.00	7490+00.00	MAIN LANES	17075	19668	
7168+20	7172+41	BRIDGE ENDS	35294		
7330+20	7331+34	BRIDGE ENDS	1400		
7400+31	7402+69	BRIDGE ENDS	2400		
* ENTIRE	PROJECT	TO BE USED IF AND WHERE			100
		DIRECTED BY THE ENGINEER			
TOTALS:			91198	130604	100

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

REMOVAL AND DISPOSAL OF ASPHALT PAVEMENT

STATION	STATION	LOCATION	AVG. WIDTH	REMOVAL AND DISPOSAL OF ASPHALT PAVEMENT
			FEET	SQ. YD.
7159+81	7168+43	RIGHT MAIN LANES	38	3639.56
7171+42	7182+39	RIGHT MAIN LANES	38	4631.78
7159+81	7169+17	LEFT MAIN LANES	38	3952.00
7172+17	7182+39	LEFT MAIN LANES	38	4315.11
TOTAL:				16538.45

NOTE: OVERALY THICKNESS 11"

REMOVAL OF RUMBLE STRIP

STATION	STATION	LOCATION	REMOVAL OF RUMBLE STRIP
			LIN. FT.
7094+42	7104+50	LT. SIDE LEFT MAIN LANES	1008
7104+80	7122+58	LT. SIDE LEFT MAIN LANES	1778
7154+00	7169+27	LT. SIDE LEFT MAIN LANES	1527
7172+37	7198+00	LT. SIDE LEFT MAIN LANES	2563
7323+00	7330+00	LT. SIDE LEFT MAIN LANES	700
7327+08	7330+04	LT. SIDE LEFT MAIN LANES	296
7331+66	7342+00	LT. SIDE LEFT MAIN LANES	1034
7415+50	7421+30	LT. SIDE LEFT MAIN LANES	580
7395+62	7400+15	LT. SIDE LEFT MAIN LANES	453
7402+96	7412+00	LT. SIDE LEFT MAIN LANES	904
7095+51	7102+56	RT. SIDE RIGHT MAIN LANES	705
7143+00	7168+23	RT. SIDE RIGHT MAIN LANES	2523
7171+26	7190+00	RT. SIDE RIGHT MAIN LANES	1874
7323+00	7330+00	RT. SIDE RIGHT MAIN LANES	700
7327+08	7329+88	RT. SIDE RIGHT MAIN LANES	280
7331+49	7342+00	RT. SIDE RIGHT MAIN LANES	1051
7415+50	7421+30	RT. SIDE RIGHT MAIN LANES	580
7395+62	7400+03	RT. SIDE RIGHT MAIN LANES	441
7402+84	7412+00	RT. SIDE RIGHT MAIN LANES	916
TOTAL:			19913

CLEARING AND GRUBBING

STATION	STATION	LOCATION	CLEARING	GRUBBING
			STATION	
7330+85	7335+00	MAIN LANES	5	5
7397+50	7401+00	MAIN LANES	4	4
7402+00	7407+00	MAIN LANES	5	5
7459+10	7490+00	MAIN LANES	31	31
TOTALS:			45	45

SELECTED PIPE BEDDING & BACKFILL

LOCATION	SELECTED PIPE BEDDING	SELECTED PIPE BACKFILL
	CU.YD.	
ENTIRE PROJECT TO BE USED IF		
AND WHERE DIRECTED BY THE	200	400
ENGINEER		
TOTALS:	200	400

NOTE: QUANTITIES ARE ESTIMATED.
SEE SECTION 104.03 OF THE STD. SPECS.

R080388.DGN 10/26/2011

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.		080388	89	452

(2) QUANTITY SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
14705
MICHAEL D. FUGETT
10-28-11

COLD MILLING ASPHALT PAVEMENT

STATION	STATION	LOCATION	AVG. WIDTH	COLD MILLING ASPHALT PAVEMENT
			FEET	SQ. YD.
7085+41	7157+17	RIGHT MAIN LANES	4	3189.33
7185+20	7327+14	RIGHT MAIN LANES	4	6308.44
7334+61	7398+03	RIGHT MAIN LANES	4	2818.67
7406+05	7490+00	RIGHT MAIN LANES	4	3731.11
7095+00	7157+17	LEFT MAIN LANES	4	2763.11
7185+20	7327+30	LEFT MAIN LANES	4	6315.56
7335+09	7397+37	LEFT MAIN LANES	4	2768.00
7407+10	7490+00	LEFT MAIN LANES	4	3684.44
TOTAL:				31578.66

GUARDRAIL

STATION	STATION	LOCATION	GUARDRAIL (TYPE A)	THRIE BEAM GUARDRAIL TERMINAL	GUARDRAIL TERMINAL (TYPE 2)	TERMINAL ANCHOR POST (TYPE 1)
			LIN.FT.	EACH		
7109+85.00	7113+05.00	LT. SIDE OF LT. MAIN LANES	275		1	1
7149+85.00	7153+10.00	RT. SIDE OF RT. MAIN LANES	275		1	1
7165+35.57	7167+54.32	RT. SIDE OF RT. MAIN LANES	150	1	1	
7173+06.69	7175+25.44	LT. SIDE OF LT. MAIN LANES	150	1	1	
7187+50.00	7190+75.00	LT. SIDE OF LT. MAIN LANES	275		1	1
7200+05.00	7203+30.00	RT. SIDE OF RT. MAIN LANES	275		1	1
7228+30.00	7231+55.00	LT. SIDE OF LT. MAIN LANES	275		1	1
7255+45.00	7258+70.00	RT. SIDE OF RT. MAIN LANES	275		1	1
7293+30.00	7296+55.00	LT. SIDE OF LT. MAIN LANES	275		1	1
7327+91.25	7330+10.00	RT. SIDE OF RT. MAIN LANES	150	1	1	
7331+44.00	7335+00.00	LT. SIDE OF LT. MAIN LANES	337	1		
7392+01.00	7395+26.00	RT. SIDE OF RT. MAIN LANES	275		1	1
7398+02.25	7400+21.00	RT. SIDE OF RT. MAIN LANES	150	1	1	
7402+67.00	7407+00.00	RT. SIDE OF RT. MAIN LANES	414	1		
7402+79.00	7407+00.00	LT. SIDE OF LT. MAIN LANES	402	1		
TOTALS:			3953	7	12	8

APPROACH GUTTERS AND SLABS

STATION	LOCATION	APPROACH GUTTER				APPROACH SLABS	REINFORCING STEEL RDWY. (GR 60)	EPOXY COATED REINF. STEEL (GR 60)	AGGREGATE BASE CRS. (CLASS 7)
		TYPE SPECIAL 1	TYPE SPECIAL 2	TYPE SPECIAL 3	TYPE SPECIAL 4				
		CU.YD.					POUND		TON
	RT. MAIN LANES				15.74		1810		
*7168+20.54	MAIN LANES	34.89				335.68	38892	1350	219.71
*7172+40.46	MAIN LANES	34.89				335.68	38892	1350	219.71
7330+20.00	RT. MAIN LANES		20.07	25.4		73.73	14994		51.10
7330+36.00	LT. MAIN LANES		20.07	25.4		73.73	14994		51.10
7331+18.00	RT. MAIN LANES		20.07	25.4		73.73	14994		51.10
7331+34.00	LT. MAIN LANES		20.07	25.4		73.73	14994		51.10
7400+31.00	RT. MAIN LANES		20.07	25.4		73.73	14994		51.10
7400+43.00	LT. MAIN LANES		20.07	25.4		73.73	14994		51.10
7402+57.00	RT. MAIN LANES		20.07	25.4		73.73	14994		51.10
7402+69.00	LT. MAIN LANES		20.07	25.4		73.73	14994		51.10
TOTALS:		69.78	160.56	203.20	15.74	1261.20	199546	2700	848.22

* CLASS S(AE) CONCRETE

EROSION CONTROL

STATION	STATION	LOCATION	PERMANENT EROSION CONTROL					TEMPORARY EROSION CONTROL									
			SEEDING	LIME	MULCH COVER	WATER	SECOND SEEDING APPLICATION	TEMPORARY SEEDING	MULCH COVER	WATER	SAND BAG DITCH CHECKS	ROCK DITCH CHECKS	DROP INLET SILT FENCE	SILT FENCE	SEDIMENT BASIN	OBLITERATION OF SEDIMENT BASIN	*SEDIMENT REMOVAL & DISPOSAL
											(E-5)	(E-6)	(E-7)	(E-11)	(E-9)		
			ACRE	TON	ACRE	M.GAL.	ACRE	ACRE	ACRE	M.GAL.	BAG	CU.YD.	LIN.FT.	LIN.FT.	CU.YD.	CU.YD.	CU. YD.
ENTIRE	PROJECT	MAIN LANES	8.78	17.56	8.78	895.6	8.78				396	25	2192	11063			493
*ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.								9.00	9.00	183.6	100	5	50	500	222	222	242
TOTALS:			8.78	17.56	8.78	895.6	8.78	9.00	9.00	183.6	496	30	2242	11563	222	222	735

BASIS OF ESTIMATE:
LIME .....2 TONS / ACRE OF SEEDING
WATER.....102.0 M.G. / ACRE OF SEEDING
WATER.....20.4 M.G. / ACRE OF TEMPORARY SEEDING
WATER.....12.6 GAL. / SQ. YD. OF SOLID SODDING
BALED STRAW DITCH CHECKS....4 BALES / LOCATION
SAND BAG DITCH CHECKS.....22 BAGS / LOCATION
ROCK DITCH CHECKS.....3 CU.YD./LOCATION

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

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

R080388.DGN 10/13/2011

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.		080388	90	452

(2) QUANTITY SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11

4" PIPE UNDERDRAIN

STATION	LOCATION	4" PIPE UNDERDRAINS	UNDERDRAIN OUTLET PROTECTORS
		LIN.FT.	EACH
7096+29	LT. OF CENTERLINE	58	1
7098+75	LT. OF CENTERLINE	36	1
7101+00	LT. OF CENTERLINE	20	1
7103+13	LT. OF CENTERLINE	28	
7105+06	LT. OF CENTERLINE	36	
7111+74	RT. OF CENTERLINE	60	
7114+17	RT. OF CENTERLINE	54	
7116+59	RT. OF CENTERLINE	52	
7119+05	RT. OF CENTERLINE	50	
7121+49	RT. OF CENTERLINE	44	
7123+98	RT. OF CENTERLINE	42	
7128+90	RT. OF CENTERLINE	40	
7131+38	RT. OF CENTERLINE	40	
7133+20	RT. OF CENTERLINE	44	
7136+22	RT. OF CENTERLINE	52	
7260+55	RT. OF CENTERLINE	48	
7263+07	RT. OF CENTERLINE	52	
7265+56	RT. OF CENTERLINE	54	
7268+07	RT. OF CENTERLINE	54	
7275+57	RT. OF CENTERLINE	54	
7278+08	RT. OF CENTERLINE	52	
7280+51	RT. OF CENTERLINE	52	
7283+00	RT. OF CENTERLINE	52	
7285+47	RT. OF CENTERLINE	52	
7287+95	RT. OF CENTERLINE	50	
7290+44	RT. OF CENTERLINE	48	
7292+91	RT. OF CENTERLINE	54	
7294+84	RT. OF CENTERLINE	52	
7296+85	RT. OF CENTERLINE	52	
7393+12	LT. OF CENTERLINE	56	
7395+96	LT. OF CENTERLINE	54	
7398+76	LT. OF CENTERLINE	54	
7401+51	LT. OF CENTERLINE	56	
7404+09	LT. OF CENTERLINE	56	
7406+62	LT. OF CENTERLINE	56	
7409+13	LT. OF CENTERLINE	54	
7411+63	LT. OF CENTERLINE	52	
7114+13	LT. OF CENTERLINE	52	
7416+65	LT. OF CENTERLINE	52	
7411+16	RT. OF CENTERLINE	50	
7413+68	RT. OF CENTERLINE	50	
7416+20	RT. OF CENTERLINE	52	
7418+66	RT. OF CENTERLINE	52	
7421+17	RT. OF CENTERLINE	52	
7423+66	RT. OF CENTERLINE	52	
7426+14	RT. OF CENTERLINE	54	
7428+65	RT. OF CENTERLINE	52	
7431+13	RT. OF CENTERLINE	52	
7432+76	RT. OF CENTERLINE	52	
7457+32	LT. OF CENTERLINE	98	
7458+63	LT. OF CENTERLINE	62	1
7461+12	LT. OF CENTERLINE	56	1
7464+01	LT. OF CENTERLINE	56	1
7466+82	LT. OF CENTERLINE	56	1
7469+41	LT. OF CENTERLINE	56	1
7471+93	LT. OF CENTERLINE	58	1
7474+45	LT. OF CENTERLINE	58	1
7476+93	LT. OF CENTERLINE	58	1
7479+39	LT. OF CENTERLINE	58	1
7481+87	LT. OF CENTERLINE	64	1
* ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER		100	2
TOTALS:		3222	15

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

UNDERDRAINS SHALL BE STUBBED INTO THE PROPOSED DROP INLET IF AND WHERE DIRECTED BY THE ENGINEER. PAYMENT FOR THIS TO BE INCLUDED IN THE UNIT PRICE BID FOR 4" PIPE UNDERDRAIN.

CONCRETE BARRIER WALL

STATION	STATION	LOCATION	CONCRETE BARRIER WALL				
			(MEDIAN TYPE A)	(MEDIAN TYPE B)	(MEDIAN TYPE C)	(SIDE TYPE A)	(SIDE TYPE E)
			LIN. FT.				
7085+41	7102+25	LT. SIDE RT. MAIN LANES				1684	
7102+25	7107+75	LT. SIDE RT. MAIN LANES					550
7107+75	7124+60	LT. SIDE RT. MAIN LANES				1685	
7094+43	7110+45	RT. SIDE LT. MAIN LANES				1602	
7110+55	7111+25	RT. SIDE LT. MAIN LANES				70	
7111+25	7124+60	RT. SIDE LT. MAIN LANES					1335
7124+60	7134+40	MEDIAN			980		
7134+40	7134+61	MEDIAN		21			
7134+61	7135+26	LT. SIDE RT. MAIN LANES				65	
7134+61	7135+26	RT. SIDE LT. MAIN LANES				65	
7135+26	7136+45	MEDIAN		119			
7136+55	7145+00	MEDIAN		845			
7145+00	7152+35	MEDIAN	735				
7152+45	7167+68	MEDIAN	1555				
7172+93	7188+15	MEDIAN	1554				
7188+25	7195+00	MEDIAN	675				
7195+00	7200+50	MEDIAN		550			
7200+50	7202+55	MEDIAN			205		
7202+65	7228+95	MEDIAN			2630		
7229+05	7236+75	MEDIAN			595		
7236+75	7244+00	MEDIAN		725			
7244+00	7257+95	MEDIAN			1395		
7258+05	7272+65	MEDIAN			1460		
7272+65	7273+87	LT. SIDE RT. MAIN LANES				122	
7272+65	7273+87	RT. SIDE LT. MAIN LANES				122	
7273+87	7293+00	MEDIAN			1913		
7293+00	7296+75	MEDIAN		270			
7296+75	7304+00	MEDIAN		725			
7304+00	7314+50	MEDIAN	1050				
7314+50	7330+00	MEDIAN		1550			
7327+08	7329+05	MEDIAN	197				
7329+05	7329+85	LT. SIDE RT. MAIN LANES				80	
7329+05	7330+01	RT. SIDE LT. MAIN LANES				96	
7331+50	7332+50	LT. SIDE RT. MAIN LANES				100	
7331+69	7332+50	RT. SIDE LT. MAIN LANES				81	
7332+50	7334+50	MEDIAN	200				
7334+50	7335+10	MEDIAN	60				
7335+10	7335+95	MEDIAN		85			
7336+05	7384+00	MEDIAN		4795			
7384+00	7392+00	MEDIAN	800				
7392+00	7393+75	MEDIAN		251			
7393+75	7394+51	MEDIAN			76		
7394+61	7415+50	MEDIAN			2089		
7415+50	7420+08	MEDIAN		458			
7420+08	7420+67	LT. SIDE RT. MAIN LANES				59	
7420+08	7420+67	RT. SIDE LT. MAIN LANES				59	
7420+67	7421+30	MEDIAN		63			
7395+62	7399+15	MEDIAN		353			
7399+15	7399+96	LT. SIDE RT. MAIN LANES				81	
7399+15	7400+08	RT. SIDE LT. MAIN LANES				93	
7402+92	7403+85	LT. SIDE RT. MAIN LANES				93	
7403+04	7403+85	RT. SIDE LT. MAIN LANES				81	
7403+85	7413+95	MEDIAN		1010			
7414+05	7421+74	MEDIAN		769			
7421+74	7422+35	LT. SIDE RT. MAIN LANES				61	
7421+74	7422+35	RT. SIDE LT. MAIN LANES				61	
7422+35	7432+00	MEDIAN		965			
7432+00	7454+00	MEDIAN	2200				
7454+00	7457+35	MEDIAN		335			
TOTALS:			9026	13889	11343	6360	1885

BENCH MARKS

STATION	LOCATION	BENCH MARKS
		EACH
7168+21	RT. SIDE BRIDGE NO. 07226	1
7330+36	LT. SIDE BRIDGE NO. A6883	1
7402+57	RT. SIDE BRIDGE NO. B6884	1
TOTAL:		3

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

ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC

LOCATION	TON	TACK COAT
		GALLON
ENTIRE PROJECT - TO BE USED IF AND WHERE	198	396
DIRECTED BY THE ENGINEER		
TOTALS:	198	396

NOTE: QUANTITIES ARE ESTIMATED.
SEE SECTION 104.03 OF THE STD. SPECS.

RUMBLE STRIPS IN ASPHALT SHOULDERS

STATION	STATION	LOCATION	RUMBLE STRIPS
			LIN. FT.
7094+42	7104+50	LT. SIDE LEFT MAIN LANES	1008
7104+80	7122+58	LT. SIDE LEFT MAIN LANES	1778
7154+00	7167+99	LT. SIDE LEFT MAIN LANES	1399
7172+62	7198+00	LT. SIDE LEFT MAIN LANES	2538
7323+00	7330+00	LT. SIDE LEFT MAIN LANES	700
7327+08	7329+99	LT. SIDE LEFT MAIN LANES	291
7331+70	7342+00	LT. SIDE LEFT MAIN LANES	1030
7415+50	7421+30	LT. SIDE LEFT MAIN LANES	580
7395+62	7400+07	LT. SIDE LEFT MAIN LANES	445
7403+05	7412+00	LT. SIDE LEFT MAIN LANES	895
7095+51	7102+56	RT. SIDE RIGHT MAIN LANES	705
7143+00	7167+36	RT. SIDE RIGHT MAIN LANES	2436
7173+25	7190+00	RT. SIDE RIGHT MAIN LANES	1675
7323+00	7330+00	RT. SIDE RIGHT MAIN LANES	700
7327+08	7329+84	RT. SIDE RIGHT MAIN LANES	276
7331+54	7342+00	RT. SIDE RIGHT MAIN LANES	1046
7415+50	7421+30	RT. SIDE RIGHT MAIN LANES	580
7395+62	7399+95	RT. SIDE RIGHT MAIN LANES	433
7402+57	7412+00	RT. SIDE RIGHT MAIN LANES	943
7094+90	7167+68	RT. SIDE LEFT MAIN LANES	7278
7172+93	7330+00	RT. SIDE LEFT MAIN LANES	15707
7327+08	7329+99	RT. SIDE LEFT MAIN LANES	291
7331+70	7421+30	RT. SIDE LEFT MAIN LANES	8960
7395+62	7400+07	RT. SIDE LEFT MAIN LANES	445
7403+05	7490+00	RT. SIDE LEFT MAIN LANES	8695
7094+90	7167+68	LT. SIDE RIGHT MAIN LANES	7278
7172+93	7330+00	LT. SIDE RIGHT MAIN LANES	15707
7327+08	7329+84	LT. SIDE RIGHT MAIN LANES	276
7331+54	7421+30	LT. SIDE RIGHT MAIN LANES	8976
7395+62	7399+95	LT. SIDE RIGHT MAIN LANES	433
7402+57	7490+00	LT. SIDE RIGHT MAIN LANES	8743
TOTAL:			102247

R080388.DGN 10/27/2011

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.		080388	91	452

(2) QUANTITY SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
NO. 7605
MICHAEL D. FUGETT
10-28-11

BASE AND SURFACING

STATION	STATION	LOCATION	LENGTH	AGGREGATE BASE COURSE (CLASS 7)		TACK COAT				ACHM BASE COURSE (1 1/2")				ACHM BINDER COURSE (1")				ACHM SURFACE COURSE (1/2")			
			FEET	TON / STATION	TON	TOTAL WID. FEET	SQ.YD.	GALLONS / SQ.YD.	GALLON	AVG. WID. FEET	SQ.YD.	POUND / SQ.YD.	PG 76-22 TON	AVG. WID. FEET	SQ.YD.	POUND / SQ.YD.	PG 76-22 TON	AVG. WID. FEET	SQ.YD.	POUND / SQ.YD.	PG 76-22 TON
MAIN LANES																					
7094+60	7102+35	LEFT MAIN LANES WIDENING	775.0	VAR.	1848.5	VAR.	3060.0	0.03	91.8	VAR.	793.5	990.0	392.8	VAR.	746.8	440.0	164.3	VAR.	2288.2	220.0	251.7
7104+65	7122+60	LEFT MAIN LANES WIDENING	1795.0	VAR.	4257.1	VAR.	6803.3	0.03	204.1	VAR.	1766.3	990.0	874.3	VAR.	1660.5	440.0	365.3	VAR.	5165.5	220.0	568.2
7085+41	7094+60	LT. SIDE RIGHT MAIN LANES	919.0	206.50	1897.7	4.0	408.4	0.10	40.8									16.0	1633.8	220.0	179.7
7094+60	7102+67	RT. SIDE LEFT MAIN LANES	807.0	292.00	2356.4	34.8	3120.4	0.03	93.6	9.1	421.3	990.0	208.5	8.5	762.2	440.0	167.7	32.3	2896.2	220.0	318.6
7094+60	7102+67	MILL INSIDE SHLDR. LT & RT LANES	807.0			8.0	717.3	0.10	71.7												
7094+60	7102+67	LT. SIDE RIGHT MAIN LANES	807.0	292.00	2356.4	34.8	3120.4	0.03	93.6	9.1	1006.3	990.0	498.1	8.5	762.2	440.0	167.7	32.3	2896.2	220.0	318.6
7102+67	7124+60	LT. SIDE MEDIAN	2193.0	268.75	5893.7	34.8	8479.6	0.03	254.4	9.1	2217.4	990.0	1097.6	8.5	2071.2	440.0	455.7	36.3	8845.1	220.0	973.0
7102+67	7124+60	RT. SIDE MEDIAN	2193.0	268.75	5893.7	34.8	8479.6	0.03	254.4	9.1	2217.4	990.0	1097.6	8.5	2071.2	440.0	455.7	36.3	8845.1	220.0	973.0
7102+67	7157+17	MILL INSIDE SHLDR.	5450.0			8.0	4844.4	0.10	484.4												
7124+60	7134+40	LT. SIDE MEDIAN	980.0	262.50	2572.5	34.8	3789.3	0.03	113.7	9.1	990.9	990.0	490.5	8.5	925.6	440.0	203.6	37.3	4061.6	220.0	446.8
7124+60	7134+40	RT. SIDE MEDIAN	980.0	262.50	2572.5	34.8	3789.3	0.03	113.7	9.1	990.9	990.0	490.5	8.5	925.6	440.0	203.6	37.3	4061.6	220.0	446.8
7134+40	7145+00	MEDIAN	1060.0	513.00	5437.8	69.7	8209.1	0.03	246.3	18.1	2131.8	990.0	1055.2	17.0	2002.2	440.0	440.5	72.5	8538.9	220.0	939.3
7145+00	7157+17	MEDIAN	1217.0	202.30	2462.0	192.0	25962.7	0.03	778.9	48.0	6490.7	990.0	3212.9	48.0	6490.7	440.0	1428.0	104.0	14063.1	220.0	1546.9
7157+17	7159+81	MEDIAN	264.0	202.30	534.1	192.0	5632.0	0.03	169.0	48.0	1408.0	990.0	697.0	48.0	1408.0	440.0	309.8	48.0	1408.0	220.0	154.9
7157+17	7159+81	RIGHT MAIN LANES	264.0			38.0	1114.7	0.10	111.5									38.0	1114.7	220.0	122.6
7157+17	7159+81	RIGHT MAIN LANES LEVELING	264.0				VAR.		414.2									38.0	1114.7	VAR.	388.8
7157+17	7159+81	LEFT MAIN LANES	264.0			38.0	1114.7	0.10	111.5									38.0	1114.7	220.0	122.6
7157+17	7159+81	LEFT MAIN LANES LEVELING	264.0				VAR.		307.4									38.0	1114.7	VAR.	338.2
7159+81	7167+68	FULL DEPTH PAVING	787.0	807.50	6355.0	437.7	38274.4	0.03	1148.2	110.1	9627.6	990.0	4765.7	109.0	9531.4	440.0	2096.9	232.5	20330.8	220.0	2236.4
7172+93	7182+39	FULL DEPTH PAVING	946.0	897.50	8490.4	437.7	46007.1	0.03	1380.2	110.1	11572.7	990.0	5728.5	109.0	11457.1	440.0	2520.6	232.5	24438.3	220.0	2688.2
7182+39	7185+20	MEDIAN	281.0	202.30	568.5	192.0	5994.7	0.03	179.8	48.0	1498.7	990.0	741.9	48.0	1498.7	440.0	329.7	48.0	1498.7	220.0	164.9
7182+39	7185+20	RIGHT MAIN LANES	281.0			38.0	1186.4	0.10	118.6									38.0	1186.4	220.0	130.5
7182+39	7185+20	RIGHT MAIN LANES LEVELING	281.0				VAR.		414.2									38.0	1186.4	VAR.	455.6
7182+39	7185+20	LEFT MAIN LANES	281.0			38.0	1186.4	0.10	118.6									38.0	1186.4	220.0	130.5
7182+39	7185+20	LEFT MAIN LANES LEVELING	281.0				VAR.		325.8									38.0	1186.4	VAR.	358.4
7185+20	7195+00	MEDIAN	980.0	202.30	1982.5	192.0	20906.7	0.03	627.2	48.0	5226.7	990.0	2587.2	48.0	5226.7	440.0	1149.9	104.0	11324.4	220.0	1245.7
7185+20	7330+00	MILL INSIDE SHLDR.	14480.0			8.0	12871.1	0.10	1287.1												
7195+00	7200+50	MEDIAN	550.0	513.00	2821.5	69.7	4259.4	0.03	127.8	18.1	1106.1	990.0	547.5	17.0	1038.9	440.0	228.6	72.5	4430.6	220.0	487.4
7200+50	7236+76	MEDIAN	3626.0	525.00	19036.5	69.7	28081.4	0.03	842.4	18.1	7292.3	990.0	3609.7	17.0	6849.1	440.0	1506.8	74.5	30015.2	220.0	3301.7
7236+76	7244+00	MEDIAN	724.0	513.00	3714.1	69.7	5607.0	0.03	168.2	18.1	1456.0	990.0	720.7	17.0	1367.6	440.0	300.9	72.5	5832.2	220.0	641.5
7244+00	7293+00	MEDIAN	4900.0	525.00	25725.0	69.7	37947.8	0.03	1138.4	18.1	9854.4	990.0	4877.9	17.0	9255.6	440.0	2036.2	74.5	40561.1	220.0	4461.7
7293+00	7326+00	MEDIAN	3300.0	513.00	16929.0	69.7	25556.7	0.03	766.7	18.1	6636.7	990.0	3285.2	17.0	6233.3	440.0	1371.3	72.5	26583.3	220.0	2924.2
7326+00	7330+00	MEDIAN	400.0	202.30	809.2	192.0	8533.3	0.03	256.0	48.0	2133.3	990.0	1056.0	48.0	2133.3	440.0	469.3	104.0	4622.2	220.0	508.4
7327+08	7330+00	LEFT MAIN LANES	292.0	101.13	295.3	132.0	4282.7	0.03	128.5	24.0	778.7	990.0	385.5	24.0	778.7	440.0	171.3	86.0	2790.2	220.0	306.9
7327+08	7330+00	LEFT MAIN LANES LEVELING	292.0			38.0	1232.9	0.10	123.3									38.0	1232.9	VAR.	321.2
7327+08	7329+84	RIGHT MAIN LANES	276.0	101.13	279.1	132.0	4048.0	0.03	121.4	24.0	736.0	990.0	364.3	24.0	736.0	440.0	161.9	86.0	2637.3	220.0	290.1
7327+08	7329+84	RIGHT MAIN LANES LEVELING	276.0			38.0	1165.3	0.10	116.5									38.0	1165.3	VAR.	432.7
7331+70	7335+10	LEFT MAIN LANES	340.0	101.13	343.8	132.0	4986.7	0.03	149.6	24.0	906.7	990.0	448.8	24.0	906.7	440.0	199.5	86.0	3248.9	220.0	357.4
7331+70	7335+10	LEFT MAIN LANES LEVELING	340.0			38.0	1435.6	0.10	143.6									38.0	1435.6	VAR.	694.9
7331+54	7335+10	RIGHT MAIN LANES	356.0	101.13	360.0	132.0	5221.3	0.03	156.6	24.0	949.3	990.0	469.9	24.0	949.3	440.0	208.8	86.0	3401.8	220.0	374.2
7331+54	7335+10	RIGHT MAIN LANES LEVELING	356.0			38.0	1503.1	0.10	150.3									38.0	1503.1	VAR.	409.7
7335+10	7339+00	MEDIAN	390.0	202.30	789.0	192.0	8320.0	0.03	249.6	48.0	2080.0	990.0	1029.6	48.0	2080.0	440.0	457.6	104.0	4506.7	220.0	495.7
7339+00	7393+75	MEDIAN	5475.0	513.00	28086.8	69.7	42400.8	0.03	1272.0	18.1	11010.8	990.0	5450.3	17.0	10341.7	440.0	2275.2	72.5	44104.2	220.0	4851.5
7335+10	7421+30	MILL INSIDE SHLDR.	8620.0			8.0	7662.2	0.10	766.2												
7393+75	7415+50	MEDIAN	2175.0	525.00	11418.8	69.7	16844.2	0.03	505.3	18.1	4374.2	990.0	2165.2	17.0	4108.3	440.0	903.8	74.5	18004.2	220.0	1980.5
7415+50	7419+00	MEDIAN	350.0	513.00	1795.5	69.7	2710.6	0.03	81.3	18.1	703.9	990.0	348.4	17.0	661.1	440.0	145.4	72.5	2819.4	220.0	310.1
7419+00	7421+30	MEDIAN	230.0	202.30	465.3	192.0	4906.7	0.03	147.2	48.0	1226.7	990.0	607.2	48.0	1226.7	440.0	269.9	104.0	2657.8	220.0	292.4
7395+62	7397+18	MEDIAN	156.0	202.30	315.6	192.0	3328.0	0.03	99.8	48.0	832.0	990.0	411.8	48.0	832.0	440.0	183.0	104.0	1802.7	220.0	198.3
7395+62	7397+18	MILL INSIDE SHLDR.	156.0			8.0	138.7	0.10	13.9												
7397+18	7399+95	RIGHT MAIN LANES	277.0	101.13	280.1	132.0	4062.7	0.03	121.9	24.0	738.7	990.0	365.7	24.0	738.7	440.0	162.5	86.0	2646.9	220.0	291.2
7397+18	7399+95	RIGHT MAIN LANES LEVELING	277.0			38.0	1169.6	0.10	117.0									38.0	1169.6	VAR.	453.3
7397+18	7400+07	LEFT MAIN LANES	289.0	101.13	292.3	132.0	4238.7	0.03	127.2	24.0	770.7	990.0	381.5	24.0	770.7	440.0	169.6	86.0	2761.6	220.0	303.8
7397+18	7400+07	LEFT MAIN LANES LEVELING	289.0			38.0	1220.2	0.10	122.0									38.0	1220.2	VAR.	661.6
7402+93	7407+10	RIGHT MAIN LANES	417.0	101.13	421.7	132.0	6116.0	0.03	183.5	24.0	1112.0	990.0	550.4	24.0	1112.0	440.0	244.6	86.0	3984.7	220.0	438.3
7402+93	7407+10	RIGHT MAIN LANES LEVELING	417.0			38.0	1760.7	0.10	176.1									38.0	1760.7	VAR.	570.7
7403+05	7407+10	LEFT MAIN LANES	405.0	101.13	409.6	132.0	5940.0	0.03	178.2	24.0	1080.0	990.0	534.6	24.0	1080.0	440.0	237.6	86.0	3870.0	220.0	425.7
7403+05	7407+10	LEFT MAIN LANES LEVELING	405.0			38.0	1710.0	0.10	171.0									38.0	1710.0	VAR.	661.6
7407+10	7411+00	MEDIAN	390.0	202.30	789.0	192.0	8320.0	0.03	249.6	48.0	2080.0	990.0	1029.6	48.0	2080.0	440.0	457.6	104.0	4506.7	220.0	495.7
7407+10	7449+68	MEDIAN	4258.0	513.00	21843.5	69.7	32975.8	0.03	989.3	18.1	8563.3	990.0	4238.8	17.0	8042.9	440.0	1769.4	72.5	34300.6	220.0	3773.1
7407+10	7457+35	MILL INSIDE SHLDR.	5025.0			8.0	4466.7	0.10	446.7												
7449+68	7457+35	MEDIAN	767.0	695.66	5335.7	69.7	5940.0	0.03	178.2	18.1	1542.5	990.0	763.5	17.0	1448.8	440.0	318.7	85.9	7320.6	220.0	805.3
7457+35	7483+00	LEFT MAIN LANES	2565.0	237.75	6098.3	34.8	9918.0	0.03	297.5	9.1	2593.5	990.0	1283.8	8.5	2422.5	440.0	533.0	30.3	8635.5	220.0	949.9
7457+35	7490+00	MILL INSIDE SHLDR. LEFT LANES	3265.0			4.0	1451.1	0.10	145.1												
7457+35	7483+00	RIGHT MAIN LANES	2565.0	237.75	6098.3	34.8	9918.0	0.03	297.5	9.1	2593.5	990.0	1283.8	8.5	2422.5	440.0	533.0	30.3	8635.5	220.0	949.9
7457+35	7490+00	MILL INSIDE SHLDR. RIGHT LANES	3265.0			4.0	1451.1	0.10	145.1												
7483+00	7490+00	LEFT MAIN LANES	700.0	237.75	1664.3	34.8	2706.7	0.03	81.2	9.1	707.8	990.0	350.4	8.5	661.1	440.0	145.4	30.3	2356.7	220.0	259.2
7483+00	7490+00	RIGHT MAIN LANES	700.0	237.75	1664.3	34.8	2706.7	0.03	81.2	9.1	707.8	990.0	350.4	8.5	661.1	440.0	145.4	30.3	2356.7	220.0	259.2
ADDITIONAL FOR SUPERELEVATION																					
7094+60	7102+35	LEFT MAIN LANES	775.0		347.0																
7117+00	7134+00	RT.SIDE LEFT MAIN LANES	1700.0		381.5																
7117+00	7134+00	LT. SIDE RIGHT MAIN LANES	1700.0		1167.5																
TOTALS:					**215456.4**				**21187.6**				**60848.8**				**26065.3**				**50438.9**

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2").....94.7% MIN. AGGR.....5.3% ASPHALT BINDER
ACHM BINDER COURSE (1").....95.4% MIN. AGGR.....4.6% ASPHALT BINDER
ACHM BASE COURSE (1 1/2").....96.1% MIN. AGGR.....3.9% ASPHALT BINDER
MAXIMUM NUMBER OF GYRATIONS = 205 FOR PG 76-22

R080388.DGN 10/26/2011

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.		080388	92	452

(2) QUANTITY SHEET

SOIL LOG (BOX 1 OF 2)

STATION	LATITUDE			LONGITUDE			LOCATION	DEPTH	LIQUID LIMIT	PLASTICITY INDEX	AASHTO CLASSIFICATION	COLOR
	DEG	MIN	SEC	DEG	MIN	SEC		FEET				
7098+00	35	6	31.20	92	25	57.80	17' RT	0-5	27	12	A-6(4)	BR/GR
7098+00	35	6	31.20	92	25	57.90	40' RT	0-5	16	1	A-4(0)	BR/GR
7102+00	35	6	27.30	92	25	57.10	CL	0-2 Z	34	18	A-6(9)	BROWN
7106+00	35	6	23.30	92	25	57.00	14' LT	0-5	28	11	A-6(4)	RD/BR
7106+00	35	6	23.30	92	25	57.00	40' LT	0-5	31	14	A-6(7)	BR/GR
7110+00	35	6	19.30	92	25	57.40	CL	0-5	25	8	A-4(3)	BROWN
7114+00	35	6	15.30	92	25	57.60	17' RT	0-5	28	11	A-6(3)	RD/BR
7114+00	35	6	15.30	92	25	57.60	28' RT	0-5	29	12	A-6(5)	BR/GR
7118+00	35	6	11.40	92	25	57.20	CL	0-5	30	12	A-6(6)	BROWN
7122+00	35	6	7.60	92	25	55.90	18' LT	0-5	27	11	A-6(5)	BR/GR
7122+00	35	6	7.60	92	25	56.00	30' LT	0-5	24	11	A-6(2)	BROWN
7126+00	35	6	3.90	92	25	54.60	CL	0-5	32	15	A-6(8)	BROWN
7130+00	35	6	0.20	92	25	52.50	14' RT	0-5	28	11	A-6(6)	BROWN
7130+00	35	6	0.20	92	25	52.20	27' RT	0-5	20	6	A-4(0)	BROWN
7134+00	35	5	57.10	92	25	49.50	CL	0-5	32	14	A-6(8)	BR/RD
7138+00	35	5	54.20	92	25	46.30	15' LT	0-5	28	11	A-6(3)	BROWN
7138+00	35	5	54.20	92	25	46.30	27' LT	0-5	20	4	A-4(0)	BROWN
7142+00	35	5	50.90	92	25	43.40	CL	0-5	32	15	A-6(8)	BROWN
7146+00	35	5	47.80	92	25	40.40	17' RT	0-5	30	13	A-6(7)	BROWN
7146+00	35	5	47.80	92	25	40.40	29' RT	0-5	30	13	A-6(5)	BROWN
7147+00	35	5	47.50	92	25	40.10	25' RT	0-5	23	6	A-4(2)	BROWN
7150+00	36	5	45.20	92	25	37.20	CL	0-5	27	11	A-6(7)	BR/GR
7154+00	35	5	42.00	92	25	34.00	16' LT	0-5	37	19	A-6(11)	BROWN
7154+00	35	5	42.00	92	25	33.90	30' LT	0-5	22	7	A-4(0)	BROWN
7158+00	35	5	39.00	92	25	31.00	CL	0-5	30	12	A-6(8)	BR/GR
7162+00	35	5	35.80	92	25	28.00	16' RT	0-5	30	12	A-6(9)	BROWN
7162+00	35	5	35.90	92	25	28.00	29' RT	0-5	27	12	A-6(5)	BROWN
7166+00	35	5	32.90	92	25	25.00	CL	0-5	32	15	A-6(7)	BR/GR
7174+00	35	5	26.70	92	25	18.80	12' RT	0-5	34	15	A-6(8)	BROWN
7174+00	35	5	26.70	92	25	18.80	24' RT	0-5	18	4	A-4(0)	BROWN
7178+00	35	5	23.60	92	25	15.60	CL	0-5	35	16	A-6(7)	BROWN
7182+00	35	5	20.70	92	25	12.20	18' LT	0-5	32	13	A-6(7)	BROWN
7182+00	35	5	20.70	92	25	12.10	30' LT	0-5	27	13	A-6(2)	BROWN
7186+00	35	5	17.50	92	25	9.40	CL	0-5	32	15	A-6(10)	BROWN
7190+00	35	5	14.30	92	25	6.30	14' RT	0-5	30	13	A-6(7)	BROWN
7190+00	35	5	14.30	92	25	6.30	25' RT	0-5	28	13	A-6(3)	BROWN
7194+00	35	5	11.30	92	25	3.20	CL	0-5	26	10	A-4(6)	BROWN
7198+00	35	5	8.30	92	25	59.80	16' LT	0-5	38	19	A-6(12)	BROWN
7198+00	35	5	8.40	92	24	59.70	29' LT	0-5	23	8	A-4(2)	BROWN
7200+00	35	5	6.80	92	24	58.60	25' RT	0-5	27	12	A-6(6)	BROWN
7202+00	35	5	5.20	92	24	56.80	CL	0-5	33	14	A-6(9)	BROWN
7204+00	35	5	3.70	92	24	55.50	17' RT	0-5	35	15	A-6(8)	BROWN
7204+00	35	5	3.70	92	24	55.40	33' RT	0-5	25	11	A-6(3)	BROWN
7208+00	35	5	0.70	92	24	52.90	CL	0-5	27	12	A-6(7)	BR/GR
7212+00	35	4	57.10	92	24	50.60	17' LT	0-5	35	15	A-6(11)	BROWN
7212+00	35	4	57.10	92	24	50.70	31' LT	0-5	20	6	A-4(0)	BROWN
7216+00	35	4	53.30	92	24	49.60	CL	0-5	33	14	A-6(7)	BROWN
7220+00	35	4	49.50	92	24	49.00	22' RT	0-5	20	6	A-4(0)	BROWN
7220+00	35	4	49.60	92	24	49.00	36' RT	0-5	28	12	A-6(7)	BROWN
7224+00	35	4	45.40	92	24	48.80	CL	0-5	36	16	A-6(12)	GR/BR
7228+00	35	4	41.50	92	24	49.10	19' LT	0-5	30	13	A-6(8)	BROWN
7228+00	35	4	41.50	92	24	49.00	33' LT	0-5	21	7	A-4(1)	BROWN
7232+00	35	4	36.80	92	24	51.30	CL	0-5	32	14	A-6(3)	BR/GR
7236+00	35	4	34.10	92	24	52.50	13' RT	0-5	29	12	A-6(2)	BROWN
7236+00	35	4	34.10	92	24	52.50	28' RT	0-5	24	10	A-4(1)	RD/BR
7240+00	35	4	32.60	92	24	53.30	CL	0-5	39	20	A-6(11)	GR/BR
7244+00	35	4	26.70	92	24	56.00	12' LT	0-5	31	15	A-6(8)	BR/RD
7244+00	35	4	26.60	92	24	56.00	29' LT	0-5	27	13	A-6(5)	BR/GR
7248+00	35	4	24.30	92	24	57.50	CL	0-5	40	19	A-6(14)	BR/GR
7252+00	35	4	20.60	92	24	59.30	15' RT	0-5	34	14	A-6(6)	BROWN
7252+00	35	4	19.40	92	24	59.90	29' RT	0-5	29	12	A-6(4)	BROWN
7253+00	35	4	19.00	92	25	0.10	25' RT	0-5	30	13	A-6(7)	BROWN
7256+00	35	4	16.30	92	25	1.00	CL	0-5	33	15	A-6(9)	RD/BR
7260+00	35	4	11.90	92	25	2.20	18' LT	0-5	26	10	A-4(6)	BROWN
7260+00	35	4	11.80	92	25	2.20	32' LT	0-5	19	6	A-4(0)	BROWN
7264+00	35	4	9.20	92	25	3.10	CL	0-5	29	12	A-6(7)	BR/GR
7268+00	35	4	4.00	92	25	4.20	16' RT	0-5	62	42	A-7-6(23)	BROWN
7268+00	35	4	4.10	92	25	4.30	29' RT	0-5	34	16	A-6(5)	BROWN
7272+00	35	4	0.60	92	25	4.50	CL	0-5	27	10	A-4(3)	BR/GR
7276+00	35	3	56.20	92	25	4.50	19' LT	0-5	33	16	A-6(9)	BROWN
7276+00	35	3	56.20	92	25	4.50	32' LT	0-5	17	4	A-4(0)	BROWN
7280+00	35	3	54.90	92	25	4.80	CL	0-5	23	8	A-4(2)	BR/GR
7284+00	35	3	48.30	92	25	4.60	14' RT	0-5	37	17	A-6(11)	BROWN
7284+00	35	3	48.30	92	25	4.50	29' RT	0-5	24	9	A-4(2)	BROWN
7288+00	38	3	44.90	92	25	4.00	CL	0-5	27	11	A-6(6)	BR/GR

SOIL CHARACTERISTICS TABULATED ABOVE ARE REPRESENTATIVE AT THE LOCATION OF THE SAMPLE, AND FROM SURFACE INDICATIONS ARE TYPICAL FOR THE LIMITS SHOWN. THESE DATA ARE SHOWN FOR INFORMATION ONLY. THE STATE WILL NOT BE RESPONSIBLE FOR VARIATIONS IN THE SOIL CHARACTERISTICS AND/OR EXTENT OF SAME DIFFERING FROM THE ABOVE TABULATIONS.
Z- AUGER REFUSAL
NP - NON-PLASTIC
ND - NOT DETERMINABLE

SOIL LOG (BOX 2 OF 2)

STATION	LATITUDE			LONGITUDE			LOCATION	DEPTH	LIQUID LIMIT	PLASTICITY INDEX	AASHTO CLASSIFICATION	COLOR
	DEG	MIN	SEC	DEG	MIN	SEC		FEET				
7292+00	35	3	40.40	92	25	3.00	15' LT	0-5	40	21	A-6(14)	BROWN
7292+00	22	8	10.40	92	25	2.80	32' LT	0-5	22	8	A-4(1)	BROWN
7396+00	35	3	21.00	92	25	24.20	CL	0-5	28	11	A-6(4)	BR/GR
7300+00	35	3	35.10	92	25	1.80	14' RT	0-5	34	14	A-6(7)	BR/GR
7300+00	35	3	32.70	92	25	1.10	28' RT	0-5	23	9	A-4(1)	BR/GR
7304+00	35	3	29.20	92	24	59.90	CL	0-5	35	15	A-6(10)	BR/GR
7306+00	35	3	20.90	92	24	57.70	25' RT	0-5	27	9	A-4(7)	BROWN
7308+00	335	3	25.10	92	24	58.60	16' LT	0-5	37	18	A-6(12)	BR/GR
7308+00	35	3	25.00	92	24	58.50	27' LT	0-5	27	12	A-6(4)	GR/BR
7316+00	35	3	17.20	92	24	56.60	15' RT	0-5	28	13	A-6(5)	RD/BR
7316+00	35	3	17.20	92	24	56.60	28' RT	0-5	17	2	A-4(0)	BR/RD
7320+00	35	3	15.30	92	24	26.10	CL	0-5	24	8	A-4(4)	BR/RD
7324+00	35	3	9.60	92	24	54.00	14' LT	0-5	50	33	A-7-6(31)	BROWN
7324+00	35	3	9.60	92	24	54.00	28'LT	0-5	27	14	A-4(2)	BROWN
7328+00	35	3	5.90	92	24	53.10	CL	0-5	33	17	A-6(12)	BROWN
7336+00	35	3	2.90	92	24	52.40	14' RT	0-5	38	21	A-6(14)	BROWN
7336+00	35	2	57.80	92	24	51.00	27' RT	0-5	25	12	A-6(5)	BROWN
7340+00	35	2	54.40	92	24	51.00	CL	0-5	33	17	A-6(8)	BROWN
7344+00	35	2	50.20	92	24	48.40	13' LT	0-5	33	17	A-6(10)	BROWN
7344+00	35	2	50.20	92	24	48.30	28'LT	0-5	22	9	A-4(1)	BROWN
7348+00	35	2	48.00	92	24	48.00	CL	0-5	36	19	A-6(12)	BROWN
7352+00	35	2	42.40	92	24	46.50	13'RT	0-5	38	20	A-6(12)	BROWN
7352+00	35	2	42.40	92	24	46.40	29'RT	0-5	18	7	A-4(1)	BROWN
7359+00	35	3	38.40	92	24	45.30	25' RT	0-5	32	12	A-6(7)	BROWN
7360+00	35	2	34.90	92	24	44.20	14'LT	0-5	36	20	A-6(13)	BROWN
7360+00	35	2	34.80	92	24	43.80	28'LT	0-5	20	8	A-4(1)	BROWN
7364+00	35	2	31.10	92	24	42.90	CL	0-5	26	11	A-6(7)	BR/GR
7368+00	35	2	26.90	92	24	41.90	14' RT	0-5	33	17	A-6(14)	BROWN
7368+00	35	2	26.90	92	24	41.90	29'RT	0-5	39	22	A-6(18)	BROWN
7372+00	35	2	23.40	92	24	40.70	CL	0-5	26	12	A-6(4)	BROWN
7376+00	35	2	19.70	92	24	39.70	13'LT	0-5	27	13	A-6(7)	BROWN
7376+00	35	2	19.70	92	24	39.40	28'LT	0-5	19	8	A-4(1)	BROWN
7380+00	35	2	16.00	92	24	38.50	CL	0-5	33	16	A-6(11)	BROWN
7384+00	35	2	12.10	92	24	37.60	14'RT	0-5	32	13	A-6(11)	BROWN
7384+00	35	2	12.00	92	24	37.70	27'RT	0-5	27	12	A-6(8)	BROWN
7388+00	35	2	8.10	92	24	36.30	CL	0-5	27	7	A-4(3)	BROWN
7392+00	35	2	4.70	92	24	35.30	12'LT	0-5	32	15	A-6(10)	BROWN
7392+00	35	2	4.30	92	24	34.90	24'LT	0-5	18	5	A-4(0)	BROWN
7396+00	35	2	0.90	92	24	34.20	CL	0-5	35	14	A-6(8)	BROWN
7400+00	35	1	56.90	92	24	33.30	14'RT	0-5	30	12	A-6(7)	BROWN
7400+00	35	1	56.50	92	24	33.30	30'RT	0-5	20	5	A-4(0)	BROWN
7404+00	35	1	52.90	92	24	32.30	CL	0-5	44	20	A-7-6(14)	BROWN
7408+00	35	1	51.30	92	24	32.20	13'LT	0-5	31	12	A-6(7)	BROWN
7408+00	35	1	48.80	92	24	31.60	28'LT	0-5	18	3	A-4(0)	BROWN
7411+00	35	1	45.90	92	24	31.90	25' RT	0-5	25	8	A-4(4)	BROWN
7412+00	35	1	45.80	92	24	31.80	CL	0-5	21	4	A-4(1)	RD/BR
7416+00	35	1	41.20	92	24	32.10	11'RT	0-5	23	8	A-4(3)	GR/BR
7416+00	35	1	40.80	92	24	32.20	28'RT	0-5	26	12	A-6(3)	BROWN
7420+00	35	1	36.90	92	24	32.50	CL	0-5	28	14	A-6(7)	GR/BR
7422+00	35	1	35.30	92	24	32.70	12'LT	0-5	28	12	A-6(6)	BROWN
7422+00	35	1	34.90	92	24	32.60	27'LT	0-5	21	6	A-4(1)	BROWN
7428+00	35	1	31.30	92	24	33.50	CL	0-5	33	13	A-6(5)	BROWN
7432+00	35	1	27.30	92	24	34.20	13'RT	0-5	34	15	A-6(6)	BROWN
7432+00	35	1	25.20	92	24	34.70	26'RT	0-5	18	1	A-4(0)	BROWN
7436+00	35	1	21.80	92	24	34.90	CL	0-5	33	15	A-6(5)	GR/BR
7440+00	35	1	17.70	92	24	35.20	14'LT	0-5	26	9	A-4(3)	GRAY
7440+00	35	1	17.20	92	24	35.20	28'LT	0-5	30	16	A-6(3)	RD/BR
7444+00	35	1	15.10	92	24	35.70	CL	0-5	37	20	A-6(10)	BR/GR
7448+00	35	1	10.70	92	24	36.20	15' RT	0-5	41	21	A-7-6(12)	BROWN
7448+00	35	1	9.40	92	24	36.30	28'RT	0-5	26	9	A-4(2)	BROWN
7452+00	35	1	6.90	92	24	36.40	CL	0-5	48	27	A-7-6(23)	BROWN
7456+00	35	1	4.50	92	24	36.60	15'LT	0-5	23	9	A-4(2)	BR/GR
7456+00	35	1	1.60	92	24	36.30	27'LT	0-5	22	11	A-6(2)	BR/GR
7460+00	35		59.20	92	24	36.70	CL	0-5	26	12	A-6(5)	BROWN
7464+00	35		53.50	92	24	36.80	25' RT	0-3.0 Z	26	9	A-4(3)	BROWN
7464+00	35		54.50	92	24	36.80	14'RT	0-3 Z	27	11	A-6(3)	BROWN
7464+00	35		53.60	92	24	36.80	27'RT	0-4 Z	ND	NP	A-4(0)	BROWN
7468+00	35		49.90	92	24	36.70	CL	0-5	25	8	A-4(1)	GRAY
7472+00	35		45.70	92	24	36.50	13'LT	0-4 Z	38	20	A-6(13)	BROWN
7472+00	35		45.60	92	24	36.50	27'LT	0-5	31	1	A-6(5)	BROWN
7476+00	35		42.60	92	24	36.80	CL	0-5	29	12	A-6(7)	RD/BR
7480+00	35		40.80	92	24	37.00	15'RT	0-5	24	7	A-4(2)	RD/BR
7480+00	35		37.70	92	24	37.00	28'RT	0-5	27	12	A-6(3)	RD/BR
7484+00	35		34.30	92	24	36.90	CL	0-5	20	7	A-4(3)	GRAY
7488+00	35		30.90	92	24	36.90	27'LT	0-5	26	11	A-6(4)	BROWN
7488+00	35		29.80	92	24	36.60	46'LT	0-5	20	8	A-4(1)	BROWN

SOIL CHARACTERISTICS TABULATED ABOVE ARE REPRESENTATIVE AT THE LOCATION OF THE SAMPLE, AND FROM SURFACE INDICATIONS ARE TYPICAL FOR THE LIMITS SHOWN. THESE DATA ARE SHOWN FOR INFORMATION ONLY. THE STATE WILL NOT BE RESPONSIBLE FOR VARIATIONS IN THE SOIL CHARACTERISTICS AND/OR EXTENT OF SAME DIFFERING FROM THE ABOVE TABULATIONS.
Z- AUGER REFUSAL
NP - NON-PLASTIC
ND - NOT DETERMINABLE

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
NO. 7405
MICHAEL D. FUGETT
10-28-11

R080388.DGN 10/26/2011

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.		080388	93	452

(2) QUANTITY SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11

STRUCTURES (BOX 1 OF 2)

STATION	DESCRIPTION	REINF. CONC. PIPE CULVERT (CLASS III)				F.E.S. FOR R.C. PIPE CULVERTS				DROP INLETS TYPE				MODIFYING DROP INLETS	SPAN	HEIGHT	LENGTH	CLASS S CONCRETE-ROADWAY	REINF. STEEL-ROADWAY (GRADE 60)	UNCL.EXC. FOR STR.-ROADWAY	SOLID SODDING	WATER	STD. DWG. NOS.
		18"	24"	30"	36"	18"	24"	30"	36"	RM	SPECIAL-1	SPECIAL-2	TM										
		LIN. FT.				EACH				EACH				EACH	LIN. FT.			CU.YD.	POUND	CU.YD.	SQ.YD.	M.GAL	
7092+14	CONSTR. DI IN MEDIAN ON EXIST R.C.BOX												1										
7097+50	CONSTR. DI IN MEDIAN EXTEND RCP		12							1													FPC-9D
7101+00	CONSTR. DI IN MEDIAN W/ RCP OUTLET		200							1													FPC-9D, PCC-1
7103+00	CONSTR. DI IN MEDIAN W/ RCP OUTLET		14							1													FPC-9D, PCC-1
7105+06	CONSTR. DI IN MEDIAN W/ RCP OUTLET		144							1													FPC-9D, PCC-1
7106+50	CONSTR. DI IN MEDIAN W/ RCP OUTLET		356							1													FPC-9D, PCC-1
7109+95	MODIFY DI & EXTEND PIPE		8				1			1													FPC-9D, PCC-1
7111+74	CONSTR. DI IN MEDIAN W/ RCP OUTLET		244							1											8	0.10	PCC-1, FES-1, FES-2, FPC-9D
7114+17	CONSTR. DI IN MEDIAN W/ RCP OUTLET		242							1													FPC-9D, PCC-1
7116+59	CONSTR. DI IN MEDIAN W/ RCP OUTLET		36									1											FPC-9D, PCC-1
7116+95	MODIFY DI IN MEDIAN													1									PCC-1, SPECIAL DETAIL
7116+95	EXTEND R.C. BOX TO LEFT														8	5	12	19.10	2085	13	12	0.15	SPECIAL DETAIL
7119+05	CONSTR. DI IN MEDIAN W/ RCP OUTLET		244									1											RCB-1, RCB-2, RCB-3, W-X45, W-X453-1, R-145X-0
7121+49	CONSTR. DI IN MEDIAN W/ RCP OUTLET		250									1											PCC-1, SPECIAL DETAIL
7123+98	CONSTR. DI IN MEDIAN W/ RCP OUTLET		100									1											PCC-1, SPECIAL DETAIL
7124+97	MODIFY DI IN MEDIAN													1									PCC-1, SPECIAL DETAIL
7128+90	CONSTR. DI IN MEDIAN W/ RCP OUTLET		248									1											SPECIAL DETAIL
7131+38	CONSTR. DI IN MEDIAN W/ RCP OUTLET		156									1											PCC-1, SPECIAL DETAIL
7132+94	MODIFY DI IN MEDIAN													1									PCC-1, SPECIAL DETAIL
7133+20	CONSTR. DI IN MEDIAN W/ RCP OUTLET		26									1											SPECIAL DETAIL
7136+22	CONSTR. DI IN MEDIAN W/ RCP OUTLET		74									1											PCC-1, SPECIAL DETAIL
7136+95	MODIFY DI IN MEDIAN													1									PCC-1, SPECIAL DETAIL
7140+00	CONSTR. DI IN MEDIAN W/ RCP OUTLET		296								1												SPECIAL DETAIL
7142+95	MODIFY DI IN MEDIAN													1									PCC-1, SPECIAL DETAIL
7146+50	CONSTR. DI IN MEDIAN W/ RCP OUTLET		344								1												SPECIAL DETAIL
7149+94	MODIFY DI IN MEDIAN													1									PCC-1, SPECIAL DETAIL
7153+00	CONSTR. DI IN MEDIAN W/ RCP OUTLET		296								1												SPECIAL DETAIL
7155+95	MODIFY DI IN MEDIAN													1									PCC-1, SPECIAL DETAIL
7159+50	CONSTR. DI IN MEDIAN W/ RCP OUTLET		356								1												SPECIAL DETAIL
7162+95	MODIFY DI IN MEDIAN													1									PCC-1, SPECIAL DETAIL
7162+95	EXTEND R.C. PIPE TO LEFT		16				1																SPECIAL DETAIL
7166+00	CONSTR. DI IN MEDIAN W/ RCP OUTLET		306								1										8	0.10	PCC-1, FES-1, FES-2
7175+00	CONSTR. DI IN MEDIAN W/ RCP OUTLET		396								1												PCC-1, SPECIAL DETAIL
7178+95	MODIFY DI IN MEDIAN													1									PCC-1, SPECIAL DETAIL
7178+95	EXTEND R.C. PIPE TO RIGHT		14				1																SPECIAL DETAIL
7183+50	CONSTR. DI IN MEDIAN W/ RCP OUTLET		446								1										8	0.10	PCC-1, FES-1, FES-2
7187+95	MODIFY DI IN MEDIAN													1									PCC-1, SPECIAL DETAIL
7192+00	CONSTR. DI IN MEDIAN W/ RCP OUTLET		396								1												SPECIAL DETAIL
7195+95	MODIFY DI IN MEDIAN													1									PCC-1, SPECIAL DETAIL
7198+70	CONSTR. DI IN MEDIAN W/ RCP OUTLET		274								1												SPECIAL DETAIL
7201+44	CONSTR. DI IN MEDIAN ON EXIST R.C.BOX													1									PCC-1, SPECIAL DETAIL
7205+20	CONSTR. DI IN MEDIAN W/ RCP OUTLET		376									1											SPECIAL DETAIL
7208+95	CONSTR. DI IN MEDIAN EXTEND RCP													1									PCC-1, SPECIAL DETAIL
7213+00	CONSTR. DI IN MEDIAN W/ RCP OUTLET		406									1											SPECIAL DETAIL
7217+00	CONSTR. DI IN MEDIAN W/ RCP OUTLET		296									1											PCC-1, SPECIAL DETAIL
7219+95	MODIFY DI IN MEDIAN													1									PCC-1, SPECIAL DETAIL
7224+00	CONSTR. DI IN MEDIAN W/ RCP OUTLET		406									1											SPECIAL DETAIL
7227+95	MODIFY DI IN MEDIAN													1									PCC-1, SPECIAL DETAIL
7232+00	CONSTR. DI IN MEDIAN W/ RCP OUTLET		406									1											SPECIAL DETAIL
7235+95	MODIFY DI IN MEDIAN													1									PCC-1, SPECIAL DETAIL
7240+70	CONSTR. DI IN MEDIAN W/ RCP OUTLET		476									1											SPECIAL DETAIL
7245+45	CONSTR. DI IN MEDIAN W/ RCP OUTLET		448									1											PCC-1, SPECIAL DETAIL
7249+92	MODIFY DI IN MEDIAN													1									PCC-1, SPECIAL DETAIL
7252+40	CONSTR. DI IN MEDIAN W/ RCP OUTLET		250									1											SPECIAL DETAIL
7254+90	MODIFY DI IN MEDIAN													1									PCC-1, SPECIAL DETAIL
7258+20	CONSTR. DI IN MEDIAN W/ RCP OUTLET		236									1											SPECIAL DETAIL
7260+55	CONSTR. DI IN MEDIAN W/ RCP OUTLET		40									1											PCC-1, SPECIAL DETAIL
7260+95	MODIFY DI IN MEDIAN													1									PCC-1, SPECIAL DETAIL
7263+07	CONSTR. DI IN MEDIAN W/ RCP OUTLET		250									1											SPECIAL DETAIL
7265+56	CONSTR. DI IN MEDIAN W/ RCP OUTLET		140									1											PCC-1, SPECIAL DETAIL
7266+95	MODIFY DI IN MEDIAN													1									PCC-1, SPECIAL DETAIL
7268+07	CONSTR. DI IN MEDIAN W/ RCP OUTLET		112									1											SPECIAL DETAIL
7271+95	MODIFY DI IN MEDIAN													1									PCC-1, SPECIAL DETAIL
7275+57	CONSTR. DI IN MEDIAN W/ RCP OUTLET		138									1											SPECIAL DETAIL
7276+95	MODIFY DI IN MEDIAN													1									PCC-1, SPECIAL DETAIL
7278+08	CONSTR. DI IN MEDIAN W/ RCP OUTLET		122									1											SPECIAL DETAIL
7280+51	CONSTR. DI IN MEDIAN W/ RCP OUTLET		250									1											PCC-1, SPECIAL DETAIL
7283+00	CONSTR. DI IN MEDIAN W/ RCP OUTLET		50									1											PCC-1, SPECIAL DETAIL
7283+50	MODIFY DI IN MEDIAN													1									PCC-1, SPECIAL DETAIL
7285+47	CONSTR. DI IN MEDIAN W/ RCP OUTLET		198									1											SPECIAL DETAIL
7287+95	CONSTR. DI IN MEDIAN W/ RCP OUTLET		100									1											PCC-1, SPECIAL DETAIL
7288+95	MODIFY DI IN MEDIAN													1									PCC-1, SPECIAL DETAIL
7290+44	CONSTR. DI IN MEDIAN W/ RCP OUTLET		150									1											SPECIAL DETAIL
7292+91	CONSTR. DI IN MEDIAN W/ RCP OUTLET		194									1											PCC-1, SPECIAL DETAIL
SUBTOTALS (BOX 1 OF 2):			**10538**				**3**			**8**	**9**	**29**	**1**	**24**				**19.10**	**2085**	**13**	**36**	**0.45**	

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

NOTE: FOR R.C. PIPE CULVERT INSTALLATIONS USE TYPE 3 BEDDING UNLESS OTHERWISE SPECIFIED.

NOTE: FOR C.M. PIPE CULVERT INSTALLATIONS USE TYPE 2 BEDDING UNLESS OTHERWISE SPECIFIED.

R080388.DGN 10/26/2011

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.		080388	94	452

(2) QUANTITY SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11

STRUCTURES (BOX 2 OF 2)

STATION	DESCRIPTION	REINF. CONC. PIPE CULVERT (CLASS III)				F.E.S. FOR R.C. PIPE CULVERTS				DROP INLETS TYPE				MODIFYING DROP INLETS	SPAN	HEIGHT	LENGTH	CLASS S CONCRETE-ROADWAY	REINF. STEEL-ROADWAY (GRADE 60)	UNCL.EXC. FOR STR.-ROADWAY	SOLID SODDING	WATER	STD. DWG. NOS.
		18"	24"	30"	36"	18"	24"	30"	36"	RM	SPECIAL-1	SPECIAL-2	TM	EACH		LIN. FT.		CU.YD.	POUND	CU.YD.	SQ.YD.	M.GAL	
7294+84	CONSTR. DI IN MEDIAN W/ RCP OUTLET		212									1											PCC-1, SPECIAL DETAIL
7296+95	MODIFY DI IN MEDIAN													1									SPECIAL DETAIL
7300+00	CONSTR. DI IN MEDIAN W/ RCP OUTLET		250								1												PCC-1, SPECIAL DETAIL
7302+50	CONSTR. DI IN MEDIAN W/ RCP OUTLET		246								1												PCC-1, SPECIAL DETAIL
7304+95	MODIFY DI IN MEDIAN													1									SPECIAL DETAIL
7309+00	CONSTR. DI IN MEDIAN W/ RCP OUTLET		396								1												PCC-1, SPECIAL DETAIL
7312+95	MODIFY DI IN MEDIAN													1									SPECIAL DETAIL
7316+00	CONSTR. DI IN MEDIAN W/ RCP OUTLET		396								1												PCC-1, SPECIAL DETAIL
7319+95	MODIFY DI IN MEDIAN													1									SPECIAL DETAIL
7323+00	CONSTR. DI IN MEDIAN W/ RCP OUTLET		296								1												PCC-1, SPECIAL DETAIL
7325+95	MODIFY DI IN MEDIAN													1									SPECIAL DETAIL
7328+95	MODIFY DI IN MEDIAN													1									SPECIAL DETAIL
7334+00	CONSTR. DI IN MEDIAN W/ RCP OUTLET	286				1					1												FES-1, FES-2, PCC-1, SPECIAL DETAIL
7337+00	MODIFY DI IN MEDIAN													1									SPECIAL DETAIL
7341+00	CONSTR. DI IN MEDIAN W/ RCP OUTLET	400									1												PCC-1, SPECIAL DETAIL
7345+00	CONSTR. DI IN MEDIAN W/ RCP OUTLET	300									1												PCC-1, SPECIAL DETAIL
7348+08	MODIFY DI IN MEDIAN													1									SPECIAL DETAIL
7352+00	CONSTR. DI IN MEDIAN W/ RCP OUTLET	392									1												PCC-1, SPECIAL DETAIL
7356+00	CONSTR. DI IN MEDIAN W/ RCP OUTLET		274								1												PCC-1, SPECIAL DETAIL
7358+73	MODIFY DI IN MEDIAN													1									SPECIAL DETAIL
7362+73	CONSTR. DI IN MEDIAN W/ RCP OUTLET		400								1												PCC-1, SPECIAL DETAIL
7366+73	CONSTR. DI IN MEDIAN W/ RCP OUTLET		228								1												PCC-1, SPECIAL DETAIL
7369+01	MODIFY DI IN MEDIAN													1									SPECIAL DETAIL
7373+00	CONSTR. DI IN MEDIAN W/ RCP OUTLET		428								1												PCC-1, SPECIAL DETAIL
7377+27	MODIFY DI IN MEDIAN													1									SPECIAL DETAIL
7381+00	CONSTR. DI IN MEDIAN W/ RCP OUTLET		374								1												PCC-1, SPECIAL DETAIL
7385+00	CONSTR. DI IN MEDIAN W/ RCP OUTLET		242								1												PCC-1, SPECIAL DETAIL
7387+41	MODIFY DI IN MEDIAN													1									SPECIAL DETAIL
7391+00	CONSTR. DI IN MEDIAN W/ RCP OUTLET		360								1												PCC-1, SPECIAL DETAIL
7293+12	CONSTR. DI IN MEDIAN W/ RCP OUTLET		94								1												PCC-1, SPECIAL DETAIL
7394+06	MODIFY DI IN MEDIAN													1									SPECIAL DETAIL
7395+96	CONSTR. DI IN MEDIAN W/ RCP OUTLET		90									1											PCC-1, SPECIAL DETAIL
7398+76	CONSTR. DI IN MEDIAN W/ RCP OUTLET		114									1											PCC-1, SPECIAL DETAIL
7399+90	MODIFY DI IN MEDIAN													1									SPECIAL DETAIL
7401+51	CONSTR. DI IN MEDIAN W/ RCP OUTLET		162									1											PCC-1, SPECIAL DETAIL
7404+09	CONSTR. DI IN MEDIAN W/ RCP OUTLET		116									1											PCC-1, SPECIAL DETAIL
7405+24	MODIFY DI IN MEDIAN													1									SPECIAL DETAIL
7406+62	CONSTR. DI IN MEDIAN W/ RCP OUTLET		138									1											PCC-1, SPECIAL DETAIL
7409+13	CONSTR. DI IN MEDIAN W/ RCP OUTLET		252									1											PCC-1, SPECIAL DETAIL
7411+63	CONSTR. DI IN MEDIAN W/ RCP OUTLET		250									1											PCC-1, SPECIAL DETAIL
7414+13	CONSTR. DI IN MEDIAN W/ RCP OUTLET		62									1											PCC-1, SPECIAL DETAIL
7414+75	MODIFY DI IN MEDIAN													1									SPECIAL DETAIL
7416+65	CONSTR. DI IN MEDIAN W/ RCP OUTLET		190									1											PCC-1, SPECIAL DETAIL
7419+00	CONSTR. DI IN MEDIAN W/ RCP OUTLET		236									1											PCC-1, SPECIAL DETAIL
7397+01	MODIFY DI IN MEDIAN													1									SPECIAL DETAIL
7407+00	MODIFY DI IN MEDIAN													1									SPECIAL DETAIL
7411+16	CONSTR. DI IN MEDIAN W/ RCP OUTLET	416									1												PCC-1, SPECIAL DETAIL
7413+68	CONSTR. DI IN MEDIAN W/ RCP OUTLET	252									1												PCC-1, SPECIAL DETAIL
7415+00	MODIFY DI IN MEDIAN													1									SPECIAL DETAIL
7416+20	CONSTR. DI IN MEDIAN W/ RCP OUTLET	120									1												PCC-1, SPECIAL DETAIL
7418+66	CONSTR. DI IN MEDIAN W/ RCP OUTLET	246									1												PCC-1, SPECIAL DETAIL
7421+17	CONSTR. DI IN MEDIAN W/ RCP OUTLET	252									1												PCC-1, SPECIAL DETAIL
7423+66	CONSTR. DI IN MEDIAN W/ RCP OUTLET	134									1												PCC-1, SPECIAL DETAIL
7425+00	MODIFY DI IN MEDIAN													1									SPECIAL DETAIL
7426+14	CONSTR. DI IN MEDIAN W/ RCP OUTLET	114									1												PCC-1, SPECIAL DETAIL
7428+65	CONSTR. DI IN MEDIAN W/ RCP OUTLET		134								1												PCC-1, SPECIAL DETAIL
7429+99	MODIFY DI IN MEDIAN													1									SPECIAL DETAIL
7431+13	CONSTR. DI IN MEDIAN W/ RCP OUTLET		114								1												PCC-1, SPECIAL DETAIL
7432+76	CONSTR. DI IN MEDIAN W/ RCP OUTLET		164								1												PCC-1, SPECIAL DETAIL
7436+00	MODIFY DI IN MEDIAN													1									SPECIAL DETAIL
7440+00	CONSTR. DI IN MEDIAN W/ RCP OUTLET		400								1												PCC-1, SPECIAL DETAIL
7444+00	CONSTR. DI IN MEDIAN W/ RCP OUTLET		400								1												PCC-1, SPECIAL DETAIL
7448+00	CONSTR. DI IN MEDIAN W/ RCP OUTLET		348								1												PCC-1, SPECIAL DETAIL
7451+48	MODIFY DI IN MEDIAN													1									SPECIAL DETAIL
7455+00	CONSTR. DI IN MEDIAN W/ RCP OUTLET		352								1												PCC-1, SPECIAL DETAIL
7457+32	CONSTR. DI IN MEDIAN W/ RCP OUTLET		232								1												PCC-1, SPECIAL DETAIL
7459+98	EXTEND R.C. PIPE LEFT				16				1												17	0.21	PCC-1, FES-1, FES-2
7459+98	EXTEND R.C. PIPE RIGHT				16				1												17	0.21	PCC-1, FES-1, FES-2
7472+17	EXTEND R.C. PIPE RIGHT				12				1												17	0.21	PCC-1, FES-1, FES-2
7472+99	EXTEND R.C. PIPE LEFT				14				1												17	0.21	PCC-1, FES-1, FES-2
7479+95	EXTEND R.C. PIPE RIGHT			14				1													13	0.16	PCC-1, FES-1, FES-2
7480+11	EXTEND R.C. PIPE LEFT			20				1													13	0.16	PCC-1, FES-1, FES-2
SUBTOTALS (BOX 2 OF 2):		**2912**	**7950**	**34**	**58**	**1**		**2**	**4**		**32**	**11**		**23**							**94**	**1.16**	
TOTALS:		**2912**	**18488**	**34**	**58**	**1**	**3**	**2**	**4**	**8**	**41**	**40**	**1**	**47**				**19.10**	**2085**	**13**	**130**	**1.61**	

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

NOTE: FOR R.C. PIPE CULVERT INSTALLATIONS USE TYPE 3 BEDDING UNLESS OTHERWISE SPECIFIED.

NOTE: FOR C.M. PIPE CULVERT INSTALLATIONS USE TYPE 2 BEDDING UNLESS OTHERWISE SPECIFIED.

R080388.DGN 10/26/2011

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.		080388	95	452
				(1) 07226		QUANTITIES		52183

SCHEDULE OF BRIDGE QUANTITIES FOR JOB 080388

BRIDGE NO. / CODE NO. / NAME PLATE TITLE	UNIT OF STRUCTURE	ITEM NO.	205	801	802	802	803	804	804	805	807	807	808	812	816	SP JOB 080388	SP JOB 080388	SP JOB 080388	SP JOB 080388	SP JOB 080388
		ITEM	REMOVAL OF EXISTING BRIDGE STRUCTURE (SITE NO. 1)	UNCLASSIFIED EXCAVATION FOR STRUCTURES-BRIDGE	CLASS S CONCRETE - BRIDGE	CLASS S(AE) CONCRETE - BRIDGE	CLASS 1 PROTECTIVE SURFACE TREATMENT	REINFORCING STEEL-BRIDGE (GRADE 60)	EPOXY COATED REINFORCING STEEL (GRADE 60)	STEEL PILING (HP12X53)	STRUCTURAL STEEL IN PLATE GIRDER SPANS (M270-GR. 50)	*PAINTING STRUCTURAL STEEL	ELASTOMERIC BEARINGS	BRIDGE NAME PLATE (TYPE D)	CONCRETE RIPRAP	DRILLED SHAFT (78" DIA.)	ARMORED JOINT WITH NEOPRENE STRIP SEAL	SHORING	TEXTURED COATING FINISH	ARCHITECTURAL FINISH
		UNIT	LUMP SUM	CUBIC YARD	CUBIC YARD	CUBIC YARD	SQ. YARD	POUND	POUND	LINEAR FOOT	POUND	TON	CUBIC INCH	EACH	CUBIC YARD	LINEAR FOOT	LINEAR FOOT	LUMP SUM	SQUARE YARD	SQUARE FOOT
07226 X211 HIGHWAY 64	BENT NO. 1			278	189.21		0.4	23,768		1,303	295	1.6	10,115.0		133				87	97
	BENT NO. 2				231.12			43,762					25,198.5			315			490	28
	BENT NO. 3				231.12			43,762					25,198.5			315			490	28
	BENT NO. 4			278	192.05		0.4	23,768		1,377	295	1.6	23,664.0		134				88	97
	417'-0" CONT. COMP. PLATE GIRDER UNIT					1,595.90	118.3		450,900		2,190,230	1,083.5		1			348		1,473	2,457
	SITE NO. 1 (BRIDGE NO. A3889)		0.5																	
	SITE NO. 1 (BRIDGE NO. B3889)		0.5																	
	TOTALS FOR BRIDGE NO. 07226			556	843.50	1,595.90	119.1	135,060	450,900	2,680	2,190,820	1,086.7	84,176.0	1	267	630	348	1	2,628	2,707

* Paint shall conform to Federal Standard 595B, Color Chip No. 20108, Brown.

ABhall 8/31/2011 4:24:43 PM
WORKSPACE: AHTD Bridge
L:\208\NG\7504 - I-40 over Hwy 64 Bridge Replacement\Drawings\Sh No 52183 - Schedule of Bridge Quantities (1 of 2).dgn
REVISED DATE:

ARKANSAS
LICENSED PROFESSIONAL ENGINEER
9-7-11
No. 8017
JOHN H. RUDDELL
BRIDGE ENGINEER

SHEET 1 OF 2
SCHEDULE OF
BRIDGE QUANTITIES
HWY. 65 - EAST (WIDENING) (F)
FAULKNER COUNTY
ROUTE 40 SEC. 32
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: PCC DATE: JUNE 2011 FILENAME: B080388_01.DGN
CHECKED BY: ABH DATE: JUNE 2011 SCALE: AS SHOWN
DESIGNED BY: PCC DATE: JUNE 2011
BRIDGE NO. 07226 DRAWING NO. 52183

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.		080388	96	452

(1) 07226, A&B6883, A&B6884-QUANTITIES-52184

SCHEDULE OF BRIDGE QUANTITIES - JOB NO. 080388

BRIDGE NUMBER	CODE NUMBER	NAME PLATE TITLE	ITEM NUMBER	205	801	802	802	803	804	804	805	805	805	807	807	808	812	816	816	816	SP JOB 080388	SP JOB 080388	SP JOB 080388	SP JOB 080388	SP JOB 080388
			ITEM / UNIT OF STRUCTURE	REMOVAL OF EXISTING BRIDGE STRUCTURE (SITE NO.)	UNCLASSIFIED EXCAVATION FOR STRUCTURES-BRIDGE	CLASS S CONCRETE-BRIDGE	CLASS S(AE) CONCRETE-BRIDGE	CLASS 1 PROTECTIVE SURFACE TREATMENT	REINFORCING STEEL-BRIDGE (GRADE 60)	EPOXY COATED REINFORCING STEEL (GRADE 60)	**STEEL PILING (HP 12X53)	**STEEL PILING (HP 14X102)	PILE ENCASEMENT	STRUCTURAL STEEL IN PLATE GIRDER SPANS (M 270, GRADE 50)	*PAINTING STRUCTURAL STEEL	ELASTOMERIC BEARINGS	BRIDGE NAME PLATE (TYPE D)	CONCRETE RIPRAP	FILTER BLANKET	DUMPED RIPRAP	DRILLED SHAFT (78'' DIA.)	ARMORED JOINT WITH NEOPRENE STRIP SEAL	SHORING	TEXTURED COATING FINISH	ARCHITECTURAL FINISH
			UNIT	LUMP SUM	CU. YD.	CU. YD.	CU. YD.	GAL.	LB.	LB.	LIN. FT.	LIN. FT.	LIN. FT.	LB.	TON	CU. IN.	EACH	CU. YD.	SQ. YD.	CU. YD.	LIN. FT.	LIN. FT.	LUMP SUM	SQ. YD.	SQ. FT.
A6883	X020	STONE DAM CREEK	END BENT A1		44	19.45			1,862		280								415	207					
			INTERIOR BENT A2		292	68.05			12,453	181															
			INTERIOR BENT A3		292	68.05			12,453	181															
			END BENT A4		44	19.45			1,862		280								435	217					
			98'-0'' CONTINUOUS R.C. SLAB SPAN UNIT				448.90	13.7		71,678							1								
			SITE NO. 2	0.5																					
			TOTALS FOR BRIDGE NO. A6883		672	175.00	448.90	13.7	28,630	72,040	560						1		850	424					
B6883	X020	STONE DAM CREEK	END BENT B1		44	19.45			1,862		280								435	217					
			INTERIOR BENT B2		292	68.05			12,453	181															
			INTERIOR BENT B3		292	68.05			12,453	181															
			END BENT B4		44	19.45			1,862		280								415	207					
			98'-0'' CONTINUOUS R.C. SLAB SPAN UNIT				448.90	13.7		71,678							1								
			SITE NO. 2	0.5																					
			TOTALS FOR BRIDGE NO. B6883		672	175.00	448.90	13.7	28,630	72,040	560						1		850	424					
A6884	X020	GOLD CREEK	END BENT A1		44	19.45			1,862		280								509	255					
			INTERIOR BENT A2			14.62			1,542	181		280	137												
			INTERIOR BENT A3		261	68.48			12,535																
			INTERIOR BENT A4		146	68.80			12,615	181															
			INTERIOR BENT A5		169	73.42			13,549	181															
			INTERIOR BENT A6		192	74.96			13,843																
			INTERIOR BENT A7			14.62			1,542	181		350	137												
			END BENT A8		44	19.45			1,862		350								537	269					
			68'-0'' CONTINUOUS R.C. SLAB SPAN UNIT				311.43	9.5		47,466							1								
			90'-0'' CONTINUOUS R.C. SLAB SPAN UNIT				356.54	12.6		59,324															
			68'-0'' CONTINUOUS R.C. SLAB SPAN UNIT				311.43	9.5		47,466															
			SITE NO. 3	0.5																					
			TOTALS FOR BRIDGE NO. A6884		856	353.80	979.40	31.6	59,350	154,980	630	630	274				1		1,046	524					
B6884	X020	GOLD CREEK	END BENT B1		44	19.45			1,862		280								537	269					
			INTERIOR BENT B2			14.62			1,542	181		280	137												
			INTERIOR BENT B3		292	70.38			12,905																
			INTERIOR BENT B4		146	68.80			12,615	181															
			INTERIOR BENT B5		142	73.42			13,549	181															
			INTERIOR BENT B6		192	74.96			13,843																
			INTERIOR BENT B7			14.62			1,542	181		380	137												
			END BENT B8		44	19.45			1,862		380								509	255					
			68'-0'' CONTINUOUS R.C. SLAB SPAN UNIT				311.43	9.5		47,466							1								
			90'-0'' CONTINUOUS R.C. SLAB SPAN UNIT				356.54	12.6		59,324															
			68'-0'' CONTINUOUS R.C. SLAB SPAN UNIT				311.43	9.5		47,466															
			SITE NO. 3	0.5																					
			TOTALS FOR BRIDGE NO. B6884		860	355.70	979.40	31.6	59,720	154,980	660	660	274				1		1,046	524					
TOTALS FOR BRIDGE NOS. A&B6883 & A&B6884					3,060	1,059.50	2,856.60	90.6	176,330	454,040	2,410	1,290	548				4		3,792	1,896					
TOTALS FROM SHEET 1 FOR BRIDGE NO. 07226					556	843.50	1,595.90	119.1	135,060	450,900	2,680	—	—	2,190,820	1,086.7	84,176.0	1	267	—	—	630	348	1	2,628	2,707
TOTALS FOR JOB NO. 080388					***3,616	1,903.00	4,452.50	209.7	311,390	904,940	5,090	1,290	548	2,190,820	1,086.7	84,176.0	5	267	3,792	1,896	630	348	1	2,628	2,707

* Paint shall conform to Federal Standard 595B, Color Chip No. 20108.

** These steel piles are required to have special tips which will not be paid for directly, but will be considered subsidiary to the item ''Steel Piling (HP 12x53)'' or ''Steel Piling (HP 14x102)''

*** Includes approx. 411 cu. yds. of rock excavation

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7510
9/1/11
CARL J. PUSELLER

BRIDGE ENGINEER

SHEET 2 OF 2
SCHEDULE OF BRIDGE QUANTITIES
HWY. 65 - EAST (WIDENING) (F)
FAULKNER COUNTY

ROUTE 40 SEC. 32

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: KDH DATE: 7-25-11
CHECKED BY: MCG DATE: 8/30/11
DESIGNED BY: — DATE: —
FILENAME: b080388_q2.dgn
SCALE: NONE

BRIDGE NO. 07226, A&B6883, A&B6884 DRAWING NO. 52184

SUMMARY OF QUANTITIES (SHEET 1 OF 2)

ITEM NUMBER	ITEM		QUANTITY	UNIT
201	CLEARING		45	STATION
201	GRUBBING		45	STATION
202	REMOVAL AND DISPOSAL OF APPROACH GUTTERS		1	EACH
202	REMOVAL AND DISPOSAL OF PIER PROTECTION		254	LIN. FT.
202	REMOVAL AND DISPOSAL OF ASPHALT PAVEMENT		16538	SQ. YD.
202	REMOVAL AND DISPOSAL OF DROP INLETS		4	EACH
SP & 202	REMOVAL AND DISPOSAL OF GUARDRAIL		5286	LIN. FT.
202	REMOVAL AND DISPOSAL OF APPROACH SLAB AND GUTTERS		12	EACH
202	REMOVAL AND DISPOSAL OF CONCRETE DITCH PAVING		127	SQ. YD.
202	REMOVAL AND DISPOSAL OF OVERHEAD SIGN STRUCTURE		2	EACH
202	REMOVAL AND DISPOSAL OF IMPACT ATTENUATION BARRIER		8	EACH
210	UNCLASSIFIED EXCAVATION		91198	CU. YD.
210	COMPACTED EMBANKMENT		130604	CU. YD.
SP & 210	SOIL STABILIZATION		100	TON
SS & 303	AGGREGATE BASE COURSE (CLASS 7)		216305	TON
401	TACK COAT		21584	GAL.
SP, SS, & 405	MINERAL AGGREGATE IN ACHM BASE COURSE (1 1/2")		58476	TON
SP, SS, & 405	ASPHALT BINDER (PG 76-22) IN ACHM BASE COURSE (1 1/2")		2373	TON
SP, SS, & 406	MINERAL AGGREGATE IN ACHM BINDER COURSE (1")		24866	TON
SP, SS, & 406	ASPHALT BINDER (PG 76-22) IN ACHM BINDER COURSE (1")		1199	TON
SP, SS, & 407	MINERAL AGGREGATE IN ACHM SURFACE COURSE (1/2")		47766	TON
SP, SS, & 407	ASPHALT BINDER (PG 76-22) IN ACHM SURFACE COURSE (1/2")		2673	TON
412	COLD MILLING ASPHALT PAVEMENT		31579	SQ. YD.
SP, SS, & 414	ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC		198	TON
SP & 504	APPROACH SLABS		1261.20	CU. YD.
SP & 504	APPROACH GUTTERS		449.28	CU. YD.
601	MOBILIZATION		1.00	LUMP SUM
SP & 602	FURNISHING FIELD OFFICE		1	EACH
SP, SS, & 603	MAINTENANCE OF TRAFFIC		1.00	LUMP SUM
603	TRAFFIC CONTROL SUPERVISOR		1.00	LUMP SUM
SS & 604	SIGNS		2076	SQ. FT.
SS & 604	TRAFFIC DRUMS		486	EACH
SS & 604	FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER		82208	LIN. FT.
SS & 604	RELOCATING PRECAST CONCRETE BARRIER		19108	LIN. FT.
SS & 604	CONSTRUCTION PAVEMENT MARKINGS		11458	LIN. FT.
604	REMOVABLE CONSTRUCTION PAVEMENT MARKINGS		97042	LIN. FT.
604	REMOVAL OF PERMANENT PAVEMENT MARKINGS		111437	LIN. FT.
SS & 604	ADVANCE WARNING ARROW PANEL		180	DAY
SP, SS, & 604	PORTABLE CHANGEABLE MESSAGE SIGN		226	WEEK
605	CONCRETE DITCH PAVING (TYPE B)		1947	SQ. YD.
SS & 606	18" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)		2912	LIN. FT.
SS & 606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)		18488	LIN. FT.
SS & 606	30" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)		34	LIN. FT.
SS & 606	36" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)		58	LIN. FT.
606	18" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS		1	EACH
606	24" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS		3	EACH
606	30" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS		2	EACH
606	36" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS		4	EACH
606	SELECTED PIPE BEDDING		200	CU. YD.
606	SELECTED PIPE BACKFILL		400	CU. YD.
609	DROP INLETS (TYPE RM)		8	EACH
609	DROP INLET (TYPE SPECIAL-1)		41	EACH
609	DROP INLET (TYPE SPECIAL-2)		40	EACH
609	DROP INLETS (TYPE TM)		1	EACH
611	UNDERDRAIN OUTLET PROTECTORS		15	EACH
611	4" PIPE UNDERDRAINS		3222	LIN. FT.
SS & 617	GUARDRAIL (TYPE A)		3953	LIN. FT.
SS & 617	TERMINAL ANCHOR POSTS (TYPE 1)		8	EACH
SS & 617	GUARDRAIL TERMINAL (TYPE 2)		12	EACH
SS & 617	THRIE BEAM GUARDRAIL TERMINAL		7	EACH
620	LIME		18	TON
620	SEEDING		8.78	ACRE
620	MULCH COVER		17.78	ACRE
SS & 620	WATER		1092.3	M.GAL.
621	TEMPORARY SEEDING		9.00	ACRE
621	SILT FENCE		11563	LIN. FT.
621	SAND BAG DITCH CHECKS		496	BAG
621	DROP INLET SILT FENCE		2242	LIN. FT.
621	SEDIMENT BASIN		222	CU. YD.
621	OBLITERATION OF SEDIMENT BASIN		222	CU. YD.
621	SEDIMENT REMOVAL AND DISPOSAL		735	CU. YD.
621	ROCK DITCH CHECKS		30	CU. YD.
623	SECOND SEEDING APPLICATION		8.78	ACRE
624	SOLID SODDING		1039	SQ. YD.
631	CONCRETE BARRIER WALL (MEDIAN TYPE A)		9026	LIN. FT.
631	CONCRETE BARRIER WALL (MEDIAN TYPE B)		13889	LIN. FT.
631	CONCRETE BARRIER WALL (MEDIAN TYPE C)		11343	LIN. FT.
SP & 631	CONCRETE BARRIER WALL (SIDE TYPE A)		6360	LIN. FT.
SP & 631	CONCRETE BARRIER WALL (SIDE TYPE E)		1885	LIN. FT.
635	ROADWAY CONSTRUCTION CONTROL		1.00	LUMP SUM
640	MODIFYING DROP INLETS		47	EACH
642	RUMBLE STRIPS IN ASPHALT SHOULDERS		102247	LIN. FT.
SS & 719	THERMOPLASTIC PAVEMENT MARKING WHITE (8")		1207	LIN. FT.
* SP & 719	INVERTED PROFILE THERMOPLASTIC PAVEMENT MARKING WHITE (4")	(ALTERNATE NO. 1)	36434	LIN. FT.
* SP	HIGH PERFORMANCE MARKING TAPE WHITE (4")	(ALTERNATE NO. 2)	36434	LIN. FT.
* SP & 719	INVERTED PROFILE THERMOPLASTIC PAVEMENT MARKING YELLOW (4")	(ALTERNATE NO. 1)	87043	LIN. FT.
* SP	HIGH PERFORMANCE MARKING TAPE YELLOW (4")	(ALTERNATE NO. 2)	87043	LIN. FT.
* SP & 719	INVERTED PROFILE THERMOPLASTIC CONTRAST PAVEMENT MARKING WHITE (4")	(ALTERNATE NO. 1)	590	LIN. FT.
* SP	HIGH PERFORMANCE CONTRAST MARKING TAPE WHITE (4")	(ALTERNATE NO. 2)	590	LIN. FT.
721	RAISED PAVEMENT MARKERS (TYPE II)		1442	EACH
SS & 725	GUIDE SIGN-ROADSIDE MOUNTED (DEMOUNTABLE LEGEND)		758	SQ. FT.
SS & 725	GUIDE SIGN-OVERHEAD MOUNTED (DEMOUNTABLE LEGEND)		3659	SQ. FT.
SS & 726	STANDARD SIGN		96	SQ. FT.
SS & 727	EXIT NUMBER PANEL (TYPE A)		214	SQ. FT.
SS & 727	EXIT NUMBER PANEL (TYPE B)		79	SQ. FT.
SS & 727	EXIT NUMBER PANEL (TYPE C)		70	SQ. FT.
730	BREAKAWAY SIGN SUPPORT (TYPE G-2)		5842	POUND
801	UNCLASSIFIED EXCAVATION FOR STRUCTURES-ROADWAY		13	CU. YD.
802	CLASS S CONCRETE - ROADWAY		19.10	CU. YD.
804	REINFORCING STEEL-ROADWAY (GRADE 60)		201631	POUND
804	EPOXY COATED REINFORCING STEEL (GRADE 60)		2700	POUND
SP	ANTENNA SUPPORT (25' HT.) WITH CAMERA		2	EACH
SP	MOBILE SPEED NOTIFICATION SYSTEM		2	EACH
SP	OVERHEAD VMS ASSEMBLY		3	EACH
SP	REMOVAL OF RUMBLE STRIP		19913	LIN. FT.
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-23-05)		1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-23-07)		1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-23-08)		1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-23-09)		1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-23-10)		1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-23-11)		1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-23-12)		1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-23-13)		1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-23-14)		1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-23-15)		1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-23-16)		1	EACH
SP	TEMPORARY IMPACT ATTENUATION BARRIER		1	EACH
SP	TEMPORARY IMPACT ATTENUATION BARRIER (REPAIR)		1	EACH

*ALTERNATE BID ITEMS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
RACHEL D. PIGOTT
10-25-11

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FEDERAL DIST. NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	080388	97	452

(2) SUMMARY OF QUANTITIES

SUMMARY OF QUANTITIES (SHEET 2 OF 2)

ITEM NUMBER	ITEM	QUANTITY	UNIT
	STRUCTURES OVER 20' SPAN		
205	REMOVAL OF EXISTING BRIDGE STRUCTURE (SITE NO. 1)	1.00	LUMP SUM
205	REMOVAL OF EXISTING BRIDGE STRUCTURE (SITE NO. 2)	1.00	LUMP SUM
205	REMOVAL OF EXISTING BRIDGE STRUCTURE (SITE NO. 3)	1.00	LUMP SUM
636	BRIDGE CONSTRUCTION CONTROL	1.00	LUMP SUM
801	UNCLASSIFIED EXCAVATION FOR STRUCTURES-BRIDGE	3616	CU. YD.
802	CLASS S CONCRETE - BRIDGE	1903.00	CU. YD.
802	CLASS S(AE) CONCRETE - BRIDGE	4452.50	CU. YD.
803	CLASS 1 PROTECTIVE SURFACE TREATMENT	209.7	GAL.
804	REINFORCING STEEL-BRIDGE (GRADE 60)	311390	POUND
804	EPOXY COATED REINFORCING STEEL (GRADE 60)	904940	POUND
805	STEEL PILING (HP 12X53)	5090	LIN. FT.
805	STEEL PILING (HP 14X102)	1290	LIN. FT.
805	PILE ENCASEMENT	548	LIN. FT.
807	STRUCTURAL STEEL IN PLATE GIRDER SPANS (M270-GR50)	2190820	POUND
807	PAINTING STRUCTURAL STEEL	1086.7	TON
808	ELASTOMERIC BEARINGS	84176.0	CU. IN.
812	BRIDGE NAME PLATE (TYPE D)	5	EACH
816	FILTER BLANKET	3792	SQ. YD.
SP & 816	DUMPED RIPRAP	1896	CU. YD.
816	CONCRETE RIPRAP	267	CU. YD.
SP	ARCHITECTURAL FINISH	2707	SQ. FT.
SP	TEXTURED COATING FINISH	2628	SQ. YD.
SP	DRILLED SHAFT (78" DIAMETER)	630	LIN. FT.
SP	ARMORED JOINT WITH NEOPRENE STRIP SEAL	348	LIN. FT.
SP	SHORING	1.00	LUMP SUM

REVISION BOX

DATE	REVISION	SHEET NUMBER

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER 14766 RUSSELL D. RUSSELL

10-28-11

(2) SUMMARY OF QUANTITIES & REVISIONS

DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED.ROAD DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	080388	98	452

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.		080388	99	452

(2) SURVEY CONTROL DETAILS

SURVEY CONTROL COORDINATES

Project Name: s080388
Date: 3/15/2011
Coordinate System: ARKANSAS STATE PLANE - NORTH BASED ON GPS CONTROL, PROJECTED TO GROUND.
Units: U.S. SURVEY FOOT

Point Name	Northing	Easting	Elev	Feature	Description
14	283324.99	1182671.46	381.23	CTL	5"*REBAR W*"CAP
15	282860.89	1183102.45	363.74	CTL	5"*REBAR W*"CAP
16	282889.94	1182737.57	364.96	CTL	5"*REBAR W*"CAP
17	282101.36	1183074.12	344.96	CTL	5"*REBAR W*"CAP
18	281162.27	1182962.55	332.31	CTL	5"*REBAR W*"CAP
19	280539.84	1182968.53	327.72	CTL	5"*REBAR W*"CAP
20	279706.54	1183193.57	322.48	CTL	5"*REBAR W*"CAP
21	279134.96	1183581.02	320.54	CTL	5"*REBAR W*"CAP
22	279056.24	1182493.64	320.65	CTL	5"*REBAR W*"CAP
23	278961.95	1184433.37	314.74	CTL	5"*REBAR W*"CAP, 3' W OF EP HWY. 266
24	278948.51	1184985.25	326.00	CTL	5"*REBAR W*"CAP, 7' W OF EP HWY. 266
25	278416.89	1184117.88	316.29	CTL	5"*REBAR W*"CAP
26	277722.46	1184695.00	313.22	CTL	5"*REBAR W*"CAP
27	277110.58	1185202.83	316.15	CTL	5"*REBAR W*"CAP
28	276799.78	1186017.07	316.82	CTL	5"*REBAR W*"CAP
29	276360.52	1185850.57	330.52	CTL	5"*REBAR W*"CAP
30	276284.14	1183301.98	314.57	CTL	5"*REBAR W*"CAP
31	276255.70	1184596.20	310.68	CTL	5"*REBAR W*"CAP
32	276334.19	1185457.03	310.51	CTL	5"*REBAR W*"CAP
33	276215.32	1186291.93	312.13	CTL	5"*REBAR W*"CAP, 3' FROM EP HWY. 64
34	276180.74	1186974.86	310.68	CTL	5"*REBAR W*"CAP
35	276228.00	1187852.47	302.77	CTL	5"*REBAR W*"CAP
36	275838.02	1185744.60	308.68	CTL	5"*REBAR W*"CAP
37	275676.65	1186446.81	319.11	CTL	5"*REBAR W*"CAP
38	275175.69	1186807.86	310.72	CTL	5"*REBAR W*"CAP
39	274335.41	1187503.65	305.33	CTL	5"*REBAR W*"CAP
40	273610.51	1188093.96	301.19	CTL	5"*REBAR W*"CAP
41	272886.15	1188467.32	299.78	CTL	5"*REBAR W*"CAP
42	272161.81	1188617.37	304.18	CTL	5"*REBAR W*"CAP
43	271459.99	1188583.49	308.50	CTL	5"*REBAR W*"CAP
44	270685.37	1188338.00	317.25	CTL	5"*REBAR W*"CAP
45	269873.70	1187987.30	328.81	CTL	5"*REBAR W*"CAP
46	268999.33	1187644.22	316.41	CTL	5"*REBAR W*"CAP
47	268051.35	1187343.22	306.93	CTL	5"*REBAR W*"CAP
48	267680.76	1187808.40	305.61	CTL	5"*REBAR W*"CAP
49	267548.41	1186840.71	301.91	CTL	5"*REBAR W*"CAP
50	267219.28	1187297.63	298.13	CTL	5"*REBAR W*"CAP
51	267209.27	1184917.28	305.78	CTL	5"*REBAR W*"CAP, 10' E OF EP HWY. 60
52	267106.45	1185891.97	299.73	CTL	5"*REBAR W*"CAP
53	267199.05	1186651.61	303.82	CTL	5"*REBAR W*"CAP
54	267123.77	1187519.09	319.88	CTL	5"*REBAR W*"CAP
55	267121.62	1189138.62	298.79	CTL	5"*REBAR W*"CAP
56	267133.17	1189152.02	294.00	CTL	5"*REBAR W*"CAP
57	267370.78	1190031.70	298.67	CTL	5"*REBAR W*"CAP
58	266579.32	1187736.71	295.22	CTL	5"*REBAR W*"CAP
59	266520.77	1187184.04	297.23	CTL	5"*REBAR W*"CAP
60	265847.76	1187306.54	293.13	CTL	5"*REBAR W*"CAP
61	264792.66	1187491.57	288.36	CTL	5"*REBAR W*"CAP
62	264067.01	1187664.33	285.23	CTL	5"*REBAR W*"CAP
63	263220.97	1187864.76	282.37	CTL	5"*REBAR W*"CAP
64	262272.90	1188089.90	279.14	CTL	5"*REBAR W*"CAP
65	261481.08	1188280.75	277.36	CTL	5"*REBAR W*"CAP
66	260637.56	1188471.76	277.39	CTL	5"*REBAR W*"CAP
67	259872.06	1188651.94	277.21	CTL	5"*REBAR W*"CAP
68	259085.81	1188839.40	276.87	CTL	5"*REBAR W*"CAP
69	258177.05	1189053.01	276.99	CTL	5"*REBAR W*"CAP
70	257350.28	1189247.97	277.18	CTL	5"*REBAR W*"CAP
71	256698.70	1189399.78	277.49	CTL	5"*REBAR W*"CAP
72	255916.48	1189584.18	277.34	CTL	5"*REBAR W*"CAP
73	255097.14	1189779.46	277.09	CTL	5"*REBAR W*"CAP
74	254209.11	1189937.86	278.73	CTL	5"*REBAR W*"CAP
75	253195.89	1189948.05	280.82	CTL	5"*REBAR W*"CAP
76	252429.80	1189245.57	275.57	CTL	5"*REBAR W*"CAP
77	252339.54	1190527.84	274.17	CTL	5"*REBAR W*"CAP
78	252295.74	1189833.95	278.08	CTL	5"*REBAR W*"CAP
79	251461.60	1189761.11	277.27	CTL	5"*REBAR W*"CAP
80	250709.50	1189639.65	277.28	CTL	5"*REBAR W*"CAP
81	249762.49	1189602.19	276.74	CTL	5"*REBAR W*"CAP
82	249714.89	1188949.27	285.07	CTL	5"*REBAR W*"CAP
83	249688.84	1189997.45	284.21	CTL	5"*REBAR W*"CAP
84	248814.26	1189536.39	280.25	CTL	5"*REBAR W*"CAP
85	247990.04	1189524.79	295.32	CTL	5"*REBAR W*"CAP
86	247184.96	1189514.52	297.54	CTL	5"*REBAR W*"CAP
87	246347.63	1189539.21	294.89	CTL	5"*REBAR W*"CAP
88	245608.56	1189524.54	297.25	CTL	5"*REBAR W*"CAP
89	245543.26	1189412.68	300.25	CTL	5"*REBAR W*"CAP
90	244602.95	1189250.42	304.17	CTL	5"*REBAR W*"CAP
91	244686.27	1189408.49	299.84	CTL	5"*REBAR W*"CAP

Note - Rebar and Cap - Standard -" Rebar with 2" Aluminum Cap stamped *(standard markings common to all caps), or as indicated (other markings indicated in the point description of the individual point).
ALL DISTANCES ARE GROUND.
USE CAF = 1.0 FOR STAKEOUT FOR THIS PROJECT.
A PROJECT CAF OF 0.9999676209 HAS BEEN USED TO COMPUTE THE ABOVE GROUND COORDINATES.
THIS CAF IS INTENDED FOR USE WITHIN THE PROJECT LIMITS.
GRID DISTANCE = GROUND DISTANCE X CAF.
GRID COORDINATES ARE STORED UNDER FILE NAME: s080388gi.CTL
HORIZONTAL DATUM: NAD 83 (1997)
VERTICAL DATUM: NAVD 88 POSITIONAL ACCURACY THIRD ORDER, UNLESS SPECIFIED OTHERWISE AT A SPECIFIC POINT.

REFERENCE POINTS (1500 SERIES) ARE TO BE USED TO ESTABLISH CONTROL IF THE PRIMARY CONTROL POINTS LISTED ABOVE HAVE BEEN DESTROYED.
REFERENCE POINTS ARE NOT TO BE USED FOR VERTICAL CONTROL

BASIS OF BEARING:
ARKANSAS STATE PLANE GRID BEARINGS - 0301-NORTH ZONE
DETERMINED FROM GPS CONTROL POINTS: 230026 - 230020, 230028 - 230028A, 230027 - 230027A
CONVERGENCE ANGLE: 00 14 33 LEFT AT LT: 35-03-29.1 LG: 92-25-00.1
GRID AZIMUTH = ASTRONOMICAL AZIMUTH - CONVERGENCE ANGLE.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. PUGATT
10-28-11

CONST.

POINT NO.	TYPE	STATION	NORTHING	EASTING
8000	POB	7059+85.85	284198.6957	1179886.8050
8001	PC	7074+62.46	283999.7894	1181349.9600
8003	PT	7102+67.58	282046.0709	1183005.3879
8004	PC	7113+64.84	280949.3027	1182972.6868
8006	PT	7134+34.67	279034.4201	1183631.6785
8007	PC	7202+60.36	273781.8867	1187990.6826
8009	PT	7234+13.20	270816.1052	1188415.9658
8010	PC	7246+74.42	269658.3344	1187915.7208
8012	PT	7295+58.15	264876.0085	1187492.7767
8013	PC	7394+57.32	254956.1446	1189830.4134
8015	PT	7415+29.94	252897.4426	1189934.5897
8016	PI	7421+29.76	252302.7151	1189856.6489
8017	PC	7404+07.34	251464.8677	1189746.1241
8019	PT	7431+89.12	248691.7013	1189550.3774
8020	PI	7448+53.36	247027.5371	1189534.1009
8021	PC	7449+68.47	246912.4351	1189532.9580
8023	PT	7483+03.58	243629.1545	1189018.4173
8024	PC	7507+28.07	241313.6530	1188299.6799
8026	PT	7547+34.94	237381.8994	1187578.5849
8027	POE	7554+11.57	236706.5634	1187536.7950

WESTBOUND

POINT NO.	TYPE	STATION	NORTHING	EASTING
8030	POB	7066+87.93	284104.1227	1180582.4845
8031	PC	7074+94.32	283995.2359	1181381.4880
8033	PT	7102+39.33	282074.3145	1183006.0215
8034	PC	7113+97.93	280916.2183	1182971.8916
8036	PT	7134+23.00	279043.4138	1183624.2456
8037	POE	7134+40.69	279029.7870	1183635.5234

EASTBOUND

POINT NO.	TYPE	STATION	NORTHING	EASTING
8044	POB	7095+10.43	282787.7072	1182879.6279
8045	PC	7095+52.57	282748.1919	1182894.2650
8047	PT	7103+33.60	281980.0842	1183003.4205
8048	PC	7113+62.55	280951.5890	1182972.7550
8050	PT	7133+44.87	279104.4085	1183575.4247
8051	POE	7134+39.67	279030.5725	1183634.8715

GOLD CREEK WESTBOUND

POINT NO.	TYPE	STATION	NORTHING	EASTING
8028	POB	7396+50.00	252215.7051	1189845.1710
8029	POE	7408+00.55	251074.6117	1189698.0457

GOLD CREEK EASTBOUND

POINT NO.	TYPE	STATION	NORTHING	EASTING
8038	POB	7396+50.00	252215.7051	1189845.1710
8039	POE	7406+49.70	251224.4306	1189715.6993

STONE DAM CREEK WESTBOUND

POINT NO.	TYPE	STATION	NORTHING	EASTING
8040	POB	7329+00.00	261623.2520	1188259.2956
8041	POE	7336+50.00	260608.6430	1188498.3903

STONE DAM CREEK EASTBOUND

POINT NO.	TYPE	STATION	NORTHING	EASTING
8042	POB	7329+00.00	261623.2520	1188259.2956
8043	POE	7335+00.00	260754.6439	1188463.9849

R080388.DGN 8/30/2010

SURVEY CONTROL DETAILS

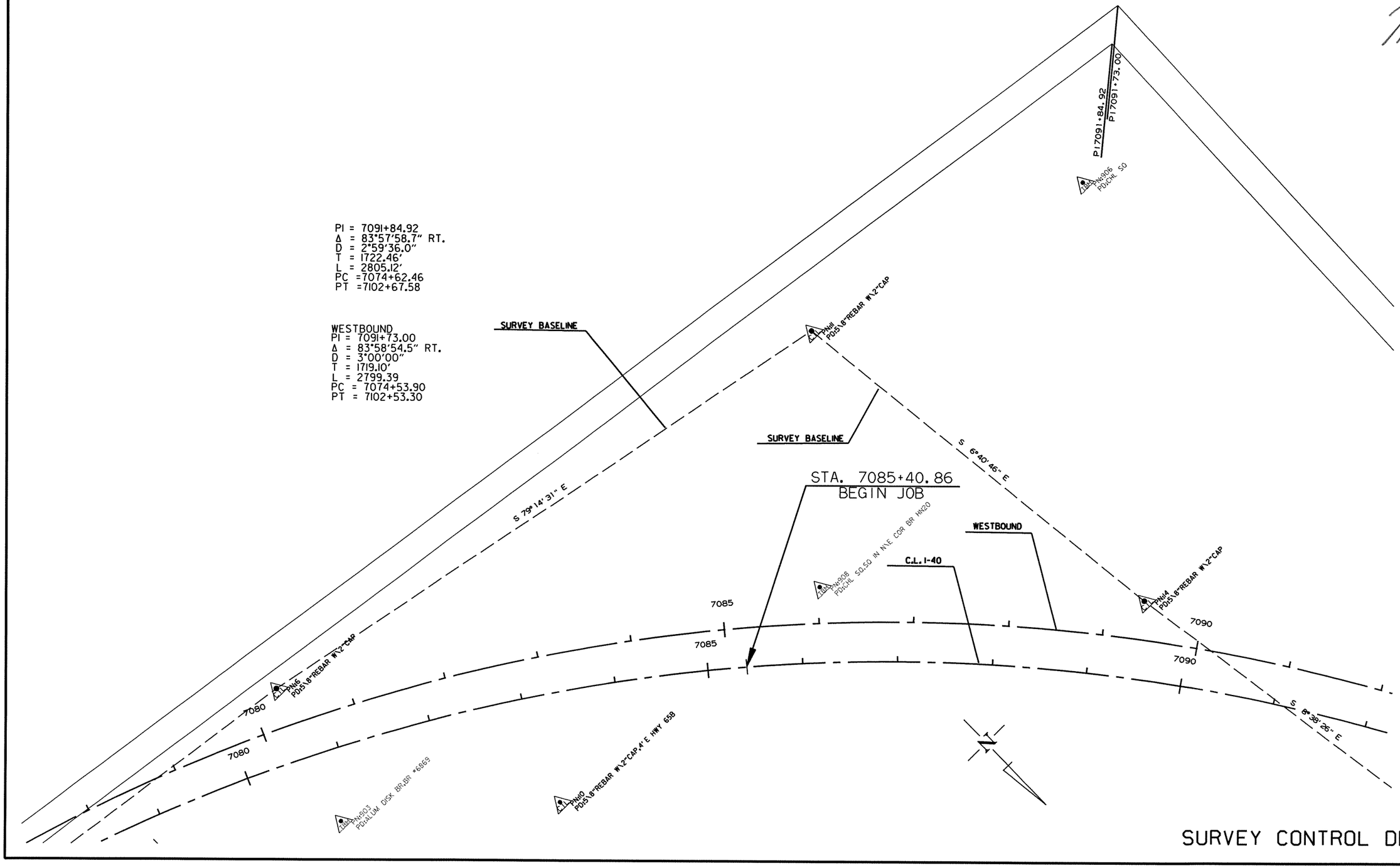
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	100	452

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. PUGETT
10-28-11

PI = 7091+84.92
Δ = 83°57'58.7" RT.
D = 2°59'36.0"
T = 1722.46'
L = 2805.12'
PC =7074+62.46
PT =7102+67.58

WESTBOUND
PI = 7091+73.00
Δ = 83°58'54.5" RT.
D = 3°00'00"
T = 1719.10'
L = 2799.39
PC = 7074+53.90
PT = 7102+53.30



SURVEY CONTROL DETAILS

R080388.DGN 3/30/2011

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.		080388	101	452

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11

PI = 7091+84.92
Δ = 83°57'58.7" RT.
D = 2°59'36.0"
T = 1722.46'
L = 2805.12'
PC = 7074+62.46
PT = 7102+67.58

WESTBOUND

C.L. I-40

S 85°25'59" E

PNW5 PDS1.8"REBAR W\2"CAP

SURVEY BASELINE

S 8°38'26" E

7090

7095

POB 7095+09.53

S 21°20'24" E
41.24'
8044
8045

PC7095+50.77

SURVEY BASELINE

PNW6 PDS1.8"REBAR W\2"CAP

SB,SO IN DIVN MEDIAN I40

S 2°08'11" W

P.I 7099+41.16

EASTBOUND

EASTBOUND
PI = 7099+41.16
Δ = 23°06'17.8" RT.
D = 3°00'00"
T = 390.39'
L = 770.16'
PC = 7095+50.77
PT = 7103+20.93

WESTBOUND

PNW7 PDS1.8"REBAR W\2"CAP

7100

8033

8003

8047

7105

C.L. I-40

PT7102+53.30

PT7102+67.58

PT7103+20.93

WESTBOUND
PI = 7091+73.00
Δ = 83°58'54.5" RT.
D = 3°00'00"
T = 1719.10'
L = 2799.39
PC = 7074+53.90
PT = 7102+53.30

PI = 7124+47.25
Δ = 41°23'47.9" LT.
D = 2°00'00"
T = 1082.42'
L = 2069.83'
PC = 7113+64.84
PT = 7134+34.67

7105

S 6°46'30" W

S 1°46'07" W
1158.72'

S 1°42'28" W
1097.26'

S 1°45'54" W
1028.95'

SURVEY BASELINE

7110

PNW8 PDS1.8"REBAR W\2"CAP

SB,SO IN DIVN MEDIAN I40

WESTBOUND

PC7113+49.89

PC7113+64.84

PC7114+12.01

8034

8004

8048

S 0°33'02" E

7115

EASTBOUND

C.L. I-40

7120

WESTBOUND
PI = 7124+63.31
Δ = 41°27'26.3" LT.
D = 2°03'45"
T = 1051.30'
L = 2010.05'
PC = 7074+27.42
PT = 7102+45.08

EASTBOUND
PI = 7123+89.36
Δ = 39°50'41.6" LT.
D = 3°00'00"
T = 1039.47'
L = 1994.48'
PC = 7113+49.89
PT = 7113+44.36

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SURVEY CONTROL 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.		080388	102	452

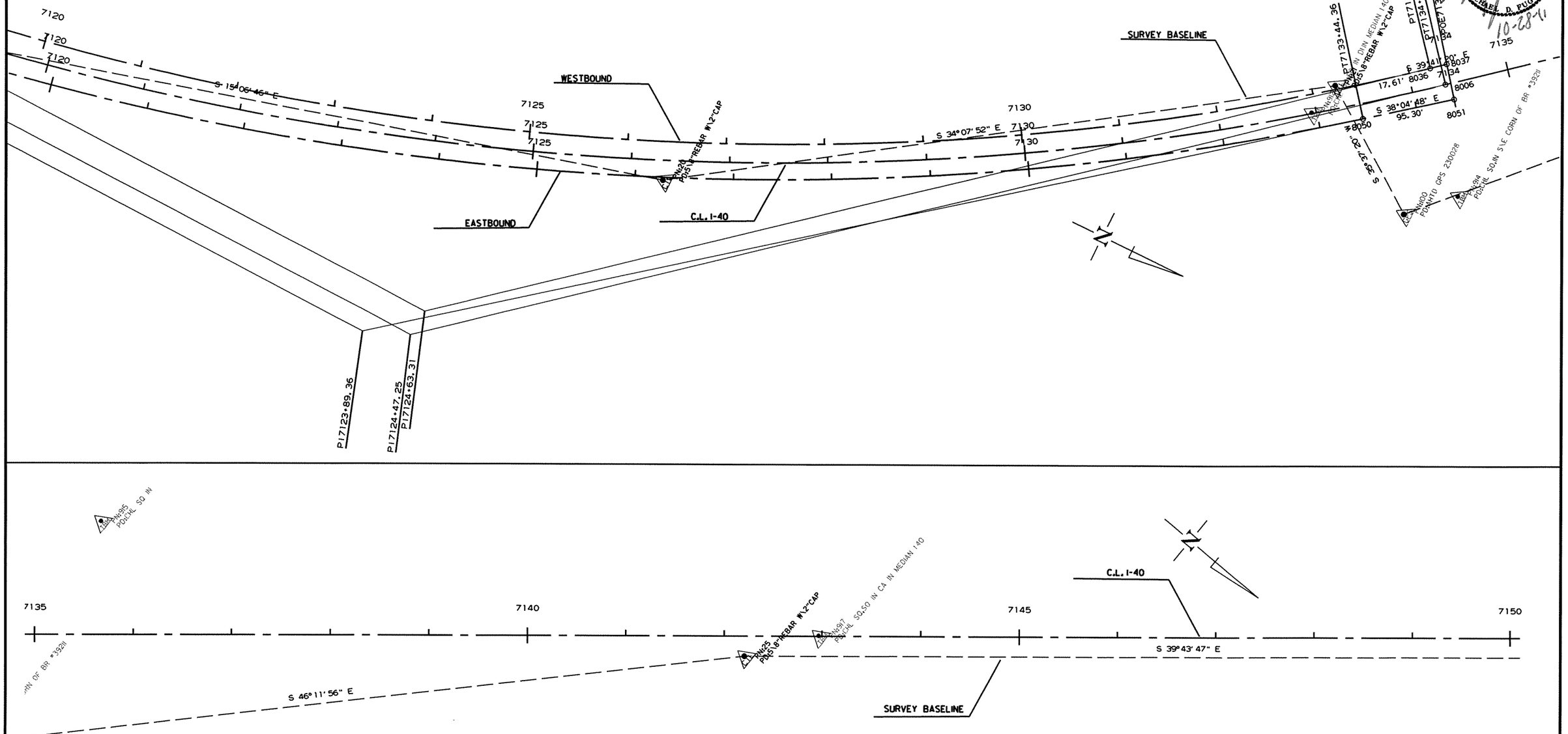
(2) SURVEY CONTROL DETAILS

PI = 7124+47.25
Δ = 41°23'47.9" LT.
D = 2°00'00"
T = 1082.42'
L = 2069.83'
PC = 7113+64.84
PT = 7134+34.67

WESTBOUND
PI = 7124+63.31
Δ = 41°27'26.3" LT.
D = 2°03'45"
T = 1051.30'
L = 2010.05'
PC = 7074+27.42
PT = 7102+45.08

EASTBOUND
PI = 7123+89.36
Δ = 39°50'41.6" LT.
D = 3°00'00"
T = 1039.47'
L = 1994.48'
PC = 7113+49.89
PT = 7113+44.36

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. PUGETT
10-28-11



SURVEY CONTROL DETAILS

R080388.DGN 8/30/2010

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.		080388	103	452

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. PUGETT
10-28-11

7150 7155 7160 7165

PN26 PDS 18"REBAR W 1/2"CAP

PN98 PKCHL SQ.SQ IN CA IN MEDIA

C.L. I-40

S 39°41'27" E

SURVEY BASELINE

PN27 PDS 18"REBAR W 1/2"CAP

S 18°07'44" E

PN37A PDCHL SQ

C.L. I-40

7165 7170 7175 7180

S 39°41'20" E
6825.69'

PN29 PDS 18"REBAR W 1/2"CAP

PN37 PDS 18"REBAR W 1/2"CAP

PN39 PDCHL SQ.S W CORN BRK

S 77°03'29" E

SURVEY BASELINE

PN32 PDS 18"REBAR W 1/2"CAP

PN33 PDCHL SQ

S 30°05'44" E

PN36 PDS 18"REBAR W 1/2"CAP

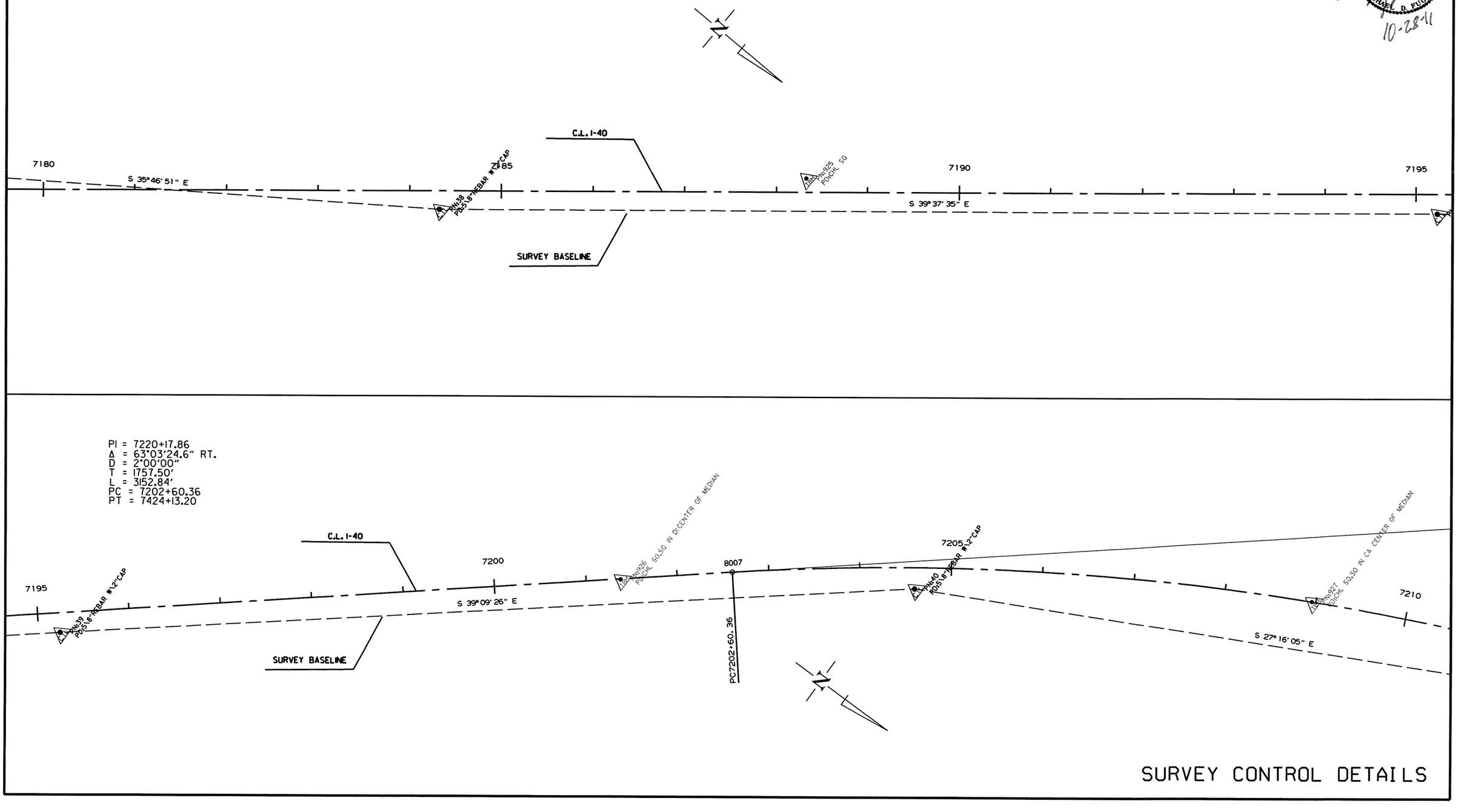
R080388.DGN 8/30/2010

SURVEY CONTROL 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.		080388	104	452

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11



SURVEY CONTROL DETAILS

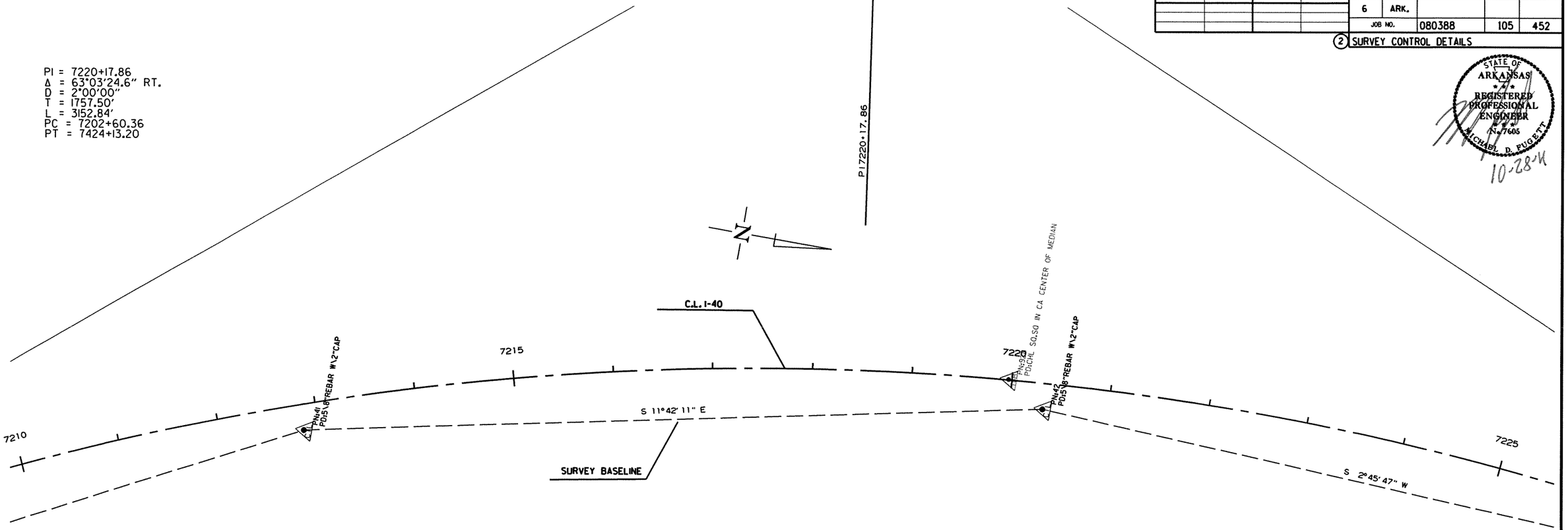
R080388.DGN 8/30/2010

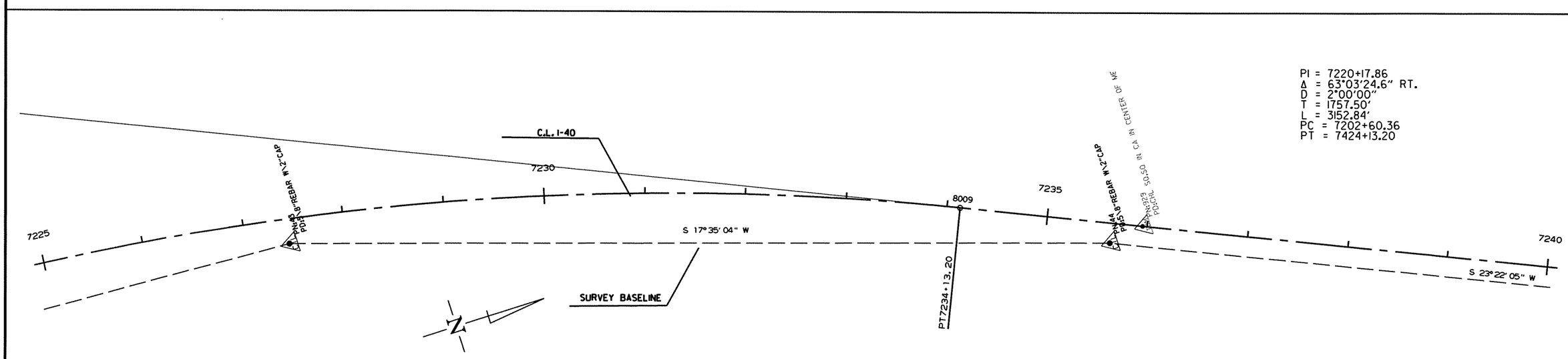
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	105	452

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11

PI = 7220+17.86
Δ = 63°03'24.6" RT.
D = 2°00'00"
T = 1757.50'
L = 3152.84'
PC = 7202+60.36
PT = 7424+13.20





SURVEY CONTROL DETAILS

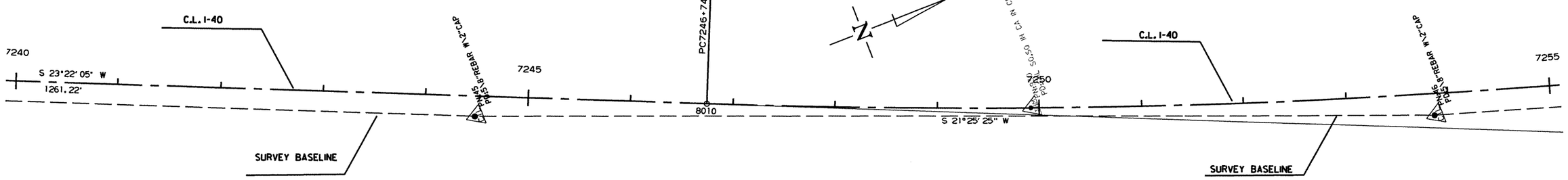
R080388.DGN 8/30/2010

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.		080388	106	452

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11

PI = 7272+02.99
Δ = 36°37'40.7" LT.
D = 0°45'00"
T = 2528.57'
L = 4883.73'
PC = 7246+74.42
PT = 7295+58.15



R080388.DGN 8/30/2010

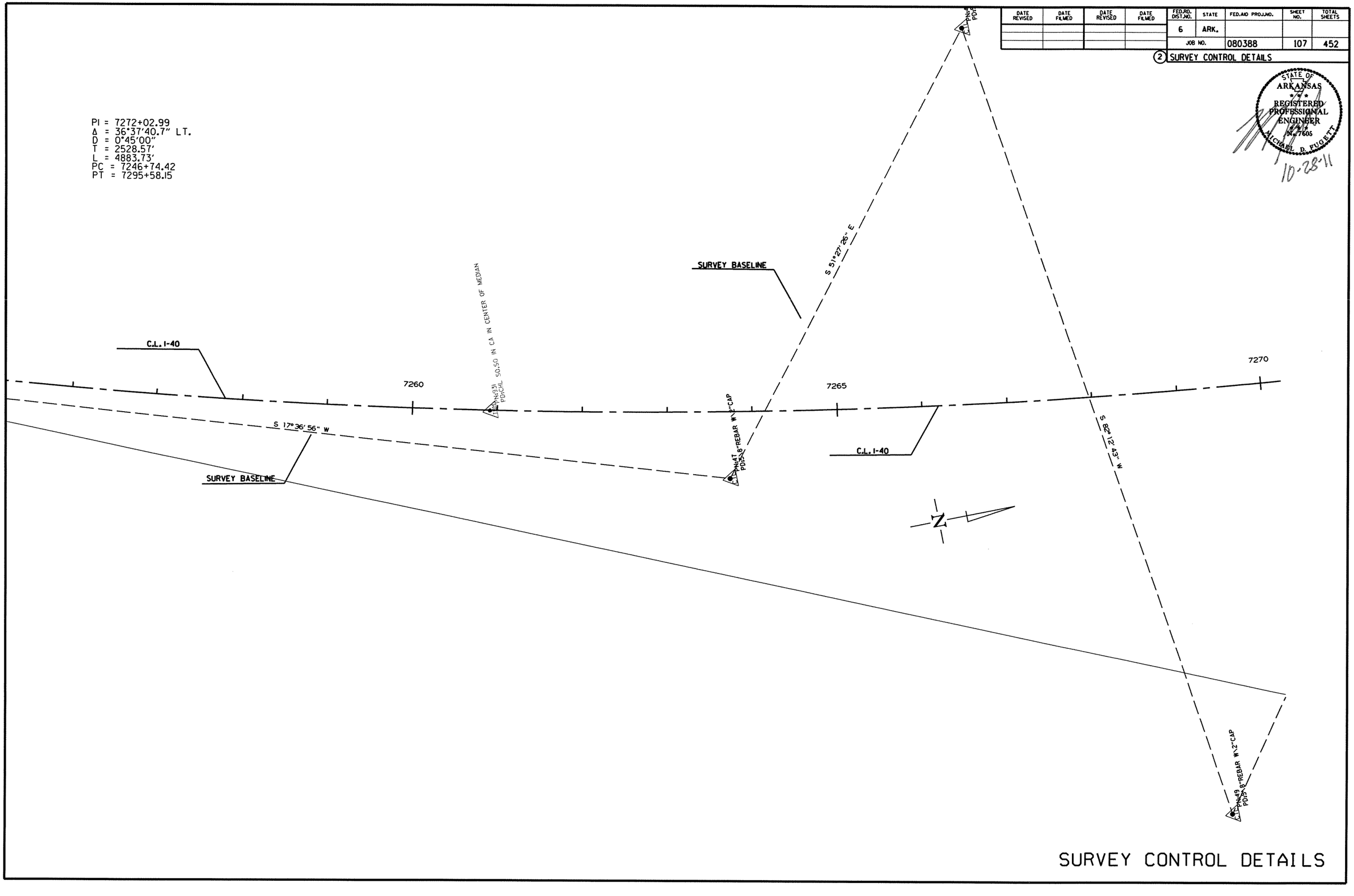
SURVEY CONTROL DETAILS

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.		080388	107	452

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11

PI = 7272+02.99
Δ = 36°37'40.7" LT.
D = 0°45'00"
T = 2528.57'
L = 4883.73'
PC = 7246+74.42
PT = 7295+58.15



SURVEY CONTROL DETAILS

R080388.DGN 8/30/2010

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.		080388	108	452

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. PUGETT
10-28-11

PI = 7272+02.99
Δ = 36°37'40.7" LT.
D = 0°45'00"
T = 2528.57'
L = 4883.73'
PC = 7246+74.42
PT = 7295+58.15

PN54 PD:5\8"REBAR W\2"CAP
PN934 PD:ALUM. DISK
PN932 PD:CHL SQUARE CUT IN CONC
PN933 PD:5\8"REBAR W\2"CAP
PN934 PD:CHL SQ.SO IN N.W. CORN BR BR #6993
PN59 PD:5\8"REBAR W\2"CAP
SURVEY BASELINE
C.L. I-40
7270
7275
7280
7285
S 66°40' 10" E
S 29°03' 30" W
S 10° 18' 56" E
S 54° 14' 02" E
P.I. 7272+02.99

PN60 PD:5\8"REBAR W\2"CAP
PN938 PD:CHL SQ.SQ IN CA IN CENTER OF ME
PT 7295+58.15
8012
7290
7295
7300
S 9°56' 48" E
S 13°2

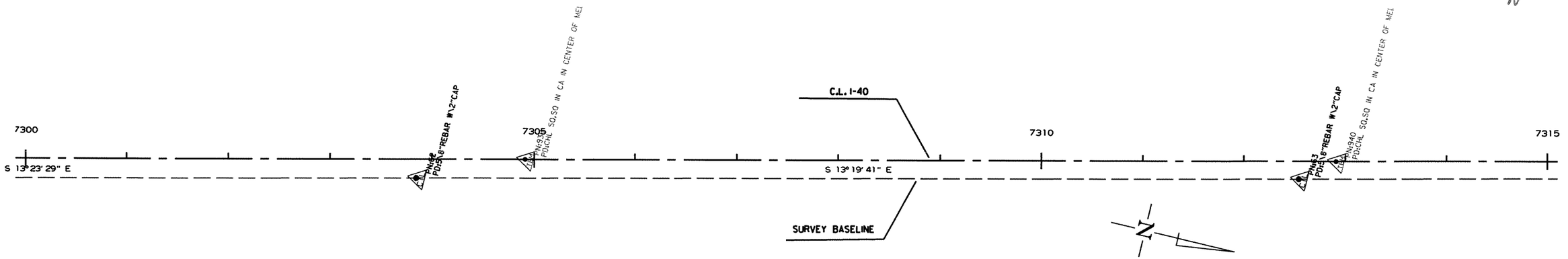
R080388.DGN 8/30/2010

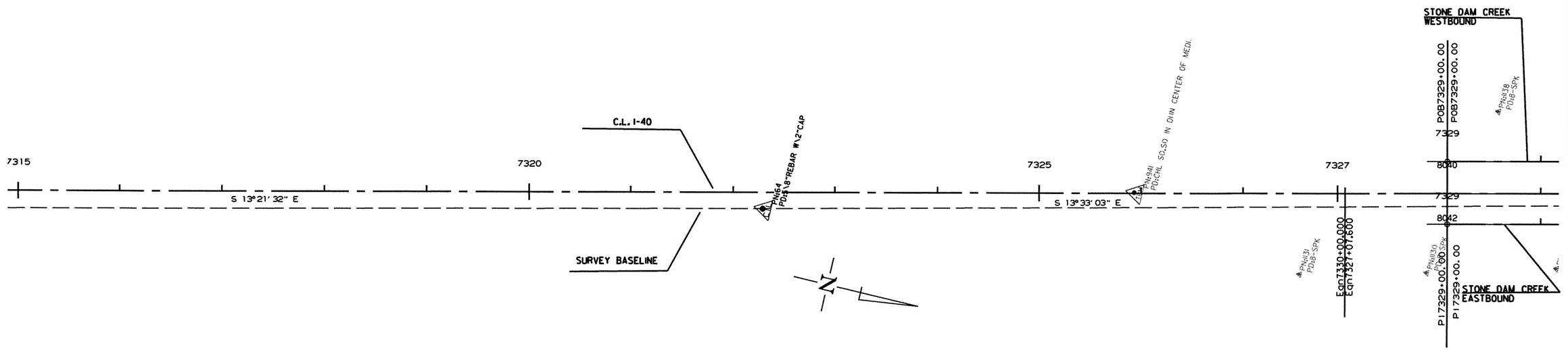
SURVEY CONTROL DETAILS

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.		080388	109	452

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11





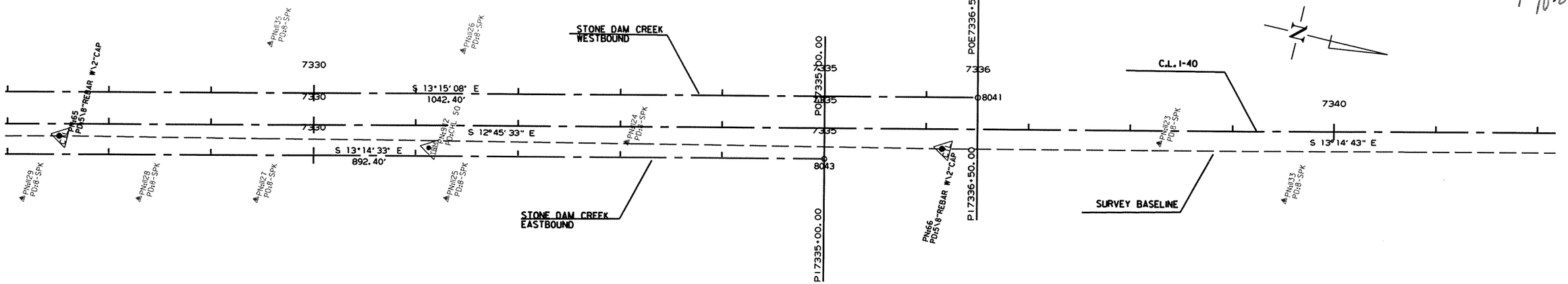
SURVEY CONTROL DETAILS

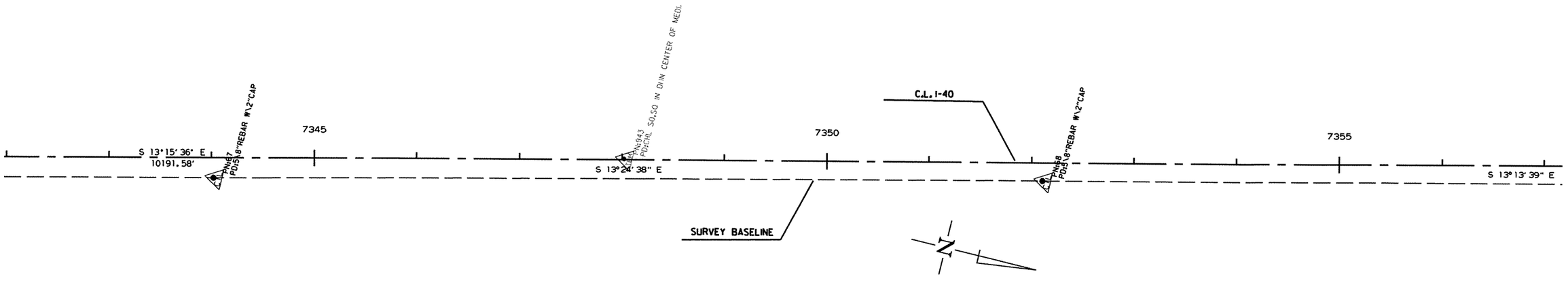
R080388.DGN 8/30/2010

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.		080388	110	452

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
14.7605
MICHAEL D. FUGETT
10-28-11





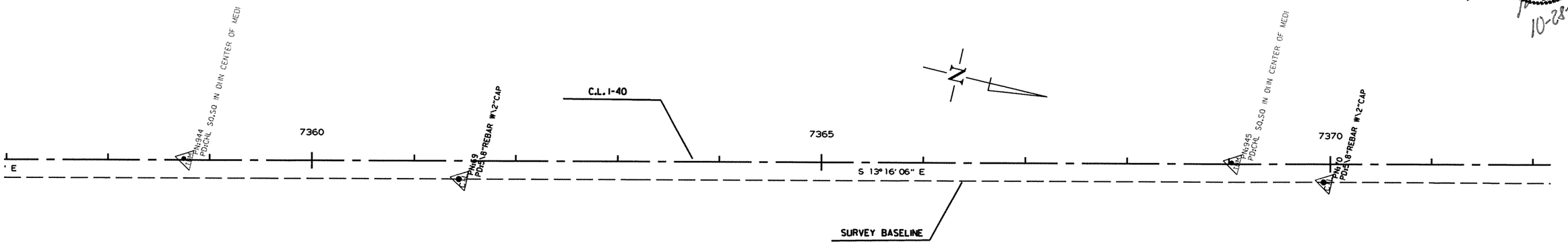
SURVEY CONTROL DETAILS

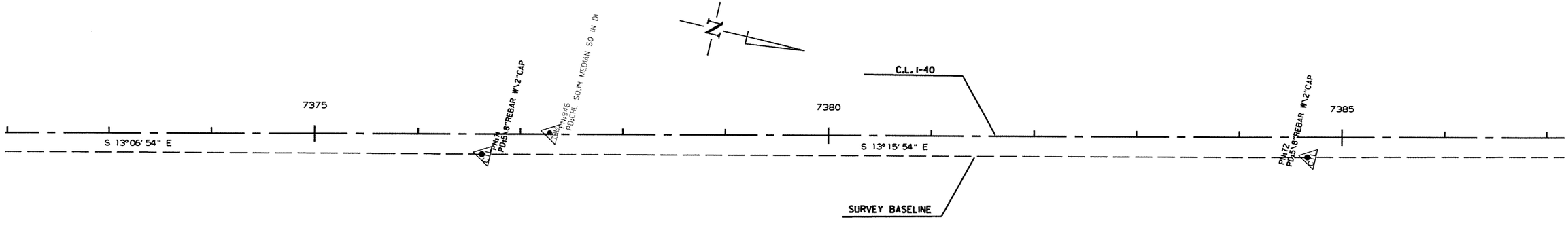
R080388.DGN 8/30/2010

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.		080388	111	452

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. PUGETT
10-28-11





R080388.DGN 8/30/2010

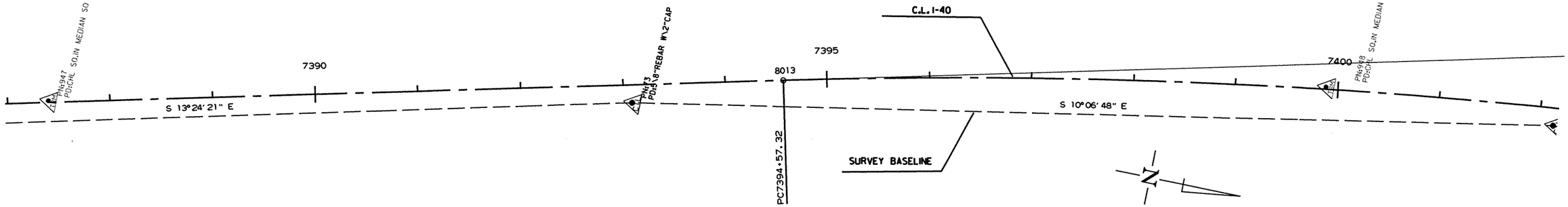
SURVEY CONTROL DETAILS

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.		080388	112	452

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11

PI = 7405+05.08
Δ = 20°43'34.3" RT.
D = 1°00'00"
T = 1047.76'
L = 4883.73'
PC = 7394+57.32
PT = 7415+29.94



R080388.DGN 3/30/2011

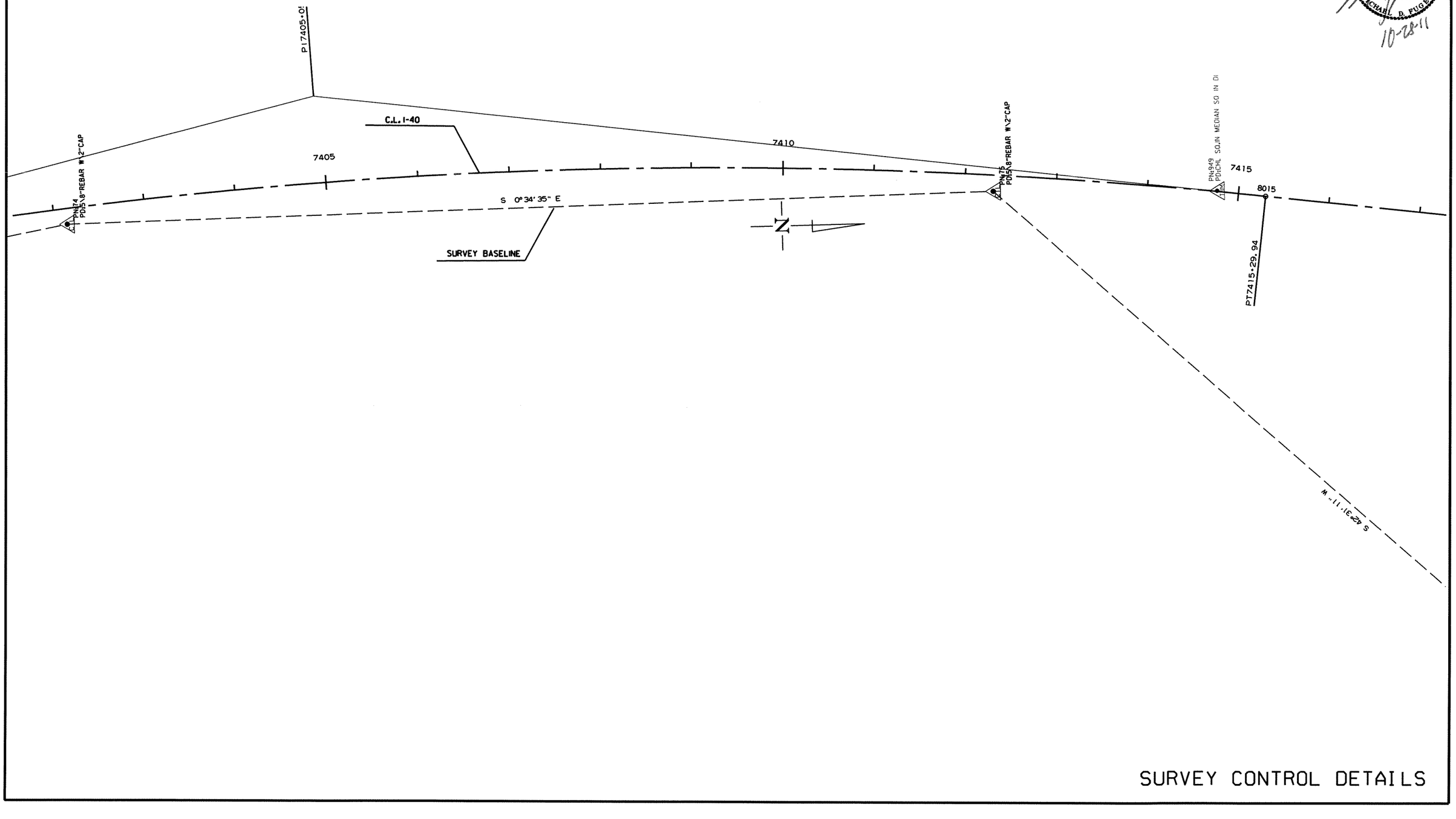
SURVEY CONTROL DETAILS

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.		080388	113	452

(2) SURVEY CONTROL DETAILS

PI = 7405+05.08
Δ = 20°43'34.3" RT.
D = 1°00'00"
T = 1047.76'
L = 4883.73'
PC = 7394+57.32
PT = 7415+29.94





R080388.DGN 8/30/2010

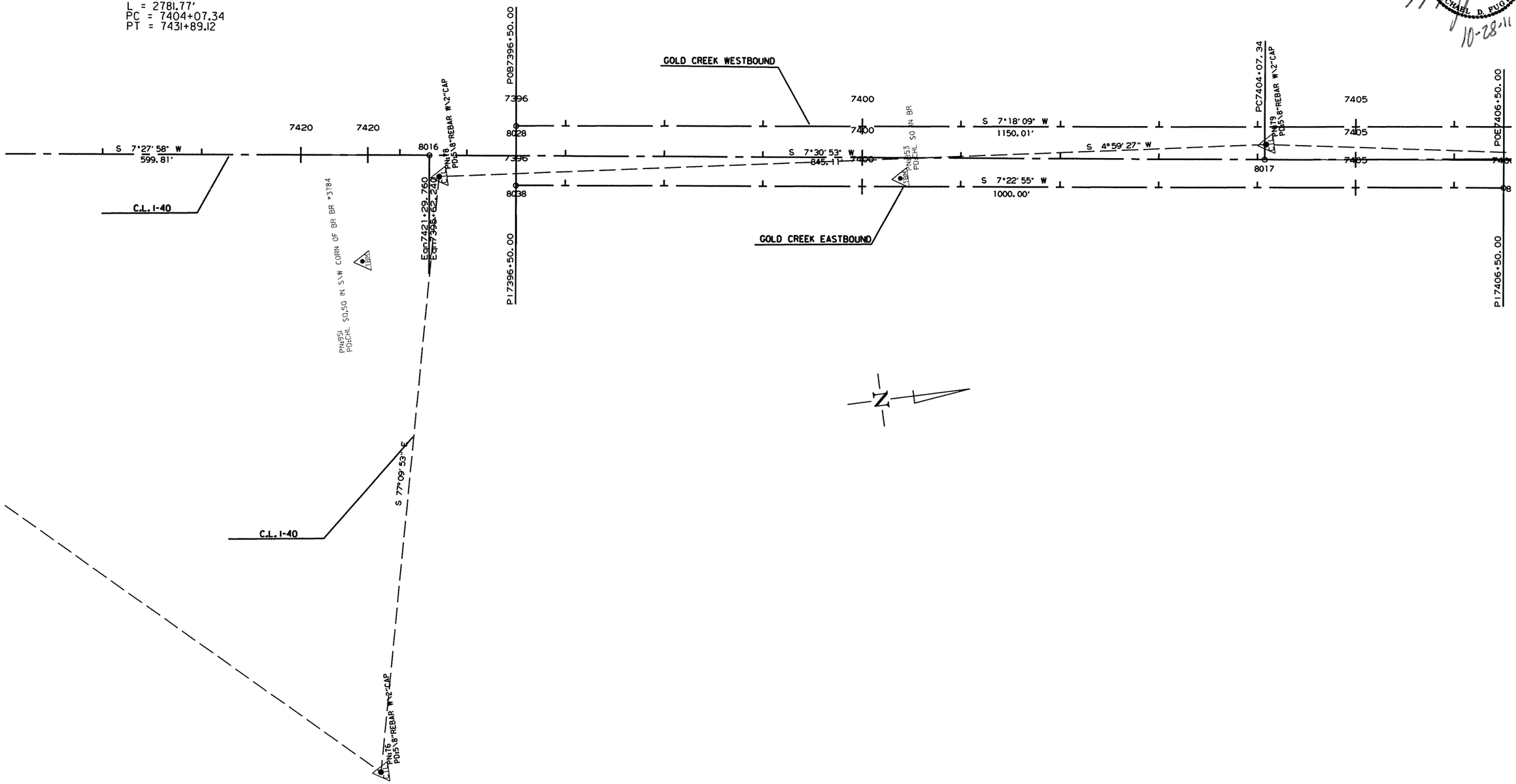
SURVEY CONTROL DETAILS

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.		080388	114	452

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
MICHAEL D. FUGETT
10-28-11

PI = 7414+99.94
Δ = 6°57'16.0" LT.
D = 0°15'00"
T = 1392.60'
L = 2781.77'
PC = 7404+07.34
PT = 7431+89.12



SURVEY CONTROL DETAILS

R080388.DGN 8/30/2010

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.		080388	115	452

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. PUGETT
10-28-11

PI = 7414+99.94
Δ = 6°57'16.0" LT.
D = 0°15'00"
T = 1392.60'
L = 2781.77'
PC = 7404+07.34
PT = 7431+89.12

GOLD CREEK WESTBOUND

POE7406+50.00

POE7408

PN957 PD&CPS,CPS

7408

8029

S 9°10'23.99" W

7406

8039

GOLD CREEK EASTBOUND

P17406+50.00

P17408+00.01

7410

PN80 PD15.8"REBAR W\2"CAP

C.L. I-40

SURVEY BASELINE

7415

PN954 PD&CHL SQ.IN MEDIAN SQ IN DI

S 2°15'54" W

7420

PN81 PD15.8"REBAR W\2"CAP

P17417+99.94

PN83 PD15.8"REBAR W\2"CAP

S 79°26'38.60" E

S 27°47'51.70" W

PN956 PD&CHL SQ.SQ IN S\W CORN OF BR BR #3786

7425

PN958 PD&CHL SQ.IN MEDIAN SQ IN DI

7430

PN84 PD15.8"REBAR W\2"CAP

PT7431+89.12

8019

C.L. I-40

7435

S 0°48'21.58" W

PN959 PD&CHL SQ.IN MEDIAN SQ IN DI PK.20686 PD&HTD BM 959

SURVEY BASELINE

PI = 7414+99.94
Δ = 6°57'16.0" LT.
D = 0°15'00"
T = 1392.60'
L = 2781.77'
PC = 7404+07.34
PT = 7431+89.12

SURVEY CONTROL DETAILS

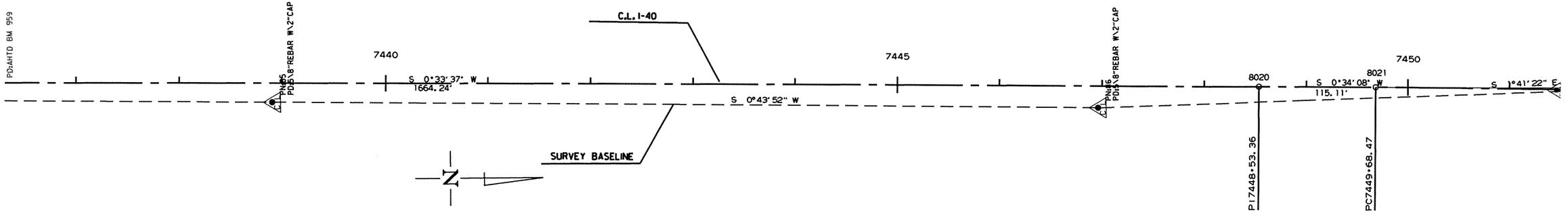
R080388.DGN 8/30/2010

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.		080388	115A	452

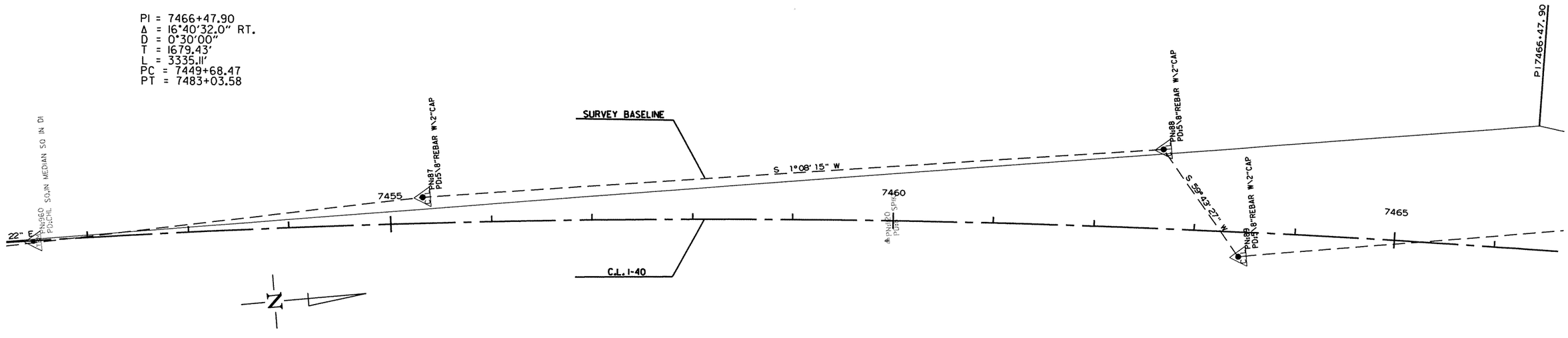
(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-31-11

PI = 7466+47.90
Δ = 16°40'32.0" RT.
D = 0°30'00"
T = 1679.43'
L = 3335.11'
PC = 7449+68.47
PT = 7483+03.58



PI = 7466+47.90
Δ = 16°40'32.0" RT.
D = 0°30'00"
T = 1679.43'
L = 3335.11'
PC = 7449+68.47
PT = 7483+03.58



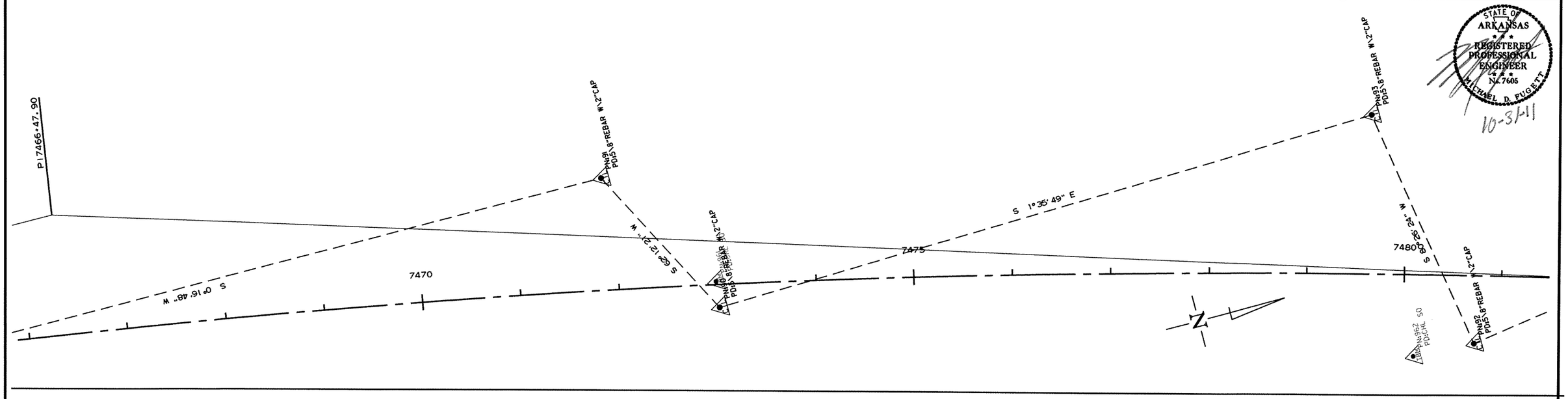
SURVEY CONTROL DETAILS

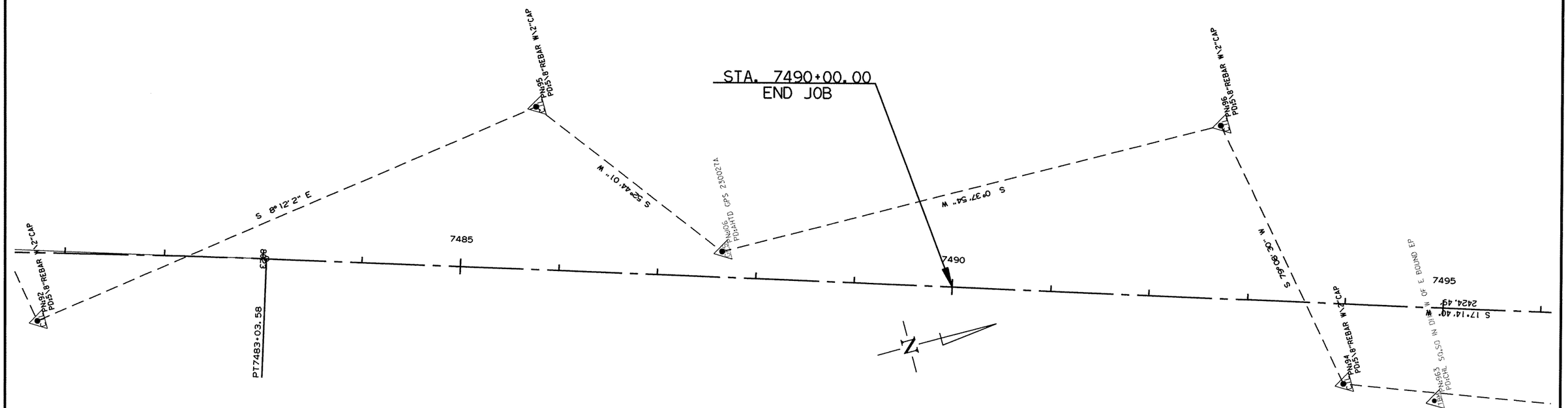
R080388.DGN 10/28/11

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.		080388	1158	452

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. PUGETT
10-31-11





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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.		080388	116	452

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-31-11

PK NAIL "PDOT"

PN97 PD5/8"REBAR W\2"CAP

PN98 PD5/8"REBAR W\2"CAP

PC7507+28.07

7500

7505

7510

S 57°59'44" E

S 39°52'01" W

S 20°17'40" W

PDOT-TH

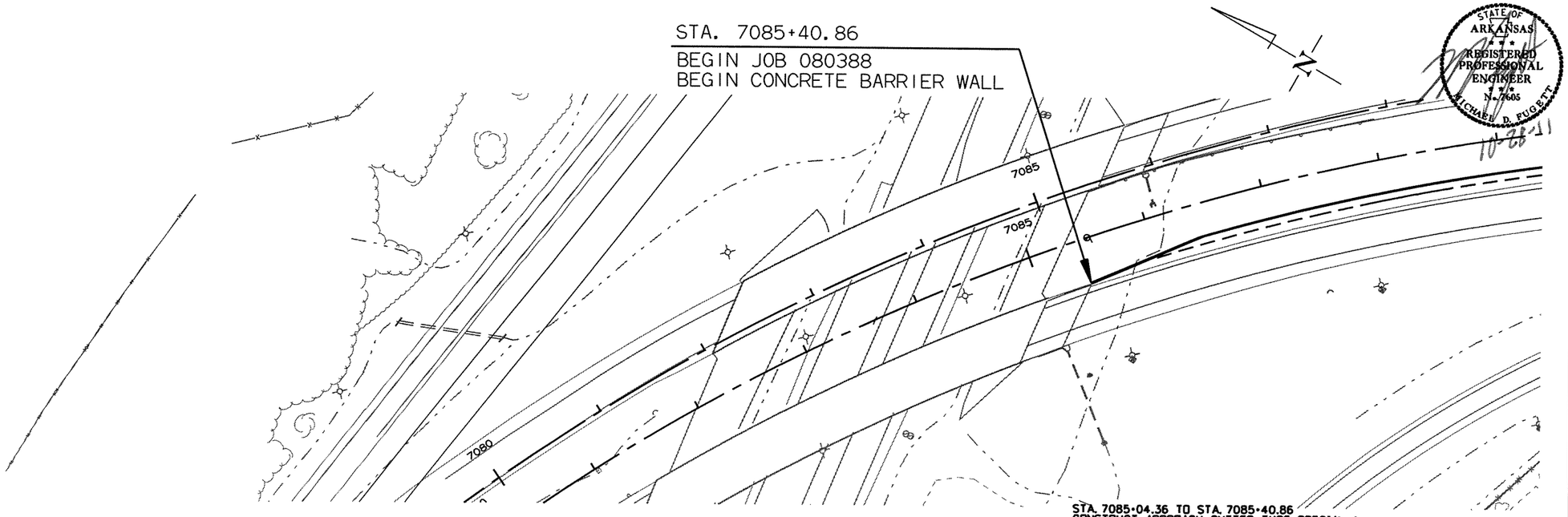
PDOT-TH

PDOT-TH

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.		080388	117	452

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11



STA. 7085+04.36 TO STA. 7085+40.86
CONSTRUCT APPROACH GUTTER TYPE SPECIAL 4
AT NORTHEAST CORNER OF BRIDGE NO. B6869

400
395
390
385
380
375
370
365
360
355
350

BM: 903 ALUM DISK BR.BR *6869
74.75 RT. OF STA. 7080+78.69
ELEVATION = 388.65

BM: 905 CHL SO
153.58 RT. OF STA. 7081+66.92
ELEVATION = 361.59

BM: 908 CHL SO,SO IN N\E COR BR HN20
79.77 LT. OF STA. 7086+20.53
ELEVATION = 390.63

BM: 906 CHL SO
512.94 LT. OF STA. 7088+51.47
ELEVATION = 374.23

7074+00 7075+00 7076+00 7077+00 7078+00 7079+00 7080+00 7081+00 7082+00 7083+00 7084+00 7085+00 7086+00 7087+00 7088+00 7089+00

r080388.dgn 9/7/11

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.		080388	118	452

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11

PI = 7091+84.92
Δ = 83°57'58.7" RT.
D = 2°59'36.0"
T = 1722.46'
L = 2805.12'
PC = 7074+62.46
PT = 7102+67.58
e = MATCH EXIST.
Ls = MATCH EXIST.

WESTBOUND
PI = 7091+73.00
Δ = 83°58'54.5" RT.
D = 3°00'00"
T = 1719.10'
L = 2799.39
PC = 7074+53.90
PT = 7102+53.30
e = MATCH EXIST.
Ls = MATCH EXIST.

STA. 7094+60
BEGIN WESTBOUND WIDENING

CONST. LIMITS

+60 24'

7095

7090

S 21°20'24.2" E

POB 7095+09.53

PC 7095+50.77

P 7099+41.16

+20 16

7100

CONST. LIMITS

S 1°46'06.6" W

S 1°42'28.1" W

S 1°45'53.6" W

PT 7102+53.58

PT 7102+67.58

PT 7103+20.98

STA. 7092+14 IN PLACE
TYPE K DROP INLET IN MEDIAN
REMOVE AND CONSTRUCT
TYPE TM DROP INLET IN MEDIAN
3' x 4' x H= 10'-6" DROP INLET

STA. 7092+14 IN PLACE
4' x 4' x 318' R.C. BOX CULVERT
RETAIN

EASTBOUND
PI = 7099+41.16
Δ = 23°06'17.8" RT.
D = 3°00'00"
T = 390.39'
L = 770.16'
PC = 7095+50.77
PT = 7103+20.93
e = MATCH EXIST.
Ls = MATCH EXIST.

STA. 7097+50 IN PLACE
TYPE M DROP INLET IN MEDIAN
REMOVE AND CONSTRUCT
TYPE RM DROP INLET IN MEDIAN
3' x 4' x H= 12'-1" DROP INLET

STA. 7097+50 INPLACE
24" x 126' R.C. PIPE CULVERT
RETAIN AND EXTEND
24" R.C. PIPE CULVERT 8' LT.
24" R.C.PIPE = 12'

STA. 7101+00 CONSTRUCT
TYPE RM DROP INLET IN MEDIAN
3' x 4' x H= 3'-4"
WITH 24" x 200' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7103+00

STA. 7103+00 IN PLACE
TYPE K DROP INLET IN MEDIAN
REMOVE AND CONSTRUCT
TYPE RM DROP INLET IN MEDIAN
3' x 4' x H= 4'-0" DROP INLET

STA. 7103+00 IN PLACE
24" x 92' R.C. PIPE CULVERT
RETAIN AND EXTEND
24" R.C. PIPE CULVERT 10' RT.
24" R.C.PIPE = 14'

380
375
370
365
360
355
350
345
340
335
330

+14
TOP D.I. 363.35

+14
TOP BOX 353.96
F.L. INLET 353.00 (LT.)
F.L. OUTLET 349.42 (RT.)

+50
TOP D.I. 354.66

F.L. D.I. 340.42
F.L. OUTLET 340.11 (RT.)

+00
TOP D.I. 342.36

F.L. D.I. 339.36

24" x 200 R.C. PIPE @ 2.0%

+00
TOP D.I. 340.41

F.L. D.I. 336.41
F.L. OUTLET 334.91 (RT.)

BM: 907 CHL SO
1438.4 LT. OF STA. 7091+00.41
ELEVATION = 391.25

BM: 909 CHL SO.SO IN DIN MEDIAN 140
1.43 RT. OF STA. 7097+51.07
ELEVATION = 348.76

7089+00 7090+00 7091+00 7092+00 7093+00 7094+00 7095+00 7096+00 7097+00 7098+00 7099+00 7100+00 7101+00 7102+00 7103+00 7104+00

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PI = 7124+47.25
Δ = 41°23'47.9" LT.
D = 2°00'00"
T = 1082.42'
L = 2069.83'
PC = 7113+64.84
PT = 7134+34.67
e = MATCH EXIST.
Ls = MATCH EXIST.

WESTBOUND
PI = 7124+63.31
Δ = 41°27'26.3" LT.
D = 2°03'45"
T = 1051.30'
L = 2010.05'
PC = 7074+27.42
PT = 7102+45.08
e = MATCH EXIST.
Ls = MATCH EXIST.

EASTBOUND
PI = 7123+89.36
Δ = 39°50'41.6" LT.
D = 3°00'00"
T = 1039.47'
L = 1994.48'
PC = 7113+49.89
PT = 7133+44.36
e = MATCH EXIST.
Ls = MATCH EXIST.

STA. 7105+06 CONSTRUCT
TYPE RM DROP INLET IN MEDIAN
3'x 4'x H= 3'-2"
WITH 24" x 144' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7106+50

STA. 7106+50 CONSTRUCT
TYPE RM DROP INLET IN MEDIAN
3'x 4'x H= 4'-8"
WITH 24" x 346' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7109+95

STA. 7109+50 IN PLACE
OVERHEAD HIGHWAY SIGN
WESTBOUND LANES
REMOVE
SEE SIGNING PLANS

STA. 7109+95 IN PLACE
TYPE N DROP INLET IN MEDIAN
REMOVE AND CONSTRUCT
TYPE RM DROP INLET IN MEDIAN
3'x 4'x H= 5'-3" DROP INLET

STA. 7109+95 IN PLACE
24" x 86' R.C. PIPE CULVERT TO LT.
UNDER LT. LANES W. HDWLS. LT
REMOVE HDWLS. LT. & EXTEND R.C. PIPE
4' LT.
CLASS III TYPE II BEDDING W./
FES RT.
24" R.C. PIPE= 8 LIN.FT.
24" FES= 1 EA.

STA. 7110+50 INSTALL
OVERHEAD HIGHWAY SIGN
WESTBOUND LANES
SEE SIGNING PLANS

STA. 7111+74 CONSTRUCT
TYPE RM DROP INLET IN MEDIAN
3'x 4'x H= 4'-3"
WITH 24" x 244' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7114+17

STA.	STA.	LOCATION	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE 2)	GUARDRAIL TERMINAL (TYPE I)
7109+85.00	7113+05.00	LT. SIDE OF LT. MAIN LANES	275 LIN. FT.	1	1

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.		080388	119	452

(2) PLAN AND PROFILE SHEETS

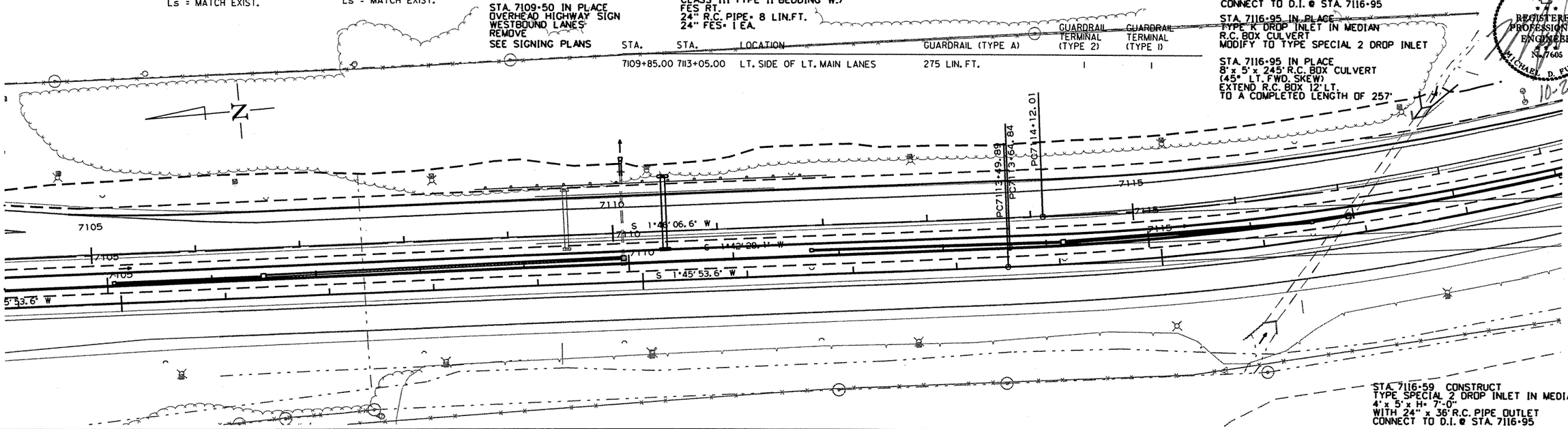
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11

STA. 7114+17 CONSTRUCT
TYPE RM DROP INLET IN MEDIAN
3'x 4'x H= 3'-5"
WITH 24" x 242' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7116+95

STA. 7116+95 IN PLACE
TYPE K DROP INLET IN MEDIAN
R.C. BOX CULVERT
MODIFY TO TYPE SPECIAL 2 DROP INLET

STA. 7116+95 IN PLACE
8'x 5'x 245' R.C. BOX CULVERT
(45° LT. FWD. SKEW)
EXTEND R.C. BOX 12' LT.
TO A COMPLETED LENGTH OF 257'

STA. 7116+59 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4'x 5'x H= 7'-0"
WITH 24" x 36' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7116+95



r080388.dgn 9/7/11

PI = 7124+47.25
Δ = 41°23'47.9" LT.
D = 2°00'00"
T = 1082.42'
L = 2069.83'
PC = 7113+64.84
PT = 7134+34.67
e = MATCH EXIST.
Ls = MATCH EXIST.

WESTBOUND
PI = 7124+63.31
Δ = 41°27'26.3" LT.
D = 2°03'45"
T = 1051.30'
L = 2010.05'
PC = 7074+27.42
PT = 7102+45.08
e = MATCH EXIST.
Ls = MATCH EXIST.

EASTBOUND
PI = 7123+89.36
Δ = 39°50'41.6" LT.
D = 3°00'00"
T = 1039.47'
L = 1994.48'
PC = 7113+49.89
PT = 7133+44.36
e = MATCH EXIST.
Ls = MATCH EXIST.

STA. 7119+05 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4'x 5'x H= 4'-0"
24" X 244' R.C. PIPE CULVERT
CONNECT TO D.I. @ STA. 7121+49

STA. 7121+49 CONSTRUCT
TYPE SPECIAL 2 DROP INLET
4'x 5'x H= 4'-0"
WITH 24" x 250' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7123+98

STA. 7123+98 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4'x 5'x H= 4'-2"
WITH 24" x 100' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7124+97

STA. 7124+97 IN PLACE
TYPE K DROP INLET IN MEDIAN OVER
R.C. BOX CULVERT
MODIFY TO TYPE SPECIAL 2 DROP INLET

STA. 7124+97 IN PLACE
DBL. 8'x 6'x 263' R.C. BOX CULVERT
(45° LT. FWD. SKEW)
RETAIN

STA. 7128+90 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4'x 5'x H= 4'-8"
WITH 24" x 248' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7131+38

STA. 7131+38 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4'x 5'x H= 4'-11"
WITH 24" x 156' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7132+94

STA. 7132+94 IN PLACE
TYPE N DROP INLET IN MEDIAN W./
36'x 204' R.C. PIPE CULVERT
(30° LT. FWD. SKEW)
RETAIN AND ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL 2 DROP INLET'

STA. 7133+20 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4'x 5'x H= 3'-5"
WITH 24" x 26' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7132+94

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.		080388	120	452

(2) PLAN AND PROFILE SHEETS

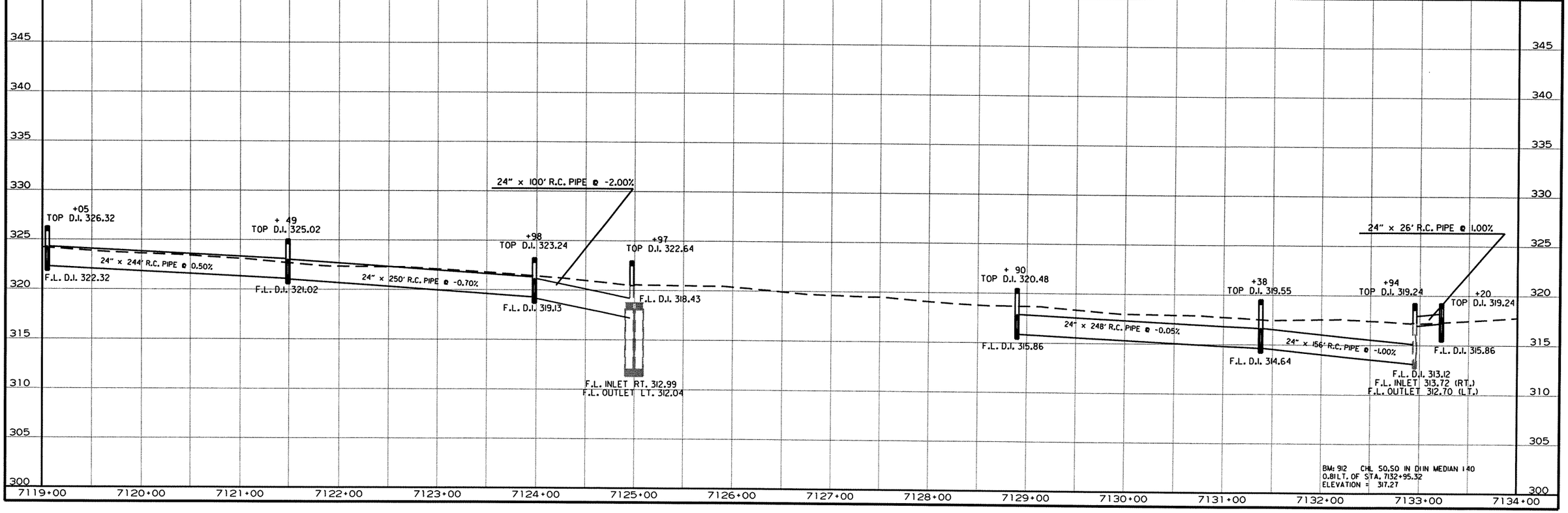
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
NO. 7605
MICHAEL D. PUGETT
10-13-11

SPECIAL FLOOD HAZARD AREA

PI 7113+44.36
S 38°04'48.0" E

7120
7125
7130
METAL

S 1°42'28.1" W
S 1°45'53.6" W
S 1°46'06.6" W



BM: 912 CHL 50.50 IN DIN MEDIAN 140
0.8 LT. OF STA. 7132+95.32
ELEVATION = 317.27

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STA. 7136+22 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4' x 5' x H= 4'-6"
WITH 24" x 74' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7136+95

STA. 7136+50 INSTALL
OVERHEAD HIGHWAY SIGN
WESTBOUND LANES
SEE SIGNING PLANS

STA. 7136+95 IN PLACE
TYPE N DROP INLET IN MEDIAN
RETAIN & ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL I DROP INLET

STA. 7136+95 IN PLACE
36" x 246' R.C. PIPE CULVERT
(45° LT. FWD. SKEW)
RETAIN

STA. 7140+00 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 3'-5"
WITH 24" x 296' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7142+95

STA. 7142+95 IN PLACE
TYPE N DROP INLET IN MEDIAN
RETAIN & ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL I DROP INLET

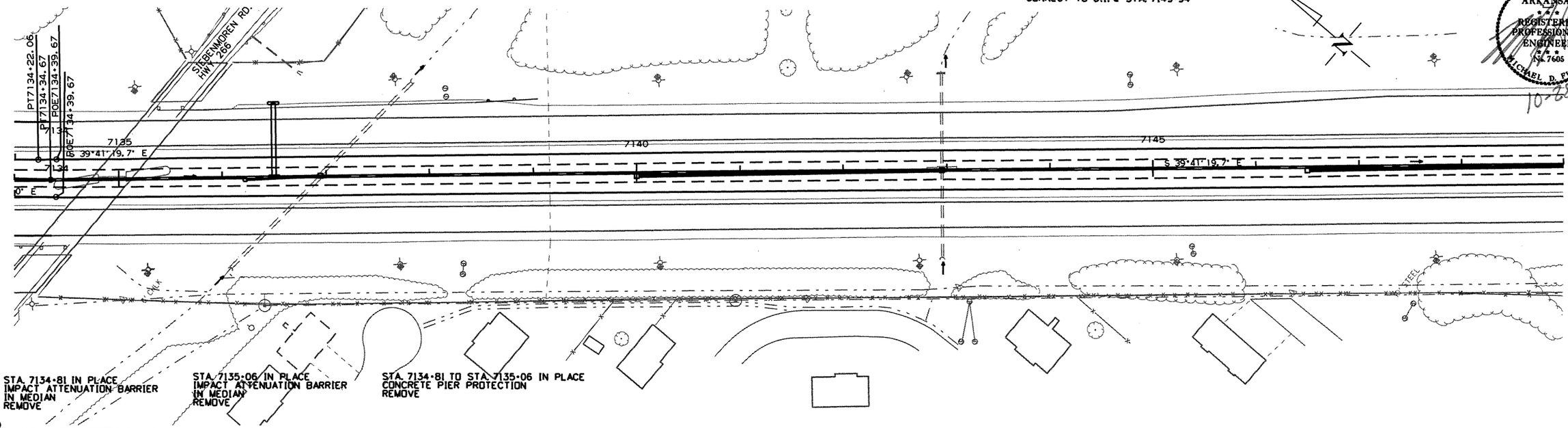
STA. 7142+95 IN PLACE
24" x 174' R.C. PIPE CULVERT
RETAIN

STA. 7146+50 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 3'-5"
WITH 24" x 344' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7149+94

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.		080388	121	452

(2) PLAN AND PROFILE SHEETS

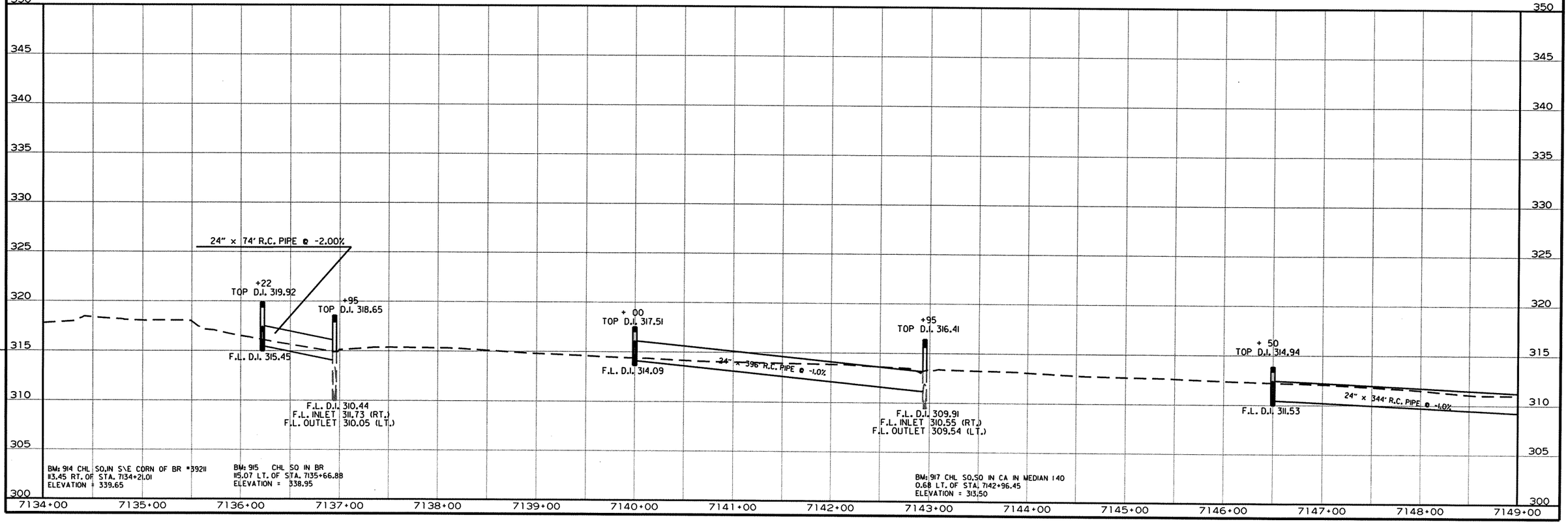
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
NO. 7605
MICHAEL D. FUGETT
10-28-11



STA. 7134+81 IN PLACE
IMPACT ATTENUATION BARRIER
IN MEDIAN
REMOVE

STA. 7135+06 IN PLACE
IMPACT ATTENUATION BARRIER
IN MEDIAN
REMOVE

STA. 7134+81 TO STA. 7135+06 IN PLACE
CONCRETE PIER PROTECTION
REMOVE



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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	122	452

(2) PLAN AND PROFILE SHEETS

STA. 7149+94 IN PLACE
TYPE N DROP INLET IN MEDIAN
RETAIN & ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL I DROP INLET

STA. 7149+94 IN PLACE
36" x 178' R.C. PIPE CULVERT
RETAIN

STA. 7153+00 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 3'-11"
WITH 24" x 296' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7155+95

STA. 7155+95 IN PLACE
TYPE N DROP INLET IN MEDIAN
RETAIN AND ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL I DROP INLET

STA. 7155+95 IN PLACE
24" x 222' R.C. PIPE CULVERT
RETAIN

STA. 7159+50 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 5'-4"
WITH 24" x 356' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7155+95

STA. 7162+95 IN PLACE
TYPE N DROP INLET IN MEDIAN
RETAIN AND ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL I DROP INLET

STA. 7162+95 IN PLACE
24" x 90' R.C. PIPE CULVERT TO LT.
UNDER LT. LANES W/ HDWLS. LT.
REMOVE HDWLS. LT. & EXTEND R.C. PIPE 12' LT.
CLASS III TYPE II BEDDING W/FES LT.
24" R.C. PIPE= 16 LIN.FT.
24" FES= 1 EA.

SPECIAL FLOOD HAZARD AREA

STA.	STA.	LOCATION	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE 2)	GUARDRAIL ANCHOR POST (TYPE I)
7149+85.00	7153+10.00	RT. SIDE OF RT. MAIN LANES	275 LIN. FT.	1	1

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 17605
MICHAEL D. FUGETT
10-28-11

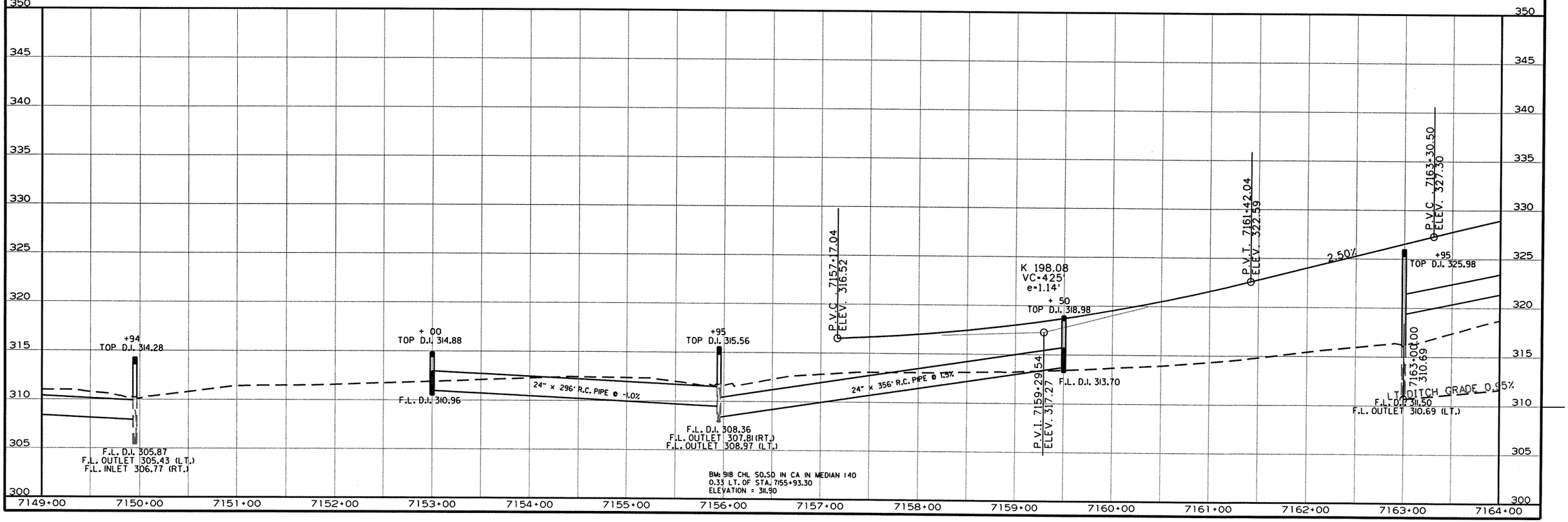
CONST. LIMITS

7150 7155 7160

S 39°41' 09" E

CONST. LIMITS

STA. 7152+40 INSTALL
OVERHEAD HIGHWAY SIGN
EASTBOUND LANES
SEE SIGNING PLANS



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STA.	STA.	LOCATION	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE 2)	THRIE BEAM GUARDRAIL TERMINAL
7165+35.57	7167+54.32	RT. SIDE OF RT. MAIN LANES	150 LIN. FT.		
7173+06.69	7175+25.44	LT. SIDE OF RT. MAIN LANES	150 LIN. 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.		080388	123	452

(2) PLAN AND PROFILE SHEETS

STA. 7166+00 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 3'-11"
WITH 24" x 306' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7162+95

STA. 7169+56 TO STA. 7171+83 IN PLACE
226.9' X 40' BRIDGE CONSISTING OF STEEL BEAMS
ON CONCRETE PIERS AND CONCRETE FOOTINGS.
REMOVE AS EXISTING STRUCTURE (SITE NO. 1) - 0.50 LUMP SUM

CONST. LIMITS

STA. 7175+00 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 3'-5"
WITH 24" x 396' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7178+95

STA. 7178+95 IN PLACE
TYPE N DROP INLET IN MEDIAN
RETAIN AND ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL I DROP INLET

STA. 7178+95 IN PLACE
24" x 102' R.C. PIPE CULVERT TO RT.
UNDER RT. LANES W. HDWLS. RT.
~~REMOVE HDWLS. RT. & EXTEND R.C. PIPE 10' RT.~~
CLASS III (TYPE III BEDDING) W/ FES
24" R.C. PIPE= 14 LIN.FT.
24" FES= 1 EA.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11

OAK ST. HWY. 64

7165

7170

7175

S 39°41' 19.7" E

CONST. LIMITS

OAK ST. HWY. 64

STA. 7168+79 TO STA. 7171+04 IN PLACE
226.9' X 40' BRIDGE CONSISTING OF STEEL BEAMS
ON CONCRETE PIERS AND CONCRETE FOOTINGS.
REMOVE AS EXISTING STRUCTURE (SITE NO. 1) - 0.50 LUMP SUM

STA. 7168+20.54 TO STA. 7172+40.46 CONSTRUCT
419'-11" X 126' CLEAR ROADWAY BRIDGE NO. 07226
417' CONT. COMP PLATE GIRDER UNIT (115',187',115)

P.V.I. 7170+30.50
ELEV. 344.80

B.E. 7168+20.54

B.E. 7172+40.46

+ 00
TOP D.I. 332.18

24" x 306' R.C. PIPE @ 2.0%

F.L. D.I. 328.28

K 280.01
VC=1400'
e=-8.75'

2:1

2:1

+ 00
TOP D.I. 331.52

F.L. D.I. 328.15

24" x 396' R.C. PIPE @ -4.0%

-2.50%

P.V.T. 7177+30.50
ELEV. 327.30

+95
TOP D.I. 322.16

F.L. D.I. 305.60
F.L. OUTLET 305.50 (LT.

7165+00.00
E 312.60

LT DITCH GRADE 0.50%

BM: 921 CHL SO
355.71 RT. OF STA. 7167+97.14
ELEVATION = 310.86

BM: 919 CHL SO,S\W CORN BR
67.93 RT. OF STA. 7168+58.93
ELEVATION = 330.22

BM: 924 CHL SO,SO IN N\E CORN BR BR *3889A
68.52 LT. OF STA. 7172+02.92
ELEVATION = 330.38

BM: 922 CHL SO
392.25 LT. OF STA. 7172+93.33
ELEVATION = 313.55

350 345 340 335 330 325 320 315 310 305 300

7164+00 7165+00 7166+00 7167+00 7168+00 7169+00 7170+00 7171+00 7172+00 7173+00 7174+00 7175+00 7176+00 7177+00 7178+00 7179+00

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STA.	STA.	LOCATION	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE 2)	GUARDRAIL ANCHOR POST (TYPE I)
7187+75.00	7190+75.00	LT. SIDE OF LT. MAIN LANES	275 LIN. FT.	1	1

STA. 7183+50 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 3'-4"
WITH 24" x 446' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7187+95

STA. 7187+95 IN PLACE
TYPE N DROP INLET IN MEDIAN
RETAIN AND ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL I DROP INLET

STA. 7187+95 IN PLACE
24' x 94' R.C. PIPE CULVERT TO LT.
RETAIN

STA. 7188+20.00 IN PLACE
OVERHEAD HIGHWAY SIGN
WESTBOUND LANES
REMOVE AND REPLACE
SEE SIGNING PLANS

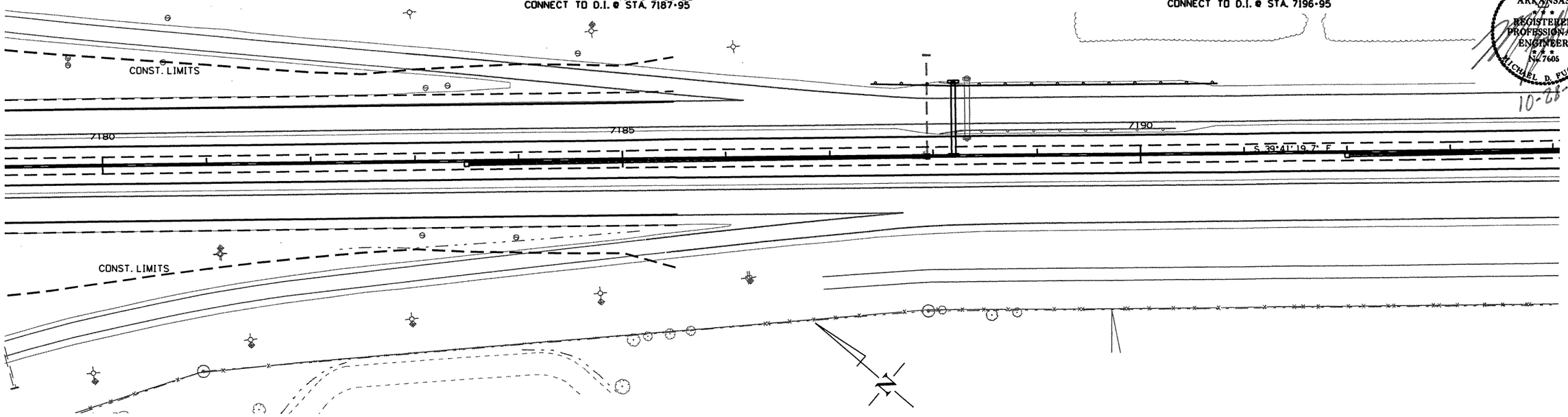
STA. 7192+00 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 4'-2"
WITH 24" x 396' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7196+95

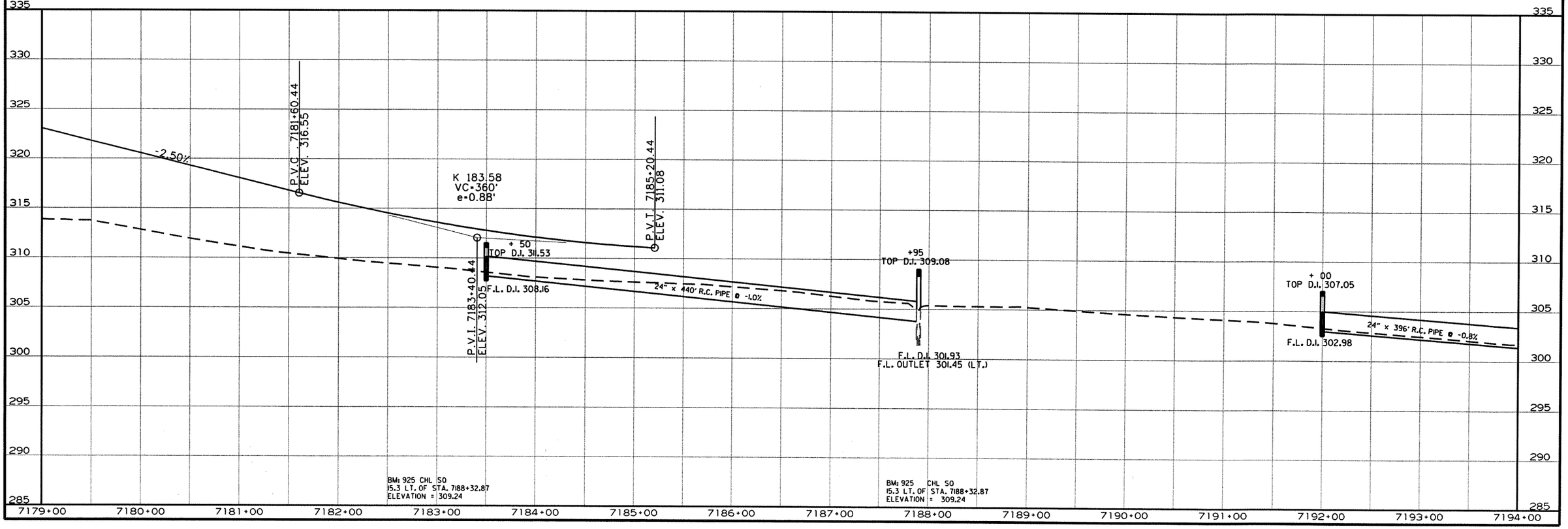
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080388	124	452

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
12760
MICHAEL D. FUGETT
10-28-11





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PI = 7220+17.86
Δ = 63°03'24.6" RT.
D = 2°00'00"
T = 1757.50'
L = 3152.84'
PC = 7202+60.36
PT = 7424+13.20
e = MATCH EXIST.
Ls = MATCH EXIST.

STA. 7195+95 IN PLACE
TYPE N DROP INLET IN MEDIAN
RETAIN AND ADJUST TO GRADE AND MODIFY TO TYPE SPECIAL 1 DROP INLET

STA. 7195+95 IN PLACE
24" x 94' R.C. PIPE CULVERT TO RT.
RETAIN

STA. 7198+70 CONSTRUCT
TYPE SPECIAL 1 DROP INLET IN MEDIAN
4' x 5' x H= 3'-4"
WITH 24" x 274' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7201+44

STA. 7201+44 IN PLACE
TYPE K DROP INLET IN MEDIAN
RETAIN AND ADJUST TO GRADE AND MODIFY TO TYPE SPECIAL 2 DROP INLET

STA. 7201+44 IN PLACE
DBL. 6' x 5' x 210' R.C. BOX CULVERT
(30° LT. FWD. SKEW)
RETAIN

STA. 7205+20 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4' x 5' x H= 4'-11"
WITH 24" x 376' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7208+95

STA. 7202+60.00 INSTALL
OVERHEAD HIGHWAY SIGN
EASTBOUND LANES
SEE SIGNING PLANS

STA. 7208+95 IN PLACE
TYPE N DROP INLET IN MEDIAN
RETAIN AND ADJUST TO GRADE AND MODIFY TO TYPE SPECIAL 2 DROP INLET

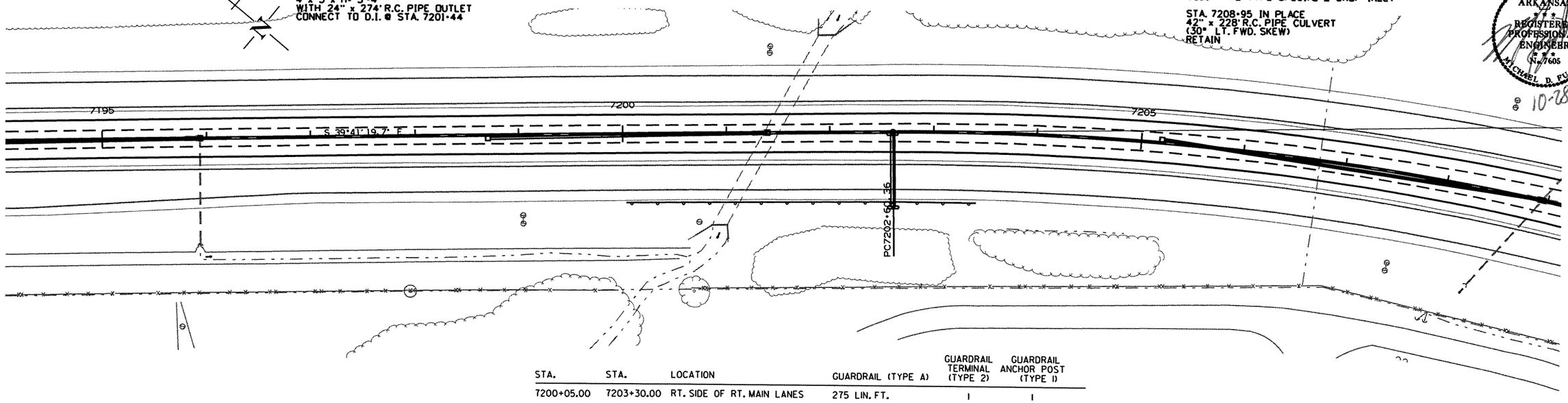
STA. 7208+95 IN PLACE
42" x 228' R.C. PIPE CULVERT
(30° LT. FWD. SKEW)
RETAIN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

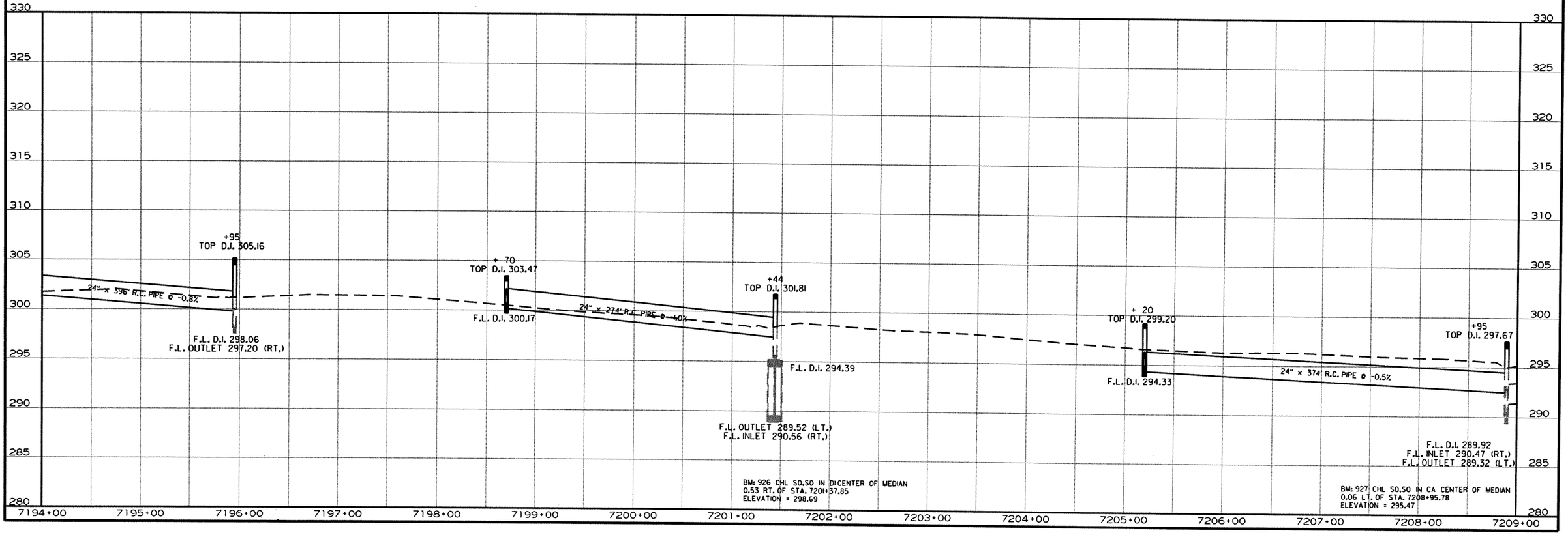
FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080388	125	452

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11



STA.	STA.	LOCATION	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE 2)	GUARDRAIL ANCHOR POST (TYPE I)
7200+05.00	7203+30.00	RT. SIDE OF RT. MAIN LANES	275 LIN. FT.	1	1



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PI = 7220+17.86
Δ = 63°03'24.6" RT.
D = 2°00'00"
T = 1757.50'
L = 3152.84'
PC = 7202+60.36
PT = 7424+13.20
e = MATCH EXIST.
Ls = MATCH EXIST.

STA. 7213+00 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4' x 5' x H= 3'-5"
WITH 24" x 406' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7208+95

STA. 7217+00 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4' x 5' x H= 3'-4"
WITH 24" x 296' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7219+95

STA. 7219+95 IN PLACE
TYPE N DROP INLET IN MEDIAN
RETAIN AND ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL 2 DROP INLET

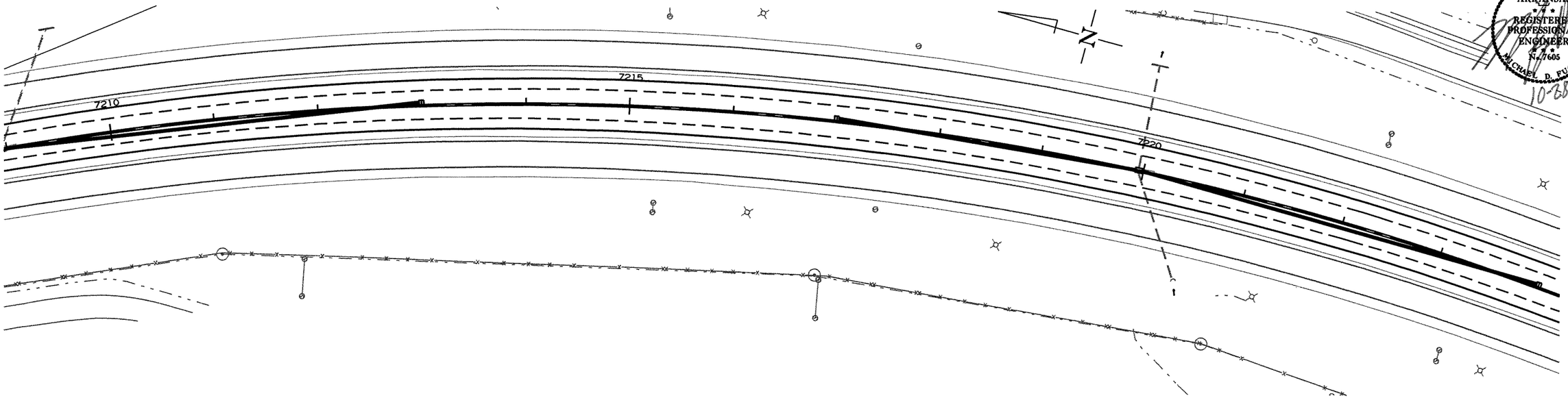
STA. 7219+95 IN PLACE
48" x 100' R.C. PIPE CULVERT TO LT.
48" x 100' R.C. PIPE CULVERT TO RT.
(30° LT. FWD. SKEW)
RETAIN

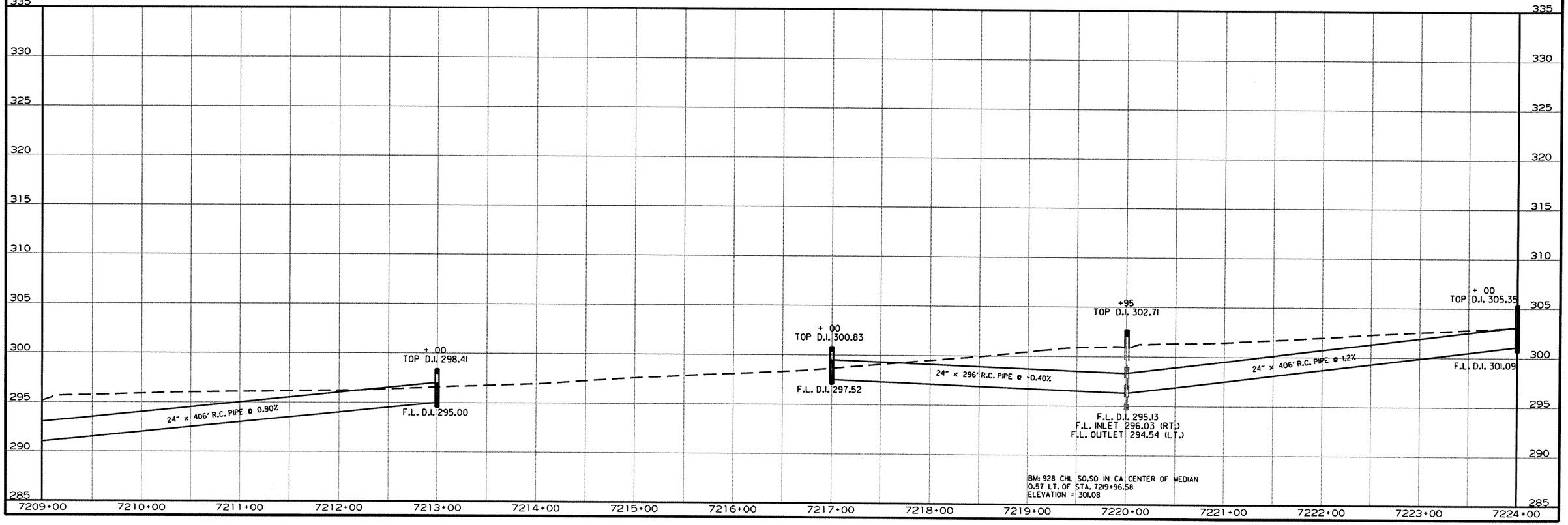
STA. 7224+00 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4' x 5' x H= 4'-3"
WITH 24" x 406' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7219+95

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.		080388	126	452

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11





BM: 928 CHL SO.SO IN CA CENTER OF MEDIAN
0.57 LT. OF STA. 7219+96.58
ELEVATION = 301.08

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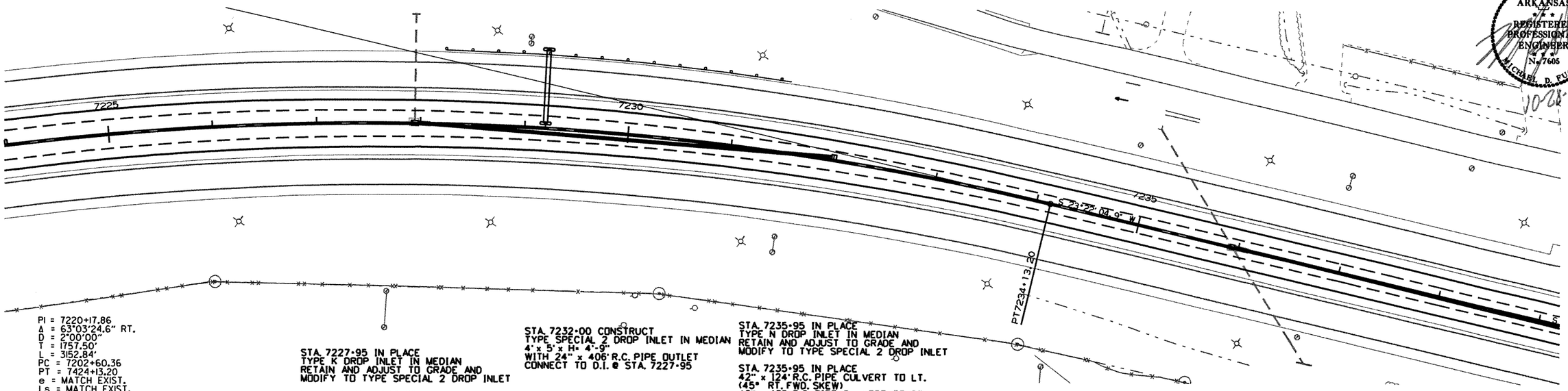
STA.	STA.	LOCATION	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE 2)	GUARDRAIL ANCHOR POST (TYPE I)
7228+30.00	7231+55.00	LT. SIDE OF LT. MAIN LANES	275 LIN. FT.	1	1

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.		080388	127	452

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. PUGETT
10-28-11

STA. 7229+20.00 INSTALL
OVERHEAD HIGHWAY SIGN
WESTBOUND LANES
SEE SIGNING PLANS



PI = 7220+17.86
Δ = 63°03'24.6" RT.
D = 2°00'00"
T = 1757.50'
L = 3152.84'
PC = 7202+60.36
PT = 7424+13.20
e = MATCH EXIST.
Ls = MATCH EXIST.

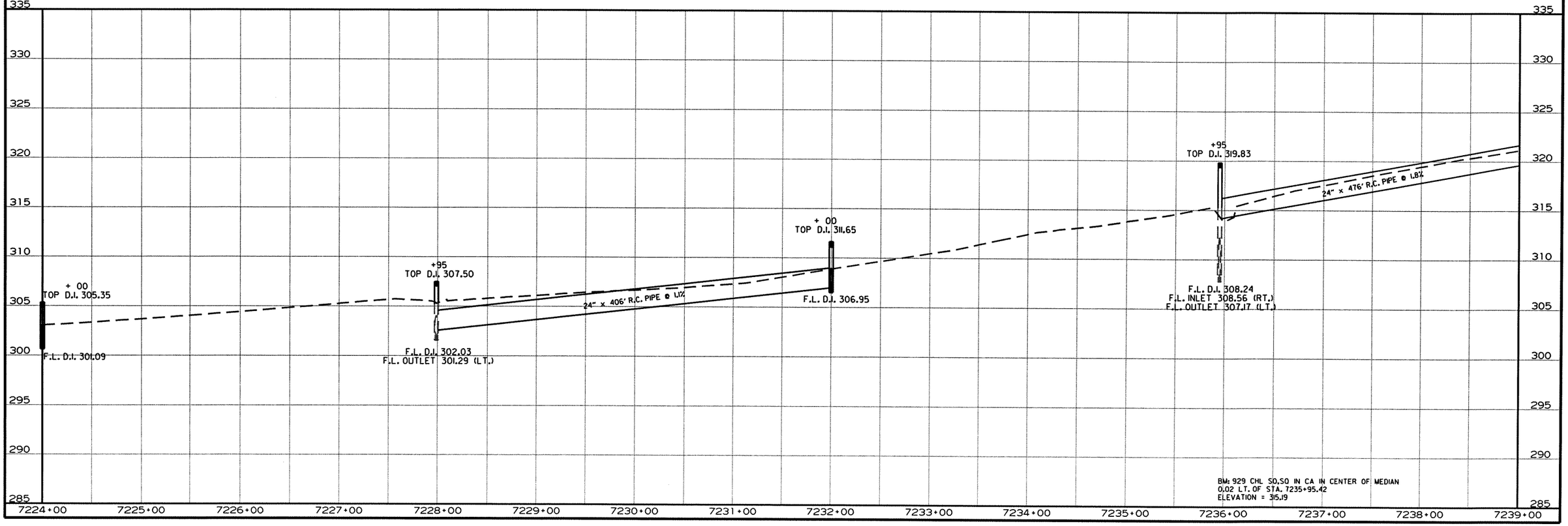
STA. 7227+95 IN PLACE
TYPE K DROP INLET IN MEDIAN
RETAIN AND ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL 2 DROP INLET

STA. 7227+95 IN PLACE
24" x 102' R.C. PIPE CULVERT TO LT.
RETAIN

STA. 7232+00 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4' x 5' x H= 4'-9"
WITH 24" x 406' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7227+95

STA. 7235+95 IN PLACE
TYPE N DROP INLET IN MEDIAN
RETAIN AND ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL 2 DROP INLET

STA. 7235+95 IN PLACE
42" x 124' R.C. PIPE CULVERT TO LT.
(45° RT. FWD. SKEW)
42" x 132' R.C. PIPE CULVERT TO RT.
(45° RT. FWD. SKEW)
RETAIN



BM: 929 CHL SQ.SQ IN CA IN CENTER OF MEDIAN
0.02 LT. OF STA. 7235+95.42
ELEVATION = 315.19

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STA. 7240+70 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4' x 5' x H= 4'-10"
WITH 24" x 476' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7235+95

PI = 7272+02.99
Δ = 36°37'40.7" LT.
D = 0°45'00"
T = 2528.57'
L = 4883.73'
PC = 7246+74.42
PT = 7295+58.15
e = MATCH EXIST.
Ls = MATCH EXIST.

STA. 7245+45 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4' x 5' x H= 4'-6"
WITH 24" x 448' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7249+92

STA. 7249+92 IN PLACE
TYPE N DROP INLET IN MEDIAN
RETAIN AND ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL 2 DROP INLET

STA. 7249+92 IN PLACE
24" x 92' R.C. PIPE CULVERT TO RT.
RETAIN

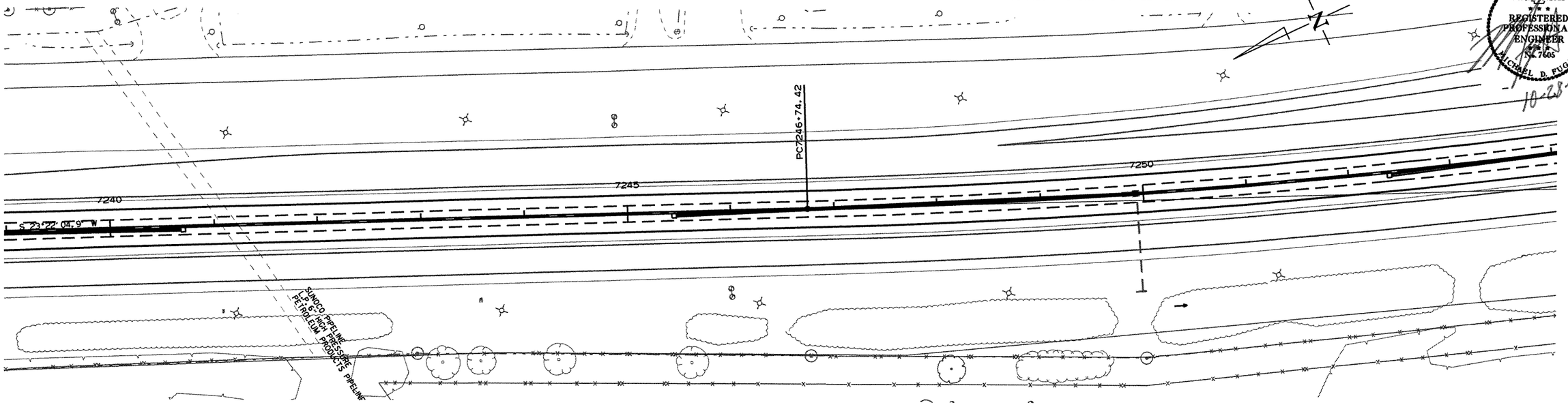
STA. 7252+40 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4' x 5' x H= 4'-9"
WITH 24" x 250' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7254+90

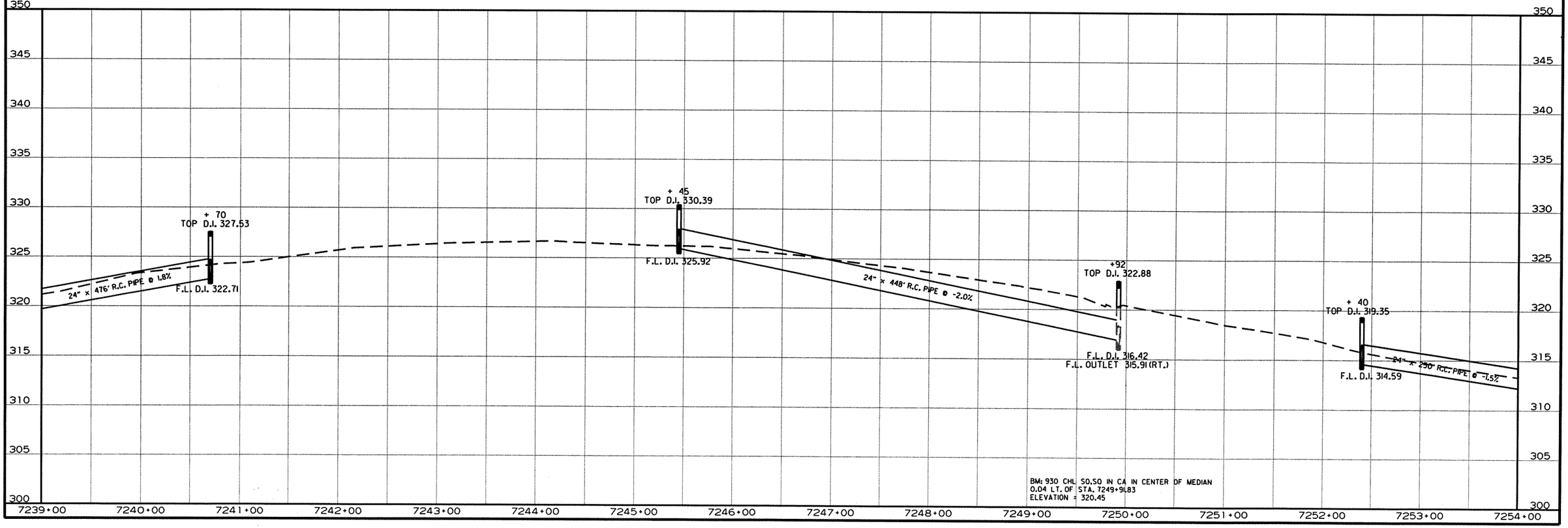
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080388	128	452

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
NO. 7605
MICHAEL D. FUGETT
10-28-11





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STA.	STA.	LOCATION	GUARDRAIL (TYPE 'A')	GUARDRAIL TERMINAL (TYPE 2)	GUARDRAIL ANCHOR POST (TYPE I)
7255+45.00	7258+70.00	RT. SIDE OF RT. MAIN LANES	275 LIN. FT.	1	1

STA. 7254+90 IN PLACE
TYPE N DROP INLET IN MEDIAN
RETAIN AND ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL 2 DROP INLET

STA. 7254+90 IN PLACE
30" x 90' R.C. PIPE CULVERT TO LT.
RETAIN
30" x 96' R.C. PIPE CULVERT TO RT.
RETAIN

STA. 7258+00.00 INSTALL
OVERHEAD HIGHWAY SIGN
EASTBOUND LANES
SEE SIGNING PLANS

STA. 7258+20 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4' x 5' x H= 3'-11"
WITH 24" x 236' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7260+55

STA. 7260+55 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4' x 5' x H= 5'-9"
WITH 24" x 40' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7260+95

STA. 7260+95 IN PLACE
TYPE N DROP INLET IN MEDIAN
RETAIN AND ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL 2 DROP INLET

STA. 7260+95 IN PLACE
24" x 104' R.C. PIPE CULVERT TO RT.
RETAIN

STA. 7263+07 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4' x 5' x H= 4'-7"
WITH 24" x 250' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7265+56

STA. 7265+56 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4' x 5' x H= 4'-11"
WITH 24" x 140' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7266+95

STA. 7266+95 IN PLACE
TYPE N DROP INLET IN MEDIAN
RETAIN AND ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL 2 DROP INLET

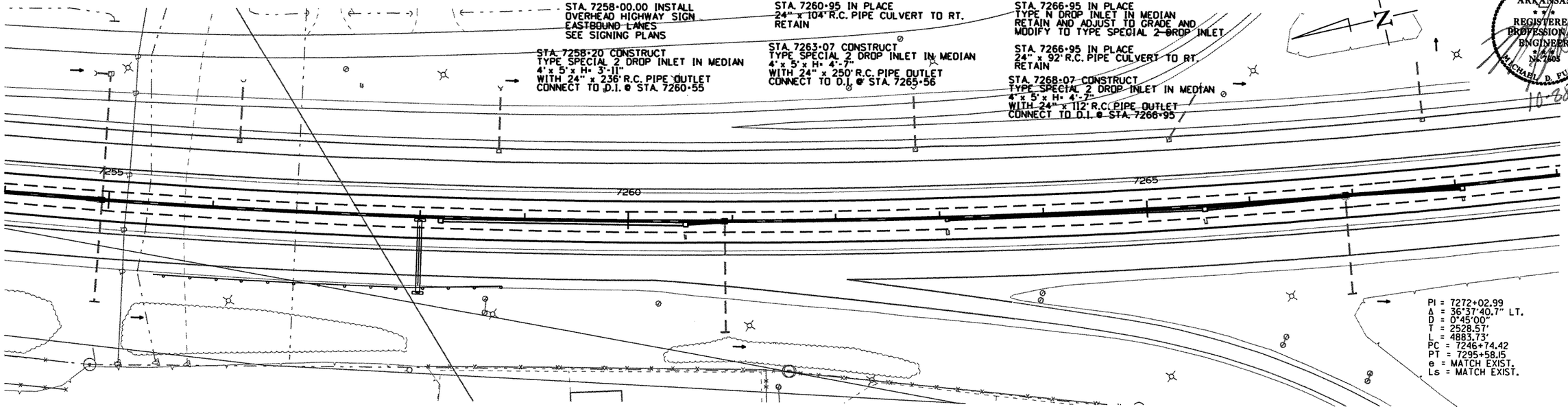
STA. 7266+95 IN PLACE
24" x 92' R.C. PIPE CULVERT TO RT.
RETAIN

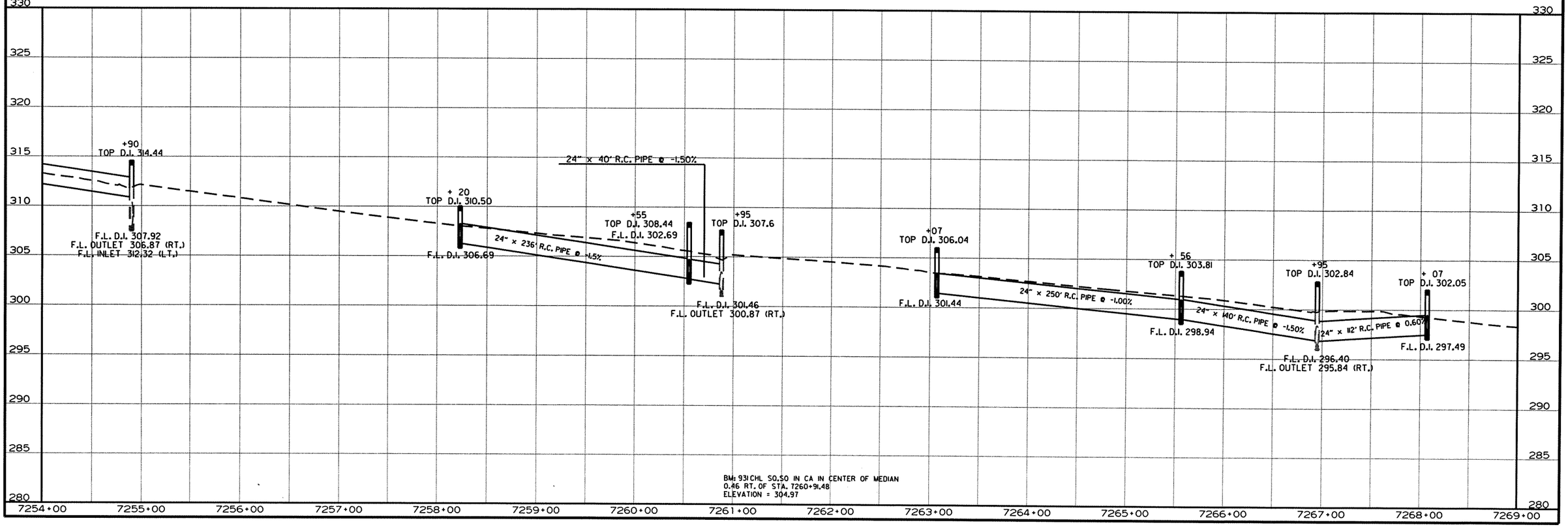
STA. 7268+07 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4' x 5' x H= 4'-7"
WITH 24" x 112' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7266+95

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
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(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7603
MICHAEL D. PUGETT
10-28-11





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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.		080388	130	452

(2) PLAN AND PROFILE SHEETS

STA. 7271+95 IN PLACE
TYPE N DROP INLET IN MEDIAN
RETAIN AND ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL 2 DROP INLET

STA. 7271+95 IN PLACE
24" x 92' R.C. PIPE CULVERT TO RT.
RETAIN

STA. 7275+57 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4' x 5' x H= 4'-11"
WITH 24" x 138' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7276+95

STA. 7276+95 IN PLACE
TYPE N DROP INLET IN MEDIAN
RETAIN AND ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL 2 DROP INLET

STA. 7276+95 IN PLACE
24" x 94' R.C. PIPE CULVERT TO RT.
RETAIN

STA. 7278+08 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4' x 5' x H= 4'-6"
WITH 24" x 122' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7276+95

PI = 7272+02.99
Δ = 36°37'40.7" LT.
D = 0°45'00"
T = 2528.57'
L = 4883.73'
PC = 7246+74.42
PT = 7295+58.15
e = MATCH EXIST.
Ls = MATCH EXIST.

STA. 7280+51 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4' x 5' x H= 3'-11"
WITH 24" x 250' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7283+00

STA. 7283+00 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4' x 5' x H= 6'-0"
WITH 24" x 50' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7283+50

STA. 7283+50 IN PALCE
TYPE N DROP INLET IN MEDIAN
RETAIN AND ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL 2 DROP INLET

STA. 7283+50 IN PALCE
24" x 122' R.C. PIPE CULVERT TO RT.
RETAIN

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-13-11

7270 7275 7280

DAVE WARD DR.
HWY. 65B

STA. 7272+95 IN PLACE
IMPACT ATTENUATION BARRIER
IN MEDIAN
REMOVE

STA. 7272+95 TO STA. 7273+57
CONCRETE PIER PROTECTION
IN MEDIAN
REMOVE

STA. 7273+57 IN PLACE
IMPACT ATTENUATION BARRIER
IN MEDIAN
REMOVE

+95
TOP D.I. 300.26
F.L. D.I. 293.40
F.L. OUTLET 291.97 (RT.)

+57
TOP D.I. 297.73
F.L. D.I. 292.82

24" x 138' R.C. PIPE @ -1.5%

+95
TOP D.I. 296.82
F.L. D.I. 290.46
F.L. OUTLET 289.77 (RT.)

24" x 122' R.C. PIPE @ 1.0%

+08
TOP D.I. 296.41
F.L. D.I. 291.92

+51
TOP D.I. 295.25
F.L. D.I. 291.34

24" x 50' R.C. PIPE @ -1.50%

24" x 250' R.C. PIPE @ -1.2%

+00
TOP D.I. 294.25
F.L. D.I. 288.22

+50
TOP D.I. 293.86
F.L. D.I. 287.12
F.L. OUTLET 282.83 (RT.)

BM: 936 ALUM DISK
1936.13 LT. OF STA. 7270+89.10
ELEVATION = 292.64

BM: 932 CUT SQUARE
0.19 LT. OF STA. 7271+91.38
ELEVATION = 296.47

BM: 935 ALUM DISK,S\E CORN BR "6939
194 LT. OF STA. 7273+55.93
ELEVATION = 323.93

BM: 933 ALUM DISK
1722.61 RT. OF STA. 7273+94.17
ELEVATION = 297.48

325 320 315 310 305 300 295 290 285 280 275 270

7269+00 7270+00 7271+00 7272+00 7273+00 7274+00 7275+00 7276+00 7277+00 7278+00 7279+00 7280+00 7281+00 7282+00 7283+00 7284+00

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STA.	STA.	LOCATION	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE 2)	GUARDRAIL ANCHOR POST (TYPE I)
7293+30.00	7296+55.00	LT. SIDE OF LT. MAIN LANES	275 LIN. FT.	1	1

STA. 7285+47 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4' x 5' x H= 4'-6"
WITH 24" x 198' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7283+50

STA. 7287+95 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4' x 5' x H= 4'-3"
WITH 24" x 100' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7288+95

STA. 7288+95 IN PLACE
TYPE N DROP INLET IN MEDIAN
RETAIN AND ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL 2 DROP INLET

STA. 7288+95 IN PLACE
24" x 120' R.C. PIPE CULVERT TO RT.
RETAIN

STA. 7290+44 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4' x 5' x H= 4'-3"
WITH 24" x 150' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7288+95

STA. 7292+91 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4' x 5' x H= 4'-3"
WITH 24" x 194' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7294+84

STA. 7294+84 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4' x 5' x H= 4'-9"
WITH 24" x 212' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7296+95

STA. 7294+00.00 INSTALL
OVERHEAD HIGHWAY SIGN
WESTBOUND LANES
SEE SIGNING PLANS

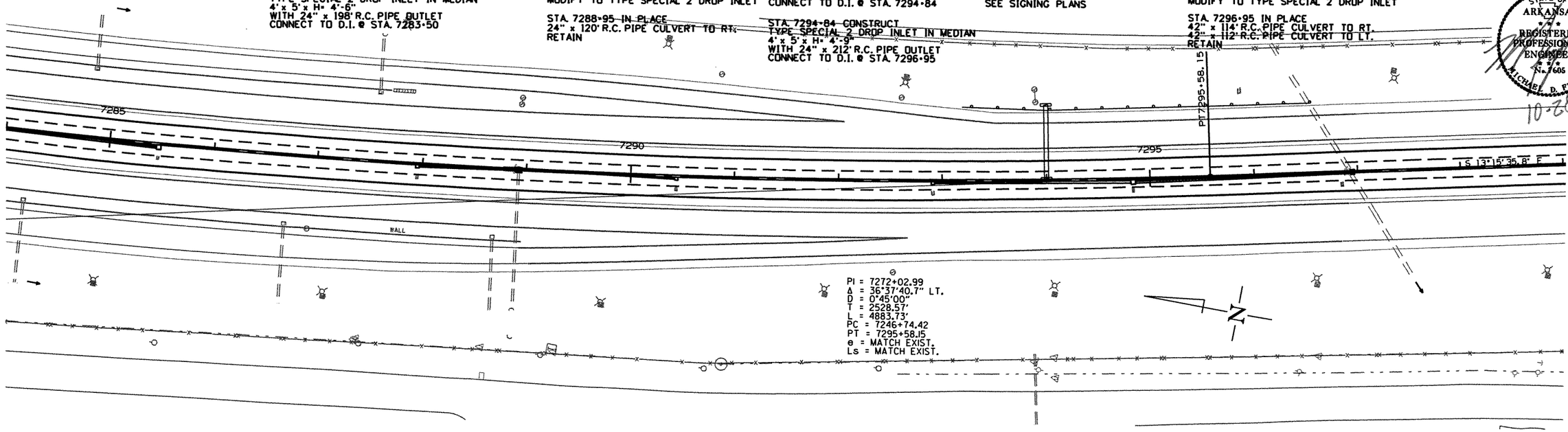
STA. 7296+95 IN PLACE
TYPE N DROP INLET IN MEDIAN
RETAIN AND ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL 2 DROP INLET

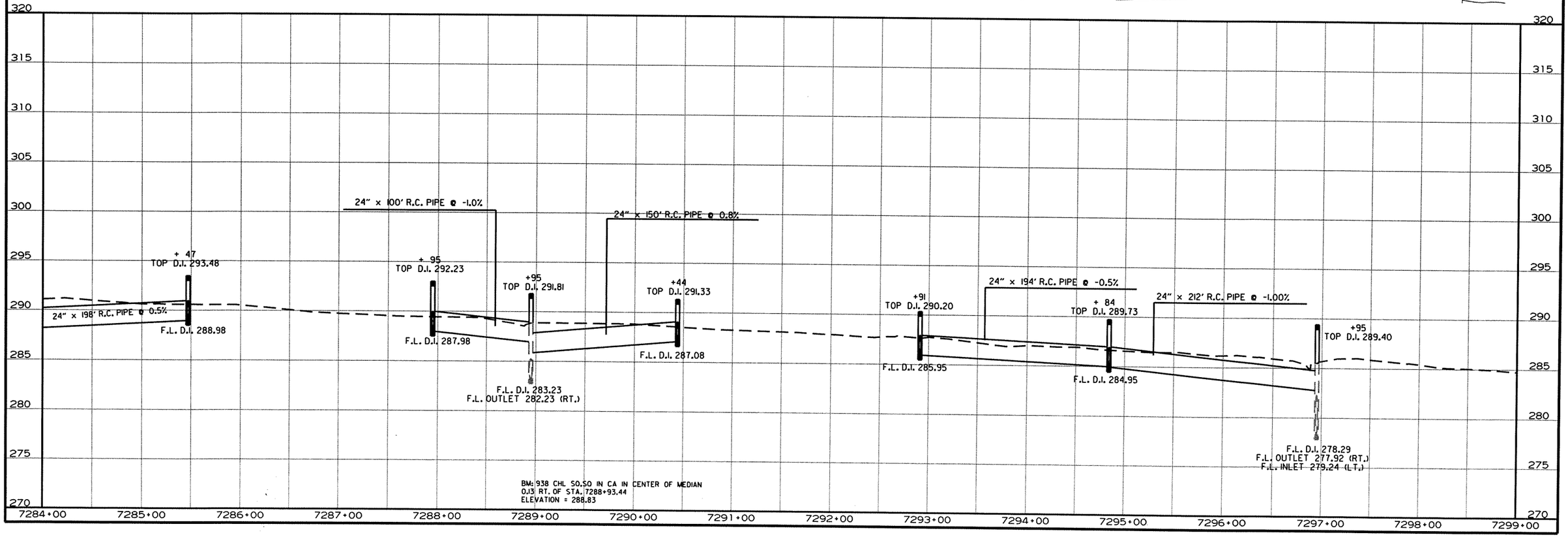
STA. 7296+95 IN PLACE
42" x 114' R.C. PIPE CULVERT TO RT.
42" x 112' R.C. PIPE CULVERT TO LT.
RETAIN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
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(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11





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STA. 7300+00 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 3'-5"
WITH 24" x 250' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7302+50

STA. 7302+50 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 5'-9"
WITH 24" x 246' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7304+95

STA. 7304+95 IN PLACE
TYPE N DROP INLET IN MEDIAN
RETAIN AND ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL I DROP INLET

STA. 7304+95 IN PLACE
24" x 92' R.C. PIPE CULVERT TO RT.
24" x 98' R.C. PIPE CULVERT TO LT.
RETAIN

STA. 7309+00 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 4'-6"
WITH 24" x 396' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7312+95

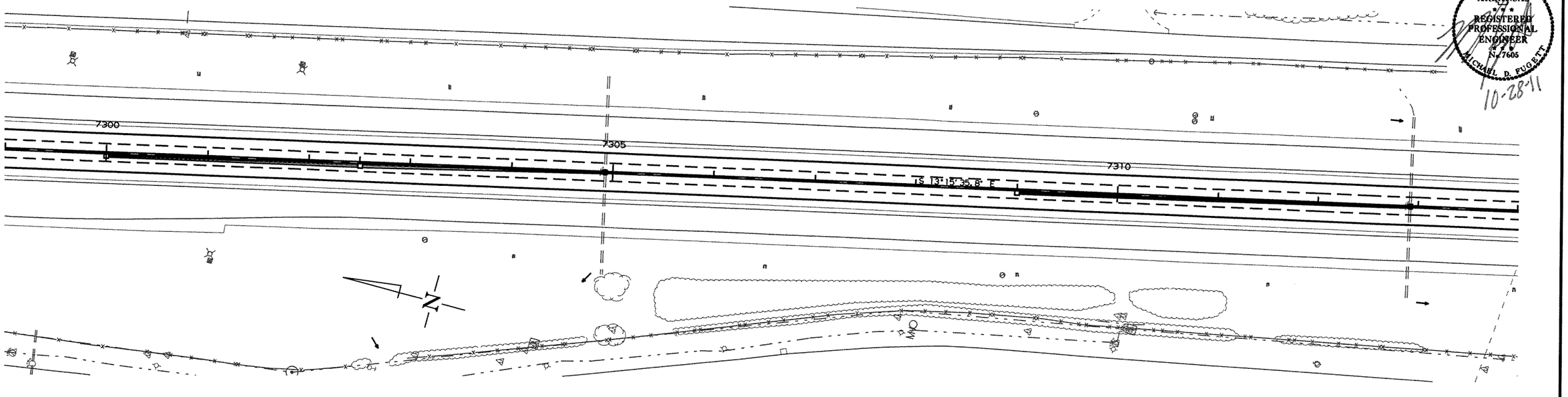
STA. 7312+95 IN PLACE
TYPE N DROP INLET IN MEDIAN
RETAIN & ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL I DROP INLET

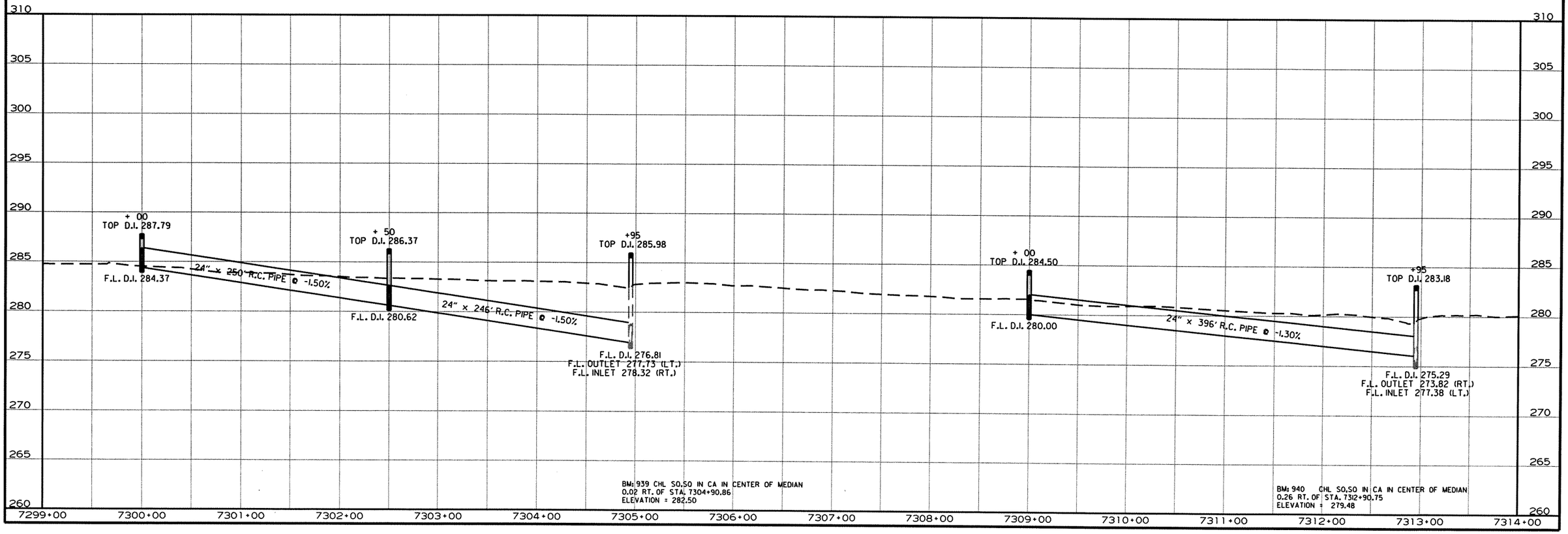
STA. 7312+95 IN PLACE
24" x 90' R.C. PIPE CULVERT RT.
24" x 78' R.C. PIPE CULVERT LT.
RETAIN

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.		080388	132	452

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 17605
MICHAEL D. FUGETT
10-28-11





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STA. 7316+00 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 3'-5"
WITH 24" x 396' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7319+95

STA. 7319+95 IN PLACE
TYPE N DROP INLET IN MEDIAN
RETAIN & ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL I DROP INLET

STA. 7319+95 IN PLACE
24" x 88' R.C. PIPE CULVERT RT.
RETAIN

STA. 7323+00 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 3'-5"
WITH 24" x 296' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7325+95

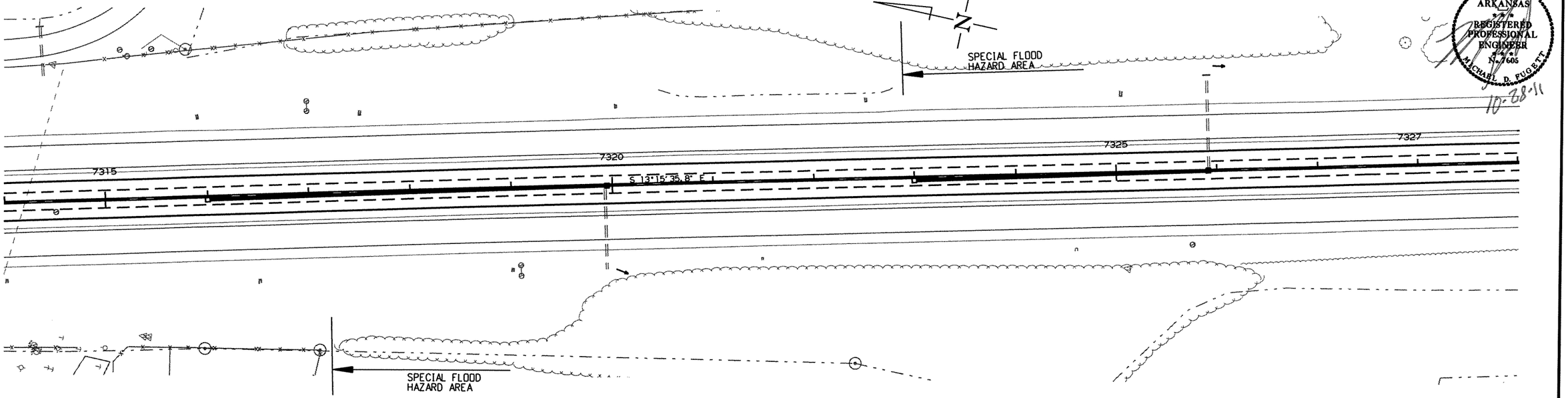
STA. 7325+95 IN PLACE
TYPE N DROP INLET IN MEDIAN
RETAIN & ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL I DROP INLET

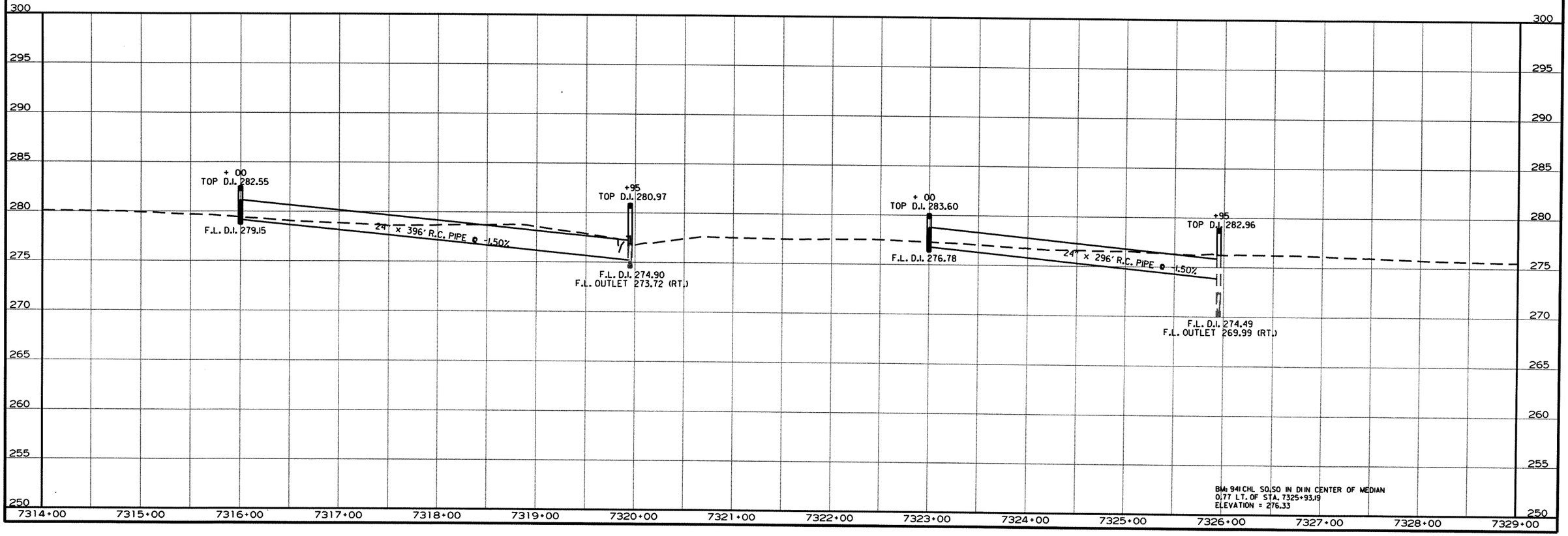
STA. 7325+95 IN PLACE
24" x 96' R.C. PIPE CULVERT RT.
RETAIN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
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(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11





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STA. 7328+95 IN PLACE
TYPE N DROP INLET IN MEDIAN
RETAIN AND ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL I DROP INLET

STA. 7328+95 IN PLACE
18" x 116' R.C. PIPE CULVERT TO RT.
RETAIN

STA. 7330+40.00 - STA. 7331+30.00 (LT. LANES) IN PLACE
90.00' x 38.5' CLEAR ROADWAY BRIDGE
CONSISTING OF A 3 SPAN CONCRETE DECK
WITH CONCRETE PILINGS
REMOVE AS EXISTING BRIDGE STRUCTURE
• 0.50 LUMP SUM

STA. 7330+36.00 - STA. 7331+34.00
CONSTRUCT
98'-0" x 56'-0" CLEAR ROADWAY
(34',30',34') CONTINUOUS R.C. SLAB SPAN
UNIT

STA. 7334+00 CONSTRUCT
TYPE SPECIAL I DROP INLET
4' x 5' x H• 4'-0"
WITH 18" x 286' R.C. PIPE OUTLET
W/ FES AT STA. 7331+15

STA. 7336+00 INSTALL
OVERHEAD HIGHWAY SIGN
WESTBOUND LANES
SEE SIGNING PLANS

STA. 7337+00 IN PLACE
TYPE H DROP INLET IN MEDIAN
RETAIN AND ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL I DROP INLET

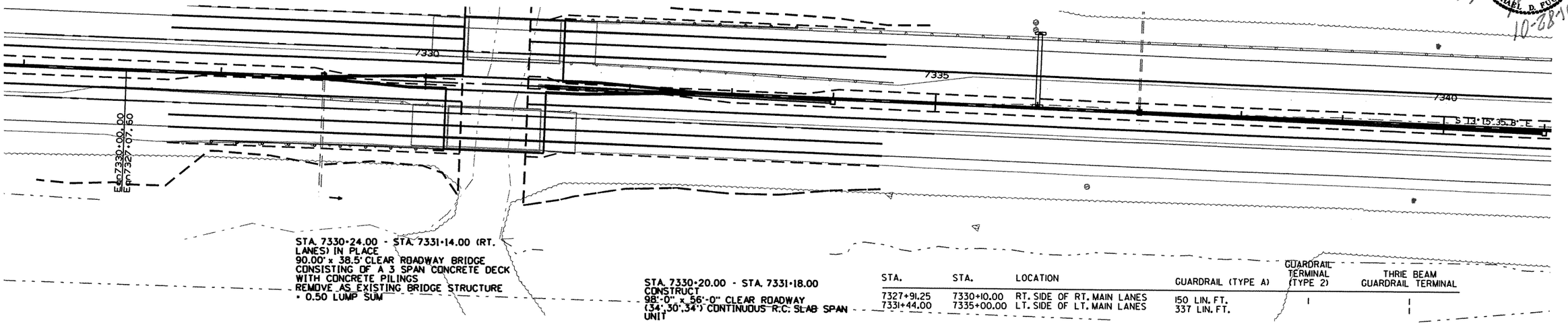
STA. 7337+00 IN PLACE
18" x 116' R.C. PIPE CULVERT TO LT.
RETAIN

STA. 7341+00 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H• 3'-5"
WITH 18" x 400' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7337+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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(2) PLAN AND PROFILE SHEETS

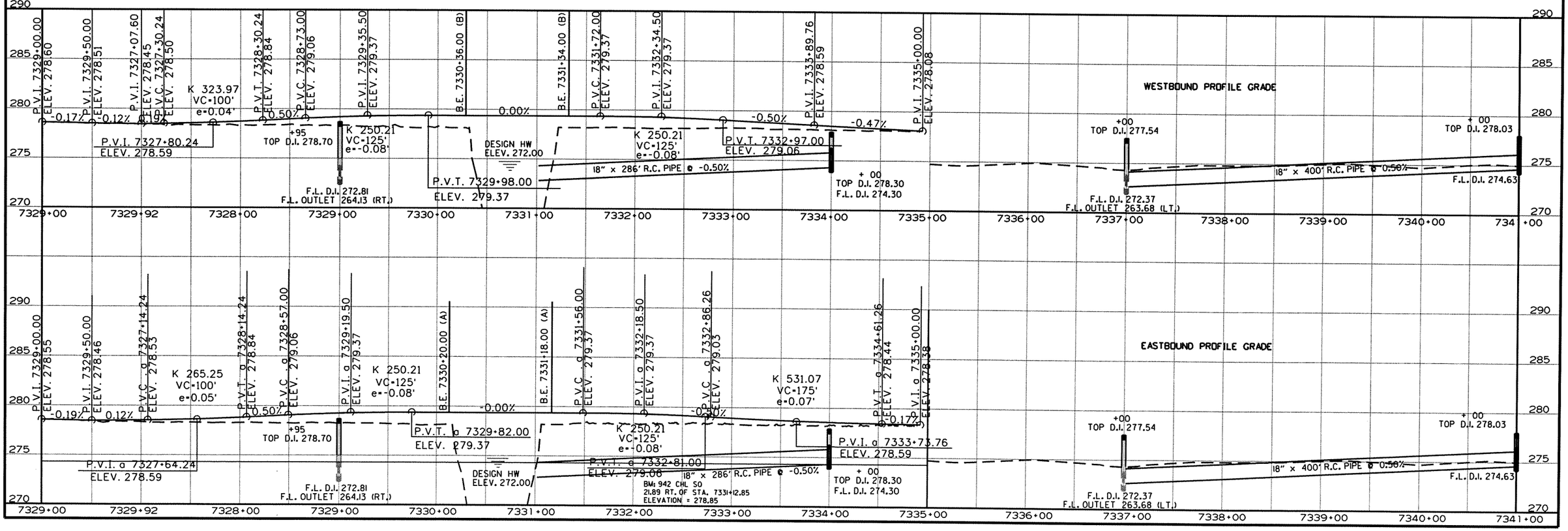
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11



STA. 7330+24.00 - STA. 7331+14.00 (RT. LANES) IN PLACE
90.00' x 38.5' CLEAR ROADWAY BRIDGE
CONSISTING OF A 3 SPAN CONCRETE DECK
WITH CONCRETE PILINGS
REMOVE AS EXISTING BRIDGE STRUCTURE
• 0.50 LUMP SUM

STA. 7330+20.00 - STA. 7331+18.00
CONSTRUCT
98'-0" x 56'-0" CLEAR ROADWAY
(34',30',34') CONTINUOUS R.C. SLAB SPAN
UNIT

STA.	STA.	LOCATION	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE 2)	THRIE BEAM GUARDRAIL TERMINAL
7327+91.25	7330+10.00	RT. SIDE OF RT. MAIN LANES	150 LIN. FT.	1	1
7331+44.00	7335+00.00	LT. SIDE OF LT. MAIN LANES	337 LIN. FT.		



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				6	ARK.			
				JOB NO.		080388	135	452

(2) PLAN AND PROFILE SHEETS

STA. 7345+00 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 3'-5"
WITH 18" x 300' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7348+00

STA. 7348+08 IN PLACE
TYPE H DROP INLET IN MEDIAN
RETAIN AND ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL I DROP INLET

STA. 7348+08 IN PLACE
18" x 116' R.C. PIPE CULVERT TO LT.
RETAIN

STA. 7352+00 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 3'-5"
WITH 18" x 392' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7348+08

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No. 7605
MICHAEL D. FUGETT
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N

7345

S 13° 15' 35.8" E

7350

7355

SPECIAL FLOOD HAZARD AREA

+ 00
TOP D.I. 278.03
F.L. D.I. 274.63

+ 00
TOP D.I. 278.07
F.L. D.I. 274.67

18" x 308' R.C. PIPE @ 0.05%

+08
TOP D.I. 278.34
F.L. D.I. 272.37
F.L. OUTLET 263.68 (L.T.)

18" x 392' R.C. PIPE @ 0.05%

+ 00
TOP D.I. 278.08
F.L. D.I. 274.68

+ 00
TOP D.I. 278.08
F.L. D.I. 274.68

BM: 943 CHL SQ.SQ IN DIN CENTER OF MEDIAN
0.75 LT. OF STA. 7348+01.77
ELEVATION = 274.08

300 295 290 285 280 275 270 265 260 255 250

7341+00 7342+00 7343+00 7344+00 7345+00 7346+00 7347+00 7348+00 7349+00 7350+00 7351+00 7352+00 7353+00 7354+00 7355+00 7356+00

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STA. 7356+00 CONSTRUCT
TYPE SPECIAL 1 DROP INLET IN MEDIAN
4' x 5' x H= 3'-5"
WITH 24" x 274' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7358+73

STA. 7358+73 IN PLACE
TYPE H DROP INLET IN MEDIAN
RETAIN AND ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL 1 DROP INLET

STA. 7358+73 IN PLACE
48" x 92' R.C. PIPE CULVERT TO RT.
48" x 96' R.C. PIPE CULVERT TO LT.
RETAIN

STA. 7362+73 CONSTRUCT
TYPE SPECIAL 1 DROP INLET IN MEDIAN
4' x 5' x H= 3'-5"
WITH 24" x 400' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7358+73

STA. 7366+73 CONSTRUCT
TYPE SPECIAL 1 DROP INLET IN MEDIAN
4' x 5' x H= 3'-5"
WITH 24" x 228' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7369+01

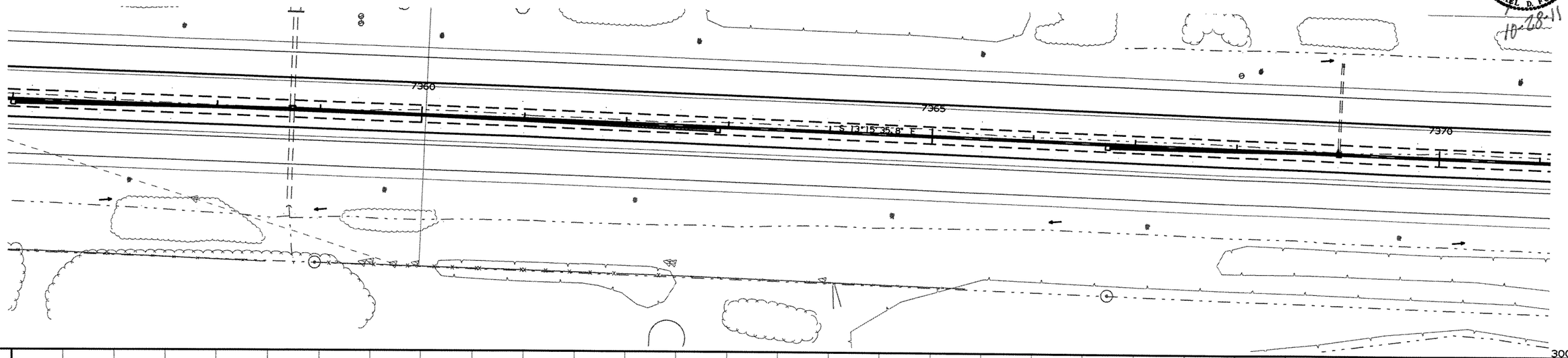
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	136	452

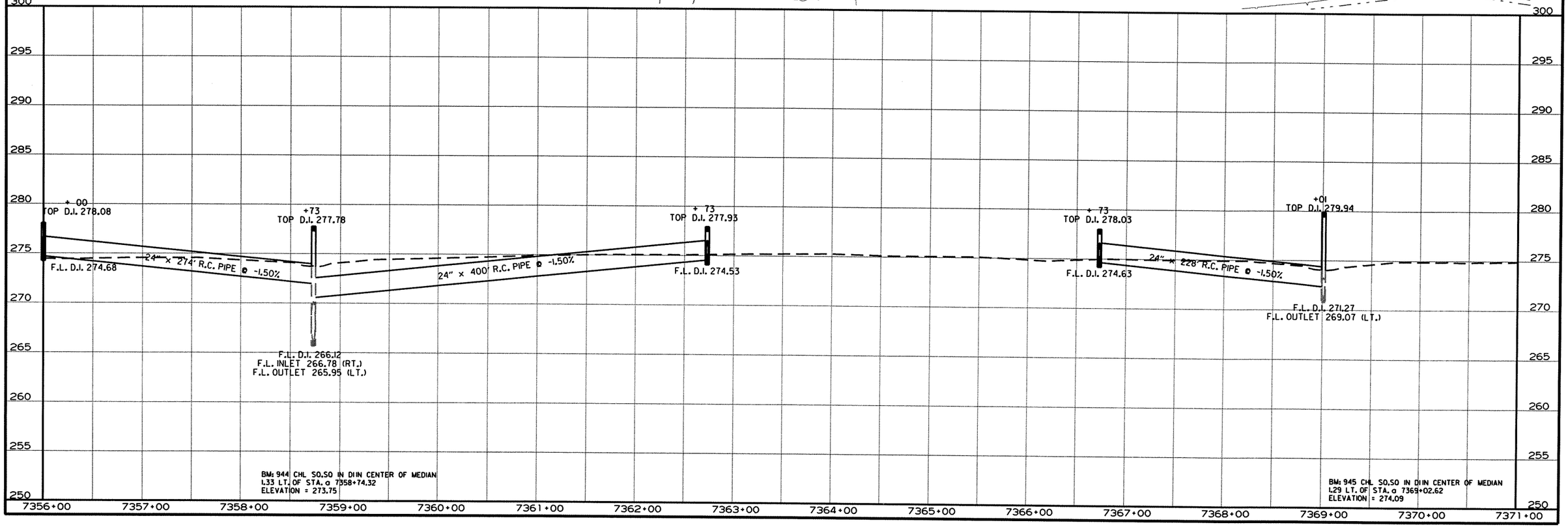
(2) PLAN AND PROFILE SHEETS

STA. 7369+01 IN PLACE
TYPE H DROP INLET IN MEDIAN
RETAIN AND ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL 1 DROP INLET

STA. 7369+01 IN PLACE
24" x 88' R.C. PIPE CULVERT TO LT.
RETAIN

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STA. 7373+00 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 3'-4"
WITH 24" x 428' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7377+27

STA. 7377+27 IN PLACE
TYPE H DROP INLET IN MEDIAN
RETAIN AND ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL I DROP INLET

STA. 7377+27 IN PLACE
48" x 96' R.C. PIPE CULVERT TO LT.
48" x 96' R.C. PIPE CULVERT TO RT.
RETAIN

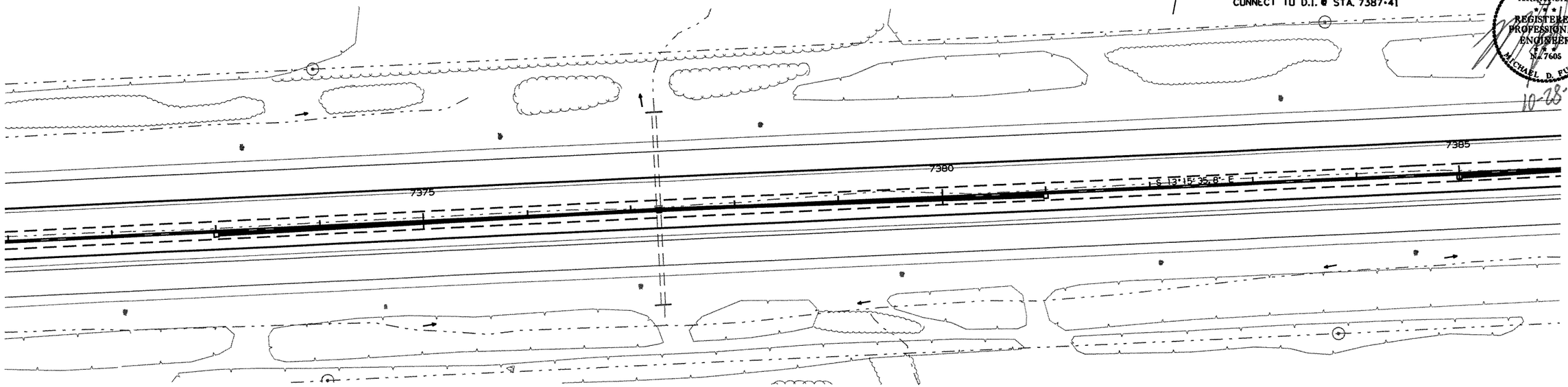
STA. 7381+00 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 3'-5"
WITH 24" x 374' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7377+27

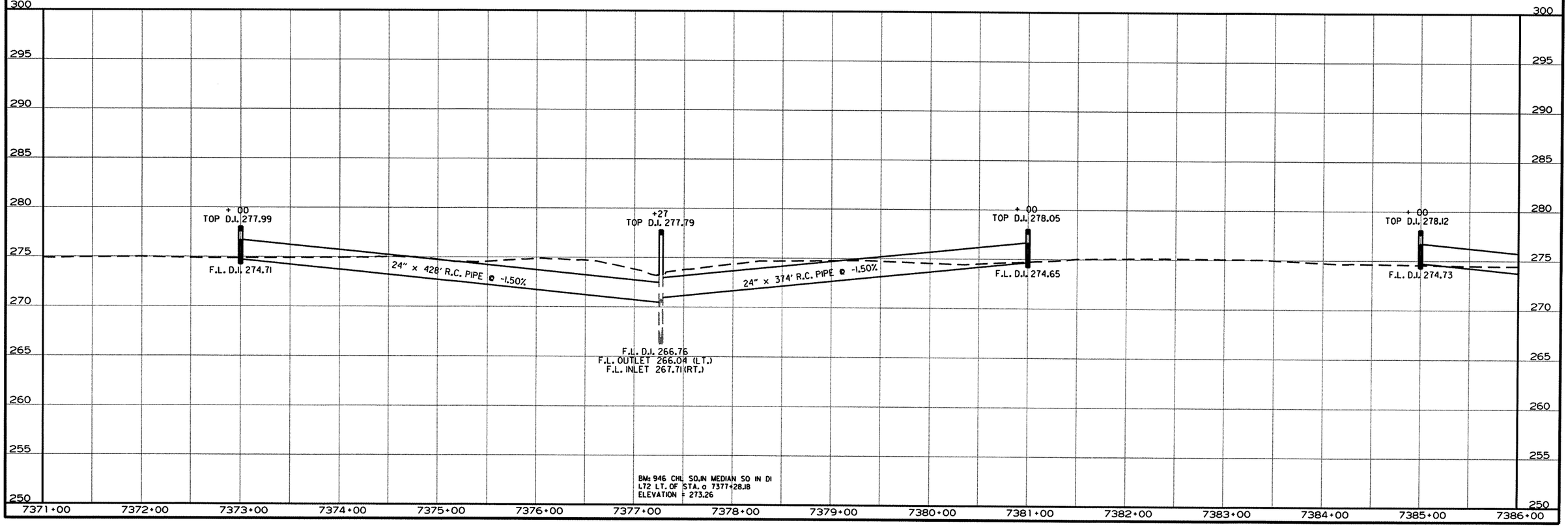
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	137	452

(2) PLAN AND PROFILE SHEETS

STA. 7385+00 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 3'-5"
WITH 24" x 242' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7387+41

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STA. 7387+41 IN PLACE
TYPE H DROP INLET IN MEDIAN
RETAIN AND ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL I DROP INLET

STA. 7387+41 IN PLACE
24" x 84' R.C. PIPE CULVERT TO RT.
24" x 96' R.C. PIPE CULVERT TO LT.
RETAIN

STA. 7391+00 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 3'-5"
WITH 24" x 360' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7387+41

STA.	STA.	LOCATION	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE 2)	GUARDRAIL ANCHOR POST (TYPE I)
7292+01.00	7395+26.00	RT. SIDE OF RT. MAIN LANES	275 LIN. FT.	1	1

STA. 7393+12 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 3'-0"
WITH 24" x 94' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7394+06

STA. 7394+06 IN PLACE
TYPE H DROP INLET IN MEDIAN
RETAIN AND ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL 2 DROP INLET

STA. 7394+06 IN PLACE
24" x 84' R.C. PIPE CULVERT TO RT.
24" x 96' R.C. PIPE CULVERT TO LT.
RETAIN

STA. 7394+56 INSTALL
OVERHEAD HIGHWAY SIGN
EASTBOUND LANES
SEE SIGNING PLANS

STA. 7395+96 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4' x 5' x H= 3'-2"
WITH 24" x 90' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7394+06

STA. 7398+76 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4' x 5' x H= 6'-5"
WITH 24" x 114' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7399+90

PI = 7405+05.08
Δ = 20°43'34.3" RT.
D = 1°00'00"
T = 1047.76'
L = 4883.73'
PC = 7394+57.32
PT = 7415+29.94
e = MATCH EXIST.
Ls = MATCH EXIST.

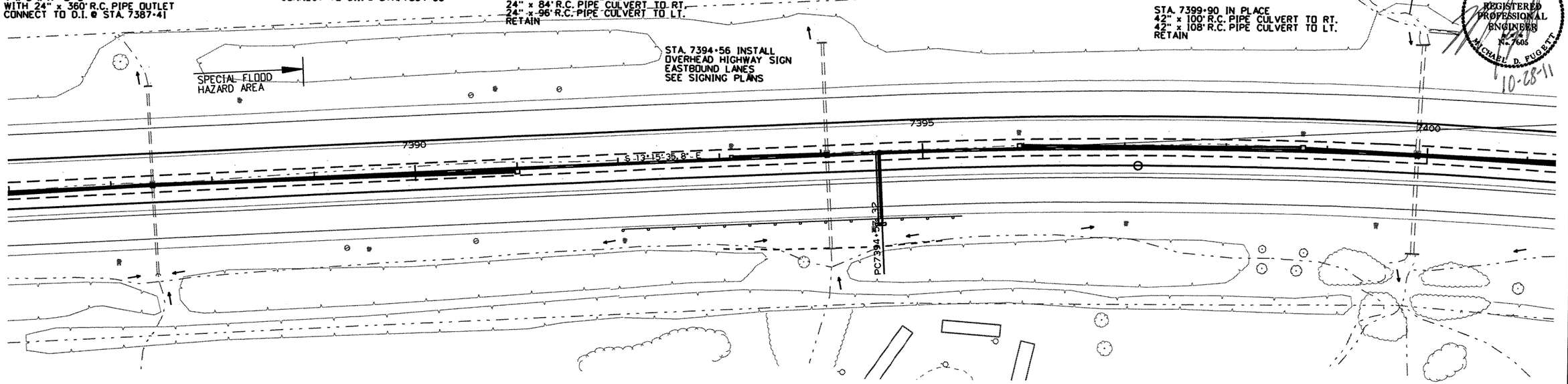
STA. 7399+90 IN PLACE
TYPE H DROP INLET IN MEDIAN
RETAIN AND ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL 2 DROP INLET

STA. 7399+90 IN PLACE
42" x 100' R.C. PIPE CULVERT TO RT.
42" x 108' R.C. PIPE CULVERT TO LT.
RETAIN

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(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11



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PI = 7405+05.08
Δ = 20°43'34.3" RT.
D = 1°00'00"
T = 1047.76'
L = 4883.73'
PC = 7394+57.32
PT = 7415+29.94
e = MATCH EXIST.
Ls = MATCH EXIST.

STA. 7401+51 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4' x 5' x H= 4'-7"
WITH 24" x 162' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7399+90

STA. 7404+09 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4' x 5' x H= 4'-2"
WITH 24" x 116' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7405+24

STA. 7405+24 IN PLACE
TYPE H DROP INLET IN MEDIAN
RETAIN AND ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL 2 DROP INLET

STA. 7405+24 IN PLACE
24" x 88' R.C. PIPE CULVERT TO LT.
RETAIN

STA. 7406+62 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4' x 5' x H= 5'-6"
WITH 24" x 138' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7405+24

STA. 7409+13 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4' x 5' x H= 5'-2"
WITH 24" x 252' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7406+62

STA. 7411+63 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4' x 5' x H= 4'-2"
WITH 24" x 250' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7414+13

STA. 7414+13 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4' x 5' x H= 4'-10"
WITH 24" x 62' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7414+75

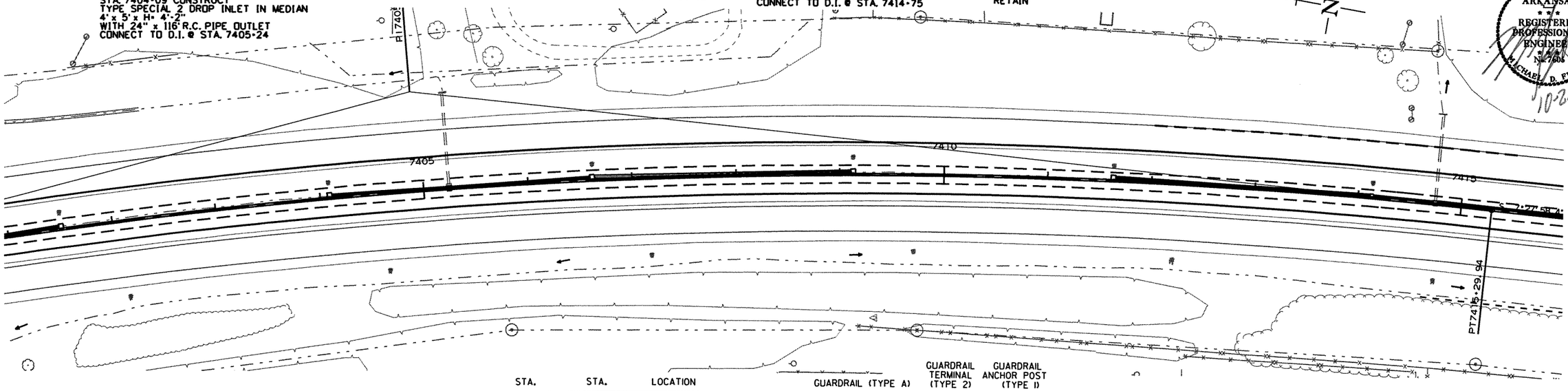
STA. 7414+75 IN PLACE
TYPE H DROP INLET IN MEDIAN
RETAIN AND ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL 2 DROP INLET

STA. 7414+75 IN PLACE
24" x 90' R.C. PIPE CULVERT TO LT.
RETAIN

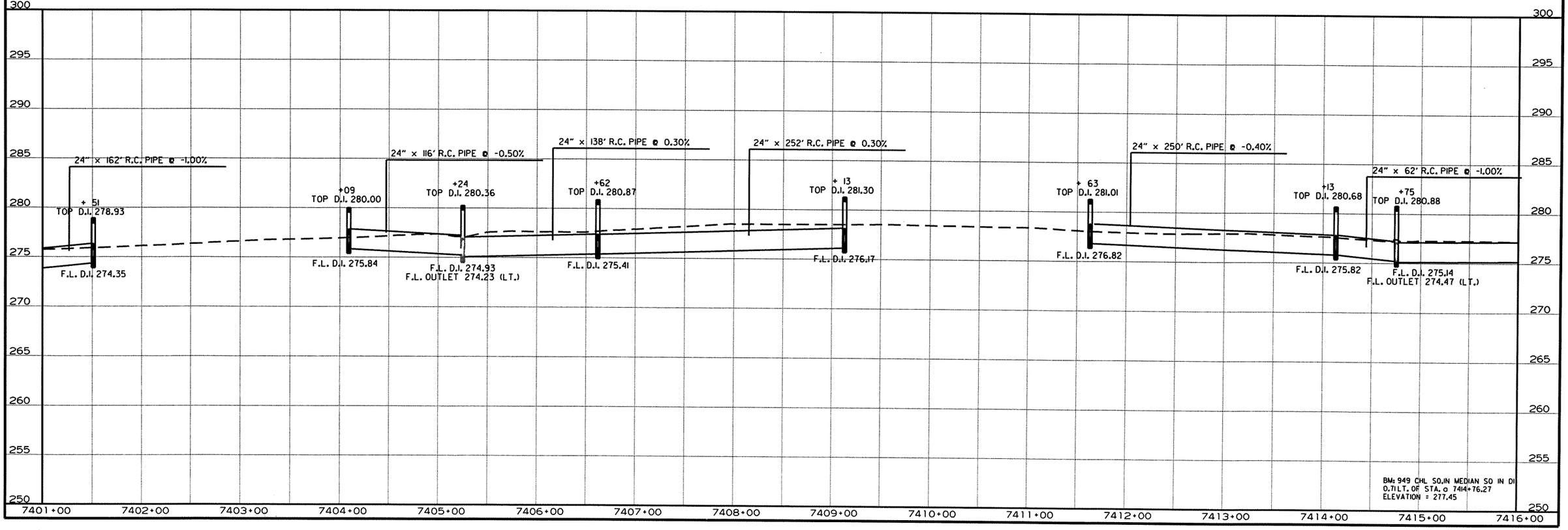
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		080388	139	452

(2) PLAN AND PROFILE SHEETS

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REGISTERED PROFESSIONAL ENGINEER
No. 7606
MICHAEL D. FUGETT
10-28-11



STA.	STA.	LOCATION	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE 2)	GUARDRAIL ANCHOR POST (TYPE I)
7411+45.00	7414+70.00	LT. SIDE OF RT. MAIN LANES	275 LIN. FT.	1	1
7413+301.00	7416+55.00	RT. SIDE OF LT. MAIN LANES	275 LIN. FT.	1	1



BM: 949 CML SO.IN MEDIAN SO IN DI
0.71 LT. OF STA. o 7414+76.27
ELEVATION = 277.45

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STA. 7416+65 CONSTRUCT
TYPE SPECIAL 2 DROP INLET IN MEDIAN
4' x 5' x H= 4'-5"
WITH 24" x 190' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7414+75

STA. 7419+00 CONSTRUCT
TYPE SPECIAL 1 DROP INLET IN MEDIAN
4' x 5' x H= 3'-3"
WITH 24" x 236' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7416+65

STA. 7420+28 TO STA. 7420+47 IN PLACE
CONCRETE PIER PROTECTION
IN MEDIAN
REMOVE

STA. 7420+28 IN PLACE
IMPACT ATTENUATION BARRIER
IN MEDIAN
REMOVE

STA. 7420+47 IN PLACE
IMPACT ATTENUATION BARRIER
IN MEDIAN
REMOVE

STA.	STA.	LOCATION	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE 2)	THRIE BEAM GUARDRAIL TERMINAL
7398+02.25	7400+21.00	RT. SIDE OF RT. MAIN LANES	150 LIN. FT.	1	1
7402+67.00	7407+00.00	RT. SIDE OF RT. MAIN LANES	414 LIN. FT.		
7402+79.00	7407+00.00	LT. SIDE OF LT. MAIN LANES	402 LIN. FT.		

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(2) PLAN AND PROFILE SHEETS

STA. 7397+01 IN PLACE
TYPE H DROP INLET IN MEDIAN
RETAIN AND ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL 1 DROP INLET

STA. 7397+01 IN PLACE
24" x 92' R.C. PIPE CULVERT TO RT.
RETAIN

STA. 7400+51.00 TO STA. 7402+61.00 - IN PLACE
38'-6" X 210' CONCRETE SLAB SPANS
WITH CONCRETE PIERS
BRIDGE NO. A3785
REMOVE AS EXISTING BRIDGE STRUCTURE
(SITE NO. 3) - 0.50 LUMP SUM

STA. 7400+39.00 TO STA. 7402+49.00 - IN PLACE
38'-6" X 210' CONCRETE SLAB SPANS
WITH CONCRETE PIERS
BRIDGE NO. B3785
REMOVE AS EXISTING BRIDGE STRUCTURE
(SITE NO. 3) - 0.50 LUMP SUM

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No. 7605
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BRANNON LANDING RD.

SPECIAL FLOOD HAZARD AREA

SPECIAL FLOOD HAZARD AREA

Eqn 7421+29.76 = Eqn 7395+62.24

PC 7404+07.34

PI = 7414+99.94
Δ = 6°57'16.0" LT.
D = 0°15'00"
T = 1392.60'
L = 2781.77'
PC = 7404+07.34
PT = 7431+89.12
e = MATCH EXIST.
Ls = MATCH EXIST.

7420 7400 7405

24" x 190' R.C. PIPE @ -0.003%
+65
TOP Y.D. 280.88
F.L. Y.D. 275.20
24" x 426' R.C. PIPE @ 0.001%
+00
TOP D.I. 279.04
F.L. D.I. 275.23

BM: 951 CHL SO,SO IN S\W CORN OF BR #3784
107.46 RT. OF STA. o 7420+62.49
ELEVATION = 298.32

P.V.I. 7397+00.00 ELEV. 278.45
P.V.C. 7397+36.74 ELEV. 278.49
K 354.97 VC=100' e=0.04'
P.V.T. 7398+36.74 ELEV. 278.84
P.V.C. 7398+79.50 ELEV. 279.06
P.V.I. 7399+42.00 ELEV. 279.37
B.E. 7400+43.00 (B)
P.V.C. 7403+07.00 ELEV. 279.37
P.V.I. 7403+69.50 ELEV. 279.37
0.09% 0.50% -0.00% +0.50%
+01 TOP D.I. 277.90
+01 TOP D.I. 277.56
P.V.I. 7397+86.74 ELEV. 278.59
K 250.21 VC=125' e=-0.08'
DESIGN HW ELEV. 272.00
K 250.21 VC=125' e=-0.08'
P.V.T. 7404+32.00 ELEV. 279.06
F.L. D.I. 271.93
F.L. OUTLET 270.87 (RT.)
P.V.I. 7400+04.50 ELEV. 279.37
WESTBOUND PROFILE GRADE

EASTBOUND PROFILE GRADE
P.V.C. 7397+18.00 ELEV. 278.60
K 217.98 VC=100' e=0.06'
P.V.T. 7398+18.00 ELEV. 278.87
P.V.C. 7398+55.50 ELEV. 279.06
P.V.I. 7399+18.00 ELEV. 279.37
B.E. 7400+31.00 (A)
P.V.C. 7402+57.00 (A) ELEV. 279.37
P.V.I. 7403+30.00 ELEV. 279.37
0.50% 0.00% -0.50%
+01 TOP D.I. 277.90
P.V.I. 7397+68.00 ELEV. 278.62
K 250.21 VC=125' e=-0.08'
P.V.I. 7399+80.50 ELEV. 279.37
DESIGN HW ELEV. 272.00
K 250.21 VC=125' e=-0.08'
P.V.T. 7403+92.50 ELEV. 279.06
F.L. D.I. 271.93
F.L. OUTLET 270.87 (RT.)
BM: 953 CHL SO IN BR
20.86 RT. OF STA. 7400+38.66
ELEVATION = 278.76

7416+00 7417+00 7418+00 7419+00 7420+00 7395+62 7396+00 7397+00 7398+00 7399+00 7400+00 7401+00 7402+00 7403+00 7404+00 7405+00

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				6	ARK.			
				JOB NO.		080388	141	452

(2) PLAN AND PROFILE SHEETS

STA. 7407+00 IN PLACE
TYPE H DROP INLET IN MEDIAN
RETAIN & ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL I DROP INLET

STA. 7407+00 IN PLACE
18" x 116' R.C. PIPE CULVERT TO LT.
RETAIN

PI = 7414+99.94
Δ = 6°57'16.0" LT.
D = 0°15'00"
T = 1392.60'
L = 2781.77'
PC = 7404+07.34
PT = 7431+89.12
e = MATCH EXIST.
Ls = MATCH EXIST.

STA. 7411+16 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 3'-0"
WITH 18" x 416' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7407+00

STA. 7413+68 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 3'-0"
WITH 18" x 252' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7411+16

STA. 7414+00 INSTALL
OVERHEAD HIGHWAY SIGN
EASTBOUND LANES
SEE SIGNING PLANS

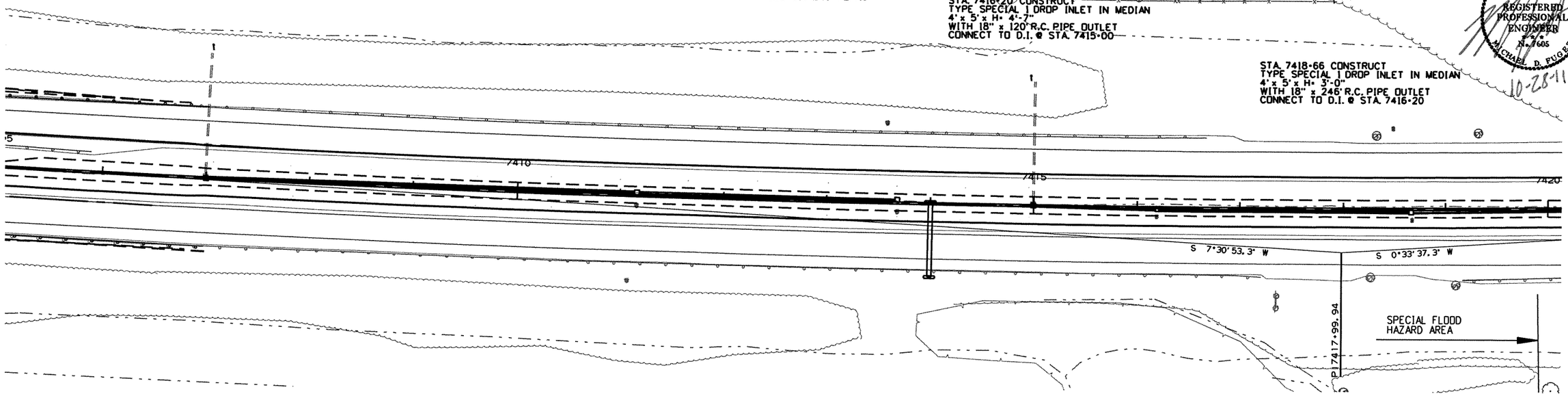
STA. 7415+00 IN PLACE
TYPE H DROP INLET IN MEDIAN
RETAIN & ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL I DROP INLET

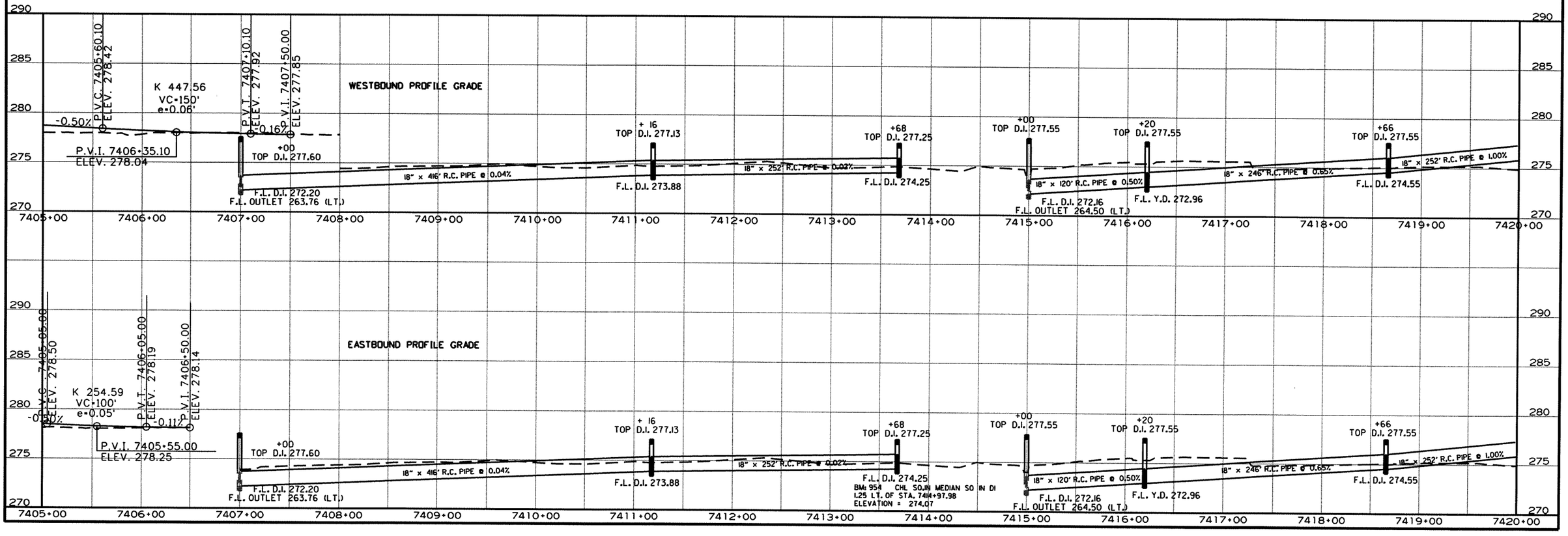
STA. 7415+00 IN PLACE
18" x 116' R.C. PIPE CULVERT TO LT.
RETAIN

STA. 7416+20 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 4'-7"
WITH 18" x 120' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7415+00

STA. 7418+66 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 3'-0"
WITH 18" x 246' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7416+20

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STA. 7421+94 TO STA. 7422+15 IN PLACE
CONCRETE PIER PROTECTION
IN MEDIAN
REMOVE

PI = 7414+99.94
Δ = 6°57'16.0" LT.
D = 0°15'00"
T = 1392.60'
L = 2781.77'
PC = 7404+07.34
PT = 7431+89.12
e = MATCH EXIST.
Ls = MATCH EXIST.

STA. 7421+94 IN PLACE
IMPACT ATTENUATION BARRIER
IN MEDIAN
REMOVE

STA. 7422+15 IN PLACE
IMPACT ATTENUATION BARRIER
IN MEDIAN
REMOVE

STA. 7421+17 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 3'-0"
WITH 18" x 252' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7418+66

STA. 7423+66 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 3'-0"
WITH 24" x 134' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7425+00

STA. 7425+00 IN PLACE
TYPE H DROP INLET IN MEDIAN
RETAIN & ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL I DROP INLET

STA. 7425+00 IN PLACE
30" x 84' R.C. PIPE CULVERT TO RT.
30" x 90' R.C. PIPE CULVERT TO LT.
RETAIN

STA. 7426+14 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 3'-0"
WITH 24" x 114' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7425+00

STA. 7428+65 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 3'-6"
WITH 24" x 134' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7429+99

STA. 7429+99 IN PLACE
TYPE H DROP INLET IN MEDIAN
RETAIN & ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL I DROP INLET

STA. 7429+99 IN PLACE
24" x 100' R.C. PIPE CULVERT TO RT.
RETAIN

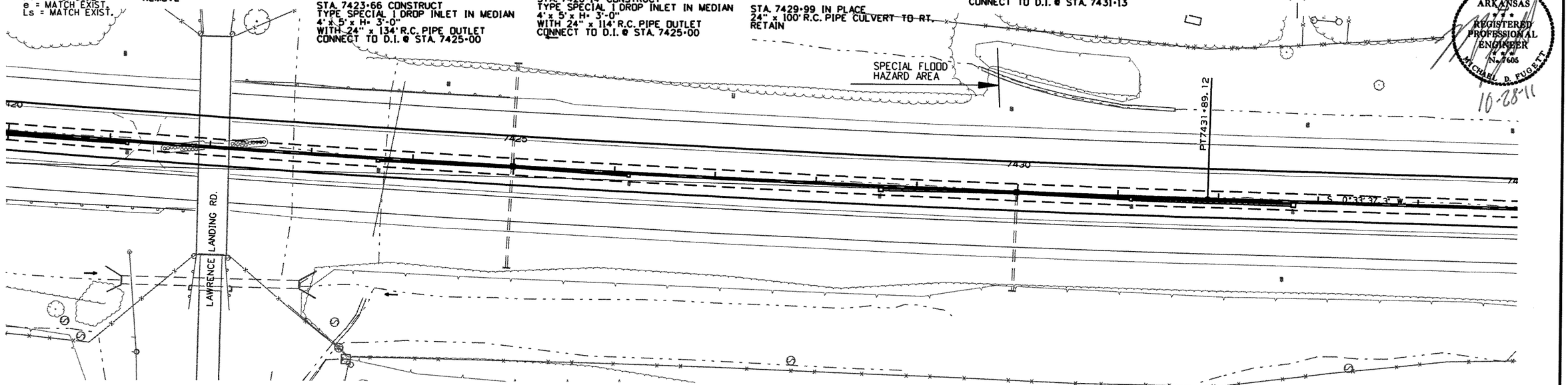
STA. 7431+13 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 5'-3"
WITH 24" x 114' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7429+99

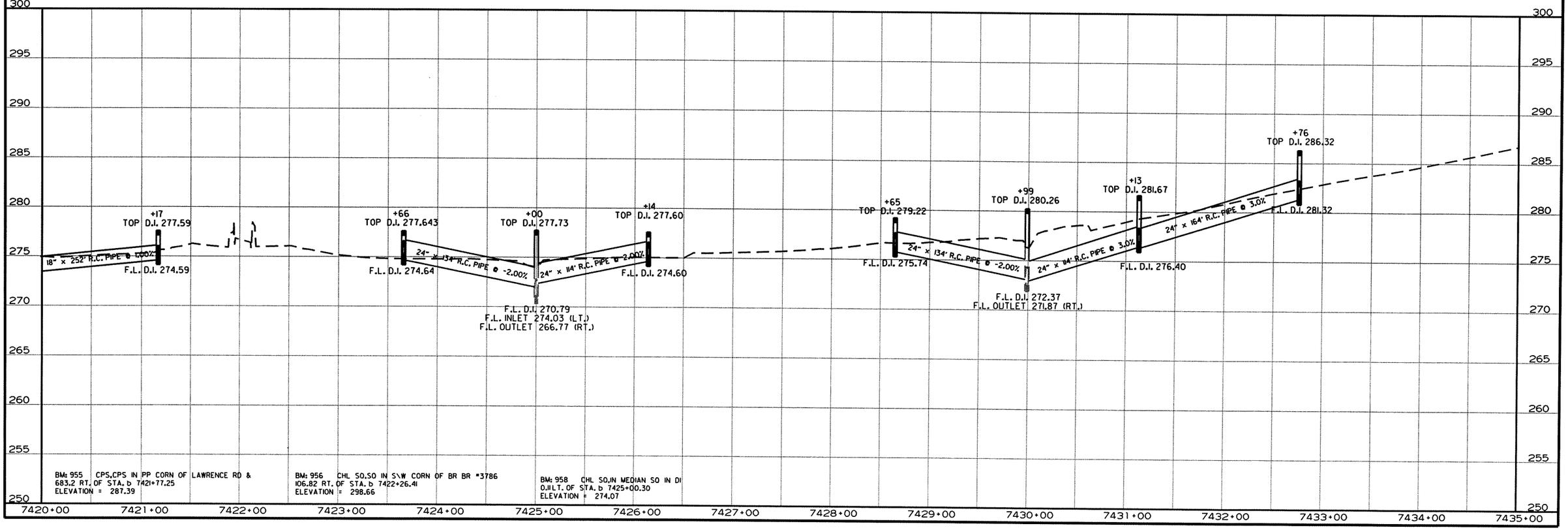
STA. 7432+76 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 5'-0"
WITH 24" x 164' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7431+13

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.		080388	142	452

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11





r080388.dgn 9/12/11

STA. 7436+00 IN PLACE
TYPE H DROP INLET IN MEDIAN
RETAIN & ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL I DROP INLET

STA. 7436+00 IN PLACE
24" x 84' R.C. PIPE CULVERT TO RT.
RETAIN

STA. 7440+00 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 3'-4"
WITH 24" x 400' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7436+00

STA. 7444+00 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 4'-7"
WITH 24" x 400' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7448+00

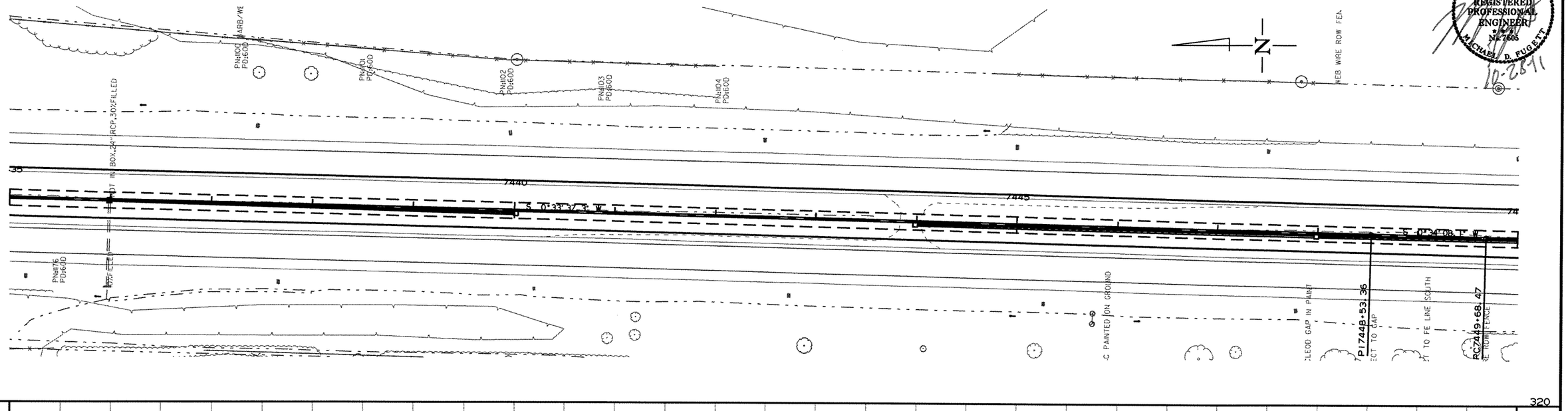
PI = 7466+47.90
Δ = 16°40'32.0" RT.
D = 0°30'00"
T = 1679.43'
L = 3335.11'
PC = 7449+68.47
PT = 7483+03.58
e = MATCH EXIST.
Ls = MATCH EXIST.

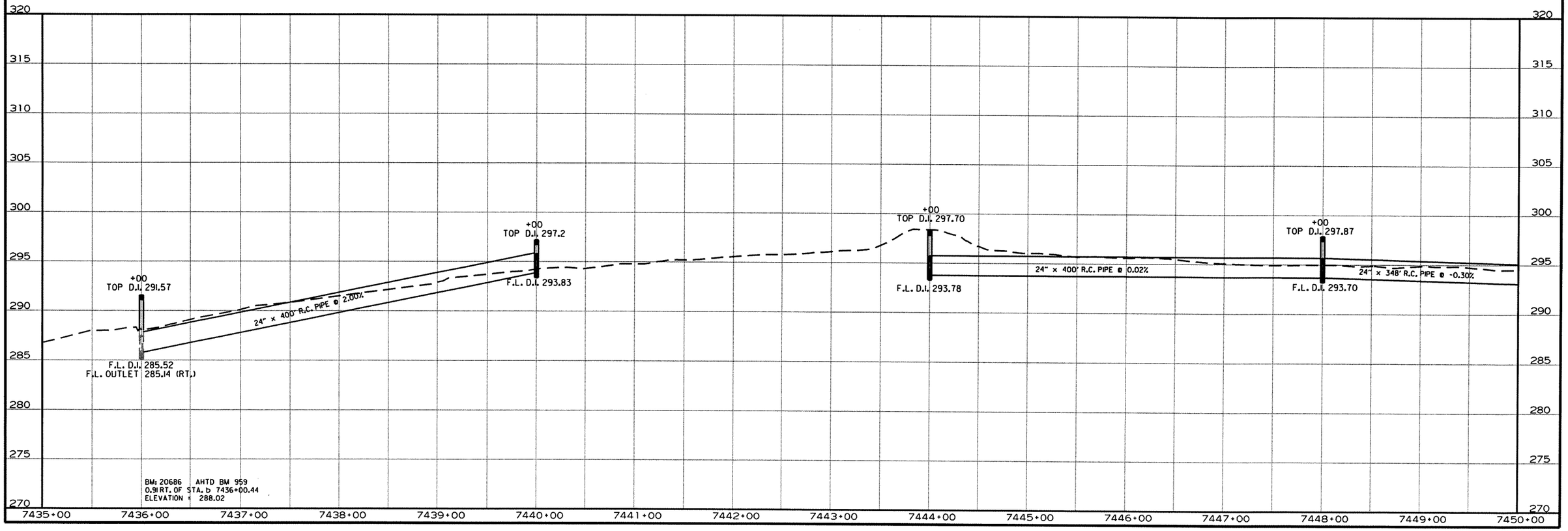
STA. 7448+00 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 4'-2"
WITH 24" x 348' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7451+48

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.		080388	143	452

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. PUGETT
12-28-11





r080388.dgn 9/12/11

PI = 7466+47.90
Δ = 16°40'32.0" RT.
D = 0°30'00"
T = 1679.43'
L = 3335.11'
PC = 7449+68.47
PT = 7483+03.58
e = MATCH EXIST.
Ls = MATCH EXIST.

STA. 7451+48 IN PLACE
TYPE H DROP INLET IN MEDIAN
RETAIN & ADJUST TO GRADE AND
MODIFY TO TYPE SPECIAL I DROP INLET

STA. 7451+48 IN PLACE
30" x 84' R.C. PIPE CULVERT TO RT.
30" x 90' R.C. PIPE CULVERT TO LT
RETAIN

STA. 7455+00 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 3'-8"
WITH 24" x 352' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7451+48

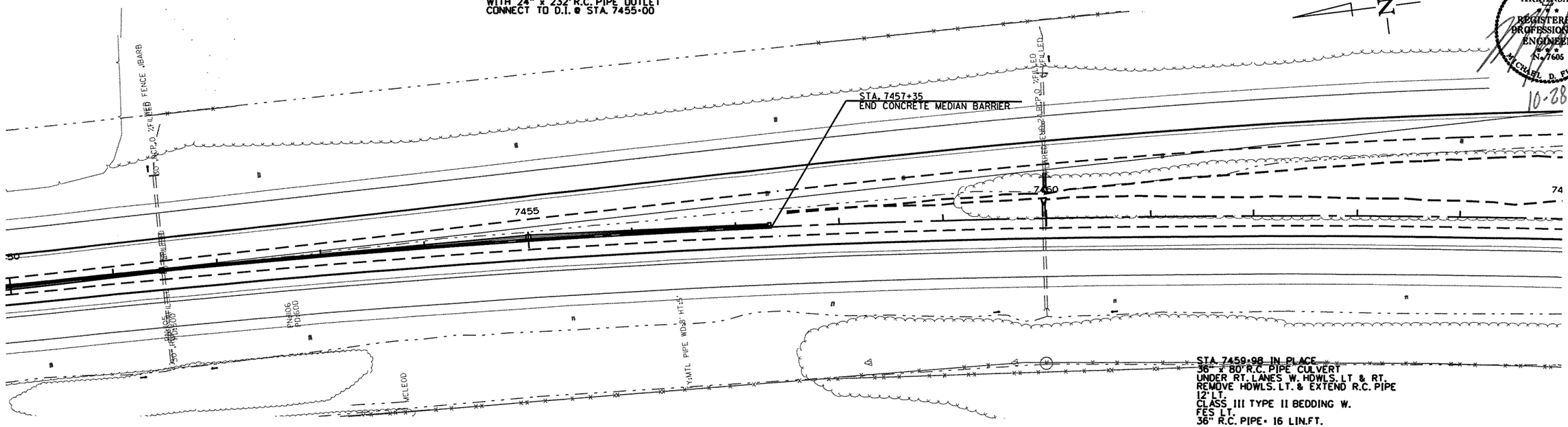
STA. 7457+32 CONSTRUCT
TYPE SPECIAL I DROP INLET IN MEDIAN
4' x 5' x H= 3'-6"
WITH 24" x 232' R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 7455+00

STA. 7459+98 IN PLACE
36" x 84' R.C. PIPE CULVERT
UNDER LT. LANES W. HDWLS. LT & RT.
REMOVE HDWLS. RT. & EXTEND R.C. PIPE
12' RT.
CLASS III TYPE II BEDDING W.
FES RT.
36" R.C. PIPE- 16 LIN.FT.
36" FES- 1 EA.

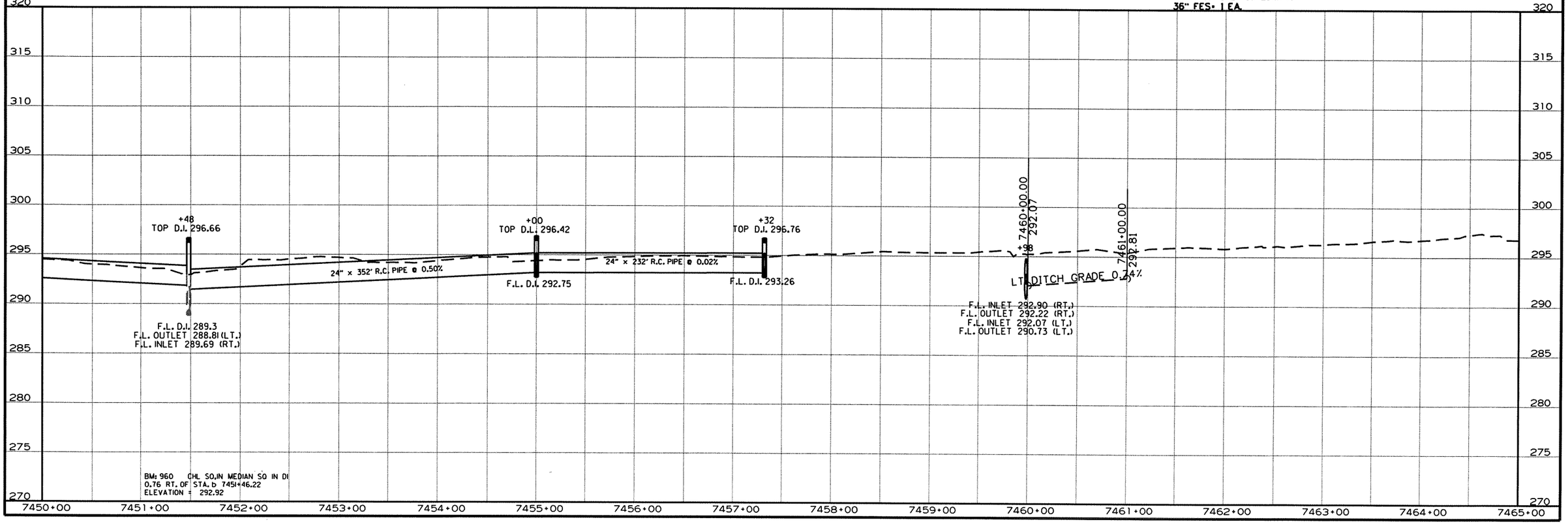
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	144	452

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11



STA. 7459+98 IN PLACE
36" x 80' R.C. PIPE CULVERT
UNDER RT. LANES W. HDWLS. LT & RT.
REMOVE HDWLS. LT. & EXTEND R.C. PIPE
12' LT.
CLASS III TYPE II BEDDING W.
FES LT.
36" R.C. PIPE- 16 LIN.FT.
36" FES- 1 EA.



r080388.dgn 9/12/11

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.		080388	145	452

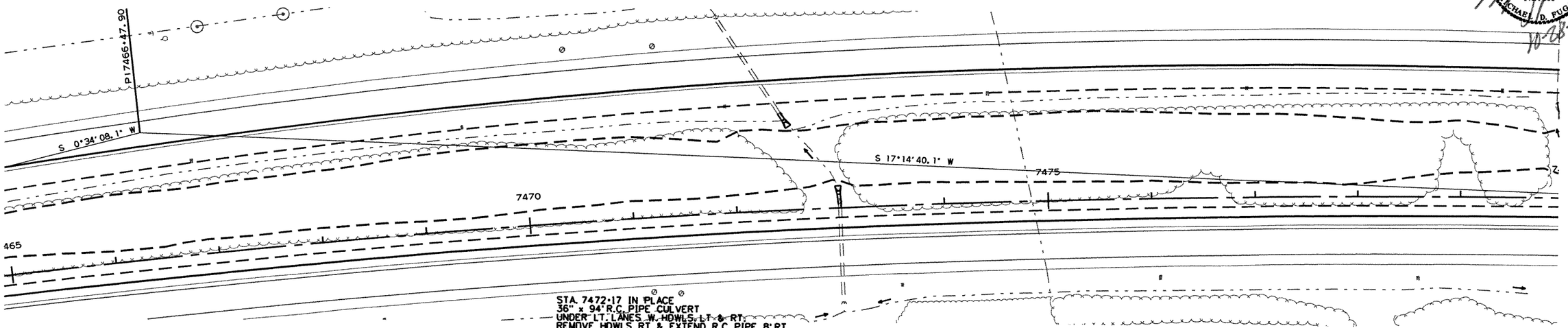
(2) PLAN AND PROFILE SHEETS

PI = 7466+47.90
Δ = 16°40'32.0" RT.
D = 0°30'00"
T = 1679.43'
L = 3335.11'
PC = 7449+68.47
PT = 7483+03.58
e = MATCH EXIST.
Ls = MATCH EXIST.

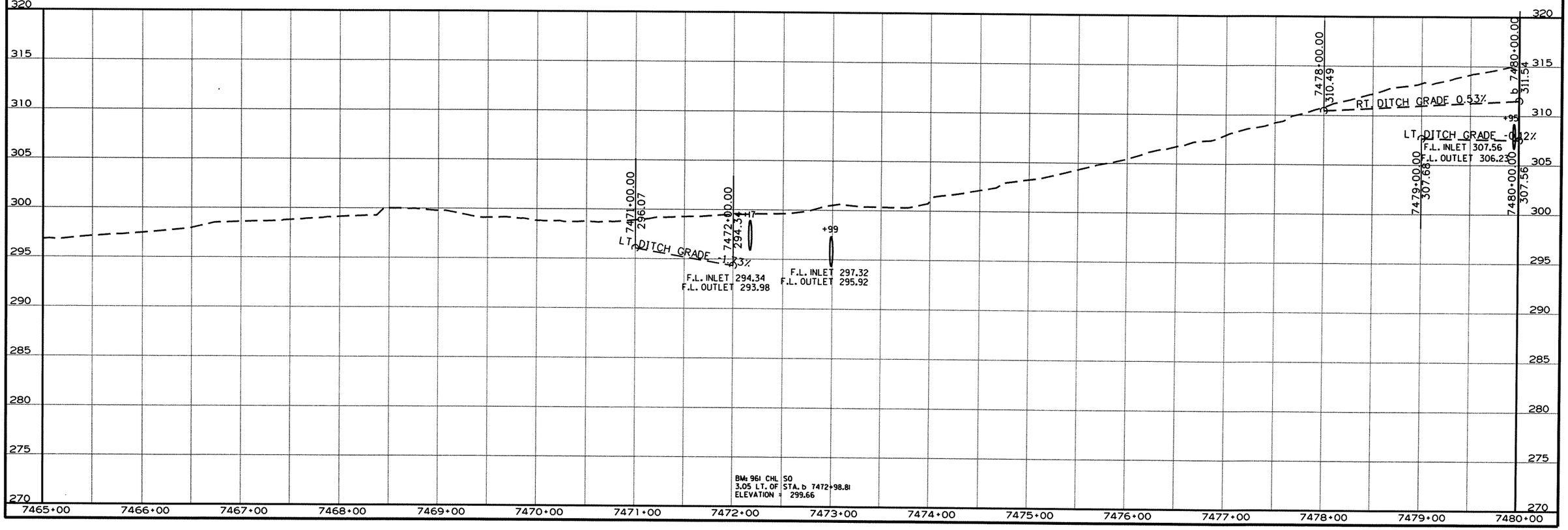
STA. 7472+99 IN PLACE
36" x 94" R.C. PIPE CULVERT
UNDER RT. LANES W. HDWLS. LT & RT.
REMOVE HDWLS. LT. & EXTEND R.C. PIPE
10' LT.
CLASS III TYPE II BEDDING W/ FES LT.
36" R.C. PIPE- 14 LIN.FT.
36" FES- 1 EA.

STA. 7479+95 IN PLACE
30" x 86" R.C. PIPE CULVERT
UNDER LT. LANES W. HDWLS. LT & RT.
REMOVE HDWLS. RT. & EXTEND R.C. PIPE
10' RT.
CLASS III TYPE II BEDDING W/ FES RT.
30" R.C. PIPE- 14 LIN.FT.
30" FES- 1 EA.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
NO. 7605
MICHAEL D. FUGETT
10-28-11



STA. 7472+17 IN PLACE
36" x 94" R.C. PIPE CULVERT
UNDER LT. LANES W. HDWLS. LT & RT.
REMOVE HDWLS. RT. & EXTEND R.C. PIPE 8' RT.
CLASS III TYPE II BEDDING W/ FES RT.
36" R.C. PIPE- 12 LIN.FT.
36" FES- 1 EA.



r080388.dgn 9/12/11

PI = 7466+47.90
Δ = 16°40'32.0" RT.
D = 0°30'00"
T = 1679.43'
L = 3335.11'
PC = 7449+68.47
PT = 7483+03.58
e = MATCH EXIST.
Ls = MATCH EXIST.

STA. 7480+11
REMOVAL AND DISPOSAL OF CONCRETE DITCH PAVING
LT. OF CENTERLINE= 18 L.F.

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.		080388	146	452

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7605
MICHAEL D. FUGETT
10-28-11

STA. 7490+00.00
END JOB

7485
7490
7495
S 17°14'40.1" W
S 17°14'40.1" W
80
PT 7483+03.58

STA. 7480+11 IN PLACE
30" x 82' R.C. PIPE CULVERT
UNDER RT. LANES W. HDWLS. LT & RT.
REMOVE HDWLS. LT. & EXTEND R.C. PIPE
16' LT.
CLASS III TYPE II BEDDING W/ FES LT.
30" R.C. PIPE= 20 LIN.FT.
30" FES= 1 EA.

+11
F.L. INLET 312.55
F.L. OUTLET 311.54

BM: 962 CHL SO
82.89 RT. OF STA. b 7480+10.69
ELEVATION = 315.83

BM: 963 CHL SO.SO IN DI16' W OF E BOUND EP
93.9 RT. OF STA. b 7494+95.57
ELEVATION = 318.80

350 345 340 335 330 325 320 315 310 305 300

7480+00 7481+00 7482+00 7483+00 7484+00 7485+00 7486+00 7487+00 7488+00 7489+00 7490+00 7491+00 7492+00 7493+00 7494+00 7495+00

r080388.dgn 9/12/11

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.		080388	147	152

(2) SIGNING QUANTITIES

SIGNING SUMMARY OF QUANTITIES

ITEM NUMBER	ITEM	TOTAL	UNIT
SP	OVERHEAD VMS ASSEMBLY	3	EACH
SP	ANTENNA SUPPORT (25' HT.) WITH CAMERA	2	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-23-05)	1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-23-07)	1	EACH
SP	STEELOVERHEAD SIGN STRUCTURE (OH-040-23-08)	1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-23-09)	1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-23-10)	1	EACH
SP	STEELOVERHEAD SIGN STRUCTURE (OH-040-23-11)	1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-23-12)	1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-23-13)	1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-23-14)	1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-23-15)	1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-23-16)	1	EACH
SS & 725	GUIDE SIGN - ROADSIDE MOUNTED (DEMOUNTABLE LEGEND)	758	SQ. FT.
SS & 725	GUIDE SIGN - OVERHEAD MOUNTED (DEMOUNTABLE LEGEND)	3,659	SQ. FT.
SS & 726	STANDARD SIGN	96	SQ. FT.
SS & 727	EXIT NUMBER PANEL (TYPE A)	214	SQ. FT.
SS & 727	EXIT NUMBER PANEL (TYPE B)	79	SQ. FT.
SS & 727	EXIT NUMBER PANEL (TYPE C)	70	SQ. FT.
730	BREAKAWAY SIGN SUPPORT (TYPE G-2)	5,842	POUND

MAIN LANES SIGNING QUANTITIES OVERHEAD MOUNTED

SIGN NO./ LOCATION	STRUCTURE TYPE			GUIDE SIGN			EXIT NUMBER PANEL				GUARDRAIL				
							LEGEND	TYPE			TYPE A	TERM. ANCHOR TYPE 1	GUARDRAIL TERM. TYPE 2	AGG. BASE CR (CL. 7)	ACHM SURF.CR. 220 LBS/SY
				Length	Height			A	B	C					
	OH	BM	CL	LIN. FT.		SQ. Ft.		SQ. FT.			LIN. FT.	EACH	EACH	TON	TON
OH-040-23-01	0														
OH-040-23-STA7281+60WB-A				13.50	15.00	202.50	129A		26.25						
OH-040-23-STA7281+60WB-B				13.50	14.50	195.75	129B		26.25						
BM-040-23-02		0													
BM-040-23-STA7273+60WB-A				13.00	15.00	195.00	129B		26.25						
BM-040-23-STA7273+60WB-B				10.50	11.50	120.75									
0H-040-23-05	1										SEE ROADWAY PLANS FOR GUARDRAIL DETAILS				
OH-040-23-STA7110+50WB-A				17.00	13.00	221.00	125	23.75							
OH-040-23-STA7110+50WB-B				12.00	8.00	96.00	124	23.75							
0H-040-23-08	1										SEE ROADWAY PLANS FOR GUARDRAIL DETAILS				
OH-040-23-STA7136+50WB-A				17.00	12.50	212.50	125	23.75							
OH-040-23-STA7136+50WB-B				18.50	11.00	203.50									
OH-040-23-09	1										SEE ROADWAY PLANS FOR GUARDRAIL DETAILS				
OH-040-23-STA7152+40EB-A				14.00	10.50	147.00	127	23.75							
VMS-040-23-STA7152+40EB-B				21.50	6.50										
OH-040-23-07	1										SEE ROADWAY PLANS FOR GUARDRAIL DETAILS				
OH-040-23-STA7188+20WB-A				14.00	10.50	147.00	127	23.75							
OH-040-23-STA7188+20WB-B				14.00	12.00	168.00	125	23.75							
OH-040-23-10	1										SEE ROADWAY PLANS FOR GUARDRAIL DETAILS				
OH-040-23-STA7202+60EB-A				15.50	12.00	186.00	129	23.75							
OH-040-23-STA7202+60EB-B				15.50	11.00	170.50									
OH-040-23-11	1										SEE ROADWAY PLANS FOR GUARDRAIL DETAILS				
OH-040-23-STA7229+00WB-A				14.00	9.50	133.00	127	23.75							
OH-040-23-STA7229+00WB-B				18.50	11.00	203.50									
OH-040-23-12	1										SEE ROADWAY PLANS FOR GUARDRAIL DETAILS				
OH-040-23-STA7258+00EB-A				15.50	13.00	201.50	129	23.75							
OH-040-23-STA7258+00EB-B				15.50	11.00	170.50									
OH-040-23-13	1										SEE ROADWAY PLANS FOR GUARDRAIL DETAILS				
OH-040-23-STA7294+00WB-A				15.50	13.00	201.50	129A-B			35.00					
OH-040-23-STA7294+00WB-B				18.50	11.00	203.50									
OH-040-23-14	1										SEE ROADWAY PLANS FOR GUARDRAIL DETAILS				
OH-040-23-STA7336+00WB-A				15.50	12.00	186.00	129A-B			35.00					
VMS-040-23-STA7336+00WB-B				21.50	6.50										
OH-040-23-15	1										SEE ROADWAY PLANS FOR GUARDRAIL DETAILS				
FUTURE SIGN															
VMS-040-23-STA7394+56EB-B				21.50	6.50										
OH-040-23-16	1										SEE ROADWAY PLANS FOR GUARDRAIL DETAILS				
FUTURE SIGN															
OH-040-23-STA7414+00EB-B				12.50	7.50	93.75									
TOTALS:	**11**					**3658.75**		**213.75**	**78.75**	**70.00**					

MAIN LANES SIGNING QUANTITIES ROADSIDE MOUNTED I-BEAM SIGN SUPPORTS

JOB 080388 SIGN NO./ LOCATION	I-BEAM SIGN SUPPORTS TYPE		GUIDE SIGN ROADSIDE MOUNTED Length	Height		BREAKAWAY SIGN SUPPORT STEEL SECT. A-572		SIGN POST LENGTH H-1	H-2	STUB POST H-1	H-2	FOOTINGS DIA.	DEPTH	EMBED.	SIGN POST AND STUB
	G-1	G-2	LIN. FT.		SQ. Ft.	BEAM	LBS	LIN FT		LIN FT		LIN FT			POUND
EX-040-23-STA7157+50EB		1	7.50	5.00	37.50	W6	9	12.50	13.50	1.99	1.99	1.50	2.50	1.66	269.82
EX-040-23-STA7183+30WB		1	7.50	5.00	37.50	W6	9	12.50	13.50	1.99	1.99	1.50	2.50	1.66	269.82
EX-040-23-STA7264+00EB		1	7.50	5.00	37.50	W6	9	12.50	13.50	1.99	1.99	1.50	2.50	1.66	269.82
EX-040-23-STA7289+00WB		1	7.50	5.00	37.50	W6	9	12.50	13.50	1.99	1.99	1.50	2.50	1.66	269.82
EX-040-23-STA7280+90WB		1	9.00	5.00	45.00	W6	9	12.50	13.50	1.99	1.99	1.50	2.50	1.66	269.82
EX-040-23-STA7269+00WB		1	8.00	11.00	88.00	W6	9	18.50	19.50	1.99	1.99	1.50	2.50	1.66	377.82
EX-040-23-STA7498+00EB		1	6.50	7.00	45.50	W6	9	14.50	15.50	1.99	1.99	1.50	2.50	1.66	305.82
GM-040-23-STA7174+00WB		1	12.00	7.50	90.00	W6	9	15.00	16.00	1.99	1.99	1.50	2.50	1.66	314.82
LF-040-23-STA7215+10EB		1	17.50	10.50	183.75	W8	21	18.00	19.00	5.01	5.01	2.50	7.00	4.68	987.42
LG-040-23-STA7223+00EB		1	13.00	12.00	156.00	W8	21	19.50	20.50	5.01	5.01	2.50	7.00	4.68	1050.42
TOTALS:		**10**			**758.25**										**4385.40**

STANDARD SIGNS (FLAT SHEET) I-BEAM SIGN SUPPORTS

SIGN NO./ LOCATION	STANDARD SIGNS FLAT SHEET I-BEAM SIGN SUPPORTS TYPE G-1	G-2	STANDARD SIGN SQ. FT.	BREAKAWAY SIGN SUPPORT STEEL SECT. A-572 BEAM	LBS	SIGN POST LENGTH H-1	H-2	STUB POST H-1	H-2	FOOTINGS DIA.	DEPTH	EMBED.	SIGN POST AND STUB POUND
						LIN FT		LIN FT		LIN FT			
SS-040-23-STA7469+10EB-A		1	16.00	W6	9	11.00	12.00	1.99	1.99	1.50	3.00	2.00	242.82
SS-040-23-STA7469+10EB-B		1	16.00	W6	9	11.00	12.00	1.99	1.99	1.50	3.00	2.00	242.82
SS-040-23-STA7454+50EB-A		1	16.00	W6	9	11.00	12.00	1.99	1.99	1.50	3.00	2.00	242.82
SS-040-23-STA7454+50EB-B		1	16.00	W6	9	11.00	12.00	1.99	1.99	1.50	3.00	2.00	242.82
SS-040-23-STA7461+10EB-A		1	16.00	W6	9	11.00	12.00	1.99	1.99	1.50	3.00	2.00	242.82
SS-040-23-STA7461+10EB-B		1	16.00	W6	9	11.00	12.00	1.99	1.99	1.50	3.00	2.00	242.82
TOTALS:		**6**	**96.00**										**1456.92**

NOTE:
BREAKAWAY SIGN SUPPORT TOTAL IS CALCULATED BY TAKING THE LENGTH OF H-1, H-2, H-3 AND EACH STUB POST AND MULTIPLYING BY THE BEAM WEIGHT (LBS).

THE CONTRACTOR WILL BE REQUIRED TO INSTALL OVERHEAD SIGNS AND SIGN STRUCTURES OVER ROADWAYS OPEN TO TRAFFIC. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE TRAFFIC CONTROL. PAYMENT WILL BE CONSIDERED TO BE INCLUDED IN ITEM 603 OF THE STANDARD SPECIFICATIONS.

THE CONTRACTOR WILL VERIFY SIGN PLACEMENT AND MAKE ANY ADJUSTMENTS NECESSARY TO ALIGN SIGNS OVER INTENDED LANES.

ALL SIGNS SHALL BE CONSTRUCTED WITH TYPE-III SHEETING BACKGROUND AND SHALL HAVE DEMOUNTABLE LEGEND CONSTRUCTED OF PRISMATIC SHEETING (TYPE-VIII OR IX), UNLESS OTHERWISE NOTED IN THE PLANS. THE LEGEND SHALL BE PLACED USING CLEARVIEW SPACING AND SERIES-5W AND 5WR CHARACTERS, UNLESS OTHERWISE NOTED IN THE PLANS.

THE CLEARVIEW FONT SHALL FOLLOW THE SPACE TABLES FOR CLEARVIEW AND NOT SHS E-MODIFIED. THIS INCLUDES THE USE OF CLEARVIEW 5-W-R. FOR GENERAL GUIDANCE ON LETTER AND WORD SPACING REFER TO THE FHWA CLEARVIEW TYPEFACE SUPPLEMENT. (HTTP://MUTCD. FHWA.DOT.GOV)

EXISTING LOGOS WILL BE RELOCATED TO THE NEW LOGO SIGN IN THE ORDER SHOWN ON THE PLANS BY THE CONTRACTOR. THE LOGO INSTALLATION SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED SUBSIDIARY TO OTHER ITEMS IN THE CONTRACT.

ALL EXISTING GUIDE SIGNS SHALL BE MAINTAINED IN SUCH A MANNER THAT THE SIGNS ARE FULLY VISIBLE, INTACT, AND ERECT FOR THE DURATION OF THE PROJECT, AND SHALL BE REMOVED WHEN THEIR USE IS NO LONGER REQUIRED.

THE EXISTING SIGNS AND SIGN STRUCTURE SHALL BECOME THE PROPERTY OF THE CONTRACTOR. THE EXISTING FOOTINGS SHALL BE REMOVED TO A MINIMUM OF 12" BELOW NORMAL GRADE AND THE HOLES FILLED WITH A SUITABLE MATERIAL AND COMPACTED. THE REMOVAL AND DISPOSAL OF THE SIGNS, SIGN SUPPORTS AND FOUNDATIONS SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED SUBSIDIARY TO OTHER ITEMS IN THE CONTRACT.

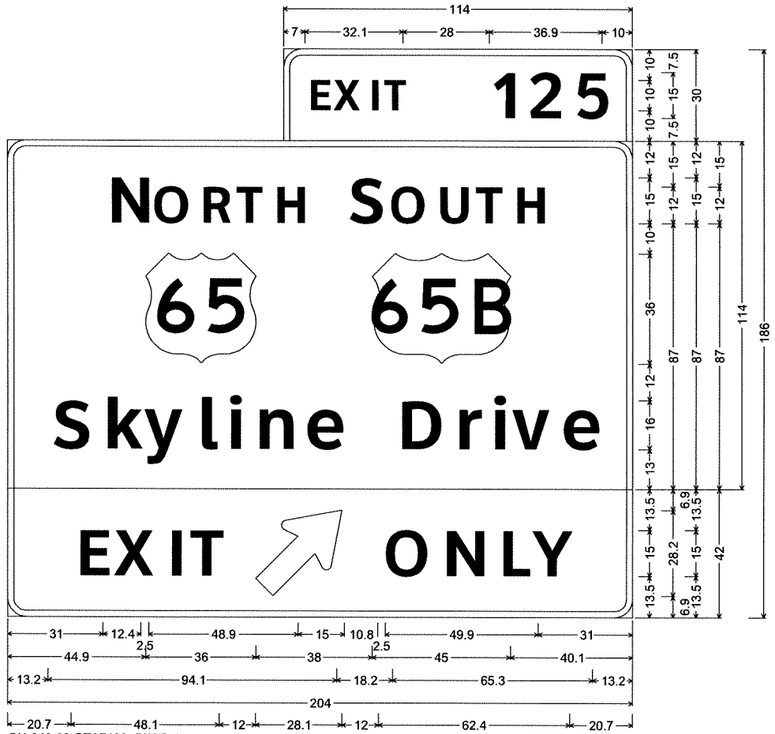
THE EXISTING VMS AT STA 7416+50 IS PART OF THE DEPARTMENT'S MORGAN NICK/AMBER ALERT PROGRAM; IT SHALL REMAIN FULLY OPERATIONAL, INTACT, AND ERECT FOR THE DURATION OF THE PROJECT. ANY DAMAGE OR COMPONENT FAILURE OF THE VARIABLE MESSAGE SIGN ASSEMBLY THAT OCCURS AS A RESULT OF ADJACENT CONSTRUCTION SHALL BE REPAIRED AND/OR REPLACED AT NO COST TO THE DEPARTMENT. THE ENGINEER SHALL PROVIDE APPROVAL IN ADVANCE OF ANY REPAIR TO DAMAGED COMPONENTS IN LIEU OF REPLACEMENT.

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 5851 ANTONY SULLIVAN 9/26/16

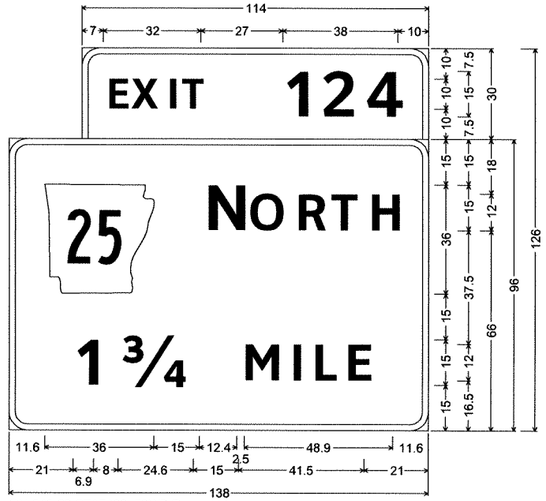
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	148	452

(2) SIGN PLACEMENT SHEET

OH-040-23-05



OH-040-23-STA7109+50WB-A;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [125] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
[N] ClearviewHwy-5-W; [ORTH] ClearviewHwy-5-W; [S] ClearviewHwy-5-W;
[OUTH] ClearviewHwy-5-W; [Skyline Drive] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, Black on Yellow;
[EXIT] ClearviewHwy-5-W; Standard Arrow Custom 35.8" X 21.6" 45°; [ONLY] ClearviewHwy-5-W;



OH-040-23-STA7109+50WB-B;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [124] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
M1-6; [N] ClearviewHwy-5-W; [ORTH] ClearviewHwy-5-W;
[1] ClearviewHwy-5-W; [1¾] ClearviewHwy-5-W;
[MILE] ClearviewHwy-5-W;

THE CONTRACTOR WILL BE REQUIRED TO INSTALL OVERHEAD SIGNS AND SIGN STRUCTURES OVER ROADWAYS OPEN TO TRAFFIC. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE TRAFFIC CONTROL. PAYMENT WILL BE CONSIDERED TO BE INCLUDED IN ITEM 603 OF THE STANDARD SPECIFICATIONS.

THE CONTRACTOR WILL VERIFY SIGN PLACEMENT AND MAKE ANY ADJUSTMENTS NECESSARY TO ALIGN SIGNS OVER INTENDED LANES.

ALL SIGNS SHALL BE CONSTRUCTED WITH TYPE-III SHEETING BACKGROUND AND SHALL HAVE DEMOUNTABLE LEGEND CONSTRUCTED OF PRISMATIC SHEETING (TYPE-VIII OR IX), UNLESS OTHERWISE NOTED IN THE PLANS. THE LEGEND SHALL BE PLACED USING CLEARVIEW SPACING AND SERIES-5W AND 5WR CHARACTERS, UNLESS OTHERWISE NOTED IN THE PLANS.

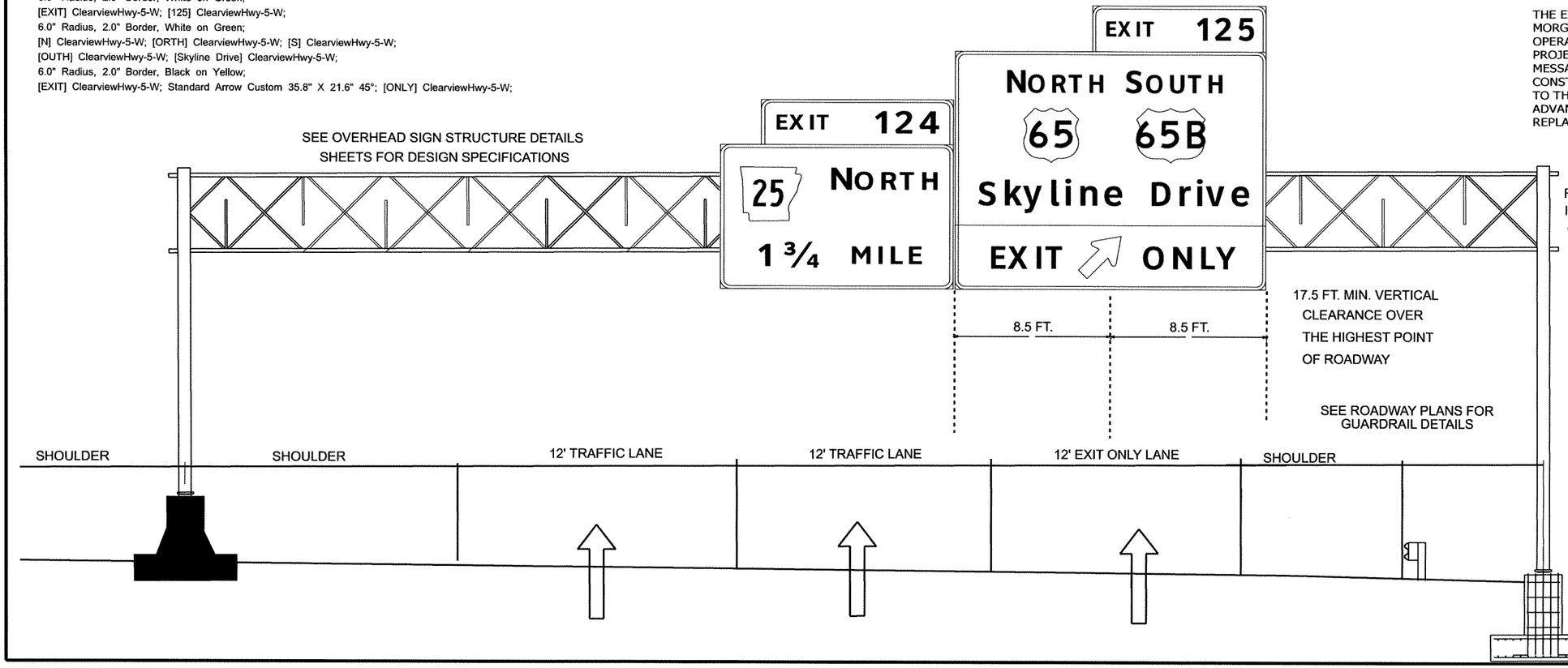
THE CLEARVIEW FONT SHALL FOLLOW THE SPACE TABLES FOR CLEARVIEW AND NOT SHS E-MODIFIED. THIS INCLUDES THE USE OF CLEARVIEW 5-W-R. FOR GENERAL GUIDANCE ON LETTER AND WORD SPACING REFER TO THE FHWA CLEARVIEW TYPEFACE SUPPLEMENT. (HTTP://MUTCD. FHWA.DOT.GOV)

EXISTING LOGOS WILL BE RELOCATED TO THE NEW LOGO SIGN IN THE ORDER SHOWN ON THE PLANS BY THE CONTRACTOR. THE LOGO INSTALLATION SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED SUBSIDIARY TO OTHER ITEMS IN THE CONTRACT.

ALL EXISTING GUIDE SIGNS SHALL BE MAINTAINED IN SUCH A MANNER THAT THE SIGNS ARE FULLY VISIBLE, INTACT, AND ERECT FOR THE DURATION OF THE PROJECT, AND SHALL BE REMOVED WHEN THEIR USE IS NO LONGER REQUIRED.

THE EXISTING SIGNS AND SIGN STRUCTURE SHALL BECOME THE PROPERTY OF THE CONTRACTOR. THE EXISTING FOOTINGS SHALL BE REMOVED TO A MINIMUM OF 12" BELOW NORMAL GRADE AND THE HOLES FILLED WITH A SUITABLE MATERIAL AND COMPACTED. THE REMOVAL AND DISPOSAL OF THE SIGNS, SIGN SUPPORTS AND FOUNDATIONS SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED SUBSIDIARY TO OTHER ITEMS IN THE CONTRACT.

THE EXISTING VMS AT STA 7416+50 IS PART OF THE DEPARTMENT'S MORGAN NICK/AMBER ALERT PROGRAM; IT SHALL REMAIN FULLY OPERATIONAL, INTACT, AND ERECT FOR THE DURATION OF THE PROJECT. ANY DAMAGE OR COMPONENT FAILURE OF THE VARIABLE MESSAGE SIGN ASSEMBLY THAT OCCURS AS A RESULT OF ADJACENT CONSTRUCTION SHALL BE REPAIRED AND/OR REPLACED AT NO COST TO THE DEPARTMENT. THE ENGINEER SHALL PROVIDE APPROVAL IN ADVANCE OF ANY REPAIR TO DAMAGED COMPONENTS IN LIEU OF REPLACEMENT.



REPLACE EXISTING OVERHEAD OH-040-23-05
INSTALL BY JOB 080296
OH-040-23-STA 7109+50WB

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
9/26/11
TONY SULLIVAN

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.		080388	149	452

(2) SIGN PLACEMENT SHEET

OH-040-23-08

SEE OVERHEAD SIGN STRUCTURE DETAILS SHEETS FOR DESIGN SPECIFICATIONS

INSTALL OH-040-23-STA 7136+50WB

(A) EXIT 125

NORTH SOUTH

65 65B

Skyline Drive

EXIT ONLY

(B)

INTERSTATE 40 WEST

Fort Smith

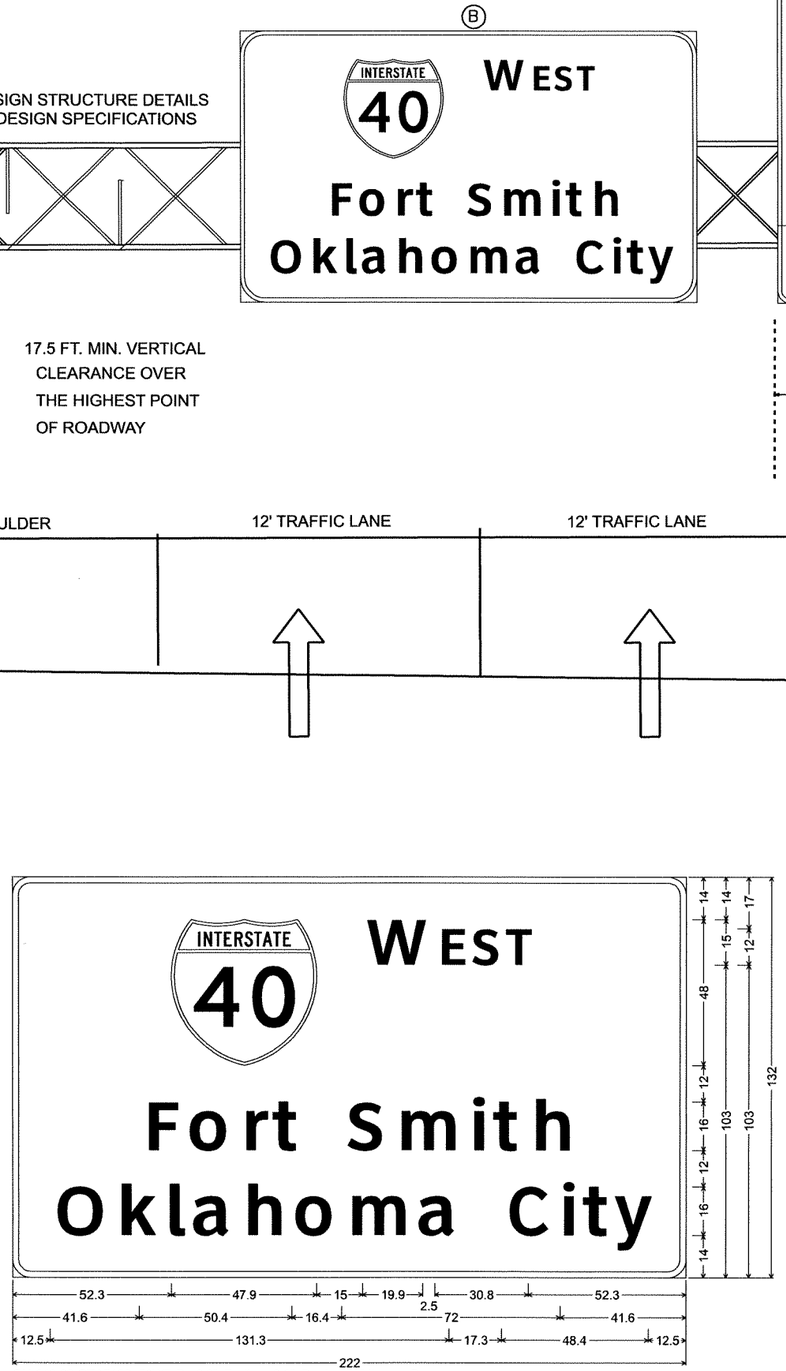
Oklahoma City

17.5 FT. MIN. VERTICAL CLEARANCE OVER THE HIGHEST POINT OF ROADWAY

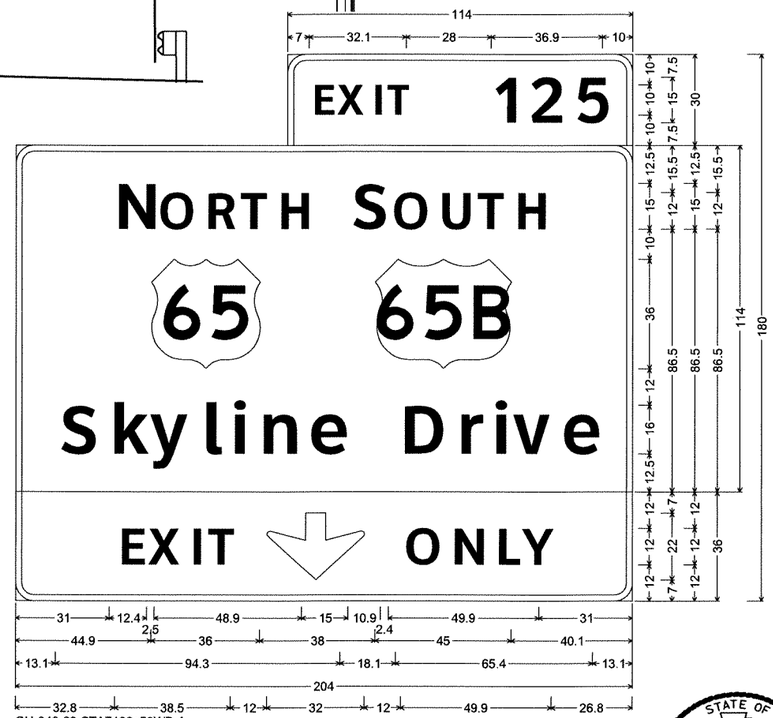
8.5' 8.5'

SEE ROADWAY PLANS FOR GUARDRAIL DETAILS

SHOULDER | SHOULDER | 12' TRAFFIC LANE | 12' TRAFFIC LANE | 12' EXIT ONLY LANE | SHOULDER



OH-040-23-STA7136+50WB-B; 6.0" Radius, 2.0" Border, White on Green;
[W] ClearviewHwy-5-W; [EST] ClearviewHwy-5-W; [Fort Smith] ClearviewHwy-5-W;
[Oklahoma City] ClearviewHwy-5-W;



OH-040-23-STA7136+50WB-A;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [125] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
[N] ClearviewHwy-5-W; [ORTH] ClearviewHwy-5-W; [S] ClearviewHwy-5-W;
[OUTH] ClearviewHwy-5-W; [Skyline Drive] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, Black on Yellow;
[EXIT] ClearviewHwy-5-W; Down Arrow 22.0" 270°; [ONLY] ClearviewHwy-5-W;

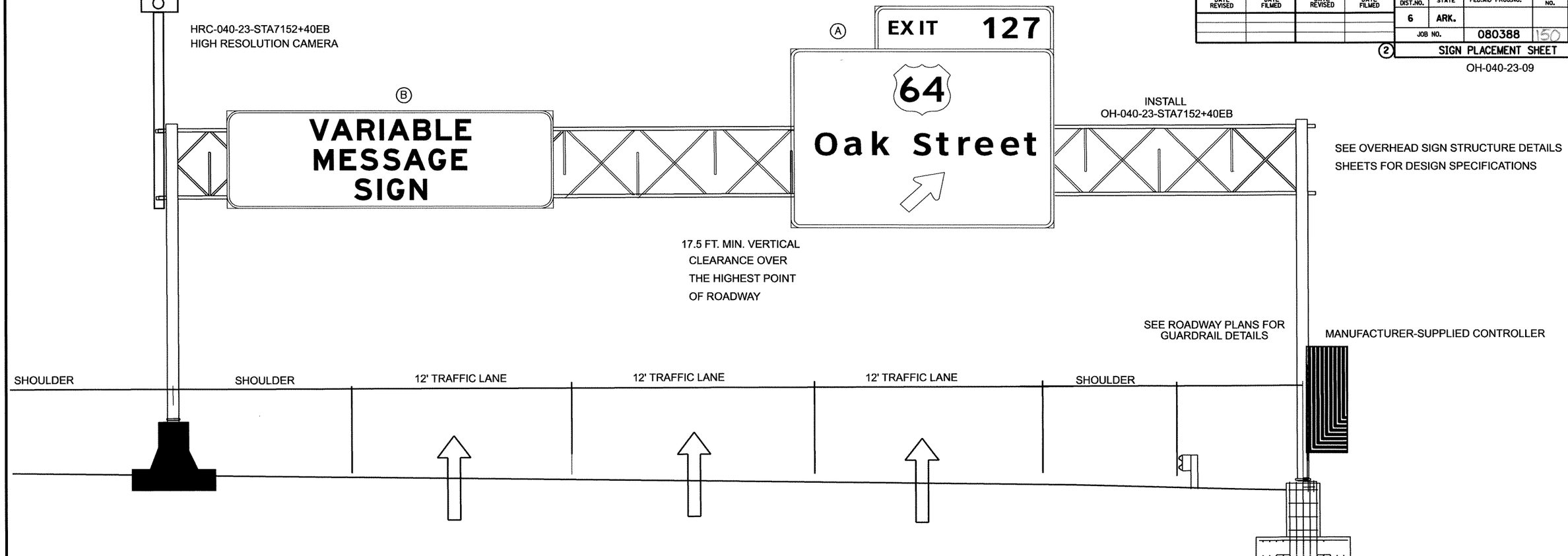
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
9/26/11
LARRY SULLIVAN

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.		080388	150	452

(2) SIGN PLACEMENT SHEET

OH-040-23-09

HRC-040-23-STA7152+40EB
HIGH RESOLUTION CAMERA



NOTE:
The contractor will verify sign placement and make any adjustments necessary to align signs over intended lanes.

System inter-operation requirement: the contractor is to guarantee system compatibility for all project components.

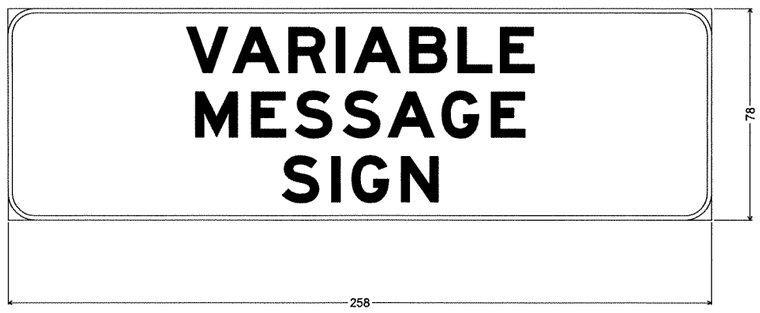
The System will be considered installed upon review of the final installation by the Engineer. At this time a one month test will commence wherein anything that fails will be the responsibility of the contractor. Only at the discretion of the Engineer will there be additional time awarded for repair work for unforeseen accidents.

All VMS equipment will be tested and verified prior to installation. It is the responsibility of the contractor to insure that all components meet or exceed existing NTCIP requirements as stated on the VMS Special Provisions of this job.

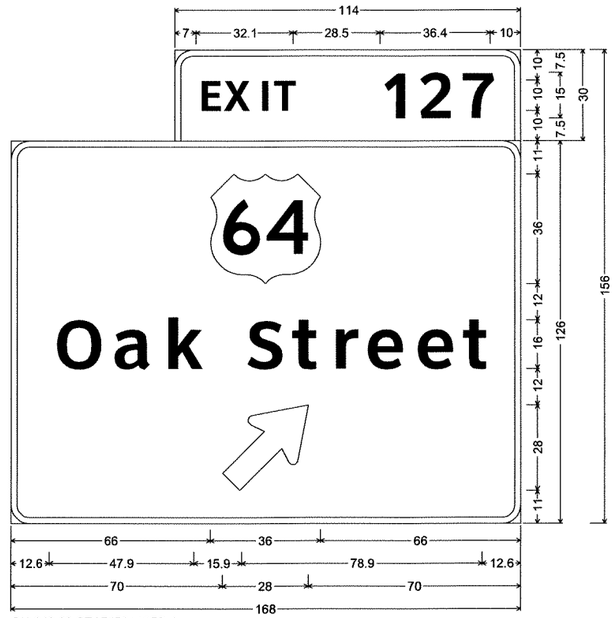
The contractor will conduct all firmware upgrades to any NTCIP equipment that occur prior to the completion of this project. All VMS equipment and software shall be from manufacturers that have references from three DOT's from prior jobs with their equipment and/or software. This Documentation will be available upon request by the Engineer.

Since the contractor will be required to install overhead signs on structures which are located over the roadways which are currently open to traffic it will be the responsibility of the contractor to provide lane closures as a part of traffic control. Payment for providing lane closures will be paid subsidiary to the pay item "Maintenance of Traffic". All Maintenance of Traffic work must conform with the MUTCD.

The Contractor will be responsible for coordination with local power companies in the installation of power to all VMS and Camera Assemblies. All installation needs, conduit, boring, or trenching will be the responsibility of the contractor. All costs required for the installation of power will be absorbed by the contractor per sign. The contractor will coordinate with the Engineer to establish billing for the monthly energy cost to the Department.



VMS-040-23-STA7152+40EB-B



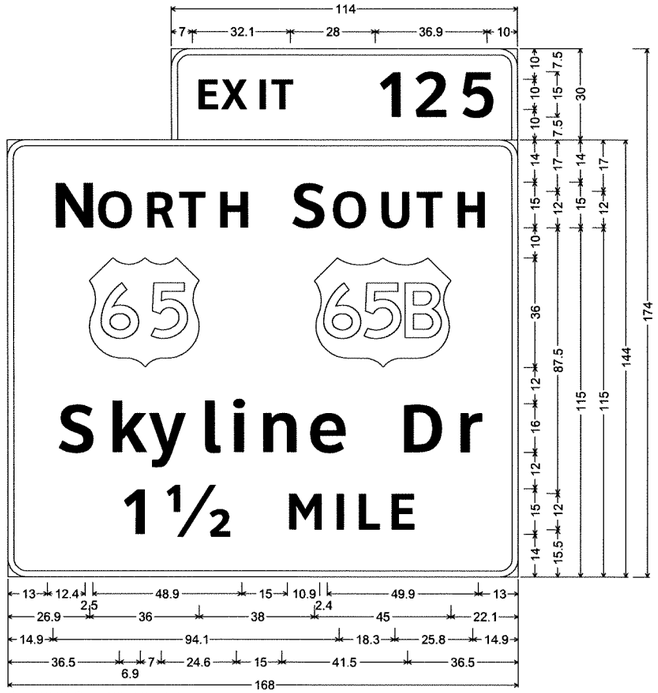
OH-040-23-STA7152+40EB-A;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [127] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
[Oak Street] ClearviewHwy-5-W; Standard Arrow Custom 35.8" X 21.6" 45°;

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
9/26/16
TONY SULLIVAN

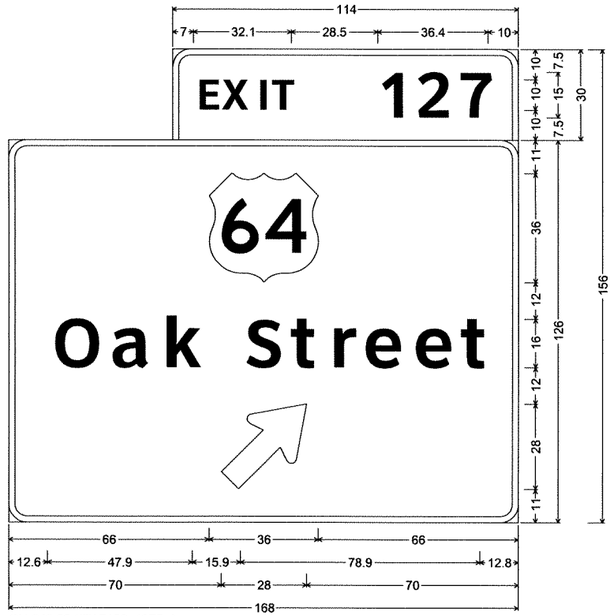
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	151	452

(2) SIGN PLACEMENT SHEET

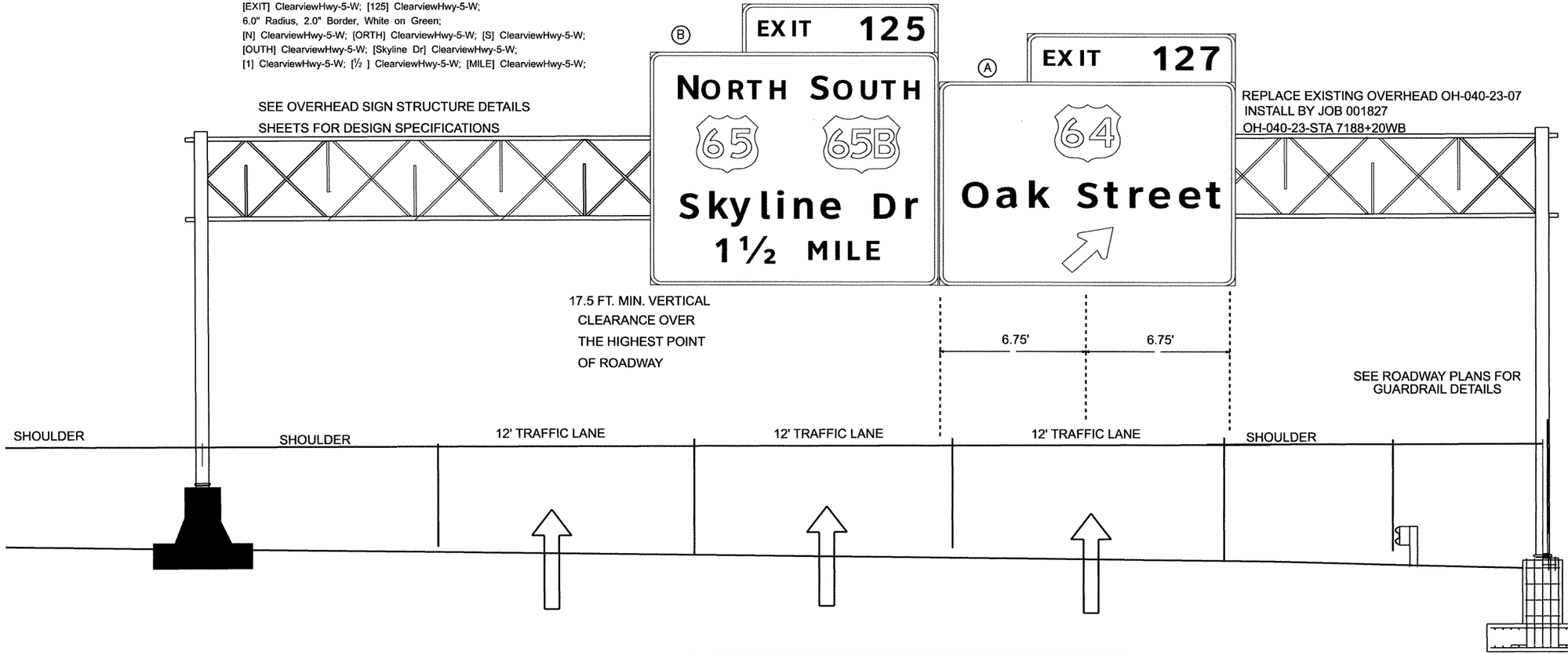
OH-040-23-07



OH-040-23-STA7188+20WB-B;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [125] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
[N] ClearviewHwy-5-W; [ORTH] ClearviewHwy-5-W; [S] ClearviewHwy-5-W;
[OUTH] ClearviewHwy-5-W; [Skyline Dr] ClearviewHwy-5-W;
[1] ClearviewHwy-5-W; [½] ClearviewHwy-5-W; [MILE] ClearviewHwy-5-W;



OH-040-23-STA7152+40EB-A;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [127] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
[Oak Street] ClearviewHwy-5-W; Standard Arrow Custom 35.8" X 21.6" 45°;

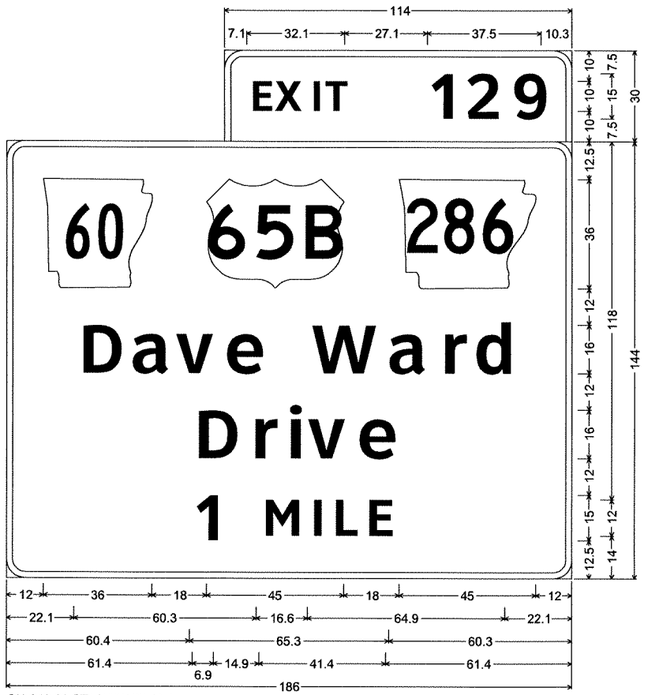


STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
9/2014
ANTONY SULLIVAN

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.		080388	152	452

(2) SIGN PLACEMENT SHEET

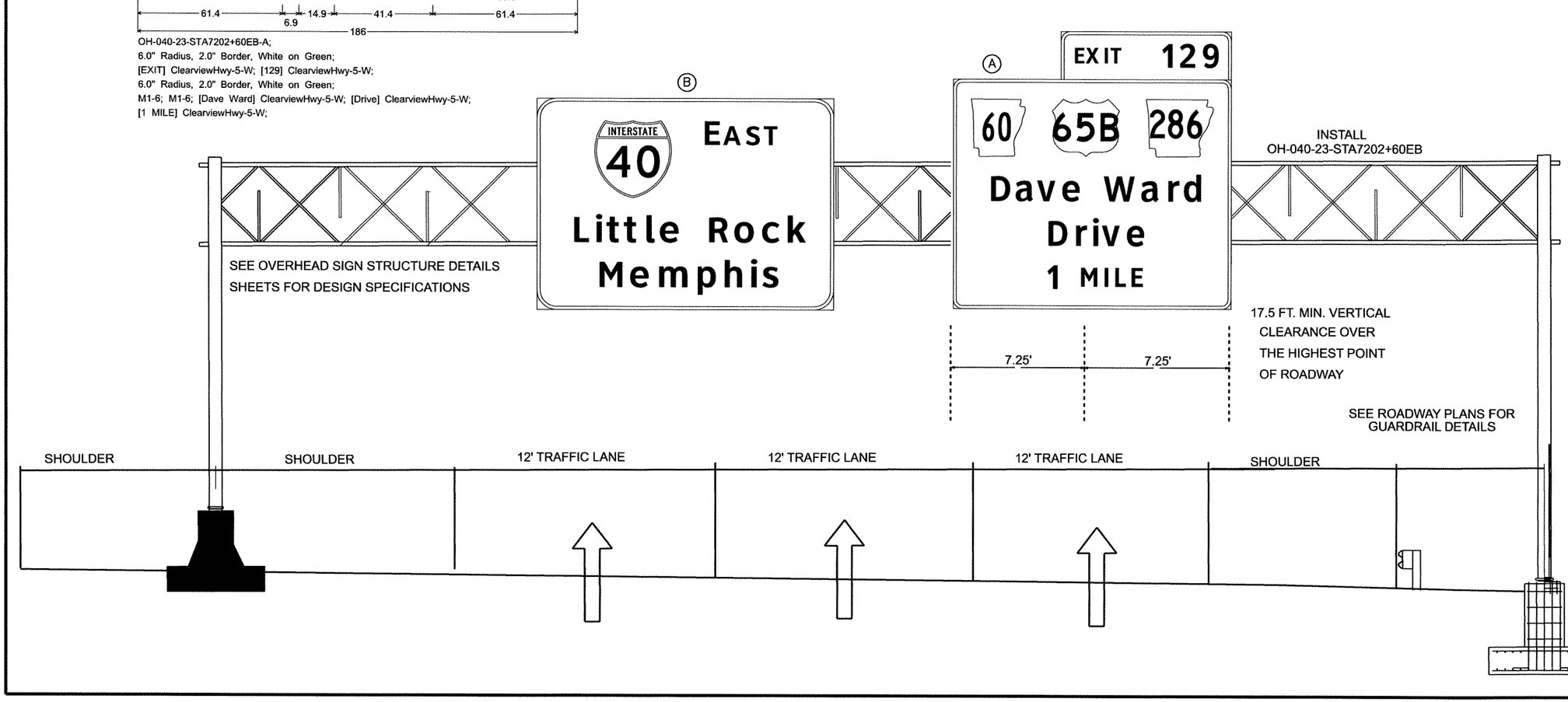
OH-040-23-10



OH-040-23-STA7202+60EB-A;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [129] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
M1-6; M1-6; [Dave Ward] ClearviewHwy-5-W; [Drive] ClearviewHwy-5-W;
[1 MILE] ClearviewHwy-5-W;



OH-040-23-STA7202+60EB-B; 6.0" Radius, 2.0" Border, White on Green;
[E] ClearviewHwy-5-W; [AST] ClearviewHwy-5-W; [Little Rock] ClearviewHwy-5-W;
[Memphis] ClearviewHwy-5-W;

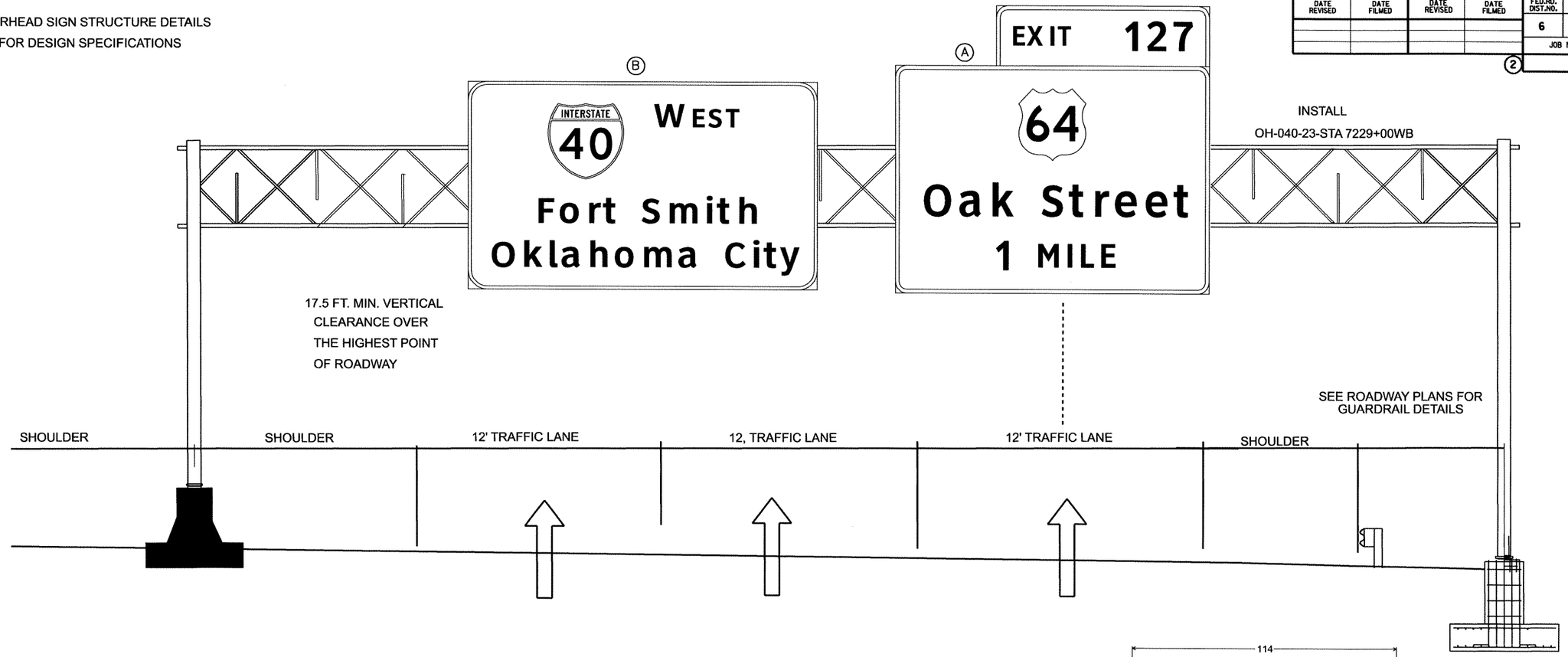


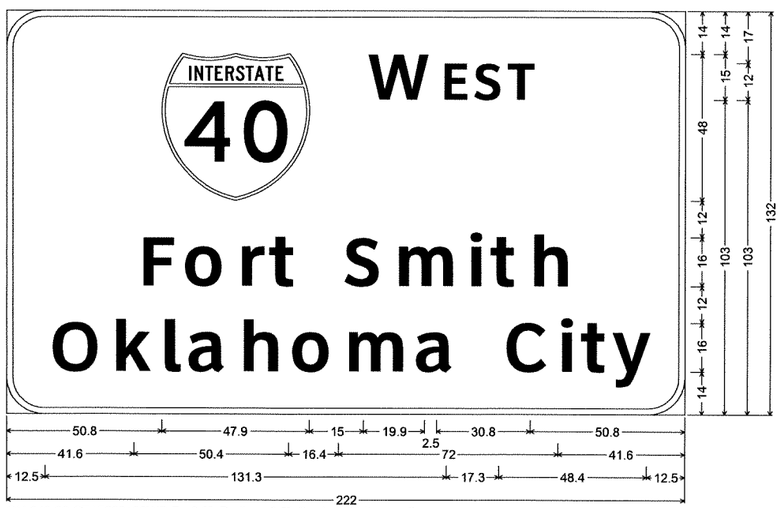
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
TONY SULLIVAN
9/26/11

SEE OVERHEAD SIGN STRUCTURE DETAILS
SHEETS FOR DESIGN SPECIFICATIONS

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.		080388	153	452

(2) SIGN PLACEMENT SHEET
OH-040-23-11





OH-040-23-STA7229+00WB-B; 6.0" Radius, 2.0" Border, White on Green;
[W] ClearviewHwy-5-W; [EST] ClearviewHwy-5-W; [Fort Smith] ClearviewHwy-5-W;
[Oklahoma City] ClearviewHwy-5-W;



OH-040-23-STA7229+00WB-A;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [127] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
[Oak Street] ClearviewHwy-5-W; [1 MILE] ClearviewHwy-5-W;

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
TONY SULLIVAN
9/24/15

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.		080388	154	462

(2) SIGN PLACEMENT SHEET

OH-040-23-12

SEE OVERHEAD SIGN STRUCTURE DETAILS SHEETS FOR DESIGN SPECIFICATIONS

INSTALL OH-040-23-STA7258+00EB

17.5 FT. MIN. VERTICAL CLEARANCE OVER THE HIGHEST POINT OF ROADWAY

(B) INTERSTATE 40 EAST Little Rock Memphis

(A) EXIT 129 60 65B 286 Dave Ward Drive

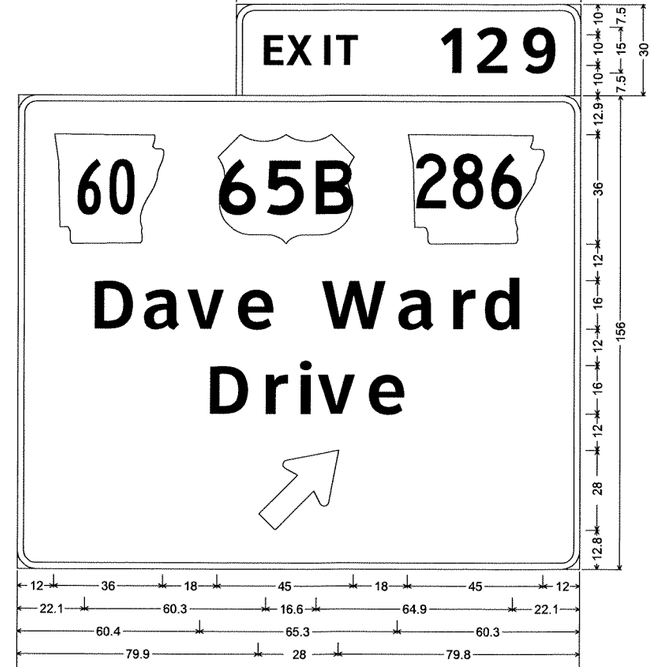
7.25' 7.25'

SEE ROADWAY PLANS FOR GUARDRAIL DETAILS

SHOULDER | SHOULDER | 12' TRAFFIC LANE | 12' TRAFFIC LANE | 12' TRAFFIC LANE | SHOULDER



OH-040-23-STA7258+00EB-B; 6.0" Radius, 2.0" Border, White on Green;
[E] ClearviewHwy-5-W; [AST] ClearviewHwy-5-W; [Little Rock] ClearviewHwy-5-W;
[Memphis] ClearviewHwy-5-W;



OH-040-23-STA7258+00EB-A;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [129] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
M1-6; M1-6; [Dave Ward] ClearviewHwy-5-W; [Drive] ClearviewHwy-5-W;
Standard Arrow Custom 0.0" X 20.3" 45°;

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
TONY SULLIVAN
9/26/16

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.		080388	155	452

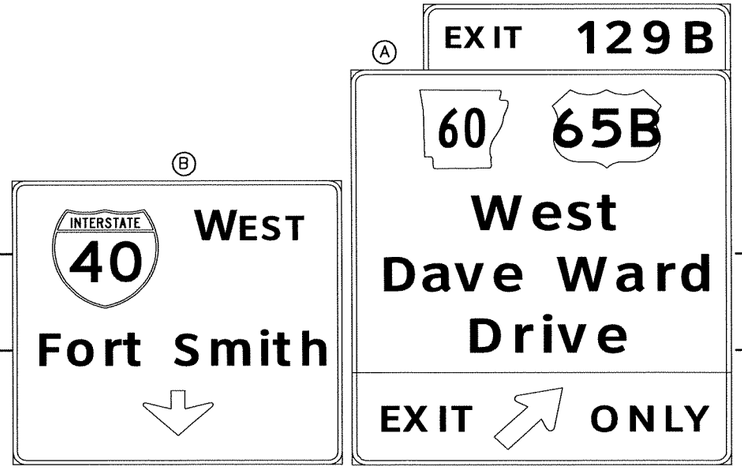
(2) SIGN PLACEMENT SHEET

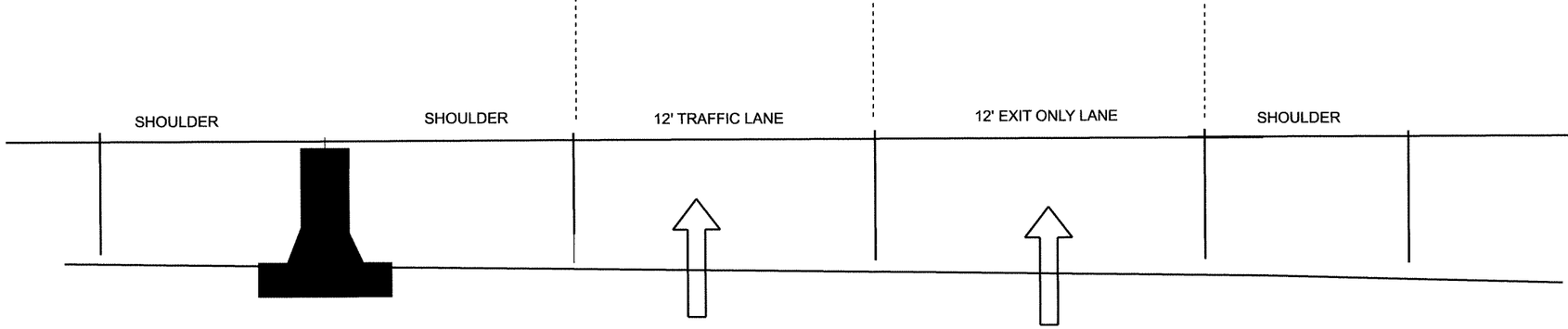
BM-040-23-02

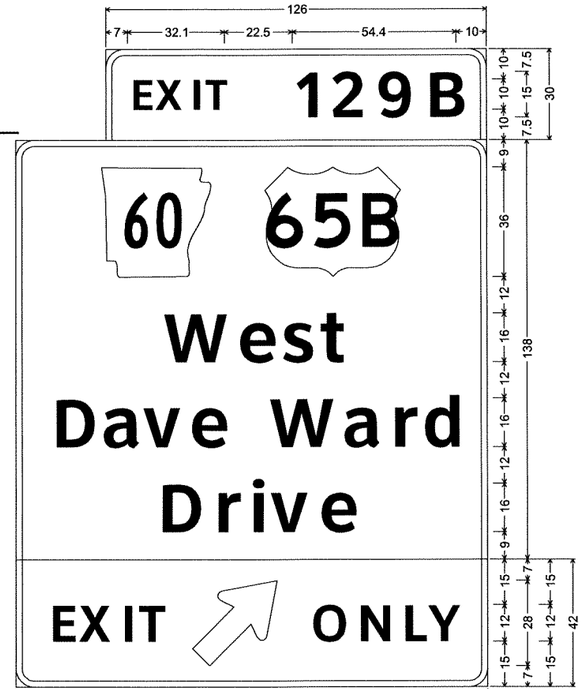
REPLACE SIGNS ON EXISTING BRIDGE MOUNTS BM-040-23-02
INSTALL BY JOB 080211

BM-040-23-STA7273+60WB

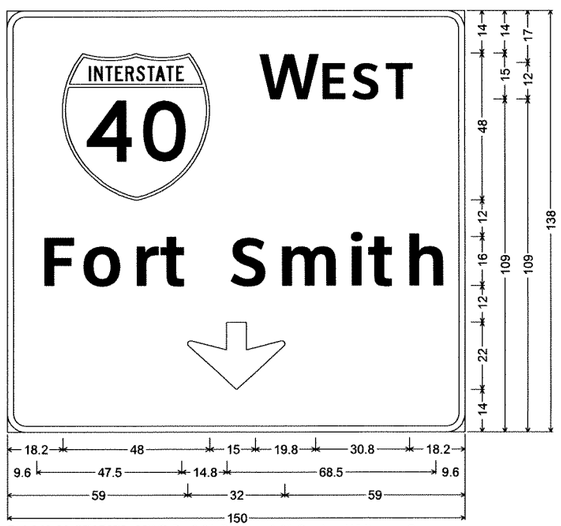
DAVE WARD DR. OVERPASS







BM-040-23-STA7273+60WB-A;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [129B] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
M1-6; [West] ClearviewHwy-5-W-R; [Dave Ward] ClearviewHwy-5-W-R;
[Drive] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, Black on Yellow;
[EXIT] ClearviewHwy-5-W; Standard Arrow Custom 0.0" X 21.6" 45°;
[ONLY] ClearviewHwy-5-W;



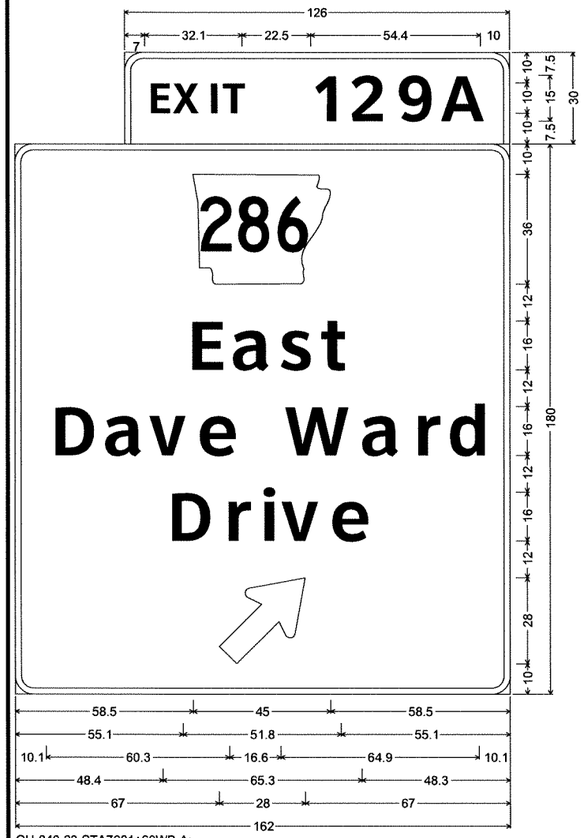
BM-040-23-STA7273+60WB-B; 6.0" Radius, 2.0" Border, White on Green;
[WEST] ClearviewHwy-5-W; [Fort Smith] ClearviewHwy-5-W-R;
Down Arrow 22.0" 270°;

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
9/26/11
TONY SULLIVAN

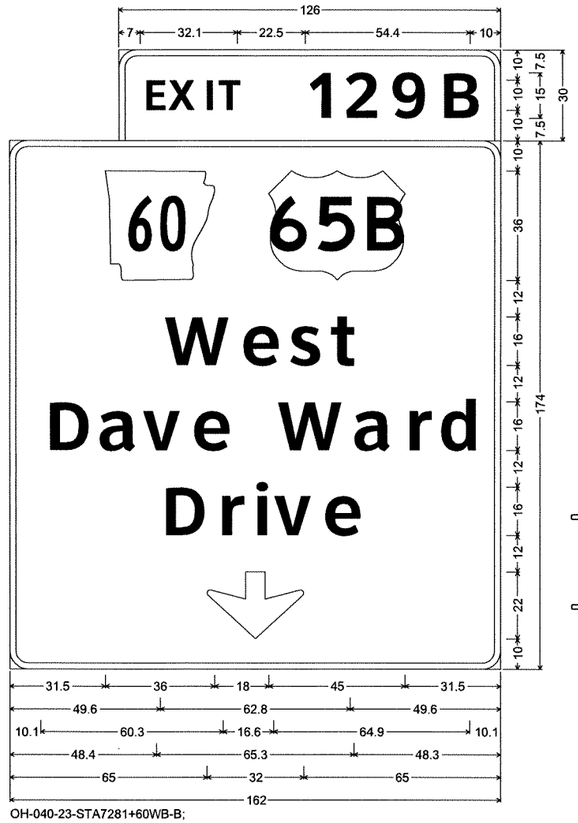
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	156	452

(2) SIGN PLACEMENT SHEET

OH-040-23-01

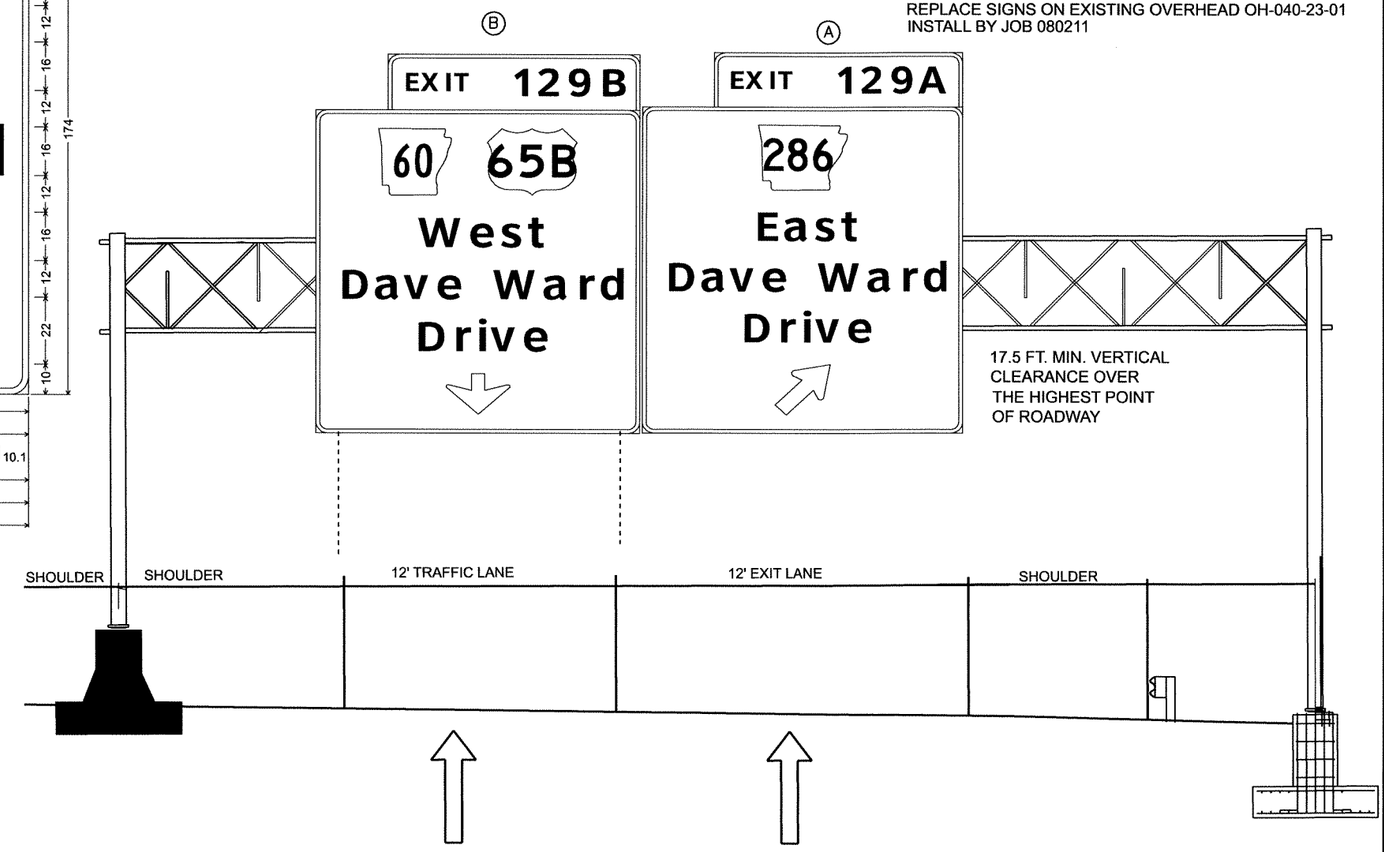


OH-040-23-STA7281+60WB-A;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [129A] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
M1-6; [East] ClearviewHwy-5-W; [Dave Ward] ClearviewHwy-5-W;
[Drive] ClearviewHwy-5-W; Standard Arrow Custom 35.8" X 21.6" 45°;



OH-040-23-STA7281+60WB-B;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [129B] ClearviewHwy-5-W;
OH-040-23-STA7281+60WB; 6.0" Radius, 2.0" Border, White on Green;
M1-6; [West] ClearviewHwy-5-W; [Dave Ward] ClearviewHwy-5-W;
[Drive] ClearviewHwy-5-W; Down Arrow 22.0" 270°;

OH-040-23-STA7281+60WB
REPLACE SIGNS ON EXISTING OVERHEAD OH-040-23-01
INSTALL BY JOB 080211

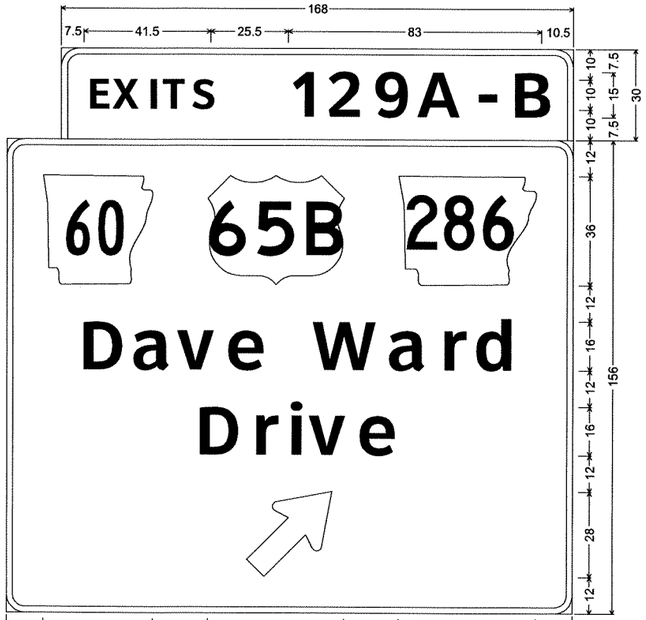


STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
TONY SUMMERS
3/26/14

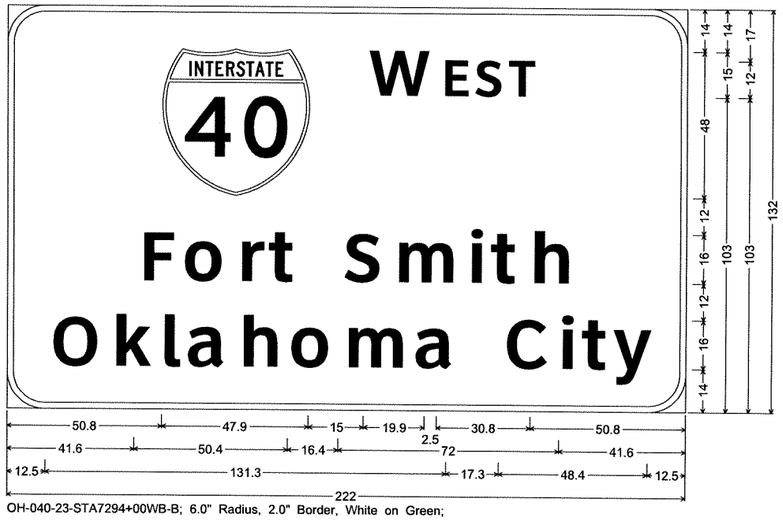
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	157	452

(2) SIGN PLACEMENT SHEET

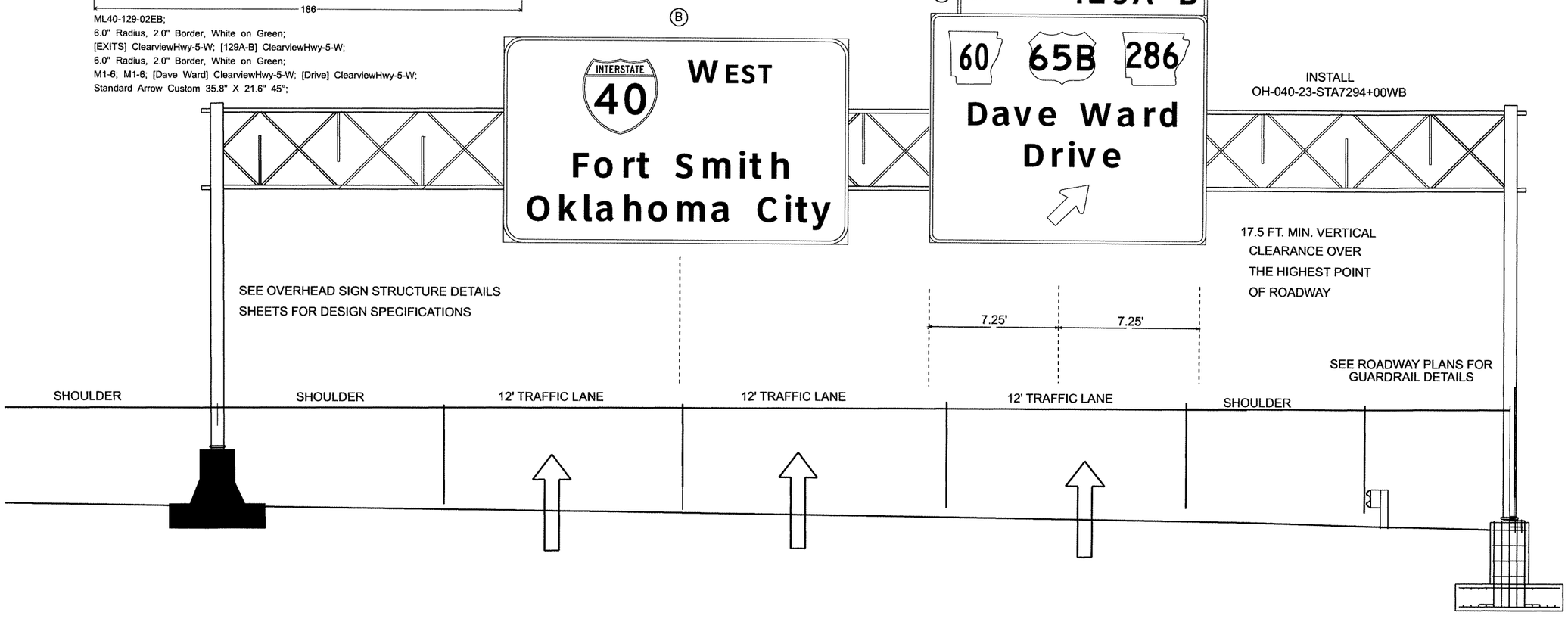
OH-040-23-13



ML40-129-02EB;
6.0" Radius, 2.0" Border, White on Green;
[EXITS] ClearviewHwy-5-W; [129A-B] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
M1-6; M1-6; [Dave Ward] ClearviewHwy-5-W; [Drive] ClearviewHwy-5-W;
Standard Arrow Custom 35.8" X 21.6" 45°;



OH-040-23-STA7294+00WB-B; 6.0" Radius, 2.0" Border, White on Green;
[W] ClearviewHwy-5-W; [EST] ClearviewHwy-5-W; [Fort Smith] ClearviewHwy-5-W;
[Oklahoma City] ClearviewHwy-5-W;





NOTE:
The contractor will verify sign placement and make any adjustments necessary to align signs over intended lanes.

System inter-operation requirement: the contractor is to guarantee system compatibility for all project components.

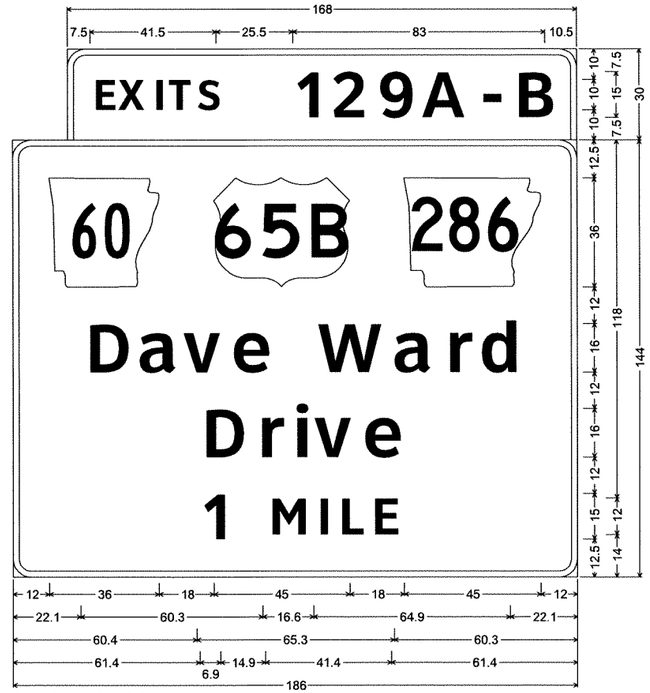
The System will be considered installed upon review of the final installation by the Engineer. At this time a one month test will commence wherein anything that fails will be the responsibility of the contractor. Only at the discretion of the Engineer will there be additional time awarded for repair work for unforeseen accidents.

All VMS equipment will be tested and verified prior to installation. It is the responsibility of the contractor to insure that all components meet or exceed existing NTCIP requirements as stated on the VMS Special Provisions of this job.

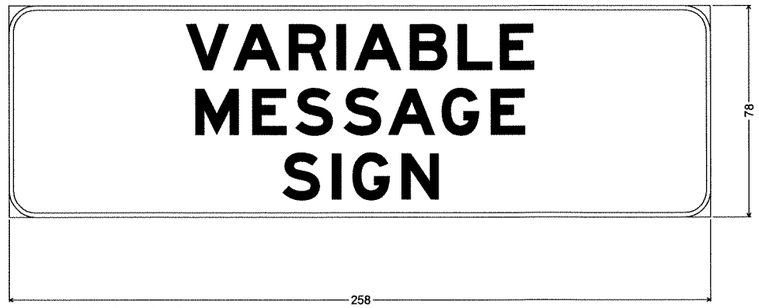
The contractor will conduct all firmware upgrades to any NTCIP equipment that occur prior to the completion of this project. All VMS equipment and software shall be from manufacturers that have references from three DOT's from prior jobs with their equipment and/or software. This Documentation will be available upon request by the Engineer.

Since the contractor will be required to install overhead signs on structures which are located over the roadways which are currently open to traffic it will be the responsibility of the contractor to provide lane closures as a part of traffic control. Payment for providing lane closures will be paid subsidiary to the pay item "Maintenance of Traffic". All Maintenance of Traffic work must conform with the MUTCD.

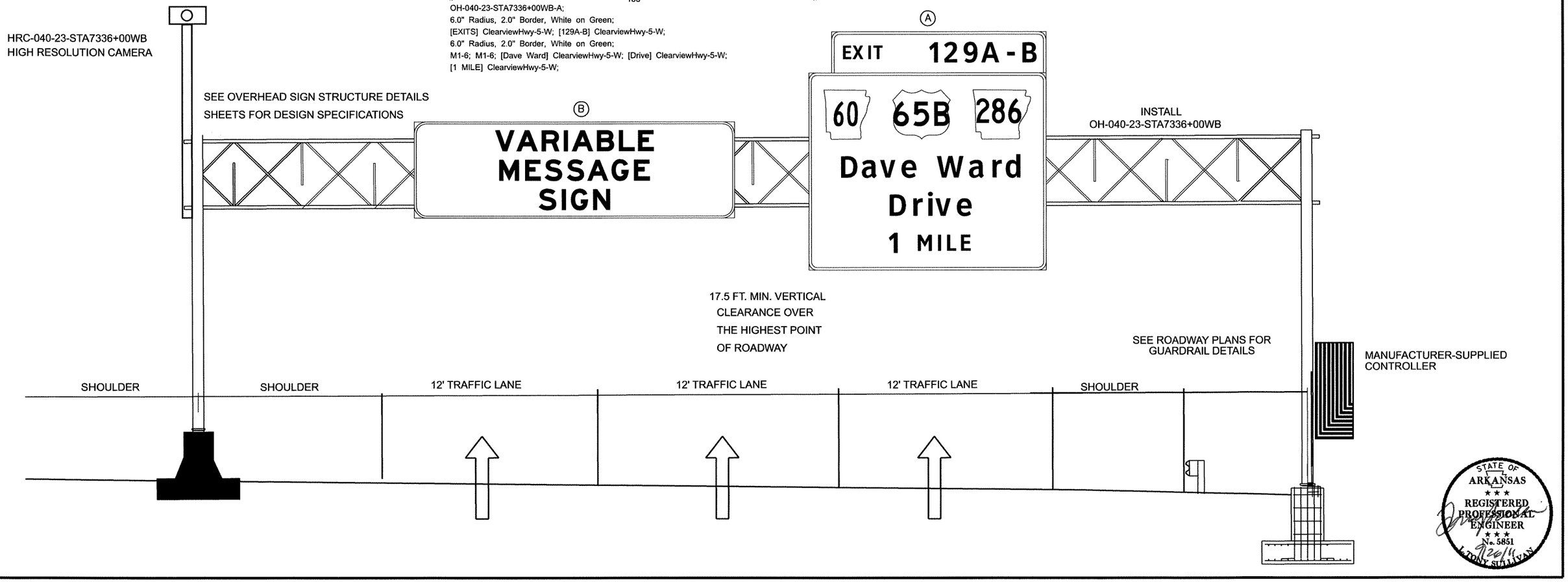
The Contractor will be responsible for coordination with local power companies in the installation of power to all VMS and Camera Assemblies. All installation needs, conduit, boring, or trenching will be the responsibility of the contractor. All costs required for the installation of power will be absorbed by the contractor per sign. The contractor will coordinate with the Engineer to establish billing for the monthly energy cost to the Department.



OH-040-23-STA7336+00WB-A;
6.0" Radius, 2.0" Border, White on Green;
[EXITS] ClearviewHwy-5-W; [129A-B] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
M1-6; M1-6; [Dave Ward] ClearviewHwy-5-W; [Drive] ClearviewHwy-5-W;
[1 MILE] ClearviewHwy-5-W;



VMS-040-23-STA7336+00WB-B



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.		080388	159	452

(2) SIGN PLACEMENT SHEET

OH-040-23-14

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
TONY SULLIVAN
9/26/16

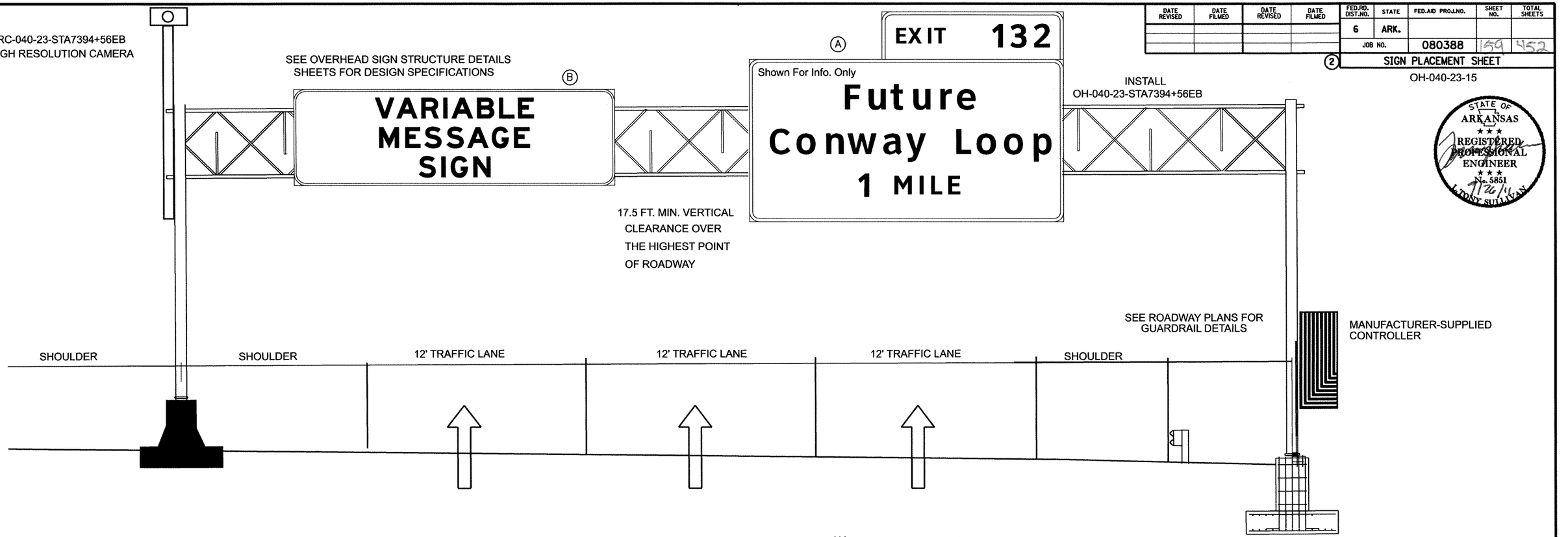
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	159	452

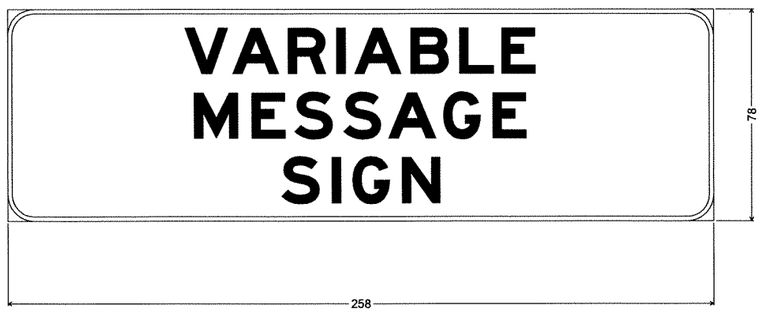
(2) SIGN PLACEMENT SHEET

OH-040-23-15

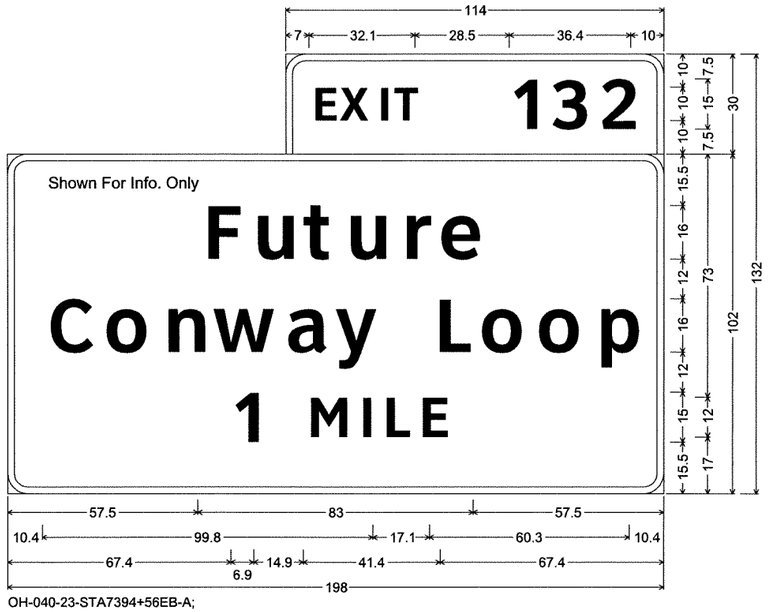
HRC-040-23-STA7394+56EB
HIGH RESOLUTION CAMERA

SEE OVERHEAD SIGN STRUCTURE DETAILS
SHEETS FOR DESIGN SPECIFICATIONS





VMS-040-23-STA7394+56EB-B



OH-040-23-STA7394+56EB-A;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [132] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
[Future] ClearviewHwy-5-W; [Conway Loop] ClearviewHwy-5-W; [1 MILE] ClearviewHwy-5-W;

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
L. TONY SULLIVAN
7/26/11

NOTE:
The contractor will verify sign placement and make any adjustments necessary to align signs over intended lanes.

System inter-operation requirement: the contractor is to guarantee system compatibility for all project components.

The System will be considered installed upon review of the final installation by the Engineer. At this time a one month test will commence wherein anything that fails will be the responsibility of the contractor. Only at the discretion of the Engineer will there be additional time awarded for repair work for unforeseen accidents.

All VMS equipment will be tested and verified prior to installation. It is the responsibility of the contractor to insure that all components meet or exceed existing NTCIP requirements as stated on the VMS Special Provisions of this job.

The contractor will conduct all firmware upgrades to any NTCIP equipment that occur prior to the completion of this project. All VMS equipment and software shall be from manufacturers that have references from three DOT's from prior jobs with their equipment and/or software. This Documentation will be available upon request by the Engineer.

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The Contractor will be responsible for coordination with local power companies in the installation of power to all VMS and Camera Assemblies. All installation needs, conduit, boring, or trenching will be the responsibility of the contractor. All costs required for the installation of power will be absorbed by the contractor per sign. The contractor will coordinate with the Engineer to establish billing for the monthly energy cost to the Department.

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.		080388	160	452

(2) SIGN PLACEMENT SHEET

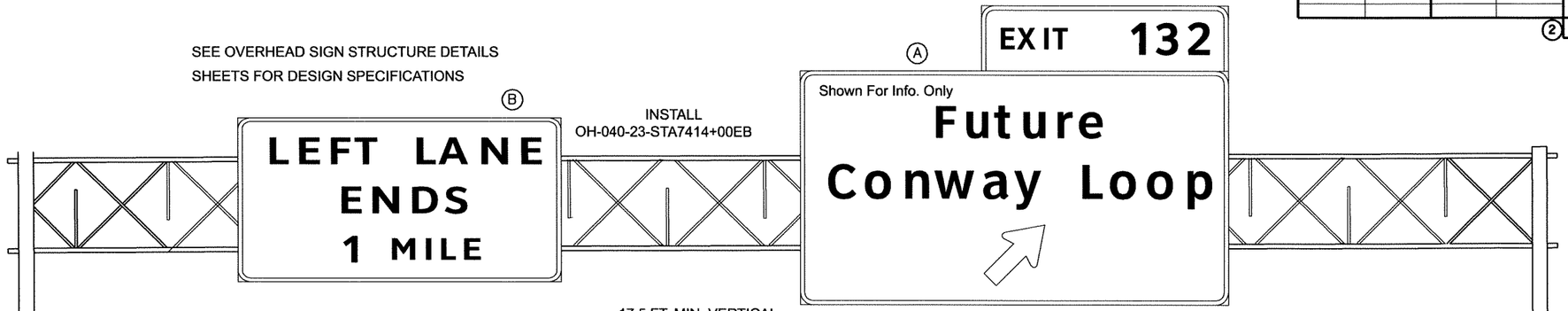
OH-040-23-16

SEE OVERHEAD SIGN STRUCTURE DETAILS
SHEETS FOR DESIGN SPECIFICATIONS

(B)

INSTALL
OH-040-23-STA7414+00EB

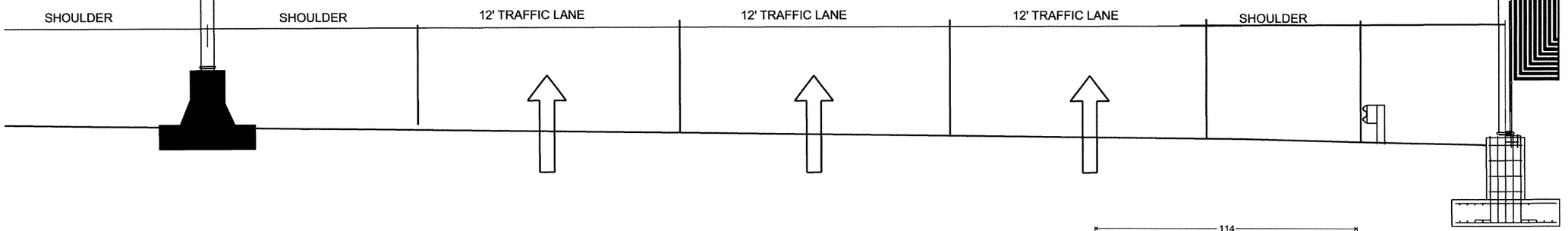
(A)

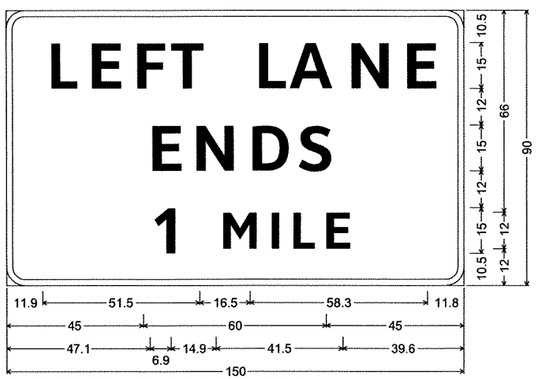


17.5 FT. MIN. VERTICAL
CLEARANCE OVER
THE HIGHEST POINT
OF ROADWAY

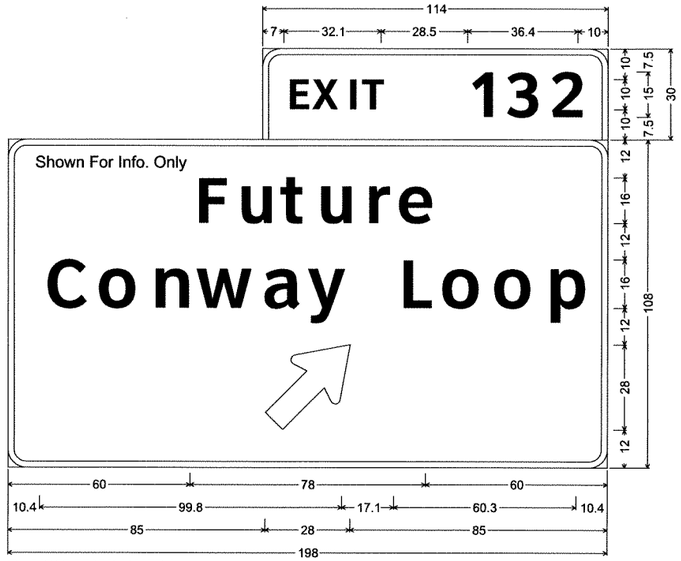
SEE ROADWAY PLANS FOR
GUARDRAIL DETAILS

MANUFACTURER-SUPPLIED
CONTROLLER





OH-040-23-STA7414+00EB-B; 6.0" Radius, 2.0" Border, Black on Yellow;
[LEFT LANE] ClearviewHwy-5-W; [ENDS] ClearviewHwy-5-W;
[ ] ClearviewHwy-5-W; [1 MILE] ClearviewHwy-5-W;



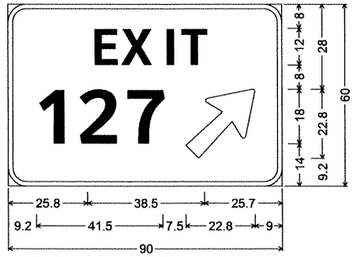
OH-040-23-STA7414+00EB-A;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [132] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
[Future] ClearviewHwy-5-W; [Conway Loop] ClearviewHwy-5-W;
Standard Arrow Custom 35.8" X 21.6" 45°;

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
8/24/16
J. TONY SULLIVAN

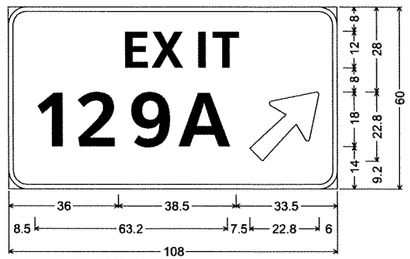
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	161	452

(2) SIGN PLACEMENT SHEET

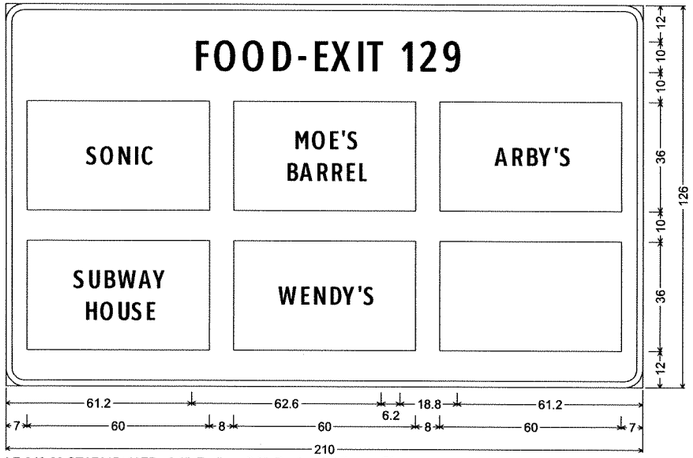
ROADSIDE MOUNTED SIGNS



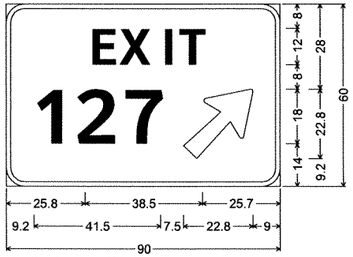
EX-040-23-STA7157+50EB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W;
[127] ClearviewHwy-5-W-R;
Arrow Custom - 29.0" 45°;



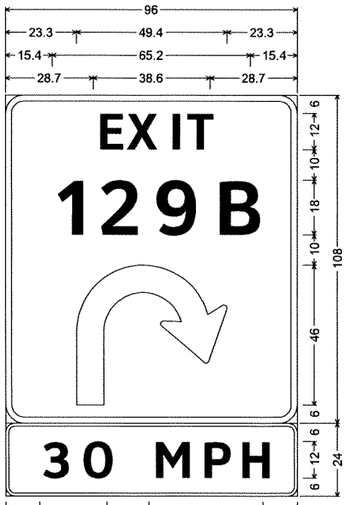
EX-040-23-STA7280+90WB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W;
[129A] ClearviewHwy-5-W-R;
Arrow Custom - 29.0" 45°;



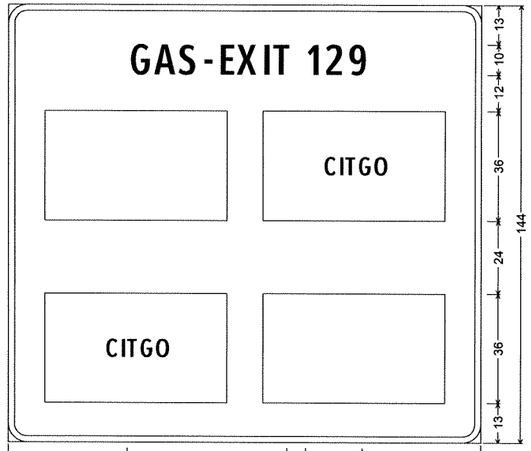
LF-040-23-STA7215+10EB; 6.0" Radius, 2.0" Border, White on Blue;
[FOOD-EXIT 129] ClearviewHwy-2-W;



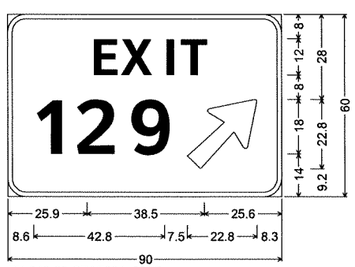
GM-040-23-STA7183+30WB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W;
[127] ClearviewHwy-5-W-R;
Arrow Custom - 29.0" 45°;



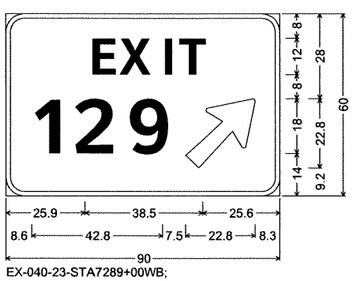
EX-040-23-STA7269+00WB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W;
[129B] ClearviewHwy-5-W; Turn Arrow 22;
3.0" Radius, 1.0" Border, Black on Yellow;
[30 MPH] ClearviewHwy-5-W;



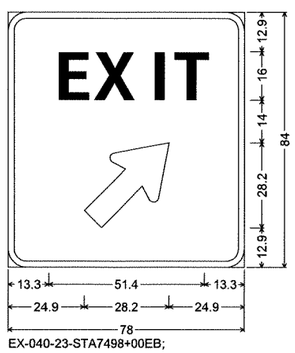
LG-040-23-STA7223+00EB; 6.0" Radius, 2.0" Border, White on Blue;
[GAS-EXIT 129] ClearviewHwy-2-W;



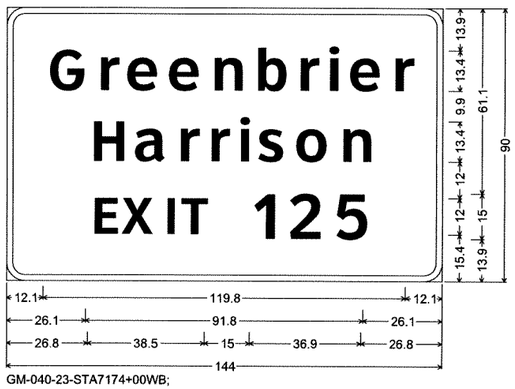
EX-040-23-STA7264+00EB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W;
[129] ClearviewHwy-5-W-R;
Arrow Custom - 29.0" 45°;



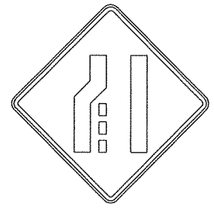
EX-040-23-STA7289+00WB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W;
[129] ClearviewHwy-5-W-R;
Arrow Custom - 29.0" 45°;



EX-040-23-STA7498+00EB;
6.0" Radius, 2.0" Border, White on Blue;
[EXIT] ClearviewHwy-5-W;
Standard Arrow Custom 35.8" X 21.6" 45°;



GM-040-23-STA7174+00WB;
6.0" Radius, 2.0" Border, White on Green;
[Greenbrier] ClearviewHwy-5-W; [Harrison] ClearviewHwy-5-W;
[EXIT] ClearviewHwy-5-W; [125] ClearviewHwy-5-W;



W4-2(LT) (48"X48")
SS-040-23-STA7469+10EB-A
SS-040-23-STA7469+10EB-B



W9-1(LT) (48"X48")
SS-040-23-STA7454+50EB-A
SS-040-23-STA7454+50EB-B



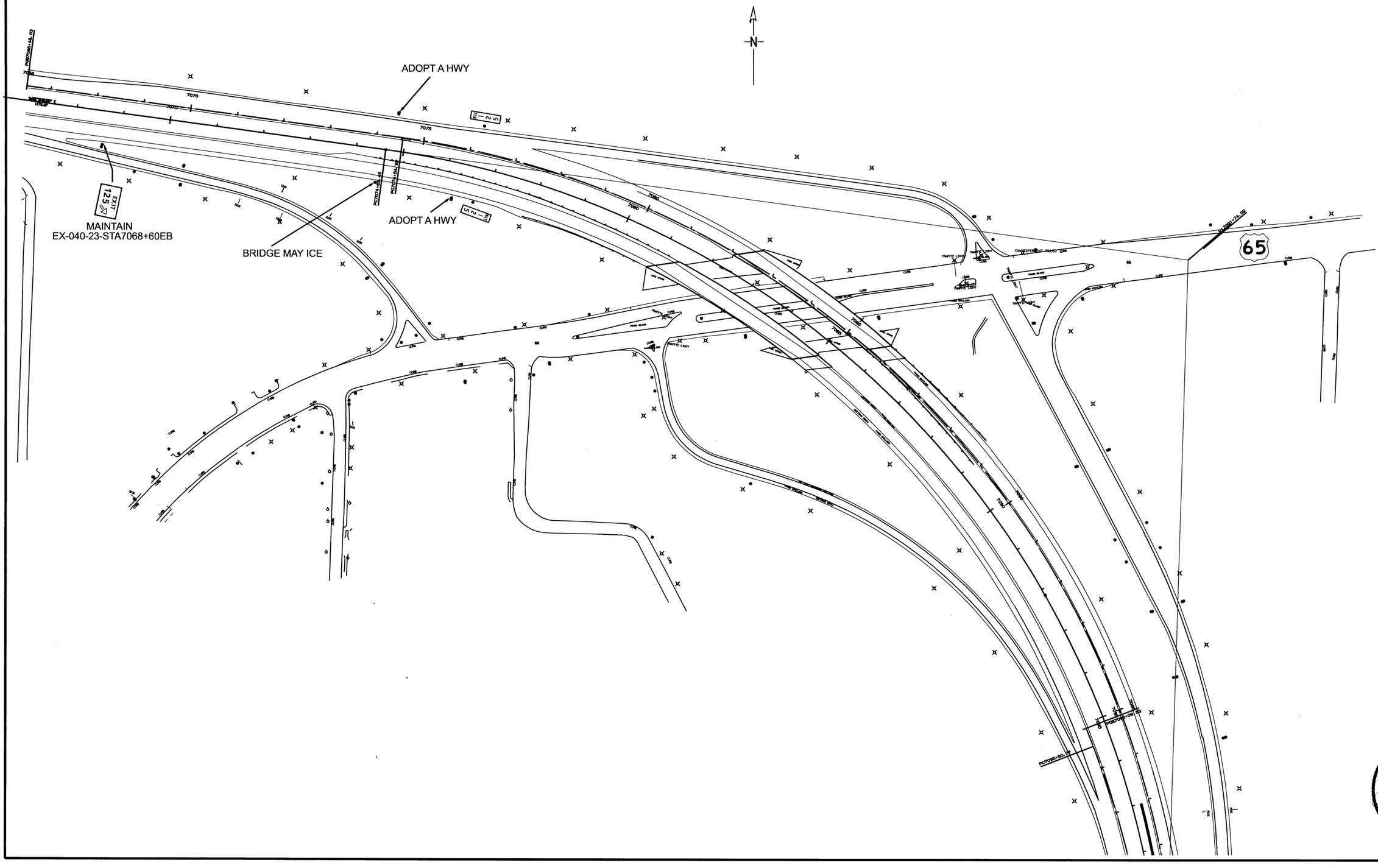
W9-2(RT) (48"X48")
SS-040-23-STA7461+10EB-A
SS-040-23-STA7461+10EB-B

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
9/26/11
J. TONY SULLIVAN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RO. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388		

(2) SIGN PLACEMENT SHEET

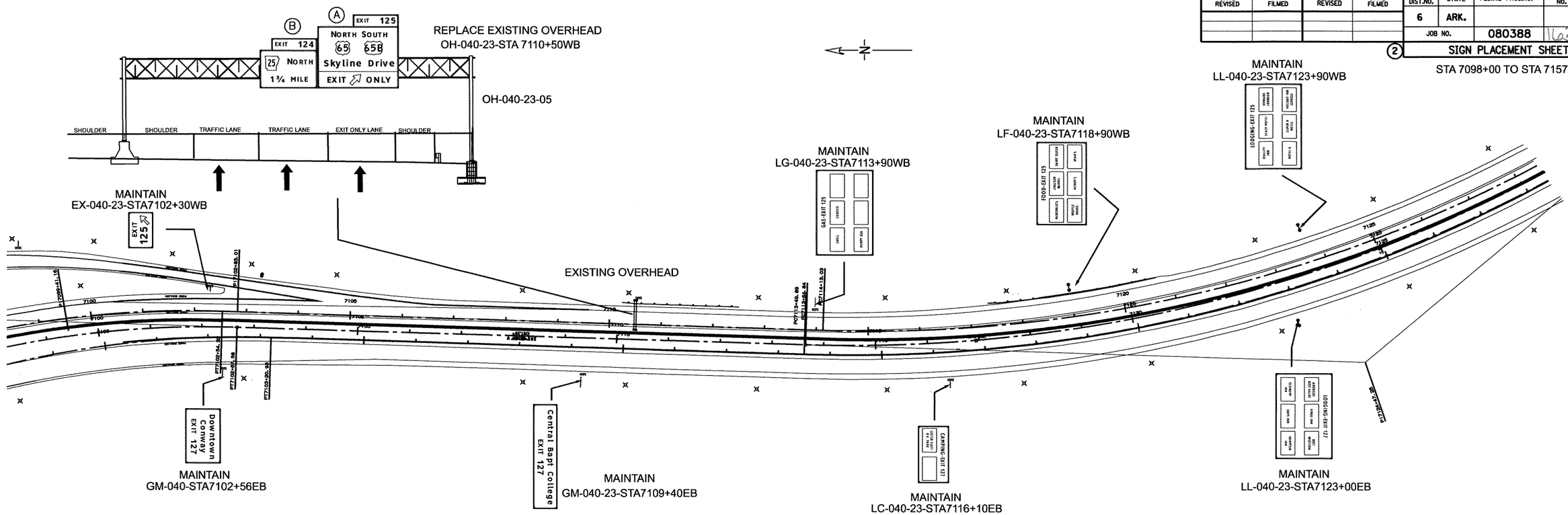
STA 7066+00 TO STA 7098+00

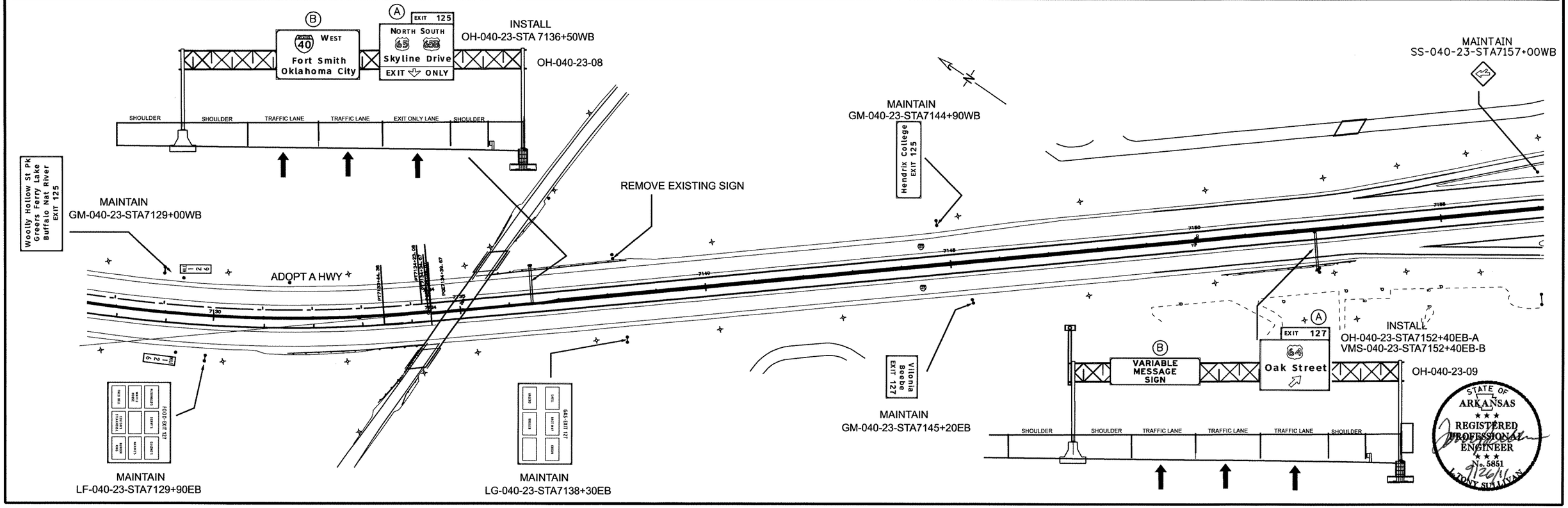

N
ADOPT A HWY
ADOPT A HWY
125 EXIT
MAINTAIN
EX-040-23-STA7068+60EB
BRIDGE MAY ICE
65
PC7068+48.03
PC7074+45.00
PC7074+45.00
PC7098+00.00
PC7098+50.78
7066
7070
7070
7078
7080
7080
7090
7090
7098
65
65
TRAFFIC LIGHT
TRAFFIC LIGHT
TRAFFIC LIGHT
TRAFFIC LIGHT
CROSSWALK NOT PAINTED
CURB
PAINT STRIPE
PAINT STRIPE
PAINT STRIPE

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.		080388	163	452

(2) SIGN PLACEMENT SHEET

STA 7098+00 TO STA 7157+00





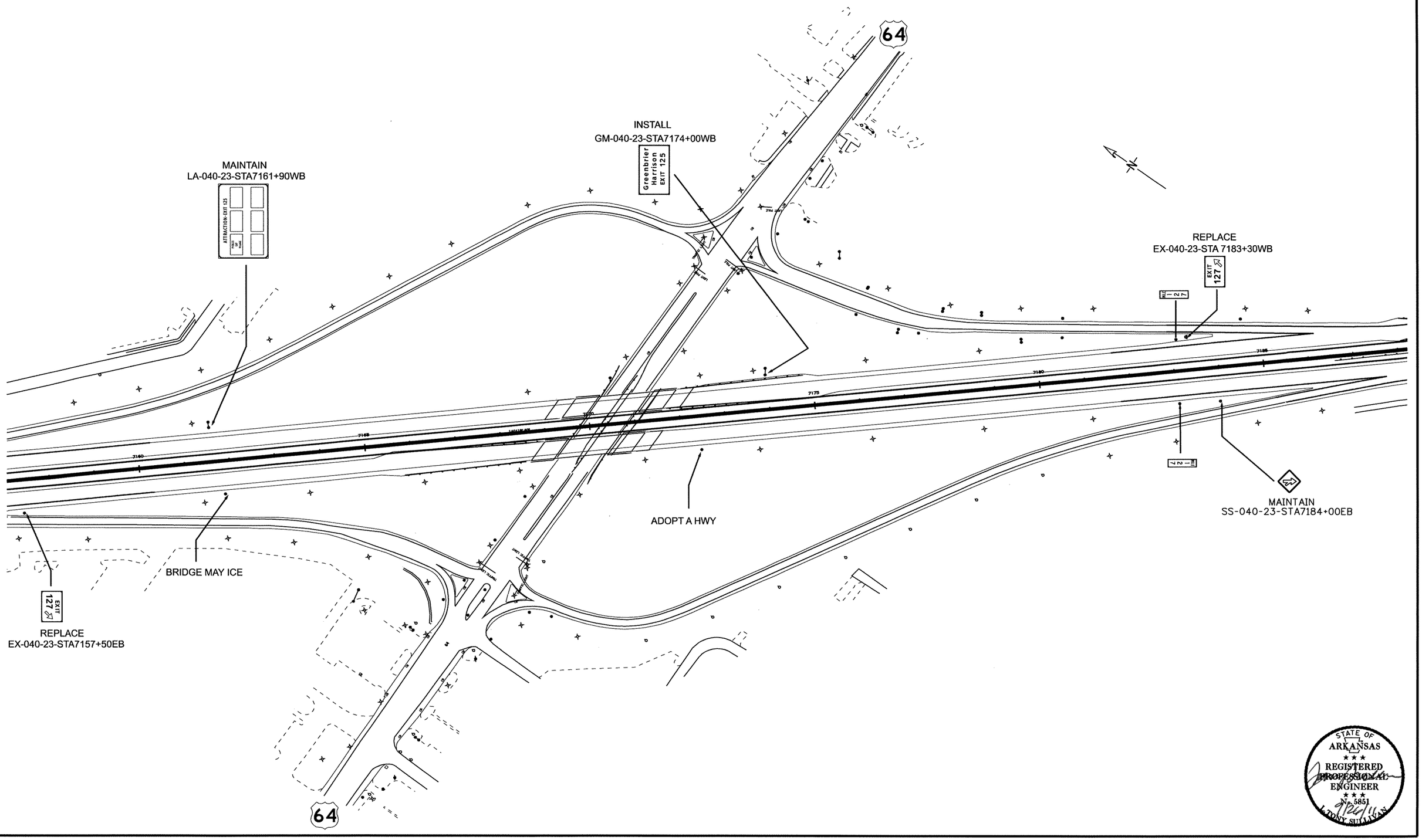
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
TONY SULLIVAN
9/26/11

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.		080388	1164	452

(2) SIGN PLACEMENT SHEET

STA 7157+00 TO STA 7188+00



STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
7/22/14
LATONY SULLIVAN

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.		080388	1105	452

(2) SIGN PLACEMENT SHEET

STA 7188+00 TO STA 7250+00

REPLACE EXISTING OVERHEAD
OH-040-23-STA 7188+20WB

OH-040-23-07

MAINTAIN
GM-040-23-STA7201+50WB

MAINTAIN
GM-040-23-STA7208+50WB

MAINTAIN
LF-040-23-STA7215+20WB

ADOPT A HWY

INSTALL
OH-040-23-STA7202+60EB

7207+20
FOOD LOGO SIGN REMOVE

OH-040-23-10

MAINTAIN
SS-040-23-STA7200+80EB

MAINTAIN
LLA-040-23-STA7199+00EB

FOOD LOGO SIGN
REPLACES GAS LOGO
LF-040-23-STA7215+10EB

ADOPT A HWY

INSTALL
OH-040-23-STA 7229+00WB

OH-040-23-11

MAINTAIN
LF-040-23-STA7122+10WB

MAINTAIN
SS-040-23-STA7235+00WB

MAINTAIN
LL-040-23-STA7236+90WB

MAINTAIN
LC-040-23-STA7245+00WB

MAINTAIN
GM-040-23-7246+00EB

LOGO GAS REPLACES EXIT 129 1/2 MILE SIGN
LG-040-23-STA7223+00EB

MAINTAIN
GM-040-23-STA7231+50EB

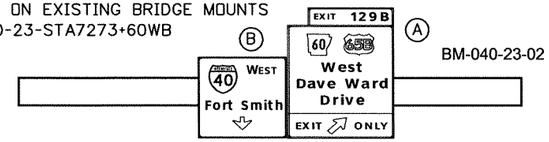
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
9/26/19
JOHN SULLIVAN

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.		080388	160	452

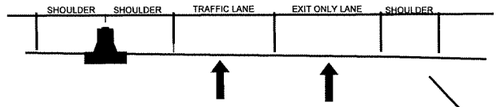
(2) SIGN PLACEMENT SHEET

STA 7250+00 TO STA 7281+00

REPLACE SIGNS ON EXISTING BRIDGE MOUNTS
BM-040-23-STA7273+60WB



BM-040-23-02



MAINTAIN
SS-040-23-STA7265+90WB

REPLACE
EX-040-23-STA7269+00WB

EXIT 129B
30 MPH

ADOPT A HWY

MAINTAIN
SS-040-23-STA7271+00WB

WEST 40 LEFT LANE

MAINTAIN
SS-040-23-STA7274+10WB

WEST 40 LEFT LANE

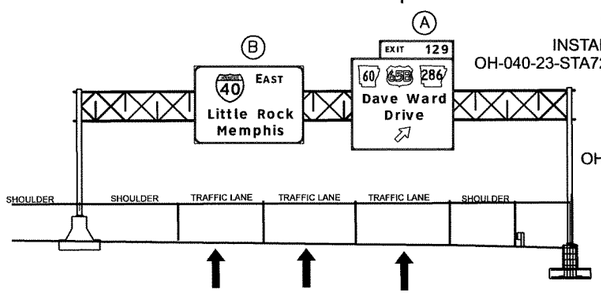
EXIT 129A

REPLACE
EX-040-23-STA7280+90WB

REMOVE

INSTALL
OH-040-23-STA7258+00EB

ADOPT A HWY



OH-040-23-12

EXIT 129

REPLACE
EX-040-23-STA7264+00EB

MAINTAIN
SS-040-23-STA7276+10EB

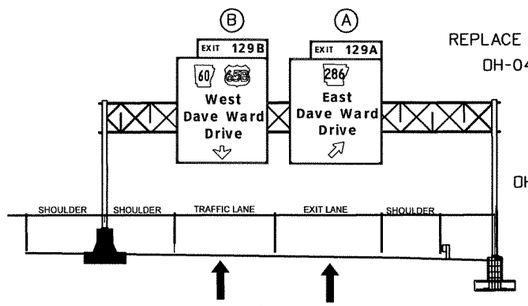
65B

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
9/24/11
J. TONY SULLIVAN

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.		080388	167	452

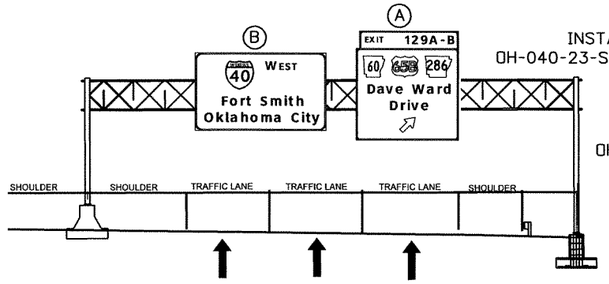
(2) SIGN PLACEMENT SHEET

STA 7281+00 TO STA 7312+00



REPLACE SIGNS ON EXISTING OVERHEAD
OH-040-23-STA7281+60WB

OH-040-23-01



INSTALL
OH-040-23-STA7294+00WB

OH-040-23-13

MAINTAIN
GM-040-23-STA7310+90WB

Toad Suck Park EXIT 129B

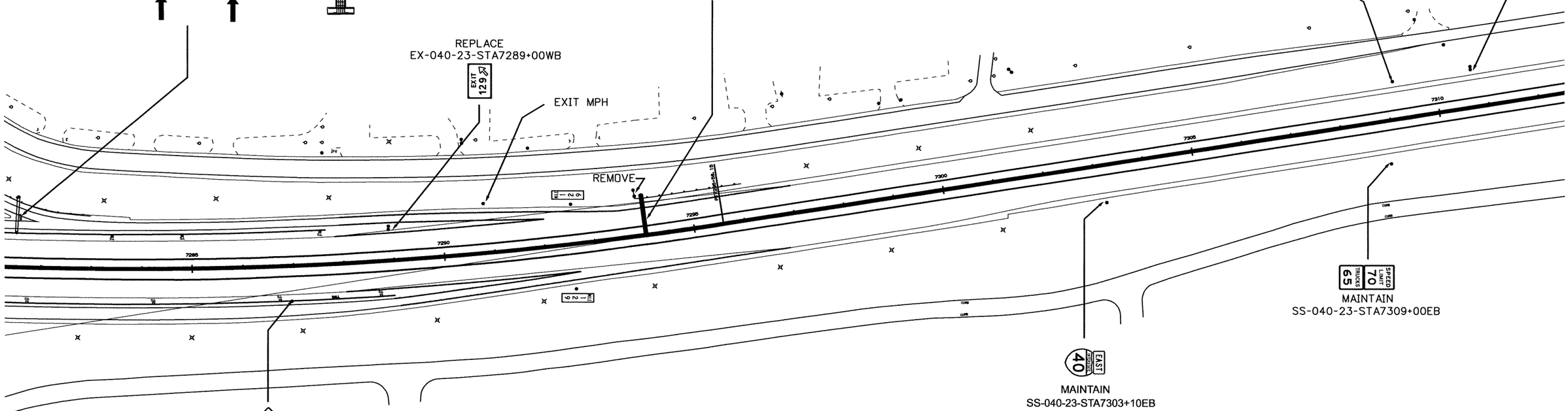
ADOPT A HWY

REPLACE
EX-040-23-STA7289+00WB

EXIT 129

EXIT MPH

REMOVE



SPEED LIMIT 70 TRUCKS 65

MAINTAIN
SS-040-23-STA7309+00EB

EAST 40 WEST

MAINTAIN
SS-040-23-STA7303+10EB

MIANTAIN
SS-040-23-STA7287+00EB

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
3/24/16
J. TONY SULLIVAN

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.		080388	168	452

(2) SIGN PLACEMENT SHEET

STA 7312+00 TO STA 7371+00

HRC-040-23-STA7336+00WB

INSTALL
OH-040-23-STA7336+00WB-A
VMS-040-23-STA7336+00WB-B

(B) VARIABLE MESSAGE SIGN

EXIT 129A-B
60 65B 286 (A)
Dave Ward Drive
1 MILE

OH-040-23-14

SHOULDER | SHOULDER | TRAFFIC LANE | TRAFFIC LANE | TRAFFIC LANE | SHOULDER

MAINTAIN
GM-040-23-STA7329+40WB

Conway Regional Med Ctr EXIT 129B

MAINTAIN
GM-040-23-STA7317+00WB

Univ Central Ark Central Bapt Coll EXIT 129B

RCE 130

ADOPT A HWY

SLOWER TRAFFIC KEEP RT.

BRIDGE MAY ICE

Mayflower 6
Little Rock 27 18

MAINTAIN
GM-040-23-STA7319+00EB

MAINTAIN
LLA-040-23-STA7359+50WB

ATTRACTION-EXIT 129B
LODGING-EXIT 129B

MAINTAIN
LF-040-23-STA7351+10WB

FOOD-EXIT 129B

REPORT LITTERING

MAINTAIN
LG-040-23-STA7343+50WB

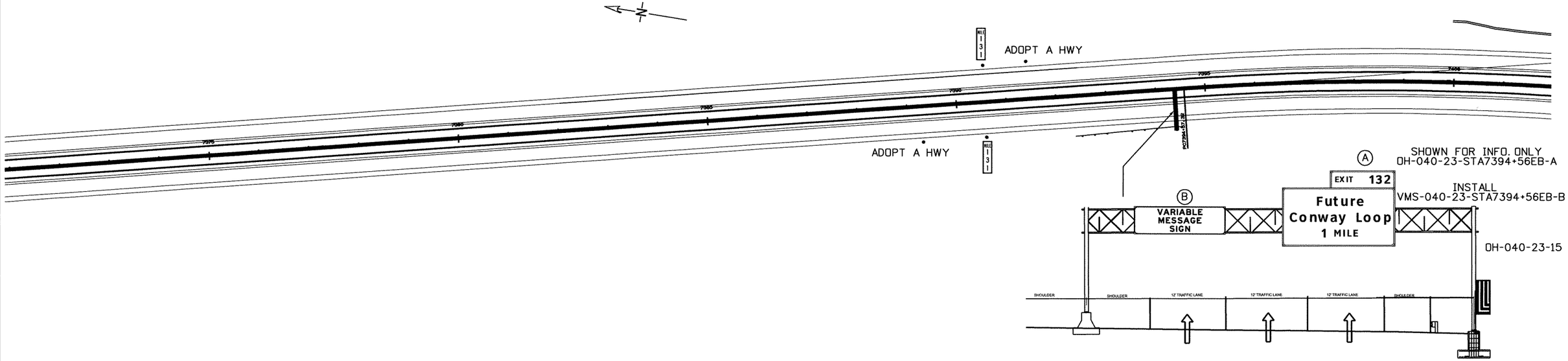
GAS-EXIT 129A
GAS-EXIT 129B

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
9/24/14
ANTONY SULLIVAN

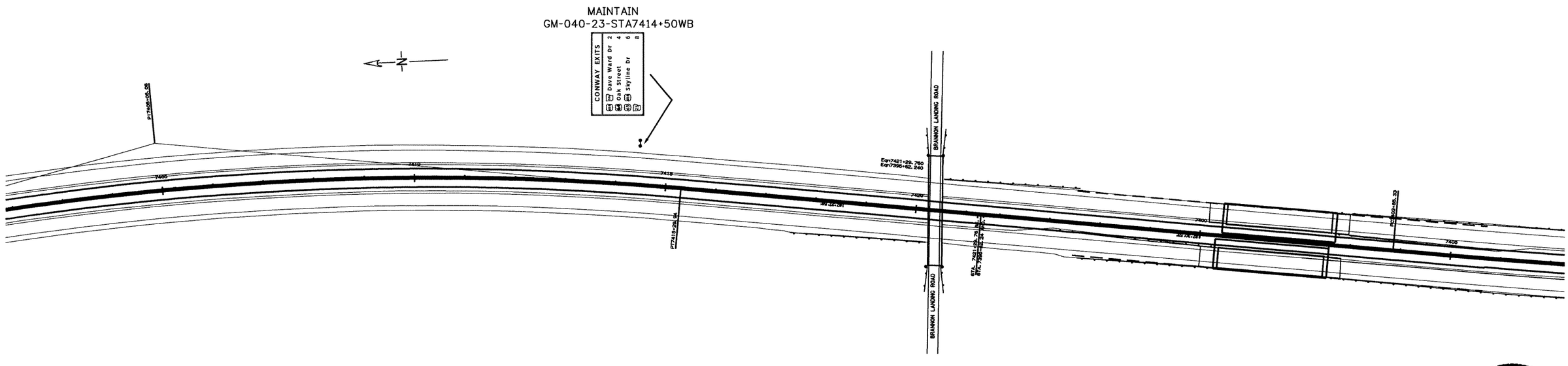
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	169	452

(2) SIGN PLACEMENT SHEET

STA 7371+00 TO STA 7407+00



MAINTAIN
GM-040-23-STA7414+50WB



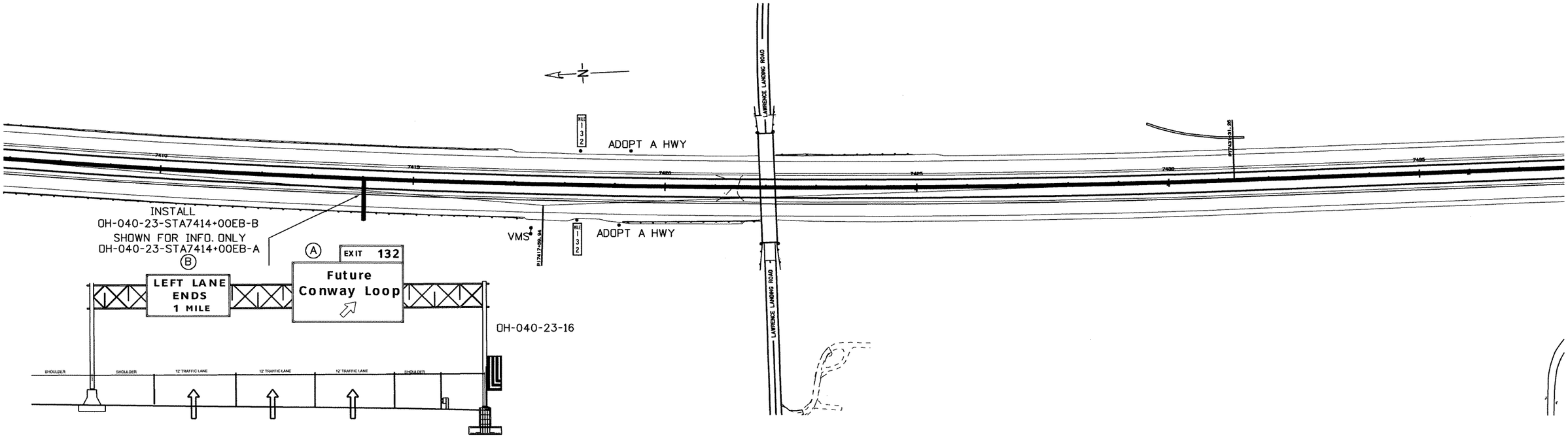
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
J. TONY SULLIVAN
9/26/14

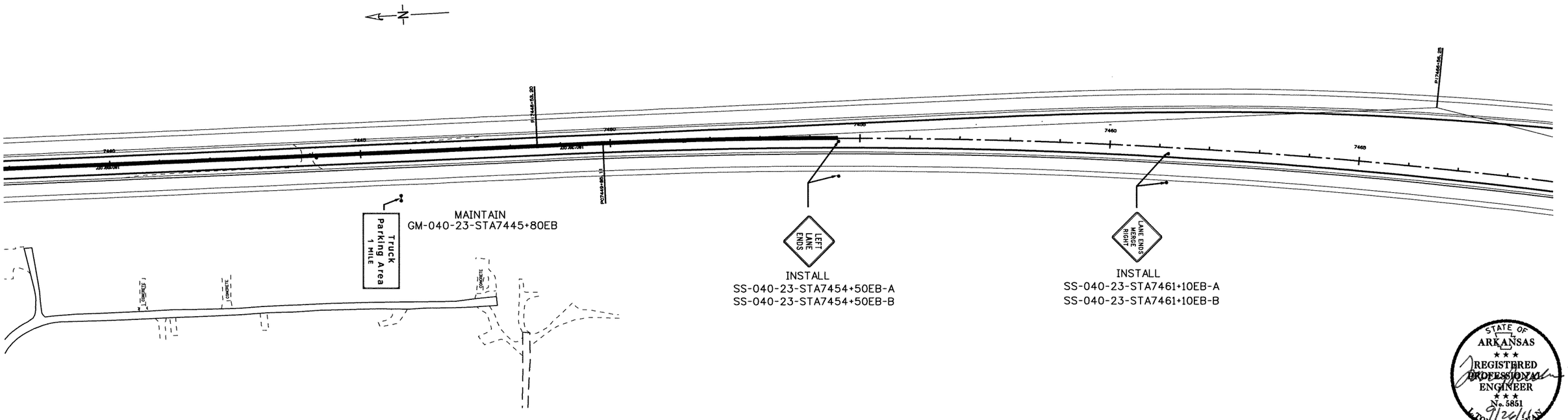
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080388	170	452

(2) SIGN PLACEMENT SHEET

STA 7407+00 TO STA 7468+00



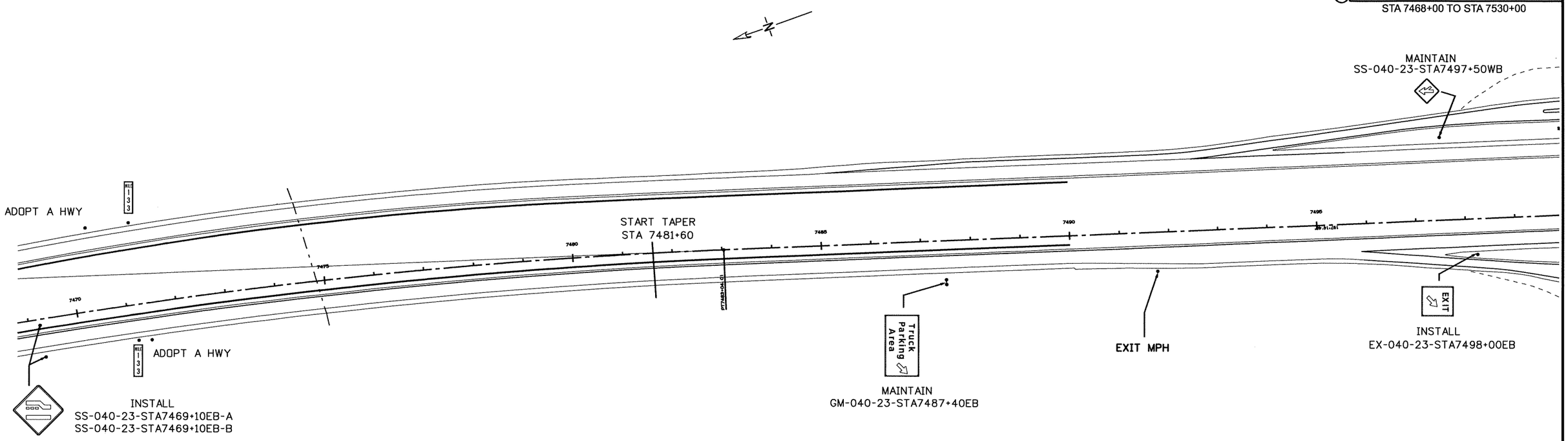


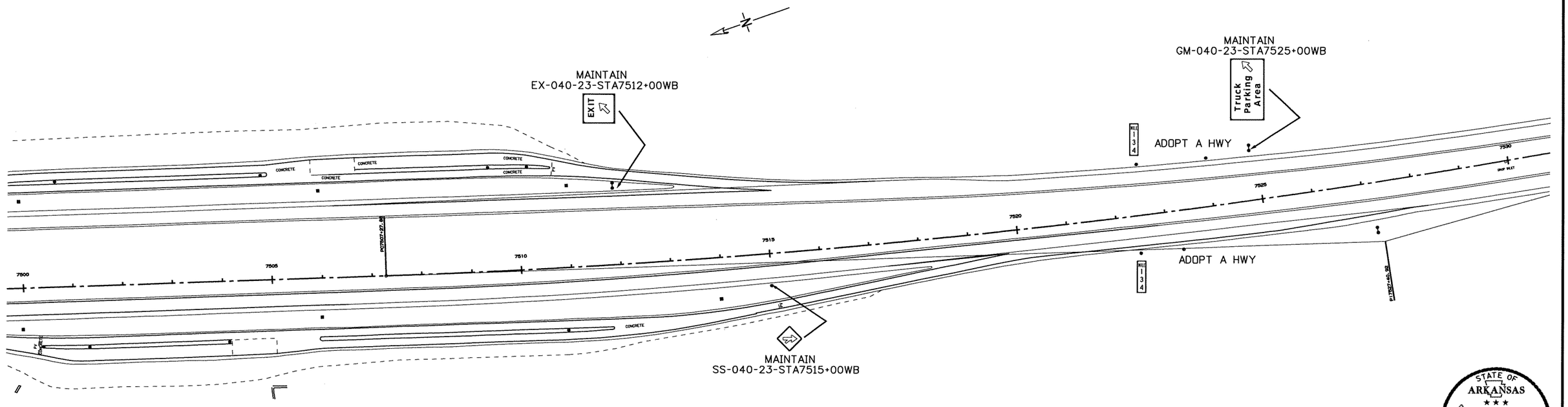
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
9/26/19
TONY SULLIVAN

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.		080388	171	452

(2) **SIGN PLACEMENT SHEET**

STA 7468+00 TO STA 7530+00



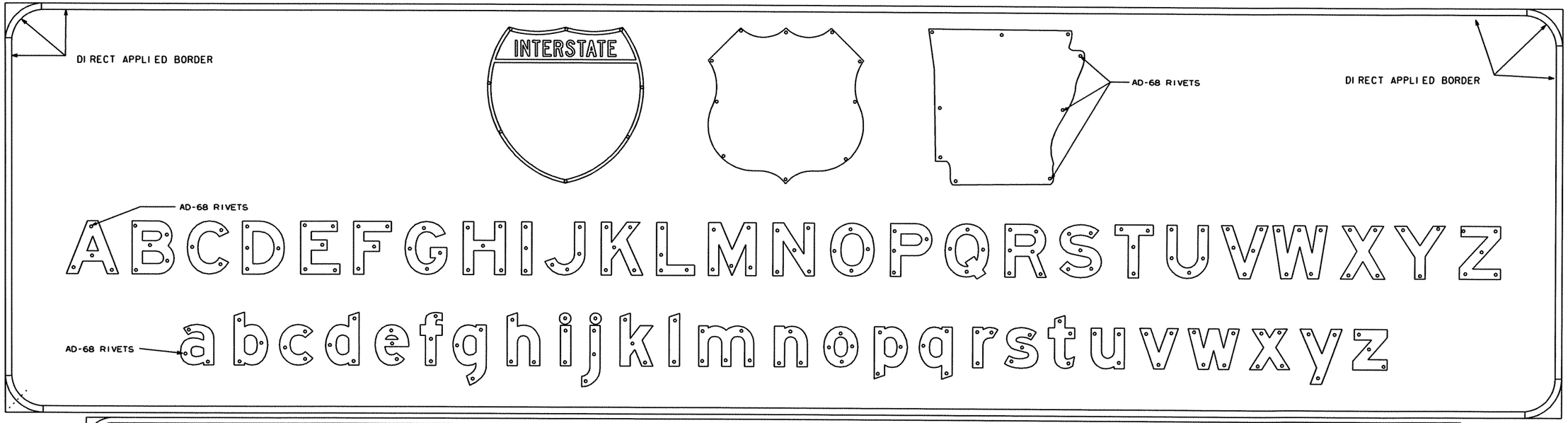


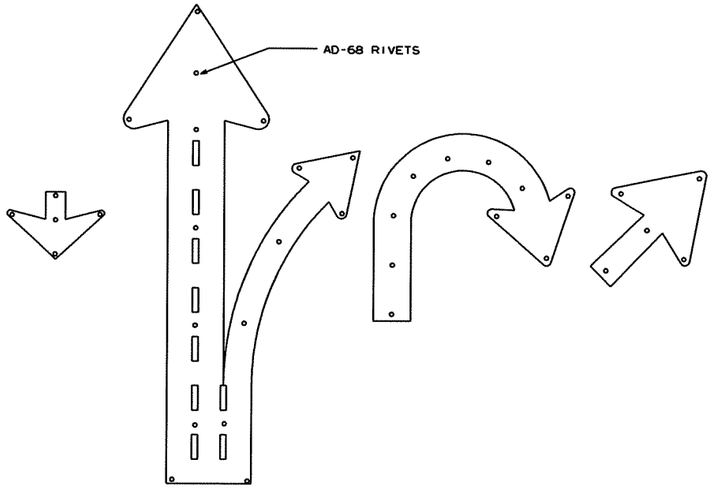
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
LYDNE SULLIVAN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.AID. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	122	452

(2) MOUNTING DETAILS FOR DEMOUNTABLE LEGEND ON GUIDE SIGNS

THE CONTRACTOR SHALL DRILL AND POP-RIVET LEGEND, SHIELDS, ARROWS, OR OTHER COPY AS SHOWN.





NOTE:

LEGEND ON GUIDE SIGNS ON THE MAIN LANES SHALL BE DEMOUNTABLE LEGEND.
LEGEND ON GUIDE SIGNS ON CROSS ROADS AND RAMPS SHALL BE DIRECT APPLIED.
THE DEMOUNTABLE AND DIRECT APPLIED LEGENDS SHALL BE TYPE IX SHEETING.

THE BACKGROUND ON ALL GUIDE SIGNS AND STANDARD SIGNS SHALL BE CONSTRUCTED USING TYPE III SHEETING.
TYPE IX SHEETING FOR BORDER, LEGEND, SHIELDS, ARROWS, OR OTHER COPY SHALL BE ORIENTED VERTICALLY AS PER MANUFACTURERS' DATUM MARKS, ORIENTATION MARKS, OR OTHER RECOMMENDATIONS.

SIGN LEGEND, SHIELDS, ARROWS OR OTHER COPY SHALL BE APPLIED WITH RIVETS ONLY.
NO OTHER METHOD OF APPLYING CHARACTERS IS ALLOWED.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 6851
12/16/14

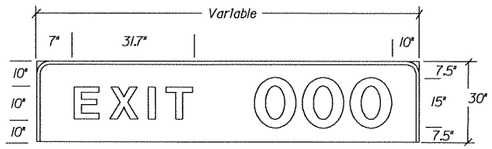
MOUNTING DETAILS FOR DEMOUNTABLE LEGEND ON GUIDE SIGNS

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.		080388	173	452
				(2)	EXIT PANEL DETAILS			



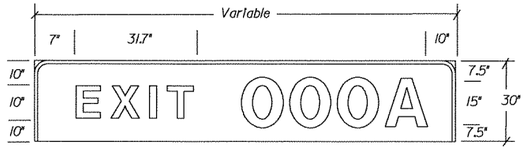
TYPICAL DETAIL

TYPE A



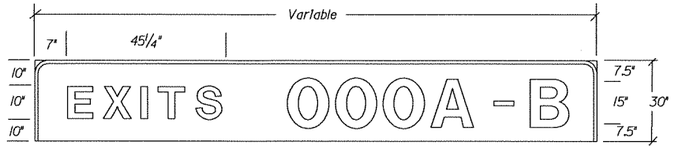
EXIT WITH 1 DIGIT 84"X30"=17.50 SF
EXIT WITH 2 DIGITS 96"X30"=20.0 SF
EXIT WITH 3 DIGITS 114"X30"=23.57 SF

TYPE B



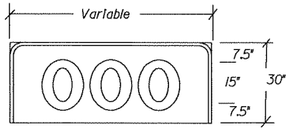
EXIT WITH 1 DIGIT PLUS "A"OR"B" 96"X30"=20.0 SF
EXIT WITH 2 DIGITS PLUS "A"OR"B" 114"X30"=23.57 SF
EXIT WITH 3 DIGITS PLUS "A"OR"B" 126"X30"=26.25 SF

TYPE C



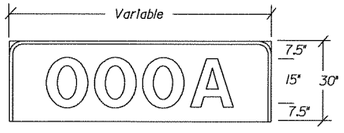
EXITS WITH 1 DIGIT PLUS "A"&"B" 132"X30"=27.50 SF
EXITS WITH 2 DIGITS PLUS "A"&"B" 150"X30"=31.25 SF
EXITS WITH 3 DIGITS PLUS "A"&"B" 168"X30"=35.00 SF

TYPE D



1 DIGIT 24"X30" =5.0 SF
2 DIGITS 42"X30" =8.75 SF
3 DIGITS 60"X30" =12.50 SF

TYPE E



1 DIGIT PLUS "A"OR"B" 42"X30"=8.75 SF
2 DIGITS PLUS "A"OR"B" 60"X30"=12.50 SF
3 DIGIT PLUS "A"OR"B" 78"X30"=16.25 SF

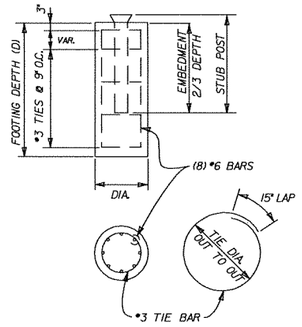
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
9/26/11
TONY SULLIVAN

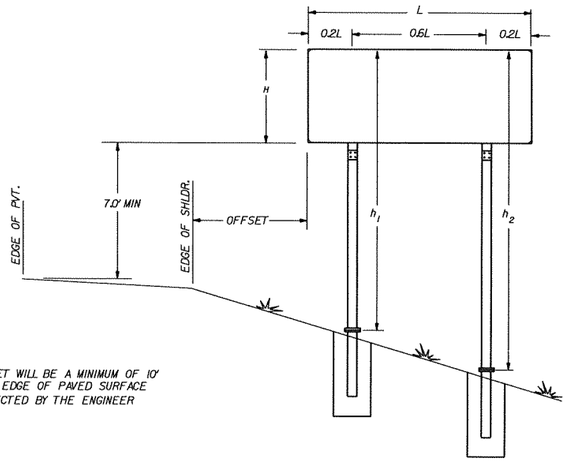
EXIT PANEL DETAILS

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.		080388	174	452

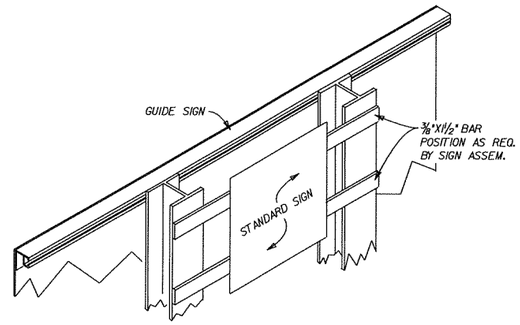
(2) I-BEAM SIGN SUPPORTS



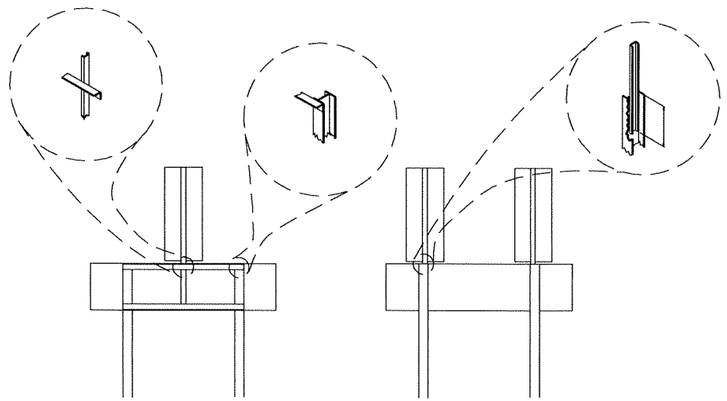


NOTE:
THE OFFSET WILL BE A MINIMUM OF 10' FROM THE EDGE OF PAVED SURFACE OR AS DIRECTED BY THE ENGINEER

G-1



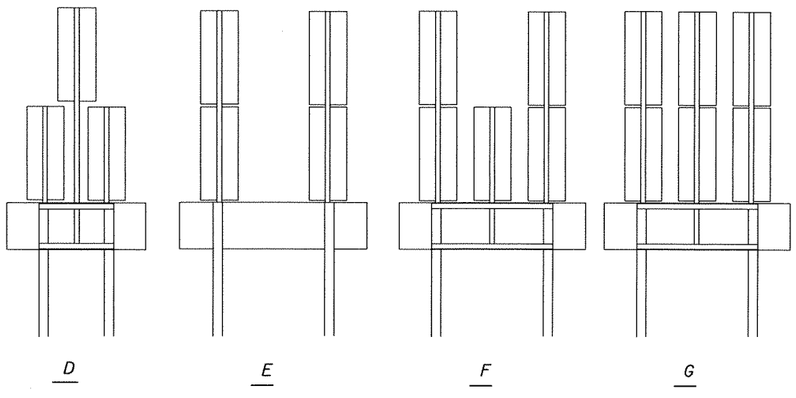
SECONDARY SIGN INSTALLATION ON BACKSIDE OF GUIDE SIGN



TRIPLE ASSEM.(C or D)

* Y	* X	TYPE ASSEM.
4'-4"	≥ 7'-6"	G-IC
4'-4"	< 7'-6"	G-ID
4'-10"	≥ 8'-0"	G-IC
4'-10"	< 8'-0"	G-ID
5'-1"	≥ 8'-6"	G-IC
5'-1"	< 8'-6"	G-ID
5'-4"	≥ 9'-0"	G-IC
5'-4"	< 9'-0"	G-ID

LEGEND
≥ GREATER THAN OR EQUAL TO
< LESS THAN



FOOTING QUANTITIES

FTG. DEPTH	NO. OF TIES	STUB PROJ.	18" DIA.		24" DIA.		30" DIA.		36" DIA.		"A"
			CU.YD.	* STEEL	CU.YD.	* STEEL	CU.YD.	* STEEL	CU.YD.	* STEEL	EMBED.
2'-6"	4	4"	0.16	30.5							1'-8"
3'-0"	4	4"	0.20	36.6							2'-0"
3'-6"	5	4"	0.23	44.2							2'-4"
4'-0"	6	4"	0.26	51.8	0.46	55.4					2'-8"
4'-6"	7	4"	0.29	59.5	0.52	63.6					3'-0"
5'-0"	7	4"	0.33	65.5	0.58	69.6	0.91	73.8			3'-4"
5'-6"	8	4"			0.64	77.9	1.00	82.6			3'-8"
6'-0"	9	4"			0.70	86.7	1.09	91.5	1.57	96.5	4'-0"
6'-6"	9	4"					1.18	97.5	1.70	102.6	4'-4"
7'-0"	10	4"					1.27	106.3	1.83	111.9	4'-8"
7'-6"	11	4"							1.96	121.3	5'-0"
8'-0"	11	4"							2.09	127.3	5'-4"

REINFORCING STEEL SCHEDULE

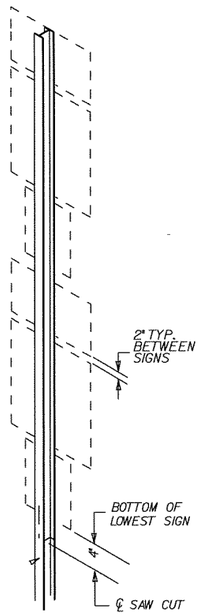
FTG. DIA. IN.	*3 TIE BARS			FTG. DEPTH FT./IN.	(8) *6 BARS		NO. TIES EA.
	DIA. IN.	LGTH.-EA. FT./IN.	WEIGHT LBS.		LGTH.-EA. FT./IN.	WEIGHT LBS.	
18"	12"	4'-4"	16.29	2'-6"	2'-0"	24.03	4
				3'-0"	2'-6"	30.04	4
24"	18"	5'-11"	2.225	3'-6"	3'-0"	36.05	5
				4'-0"	3'-6"	42.06	6
30"	24"	7'-6"	2.820	4'-6"	4'-0"	48.06	7
				5'-0"	4'-6"	54.07	7
36"	30"	9'-0"	3.384	5'-6"	5'-0"	60.08	8
				6'-0"	5'-6"	66.09	9
				6'-6"	6'-0"	72.10	9
				7'-0"	6'-6"	78.10	10
				7'-6"	7'-0"	84.11	11
				8'-0"	7'-6"	90.12	11

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
3/26/85
LARRY SULLIVAN

I-BEAM SIGN SUPPORTS

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.		080388	175	452

(2) SPECIAL DETAILS SHOWING BREAKAWAY SIGN SUPPORTS (I-BEAM)

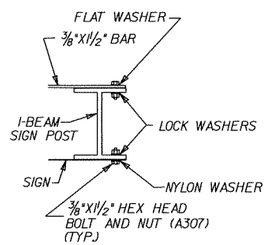


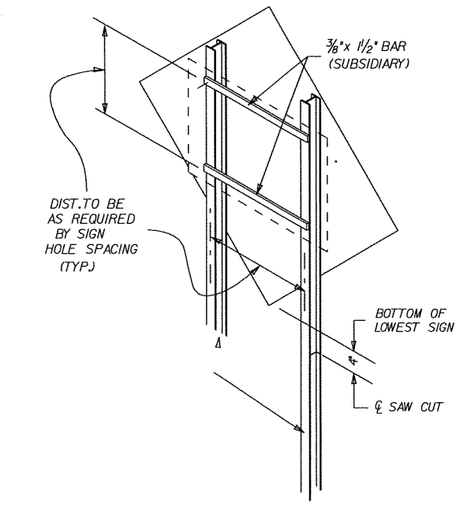
TYPE-1

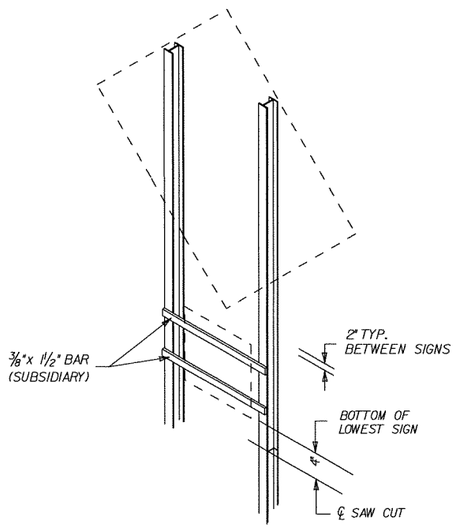
I-BEAM (TYPICAL)

BASIS OF ESTIMATE
APPROX. 325 lbs STEEL

FOOTING
DIA. 1'-6"
DEPTH 4'-6"
EMBED. 4'-0" MIN.







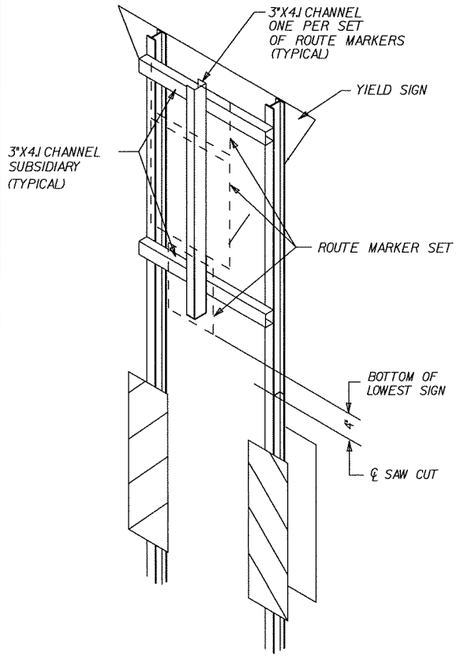
TYPE-2

I-BEAM (TYPICAL)
BASIS OF ESTIMATE
APPROX. 160 lbs STEEL

FOOTING
DIA. 1'-0"
DEPTH 3'-6"
EMBED. 3'-0" MIN.

NOTE

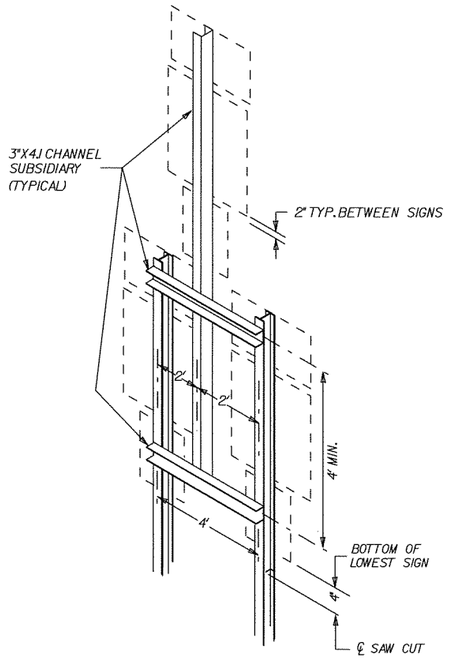
ALL ADDITIONAL MOUNTING HARDWARE, BOLTS, NUTS, CHANNELS AND BAR STRAPS REQUIRED TO MOUNT SECONDARY SIGNS WILL BE CONSIDERED TO BE SUPPLEMENTAL TO THE MAIN SIGN SUPPORT SPECIFIED. PAYMENT WILL BE CONSIDERED SUBSIDIARY TO THE MAIN SUPPORT .



TYPE-3

I-BEAM (TYPICAL)
BASIS OF ESTIMATE
APPROX. 160 lbs STEEL

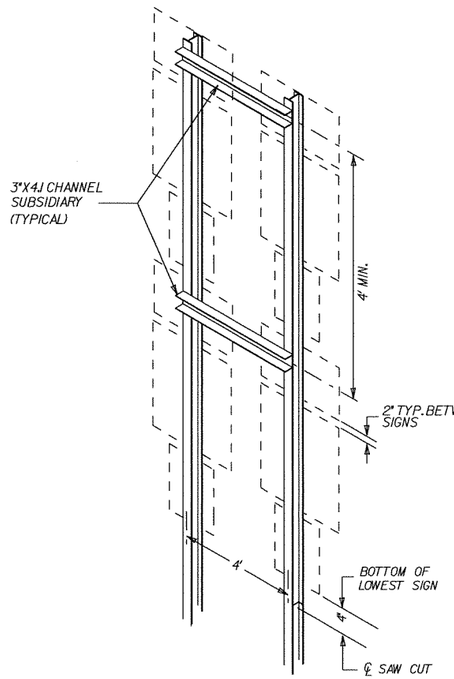
FOOTING
DIA. 1'-0"
DEPTH 3'-6"
EMBED. 3'-0" MIN.



TYPE-4

I-BEAM (TYPICAL)
BASIS OF ESTIMATE
APPROX. 325 lbs STEEL

FOOTING
DIA. 1'-0"
DEPTH 3'-6"
EMBED. 3'-0" MIN.



TYPE-5

I-BEAM (TYPICAL)
BASIS OF ESTIMATE
APPROX. 325 lbs STEEL

FOOTING
DIA. 1'-0"
DEPTH 3'-6"
EMBED. 3'-0" MIN.

NOTE:

THE GALVANIZED STEEL CHANNEL AND BAR SUPPORTS MAY BE ASTM A-36.

FOOTING DESIGN IS BASED ON THE FOLLOWING:
AVG. SOIL PRESSURE S =1200LBS PER SQ.FT.
MAX. FOUNDATION PRESSURE = 3000LBS. PER SQ.FT.
ALL CONCRETE TO BE CLASS "S".

REFER TO THE P.C. RUTLEDGE FORMULA ON PAGE 58 OF THE AASHTO PUBLICATION "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS".

ALL BOLT HOLES SHALL BE 1/8" DIA. UNLESS OTHERWISE SHOWN.

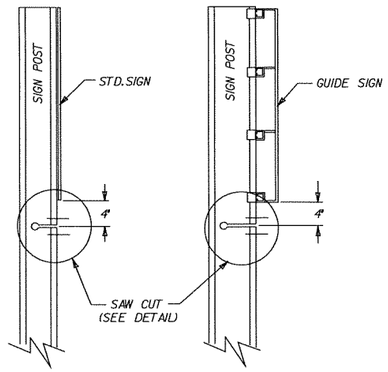
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
9/20/13

SPECIAL DETAILS SHOWING BREAKAWAY SIGN SUPPORTS (I-BEAM) - FOR STANDARD SIGNS -

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.		080388	176	452

(2) **DETAILS OF I-BEAM SIGN SUPPORTS**

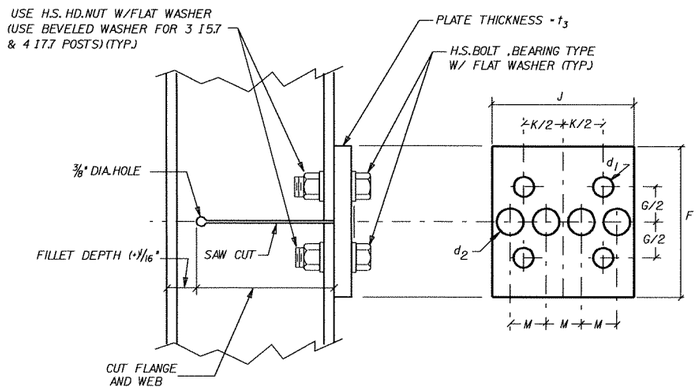
NOTE: BOLT HOLES, USED IN THE MOUNTING OF STANDARD SIGNS SHALL BE LOCATED IN THE FLANGE ADJACENT TO THE NEAR EDGE OF PAVEMENT FOR SINGLE POST ASSEMBLIES AND IN THE OUTSIDE FLANGES FOR MULTIPLE POST ASSEMBLIES.



NOTE: POST SHALL BE SAW CUT AFTER GALVANIZING AND THE CUT SURFACE TREATED, AFTER PLATE IS INSTALLED AND ALL BOLTS FULLY TIGHTENED, WITH AN APPROVED ZINC SOLDER MEETING THE FEDERAL SPEC. O-G-93 (STICK ONLY).

Standard Signs

Guide Signs

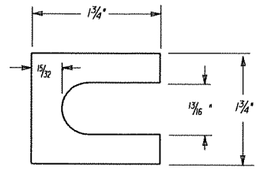


NOTE: USE H.S. HEX HEAD BOLTS, HEX HEAD NUTS AND BEVEL OR FLAT WASHERS (WHERE REQ.) UNDER NUTS. ALL HOLES SHALL BE DRILLED. ALL PLATE CUTS SHALL PREFERABLY BE SAW CUTS, HOWEVER FLAME CUTTING WILL BE PERMITTED PROVIDED ALL EDGES ARE GROUND. METAL PROJECTING BEYOND THE PLANE OF THE PLATE FACE WILL NOT BE PERMITTED. STEEL FUSE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM-A36, ASTM-A441, ASTM-572 GRADE 50, OR ASTM-A588 MAY BE SUBSTITUTED FOR A36 AT THE OPTION OF THE FABRICATOR. STEEL USED SHALL HAVE AN ULTIMATE TENSILE STRENGTH NOT TO EXCEED 80 KSI.

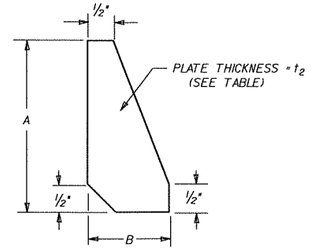
POST SIZE	BASE CONNECTION DATA										FUSE PLATE DATA									
	BOLT SIZE	BOLT TORQUE (INCH/LBS)	A	B	C	D	E	t_1	t_2	W	R	F	G		J	K	M	d_1	d_2	t_3	BOLT SIZE	WT. OF EACH FUSE PLATE LBS.
W 6X9	⅝" x 2¾"	450"-680"	5"	2"	1¼"	2¾"	1⅛"	¾"	½"	¼"	11/32"	4¼"	2"		4"	2¼"	1"	9/16"	¾"	¼"	½" x 1½"	1.01
W 6X12																						
W 6X15												5"	2½"		6"	3½"	1½"	11/16"	1¼"	⅜"	⅝" x 2¼"	2.51
W 8X18	¾" x 3½"	750"-1050"	6"	2¼"	1⅜"	3½"	1¼"	1"	¾"	5/16"	11/32"	5"	2½"		5¼"	2¾"	1¼"	11/16"	1¼"	⅜"	¾" x 2¼"	2.26
W 8X21												5½"	2½"		5¼"	2¾"	1¼"	13/16"	1"	½"	¾" x 2¼"	3.35
W 10X22												6"	3"		5¾"	2¾"	1⅜"	13/16"	1⅛"	½"	¾" x 2¼"	4.03
W 10X26																						
W 12X26												6"	3"		6½"	3½"	1⅝"	13/16"	1⅝"	½"	¾" x 2¼"	4.47

FUSE PLATE DETAILS

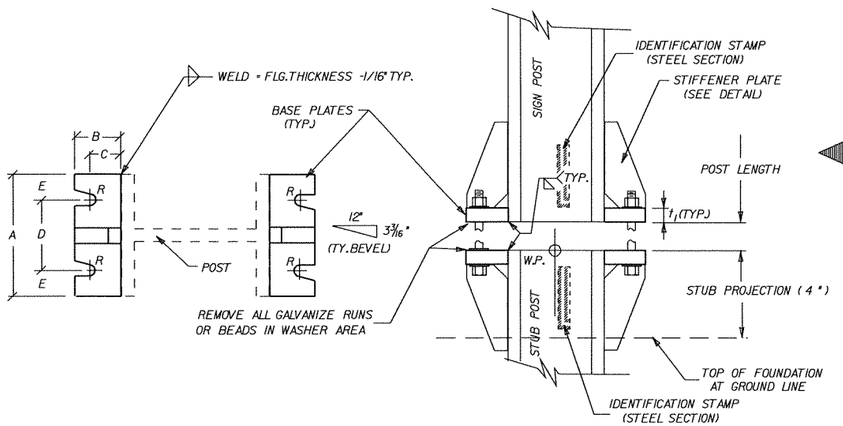
FURNISH 2 ~ .012"+/- THICK AND 2 ~ .032"+/- THICK SHIMS PER POST



SHIM DETAIL



STIFFENER PLATE DETAIL



TRAFFIC FLOW DIRECTION

NOTE: SECTIONS SHOWN ARE FOR INSTALLATION ON THE RIGHT SHOULDER AND IN THE GORE. BOLT HOLES IN BASE PLATE ARE SLOTTED AND BEVELED AS SHOWN. USE H.S. BOLTS WITH HEX HD., HEX NUT AND THREE FLAT WASHERS FOR EACH BOLT. SEE TABLE FOR BOLT DIA. AND TORQUE.
NOTE: ASSEMBLE SIGN POST TO STUB POST USING THE BOLTS SPEC. IN THE TABLE AND AS SHOWN IN THE ELEVATION DETAILS. THERE SHALL BE THREE FLAT WASHERS ON EACH BOLT LOCATED AS SHOWN IN THE ELEVATIONS. USE A SHIM TO PLUMB THE SIGN POST, THEN TIGHTEN THE BOLTS USING A 12" TO 15" WRENCH UNTIL THE WASHERS AND SHIMS ARE SEATED AND THE BOLT THREADS ARE CLEAR, THEN LOOSEN EACH BOLT IN TURN AND RETIGHTEN IN A SYSTEMATIC ORDER TO THE PRESCRIBED TORQUE (SEE TABLE), THE BURR THREADS ADJACENT TO THE BACK SIDE OF THE NUT TO PREVENT LOOSENING.

SIGN POST AND STUB POST

GENERAL NOTES

TIGHTEN THE HIGH STRENGTH BOLTS IN THE BASE CONNECTION ONLY TO THE TORQUE SHOWN. DO NOT OVERTIGHTEN.

BASE PLATES AND STIFFENER PLATES SHALL BE OF THE SAME MATERIAL AS THE PRIMARY SUPPORT POSTS WHICH THEY ARE WELDED.

FOR FOOTING DETAILS REFER TO PLANS.

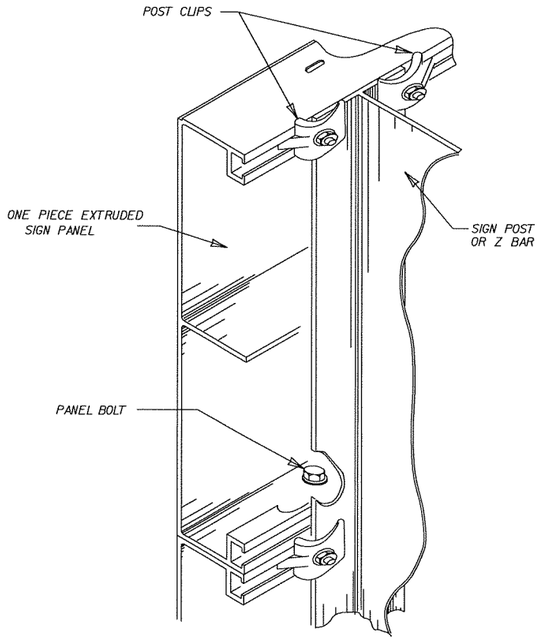
EACH STUB POST AND SIGN POST SHALL HAVE A PERMANENT IDENTIFYING STAMP WHICH SPECIFIES THE STEEL SECTION USED. IF THE CONTRACTOR ELECTS TO SHIP THE STUB POST SEPARATE FROM THE SIGN POST A MATCH MARK SYSTEM WILL BE REQUIRED.

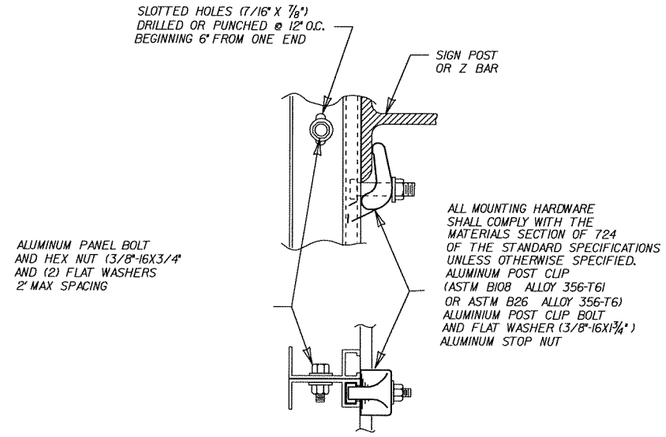


DETAILS OF I-BEAM SIGN SUPPORTS

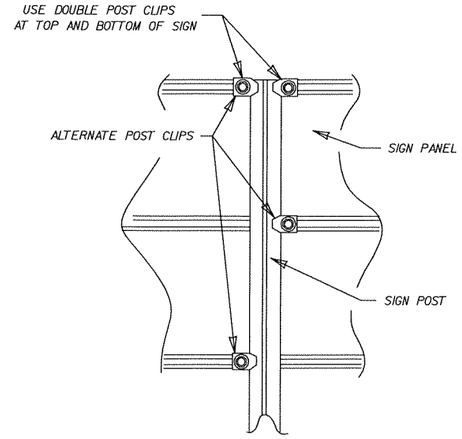
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				6	ARK.			
				JOB NO.		080388	170	452

(2) DETAILS OF GUIDE SIGN PANELS

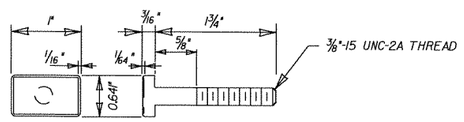




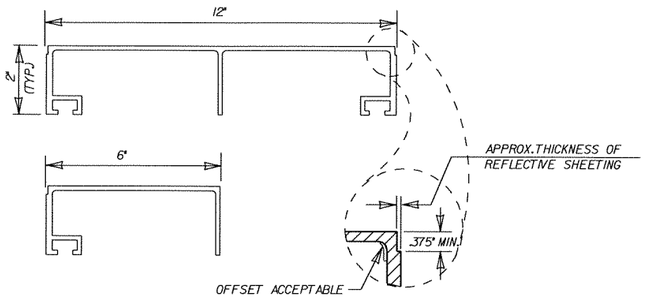
MOUNTING HARDWARE



POST CLIP PLACEMENT

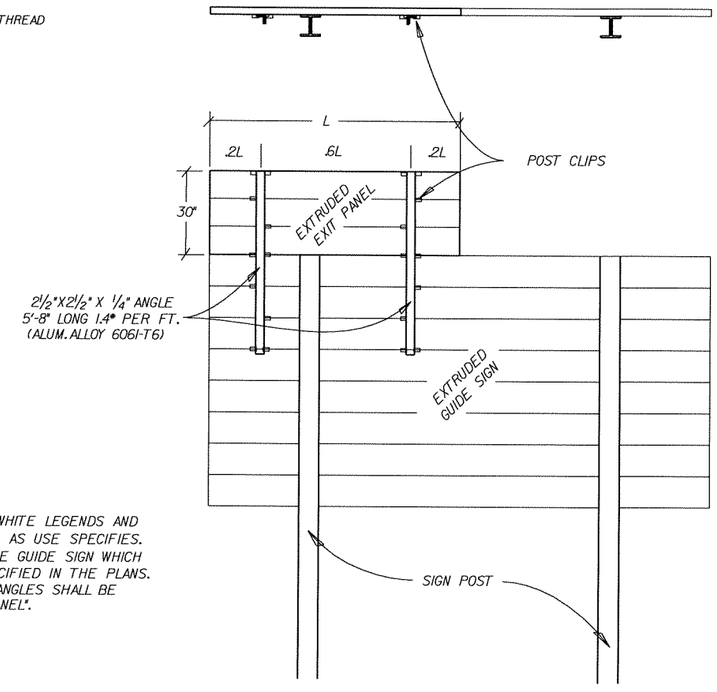


POST CLIP BOLT



ONE PIECE EXTRUDED SIGN PANELS

NOTE: EXIT NUMBER PANELS SHALL HAVE WHITE LEGENDS AND BORDERS. THE BACKGROUND COLOR WILL BE AS USE SPECIFIES. SHEETING TYPE WILL BE THE SAME AS THE GUIDE SIGN WHICH THE EXIT PANEL IS ATTACHED OR AS SPECIFIED IN THE PLANS. PAYMENT FOR ALL POST CLIPS, BOLTS, AND ANGLES SHALL BE SUBSIDIARY TO THE ITEM "EXIT NUMBER PANEL".



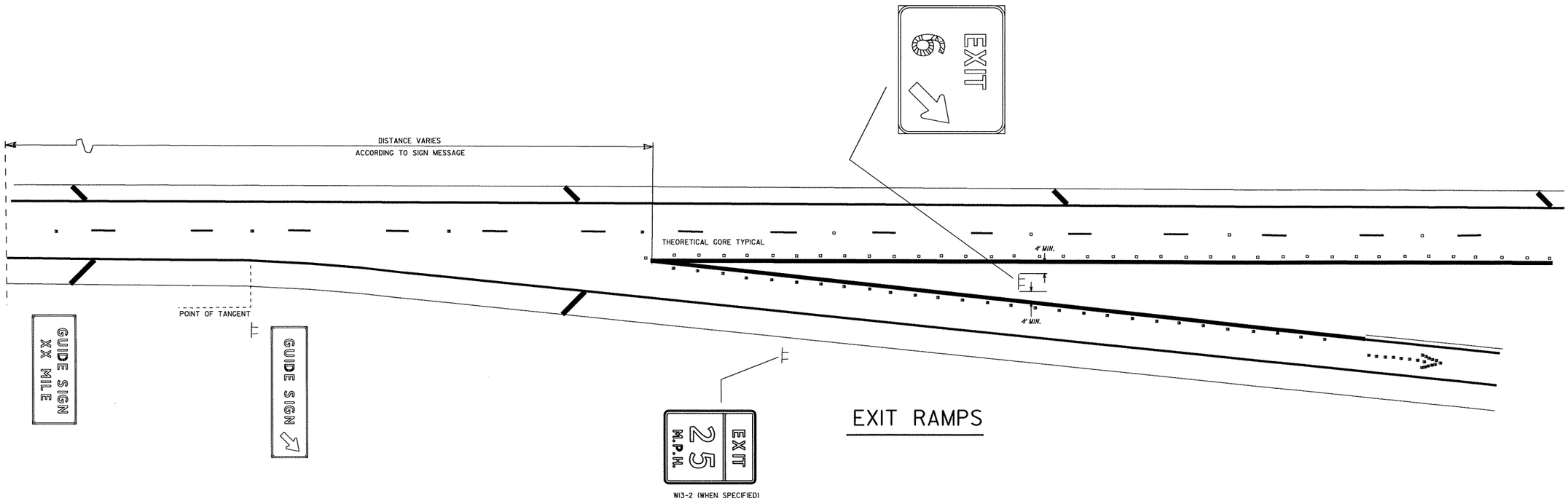
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
9/12/16
TONY SUMMERS

DETAILS OF GUIDE SIGN PANELS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

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6	ARK.			
JOB NO.		080388	178	452

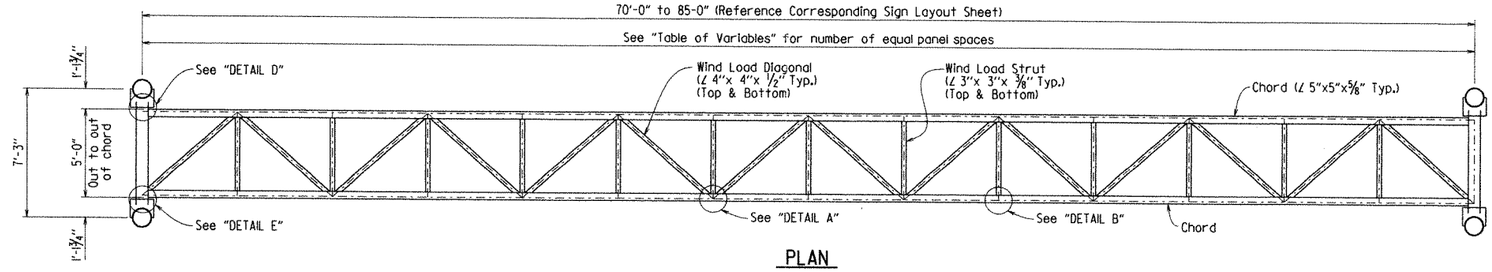
(2) DETAIL OF SIGN PLACEMENT



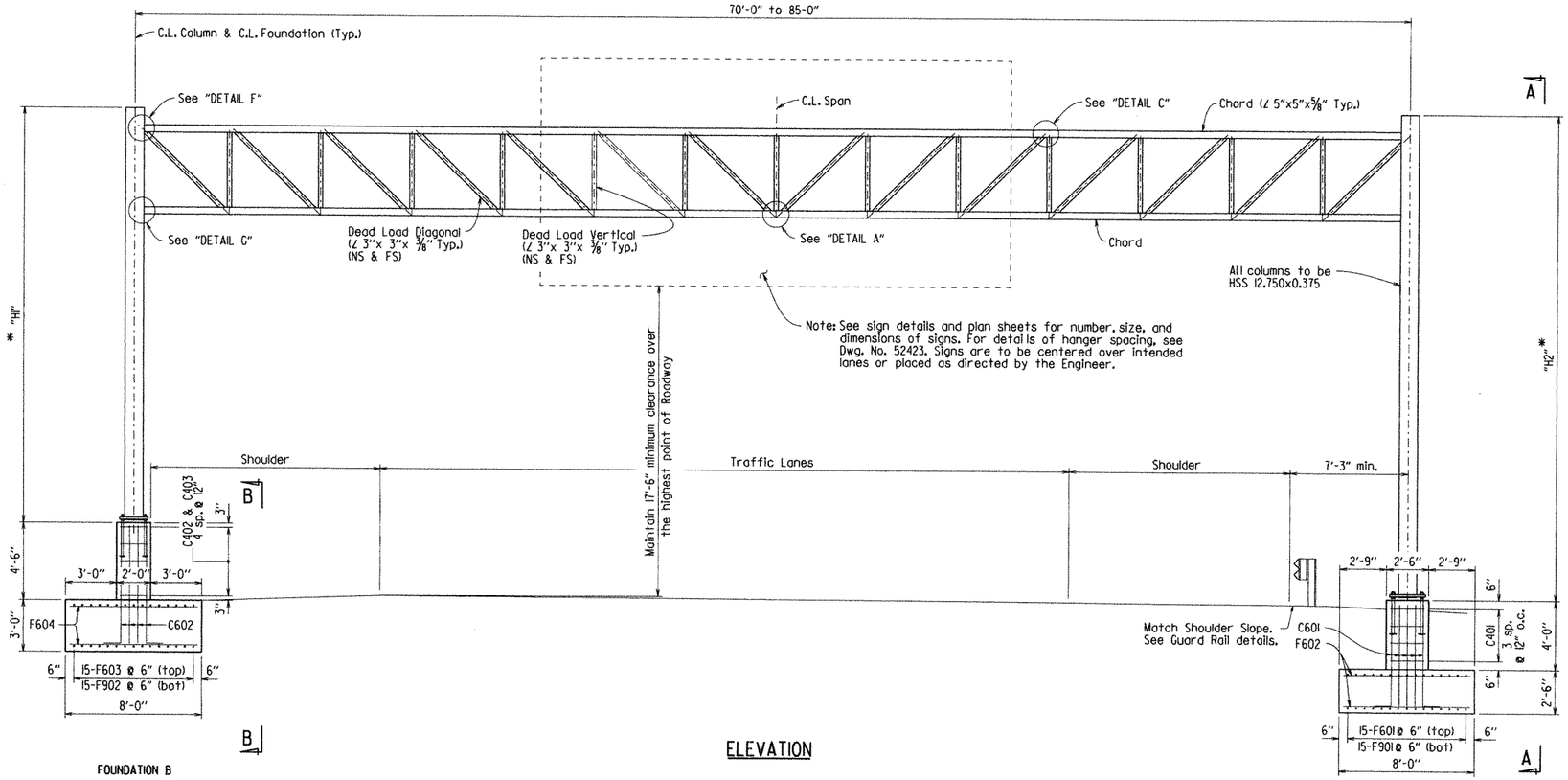
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
9/20/11

DETAIL OF SIGN PLACEMENT

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.		080388	17	452
				1 OH-040-23-05; OH-040-23-07 THRU OH-040-23-16		SIGN STRUCTURE		52419



PLAN

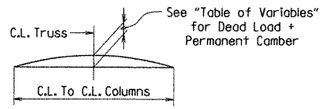


ELEVATION

FOUNDATION B

FOUNDATION A

* Note: The Contractor shall make field measurements to determine the Column heights "H1" and "H2" that are required to maintain the minimum vertical clearance with the centerline of the sign located at the centerline of the truss. These column heights shall be shown on the shop drawings with a note stating that the Contractor has made the required field measurements. If the structure height ("H1" or "H2") exceeds 30'-0" contact the Engineer. The Contractor shall also verify that the variable span length (70'-0" to 85'-0") is sufficient to meet the minimum clearances and to fit the new structure to the existing and/or proposed conditions.



TRUSS CAMBER DIAGRAM

TABLE OF VARIABLES

Span (ft)	No. of Equal Panel Spaces	Dead Load + Permanent Camber
70' thru 75'	14	1"
76' thru 85'	16	1¼"

APPROXIMATE QUANTITIES FOR FOUNDATION (FOR INFORMATION ONLY)

FOUNDATION	CLASS S CONCRETE (Cu. Yds.)	REINFORCING STEEL (Lbs.)	EXCAVATION (Cu. Yds.)
A	17.2	2659	51
B	22.0	3137	26

BAR LIST-FOUNDATION 'A'

MARK	NO. REQ'D	LENGTH	P.D.	BENDING DIAGRAMS
				Dimensions are out to out of bars.
C401	8	18'-2"	3"	6'-9", 2'-1", 5", (Typ.), 45°, 5'-11", 12", C401, C601
C601	48	6'-9"	4½"	
F601	15	17'-6"	Str.	
F602	70	7'-6"	Str.	
F901	15	17'-6"	Str.	

BAR LIST-FOUNDATION 'B'

MARK	NO. REQ'D	LENGTH	P.D.	BENDING DIAGRAMS
				Dimensions are out to out of bars.
C402	10	17'-8"	3"	7'-0", 10'-6", 1'-7", 5", (Typ.), 45°, 6'-11", 12", C402, C403, C602
C403	5	24'-8"	3"	
C602	74	7'-9"	4½"	
F603	15	17'-6"	Str.	
F604	70	7'-6"	Str.	
F902	15	17'-6"	Str.	

STATE OF ARKANSAS
Carl J. Fuselier
REGISTERED PROFESSIONAL ENGINEER
No. 7510
9/29/11
CARL J. FUSELIER

BRIDGE ENGINEER

SHEET 1 OF 5
DETAILS FOR 70' TO 85'
STEEL OVERHEAD SIGN STRUCTURES
HWY. 65-EAST (WIDENING) (F)
FAULKNER COUNTY

ROUTE 40 SEC. 32

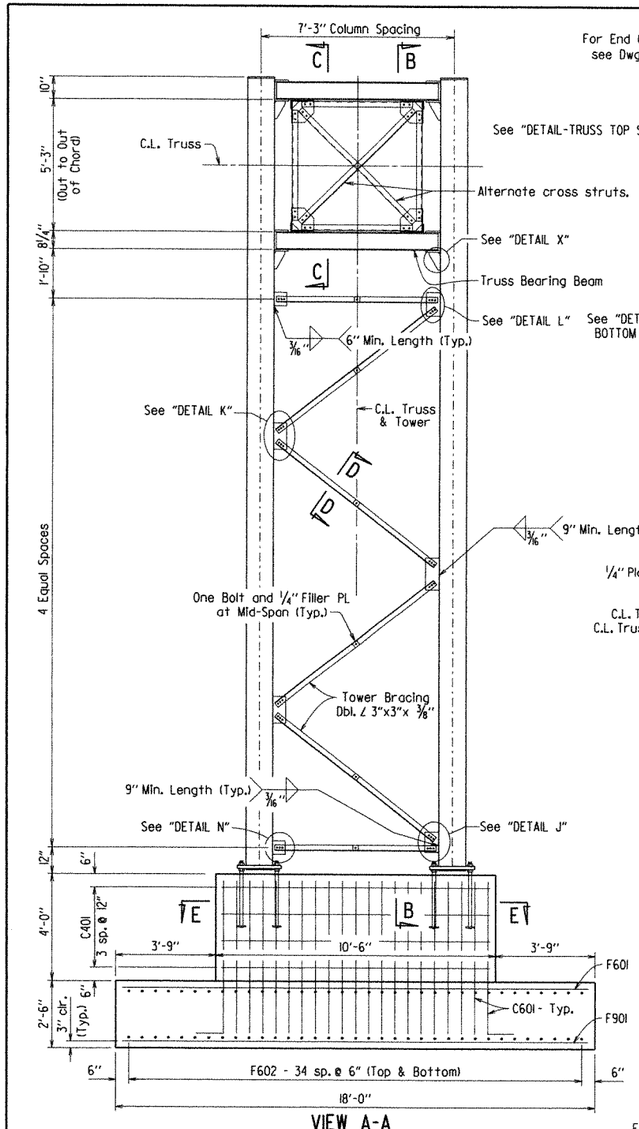
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

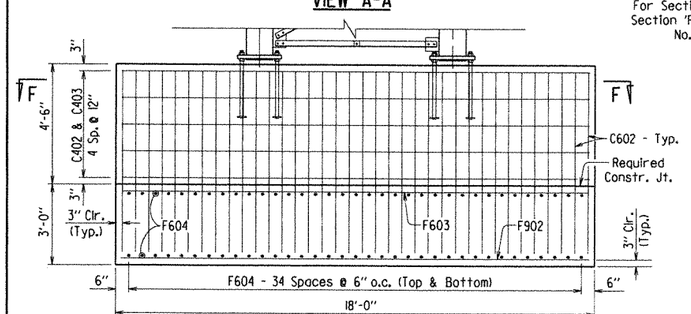
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CHECKED BY: DHP DATE: 9/28/11 SCALE: NOT TO SCALE
DESIGNED BY: RBR DATE: 8-11

STR. NO. OH-040-23-05; OH-040-23-07 THRU OH-040-23-16 DRAWING NO. 52419

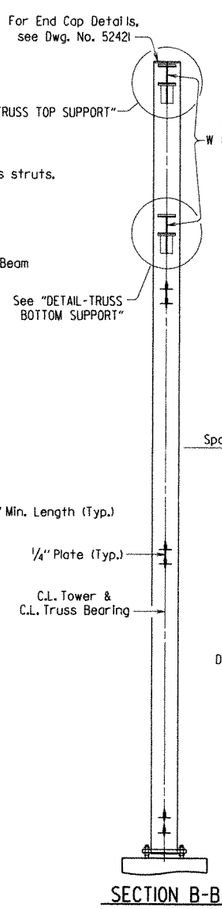
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				6	ARK.			
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				1 OH-040-23-05; OH-040-23-07 THRU OH-040-23-16		SIGN STRUCTURE		52420



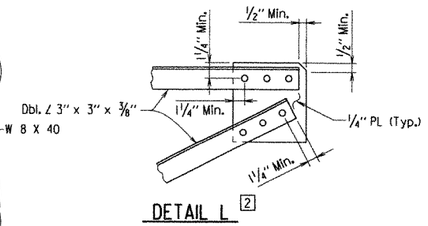
VIEW A-A



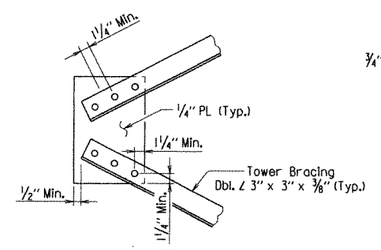
VIEW B-B



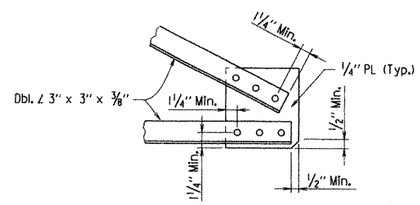
SECTION B-B



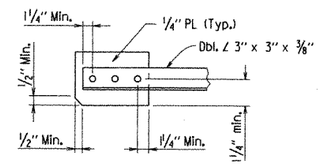
DETAIL L [2]



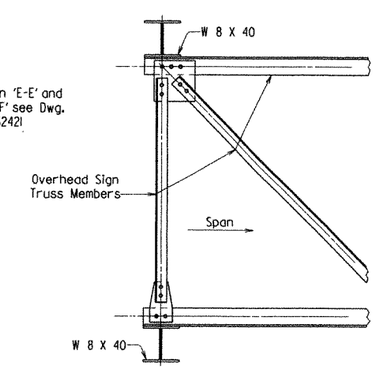
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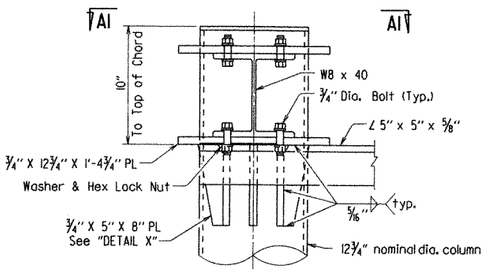
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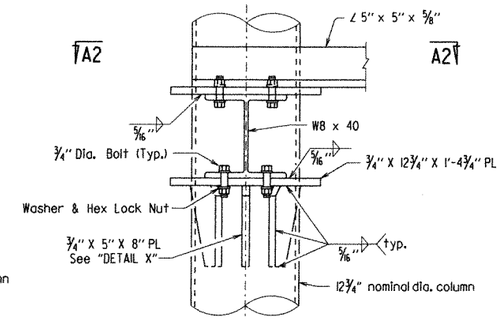
DETAIL N [2]



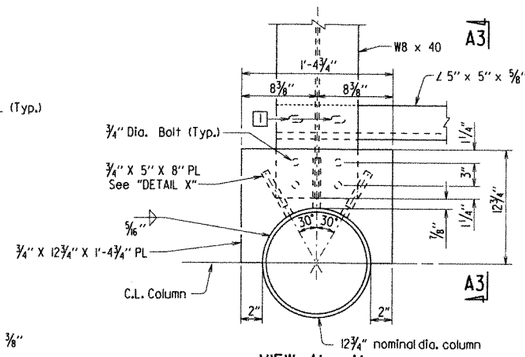
SECTION C-C



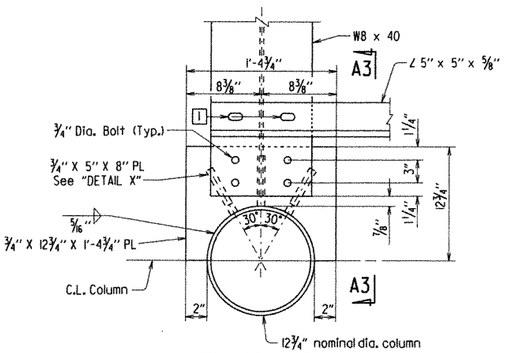
DETAIL - TRUSS TOP SUPPORT



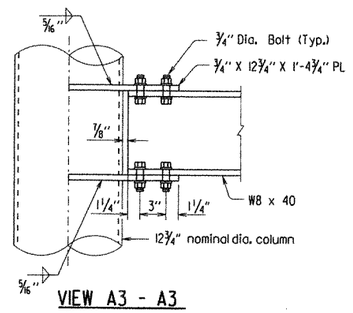
DETAIL - TRUSS BOTTOM SUPPORT



VIEW A1 - A1

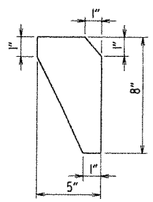


VIEW A2 - A2

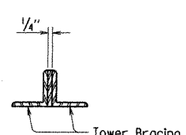


VIEW A3 - A3

¾" X 5" X 8" Plate not shown for clarity



DETAIL X



SECTION D-D

1 Slotted Hole in Chord Angle 11/16" X 2". Use plate washer on Chord Angle side.

2 Bolts shall be ¾" Dia. and open holes shall be 13/16". Minimum spacing shall be 2¼".

STATE OF ARKANSAS
Carl B. Fuselier
REGISTERED PROFESSIONAL ENGINEER
No. 7510
CARL B. FUSELIER 9/29/11
BRIDGE ENGINEER

SHEET 2 OF 5
DETAILS FOR 70' TO 85'
STEEL OVERHEAD SIGN STRUCTURES
HWY. 65-EAST (WIDENING) (F)
FAULKNER COUNTY

ROUTE 40 SEC. 32
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

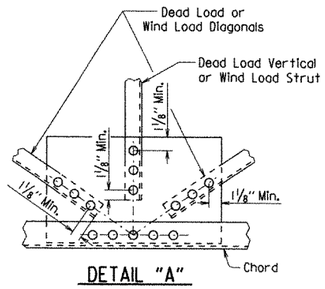
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CHECKED BY: DHP DATE: 9/28/11
DESIGNED BY: RBR DATE: 8-11
FILENAME: 080388signdetails.dgn
SCALE: NOT TO SCALE

STR. NO. OH-040-23-05; OH-040-23-07 THRU OH-040-23-16 DRAWING NO. 52420

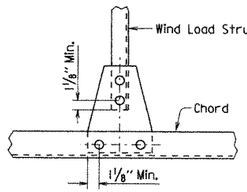
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	181	452
				(1) OH-040-23-05; OH-040-23-07 THRU OH-040-23-16		SIGN STRUCTURE		52421

Note: All Gusset Plate thicknesses shall be 3/8".

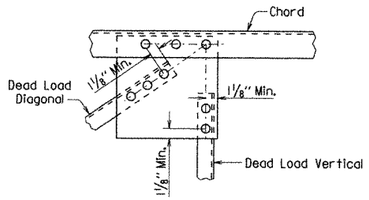
[1] Slotted Hole in Gusset Plate and Chord Angle 9/16" X 2". Use plate washer on Gusset plate side.



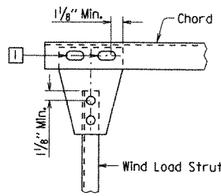
DETAIL "A"



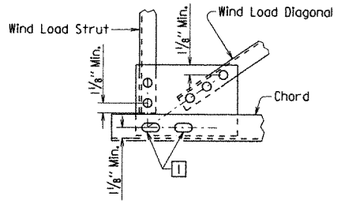
DETAIL "B"



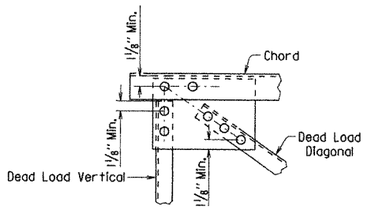
DETAIL "C"



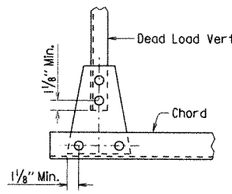
DETAIL "D"



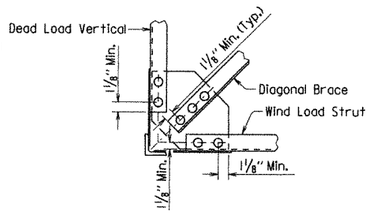
DETAIL "E"



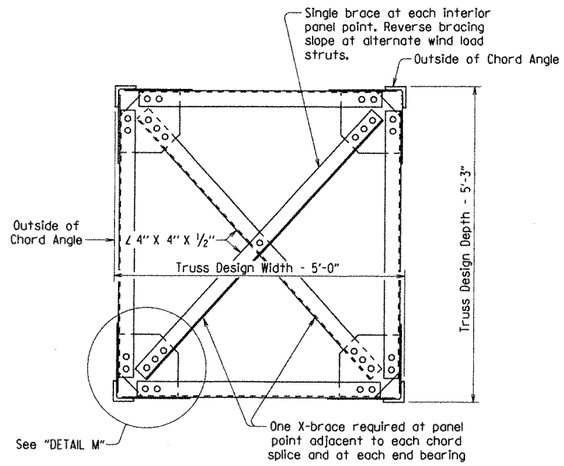
DETAIL "F"



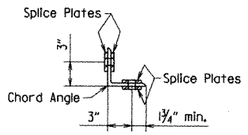
DETAIL "G"



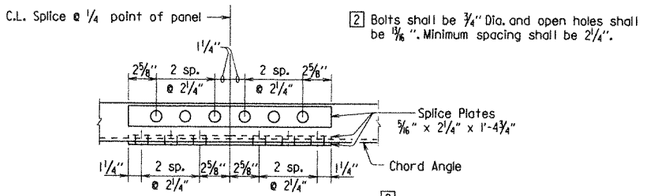
DETAIL "M"



TRUSS SECTION

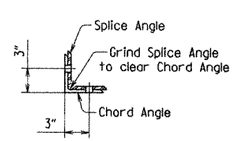


SECTION ON C.L. SPLICE

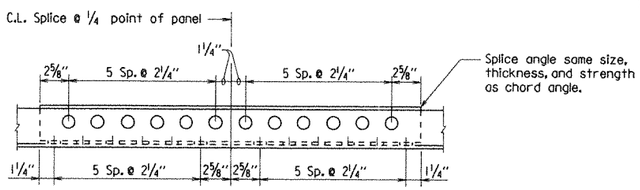


[2] Bolts shall be ¾" Dia. and open holes shall be 15/16". Minimum spacing shall be 2¼".

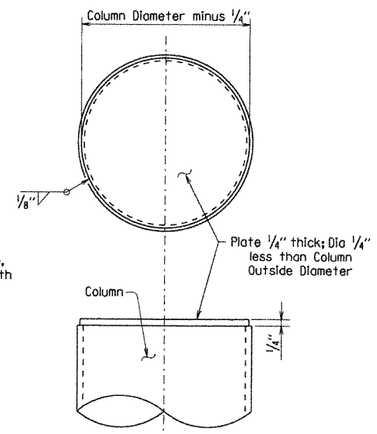
CHORD SPLICE USING PLATES [2]



SECTION ON C.L. SPLICE

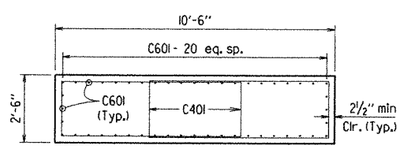


OPTIONAL CHORD SPLICE USING ANGLES [2]
Place Splice Angle on inside of Truss

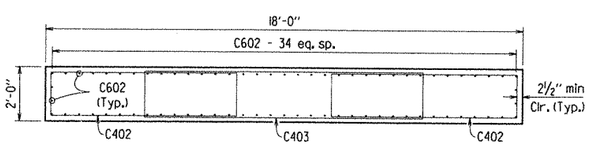


END CAP DETAILS

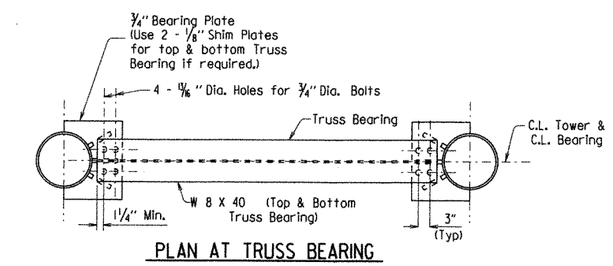
Note: Chord angles may be spliced in convenient lengths for galvanizing and sign placement.



SECTION "E-E"
Foundation A



SECTION "F-F"
Foundation B



PLAN AT TRUSS BEARING

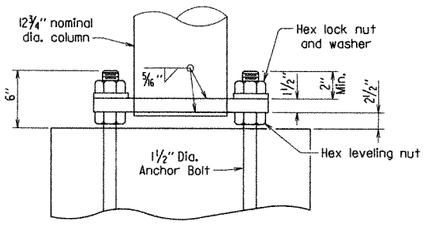
STATE OF ARKANSAS
Carl R. Tumlin
No. 7510
REGISTERED PROFESSIONAL ENGINEER
CARL R. TUMLIN
9/28/11
BRIDGE ENGINEER

SHEET 3 OF 5
DETAILS FOR 70' TO 85'
STEEL OVERHEAD SIGN STRUCTURES
HWY. 65-EAST (WIDENING) (F)
FAULKNER COUNTY

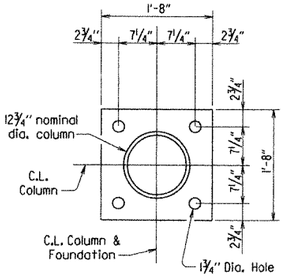
ROUTE 40 SEC. 32
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: RBR DATE: 08/01/11
CHECKED BY: DHP DATE: 9/28/11
DESIGNED BY: RBR DATE: 8-11
FILENAME: 080388signdetails.dgn
SCALE: NOT TO SCALE
STR. NO. OH-040-23-05; OH-040-23-07 THRU OH-040-23-16 DRAWING NO. 52421

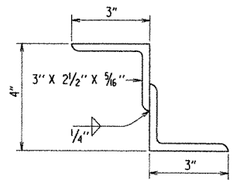
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				6	ARK.			
				JOB NO.		080388	182	452
				(1) OH-040-23-05; OH-040-23-07 THRU OH-040-23-16		SIGN STRUCTURE		52422



ELEVATION - COLUMN BASE

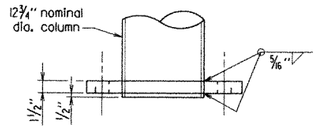


PLAN - COLUMN BASE



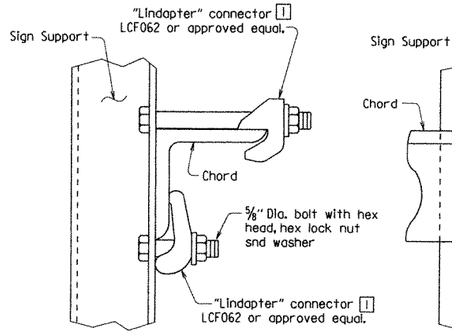
NOTE: Structural Z support may be fabricated from angles as shown.

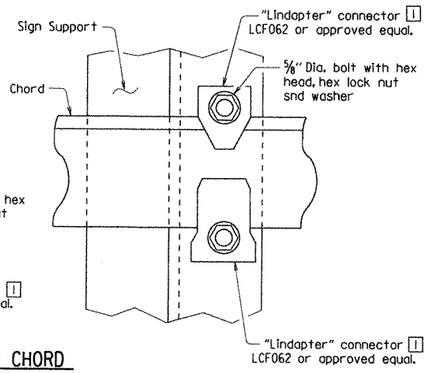
DETAILS OF ALTERNATE Z SUPPORT



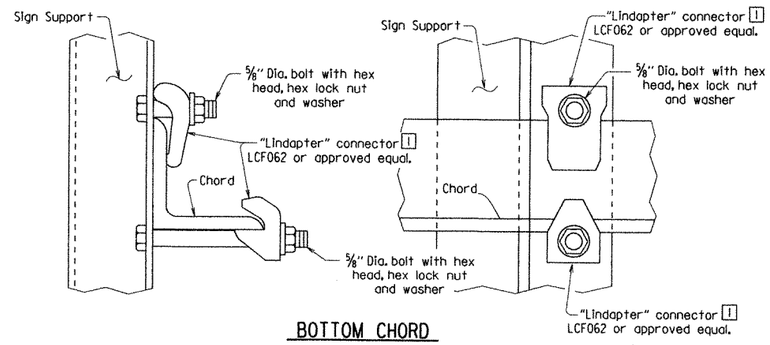
Note: Diameter of hole in base plate to be ⅛" larger than column diameter.

DETAIL OF COLUMN CONNECTION TO BASE PLATE





TOP CHORD

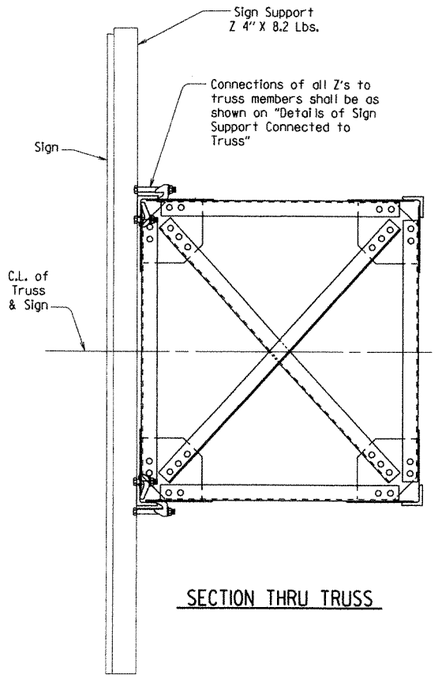


BOTTOM CHORD

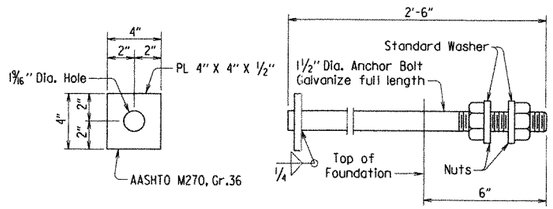
[1] Note: All "Lindapter" connectors or approved equal shall be installed according to manufacturer's recommendations. All connectors, bolts, nuts and washers shall be galvanized.

Note: Install all support connectors clear of the gusset plates and splice locations.

DETAIL OF SIGN SUPPORT CONNECTED TO TRUSS



SECTION THRU TRUSS



Anchor bolts shall comply with AASHTO M314, Grade 55, with Supplementary Requirement S1, and galvanized according to Section 807.07. Nuts for bolts shall be as specified in Section 807.07.

ANCHOR BOLT DETAIL

STATE OF ARKANSAS
CARL L. FUSELIER
REGISTERED PROFESSIONAL ENGINEER
No. 7510
9/28/11

BRIDGE ENGINEER

SHEET 4 OF 5
DETAILS FOR 70' TO 85'
STEEL OVERHEAD SIGN STRUCTURES
HWY. 65-EAST (WIDENING) (F)
FAULKNER COUNTY

ROUTE 40 SEC. 32

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: RBR DATE: 08/01/11 FILENAME: 080388signdetails.dgn
CHECKED BY: DHP DATE: 9/28/11 SCALE: NOT TO SCALE
DESIGNED BY: RBR DATE: 8-11
STR. NO. OH-040-23-05; OH-040-23-07 THRU OH-040-23-16 DRAWING NO. 52422

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.		080388	183	452

(1) OH-040-23-05; OH-040-23-07 THRU OH-040-23-16 — SIGN STRUCTURE — 52423

GENERAL NOTES:
Construction Specifications: Arkansas State Highway Commission Standard Specifications for Highway Construction, Edition of 2003, with applicable special provisions and Supplemental Specifications.

Design Specifications: Standard Specifications for Structural supports for Highway Signs, Luminaries and Traffic Signals, AASHTO Fifth Edition 2009.

Basic Wind Speed = 90 m.p.h.

This structure is approved for a sign area equivalent to 75% of the span at 15' tall. Use of additional sign area must be approved by the Engineer. If the structure height ('H1' or 'H2') exceeds 30'-0" contact the engineer.

FOUNDATION MATERIALS AND STRENGTHS:
Class S Concrete f 'c = 3,500 psi
Reinforcing Steel (AASHTO M31 or M53, Grade 60)fy = 60,000 psi

Structural steel sign support members shall comply with the following specifications:

Angles:	AASHTO M270, Grade 36 (Fy = 36,000 psi).
Plate, W-Section, WT-Section:	AASHTO M270, Grade 50 (Fy = 50,000 psi).
[1] Pipe:	ASTM A500 Grade B (Fy = 42,000 psi.
Z-Shapes:	AASHTO M270, Grade 36 (Fy = 36,000 psi).
Shim Plates:	ASTM A1011, SS, Grade 36, Type 2, or Grade 40.
Bolts:	AASHTO M164, Type I.
Locknuts - Approved Type:	Meeting or exceeding AASHTO M292
Washers:	AASHTO M293
Nuts:	AASHTO M291 or M292, Grade 2H or Grade DH (Grade IOS)

All steel shall be Galvanized according to section 807.19. Steel completely encased in concrete may not be Galvanized.

Drawings show general features of design only. Shop drawings shall be made in accordance with section 807.04, submitted, and approval secured before fabrication is begun.

No circumferential butt welds will be allowed in any pipe sections.

Requests for substitution of structural steel shapes shown with shapes of greater size must be submitted by the Contractor to the Engineer for approval. Steels of equal or greater strengths will be accepted only when shown on the approved shop drawings. Shapes and materials shown in the plans will be the basis of payment and no additional compensation will be made for any adjustments due to substitutions.

Connections shall be bolted with high-strength bolts. Unless noted otherwise, bolts shall be 5/8" diameter and open holes shall be 11/16". Bolt spacing shall be 2 1/4" for 5/8" diameter bolts unless otherwise noted. Bolts shall be placed with heads on the outside face of all members.

All welding that is to be done during fabrication of structural steel, including temporary welds, shall be detailed on the shop drawings and submitted for approval, If additional welds are required, whether temporary or permanent, a formal request with detailed drawings shall be submitted to the Engineer for approval. All welding shall conform to subsection 807.26.

Anchor bolts shall comply with AASHTO M314, Grade 55, with Supplementary Requirement S1, and galvanized according to Section 807.07. Nuts and washers for anchor bolts shall be furnished and galvanized in accordance with subsection 807.07.

All truss frame bolts shall comply with AASHTO M164 Type I, galvanized according to Subsection 807.06, Nuts and washers for AASHTO Mi64 Type I bolts shall be furnished and galvanized in accordance with subsection 807.06.

Field splices shall be located In order to avoid sign panel connections, There shall be a maximum of two field splices and they shall be spaced a minimum of 15 ft. apart.

All main load carrying tension members greater than ½" in thickness shall conform to the requirements of the Longitudinal Charpy V-notch test specified for Zone I minimum service temperature. This work and materials shall be paid for in accordance with Special Provision Job 080388 "STEEL OVERHEAD SIGN STRUCTURES".

All fillet welds of critical members shall be tested according to AWS D1.1 Structural Welding Code - Steel, using the magnetic particle method, Critical welds shall include: column to base plate and truss bottom support to column.

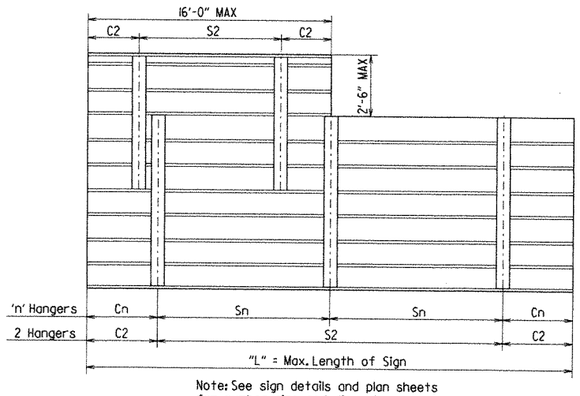
Truss field sections shall be shop assembled. Entire truss shall be fully assembled and lifted into place as one unit on to tower supports.
All truss member connections shall be bolted connections.

Lock nuts to be equipped with nylon locking inserts or other approved type locking system. Lock nuts to be installed according to manufacturer's recommendations.

The excavations for the footings shall be back-filled before the structure is attached to the foundations.

Galvanized Coating damaged during transport, handling, or erection shall be field repaired in accordance with section 807.88.

The Contractor shall make check measurements in the field and make any adjustments necessary to meet the required clearances and to fit the new structures to the existing conditions.



Note: See sign details and plan sheets for number, size and dimensions of signs.

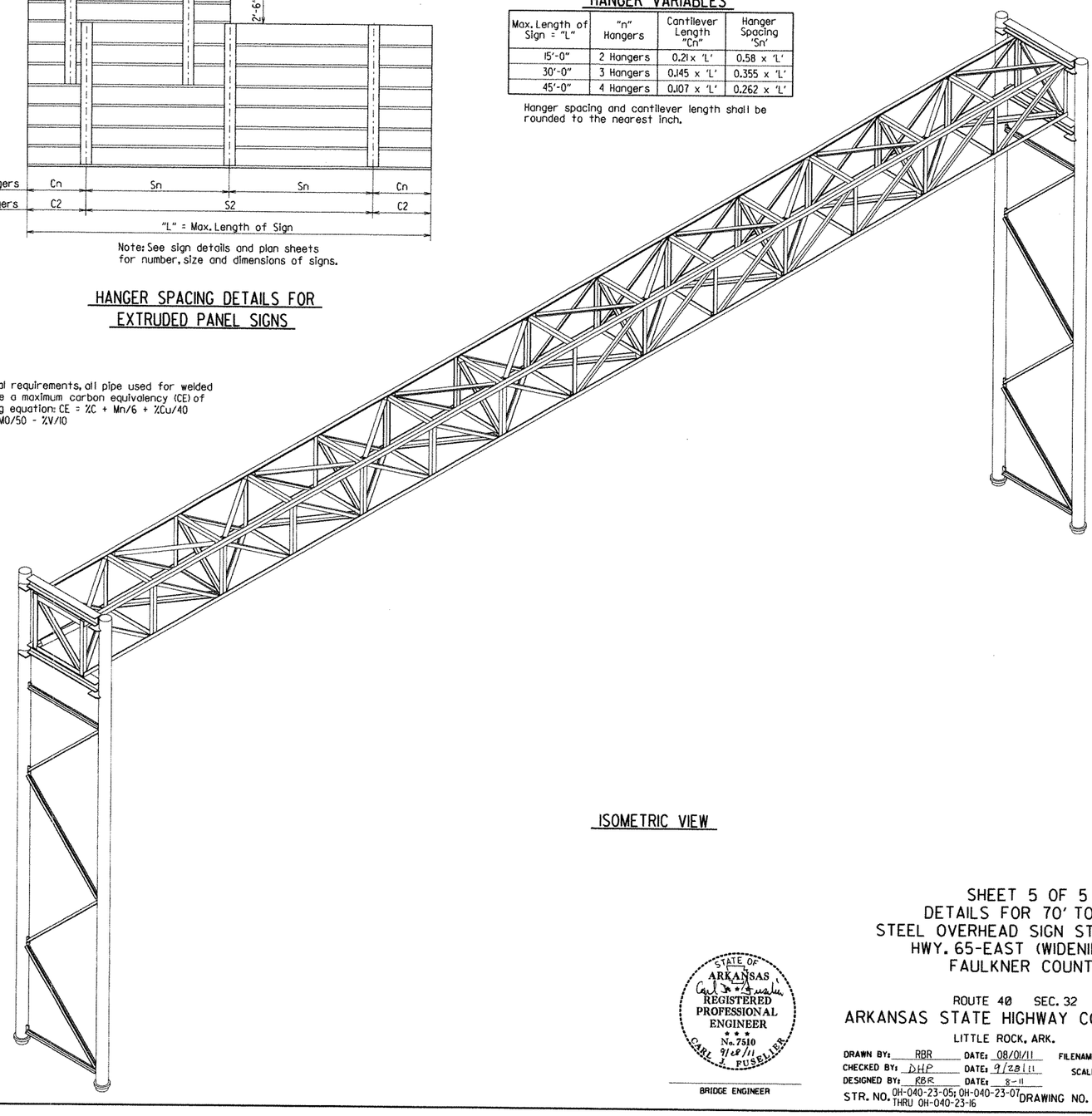
HANGER SPACING DETAILS FOR EXTRUDED PANEL SIGNS

[1] In addition to material requirements, all pipe used for welded applications shall have a maximum carbon equivalency (CE) of 0.4 using the following equation: CE = %C + Mn/6 + %Cu/40 + %Ni/20 + %Cr/10 - %M0/50 - %V/10

HANGER VARIABLES

Max. Length of Sign = "L"	"n" Hangers	Cantilever Length "Cn"	Hanger Spacing 'Sn'
15'-0"	2 Hangers	0.21x 'L'	0.58 x 'L'
30'-0"	3 Hangers	0.145 x 'L'	0.355 x 'L'
45'-0"	4 Hangers	0.107 x 'L'	0.262 x 'L'

Hanger spacing and cantilever length shall be rounded to the nearest inch.



ISOMETRIC VIEW

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7510
9/28/11
CARL T. FUSELIER

BRIDGE ENGINEER

SHEET 5 OF 5
DETAILS FOR 70' TO 85'
STEEL OVERHEAD SIGN STRUCTURES
HWY. 65-EAST (WIDENING) (F)
FAULKNER COUNTY

ROUTE 40 SEC. 32
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

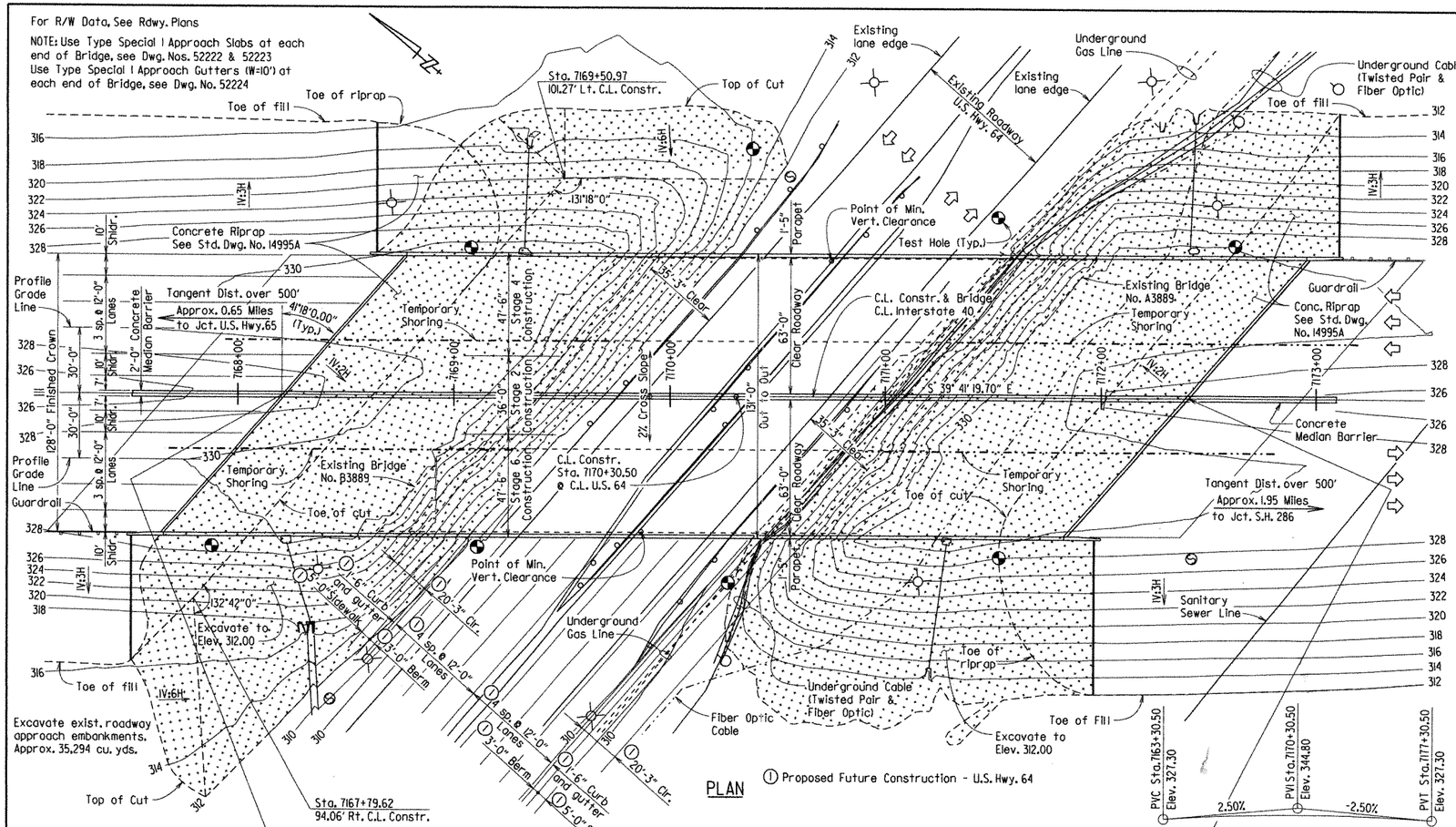
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CHECKED BY: DHP DATE: 9/28/11
DESIGNED BY: RBR DATE: 8-11
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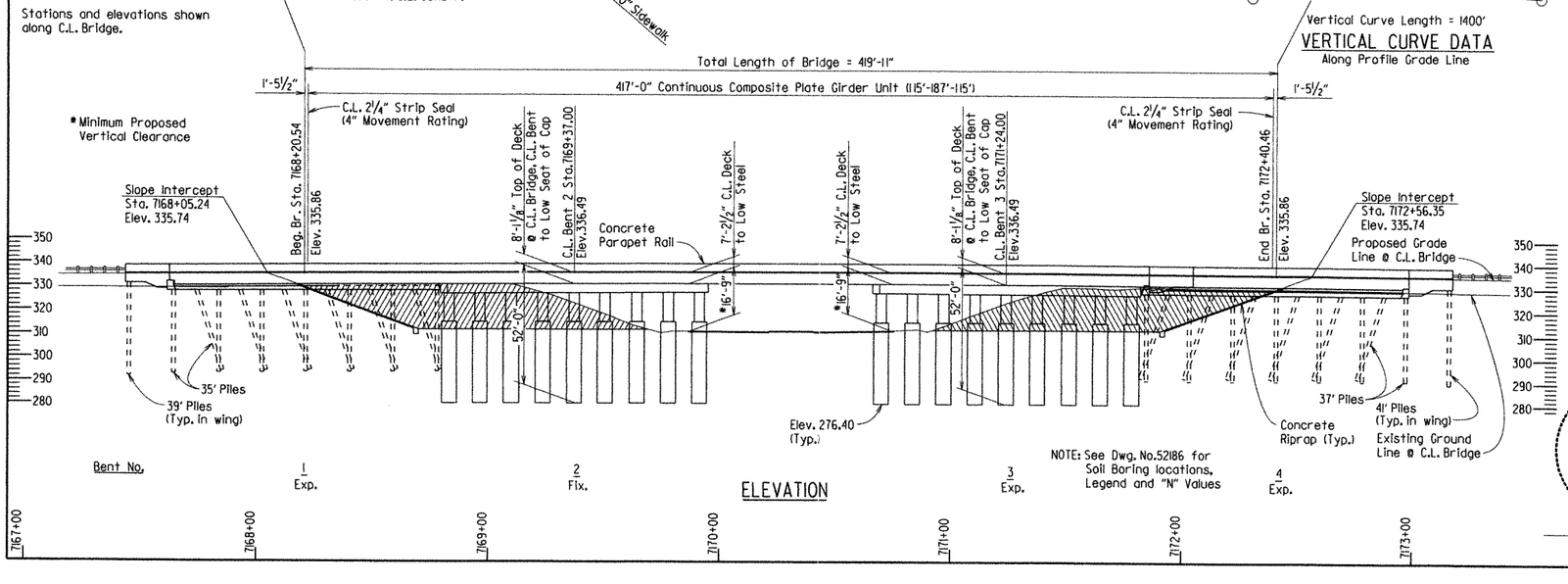
STR. NO. OH-040-23-05; OH-040-23-07 THRU OH-040-23-16 DRAWING NO. 52423

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				6	ARK.			
				JOB NO.		080388	184	452
				07226		LAYOUT		52185

For R/W Data, See Rdwy. Plans

NOTE: Use Type Special I Approach Slabs at each end of Bridge, see Dwg. Nos. 52222 & 52223
Use Type Special I Approach Gutters (W=10') at each end of Bridge, see Dwg. No. 52224





GENERAL NOTES

BENCH MARK: ⅝"ø Rebar with 2" Cap, 0.1' Right of C.L. Median I-40 Sta. 7169+09.32, Elev. 330.52

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (2003 edition) with applicable supplemental specifications and special provisions. Unless otherwise noted on the plans, section and subsection refer to Standard Specifications for Highway Construction.

DESIGN SPECIFICATIONS: AASHTO LRFD Bridge Design Specifications 5th Edition (2010) with 2010 interim.

LIVE LOADING: HL-93
SEISMIC PERFORMANCE ZONE: I S_{DI} = 0.094 SITE CLASS: B

MATERIALS AND STRENGTHS:

Class S(AE) Concrete (Superstructure)	f'c = 4,000 psi
Class S Concrete (Substructure)	f'c = 3,500 psi
Reinforcing Steel (AASHTO M31 or M53, Gr. 60)	fy = 60,000 psi
Structural Steel (AASHTO) M270, Gr. 50)	Fy = 50,000 psi
Structural Steel (AASHTO) M270, Gr. 36)	Fy = 36,000 psi

BORING LOGS: Boring logs may be obtained from the Programs and Contracts Division.

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

STEEL PILING: Piling in Bents 1 and 4 shall be HP12x53 (Grade 50) and shall be driven with an approved air, steam, or diesel hammer to a minimum safe bearing capacity of 70 tons per pile and into medium hard, slightly weathered Shale to Shale with sandstone seams as detailed in borings. Lengths of piling shown are for estimating quantities and for use in determining payment for cut-off and build-up in accordance with the Standard Specifications. Piles to be driven after embankment to bottom of cap is in place. On all piling, the Contractor shall use approved steel H-Pile driving points.

DRILLED SHAFTS: All drilled shafts shall be founded a minimum of 13'-0" into medium hard, slightly weathered Shale to Shale with sandstone seams as detailed in borings. No adjustment in plan tip elevation shall be made without prior approval from the Engineer. Methods of construction of the drilled shafts shall be in accordance with Special Provision, Job 080388 "Drilled Shaft Foundations".

TEXTURED COATING FINISH: Class 3 Textured Coating Finish shall be applied to bridge surfaces as specified in Special Provision Job No. 080388 "Textured Coating Finish" and in accordance with subsection 802.19(b)(3). Textured Coating Finish shall not be applied on surfaces where Class I Protective Surface Treatment is applied.
PAINTING: All structural steel except galvanized members and as noted in the plans shall be painted as specified in Section 807. Color of paint shall be Dark Brown and shall match Fed. Std. 595B, Color Chip 20108.

DETAIL DRAWINGS:

	DRAWING NUMBER
End Bents	52192-52197
Intermediate Bents	52198-52201
417' Cont. Comp. Plate Girder Unit	52202-52219
Elastomeric Bearings	52220-52221
Steel Piling	14995A
Type Special I Approach Gutters	52224
Type Special I Approach Slab	52222, 52223 & 52223A
Soil Borings	52226
Stage Construction	52187-52191

TEMPORARY SHORING: Temporary Shoring will be required to retain existing and/or new embankments to maintain traffic during removal of Bridge Nos. A3889 and B3889 and construction of Bridge No. 07226. Shoring shall be constructed in accordance with Special Provision 080388 "Shoring". Payment shall be as specified in Special Provision Job No. 080388 "Shoring".
EXISTING BRIDGES: Existing bridges No. A3889 and B3889 (log mile 126.76) are 40.0' wide and 226.9' long consisting of four composite I-Beam simple spans supported by reinforced concrete intermediate bents on concrete footings. The centerline of existing bridges are located approximately 44' left and right of the proposed C.L. Construction.

REMOVAL AND SALVAGE: The new bridge is to be built in stages. Partial removal of bridge Nos. A3889 and B3889 will be required for Stage I Construction. After Stage 3 Construction is complete and opened to traffic, the remaining portion of existing Bridge No. A3889 shall be removed in accordance with Section 205 of the Standard Specifications. After Stage 5 Construction is complete and opened to traffic, the remaining portion of existing Bridge No. B3889 shall be removed in accordance with Section 205 of the Standard Specifications. All salvageable approach guard rail, including ET2000 terminals and 40 of the existing 27" W-Beams shall remain the property of the department. The Contractor shall deliver all salvageable guard rail and 28 of the 27" W-Beams to AHTD District 8 Headquarters (372 Aspen Lane, Russellville, Ark.) and 12 of the 27" W-Beams shall be delivered to AHTD Central Shop (11300 West Baseline Road, Little Rock, Ark.). The Contractor shall coordinate with the Engineer for removal and delivery of salvage material. All other material from the existing bridge shall become the property of the contractor.

MAINTENANCE OF TRAFFIC: See Roadway Plans.

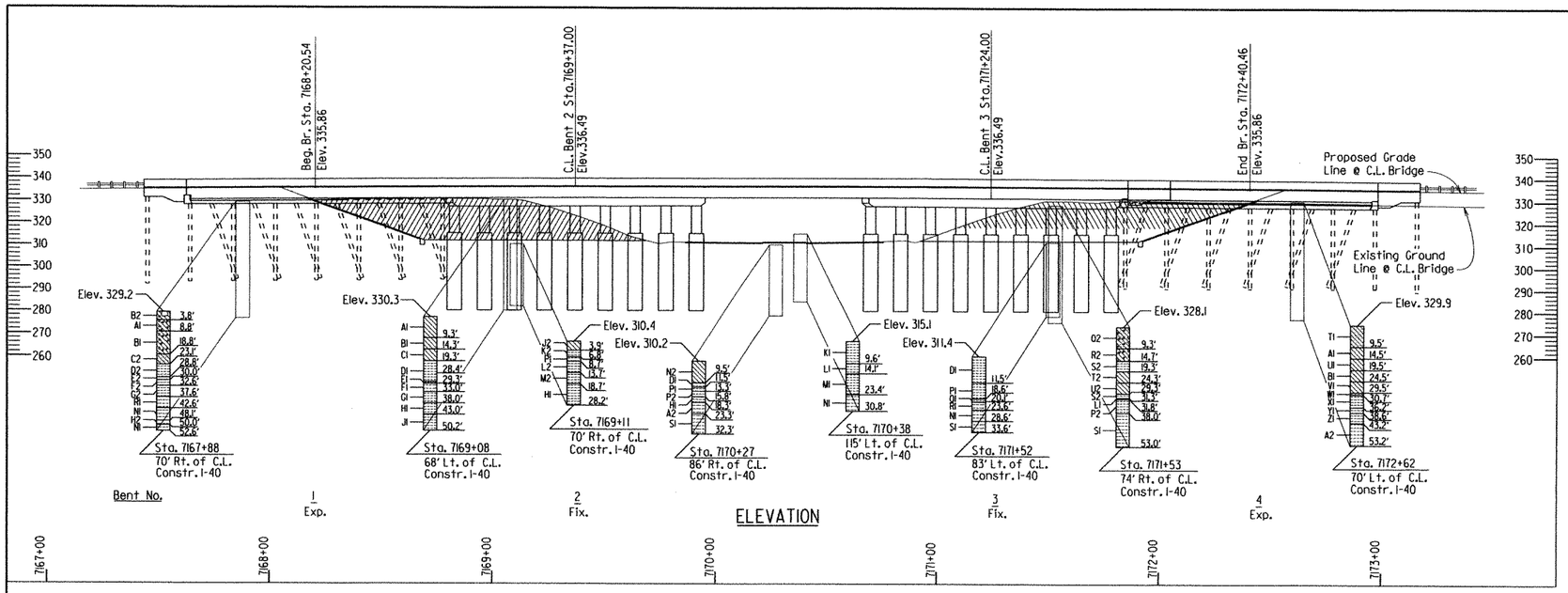
STATE OF ARKANSAS
Carl J. Fusselier
REGISTERED PROFESSIONAL ENGINEER
No. 7510
CARL J. FUSSELIER
9/28/11
BRIDGE ENGINEER

SHEET 1 OF 2
LAYOUT OF BRIDGE OVER U.S. HWY. 64
HWY. 65 - EAST (WIDENING) (F)
FAULKNER COUNTY
ROUTE 40 SEC. 32
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: MRE DATE: 4/28/11 FILENAME: b080388_ll.dgn
CHECKED BY: CSL DATE: Sept 27 2011 SCALE: 1" = 30'-0"
DESIGNED BY: CSL DATE: April 2011

BRIDGE NO. 07226 DRAWING NO. 52185

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.		080388	185	452
				07226		LAYOUT		52186



BORING LEGEND

A1-Moist, Medium Stiff, Brown and Gray Clay with Highly Weathered Shale
B1-Moist, Stiff, Brown and Gray Clay with Highly Weathered Shale
C1-Moist, Stiff, Brown and Gray Clay with some Shale Fragments
D1-SHALE - Brown and Gray, Highly Weathered, Medium Hard
E1-SHALE - Brown and Gray, Weathered, Medium Hard
F1-SHALE WITH SANDSTONE SEAMS - Brown and Dark Gray, Laminated, Weathered, Medium Hard, with Slight Dip
G1-SHALE - Brown and Dark Gray, Laminated, Slightly Weathered, Medium Hard, with Slight Dip (1)
H1-SHALE - Dark Gray, Laminated, Slightly Weathered, Medium Hard, with Slight Dip
J1-SHALE - Dark Gray, Laminated, Slightly Weathered, Hard, with Slight Dip
K1-SHALE - Reddish Brown, Highly Weathered, Soft
L1-SHALE - Brown and Gray, Laminated, Highly Weathered, Soft, with Slight Dip
M1-SHALE WITH WEATHERED SHALE LAYERS- Brown and Dark Gray, Laminated, Medium Hard, with Slight Dip
N1-SHALE WITH SANDSTONE SEAMS - Dark Gray, Laminated, Slightly Weathered, Medium Hard, with Slight Dip and Pyrite Partings
P1-SHALE - Brown and Gray, Laminated, Highly Weathered, Medium Hard, with Slight Dip
Q1-SHALE - Brown and Gray, Laminated, Weathered, Medium Hard, with Slight Dip
R1-SHALE WITH SANDSTONE SEAMS - Dark Gray, Laminated, Slightly Weathered, Medium Hard, with Slight Dip
S1-SHALE WITH SANDSTONE SEAMS - Dark Gray, Laminated, Slightly Weathered, Hard, with Slight Dip and Pyrite Partings
T1-Moist, Medium Stiff, Brown and Gray Clay with Sand, Highly Weathered Shale and some Organic Matter
U1-Moist, Very Stiff, Brown and Gray Clay with Highly Weathered Shale
V1-Moist, Very Stiff, Reddish Brown and Gray Clay with Highly Weathered Shale
W1-SHALE - Brown, Highly Weathered, Medium Hard
X1-SHALE - Brown, Laminated, Highly Weathered, Medium Hard, with Slight Dip
Y1-SHALE - Dark Gray, Laminated, Weathered, Medium Hard, with Slight Dip
Z1-SHALE - Dark Gray, Laminated, Slightly Weathered, Hard, with Slight Dip
A2-SHALE WITH SANDSTONE SEAMS - Dark Gray, Laminated, Slightly Weathered, Hard, with Slight Dip
B2-Moist, Medium Stiff, Brown Clay with Gravel (Shale Fragments), Cobbles and Boulders
C2-Wet, Very Soft, Brown Clay with Sand and Trace of Organic Matter
D2-SHALE - Brown and Dark Gray, Highly Weathered, Soft (2)
E2-SHALE - Brown and Dark Gray, Highly Weathered, Medium Hard
F2-SHALE - Brown and Dark Gray, Laminated, Slightly Weathered, Medium Hard, with Slight Dip and Vertically Fractured Seams
G2-SHALE - Dark Gray, Laminated, Slightly Weathered, Medium Hard, with Slight Dip (3)
H2-SHALE WITH SANDSTONE SEAMS - Dark Gray, Laminated, Slightly Weathered, Medium Hard, with Slight Dip, Vertically Fractured Layer and Pyrite Partings
J2-Moist, Soft, Brown Clay
K2-SHALE - Reddish Brown, Highly Weathered, Soft to Medium Hard
L2-SHALE - Brown and Dark Gray, Laminated, Weathered, Soft, with Slight Dip
M2-SHALE - Dark Gray, Laminated, Slightly Weathered, Medium Hard, with Slight Dip, Fractured Seams and Pyrite Partings
N2-Moist, Very Stiff, Brown and Gray Clay with Highly Weathered Shale (4)
P2-SHALE - Brown and Dark Gray, Laminated, Weathered, Medium Hard, with Slight Dip
Q2-Moist, Medium Stiff, Brown and Gray Clay with Sand, Gravel (Shale Fragments) and some Organic Matter
R2-Moist, Medium Stiff, Brown and Gray Clay with Gravel (Shale Fragments) and some Organic Matter
S2-SHALE - Brown and Gray, Highly Weathered, Soft
T2-Moist, Soft, Light Gray and Brown Clay
U2-Moist, Stiff, Brown Clay

(1) Partial water loss was encountered at 34.8'
(2) Water stratum was encountered at 28.7'
(3) Partial water loss was encountered at 34.3'
(4) Water stratum was encountered at 3.6'

"N" VALUES

Sta. 7169+08 - 68' Lt. of C.L. Constr. I-40
4.8- 5.8, N=7
9.8- 10.8, N=10
14.8- 15.8, N=13
19.8- 20.8, N=66
24.8- 25.8, N=85

Sta. 7170+38 - 115' Lt. of C.L. Constr. I-40
5.1- 6.1, N=44

Sta. 7171+52 - 83' Lt. of C.L. Constr. I-40
5.0- 6.0, N=72
10.0- 11.0, N=89

Sta. 7172+62 - 70' Lt. of C.L. of Constr. I-40
5.0- 6.0, N=5
10.0- 11.0, N=6
15.0- 16.0, N=18
20.0- 21.0, N=9
25.0- 26.0, N=25
30.0- 30.7, N=80(2")

Sta. 7167+88 - 70' Rt. of C.L. Constr. I-40
4.3- 5.3, N=7
9.3- 10.3, N=11
14.3- 15.3, N=10
19.3- 20.3, N=0
24.3- 25.3, N=52
29.3- 29.6, N=38(4")

Sta. 7169+11 - 70' Rt. of C.L. Constr. I-40
5.3- 6.1, N=57(9")

Sta. 7170+27 - 86' Rt. of C.L. of Constr. I-40
5.0- 6.0, N=27
10.0- 10.4, N=60(5")

Sta. 7171+53 - 74' Rt. of C.L. of Constr. I-40
4.8- 5.8, N=8
9.8- 10.8, N=6
14.8- 15.8, N=13
19.8- 20.8, N=4
24.8- 25.8, N=12
29.8- 30.8, N=51

STATE OF ARKANSAS
Carl L. Fuselier
REGISTERED PROFESSIONAL ENGINEER
No. 7510
9/1/11
CARL L. FUSELIER
BRIDGE ENGINEER

SHEET 2 OF 2
LAYOUT OF BRIDGE OVER U.S. HWY. 64 HWY. 65 - EAST (WIDENING) (F)
FAULKNER COUNTY
ROUTE 40 SEC. 32
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

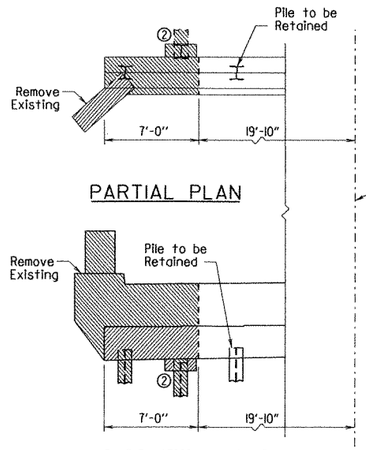
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DESIGNED BY: CSL DATE: Aug. 1 2011
BRIDGE NO. 07226 DRAWING NO. 52186

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				6	ARK.			
				JOB NO.		080388	186	457
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NOTES:
Details that pertain to Maintenance of Traffic shown on bridge plans are for information only. See Roadway plans for Maintenance of Traffic.

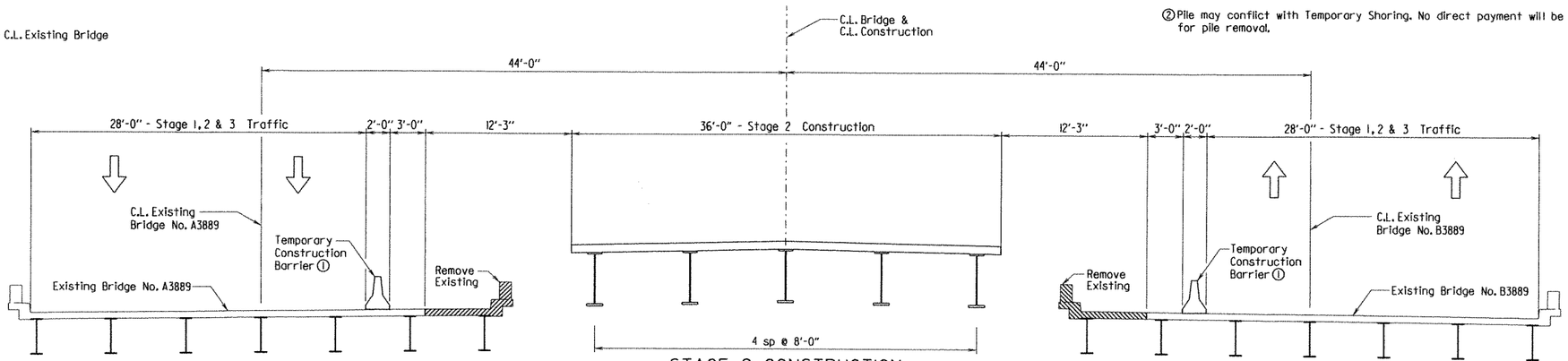
(1) Temporary Construction Barrier shall be attached to Bridge Deck, for details see Dwg. Nos. TC-4 and TC-5.

(2) Pile may conflict with Temporary Shoring. No direct payment will be made for pile removal.

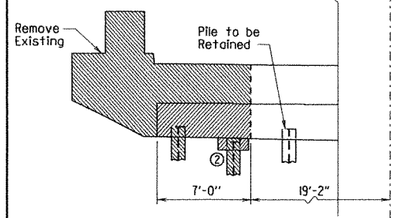


PARTIAL PLAN

Bt. 5 Br. A3889 - Looking Back
Bt. 1 Br. B3889 - Looking Forward
(Dimensions shown along C.L. of Cap)



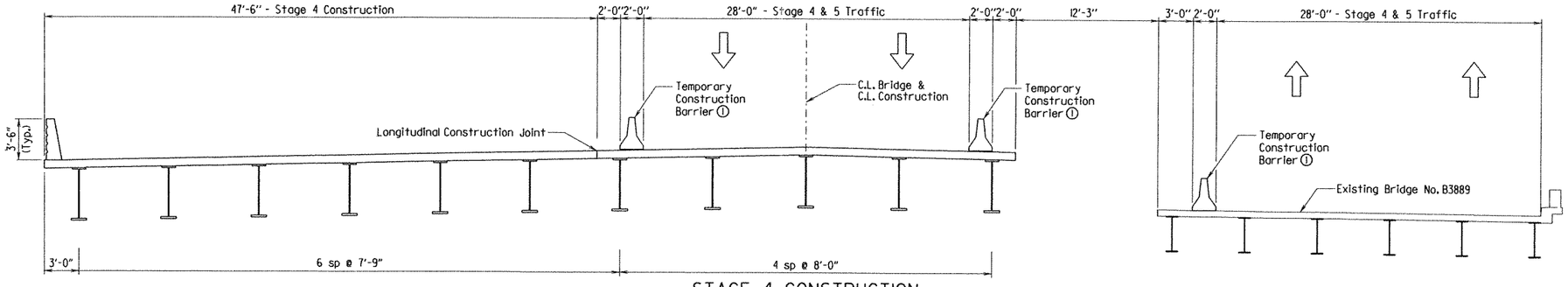
STAGE 2 CONSTRUCTION
(Looking Forward)



PARTIAL PLAN

Bt. 1 Br. A3889 - Looking Back
Bt. 5 Br. B3889 - Looking Forward
(Dimensions shown along C.L. of Cap)

DETAILS OF END BENT REMOVAL - STAGE 1



STAGE 4 CONSTRUCTION
(Looking Forward)

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7510
CARL S. PUSELLIER
9/1/11

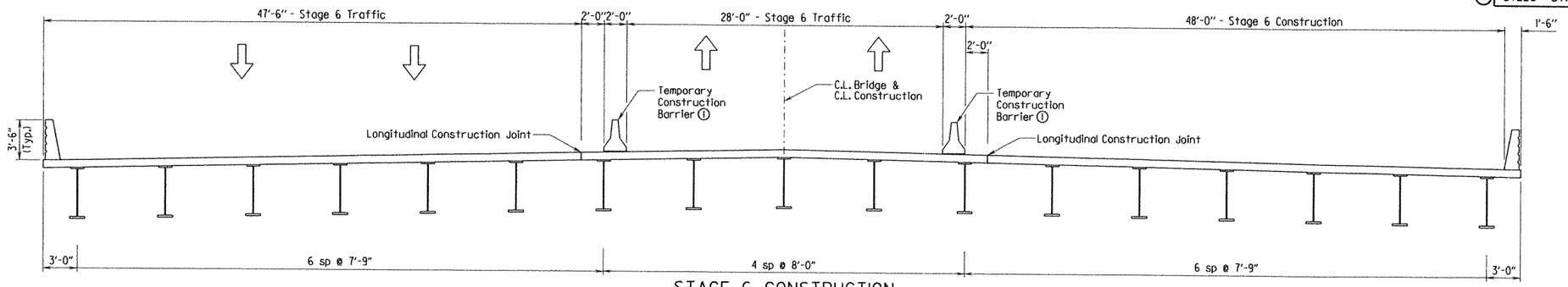
BRIDGE ENGINEER

SHEET 1 OF 5
DETAILS OF STAGE CONSTRUCTION
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

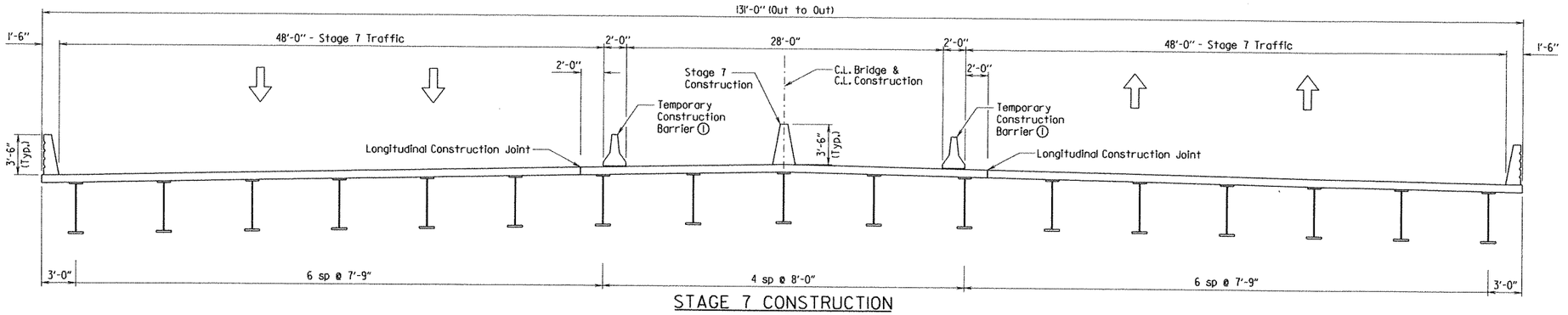
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BRIDGE NO. 07226 DRAWING NO. 52187

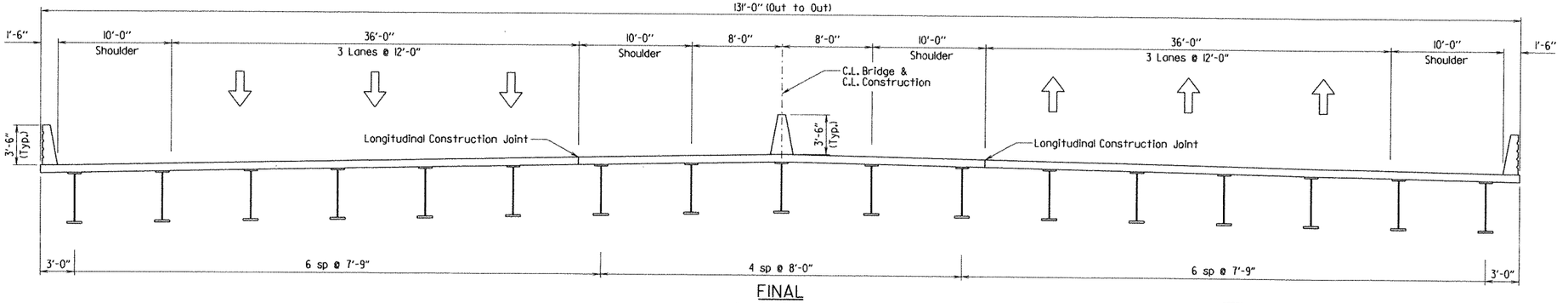
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				6	ARK.			
				JOB NO.		080388	187	452
				①	07226	STAGE CONSTRUCTION	52188	



STAGE 6 CONSTRUCTION
(Looking Forward)



STAGE 7 CONSTRUCTION
(Looking Forward)



FINAL
(Looking Forward)

NOTES:
Details that pertain to Maintenance of Traffic shown on bridge plans are for information only. See Roadway plans for Maintenance of Traffic.

① Temporary Construction Barrier shall be attached to Bridge Deck, for details see Dwg. Nos. TC-4 and TC-5.

STATE OF ARKANSAS
Carl J. Fuselier
REGISTERED PROFESSIONAL ENGINEER
No. 7510
5/1/11
CARL J. FUSELIER

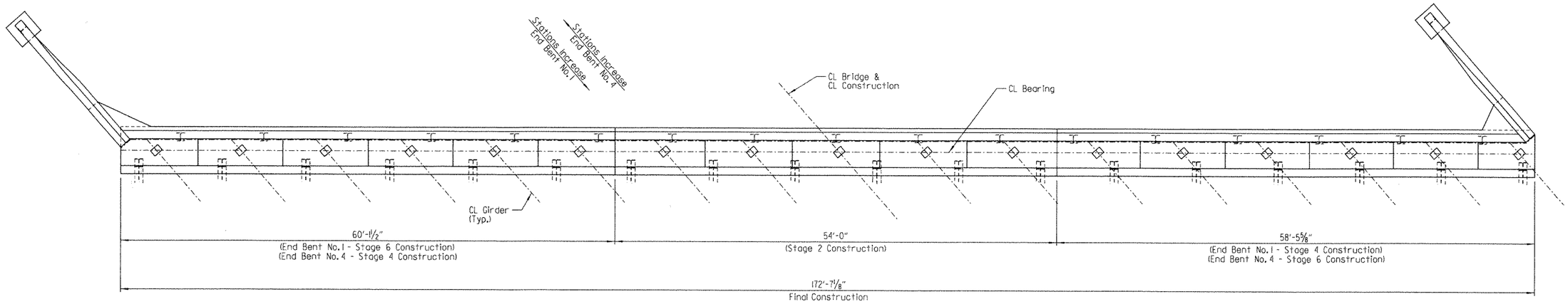
BRIDGE ENGINEER

SHEET 2 OF 5
DETAILS OF STAGE CONSTRUCTION
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

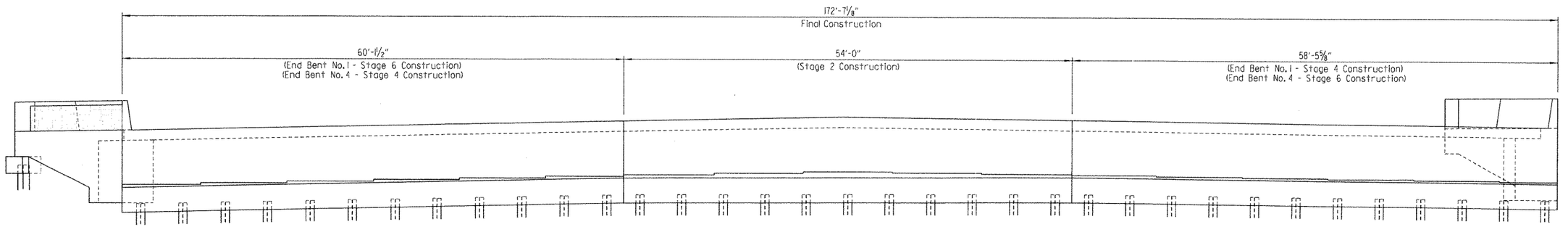
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BRIDGE NO. 07226 DRAWING NO. 52188

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.		080388	188	452
				(1) 07226		STAGE CONSTRUCTION		52189



PLAN



ELEVATION

(Looking Back - End Bent No. 1)
(Looking Forward - End Bent No. 4)

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
6-16-11
No. 8017
JOHN H. RUDDELL

BRIDGE ENGINEER

SHEET 3 OF 5
DETAILS OF STAGE CONSTRUCTION
INTERSTATE 40
OVER U.S. HWY 64
FAULKNER COUNTY

ROUTE 40 SEC. 32

ARKANSAS STATE HIGHWAY COMMISSION

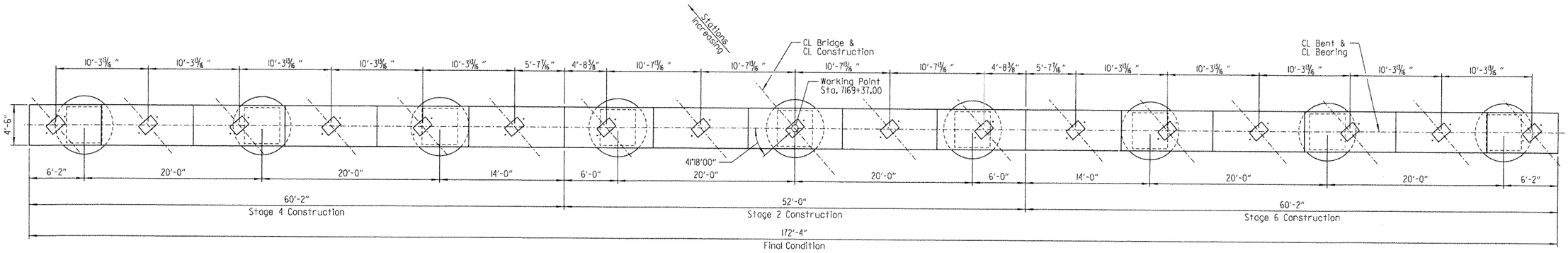
LITTLE ROCK, ARK.

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DESIGNED BY: SFH DATE: JUNE 2011

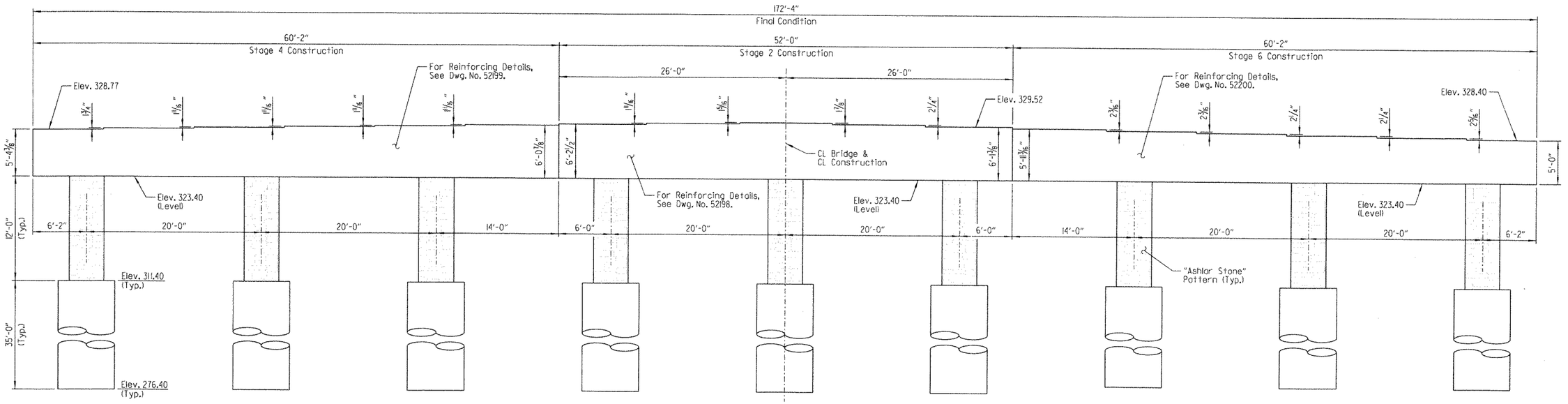
BRIDGE NO. 07226 DRAWING NO. 52189

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WORKSPACE: AHTD Bridge
L:\ZOINJOB\07504 - I-40 over Hwy 64 Bridge Replacement\Drawings\Sh No 52189 - Stage Construction Details (3 of 5).dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	189	452
				(1) 07226		STAGE CONSTRUCTION		52190



PLAN - INTERMEDIATE BENT NO. 2



ELEVATION - INTERMEDIATE BENT NO. 2

(Looking Forward)

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. RUDDELL

BRIDGE ENGINEER

SHEET 4 OF 5
DETAILS OF STAGE CONSTRUCTION
INTERSTATE 40
OVER U.S. HWY 64
FAULKNER COUNTY

ROUTE 40 SEC. 32

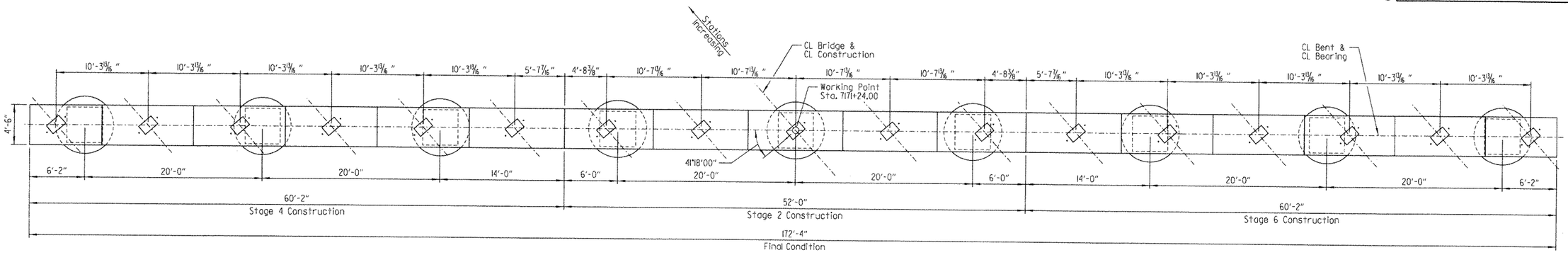
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

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CHECKED BY: BWS DATE: JUNE 2011 SCALE: AS SHOWN
DESIGNED BY: ABH DATE: JUNE 2011

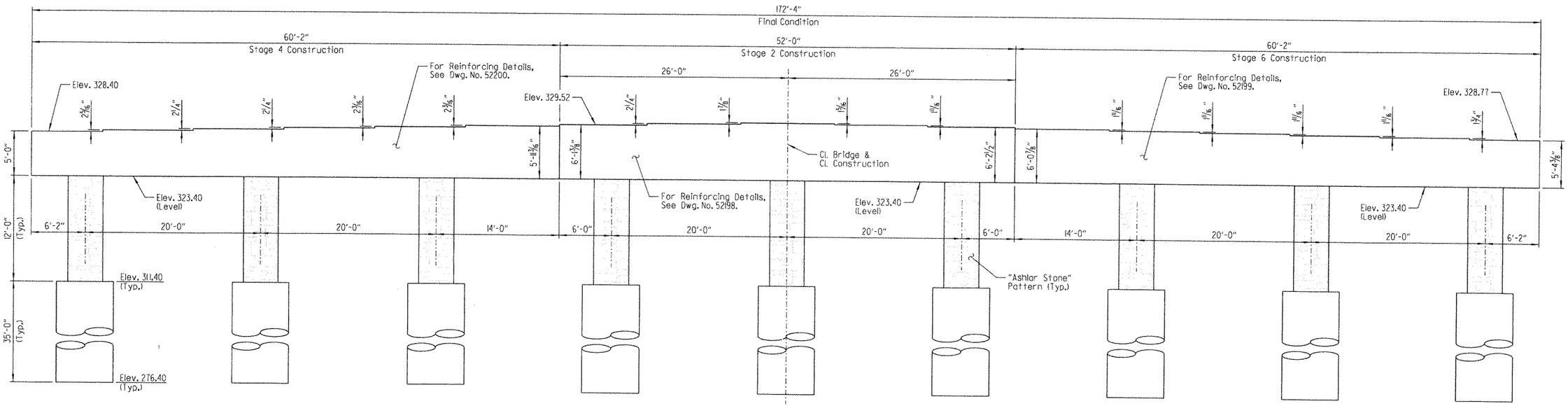
BRIDGE NO. 07226 DRAWING NO. 52190

ABHall 8/29/2011 4:28:57 PM
WORKSPACE: AHTD Bridge
L:\2011\80788\04 - I-40 over Hwy 64 Bridge Replacement\Drawings\Sh No 52190 - Stage Construction Details (4 of 5).dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	190	452
				(1) 07226		STAGE CONSTRUCTION		52191



PLAN - INTERMEDIATE BENT NO. 3



ELEVATION - INTERMEDIATE BENT NO. 3
(Looking Forward)

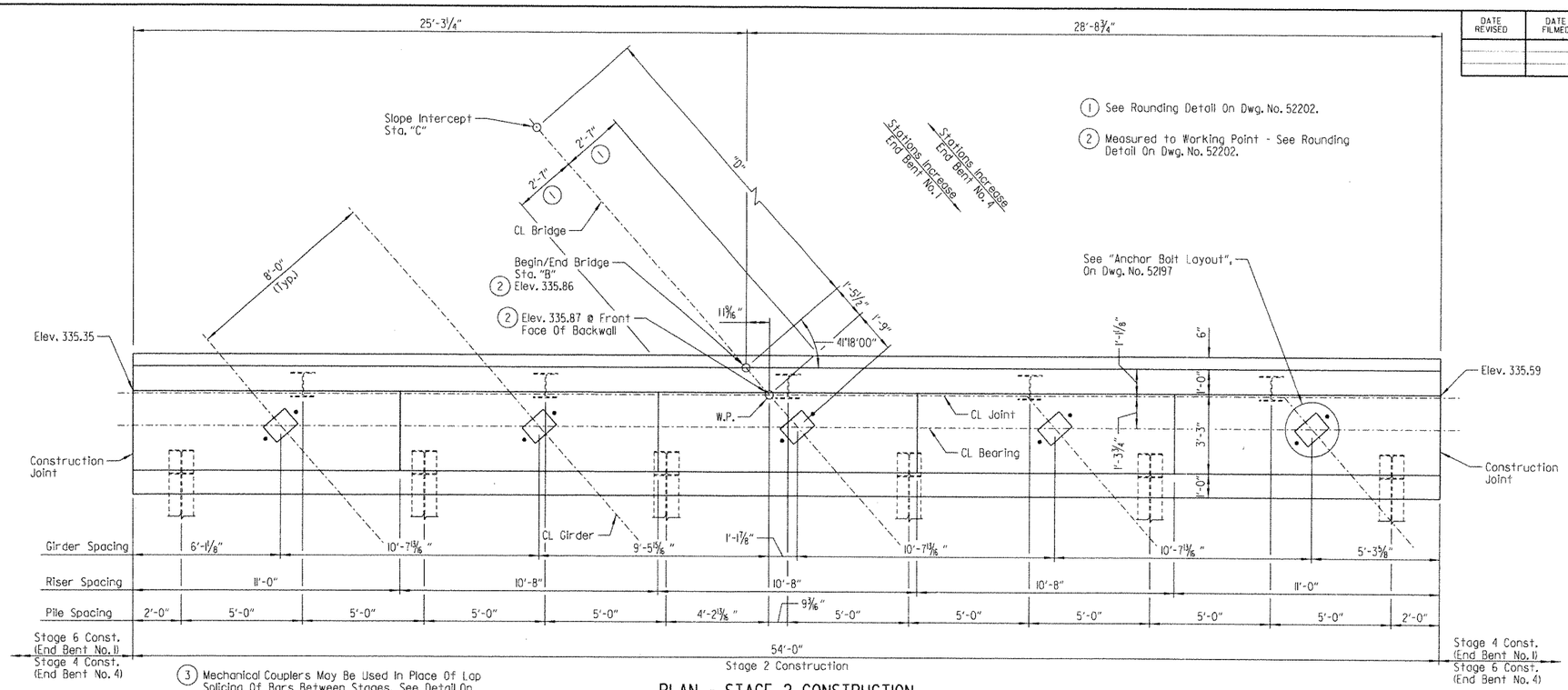
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. RUDDELL
BRIDGE ENGINEER

SHEET 5 OF 5
DETAILS OF STAGE CONSTRUCTION
INTERSTATE 40
OVER U.S. HWY 64
FAULKNER COUNTY
ROUTE 40 SEC. 32
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: ABH DATE: JUNE 2011 FILENAME: B080388XI_SC5.DGN
CHECKED BY: BWS DATE: JUNE 2011 SCALE: AS SHOWN
DESIGNED BY: ABH DATE: JUNE 2011
BRIDGE NO. 07226 DRAWING NO. 52191

ABHall 8/30/2011 1:22:34 AM
WORKSPACE: AHTD Bridge
L:\ROW\RDT504 - I-40 Over Hwy 64 Bridge Replacement\Drawings\Sh No 52191 - Stage Construction Details 15 of 51.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	191	452
				(1) 07226		END BENT DETAILS		52192



(1) See Rounding Detail On Dwg. No. 52202.

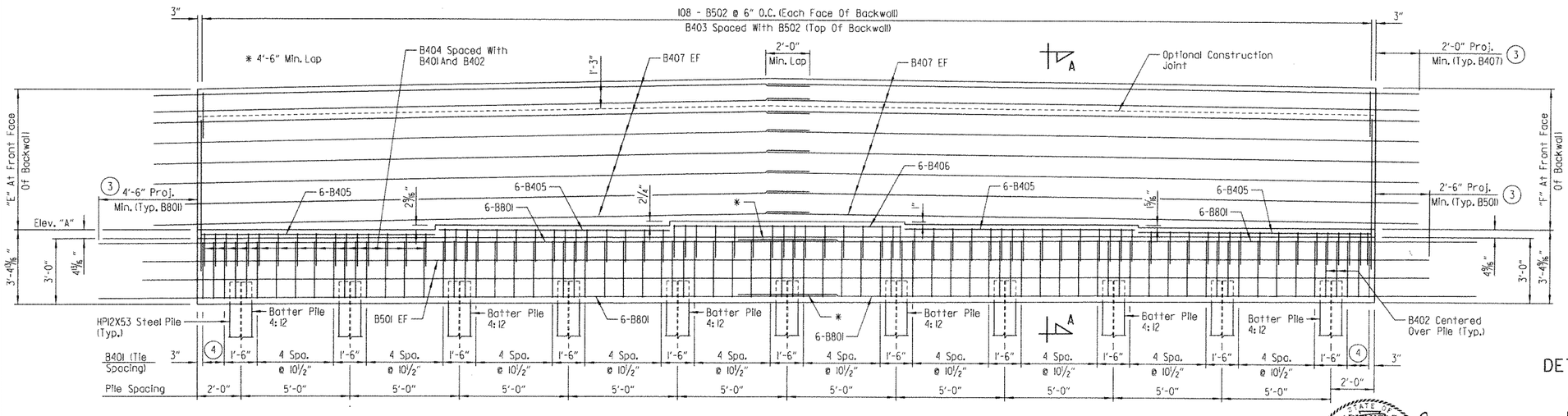
(2) Measured to Working Point - See Rounding Detail On Dwg. No. 52202.

(3) Mechanical Couplers May Be Used In Place Of Lap Splicing Of Bars Between Stages. See Detail On Dwg. No. 52195 For Requirements.

(4) 2 Spa. @ 6"

PLAN - STAGE 2 CONSTRUCTION

(Lookin Back At End Bent No. 1)
(Looking Forward At End Bent No. 4)
Scale: ⅜" = 1'-0"



ELEVATION - STAGE 2 CONSTRUCTION

(Looking Back At End Bent No. 1)
(Looking Forward At End Bent No. 4)
Scale: ⅜" = 1'-0"

TABLE OF VARIABLES						
BENT	"A"	"B"	"C"	"D"	"E"	"F"
No. 1	329.01	7168+20.54	7168+05.24	15'-3⅝"	6'-4⅛16"	6'-4⅞16"
No. 4	328.66	7172+40.46	7172+56.35	15'-10¹¹⁄₁₆"	6'-8⅛16"	6'-8¹¹⁄₁₆"

GENERAL NOTES

All concrete shall be Class "S" and be poured in the dry. All exposed corners to be chamfered ¾" unless otherwise noted.

All reinforcing steel shall conform to AASHTO M31 or M53, Gr. 60.

Structural steel in end bents shall be AASHTO M270, Gr. 50 and shall be paid for as "Structural Steel In Plate Girder Spans (AASHTO M270, Gr.50)". Structural Steel shall be cleaned and painted in accordance with Section 807. The color of the paint shall be Brown and shall match Fed. Std. 595B, Color Chip No. 20108.

If anchor bolts are drilled into cap, top reinforcing bars shall be properly placed to avoid damage.

For additional information, see LAYOUT.

Class 1 Protective Surface Treatment shall be applied to the top of backwall. Class 3 Textured Coating shall be applied in accordance with SP Job 080388 "Textured Coating Finish".

NOTES:

For Details Of Elastomeric Bearing Pads, See Dwg. Nos. 52220 & 52221.

For Bar List & Bar Bending Diagram, See Dwg. No. 52197.

For Section A-A, See Dwg. No. 52195.

LEGEND

EF = Each Face

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. RUDDELL
BRIDGE ENGINEER

SHEET 1 OF 6
DETAILS OF END BENTS
INTERSTATE 40
OVER U.S. HWY 64
FAULKNER COUNTY
ROUTE 40 SEC. 32

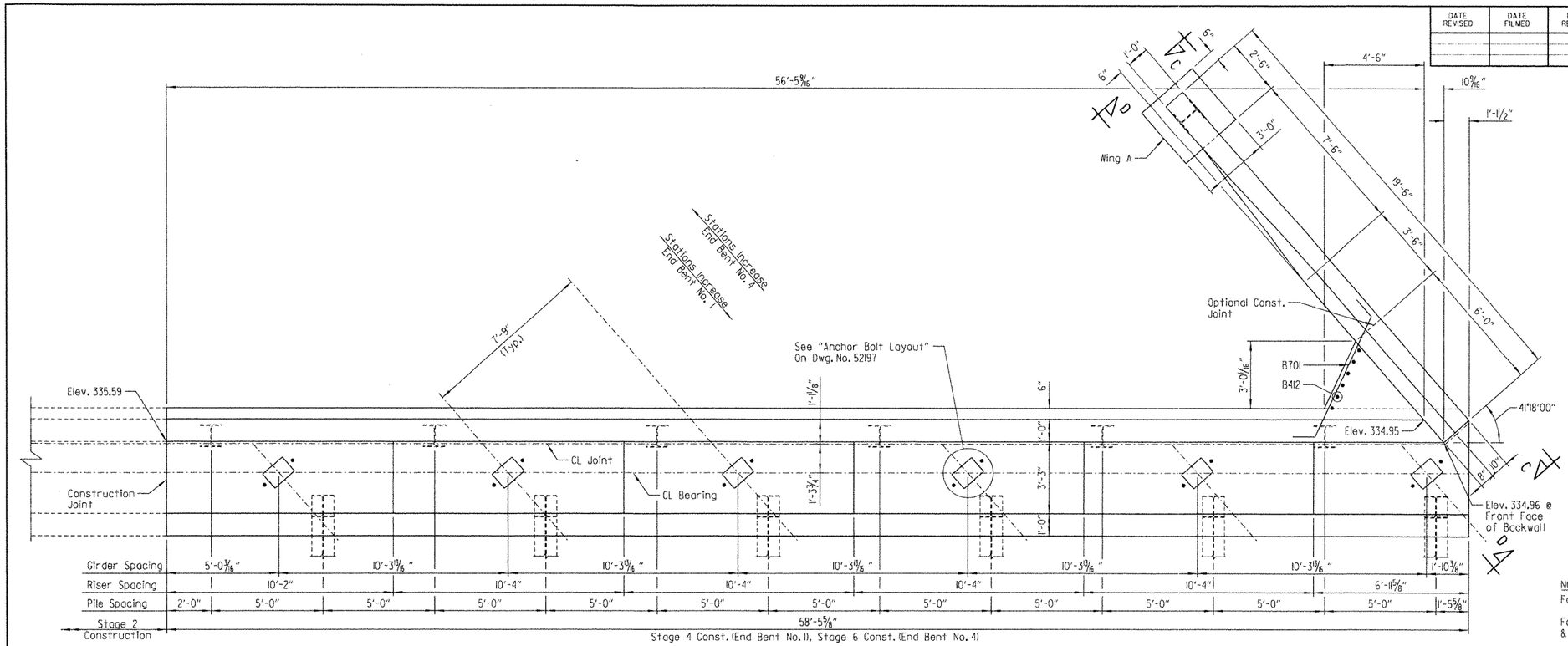
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: PCC DATE: JUNE 2011 FILENAME: B080388XI_A1.DGN
CHECKED BY: BWS DATE: JUNE 2011 SCALE: AS SHOWN
DESIGNED BY: SFH DATE: JUNE 2011

BRIDGE NO. 07226 DRAWING NO. 52192

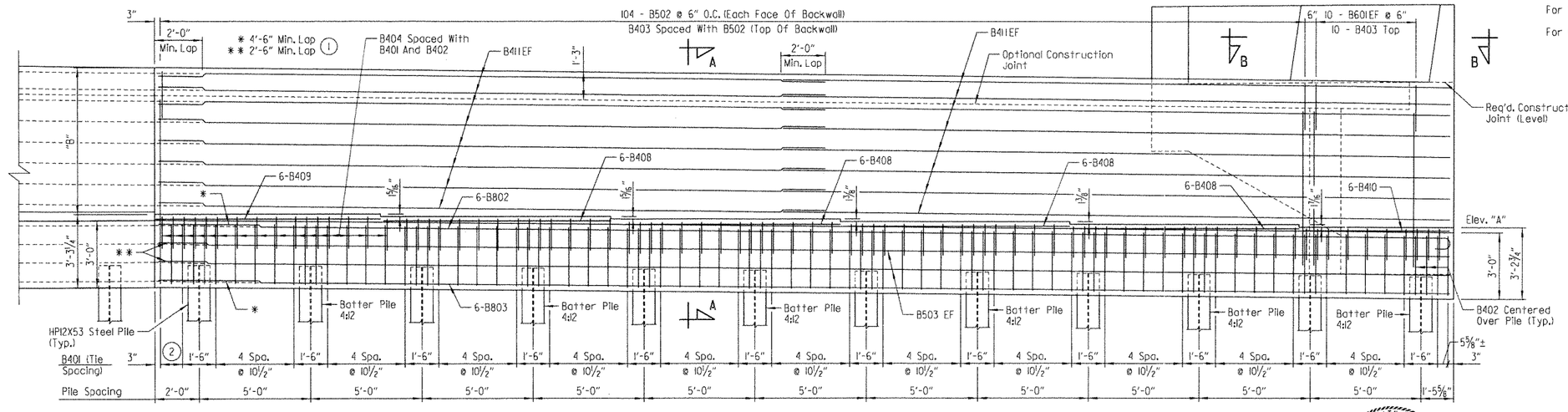
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WORKSPACE: AHTD Bridge
L:\2DRAW\07504 - I-40 over Hwy 64 Bridge Replacement\Drawings\Sh No 52192 - End Bent Details 11of 61.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	192	452
				(1) 07226		END BENT DETAILS		52193



PLAN - STAGES 4 & 6 CONSTRUCTION

Scale: ⅜" = 1'-0"



ELEVATION - STAGES 4 & 6 CONSTRUCTION

(Looking Back - End Bent No. 1, Stage 4 Construction)
(Looking Forward - End Bent No. 4, Stage 6 Construction)
Scale: ⅜" = 1'-0"

TABLE OF VARIABLES		
BENT	"A"	"B"
No. 1	328.54	6'-5¾"
No. 4	328.19	6'-9⅝"

(1) Mechanical Couplers May Be Used In Place Of Lap Splicing Of Bars Between Stages. See Detail On Dwg. No. 52195 For Requirements.

(2) 2 Spa. @ 6"

NOTES:

For Details Of Wing & Rail, See Dwg. Nos. 52195 & 52196.

For Details Of Elastomeric Bearing Pads, See Dwg. Nos. 52220 & 52221.

For Bar List & Bar Bending Diagram, See Dwg. No. 52197.

For Section A-A & View B-B, See Dwg. No. 52195.

For Views C-C & D-D, See Dwg. No. 52196.

For General Notes, See Dwg. No. 52192.

LEGEND

EF = Each Face

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. RUDDELL
BRIDGE ENGINEER

SHEET 2 OF 6
DETAILS OF END BENTS
INTERSTATE 40
OVER U.S. HWY 64
FAULKNER COUNTY

ROUTE 40 SEC. 32

ARKANSAS STATE HIGHWAY COMMISSION

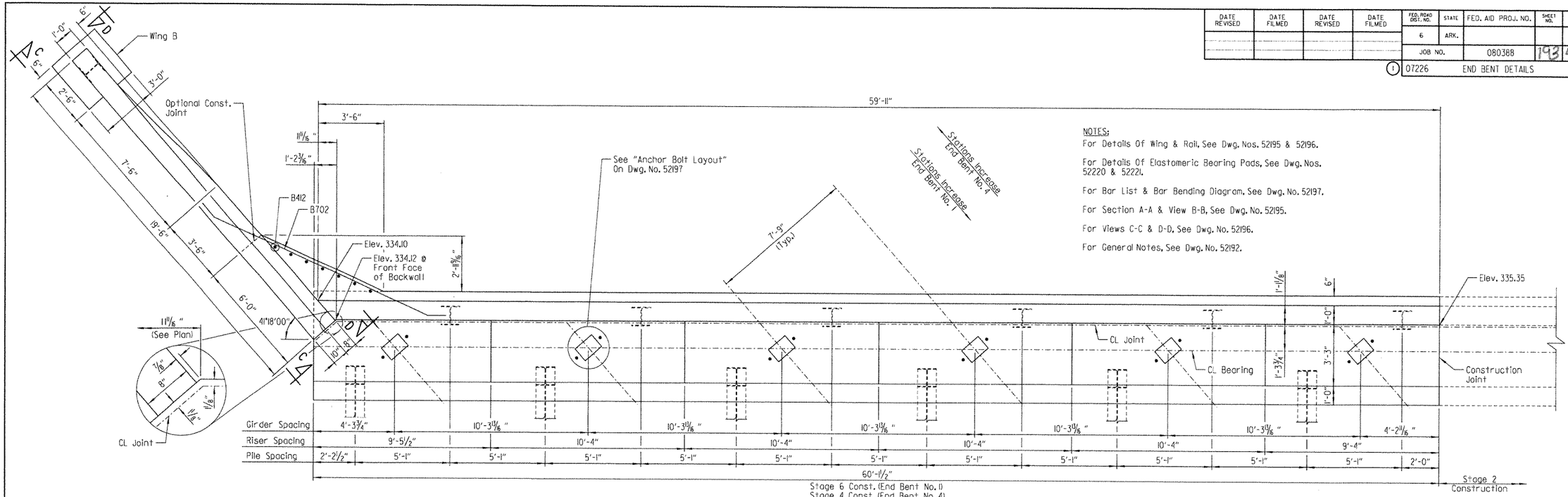
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: JUNE 2011 FILENAME: B080388XL_A2.DGN
CHECKED BY: BWS DATE: JUNE 2011 SCALE: AS SHOWN
DESIGNED BY: SFH DATE: JUNE 2011

BRIDGE NO. 07226 DRAWING NO. 52193

ABhall 8/29/2011 4:28:58 PM
WORKSPACE: AHTD Bridge
L:\r20h\80\7504 - I-40 over Hwy 64 Bridge Replacement\Drawings\Sh No 52193 - End Bent Details (2 of 6).dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	193	462
				(1) 07226		END BENT DETAILS		52194



NOTES:

For Details Of Wing & Rail, See Dwg. Nos. 52195 & 52196.

For Details Of Elastomeric Bearing Pads, See Dwg. Nos. 52220 & 52221.

For Bar List & Bar Bending Diagram, See Dwg. No. 52197.

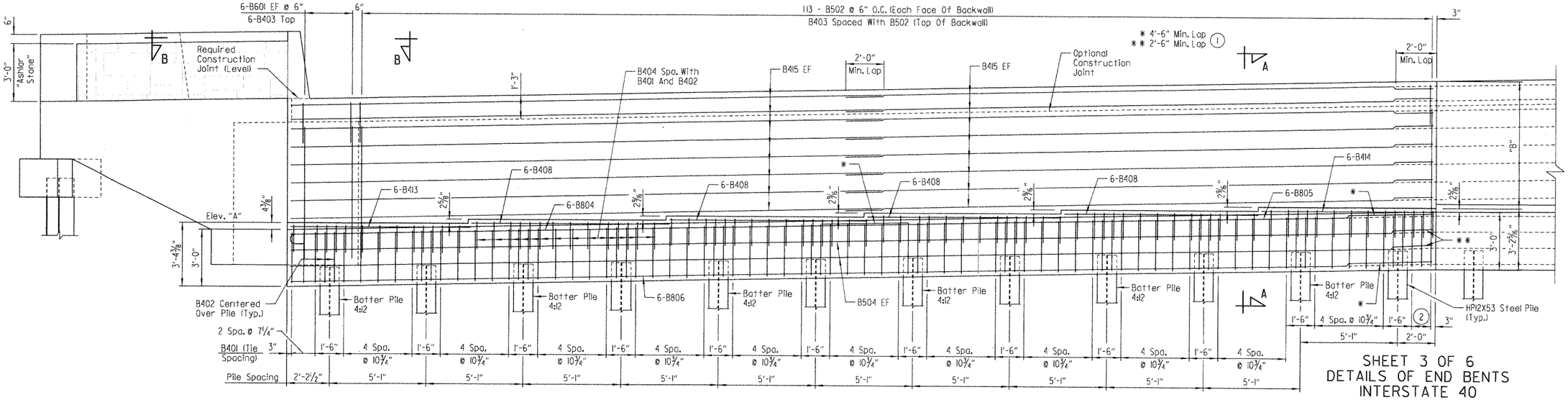
For Section A-A & View B-B, See Dwg. No. 52195.

For Views C-C & D-D, See Dwg. No. 52196.

For General Notes, See Dwg. No. 52192.

PLAN - STAGES 4 & 6 CONSTRUCTION

Scale: 3/8" = 1'-0"



ELEVATION - STAGES 4 & 6 CONSTRUCTION

(Looking Back - End Bent No. 1, Stage 6 Construction)
(Looking Forward - End Bent No. 4, Stage 4 Construction)
Scale: 1/8" = 1'-0"

TABLE OF VARIABLES		
BENT	"A"	"B"
No. 1	327.72	6'-6 11/16"
No. 4	327.38	6'-10 3/4"

(1) Mechanical Couplers May Be Used In Place Of Lap Splicing Of Bars Between Stages. See Detail On Dwg. No. 52195 For Requirements.

(2) 2 Spa. @ 6"

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. PUDDELL
BRIDGE ENGINEER

SHEET 3 OF 6
DETAILS OF END BENTS
INTERSTATE 40
OVER U.S. HWY 64
FAULKNER COUNTY

ROUTE 40 SEC. 32

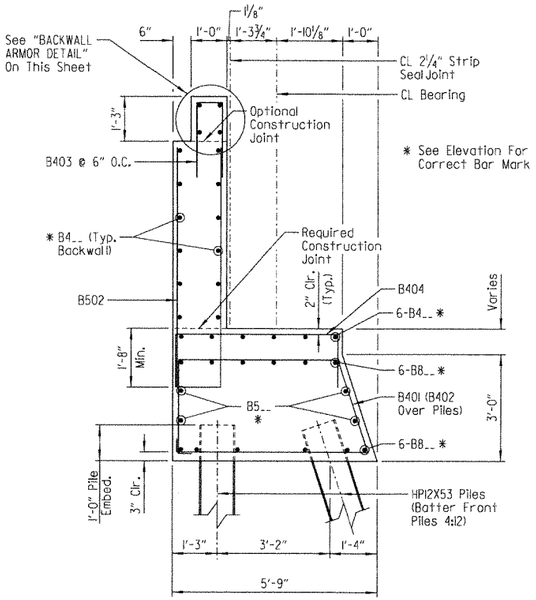
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: CWT DATE: JUNE 2011 FILENAME: B080388XI_A3.DGN
CHECKED BY: BWS DATE: JUNE 2011 SCALE: AS SHOWN
DESIGNED BY: SFH DATE: JUNE 2011
BRIDGE NO. 07226 DRAWING NO. 52194

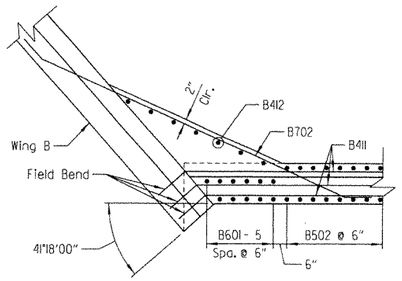
ABHall 8/29/2011 4:28:59 PM
WORKSPACE: AHTD Bridge
L:\208\80\7504 - I-40 over Hwy 64 Bridge Replacement\Drawings\Sh No 52194 - End Bent Details (3 of 6).dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	194	452
				(1) 07226		END BENT DETAILS		52195

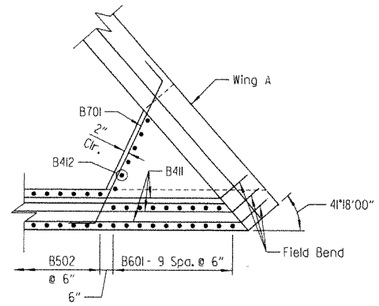


SECTION A-A
Scale: ½" = 1'-0"

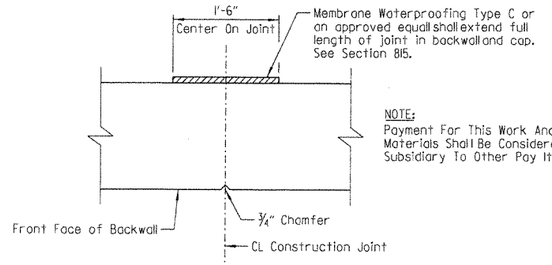
Note:
The Backwall Above The Required Construction Joint Shall Not Be Poured Until The Girders Are In Place. Backwall May Be Placed Prior To Placing The Adjacent Concrete Deck Only If The Optional Backwall Construction Joint Is Used. See "DETAILS FOR BLOCKING EXPANSION JOINT DEVICE" On Dwg. No. 52219 For Additional Information.



VIEW B-B (WING B)
Scale: ⅜" = 1'-0"

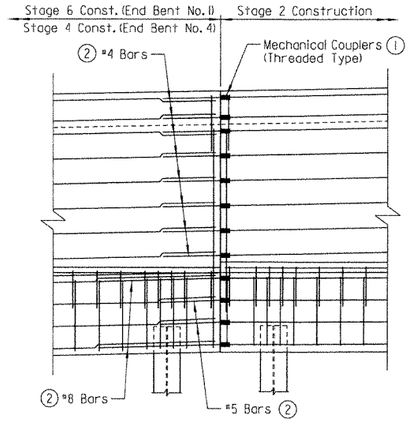


VIEW B-B (WING A)
Scale: ⅜" = 1'-0"



NOTE:
Payment For This Work And Materials Shall Be Considered Subsidiary To Other Pay Items.

CONSTRUCTION JOINT DETAIL
Scale: 1" = 1'-0"

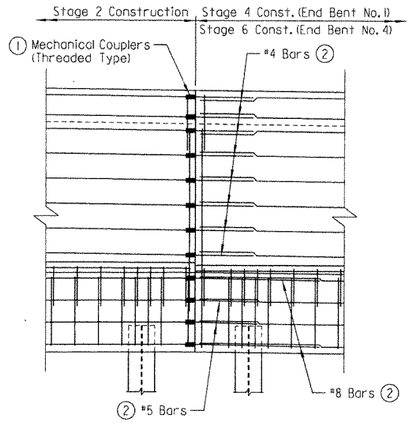


OPTIONAL MECHANICAL COUPLER DETAIL
Scale: ⅜" = 1'-0"

(1) The Mechanical Couplers shall be an approved type in accordance with the AHTD Qualified Products List (QPL).

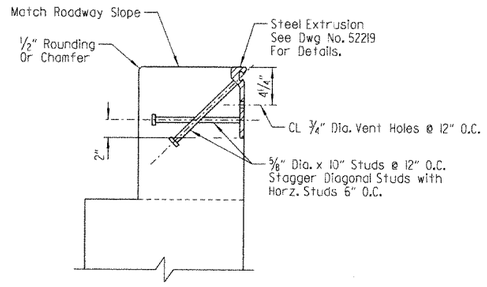
The cost of Mechanical Couplers shall not be measured for separate payment but shall be considered subsidiary to the item "REINFORCING STEEL-BRIDGE (GRADE 60)".

Mechanical couplers shall develop at least 125% of the specified yield strength of the reinforcing steel.



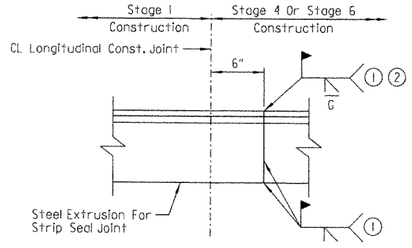
OPTIONAL MECHANICAL COUPLER DETAIL
Scale: ⅜" = 1'-0"

(2) One end of Bar shall be threaded to match Mechanical Coupler. Length of Bar shall match Lap Splice length detailed on plans.



BACKWALL ARMOR DETAIL
Scale: 1½" = 1'-0"

Note:
Concrete Shall Be Hand Packed Under The Joint Armor.



(1) Weld after Stage 2 Pour & prior to Stage 4 & Stage 6 Pours.

(2) Grind Flush

BACKWALL ARMOR JOINT DETAIL
Scale: 1½" = 1'-0"

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. RUDDELL

BRIDGE ENGINEER

SHEET 4 OF 6
DETAILS OF END BENTS
INTERSTATE 40
OVER U.S. HWY 64
FAULKNER COUNTY

ROUTE 40 SEC. 32

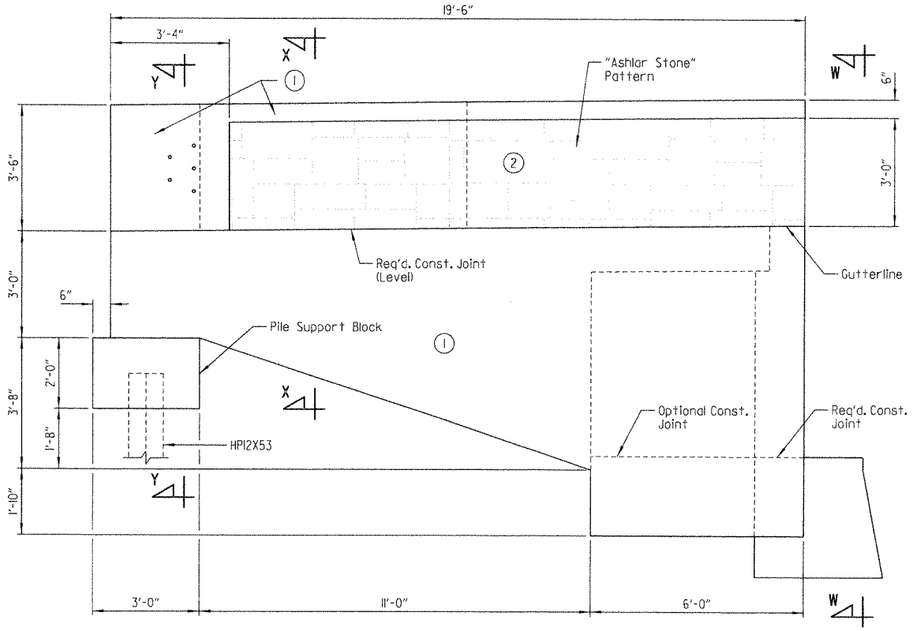
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: PCC DATE: JUNE 2011 FILENAME: B080388XL_A4.DGN
CHECKED BY: BWS DATE: JUNE 2011 SCALE: AS SHOWN
DESIGNED BY: SFH DATE: JUNE 2011

BRIDGE NO. 07226 DRAWING NO. 52195

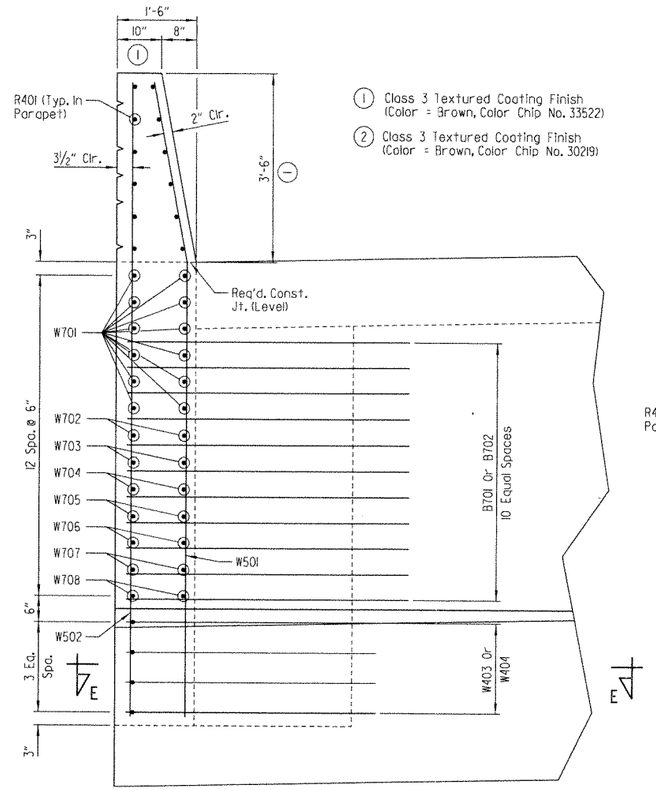
ABHall 8/29/2011 4:28:59 PM
WORKSPACE: AHTD Bridge
L:\2011\N007504 - I-40 over Hwy 64 Bridge Replacement\Drawings\Sh No 5295 - End Bent Details (4 of 6).dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	195452	
				① 07226		END BENT DETAILS		52196



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

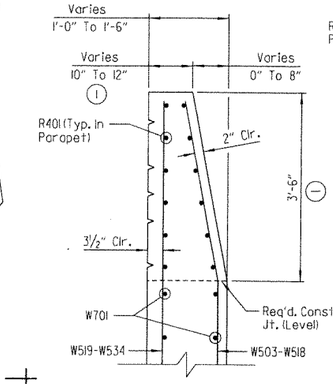
LEGEND
FF = Front Face
BF = Back Face
EF = Each Face



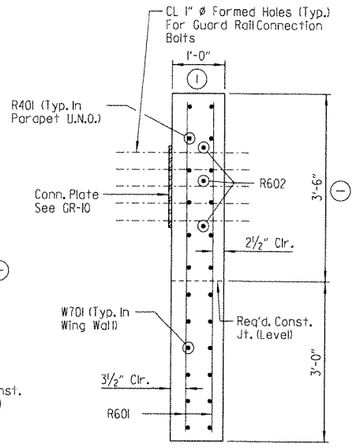
① Class 3 Textured Coating Finish (Color = Brown, Color Chip No. 33522)

② Class 3 Textured Coating Finish (Color = Brown, Color Chip No. 30219)

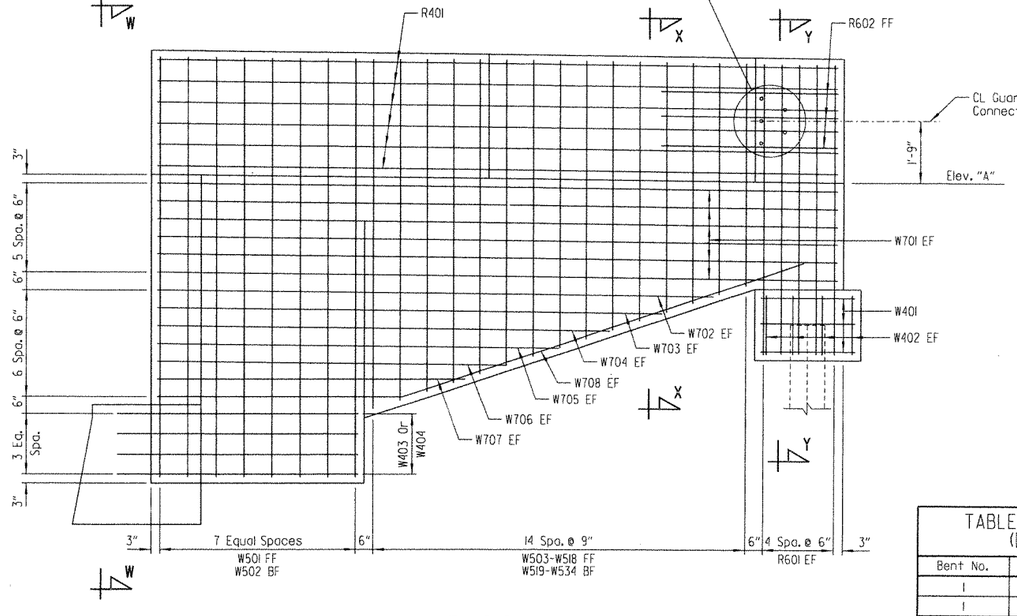
VIEW W-W
Scale: 3/4" = 1'-0"



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

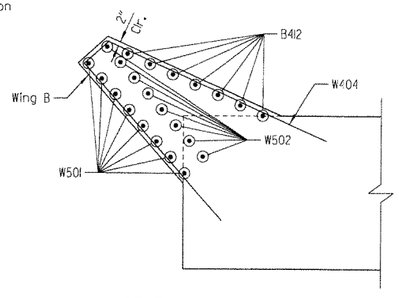


SECTION Y-Y
Scale: 3/4" = 1'-0"

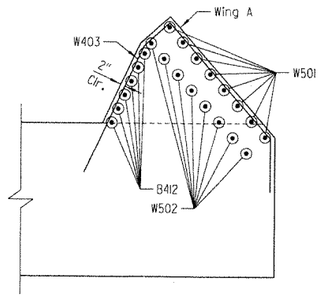


VIEW D-D
Scale: 1/2" = 1'-0"

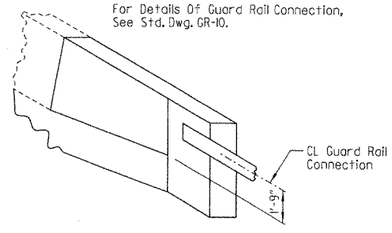
TABLE OF VARIABLES (ELEV. "A")		
Bent No.	Wing	Elev.
1	A	334.83
1	B	333.92
4	A	334.83
4	B	333.92



SECTION E-E (WING B)
Scale: 3/8" = 1'-0"



SECTION E-E (WING A)
Scale: 3/8" = 1'-0"



THREE DIMENSIONAL VIEW OF RAIL
Scale: N.T.S.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. RUDDELL
BRIDGE ENGINEER

SHEET 5 OF 6
DETAILS OF END BENTS
INTERSTATE 40
OVER U.S. HWY 64
FAULKNER COUNTY
ROUTE 40 SEC. 32
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: PCC DATE: JUNE 2011 FILENAME: B080388XL_A5.DGN
CHECKED BY: BWS DATE: JUNE 2011 SCALE: AS SHOWN
DESIGNED BY: SFH DATE: JUNE 2011

BRIDGE NO. 07226 DRAWING NO. 52196

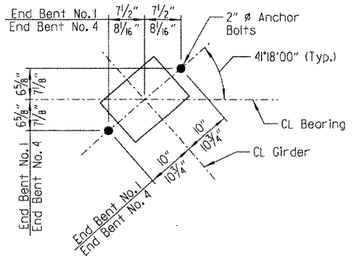
ABHall 8/29/2011 4:28:59 PM
WORKSPACE: AHTD Bridge
L:\2011\11001507504 - I-40 over Hwy 64 Bridge Replacement\Drawings\Sh No 5296 - End Bent Details (5 of 6).dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	196	452
				07226		END BENT DETAILS		52197

STAGE 2 CONSTRUCTION - BAR LIST

MARK	NO. REQ'D	LENGTH	"A"	"B"	P.D.
B401	112	15-5"			2"
B402	44	9'-7"			2"
B403	216	5'-6"	2'-6"	8"	2"
B404	156	8'-3"	2'-0"	4'-5"	2"
B405	48	11'-0"			Str.
B406	12	10'-4"			Str.
B407	64	30'-0"			Str.
B501	8	59'-0"			Str.
B502	216	15'-0"	7'-0"	1'-2"	2½"
B801	48	33'-9"			Str.

NOTE:
Number Of Bars In Each Bar List Is For Both End Bent Nos.1 & 4.



ANCHOR BOLT LAYOUT
Scale: ¾" = 1'-0"

STAGE 4 CONSTRUCTION - BAR LIST

MARK	NO. REQ'D	LENGTH	"A"	"B"	P.D.
B401	121	15'-5"			2"
B402	48	9'-7"			2"
B403	223	5'-6"	2'-6"	8"	2"
B404	168	8'-3"	2'-0"	4'-5"	2"
B408	48	11'-0"			Str.
B409	6	10'-0"			Str.
B410	6	7'-0"			Str.
B411	32	30'-2"			Str.
B412	13	7'-0"			Str.
B413	6	9'-5"			Str.
B414	6	9'-2"			Str.
B415	32	31'-0"			Str.
B502	217	15'-0"	7'-0"	1'-2"	2½"
B503	4	58'-3"			Str.
B504	4	59'-11"			Str.
B601	34	7'-0"			Str.
B701	11	7'-11"			5¼"
B702	11	14'-6"			5¼"
B802	6	59'-2"	58'-3"	8"	6"
B803	6	58'-3"			Str.
B804	6	33'-5"	32'-6"	8"	6"
B805	6	32'-0"			Str.
B806	6	59'-11"			Str.
R401	24	19'-2"			Str.
R601	20	8'-2"			Str.
R602	6	5'-0"			Str.
W401	6	11'-0"			2"
W402	24	1'-8"			Str.
W403	8	14'-1"			2"
W404	8	18'-0"			2"
W501	16	11'-10"			2½"
W502	16	11'-10"			Str.
W503 To W518	2 Ea.	6'-3" To 9'-10"	2'-11" To 6'-6"	0 To 2¼	2½"
W519 To W534	2 Ea.	6'-3" To 9'-10"			Str.
W701	24	19'-2"			Str.
W702 To W707	4 Ea.	15'-8" To 8'-8"			Str.
W708	4	18'-11"			5¼"

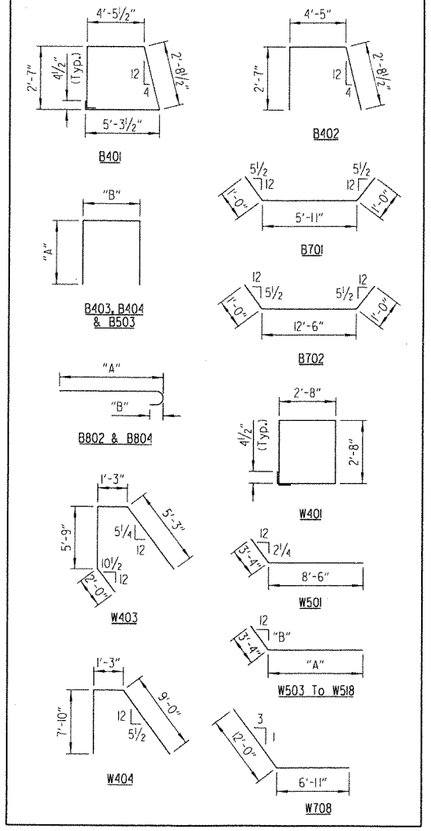
NOTE:
Number Of Bars In Each Bar List Is For Both End Bent Nos.1 & 4.

STAGE 6 CONSTRUCTION - BAR LIST

MARK	NO. REQ'D	LENGTH	"A"	"B"	P.D.
B401	121	15'-5"			2"
B402	48	9'-7"			2"
B403	223	5'-6"	2'-6"	8"	2"
B404	168	8'-3"	2'-0"	4'-5"	2"
B408	48	11'-0"			Str.
B409	6	10'-0"			Str.
B410	6	7'-0"			Str.
B411	32	30'-2"			Str.
B412	13	7'-0"			Str.
B413	6	9'-5"			Str.
B414	6	9'-2"			Str.
B415	32	31'-0"			Str.
B502	217	15'-0"	7'-0"	1'-2"	2½"
B503	4	58'-3"			Str.
B504	4	59'-11"			Str.
B601	34	7'-0"			Str.
B701	11	7'-11"			5¼"
B702	11	14'-6"			5¼"
B802	6	59'-2"	58'-3"	8"	6"
B803	6	58'-3"			Str.
B804	6	33'-5"	32'-6"	8"	6"
B805	6	32'-0"			Str.
B806	6	59'-11"			Str.
R401	24	19'-2"			Str.
R601	20	8'-2"			Str.
R602	6	5'-0"			Str.
W401	6	11'-0"			2"
W402	24	1'-8"			Str.
W403	8	14'-1"			2"
W404	8	18'-0"			2"
W501	16	11'-10"			2½"
W502	16	11'-10"			Str.
W503 To W518	2 Ea.	6'-3" To 9'-10"	2'-11" To 6'-6"	0 To 2¼	2½"
W519 To W534	2 Ea.	6'-3" To 9'-10"			Str.
W701	24	19'-2"			Str.
W702 To W707	4 Ea.	15'-8" To 8'-8"			Str.
W708	4	18'-11"			5¼"

NOTE:
Number Of Bars In Each Bar List Is For Both End Bent Nos.1 & 4.

BENDING DIAGRAM



NOTE:
Dimensions Of Bars Are Out-To-Out.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. RUDDELL
BRIDGE ENGINEER

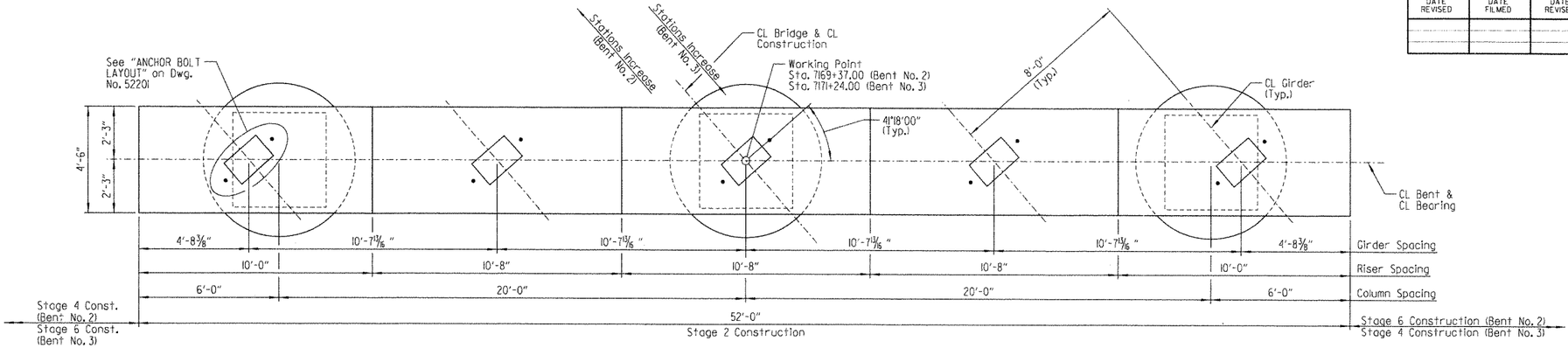
SHEET 6 OF 6
DETAILS OF END BENTS
INTERSTATE 40
OVER U.S. HWY 64
FAULKNER COUNTY
ROUTE 40 SEC. 32

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: PCC DATE: JUNE 2011 FILENAME: B080388XI_A6.DGN
CHECKED BY: BWS DATE: JUNE 2011 SCALE: AS SHOWN
DESIGNED BY: SFH DATE: JUNE 2011
BRIDGE NO. 07226 DRAWING NO. 52197

ABHall 8/29/2011 4:28:59 PM
WORKSPACE: AHTD Bridge
L:\2011\11075104 - I-40 over Hwy 64 Bridge Replacement\Drawings\Sh No 52197 - End Bent Details 16 of 61.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	197	452
				(1) 07226		INT. BENT DETAILS		52198

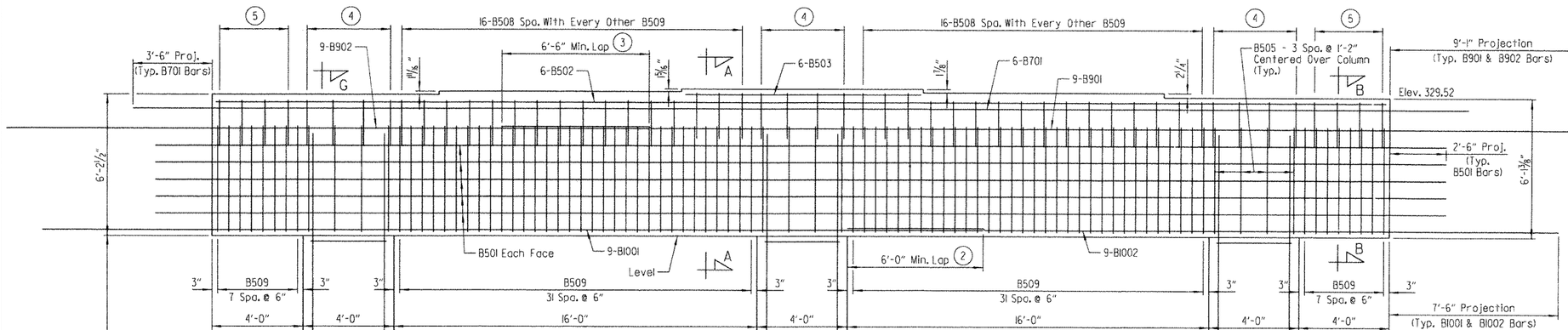


PLAN - STAGE 2 CONSTRUCTION

Scale: 3/8" = 1'-0"

(4) 4-B508 Spaced With B505

(5) 4-B508 Spaced With Every Other B509



ELEVATION - STAGE 2 CONSTRUCTION

(Looking Forward - Bent No. 2; Looking Back - Bent No. 3)

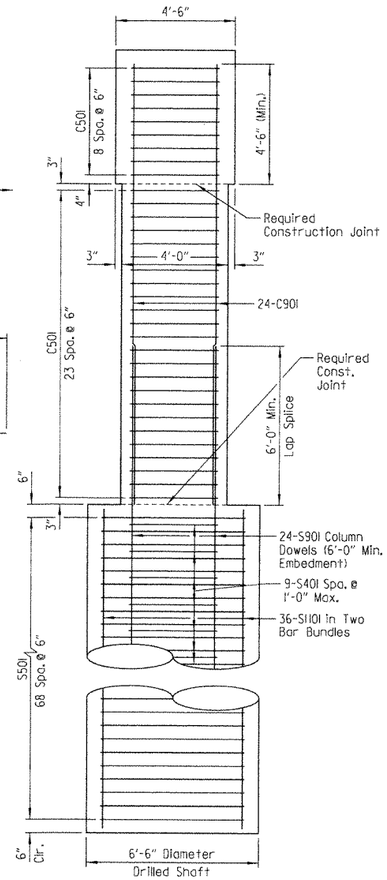
Scale: 3/8" = 1'-0"

(1) Minimum Embedment Into Medium Hard, Slightly Weathered Shale To Shale With Sandstone Seams As Detailed In Borings Shall Not Be Less Than 13'-0".

(2) Lap Splice Bars Immediately Adjacent To The Face Of Center Column And Extend Into Bay. Splices Shall Also Alternate On Either Side Of Column Such That No Two Adjacent Bars Are Spliced At The Same Location.

(3) Lap Splice Bars At Center Of Bay, Splices Shall Also Alternate Between Bays Such That No Two Adjacent Bars Are Spliced At The Same Location.

NOTE:
For Sections A-A, B-B, E-E, F-F & Bar List for Stage 2 Construction, See Dwg. No. 52201.



SECTION G-G

Scale: 3/8" = 1'-0"

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN B. RUDDELL
BRIDGE ENGINEER

SHEET 1 OF 4
DETAILS OF INTERMEDIATE BENTS
INTERSTATE 40
OVER U.S. HWY 64
FAULKNER COUNTY

ROUTE 40 SEC. 32

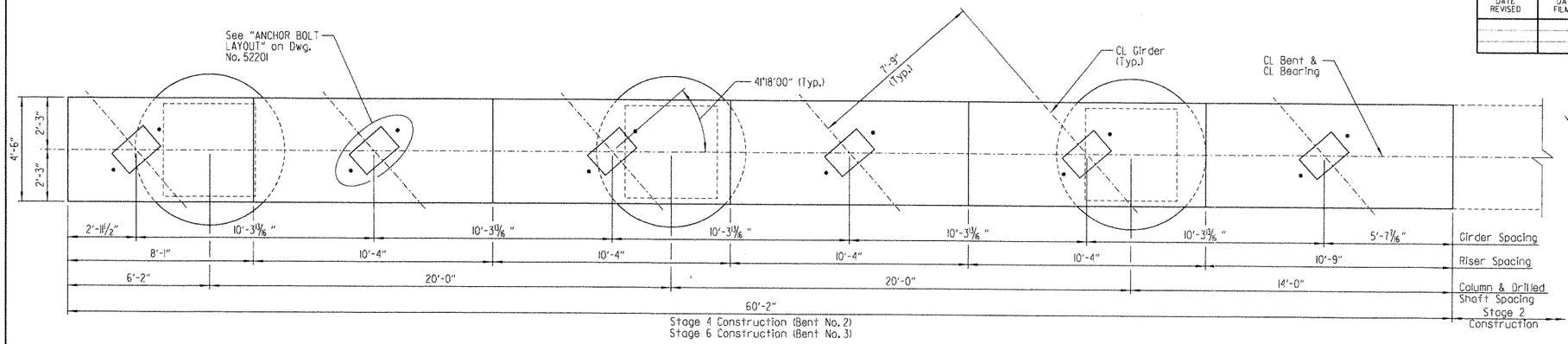
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: ABH DATE: JUNE 2011 FILENAME: B080388XI_BI.DGN
CHECKED BY: BWS DATE: JUNE 2011 SCALE: AS SHOWN
DESIGNED BY: ABH DATE: JUNE 2011
BRIDGE NO. 07226 DRAWING NO. 52198

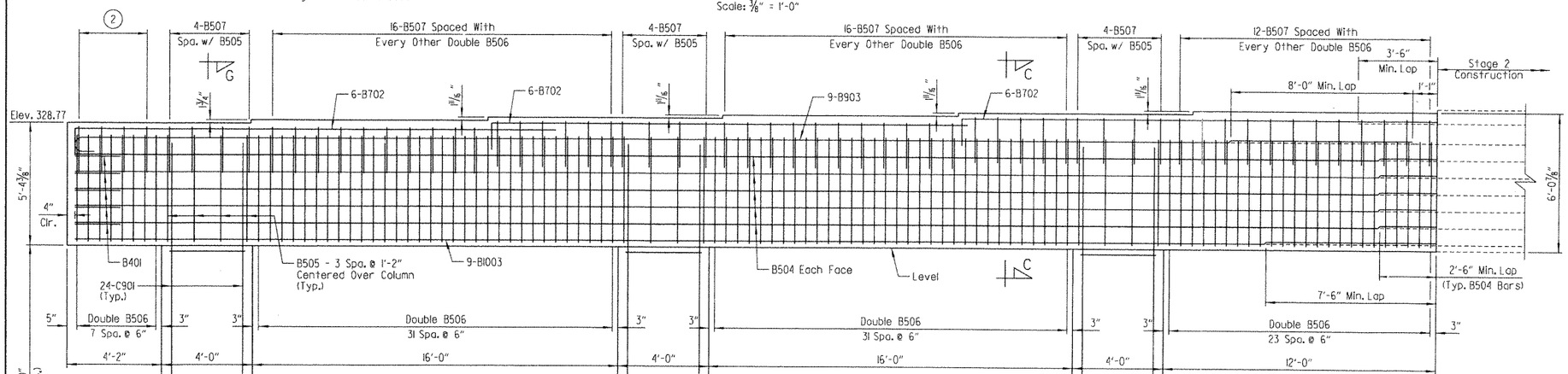
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WORKSPACE: AHTD Bridge
L:\2011\11001750\4 - I-40 over Hwy 64 Bridge Replacement\Drawings\Sh No 52198 - Int Bent Details 1 of 4.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	198	452
				(1) 07226		INT. BENT DETAILS		52199



PLAN - STAGES 4 & 6 CONSTRUCTION

Scale: ⅜" = 1'-0"

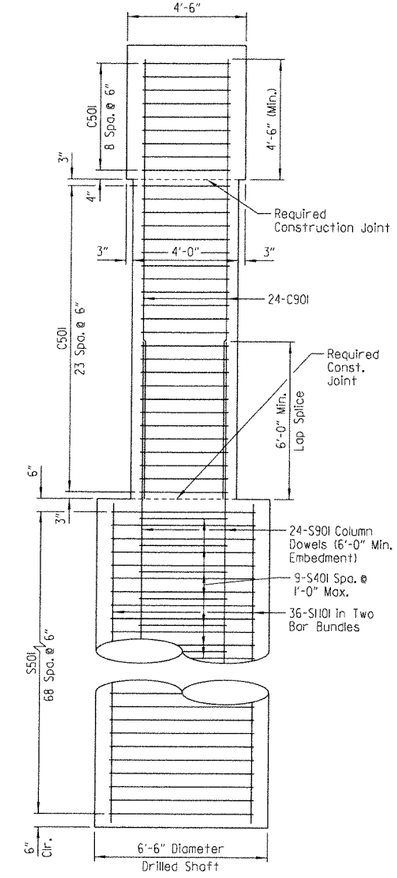


(1) Minimum Embedment Into Medium Hard, Slightly Weathered Shale To Shale With Sandstone Seams As Detailed In Borings Shall Not Be Less Than 13'-0".

NOTE:
For Sections C-C, E-E, F-F & Bar List for Stages 4 & 6 Construction, See Dwg. No. 52201.

ELEVATION - STAGES 4 & 6 CONSTRUCTION

(Looking Forward - Bent No. 2, Stage 4 Construction)
(Looking Back - Bent No. 3, Stage 6 Construction)
Scale: ⅜" = 1'-0"



SECTION G-G

Scale: ⅜" = 1'-0"

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. RUNDELL

BRIDGE ENGINEER

SHEET 2 OF 4
DETAILS OF INTERMEDIATE BENTS
INTERSTATE 40
OVER U.S. HWY 64
FAULKNER COUNTY

ROUTE 40 SEC. 32

ARKANSAS STATE HIGHWAY COMMISSION

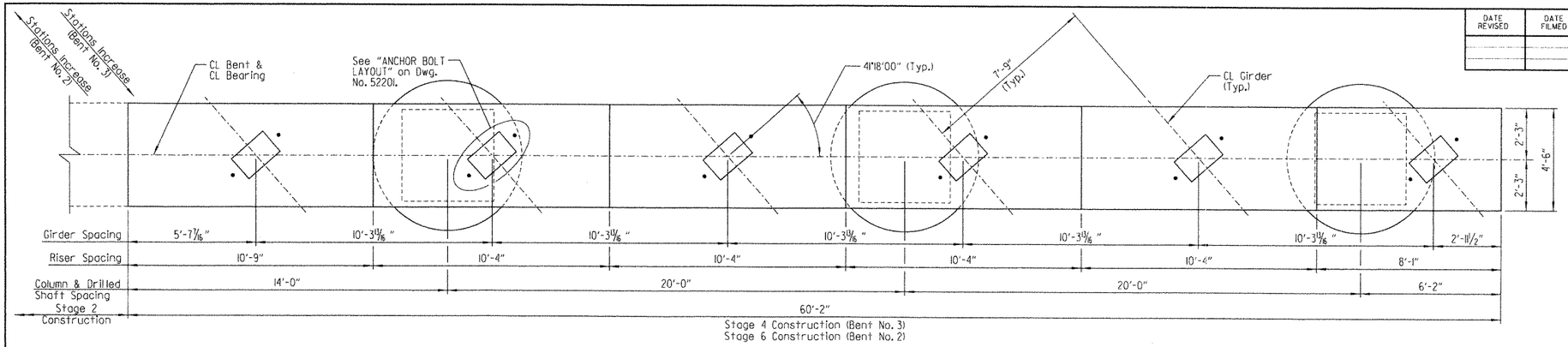
LITTLE ROCK, ARK.

DRAWN BY: ABH DATE: JUNE 2011 FILENAME: B080388X1_B2.DGN
CHECKED BY: BWS DATE: JUNE 2011 SCALE: AS SHOWN
DESIGNED BY: ABH DATE: JUNE 2011

BRIDGE NO. 07226 DRAWING NO. 52199

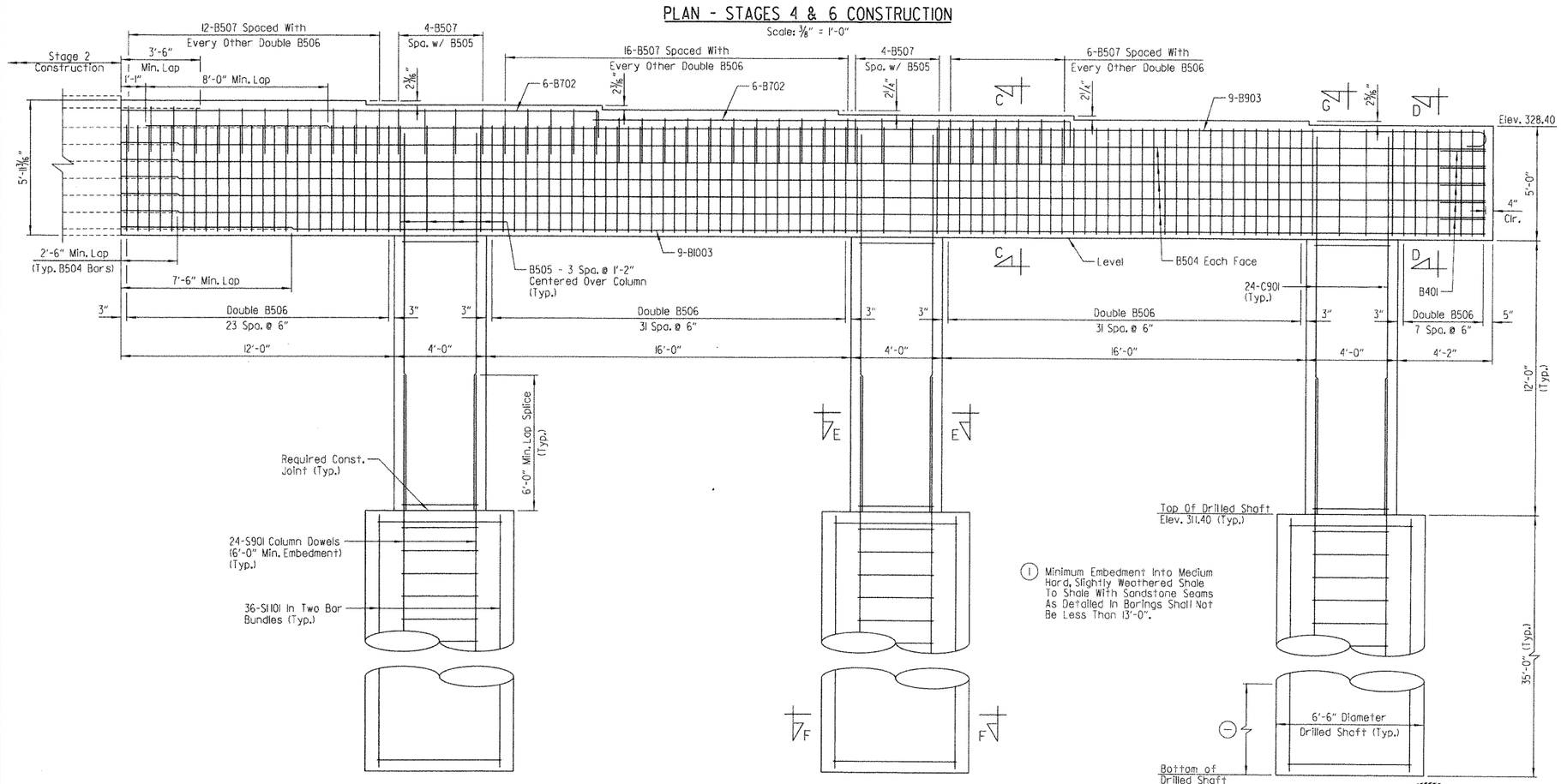
ABHall
8/29/2011 4:29:00 PM
WORKSPACE(..AHTD Bridge
L:\120\MDT\504 - I-40 over Hwy 64 Bridge Replacement\Drawings\Sh No 52199 - Int Bent Details 12 of 41.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	199	452
				(1) 07226		INT. BENT DETAILS		52200



PLAN - STAGES 4 & 6 CONSTRUCTION

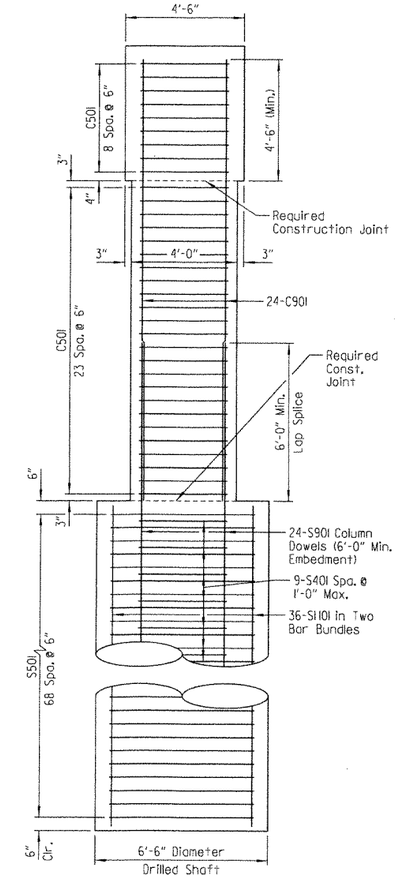
Scale: 3/8" = 1'-0"



(1) Minimum Embedment Into Medium Hard, Slightly Weathered Shale To Shale With Sandstone Seams As Detailed In Borings Shall Not Be Less Than 13'-0".

ELEVATION - STAGES 4 & 6 CONSTRUCTION

(Looking Forward - Bent No. 2, Stage 6 Construction)
(Looking Back - Bent No. 3, Stage 4 Construction)
Scale: 3/8" = 1'-0"



SECTION G-G

Scale: 3/8" = 1'-0"

NOTE:
For Sections C-C, D-D, E-E, F-F & Bar List for Stages 4 & 6 Construction, see Dwg. No. 52201.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
JOHN H. BUDDELL
No. 8017
BRIDGE ENGINEER

SHEET 3 OF 4
DETAILS OF INTERMEDIATE BENTS
INTERSTATE 40
OVER U.S. HWY 64
FAULKNER COUNTY

ROUTE 40 SEC. 32

ARKANSAS STATE HIGHWAY COMMISSION

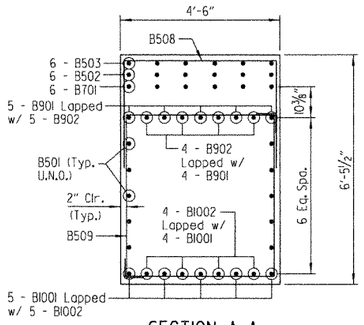
LITTLE ROCK, ARK.

DRAWN BY: ABH DATE: JUNE 2011 FILENAME: B080388X1_B3.DGN
CHECKED BY: BWS DATE: JUNE 2011 SCALE: AS SHOWN
DESIGNED BY: ABH DATE: JUNE 2011

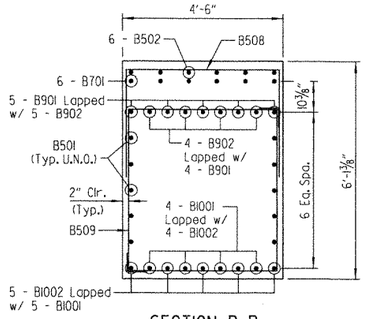
BRIDGE NO. 07226 DRAWING NO. 52200

ABHall 8/29/2011 4:29:00 PM
WORKSPACE: AHTD Bridge
L:\20NK\NO7504 - I-40 over Hwy 64 Bridge Replacement\Drawings\Sh No 52200 - Int Bent Details (3 of 4).dgn
REVISED DATE:

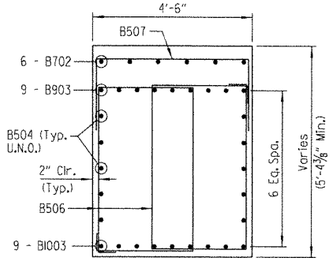
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	200	452
				(1) 07226		INT. BENT DETAILS		52201



SECTION A-A
Scale: ½" = 1'-0"

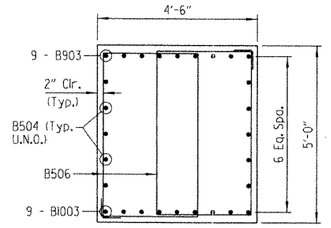


SECTION B-B
Scale: ½" = 1'-0"

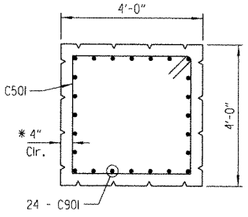


SECTION C-C
Scale: ½" = 1'-0"

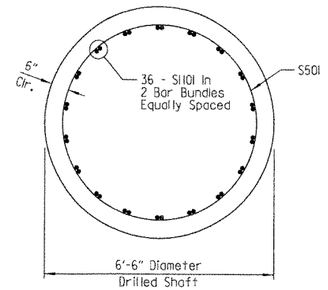
* Form Liner Shall Be A Maximum Depth Of 2" To Provide A Minimum Clearance Of 2".



SECTION D-D
Scale: ½" = 1'-0"



SECTION E-E
Scale: ½" = 1'-0"



SECTION F-F
Scale: ½" = 1'-0"

BAR LIST - STAGE 2 CONSTRUCTION

MARK	NO. REQ'D	LENGTH	"A"	P.D.
B501	20	57'-0"		Str.
B502	12	51'-8"		Str.
B503	12	10'-4"		Str.
B505	24	13'-3½"	4'-8"	2½"
B508	104	9'-11½"	3'-0"	2½"
B509	160	18'-2"	4'-2"	2½"
B701	12	59'-0"		Str.
B901	18	48'-4"		Str.
B902	18	28'-4"		Str.
B1001	18	41'-6"		Str.
B1002	18	31'-6"		Str.
C501	198	14'-0"	6¼"	3¾"
C901	144	16'-6"		Str.
(3) S401	54	13'-10"	5"	3"
(3) S501	414	18'-8"		3¾"
(3) S901	144	12'-0"		Str.
(3) S1101	216	34'-6"		Str.

NOTE:
Number of bars is for both Bent No. 2 & Bent No. 3.

BAR LIST - STAGE 4 CONSTRUCTION

MARK	NO. REQ'D	LENGTH	"A"	P.D.
B401	10	8'-0"	2'-0"	2"
B504	20	59'-10"		Str.
B505	24	13'-3½"	4'-8"	2½"
B506	384	15'-2"	2'-8"	2½"
B507	102	7'-11½"	2'-0"	2½"
B702	30	21'-11"		5¼"
B903	18	60'-0"		9"
B1003	18	59'-10"		Str.
C501	198	14'-0"	6¼"	3¾"
C901	144	16'-6"		Str.
(3) S401	54	13'-10"	5"	3"
(3) S501	414	18'-8"		3¾"
(3) S901	144	12'-0"		Str.
(3) S1101	216	34'-6"		Str.

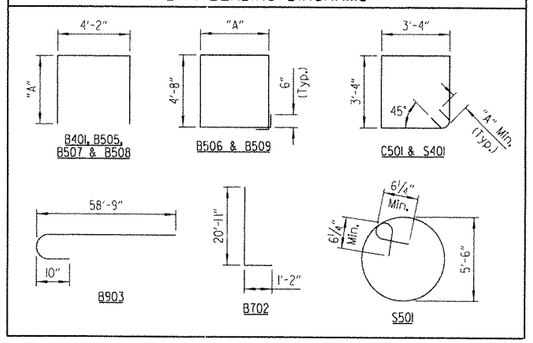
NOTE:
Number of bars is for both Bent No. 2 & Bent No. 3.

BAR LIST - STAGE 6 CONSTRUCTION

MARK	NO. REQ'D	LENGTH	"A"	P.D.
B401	10	8'-0"	2'-0"	2"
B504	20	59'-10"		Str.
B505	24	13'-3½"	4'-8"	2½"
B506	384	15'-2"	2'-8"	2½"
B507	102	7'-11½"	2'-0"	2½"
B702	30	21'-11"		5¼"
B903	18	60'-0"		9"
B1003	18	59'-10"		Str.
C501	198	14'-0"	6¼"	3¾"
C901	144	16'-6"		Str.
(3) S401	54	13'-10"	5"	3"
(3) S501	414	18'-8"		3¾"
(3) S901	144	12'-0"		Str.
(3) S1101	216	34'-6"		Str.

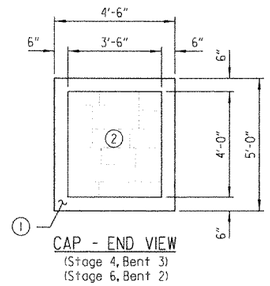
NOTE:
Number of bars is for both Bent No. 2 & Bent No. 3.

BAR BENDING DIAGRAMS

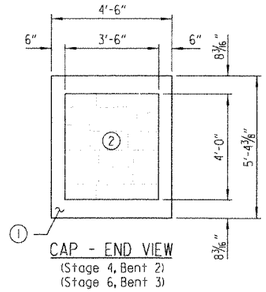


NOTE:
Dimensions of bars are out-to-out.

(3) Non-Pay Item - Subsidiary to SP Job 080388 "Drilled Shaft (78" Dia.)".



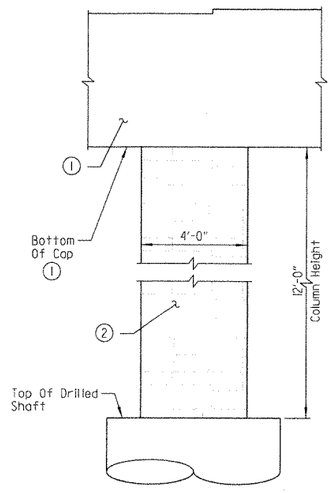
CAP - END VIEW
(Stage 4, Bent 3)
(Stage 6, Bent 2)



CAP - END VIEW
(Stage 4, Bent 2)
(Stage 6, Bent 3)

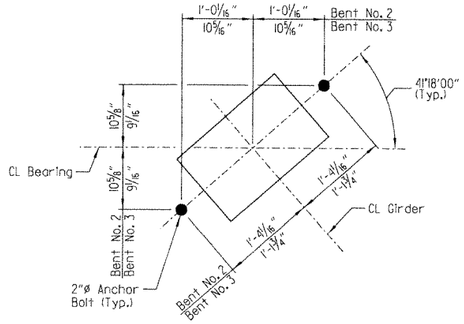
(1) Class 3 Textured Coating Finish (Color = Brown, Color Chip No. 33522)

(2) "Ashlar Stone" Pattern & Class 3 Textured Coating Finish (Color = Brown, Color Chip No. 30219)



ASHLAR STONE PATTERN
Scale: ⅜" = 1'-0"

COLUMN
(Typ. All Columns)



ANCHOR BOLT LAYOUT
Scale: 1" = 1'-0"

NOTE:
For details of elastomeric bearing pads, see Dwg. Nos. 52220 & 52221.

GENERAL NOTES

All Concrete shall be Class "S" with a minimum 28-day compressive strength f'c = 3500 psi. Concrete shall be poured in the dry and all exposed corners to be chamfered ¾" unless otherwise noted.

All reinforcing steel shall conform to AASHTO M31 or M53, Grade 60 (Yield Strength = 60,000 psi) except as noted otherwise.

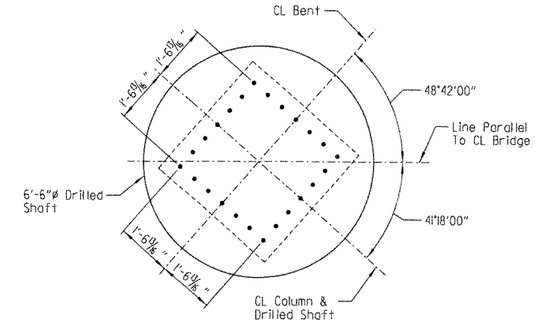
Reinforcing bars in top of cap shall be properly placed to avoid interference with anchor bolts or sheet metal sleeves.

For additional information, see Layout.

Concrete and reinforcing steel in drilled shafts, including column dowels, will not be paid for directly but will be included in the unit prices of the drilled shaft items.

For construction methods, materials, measurement and payment of drilled shafts, see Job 080388 Special Provision "Drilled Shaft Foundations".

Column dowels may be secured in place before concrete placement or inserted after concrete placement of the shaft is complete. Vibration of concrete for the embedment depth of the column dowels will be required to ensure consolidation of the concrete around the column dowels and to facilitate insertion. The contractor shall be responsible for satisfactory results.



DOWEL BAR LAYOUT
Scale: ½" = 1'-0"

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
3-7-11
JOHN H. RUDDELL
BRIDGE ENGINEER

SHEET 4 OF 4
DETAILS OF INTERMEDIATE BENTS
INTERSTATE 40
OVER U.S. HWY 64
FAULKNER COUNTY

ROUTE 40 SEC. 32

ARKANSAS STATE HIGHWAY COMMISSION

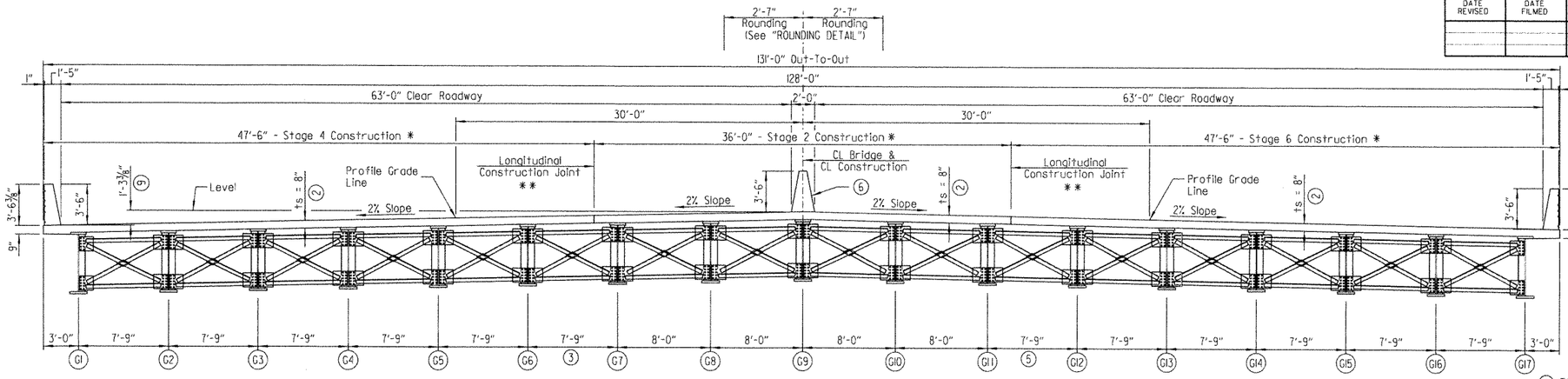
LITTLE ROCK, ARK.

DRAWN BY: ABH DATE: JUNE 2011 FILENAME: B080388XL_B4.DGN
CHECKED BY: BWS DATE: JUNE 2011 SCALE: AS SHOWN
DESIGNED BY: ABH DATE: JUNE 2011

BRIDGE NO. 07226 DRAWING NO. 52201

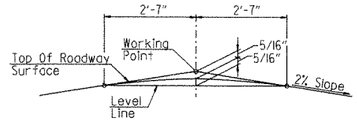
ABHall 8/29/2011 4:29:01 PM
WORKSPACE: AHTD Bridge
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REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	201	452
				(1) 07226		417' PL GIRDER UNIT		52202



TYPICAL SECTION - FINAL CONDITION

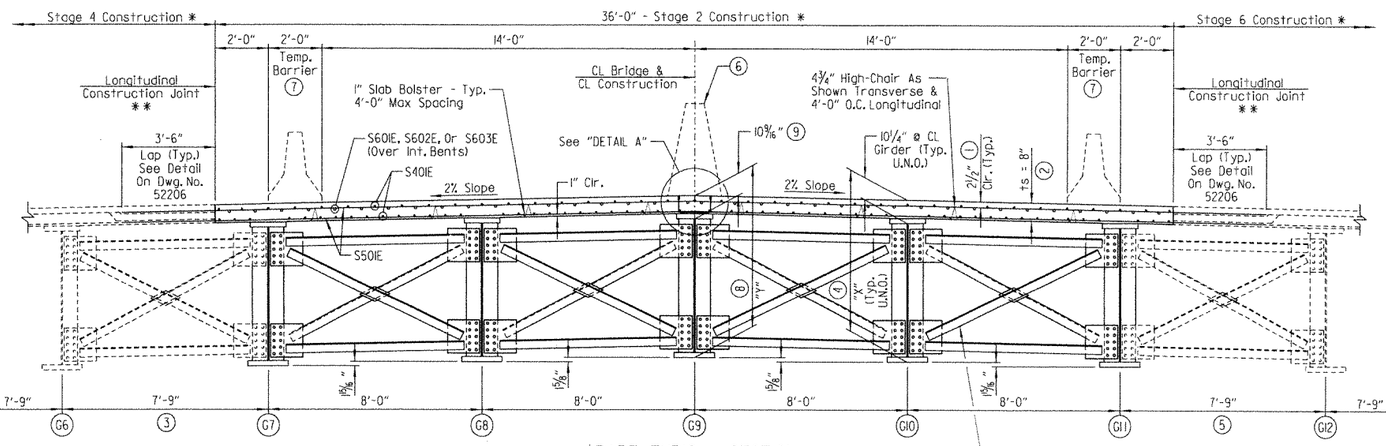
(Looking Forward)
(Showing Dimensions & Stage Construction Details)
Scale: 3/16" = 1'-0"



Note:
Working Point Matches Theoretical Profile Grade.

ROUNDING DETAIL

Scale: N.T.S.

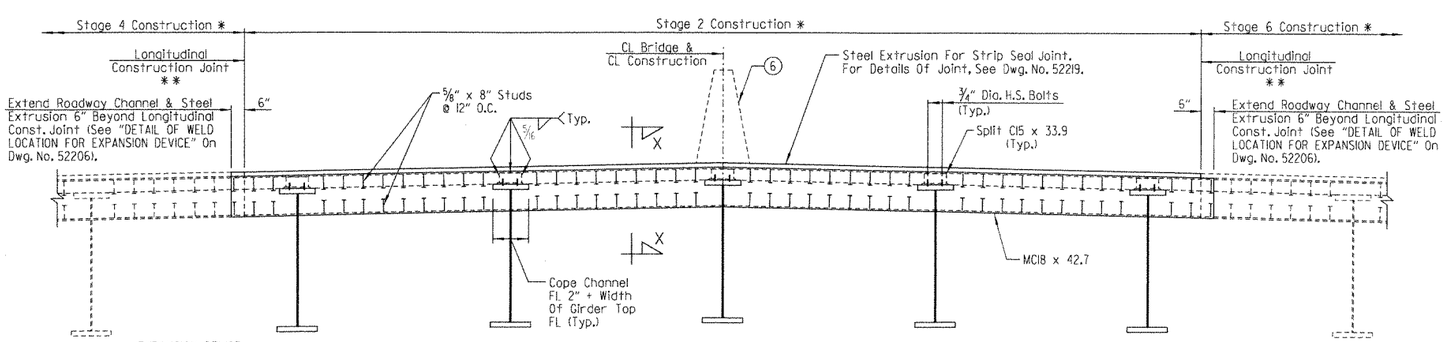


* For Stage Construction Details, See Dwg. Nos. 52187 & 52188.

** See Detail On Dwg. No. 52207.

PART TYPICAL SECTION

(Looking Forward)
(Showing Slab Reinforcing, Stage 2 Construction)
Scale: 3/8" = 1'-0"



EXPANSION DEVICE:
Rdwy. MC18 x 42.7
Conn. Angles Split C15 x 33.9
Neoprene Strip Seal With Steel Extrusion
Detail Device ⅛" High And Provide ¼" Shims Using 2 - 1/16" And 1 - ⅛" Plates

VIEW AT CL JOINT

(Looking Forward)
(Stage 2 Construction)
Scale: N.T.S.

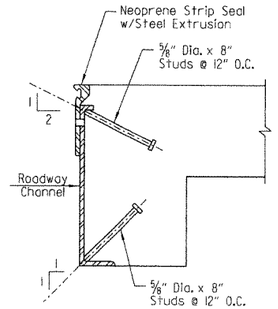
LEGEND

U.N.O. = Unless Noted Otherwise

Note:
Class 1 Protective Surface Treatment Shall Be Applied To The Roadway Surface Only. For Details Of Class 3 Textured Coating Finish To Be Applied To Concrete Parapet And Median Barrier Surfaces, See Dwg. No. 52213.

SLAB REINFORCING: (Stage 2 Construction)
Transverse: S501E @ 6" O.C. In Top & Bottom

Longitudinal: S401E (Placed As Shown)
Top & Bottom
S601E, S602E, S603E (Placed As Shown Over Int. Supports)



SECTION X-X

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

Note:
As An Alternate To ⅝" Dia. Studs, ½" Dia. x 8" Studs Spaced @ 8" o.c. May Be Used. Use Weight Of ⅝" Dia. Stud As Basis Of Measurement Of Structural Steel In Anchors.

NOTE:
The Threaded Dowel And Coupler Assembly Shall Consist Of A OPL Approved Mechanical Splice With Protective Cap And Threaded Dowel Bars (M401E And M417E) As Shown And Shall Develop At Least 125% Of The Yield Strength Of The Dowel Bars.

M401E And M417E Dowel Bars Shall Be a Minimum 60 ksi Yield Strength And Threaded As Required. Threaded Dowel And Coupler Assembly, Except Mating Surfaces, Shall Be Epoxy Coated In Accordance With The Requirements Of Section 804.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. RUDDELL
BRIDGE ENGINEER

(1) TOLERANCE:
Minus = ¼"
Plus = Equal To Amount Of Slab Thickening Used To Meet Slab Thickness Tolerance - See "ADJUSTMENT FOR SLAB THICKNESS TOLERANCE WHEN REMOVABLE DECK FORMING IS USED" On Dwg. No. 52203.

(2) See "ADJUSTMENT FOR SLAB THICKNESS TOLERANCE WHEN REMOVABLE DECK FORMING IS USED" On Dwg. No. 52203.

(3) Tighten Bolts In Cross-Frames Between Girders 6 & 7 Only After All Deck Pours For Stage 4 Construction Are Complete.

(4) "X" = 5'-10¼" + Bottom Flange Thickness, Measured At CL Bearing & CL Girder.

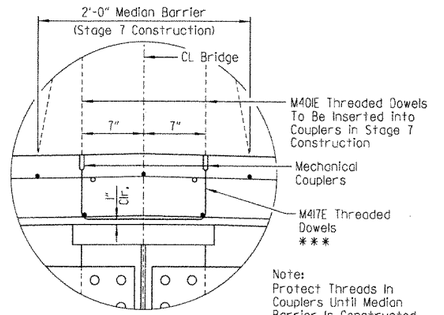
(5) Tighten Bolts In Cross-Frames Between Girders 11 & 12 Only After All Deck Pours For Stage 6 Construction Are Complete.

(6) 2' Wide Median Barrier (Stage 7 Construction)

(7) Threaded Inserts Shall Be Cast In Place In Stage 2 Deck Construction To Accommodate The Connection Of Temp. Barrier See Standard Drawing TC-4 For Additional Details.

(8) "Y" = 5'-10⅜" + Bottom Flange Thickness, Measured At CL Bearing & CL Girder

(9) Measured To Working Point - See Rounding Detail



DETAIL "A"

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

Note:
Protect Threads In Couplers Until Median Barrier Is Constructed in Stage 7 Construction

*** Space and Orient M417E Bars to Align Mechanical Couplers with M401E Bars To Be Installed in Stage 7 Construction. See Median Barrier Details on Dwg. Nos. 52216-52218 for Spacing and Positioning of M401E Bars.

SHEET 1 OF 18
DETAILS OF 417'-0" COMPOSITE PLATE GIRDER UNIT INTERSTATE 40 OVER U.S. HWY 64 FAULKNER COUNTY

ROUTE 40 SEC. 32

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

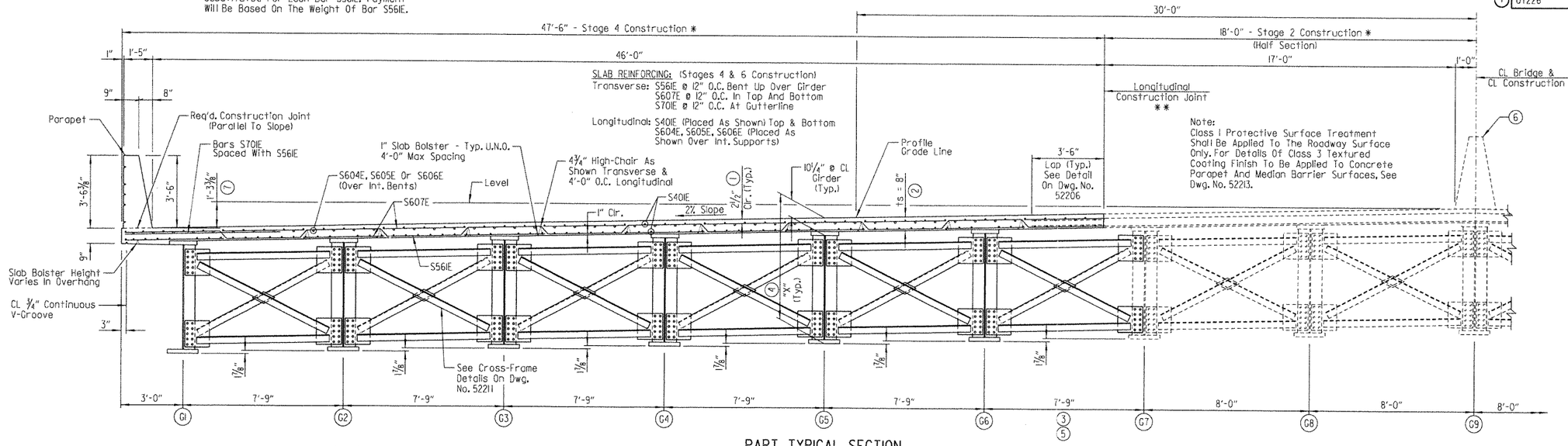
DRAWN BY: HEW DATE: JUNE 2011 FILENAME: B080388X1_SI.DGN
CHECKED BY: JHR/ABH DATE: JUNE 2011 SCALE: AS SHOWN
DESIGNED BY: BWS DATE: JUNE 2011

BRIDGE NO. 07226 DRAWING NO. 52202

ABholt 8/29/2011 4:29:01 PM
WORKSPACE: AHTD Bridge
L:\2011\080388\Drawings\Sh No 52202 - Typical Section 1 of 2.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	202	452
				(1) 07226		417' PL GIRDER UNIT		52203

Note:
At The Contractor's Option, One Epoxy Coated #5 Bar In The Top And One Epoxy Coated #5 Bar In The Bottom May Be Substituted For Each Bar S56IE. Payment Will Be Based On The Weight Of Bar S56IE.

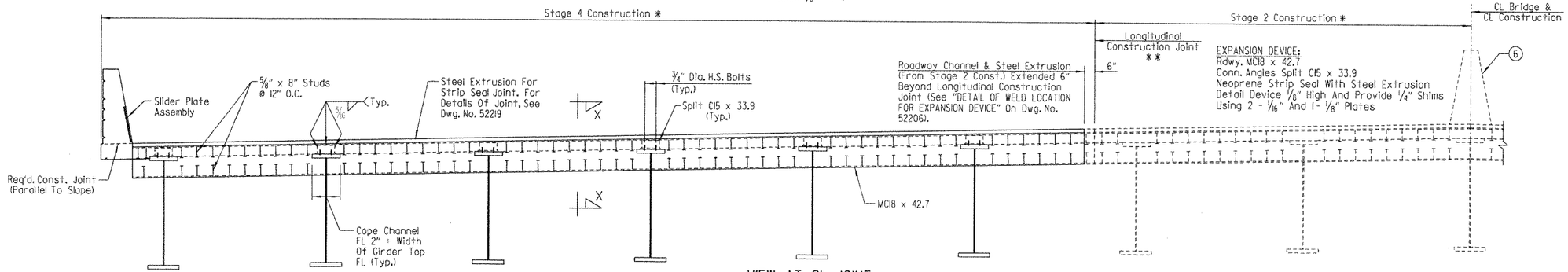


* For Stage Construction Details, See Dwg. Nos. 52187 & 52188.

** See Detail On Dwg. No. 52207.

PART TYPICAL SECTION

(Looking Forward)
(Showing Slab Reinforcing)
(Showing Stage 4, Stage 6 Similar By Orientation)
Scale: ⅜" = 1'-0"



VIEW AT CL JOINT

(Looking Forward)
(Showing Stage 4, Stage 6 Similar By Orientation)
Scale: N.T.S.

(1) TOLERANCE:
Minus = ¼"
Plus = Equal To Amount Of Slab Thickening Used To Meet Slab Thickness Tolerance - See "ADJUSTMENT FOR SLAB THICKNESS TOLERANCE WHEN REMOVABLE DECK FORMING IS USED".

(2) See "ADJUSTMENT FOR SLAB THICKNESS TOLERANCE WHEN REMOVABLE DECK FORMING IS USED".

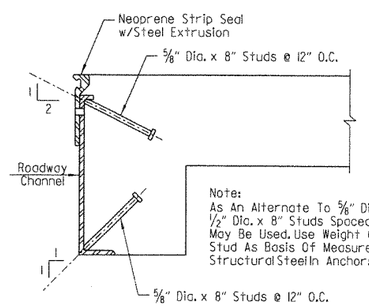
(3) Tighten Bolts In Cross-Frames Between Girders 6 & 7 Only After All Deck Pours For Stage 4 Construction Are Complete.

(4) "X" = 5'-10¼" + Bottom Flange Thickness, Measured At CL Bearing & CL Girder.

(5) Tighten Bolts In Cross-Frames Between Girders 11 & 12 Only After All Deck Pours For Stage 6 Construction Are Complete.

(6) 2' Wide Median Barrier (Stage 7 Construction)

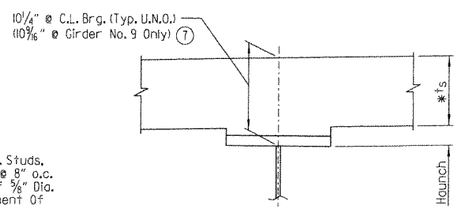
(7) Measured To Working Point - See Rounding Detail On Dwg. No. 52202.



Note:
As An Alternate To ⅝" Dia. Studs, ½" Dia. x 8" Studs Spaced @ 8" o.c. May Be Used. Use Weight Of ⅝" Dia. Stud As Basis Of Measurement Of Structural Steel In Anchors.

SECTION X-X

Scale: 1½" = 1'-0"



Note: t_S = Slab Thickness As Shown On "TYPICAL SECTION".
* Tolerance When Removable Deck Forming Is Used Is = +½", -¼". Haunch Forming Is Required And Shall Be Adjusted To Maintain Slab Thickness Tolerance.

ADJUSTMENT FOR SLAB THICKNESS TOLERANCE WHEN REMOVABLE DECK FORMING IS USED

Scale: N.T.S.

Note:
Haunch Dimension May Vary Within The Following Limits To Maintain The Grade And Slab Thickness Tolerance: Minimum - Occurs When The Top Flange Contacts The Bottom Reinforcing Steel; Maximum - Top Flange Thickness Plus 1⅜". No Increase In Concrete And Structural Steel Quantities Will Be Made To Maintain Tolerances.

Tolerances Shown Are Applicable Only When Removable Deck Forming Is Used. See Std. Dwg. No. 14991 For Tolerances When Permanent Steel Deck Forms Are Used. Payment For Concrete Shall Be Based On Removable Deck Forming.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. RUDDELL
BRIDGE ENGINEER

LEGEND
U.N.O. = Unless Noted Otherwise

SHEET 2 OF 18
DETAILS OF 417'-0" COMPOSITE PLATE GIRDER UNIT INTERSTATE 40 OVER U.S. HWY 64 FAULKNER COUNTY

ROUTE 40 SEC. 32

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: JUNE 2011 FILENAME: B080388XL_S2.DGN
CHECKED BY: JHR/ABH DATE: JUNE 2011 SCALE: AS SHOWN
DESIGNED BY: BWS DATE: JUNE 2011
BRIDGE NO. 07226 DRAWING NO. 52203

ABHall 8/29/2011 4:29:01 PM
WORKSPACE: AHTD Bridge
L:\CORNOT504 - I-40 over Hwy 64 Bridge Replacement\Drawings\Sh No 52203 - TypicalSection 12 of 21.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	263	452
				(1) 07226		417' PL GIRDER UNIT		52204

(1) Parapet Joints Designated With Symbol (F) Shall be Stopped 4" From Top of Slab. All Other Parapet Joints With Symbol (P) Shall be Partial Depth Joints Stopped 1'-6" From Top of Slab. See Dwg. Nos. 52214 & 52215 For Details.

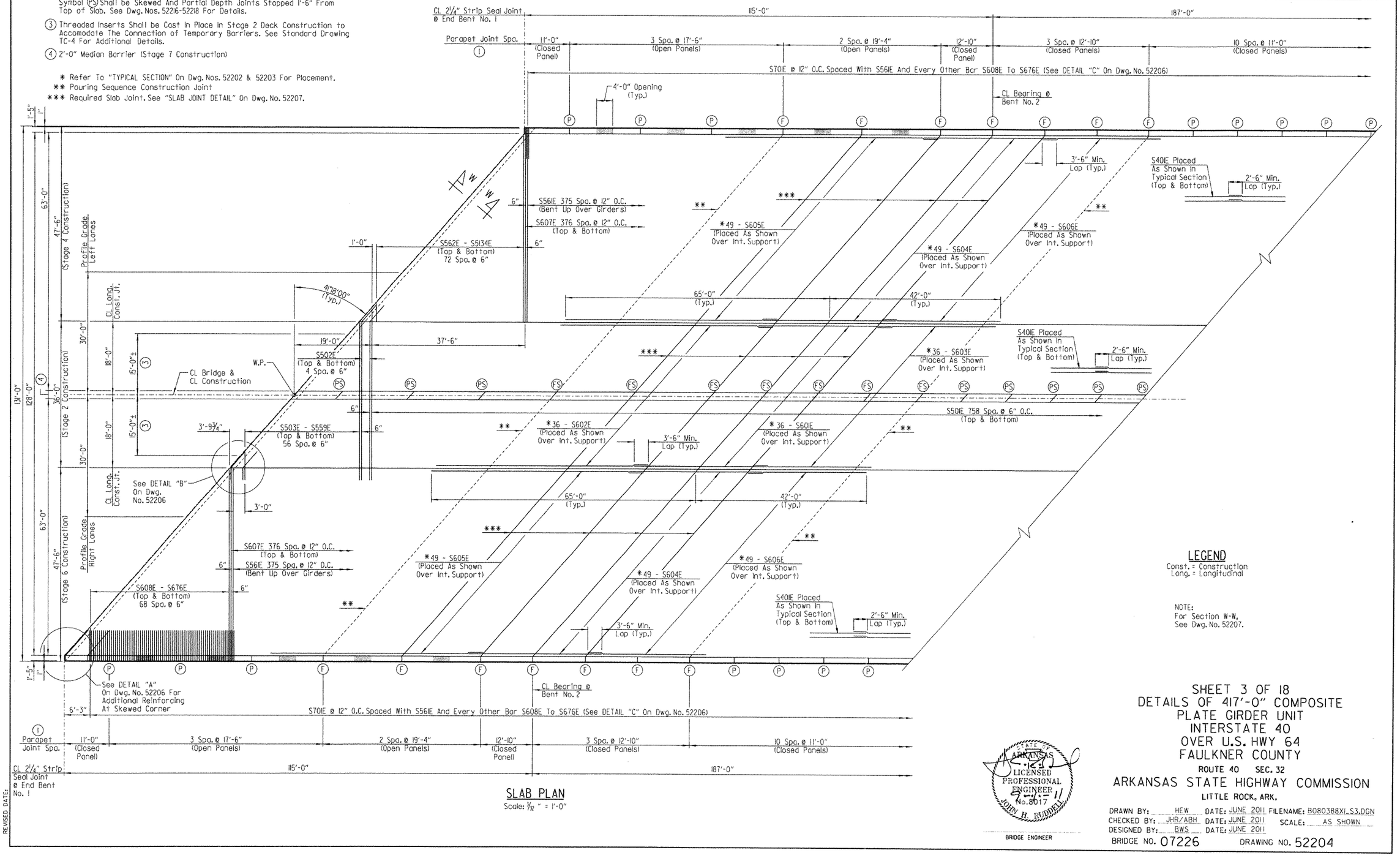
(2) Median Barrier Joints Designated With Symbol (FS) Shall be Skewed And Stopped 4" From Top of Slab. All Other Median Barrier Joints With Symbol (PS) Shall be Skewed And Partial Depth Joints Stopped 1'-6" From Top of Slab. See Dwg. Nos. 52216-52218 For Details.

(3) Threaded Inserts Shall be Cast In Place In Stage 2 Deck Construction to Accomodate The Connection of Temporary Barriers. See Standard Drawing TC-4 For Additional Details.

(4) 2'-0" Median Barrier (Stage 7 Construction)

* Refer To "TYPICAL SECTION" On Dwg. Nos. 52202 & 52203 For Placement.
** Pouring Sequence Construction Joint
*** Required Slab Joint. See "SLAB JOINT DETAIL" On Dwg. No. 52207.

Note:
Required Slab Joints And Pouring Sequence Joints Shall Align With The Parapet Open Joints At The Gutterline.



SLAB PLAN
Scale: 1/32 " = 1'-0"

LEGEND
Const. = Construction
Long. = Longitudinal

NOTE:
For Section W-W, See Dwg. No. 52207.

ARKANSAS 12414 LICENSED PROFESSIONAL ENGINEER 8-17-11 No. 8017 JOHN H. RUDDELL
BRIDGE ENGINEER

SHEET 3 OF 18
DETAILS OF 417'-0" COMPOSITE PLATE GIRDER UNIT
INTERSTATE 40
OVER U.S. HWY 64
FAULKNER COUNTY
ROUTE 40 SEC. 32

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: JUNE 2011 FILENAME: B080388XL_S3.DGN
CHECKED BY: JHR/ABH DATE: JUNE 2011 SCALE: AS SHOWN
DESIGNED BY: BWS DATE: JUNE 2011
BRIDGE NO. 07226 DRAWING NO. 52204

ABHall 8/29/2011 4:29:02 PM
WORKSPACE: AHTD Bridge
L:\2DN\07504 - I-40 over Hwy 64 Bridge Replacement\Drawings\Sh No 52204 - Slab Plan 11of 21.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	204	452
				(1) 07226		417' PL GIRDER UNIT		52205

(1) Parapet Joints Designated With Symbol (F) Shall be Stopped 4" From Top of Slab. All Other Parapet Joints With Symbol (P) Shall be Partial Depth Joints Stopped 1'-6" From Top of Slab. See Dwg. Nos. 52214 & 52215 For Details.

(2) Median Barrier Joints Designated With Symbol (FS) Shall be Skewed And Stopped 4" From Top of Slab. All Other Median Barrier Joints With Symbol (PS) Shall be Skewed And Partial Depth Joints Stopped 1'-6" From Top of Slab. See Dwg. Nos. 52216-52218 For Details.

(3) Threaded Inserts Shall be Cast In Place In Stage 2 Deck Construction to Accomodate The Connection of Temporary Barriers. See Standard Drawing TC-4 For Additional Details.

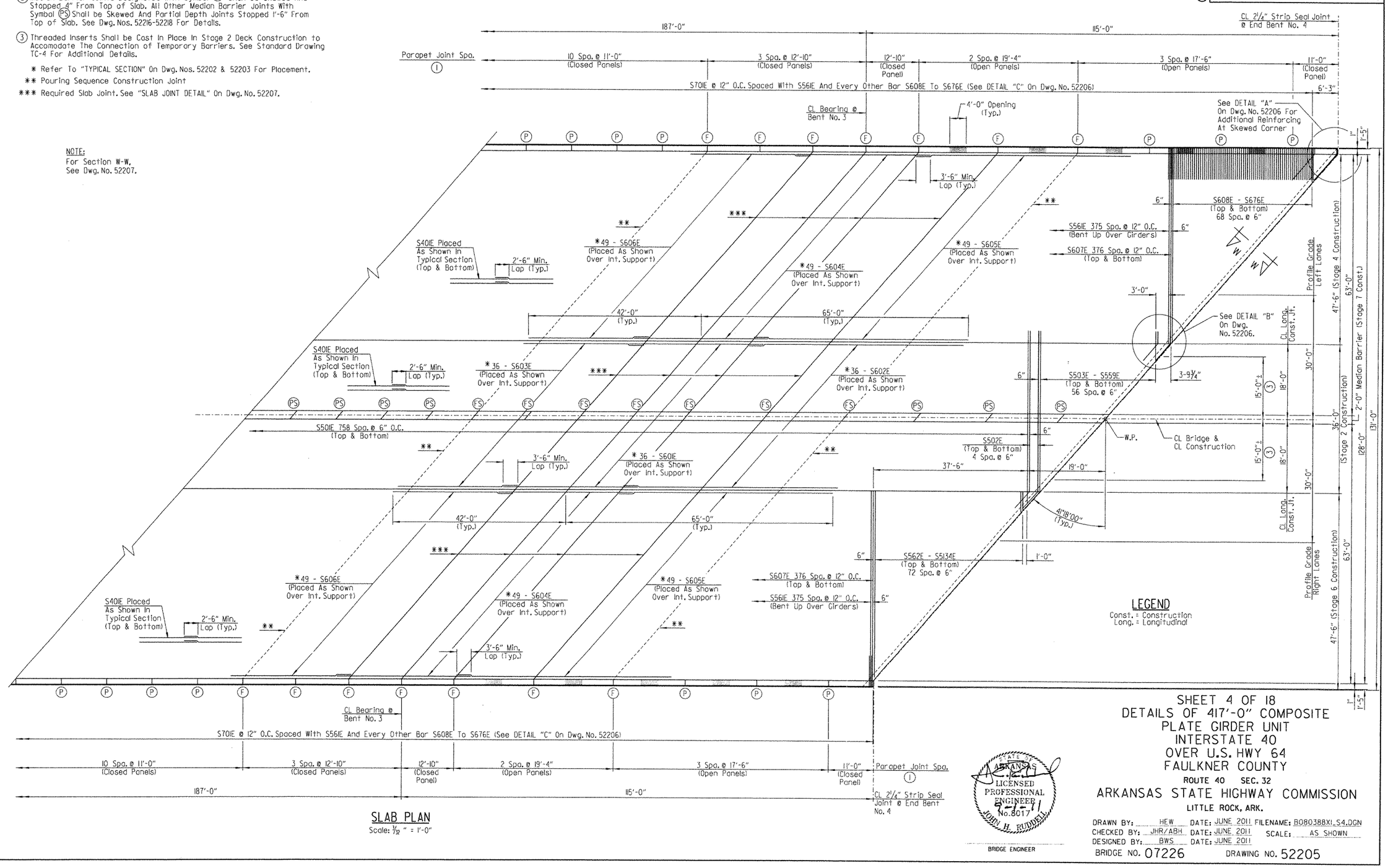
* Refer To "TYPICAL SECTION" On Dwg. Nos. 52202 & 52203 For Placement.

** Pouring Sequence Construction Joint

*** Required Slab Joint. See "SLAB JOINT DETAIL" On Dwg. No. 52207.

NOTE:
Required Slab Joints And Pouring Sequence Joints Shall Align With The Parapet Open Joints At The Gutterline.

NOTE:
For Section W-W, See Dwg. No. 52207.



SLAB PLAN

Scale: 3/32 " = 1'-0"

LEGEND

Const. = Construction
Long. = Longitudinal

ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. RUDDELL
BRIDGE ENGINEER

SHEET 4 OF 18
DETAILS OF 417'-0" COMPOSITE PLATE GIRDER UNIT INTERSTATE 40 OVER U.S. HWY 64 FAULKNER COUNTY

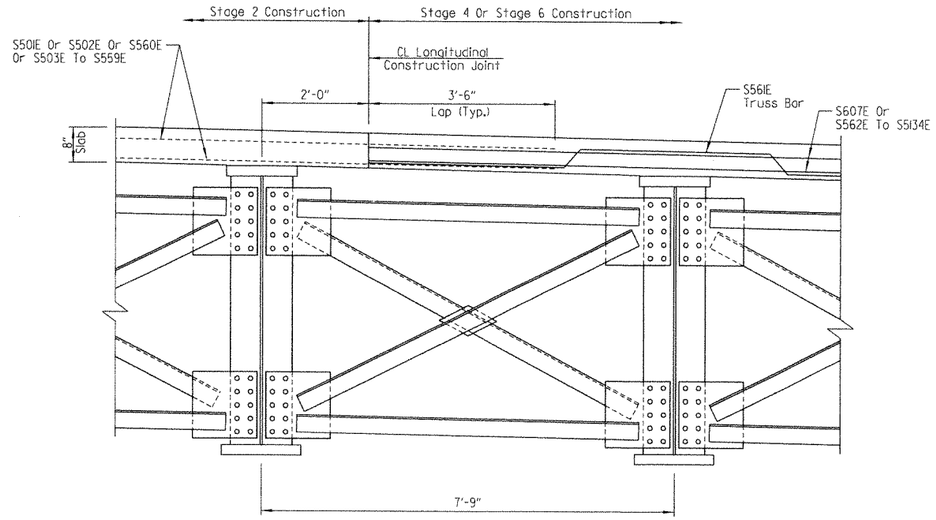
ROUTE 40 SEC. 32

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: JUNE 2011 FILENAME: B080388XI_S4.DGN
CHECKED BY: JHR/ABH DATE: JUNE 2011 SCALE: AS SHOWN
DESIGNED BY: BWS DATE: JUNE 2011
BRIDGE NO. 07226 DRAWING NO. 52205

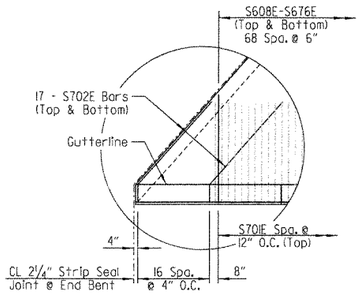
ABhatt 8/29/2011 4:29:02 PM
WORKSPACE: AHTD Bridge
L:\V20\I80\7504 - I-40 over Hwy 64 Bridge Replacement\Drawings\Sh No 52205 - Slab Plan (2 of 2).dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	205	452
				(1) 07226		417' PL GIRDER UNIT		52206



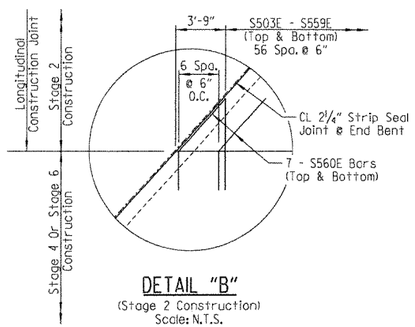
LAP DETAIL @ LONGITUDINAL JOINT

(Looking Back - Stage 4 Construction
(Looking Forward - Stage 6 Construction)
Scale: 3/4" = 1'-0"



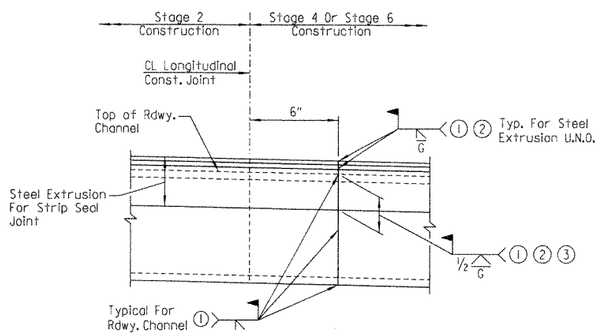
DETAIL "A"

(Stages 4 & 6 Construction)
Scale: N.T.S.



DETAIL "B"

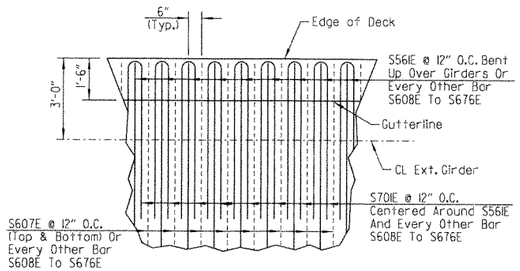
(Stage 2 Construction)
Scale: N.T.S.



1. Weld After Stage 2 Pour & Prior To Stage 4 & Stage 6 Pours.
2. Grind Flush.
3. Single-V-Groove Weld For Only The Vertical Leg Of The Steel Extrusion (In Region Overlapping Roadway Channel).

DETAIL OF WELD LOCATION FOR EXPANSION JOINT

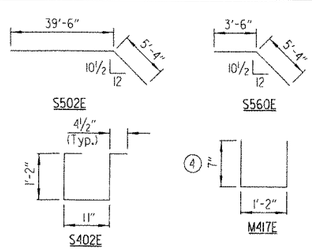
(View From CL Joint)
Scale: N.T.S.



DETAIL "C"

(Stages 4 & 6 Construction)
Scale: N.T.S.

BENDING DIAGRAM

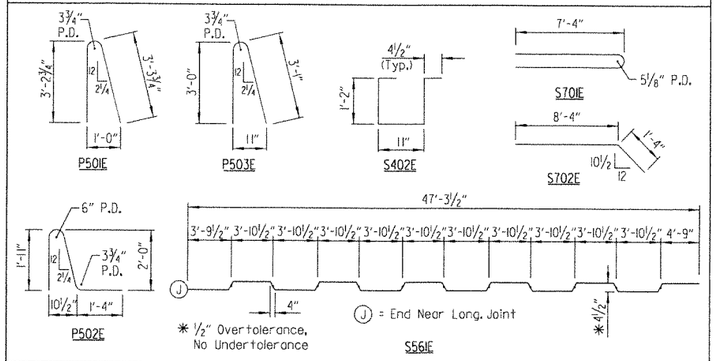


BAR LIST - STAGE 2 CONSTRUCTION

MARK	NO. REQ'D.	LENGTH	P.D.
S401E	1092	37'-1"	STR.
S402E	64	3'-8"	2"
S501E	1518	43'-0"	STR.
S502E	20	44'-10"	3¾"
S503E To S559E	4 Each	7'-6" To 39'-4"	STR.
S560E	28	8'-10"	3¾"
S601E	72	32'-8"	STR.
S602E	72	52'-2"	STR.
S603E	72	29'-2"	STR.
S677E	6	56'-0"	STR.
S678E	16	10'-4"	STR.
S679E	8	7'-2"	STR.
(4) M417E	838	2'-2"	2"

(4) Ends Threaded For Mechanical Couplers. Length Of Vertical Legs Includes The Length Of The Mechanical Coupler. The Actual Length Of Vertical Leg Engagement Into The Mechanical Coupler Shall Be Determined By The Mechanical Coupler Manufacturer, And The Length Of The Vertical Legs Shall Be Adjusted Accordingly.

BENDING DIAGRAM



BAR LIST - STAGE 4 CONSTRUCTION

MARK	NO. REQ'D.	LENGTH	P.D.
S401E	1476	37'-1"	STR.
S402E	86	3'-8"	2"
S561E	376	48'-5½"	3"
S562E To S5134E	2 Each	4'-5" To 45'-5"	STR.
S604E	98	32'-8"	STR.
S605E	98	52'-2"	STR.
S606E	98	29'-2"	STR.
S607E	754	47'-4"	STR.
S608E To S676E	2 Each	8'-1" To 46'-9"	STR.
S680E	6	60'-0"	STR.
S681E	20	10'-0"	STR.
S682E	4	6'-5"	STR.
S683E	4	1'-8"	STR.
S701E	411	14'-11"	5⅛"
S702E	34	9'-8"	5¼"
P401E	60	10'-8"	STR.
P402E	30	17'-2"	STR.
P403E	24	32'-10"	STR.
P404E	44	19'-0"	STR.
P405E	88	12'-6"	STR.
P406E	18	38'-3"	STR.
P501E	740	6'-8"	3¾"
P502E	740	5'-4"	3¾", 6"
P503E	86	6'-2½"	3¾"

BAR LIST - STAGE 6 CONSTRUCTION

MARK	NO. REQ'D.	LENGTH	P.D.
S401E	1476	37'-1"	STR.
S402E	86	3'-8"	2"
S561E	376	48'-5½"	3"
S562E To S5134E	2 Each	4'-5" To 45'-5"	STR.
S604E	98	32'-8"	STR.
S605E	98	52'-2"	STR.
S606E	98	29'-2"	STR.
S607E	754	47'-4"	STR.
S608E To S676E	2 Each	8'-1" To 46'-9"	STR.
S680E	6	60'-0"	STR.
S681E	20	10'-0"	STR.
S682E	4	6'-5"	STR.
S683E	4	1'-8"	STR.
S701E	411	14'-11"	5⅛"
S702E	34	9'-8"	5¼"
P401E	60	10'-8"	STR.
P402E	30	17'-2"	STR.
P403E	24	32'-10"	STR.
P404E	44	19'-0"	STR.
P405E	88	12'-6"	STR.
P406E	18	38'-3"	STR.
P501E	740	6'-8"	3¾"
P502E	740	5'-4"	3¾", 6"
P503E	86	6'-2½"	3¾"

LEGEND

U.N.O. = Unless Noted Otherwise

Notes:
1. Dimensions Of Bars Are Out-To-Out.
2. Bar Designations Ending With "E" Indicates Epoxy Coated Bars.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. RUDDELL
8-29-11

BRIDGE ENGINEER

SHEET 5 OF 18
DETAILS OF 417'-0" COMPOSITE PLATE GIRDER UNIT INTERSTATE 40 OVER U.S. HWY 64 FAULKNER COUNTY

ROUTE 40 SEC. 32

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

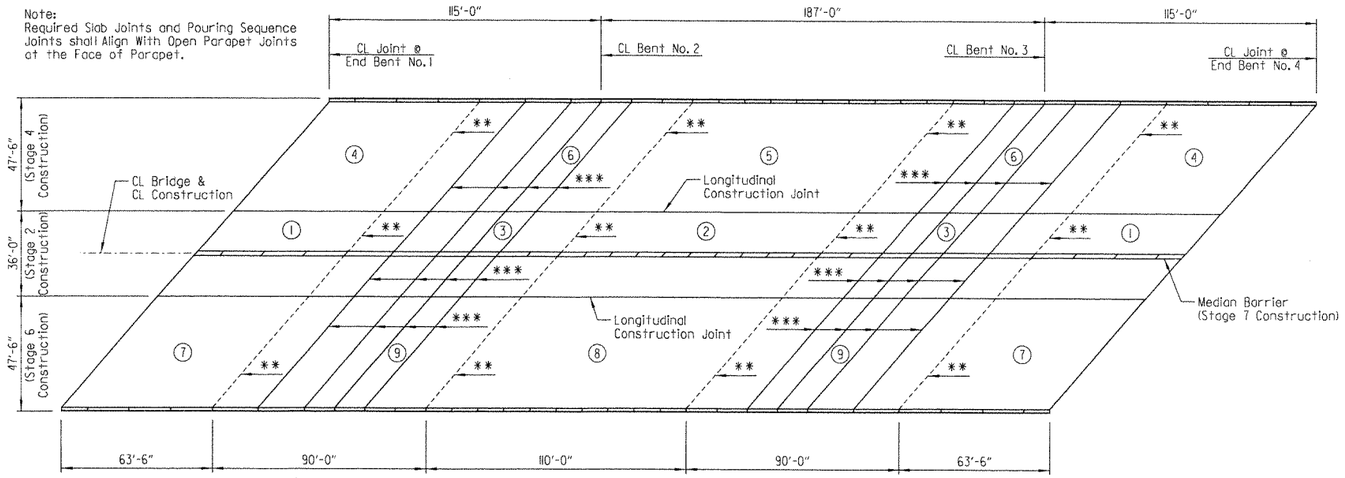
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CHECKED BY: ABH DATE: JUNE 2011 SCALE: AS SHOWN
DESIGNED BY: WRF DATE: JUNE 2011
BRIDGE NO. 07226 DRAWING NO. 52206

ABHolt 8/29/2011 4:29:02 PM
WORKSPACE: AHTD Bridge
L:\ZDATA\080388\S4 - I-40 over Hwy 64 Bridge Replacement\Drawings\Sh No 52206 - Misc. Span Details (1 of 2).dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	206	452
				(1) 07226		417' PL GIRDER UNIT		52207

** Pouring Sequence Construction Joint
*** Required Slab Joint

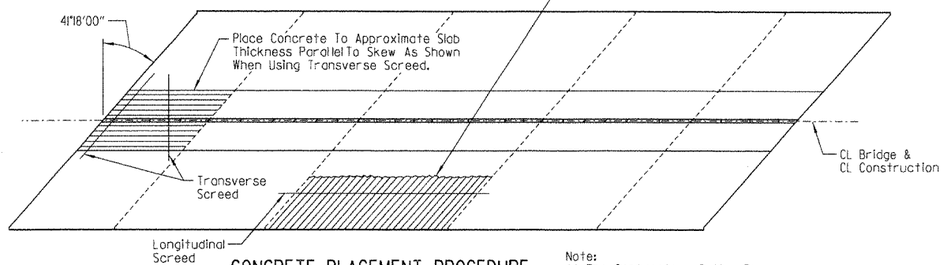
Note:
Required Slab Joints and Pouring Sequence Joints shall Align With Open Parapet Joints at the Face of Parapet.



POURING SEQUENCE
Scale: 1" = 30'-0"

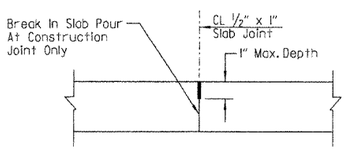
NOTE:
Pours with the same number may be placed simultaneously or separately.
For Stage 2 Pours, (1) and (2) must be placed before Pours (3) can be placed.
For Stage 4 Pours, (4) and (5) must be placed before Pours (6) can be placed.
For Stage 6 Pours, (7) and (8) must be placed before Pours (9) can be placed.
48 hours shall elapse between the end of a pour and the start of the next pour. 72 hours shall elapse between the end of a pour and the start of an adjacent pour and between the end of a pour and the pouring of the parapet. Any parapet pours made before the entire slab unit has been placed must be approved by the Engineer.

Concrete in bridge superstructure shall be consolidated for the entire pour before any concrete has taken its initial set. This may require the use of a retarding agent. The Contractor must obtain approval from the Engineer for any deviations from the pouring sequence shown.



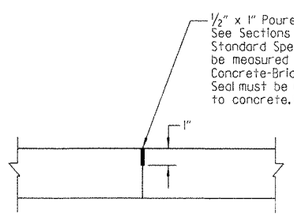
CONCRETE PLACEMENT PROCEDURE
Scale: N.T.S.

Note:
At The Contractors Option, The Transverse Screed May Be Placed Parallel To The Skew Or Perpendicular To CL Bridge.

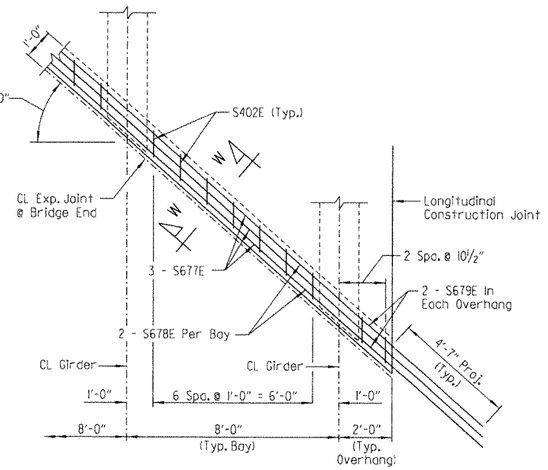


The ½" x 1" Poured Joint Sealer (Type 3, 4 or 6) in slab shall conform to Subsection 501.02 (h) And 501.05 (j). The Poured Joint Sealer shall be paid for as Class S(AE) Concrete-Bridge. Slab joints shall extend to the outside edge of the deck slab. Slab joints shall be installed before the parapet railing is poured. If slab joints are to be sawed, they shall be sawed as soon as the concrete has sufficiently set to allow sawing of the joint without damage to the slab. Slab joints shall be placed at all pouring sequence construction joints and required slab joint locations. Backer rod is not required.

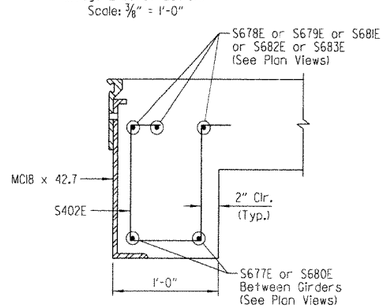
SLAB JOINT DETAIL
Scale: N.T.S.



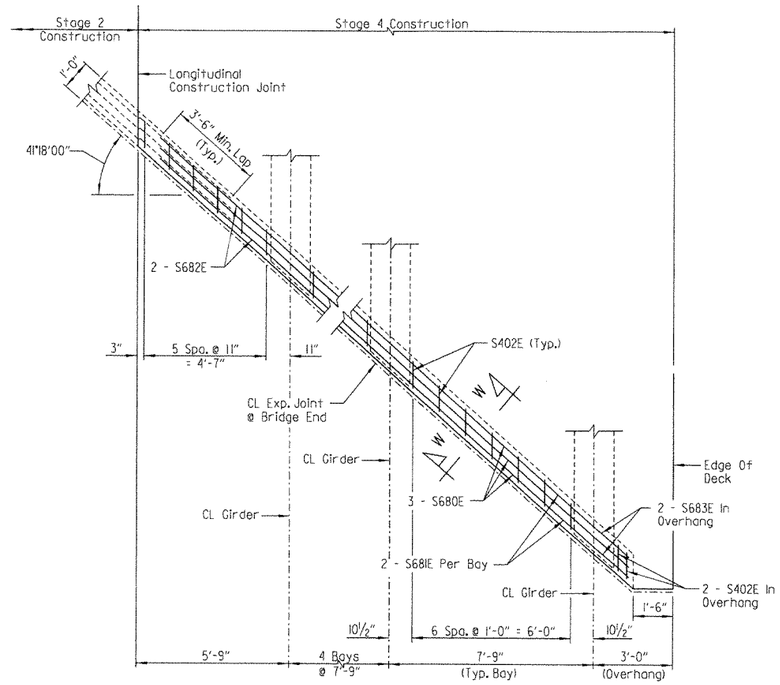
LONGITUDINAL CONSTRUCTION JOINT
Scale: N.T.S.



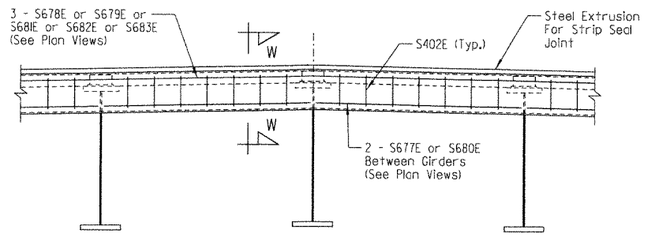
PLAN OF TURNDOWN AT BRIDGE ENDS
(Stage 2 Construction)
Scale: ⅜" = 1'-0"



SECTION W-W
Scale: N.T.S.



PLAN OF TURNDOWN AT BRIDGE ENDS
(Stage 4 Construction Shown, Stage 6 Construction Similar)
Scale: ⅜" = 1'-0"



ELEVATION OF TURNDOWN AT BRIDGE ENDS
Scale: N.T.S.

SHEET 6 OF 18
DETAILS OF 417'-0" COMPOSITE PLATE GIRDER UNIT INTERSTATE 40 OVER U.S. HWY 64 FAULKNER COUNTY

ROUTE 40 SEC. 32

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

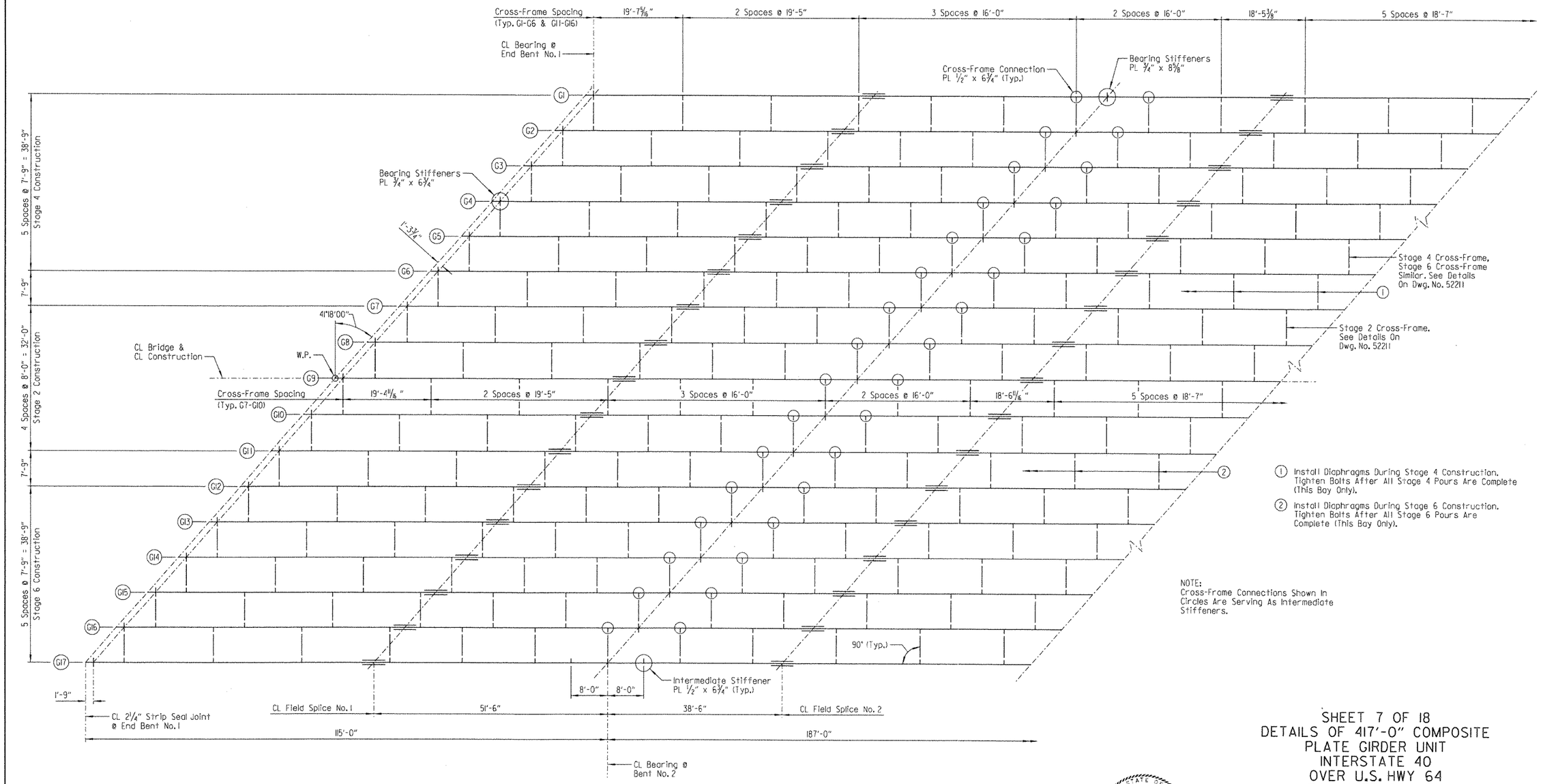
STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER 9-7-11 No. 8017 JOHN H. RUDDELL

BRIDGE ENGINEER

DRAWN BY: HEW DATE: JUNE 2011 FILENAME: B080388XI_S6.DGN
CHECKED BY: ABH DATE: JUNE 2011 SCALE: AS SHOWN
DESIGNED BY: WRF DATE: JUNE 2011
BRIDGE NO. 07226 DRAWING NO. 52207

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WORKSPACE: AHTD Bridge
L:\2011\11007504 - I-40 over Hwy 64 Bridge Replacement\Drawings\Sh No 52207 - Misc. Span Details (2 of 2).dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	207	452
				(1) 07226		417' PL GIRDER UNIT		52208



FRAMING PLAN
Scale: 3/32" = 1'-0"

(1) Install Diaphragms During Stage 4 Construction. Tighten Bolts After All Stage 4 Pours Are Complete (This Bay Only).

(2) Install Diaphragms During Stage 6 Construction. Tighten Bolts After All Stage 6 Pours Are Complete (This Bay Only).

NOTE:
Cross-Frame Connections Shown In Circles Are Serving As Intermediate Stiffeners.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. RUDDELL
BRIDGE ENGINEER

SHEET 7 OF 18
DETAILS OF 417'-0" COMPOSITE PLATE GIRDER UNIT
INTERSTATE 40
OVER U.S. HWY 64
FAULKNER COUNTY

ROUTE 40 SEC. 32

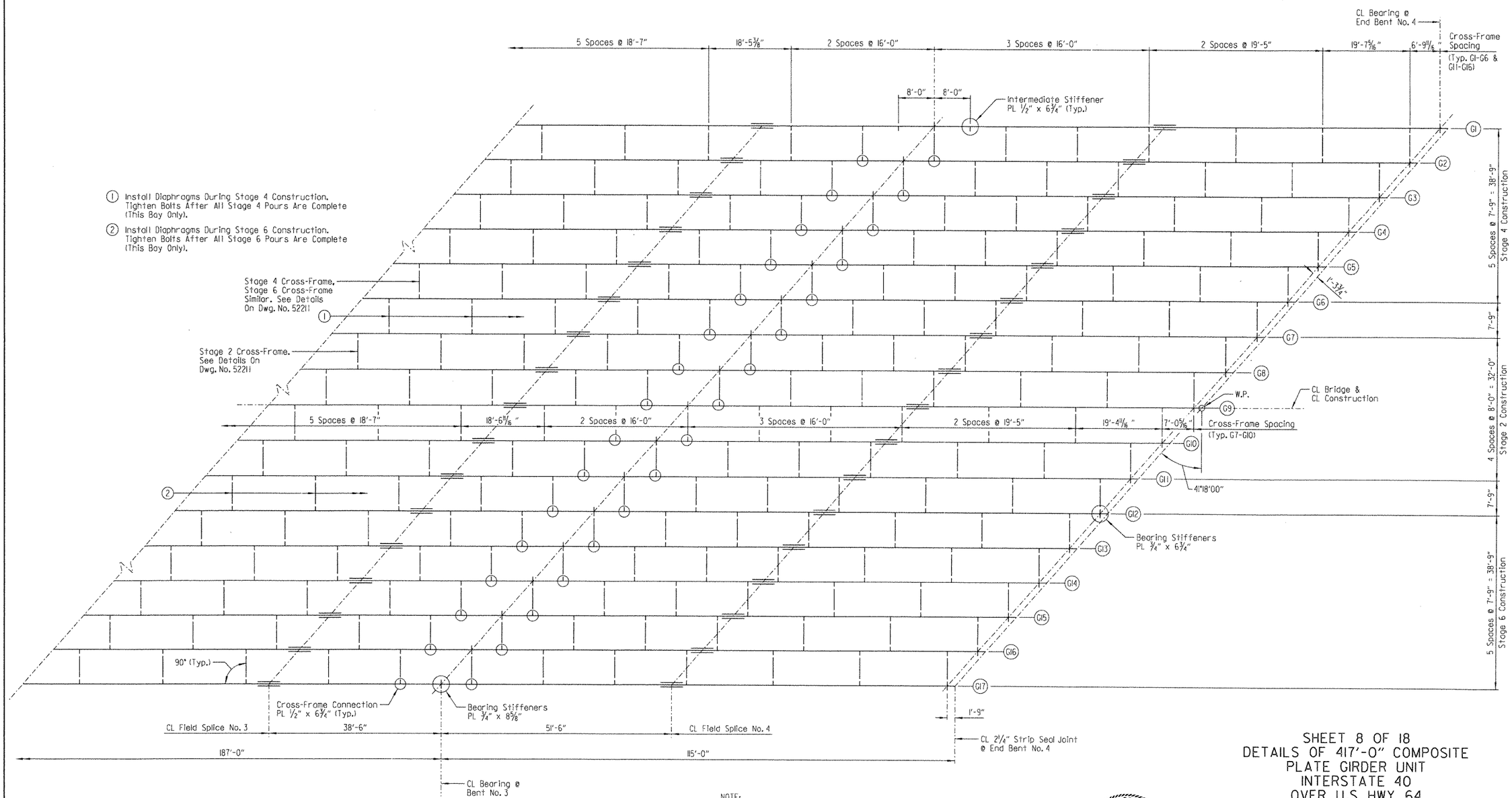
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

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CHECKED BY: ABH DATE: JUNE 2011 SCALE: AS SHOWN
DESIGNED BY: BWS DATE: JUNE 2011
BRIDGE NO. 07226 DRAWING NO. 52208

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WORKSPACE: AHTD Bridge
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REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080388	208	452
(1) 07226		417' PL GIRDER UNIT		52209



FRAMING PLAN
Scale: 1/32 " = 1'-0"

NOTE:
Cross-Frame Connections Shown In Circles Are Serving As Intermediate Stiffeners.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
8-29-11
No. 8017
JOHN H. RUDDELL
BRIDGE ENGINEER

SHEET 8 OF 18
DETAILS OF 417'-0" COMPOSITE PLATE GIRDER UNIT INTERSTATE 40 OVER U.S. HWY 64 FAULKNER COUNTY

ROUTE 40 SEC. 32

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: BWS DATE: JUNE 2011 FILENAME: B080388XI_S8.DGN
CHECKED BY: ABH DATE: JUNE 2011 SCALE: AS SHOWN
DESIGNED BY: BWS DATE: JUNE 2011

BRIDGE NO. 07226 DRAWING NO. 52209

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WORKSPACE: AHTD Bridge
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REVISED DATE:

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				JOB NO.		080388	209	452
				① 07226		417' PL GIRDER UNIT		52210

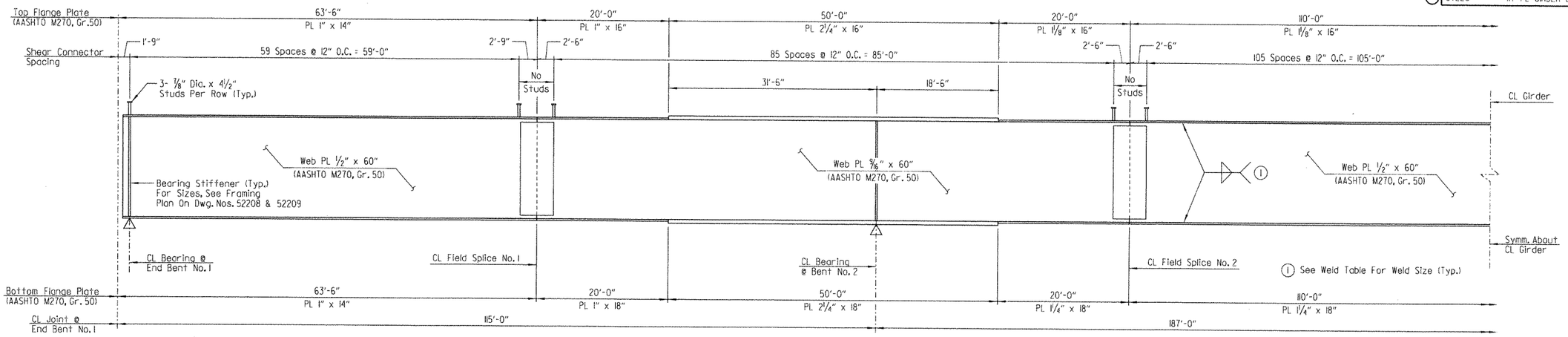
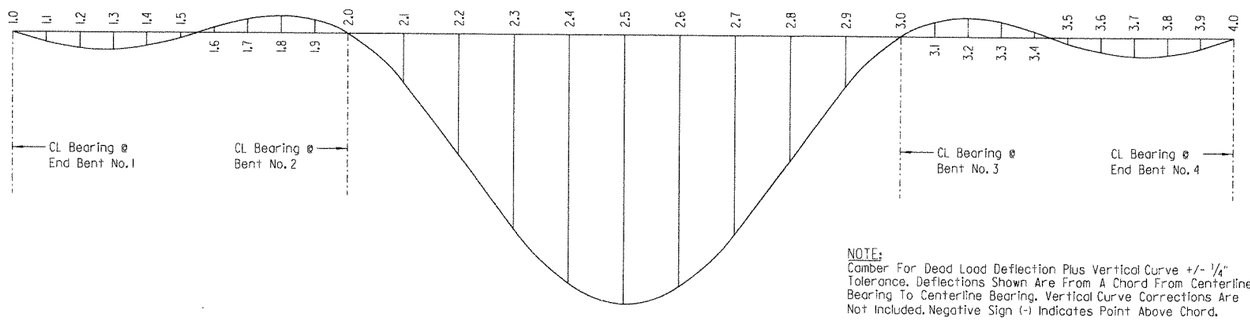


TABLE OF DEAD LOAD DEFLECTIONS (Inches)

Point Of Deflection	Girders 1 & 17			Girders 2 - 16		
	Wt. Of Girder And Cross-Frames	Wt. Of Girder, Cross-Frames And Slab	Wt. Of Girder, Cross-Frames, Slab And Parapet	Wt. Of Girder And Cross-Frames	Wt. Of Girder, Cross-Frames And Slab	Wt. Of Girder, Cross-Frames, Slab And Parapet
1.0	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.04	0.19	0.21	0.04	0.21	0.22
1.2	0.06	0.31	0.34	0.07	0.35	0.38
1.3	0.06	0.34	0.38	0.07	0.39	0.42
1.4	0.04	0.28	0.31	0.05	0.31	0.34
1.5	0.00	0.12	0.15	0.01	0.14	0.16
1.6	-0.04	-0.08	-0.06	-0.05	-0.08	-0.07
1.7	-0.08	-0.25	-0.25	-0.09	-0.26	-0.26
1.8	-0.10	-0.32	-0.33	-0.10	-0.33	-0.34
1.9	-0.07	-0.25	-0.26	-0.08	-0.26	-0.27
2.0	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.25	0.92	0.97	0.28	0.98	1.03
2.2	0.63	2.28	2.42	0.69	2.46	2.59
2.3	1.01	3.68	3.91	1.11	3.96	4.18
2.4	1.28	4.68	4.98	1.41	5.04	5.31
2.5	1.39	5.05	5.37	1.51	5.43	5.72
2.6	1.29	4.71	5.00	1.41	5.04	5.32
2.7	1.03	3.72	3.95	1.11	3.97	4.18
2.8	0.65	2.34	2.48	0.70	2.47	2.61
2.9	0.27	0.94	1.00	0.28	0.99	1.04
3.0	0.00	0.00	0.00	0.00	0.00	0.00
3.1	-0.08	-0.26	-0.27	-0.08	-0.27	-0.28
3.2	-0.11	-0.34	-0.35	-0.10	-0.34	-0.35
3.3	-0.10	-0.27	-0.27	-0.09	-0.26	-0.27
3.4	-0.06	-0.11	-0.10	-0.05	-0.09	-0.07
3.5	-0.02	0.09	0.11	0.00	0.13	0.15
3.6	0.03	0.25	0.29	0.05	0.30	0.34
3.7	0.05	0.33	0.37	0.07	0.38	0.42
3.8	0.05	0.31	0.34	0.07	0.35	0.38
3.9	0.04	0.19	0.21	0.04	0.21	0.23
4.0	0.00	0.00	0.00	0.00	0.00	0.00

TYPICAL GIRDER ELEVATION

Scale: N.T.S.



NOTE:
Camber For Dead Load Deflection Plus Vertical Curve +/- ¼" Tolerance. Deflections Shown Are From A Chord From Centerline Bearing To Centerline Bearing. Vertical Curve Corrections Are Not Included. Negative Sign (-) Indicates Point Above Chord.

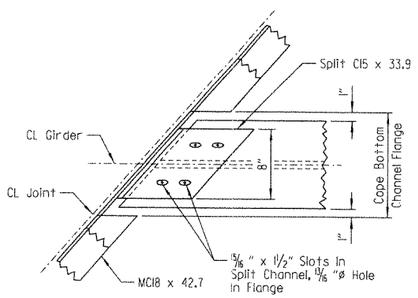
DEAD LOAD DEFLECTION

Scale: N.T.S.

TABLE FOR WELDS		
Material Thickness Of Thicker Part Joined (Inches)	Minimum Size Of Fillet Weld (Inches)	Single Pass Weld Must Be Used
To ¾" Inclusive	¼"	
Over ¾"	5/16"	

NOTES: When A Fillet Weld Size, As Shown On The Plans, Is Larger Than The Minimum, The First Pass Shall Be That Specified For Minimum Size Of Fillet Weld.

NOTES:
1. For General Notes, See Drawing No. 52213.
2. All Structural Steel, Including Girders, Cross-Frames, Bearing Stiffeners, Web Stiffeners And Connection Plates, Shall Be AASHTO M270 Grade 50.
3. For Elastomeric Bearing Details, See Drawing Nos. 52220 & 52221.
4. For Details of Field Splices, Cross-Frames And Stiffeners, See Drawing No. 52211.
5. For Typical Haunch Details, See Drawing No. 52203.
6. For Expansion Joint Details, See Drawing No. 52219.



CHANNEL CONNECTION DETAIL

Scale: N.T.S.

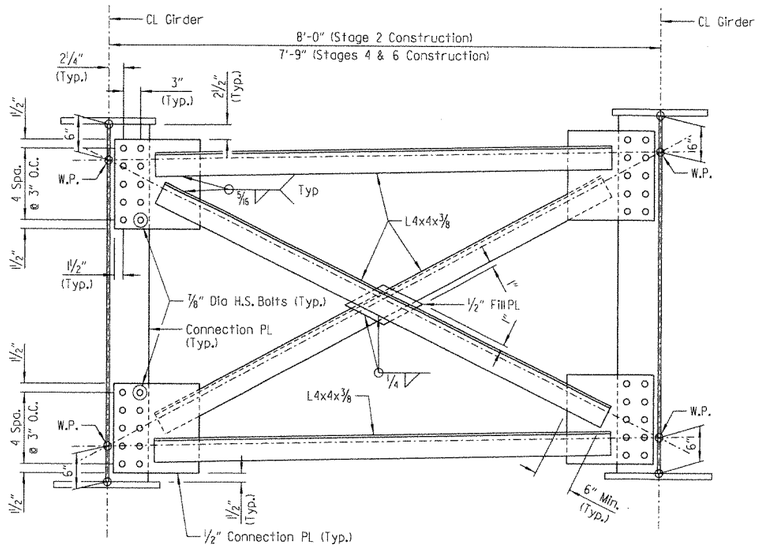
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. RUDDELL
BRIDGE ENGINEER

SHEET 9 OF 18
DETAILS OF 417'-0" COMPOSITE PLATE GIRDER UNIT
INTERSTATE 40
OVER U.S. HWY 64
FAULKNER COUNTY
ROUTE 40 SEC. 32
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: BWS DATE: JUNE 2011 FILENAME: B080388XI_S9.DGN
CHECKED BY: ABH DATE: JUNE 2011 SCALE: AS SHOWN
DESIGNED BY: BWS DATE: JUNE 2011
BRIDGE NO. 07226 DRAWING NO. 52210

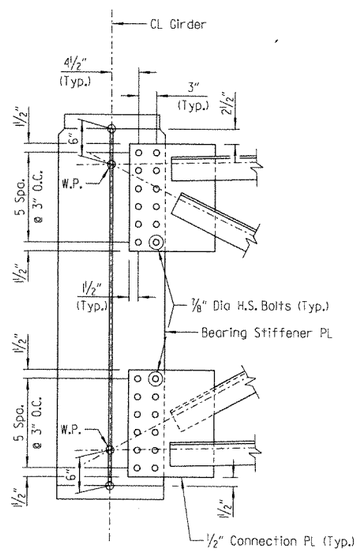
ABHall 8/29/2011 4:29:04 PM
WORKSPACE: AHTD Bridge
L:\DGN\BDT504 - I-40 over Hwy 64 Bridge Replacement\Drawings\Sh No 52210 - Girder Details II of 3.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	210	452
				① 07226		417' PL GIRDER UNIT		52211

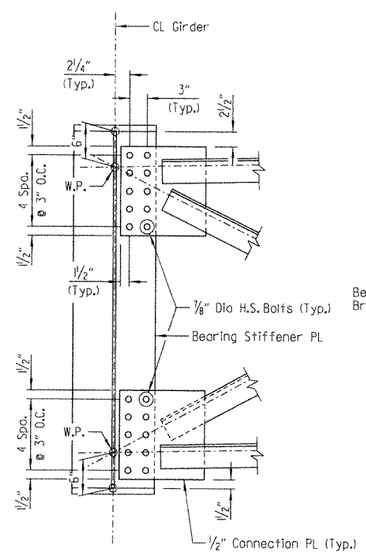


NOTE:
Bolts In Cross-Frame Connections Shall Be Properly Installed And Tightened In Accordance With Subsection 807.71 Of The Standard Specifications Except As Noted On The Framing Plan.

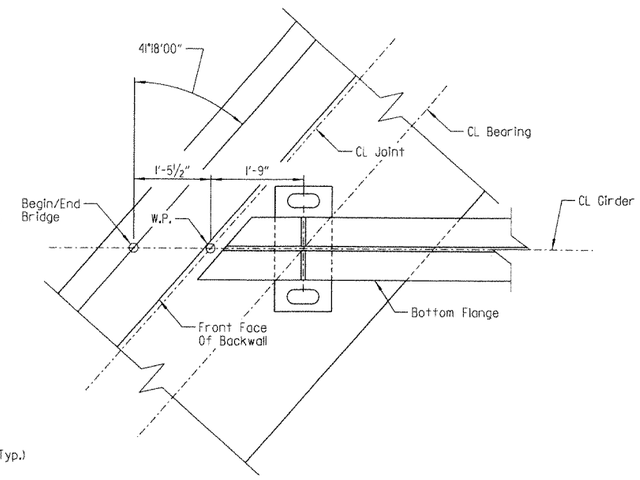
INTERMEDIATE CROSS-FRAME DETAIL
Scale: 1" = 1'-0"



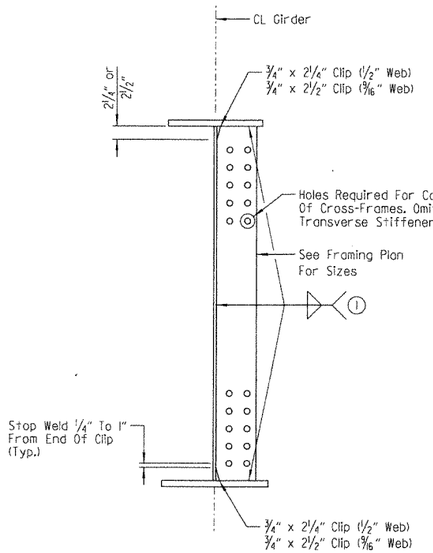
CROSS-FRAME DETAIL CONNECTION @ INTERIOR BENT BEARING
Scale: 1" = 1'-0"



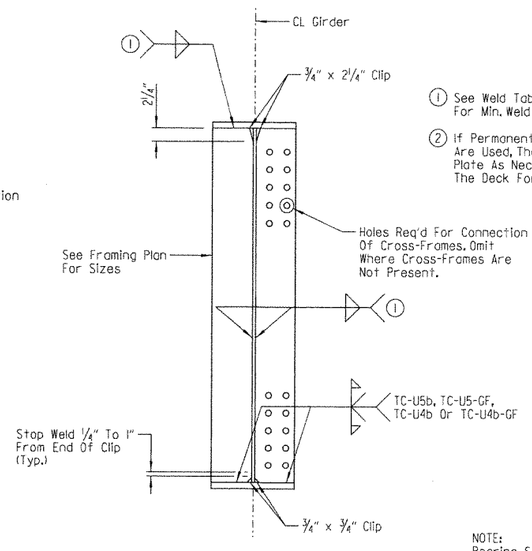
CROSS-FRAME CONNECTION @ END BENT BEARING
Scale: 1" = 1'-0"



BEARING PLAN AT END BENT
Scale: ¾" = 1'-0"



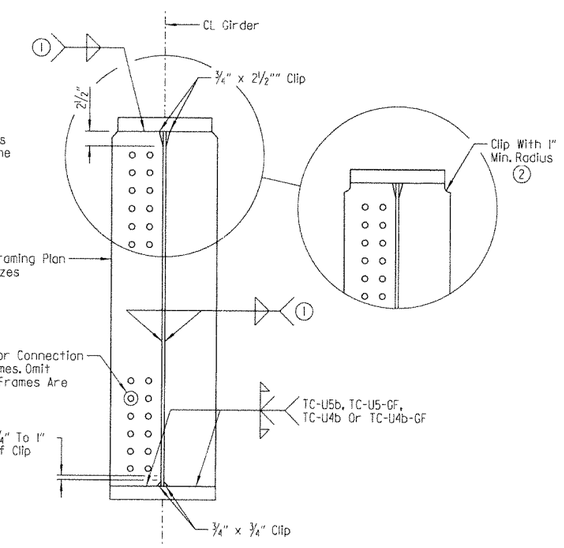
CROSS-FRAME CONNECTION & INTERMEDIATE STIFFENER PLATE DETAIL
Scale: 1" = 1'-0"



① See Weld Table On Dwg. No. 52211 For Min. Weld Size

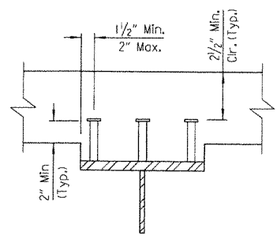
② If Permanent Steel Bridge Deck Forms Are Used, The Fabricator Shall Clip The Plate As Necessary To Accommodate The Deck Form Support.

BEARING STIFFENER @ END BENTS
Scale: 1" = 1'-0"



NOTE:
Bearing Stiffeners Shall Be Fabricated To Be Plumb In Their Final Positions.

BEARING STIFFENER @ INTERIOR BENTS
Scale: 1" = 1'-0"



Stud Shear Connectors Shown Shall Be ⅞" Dia. x 4½" Long, Granular Flux Filled, Solid Fluxed Or Equal, And Automatically End Welded To The Girder Flange In Accordance With The Recommendations Of The Manufacturer. ¾" Dia. Studs May Be Used In Place Of The ⅞" Dia. Studs Shown. At The Ratio Of 1.361- ¾" Dia. Studs In Place Of One ⅞" Dia. Stud. ⅞" Dia. Studs Will Be Used As Basis For Measurement Of Structural Steel In Shear Connectors.

SHEAR CONNECTOR DETAIL
Scale: N.T.S.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. RUDDELL
BRIDGE ENGINEER

SHEET 10 OF 18
DETAILS OF 417'-0" COMPOSITE PLATE GIRDER UNIT INTERSTATE 40 OVER U.S. HWY 64 FAULKNER COUNTY

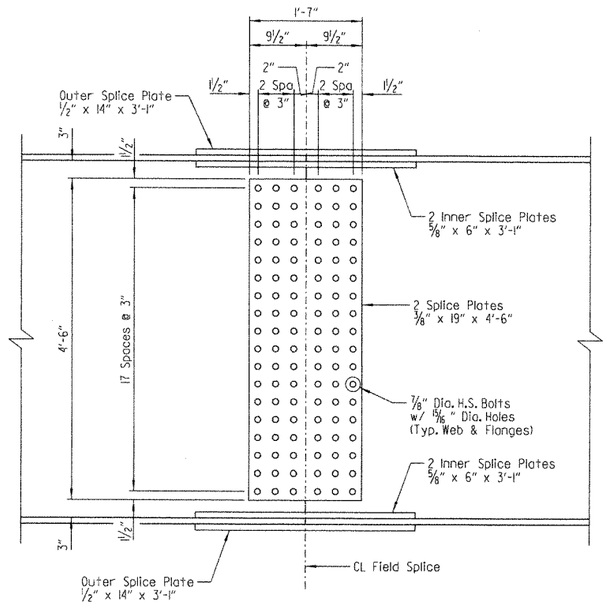
ROUTE 40 SEC. 32

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

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CHECKED BY: ABH DATE: JUNE 2011 SCALE: AS SHOWN
DESIGNED BY: BWS DATE: JUNE 2011
BRIDGE NO. 07226 DRAWING NO. 52211

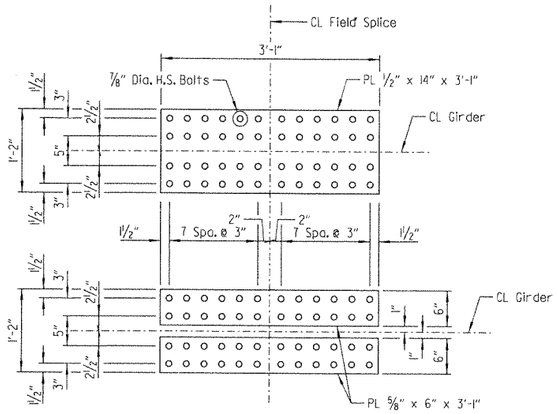
ABHall 8/29/2011 4:29:04 PM
WORKSPACE: AHTD Bridge
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REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		080388	21	452
				07226		417' PL GIRDER UNIT		52212



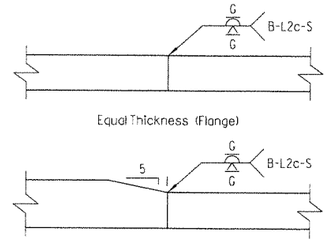
ELEVATION OF FIELD SPLICE NOS. 1 & 4

Scale: 1" = 1'-0"



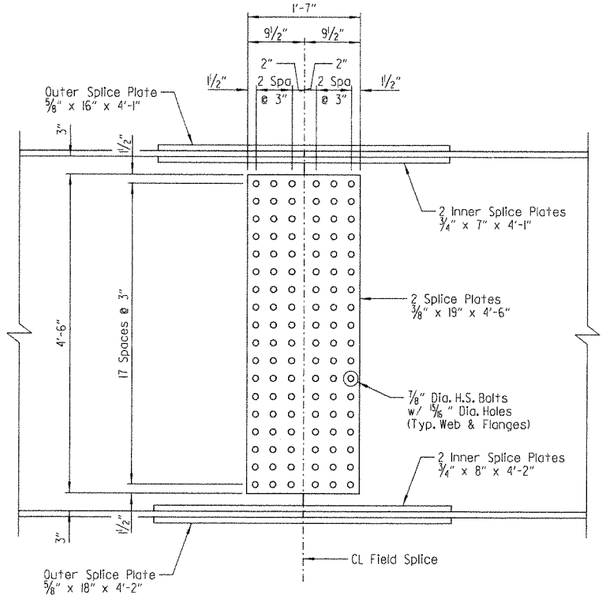
TOP & BOTTOM FLANGE SPLICE - FIELD SPLICE NOS. 1 & 4

Scale: 1" = 1'-0"



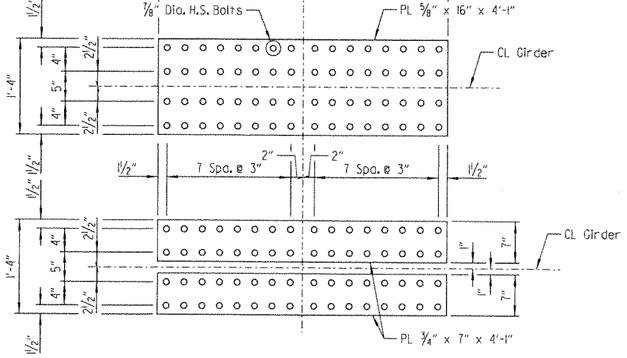
DETAILS OF WELDED SPLICES

Scale: N.T.S.



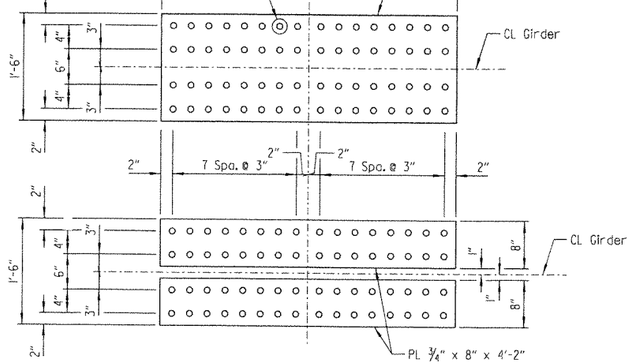
ELEVATION OF FIELD SPLICE NOS. 2 & 3

Scale: 1" = 1'-0"



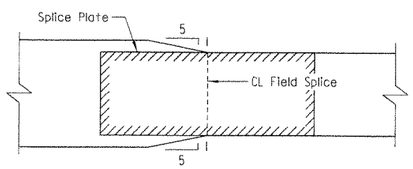
TOP FLANGE SPLICE - FIELD SPLICE NOS. 2 & 3

Scale: 1" = 1'-0"



BOTTOM FLANGE SPLICE - FIELD SPLICE NOS. 2 & 3

Scale: 1" = 1'-0"



DETAIL OF BOTTOM FLANGE TRANSITION

Scale: N.T.S.

NOTES:

All Field Splice Bolts Shall Be ⅞" Dia. H.S. Bolts.

All Holes For Splice Bolts Shall Be 15/16" Dia.

All Field Splice Plates Shall Be AASHTO M270, Gr. 50 Steel.

Bolted Field Splices Shown May Be Eliminated Or Shop Welded Splices May Be Substituted With Approval Of The Engineer. Payment Will Be Made On The Basis Of The Plan Quantities.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. RUDDELL
9-1-11

BRIDGE ENGINEER

SHEET 11 OF 18
DETAILS OF 417'-0" COMPOSITE PLATE GIRDER UNIT
INTERSTATE 40
OVER U.S. HWY 64
FAULKNER COUNTY
ROUTE 40 SEC. 32
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: BWS DATE: JUNE 2011 FILENAME: B080388XI_SI1.DGN
CHECKED BY: ABH DATE: JUNE 2011 SCALE: AS SHOWN
DESIGNED BY: BWS DATE: JUNE 2011
BRIDGE NO. 07226 DRAWING NO. 52212

ABHall 8/29/2011 4:29:04 PM
WORKSPACE: AHTD Bridge
L:\2011\071504 - I-40 over Hwy 64 Bridge Replacement\Drawings\Sh No 52212 - Girder Details (3 of 3).dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	212	452
				(1) 07226		417' PL GIRDER UNIT		52213

GENERAL NOTES:

STRUCTURAL STEEL:

All structural steel shall be AASHTO M270, Gr. 50 and shall be paid for at the unit price per pound bid for "Structural Steel in Plate Girder Spans (M270, Gr.50)". All structural steel shall be cleaned in accordance with Section 807.84 unless noted otherwise. See Drawing No. 52220 for cleaning requirements of external load plates on elastomeric bearings.

All Structural Steel, except galvanized members or steel which is completely encased in concrete, shall be painted in accordance with subsection 807.75. The color of paint shall conform to Federal Standard 595B, Color Chip No. 20108, Brown.

Requests for substitution of structural steel shapes shown with shapes of greater size must be submitted by the Contractor to the Engineer for approval. Steels of equal or greater strengths will be accepted only when shown on approved shop drawings. Shapes and materials shown in the plans will be the basis of payment and no additional compensation will be made for any adjustments due to substitutions.

Drawings show general features of design only. Shop drawings shall be prepared in accordance with the specifications, submitted and approved before fabrication is begun.

Bolted field splices shown may be eliminated or shop welded splices may be substituted with approval of the Engineer. Payment will be made on the basis of plan quantities.

All girders, including field splice plates, are considered main load carrying members and shall meet the Longitudinal Charpy V-Notch Test specified in Section 807.05. This work and material will not be paid for directly but are considered subsidiary to the item "Structural Steel in Plate Girder Spans (M270, Gr. 50)".

Steel plates for main load carrying members (flange and web plates) and flange field splice plates shall be cut and fabricated so that the primary direction of rolling is parallel to the direction of the main tensile and/or compressive stresses.

Girder webs may be made by shop splicing with a minimum length of 25'-0" for sections. Flange plates longer than 50'-0" may be made by shop splicing with a minimum length of 25'-0" for sections. Material specifications and locations of shop-welded splices, if any, shall be shown on the shop drawings. No additional payment for these welded splices will be made.

All welding that is to be done during fabrication of structural steel, including temporary welds, shall be detailed on the shop drawings and submitted for approval. If additional welds are required, whether temporary or permanent, a formal request with detailed drawings shall be submitted to the Engineer for approval; however, additional welds used for attaching falsework support devices or screed rail supports to the structural steel that do not exceed the limitations of subsection 802.13 will not require approval prior to construction. All welding shall conform to subsection 807.26.

All girders shall be blocked in their true position with webs horizontal in the shop as specified in section 807.54 (b)(2) of the Standard Specifications. The camber, length of sections, distance between bearings and opening of joints shall be measured with the girders in their true position and this information shall become a part of the permanent records of this job. The component parts shall be match marked in this assembly and these marks shall be shown on the erection diagram. All girder dimensions are based on a temperature of 60°F. A tolerance of +/- 1/4" is allowed for camber.

Groove welds in flange and web plates shall be Quality Control (Q.C.) tested by nondestructive testing, as required by the Standard Specifications.

Fillet welds at flange to web plate connections shall be Quality Control (Q.C.) tested by the magnetic particle method.

All Quality Control (Q. C.) testing is at the Contractor's expense.

All Connection Plates and Intermediate Stiffeners shall be fabricated normal to the top flange and on the side of the girder web as indicated on the framing plans. No intermediate Stiffeners are to be placed on the outside of the exterior girders except as noted. All bearing stiffeners shall be fabricated to be plumb in their final position.

Diaphragms shall be installed as girders are erected. All bolts in diaphragms and field splices shall be installed and tightened in accordance with subsection 807.71 prior to pouring of the concrete deck except as noted on the framing plan.

Field connections shall be bolted with high-strength bolts and shall be 3/4" diameter bolts unless otherwise noted. Bolts shall be placed with heads on the outside face of the exterior girder webs and on the bottom of the girder flanges. Holes for 3/4" diameter high-strength bolts may be 15/16" diameter if a washer is supplied for use under both the nut and head of the bolt.

All contact surfaces between plates at field splices shall be free of paint, oil, rust or scale before assembly.

All stud shear connectors shall be granular flux filled, solid fluxed or equal and shall be automatically end welded in accordance with recommendations of the manufacturer.

Bearings with masonry plates shall be firmly seated in accordance with Section 807.66 of the Standard Specifications. Bearings without masonry plates shall be firmly seated in accordance with Section 808.08 of the Standard Specifications. This work is to be considered subsidiary to the item "Structural Steel in Plate Girder Spans (M270 Gr.50)" and will not be paid for directly.

Anchor bolts shall be AASHTO designation M314 Gr. 55, including supplemental requirement S1, and shall be galvanized to conform to AASHTO M 232, Class C or AASHTO M298 Class 50. Anchor bolts will be paid for at the contract unit price bid for "Structural Steel in Plate Girder Spans (M 270, Gr. 50)".

CONCRETE:

Concrete shall be poured in the dry and all exposed corners shall be chamfered 3/4" unless otherwise noted. All concrete shall be Class S(AE) with a minimum 28 day compressive strength f'c = 4,000 psi.

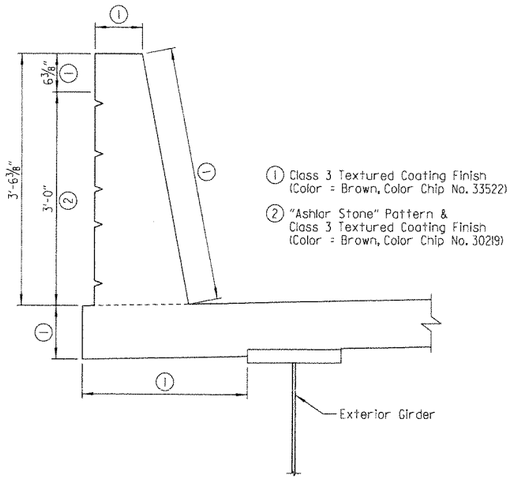
The superstructure details shown are for use when removable deck forming is used and are the basis for measurements of Class S(AE) Concrete. See Standard Drawing No. 14991 for allowable modifications and for tolerances when Permanent Steel Deck Forms are used.

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

The concrete deck shall be given a tine finish in accordance with subsection 802.19 for Class 5 Tined Bridge Roadway Surface Finish. Movement of the finishing machine across new concrete shall be on planks placed on the surface and shall be prohibited for 72 hours after finishing the pour. Sufficient concrete must be placed ahead of the strike-off to fully load the girder. A minimum of 72 hours shall elapse between completion of the slab and the pouring of the parapet railing. If a longitudinal strike-off is used, a vertical camber adjustment must be made in the strike-off to account for the future dead load deflection due to the parapet railing. A minimum of 72 hours shall elapse between completion of the slab and the pouring of the parapet railing.

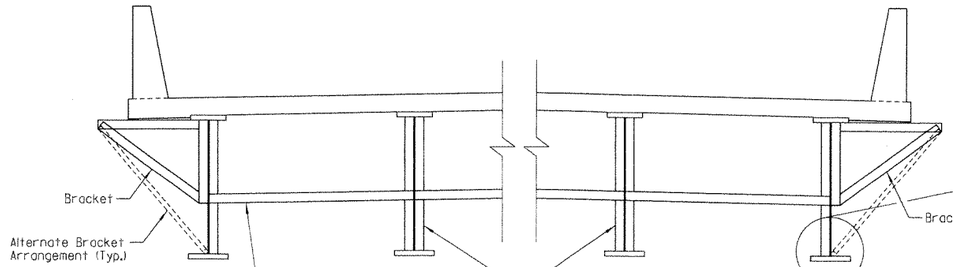
REINFORCING STEEL:

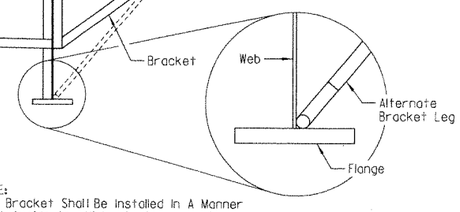
All reinforcing steel shall conform to AASHTO M31 or M53, Grade 60. The reinforcing steel is to be accurately located in the forms and firmly held in place by steel wire supports, sufficient in number and size to prevent displacement during the course of construction. The wire supports will not be paid for directly, but will be considered subsidiary to the item "Epoxy Coated Reinforcing Steel (Grade 60)".



TEXTURED COATING FINISH

Scale: 1" = 1'-0"





NOTE:
The Bracket Shall Be Installed In A Manner That Avoids Any Nicks Or Gouges In The Flange, Web And Weld.

NOTE:
If a transverse finishing machine is used, the rail shall be supported directly over the exterior girders, or as an alternate, the rail may be supported by the overhang brackets if the above strutting system is used. The strutting system may be omitted if 1/2" x 5 3/4" web stiffeners are welded to the insides of the exterior girders at the location of each bracket or if the alternate bracket shown above is used. The alternate bracket arrangement shall extend down to the junction of the web and bottom flange. The stiffeners shall conform to the details for intermediate connection plates shown on Drawing No. 52211. No direct payment will be made for brackets, timber bracing, supports, or welded stiffeners. Payment shall be subsidiary to "Structural Steel in Plate Girder Spans (M270, Gr. 50)."

SCREED RAIL SUPPORT DETAIL

Scale: N.T.S.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. RUDDELL

BRIDGE ENGINEER

SHEET 12 OF 18
DETAILS OF 417'-0" COMPOSITE PLATE GIRDER UNIT
INTERSTATE 40
OVER U.S. HWY 64
FAULKNER COUNTY
ROUTE 40 SEC. 32
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

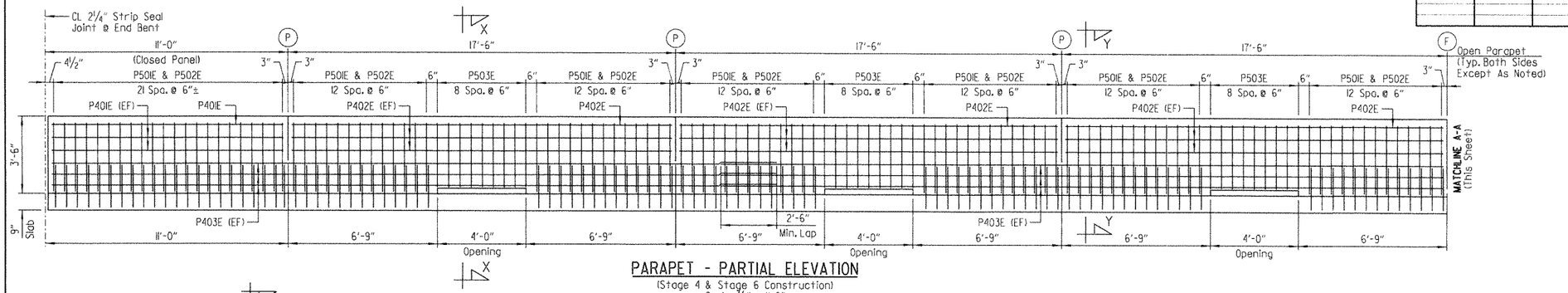
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CHECKED BY: ABH DATE: JUNE 2011 SCALE: AS SHOWN
DESIGNED BY: BWS DATE: JUNE 2011

BRIDGE NO. 07226 DRAWING NO. 52213

ABhall 8/29/2011 4:29:04 PM
WORKSPACE: AHTD Bridge
L:\20A\ND\7504 - I-40 over Hwy 64 Bridge Replacement\Drawings\Sh No 52213 - Superstructure Notes.dgn
REVISED DATE:

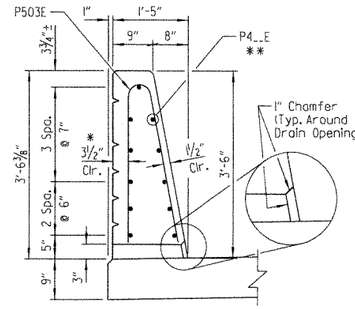
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080388	213	452
(1) 07226		417' PL GIRDER UNIT		52214



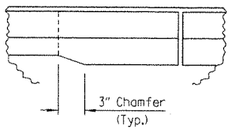
PARAPET - PARTIAL ELEVATION

(Stage 4 & Stage 6 Construction)
Scale: ⅜" = 1'-0"



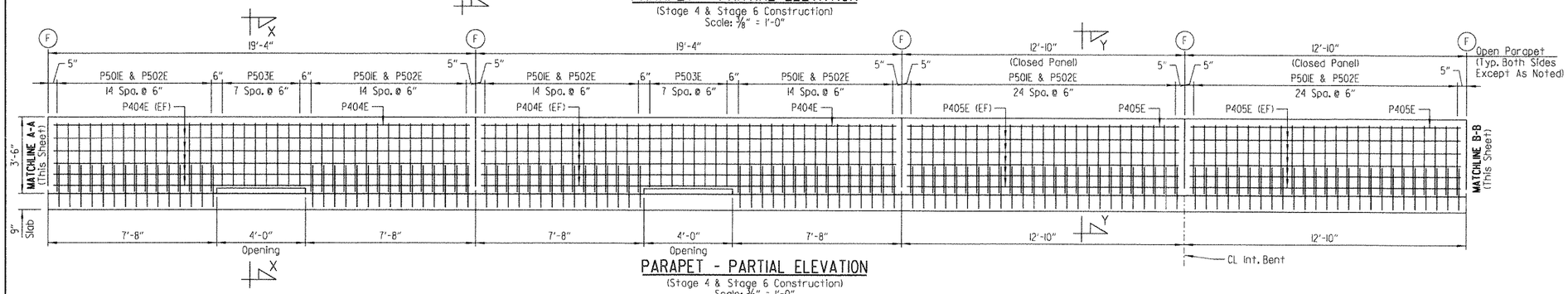
SECTION X-X

(At Open Drains)
Scale: ¾" = 1'-0"



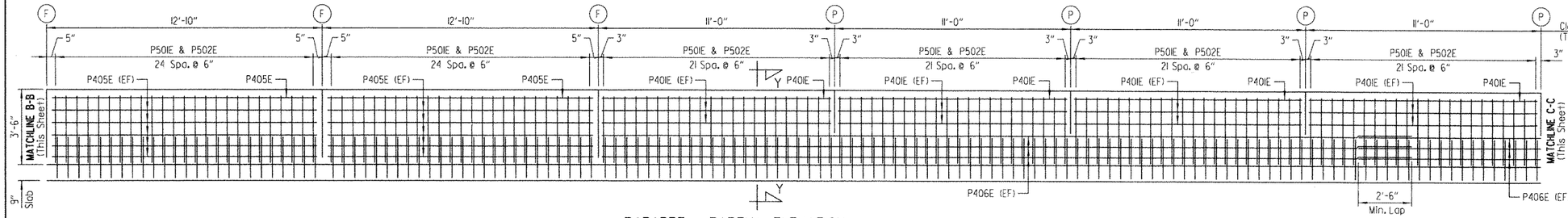
PLAN OF RAIL POST CHAMFER

N.T.S.
(Typ. for Open Drain Panels Only)



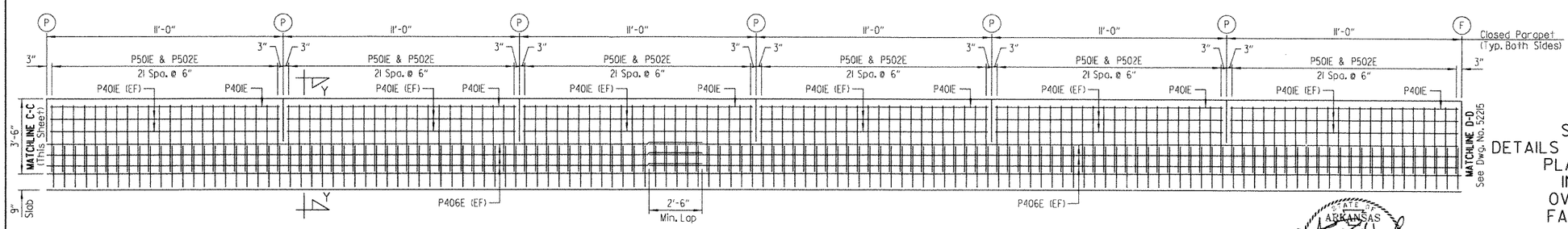
PARAPET - PARTIAL ELEVATION

(Stage 4 & Stage 6 Construction)
Scale: ⅜" = 1'-0"



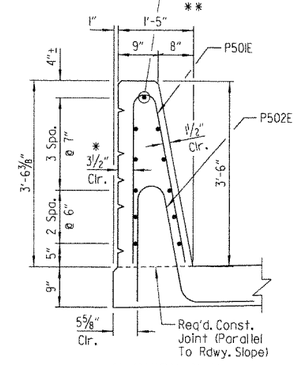
PARAPET - PARTIAL ELEVATION

(Stage 4 & Stage 6 Construction)
Scale: ⅜" = 1'-0"



PARAPET - PARTIAL ELEVATION

(Stage 4 & Stage 6 Construction)
Scale: ⅜" = 1'-0"



SECTION Y-Y

Scale: ¾" = 1'-0"

(P) CL Partial-Depth Parapet Joint (¼" To 1" Max.) As Shown on Slab Plans on Dwg Nos. 52204 & 52205. Stop 1'-6" From Top Of Slab.

(F) CL Full-Depth Parapet Joint (¼" To 1" Max.) As Shown on Slab Plans on Dwg Nos. 52204 & 52205. Stop 4" From Top Of Slab.

LEGEND
EF = Each Face

* Form Liner Shall Be A Max. Depth Of 2" To Provide A Min. Clearance Of 1½"

** See Elevation For Correct Bar Mark.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. RUDDELL
9-1-11
BRIDGE ENGINEER

SHEET 13 OF 18
DETAILS OF 417'-0" COMPOSITE PLATE GIRDER UNIT INTERSTATE 40 OVER U.S. HWY 64 FAULKNER COUNTY

ROUTE 40 SEC. 32

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

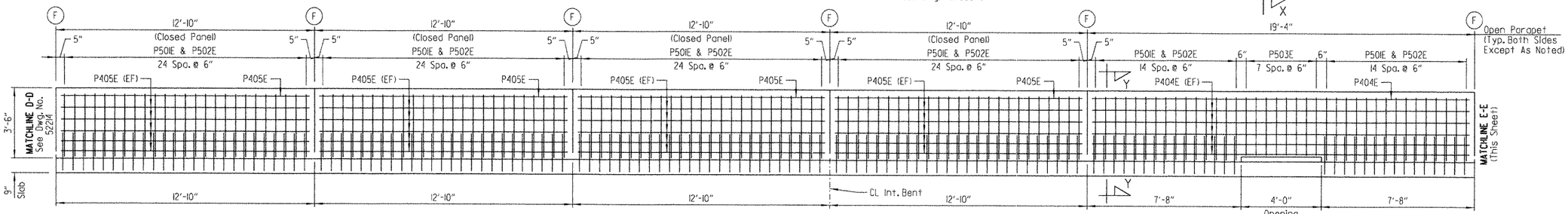
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DESIGNED BY: WRF DATE: JUNE 2011

BRIDGE NO. 07226 DRAWING NO. 52214

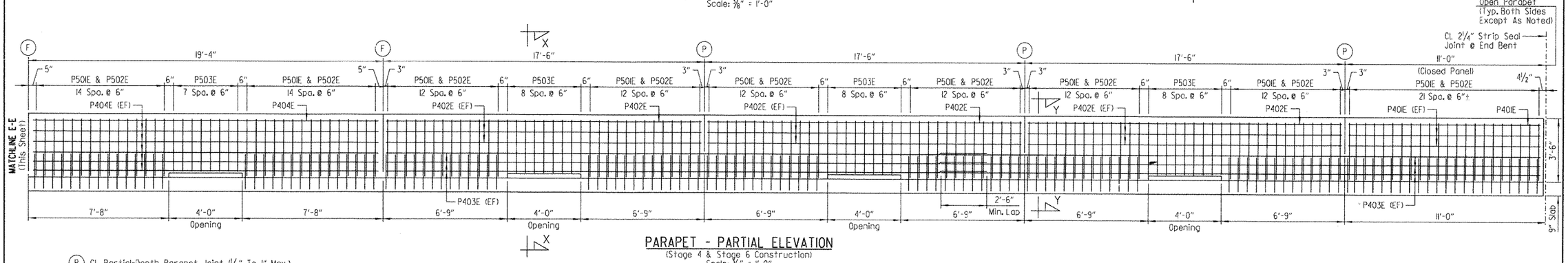
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WORKSPACE: AHTD Bridge
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REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	214	452
				(1) 07226		417' PL GIRDER UNIT		52215

NOTE:
For Sections X-X & Y-Y,
See Dwg. No. 52214.



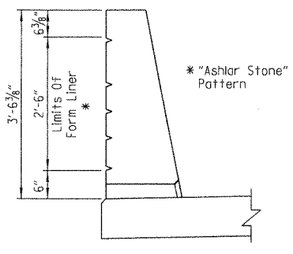
PARAPET - PARTIAL ELEVATION
(Stage 4 & Stage 6 Construction)
Scale: ⅛" = 1'-0"



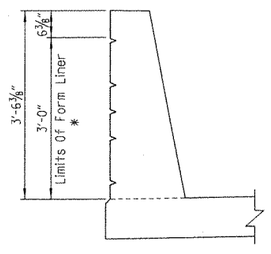
PARAPET - PARTIAL ELEVATION
(Stage 4 & Stage 6 Construction)
Scale: ⅛" = 1'-0"

(P) CL Partial-Depth Parapet Joint (1¼" To 1" Max.)
As Shown on Slab Plans on Dwg Nos. 52204 & 52205.
Stop 1'-6" From Top Of Slab.

(F) CL Full-Depth Parapet Joint (1¼" To 1" Max.)
As Shown on Slab Plans on Dwg Nos. 52204 & 52205.
Stop 4" From Top Of Slab.

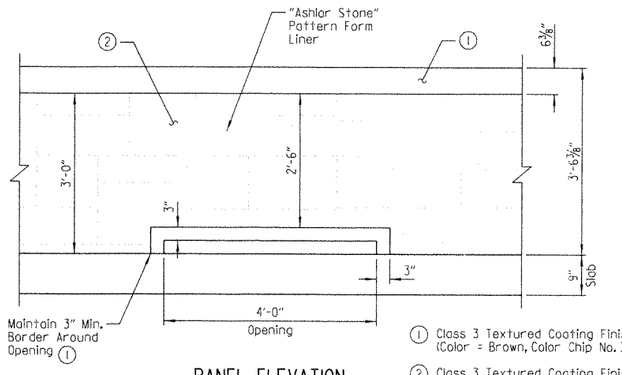


OPEN PANEL PARAPET
Scale: ¾" = 1'-0"



CLOSED PANEL PARAPET
Scale: ¾" = 1'-0"

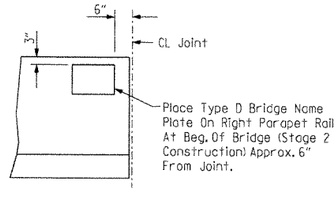
NOTE:
Form Liner Shall Be A Max.
Depth Of 2" To Provide A Min.
Clearance Of 1½" To Parapet
Reinforcing.



PANEL ELEVATION
(Showing Outside Face Of Parapet)
Scale: ¾" = 1'-0"

(1) Class 3 Textured Coating Finish
(Color = Brown, Color Chip No. 33522)

(2) Class 3 Textured Coating Finish
(Color = Brown, Color Chip No. 30219)



VIEW SHOWING LOCATION OF NAME PLATE
(Showing Inside Face Of Parapet)
Scale: ½" = 1'-0"

LEGEND
EF = Each Face

GENERAL NOTES

CONCRETE: All Concrete Shall Be Class S(AE) With A Minimum 28 Day Compressive Strength f'c = 4000 psi.

REINFORCING STEEL: All Reinforcing Steel Shall Conform To AASHTO M31 Or M53, Grade 60

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. RUDDELL

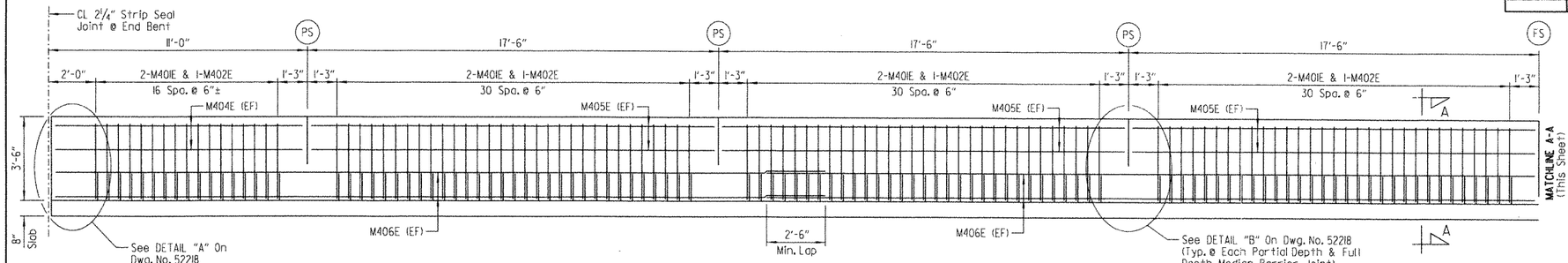
BRIDGE ENGINEER

SHEET 14 OF 18
DETAILS OF 417'-0" COMPOSITE PLATE GIRDER UNIT
INTERSTATE 40
OVER U.S. HWY 64
FAULKNER COUNTY
ROUTE 40 SEC. 32
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

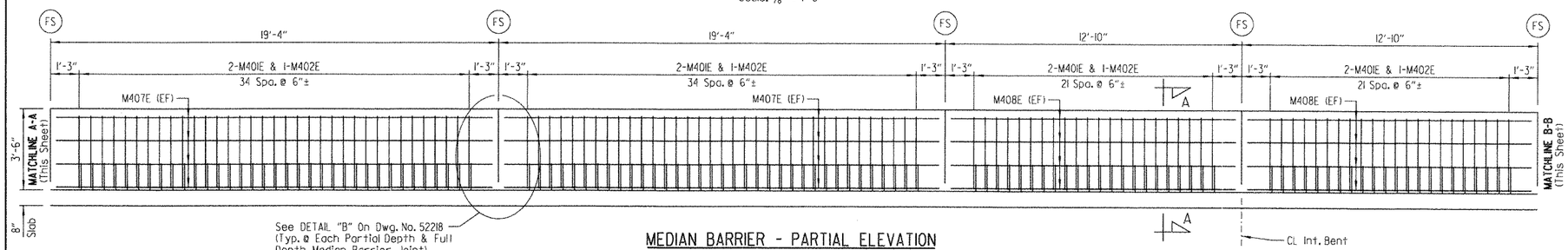
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DESIGNED BY: WRF DATE: JUNE 2011
BRIDGE NO. 07226 DRAWING NO. 52215

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WORKSPACE: AHTD Bridge
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REVISED DATE:

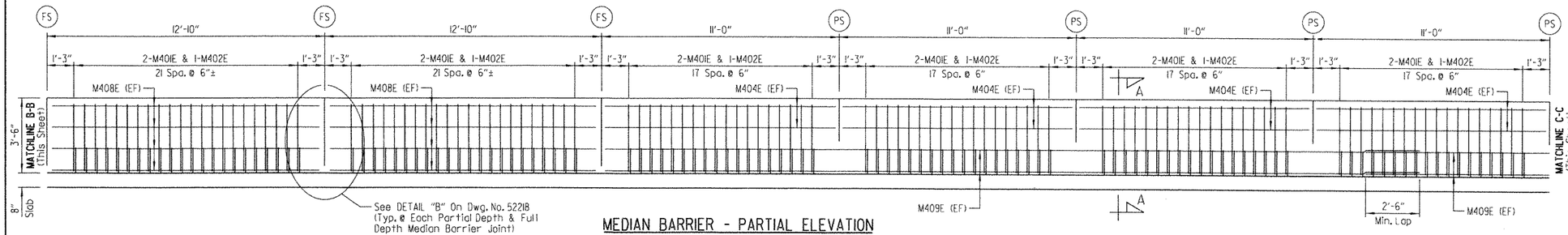
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				6	ARK.			
				JOB NO.		080388	215	452
				(1) 07226		417' PL GIRDER UNIT		52216



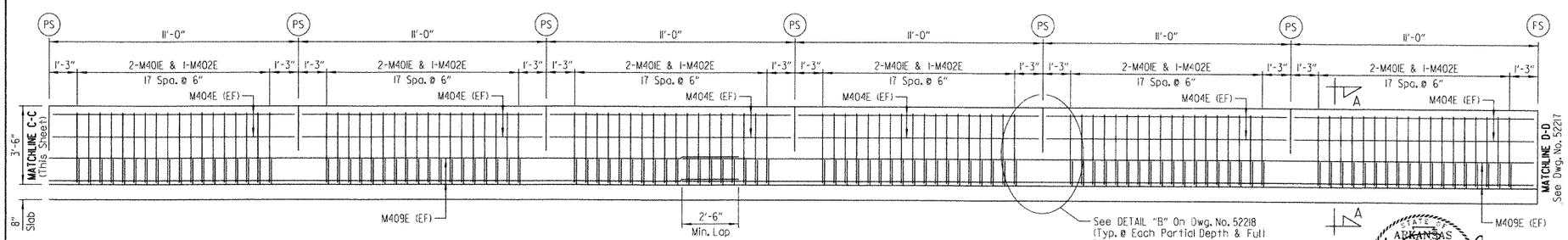
MEDIAN BARRIER - PARTIAL ELEVATION
(Stage 7 Construction)
Scale: ⅜" = 1'-0"



MEDIAN BARRIER - PARTIAL ELEVATION
(Stage 7 Construction)
Scale: ⅜" = 1'-0"



MEDIAN BARRIER - PARTIAL ELEVATION
(Stage 7 Construction)
Scale: ⅜" = 1'-0"



MEDIAN BARRIER - PARTIAL ELEVATION
(Stage 7 Construction)
Scale: ⅜" = 1'-0"

(PS) CL Partial-Depth And Skewed Median Barrier Joint (¼" To 1" Max.) As Shown on Slab Plans on Dwg Nos. 52204 & 52205. Stop 1'-6" From Top Of Slab.

(FS) CL Full-Depth And Skewed Median Barrier Joint (¼" To 1" Max.) As Shown on Slab Plans on Dwg Nos. 52204 & 52205. Stop 4" From Top Of Slab.

NOTE:
For Section A-A, See Dwg. No. 52217.

LEGEND
EF = Each Face

SHEET 15 OF 18
DETAILS OF 417'-0" COMPOSITE PLATE GIRDER UNIT INTERSTATE 40 OVER U.S. HWY 64 FAULKNER COUNTY

ROUTE 40 SEC. 32

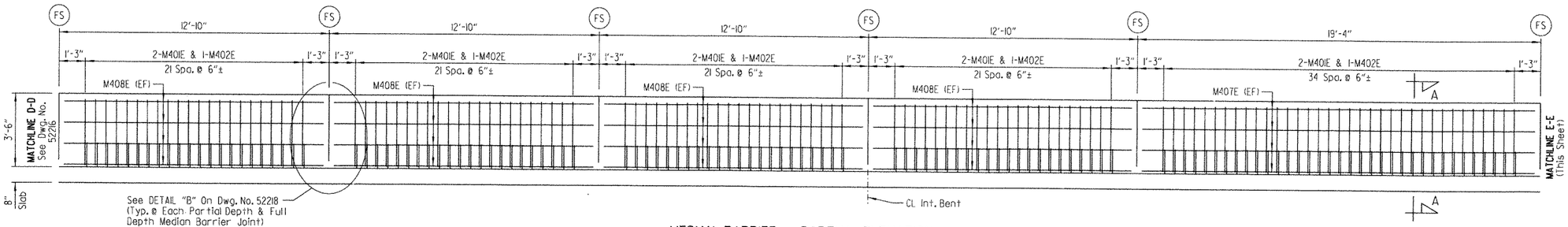
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: CWT DATE: JUNE 2011 FILENAME: B080388XI_RI.DGN
CHECKED BY: JHR DATE: JUNE 2011 SCALE: AS SHOWN
DESIGNED BY: WRF DATE: JUNE 2011
BRIDGE NO. 07226 DRAWING NO. 52216

STATE OF ARKANSAS
JOHN H. RUDDELL
LICENSED PROFESSIONAL ENGINEER
No. 8017
6-7-11
BRIDGE ENGINEER

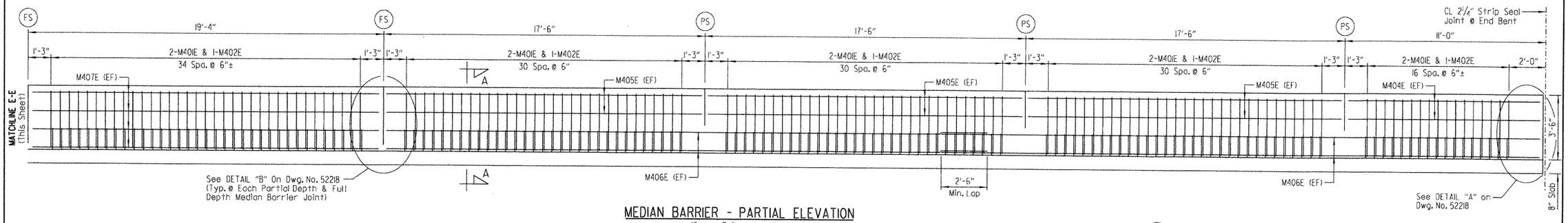
ABHall 8/29/2011 4:29:05 PM
WORKSPACE: AHTD Bridge
L:\ZONDOT504 - I-40 over Hwy 64 Bridge Replacement\Drawings\Sh No 52216 - Median Barrier Details 11of 3x.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	216	452
				(1) 07226		417' PL GIRDER UNIT		52217



MEDIAN BARRIER - PARTIAL ELEVATION

(Stage 7 Construction)
Scale: 3/8" = 1'-0"

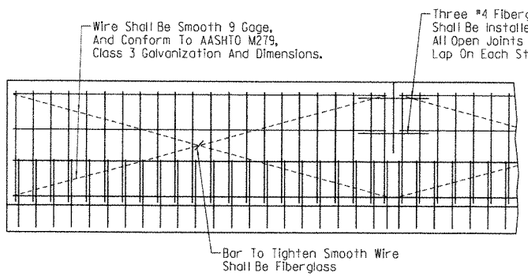


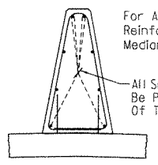
MEDIAN BARRIER - PARTIAL ELEVATION

(Stage 7 Construction)
Scale: 3/8" = 1'-0"

(PS) CL Partial-Depth And Skewed Median Barrier Joint (¼" To 1" Max.) As Shown On Slab Plans On Dwg Nos. 52204 & 52205. Stop 1'-6" From Top Of Slab.

(FS) CL Full-Depth And Skewed Median Barrier Joint (¼" To 1" Max.) As Shown On Slab Plans On Dwg. Nos. 52204 & 52205. Stop 4" From Top Of Slab.



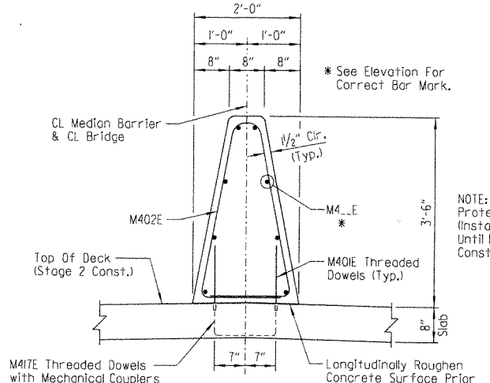


All Panels Shall Be Braced As Shown To Prevent Racking. All Open Joints Shall Be Sawed As Soon As Practical To A Minimum Width Of 1/4". To Control Cracking Before Sawing All Joints Must Be Grooved Before The Concrete Is Set. Sawing Of The Joints Must Be Controlled So It Will Follow The Grooved Joint.

The Extruded Median Barrier Shall Conform To The Horizontal And Vertical Lines Shown On The Plans Or As Directed By The Engineer And Shall Present A Smooth, Uniform Appearance And Texture. Exposed Surfaces Shall Be Given A Class 3 Textured Coating Finish.

DETAILS OF OPTIONAL SLIPFORMING OF CONCRETE MEDIAN BARRIER

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



NOTE:
Protect Threads In Couplers (Installed In Stage 2 Constr.) Until Median Barrier Is Constructed.

SECTION A-A

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

NOTE:
The Threaded Dowel And Coupler Assembly Shall Consist Of A OPL Approved Mechanical Splice With Protective Cap And Threaded Dowel Bars (M401E And M417E) As Shown And Shall Develop At Least 125% Of The Yield Strength Of The Dowel Bars.

M401E And M417E Dowel Bars Shall Be a Minimum 60 ksi Yield Strength And Threaded As Required. Threaded Dowel And Coupler Assembly, Except Mating Surfaces, Shall Be Epoxy Coated In Accordance With The Requirements Of Section 804.

GENERAL NOTES

CONCRETE: All Concrete Shall Be Class S(AE) With A Minimum 28 Day Compressive Strength f'c = 4000 psi.

REINFORCING STEEL: All Reinforcing Steel Shall Conform To AASHTO M31 Or M53, Grade 60

LEGEND

EF = Each Face

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. RUDDELL
BRIDGE ENGINEER

SHEET 16 OF 18
DETAILS OF 417'-0" COMPOSITE PLATE GIRDER UNIT
INTERSTATE 40
OVER U.S. HWY 64
FAULKNER COUNTY

ROUTE 40 SEC. 32

ARKANSAS STATE HIGHWAY COMMISSION

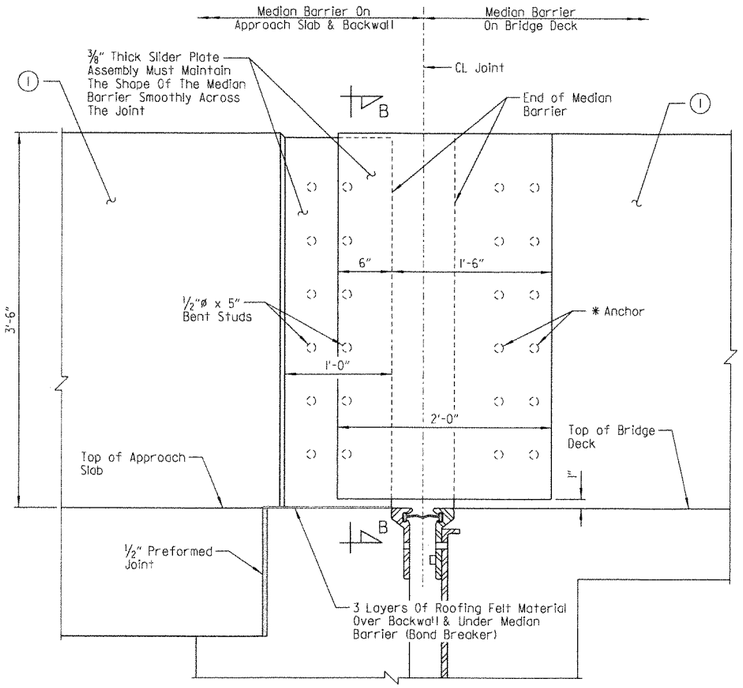
LITTLE ROCK, ARK.

DRAWN BY: CWT DATE: JUNE 2011 FILENAME: B080388XL_R2.DGN
CHECKED BY: JHR DATE: JUNE 2011 SCALE: AS SHOWN
DESIGNED BY: WRF DATE: JUNE 2011

BRIDGE NO. 07226 DRAWING NO. 52217

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WORKSPACE: AHTD Bridge
L:\2011\080758\04 - I-40 over Hwy 64 Bridge Replacement\Drawings\Sh No 52217 - Median Barrier Details (2 of 3).dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	217	452
				(1) 07226		417' PL GIRDER UNIT		52218



DETAIL OF NEOPRENE SEAL @ MEDIAN BARRIER

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

Note:
For Additional Strip Seal Joint Details, See Dwg. No. 52219.

GENERAL NOTES

All Structural Steel For The Median Barrier Slider Plates, Bent Studs, and Slider Plate Anchors Shall Be AASHTO M 270, Grade 50 Unless Otherwise Noted. Structural Steel Completely Embedded In Concrete Need Not Be Painted.

All Structural Steel For The Median Barrier Slider Plates And Bent Studs Shall Be Paid For As "STRUCTURAL STEEL IN PLATE GIRDER SPANS (M270, Grade 50)".

Details Of The Proposed Slider Plate Assembly For The Median Barrier Shall Be Submitted To And Approved By The Engineer Prior To Fabrication Of The Structural Steel At The Expansion Device.

All Exposed Surfaces Of The Median Barrier Slider Plates Are To Be Cleaned And Painted Brown, Color Chip No. 33522, In Accordance With Section 807.

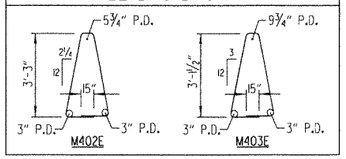
(1) Class 3 Textured Coating Finish (Color = Brown, Color Chip No. 33522)

* The Method Of Attachment Of The Cover Slider Plate Assembly Or Similar Device Must Be Such That It May Be Removed In Order To Provide For Future Replacement Of The Neoprene Seal.

Anchors Will Not Be Paid For Directly But Will Be Considered Subsidiary To "STRUCTURAL STEEL IN PLATE GIRDER SPANS (M270, Grade 50)".

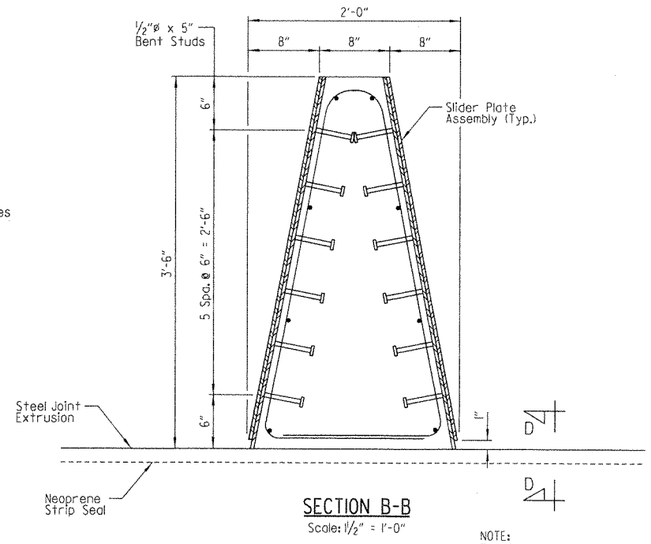
BAR LIST - STAGE 7 CONSTRUCTION			
MARK	NO. REQ'D.	LENGTH	P.D.
(2) M401E	1676	1'-1"	STR.
M402E	718	9'-7"	5 3/4", 3"
M403E	180	10'-4"	9 3/4", 3"
M404E	48	10'-8"	STR.
M405E	24	17'-2"	STR.
M406E	16	32'-10"	STR.
M407E	32	19'-0"	STR.
M408E	64	12'-6"	STR.
M409E	12	38'-3"	STR.

BENDING DIAGRAM



(2) One End Threaded For Mechanical Coupler. Length Of Bar Does Not Include Any Additional Length For Engagement Into Mechanical Coupler. The Actual Length Of Bar Engagement Into The Mechanical Coupler Shall Be Determined By The Mechanical Coupler Manufacturer, And The Length Of The Bar Shall Be Adjusted Accordingly.

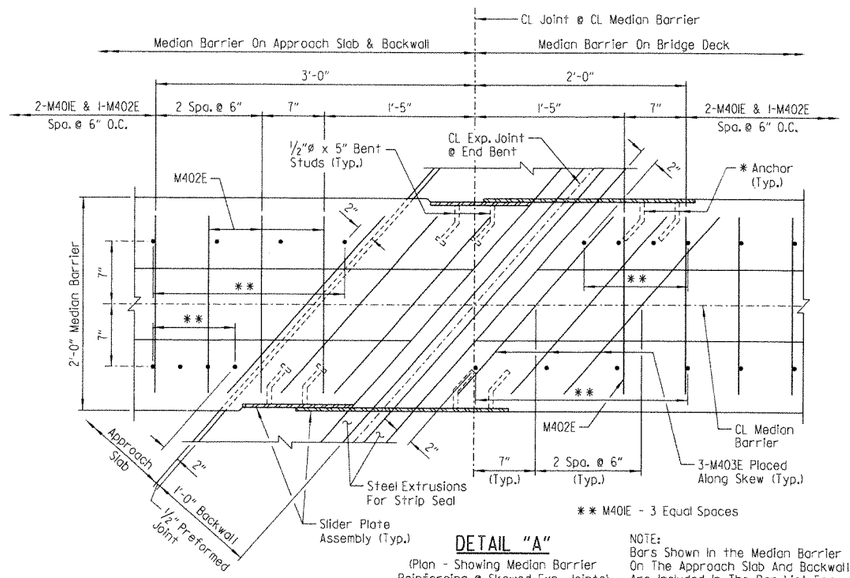
Notes:
1. Dimensions Of Bars Are Out-To-Out.
2. Bar Designations Ending With "E" Indicates Epoxy Coated Bars.



SECTION B-B

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

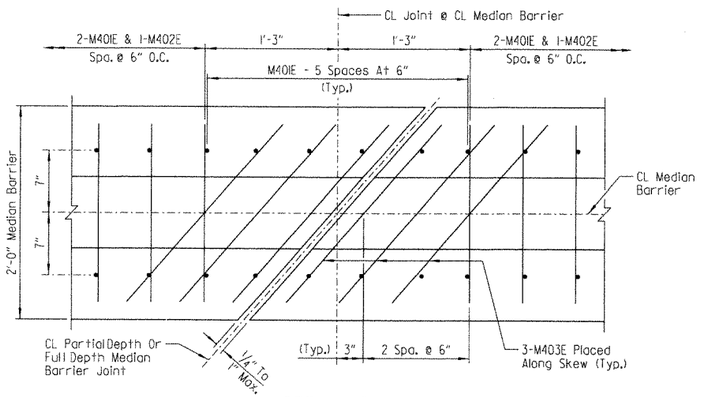
NOTE:
For Section D-D, See Dwg. No. 52219.



DETAIL "A"

(Plan - Showing Median Barrier Reinforcing @ Skewed Exp. Joints)
Scale: 1/2" = 1'-0"

NOTE:
Bars Shown In the Median Barrier On The Approach Slab And Backwall Are Included In The Bar List For The Approach Slab Median Barrier (Stage 7 Construction) On Dwg. No. 52223.



DETAIL "B"

(Plan - Showing Median Barrier Reinforcing @ Skewed Barrier Joints)
Scale: 1/2" = 1'-0"

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. RUDDELL
9-15-11

BRIDGE ENGINEER

SHEET 17 OF 18
DETAILS OF 417'-0" COMPOSITE PLATE GIRDER UNIT INTERSTATE 40 OVER U.S. HWY 64 FAULKNER COUNTY

ROUTE 40 SEC. 32

ARKANSAS STATE HIGHWAY COMMISSION

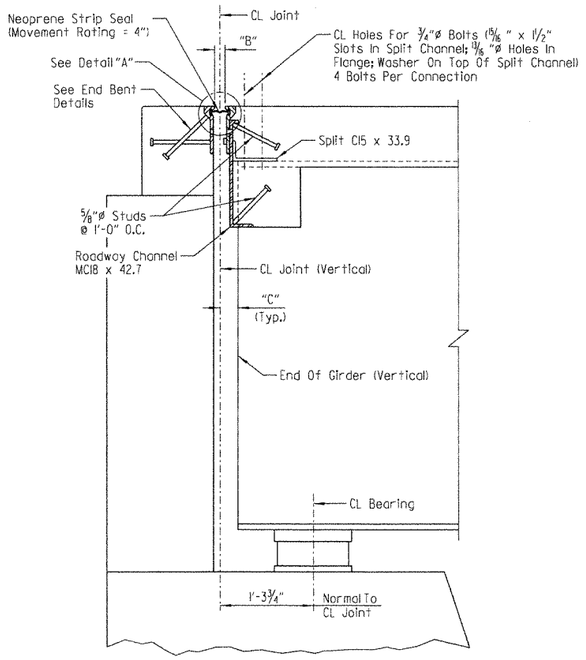
LITTLE ROCK, ARK.

DRAWN BY: CWT DATE: JUNE 2011 FILENAME: B080388XI_R3.DGN
CHECKED BY: ABH DATE: JUNE 2011 SCALE: AS SHOWN
DESIGNED BY: WRF DATE: JUNE 2011

BRIDGE NO. 07226 DRAWING NO. 52218

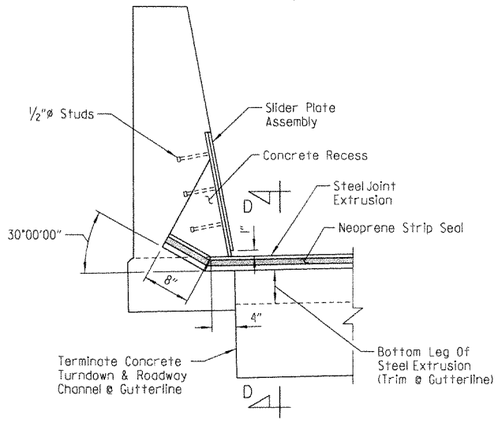
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REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	218	452
				07226		417' PL GIRDER UNIT		52219



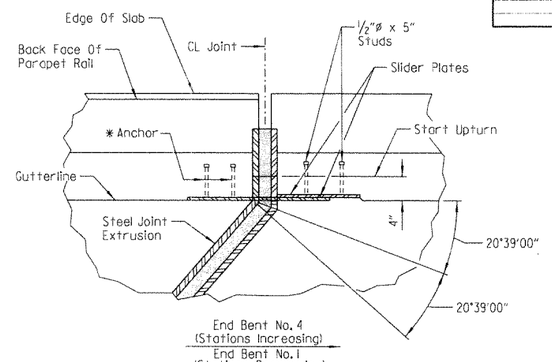
SECTION THRU JOINT AT END BENTS

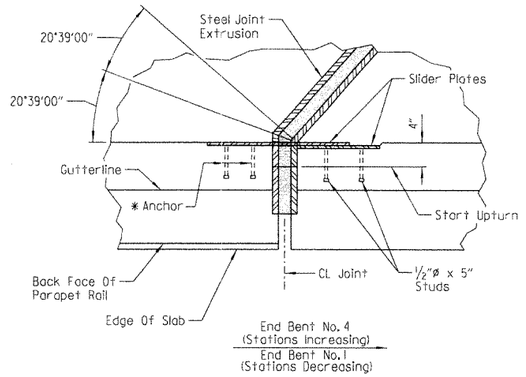
Note: Section Taken Normal To CL Joint
Scale: 1" = 1'-0"



SECTION B-B

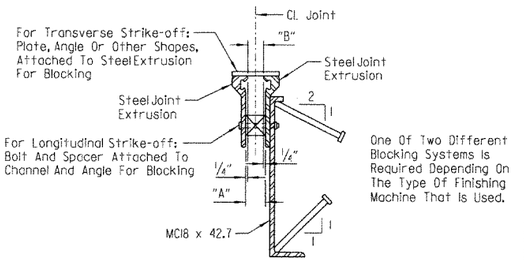
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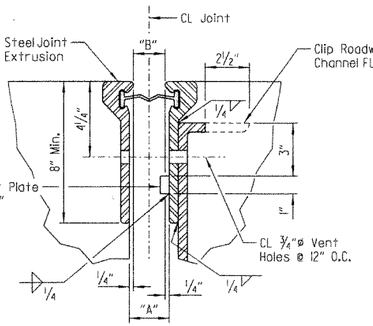
SECTION C-C

Scale: 1" = 1'-0"



One Of Two Different Blocking Systems Is Required Depending On The Type Of Finishing Machine That Is Used.

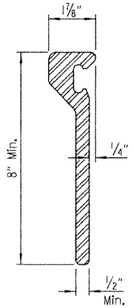
Note:
Each Expansion Joint Device Shall Be Blocked In The Shop By The Fabricator To The Dimension Shown For 60°F And The Blocking Details Shall Be Shown On The Shop Drawings. Blocking Shall Be Placed Within 2' Of Each End Of The Device And With A Maximum Spacing Of 8'.



DETAIL "A"

Scale: 3" = 1'-0"

Note:
Concrete Shall Be Hand Packed Under The Joint Armor.

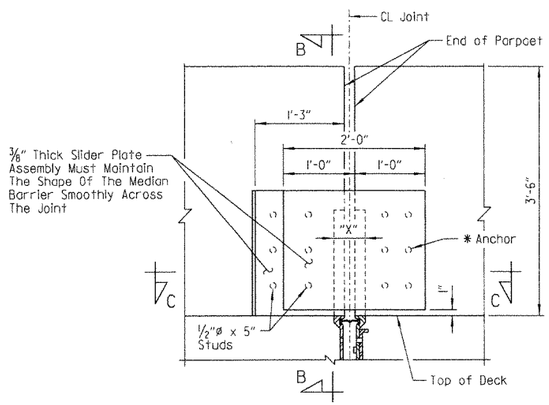


STEEL EXTRUSION DETAIL

Scale: N.T.S.

* The Method Of Attachment Of The Cover Slider Plate Assembly Or Similar Device Must Be Such That It May Be Removed In Order To Provide For Future Replacement Of The Neoprene Seal.

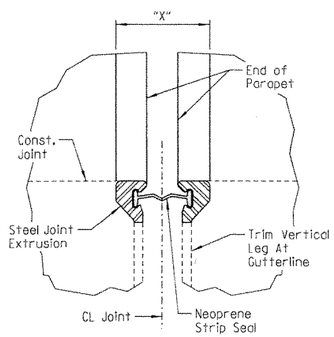
Anchors Will Not Be Paid For Directly But Will Be Considered Subsidiary To "STRUCTURAL STEEL IN PLATE GIRDER SPANS (M 270, Grade 50)".



DETAIL OF NEOPRENE SEAL @ GUTTERLINE

Scale: 1" = 1'-0"

Note:
Dimension "X" Equals The Width Of The Recess In Parapet At Gutterline To Allow For Removal Or Repair Of Joint.



SECTION D-D

Scale: 3" = 1'-0"

STRIP SEAL JOINT DATA

Bent No.	Movement Rating (inch)	"A" Width Perpendicular To Joint At 24 Hour Average Temperature ** Of:			"B" Width Perpendicular To Joint At 24 Hour Average Temperature ** Of:			"C" Perpendicular To Joint At 24 Hour Average Temperature Of 60°F
		40°F	60°F	80°F	40°F	60°F	80°F	
1	4"	2⅜"	2¼"	2⅛"	1⅞"	1¾"	1⅝"	2⅛"
4	4"	2⅝"	2¼"	1⅞"	2⅛"	1¾"	1⅜"	2⅛"

** The Temperature Used To Set The Joint Opening Shall Be The Approximate Average Air Temperature During The 24 Hour Period Immediately Before The Bolts Are Tightened. The Engineer Shall Establish The Temperature.

Installation Is Limited To 40 Degrees Fahrenheit Min. And 80 degrees Fahrenheit Max. Interpolation Of The Table May Be Necessary. The Temperature Limitations Of The Lubricant-Adhesive Manufacturer Shall Be Observed.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. RUDDELL
BRIDGE ENGINEER

GENERAL NOTES

EXPANSION NEOPRENE STRIP SEAL: The Expansion Device Shall Provide A Movement Of 4" As Shown In The "STRIP SEAL JOINT DATA" Table. The Expansion Joint Shall Be Capable Of Sealing The Deck Surface And Parapet Area To Prevent Moisture And Other Contaminants From Descending Through The Joint.

All Structural Steel Shall Be AASHTO M 270, Grade 50 Unless Otherwise Noted. Structural Steel Completely Embedded In Concrete Need Not Be Painted.

All Structural Steel, Except For The Steel Extrusion For The Strip Seal, Shall Be Paid For As "STRUCTURAL STEEL IN PLATE GIRDER SPANS (M270, Grade 50)". The Steel Extrusion And Neoprene Strip Seal Shall Be Paid For In Accordance With Special Provision Job 080388 "ARMORED JOINT WITH NEOPRENE STRIP SEAL".

Details Of The Proposed Slider Plate Assembly Shall Be Submitted To And Approved By The Engineer Prior To Fabrication Of The Structural Steel At The Expansion Device.

All Exposed Surfaces, Except The Parapet And Median Barrier Slider Plates, Are To Be Cleaned And Painted Brown, Color Chip No. 20108, In Accordance With Section 807. The Parapet And Median Barrier Slider Plates Are To Be Cleaned And Painted Brown, Color Chip No. 33522, In Accordance With Section 807.

DETAILS FOR BLOCKING EXPANSION JOINT DEVICE

EXPANSION DEVICE INSTALLATION AT END BENTS:

The Contractor May Elect To Install The Expansion Device Using One Of The Following Two Alternatives.

1) The Concrete Span Pour Adjacent To Joint Shall Be Placed Before The End Bent Backwall Is Placed. After The End Bent Backwall Forms Are In Place And The Girders Erected, The Blocked Expansion Device Shall Be Installed And Adjusted For Grade. All Connection Bolts Shall Be Fully Tightened Prior To Placing The Deck Concrete Adjacent To The Bent. Immediately Prior To Pouring The Backwall Concrete, The Blocking Shall Be Removed, The Opening Adjusted For Temperature, And The Backwall Constructed.

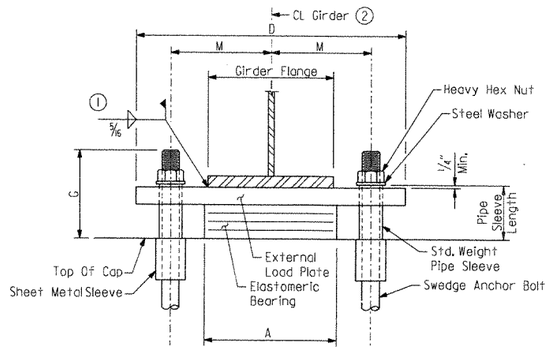
2) The Backwall Shall Be Poured To The Optional Construction Joint After Girders Are Erected. The Blocked Expansion Device Shall Be Installed And Adjusted For Grade. All Connection Bolts Shall Be Fully Tightened Prior To Placing The Deck Concrete Adjacent To The Bent. Immediately Prior To Pouring The Remainder Of The Backwall Concrete, The Blocking Shall Be Removed And The Opening Adjusted For Temperature.

SHEET 18 OF 18
DETAILS OF 417'-0" COMPOSITE PLATE GIRDER UNIT
INTERSTATE 40
OVER U.S. HWY 64
FAULKNER COUNTY
ROUTE 40 SEC. 32
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

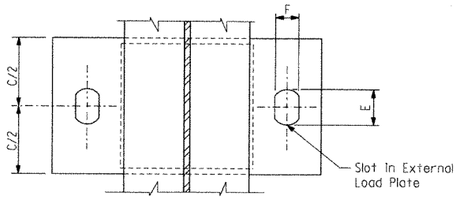
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CHECKED BY: JHR/ABH DATE: JUNE 2011 SCALE: AS SHOWN
DESIGNED BY: WRF DATE: JUNE 2011
BRIDGE NO. 07226 DRAWING NO. 52219

ABHall 8/29/2011 4:29:06 PM
WORKSPACE: AHTD Bridge
L:\2011\011504 - I-40 over Hwy 64 Bridge Replacement\Drawings\Sh No 52219 - Strip Seal Details (1 of 1).dgn
REVISED DATE:

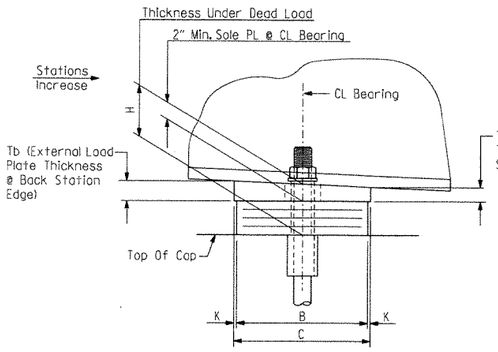
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				6	ARK.			
				JOB NO.		080388	219	452
				(1) 07226		ELASTOMERIC BEARINGS		52220



FRONT VIEW - AT BENT NOS. 1 & 3



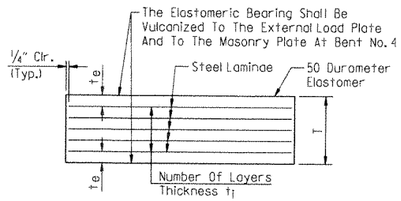
PLAN VIEW - AT BENT NOS. 1 & 3



SIDE VIEW - AT BENT NOS. 1 & 3

(1) Care shall be taken to ensure that the external load plate is in full and complete contact with the girder flange before welding begins.

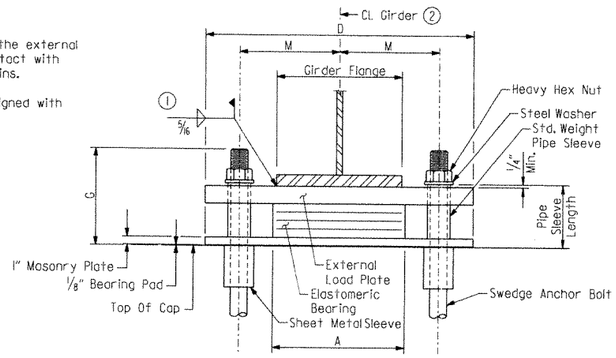
(2) Centerline elastomeric pad shall be aligned with centerline girder.



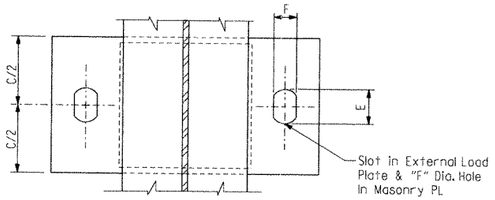
t_e = Thickness Of Elastomer Cover On Top And Bottom Of Pad
t_i = Thickness Of Elastomer Between Steel Laminae
N = Number Of Elastomer Layers Of Thickness t_i

ELASTOMERIC BEARING

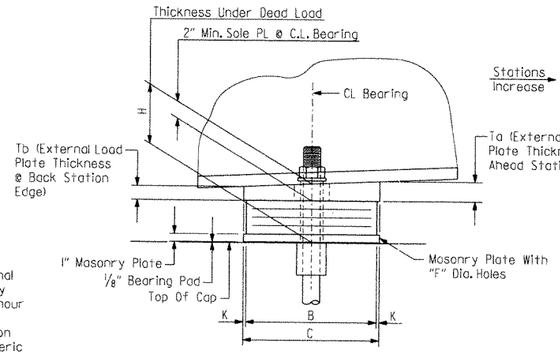
Unless otherwise approved by the Engineer, welding of the external load plate at expansion bearings to the girder will be allowed only when: 1) The approximate average air temperature during the 24 hour period immediately preceding welding is between 40°F and 80°F; and 2) The slots in the external load plate are positioned to center on the anchor bolts; and 3) No horizontal deformation of the elastomeric pad is evident. If welding at other temperatures is required, the Engineer will provide adjustment data.



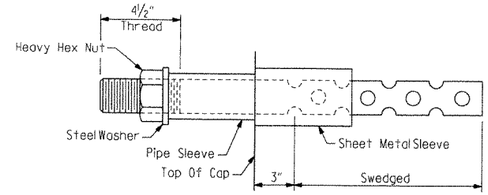
FRONT VIEW - AT BENT NO. 4



PLAN VIEW - AT BENT NO. 4



SIDE VIEW - AT BENT NO. 4



ANCHOR BOLT DETAIL

Note: Anchor bolts may be cast in place or drilled and grouted into place. If anchor bolts are to be cast in place, the galvanized sheet metal sleeves will not be required.

If anchor bolts are to be drilled and grouted in place, the galvanized sheet metal sleeves shall be cast in place as shown. Sleeves shall be dry packed with styrofoam, urethane foam or approved equal prior to pouring of concrete. After pouring of the cap and prior to erection of structural steel, the dry pack shall be removed and holes for the anchor bolts shall be accurately drilled into the masonry. Bolts placed in drilled holes shall be accurately set and fixed using a QPL approved epoxy or non-shrink grout that completely fills the holes. Galvanized sheet metal sleeves will not be paid for directly, but will be considered subsidiary to the item "Structural Steel In Plate Girder Spans, (M270, Gr. 50)"

GENERAL NOTES

Elastomeric bearings shall conform to Section 808 of the Standard Specifications and shall be paid for at the unit price bid for "Elastomeric Bearings."

External load plates and shear blocks shall conform to AASHTO M270, Grade 50. Pipe sleeves shall be ASTM A53, Grade B, and shall be galvanized to conform to AASHTO M232, Class C or AASHTO M298, Class 50.

External load plates and masonry plates shall be completely fabricated (including bevel and bolt holes) and shall be cleaned before vulcanizing to the elastomeric bearing. The surface in contact with the elastomeric bearing shall be cleaned in accordance with Subsection 808. Other surfaces shall be blast cleaned in accordance with Subsection 807.04(B) for painted steel and painted in accordance with Section 807.75. Mask areas of field welding. The color of paint shall be Brown and shall match Fed. Std. 595B, Color Chip No. 20108. Painting will not be paid for directly but will be considered subsidiary to "Elastomeric Bearings".

Anchor bolts, washers and nuts shall conform to Subsection 807.07 of the Standard Specifications. The anchor bolt grade of steel shall be as specified in the "Table Of Fabricator Variables". Indentations shall be circular with rounded bottoms and staggered as shown in the details.

Pipe sleeves, anchor bolts, washers and nuts shall be paid for at the unit price bid for "Structural Steel In Plate Girder Spans (M270, Gr. 50)". External load plates, masonry plates and shear blocks will not be measured or paid for separately but will be included in the unit price bid for "Elastomeric Bearings".

Bearings with masonry plates shall be seated in accordance with Subsection 807.66. Bearings without masonry plates shall be seated in accordance with Subsection 808.08.

TABLE OF FABRICATOR VARIABLES

Bridge No.	Location		Bearing Type	No. Of Bearings Each Bent	* Maximum Design Load (Kips)	Elastomeric Pad								External Load Plate								Anchor Bolt				
	Bent No.(s)	Beam Or Girder No.				G	H	A	B	N	t_i	t_e	No. & Thickness Of Steel Laminate	T	C	D	E	F	J	K	M	T_a	T_b	Anchor Bolt (Dia. x L)	Anchor Bolt Grade	Pipe Sleeve Size (Dia. x L)	Sheet Metal Sleeve Size (Dia. x L)	Steel Washer Size (O.D.)
-	1	All	Exp.	17	138	9 7/16"	6 3/16"	14"	10"	6	1/2"	1/4"	7 @ 12 Ga.	4 1/4"	11"	26 1/2"	5 1/4"	3 1/8"	-	1/2"	10"	2.04"	1.96"	2" x 32"	55	2 1/2" x 6 7/16"	4" x 7"	3 3/4"
	3	All	Exp.	17	450	10"	6 3/4"	22"	14"	7	1/2"	1/4"	8 @ 12 Ga.	4 13/16"	15"	34"	6"	3 1/8"	-	1/2"	13 3/4"	1.97	2.03	2" x 35"	55	2 1/2" x 7"	4" x 20"	3 3/4"
	4	All	Exp.	17	138	13 3/16"	10 5/16"	16"	12"	11	1/2"	1/4"	12 @ 12 Ga.	7 1/4"	13"	28"	7 3/4"	3 1/8"	-	1/2"	10 3/4"	1.95"	2.05"	2" x 36"	55	2 1/2" x 10 9/16"	4" x 7"	3 3/4"

* Maximum Design Load = Service Load

** The Dimension "E" Does Not Apply To Masonry Plates. See "SIDE VIEW - AT BENT NO. 4".

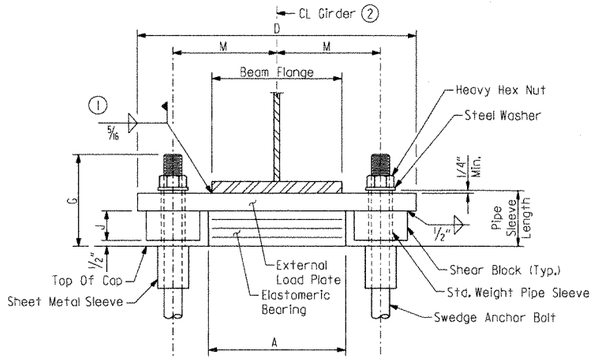
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
6-1-11
JOHN H. RUTHVEN
BRIDGE ENGINEER

SHEET 1 OF 2
DETAILS OF ELASTOMERIC BEARINGS
INTERSTATE 40
OVER U.S. HWY 64
FAULKNER COUNTY
ROUTE 40 SEC. 32
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

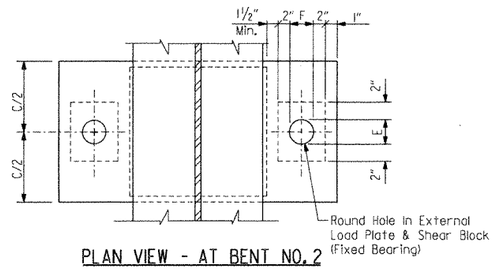
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REVISED DATE:

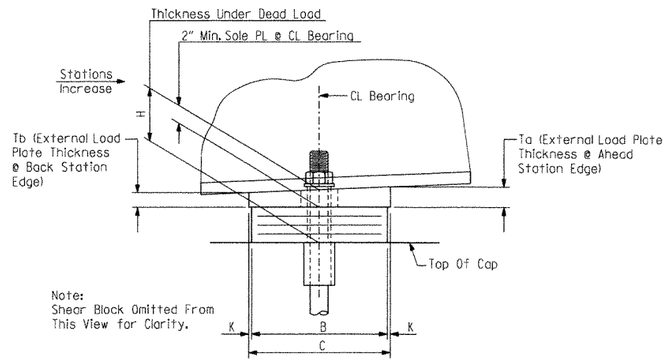
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				6	ARK.			
				JOB NO.		080388	220	452
				(1) 07226		ELASTOMERIC BEARINGS		52221



FRONT VIEW - AT BENT NO. 2



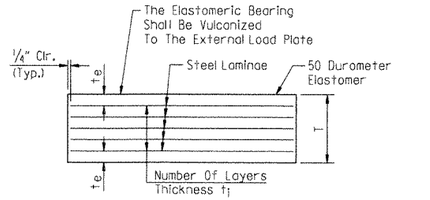
PLAN VIEW - AT BENT NO. 2



SIDE VIEW - AT BENT NO. 2

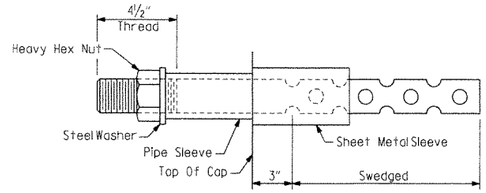
(1) Care shall be taken to ensure that the external load plate is in full and complete contact with the girder flange before welding begins.

(2) Centerline elastomeric pad shall be aligned with centerline girder.



t_e = Thickness Of Elastomer Cover On Top And Bottom Of Pad
t_i = Thickness Of Elastomer Between Steel Laminae
N = Number Of Elastomer Layers Of Thickness t_i

ELASTOMERIC BEARING



ANCHOR BOLT DETAIL

Note: Anchor bolts may be cast in place or drilled and grouted into place. If anchor bolts are to be cast in place, the galvanized sheet metal sleeves will not be required.

If anchor bolts are to be drilled and grouted in place, the galvanized sheet metal sleeves shall be cast in place as shown. Sleeves shall be dry packed with styrofoam, urethane foam or approved equal prior to pouring of concrete. After pouring of the cap and prior to erection of structural steel, the dry pack shall be removed and holes for the anchor bolts shall be accurately drilled into the masonry. Bolts placed in drilled holes shall be accurately set and fixed using a QPL approved epoxy or non-shrink grout that completely fills the holes. Galvanized sheet metal sleeves will not be paid for directly, but will be considered subsidiary to the item "Structural Steel In Plate Girder Spans, (M270, Gr. 50)"

GENERAL NOTES

Elastomeric bearings shall conform to Section 808 of the Standard Specifications and shall be paid for at the unit price bid for "Elastomeric Bearings."

External load plates and shear blocks shall conform to AASHTO M270, Grade 50. Pipe sleeves shall be ASTM A53, Grade B, and shall be galvanized to conform to AASHTO M232, Class C or AASHTO M298, Class 50.

External load plates (with shear blocks as applicable) and masonry plates shall be completely fabricated (including bevel and bolt holes) and shall be cleaned before vulcanizing to the elastomeric bearing. The surface in contact with the elastomeric bearing shall be cleaned in accordance with Subsection 808. Other surfaces shall be blast cleaned in accordance with Subsection 807.84(B) for painted steel and painted in accordance with Section 807.75. Mask areas of field welding. The color of paint shall be Brown and shall match Fed. Std. 595B, Color Chip No. 20108. Painting will not be paid for directly but will be considered subsidiary to "Elastomeric Bearings".

Anchor bolts, washers and nuts shall conform to Subsection 807.07 of the Standard Specifications. The anchor bolt grade of steel shall be as specified in the "Table Of Fabricator Variables". Indentations shall be circular with rounded bottoms and staggered as shown in the details.

Pipe sleeves, anchor bolts, washers and nuts shall be paid for at the unit price bid for "Structural Steel In Plate Girder Spans (M270, Gr. 50)". External load plates, masonry plates and shear blocks will not be measured or paid for separately but will be included in the unit price bid for "Elastomeric Bearings".

Bearings with masonry plates shall be seated in accordance with Subsection 807.66. Bearings without masonry plates shall be seated in accordance with Subsection 808.08.

TABLE OF FABRICATOR VARIABLES

Bridge No.	Location		Bearing Type	No. Of Bearings Each Bent	* Maximum Design Load (Kips)	Elastomeric Pad							External Load Plate									Anchor Bolt				
	Bent No.(s)	Beam Or Girder No.				G	H	A	B	N	t_i	t_e	No. & Thickness Of Steel Laminate	T	C	D	E	F	J	K	M	T_a	T_b	Anchor Bolt (Dia. x L)	Anchor Bolt Grade	Pipe Sleeve Size (Dia. x L)	Sheet Metal Sleeve Size (Dia. x L)	Steel Washer Size (O.D.)
-	2	All	Fixed	17	450	10"	6 3/4"	22"	14"	7	1/2"	1/4"	8 @ 12 Ga.	4 1/16"	15"	41 1/4"	3 1/8"	3 1/8"	4 1/4"	1/2"	16 1/16"	2.03"	1.97"	2" x 35"	55	2 1/2" x 7"	4" x 20"	3 3/4"

* Maximum Design Load = Service Load

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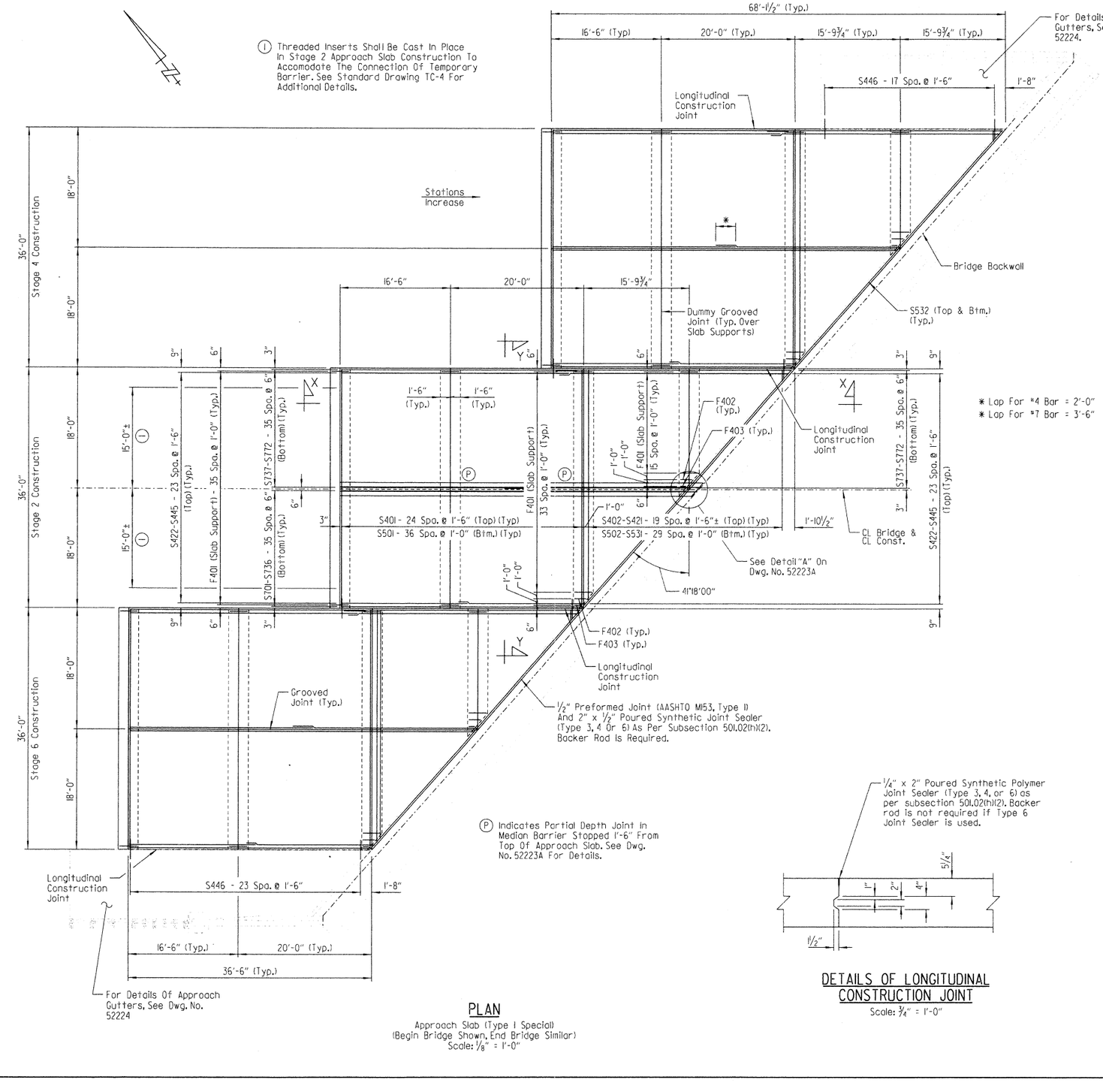
SHEET 2 OF 2
DETAILS OF ELASTOMERIC BEARINGS
INTERSTATE 40
OVER U.S. HWY 64
FAULKNER COUNTY
ROUTE 40 SEC. 32
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: PCC DATE: JUNE 2011 FILENAME: B080388XI_E2.DGN
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DESIGNED BY: BWS DATE: JUNE 2011
BRIDGE NO. 07226 DRAWING NO. 52221

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DATE REVISED	BY	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
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				(1) 07226		APPROACH SLABS		52222

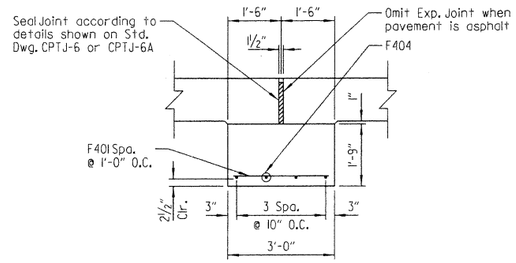
(1) Threaded Inserts Shall Be Cast In Place In Stage 2 Approach Slab Construction To Accomodate The Connection Of Temporary Barrier. See Standard Drawing TC-4 For Additional Details.



(P) Indicates Partial Depth Joint In Median Barrier Stopped 1'-6" From Top Of Approach Slab. See Dwg. No. 52223A For Details.

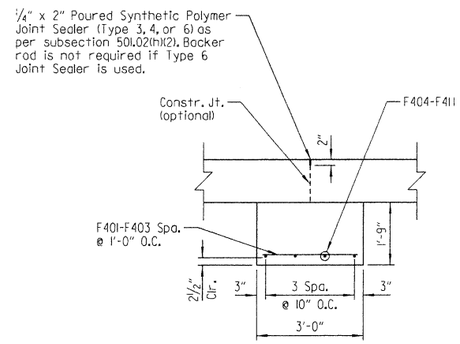
PLAN
Approach Slab (Type 1 Special)
(Begin Bridge Shown, End Bridge Similar)
Scale: ⅛" = 1'-0"

* Lap For #4 Bar = 2'-0"
* Lap For #7 Bar = 3'-6"



DETAILS OF SUPPORT AT END OF SLAB
Scale: ½" = 1'-0"

DETAILS OF LONGITUDINAL CONSTRUCTION JOINT
Scale: ¾" = 1'-0"



DETAILS OF INTERIOR SUPPORT OF SLAB
Scale: ½" = 1'-0"

NOTE:
For Sections X-X & Y-Y, General Notes And Bar List, See Dwg. No. 52223.

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SHEET 1 OF 3
DETAILS OF APPROACH SLABS
INTERSTATE 40
OVER U.S. HWY 64
FAULKNER COUNTY

ROUTE 40 SEC. 32

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

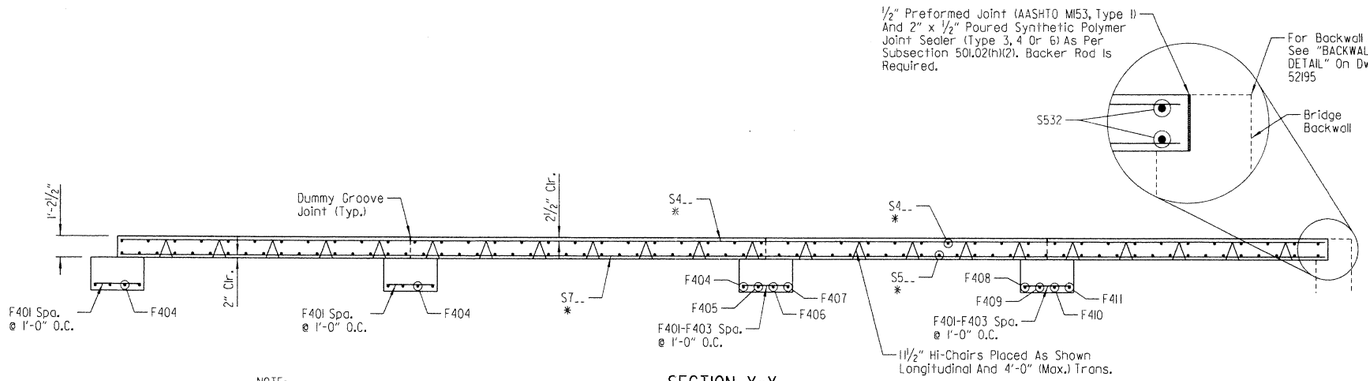
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BRIDGE NO. 07226 DRAWING NO. 52222

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REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
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JOB NO.		080388		
(1) 07226		APPROACH SLABS		52223

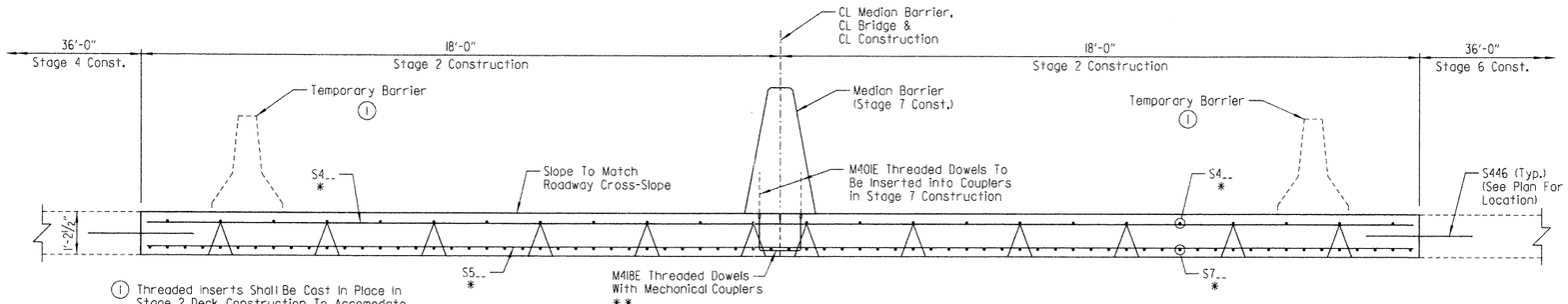


NOTE:
Sections X-X & Y-Y Shown For Stage 2 Construction. Stages 4 & 6 Are Similar But Do Not Include A Median Barrier Or M418E Threaded Dowels.

SECTION X-X

Scale: ¼" = 1'-0"

* For Bar Marks & Locations, See Approach Slab Plan On Dwg. No. 52222.



(1) Threaded Inserts Shall Be Cast In Place In Stage 2 Deck Construction To Accomodate The Connection Of Temporary Barrier. See Standard Drawing TC-4 For Additional Details.

SECTION Y-Y

Scale: ½" = 1'-0"

** Space and Orient M418E Bars to Align Mechanical Couplers with M401E Bars To Be Installed in Stage 7 Construction. See Median Barrier on Approach Slab Details On Dwg. No. 52223A For Spacing and Positioning of M401E Bars.

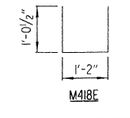
BAR LIST - APPROACH SLABS

MARK	NO. REQ'D.	LENGTH	P.D.
S401	50	35'-8"	Str.
S402 To S421	2 Ea.	1'-8" To 34'-8"	Str.
S422 To S445	4 Ea.	19'-5" To 34'-7"	Str.
(2) S446	"X"	4'-0"	Str.
S501	74	35'-8"	Str.
S502 To S531	2 Ea.	1'-8" To 34'-8"	Str.
S532	4	47'-6"	Str.
S701 To S736	2 Ea.	36'-4" To 51'-8"	Str.
S737 To S772	4 Ea.	27'-10" To 35'-7"	Str.
F401	244	2'-8"	Str.
F402	4	1'-9"	Str.
F403	4	11"	Str.
F404	18	35'-8"	Str.
F405	2	35'-3"	Str.
F406	2	34'-4"	Str.
F407	2	33'-5"	Str.
F408	2	18'-3"	Str.
F409	2	17'-3"	Str.
F410	2	16'-4"	Str.
F411	2	15'-5"	Str.
(3) M418E	210	3'-1"	2"

DOWEL SCHEDULE

STAGE NO.	"X"
2	48
4	18
6	24

BAR BENDING DIAGRAM



NOTES:
Bars Shown Are For Stage 2 Construction (Both Ends of Bridge). Stages 4 And 6 Are Similar Except As Noted In "DOWEL SCHEDULE" And Do Not Include M418E Bars.

Bar Designations Ending With "E" Indicates Epoxy Coated Bars.

(2) See "DOWEL SCHEDULE" For Number Of Bars.

(3) Ends Threaded For Mechanical Couplers. Length Of Vertical Legs Includes The Length Of The Mechanical Coupler. The Actual Length Of Vertical Leg Engagement Into The Mechanical Coupler Shall Be Determined By The Mechanical Coupler Manufacturer, And The Length Of The Vertical Legs Shall Be Adjusted Accordingly.

Dimensions Of Bars Are Out-To-Out.

TABLE OF QUANTITIES FOR ONE APPROACH SLAB

(All Stages, Including Median Barrier On One Approach Slab)

Class S(AE) Concrete	Reinforcing Steel (Gr. 60)	Epoxy-Coated Reinforcing Steel (Gr. 60)
335.68 Cu. Yds. ***	36,781 lb.	1,350 lb.

*** Includes 9.29 Cu. Yds. For The Median Barrier. For Details of Median Barrier on Approach Slab, Including Bar List, See Dwg. No. 52223A.

GENERAL NOTES

Concrete Shall Be Class S(AE) (f'c = 4,000 psi).

Reinforcing Steel Shall Conform To AASHTO M31 Or M53, Grade 60 (fy = 60,000 psi)

Approach Slabs Will Be Measured And Paid For In Accordance With Section 504 Of The Standard Specifications.

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SHEET 2 OF 3
DETAILS OF APPROACH SLABS
INTERSTATE 40
OVER U.S. HWY 64
FAULKNER COUNTY

ROUTE 40 SEC. 32

ARKANSAS STATE HIGHWAY COMMISSION

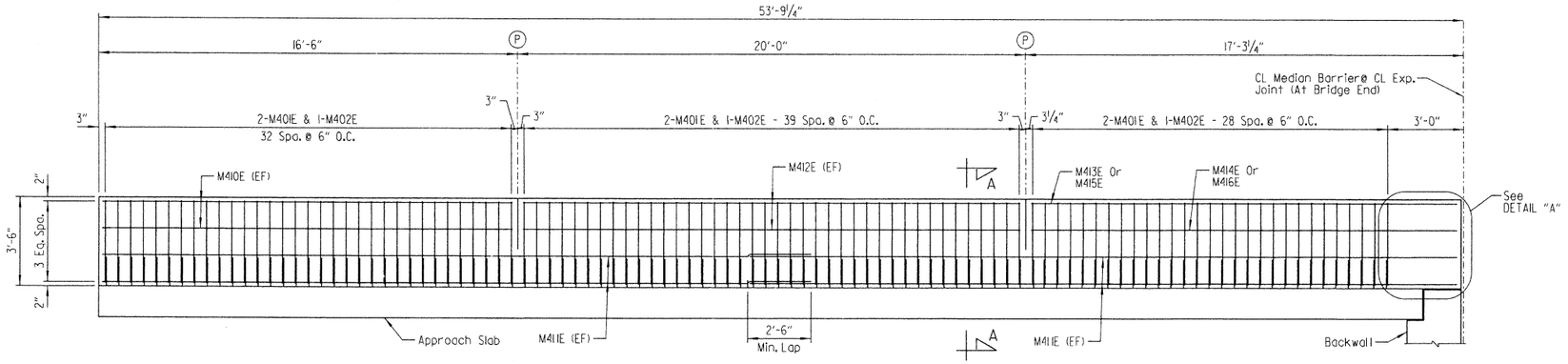
LITTLE ROCK, ARK.

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CHECKED BY: ABH DATE: JUNE 2011 SCALE: AS SHOWN
DESIGNED BY: PCC DATE: JUNE 2011

BRIDGE NO. 07226 DRAWING NO. 52223

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WORKSPACE: AHTD Bridge
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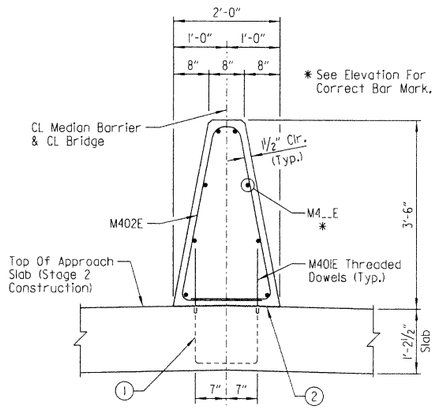
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				6	ARK.			
				JOB NO.		080388	223	152
				(1) 07226		APPROACH SLABS		52223



(P) CL Partial Depth Median Barrier Joint (¼" To 1" Max.) Stop 1'-6" From Top Of Approach Slab

ELEVATION - MEDIAN BARRIER ON APPROACH SLAB

(Stage 7 Construction)
Scale: ⅜" = 1'-0"



SECTION A-A

(Normal Section)
Scale: ¾" = 1'-0"

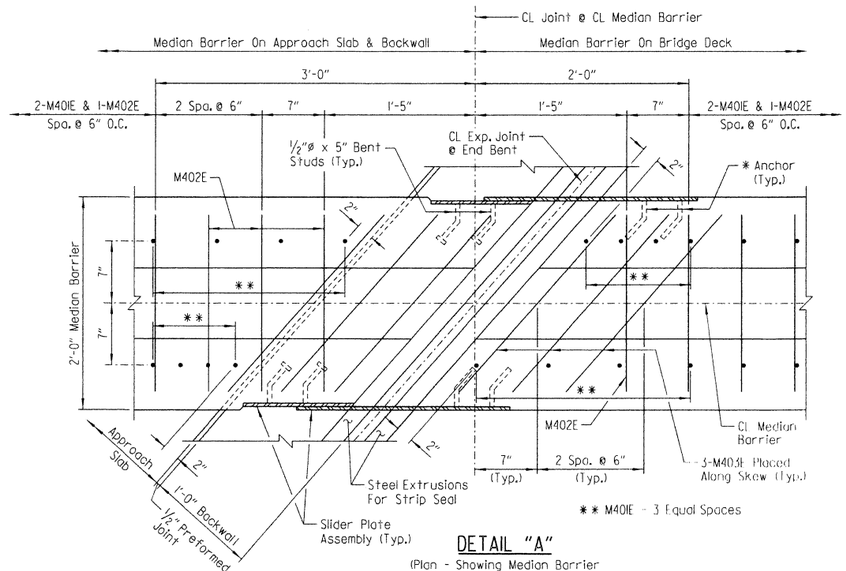
(1) M418E Threaded Dowels with Mechanical Couplers Installed in Stage 2 Construction

(2) Longitudinally Roughen Concrete Surface Prior To Pouring Concrete For Median Barrier

NOTES:
Protect Threads In Couplers (Installed In Stage 2 Construction) Until Median Barrier Is Constructed.

The Threaded Dowel And Coupler Assembly Shall Consist Of A QPL Approved Mechanical Splice With Protective Cap And Threaded Dowel Bars (M401E And M417E) As Shown And Shall Develop At Least 125% Of The Yield Strength Of The Dowel Bars.

M401E And M417E Dowel Bars Shall Be a Minimum 60 ksi Yield Strength And Threaded As Required. Threaded Dowel And Coupler Assembly, Except Mating Surfaces, Shall Be Epoxy Coated In Accordance With The Requirements Of Section 804.



** M401E - 3 Equal Spaces

DETAIL "A"

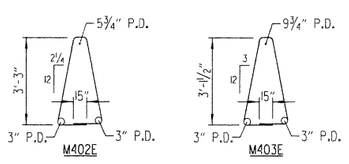
(Plan - Showing Median Barrier Reinforcing @ Skewed Exp. Joints)
Scale: 1½" = 1'-0"

BAR LIST - MEDIAN BARRIER (3)			
MARK	NO. REQ'D.	LENGTH	P.D.
(4) M401E	420	1'-1"	Str.
M402E	210	9'-7"	5¾", 3"
M403E	6	10'-4"	9¾", 3"
M410E	8	16'-2"	Str.
M411E	16	28'-2"	Str.
M412E	8	18'-8"	Str.
M413E	2	16'-8"	Str.
M414E	2	16'-6"	Str.
M415E	2	17'-0"	Str.
M416E	2	17'-2"	Str.

NOTES:
Dimensions Of Bars Are Out-To-Out.

Bar Designations Ending With "E" Indicates Epoxy Coated Bars.

BAR BENDING DIAGRAM



(3) Bars Shown Are For Stage 7 Construction, Median Barrier on Approach Slabs (Both Ends Of Bridge).

(4) One End Threaded For Mechanical Coupler. Length Of Bar Does Not Include Any Additional Length For Engagement Into Mechanical Coupler. The Actual Length Of Bar Engagement Into The Mechanical Coupler Shall Be Determined By The Mechanical Coupler Manufacturer, And The Length Of The Bar Shall Be Adjusted Accordingly.

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SHEET 3 OF 3
DETAILS OF APPROACH SLABS
INTERSTATE 40
OVER U.S. HWY 64
FAULKNER COUNTY

ROUTE 40 SEC. 32

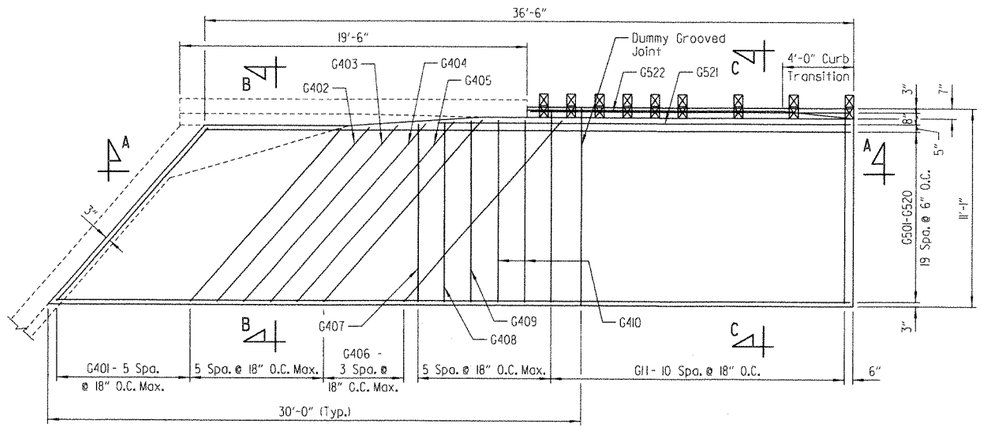
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CHECKED BY: ABH DATE: JUNE 2011 SCALE: AS SHOWN
DESIGNED BY: FLC DATE: JUNE 2011
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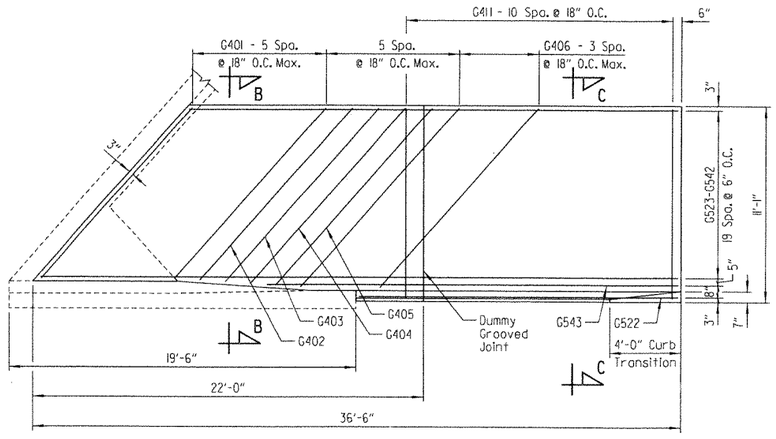
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WORKSPACE: AHTD Bridge
L:\2011\11075\04 - I-40 over Hwy 64 Bridge Replacement\Drawings\Sh No 52223A - Approach Slab Details (3 of 3).dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	224	452
				(1) 07226		APPROACH GUTTERS		52224



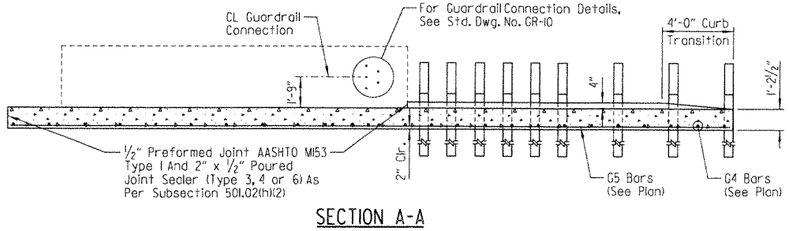
PLAN

Approach Gutter (Type Special I)
(End Bridge, Stage 4 Construction Shown;
Begin Bridge, Stage 6 Construction Similar)
Scale: 1/4" = 1'-0"



PLAN

Approach Gutter (Type Special I)
(End Bridge, Stage 6 Construction Shown;
Begin Bridge, Stage 4 Construction Similar)
Scale: 1/4" = 1'-0"



SECTION A-A

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

TABLE OF QUANTITIES FOR APPROACH GUTTERS ON ONE END OF BRIDGE

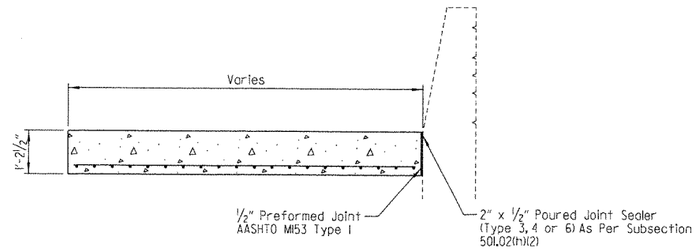
Class S(AE) Concrete	Reinforcing Steel (Gr. 60)
34.89 Cu. Yds.	2,111 lb.

BAR LIST - APPROACH GUTTERS

MARK	NO. REQ'D.	LENGTH	P.O.
G401	12	12'-10"	Str.
G402	2	13'-0"	Str.
G403	2	13'-1"	Str.
G404	2	13'-3"	Str.
G405	2	13'-4"	Str.
G406	8	13'-6"	Str.
G407	1	9'-11"	Str.
G408	1	10'-0"	Str.
G409	1	10'-1"	Str.
G410	2	10'-2"	Str.
G411	22	10'-9"	Str.
G501 To G520	1 Ea.	36'-4" To 44'-8"	Str.
G521	1	23'-3"	Str.
G522	2	18'-0"	Str.
G523 To G542	1 Ea.	27'-6" To 35'-11"	Str.
G543	1	23'-2"	Str.

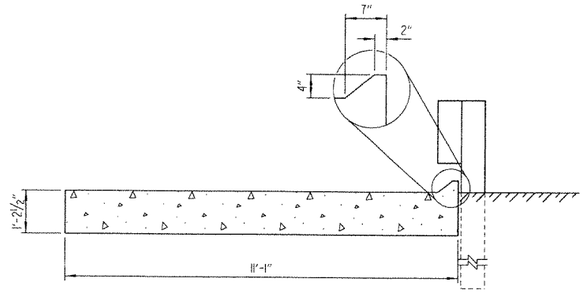
NOTES:
Bars Shown Are For Stage 4 Construction (Both Ends of Bridge). Bars For Stage 6 Are Similar.

Dimensions Of Bars Are Out-To-Out.



SECTION B-B

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



SECTION C-C

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

GENERAL NOTES

Concrete Shall Be Class S(AE) (f'c = 4,000 psi).

Reinforcing Steel Shall Conform To AASHTO M31 Or M53, Grade 60 (fy = 60,000 psi).

Approach Gutters Will Be Measured And Paid For In Accordance With Section 504 Of The Standard Specifications.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. RUDDELL

BRIDGE ENGINEER

DETAILS OF TYPE SPECIAL I APPROACH GUTTERS INTERSTATE 40 OVER U.S. HWY 64 FAULKNER COUNTY

ROUTE 40 SEC. 32

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: CWT DATE: JUNE 2011 FILENAME: BQ80388XI_GI.DGN
CHECKED BY: ABH DATE: JUNE 2011 SCALE: AS SHOWN
DESIGNED BY: PCC DATE: JUNE 2011

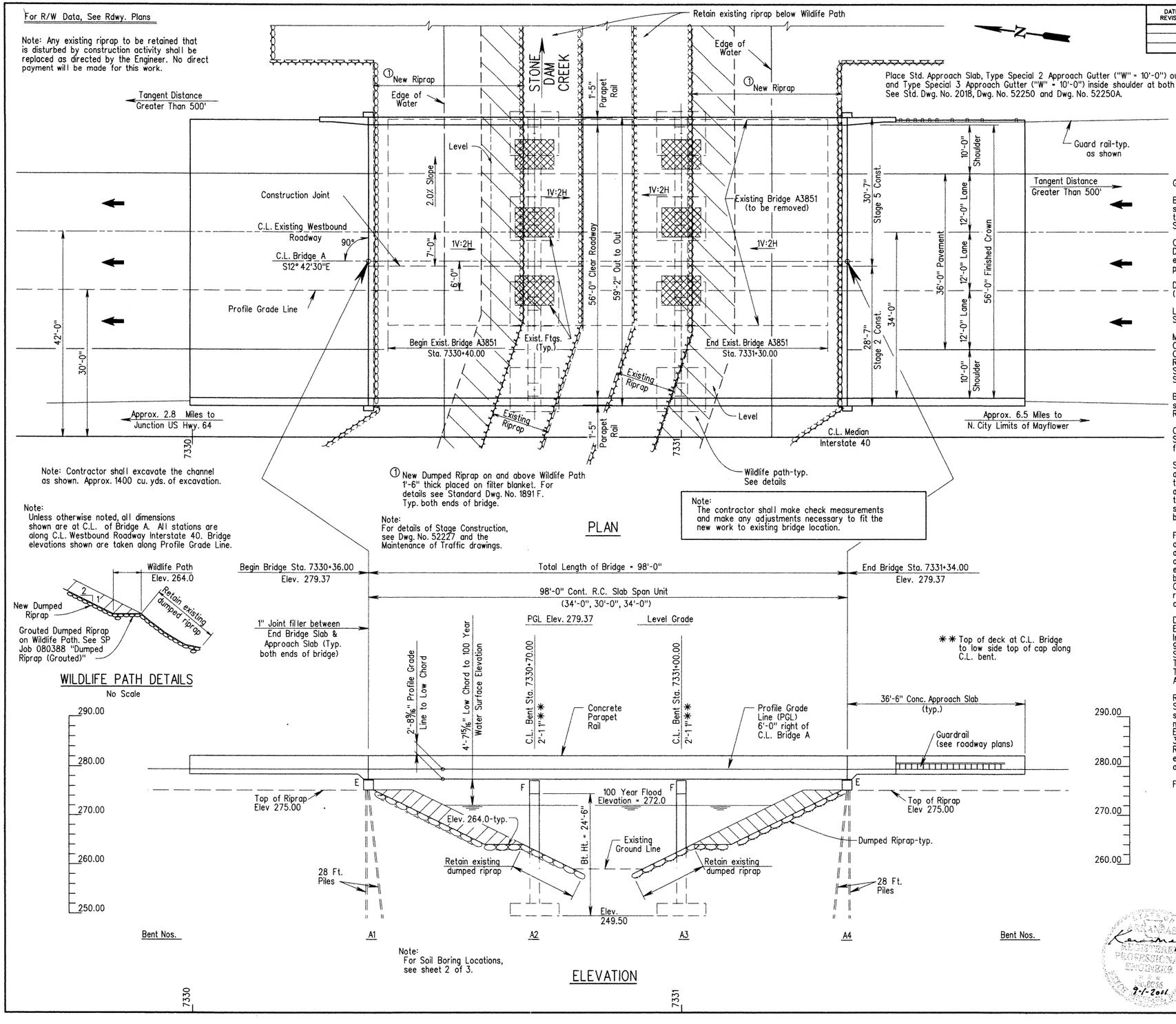
BRIDGE NO. 07226 DRAWING NO. 52224

ABHall
WORKSPACE: AHTD Bridge
L:\20IN\I07504 - I-40 over Hwy 64 Bridge Replacement\Drawings\Sh No 52224 - Approach Gutter Details (1 of 1).dgn
REVISED DATE:
8/29/2011 4:29:08 PM

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.		080388	225	52
				(1) A6883		LAYOUT		52225

For R/W Data, See Rdwy. Plans

Note: Any existing riprap to be retained that is disturbed by construction activity shall be replaced as directed by the Engineer. No direct payment will be made for this work.



Note: Contractor shall excavate the channel as shown. Approx. 1400 cu. yds. of excavation.

Note: Unless otherwise noted, all dimensions shown are at C.L. of Bridge A. All stations are along C.L. Westbound Roadway Interstate 40. Bridge elevations shown are taken along Profile Grade Line.

(1) New Dumped Riprap on and above Wildlife Path 1'-6" thick placed on filter blanket. For details see Standard Dwg. No. 1891 F. Typ. both ends of bridge.

Note: For details of Stage Construction, see Dwg. No. 52227 and the Maintenance of Traffic drawings.

PLAN

Note: The contractor shall make check measurements and make any adjustments necessary to fit the new work to existing bridge location.

WILDLIFE PATH DETAILS

No Scale

Note: For Soil Boring Locations, see sheet 2 of 3.

ELEVATION

GENERAL NOTES:

BENCH MARK: Elevations and stations are assumed to be the same as shown on the original plans. The original layout shows the elevation at the top of the deck and centerline of existing bridge to be at 278.18 at Sta. 7330+40.00 (Beg. of Br. A3851).

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (2003 edition), with applicable supplemental specifications and special provisions.

DESIGN SPECIFICATIONS: AASHTO Standard Specifications for Highway Bridges (1996 edition), with current interim specifications.

LIVE LOAD: HS20 + Military Loading METHOD OF DESIGN: Load Factor
SEISMIC PERFORMANCE CATAGORY: A

MATERIALS AND STRENGTHS:

Class S(AE) Concrete (superstructure)	f'c = 4,000 psi
Class S Concrete (substructure)	f'c = 3,500 psi
Reinforcing Steel (AASHTO M31 or M53, Gr. 60)	fy = 60,000 psi
Structural Steel (AASHTO M270, Gr. 36)	Fy = 36,000 psi
Structural Steel (AASHTO M270, Gr. 50W)	Fy = 50,000 psi

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

CLASS 1 PROTECTIVE SURFACE TREATMENT: Class 1 Protective Surface Treatment shall be applied to the roadway surface and to the face and top of the concrete parapet rail.

STEEL PILING: Piling for Bents shall be HP 12x53 and shall be driven with an approved air, steam, or diesel hammer to a minimum safe bearing capacity of 60 tons per pile. Lengths of piling shown are assumed for estimating quantities and for use in determining payment for cut off & build up in accordance with the Standard Specification. On all piles the contractor shall use approved steel H-Pile driving points. Piles in end bents to be driven after embankment to bottom of cap is in place.

FOOTINGS: Footings shall be set a minimum of 2'-0" into material designated as hard brown shale on the boring legend and shall have a minimum cover above top of footing of 1'-0". Foundations for footings shall be prepared in accordance with Section 801.04 of the Standard Specifications. Rock excavations shall be made to neat lines of the concrete footings. Care shall be excercised to avoid shattering of rock faces by excessive blasting. Concrete in footings shall be poured directly against excavated surfaces of rock. Footings shall be backfilled, and backfill shall conform to Subsection 801.08 of the Standard Specifications.

DETAIL DRAWINGS:	DRAWING NO.
End Bents	52228
Intermediate Bents	52229 & 52230
98'-0" Cont. R.C. Slab Span Unit	52231 thru 52234
Steel Piling	14995A
Type Special 2 Approach Gutters	52250
Type Special 3 Approach Gutters	52250A
Approach Slab	2018

REMOVAL AND SALVAGE: The existing bridges shall be removed in accordance with Section 205 of the Standard Specifications. All material from existing bridges shall become the property of the contractor. Complete removal of existing footing may be needed to construct new footing.
EXISTING BRIDGE: Existing Bridge A3851 is 38'-6" wide and 90'-0" long and consists of 3 R.C. Slab Spans Units (with voids) supported by substructures consisting of R.C. Int. Bents with multi-columns on spread footings and Pile End Bents. Plans for existing bridge will be made available to the Contractor upon request to Programs and Contracts Division. Existing Dwg. Nos. 12427, 12427A, 5431-A4, 5434A & 5434B.

For additional GENERAL NOTES, see Dwg. 52226.

SHEET 1 OF 3

BRIDGE A LAYOUT
INTERSTATE 40 BRIDGE OVER
STONE DAM CREEK
HWY. 65 - EAST (WIDENING) (F)
FAULKNER COUNTY
ROUTE I-40 SEC.32

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

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CHECKED BY: DKM/JM DATE: Sept 2011 SCALE: 1" = 10'
DESIGNED BY: KMM/KM DATE: Sept 2011

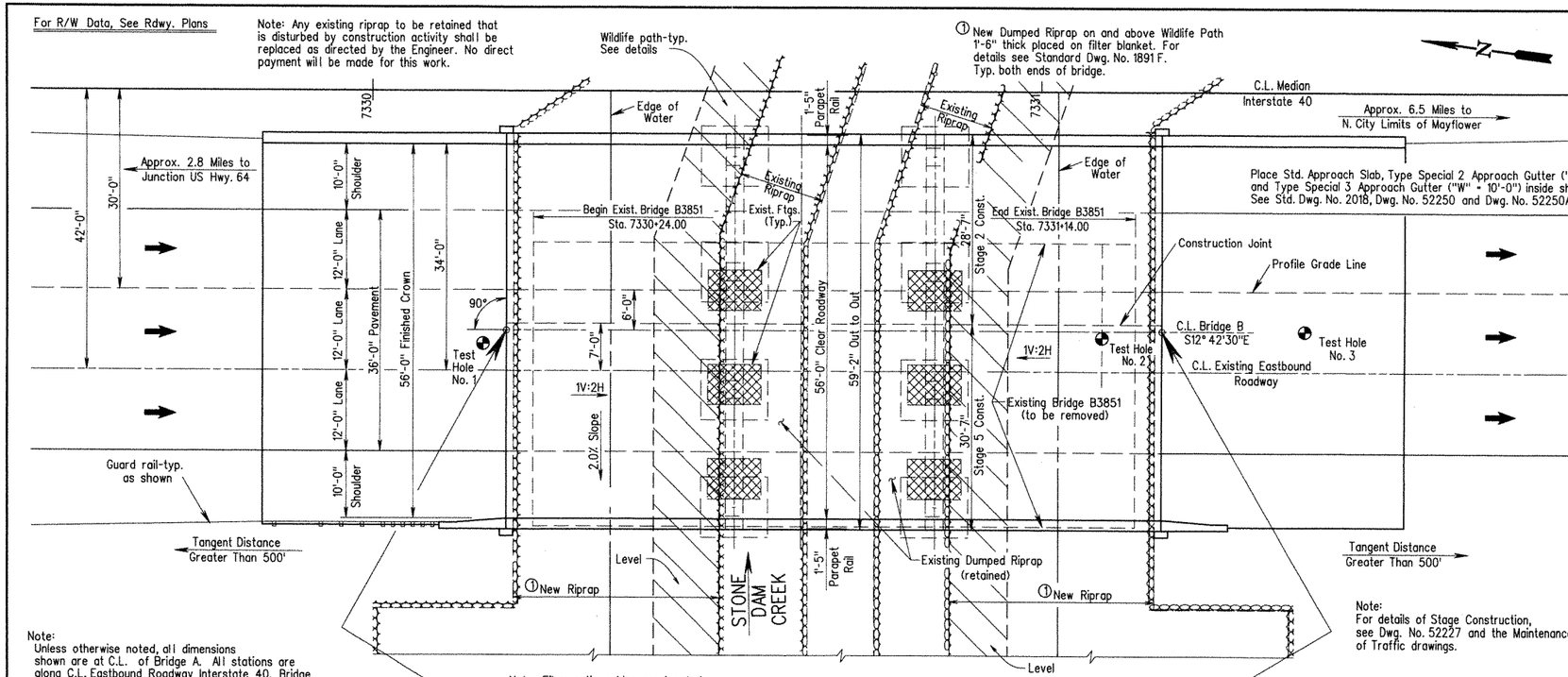
BRIDGE NO. A6883 DRAWING NO. 52225

STATE OF ARKANSAS Kenneth Mayo REGISTERED PROFESSIONAL ENGINEER No. 9-1-2011

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.		080388	226	452
				(1) B6883		LAYOUT		52226

For R/W Data, See Rdwy. Plans

Note: Any existing riprap to be retained that is disturbed by construction activity shall be replaced as directed by the Engineer. No direct payment will be made for this work.



Note:
Unless otherwise noted, all dimensions shown are at C.L. of Bridge A. All stations are along C.L. Eastbound Roadway Interstate 40. Bridge elevations shown are taken along Profile Grade Line.

Note: Fiber optic cables are located approx. 50 ft right (looking ahead) of C.L. Existing Bridge B.

PLAN

Note:
For details of Stage Construction, see Dwg. No. 52227 and the Maintenance of Traffic drawings.

GENERAL NOTES: (CONTINUED)

DETAIL DRAWINGS:

	DRAWING NO.
End Bents	52228
Intermediate Bents	52229 & 52230
98'-0" R.C. Slab Span Unit	52231 thru 52234
Steel Piling	14995A
Type Special 2 Approach Gutters	52250
Type Special 3 Approach Gutters	52250A
Approach Slab	2018

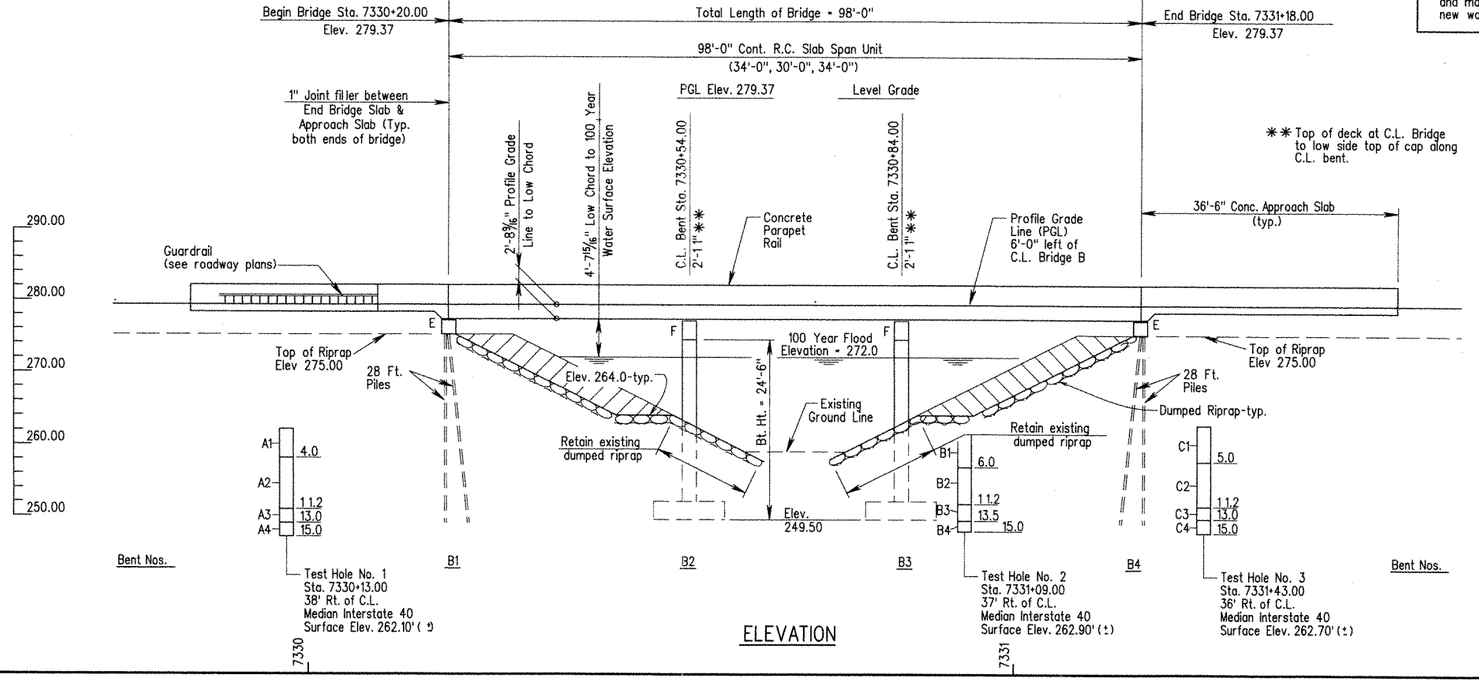
EXISTING BRIDGE: Existing Bridge B3851 is 38'-6" wide and 90'-0" long and consists of 3 R.C. Slab Spans Units (with voids) supported by substructures consisting of R.C. Int. Bents with multi-columns on spread footings and Pile End Bents. Plans for existing bridge will be made available to the Contractor upon request to Programs and Contracts Division. Existing Dwg. Nos. 12427, 12427A, 5431-A4, 5434A & 5434B.

MAINTENANCE OF TRAFFIC: Details which relate to maintenance of traffic are shown on the bridge plans for information only; however, payment, job special provisions, etc. are considered as part of the roadway plans.

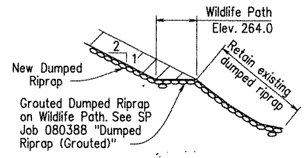
For Soil Boring Legend, see Dwg. No. 52227.

For additional GENERAL NOTES, see Dwg. No. 52225.

Note:
The contractor shall make check measurements and make any adjustments necessary to fit the new work to existing bridge location.



ELEVATION



WILDLIFE PATH DETAILS
No Scale

SHEET 2 OF 3

BRIDGE B LAYOUT
INTERSTATE 40 BRIDGE OVER
STONE DAM CREEK
HWY. 65 - EAST (WIDENING) (F)
FAULKNER COUNTY
ROUTE I-40 SEC.32

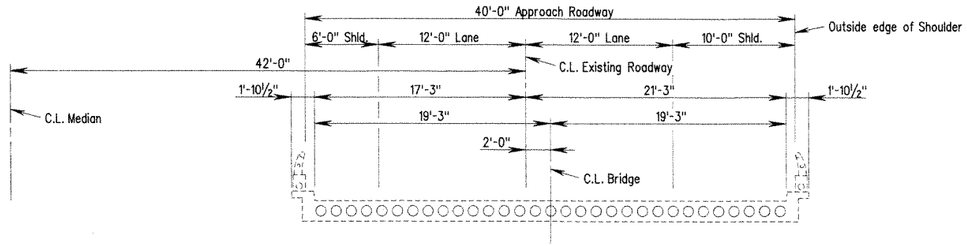
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

STATE OF ARKANSAS — REGISTERED PROFESSIONAL ENGINEER — No. 9396 — 9-1-2011

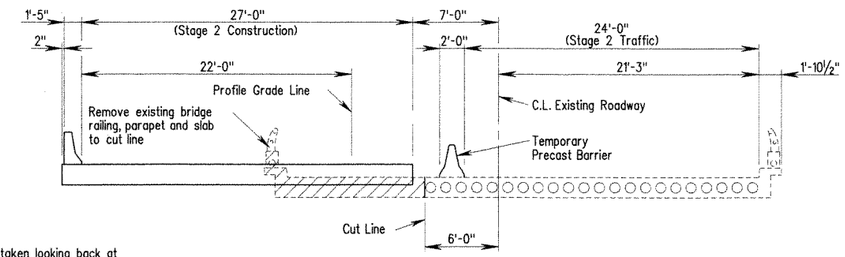
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DESIGNED BY: KMM\KM DATE: Sept 2011

BRIDGE NO. B6883 DRAWING NO. 52226

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		080388	227	452
				(1)	A6883, B6883	LAYOUT		52227

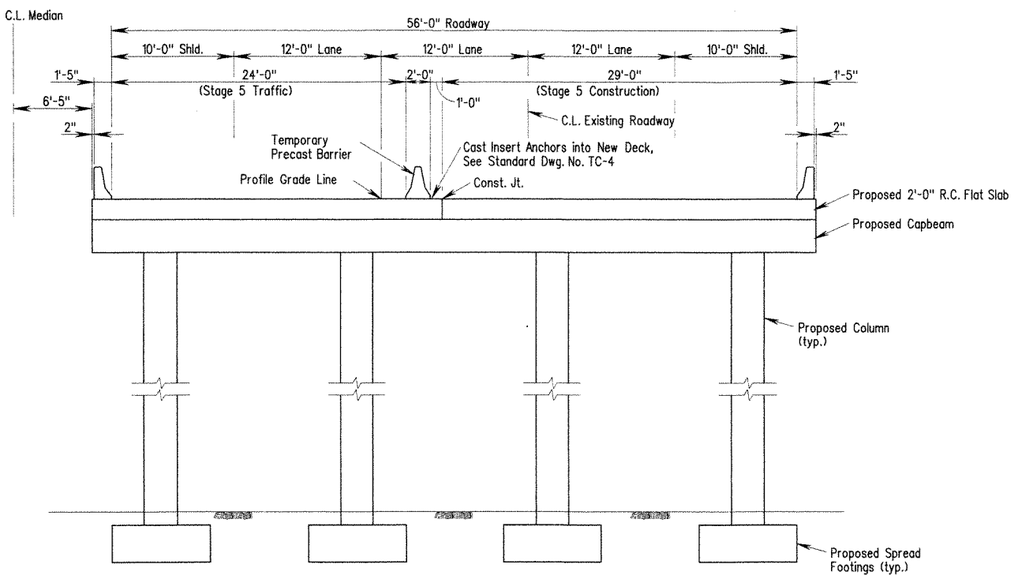


EXISTING
N.T.S.



Note:
Sections are taken looking back at Bridge "A" and looking ahead at Bridge "B".

STAGE 2 CONSTRUCTION
N.T.S.



STAGE 5 CONSTRUCTION
N.T.S.

Test Hole No. 1
Sta. 7330+13 - 38' Rt. of C.L. Median Interstate 40

BORING LEGEND	BORING "N" VALUES
A1 -Soft brown sandy Clay - moist	Not Available
A2 - Medium firm brown sandy Clay	
A3 - Hard brown Shale - dry	
A4 - Very hard blue Shale - dry	

Test Hole No. 2
Sta. 7331+09 - 37' Rt. of C.L. Median Interstate 40

BORING LEGEND	BORING "N" VALUES
B1 -Soft brown sandy Clay - moist	Not Available
B2 - Medium firm brown sandy Clay - moist	
B3 - Hard brown Shale	
B4 - Very hard blue Shale	

Test Hole No. 3
Sta. 7331+43 - 36' Rt. of C.L. Median Interstate 40

BORING LEGEND	BORING "N" VALUES
C1 -Soft brown sandy Clay - moist	Not Available
C2 - Medium firm brown sandy Clay	
C3 - Hard brown Shale	
C4 - Very hard blue Shale	

Note:
Details that pertain to Maintenance of Traffic shown on bridge plans are for information only. See Roadway Plans for Maintenance of Traffic.

For details of temporary barriers, see Std. Dwg. Nos. TC-4 & TC-5.

Note:
- For General Notes, see Dwg. Nos. 52225 and 52226.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
9-7-11
DATE

SHEET 3 OF 3

BRIDGE A & B LAYOUT
INTERSTATE 40 BRIDGE OVER
STONE DAM CREEK
HWY. 65 - EAST (WIDENING) (F)
FAULKNER COUNTY
ROUTE I-40 SEC.32

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

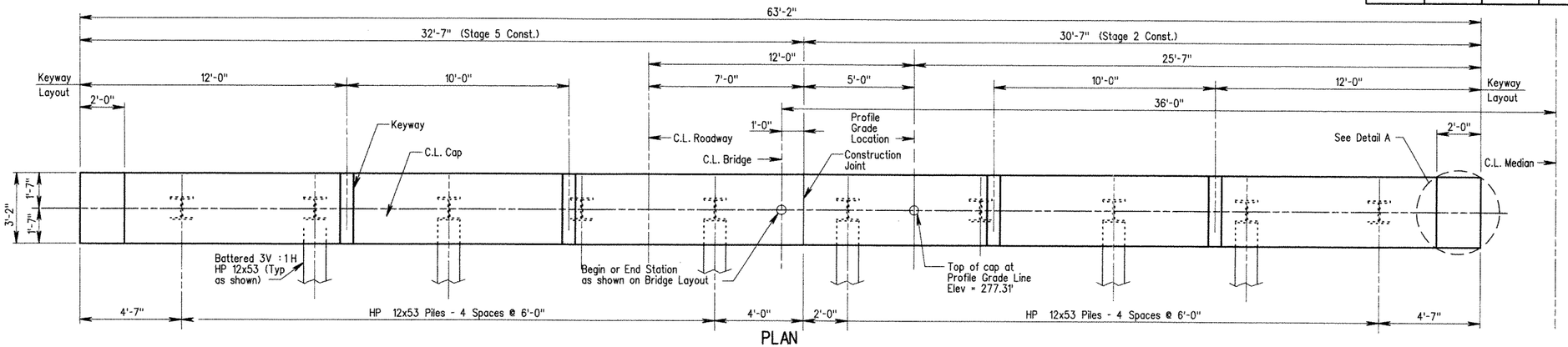
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DESIGNED BY: KMM/KM DATE: Sept 2011

BRIDGE NO. A6883, B6883 DRAWING NO. 52227

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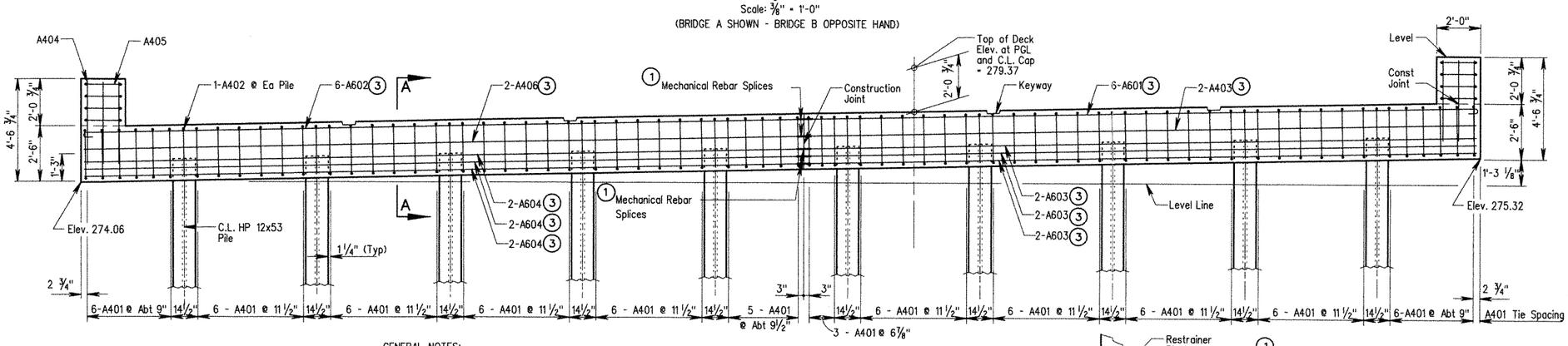
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6	ARK.			
JOB NO.		080388	228	452

(1) A6883 & B6883 — END BENT DETAILS — 52228



PLAN

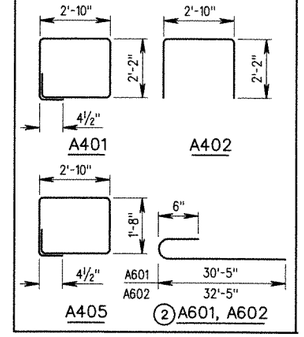
Looking Ahead
Scale: 3/8" = 1'-0"
(BRIDGE A SHOWN - BRIDGE B OPPOSITE HAND)



BAR LIST - PER END BENT

MK	No. Req'd.	Length	Dia. Pin
A401	68	10'-4"	2"
A402	10	7'-0"	2"
A403	2	30'-5"	Str.
A404	28	3'-7"	Str.
A405	8	9'-4"	2"
A406	2	32'-5"	Str.
A601	6	31'-1"	4 1/2"
A602	6	33'-1"	4 1/2"
A603	6	30'-5"	Str.
A604	6	32'-5"	Str.

Bending Diagrams
(Dimensions are out to out of bars)



Note:
Pour Restrainer Block after slab is in place. For General Notes, see Dwg. No. 52225.

(2) The lengths shown are from end of bar to the required construction joint. Individual lengths shall be determined by the Contractor based on the type of mechanical coupler used.

GENERAL NOTES:

All concrete shall be Class "S" with a minumum 28 day compressive strength f'c = 3500 psi. Concrete shall be poured in the dry and all exposed corners to be chamfered 3/4" unless otherwise noted.

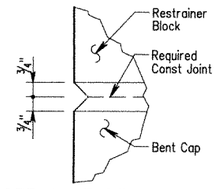
All reinforcing steel shall conform to AASHTO M31 or M53, Grade 60 (yield strength = 60,000 psi.).

For additional information, see Layout.

ELEVATION

Looking Ahead
Scale: 3/8" = 1'-0"
Looking Back @ Bent 1, Br. B (Bent 1, Br. A is opposite hand)
Looking Ahead @ Bent 4, Br. A (Bent 4, Br. B is opposite hand)

Note:
For H-Pile Details see Standard Drawing 14995A



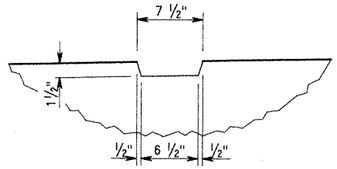
CHAMFER DETAIL AT RESTRAINER BLOCK

NTS

(1) These bars shall have mechanical rebar splices. They shall develop at least 125% of the specified yield strength of the bar.

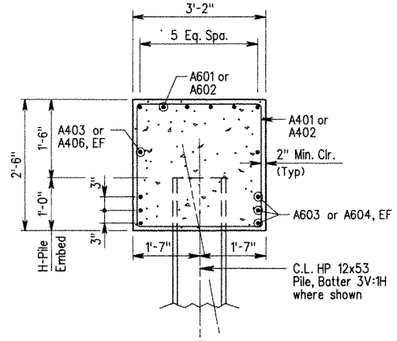
The mechanical rebar splices shall be from the AHTD Qualified Products List (QPL) and shall maintain minimum clearances shown. Their payment shall be considered subsidiary to the item "Reinforcing Steel-Bridge (Grade 60)".

(3) These bars shall have mechanical rebar splices.



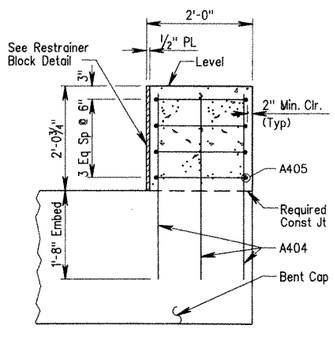
DETAIL OF KEYWAY

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



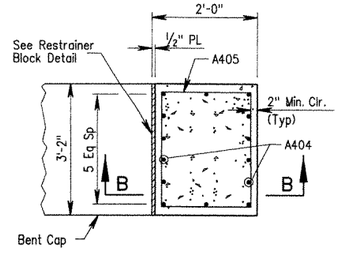
SECTION A-A

N.T.S.



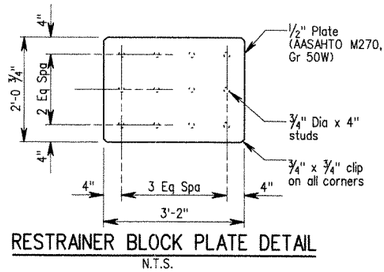
SECTION B-B

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



DETAIL A

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



RESTRAINER BLOCK PLATE DETAIL

N.T.S.

Note:
3/4" dia studs shall be granular flux filled, solid fluxed or equal, and automatically end welded in accordance with the recommendations of the manufacturer.

Studs and plate shall be considered subsidiary to the item "Class S Concrete - Bridge".



SHEET 1 OF 1

DETAILS OF END BENTS
INTERSTATE 40 BRIDGE OVER
STONE DAM CREEK
ROUTE SEC.

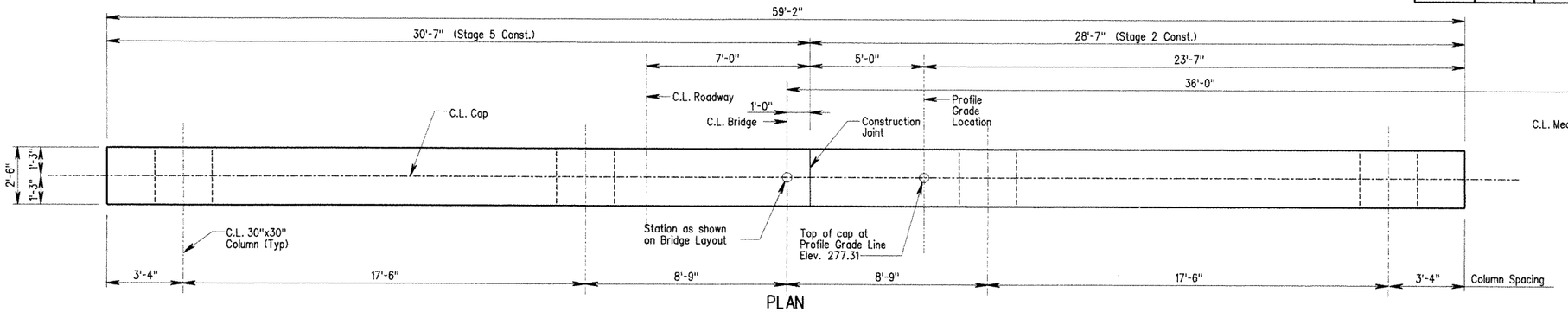
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: DK/KR DATE: Sept 2011 FILENAME: FILENAME
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DESIGNED BY: TT/PG DATE: Sept 2011

BRIDGE NO. A6883 & B6883 DRAWING NO. 52228

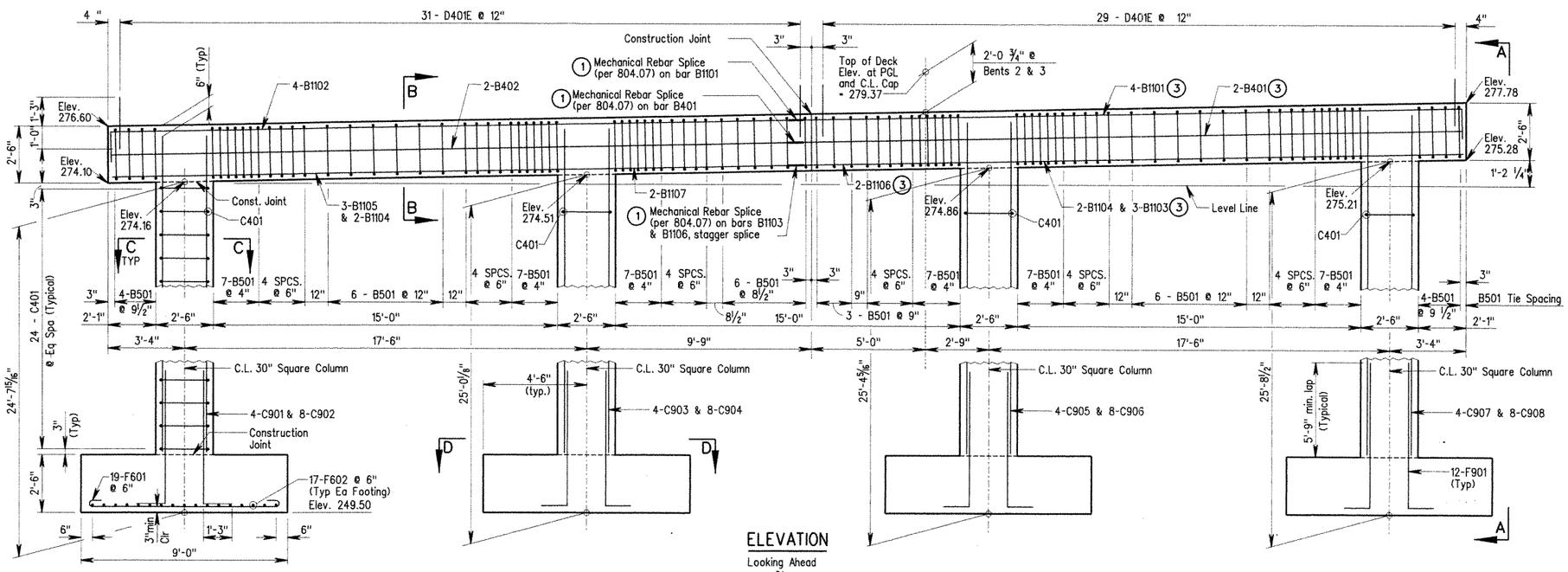
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	229	452

(1) A6883 & B6883 BENT2 2 & 3 DETAILS 52229



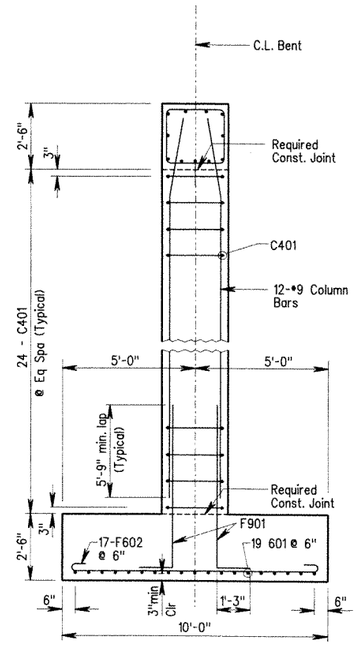
PLAN

Looking Ahead
Scale: 3/8" = 1'-0"
(BRIDGE A SHOWN - BRIDGE B OPPOSITE HAND)



ELEVATION

Looking Ahead
Scale: 3/8" = 1'-0"
(BRIDGE A SHOWN - BRIDGE B OPPOSITE HAND)



SECTION A-A

Scale: 3/8" = 1'-0"

(1) These bars shall have mechanical rebar splices. They shall develop at least 125% of the specified yield strength of the bar.

The mechanical rebar splices shall be from the AHTD Qualified Products List (QPL) and shall maintain minimum clearances shown. Their payment shall be considered subsidiary to the item "Reinforcing Steel-Bridge (Grade 60)".

(3) These bars shall have mechanical rebar splices.

GENERAL NOTES:

All concrete shall be Class "S" with a minumum 28 day compressive strength f'c = 3500 psi. Concrete shall be poured in the dry and all exposed corners to be chamfered 3/4" unless otherwise noted.

All reinforcing steel shall conform to AASHTO M31 or M53, Grade 60 (yield strength = 60,000 psi.).

For additional information, see Layout.

KENNETH GENE MAY REGISTERED PROFESSIONAL ENGINEER 9-2-2011

SHEET 1 OF 2

DETAILS OF BENT NOS. 2 & 3
INTERSTATE 40 BRIDGE OVER
STONE DAM CREEK
ROUTE SEC.

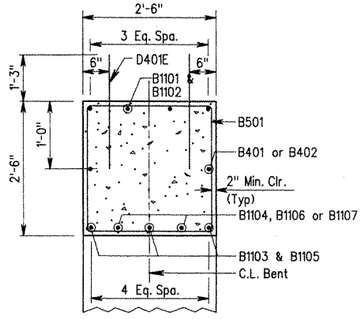
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: DK/KR DATE: Sept 2011 FILENAME: FILENAME
CHECKED BY: KG/KM DATE: Sept 2011 SCALE: AS SHOWN
DESIGNED BY: TT/PG DATE: Sept 2011

BRIDGE NO. A6883 & B6883 DRAWING NO. 52229

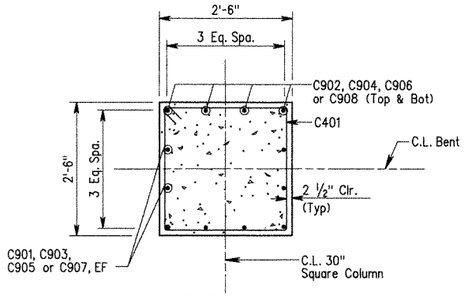
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				6	ARK.			
				JOB NO.		080388	230	452

(1) A6883 & B6883 BENTS 2 & 3 DETAILS 52230



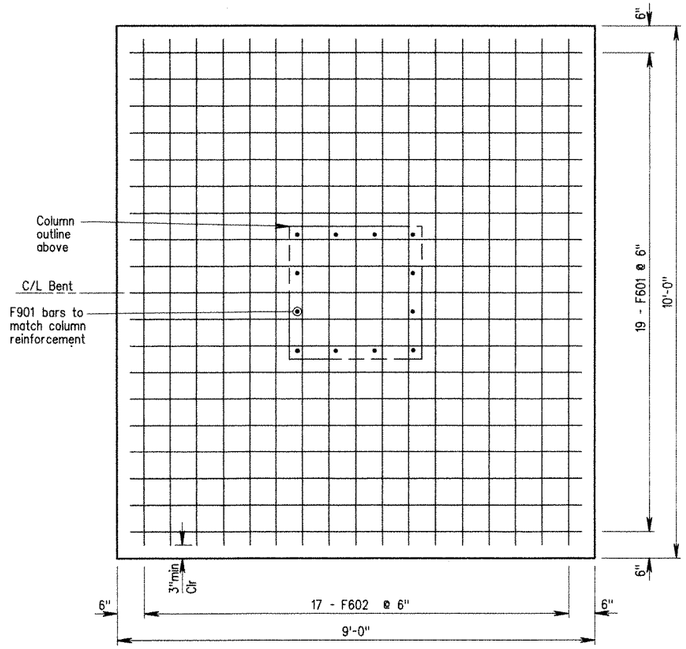
SECTION B-B

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



SECTION C-C

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



SECTION D-D

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

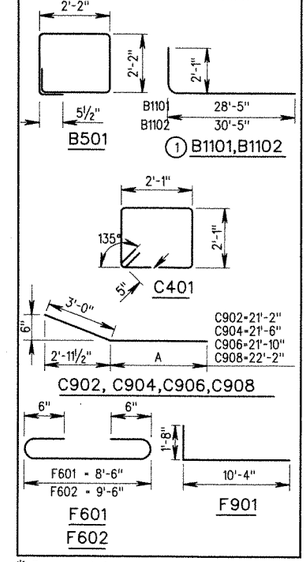
(1) The lengths shown are from end of bar to the required construction joint. Individual lengths shall be determined by the Contractor based on the type of mechanical coupler used.

BAR LIST - PER BENT (2 & 3)

	MK	No. Req'd.	Length	Dia. Pin
CAP	B401	2	28'-5"	Str.
	B402	2	30'-5"	Str.
	B501	95	9'-2"	2 1/2"
	B1101	4	30'-1"	11 1/4"
	B1102	4	32'-1"	11 1/4"
	B1103	3	28'-5"	Str.
	B1104	4	15'-0"	Str.
	B1105	3	30'-5"	Str.
	B1106	2	6'-6"	Str.
	B1107	2	8'-6"	Str.
	* D401E	120	2'-3"	Str.
COL	C401	96	8'-8"	2"
	C901	4	24'-2"	Str.
	C902	8	24'-2"	9"
	C903	4	24'-6"	Str.
	C904	8	24'-6"	9"
	C905	4	24'-10"	Str.
	C906	8	24'-10"	9"
	C907	4	25'-2"	Str.
	C908	8	25'-2"	9"
FND	F601	76	9'-10"	4 1/2"
	F602	68	10'-10"	4 1/2"
	F901	48	11'-9"	9"

Bending Diagrams

(Dimensions are out to out of bars)



* Epoxy coated

For General Notes, see dwg. no. 52225.

SHEET 2 OF 2

DETAILS OF BENT NOS. 2 & 3
INTERSTATE 40 BRIDGE OVER
STONE DAM CREEK

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

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CHECKED BY: KG/KM DATE: Sept 2011 SCALE: AS SHOWN
DESIGNED BY: TT/PG DATE: Sept 2011

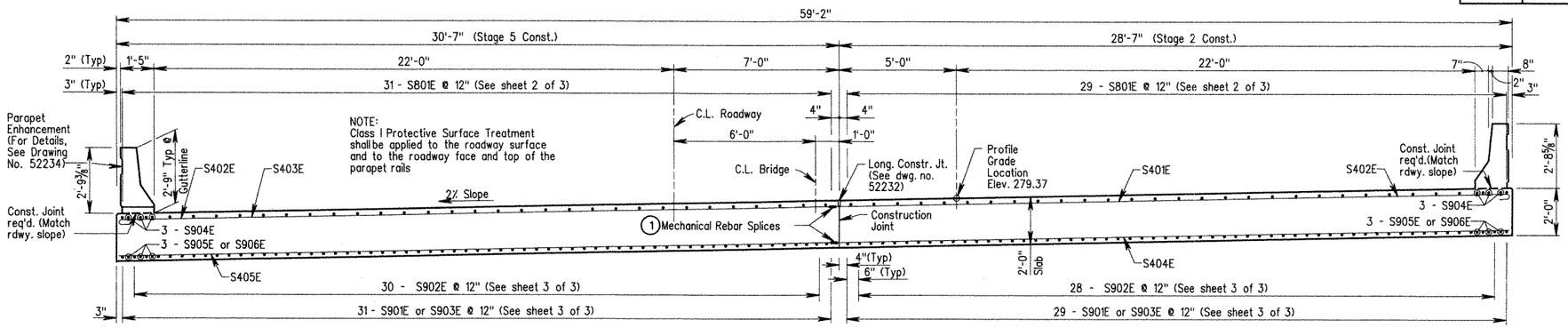
BRIDGE NO. A6883 & B6883 DRAWING NO. 52230



rb 12-21-01

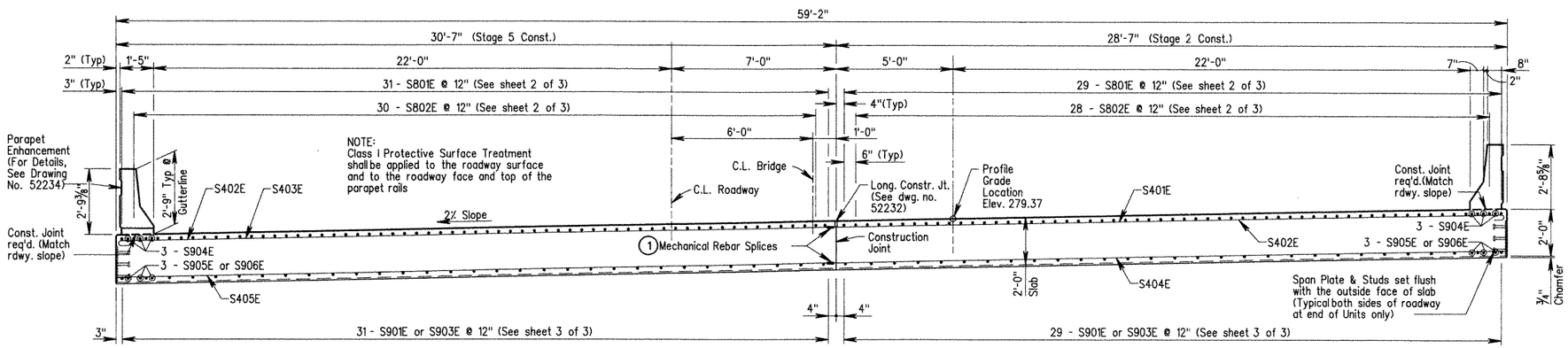
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				6	ARK.			
				JOB NO.		080388	231	452

(1) A6883 & B6883 — 98' CONT. R.C. SLAB UNIT — 52231



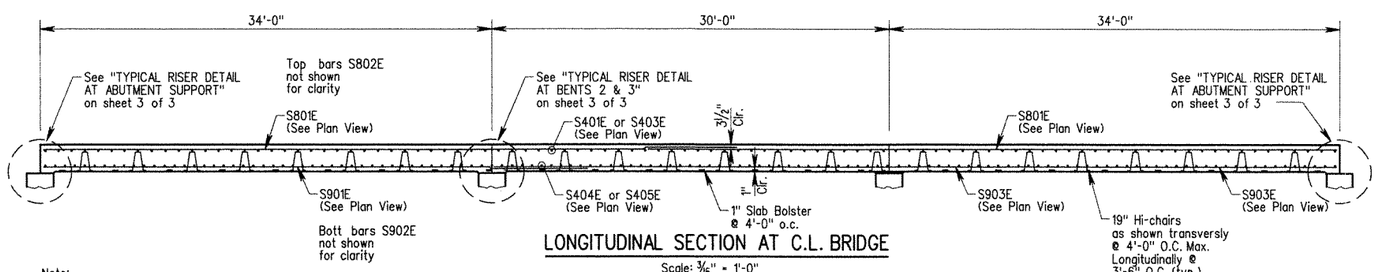
TYPICAL ROADWAY SECTION AT MID-SPAN

Looking Ahead
Scale: ⅜" = 1'-0"
(BRIDGE A SHOWN - BRIDGE B OPPOSITE HAND)



TYPICAL ROADWAY SECTION OVER BENT

Looking Ahead
Scale: ⅜" = 1'-0"
(BRIDGE A SHOWN - BRIDGE B OPPOSITE HAND)



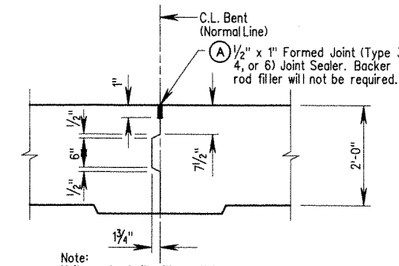
LONGITUDINAL SECTION AT C.L. BRIDGE

Scale: 3/16" = 1'-0"

Note:
Reinforcing is to be accurately located in the forms and firmly held in place by steel wire supports, sufficient in number and size to prevent displacement during the course of construction. The wire supports will not be paid for directly but will be considered subsidiary to the item "Epoxy Coated Reinforcing Steel (Grade 60)".

(1) These bars shall be epoxy coated mechanical rebar splices. They shall develop at least 125% of the specified yield strength of the bar.

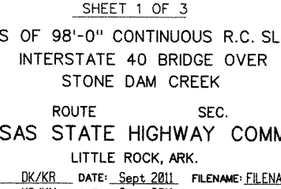
The mechanical rebar splices shall be from the AHTD Qualified Products List (QPL) and shall maintain minimum clearances shown. Their payment shall be considered subsidiary to the item "Epoxy Coated Reinforcing Steel (Grade 60)".



Note:
Unit can be built with partial pours terminating at ends of spans only

OPTIONAL DECK SLAB CONSTRUCTION JOINT DETAIL

NTS



REQUIRED SLAB JOINT DETAIL

NTS

Note:
Slab joint to be placed over each interior bent and other locations as shown on top slab plan

(A) Use ½"x 1" Type 3, 4, or 6 Joint Sealer. See Section 501.02(h) and 501.05(j). Backer Rod filler will not be required. Joint Sealer shall be measured and paid for as Class S(AE) Concrete-Bridge. Slab joints shall extend to the outside edge of the deck slab. Slab joints shall be installed before the falsework is removed and before the parapet railing is poured. If slab joints are to be sawed, they shall be sawed as soon as the concrete has sufficiently set to allow sawing of the joint without damage to the slab. Slab Joints shall be placed at required slab joint locations. No Joint sealer shall be placed under the parapet rails. Slab joints shall align with parapet open joints.

GENERAL NOTES:

All concrete shall be Class "S(AE)" with a minumum 28 day compressive strength f'c = 4000 psi. Concrete shall be poured in the dry and all exposed corners to be chamfered ¾" unless otherwise noted.

All reinforcing steel shall conform to AASHTO M31 or M53, Grade 60 (yield strength = 60,000 psi.).

For additional information, see Layout.

Dead Load 324 lb/sf (Includes 24 lb/sf future surface)

Live Load 0.185 wheels/ft of width + impact

SHEET 1 OF 3

DETAILS OF 98'-0" CONTINUOUS R.C. SLAB UNIT INTERSTATE 40 BRIDGE OVER STONE DAM CREEK

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

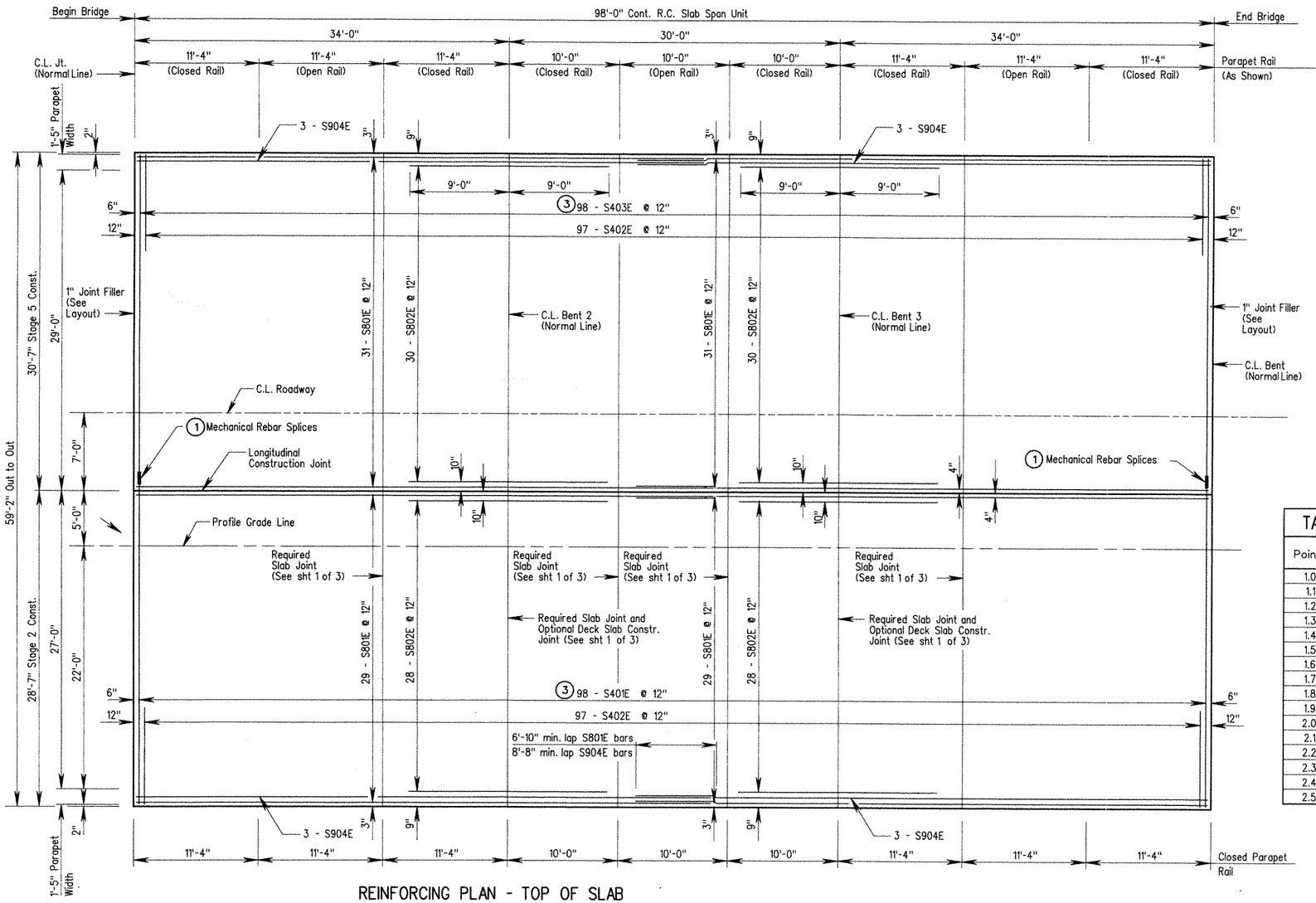
STATE OF ARKANSAS — Kevin Mayo — REGISTERED PROFESSIONAL ENGINEER — No. 10966 — 9-1-2011 — KEVIN MICHAEL MAYO

DRAWN BY: DK/KR DATE: Sept 2011 FILENAME: FILENAME
CHECKED BY: KG/KM DATE: Sept 2011 SCALE: AS SHOWN
DESIGNED BY: TT/CZ DATE: Sept 2011

BRIDGE NO. A6883 & B6883 DRAWING NO. 52231

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.		080388	232	452
(1) A6883 & B6883	98' CONT. R.C. SLAB UNIT		52232	



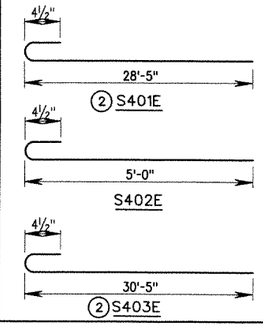
REINFORCING PLAN - TOP OF SLAB

Scale: 3/16" = 1'-0"
(BRIDGE A SHOWN - BRIDGE B OPPOSITE HAND)

BAR LIST - PER UNIT

	MK	No. Req'd.	Length	Dia. Pin
TOP	S401E	98	28'-11"	3"
	S402E	194	5'-6"	3"
	S403E	98	30'-11"	3"
	S801E	120	52'-6"	Str.
	S802E	116	18'-0"	Str.
	S904E	12	53'-6"	Str.
BOTTOM	S404E	131	28'-5"	Str.
	S405E	131	30'-5"	Str.
	S901E	60	45'-0"	Str.
	S902E	116	27'-0"	Str.
	S903E	60	60'-0"	Str.
	S905E	6	45'-0"	Str.
	S906E	6	60'-0"	Str.
PARAPET	P401E	194	6'-4"	2"
	P402E	194	8'-1"	2"
	P403E	30	5'-9"	2"
	P404E	30	3'-5"	2"
	P405E	39	9'-7"	Str.
	P406E	78	10'-11"	Str.
	P601E	5	9'-7"	Str.
	P602E	10	10'-11"	Str.

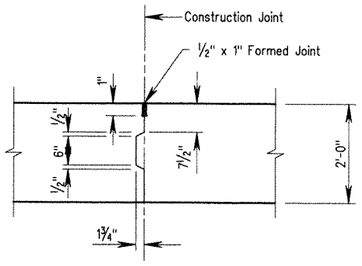
Bending Diagrams
(Dimensions are out to out of bars)



(2) The lengths shown are from end of slab to the required construction joint. Individual lengths shall be determined by the Contractor based on the type of mechanical coupler used.

TABLE SYMM ABOUT PT 2.5

Point	Immediate Deflection	Total Deflection
1.0	0"	0"
1.1	1/16"	1/8"
1.2	1/16"	1/2"
1.3	1/8"	7/16"
1.4	3/16"	9/16"
1.5	3/16"	1/2"
1.6	1/8"	3/8"
1.7	1/16"	1/2"
1.8	0"	1/8"
1.9	0"	1/16"
2.0	0"	0"
2.1	0"	0"
2.2	0"	0"
2.3	0"	0"
2.4	0"	0"
2.5	0"	0"



LONGITUDINAL CONSTRUCTION JOINT DETAIL

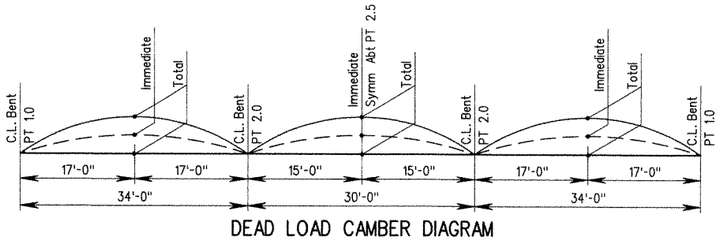
NTS

Use ½"x 1" Type 3, 4, or 6 Joint Sealer. See Section 501.02(h) and 501.05(j) of the Standard Specifications. Backer Rod filler will not be required. Joint Sealer shall be measured and paid for as Class S(AE) Concrete Bridge. Color shall be gray or other color similar to concrete.

(1) These bars shall be epoxy coated mechanical rebar splices. They shall develop at least 125% of the specified yield strength of the bar.

The mechanical rebar splices shall be from the AHTD Qualified Products List (QPL) and shall maintain minimum clearances shown. Their payment shall be considered subsidiary to the item "Epoxy Coated Reinforcing Steel (Grade 60)".

Note:
No part of the falsework for each stage of the unit shall be removed until all of the concrete in the bridge deck slab for each stage has been placed and cured. Any railing pours made before the entire slab unit has been placed must be approved by the Engineer. At least 72 hours shall elapse between adjacent pours. Concrete in bridge superstructure shall be consolidated for the entire pour before any concrete has taken its initial set. This may require the use of a retarding agent. The contractor must obtain approval from the Engineer for any deviation from the pouring sequence shown.



DEAD LOAD CAMBER DIAGRAM

Tolerance +1/4 for camber and vertical alignment. Camber shown is from a chord from centerline bent to centerline bent. Vertical alignment correction are not included.

Notes:
For General Notes, see dwg. no. 52225.
For Parapet Rail bar bending diagrams, see dwg. no. 52234.
All bars to be epoxy coated. See Section 804 of the Standard Specifications for Epoxy Coated Reinforcing Steel (Grade 60).

Note:
Required slab joints shall align with parapet open joints.

(3) These bars shall have mechanical rebar splices.

STATE OF ARKANSAS
KEVIN REGISTERED PROFESSIONAL ENGINEER
9-7-2011

SHEET 2 OF 3

DETAILS OF 98'-0" CONTINUOUS R.C. SLAB UNIT
INTERSTATE 40 BRIDGE OVER
STONE DAM CREEK

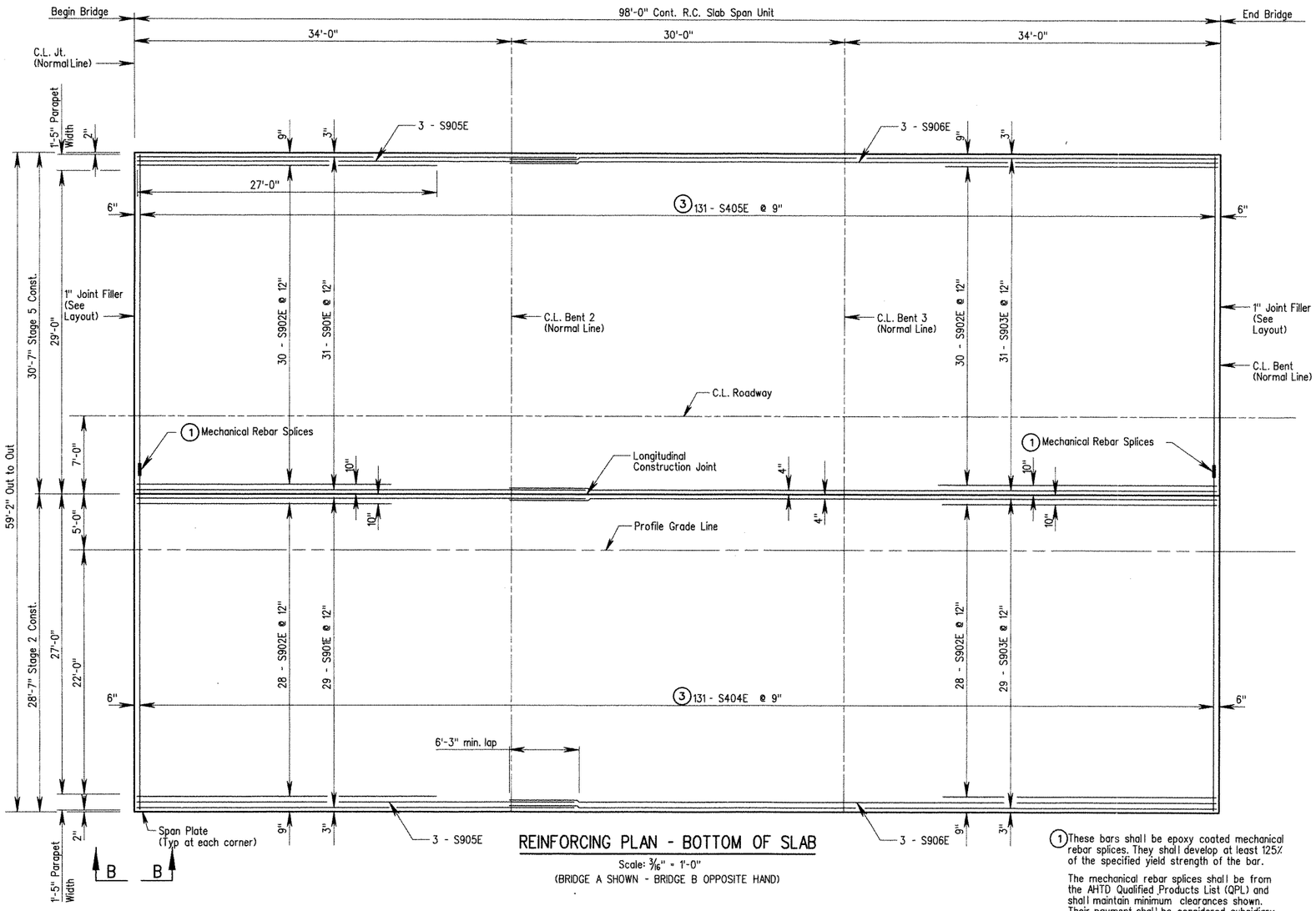
ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: DK/KR DATE: Sept 2011 FILENAME: FILENAME
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DESIGNED BY: TT/CZ DATE: Sept 2011

BRIDGE NO. A6883 & B6883 DRAWING NO. 52232

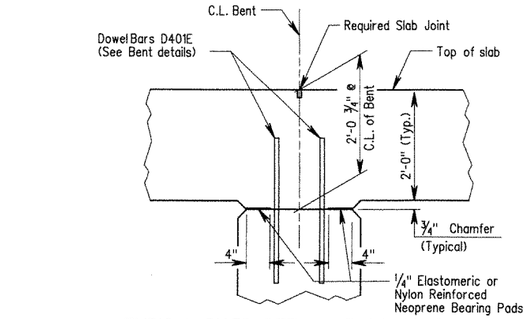
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				6	ARK.			
				JOB NO.		080388	232	452
				(1) A6883 & B6883		98' CONT. R.C. SLAB UNIT		52233



REINFORCING PLAN - BOTTOM OF SLAB

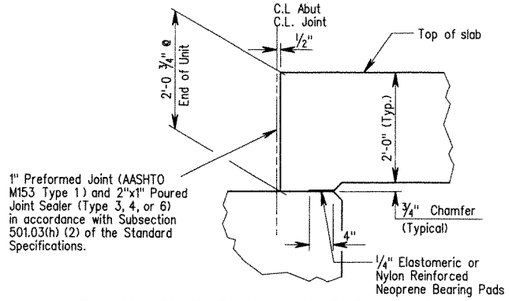
Scale: 3/16" = 1'-0"

(BRIDGE A SHOWN - BRIDGE B OPPOSITE HAND)



TYPICAL RISER DETAIL AT BENTS 2 & 3

NTS



TYPICAL RISER DETAIL AT ABUTMENT SUPPORT

NTS

Note:
Elastomeric or Nylon Reinforced Neoprene Bearing Pads shall be measured and paid for as "Class S(AE) Concrete - Bridge." The pad shall be one piece for the full length of the bearing for each stage width of construction. The elastomeric bearing pad shall meet the requirements of section 808 of the standard specifications for unreinforced pads. The nylon reinforced neoprene pad material shall meet the requirements of section 807.20 of the standard specifications.

Note:
No part of the falsework for each stage of the unit shall be removed until all of the concrete in the bridge deck slab for each stage has been placed and cured. Any railing pours made before the entire slab unit has been placed must be approved by the Engineer. At least 72 hours shall elapse between adjacent pours. Concrete in bridge superstructure shall be consolidated for the entire pour before any concrete has taken its initial set. This may require the use of a retarding agent. The contractor must obtain approval from the Engineer for any deviation from the pouring sequence shown.

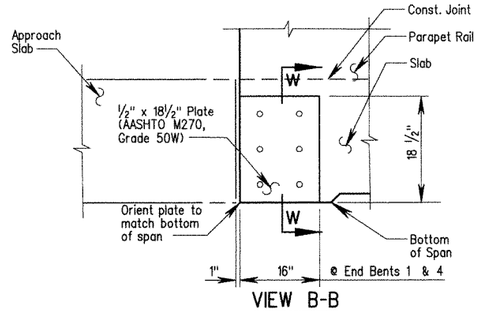
(1) These bars shall be epoxy coated mechanical rebar splices. They shall develop at least 125% of the specified yield strength of the bar.

The mechanical rebar splices shall be from the AHTD Qualified Products List (QPL) and shall maintain minimum clearances shown. Their payment shall be considered subsidiary to the item "Epoxy Coated Reinforcing Steel (Grade 60)".

(3) These bars shall have mechanical rebar splices.

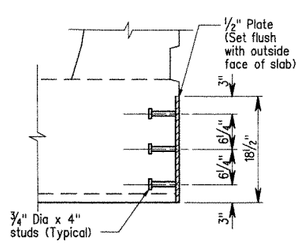
Note:
3/4" dia studs shall be granular flux filled, solid fluxed or equal, and automatically end welded in accordance with the recommendations of the manufacturer.

Studs and plate shall be considered subsidiary to the item "Class S(AE) Concrete - Bridge".



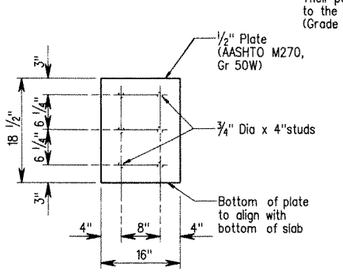
VIEW B-B

NTS



SECTION W-W

NTS



DETAIL OF SPAN PLATE

NTS

SHEET 3 OF 3

DETAILS OF 98'-0" CONTINUOUS R.C. SLAB UNIT

INTERSTATE 40 BRIDGE OVER

STONE DAM CREEK

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

STATE OF ARKANSAS — KENNETH GENE MAYO — REGISTERED PROFESSIONAL ENGINEER — 9-16-11

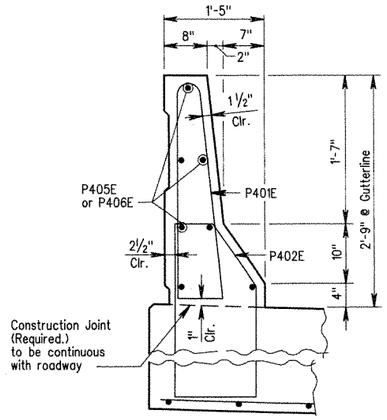
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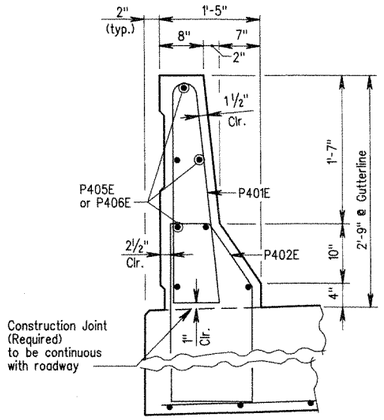
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BRIDGE NO. A6883 & B6883 DRAWING NO. 52233

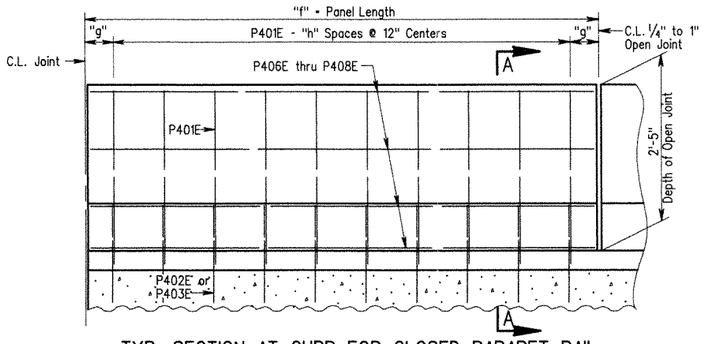
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				6	ARK.			
				JOB NO.		080388	134	452
				(1) A6883 & B6883		COMMON DETAILS		52234



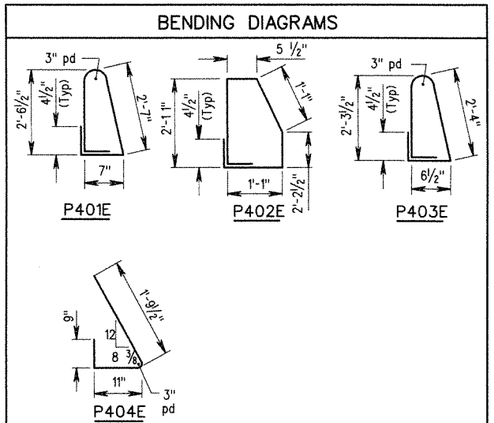
SECTION A-A
NTS
(High side of roadway)



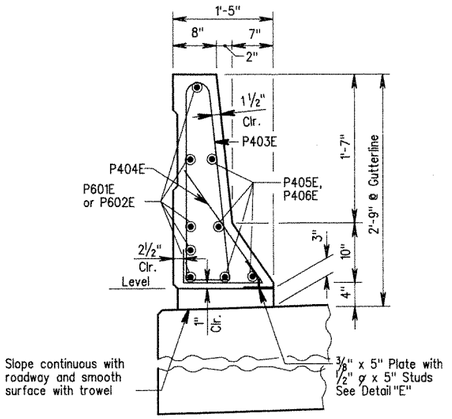
SECTION A-A
NTS
(Low side of roadway)



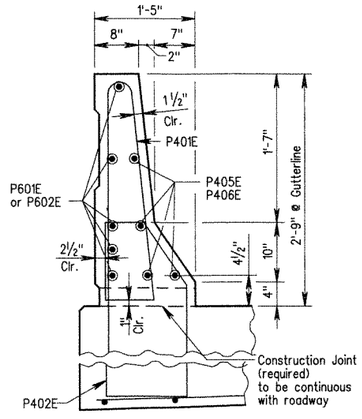
TYP. SECTION AT CURB FOR CLOSED PARAPET RAIL



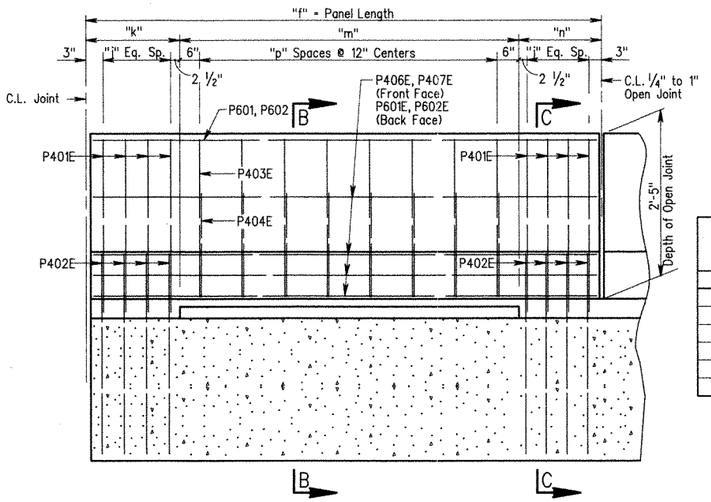
For "Bar List" see "Details of R.C. Slab Unit". All bars to be epoxy coated.



SECTION B-B



SECTION C-C

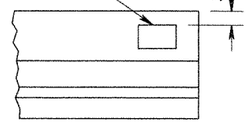


SECTION AT CURB FOR OPEN PARAPET RAIL

TABLE OF VARIABLES

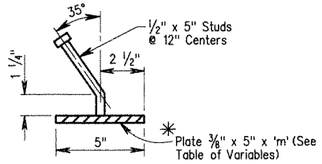
Parapet Joint Variables	Closed Rail		Open Rail				
'f'	'g'	'h'	'j'	'k'	'm'	'n'	'p'
10'-0"	6"	9	4	2'-6"	5'-0"	2'-6"	4
11'-4"	8"	10	5	3'-2"	5'-0"	3'-2"	4

Place Type D Bridge Name Plate on front face of span rail approx. 2'-0" from C.L. Joint on the left side End of Bridge A and on the right side Beginning of Bridge B



NAME PLATE DETAIL

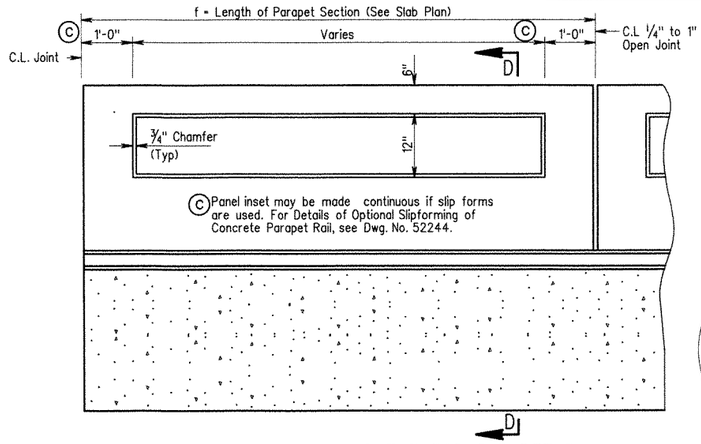
N.T.S.



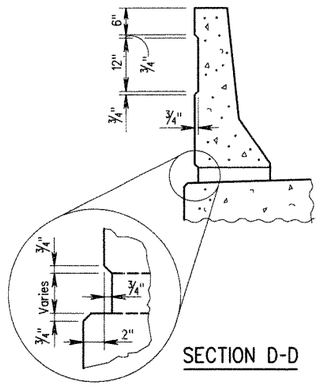
DETAIL "E"

Note:
Studs shall be 5" long, Granular Flux Filled, Solid Fluxed, or Equal, and automatically welded to plate. Studs and plate to be AASHTO M270, Grade 36 and shall be considered subsidiary to Class S(AE) concrete.

✳ The surfaces of the ⅜" plates which will not be in contact with concrete shall be painted in accordance with section 638 or as approved by the engineer. Only one coat is required, and it shall be applied in the shop. Painting will not be paid directly but shall be considered subsidiary to Class S(AE) concrete.



ELEVATION SHOWING TREATMENT FOR PARAPET RAIL



SECTION D-D

SHEET 1 OF 1

COMMON DETAILS FOR CONTINUOUS R.C. SLAB UNITS
INTERSTATE 40 BRIDGE OVER
STONE DAM CREEK

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: RLB DATE: Sept 2011 FILENAME: FILENAME
CHECKED BY: DKM/KM DATE: Sept 2011 SCALE: AS SHOWN
DESIGNED BY: KMM/KM DATE: Sept 2011

BRIDGE NO. A6883 & B6883 DRAWING NO. 52234

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 11966 9/1/11

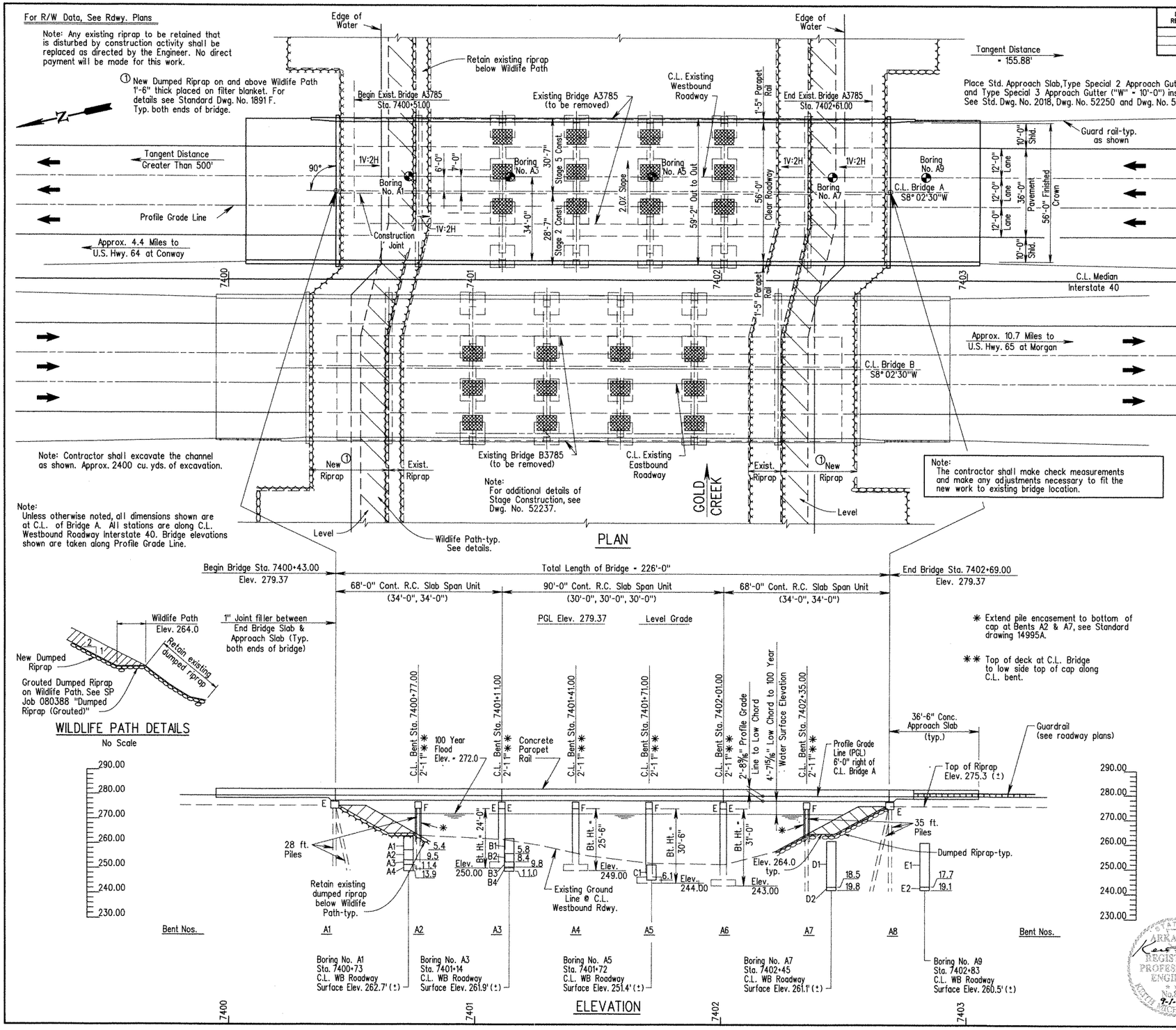
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				6	ARK.			
				JOB NO.		080388	235	452
				(1) A6884		LAYOUT		52235

For R/W Data, See Rdwy. Plans

Note: Any existing riprap to be retained that is disturbed by construction activity shall be replaced as directed by the Engineer. No direct payment will be made for this work.

(1) New Dumped Riprap on and above Wildlife Path 1'-6" thick placed on filter blanket. For details see Standard Dwg. No. 1891 F. Typ. both ends of bridge.

Place Std. Approach Slab,Type Special 2 Approach Gutter ("W" = 10'-0") outside shoulder, and Type Special 3 Approach Gutter ("W" = 10'-0") inside shoulder at both ends of bridge. See Std. Dwg. No. 2018, Dwg. No. 52250 and Dwg. No. 52250A.



GENERAL NOTES:

BENCH MARK: Elevations and stations are assumed to be the same as shown on the original plans. The original layout shows the elevation at the top of the deck and centerline of existing bridge to be at 278.18 at Sta. 7400+51.00 (Beg. of Br. A3785).

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (2003 edition), with applicable supplemental specifications and special provisions.

DESIGN SPECIFICATIONS: AASHTO Standard Specifications for Highway Bridges (1996 edition), with current interim specifications.

LIVE LOAD: HS20 + Military Loading — METHOD OF DESIGN: Load Factor
SEISMIC PERFORMANCE CATAGORY: A

MATERIALS AND STRENGTHS:

Class S(AE) Concrete (superstructure)	f'c = 4,000 psi
Class S Concrete (substructure)	f'c = 3,500 psi
Reinforcing Steel (AASHTO M31 or M53, Gr. 60)	fy = 60,000 psi
Structural Steel (AASHTO M270, Gr. 36)	Fy = 36,000 psi
Structural Steel (AASHTO M270, Gr. 50W)	Fy = 50,000 psi

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

CLASS 1 PROTECTIVE SURFACE TREATMENT: Class 1 Protective Surface Treatment shall be applied to the roadway surface and to the face and top of the concrete parapet rail.

STEEL PILING: Piling for Bents shall be HP 12x53 or HP 14x102 (Gr.50), as shown on the plans and shall be driven with an approved air, steam, or diesel hammer to a minimum safe bearing capacity of 60 tons per pile. Lengths of piling shown are assumed for estimating quantities and for use in determining payment for cut off & build up in accordance with the Standard Specification. On all piles the contractor shall use approved steel H-Pile driving points. Piles in end bents to be driven after embankment to bottom of cap is in place

FOOTINGS: Footings shall be set a minimum of 2'-0" into material designated as hard brown or blue shale on the boring legend and shall have a minimum cover above top of footing of 1'-0". Foundations for footings shall be prepared in accordance with Section 801.04 of the Standard Specifications. Rock excavations shall be made to neat lines of the concrete footings. Care shall be excercised to avoid shattering of rock faces by excessive blasting. Concrete in footings shall be poured directly against excavated surfaces of rock.

DETAIL DRAWINGS:	DRAWING NO.
End Bents	52238
Intermediate Bents	52239-52242
68'-0" R.C. Slab Span Unit	52243-52245
90'-0" R.C. Slab Span Unit	52246-52248
Comon Details for R.C. Slab Span Units	52249
Steel Piling	14995A
Type Special 2 Approach Gutters	52250
Type Special 3 Approach Gutters	52250A
Approach Slab	2018

REMOVAL AND SALVAGE: The existing bridges shall be removed in accordance with Section 205 of the Standard Specifications. All material from existing bridges shall become the property of the contractor. Complete removal of existing footing may be needed to construct new footing.
EXISTING BRIDGE: Existing Bridge A3785 is 38'-6" wide and 210'-0" long and consists of 7 R.C. Slab Spans Units (with voids) supported by substructures consisting of R.C. Int. Bents with multi-columns on spread footings and Pile-End Bents. Plans for existing bridge will be made available to the Contractor upon request to Programs and Contracts Division. Existing Dwg. Nos. 12429, 5431-A4, 5434A & 5434B.

For additional GENERAL NOTES, see Dwg. 52236.

SHEET 1 OF 3

BRIDGE A LAYOUT
INTERSTATE 40 BRIDGE OVER
GOLD CREEK
HWY. 65 - EAST (WIDENING) (F)
FAULKNER COUNTY
ROUTE I-40 SEC.32

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 8966 9-1-2011 KEITH MICHAEL KERR

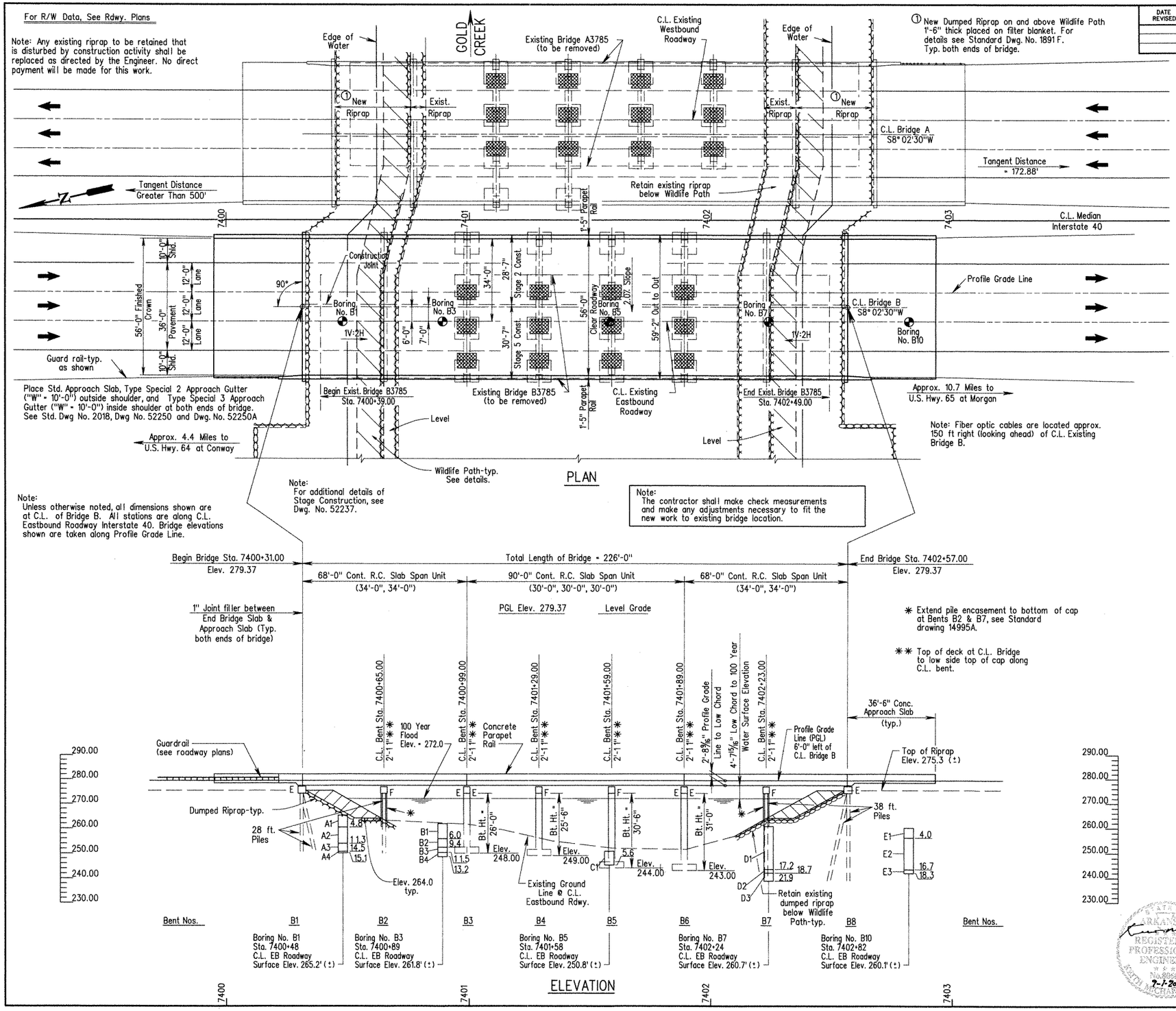
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CHECKED BY: DKM/JM DATE: Sept 2011 SCALE: 1" = 20'
DESIGNED BY: KMM/KM DATE: Sept 2011

BRIDGE NO. A6884 DRAWING NO. 52235

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.		080388	236	452
				(1) B6884		LAYOUT		52236

For R/W Data, See Rdwy. Plans

Note: Any existing riprap to be retained that is disturbed by construction activity shall be replaced as directed by the Engineer. No direct payment will be made for this work.



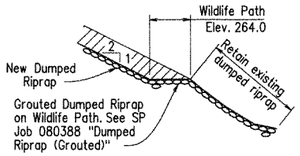
PLAN

Note: For additional details of Stage Construction, see Dwg. No. 52237.

Note: The contractor shall make check measurements and make any adjustments necessary to fit the new work to existing bridge location.

Note: Unless otherwise noted, all dimensions shown are at C.L. of Bridge B. All stations are along C.L. Eastbound Roadway Interstate 40. Bridge elevations shown are taken along Profile Grade Line.

ELEVATION



WILDLIFE PATH DETAILS

No Scale

GENERAL NOTES: (CONTINUED)

DETAIL DRAWINGS:	DRAWING NO.
End Bents	52238
Intermediate Bents	52239-52242
68'-0" R.C. Slab Span Unit	52243-52245
90'-0" R.C. Slab Span Unit	52246-52248
Comon Details for R.C. Slab Span Units	52249
Steel Piling	14995A
Type Special 2 Approach Gutters	52250
Type Special 3 Approach Gutters	52250A
Approach Slab	2018

EXISTING BRIDGE: Existing Bridge B3785 is 38'-6" wide and 210'-0" long and consists of 7 R.C. Slab Spans Units (with voids) supported by substructures consisting of R.C. Int. Bents with multi-columns on spread footings and Pile End Bents. Plans for existing bridge will be made available to the Contractor upon request to Programs and Contracts Division. Existing Dwg. Nos. 12429, 5431-A4, 5434A & 5434B.

MAINTENANCE OF TRAFFIC: Details which relate to maintenance of traffic are shown on the bridge plans for information only; however, payment, job special provisions, etc. are considered as part of the roadway plans.

For Soil Boring Legend, see Dwg. No. 52237.

For additional GENERAL NOTES, see Dwg. No. 52235.

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No.8066 7-1-2011

SHEET 2 OF 3

BRIDGE B LAYOUT

INTERSTATE 40 BRIDGE OVER

GOLD CREEK

HWY. 65 - EAST (WIDENING) (F)

FAULKNER COUNTY

ROUTE I-40 SEC.32

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

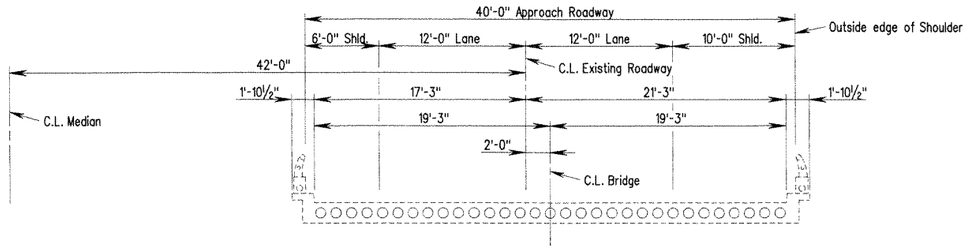
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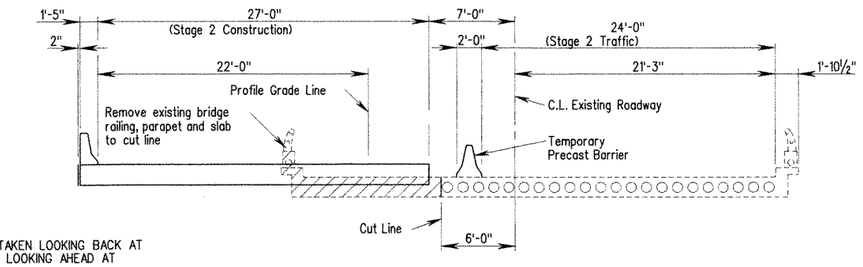
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BRIDGE NO. B6884 DRAWING NO. 52236

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		080388	237	452
				(1) A6884, B6884		LAYOUT		52237

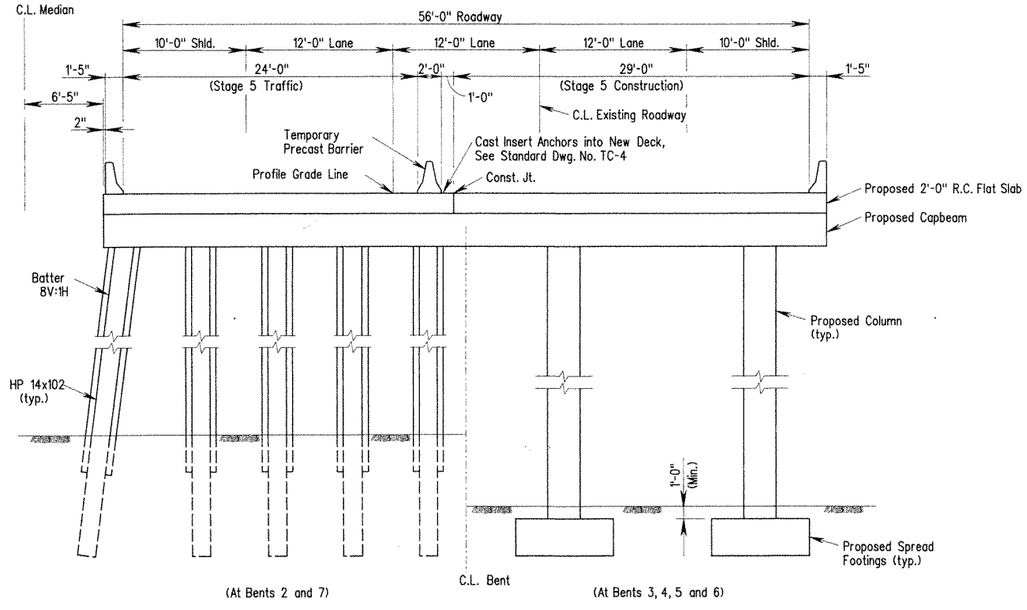


EXISTING
N.T.S.



NOTE:
SECTIONS ARE TAKEN LOOKING BACK AT BRIDGE "A" AND LOOKING AHEAD AT BRIDGE "B".

STAGE 2 CONSTRUCTION
N.T.S.



STAGE 5 CONSTRUCTION
N.T.S.

Boring No. A1
Sta. 7400+73 - C.L. WB Roadway

BORING LEGEND	BORING "N" VALUES
A1 - Soft brown sandy Clay - wet	Not Available
A2 - Firm brown sandy Clay - moist	
A3 - Medium hard brown sandy Clay - moist	
A4 - Hard brown Shale	

Boring No. A3
Sta. 7401+14 - C.L. WB Roadway

BORING LEGEND	BORING "N" VALUES
B1 - Firm brown Clay - trace of sand	Not Available
B2 - Firm brown sandy Clay	
B3 - Slate rock	
B4 - Hard brown Shale	

Boring No. A5
Sta. 7401+72 - C.L. WB Roadway

BORING LEGEND	BORING "N" VALUES
C1 - Medium firm Clay, gravel & small boulders, hard Shale	Not Available

Boring No. A7
Sta. 7402+45 - C.L. WB Roadway

BORING LEGEND	BORING "N" VALUES
D1 - Soft brown Clay, some sand - wet	Not Available
D2 - Hard blue Shale	

Boring No. A9
Sta. 7402+83 - C.L. WB Roadway

BORING LEGEND	BORING "N" VALUES
E1 - Soft brown Clay, some sand - wet	Not Available
E2 - Hard blue Shale	

Boring No. B1
Sta. 7400+48 - C.L. EB Roadway

BORING LEGEND	BORING "N" VALUES
A1 - Firm brown sandy Clay	Not Available
A2 - Firm brown Clay - trace of sand	
A3 - Firm brown Clay - trace of sand - moist	
A4 - Hard brown Shale	

Boring No. B3
Sta. 7400+89 - C.L. EB Roadway

BORING LEGEND	BORING "N" VALUES
B1 - Firm brown Clay - trace of sand - dry	Not Available
B2 - Medium firm brown sandy Clay - moist	
B3 - Compacted Clay and small boulders	
B4 - Hard brown Shale - hard blue Shale	

Boring No. B5
Sta. 7401+58 - C.L. EB Roadway

BORING LEGEND	BORING "N" VALUES
C1 - Firm Clay, gravel & small boulders, hard Shale	Not Available

Boring No. B7
Sta. 7402+24 - C.L. EB Roadway

BORING LEGEND	BORING "N" VALUES
D1 - Soft brown Clay - trace of sand - wet	Not Available
D2 - Firm Clay	
D3 - Hard blue Shale	

Boring No. B10
Sta. 7402+82 - C.L. EB Roadway

BORING LEGEND	BORING "N" VALUES
E1 - Soft brown Clay - trace of sand - wet	Not Available
E2 - Medium soft brown Clay. some sand - wet	
E3 - Hard blue Shale	

Note:

Details that pertain to Maintenance of Traffic shown on bridge plans are for information only. See Roadway Plans for Maintenance of Traffic.

For details of temporary barriers, see Std. Dwg. Nos. TC-4 & TC-5.

Note:
- For General Notes, see Dwg. Nos. 52235 and 52236.

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER 13,864 MICHAEL MAYO

SHEET 3 OF 3

BRIDGE A & B LAYOUT
INTERSTATE 40 BRIDGE OVER
GOLD CREEK
HWY. 65 - EAST (WIDENING) (F)
FAULKNER COUNTY
ROUTE I-40 SEC.32

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

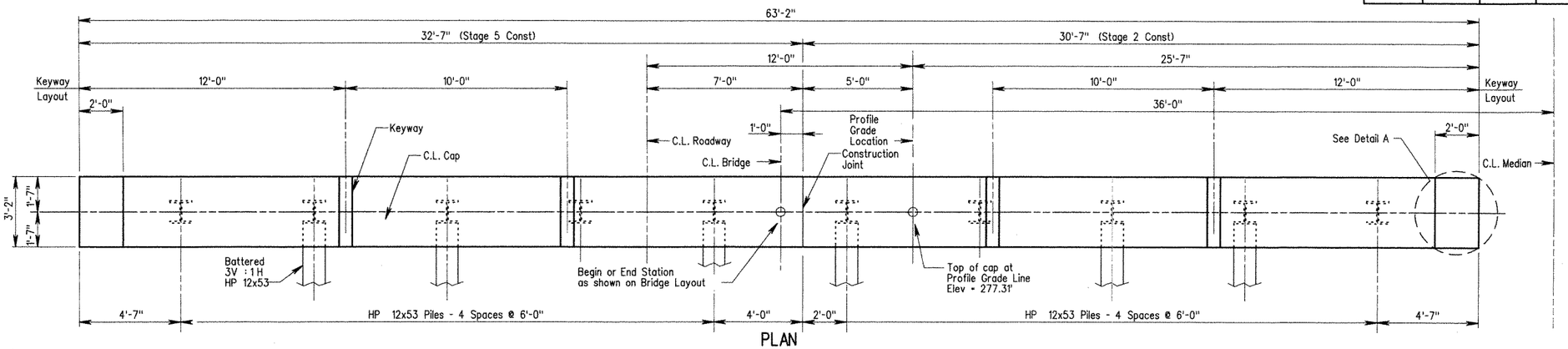
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CHECKED BY: DKM/JM DATE: Sept 2011 SCALE: N.T.S.
DESIGNED BY: KMM/KM DATE: Sept 2011

BRIDGE NO. A6884, B6884 DRAWING NO. 52237

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

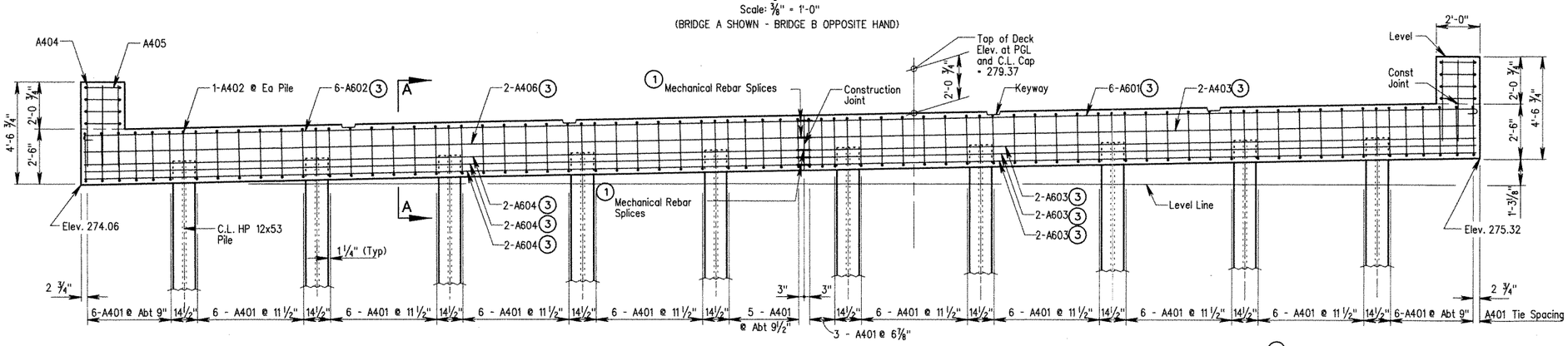
FED.RD. DIST.NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080388	238	452

(1) A6884 & B6884 — END BENT DETAILS — 52238



PLAN

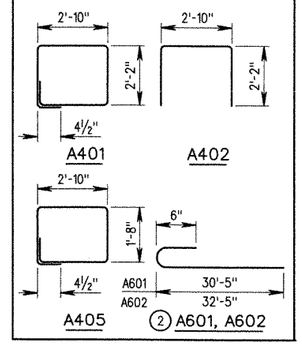
Looking Ahead
Scale: 3/8" = 1'-0"
(BRIDGE A SHOWN - BRIDGE B OPPOSITE HAND)



BAR LIST - PER END BENT

MK	No. Req'd.	Length	Dia. Pin
A401	68	10'-4"	2"
A402	10	7'-0"	2"
A403	2	30'-5"	Str.
A404	28	3'-7"	Str.
A405	8	9'-4"	2"
A406	2	32'-5"	Str.
A601	6	31'-1"	4 1/2"
A602	6	33'-1"	4 1/2"
A603	6	30'-5"	Str.
A604	6	32'-5"	Str.

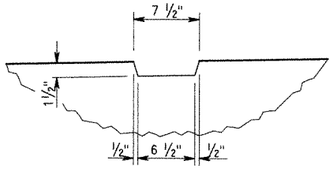
Bending Diagrams
(Dimensions are out to out of bars)



Note:
Pour Restrainer Block after slab is in place
For General Notes, see dwg. no. 52235.

(2) The lengths shown are from end of bar to the required construction joint. Individual lengths shall be determined by the Contractor based on the type of mechanical coupler used.

(3) These bars shall have mechanical rebar splices.



DETAIL OF KEYWAY

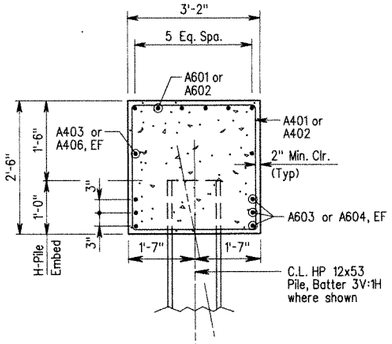
Scale: 1 1/2" = 1'-0"

GENERAL NOTES:

All concrete shall be Class "S" with a minumum 28 day compressive strength f'c = 3500 psi. Concrete shall be poured in the dry and all exposed corners to be chamfered 3/4" unless otherwise noted.

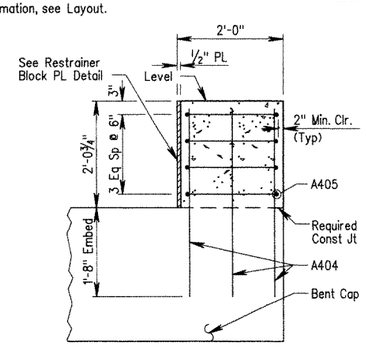
All reinforcing steel shall conform to AASHTO M31 or M53, Grade 60 (yield strength = 60,000 psi.).

For additional information, see Layout.



SECTION A-A

N.T.S.



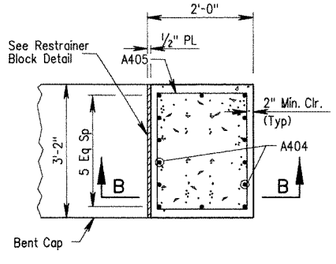
SECTION B-B

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

ELEVATION

Looking Ahead
Scale: 3/8" = 1'-0"
Looking Back @ Bent 1, Br. B (Bent 1, Br. A is opposite hand)
Looking Ahead @ Bent 8, Br. A (Bent 4, Br. B is opposite hand)

Note:
For H-Pile Details see Standard Drawing 14995A

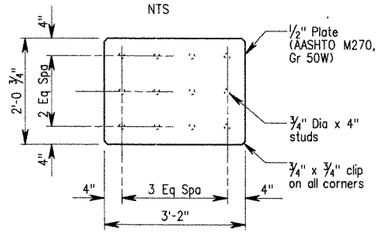


DETAIL A

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

CHAMFER DETAIL AT RESTRAINER BLOCK

NTS



RESTRAINER BLOCK PLATE DETAIL

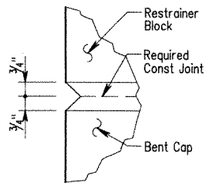
N.T.S.

Note:
3/4" dia studs shall be granular flux filled, solid fluxed or equal, and automatically end welded in accordance with the recommendations of the manufacturer.

Studs and plate shall be considered subsidiary to the item "Class S Concrete - Bridge".

(1) These bars shall have mechanical rebar splices. They shall develop at least 125% of the specified yield strength of the bar.

The mechanical rebar splices shall be from the AHTD Qualified Products List (QPL) and shall maintain minimum clearances shown. Their payment shall be considered subsidiary to the item "Reinforcing Steel-Bridge (Grade 60)".



STATE OF ARKANSAS — KEITH MICHAEL MEEKS — REGISTERED PROFESSIONAL ENGINEER — No. 9066 — 9-1-2011

SHEET 1 OF 1

DETAILS OF END BENTS
INTERSTATE 40 BRIDGE OVER
GOLD CREEK

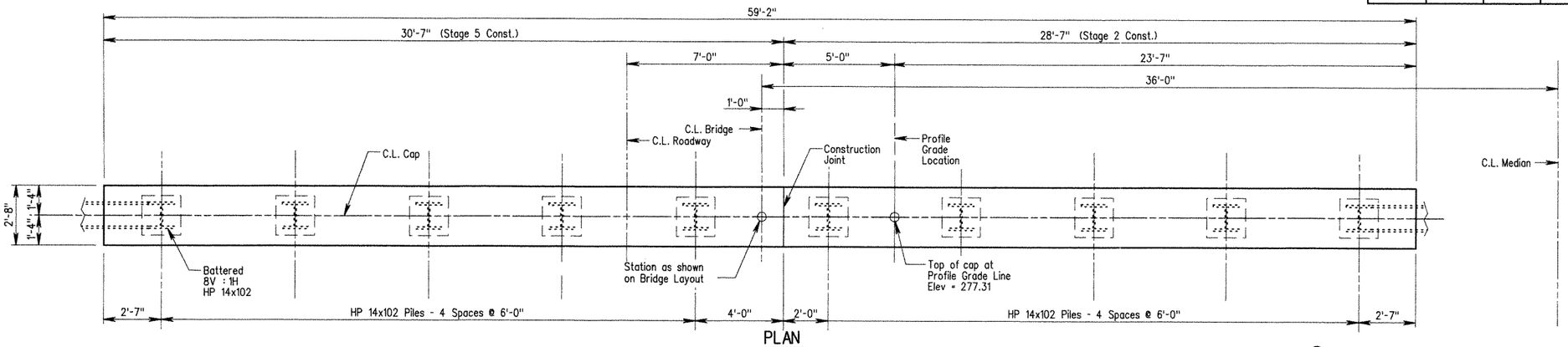
ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: DK/KR DATE: Sept 2011 FILENAME: FILENAME
CHECKED BY: KG/KM DATE: Sept 2011 SCALE: AS SHOWN
DESIGNED BY: TT/PG DATE: Sept 2011

BRIDGE NO. A6884 & B6884 DRAWING NO. 52238

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.		080388	235	462
				(1) A6884 & B6884		BENTS 2 & 7 DETAILS		52239



PLAN

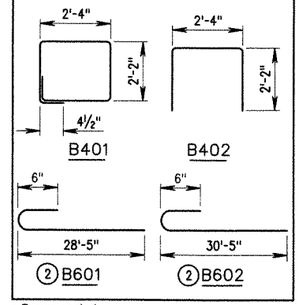
Looking Ahead
Scale: 3/8" = 1'-0"
(BRIDGE A SHOWN - BRIDGE B OPPOSITE HAND)

(2) The lengths shown are from end of bar to the required construction joint. Individual lengths shall be determined by the Contractor based on the type of mechanical coupler used.

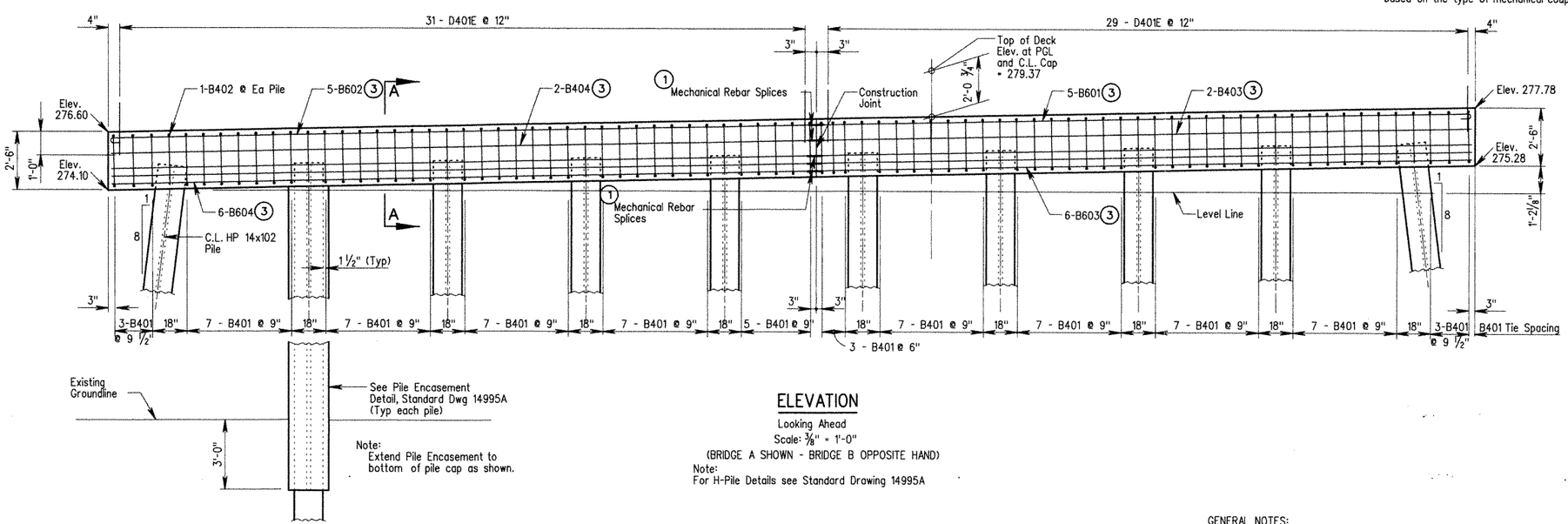
BAR LIST - PER BENT

	MK	No. Req'd.	Length	Dia. Pin
BENT	B401	70	9'-4"	2"
	B402	10	6'-6"	2"
	B403	2	28'-5"	Str.
	B404	2	30'-5"	Str.
	B601	5	29'-0"	4½"
	B602	5	31'-2"	4½"
	B603	6	28'-5"	Str.
	B604	6	30'-5"	Str.
	* D401E	120	2'-3"	Str.

Bending Diagrams
(Dimensions are out to out of bars.)

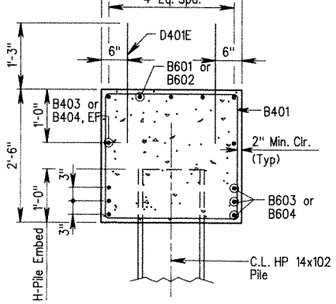


* Epoxy coated



ELEVATION

Looking Ahead
Scale: 3/8" = 1'-0"
(BRIDGE A SHOWN - BRIDGE B OPPOSITE HAND)
Note:
For H-Pile Details see Standard Drawing 14995A



SECTION A-A

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

(1) These bars shall have mechanical rebar splices. They shall develop at least 125% of the specified yield strength of the bar.

The mechanical rebar splices shall be from the AHTD Qualified Products List (QPL) and shall maintain minimum clearances shown. Their payment shall be considered subsidiary to the item "Reinforcing Steel-Bridge (Grade 60)".

(3) These bars shall have mechanical rebar splices.

GENERAL NOTES:

All concrete shall be Class "S" with a minumum 28 day compressive strength f'c = 3500 psi. Concrete shall be poured in the dry and all exposed corners to be chamfered 3/4" unless otherwise noted.

All reinforcing steel shall conform to AASHTO M31 or M53, Grade 60 (yield strength = 60,000 psi.).

For additional information, see Layout.

ARKANSAS REGISTERED PROFESSIONAL ENGINEER No.08066 SCOTT MICHAEL MAYO 9-1-2011

SHEET 1 OF 1

DETAILS OF BENT NOS. 2 & 7
INTERSTATE 40 BRIDGE OVER
GOLD CREEK

ROUTE SEC.

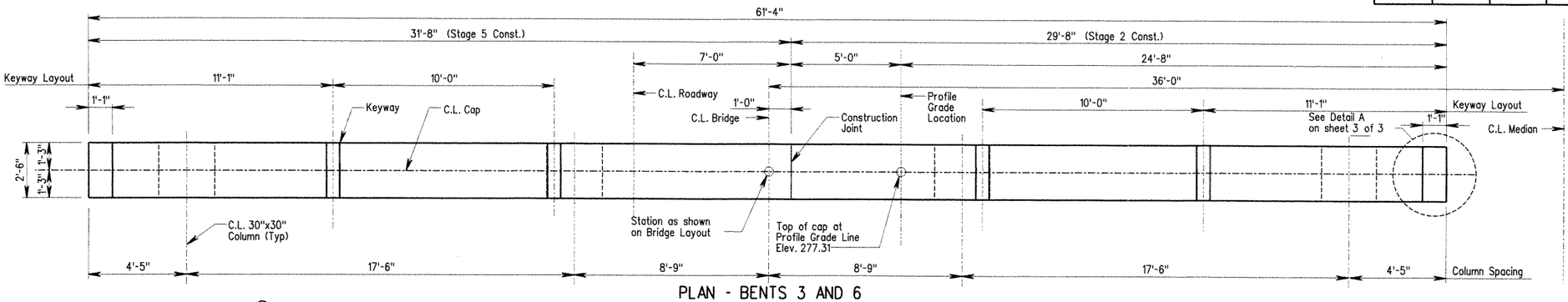
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: DK DATE: Sept 2011 FILENAME: FILENAME
CHECKED BY: KG/KM DATE: Sept 2011 SCALE: AS SHOWN
DESIGNED BY: TT/PG DATE: Sept 2011

BRIDGE NO. A6884 & B6884 DRAWING NO. 52239

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.		080388	240	452

(1) A6884 & B6884 BENTS 3 THRU 6 DETAILS 52240



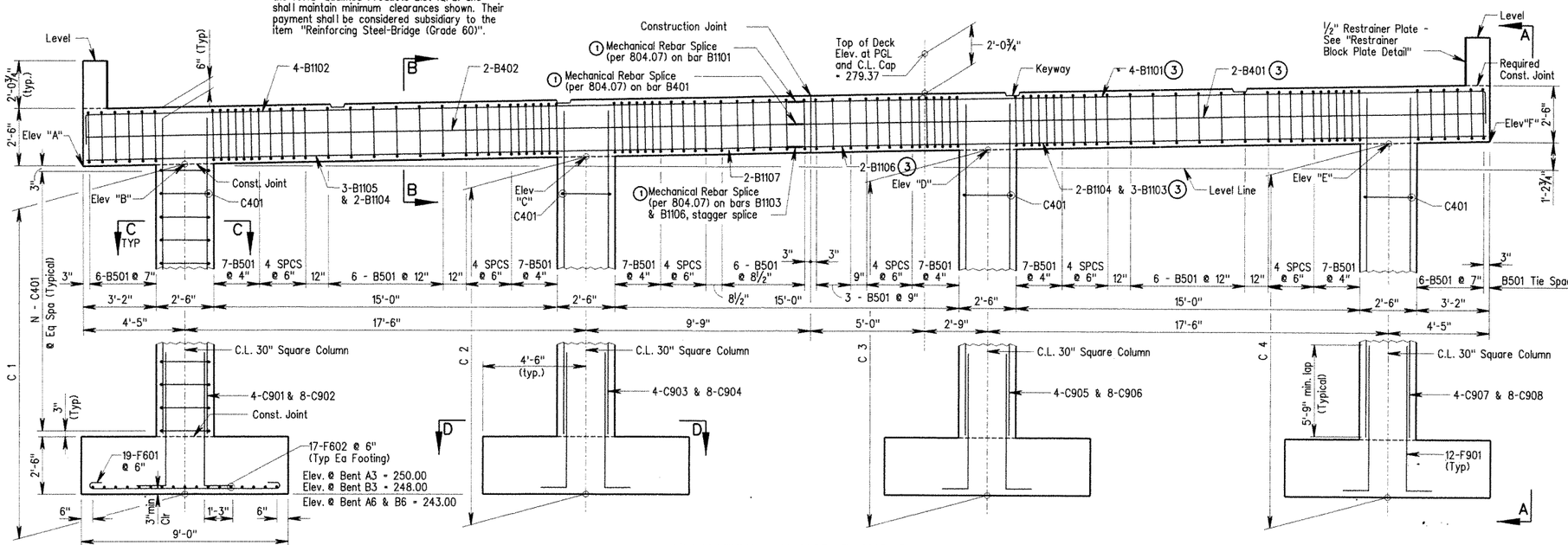
PLAN - BENTS 3 AND 6

Looking Ahead
Scale: 3/8" = 1'-0"
(BRIDGE A SHOWN - BRIDGE B OPPOSITE HAND)

(1) These bars shall have mechanical rebar splices. They shall develop at least 125% of the specified yield strength of the bar.

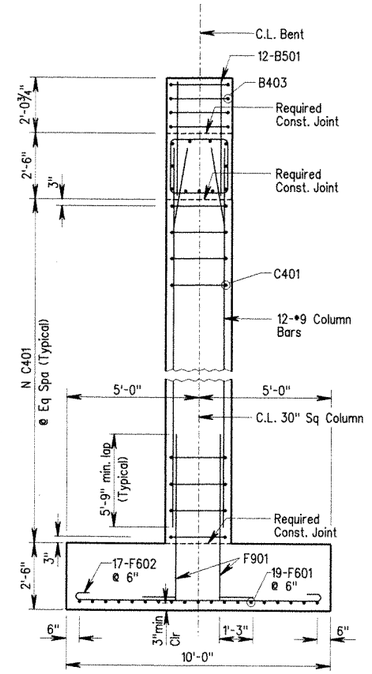
The mechanical rebar splices shall be from the AHTD Qualified Products List (QPL) and shall maintain minimum clearances shown. Their payment shall be considered subsidiary to the item "Reinforcing Steel-Bridge (Grade 60)".

(3) These bars shall have mechanical rebar splices.



ELEVATION - BENTS 3 AND 6

Looking Ahead
Scale: 3/8" = 1'-0"
(BRIDGE A SHOWN - BRIDGE B OPPOSITE HAND)



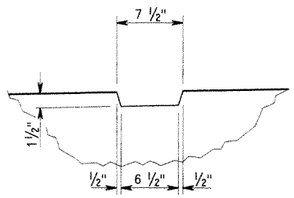
SECTION A-A

Scale: 3/8" = 1'-0"

Note:
For General Notes, See Dwg. no. 52239.

TABLE OF COLUMN VARIABLES

BENT NO.	C1	C2	C3	C4	N
A3	24'-1 15/16"	24'-6 7/8"	24'-10 5/16"	25'-2 1/2"	24
A6	31'-1 15/16"	31'-6 7/8"	31'-10 5/16"	32'-2 1/2"	31
B3	26'-1 15/16"	26'-6 7/8"	26'-10 5/16"	27'-2 1/2"	26
B6	31'-1 15/16"	31'-6 7/8"	31'-10 5/16"	32'-2 1/2"	31



DETAIL OF KEYWAY

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

TABLE OF BENT ELEVATIONS

Elev. "A"	Elev. "B"	Elev. "C"	Elev. "D"	Elev. "E"	Elev. "F"
274.07	274.16	274.51	274.86	275.21	275.30

STATE OF ARKANSAS
Kevin Gray
REGISTERED PROFESSIONAL ENGINEER
No. 9065
7-7-2011
KEITH MICHAEL GRAY

SHEET 1 OF 3

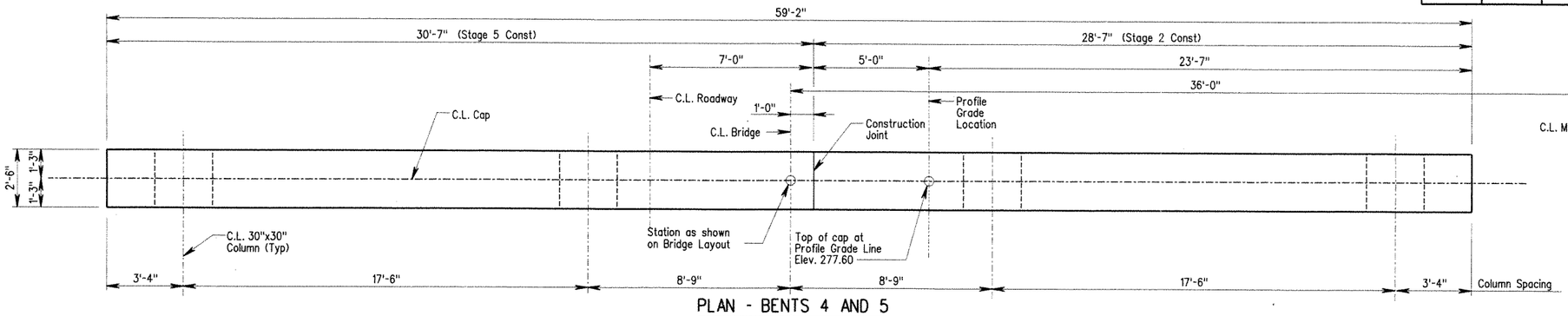
DETAILS OF BENT NOS. 3 THRU 6
INTERSTATE 40 BRIDGE OVER
GOLD CREEK
ROUTE I-40 SEC.32

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: DK/KR DATE: Sept 2011 FILENAME: FILENAME
CHECKED BY: KG/KM DATE: Sept 2011 SCALE: AS SHOWN
DESIGNED BY: TT/PG DATE: Sept 2011

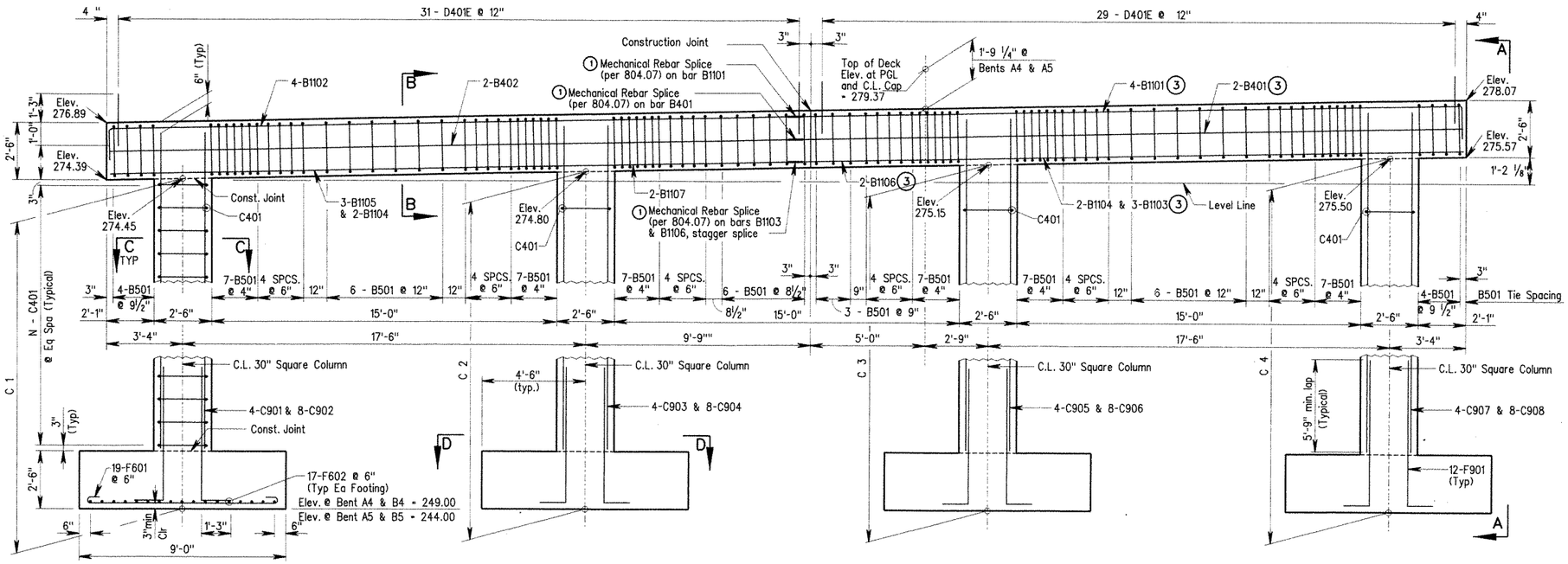
BRIDGE NO. A6884 & B6884 DRAWING NO. 52240

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.		080388	241	452
				(1) A6884 & B6884		BENTS 3 THRU 6 DETAILS		52241



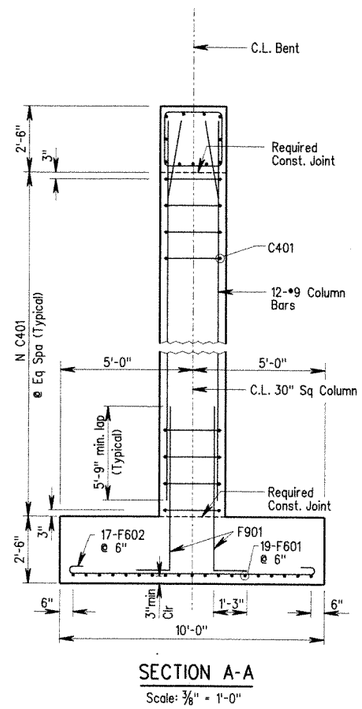
PLAN - BENTS 4 AND 5

Looking Ahead
Scale: 3/8" = 1'-0"
BRIDGE A SHOWN - BRIDGE B OPPOSITE HAND



ELEVATION - BENTS 4 AND 5

Looking Ahead
Scale: 3/8" = 1'-0"
BRIDGE A SHOWN - BRIDGE B OPPOSITE HAND



SECTION A-A

Scale: 3/8" = 1'-0"

TABLE OF COLUMN VARIABLES

BENT NO.	C1	C2	C3	C4	N
A4	25'-5 3/8"	25'-9 5/8"	26'-1 13/16"	26'-6"	25
A5	30'-5 3/8"	30'-9 5/8"	31'-1 13/16"	31'-6"	30
B4	25'-5 3/8"	25'-9 5/8"	26'-1 13/16"	26'-6"	25
B5	30'-5 3/8"	30'-9 5/8"	31'-1 13/16"	31'-6"	30

Note:
For General Notes, See Dwg. no. 52239.

(1) These bars shall be epoxy coated mechanical rebar splices. They shall develop at least 125% of the specified yield strength of the bar.

The mechanical rebar splices shall be from the AHTD Qualified Products List (QPL) and shall maintain minimum clearances shown. Their payment shall be considered subsidiary to the item "Reinforcing Steel-Bridge (Grade 60)".

(3) These bars shall have mechanical rebar splices.

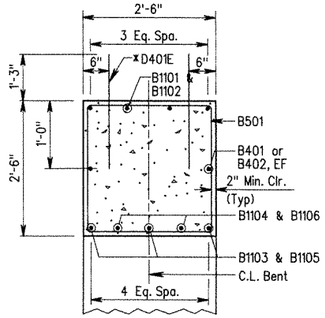
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9056
9-1-2011
MICHAEL SISTER

SHEET 2 OF 3
DETAILS OF BENT NOS. 3 THRU 6
INTERSTATE 40 BRIDGE OVER
GOLD CREEK
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: DK/KR DATE: Sept 2011 FILENAME: FILENAME
CHECKED BY: KG/KM DATE: Sept 2011 SCALE: AS SHOWN
DESIGNED BY: TT/PG DATE: Sept 2011

BRIDGE NO. A6884 & B6884 DRAWING NO. 52241

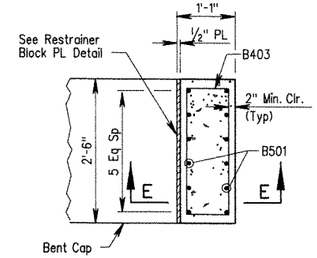
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	242	452
				(1) A6884 & B6884		BENTS 3 THRU 6 DETAILS		52242



SECTION B-B

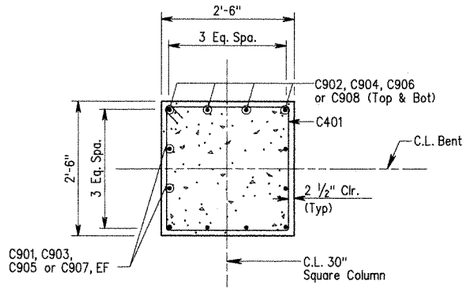
Scale: 3/4" = 1'-0"

x Bents 4 & 5 only



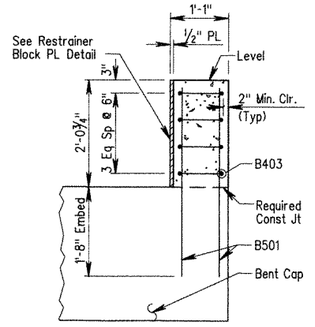
DETAIL A

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



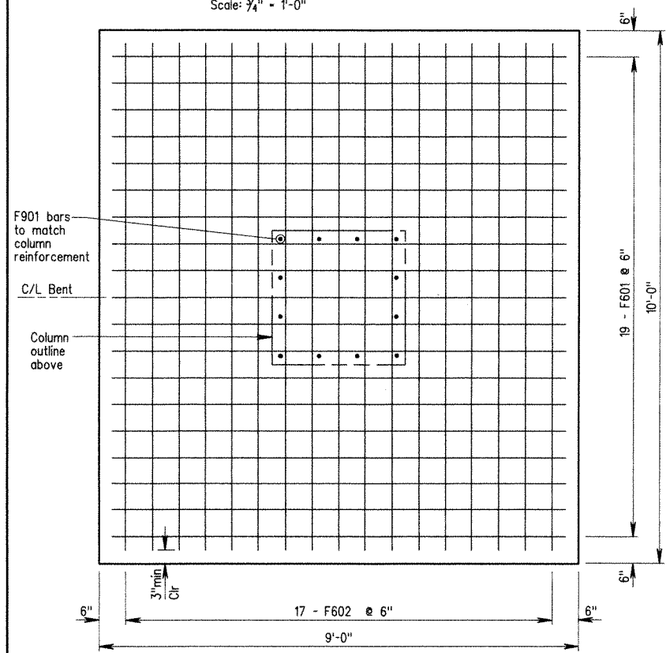
SECTION C-C

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



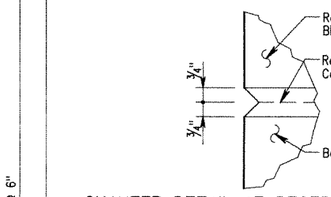
SECTION E-E

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



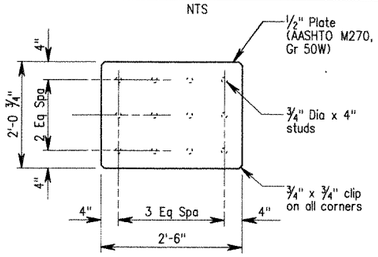
SECTION D-D

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



CHAMFER DETAIL AT RESTRAINER BLOCK

NTS



RESTRAINER BLOCK PLATE DETAIL

NTS

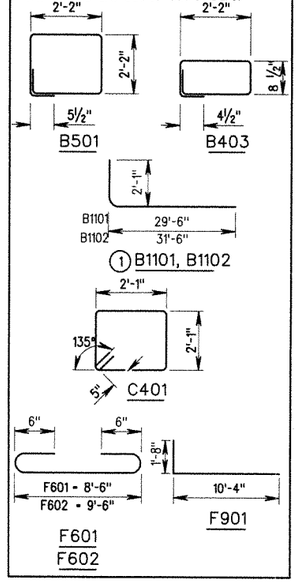
Note:
3/4" dia studs shall be granular flux filled, solid fluxed or equal, and automatically end welded in accordance with the recommendations of the manufacturer.

Studs and plate shall be considered subsidiary to the item "Class S Concrete - Bridge".

BAR LIST - PER BENT (3 & 6)

	MK	No. Req'd.	Length	Dia. Pin
CAP	B401	2	29'-6"	Str.
	B402	2	31'-6"	Str.
	B403	8	6'-1"	2"
	B501	99	9'-2"	2"
	B1101	4	31'-3"	11 1/4"
	B1102	4	33'-3"	11 1/4"
	B1103	3	29'-6"	Str.
	B1104	4	15'-0"	Str.
	B1105	3	31'-6"	Str.
	B1106	2	6'-6"	Str.
	B1107	2	8'-6"	Str.
BENT A3 COL	C401	96	8'-10"	2"
	C901	4	23'-7"	Str.
	C902	8	23'-7"	9"
	C903	4	24'-0"	Str.
	C904	8	24'-0"	9"
	C905	4	24'-4"	Str.
	C906	8	24'-4"	9"
	C907	4	24'-8"	Str.
	C908	8	24'-8"	9"
BENT 6 COL	C401	124	8'-10"	2"
	C901	4	30'-7"	Str.
	C902	8	30'-7"	9"
	C903	4	31'-0"	Str.
	C904	8	31'-0"	9"
	C905	4	31'-4"	Str.
	C906	8	31'-4"	9"
	C907	4	31'-8"	Str.
	C908	8	31'-8"	9"
FND	F601	76	9'-10"	4 1/2"
	F602	68	10'-10"	4 1/2"
	F901	48	11'-9"	9"

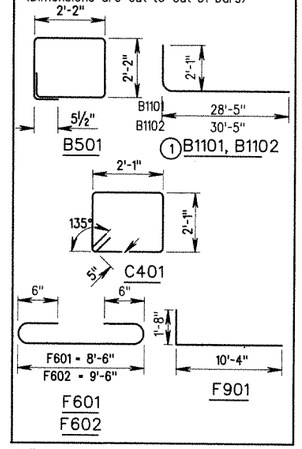
Bending Diagrams
(Dimensions are out to out of bars)



BAR LIST - PER BENT (4 & 5)

	MK	No. Req'd.	Length	Dia. Pin
CAP	B401	2	28'-5"	Str.
	B402	2	30'-5"	Str.
	B501	95	9'-2"	2"
	B1101	4	30'-2"	11 1/4"
	B1102	4	32'-2"	11 1/4"
	B1103	3	28'-5"	Str.
	B1104	4	15'-0"	Str.
	B1105	3	30'-5"	Str.
	B1106	2	6'-6"	Str.
	B1107	2	8'-6"	Str.
	* D401E	120	2'-3"	Str.
BENT 4 COL	C401	100	8'-10"	2"
	C901	4	24'-11"	Str.
	C902	8	24'-11"	9"
	C903	4	25'-3"	Str.
	C904	8	25'-3"	9"
	C905	4	25'-7"	Str.
	C906	8	25'-7"	9"
	C907	4	26'-0"	Str.
	C908	8	26'-0"	9"
BENT 5 COL	C401	120	8'-10"	2"
	C901	4	29'-11"	Str.
	C902	8	29'-11"	9"
	C903	4	30'-3"	Str.
	C904	8	30'-3"	9"
	C905	4	30'-7"	Str.
	C906	8	30'-7"	9"
	C907	4	31'-0"	Str.
	C908	8	31'-0"	9"
FND	F601	76	9'-10"	4 1/2"
	F602	68	10'-10"	4 1/2"
	F901	48	11'-9"	9"

Bending Diagrams
(Dimensions are out to out of bars)

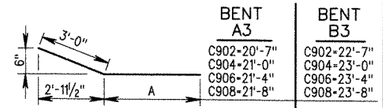


* Epoxy Coated

Note:
For General Notes, See Dwg. no. 52239.

(1) The lengths shown are from end of bar to the required construction joint. Individual lengths shall be determined by the Contractor based on the type of mechanical coupler used.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9066
9-1-2011
KEITH MICHAEL MEEKS



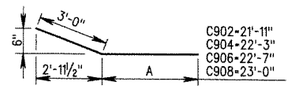
BENT A3	BENT B3
C902-20'-7"	C902-22'-7"
C904-21'-0"	C904-23'-0"
C906-21'-4"	C906-23'-4"
C908-21'-8"	C908-23'-8"

C902, C904,C906,C908

BENT 3

BAR LIST - PER BENT B3

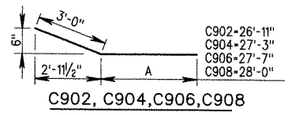
	MK	No. Req'd.	Length	Dia. Pin
COL	C401	104	8'-10"	2"
	C901	4	25'-7"	Str.
	C902	8	25'-7"	9"
	C903	4	26'-0"	Str.
	C904	8	26'-0"	9"
	C905	4	26'-4"	Str.
	C906	8	26'-4"	9"
	C907	4	26'-8"	Str.
	C908	8	26'-8"	9"



C902-21'-11"
C904-22'-3"
C906-22'-7"
C908-23'-0"

C902, C904,C906,C908

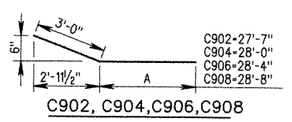
BENT 4



C902-26'-11"
C904-27'-3"
C906-27'-7"
C908-28'-0"

C902, C904,C906,C908

BENT 5



C902-27'-7"
C904-28'-0"
C906-28'-4"
C908-28'-8"

C902, C904,C906,C908

BENT 6

SHEET 3 OF 3

DETAILS OF BENT NOS. 3 THRU 6
INTERSTATE 40 BRIDGE OVER
GOLD CREEK

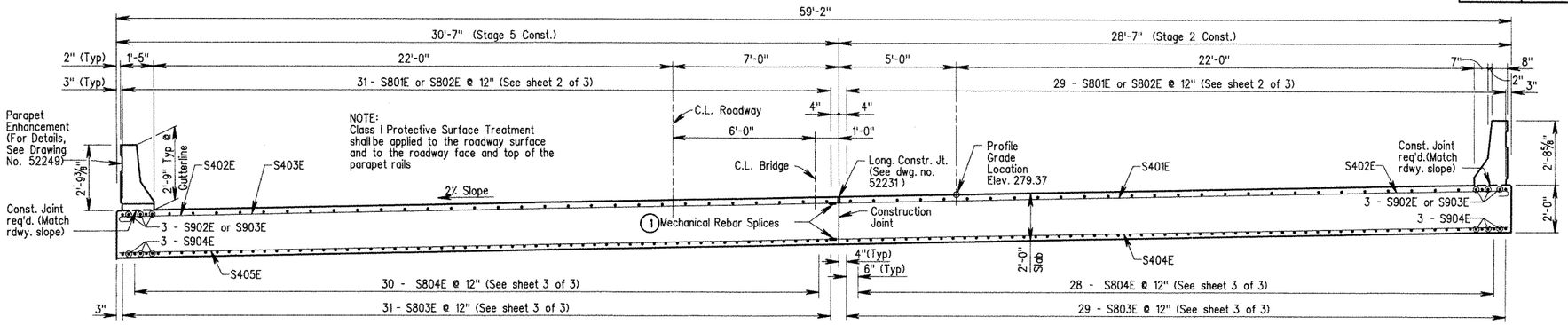
ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: DK/KR DATE: Sept 2011 FILENAME: FILENAME
CHECKED BY: KG/KM DATE: Sept 2011 SCALE: AS SHOWN
DESIGNED BY: TT/PG DATE: Sept 2011

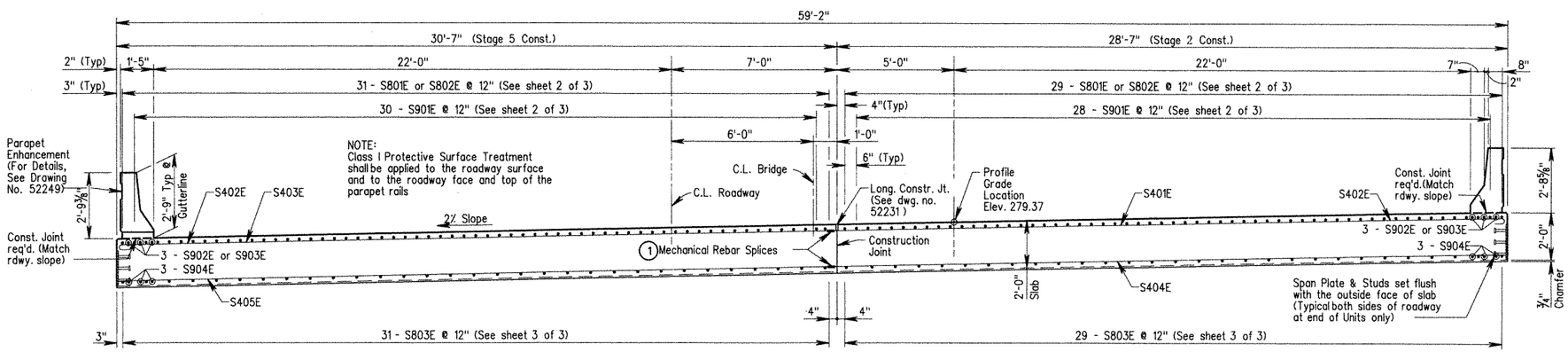
BRIDGE NO. A6884 & B6884 DRAWING NO. 52242

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.		080388	243	452
				(1) A6884 & B6884		68' CONT. R.C. SLAB UNIT		52243



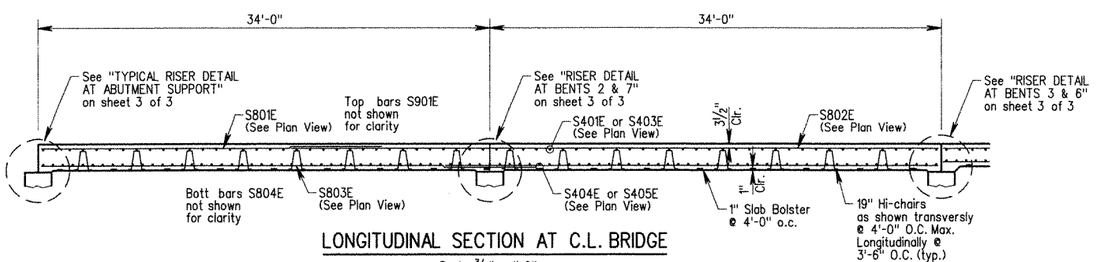
TYPICAL ROADWAY SECTION AT MID-SPAN

Looking Ahead
Scale: ⅜" = 1'-0"
(BRIDGE A SHOWN - BRIDGE B OPPOSITE HAND)



TYPICAL ROADWAY SECTION OVER BENT

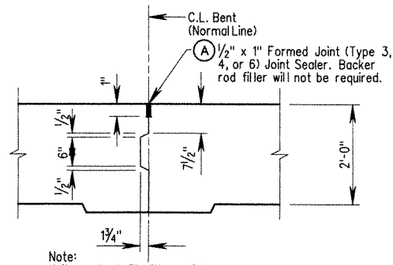
Looking Ahead
Scale: ⅜" = 1'-0"
(BRIDGE A SHOWN - BRIDGE B OPPOSITE HAND)



LONGITUDINAL SECTION AT C.L. BRIDGE

Scale: 3/16" = 1'-0"

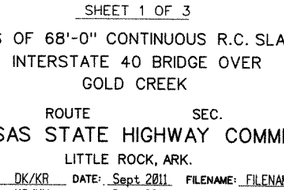
Note:
Reinforcing is to be accurately located in the forms and firmly held in place by steel wire supports, sufficient in number and size to prevent displacement during the course of construction. The wire supports will not be paid for directly but will be considered subsidiary to the item "Epoxy Coated Reinforcing Steel (Grade 60)".



Note:
Unit can be built with partial pours terminating at ends of spans only

OPTIONAL DECK SLAB CONSTRUCTION JOINT DETAIL

NTS



REQUIRED SLAB JOINT DETAIL

NTS

Note:
Slab joint to be placed over each interior bent and other locations as shown on top slab plan

(A) Use ½"x 1" Type 3, 4, or 6 Joint Sealer. See Section 501.02(h) and 501.05(j). Backer Rod filler will not be required. Joint Sealer shall be measured and paid for as Class S(AE) Concrete-Bridge. Slab joints shall extend to the outside edge of the deck slab. Slab joints shall be installed before the falsework is removed and before the parapet railing is poured. If slab joints are to be sawed, they shall be sawed as soon as the concrete has sufficiently set to allow sawing of the joint without damage to the slab. Slab Joints shall be placed at required slab joint locations. No Joint sealer shall be placed under the parapet rails. Slab joints shall align with parapet open joints.

(1) These bars shall be epoxy coated mechanical rebar splices. They shall develop at least 125% of the specified yield strength of the bar.

The mechanical rebar splices shall be from the AHTD Qualified Products List (QPL) and shall maintain minimum clearances shown. Their payment shall be considered subsidiary to the item "Epoxy Coated Reinforcing Steel (Grade 60)".

GENERAL NOTES:

All concrete shall be Class "S(AE)" with a minumum 28 day compressive strength f'c = 4000 psi. Concrete shall be poured in the dry and all exposed corners to be chamfered ¾" unless otherwise noted.

All reinforcing steel shall conform to AASHTO M31 or M53, Grade 60 (yield strength = 60,000 psi.).

For additional information, see Layout.

Dead Load 324 lb/sf (Includes 24 lb/sf future surface)

Live Load 0.178 wheels/ft of width + impact

SHEET 1 OF 3

DETAILS OF 68'-0" CONTINUOUS R.C. SLAB UNIT INTERSTATE 40 BRIDGE OVER GOLD CREEK

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

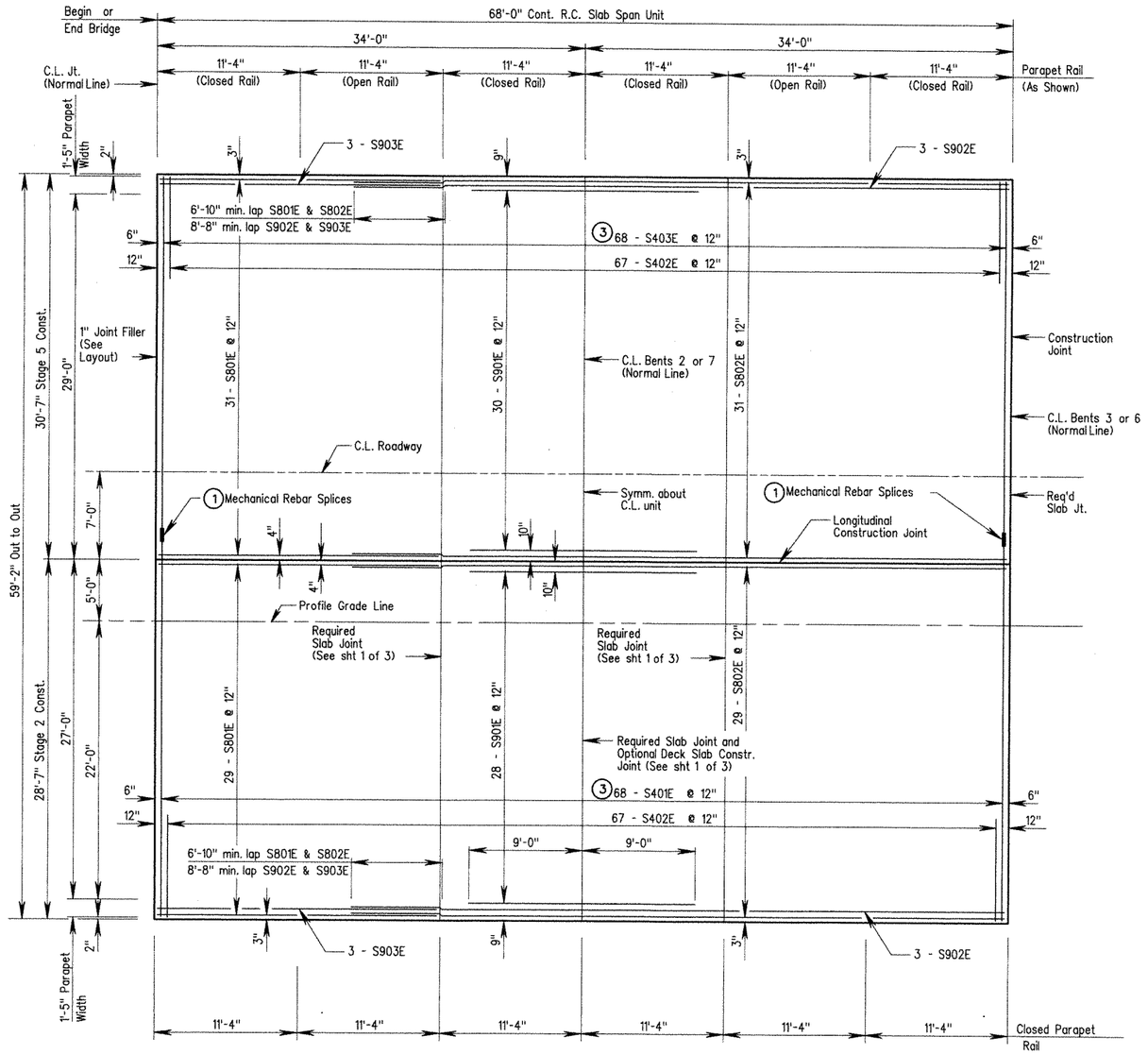
STATE OF ARKANSAS — KEITH MICHAEL MEYER — REGISTERED PROFESSIONAL ENGINEER — No. 11066 — 9-1-11

DRAWN BY: DK/KR DATE: Sept 2011 FILENAME: FILENAME
CHECKED BY: KG/KM DATE: Sept 2011 SCALE: AS SHOWN
DESIGNED BY: TT/CZ DATE: Sept 2011

BRIDGE NO. A6884 & B6884 DRAWING NO. 52243

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.		080388	244	452

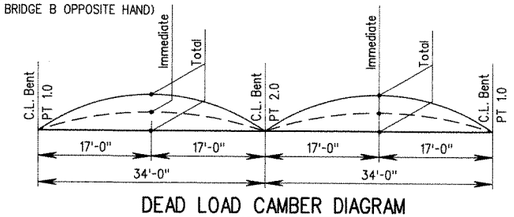
(1) A6884 & B6884 — 68' CONT. R.C. SLAB UNIT — 52244



REINFORCING PLAN - TOP OF SLAB

Scale: 3/16" = 1'-0"
(BRIDGE A SHOWN - BRIDGE B OPPOSITE HAND)

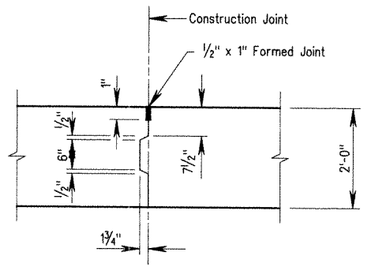
Note:
No part of the falsework for each stage of the unit shall be removed until all of the concrete in the bridge deck slab for each stage has been placed and cured. Any railing pours made before the entire slab unit has been placed must be approved by the Engineer. At least 72 hours shall elapse between adjacent pours. Concrete in bridge superstructure shall be consolidated for the entire pour before any concrete has taken its initial set. This may require the use of a retarding agent. The contractor must obtain approval from the Engineer for any deviation from the pouring sequence shown.



DEAD LOAD CAMBER DIAGRAM

Tolerance +1/4 for camber and vertical alignment. Camber shown is from a chord from centerline bent to centerline bent. Vertical alignment correction are not included.

TABLE SYMM ABOUT PT 2.0		
Point	Immediate Deflection	Total Deflection
1.0	0"	0"
1.1	0"	1/16"
1.2	1/16"	3/16"
1.3	1/8"	5/16"
1.4	1/8"	3/8"
1.5	1/8"	3/8"
1.6	1/16"	3/16"
1.7	1/16"	1/8"
1.8	0"	1/16"
1.9	0"	0"
2.0	0"	0"



LONGITUDINAL CONSTRUCTION JOINT DETAIL

NTS

Use 1/2"x 1" Type 3, 4, or 6 Joint Sealer. See Section 501.02(h) and 501.05(j) of the Standard Specifications. Backer Rod filler will not be required. Joint Sealer shall be measured and paid for as Class S(AE) Concrete Bridge. Color shall be gray or other color similar to concrete.

(1) These bars shall be epoxy coated mechanical rebar splices. They shall develop at least 125% of the specified yield strength of the bar.

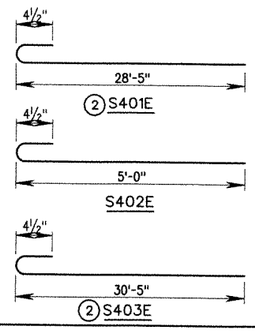
The mechanical rebar splices shall be from the AHTD Qualified Products List (QPL) and shall maintain minimum clearances shown. Their payment shall be considered subsidiary to the item "Epoxy Coated Reinforcing Steel (Grade 60)".

(3) These bars shall have mechanical rebar splices.

BAR LIST - PER UNIT

	MK	No. Req'd.	Length	Dia. Pin
TOP	S401E	68	28'-11"	3"
	S402E	134	5'-6"	3"
	S403E	68	30'-11"	3"
	S801E	60	22'-4"	Str.
	S802E	60	52'-6"	Str.
	S901E	58	18'-0"	Str.
	S902E	6	54'-0"	Str.
	S903E	6	22'-4"	Str.
BOTTOM	S404E	91	28'-5"	Str.
	S405E	91	30'-5"	Str.
	S803E	120	36'-6"	Str.
	S804E	116	27'-0"	Str.
	S904E	12	37'-2"	Str.
PARAPET	P401E	134	6'-4"	2"
	P402E	134	7'-3"	2"
	P403E	10	5'-9"	2"
	P404E	10	3'-5"	2"
	P406E	78	10'-11"	Str.
	P602E	10	10'-11"	Str.

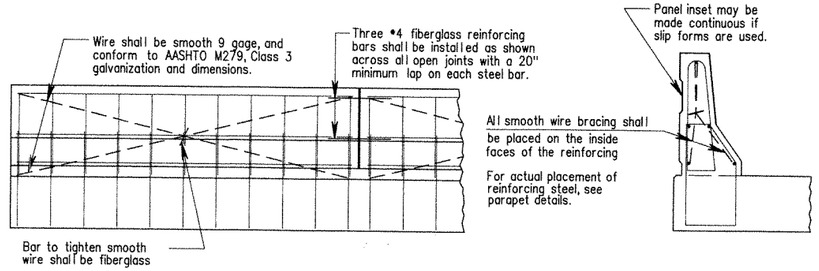
Bending Diagrams



(2) The lengths shown are from end of bar to the required construction joint. Individual lengths shall be determined by the Contractor based on the type of mechanical coupler used.

Notes:
For General Notes, see dwg. no. 52235.
For Parapet Rail bar bending diagrams, see dwg. no. 52249.
All bars to be epoxy coated. See Section 804 of the Standard Specifications for Epoxy Coated Reinforcing Steel (Grade 60).

Note:
Required slab joints shall align with parapet open joints.



All panels shall be braced as required to prevent racking. All open joints shall be sawed as soon as practical to a minimum width of 1/4". To control cracking before sawing all joints must be grooved before the concrete is set. Sawing of the joints must be controlled so it will follow the grooved joint.

The extruded parapet shall conform to the horizontal and vertical lines shown on the plans or as directed by the Engineer and shall present a smooth, uniform appearance and texture. Exposed surface may be given a light brush finish or a Class 3, Textured Coating Finish, in place of the Class 2, Rubbed Finish.

DETAILS OF OPTIONAL SLIPFORMING OF CONCRETE PARAPET RAIL

No Scale

STATE OF ARKANSAS — REGISTERED PROFESSIONAL ENGINEER — No. 10065 — KEITH MICHAEL KEVER — 9-1-2011

SHEET 2 OF 3

DETAILS OF 68'-0" CONTINUOUS R.C. SLAB UNIT
INTERSTATE 40 BRIDGE OVER
GOLD CREEK

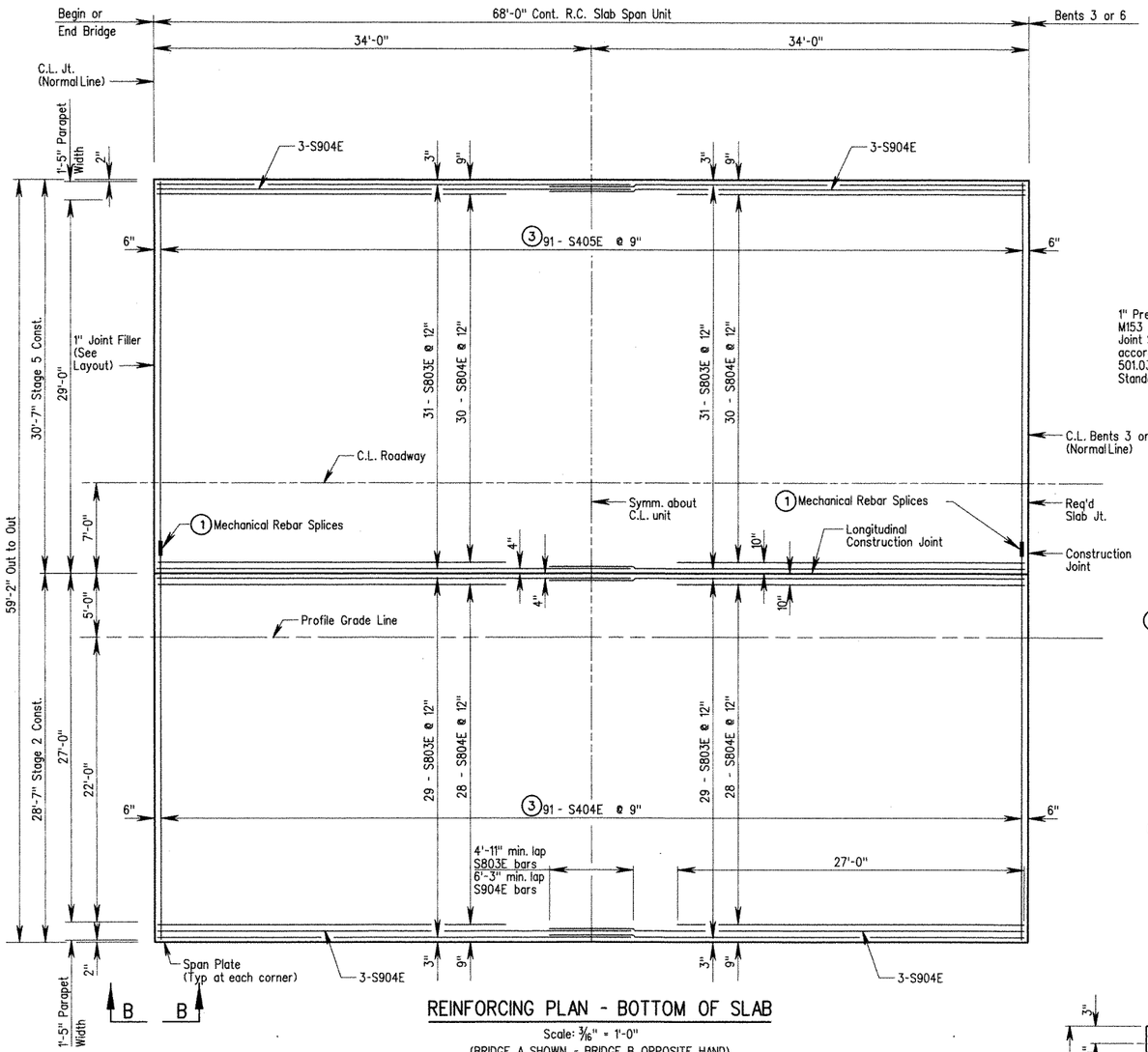
ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

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CHECKED BY: KG/KM DATE: Sept 2011 SCALE: AS SHOWN
DESIGNED BY: TT/CZ DATE: Sept 2011

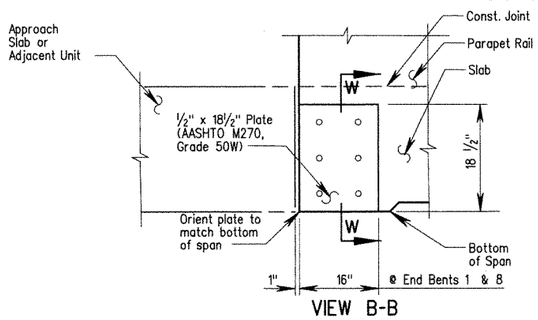
BRIDGE NO. A6884 & B6884 DRAWING NO. 52244

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		080388	245	452
				(1) A6884 & B6884		68' CONT. R.C. SLAB UNIT		52245

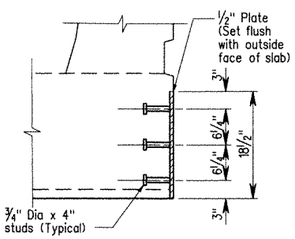


REINFORCING PLAN - BOTTOM OF SLAB

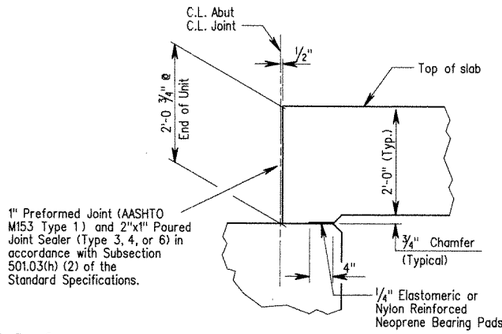
Scale: 3/16" = 1'-0"
(BRIDGE A SHOWN - BRIDGE B OPPOSITE HAND)



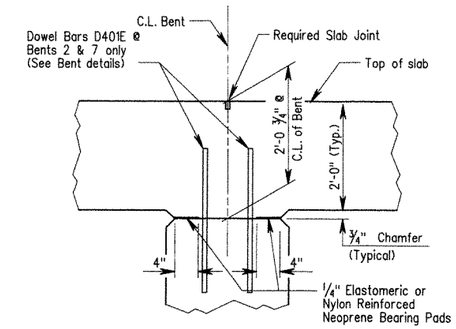
VIEW B-B
NTS



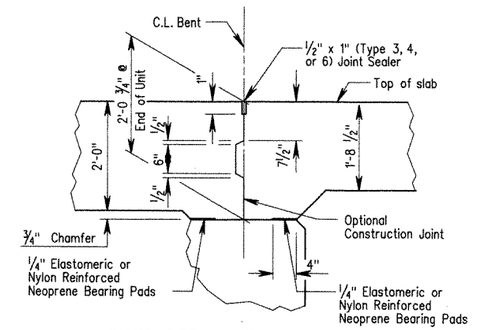
SECTION W-W
NTS



TYPICAL RISER DETAIL AT ABUTMENT SUPPORT
NTS



TYPICAL RISER DETAIL AT BENTS 2 & 7
NTS

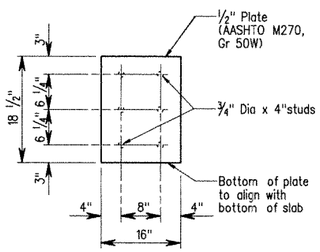


RISER DETAIL AT BENTS 3 & 6
NTS

(1) These bars shall be epoxy coated mechanical rebar splices. They shall develop at least 125% of the specified yield strength of the bar.

The mechanical rebar splices shall be from the AHTD Qualified Products List (QPL) and shall maintain minimum clearances shown. Their payment shall be considered subsidiary to the item "Epoxy Coated Reinforcing Steel (Grade 60)".

(3) These bars shall have mechanical rebar splices.



DETAIL OF SPAN PLATE
NTS

Note:
3/4" dia studs shall be granular flux filled, solid fluxed or equal, and automatically end welded in accordance with the recommendations of the manufacturer.

Studs and plate shall be considered subsidiary to the item "Class S(AE) Concrete - Bridge".

Note:
Elastomeric or Nylon Reinforced Neoprene Bearing Pads shall be measured and paid for as "Class S(AE) Concrete - Bridge." The pad shall be one piece for the full length of the bearing. The elastomeric bearing pad shall meet the requirements of section 808 of the standard specifications for unreinforced pads. The nylon reinforced neoprene pad material shall meet the requirements of section 807.20 of the standard specifications.

Note:
No part of the falsework for each stage of the unit shall be removed until all of the concrete in the bridge deck slab for each stage has been placed and cured. Any railing pours made before the entire slab unit has been placed must be approved by the Engineer. At least 72 hours shall elapse between adjacent pours. Concrete in bridge superstructure shall be consolidated for the entire pour before any concrete has taken its initial set. This may require the use of a retarding agent. The contractor must obtain approval from the Engineer for any deviation from the pouring sequence shown.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9066
9-1-2011
KEITH MICHAEL MEYER

SHEET 3 OF 3

DETAILS OF 68'-0" CONTINUOUS R.C. SLAB UNIT
INTERSTATE 40 BRIDGE OVER
GOLD CREEK

ROUTE SEC.

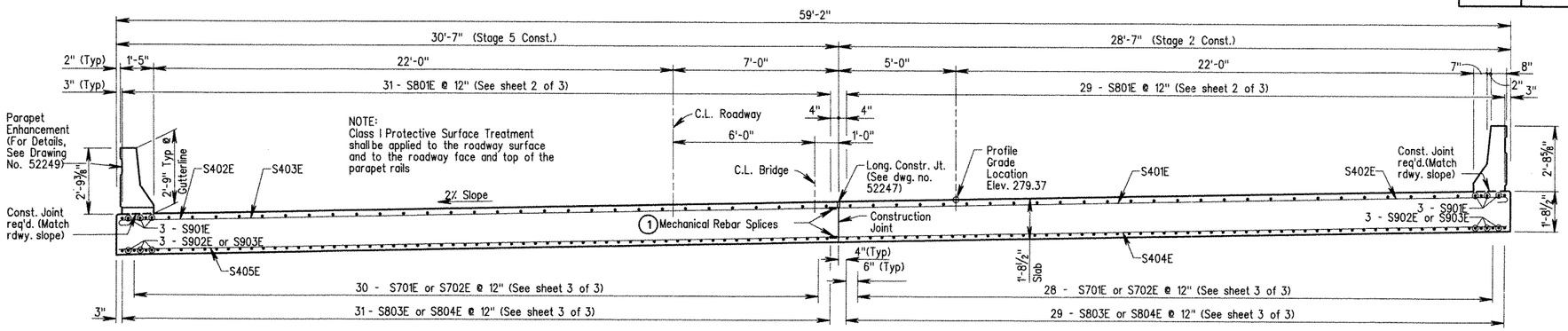
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: DK DATE: Sept 2011 FILENAME: FILENAME
CHECKED BY: KG/KM DATE: Sept 2011 SCALE: AS SHOWN
DESIGNED BY: TT/CZ DATE: Sept 2011

BRIDGE NO. A6884 & B6884 DRAWING NO. 52245

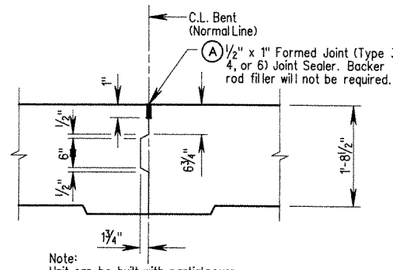
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080388	246	452

(1) A6884 & B6884 — 90' CONT.R.C. SLAB UNIT — 52246



TYPICAL ROADWAY SECTION AT MID-SPAN

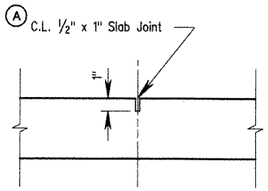
Looking Ahead
Scale: ⅜" = 1'-0"
(BRIDGE A SHOWN - BRIDGE B OPPOSITE HAND)



Note:
Unit can be built with partial pours terminating at ends of spans only

OPTIONAL DECK SLAB CONSTRUCTION JOINT DETAIL

NTS

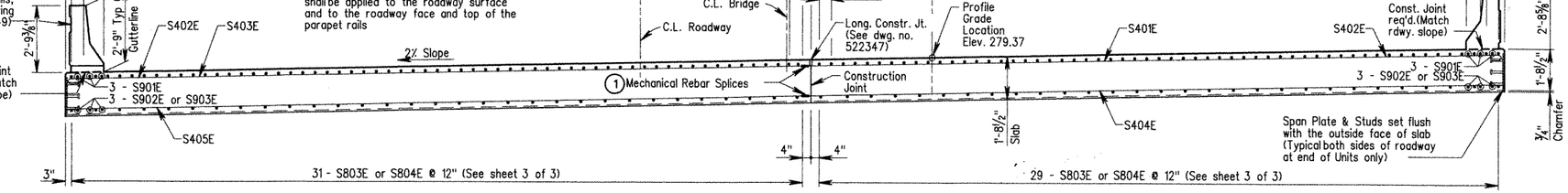


REQUIRED SLAB JOINT DETAIL

NTS

Note:
Slab joint to be placed over each interior bent and other locations as shown on top slab plan

(A) Use ½"x 1" Type 3, 4, or 6 Joint Sealer. See Section 501.02(h) and 501.05(j). Backer Rod filler will not be required. Joint Sealer shall be measured and paid for as Class S(AE) Concrete-Bridge. Slab joints shall extend to the outside edge of the deck slab. Slab joints shall be installed before the falsework is removed and before the parapet railing is poured. If slab joints are to be sawed, they shall be sawed as soon as the concrete has sufficiently set to allow sawing of the joint without damage to the slab. Slab Joints shall be placed at required slab joint locations. No Joint sealer shall be placed under the parapet rails. Slab joints shall align with parapet open joints.

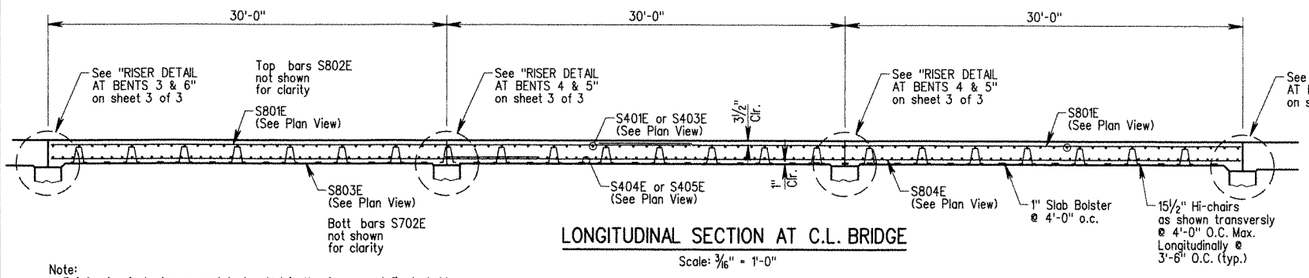


TYPICAL ROADWAY SECTION OVER BENT

Looking Ahead
Scale: ⅜" = 1'-0"
(BRIDGE A SHOWN - BRIDGE B OPPOSITE HAND)

(1) These bars shall be epoxy coated mechanical rebar splices. They shall develop at least 125% of the specified yield strength of the bar.

The mechanical rebar splices shall be from the AHTD Qualified Products List (QPL) and shall maintain minimum clearances shown. Their payment shall be considered subsidiary to the item "Epoxy Coated Reinforcing Steel (Grade 60)".



LONGITUDINAL SECTION AT C.L. BRIDGE

Scale: 3/16" = 1'-0"

Note:
Reinforcing is to be accurately located in the forms and firmly held in place by steel wire supports, sufficient in number and size to prevent displacement during the course of construction. The wire supports will not be paid for directly but will be considered subsidiary to the item "Epoxy Coated Reinforcing Steel (Grade 60)".

GENERAL NOTES:

All concrete shall be Class "S(AE)" with a minumum 28 day compressive strength f'c = 4000 psi. Concrete shall be poured in the dry and all exposed corners to be chamfered ¾" unless otherwise noted.

All reinforcing steel shall conform to AASHTO M31 or M53, Grade 60 (yield strength = 60,000 psi.).

For additional information, see Layout.

Dead Load 280 lb/sf (Includes 24 lb/sf future surface)

Live Load 0.193 wheels/ft of width + impact

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No.9066 KEITH MICHAEL MEYER 7-1-2011

SHEET 1 OF 3

DETAILS OF 90'-0" CONTINUOUS R.C. SLAB UNIT
INTERSTATE 40 BRIDGE OVER
GOLD CREEK

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

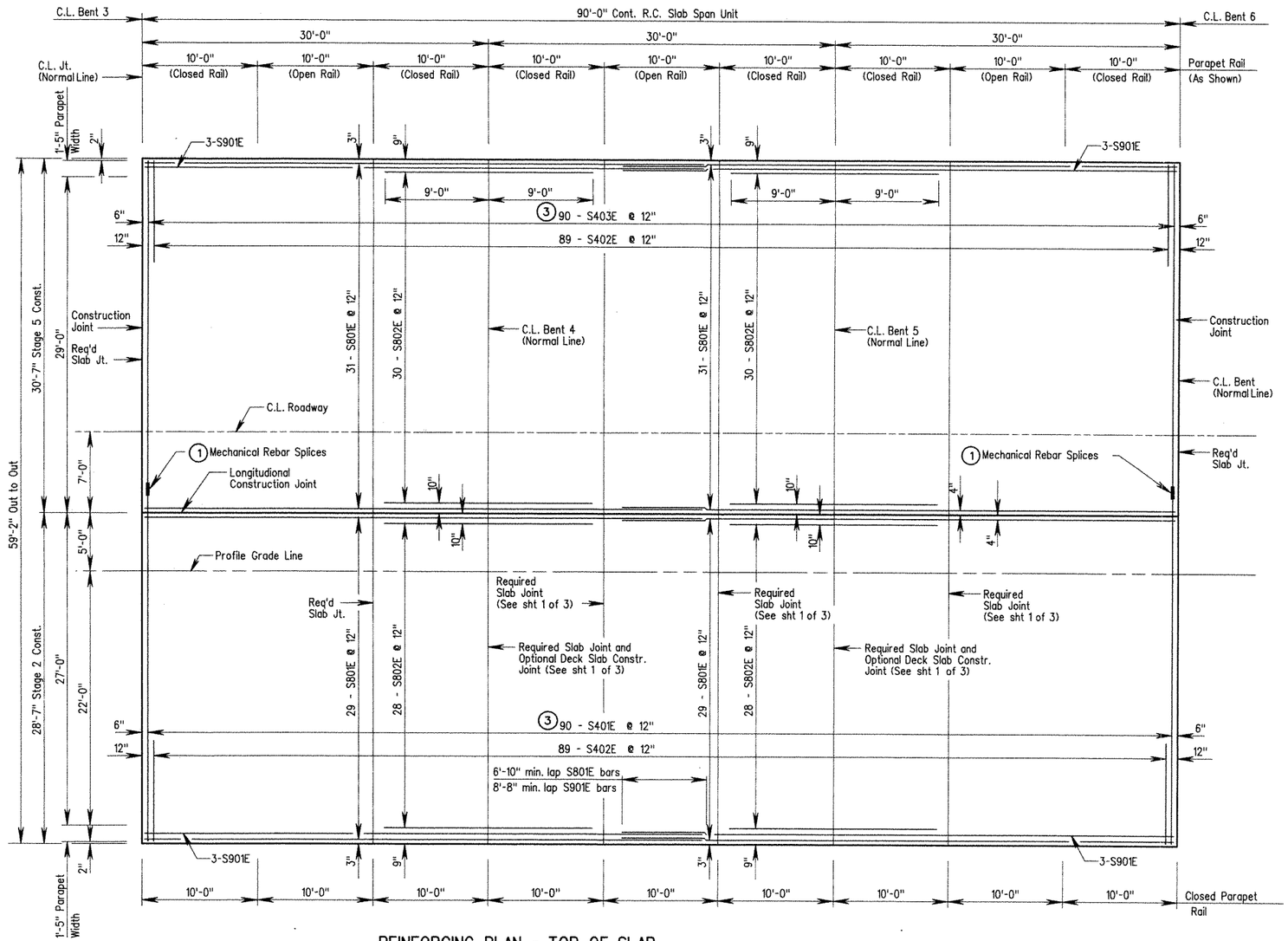
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CHECKED BY: KG/KM DATE: Sept 2011 SCALE: AS SHOWN
DESIGNED BY: TT/CZ DATE: Sept 2011

BRIDGE NO. A6884 & B6884 DRAWING NO. 52246

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.		080388	247	458

(1) A6884 & B6884 — 90' CONT. R.C. SLAB UNIT — 52247



REINFORCING PLAN - TOP OF SLAB

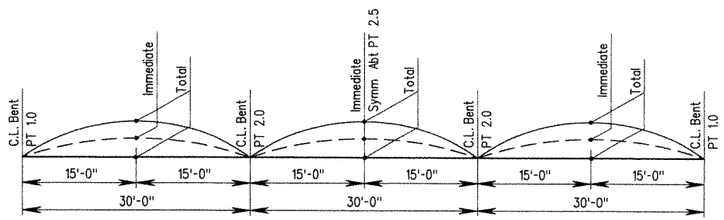
Scale: 3/16" = 1'-0"

(BRIDGE A SHOWN - BRIDGE B OPPOSITE HAND)

(1) These bars shall be epoxy coated mechanical rebar splices. They shall develop at least 125% of the specified yield strength of the bar.

The mechanical rebar splices shall be from the AHTD Qualified Products List (QPL) and shall maintain minimum clearances shown. Their payment shall be considered subsidiary to the item "Epoxy Coated Reinforcing Steel (Grade 60)".

Note:
No part of the falsework for each stage of the unit shall be removed until all of the concrete in the bridge deck slab for each stage has been placed and cured. Any railing pours made before the entire slab unit has been placed must be approved by the Engineer. At least 72 hours shall elapse between adjacent pours. Concrete in bridge superstructure shall be consolidated for the entire pour before any concrete has taken its initial set. This may require the use of a retarding agent. The contractor must obtain approval from the Engineer for any deviation from the pouring sequence shown.



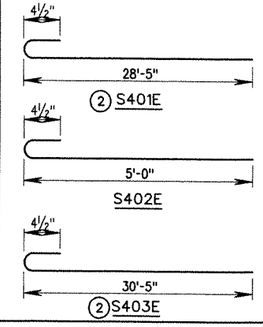
DEAD LOAD CAMBER DIAGRAM

Tolerance +1/4 for camber and vertical alignment. Camber shown is from a chord from centerline bent to centerline bent. Vertical alignment correction are not included.

BAR LIST - PER UNIT

	MK	No. Req'd.	Length	Dia. Pin
T	S401E	90	28'-11"	3"
T	S402E	178	5'-6"	3"
O	S403E	90	30'-11"	3"
P	S801E	120	48'-6"	Str.
	S802E	116	18'-0"	Str.
	S901E	12	49'-6"	Str.
	S404E	120	28'-5"	Str.
B	S405E	120	30'-5"	Str.
O	S701E	116	23'-0"	Str.
T	S702E	58	16'-0"	Str.
T	S803E	60	36'-6"	Str.
O	S804E	60	58'-6"	Str.
M	S902E	6	37'-9"	Str.
	S903E	6	58'-6"	Str.
P	P401E	180	6'-4"	2"
A	P402E	180	7'-3"	2"
R	P403E	15	5'-9"	2"
A	P404E	15	3'-5"	2"
P	P405E	117	9'-7"	Str.
E	P601E	15	9'-7"	Str.
T				

Bending Diagrams
(Dimensions are out to out of bars)



(2) The lengths shown are from end of bar to the required construction joint. Individual lengths shall be determined by the Contractor based on the type of mechanical coupler used.

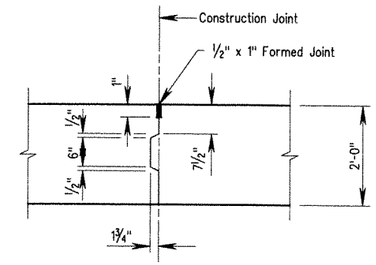
TABLE SYMM ABOUT PT 2.5

Point	Immediate Deflection	Total Deflection
1.0	0"	0"
1.1	0"	1/16"
1.2	1/16"	1/4"
1.3	1/8"	7/16"
1.4	3/16"	1/2"
1.5	3/16"	1/2"
1.6	1/8"	5/16"
1.7	1/16"	3/16"
1.8	0"	1/8"
1.9	0"	1/16"
2.0	0"	0"
2.1	0"	0"
2.2	0"	0"
2.3	0"	0"
2.4	0"	0"
2.5	0"	0"

Notes:
For General Notes, see dwg. no. 52235.
For Parapet Rail bar bending diagrams, see dwg. no. 52249.
All bars to be epoxy coated. See Section 804 of the Standard Specifications for Epoxy Coated Reinforcing Steel (Grade 60).

Note:
Required slab joints shall align with parapet open joints.

(3) These bars shall have mechanical rebar splices.



LONGITUDINAL CONSTRUCTION JOINT DETAIL

NTS

Use ½"x 1" Type 3, 4, or 6 Joint Sealer. See Section 501.02(h) and 501.05(j) of the Standard Specifications. Backer Rod filler will not be required. Joint Sealer shall be measured and paid for as Class S(AE) Concrete Bridge. Color shall be gray or other color similar to concrete.

STATE OF ARKANSAS
Kevin Mayo
REGISTERED PROFESSIONAL ENGINEER
No. 8066
9-1-2011
KEVIN MICHAEL MAYO

SHEET 2 OF 3

DETAILS OF 90'-0" CONTINUOUS R.C. SLAB UNIT
INTERSTATE 40 BRIDGE OVER
GOLD CREEK

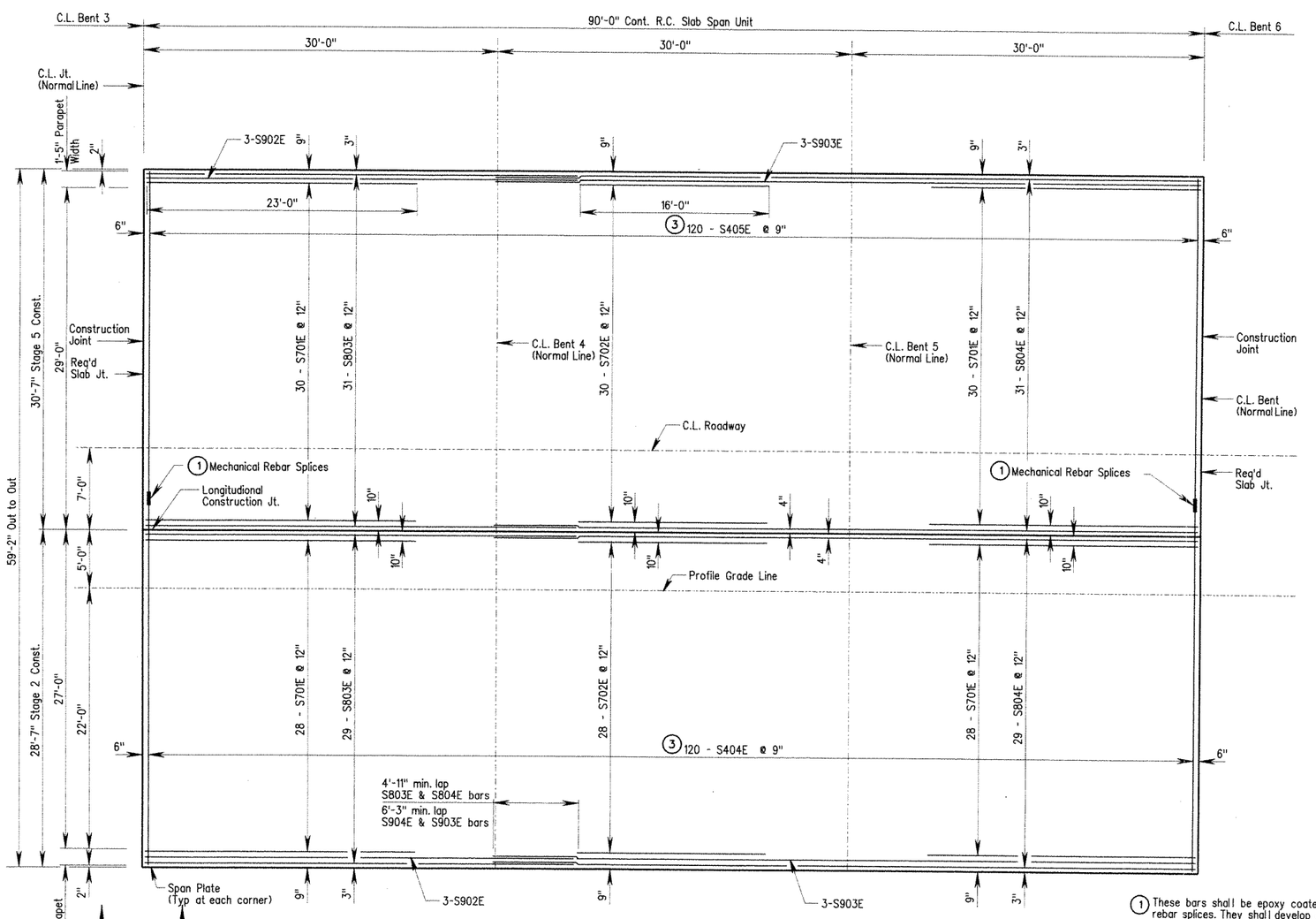
ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: DK DATE: Sept 2011 FILENAME: FILENAME
CHECKED BY: KG/KM DATE: Sept 2011 SCALE: AS SHOWN
DESIGNED BY: TT/CZ DATE: Sept 2011

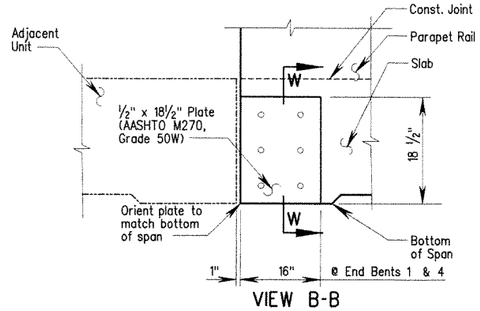
BRIDGE NO. A6884 & B6884 DRAWING NO. 52247

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.		080388	248	452
				(1) A6884 & B6884		90' CONT. R.C. SLAB UNIT		52248

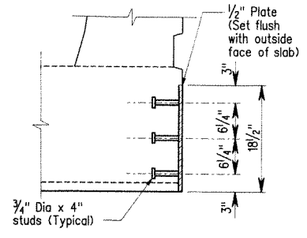


REINFORCING PLAN - BOTTOM OF SLAB

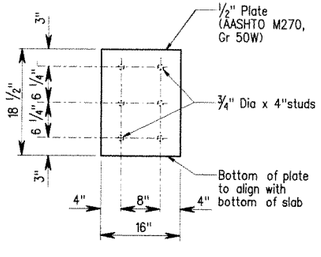
Scale: 3/16" - 1'-0"
(BRIDGE A SHOWN - BRIDGE B OPPOSITE HAND)



VIEW B-B
NTS



SECTION W-W
NTS



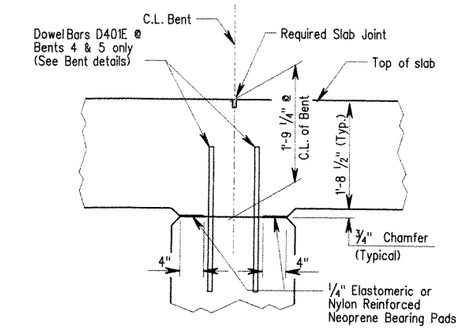
DETAIL OF SPAN PLATE
NTS

(1) These bars shall be epoxy coated mechanical rebar splices. They shall develop at least 125% of the specified yield strength of the bar.

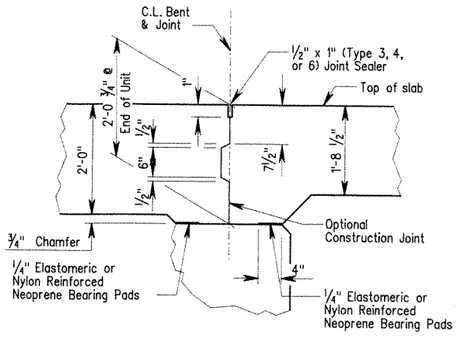
The mechanical rebar splices shall be from the AHTD Qualified Products List (QPL) and shall maintain minimum clearances shown. Their payment shall be considered subsidiary to the item "Epoxy Coated Reinforcing Steel (Grade 60)".

Note:
¾" dia studs shall be granular flux filled, solid fluxed or equal, and automatically end welded in accordance with the recommendations of the manufacturer.

Studs and plate shall be considered subsidiary to the item "Class S(AE) Concrete - Bridge".



TYPICAL RISER DETAIL AT BENTS 4 & 5
NTS



RISER DETAIL AT BENTS 3 & 6
NTS

Note:
Elastomeric or Nylon Reinforced Neoprene Bearing Pads shall be measured and paid for as "Class S(AE) Concrete - Bridge." The pad shall be one piece for the full length of the bearing. The elastomeric bearing pad shall meet the requirements of section 808 of the standard specifications for unreinforced pads. The nylon reinforced neoprene pad material shall meet the requirements of section 807.20 of the standard specifications.

Note:
No part of the falsework for each stage of the unit shall be removed until all of the concrete in the bridge deck slab for each stage has been placed and cured. Any railing pours made before the entire slab unit has been placed must be approved by the Engineer. At least 72 hours shall elapse between adjacent pours. Concrete in bridge superstructure shall be consolidated for the entire pour before any concrete has taken its initial set. This may require the use of a retarding agent. The contractor must obtain approval from the Engineer for any deviation from the pouring sequence shown.

(3) These bars shall have mechanical rebar splices.



SHEET 3 OF 3

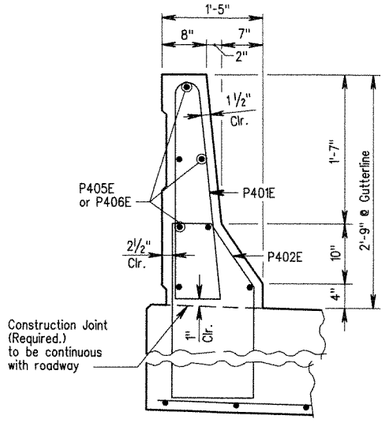
DETAILS OF 90'-0" CONTINUOUS R.C. SLAB UNIT
INTERSTATE 40 BRIDGE OVER
GOLD CREEK

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: DK/KR DATE: Sept 2011 FILENAME: FILENAME
CHECKED BY: KG/KM DATE: Sept 2011 SCALE: AS SHOWN
DESIGNED BY: TT/CZ DATE: Sept 2011

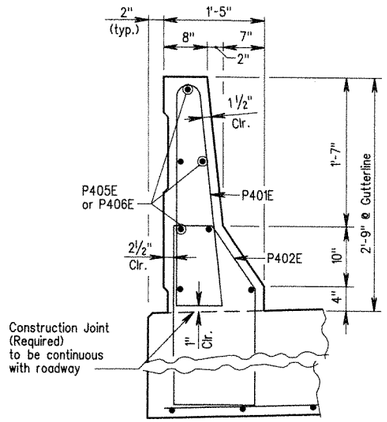
BRIDGE NO. A6884 & B6884 DRAWING NO. 52248



SECTION A-A

NTS

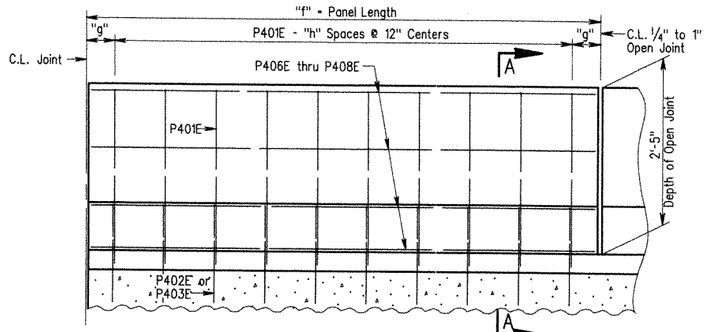
(High side of roadway)



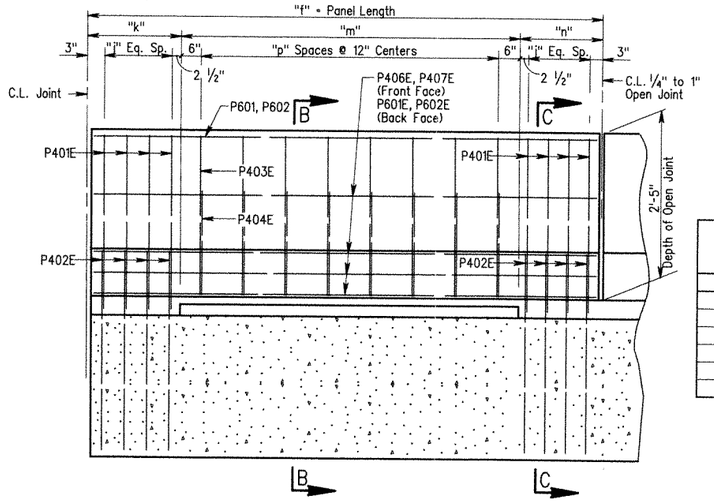
SECTION A-A

NTS

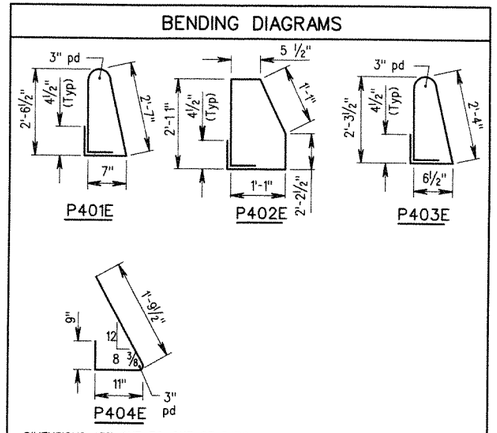
(Low side of roadway)



TYP. SECTION AT CURB FOR CLOSED PARAPET RAIL



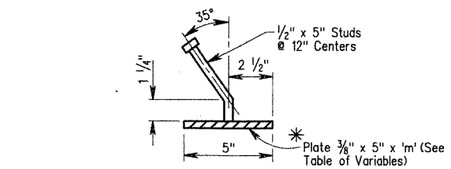
SECTION AT CURB FOR OPEN PARAPET RAIL



For "Bar List" see "Details of R.C. Slab Unit". All bars to be epoxy coated.

TABLE OF VARIABLES

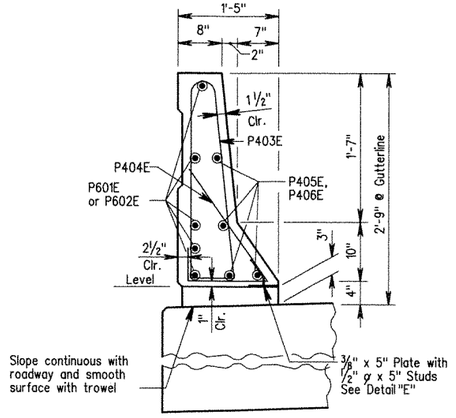
Parapet Joint Variables	Closed Rail		Open Rail				
'f'	'g'	'h'	'j'	'k'	'm'	'n'	'p'
10'-0"	6"	9	4	2'-6"	5'-0"	2'-6"	4
11'-4"	8"	10	5	3'-2"	5'-0"	3'-2"	4



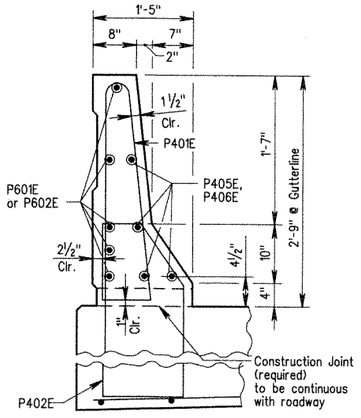
DETAIL "E"

Note:
Studs shall be 5" long, Granular Flux Filled, Solid Fluxed, or Equal, and automatically welded to plate. Studs and plate to be AASHTO M270, Grade 36 and shall be considered subsidiary to Class S(AE) Concrete.

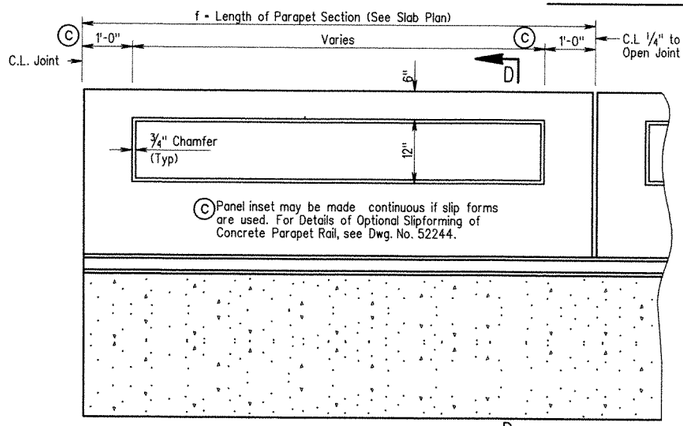
✳ The surfaces of the ⅜" plates which will not be in contact with concrete shall be painted in accordance with section 638 or as approved by the engineer. Only one coat is required, and it shall be applied in the shop. Painting will not be paid directly but shall be considered subsidiary to Class S(AE) Concrete.



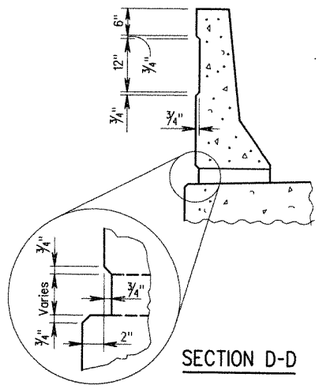
SECTION B-B



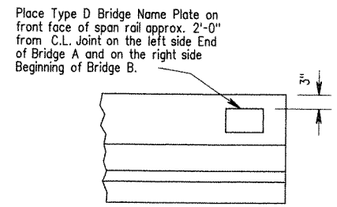
SECTION C-C



ELEVATION SHOWING TREATMENT FOR PARAPET RAIL

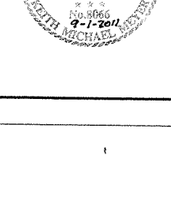


SECTION D-D



NAME PLATE DETAIL

N.T.S.



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.		080388	249	252
				(1) A6884 & B6884		COMMON DETAILS		52249

SHEET 1 OF 1

COMMON DETAILS FOR CONTINUOUS R.C. SLAB UNITS

INTERSTATE 40 BRIDGE OVER

GOLD CREEK

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: RLB DATE: Sept 2011 FILENAME: FILENAME

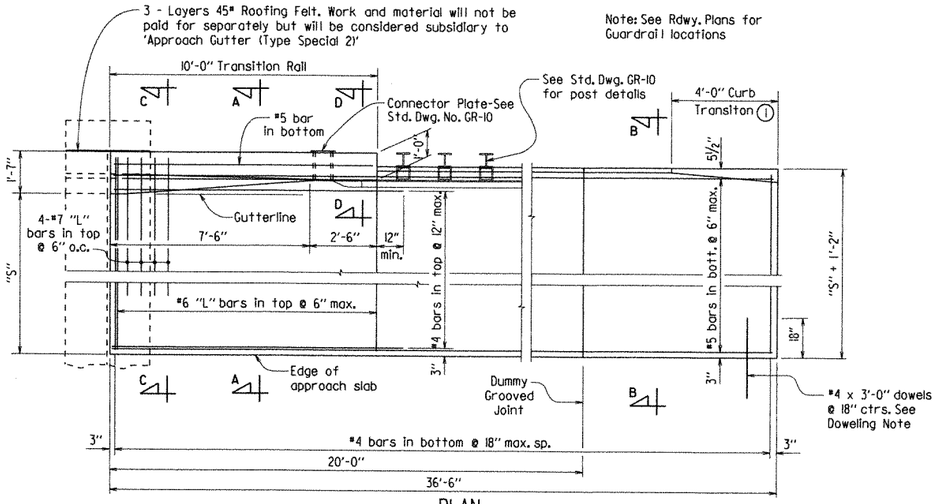
CHECKED BY: DKM/KM DATE: Sept 2011 SCALE: AS SHOWN

DESIGNED BY: KMM/KM DATE: Sept 2011

BRIDGE NO. A6884 & B6884 DRAWING NO. 52249

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.		080388	250	452

(1) A&B6883, A&B6884 APPR. GUTTER DETAIL 52250



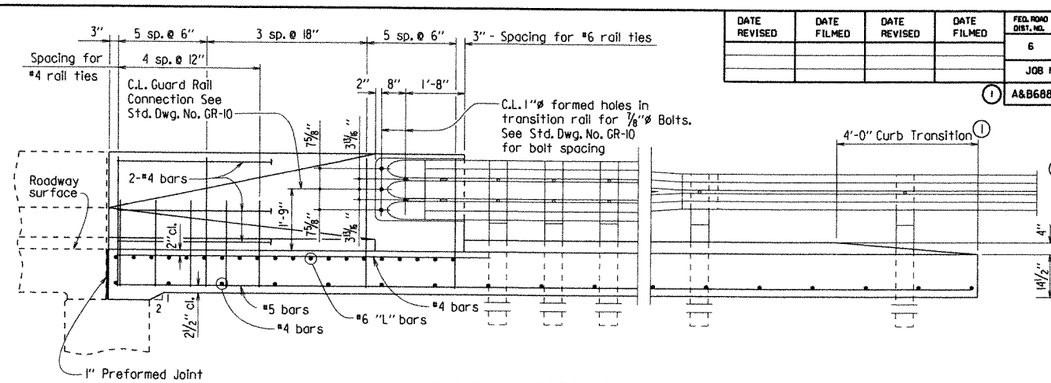
PLAN

Scale: 3/8" = 1'-0"

"S" = Distance from gutterline to edge of approach slab.

DOWELING NOTE:

Place dowels into approach slab using 18" embedment.

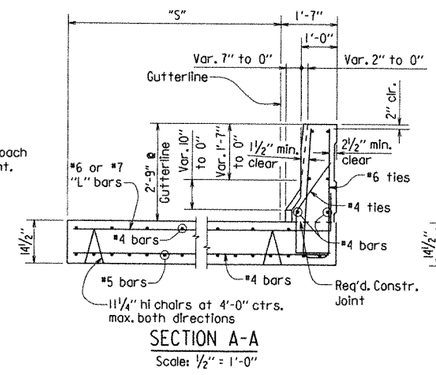


(1) Construct curb with height-transition as shown if drop inlet is not used at end of gutter.

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

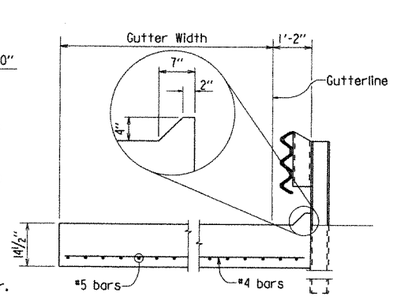
LONGITUDINAL SECTION THRU GUTTER

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



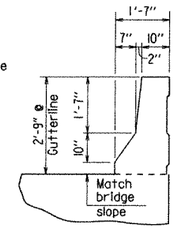
SECTION A-A

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



SECTION B-B

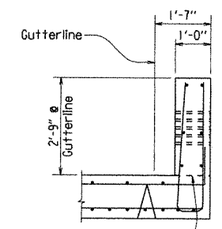
Scale: 1/2" = 1'-0"



SECTION C-C

At End of Transition Rail

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



SECTION D-D

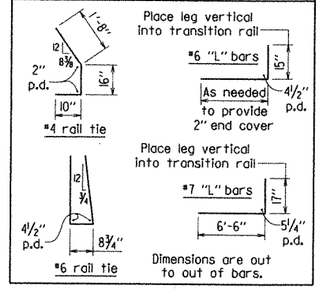
Scale: 1/2" = 1'-0"

1/4" x 2" Poured Synthetic Polymer Jt. Sealer (Type 3, 4 or 6) as per Subsection 501.02 (h) (2)
Backer rod is not required
Constr. Jt. (optional)
2"

DETAILS OF DUMMY GROOVED JOINT

No Scale

BENDING DIAGRAMS



GENERAL NOTES

Concrete shall be Class S(AE) (f'c = 4,000 psi).

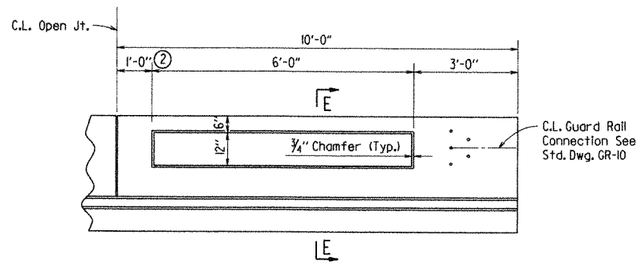
Reinforcing steel shall conform to AASHTO M31 or M53, Grade 60 (fy = 60,000 psi.) Fabricate bar lengths to provide 2" minumum cover at each end.

Approach gutters will be measured and paid for in accordance with Section 504 of the Standard Specifications.

QUANTITIES FOR ONE SQUARE APPROACH GUTTER

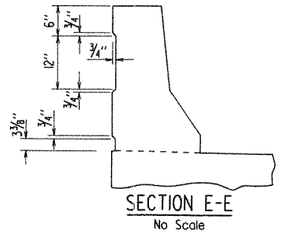
"S"	Concrete	Reinforcing Steel
10'-0"	20.07 cu.yd.	1815 lb.

(2) Panel insert shall be made continuous if slip form is used on Bridge Rail.



DETAILS OF TRANSITION RAIL ENHANCEMENT

No Scale



SECTION E-E

No Scale

STATE OF ARKANSAS
CARL W. FUSELIER
REGISTERED PROFESSIONAL ENGINEER
No. 7510
9/28/11

BRIDGE ENGINEER

DETAILS OF TYPE SPECIAL 2 APPROACH GUTTER

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: CMW DATE: 9-20-2011 FILENAME: b080388_g2.dgn

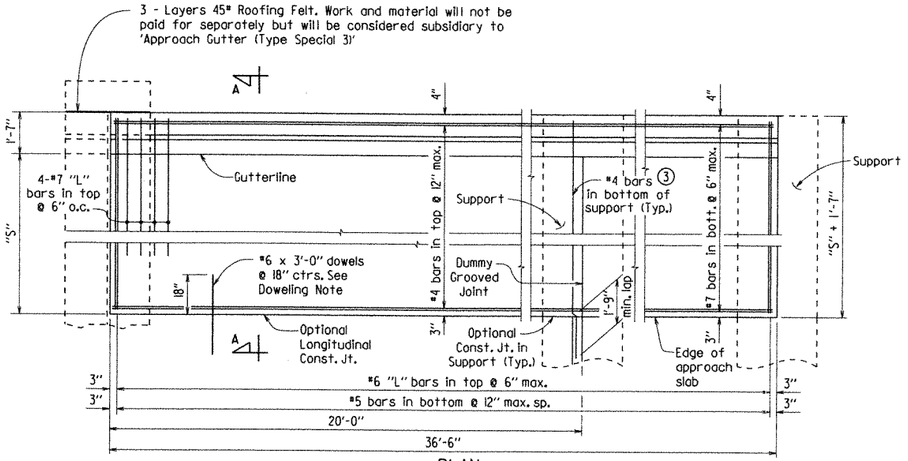
CHECKED BY: DHP DATE: 9-27-11 SCALE: AS NOTED

DESIGNED BY: Std. DATE: —

BRIDGE NOS. A&B6883, A&B6884 DRAWING NO. 52250

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.		080388	251	452

(1) A&B6883, A&B6884 APPR. GUTTER DETAIL 52250A



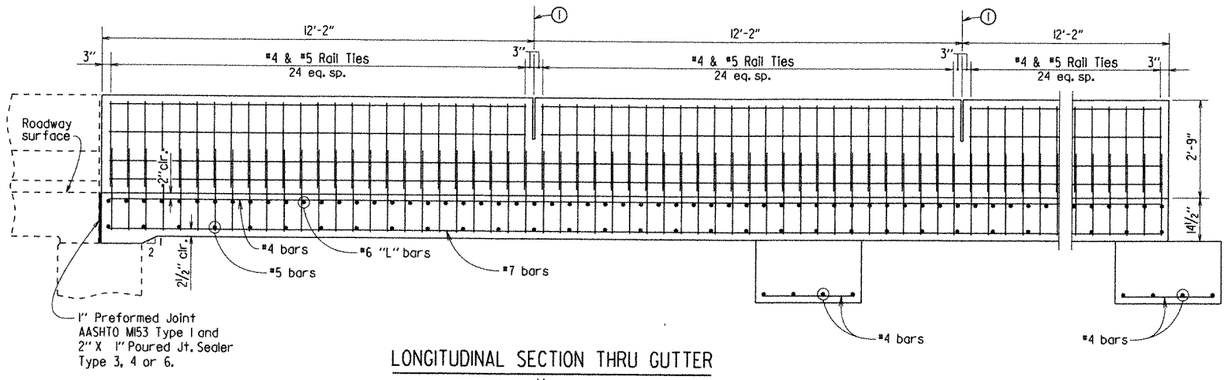
PLAN

Scale: 3/8" = 1'-0"

"S" = Distance from gutterline to edge of approach slab.

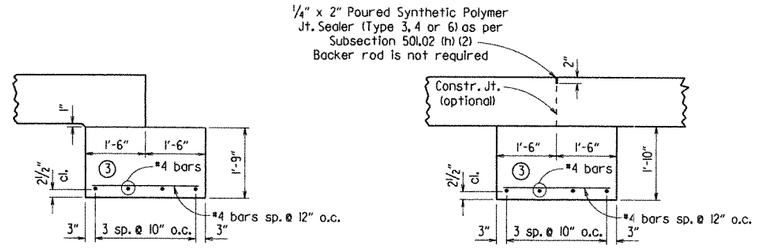
DOWELING NOTE:

Place dowels into approach slab using 18" embedment.



LONGITUDINAL SECTION THRU GUTTER

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

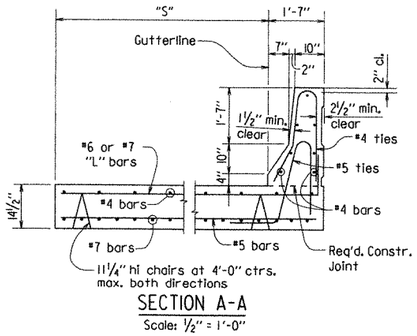


DETAILS OF SUPPORT

No Scale

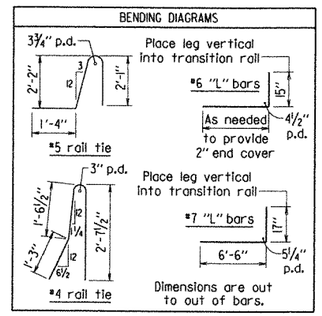
DETAILS OF DUMMY GROOVED JOINT

No Scale



SECTION A-A

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



GENERAL NOTES

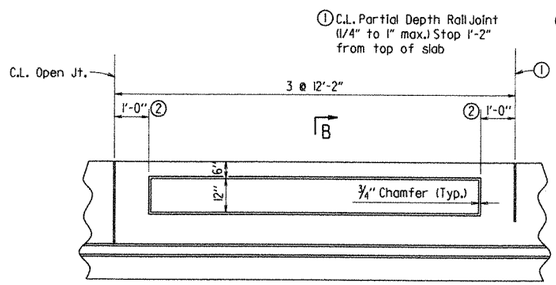
Concrete shall be Class S(AE) (f'c = 4,000 psi).

Reinforcing steel shall conform to AASHTO M31 or M53, Grade 60 (fy = 60,000 psi.) Fabricate bar lengths to provide 2" minumum cover at each end.

Approach gutters will be measured and paid for in accordance with Section 504 of the Standard Specifications.

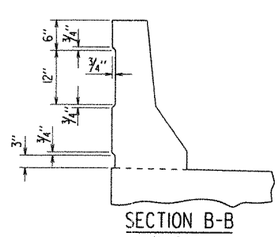
QUANTITIES FOR ONE SQUARE APPROACH GUTTER

"S"	Concrete	Reinforcing Steel
10'-0"	25.40 cu.yd.	4885 lb.



DETAILS OF TRANSITION RAIL ENHANCEMENT

No Scale



SECTION B-B

No Scale

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7510
9/28/11
CARL J. PUSELLER

BRIDGE ENGINEER

DETAILS OF TYPE SPECIAL 3 APPROACH GUTTER

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

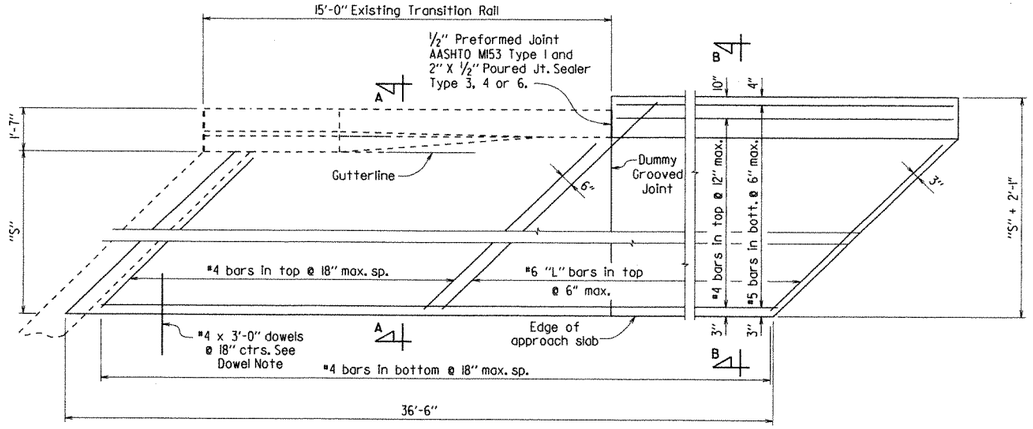
DRAWN BY: CMW DATE: 9-20-2011 FILENAME: b080388_g3.dgn

CHECKED BY: DHP DATE: 9-27-11 SCALE: AS NOTED

DESIGNED BY: Std. DATE: ——

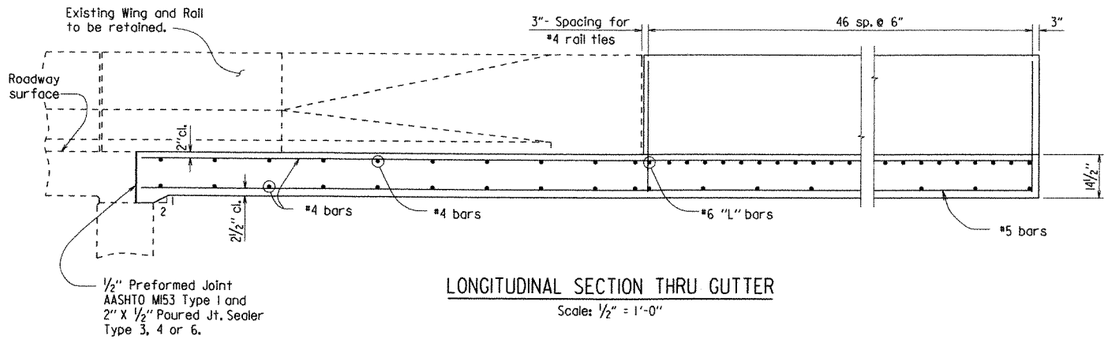
BRIDGE NOS. A&B6883, A&B6884 DRAWING NO. 52250A

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.		080388	25	45
				(1) B6869		APPR. GUTTER DETAIL	52250B	



PLAN

Scale: ⅜" = 1'-0"



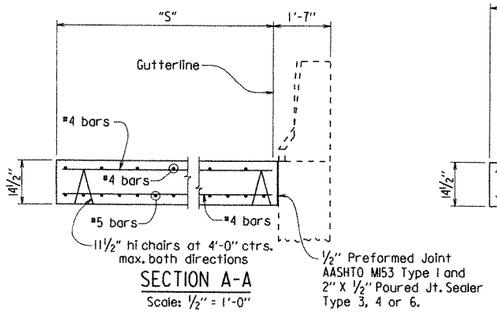
LONGITUDINAL SECTION THRU GUTTER

Scale: ½" = 1'-0"

DOWEL NOTE

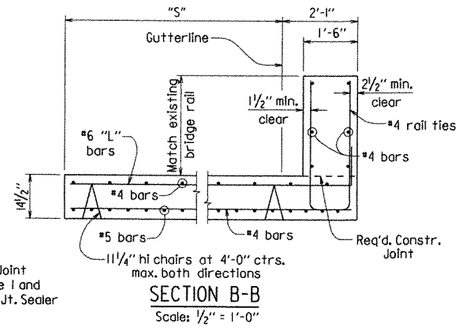
If new approach slab is used, place dowels into approach slab using 18" embedment.

If existing approach slab is retained, dowels shall be drilled and grouted 18" into existing slab. At the Contractor's option, existing dowels may be retained, cleaned and incorporated into new gutters. Work for drilling and grouting, or retaining and cleaning will not be paid for separately but will be considered subsidiary to 'Approach Gutters (Type Special 4)'.



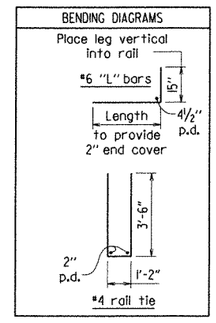
SECTION A-A

Scale: ½" = 1'-0"



SECTION B-B

Scale: ½" = 1'-0"

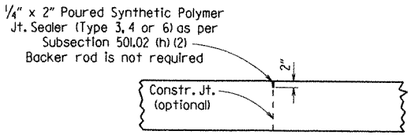


GENERAL NOTES

Concrete shall be Class S(AE).

Reinforcing steel shall conform to AASHTO M31 or M53, Grade 60 (fy = 60,000 psi.) Fabricate bar lengths to provide 2" minumum cover at each end.

Approach gutters will be measured and paid for in accordance with Section 504 of the Standard Specifications.



DETAILS OF DUMMY GROOVED JOINT

No Scale

QUANTITIES FOR ONE SQUARE APPROACH GUTTER

"S"	Concrete	Reinforcing Steel
6'-0"	15.74 cu.yd.	1810 lb.

STATE OF ARKANSAS
CARL J. FUSELIER
REGISTERED PROFESSIONAL ENGINEER
No. 7510
10/13/11

BRIDGE ENGINEER

DETAILS OF TYPE SPECIAL 4 APPROACH GUTTER

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: CMW DATE: 10-7-2011 FILENAME: b080388_g4.dgn

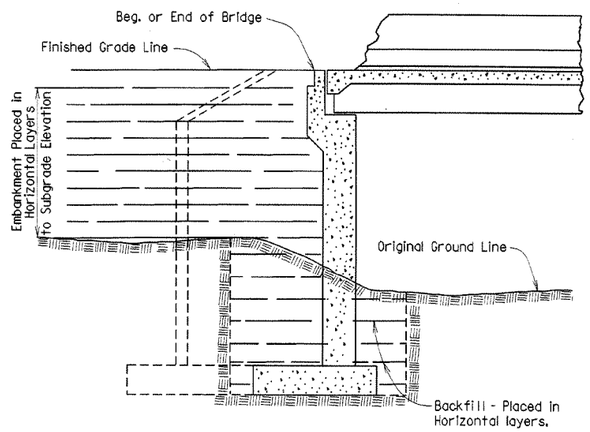
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DESIGNED BY: STD. DATE:

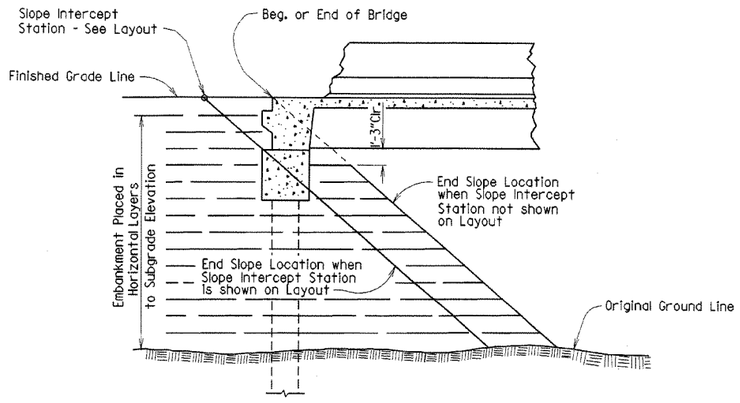
BRIDGE NO. B6869 DRAWING NO. 52250B

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
04-10-2003				6	ARK.		253	
				JOB NO.				

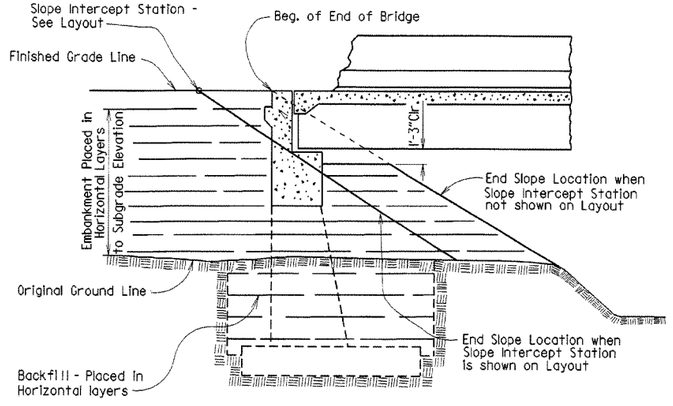
① EMBANKMENT & BACKFILL 1888A



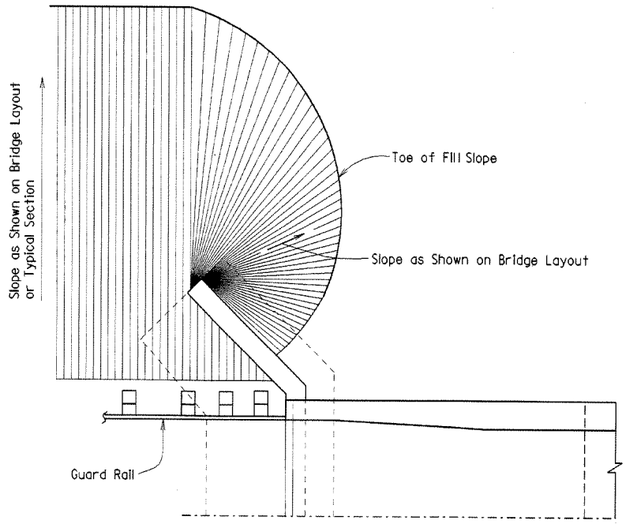
EMBANKMENT CONSTRUCTION AND FOOTING BACKFILL AT VERTICAL WALL ABUTMENTS



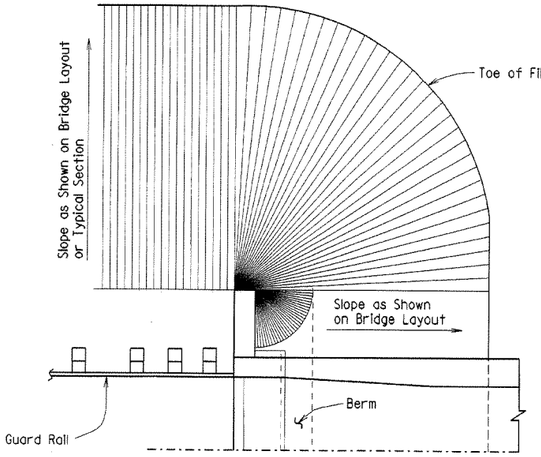
EMBANKMENT CONSTRUCTION AT SPILL-THROUGH PILE END BENTS



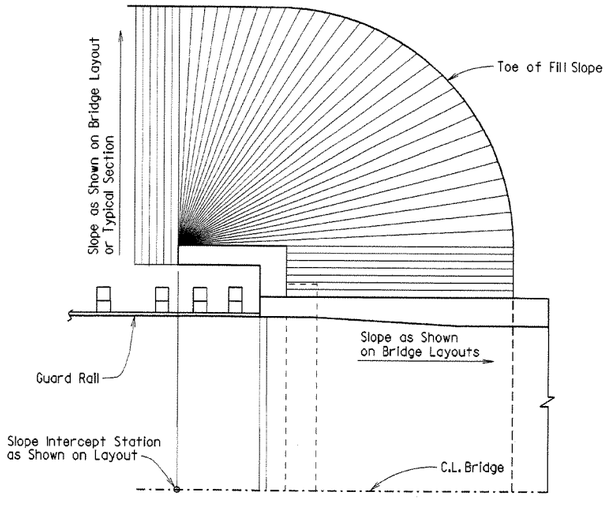
EMBANKMENT CONSTRUCTION AND FOOTING BACKFILL AT SPILL-THROUGH END BENTS



VERTICAL WALL ABUTMENTS



SPILL-THROUGH END BENTS WITH STUB WING



SPILL-THROUGH END BENTS WITH TURNBACK WING

SPILL-THROUGH END BENTS WITH TRANSITION WING

METHOD OF DETERMINING FILL SLOPE LOCATION AT BRIDGE ENDS

GENERAL NOTES

The Bridge End Embankment shall be defined as a section of embankment, not less than 20 feet long adjacent to the bridge end, together with the side slopes and slopes under the bridge end including around the end of wingwalls. Embankment adjacent to structures shall be constructed in 4 inch horizontal layers (loose measure) and compacted by the use of mechanical equipment to the satisfaction of the Engineer. Refer to subsections 210.09, 210.10 and 801.08 of the Specifications for construction requirements.

⚠ Revised and redrawn MJT 04-10-2003
Chk'd. By: CJF 04-10-2003

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 4337
CHARLES P. BRAND

BRIDGE ENGINEER

EMBANKMENT CONSTRUCTION AND BACKFILL AT BRIDGE ENDS

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

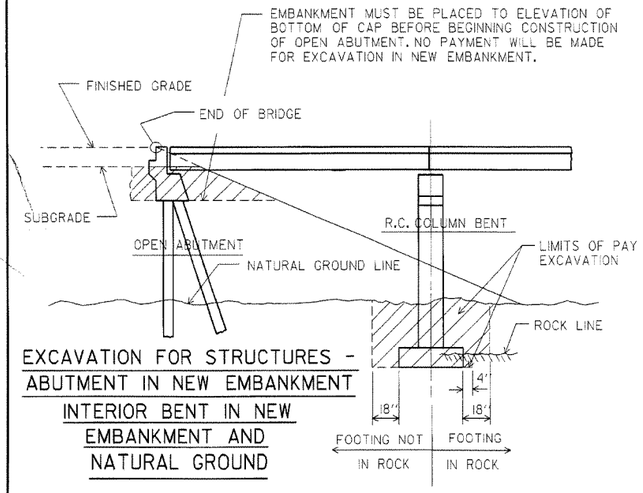
LITTLE ROCK, ARK.

DRAWN BY: MJT DATE: 04-10-2003 FILENAME: BI888A.STD
CHECKED BY: CJF DATE: 04-10-2003 SCALE: NO SCALE
DESIGNED BY: STD. DATE: —

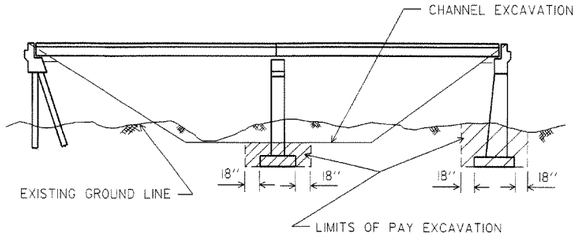
BRIDGE NO. DRAWING NO. 1888A

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
04-10-2003				6	ARK.		254	
				JOB NO.				

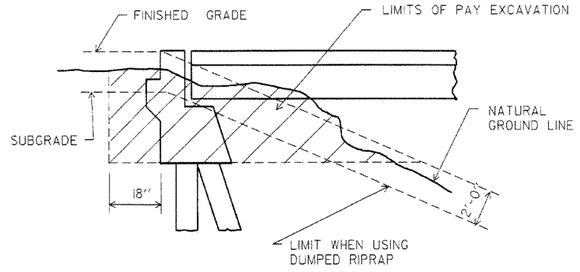
1 RIP. & EXCAV. 1891F



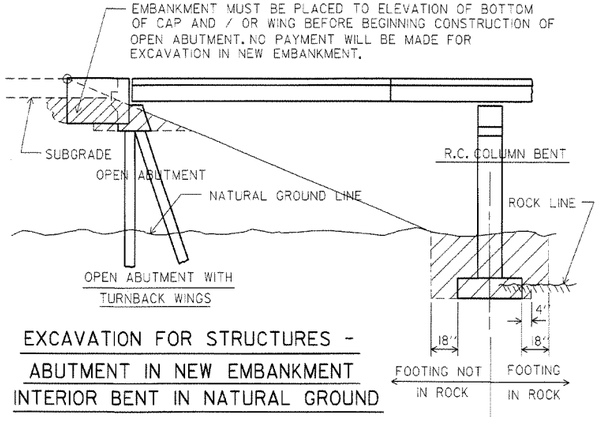
EXCAVATION FOR STRUCTURES - ABUTMENT IN NEW EMBANKMENT INTERIOR BENT IN NEW EMBANKMENT AND NATURAL GROUND



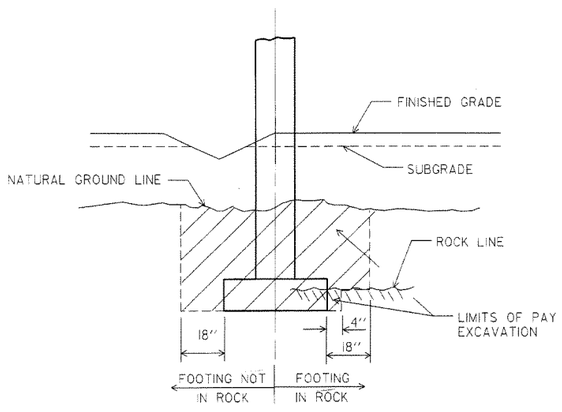
EXCAVATION FOR STRUCTURES - BRIDGE LOCATION WITH DESIGNATED CHANNEL CHANGE



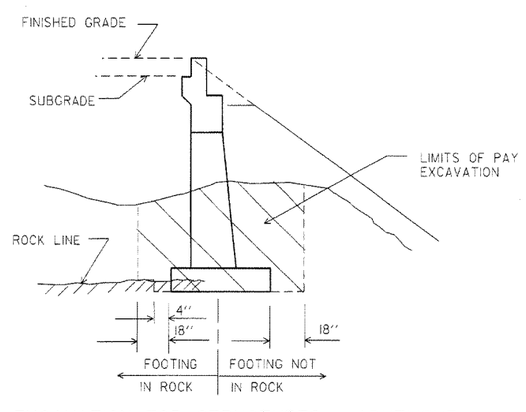
EXCAVATION FOR STRUCTURES - ABUTMENT IN NATURAL GROUND



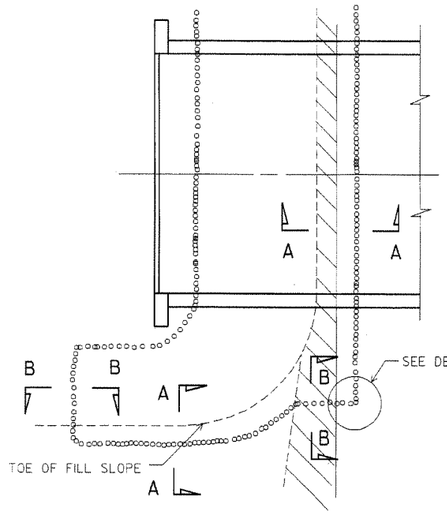
EXCAVATION FOR STRUCTURES - ABUTMENT IN NEW EMBANKMENT INTERIOR BENT IN NATURAL GROUND



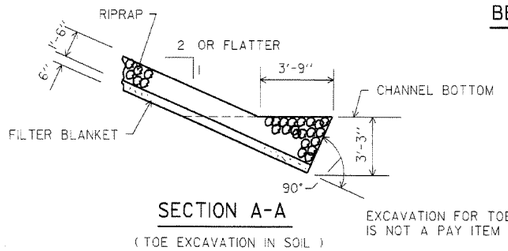
EXCAVATION FOR STRUCTURES - BENT IN ROADWAY FILL SECTION AND NATURAL GROUND



EXCAVATION FOR STRUCTURES - ABUTMENT IN NATURAL GROUND AND NEW EMBANKMENT

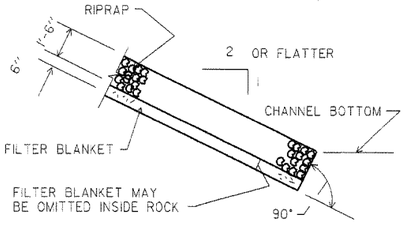


PLAN OF DUMPED RIPRAP



SECTION A-A

(TOE EXCAVATION IN SOIL)



SECTION A-A

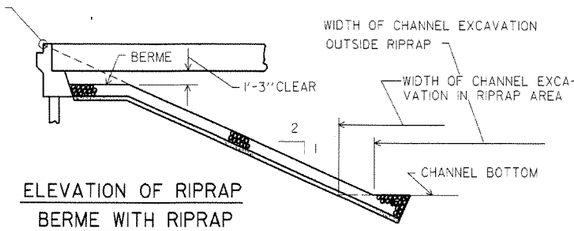
(TOE EXCAVATION IN ROCK)

NOTE : USE THIS TYPE OF TOE WHEN ROCK IS ENCOUNTERED WHICH IS IN A STABLE CONDITION.

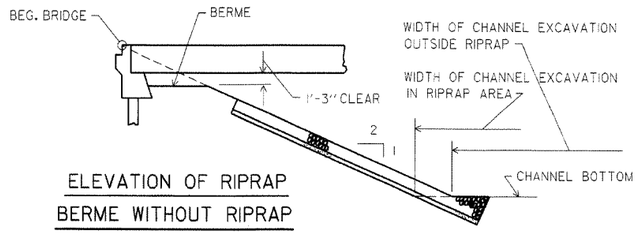
NOTE : IN LIEU OF AN AGGREGATE FILTER BLANKET, A SYNTHETIC FIBER GEOTEXTILE FABRIC COMPLYING WITH THE REQUIREMENTS OF SUBSECTION 816.02(e) MAY BE USED.

NOTE : DETAILS FOR COMPUTING EXCAVATION FOR STRUCTURES ARE INCLUDED FOR INFORMATION AS TO HOW PLAN QUANTITIES WERE CALCULATED AND FOR USE WHEN ADJUSTING QUANTITIES WHEN CHANGING FOOTING ELEVATION.

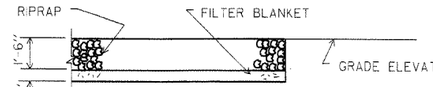
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 4937
CHARLES F. BRAND
BRIDGE ENGINEER



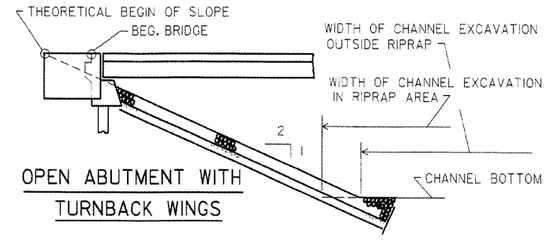
ELEVATION OF RIPRAP BERME WITH RIPRAP



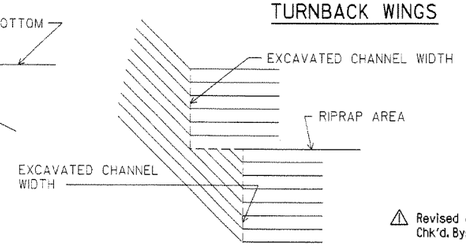
ELEVATION OF RIPRAP BERME WITHOUT RIPRAP



SECTION B-B



OPEN ABUTMENT WITH TURNBACK WINGS



DETAIL C

⚠ Revised and redrawn MJT 04-10-2003
Chk'd. By: CJF 04-10-2003

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

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

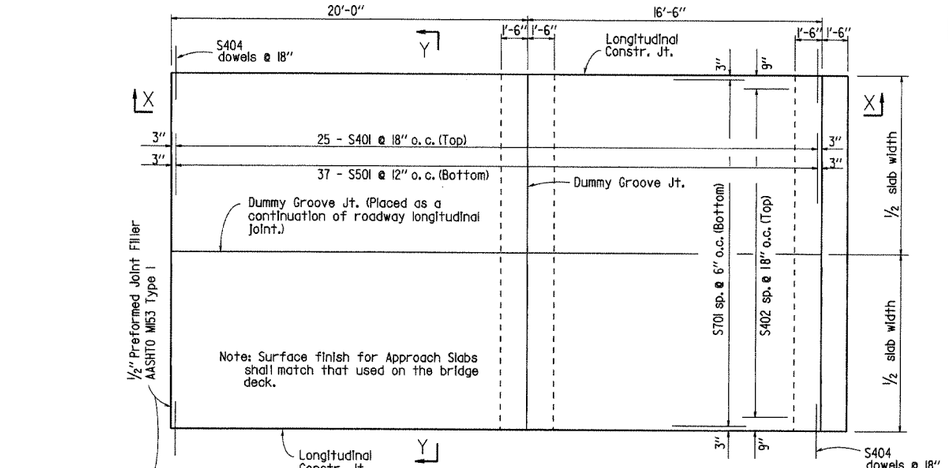
LITTLE ROCK, ARK.

DRAWN BY:	MJT	DATE:	04-10-2003	FILENAME:	B1891F.STD
CHECKED BY:	CJF	DATE:	04-10-2003	SCALE:	NO SCALE
DESIGNED BY:	STD.	DATE:	—		

BRIDGE NO. DRAWING NO. 1891F

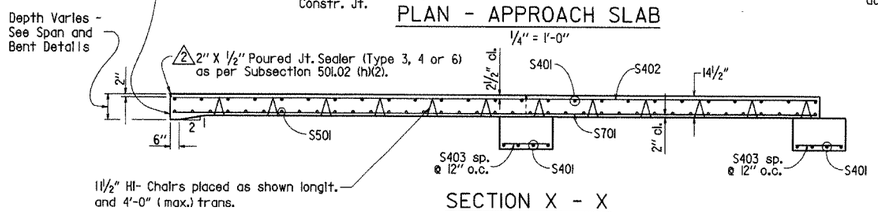
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
4-10-2003				6	ARK.		255	
07-14-2010				JOB NO.				

① APPROACH SLAB - 2018



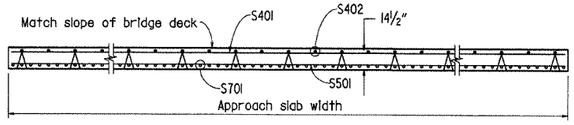
PLAN - APPROACH SLAB

1/4" = 1'-0"



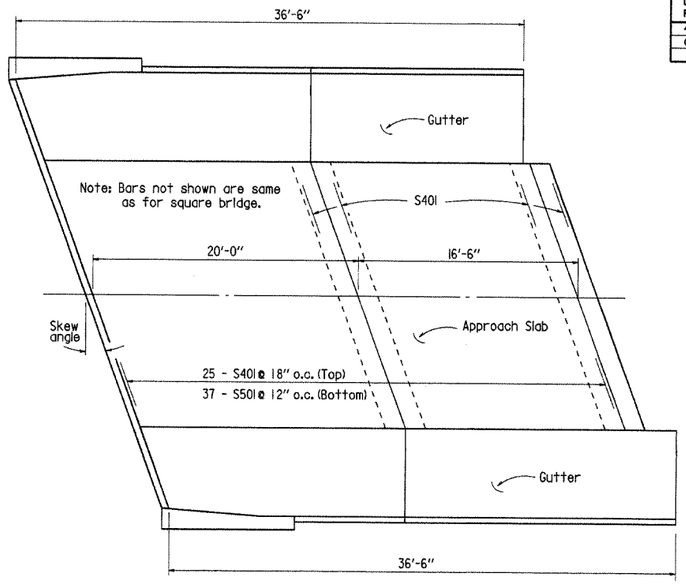
SECTION X - X

N.T.S.



SECTION Y - Y

N.T.S.



PLAN VIEW SHOWING APPROACH FOR SKEWED BRIDGE

3/16" = 1'-0"

BAR LISTS

(Square & Skewed Slabs)

	Mark	No. Req'd.	Length	
			Square	Skewed
15'-0" slab width	S401	33	14'-8"	14'-8" (secant skew angle)
	S402	10	36'-2"	
	S403	* 30	2'-8"	
	S404	* 50	3'-0"	
	S501	37	14'-8"	14'-8" (secant skew angle)
	S701	30	36'-2"	
24'-0" slab width	S401	33	23'-8"	23'-8" (secant skew angle)
	S402	16	36'-2"	
	S403	* 48	2'-8"	
	S404	* 50	3'-0"	
	S501	37	23'-8"	23'-8" (secant skew angle)
	S701	48	36'-2"	
36'-0" slab width	S401	33	35'-8"	35'-8" (secant skew angle)
	S402	24	36'-2"	
	S403	* 72	2'-8"	
	S404	* 50	3'-0"	
	S501	37	35'-8"	35'-8" (secant skew angle)
	S701	72	36'-2"	

* Varies with skew angle. The number shown is for square bridges.

GENERAL NOTES

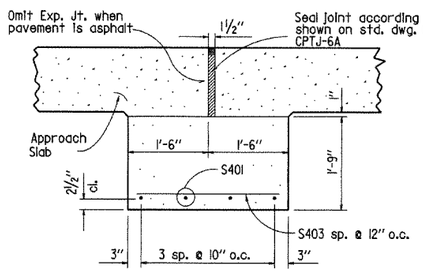
Concrete shall be Class S (AE) (f'c = 4,000 psi).

Reinforcement Steel shall conform to AASHTO M31 or M53, Grade 60 (fy = 60,000 psi).

Approach Slabs will be measured and paid for in accordance with Section 504 of the Standard Specifications.

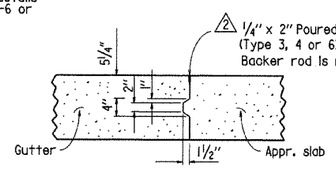
1 Revised and redrawn 4-10-2003. By KDH Ck. By: CJF 4-10-2003

2 Added joint sealer type 07-14-2010 By MJT Ck. By: CJF 07-14-2010



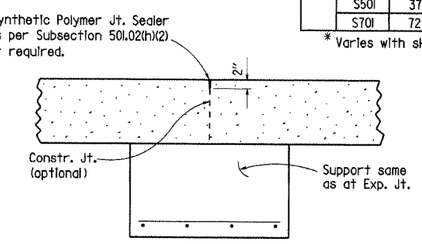
DETAILS OF SUPPORT AT EXPANSION JOINT

3/4" = 1'-0"



DETAILS OF LONGITUDINAL CONSTRUCTION JOINT

3/4" = 1'-0"



DETAILS OF DUMMY GROOVED JOINT

3/4" = 1'-0"

TABLE OF QUANTITIES FOR ONE SQUARE APPROACH SLAB

Slab Width	Reinforcing Steel	Concrete (Cu. Yds.)
15'-0"	3502 lb.	30.72
24'-0"	5556 lb.	49.15
36'-0"	8294 lb.	73.73

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 4337
CHARLES P. BRAND

BRIDGE ENGINEER

DETAILS OF APPROACH SLAB

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: KDH DATE: 4-10-2003 FILENAME: B2018.STD

CHECKED BY: CJF DATE: 4-10-2003 SCALE: AS SHOWN

DESIGNED BY: Std. DATE:

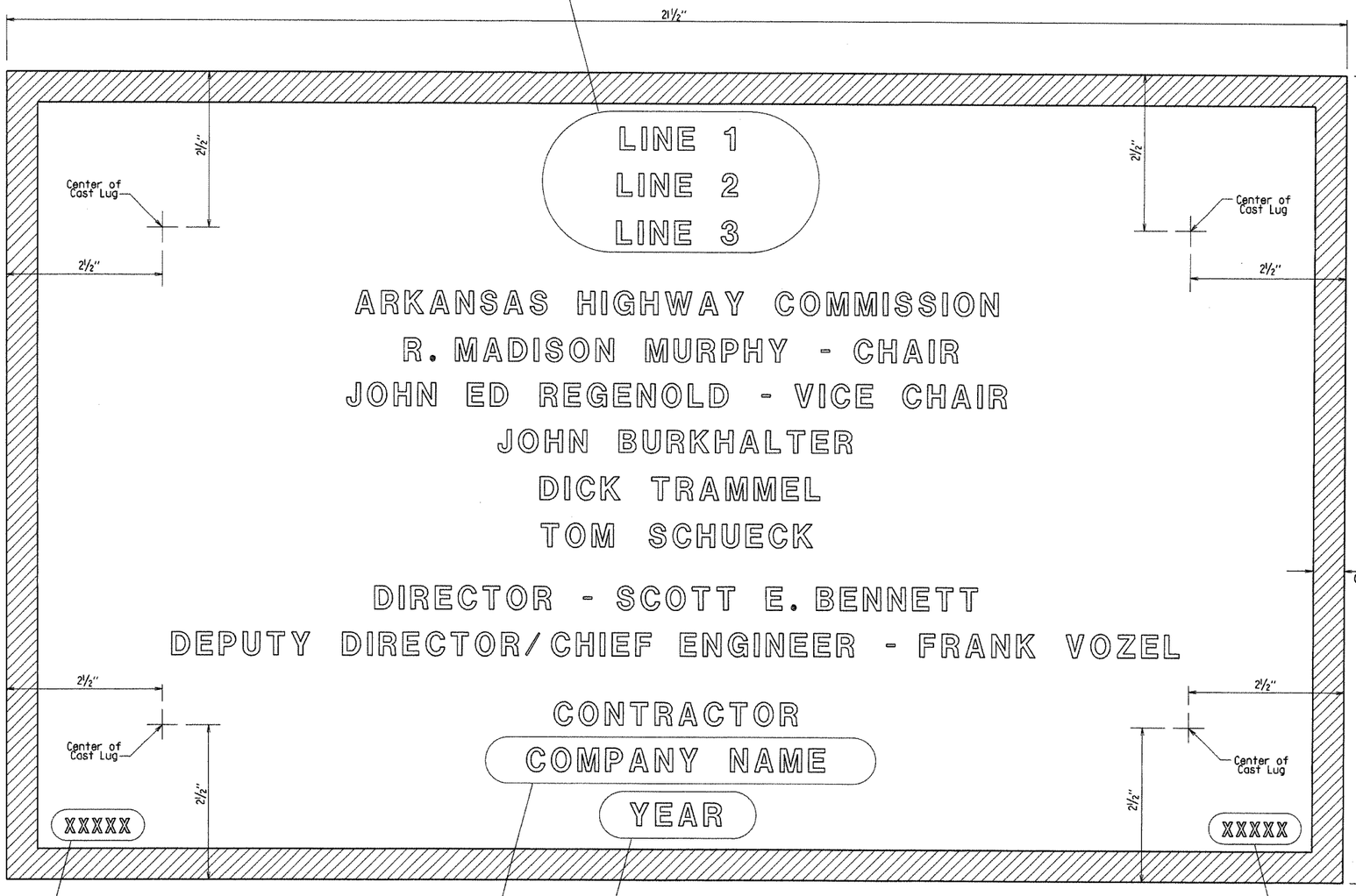
BRIDGE NO. DRAWING NO. 2018

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
9-8-11				6	ARK.		756	
				JOB NO.				

1 NAME PLATE 2387

The name of the bridge as shown on the plans shall be placed on Lines 1 - 3 using 1/8" raised letters and numerals 3/8" high.

	Example 1	Example 2	Example 3	Example 4
Line 1	Red River	Southern	Saline	
Line 2	Relief	Railroad	River	Highway 5
Line 3		Overpass	Relief	



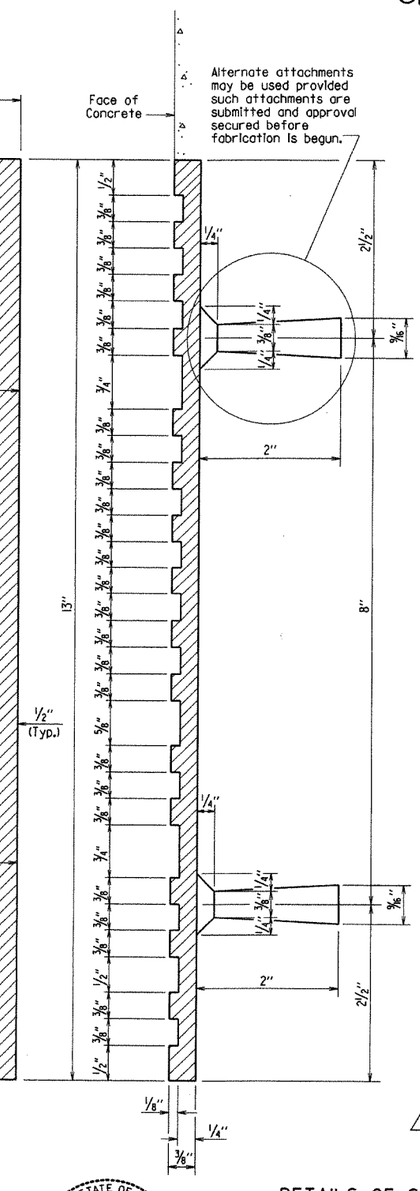
Place the design live loading here using 1/8" raised letters and numerals 1/4" high. Examples : HS 20
HL-93

Place the name of the company awarded the construction contract here using 1/8" raised letters and numerals 3/8" high. Example : ABCD CONSTRUCTION, INC.

Place the Year in which Contract was awarded here using 1/8" raised numerals 3/8" high. Example : 2001

Place the Bridge number here using 1/8" raised letters and numerals 1/4" high. Examples : AI234
05432

TYPICAL BRIDGE NAME PLATE



GENERAL NOTES

Specifications: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction, (2003 Edition) with applicable Supplemental Specifications and Special Provisions.

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

Body of plate shall be 1/4" thick and shall include four tapering cone lugs 3/8" to 9/16" x 2" long. The border and all lettering shall be raised 1/8" above the face of plate and shall be polished.

All lettering shall be plain gothic, square cut and not tapered. The number of plates required and the location and name on the plate for each bridge shall be as designated on the plans.

1 Revised and Redrawn 9-8-11 KDH Checked By: CRE

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7510
CARL J. PUSELLER
BRIDGE ENGINEER

DETAILS OF STANDARD TYPE D BRIDGE NAME PLATE

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

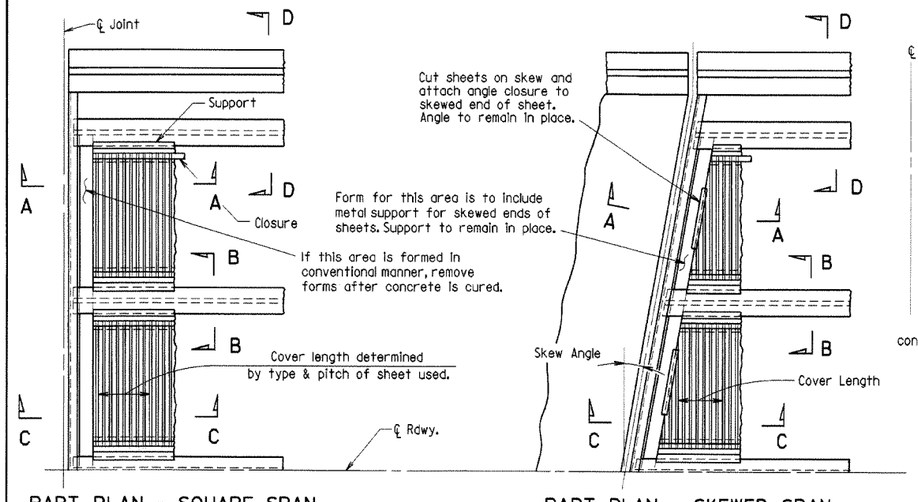
LITTLE ROCK, ARK.

DRAWN BY: KDH DATE: 9-8-11 FILENAME: B2387.STD
CHECKED BY: CRE DATE: 9-8-11 SCALE: 1'-0" = 1'-0" OR AS NOTED
DESIGNED BY: STD. DATE: —

BRIDGE NO.

DRAWING NO. 2387

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-27-96						6	ARK.		257	
04-10-2003						JOB NO.				
						① BR. DECK FORMS 14991				

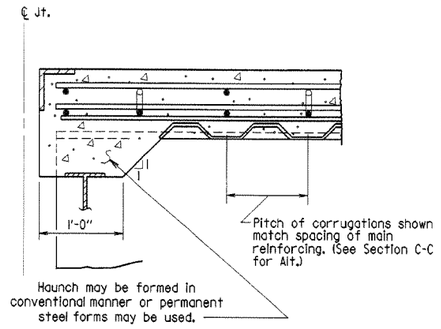


PART PLAN - SQUARE SPAN

3/8" = 1'-0"

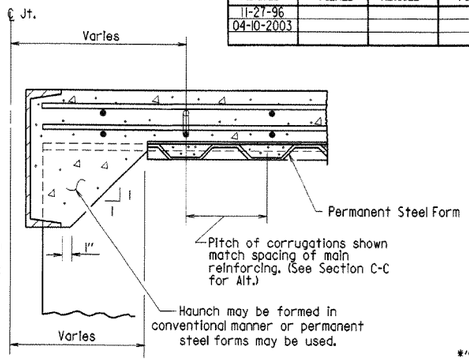
PART PLAN - SKEWED SPAN

3/8" = 1'-0"



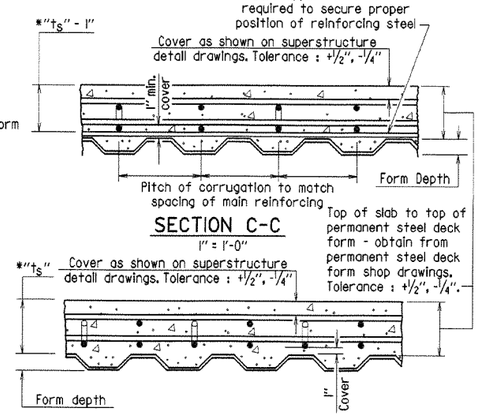
SECTION A-A

N.T.S.
(Angle at end of span)



SECTION A-A

N.T.S.
(Channel at end of span)

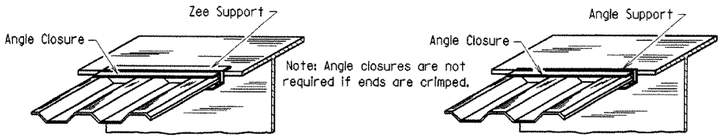


SECTION C-C

1" = 1'-0"

SECTION C-C - ALTERNATE

1" = 1'-0"
(Applicable when corrugations do not match spacing of main reinforcement)



SKETCH OF PERMISSIBLE SUPPORTS

N.T.S.

*t_s = slab thickness as shown on superstructure detail drawings.

GENERAL NOTES

Permanent steel deck forms may be used at the Contractor's option and shall be at no additional cost to the Department. Such use may result in changes to the dead load deflection of the girder. Any cost for adjustments due to a change in the dead load deflection will be borne by the Contractor. Payment for deck concrete and structural steel will not be increased due to use of permanent steel deck forms.

Permanent steel deck forms shall conform to subsection 802.14(b) of the Standard Specifications. Detailed plans, including detailed calculations and manufacturer's technical brochure, shall be submitted to and approved by the Bridge Engineer before work of forming the bridge deck is started.

Welding of form supports to the tension flange of steel girders will be permitted only in areas where shear connectors are used. When welding is not allowed, the method of fastening Z or ∠ supports to the flange must be approved by the Bridge Engineer.

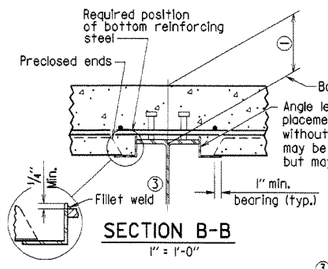
Form sheets shall be fastened to supporting members and to each other with galvanized metal screws sufficient in size and number to provide a secure attachment. Alternate methods of attachment must be approved by the Bridge Engineer.

When the pitch of form corrugations match the reinforcing spacing, transversely align form sheets across the bridge to maintain the correct orientation of continuous reinforcing bars in the corrugations.

Bar support rods, when used, shall be sized and spaced to adequately support the bottom reinforcing mat at the required position.

High chairs shall be sized to support the top mat of reinforcing at the proper position. High chairs shall be placed at locations shown on the detail drawings.

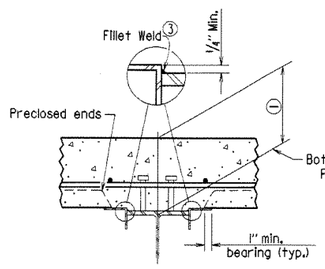
⚠2 Specifications: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (2003 Edition), with applicable supplemental specifications and special provisions.



SECTION B-B

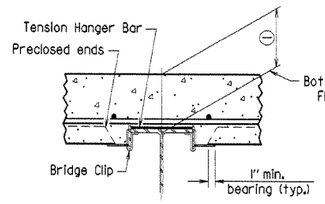
1" = 1'-0"
(Showing permissible support for tension flange where shear connectors are used, and for all compression flanges)

③ Minimum weld: 1/8" x 1" @ 18". More weld may be required; maximum length per weld = 1 1/2" (typ.)



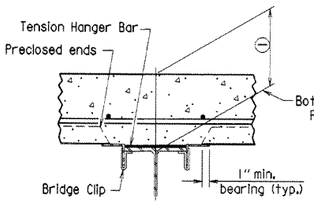
SECTION B-B

1" = 1'-0"
(Showing permissible support for tension flange where shear connectors are used and for all compression flanges)



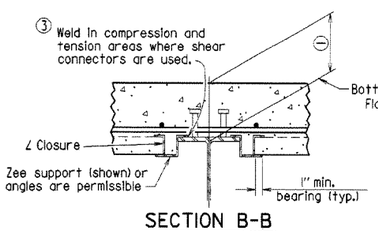
SECTION B-B

1" = 1'-0"
(Showing permissible support for tension flange where shear connectors are not used)



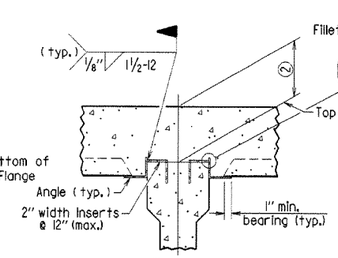
SECTION B-B

1" = 1'-0"
(Showing permissible support for tension flange where shear connectors are not used)



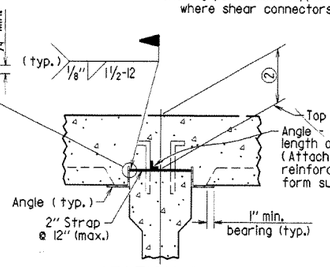
SECTION B-B

1" = 1'-0"
(Showing ∠ Closure)



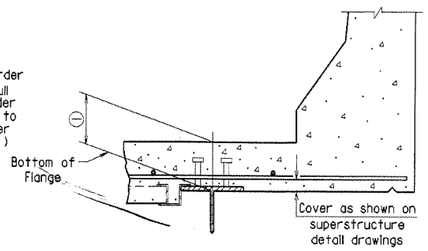
SECTION B-B (FOR CONCRETE GIRDERS)

1" = 1'-0"
(Showing support by Insert cast in girder)



SECTION B-B (FOR CONCRETE GIRDERS)

1" = 1'-0"
(Showing support by Strap)



SECTION D-D

1" = 1'-0"
Note: Only Bottom Reinforcing is shown.

① Distance from top of slab to bottom of top flange as measured at centerline girder and as shown on superstructure detail drawings. This dimension may vary within the following limits to maintain the grade and slab thickness tolerances : Minimum - occurs when either the top flange or the support angle leg contacts the bottom reinforcing steel; Maximum = t_s + 1 3/4" + flange thickness. See Section C-C for slab thickness tolerance between adjacent girder flanges.

② Distance from top of slab to top of girder as measured at centerline girder and as shown on superstructure detail drawings. This dimension may vary within the following limits to maintain the grade and slab thickness tolerances : Minimum - occurs when either the top of girder or the support angle leg contacts the bottom reinforcing steel; Maximum - value shown on the superstructure detail drawings when removable forms are used. See Section C-C for slab thickness tolerance between adjacent girder flanges.

⚠1 Redrawn and revised 11/27/96; MJT

⚠2 Revised for 2003 AHTD Construction Specifications and CPB Seal. MJT 04-10-2003
Chk'd. By: CJF 04-10-2003

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 4337
CHARLES P. BRAND
BRIDGE ENGINEER

DETAILS OF PERMISSIBLE TYPE PERMANENT STEEL BRIDGE DECK FORMS FOR STEEL & CONCRETE GIRDER SPANS

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

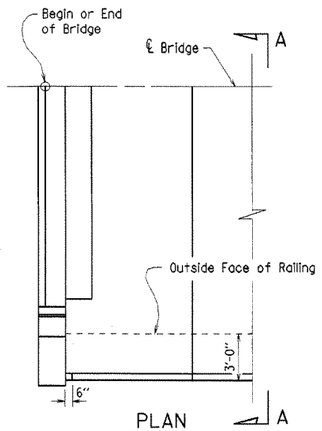
DRAWN BY: MJT DATE: 10-17-96
CHECKED BY: CPB DATE: 10-17-96
DESIGNED BY: STD. DATE: —
SCALE: as noted

BRIDGE NO. DRAWING NO. 14991

BI4991.STD

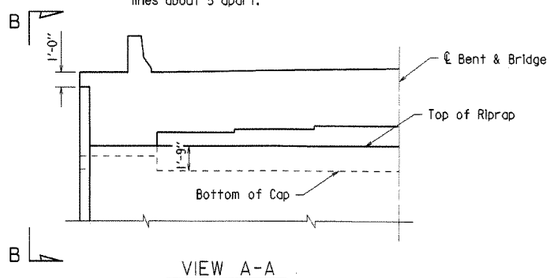
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
04-10-2003				6	ARK.		258	
				JOB NO.				

1 RIPRAP & PILE - 14995A

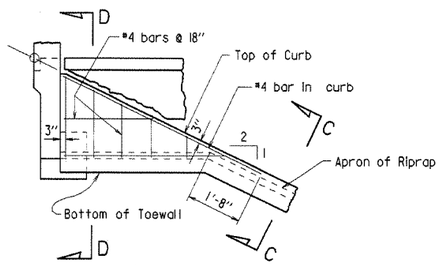


PLAN

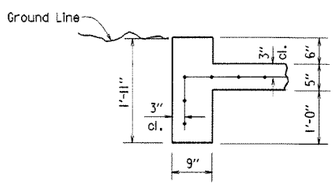
Note:
Sloped surfaces of concrete riprap to be marked off into blocks (construction joints optional) with an approved grooving tool, spacing the grooved lines about 5' apart.



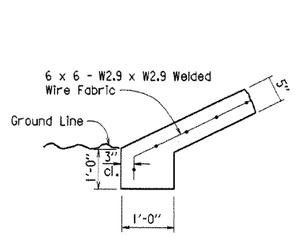
VIEW A-A



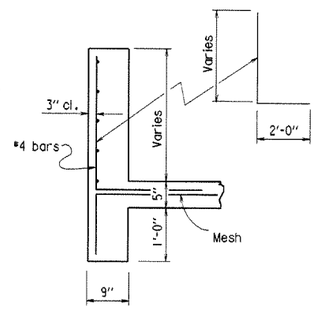
VIEW B-B



SECTION C-C

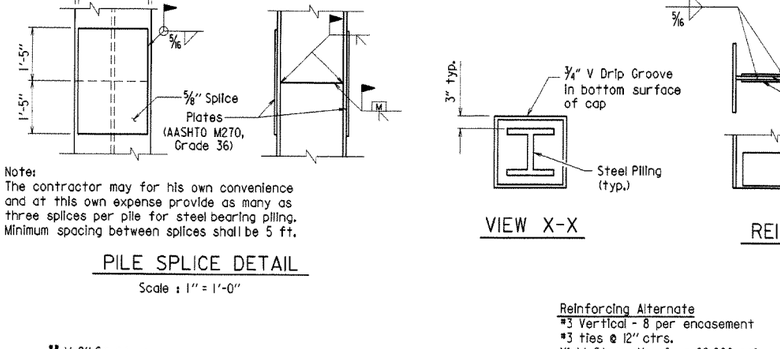


TOE WALL



SECTION D-D

DETAILS OF CONCRETE RIPRAP



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

Omit bottom bracing where "H" is less than 10 ft. Omit all bracing where "H" is less than 5 ft.

Note:
Where required by the bridge layout sheet, pile encasements shall be constructed.

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

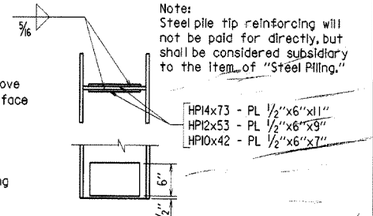
TYPICAL BRACING FOR INT. STEEL PILE BENTS

Note:
The contractor may for his own convenience and at this own expense provide as many as three splices per pile for steel bearing piling. Minimum spacing between splices shall be 5 ft.

PILE SPLICE DETAIL

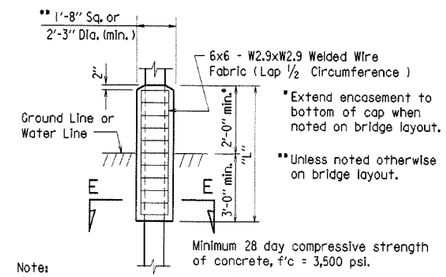
Scale : 1" = 1'-0"

VIEW X-X



REINFORCING DETAIL FOR STEEL PILE TIP

Scale : 1" = 1'-0"



*Extend encasement to bottom of cap when noted on bridge layout.

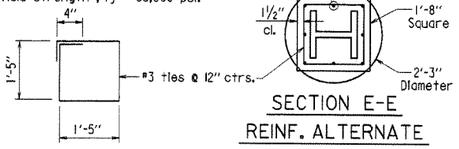
**Unless noted otherwise on bridge layout.

Minimum 28 day compressive strength of concrete, f'c = 3,500 psi.

Note:
If concrete cannot be placed in the dry, seal concrete may be deposited under water. Concrete & welded wire fabric or reinforcing in encasements shall be paid for at the contract unit price per linear foot bid for "Pile Encasement."

PILE ENCASEMENT DETAIL

Reinforcing Alternate
#3 Vertical - 8 per encasement
#3 ties @ 12" ctrs.
Yield Strength , fy = 60,000 psi.



SECTION E-E

REINF. ALTERNATE

PLAN

Note:
For use on bridges with turned back wings. All other details same as shown above.

PLAN

Note:
For use with bridge with concrete riprap on corner slope. All other details same as shown above.

ELEVATION

SECTION F-F

PLAN

Note:
For use on bridges with turned back wings and concrete riprap on corner slopes. All other details same as shown above.

⚠1 Revised and redrawn MJT 04-10-2003
Chk'd. By: CJF 04-10-2003

DETAILS OF CONCRETE RIPRAP AND MISC. DETAILS OF STEEL PILING

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

STATE OF ARKANSAS * * * REGISTERED PROFESSIONAL ENGINEER * * * No. 4337 CHARLES P. BRAND

BRIDGE ENGINEER

DRAWN BY: MJT DATE: 04-10-2003 FILENAME: BI4995A.STD

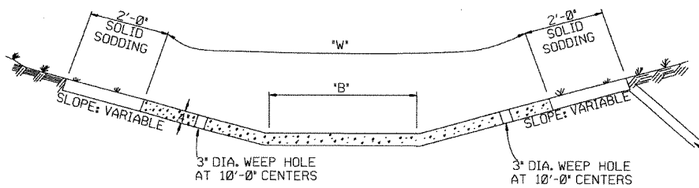
CHECKED BY: CJF DATE: 04-10-2003 SCALE: No Scale or As Noted

DESIGNED BY: STD. DATE: —

BRIDGE NO.

DRAWING NO. 14995A

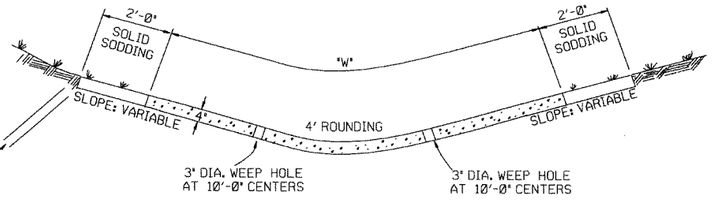
REFER TO TABULATION OF QUANTITIES FOR "W" & "B" DIMENSIONS



TYPE A

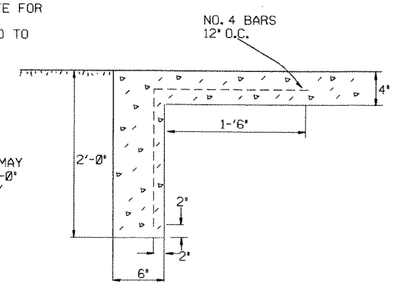
EXCAVATE TO NEAT LINES TO CONSTRUCT DITCH PAVING AND SOLID SODDING.

REFER TO TABULATION OF QUANTITIES FOR "W" DIMENSIONS



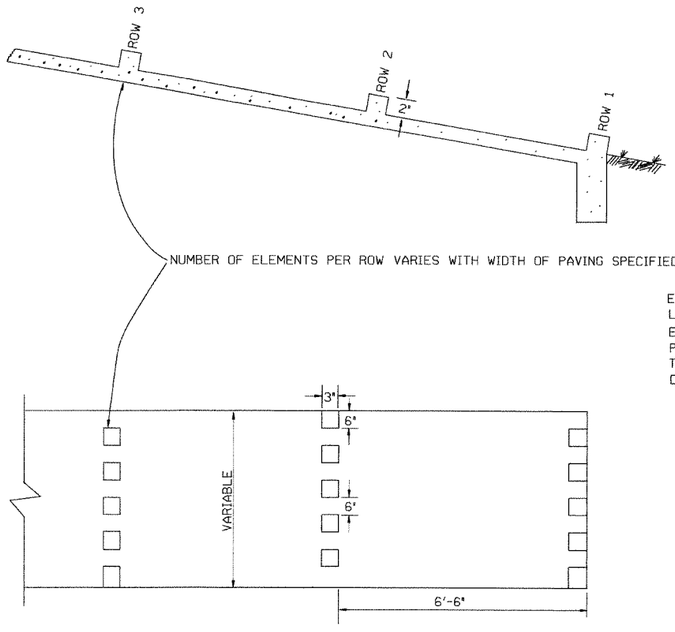
TYPE B

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.

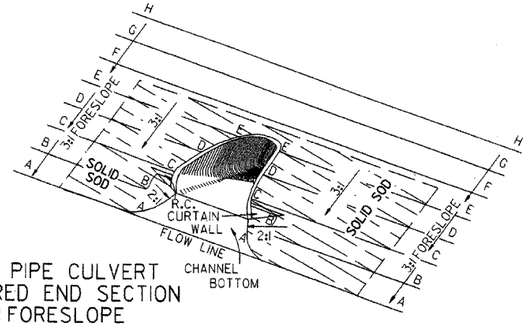
1" WIDE TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE DITCH PAVING AT 45' INTERVALS. THE SPACE SHALL BE FILLED WITH APPROVED JOINT FILLER COMPLYING WITH AASHTO M213.

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

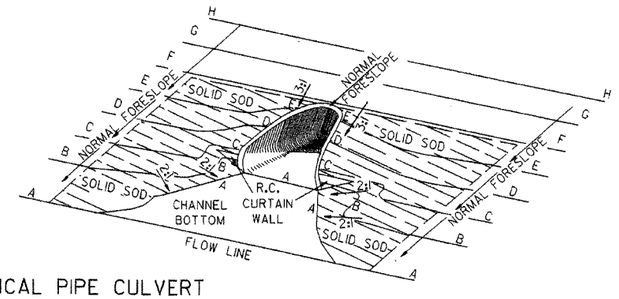
ARKANSAS STATE HIGHWAY COMMISSION

CONCRETE DITCH PAVING

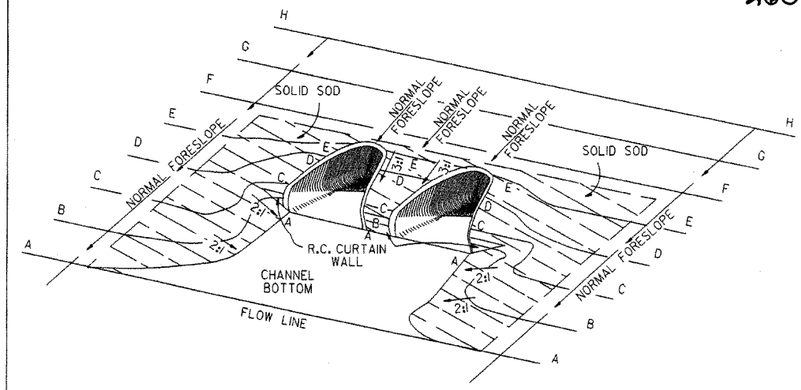
STANDARD DRAWING CDP-1



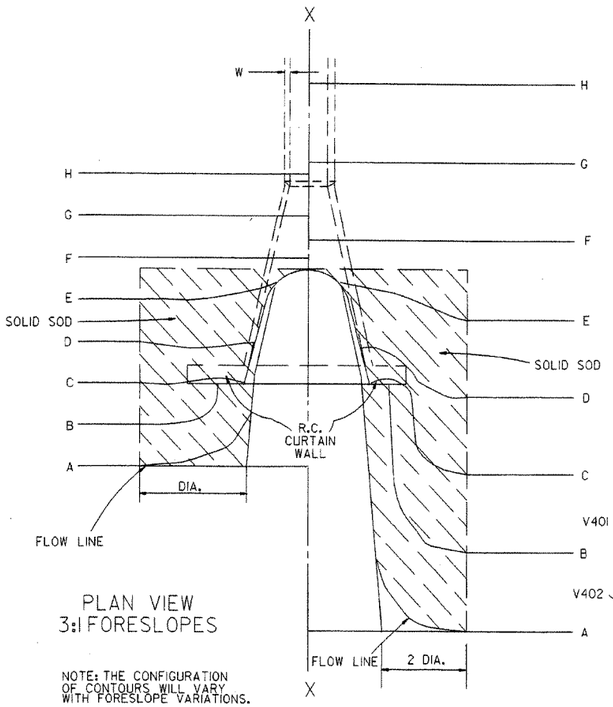
TYPICAL PIPE CULVERT
WITH FLARED END SECTION
& 3:1 FORESLOPE



TYPICAL PIPE CULVERT
WITH FLARED END SECTION
& FLATTENED ADJACENT SLOPES



TYPICAL MULTIPLE PIPE CULVERT
WITH FLARED END SECTIONS
& FLATTENED ADJACENT SLOPES



PLAN VIEW
3:1 FORESLOPES

NOTE: THE CONFIGURATION OF CONTOURS WILL VARY WITH FORESLOPE VARIATIONS.

PLAN VIEW
FLATTENED FORESLOPES

R.C. CURTAIN WALL DIMENSIONS & QUANTITIES

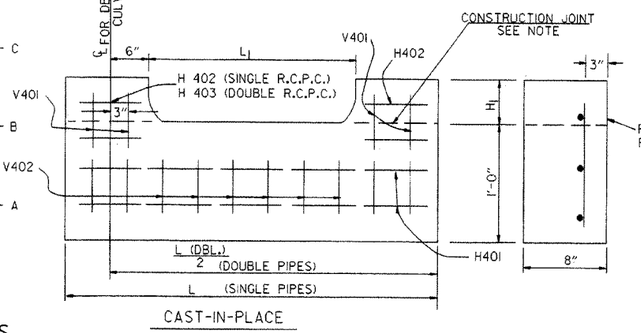
PIPE DIA.	H_1	L_1	L	L (DBL.)/2	SINGLE R.C.P.C. CONC.	SINGLE R.C.P.C. REINF. STEEL	DOUBLE R.C.P.C. CONC.	DOUBLE R.C.P.C. REINF. STEEL
					CU. YDS.	LBS.	CU. YDS.	LBS.
18"	11½"	3'-5"	8'-0"	6'-3"	0.31	27.7	0.45	39.5
24"	1'-0½"	4'-6"	9'-6"	7'-6"	0.37	33.4	0.53	48.0
30"	1'-3½"	5'-7"	11'-0"	9'-0"	0.45	39.0	0.67	59.0
36"	1'-7"	6'-8"	13'-0"	10'-6"	0.58	52.6	0.83	73.9
42"	2'-1½"	7'-3"	15'-6"	12'-0"	0.82	77.1	1.10	100.7
48"	2'-5"	7'-10"	17'-0"	13'-0"	0.98	94.9	1.27	120.4
54"	2'-9½"	8'-5"	18'-6"	14'-0"	1.16	115.8	1.47	143.7
60"	3'-4"	9'-0"	20'-6"	15'-6"	1.47	149.7	1.84	180.3
72"	4'-5"	10'-2"	25'-6"	18'-6"	2.31	232.6	2.73	271.0

NOTE: QUANTITIES SHOWN ARE FOR ONE (1) CURTAIN WALL.

REINFORCING STEEL SCHEDULE

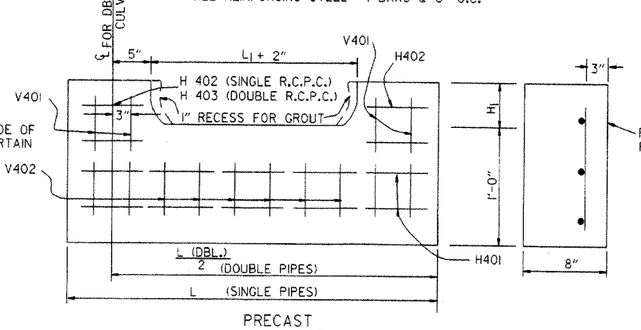
PIPE DIA.	SINGLE R.C. PIPE CULVERT H401 L	NO.	H402 L	NO.	V401 L	NO.	V402 L	NO.	DOUBLE R.C. PIPE CULVERT H401 L	NO.	H402 L	NO.	H403 L	NO.	V401 L	NO.	V402 L	NO.
18"	7'-8"	2	1'-11½"	4	1'-7½"	8	8"	8	12'-2"	2	1'-11½"	4	8"	2	1'-7½"	10	8"	14
24"	9'-2"	2	2'-2"	4	1'-8½"	10	8"	9	14'-8"	2	2'-2"	4	8"	2	1'-8½"	12	8"	18
30"	10'-8"	2	2'-4½"	4	1'-11½"	10	8"	12	17'-8"	2	2'-4½"	4	8"	2	1'-11½"	14	8"	22
36"	12'-8"	2	2'-10"	6	2'-3"	12	8"	14	20'-8"	2	2'-10"	6	8"	3	2'-3"	14	8"	28
42"	15'-2"	2	3'-9½"	8	2'-9½"	16	8"	15	23'-8"	2	3'-9½"	8	8"	4	2'-9½"	18	8"	30
48"	16'-8"	2	4'-3"	10	3'-1"	18	8"	16	25'-8"	2	4'-3"	10	8"	5	3'-1"	20	8"	32
54"	18'-2"	2	4'-8½"	12	3'-5½"	20	8"	17	27'-8"	2	4'-9"	12	8"	6	3'-5½"	22	8"	34
60"	20'-2"	2	5'-5"	14	4'-0"	24	8"	18	30'-8"	2	5'-5"	14	8"	7	4'-0"	26	8"	36
72"	25'-2"	2	7'-4"	18	5'-1"	30	8"	20	36'-8"	2	7'-4"	18	8"	9	5'-1"	33	8"	40

ALL REINFORCING STEEL #4 BARS @ 6" O.C.



CAST-IN-PLACE

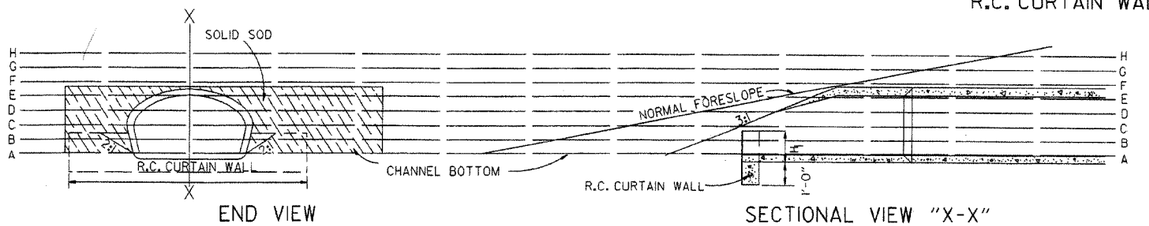
NOTE: THE PORTION OF THE R.C. CURTAIN WALL BENEATH THE FLARED END SECTION (LOWER 1'-0") SHALL BE PLACED MONOLITHICALLY. THE FLARED END SECTION SHALL THEN BE SET IN PLACE & THE REMAINING PORTIONS OF THE R.C. CURTAIN WALL PLACED.



PRECAST

NOTE: THE PRECAST CURTAIN WALL WILL BE SET AND BACKFILLED WITH COMPACTED MATERIAL. THE FLARED END SECTION SHALL THEN BE SET IN PLACE AND THE 1" RECESS FILLED WITH GROUT. WHERE "L" EXCEEDS 11' THE CURTAIN WALL MAY BE CAST IN TWO (2) OR MORE SECTIONS. THE METHOD OF JOINING THE SECTIONS FOR INSTALLATION SHALL BE APPROVED BY THE ENGINEER.

R.C. CURTAIN WALL DETAILS



END VIEW

SECTIONAL VIEW "X-X"

SOLID SODDING

PIPE DIA.	SINGLE R.C.P.C. 3:1	4:1	6:1	DOUBLE R.C.P.C. 3:1	4:1	6:1
	SQ. YDS.			SQ. YDS.		
18"	5	7	12	6	8	13
24"	8	12	19	9	13	20
30"	13	18	29	14	19	30
36"	17	26	41	18	28	43
42"	23	35	55	25	37	57
48"	29	46	68	31	48	70
54"	35	57	85	37	59	87
60"	45	62	104	48	65	107
72"	64	92	156	67	95	159

NOTE: QUANTITIES SHOWN ABOVE ARE FOR ONE (1) END OF F.E.S.

GENERAL NOTES

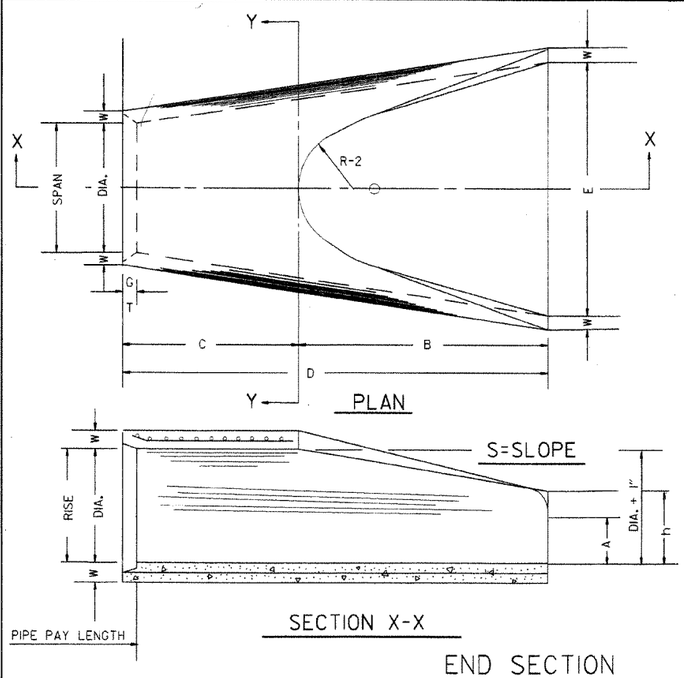
1. A CAST-IN-PLACE OR PRECAST CURTAIN WALL MAY BE USED. PAYMENT FOR THE CURTAIN WALL SHALL BE CONSIDERED TO BE INCLUDED IN THE UNIT PRICE BID EACH FOR FLARED END SECTIONS OF THE SEVERAL SIZES, WHICH PRICE SHALL BE FULL COMPENSATION FOR FURNISHING ALL MATERIALS INCLUDING REINFORCING STEEL AND CONCRETE; FOR FORMS, MIXING AND PLACING; FOR EXCAVATION AND BACKFILL, AND FOR ALL LABOR, TOOLS, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.
2. ALL EXPOSED EDGES SHALL BE CHAMFERED ¾".
3. CONCRETE FOR CURTAIN WALL SHALL MEET THE REQUIREMENTS FOR CLASS A OR S CONCRETE AS PROVIDED IN SECTION 802 OF THE STANDARD SPECIFICATIONS OR FOR PAVING CONCRETE AS PROVIDED IN SECTION 501 OF THE STANDARD SPECIFICATIONS.
4. WELDED WIRE MESH 3 x 3 W10 x W10 MAY BE USED IN LIEU OF REINFORCING BARS.

DATE	REVISION	FILMED
10-18-96	ADDED NOTE TO SOLID SODDING	10-18-96
10-12-95	CORRECTED SPELLING	
11- 3-94	ADDED GENERAL NOTE NO. 4	
8-15-91	REV. CURTAIN WALL QUANT. STEEL SCH. & SOLID SOD QUANT.	
3-2-81	ALLOW PRECAST IN 2 OR MORE PIECES CHAMFER EDGES	
5-15-80	ADDED PRECAST WALL & GENERAL NOTES	
10-2-72	REVISED AND REDRAWN	

ARKANSAS STATE HIGHWAY COMMISSION

FLARED END SECTION

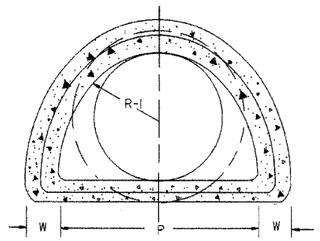
STANDARD DRAWING FES-1



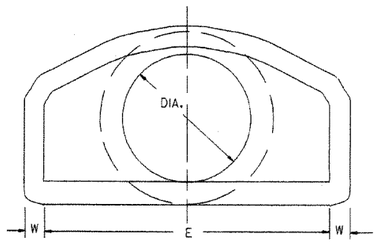
END SECTION FOR REINFORCED CONCRETE PIPE CULVERTS

TABLE OF DIMENSIONS

DIA.	WALL	A	B	C	D	E	S	DIA. + 1"	P	R-1	R-2	G-T	WT.	h
18"	2½"	9"	2'-3"	3'-10"	6'-1"	3'-0"	3:1	19"	29"	15½"	12"	2"	1000	1'-0½"
24"	3"	9½"	3'-7½"	2'-6"	6'-1½"	4'-0"	3:1	25"	33⅜"	16⅝"	14"	2½"	1600	1'-1½"
30"	3½"	1'-0"	4'-6"	1'-7¾"	6'-1¾"	5'-0"	3:1	31"	37"	18½"	15"	3¼"	1940	1'-4⅝"
36"	4"	1'-3"	5'-3"	2'-10¼"	8'-1¾"	6'-0"	3:1	37"	47⅛"	24⅝"	20"	3½"	4100	1'-8"
42"	4½"	1'-9"	5'-3"	2'-11"	8'-2"	6'-6"	3:1	43"	53⅞"	27½"	22"	3½"	5380	2'-2½"
48"	5"	2'-0"	6'-0"	2'-2"	8'-2"	7'-0"	3:1	49"	56½"	28½"	22"	3½"	6550	2'-6"
54"	5½"	2'-4"	6'-6"	1'-10"	8'-4"	7'-6"	3:1	55"	65½"	33⅛"	24"	4"	8750	2'-10½"
60"	6"	2'-10"	6'-6"	1'-10"	8'-4"	8'-0"	3:1	61"	72½"	36⅛"	24"	4"	9270	3'-5"
72"	7"	3'-10"	6'-6"	1'-10"	8'-4"	9'-0"	3:1	73"	77⅛"	38⅝"	24"	5"	13250	4'-6"



SECTION Y-Y



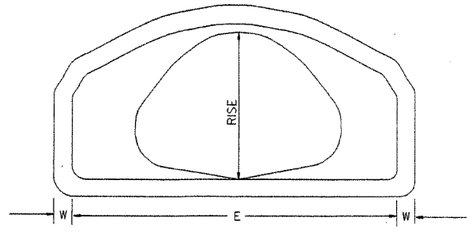
END VIEW

NOTE: TONGUE END ON UPSTREAM SECTION
GROOVE END ON DOWNSTREAM SECTION

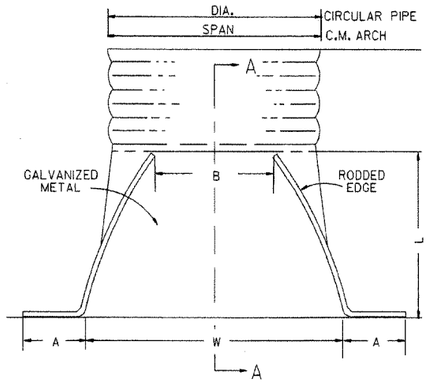
ARCH PIPE

EQUIV. DIA.	• SPAN AASHTO M 206	• SPAN AHD NOMINAL	• RISE AASHTO M 206	• RISE AHD NOMINAL	W	A	B	C	D	E	P	R2	G-T	S
	INCHES													
15	18	18	11	11	2"	4"	2'-0"	4'-0"	6'-0"	3'-0"	29"	12"	1½"	2½:1
18	22	22	13½	14	2½"	5"	2'-0"	4'-1"	6'-1"	3'-6"	32⅛"	13"	2½"	2½:1
21	26	26	15½	16	2¾"	7"	2'-3"	3'-10"	6'-1"	4'-0"	34⅛"	14"	2½"	2½:1
24	28½	29	18	18	3"	9"	2'-3"	3'-10"	6'-1"	5'-0"	36⅛"	15"	2½"	2½:1
30	36¼	36	22½	23	3½"	10"	3'-1"	3'-0½"	6'-1½"	6'-0"	47⅜"	20"	3"	2½:1
36	43¾	44	26⅝	27	4"	10½"	4'-0"	2'-1½"	6'-1½"	6'-6"	54⅝"	22"	3½"	2½:1
42	51⅛	51	31⅜	31	4½"	11½"	4'-7"	1'-10¼"	6'-5¼"	7'-2"	59½"	23"	3¾"	2½:1
48	58½	59	36	36	5"	1'-3"	5'-3"	2'-10¾"	8'-1¾"	7'-10"	70⅝"	24"	4¼"	2½:1
54	65	65	40	40	5½"	1'-7"	5'-3"	2'-11"	8'-2"	8'-6"	72⅛"	24"	4¾"	2¼:1
60	73	73	45	45	6"	1'-10"	5'-6"	2'-8"	8'-2"	9'-0"	77⅛"	24"	5"	2¼:1

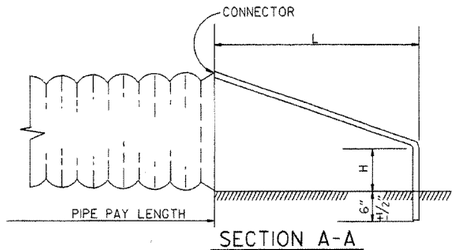
• THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN ± 2 PER CENT FROM THE VALUES SPECIFIED BY AASHTO M 206.



END VIEW
CONCRETE ARCH PIPE

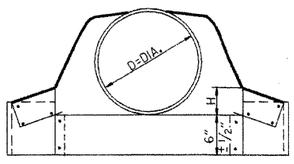


PLAN

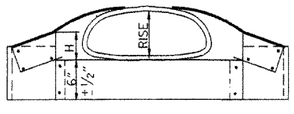


SECTION A-A

NOTE: ALTERNATE CONNECTIONS TO THE PIPE CULVERTS, IN ACCORDANCE WITH MANUFACTURER'S STANDARD PRACTICES, MAY BE MADE SUBJECT TO THE APPROVAL OF THE ENGINEER.



CIRCULAR PIPE



C.M. ARCH PIPE

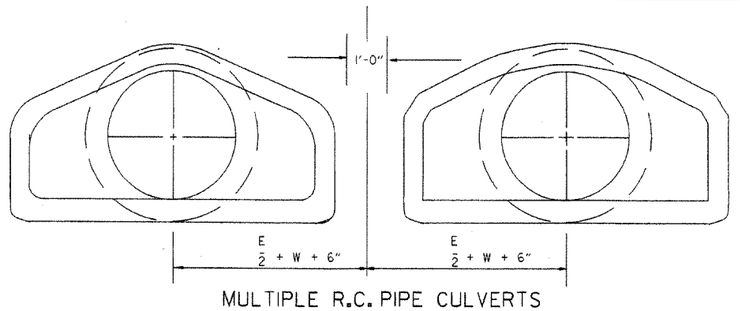
CIRCULAR PIPE

D. DIA.	GAUGE	A 1" ±	B. MAX.	H 1" ±	L 1½" ±	W 2" ±	S
		INCHES					
12	16	6	6	6	21	24	2½:1
15	16	7	8	6	26	30	2½:1
18	16	8	10	6	31	36	2½:1
21	16	9	12	6	36	42	2½:1
24	16	10	13	6	41	48	2½:1
30	14	12	16	8	51	60	2½:1
36	14	14	19	9	60	72	2½:1
42	12	16	22	11	69	84	2½:1
48	12	18	27	12	78	90	2½:1
54	12	18	30	12	84	102	2:1
60	12	18	33	12	87	114	1¾:1
66	12	18	36	12	87	120	1½:1
72	12	18	39	12	87	126	1 1/3:1

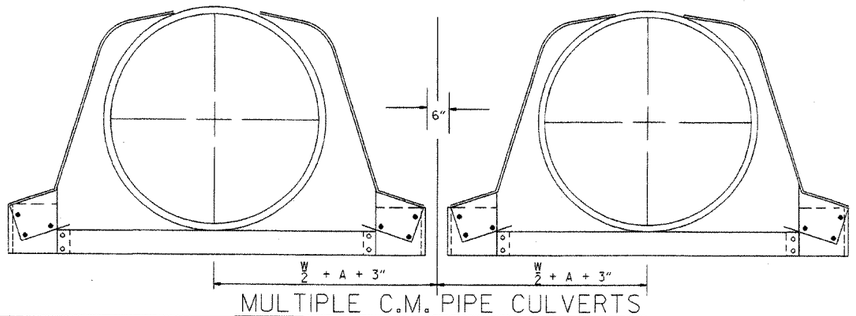
C.M. ARCH PIPE

EQUIV. DIA.	SPAN	RISE	A 1" ±	B MAX.	H 1" ±	L 1½" ±	W 2" ±	S	GAUGE
	INCHES								
15"	17	13	7	9	6	19	30	2½:1	16
18"	21	15	7	10	6	23	36	2½:1	16
21"	24	18	8	12	6	28	42	2½:1	16
24"	28	20	9	14	6	32	48	2½:1	16
30"	35	24	10	16	6	39	60	2½:1	14
36"	42	29	12	18	8	46	75	2½:1	14
42"	49	33	13	21	9	53	85	2½:1	12
48"	57	38	18	26	12	63	90	2½:1	12
54"	64	43	18	30	12	70	102	2¼:1	12
60"	71	47	18	33	12	77	114	2¼:1	12

END SECTIONS FOR CORRUGATED METAL PIPE CULVERTS



MULTIPLE R.C. PIPE CULVERTS



MULTIPLE C.M. PIPE CULVERTS

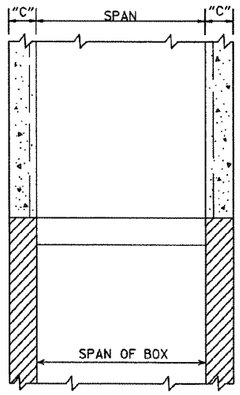
DATE	REVISION	FILMED
10-18-96	REVISED ASTM REF. TO AASHTO	10-18-96
5-15-80	REVISED DISTANCE BETWEEN MULTIPLE R.C.P. F.E.S.	664-5-15-80
7-14-78	C.M. ARCH SIZES TO CONFORM WITH AASHTO SIZES	752-7-14-78
8-22-75	ADDED MULTIPLE PIPE CULVERTS	517-8-22-75
12-5-74	REMOVED NOTE RE REINF. FOR R.C. F.E.S.	500-12-5-74
5-24-73	CMP END SECTION, SHOW PIPE PAY LENGTH	627-5-24-73
10-2-72	REVISED AND REDRAWN	760-10-2-72

ARKANSAS STATE HIGHWAY COMMISION

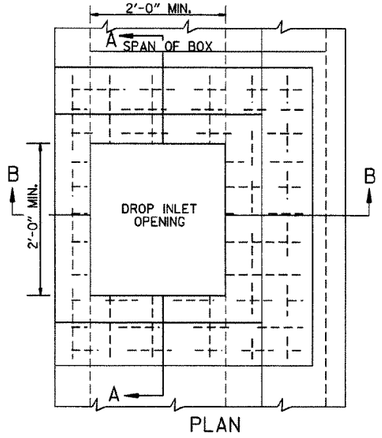
FLARED END SECTION

STANDARD DRAWING FES-2

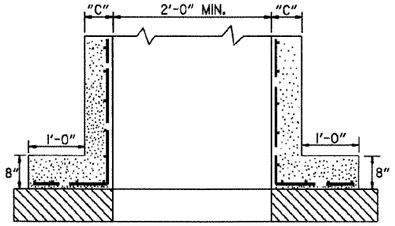
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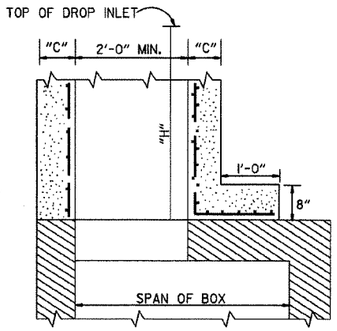
SECTION B-B



PLAN

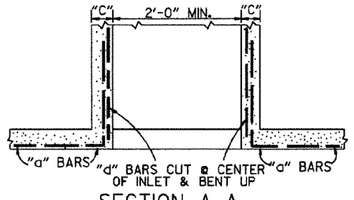


SECTION A-A

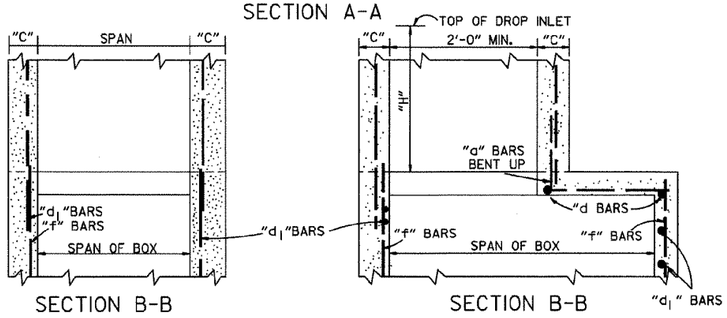


SECTION B-B

METHOD OF CONSTRUCTING DROP INLET ON EXISTING R.C. BOX CULVERT



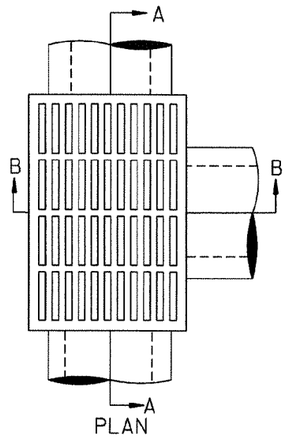
SECTION A-A



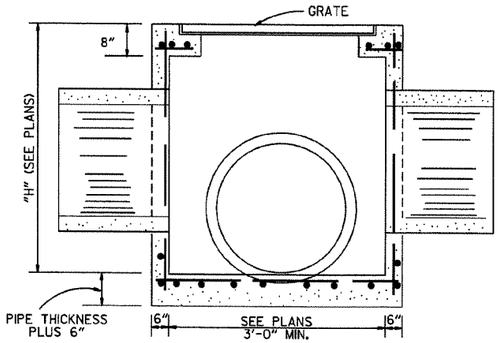
SECTION B-B SECTION B-B

METHOD OF CONSTRUCTING DROP INLET ON NEW R.C. BOX CULVERT

NOTE: "C" DIMENSIONS AND REINFORCING BAR SIZES, SHALL CONFORM TO THOSE SHOWN ON STANDARD DRAWING FOR DROP INLET.

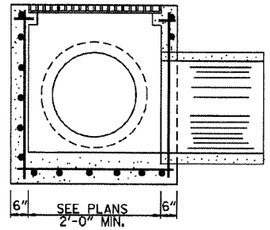


PLAN



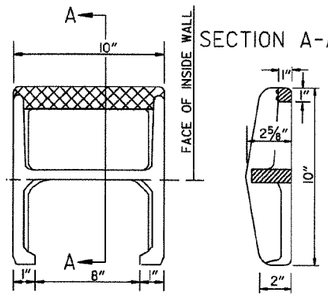
SECTION A-A

NOTE: REINF. BARS TO BE #4 BARS ON 6" CTRS. WITH 1½" MIN. COVER. THIS TYPE DROP INLET TO BE USED WHERE NOT SUBJECTED TO TRAFFIC.



SECTION B-B

DROP INLET (TYPE E)



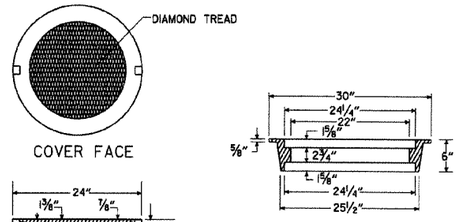
SECTION A-A

APPROX. WEIGHT = 11 LBS. (CAST IRON)

PLAN

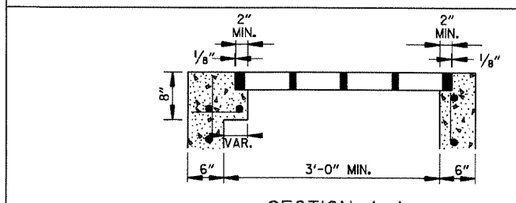
NOTE: THIS DETAIL IS TYPICAL. OTHERS MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER.

DETAIL OF STEP FOR DROP INLET

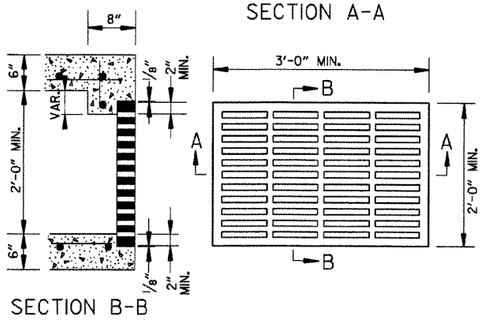


APPROXIMATE TOTAL WEIGHT = 333 LBS.

HEAVY DUTY RING & COVER



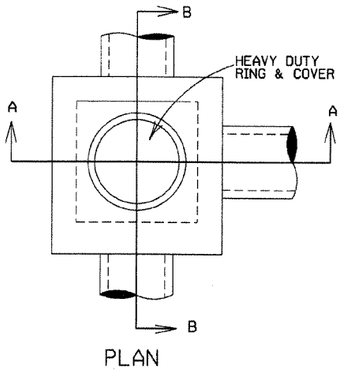
SECTION A-A



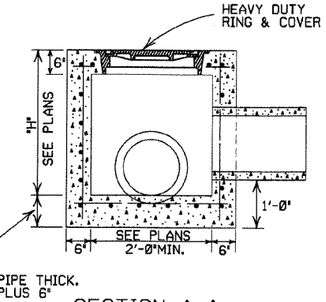
SECTION B-B

APPROXIMATE MINIMUM WATERWAY OPENING = 260 SQ. IN.

GRATE FOR TYPE E DROP INLET

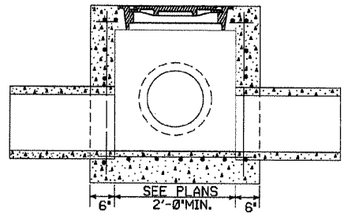


PLAN



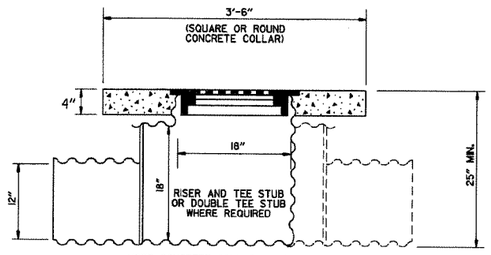
SECTION A-A

NOTE: REINF. BARS TO BE #4 BARS ON 6" CTRS. WITH 1½" MIN. COVER. THIS TYPE JUNCTION BOX TO BE USED WHERE NOT SUBJECTED TO TRAFFIC.

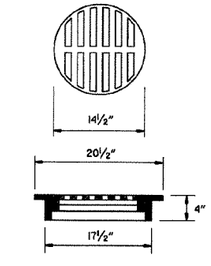


SECTION B-B

JUNCTION BOX (TYPE E)



NOTE: CONCRETE COLLAR TO BE CAST IN PLACE. 12" PIPE CULVERTS TO BE MEASURED AND PAID FOR AS " 12" SIDE DRAIN ".



USE NEENAH R-5901-C OR EQUIVALENT BICYCLE SAFE FRAME AND GRATE

DETAIL OF YARD DRAIN

GENERAL NOTES:

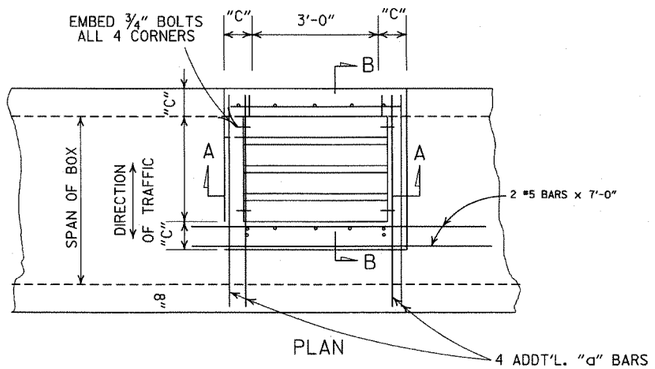
1. ALL EXPOSED CORNERS SHALL BE ¾" CHAMFERED.
2. STEPS SHALL BE INSTALLED ON 16" CENTERS ON ALL INLETS 4'-0" HIGH OR OVER, OR AS APPROVED BY THE ENGINEER.
3. EXPANSION JOINT MATERIAL SHALL BE ¾" PREFORMED FIBER.
4. GRATE OR GRATE AND FRAME SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M 105 CLASS 35B. GRATE MAY BE USED WITHOUT FRAME.
5. GRATE AND FRAME SHALL NOT BE PAINTED.
6. GRATE SHALL BE BICYCLE SAFE.
7. HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON TOP.
8. HEAVY DUTY RING AND COVER SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M105 CLASS 35B & AASHTO M306.
9. HEAVY DUTY RING AND COVER SHALL NOT BE PAINTED.
10. DIMENSIONS SHOWN FOR RING AND COVER ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR CASTINGS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR CASTING DESIGNS MAY BE MADE BY REFERRING TO PREVIOUSLY APPROVED DRAWINGS.

DATE REV.	REVISION	DATE FILMED
11-16-01	ADDED NOTE 10	
1-12-00	REVISED HEAVY DUTY RING & COVER	
7-02-98	CHANGED GRATE DETAIL, DELETED DI(TYPE D), REPLACED RING & COVER W/HEAVY DUTY RING & COVER, ADDED JUNCTION BOX (TYPE E)	
6-26-97	ADDED DIMENSION TO TYPE IV-A	
10-18-96	ADDED DETAIL OF YARD DRAIN	
8-15-91	DELETE TYPE IV GRATE	
7-15-88	REVISED STEP DETAIL	
5-20-83	REVISED DETAILS OF GRATES (TYPE IV & IV-A)	
2-4-83	ADDED GENERAL NOTE NO. 4	
3-2-81	ADDED TYPE IV-A GRATE	
5-22-74	DELETED INLET (TYPE F) & GRATE (TYPE III)	
10-2-72	REVISED AND REDRAWN	

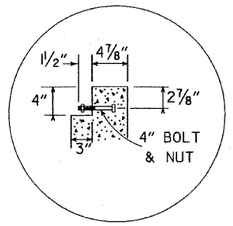
ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DROP INLETS & JUNCTION BOXES

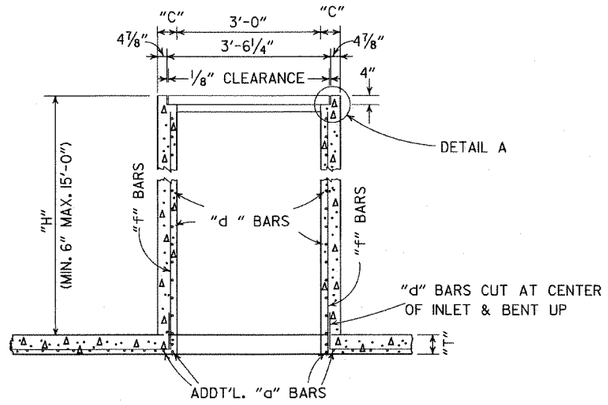
STANDARD DRAWING FPC-9



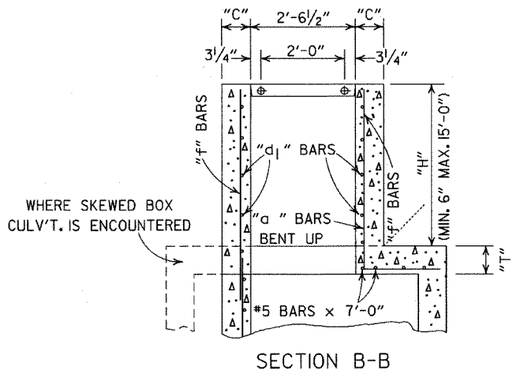
PLAN



DETAIL A



SECTION A-A

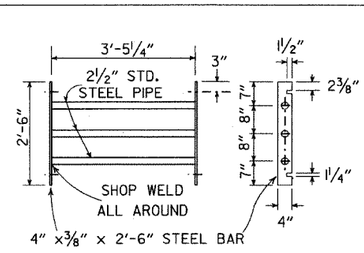


SECTION B-B

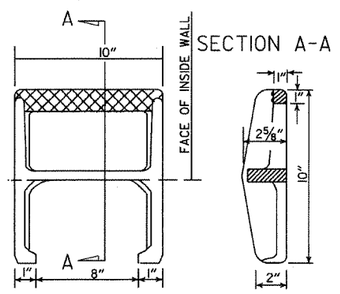
NOTE: ADDT'L.REINF. STEEL TO BE INCLUDED IN UNIT PRICE BID PER TYPE "TM" D.I.

DIMENSIONS & REINF. BARS FOR D.I. TO BE THE SAME AS THOSE SHOWN ON APPLICABLE STD. BARREL DRAWING FOR R.C. BOX CULVERTS.

DROP INLET TYPE "TM" FOR REINFORCED CONC. BOX CULVERTS



GRATE DETAIL



APPROX. WEIGHT = 11LBS. (CAST IRON)

PLAN

NOTE: THIS DETAIL IS TYPICAL. OTHERS MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER.

DETAIL OF STEP FOR DROP INLET

GENERAL NOTES:

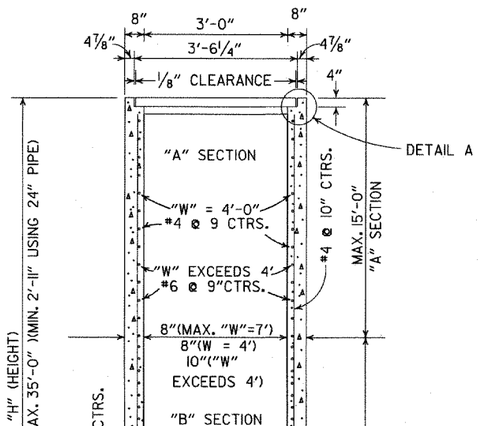
1. STEEL PIPE FOR GRATES AND BOLTS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 807. BOLTS SHALL CONFORM TO ONE OF THE FOLLOWING: ASTM A193, GRADE B8 CLASS 1 OR 2, ASTM A307 OR AASHTO M 164.
2. STEEL PIPE FOR GRATES SHALL BE "STANDARD WEIGHT" PIPE CONFORMING TO ASTM A53 NATIONAL STANDARD PIPE.
3. BOLTS, NUTS, WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M 232 OR AASHTO M 298, CLASS 40 OR 50.
4. ALL EXPOSED CORNERS TO HAVE ¾" CHAMFER.
5. ALL #4 AND #5 REINFORCING BARS TO HAVE 1½" COVER. LARGER SIZES TO HAVE 2" COVER.
6. THE COMPLETE PIPE GRATE SHALL BE PAINTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

TABLE OF "W" DIMENSIONS

263

I.D. PIPE	SKEW OF CROSS DRAIN		
	STRAIGHT	30°	45°
	"W"	"W"	"W"
24"	4'-0"	4'-0"	4'-0"
30"	4'-0"	4'-0"	4'-5"
36"	4'-0"	4'-3"	5'-3"
42"	4'-3"	4'-11"	6'-1"
48"	4'-10"	5'-7"	6'-11"

NOTE: DIMENSIONS SHOWN ABOVE ARE FOR PIPES INTERSECTING DROP INLET ON ONE SIDE ONLY. FOR SKEWED PIPES INTERSECTING BOTH SIDES OF DROP INLET, "W" WILL NEED TO BE INCREASED OR AXIS OF INTERSECTING PIPES WILL NEED TO BE SHIFTED.

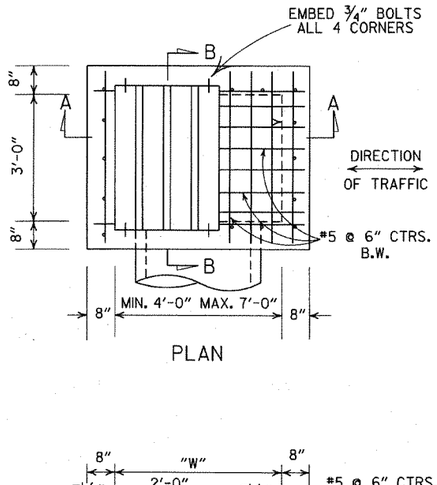


"A" SECT. (MAX. "W" = 7')
"B" SECT. ("W" = 4')
"C" SECT. ("W" EXCEEDS 4')

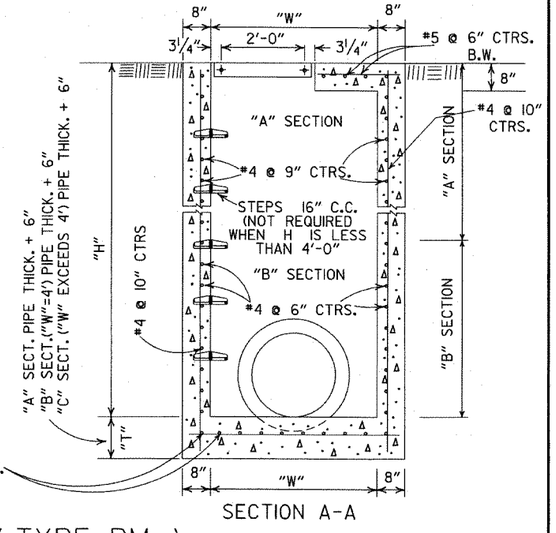
8" 3'-0" 8"
8" 10"

#4 @ 6" O.C. 'A' SECT.
#6 @ 6" O.C. "B" SECT.

SECTION B-B



PLAN



SECTION A-A

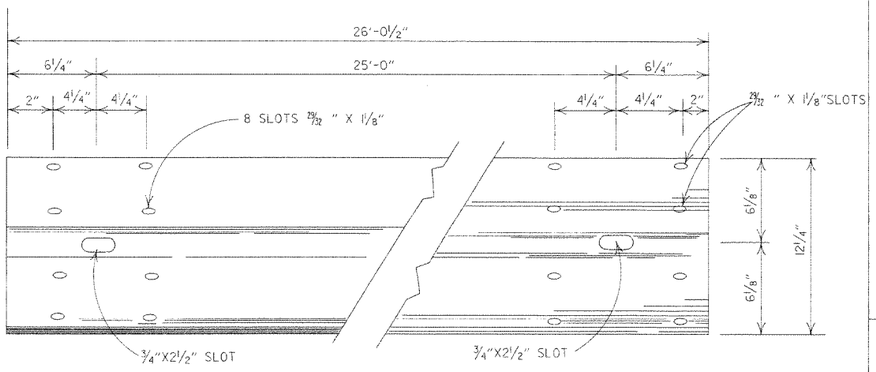
DROP INLET(TYPE RM)

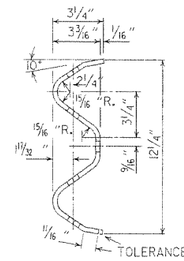
REVISED		DATE FILMED
8-22-02	ADDED & REVISED DIMENSION TO SECTION A-A	
1-12-00	CORRECTED DIMENSION ON SECTION B-B	
11-06-97	ADDED DIMENSION TO SECTION A-A	
10-18-96	REVISED ASTM REF. TO AASHTO AND ADDED NOTE TO TABLE OF "W" DIMENSIONS	
10-1-92	ADDED DIRECTION OF TRAFFIC	10-1-92
8-15-91	ADDED NOTE ABOUT PAINTING OF GRATE	8-15-91
11-30-89	ALTERED DETAIL A	11-30-89
7-15-88	REVISED STEP DETAIL,TM & RM D.I. & GRATE DETAIL	719-7-15-88
10-2-72	REVISED AND REDRAWN	542-10-2-72

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DROP INLETS

STANDARD DRAWING FPC-9D

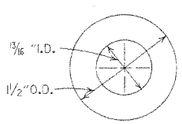




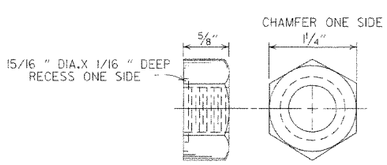
DETAILS OF W-BEAM GUARD RAIL

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

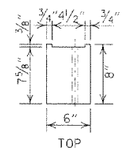
SPLICE BOLT
POST BOLT - SAME EXCEPT LENGTH



CUT STEEL WASHER

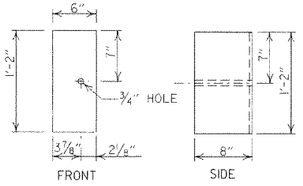


NUT



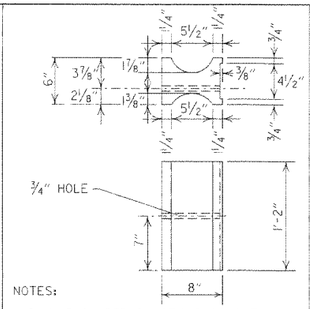
WOOD BLOCKOUT USED WITH WOOD POSTS SHALL BE 6"x8"x1'-2" WITH NO NOTCH REQUIRED.

TOP



FRONT SIDE

WOOD BLOCKOUT (W-BEAM)

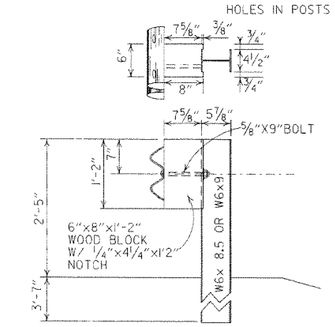


NOTES:

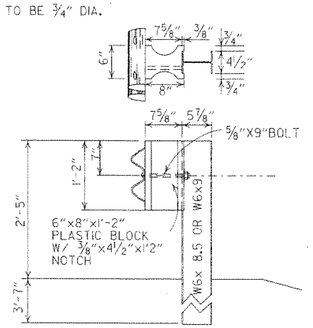
1. SIMILAR SHAPED PLASTIC BLOCKOUTS MAY BE USED AS LONG AS THEY MEET NCHRP-350 TEST LEVEL 3 SPECIFICATIONS OR REQUIREMENTS FOR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).
2. DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCES.

PLASTIC BLOCKOUT (W-BEAM)

HOLES IN POSTS AND BLOCKS TO BE 3/4" DIA.

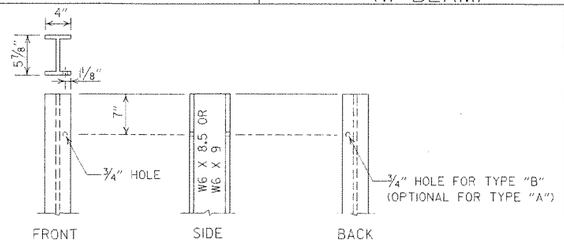


WOOD BLOCKOUT CONNECTIONS

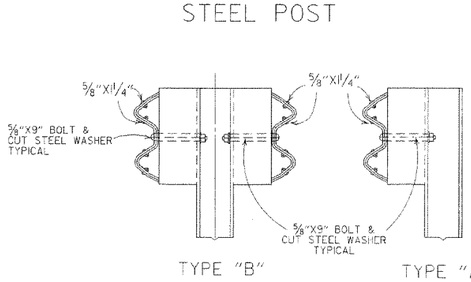


PLASTIC BLOCKOUT CONNECTIONS

DETAILS OF STEEL LINE POST CONNECTIONS (W-BEAM)



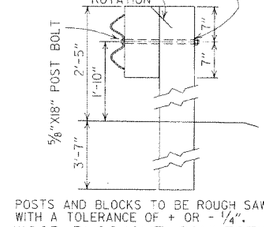
STEEL POST



TYPE "B" TYPE "A"

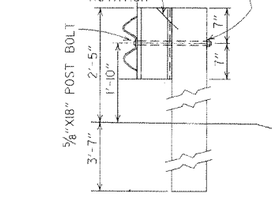
DETAILS OF STEEL LINE POST CONNECTIONS (W-BEAM)

HOLES IN POSTS AND BLOCKS TO BE 3/4" DIA.



POSTS AND BLOCKS TO BE ROUGH SAWN 6"X8" WITH A TOLERANCE OF + OR - 1/4".

WOOD BLOCKOUT CONNECTIONS



PLASTIC BLOCKOUT CONNECTIONS

DETAILS OF WOOD 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 3/4" 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.

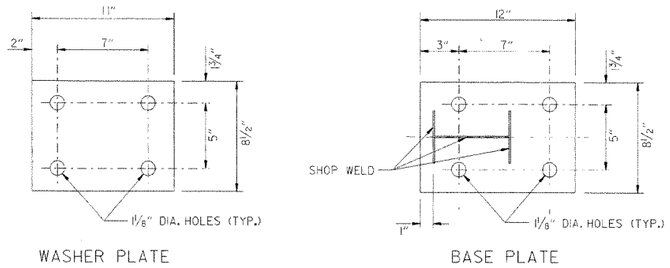
CONTRACTOR SHALL HAVE THE OPTION OF USING WOOD BLOCKOUTS FOR W-BEAM GUARD RAIL OR PLASTIC BLOCKOUTS, AS LONG AS BLOCKOUT USED MEETS NCHRP-350 TEST LEVEL 3 SPECIFICATIONS OR REQUIREMENTS FOR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) FOR W-BEAM GUARD RAIL.

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 AT. 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

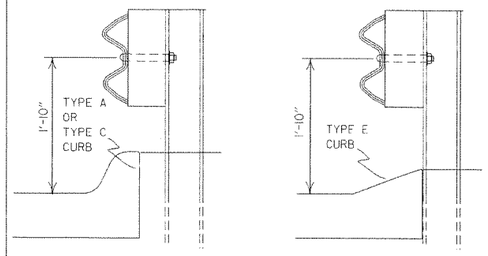
STANDARD DRAWING GR-8



WASHER PLATE

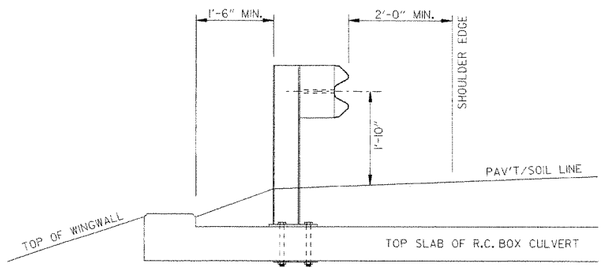
BASE PLATE

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

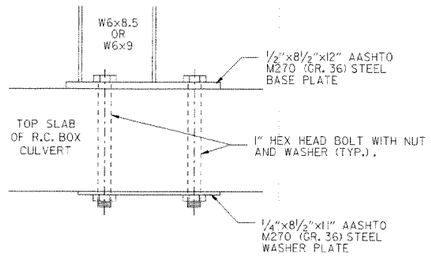


DETAIL OF GUARD RAIL PLACEMENT BEHIND CURB (W-BEAM)

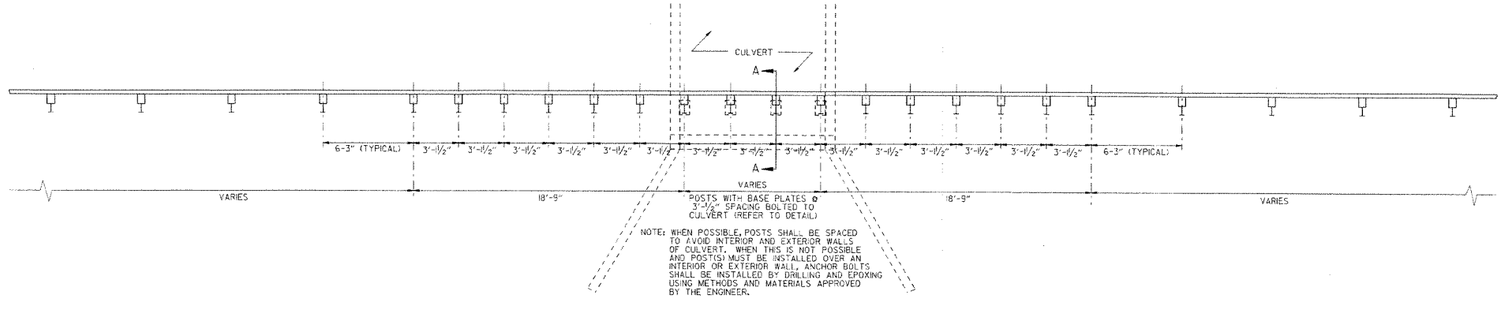
FOR DESIGN SPEEDS OF 50 MPH OR LESS ALL CURB FACES, AS SHOWN ON STD. DRWG. CG-1, MAY BE USED. FOR DESIGN SPEEDS OF 55 MPH OR MORE TYPE "E" CURB FACE SHALL BE USED.



SECTION A-A



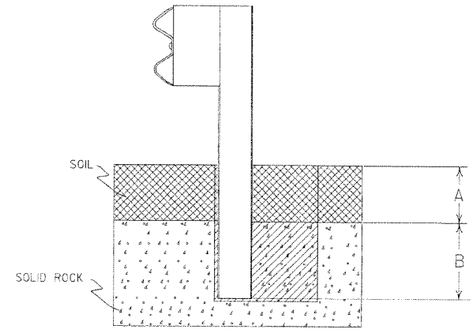
DETAIL OF CONNECTION



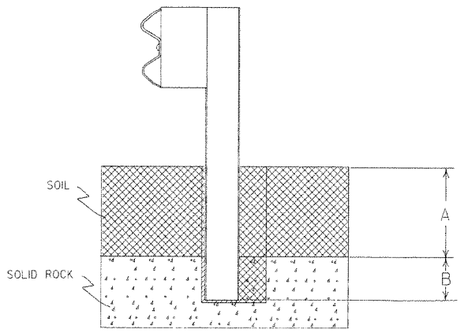
PLAN LAYOUT OF TYPE A GUARD RAIL AT LOW-FILL CULVERTS

NOTE: THIS DETAIL IS TO BE USED ONLY WHEN THE COVER OVER THE CULVERT DOES NOT PERMIT FULL EMBEDMENT OF GUARD RAIL POSTS AS SHOWN ON STD. DWG. GR-8.

Case 1

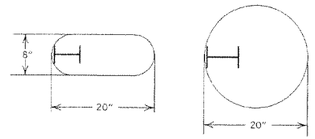


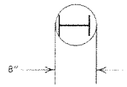
Case 2



Plan View Steel Posts

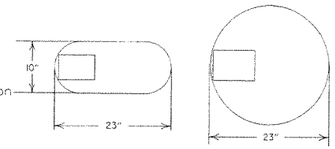
Either hole configuration acceptable

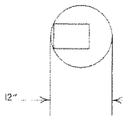




Plan View Wood Posts

Either hole configuration acceptable





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

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

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

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

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

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

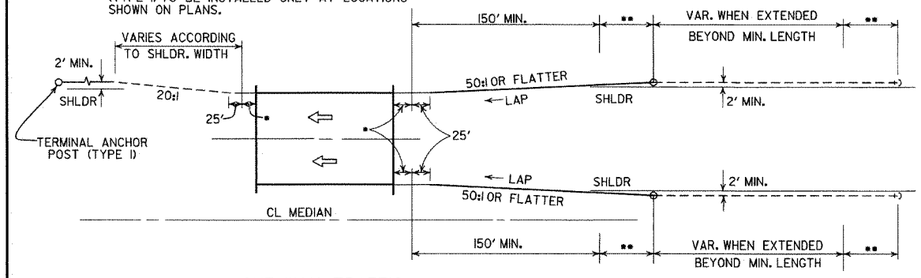
DATE	REVISION	DATE FILM
7-14-10	RAISED HEIGHT OF GUARD RAIL 1"	
4-12-07	REVISED DETAIL OF GUARD RAIL PLACEMENT BEHIND CURB	
11-10-05	ADDED GUARD RAIL PLACEMENT BEHIND CURB; REVISED DETAIL OF CONNECTION	
11-18-04	REVISED POST PLACEMENT IN ROCK & CULVERT CONNECTION DETAILS. ADDED DETAIL FOR GUARD RAIL PLACEMENT AT LOW-FILL CULVERTS	
3-30-00	REMOVED CONCRETE INSERT ANCHOR	
6-12-98	CHANGED STEEL SPACER BLOCK TO WOOD BLOCKOUT, ADD. DET. OF GUARD RAIL CONNECTION TO R.C. BOX CULVT. DELETED DET. OF STEEL LINE POST CONN.& ADDED DET. OF GUARD RAIL PLACE. BEHIND CURB & DET. OF POST PLACE. IN SOLID ROCK	
4-3-96	PLACED ARROWS AT CUT STEEL WASHERS	4-3-96
10-18-96	REV. ASTM REF. TO AASHTO	
11-22-95	ADDED OPTIONAL HOLES	
6-2-94	REVISED ALTERNATE POST SIZE	
8-6-93	REVISED STEEL POST SIZE	
10-1-92	REDRAWN & REVISED	10-1-92
8-2-90	DEL. WASHER ON ANCHOR ASSEMBLY	8-2-90
7-15-88	CONFORMED TO 1988 SPECS	
3-4-88	REVISED ANCHOR NOTE	
10-30-87	REVISED ANCHOR ASSEMBLY	712-10-30-87
10-30-87	REVISED PLACEMENT BEHIND CURB	547-10-30-87
10-9-87	REDRAWN & REVISED	803-10-9-87

ARKANSAS STATE HIGHWAY COMMISSION

GUARD RAIL DETAILS

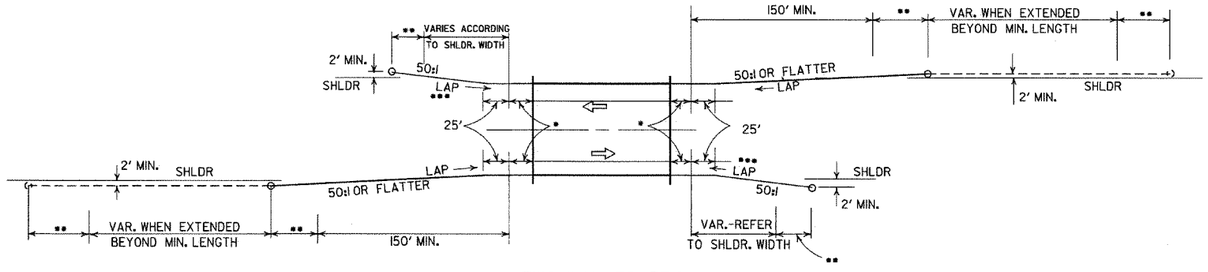
STANDARD DRAWING GR-8A

NOTE: GUARD RAIL WITH GUARD RAIL TERMINAL (TYPE I) TO BE INSTALLED ONLY AT LOCATIONS SHOWN ON PLANS.



ONE-WAY TRAFFIC

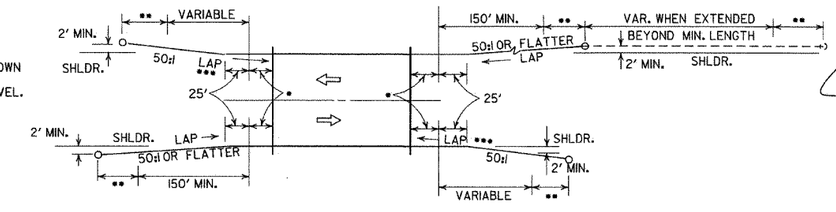
••• LAP OF GUARD RAIL SHALL BE AS SHOWN FOR A DISTANCE OF UP TO 200', CHANGE TO LAP IN DIRECTION OF TRAVEL.



TWO-WAY TRAFFIC

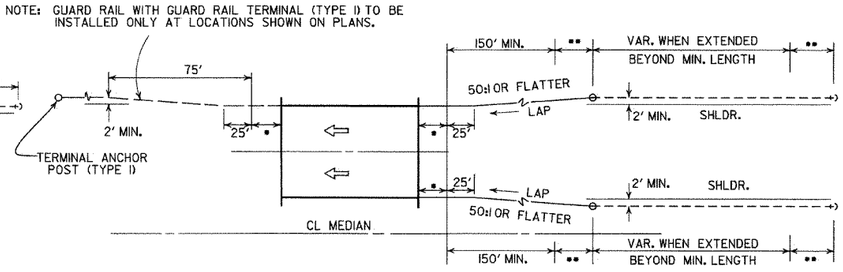
METHODS OF INSTALLATION OF GUARD RAIL AT LESS THAN FULL SHOULDER WIDTH BRIDGES USING GUARD RAIL TERMINAL (TYPE 2)

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



TWO-WAY TRAFFIC

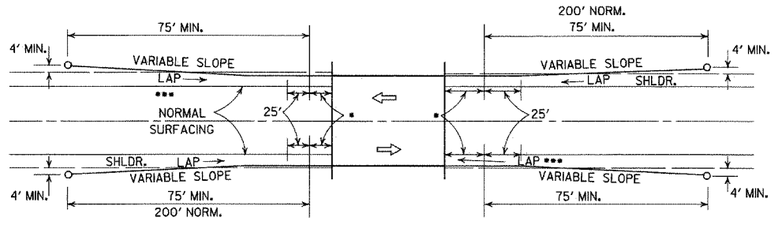
NOTE: GUARD RAIL WITH GUARD RAIL TERMINAL (TYPE I) TO BE INSTALLED ONLY AT LOCATIONS SHOWN ON PLANS.



ONE-WAY TRAFFIC

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

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



METHOD OF INSTALLATION OF GUARD RAIL USING GUARD RAIL TERMINAL (TYPE I) (FULL SHOULDER WIDTH OR LESS BRIDGES)

LEGEND

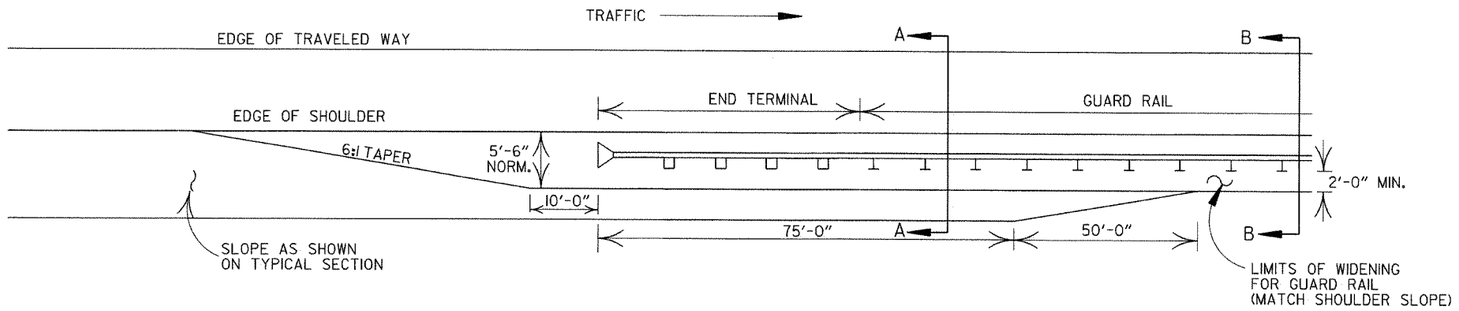
- • THRIE BEAM GUARD RAIL TERMINAL
- •• GUARD RAIL TERMINAL (TYPE 2)

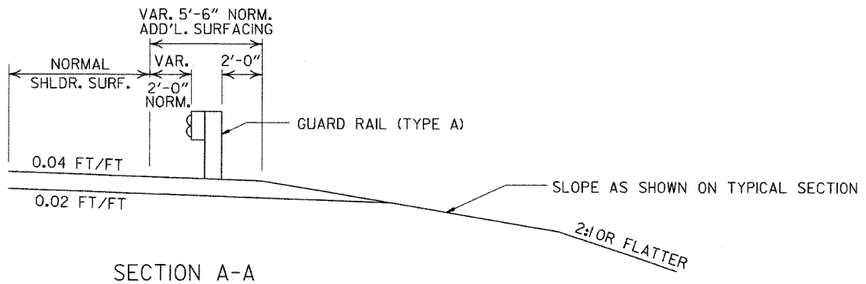
DATE	REVISION	DATE FILM
4-17-08	REVISED LAYOUTS	
11-10-05	REMOVED GUARD RAIL NOTES AND DETAILS	
11-16-01	DELETED NOTE-METHOD OF INSTALLATION OF GUARD RAIL USING GUARD RAIL TERM. (TY. I)	
1-12-00	ADDED CONSTRUCTION NOTE	1-12-00
6-26-97	REVISED LAYOUT	
10-1-92	REDRAWN & REVISED	10-1-92
	ADDED NOTE	
10-9-87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

ARKANSAS STATE HIGHWAY COMMISSION

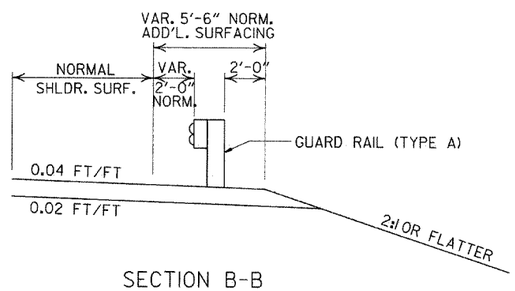
GUARD RAIL DETAILS

STANDARD DRAWING GR-9





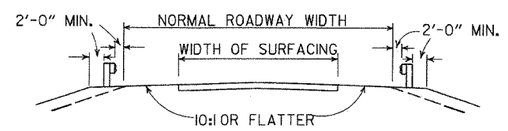
SECTION A-A



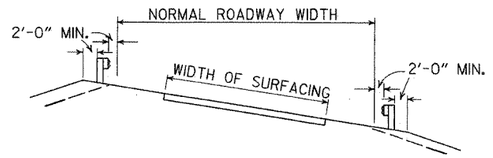
SECTION B-B

DETAILS OF WIDENING FOR GUARD RAIL

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

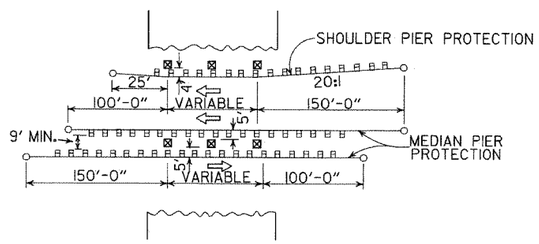


SECTION ON TANGENT



SECTION ON CURVE

DETAILS SHOWING POSITION OF GUARD RAIL ON HIGHWAY



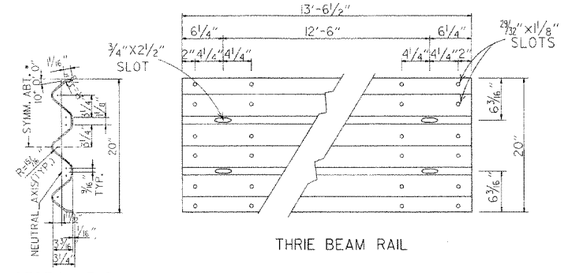
METHOD OF INSTALLATION OF GUARD RAIL AT FIXED OBSTACLE

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

ARKANSAS STATE HIGHWAY COMMISSION

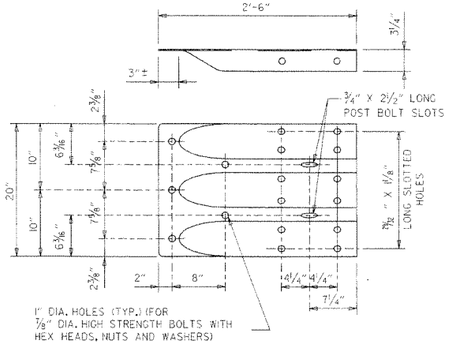
GUARD RAIL DETAILS

STANDARD DRAWING GR-9A



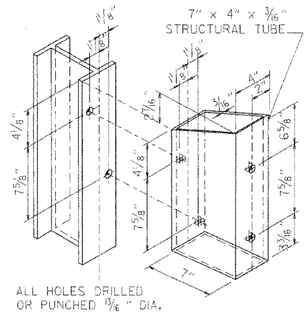
THRIE BEAM RAIL

SECTION THRU THRIE BEAM RAIL



1" DIA. HOLES (TYP.) (FOR ⅞" DIA. HIGH STRENGTH BOLTS WITH HEX HEADS, NUTS AND WASHERS)

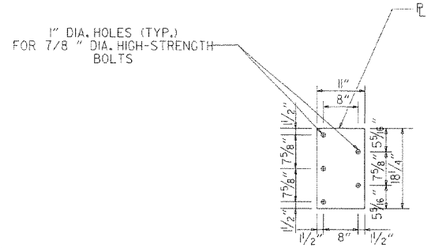
SPECIAL END SHOE



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

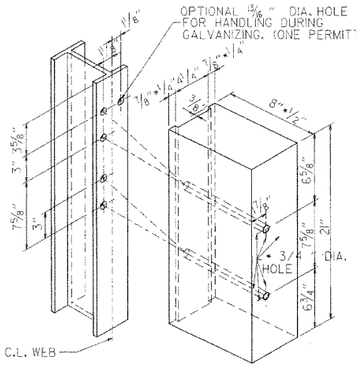
ALL HOLES DRILLED OR PUNCHED 13/16" DIA.

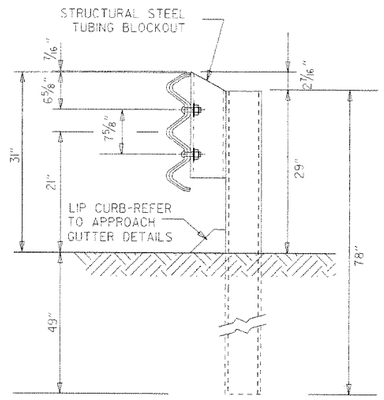
STRUCTURAL STEEL TUBING BLOCKOUT DETAIL



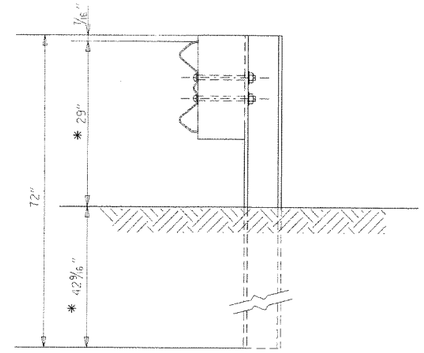
CONNECTOR PLATE

NOTE:
SEE STANDARD DRAWING GR-10A FOR GUARD RAIL POST EMBEDMENT DEPTHS.


OPTIONAL 13/16" DIA. HOLE FOR HANDLING DURING GALVANIZING. (ONE PERMITTED)
1⅛"
⅛"
⅛"
⅛"

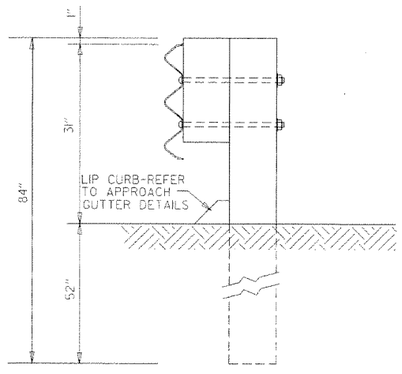


THRIE BEAM RAIL WITH STEEL TUBING BLOCKOUT
AND STEEL POST
POSTS 1-7

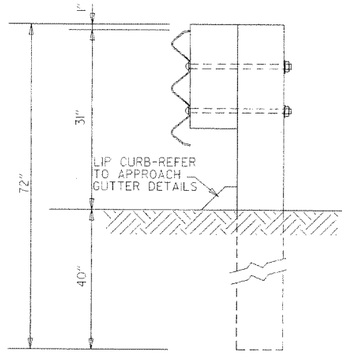


W-BEAM TO THRIE BEAM TRANSITION RAIL
WITH WOOD OR PLASTIC BLOCKOUT AND STEEL POST
POST 8

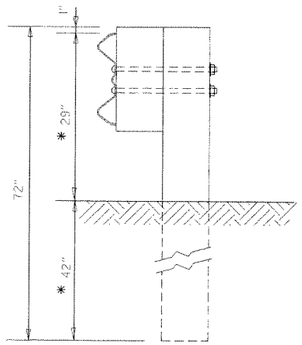
* NOTE:
THESE DIMENSIONS WILL NEED TO BE ADJUSTED IN THE FIELD TO MAKE THE TRANSITION FROM 21" MID POINT OF THRIE BEAM TO 22" MID POINT OF W-BEAM.



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



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



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

GENERAL NOTES:

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

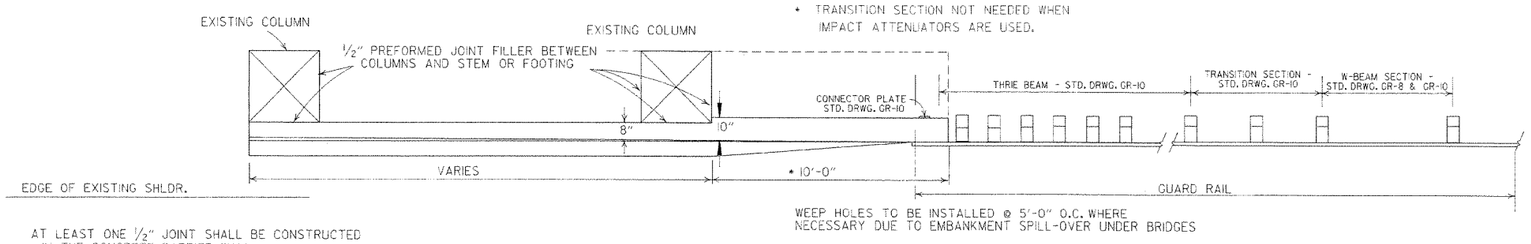
WOOD POSTS & WOOD BLOCKS SHALL BE EITHER DENSE NO. 1 STRUCTURAL OR BETTER 9.7 f (1400 f) OR NO. 1 1350 f SOUTHERN PINE.

DATE	REVISION	DATE FILM
7-14-10	REVISED POST 8 DIMENSIONS	
11-29-07	ADDED PLASTIC BLOCKOUTS	
8-22-02	REVISED LIP CURB NOTE	
3-30-00	DRAWN & ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

GUARD RAIL DETAILS

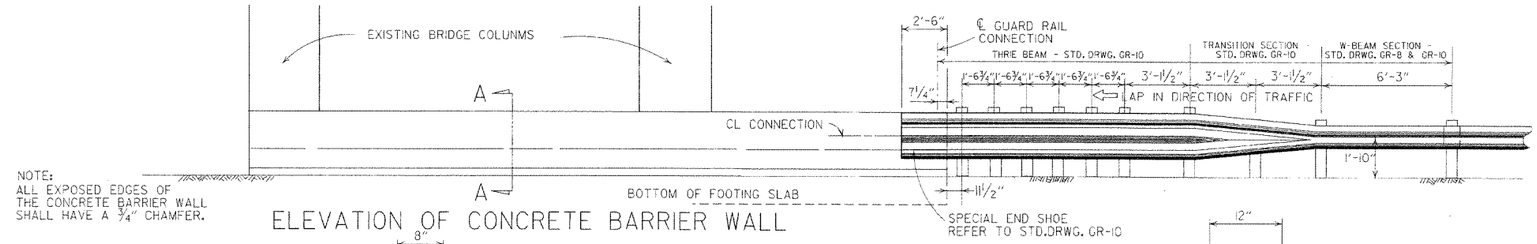
STANDARD DRAWING GR-10A



* TRANSITION SECTION NOT NEEDED WHEN IMPACT ATTENUATORS ARE USED.

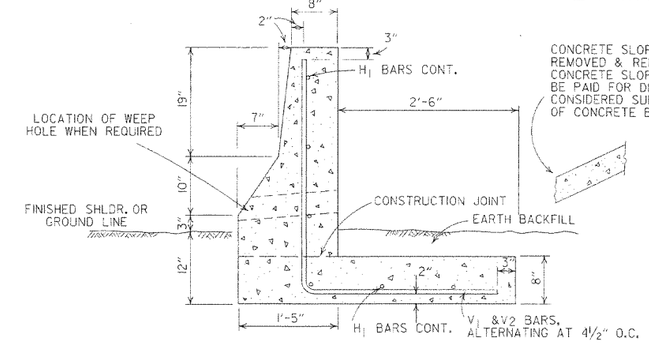
AT LEAST ONE 1/2" JOINT SHALL BE CONSTRUCTED IN THE CONCRETE BARRIER WALL. JOINTS SHALL BE EQUALLY SPACED AT A MAXIMUM OF 25'-0" O.C. FILL JOINT WITH PREFORMED JOINT FILLER.

PLAN OF CONCRETE BARRIER WALL



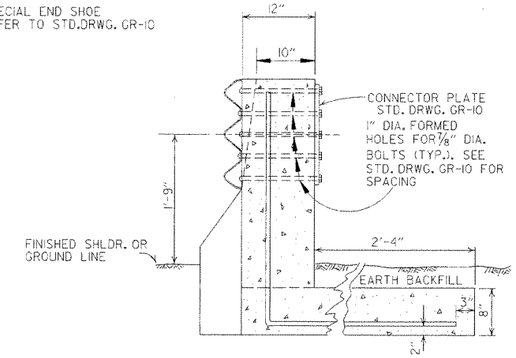
NOTE:
ALL EXPOSED EDGES OF THE CONCRETE BARRIER WALL SHALL HAVE A 3/4" CHAMFER.

ELEVATION OF CONCRETE BARRIER WALL



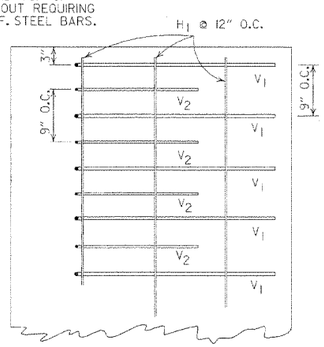
CONCRETE SLOPE PAVING TO BE REMOVED & REPLACED WHERE REQ'D. CONCRETE SLOPE PAVING WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED SUBSIDIARY TO THE ITEM OF CONCRETE BARRIER WALL.

SECTION A-A



SECTION THRU CONNECTION

IF FOR ANY REASON IT IS NECESSARY TO CONSTRUCT THE FOOTING AT A LOWER ELEVATION THAN IS SHOWN, THE STEM MAY BE LENGTHENED 1'-0" BETWEEN FIN. SHLDR. AND TOP OF FOOTING WITHOUT REQUIRING HEAVIER REINF. STEEL BARS.

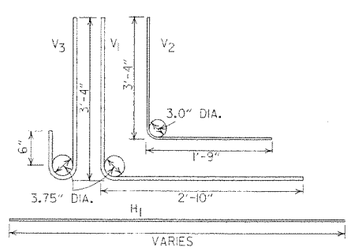


PLAN OF REINFORCING STEEL IN FOOTING

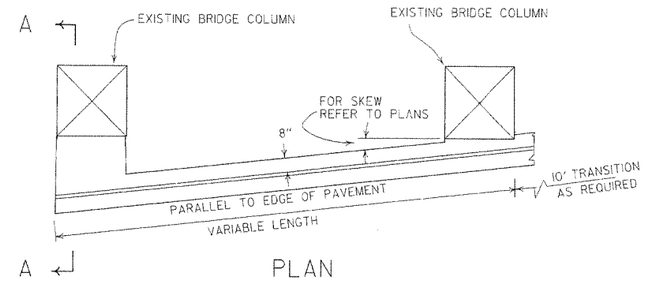
BAR LIST

MARK	NO.	SIZE	LENGTH
V1		#5	6'-2 1/4"
V2		#4	5'-1"
V3		#5	4'-11 1/8"
H1	6	4	VAR.

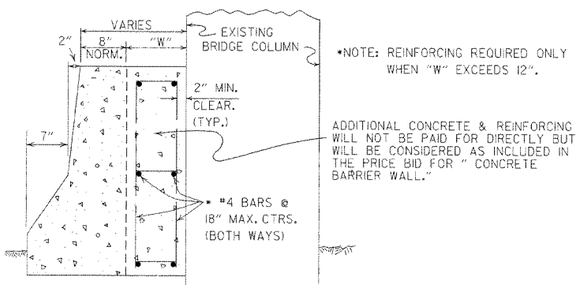
THE V3 BARS SHALL BE USED IN PLACE OF THE V1 & V2 BARS IN FRONT OF PIERS.



BEND DIAGRAMS



PLAN



*NOTE: REINFORCING REQUIRED ONLY WHEN "W" EXCEEDS 12".

ADDITIONAL CONCRETE & REINFORCING WILL NOT BE PAID FOR DIRECTLY BUT WILL BE CONSIDERED AS INCLUDED IN THE PRICE BID FOR " CONCRETE BARRIER WALL."

SECTION A-A

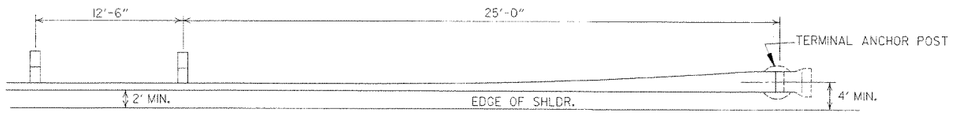
DETAILS OF CONCRETE BARRIER WALL WHEN PIERS ARE SKEWED TO ROADWAY

DATE	REVISION	DATE FILM
7-14-10	RAISED HEIGHT OF W-BEAM 1"	
8-22-02	REV. SECTION A-A OF DETAILS OF CONCRETE BARRIER WALL	
6-29-00	MOVED DIMENSION LINE	
5-18-00	ADDED NOTE	
3-30-00	REVISED TO INCLUDE THRIE BEAM	
6-2-94	ADDED TRANSITION SECTION NOTE	
10-1-92	REDRAWN & REVISED	10-1-92
8-15-91	REVISED DRAWING PLAN CONC. BARR.	8-15-91
2-16-89	ADDED SKEWED DETAILS	594-2-16-89
7-14-88	CHANGED TITLE	
10-9-87	REDRAWN & REVISED	

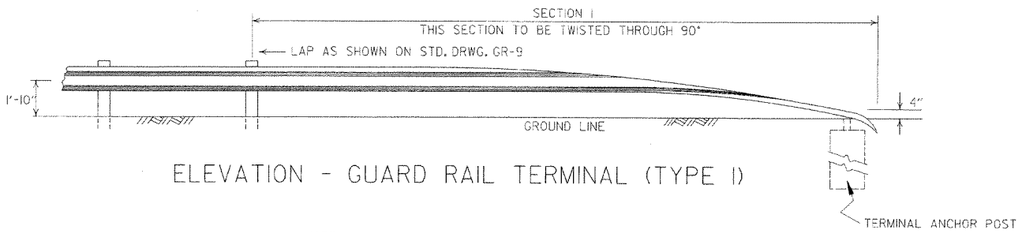
ARKANSAS STATE HIGHWAY COMMISSION

CONCRETE BARRIER WALL (PIER PROTECTION TYPE A)

STANDARD DRAWING GR-11

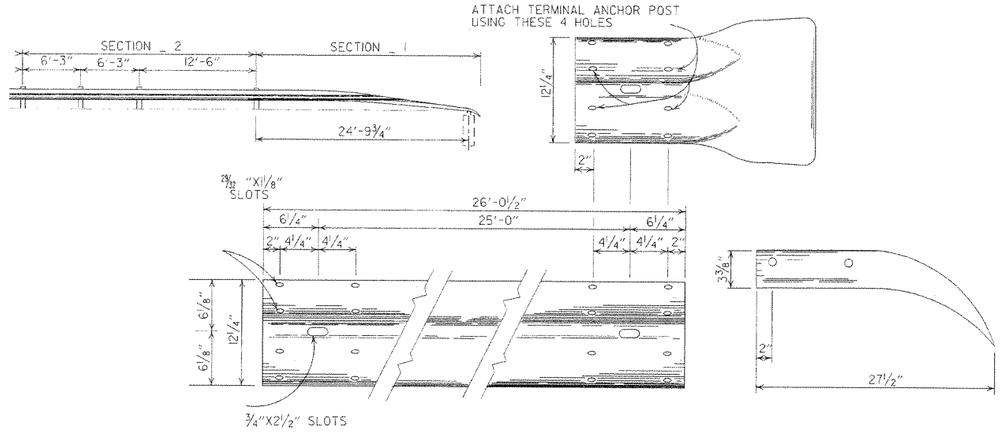


PLAN - GUARD RAIL TERMINAL (TYPE I)



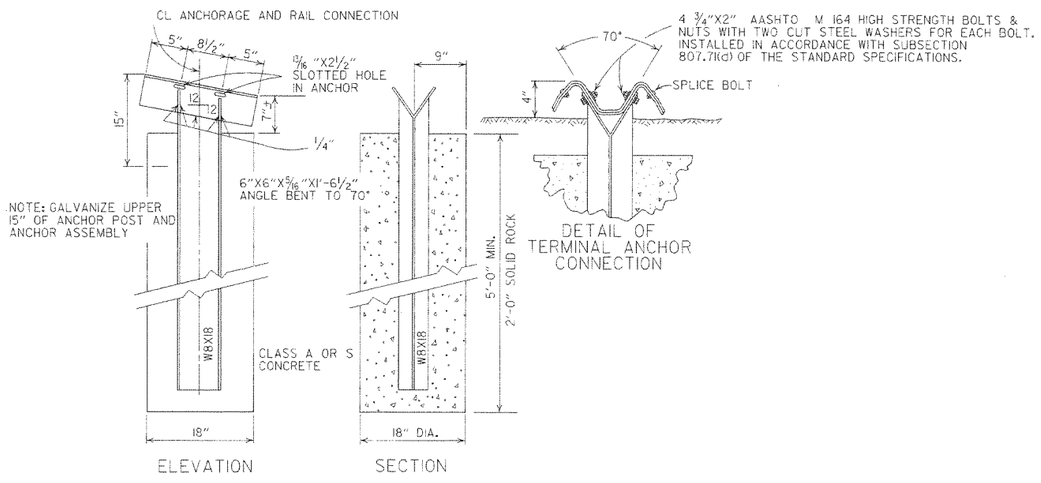
ELEVATION - GUARD RAIL TERMINAL (TYPE I)

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

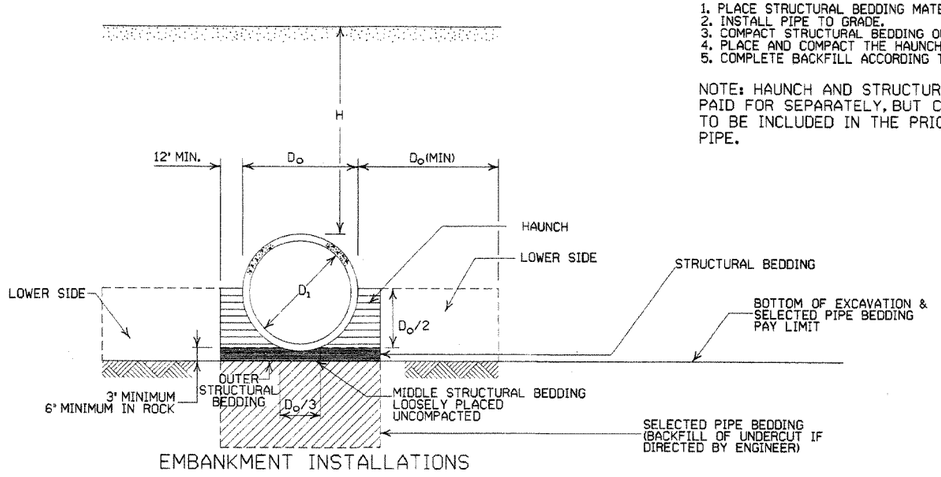
GUARD RAIL DETAILS

STANDARD DRAWING GRT-1

CONSTRUCTION SEQUENCE

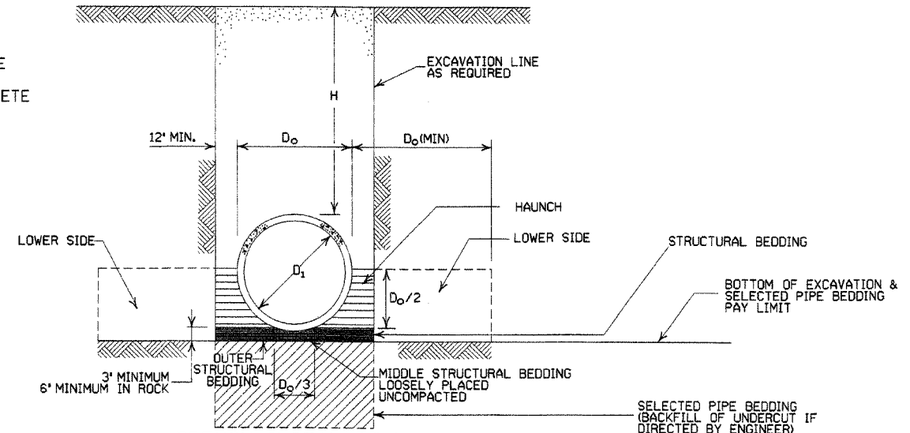
1. PLACE STRUCTURAL BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
2. INSTALL PIPE TO GRADE.
3. COMPACT STRUCTURAL BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
4. PLACE AND COMPACT THE HAUNCH AREA UP TO THE MIDDLE OF THE PIPE.
5. COMPLETE BACKFILL ACCORDING TO SPECIFICATIONS.

NOTE: HAUNCH AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF CONCRETE PIPE.



EMBANKMENT INSTALLATIONS

1. MATERIAL IN THE LOWER SIDE, HAUNCH, AND OUTER STRUCTURAL BEDDING SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.



TRENCH INSTALLATIONS

1. MATERIAL IN THE HAUNCH AND OUTER STRUCTURAL BEDDING SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.
2. FOR TRENCHES WITH WALLS OF NATURAL SOIL, THE DENSITY OF THE SOIL IN THE LOWER SIDE ZONE SHALL BE AS FIRM AS THE 95% DENSITY REQUIRED FOR THE HAUNCH. IF THE EXISTING SOIL DOES NOT MEET THIS CRITERIA, IT SHALL BE REMOVED AND RECOMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OF MATERIAL USED.

REINFORCED CONCRETE ARCH PIPE DIMENSIONS

EQUIV. DIA.	•SPAN		• RISE	
	AASHTO M 206	AHD NOMINAL	AASHTO M 206	AHD NOMINAL
INCHES	INCHES			
15	18	18	11	11
18	22	22	13½	14
21	26	26	15½	16
24	28½	29	18	18
30	36¼	36	22½	23
36	43¾	44	26⅞	27
42	51⅛	51	31 1/16	31
48	58½	59	36	36
54	65	65	40	40
60	73	73	45	45
72	88	88	54	54
84	102	102	62	62
90	115	115	72	72
96	122	122	77½	77
108	138	138	87½	87
120	154	154	96⅞	97
132	168¾	169	106½	107

• THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN ± 2 PER CENT FROM THE VALUES SPECIFIED BY AASHTO M 206.

INSTALLATION TYPE	* MATERIAL REQUIREMENTS FOR HAUNCH AND STRUCTURAL BEDDING
TYPE 1	AGGREGATE BASE COURSE (CLASS 5 OR CLASS 7)
TYPE 2	SELECTED MATERIALS (CLASS SM-1, SM-2, OR SM-3) OR TYPE 1 INSTALLATION MATERIAL
TYPE 3	AASHTO CLASSIFICATION A-1 THRU A-6 SOIL OR TYPE 1 OR 2 INSTALLATION MATERIAL

* MATERIALS SHALL NOT INCLUDE ORGANIC MATERIALS OR STONES LARGER THAN 3 INCHES.

MAXIMUM HEIGHT OF FILL OVER R.C. PIPE CULVERTS

INSTALLATION TYPE	CLASS OF PIPE		
	CLASS III	CLASS IV	CLASS V
	FEET		
TYPE 1	21	32	50
TYPE 2	17	27	41
TYPE 3	13	20	32

NOTE: IF FILL HEIGHT EXCEEDS 50 FEET, A SPECIAL DESIGN CONCRETE PIPE WILL BE REQUIRED USING TYPE 1 INSTALLATION.

GENERAL NOTES

1. ALL PIPE SHALL BE PROTECTED DURING CONSTRUCTION BY A COVER SUFFICIENT TO PREVENT DAMAGE FROM PASSAGE OF EQUIPMENT.
2. THE MINIMUM TRENCH WIDTH SHALL BE THE OUTSIDE DIAMETER OF THE PIPE PLUS 24 INCHES.
3. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PRACTICABLE FOR WORKING CONDITIONS.
4. MULTIPLE PIPE CULVERTS SHALL BE INSTALLED WITH A MINIMUM CLEARANCE OF 24 INCHES BETWEEN STRINGS OF PIPE.
5. REFER TO STD. DWG. FES-2 FOR MINIMUM CLEARANCE WHERE FLARED END SECTIONS ARE USED.
6. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
7. NOT MORE THAN ONE LIFTING HOLE MAY BE PROVIDED IN CONCRETE PIPE TO FACILITATE HANDLING. HOLE MAY BE CAST IN PLACE, CUT INTO THE FRESH CONCRETE AFTER FORMS ARE REMOVED, OR DRILLED. THE HOLE SHALL NOT BE MORE THAN TWO INCHES IN DIAMETER OR TWO INCHES SQUARE. CUTTING OR DISPLACEMENT OF REINFORCEMENT WILL NOT BE PERMITTED. SPALLED AREAS AROUND THE HOLE SHALL BE REPAIRED IN A WORKMANLIKE MANNER. LIFTING HOLE SHALL BE FILLED WITH MORTAR, CONCRETE, OR OTHER METHOD AS APPROVED BY THE ENGINEER.
8. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS 'STRUCTURAL BEDDING' ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE QUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS 'SELECTED PIPE BEDDING.'
9. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED ABOVE AS THE HAUNCH), BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE. IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF 'SELECTED PIPE BACKFILL.'

- LEGEND -

D_1 = NORMAL INSIDE DIAMETER OF PIPE
D_o = OUTSIDE DIAMETER OF PIPE
H = FILL COVER HEIGHT OVER PIPE (FEET)
MIN. = MINIMUM
▨ = UNDISTURBED SOIL

DATE	REVISION	DATE FILMED
5-18-00	REVISED TYPE 3 BEDDING & ADDED NOTE	
3-30-00	REVISED INSTALLATIONS	
11-06-97	ISSUED	

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CONCRETE PIPE CULVERT FILL HEIGHTS & BEDDING

STANDARD DRAWING PCC-1

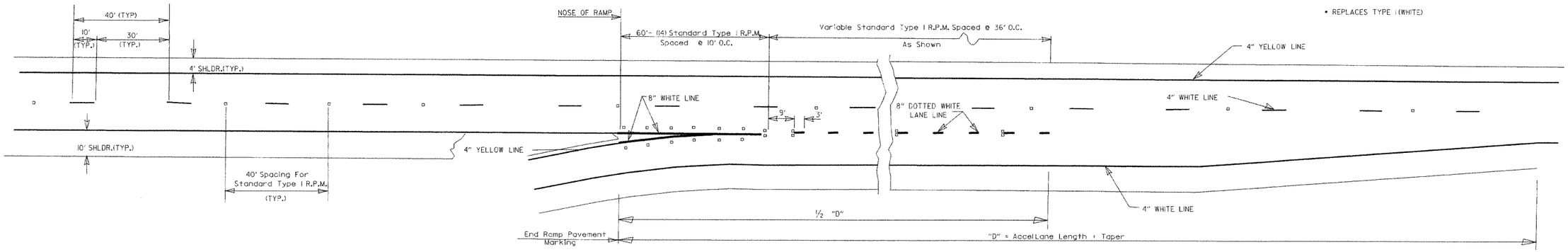
PAVEMENT MARKING QUANTITIES
(BASED ON 700' ACCEL. LANE + 300' TAPER)

ENTRANCE RAMP

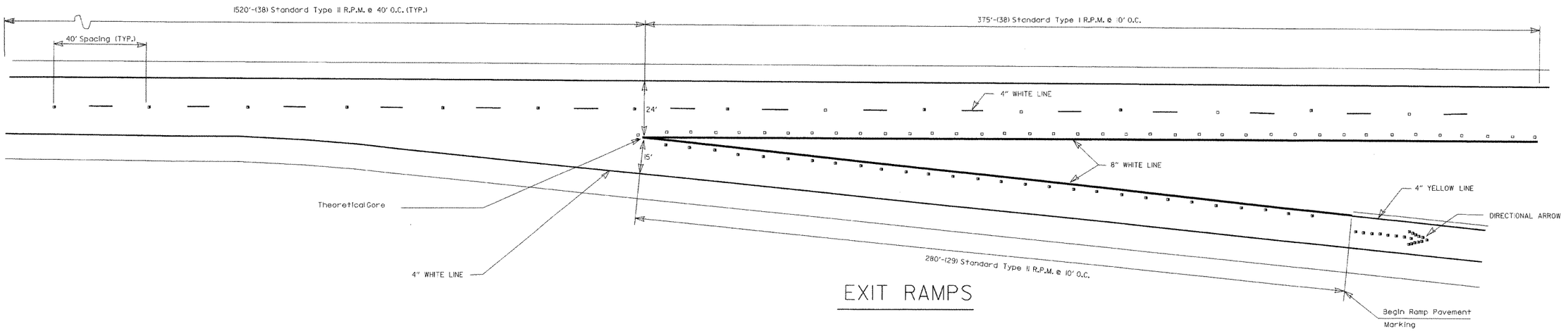
8" WHITE = 228 LIN. FT.
RAISED PAVEMENT MARKERS TYPE I(WHITE) = 38 EACH

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

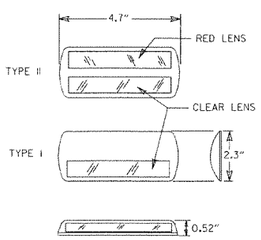
* REPLACES TYPE I(WHITE)



ENTRANCE RAMPS

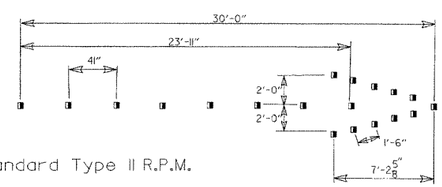


EXIT RAMPS



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.

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
DATE	REVISION	FILMED

ARKANSAS STATE HIGHWAY COMMISSION

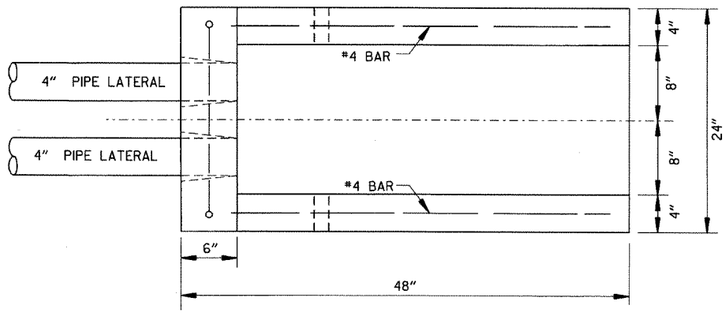
PERMANENT PAVEMENT MARKING ON ACCESS CONTROLLED ROADWAYS

STANDARD DRAWING PM-2

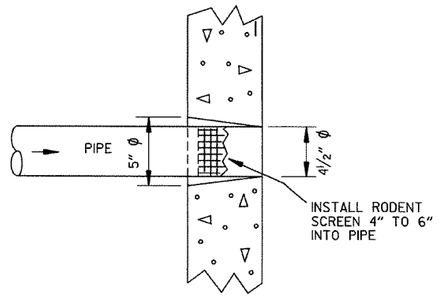
NOTE:
1. GRANULAR BACKFILL TO BE SUBSIDIARY TO PIPE UNDERDRAIN.

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

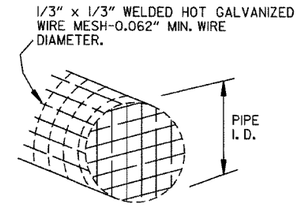
3. GRANULAR MATERIAL SHALL BE WRAPPED WITH GEOTEXTILE FABRIC. LAP FABRIC 12" OR THE WIDTH OF THE TRENCH AT THE TOP.



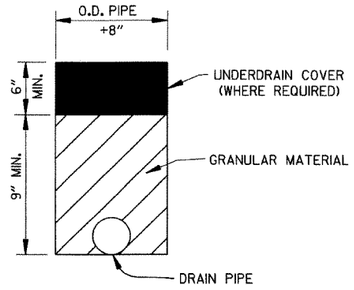
PLAN VIEW

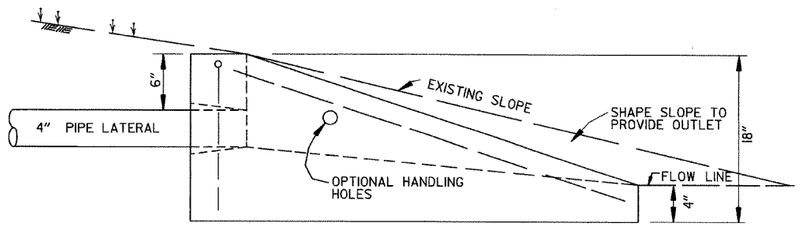


DETAIL OF HOLE FOR 4" PIPE

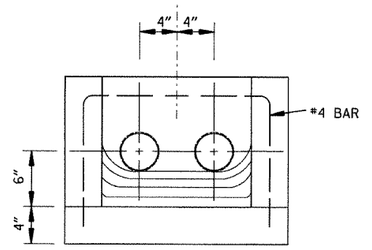


DETAIL OF RODENT SCREEN

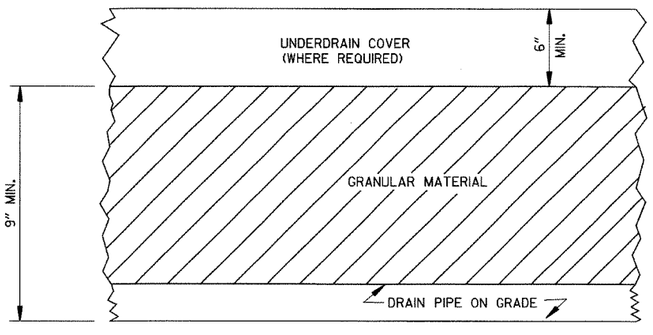




SIDE VIEW

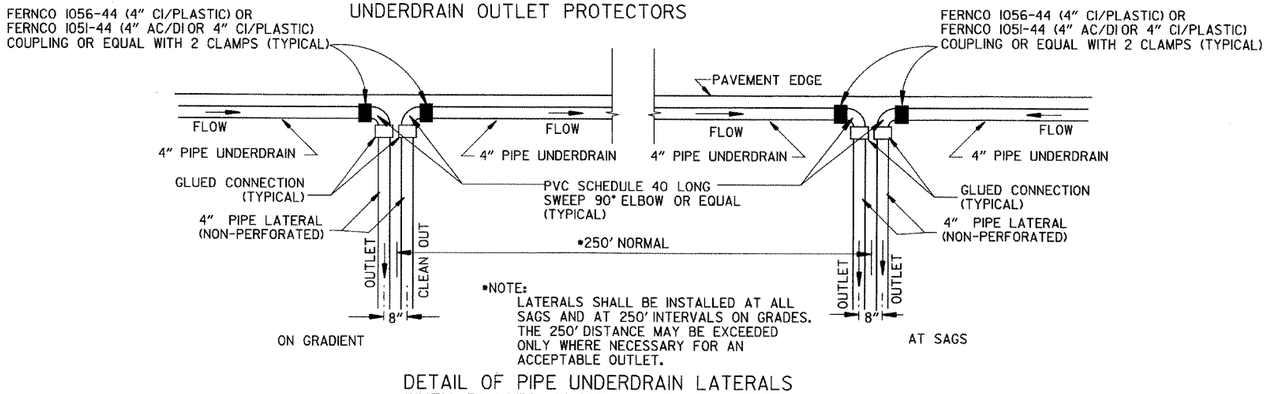


FRONT VIEW



DETAILS OF PIPE UNDERDRAIN

UNDERDRAIN OUTLET PROTECTORS



DETAIL OF PIPE UNDERDRAIN LATERALS WHEN PLACED ALONG PAVEMENT EDGE

NOTE: PVC PIPE FOR LATERALS SHALL MEET THE REQUIREMENTS OF ASTM D 1785 (LATEST REVISION) FOR SCHEDULE 40 PIPE.

DATE	REVISION	DATE FILMED
4-10-03	REVISED NOTE 3	
1-12-00	REVISED DETAIL OF UNDERDRAIN LATERALS	
11-18-98	REVISED NOTE	
10-18-96	REVISED MIN. DEPTH & GEOTEXTILE FABRIC	
4-26-96	ADDED LATERAL NOTE; 5½" TO 5"	
11-22-95	REVISED LATERALS	
7-20-95	REVISED LATERALS & ADDED NOTE	
11- 3-94	REVISED FOR DUAL LATERALS	11- 3-94
10- 1-92	SUBSTITUTED GEOTEXTILE	10- 1-92
8-15-91	ADDED POLYEDTHYLENE PIPE	8-15-91
11- 8-90	DELETED ALTERNATE NOTE	11- 8-90
1-25-90	ADDED 4" SNAP ADAPTER	1-25-90
11-30-89	DEL. (SUBGRADE); ADDED (WHERE REQUIRED)	11-30-89
7-15-88	ISSUED P.L.M.	647-7-15-88

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF PIPE UNDERDRAIN

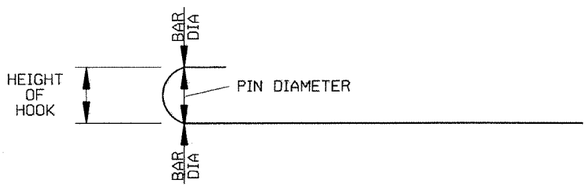
STANDARD DRAWING PU-1

7-20-95 INSTD.PUI

STEEL FABRICATION: REINFORCING STEEL FABRICATION SHALL CONFORM TO THE DIMENSIONS LISTED IN THE TABLE BELOW:

BAR SIZE	PIN DIAMETER	HOOK EXTENSION "K"
3	2¼"	4"
4	3 "	4½"
5	3¾"	5"
6	4½"	6"
7	5¼"	7"
8	6"	8"

IF THE OVERALL HEIGHT OF THE HOOK (SEE DIAGRAM BELOW) FOR A "b", "b1", "b2" or "b3" BENT BAR IS GREATER THAN THE CORRESPONDING TOP OR BOTTOM SLAB THICKNESS, LESS 2¾ INCHES, EACH BENT BAR SHALL BE REPLACED WITH ONE HOOKED BAR AND ONE STRAIGHT BAR, USING LENGTHS AS SHOWN IN THE TABLE BELOW. THE TWO BARS SHALL BE THE SAME DIAMETER AS, AND PLACED AT THE SAME SPACING AS, THE "b", "b1", "b2" OR "b3" BENT BARS THEY REPLACE.



NOTE: DIMENSIONS OF BARS ARE MEASURED OUT TO OUT OF BARS.

OVERALL HEIGHT OF HOOKED BAR DIAGRAM

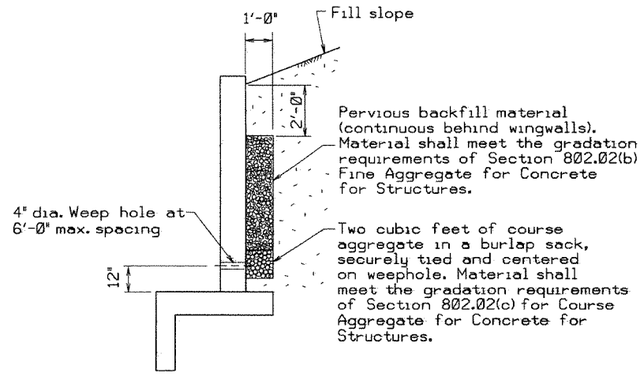
THE HOOKED BARS SHALL BE PLACED IN THE BOTTOM OF THE TOP SLAB AND THE TOP OF THE BOTTOM SLAB. THE STRAIGHT BARS SHALL BE PLACED IN THE TOP OF THE TOP SLAB AND THE BOTTOM OF THE BOTTOM SLAB. SEE TABLE BELOW FOR LENGTHS OF REPLACEMENT HOOKED AND STRAIGHT BARS.

FOR SKEWED CULVERTS, THE REPLACEMENT STRAIGHT BAR MAY HAVE TO BE CUT IN FIELD TO FIT.

REPLACEMENT BAR LENGTHS TABLE

BAR SIZE: "b", "b1", "b2" OR "b3"	LENGTH OF HOOKED BAR	LENGTH OF STRAIGHT BAR
#4	L + 1' - 0"	SEE "c" BAR LENGTH
#5	L + 1' - 2"	SEE "c" BAR LENGTH
#6	L + 1' - 4"	SEE "c" BAR LENGTH
#7	L + 1' - 8"	SEE "c" BAR LENGTH
#8	L + 1' - 10"	SEE "c" BAR LENGTH
#9	L + 2' - 6"	SEE "c" BAR LENGTH

L = "OW" - 3 INCHES



WINGWALL DRAINAGE DETAIL

REINFORCED CONCRETE BOX CULVERT GENERAL NOTES

CONCRETE SHALL BE CLASS S WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3500 PSI.

REINFORCING STEEL SHALL BE AASHTO M 31 OR M 53, GRADE 60.

CONSTRUCTION AND MATERIALS FOR WINGWALL DRAINAGE, INCLUDING WEEP HOLES AND GRANULAR MATERIAL, SHALL BE SUBSIDIARY TO THE BID ITEM, "CLASS S CONCRETE".

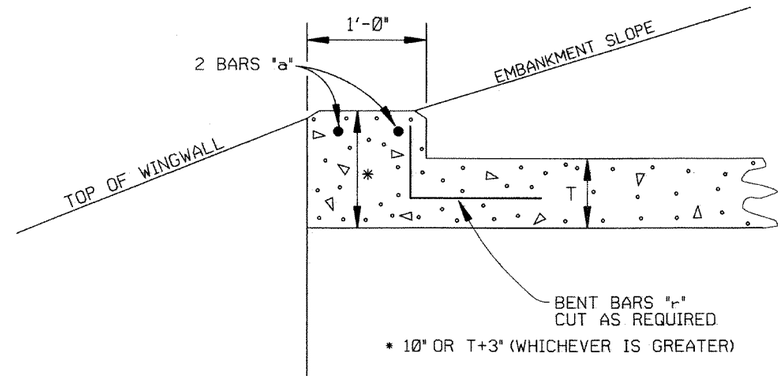
MEMBRANE WATERPROOFING SHALL CONFORM TO THE REQUIREMENTS OF SECTION 815 OF THE STANDARD SPECIFICATIONS.

MEMBRANE WATERPROOFING SHALL BE APPLIED TO ALL CONSTRUCTION JOINTS IN THE TOP SLAB AND THE SIDEWALLS OF R.C. BOX CULVERTS AS DIRECTED BY THE ENGINEER. NO PAYMENT SHALL BE MADE FOR THIS ITEM, BUT PAYMENT WILL BE CONSIDERED TO BE INCLUDED IN THE VARIOUS ITEMS BID FOR THE R.C. BOX CULVERT.

REINFORCING STEEL TOLERANCES: THE TOLERANCES FOR REINFORCING STEEL SHALL MEET THOSE LISTED IN "MANUAL OF STANDARD PRACTICE" PUBLISHED BY CONCRETE REINFORCING STEEL INSTITUTE (CRSI) EXCEPT THAT THE TOLERANCE FOR TRUSS BARS SUCH AS FIGURE 3 ON PAGE 7-4 OF THE CRSI MANUAL SHALL BE MINUS ZERO TO PLUS ½ INCH.

WEEP HOLES IN WINGWALLS: THE MAXIMUM HORIZONTAL SPACING OF WEEP HOLES IN WINGWALLS SHALL BE 6'-0" AND SHALL BE SPACED TO CLEAR ALL REINFORCING STEEL. THE DRAIN OPENING SHALL BE 4" DIAMETER AND PLACED 12" ABOVE TOP OF WINGWALL FOOTING.

THE REQUIREMENTS SHOWN ON THIS DRAWING SHALL SUPERCEDE THE CORRESPONDING REQUIREMENTS ON ALL REINFORCED CONCRETE BOX CULVERT STANDARD DRAWINGS.



NOTE: FOR ALL SKEWED R.C. BOX CULVERTS THE LENGTH "K" OF THE MODIFIED HEADWALL SHALL BE EQUAL TO THE ROADWAY LENGTH "RL". THE ENDS OF THE HEADWALL SHALL BE CONSTRUCTED PARALLEL TO THE SKEW ANGLE OF THE BOX CULVERT.

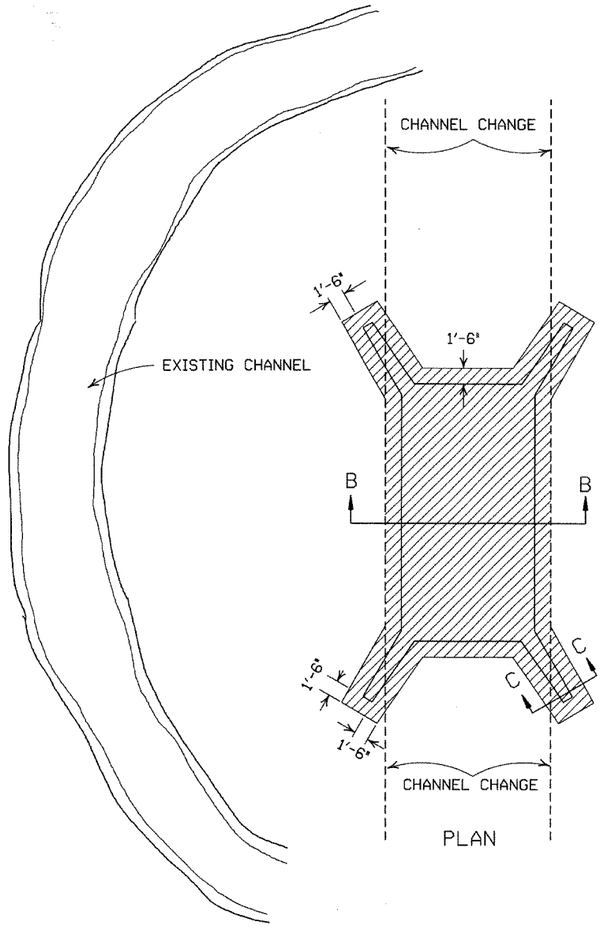
R.C. BOX CULVERT HEADWALL MODIFICATIONS

DATE	REVISION	DATE FILMED
05-25-06	REV. GEN. NOTES AND DETAILS FOR WEEP HOLES; BAR DIAGRAM	
11-16-01	ADDED WINGWALL DRAINAGE DETAIL/EDITED GEN. NOTES	
10-18-96	REV. ASTM REF. TO AASHTO & ADDED BAR DIAGRAM	
10-12-95	MOVED SOLID SODDING DETAIL TO RCB-2	
6-2-94	ADDED SOLID SODDING PLAN DETAIL	
8-5-93	REVISED PIN DIAMETER TO SPECS.	
8-15-91	DRAWN AND ISSUED	

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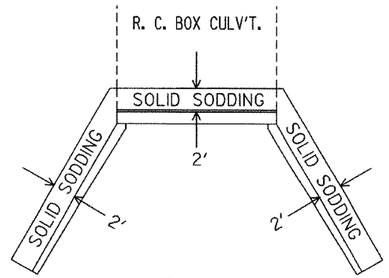
REINFORCED CONCRETE BOX CULVERT DETAILS

STANDARD DRAWING RCB-1



PLAN

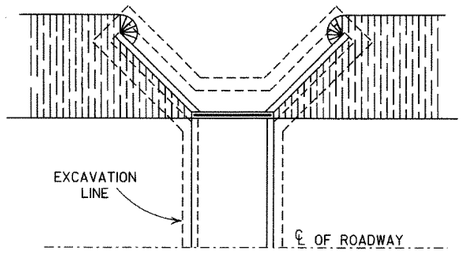
SOLID SODDING



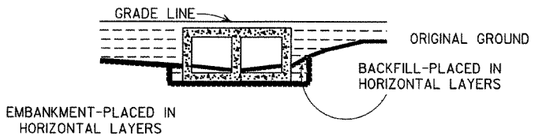
PLAN

PARTIAL SECTION SHOWING SOLID SODDING AT HEADWALLS AND WING WALLS

NOTE: LENGTH MEASURED ALONG THE CENTER OF 2' STRIP OF SOLID SODDING.

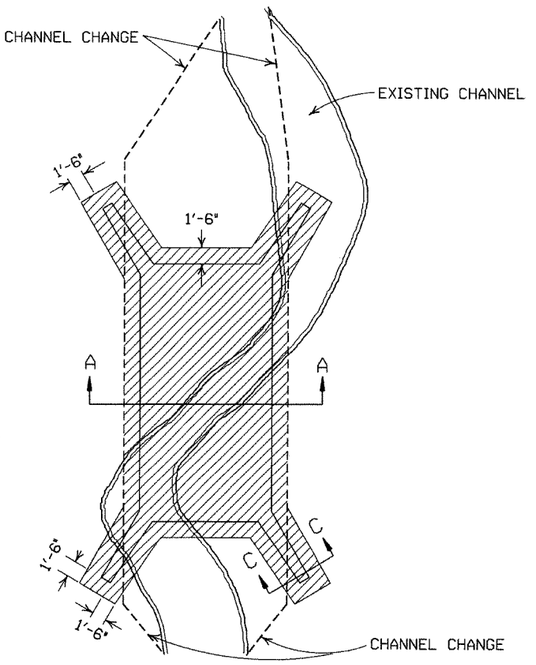


PLAN

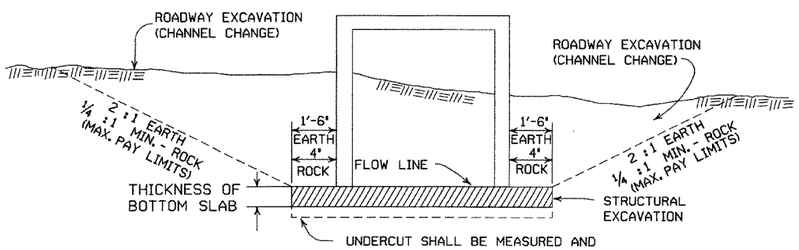


LONGITUDINAL SECTION

BACKFILL DETAILS FOR BOX CULVERT

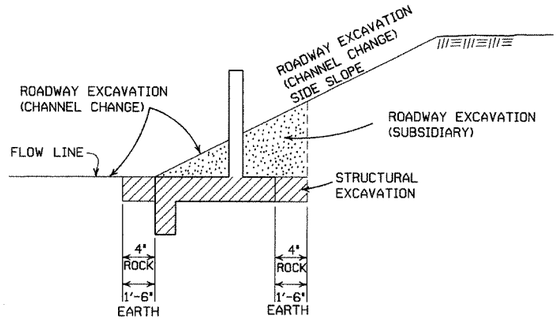


PLAN

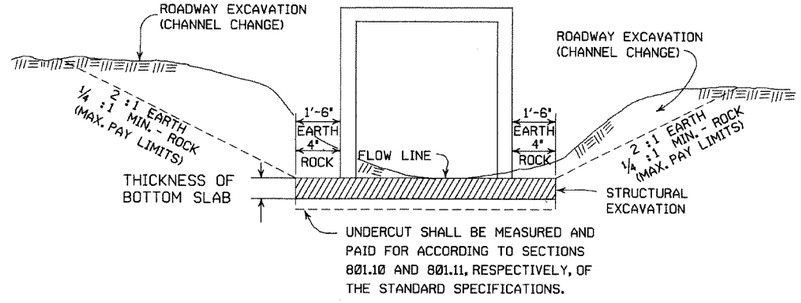


SECTION B-B

DETAILS FOR NEW CHANNELS



SECTION C-C



SECTION A-A

DETAILS THROUGH EXISTING CHANNELS

GENERAL NOTES:

ROADWAY EXCAVATION (CHANNEL CHANGE) WILL BE PAID FOR AT R.C. BOX CULVERT LOCATIONS. IT WILL BE PAID TO THE LIMITS ACTUALLY CUT AND WILL BE CONFINED TO THAT PORTION OF THE INDICATED AREA THAT IS ABOVE THE FLOW LINE. ROADWAY EXCAVATION (CHANNEL CHANGE) SHALL BE MEASURED BY CROSS SECTIONS AND VOLUMES COMPUTED BY AVERAGE END AREA METHOD. ALL CHANNEL CHANGES SHALL BE BROUGHT TO GRADE PRIOR TO MAKING ANY EXCAVATION FOR STRUCTURES.

EXCAVATION FOR STRUCTURES WILL BE PAID FOR AT ALL R.C. BOX CULVERT LOCATIONS. IT WILL BE PAID TO THE LIMITS SHOWN AND SHALL BE CONFINED TO THAT PORTION OF THE INDICATED AREA THAT IS BELOW THE CHANNEL FLOW LINE.

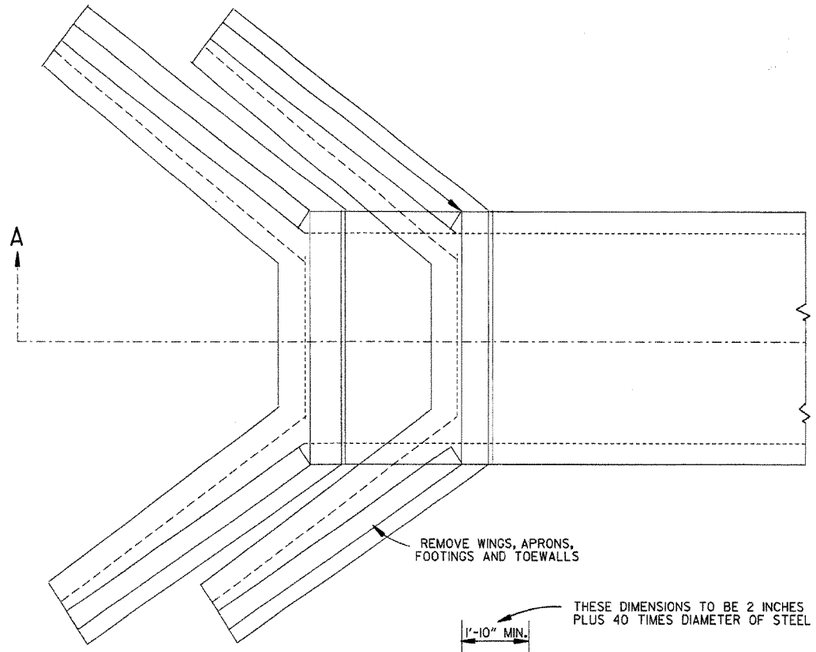
ROADWAY EXCAVATION SHOWN IN SECTION C-C ABOVE AS SUBSIDIARY WILL NOT BE MEASURED OR PAID FOR DIRECTLY, BUT PAYMENT WILL BE CONSIDERED TO BE INCLUDED IN THE VARIOUS ITEMS OF EXCAVATION.

DATE	REVISION	FILMED
11-20-03	REVISED SECTION A-A NOTE	
8-22-02	REVISED SECTION B-B NOTE	
10-12-95	COMBINED 1891B AND 1888A	
1-4-83	REVISED GENERAL NOTES	674-1-4-83
	AND ADDED MAXIMUM PAY	
	LIMIT NOTES.	
2-2-76	EXCAV. PAY LIMITS	917-2-2-76
10-2-72	REVISED AND REDRAWN	564-10-16-72

ARKANSAS STATE HIGHWAY COMMISSION

EXCAVATION PAY LIMITS, BACKFILL, & SOLID SODDING FOR BOX CULVERTS

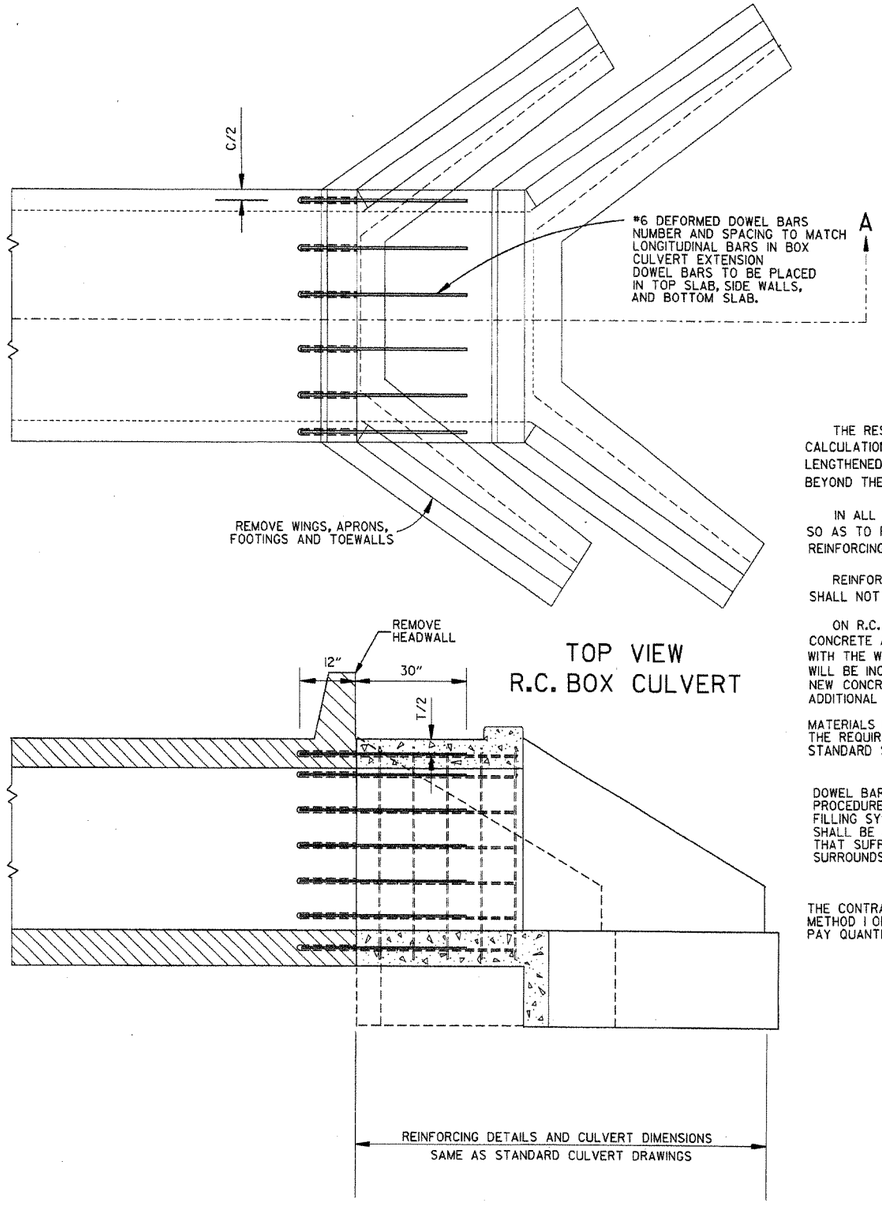
STANDARD DRAWING RCB-2



TOP VIEW
R.C. BOX CULVERT

SECTION A-A

METHOD 1



TOP VIEW
R.C. BOX CULVERT

SECTION A-A

METHOD 2

GENERAL NOTES

	USE FOR METHOD
THE RESIDENT ENGINEER WILL MAKE INDIVIDUAL CALCULATIONS OF QUANTITIES FOR EACH STRUCTURE LENGTHENED, MAKING NO ALLOWANCE FOR OVERBREAKAGE BEYOND THE LINES INDICATED.	1
IN ALL INSTANCES CONCRETE SHALL BE REMOVED SO AS TO PERMIT FULL 40 DIAMETER SPLICE OF REINFORCING STEEL.	1
REINFORCING STEEL REMOVED FROM EXISTING STRUCTURE SHALL NOT BE REUSED IN CONSTRUCTING EXTENSION.	1&2
ON R.C. BOX CULVERTS THAT HAVE AN EXISTING CONCRETE APRON; THE CONCRETE APRON SHALL BE REMOVED WITH THE WINGS. THE COST OF REMOVING ALL OLD CONCRETE WILL BE INCLUDED IN THE PRICE BID PER CUBIC YARD FOR NEW CONCRETE OF THE CLASS SPECIFIED AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.	1&2
MATERIALS FOR SECURING DOWEL BARS SHALL MEET THE REQUIREMENTS OF SECTION 507.02 OF THE STANDARD SPECIFICATIONS.	2
DOWEL BARS SHALL BE INSTALLED AS FOLLOWS: THE DRILLING PROCEDURE SHALL BE APPROVED BY THE ENGINEER, THE FILLING SYSTEM SHALL BE APPROVED BY THE ENGINEER, AND SHALL BE AN INJECTION-TYPE SYSTEM WHICH WILL INSURE THAT SUFFICIENT MATERIAL IS INJECTED SO IT COMPLETELY SURROUNDS THE BARS AND FILLS THE HOLES.	2
THE CONTRACTOR SHALL HAVE THE OPTION OF USING EITHER METHOD 1 OR METHOD 2, REGARDLESS OF WHICH METHOD IS USED, PAY QUANTITIES WILL BE CALCULATED BASED ON METHOD 1.	1&2

NOTE:
NO PART OF THIS STANDARD IS TO BE USED FOR ANY DETAILS RELATIVE TO NEW CONSTRUCTION.

SEE STANDARD DRAWING LISTED IN TABULATION OF STRUCTURES FOR ALL NEW CONSTRUCTION DETAILS.

DATE	REVISION	DATE FILM
10-12-95	CHANGED DRAWING # FROM 144-A	
4-1-93	ADDED GENERAL NOTE	
10-1-92	ADDED ALT. METHOD OF EXTENSION	
11-30-89	REDRAWN	
1-4-83	ELIMINATED CONCRETE CLASS	
12-20-56	RETRACED	

ARKANSAS STATE HIGHWAY COMMISSION

METHOD OF EXTENDING EXISTING R.C. BOX CULVERTS

STANDARD DRAWING RCB-3

SUPERELEVATION TABLE FOR ONE - WAY TRAFFIC

DEGREE OF CURVE	30 MPH e	30 MPH Ls (FT) MINIMUM	30 MPH Ls (FT) DESIRABLE	40 MPH e	40 MPH Ls (FT) MINIMUM	40 MPH Ls (FT) DESIRABLE	50 MPH e	50 MPH Ls (FT) MINIMUM	50 MPH Ls (FT) DESIRABLE	55 MPH e	55 MPH Ls (FT) MINIMUM	55 MPH Ls (FT) DESIRABLE	60 MPH e	60 MPH Ls (FT) MINIMUM	60 MPH Ls (FT) DESIRABLE	65 MPH e	65 MPH Ls (FT) MINIMUM	65 MPH Ls (FT) DESIRABLE	70 MPH e	70 MPH Ls (FT) MINIMUM	70 MPH Ls (FT) DESIRABLE
0° 15′	N. C.			N. C.			N. C.			N. C.			N. C.			N. C.			N. C.		
0° 30′	N. C.			N. C.			N. C.			N. C.			0.023			N. C.			N. C.		
0° 45′	N. C.			N. C.			R. C.			0.022			0.030			0.025			0.028		
1° 00′	N. C.			N. C.			0.021			0.026			0.037			0.033			0.037		
1° 15′	N. C.			R. C.			0.026			0.032			0.043			0.041			0.046		
1° 30′	N. C.			0.021			0.031			0.037			0.049			0.048			0.054		
1° 45′	N. C.			0.025			0.036			0.043			0.055			0.055			0.062		
2° 00′	R. C.			0.028			0.040			0.048			0.061			0.062			0.070		
2° 15′	R. C.			0.031			0.045			0.053			0.067			0.069			0.078		
2° 30′	0.021			0.034			0.049			0.058			0.072			0.075			0.085		
2° 45′	0.023			0.037			0.053			0.063			0.077			0.081			0.091		
3° 00′	0.025			0.040			0.057			0.067			0.082			0.087			0.096		
3° 15′	0.027	150		0.043	175		0.061	200		0.072	225		0.086	250		0.090	250		0.098	275	
3° 30′	0.029			0.046			0.065			0.076			0.090			0.095			0.100		
3° 45′	0.031			0.049			0.069	215		0.080	265		0.093	305		0.097	345				
4° 00′	0.033			0.051			0.072	225		0.083	270		0.096	315		0.099	350				
4° 30′	0.037			0.056			0.078	240		0.087	280		0.098	320							
5° 00′	0.040			0.061			0.083	250		0.091	295										
5° 30′	0.043			0.066	185		0.088	260		0.094	300										
6° 00′	0.046			0.070	190		0.092	270		0.096	305										
6° 30′	0.050			0.074	200		0.095	280		0.100	315										
7° 00′	0.053			0.078	210		0.098	285													
7° 30′	0.056			0.081	215		0.099	290													
8° 00′	0.058			0.084	220		0.100	290													
8° 30′	0.061			0.087	225	300															
9° 00′	0.063			0.089	230																
10° 00′	0.068	160		0.094	235																
11° 00′	0.072	170		0.097	250																
12° 00′	0.076	175		0.099	250																
13° 00′	0.080	180		0.100	250																
14° 00′	0.083	190																			
15° 00′	0.086	195																			
16° 00′	0.089	200																			
17° 00′	0.091	200																			
18° 00′	0.093	205																			
19° 00′	0.095	210																			
20° 00′	0.097	215	300																		
21° 00′	0.098	215																			
22° 00′	0.099	215																			
23° 00′	0.099	215																			
24° 00′	0.100	220																			

D MAX = 24° 45′ | D MAX = 13° 15′ | D MAX = 8° 15′ | D MAX = 6° 30′ | D MAX = 5° 15′ | D MAX = 4° 15′ | D MAX = 3° 30′

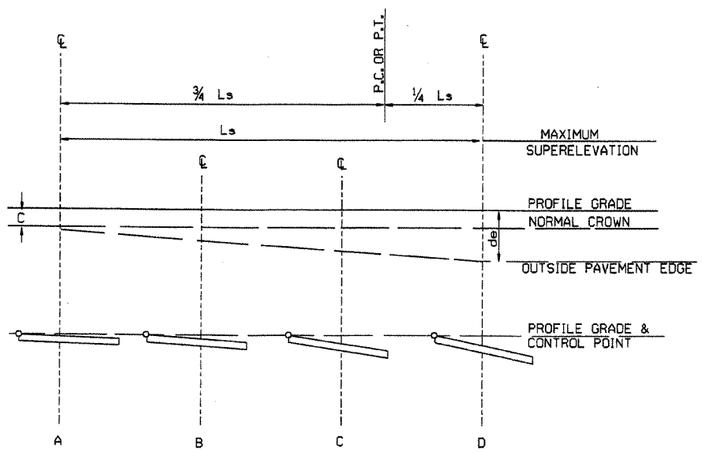
GENERAL NOTES

1. ON PAVEMENT WITH ONE-WAY TRAFFIC, THE SUPERELEVATION SHALL BE REVOLVED ON THE PROFILE GRADE POINT.
2. SUPERELEVATION VALUES SHOWN ON THE CROSS SECTIONS ARE VALUES (+) OR (-) TO BE ADDED OR SUBTRACTED FROM THE POINT OF CONTROL.
3. LENGTHS FOR L_s MAY BE ROUNDED IN MULTIPLES OF 25 FT. OR 50 FT. TO PERMIT SIMPLER CALCULATIONS.
4. MINIMUM L_s VALUES MAY BE USED FOR RAMPS; DESIRABLE VALUES SHALL APPLY TO MAIN LANES.
5. DIVIDED PAVEMENTS WIDER THAN 4 LANES SHALL HAVE ADDITIONAL TRANSITION LENGTHS AS FOLOWS:

6 LANE DIVIDED---------+20%
8 LANE DIVIDED---------+50%

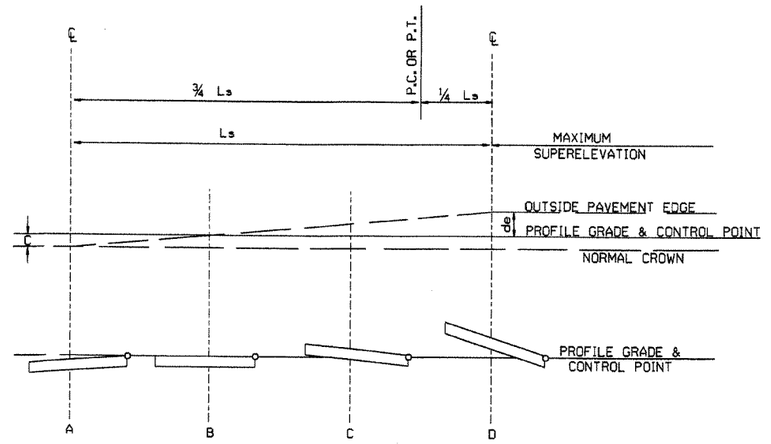
ABBREVIATIONS

NC - NORMAL CROWN
RC - REVERSE CROWN, SUPERELEVATION AT NORMAL CROWN SLOPE
S - SUPERELEVATION
L - DISTANCE FROM BEGINNING OF SUPERELEVATION TRANSITION TO ANY POINT (FT.)
d - WIDTH OF PAVEMENT
e - MAXIMUM RATE OF SUPERELEVATION (FT. PER FT.)
L_s - LENGTH OF SUPERELEVATION TRANSITION (FT.)
C - NORMAL CROWN (FT.)



ONE-WAY TRAFFIC
INSIDE LANE

SUPERELEVATION FORMULA = $S = -\frac{L(de-C)}{Ls} - C$



ONE-WAY TRAFFIC
OUTSIDE LANE

SUPERELEVATION FORMULA = $S = +\frac{L(de+C)}{Ls} - C$

DATE	REVISION	DATE FILMED
01-09-87	ISSUED	578-1-15-87

ARKANSAS STATE HIGHWAY COMMISSION

TABLES AND METHOD OF SUPERELEVATION FOR ONE-WAY TRAFFIC

STANDARD DRAWING SE-1

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.		279	
JOB NO.				

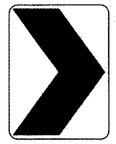
(4) STD. HWY. SIGNS & SUP ASSEMB



R1-1
30"X30"



W1-3
30"X30"
(LT. OR RT.)



W1-8
18"X24"



W2-5
30"X30"



W3-1
36"X36"



W5-1
36"X36"



M6-3
21"X15"



R1-2
36"X36"X36"



W1-4
30"X30"
(LT. or RT.)



W2-1
30"X30"



S1-1
36"X36"

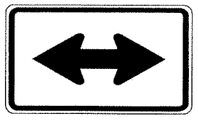


W3-2
36"X36"

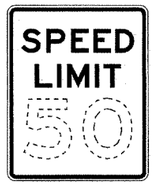


County
Route Marker
M1-5
24"X24"

NOTE: REFLECTORIZED YELLOW LEGEND (COUNTY NAME, ROUTE LETTER & NUMBER) & BORDER ON A BLUE BACKGROUND.



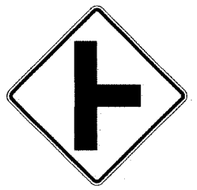
M6-4
21"X15"



R2-1
24"X30"



W1-5
30"X30"
(LT. or RT.)



W2-2
30"X30"



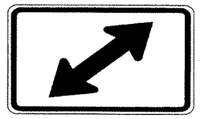
W5-2
36"X36"



W8-3
36"X36"



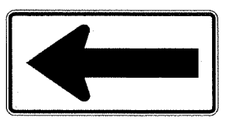
R1-3
12"X6"



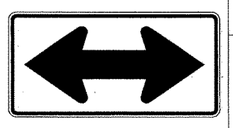
M6-5
21"X15"



W1-1
30"X30"
(LT. or RT.)



W1-6
48"X24"



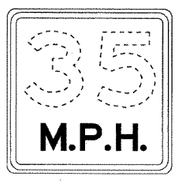
W1-7
48"X24"



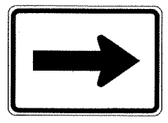
W2-3
30"X30"
(LT. or RT.)



W5-3
36"X36"

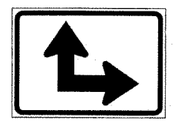


W13-1
18"X18"



M6-1
21"X15"

NOTE: ALL M6 SIGNS TO BE MADE WITH REFLECTORIZED YELLOW ARROW & BORDER WITH BLUE BACKGROUND.



M6-6
21"X15"



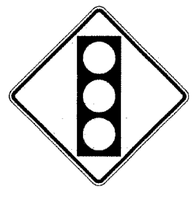
W1-2
30"X30"
(LT. or RT.)



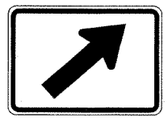
W2-4
30"X30"



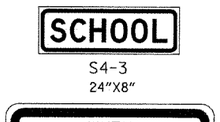
W10-1
36" DIAMETER



W3-3
36"X36"



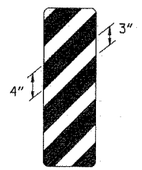
M6-2
21"X15"



S4-3
24"X8"



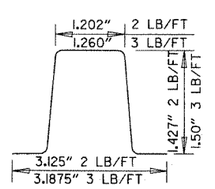
S4-2
24"X10"



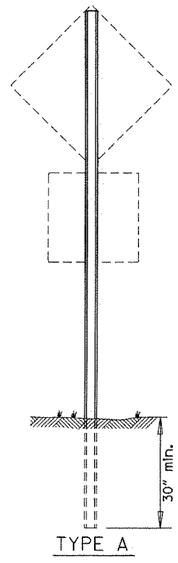
OM-3
12"X36"
(LT. or RT.)

MINIMUM DIMENSIONS SHOWN

SUPPORT SECTION

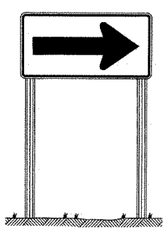


(U-CHANNEL)
STANDARD SUPPORT
ASSEMBLIES

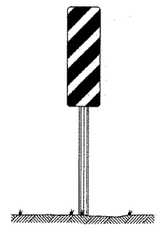


TYPE A

NOTE: LENGTH OF SIGN POSTS SHALL BE DETERMINED SO AS TO PROVIDE FOR MINIMUM VERTICAL CLEARANCES AS CALLED FOR IN THE SPECIFICATIONS PLUS A MINIMUM VERTICAL PENETRATION OF 30" IN THE SOIL.



TYPE B



TYPE C

MINIMUM WEIGHT

TYPE A & B = 3 LBS./FT.
TYPE C = 2 LBS./FT.

STANDARD HIGHWAY SIGNS

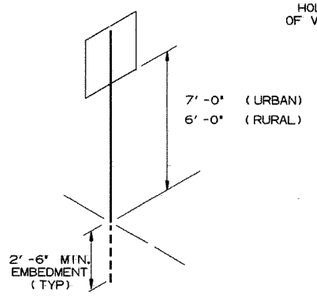
DATE	REVISION	DATE FILMED
4-17-08	REVISED SIGN DESIGNATION - W3-1 & W3-2	
4-10-03	REVISED W5-2, W8-3, OM-3; ADDED W1-8	
1-5-81	REDRAWN	960-1-15-81
9-15-78	ADDED W14-3	877-9-15-78
9-2-76	POST WT.	623-9-3-76
	STEEL POST WT. FROM 2# - 3#	
5-3-76	ADDED S4-2 & S4-3	504-5-3-76
8-12-74	REV. HT. TYPE "C" ASSEMBLY	500-8-21-74
12-21-72	ADDED M6-2,3,4,5,6	500-12-21-72
12-1-72	ISSUED	562-12-1-72

SUPPORT ASSEMBLIES

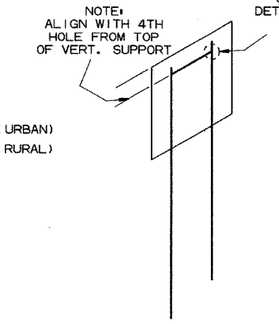
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD HIGHWAY SIGNS AND SUPPORT ASSEMBLIES

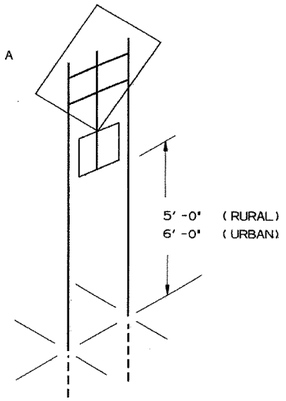
STANDARD DRAWING SHS-1



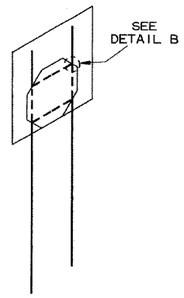
U-1



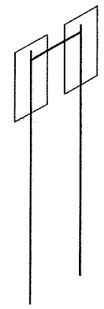
U-2



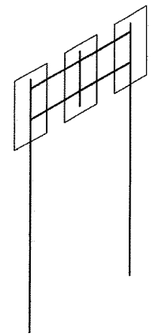
U-2 (A)



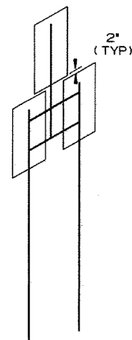
U-2 (B)



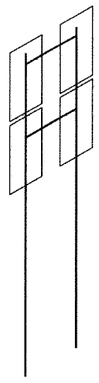
U-2 (1)



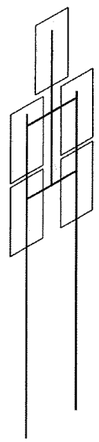
U-2 (2)



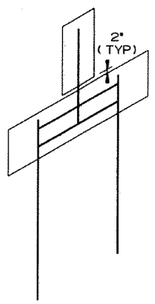
U-2 (3)



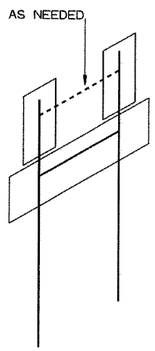
U-2 (4)



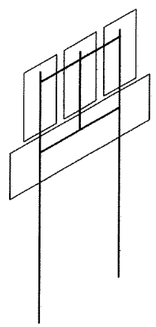
U-2 (5)



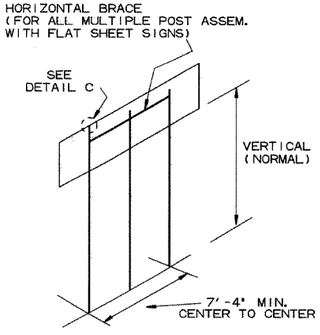
U-2 (6)



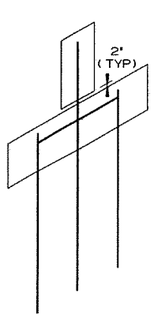
U-2 (7)



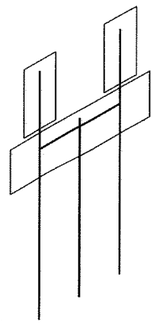
U-2 (8)



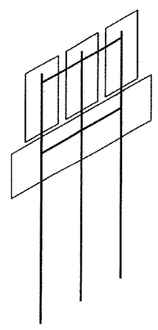
U-3



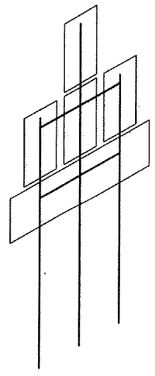
U-3 (1)



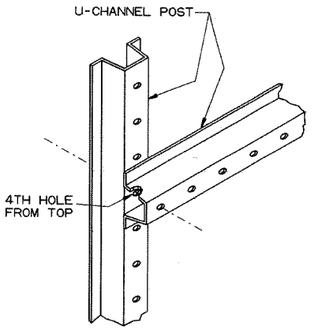
U-3 (2)



U-3 (3)

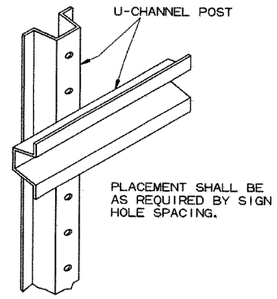


U-3 (4)



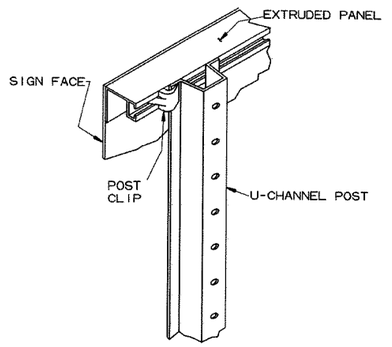
DETAIL A

SHOWING HORIZONTAL BRACE



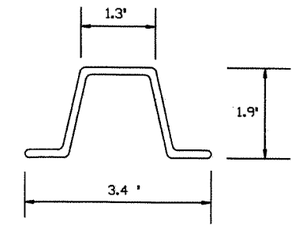
DETAIL B

SHOWING BACK-TO-BACK INSTALLATION



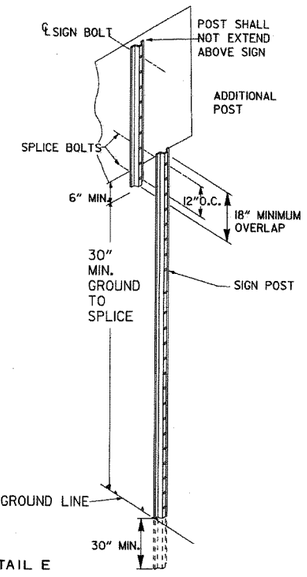
DETAIL C

SHOWING GUIDE SIGN MOUNTING WITH EXTRUDED PANELS



DETAIL D

(3 LB. U-CHANNEL POST)



DETAIL E

NOTES:

SIGNS AT LEAST 8' IN LENGTH MAY BE INSTALLED ON THREE 3 LB. POST. IN NO CASE SHALL THERE BE MORE THAN TWO 3 LB. POSTS WITHIN A 7' PATH.

SPLICES NECESSARY TO ATTAIN PROPER MOUNTING HEIGHT SHALL BE AS SHOWN IN DETAIL (E).

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

ALL SIGN POSTS SHALL BE PLUMB.

DATE	REVISION	FILMED
10-9-03	REMOVED ROUND POST & REVISED SPACING	10-9-03
10-12-95	MOVED UPPER SPLICE	
6-8-95	REVISED SPLICE DETAIL	6-8-95
2-2-95	REDRAWN	2-2-95

ARKANSAS STATE HIGHWAY COMMISSION

U-CHANNEL POST ASSEMBLIES

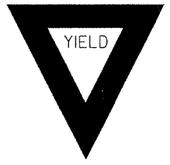
STANDARD DRAWING SHS-2

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



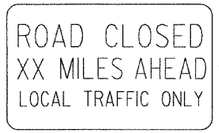
STD. 30"X30"
EXPWY. 36"X36"
SPECIAL 48"X48"

RII-2



48"X30"

RII-3A



60"X30"

RII-4



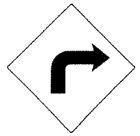
60"X30"

RSP-1



48"X30"

WI-1



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

WI-2



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

WI-3



STD. 48"X48"

WI-4



STD. 48"X48"

WI-6



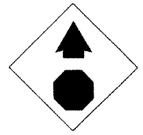
STD. 48"X24"
SPECIAL 60"X30"

WI-8



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

W3-1



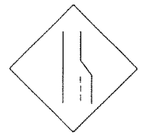
STD. 36"X36"
SPECIAL 48"X48"

W3-2



STD. 36"X36"
SPECIAL 48"X48"

W4-2



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

W5-1



STD. 36"X36"
SPECIAL 48"X48"

W6-3



EXPWY. 36"X36"
SPECIAL 48"X48"

W8-7



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

W9-2



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

WI3-1



STD. 24"X24"

W20-1



STD. 48"X48"

W20-2



STD. 48"X48"

W20-3



STD. 48"X48"

W20-4



STD. 48"X48"

W20-5



STD. 48"X48"

W20-7a



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

W21-2



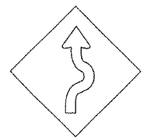
STD. 30"X30"
SPECIAL 36"X36"

W21-5



STD. 30"X30"
SPECIAL 36"X36"

W24-1



STD. 36"X36"

WI-4b



STD. 48"X48"

R56-1



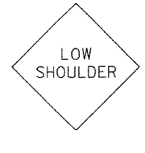
STD. 18"X18"

W8-11



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

W8-9



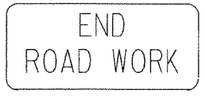
STD. 36"X36"
FWY. 48"X48"

G20-1



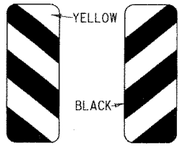
60"X24"

G20-2



48"X24"

OM-3L OM-3R



12"X36"

M4-9



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

M4-10



48"X18"

R55-1

FINES DOUBLE
IN WORK ZONES *

WHEN WORKERS
ARE PRESENT **

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.

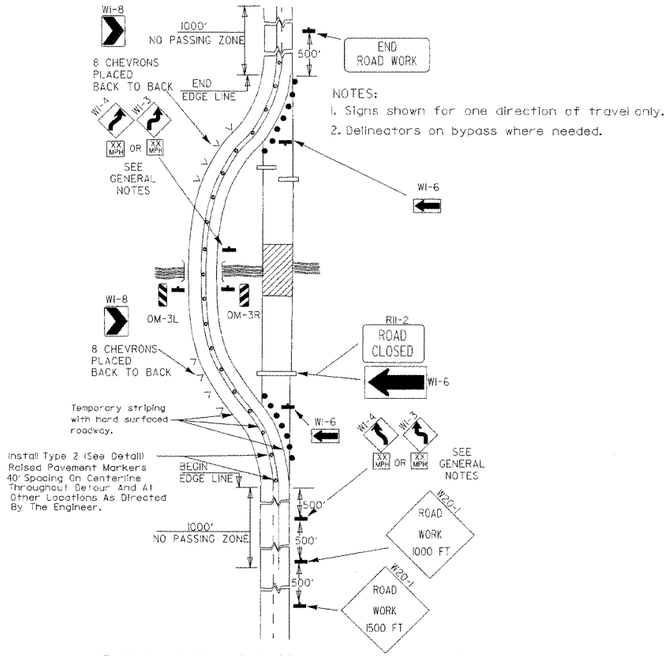
* NOTE: SUPPORTS FOR SIGNS, BARRICADES, AND VERTICAL PANELS THAT ARE DIFFERENT FROM THE REQUIREMENTS SHOWN IN NOTES 4 & 5, BUT MEET THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH), WILL BE ACCEPTED. COMPLIANCE WITH THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY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

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

ARKANSAS STATE HIGHWAY COMMISSION

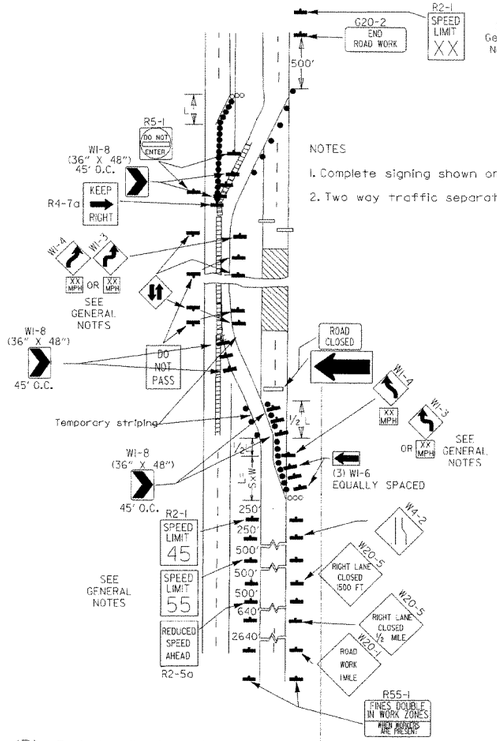
STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

STANDARD DRAWING TC-1



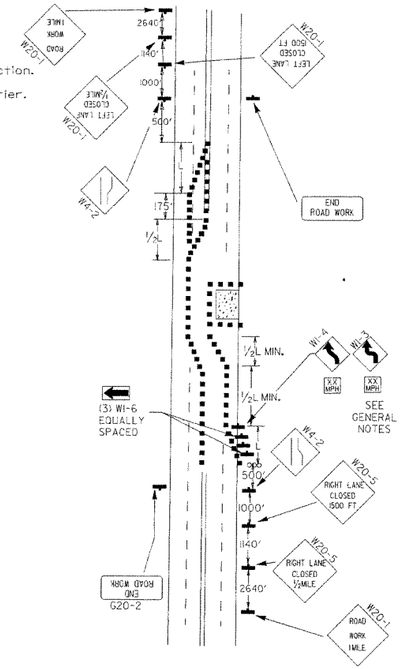
NOTES:
1. Signs shown for one direction of travel only.
2. Delineators on bypass where needed.

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

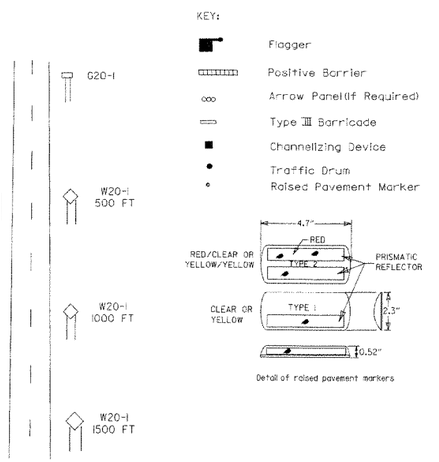


NOTES
1. Complete signing shown only in crossover direction.
2. Two way traffic separated with positive barrier.

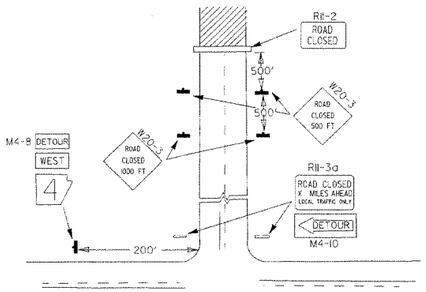
(B) Typical application - 4-lane divided roadway where one roadway is closed.



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

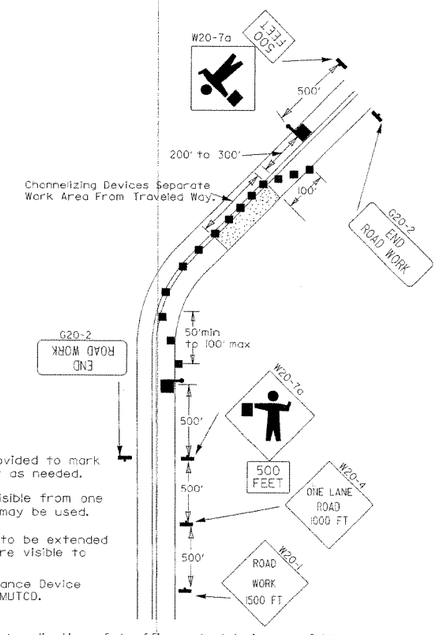


Typical advance warning sign placement



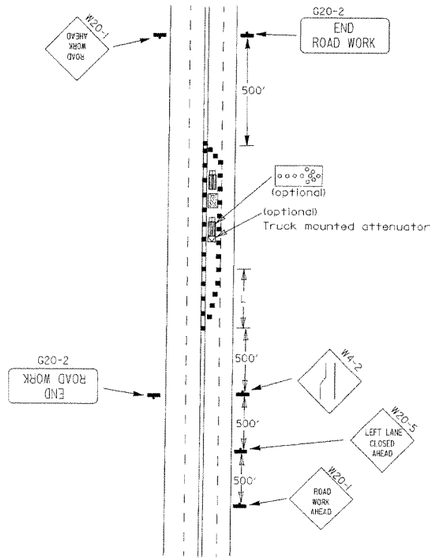
NOTES:
1. Regulatory traffic control devices to be modified as needed for the duration of the detour.
2. Street names may be used when desirable for directing detoured traffic.

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



NOTES:
1. Flood lights should be provided to mark flagger stations at night as needed.
2. If entire work area is visible from one station, a single flagger may be used.
3. Channelizing devices are to be extended to a point where they are visible to approaching traffic.
4. Automated Flagger Assistance Device (AFAD) optional. Refer to MUTCD.

(E) Typical application of traffic control devices on 2-lane highway where one lane is closed and flagging is provided.



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

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:

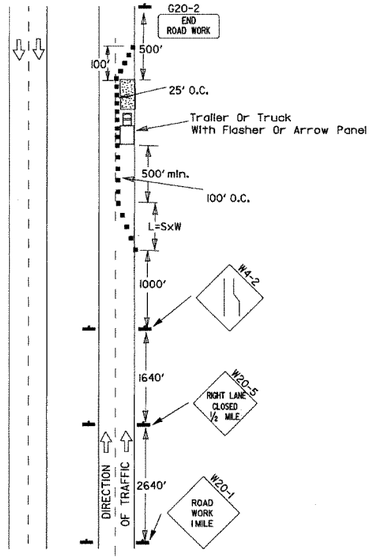
1. Advisory speed posted on W1-3 or W1-4 curve warning signs to be determined at site. Use W1-4 when speed is greater than 30mph and W1-3 when 30mph or less.
2. When the existing speed limit is 55mph and the plans require a speed limit of 45mph, the R2-1(55) shall be omitted and the R2-5A shall be installed 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. 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.

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 W1-4A	6-8-95
2-2-95	REVISED PER PART VI, MUTCD, SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	

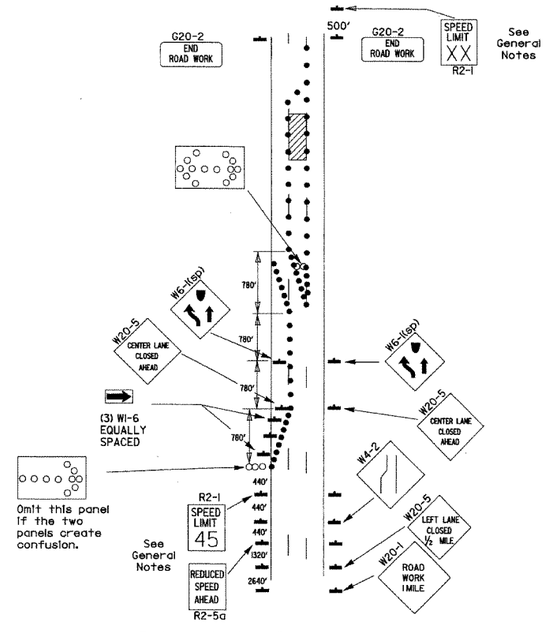
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

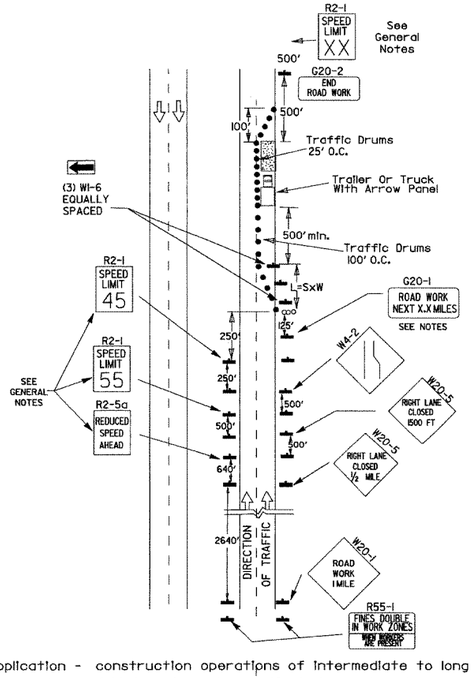
STANDARD DRAWING TC 2



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



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



(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)

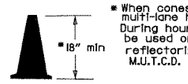
■ Channelizing Device

● Traffic drum

GENERAL NOTES:

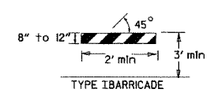
1. A speed limit reduction may be implemented ONLY when designated in the plan or when recommended by the Roadway Design Division.
2. When the existing speed limit is 55mph and the plans require a speed limit of 45mph, the R2-1(55) shall be omitted and the R2-5A shall be installed at that location. Additional 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



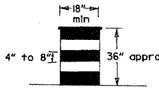
* When cones are used on freeways and multi-lane highways, they shall be 28" min. During hours of darkness, 28" cones shall be used on all roadways, and shall be reflectorized in accordance with the M.U.T.C.D.

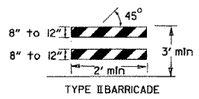
CONES



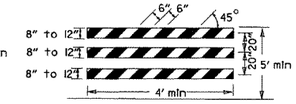
TYPE I BARRICADE

PLASTIC DRUM



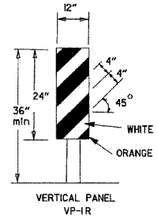


TYPE II BARRICADE



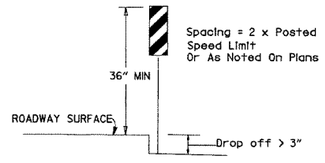
TYPE III BARRICADE

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



VERTICAL PANEL
VP-1R

VERTICAL PANEL PLACEMENT



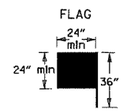
TRAFFIC CONTROL DEVICES
FOR
VERTICAL PAVEMENT DIFFERENTIALS

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.

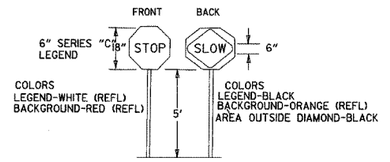
When the shoulder area is used as part of the traveled lane and there is insufficient width to place drums on the remaining shoulder width, then vertical panels shall be used.

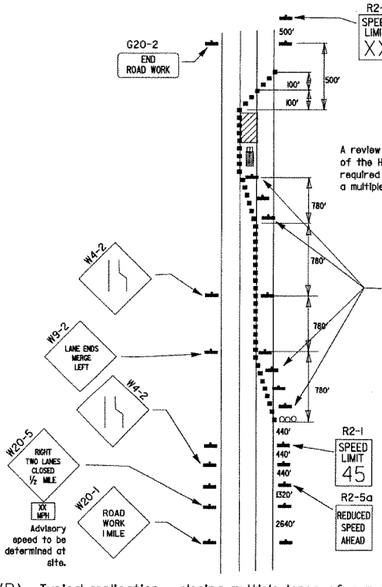
FLAG



Flag shall be of good grade red material

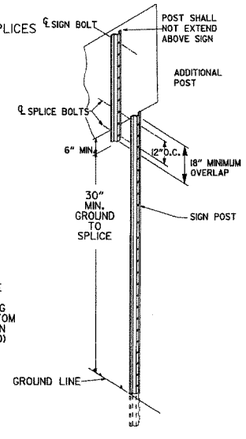
STOP SLOW PADDLE





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

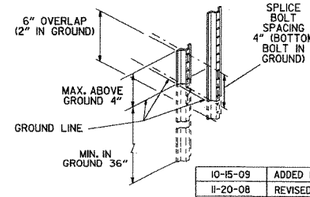
DETAIL OF SPLICES



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

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

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



DATE	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	

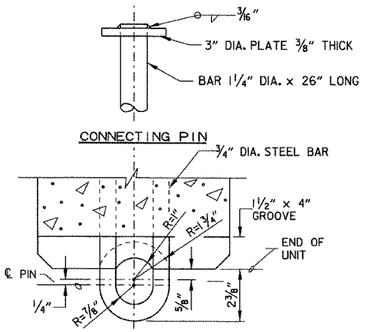
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

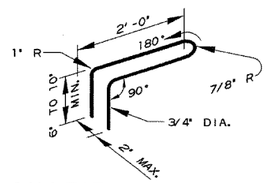
STANDARD DRAWING TC-3

REINFORCING BAR TABLE PER BARRIER UNIT

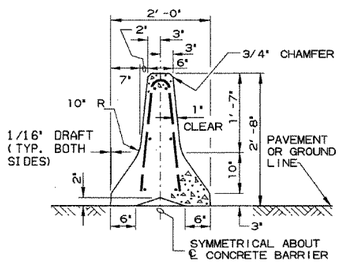
MARK	LOCATION	BAR SIZE	(NO. BARS)	SKETCH
H-1	HORIZONTAL IN BARRIER TIED INSIDE V-1 BARS	#5	(6)	19'-3"
H-2	CENTERED ABOVE DRAIN SLOTS LONG. & TRANSVERSELY	#5	(6)	6'-6"
H-3	TIED ABOVE H-1 BARS TO SUPPORT H-2, TIED TO V-1	#4	(2)	1'-6"
S-1	OVER LIFT HOLES	#4	(2)	2'-5", LIFTING HOLE, 90°, 3 3/8" R
S-2	HORIZ.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



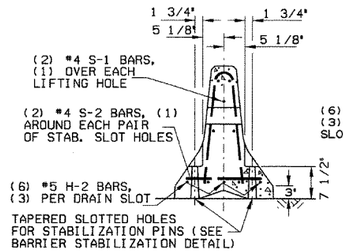
CONNECTION DETAILS



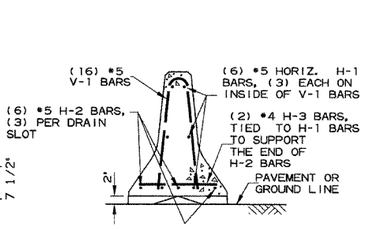
CONNECTION LOOP



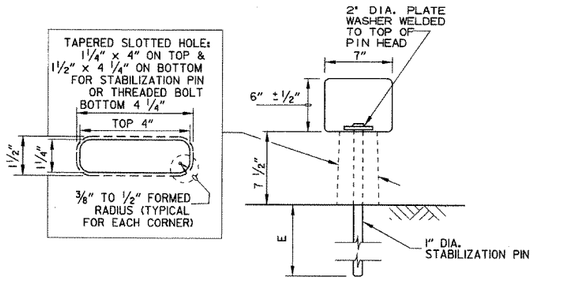
SECTION A-A



SECTION B-B



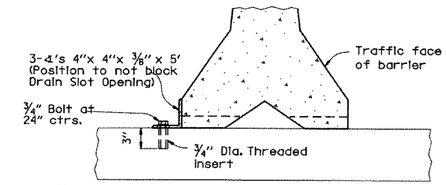
SECTION C-C



BARRIER STABILIZATION DETAIL

ROADWAY SECTION

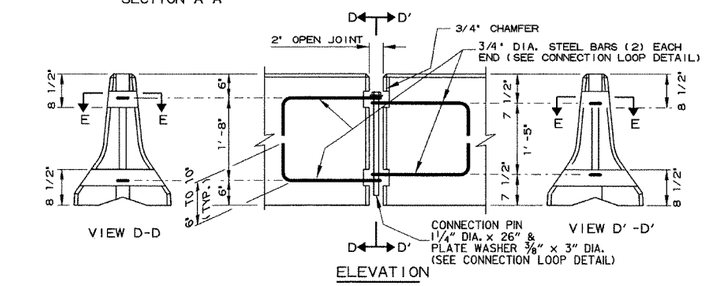
Ⓔ 4" - Concrete Pavement
8" - Asphalt Pavement
12" - Shoulder Areas



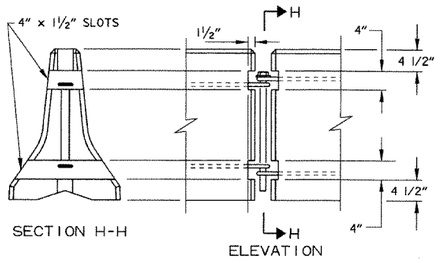
NOTE: 3/4" Threaded Inserts shall be cast in place for all new bridge decks and drilled and grouted for existing bridge decks to be retained. Inserts shall have a minimum ultimate load capacity of 8000 lbs. in tension. After removal of barrier, bolts, and angles, the inserts shall be filled with approved non-shrink epoxy.

BARRIER STABILIZATION DETAIL

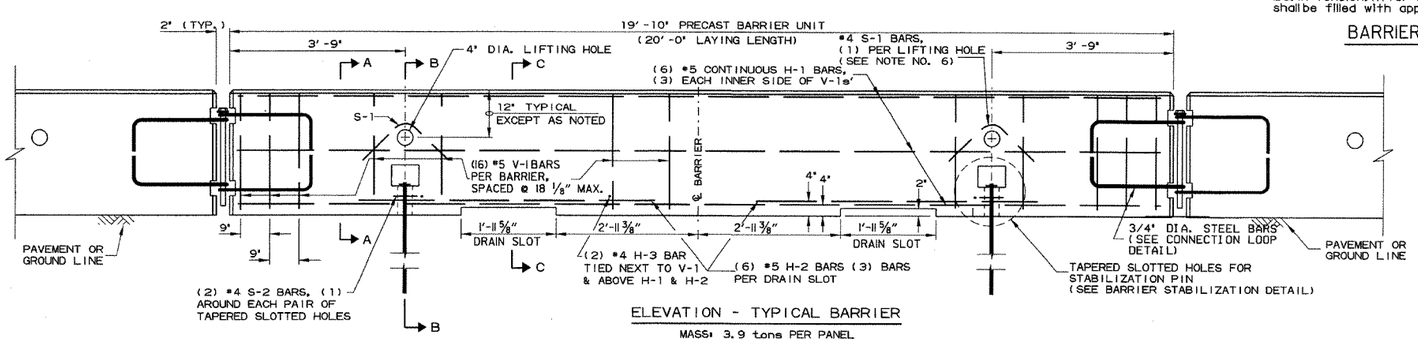
BRIDGE DECKS



ELEVATION



BARRIER REMOVAL SLOT DETAILS



ELEVATION - TYPICAL BARRIER

MASS: 3.9 tons PER PANEL

General Notes

(1) The contractor shall furnish the Precast Concrete Barrier Units and shall be responsible for the manufacture, shipment, storage, placement and removal. At the completion of the project, the precast units will remain the property of the contractor.

(2) Materials shall meet the following minimum requirements:
Concrete: 2500 psi compressive strength at 28 days.
Reinforcing Steel: AASHTO M 31 or M 53, Grade 60
Structural Steel: AASHTO-M270 Grade 36 shall be used for the Connection Pin, Connection Loops, and Stabilization Pins. A One Piece Pin with a 3" rounded top may be used in place of the detailed Connection Pin.
Delineators: Delineators shall be mounted at 10' spacing on top of precast barrier.

In applications where barrier wall is within 6 feet of a traffic lane, additional delineators shall be placed on the barrier at 10' spacing approximately one (1) foot from the top of the barrier. Delineators shall be on the AHTD Qualified Products List for Construction Concrete Barrier Markers.
Delineator color shall be in accordance with the Manual on Uniform Traffic Control Devices.
Payment for delineators shall be considered included in the price bid per Lin. Ft. for "Furnishing and Installing Precast Concrete Barrier". The contractor shall certify to the Engineer that the material and the design used in the precast barrier units meets the requirements as shown on this standard drawing.

(3) Other Precast Concrete Barriers that have been crash tested and approved by the Federal Highway Administration to meet the requirements of NCHRP-350 test level 3 or Manual For Assessing Safety Hardware (MASH) will be accepted in lieu of the barrier shown. Drain slots shall be provided as needed or as directed by the Engineer. The Contractor shall furnish a certification of NCHRP Report 350 or Manual For Assessing Safety Hardware (MASH) compliance for any other types of precast barrier to be used. The certification shall state that the precast concrete barrier meets the requirements of NCHRP Report 350 or Manual For Assessing Safety Hardware (MASH) and include a copy of the Federal Highway Administration's (FHWA) approval letter with all attachments. Precast concrete barrier units shall be fabricated and installed in accordance with crash testing and documentation provided in the FHWA approval letter. Mixing of shapes will not be allowed in a continuous line of units.

(4) Dowel holes in pavement or bridge slabs that are to remain in place shall be filled. Holes in concrete pavement and bridge slabs shall be filled with an approved non-shrink epoxy grout. Holes in asphalt pavement shall be filled with an approved asphalt joint filler. Payment for drilling and filling holes to be included in the price for various barrier items.

(5) Attach Units To Roadway Surface with Stabilization Pins and to Deck Slabs using bolts when required.

(6) A 4" White PVC Sleeve may be used to form the Lifting Hole and if used the Sleeve is to be left in place.

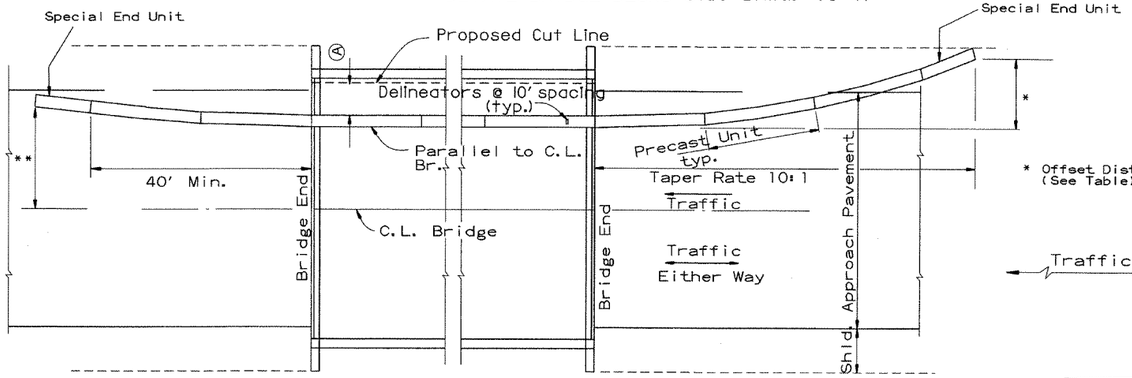
DATE	REVISION	FILMED
10-15-09	ADDED REFERENCE TO MASH	
8-5-09	REV. NOTE 3 CONCERNING DRAIN SLOTS	
11-29-07	REVISED NOTE 3	
5-25-06	DELETED GENERAL NOTE 7	
11-18-04	REVISED BARRIER STABILIZATION DETAIL BRIDGE DECKS	
4-10-03	REVISED GENERAL NOTE 2	
8-22-02	ISSUED NEW DRAWING	

ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION - TEMPORARY PRECAST BARRIER

STANDARD DRAWING TC-4

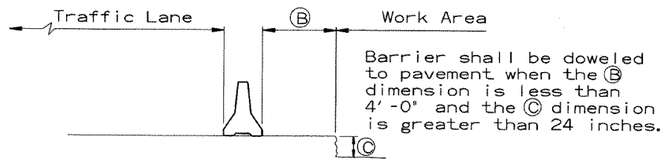
Ⓐ 4 feet or greater preferred. If less than 4 feet, Precast Units shall be connected to slab (SEE BARRIER STABILIZATION DETAIL-BRIDGE DECKS STD. DRWG. TC-4)



* Offset Distance (See Table)

BARRIER PLACEMENT ALONG BRIDGE WITH OFFSET

No Scale

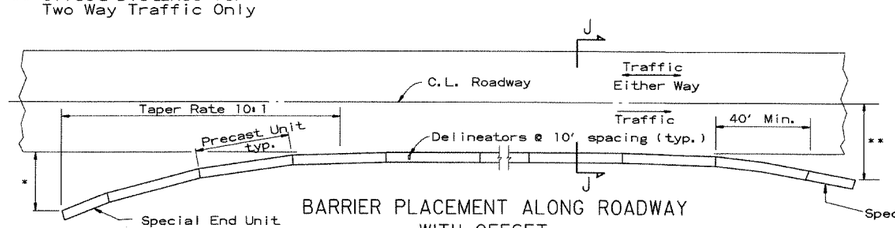


Barrier shall be doweled to pavement when the Ⓑ dimension is less than 4'-0" and the Ⓒ dimension is greater than 24 inches.

SECTION J-J

No Scale

** Offset Distance for Two Way Traffic Only



BARRIER PLACEMENT ALONG ROADWAY WITH OFFSET

No Scale

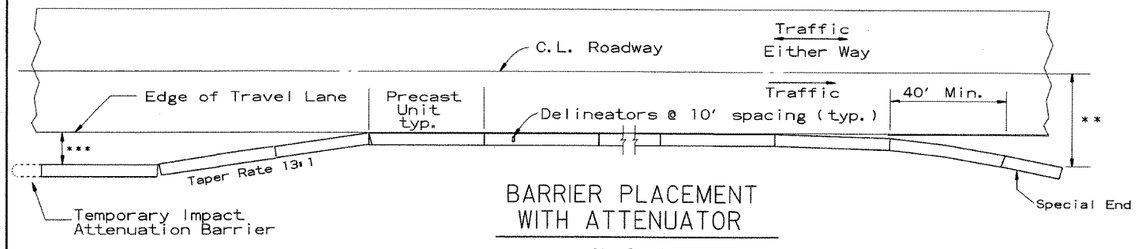
* Offset Distance (See Table)

** Offset Distance For Two Way Traffic Only

Offset Distance Table

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

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

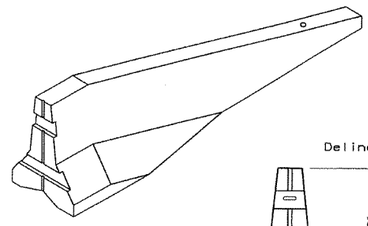


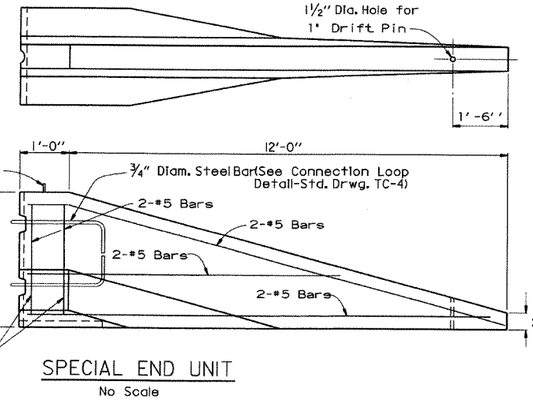
BARRIER PLACEMENT WITH ATTENUATOR

No Scale

** Offset Distance For Two Way Traffic Only

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





SPECIAL END UNIT

No Scale

General Notes

When shown on the Plans, the ends of the Temporary Precast Concrete Barrier shall be protected with an NCHRP-350 or Manual For Assessing Safety Hardware (MASH) approved Crash Cushion. Payment for Crash Cushions shall be made under the item of "Temporary Impact Attenuation Barrier."

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

ARKANSAS STATE HIGHWAY COMMISSION

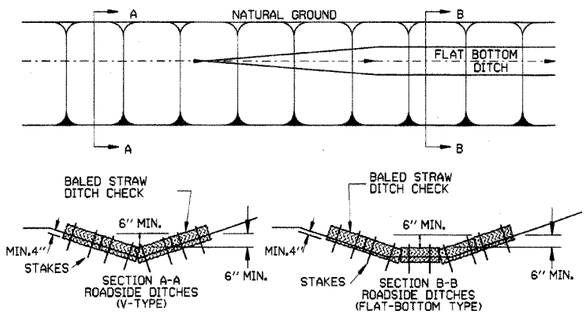
STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION - TEMPORARY PRECAST BARRIER

STANDARD DRAWING TC-5

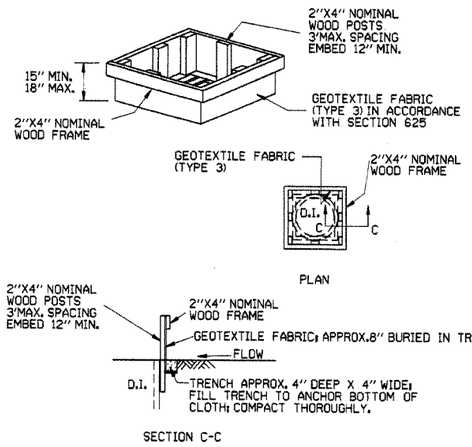
GENERAL NOTES

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.

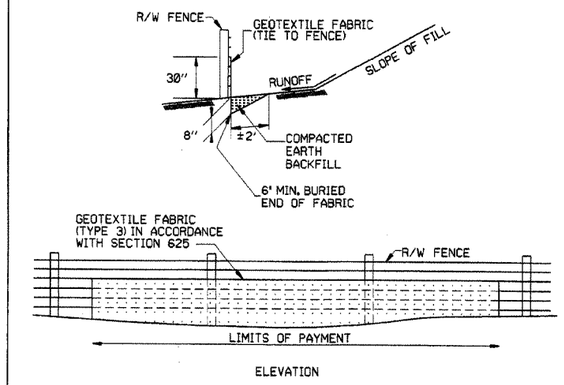
2. STRAW BALES SHALL BE KEYED INTO SOIL A MINIMUM OF 4' AND NO GAPS SHALL BE LEFT BETWEEN BALES.



BALED STRAW DITCH CHECK (E-1)



DROP INLET SILT FENCE (E-7)



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

GENERAL NOTES

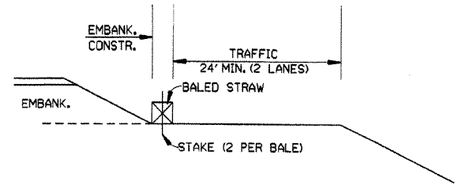
GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST, OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.

GENERAL NOTES

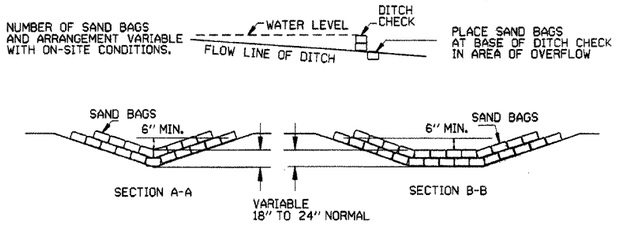
1. STRAW BALES SHALL BE INSTALLED SO THAT THE BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES. THE BALES SHALL BE A MINIMUM OF 30 INCHES IN LENGTH.

2. NO GAPS SHALL BE LEFT BETWEEN BALES.

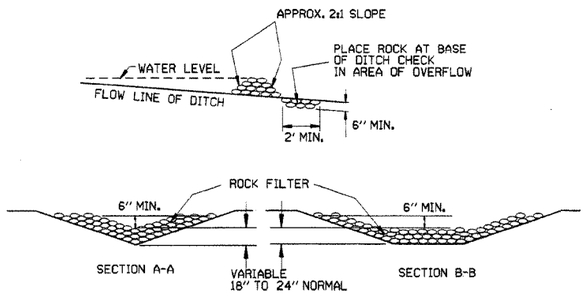
3. BALED STRAW FILTER BARRIERS COMPLETED AND ACCEPTED WILL BE MEASURED BY THE BALE IN PLACE AS AUTHORIZED BY THE ENGINEER AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER BALE FOR BALED STRAW DITCH CHECKS.



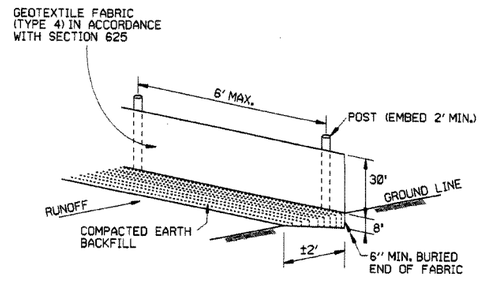
BALED STRAW FILTER BARRIER (E-2)



SAND BAG DITCH CHECK (E-5)



ROCK DITCH CHECK (E-6)



SILT FENCE (E-11)

GENERAL NOTES

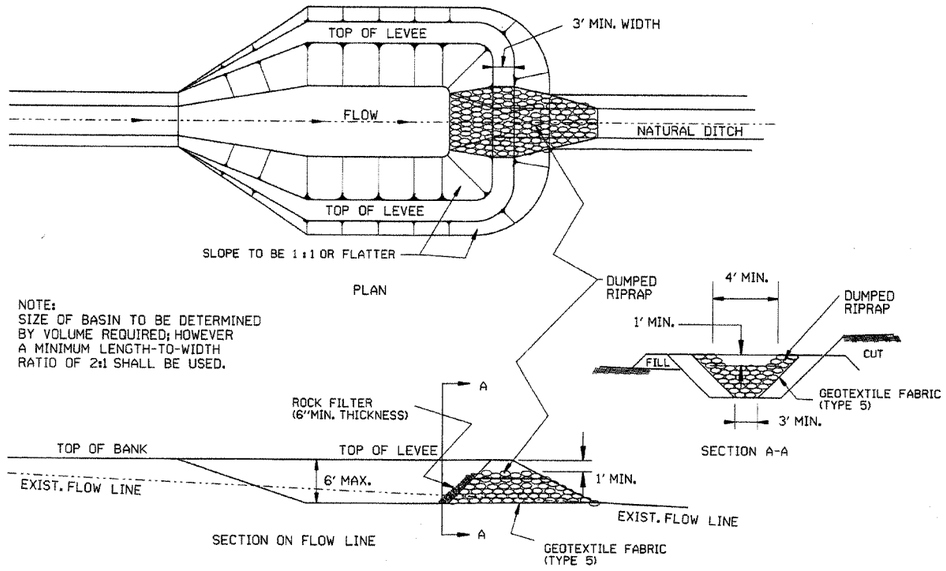
GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST, OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.

DATE	REVISION	FILMED
11-18-98	ADDED NOTES	11-18-98
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

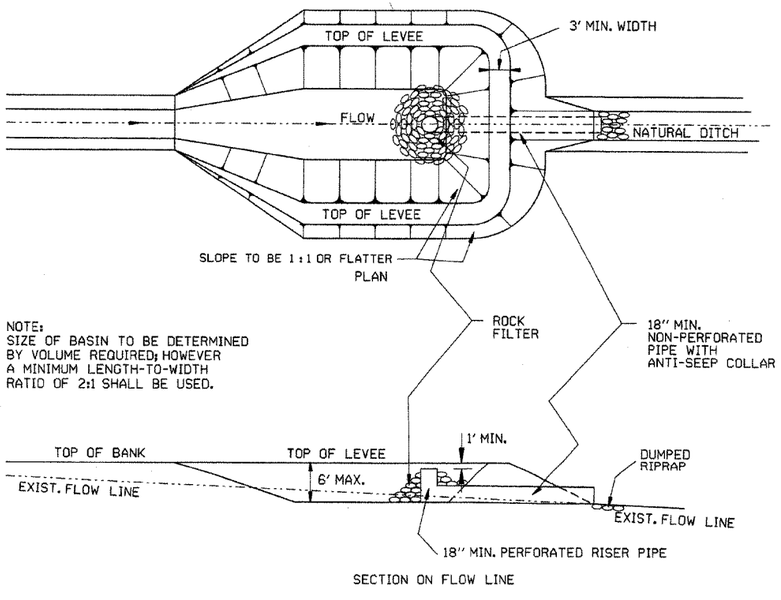
ARKANSAS STATE HIGHWAY COMMISSION

TEMPORARY EROSION CONTROL DEVICES

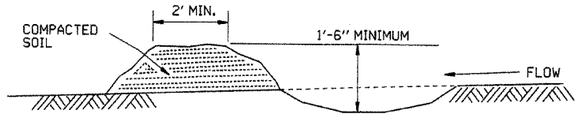
STANDARD DRAWING TEC-1



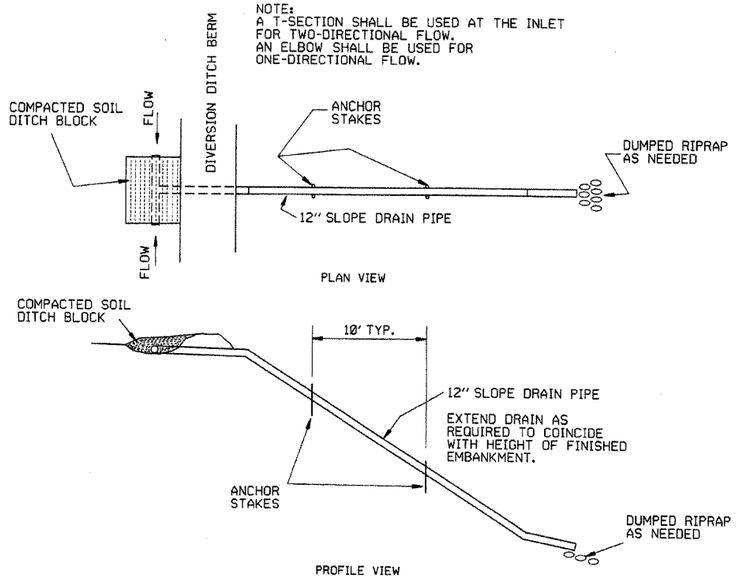
SEDIMENT BASIN WITH RIPRAP OUTLET (E-9)



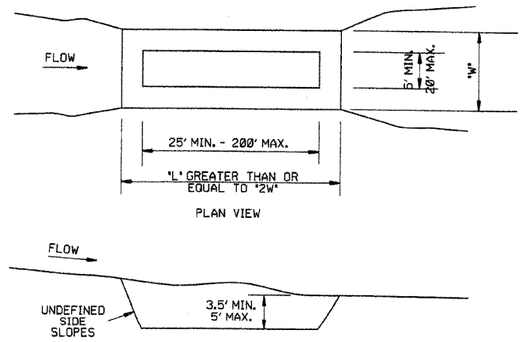
SEDIMENT BASIN WITH PIPE OUTLET (E-10)



DIVERSION DITCH (E-8)



SLOPE DRAIN (E-12)



SEDIMENT BASIN (E-14)

DATE	REVISION	FILMED
6-2-94	Revised E-8 & E-12; Added E-14 & Deleted E-13	
4-1-93	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

TEMPORARY EROSION CONTROL DEVICES

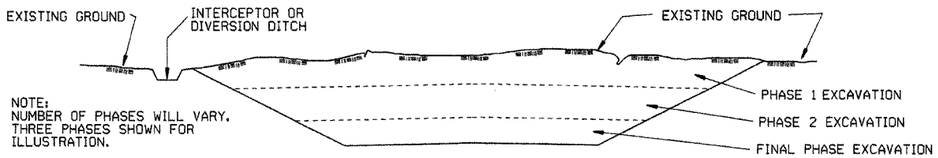
STANDARD DRAWING TEC-2

CLEARING AND GRUBBING

CONSTRUCTION SEQUENCE

1. PLACE PERIMETER CONTROLS (I.E. SILT FENCES , DIVERSION DITCHES, SEDIMENT BASINS, ETC.)
2. PERFORM CLEARING AND GRUBBING OPERATION.

EXCAVATION



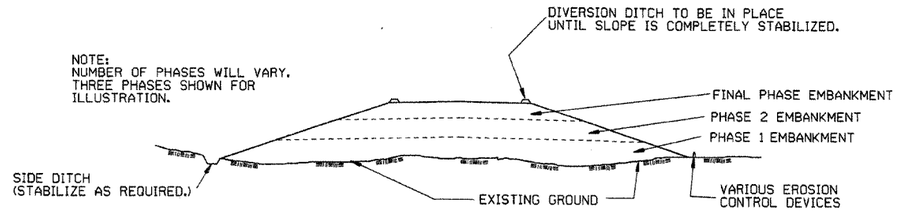
GENERAL NOTE

ALL CUT SLOPES SHALL BE DRESSED, PREPARED, SEEDED, AND MULCHED AS THE WORK PROGRESSES. SLOPES SHALL BE EXCAVATED AND STABILIZED IN EQUAL INCREMENTS NOT TO EXCEED 25 FEET, MEASURED VERTICALLY.

CONSTRUCTION SEQUENCE

1. EXCAVATE AND STABILIZE INTERCEPTOR AND/OR DIVERSION DITCHES.
2. PERFORM PHASE 1 EXCAVATION. PLACE PERMANENT OR TEMPORARY SEEDING.
3. PERFORM PHASE 2 EXCAVATION. PLACE PERMANENT OR TEMPORARY SEEDING.
4. PERFORM FINAL PHASE OF EXCAVATION. PLACE PERMANENT OR TEMPORARY SEEDING. STABILIZE DITCHES. CONSTRUCT DITCH CHECKS, DIVERSION DITCHES, SEDIMENT BASINS, OR OTHER EROSION CONTROL DEVICES AS REQUIRED.

EMBANKMENT



GENERAL NOTE

ALL EMBANKMENT SLOPES SHALL BE DRESSED, PREPARED, SEEDED, AND MULCHED AS THE WORK PROGRESSES. SLOPES SHALL BE CONSTRUCTED AND STABILIZED IN EQUAL INCREMENTS NOT TO EXCEED 25 FEET, MEASURED VERTICALLY.

CONSTRUCTION SEQUENCE

1. CONSTRUCT DIVERSION DITCHES, DITCH CHECKS, SEDIMENT BASINS, SILT FENCES, OR OTHER EROSION CONTROL DEVICES AS SPECIFIED.
2. PLACE PHASE 1 EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING. PROVIDE DIVERSION DITCHES AND SLOPE DRAINS IF EMBANKMENT CONSTRUCTION IS TO BE TEMPORARILY ABANDONED FOR A PERIOD OF GREATER THAN 21 DAYS.
3. PLACE PHASE 2 EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING. PROVIDE DIVERSION DITCHES AND SLOPE DRAINS IF EMBANKMENT CONSTRUCTION IS TO BE TEMPORARILY ABANDONED FOR A PERIOD OF GREATER THAN 21 DAYS.
4. PLACE FINAL PHASE OF EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING. PLACE DIVERSION DITCHES AND SLOPE DRAINS AND MAINTAIN UNTIL ENTIRE SLOPE IS STABILIZED.

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

ARKANSAS STATE HIGHWAY COMMISSION

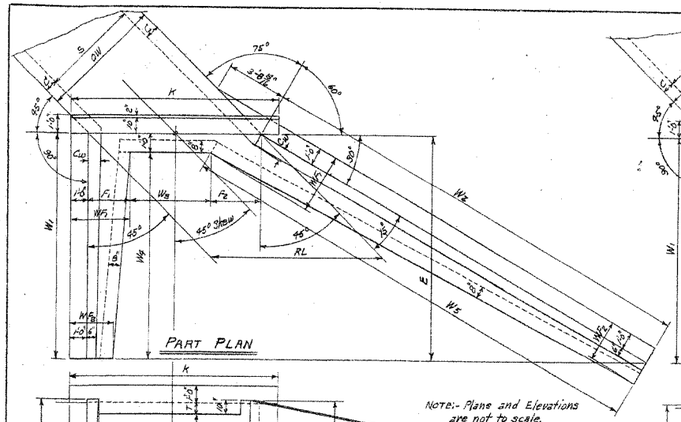
TEMPORARY EROSION CONTROL DEVICES

STANDARD DRAWING TEC-3

stdtec3.dgn

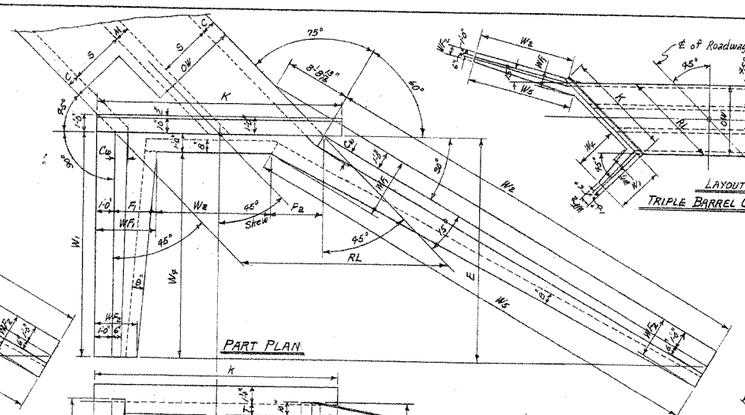
Reshot 3-8-93

FED. ROAD No.	STATE	FED. AID PROJECT	FISCAL YEAR	SHEET No.	TOTAL SHEETS
6	ARK.			289	
JOB No.					



SINGLE BARREL CULVERT - 45° SKEW RIGHT FORWARD

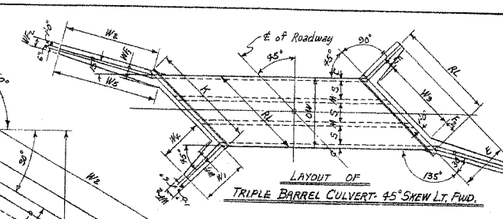
Details of Culvert with 45° Skew Left Forward is reversed, see Layout below.



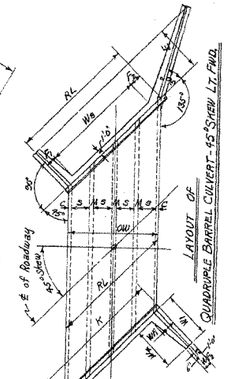
DOUBLE BARREL CULVERT - 45° SKEW RIGHT FORWARD

Details of Culvert with 45° Skew Left Forward is reversed, see Layout below.

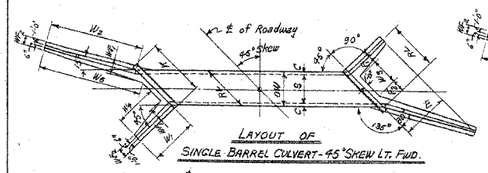
NOTE:- Plans and Elevations are not to scale.



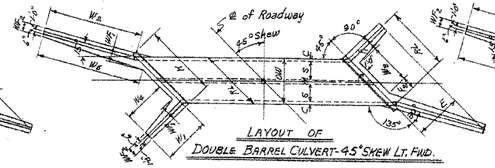
LAYOUT OF TRIPLE BARREL CULVERT - 45° SKEW LT. FWD.



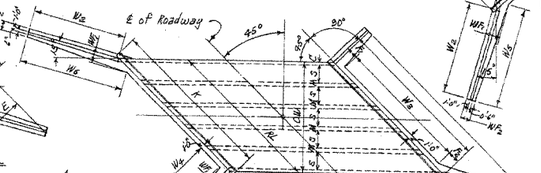
LAYOUT OF QUADRUPLE BARREL CULVERT - 45° SKEW LT. FWD.



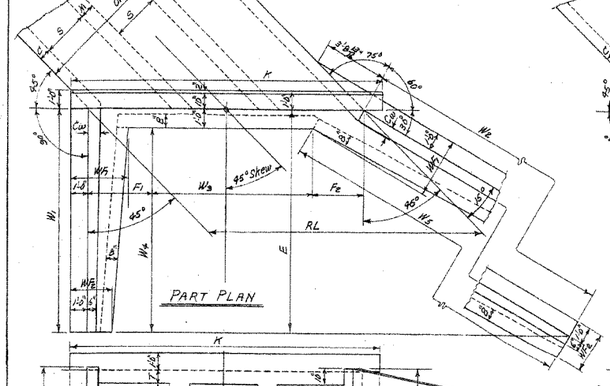
LAYOUT OF SINGLE BARREL CULVERT - 45° SKEW LT. FWD.



LAYOUT OF DOUBLE BARREL CULVERT - 45° SKEW LT. FWD.

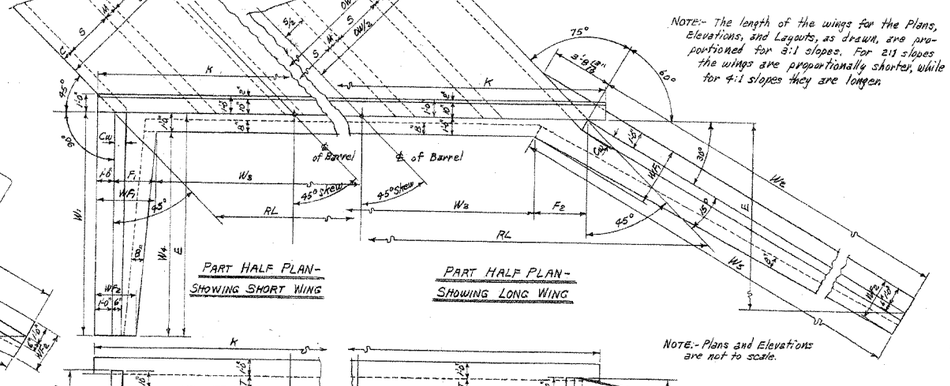


LAYOUT OF QUINTUPLE BARREL CULVERT - 45° SKEW LT. FWD.



TRIPLE BARREL CULVERT - 45° SKEW RIGHT FORWARD

Details of Culvert with 45° Skew Left Forward is reversed, see Layout at top center of sheet.

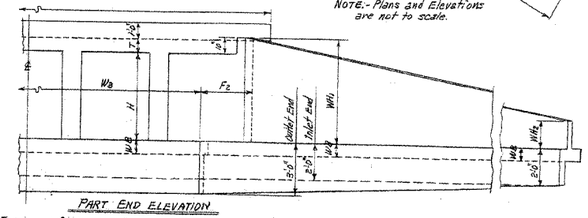


QUADRUPLE BARREL CULVERT - 45° SKEW RT. FWD.

Details of Culvert with 45° Skew Left Forward is reversed, see Layout at above center.

NOTE:- The length of the wings for the Plans, Elevations, and Layouts, as drawn, are proportioned for 3:1 slopes. For 2:1 slopes the wings are proportionally shorter, while for 4:1 slopes they are longer.

NOTE:- Plans and Elevations are not to scale.



QUINTUPLE BARREL CULVERT - 45° SKEW RT. FWD.

Details of Culvert with 45° Skew Left Forward is reversed, see Layout above.

ROADWAY LENGTH RL — HEADWALL LENGTH K — APRON DIMENSION W_3

RL = OW × 1.41421 — K = RL + (2'-0") — $W_3 = RL - (F_1 + F_2)$

USE WITH DRAWING No.	CLEAR SPAN	CLEAR HEIGHT	SUM OF WING DIMENSIONS	SINGLE BARREL CULVERT				DOUBLE BARREL CULVERT				TRIPLE BARREL CULVERT				QUADRUPLE BARREL CULVERT				QUINTUPLE BARREL CULVERT			
	S	H	F_1 & F_2	OW	RL	K	W_3	OW	RL	K	W_3	OW	RL	K	W_3	OW	RL	K	W_3	OW	RL	K	W_3
W-X452-1, W-X453-1 OR W-X454-1. (FOR H=8'0 OR LESS)	4'	2	2'-3⅜	5'-0"	7'-0⅜	9'-0⅝	4'-9⅜	9'-8"	13'-8"	15'-8"	11'-4⅞	14'-0"	20'-3⅜	22'-3⅜	18'-0"	18'-0"	26'-10⅝	28'-10⅝	24'-7⅞	23'-8"	33'-5⅝	35'-5⅝	31'-2⅝
		3	3'-3⅜	5'-0"	"	"	3'-9⅜	9'-8"	"	"	10'-4⅞	14'-4"	"	"	17'-0"	19'-0"	"	"	23'-7⅛	23'-8"	"	"	30'-2⅝
		4	4'-3⅜	5'-0"	"	"	2'-9⅜	9'-8"	"	"	9'-4⅞	14'-6"	"	"	16'-0"	19'-0"	"	"	22'-7⅛	23'-8"	"	"	29'-2⅝
		5	5'-3⅜	5'-0"	7'-0⅜	9'-0⅝	1'-9⅜	9'-8"	13'-8"	15'-8"	8'-4⅞	14'-6"	20'-3⅜	22'-3⅜	15'-0"	19'-0"	26'-10⅝	28'-10⅝	21'-7⅛	23'-8"	33'-5⅝	35'-5⅝	28'-2⅝
		6	6'-3⅜	5'-2"	7'-3⅝	9'-3⅝	1'-0⅜	9'-11"	14'-0⅜	16'-0⅜	7'-0⅛	14'-8"	20'-8⅜	22'-8"	13'-5⅜	19'-2"	27'-1⅝	29'-1⅞	20'-2⅝	24'-2"	34'-2⅝	36'-2"	27'-10⅜
	5'	3	3'-3⅜	6'-0"	8'-5⅜	10'-5⅜	5'-2⅝	11'-8"	16'-6"	18'-6"	13'-2⅝	17'-8"	24'-4⅜	26'-4⅜	21'-3"	23'-0"	32'-4⅜	34'-4⅜	29'-1"	28'-8"	40'-6⅝	42'-6⅝	37'-3⅜
		4	4'-3⅜	6'-0"	"	"	4'-2⅝	11'-8"	"	"	9'-2⅝	17'-8"	"	"	20'-3"	23'-0"	"	"	28'-3"	28'-8"	"	"	36'-3⅝
		5	5'-3⅜	6'-0"	8'-5⅜	10'-5⅜	3'-2⅝	11'-8"	16'-6"	18'-6"	11'-2⅝	17'-8"	24'-4⅜	26'-4⅜	19'-3"	23'-0"	32'-4⅜	34'-4⅜	27'-8"	28'-8"	40'-6⅝	42'-6⅝	35'-3⅜
		6	6'-3⅜	6'-2"	8'-5⅜	10'-8⅜	2'-5⅝	11'-11"	16'-10⅛	18'-10⅛	10'-7"	17'-8"	24'-8⅛	27'-0"	18'-8⅜	23'-5"	33'-0⅛	35'-1⅛	26'-10⅝	29'-2"	41'-3"	43'-3"	34'-11⅜
		7	7'-3⅜	6'-3"	8'-10⅝	10'-10⅜	1'-8⅜	12'-1"	17'-1"	19'-1"	9'-10⅜	17'-11"	25'-0"	27'-4"	17'-6⅝	23'-10"	33'-7"	35'-7"	25'-9"	29'-8"	41'-10"	43'-10"	34'-0⅜
		3	3'-3⅜	7'-0"	9'-10⅝	11'-10⅝	6'-7⅝	13'-8"	19'-4⅝	21'-4"	16'-0⅝	20'-6"	28'-8⅝	30'-8"	25'-5⅜	27'-0"	38'-2⅝	40'-2⅝	34'-1"	33'-8"	47'-7⅜	49'-7⅜	42'-4"
		4	4'-3⅜	7'-0"	"	"	5'-7⅝	13'-8"	"	"	15'-0⅜	20'-6"	"	"	24'-5⅝	27'-0"	"	"	33'-1"	33'-8"	"	"	42'-4"
		5	5'-3⅜	7'-0"	9'-10⅝	11'-10⅝	4'-7⅜	13'-8"	19'-3⅜	21'-4"	14'-10⅝	20'-6"	28'-8⅝	30'-8"	23'-5⅝	27'-0"	38'-2⅝	40'-2⅝	32'-1"	33'-8"	47'-7⅜	49'-7⅜	42'-4"
		6	6'-3⅜	7'-2"	10'-1⅝	12'-1⅝	3'-10⅜	13'-11"	19'-10⅛	21'-10⅛	13'-5"	20'-8"	29'-0⅛	31'-0⅛	22'-1⅛	27'-5"	38'-8⅛	40'-8⅛	30'-9"	34'-0"	48'-0⅛	50'-0⅛	42'-0"
		7	7'-3⅜	7'-3"	10'-3⅝	12'-3"	2'-5⅜	14'-1"	19'-11"	21'-11"	12'-1⅜	20'-11"	29'-3"	31'-3"	21'-3⅜	27'-9"	39'-3"	41'-3"	30'-5⅜	34'-7"	48'-10⅝	50'-10⅝	41'-7⅜
		8	8'-3⅜	7'-4"	10'-4⅝	12'-4⅝	1'-1⅜	14'-2"	20'-0⅜	22'-0⅜	10'-9⅜	21'-0"	29'-5⅜	31'-5⅜	20'-5⅝	27'-10"	39'-4⅜	41'-4⅜	30'-1"	34'-8"	49'-0⅜	51'-0⅜	39'-9⅜
	7'	4	4'-3⅜	8'-0"	11'-3⅝	13'-3⅝	7'-0⅜	15'-8"	22'-1⅞	24'-1⅞	17'-10⅜	23'-6"	33'-0"	35'-0"	28'-0⅜	31'-0"	43'-10⅜	45'-10"	39'-6⅜	38'-8"	54'-6⅜	56'-6⅜	50'-5"
		5	5'-3⅜	8'-0"	11'-3⅝	13'-3⅝	6'-1⅜	15'-9"	22'-1⅞	24'-1⅞	16'-10⅜	23'-6"	33'-0"	35'-0"	27'-0⅜	31'-0"	43'-10⅜	45'-10"	38'-6⅜	38'-8"	54'-6⅜	56'-6⅜	49'-5"
		6	6'-3⅜	8'-2"	11'-5⅝	13'-5⅝	5'-3⅜	15'-11"	22'-4⅝	24'-4"	15'-9⅜	23'-8"	33'-2⅝	35'-2⅝	26'-1⅜	31'-2"	44'-0⅝	46'-0⅝	37'-6⅜	38'-8"	54'-8⅝	56'-8⅝	48'-7"
		7	7'-3⅜	8'-3"	11'-6"	13'-6"	4'-5⅜	16'-1"	22'-6"	24'-6"	14'-9⅜	23'-11"	33'-5"	35'-5"	25'-2⅜	31'-5"	44'-3⅜	46'-3⅜	36'-7⅜	38'-8"	54'-10⅜	56'-10⅜	47'-10"
		8	8'-3⅜	8'-4"	11'-7⅝	13'-7⅝	3'-6⅜	16'-2"	22'-8⅜	24'-8⅜	13'-7"	24'-0"	33'-7⅛	35'-7⅛	24'-4⅜	31'-10"	44'-8⅛	46'-8⅛	35'-9"	38'-8"	54'-11⅛	56'-11⅛	46'-12⅝
	8'	5	5'-3⅜	9'-0"	12'-9⅝	14'-9⅝	8'-5⅜	17'-4"	24'-3⅛	26'-3⅛	20'-0⅜	24'-6"	34'-4⅝	36'-4⅝	29'-1⅜	35'-0"	49'-0⅝	51'-0⅝	43'-6⅜	43'-8"	61'-1⅝	63'-1⅝	54'-10⅜
		6	6'-3⅜	9'-2"	12'-11⅝	14'-11⅝	7'-9⅜	17'-11"	25'-1"	27'-1"	19'-0⅜	24'-9"	34'-8⅝	36'-8⅝	28'-7⅜	35'-5"	49'-7⅝	51'-7⅝	42'-11⅜	43'-8"	61'-3⅝	63'-3⅝	54'-2"
		7	7'-3⅜	9'-3"	13'-1"	15'-1"	5'-3⅜	18'-1"	25'-4⅜	27'-4⅜	17'-7⅜	24'-11"	34'-10⅝	36'-10⅝	27'-6⅜	35'-7"	49'-9⅝	51'-9⅝	41'-3⅜	43'-8"	61'-5⅝	63'-5⅝	51'-2⅜
		8	8'-3⅜	9'-4"	13'-2⅝	15'-2⅝	3'-11⅜	18'-2"	25'-6⅛	27'-6⅛	16'-5"	27'-0"	38'-2⅝	40'-2⅝	28'-1"	35'-10"	50'-1⅛	52'-1⅛	41'-5"	44'-8"	63'-2"	65'-2"	53'-10⅜
	9'	5	5'-3⅜	10'-2"	14'-5⅝	16'-4⅝	9'-1⅜	19'-11"	28'-2"	30'-2"	22'-1⅛	25'-6"	36'-0⅛	38'-0⅛	30'-8⅜	39'-5"	55'-8⅛	57'-8⅛	47'-10⅜	48'-8"	68'-10⅛	70'-10⅛	58'-7"
		6	6'-3⅜	10'-3"	14'-6"	16'-4"	8'-1⅜	20'-1"	28'-3⅝	30'-3⅝	22'-10⅛	25'-6"	36'-0⅛	38'-0⅛	30'-8⅜	39'-5"	55'-8⅛	57'-8⅛	47'-10⅜	48'-8"	68'-10⅛	70'-10⅛	58'-7"
		7	7'-3⅜	10'-3"	14'-6"	16'-4"	6'-11⅜	20'-1"	28'-3⅝	30'-3⅝	22'-1⅛	25'-6"	36'-0⅛	38'-0⅛	30'-8⅜	39'-5"	55'-8⅛	57'-8⅛	47'-10⅜	48'-8"	68'-10⅛	70'-10⅛	58'-7"
		8	8'-3⅜	10'-4"	14'-7⅝	16'-7⅝	5'-5⅜	20'-2"	28'-4⅝	30'-4⅝	19'-3"	26'-0"	36'-6⅝	38'-6⅝	29'-1⅜	40'-0"	56'-2⅝	58'-2⅝	47'-4⅜	49'-8"	70'-2⅝	72'-2⅝	60'-1⅜
	10'	6	6'-3⅜	11'-2"	15'-8⅝	17'-8⅝	10'-1⅜	21'-11"	31'-0"	33'-0"	24'-8⅛	26'-6"	37'-4⅝	39'-4⅝	30'-3⅜	40'-5"	56'-11⅝	58'-11⅝	48'-7⅜	49'-8"	70'-5⅝	72'-5⅝	60'-4⅜
		7	7'-3⅜	11'-3"	15'-9⅞	17'-11"	9'-4⅜	22'-1"	31'-2⅝	33'-2⅝	24'-11⅛	27'-0"	38'-0⅝	40'-0⅝	30'-9⅜	41'-0"	57'-8⅝	59'-8⅝	49'-3⅜	49'-8"	71'-0⅝	73'-0⅝	61'-1⅜
		8	8'-3⅜	11'-4"	16'-0⅝	18'-0⅝	8'-7⅜	22'-2"	31'-4⅝	33'-4⅝	23'-5"	27'-6"	38'-8⅝	40'-8⅝	31'-3⅜	41'-7"	58'-5⅝	60'-5⅝	49'-11⅜	49'-8"	71'-8⅝	73'-8⅝	61'-9⅜
	11'	6	6'-3⅜	12'-4"	17'-5⅝	19'-5⅝	11'-2⅜	24'-2"	34'-2⅝	36'-2⅝	27'-11⅛	28'-0"	39'-4⅝	41'-4⅝	32'-3⅜	42'-10"	60'-5⅝	62'-5⅝	52'-1⅜	53'-8"	75'-8⅝	77'-8⅝	65'-3⅜
		7	7'-3⅜	12'-4"	"	"	10'-1⅜	24'-2"	"	"	26'-11"	34'-0"	"	"	43'-1⅜	47'-10"	"	"	58'-1⅜	—	—	—	—
		8	8'-3⅜	12'-5"	"	"	9'-0⅜	24'-2"	"	"	25'-11"	34'-0"	"	"	44'-1⅜	47'-10"	"	"	58'-1⅜	—	—	—	—
	12'	6	6'-3⅜	13'-6"	18'-10⅝	20'-10⅝	12'-7⅜	26'-2"	37'-0⅝	39'-0"	30'-8⅝	29'-6"	41'-8⅝	43'-8⅝	34'-7⅜	45'-3"	63'-8⅝	65'-8⅝	55'-6⅜	58'-8"	82'-8⅝	84'-8⅝	72'-5⅜
		7	7'-3⅜	13'-6"	"	"	11'-4⅜	26'-2"	"	"	29'-6⅜	39'-0"	"	"	47'-4⅜	51'-10"	"	"	61'-6⅜	—	—	—	—
		8	8'-3⅜	13'-6"	"	"	9'-7⅜	26'-2"	"	"	27'-6⅜	39'-0"	"	"	45'-4⅜	51'-10"	"	"	65'-6⅜	—	—	—	—
W-X452-2, W-X453-2 OR W-X454-2. (FOR H=9'0 & OVER)	7'	9	10'-9⅜	8'-6"	12'-0⅝	14'-0⅝	1'-3"	16'-5"	23'-5⅝	25'-5⅝	12'-5⅜	24'-4"	34'-5"	36'-5"	23'-3⅜	32'-3⅜	45'-7⅝	47'-7⅝	39'-10"	40'-2"	56'-8⅜	58'-8⅜	44'-5⅝
	8'	9	10'-9⅜	9'-6"	13'-5⅞	15'-5⅞	2'-8"	18'-5"	26'-0⅜	28'-0⅜	15'-3⅜	27'-4"	38'-7⅜	40'-7⅜	26'-10⅜	36'-3"	51'-3⅜	53'-3⅜	40'-6"	45'-2"	63'-10⅜	65'-10⅜	52'-1⅜
		10	12'-3⅜	9'-8"	13'-8"	15'-8"	1'-10⅜	19'-8"	26'-9⅜	28'-9⅜	16'-4⅜	27'-8"	39'-1⅜	41'-1⅜	26'-10⅜	36'-8"	51'-10⅜	53'-10⅜	39'-7"	45'-9"	64'-7"	66'-7"	52'-3⅜
	9'	9	10'-9⅜	10'-6"	14'-10⅝	16'-10⅝	4'-1"	20'-5"	28'-10⅝	30'-10⅝	18'-1⅜	30'-6"	43'-0⅝	45'-0⅝	32'-1⅜	42'-0"	59'-1⅝	61'-1⅝	47'-8"	50'-2"	70'-11⅝	72'-11⅝	58'-7⅜
		10	12'-3⅜	10'-8"	15'-1"	17'-1"	2'-6⅜	20'-8"	29'-2⅝	31'-2⅝	18'-6⅜	30'-8"	43'-2⅝	45'-2⅝	32'-3⅜	42'-2"	59'-3⅝	61'-3⅝	47'-10"	50'-2"	70'-11⅝	72'-11⅝	58'-7⅜
		11	13'-3⅜	10'-10"	15'-3⅜	17'-3⅜	1'-6⅜	20'-10"	29'-5⅛	31'-5⅛	19'-0⅜	30'-10"	43'-4⅛	45'-4⅛	32'-5⅜	42'-4"	59'-5⅛	61'-5⅛	48'-0"	50'-2"	71'-1⅛	73'-1⅛	58'-9⅜
	10'	9	10'-9⅜	11'-6"	16'-2⅝	18'-2⅝	5'-4"	22'-5"	31'-8⅜	33'-8⅜	20'-11⅝	33'-6"	47'-1⅜	49'-1⅜	34'-4⅜	44'-3"	62'-2⅜	64'-2⅜	51'-0⅜	53'-2"	78'-0⅜	80'-0⅜	67'-3"
		10	12'-3⅜	11'-8"	16'-4"	18'-4"	4'-2⅜	22'-8"	32'-0⅜	34'-0⅜	21'-9⅛	33'-8"	47'-3⅜	49'-3⅜	35'-1⅜	44'-5"	62'-4⅜	64'-4⅜	51'-2⅜	53'-2"	78'-0⅜	80'-0⅜	67'-3"
		11	13'-3⅜	11'-10"	16'-5⅝	18'-5⅝	2'-11⅜	22'-10"	32'-1⅝	34'-1⅝	22'-6⅛	33'-10"	47'-5⅝	49'-5⅝	35'-3⅜	44'-6"	62'-5⅝	64'-5⅝	51'-3⅜	53'-2"	78'-0⅜	80'-0⅜	66'-2⅜
		12	15'-3⅜	12'-0"	16'-7⅛	18'-7⅛	1'-8⅜	23'-0"	32'-3⅛	34'-3⅛	23'-1⅜	34'-0"	47'-7⅛	49'-7⅛	35'-5⅜	44'-6"	62'-7⅛	64'-7⅛	51'-5⅜	53'-2"	78'-0⅜	80'-0⅜	66'-2⅜
	11'	9	10'-9⅜	12'-6"	17'-5⅛	19'-5⅛	6'-10⅜	24'-5"	34'-4⅛	36'-4⅛	23'-9⅛	34'-4"	48'-1⅛	50'-1⅛	36'-0⅜	45'-9"	63'-8⅛	65'-8⅛	52'-6⅜	56'-0"	79'-2⅛	81'-2⅛	68'-1⅜
		10	12'-3⅜	12'-8"	17'-7"	19'-7"	5'-7⅜	24'-8"	34'-7⅝	36'-7⅝	22'-7⅛	34'-8"	48'-5⅝	50'-5⅝	36'-4⅜	45'-10"	63'-9⅝	65'-9⅝	52'-7⅜	56'-0"	79'-2⅛	81'-2⅛	68'-1⅜
		11	13'-3⅜	12'-10"	17'-8⅝	19'-8⅝	4'-4⅜	24'-10"	34'-9⅛	36'-9⅛	21'-4⅝	34'-10"	48'-7⅛	50'-7⅛	36'-6⅜	45'-11"	63'-10⅛	65'-10⅛	52'-8⅜	56'-0"	79'-2⅛	81'-2⅛	68'-1⅜
		12	15'-3⅜	13'-0"	18'-0⅝	20'-0⅝	3'-1⅜	25'-0"	35'-1⅝	37'-1⅝	20'-1"	35'-0"	48'-9⅝	50'-9⅝	36'-8⅜	46'-0"	64'-0⅝	66'-0⅝	52'-9⅜	56'-0"	79'-2⅛	81'-2⅛	68'-1⅜
	12'	9	10'-9⅜	13'-6"	18'-7"	20'-7"	8'-3⅜	26'-5"	37'-0⅜	39'-0⅜	26'-7"	35'-4"	49'-5⅜	51'-5⅜	37'-0⅜	46'-3"	64'-4⅜	66'-4⅜	53'-1⅜	56'-8"	80'-0⅜	82'-0⅜	68'-9⅜
		10	12'-3⅜	13'-8"	18'-9⅝	20'-9⅝	7'-0⅜	26'-8"	37'-1⅝	39'-1⅝	25'-5⅜	35'-6"	49'-7⅝	51'-7⅝	37'-2⅜	46'-5"	64'-6⅝	66'-6⅝	53'-3⅜	56'-8"	80'-0⅜	82'-0⅜	68'-9⅜
		11	13'-3⅜	13'-10"	18'-10⅝	20'-10⅝	5'-9⅜	26'-10"	37'-3⅛	39'-3⅛	24'-3⅝	35'-8"	49'-9⅝	51'-9⅝	37'-4⅜	46'-6"	64'-7⅛	66'-7⅛	53'-4⅜	56'-8"	80'-0⅜	82'-0⅜	68'-9⅜
		12	15'-3⅜	14'-0"	19'-0⅝	21'-0⅝	4'-6⅜	27'-0"	38'-3⅝	40'-3⅝	22'-11"	35'-10"	50'-1⅝	52'-1⅝	37'-6⅜	46'-7"	64'-8⅝	66'-8⅝	53'-5⅜	56'-8"	80'-0⅜	82'-0⅜	68'-9⅜

NOTE:- This drawing to be used in conjunction with Standard Wing Drawings for 45° Skews for each slope as listed below.

2:1 Slopes	3:1 Slopes	4:1 Slopes
W-X452-1 or W-X452-2	W-X453-1 or W-X453-2	W-X454-1 or W-X454-2.

NOTE:- This drawing to be used in conjunction with Standard Barrel Sections, Drawing Nos.-

SINGLES	DOUBLES	TRIPLES	QUADRUPLES	QUINTUPLES
R-145X-0	R-245X-01	R-345X-01	R-445X-01	R-545X-01
	R-245X-02	R-345X-02	R-445X-02	R-545X-02
R-145X-1	R-245X-1	R-345X-1	R-445X-1	
	R-245X-2	R-345X-2		

CLASS S CONCRETE

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF STANDARD WINGS FOR REINFORCED CONCRETE BOX CULVERTS 45° SKEW

4', 5', 6', 7', 8', 9', 10', 11' & 12' SPANS — 2:1, 3:1 & 4:1 SLOPES

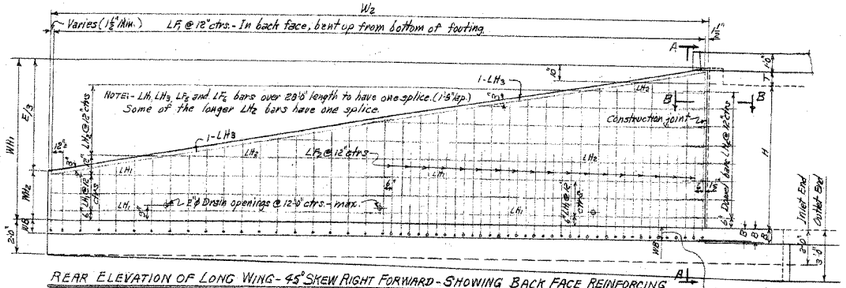
SINGLES, DOUBLES, TRIPLES, QUADRUPLES & QUINTUPLES — ALL DEPTHS OF COVER H=2',3',4',5',6',7',8',9',10',11' & 12'

STANDARD DRAWING No. W-X45

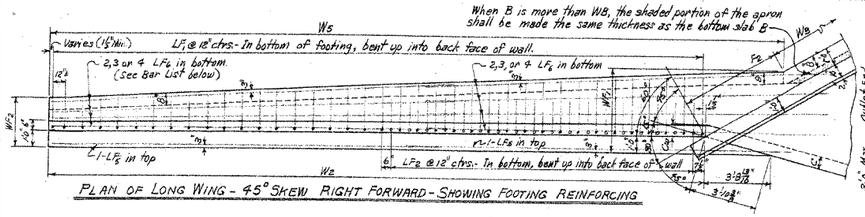
Designed by:- W.C.H. 5-16-63 Checked by:-
Drawn by:- W.C.H. 6-15-64 Checked by:- J.E.M. 6-23-64
Quantities by:- Checked by:-

Reshot 3-8-93 352

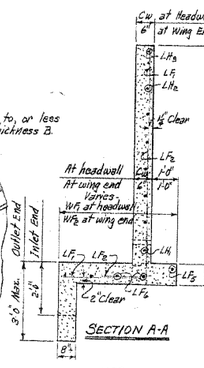
FED. ROAD No.	STATE	FED. AID PROJECT	FISCAL YEAR	SHEET No.	TOTAL SHEETS
6	ARK.			290	
JOB No.					



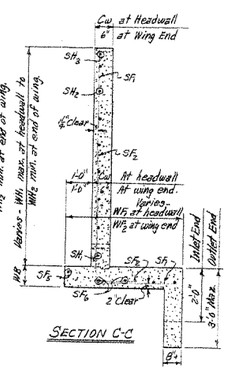
REAR ELEVATION OF LONG WING - 45° SKEW RIGHT FORWARD - SHOWING BACK FACE REINFORCING



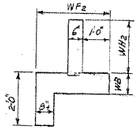
PLAN OF LONG WING - 45° SKEW RIGHT FORWARD - SHOWING FOOTING REINFORCING



SECTION A-A



SECTION C-C



TYPICAL END VIEW OF WING

REGULAR WING DIMENSIONS - 3:1 SLOPES

CLEAR HEIGHT OF BOX	THICKNESS OF WING FOOTING	THICKNESS OF WING AT HEADWALL C	WINGWALL HEIGHTS		WIDTHS OF WING FOOTINGS		FOOTING DIMENSION PARALLEL WITH HEADWALL		PERPENDICULAR DIST. FROM HEAD. TO END OF WING	LENGTHS OF WINGWALLS		INSIDE FOOTING DIMENSION		* QUANTITY PER WING CLASS S CONCRETE			
			AT HEADWALL	AT END OF WING	AT HEADWALL	AT END OF WING	SHORT WING	LONG WING		SHORT WING	LONG WING	SHORT WING	LONG WING	INLET END		OUTLET END	
														SHORT WING	LONG WING	SHORT WING	LONG WING
H	WB	Cw	WH1	WH2	WF1	WF2	F1	F2	E	W1	W2	W3	W4	CU.YD.	CU.YD.	CU.YD.	CU.YD.
2'	7"	6"	2'-10"	0'-8"	2'-5"	2'-0"	1'-6"	0'-11½"	6'-6"	6'-6"	13'-0"	5'-6"	13'-3⅝"	0.793	1.572	0.827	1.761
3'	7"	6"	3'-10"	1'-0"	2'-8"	2'-1½"	1'-8"	1'-7⅛"	8'-6"	8'-6"	17'-0"	7'-6"	17'-10⅝"	1.120	2.364	1.229	2.590
4'	7"	6"	4'-10"	1'-0"	3'-0"	2'-3"	2'-0"	2'-3⅛"	10'-6"	10'-6"	21'-0"	9'-6"	22'-5⅛"	1.567	3.295	1.700	3.577
5'	7"	6"	5'-10"	1'-0"	3'-3"	2'-4½"	2'-0"	2'-3⅛"	12'-6"	12'-6"	25'-0"	11'-6"	27'-10⅝"	2.082	4.367	2.241	4.705
		7"	5'-10"	1'-0"	3'-3"	2'-4½"	2'-0"	2'-11⅛"	12'-6"	12'-6"	25'-0"	11'-6"	27'-10⅝"	2.166	4.551	2.325	4.889
6'	8"	7"	6'-10"	2'-0"	3'-8"	2'-6"	2'-0"	3'-7⅛"	14'-6"	14'-6"	29'-0"	13'-6"	31'-7½"	2.894	6.055	3.078	6.466
		8"	6'-10"	2'-0"	3'-8"	2'-6"	2'-0"	3'-7⅛"	14'-6"	14'-6"	29'-0"	13'-6"	31'-7½"	2.992	6.180	3.185	6.675
7'	8½"	7½"	7'-10"	2'-8"	4'-2"	2'-9½"	3'-2"	4'-2⅛"	16'-6"	16'-6"	33'-0"	15'-6"	36'-3⅝"	3.794	7.950	4.003	8.385
		8"	7'-10"	2'-8"	4'-2"	2'-9½"	3'-2"	4'-2⅛"	16'-6"	16'-6"	33'-0"	15'-6"	36'-3⅝"	3.920	8.093	4.078	8.598
8'	9"	8"	8'-10"	2'-8"	4'-8"	2'-9"	3'-6"	5'-1⅛"	18'-6"	18'-6"	37'-0"	17'-6"	41'-9⅝"	4.855	10.186	5.088	10.651

* Quantity per wing does not include headwall or that portion of apron or toewall for the length W5.

QUANTITIES

CLEAR SPAN	CLEAR HEIGHT	THICKNESS OF WING AT HEADWALL	THICKNESS OF WING FOOTING	REINFORCING STEEL - FOR 4 WINGS	CLASS S CONCRETE - 4 WINGS HEADWALLS, WINGWALLS, FOOTINGS, TOEWALLS AND APRONS					
					SINGLE BARREL CULVERT	DOUBLE BARREL CULVERT	TRIPLE BARREL CULVERT	QUADRUPLE BARREL CULVERT	QUINTUPLE BARREL CULVERT	
S	H	Cw	WB	LB.	CU.YD.	CU.YD.	CU.YD.	CU.YD.	CU.YD.	
4'	2'	6"	7"	142	6.15	7.50	8.84	10.22	11.58	
	3'	6"	7"	214	8.44	9.79	11.14	12.50	13.86	
	4'	6"	7"	328	11.13	12.98	13.84	15.20	16.56	
	5'	6"	7"	468	14.25	15.60	16.96	18.32	19.68	
	6'	7"	8"	743	19.23	20.62	22.02	23.41	24.81	
5'	3'	6"	7"	214	8.74	10.38	12.03	13.67	15.32	
	4'	6"	7"	328	11.43	13.07	14.72	16.37	18.02	
	5'	6"	7"	463	14.55	16.19	17.84	19.49	21.14	
	6'	7"	8"	763	19.53	21.21	22.90	24.59	26.28	
	7'	7½	8½	1975	26.98	28.66	28.91	30.14	31.86	
6'	3'	6"	7"	214	9.03	10.99	12.91	14.86	16.79	
	4'	6"	7"	328	11.78	13.69	15.60	17.54	19.48	
	5'	6"	7"	463	14.85	16.80	18.72	20.68	22.60	
	6'	7"	8"	763	19.83	21.82	23.79	25.78	27.74	
	7'	7½	8½	1975	25.28	27.30	29.31	31.33	33.35	
	8'	8"	9"	1872	31.70	33.74	35.75	37.79	39.81	
7'	4'	6"	7"	328	12.04	14.31	16.54	18.81	21.02	
	5'	6"	7"	463	15.15	17.43	19.65	21.93	24.13	
	6'	7"	8"	763	20.14	22.44	24.69	26.99	29.24	
	7'	7½	8½	1975	25.59	27.91	30.21	32.53	34.83	
	8'	8"	9"	1872	32.02	34.36	36.66	38.99	41.31	
8'	4'	6"	7"	328	12.35	14.95	17.49	20.08	22.57	
	5'	7"	7"	463	16.05	18.47	21.04	23.96	26.37	
	6'	7"	8"	763	20.95	23.07	25.66	28.24	30.77	
	7'	7½	8½	1975	25.90	28.54	31.18	33.78	36.32	
	8'	8"	9"	1872	32.33	34.97	37.56	40.21	42.80	
9'	5'	7"	7"	963	16.37	19.92	22.18	25.02	27.91	
	6'	7½	8"	763	21.16	24.13	27.02	29.89	32.81	
	7'	7½	8½	1975	26.21	29.18	32.08	34.94	37.86	
	8'	8"	9"	1872	32.63	35.61	38.61	41.37	44.29	
10'	5'	7"	7"	963	16.69	19.96	23.14	26.27	29.47	
	6'	7½	8'	763	21.98	24.77	27.99	31.13	34.34	
	7'	7½	8½	1975	26.53	29.82	33.04	36.19	39.42	
	8'	8"	9"	1872	32.95	36.25	39.96	42.62	45.85	
11'	6'	8"	8"	763	22.18	25.83	29.35	32.84	——	
	7'	8"	8½	1975	27.33	30.99	34.51	38.01	——	
	8'	8"	9"	1872	33.26	36.91	40.43	43.93	——	
12'	6'	8"	8"	763	22.50	26.51	30.85	34.19	——	
	7'	8"	8½	1975	27.66	31.66	35.49	39.35	——	
	8'	8"	9"	1872	33.58	37.58	41.41	45.27	——	

⊕ For reinforcing steel in Headwalls and Aprons, see Drawing Nos. of Barrel Sections listed below.

GENERAL NOTES:-

CONCRETE:- All concrete to be Class S, and shall be poured in the dry. All exposed corners to have ¾" chamfers.

REINFORCING STEEL:- Reinforcing steel to be deformed bars of intermediate or hard grade.

CONSTRUCTION JOINTS:- Construction joints between wingwall, footings and sidewalls shall be only where shown on plans.

SPECIFICATIONS:- Arkansas State Highway Commission Standard Specifications for Highway Construction and applicable Special Provisions.

UNIT STRESSES:-

Class S Concrete (n=10) 1200 #/□"
Reinforcing Steel 20,000 #/□"

NOTE:-

This drawing to be used in conjunction with Standard Barrel Sections, Drawing Nos.:-

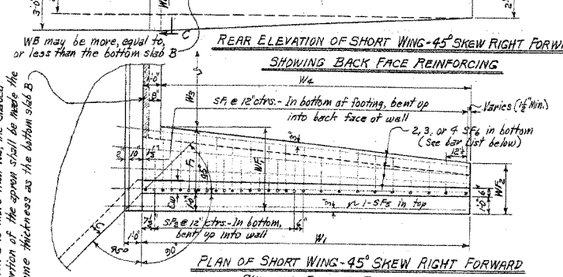
SINGLES	DOUBLES	TRIPLES	QUADRUPLES	QUINTUPLES
R-145X-0	R-245X-01	R-345X-01	R-445X-01	R-545X-01
	R-245X-02	R-345X-02	R-445X-02	R-545X-02
R-145X-1	R-245X-1	R-345X-1	R-445X-1	
	R-245X-2	R-345X-2		

CLASS S CONCRETE

ARKANSAS STATE HIGHWAY COMMISSION
DETAILS OF STANDARD WINGS
FOR
REINFORCED CONCRETE BOX CULVERTS
45° SKEW

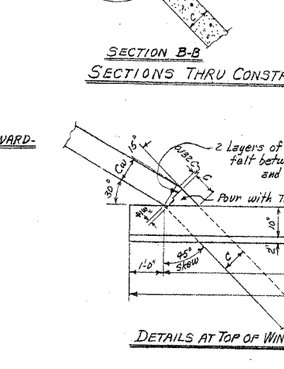
4', 5', 6', 7', 8', 9', 10', 11' & 12' SPANS — 3:1 SLOPES
SINGLES, DOUBLES, TRIPLES, QUADRUPLES & QUINTUPLES — ALL DEPTHS OF COVER FOR H= 8'-0" OR LESS

STANDARD DRAWING No. W-X453-1

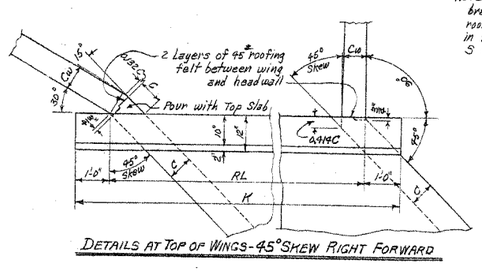


PLAN OF SHORT WING - 45° SKEW RIGHT FORWARD SHOWING FOOTING REINFORCING

REAR ELEVATION OF SHORT WING - 45° SKEW RIGHT FORWARD - SHOWING BACK FACE REINFORCING

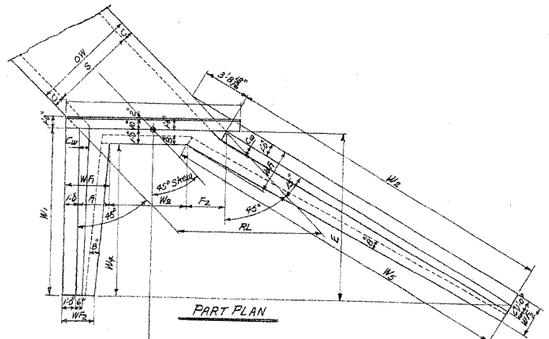


SECTIONS THRU CONSTRUCTION JOINTS



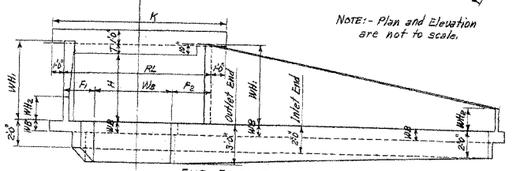
DETAILS AT TOP OF WINGS - 45° SKEW RIGHT FORWARD

NOTE:- Payment for the membrane waterproofing and roofing felt to be included in the price bid for Class S Concrete.



PART PLAN

NOTE:- Plan and Elevation are not to scale.



END ELEVATION

SINGLE BARREL CULVERT - 45° SKEW RIGHT FORWARD

Details of Culvert with 45° Skew Left Forward is reversed, see Drawing No. W-X45.

TYPICAL WING DETAILS

NOTE:-

For remainder of General Plans and Elevations of Single, Double, Triple, Quadruple and Quintuple Span Culverts, see Std. Drawing No. W-X45.
For values of RL, H and W3 for each box, see above Std. also.

MEMBRANE:- A membrane waterproofing 12" wide, consisting of three mopings of waterproofing asphalt and two intermediate layers of treated cotton fabric, shall be applied to the back face of wing to cover the construction joints in wings.

BAR LIST FOR ONE SHORT AND ONE LONG WING — 2 EACH REQUIRED

CLEAR HEIGHT	WING LOCATION	SF1 & LF1 BENT: In bottom of footing, bent up into back face of wing. One bar (or two bars) of each length.						SF2 & LF2 BENT: In bottom of footing, bent up into back face of wing, Alt. with F1 bars						SF3 & LF3 STRAIGHT: Longitudinal in top of wing footing heel.			SF4 & LF4 STRAIGHT: Longitudinal in bottom of wing footing toe.			SH1 & LH1 STRAIGHT: Horizontal in back face of wing.			SH2 & LH2 STRAIGHT: Horizontal in back face of wing. One bar of each length. *				SH3 & LH3 STRAIGHT: In back face of wing at top - on slope			SH4 & LH4 BENT: Dowels thru construction joint at headwall.				BAR BENDING DIAGRAM	QUANTITY: REINFORCING STEEL PER WING - LBS.	
		LENGTHS VARY																																				
H	SHORT OR LONG	SIZE	SPACING	NO. REQD	MIN.	MAX.	X MIN.	X MAX.	Y MIN.	Y MAX.	SIZE	SPACING	NO. REQD	LENGTH	X	Y	SIZE	NO. REQD	LENGTH	SIZE	NO. REQD	LENGTH	SIZE	SPACING	NO. REQD	LENGTH	SIZE	SPACING	NO. REQD	LENGTH	SIZE	NO. REQD	LENGTH	SIZE	SPACING	NO. REQD	LENGTH	X		SHORT WING	LONG WING
2'	Short	#3	12"	7	1'-7"	3'-11"	0'-8"	1'-0"	1'-0"	3'0"	#3	12"	1	8'-8"	#3	2	8'-0"	#3	1	6'-3"	#3	12"	1	6'-3"	#3	12"	1	—	3'-8"	#3	1	6'-7"	#3	12"	2	2'-8"	1'-9"		29.4	46.3
	Long	#3	12"	14	1'-5"	5'-11"	0'-8"	1'-0"	0'-10"	3'0"	#3	12"	1	17'-6"	#3	2	16'-6"	#3	1	12'-11"	#3	12"	1	12'-11"	#3	12"	1	—	6'-6"	#3	1	12'-11"	#3	12"	2	"	"			
3'	Short	#3	12"	9	2'-1"	5'-3"	0'-10"	1'-4"	1'-4"	4'0"	#3	12"	1	10'-8"	#3	2	10'-0"	#3	1	8'-3"	#3	12"	1	8'-3"	#3	12"	2	6'-9"	3'-9"	#3	1	8'-8"	#3	12"	3	"	"		36.8	70.3
	Long	#3	12"	18	1'-11"	5'-3"	0'-10"	1'-4"	1'-2"	4'0"	#3	12"	1	21'-6"	#3	2	20'-6"	#3	1	16'-9"	#3	12"	1	16'-9"	#3	12"	2	12'-6"	6'-6"	#3	1	16'-10"	#3	12"	3	"	"			
4'	Short	#3	12"	11	2'-6"	6'-7"	0'-11"	1'-8"	1'-8"	5'0"	#3	12"	1	12'-4"	#3	3	12'-0"	#3	1	10'-3"	#3	12"	1	10'-3"	#3	12"	3	9'-3"	3'-9"	#3	1	10'-9"	#3	12"	4	"	"		55.9	107.9
	Long	#3	12"	22	2'-4"	6'-6"	0'-11"	1'-7"	1'-6"	5'-0"	#3	12"	1	25'-6"	#3	3	24'-6"	#3	1	20'-8"	#3	12"	1	20'-8"	#3	12"	3	17'-9"	6'-6"	#3	1	21'-0"	#3	12"	4	"	"			
5'	Short	#3	12"	13	2'-10"	7'-11"	1'-0"	2'-0"	2'-0"	6'0"	#3	12"	1	14'-6"	#3	3	14'-0"	#3	1	12'-3"	#3	12"	2	12'-3"	#3	12"	3	9'-3"	3'-9"	#3	1	12'-10"	#3	12"	4	"	"		72.7	153.7
	Long	#3	12"	26	2'-9"	7'-10"	1'-0"	1'-11"	1'-10"	6'0"	#3	12"	6	31'-6"	#3	4	30'-6"	#3	2	25'-6"	#3	12"	2	24'-10"	#3	12"	3	18'-6"	6'-6"	#3	2	25'-6"	#3	12"	5	"	"			
6'	Short	#4	12"	15	3'-4"	9'-4"	1'-2"	2'-4"	2'-5"	7'-1"	#3	12"	9	16'-6"	#3	3	16'-0"	#3	2	14'-3"	#3	12"	2	14'-3"	#3	12"	4	12'-3"	3'-9"	#3	1	15'-0"	#3	12"	5	"	"		127.6	253.9
	Long	#4	12"	30	3'-4"	9'-3"	1'-2"	2'-3"	2'-3"	7'-1"	#3	12"	6	9'-6"	1'-4"	3'-5"	#3	2	17'-8"	#3	6	18'-0"	#3	12"	4	15'-0"	#3	12"	4	24'-6"	6'-6"	#3	2	15'-6"	#3	12"	6	2'-8"	1'-9"			
7'	Short	#4	12"	17	3'-11"	10'-10"	1'-3"	2'-10"	2'-9"	8'-1"	#4	12"	6	5'-6"	1'-7"	4'-0"	#4	1	18'-6"	#4	4	18'-0"	#4	12"	2	16'-8"	#4	12"	5	15'-3"	3'-8"	#4	1	17'-1"	#4	12"	7	3'-6"	1'-9"		246.5	491.1
	Long	#4	12"	34	3'-9"	10'-8"	1'-3"	2'-8"	2'-7"	8'-1"	#4	12"	12	5'-6"	1'-7"	4'-0"	#4	2	19'-8"	#4	8	20'-9"	#4	12"	4	17'-2"	#4	12"	5	30'-6"	6'-6"	#4	2	17'-5"	#4	12"	7	"	"			
8'	Short	#4	12"	19	4'-6"	12'-5"	1'-5"	3'-4"	3'-3"	9'-2"	#4	12"	9	6'-6"	1'-10"	4'-9"	#4	1	20'-6"	#4	4	20'-0"	#4	12"	3	18'-3"	#4	12"	5	15'-3"	3'-9"	#4	1	19'-8"	#4	12"	8	"	"		312.5	623.6
	Long	#4	12"	38	4'-4"	12'-3"	1'-5"	3'-3"	3'-0"	9'-2"	#4	12"	16	6'-6"	1'-10"	4'-9"	#4	2	21'-8"	#4	8	22'-3"	#4	12"	4	19'-2"	#4	12"	5	30'-6"	6'-6"	#4	2	19'-6"	#4	12"	8	3'-6"	1'-9"			

NOTE:- Bars for short wing shall be marked with prefix letter "S", while those for long wing shall be marked with letter "L".

* Length without splice. Bars over 28'-0" length may be spliced. (1'-8" lap)

REVISIONS:- Membrane Added. 5-10-66 W.C.H.

Designed By:- W.C.H. 5-13-63 Checked By:- J.S.M. 7-21-64
Drawn By:- W.C.H. 6-5-64 Checked By:- J.S.M. 7-21-64
Quantities By:- W.C.H. 7-2-64 Checked By:- J.S.M. 7-21-64

RESHOT 3-9-93

FED. ROAD No.	STATE	FED. AID PROJECT	FISCAL YEAR	SHEET No.	TOTAL SHEETS
6	ARK.			291	
JOB No.					

BAR LIST FOR BARREL SECTION 60'-0" IN LENGTH - TWO 45° SKEWED ENDS.

DEPTH OF COVER D	CLEAR SPAN S	CLEAR HEIGHT H	'a' bars STRAIGHT: In Top and Bottom Slabs of Barrel. SIZE	'a' bars STRAIGHT: In Top and Bottom Slab of Barrel-(Four of each Length) SPACING	'a' bars STRAIGHT: In Top and Bottom Slab of Barrel-(Four of each Length) NO. REQD	'a' bars STRAIGHT: In Top and Bottom Slab of Barrel-(Four of each Length) LENGTH	'b' bars BENT - See Diagrams below: In Top and Bottom Slabs of Barrel-Hooked. Alternate with 'a' bars SIZE	'b' bars BENT: In Top and Bottom Slabs of Barrel- one end hooked. (Four of each Length) Alternate with 'a' bars. SPACING	'b' bars BENT: NO. REQD	'b' bars BENT: LENGTH MAX.	'b' bars BENT: LENGTH MIN.	'b' bars BENT: X MAX.	'b' bars BENT: X MIN.	'd' bars STRAIGHT: Longitudinal in Top Slab of Barrel. SIZE	'd' bars STRAIGHT: Longitudinal in Top Slab of Barrel. SPACING	'd' bars STRAIGHT: Longitudinal in Top Slab of Barrel. NO. REQD	'd' bars STRAIGHT: Longitudinal in Top Slab of Barrel. LENGTH	'd1' bars STRAIGHT: Longitudinal in Sidewalls. SIZE	'd1' bars STRAIGHT: Longitudinal in Sidewalls. SPACING	'd1' bars STRAIGHT: Longitudinal in Sidewalls. NO. REQD	'd1' bars STRAIGHT: Longitudinal in Sidewalls. LENGTH	'e' bars STRAIGHT: Longitudinal in Bottom Slab of Barrel. SIZE	'e' bars STRAIGHT: Longitudinal in Bottom Slab of Barrel. SPACING	'e' bars STRAIGHT: Longitudinal in Bottom Slab of Barrel. NO. REQD	'e' bars STRAIGHT: Longitudinal in Bottom Slab of Barrel. LENGTH	'f' bars STRAIGHT: Verticals in Sidewalls. SIZE	'f' bars STRAIGHT: Verticals in Sidewalls. SPACING	'f' bars STRAIGHT: Verticals in Sidewalls. NO. REQD	'f' bars STRAIGHT: Verticals in Sidewalls. LENGTH	'k1' bars In Bottom of Headwall. SIZE	'k1' bars In Bottom of Headwall. NO. REQD	'k1' bars In Bottom of Headwall. LENGTH	'k2' bars In Top of Headwall and Apron. (2 Each) SIZE	'k2' bars In Top of Headwall and Apron. (2 Each) NO. REQD	'k2' bars In Top of Headwall and Apron. (2 Each) LENGTH
0'-0 TO 5'-0 MAXIMUM	4'@4'	2'			104	4'-9"			8	3'-8"	2'-7"																						
		3'			106	4'-9"			8	"	"																						
		4'	#5	15"	104	4'-9"	#6	13"	8	"	"																						
		5'			104	4'-9"			8	"	"																						
		6'			104	4'-11"			8	3'-10"	2'-9"																						
	5'@4'	3'			102	5'-9"			12	4'-8"	2'-6"																						
		4'			102	5'-9"			12	"	"																						
		5'	#6	13"	102	5'-9"	#6	13"	12	"	"																						
		6'			102	5'-11"			12	4'-10"	2'-8"																						
		7'			102	6'-0"			12	4'-11"	2'-9"																						
	6'@4'	3'			110	6'-9"			16	5'-9"	2'-9"																						
		4'			110	6'-9"			16	"	"																						
		5'	#6	12"	110	6'-9"	#6	12"	16	"	"																						
		6'			108	6'-11"			16	5'-11"	2'-11"																						
		7'			108	7'-0"			14	6'-0"	3'-0"																						
		8'			108	7'-1"			16	6'-1"	3'-1"																						
	0'-0 TO 5'-0 MAXIMUM	9'			116	7'-9"			24	6'-10"	2'-9"																						
		5'			116	7'-9"			24	"	"																						
		6'	#6	11"	116	7'-11"	#6	11"	24	7'-0"	2'-10"																						
		7'			116	8'-0"			24	7'-1"	2'-11"																						
		8'			116	8'-1"			24	7'-2"	3'-0"																						
		9'			116	8'-2"			24	7'-4"	2'-9"																						
	8'@5'	4'			106	8'-9"			24	7'-9"	2'-9"																						
		5'			104	8'-11"			24	7'-11"	2'-11"																						
		6'	#7	12"	104	8'-11"	#6	12"	24	"	"																						
		7'			104	9'-0"			24	8'-0"	3'-0"																						
		8'			104	9'-1"			24	8'-1"	3'-1"																						
		9'			104	9'-3"			24	8'-3"	3'-3"																						
		10'			104	9'-5"			28	8'-6"	2'-5"																						
	9'@5'	5'			112	9'-11"			28	9'-0"	2'-7"																						
		6'			112	10'-0"			32	9'-1"	2'-8"																						
		7'	#7	11"	112	10'-0"	#6	11"	32	"	"																						
		8'			112	10'-1"			32	9'-2"	2'-9"																						
		9'			112	10'-3"			32	9'-4"	2'-11"																						
		10'			110	10'-5"			32	9'-6"	3'-1"																						
		11'			110	10'-7"			32	9'-8"	3'-3"																						
		5'			100	10'-11"			32	9'-11"	2'-1"																						
		6'			100	11'-0"			32	10'-0"	3'-0"																						
	10'@5'	7'			100	11'-0"			32	"	"																						
		8'	#7	11"	100	11'-1"	#6	11"	32	10'-1"	3'-1"																						
		9'			100	11'-3"			32	10'-3"	3'-3"																						
		10'			100	11'-5"			36	10'-5"	2'-5"																						
		11'			100	11'-7"			36	10'-7"	2'-7"																						
		12'			100	11'-9"			36	10'-9"	2'-9"																						
		6'			108	12'-1"			90	11'-2"	2'-11"																						
		7'			106	12'-1"			90	"	"																						
		8'			106	12'-1"			90	"	"																						
	1@10'	9'	#7	11"	106	12'-3"	#7	11"	90	11'-4"	3'-1"																						
		10'			106	12'-5"			90	11'-6"	3'-3"																						
		11'			106	12'-7"			90	11'-8"	2'-6"																						
		12'			106	12'-9"			90	11'-10"	2'-8"																						
		6'			96	13'-1"			90	12'-1"	3'-1"																						
		7'			96	13'-1"			90	"	"																						
		8'			96	13'-1"			90	"	"																						
	1@12'	9'	#7	12"	96	13'-3"	#8	12"	90	12'-3"	3'-3"																						
		10'			96	13'-5"			90	12'-5"	2'-5"																						
		11'			96	13'-7"			90	12'-7"	2'-7"																						
		12'			96	13'-9"			90	12'-9"	2'-9"																						

These bars are in the skewed portion of barrel only. The length of 'a' bars and overall length X of 'b' bars vary by 1'-1" for 18" spacing, 1'-0" for 12" spacing and 0'-11" for 11" spacing.

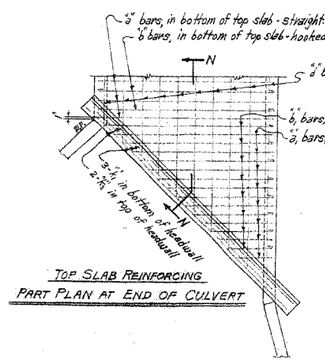
BAR SIZE	PIN DIAM	K	ADD FOR HOOKS	BENDING DIAGRAMS FOR BARS 'b' & 'b1'
#6	3"	5"	1'-2"	2 HOOKS: 'b' bars — Pin diam. — X
#7	3½"	5⅝"	1'-4"	
#6	3"	5"	0'-7"	1 HOOK: 'b1' bars — Pin diam. — X
#7	3½"	5⅝"	0'-8"	

NOTE:- Dimensions are to centers of bars ('b' and 'b1')

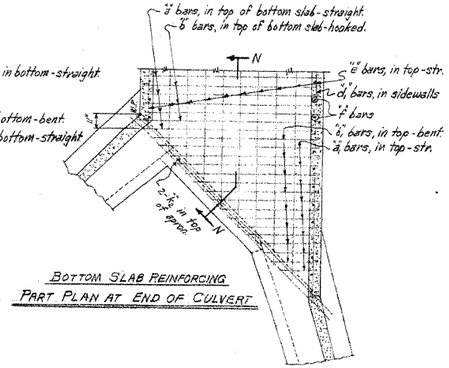
DOWEL BARS FOR TWO HEADWALLS

SPAN	SIZE	SPACING	NO. REQD	LENGTH	X	Dowel bars 'f' in Two Headwalls
4'	#4	12"±	16	2'-6"	1'-3"	
5'	#4	12"±	18	2'-7"	1'-3½"	
6'	#4	12"±	22	2'-8"	1'-4"	
7'	#4	12"±	24	2'-9"	1'-4½"	
8'	#4	12"±	28	2'-11"	1'-5½"	
9'	#4	12"±	30	3'-0"	1'-6"	
10'	#4	12"±	34	3'-1"	1'-6½"	
11'	#4	12"±	36	3'-2"	1'-7"	
12'	#4	12"±	40	3'-3"	1'-7½"	

Designed by:- W.C.H. 1-23-63.
Drawn by:- W.C.H. 7-10-64
Quantities by:- W.C.H. 9-30-64
Checked by:- A.H.S. 5-8-63
Checked by:-
Checked by:-

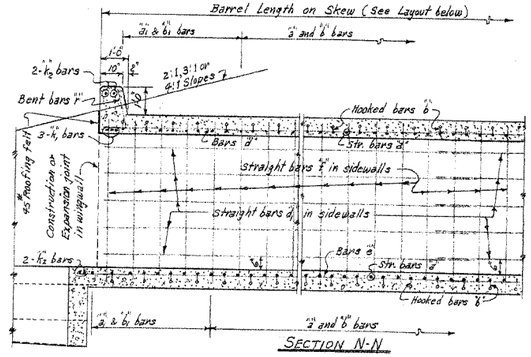


TOP SLAB REINFORCING
PART PLAN AT END OF CULVERT

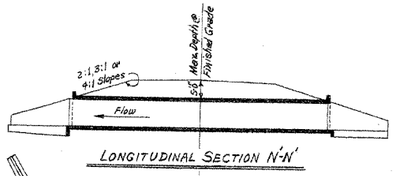


BOTTOM SLAB REINFORCING
PART PLAN AT END OF CULVERT

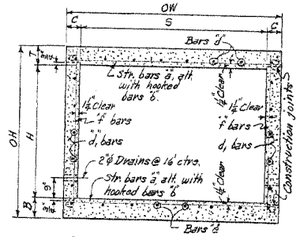
NOTE:- For Details of Standard Wings and bar lists, see Drawing No. W-X452-1 or W-X452-2; W-X453-1 or W-X453-2, and W-X454-1 or W-X454-2. Also W-X45.



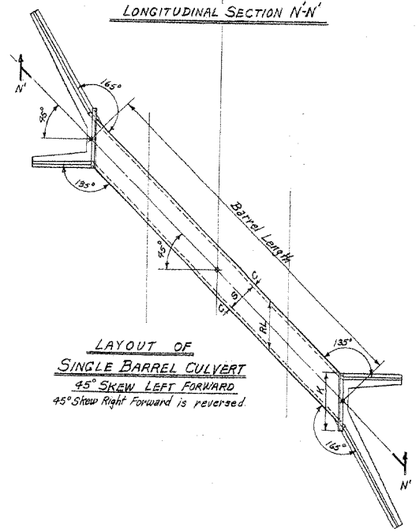
SECTION N-N



LONGITUDINAL SECTION N'-N'



TYPICAL SECTION M-M



LAYOUT OF
SINGLE BARREL CULVERT
45° SKEW LEFT FORWARD
45° Skew Right Forward is reversed.

DESIGN LIVE LOAD
H20-S16 LOADING A.A.S.H.O. 1961
AND
SPECIAL MILITARY LOADING
Two 24,000 Lb. Axles @ 4'-0" ctrs.
UNIT STRESSES:-
Class S Concrete (n=10) 1200 #/□"
Reinforcing Steel 20,000 #/□"

NOTE:- This drawing to be used in conjunction with Standard Wing Drawing Nos. W-X452-1 or W-X452-2, W-X453-1 or W-X453-2, and W-X454-1 or W-X454-2. Also W-X45.

GENERAL NOTES

CONCRETE:- All concrete to be Class S, and shall be poured in the dry. All exposed corners to have ¾" chamfers.
REINFORCING STEEL:- Reinforcing to be deformed bars of intermediate or hard grade.
BAR LAP:- In computing the quantities of steel from the tables add one lap for each additional 33'-0" length of barrel over 32'-0". Lap longitudinal bars 30 diameters min.
CONSTRUCTION JOINTS:- Construction joints between wingwalls, sidewalls, and slabs shall be only where shown on plans.
SPECIFICATIONS:- Arkansas State Highway Commission Standard Specifications for Highway Construction and applicable Special Provisions.

MAX. DESIGN DEPTH OF COVER	CLEAR SPANS	BARREL DIMENSIONS: SQ. FT. OPENING	OVERALL WIDTH	THICKNESS OF TOP SLAB	THICKNESS OF SIDEWALLS	THICKNESS OF BOTTOM SLAB	OVERALL HEIGHT	ROADWAY LENGTH	LENGTH OF HEADWALL	* QUANTITIES: CLASS S CONC. PER LIN. FT. OF BARREL	REINFORCING STEEL: TOTAL WT. PER LENGTH OF BARREL	REINFORCING STEEL: PER LIN. FT. OF BARREL	REINFORCING STEEL: ADDITIONAL PER LAP
D	S	H	OW	T	C	B	OH	RL	K	CU.YD.	LB.	LB.	LB.
5'-0"	2'	8	5'-0"	6"			3'-1½"	7'-0⅜"	9'-0⅜"	0.282	2635	91.99	17.95
	3'	12	5'-0"	6"			4'-1½"	"	"	0.413	2797	99.16	19.62
	4'	16	5'-0"	6"	7"	6"	5'-1½"	"	"	0.556	2958	96.83	21.29
	5'	20	5'-0"	6"			6'-1½"	"	"	0.699	3120	98.50	22.96
	6'	24	5'-8"	7"			7'-1½"	7'-3⅝"	9'-3⅝"	0.974	3336	52.96	24.63
	3'	15	6'-0"	6"			4'-2½"	8'-5⅛"	10'-5⅛"	0.380	3572	55.55	22.19
	4'	20	6'-0"	6"			5'-2½"	"	"	0.497	3733	58.23	23.86
	5'	25	6'-0"	6"	7"	7"	6'-2½"	"	"	0.959	3895	60.90	25.53
	6'	30	6'-8"	7"			7'-2½"	8'-8⅜"	11'-0⅜"	0.535	4115	64.99	27.20
	7'	35	6'-8"	7½"			8'-2½"	8'-10⅝"	10'-10⅝"	0.609	4308	67.63	28.87
	3'	18	7'-0"	6"			4'-3½"	9'-10⅝"	11'-10⅝"	0.996	4260	66.29	29.76
	4'	24	7'-0"	6"			5'-3½"	"	"	0.983	4921	68.96	26.93
	5'	30	7'-0"	6"			6'-3½"	"	"	0.520	4583	71.64	28.10
	6'	36	7'-2"	7"			7'-3½"	10'-1⅝"	12'-1⅝"	0.602	4813	75.31	29.77
	7'	42	7'-8"	7½"			8'-3½"	10'-3"	12'-3"	0.671	5008	78.99	31.44
	8'	48	7'-8"	8"			9'-3½"	10'-4½"	12'-4½"	0.746	5610	89.97	33.11
	4'	28	8'-0"	6"			5'-5"	11'-3⅝"	13'-3⅝"	0.568	5303	81.82	29.01
	5'	35	8'-0"	6"			6'-5"	"	"	0.605	5469	84.00	30.68
	6'	42	8'-8"	7"			7'-5"	11'-6⅝"	13'-6⅝"	0.688	5700	87.76	32.35
	7'	49	8'-8"	7½"			8'-5"	11'-8"	13'-8"	0.767	5901	90.88	34.02
	8'	56	8'-8"	8"			9'-5"	11'-9⅝"	13'-9⅝"	0.832	6219	96.65	35.69
	9'	63	8'-8"	8½"			10'-5"	12'-0⅛"	14'-0⅛"	0.996	6976	105.59	37.36
	4'	32	9'-0"	7"			5'-7"	12'-3⅝"	14'-3⅝"	0.676	6196	95.26	33.32
	5'	40	9'-2"	7"			6'-7"	12'-5⅛"	14'-5⅛"	0.754	6423	99.12	34.99
	6'	48	9'-2"	7½"			7'-7"	"	"	0.797	6581	101.79	36.66
	7'	56	9'-3"	7½"	9½"	8½"	8'-7"	13'-1"	15'-1"	0.867	6788	105.05	38.33
	8'	64	9'-4"	8"			9'-7"	13'-2⅝"	15'-2⅝"	0.942	7141	110.81	40.00
	9'	72	9'-6"	8½"			10'-7"	13'-5⅛"	15'-5⅛"	1.057	7701	119.32	41.67
	10'	80	9'-8"	9"			11'-7"	13'-8"	15'-8"	1.184	8121	126.67	43.34
	5'	95	10'-8"	7"			6'-8"	14'-2⅛"	16'-2⅛"	0.994	7535	114.72	37.56
	6'	60	11'-8"	7½"			7'-8"	14'-4"	16'6"	0.910	7745	118.04	39.23
	7'	70	11'-8"	7½"			8'-8"	"	"	0.857	7906	120.71	40.90
	8'	80	11'-9"	8"	10"	10"	9'-8"	14'-10⅝"	16'-10⅝"	1.147	9308	142.55	45.14
	9'	90	11'-6"	9"			10'-8"	14'-10⅝"	16'-10⅝"	1.263	9891	151.92	46.81
	10'	100	11'-8"	10"			11'-8"	15'-1"	17'-1"	1.391	10,310	158.89	48.48
	11'	110	11'-10"	11"			12'-8"	15'-3⅝"	17'-3⅝"	1.532	10,785	166.71	50.15
	12'	120	12'-0"	12"			13'-8"	15'-6⅛"	17'-6⅛"	1.685	11,529	178.69	51.82
	6'	66	12'-8"	8"			7'-10"	17'-5⅝"	19'-5⅝"	1.153	10,378	155.14	46.12
	7'	77	12'-9"	8"			8'-10"	"	"	1.202	10,539	157.83	47.79
	8'	88	12'-9"	8"			9'-10"	"	"	1.252	10,855	163.06	49.46
	9'	99	13'-6"	9"	11"	11"	10'-10"	17'-3⅝"	19'-3⅝"	1.368	11,998	172.60	51.13
	10'	110	13'-9"	10"			11'-10"	17'-11"	19'-11"	1.497	12,886	179.70	52.80
	11'	121	13'-10"	11"			12'-10"	18'-1⅝"	20'-1⅝"	1.638	12,379	187.60	54.47
	12'	132	13'-10"	12"			13'-10"	18'-4⅛"	20'-4⅛"	1.792	13,071	193.79	56.14
	6'	72	13'-6"	8"			8'-0"	18'-10⅝"	20'-10⅝"	1.284	11,980	172.80	48.69
	7'	84	13'-9"	8"			9'-0"	"	"	1.333	11,581	174.87	50.36
	8'	96	13'-9"	8"			10'-0"	"	"	1.383	11,893	180.15	52.03
	9'	108	13'-6"	9"	12"	12"	11'-0"	18'-1⅝"	21'-1"	1.500	12,500	188.85	53.70
	10'	120	13'-8"	10"			12'-0"	19'-3⅝"	21'-3"	1.630	12,948	192.07	55.37
	11'	132	13'-10"	11"			13'-0"	19'-6⅛"	21'-5⅝"	1.772	13,496	200.16	57.04
	12'	144	14'-0"	12"			14'-0"	19'-8⅝"	21'-8⅝"	1.926	14,212	211.95	58.71

* For remainder of quantities see Std. Wing Drawings listed at left.
Total steel quantities listed above include one lap of longitudinal bars.

CLASS S CONCRETE

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF STANDARD BARREL SECTIONS
FOR
REINFORCED CONCRETE BOX CULVERTS
45° SKEW

4,5,6,7,8,9,10,11 & 12 SPANS SINGLES — 2:1, 3:1 OR 4:1 SLOPES UNDER 5'-0" COVER

STANDARD DRAWING NO. R-145X-0