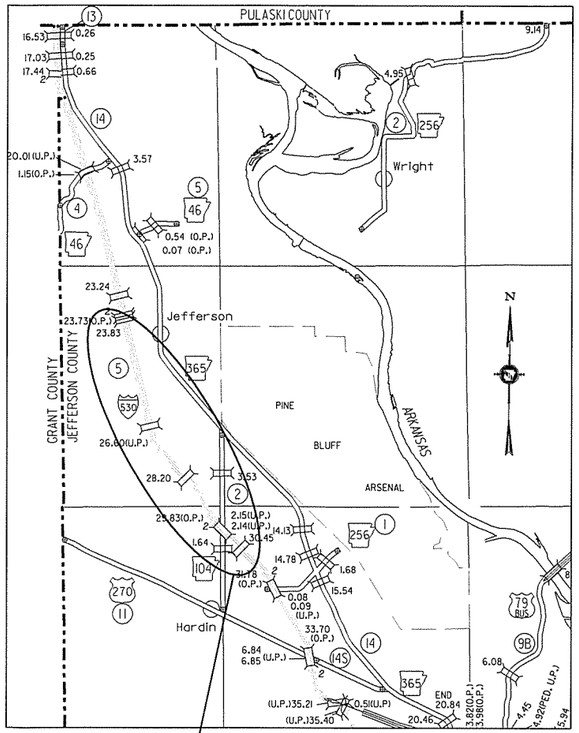
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	1	186
				(2)	JEFFERSON - HWY. 104 (F)			

"A FULLY CONTROLLED ACCESS FACILITY"
ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
CONSTRUCTION PLANS FOR STATE HIGHWAY

JEFFERSON - HWY. 104 (F)

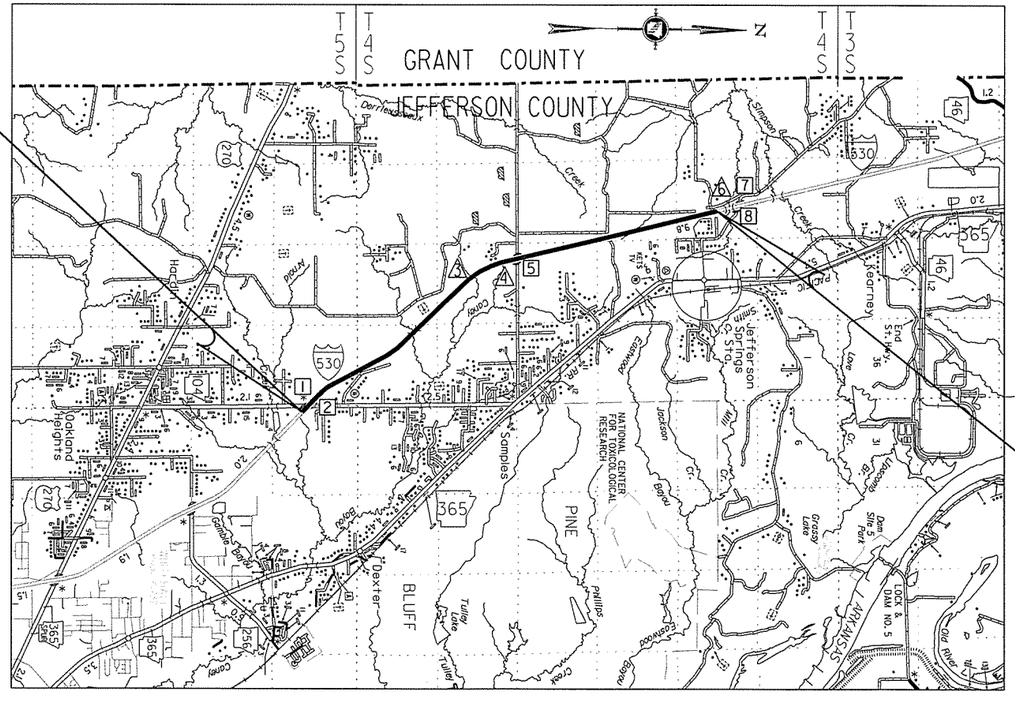
JEFFERSON COUNTY
ROUTE 530 SECTION 5
FED. AID PROJ. BIM-B530(201) & 9050

JOB BB0201



PROJECT LOCATION

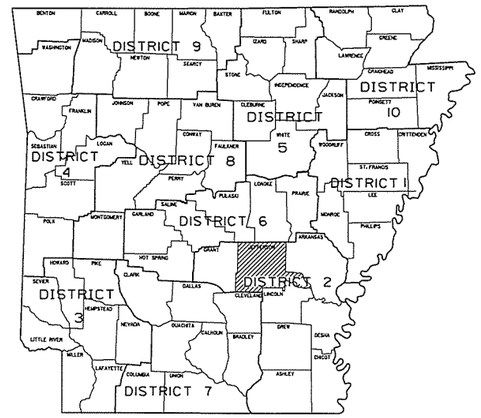
"NOT TO SCALE"



STA. 447+69.51
BEGIN JOB BB0201
LOG MILE = 29.89

RIIW
RIOW

STA. 770+26.77
END JOB BB0201
LOG MILE = 23.76



ARK. HWY. DIST. NO. 2

DESIGN TRAFFIC DATA

DESIGN YEAR	2035
2015 ADT	19,500
2035 ADT	27,500
2035 DHV	3,025
DIRECTIONAL DISTRIBUTION	0.60
TRUCKS	17%
DESIGN SPEED	70 MPH

BRIDGE DATA (FOR INFORMATION ONLY)

1. STA. 447+87.15 BRIDGE END
   IN PLACE 245'-1 1/8" STEEL WITH CONC. DECK
   BR. NO. A5611
   39'-0" CLEAR ROADWAY
   STA. 450+32.24 BRIDGE END
   RETAIN & HYDRODEMOLITION
2. STA. 448+75.16 BRIDGE END
   IN PLACE 245'-1 1/8" STEEL WITH CONC. DECK
   BR. NO. B5611
   39'-0" CLEAR ROADWAY
   STA. 451+20.25 BRIDGE END
   RETAIN & HYDRODEMOLITION
5. C.L. GRAVEL PIT RD.
   STA. 13+66.81 BRIDGE END
   BR. NO. 05646
   IN PLACE 274'-3 1/2" STEEL WITH CONC. DECK
   30'-0" CLEAR ROADWAY
   STA. 16+41.10 BRIDGE END
   RETAIN
7. STA. 770+52.15 BRIDGE END
   IN PLACE 146'-5 9/16" STEEL WITH CONC. DECK
   BR. NO. A5612
   39'-0" CLEAR ROADWAY
   STA. 771+98.61 BRIDGE END
   RETAIN
8. STA. 770+01.39 BRIDGE END
   IN PLACE 146'-5 9/16" STEEL WITH CONC. DECK
   BR. NO. B5612
   39'-0" CLEAR ROADWAY
   STA. 771+47.85 BRIDGE END
   RETAIN

STRUCTURES OVER 20'-0" SPAN (FOR INFORMATION ONLY)

3. STA. 535+50.00
   IN PLACE TRIP. 7'X4'X217'
   R.C. BOX CULVERT 30° LT. FWD SKEW
   NO. X0328 L.M. 28.24
   SPAN = 26.95'
   RETAIN
4. STA. 610+44.00
   IN PLACE QUAD. 6'X4'X267'
   R.C. BOX CULVERT
   L.M. 26.414
   SPAN = 27.00'
   RETAIN
6. STA. 766+80.00
   IN PLACE QUAD. 6'X4'X669'
   R.C. BOX CULVERT 15° LT. FWD SKEW
   NO. X0327 L.M. 23.86
   SPAN = 27.95'
   RETAIN

	BEGIN OF PROJECT	MID-POINT OF PROJECT	END PROJECT
LATITUDE	N 34°18'30"	N 34°20'38"	N 34°23'12"
LONGITUDE	W 92°08'28"	W 92°10'16"	W 92°10'55"

LENGTH MEASURE ALONG C.L. MEDIAN (FOR INFORMATION ONLY)

GROSS LENGTH OF	PROJECT	32257.26	FEET OR	6.109	MILES
NET	" " ROADWAY	32012.17	" "	6.063	"
NET	" " BRIDGES	245.09	" "	0.046	"
NET	" " PROJECT	32257.26	" "	6.109	"

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

P.E. JOB BB0201

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 10887
SCOTT P. THORNSBERRY
1-30-2015

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WORKSPACE: scott.thornsberry
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Baker

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	2	186
				(2)	INDEX OF SHEETS			

INDEX OF SHEETS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
1-30-2015

INDEX OF SHEETS

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2-19-15				2	ARK.			
				JOB NO.		BB0201	3	186
				(2)	GOV. SPECS. & GEN. NOTES			

GOVERNING SPECIFICATIONS

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

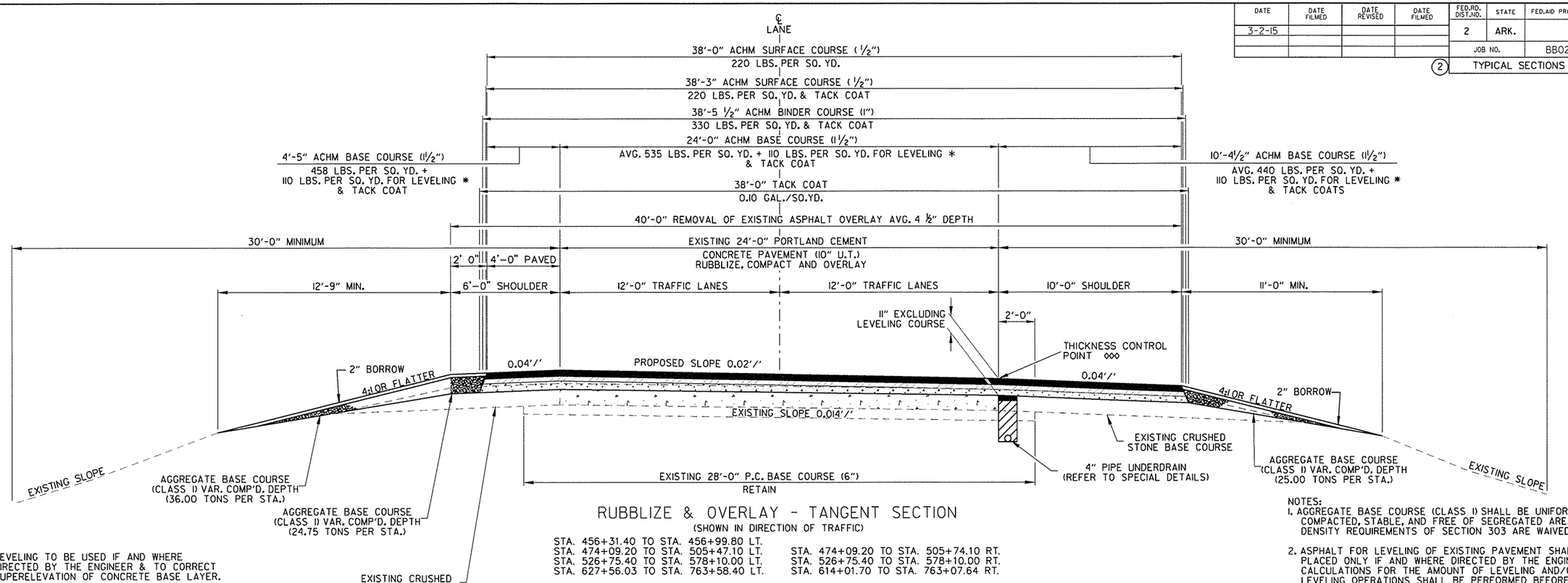
NUMBER	TITLE
ERRATA_____	ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS
FHWA-1273_____	REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS
FHWA-1273_____	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - NOTICE TO CONTRACTORS
FHWA-1273_____	SUPPLEMENT - SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES (23 U.S.C. 140)
FHWA-1273_____	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - GOALS AND TIMETABLES
FHWA-1273_____	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - FEDERAL STANDARDS
FHWA-1273_____	SUPPLEMENT - TRAINING PROGRAM - JOB BB0201
FHWA-1273_____	SUPPLEMENT - POSTERS AND NOTICES REQUIRED FOR FEDERAL-AID PROJECTS
FHWA-1273_____	SUPPLEMENT - WAGE RATE DETERMINATION
108-1_____	LIQUIDATED DAMAGES
410-1_____	CONSTRUCTION REQUIREMENTS AND ACCEPTANCE OF ASPHALT CONCRETE PLANT MIX COURSES
604-1_____	RETROREFLECTIVE SHEETING FOR TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
620-1_____	MULCH COVER
JOB BB0201_____	ASSESSMENT OF WORKING DAYS - REVISED "CALENDAR DAY"
JOB BB0201_____	ASSESSMENT OF WORKING DAYS - SATURDAYS
JOB BB0201_____	AUTOMATED WORK ZONE INFORMATION SYSTEM
JOB BB0201_____	BORROW
JOB BB0201_____	BRIDGE DECK REPAIR
JOB BB0201_____	BROADBAND INTERNET SERVICE FOR ASPHALT CONCRETE PLANT
JOB BB0201_____	BROADBAND INTERNET SERVICE FOR FIELD OFFICE
JOB BB0201_____	CHANNEL POST SIGN SUPPORT
JOB BB0201_____	CONCRETE DITCH PAVING
JOB BB0201_____	DISADVANTAGED BUSINESS ENTERPRISE BIDDER'S RESPONSIBILITIES
JOB BB0201_____	EMPLOYMENT REPORTING
JOB BB0201_____	FURNISH AND OPERATION OF MOBILE SPEED NOTIFICATION SYSTEM
JOB BB0201_____	GOALS FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION
JOB BB0201_____	HIGH PERFORMANCE PAVEMENT MARKING
JOB BB0201_____	HYDRODEMOLITION
JOB BB0201_____	LATEX MODIFIED CONCRETE OVERLAY
JOB BB0201_____	MAINTENANCE OF TRAFFIC
JOB BB0201_____	MANAGEMENT OF HYDRODEMOLITION WASTEWATER
JOB BB0201_____	MANDATORY USE OF INTERNET BIDDING
JOB BB0201_____	MODULAR GLARE SHIELD
JOB BB0201_____	MOTORIST ASSISTANCE PATROL
JOB BB0201_____	OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORT
JOB BB0201_____	PARTNERING REQUIREMENTS
JOB BB0201_____	PERCENT WITHIN LIMITS/PAVEMENT SMOOTHNESS
JOB BB0201_____	PORTABLE CONSTRUCTION LIGHTING
JOB BB0201_____	PROSECUTION AND PROGRESS
JOB BB0201_____	REMOVAL AND DISPOSAL OF GUARDRAIL
JOB BB0201_____	REMOVAL AND DISPOSAL OF IMPACT ATTENUATION BARRIERS
JOB BB0201_____	REMOVAL AND DISPOSAL OF WIRE ROPE SAFETY FENCE
JOB BB0201_____	REMOVAL OF EXISTING ASPHALT OVERLAY
JOB BB0201_____	REMOVING EXISTING PORTLAND CEMENT CONCRETE PAVEMENT
JOB BB0201_____	ROADWAY CONSTRUCTION CONTROL
JOB BB0201_____	RUMBLE STRIP REMOVAL
JOB BB0201_____	SCARIFYING CONCRETE PAVEMENT
JOB BB0201_____	SEQUENCE OF CONSTRUCTION
JOB BB0201_____	SITE USE (A+C METHOD)
JOB BB0201_____	SOIL STABILIZATION
JOB BB0201_____	STORM WATER POLLUTION PREVENTION PLAN
JOB BB0201_____	SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS
JOB BB0201_____	TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
JOB BB0201_____	TRAFFIC CONTROL SUPERVISOR
JOB BB0201_____	TRENCHING AND SHOULDER PREPARATION
JOB BB0201_____	UTILITY ADJUSTMENTS
JOB BB0201_____	VALUE ENGINEERING
JOB BB0201_____	WARM MIX ASPHALT
JOB BB0201_____	WEIGH IN MOTION SCALE
JOB BB0201_____	WELLHEAD PROTECTION
JOB BB0201_____	WIRE ROPE SAFETY FENCE END TERMINAL
JOB BB0201_____	WIRE ROPE SAFETY FENCE (POST REPAIR)
JOB BB0201_____	WIRE ROPE SAFETY FENCE (WRSF) SPECIFICATIONS

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. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A FENCE TO CONTROL LIVESTOCK IN AREAS WHERE PASTURES ARE SEVERED. WIRE FENCE MAY BE CONSTRUCTED INITIALLY, OR IN LIEU THEREOF, THE CONTRACTOR AT HIS OWN EXPENSE, MAY ELECT TO PROVIDE TEMPORARY FENCING SUITABLE TO CONTAIN LIVESTOCK.
7. ALL FLEXIBLE BASE AND ASPHALTIC PAVEMENTS REMOVED SHALL BE PAID FOR UNDER THE ITEM NO. 210 - UNCLASSIFIED EXCAVATION.
8. 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.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
SCOTT P. THORNSBERRY
No.10887
2-19-2015

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
3-2-15				2	ARK.			
				JOB NO.		BB0201	4	186

(2) TYPICAL SECTIONS OF IMPROVEMENT



RUBBLIZE & OVERLAY - TANGENT SECTION

(SHOWN IN DIRECTION OF TRAFFIC)

STA. 456+31.40 TO STA. 456+99.80 LT.
STA. 474+09.20 TO STA. 505+47.10 LT. STA. 474+09.20 TO STA. 505+74.10 RT.
STA. 526+75.40 TO STA. 578+10.00 LT. STA. 526+75.40 TO STA. 578+10.00 RT.
STA. 627+56.03 TO STA. 763+58.40 LT. STA. 614+01.70 TO STA. 763+07.64 RT.

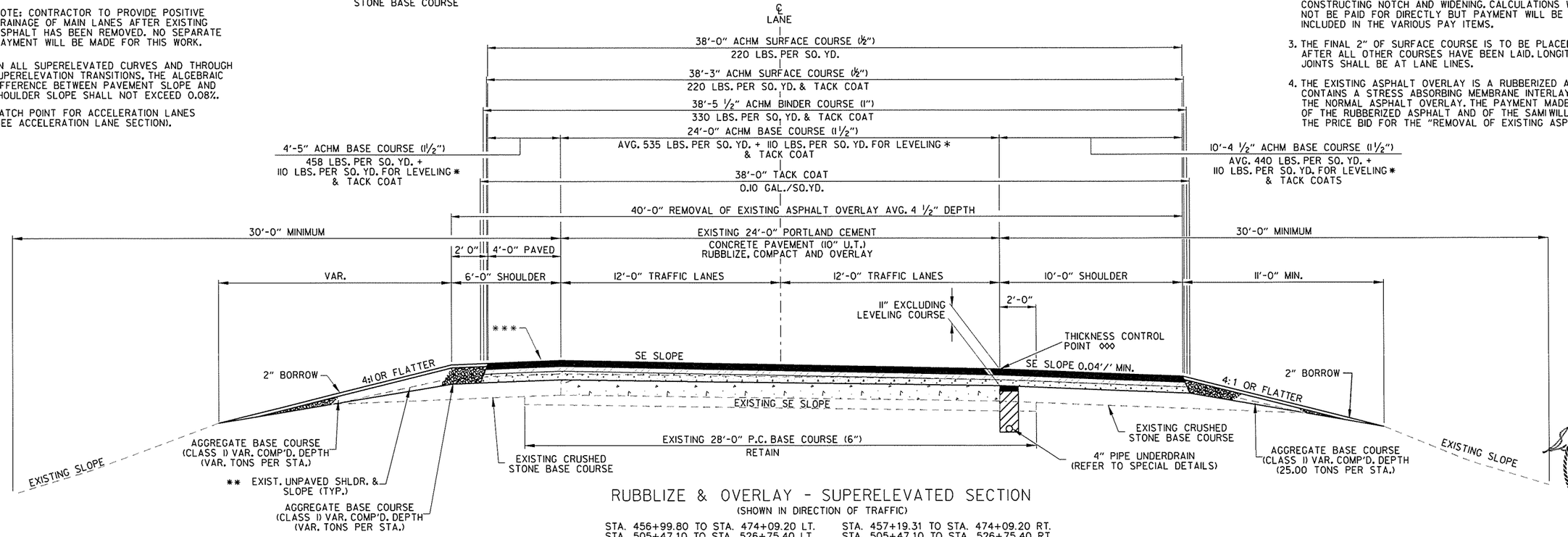
*LEVELING TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER & TO CORRECT SUPERELEVATION OF CONCRETE BASE LAYER.

**NOTE: CONTRACTOR TO PROVIDE POSITIVE DRAINAGE OF MAIN LANES AFTER EXISTING ASPHALT HAS BEEN REMOVED. NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK.

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

◇◇◇MATCH POINT FOR ACCELERATION LANES (SEE ACCELERATION LANE SECTION).

NOTES:
1. AGGREGATE BASE COURSE (CLASS I) SHALL BE UNIFORMLY COMPACTED, STABLE, AND FREE OF SEGREGATED AREAS. THE DENSITY REQUIREMENTS OF SECTION 303 ARE WAIVED.
2. 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. CALCULATIONS WILL NOT BE PAID FOR DIRECTLY BUT PAYMENT WILL BE CONSIDERED INCLUDED IN THE VARIOUS PAY ITEMS.
3. THE FINAL 2" OF SURFACE COURSE IS TO BE PLACED AFTER ALL OTHER COURSES HAVE BEEN LAID. LONGITUDINAL JOINTS SHALL BE AT LANE LINES.
4. THE EXISTING ASPHALT OVERLAY IS A RUBBERIZED ASPHALT WHICH CONTAINS A STRESS ABSORBING MEMBRANE INTERLAYER (SAMI) BENEATH THE NORMAL ASPHALT OVERLAY. THE PAYMENT MADE FOR THE REMOVAL OF THE RUBBERIZED ASPHALT AND OF THE SAMI WILL BE SUBSIDIARY TO THE PRICE BID FOR THE "REMOVAL OF EXISTING ASPHALT OVERLAY."



RUBBLIZE & OVERLAY - SUPERELEVATED SECTION

(SHOWN IN DIRECTION OF TRAFFIC)

STA. 456+99.80 TO STA. 474+09.20 LT. STA. 457+19.31 TO STA. 474+09.20 RT.
STA. 505+47.10 TO STA. 526+75.40 LT. STA. 505+47.10 TO STA. 526+75.40 RT.
STA. 578+10.00 TO STA. 613+56.03 LT. STA. 578+10.00 TO STA. 614+01.70 RT.

STATE OF ARKANSAS
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SCOTT P. THORNSBERRY
3-2-2015

TYPICAL SECTIONS OF IMPROVEMENT

Baker

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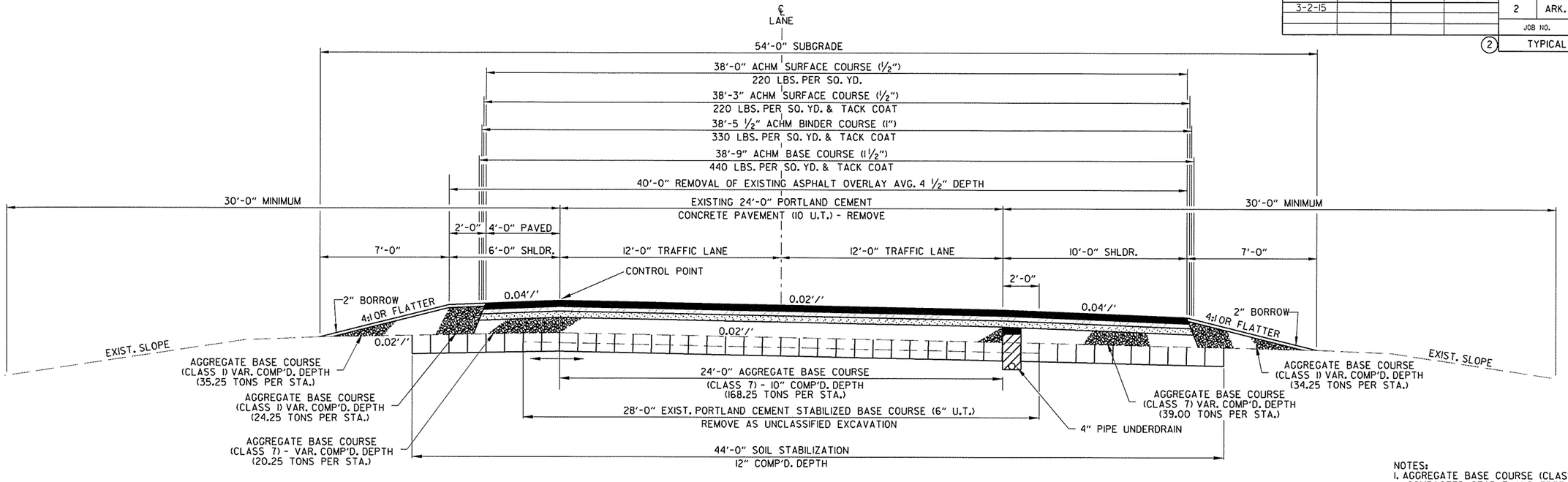
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
3-2-15				2	ARK.			
				JOB NO.		BB0201	5	186

(2) TYPICAL SECTIONS OF IMPROVEMENT



FULL-DEPTH RECONSTRUCTION - TANGENT SECTION

(SHOWN IN DIRECTION OF TRAFFIC)

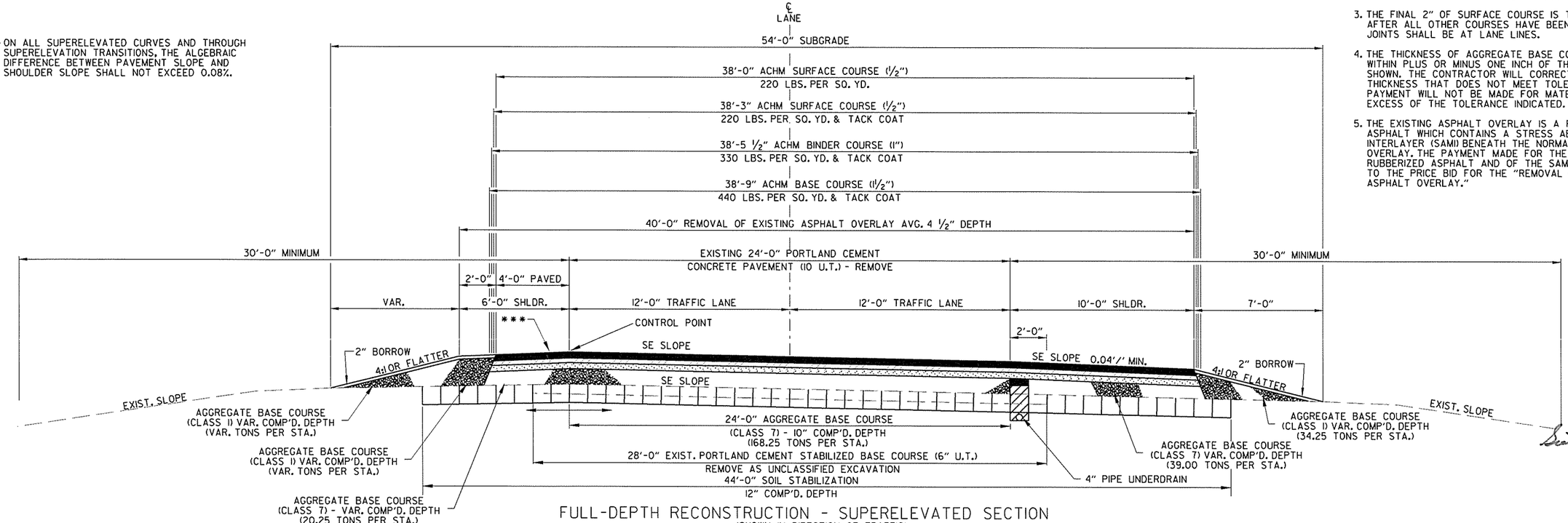
STA. 450+81.40 TO STA. 456+31.40 LT.
STA. 614+01.70 TO STA. 627+56.03 LT.
STA. 763+58.40 TO STA. 770+08.40 LT.

STA. 451+69.31 TO STA. 456+99.80 RT.
STA. 763+07.64 TO STA. 769+57.64 RT.

NOTES:

1. AGGREGATE BASE COURSE (CLASS 1) SHALL BE UNIFORMLY COMPACTED, STABLE, AND FREE OF SEGREGATED AREAS. THE DENSITY REQUIREMENTS OF SECTION 303 ARE WAIVED.
2. 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. CALCULATIONS WILL NOT BE PAID FOR DIRECTLY BUT PAYMENT WILL BE CONSIDERED INCLUDED IN THE VARIOUS PAY ITEMS.
3. THE FINAL 2" OF SURFACE COURSE IS TO BE PLACED AFTER ALL OTHER COURSES HAVE BEEN LAID. LONGITUDINAL JOINTS SHALL BE AT LANE LINES.
4. 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.
5. THE EXISTING ASPHALT OVERLAY IS A RUBBERIZED ASPHALT WHICH CONTAINS A STRESS ABSORBING MEMBRANE INTERLAYER (SAMI) BENEATH THE NORMAL ASPHALT OVERLAY. THE PAYMENT MADE FOR THE REMOVAL OF THE RUBBERIZED ASPHALT AND OF THE SAMI WILL BE SUBSIDIARY TO THE PRICE BID FOR THE "REMOVAL OF EXISTING ASPHALT OVERLAY."

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



FULL-DEPTH RECONSTRUCTION - SUPERELEVATED SECTION

(SHOWN IN DIRECTION OF TRAFFIC)

STA. 613+56.03 TO STA. 614+01.70 LT. STA. 456+99.80 TO STA. 457+19.31 RT.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
SCOTT P. THORNSBERRY
No. 10887
3-2-2015

TYPICAL SECTIONS OF IMPROVEMENT

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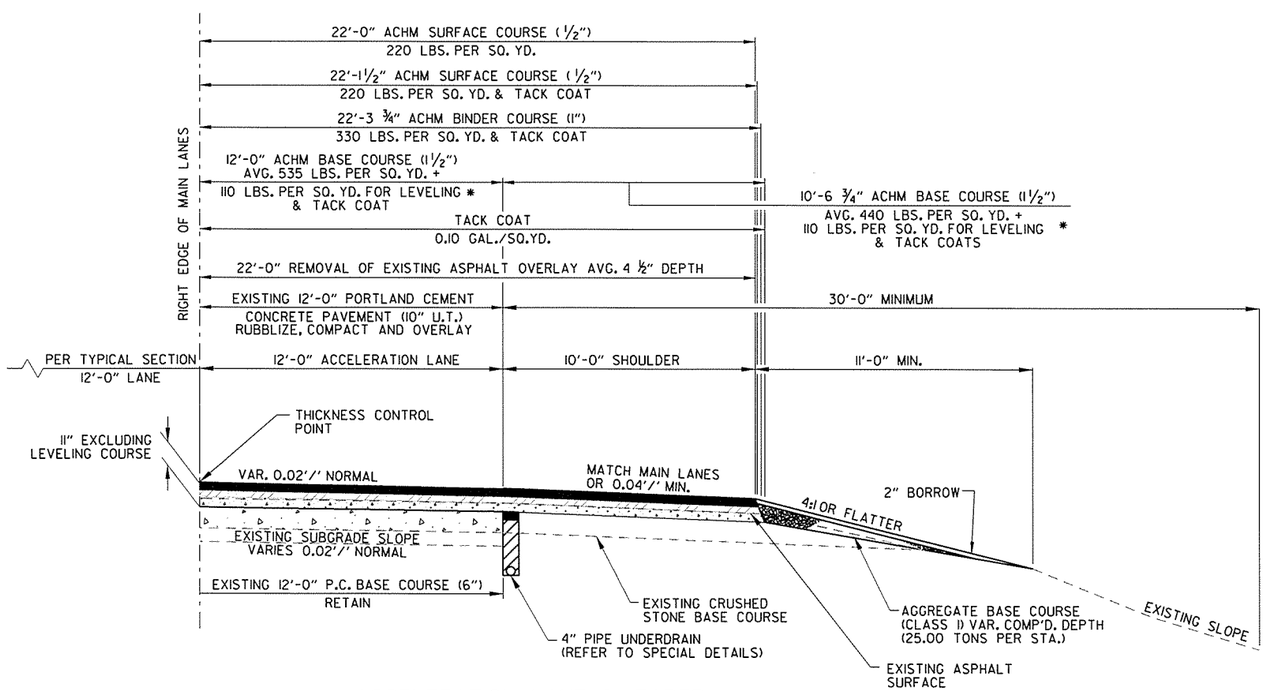
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
3-2-15				2	ARK.			
				JOB NO.		BB0201	6	186

(2) TYPICAL SECTIONS OF IMPROVEMENT



ACCELERATION LANE & TAPER RUBBLIZE & OVERLAY SECTION

(SHOWN IN DIRECTION OF TRAFFIC)

STA. 601+28.12 TO STA. 611+28.12 LT. STA. 462+84.24 TO STA. 472+84.24 RT.
STA. 750+33.27 TO STA. 760+33.27 LT. STA. 630+83.65 TO STA. 640+83.65 RT.

NOTES:

1. AGGREGATE BASE COURSE (CLASS 1) SHALL BE UNIFORMLY COMPACTED, STABLE, AND FREE OF SEGREGATED AREAS. THE DENSITY REQUIREMENTS OF SECTION 303 ARE WAIVED.
2. 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. CALCULATIONS WILL NOT BE PAID FOR DIRECTLY BUT PAYMENT WILL BE CONSIDERED INCLUDED IN THE VARIOUS PAY ITEMS.
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4. 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.
5. THE EXISTING ASPHALT OVERLAY IS A RUBBERIZED ASPHALT WHICH CONTAINS A STRESS ABSORBING MEMBRANE INTERLAYER (SAMI) BENEATH THE NORMAL ASPHALT OVERLAY. THE PAYMENT MADE FOR THE REMOVAL OF THE RUBBERIZED ASPHALT AND OF THE SAMI WILL BE SUBSIDIARY TO THE PRICE BID FOR THE "REMOVAL OF EXISTING ASPHALT OVERLAY."

*LEVELING TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.

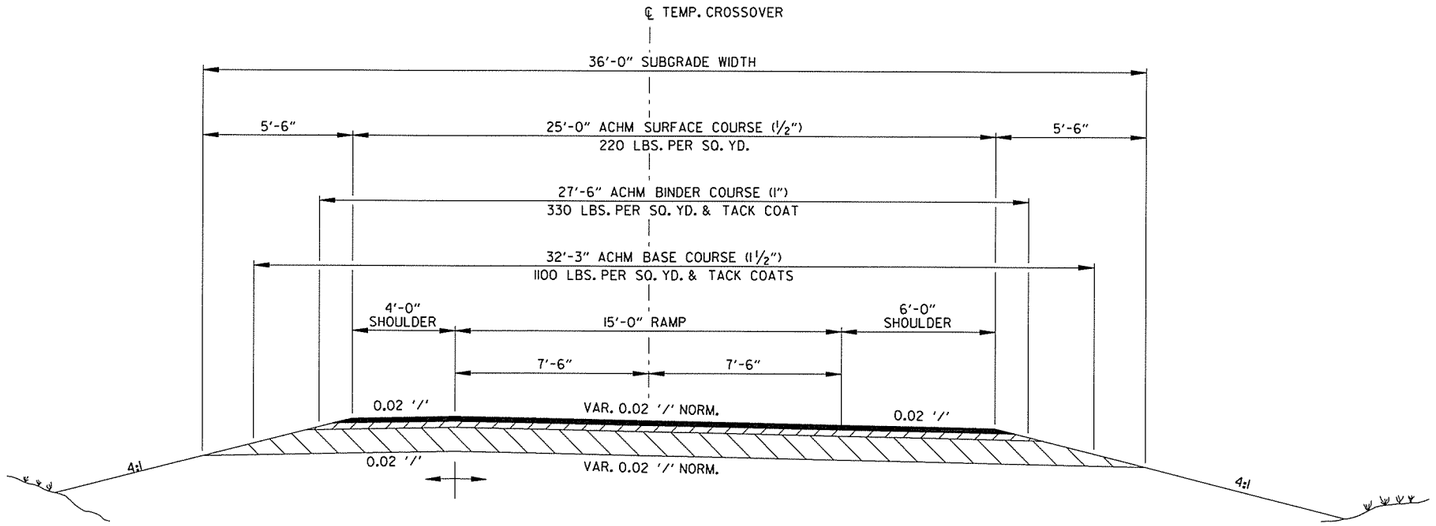
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
3-2-2015

TYPICAL SECTIONS OF IMPROVEMENT

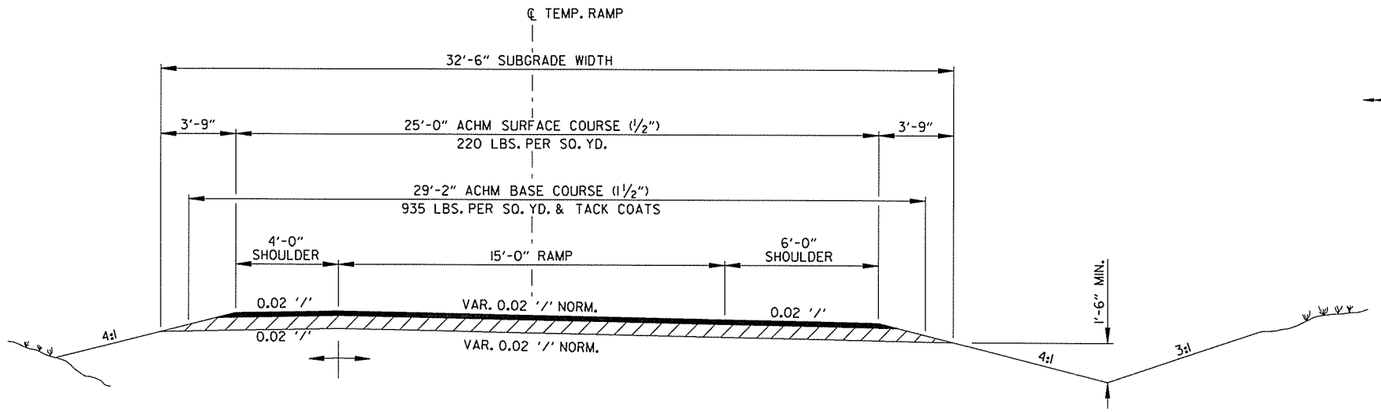
Baker

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	7	186

(2) TYPICAL SECTIONS OF IMPROVEMENT



MAIN LANE TEMP. CROSSOVER FOR MAINTENANCE OF TRAFFIC

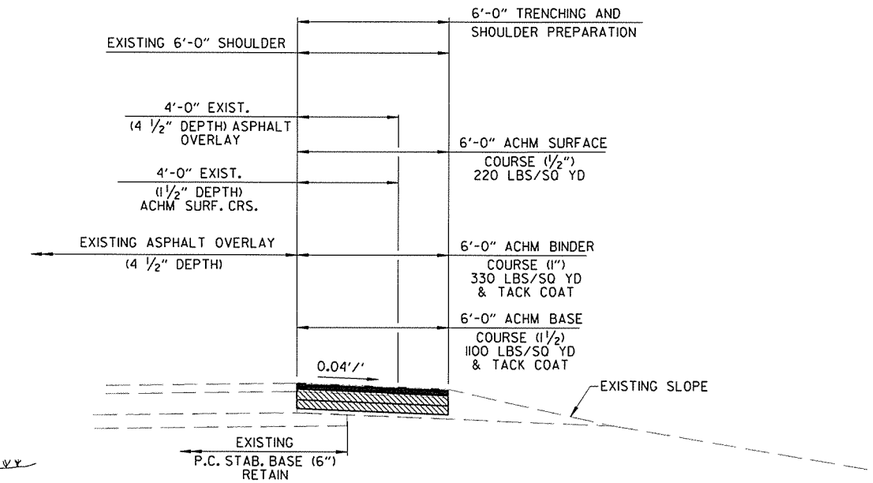


TEMPORARY INTERCHANGE RAMPS FOR MAINTENANCE OF TRAFFIC

NOTES:

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

2. 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.



INSIDE SHOULDER MAIN LANES REHAB FOR MAINTENANCE OF TRAFFIC

STA. 444+57.26 TO STA. 447+63.72 RT. OF LT. M.L. STA. 444+71.15 TO STA. 448+26.59 LT. OF RT. M.L.
STA. 450+81.40 TO STA. 770+08.40 RT. OF LT. M.L.

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No. 10887
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TYPICAL SECTIONS OF IMPROVEMENT

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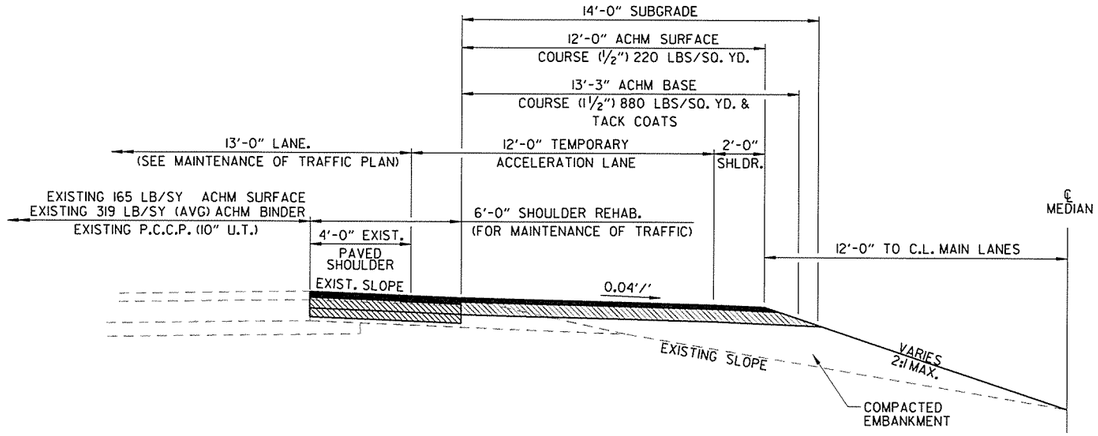
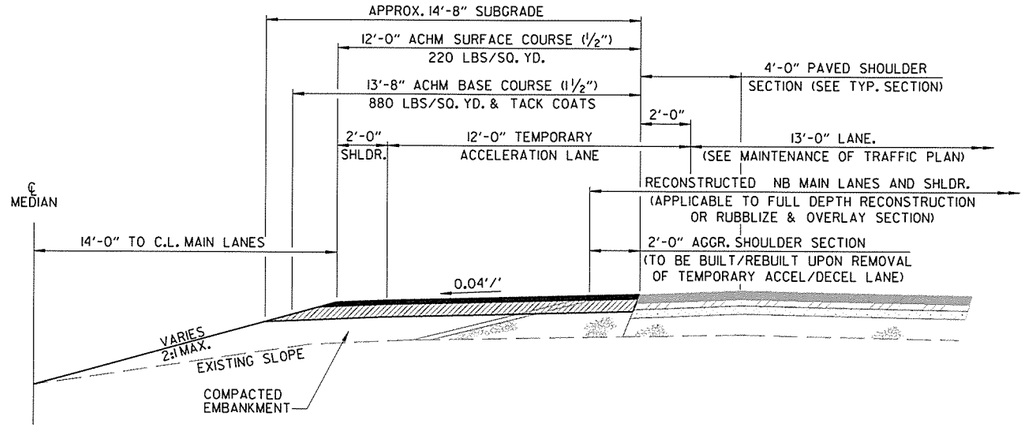
				2	ARK.			
				JOB NO.		BB0201	8	186

(2) TYPICAL SECTIONS OF IMPROVEMENT



TEMPORARY ACCELERATION LANE
FOR MAINTENANCE OF TRAFFIC - LEFT (SB) MAIN LANES

STA. 463+19.25 TO STA. 478+53.64 LT.
STA. 631+45.24 TO STA. 647+00.57 LT.



TEMPORARY ACCELERATION LANE
FOR MAINTENANCE OF TRAFFIC - RIGHT (NB) MAIN LANES

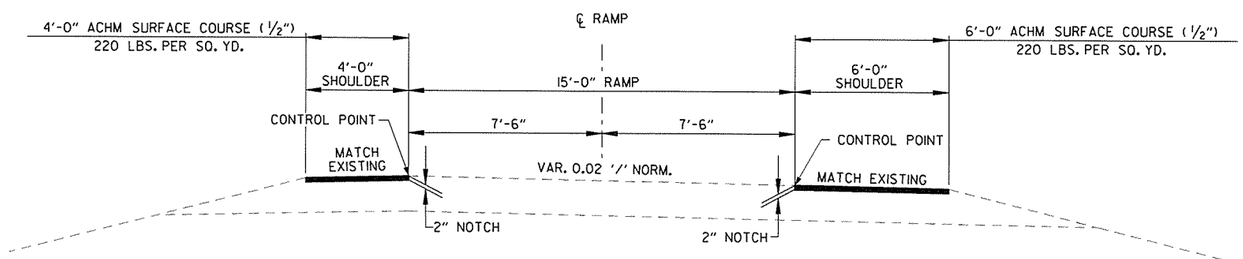
STA. 594+90.15 TO STA. 610+80.21 RT.
STA. 745+18.63 TO STA. 759+82.73 RT.

NOTES:
1. CONSTRUCT ACCELERATION LANES TO LIMITS INDICATED IN THE MAINTENANCE OF TRAFFIC PLANS.

2. CONSTRUCT RUMBLE STRIPS ON NB LANES AFTER TEMPORARY CROSSOVERS AND TEMPORARY RAMPS HAVE BEEN REMOVED.

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

4. ANY EXISTING CONCRETE, GRAVEL, OR 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 CONCRETE PAVEMENT THAT IS TO REMAIN IN PLACE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.



SHOULDER RECONSTRUCTION TYPICAL FOR RAMPS

HWY. 104 RAMP 2 - STA. 455+85.35 TO STA. 459+13.36
HWY. 104 RAMP 3 - STA. 452+46.32 TO STA. 453+46.32
GRAVEL PIT ROAD RAMP 1- STA. 611+76.36 TO STA. 615+32.66
GRAVEL PIT ROAD RAMP 4 - STA. 614+58.53 TO STA. 619+30.38
GRAVEL PIT ROAD RAMP 2 - STA. 623+36.83 TO STA. 627+46.77
GRAVEL PIT ROAD RAMP 3 - STA. 625+47.36 TO STA. 628+51.32
STAGECOACH ROAD RAMP 1- STA. 763+61.99 TO 767+30.82
STAGECOACH ROAD RAMP 4 - STA. 763+89.97 TO 766+69.63

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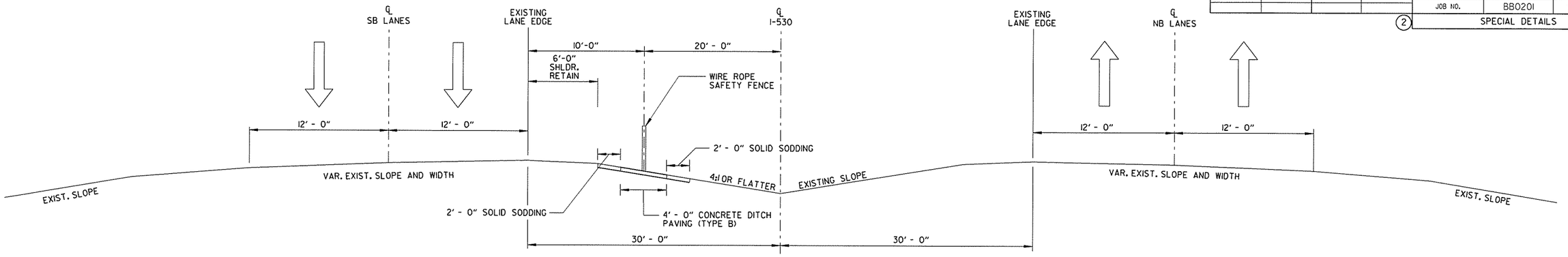
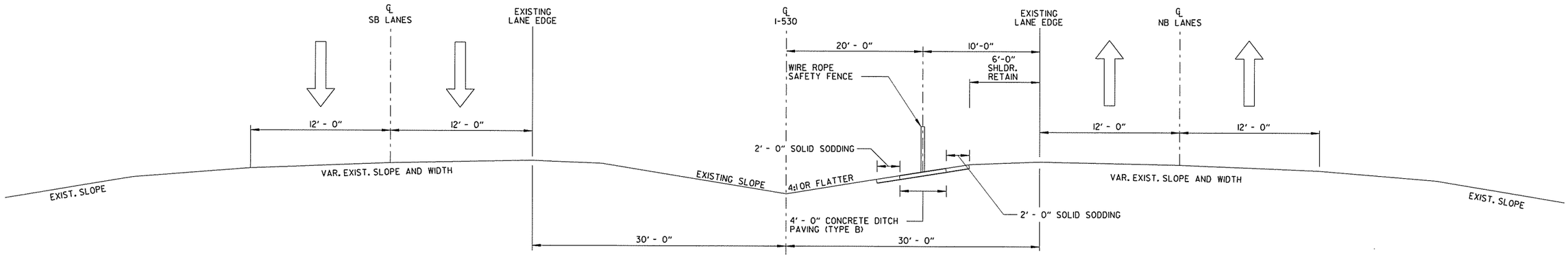
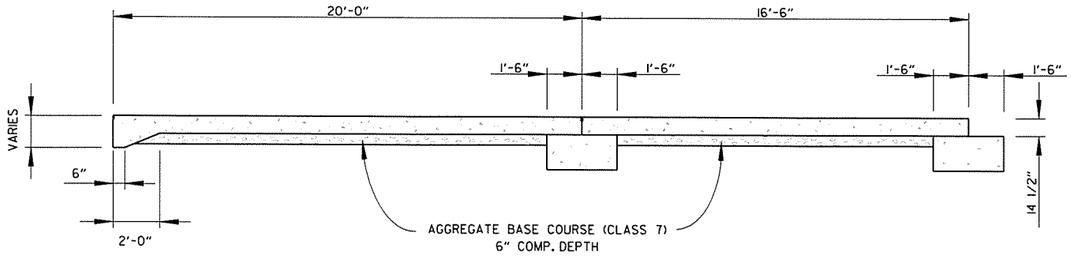


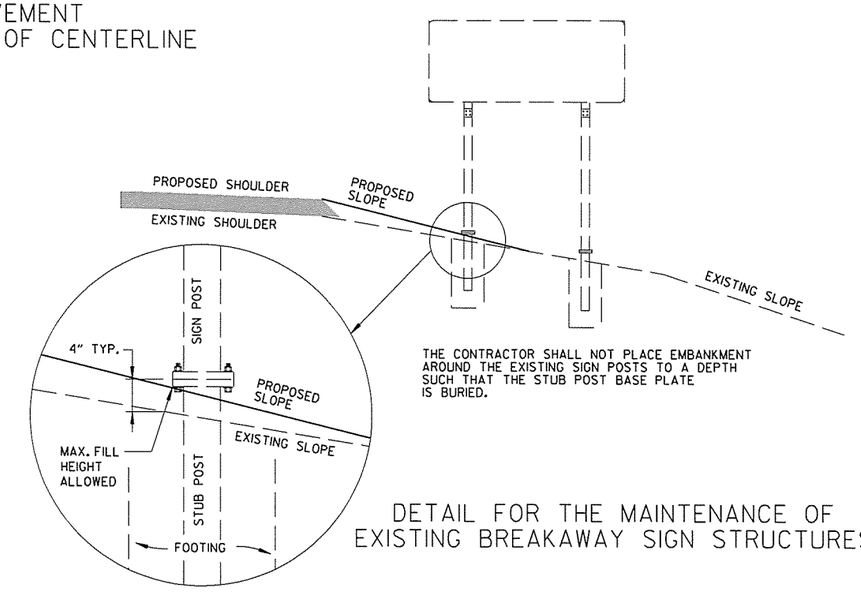
TYPICAL SECTION OF IMPROVEMENT
FOR WIRE ROPE SAFETY FENCE LEFT OF CENTERLINE



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



SECTION OF APPROACH SLAB



DETAIL FOR THE MAINTENANCE OF
EXISTING BREAKAWAY SIGN STRUCTURES

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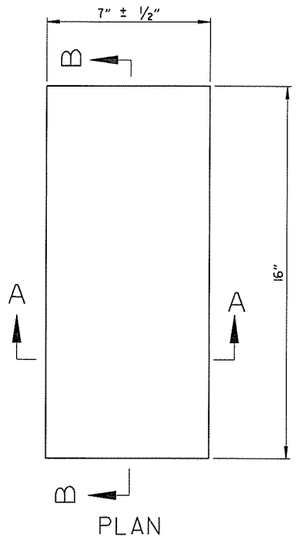
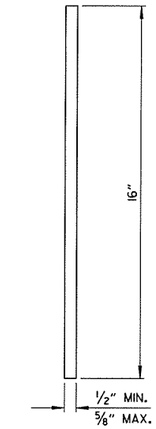


PLAN

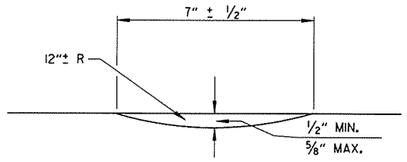


SECTION B-B

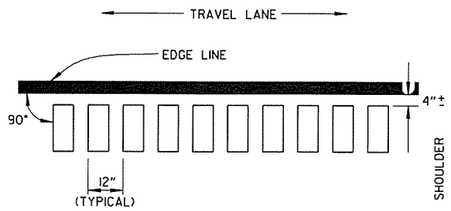
DETAILS OF RUMBLE STRIPS

NOTES:

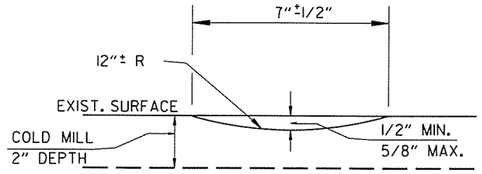
1. ALIGNMENT OF RUMBLE STRIPS SHALL GENERALLY BE STRAIGHT AND OFFSET APPROXIMATELY 4" FROM THE OUTER EDGE OF THE EDGE LINE. THIS OFFSET MAY BE ADJUSTED TO ACCOMMODATE VARIATIONS IN THE EDGE LINE AS WELL AS TO AVOID EXISTING LONGITUDINAL JOINTS.
2. THE 1/2" DEPTH SHALL GENERALLY APPLY FOR THE ENTIRE 16"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



SECTION A-A

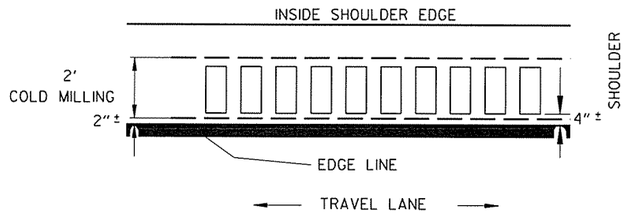


LOCATION PLAN OF RUMBLE STRIPS
LEFT OR RIGHT SHOULDER

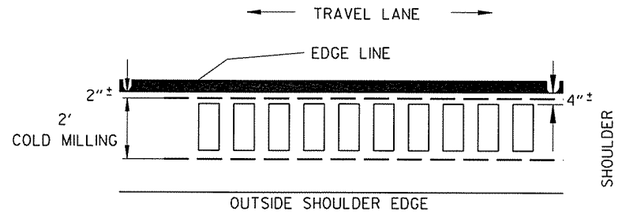


2' STRIP TO BE MILLED & INLAID WITH ACHM SURFACE COURSE (½") (PG 76-22) (220 LBS. PER SQ. YD.) & 2'-0" TACK COAT (0.10 GAL. PER SQ. YD.)

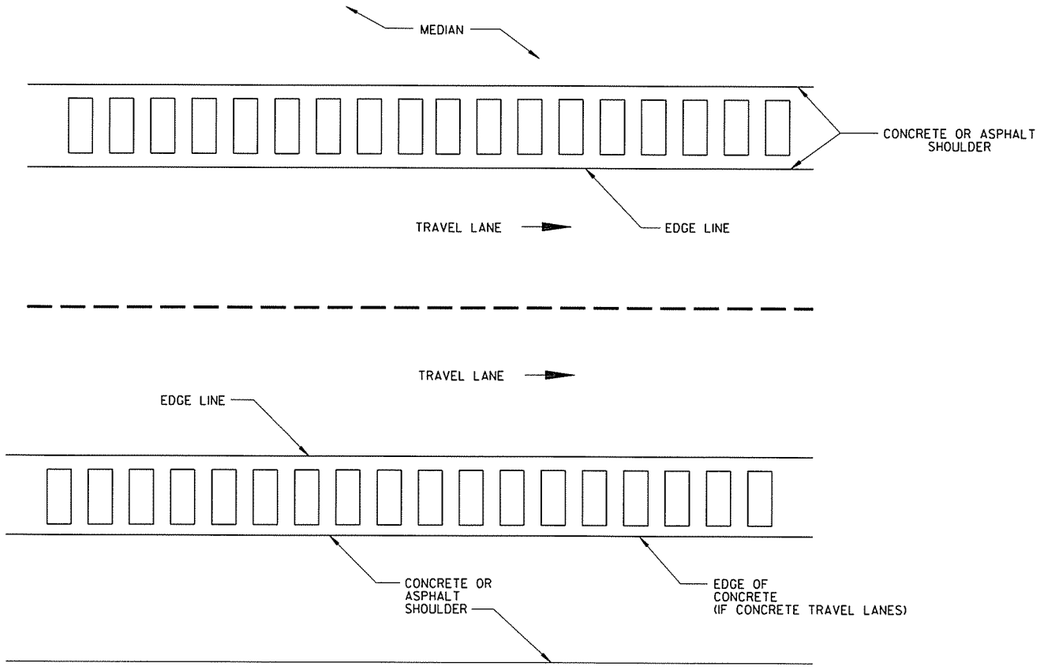
ELEVATION VIEW



PLAN VIEW

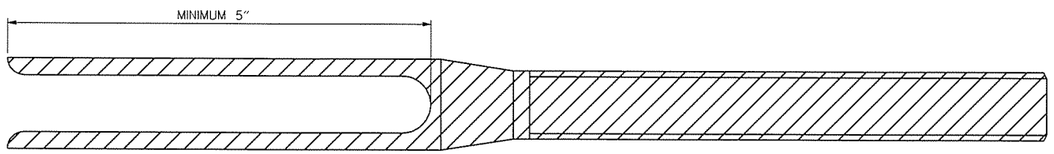


PLAN VIEW

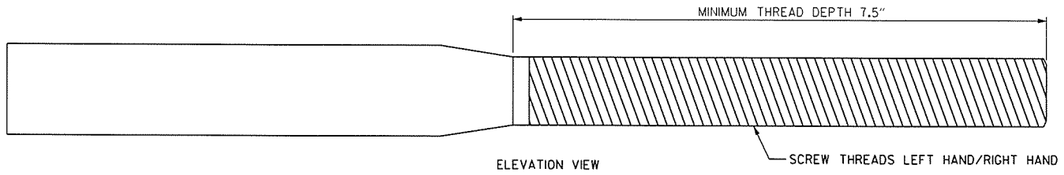


PLAN VIEW

DETAIL OF RUMBLE STRIP REMOVAL IN INSIDE AND OUTSIDE SHOULDERS



SECTION VIEW



ELEVATION VIEW

NOTE:
REFER TO "WIRE ROPE SAFETY FENCE (WRSF) SPECIFICATIONS" SPECIAL PROVISION FOR ADDITIONAL REQUIREMENTS.

THREADED TERMINAL DETAIL

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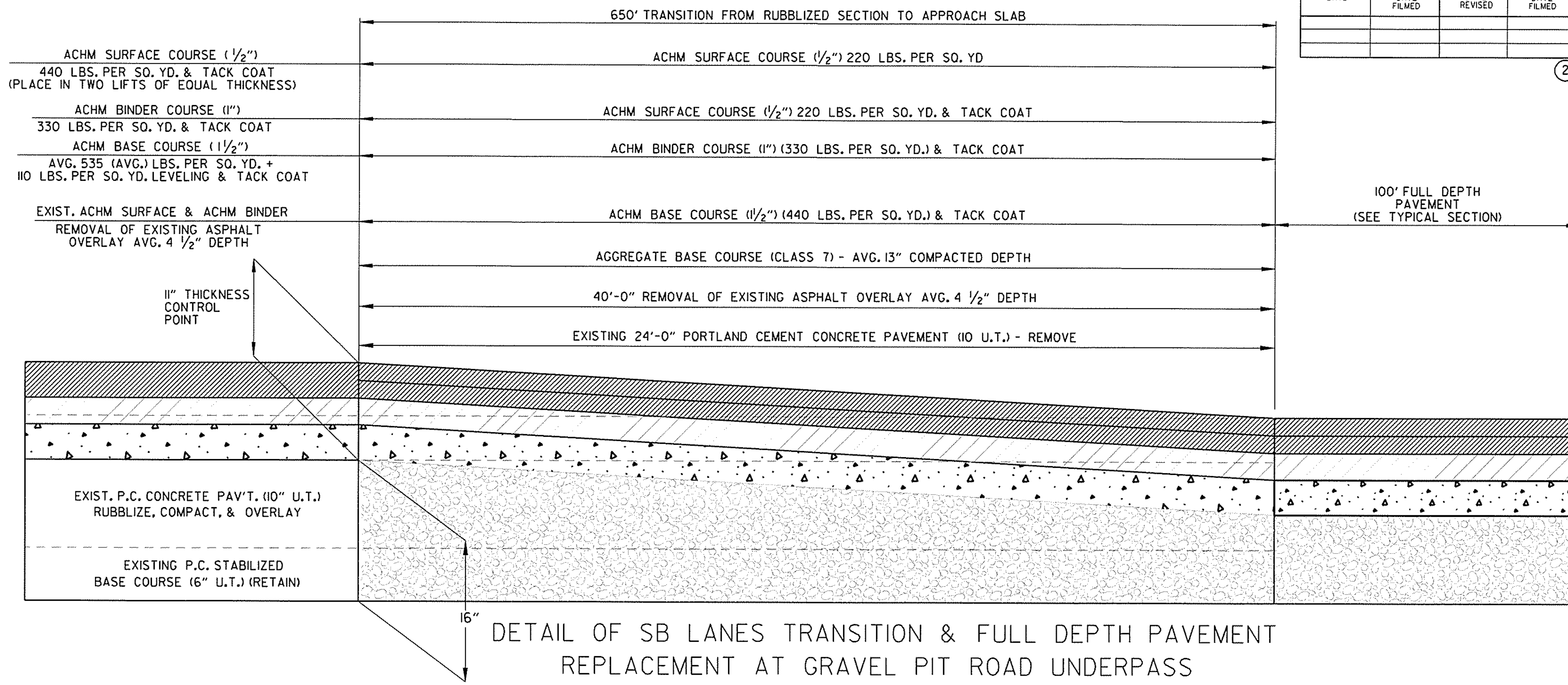
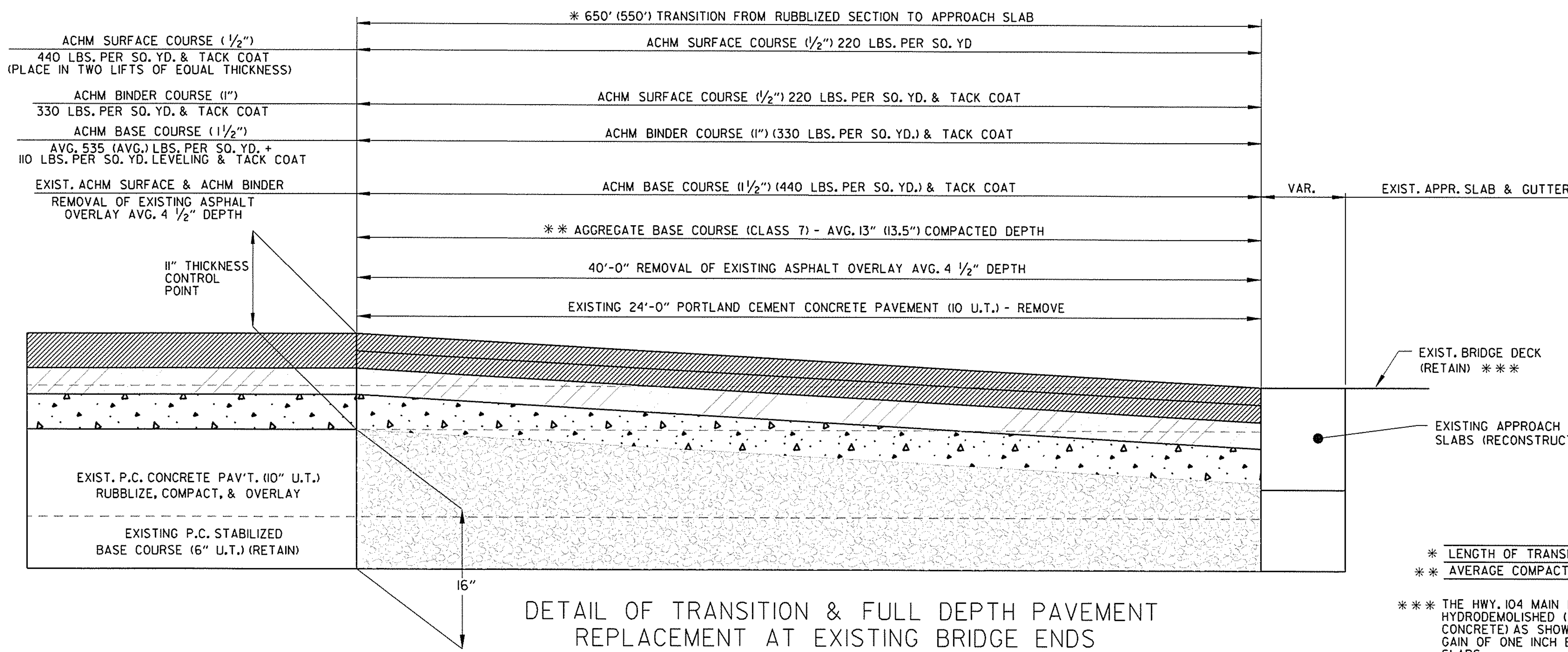


DETAIL OF SB LANES TRANSITION & FULL DEPTH PAVEMENT REPLACEMENT AT GRAVEL PIT ROAD UNDERPASS

STA. 613+56.03 TO STA. 627+56.03 LT.

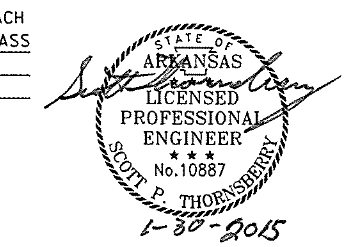


DETAIL OF TRANSITION & FULL DEPTH PAVEMENT REPLACEMENT AT EXISTING BRIDGE ENDS

(1) STA. 450+81.40 TO STA. 456+31.40 LT. (1) STA. 451+69.31 TO STA. 457+19.31 RT.
(2) STA. 763+58.40 TO STA. 770+08.40 LT. (2) STA. 763+07.64 TO STA. 769+57.64 RT.

	(1) HWY. 104 OVERPASS	(2) STAGECOACH ROAD OVERPASS
* LENGTH OF TRANSITION (FT)	550	650
** AVERAGE COMPACTED DEPTH (IN)	13.5	13

*** THE HWY. 104 MAIN LANE OVERPASS BRIDGES WILL BE HYDRODEMOLISHED (1/2" SURFACE REMOVAL) AND OVERLAID (1 1/2" CONCRETE) AS SHOWN IN THE PLANS. THIS WILL RESULT IN A NET GAIN OF ONE INCH ELEVATION AT THE BRIDGE DECK AND APPROACH SLABS.



SPECIAL DETAILS

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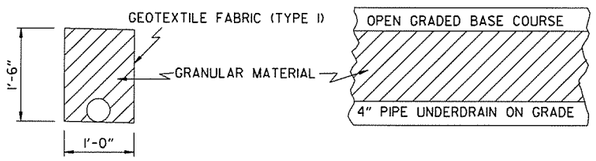
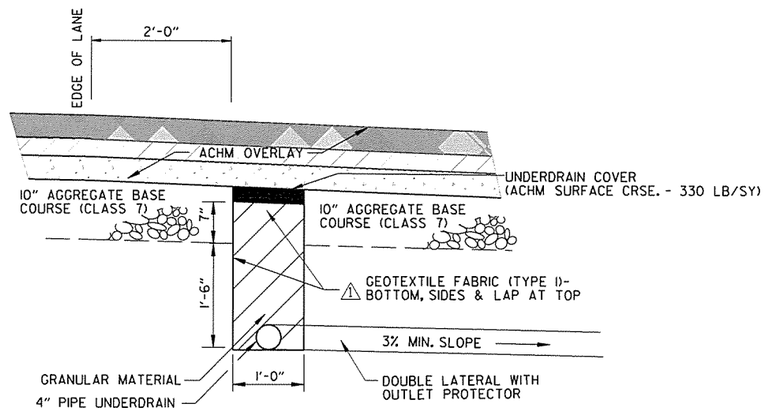
DETAILS OF PIPE UNDERDRAINS

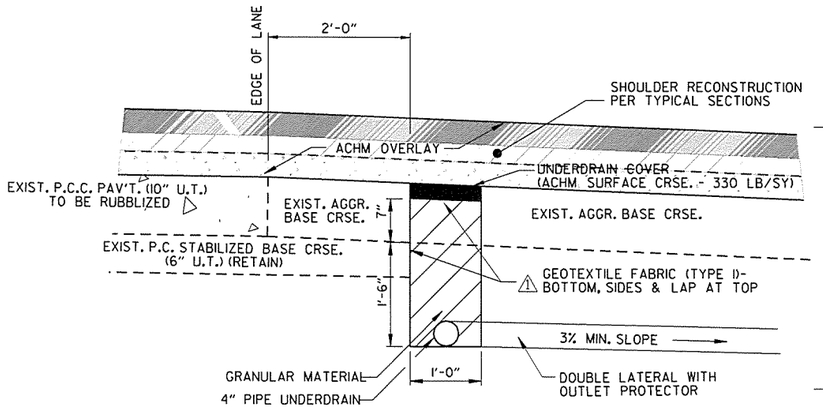


NOTE: GEOTEXTILE FABRIC SHALL MEET THE REQUIREMENTS OF SECTION 625 FOR TYPE I.

⚠1 IN LIEU OF LAPPING THE GEOTEXTILE FABRIC, THE CONTRACTOR MAY (WITH APPROVAL OF THE ENGINEER) UTILIZE AN ALTERNATE METHOD FOR PROVIDING POSITIVE CLOSURE.



SECTION A-A
FULL DEPTH CONSTRUCTION



SECTION A-A
RUBBLIZE & OVERLAY

FOR WIDTH OF EXISTING SHOULDER, TRENCH FOR LATERALS SHALL BE BACKFILLED WITH GRANULAR MATERIAL OR AGGREGATE BASE COURSE (CLASS 7). PAYMENT SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS.

NOTES FOR PIPE UNDERDRAINS

1. GEOTEXTILE FABRIC SHALL MEET THE REQUIREMENTS OF SECTION 625 FOR TYPE I. PAYMENT FOR GEOTEXTILE FABRIC AND GRANULAR FILTER MATERIAL SHALL BE INCLUDED IN THE PRICE BID PER LIN. FT. FOR "4" PIPE UNDERDRAINS" IN ACCORDANCE WITH SECTION 611 OF THE STANDARD SPECIFICATIONS.

2. 4" NON-PERFORATED SCHEDULE 40 PVC PIPE LATERALS WITH OUTLET PROTECTORS SHALL BE INSTALLED AS SHOWN HEREON OR AS ON STD. DWG. PU-1. LATERALS WILL BE MEASURED AND PAID FOR AS "4" PIPE UNDERDRAINS." UNDERDRAIN OUTLET PROTECTORS WILL BE MEASURED AND PAID FOR BY THE UNIT IN ACCORDANCE WITH SECTION 611 OF THE STANDARD SPECIFICATIONS.

3. 4" PIPE UNDERDRAINS SHALL BE PLACED ON THE LOW SIDE OF SUPERELEVATED ROADWAYS AS SHOWN ON THE TYPICAL SECTIONS. 4" PIPE UNDERDRAINS SHALL BE CONNECTED TO MEDIAN DROP INLETS WHERE DIRECTED BY THE ENGINEER. PAYMENT FOR CONNECTING TO DROP INLETS SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR "4" PIPE UNDERDRAINS."

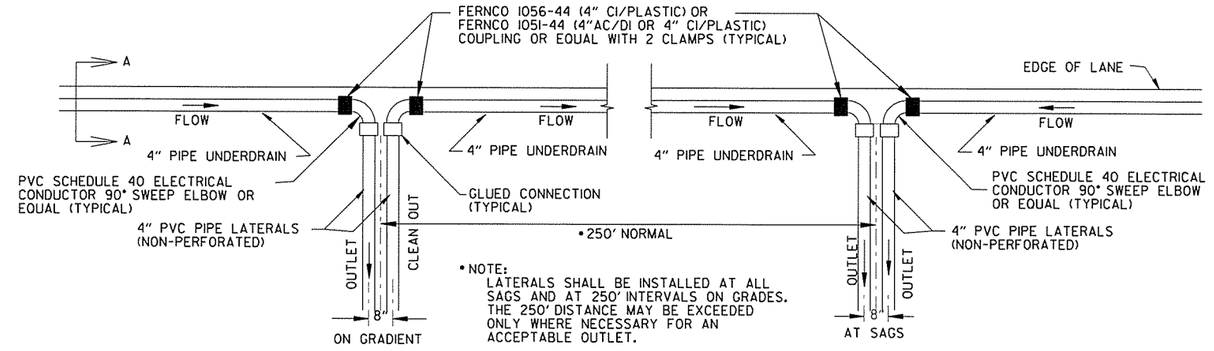
4. THE LOCATION OF ALL LATERALS SHALL BE MARKED WITH 4" X 12" PERMANENT PAVEMENT MARKING TAPE (TYPE III WHITE) AT THE OUTSIDE EDGE OF THE SHOULDER, PLACED TRANSVERSE TO TRAFFIC. PAYMENT SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS.

5. THE RODENT SCREEN SHOWN HEREON SHALL BE USED IN LIEU OF THE RODENT SCREEN SHOWN ON STD. DWG. PU-1. PAYMENT FOR THE RODENT SCREEN SHALL BE INCLUDED IN THE PRICE BID PER EACH FOR "UNDERDRAIN OUTLET PROTECTORS."

6. ANY EXISTING UNDERDRAINS THAT INTERFERE WITH INSTALLATION OF THE NEW UNDERDRAIN SYSTEM SHALL BE REMOVED AND DISPOSED OF AS DIRECTED BY THE ENGINEER. PAYMENT FOR LATERALS TO BE REMOVED OR ABANDONED SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS.

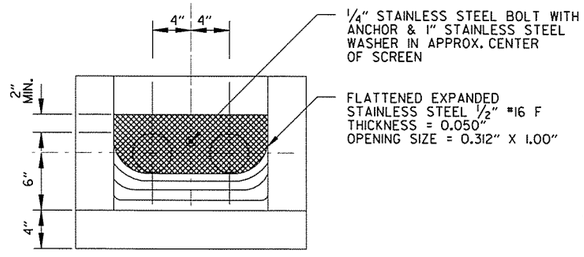
7. AT LOCATIONS WHERE A SINGLE LATERAL IS USED, THE CONTRACTOR SHALL HAVE THE FOLLOWING OPTIONS: 1.) INSTALL OUTLET PROTECTOR AS SHOWN ON STANDARD DRAWING PU-1 AND GROUT THE UNUSED HOLE OR 2.) INSTALL AN OUTLET PROTECTOR WITH A SINGLE HOLE. PAYMENT SHALL BE INCLUDED IN THE PRICE BID EACH FOR "UNDERDRAIN OUTLET PROTECTORS."

8. 4" PIPE UNDERDRAIN SHALL BE PLACED SUCH THAT POSITIVE DRAINAGE IS ACHIEVED.



PLAN DETAIL OF PIPE UNDERDRAIN LATERALS

NOTE:
PVC PIPE FOR LATERALS SHALL MEET THE REQUIREMENTS OF ASTM D 1785 (LATEST REVISION) FOR SCHEDULE 40 PIPE. UNDERDRAIN OUTLET PROTECTORS SHALL BE INSTALLED ON NEW LATERALS. (REFER TO STD. DWG. PU-1. & NOTE #5.)



DETAIL OF RODENT SCREEN

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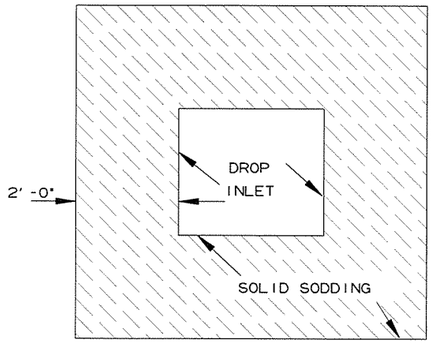
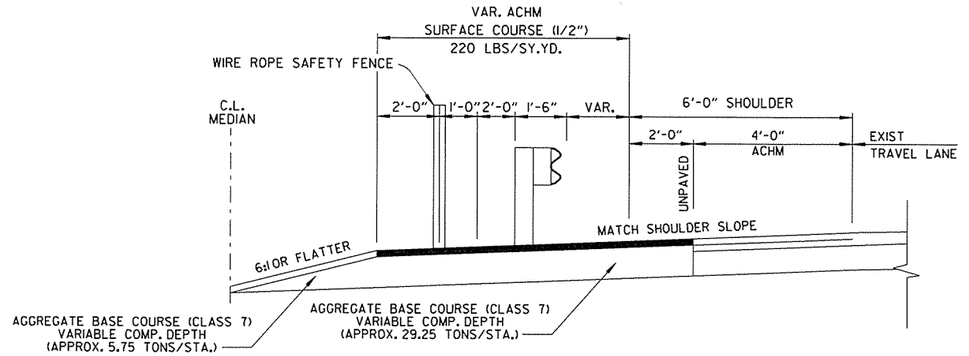


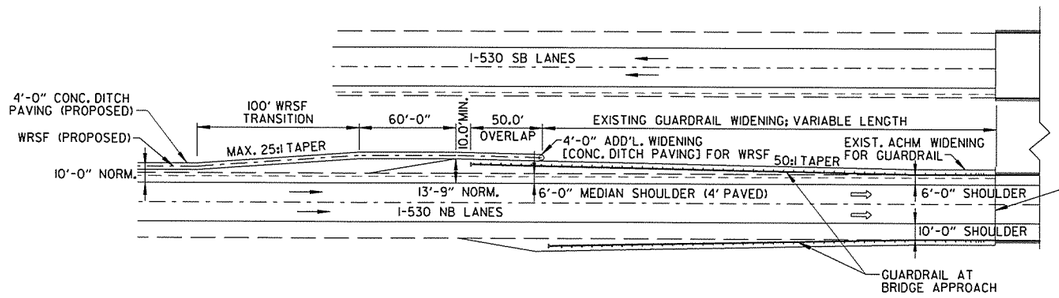
DETAIL FOR SOLID SODDING
AROUND DROP INLETS



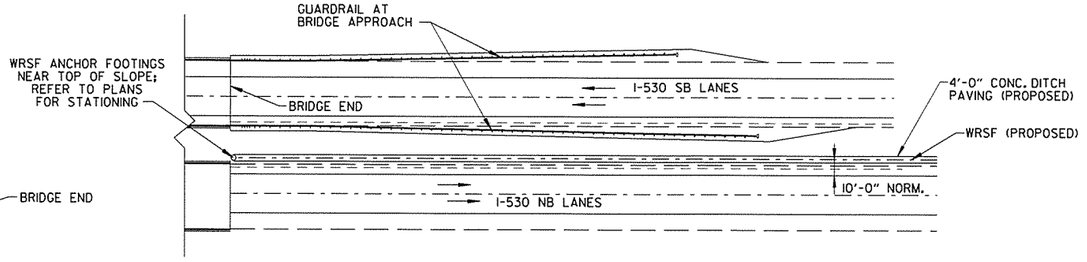
SECTION DETAIL OF WIDENING FOR GUARDRAIL - INSIDE SHOULDER

REFER TO STANDARD DRAWINGS GR-8, GR-9, GR-9A, GR-10,
GR-10A FOR ADDITIONAL INFORMATION.

TYPICAL LAYOUT OF GUARDRAIL AT BRIDGE ENDS



WRSF AND EXIST. GUARDRAIL
ON SAME SIDE OF MEDIAN



WRSF AND EXIST. GUARDRAIL
ON OPPOSITE SIDES OF MEDIAN

DETAIL OF WIRE ROPE SAFETY FENCE AT EXISTING BRIDGE ENDS

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

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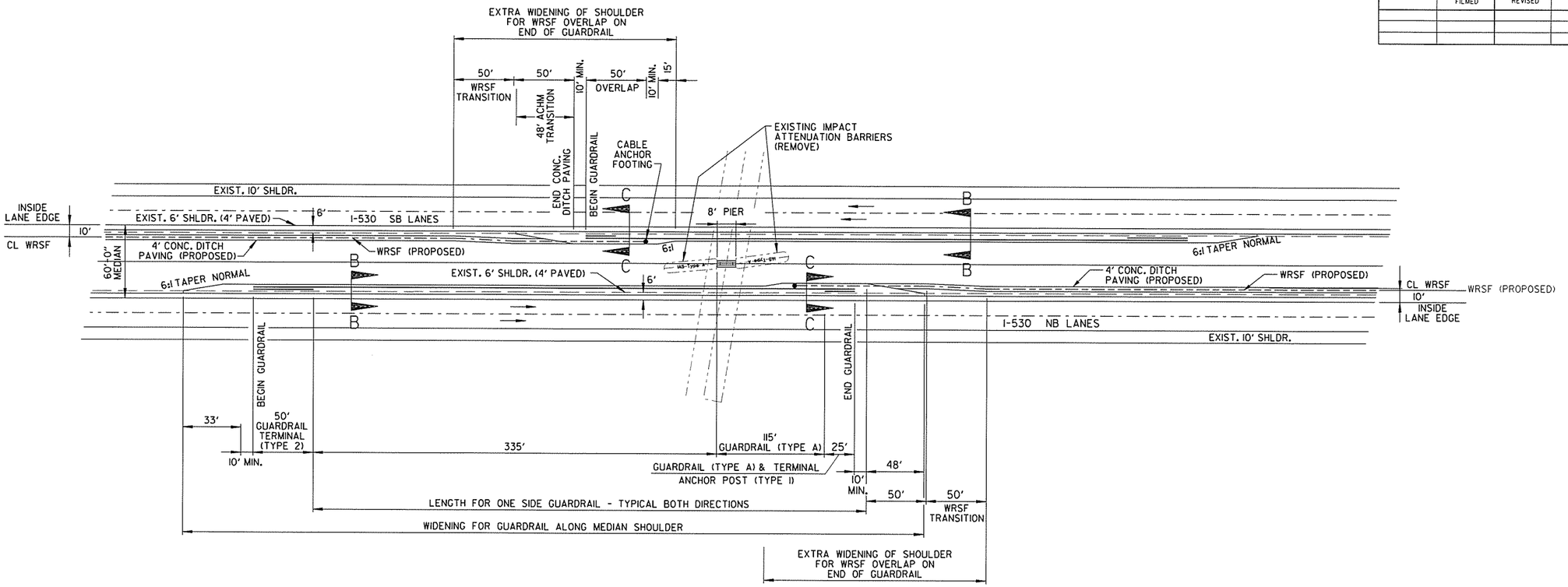
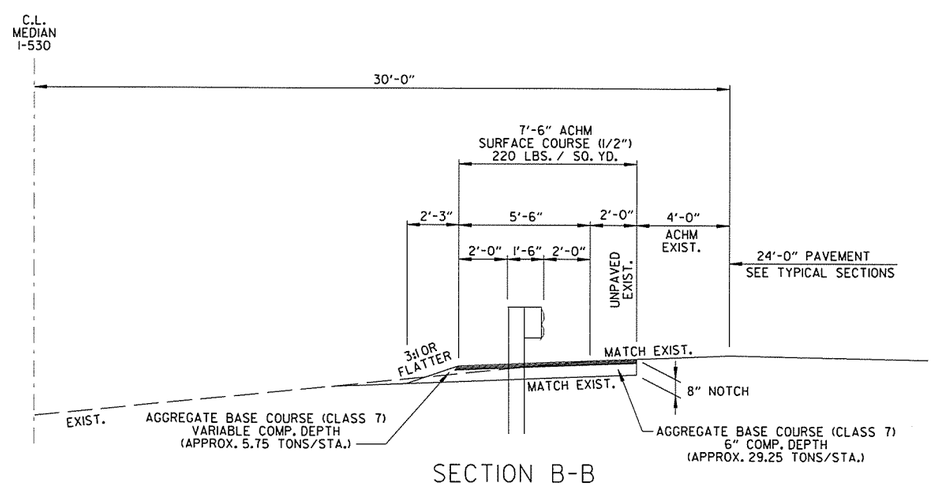
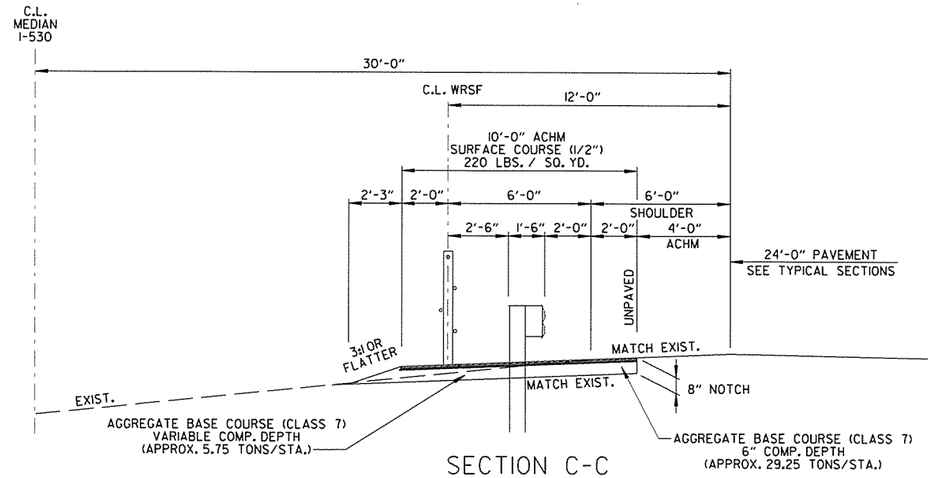


DETAIL AT GRAVEL PIT RD OVERPASS

NOTE: REFER TO PLAN SHEETS FOR PLACEMENT OF WIRE ROPE SAFETY FENCE ON SOUTHBOUND OR NORTHBOUND FORESLOPES.



SECTION B-B



SECTION C-C

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

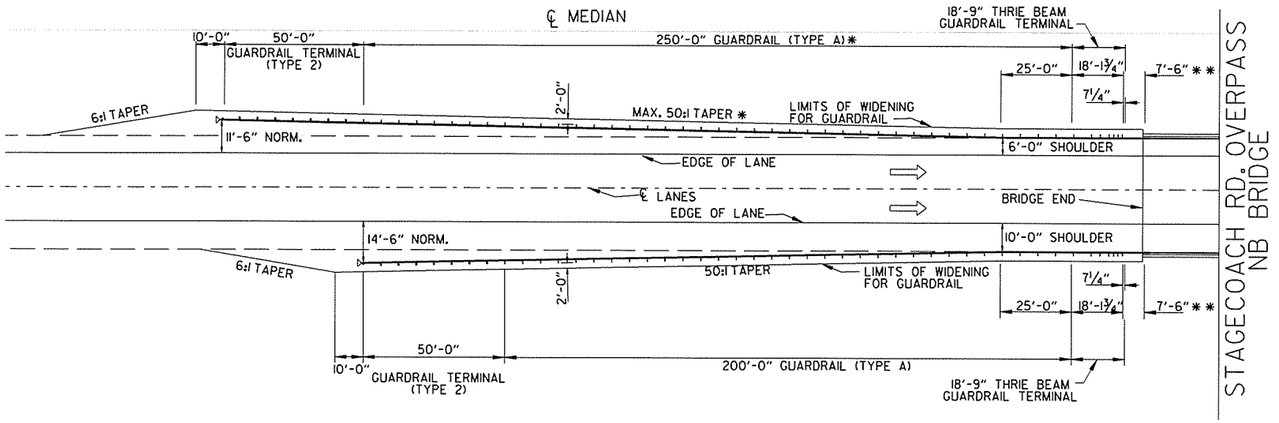
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
1-30-2015

SPECIAL DETAILS

Baker

Scott.Thornsberry@30/2015 1:42:08 PM
WORKSPACE: scott.thornsberry
Y:\Projects\AHTD_13823_I-530_Jefferson-Hwy104\Deliverables\ROADWAY\Drawings\RBB0201_05_SD_MAIN_06.dgn

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	15	186
				(2)	SPECIAL DETAILS			

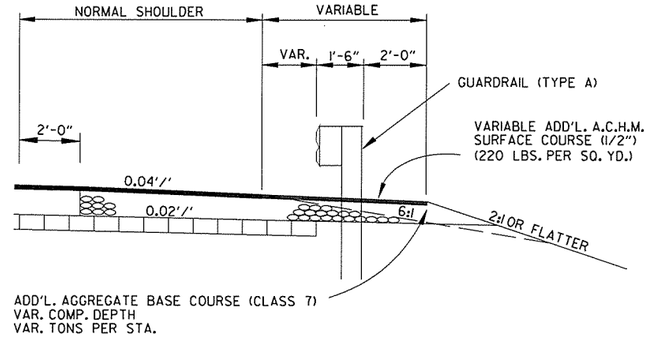


GUARDRAIL DETAIL FOR NB MAIN LANES AT STAGECOACH ROAD OVERPASS

NOTE: LAYOUT OF GUARDRAIL AT CONCRETE PIER PROTECTION SHALL BE AS SHOWN FOR RIGHT SIDE OF BRIDGE.

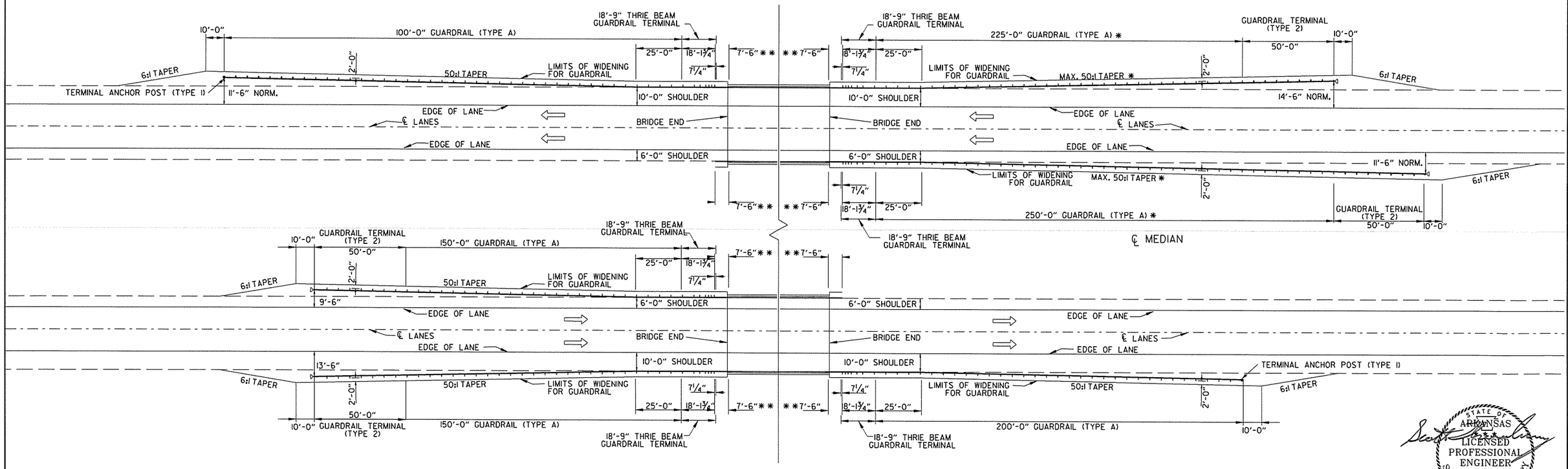
* WHEN LENGTH OF GUARDRAIL EXCEEDS 200', FLATTEN TAPER TO MAINTAIN 14'-6" OFFSET AT APPROACH END.

* * PARAPET WALL WITH THRIE BEAM GUARDRAIL CONNECTION AT BRIDGE. SEE STD. DWG. GR-10.



WIDENING FOR GUARDRAIL

NOTE: REFER TO STANDARD DRAWINGS GR-8, GR-8A, GR-9, GR-10 & GR-10A FOR ADDITIONAL INFORMATION.



GUARDRAIL DETAIL FOR MAIN LANES AT HWY. 104 OVERPASS

NOTE: REFER TO STANDARD DRAWINGS GR-8, GR-8A, GR-9, GR-10 & GR-10A FOR ADDITIONAL INFORMATION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 10887
SCOTT P. THORNSBERRY
1-30-2015

SPECIAL DETAILS

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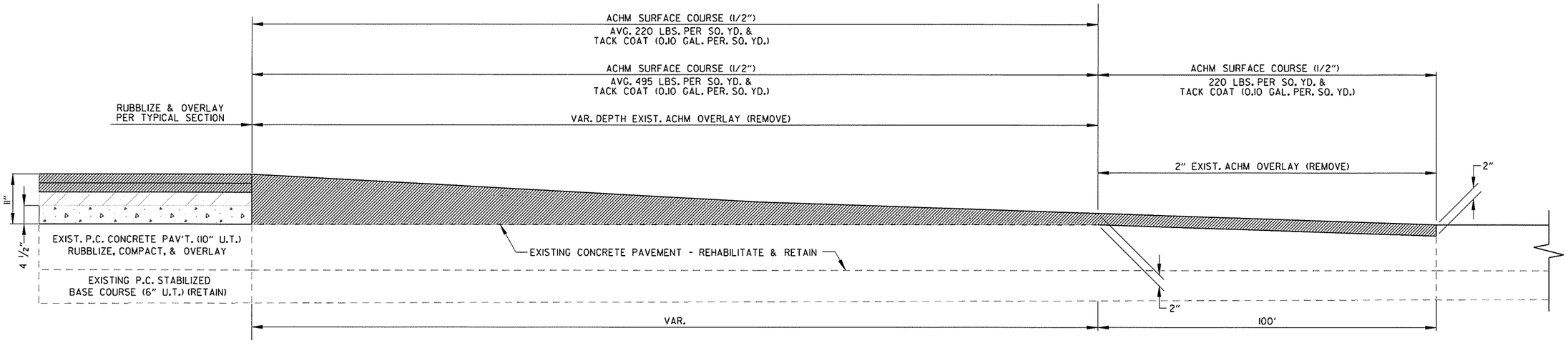
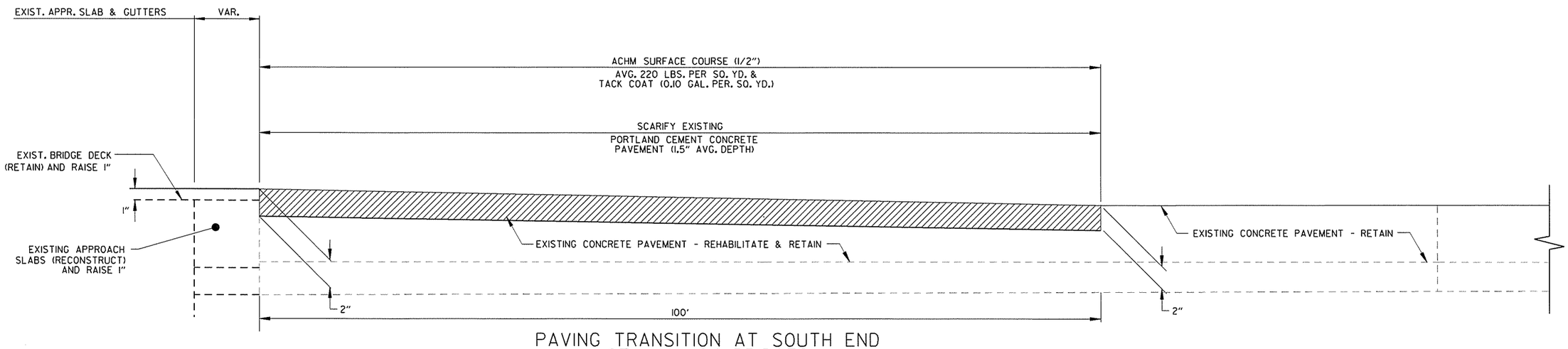
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	16	186
				(2)	SPECIAL DETAILS			



PAVING TRANSITION AT INTERCHANGE RAMPS

NOTE:
PLACE AGGREGATE BASE COURSE (CLASS 7) TO RAISE THE GRADE OF THE RAMP SHOULDERS IN THE PAVING TRANSITION AREAS.



PAVING TRANSITION AT SOUTH END
OF HWY. 104 BRIDGES

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
1-30-2015

SPECIAL DETAILS

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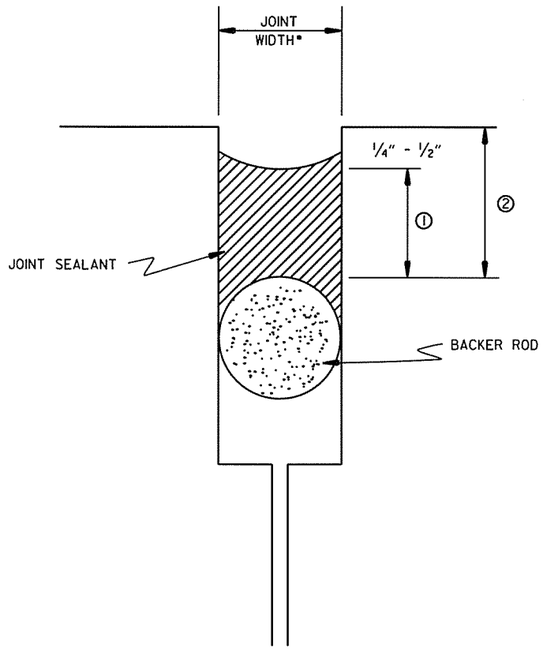
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	17	186
				(2)	SPECIAL DETAILS			

JOINT CONFIGURATION FOR TYPE 3 & 4 JOINT SEALANT

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

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

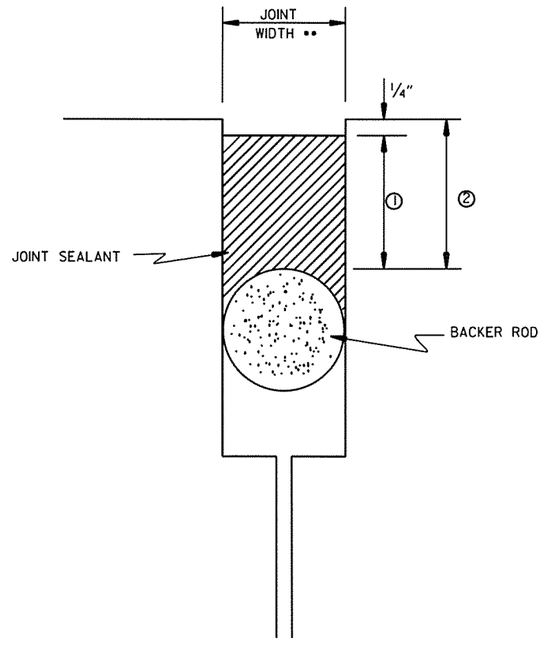


* CONTRACTION JOINTS SHALL BE SAWED TO MIN. WIDTH OF 3/8". WARPING & LONGITUDINAL JOINTS SHALL BE SAWED TO MIN. WIDTH OF EXISTING WIDTH +1/8" (1/16" ON EACH SIDE).

DETAILS OF TYPE A OR TYPE B JOINT REHABILITATION

JOINT CONFIGURATION FOR TYPE 5 JOINT SEALANT

JOINT WIDTH	APPROX. WIDTH TO DEPTH RATIO	SEALANT THICKNESS (1)	BACKER ROD DIAMETER	BACKER ROD PLACEMENT DEPTH (2)
INCHES		INCHES		
1/4	1:2	1/2	3/8	3/4
3/8		3/4	1/2	1
1/2		1	5/8	1 1/4
5/8		1 1/4	3/4	1 1/2
3/4	1:1.75	1 3/8	7/8	1 5/8
7/8		1 1/2	1	1 3/4
1	1:1.6	1 5/8	1 1/4	1 7/8
1 TO 3		1 5/8 +	1 1/4 +	1 7/8 +



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

NOTE: FOR JOINTS WIDER THAN 1 1/2", THE CONTRACTOR SHALL HAVE THE OPTION OF COMPLETELY FILLING THE JOINT IN LIEU OF USING A BACKER ROD.

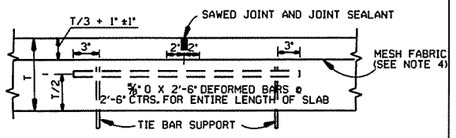
DETAILS OF TYPE B JOINT REHABILITATION

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
1-30-2015

SPECIAL DETAILS

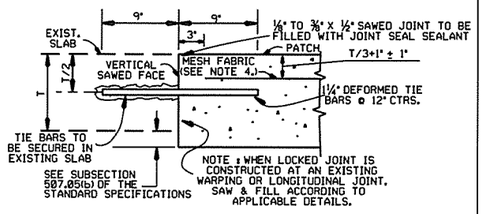
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	18	186

(2) SPECIAL DETAILS



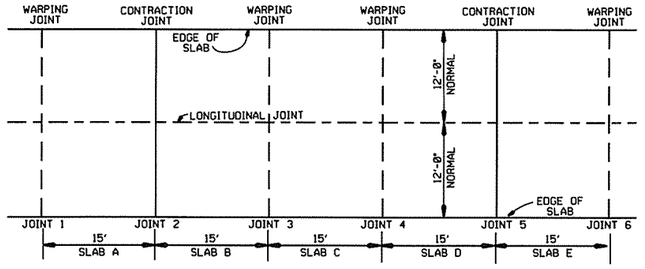
SECTION A-A

TIED LONGITUDINAL JOINT



SECTION D-D

LOCKED JOINT



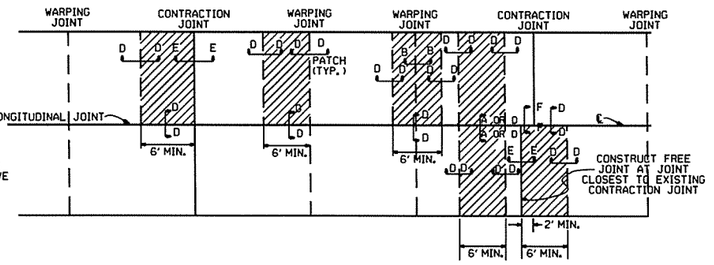
PLAN OF PAVEMENT REPAIR
(FULL SLABS)

TYPICAL SLAB REPLACEMENT EXAMPLES

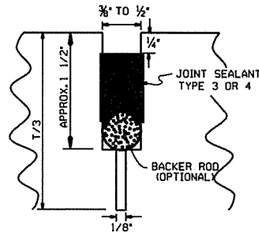
SLAB(S) TO BE RECONSTRUCTED	TYPE OF JOINT TO BE CONSTRUCTED					
	JOINT 1	JOINT 2	JOINT 3	JOINT 4	JOINT 5	JOINT 6
A OR D	LOCKED	FREE		LOCKED	FREE	
B OR E		FREE	LOCKED		FREE	LOCKED
A & B OR D & E	LOCKED	CONTRACTION	LOCKED	LOCKED	CONTRACTION	LOCKED
B & C		FREE	WARPING	LOCKED		
B, C & D		FREE	WARPING	WARPING	FREE	
C			LOCKED	LOCKED		

NOTES FOR PAVEMENT REPAIR

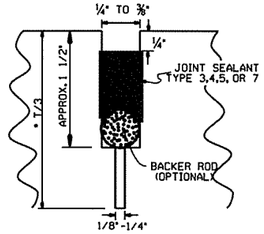
1. EXACT SIZE AND LOCATION OF AREA TO BE REPAIRED SHALL BE DETERMINED BY THE ENGINEER. ALL PATCHES SHALL EXTEND ACROSS THE FULL WIDTH OF THE SLAB AS SHOWN IN THESE DETAILS.
2. THE FINAL SURFACE FINISH FOR PATCHES SHALL MATCH THAT OF THE EXISTING PAVEMENT.
3. WHEN AREA TO BE REPAIRED INCLUDES AN EXISTING JOINT, THE JOINT SHALL BE RECONSTRUCTED TO THE CONFIGURATION SHOWN IN THESE DETAILS.
4. ALL REPAIRED AREAS SHALL BE REINFORCED WITH MESH FABRIC AS SHOWN. DEPTH OF MESH PLACEMENT SHALL HAVE A TOLERANCE OF ±1 INCH. MESH FABRIC SHALL BE 12 x 12 - W4 x W4 WELDED WIRE FABRIC (MINIMUM WIRE SIZE). LAPS SHALL BE MINIMUM 6" IN EACH DIRECTION.
5. FORMS FOR PAVEMENT REPAIR SHALL BE METAL UNLESS OTHERWISE APPROVED BY THE ENGINEER.
6. CLOSED CELL POLYETHYLENE FOAM SHALL BE SECURED TO SAWED FACE OF EXISTING P.C.C. PAVEMENT WITH ADHESIVE OR ADHESIVE TAPE AS APPROVED BY THE ENGINEER AND TRIMMED FLUSH WITH TOP OF EXISTING SLAB TO PREVENT DISPLACEMENT WHEN THE PATCH IS BEING PLACED.
7. WHEN THE PATCH IS PLACED OVER GRANULAR BASE, REMOVE ANY LOOSE BASE MATERIAL, COMPACT REMAINING BASE AS NECESSARY AND PLACE PATCH. WHEN PATCH IS PLACED OVER TREATED BASE, REMOVE ANY LOOSE BASE MATERIAL AND PLACE PATCH.
8. ¼" THICK COMPRESSIBLE MATERIAL SHALL BE ATTACHED TO THE ENDS OF DOWEL BARS AT ALL FREE TRANSVERSE JOINTS (SEE SECTION E-E). THE MATERIAL SHALL BE THE SAME DIAMETER AS THE DOWEL BAR. A PLASTIC CAP OR OTHER TYPE OF DEVICE MAY BE USED WITH THE APPROVAL OF THE ENGINEER.
9. DOWEL BARS SHALL BE PLACED IN ACCORDANCE WITH THE DIMENSIONS SHOWN. A TOLERANCE OF PLUS OR MINUS ONE INCH WILL BE ALLOWED FOR VERTICAL AND LATERAL PLACEMENT AND A TOLERANCE OF PLUS OR MINUS ¼" WILL BE ALLOWED FOR THE TILT AND SKEW.



PLAN OF PAVEMENT REPAIR
(PARTIAL SLABS)

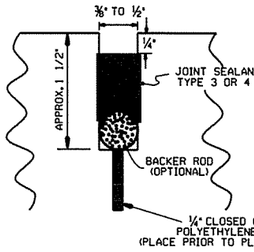


DETAIL OF SAWED CONTRACTION JOINT

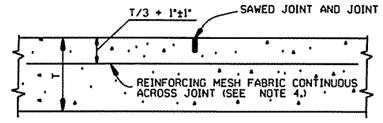


*NOTE: T/3 SAW CUT NOT REQUIRED FOR LONGITUDINAL CONSTRUCTION JOINT.

DETAIL OF SAWED
TIED LONGITUDINAL JOINT
AND WARPING JOINT

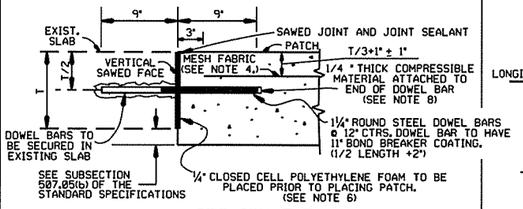


DETAIL OF SAWED FREE TRANSVERSE &
FREE LONGITUDINAL JOINT



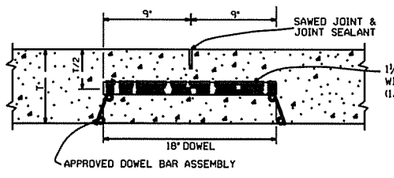
SECTION B-B

WARPING JOINT

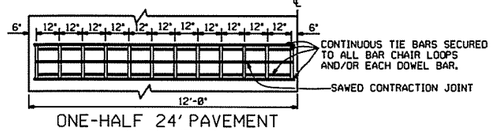


SECTION E-E

FREE TRANSVERSE JOINT



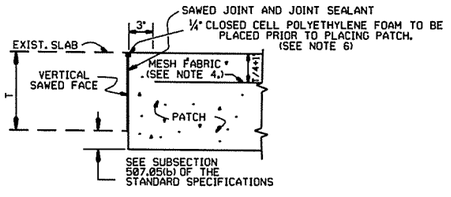
SECTION C-C



ONE-HALF 24' PAVEMENT
12 DOWELS
PLAN - CONTRACTION JOINT

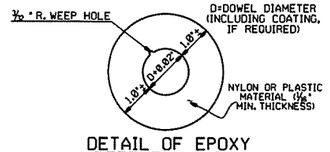
NOTE: FOR 28' PAVEMENT USE 28 DOWELS @ 12" CTRS. WITH 6" SPACING FROM C.L. AND EDGE OF SLAB TO FIRST BAR. FOR 15' PAVEMENT USE 15 DOWELS @ 12" CTRS. WITH 6" SPACING FROM C.L. AND EDGE OF SLAB TO FIRST BAR. FOR 26' PAVEMENT USE 26 DOWELS @ 12" CTRS. WITH 6" SPACING FROM C.L. AND EDGE OF SLAB TO FIRST BAR. FOR PAVEMENT WIDTHS OTHER THAN THOSE SHOWN ABOVE, USE DOWELS AT 12" CTRS. WITH 6" MAX. SPACING FROM C.L. TO FIRST BAR. DISTANCE FROM EDGE OF SLAB TO FIRST BAR SHALL BE ADJUSTED TO MAINTAIN 12" DOWEL BAR SPACING

CONTRACTION JOINT DETAILS



SECTION F-F

FREE LONGITUDINAL JOINT



DETAIL OF EPOXY
RETENTION DISK

NOTE: EPOXY RETENTION DISK SHALL BE SLIPPED TIGHTLY OVER TIE BARS AND FIRMLY AGAINST THE SLAB FACE AFTER INSERTING TIE BAR AND EPOXY INTO HOLE

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
1-30-2015

DETAILS OF PORTLAND CEMENT CONCRETE PAVEMENT PATCHING (MAIN LANES)

Scott.Thornsberry 30/2015 1:42:21 PM
WORKSPACE: scott.thornsberry
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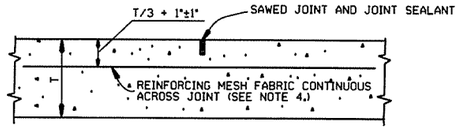
Baker

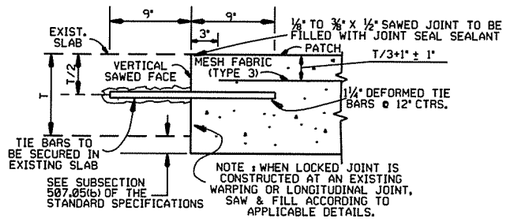
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	19	186

(2) SPECIAL DETAILS

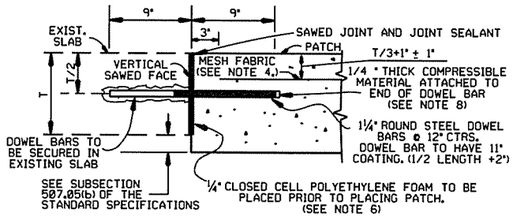


SECTION B-B

WARPING JOINT

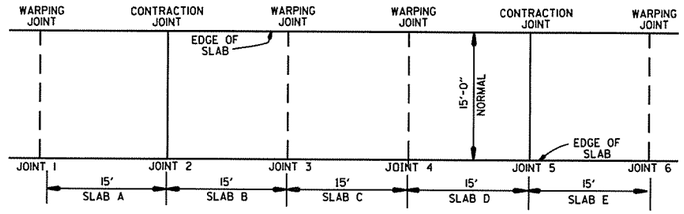


SECTION D-D



SECTION E-E

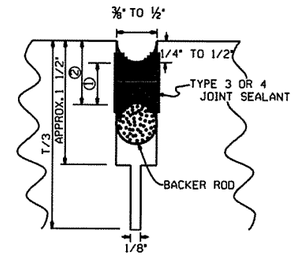
FREE TRANSVERSE JOINT



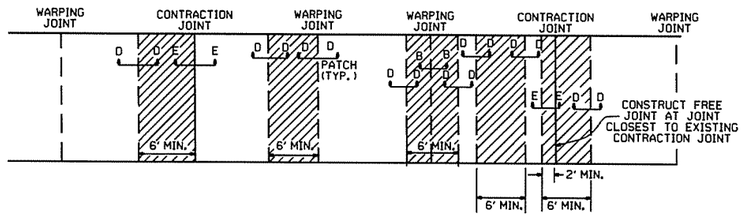
PLAN OF PAVEMENT REPAIR
(FULL SLABS)

TYPICAL SLAB REPLACEMENT EXAMPLES

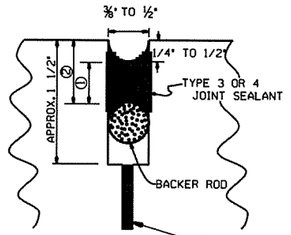
SLAB(S) TO BE RECONSTRUCTED	TYPE OF JOINT TO BE CONSTRUCTED					
	JOINT 1	JOINT 2	JOINT 3	JOINT 4	JOINT 5	JOINT 6
A OR D	LOCKED	FREE		LOCKED	FREE	
B OR E		FREE	LOCKED		FREE	LOCKED
A & B OR D & E	LOCKED	CONTRACTION	LOCKED	LOCKED	CONTRACTION	LOCKED
B & C		FREE	WARPING	LOCKED		
B, C & D		FREE	WARPING	WARPING	FREE	
C			LOCKED	LOCKED		



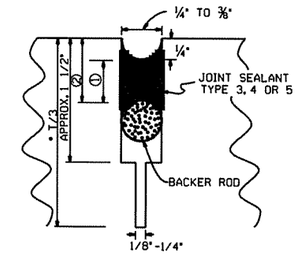
DETAIL OF SAWED CONTRACTION JOINT



PLAN OF PAVEMENT REPAIR
(PARTIAL SLABS)

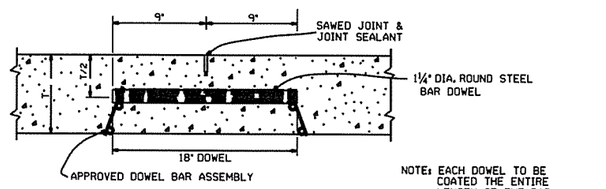


DETAIL OF SAWED FREE
TRANSVERSE JOINT



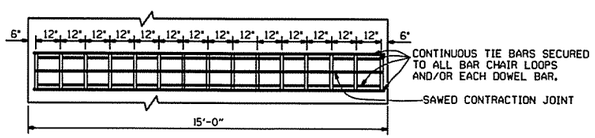
•NOTE: T/3 SAW CUT NOT REQUIRED FOR LONGITUDINAL CONSTRUCTION JOINT.

DETAIL OF SAWED WARPING JOINT



NOTE: EACH DOWEL TO BE COATED THE ENTIRE LENGTH OF THE BAR UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

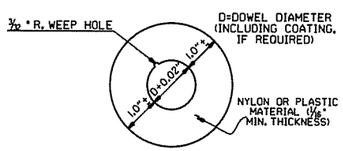
SECTION C-C



15' PAVEMENT
15 DOWELS
PLAN - CONTRACTION JOINT

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

CONTRACTION JOINT DETAILS



DETAIL OF EPOXY
RETENTION DISK

NOTE: EPOXY RETENTION DISK SHALL BE SLIPPED TIGHTLY OVER TIE BARS AND FIRMLY AGAINST THE SLAB FACE AFTER INSERTING TIE BAR AND EPOXY INTO HOLE

JOINT CONFIGURATION FOR
TYPE 3 OR 4 JOINT SEALANT

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

JOINT CONFIGURATION FOR
TYPE 5 JOINT SEALANT

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

NOTES FOR PAVEMENT REPAIR

1. EXACT SIZE AND LOCATION OF AREA TO BE REPAIRED SHALL BE DETERMINED BY THE ENGINEER. ALL PATCHES SHALL EXTEND ACROSS THE FULL WIDTH OF THE SLAB AS SHOWN IN THESE DETAILS.
2. THE FINAL SURFACE FINISH FOR PATCHES SHALL MATCH THAT OF THE EXISTING PAVEMENT.
3. WHEN AREA TO BE REPAIRED INCLUDES AN EXISTING JOINT, THE JOINT SHALL BE RECONSTRUCTED TO THE CONFIGURATION SHOWN IN THESE DETAILS.
4. ALL REPAIRED AREAS SHALL BE REINFORCED WITH MESH FABRIC AS SHOWN. DEPTH OF MESH PLACEMENT SHALL HAVE A TOLERANCE OF ±1 INCH. MESH FABRIC SHALL BE 12 x 12 - W4 x W4 WELDED WIRE FABRIC (MINIMUM WIRE SIZE). LAPS SHALL BE MINIMUM 6" IN EACH DIRECTION. MINIMUM COVER AT EDGES SHALL BE 2".
5. FORMS FOR PAVEMENT REPAIR SHALL BE METAL UNLESS OTHERWISE APPROVED BY THE ENGINEER.
6. CLOSED CELL POLYETHYLENE FOAM SHALL BE SECURED TO SAWED FACE OF EXISTING P.C.C. PAVEMENT WITH ADHESIVE OR ADHESIVE TAPE AS APPROVED BY THE ENGINEER AND TRIMMED FLUSH WITH TOP OF EXISTING SLAB TO PREVENT DISPLACEMENT WHEN THE PATCH IS BEING PLACED.
7. WHEN THE PATCH IS PLACED OVER GRANULAR BASE, REMOVE ANY LOOSE BASE MATERIAL, COMPACT REMAINING BASE AS NECESSARY AND PLACE PATCH. WHEN PATCH IS PLACED OVER TREATED BASE, REMOVE ANY LOOSE BASE MATERIAL AND PLACE PATCH.
8. ¼" THICK COMPRESSIBLE MATERIAL SHALL BE ATTACHED TO THE ENDS OF DOWEL BARS AT ALL FREE TRANSVERSE JOINTS (SEE SECTION E-E). THE MATERIAL SHALL BE THE SAME DIAMETER AS THE DOWEL BAR. A PLASTIC CAP OR OTHER TYPE OF DEVICE MAY BE USED WITH THE APPROVAL OF THE ENGINEER.
9. DOWEL BARS SHALL BE PLACED IN ACCORDANCE WITH THE DIMENSIONS SHOWN. A TOLERANCE OF PLUS OR MINUS ONE INCH WILL BE ALLOWED FOR VERTICAL AND LATERAL PLACEMENT AND A TOLERANCE OF PLUS OR MINUS ¼" WILL BE ALLOWED FOR THE TILT AND SKEW.

DETAILS OF PORTLAND CEMENT CONCRETE PAVEMENT PATCHING (RAMPS)

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	20	186

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
1-30-2015

STA. 436+75 TO STA. 437+75
2 EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)
(100' O.C.)

APPROXIMATE 100 YR FLOODPLAIN LIMITS

PC 434+49.50
PI 435+51.56
PT 438+49.50
PC 441+06.08
RAMP 4
N64°42'00"W
N44°42'00"W

8'x5' BC

STA. 444+50 TO STA. 446+00
2 EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)
(150' O.C.)

C.L. CROSSOVER IB
C.L. CROSSOVER IA
C.L. I-530

STA. 433+00
STA. 447+00

E-7 E-5 E-5 E-5 E-5 N44°42'00"W

STA. 435+84.10 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

N44°42'00"W N38°59'30"W

PC 435+04.80
PI 436+00.02
PT 436+95.08

RAMP N38°59'30"W N28°29'40"W

PC 440+31.83
PI 442+07.27
PT 443+81.74
APPROXIMATE 100 YR FLOODPLAIN LIMITS

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5 = SAND BAG DITCH CHECK
E-7 = DROP INLET SILT FENCE
E-11 = SILT FENCE
= CONSTRUCTION AREA

EXISTING R/W & C/A

STA. 458+00 TO STA. 462+00 LT.
444 L.F. SILT FENCE (TYPE E-11)
E-11

RAMP 3
N32°01'59"W

PT 452+59.75
PI 459+22.31
PI 460+12.77
PT 461+03.14
N36°32'06"W

6'x6' BC
24°

C.L. TEMPORARY RAMP 3

STA. 447+00
STA. 462+00

E-5 N44°42'00"W E-5 E-5 E-5 E-7 E-5 N44°42'00"W

C.L. I-530

STA. 447+69.51
BEGIN JOB BB0201

C.L. I-530 STA.
C.L. HWY. 104 STA. 20+00

APPROXIMATE 100 YR FLOODPLAIN LIMITS

N00°38'00"E
C.L. HWY. 104

APPROXIMATE 100 YR FLOODPLAIN LIMITS

S64°21'28"E

18° STA. 457+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

C.L. TEMPORARY RAMP 2

PT 450+33.27
POE 452+29.34
PC 452+92.19

STA. 453+00 1 EACH
SAND BAG DITCH CHECK
IN MEDIAN (TYPE E-5)

STA. 454+75 TO STA. 457+75
4 EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)
(100' O.C.)

PT 456+85.35
PC 458+95.55
PC 459+62.30
PI 461+72.34

EXISTING R/W & C/A

RAMP 2

TEMPORARY EROSION CONTROL DETAILS - STAGE IA

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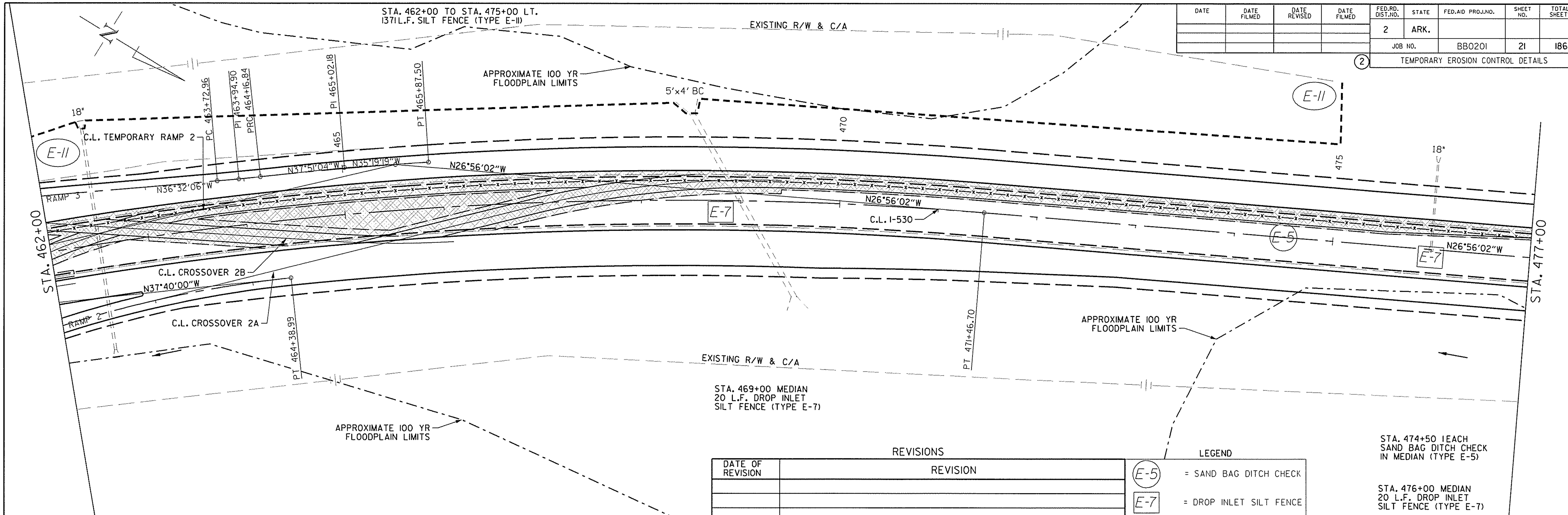
				JOB NO.		BB0201	21	186

(2) TEMPORARY EROSION CONTROL DETAILS



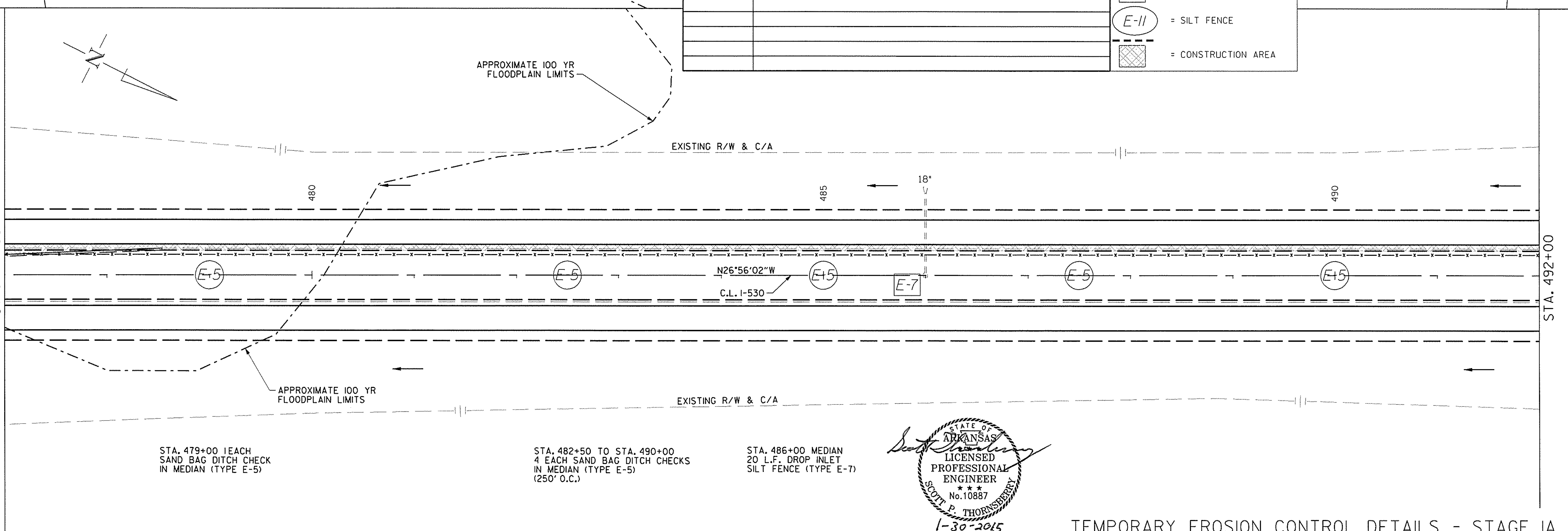
STA. 462+00 TO STA. 475+00 LT.
1371 L.F. SILT FENCE (TYPE E-11)
EXISTING R/W & C/A
APPROXIMATE 100 YR FLOODPLAIN LIMITS
5'x4' BC
18"
C.L. TEMPORARY RAMP 2
PC 463+72.96
PI 463+94.90
PRC 464+16.84
PI 465+02.18
PT 465+87.50
N37°51'04"W
N35°19'19"W
N26°56'02"W
N36°32'06"W
RAMP 3
STA. 462+00
C.L. CROSSOVER 2B
N37°40'00"W
RAMP 2
C.L. CROSSOVER 2A
PT 464+38.99
C.L. I-530
PT 471+46.70
STA. 477+00
E-11
E-7
E-5
465
470
475
STA. 469+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)
STA. 474+50 1 EACH
SAND BAG DITCH CHECK
IN MEDIAN (TYPE E-5)
STA. 476+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5	= SAND BAG DITCH CHECK
E-7	= DROP INLET SILT FENCE
E-11	= SILT FENCE
(hatched)	= CONSTRUCTION AREA



APPROXIMATE 100 YR FLOODPLAIN LIMITS
EXISTING R/W & C/A
480
485
490
18"
STA. 477+00
STA. 492+00
N26°56'02"W
C.L. I-530
E-5
E-7
STA. 479+00 1 EACH
SAND BAG DITCH CHECK
IN MEDIAN (TYPE E-5)
STA. 482+50 TO STA. 490+00
4 EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)
(250' O.C.)
STA. 486+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No.10887 SCOTT P. THORNSBERRY

1-30-2015

TEMPORARY EROSION CONTROL DETAILS - STAGE 1A

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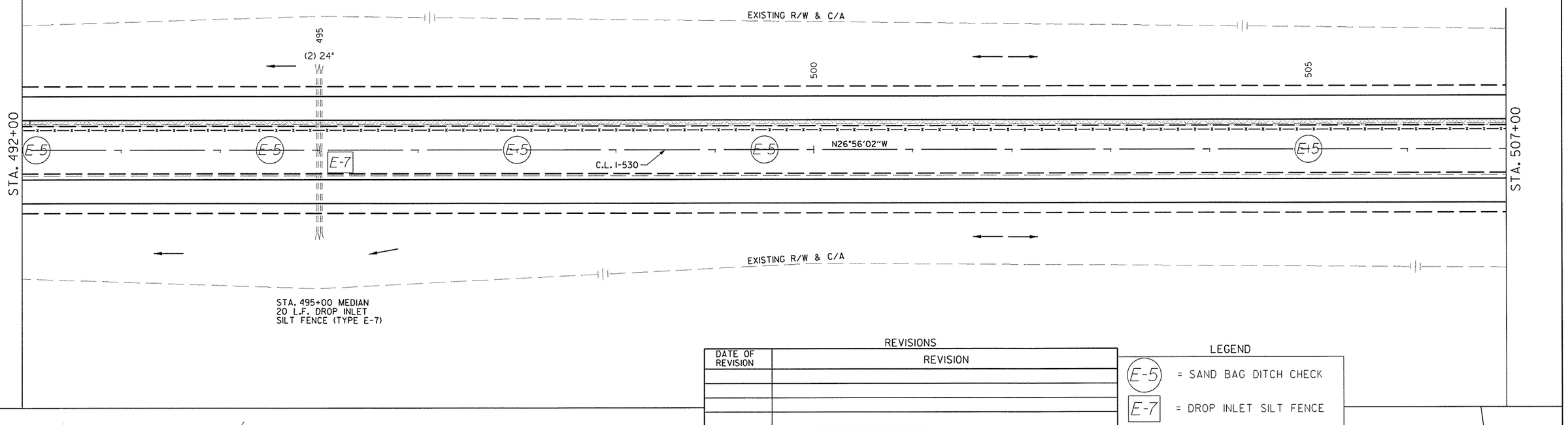
				2	ARK.			
				JOB NO.		BB0201	22	186
				(2)	TEMPORARY EROSION CONTROL DETAILS			

STA. 492+00 TO STA. 499+50
4 EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)
(250' O.C.)

STA. 505+00 1EACH
SAND BAG DITCH CHECK
IN MEDIAN (TYPE E-5)



STA. 495+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

REVISIONS

DATE OF REVISION	REVISION

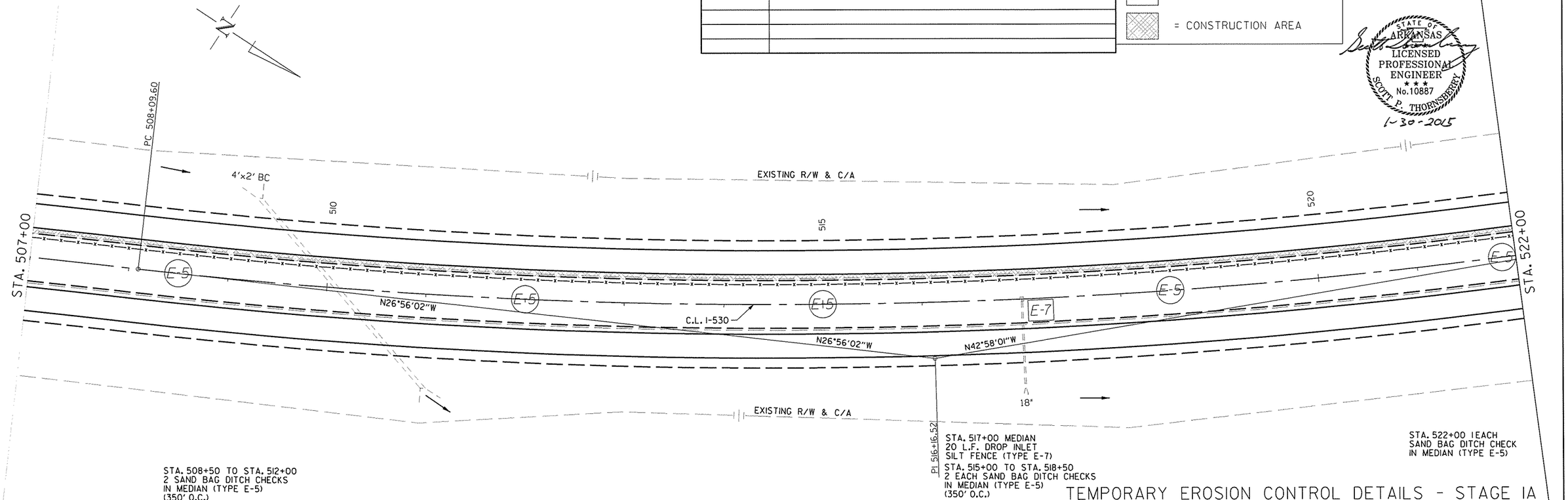
LEGEND

E-5 = SAND BAG DITCH CHECK

E-7 = DROP INLET SILT FENCE

= CONSTRUCTION AREA

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
1-30-2015



STA. 508+50 TO STA. 512+00
2 SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)
(350' O.C.)

STA. 517+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

STA. 515+00 TO STA. 518+50
2 EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)
(350' O.C.)

PI 516+16.52

STA. 522+00 1EACH
SAND BAG DITCH CHECK
IN MEDIAN (TYPE E-5)

TEMPORARY EROSION CONTROL DETAILS - STAGE IA

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				2	ARK.			
				JOB NO.		BB0201	23	186
				(2)	TEMPORARY EROSION CONTROL DETAILS			

STA. 525+50 TO STA. 528+50
2 EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)
(300' O.C.)

PT 524+12.90

EXISTING R/W & C/A

DBL 4'×3' BC

TRIP 7'×4' BC

525 530 535

STA. 522+00

STA. 537+00

E-7 E-5 E-5 N42°58'01"W E-7 E-7

C.L. I-530

E-11 E-11

18"

EXISTING R/W & C/A

STA. 524+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

STA. 529+80 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

STA. 535+50 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

STA. 530+00 TO STA. 535+00 RT.
452 L.F. SILT FENCE (TYPE E-11)

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- E-5 = SAND BAG DITCH CHECK
- E-7 = DROP INLET SILT FENCE
- E-11 = SILT FENCE
- = CONSTRUCTION AREA

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
1-30-2015

EXISTING R/W & C/A

540 545 550

STA. 537+00

STA. 552+00

E-5 E-5 E-7 N42°58'01"W E-5 E-5 E-7 E-5

C.L. I-530

18" 18"

EXISTING R/W & C/A

STA. 543+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

STA. 538+50 TO STA. 541+00
2 EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)
(250' O.C.)

STA. 546+00 TO STA. 551+00
3 EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)
(250' O.C.)

STA. 550+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

TEMPORARY EROSION CONTROL DETAILS - STAGE IA

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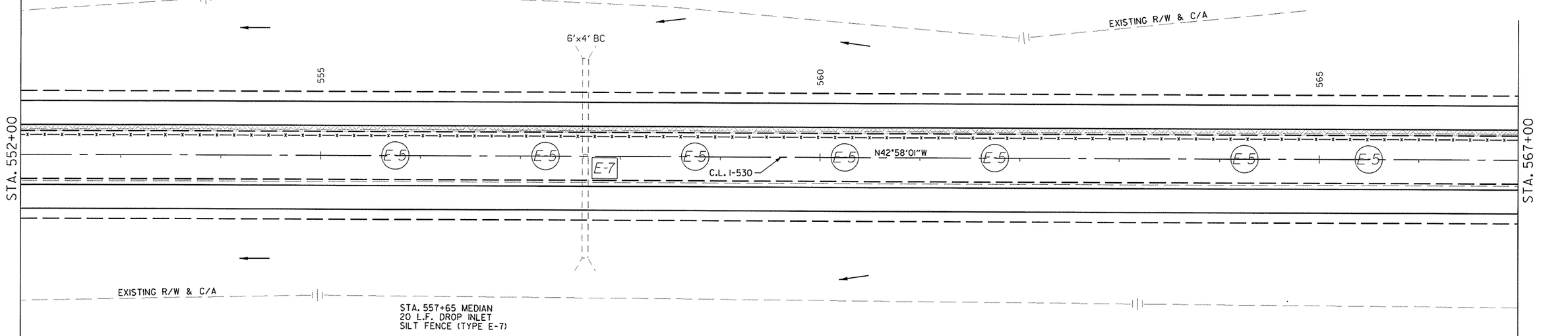
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	24	186
				(2)	TEMPORARY EROSION CONTROL DETAILS			

STA. 555+75 TO STA. 561+75
5 EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)
(150' O.C.)

STA. 564+25 TO STA. 565+50
2 EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)
(125' O.C.)



LEGEND

E-5 = SAND BAG DITCH CHECK

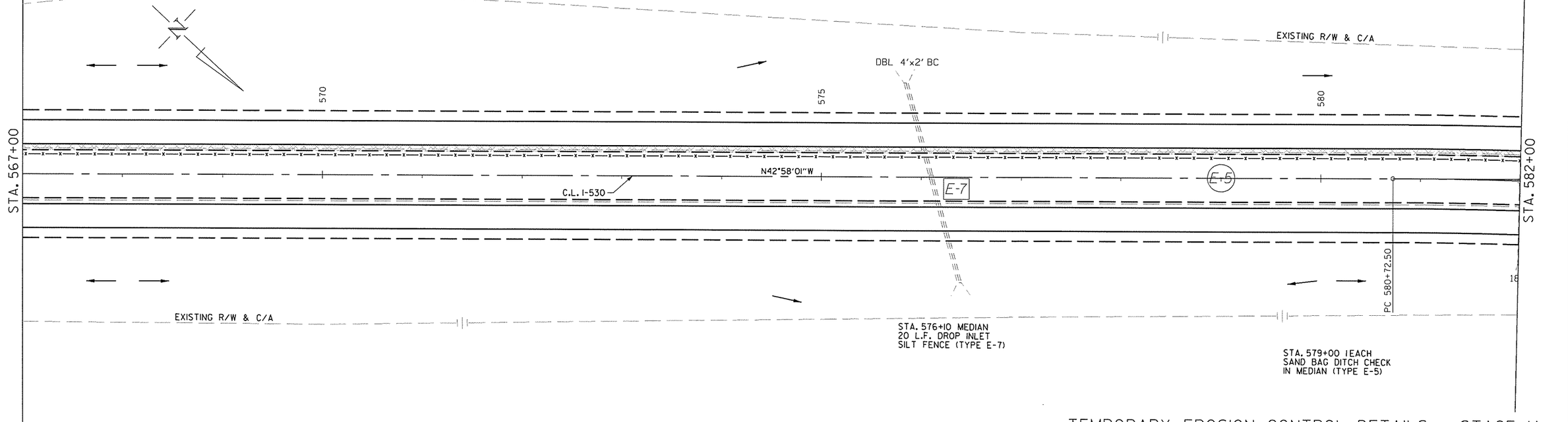
E-7 = DROP INLET SILT FENCE

= CONSTRUCTION AREA

REVISIONS

DATE OF REVISION	REVISION

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
1-30-2015



TEMPORARY EROSION CONTROL DETAILS - STAGE IA

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DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	25	186

(2) TEMPORARY EROSION CONTROL DETAILS

STA. 588+00 TO STA. 590+00 LT.
217 L.F. SILT FENCE (TYPE E-11)

EXISTING R/W & C/A

N42°58'01"W

DBL 6'x4' BC

E-11

E-11

585

590

595

E-7

C.L. I-530

E-5

E-5

E-5

E-5

STA. 582+00

N42°58'01"W

EXISTING R/W & C/A

STA. 588+97 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

STA. 591+50 TO STA. 596+00
4 EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)
(150' O.C.)

STA. 597+00

LEGEND

- E-5 = SAND BAG DITCH CHECK
- E-7 = DROP INLET SILT FENCE
- E-11 = SILT FENCE
- = CONSTRUCTION AREA

REVISIONS

DATE OF REVISION	REVISION

STA. 610+00 TO STA. 612+00 LT.
221 L.F. SILT FENCE (TYPE E-11)

610

N12°18'00"W

600

STA 601+26.14

605

EXISTING R/W & C/A

PC 610+34.20

QUAD 6'x4' BC

E-11

C.L. CROSSOVER 3B

N12°18'00"W

605

RAMP 4

C.L. TEMPORARY RAMP 4

C.L. I-530

E-5

STA. 597+00

C.L. CROSSOVER 3A

N19°31'02"W

STA. 612+00

PC 604+19.20

12"

610

N16°49'30"E

PT 611+39.20

EXISTING R/W & C/A

RAMP 1

C.L. TEMPORARY RAMP 1

PI 608+75.20

18"

STA. 698+50 1EACH
SAND BAG DITCH CHECK
IN MEDIAN (TYPE E-5)

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY

1-30-2015

TEMPORARY EROSION CONTROL DETAILS - STAGE IA

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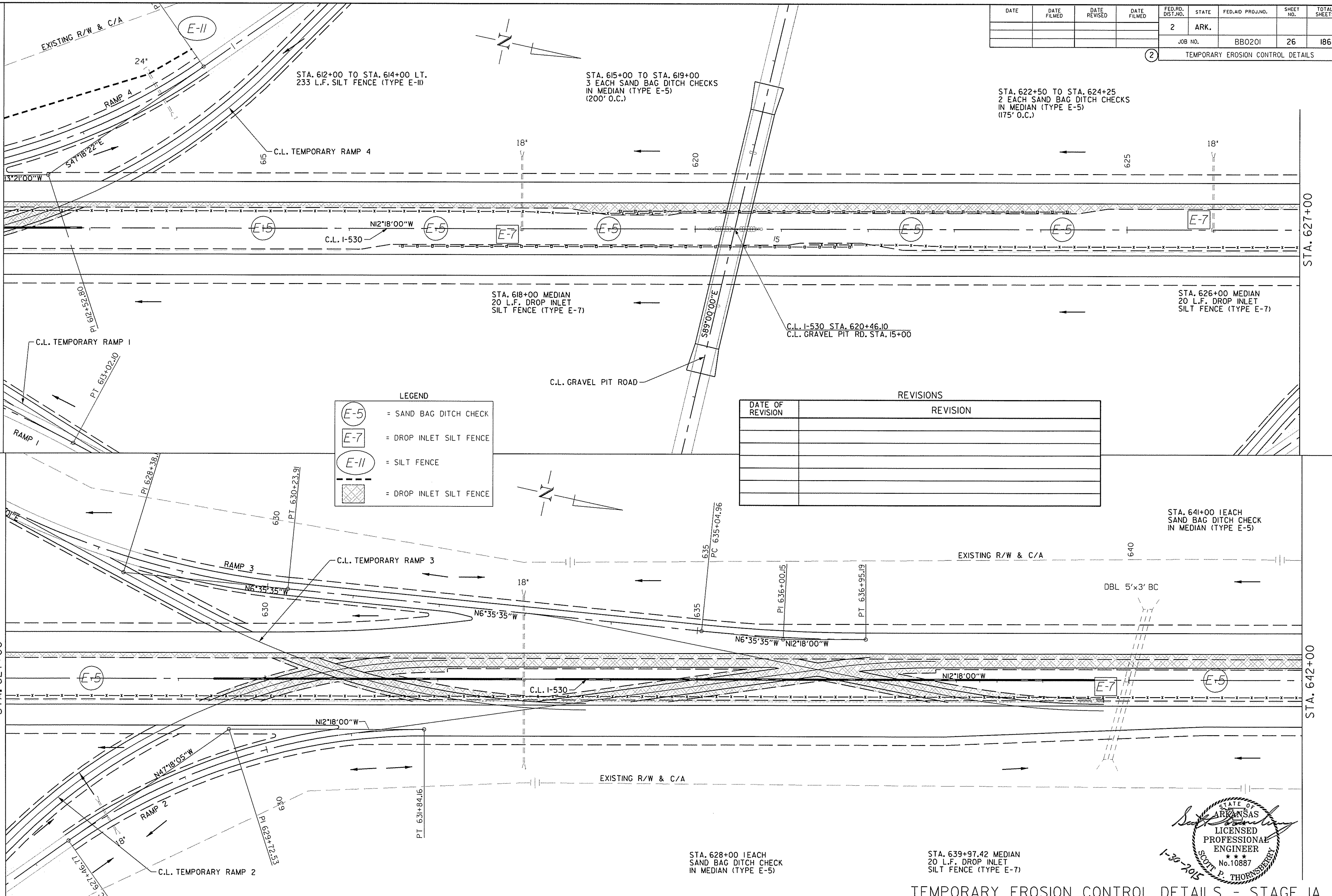
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	26	186

(2) TEMPORARY EROSION CONTROL DETAILS



EXISTING R/W & C/A
E-11
24"
RAMP 4
S47°18'22"E
13°21'00"W
C.L. TEMPORARY RAMP 4
615
STA. 612+00 TO STA. 614+00 LT.
233 L.F. SILT FENCE (TYPE E-11)
STA. 615+00 TO STA. 619+00
3 EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)
(200' O.C.)
STA. 622+50 TO STA. 624+25
2 EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)
(175' O.C.)
18"
620
625
STA. 612+00
STA. 627+00
N12°18'00"W
C.L. I-530
E-5
E-7
15
PI 612+52.80
STA. 618+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)
S89°00'00"E
C.L. I-530 STA. 620+46.10
C.L. GRAVEL PIT RD. STA. 15+00
STA. 626+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)
C.L. TEMPORARY RAMP 1
PT 613+02.10
RAMP 1
C.L. GRAVEL PIT ROAD
PI 628+38.
PT 630+23.91
630
RAMP 3
C.L. TEMPORARY RAMP 3
N6°35'35"W
635
PC 635+04.96
PI 636+00.15
PT 636+95.19
N12°18'00"W
EXISTING R/W & C/A
640
DBL 5'x3' BC
STA. 641+00 1EACH
SAND BAG DITCH CHECK
IN MEDIAN (TYPE E-5)
STA. 627+00
STA. 642+00
C.L. I-530
N47°18'05"W
RAMP 2
PI 629+72.53
PT 631+84.16
PC 627+46.17
C.L. TEMPORARY RAMP 2
STA. 628+00 1EACH
SAND BAG DITCH CHECK
IN MEDIAN (TYPE E-5)
STA. 639+97.42 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
1-30-2015

LEGEND

Symbol	Description
E-5	= SAND BAG DITCH CHECK
E-7	= DROP INLET SILT FENCE
E-11	= SILT FENCE
(dashed line)	
(hatched box)	= DROP INLET SILT FENCE

REVISIONS

DATE OF REVISION	REVISION

TEMPORARY EROSION CONTROL DETAILS - STAGE 1A

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				2	ARK.			
				JOB NO.		BB0201	27	186

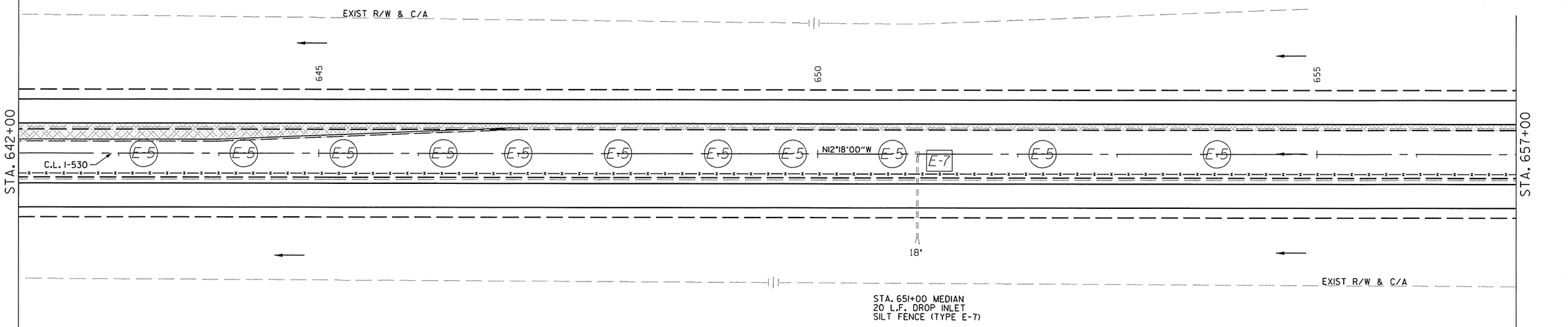
(2) TEMPORARY EROSION CONTROL DETAILS

STA. 643+25 TO STA. 646+25
4 EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)
(100' O.C.)

STA. 647+00 TO STA. 649+00
3 EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)
(100' O.C.)

STA. 649+75 TO STA. 650+75
2 EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)
(100' O.C.)

STA. 652+25 TO STA. 654+00
2 EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)
(175' O.C.)



STA. 651+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

LEGEND

E-5 = SAND BAG DITCH CHECK

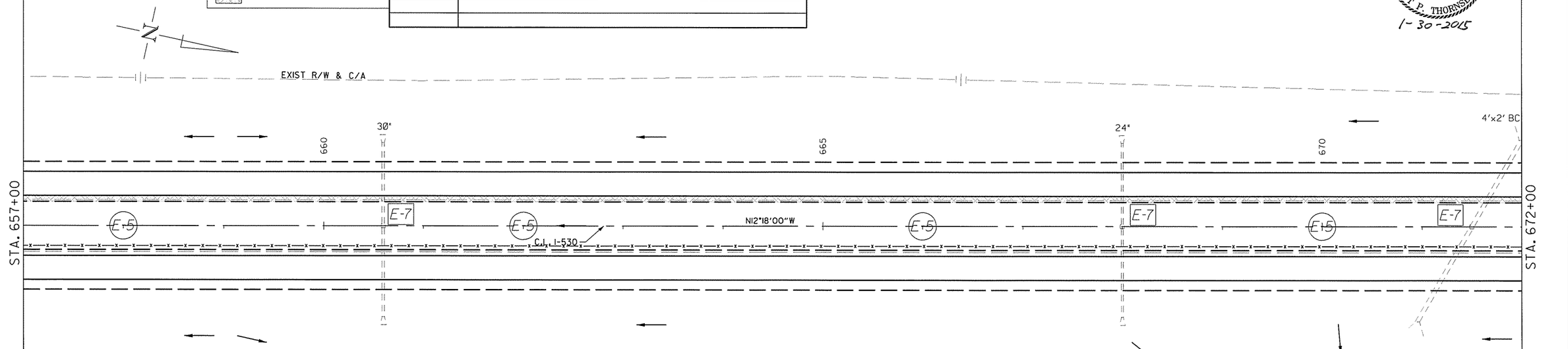
E-7 = DROP INLET SILT FENCE

= CONSTRUCTION AREA

REVISIONS

DATE OF REVISION	REVISION

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
1-30-2015



STA. 660+60 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

STA. 658+00 TO STA. 670+00
4 EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)
(400' O.C.)

STA. 668+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

STA. 671+50 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

TEMPORARY EROSION CONTROL DETAILS - STAGE IA

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	28	186

(2) TEMPORARY EROSION CONTROL DETAILS

STA. 674+00 1 EACH
SAND BAG DITCH CHECK
IN MEDIAN (TYPE E-5)

STA. 680+50 1 EACH
SAND BAG DITCH CHECK
IN MEDIAN (TYPE E-5)

STA. 682+50 TO STA. 686+50
5 EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)
(100' O.C.)

EXISTING R/W & C/A

675 680 685

STA. 672+00

C.L. I-530 N12°18'00"W

E-5 E-5 E-5 E-5 E-5 E-7 E-5 E-5

18"

EXISTING R/W & C/A

STA. 687+00

STA. 685+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

LEGEND

- (E-5) = SAND BAG DITCH CHECK
- [E-7] = DROP INLET SILT FENCE
- (E-11) = SILT FENCE
- = CONSTRUCTION AREA

REVISIONS

DATE OF REVISION	REVISION

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 10887
SCOTT P. THORNSBERRY
1-30-205

E-11

EXISTING R/W & C/A

STA. 690+50 TO STA. 702+00 LT.
968 L.F. SILT FENCE (TYPE E-11)

5'x3' BC

690 695 700

STA. 687+00

E-5 E-5 E-5 E-5 E-5 E-5 E-7 E-5 C.L. I-530 N12°18'00"W E-5 E-5 E-5 E-7

18"

EXISTING R/W & C/A

STA. 695+00 TO STA. 699+00 RT.
456 L.F. SILT FENCE (TYPE E-11)

E-11

STA. 693+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

STA. 687+50 TO STA. 695+50
8 EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)
(100' O.C.)

STA. 700+75 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

STA. 697+00 TO STA. 699+00
2 EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)
(200' O.C.)

STA. 702+00

TEMPORARY EROSION CONTROL DETAILS - STAGE IA

Baker

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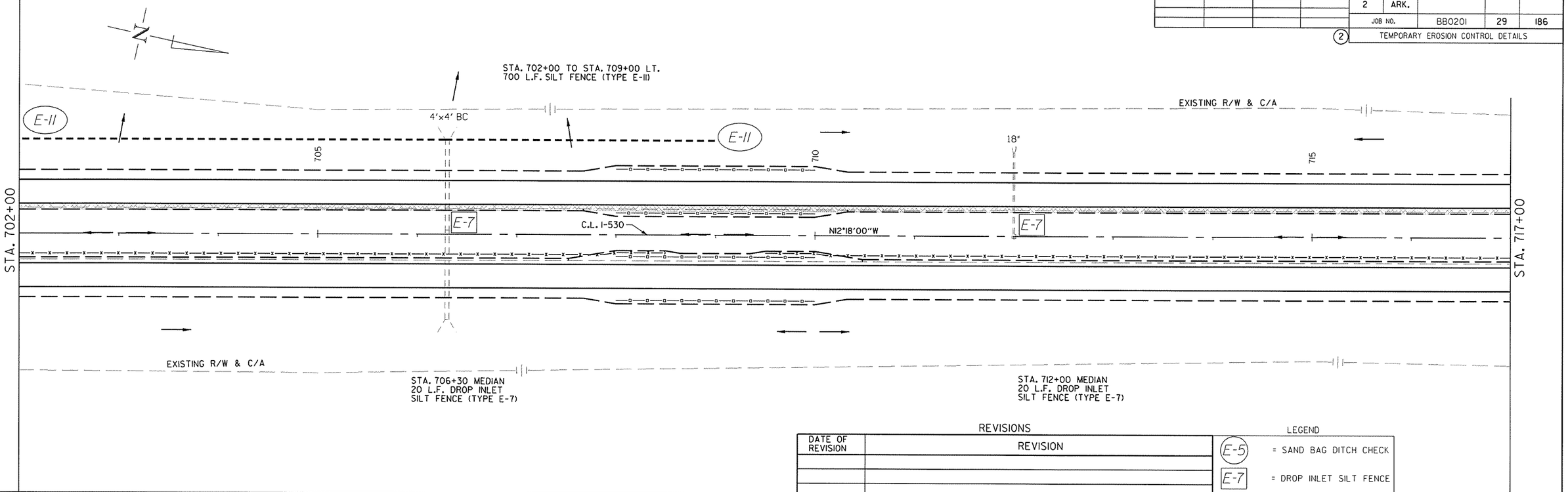
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	29	186
				(2)	TEMPORARY EROSION CONTROL DETAILS			

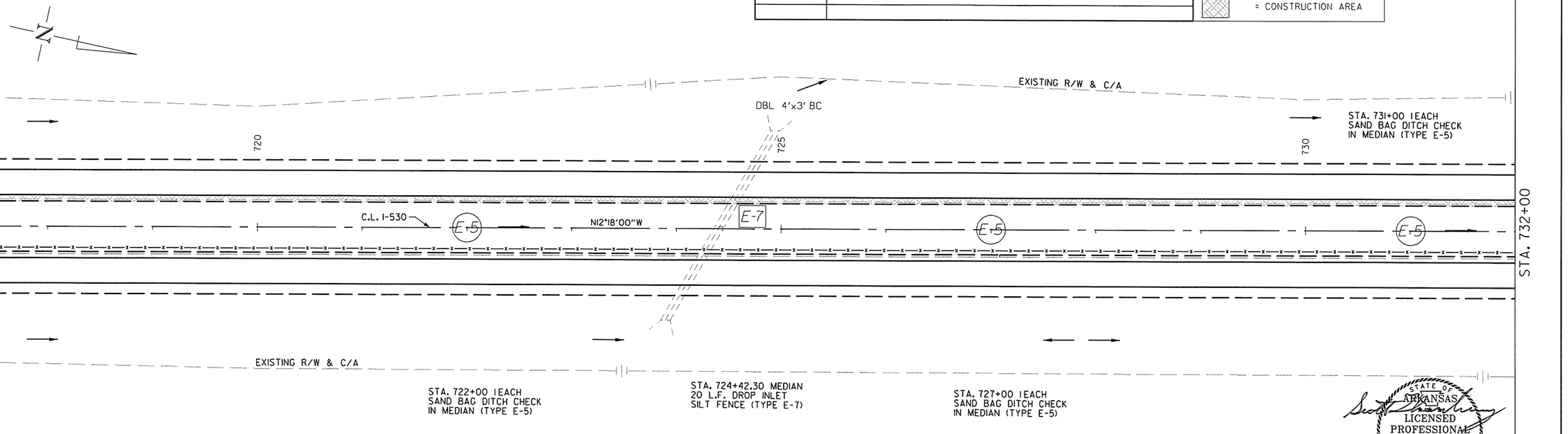


REVISIONS

DATE OF REVISION	REVISION

LEGEND

- E-5 = SAND BAG DITCH CHECK
- E-7 = DROP INLET SILT FENCE
- E-11 = SILT FENCE
- = CONSTRUCTION AREA



STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
1-30-2015

TEMPORARY EROSION CONTROL DETAILS - STAGE IA

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DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	30	186
				(2)	TEMPORARY EROSION CONTROL DETAILS			

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
SCOTT P. THORNSBERRY
No.10887
1-30-2015

STA. 734+00 1EACH
SAND BAG DITCH CHECK
IN MEDIAN (TYPE E-5)

STA. 737+00 1EACH
SAND BAG DITCH CHECK
IN MEDIAN (TYPE E-5)

STA. 741+00 1EACH
SAND BAG DITCH CHECK
IN MEDIAN (TYPE E-5)

STA. 732+00

STA. 747+00

EXISTING R/W & C/A

18"

735

740

745

36"

E-5

E-7

N12°18'00"W

C.L. I-530

EXISTING R/W & C/A

STA. 735+50 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

STA. 746+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5 = SAND BAG DITCH CHECK

E-7 = DROP INLET SILT FENCE

= CONSTRUCTION AREA

STA. 747+00

STA. 762+00

EXISTING R/W & C/A

750

755

760

760

760

PC 758+69.50

PI 760+70.23

18"

RAMP 4

N24°18'00"W

N12°18'00"W

C.L. TEMPORARY RAMP 1

C.L. CROSSOVER 5B

C.L. CROSSOVER 5A

C.L. I-530

E-5

E-7

N12°18'00"W

N12°18'00"W, N6°35'30"W

C.L. TEMPORARY RAMP 4

18"

PC 755+04.80

PI 756+00.02

PT 756+95.08

N6°35'30"W

RAMP 1

EXISTING R/W & C/A

PC 760+15.01

PI 761+99.88

STA. 751+00 1EACH
SAND BAG DITCH CHECK
IN MEDIAN (TYPE E-5)

STA. 753+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

STA. 760+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

TEMPORARY EROSION CONTROL DETAILS - STAGE IA

Baker

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DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	31	186
				(2)	TEMPORARY EROSION CONTROL DETAILS			

EXISTING R/W & C/A

PT 762+69.50

C.L. TEMPORARY RAMP 4

RAMP 4

STA. 764+50 TO STA. 767+50
3 EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)
(200' O.C.)

STA. 770+26.77
END JOB BB0201

POB 772+34.84

STA. 775+00 1EACH
SAND BAG DITCH CHECK
IN MEDIAN (TYPE E-5)

STA.762+00

STA.777+00

N12°18'00"W

C.L. I-530

C.L. CROSSOVER 6B

C.L. CROSSOVER 6A

C.L. TEMPORARY RAMP 2

C.L. I-530 STA. 771+00
C.L. STAGECOACH RD. STA 23+05.40

RAMP 1

N1°03'00"W

PI 767+63.46

30°

POC 769+65.18

N72°18'00"W

C.L. STAGECOACH ROAD

PT 763+84.46

N1°03'00"W N2°42'00"E

EXISTING R/W & C/A

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5 = SAND BAG DITCH CHECK

E-7 = DROP INLET SILT FENCE

= CONSTRUCTION AREA

PC 778+15.54

PI 780+00.41

PT 781+84.99

PC 785+04.92

PT 786+95.20

RAMP 3

N1°03'00"W N6°35'30"W

EXISTING R/W & C/A

N6°35'30"W N12°18'00"W

18°

C.L. CROSSOVER 6A

C.L. CROSSOVER 6B

N12°18'00"W

C.L. I-530

58.50'

PI 786+00.14

STA.777+00

STA.792+00

N24°18'00"W N12°18'00"W

RAMP 2

PC 779+30.10

PI 781+30.83

PT 783+30.10

EXISTING R/W & C/A

STA. 781+50 TO STA. 783+50
2 EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)
(200' O.C.)

STA. 785+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
1-30-2015

TEMPORARY EROSION CONTROL DETAILS - STAGE IA

Baker

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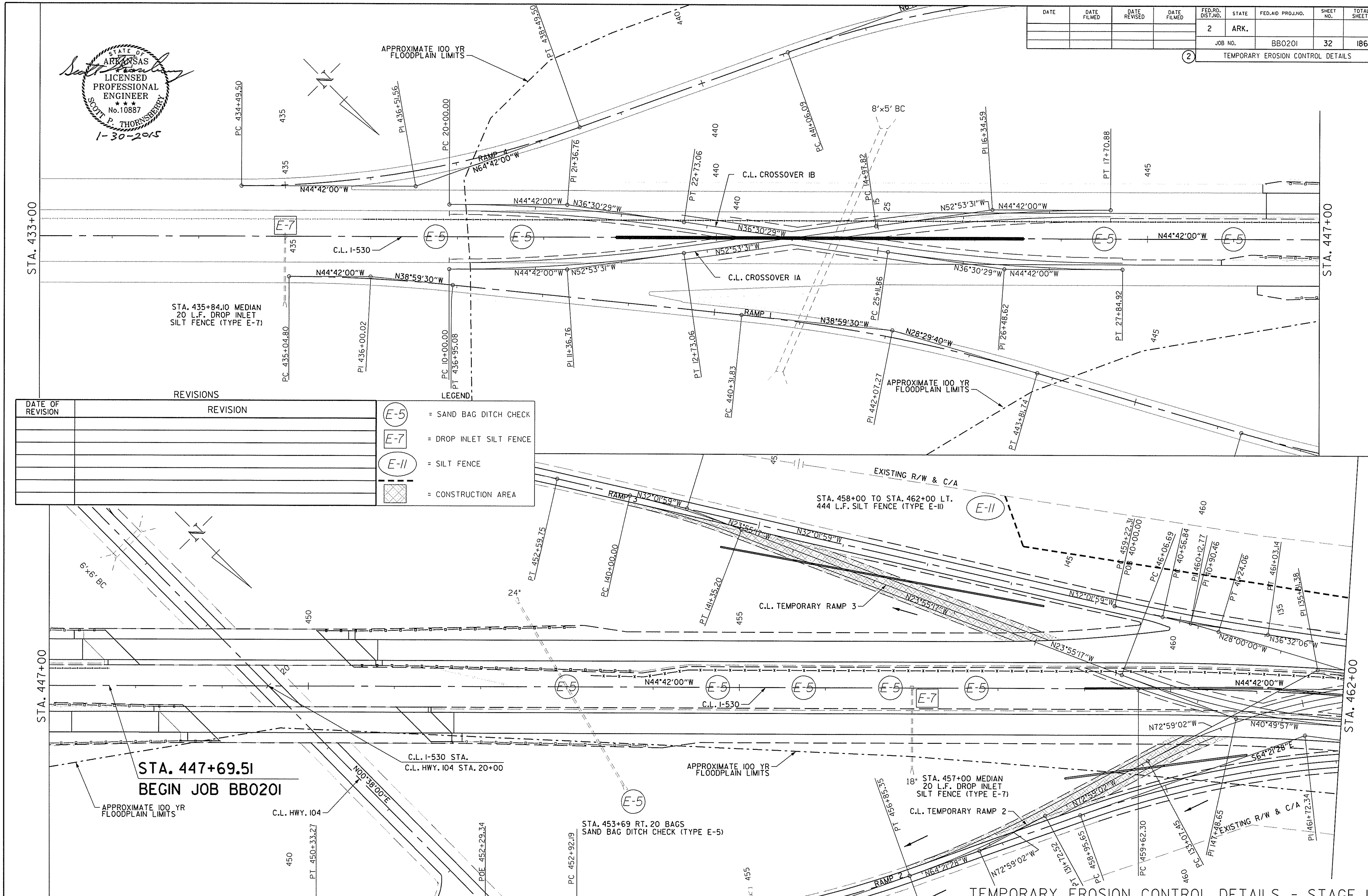
				2	ARK.			
				JOB NO.		BB0201	32	186

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER ★ ★ ★ No.10887 SCOTT P. THORNSBERRY

1-30-2015



APPROXIMATE 100 YR FLOODPLAIN LIMITS
PC 434+49.50
PI 436+51.56
PC 20+00.00
PT 438+49.50
RAMP 4
N64°42'00"W
N44°42'00"W
PI 21+36.76
PT 22+73.06
C.L. CROSSOVER IB
PC 441+06.09
8'x5' BC
PC 14+97.82
PI 16+34.59
PT 17+70.88
N36°30'29"W
N52°53'31"W
E-7
E-5
C.L. I-530
N44°42'00"W
C.L. CROSSOVER IA
N38°59'30"W
STA. 433+00
STA. 447+00
STA. 435+84.10 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)
PC 435+04.80
PI 436+00.02
PC 10+00.00
PT 436+95.08
PI 11+36.76
PT 12+73.06
RAMP 1
PC 440+31.83
PC 25+11.86
N28°29'40"W
PI 26+48.62
PT 27+84.92
PI 442+07.27
PT 443+81.74
EXISTING R/W & C/A
STA. 458+00 TO STA. 462+00 LT.
444 L.F. SILT FENCE (TYPE E-11)
E-11
RAMP 3
N32°01'59"W
N23°55'17"W
6'x6' BC
PT 452+59.75
PC 140+00.00
PT 141+35.20
C.L. TEMPORARY RAMP 3
PI 459+22.31
POB 40+00.00
PC 146+06.69
PI 40+56.84
PI 460+12.77
PT 40+90.46
PT 41+24.06
PI 461+03.14
PI 135+81.38
N28°00'00"W
N36°32'06"W
STA. 462+00
N40°49'57"W
N72°59'02"W
S64°21'28"E
STA. 447+69.51
BEGIN JOB BB0201
C.L. I-530 STA.
C.L. HWY. 104 STA. 20+00
N00°38'00"E
C.L. HWY. 104
APPROXIMATE 100 YR FLOODPLAIN LIMITS
STA. 453+69 RT. 20 BAGS
SAND BAG DITCH CHECK (TYPE E-5)
STA. 457+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)
C.L. TEMPORARY RAMP 2
PT 450+33.27
POE 452+29.34
PC 452+92.19
PT 456+85.35
RAMP 2
N64°21'28"W
PT 131+72.52
PC 458+95.65
PC 459+62.30
PC 133+07.45
PI 147+48.65
PI 461+72.34

REVISIONS

DATE OF REVISION	REVISION

LEGEND

Symbol	Description
(E-5)	= SAND BAG DITCH CHECK
[E-7]	= DROP INLET SILT FENCE
(E-11)	= SILT FENCE
- - - -	= CONSTRUCTION AREA

TEMPORARY EROSION CONTROL DETAILS - STAGE IB

Scott.Thornsberry 1/30/2015 1:43:30 PM
WORKSPACE: scott.thornsberry
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DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0201	33	186

(2) TEMPORARY EROSION CONTROL DETAILS

EXISTING R/W & C/A

APPROXIMATE 100 YR FLOODPLAIN LIMITS

5'x4' BC

PT 36+68.59

PI 35+39.10

PI 465+02.18

PC 463+12.96

PT 137+41.53

PI 463+94.90

PRC 464+16.84

PT 465+87.50

35

45

465

470

475

18"

C.L. TEMPORARY RAMP 2

RAMP 3

RAMP 2

N37°51'04"W

N35°19'19"W

N26°56'02"W

N45°35'13"W

N30°01'27"W

N36°32'06"W

N38°15'28"W

N28°00'00"W

N37°40'00"W

C.L. CROSSOVER 2B

C.L. CROSSOVER 2A

C.L. I-530

STA. 462+00

STA. 477+00

E-5

E-7

E-11

PT 148+88.54

POB 130+00.00

PT 464+38.99

PC 45+72.65

PI 46+31.19

PT 46+89.58

PC 34+09.21

PT 471+46.70

STA. 462+50 RT. 20 BAGS
SAND BAG DITCH CHECK (TYPE E-5)

STA. 462+50 LT. 20 BAGS
SAND BAG DITCH CHECK (TYPE E-5)

STA. 469+57 RT. 20 BAGS
SAND BAG DITCH CHECK (TYPE E-5)

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5 = SAND BAG DITCH CHECK

E-7 = DROP INLET SILT FENCE

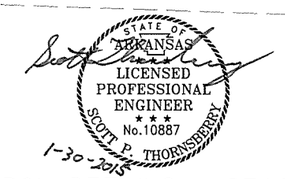
E-11 = SILT FENCE

480

485

490

STA. 492+00



TEMPORARY EROSION CONTROL DETAILS - STAGE IB

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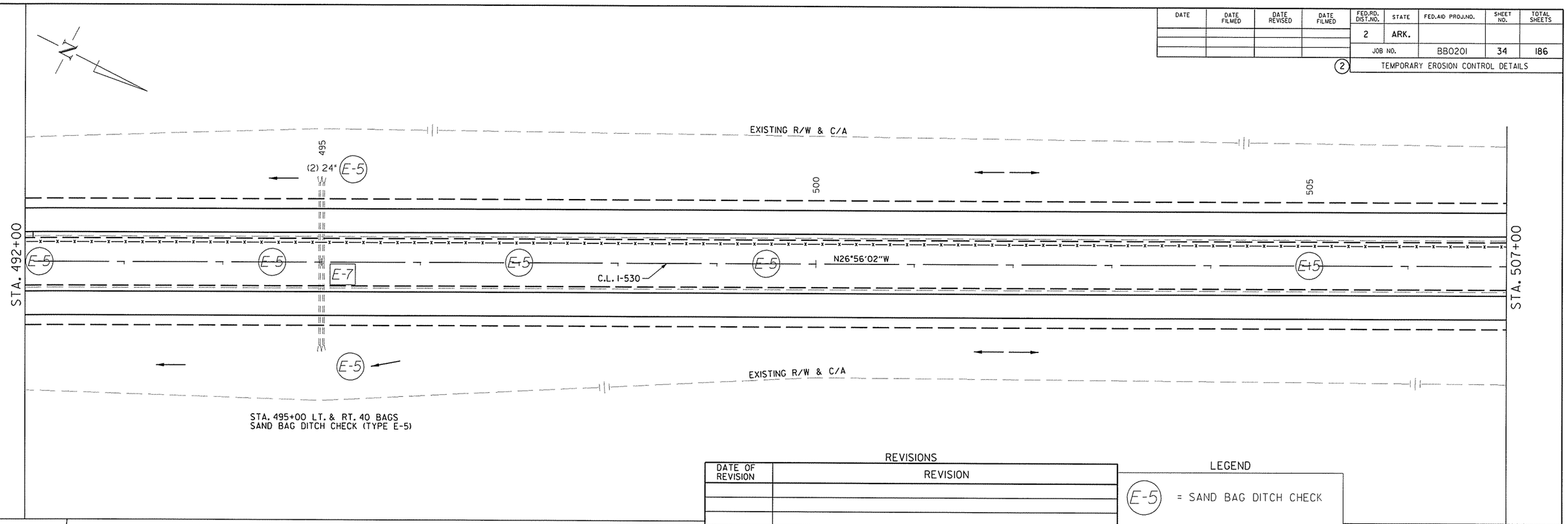
				2	ARK.			
				JOB NO.		BB0201	34	186

(2) TEMPORARY EROSION CONTROL DETAILS



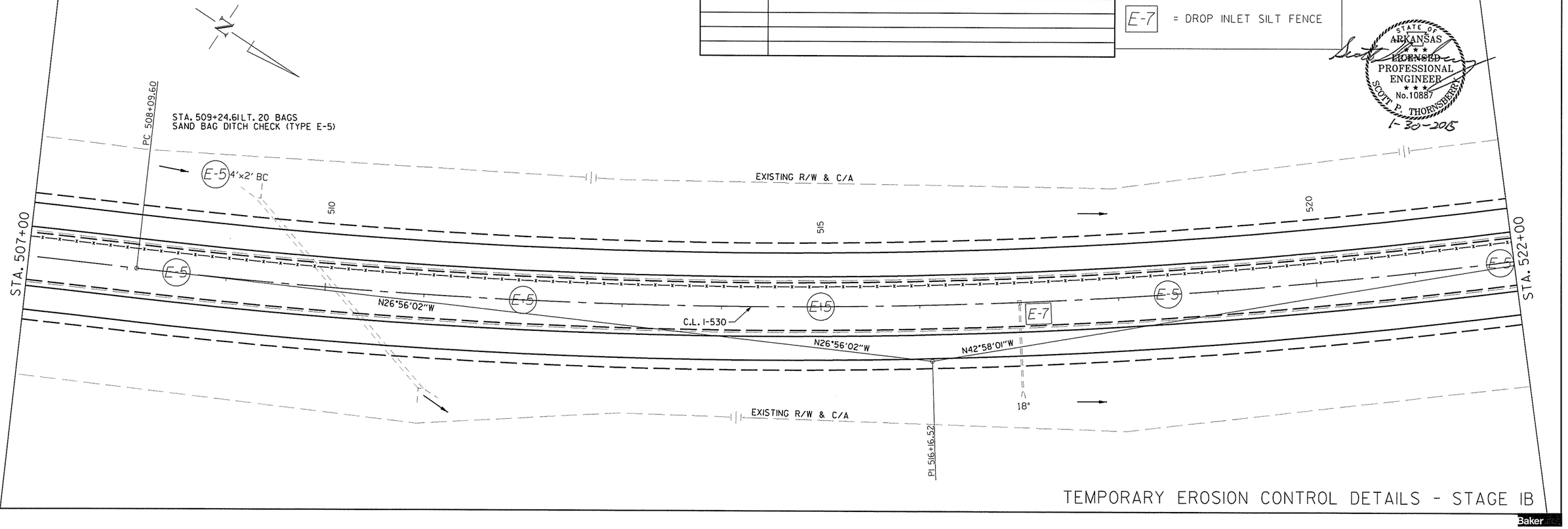
REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5 = SAND BAG DITCH CHECK

E-7 = DROP INLET SILT FENCE



TEMPORARY EROSION CONTROL DETAILS - STAGE IB

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				2	ARK.			
				JOB NO.		BB0201	35	186
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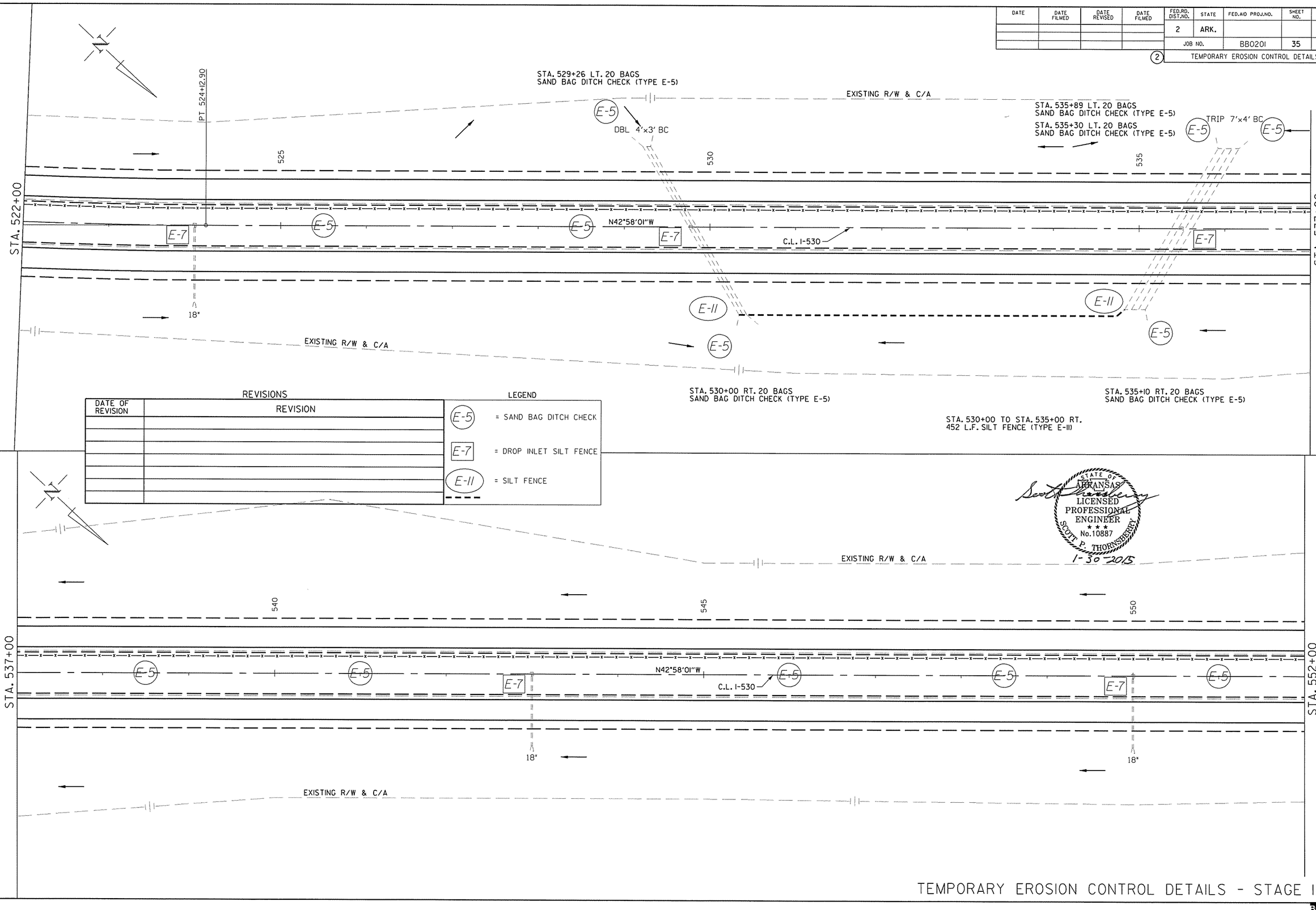

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5 = SAND BAG DITCH CHECK

E-7 = DROP INLET SILT FENCE

E-11 = SILT FENCE

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
1-30-2015

TEMPORARY EROSION CONTROL DETAILS - STAGE IB

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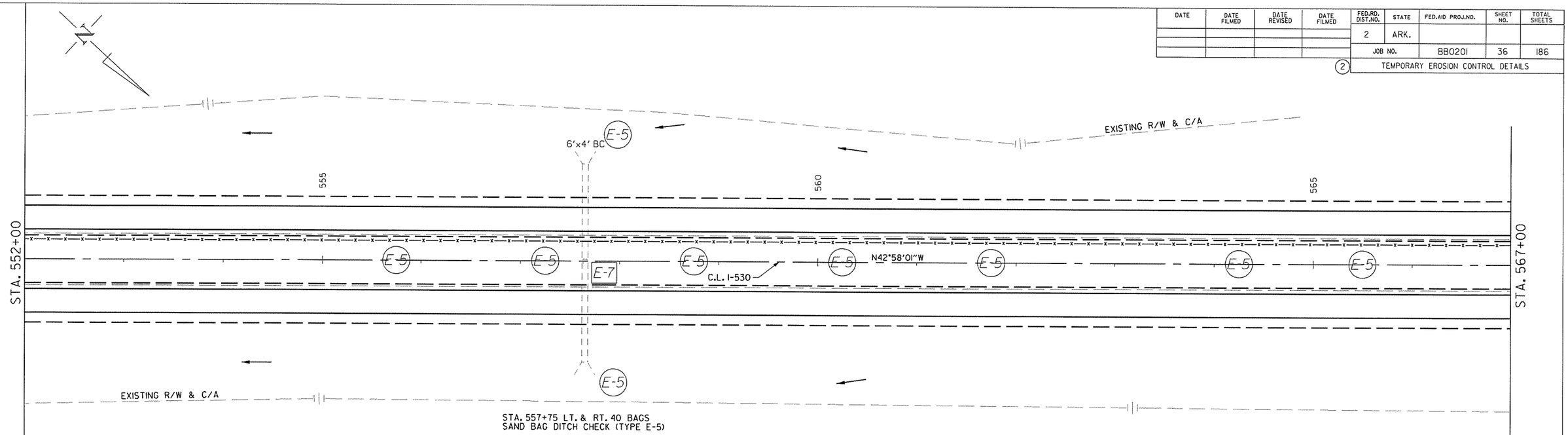
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	36	186
				(2)	TEMPORARY EROSION CONTROL DETAILS			



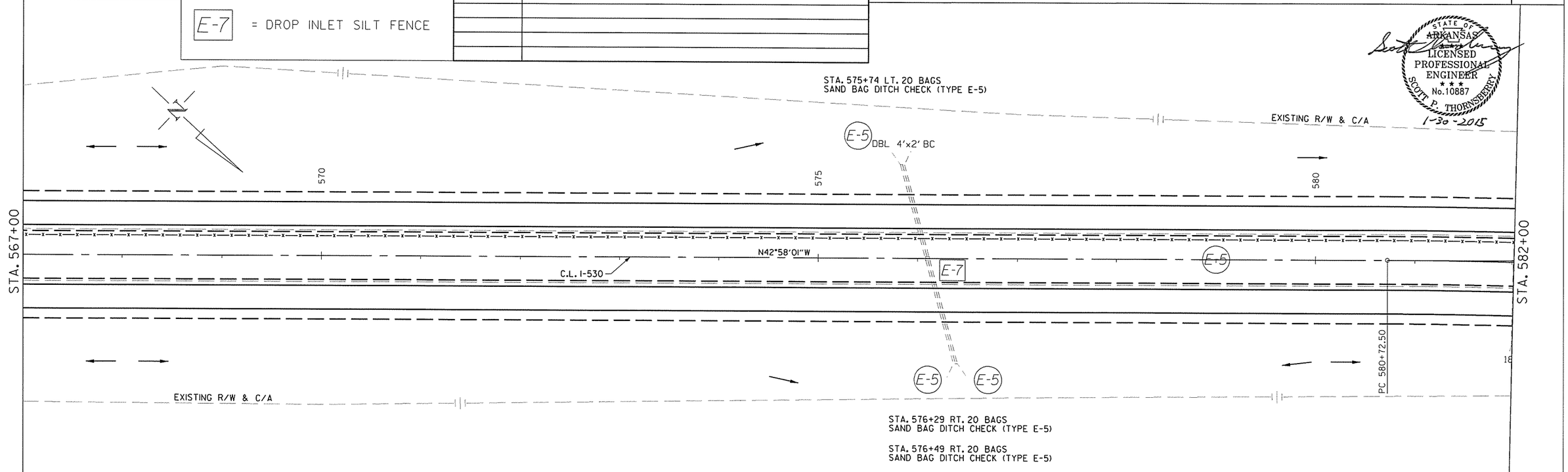
LEGEND

(E-5) = SAND BAG DITCH CHECK

[E-7] = DROP INLET SILT FENCE

REVISIONS

DATE OF REVISION	REVISION



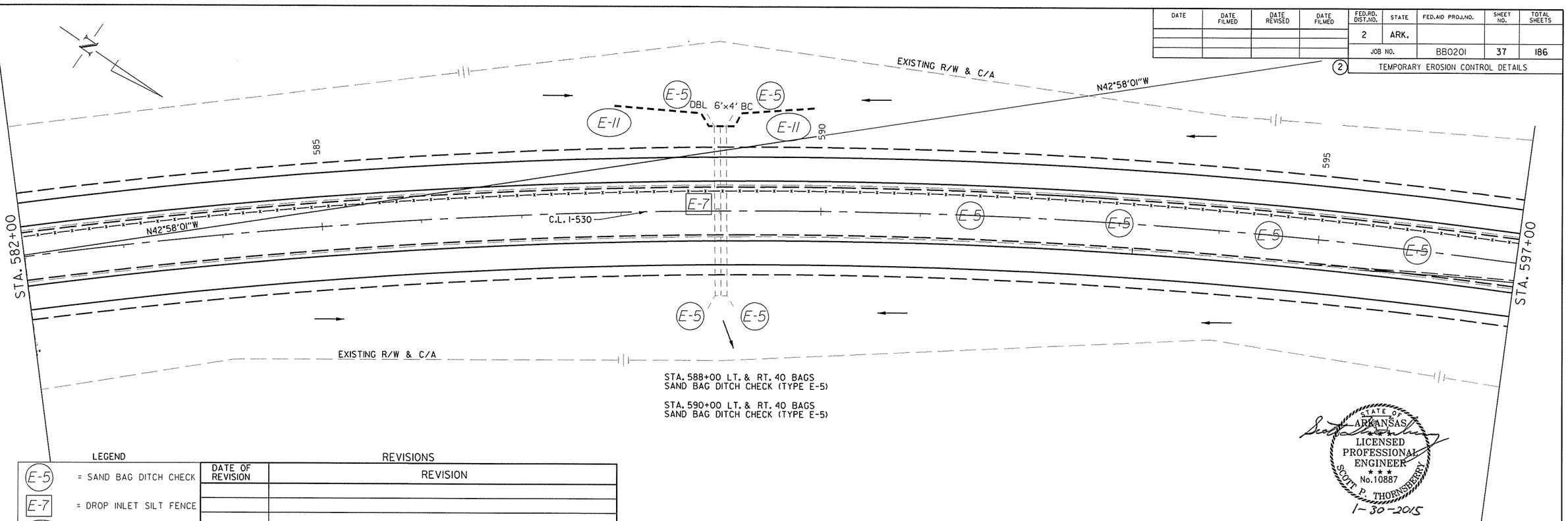
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
1-30-2015

TEMPORARY EROSION CONTROL DETAILS - STAGE IB

Baker

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	37	186

(2) TEMPORARY EROSION CONTROL DETAILS



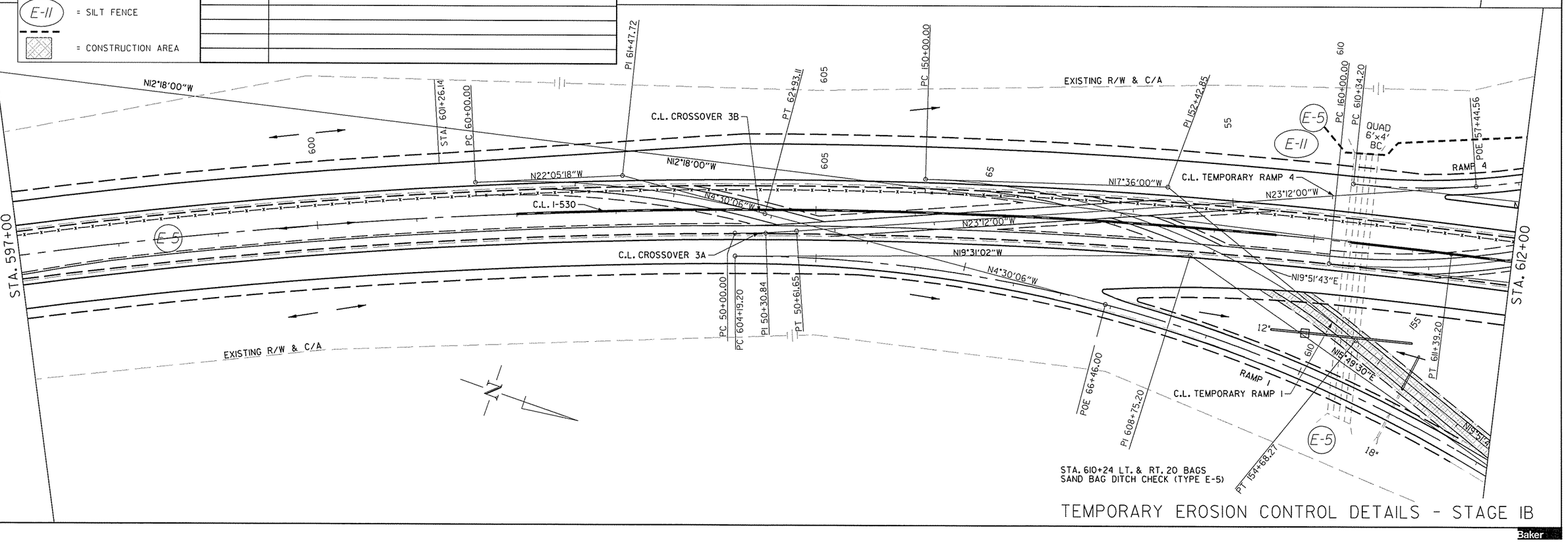
LEGEND

- E-5 = SAND BAG DITCH CHECK
- E-7 = DROP INLET SILT FENCE
- E-11 = SILT FENCE
- = CONSTRUCTION AREA

REVISIONS

DATE OF REVISION	REVISION

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
1-30-2015



TEMPORARY EROSION CONTROL DETAILS - STAGE IB

Baker

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DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0201	38	186

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
1-30-2015

STA. 612+00

STA. 627+00

STA. 627+00

STA. 642+00

EXISTING R/W & C/A

RAMP 4

RAMP 1

RAMP 3

RAMP 2

C.L. TEMPORARY RAMP 4

C.L. TEMPORARY RAMP

C.L. TEMPORARY RAMP 3

C.L. TEMPORARY RAMP 2

C.L. I-530

C.L. GRAVEL PIT ROAD

C.L. I-530 STA. 620+46.10
C.L. GRAVEL PIT RD. STA. 15+00

RAMP 4 STA. 614+00 RT. 20 BAGS
SAND BAG DITCH CHECK (TYPE E-5)

RAMP 4 STA. 613+97 RT. 20 BAGS
SAND BAG DITCH CHECK (TYPE E-5)

STA. 632+97 LT. & RT. 40 BAGS
SAND BAG DITCH CHECK (TYPE E-5)

STA. 633+03 LT. 20 BAGS
SAND BAG DITCH CHECK (TYPE E-5)

STA. 640+36 LT. 20 BAGS
SAND BAG DITCH CHECK (TYPE E-5)

STA. 639+87 RT. 20 BAGS
SAND BAG DITCH CHECK (TYPE E-5)

STA. 639+61 RT. 20 BAGS
SAND BAG DITCH CHECK (TYPE E-5)

DBL 5'x3' BC

LEGEND

E-5	= SAND BAG DITCH CHECK
E-7	= DROP INLET SILT FENCE
E-11	= SILT FENCE
	= DROP INLET SILT FENCE

REVISIONS

DATE OF REVISION	REVISION

TEMPORARY EROSION CONTROL DETAILS - STAGE IB

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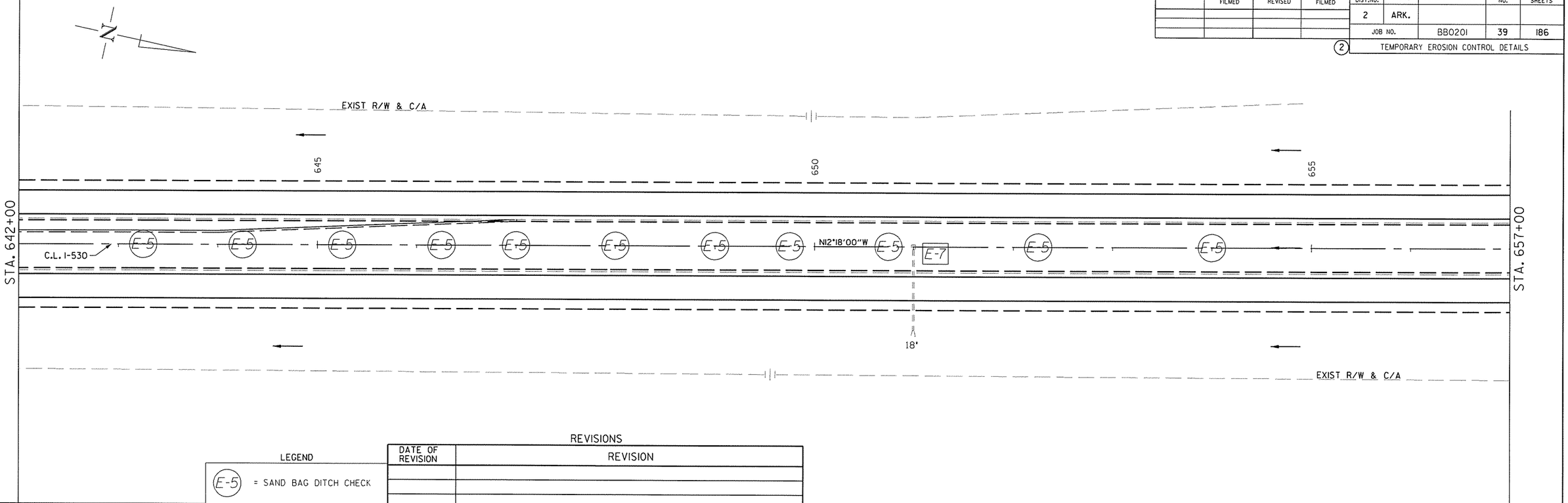
Scott.Thornsberry@30/2015 1:43:34 PM
WORKSPACE: scott_thornsberry
Y:\Projects\AHTD_(38213_I-530_Jefferson-Hwy)\04\Deliverables\ROADWAY\Drawings\RBB0201_05E_EC_IB-MAIN_07.dgn

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0201	39	186

(2) TEMPORARY EROSION CONTROL DETAILS



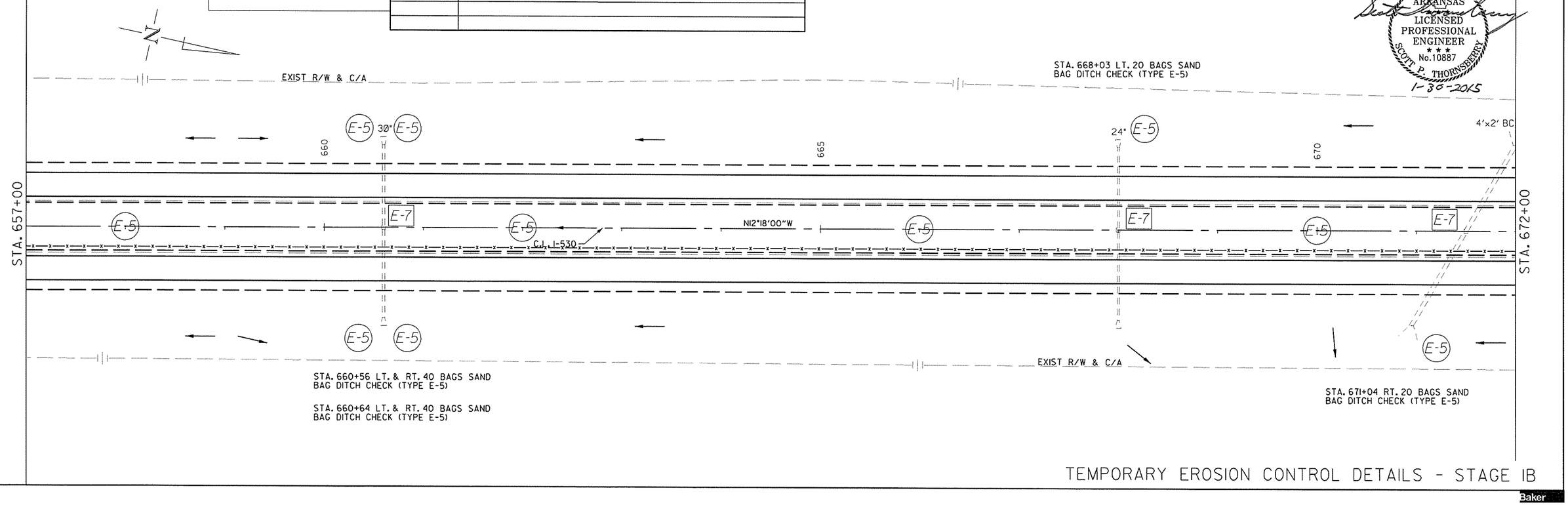
LEGEND

(E-5) = SAND BAG DITCH CHECK

(E-7) = DROP INLET SILT FENCE

REVISIONS

DATE OF REVISION	REVISION



STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
1-30-2015

TEMPORARY EROSION CONTROL DETAILS - STAGE IB

Baker

Scott.Thornsberry 1/30/2015 1:43:34 PM
WORKSPACE: scott.thornsberry
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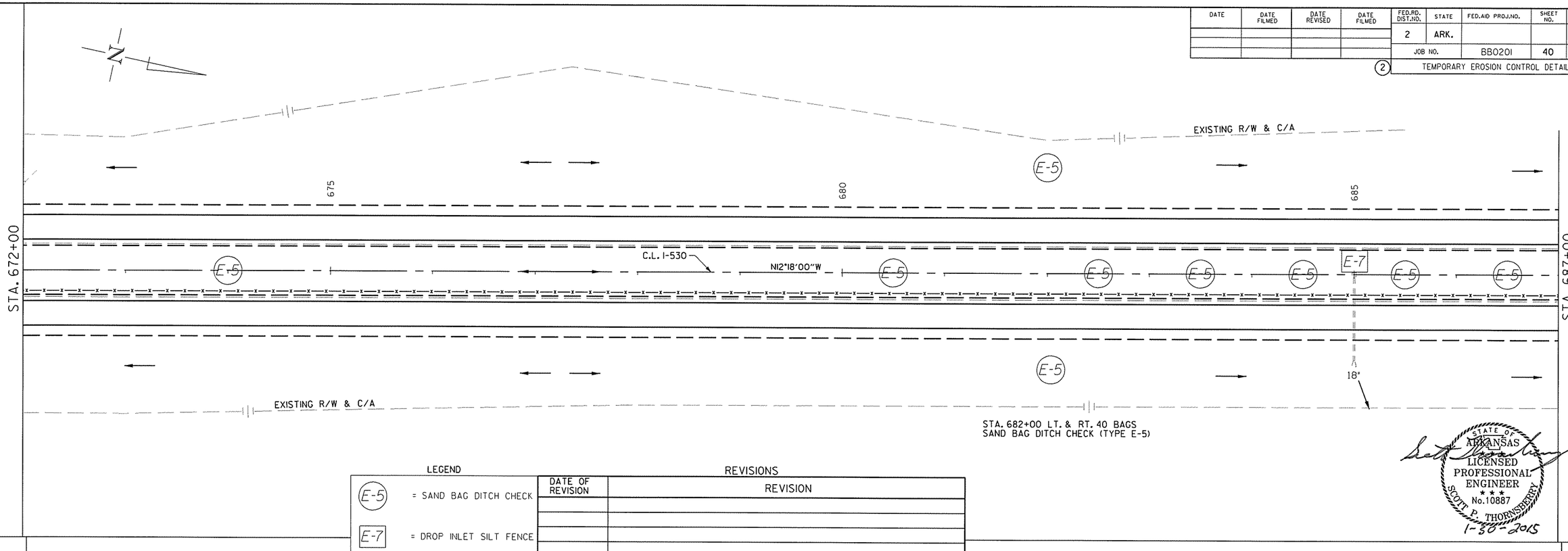
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	40	186
				(2)	TEMPORARY EROSION CONTROL DETAILS			

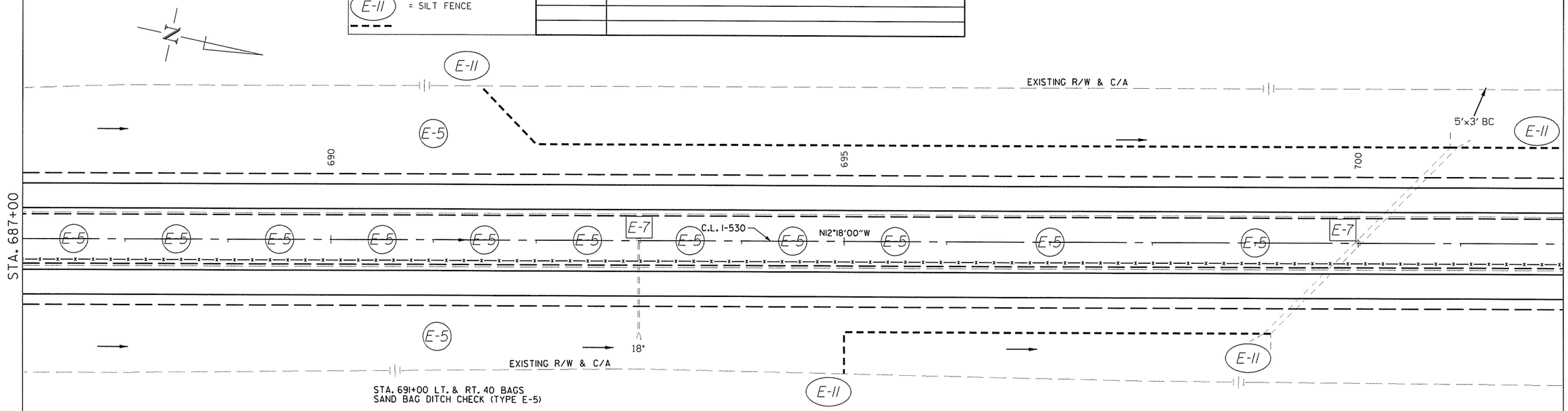


LEGEND

- (E-5) = SAND BAG DITCH CHECK
- [E-7] = DROP INLET SILT FENCE
- (E-11) = SILT FENCE

REVISIONS

DATE OF REVISION	REVISION



STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
1-30-2015

TEMPORARY EROSION CONTROL DETAILS - STAGE IB

Baker

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DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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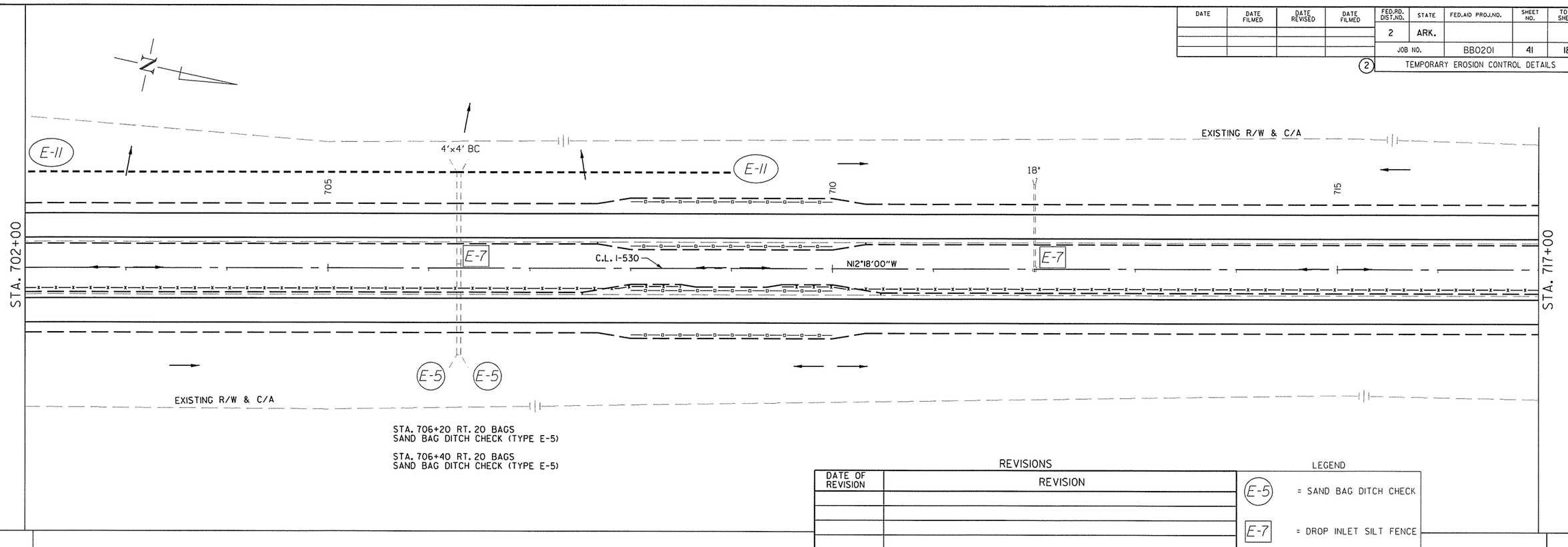
				JOB NO.		BB0201	41	186

(2) TEMPORARY EROSION CONTROL DETAILS



STA. 706+20 RT. 20 BAGS
SAND BAG DITCH CHECK (TYPE E-5)

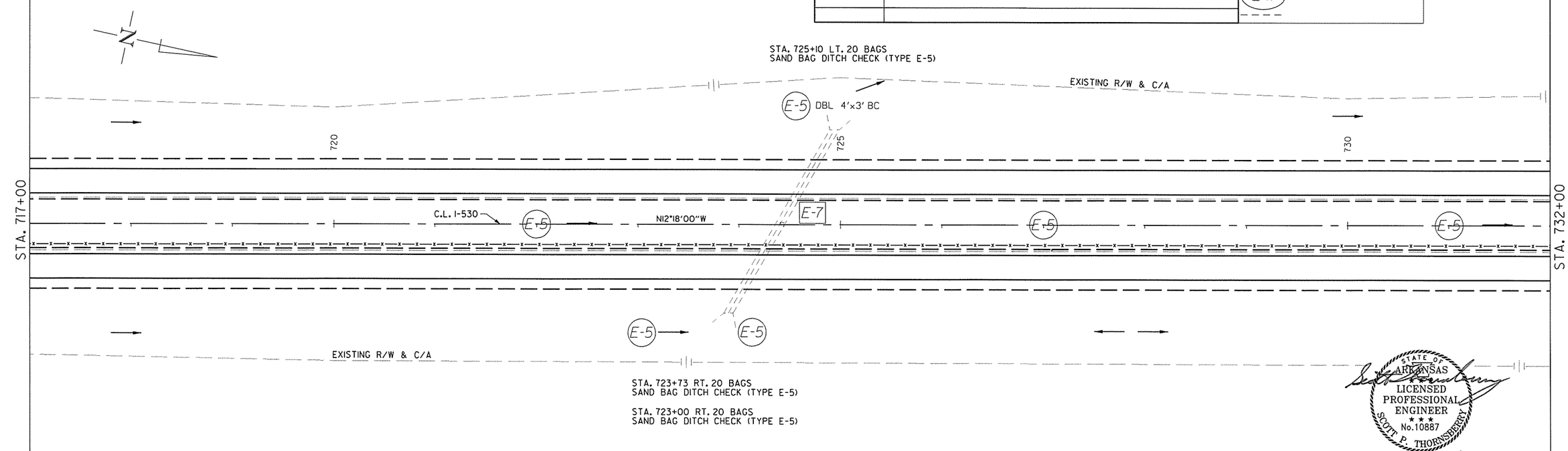
STA. 706+40 RT. 20 BAGS
SAND BAG DITCH CHECK (TYPE E-5)

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECK
- [E-7] = DROP INLET SILT FENCE
- (E-11) = SILT FENCE



STA. 723+73 RT. 20 BAGS
SAND BAG DITCH CHECK (TYPE E-5)

STA. 723+00 RT. 20 BAGS
SAND BAG DITCH CHECK (TYPE E-5)

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
1-30-2015

TEMPORARY EROSION CONTROL DETAILS - STAGE IB

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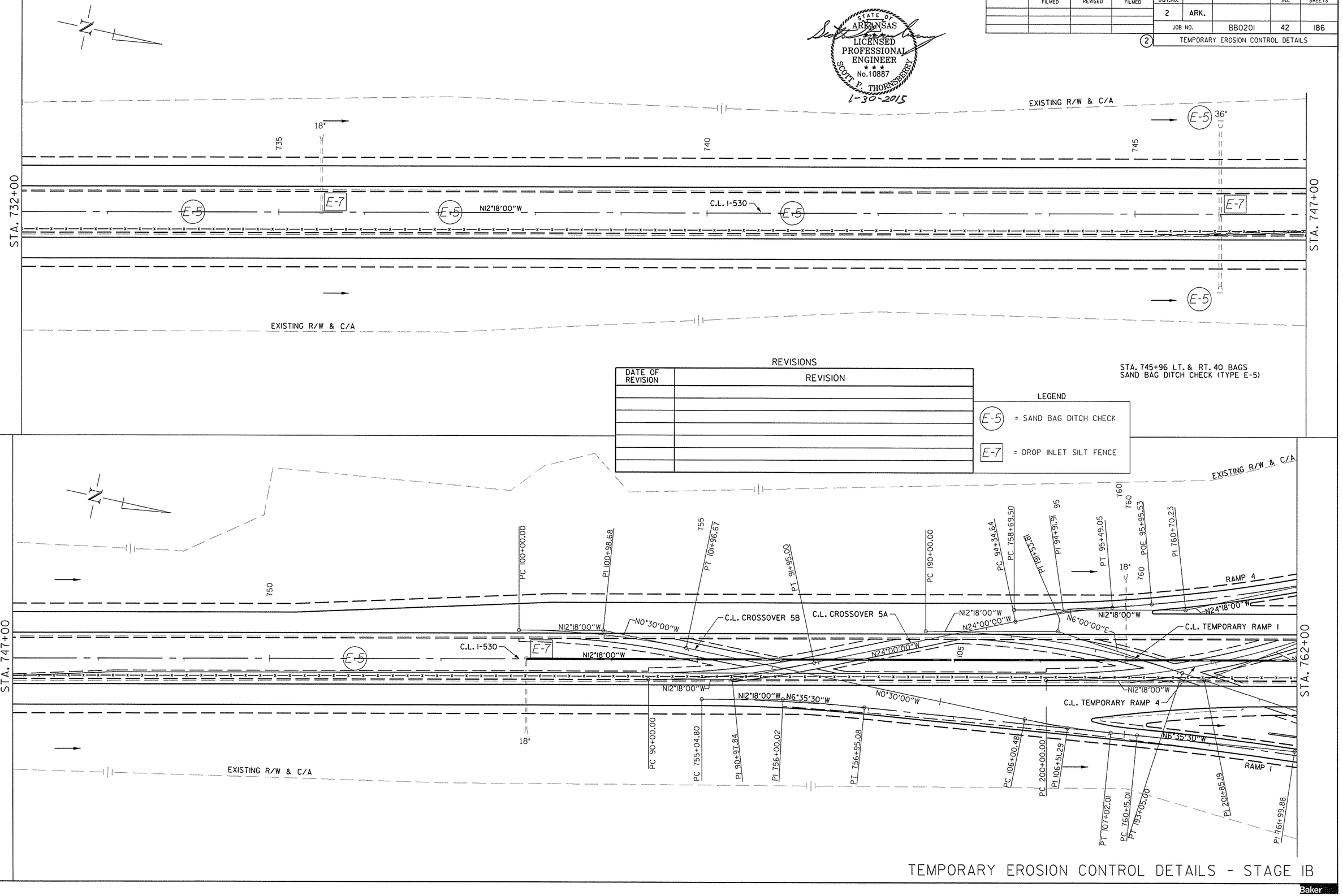
Baker

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	42	186
				(2)	TEMPORARY EROSION CONTROL DETAILS			

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
SCOTT P. THORNSBERRY
No.10887
1-30-2015



REVISIONS

DATE OF REVISION	REVISION

LEGEND

(E-5) = SAND BAG DITCH CHECK

E-7 = DROP INLET SILT FENCE

STA. 745+96 LT. & RT. 40 BAGS
SAND BAG DITCH CHECK (TYPE E-5)

TEMPORARY EROSION CONTROL DETAILS - STAGE IB

Scott.Thornsberry@30/2015 1:43:36 PM
WORKSPACE: scott.thornsberry
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Baker

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	43	186

(2) TEMPORARY EROSION CONTROL DETAILS

STA. 770+26.77
END JOB BB0201

STA.762+00

STA.777+00

STA.792+00

EXISTING R/W & C/A

C.L. TEMPORARY RAMP 4

RAMP 4

PI 202+65.83

PT 762+69.50

PC 205+88.83

PT 207+56.56

N24°11'10"W

N34°15'00"W

C.L. I-530

N12°18'00"W

C.L. TEMPORARY RAMP 2

RAMP 1

N6°00'00"E

N1°03'00"W

PT 198+86.11

PI 767+63.46

PT 763+84.46

PC 197+68.61

198+27.43

N2°42'00"E

POE 769+65.18

STA. 768+00 RT.
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

RAMP 1 STA. 766+19 RT. 20 BAGS
SAND BAG DITCH CHECK (TYPE E-5)

RAMP 1 STA. 766+58 RT. 20 BAGS
SAND BAG DITCH CHECK (TYPE E-5)

C.L. I-530 STA. 771+00
C.L. STAGECOACH RD. STA 23+05.40

C.L. STAGECOACH ROAD

N72°18'00"W

POB 772+34.84

PC 120+00.00

PI 121+36.76

N4°06'30"W

C.L. CROSSOVER 6B

C.L. CROSSOVER 6A

N20°29'30"W

PC 110+00.00

PI 111+36.76

PC 778+15.54

PI 780+00.41

PT 781+84.99

PI 116+48.63

PT 117+84.92

PC 785+04.92

PT 786+95.20

RAMP 3

N1°03'00"W

N6°35'30"W

PT 122+73.06

PC 115+11.87

PC 124+97.83

PT 112+73.06

RAMP 2

N24°18'00"W

PI 126+34.59

PI 781+30.83

PT 127+70.89

PT 783+30.10

PC 779+30.10

PI 786+00.14

58.50'

E-5 SAND BAG DITCH CHECK

E-7 DROP INLET SILT FENCE

30"

18"

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- E-5 = SAND BAG DITCH CHECK
- E-7 = DROP INLET SILT FENCE
- = CONSTRUCTION AREA

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
1-30-2015

TEMPORARY EROSION CONTROL DETAILS - STAGE IB

Baker

Scott.Thornsberry@30/205 14:43:36 PM
WORKSPACE: scott.thornsberry
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DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	44	186
				(2)	MAINTENANCE OF TRAFFIC			

SUMMARY OF SEQUENCE OF CONSTRUCTION

STAGE 1A OPERATIONS:
INSTALL ADVANCE WARNING SIGNS
CLOSE INSIDE LANE ON MAIN LANES
CONSTRUCT CROSSOVERS, TEMPORARY RAMPS AND ACCELERATION LANES IN MEDIAN AREA
TRENCH & SHOULDER PREPARATION OF THE INSIDE SOUTHBOUND SHOULDER OF THE SB I-530 LANES

STAGE 1B OPERATIONS:
CLOSE OUTSIDE LANE ON MAIN LANES
CONSTRUCT TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS

STAGE 2A OPERATIONS:
INSTALL PRECAST CONCRETE BARRIER
ROUTE NB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANES OF SB MAIN LANES
RECONSTRUCT NB LANES, APPROACH GUTTERS & SLABS, PERFORM HYDRODEMOLITION OPERATIONS IN THE AREAS SHOWN
OVERLAY TEMPORARY RAMPS WHERE DIRECTED BY ENGINEER TO MATCH SURFACE OF RECONSTRUCTED NB I-530 LANES.

STAGE 2B OPERATIONS:
RETAIN STAGE 2A TRAFFIC PATH FOR NB I-530 TRAFFIC
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO ALTERNATE TEMPORARY RAMPS
RECONSTRUCT REMAINING SECTIONS OF I-530 NORTHBOUND LANES.
OVERLAY REMAINING TEMPORARY RAMPS WHERE DIRECTED BY ENGINEER TO MATCH SURFACE OF RECONSTRUCTED NB I-530 LANES.
OBLITERATE NORTHBOUND TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS

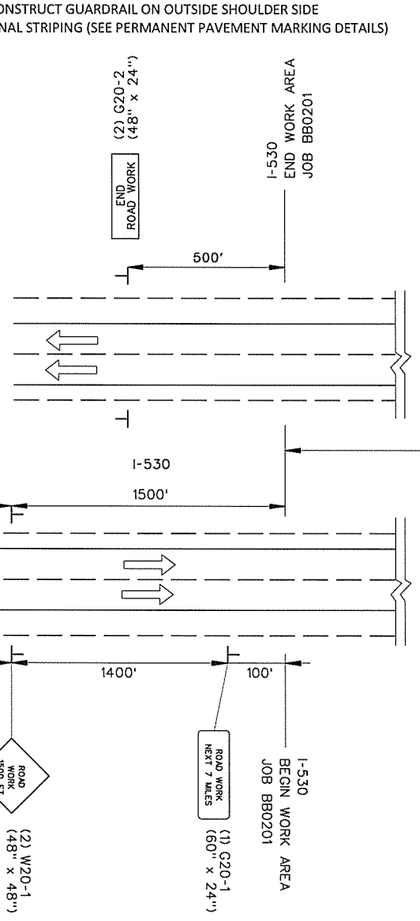
STAGE 3A OPERATIONS:
RELOCATE PRECAST CONCRETE BARRIER TO NB LANES
ROUTE SB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANES OF NB MAIN LANES
RECONSTRUCT SB LANES, APPROACH GUTTERS & SLABS, PERFORM HYDRODEMOLITION OPERATIONS IN THE AREAS SHOWN
OVERLAY TEMPORARY RAMPS WHERE DIRECTED BY ENGINEER TO MATCH SURFACE OF RECONSTRUCTED SB I-530 LANES.

STAGE 3B OPERATIONS:
RETAIN STAGE 3A TRAFFIC PATH FOR NB I-530 TRAFFIC
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO ALTERNATE TEMPORARY RAMPS
RECONSTRUCT REMAINING SECTIONS OF I-530 SOUTHBOUND LANES.
OBLITERATE SOUTHBOUND TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS

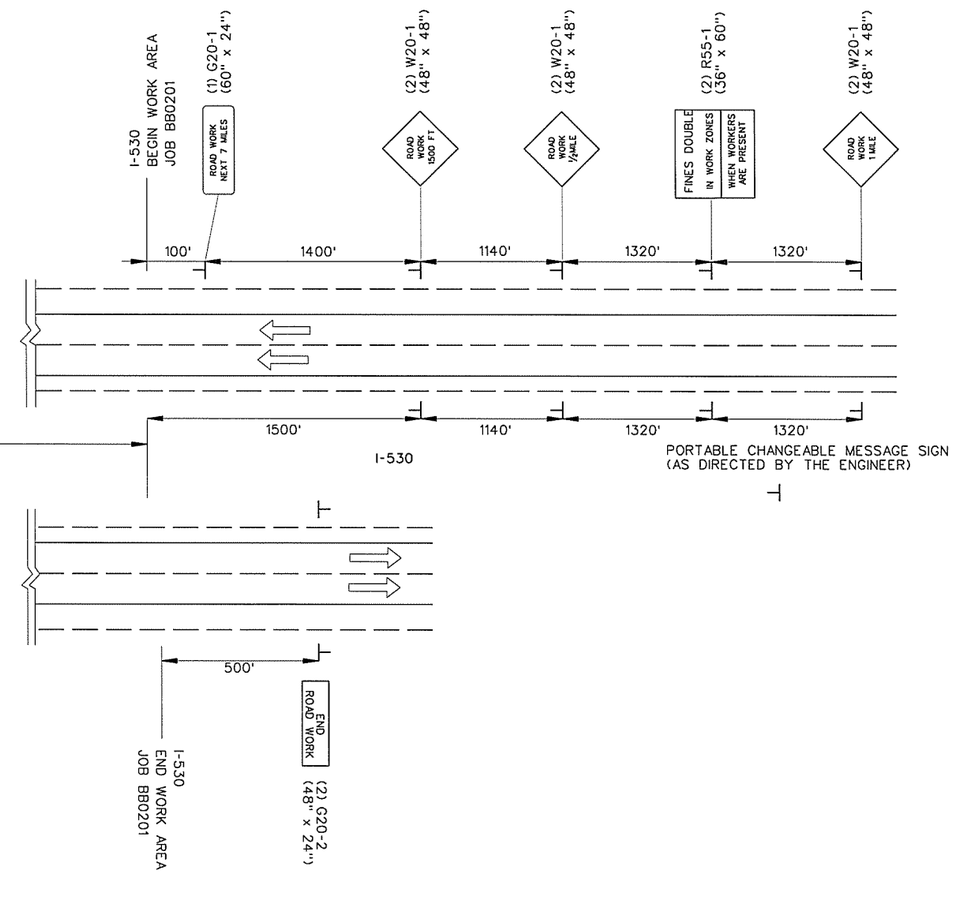
STAGE 4A OPERATIONS:
SHIFT SB TRAFFIC TO OUTSIDE SB LANE
RETAIN NB TRAFFIC IN OUTSIDE NB LANE
REMOVE PRECAST CONCRETE BARRIER AND REPLACE WITH TRAFFIC DRUMS
OBLITERATE CROSSOVERS AND TEMPORARY RAMPS IN MEDIAN AREA
CONSTRUCT FINAL GRADING IN MEDIAN AREA
PLACE FINAL LIFT OF SURFACE ON INSIDE LANE AND SHOULDER
CONSTRUCT WRSF AND GUARDRAIL ON MEDIAN SIDE

STAGE 4B OPERATIONS:
SHIFT TRAFFIC TO INSIDE LANES OF NB & SB LANES. PLACE FINAL LIFT OF SURFACE ON OUTSIDE LANES, SHOULDERS, AND RAMPS
CONSTRUCT GUARDRAIL ON OUTSIDE SHOULDER SIDE
FINAL STRIPING (SEE PERMANENT PAVEMENT MARKING DETAILS)

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA
1/30/15



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



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

ADVANCE WARNING SIGNS AT BEGINNING AND END OF JOB

SUMMARY OF SEQUENCE OF CONSTRUCTION

STAGE 1A OPERATIONS:
INSTALL ADVANCE WARNING SIGNS
CLOSE INSIDE LANE ON MAIN LANES
CONSTRUCT CROSSOVERS, TEMPORARY RAMPS AND ACCELERATION LANES IN MEDIAN AREA
TRENCH & SHOULDER PREPARATION OF THE INSIDE SOUTHBOUND SHOULDER OF THE SB I-530 LANES

STAGE 1B OPERATIONS:
CLOSE OUTSIDE LANE ON MAIN LANES
CONSTRUCT TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS

STAGE 2A OPERATIONS:
INSTALL PRECAST CONCRETE BARRIER
ROUTE NB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANES OF SB MAIN LANES
RECONSTRUCT NB LANES, APPROACH GUTTERS & SLABS, PERFORM HYDRODEMOLITION OPERATIONS IN THE AREAS SHOWN
OVERLAY TEMPORARY RAMPS WHERE DIRECTED BY ENGINEER TO MATCH SURFACE OF RECONSTRUCTED NB I-530 LANES.

STAGE 2B OPERATIONS:
RETAIN STAGE 2A TRAFFIC PATH FOR NB I-530 TRAFFIC
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO ALTERNATE TEMPORARY RAMPS
RECONSTRUCT REMAINING SECTIONS OF I-530 NORTHBOUND LANES.
OVERLAY REMAINING TEMPORARY RAMPS WHERE DIRECTED BY ENGINEER TO MATCH SURFACE OF RECONSTRUCTED NB I-530 LANES.
OBLITERATE NORTHBOUND TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS

STAGE 3A OPERATIONS:
RELOCATE PRECAST CONCRETE BARRIER TO NB LANES
ROUTE SB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANES OF NB MAIN LANES
RECONSTRUCT SB LANES, APPROACH GUTTERS & SLABS, PERFORM HYDRODEMOLITION OPERATIONS IN THE AREAS SHOWN
OVERLAY TEMPORARY RAMPS WHERE DIRECTED BY ENGINEER TO MATCH SURFACE OF RECONSTRUCTED SB I-530 LANES.

STAGE 3B OPERATIONS:
RETAIN STAGE 3A TRAFFIC PATH FOR NB I-530 TRAFFIC
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO ALTERNATE TEMPORARY RAMPS
RECONSTRUCT REMAINING SECTIONS OF I-530 SOUTHBOUND LANES.
OBLITERATE SOUTHBOUND TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS

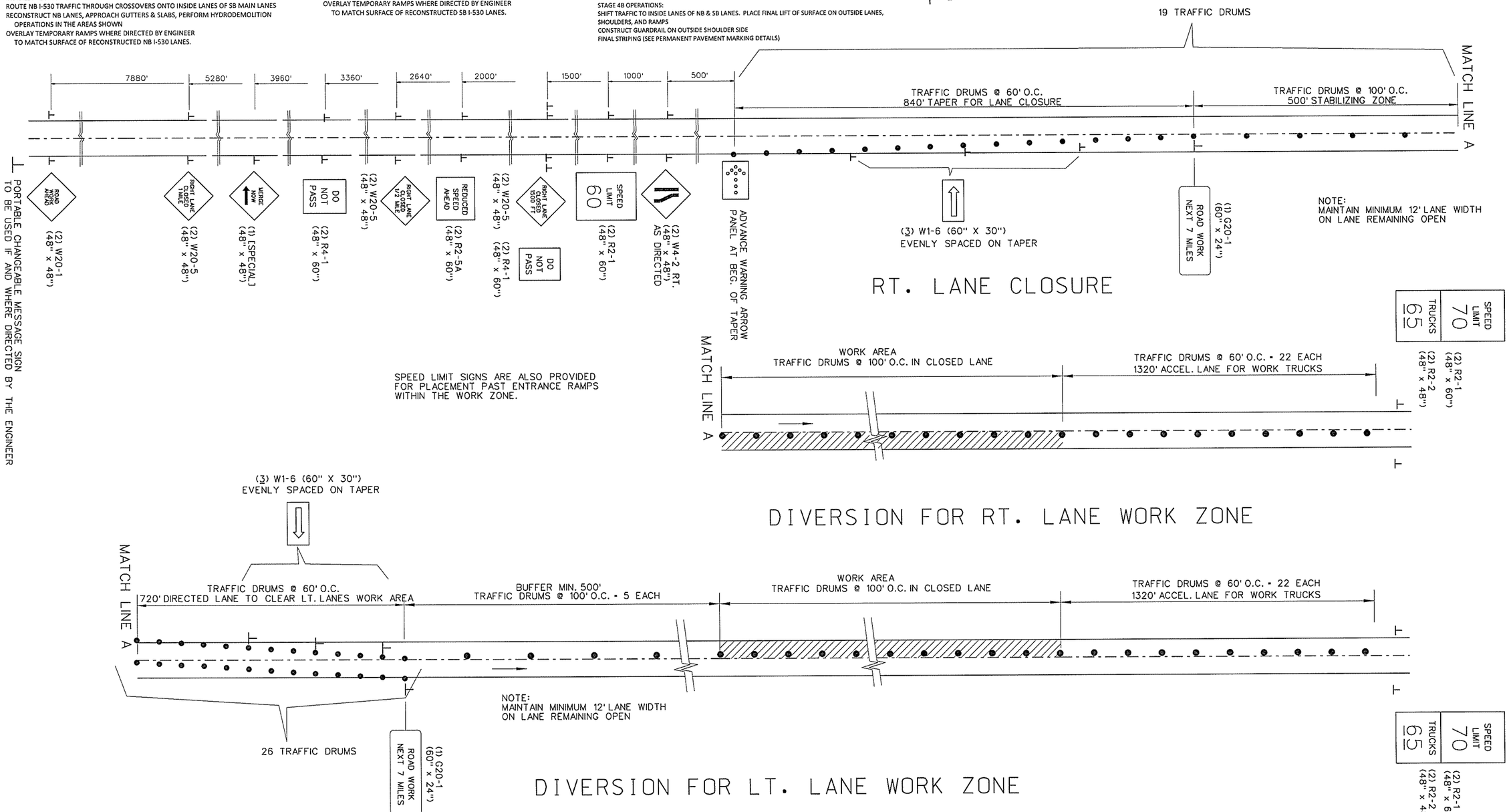
STAGE 4A OPERATIONS:
SHIFT SB TRAFFIC TO OUTSIDE SB LANE
RETAIN NB TRAFFIC IN OUTSIDE NB LANE
REMOVE PRECAST CONCRETE BARRIER AND REPLACE WITH TRAFFIC DRUMS
OBLITERATE CROSSOVERS AND TEMPORARY RAMPS IN MEDIAN AREA
CONSTRUCT FINAL GRADING IN MEDIAN AREA
PLACE FINAL LIFT OF SURFACE ON INSIDE LANE AND SHOULDER
CONSTRUCT WRSF AND GUARDRAIL ON MEDIAN SIDE

STAGE 4B OPERATIONS:
SHIFT TRAFFIC TO INSIDE LANES OF NB & SB LANES. PLACE FINAL LIFT OF SURFACE ON OUTSIDE LANES, SHOULDERS, AND RAMPS
CONSTRUCT GUARDRAIL ON OUTSIDE SHOULDER SIDE
FINAL STRIPING (SEE PERMANENT PAVEMENT MARKING DETAILS)

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

1/30/15

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	45	186
				(2)	MAINTENANCE OF TRAFFIC			



RT. LANE CLOSURE

SPEED LIMIT 70 / TRUCKS 65

SPEED LIMIT ASSIGNMENTS ARE ALSO PROVIDED FOR PLACEMENT PAST ENTRANCE RAMPS WITHIN THE WORK ZONE.

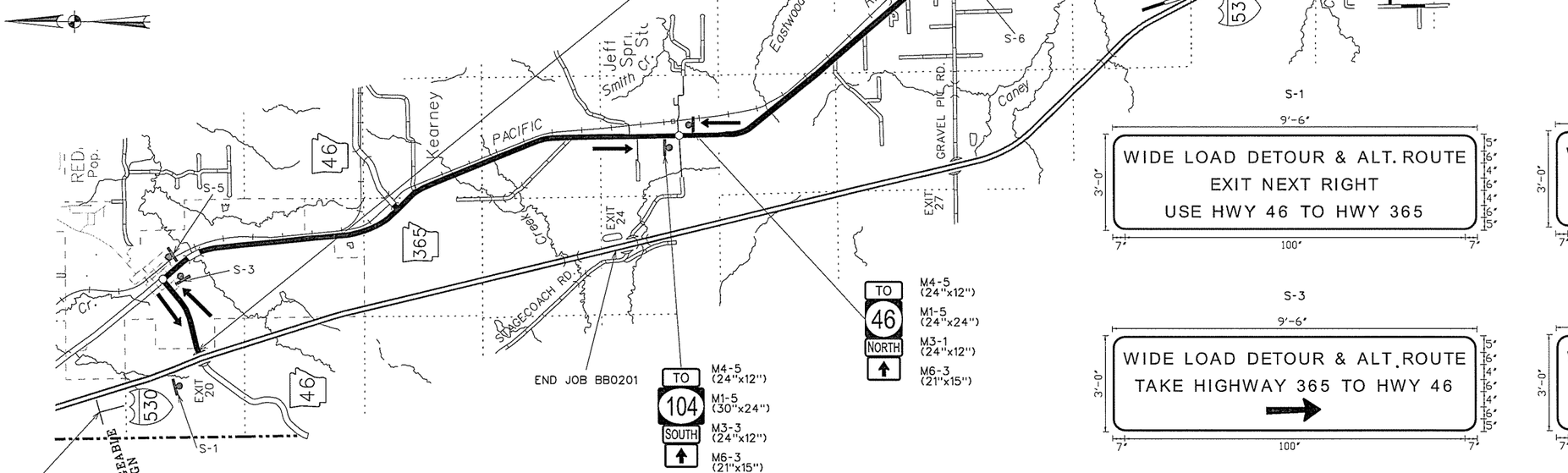
DIVERSION FOR RT. LANE WORK ZONE

DIVERSION FOR LT. LANE WORK ZONE

ADVANCE WARNING SIGNS AND LANE CLOSURES

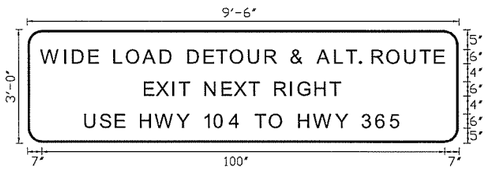
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	46	186
				(2)	MAINTENANCE OF TRAFFIC			

SIGN TYPE	DESCRIPTION	SIGN SIZE	MAXIMUM NUMBER REQUIRED	SIGN AREA SQ. FT.
M1-5	HWY 46	(24" x 24")	1	4
M1-5	HWY 104	(30" x 24")	1	5
M3-1	NORTH	(24" x 12")	1	2
M3-3	SOUTH	(24" x 12")	1	2
M4-5	TO	(24" x 12")	2	4
M6-3	STRAIGHT AHEAD ARROW	(21" x 15")	2	4.4
S-1	WIDE LOAD DETOUR & ALT. ROUTE EXIT NEXT RIGHT USE HWY 46 TO HWY 365	(9.5' x 3')	1	28.5
S-2	WIDE LOAD DETOUR & ALT. ROUTE EXIT NEXT RIGHT USE HWY 104 TO HWY 365	(9.5' x 3')	1	28.5
S-3	WIDE LOAD DETOUR & ALT. ROUTE TAKE HWY 365 TO HWY 104	(9.5' x 3')	1	28.5
S-4	WIDE LOAD DETOUR & ALT. ROUTE TAKE HWY 365 TO HWY 46	(9.5' x 3')	1	28.5
S-5	WIDE LOAD DETOUR & ALT. ROUTE	(9.5' x 3')	1	28.5
S-6	WIDE LOAD DETOUR & ALT. ROUTE	(9.5' x 3')	1	28.5
	TOTALS FOR JOB BB0201			192.4



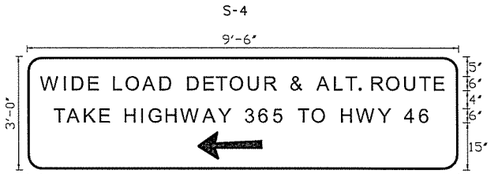
S-1

S-2

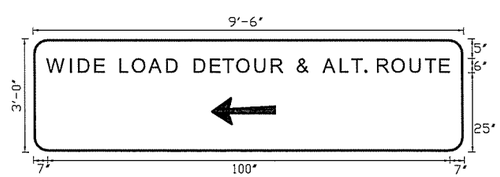


S-3

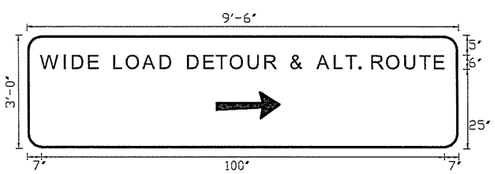
S-4



S-5



S-6



NOTES:

1) SPECIAL SIGNS SHALL BE CONSTRUCTED USING (WHITE) TYPE III BACKGROUND WITH (BLACK) TYPE V LEGEND AND BORDER.

2) PAYMENT FOR MOUNTING THE GUIDE SIGNS ON TEMPORARY SUPPORTS, RELOCATING THE SIGNS AS REQUIRED DURING VARIOUS PHASES OF CONSTRUCTION, AND REMOVING AND DISPOSING OF THE SIGNS WHEN THE PROJECT IS COMPLETED SHALL BE SUBSIDIARY TO SECTION 604, STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, 2014 EDITION.

3) EXACT PLACEMENT OF SIGNS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

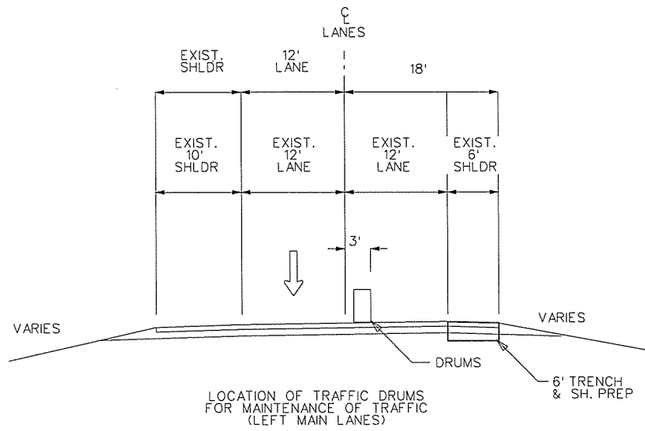
P.E.
11/30/15

WIDE LOAD DETOUR AND ALT ROUTE AND TEMPORARY SIGNS

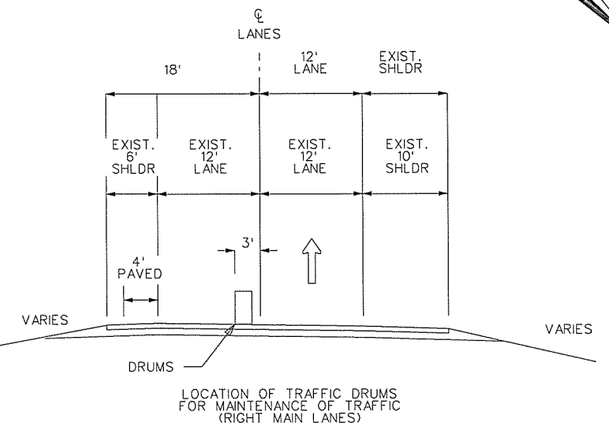
MAINTENANCE OF TRAFFIC

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	47	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 1A OPERATIONS:
INSTALL ADVANCE WARNING SIGNS
CLOSE INSIDE LANE ON MAIN LANES
CONSTRUCT CROSSOVERS, TEMPORARY RAMPS AND ACCELERATION LANES IN MEDIAN AREA
TRENCH & SHOULDER PREPARATION OF THE INSIDE SOUTHBOUND SHOULDER OF THE SB I-530 LANES



LOCATION OF TRAFFIC DRUMS
FOR MAINTENANCE OF TRAFFIC
(LEFT MAIN LANES)



LOCATION OF TRAFFIC DRUMS
FOR MAINTENANCE OF TRAFFIC
(RIGHT MAIN LANES)

11/30/15

STATE OF ARKANSAS
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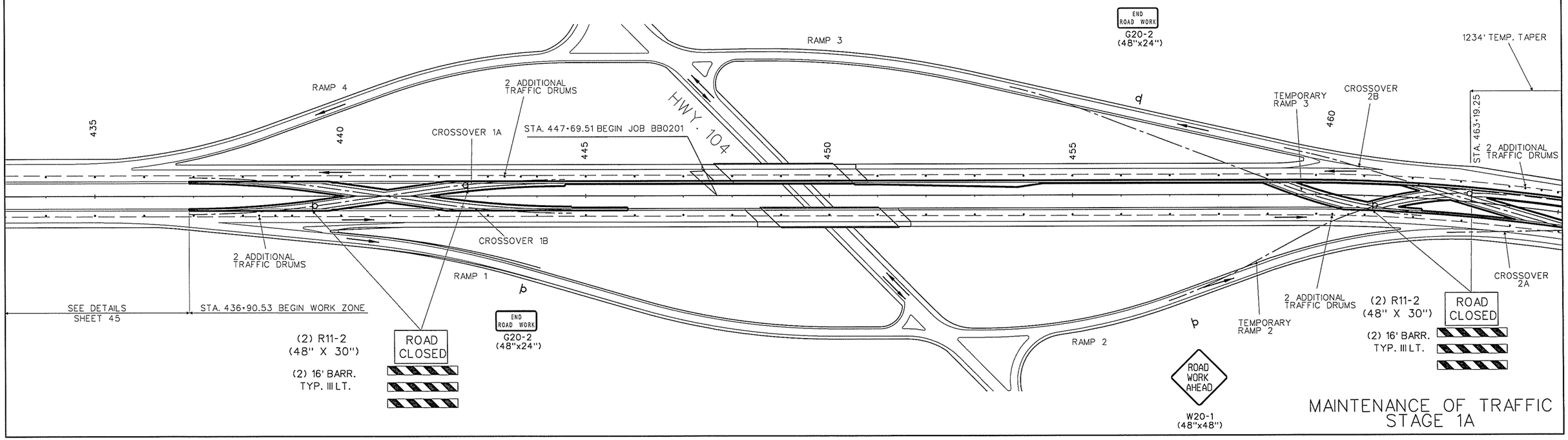
No. 15509
KENNETH MORA

DENOTES: CONSTRUCTION FOR MOT

STA. 436+90.53 - STA. 782+53.38 NB MAIN LANES
TRAFFIC DRUMS (100' O.C.): 346 EACH + 20 ADDITIONAL DRUMS
STA. 436+90.53 - STA. 782+53.38 SB MAIN LANES
TRAFFIC DRUMS (100' O.C.): 346 EACH + 20 ADDITIONAL DRUMS



MAINTENANCE OF TRAFFIC
STAGE 1A

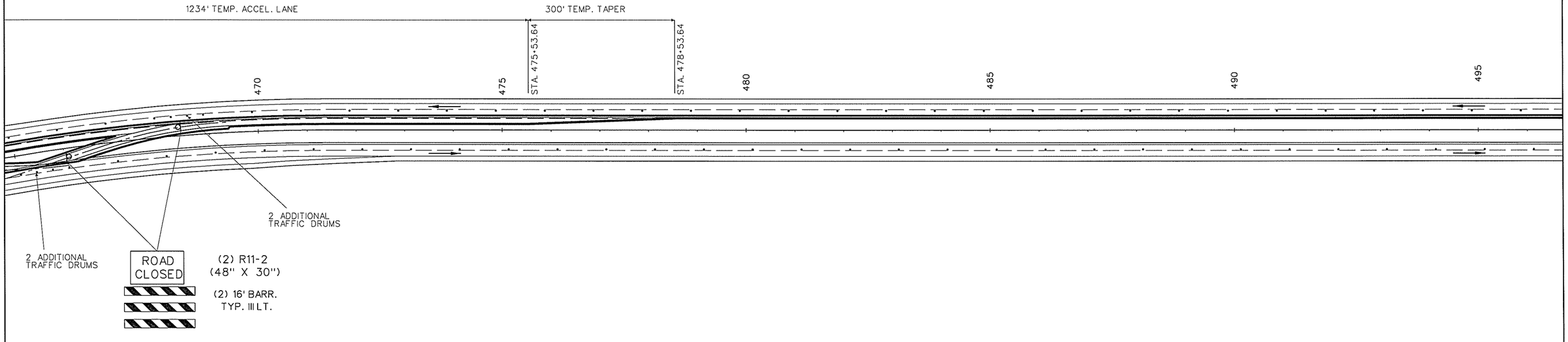
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	48	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 1A OPERATIONS:
INSTALL ADVANCE WARNING SIGNS
CLOSE INSIDE LANE ON MAIN LANES
CONSTRUCT CROSSOVERS, TEMPORARY RAMPS AND ACCELERATION LANES IN MEDIAN AREA
TRENCH & SHOULDER PREPARATION OF THE INSIDE SOUTHBOUND SHOULDER OF THE SB I-530 LANES

P.E.
11/30/15

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

DENOTES: CONSTRUCTION FOR MOT



MAINTENANCE OF TRAFFIC
STAGE 1A

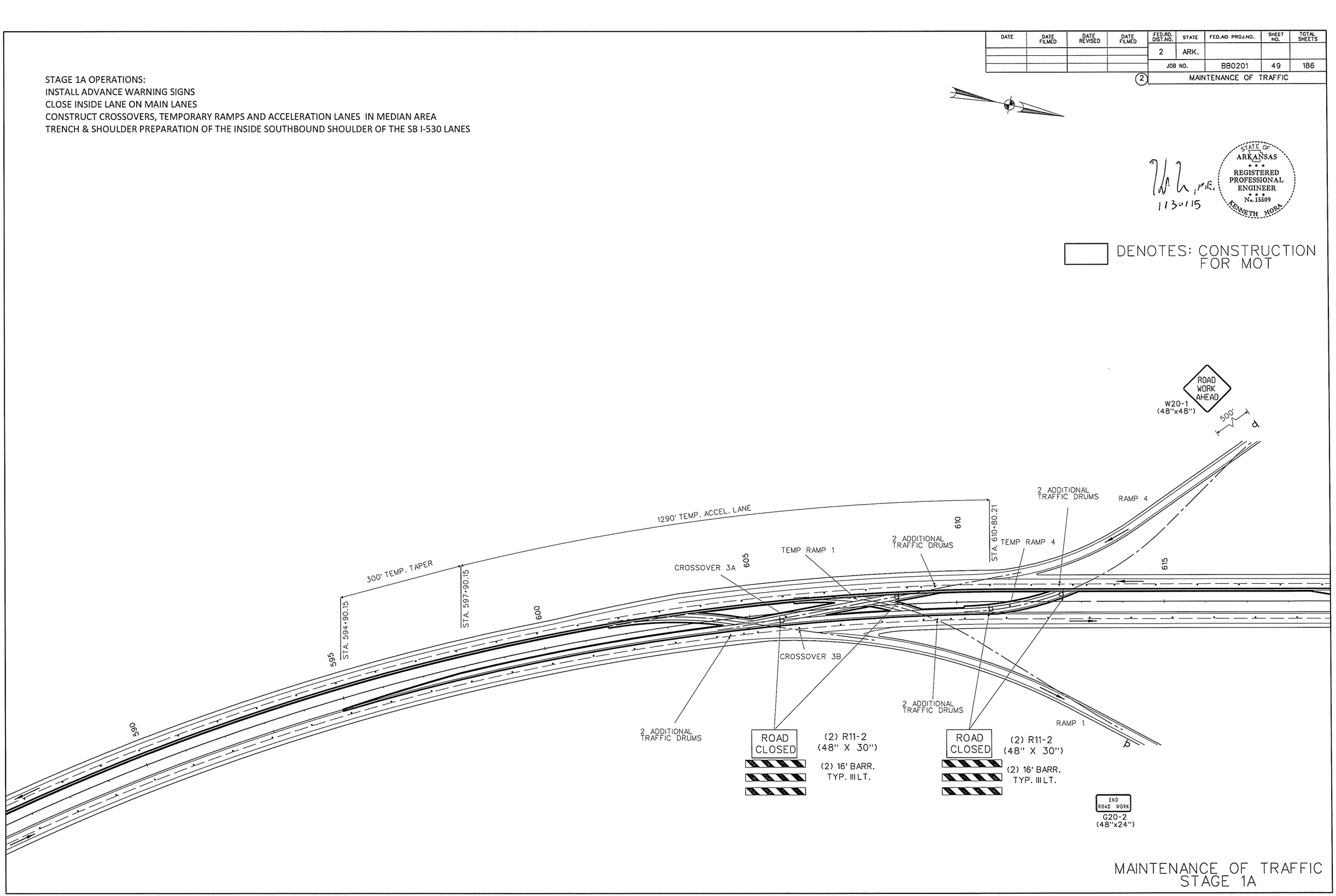
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	49	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 1A OPERATIONS:
INSTALL ADVANCE WARNING SIGNS
CLOSE INSIDE LANE ON MAIN LANES
CONSTRUCT CROSSOVERS, TEMPORARY RAMPS AND ACCELERATION LANES IN MEDIAN AREA
TRENCH & SHOULDER PREPARATION OF THE INSIDE SOUTHBOUND SHOULDER OF THE SB I-530 LANES

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

11-30-15

DENOTES: CONSTRUCTION FOR MOT



MAINTENANCE OF TRAFFIC
STAGE 1A

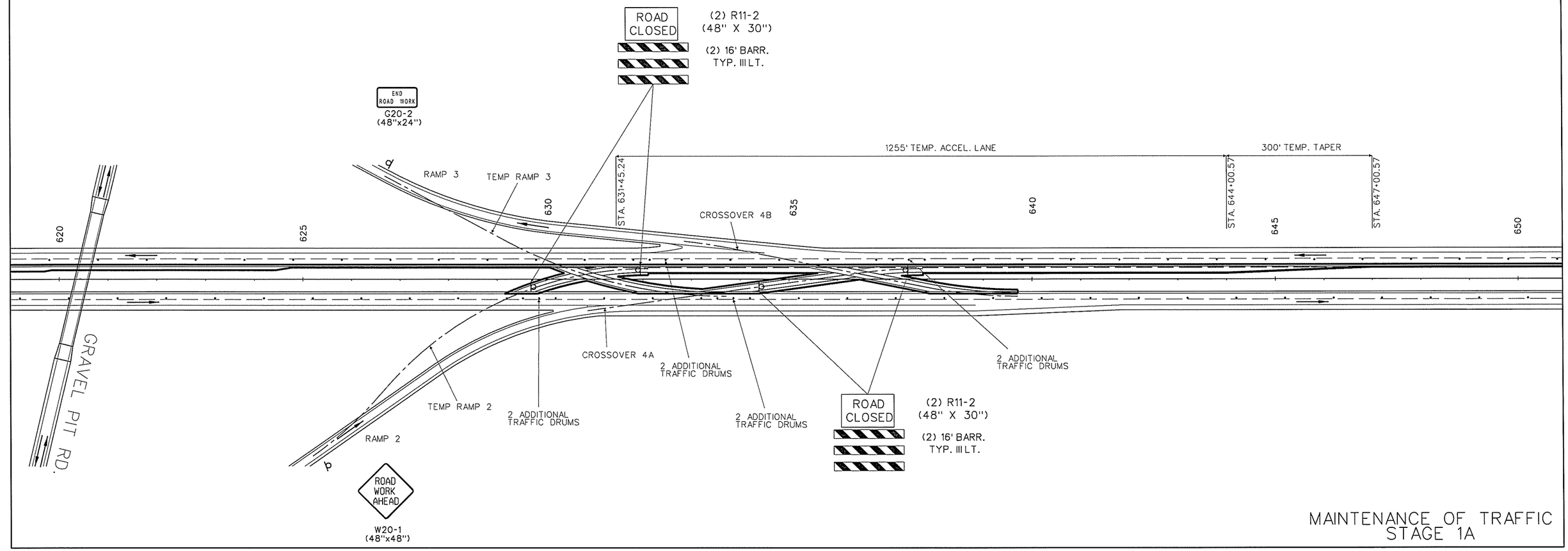
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	50	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 1A OPERATIONS:
INSTALL ADVANCE WARNING SIGNS
CLOSE INSIDE LANE ON MAIN LANES
CONSTRUCT CROSSOVERS, TEMPORARY RAMPS AND ACCELERATION LANES IN MEDIAN AREA
TRENCH & SHOULDER PREPARATION OF THE INSIDE SOUTHBOUND SHOULDER OF THE SB I-530 LANES

11/30/15

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

☐ DENOTES: CONSTRUCTION FOR MOT



MAINTENANCE OF TRAFFIC
STAGE 1A

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	51	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 1A OPERATIONS:
INSTALL ADVANCE WARNING SIGNS
CLOSE INSIDE LANE ON MAIN LANES
CONSTRUCT CROSSOVERS, TEMPORARY RAMPS AND ACCELERATION LANES IN MEDIAN AREA
TRENCH & SHOULDER PREPARATION OF THE INSIDE SOUTHBOUND SHOULDER OF THE SB I-530 LANES

11/30/15 P.E.

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No. 15509
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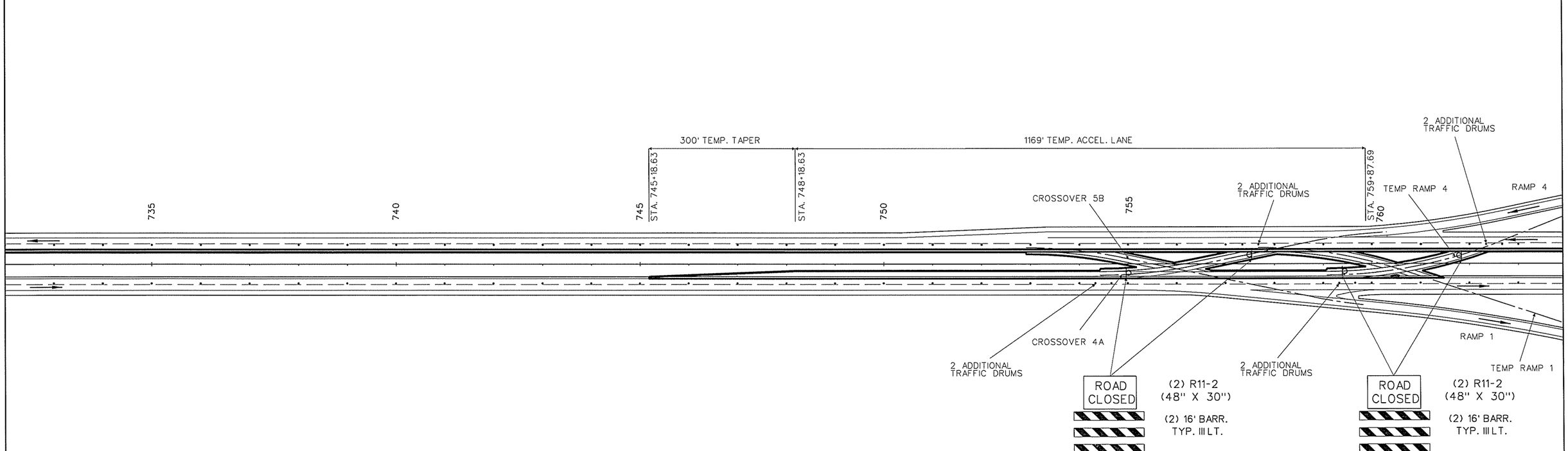
DENOTES: CONSTRUCTION FOR MOT



MAINTENANCE OF TRAFFIC
STAGE 1A

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	52	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 1A OPERATIONS:
INSTALL ADVANCE WARNING SIGNS
CLOSE INSIDE LANE ON MAIN LANES
CONSTRUCT CROSSOVERS, TEMPORARY RAMPS AND ACCELERATION LANES IN MEDIAN AREA
TRENCH & SHOULDER PREPARATION OF THE INSIDE SOUTHBOUND SHOULDER OF THE SB I-530 LANES

11/30/15 P.E.

STATE OF ARKANSAS
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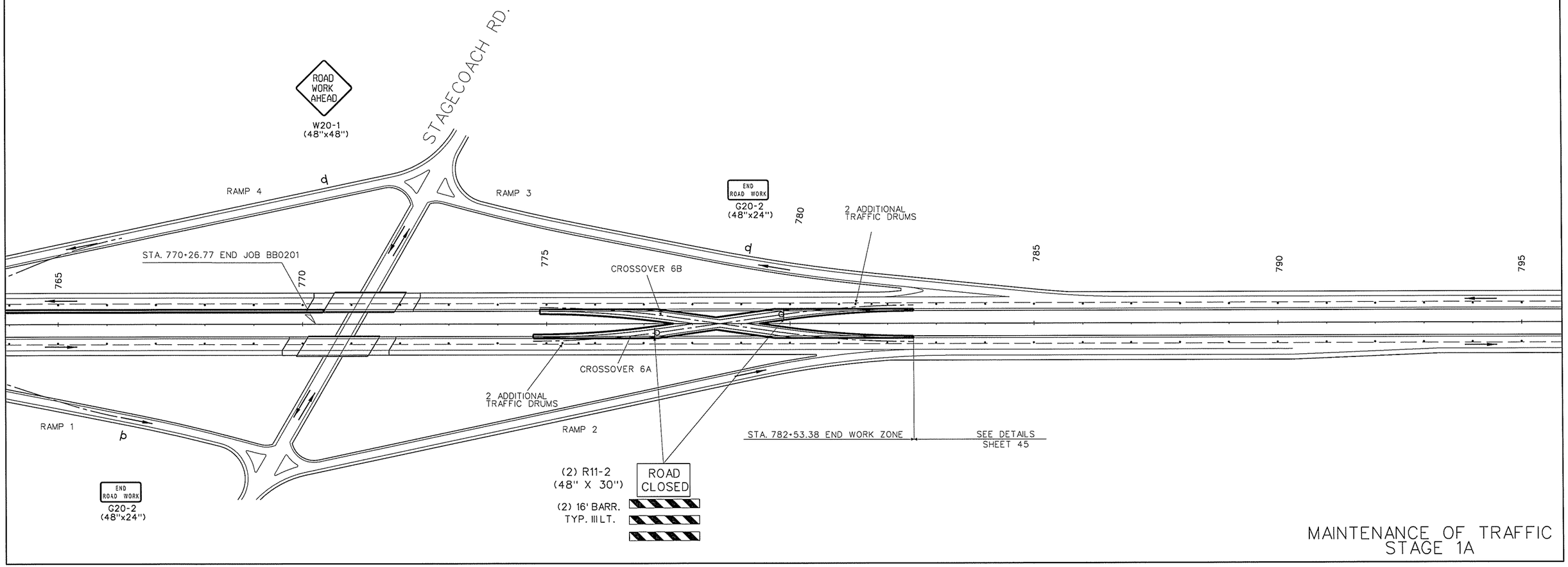
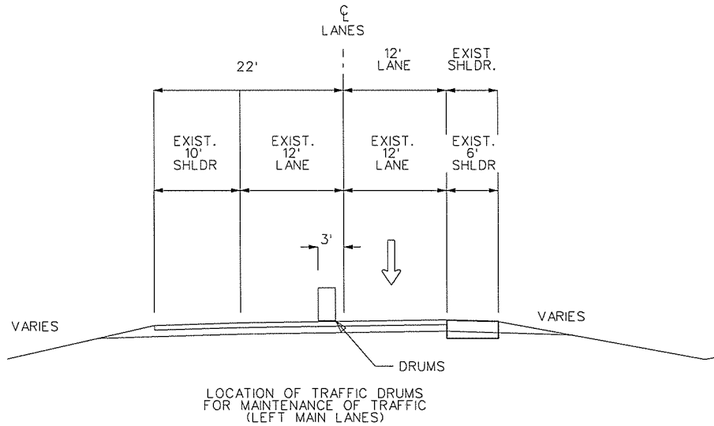
DENOTES: CONSTRUCTION FOR MOT



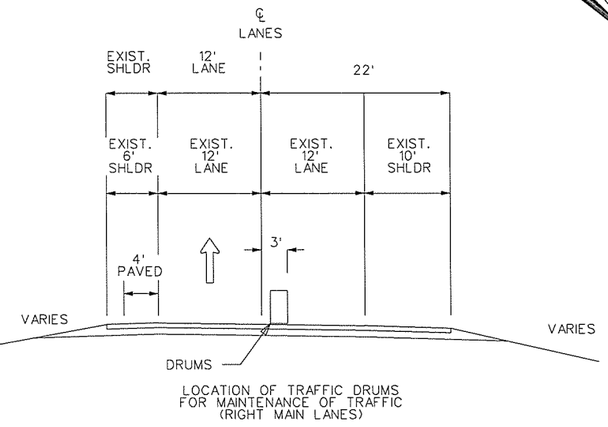
MAINTENANCE OF TRAFFIC
STAGE 1A

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	53	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 1B OPERATIONS:
CLOSE OUTSIDE LANE ON MAIN LANES
CONSTRUCT TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS



LOCATION OF TRAFFIC DRUMS
FOR MAINTENANCE OF TRAFFIC
(LEFT MAIN LANES)



LOCATION OF TRAFFIC DRUMS
FOR MAINTENANCE OF TRAFFIC
(RIGHT MAIN LANES)

STA. 436+90.53 - STA. 782+53.38 NB MAIN LANES
TRAFFIC DRUMS (100' O.C.): 346 EACH + 178 ADDITIONAL DRUMS
STA. 436+90.53 - STA. 782+53.38 SB MAIN LANES
TRAFFIC DRUMS (100' O.C.): 346 EACH + 169 ADDITIONAL DRUMS

11/30/15

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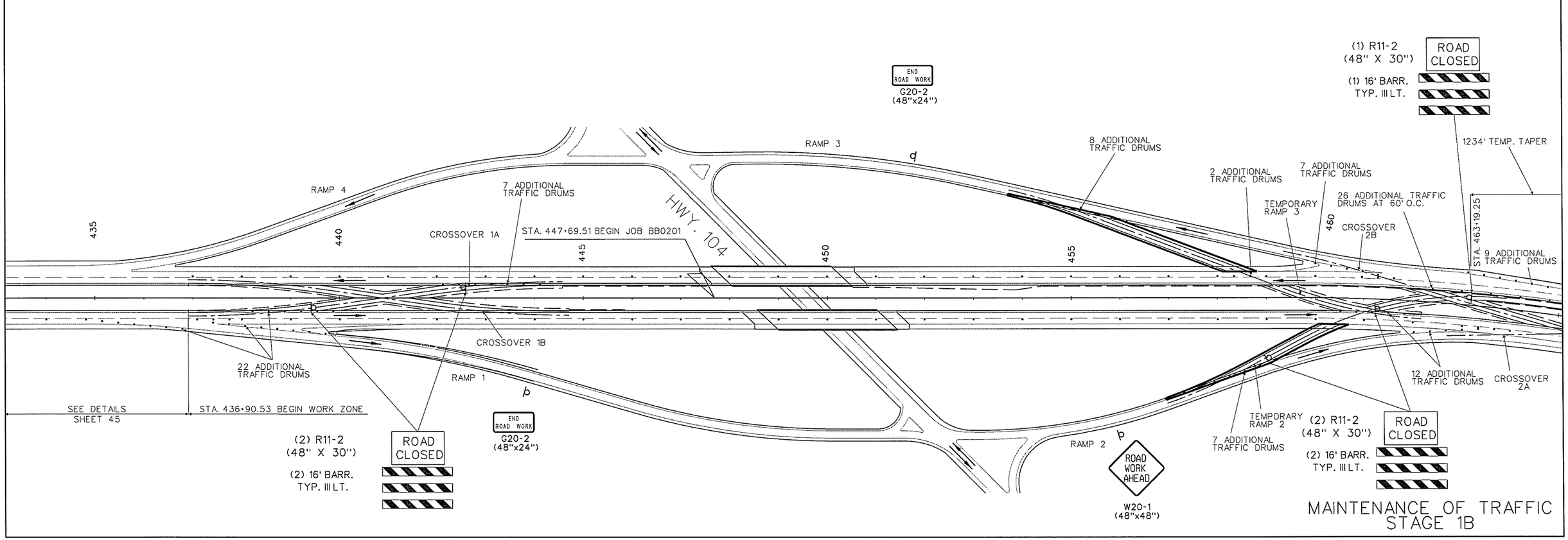
KENNETH MORA

DENOTES: CONSTRUCTION FOR MOT



MAINTENANCE OF TRAFFIC
STAGE 1B

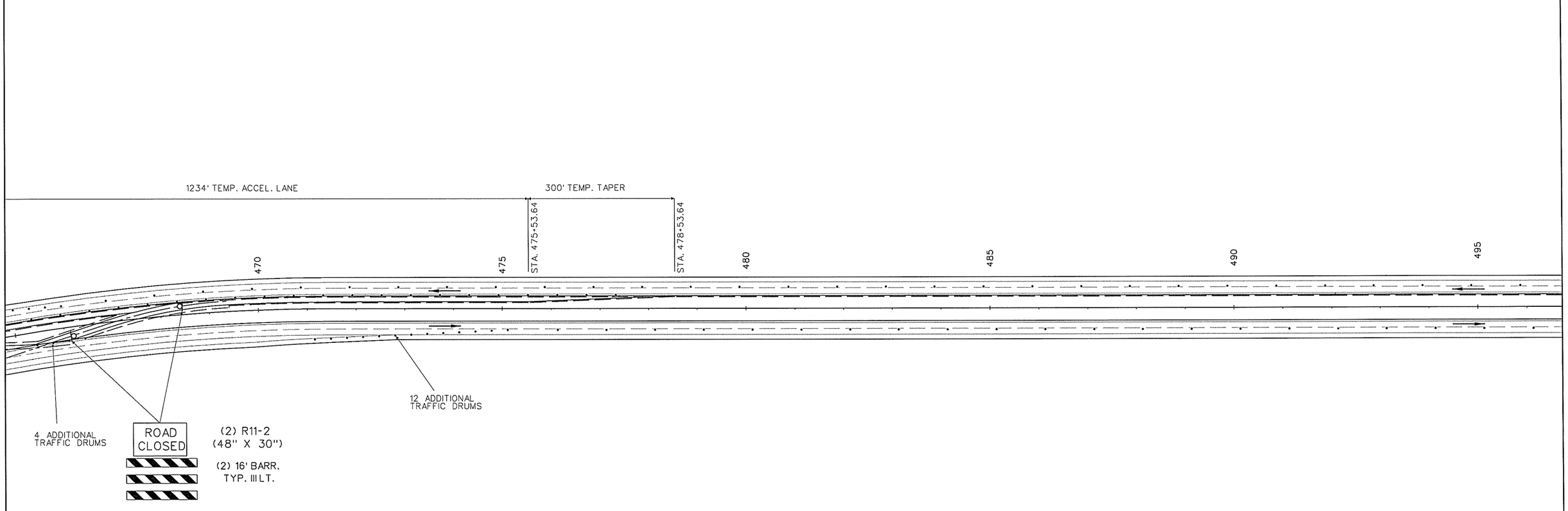
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	54	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 1B OPERATIONS:
CLOSE OUTSIDE LANE ON MAIN LANES
CONSTRUCT TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS

KH, PE, 1/30/15

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

DENOTES: CONSTRUCTION FOR MOT



MAINTENANCE OF TRAFFIC
STAGE 1B

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	55	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 1B OPERATIONS:
CLOSE OUTSIDE LANE ON MAIN LANES
CONSTRUCT TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS

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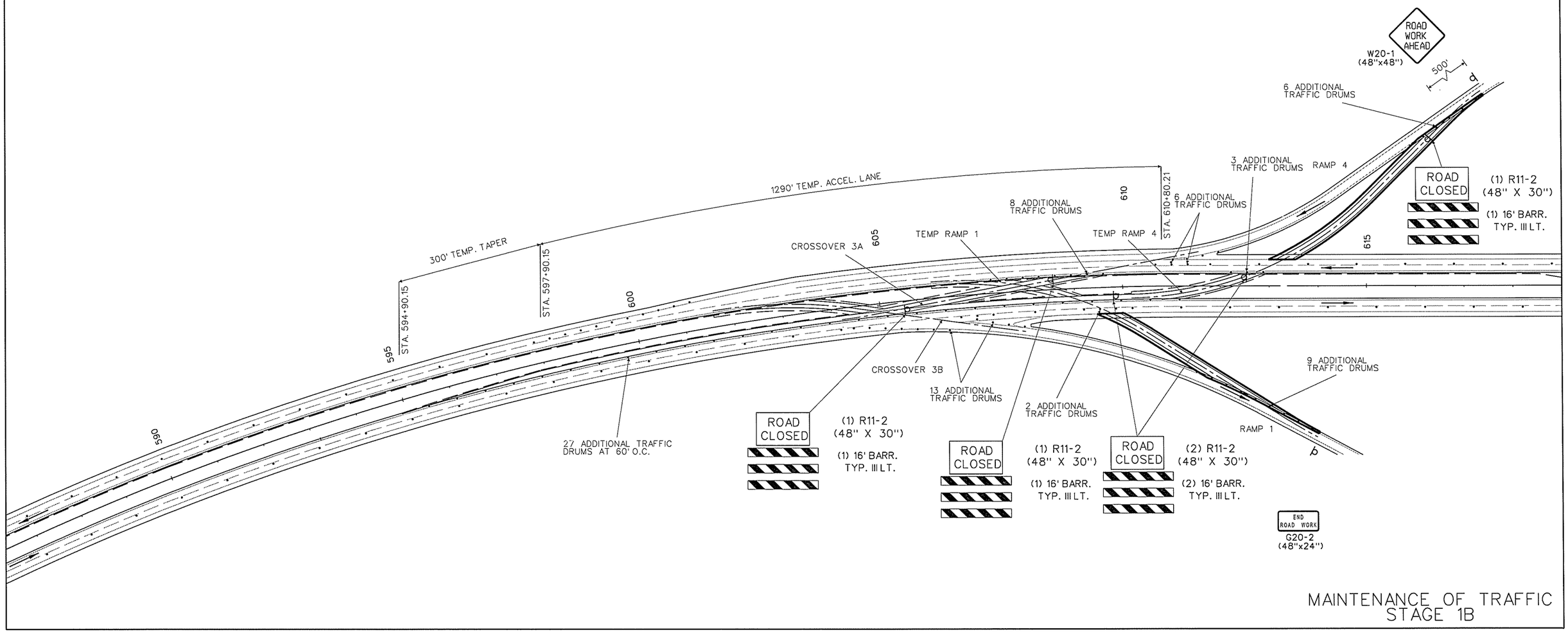
DENOTES: CONSTRUCTION FOR MOT



MAINTENANCE OF TRAFFIC
STAGE 1B

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	56	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 1B OPERATIONS:
CLOSE OUTSIDE LANE ON MAIN LANES
CONSTRUCT TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS

1/30/15

STATE OF ARKANSAS
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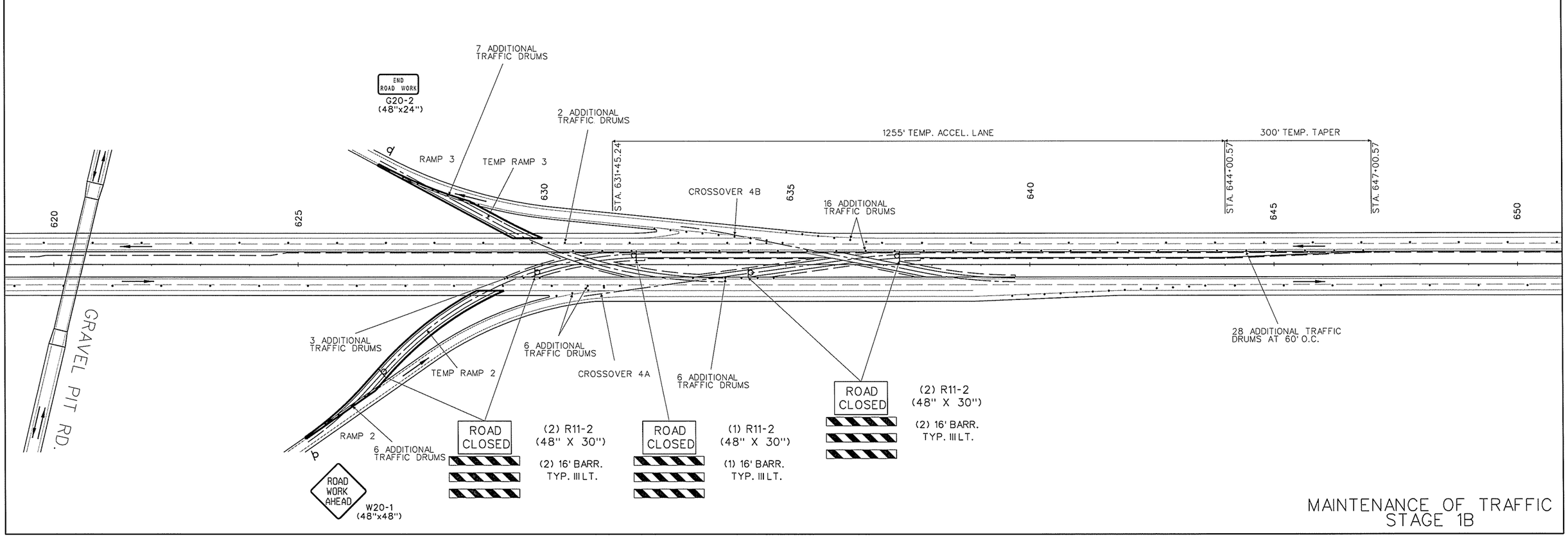
No. 15509
KENNETH MORA

DENOTES: CONSTRUCTION FOR MOT



MAINTENANCE OF TRAFFIC
STAGE 1B

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	57	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 1B OPERATIONS:
CLOSE OUTSIDE LANE ON MAIN LANES
CONSTRUCT TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS

STATE OF ARKANSAS
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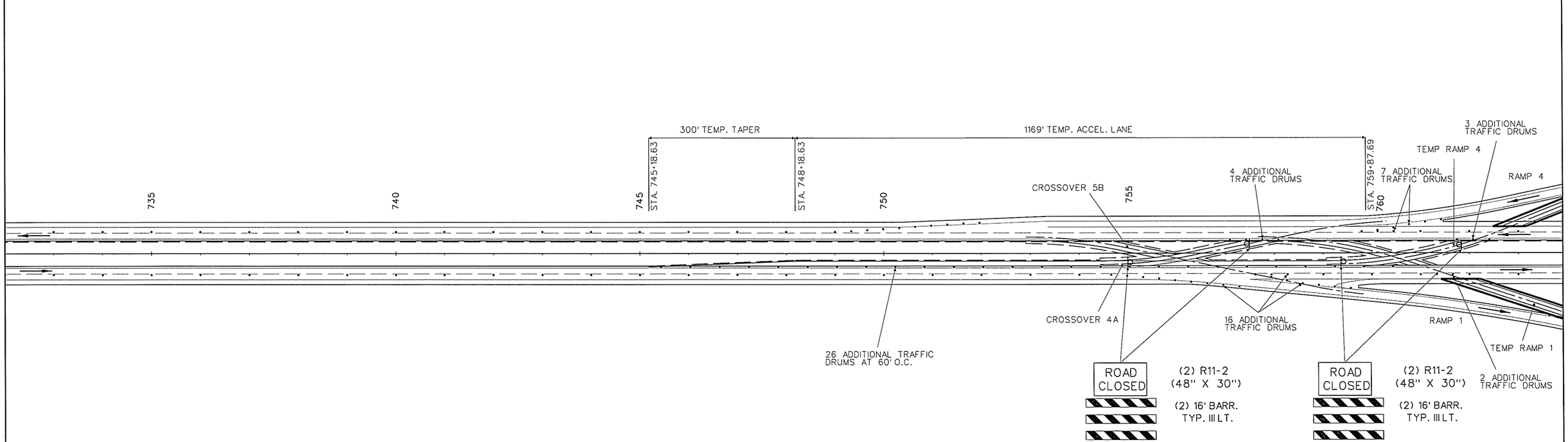
No. 15509
KENNETH MORA

P.E.
1/30/15

DENOTES: CONSTRUCTION FOR MOT



MAINTENANCE OF TRAFFIC
STAGE 1B

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	58	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 1B OPERATIONS:
CLOSE OUTSIDE LANE ON MAIN LANES
CONSTRUCT TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS

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KENNETH MORA

11/30/15

DENOTES: CONSTRUCTION FOR MOT

(1) R11-2
(48" X 30")
ROAD CLOSED
(1) 16' BARR. TYP. III LT.

ROAD WORK AHEAD
W20-1
(48"x48")

7 ADDITIONAL TRAFFIC DRUMS

STAGECOACH RD.

RAMP 4

RAMP 3

END ROAD WORK
G20-2
(48"x24")

7 ADDITIONAL TRAFFIC DRUMS

15 ADDITIONAL TRAFFIC DRUMS

STA. 770+26.77 END JOB BB0201

765 770 775 780 785 790 795

CROSSOVER 6B

CROSSOVER 6A

9 ADDITIONAL TRAFFIC DRUMS

9 ADDITIONAL TRAFFIC DRUMS

RAMP 1

RAMP 2

STA. 782+53.38 END WORK ZONE

SEE DETAILS SHEET 45

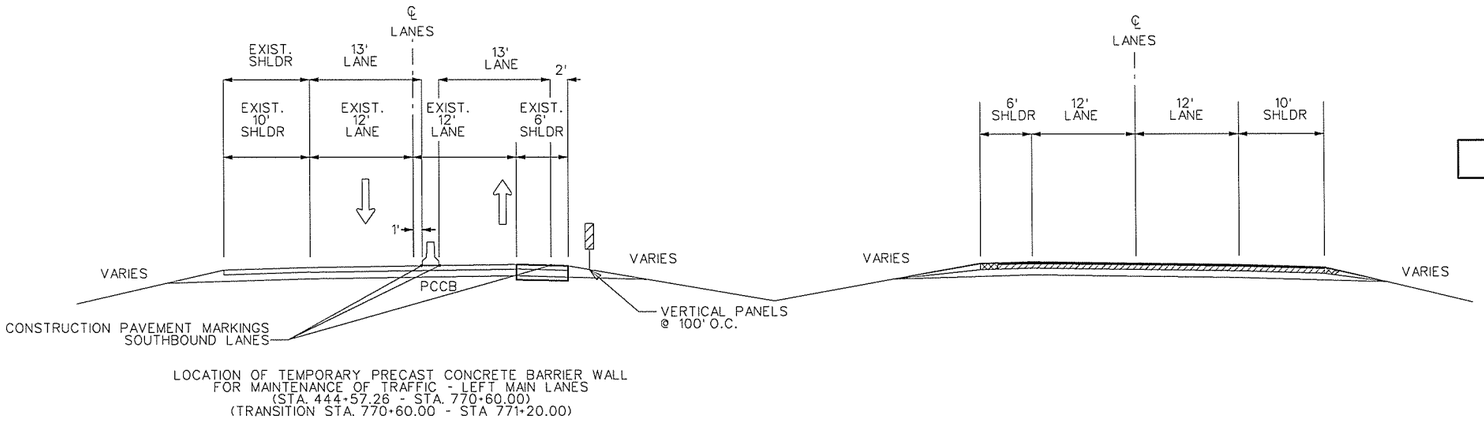
END ROAD WORK
G20-2
(48"x24")

(2) R11-2
(48" X 30")
ROAD CLOSED
(2) 16' BARR. TYP. III LT.

MAINTENANCE OF TRAFFIC
STAGE 1B

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	59	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 2A OPERATIONS:
INSTALL PRECAST CONCRETE BARRIER
ROUTE NB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANES OF SB MAIN LANES
RECONSTRUCT NB LANES, APPROACH GUTTERS & SLABS, PERFORM HYDRODEMOLITION OPERATIONS IN THE AREAS SHOWN
OVERLAY TEMPORARY RAMPS WHERE DIRECTED BY ENGINEER TO MATCH SURFACE OF RECONSTRUCTED NB I-530 LANES.



LOCATION OF TEMPORARY PRECAST CONCRETE BARRIER WALL
FOR MAINTENANCE OF TRAFFIC - LEFT MAIN LANES
(STA. 444+57.26 - STA. 770+60.00)
(TRANSITION STA. 770+60.00 - STA 771+20.00)

1/30/15 P.E.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

DENOTES: CONSTRUCTION FOR MOT

STA. 436+90.53 - STA. 782+53.38 SB MAIN LANES
VERTICAL PANELS (100' O.C.): 325 EACH

STA. 436+90.53 - STA. 782+53.38 SB MAIN LANES
REMOVAL OF PERMANENT PAVEMENT MARKINGS: 43,363 LF

(BRIDGE DECK & APPROACH SLABS)
REMOVABLE CONSTRUCTION PAVEMENT MARKINGS: 1,620 LF

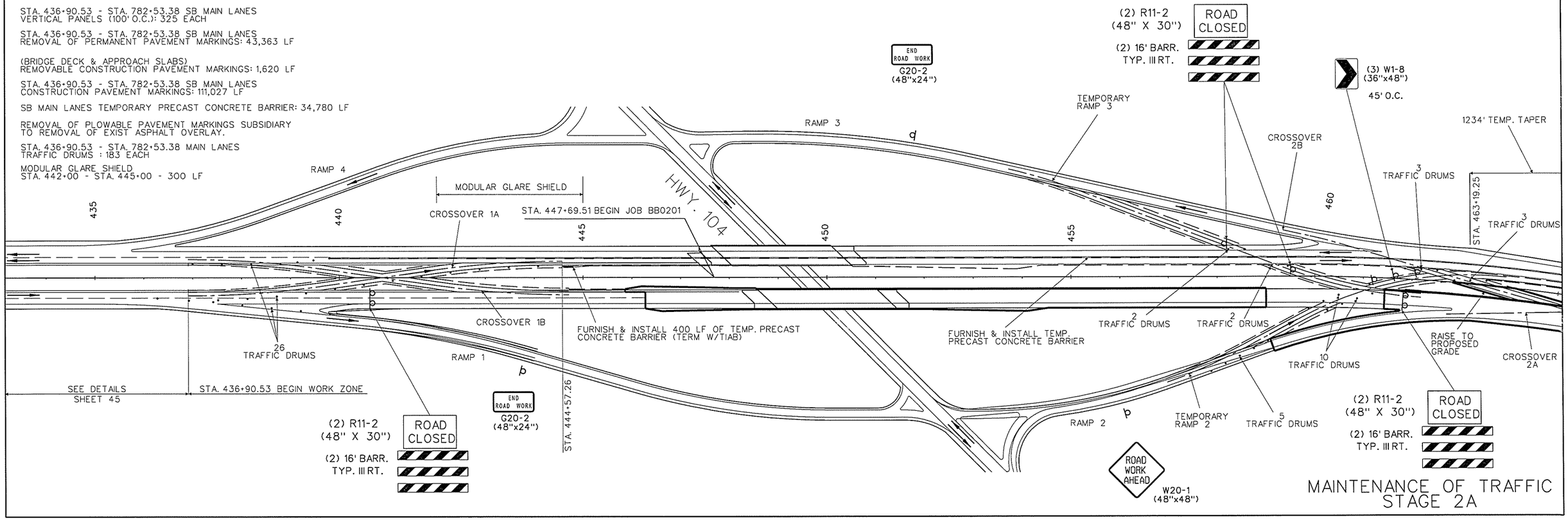
STA. 436+90.53 - STA. 782+53.38 SB MAIN LANES
CONSTRUCTION PAVEMENT MARKINGS: 111,027 LF

SB MAIN LANES TEMPORARY PRECAST CONCRETE BARRIER: 34,780 LF

REMOVAL OF PLOWABLE PAVEMENT MARKINGS SUBSIDIARY TO REMOVAL OF EXIST ASPHALT OVERLAY.

STA. 436+90.53 - STA. 782+53.38 MAIN LANES
TRAFFIC DRUMS : 183 EACH

MODULAR GLARE SHIELD
STA. 442+00 - STA. 445+00 - 300 LF



MAINTENANCE OF TRAFFIC
STAGE 2A

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	60	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 2A OPERATIONS:
INSTALL PRECAST CONCRETE BARRIER
ROUTE NB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANES OF SB MAIN LANES
RECONSTRUCT NB LANES, APPROACH GUTTERS & SLABS, PERFORM HYDRODEMOLITION
OPERATIONS IN THE AREAS SHOWN
OVERLAY TEMPORARY RAMPS WHERE DIRECTED BY ENGINEER
TO MATCH SURFACE OF RECONSTRUCTED NB I-530 LANES.

1/30/15

STATE OF ARKANSAS
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No. 15509
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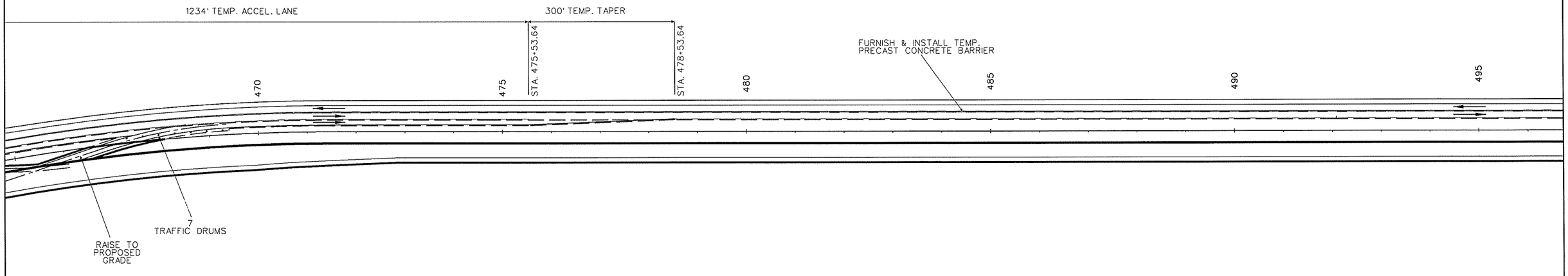
DENOTES: CONSTRUCTION FOR MOT



MAINTENANCE OF TRAFFIC
STAGE 2A

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	61	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 2A OPERATIONS:
INSTALL PRECAST CONCRETE BARRIER
ROUTE NB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANES OF SB MAIN LANES
RECONSTRUCT NB LANES, APPROACH GUTTERS & SLABS, PERFORM HYDRODEMOLITION
OPERATIONS IN THE AREAS SHOWN
OVERLAY TEMPORARY RAMPS WHERE DIRECTED BY ENGINEER
TO MATCH SURFACE OF RECONSTRUCTED NB I-530 LANES.

1/30/15 P.E.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
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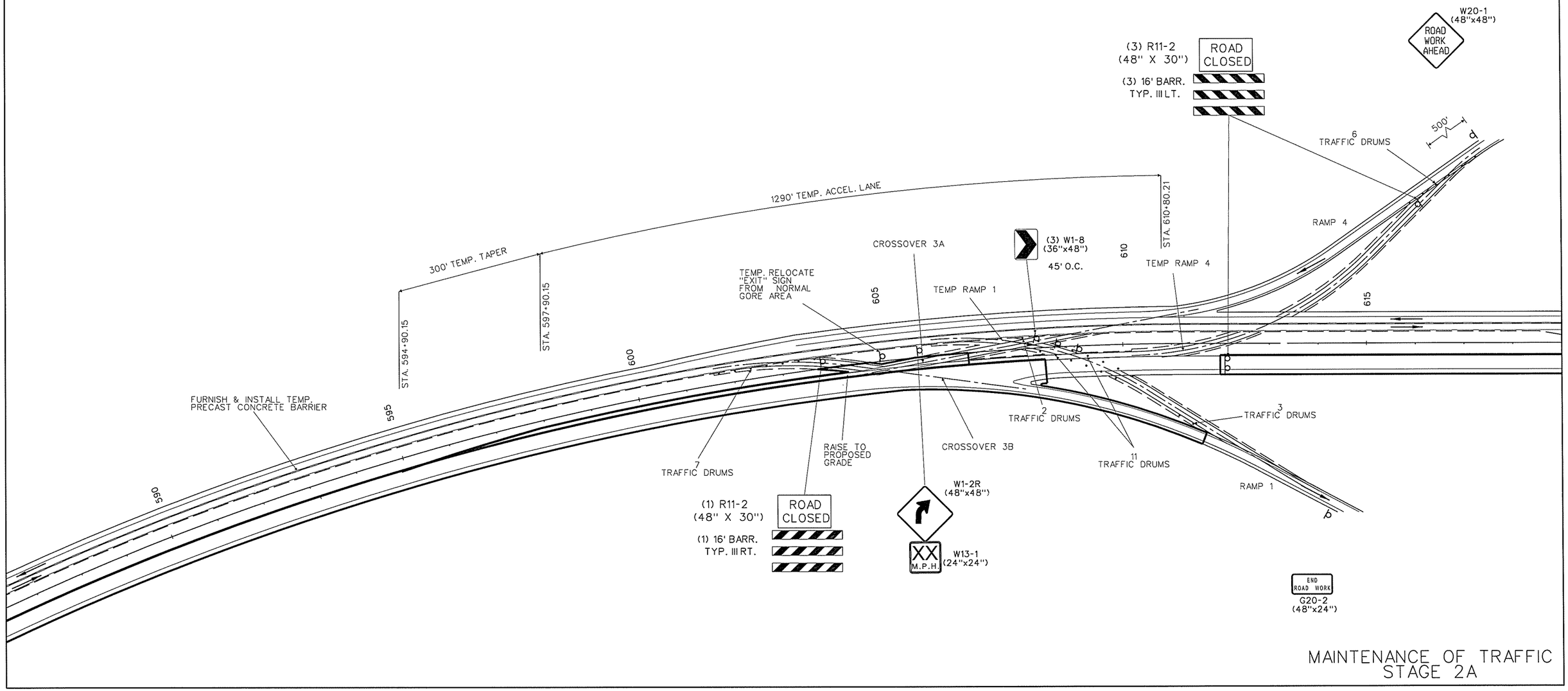
DENOTES: CONSTRUCTION FOR MOT



MAINTENANCE OF TRAFFIC
STAGE 2A

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	62	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 2A OPERATIONS:
INSTALL PRECAST CONCRETE BARRIER
ROUTE NB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANES OF SB MAIN LANES
RECONSTRUCT NB LANES, APPROACH GUTTERS & SLABS, PERFORM HYDRODEMOLITION
OPERATIONS IN THE AREAS SHOWN
OVERLAY TEMPORARY RAMPS WHERE DIRECTED BY ENGINEER
TO MATCH SURFACE OF RECONSTRUCTED NB I-530 LANES.

1/30/15

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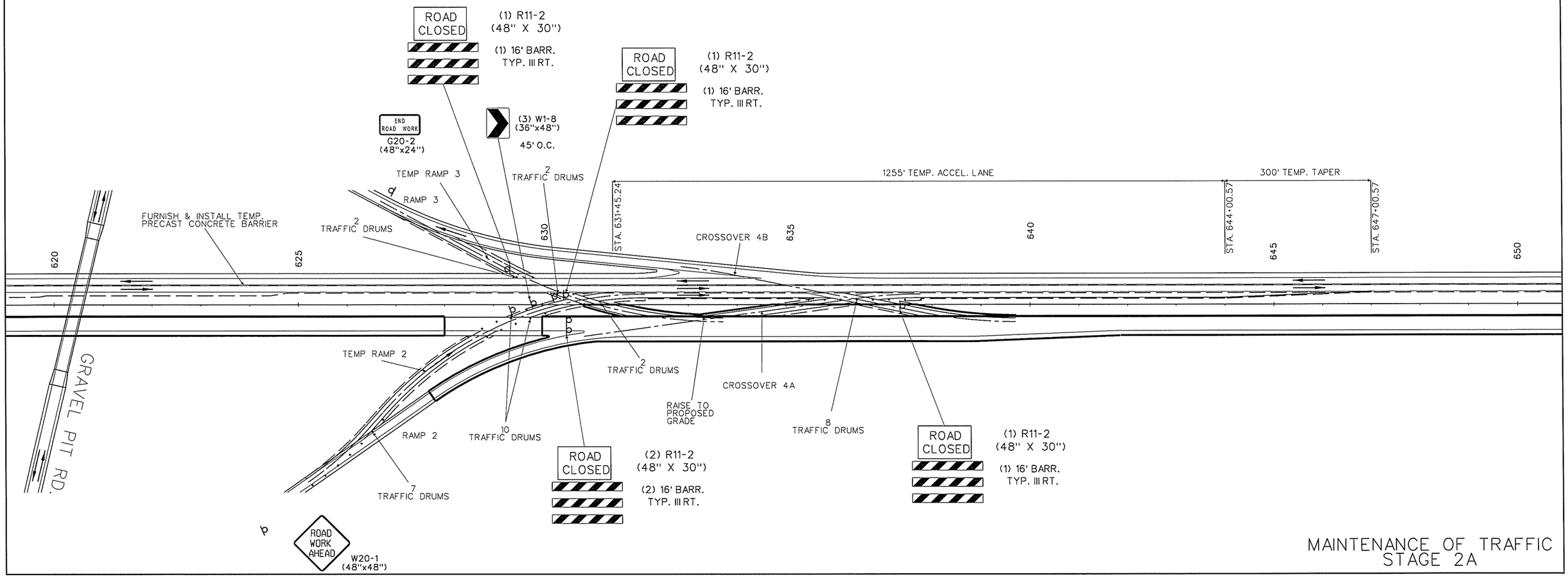
DENOTES: CONSTRUCTION FOR MOT



MAINTENANCE OF TRAFFIC
STAGE 2A

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	63	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 2A OPERATIONS:
INSTALL PRECAST CONCRETE BARRIER
ROUTE NB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANES OF SB MAIN LANES
RECONSTRUCT NB LANES, APPROACH GUTTERS & SLABS, PERFORM HYDRODEMOLITION
OPERATIONS IN THE AREAS SHOWN
OVERLAY TEMPORARY RAMPS WHERE DIRECTED BY ENGINEER
TO MATCH SURFACE OF RECONSTRUCTED NB I-530 LANES.

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STATE OF ARKANSAS
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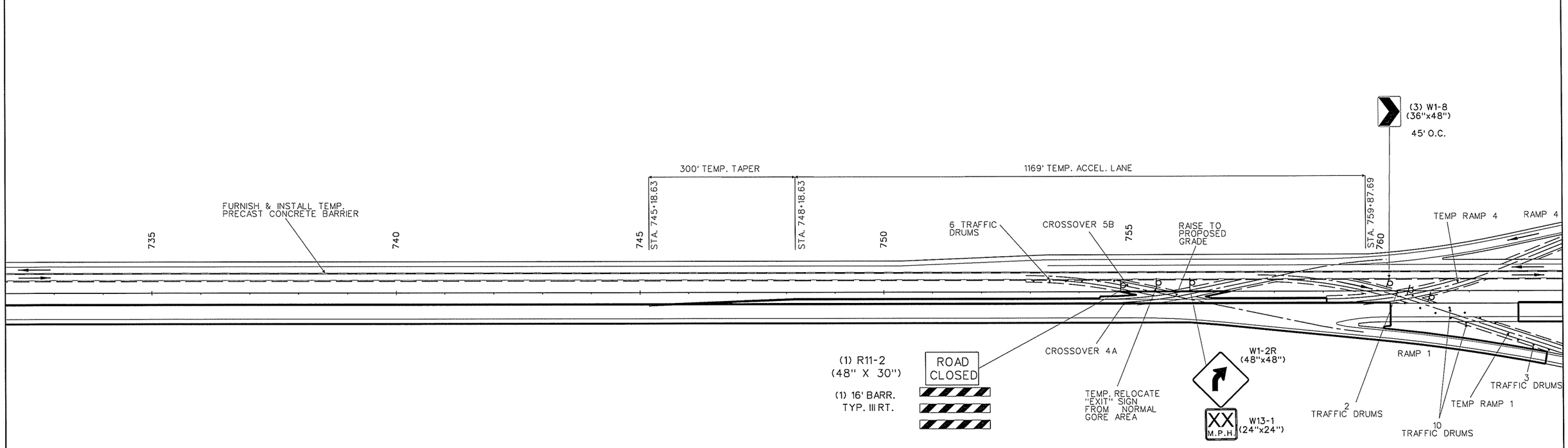
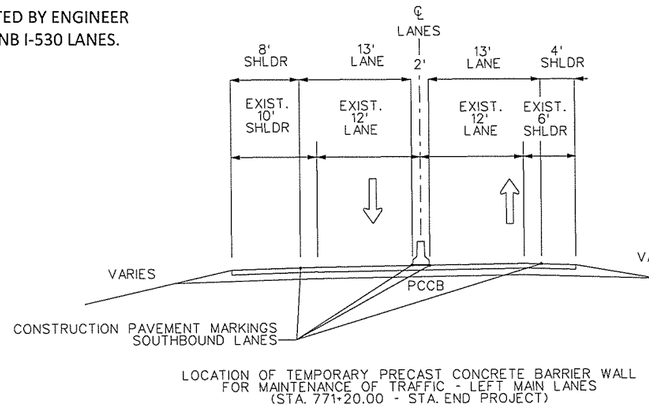


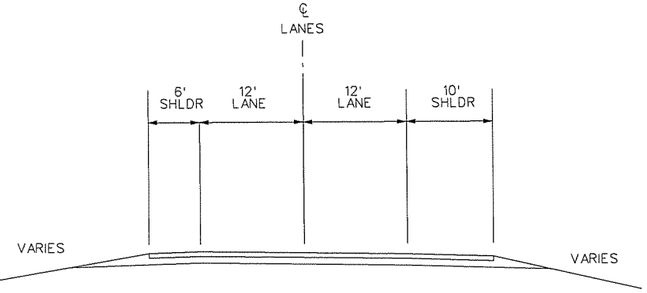
MAINTENANCE OF TRAFFIC
STAGE 2A

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	64	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 2A OPERATIONS:
INSTALL PRECAST CONCRETE BARRIER
ROUTE NB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANES OF SB MAIN LANES
RECONSTRUCT NB LANES, APPROACH GUTTERS & SLABS, PERFORM HYDRODEMOLITION OPERATIONS IN THE AREAS SHOWN
OVERLAY TEMPORARY RAMPS WHERE DIRECTED BY ENGINEER TO MATCH SURFACE OF RECONSTRUCTED NB I-530 LANES.



LOCATION OF TEMPORARY PRECAST CONCRETE BARRIER WALL FOR MAINTENANCE OF TRAFFIC - LEFT MAIN LANES (STA. 771+20.00 - STA. END PROJECT)



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STATE OF ARKANSAS
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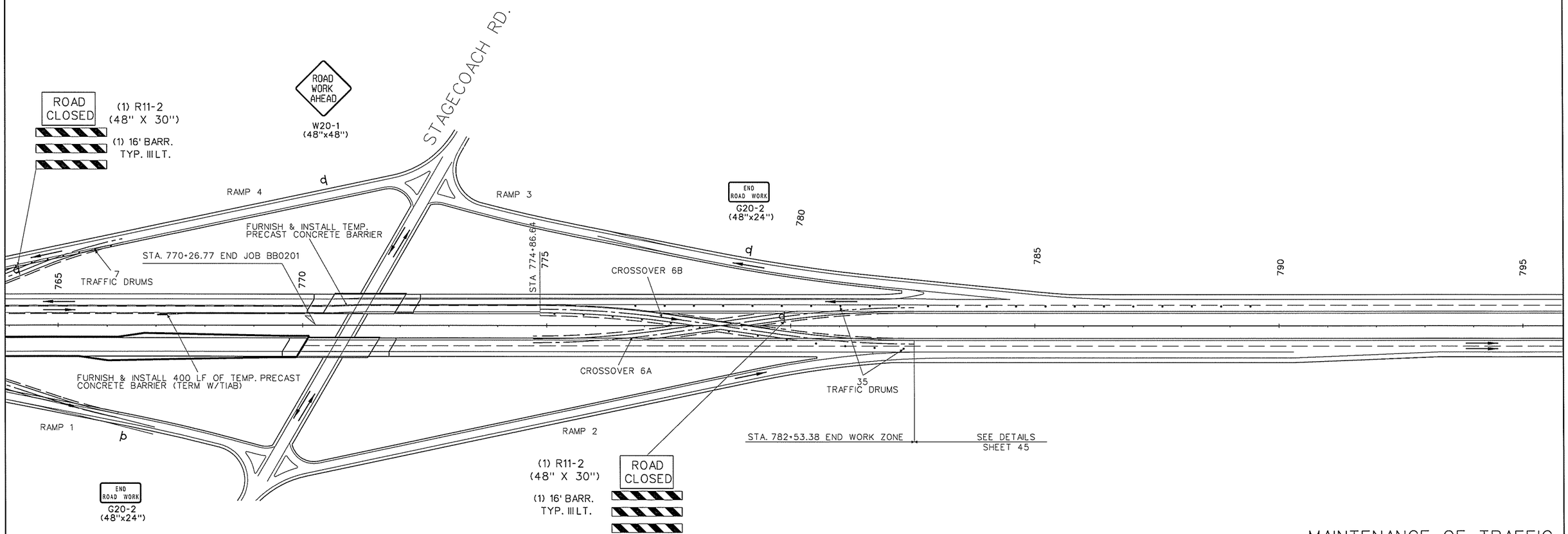
KENNETH MORA

DENOTES: CONSTRUCTION FOR MOT



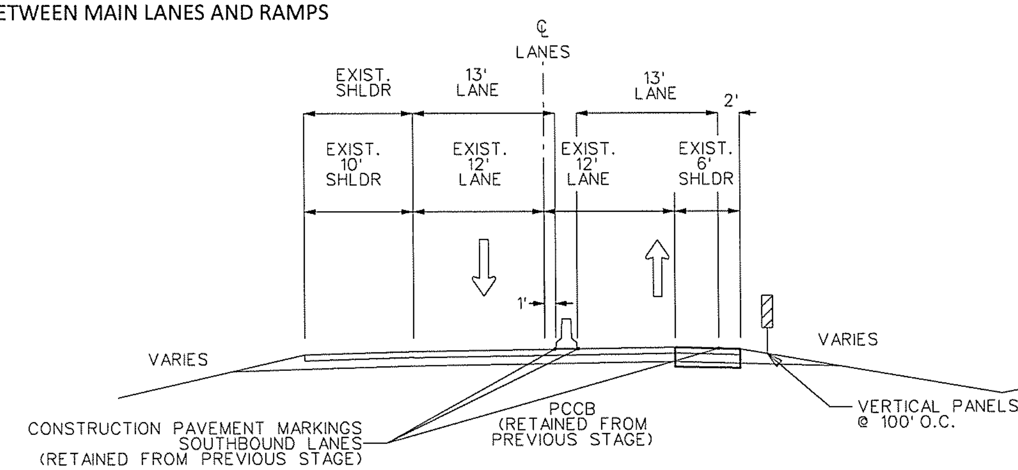
MAINTENANCE OF TRAFFIC STAGE 2A

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	65	186

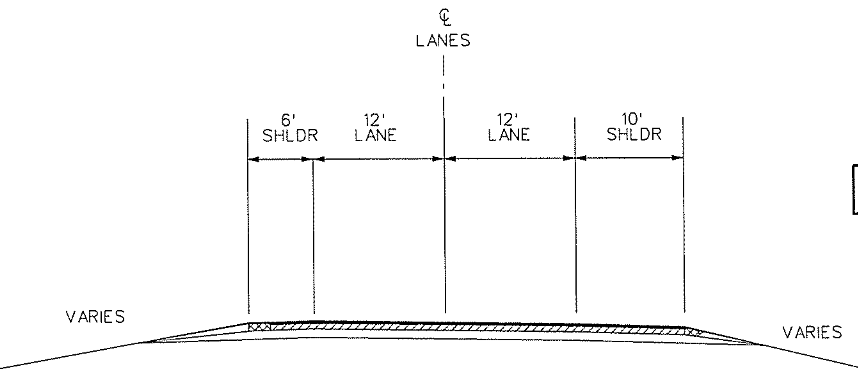
(2) MAINTENANCE OF TRAFFIC

STAGE 2B OPERATIONS:
RETAIN STAGE 2A TRAFFIC PATH FOR NB I-530 TRAFFIC
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO
ALTERNATE TEMPORARY RAMPS
RECONSTRUCT REMAINING SECTIONS OF I-530 NORTHBOUND LANES.
OVERLAY REMAINING TEMPORARY RAMPS WHERE DIRECTED BY ENGINEER
TO MATCH SURFACE OF RECONSTRUCTED NB I-530 LANES.
OBLITERATE NORTHBOUND TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 15509 KENNETH MORA
P.E. 11/30/15



LOCATION OF TEMPORARY PRECAST CONCRETE BARRIER WALL FOR MAINTENANCE OF TRAFFIC - LEFT MAIN LANES
(STA. 444+57.26 - STA. 770+60.00)
(TRANSITION STA. 770+60.00 - STA. 771+20.00)



DENOTES: CONSTRUCTION FOR MOT

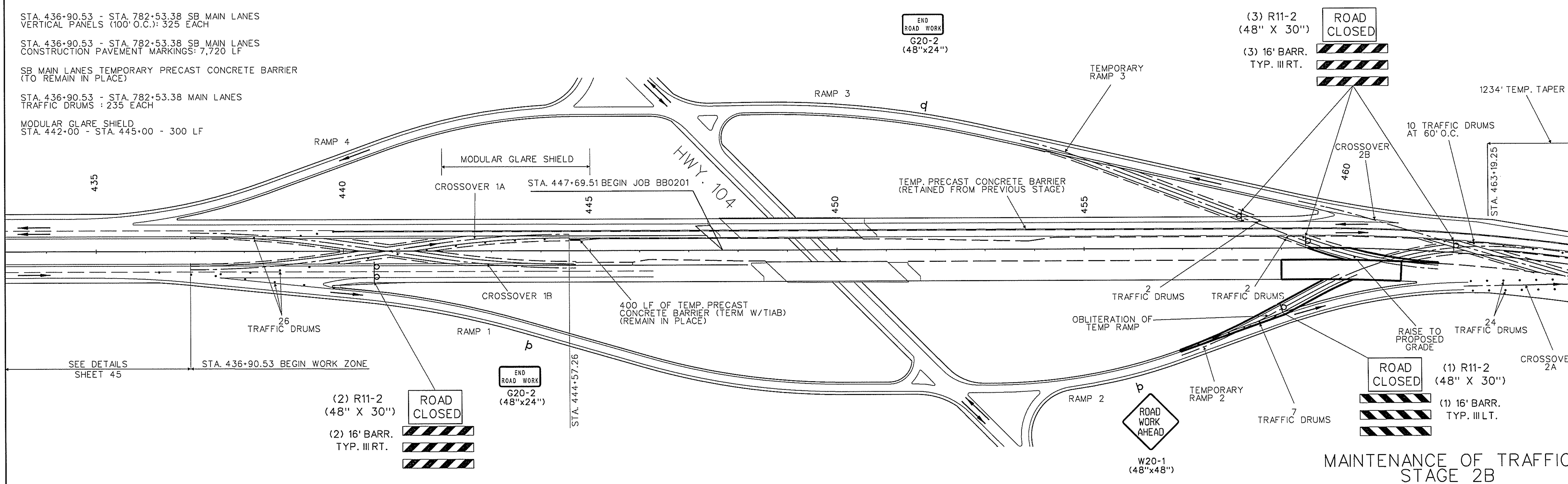
STA. 436+90.53 - STA. 782+53.38 SB MAIN LANES
VERTICAL PANELS (100' O.C.): 325 EACH

STA. 436+90.53 - STA. 782+53.38 SB MAIN LANES
CONSTRUCTION PAVEMENT MARKINGS: 7,720 LF

SB MAIN LANES TEMPORARY PRECAST CONCRETE BARRIER
(TO REMAIN IN PLACE)

STA. 436+90.53 - STA. 782+53.38 MAIN LANES
TRAFFIC DRUMS : 235 EACH

MODULAR GLARE SHIELD
STA. 442+00 - STA. 445+00 - 300 LF



MAINTENANCE OF TRAFFIC
STAGE 2B

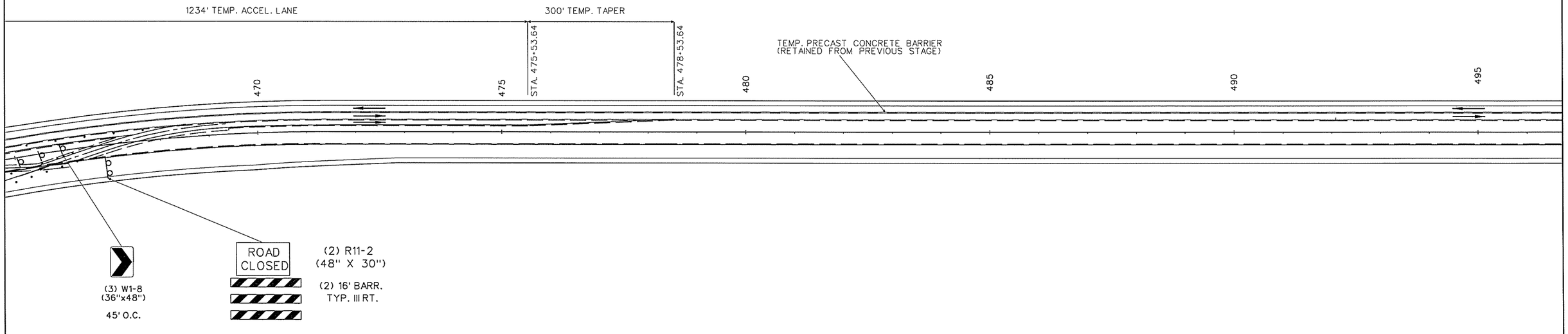
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	66	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 2B OPERATIONS:
RETAIN STAGE 2A TRAFFIC PATH FOR NB I-530 TRAFFIC
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO
ALTERNATE TEMPORARY RAMPS
RECONSTRUCT REMAINING SECTIONS OF I-530 NORTHBOUND LANES.
OVERLAY REMAINING TEMPORARY RAMPS WHERE DIRECTED BY ENGINEER
TO MATCH SURFACE OF RECONSTRUCTED NB I-530 LANES.
OBLITERATE NORTHBOUND TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS

P.E.
1/30/15

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

DENOTES: CONSTRUCTION FOR MOT



MAINTENANCE OF TRAFFIC
STAGE 2B

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	67	186

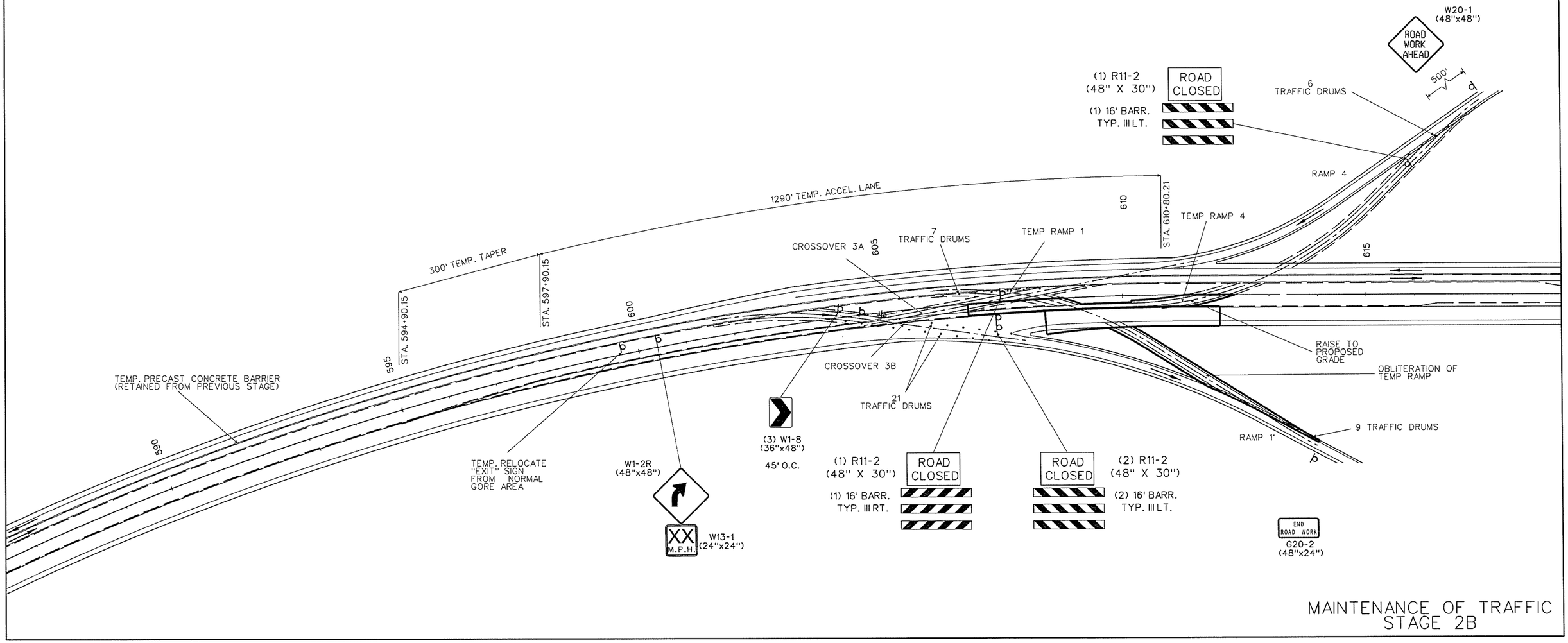
(2) MAINTENANCE OF TRAFFIC

STAGE 2B OPERATIONS:
RETAIN STAGE 2A TRAFFIC PATH FOR NB I-530 TRAFFIC
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO
ALTERNATE TEMPORARY RAMPS
RECONSTRUCT REMAINING SECTIONS OF I-530 NORTHBOUND LANES.
OVERLAY REMAINING TEMPORARY RAMPS WHERE DIRECTED BY ENGINEER
TO MATCH SURFACE OF RECONSTRUCTED NB I-530 LANES.
OBLITERATE NORTHBOUND TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS

KH, P.E.
113015

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

DENOTES: CONSTRUCTION FOR MOT



MAINTENANCE OF TRAFFIC
STAGE 2B

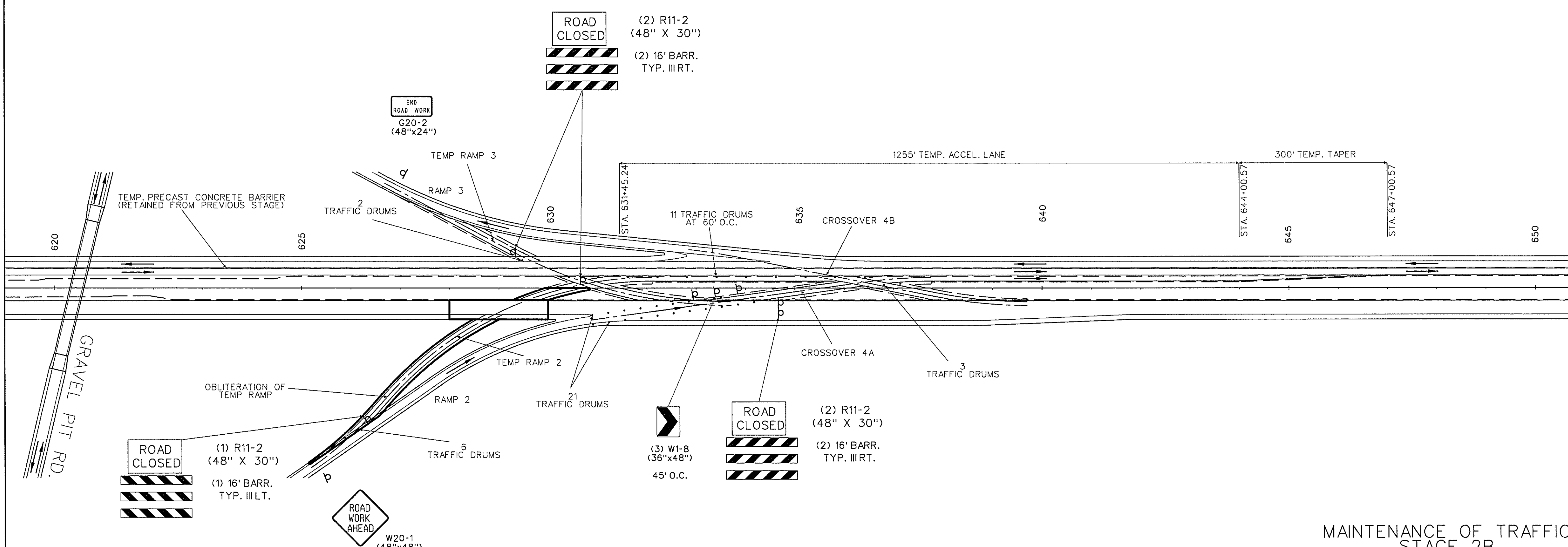
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	68	186

(2) MAINTENANCE OF TRAFFIC

STAGE 2B OPERATIONS:
RETAIN STAGE 2A TRAFFIC PATH FOR NB I-530 TRAFFIC
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO
ALTERNATE TEMPORARY RAMPS
RECONSTRUCT REMAINING SECTIONS OF I-530 NORTHBOUND LANES.
OVERLAY REMAINING TEMPORARY RAMPS WHERE DIRECTED BY ENGINEER
TO MATCH SURFACE OF RECONSTRUCTED NB I-530 LANES.
OBLITERATE NORTHBOUND TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 15509 KENNETH MORA

DENOTES: CONSTRUCTION FOR MOT



MAINTENANCE OF TRAFFIC
STAGE 2B

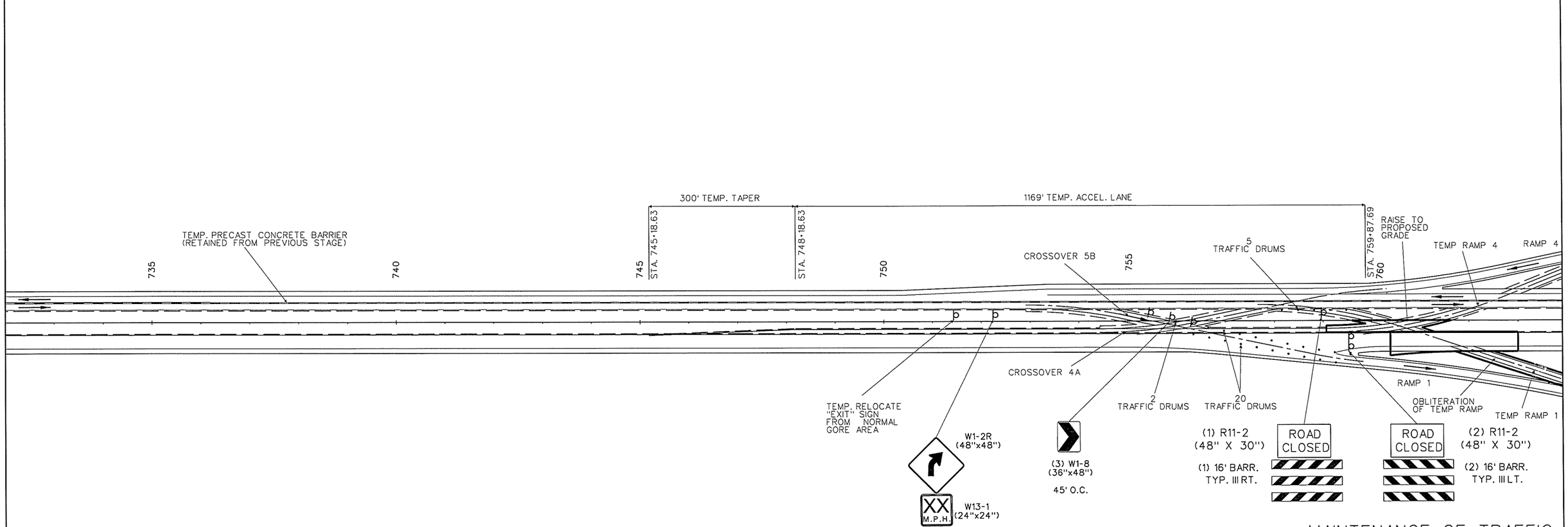
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	69	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 2B OPERATIONS:
RETAIN STAGE 2A TRAFFIC PATH FOR NB I-530 TRAFFIC
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO
ALTERNATE TEMPORARY RAMPS
RECONSTRUCT REMAINING SECTIONS OF I-530 NORTHBOUND LANES.
OVERLAY REMAINING TEMPORARY RAMPS WHERE DIRECTED BY ENGINEER
TO MATCH SURFACE OF RECONSTRUCTED NB I-530 LANES.
OBLITERATE NORTHBOUND TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS

P.E. 1/30/15

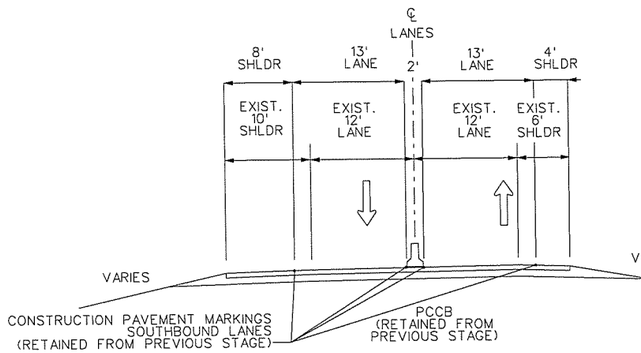
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

DENOTES: CONSTRUCTION FOR MOT

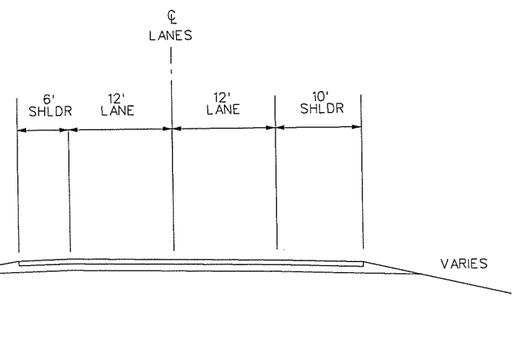


MAINTENANCE OF TRAFFIC
STAGE 2B

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	70	186
				(2)	MAINTENANCE OF TRAFFIC			



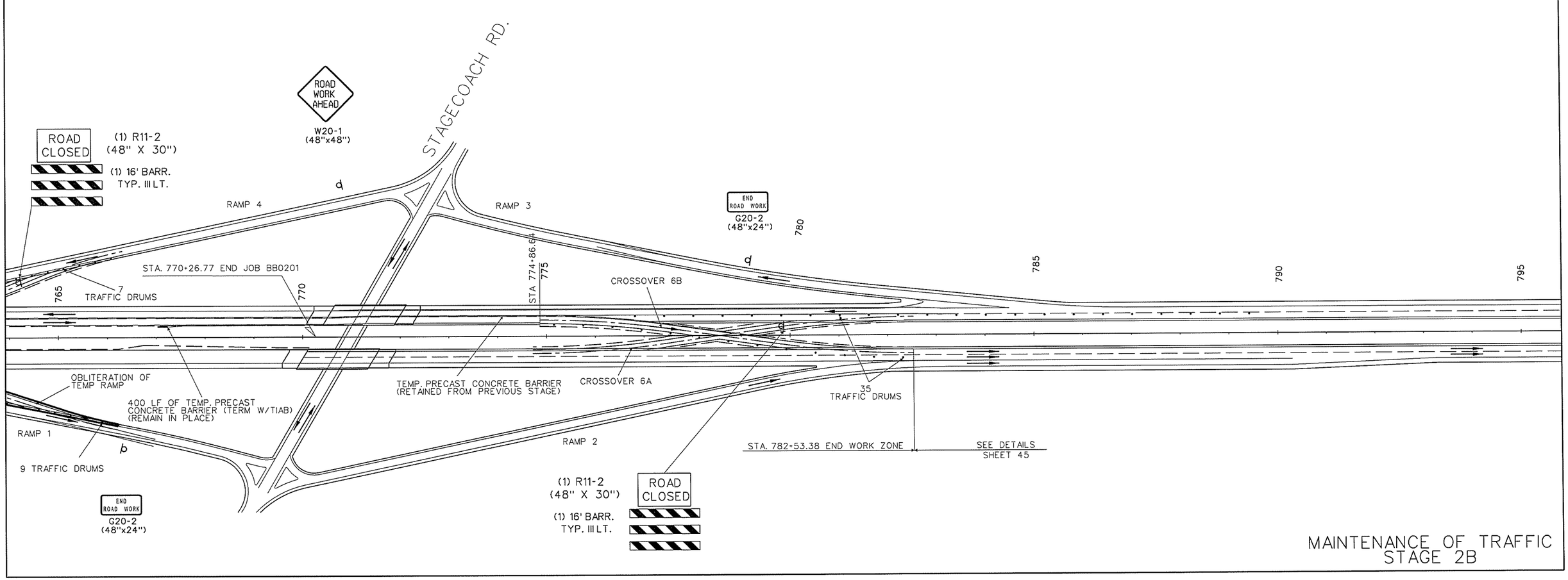
LOCATION OF TEMPORARY PRECAST CONCRETE BARRIER WALL
FOR MAINTENANCE OF TRAFFIC - LEFT MAIN LANES
(STA. 771+20.00 - STA. END PROJECT)



1/30/15

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

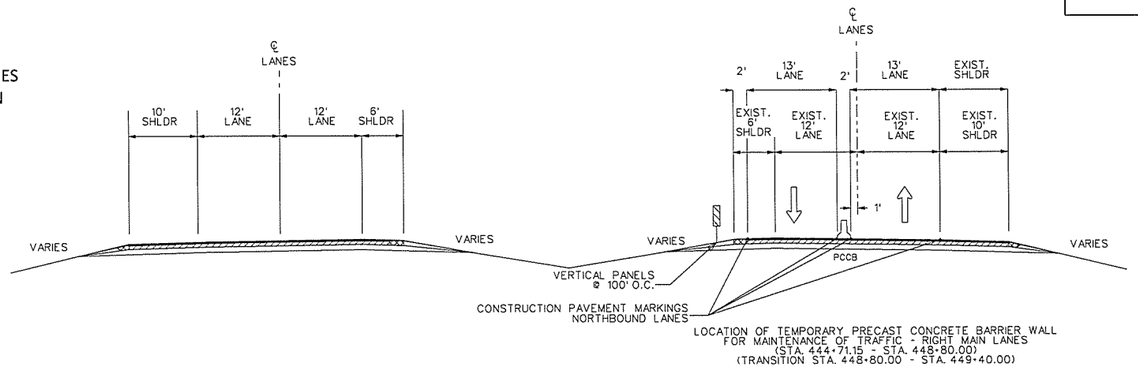
DENOTES: CONSTRUCTION FOR MOT

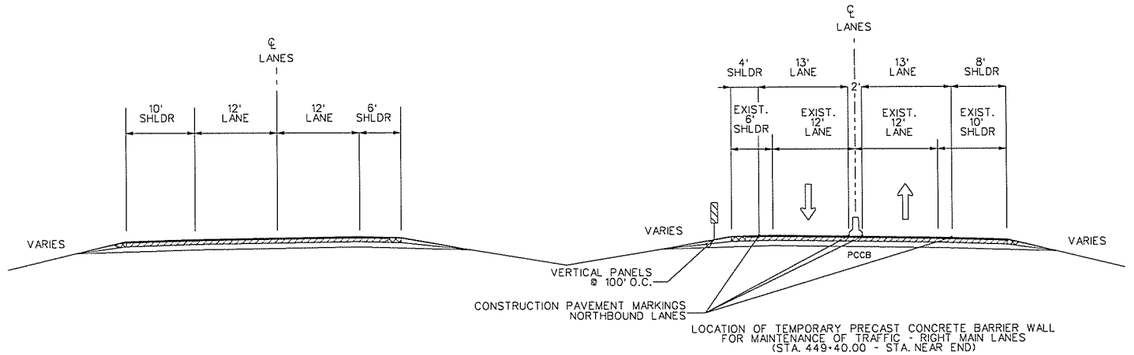


MAINTENANCE OF TRAFFIC
STAGE 2B

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	71	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 3A OPERATIONS:
RELOCATE PRECAST CONCRETE BARRIER TO NB LANES
ROUTE SB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANES OF NB MAIN LANES
RECONSTRUCT SB LANES, APPROACH GUTTERS & SLABS, PERFORM HYDRODEMOLITION OPERATIONS IN THE AREAS SHOWN
OVERLAY TEMPORARY RAMPS WHERE DIRECTED BY ENGINEER TO MATCH SURFACE OF RECONSTRUCTED SB I-530 LANES.





STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

1/30/15

DENOTES: CONSTRUCTION FOR MOT

STA. 436+90.53 - STA. 782+53.38 NB MAIN LANES
VERTICAL PANELS (100' O.C.): 325 EACH

STA. 436+90.53 - STA. 782+53.38 NB MAIN LANES
REMOVAL OF PERMANENT PAVEMENT MARKINGS: 2,157 LF

(BRIDGE DECK & APPROACH SLABS)
REMOVABLE CONSTRUCTION PAVEMENT MARKINGS: 2,160 LF

STA. 436+90.53 - STA. 782+53.38 NB MAIN LANES
CONSTRUCTION PAVEMENT MARKINGS: 146,841 LF

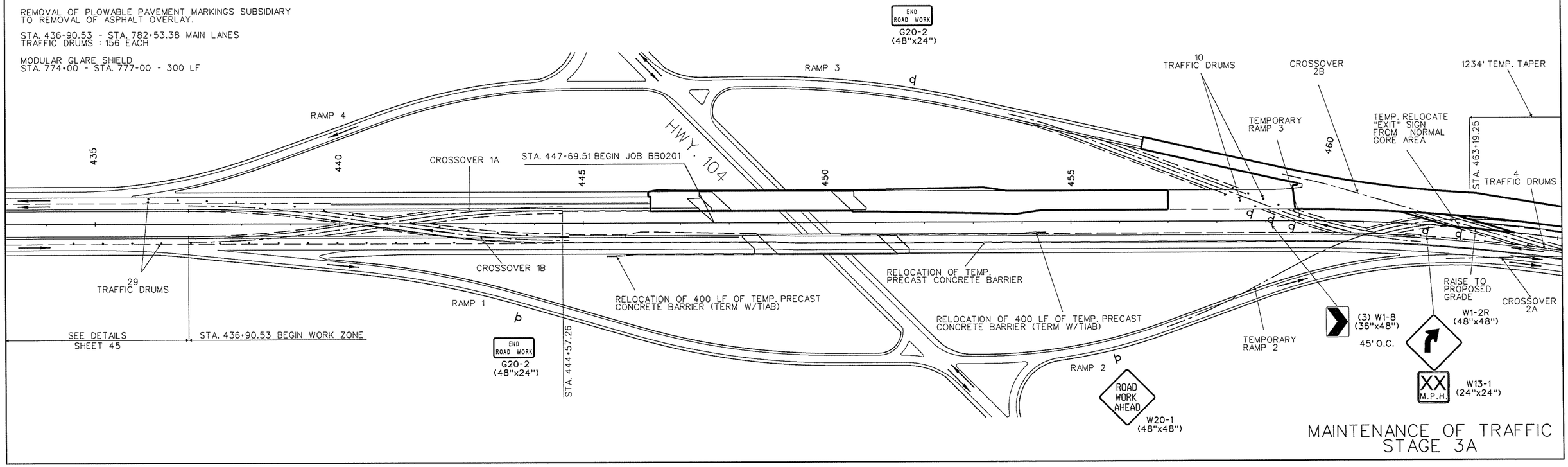
STA. 436+90.53 - STA. 782+53.38 NB MAIN LANES
REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS: 1,620 LF

NB MAIN LANES RELOCATE TEMPORARY PRECAST CONCRETE BARRIER: 34,780 LF
NB MAIN LANES FURNISH & INSTALL TEMPORARY PRECAST CONCRETE BARRIER: 800 LF

REMOVAL OF PLOWABLE PAVEMENT MARKINGS SUBSIDIARY TO REMOVAL OF ASPHALT OVERLAY.

STA. 436+90.53 - STA. 782+53.38 MAIN LANES
TRAFFIC DRUMS : 156 EACH

MODULAR GLARE SHIELD
STA. 774+00 - STA. 777+00 - 300 LF



MAINTENANCE OF TRAFFIC
STAGE 3A

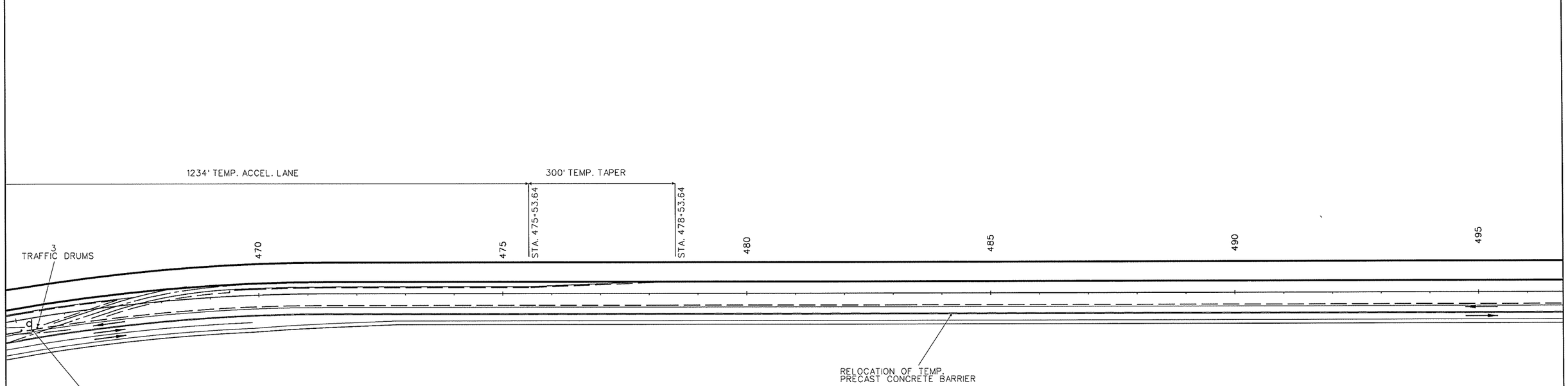
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	72	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 3A OPERATIONS:
RELOCATE PRECAST CONCRETE BARRIER TO NB LANES
ROUTE SB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANES OF NB MAIN LANES
RECONSTRUCT SB LANES, APPROACH GUTTERS & SLABS, PERFORM HYDRODEMOLITION
OPERATIONS IN THE AREAS SHOWN
OVERLAY TEMPORARY RAMPS WHERE DIRECTED BY ENGINEER
TO MATCH SURFACE OF RECONSTRUCTED SB I-530 LANES.

1130115

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

DENOTES: CONSTRUCTION FOR MOT



MAINTENANCE OF TRAFFIC
STAGE 3A

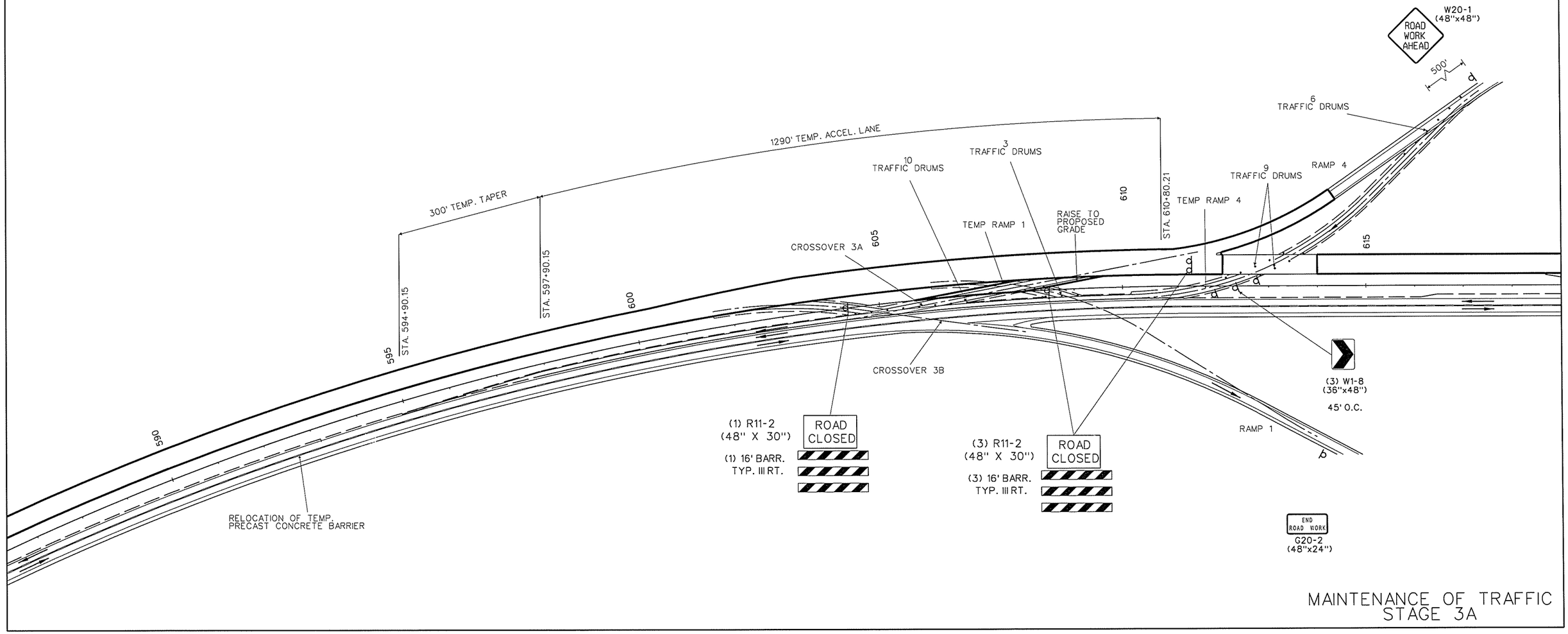
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	73	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 3A OPERATIONS:
RELOCATE PRECAST CONCRETE BARRIER TO NB LANES
ROUTE SB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANES OF NB MAIN LANES
RECONSTRUCT SB LANES, APPROACH GUTTERS & SLABS, PERFORM HYDRODEMOLITION
OPERATIONS IN THE AREAS SHOWN
OVERLAY TEMPORARY RAMPS WHERE DIRECTED BY ENGINEER
TO MATCH SURFACE OF RECONSTRUCTED SB I-530 LANES.

KH, P.E.
1130115

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

DENOTES: CONSTRUCTION FOR MOT



MAINTENANCE OF TRAFFIC
STAGE 3A

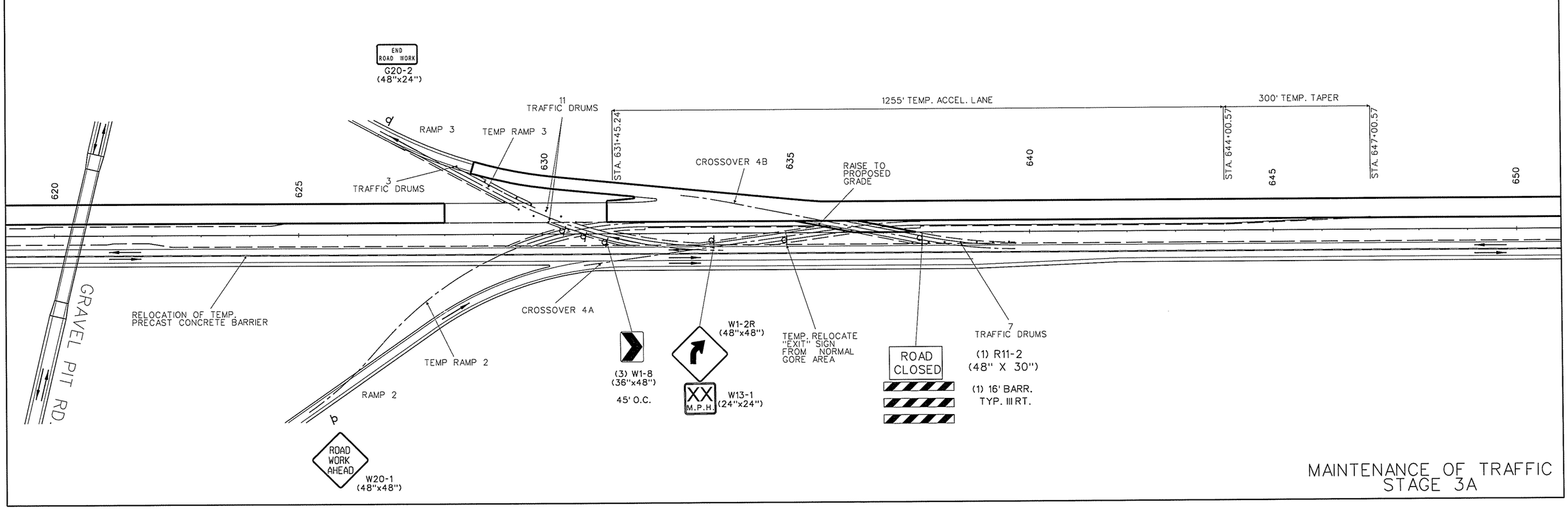
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	74	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 3A OPERATIONS:
RELOCATE PRECAST CONCRETE BARRIER TO NB LANES
ROUTE SB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANES OF NB MAIN LANES
RECONSTRUCT SB LANES, APPROACH GUTTERS & SLABS, PERFORM HYDRODEMOLITION
OPERATIONS IN THE AREAS SHOWN
OVERLAY TEMPORARY RAMPS WHERE DIRECTED BY ENGINEER
TO MATCH SURFACE OF RECONSTRUCTED SB I-530 LANES.

1/30/15

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

DENOTES: CONSTRUCTION FOR MOT



MAINTENANCE OF TRAFFIC
STAGE 3A

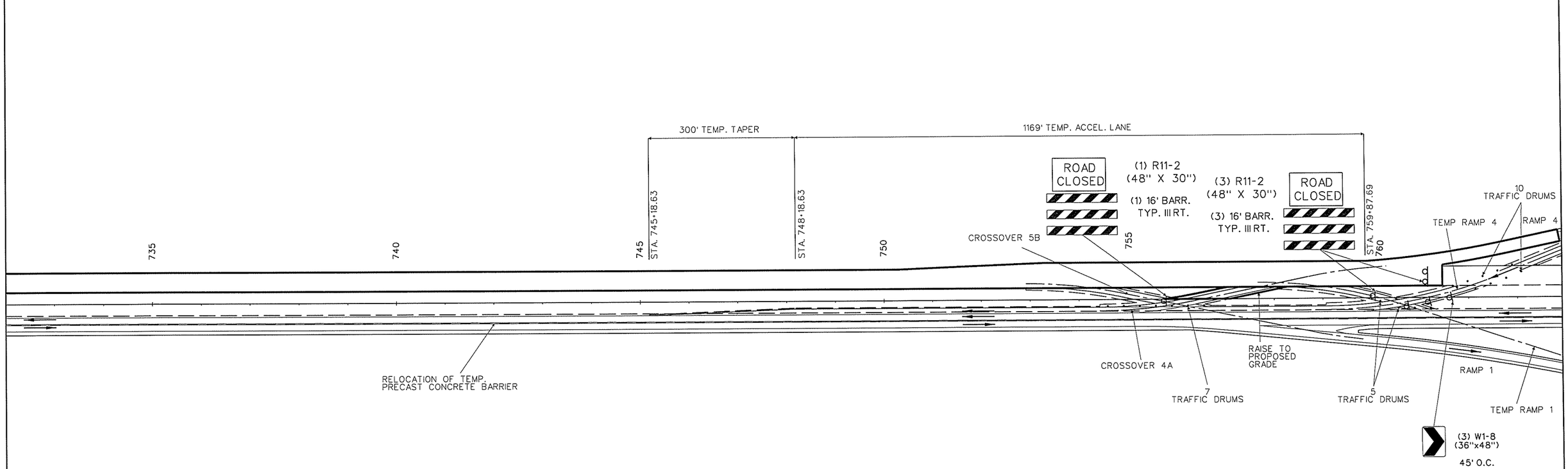
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	75	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 3A OPERATIONS:
RELOCATE PRECAST CONCRETE BARRIER TO NB LANES
ROUTE SB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANES OF NB MAIN LANES
RECONSTRUCT SB LANES, APPROACH GUTTERS & SLABS, PERFORM HYDRODEMOLITION
OPERATIONS IN THE AREAS SHOWN
OVERLAY TEMPORARY RAMPS WHERE DIRECTED BY ENGINEER
TO MATCH SURFACE OF RECONSTRUCTED SB I-530 LANES.

THL, P.E.
11/30/15

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

DENOTES: CONSTRUCTION FOR MOT



MAINTENANCE OF TRAFFIC
STAGE 3A

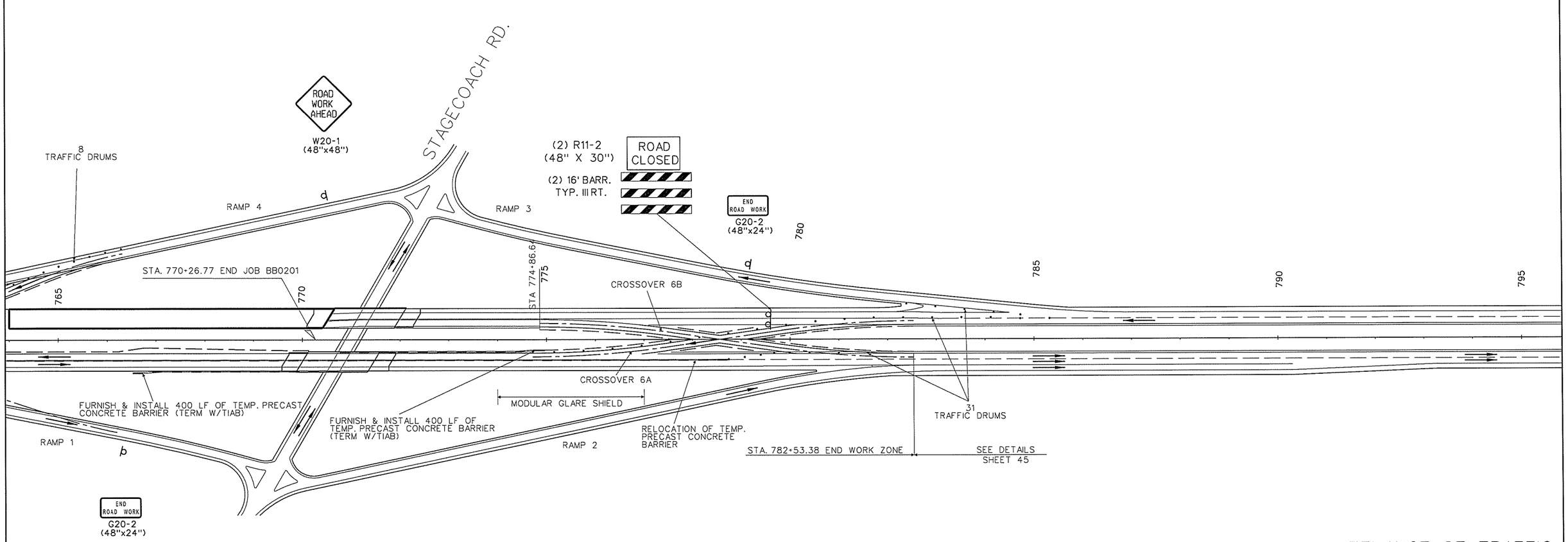
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	76	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 3A OPERATIONS:
RELOCATE PRECAST CONCRETE BARRIER TO NB LANES
ROUTE SB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANES OF NB MAIN LANES
RECONSTRUCT SB LANES, APPROACH GUTTERS & SLABS, PERFORM HYDRODEMOLITION
OPERATIONS IN THE AREAS SHOWN
OVERLAY TEMPORARY RAMPS WHERE DIRECTED BY ENGINEER
TO MATCH SURFACE OF RECONSTRUCTED SB I-530 LANES.

K.M., P.E.
11/30/15

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

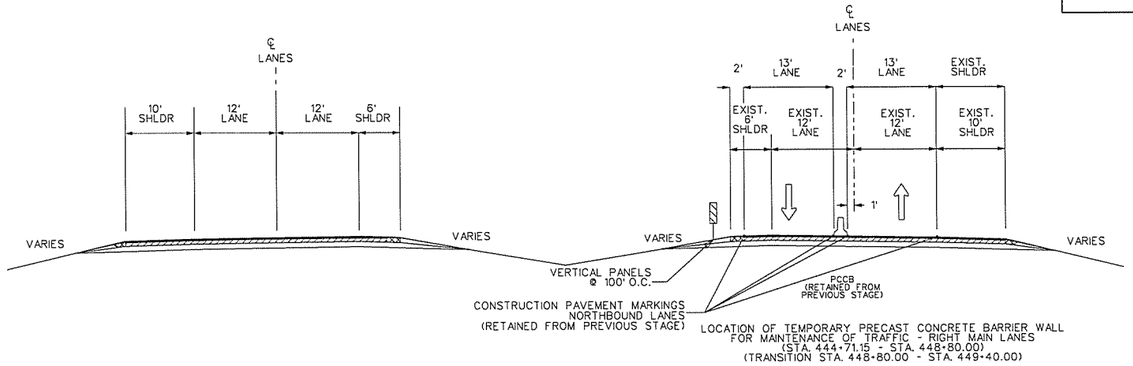
DENOTES: CONSTRUCTION FOR MOT

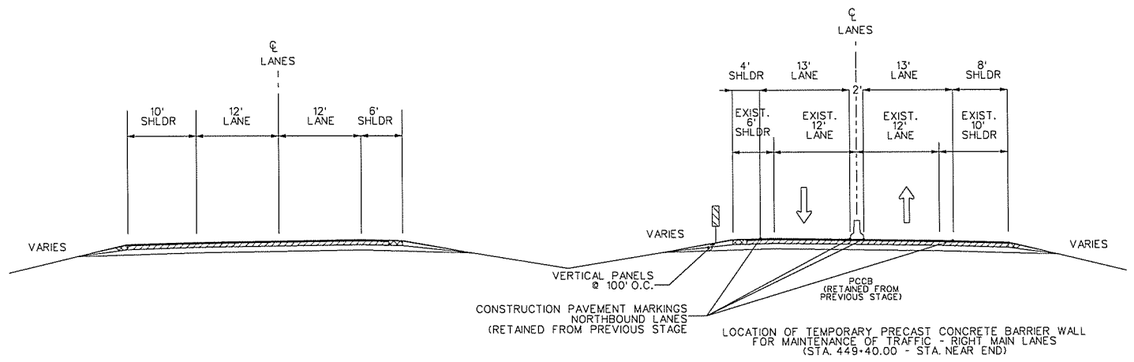


MAINTENANCE OF TRAFFIC
STAGE 3A

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	77	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 3B OPERATIONS:
RETAIN STAGE 3A TRAFFIC PATH FOR NB I-530 TRAFFIC
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO
ALTERNATE TEMPORARY RAMPS
RECONSTRUCT REMAINING SECTIONS OF I-530 SOUTHBOUND LANES.
OBLITERATE SOUTHBOUND TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS





762, P.E.
11-20-15

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

DENOTES: CONSTRUCTION FOR MOT

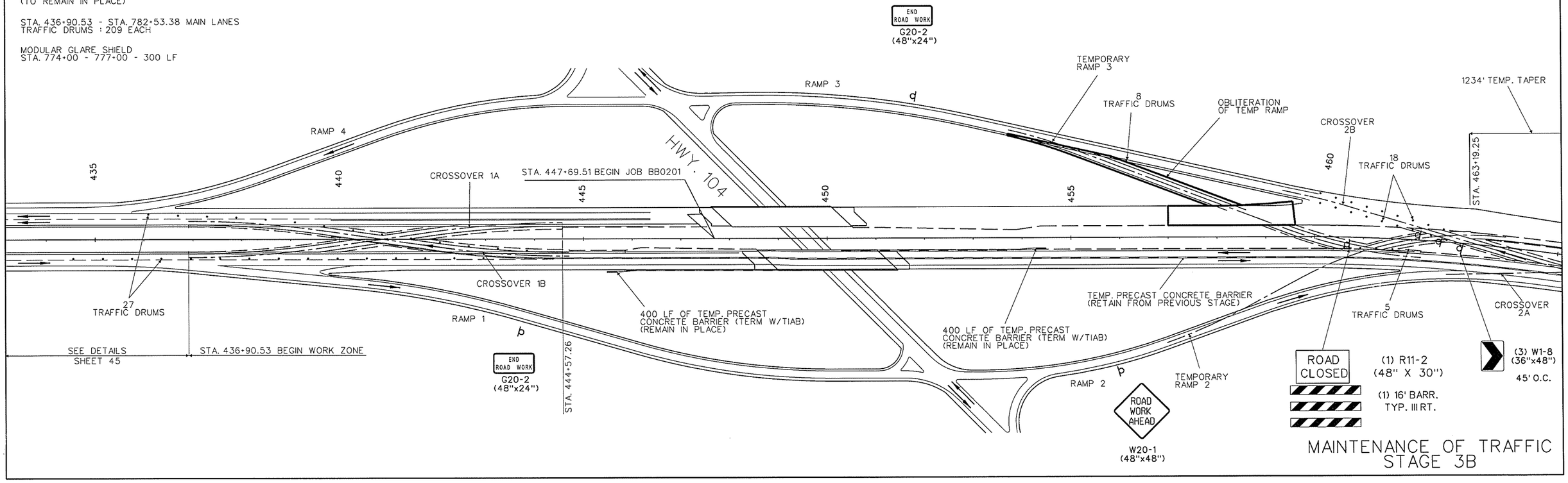
STA. 436+90.53 - STA. 782+53.38 NB MAIN LANES
VERTICAL PANELS (100' O.C.): 325 EACH

STA. 436+90.53 - STA. 782+53.38 NB MAIN LANES
CONSTRUCTION PAVEMENT MARKINGS: 7,641 LF

NB MAIN LANES TEMPORARY PRECAST CONCRETE BARRIER
(TO REMAIN IN PLACE)

STA. 436+90.53 - STA. 782+53.38 MAIN LANES
TRAFFIC DRUMS : 209 EACH

MODULAR GLARE SHIELD
STA. 774+00 - 777+00 - 300 LF



MAINTENANCE OF TRAFFIC STAGE 3B

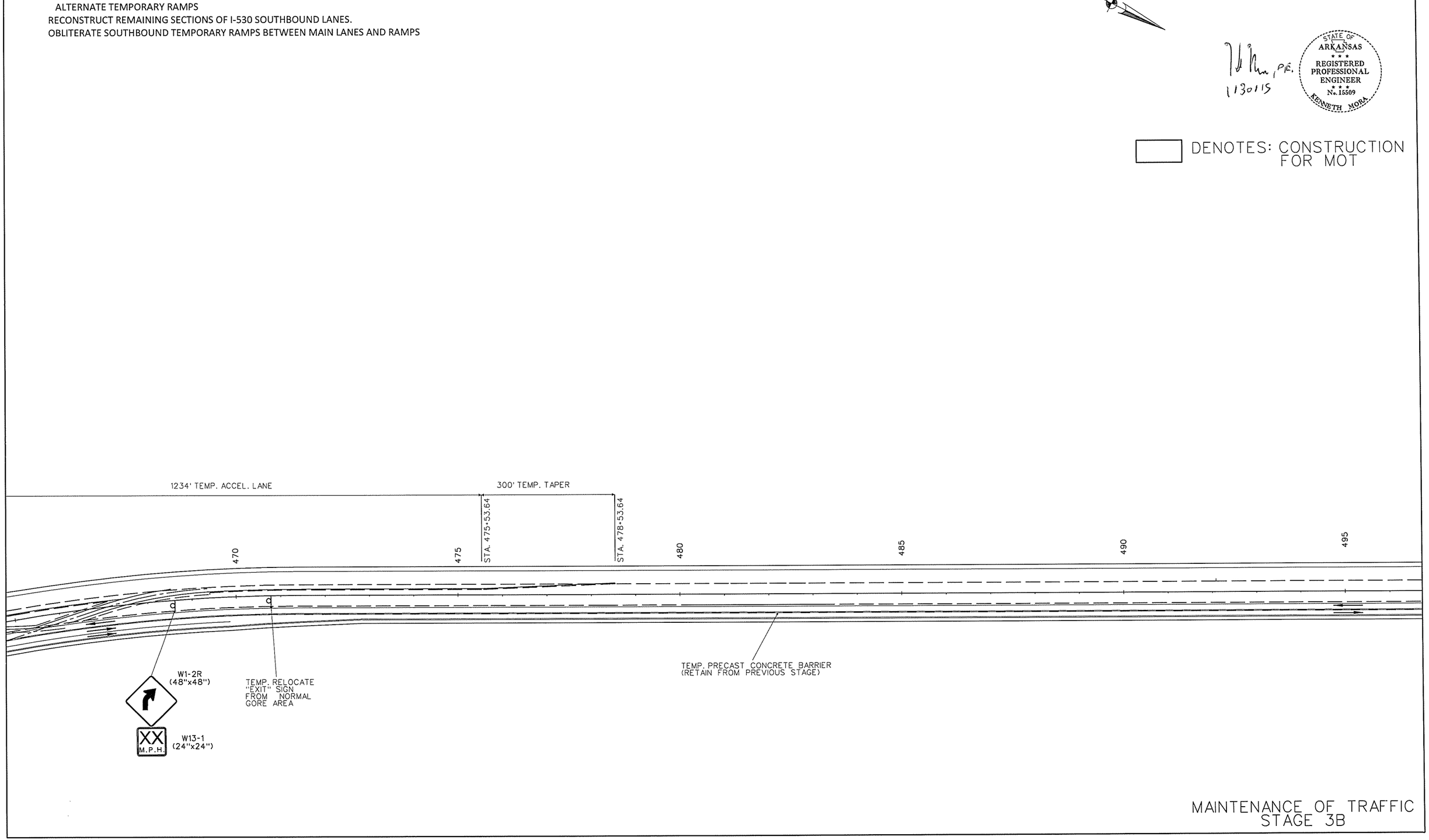
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	78	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 3B OPERATIONS:
RETAIN STAGE 3A TRAFFIC PATH FOR NB I-530 TRAFFIC
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO
ALTERNATE TEMPORARY RAMPS
RECONSTRUCT REMAINING SECTIONS OF I-530 SOUTHBOUND LANES.
OBLITERATE SOUTHBOUND TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS

W. Thom, P.E.
113015

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

DENOTES: CONSTRUCTION FOR MOT



MAINTENANCE OF TRAFFIC
STAGE 3B

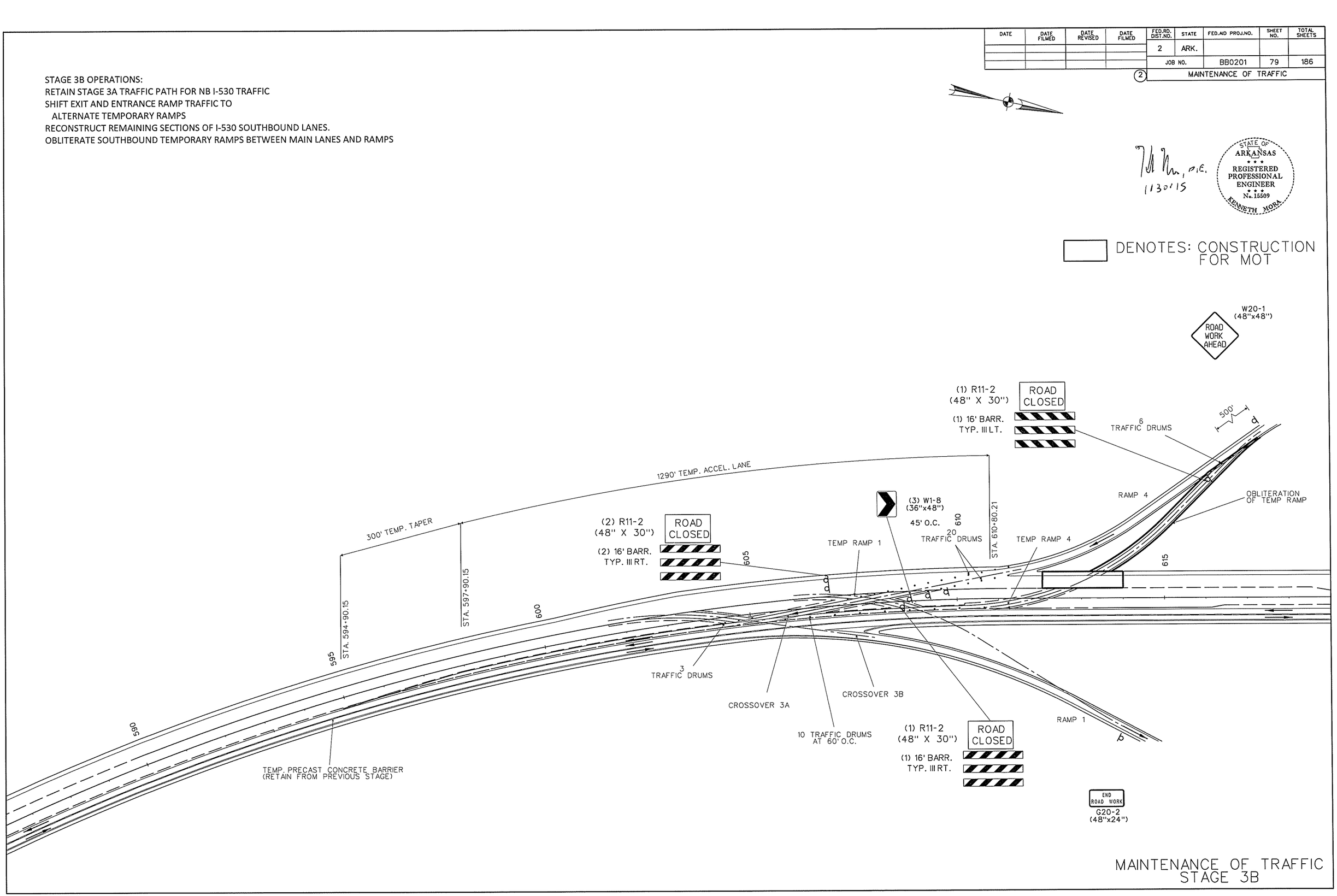
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	79	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 3B OPERATIONS:
RETAIN STAGE 3A TRAFFIC PATH FOR NB I-530 TRAFFIC
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO
ALTERNATE TEMPORARY RAMPS
RECONSTRUCT REMAINING SECTIONS OF I-530 SOUTHBOUND LANES.
OBLITERATE SOUTHBOUND TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS

K. Mora, P.E.
11/30/15

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

DENOTES: CONSTRUCTION FOR MOT



MAINTENANCE OF TRAFFIC
STAGE 3B

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	80	186

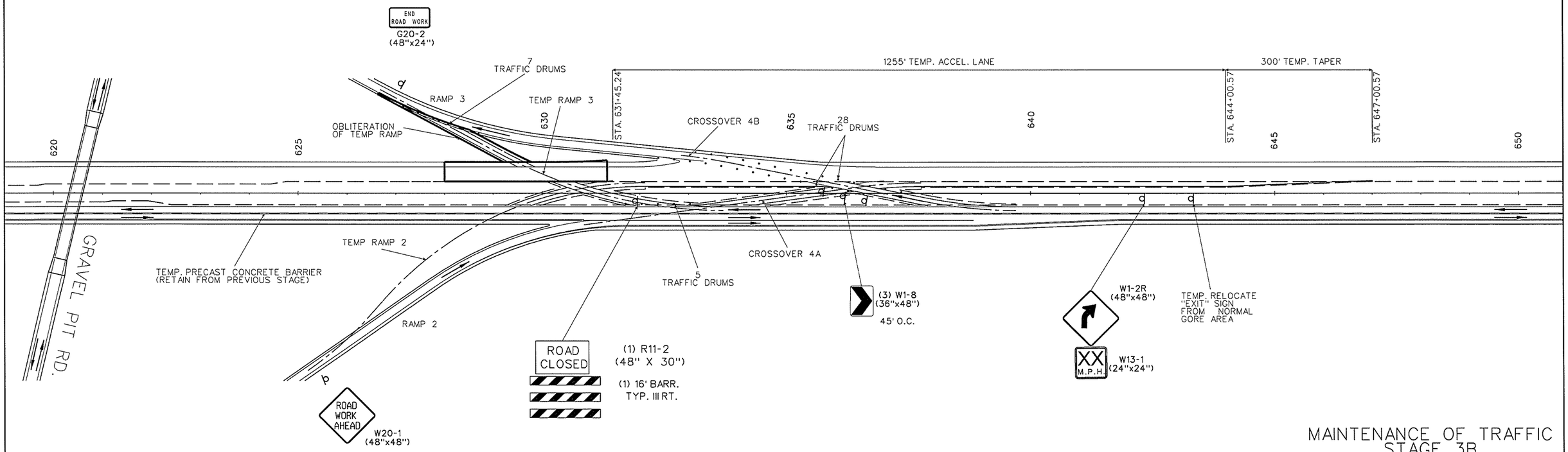
(2) MAINTENANCE OF TRAFFIC

STAGE 3B OPERATIONS:
RETAIN STAGE 3A TRAFFIC PATH FOR NB I-530 TRAFFIC
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO
ALTERNATE TEMPORARY RAMPS
RECONSTRUCT REMAINING SECTIONS OF I-530 SOUTHBOUND LANES.
OBLITERATE SOUTHBOUND TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS

7/17, P.E.
1/30/15

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

DENOTES: CONSTRUCTION FOR MOT



MAINTENANCE OF TRAFFIC
STAGE 3B

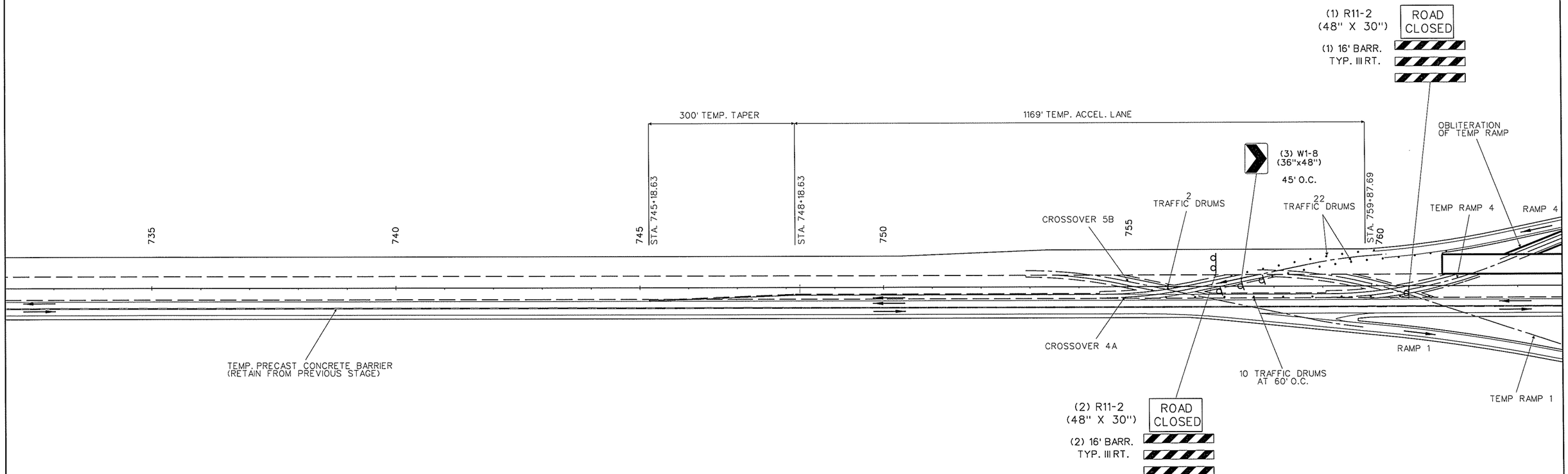
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	81	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 3B OPERATIONS:
RETAIN STAGE 3A TRAFFIC PATH FOR NB I-530 TRAFFIC
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO
ALTERNATE TEMPORARY RAMPS
RECONSTRUCT REMAINING SECTIONS OF I-530 SOUTHBOUND LANES.
OBLITERATE SOUTHBOUND TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS

KMP, P.E.
130115

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

DENOTES: CONSTRUCTION FOR MOT



MAINTENANCE OF TRAFFIC
STAGE 3B

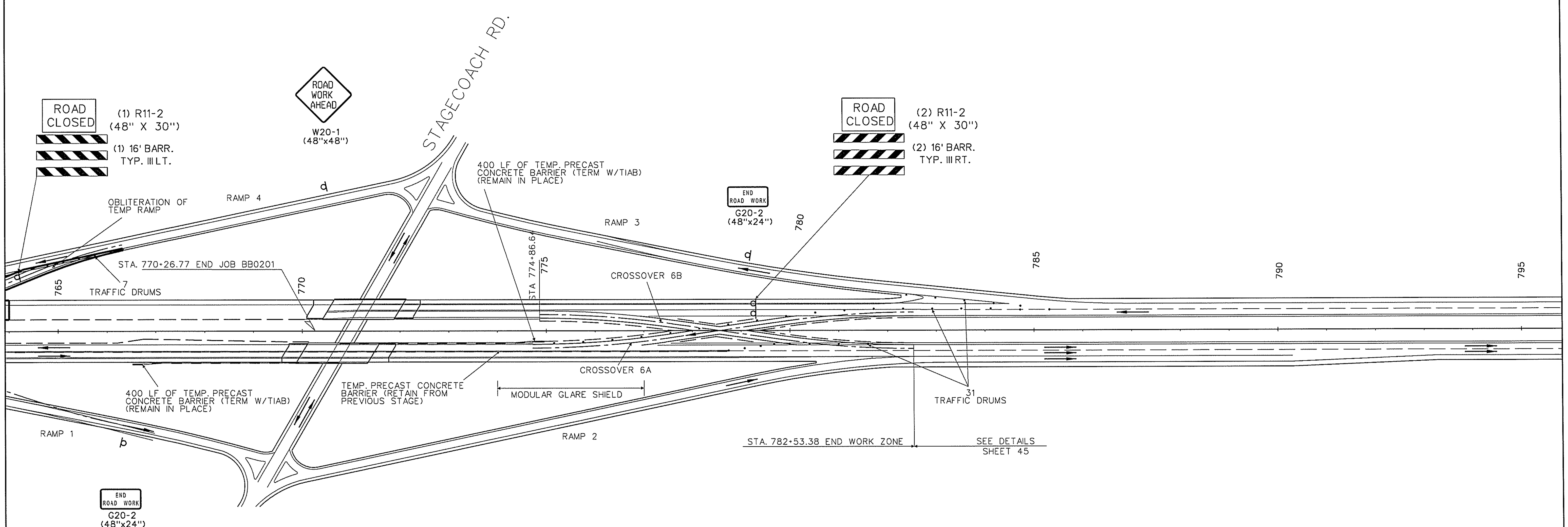
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	82	186
				(2) MAINTENANCE OF TRAFFIC				

STAGE 3B OPERATIONS:
RETAIN STAGE 3A TRAFFIC PATH FOR NB I-530 TRAFFIC
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO
ALTERNATE TEMPORARY RAMPS
RECONSTRUCT REMAINING SECTIONS OF I-530 SOUTHBOUND LANES.
OBLITERATE SOUTHBOUND TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS

P.E. 11300115

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 15509 KENNETH MORA

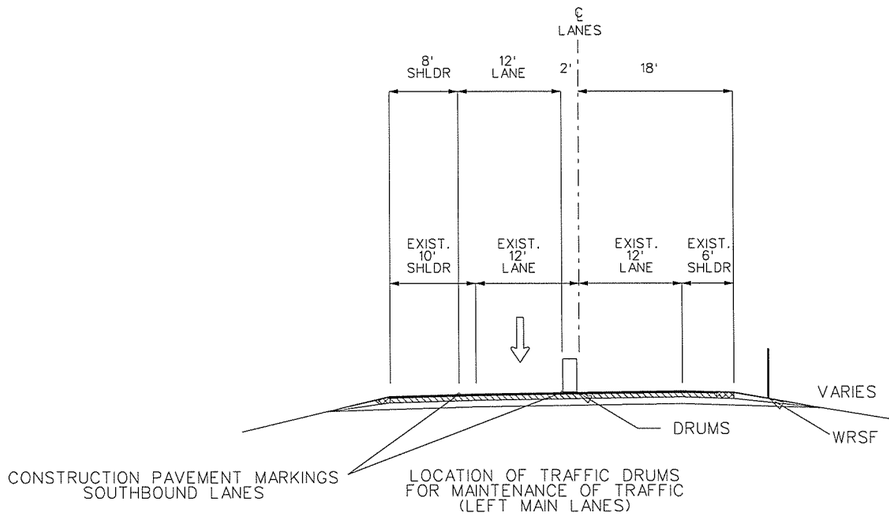
DENOTES: CONSTRUCTION FOR MOT

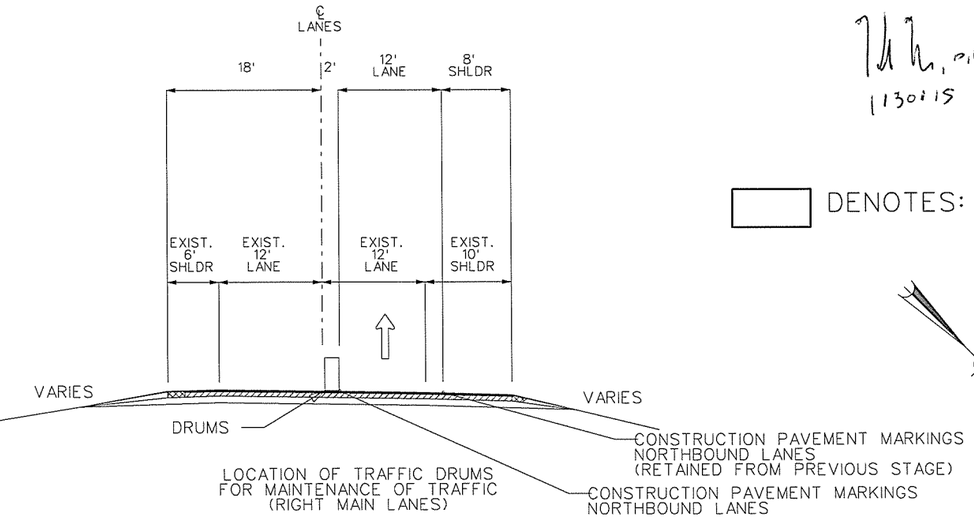


MAINTENANCE OF TRAFFIC
STAGE 3B

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	83	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 4A OPERATIONS:
SHIFT SB TRAFFIC TO OUTSIDE SB LANE
RETAIN NB TRAFFIC IN OUTSIDE NB LANE
REMOVE PRECAST CONCRETE BARRIER AND REPLACE WITH TRAFFIC DRUMS
OBLITERATE CROSSOVERS AND TEMPORARY RAMPS IN MEDIAN AREA
CONSTRUCT FINAL GRADING IN MEDIAN AREA
PLACE FINAL LIFT OF SURFACE ON INSIDE LANE AND SHOULDER
CONSTRUCT WRSF AND GUARDRAIL ON MEDIAN SIDE





11/30/15

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

DENOTES: CONSTRUCTION FOR MOT

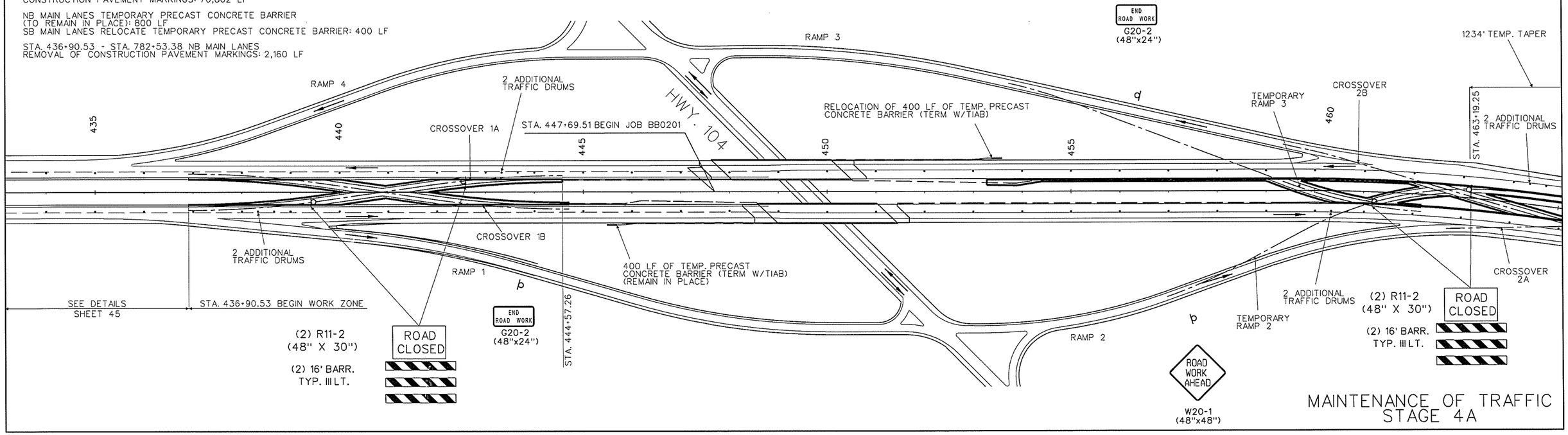
STA. 436+90.53 - STA. 782+53.38 NB MAIN LANES
TRAFFIC DRUMS (100' O.C.): 346 EACH + 20 ADDITIONAL DRUMS
STA. 436+90.53 - STA. 782+53.38 SB MAIN LANES
TRAFFIC DRUMS (100' O.C.): 346 EACH + 20 ADDITIONAL DRUMS

(BRIDGE DECK & APPROACH SLABS NB MAIN LANES)
REMOVABLE CONSTRUCTION PAVEMENT MARKINGS: 540 LF
(BRIDGE DECK & APPROACH SLABS SB MAIN LANES)
REMOVABLE CONSTRUCTION PAVEMENT MARKINGS: 1,080 LF

STA. 436+90.53 - STA. 782+53.38 NB MAIN LANES
CONSTRUCTION PAVEMENT MARKINGS: 37,160 LF
STA. 436+90.53 - STA. 782+53.38 SB MAIN LANES
CONSTRUCTION PAVEMENT MARKINGS: 70,862 LF

NB MAIN LANES TEMPORARY PRECAST CONCRETE BARRIER
(TO REMAIN IN PLACE): 800 LF
SB MAIN LANES RELOCATE TEMPORARY PRECAST CONCRETE BARRIER: 400 LF

STA. 436+90.53 - STA. 782+53.38 NB MAIN LANES
REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS: 2,160 LF



MAINTENANCE OF TRAFFIC
STAGE 4A

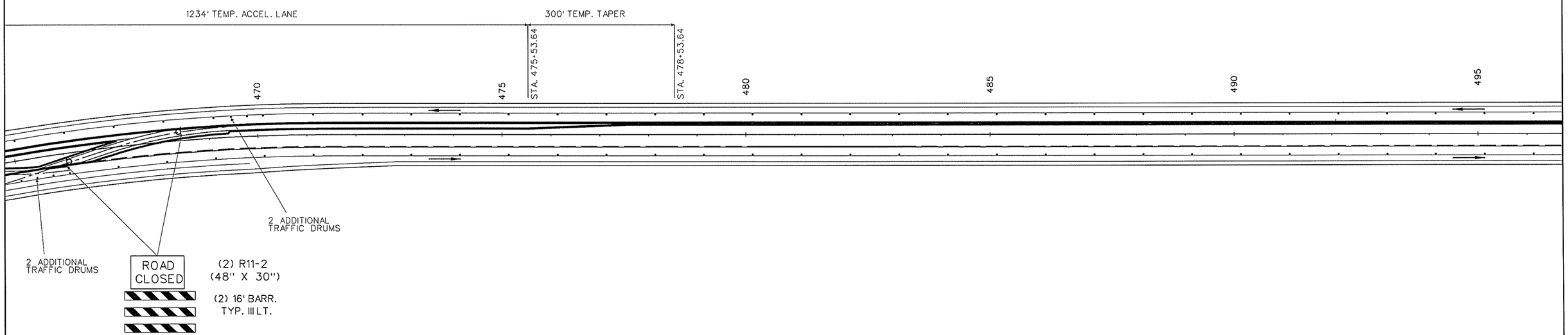
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	84	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 4A OPERATIONS:
SHIFT SB TRAFFIC TO OUTSIDE SB LANE
RETAIN NB TRAFFIC IN OUTSIDE NB LANE
REMOVE PRECAST CONCRETE BARRIER AND REPLACE WITH TRAFFIC DRUMS
OBLITERATE CROSSOVERS AND TEMPORARY RAMPS IN MEDIAN AREA
CONSTRUCT FINAL GRADING IN MEDIAN AREA
PLACE FINAL LIFT OF SURFACE ON INSIDE LANE AND SHOULDER
CONSTRUCT WRSF AND GUARDRAIL ON MEDIAN SIDE

1/30/15

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

DENOTES: CONSTRUCTION FOR MOT



MAINTENANCE OF TRAFFIC
STAGE 4A

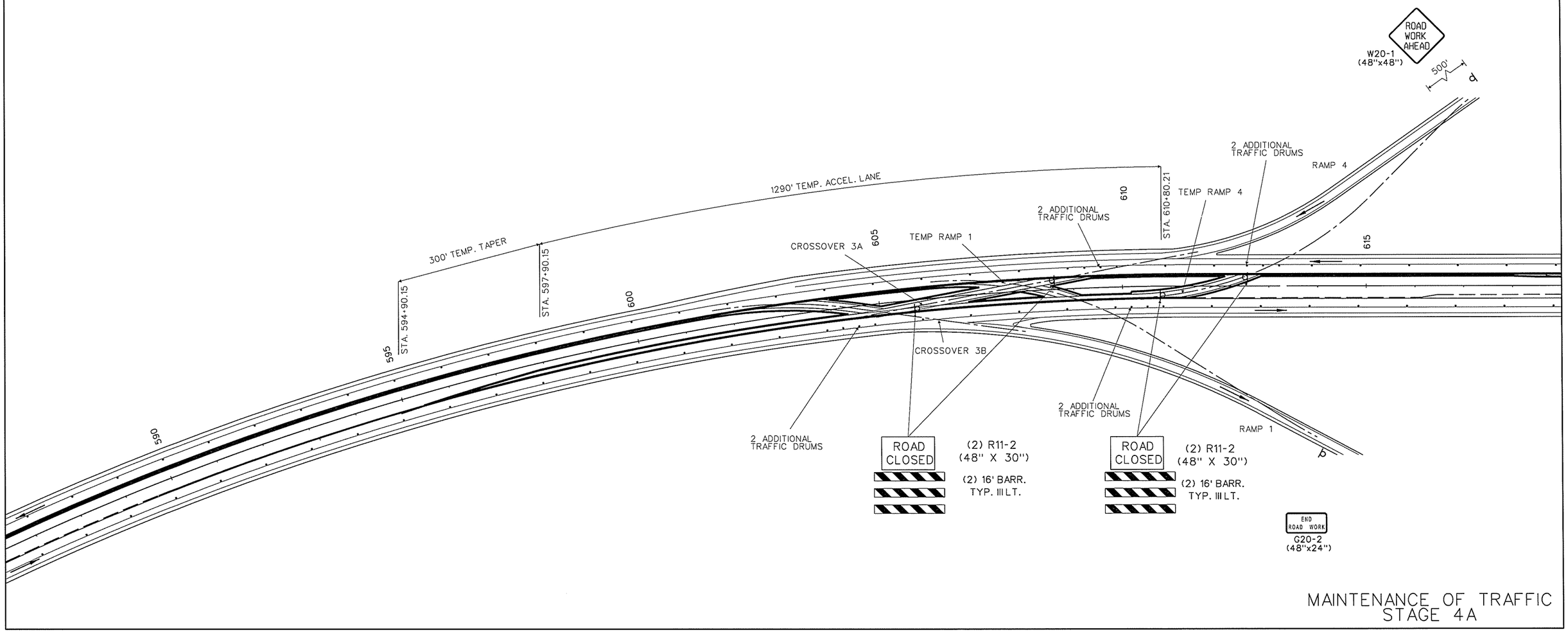
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	85	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 4A OPERATIONS:
SHIFT SB TRAFFIC TO OUTSIDE SB LANE
RETAIN NB TRAFFIC IN OUTSIDE NB LANE
REMOVE PRECAST CONCRETE BARRIER AND REPLACE WITH TRAFFIC DRUMS
OBLITERATE CROSSOVERS AND TEMPORARY RAMPS IN MEDIAN AREA
CONSTRUCT FINAL GRADING IN MEDIAN AREA
PLACE FINAL LIFT OF SURFACE ON INSIDE LANE AND SHOULDER
CONSTRUCT WRSF AND GUARDRAIL ON MEDIAN SIDE

1/30/15

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

DENOTES: CONSTRUCTION FOR MOT



MAINTENANCE OF TRAFFIC
STAGE 4A

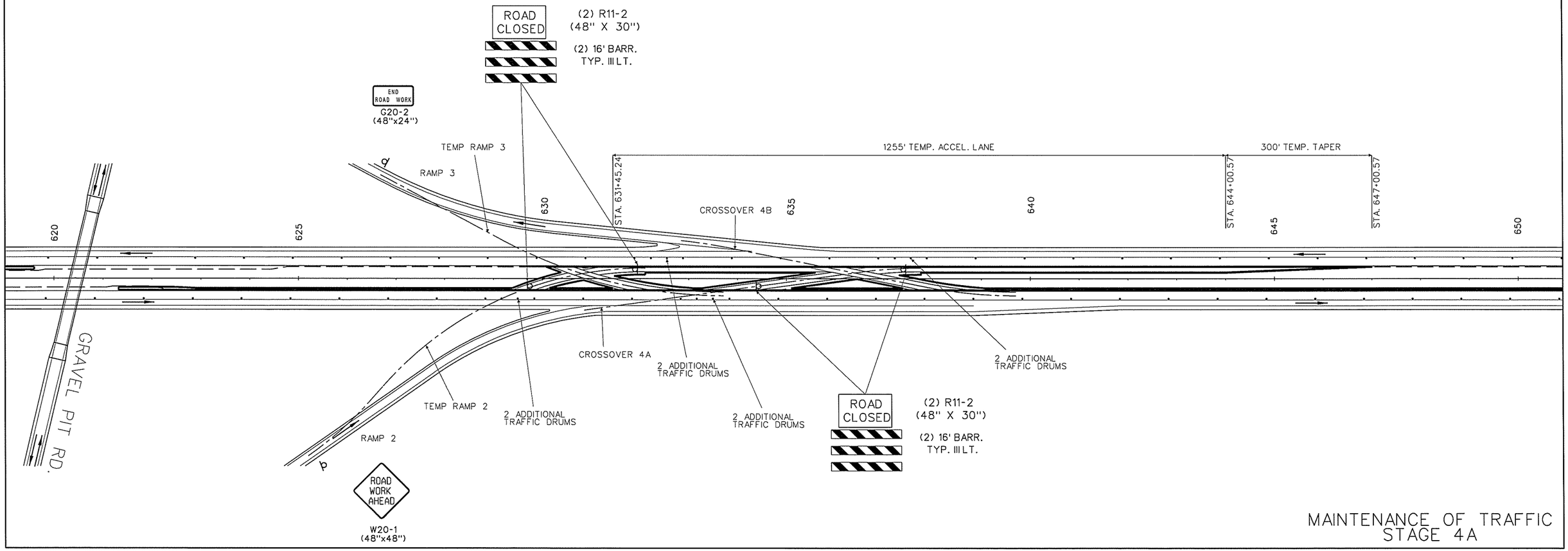
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	86	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 4A OPERATIONS:
SHIFT SB TRAFFIC TO OUTSIDE SB LANE
RETAIN NB TRAFFIC IN OUTSIDE NB LANE
REMOVE PRECAST CONCRETE BARRIER AND REPLACE WITH TRAFFIC DRUMS
OBLITERATE CROSSOVERS AND TEMPORARY RAMPS IN MEDIAN AREA
CONSTRUCT FINAL GRADING IN MEDIAN AREA
PLACE FINAL LIFT OF SURFACE ON INSIDE LANE AND SHOULDER
CONSTRUCT WRSF AND GUARDRAIL ON MEDIAN SIDE

KMH, P.E.
113015

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

☐ DENOTES: CONSTRUCTION FOR MOT



MAINTENANCE OF TRAFFIC
STAGE 4A

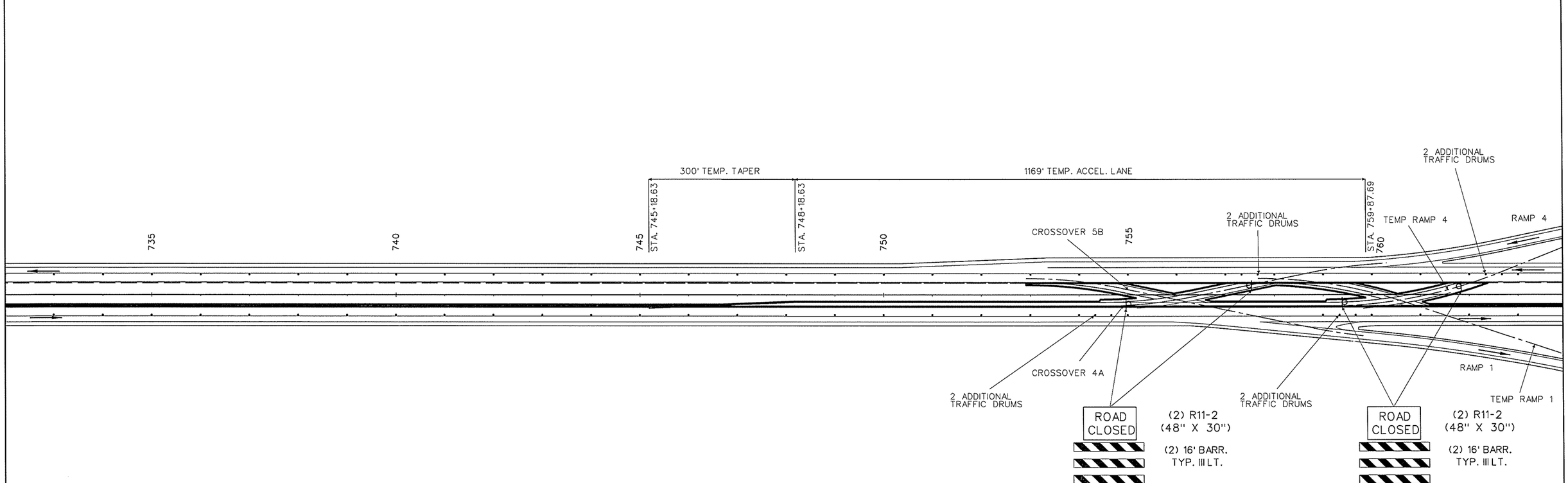
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	87	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 4A OPERATIONS:
SHIFT SB TRAFFIC TO OUTSIDE SB LANE
RETAIN NB TRAFFIC IN OUTSIDE NB LANE
REMOVE PRECAST CONCRETE BARRIER AND REPLACE WITH TRAFFIC DRUMS
OBLITERATE CROSSOVERS AND TEMPORARY RAMPS IN MEDIAN AREA
CONSTRUCT FINAL GRADING IN MEDIAN AREA
PLACE FINAL LIFT OF SURFACE ON INSIDE LANE AND SHOULDER
CONSTRUCT WRSF AND GUARDRAIL ON MEDIAN SIDE

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

11/30/15

DENOTES: CONSTRUCTION FOR MOT



MAINTENANCE OF TRAFFIC
STAGE 4A

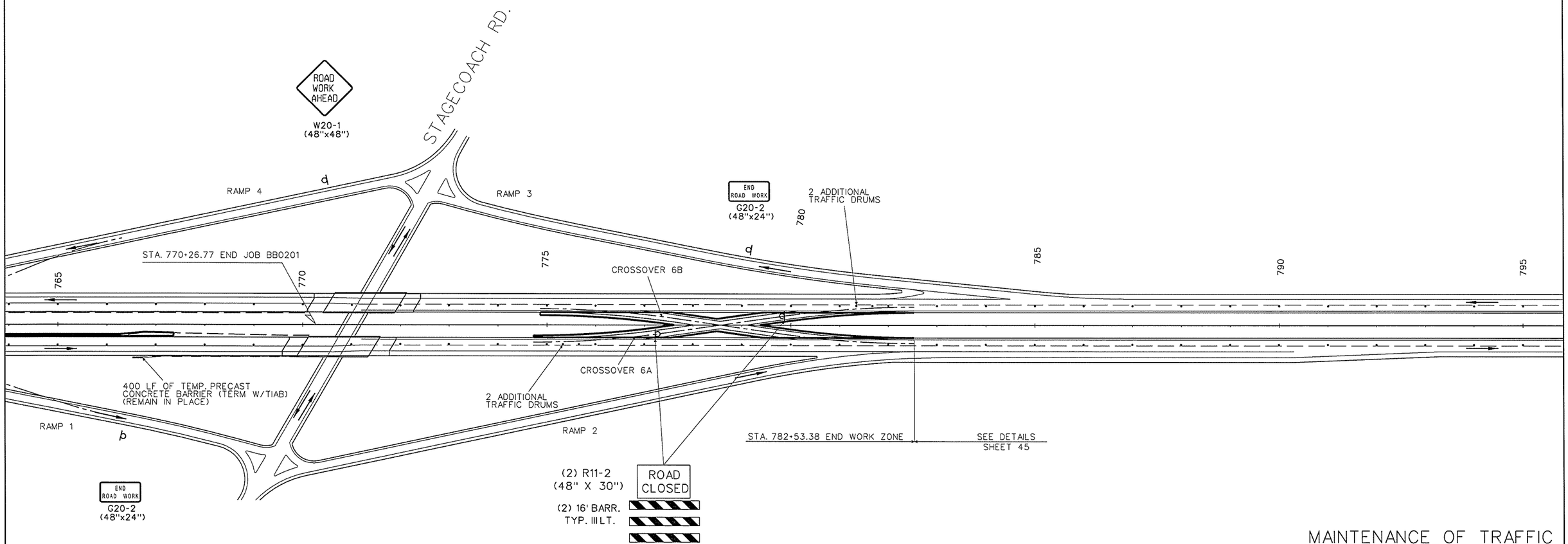
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	88	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 4A OPERATIONS:
SHIFT SB TRAFFIC TO OUTSIDE SB LANE
RETAIN NB TRAFFIC IN OUTSIDE NB LANE
REMOVE PRECAST CONCRETE BARRIER AND REPLACE WITH TRAFFIC DRUMS
OBLITERATE CROSSOVERS AND TEMPORARY RAMPS IN MEDIAN AREA
CONSTRUCT FINAL GRADING IN MEDIAN AREA
PLACE FINAL LIFT OF SURFACE ON INSIDE LANE AND SHOULDER
CONSTRUCT WRSF AND GUARDRAIL ON MEDIAN SIDE

1/30/15

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

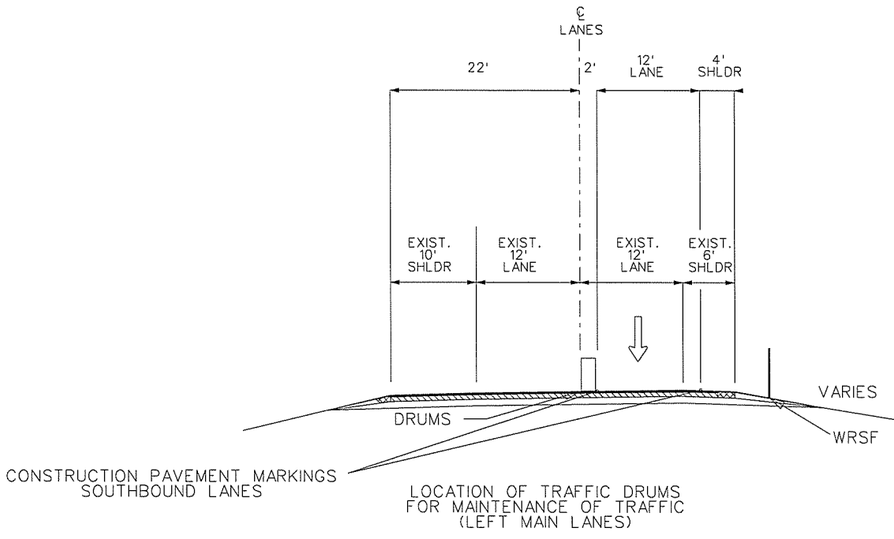
DENOTES: CONSTRUCTION FOR MOT



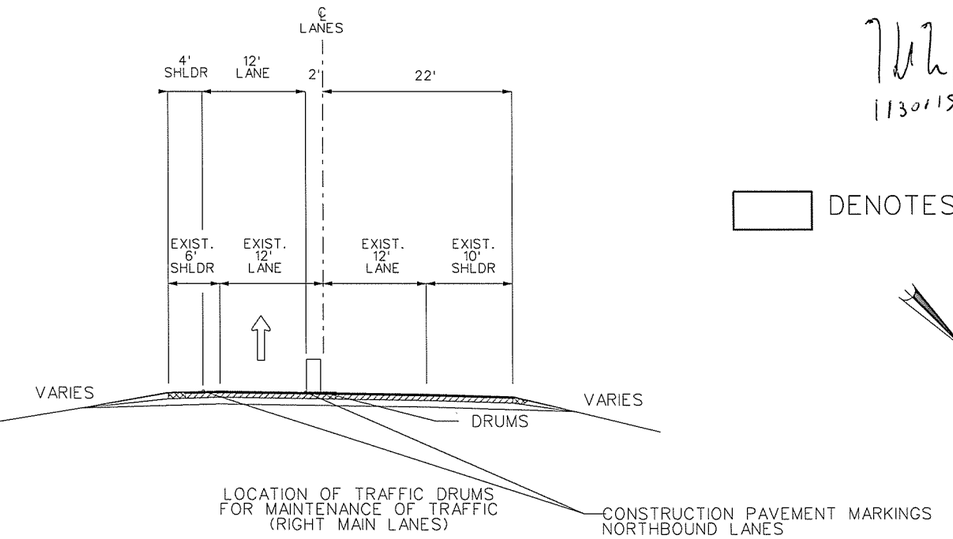
MAINTENANCE OF TRAFFIC
STAGE 4A

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	89	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 4B OPERATIONS:
SHIFT TRAFFIC TO INSIDE LANES OF NB & SB LANES
PLACE FINAL LIFT OF SURFACE ON OUTSIDE LANES, SHOULDERS, AND RAMPS
CONSTRUCT GUARDRAIL ON OUTSIDE SHOULDER SIDE
FINAL STRIPING (SEE PERMANENT PAVEMENT MARKING DETAILS)



LOCATION OF TRAFFIC DRUMS FOR MAINTENANCE OF TRAFFIC (LEFT MAIN LANES)



LOCATION OF TRAFFIC DRUMS FOR MAINTENANCE OF TRAFFIC (RIGHT MAIN LANES)

1130115

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

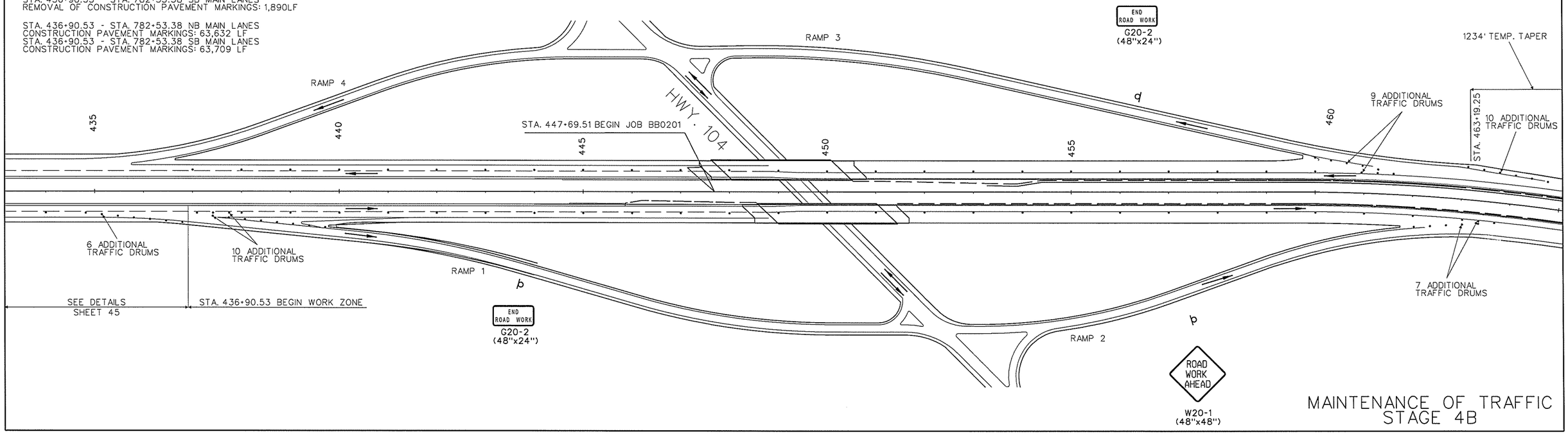
DENOTES: CONSTRUCTION FOR MOT

STA. 436+90.53 - STA. 782+53.38 NB MAIN LANES
TRAFFIC DRUMS (100' O.C.): 346 EACH + 73 ADDITIONAL DRUMS
STA. 436+90.53 - STA. 782+53.38 SB MAIN LANES
TRAFFIC DRUMS (100' O.C.): 346 EACH + 94 ADDITIONAL DRUMS

(BRIDGE DECK & APPROACH SLABS NB MAIN LANES)
REMOVABLE CONSTRUCTION PAVEMENT MARKINGS: 810 LF
(BRIDGE DECK & APPROACH SLABS SB MAIN LANES)
REMOVABLE CONSTRUCTION PAVEMENT MARKINGS: 810 LF

STA. 436+90.53 - STA. 782+53.38 NB MAIN LANES
REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS: 1,350 LF
STA. 436+90.53 - STA. 782+53.38 SB MAIN LANES
REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS: 1,890LF

STA. 436+90.53 - STA. 782+53.38 NB MAIN LANES
CONSTRUCTION PAVEMENT MARKINGS: 63,632 LF
STA. 436+90.53 - STA. 782+53.38 SB MAIN LANES
CONSTRUCTION PAVEMENT MARKINGS: 63,709 LF



MAINTENANCE OF TRAFFIC STAGE 4B

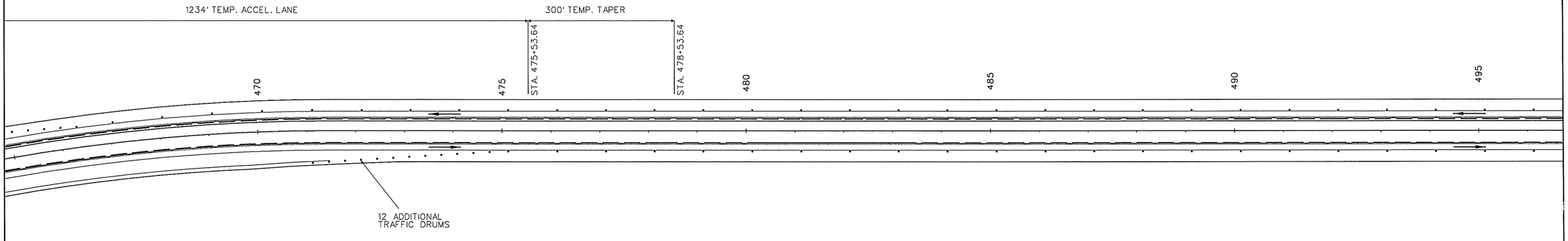
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	90	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 4B OPERATIONS:
SHIFT TRAFFIC TO INSIDE LANES OF NB & SB LANES
PLACE FINAL LIFT OF SURFACE ON OUTSIDE LANES, SHOULDERS, AND RAMPS
CONSTRUCT GUARDRAIL ON OUTSIDE SHOULDER SIDE
FINAL STRIPING (SEE PERMANENT PAVEMENT MARKING DETAILS)

1130115

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

DENOTES: CONSTRUCTION FOR MOT



MAINTENANCE OF TRAFFIC
STAGE 4B

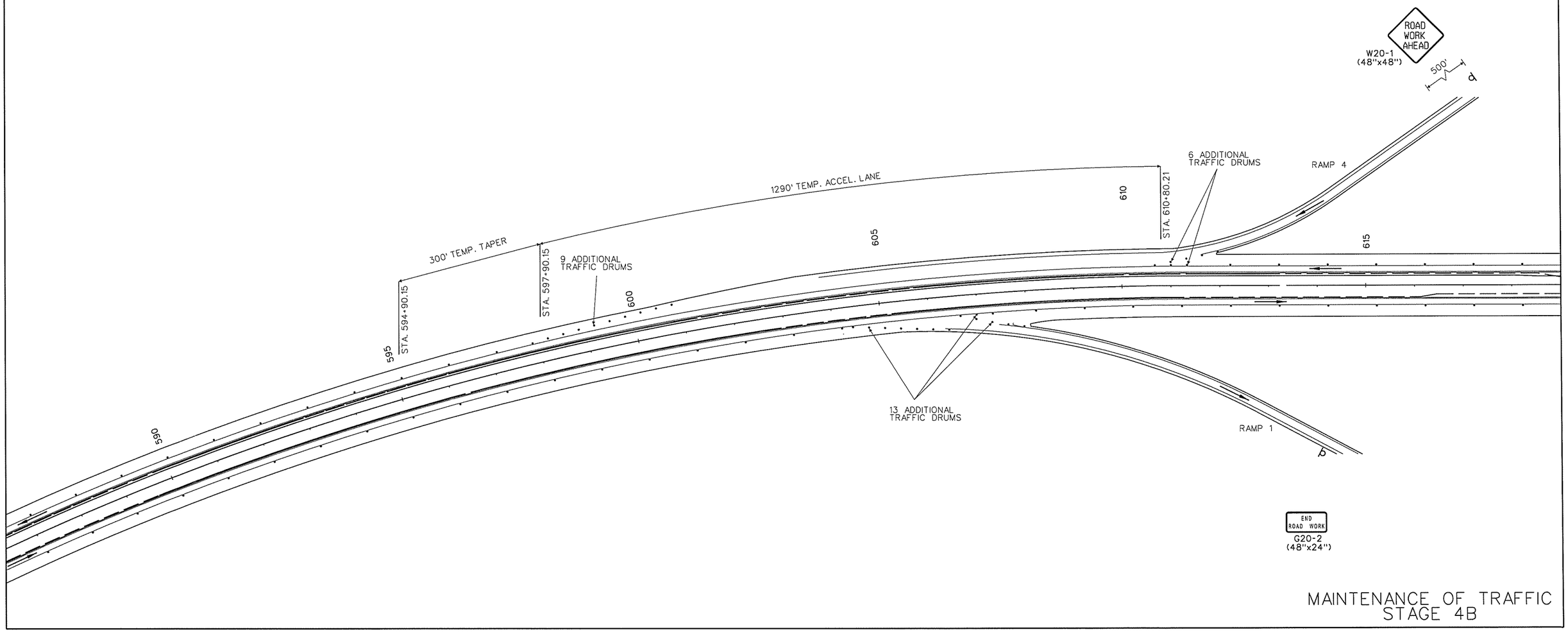
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	91	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 4B OPERATIONS:
SHIFT TRAFFIC TO INSIDE LANES OF NB & SB LANES
PLACE FINAL LIFT OF SURFACE ON OUTSIDE LANES, SHOULDERS, AND RAMPS
CONSTRUCT GUARDRAIL ON OUTSIDE SHOULDER SIDE
FINAL STRIPING (SEE PERMANENT PAVEMENT MARKING DETAILS)

KM, P.E.
11/30/15

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

DENOTES: CONSTRUCTION FOR MOT



MAINTENANCE OF TRAFFIC
STAGE 4B

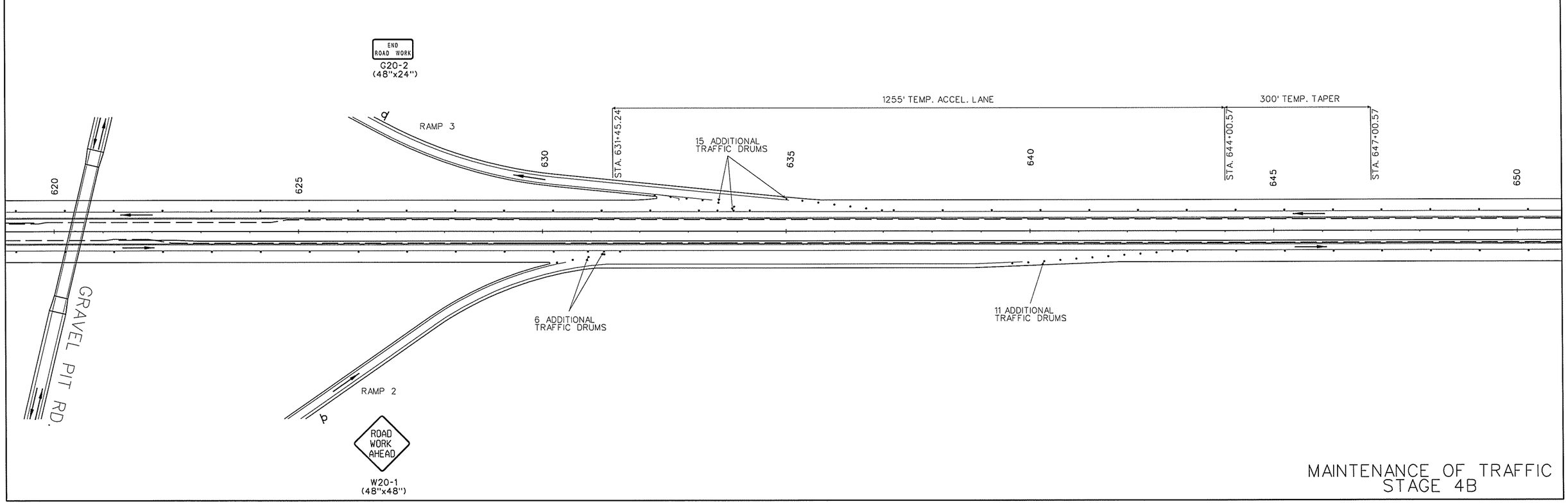
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	92	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 4B OPERATIONS:
SHIFT TRAFFIC TO INSIDE LANES OF NB & SB LANES
PLACE FINAL LIFT OF SURFACE ON OUTSIDE LANES, SHOULDERS, AND RAMPS
CONSTRUCT GUARDRAIL ON OUTSIDE SHOULDER SIDE
FINAL STRIPING (SEE PERMANENT PAVEMENT MARKING DETAILS)

PE
113015

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

DENOTES: CONSTRUCTION FOR MOT



MAINTENANCE OF TRAFFIC
STAGE 4B

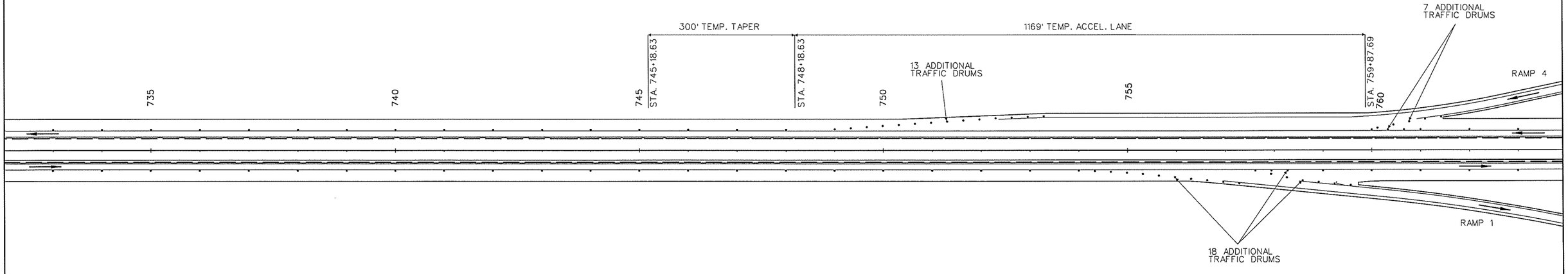
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	93	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 4B OPERATIONS:
SHIFT TRAFFIC TO INSIDE LANES OF NB & SB LANES
PLACE FINAL LIFT OF SURFACE ON OUTSIDE LANES, SHOULDERS, AND RAMPS
CONSTRUCT GUARDRAIL ON OUTSIDE SHOULDER SIDE
FINAL STRIPING (SEE PERMANENT PAVEMENT MARKING DETAILS)

7th h, P.E.
1/30/15

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

☐ DENOTES: CONSTRUCTION FOR MOT



MAINTENANCE OF TRAFFIC
STAGE 4B

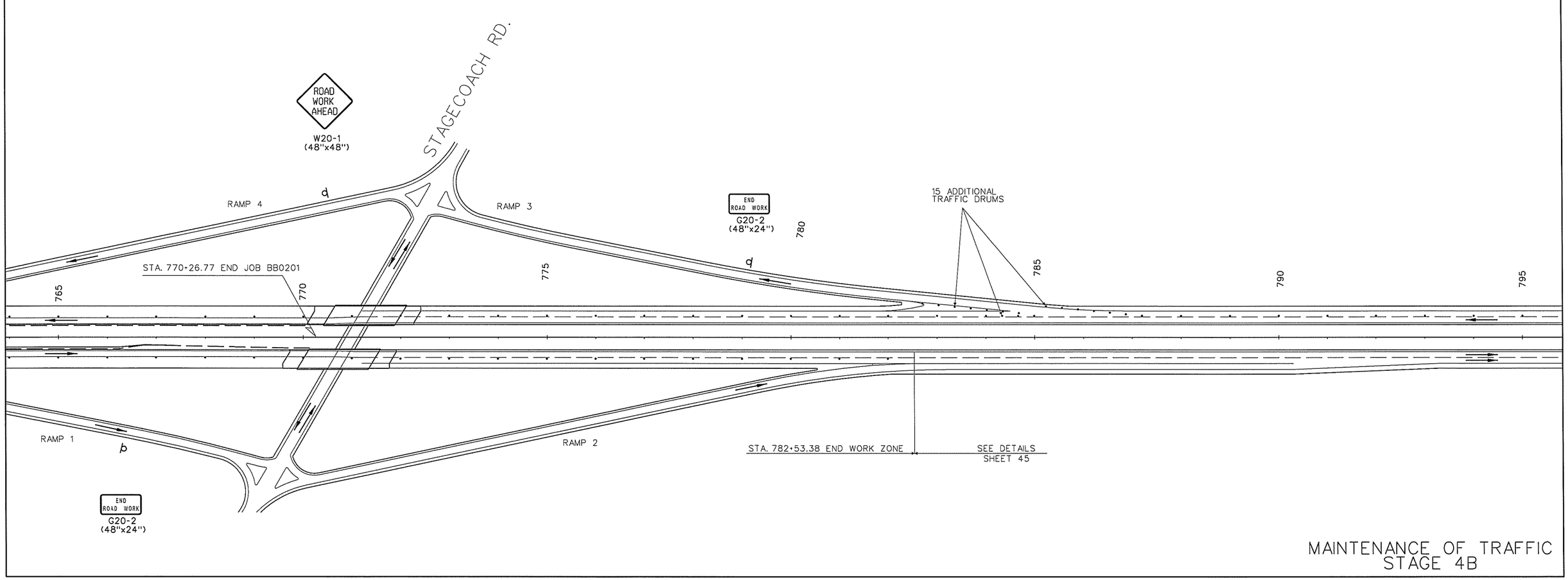
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	94	186
				(2)	MAINTENANCE OF TRAFFIC			

STAGE 4B OPERATIONS:
SHIFT TRAFFIC TO INSIDE LANES OF NB & SB LANES
PLACE FINAL LIFT OF SURFACE ON OUTSIDE LANES, SHOULDERS, AND RAMPS
CONSTRUCT GUARDRAIL ON OUTSIDE SHOULDER SIDE
FINAL STRIPING (SEE PERMANENT PAVEMENT MARKING DETAILS)

KH, P.E.
11/30/15

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 15509
KENNETH MORA

DENOTES: CONSTRUCTION FOR MOT

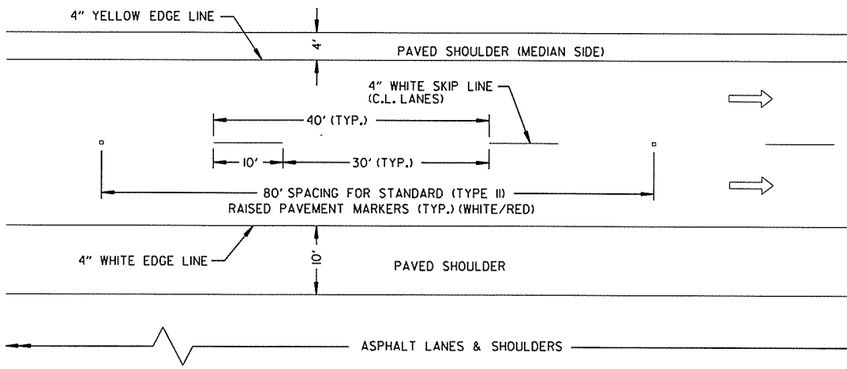


MAINTENANCE OF TRAFFIC
STAGE 4B

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	95	186
				(2)	PERMANENT PAVEMENT MARKING DETAILS			

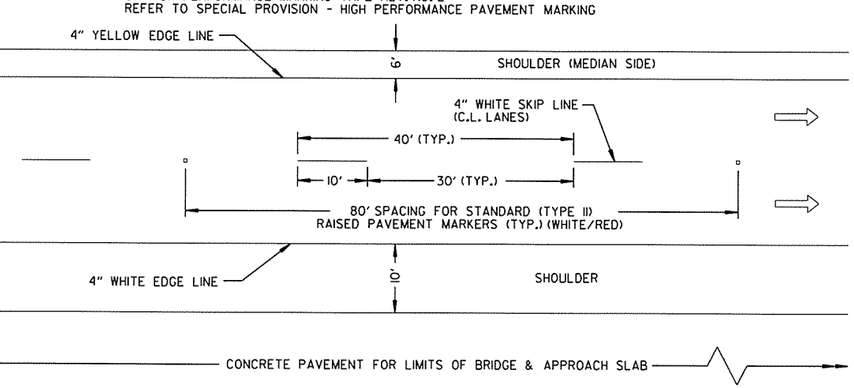
ASPHALT ROADWAY

HIGH PERFORMANCE PAVEMENT MARKINGS:
SKIP LINE - INVERTED PROFILE THERMOPLASTIC PAVEMENT MARKING (SKIP LINE) WHITE (4") ALT. NO. 1
OR HIGH PERFORMANCE MARKING (SKIP LINE) WHITE (4") TAPE ALT. NO. 2
EDGE LINES - INVERTED PROFILE THERMOPLASTIC PAVEMENT MARKING ALT. NO. 1
OR HIGH PERFORMANCE MARKING TAPE ALT. NO. 2
REFER TO SPECIAL PROVISION - HIGH PERFORMANCE PAVEMENT MARKING



CONCRETE APPROACH SLAB & BRIDGE DECK

HIGH PERFORMANCE PAVEMENT MARKINGS:
SKIP LINE - INVERTED PROFILE THERMOPLASTIC CONTRAST PAVEMENT MARKING WHITE (4") ALT. NO. 1
OR HIGH PERFORMANCE CONTRAST MARKING TAPE (WHITE) (4") ALT. NO. 2
EDGE LINES - INVERTED PROFILE THERMOPLASTIC PAVEMENT MARKING ALT. NO. 1
OR HIGH PERFORMANCE MARKING TAPE ALT. NO. 2
REFER TO SPECIAL PROVISION - HIGH PERFORMANCE PAVEMENT MARKING



PERMANENT PAVEMENT MARKING DETAILS

NOTE: REFER TO PM-2 FOR PERMANENT PAVEMENT MARKINGS AT INTERCHANGE.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 10887
SCOTT P. THORNSBERRY
1-30-2015

PERMANENT PAVEMENT MARKING DETAILS

Baker

Scott.Thornsberry 30/2015 1:43:37 PM
WORKSPACE: scott.thornsberry
Y:\Projects\AHTD\138213_I-530_Jefferson-Hwy104\Deliverables\ROADWAY\Drawings\RBB0201_07_PM_MAIN_01.dgn

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0201	96	186

(2) SIGN LAYOUT SHEET

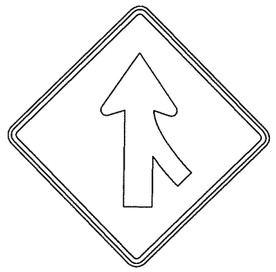
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI
JAN 29, 2015

G-2

W8-13
48"X48"

SS 530-35-457+50SB
SS-530-35-763+00NB

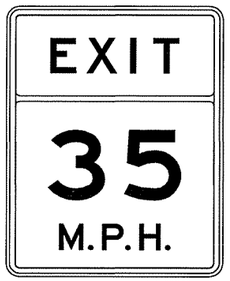
G-2



W4-1R
48"X48"

SS 530-35-456+90NB
SS 530-35-615+00SB
SS-530-35-625+00NB
SS 530-35-765+00SB

G-2



W13-3
48"X60"

SS 530-35-633+80SB
SS-530-35-605+00NB
SS 530-35-635+80SB
SS-530-35-605+00NB

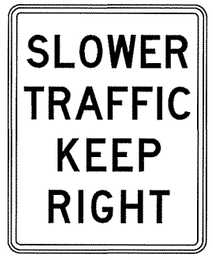
G-2

R2-1
48"X60"

R2-2
48"X48"

SS 530-35-482+00NB
SS 530-35-594+00SB
SS 530-35-651+50NB
SS 530-35-742+00SB

G-2



R4-3
48"X60"

SS 530-35-479+00NB
SS 530-35-597+00SB
SS 530-35-648+00NB
SS 530-35-745+00SB

G-2

M3-1
30"X15"

M1-1
45"X36"

SS 530-35-476+00NB
SS 530-35-645+00NB

G-2

M3-3
30"X15"

M1-1
45"X36"

SS 530-35-600+00SB
SS 530-35-748+00SB

U1-1

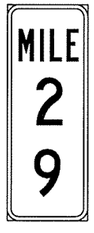
OM-3L
12"X36"

OM-3R
12"X36"

SS 530-35-451+00SB-A
SS 530-35-451+00SB-B
SS 530-35-770+00NB-A
SS 530-35-770+00NB-B

SS 530-35-494+00SB
SS 530-35-494+00NB

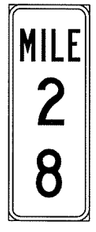
U1-1



D10-2
10"X27"

SS 530-35-546+80NB
SS 530-35-546+80SB

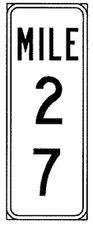
U1-1



D10-2
10"X27"

SS 530-35-599+60NB
SS 530-35-599+60SB

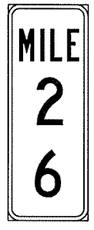
U1-1



D10-2
10"X27"

SS 530-35-652+40SB
SS 530-35-652+40NB

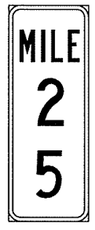
U1-1



D10-2
10"X27"

SS 530-35-705+20NB
SS 530-35-705+20SB

U1-1



D10-2
10"X27"

SS 530-35-758+00NB
SS 530-35-758+00SB

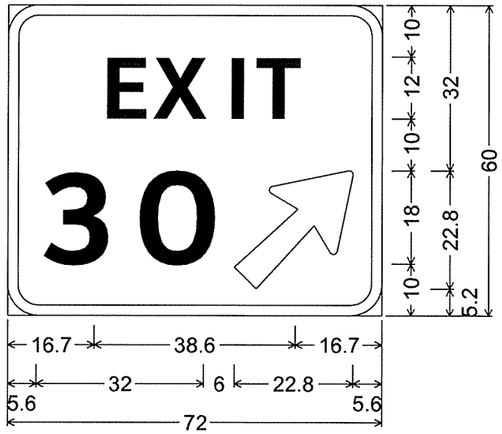
U1-1

D10-2
10"X27"

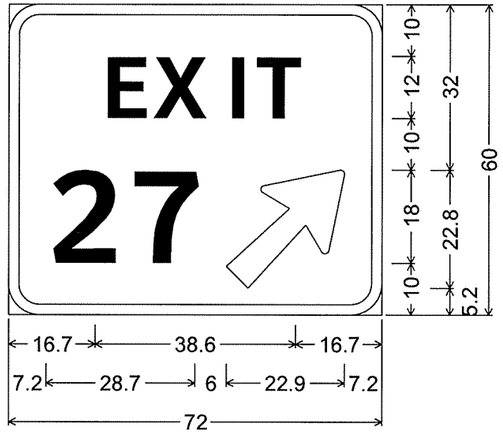
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0201	97	186

(2) SIGN LAYOUT SHEET

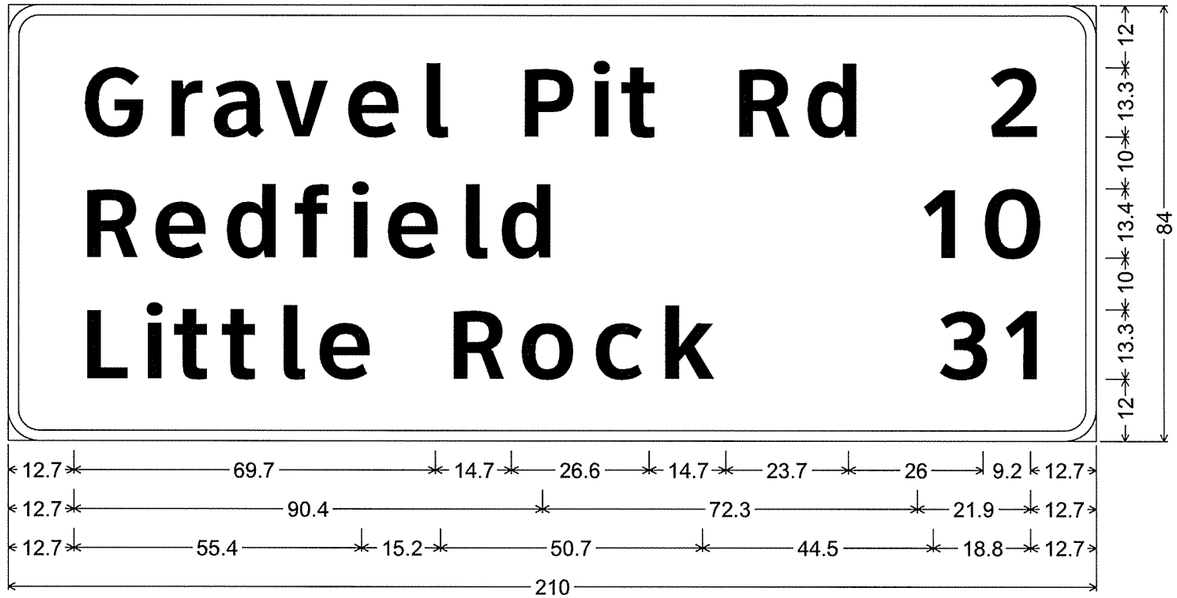
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI
SEP 29, 2015



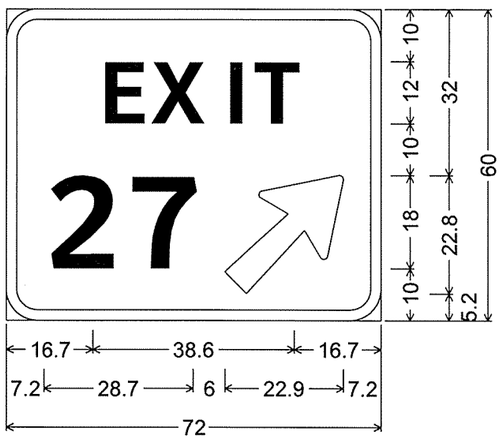
EXIT-20NB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W;
[30] ClearviewHwy-5-W-R;
Arrow Custom - 29.0" 45°;



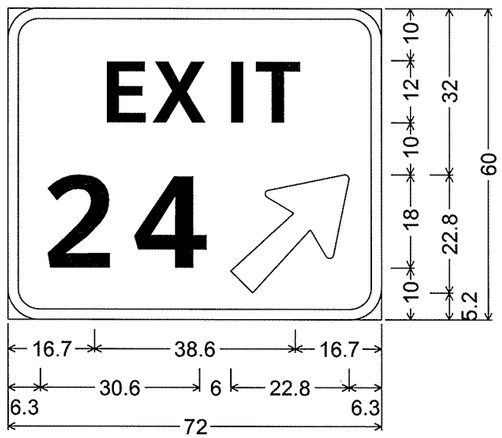
EX-530-35-631+90SB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W;
[27] ClearviewHwy-5-W-R;
Arrow Custom - 29.0" 45°;



GM-530-35-489+00NB; 6.0" Radius, 2.0" Border, White on Green;
[Gravel Pit Rd] ClearviewHwy-5-W; [2] ClearviewHwy-5-W; [Redfield] ClearviewHwy-5-W;
[10] ClearviewHwy-5-W; [Little Rock] ClearviewHwy-5-W; [31] ClearviewHwy-5-W;



EX-530-35-608+30NB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W;
[27] ClearviewHwy-5-W-R;
Arrow Custom - 29.0" 45°;

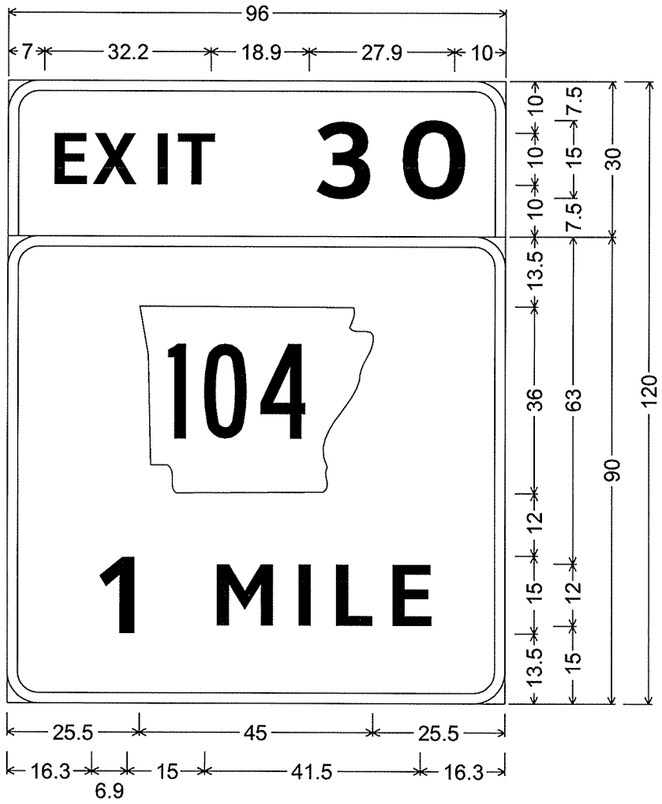


EX-530-35-760+00NB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W;
[24] ClearviewHwy-5-W-R;
Arrow Custom - 29.0" 45°;

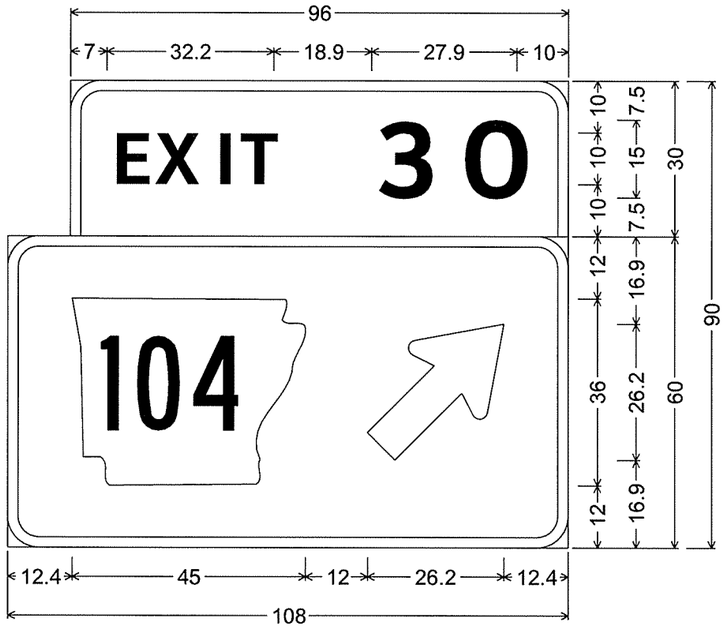
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0201	98	186

(2) SIGN LAYOUT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI
JAN 29, 2015



GM-530-35-513+00SB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W;
[30] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
M1-6; [1] ClearviewHwy-5-W;
[MILE] ClearviewHwy-5-W;

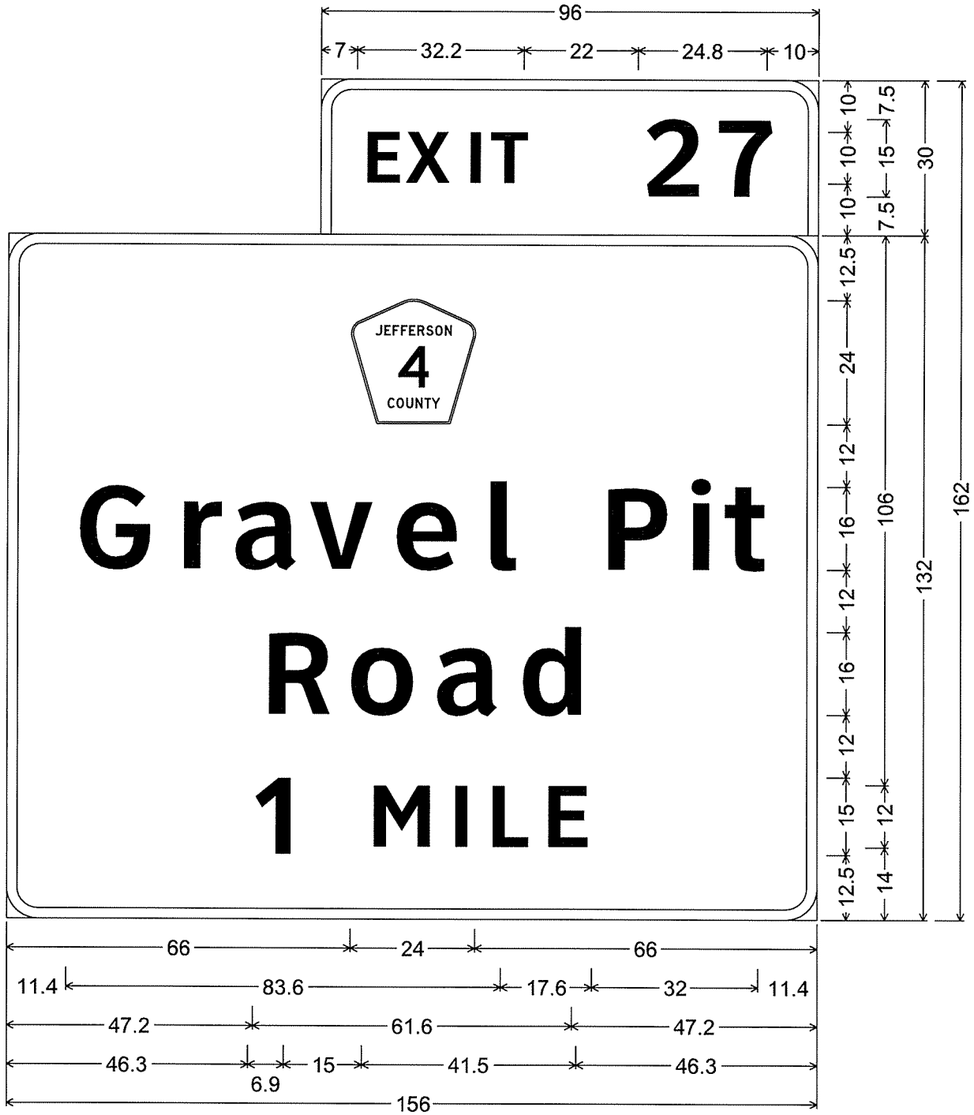


GM-530-35-465+00SB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W;
[30] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
M1-6; Standard Arrow Custom 33.4" X 20.3" 45°;

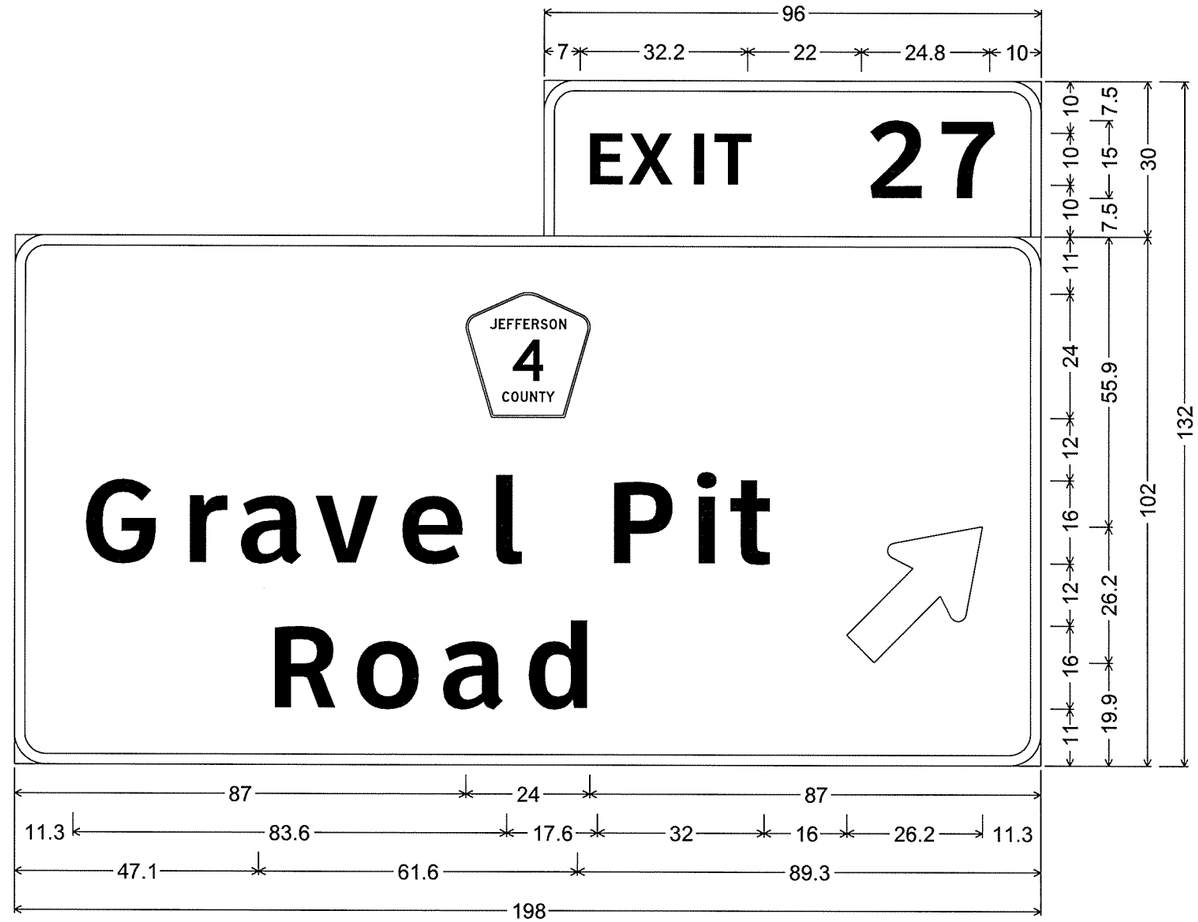
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0201	99	126

(2) SIGN LAYOUT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI
JAN 29, 2015



GM-530-35-551+00NB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [27] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
[Gravel Pit] ClearviewHwy-5-W; [Road] ClearviewHwy-5-W;
[1] ClearviewHwy-5-W; [MILE] ClearviewHwy-5-W;

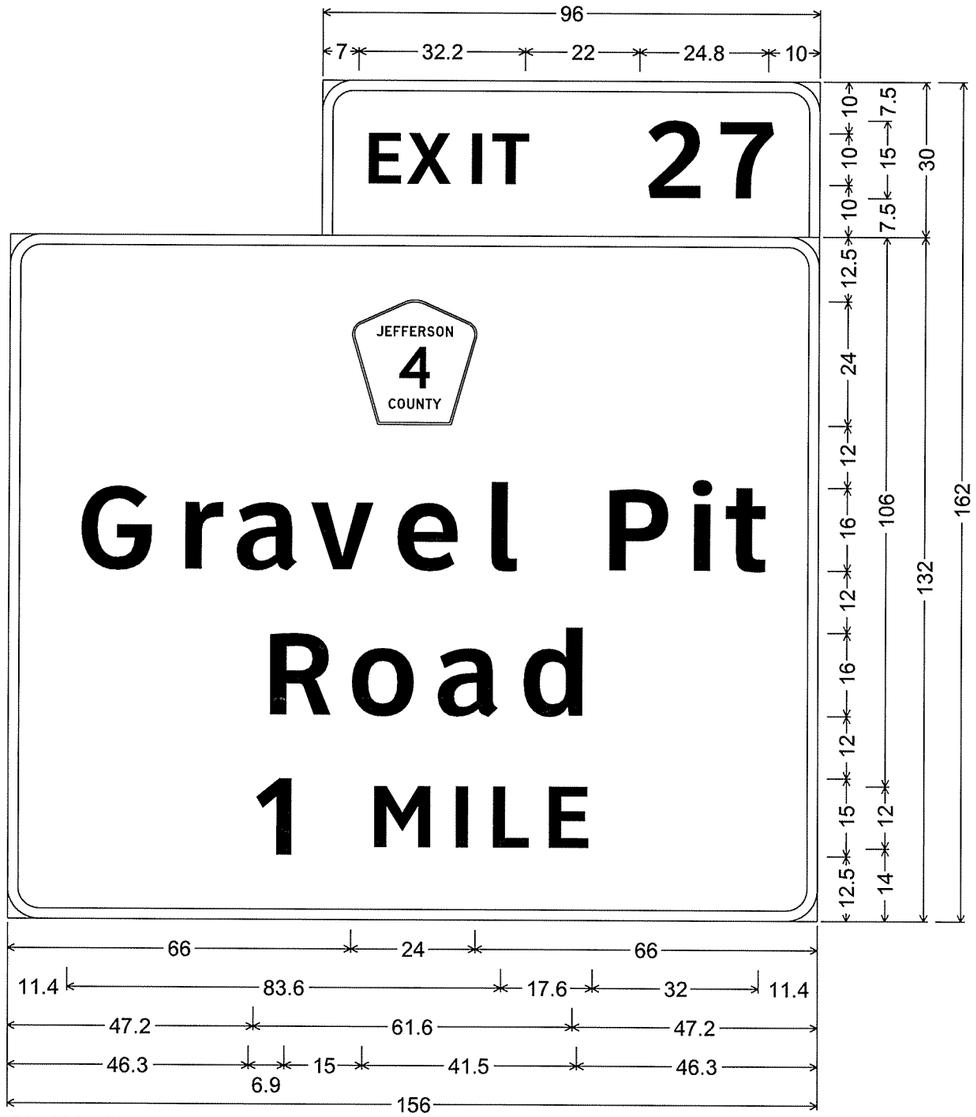


GM-530-35-604+00NB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [27] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
[Gravel Pit] ClearviewHwy-5-W; [Road] ClearviewHwy-5-W;
Standard Arrow Custom 33.4" X 20.3" 45°;

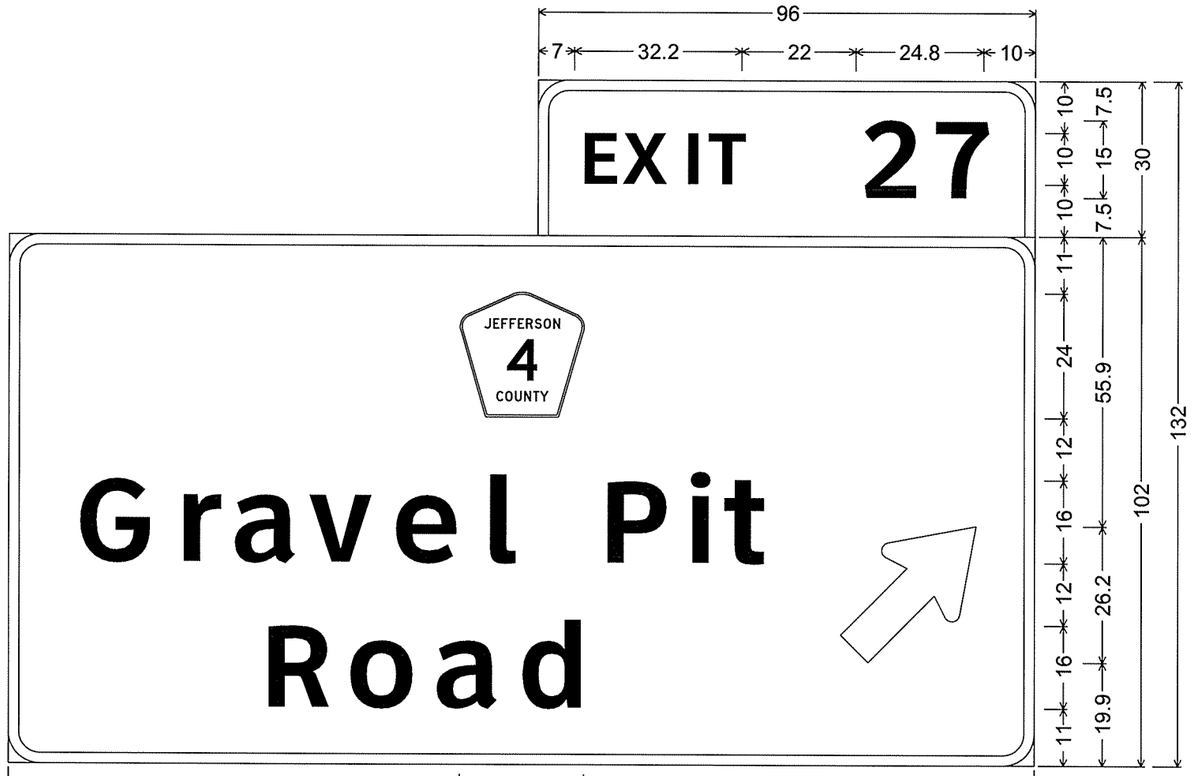
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0201	100	186

(2) SIGN LAYOUT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI
JAN 29, 2015



GM-530-35-689+00SB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [27] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
[Gravel Pit] ClearviewHwy-5-W; [Road] ClearviewHwy-5-W;
[1] ClearviewHwy-5-W; [MILE] ClearviewHwy-5-W;

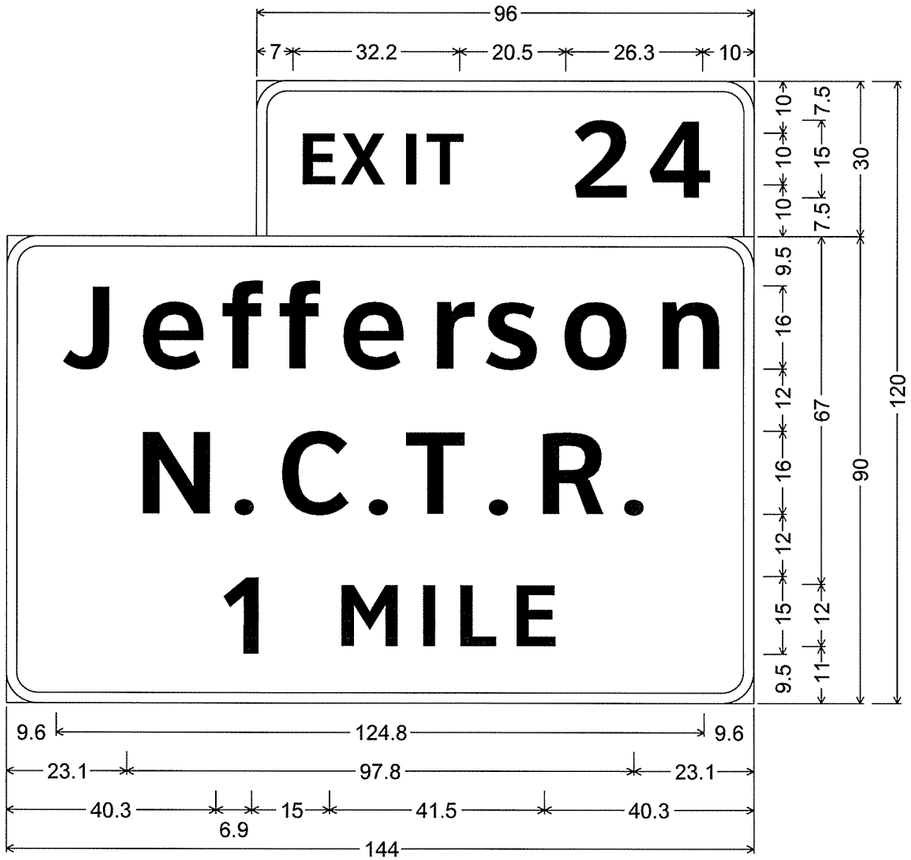


GM-530-35-637+00SB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [27] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
[Gravel Pit] ClearviewHwy-5-W; [Road] ClearviewHwy-5-W;
Standard Arrow Custom 33.4" X 20.3" 45°;

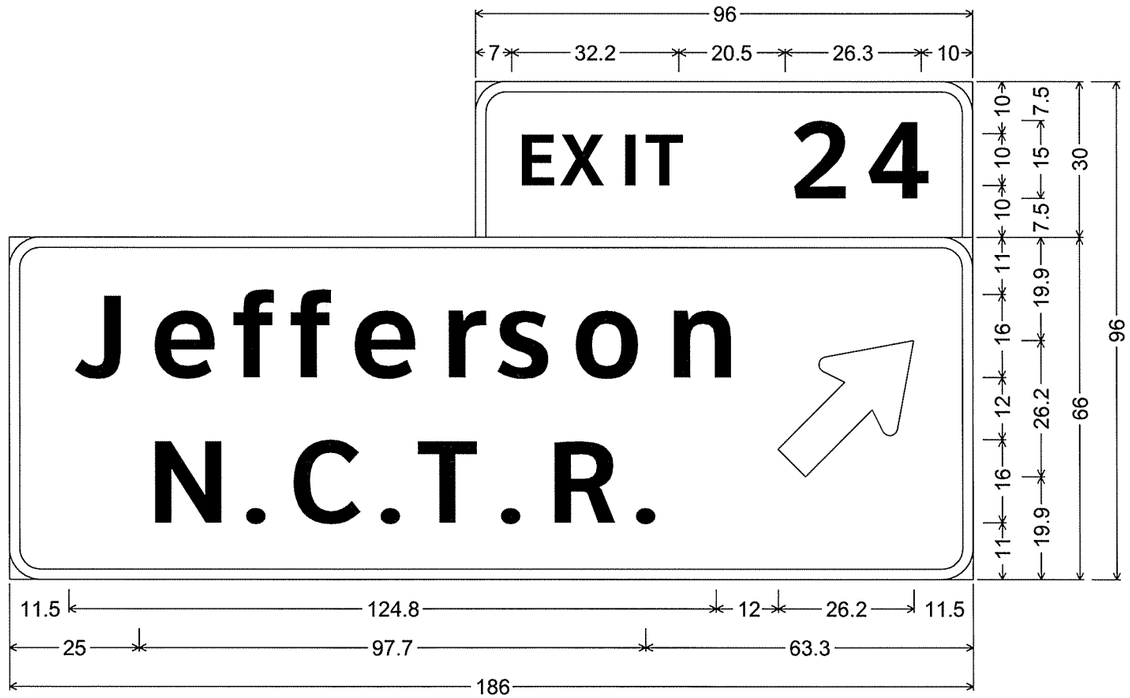
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0201	101	186

(2) SIGN LAYOUT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI
JAN 29, 2015



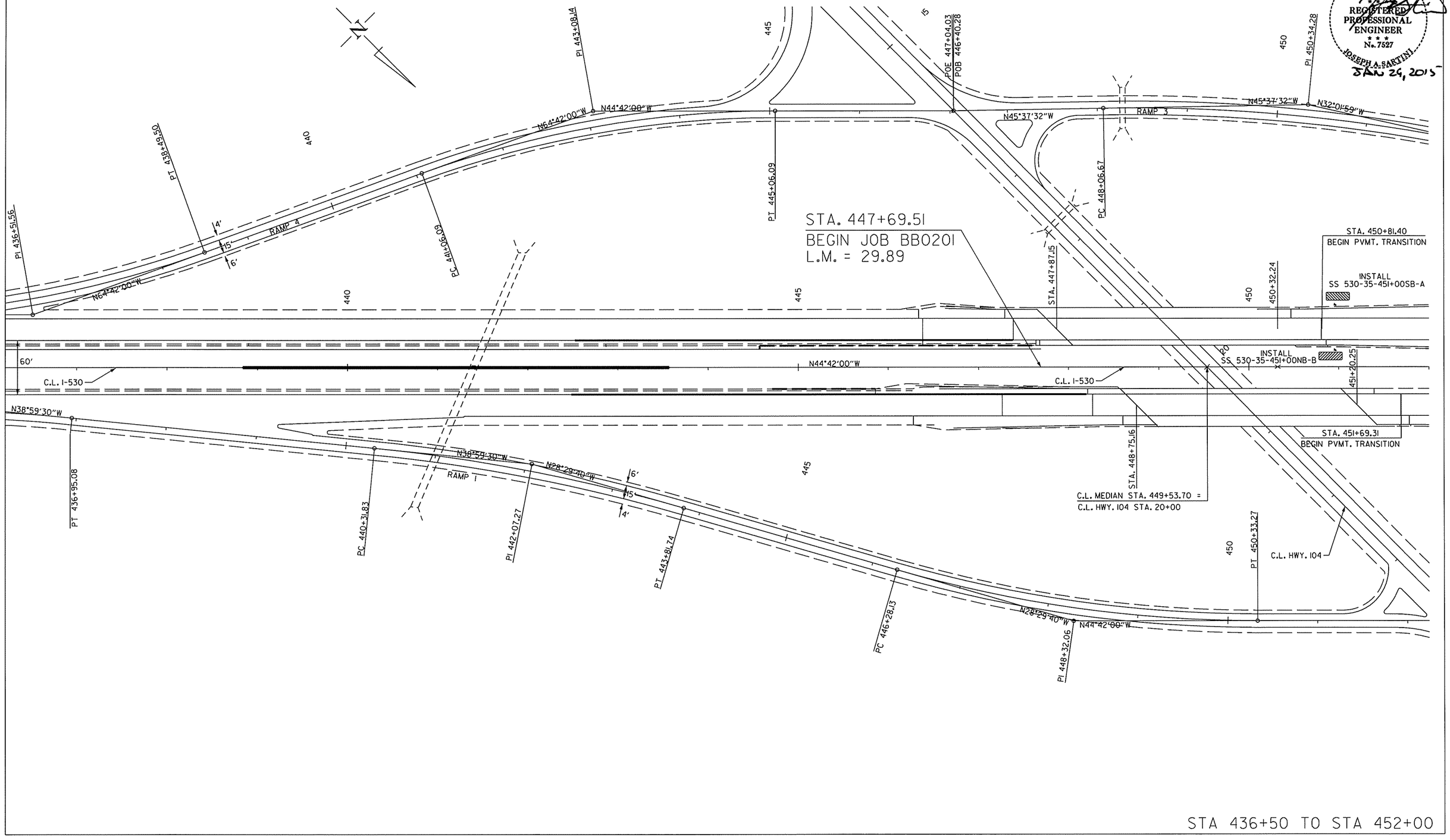
GM-530-35-702+00NB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [24] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
[Jefferson] ClearviewHwy-5-W; [N.C.T.R.] ClearviewHwy-5-W;
[1] ClearviewHwy-5-W; [MILE] ClearviewHwy-5-W;



GM-530-35-755+00NB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [24] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
[Jefferson] ClearviewHwy-5-W; [N.C.T.R.] ClearviewHwy-5-W;
Standard Arrow Custom 33.4" X 20.3" 45°;

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0201	102	186
				(2)	SIGN PLACEMENT SHEET			

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI
JAN 29, 2015



STA 436+50 TO STA 452+00

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		BB0201	103	186

(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
* * *
No. 7527
JOSEPH A. SARTINI
JAN 21, 2015

INSTALL
SS 530-35-457+50SB

INSTALL
EX-530-35-459+30SB

INSTALL
GM-530-35-465+00SB

INSTALL
SS 530-35-633+80SB

INSTALL
SS 530-35-456+90NB

WIRE ROPE SAFETY FENCE
10' RT OF I-530 L.M.L. (P.C.)
WITH CONCRETE DITCH PAVING
TYPE B (4'-0")

STA. 453+27.75
BEGIN WRSF
ON SB FORESLOPE
BEHIND GUARDRAIL
(L.M. 29.88)

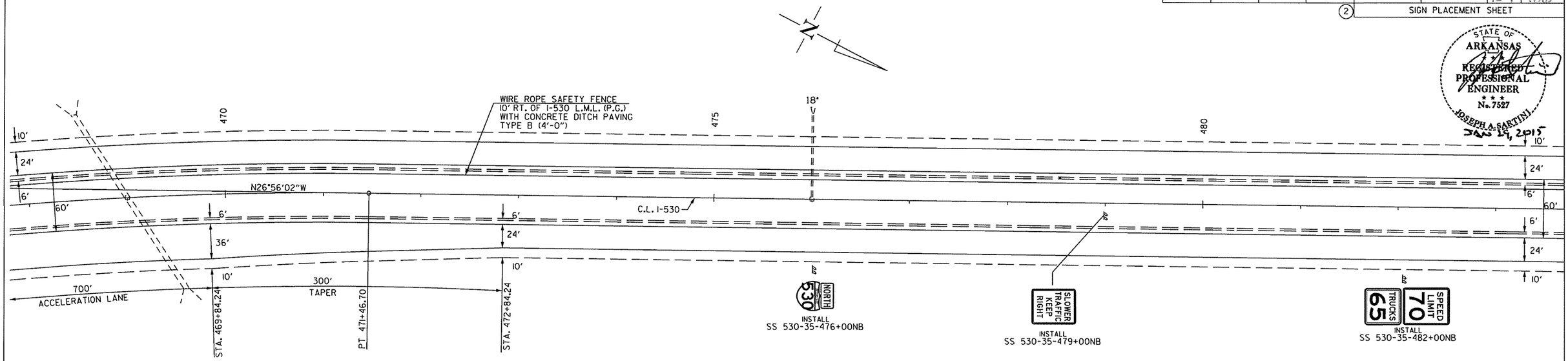
700'
ACCELERATION
LANE

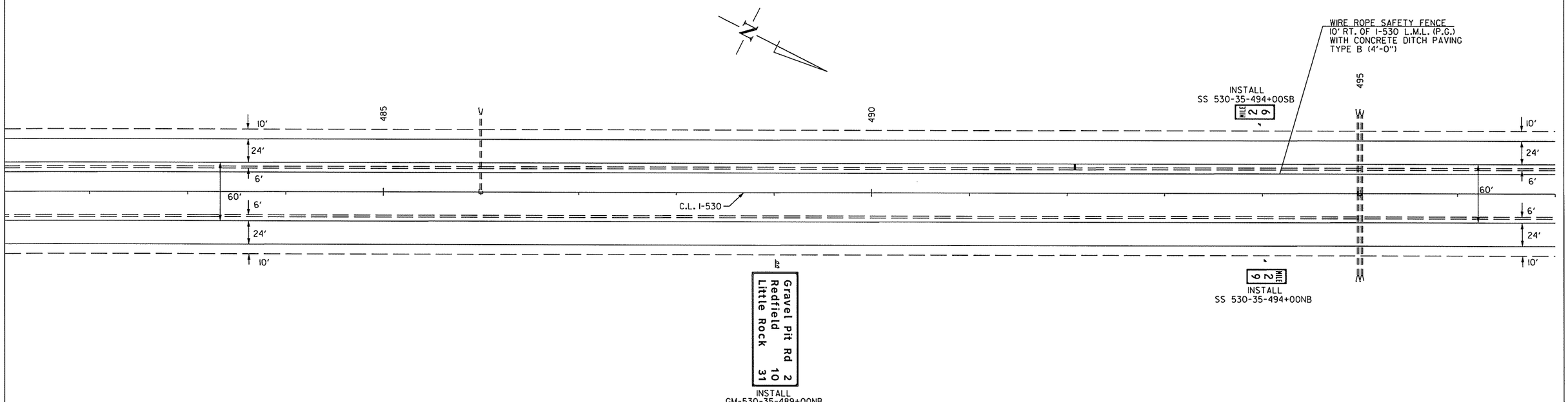
STA 452+00 TO STA 466+80

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0201	104	1816

(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI
JAN 14, 2015



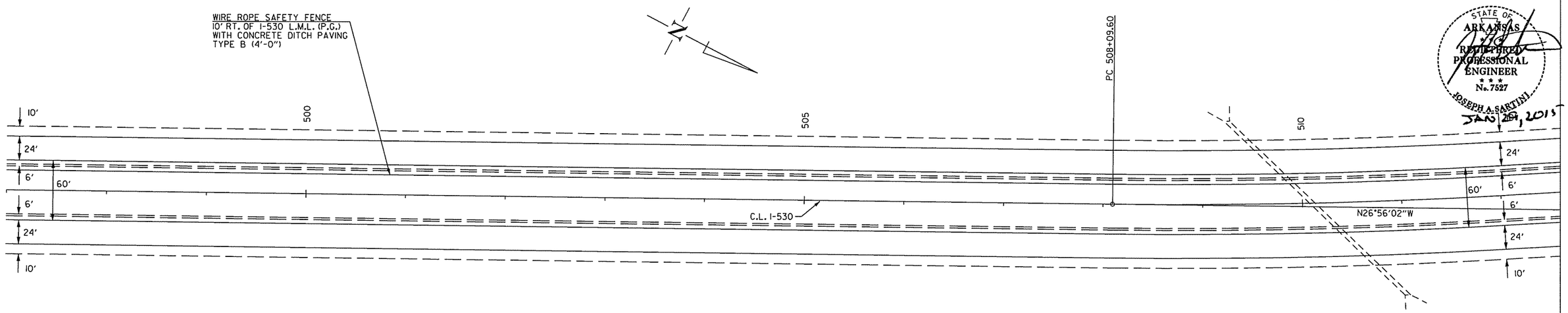


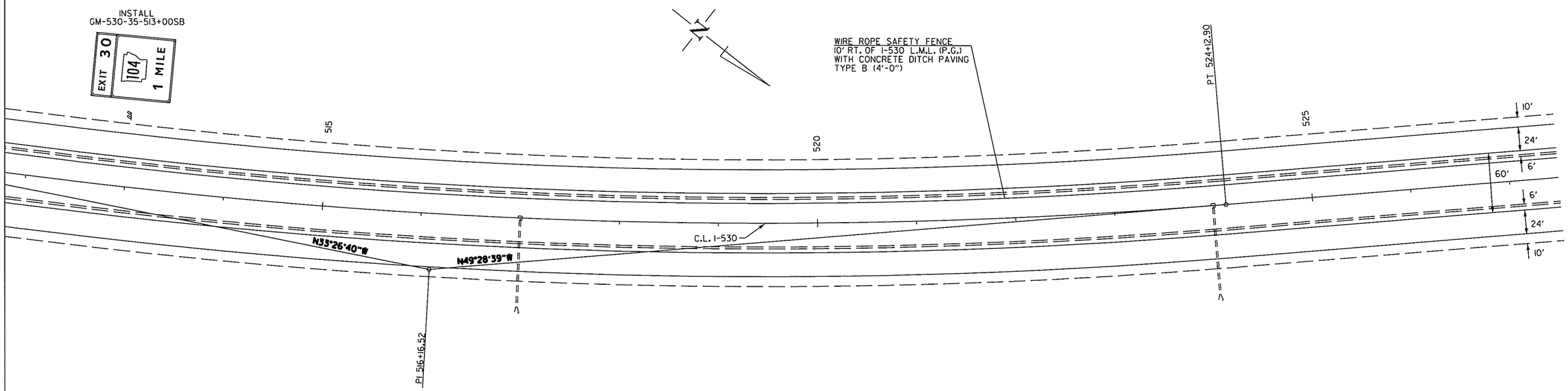
STA 466+80 TO STA 497+00

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0201	105	186

(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI
JAN 29, 2015



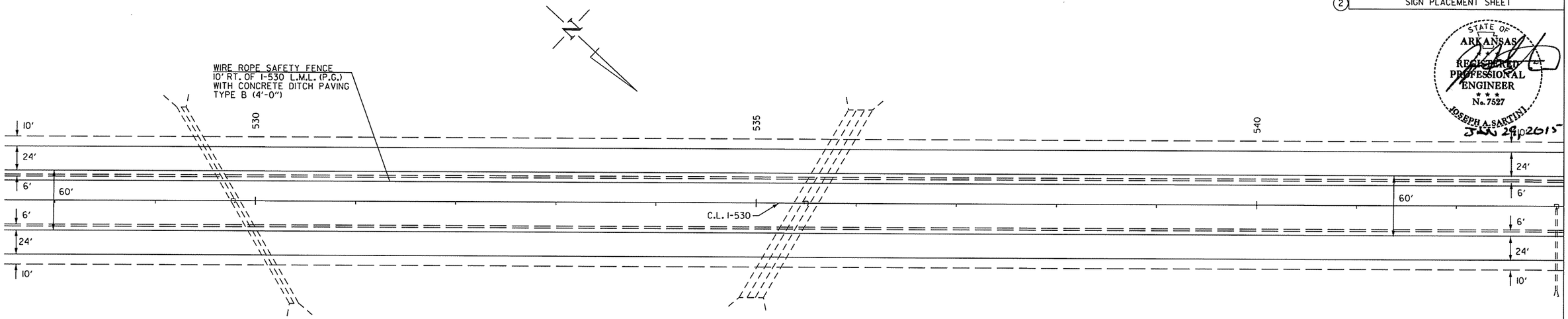


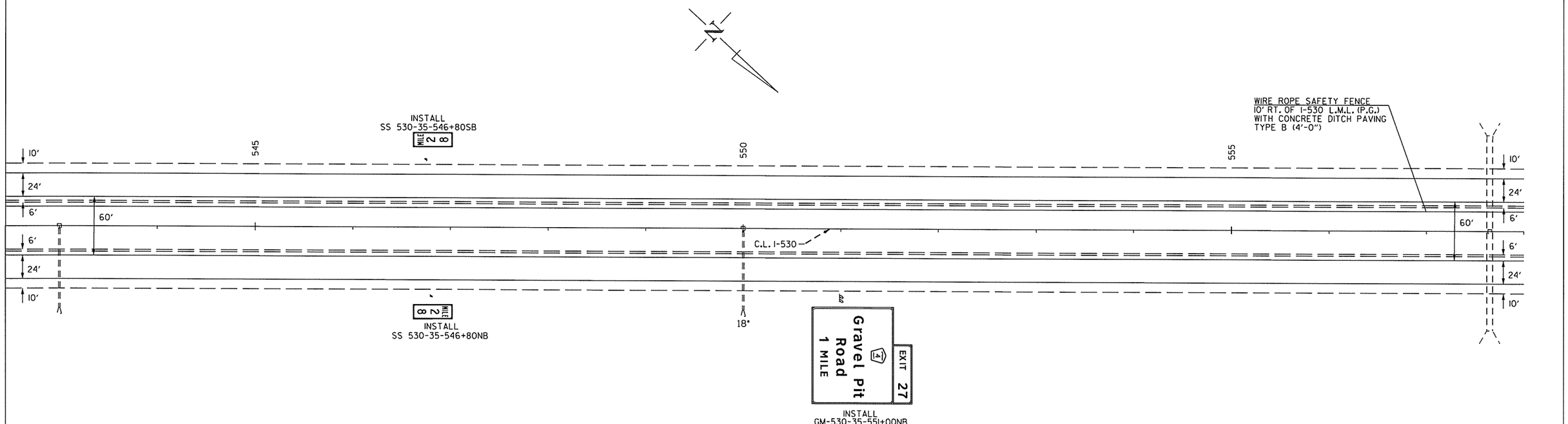
STA 497+00 TO STA 527+00

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0201	106	186

(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
* * *
No. 7527
JOSEPH A. SARTINI
JAN 29 2015



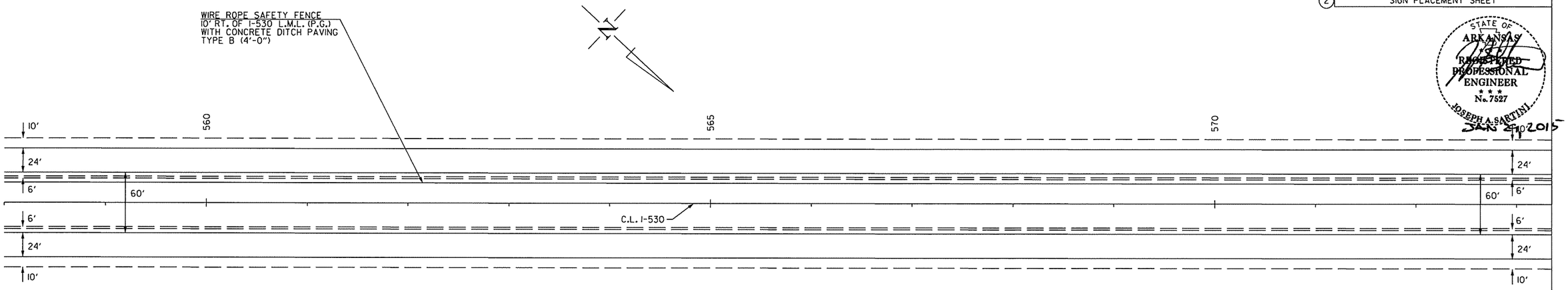


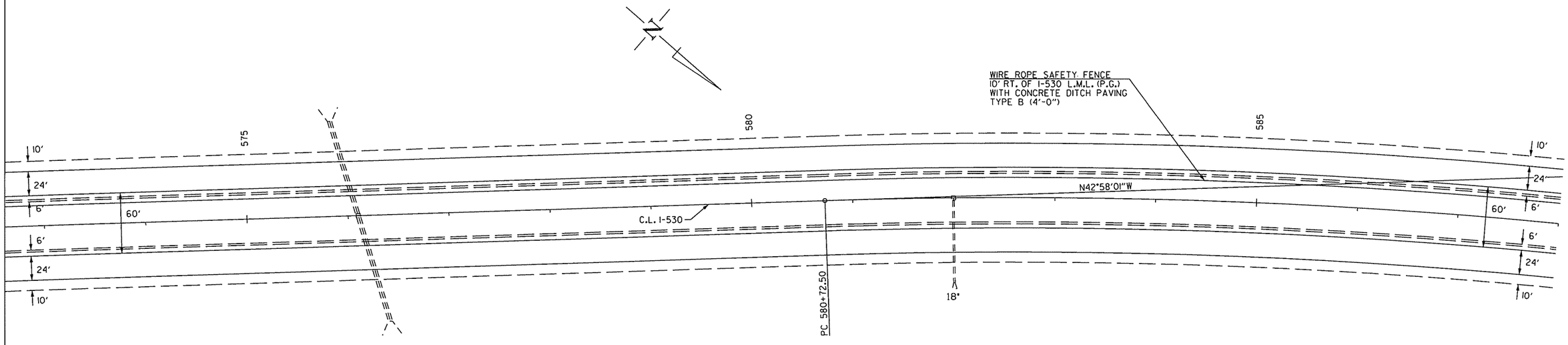
STA 527+00 TO STA 558+00

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0201	101	186

(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
JOSEPH A. SARTINI
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JAN 21 2015



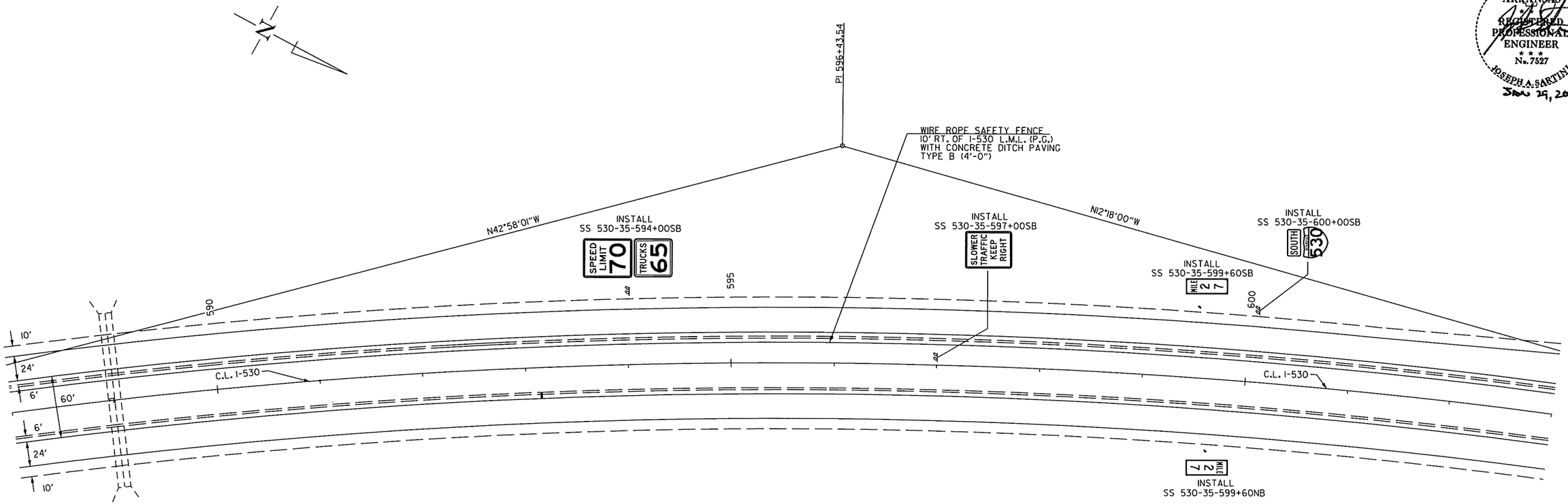


STA 558+00 TO STA 588+00

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0201	108	186

(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI
JAN 29, 2015



STA 588+00 TO STA 603+00

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0201	109	186

(2) SIGNS PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
2-2-12
JOSEPH A. SARTINI

N

MAIN LANES STA. 611+28.12, 56.00' LT. =
RAMP 4 STA. 611+28.06, 9.50' RT.

PC 610+34.20

PT 614+58.53

PC 618+30.38

605

STA. 604+28.12

300' TAPER

700' ACCELERATION LANE

RAMP 4

N12°18'00"W

N43°18'43"W

S77°16'05"E

INSTALL
SS 530-35-615+00SB

615

10'

36'

6'

6'

24'

10'

N19°31'02"W

C.L. I-530

PC 604+19.20

INSTALL
SS-530-35-605+00NB

4'

5'

6'

610

N44°28'13"W

PT 611+39.20

PI 612+52.80

WIRE ROPE SAFETY FENCE
10' RT. OF I-530 L.M.L. (P.G.)
WITH CONCRETE DITCH PAVING
TYPE B (4'-0")

RAMP 1

PI 608+75.20

INSTALL
EX-530-35-608+30NB

PT 613+02.10

Gravel Pit Road

EXIT 27

INSTALL
GM-530-35-604+00NB

605

STA 603+00 TO STA 618+00

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0201	110	186
				(2)	SIGNS PLACEMENT SHEET			

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI
JAN 29, 2015

PT 621+22.24

N16°00'01"E

625

PC 626+47.36

PI 628+38.11

STA. 628+51.32

630

PT 630+23.91

INSTALL
EX-530-35-631+90SB

EXIT 27

RAMP 3

N6°35'35"W

6'

15'

4'

STA. 619+59.99
END WRSF
ON SB FORESLOPE
BEHIND GUARDRAIL
(L.M. 26.63)

620

625

630

10'

24'

6'

60'

6'

24'

N12°18'00"W

C.L. I-530

15

N12°18'00"W

10'

4'

15'

6'

700'
ACCELERATION LANE

N47°18'05"W

RAMP 2

630

PI 629+72.53

PT 631+84.16

PC 627+46.77

625

PT 622+01.09

STA. 621+32.21
BEGIN WRSF
ON NB FORESLOPE
BEHIND GUARDRAIL
(L.M. 26.66)

MAIN LANES STA. 620+46.10
C.L. GRAVEL PIT RD. STA. 15+00

C.L. GRAVEL PIT ROAD

INSTALL
SS-530-35-625+00NB

WIRE ROPE SAFETY FENCE
10' LT. OF I-530 R.M.L. (P.G.)
WITH CONCRETE DITCH PAVING
TYPE B (4'-0")

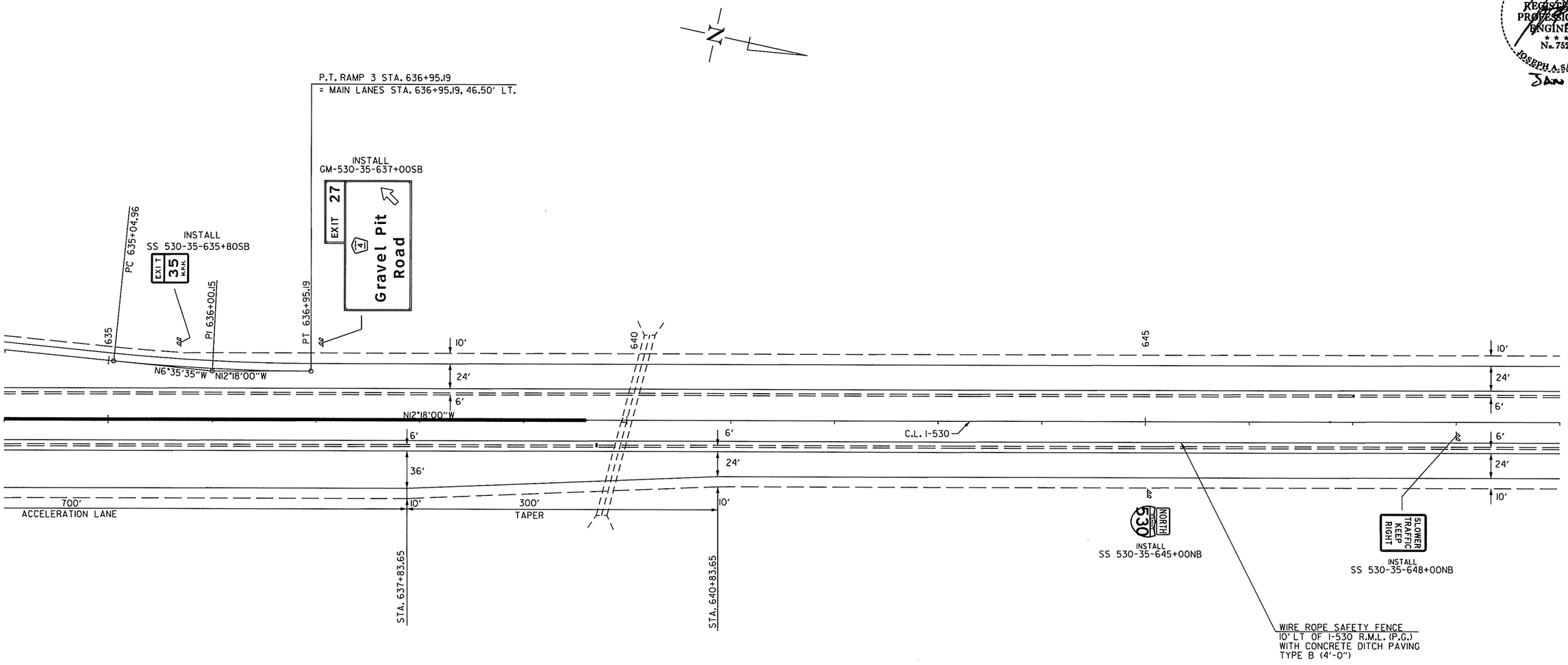
NOTE: EXISTING VERTICAL CLEARANCE UNDER BRIDGE NO. 05646 IS 17'-2" NB AND 16'-3" SB. A MINIMUM 16'-0" VERTICAL CLEARANCE IS REQUIRED FOR FINISHED ROADWAY.

20

STA 618+00 TO STA 634+00

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0201	111	186
				(2)	SIGNS PLACEMENT SHEET			

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI
JAN 29, 2015

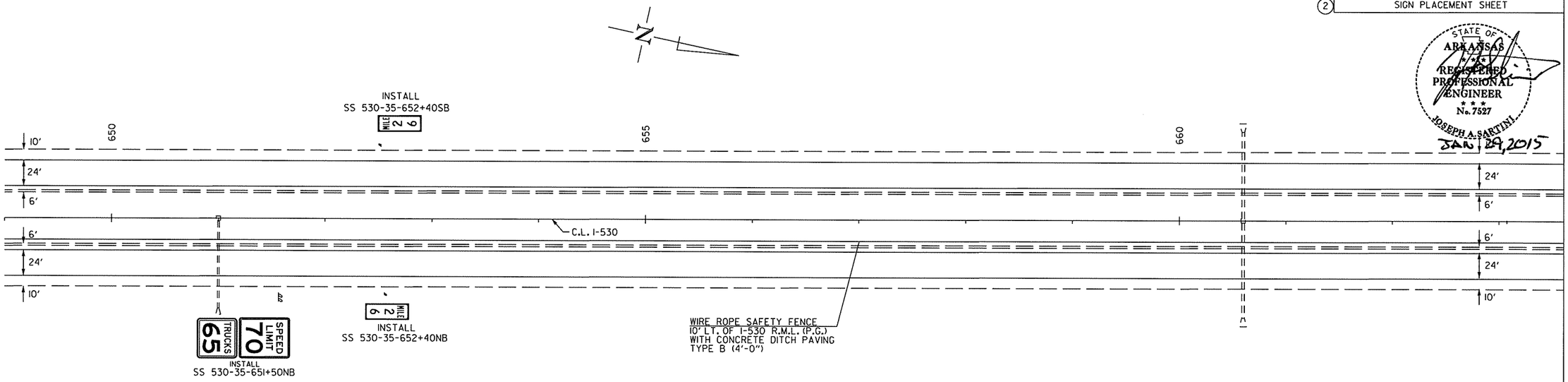


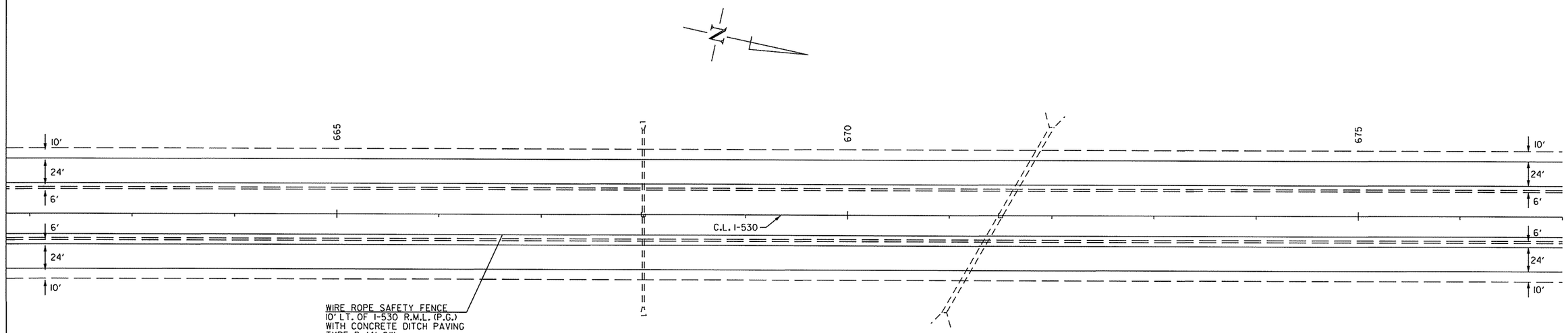
STA 634+00 TO STA 649+00

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0201	112	186

(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI
JAN 29, 2015



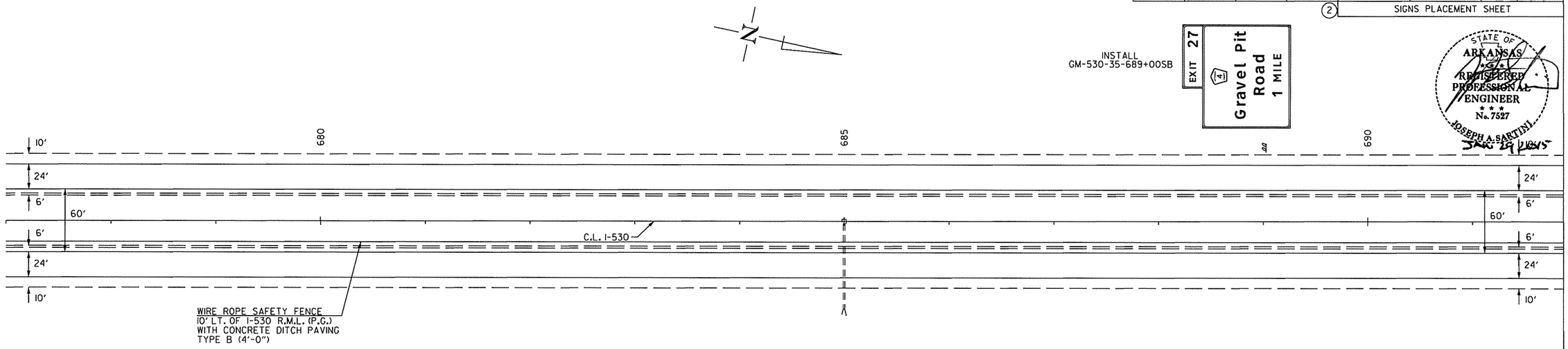


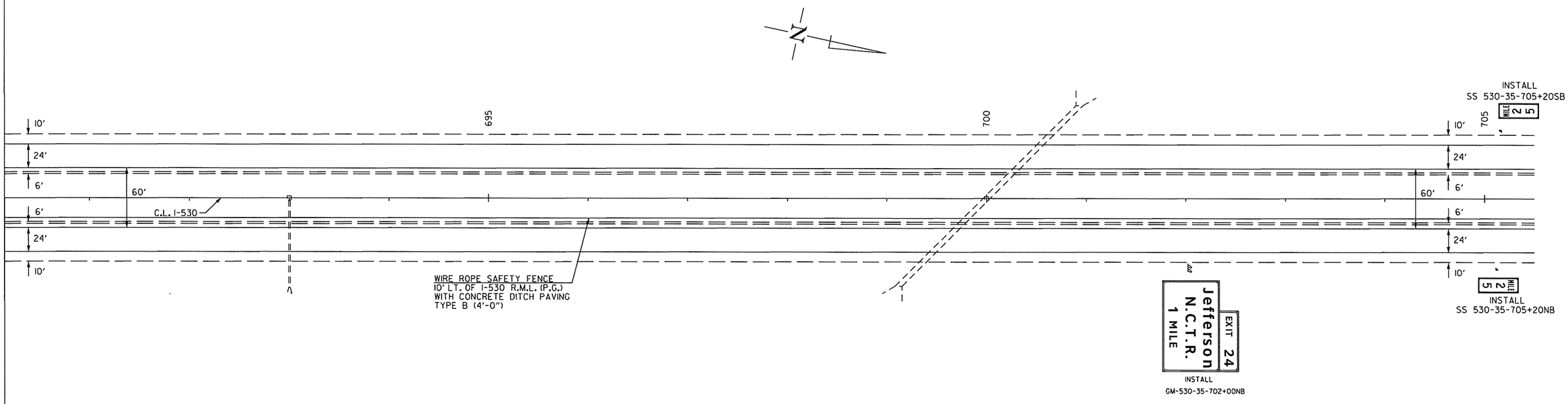
STA 649+00 TO STA 677+00

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0201	113	186

(2) SIGNS PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI
JAN 29 2015

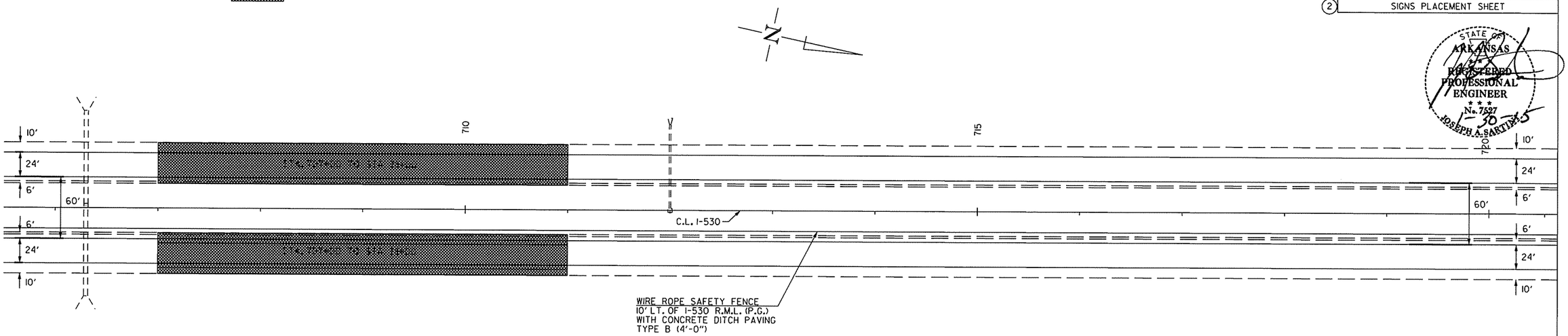




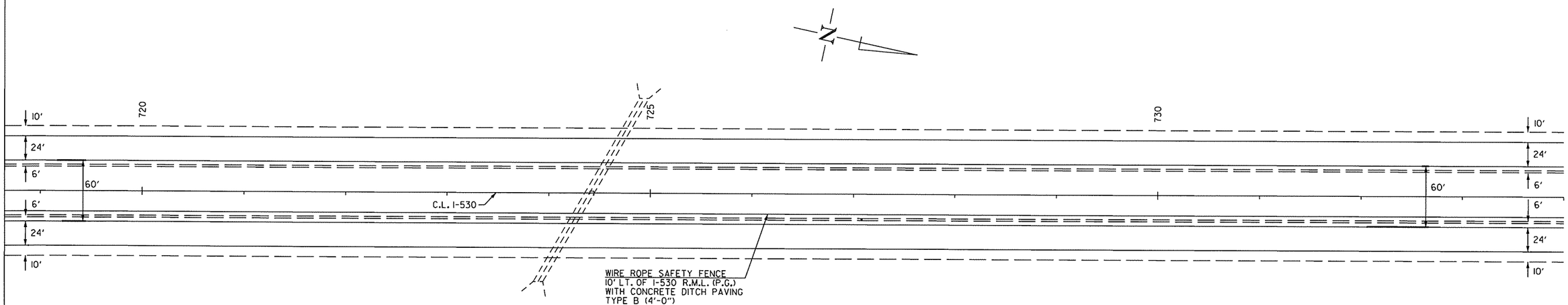
STA 677+00 TO STA 705+00

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0201	114	186
				(2)	SIGNS PLACEMENT SHEET			

WEIGH IN MOTION SCALE



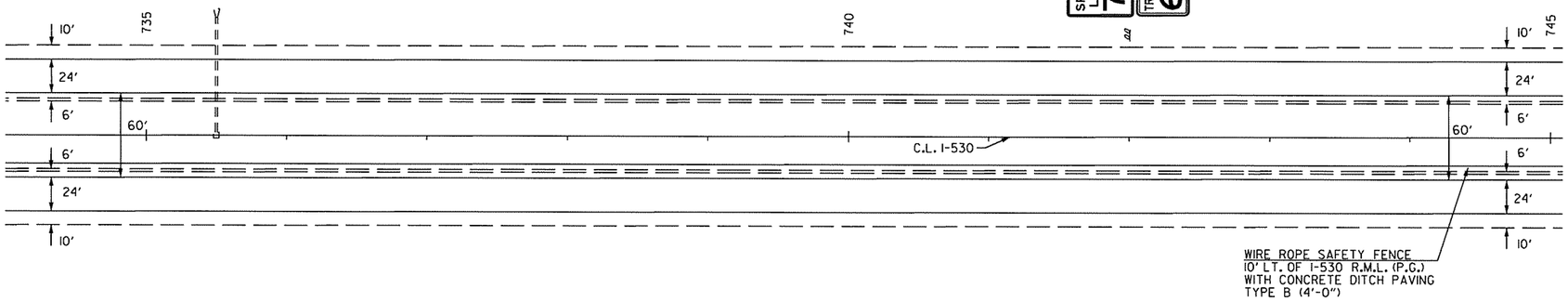
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTIN
12-30-05

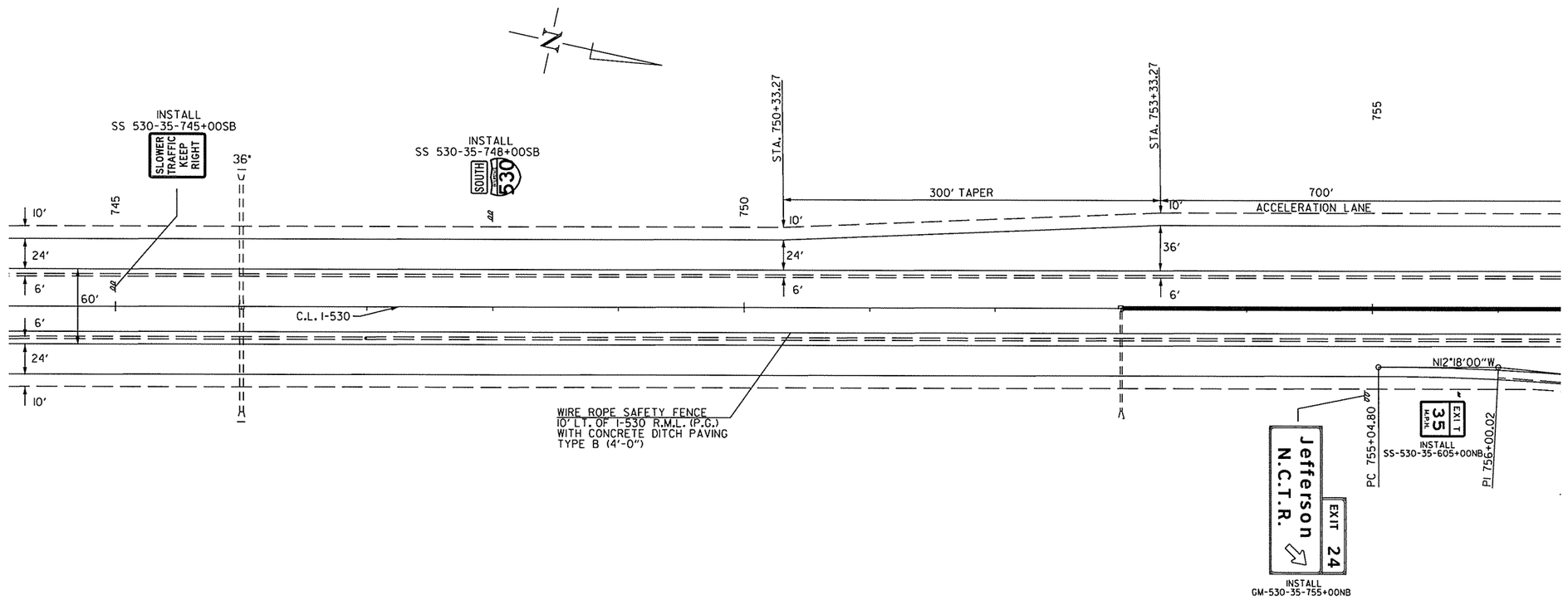


STA 705+00 TO STA 734+00

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0201	115	186
				(2)	SIGNS PLACEMENT SHEET			

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI
JAN 19, 2015





STA 734+00 TO STA 756+00

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0201	116	186

(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI
JAN 29 2015

N

INSTALL
SS 530-35-758+00SB
MILE 24

PC 758+69.50

ACCELERATION LANE
700'

MAIN LANES STA. 760+33.27, 56.00' LT. =

760

PI 760+70.23

PT 762+69.50

RAMP 4

STA. 763+89.96

6'
15'
4'

INSTALL
SS 530-35-765+00SB

765

N44°24'56"W

N56°24'56"W

10'

770

C.L. MAIN LANES STA. 771+00
C.L. STAGECOACH RD. STA 23+05.40

STA. 770+26.77
END JOB BB0201
L.M. = 23.76

STA. 770+52.15

60'
C.L. I-530
6'
24'
10'

INSTALL
SS 530-35-770+00NB-B

INSTALL
SS 530-35-770+00NB-A

MILE 24

INSTALL
SS 530-35-758+00NB

PT 756+95.08

RAMP 1

EXIT 24

INSTALL
EX-530-35-760+00NB

PC 760+15.01

PI 761+99.88

ICES BEFORE ROAD BRIDGE

INSTALL
SS-530-35-763+00NB

STA. 763+61.99

PT 763+84.46

4'
15'
6'

WIRE ROPE SAFETY FENCE
10' LT. OF I-530 R.M.L. (P.G.)
WITH CONCRETE DITCH PAVING
TYPE B (4'-0")

PI 767+63.46

STA. 767+36.11
END WRSF
ON NB FORESLOPE
BEHIND GUARDRAIL
(L.M. 23.82)

30°

C.L. STAGECOACH ROAD

POE 769+65.18

STA. 770+01.39

N1°03'00"W

N2°42'00"E

PC 766+56.27

PT 768+70.56

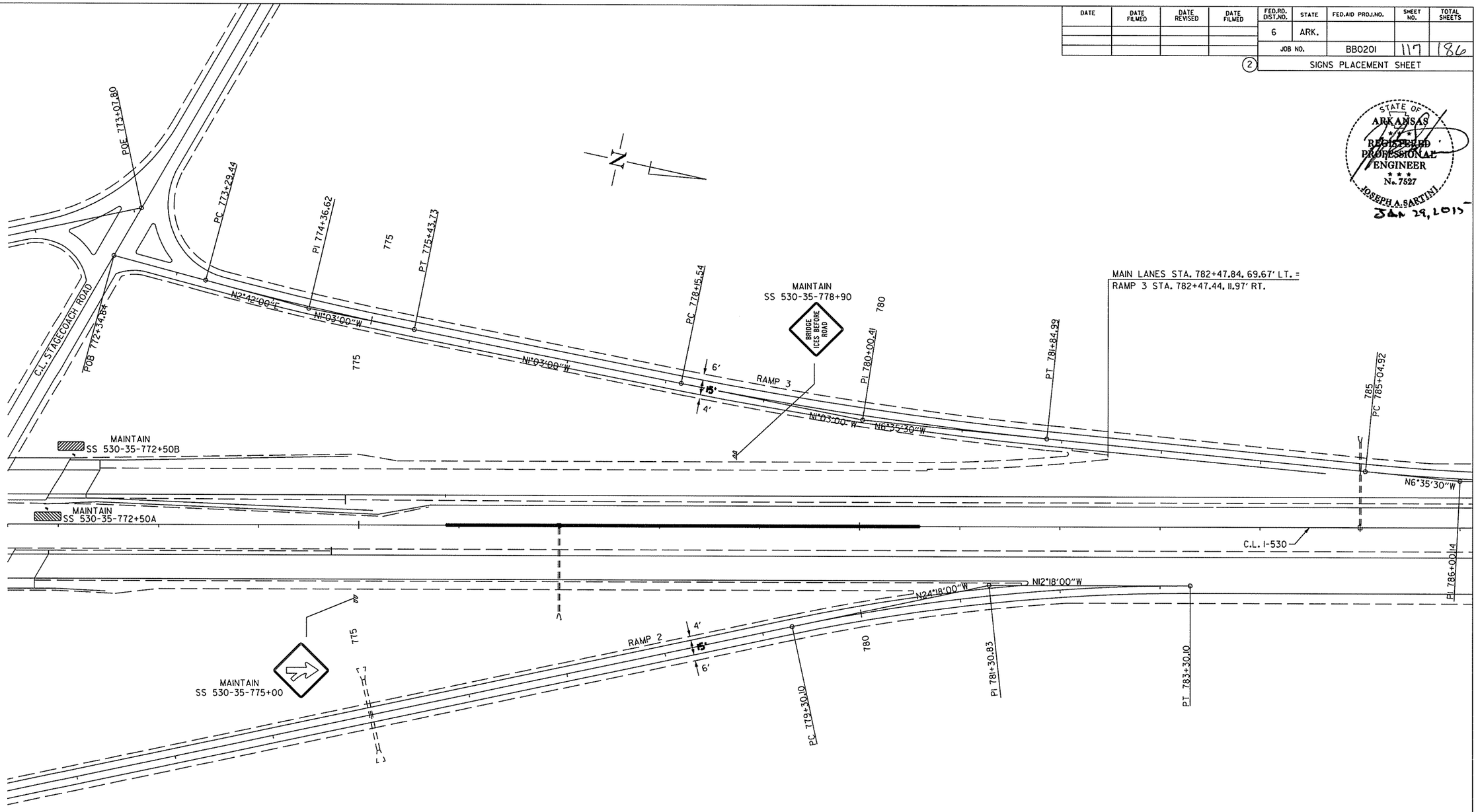
POB 768+91.59

STA 756+00 TO STA 771+00

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0201	117	186

(2) SIGNS PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI
Jan 29, 2015



STA 771+00 TO STA 786+00

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0201	118	186
				(2)	SIGNING QUANTITIES SHEET			

SIGNING SUMMARY OF QUANTITIES

ITEM NUMBER	ITEM	TOTAL	UNIT
725	GUIDE SIGN - ROADSIDE MOUNTED (DEMOUNTABLE LEGEND)	1167	SQ. FT.
726	STANDARD SIGN	492	SQ. FT.
727	EXIT NUMBER PANEL (TYPE A)	160	SQ. FT.
SP	OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS (TYPE G-2)	22	EACH
SP & 729	CHANNEL POST SIGN SUPPORT (TYPE U-1)	16	EACH
730	BREAKAWAY SIGN SUPPORT (TYPE G-2)	8564	POUND

NOTES:
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. REMOVAL AND DISPOSAL OF ROADSIDE MOUNTED SIGNS, SUPPORTS SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED SUBSIDIARY TO OTHER ITEMS IN THE CONTRACT.

THE EXISTING SIGNS AND POSTS SHALL BECOME THE PROPERTY OF THE CONTRACTOR. THE EXISTING FOOTINGS SHALL BE REMOVED AND THE HOLES FILLED WITH A SUITABLE MATERIAL AND COMPACTED.

EXISTING LOGOS WILL BE RELOCATED TO THE NEW LOGO SIGN BY THE CONTRACTOR. THE LOGO INSTALLATION SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED SUBSIDIARY TO OTHER ITEMS IN THE CONTRACT.

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)

NOTE:
BREAKAWAY SIGN SUPPORT TOTAL IS CALAULATED BY TAKING THE LENGTH OF H1, H2, H3 AND THE STUB POST AND MULTIPLYING BY THE BEAM WEIGHT (LBS).

MAIN LANES SIGNING QUANTITIES

SIGN NO./ LOCATION	STRUCTURE TYPE ST	CL	OH	BM	G-2	GUIDE SIGN Length	Height	SQ. Ft.	BREAKAWAY SIGN SUPPORT STEEL SECT. A-572 BEAM	LBS	SIGN POST LENGTH H - 1	H - 2	H - 3	STUB POST H - 1	H - 2	H - 3	FOOTINGS DIA.	DEPTH	EMBED.	SIGN POST AND STUB POUND	EXIT NUMBER PANEL LEGEND	TYPE A	B	C
						LIN. FT.					LIN FT			LIN FT			LIN FT					SQ. FT.		
EXIT 24																								
EX-530-35-760+00NB					1	6.00	7.00	42.00	W6	9	14.00	15.00		3.99	3.99		2.00	5.50	3.66	332.82				
GM-530-35-702+00NB					1	12.00	10.00	120.00	W8	21	17.00	18.00		4.99	4.99		2.50	7.00	4.66	944.58	24	20.00		
GM-530-35-755+00NB					1	15.50	5.50	85.25	W8	21	12.50	13.50		4.99	4.99		2.50	7.00	4.66	755.58	24	20.00		
EXIT 27																								
EX-530-35-608+30NB					1	6.00	7.00	42.00	W6	9	14.00	15.00		2.33	2.33		1.50	3.00	2.00	302.94				
EX-530-35-631+90SB					1	6.00	7.00	42.00	W6	9	14.00	15.00		2.33	2.33		1.50	3.00	2.00	302.94				
GM-530-35-551+00NB					1	13.00	11.00	143.00	W8	21	18.00	19.00		3.99	3.99		2.50	5.50	3.66	944.58	27	20.00		
GM-530-35-689+00SB					1	13.00	11.00	143.00	W8	21	18.00	19.00		3.99	3.99		2.50	5.50	3.66	944.58	27	20.00		
GM-530-35-604+00NB					1	16.50	8.50	140.25	W8	21	15.50	16.50		3.99	3.99		2.50	5.50	3.66	839.58	27	20.00		
GM-530-35-637+00SB					1	16.50	8.50	140.25	W8	21	15.50	16.50		3.99	3.99		2.50	5.50	3.66	839.58	27	20.00		
EXIT 30																								
EX-530-35-459+30SB;					1	6.00	7.00	42.00	W6	9	14.00	15.00		2.33	2.33		1.50	3.00	2.00	302.94				
GM-530-35-513+00SB;					1	8.00	7.50	60.00	W8	18	14.50	15.50		3.99	3.99		2.50	5.50	3.66	683.64	30	20.00		
GM-530-35-465+00SB;					1	9.00	5.00	45.00	W8	18	12.00	13.00		3.99	3.99		2.50	5.50	3.66	593.64	30	20.00		
GM-530-35-489+00NB					1	17.50	7.00	122.50	W8	21	14.00	15.00		3.99	3.99		2.50	5.50	3.66	776.58				
GUIDE SIGNS ROADSIDE MOUNTED TOTALS;								1,167.25			-	-	-											
TOTALS:	-	-	-	-	13.00			1,167.25												8,563.98		160.00	-	-

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0201	119	186
				(2)	SIGNING QUANTITIES SHEET			

STANDARD SIGNS FLAT SHEET
OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS

SIGN NO./ LOCATION	TYPE												STANDARD SIGN
	G1	G2	G2-1	G2-2	G2-3	G2-4	G2-5	G2-6	G2-7	G2-8	G2-9	G2-10	
	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	SQ. FT.
SS 530-35-457+50SB		1											16.00
SS-530-35-763+00NB		1											16.00
SS 530-35-456+90NB		1											16.00
SS 530-35-615+00SB		1											16.00
SS-530-35-625+00NB		1											16.00
SS 530-35-765+00SB		1											16.00
SS 530-35-633+80SB		1											20.00
SS-530-35-605+00NB		1											20.00
SS 530-35-635+80SB		1											20.00
SS-530-35-605+00NB		1											20.00
SS 530-35-482+00NB		1											36.00
SS 530-35-594+00SB		1											36.00
SS 530-35-651+50NB		1											36.00
SS 530-35-742+00SB		1											36.00
SS 530-35-479+00NB		1											20.00
SS 530-35-597+00SB		1											20.00
SS 530-35-648+00NB		1											20.00
SS 530-35-745+00SB		1											20.00
SS 530-35-476+00NB		1											14.38
SS 530-35-645+00NB		1											14.38
SS 530-35-600+00SB		1											14.38
SS 530-35-748+00SB		1											14.38
TOTALS:		**22**											**457.52**

STANDARD SIGNS FLAT SHEET
CHANNEL POST SIGN SUPPORTS

SIGN NO./ LOCATION	TYPE												STANDARD SIGN
	U1	U2	U2-1	U2-2	U2-3	U2-4	U2-5	U2-6	U2-7	U2-8	U2-9	U2-10	
	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	SQ. FT.
SS 530-35-451+00SB-A	1												3.00
SS 530-35-451+00SB-B	1												3.00
SS 530-35-770+00NB-A	1												3.00
SS 530-35-770+00NB-B	1												3.00
SS 530-35-494+00SB	1												1.88
SS 530-35-494+00NB	1												1.88
SS 530-35-546+80NB	1												1.88
SS 530-35-546+80SB	1												1.88
SS 530-35-599+60NB	1												1.88
SS 530-35-599+60SB	1												1.88
SS 530-35-652+40SB	1												1.88
SS 530-35-652+40NB	1												1.88
SS 530-35-705+20NB	1												1.88
SS 530-35-705+20SB	1												1.88
SS 530-35-758+00NB	1												1.88
SS 530-35-758+00SB	1												1.88
TOTALS:	**16**												**34.56**

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI
JAN 21, 2015

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	120	186

(2) QUANTITIES

CONSTRUCTION PAVEMENT MARKINGS AND PERMANENT PAVEMENT MARKINGS

DESCRIPTION	STAGE 1A	STAGE 1B	STAGE 2A	STAGE 2B	STAGE 3A	STAGE 3B	STAGE 4A	STAGE 4B	REMOVAL OF PERMANENT PAVEMENT MARKINGS	CONSTRUCTION PAVEMENT MARKINGS	REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS	REMOVABLE CONSTRUCTION PAVEMENT MARKINGS	RAISED PAVEMENT MARKERS	HIGH PERFORMANCE CONTRAST PAVEMENT	HIGH PERFORMANCE PAVEMENT MARKING			
													TYPE II (WHITE/RED)	4" WHITE	4" WHITE	SKIP WHITE	YELLOW	8" WHITE
	LIN. FT. - EACH								LIN. FT.		LIN. FT.		EACH	LIN. FT.	LIN. FT.			
REMOVAL OF PERMANENT PAVEMENT MARKINGS			43363		2157				45520									
CONSTRUCTION PAVEMENT MARKINGS			111027	7720	146841	7641	108022	127341		508592								
REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS					1620		2160	3240			7020							
REMOVABLE CONSTRUCTION PAVEMENT MARKINGS			1620		2160		1620	1620				7020						
RAISED PAVEMENT MARKERS TYPE II (WHITE)								1461					1461					
HIGH PERFORMANCE CONTRAST PAVEMENT MARKING WHITE (4")								172						172				
HIGH PERFORMANCE PAVEMENT MARKING WHITE (4")								70587							70587			
HIGH PERFORMANCE MARKING TAPE (SKIP LINE) WHITE (4")								15979								15979		
HIGH PERFORMANCE PAVEMENT MARKING YELLOW (4")								66599									66599	
HIGH PERFORMANCE PAVEMENT MARKING WHITE (8")								3532										3532
TOTALS:									**45520**	**508592**	**7020**	**7020**	**1461**	**172**	**70587**	**15979**	**66599**	**3532**

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

ADVANCE WARNING SIGNS AND DEVICES

SIGN NUMBER	DESCRIPTION	SIGN SIZE	STAGE 1A	STAGE 1B	STAGE 2A	STAGE 2B	STAGE 3A	STAGE 3B	STAGE 4A	STAGE 4B	MAXIMUM NUMBER REQUIRED	TOTAL SIGNS REQUIRED		VERTICAL PANELS	TRAFFIC DRUMS	BARRICADES (TYPE III)		FURNISHING & INSTALLING PRECAST CONC. BARRIER	RELOCATING PRECAST CONCRETE BARRIER	TEMPORARY IMPACT ATTENUATION BARRIER	TEMP. IMPACT ATTEN.BARR. (REPAIR)
												NO.	SQ. FT.			RIGHT	LEFT				
			LIN. FT. - EACH											EACH				LIN. FT.			EACH
W20-1	ROAD WORK AHEAD	48"x48"	8	8	8	8	8	8	8	8	8	8	128.0								
R2-5A	REDUCED SPEED AHEAD	48"x60"	4	4	4	4	4	4	4	4	4	4	80.0								
W20-1	ROAD WORK 1 MILE	48"x48"	4	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	4	64.0								
W20-1	ROAD WORK 1500 FT.	48"x48"	4	4	4	4	4	4	4	4	4	4	64.0								
G20-2	END ROAD WORK	48"x24"	10	10	10	10	10	10	10	10	10	10	80.0								
G20-1	ROAD WORK NEXT xx MILES	60"x24"	2	2	2	2	2	2	2	2	2	2	20.0								
W1-2R	CURVE RT.	48"x48"			2	2	2	2			2	2	32.0								
W13-1	SPEED LIMIT (ADVISORY)	24"x24"			2	2	2	2			2	2	8.0								
R11-2	ROAD CLOSED	48"x30"	20	24	18	22	12	12	20		24	24	240.0								
W1-6	LARGE ARROW	60"x30"	12	12	12	12	12	12	12	12	12	12	150.0								
W1-8	CHEVRONS	36"x48"			12	12	12	12			12	12	144.0								
R2-1	SPEED LIMIT	48"x60"	8	8	8	8	8	8	8	8	8	8	160.0								
R2-2	SPEED LIMIT TRUCKS	48"x48"	4	4	4	4	4	4	4	4	4	4	64.0								
R4-1	DO NOT PASS	48"x60"	8	8	8	8	8	8	8	8	8	8	160.0								
R55-1	FINES DOUBLE	36"x60"	4	4	4	4	4	4	4	4	4	4	60.0								
W4-2R	RIGHT LANE CLOSED	48"x48"	4	4	4	4	4	4	4	4	4	4	64.0								
SPECIAL	MERGE NOW	48"x48"	2	2	2	2	2	2	2	2	2	2	32.0								
	WIDE LOAD & ALT. ROUTE DETOUR SIGNS												192.4								
RSP-1	SHOULDER CLOSED (F & WHERE DIRECTED)	48"x30"																			
	VERTICAL PANELS				325	325	325	325			325			325							
	TRAFFIC DRUMS		820	1137	280	332	156	253	820	956	1137				1137						
	TYPE III BARRICADE-RT. (16')				13	13	12	10			13					208					
	TYPE III BARRICADE-LT. (16')		20	24	5	9		2	20		24						384				
	FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER				34300		320				34620							34620			
	RELOCATING PRECAST CONCRETE BARRIER						34300	160			34460								34460		
	TEMPORARY IMPACT ATTENUATION BARRIER				3	3	4	4	3		4									4	
	TEMPORARY IMPACT ATTENUATION BARRIER (REPAIR)										4										4
TOTALS:													**1806.4**	**325**	**1137**	**208**	**384**	**34620**	**34460**	**4**	**4**

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

NOTE: THE QUANTITY OF TRAFFIC DRUMS PROVIDED IS FOR BOTH SIDES OF THE ROADWAY FOR THE FULL LENGTH OF THE JOB. HOWEVER, THE INSTALLATION OF TRAFFIC DRUMS SHALL NEVER EXCEED THE ACTUAL WORK AREA BY MORE THAN 1/4 MILE, UNLESS APPROVED BY THE ENGINEER.

MAINTENANCE OF TRAFFIC ITEMS

STATION	STATION	LOCATION	MOBILE SPEED NOTIFICATION SYSTEM	MOTORIST ASSISTANCE PATROL	TRAFFIC CONTROL SUPERVISOR	PORTABLE CONSTRUCTION LIGHTING		ADVANCE WARNING ARROW PANEL		PORTABLE CHANGEABLE MESSAGE SIGN	MODULAR GLARE SHIELD
								SIGNS	DAY		
			EACH	LUMP SUM	LUMP SUM	TOTAL NO.	DAY	EACH		WEEK	LIN. FT
ENTIRE PROJECT IF AND WHERE DIRECTED BY ENGINEER			2	1.00	1.00						300
ENTIRE PROJECT - CROSSOVER LOCATIONS						4	800				
WIDE LOAD DETOUR (REFER TO PLAN SHEET 46)								2		110	
BEG & END OF PROJECT								2	950	140	
TOTALS:			**2**	**1.00**	**1.00**	**4**	**800**		**950**	**250**	**300**

NOTE:THIS IS A HIGH TRAFFIC VOLUME ROAD AS DEFINED IN SECTION 604.03 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION,2014 EDITION.

AUTOMATED WORK ZONE INFORMATION SYSTEM

LOCATION	FURNISH AND INSTALLVEHICLE DETECTION SYSTEM	FURNISH AND INSTALL CLOSED CIRCUIT TELEVISION SYSTEM	FURNISH AND INSTALL VARIABLE MESSAGE SIGN	FURNISH AND INSTALL PUBLIC NOTIFICATION SYSTEM	* AWIS OPERATION	AWIS MOBILIZATION	* DEVICE RELOCATION
	EACH	EACH	EACH	EACH	MONTH	LUMP SUM	EACH
1/2 MILE BEFORE & AFTER PROJECT; 1 MI SPACING WITHIN JOB LIMITS	22						
ONE @ EXITS 24,27, AND 30		3					
NB - IN ADVANCE OF EXITS 34,32, 30 & 27 SB - IN ADVANCE OF EXITS 20, 24, & 27			7				
1 @ MI MARKER 22 & 1 @ EXIT 32				2			
					16		
						1.00	
ESTIMATED QUANTITY: IF AND WHERE DIRECTED BY THE ENGINEER							16
TOTALS:	**22**	**3**	**7**	**2**	**16**	**1.00**	**16**

* QUANTITIES ESTIMATED. REFER TO SECTION 104.03 OF THE STANDARD SPECIFICATIONS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 10887
SCOTT P. THORNSBERRY
1-30-2015

QUANTITIES

Baker

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
3-6-15				2	ARK.			
				JOB NO.		BB020I	121	186

(2) QUANTITIES

SOIL STABILIZATION

STATION	STATION	LOCATION / DESCRIPTION	SOIL STABILIZATION
			TON
ENTIRE	PROJECT	IF AND WHERE DIRECTED BY THE ENGINEER	5000
TOTAL:			5000

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

REMOVAL AND DISPOSAL OF PIPE UNDERDRAINS

STATION	STATION	LOCATIONS	REMOVAL AND DISPOSAL	
			PIPE UNDERDRAINS	UNDERDRAIN OUTLET PROTECTORS
			LIN. FT.	EACH
* ENTIRE PROJECT TO BE USED IF AND			2000	8
WHERE DIRECTED BY THE ENGINEER				
TOTALS:			2000	8

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

REMOVAL AND DISPOSAL OF ITEMS

STATION	STATION	LOCATION	CONCRETE DITCH PAVING			RUMBLE STRIPS			IMPACT ATTEN. BARRIER	WIRE ROPE SAFETY FENCE	GUARDRAIL	APPROACH SLAB & GUTTERS
			LENGTH	WIDTH	SQ. YD.	LENGTH	WIDTH	SQ. YD.				
			LIN. FT.	FEET		LIN. FT.	FEET		EACH	LIN. FT.	LIN. FT.	EACH
435+90.00	447+70.00	RT. - L.M.L.	1180	4	524					1180		
771+86.00	783+53.00	RT. - L.M.L.	1167	4	519					1167		
446+56.00	448+56.00	LT. - R.M.L.									175	
446+64.00	447+64.00	LT. - L.M.L.									75	
446+98.00	448+98.00	RT. - L.M.L.									175	
450+09.00	453+09.00	LT. - L.M.L.									275	
450+51.00	452+51.00	RT. - L.M.L.									175	
451+43.00	453+93.00	RT. - R.M.L.									225	
770+12.00	768+22.00	LT. - R.M.L.									165	
766+37.00	769+87.00	RT. - R.M.L.									325	
		GRAVEL PIT ROAD (MEDIAN)							2			
771+77.00	774+73.00	RT. - R.M.L.				296	1.33	44				
771+91.00	774+73.00	LT. - R.M.L.				282	1.33	42				
772+27.00	774+87.00	RT. - L.M.L.				260	1.33	38				
772+41.00	774+87.00	LT. - L.M.L.				246	1.33	36				
		BRIDGE A5611 LT. MAIN LANES										2
		BRIDGE B5611 RT. MAIN LANES										2
		BRIDGE A5612 LT. MAIN LANES										1
		BRIDGE B5612 RT. MAIN LANES										1
TOTALS:					1043			160	2	2347	1590	6

NOTE: THE PAY ITEM FOR REMOVAL AND DISPOSAL OF GUARDRAIL SHALL INCLUDE THE REMOVAL OF ANY TERMINAL ANCHOR POSTS.

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 (E-5)	DROP INLET SILT FENCE (E-7)	SILT FENCE (E-11)	*SEDIMENT REMOVAL & DISPOSAL
			ACRE	TON	ACRE	M.GAL.	ACRE	ACRE	ACRE	M.GAL.	BAG	LIN. FT.	LIN. FT.	CU. YD.
ENTIRE	PROJECT	CLEARING AND GRUBBING												
ENTIRE	PROJECT	STAGE 1A						53.00	53.00	1081.2	3036	660	5062	350
ENTIRE	PROJECT	STAGE 1B						6.40	6.40	130.6				
ENTIRE	PROJECT	STAGE 2						50.00	50.00	1020.0				
		STAGE 3						50.00	50.00	1020.0				
		STAGE 4	85.57	171.14	85.57	8728.1	85.57							
TOTALS:			85.57	171.14	85.57	8728.1	85.57	159.40	159.40	3251.8	3036	660	5062	350

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
SAND BAG DITCH CHECKS.....22 BAGS / LOCATION

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

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

WIRE ROPE SAFETY FENCE

9050

STATION	STATION	LOCATION	WIRE ROPE SAFETY FENCE	WRSF END TERMINAL	DITCH PAVING					WRSF POST REPAIR
					LENGTH	WIDTH	CONCRETE DITCH PAVING (TYPE B)	SOLID SODDING	WATER	
			LIN. FT.	EACH	LIN. FT.	LIN. FT.	SQ. YD.	SQ. YD.	M. GAL.	EACH
453+28	619+60	RT. - L.M.L.	16632	* 2	16632	4	7392	7392	93.1	
621+32	707+50	LT. - R.M.L.	8618	* 2	8618	4	3830	3830	48.3	
710+50	767+36	LT. - R.M.L.	5686	* 2	5686	4	2527	2527	31.8	
435+90	447+70	RT. - L.M.L.	1180	* 2	1180	4	524	524	6.6	
774+75	783+53	RT. - L.M.L.	878	* 2	878	4	390	390	4.9	
435+90	447+70	END OF R&D WRSF SECTION	1180	1	1180	4	524	4716	59	
771+86	783+53	END OF R&D WRSF SECTION	1167	1	1167	4	519	4671	59	
ENTIRE PROJECT										** 50
TOTALS:			35341	2			15706	24050	302.7	50

* THIS ITEM IS SHOWN FOR INFORMATION ONLY
** QUANTITY ESTIMATED. SEE SECTION 104.03 OF THE STANDARD SPECIFICATIONS
NOTE: STA. 435+90 TO STA. 447+70 WRSF SHALL BE NU-CABLE
STA. 774+75 TO STAT. 783+53 WRSF SHALL BE BRIFEN
STA. 453+28 TO STA. 767+36 WRSF SHALL BE NU-CABLE OR BRIFEN

4" PIPE UNDERDRAIN

STATION	STATION	LOCATIONS	4" PIPE UNDERDRAINS	UNDERDRAIN COVER	UNDERDRAIN VIDEO INSPECTION	UNDERDRAIN OUTLET PROTECTORS
			LIN. FT.	LIN. FT.	LIN. FT.	EACH
450+81	769+58	RT. - R.M.L.	38277	31877	38277	129
451+69	769+58	LT. - L.M.L.	38189	31789	38189	129
TOTALS:			76466	63666	76466	258

* NOTE: QUANTITIES 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.

GUARDRAIL

STATION	STATION	LOCATION	GUARDRAIL (TYPE A)	THRIE BEAM GUARDRAIL TERMINAL	GUARDRAIL TERMINAL (TYPE 2)	TERMINAL ANCHOR POST (TYPE 1)
			LIN. FT.	EACH		
446+30.00	448+49.00	LT. - R.M.L.	150	1	1	
446+63.00	447+57.00	LT. - L.M.L.	50	1		1
446+72.00	448+91.00	RT. - L.M.L.	150	1	1	
450+16.00	453+10.00	LT. - L.M.L.	225	1	1	
450+58.00	453+77.00	RT. - L.M.L.	250	1	1	
451+50.00	453+94.00	RT. - R.M.L.	200	1		1
616+57.00	621+82.00	LT. - R.M.L.	450	1		1
619+10.00	624+35.00	RT. - L.M.L.	450	1		1
766+12.00	769+80.00	RT. - R.M.L.	300	1	1	
766+86.00	770+04.00	LT. - R.M.L.	250	1	1	
* 708+00.00	710+00.00	RT. - R.M.L. FOR W.I.M. SCALE	125		1	1
* 708+00.00	710+00.00	LT. - R.M.L. FOR W.I.M. SCALE	125		1	1
* 708+00.00	710+00.00	RT. - L.M.L. FOR W.I.M. SCALE	125		1	1
* 708+00.00	710+00.00	LT. - L.M.L. FOR W.I.M. SCALE	125		1	1
TOTALS:			2975	10	10	8

* LOCATION SHALL BE IF AND WHERE DIRECTED BY THE ENGINEER.

BASE AND SURFACING - GUARDRAIL WIDENING

STATION	STATION	LOCATION	LENGTH	ACHM SURFACE COURSE (1/2")				AGGREGATE BASE COURSE (CLASS 7)	
				AVG WID.	SQ. YD.	POUND / SQ.YD.	PG 64-22	TON / STATION	TON
			FEET	FEET			TON		
446+33.69	447+64.10	LT. - L.M.L.	130.41	VAR.	32.39	220.00	3.56	6.48	8.45
445+85.89	448+56.30	LT. - R.M.L.	270.41	VAR.	101.11	220.00	11.12	14.68	39.70
446+27.80	448+98.21	RT. - R.M.L.	270.41	VAR.	101.57	220.00	11.17	14.81	15.04
450+09.22	453+69.71	LT. - L.M.L.	360.49	VAR.	161.98	220.00	17.82	21.20	34.34
450+51.08	454+48.58	RT. - L.M.L.	397.50	VAR.	268.32	220.00	29.52	47.84	128.36
451+67.81	454+83.95	RT. - R.M.L.	316.14	VAR.	121.10	220.00	13.32	15.41	18.66
616+02.21	622+52.21	LT. - R.M.L.	650.00	VAR.	527.78	220.00	58.06	69.23	365.38
618+39.09	624+89.95	RT. - L.M.L.	649.96	VAR.	527.74	220.00	58.05	69.22	365.30
766+09.77	770+12.27	LT. - R.M.L.	402.50	VAR.	266.54	220.00	29.32	46.04	122.72
765+42.45	769+88.10	RT. - R.M.L.	445.65	VAR.	244.09	220.00	26.85	31.50	76.89
708+00.00	710+00.00	RT. - R.M.L. FOR W.I.M. SCALE	200.00	5.50	122.22	220.00	13.44	39.21	47.92
707+77.00	708+00.00	RT. - R.M.L.TAPER FOR W.I.M. SCALE	33.00	2.75	10.08	220.00	1.11	9.80	0.99
710+00.00	710+33.00	RT. - R.M.L.TAPER FOR W.I.M. SCALE	33.00	2.75	10.08	220.00	1.11	9.80	0.99
708+65.00	709+35.00	LT. - R.M.L. FOR W.I.M. SCALE	70.00	7.50	58.33	220.00	6.42	72.91	42.53
708+00.00	708+50.00	LT. - R.M.L.EXTRA WIDENING FOR W.I.M. SCALE	50.00	10.00	55.56	220.00	6.11	129.65	72.03
709+50.00	710+00.00	LT. - R.M.L. EXTRA WIDENING FOR W.I.M. SCALE	50.00	10.00	55.56	220.00	6.11	129.65	72.03
708+50.00	708+65.00	LT. - R.M.L. INTERIOR TAPER FOR W.I.M. SCALE	15.00	8.75	14.58	220.00	1.60	99.20	14.46
709+35.00	709+50.00	LT. - R.M.L. INTERIOR TAPER FOR W.I.M. SCALE	15.00	8.75	14.58	220.00	1.60	99.20	14.46
707+52.00	708+00.00	LT. - R.M.L. TAPER FOR W.I.M. SCALE	48.00	6.00	32.00	220.00	3.52	46.67	14.93
710+00.00	710+48.00	LT. - R.M.L. TAPER FOR W.I.M. SCALE	48.00	6.00	32.00	220.00	3.52	46.67	14.93
707+00.00	711+00.00	RT. - L.M.L. FOR W.I.M. SCALE	400.00	7.50	333.33	220.00	36.67	72.92	243.06
706+77.00	707+00.00	RT. - L.M.L. TAPER FOR W.I.M. SCALE	33.00	4.75	17.42	220.00	1.92	29.26	5.10
711+00.00	711+33.00	RT. - L.M.L. TAPER FOR W.I.M. SCALE	33.00	4.75	17.42	220.00	1.92	29.26	5.10
707+00.00	711+00.00	LT. - L.M.L. FOR W.I.M. SCALE	400.00	5.50	244.44	220.00	26.89	39.21	95.84
706+77.00	707+00.00	LT. - L.M.L. TAPER FOR W.I.M. SCALE	33.00	2.75	10.08	220.00	1.11	9.80	0.99
711+00.00	711+33.00	LT. - L.M.L. TAPER FOR W.I.M. SCALE	33.00	2.57	9.42	220.00	1.04	8.56	0.81
TOTALS:					3389.72		372.88		1821.01

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2").....94.8% MIN. AGGR.....5.2% ASPHALT BINDER
MAXIMUM NUMBER OF GYRATIONS = 115 FOR PG 64-22
NOTE: FINAL LOCATION FOR GUARDRAIL WIDENING FOR W.I.M SCALE TO BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION OPERATIONS.

CLEARING AND GRUBBING

STATION	STATION	LOCATION	CLEARING	GRUBBING
			STATION	
171+50	173+50	GRAVEL PIT RD. TEMP. RAMP 2	2	2
142+82	142+85	HWY. 104 TEMP. RAMP 3	1	1
TOTALS:			3	3

APPROACH GUTTERS AND SLABS

STATION	STATION	LOCATION	APPROACH GUTTER (TYPE AT)	APPROACH SLAB (TYPE C1)	APPROACH SLABS (TYPE SPECIAL)	REINFORCING STEEL RDWY. (GR 60)	AGGREGATE BASE CRS. (CLASS 7)
			CU.YD.	CU.YD.	CU.YD.	POUND	TON
		BRIDGE A5611 LT. MAIN LANES - SOUTH	32.38		69.06	10784.00	61.00
		BRIDGE B5611 RT. MAIN LANES - SOUTH	29.30		69.06	10784.00	58.70
		BRIDGE A5611 LT. MAIN LANES - NORTH	29.30		69.06	10784.00	58.70
		BRIDGE B5611 RT. MAIN LANES - NORTH	32.38		69.06	10784.00	61.00
		BRIDGE A5612 LT. MAIN LANES - SOUTH	29.95	61.29		9963.00	55.80
		BRIDGE B5612 RT. MAIN LANES - SOUTH	31.73	61.29		9963.00	57.20
TOTALS:			185.04	122.58	276.24	63062.00	352.40

EARTHWORK

STATION	STATION	LOCATION / DESCRIPTION	UNCLASSIFIED EXCAVATION			COMPACTED EMBANKMENT
			LENGTH - FEET	CU. YD. / STA.	CU. YD.	CU. YD.
ENTIRE	PROJECT	CROSSOVERS INSTALLATION				20560
ENTIRE	PROJECT	SHOULDER REMOVAL FOR CROSSOVERS INSTALLATION			2735	
ENTIRE	PROJECT	CROSSOVERS REMOVAL			30530	
450+47.14	456+31.40	LT. - L.M.L.	584.26	16.22	95	
450+86.14	456+31.40	RT. - L.M.L.	545.26	43.07	235	
451+39.25	456+19.31	LT. - R.M.L.	480.06	43.07	207	
451+78.25	456+19.31	RT. - R.M.L.	441.06	16.22	72	
613+56.03	627+56.03	LT. - L.M.L.	1400.00	16.22	227	
613+56.03	627+56.03	RT. - L.M.L.	1400.00	43.07	603	
613+56.03	627+56.03	LT. - R.M.L.	1400.00	43.07	603	
613+56.03	627+56.03	RT. - L.M.L.	1400.00	16.22	227	
763+58.40	770+28.06	LT. - R.M.L.	669.66	16.22	109	
763+58.40	770+05.55	RT. - L.M.L.	647.15	43.07	279	
763+07.64	769+74.99	LT. - R.M.L.	667.35	43.07	287	
763+07.64	769+52.48	RT. - L.M.L.	644.84	16.22	105	
TOTALS:					36314	20560

NOTE: EARTHWORK QUANTITIES SHOWN ABOVE SHALL BE PAID AS PLAN QUANTITY.

WEIGH IN MOTION SYSTEM

STATION	LOCATION	WEIGH IN MOTION SCALE
		EACH
709+00.00	R.M.L.	2
709+00.00	L.M.L.	2
TOTAL:		4

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
3-6-2015

QUANTITIES

Baker

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB020I	122	186

(2) QUANTITIES

BASE AND SURFACING - MAIN LANES

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")								
				TON / STATION	TON	AVG. WID.	SQ.YD.	GALLONS / SQ.YD.	GALLON	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 76-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 76-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 76-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 76-22	TOTAL PG 76-22
			FEET			FEET				FEET			TON	FEET			TON	FEET			TON	FEET			TON	TON
456+31.40	456+99.80	RUBBLIZE NORMAL CROWN LT - MAIN LANES	68.40			72.00	547.20	0.03	16.42	24.00	182.40	535.00	48.79	24.00	182.40	330.00	30.10	24.00	182.40	220.00	20.06	24.00	182.40	220.00	20.06	40.12
474+09.20	505+47.10	RUBBLIZE NORMAL CROWN LT - MAIN LANES	3137.90			72.00	25103.20	0.03	753.10	24.00	8367.73	535.00	2238.37	24.00	8367.73	330.00	1380.68	24.00	8367.73	220.00	920.45	24.00	8367.73	220.00	920.45	1840.90
526+75.40	578+10.00	RUBBLIZE NORMAL CROWN LT - MAIN LANES	5134.60			72.00	41076.80	0.03	1232.30	24.00	13692.27	535.00	3662.68	24.00	13692.27	330.00	2259.22	24.00	13692.27	220.00	1506.15	24.00	13692.27	220.00	1506.15	3012.30
627+56.03	707+00.00	RUBBLIZE NORMAL CROWN LT - MAIN LANES	7943.97			72.00	63551.76	0.03	1906.55	24.00	21183.92	535.00	5666.70	24.00	21183.92	330.00	3495.35	24.00	21183.92	220.00	2330.23	24.00	21183.92	220.00	2330.23	4660.46
707+00.00	711+00.00	RUBBLIZE NORMAL CROWN LT - MAIN LANES	400.00			72.00	3200.00	0.03	96.00	24.00	1066.67	535.00	285.33	24.00	1066.67	330.00	176.00	24.00	1066.67	220.00	117.33	24.00	1066.67	220.00	117.33	234.66
711+00.00	763+58.40	RUBBLIZE NORMAL CROWN LT - MAIN LANES	5258.40			72.00	42067.20	0.03	1262.02	24.00	14022.40	535.00	3750.99	24.00	14022.40	330.00	2313.70	24.00	14022.40	220.00	1542.46	24.00	14022.40	220.00	1542.46	3084.92
474+09.20	505+74.10	RUBBLIZE NORMAL CROWN RT - MAIN LANES	3164.90			72.00	25319.20	0.03	759.58	24.00	8439.73	535.00	2257.63	24.00	8439.73	330.00	1392.56	24.00	8439.73	220.00	928.37	24.00	8439.73	220.00	928.37	1856.74
526+75.40	578+10.00	RUBBLIZE NORMAL CROWN RT - MAIN LANES	5134.60			72.00	41076.80	0.03	1232.30	24.00	13692.27	535.00	3662.68	24.00	13692.27	330.00	2259.22	24.00	13692.27	220.00	1506.15	24.00	13692.27	220.00	1506.15	3012.30
614+01.70	707+00.00	RUBBLIZE NORMAL CROWN RT - MAIN LANES	9298.30			72.00	74386.40	0.03	2231.59	24.00	24795.47	535.00	6632.79	24.00	24795.47	330.00	4091.25	24.00	24795.47	220.00	2727.50	24.00	24795.47	220.00	2727.50	5455.00
707+00.00	711+00.00	RUBBLIZE NORMAL CROWN RT - MAIN LANES	400.00			72.00	3200.00	0.03	96.00	24.00	1066.67	535.00	285.33	24.00	1066.67	330.00	176.00	24.00	1066.67	220.00	117.33	24.00	1066.67	220.00	117.33	234.66
711+00.00	763+07.64	RUBBLIZE NORMAL CROWN RT - MAIN LANES	5207.64			72.00	41661.12	0.03	1249.83	24.00	13887.04	535.00	3714.78	24.00	13887.04	330.00	2291.36	24.00	13887.04	220.00	1527.57	24.00	13887.04	220.00	1527.57	3055.14
456+99.80	474+09.20	RUBBLIZE SUPER CROWN LT - MAIN LANES	1709.40			72.00	13675.20	0.03	410.26	24.00	4558.40	535.00	1219.37	24.00	4558.40	330.00	752.14	24.00	4558.40	220.00	501.42	24.00	4558.40	220.00	501.42	1002.84
505+47.10	526+75.40	RUBBLIZE SUPER CROWN LT - MAIN LANES	2128.30			72.00	17026.40	0.03	510.79	24.00	5675.47	535.00	1518.19	24.00	5675.47	330.00	936.45	24.00	5675.47	220.00	624.30	24.00	5675.47	220.00	624.30	1248.60
578+10.00	613+56.03	RUBBLIZE SUPER CROWN LT - MAIN LANES	3546.03			72.00	28368.24	0.03	851.05	24.00	9456.08	535.00	2529.50	24.00	9456.08	330.00	1560.25	24.00	9456.08	220.00	1040.17	24.00	9456.08	220.00	1040.17	2080.34
457+19.31	474+09.20	RUBBLIZE SUPER CROWN RT - MAIN LANES	1689.89			72.00	13519.12	0.03	405.57	24.00	4506.37	535.00	1205.45	24.00	4506.37	330.00	743.55	24.00	4506.37	220.00	495.70	24.00	4506.37	220.00	495.70	991.40
505+47.10	526+75.40	RUBBLIZE SUPER CROWN RT - MAIN LANES	2128.30			72.00	17026.40	0.03	510.79	24.00	5675.47	535.00	1518.19	24.00	5675.47	330.00	936.45	24.00	5675.47	220.00	624.30	24.00	5675.47	220.00	624.30	1248.60
578+10.00	614+01.70	RUBBLIZE SUPER CROWN RT - MAIN LANES	3591.70			72.00	28733.60	0.03	862.01	24.00	9577.87	535.00	2562.08	24.00	9577.87	330.00	1580.35	24.00	9577.87	220.00	1053.57	24.00	9577.87	220.00	1053.57	2107.14
450+81.40	456+31.40	FULL DEPTH NORMAL CROWN LT - MAIN LANES	550.00	168.25	925.38	72.00	4400.00	0.03	132.00	24.00	1466.67	440.00	322.67	24.00	1466.67	330.00	242.00	24.00	1466.67	220.00	161.33	24.00	1466.67	220.00	161.33	322.66
614+01.70	627+56.03	FULL DEPTH NORMAL CROWN LT - MAIN LANES	1354.33	168.25	2278.66	72.00	10834.64	0.03	325.04	24.00	3611.55	440.00	794.54	24.00	3611.55	330.00	595.91	24.00	3611.55	220.00	397.27	24.00	3611.55	220.00	397.27	794.54
763+58.40	770+08.40	FULL DEPTH NORMAL CROWN LT - MAIN LANES	650.00	168.25	1093.63	72.00	5200.00	0.03	156.00	24.00	1733.33	440.00	381.33	24.00	1733.33	330.00	286.00	24.00	1733.33	220.00	190.67	24.00	1733.33	220.00	190.67	381.34
451+69.31	456+99.80	FULL DEPTH NORMAL CROWN RT - MAIN LANES	830.49	168.25	1397.30	72.00	6643.92	0.03	199.32	24.00	2214.64	440.00	487.22	24.00	2214.64	330.00	365.42	24.00	2214.64	220.00	243.61	24.00	2214.64	220.00	243.61	487.22
763+07.64	769+57.64	FULL DEPTH NORMAL CROWN RT - MAIN LANES	650.00	168.25	1093.63	72.00	5200.00	0.03	156.00	24.00	1733.33	440.00	381.33	24.00	1733.33	330.00	286.00	24.00	1733.33	220.00	190.67	24.00	1733.33	220.00	190.67	381.34
450+81.40	456+31.40	AGGREGATE BASE COURSE TRANSITION LT MAIN LANE (44' WIDTH)	550.00	99.81	548.96																					
451+69.31	457+19.31	AGGREGATE BASE COURSE TRANSITION RT MAIN LANE (44' WIDTH)	550.00	99.81	548.96																					
613+56.03	620+06.03	AGGREGATE BASE COURSE TRANSITION LT MAIN LANE (44' WIDTH)	650.00	85.56	556.14																					
621+06.03	627+56.03	AGGREGATE BASE COURSE TRANSITION LT MAIN LANE (44' WIDTH)	650.00	85.56	556.14																					
763+58.40	770+08.40	AGGREGATE BASE COURSE TRANSITION LT MAIN LANE (44' WIDTH)	650.00	85.56	556.14																					
763+07.64	769+57.64	AGGREGATE BASE COURSE TRANSITION RT MAIN LANE (44' WIDTH)	650.00	85.56	556.14																					
613+56.03	614+01.70	FULL DEPTH SUPER CROWN LT - MAIN LANES	45.67	168.25	76.84	72.00	365.36	0.03	10.96	24.00	121.79	440.00	26.79	24.00	121.79	330.00	20.10	24.00	121.79	220.00	13.40	24.00	121.79	220.00	13.40	26.80
456+99.80	457+19.31	FULL DEPTH SUPER CROWN LT - MAIN LANES	19.51	168.25	32.83	72.00	156.08	0.03	4.68	24.00	52.03	440.00	11.45	24.00	52.03	330.00	8.58	24.00	52.03	220.00	5.72	24.00	52.03	220.00	5.72	11.44
TOTALS:					**10220.75**		**512338.64**		**15370.16**		**170779.57**		**45164.18**		**170779.57**		**28178.64**		**170779.57**		**18785.73**		**170779.57**		**18785.73**	**37571.46**

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2").....94.8% MIN. AGGR.....5.2% ASPHALT BINDER
ACHM BINDER COURSE (1").....95.5% MIN. AGGR.....4.5% 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

BASE AND SURFACING - ACCELERATION LANES AND RAMPS

STATION	STATION	LOCATION	LENGTH	BORROW		AGGREGATE BASE COURSE (CLASS 7)		TACK COAT				ACHM BASE COURSE (1 1/2")				ACHM BINDER COURSE (1")				ACHM SURFACE COURSE (1/2")								
				CU. YD. / LIN. FT.	CU. YD.	TON / STATION	TON	AVG. WID.	SQ.YD.	GALLONS / SQ.YD.	GALLON	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 76-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 76-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 76-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 76-22	TOTAL PG 76-22
			FEET					FEET				FEET			TON	FEET			TON	FEET			TON	FEET			TON	TON
ACCELERATION LANES, TAPERS, GORE TAPERS & GORE RETURNS																												
457+88.40	464+18.89	LT ENTRANCE LANE TAPER & RETURN	630.49					30.42	2131.06	0.03	63.93	10.14	710.35	440.00	156.28	10.14	710.35	330.00	117.21	10.14	710.35	220.00	78.14	10.14	710.35	220.00	78.14	156.28
462+84.24	464+39.01	RT ENTRANCE LANE TAPER TO ACCEL LANE	154.77					42.51	731.03	0.03	21.93	14.17	243.68	440.00	53.61	14.17	243.68	330.00	40.21	14.17	243.68	220.00	26.80	14.17	243.68	220.00	26.80	53.60
464+39.01	469+84.24	RT LANE ACCELERATION LANE	545.23					36.00	2180.92	0.03	65.43	12.00	726.97	440.00	159.93	12.00	726.97	330.00	119.95	12.00	726.97	220.00	79.97	12.00	726.97	220.00	79.97	159.94
469+84.24	472+84.24	RT LANE ACCELERATION LANE TAPER	300.00					18.00	600.00	0.03	18.00	6.00	200.00	440.00	44.00	6.00	200.00	330.00	33.00	6.00	200.00	220.00	22.00	6.00	200.00	220.00	22.00	44.00
604+19.20	610+43.93	RT EXIT LANE TAPER & RETURN	624.73					27.00	1874.19	0.03	56.23	9.00	624.73	440.00	137.44	9.00	624.73	330.00	103.08	9.00	624.73	220.00	68.72	9.00	624.73	220.00	68.72	137.44
604+28.12	610+34.20	LT LANE ACCELERATION LANE	606.08					36.00	2424.32	0.03	72.73	12.00	808.11	440.00	177.78	12.00	808.11	330.00	133.34	12.00	808.11	220.00	88.89	12.00	808.11	220.00	88.89	177.78
601+28.12	604+28.12	LT LANE ACCELERATION LANE TAPER	300.00					18.00	600.00	0.03	18.00	6.00	200.00	440.00	44.00	6.00	200.00	330.00	33.00	6.00	200.00	220.00	22.00	6.00	200.00	220.00	22.00	44.00
610+34.20	611+28.12	LT ENTRANCE LANE TAPER	93.92					43.44	453.32	0.03	13.60	14.48	151.11	440.00	33.24	14.48	151.11	330.00	24.93	14.48	151.11	220.00	16.62	14.48	151.11	220.00	16.62	33.24
630+85.44	631+84.16	RT ENTRANCE LANE TAPER	98.72					43.74	479.78	0.03	14.39	14.58	159.93	440.00	35.18	14.58	159.93	330.00	26.39	14.58	159.93	220.00	17.59	14.58	159.93	220.00	17.59	35.18
631+84.16	637+85.44	RT LANE ACCELERATION LANE	601.28					36.00	2405.12	0.03	72.15	12.00	801.71	440.00	176.38	12.00	801.71	330.00	132.28	12.00	801.71	220.00	88.19	12.00	801.71	220.00	88.19	176.38
637+85.44	640+85.44	RT LANE ACCLERATION LANE TAPER	300.00					18.00	600.00	0.03	18.00	6.00	200.00	440.00	44.00	6.00	200.00	330.00	33.00	6.00	200.00	220.00	22.00	6.00	200.00	220.00	22.00	44.00
630+28.13	636+95.19	LT EXIT LANE TAPER & RETURN	667.06					34.53	2559.29	0.03	76.78	11.51	853.10	440.00	187.68	11.51	853.10	330.00	140.76	11.51	853.10	220.00	93.84	11.51	853.10	220.00	93.84	187.68
755+04.80	761+71.88	RT ENTRANCE LANE TAPER & RETURN	667.08					34.56	2561.59	0.03	76.85	11.52	853.86	440.00	187.85	11.52	853.86	330.00	140.89	11.52	853.86	220.00	93.92	11.52	853.86	220.00	93.92	187.84
753+33.27	758+69.50	LT LANE ACCELERATION LANE	536.23					36.00	2144.92	0.03	64.35	12.00	714.97	440.00	157.29	12.00	714.97	330.00	117.97	12.00	714.97	220.00	78.65	12.00	714.97	220.00	78.65	157.30
750+33.27	753+33.27	LT LANE ACCELERATION LANE TAPER	300.00					18.00	600.00	0.03	18.00	6.00	200.00	440.00	44.00	6.00	200.00	330.00	33.00	6.00	200.00	220.00	22.00	6.00	200.00	220.00	22.00	44.00
758+69.50	760+33.27	LT ENTRANCE LANE TAPER	163.77					42.93	781.18	0.03	23.44	14.31	260.39	440.00	57.29	14.31	260.39	330.00	42.96	14.31	260.39	220.00	28.64	14.31	260.39	220.00	28.64	57.28
ACCELERATION LANES, TAPERS, GORE TAPERS & GORE RETURN LEVELING																												
457+88.40	464+18.89	LT ENTRANCE LANE TAPER & RETURN	630.49					10.14	710.35	0.10	71.04	10.14	710.35	110.00	39.07													
462+84.24	464+39.01	RT ENTRANCE LANE TAPER TO ACCEL LANE	154.77					14.17	243.68	0.10	24.37	14.17	243.68	110.00	13.40													
464+39.01	469+84.24	RT LANE ACCELERATION LANE	545.23					12.00	726.97	0.10	72.70	12.00	726.97	110.00	39.98													
469+84.24	472+84.24	RT LANE ACCELERATION LANE TAPER	300.00					6.00	200.00	0.10	20.00	6.00	200.00	110.00	11.00													
604+19.20	610+43.93	RT EXIT LANE TAPER & RETURN	624.73					9.00	624.73	0.10	62.47	9.00	624.73	110.00	34.36													
604+28.12	610+34.20	LT LANE ACCELERATION LANE	606.08					12.00	808.11	0.10	80.81	12.00	808.11	110.00	44.45													
601+28.12	604+28.12	LT LANE ACCELERATION LANE TAPER	300.00					6.00	200.00	0.10	20.00	6.00	200.00	110.00	11.00													
610+34.20	611+28.12	LT ENTRANCE LANE TAPER	93.92					14.48	151.11	0.10	15.11	14.48	151.11	110.00	8.31													
630+85.44	631+84.16	RT ENTRANCE LANE TAPER	98.72					14.58	159.93	0.10	15.99	14.58	159.93	110.00	8.80													
631+84.16	637+85.44	RT LANE ACCELERATION LANE	601.28					12.00	801.71	0.10	80.17	12.00	801.71	110.00	44.09													
637+85.44	640+85.44	RT LANE ACCLERATION LANE TAPER	300.00					6.00	200.00	0.10	20.00	6.00	200.00	110.00	11.00													
630+28.13	636+95.19	LT EXIT LANE TAPER & RETURN	667.06					11.51	853.10	0.10	85.31	11.51	853.10	110.00	46.92													
755+04.80	761+71.88	RT ENTRANCE LANE TAPER & RETURN	667.08					11.52	853.86	0.10	85.39	11.52	853.86	110.00	46.96													
753+33.27	758+69.50	LT LANE ACCELERATION LANE	536.23					12.00	714.97	0.10	71.50	12.00	714.97	110.00	39.32													
750+33.27	753+33.27	LT LANE ACCELERATION LANE TAPER	300.00					6.00	200.00	0.10	20.00	6.00	200.00	110.00	11.00													
758+69.50	760+33.27	LT ENTRANCE LANE TAPER	163.77					14.31	260.39	0.10	26.04	14.31	260.39	110.00	14.32													
RAMP OVERLAYS (TOP 2")																												
459+13.36	462+87.37	HWY. 104 RAMP 2	374.01					25.00	1038.92	0.03	31.17													25.00	1038.92	220.00	114.28	114.28
456+27.03	459+88.25	HWY. 104 RAMP 3	361.22					25.00	1003.39	0.03	30.10													25.00	1003.39	220.00	110.37	110.37
607+90.17	611+76.36	GPR RAMP 1	386.19					25.00	1072.75	0.03	32.18													25.00	1072.75	220.00	118.00	118.00
611+28.06	614+58.53	GPR RAMP 4	330.47					25.00	917.97	0.03	27.54													25.00	917.97	220.00	100.98	100.98
627+46.77	630+84.64	GPR RAMP 2	337.87					25.00	938.53	0.03	28.16													25.00	938.53	220.00	103.24	103.24
628+51.32	632+37.61	GPR RAMP 3	386.29					25.00	1073.03	0.03	32.19													25.00	1073.03	220.00	118.03	118.03
759+62.40	763+61.99	STAGECOACH RAMP 1	399.59					25.00	1109.97	0.03	33.30													25.00	1109.97	220.00	122.10	122.10
760+32.66	763+89.97	STAGECOACH RAMP 4	357.31					25.00	992.53	0.03	29.78													25.00	992.53	220.00	109.18	109.18
RAMP OVERLAY ELEVATION TRANSITIONS																												
460+13.36	462+87.37	HWY. 104 RAMP 2	274.01	0.11	50.92	55.42	151.86	15.00	456.68	0.10	45.67													25.00	761.14	495.00	188.38	188.38
457+27.03	459+88.25	HWY. 104 RAMP 3	261.22	0.11	50.59	55.42	144.77	15.00	435.37	0.10	43.54													25.00	725.61	495.00	179.59	179.59
607+90.17	610+76.36	GPR RAMP 1	286.19	0.11	67.18	55.42	158.61	15.00	476.98	0.10	47.70													25.00	794.97	495.00	196.76	196.76
611+28.06	613+58.53	GPR RAMP 4	230.47	0.11	67.49	55.42	127.73	15.00	384.12	0.10	38.41													25.00	640.19	495.00	158.45	158.45
628+46.77	630+84.64	GPR RAMP 2	237.87	0.11	69.39	55.42	131.83	15.00	396.45	0.10	39.65													25.00	660.75	495.00	163.54	163.54
629+51.32	632+37.61	GPR RAMP 3	286.29	0.11	69.56	55.42	158.66	15.00	477.15	0.10	47.72													25.00	795.25	495.00	196.82	196.82
759+62.40	762+61.99	STAGECOACH RAMP 1	299.59	0.11	83.89	55.42	166.03	15.00	499.32	0.10	49.93													25.00	832.19	495.00	205.97	205.97
760+32.66	762+89.97	STAGECOACH RAMP 4	257.31	0.11	83.92	55.42	142.60	15.00	428.85	0.10	42.89													25.00	714.75	495.00	176.90	176.90
446+38.08	447+38.08	LT MAIN LANE PAVING TRANSITION	100.00					24.00	266.67	0.10	26.67													24.00	266.67	220.00	29.33	29.33
447+26.09	448+26.09	RT MAIN LANE PAVING TRANSITION	100.00					24.00	266.67	0.10	26.67													24.00	266.67	220.00	29.33	29.33
TOTALS:						**542.94**			**1182.09**		**43070.98**		**2117.98**		**15417.82**		**2119.93**		**7708.91**		**1271.97**		**7708.91**		**847.97**		**22314.19**		**3269.22**	**4117.19**

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2").....94.8% MIN. AGGR.....5.2% ASPHALT BINDER
ACHM BINDER COURSE (1").....95.5% MIN. AGGR.....4.5% 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

Scott.Thornsberry 1-30-2015
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
1-30-2015

QUANTITIES

Baker

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB020I	123	186
				(2)	QUANTITIES			

BASE AND SURFACING - SHOULDERS

STATION	STATION	LOCATION	LENGTH	BORROW		AGGREGATE BASE COURSE (CLASS 1)		AGGREGATE BASE COURSE (CLASS 7)		TACK COAT				ACHM BASE COURSE (1 1/2")				ACHM BINDER COURSE (1")				ACHM SURFACE COURSE (1/2")							TOTAL
				CU. YD. / LIN. FT.	CU. YD.	TON / STATION	TON	TON / STATION	TON	AVG. WID.	SQ.YD.	GALLONS / SQ.YD.	GALLON	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 76-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 76-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 76-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 76-22	TOTAL PG 76-22
			FEET							FEET				FEET			TON	FEET			TON	FEET			TON	FEET			TON	TON
		OUTSIDE SHOULDERS - MAIN LANES																											
456+31.40	456+99.80	OUTSIDE SHOULDER - RUBBLIZE NORMAL CROWN LT	68.40	0.068	4.65	25.00	17.10			30.38	230.89	0.03	6.93	10.38	78.89	440.00	17.36	10.25	77.90	330.00	12.85	10.13	76.99	220.00	8.47	10.00	76.00	220.00	8.36	16.83
474+09.20	505+47.10	OUTSIDE SHOULDER - RUBBLIZE NORMAL CROWN LT	3137.90	0.068	213.38	25.00	784.48			30.38	10592.16	0.03	317.76	10.38	3619.04	440.00	796.19	10.25	3573.72	330.00	589.66	10.13	3531.88	220.00	388.51	10.00	3486.56	220.00	383.52	772.03
526+75.40	578+10.00	OUTSIDE SHOULDER - RUBBLIZE NORMAL CROWN LT	5134.60	0.068	349.15	25.00	1283.65			30.38	17332.13	0.03	519.96	10.38	5921.91	440.00	1302.82	10.25	5847.74	330.00	964.88	10.13	5779.28	220.00	635.72	10.00	5705.11	220.00	627.56	1263.28
627+56.03	707+00.00	OUTSIDE SHOULDER - RUBBLIZE NORMAL CROWN LT	7943.97	0.068	540.19	25.00	1985.99			30.38	26815.31	0.03	804.46	10.38	9162.05	440.00	2015.65	10.25	9047.30	330.00	1492.80	10.13	8941.38	220.00	983.55	10.00	8826.63	220.00	970.93	1954.48
707+00.00	711+00.00	OUTSIDE SHOULDER - RUBBLIZE NORMAL CROWN LT	400.00	0.068	27.20	25.00	100.00			30.38	1350.22	0.03	40.51	10.38	461.33	440.00	101.49	10.25	455.56	330.00	75.17	10.13	450.22	220.00	49.52	10.00	444.44	220.00	48.89	98.41
711+00.00	763+58.40	OUTSIDE SHOULDER - RUBBLIZE NORMAL CROWN LT	5258.40	0.068	357.57	25.00	1314.60			30.38	17750.02	0.03	532.50	10.38	6064.69	440.00	1334.23	10.25	5988.73	330.00	988.14	10.13	5918.62	220.00	651.05	10.00	5842.67	220.00	642.69	1293.74
474+09.20	505+74.10	OUTSIDE SHOULDER - RUBBLIZE NORMAL CROWN RT	3164.90	0.068	215.21	25.00	791.23			30.38	10683.30	0.03	320.50	10.38	3650.18	440.00	803.04	10.25	3604.47	330.00	594.74	10.13	3562.27	220.00	391.85	10.00	3516.56	220.00	386.82	778.67
526+75.40	578+10.00	OUTSIDE SHOULDER - RUBBLIZE NORMAL CROWN RT	5134.60	0.068	349.15	25.00	1283.65			30.38	17332.13	0.03	519.96	10.38	5921.91	440.00	1302.82	10.25	5847.74	330.00	964.88	10.13	5779.28	220.00	635.72	10.00	5705.11	220.00	627.56	1263.28
614+01.70	707+00.00	OUTSIDE SHOULDER - RUBBLIZE NORMAL CROWN RT	9298.30	0.068	632.28	25.00	2324.58			30.38	31386.93	0.03	941.61	10.38	10724.04	440.00	2359.29	10.25	10589.73	330.00	1747.31	10.13	10465.75	220.00	1151.23	10.00	10331.44	220.00	1136.46	2287.69
707+00.00	711+00.00	OUTSIDE SHOULDER - RUBBLIZE NORMAL CROWN RT	400.00	0.068	27.20	25.00	100.00			30.38	1350.22	0.03	40.51	10.38	461.33	440.00	101.49	10.25	455.56	330.00	75.17	10.13	450.22	220.00	49.52	10.00	444.44	220.00	48.89	98.41
711+00.00	763+07.64	OUTSIDE SHOULDER - RUBBLIZE NORMAL CROWN RT	5207.64	0.068	354.12	25.00	1301.91			30.38	17578.68	0.03	527.36	10.38	6006.14	440.00	1321.35	10.25	5930.92	330.00	978.60	10.13	5861.49	220.00	644.76	10.00	5786.27	220.00	636.49	1281.25
456+99.80	474+09.20	OUTSIDE SHOULDER - RUBBLIZE SUPER CROWN LT	1709.40	0.068	116.24	25.00	427.35			30.38	5770.17	0.03	173.11	10.38	1971.51	440.00	433.73	10.25	1946.82	330.00	321.23	10.13	1924.02	220.00	211.64	10.00	1899.33	220.00	208.93	420.57
505+47.10	526+75.40	OUTSIDE SHOULDER - RUBBLIZE SUPER CROWN LT	2128.30	0.068	144.72	25.00	532.08			30.38	7184.19	0.03	215.53	10.38	2454.64	440.00	540.02	10.25	2423.90	330.00	399.94	10.13	2395.52	220.00	263.51	10.00	2364.78	220.00	260.13	523.64
578+10.00	613+56.03	OUTSIDE SHOULDER - RUBBLIZE SUPER CROWN LT	3546.03	0.068	241.13	25.00	886.51			30.38	11969.82	0.03	359.09	10.38	4089.75	440.00	899.75	10.25	4038.53	330.00	666.36	10.13	3991.25	220.00	439.04	10.00	3940.03	220.00	433.40	872.44
457+19.31	474+09.20	OUTSIDE SHOULDER - RUBBLIZE SUPER CROWN RT	1689.89	0.068	114.91	25.00	422.47			30.38	5704.32	0.03	171.13	10.38	1949.01	440.00	428.78	10.25	1924.60	330.00	317.56	10.13	1902.07	220.00	209.23	10.00	1877.66	220.00	206.54	415.77
505+47.10	526+75.40	OUTSIDE SHOULDER - RUBBLIZE SUPER CROWN RT	2128.30	0.068	144.72	25.00	532.08			30.38	7184.19	0.03	215.53	10.38	2454.64	440.00	540.02	10.25	2423.90	330.00	399.94	10.13	2395.52	220.00	263.51	10.00	2364.78	220.00	260.13	523.64
578+10.00	614+01.70	OUTSIDE SHOULDER - RUBBLIZE SUPER CROWN RT	3591.70	0.068	244.24	25.00	897.93			30.38	12123.98	0.03	363.72	10.38	4142.43	440.00	911.33	10.25	4090.55	330.00	674.94	10.13	4042.66	220.00	444.69	10.00	3990.78	220.00	438.99	883.68
450+81.40	456+31.40	OUTSIDE SHOULDER - FULL DEPTH NORMAL CROWN LT	550.00	0.043	23.65	34.25	188.38	39.00	214.50	30.38	1856.56	0.03	55.70	10.38	634.33	440.00	139.55	10.25	626.39	330.00	103.35	10.13	619.06	220.00	68.10	10.00	611.11	220.00	67.22	135.32
614+01.70	627+56.03	OUTSIDE SHOULDER - FULL DEPTH NORMAL CROWN LT	1354.33	0.043	58.24	34.25	463.86	39.00	528.19	30.38	4571.62	0.03	137.15	10.38	1561.99	440.00	343.64	10.25	1542.43	330.00	254.50	10.13	1524.37	220.00	167.68	10.00	1504.81	220.00	165.53	333.21
763+58.40	770+08.40	OUTSIDE SHOULDER - FULL DEPTH NORMAL CROWN LT	650.00	0.043	27.95	34.25	222.63	39.00	253.50	30.38	2194.11	0.03	65.82	10.38	749.67	440.00	164.93	10.25	740.28	330.00	122.15	10.13	731.61	220.00	80.48	10.00	722.22	220.00	79.44	159.92
451+69.31	459+99.80	OUTSIDE SHOULDER - FULL DEPTH NORMAL CROWN RT	830.49	0.043	35.71	34.25	284.44	39.00	323.89	30.38	2803.37	0.03	84.10	10.38	957.83	440.00	210.72	10.25	945.84	330.00	156.06	10.13	934.76	220.00	102.82	10.00	922.77	220.00	101.50	204.32
763+07.64	769+57.64	OUTSIDE SHOULDER - FULL DEPTH NORMAL CROWN RT	650.00	0.043	27.95	34.25	222.63	39.00	253.50	30.38	2194.11	0.03	65.82	10.38	749.67	440.00	164.93	10.25	740.28	330.00	122.15	10.13	731.61	220.00	80.48	10.00	722.22	220.00	79.44	159.92
613+56.03	614+01.70	OUTSIDE SHOULDER - FULL DEPTH SUPER CROWN LT	45.67	0.043	1.96	34.25	15.64	39.00	17.81	30.38	154.16	0.03	4.62	10.38	52.67	440.00	11.59	10.25	52.01	330.00	8.58	10.13	51.40	220.00	5.65	10.00	50.74	220.00	5.58	11.23
456+99.80	457+19.31	OUTSIDE SHOULDER - FULL DEPTH SUPER CROWN LT	19.51	0.043	0.84	34.25	6.68	39.00	7.61	30.38	65.86	0.03	1.98	10.38	22.50	440.00	4.95	10.25	22.22	330.00	3.67	10.13	21.96	220.00	2.42	10.00	21.68	220.00	2.38	4.80
		INSIDE SHOULDERS - MAIN LANES																												
456+31.40	456+99.80	INSIDE SHOULDER - RUBBLIZE NORMAL CROWN LT	68.40	0.079	5.40	24.75	16.93			12.38	94.09	0.03	2.82	4.42	33.59	458.00	7.69	4.25	32.30	330.00	5.33	4.13	31.39	220.00	3.45	4.00	30.40	220.00	3.34	6.79
474+09.20	505+47.10	INSIDE SHOULDER - RUBBLIZE NORMAL CROWN LT	3137.90	0.079	247.89	24.75	776.63			12.38	4316.36	0.03	129.49	4.42	1541.06	458.00	352.90	4.25	1481.79	330.00	244.50	4.13	1439.95	220.00	158.39	4.00	1394.62	220.00	153.41	311.80
526+75.40	578+10.00	INSIDE SHOULDER - RUBBLIZE NORMAL CROWN LT	5134.60	0.079	405.63	24.75	1270.81			12.38	7062.93	0.03	211.89	4.42	2521.66	458.00	577.46	4.25	2424.67	330.00	400.07	4.13	2356.21	220.00	259.18	4.00	2282.04	220.00	251.02	510.20
627+56.03	707+00.00	INSIDE SHOULDER - RUBBLIZE NORMAL CROWN LT	7943.97	0.079	627.57	24.75	1966.13			12.38	10927.37	0.03	327.82	4.42	3901.37	458.00	893.41	4.25	3751.32	330.00	618.97	4.13	3645.40	220.00	400.99	4.00	3530.65	220.00	388.37	789.36
707+00.00	711+00.00	INSIDE SHOULDER - RUBBLIZE NORMAL CROWN LT	400.00	0.079	31.60	24.75	99.00			12.38	550.22	0.03	16.51	4.42	196.44	458.00	44.98	4.25	188.89	330.00	31.17	4.13	183.56	220.00	20.19	4.00	177.78	220.00	19.56	39.75
711+00.00	763+58.40	INSIDE SHOULDER - RUBBLIZE NORMAL CROWN LT	5258.40	0.079	415.41	24.75	1301.45			12.38	7233.22	0.03	217.00	4.42	2582.46	458.00	591.38	4.25	2483.13	330.00	409.72	4.13	2413.02	220.00	265.43	4.00	2337.07	220.00	257.08	522.51
474+09.20	505+74.10	INSIDE SHOULDER - RUBBLIZE NORMAL CROWN RT	3164.90	0.079	250.03	24.75	783.31			12.38	4353.50	0.03	130.61	4.42	1554.32	458.00	355.94	4.25	1494.54	330.00	246.60	4.13	1452.34	220.00	159.76	4.00	1406.62	220.00	154.73	314.49
526+75.40	578+10.00	INSIDE SHOULDER - RUBBLIZE NORMAL CROWN RT	5134.60	0.079	405.63	24.75	1270.81			12.38	7062.93	0.03	211.89	4.42	2521.66	458.00	577.46	4.25	2424.67	330.00	400.07	4.13	2356.21	220.00	259.18	4.00	2282.04	220.00	251.02	510.20
614+01.70	707+00.00	INSIDE SHOULDER - RUBBLIZE NORMAL CROWN RT	9298.30	0.079	734.57	24.75	2301.33			12.38	12790.33	0.03	383.71	4.42	4566.50	458.00	1045.73	4.25	4390.86	330.00	724.49	4.13	4266.89	220.00	469.36	4.00	4132.58	220.00	454.58	923.94
707+00.00	711+00.00	INSIDE SHOULDER - RUBBLIZE NORMAL CROWN RT	400.00	0.079	31.60	24.75	99.00			12.38	550.22	0.03	16.51	4.42	196.44	458.00	44.98	4.25	188.89	330.00	31.17	4.13	183.56	220.00	20.19	4.00	177.78	220.00	19.56	39.75
711+00.00	763+07.64	INSIDE SHOULDER - RUBBLIZE NORMAL CROWN RT	5207.64	0.079	411.40	24.75	1288.89			12.38	7163.40	0.03	214.90	4.42	2557.53	458.00	585.67	4.25	2459.16	330.00	405.76	4.13	2389.73	220.00	262.87	4.00	2314.51	220.00	254.60	517.47
456+99.80	474+09.20	INSIDE SHOULDER - RUBBLIZE SUPER CROWN LT	1709.40	0.083	141.88	24.75	423.08			12.38	2351.37	0.03	70.54	4.42	839.51	458.00	192.25	4.25	807.22	330.00	133.19	4.13	784.42	220.00	86.29	4.00	759.73	220.00	83.57	169.86
505+47.10	526+75.40	INSIDE SHOULDER - RUBBLIZE SUPER CROWN LT	2128.30	0.083	176.65	24.75	526.75			12.38	2927.59	0.03	87.83	4.42	1045.23	458.00	239.36	4.25	1005.03	330.00	165.83	4.13	976.65	220.00	107.43	4.00	945.91	220.00	104.05	211.48
578+10.00	613+56.03	INSIDE SHOULDER - RUBBLIZE SUPER CROWN LT	3546.03	0.083	294.32	24.75	877.64			12.38	4877.76	0.03	146.33	4.42	1741.49	458.00	398.80	4.25	1674.51	330.00	276.29	4.13	1627.23	220.00	179.00	4.00	1576.01	220.00	173.36	352.36
457+19.31	474+09.20	INSIDE SHOULDER - RUBBLIZE SUPER CROWN RT	1689.89	0.083	140.26	24.75	418.25			12.38	2324.54	0.03	69.74	4.42	829.92	458.00	190.05	4.25	798.00	330.00	131.67	4.13	775.47	220.00	85.30	4.00	751.06	220.00	82.62	167.92
505+47.10	526+75.40	INSIDE SHOULDER - RUBBLIZE SUPER CROWN RT	2128.30	0.083	176.65	24.75	526.75			12.38	2927.59	0.03	87.83	4.42	1045.23	458.00	239.36	4.25	1005.03	330.00	165.83	4.13	976.65	220.00	107.43	4.00	945.91	220.00	104.05	211.48
578+10.00	614+01.70	INSIDE SHOULDER - RUBBLIZE SUPER CROWN RT	3591.70	0.083	298.11	24.75	888.95			12.38	4940.58	0.03	148.22	4.42	1763.92	458.00	403.94	4.25	1696.08	330.00	279.85	4.13	1648.19	220.00	181.30	4.00	1596.31	220.00	175.59	356.89
450+81.40	456+31.40	INSIDE SHOULDER - FULL DEPTH NORMAL CROWN LT	550.00	0.056	30.80	24.25	133.38	20.25	111.38	12.38	756.56	0.03	22.70	4.42	270.11	440.00	59.42	4.25	259.72	330.00	42.85	4.13	252.39	220.00	27.76	4.00	244.44	220.00	26.89	54.65
614+01.70	627+56.03	INSIDE SHOULDER - FULL DEPTH NORMAL CROWN LT	1354.33	0.056	75.84	24.25	328.43	20.25	274.25	12.38	1862.96	0.03	55.89	4.42	665.13	440.00	146.33	4.25	639.54	330.00	105.52	4.13	621.49	220.00	68.36	4.00	601.92	220.00	66.21	134.57
763+58.40	770+08.40	INSIDE SHOULDER - FULL DEPTH NORMAL CROWN LT	650.00	0.056	36.40	24.25	157.63	20.25	131.63	12.38	894.11	0.03	26.82	4.42	319.22	440.00	70.23	4.25	306.94	330.00	50.65	4.13	298.28	220.00	32.81	4.00	288.89	220.00	31.78	64.59
451+69.31	459+99.80	INSIDE SHOULDER - FULL DEPTH NORMAL CROWN RT	830.49	0.056	46.51	24.25	201.39	20.25	168.17	12.38	1142.39	0.03	34.27	4.42	407.86	440.00	89.73	4.25	392.18	330.00	64.71	4.13	381.10	220.00	41.92	4.00	369.11	220.00	40.60	82.52
763+07.64	769+57.64	INSIDE SHOULDER - FULL DEPTH NORMAL CROWN RT	650.00	0.056	36.40	24.25	157.63	20.25	131.63	12.38	894.11	0.03	26.82	4.42	319.22	440.00	70.23	4.25	306.94	330.00	50.65	4.13	298.28	220.00	32.81	4.00	288.89	220.00	31.78	64.59
613+56.03	614+01.70	INSIDE SHOULDER - FULL DEPTH SUPER CROWN LT	45.67	0.068	3.11	24.25	11.07	20.25	9.25	12.38	62.82	0.03	1.88	4.42	22.43	440.00	4.93	4.25	21.57	330.00	3.56	4.13	20.96	220.00	2.31	4.00	20.30	220.00	2.23	4.54
456+99.80	457+19.31	INSIDE SHOULDER - FULL DEPTH SUPER CROWN LT	19.51	0.068	1.33	24.25	4.73	20.25	3.95	12.38	26.84	0.03	0.81	4.42	9.58	440.00	2.11	4.25	9.21	330.00	1.52	4.13	8.95	220.00	0.98	4.00	8.67	220.00	0.95	1.93
TOTALS:					**9277.35**		**32219.84**		**2429.26**		**304272.24**		**9128.19**		**105314.03**		**23434.01**		**103179.31**		**17024.60**		**101471.51**		**11181.84**		**99621.38**		**10958.33**	**22120.17**

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2").....94.8% MIN. AGGR.....5.2% ASPHALT BINDER
ACHM BINDER COURSE (1").....95.5% MIN. AGGR.....4.5% 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

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
1-30-2015

QUANTITIES

Baker

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB020I	124	186

(2) QUANTITIES

BASE AND SURFACING - MAIN LANES MISC.

STATION	STATION	LOCATION	LENGTH	TACK COAT				ACHM BASE COURSE (1 1/2")			
				AVG. WID.	SQ.YD.	GALLONS / SQ.YD.	GALLON	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 76-22
			FEET	FEET				FEET			TON
		ADDITIONAL FOR LEVELING & SUPERELEVATION CORRECTION									
456+31.40	456+99.80	RUBBLIZE NORMAL CROWN LT - MAIN LANES	68.40	24.00	182.40	0.10	18.24	24.00	182.40	110.00	10.03
474+09.20	505+47.10	RUBBLIZE NORMAL CROWN LT - MAIN LANES	3137.90	24.00	8367.73	0.10	836.77	24.00	8367.73	110.00	460.23
526+75.40	578+10.00	RUBBLIZE NORMAL CROWN LT - MAIN LANES	5134.60	24.00	13692.27	0.10	1369.23	24.00	13692.27	110.00	753.07
627+56.03	707+00.00	RUBBLIZE NORMAL CROWN LT - MAIN LANES	7943.97	24.00	21183.92	0.10	2118.39	24.00	21183.92	110.00	1165.12
707+00.00	711+00.00	RUBBLIZE NORMAL CROWN LT - MAIN LANES FOR W.I.M. SCALE	400.00	24.00	1066.67	0.10	106.67	24.00	1066.67	110.00	58.67
711+00.00	763+58.40	RUBBLIZE NORMAL CROWN LT - MAIN LANES	5258.40	24.00	14022.40	0.10	1402.24	24.00	14022.40	110.00	771.23
474+09.20	505+74.10	RUBBLIZE NORMAL CROWN RT - MAIN LANES	3164.90	24.00	8439.73	0.10	843.97	24.00	8439.73	110.00	464.19
526+75.40	578+10.00	RUBBLIZE NORMAL CROWN RT - MAIN LANES	5134.60	24.00	13692.27	0.10	1369.23	24.00	13692.27	110.00	753.07
614+01.70	707+00.00	RUBBLIZE NORMAL CROWN RT - MAIN LANES	9298.30	24.00	24795.47	0.10	2479.55	24.00	24795.47	110.00	1363.75
707+00.00	711+00.00	RUBBLIZE NORMAL CROWN RT - MAIN LANES FOR W.I.M. SCALE	400.00	24.00	1066.67	0.10	106.67	24.00	1066.67	110.00	58.67
711+00.00	763+07.64	RUBBLIZE SUPER CROWN LT - MAIN LANES	5207.64	24.00	13887.04	0.10	1388.70	24.00	13887.04	110.00	763.79
456+99.80	474+09.20	RUBBLIZE SUPER CROWN LT - MAIN LANES	1709.40	24.00	4558.40	0.10	455.84	24.00	4558.40	110.00	250.71
505+47.10	526+75.40	RUBBLIZE SUPER CROWN LT - MAIN LANES	2128.30	24.00	5675.47	0.10	567.55	24.00	5675.47	110.00	312.15
578+10.00	613+56.03	RUBBLIZE SUPER CROWN LT - MAIN LANES	3546.03	24.00	9456.08	0.10	945.61	24.00	9456.08	110.00	520.08
457+19.31	474+09.20	RUBBLIZE SUPER CROWN RT - MAIN LANES	1689.89	24.00	4506.37	0.10	450.64	24.00	4506.37	110.00	247.85
505+47.10	526+75.40	RUBBLIZE SUPER CROWN RT - MAIN LANES	2128.30	24.00	5675.47	0.10	567.55	24.00	5675.47	110.00	312.15
578+10.00	614+01.70	RUBBLIZE SUPER CROWN RT - MAIN LANES	3591.70	24.00	9577.87	0.10	957.79	24.00	9577.87	110.00	526.78
450+81.40	456+31.40	FULL DEPTH NORMAL CROWN LT - MAIN LANES	550.00	24.00	1466.67	0.10	146.67	24.00	1466.67	110.00	80.67
614+01.70	627+56.03	FULL DEPTH NORMAL CROWN LT - MAIN LANES	1354.33	24.00	3611.55	0.10	361.16	24.00	3611.55	110.00	198.64
763+58.40	770+08.40	FULL DEPTH NORMAL CROWN LT - MAIN LANES	650.00	24.00	1733.33	0.10	173.33	24.00	1733.33	110.00	95.33
451+69.31	459+99.80	FULL DEPTH NORMAL CROWN RT - MAIN LANES	830.49	24.00	2214.64	0.10	221.46	24.00	2214.64	110.00	121.81
763+07.64	769+57.64	FULL DEPTH NORMAL CROWN RT - MAIN LANES	650.00	24.00	1733.33	0.10	173.33	24.00	1733.33	110.00	95.33
613+56.03	614+01.70	FULL DEPTH SUPER CROWN LT - MAIN LANES	45.67	24.00	121.79	0.10	12.18	24.00	121.79	110.00	6.70
456+99.80	457+19.31	FULL DEPTH SUPER CROWN LT - MAIN LANES	19.51	24.00	52.03	0.10	5.20	24.00	52.03	110.00	2.86
		OUTSIDE SHOULDERS - MAIN LANES									
456+31.40	456+99.80	OUTSIDE SHOULDER - RUBBLIZE NORMAL CROWN LT	68.40	10.38	78.89	0.10	7.89	10.38	78.89	110.00	4.34
474+09.20	505+47.10	OUTSIDE SHOULDER - RUBBLIZE NORMAL CROWN LT	3137.90	10.38	3619.04	0.10	361.90	10.38	3619.04	110.00	199.05
526+75.40	578+10.00	OUTSIDE SHOULDER - RUBBLIZE NORMAL CROWN LT	5134.60	10.38	5921.91	0.10	592.19	10.38	5921.91	110.00	325.71
627+56.03	707+00.00	OUTSIDE SHOULDER - RUBBLIZE NORMAL CROWN LT	7943.97	10.38	9162.05	0.10	916.21	10.38	9162.05	110.00	503.91
707+00.00	711+00.00	OUTSIDE SHOULDER - RUBBLIZE NORMAL CROWN LT FOR W.I.M. SCALE	400.00	10.38	461.33	0.10	46.13	10.38	461.33	110.00	25.37
711+00.00	763+58.40	OUTSIDE SHOULDER - RUBBLIZE NORMAL CROWN LT	5258.40	10.38	6064.69	0.10	606.47	10.38	6064.69	110.00	333.56
474+09.20	505+74.10	OUTSIDE SHOULDER - RUBBLIZE NORMAL CROWN RT	3164.90	10.38	3650.18	0.10	365.02	10.38	3650.18	110.00	200.76
526+75.40	578+10.00	OUTSIDE SHOULDER - RUBBLIZE NORMAL CROWN RT	5134.60	10.38	5921.91	0.10	592.19	10.38	5921.91	110.00	325.71
614+01.70	707+00.00	OUTSIDE SHOULDER - RUBBLIZE NORMAL CROWN RT	9298.30	10.38	10724.04	0.10	1072.40	10.38	10724.04	110.00	589.82
707+00.00	711+00.00	OUTSIDE SHOULDER - RUBBLIZE NORMAL CROWN RT FOR W.I.M. SCALE	400.00	10.38	461.33	0.10	46.13	10.38	461.33	110.00	25.37
711+00.00	763+07.64	OUTSIDE SHOULDER - RUBBLIZE NORMAL CROWN RT	5207.64	10.38	6006.14	0.10	600.61	10.38	6006.14	110.00	330.34
456+99.80	474+09.20	OUTSIDE SHOULDER - RUBBLIZE SUPER CROWN LT	1709.40	10.38	1971.51	0.10	197.15	10.38	1971.51	110.00	108.43
505+47.10	526+75.40	OUTSIDE SHOULDER - RUBBLIZE SUPER CROWN LT	2128.30	10.38	2454.64	0.10	245.46	10.38	2454.64	110.00	135.01
578+10.00	613+56.03	OUTSIDE SHOULDER - RUBBLIZE SUPER CROWN LT	3546.03	10.38	4089.75	0.10	408.98	10.38	4089.75	110.00	224.94
457+19.31	474+09.20	OUTSIDE SHOULDER - RUBBLIZE SUPER CROWN RT	1689.89	10.38	1949.01	0.10	194.90	10.38	1949.01	110.00	107.20
505+47.10	526+75.40	OUTSIDE SHOULDER - RUBBLIZE SUPER CROWN RT	2128.30	10.38	2454.64	0.10	245.46	10.38	2454.64	110.00	135.01
578+10.00	614+01.70	OUTSIDE SHOULDER - RUBBLIZE SUPER CROWN RT	3591.70	10.38	4142.43	0.10	414.24	10.38	4142.43	110.00	227.83
450+81.40	456+31.40	OUTSIDE SHOULDER - FULL DEPTH NORMAL CROWN LT	550.00	10.38	634.33	0.10	63.43	10.38	634.33	110.00	34.89
614+01.70	627+56.03	OUTSIDE SHOULDER - FULL DEPTH NORMAL CROWN LT	1354.33	10.38	1561.99	0.10	156.20	10.38	1561.99	110.00	85.91
763+58.40	770+08.40	OUTSIDE SHOULDER - FULL DEPTH NORMAL CROWN LT	650.00	10.38	749.67	0.10	74.97	10.38	749.67	110.00	41.23
451+69.31	459+99.80	OUTSIDE SHOULDER - FULL DEPTH NORMAL CROWN RT	830.49	10.38	957.83	0.10	95.78	10.38	957.83	110.00	52.68
763+07.64	769+57.64	OUTSIDE SHOULDER - FULL DEPTH NORMAL CROWN RT	650.00	10.38	749.67	0.10	74.97	10.38	749.67	110.00	41.23
613+56.03	614+01.70	OUTSIDE SHOULDER - FULL DEPTH SUPER CROWN LT	45.67	10.38	52.67	0.10	5.27	10.38	52.67	110.00	2.90
456+99.80	457+19.31	OUTSIDE SHOULDER - FULL DEPTH SUPER CROWN LT	19.51	10.38	22.50	0.10	2.25	10.38	22.50	110.00	1.24
		INSIDE SHOULDERS - MAIN LANES									
456+31.40	456+99.80	INSIDE SHOULDER - RUBBLIZE NORMAL CROWN LT	68.40	4.42	33.59	0.10	3.36	4.42	33.59	110.00	1.85
474+09.20	505+47.10	INSIDE SHOULDER - RUBBLIZE NORMAL CROWN LT	3137.90	4.42	1541.06	0.10	154.11	4.42	1541.06	110.00	84.76
526+75.40	578+10.00	INSIDE SHOULDER - RUBBLIZE NORMAL CROWN LT	5134.60	4.42	2521.66	0.10	252.17	4.42	2521.66	110.00	138.69
627+56.03	707+00.00	INSIDE SHOULDER - RUBBLIZE NORMAL CROWN LT FOR W.I.M. SCALE	7943.97	4.42	3901.37	0.10	390.14	4.42	3901.37	110.00	214.58
707+00.00	711+00.00	INSIDE SHOULDER - RUBBLIZE NORMAL CROWN LT	400.00	4.42	196.44	0.10	19.64	4.42	196.44	110.00	10.80
711+00.00	763+58.40	INSIDE SHOULDER - RUBBLIZE NORMAL CROWN LT	5258.40	4.42	2582.46	0.10	258.25	4.42	2582.46	110.00	142.04
474+09.20	505+74.10	INSIDE SHOULDER - RUBBLIZE NORMAL CROWN LT	3164.90	4.42	1554.32	0.10	155.43	4.42	1554.32	110.00	85.49
526+75.40	578+10.00	INSIDE SHOULDER - RUBBLIZE NORMAL CROWN RT	5134.60	4.42	2521.66	0.10	252.17	4.42	2521.66	110.00	138.69
614+01.70	707+00.00	INSIDE SHOULDER - RUBBLIZE NORMAL CROWN RT	9298.30	4.42	4566.50	0.10	456.65	4.42	4566.50	110.00	251.16
707+00.00	711+00.00	INSIDE SHOULDER - RUBBLIZE NORMAL CROWN RT FOR W.I.M. SCALE	400.00	4.42	196.44	0.10	19.64	4.42	196.44	110.00	10.80
711+00.00	763+07.64	INSIDE SHOULDER - RUBBLIZE NORMAL CROWN RT	5207.64	4.42	2557.53	0.10	255.75	4.42	2557.53	110.00	140.66
456+99.80	474+09.20	INSIDE SHOULDER - RUBBLIZE SUPER CROWN LT	1709.40	4.42	839.51	0.10	83.95	4.42	839.51	110.00	46.17
505+47.10	526+75.40	INSIDE SHOULDER - RUBBLIZE SUPER CROWN LT	2128.30	4.42	1045.23	0.10	104.52	4.42	1045.23	110.00	57.49
578+10.00	613+56.03	INSIDE SHOULDER - RUBBLIZE SUPER CROWN LT	3546.03	4.42	1741.49	0.10	174.15	4.42	1741.49	110.00	95.78
457+19.31	474+09.20	INSIDE SHOULDER - RUBBLIZE SUPER CROWN RT	1689.89	4.42	829.92	0.10	82.99	4.42	829.92	110.00	45.65
505+47.10	526+75.40	INSIDE SHOULDER - RUBBLIZE SUPER CROWN RT	2128.30	4.42	1045.23	0.10	104.52	4.42	1045.23	110.00	57.49
578+10.00	614+01.70	INSIDE SHOULDER - RUBBLIZE SUPER CROWN RT	3591.70	4.42	1763.92	0.10	176.39	4.42	1763.92	110.00	97.02
450+81.40	456+31.40	INSIDE SHOULDER - FULL DEPTH NORMAL CROWN LT	550.00	4.42	270.11	0.10	27.01	4.42	270.11	110.00	14.86
614+01.70	627+56.03	INSIDE SHOULDER - FULL DEPTH NORMAL CROWN LT	1354.33	4.42	665.13	0.10	66.51	4.42	665.13	110.00	36.58
763+58.40	770+08.40	INSIDE SHOULDER - FULL DEPTH NORMAL CROWN LT	650.00	4.42	319.22	0.10	31.92	4.42	319.22	110.00	17.56
451+69.31	459+99.80	INSIDE SHOULDER - FULL DEPTH NORMAL CROWN RT	830.49	4.42	407.86	0.10	40.79	4.42	407.86	110.00	22.43
763+07.64	769+57.64	INSIDE SHOULDER - FULL DEPTH NORMAL CROWN RT	650.00	4.42	319.22	0.10	31.92	4.42	319.22	110.00	17.56
613+56.03	614+01.70	INSIDE SHOULDER - FULL DEPTH SUPER CROWN LT	45.67	4.42	22.43	0.10	2.24	4.42	22.43	110.00	1.23
456+99.80	457+19.31	INSIDE SHOULDER - FULL DEPTH SUPER CROWN LT	19.51	4.42	9.58	0.10	0.96	4.42	9.58	110.00	0.53
TOTALS:					**276093.60**		**27609.35**		**276093.60**		**15185.19**

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2").....94.8% MIN. AGGR.....5.2% ASPHALT BINDER
ACHM BINDER COURSE (1").....95.5% MIN. AGGR.....4.5% 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

STRUCTURES

STATION	DESCRIPTION	TEMPORARY CULVERTS			* MODIFYING DROP INLET	SOLID SODDING	WATER
		12"	18"	24"			
		LIN. FT.			EACH	SQ.YD.	M.GAL
142+67	HWY. 104 TEMP. RAMP 3		381				
450+55	LT. - L.M.L.				1		
450+79	RT. - L.M.L.				1		
451+42	LT. - R.M.L.				1		
451+66	RT. - R.M.L.				1		
438+84	CENTER OF MEDIAN		473				
457+00	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
459+00	CENTER OF MEDIAN		213				
462+50	DROP INLET @ CENTERLINE MEDIAN				2	1.78	0.02
462+77	CENTER OF MEDIAN		164				
462+86	CENTER OF MEDIAN		262				
469+00	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
476+00	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
132+85	TEMP. RAMP 2		207				
486+00	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
495+00	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
517+00	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
524+00	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
529+80	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
535+50	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
543+00	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
550+00	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
557+65	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
576+00	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
582+00	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
589+00	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
602+00	CULVERT IN MEDIAN		762				
610+00	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
610+44	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
614+00	RAMP 4			62			
154+60	TEMP. RAMP 1	143					
610+38	CULVERT IN MEDIAN		253				
611+00	RAMP 1		38				
182+47	TEMP. RAMP 3	190					
174+35	TEMP. RAMP 2	115					
618+00	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
626+00	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
628+00	EXT. CULVERT		60				
629+98	CULVERT IN MEDIAN		357				
633+00	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
633+36	CULVERT IN MEDIAN		624				
640+00	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
651+00	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
660+60	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
668+00	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
671+50	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
685+00	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
693+00	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
700+75	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
706+30	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
712+00	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
724+40	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
746+00	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
196+00	TEMP. RAMP 1	315					
753+00	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
758+00	CULVERT IN MEDIAN		439				
753+00	CENTER OF MEDIAN		496				
760+00	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
768+00	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
766+80	DROP INLET @ CENTERLINE MEDIAN					1.78	0.02
775+87	CENTER OF MEDIAN		473				
TOTALS:		**763**	**5202**	**62**	**6**	**65.86**	**0.74**

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

PORTLAND CEMENT CONCRETE PAVEMENT PATCHING

LOCATION	REMOVAL & DISPOSAL OF CONCRETE PAVEMENT FOR PATCHING *	PORTLAND CEMENT CONCRETE PAVEMENT PATCHING (10" U.T.) *
	SQ. YD.	
ENTIRE PROJECT - TO BE USED IF AND WHERE	152	152
DIRECTED BY THE ENGINEER		
TOTALS:	**152**	**152**

* QUANTITY ESTIMATED. SEE SECTION 104.03 OF THE STD. SPECS. PORTLAND CEMENT CONCRETE PAVEMENT PATCHING SHALL BE DONE AT LOCATIONS DESIGNATED BY THE ENGINEER.

SCARIFYING CONCRETE PAVEMENT

STATION	STATION	LOCATION	AVG. WIDTH	SCARIFYING CONCRETE PAVEMENT
			FEET	SQ. YD.
446+38.08	447+38.08	L.M.L	24	266.67
447+26.09	448+26.09	R.M.L.	24	266.67
TOTAL:				**533.34**

RUMBLE STRIPS IN SHOULDERS

STATION	STATION	LOCATION	* RUMBLE STRIPS IN ASPHALT SHOULDERS	* RUMBLE STRIPS IN PORTLAND CEMENT CONCRETE SHOULDERS
			LIN.FT.	LIN.FT.
451+69	769+94	RT. - R.M.L.	31825	
707+00	711+00	RT. - R.M.L. FOR W.I.M. SCALE	400	
711+00	769+94	RT. - R.M.L.	5894	
451+44	770+09	LT. - R.M.L.	31865	
707+00	711+00	LT. - R.M.L. FOR W.I.M. SCALE	400	
711+00	770+09	LT. - R.M.L.	5909	
450+56	770+45	LT. - L.M.L.	31989	
707+00	711+00	LT. - L.M.L. FOR W.I.M. SCALE	400	
711+00	770+45	LT. - L.M.L.	5945	
450+81	770+59	RT. - L.M.L.	31978	
707+00	711+00	RT. - L.M.L. FOR W.I.M. SCALE	400	
711+00	770+59	RT. - L.M.L.	5959	
455+85	462+88	104 RAMP 2 - LT.	703	
455+85	462+88	104 RAMP 2 - RT.	703	
452+46	459+53	104 RAMP 3 - LT.	707	
452+46	459+53	104 RAMP 3 - RT.	707	
608+23	615+33	GPR RAMP 1 - LT.	710	
608+23	615+33	GPR RAMP 1 - RT.	710	
623+37	630+85	GPR RAMP 2 - LT.	748	
623+37	630+85	GPR RAMP 2 - RT.	748	
625+47	632+01	GPR RAMP 3 - LT.	654	
625+47	632+01	GPR RAMP 3 - RT.	654	
611+28	619+30	GPR RAMP 4 - LT.	802	
611+28	619+30	GPR RAMP 4 - RT.	802	
760+15	767+31	STAGECOACH RAMP 1 - LT.	716	
760+15	767+31	STAGECOACH RAMP 1 - RT.	716	
760+33	766+70	STAGECOACH RAMP 4 - LT.	637	
760+33	766+70	STAGECOACH RAMP 4 - RT.	637	
772+28	782+53	RT. OF L.M.L.		1025
771+91	782+53	LT. OF R.M.L.		1062
436+91	447+68	RT. OF L.M.L.	1077	
436+91	448+21	LT. OF R.M.L.	1130	
TOTAL:			**166525**	**2087**

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

ACHM PATCHING OF EXISTING ROADWAY

LOCATION	ACHM PATCHING OF EXIST.
	TONS
ENTIRE PROJECT - TO BE USED IF AND WHERE	150
DIRECTED BY THE ENGINEER	
TOTALS:	**150**

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

SELECTED PIPE BEDDING

LOCATION	SELECTED PIPE BEDDING
	CU.YD.
ENTIRE PROJECT TO BE USED IF	
AND WHERE DIRECTED BY THE	390
ENGINEER	
TOTAL:	**390**

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

ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC

LOCATION	TON	TACK COAT
		GALLON
ENTIRE PROJECT - TO BE USED IF AND WHERE	150	300
DIRECTED BY THE ENGINEER		
TOTALS:	**150**	**300**

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

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
1-30-2015

QUANTITIES

Baker

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	125	186

(2) QUANTITIES

CROSSOVER & TEMP. ACCEL. LANE - BASE & SURFACING

STATION	STATION	LOCATION	LENGTH	TACK COAT 0.03 GAL. PER SQ. YD.			ACHM BASE COURSE (1-1/2")				ACHM BINDER COURSE (1")				ACHM SURFACE COURSE (1/2")			
				TOTAL WID.	SQ. YD.	GALLONS	AVG. WID.	SQ. YD.	POUND /	PG 76-22	AVG. WID.	SQ. YD.	POUND /	PG 76-22	AVG. WID.	SQ. YD.	POUND /	PG 76-22
			FT.	FEET			FEET		SQ.YD.	TON	FEET		SQ.YD.	TON	FEET		SQ.YD.	TON
463+19.25	478+53.64	TEMP. ACCEL. LANE - RT. - L.M.L. *	1384.39				13.30	2045.82	880.00	900.16					12.00	1845.85	220.00	203.04
631+45.24	647+00.57	TEMP. ACCEL. LANE - RT. - L.M.L. *	1405.33				13.30	2076.77	880.00	913.78					12.00	1873.77	220.00	206.11
594+90.15	610+80.21	TEMP. ACCEL. LANE - LT. - R.M.L. *	1440.06				13.70	2192.09	880.00	964.52					12.00	1920.08	220.00	211.21
745+18.63	759+82.73	TEMP. ACCEL. LANE - LT. - R.M.L. *	1314.10				13.70	2000.35	880.00	880.15					12.00	1752.13	220.00	192.73
11+80.21	16+73.13	CROSSOVER 1A	492.92	59.80	3275.18	98.26	32.30	1769.04	1100.00	972.97	27.50	1506.14	330.00	248.51	25.00	1369.22	220.00	150.61
21+80.21	23+76.29	CROSSOVER 1B	196.08	59.80	1302.84	39.09	32.30	703.71	1100.00	387.04	27.50	599.13	330.00	98.86	25.00	544.67	220.00	59.91
24+29.47	29+53.75	CROSSOVER 1B	224.28	59.80	1490.22	44.71	32.30	804.92	1100.00	442.71	27.50	685.30	330.00	113.07	25.00	623.00	220.00	68.53
131+39.60	133+76.98	HWY. 104 TEMP RAMP 2	237.38	29.20	770.17	23.11	29.20	770.17	935.00	360.05					25.00	659.39	220.00	72.53
134+82.10	135+92.20	HWY. 104 TEMP RAMP 2	110.10	29.20	357.21	10.72	29.20	357.21	935.00	167.00					25.00	305.83	220.00	33.64
136+68.55	136+69.14	HWY. 104 TEMP RAMP 2	0.59	29.20	1.91	0.06	29.20	1.91	935.00	0.89					25.00	1.64	220.00	0.18
141+27.66	144+99.05	HWY. 104 TEMP RAMP 3	371.39	29.20	1204.95	36.15	29.20	1204.95	935.00	563.31					25.00	1031.64	220.00	113.48
145+86.26	147+74.48	HWY. 104 TEMP RAMP 3	188.22	29.20	610.67	18.32	29.20	610.67	935.00	285.49					25.00	522.83	220.00	57.51
33+25.57	35+21.48	CROSSOVER 2A	195.91	59.80	1301.71	39.05	32.30	703.10	1100.00	386.71	27.50	598.61	330.00	98.77	25.00	544.19	220.00	59.86
43+06.72	45+75.49	CROSSOVER 2B	268.77	59.80	1785.83	53.57	32.30	964.59	1100.00	530.52	27.50	821.24	330.00	135.50	25.00	746.58	220.00	82.12
51+37.18	54+63.25	CROSSOVER 3A	326.07	59.80	2166.55	65.00	32.30	1170.23	1100.00	643.63	27.50	996.33	330.00	164.39	25.00	905.75	220.00	99.63
61+39.63	63+09.09	CROSSOVER 3B	169.46	59.80	1125.97	33.78	32.30	608.17	1100.00	334.49	27.50	517.79	330.00	85.44	25.00	470.72	220.00	51.78
151+18.07	151+46.03	GRAVEL PIT RD. TEMP. RAMP 1	27.96	29.20	90.71	2.72	29.20	90.71	935.00	42.41					25.00	77.67	220.00	8.54
152+18.61	152+77.12	GRAVEL PIT RD. TEMP. RAMP 1	58.51	29.20	189.83	5.69	29.20	189.83	935.00	88.75					25.00	162.53	220.00	17.88
153+81.65	157+20.02	GRAVEL PIT RD. TEMP. RAMP 1	338.37	29.20	1097.82	32.93	29.20	1097.82	935.00	513.23					25.00	939.92	220.00	103.39
160+80.31	162+48.55	GRAVEL PIT RD. TEMP. RAMP 4	168.24	29.20	545.85	16.38	29.20	545.85	935.00	255.18					25.00	467.33	220.00	51.41
163+22.31	167+69.24	GRAVEL PIT RD. TEMP. RAMP 4	446.93	29.20	1450.04	43.50	29.20	1450.04	935.00	677.89					25.00	1241.47	220.00	136.56
171+10.37	174+89.84	GRAVEL PIT RD. TEMP. RAMP 2	379.47	29.20	1231.17	36.94	29.20	1231.17	935.00	575.57					25.00	1054.08	220.00	115.95
175+59.07	176+67.61	GRAVEL PIT RD. TEMP. RAMP 2	107.64	29.20	349.23	10.48	29.20	349.23	935.00	163.27					25.00	299.00	220.00	32.89
177+22.18	177+53.64	GRAVEL PIT RD. TEMP. RAMP 2	31.46	29.20	102.07	3.06	29.20	102.07	935.00	47.72					25.00	87.39	220.00	9.61
181+27.63	183+40.83	GRAVEL PIT RD. TEMP. RAMP 3	213.20	29.20	691.72	20.75	29.20	691.72	935.00	323.38					25.00	592.22	220.00	65.14
184+19.35	186+27.94	GRAVEL PIT RD. TEMP. RAMP 3	208.59	29.20	676.76	20.30	29.20	676.76	935.00	316.39					25.00	579.42	220.00	63.74
72+92.87	75+69.02	CROSSOVER 4A	276.15	59.80	1834.86	55.05	32.30	991.07	1100.00	545.09	27.50	843.79	330.00	139.23	25.00	767.08	220.00	84.38
84+05.09	85+58.58	CROSSOVER 4B	153.49	59.80	1019.86	30.60	32.30	550.86	1100.00	302.97	27.50	469.00	330.00	77.39	25.00	426.36	220.00	46.90
91+27.57	93+14.80	CROSSOVER 5A	187.03	59.80	1242.71	37.28	32.30	671.23	1100.00	369.18	27.50	571.48	330.00	94.29	25.00	519.53	220.00	57.15
101+27.57	102+70.71	CROSSOVER 5B	143.14	59.80	951.09	28.53	32.30	513.71	1100.00	282.54	27.50	437.37	330.00	72.17	25.00	397.61	220.00	43.74
191+27.57	192+60.42	STAGECOACH RD. TEMP RAMP 1	132.85	29.20	431.02	12.93	29.20	431.02	935.00	201.50					25.00	369.03	220.00	40.59
194+26.84	197+58.24	STAGECOACH RD. TEMP RAMP 1	331.40	29.20	1075.21	32.26	29.20	1075.21	935.00	502.66					25.00	920.56	220.00	101.26
200+98.25	201+16.05	STAGECOACH RD. TEMP RAMP 4	17.80	29.20	57.75	1.73	29.20	57.75	935.00	27.00					25.00	49.44	220.00	5.44
201+73.13	202+99.39	STAGECOACH RD. TEMP RAMP 4	126.26	29.20	409.64	12.29	29.20	409.64	935.00	191.51					25.00	350.72	220.00	38.58
203+85.50	206+21.86	STAGECOACH RD. TEMP RAMP 4	236.36	29.20	766.86	23.01	29.20	766.86	935.00	358.51					25.00	656.56	220.00	72.22
111+31.17	116+04.72	CROSSOVER 6A	473.55	59.80	3146.48	94.39	32.30	1699.52	1100.00	934.74	27.50	1446.96	330.00	238.75	25.00	1315.42	220.00	144.70
120+97.76	123+20.14	CROSSOVER 6B	222.38	59.80	1477.59	44.33	32.30	798.10	1100.00	438.96	27.50	679.49	330.00	112.12	25.00	617.72	220.00	67.95
124+08.78	125+90.68	CROSSOVER 6B	181.90	59.80	1208.62	36.26	32.30	652.82	1100.00	359.05	27.50	555.81	330.00	91.71	25.00	505.28	220.00	55.58
TOTALS:					35440.10	1063.23		33026.69		16250.92		10728.44		1770.20		27513.63		3026.47

BASIS OF ESTIMATE:
TACK COAT - AS SHOWN ABOVE
ACHM SURFACE COURSE (1/2").....94.8% MIN. AGGR.....5.2% ASPHALT BINDER
ACHM BINDER COURSE (1").....95.5% MIN. AGGR.....4.5% 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
* TEMP. ACCEL. LANE & TAPER LENGTH CALCULATION REMOVES 150' FROM THE STATION DIFFERENCE TO ACCOUNT FOR HALF THE 300' TAPER WIDTH

SHOULDER RECONSTRUCTION

STATION	STATION	LOCATION	LENGTH	TRENCHING AND SHOULDER PREP			ACHM BASE COURSE (1-1/2")				ACHM BINDER COURSE (1")				ACHM SURFACE COURSE (1/2")				TACK COAT 0.03 GAL. PER SQ. YD.			
				AVG. WID.			AVG. WID.	SQ. YD.	POUND /	PG 76-22	AVG. WID.	SQ. YD.	POUND /	PG 76-22	AVG. WID.	SQ. YD.	POUND /	PG 76-22	TOTAL WID.	SQ. YD.	GALLONS	TOTAL GALLONS
			FEET	FEET	STA.		FEET		SQ.YD.	TON	FEET		SQ.YD.	TON	FEET		SQ.YD.	TON	FEET			
444+57.26	447+63.72	RT. - L.M.L. (FOR MOT)	306.46	6.00	3.06		6.00	204.31	1100.00	112.37	6.00	204.31	330.00	33.71	6.00	204.31	220.00	22.47	12.00	408.61	12.26	12.26
444+71.15	448+26.59	LT. - R.M.L. (FOR MOT)	355.44	6.00	3.55		6.00	236.96	1100.00	130.33	6.00	236.96	330.00	39.10	6.00	236.96	220.00	26.07	12.00	473.92	14.22	14.22
450+81.40	770+08.40	RT. - L.M.L. (FOR MOT)	31927.00	6.00	319.27		6.00	21284.67	1100.00	11706.57	6.00	21284.67	330.00	3511.97	6.00	21284.67	220.00	2341.31	12.00	42569.33	1277.08	1277.08
455+85.35	459+13.36	HWY. 104 RAMP 2 RT	328.01	6.00	3.28										6.00	218.67	220.00	24.05				
455+85.35	459+13.36	HWY. 104 RAMP 2 LT	328.01	4.00	3.28										4.00	145.78	220.00	16.04				
452+46.32	456+27.03	HWY. 104 RAMP 3 RT	380.71	4.00	3.81										4.00	169.20	220.00	18.61				
452+46.32	456+27.03	HWY. 104 RAMP 3 LT	380.71	6.00	3.81										6.00	253.81	220.00	27.92				
611+76.36	615+32.66	GRAVEL PIT ROAD RAMP 1 RT	356.30	6.00	3.56										6.00	237.53	220.00	26.13				
611+76.36	615+32.66	GRAVEL PIT ROAD RAMP 1 LT	356.30	4.00	3.56										4.00	158.36	220.00	17.42				
614+58.53	619+30.38	GRAVEL PIT ROAD RAMP 4 RT	471.85	4.00	4.72										4.00	209.71	220.00	23.07				
614+58.53	619+30.38	GRAVEL PIT ROAD RAMP 4 LT	471.85	6.00	4.72										6.00	314.57	220.00	34.60				
623+36.83	627+46.77	GRAVEL PIT ROAD RAMP 2 RT	409.94	6.00	4.10										6.00	273.29	220.00	30.06				
623+36.83	627+46.77	GRAVEL PIT ROAD RAMP 2 LT	409.94	4.00	4.10										4.00	182.20	220.00	20.04				
625+47.36	628+51.32	GRAVEL PIT ROAD RAMP 3 RT	303.96	4.00	3.04										4.00	135.09	220.00	14.86				
625+47.36	628+51.32	GRAVEL PIT ROAD RAMP 3 LT	303.96	6.00	3.04										6.00	202.64	220.00	22.29				
763+61.99	767+30.82	STAGECOACH ROAD RAMP 1 RT	368.83	6.00	3.69										6.00	245.89	220.00	27.05				
763+61.99	767+30.82	STAGECOACH ROAD RAMP 1 LT	368.83	4.00	3.69										4.00	163.92	220.00	18.03				
763+89.97	766+69.63	STAGECOACH ROAD RAMP 4 RT	279.66	4.00	2.80										4.00	124.29	220.00	13.67				
763+89.97	766+69.63	STAGECOACH ROAD RAMP 4 LT	279.66	6.00	2.80										6.00	186.44	220.00	20.51				
TOTALS:					383.88			21725.94		11949.27		21725.94		3584.78		24947.33		2744.20			1303.56	1303.56

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2").....94.8% MIN. AGGR.....5.2% ASPHALT BINDER
ACHM BINDER COURSE (1").....95.5% MIN. AGGR.....4.5% 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

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
SCOTT P. THORNSBERRY
No.10887
1-30-2015

QUANTITIES

Baker

Scott.Thornsberry 1/30/2015 3:33:48 PM
WORKSPACE: scott.thornsberry
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DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
3-2-15				2	ARK.			
				JOB NO.		BB0201	126	186

(2) QUANTITIES

RUBBLIZING & REMOVAL OF PORTLAND AND ASHPALT CEMENT CONCRETE PAVEMENTS

STATION	STATION	LOCATION	LENGTH	# REMOVAL OF EXISTING ASPHALT OVERLAY		REMOVAL OF EXISTING PORTLAND CEMENT CONCRETE PAVEMENT		RUBBLIZING PORTLAND CEMENT CONCRETE PAVEMENT		* REMOVAL OF EXISTING P.C. STABILIZED BASE (6" U.T.)		*** SOIL STABILIZATION
				WIDTH	SQ. YD.	WIDTH	SQ. YD.	WIDTH	SQ. YD.	WIDTH	CU. YD.	
			LIN. FT.	FEET		FEET		FEET		FEET		TON
450+81.40	456+31.40	FULL DEPTH MAIN LANE LT & SHOULDERS	550.00	42.00	2566.67	24.00	1466.67			38.00	387.04	96.80
451+69.31	457+19.31	FULL DEPTH MAIN LANE RT & SHOULDERS	550.00	40.00	2444.44	24.00	1466.67			38.00	387.04	96.80
456+31.40	613+56.03	RUBBLIZE & OVERLAY MAIN LANE LT	15724.63	42.00	73381.61			24.00	41932.35			
457+19.31	763+58.40	RUBBLIZE & OVERLAY MAIN LANE RT	30639.09	40.00	136173.73			24.00	81704.24			
613+56.03	627+56.03	FULL DEPTH MAIN LANE LT	1400.00	42.00	6533.33	24.00	3733.33			38.00	985.19	246.40
627+56.03	763+07.64	RUBBLIZE & OVERLAY MAIN LANE LT	13551.61	42.00	63240.85			24.00	36137.63			
763+58.40	770+08.40	FULL DEPTH MAIN LANE LT	650.00	42.00	3033.33	24.00	1733.33			38.00	457.41	114.40
763+07.64	769+57.64	FULL DEPTH MAIN LANE RT	650.00	40.00	2888.89	24.00	1733.33			38.00	457.41	114.40
457+88.40	464+18.89	LT ENTRANE LANE TAPER & RETURN	630.50	10.10	707.56			10.10	707.56			
462+84.24	464+39.01	RT ENTRANCE LANE TAPER TO ACCEL LANE	154.80	14.20	244.24			14.20	244.24			
464+39.01	472+84.24	RT LANE ACCELERATION LANE & TAPER **	695.20	12.00	926.93			12.00	926.93			
604+19.20	610+43.93	RT EXIT LANE TAPER & RETURN	624.70	9.00	624.70			9.00	624.70			
601+28.12	610+34.20	LT LANE ACCELERATION LANE & TAPER **	756.10	12.00	1008.13			12.00	1008.13			
610+34.20	611+28.12	LT ENTRANCE LANE TAPER	93.90	14.50	151.28			14.50	151.28			
630+85.44	631+84.16	RT ENTRANCE LANE TAPER	98.70	14.60	160.11			14.60	160.11			
631+84.16	640+85.44	RT LANE ACCELERATION LANE & TAPER **	751.30	12.00	1001.73			12.00	1001.73			
630+28.13	636+95.19	LT EXIT LANE TAPER & RETURN	667.10	11.50	852.41			11.50	852.41			
755+04.80	761+71.88	RT ENTRANCE LANE TAPER & RETURN	667.10	11.50	852.41			11.50	852.41			
750+33.27	758+69.50	LT LANE ACCELERATION LANE & TAPER **	686.20	12.00	914.93			12.00	914.93			
758+69.50	760+33.27	LT ENTRANCE LANE TAPER	163.80	14.30	260.26			14.30	260.26			
459+13.36	462+87.37	HWY. 104 RAMP 2	374.01	25.00	1038.92							
456+27.03	459+88.25	HWY. 104 RAMP 3	361.22	25.00	1003.39							
607+90.17	611+76.36	GPR RAMP 1	386.19	25.00	1072.75							
611+28.06	614+58.53	GPR RAMP 4	330.47	25.00	917.97							
627+46.77	630+84.64	GPR RAMP 2	337.87	25.00	938.53							
628+51.32	632+37.61	GPR RAMP 3	386.29	25.00	1073.03							
759+62.40	763+61.99	STAGECOACH RAMP 1	399.59	25.00	1109.97							
760+32.66	763+89.97	STAGECOACH RAMP 4	357.31	25.00	992.53							
TOTALS:					**306114.63**		**10133.33**		**167478.91**		**2674.09**	**668.80**

NOTE: PAYMENT MADE FOR REMOVAL OF PLOWABLE PAVEMENT MARKERS WILL BE CONSIDERED SUBSIDIARY TO PRICE BID FOR 'REMOVAL OF EXISTING ASPHALT OVERLAY'

* REMOVAL & DISPOSAL OF P.C. STABILIZED BASE (6" U.T.) WILL BE PAID FOR AS UNCLASSIFIED EXCAVATION

** ACCELERATION LANE & TAPER LENGTH CALCULATION REMOVES 150' FROM THE STATION DIFFERENCE TO ACCOUNT FOR HALF THE 300' TAPER WIDTH

*** ESTIMATED ON A LIME APPLICATION RATE OF 8% BY WEIGHT (PER AHTD SPECIFICATION SECTION 301.02) AND A 100 PCF DRY UNIT WEIGHT OF TREATED SUBGRADE

THE EXISTING ASPHALT OVERLAY IS A RUBBERIZED ASPHALT WHICH CONTAINS A STRESS ABSORBING MEMBRANE INTERLAYER (SAMI) BENEATH THE NORMAL ASPHALT OVERLAY. THE PAYMENT MADE FOR THE REMOVAL OF THE RUBBERIZED ASPHALT AND OF THE SAMI WILL BE SUBSIDIARY TO THE PRICE BID FOR THE "REMOVAL OF EXISTING ASPHALT OVERLAY."

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
3-2-2015

SCHEDULE OF BRIDGE QUANTITIES - JOB BB0201

LOG MILE	UNIT OF STRUCTURE	ITEM NO.	802	803	803	804	809	821	SP JOB BB0201	SP JOB BB0201	SP JOB BB0201
		ITEM / UNIT	GROOVING	CLASS 1 PROTECTIVE SURFACE TREATMENT	CLASS 3 PROTECTIVE SURFACE TREATMENT	REINFORCING STEEL - BRIDGE (GRADE 60)	SILICONE JOINT SEALANT	MODIFICATION OF EXISTING BRIDGE STRUCTURE (BRIDGE NO.)	HYDRODEMOLITION	BRIDGE DECK REPAIR	LATEX MODIFIED CONCRETE OVERLAY ($1\frac{1}{2}$" THICK)
			SQ. YD.	GALLON	LIN. FT.	LBS.	LIN. FT.	LUMP SUM	SQ. YD.	SQ. FT.	SQ. YD.
29.86	EXISTING BRIDGE NO. A5611		968	21.2	484	500	117	1	1048.7	1,416	1048.7
29.87	EXISTING BRIDGE NO. B5611		968	21.2	484	500	117	1	1048.7	1,416	1048.7
TOTALS FOR JOB NO. BB0201			1,936	42.4	968	1,000 (1)	234	---	2097.4	2,832 (1)	2097.4

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

SCHEDULE OF BRIDGE QUANTITIES
JEFFERSON - HWY. 104 (F)
JEFFERSON COUNTY
ROUTE 530 SECTION 5
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARKANSAS

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No.14501 STEPHEN F. HARPER

2/2/15

BRIDGE ENGINEER
PRINT DATE: 2/2/2015

DRAWN BY: WEG DATE: 11/14 FILENAME: BBB0201M1.OXI
CHECKED BY: CPB DATE: 1/12/15
DESIGNED BY: SFH DATE: 11/14 SCALE: No Scale
BRIDGE NO. A&B5611 DRAWING NO. 56711

Scott.Thornsberry 2/2/2015 8:27:19 AM
WORKSPACE: scott.thornsberry
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Baker

DATE	DATE FILMED	DATE REVISED	DATE FILMED
2-19-15			
3-2-15			
3-6-15			

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0201	128	186

(2) SUMMARY OF QUANTITIES AND REVISIONS

SUMMARY OF QUANTITIES

ITEM NUMBER	ITEM	QUANTITY 9050	QUANTITY BIM-B530(201)	TOTALS	UNIT
201	CLEARING		3	3	STATION
201	GRUBBING		3	3	STATION
202	REMOVAL AND DISPOSAL OF APPROACH SLAB AND GUTTERS		6	6	EACH
202	REMOVAL AND DISPOSAL OF CONCRETE DITCH PAVING		1043	1043	SQ. YD.
SP & 202	REMOVAL AND DISPOSAL OF GUARDRAIL		1590	1590	LIN. FT.
202	REMOVAL AND DISPOSAL OF PIPE UNDERDRAINS		2000	2000	LIN. FT.
202	REMOVAL AND DISPOSAL OF UNDERDRAIN OUTLET PROTECTORS		8	8	EACH
SP & 202	REMOVAL OF EXISTING PORTLAND CEMENT CONCRETE PAVEMENT		10133	10133	SQ. YD.
210	UNCLASSIFIED EXCAVATION		38988	38988	CU. YD.
SP & 210	BORROW		9820	9820	CU. YD.
210	COMPACTED EMBANKMENT		20560	20560	CU. YD.
SP & 210	SOIL STABILIZATION		5669	5669	TON
SP & 215	TRENCHING AND SHOULDER PREPARATION		384	384	STATION
303	AGGREGATE BASE COURSE (CLASS 1)		32220	32220	TON
303	AGGREGATE BASE COURSE (CLASS 7)		16006	16006	TON
401	TACK COAT		56892	56892	GAL.
SP & 405	MINERAL AGGREGATE IN ACHM BASE COURSE (1 1/2")		109654	109654	TON
SP & 405	ASPHALT BINDER (PG 76-22) IN ACHM BASE COURSE (1 1/2")		4450	4450	TON
SP, SS, & 406	MINERAL AGGREGATE IN ACHM BINDER COURSE (1")		49498	49498	TON
SP, SS, & 406	ASPHALT BINDER (PG 76-22) IN ACHM BINDER COURSE (1")		2332	2332	TON
SP, SS, & 407	MINERAL AGGREGATE IN ACHM SURFACE COURSE (1/2")		66315	66315	TON
SP, SS, & 407	ASPHALT BINDER (PG 64-22) IN ACHM SURFACE COURSE (1/2")		19	19	TON
SP, SS, & 407	ASPHALT BINDER (PG 76-22) IN ACHM SURFACE COURSE (1/2")		3618	3618	TON
SP, SS, & 414	ASPHALT BINDER (PG 76-22) IN ACHM SURFACE COURSE (1/2")		150	150	TON
SP & 415	ACHM PATCHING OF EXISTING ROADWAY		150	150	TON
504	APPROACH SLABS		398.82	398.82	CU. YD.
504	APPROACH GUTTERS		185.04	185.04	CU. YD.
507	REMOVAL AND DISPOSAL OF CONCRETE PAVEMENT FOR PATCHING		152	152	SQ. YD.
507	PORTLAND CEMENT CONCRETE PAVEMENT PATCHING (10" UNIFORM THICKNESS)		152	152	SQ. YD.
513	RUBBLIZING PORTLAND CEMENT CONCRETE PAVEMENT		167479	167479	SQ. YD.
SP & 513	REMOVAL OF EXISTING ASPHALT OVERLAY		306115	306115	SQ. YD.
601	MOBILIZATION		1.00	1.00	LUMP SUM
SP & 602	FURNISHING FIELD OFFICE		1	1	EACH
SP & 603	MAINTENANCE OF TRAFFIC		1.00	1.00	LUMP SUM
SP & 603	TRAFFIC CONTROL SUPERVISOR		1.00	1.00	LUMP SUM
603	12" TEMPORARY CULVERT		763	763	LIN. FT.
603	18" TEMPORARY CULVERT		5202	5202	LIN. FT.
603	24" TEMPORARY CULVERT		62	62	LIN. FT.
SS & 604	SIGNS		1806	1806	SQ. FT.
SS & 604	BARRICADES		592	592	LIN. FT.
SS & 604	TRAFFIC DRUMS		1137	1137	EACH
604	FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER		34620	34620	LIN. FT.
604	RELOCATING PRECAST CONCRETE BARRIER		34460	34460	LIN. FT.
604	CONSTRUCTION PAVEMENT MARKINGS		508592	508592	LIN. FT.
604	REMOVABLE CONSTRUCTION PAVEMENT MARKINGS		7020	7020	LIN. FT.
604	REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS		7020	7020	LIN. FT.
604	REMOVAL OF PERMANENT PAVEMENT MARKINGS		45520	45520	LIN. FT.
604	ADVANCE WARNING ARROW PANEL		950	950	DAY
SS & 604	VERTICAL PANELS		325	325	EACH
SP & 604	PORTABLE CHANGEABLE MESSAGE SIGN		250	250	WEEK
SP & 605	CONCRETE DITCH PAVING (TYPE B)	15706	15706	15706	SQ. YD.
606	SELECTED PIPE BEDDING		390	390	CU. YD.
611	UNDERDRAIN OUTLET PROTECTORS		258	258	EACH
611	UNDERDRAIN COVER		63666	63666	LIN. FT.
611	UNDERDRAIN VIDEO INSPECTION		76466	76466	LIN. FT.
611	4" PIPE UNDERDRAINS		76466	76466	LIN. FT.
617	GUARDRAIL (TYPE A)		2975	2975	LIN. FT.
617	TERMINAL ANCHOR POSTS (TYPE 1)		8	8	EACH
617	GUARDRAIL TERMINAL (TYPE 2)		10	10	EACH
617	THRIE BEAM GUARDRAIL TERMINAL		10	10	EACH
620	LIME		171	171	TON
620	SEEDING		85.57	85.57	ACRE
SS & 620	MULCH COVER		244.97	244.97	ACRE
620	WATER	302.7	11980.6	12283.3	M.GAL.
621	TEMPORARY SEEDING		159.40	159.40	ACRE
621	SILT FENCE		5062	5062	LIN. FT.
621	SAND BAG DITCH CHECKS		3036	3036	BAG
621	DROP INLET SILT FENCE		660	660	LIN. FT.
621	SEDIMENT REMOVAL AND DISPOSAL		350	350	CU. YD.
623	SECOND SEEDING APPLICATION		85.57	85.57	ACRE
624	SOLID SODDING	24050	66	24116	SQ. YD.
SP & 635	ROADWAY CONSTRUCTION CONTROL		1.00	1.00	LUMP SUM
640	MODIFYING DROP INLETS		6	6	EACH
642	RUMBLE STRIPS IN ASPHALT SHOULDERS		166525	166525	LIN. FT.
642	RUMBLE STRIPS IN PORTLAND CEMENT CONCRETE SHOULDERS		2087	2087	LIN. FT.
* SP & 719	INVERTED PROFILE THERMOPLASTIC PAVEMENT MARKING WHITE (4") (ALTERNATE NO. 1)		70587	70587	LIN. FT.
* SP	HIGH PERFORMANCE MARKING TAPE WHITE (4") (ALTERNATE NO. 1)		3532	3532	LIN. FT.
* SP & 719	INVERTED PROFILE THERMOPLASTIC PAVEMENT MARKING WHITE (8") (ALTERNATE NO. 1)		3532	3532	LIN. FT.
* SP & 719	INVERTED PROFILE THERMOPLASTIC PAVEMENT MARKING (SKIP LINE) WHITE (4") (ALTERNATE NO. 2)		15979	15979	LIN. FT.
* SP	HIGH PERFORMANCE MARKING TAPE (SKIP LINE) WHITE (4") (ALTERNATE NO. 1)		66599	66599	LIN. FT.
* SP & 719	INVERTED PROFILE THERMOPLASTIC PAVEMENT MARKING YELLOW (4") (ALTERNATE NO. 2)		66599	66599	LIN. FT.
* SP	HIGH PERFORMANCE MARKING TAPE YELLOW (4") (ALTERNATE NO. 1)		172	172	LIN. FT.
* SP & 719	INVERTED PROFILE THERMOPLASTIC CONTRAST PAVEMENT MARKING WHITE (4") (ALTERNATE NO. 2)		172	172	LIN. FT.
* SP	HIGH PERFORMANCE CONTRAST MARKING TAPE WHITE (4")		1461	1461	EACH
721	RAISED PAVEMENT MARKERS (TYPE II)		1167	1167	SQ. FT.
725	GUIDE SIGN-ROADSIDE MOUNTED (DEMOUNTABLE LEGEND)		492	492	SQ. FT.
726	STANDARD SIGN		160	160	SQ. FT.
727	EXIT NUMBER PANEL (TYPE A)		16	16	EACH
SP & 729	CHANNEL POST SIGN SUPPORT (TYPE U-1)		8564	8564	POUND
730	BREAKAWAY SIGN SUPPORT (TYPE G-2)		4	4	EACH
731	TEMPORARY IMPACT ATTENUATION BARRIER		4	4	EACH
731	TEMPORARY IMPACT ATTENUATION BARRIER (REPAIR)		63062	63062	POUND
804	REINFORCING STEEL-ROADWAY (GRADE 60)		22	22	EACH
SP	OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS (TYPE G-2)		2	2	EACH
SP	REMOVAL AND DISPOSAL OF IMPACT ATTENUATION BARRIER		2	2	EACH
SP	MOBILE SPEED NOTIFICATION SYSTEM		300	300	LIN. FT.
SP	MODULAR GLARE SHIELD		1.00	1.00	LUMP SUM
SP	MOTORIST ASSISTANCE PATROL		800	800	DAY
SP	PORTABLE CONSTRUCTION LIGHTING		160	160	SQ. YD.
SP	REMOVAL OF RUMBLE STRIP		2347	2347	LIN. FT.
SP	REMOVAL AND DISPOSAL OF WIRE ROPE SAFETY FENCE	35341	533	533	SQ. YD.
SP	SCARIFYING CONCRETE PAVEMENT	50		35341	LIN. FT.
SP	WIRE ROPE SAFETY FENCE			50	EACH
SP	WIRE ROPE SAFETY FENCE (POST REPAIR)	2		2	EACH
SP	WIRE ROPE SAFETY FENCE END TERMINAL		4	4	EACH
SP	FURNISH AND INSTALL VEHICLE DETECTION SYSTEM		22	22	EACH
SP	FURNISH AND INSTALL CLOSED CIRCUIT TELEVISION SYSTEM		3	3	EACH
SP	FURNISH AND INSTALL VARIABLE MESSAGE SIGN		7	7	EACH
SP	FURNISH AND INSTALL PUBLIC NOTIFICATION SYSTEM		2	2	EACH
SP	AWIS OPERATION		16	16	MONTH
SP	AWIS MOBILIZATION		1.00	1.00	LUMP SUM
SP	DEVICE RELOCATION		16	16	EACH
	STRUCTURES OVER 20' SPAN				
636	BRIDGE CONSTRUCTION CONTROL		1.00	1.00	LUMP SUM
802	GROOVING		1936	1936	SQ. YD.
803	CLASS 1 PROTECTIVE SURFACE TREATMENT		42.4	42.4	GAL.
803	CLASS 3 PROTECTIVE SURFACE TREATMENT		968	968	LIN. FT.
804	REINFORCING STEEL-BRIDGE (GRADE 60)		1000	1000	POUND
809	SILICONE JOINT SEALANT		234	234	LIN. FT.
821	MODIFICATION OF EXISTING BRIDGE STRUCTURE (BRIDGE NO. A5611)		1.00	1.00	LUMP SUM
821	MODIFICATION OF EXISTING BRIDGE STRUCTURE (BRIDGE NO. B5611)		1.00	1.00	LUMP SUM
SP	BRIDGE DECK REPAIR		2832	2832	SQ. FT.
SP	HYDRODEMOLITION		2097.4	2097.4	SQ. YD.
SP	LATEX MODIFIED CONCRETE OVERLAY (1 1/2" THICK)		2097.4	2097.4	SQ. YD.

* DENOTES ALTERNATE BID ITEMS

REVISIONS

DATE	REVISION	SHEET NUMBER
2/19/2015	DELETE SP "ELECTRONIC SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS" AND ADDED SP "SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS"	3, 128
3/2/2015	ADDED STRESS ABSORBING MEMBRANE INTERLAYER (SAMI) NOTE, "WEIGH IN MOTION SCALE" SP REVISED	4, 5, 6, 126, 128
3/6/2015	REVISED QUANTITY FOR 4" PIPE UNDERDRAINS, ADDED QUANTITY FOR UNDERDRAIN COVER AND UNDERDRAIN VIDEO INSPECTION	121, 128

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
3-6-2015

SUMMARY OF QUANTITIES AND REVISIONS

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	129	186
				(2)	PLAN SHEET			

RAMP 4
P.I. 436+51.56
Δ = 20°00'00" LT.
D = 5°00'00"
T = 202.06'
L = 400.00'
P.C. = 434+49.50
P.T. = 438+49.50
MATCH EXIST. SUPER

CROSSOVER IB
P.I. 21+36.76
Δ = 8°11'31" RT.
D = 3°00'00"
T = 136.76'
L = 273.05'
P.C. = 20+00.00
P.T. = 22+73.06
NO SUPER

RAMP 4
P.I. 443+08.14
Δ = 20°00'00" RT.
D = 5°00'00"
T = 202.06'
L = 400.00'
P.C. = 441+06.09
P.T. = 445+06.09
MATCH EXIST. SUPER

CROSSOVER IA
P.I. 16+34.59
Δ = 8°11'31" RT.
D = 3°00'00"
T = 136.76'
L = 273.06'
P.C. = 14+97.82
P.T. = 17+70.88
NO SUPER

RAMP 3 STA. 448+28 IN PLACE
6' X 5' X 46' R.C. BOX CULVERT
Q50 = 280 CFS D.A. = 559 ACRES
RETAIN

RAMP 3
P.I. 450+34.28
Δ = 13°35'33" RT.
D = 3°00'00"
T = 227.61'
L = 453.08'
P.C. = 448+06.67
P.T. = 452+59.75
MATCH EXIST. SUPER

STA. 450+54.04 IN PLACE
TYPE N-2 DROP INLET
ADJUST TO GRADE

REMOVE WRSF FROM STA. 435+90 TO STA. 447+70 & INSTALL NEW ANCHOR AT STA. 435+90. AFTER CROSSOVERS ARE REMOVED INSTALL NEW WRSF AT ORIGINAL LOCATION.

STA. 438+84 TO STA. 443+57, INSTALL 18"X473' TEMPORARY CULVERT IN MEDIAN

APPROXIMATE 100 YR. FLOODPLAIN LIMITS

C.L. CROSSOVER IB STA. 20+00.00=
MAIN LANES STA. 436+90.53, 37.5' LT.

P.T. CROSSOVER IA STA. 17+70.88=
MAIN LANES STA. 444+57.26, 33.5' RT.

STA. 447+40.51 IN PLACE
TYPE N-2 DROP INLET
ADJUST TO GRADE

WIRE ROPE SAFETY FENCE

8'x5' BC

6'x5' BC

6'x6' BC

RAMP 4

RAMP 3

EXISTING R/W & C/A

LEGEND
- CONST. HYDRODEMOLITION ON BRIDGE DECKS A56II & B56II
- REMOVE & RECONSTRUCT APPR. SLAB & GUTTERS
- FULL DEPTH PAVEMENT TRANSITION
- 100' TRANSITION TO MATCH EXIST. (SEE SPECIAL DETAILS)

STA. 447+69.51
BEGIN JOB BB0201
L.M. = 29.89

STA. 446+38.08
BEGIN 100' TRANSITION LT.

STA. 447+87.15

STA. 450+32.24

STA. 450+81.40
BEGIN PVMT. TRANSITION

C.L. I-530

C.L. CROSSOVER IB

C.L. CROSSOVER IA

RAMP 1

STA. 447+26.09
BEGIN 100' TRANSITION RT.

STA. 448+75.16

STA. 451+69.31
BEGIN PVMT. TRANSITION

APPROXIMATE 100 YR. FLOODPLAIN LIMITS

C.L. MEDIAN STA. 449+53.70 =
C.L. HWY. 104 STA. 20+00

P.T. CROSSOVER IB STA. 27+84.92=
MAIN LANES STA. 444+71.15, 35.50' RT.

C.L. HWY. 104

STA. 452+00

STA. 435+84.10 IN PLACE
TYPE RM DROP INLET
IN MEDIAN (4' X 3' X H= 2'6")
WITH 18" X 76' R.C. PIPE OUTLET
ON RT. WITH FES
RETAIN

C.L. CROSSOVER IA STA. 10+00.00=
MAIN LANES STA. 436+90.53, 37.5' RT.

CROSSOVER IA
P.I. 11+36.76
Δ = 8°11'31" LT.
D = 3°00'00"
T = 136.76'
L = 273.06'
P.C. = 10+00.00
P.T. = 12+73.06
NO SUPER

STA. 442+24.10 IN PLACE
8' X 5' X 306.5' R.C. BOX CULVERT
23° LT. FWD. SKEW WITH
TYPE T DROP INLET IN MEDIAN
4' X 3' X H=6'-5"
Q50 = 416 CFS DA = 578 ACRES
RETAIN

COVER EXISTING INLET AT STA. 437+40.00 AS DIRECTED BY THE ENGINEER PRIOR TO CONSTRUCTION OF THE TEMPORARY CROSSOVER. REMOVE COVER WHEN THE TEMPORARY CROSSOVER IS REMOVED. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS CONTRACT ITEMS.

RAMP 1
P.I. 442+07.27
Δ = 10°29'50" RT.
D = 3°00'00"
T = 175.45'
L = 349.91'
P.C. = 440+31.83
P.T. = 443+81.74
MATCH EXIST. SUPER

CROSSOVER IB
P.I. 26+48.62
Δ = 8°11'31" LT.
D = 3°00'00"
T = 136.76'
L = 273.06'
P.C. = 25+11.86
P.T. = 27+84.92
NO SUPER

REMOVAL AND DISPOSAL OF APPROACH SLABS & GUTTERS

STA. 447+51.15 TO STA. 447+87.15	- BR. NO. A56II - 1EACH
STA. 448+39.16 TO STA. 448+75.16	- BR. NO. B56II - 1EACH
STA. 450+32.34 TO STA. 450+67.34	- BR. NO. A56II - 1EACH
STA. 451+20.25 TO STA. 451+55.25	- BR. NO. B56II - 1EACH

STA. 448+52.30 IN PLACE
TYPE N-2 DROP INLET
ADJUST TO GRADE

STA. 451+62.68 IN PLACE
TYPE N-2 DROP INLET
ADJUST TO GRADE

RAMP 1
P.I. 448+32.06
Δ = 16°12'20" LT.
D = 4°00'00"
T = 203.93'
L = 405.14'
P.C. = 446+28.13
P.T. = 450+33.27
MATCH EXIST. SUPER

REMOVAL AND DISPOSAL OF GUARDRAIL

	GUARDRAIL (TYPE A)	TERMINAL ANCHOR POST (TYPE 1)
STA. 446 +56 TO STA. 448 +56 LT. OF R.M.L.	= 175 LIN. FT.	1 EACH
STA. 446 +64 TO STA. 447 +64 LT. OF L.M.L.	= 75 LIN. FT.	1 EACH
STA. 446 +98 TO STA. 448 +98 RT. OF L.M.L.	= 175 LIN. FT.	1 EACH
STA. 450 +09 TO STA. 453 +09 LT. OF L.M.L.	= 275 LIN. FT.	1 EACH
STA. 450 +51 TO STA. 452 +51 RT. OF L.M.L.	= 175 LIN. FT.	1 EACH
STA. 451 +43 TO STA. 453 +93 RT. OF R.M.L.	= 225 LIN. FT.	1 EACH

GUARDRAIL

	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE 2)	THRIE BEAM GUARDRAIL TERMINAL	TERMINAL ANCHOR POST (TYPE 1)
STA. 446 +30 TO STA. 448 +49 LT. OF R.M.L.	= 150 LIN. FT.	1 EACH	1 EACH	
STA. 446 +63 TO STA. 447 +57 LT. OF L.M.L.	= 50 LIN. FT.		1 EACH	1 EACH
STA. 446 +72 TO STA. 448 +91 RT. OF L.M.L.	= 150 LIN. FT.	1 EACH	1 EACH	
STA. 450 +16 TO STA. 453 +10 LT. OF L.M.L.	= 225 LIN. FT.	1 EACH	1 EACH	
STA. 450 +58 TO STA. 453 +77 RT. OF L.M.L.	= 250 LIN. FT.	1 EACH	1 EACH	
STA. 451 +50 TO STA. 453 +94 RT. OF R.M.L.	= 200 LIN. FT.		1 EACH	1 EACH

STA. 447+87.15 BRIDGE END
IN PLACE 245'-1 1/8" STEEL WITH CONC. DECK
BR. NO. A56II
39'-0" CLEAR ROADWAY
STA. 450+32.24 BRIDGE END
RETAIN & HYDRODEMOLITION

STA. 448+75.16 BRIDGE END
IN PLACE 245'-1 1/8"STEEL WITH CONC. DECK
BR. NO. B56II
39'-0" CLEAR ROADWAY
STA. 451+20.25 BRIDGE END
RETAIN & HYDRODEMOLITION

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
SCOTT P. THORNSBERRY
No.10887
1-30-2015

PLAN SHEETS

Baker

Scott.Thornsberry@30/2015 3:33:21 PM
WORKSPACE: scott.thornsberry
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DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	130	186

(2) PLAN SHEET

TEMP. RAMP 3 STA. 142+67.00
79° LT. FWD. SKEW
INSTALL 12"X381' TEMP. CULVERT

STA. 459+00 TO STA. 461+13, INSTALL
18"X213' TEMPORARY CULVERT IN MEDIAN

STA. 461+13 TO STA. 462+77, INSTALL
18"X164' TEMPORARY CULVERT WITH
TEMP. CONNECTION TO MEDIAN DROP
INLET AT STA. 462+50

STA. 462+86 TO STA. 465+48, INSTALL
18"X262' TEMPORARY CULVERT WITH
TEMP. CONNECTION TO MEDIAN DROP
INLET AT STA. 462+50

STA. 462+50 IN PLACE
TYPE RM DROP INLET
IN MEDIAN (4' X 3' X H= 8'-0")
WITH 30" X 108' R.C. PIPE INLET ON RT. &
30" X 118' R.C. PIPE OUTLET ON LT.
WITH FES RT. & LT.
RETAIN

TEMPORARY RAMP 3
P.I. 140+67.71
Δ = 8°06'42" RT.
D = 6°00'00"
T = 67.71'
L = 135.20'
P.C. = 140+00.00
P.T. = 141+35.20
NO SUPER

STA. 456+99.80 BEGIN SUPERELEVATION
STA. 460+49.80 MAX. SUPERELEVATION (0.054'/')
STA. 470+59+20 MAX. SUPERELEVATION (0.054'/')
STA. 474+09.20 END SUPERELEVATION

RAMP 3
P.I. 460+12.77
Δ = 4°30'07" LT.
D = 2°29'22"
T = 90.46'
L = 180.83'
P.C. = 459+22.31
P.T. = 461+03.14
MATCH EXIST. SUPER

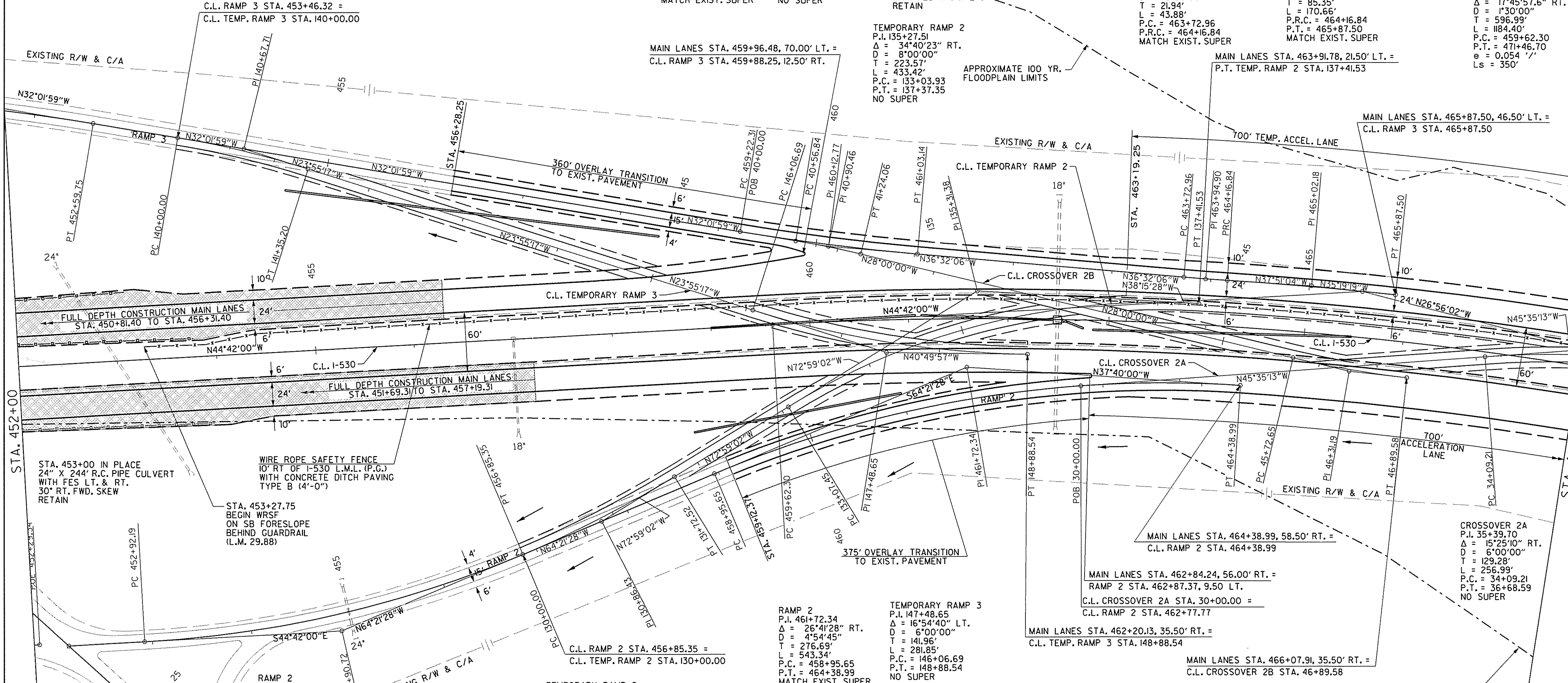
CROSSOVER 2B
P.I. 40+90.46
Δ = 4°01'59" RT.
D = 6°00'00"
T = 33.62'
L = 67.22'
P.C. = 40+56.84
P.T. = 41+24.06
NO SUPER

TEMPORARY RAMP 2
P.I. 135+27.51
Δ = 34°40'23" RT.
D = 8°00'00"
T = 223.57'
L = 433.42'
P.C. = 133+03.93
P.T. = 137+37.35
NO SUPER

RAMP 3
P.I. 463+94.90
Δ = 1°18'59" LT.
D = 3°00'00"
T = 21.94'
L = 43.88'
P.C. = 463+72.96
P.R.C. = 464+16.84
MATCH EXIST. SUPER

RAMP 3
P.I. 465+02.18
Δ = 2°31'45" RT.
D = 1°28'55"
T = 85.35'
L = 170.66'
P.R.C. = 464+16.84
P.T. = 465+87.50
MATCH EXIST. SUPER

C.L. I-530
P.I. 465+59.29
Δ = 17°45'57.6" RT.
D = 1°30'00"
T = 596.99'
L = 1184.40'
P.C. = 459+62.30
P.T. = 471+46.70
e = 0.054 '/'
Ls = 350'



CROSSOVER 2A
P.I. 35+39.70
Δ = 15°25'10" RT.
D = 6°00'00"
T = 129.28'
L = 256.99'
P.C. = 34+09.21
P.T. = 36+68.59
NO SUPER

RAMP 2
P.I. 454+90.72
Δ = 19°39'28" LT.
D = 5°00'00"
T = 198.53'
L = 393.16'
P.C. = 452+92.19
P.T. = 456+85.35
MATCH EXIST. SUPER

STA. 457+00 IN PLACE
TYPE RM DROP INLET
IN MEDIAN (4' X 3' X H= 7'-0")
WITH 18" X 92' R.C. PIPE OUTLET
WITH FES ON RT.
RETAIN

TEMPORARY RAMP 2
P.I. 130+86.43
Δ = 8°37'34" LT.
D = 5°00'00"
T = 86.43'
L = 172.52'
P.C. = 130+00.00
P.T. = 131+72.52
NO SUPER

TEMP. RAMP 2 STA. 132+85.00
70° RT. FWD. SKEW
INSTALL 12"X207' TEMP. CULVERT

RAMP 2 STA. 455+00 IN PLACE
24"X40' R.C. PIPE CULVERT
WITH F.E.S. LT. & RT.
RETAIN

RAMP 2
P.I. 461+72.34
Δ = 26°41'28" RT.
D = 4°54'45"
T = 276.69'
L = 543.34'
P.C. = 458+95.65
P.T. = 464+38.99
MATCH EXIST. SUPER

TEMPORARY RAMP 3
P.I. 147+48.65
Δ = 16°54'40" LT.
D = 6°00'00"
T = 141.96'
L = 281.85'
P.C. = 146+06.69
P.T. = 148+88.54
NO SUPER

CROSSOVER 2B
P.I. 46+31.19
Δ = 7°00'57" LT.
D = 6°00'00"
T = 58.54'
L = 116.93'
P.C. = 45+72.65
P.T. = 46+89.58
NO SUPER

REMOVAL AND DISPOSAL OF GUARDRAIL

	GUARDRAIL (TYPE A)	TERMINAL ANCHOR POST (TYPE 1)
STA. 446 +56 TO STA. 448 +56 LT. OF R.M.L.	= 175 LIN. FT.	1 EACH
STA. 446 +64 TO STA. 447 +64 LT. OF L.M.L.	= 75 LIN. FT.	1 EACH
STA. 446 +98 TO STA. 448 +98 RT. OF L.M.L.	= 175 LIN. FT.	1 EACH
STA. 450 +09 TO STA. 453 +09 LT. OF L.M.L.	= 275 LIN. FT.	1 EACH
STA. 450 +51 TO STA. 452 +51 RT. OF L.M.L.	= 175 LIN. FT.	1 EACH
STA. 451 +43 TO STA. 453 +93 RT. OF R.M.L.	= 225 LIN. FT.	1 EACH

GUARDRAIL

	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE 2)	THRIE BEAM GUARDRAIL TERMINAL	TERMINAL ANCHOR POST (TYPE 1)
STA. 446 +30 TO STA. 448 +49 LT. OF R.M.L.	= 150 LIN. FT.	1 EACH	1 EACH	
STA. 446 +63 TO STA. 447 +57 LT. OF L.M.L.	= 50 LIN. FT.		1 EACH	1 EACH
STA. 446 +72 TO STA. 448 +91 RT. OF L.M.L.	= 150 LIN. FT.	1 EACH	1 EACH	
STA. 450 +16 TO STA. 453 +10 LT. OF L.M.L.	= 225 LIN. FT.	1 EACH	1 EACH	
STA. 450 +58 TO STA. 453 +77 RT. OF L.M.L.	= 250 LIN. FT.	1 EACH	1 EACH	
STA. 451 +50 TO STA. 453 +94 RT. OF R.M.L.	= 200 LIN. FT.		1 EACH	1 EACH

STATE OF ARKANSAS
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PLAN SHEETS

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				2	ARK.			
				JOB NO.		BB0201	131	186
				(2)	PLAN SHEET			

STA. 469+00 IN PLACE
5' X 4' X 212' R.C. BOX CULVERT
30° RT. FWD. SKEW WITH
TYPE T DROP INLET
IN MEDIAN 3' X 2'-6" X H=4'-6"
Q50 = 10.5 CFS D.A. = 37 ACRES
RETAIN

APPROXIMATE 100 YR. FLOODPLAIN LIMITS

P.T. CROSSOVER 2A STA. 36+68.59
MAIN LANES STA. 469+40.69, 21.5' LT.

EXISTING R/W & C/A

STA. 468+53.64

700'
TEMPORARY ACCELERATION LANE

300'
TAPER

PT 36+68.59

5'x4' BC

PI 35+39.70

470

WIRE ROPE SAFETY FENCE
10' RT. OF I-530 L.M.L. (P.G.)
WITH CONCRETE DITCH PAVING
TYPE B (4'-0")

475

STA. 475+53.64

18"

STA. 478+53.64

480

10'
24'
N30°01'27"W
6'
60'
6'
36'
C.L. CROSSOVER 2A

N26°56'02"W
C.L. I-530
N26°56'02"W

6'
24'
6'
60'
6'
24'
10'

700'
ACCELERATION LANE

10'
300'
TAPER
10'

STA. 469+84.24
PT 471+46.70
STA. 472+84.24

STA. 466+80

EXISTING R/W & C/A

EXISTING R/W & C/A

CROSSOVER 2A
P.I. 35+39.70
Δ = 15°25'10" RT.
D = 6°00'00"
T = 129.28'
L = 256.99'
P.C. = 34+09.21
P.T. = 36+68.59
NO SUPER

C. L. I-530
P.I. 465+59.29
Δ = 17°45'57.6" RT.
D = 1°30'00"
T = 596.99'
L = 1184.40'
P.C. = 459+62.30
P.T. = 471+46.70
e = 0.054 '/'
Ls = 350'

APPROXIMATE 100 YR. FLOODPLAIN LIMITS

STA. 476+00 IN PLACE
TYPE RM DROP INLET
IN MEDIAN (4' X 3' X H= 4'-0")
WITH 18" X 88' R.C. PIPE
OUTLET ON LT. WITH FES
RETAIN

APPROXIMATE 100 YR. FLOODPLAIN LIMITS

STA. 486+00 IN PLACE
TYPE RM DROP INLET
IN MEDIAN (4' X 3' X H= 2'-6")
WITH 18" X 80' R.C. PIPE OUTLET
ON LT. WITH FES
RETAIN

STA. 497+00

EXISTING R/W & C/A

WIRE ROPE SAFETY FENCE
10' RT. OF I-530 L.M.L. (P.G.)
WITH CONCRETE DITCH PAVING
TYPE B (4'-0")

485

18"

490

495

(2) 24"

10'
24'
6'
N26°56'02"W
60'
6'
C.L. I-530
6'
60'
6'
24'
24'
10'
10'

EXISTING R/W & C/A

EXISTING R/W & C/A

STA. 495+00 IN PLACE
TYPE RM DROP INLET
IN MEDIAN (4' X 3' X H=3'-1") WITH
DBL 24" X 80' R.C. PIPE INLET
WITH 2-FES. ON LT. &
DBL 24"X84' R.C. PIPE OUTLET
WITH 2-FES ON RT.
RETAIN

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				2	ARK.			
				JOB NO.		BB0201	132	186
				(2)	PLAN SHEET			

STA. 497+00

EXISTING R/W & C/A

WIRE ROPE SAFETY FENCE
10' RT. OF I-530 L.M.L. (P.C.)
WITH CONCRETE DITCH PAVING
TYPE B (4'-0")

500 505 510

PC 508+09.60

STA. 510+10 IN PLACE
4' X 2' X 252' R.C. BOX CULVERT
45° RT. FWD. SKEW
Q50 = 57 CFS D.A. = 8 ACRES
RETAIN

4'×2' BC

10' 24' 6' 60' 6' 24' 10'

N26°56'02"W

C.L. I-530

EXISTING R/W & C/A

C. L. I-530
P.I. 516+16.52
Δ = 16°01'58.8" LT.
D = 1°00'00"
T = 806.92'
L = 1603.30'
P.C. = 508+09.60
P.T. = 524+12.90
e = 0.037 '/'
Ls = 350'

STA. 505+47.10 BEGIN SUPERELEVATION
STA. 508+97.10 MAX. SUPREELEVATION (0.037'/')
STA. 523+25.40 MAX. SUPREELEVATION (0.037'/')
STA. 526+75.40 END SUPERELEVATION

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WIRE ROPE SAFETY FENCE
10' RT. OF I-530 L.M.L. (P.C.)
WITH CONCRETE DITCH PAVING
TYPE B (4'-0")

PT 524+12.90

515 520 525

STA. 527+50

N26°56'02"W N42°58'01"W

C.L. I-530

18"

PI 516+16.52

STA. 517+00 IN PLACE
TYPE RM DROP INLET
IN MEDIAN (4' X 3' X H=2'-6")
WITH 18"X88' R.C. PIPE OUTLET
WITH FES ON RT.
RETAIN

STA. 524+00 IN PLACE
TYPE RM DROP INLET
IN MEDIAN (4' X 3' X H=2'-6")
WITH 18" X 90' R.C. PIPE OUTLET
WITH FES ON RT.
RETAIN

PLAN SHEETS

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				2	ARK.			
				JOB NO.		BB0201	133	186
				(2)	PLAN SHEET			

STA. 529+80 IN PLACE
DBL 4' X 3' X 226' R.C. BOX CULVERT
30° RT. FWD. SKEW
Q50 = 181 CFS D.A. = 98 ACRES
RETAIN

EXISTING R/W & C/A

WIRE ROPE SAFETY FENCE
10' RT. OF I-530 L.M.L. (P.G.)
WITH CONCRETE DITCH PAVING
TYPE B (4'-0")

DBL 4'x3' BC

TRIP 7'x4' BC

STA. 527+50

530 535 540

10' 24' 6' 60' N42°58'01"W 6' 24' 10'

C.L. I-530

EXISTING R/W & C/A

STA. 535+50 IN PLACE
TRIP 7' X 4' X 217' R.C. BOX CULVERT
30° LT. FWD. SKEW
Q50 = 766 CFS D.A. = 957 ACRES
RETAIN

EXISTING R/W & C/A

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EXISTING R/W & C/A

EXISTING R/W & C/A

WIRE ROPE SAFETY FENCE
10' RT. OF I-530 L.M.L. (P.G.)
WITH CONCRETE DITCH PAVING
TYPE B (4'-0")

6'x4' BC

545 550 555

10' 24' 6' 60' N42°58'01"W 6' 24' 10'

C.L. I-530

18" 18"

STA. 558+00

EXISTING R/W & C/A

EXISTING R/W & C/A

STA. 543+00 IN PLACE
TYPE RM DROP INLET
IN MEDIAN (4' X 3' X H=2'-6")
WITH 18" X 84' R.C. PIPE OUTLET
WITH FES ON RT.
RETAIN

STA. 550+00 IN PLACE
TYPE RM DROP INLET
IN MEDIAN (4' X 3' X H=2'-6")
WITH 18" X 82' R.C. PIPE OUTLET
WITH FES ON RT.
RETAIN

STA. 557+65 IN PLACE
6' X 4' X 200' R.C. BOX CULVERT
WITH TYPE T DROP INLET
IN MEDIAN (3' X 2'-6" X H=8'-2")
Q50 = 153 CFS D.A. = 75 ACRES
RETAIN

PLAN SHEETS

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				2	ARK.			
				JOB NO.		BB0201	134	186
				(2)	PLAN SHEET			

STA. 558+00

EXISTING R/W & C/A

WIRE ROPE SAFETY FENCE
10' RT. OF I-530 L.M.L. (P.G.)
WITH CONCRETE DITCH PAVING
TYPE B (4'-0")

EXISTING R/W & C/A

560 565 570

10' 24' 6' 6' 24' 10'

60'

N42°58'01"W

C.L. I-530

EXISTING R/W & C/A

EXISTING R/W & C/A

EXISTING R/W & C/A

DBL 4'x2' BC

575 580 585

WIRE ROPE SAFETY FENCE
10' RT. OF I-530 L.M.L. (P.G.)
WITH CONCRETE DITCH PAVING
TYPE B (4'-0")

10' 24' 6' 6' 24' 10'

60'

N42°58'01"W

C.L. I-530

PC 580+72.50

18"

STA. 588+00

EXISTING R/W & C/A

EXISTING R/W & C/A

STA. 576+10 IN PLACE
DBL 4' X 2' X 207' R.C. BOX CULVERT
15° RT. FWD SKEW WITH
TYPE T DROP INLET
IN MEDIAN (3' X 2'-6" X H=8'-0")
Q50 = 80 CFS D.A. = 30 ACRES
RETAIN

STA. 582+00 IN PLACE
TYPE R DROP INLET IN MEDIAN
(4' X 3'-6" X H=2'-6")
18" X 80" R.C. PIPE OUTLET
TO RT WITH FES
RETAIN

C. L. MEDIAN
P.I. 596+43.54
Δ = 30°40'01.2" RT.
D = 1°00'00"
T = 1571.04'
L = 3066.70'
P.C. = 580+72.50
P.T. = 611+39.20
e = 0.037 '/'
Ls = 350'

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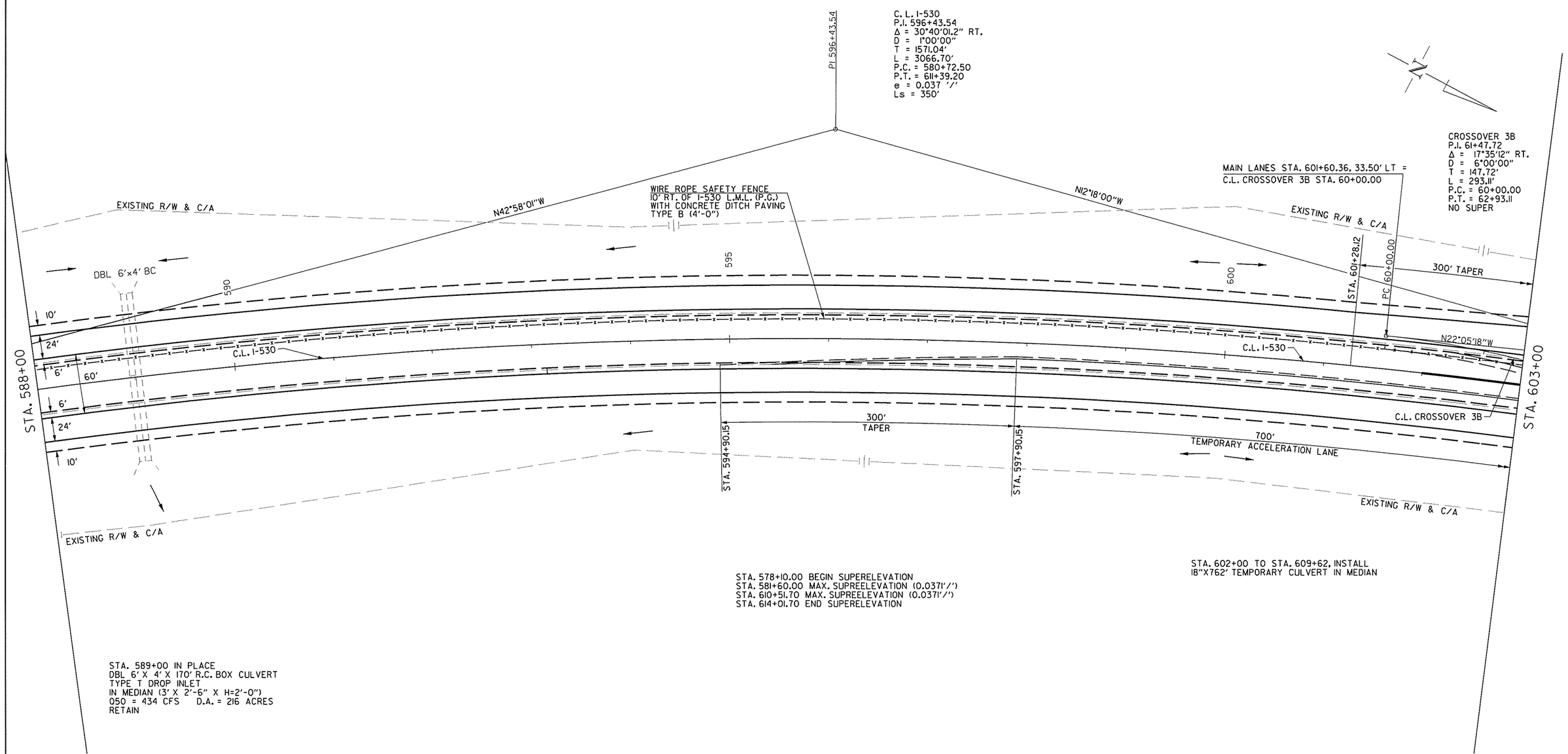
				2	ARK.			
				JOB NO.		BB0201	135	186
				(2)	PLAN SHEET			



STA. 589+00 IN PLACE
DBL 6' X 4' X 170' R.C. BOX CULVERT
TYPE T DROP INLET
IN MEDIAN (3' X 2'-6" X H=2'-0")
Q50 = 434 CFS D.A. = 216 ACRES
RETAIN

STA. 578+10.00 BEGIN SUPERELEVATION
STA. 581+60.00 MAX. SUPREELEVATION (0.037I'/')
STA. 610+51.70 MAX. SUPREELEVATION (0.037I'/')
STA. 614+01.70 END SUPERELEVATION

STA. 602+00 TO STA. 609+62, INSTALL
18"X762' TEMPORARY CULVERT IN MEDIAN

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				2	ARK.			
				JOB NO.		BB0201	136	186
				(2)	PLAN SHEET			

RAMP 4 STA. 614+00 IN PLACE
24"X49' R.C. PIPE CULVERT
WITH FES LT. & RT.
Q50 = 33 CFS DA = 17 ACRES
RETAIN
REMOVE FES RT AND INSTALL
24"x62' TEMPORARY CULVERT
EXTENSION RT

RAMP 4
P.I. 619+81.03
Δ = 35°01'22" RT.
D = 12°00'00"
T = 150.65'
L = 291.86'
P.C. = 618+30.38
P.T. = 621+22.24
MATCH EXIST. SUPER

RAMP 4
P.I. 612+52.80
Δ = 33°57'22" LT.
D = 8°00'09"
T = 218.60'
L = 424.32'
P.C. = 610+34.20
P.T. = 614+58.53
MATCH EXIST. SUPER

TEMPORARY RAMP 4
P.I. 168+18.14
Δ = 9°59'33" RT.
D = 12°00'00"
T = 41.74'
L = 83.27'
P.C. = 167+76.40
P.T. = 168+59.67
NO SUPER

TEMPORARY RAMP 4
P.I. 162+87.80
Δ = 43°47'07" LT.
D = 8°00'00"
T = 287.80'
L = 547.32'
P.C. = 160+00.00
P.T. = 165+47.32
NO SUPER

TEMPORARY RAMP 1
P.I. 152+42.64
Δ = 37°25'56" RT.
D = 8°00'00"
T = 242.64'
L = 467.90'
P.C. = 150+00.00
P.T. = 154+67.90
NO SUPER

CROSSOVER 3B
P.I. 61+47.07
Δ = 17°30'41" RT.
D = 6°00'00"
T = 147.07'
L = 291.86'
P.C. = 60+00.00
P.T. = 62+91.86
NO SUPER

C.L. RAMP 4 STA. 611+57.29 =
CROSSOVER 3A STA. 57+44.56

MAIN LANES STA. 611+28.12, 56.00' LT. =
RAMP 4 STA. 611+28.06, 9.50' RT.

MAIN LANES STA. 610+34.20, 58.50' LT.=
RAMP 4 STA. 610+34.20

MAIN LANES STA. 610+17.88, 23.50' RT. =
TEMP. RAMP 4 STA. 160+00.00

MAIN LANES 606+09.22, 33.50' LT.=
P.C. TEMP. RAMP 1 STA. 150+00.00

P.C. RAMP 4 STA. 618+30.38 =
P.T. TEMP RAMP 4 STA. 168+59.67

STA. 618+00 IN PLACE
TYPE R DROP INLET
IN MEDIAN (4' X 3' X H= 2'-6")
WITH 18" X 84' R.C. PIPE OUTLET
WITH FES ON LT.
RETAIN

EXISTING R/W & C/A
700' ACCELERATION LANE
300' TAPER
330.47 FT. OVERLAY TRANSITION TO EXIST. RAMP PAVEMENT
RAMP 4
C.L. TEMP. RAMP 4
C.L. CROSSOVER 3A
QUAD 6'x4' BC
FULL DEPTH CONSTRUCTION SB MAIN LANES STA. 613+56.03 TO STA. 627+56.03
C.L. I-530
STA. 603+00
STA. 618+50

WIRE ROPE SAFETY FENCE
10' RT. OF I-530 L.M.L. (P.G.)
WITH CONCRETE DITCH PAVING
TYPE B (4'-0")

700' TEMP. ACCEL. LANE
MAIN LANES STA. 604+19.20, 46.50' RT.
C.L. RAMP I STA. 604+19.20

RAMP I
P.I. 608+75.20
Δ = 35°20'32.2" RT.
D = 4°00'11"
T = 456.00'
L = 882.89'
P.C. = 604+19.20
P.T. = 613+02.10
MATCH EXIST. SUPER

MAIN LANES STA. 607+94.09, 70.00' RT.
RAMP I STA. 607+90.17, 12.50' LT.

C.L. RAMP I STA. 607+95.77
C.L. CROSSOVER 3B STA. 66+46.00

MAIN LANES STA. 604+19.10, 23.50' RT. =
P.C. CROSSOVER 3A STA. 50+00.00

CROSSOVER 3A
P.I. 50+30.84
Δ = 3°41'56" RT.
D = 6°00'00"
T = 30.84'
L = 61.65'
P.C. = 50+00.00
P.T. = 50+61.65
NO SUPER

STA. 602+00 TO STA. 609+62, INSTALL
18"X762' TEMPORARY CULVERT IN MEDIAN

STA. 610+00 95' RT. IN PLACE
TYPE RM DROP INLET
IN GORE (4' X 3' X H=3'-0")
WITH 18" X 30' R.C. PIPE OUTLET
CONNECTING WITH R.C. BOX AT STA 610+44
RETAIN

STA. 610+44 IN PLACE
QUAD 6' X 4' X 267' R.C. BOX CULVERT
WITH TYPE T DROP INLET
IN MEDIAN (3' X 2'-6" X H=2'-10")
Q50 = 645 CFS D.A. = 352 ACRES
RETAIN

RAMP I STA. 611+00 IN PLACE
18"X54' R.C. PIPE CULVERT
WITH FES LT. & RT.
RETAIN
REMOVE FES LT AND INSTALL
18"X38' TEMPORARY CULVERT
EXTENSION LT

TEMP. RAMP I STA. 154+60
INSTALL 12"X143' TEMPORARY CULVERT
58° RT. FWD. SKEW
COVER EXISTING DROP INLET AS DIRECTED
BY THE ENGINEER PRIOR TO CONSTRUCTION
OF THE TEMPORARY RAMP. REMOVE COVER
WHEN THE TEMPORARY RAMP IS REMOVED.
PAYMENT FOR THIS WORK SHALL BE INCLUDED
IN THE PRICE BID FOR VARIOUS CONTRACT
ITEMS.

STA. 610+38 TO STA. 612+91, INSTALL
18"X253' CULVERT IN MEDIAN

RAMP I STA. 614+33.66
TEMP. RAMP I STA. 158+68.61

TEMPORARY RAMP I
P.I. 158+34.98
Δ = 4°02'14" LT.
D = 6°00'00"
T = 33.66'
L = 67.28'
P.C. = 158+01.33
P.T. = 158+68.61
NO SUPER

EXISTING R/W & C/A
700' TEMP. ACCEL. LANE
386.19 FT. OVERLAY TRANSITION TO EXIST. RAMP PAVEMENT
RAMP I
C.L. TEMP. RAMP I
C.L. CROSSOVER 3B
EXISTING R/W & C/A

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2	ARK.			
JOB NO.		BB0201	137	186
(2)	PLAN SHEET			

STA. 618+50

STA. 634+00

EXISTING R/W & C/A

N16°00'01"E

PT 621+22.24

C.L. GRAVEL PIT RD.
STA. 13+66.81 BRIDGE END
BR. NO. 05646
IN PLACE 274'-3½" STEEL WITH CONC. DECK
30'-0" CLEAR ROADWAY
STA. 16+41.10 BRIDGE END
RETAIN

STA. 619+59.99
END WRSF
ON SB FORESLOPE
BEHIND GUARDRAIL
(L.M. 26.63)

STA. 620+46.10
REMOVE AND DISPOSE OF IMPACT
ATTENUATION BARRIER (TYPE A) = 2 EACH

P.C. RAMP 3 STA. 626+47.36 =
C.L. TEMP. RAMP 3 STA. 180+00.00

POB 180+00.00
PC 626+47.36

STA. 626+00 IN PLACE
TYPE R DROP INLET
IN MEDIAN (4' X 3' X H= 2'-6")
WITH 18" X 84' R.C. PIPE OUTLET
WITH FES ON LT.
RETAIN

RAMP 3
P.I. 628+38.11
Δ = 22°35'36" LT.
D = 6°00'00"
T = 190.75'
L = 376.55'
P.C. = 626+47.36
P.T. = 630+23.91
MATCH EXIST. SUPER

TEMP. RAMP 3 STA. 182+47
71° LT. FWD. SKEW
INSTALL TEMP. 12"x190' CULVERT

PI 628+38.11
STA. 628+51.32
PC 182+83.84
PT 630+23.91

C.L. RAMP 3 STA. 632+83.56 =
P.C. CROSSOVER 4B STA. 80+00.00

MAIN LANES STA. 632+38.00, 70.00' LT. =
RAMP 3 STA. 632+37.61, 12.61' RT.

MAIN LANES STA. 632+11.06, 21.50 LT =
P.T. TEMP. RAMP 2 STA. 178+19.65

CROSSOVER 4B
P.I. 80+46.65
Δ = 5°35'35" RT.
D = 6°00'00"
T = 46.65'
L = 93.22'
P.C. = 80+00.00
P.T. = 80+93.22
NO SUPER

EXISTING R/W & C/A

386.29 FT. OVERLAY TRANSITION
TO EXIST. RAMP PAVEMENT

RAMP 3

PT 178+19.65

PC 80+00.00

PI 80+46.65

PT 80+93.22

N6°35'35"W

N01°00'00"W

PT 175+35.03

N16°00'01"E

C.L. TEMPORARY RAMP 3

700' TEMP. ACCEL. LANE
STA. 631+45.24

C.L. CROSSOVER 4B

FULL DEPTH CONSTRUCTION SB MAIN LANES
STA. 613+56.03 TO STA. 627+56.03

C.L. I-530

N12°18'00"W

C.L. TEMPORARY RAMP 2

N12°18'00"W

N20°12'35"W

C.L. CROSSOVER 4A

700'
ACCELERATION LANE

EXISTING R/W & C/A

S89°00'00"E

STA. 621+32.21
BEGIN WRSF
ON NB FORESLOPE
BEHIND GUARDRAIL
(L.M. 26.66)

WIRE ROPE SAFETY FENCE
10' LT. OF I-530 R.M.L. (P.C.)
WITH CONCRETE DITCH PAVING
TYPE B (4'-0")

TEMPORARY RAMP 2
P.I. 175+35.03
Δ = 48°42'00" RT.
D = 8°00'00"
T = 324.13'
L = 608.75'
P.C. = 172+10.90
P.T. = 178+19.65
NO SUPER

N61°00'00"W

N47°18'05"W

RAMP 2
337.87 FT. OVERLAY TRANSITION
TO EXIST. RAMP PAVEMENT

PI 629+72.53

PT 631+84.16

PI 185+24.59

PT 187+55.52

POB 70+00.00

MAIN LANES STA. 620+46.10
C.L. GRAVEL PIT RD. STA. 15+00

C.L. GRAVEL PIT ROAD

NOTE: EXISTING VERTICAL CLEARANCE
UNDER BRIDGE NO. 05646 IS 17'-2" NB
AND 16'-3" SB. A MINIMUM 16'-0"
VERTICAL CLEARANCE IS REQUIRED
FOR FINISHED ROADWAY.

TEMPORARY RAMP 2
P.I. 170+86.03
Δ = 13°41'55" LT.
D = 8°00'00"
T = 86.03'
L = 171.23'
P.C. = 170+00.00
P.T. = 171+71.23
NO SUPER

PT 171+71.23

RAMP 2 STA. 624+36.83 =
P.C. TEMP. RAMP 2 STA. 170+00.00

PC 170+00.00

PC 621+46.77

PC 172+10.90

N61°00'00"W

N47°18'05"W

PI 170+86.03

EXISTING R/W & C/A

PT 622+07.09

RAMP 2
P.I. 620+65.95
Δ = 35°00'11" LT.
D = 12°00'00"
T = 150.56'
L = 291.69'
P.C. = 619+15.40
P.T. = 622+07.09
MATCH EXIST. SUPER

PC 619+15.40

RAMP 2 STA. 628+00 IN PLACE
18"x38' R.C. PIPE CULVERT
WITH FES LT. & RT.
RETAIN
REMOVE FES LT AND INSTALL
18"x60' TEMPORARY CULVERT
EXTENSION LT

TEMP. RAMP 2 STA. 174+35
60° RT. FWD. SKEW
INSTALL TEMP. 12"x115' CULVERT

MAIN LANES STA. 629+41 TO 632+98
INSTALL TEMPORARY 18"X357' CULVERT
IN MEDIAN

MAIN LANES STA. 633+36 TO 639+60
INSTALL TEMPORARY 18"x624' CULVERT
IN MEDIAN

MAIN LANES STA. 630+83.65, 56.00' RT. =
RAMP 2 STA. 630+84.64, 9.50' LT.

C.L. RAMP 2 STA. 630+85.32 =
C.L. CROSSOVER 4A STA. 70+00.00

RAMP 2
P.I. 629+72.53
Δ = 35°00'05.3" RT.
D = 8°00'08"
T = 225.76'
L = 437.40'
P.C. = 627+46.77
P.T. = 631+84.16
MATCH EXIST. SUPER

MAIN LANES STA. 631+84.16, 58.50 RT. =
P.T. RAMP 2 STA. 631+84.16

STA. 633+00 IN PLACE
TYPE R DROP INLET
IN MEDIAN (4' X 3' X H= 6'-4")
WITH 18" X 99' R.C. PIPE INLET
WITH FES ON LT. &
18"X94' R.C. PIPE OUTLET
WITH FES ON RT.
RETAIN

TEMPORARY RAMP 3
P.I. 185+24.59
Δ = 28°18'01" LT.
D = 6°00'00"
T = 240.75'
L = 471.67'
P.C. = 182+83.84
P.T. = 187+55.52
NO SUPER

MAIN LANES STA. 633+71.49, 35.50 RT. =
P.T. TEMP. RAMP 3 STA. 187+55.52

STA. 628+00 RAMP 2 IN PLACE
18" X 38' R.C. PIPE CULVERT
WITH F.E.S. LT. & RT.
D.A. 2 AC. 050 = 8 CFS
RETAIN

GUARDRAIL

	THRIE BEAM GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL	TERMINAL ANCHOR POST (TYPE 1)
STA. 616+57 TO STA. 621+82 LT. OF R.M.L. = 450 LIN. FT.	1	EACH	1 EACH
STA. 619+10 TO STA. 624+35 RT. OF L.M.L. = 450 LIN. FT.	1	EACH	1 EACH

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
SCOTT P. THORNSBERRY
No. 10887
1-30-2015

PLAN SHEETS

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WORKSPACE: scott-thornsberry
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DATE	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.		BB0201	138	186
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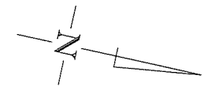

P.T. RAMP 3 STA. 636+95.19
= MAIN LANES STA. 636+95.19, 46.50' LT.

700' TEMPORARY ACCELERATION LANE

300' TAPER

RAMP 3
P.I. 636+00.15
Δ = 5°42'25" LT.
D = 3°00'00"
T = 95.19'
L = 190.23'
P.C. = 635+04.96
P.T. = 636+95.19
MATCH EXIST. SUPER

P.T. CROSSOVER 4A STA. 76+96.66
= MAIN LANES STA. 637+76.50, 21.50' LT.

CROSSOVER 4A
P.I. 76+30.85
Δ = 7°54'35" RT.
D = 6°00'00"
T = 66.02'
L = 131.83'
P.C. = 75+64.83
P.T. = 76+96.66
NO SUPER

STA. 637+00.57

STA. 644+00.57

STA. 647+00.57

EXISTING R/W & C/A

DBL 5'x3' BC

C.L. CROSSOVER 4B

C.L. CROSSOVER 4A

C.L. I-530

N1°00'00"W

N6°35'35"W

N12°18'00"W

N20°12'35"W

10'

24'

6'

36'

700'
ACCELERATION LANE

300'
TAPER

STA. 634+00

STA. 649+00

PC 635+04.96

PI 636+00.15

PC 75+64.83

PT 636+95.19

PI 76+30.85

PT 76+96.66

PC 85+07.58

PI 86+02.05

PT 86+95.91

STA. 637+83.65

STA. 640+83.65

WIRE ROPE SAFETY FENCE
10' LT OF I-530 R.M.L. (P.C.)
WITH CONCRETE DITCH PAVING
TYPE B (4'-0")

P.T. CROSSOVER 4B STA. 86+95.91
= MAIN LANES STA. 639+70.58, 35.50' RT.

CROSSOVER 4B
P.I. 86+02.05
Δ = 11°18'00" RT.
D = 6°00'00"
T = 94.47'
L = 188.33'
P.C. = 85+07.58
P.T. = 86+95.91
NO SUPER

MAIN LANES STA. 633+36 TO 639+60
INSTALL TEMPORARY 18"x624' CULVERT
IN MEDIAN

STA. 640+00 IN PLACE
DBL 5' X 3' X 180' R.C. BOX CULVERT
15° LT. FWD. SKEW WITH
TYPE T DROP INLET
IN MEDIAN 3' X 2'-6" X H=4'-0"
Q50 = 229 CFS D.A. = 92 ACRES
RETAIN

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
1-30-2015

PLAN SHEETS

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DATE	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.		BB0201	139	186

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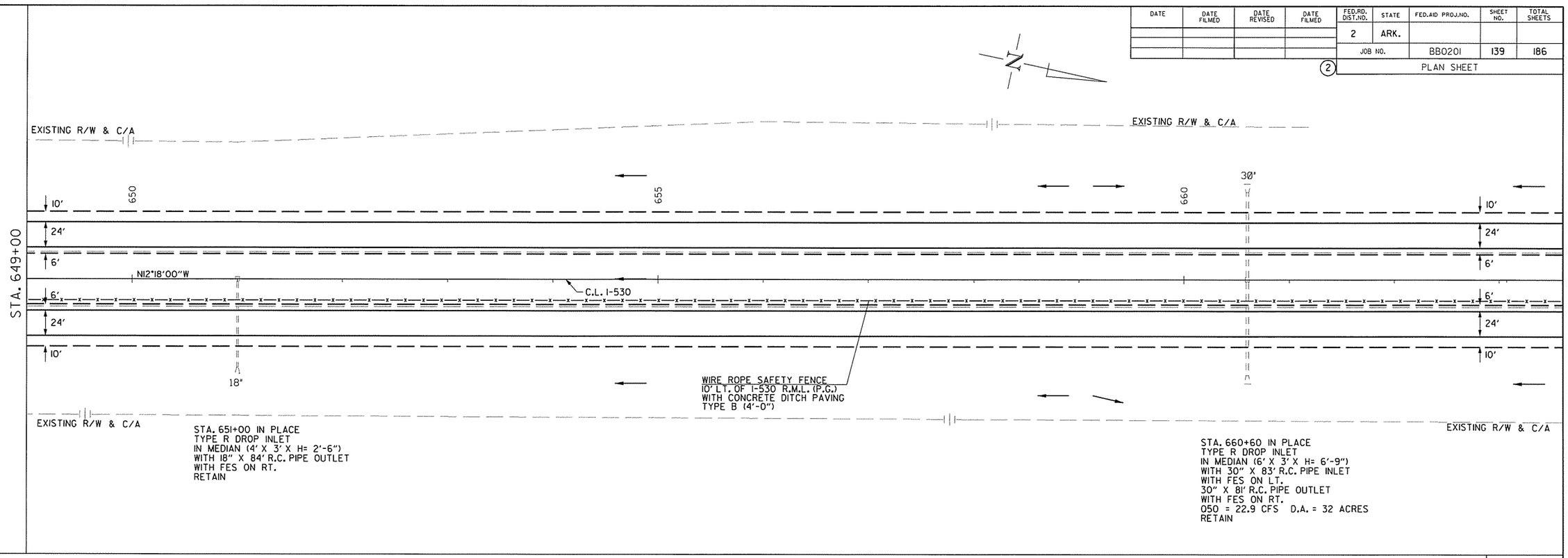

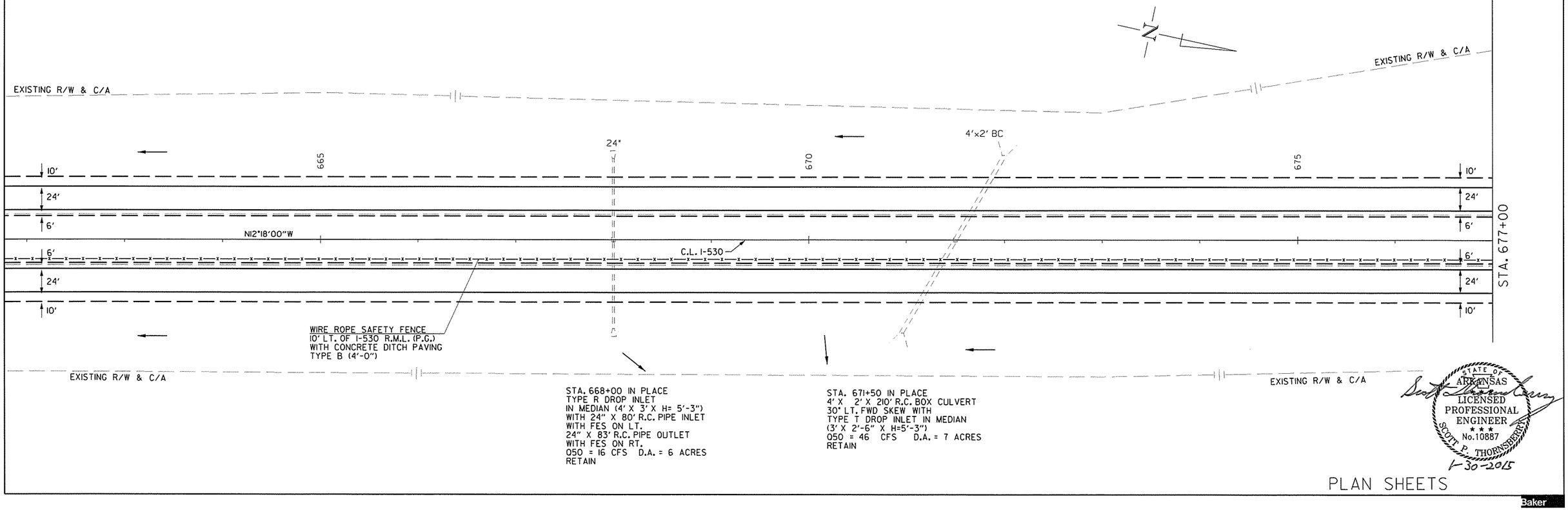

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
SCOTT P. THORNSBERRY
No.10887
4-30-2015

PLAN SHEETS

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DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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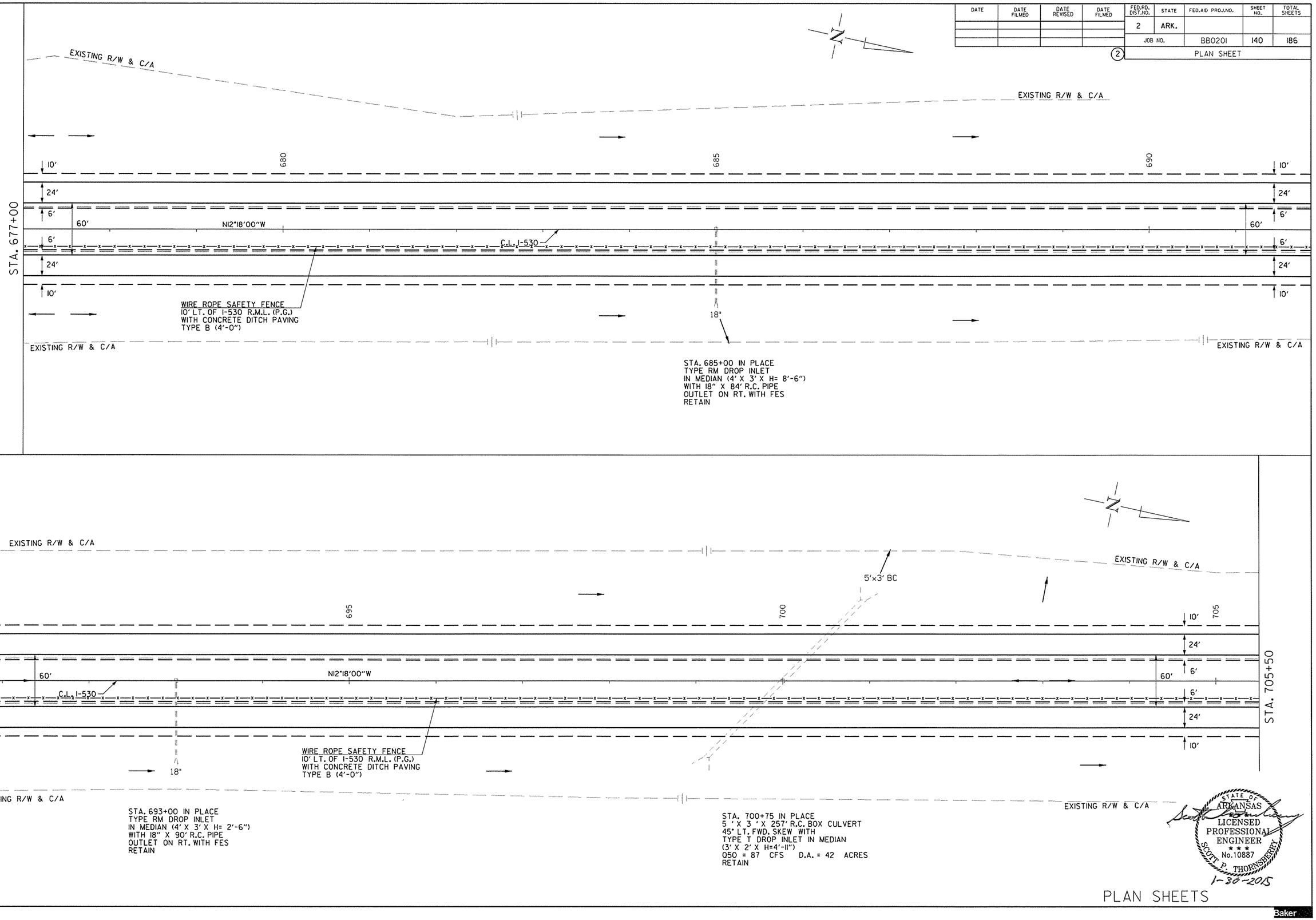

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
1-30-2015

PLAN SHEETS

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
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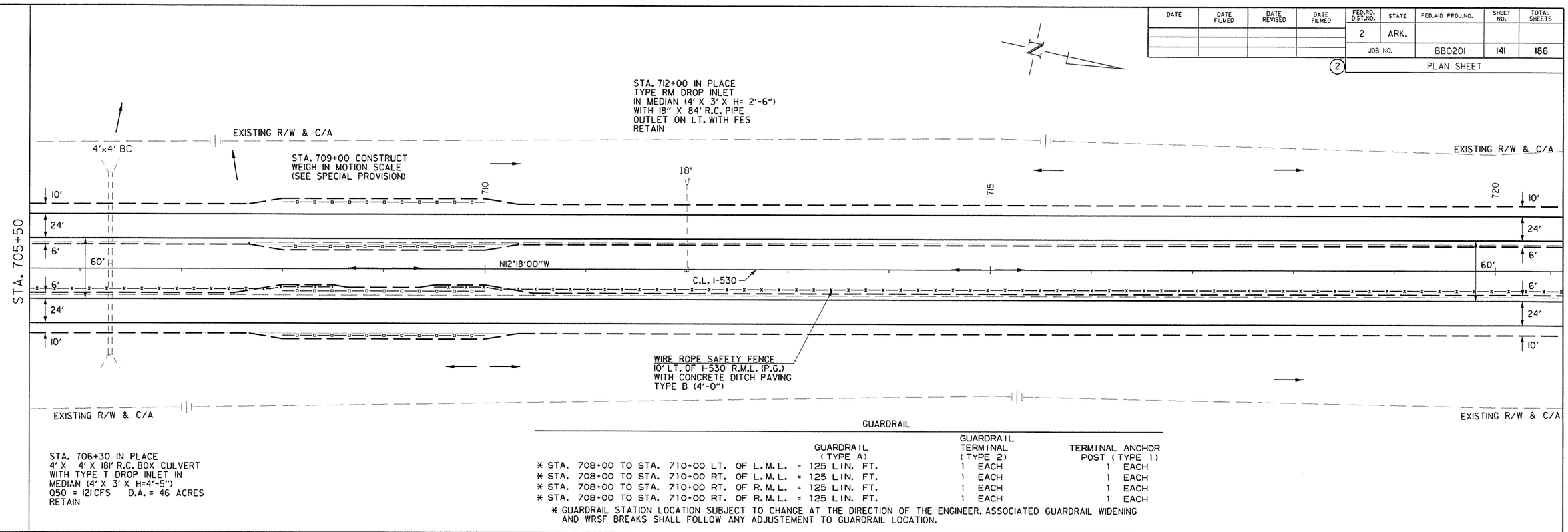
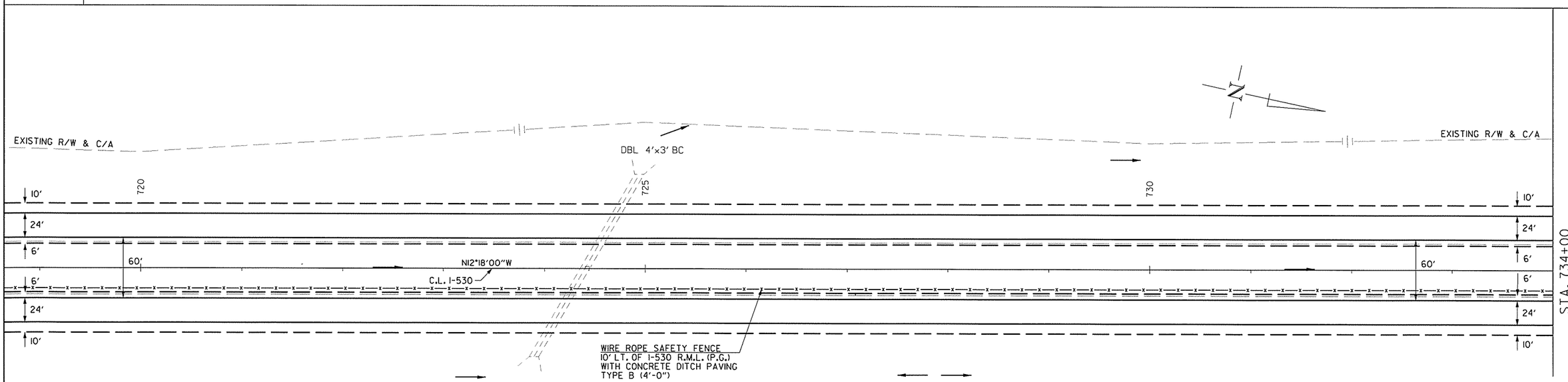


GUARDRAIL

	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE 2)	TERMINAL ANCHOR POST (TYPE 1)
* STA. 708+00 TO STA. 710+00 LT. OF L.M.L.	= 125 LIN. FT.	1 EACH	1 EACH
* STA. 708+00 TO STA. 710+00 RT. OF L.M.L.	= 125 LIN. FT.	1 EACH	1 EACH
* STA. 708+00 TO STA. 710+00 RT. OF R.M.L.	= 125 LIN. FT.	1 EACH	1 EACH
* STA. 708+00 TO STA. 710+00 RT. OF R.M.L.	= 125 LIN. FT.	1 EACH	1 EACH

* GUARDRAIL STATION LOCATION SUBJECT TO CHANGE AT THE DIRECTION OF THE ENGINEER. ASSOCIATED GUARDRAIL WIDENING AND WRSF BREAKS SHALL FOLLOW ANY ADJUSTEMENT TO GUARDRAIL LOCATION.



STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
1-30-2015

PLAN SHEETS

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WORKSPACE: scott.thornsberry
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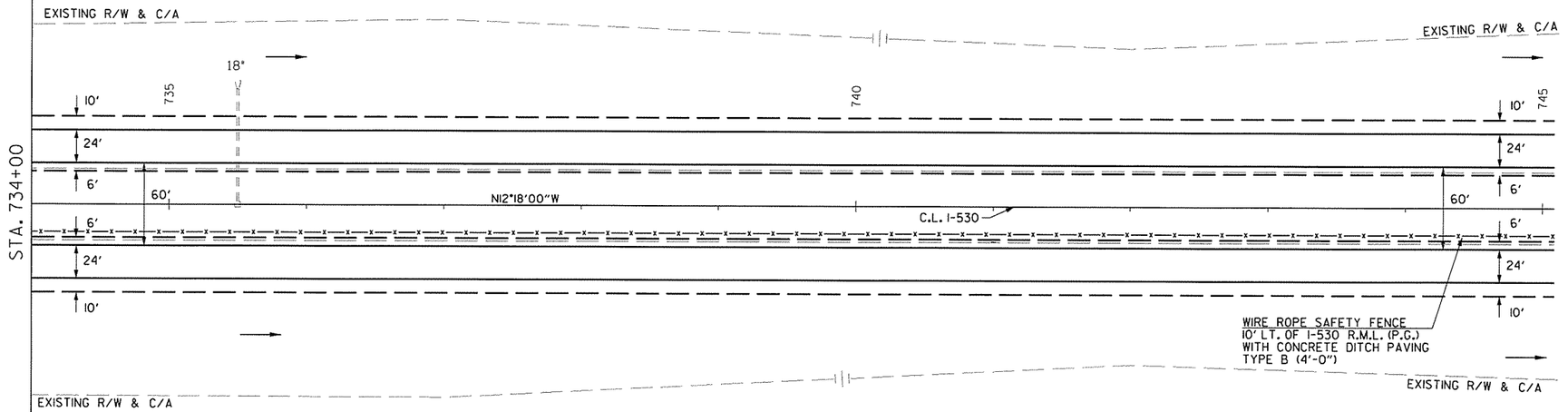
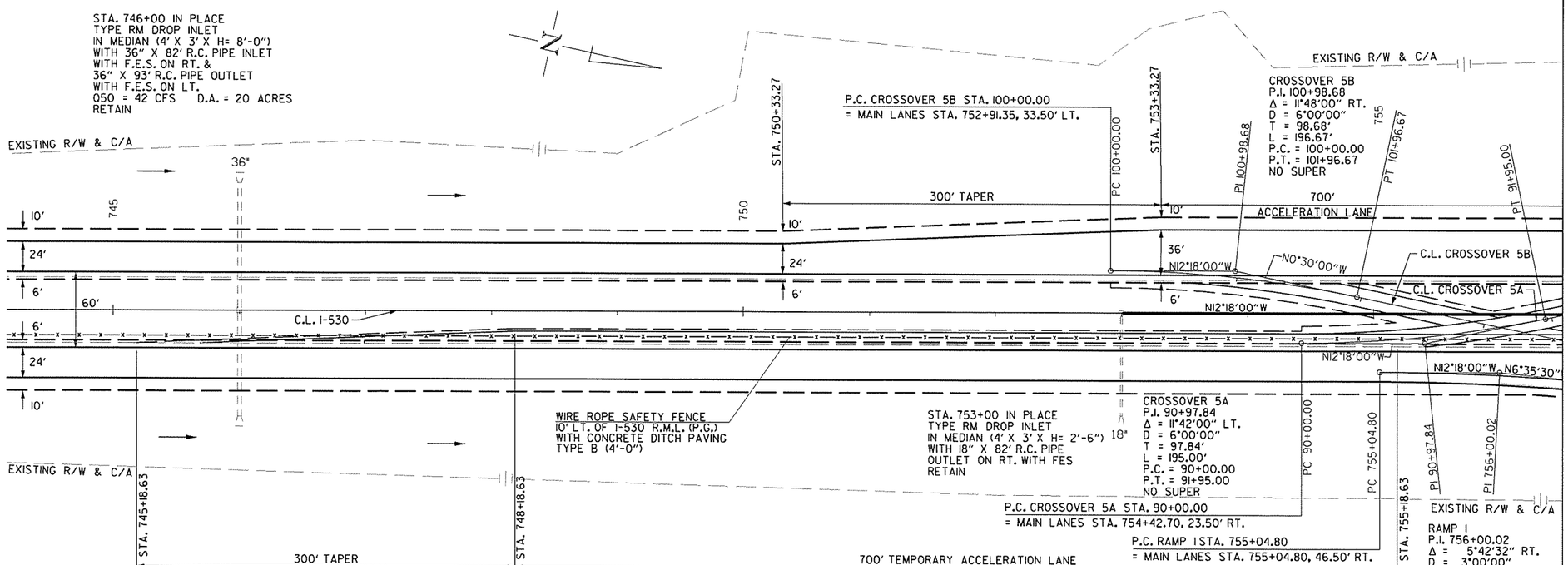
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	142	186
				(2)	PLAN SHEET			

STA. 735+50 IN PLACE
TYPE RM DROP INLET
IN MEDIAN (4' X 3' X H= 2'-6")
WITH 18" X 84' R.C. PIPE
OUTLET ON LT. WITH FES
RETAIN



STA. 746+00 IN PLACE
TYPE RM DROP INLET
IN MEDIAN (4' X 3' X H= 8'-0")
WITH 36" X 82' R.C. PIPE INLET
WITH F.E.S. ON RT. &
36" X 93' R.C. PIPE OUTLET
WITH F.E.S. ON LT.
Q50 = 42 CFS D.A. = 20 ACRES
RETAIN



STA. 753+00 TO STA. 757+96, INSTALL
TEMPORARY 18"x496' CULVERT

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
1-30-2015

PLAN SHEETS

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WORKSPACE: scott.thornsberry
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DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	143	186
						PLAN SHEET		

CROSSOVER 5A
P.I. 94+91.91
Δ = 6°51'53" RT.
D = 6°00'00"
T = 57.28'
L = 114.41'
P.C. = 94+34.64
P.T. = 95+49.05
NO SUPER

STA. 760+00 IN PLACE
TYPE RM DROP INLET
IN MEDIAN (4' X 3' X H= 2'-6")
WITH 18" X 94' R.C. PIPE OUTLET
ON LT. WITH FES
RETAIN

TEMPORARY RAMP 1
P.I. 191+53.81
Δ = 18°18'00" RT.
D = 6°00'00"
T = 153.81'
L = 305.00'
P.C. = 190+00.00
P.T. = 193+05.00
NO SUPER

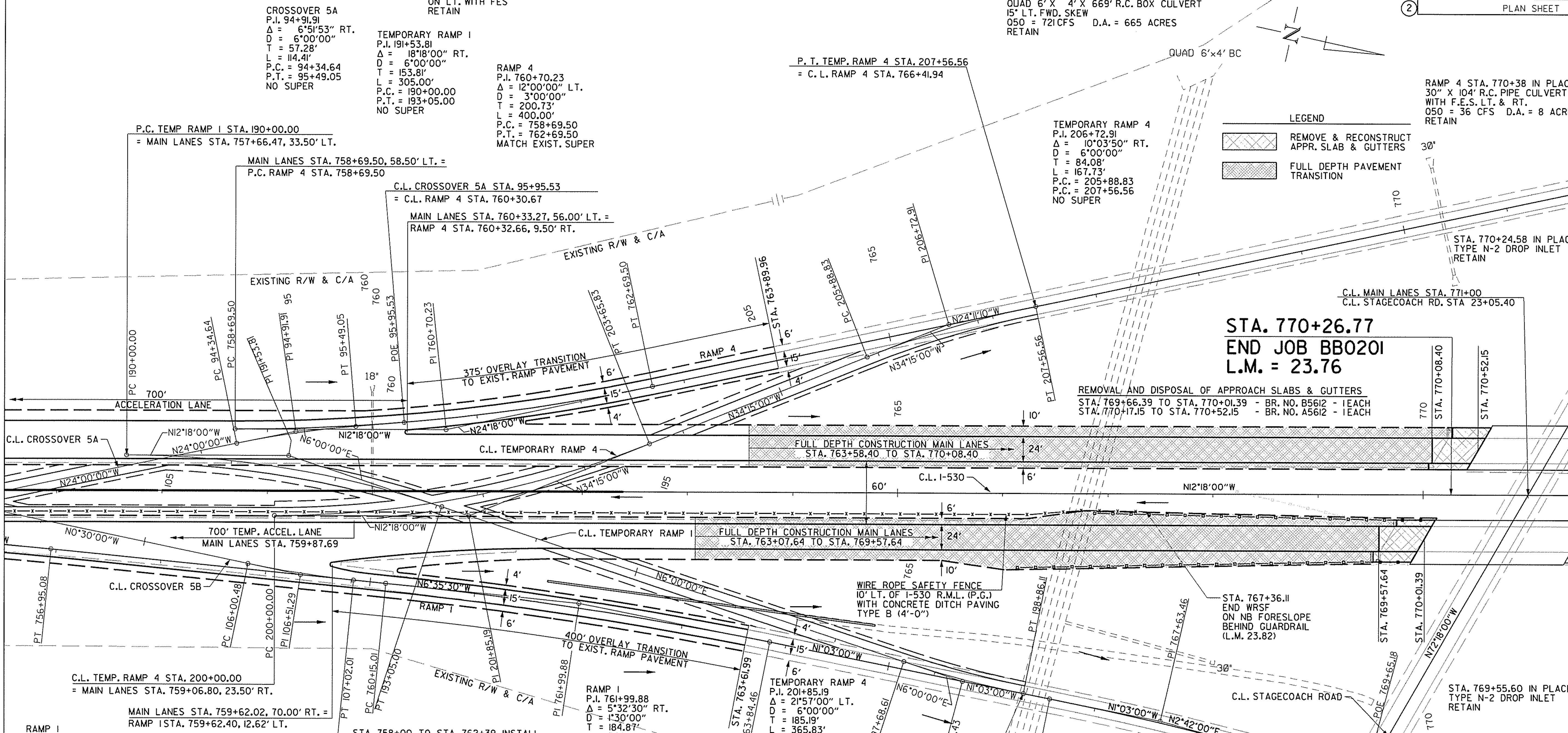
RAMP 4
P.I. 760+70.23
Δ = 12°00'00" LT.
D = 3°00'00"
T = 200.73'
L = 400.00'
P.C. = 758+69.50
P.T. = 762+69.50
MATCH EXIST. SUPER

STA. 766+80 IN PLACE
QUAD 6' X 4' X 669' R.C. BOX CULVERT
15° LT. FWD. SKEW
050 = 721 CFS D.A. = 665 ACRES
RETAIN

RAMP 4 STA. 770+38 IN PLACE
30" X 104' R.C. PIPE CULVERT
WITH F.E.S. LT. & RT.
050 = 36 CFS D.A. = 8 ACRES
RETAIN

TEMPORARY RAMP 4
P.I. 206+72.91
Δ = 10°03'50" RT.
D = 6°00'00"
T = 84.08'
L = 167.73'
P.C. = 205+88.83
P.T. = 207+56.56
NO SUPER

LEGEND
- REMOVE & RECONSTRUCT APPR. SLAB & GUTTERS
- FULL DEPTH PAVEMENT TRANSITION



C.L. TEMP. RAMP 4 STA. 200+00.00 = MAIN LANES STA. 759+06.80, 23.50' RT.

MAIN LANES STA. 759+62.02, 70.00' RT. = RAMP 1 STA. 759+62.40, 12.62' LT.

RAMP 1
P.I. 756+00.02
Δ = 5°42'32" RT.
D = 3°00'00"
T = 95.22'
L = 190.28'
P.C. = 755+04.80
P.T. = 756+95.08
MATCH EXIST. SUPER

P.T. CROSSOVER 5B 107+02.01 = C.L. RAMP 1 STA. 759+83.95

CROSSOVER 5B
P.I. 106+51.29
Δ = 6°05'30" LT.
D = 6°00'00"
T = 50.81'
L = 101.53'
P.C. = 106+00.48
P.T. = 107+02.01
NO SUPER

STA. 758+00 TO STA. 762+39, INSTALL TEMPORARY 18"x439' CULVERT IN MEDIAN. COVER EXISTING DROP INLET AT STA. 760+00 AS DIRECTED BY THE ENGINEER PRIOR TO CONSTRUCTION OF THE TEMPORARY CROSSOVER. REMOVE COVER WHEN CROSSOVER IS REMOVED. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS CONTRACT ITEMS.

STA. 753+00 TO STA. 757+96, INSTALL TEMPORARY 18"x496' CULVERT

TEMP. RAMP 1 STA. 196+00.00 INSTALL TEMP. 12"X315' CULVERT 79° LT. FWD. SKEW

RAMP 1
P.I. 761+99.88
Δ = 5°32'30" RT.
D = 1°30'00"
T = 184.87'
L = 369.44'
P.C. = 760+15.01
P.T. = 763+84.46
MATCH EXIST. SUPER

TEMPORARY RAMP 4
P.I. 201+85.19
Δ = 21°57'00" LT.
D = 6°00'00"
T = 185.19'
L = 365.83'
P.C. = 200+00.00
P.T. = 203+65.83
NO SUPER

P. T. TEMP. RAMP 1 STA. 198+86.11 = C. L. RAMP 1 STA. 766+30.82

STA. 768+00 IN PLACE
TYPE RM DROP INLET
IN MEDIAN (4' X 3' X H= 3'-6")
WITH 30" X 143' R.C. PIPE OUTLET
CONNECTED TO R.C. BOX AT
STA. 766+80
RETAIN

RAMP 1
P.I. 767+63.46
Δ = 3°45'00" RT.
D = 1°45'00"
T = 107.18'
L = 214.29'
P.C. = 766+56.27
P.T. = 768+70.56
MATCH EXIST. SUPER

TEMPORARY RAMP 1
P.I. 198+27.43
Δ = 7°03'00" LT.
D = 6°00'00"
T = 58.82'
L = 117.50'
P.C. = 197+68.61
P.T. = 198+86.11
NO SUPER

STA. 770+52.15 BRIDGE END
IN PLACE 146'-5 9/16" STEEL WITH CONC. DECK
BR. NO. A5612
39'-00" CLEAR ROADWAY
STA. 771+98.61 BRIDGE END
RETAIN

STA. 770+01.39 BRIDGE END
IN PLACE 146'-5 9/16" STEEL WITH CONC. DECK
BR. NO. B5612
39'-0" CLEAR ROADWAY
STA. 771+47.85 BRIDGE END
RETAIN

REMOVAL AND DISPOSAL OF GUARDRAIL

	GUARDRAIL (TYPE A)	TERMINAL ANCHOR POST (TYPE 1)
STA. 770+12 TO STA. 768+22 LT. OF R.M.L.	= 165 LIN. FT.	1 EACH
STA. 766+37 TO STA. 769+87 RT. OF R.M.L.	= 325 LIN. FT.	1 EACH

GUARDRAIL

	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE 2)	THRIE BEAM GUARDRAIL TERMINAL
STA. 766+12 TO STA. 769+80 RT. OF R.M.L.	= 300 LIN. FT.	1 EACH	1 EACH
STA. 766+86 TO STA. 770+04 LT. OF R.M.L.	= 250 LIN. FT.	1 EACH	1 EACH

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No.10887 SCOTT P. THORNSBERRY
1-30-2015

PLAN SHEETS

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DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0201	144	186

(2) PLAN SHEET

RAMP 3
P.I. 774+36.62
Δ = 3°45'00" LT.
D = 1°45'00"
T = 107.18'
L = 214.29'
P.C. = 773+29.44
P.T. = 775+43.73
MATCH EXIST. SUPER

CROSSOVER 6B
P.I. 121+36.76
Δ = 8°11'30" RT.
D = 3°00'00"
T = 136.76'
L = 273.06'
P.C. = 120+00.00
P.T. = 122+73.06
NO SUPER

RAMP 3
P.I. 780+00.41
Δ = 5°32'30" LT.
D = 1°30'00"
T = 184.87'
L = 369.44'
P.C. = 778+15.54
P.T. = 781+84.99
MATCH EXIST. SUPER

CROSSOVER 6A
P.I. 116+48.63
Δ = 8°11'30" RT.
D = 3°00'00"
T = 136.76'
L = 273.06'
P.C. = 115+11.87
P.T. = 117+84.92
NO SUPER

REMOVE WRSF FROM STA. 771+86 TO 783+53 & INSTALL NEW ANCHOR AT STA. 783+53. AFTER CROSSOVERS ARE REMOVED REINSTALL NEW WRSF AT ORIGINAL LOCATION.

STA. 785+00 IN PLACE
TYPE RM DROP INLET
IN MEDIAN (4' X 3' X H= 2'-6")
WITH 18" X 85' R.C. PIPE
OUTLET ON LT. WITH FES
RETAIN

RAMP 3
P.I. 786+00.14
Δ = 5°42'30" LT.
D = 3°00'00"
T = 95.22'
L = 190.28'
P.C. = 785+04.92
P.T. = 786+95.20
MATCH EXIST. SUPER

MAIN LANES STA. 782+47.84, 69.67' LT. =
RAMP 3 STA. 782+47.44, 11.97' RT.

P.T. CROSSOVER 6A STA. 117+84.92
= MAIN LANES STA. 782+53.38, 37.50' LT.

P.C. CROSSOVER 6B STA. 120+00.00
= C.L. MEDIAN I-530 STA. 774+86.64, 33.50' LT.

P.C. CROSSOVER 6A STA. 110+00.00
= MAIN LANES STA. 774+72.75, 35.50' RT.

STA. 770+01.39 BRIDGE END
IN PLACE 146'-6" STEEL WITH CONC. DECK
BR. NO. 5612B
39'-00" CLEAR ROADWAY
STA. 771+47.85 BRIDGE END
RETAIN

COVER EXISTING DROP INLET AT STA. 777+00.00 AS DIRECTED BY THE ENGINEER PRIOR TO CONSTRUCTION OF THE TEMPORARY CROSSOVER. REMOVE COVER WHEN CROSSOVER IS REMOVED. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS CONTRACT ITEMS.

MAIN LANES STA. 781+66.33, 56.00' RT. =
RAMP 2 STA. 781+66.94, 9.50' LT.

P.T. CROSSOVER 6B STA. 127+70.89
= MAIN LANES STA. 782+53.38, 37.50' RT.

P.T. RAMP 2 STA. 783+30.10
= MAIN LANES STA. 783+30.10, 58.50' RT.

RAMP 2 STA. 775+00 IN PLACE
36" X 72' R.C. PIPE CULVERT
WITH F.E.S. LT. & RT.
Q50 = 36 CFS D.A. = 14 ACRES
RETAIN

STA. 775+87 TO STA. 780+60 INSTALL
18"X473' TEMPORARY CULVERT IN MEDIAN

CROSSOVER 6A
P.I. 111+36.76
Δ = 8°11'30" LT.
D = 3°00'00"
T = 136.76'
L = 273.06'
P.C. = 110+00.00
P.T. = 112+73.06
NO SUPER

CROSSOVER 6B
P.I. 126+34.59
Δ = 8°11'30" LT.
D = 3°00'00"
T = 136.76'
L = 273.06'
P.C. = 124+97.83
P.T. = 127+70.89
NO SUPER

RAMP 2
P.I. 781+30.83
Δ = 12°00'00" RT.
D = 3°00'00"
T = 200.73'
L = 400.00'
P.C. = 779+30.10
P.T. = 783+30.10
MATCH EXIST SUPER

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
1-30-2015

PLAN SHEETS

Baker

Scott.Thornsberry@30/2015 3:33:35 PM
WORKSPACE: scott.thornsberry
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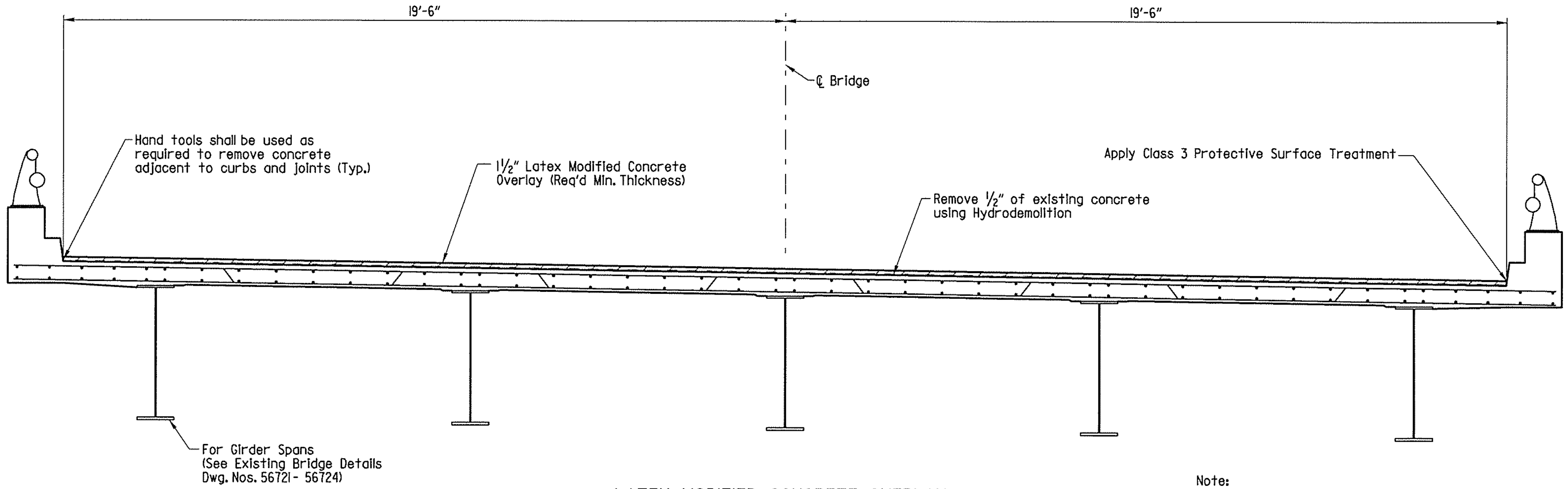
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	145	186

(1) A&B5611 - LMC OVERLAY - 56712



LATEX MODIFIED CONCRETE OVERLAY

(Looking forward at Bridge B5611, looking back at Bridge A5611)

Note:
The Minimum overlay placement length shall be a full span on simple span bridges and to an existing slab joint on continuous unit bridges. Refer to existing bridge drawings.

GENERAL NOTES

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway Commission Standard Specifications for Highway Construction, Edition of 2014, with applicable Special Provisions and Supplemental Specifications. Unless otherwise noted in the plans Section and Subsection refer to the Standard Specifications.

Drawing shows details and dimensions of existing structures based on the original bridge plans. The Contractor shall make check measurements in the field and make any adjustments necessary to meet the required clearances and fit the new work to the existing structure.

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

HYDRODEMOLITION: The designated area of the existing bridge deck shall receive hydrodemolition in accordance with the Job Special Provision "Hydrodemolition" to a planned depth of ½" below the existing bridge deck surface. Deteriorated concrete in the bridge deck below this depth shall be removed at the direction of the Engineer and up to the limits detailed. These areas shall be measured by the square yard and shall be paid for at the unit price bid for the item SP Job BB0201 "Hydrodemolition".

BRIDGE DECK REPAIR: After hydrodemolition, the deck surface shall be sounded and any areas of unsound, delaminated or otherwise deteriorated concrete shall be removed at the direction of the Engineer and in accordance with SP JOB BB0201 "Bridge Deck Repair".

LATEX MODIFIED CONCRETE OVERLAY: The designated area of the existing bridge deck shall receive a Latex Modified Concrete (LMC) Overlay with a required minimum thickness of 1½", in accordance with SP JOB BB0201 "Latex Modified Concrete Overlay".

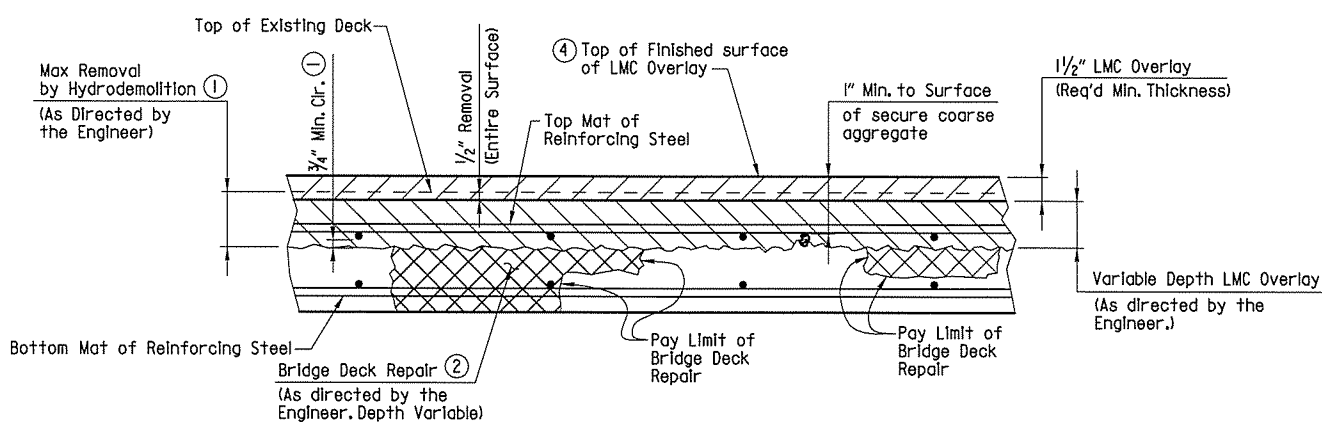
These areas shall be measured by the square yard and shall be paid for at the unit price bid for the item SP JOB BB0201 "Latex Modified Concrete Overlay (1½" Thick)". Areas of the existing bridge deck removed at the direction of the Engineer to a depth greater than ½" below the existing bridge deck surface shall be filled with LMC concurrent to the placement of the 1½" LMC Overlay. This area shall be measured and paid in accordance with SP JOB BB0201 "Latex Modified Concrete Overlay".

SURFACE FINISH: The LMC Overlay surface of the bridge deck shall be given a grooved finish as specified for final finishing in Subsection 802.19 for Class 7 Grooved Bridge Roadway Surface Finish and in accordance with SP JOB BB0201 "Latex Modified Concrete Overlay".

PROTECTIVE SURFACE TREATMENT: The longitudinal joints between the LMC overlay and the adjacent existing concrete curb or rail shall be given Class 3 Protective Surface Treatment as specified in Section 803 and in accordance with SP JOB BB0201 "Latex Modified Concrete Overlay".

Transverse and longitudinal construction joints separating adjacent overlay placements shall be prepared and sealed in accordance with joint details on Dwg. No. 56713.

The roadway surface of the LMC Overlay shall be given a Class 1 Protective Surface Treatment as specified in Section 803.



DETAILS OF HYDRODEMOLITION AND LATEX MODIFIED CONCRETE OVERLAY

(1) Removal of unsound concrete beyond ½" below the original surface shall be at the direction of the Engineer. If the bond between existing concrete and the top mat of reinforcing steel is destroyed, then the concrete shall be removed to a minimum of ¾" clearance below the bar.

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

(3) Depth varies to achieve minimum clearance below top mat of reinforcing steel.

(4) Finished surface of LMC Overlay shall be 1" above existing concrete deck surfaces unless increase is required to maintain minimum required LMC Overlay thickness and a minimum of 1½" cover to reinforcing steel or shear connectors.

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No.14501 STEPHEN F. HARPER

2/2/15

BRIDGE ENGINEER
PRINT DATE: 2/2/2015

SHEET 1 OF 3
DETAILS OF
LATEX MODIFIED CONCRETE OVERLAY
WITH GRADE RAISE
JEFFERSON COUNTY
ROUTE SECTION
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARKANSAS

DRAWN BY: WEG DATE: 11/14 FILENAME: BBB0201MI.SXI
CHECKED BY: CPB DATE: 1/12/15
DESIGNED BY: SFH DATE: 11/14 SCALE: No Scale
BRIDGE NO. A&B5611 DRAWING NO. 56712

william.greenup 2/2/2015 8:36:53 AM
WORKSPACE: William.Greenup
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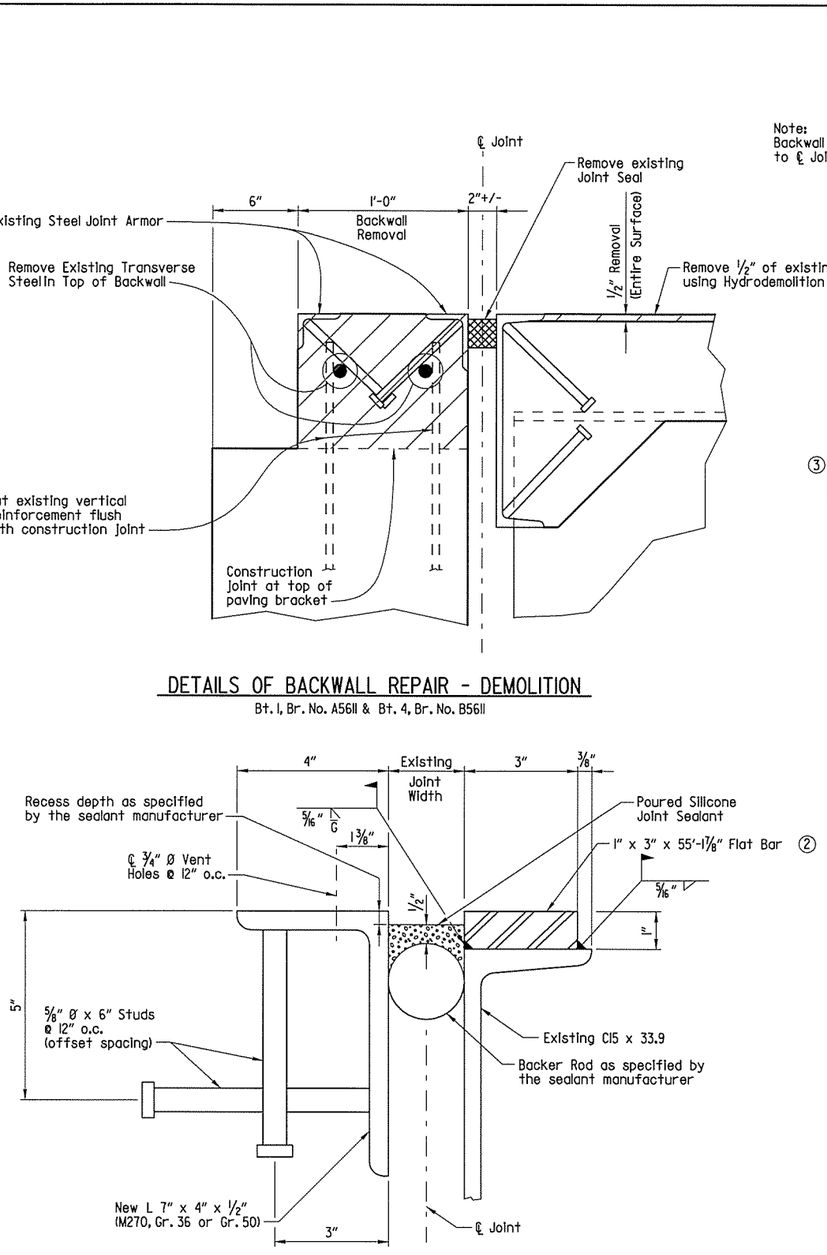
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	146	186
				(1)	A&B5611 - LMC OVERLAY - 56713			

DETAILS OF BACKWALL REPAIR - DEMOLITION

Bt. 1, Br. No. A5611 & Bt. 4, Br. No. B5611



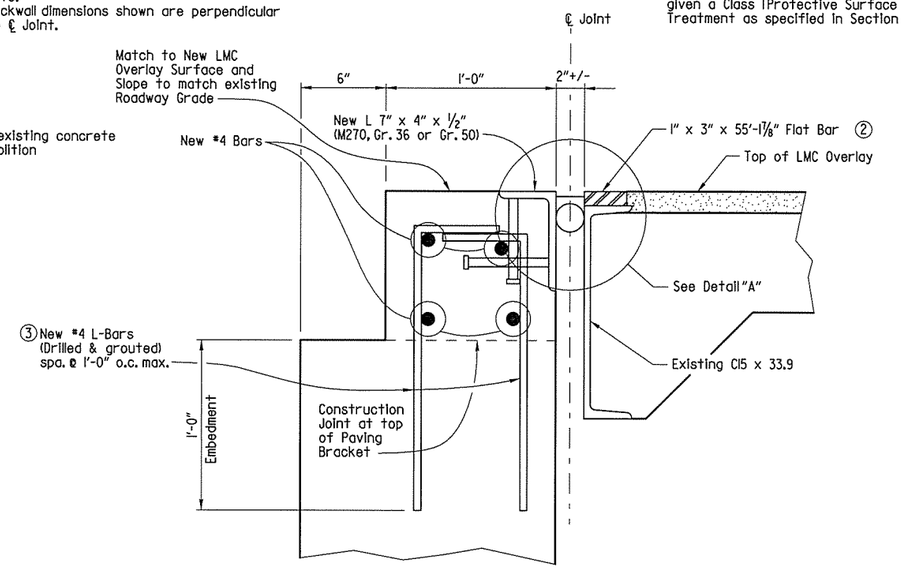
DETAIL "A"

Notes:
All new structural steel shall be AASHTO M270 (Gr. 36, 50 or 50W). For Grade 36 and Grade 50 steel, the surfaces not in contact with concrete shall be cleaned and painted in accordance with Section 638. Painting will not be paid for directly, but shall be subsidiary to other items. Grade 50W steel shall not be painted, but shall be cleaned in accordance with Subsection 807.84(e).

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

Note:
Backwall dimensions shown are perpendicular to ℄ Joint.

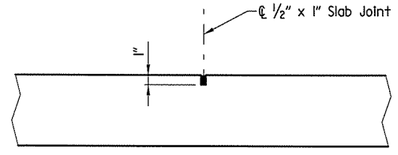
Note:
Top of new backwall shall be given a Class I Protective Surface Treatment as specified in Section 803.



DETAILS OF BACKWALL REPAIR - CONSTRUCTION

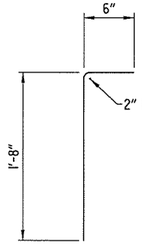
② Length of existing joint armor taken from original construction plans. The Contractor shall field verify the length of existing joint armor prior to fabrication to ensure proper fit. The Contractor shall make field measurements to verify that the bar thickness will match the top of the LMC Overlay.

③ Grout new #4 L Bars into drilled holes spaced to avoid existing reinforcing steel. Grout shall be an approved non-shrunk or epoxy grout listed on the QPL. Hole diameter and installation procedure shall be as required by the grout manufacturer.

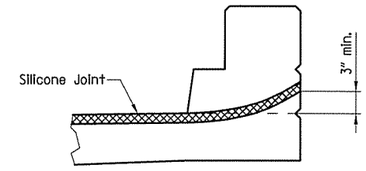


Use ½" x 1" Type 3 or 4 Joint Sealer. See Subsections 501.02(h) and 501.05(j). Backer rod shall not be installed. Joint Sealer shall be measured and paid for as LMC Overlay. Transverse slab joints shall extend from curb to curb. Slab joints shall be placed at all pouring sequence construction joints and are required at existing slab joint locations. Overlay joints shall be sawed as soon as the concrete has sufficiently set to allow sawing of the joint without damage to the overlay. Sealant must be gray or other color similar to concrete.

OVERLAY JOINT DETAIL



#4 L-BAR



JOINT SEAL PLACEMENT AT CURB

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

Structural Steel (lb.)	Reinforcing Steel (lb.)	Class S(AE) Concrete (cu. yd.)
28.9	5.45	0.032

APPROXIMATE QUANTITIES FOR BACKWALL REPAIR ①

① The Contractor shall make measurements at the locations designated by the Engineer for Backwall Repair prior to beginning work on the Bridge. Replacement concrete shall be Class S or S(AE) or LMC. Reinforcing Steel shall conform to Section 804. Removal of top portion of backwall, concrete and reinforcement in top of backwall, Structural Steel, Labor, Tools and Equipment shall not be paid for directly but shall be considered subsidiary to the item "Modification of Existing Bridge Structure".

These details apply to Bent 1 (Bridge A5611) and Bent 4 (Bridge B5611)

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 14501
STEPHEN F. HARPER

2/2/15

BRIDGE ENGINEER
PRINT DATE: 2/2/2015

SHEET 2 OF 3
DETAILS OF
LATEX MODIFIED CONCRETE OVERLAY
WITH GRADE RAISE
JEFFERSON COUNTY
ROUTE SECTION
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARKANSAS

DRAWN BY:	WEG	DATE:	11/14	FILENAME:	BBB0201M1.AXI
CHECKED BY:	CPB	DATE:	1/12/15		
DESIGNED BY:	SFH	DATE:	11/14	SCALE:	No Scale
BRIDGE NO. A&B5611				DRAWING NO. 56713	

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WORKSPACE: William.Greenup
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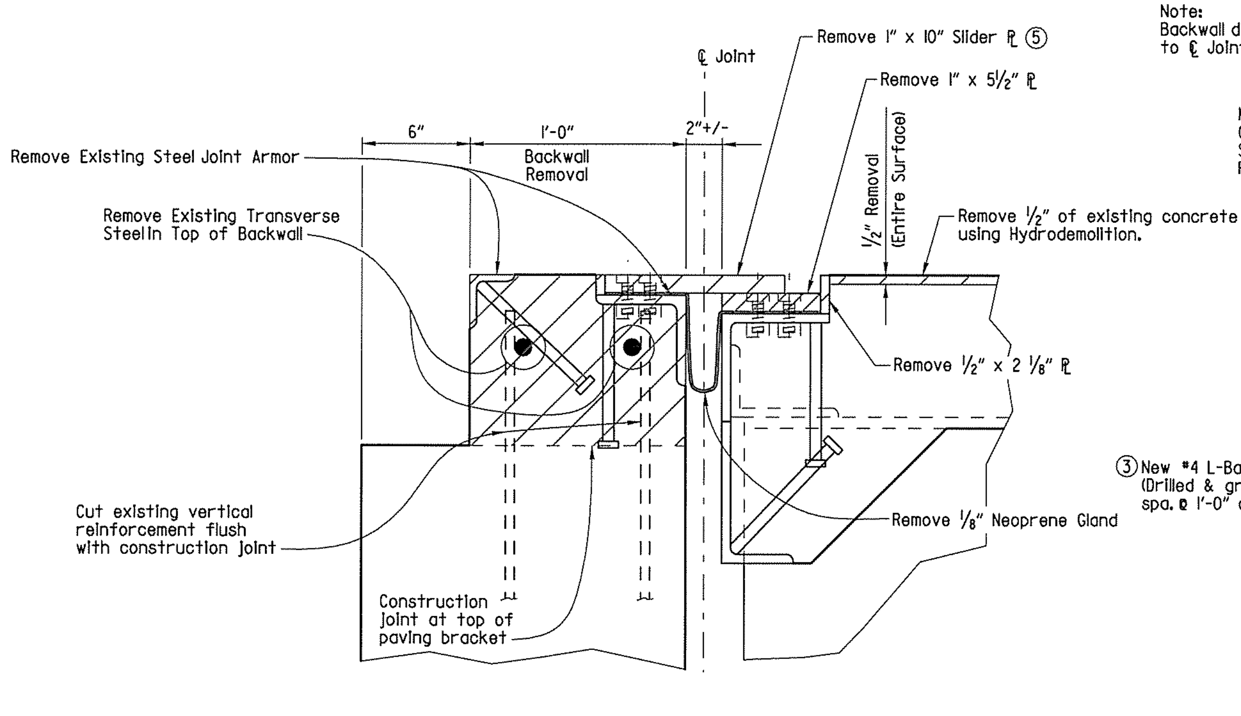
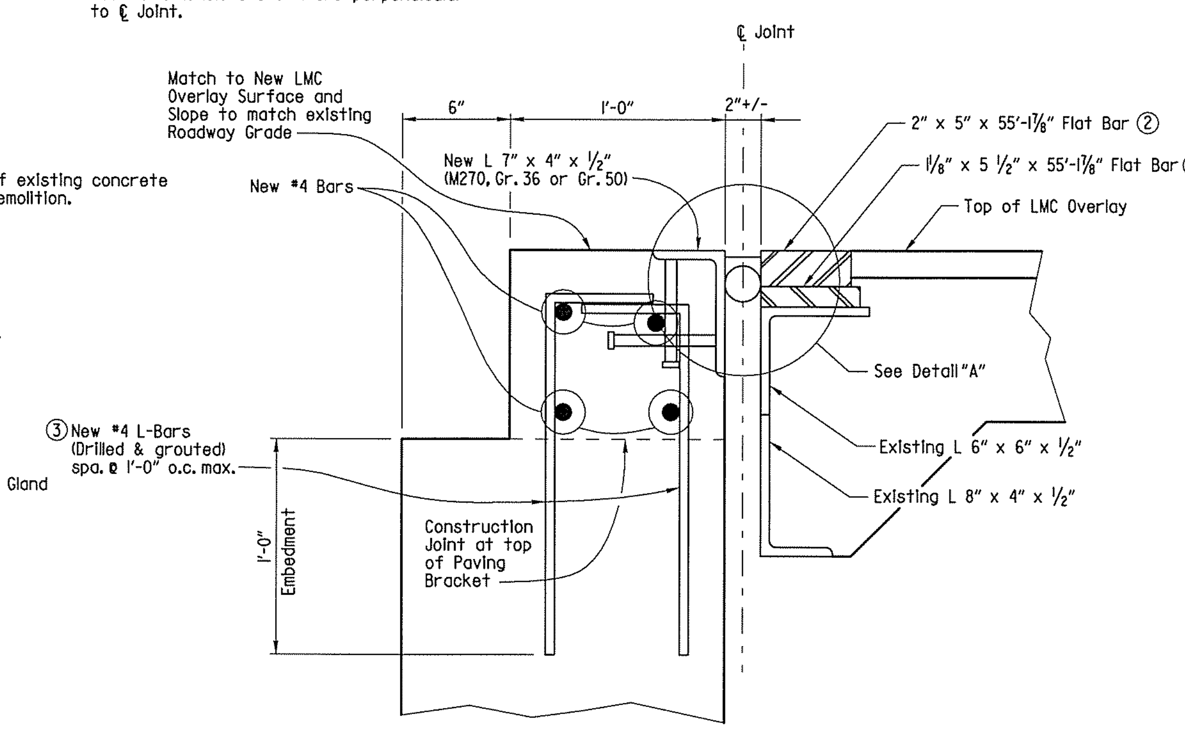
Baker

Note:
Backwall dimensions shown are perpendicular to ℄ Joint.



DETAILS OF BACKWALL REPAIR - DEMOLITION



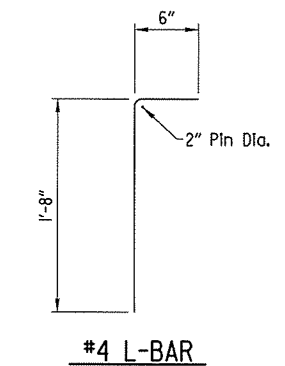
DETAILS OF BACKWALL REPAIR - CONSTRUCTION

(2) Length of existing joint armor taken from original construction plans. The Contractor shall field verify the length of existing joint armor prior to fabrication to ensure proper fit. The Contractor shall make field measurements to verify that the bar thickness will match the top of the LMC Overlay.

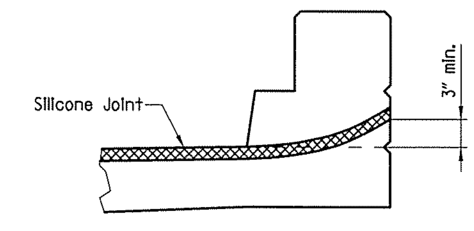
(3) Grout new #4 L Bars into drilled holes spaced to avoid existing reinforcing steel. Grout shall be an approved non-shrunk or epoxy grout listed on the QPL. Hole diameter and installation procedure shall be as required by the grout manufacturer.

(4) Detail "A" shown for joint located at Bent 4 of Bridge A5611. Slider ℞ joint located at Bent 1 of Bridge B5611 is similar except that the original slider ℞ has been removed, and the recess has been filled with concrete on the abutment backwall side and a steel fill ℞ on the span side of the joint. At this location, the Contractor shall remove and reset the top portion of existing backwall above paving bracket, and remove existing steel fill ℞ on span. This location shall be rebuilt such that it is identical to Bent 4 (Bridge A5611) in the proposed condition.

(5) Existing ½" x 3" x 1'-2 ⅛" vertical ℞ located at the gutterline shall be removed with the roadway slider ℞. The steel ℞ embedded in the curb section shall remain in place. See "Part Section of Joint at Curb" on Dwg. No. 56723 for additional information.



#4 L-BAR



JOINT SEAL PLACEMENT AT CURB

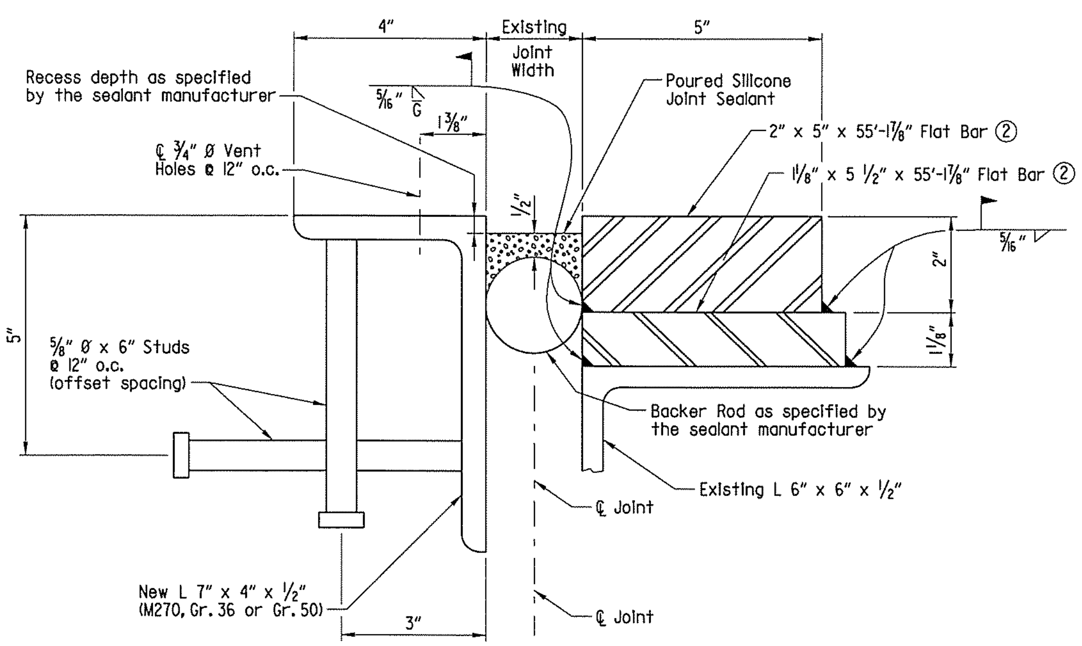
Quantities shown are per foot of repair and are for information only.

Structural Steel (lb.)	Reinforcing Steel (lb.)	Class S(AE) Concrete (cu. yd.)
73.8	5.45	0.032

APPROXIMATE QUANTITIES FOR BACKWALL REPAIR (1)

(1) The Contractor shall make measurements at the locations designated by the Engineer for Backwall Repair prior to beginning work on the Bridge. Replacement concrete shall be Class S or S(AE) or LMC. Reinforcing Steel shall conform to Section 804. Removal of top portion of backwall, concrete and reinforcement in top of backwall, Structural Steel, Labor, Tools and Equipment shall not be paid for directly but shall be considered subsidiary to the item "Modification of Existing Bridge Structure".

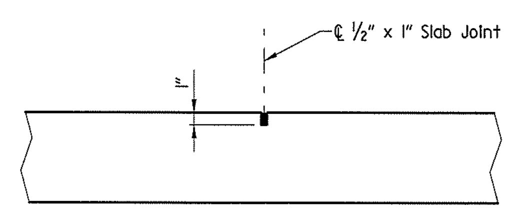
These details apply to Bent 4 (Bridge A5611) and Bent 1 (Bridge B5611)



DETAIL "A" (4)

Notes:
All new structural steel shall be AASHTO M270 (Gr. 36, 50 or 50W). For Grade 36 and Grade 50 steel, the surfaces not in contact with concrete shall be cleaned and painted in accordance with Section 638. Painting will not be paid for directly, but shall be subsidiary to other items. Grade 50W steel shall not be painted, but shall be cleaned in accordance with Subsection 807.84(e).

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



Use ½" x 1" Type 3 or 4 Joint Sealer. See Subsections 501.02(h) and 501.05(j). Backer rod shall not be installed. Joint Sealer shall be measured and paid for as LMC Overlay. Transverse slab joints shall extend from curb to curb. Slab joints shall be placed at all pouring sequence construction joints and are required at existing slab joint locations. Overlay joints shall be sawed as soon as the concrete has sufficiently set to allow sawing of the joint without damage to the overlay. Sealant must be gray or other color similar to concrete.

OVERLAY JOINT DETAIL

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No. 14501 STEPHEN F. HARPER

2/2/15

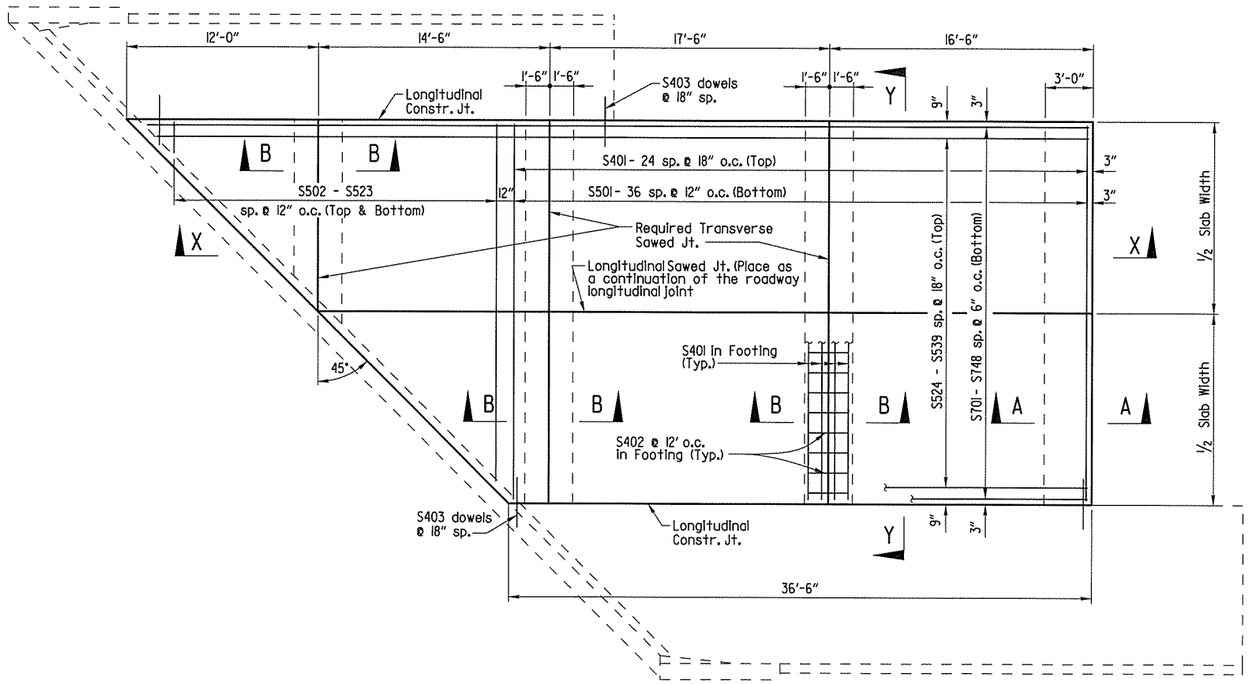
BRIDGE ENGINEER
PRINT DATE: 2/2/2015

SHEET 3 OF 3
DETAILS OF
LATEX MODIFIED CONCRETE OVERLAY
WITH GRADE RAISE
JEFFERSON COUNTY
ROUTE SECTION
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARKANSAS

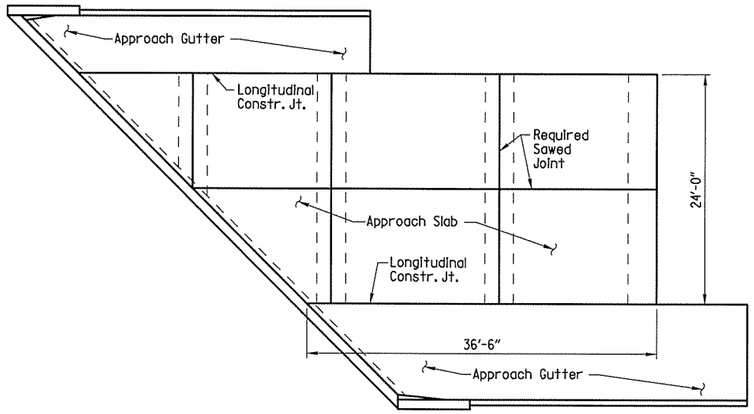
DRAWN BY: WEG DATE: 11/14 FILENAME: BB0201MI.AX2
CHECKED BY: CPB DATE: 1/12/15
DESIGNED BY: SFH DATE: 11/14 SCALE: No Scale
BRIDGE NO. A&B5611 DRAWING NO. 56714

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	148	186

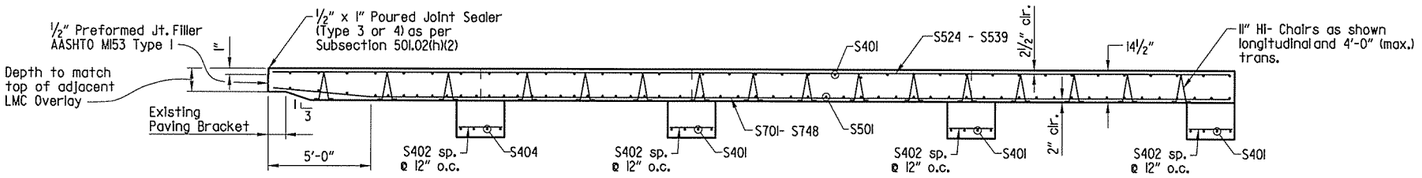
(1) A&B561I - TYPE SPEC. APPROACH SLAB - 56715



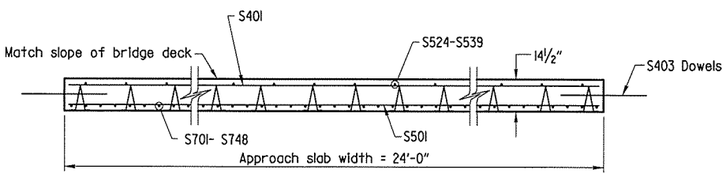
PLAN



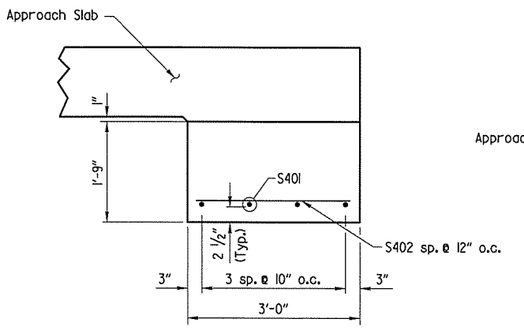
PLAN OF APPROACH SLABS AND APPROACH GUTTERS



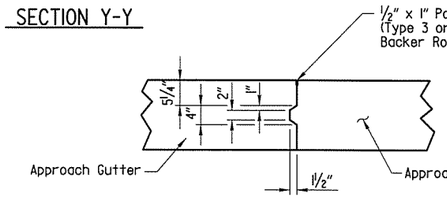
SECTION X-X



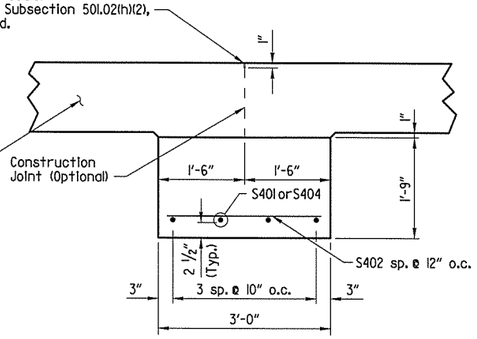
SECTION Y-Y



SECTION A-A



DETAILS OF LONGITUDINAL CONSTRUCTION JOINT



SECTION B-B

BAR LIST FOR ONE TYPE SPECIAL APPROACH SLAB

Mark	No.	Length
S401	37	23'-8"
S402	83	2'-8"
* S403	44	3'-0"
** S404	4	12'-1"
S501	37	23'-8"
S502 to S523	2 each	1'-10" to 22'-10"
S524 to S539	1 each	36'-10" to 59'-4"
S701 to S748	1 each	36'-4" to 59'-10"

*Approach Slab shown for Bent 1 of Bridge A561I and Bent 4 of Bridge B561I. Bent 4 of Bridge A561I and Bent 1 of Bridge B561I contain 42 - S403 bars.

**Field cut as required.

QUANTITIES FOR ONE TYPE SPECIAL APPROACH SLAB

(For Information Only)

Reinforcing Steel (lbs.)	Concrete (cubic yds) T=14½"
7,853	69.06

GENERAL NOTES

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

Reinforcement Steel shall conform to AASHTO M31 or M322, Type A, with mill test reports. Grade 60 (fy = 60,000 psi).

Approach Slabs will be measured and paid for in accordance with Section 504 of the Standard Specifications.

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No.14501 STEPHEN F. HARPER

2/2/15

BRIDGE ENGINEER
PRINT DATE: 2/2/2015

DETAILS OF TYPE SPECIAL APPROACH SLABS JEFFERSON COUNTY

ROUTE SECTION

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARKANSAS

DRAWN BY:	WEG	DATE:	11/14	FILENAME:	BBB0201M1.GXI
CHECKED BY:	CPB	DATE:	1/12/15		
DESIGNED BY:	SFH	DATE:	11/14	SCALE:	No Scale
BRIDGE NO. A&B561I				DRAWING NO.	56715

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WORKSPACE: William.Greenup
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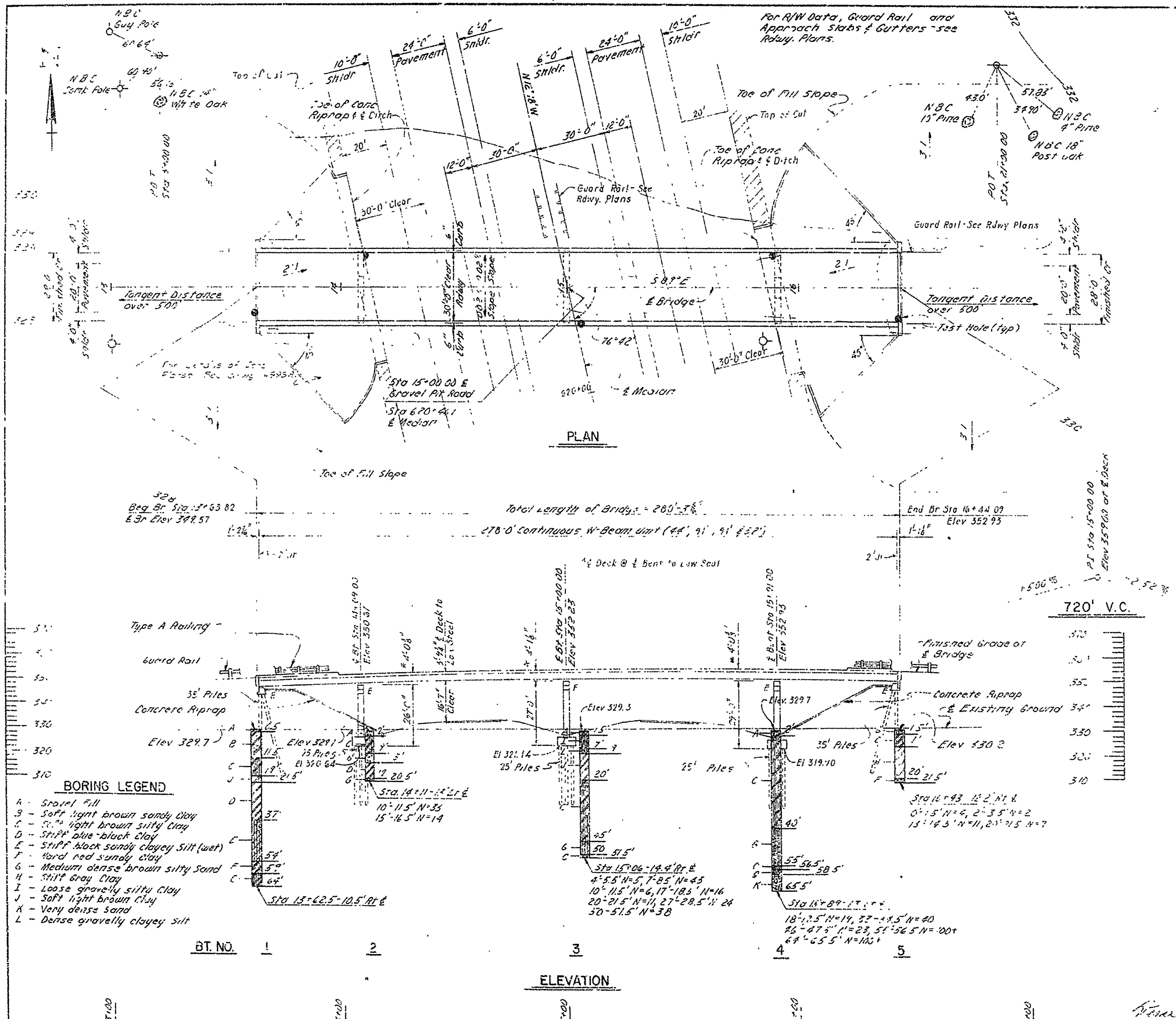
Baker

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	149	186

① 05646 - LAYOUT - 56716

107



GENERAL NOTES

BENCH MARK #64 COTTON PICKER SPIKE IN CONS. POLE 199 FT. LT. STA. 670+70. ELEV. 330.02.

ALL CONCRETE SHALL BE POURED IN THE DRY.

ALL PILING SHALL BE 16" OCTAGONAL PRECAST CONCRETE DRIVEN WITH AN APPROVED AIR, STEAM OR DIESEL HAMMER TO A MINIMUM BEARING CAPACITY OF 60 TONS FOR PILES IN INTERMEDIATE BENTS AND 40 TONS FOR PILES IN END BENTS AND TO A MINIMUM PENETRATION OF 10 FT. BELOW NATURAL GROUND OR BOTTOM OF FOOTING. PILE LENGTHS SHOWN ARE FOR ESTIMATING QUANTITIES ONLY.

ACTUAL PILE LENGTHS SHALL BE DETERMINED IN THE FIELD BY THE FOLLOWING PROCEDURE: IN BENT NO. 3, DRIVE ONE 25 FT. TEST PILE TO BE TEST LOADED ACCORDING TO SECTION 805.06(6) AS REVISED BY SP JOB 1473. [illegible] DEPTH OF PENETRATION IS OBTAINED AND THE MINIMUM BEARING CAPACITY AS COMPUTED BY THE PILE FORMULA IS ATTAINED THROUGHOUT THE LAST FIVE FEET OF DRIVING OR THE LAST 200 BLOWS OF THE HAMMER, DRIVING SHALL CEASE AND THE PILE SHALL BE TEST LOADED. WHEN THESE MINIMUM REQUIREMENTS HAVE BEEN FULFILLED DO NOT DRIVE THE PILE TO A DEEPER DEPTH BEFORE TEST LOADING.

DRIVE ONE 40' TEST PILE IN BENT NO. 1 OR 5.

PILES IN END BENTS TO BE DRIVEN AFTER EMBANKMENT TO SUBGRADE IS IN PLACE.

FOR DETAILS OF END BENTS, SEE DWG. NO. 19717
FOR DETAILS OF INTERMEDIATE BENTS, SEE DWG. NO. 19718
FOR DETAILS OF CONTINUOUS UNIT, SEE DWG. NOS. 19719 THRU 19722
FOR DETAILS OF PRECAST CONCRETE PILING, SEE DWG. NO. [illegible]

SPECIFICATIONS: ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 1972, AND APPLICABLE SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1973 WITH 1974 AND 1975 INTERIM SPECIFICATIONS.

LIVE LOADING: HS20

METHOD OF DESIGN: SUBSTRUCTURE - LOAD FACTOR
SUPERSTRUCTURE - [illegible]

FOURTEEN INCH SQUARE PILES MAY BE USED IN LIEU OF 16" OCTAGONAL PILES.

FOR INFORMATION ONLY

LAYOUT OF
GRAVEL PIT ROAD UNDERPASS
HWY. 104 - PULASKI CO. LINE
JEFFERSON COUNTY
ROUTE 65 SEC. 14

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: [illegible] DATE: [illegible]
DESIGNED BY: ______ DATE: ______
CHECKED BY: DFL DATE: 4-5-76
SCALE: 1" = 20'-0"

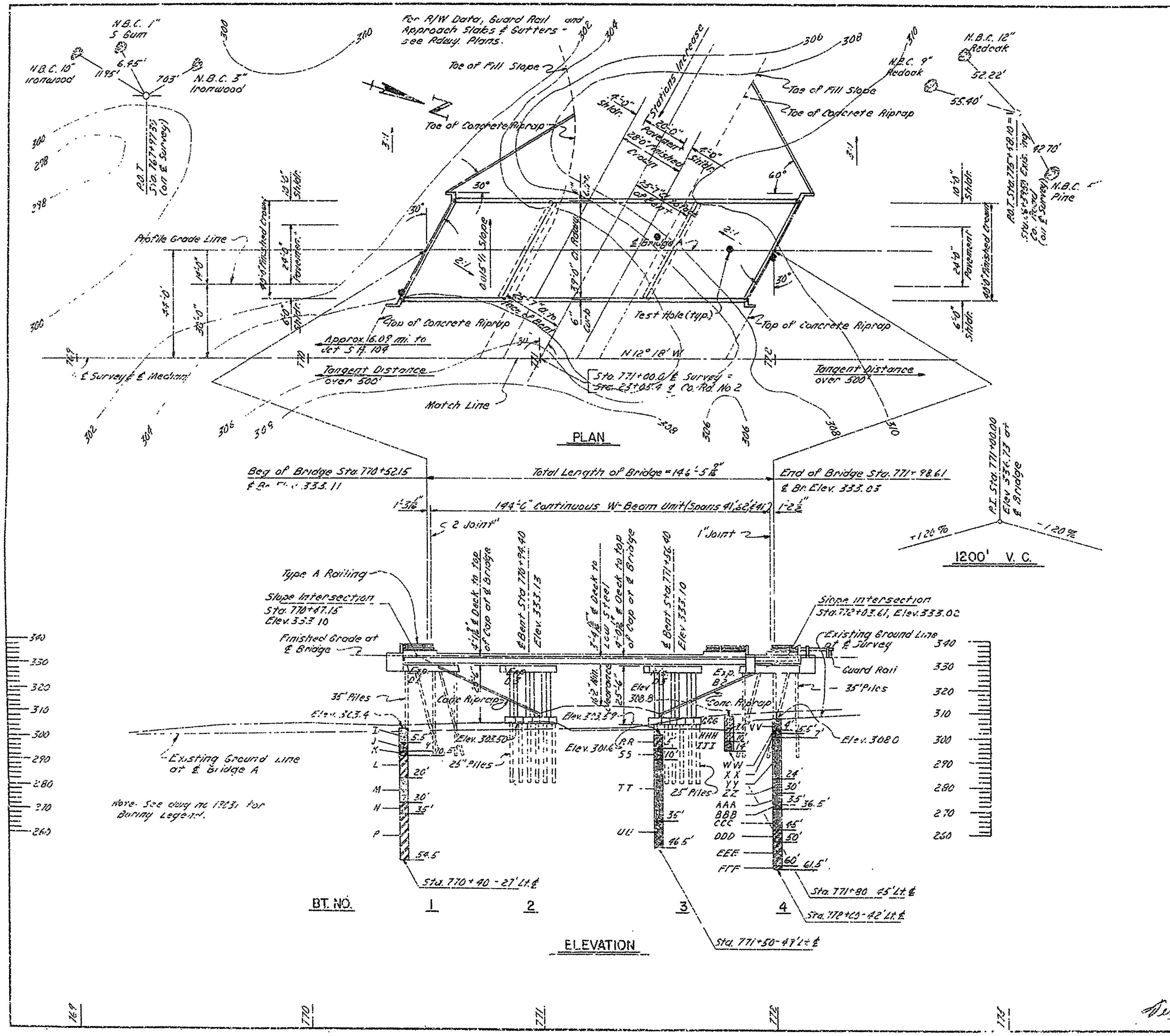
BRIDGE ENGINEER

BRIDGE NO. 5646 DRAWING NO. ~~19048~~ 56716

william.greenup 2/2/2015 8:36:58 AM
WORKSPACE: William.Greenup
Y:\Projects\AHTD_138213_I-530_Jefferson-Hwy104\Deliverables\ROADWAY\Drawings\RBB0201_13_MS_MAIN_01.dgn

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	150	186
				A5612 - LAYOUT - 56717				

299



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	EAC RF-065-2(31)		
				JOB NO.		2763	56	211
				5612A LAYOUT				

GENERAL NOTES

BENCH MARK - COTTON PICKER SPIKE IN STUMP 24' PINE 179' RT. STA. 769+86, ELEV. 310.48.

ALL PILING SHALL BE 16" PRECAST CONCRETE AND SHALL BE DRIVEN WITH AN APPROVED AIR, STEAM, OR DIESEL HAMMER TO A MINIMUM CAPACITY OF 44 TONS PER PILE AND TO A MINIMUM PENETRATION OF 20' BELOW THE GROUND LINE, AND AT LEAST 12' BELOW NATURAL GROUND. LENGTH OF PILING SHOWN ARE ASSUMED FOR ESTIMATING QUANTITIES ONLY. ACTUAL LENGTH ARE TO BE DETERMINED IN THE FIELD. DRIVE ONE 30' TEST PILE IN BENT NO. 2 OF BRIDGE "B" AND ONE 30' TEST PILE IN BENT NO. 3 OF BRIDGE "A". PILES FOR END BENTS SHALL BE DRIVEN AFTER EMBANKMENT TO SUBGRADE IS IN PLACE.

ALL CONCRETE IN THE SUPERSTRUCTURE SHALL BE CLASS S(AE). ALL CONCRETE IN THE SUBSTRUCTURE SHALL BE CLASS "S" AND SHALL BE POURED IN THE DRY. ALL EXPOSED CORNERS SHALL BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED.

FOR DETAILS OF END BENTS, SEE DWG. NO. 19041 AND 19042
FOR DETAILS OF INT. BENTS, SEE DWG. NO. 19043 AND 19044
FOR DETAILS OF SUPERSTRUCTURE, SEE DWG. NO. 19045 THRU 19047
FOR DETAILS OF PRECAST CONCRETE PILING, SEE DWG. NO. 2262
FOR DETAILS OF CONCRETE FILLED METAL SHELL PILING, SEE DWG. NO. 2381A
FOR DETAILS OF CONCRETE RIPRAP SEE DWG. NO. 14995A

SPECIFICATIONS: ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 1972, AND APPLICABLE SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: AASHTO 1973 AND 1974 INTERIM SPECIFICATIONS.

LIVE LOADING: HS20

METHOD OF DESIGN: SUPERSTRUCTURE - SERVICE LOAD DESIGN
SUBSTRUCTURE - LOAD FACTOR DESIGN

UNIT STRESSES:

SUPERSTRUCTURE:

COMPRESSIVE STRENGTH OF CLASS S(AE) CONCRETE (N=10)	=	3,500 PSI
YIELD STRENGTH OF REINFORCING STEEL	=	40,000 PSI
YIELD STRENGTH OF STRUCTURAL STEEL (A36)	=	36,000 PSI
YIELD STRENGTH OF STRUCTURAL STEEL (A572-50)	=	50,000 PSI

SUBSTRUCTURE:

COMPRESSIVE STRENGTH OF CLASS S CONCRETE (N=10)	=	3,000 PSI
YIELD STRENGTH OF REINFORCEMENT	=	40,000 PSI

FOR INFORMATION ONLY

SHEET 1 OF 2
LAYOUT OF BRIDGES
OVER JEFFERSON ROAD
HIGHWAY 104 - JEFFERSON ROAD
JEFFERSON COUNTY
ROUTE 65 SEC. 14

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: J.R.S. DATE: 5-74
DESIGNED BY: E.E.S. DATE: Mar. 74
CHECKED BY: H.D. DATE: 10-4-74
SCALE: 1"=20'-0"

BRIDGE ENGINEER

56717
BRIDGE NO. 5612 A DRAWING NO. ~~19039~~

william.greenup 2/2/2015 8:37:38 AM
WORKSPACE: William.Greenup
Y:\Projects\AHTD_138213_I-530_Jefferson-Hwy104\Deliverables\ROADWAY\Drawings\BB0201_13_MS_MAIN_02.dgn

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	151	186
				(1)	B5612 - LAYOUT - 56718			

300

DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	E.A.C. RF 025-2 (32)		
				JOB NO.		2703	51	211
				(1)	56128	LAYOUT	19040	

For R/W Data, Guard Rail & Approach Slabs & Gutters - see Rdwy. Plans

PLAN

Beg of Bridge Sta. 770+01.39
℄ Bridge Elev. 333.13

Total Length of Bridge = 186'-5⅛"

End of Bridge Sta. 771+87.86
℄ Bridge Elev. 333.11

1200' V.C.

ELEVATION

BT. NO. 1 2 3 4

Note: For Boring Legend see dwg. no. 19031.

FOR INFORMATION ONLY

SHEET 2 OF 2
LAYOUT OF BRIDGES
OVER JEFFERSON ROAD
HIGHWAY 104—JEFFERSON ROAD
JEFFERSON COUNTY
ROUTE 65 SEC. 14
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: J.A.S. DATE: 5-21-74
DESIGNED BY: E.E.S. DATE: May 74
CHECKED BY: H.D. DATE: 10-22-74
SCALE: 1" = 20'-0"

56718

Neal Pinkerton
BRIDGE ENGINEER

BRIDGE NO. 5612 D DRAWING NO. ~~19040~~

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	152	186

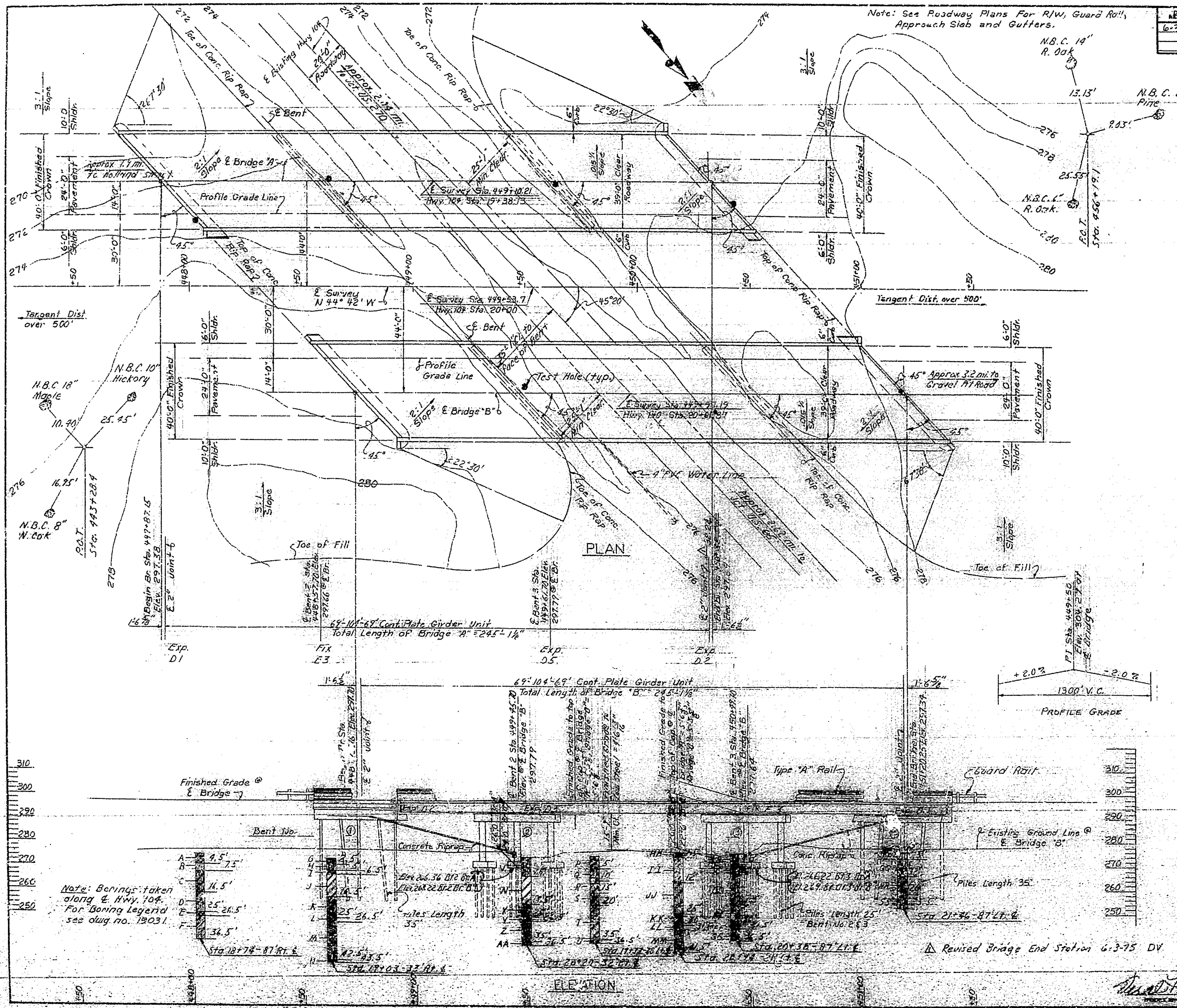
(1) A&B 5611 - LAYOUT - 56719

290

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ.	SHEET NO.	TOTAL SHEETS
6-3-75	507-64-75			6	ARK.	EAC RF-073-2(32)		
				JOB NO.		2783	41	2[illegible]

(1) 5611 A,B LAYOUT

Note: See Roadway Plans For R/W, Guard Rail, Approach Slab and Gutters.



GENERAL NOTES

BENCH MARK - RAILROAD SPIKE IN POWER POLE 154' RT, STA. 450+50, ELEV. 276.53.

ALL PILING SHALL BE 16" PRECAST CONCRETE AND SHALL BE DRIVEN WITH AN APPROVED AIR, STEAM, OR DIESEL HAMMER TO A MINIMUM CAPACITY OF 44 TONS PER PILE AND TO A MINIMUM PENETRATION OF 20' BELOW THE GROUND LINE. LENGTHS OF PILING SHOWN ARE ASSUMED FOR ESTIMATING QUANTITIES ONLY. ACTUAL LENGTHS ARE TO BE DETERMINED IN THE FIELD. DRIVE ONE 40' TEST PILE IN BENT NO. 4 OF BRIDGE "B" AND ONE 30' TEST PILE IN BENT NO. 2 OF BRIDGE "A". PILES FOR END BENTS SHALL BE DRIVEN AFTER EMBANKMENT TO SUBGRADE IS IN PLACE.

ALL CONCRETE IN THE SUPERSTRUCTURE SHALL BE CLASS S(AE). ALL CONCRETE IN THE SUBSTRUCTURE SHALL BE CLASS "S" AND SHALL BE POURED IN THE DRY. ALL EXPOSED CORNERS SHALL BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED.

FOR DETAILS OF END BENTS, SEE DWG. NO. 19032
FOR DETAILS OF INTERMEDIATE BENTS, SEE DWG. NO. 19033 AND 19034
FOR DETAILS OF SUPERSTRUCTURE, SEE DWG. NO. 19035 THRU 19038
FOR DETAILS OF PRECAST CONCRETE PILING, SEE DWG. NO. 2382
FOR DETAILS OF CONCRETE FILLED METAL SHELL PILING, SEE DWG. NO. 2386

SPECIFICATIONS: ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 1972, AND APPLICABLE SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: AASHTO 1973 AND 1974 INTERIM SPECIFICATIONS.

LIVE LOADING: HS20

METHOD OF DESIGN:
SUPERSTRUCTURE: SERVICE LOAD DESIGN
SUBSTRUCTURE: LOAD FACTOR DESIGN

UNIT STRESSES:

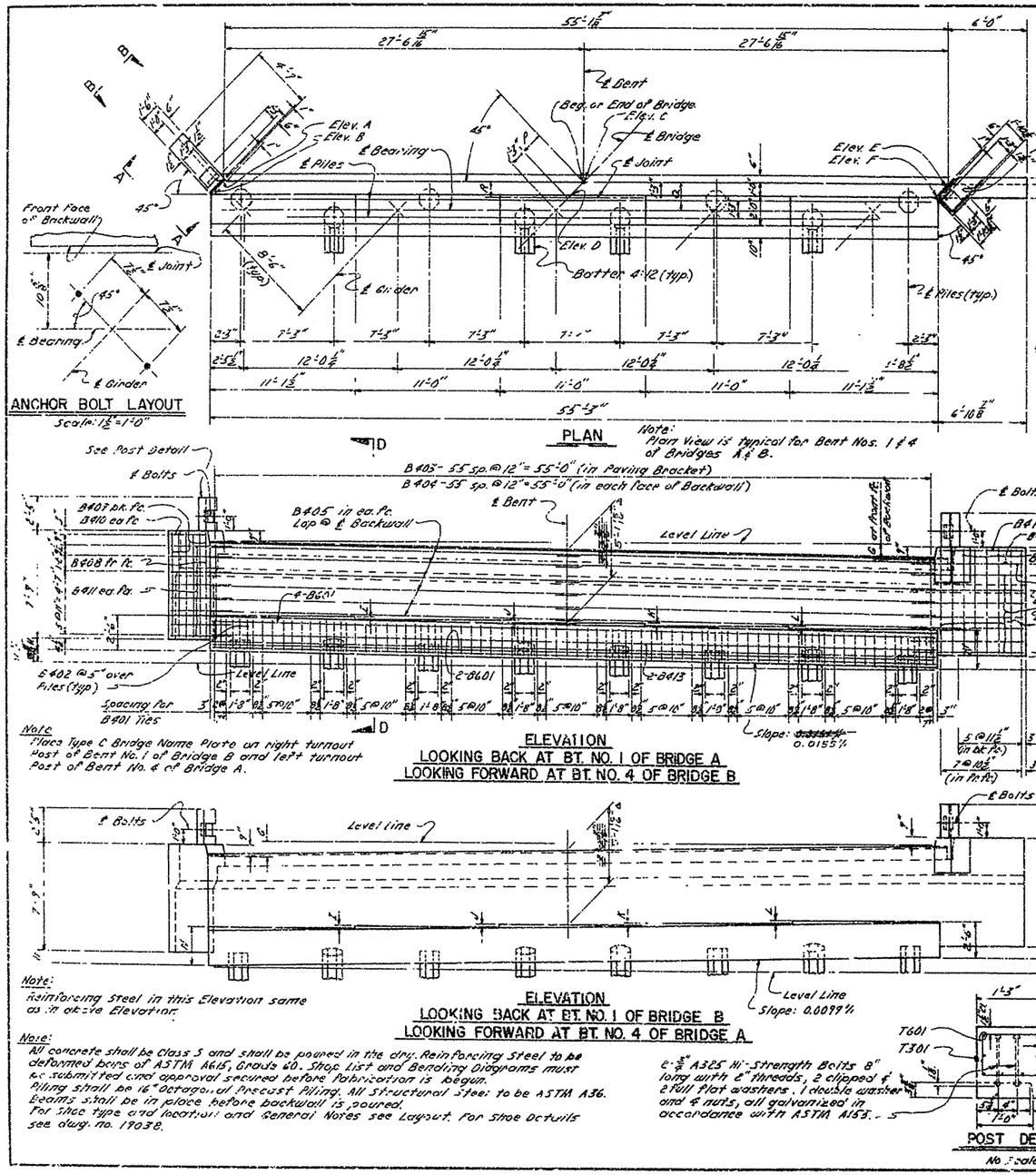
SUPERSTRUCTURE:	
COMPRESSIVE STRENGTH OF CLASS S(AE) CONCRETE (N=10)	3,500 PSI
YIELD STRENGTH OF REINFORCING STEEL	60,000 PSI
YIELD STRENGTH OF STRUCTURAL STEEL (A572-50)	50,000 PSI
YIELD STRENGTH OF STRUCTURAL STEEL (A36)	36,000 PSI
SUBSTRUCTURE:	
COMPRESSIVE STRENGTH OF CLASS S CONCRETE (N=10)	3,000 PSI
YIELD STRENGTH OF REINFORCING STEEL	60,000 PSI

FOR INFORMATION ONLY

LAYOUT OF BRIDGES
OVER HWY. 104
HIGHWAY 104 - JEFFERSON ROAD
JEFFERSON COUNTY
ROUTE 65 SEC. 14
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: D.F.B. DATE: 22 Mar. 75
CHECKED BY: DV DATE: 9-23-75 SCALE: 1" = 20'-0"

BRIDGE NO. 5611 A&B DRAWING NO. ~~19030~~ 56719



DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	153	186
				①	A&B 5611 - END BENTS - 56720			

FOR INFORMATION ONLY

292

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-3-75	56-11-5-75			6	ARK.	EAC RF-0252(82)		
				JOB NO.		2783	83	211
				①	5611 A&B END BT. DTLS. 19032			

Note: Place Type C Bridge Name Plate on right turnout Post of Bent No. 1 of Bridge B and left turnout Post of Bent No. 4 of Bridge A.

ELEVATION
LOOKING BACK AT BT. NO. 1 OF BRIDGE A
LOOKING FORWARD AT BT. NO. 4 OF BRIDGE B

Note: Reinforcing Steel in this Elevation same as in above Elevation.

ELEVATION
LOOKING BACK AT BT. NO. 1 OF BRIDGE B
LOOKING FORWARD AT BT. NO. 4 OF BRIDGE A

Note:
All concrete shall be Class S and shall be poured in the dry. Reinforcing Steel to be deformed bars of ASTM A615, Grade 60. Shop List and Bending Diagrams must be submitted and approval secured before fabrication is begun.
Piling shall be 16" Octagonal Precast Piling. All Structural steel to be ASTM A36.
Beams shall be in place before backwall is poured.
For Shoe type and location and General Notes see Layout. For Shoe Details see dwg. no. 19038.

2-¾" A325 Hi-Strength Bolts 8" long with 2" threads, 2 clipped & 2 full flat washers, 1 double washer and 4 nuts, all galvanized in accordance with ASTM A153.

① Revised Backwall Depth 11-3-75 HD

BAR LIST PER END BENT

Mk	No. Req'd	Length	A	B	Pin Dia.	Bending Diagrams
B401	62	11'-4"			2"	
B402	24	7'-0"			2"	
B403	54	3'-11"	1'-2"	9"	2"	
B404	112	6'-8"			str.	
B405	24	28'-5"			str.	
B406	2	5'-0"			str.	
B407	15	8'-6"			str.	
B408	14	7'-5"			str.	
B409	12	7'-7"	2'-3½"	4'-7½"	2"	
B410	2	4'-4"			str.	
B411	16	6'-3"	4'-7"	1'-8"	2"	
B412	4	6'-5"	3'-2½"	1'-9"	2"	
B415	4	28'-4"			str.	
B601	20	28'-9"			str.	
T301	8	4'-1"	1'-0"	8½"	1½"	
T601	16	4'-7"			str.	
B414	1	6'-4"			str.	
						Dimensions are out to out of bars.

TABLE OF VARIABLES

Variables	Bridge A		Bridge B	
	Bent No. 1	Bent No. 4	Bent No. 1	Bent No. 4
Elev. A	297.71	297.44	297.45	297.73
Elev. B	297.77	297.44	297.45	297.74
Elev. C	297.38	297.69	297.71	297.35
Elev. D	297.39	297.69	297.71	297.35
Elev. E	296.99	297.92	297.95	296.94
Elev. F	297.00	297.92	297.95	296.95
G	9 5/8"	5 7/8"	5 15/16"	9 1/16"
H	8 3/4"	9 1/4"	9 5/16"	8 3/4"
I	2"	1 5/16"	1 5/16"	2"
J	2"	1 5/16"	1 5/16"	2 1/16"
K	2 1/16"	1 1/4"	1 5/16"	2 1/16"
L	2 1/16"	1 1/4"	1 1/4"	2 1/8"
M	10 1/8"	8 9/16"	8 7/16"	9 15/16"
N	2'-8 1/16"	2'-7 1/16"	2'-7 3/8"	2'-8 3/16"
P	1'-6 5/8"	1'-6 1/2"	1'-6 1/2"	1'-6 5/8"
Q	1'-11 13/16"	1'-11 11/16"	1'-11 11/16"	1'-11 13/16"
R	1'-1 5/16"	1'-1 1/16"	1'-1 1/16"	1'-1 5/16"

DETAILS OF END BENTS
HWY. 104
HIGHWAY 104 - JEFFERSON ROAD
JEFFERSON COUNTY
ROUTE 65 SEC. 14
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: J.P.S. DATE: 8-2-74
DESIGNED BY: ARW DATE: 7-74
CHECKED BY: THD DATE: 8-6-74
SCALE: ¼"=1'-0" or as noted
BRIDGE ENGINEER
56720
BRIDGE NO. 5611 A&B DRAWING NO. ~~19032~~

william.greenup 2/2/2015 8:39:31 AM
WORKSPACE: William.Greenup
Y:\Projects\AHTD_I3823_I-530_Jefferson-Hwy104\Deliverables\ROADWAY\Drawings\RBB0201_I3_MS_MAIN_05.dgn

Baker

FOR INFORMATION ONLY

295

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3-21-75	[illegible]			6	ARK.	EAC F-025-2(32)		
				JOB NO.		2783	4C	[illegible]

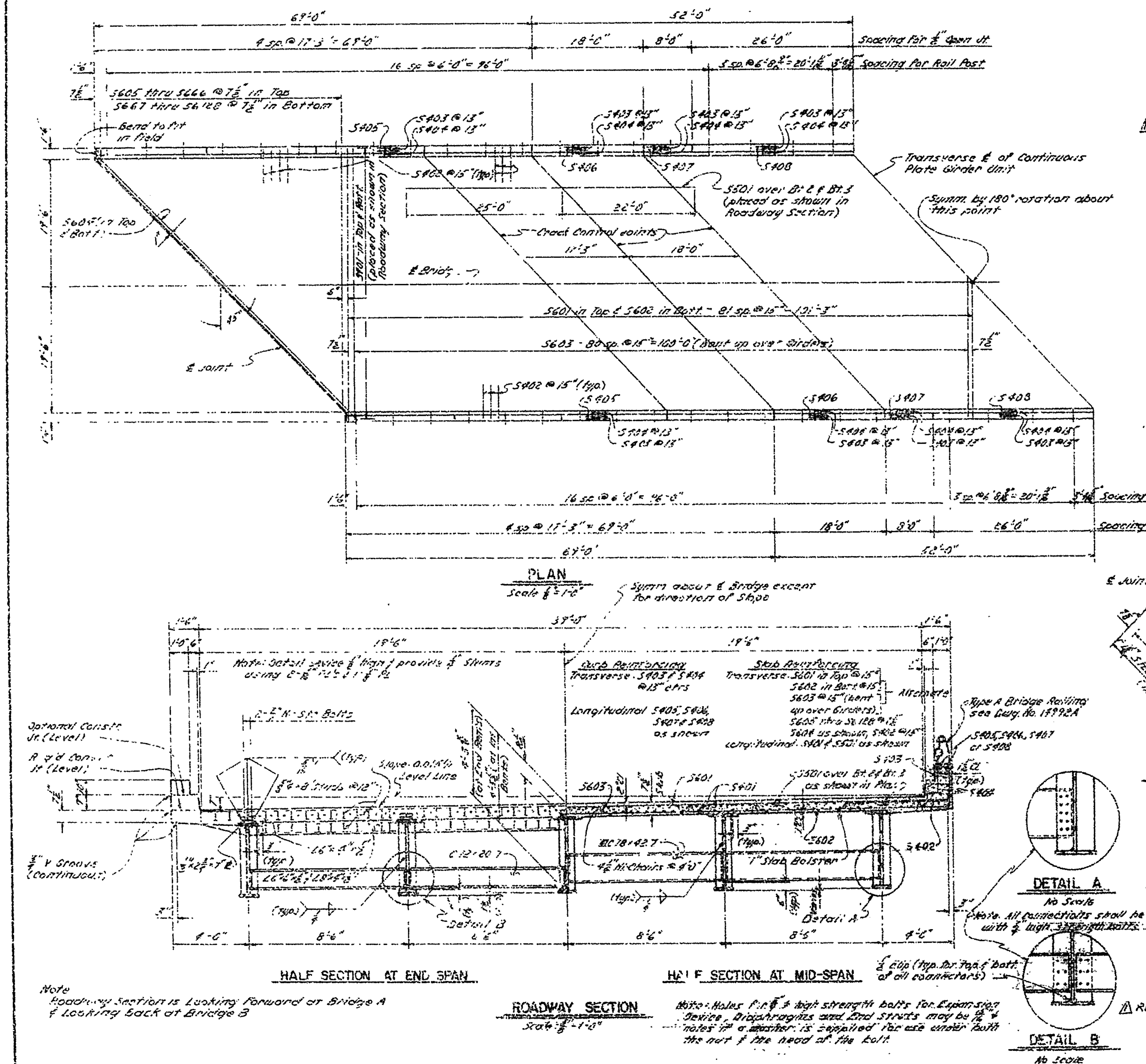
(1) 5611 A, B - SPAN DTL'S - 19035

BAR LIST - 242' UNIT

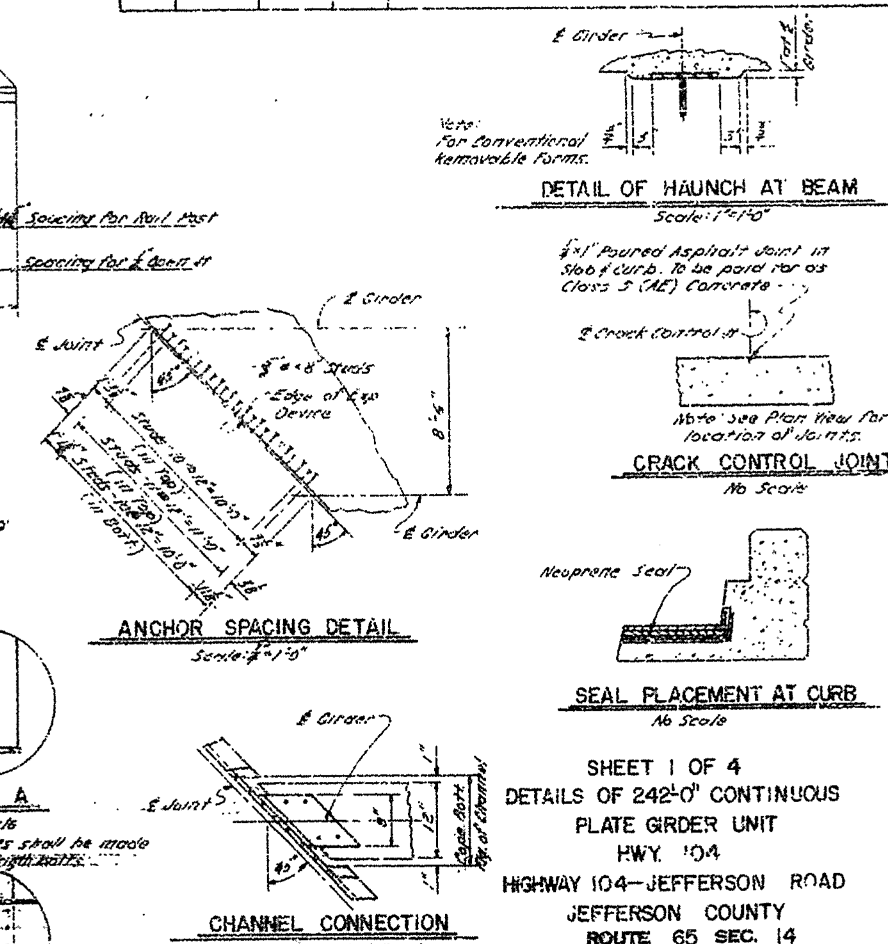
Mark	No Req'd	Length	Bend
S401	706	35'-0"	str.
S402	398	5'-6"	str.
S403	472	4'-10"	2"
S404	472	4'-2"	2"
S405	32	16'-10"	str
S406	8	17'-3"	str.
S407	6	7'-7"	str.
S408	8	25'-7"	str.
S501	112	47'-0"	str.
S601	163	42'-4"	3 3/4"
S602	163	41'-8"	str.
S603	162	43'-4"	3 3/4"
S604	4	58'-2"	str.
S605 to S666	2 ea.	2'-1" to 40'-4"	3 3/4
S667 to S6128	2 ea.	1'-9" to 39'-11"	str

Bending Diagrams

Dimensions are out to out of bars



Note
Roadway Section is Looking Forward at Bridge A & Looking Back at Bridge B



(1) Revised-Changed S402-As Shown. 3-21-75 LDF

SHEET 1 OF 4
DETAILS OF 242'-0" CONTINUOUS PLATE GIRDER UNIT
HWY. 104
HIGHWAY 104—JEFFERSON ROAD
JEFFERSON COUNTY
ROUTE 65 SEC. 14

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY J.P.S. DATE 9-12-74
SCALE: as noted
DRAWING NO. ~~19035~~ 56721
BRIDGE NO. 5611 A B

Baker

FOR INFORMATION ONLY

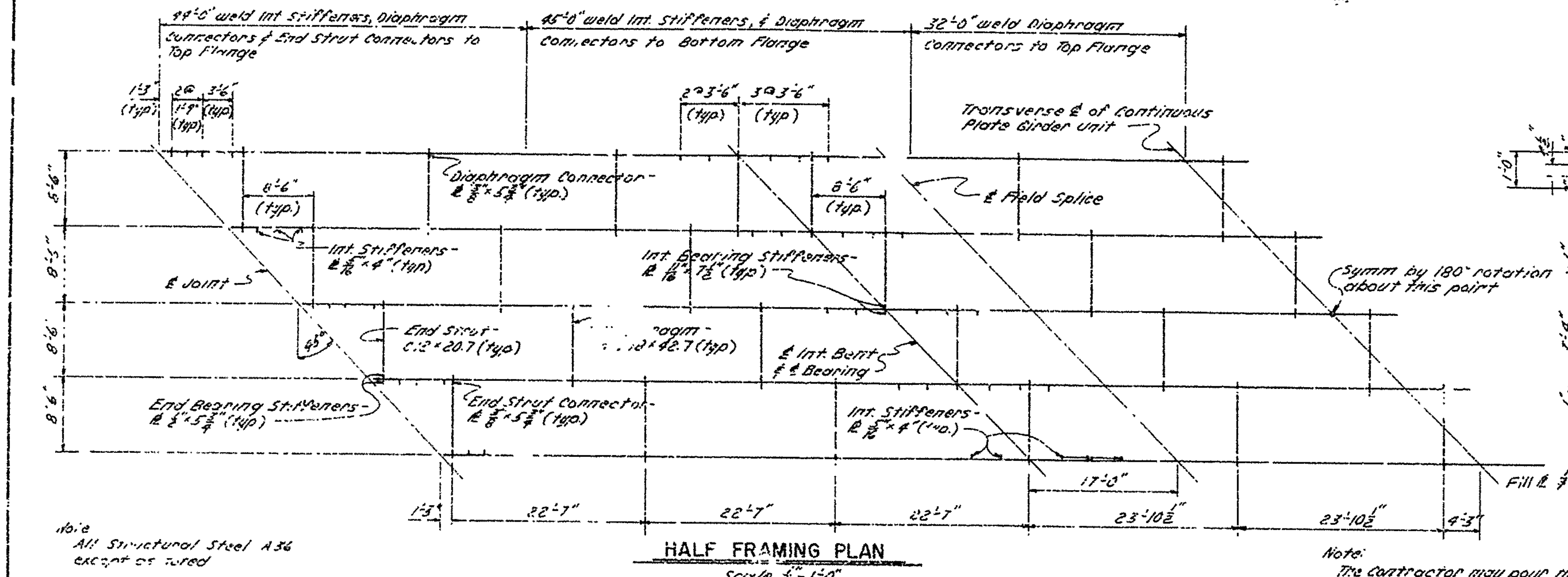
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	155	186

(1) A&B5611 - SUPERSTRUCTURE - 56722

296

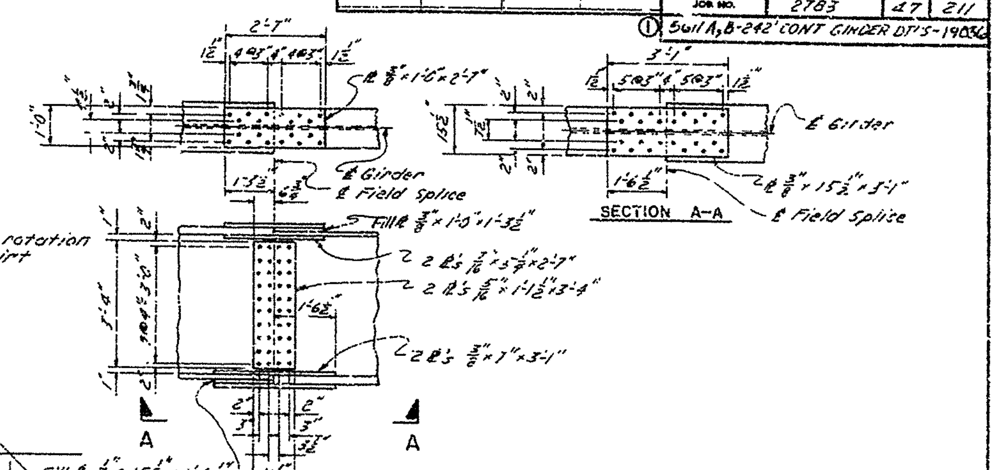
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	EAC RF-125-2(32)		
				JOB NO.		2783	47	211

(1) 5611 A,B-242' CONT GIRDER DT'S-19036

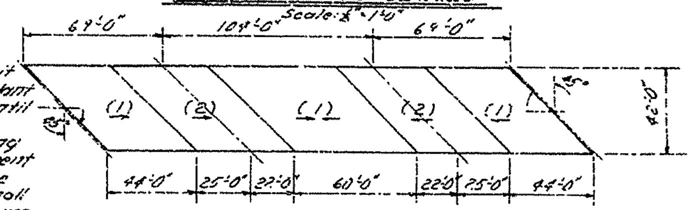


Note: All Structural Steel A36 except as noted

HALF FRAMING PLAN
Scale: 1/8" = 1'-0"

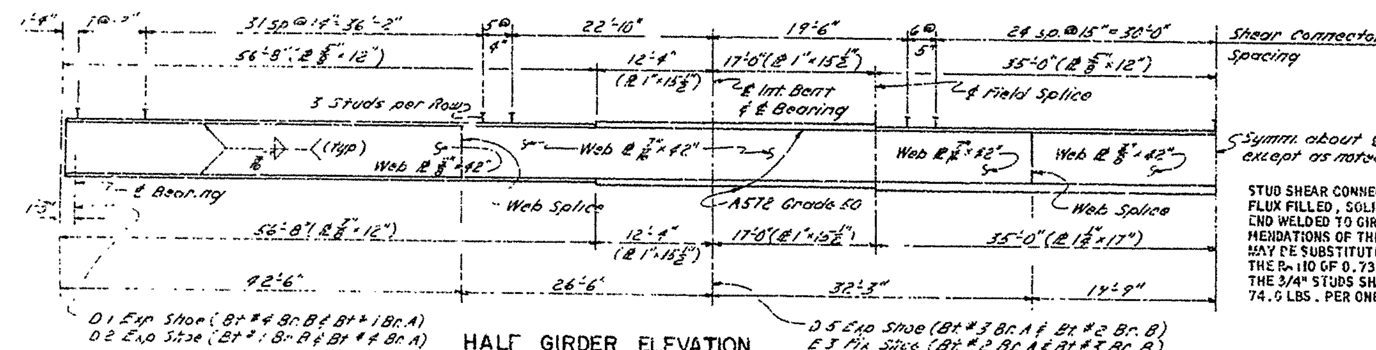


FIELD SPLICE DETAILS
Scale: 3/4" = 1'-0"



Note:
The Contractor may pour the 242' Unit in one continuous pour using retardant to delay the set of the concrete until the entire Unit is complete. If the Contractor elects to use the pouring sequence shown, all pours (1) adjacent to pours (2) must be placed before pours (2) can be placed. 48 hours shall elapse between pours (1) and 72 hours shall elapse between pours (1) and pours (2). Pours with same number may be poured simultaneously.

POURING SEQUENCE
Scale: 1" = 40'-0"



Note: All Structural Steel A36 except as noted

HALF GIRDER ELEVATION
No Scale

STUD SHEAR CONNECTORS SHOWN SHALL BE 5" LONG, GRANULAR FLUX FILLED, SOLID FLUXED OR EQUAL, AND AUTOMATICALLY END WELDED TO GIRDER FLANGES IN ACCORDANCE WITH RECOMMENDATIONS OF THE MANUFACTURER. 7/8" DIAMETER STUDS MAY BE SUBSTITUTED FOR 3/4" DIAMETER STUDS SHOWN AT THE RATIO OF 0.73 - 7/8" STUDS IN PLACE OF 1-3/4" STUDS. THE 3/4" STUDS SHALL BE USED AS THE BASIS OF PAYMENT OF 74.0 LBS. PER ONE HUNDRED STUDS.

DESIGN SPECIFICATIONS: AASHTO 1973 AND 1974 INTERIM
METHOD OF DESIGN - SERVICE LOAD DESIGN
DESIGN LIVE LOADING HS20
LOAD DISTRIBUTION:

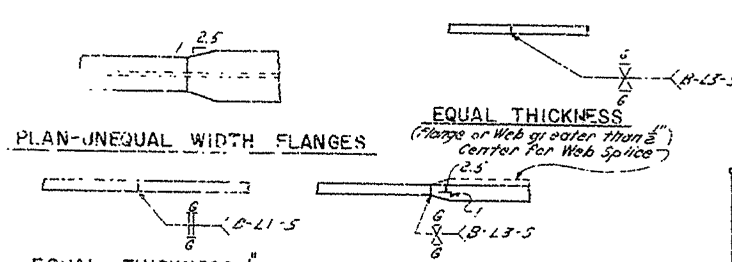
	TO INTERIOR GIRDER	TO EXTERIOR GIRDER
DEAD LOAD TO GIRDER	603#/FT. + WT. OF GIRDER	[illegible]#/FT. + WT. OF GIRDER
DEAD LOAD TO COMPOSITE GIRDER (INCLUDES 16#/FT. FOR FUTURE WEARING SURFACES)	221#/FT.	221#/FT
LIVE LOAD TO COMPOSITE GIRDER	1.5455 WHEELS + IMPACT	1.5455 WHEELS + IMPACT

UNIT STRESSES:

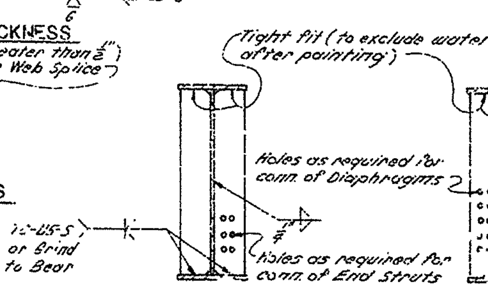
COMPRESSIVE STRENGTH OF CLASS S(AE) CONCRETE (N=10)	3,500 PSI
YIELD STRENGTH OF REINFORCING STEEL	60,000 PSI
YIELD STRENGTH OF STRUCTURAL STEEL (A572-50)	50,000 PSI
YIELD STRENGTH OF STRUCTURAL STEEL (A36)	36,000 PSI

ALL GIRDERS SHALL BE SHOP ASSEMBLED IN THEIR TRUE POSITION, FIELD CONNECTION HOLES REAMED AND ALL PARTS MATCH MARKED. THE SHOP ASSEMBLY SHALL HAVE A MINIMUM ASSEMBLED SEQUENCE OF THREE SECTIONS.

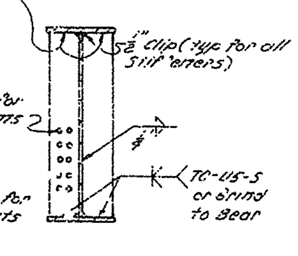
ALL FLANGES AND WEBS ARE CONSIDERED MAIN LOAD CARRYING MEMBERS AND SHALL MEET THE CHARPY V-NOTCH TEST REQUIREMENTS OF SPECIAL PROVISION 807-4.



FLANGE & WEB SPLICE BUTT WELD DETAILS
No Scale

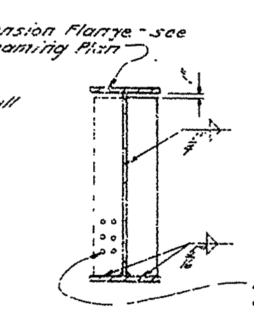


END BEARING STIFFENER
No Scale

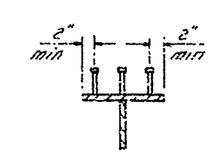


INT. BEARING STIFFENER
No Scale

Note: See Half Framing Plan for Plate sizes.



INT. STIFFENER
No Scale



SHEAR CONNECTOR DETAIL
No Scale

SHEET 2 OF 4
DETAILS OF 242'-0" CONTINUOUS PLATE GIRDER UNIT
HWY. 104
HIGHWAY 104—JEFFERSON ROAD
JEFFERSON COUNTY
ROUTE 65 SEC. 14
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: J.P.S. DATE: 9-16-74
CHECKED BY: JD DATE: 9-24-74
SCALE: as noted.

BRIDGE ENGINEER

BRIDGE NO. 5611 A B

DRAWING NO. ~~19036~~ 56722

william.greenup 2/2/2015 8:39:53 AM
WORKSPACE: William.Greenup
Y:\Projects\AHTD_I38203_I-530_Jefferson-Hwy104\Deliverables\ROADWAY\Drawings\RBB0201_I3_MS_MAIN_07.dgn

Baker

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	156	186

(1) A&B5611 - SUPERSTRUCTURE - 56723

FOR INFORMATION ONLY

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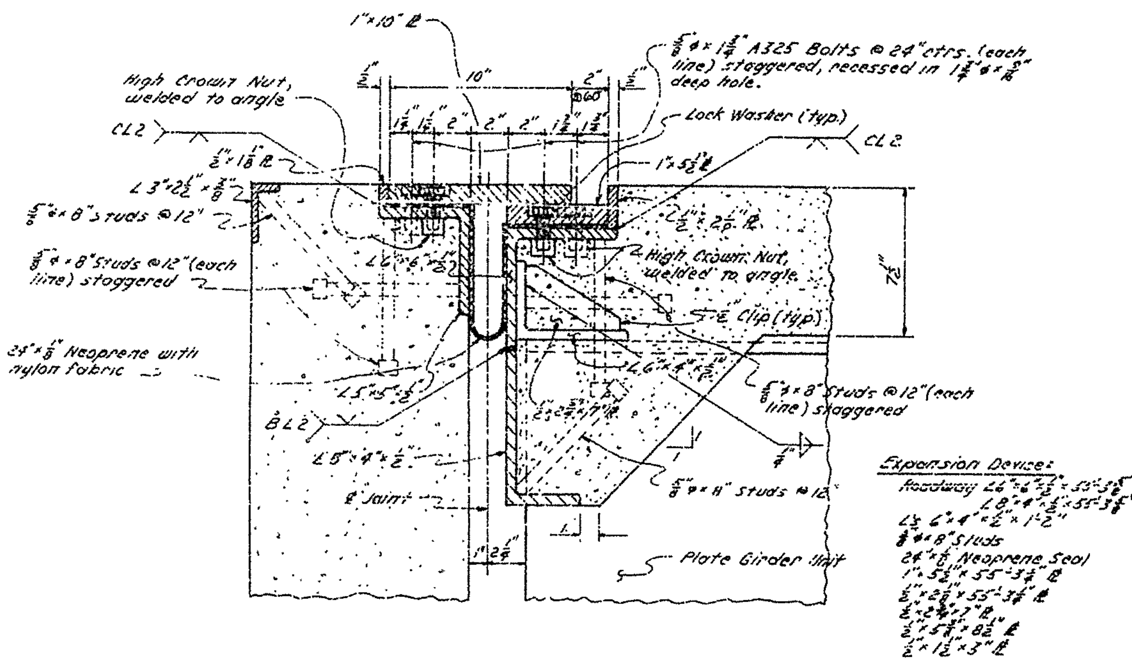
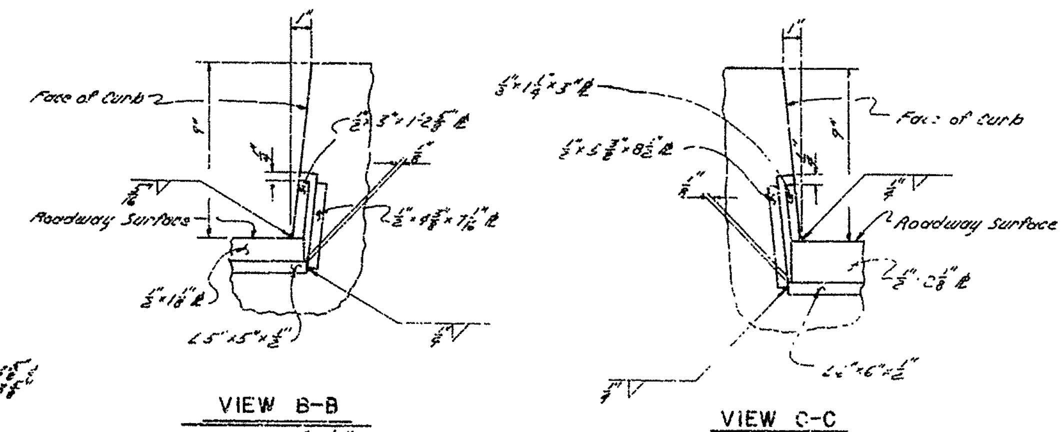
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-3-75	3-8-11-5-75			6	ARK.	EAC RF-052(32)		
				JOB NO.		2783	48	211

(1) 5611A, 3-242' CONT. GIRDER DTL'S: 19057

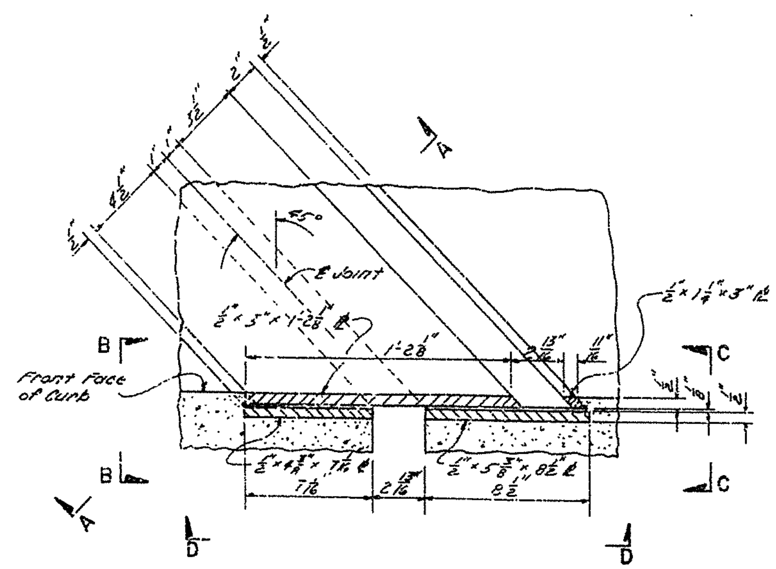


SECTION A-A
Scale: 3"=1'-0"



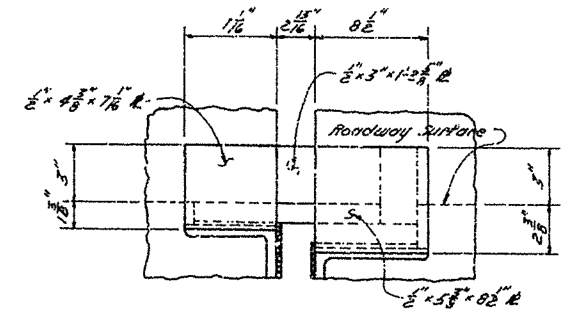
VIEW B-B
Scale: 3"=1'-0"

VIEW C-C
Scale: 3"=1'-0"



PART SECTION OF JOINT AT CURB
Scale: 3"=1'-0"

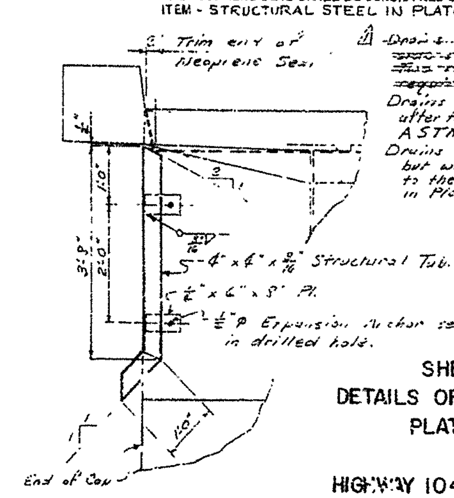
NOTE: BOLTS SHALL BE IN PLACE WHILE CONCRETE IS POURED. PROVIDE APPLICATION OF GREASE TO NUTS AND BOLTS TO FACILITATE REMOVAL DURING CONSTRUCTION.



VIEW D-D
No Scale

NOTE: SECTIONS, VIEWS AND DETAIL OF JOINT ARE SHOWN BASED ON LEVEL GRADE. ADJUSTMENTS SHALL BE MADE FOR GRADE.

THE NEOPRENE SEAL SHALL BE CONSIDERED SUBSIDIARY TO THE ITEM - STRUCTURAL STEEL IN PLATE GIRDER SPANS (A 36)



DRAIN DETAIL
Scale 3/4" = 1'-0"

Drains are to be hot-dip galvanized after fabrication in accordance with ASTM A-123.

Drains will not be paid for directly but will be considered subsidiary to the item of Structural Steel in Plate Girder Spans (A 36.)

⚠ Drains are to be installed on the low side of Bent 4 Bridge 5611 A and Bent 1 Bridge 5611 B. One required per bridge.

⚠ Revised number of drains - JCK 11-3-75
⚠ Use sliding plate joints at Bent 4 Bridge 5611A and Bent 1 Bridge 5611 B - JCK 11-3-75

SHEET 3 OF 4
DETAILS OF 242'-0" CONTINUOUS PLATE GIRDER UNIT
HWY. 104
HIGHWAY 104-JEFFERSON ROAD
JEFFERSON COUNTY
ROUTE 65 SEC. 14

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: J.P.S. DATE: 9-18-74
DESIGNED BY: DATE:
CHECKED BY: DATE: 9-26-74
SCALE: as noted

BRIDGE ENGINEER

BRIDGE NO. 5611 A B
DRAWING NO. ~~19037~~ 56723

william.greenup 2/2/2015 8:40:04 AM
WORKSPACE: William.Greenup
Y:\Projects\AHTD_13823_I-530_Jefferson-Hwy104\Deliverables\ROADWAY\Drawings\BB0201_13_MS_MAIN_08.dgn

Baker

FOR INFORMATION ONLY

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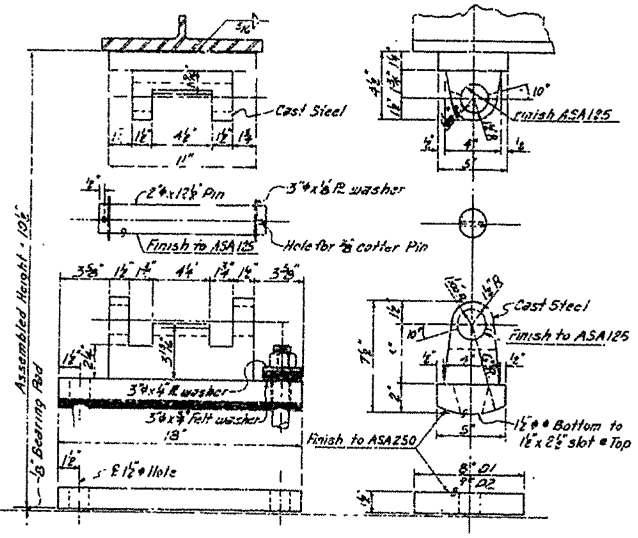
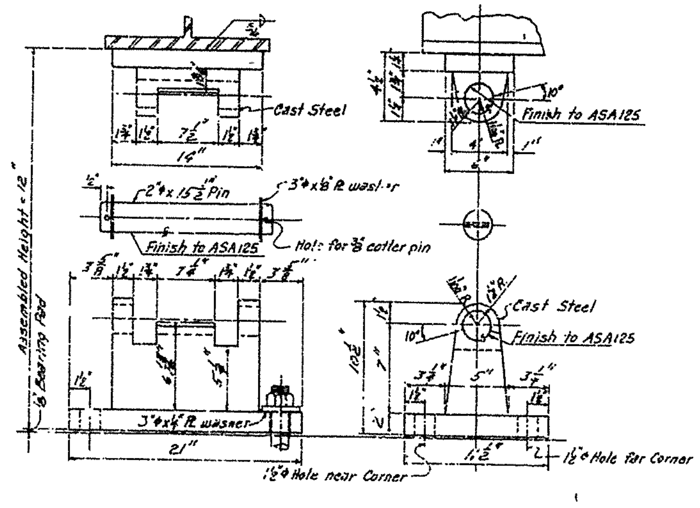


TYPE D1 & D2 EXPANSION SHOE

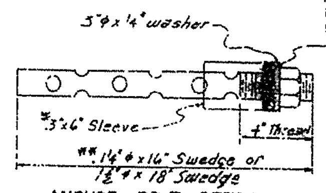
Material: Steel Castings ASTM A27 Grade 70-40, ℞ ASTM A-36



TYPE E3 FIXED SHOE

Material: Steel Castings ASTM A27 Grade 70-40

NOTE: 3" DIA. X 6" SHEET METAL SLEEVE. DRY PACK WITH STYROFOAM, OR URETHANE FOAM OR APPROVED EQUAL PRIOR TO POURING CONCRETE AFTER POURING BENTS AND PRIOR TO ERECTING BEAMS, ADJUST ANCHOR BOLTS TO MATCH HOLES IN MASONRY PLATES. REMOVE DRY PACK MATERIAL FROM SLEEVE AND REFILL WITH NON-SHRINK GROUT.

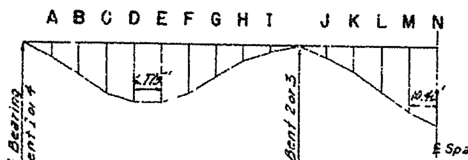


ANCHOR BOLT DETAIL

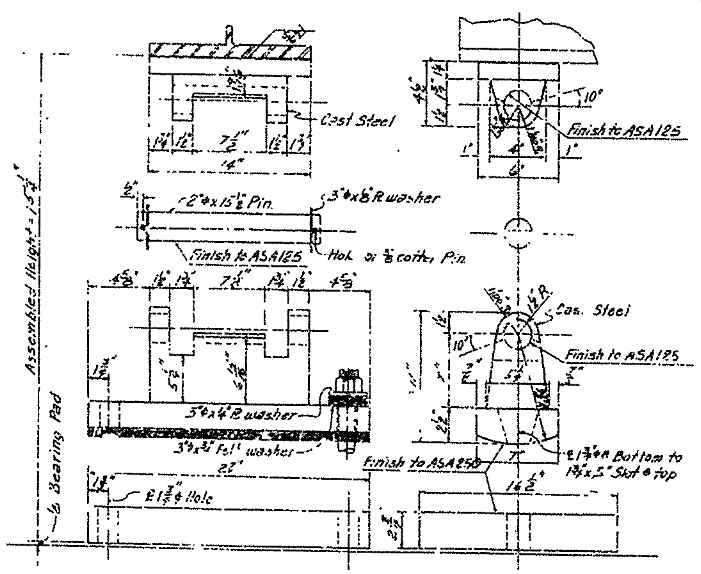
No Scale

*Use sleeve when cap is poured with anchor bolts in place.

** 1¼"φ x 16" Swedge for D1 & D2 Exp. Shoes, & E3 Fixed Shoe. 1⅝"φ x 18" Swedge for D5 Exp. Shoe.



DEAD LOAD DEFLECTION



TYPE D5 EXPANSION SHOE

Material: Steel Castings ASTM A27 Grade 70-40, ℞ ASTM A-36

TABLE OF DEFLECTIONS (IN)

POINT OF DEFLEC.	WT. OF GIRDER INT.	WT. OF GIRDER EXT.	WT. OF GIRDER & SLAB INT.	WT. OF GIRDER & SLAB EXT.	WT OF GIRDER SLAB, PARA, RAIL INT.	WT OF GIRDER SLAB, PARA, RAIL EXT.
A	[illegible]	.012	.130	.130	.143	.143
	.021	.021	.230	.230	.252	.252
C	.022	.022	.279	.279	.307	.307
D	[illegible]	.016	.273	.273	.302	.302
	[illegible]	.006	.214	.214	.240	.240
	[illegible]	-.008	.118	.118	.136	.136
	-.022	-.022	.013	.013	.021	.021
H	-.029	-.029	-.063	-.063	-.064	-.064
I	-.022	-.022	-.075	-.076	.081	-.081
J	.020	.070	.327	.327	.360	.360
K	.163	.163	.793	.793	.866	.866
L	.249	.249	1.246	1.246	1.357	1.357
M	.310	.310	1.567	1.569	1.705	1.705
N	.333	.333	1.686	1.686	1.832	1.832

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 NOT INCLUDED. NEGATIVE SIGN (-) INDICATES POINT ABOVE CHORD.

GENERAL NOTES:

ALL CONCRETE TO BE CLASS S(AE). ALL EXPOSED CORNERS TO BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED.

FIELD CONNECTIONS TO BE BOLTED WITH HIGH STRENGTH BOLTS. BOLTS: 3/4" φ, OPEN HOLES 13/16" φ EXCEPT WHERE NOTED OTHERWISE. BOLT SPACING SHALL BE 2 1/2" UNLESS OTHERWISE NOTED. MINIMUM EDGE DISTANCE SHALL BE 1 1/4" UNLESS NOTED OTHERWISE. BOLTS SHALL BE PLACED WITH HEADS ON THE OUTSIDE FACE OF EXTERIOR GIRDERS AND ON BOTTOM OF GIRDER FLANGES. FIELD SPLICE BOLTS: ⅞" φ, OPEN HOLES 15/16" φ

STRUCTURAL SHAPES OF EQUAL OR GREATER STRENGTH MAY BE SUBSTITUTED FOR SHAPES SHOWN, BUT PAYMENT WILL BE MADE ON THE BASIS OF SHAPES SHOWN.

ALL WELDING SHALL CONFORM TO THE AMERICAN WELDING SOCIETY STANDARD SPECIFICATIONS FOR WELDED HIGHWAY AND RAILWAY BRIDGES, CURRENT EDITION.

SHOP PAINT: ALL STRUCTURAL STEEL EXCEPT GALVANIZED MEMBERS, CONTACT SURFACES OF BOLTED CONNECTIONS, AND SURFACES WITHIN 3" OF HOLES AND FIELD WELDS, AND SURFACES IN CONTACT WITH CONCRETE SHALL BE GIVEN ONE PRIME COAT AS SPECIFIED IN SECTION 807.59 OF THE STANDARD SPECIFICATIONS.

FIELD PAINT: AFTER ERECTION ALL EXPOSED STEEL SURFACES WHICH DID NOT RECEIVE A COAT OF SHOP PAINT EXCEPT SURFACES IN CONTACT WITH CONCRETE SHALL BE GIVEN ONE COAT AS SPECIFIED IN 807.59. TWO ADDITIONAL COATS OF FIELD PAINT SHALL BE APPLIED TO ALL EXPOSED SURFACES. FIRST COAT - RED LEAD TINTED WITH LAMP BLACK; SECOND COAT - ALUMINUM PAINT.

BEARINGS SHALL BE FINALLY SEATED IN ACCORDANCE WITH SEC. 807.05(2) OF THE STANDARD SPECIFICATIONS. THIS WORK AND MATERIAL IS TO BE CONSIDERED AS SUBSIDIARY TO THE ITEM OF "STRUCTURAL STEEL" AND WILL NOT BE PAID FOR DIRECTLY. THESE DRAWINGS SHOW GENERAL FEATURES OF DESIGN ONLY. SHOP DRAWINGS SHALL BE MADE IN ACCORDANCE WITH THE SPECIFICATIONS, SUBMITTED AND APPROVAL SECURED BEFORE FABRICATION IS BEGUN. ANCHOR BOLTS SHALL BE GALVANIZED TO CONFORM TO ASTM SPECIFICATIONS, DESIGNATION A153.

REINFORCING STEEL TO BE ASTM A615, 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 OF "REINFORCING STEEL". SHOP LISTS AND BENDING DIAGRAMS OF REINFORCING STEEL, INCLUDING WIRE SUPPORTS, SHALL BE SUBMITTED AND APPROVAL SECURED BEFORE FABRICATION IS BEGUN.

THE CONTRACTOR, AT HIS OPTION, MAY POUR BRIDGE SLAB CONTINUOUS OVER THE ENTIRE UNIT USING A RETARDING AGENT TO RETARD SET. NOT LESS THAN 72 HOURS SHALL ELAPSE BETWEEN POURING OF SLAB AND THE CURB SECTIONS. IF THE PARAPET IS NOT POURED WITH THE CURB, 48 HOURS SHALL ELAPSE BETWEEN POURING OF CURB AND PARAPET.

ALL CONCRETE SHALL BE POURED AND SCREEDED OFF PRIOR TO INITIAL SET. THE CONCRETE DECK SHALL BE FINISHED IN ACCORDANCE WITH SECTION 802.23 OF THE STANDARD SPECIFICATIONS. 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.

GIRDER WEBS MAY BE MADE BY SHOP SPLICING WITH MINIMUM LENGTH OF 25'-0" FOR SECTIONS. FLANGE PLATES LONGER THAN 50' MAY BE MADE BY SHOP SPLICING WITH MINIMUM LENGTH OF 25'-0" FOR SECTIONS. NO ADDITIONAL PAYMENT FOR WELDS FOR THESE SPLICES WILL BE MADE.

FLANGES NOTED ON GIRDER ELEVATION (SHEET 2 OF 4) AS HIGH STRENGTH LOW ALLOY COLUMBIUM VANADIUM STEEL, ASTM DESIGNATION A572, GRADE 50 AND SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER POUND BID FOR "STRUCTURAL STEEL IN PLATE GIRDER SPANS A572". ALL OTHER STRUCTURAL STEEL SHALL BE ASTM DESIGNATION A36 AND SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER POUND BID FOR "STRUCTURAL STEEL IN PLATE GIRDER SPANS A36".

FOR DETAILS OF BRIDGE RAILING, SEE DRAWING NO. 14992A.

SPECIFICATIONS: ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 1972, AND APPLICABLE SPECIAL PROVISIONS.

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 THE CONTRACTOR OR ERECTOR SHOULD WANT TO MAKE ADDITIONAL WELDS, WHETHER TEMPORARY OR PERMANENT, HE SHALL SUBMIT DETAILED DRAWINGS WITH A FORMAL REQUEST TO THE BRIDGE DESIGN DIVISION OF THE ARKANSAS STATE HIGHWAY DEPARTMENT FOR APPROVAL.

ASTM A27, GRADE 70-40 STEEL SHOE CASTINGS SHALL BE PAID FOR AT THE UNIT PRICE PER POUND BID FOR "STRUCTURAL STEEL IN PLATE GIRDER SPANS A36".

SHEET 4 OF 4

DETAILS OF 242'-0" CONTINUOUS PLATE GIRDER UNIT

HWY. 104

HIGHWAY 104—JEFFERSON ROAD

JEFFERSON COUNTY

ROUTE 65 SEC. 14

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: J.P.S. DATE: 7-18-74

DESIGNED BY: C.E.D. DATE:

CHECKED BY: H.C. DATE: 4-26-74

SCALE: As noted

BRIDGE ENGINEER

BRIDGE NO. 5611 A B

DRAWING NO. ~~19038~~ 56724

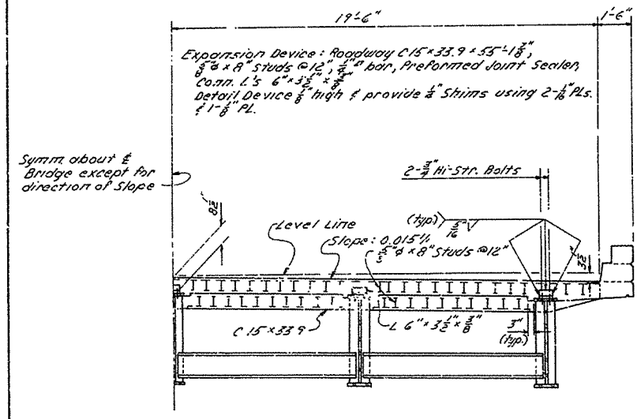
FOR INFORMATION ONLY

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0201	158	186

(1) A&B5611 - SUPERSTRUCTURE - 56725

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED ROAD NO.	STATE	FED. AID PROJ. NO	SHEET NO.	TOTAL SHEETS
				6	ARK.	FAC RF-025-2(32)		
				JOB NO		2783	48A	211

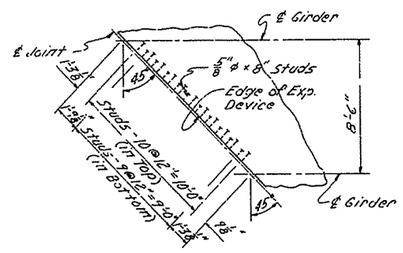
(1) 5611A & B EXP. DEVICE DTL'S



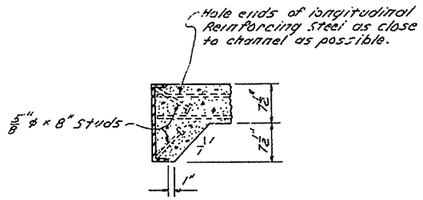
HALF ROADWAY SECTION AT END OF SPAN

Note: Holes for 7/8" ø high strength bolts for Expansions Device may be 1" ø holes if a washer is supplied for use under both the nut & the head of the bolt.

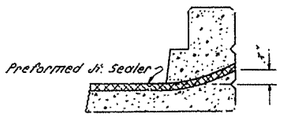
Half Roadway Section is Looking Back at Bent 1 of Bridge A and Looking Forward at Bent 4 of Bridge B.



ANCHOR SPACING DETAIL
Scale: 1/4"=1'-0"

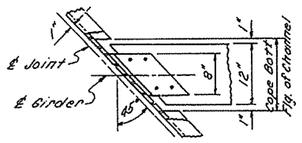


ANCHOR DETAIL
Scale: 1"=1'-0"



SEAL PLACEMENT IN CURB
No Scale

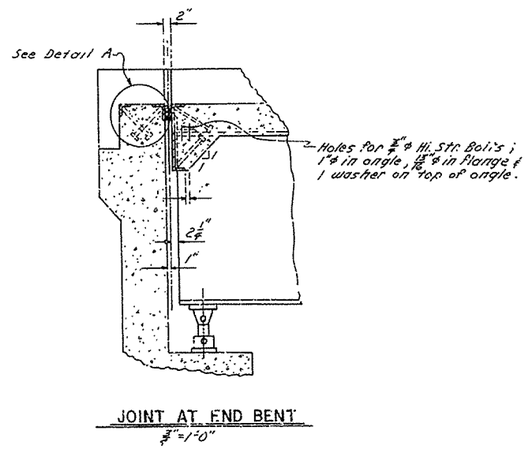
Note:
Length of Preformed Jt Sealer = 58.2' per Joint.



CHANNEL CONNECTION
Scale: 1"=1'-0"

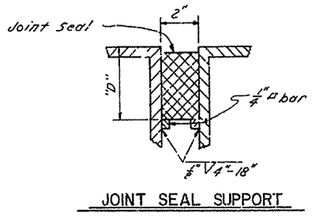
STRUCTURAL STEEL QUANTITIES (PER JOINT)

	Preformed Jt.	Sliding ℄ Jt.	Difference
End Bent	934.96 Lbs.	3407.37 Lbs	2472.41 Lbs.
Span	1921.72 Lbs.	3414.66 Lbs	1492.74 Lbs.
Totals	2856.88 Lbs.	6822.03 Lbs.	3965.15 Lbs.



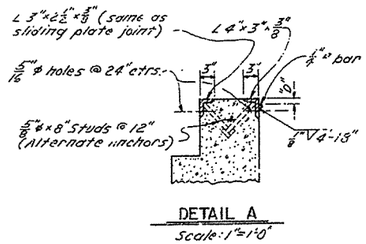
JOINT AT END BENT
3/4"=1'-0"

Note: Details of Joint are shown based on level Grade. Adjustments shall be made for Grade.



JOINT SEAL SUPPORT
No Scale

Note: The dimension "D" shall conform to the recommendations of the Seal Manufacturer as approved by the Bridge Engineer. The depth of the Seal shall be approximately equal to the uncompressed width of the Seal.



DETAIL A
Scale: 1"=1'-0"

SUPPLEMENTAL DETAILS OF
EXPANSION DEVICE AT
BENT NO. 1 - BRIDGE NO. 5611A &
BENT NO. 4 - BRIDGE NO. 5611B
HWY. 104
HIGHWAY 104 - JEFFERSON ROAD
JEFFERSON COUNTY
ROUTE 65 SEC. 14
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: J.P.S. DATE: 1-10-75
CHECKED BY: J.C.K. DATE: 1-15-75 SCALE: AS SHOWN
DESIGNED BY: _____ DATE: _____

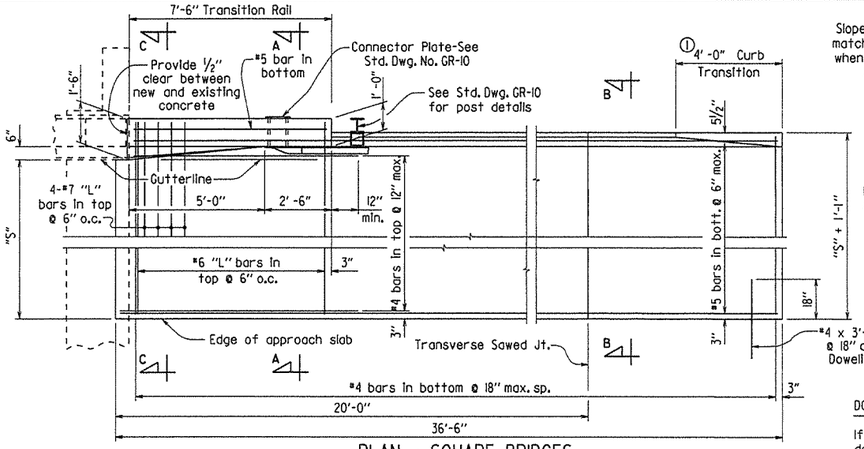
56725

BRIDGE ENGINEER

BRIDGE NO. 5611A & B DRAWING NO. [illegible]

Baker

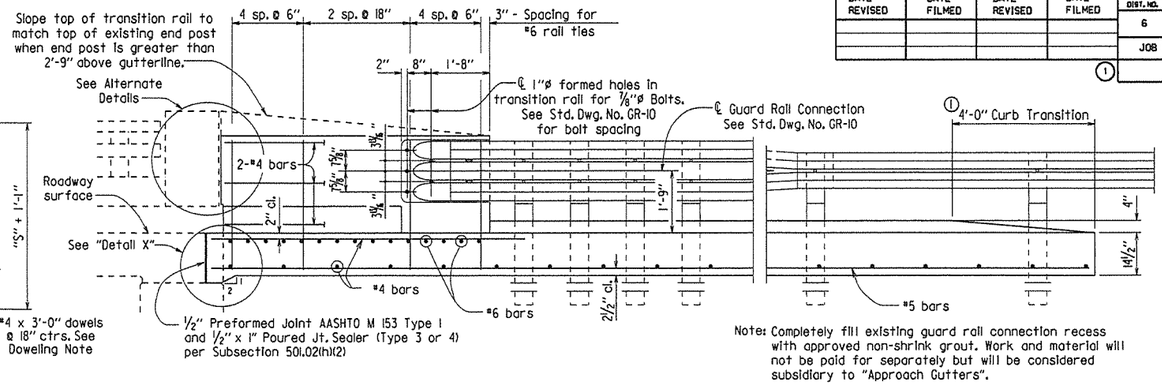
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		159	
				JOB NO.				
				TYPE AT GUTTERS			55036	



PLAN - SQUARE BRIDGES

⅜" = 1'-0"

"S" = Distance from gutterline to edge of approach slab.



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

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

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

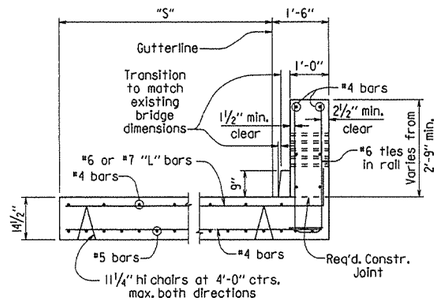
DOWELING NOTE

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".

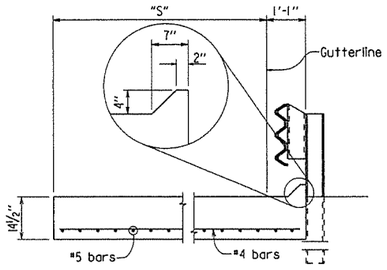
LONGITUDINAL SECTION THRU GUTTER

½" = 1'-0"



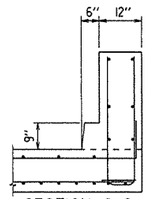
SECTION A-A

½" = 1'-0"



SECTION B-B

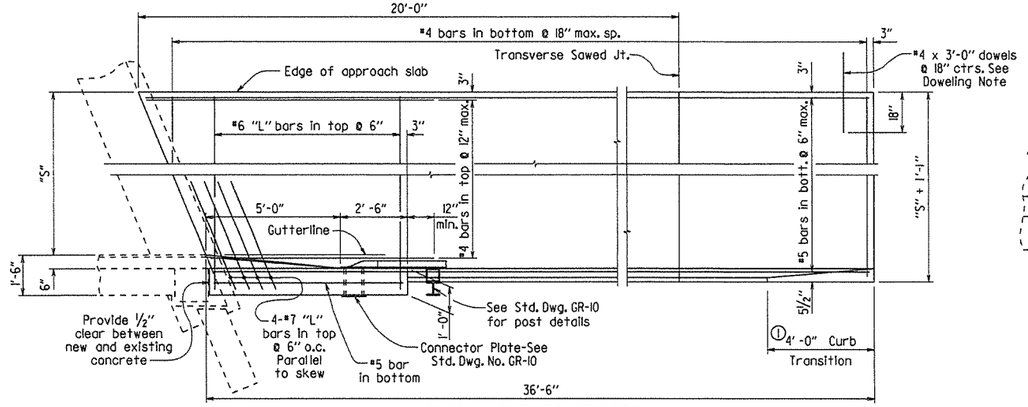
½" = 1'-0"

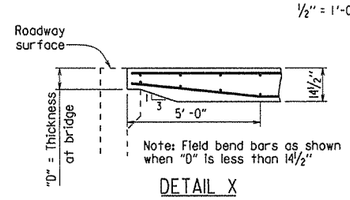


SECTION C-C

At end of Transition Rail

½" = 1'-0"



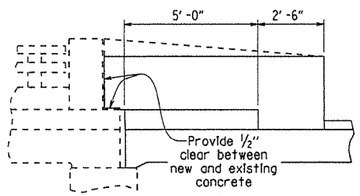


DETAIL X

⅜" = 1'-0"

PLAN - SKEWED BRIDGES

⅜" = 1'-0"

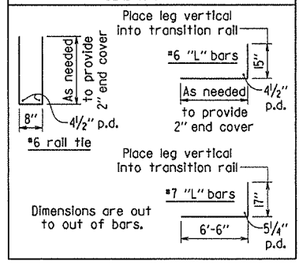


Bridge end may vary from that shown. Adjust gutter details as required to provide similar railing transition.

ALTERNATE DETAILS

N.T.S.

BENDING DIAGRAMS



QUANTITIES FOR ONE SQUARE APPROACH GUTTER

(FOR INFORMATION ONLY)

"S"	Concrete	Reinforcing Steel
5'-6"	12.06 cu.yd.	1091 lb.
9'-6"	18.78 cu.yd.	1573 lb.

GENERAL NOTES

All concrete shall be Class S or S(AE) or mixture used for Portland Cement Concrete Pavement and shall be poured in the dry.

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

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

This document was originally issued and sealed by Carl J. Fuselier, PE No. 7510, on February 27, 2014. This copy is not a signed and sealed document.

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

BRIDGE ENGINEER

STANDARD DETAILS FOR TYPE 'AT' APPROACH GUTTERS (BRIDGES WITH 6" CURB WIDTH & TYPE A RAILING)

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: KDH DATE: 2/27/2014 FILENAME: b55036.dgn

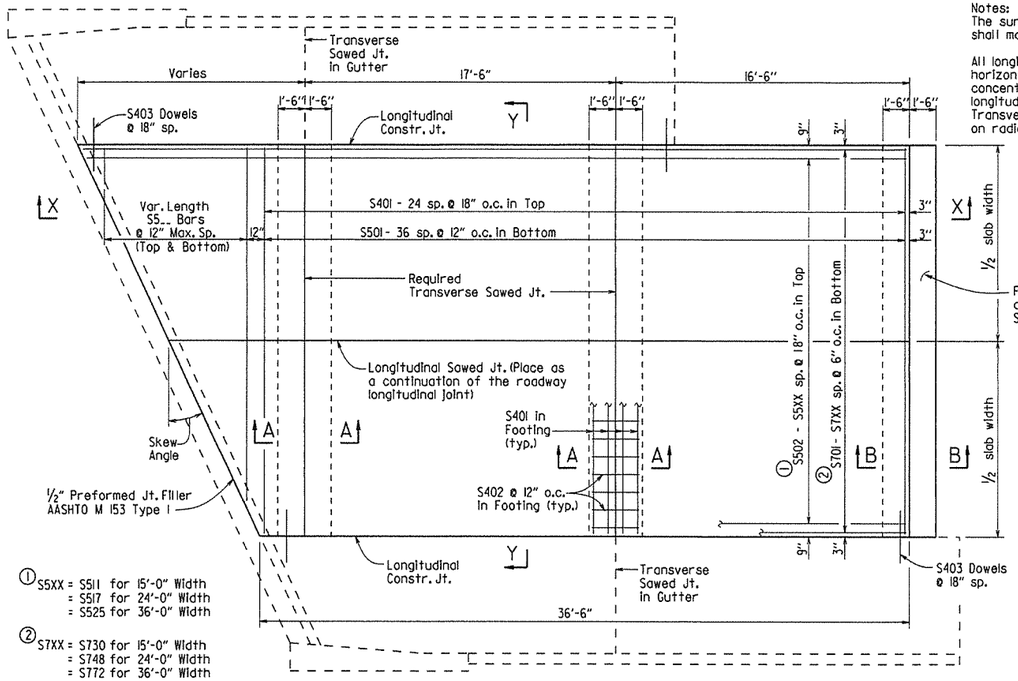
CHECKED BY: KWY DATE: 2/27/2014 SCALE: AS SHOWN

DESIGNED BY: STD. DATE:

DRAWING NO. 55036

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		160	
				JOB NO.				

TYPE CI APPROACH SLAB 55040CI



① S5XX = S511 for 15'-0" Width
= S517 for 24'-0" Width
= S525 for 36'-0" Width

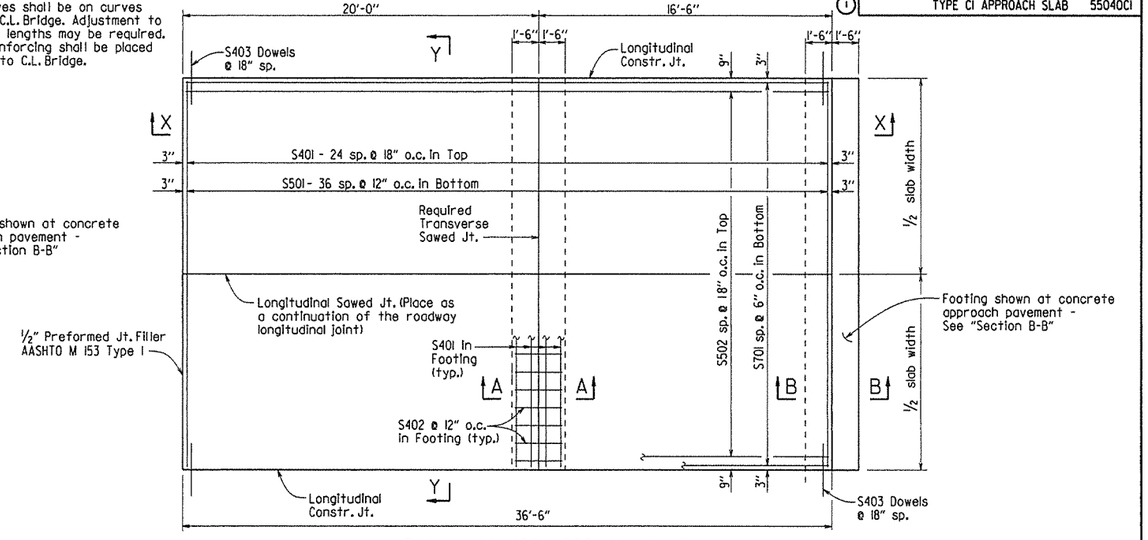
② S7XX = S730 for 15'-0" Width
= S748 for 24'-0" Width
= S772 for 36'-0" Width

PLAN - SKEWED APPROACH SLAB WITH APPROACH GUTTERS

1/4" = 1'-0"

Notes:
The surface finish for Approach Slabs shall match that used on the bridge deck.

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



PLAN - SQUARE APPROACH SLAB

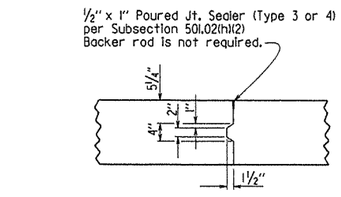
1/4" = 1'-0"

BAR LIST

(Square & Skewed Approach Slabs)

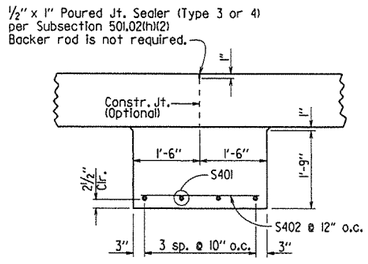
		Square		Skewed	
	Mark	No. Req'd.	Length	No. Req'd.	Length
15'-0" Slab Width	S401	33	14'-8"	37	14'-8"
	S402	30	2'-8"	45	2'-8"
	S403	50	3'-0"	*	3'-0"
	S501	37	14'-8"	37	14'-8"
	S502	10	36'-2"	—	—
	S502 - S511	—	—	1 Ea.	36.1' + 0.75'(tan skew angle) to 36.1' + 14.25'(tan skew angle)
	S5..	—	—	2 Ea.	14.7' - 0.75'/(tan skew angle) to 2'-0" Min.
	S701	30	36'-2"	—	—
	S701 - S730	—	—	1 Ea.	36.1' + 0.25'(tan skew angle) to 36.1' + 14.75'(tan skew angle)
24'-0" Slab Width	S401	33	23'-8"	37	23'-8"
	S402	48	2'-8"	72	2'-8"
	S403	50	3'-0"	*	3'-0"
	S501	37	23'-8"	37	23'-8"
	S502	16	36'-2"	—	—
	S502 - S517	—	—	1 Ea.	36.1' + 0.75'(tan skew angle) to 36.1' + 23.25'(tan skew angle)
	S5..	—	—	2 Ea.	23.7' - 0.75'/(tan skew angle) to 2'-0" Min.
	S701	48	36'-2"	—	—
	S701 - S748	—	—	1 Ea.	36.1' + 0.25'(tan skew angle) to 36.1' + 23.75'(tan skew angle)
36'-0" Slab Width	S401	33	35'-8"	37	35'-8"
	S402	72	2'-8"	108	2'-8"
	S403	50	3'-0"	*	3'-0"
	S501	37	35'-8"	37	35'-8"
	S502	24	36'-2"	—	—
	S502 - S525	—	—	1 Ea.	36.1' + 0.75'(tan skew angle) to 36.1' + 35.25'(tan skew angle)
	S5..	—	—	2 Ea.	35.7' - 0.75'/(tan skew angle) to 2'-0" Min.
	S701	72	36'-2"	—	—
	S701 - S772	—	—	1 Ea.	36.1' + 0.25'(tan skew angle) to 36.1' + 35.75'(tan skew angle)

* Varies with skew angle



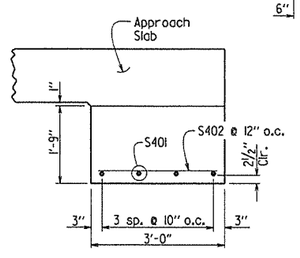
DETAILS OF LONGITUDINAL CONSTRUCTION JOINT

¾" = 1'-0"



SECTION A-A

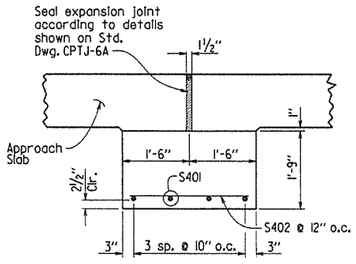
N.T.S.



SECTION B-B

AT ASPHALT APPROACH PAVEMENT

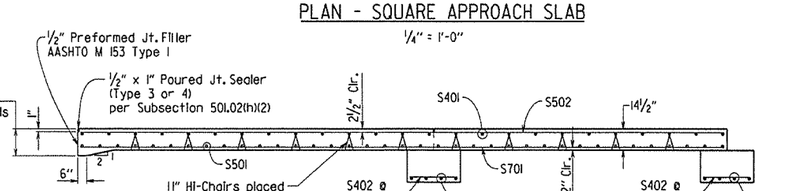
N.T.S.



SECTION B-B

AT CONCRETE APPROACH PAVEMENT

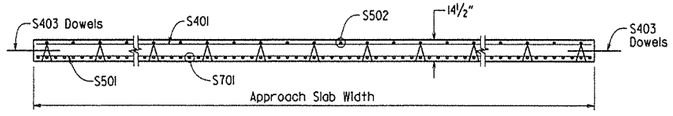
N.T.S.



SECTION X-X

SQUARE APPROACH SLAB SHOWN

1/4" = 1'-0"



SECTION Y-Y

N.T.S.

TABLE OF QUANTITIES FOR ONE SQUARE APPROACH SLAB

(FOR INFORMATION ONLY)

Slab Width	Reinforcing Steel (Lbs.)	Concrete (Cu. Yds.)
15'-0"	3640	30.75
24'-0"	5775	49.15
36'-0"	8620	73.75

GENERAL NOTES

This drawing shall be used for Approach Slabs in Seismic Performance Zone 1 and for the maximum skew angles shown below:

15'-0" Slab Width: Maximum Skew Angle = 50°
24'-0" Slab Width: Maximum Skew Angle = 40°
36'-0" Slab Width: Maximum Skew Angle = 30°

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

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

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

STANDARD DETAILS FOR TYPE CI APPROACH SLAB

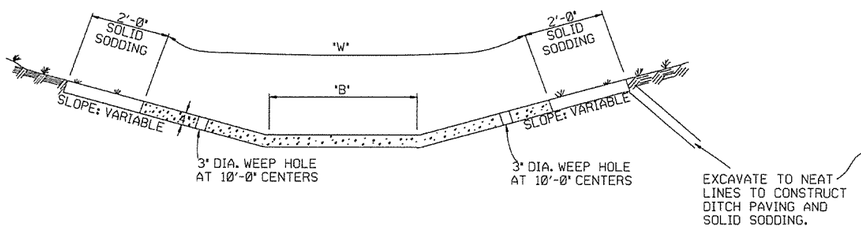
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: A.M.S. DATE: 2/27/2014 FILENAME: b55040ci.dgn
CHECKED BY: K.W.Y. DATE: 2/27/2014 SCALE: AS SHOWN
DESIGNED BY: STD. DATE:

DRAWING NO. 55040CI

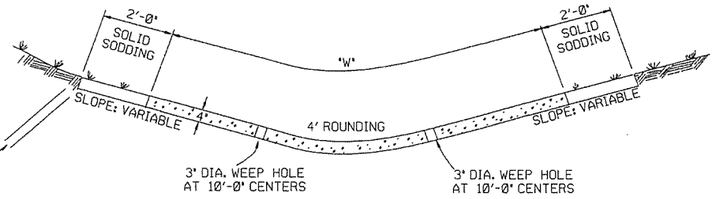
REFER TO TABULATION OF QUANTITIES
FOR 'W' & 'B' DIMENSIONS



TYPE A

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

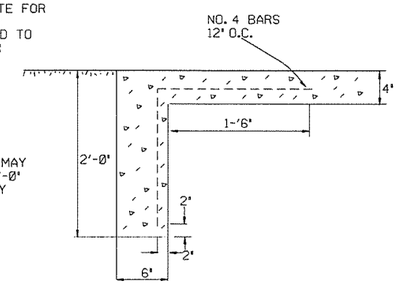
REFER TO TABULATION OF QUANTITIES
FOR 'W' DIMENSIONS



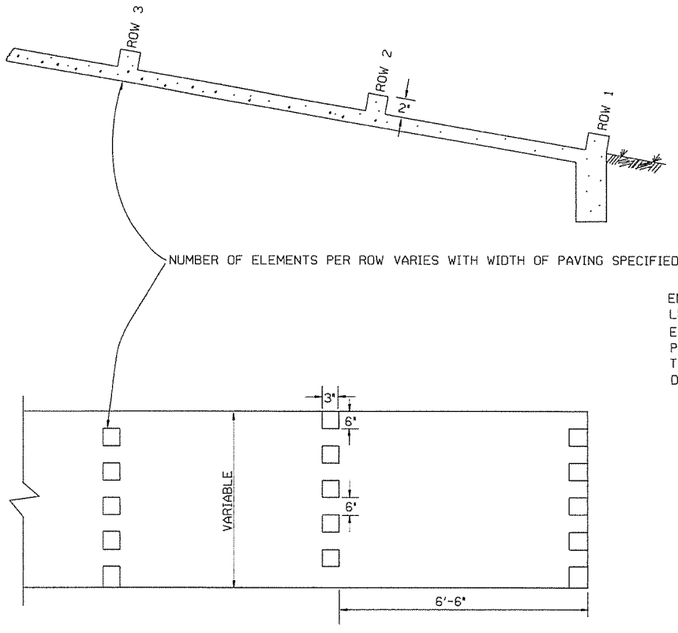
TYPE B

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.

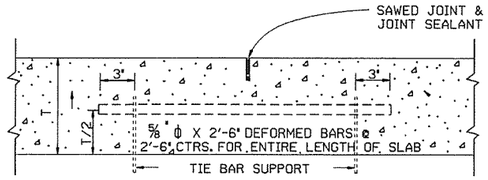
1" WIDE TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE DITCH PAVING AT 45' INTERVALS. THE SPACE SHALL BE FILLED WITH APPROVED JOINT FILLER COMPLYING WITH AASHTO M213.

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
DATE	REVISION	DATE FILM'D

ARKANSAS STATE HIGHWAY COMMISSION

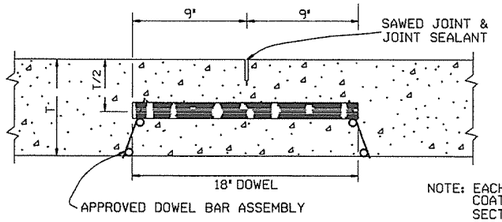
CONCRETE DITCH PAVING

STANDARD DRAWING CDP-1



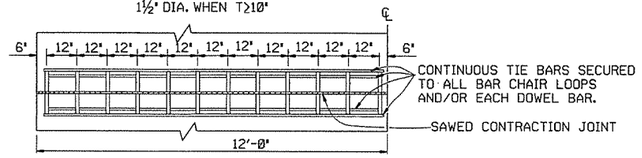
LONGITUDINAL JOINT

NOTE: THE TIE BAR SUPPORT SHOWN ABOVE MAY BE ELIMINATED IF OTHER APPROVED METHODS FOR PLACING AND SUPPORTING THE TIE BARS ARE PROVIDED.
TIE BARS SHALL BE 15' FROM TRANSVERSE JOINTS.



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

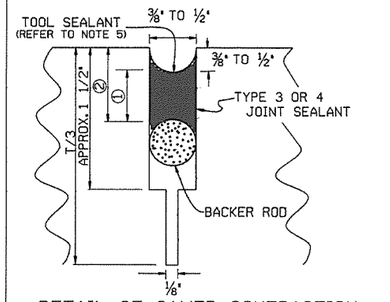
ROUND STEEL BAR DOWEL
1¼" DIA. WHEN T<10"
1½" DIA. WHEN T≥10"



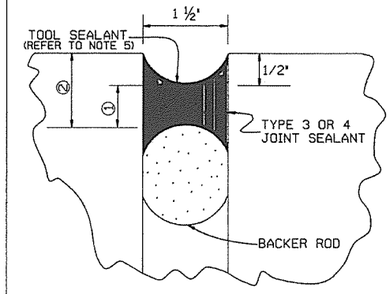
ONE-HALF 24' PAVEMENT
12 DOWELS
PLAN

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

CONTRACTION JOINT DETAILS



DETAIL OF SAWED CONTRACTION JOINT



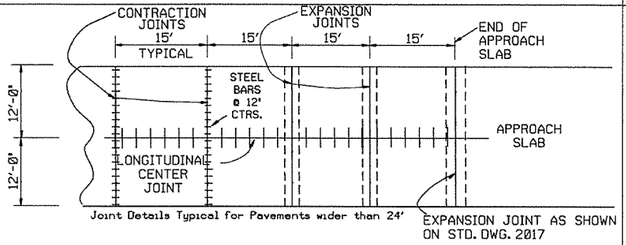
DETAIL OF EXPANSION JOINT

JOINT CONFIGURATION FOR TYPE 3 OR 4 JOINT SEALANT

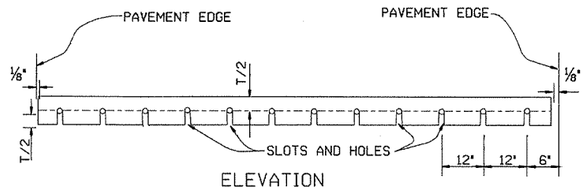
JOINT WIDTH	SEALANT THICKNESS ①	BACKER ROD DIAMETER	BACKER ROD PLACEMENT DEPTH ②
INCHES			
¼	¼	⅜	½
⅜	¼	½	½
½	¼	⅝	½
⅝	⅝	¾	⅝
¾	¾	⅞	⅞
1 ½	¾	2	1 ¼

JOINT CONFIGURATION FOR TYPE 5 JOINT SEALANT

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

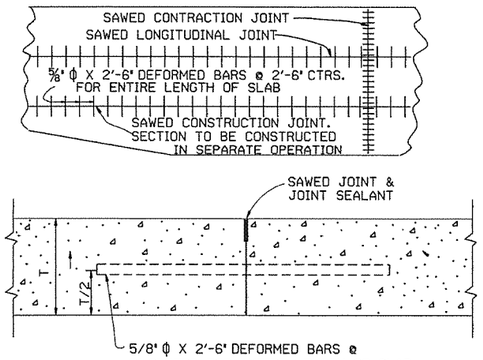


PLAN SHOWING EXPANSION JOINTS AT BRIDGE APPROACH SLABS



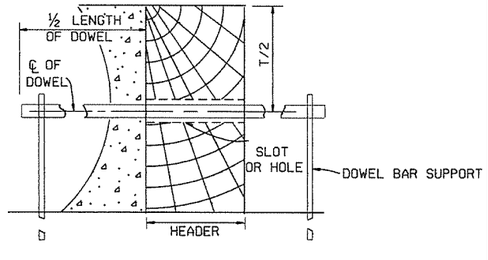
ELEVATION

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



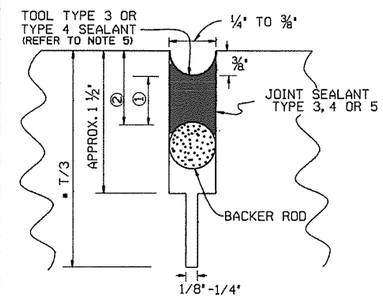
NOTE: TIE BARS SHALL BE 15' FROM TRANSVERSE JOINTS.

LONGITUDINAL CONSTRUCTION JOINT



SECTION

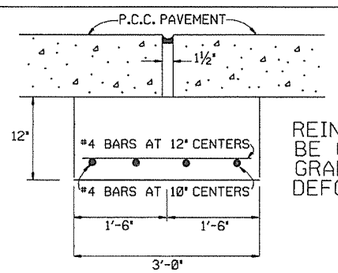
TRANSVERSE CONSTRUCTION JOINT



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

DETAIL OF SAWED LONGITUDINAL JOINT AND LONGITUDINAL CONSTRUCTION JOINT

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



DETAIL OF JOINT SUPPORT FOR EXPANSION JOINTS

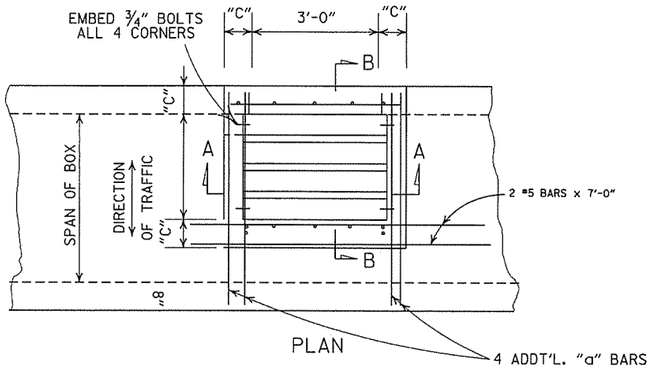
REINFORCING SHALL BE GRADE 40 OR GRADE 60 DEFORMED BARS.

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

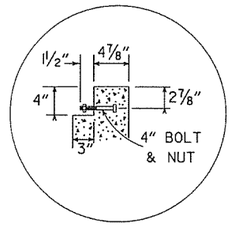
ARKANSAS STATE HIGHWAY COMMISSION

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

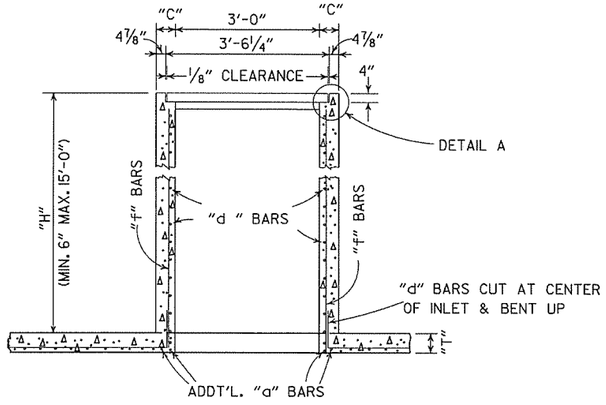
STANDARD DRAWING CPTJ - 6A



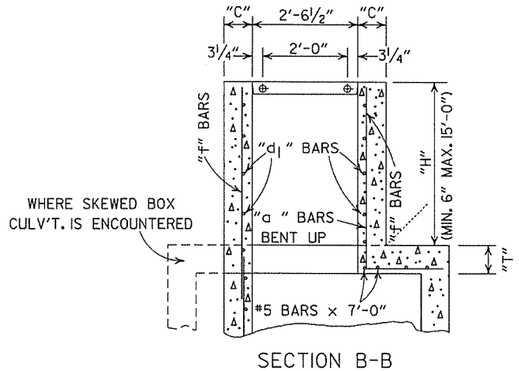
PLAN



DETAIL A



SECTION A-A

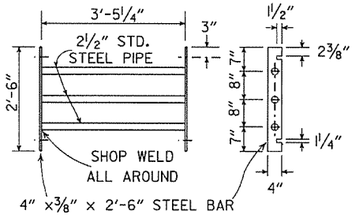


SECTION B-B

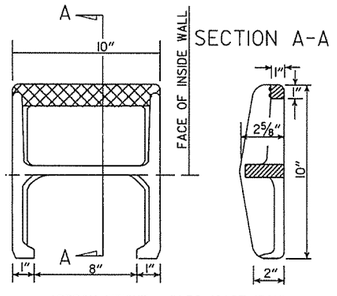
NOTE: ADDT'L.REINF. STEEL TO BE INCLUDED IN UNIT PRICE BID PER TYPE "TM" D.I.

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 = 11 LBS. (CAST IRON)

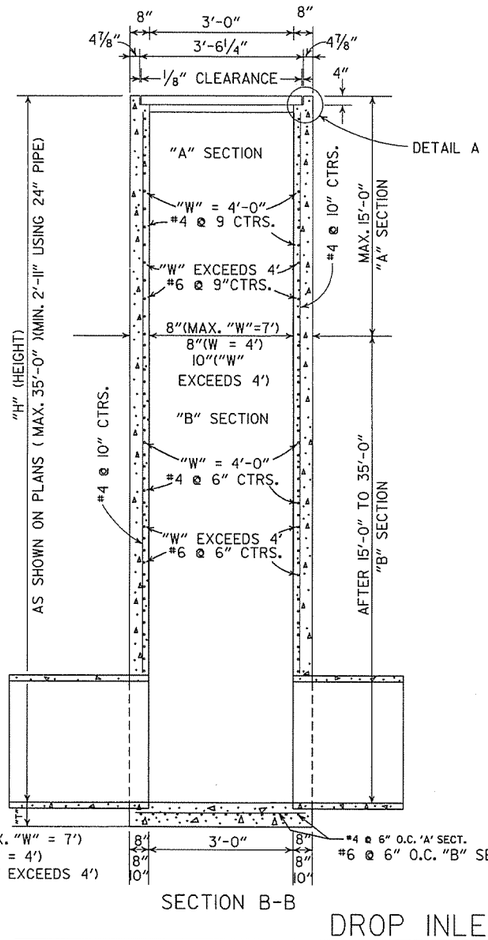
PLAN

NOTE: THIS DETAIL IS TYPICAL. OTHERS MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER.

DETAIL OF STEP FOR DROP INLET

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.



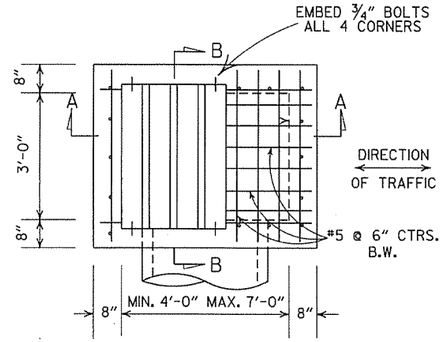
SECTION B-B

TABLE OF "W" DIMENSIONS

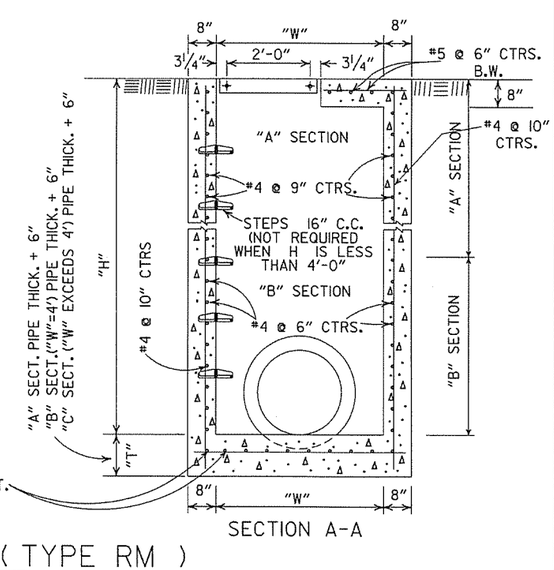
163

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.



PLAN



SECTION A-A

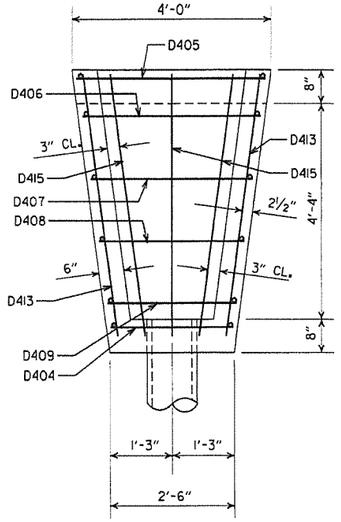
DROP INLET(TYPE RM)

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
REVISED		DATE FILMED

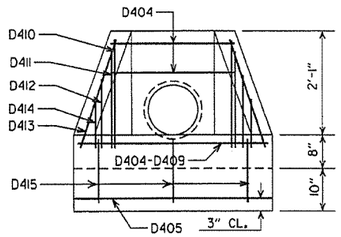
ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DROP INLETS

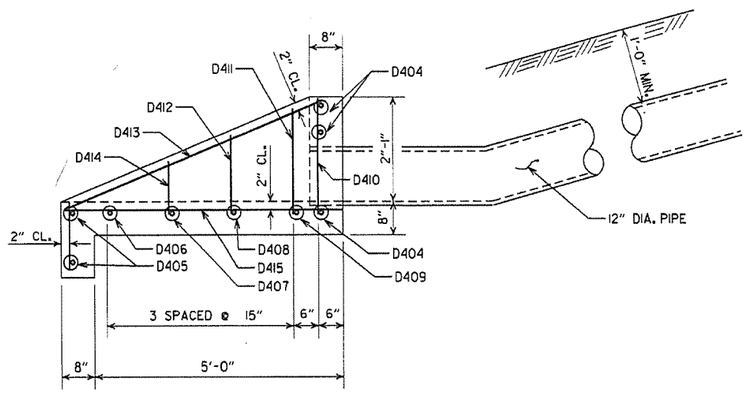
STANDARD DRAWING FPC-9D



PLAN



FRONT ELEVATION

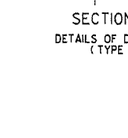


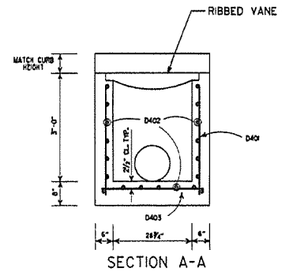
SIDE ELEVATION
CONCRETE SPILLWAY

DETAILS OF CONCRETE SPILLWAY (TYPE A)

BAR LIST (CONCRETE SPILLWAY)

MARK	NO. REQ'D.	LENGTH	BENDING DIAGRAM
D404	3	2'-2"	
D405	2	3'-8"	
D406	1	3'-5"	
D407	1	3'-1"	
D408	1	2'-9"	
D409	1	2'-5"	
D410	2	2'-5"	
D411	2	2'-2"	
D412	2	1'-9"	
D413	2	5'-6"	
D414	2	1'-2"	
D415	3	6'-5"	



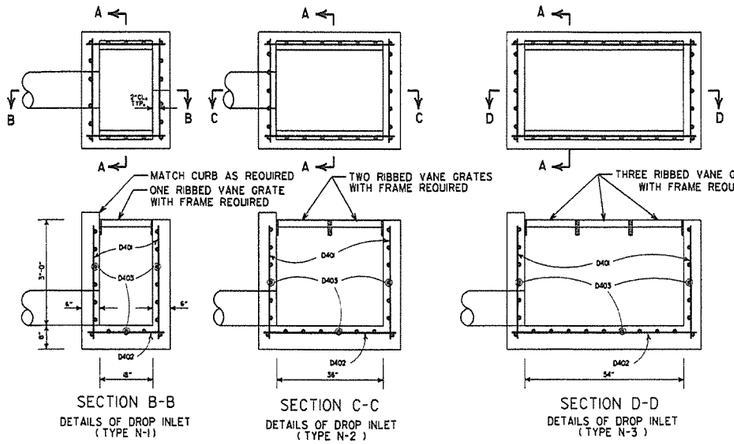


SECTION A-A

BAR LIST (DROP INLET)

MARK	TYPE N-1		TYPE N-2		TYPE N-3	
	NO. REQ'D.	LENGTH	NO. REQ'D.	LENGTH	NO. REQ'D.	LENGTH
D401	20	3'-0"	26	3'-0"	32	3'-0"
D402	19	2'-2"	19	3'-8"	19	5'-2"
D403	17	2'-11"	20	2'-11"	23	2'-11"

ALL BARS #4 @ 6" SPACING



SECTION B-B
DETAILS OF DROP INLET
(TYPE N-1)

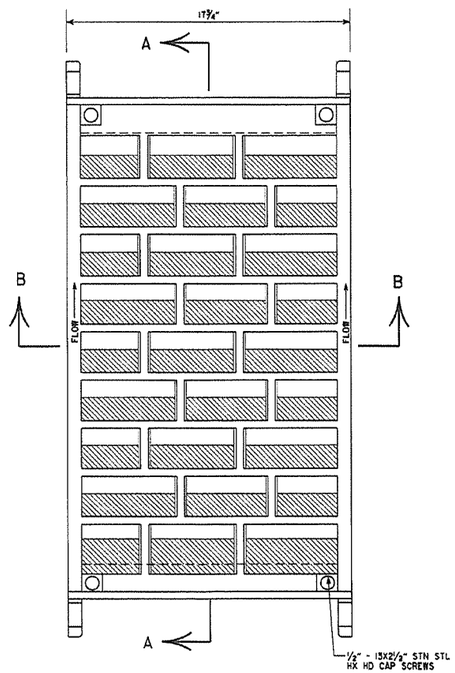
SECTION C-C
DETAILS OF DROP INLET
(TYPE N-2)

SECTION D-D
DETAILS OF DROP INLET
(TYPE N-3)

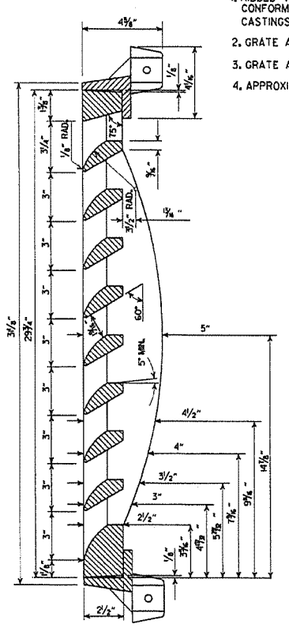
DETAILS OF DROP INLET

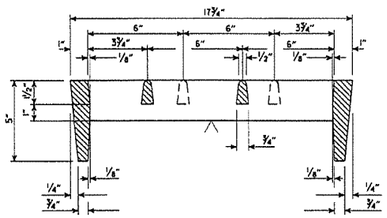
GENERAL NOTES (GRATE & FRAME)

1. RIBBED VANE 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 & AASHTO M 306.
2. GRATE AND FRAME SHALL NOT BE PAINTED.
3. GRATE AND FRAME SHALL BE INSTALLED IN DROP INLET IN ASSEMBLED POSITION.
4. APPROXIMATE WEIGHT OF GRATE SHALL BE 170 LBS.

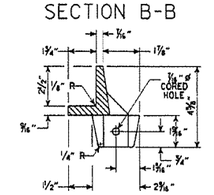


SECTION A-A





SECTION B-B



SECTION THRU FRAME

DETAILS OF RIBBED VANE GRATE AND FRAME

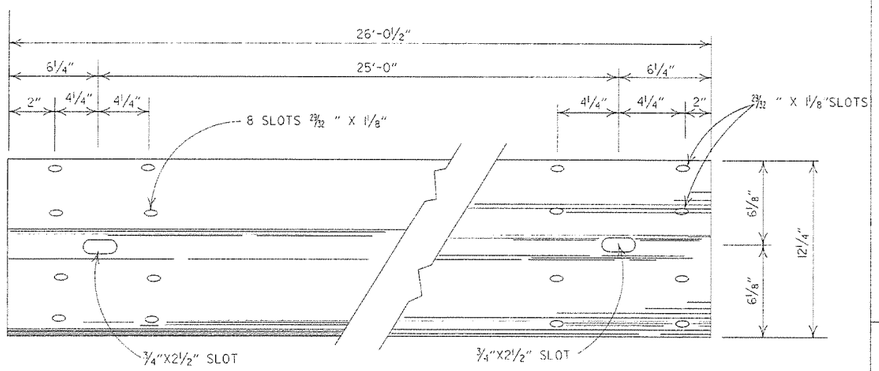
DATE REVISED	DATE FILMED	DESCRIPTION
7-02-98	7-2-98	REVISED SECT. A-A DETAIL OF DROP INLET & ADDED AASHTO REF. TO NOTE 1, REVISED GRATE
10-18-96		REVISED ASTM REF. TO AASHTO
8-15-91		ISSUED

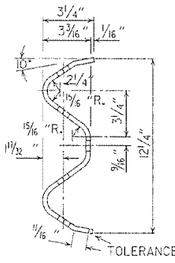
ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DROP INLETS AND SPILLWAY OUTLET

STANDARD DRAWING FPC-9N

STDfpc9N.DGN

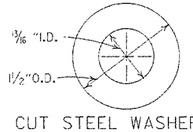




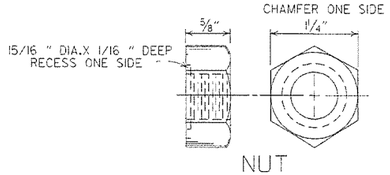
DETAILS OF
W-BEAM GUARD RAIL

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

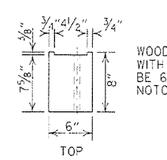
SPLICE BOLT
POST BOLT - SAME EXCEPT LENGTH



CUT STEEL WASHER

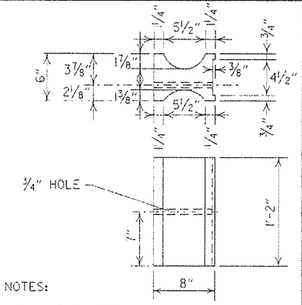


NUT



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

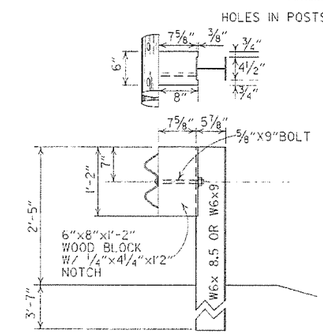
WOOD BLOCKOUT
(W-BEAM)



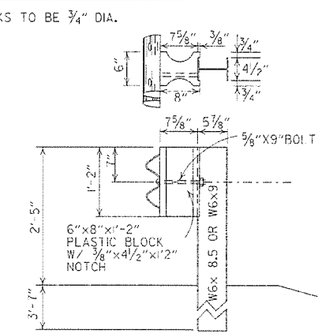
NOTES:
1. SIMILAR SHAPED PLASTIC BLOCKOUTS MAY BE USED AS LONG AS THEY MEET NCHRP-350 TEST LEVEL 3 SPECIFICATIONS OR REQUIREMENTS FOR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).
2. DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCES.

PLASTIC BLOCKOUT
(W-BEAM)

HOLES IN POSTS AND BLOCKS TO BE 3/4" DIA.

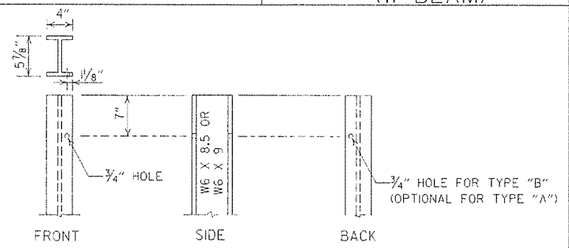


WOOD BLOCKOUT CONNECTIONS

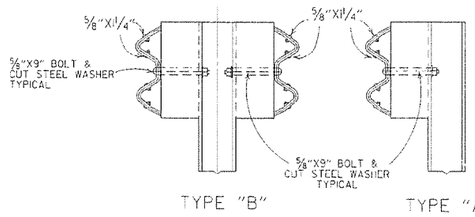


PLASTIC BLOCKOUT CONNECTIONS

DETAILS OF STEEL LINE POST CONNECTIONS
(W-BEAM)



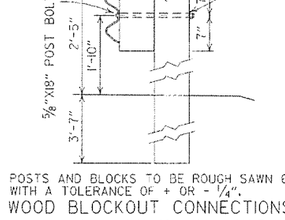
STEEL POST



TYPE "B" TYPE "A"

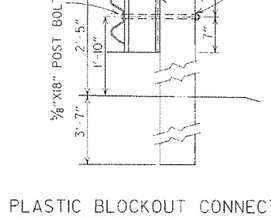
DETAILS OF STEEL LINE POST CONNECTIONS
(W-BEAM)

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 1/4" 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.

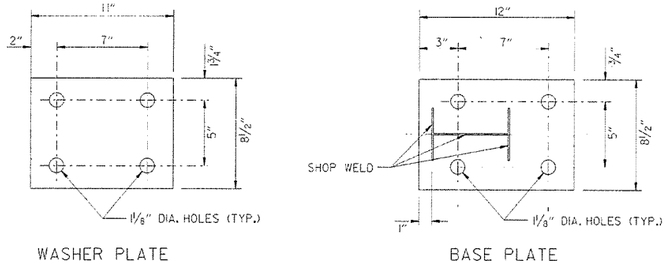
CONTRACTOR SHALL HAVE THE OPTION OF USING WOOD BLOCKOUTS FOR W-BEAM GUARD RAIL OR PLASTIC BLOCKOUTS, AS LONG AS BLOCKOUT USED MEETS NCHRP-350 TEST LEVEL 3 SPECIFICATIONS OR REQUIREMENTS FOR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) FOR W-BEAM GUARD RAIL.

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 ALT. STEEL POST SIZE	
8-5-93	REVISED STEEL POST SIZE	8-5-93
10-1-92	REDRAWN & REVISED	10-1-92
8-15-91	REVISED WASHER NOTE	8-15-91
8-2-90	REV. GEN. NOTE & DEPHT OF ANC. POST IN ROCK	8-2-90
7-15-88	REVISED SECTION 3 & GENERAL NOTES	
3-4-88	REV. ANCHOR POST, ELEV. NOTES & POST IN ROCK	780-3-4-88
10-30-87	REVISED WOOD LINE POST DETAIL	546-10-30-87
10-9-87	REDRAWN & REVISED	802-10-9-87

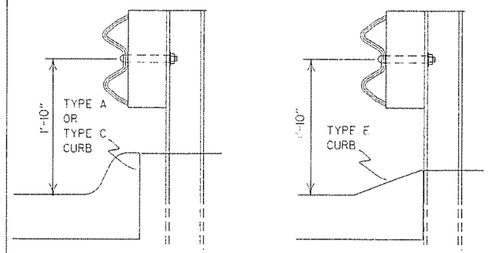
ARKANSAS STATE HIGHWAY COMMISSION

GUARD RAIL DETAILS

STANDARD DRAWING GR-8

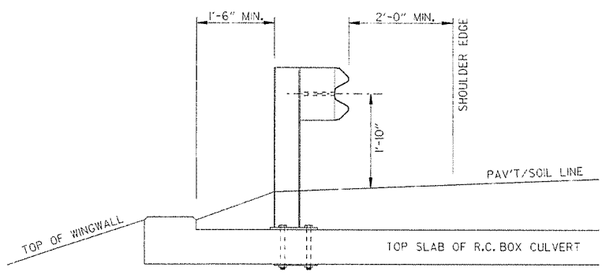


Note: Bolts, nuts, washers and plates shall be galvanized in accordance with Section 801 of the Standard Specifications.

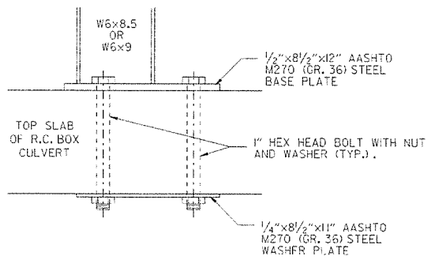


DETAIL OF GUARD RAIL PLACEMENT BEHIND CURB (W-BEAM)

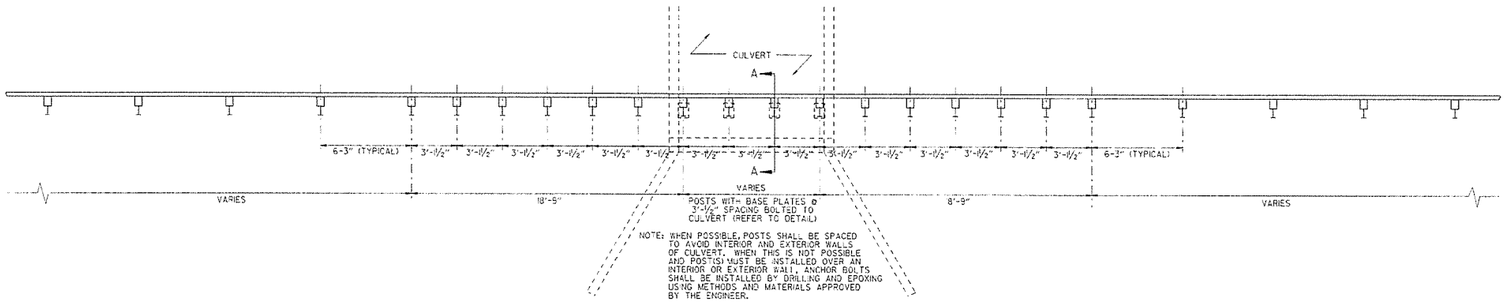
FOR DESIGN SPEEDS OF 50 MPH OR LESS ALL CURB FACES, AS SHOWN ON STD. DRWG. CG-1, MAY BE USED. FOR DESIGN SPEEDS OF 55 MPH OR MORE TYPE "E" CURB FACE SHALL BE USED.



SECTION A-A



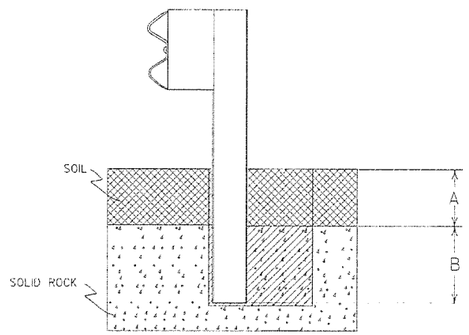
DETAIL OF CONNECTION



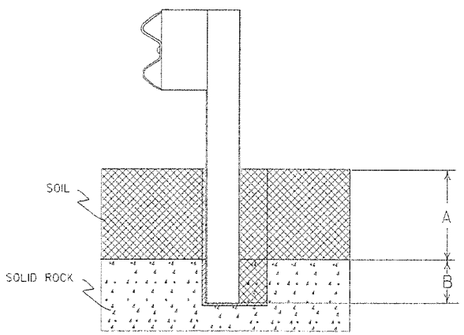
PLAN LAYOUT OF TYPE A GUARD RAIL AT LOW-FILL CULVERTS

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

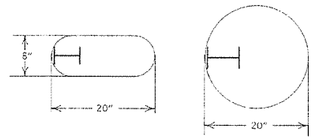


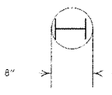
Case 2



Plan View Steel Posts

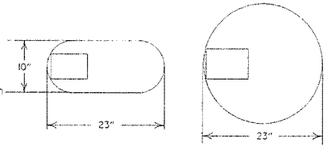
Either hole configuration acceptable

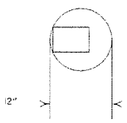




Plan View Wood Posts

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)

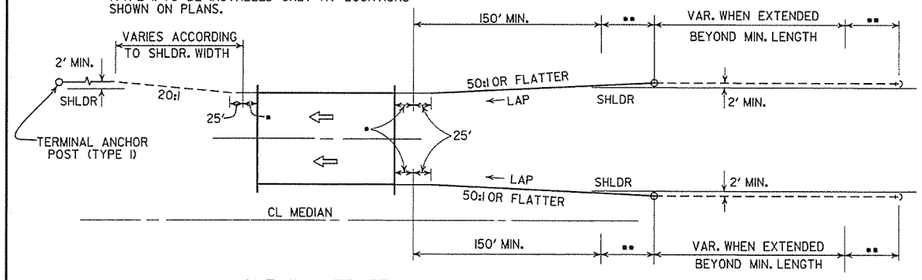
DATE	REVISION	DATE FILM
7-14-10	RAISED HEIGHT OF GUARD RAIL 1"	
4-12-07	REVISED DETAIL OF GUARD RAIL PLACEMENT BEHIND CURB	
11-10-05	ADDED GUARD RAIL PLACEMENT BEHIND CURB; REVISED DETAIL OF CONNECTION	
11-18-04	REVISED POST PLACEMENT IN ROCK & CULVERT CONNECTION DETAILS. ADDED DETAIL FOR GUARD RAIL PLACEMENT AT LOW-FILL CULVERTS	
3-30-00	REMOVED CONCRETE INSERT ANCHOR	
8-12-98	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	
8-5-93	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

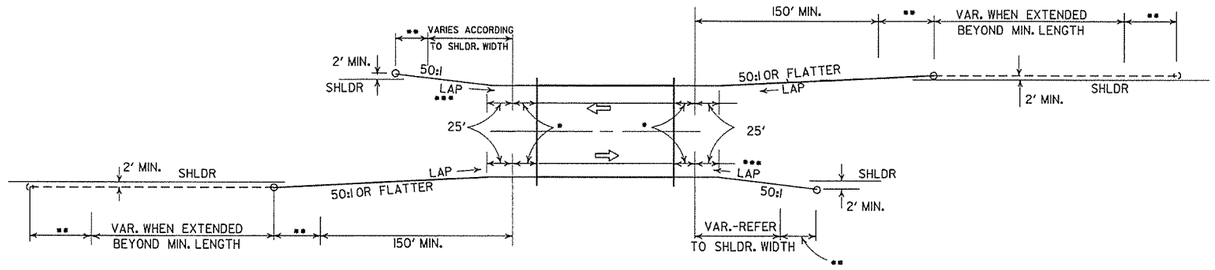
STANDARD DRAWING GR-8A

NOTE: GUARD RAIL WITH GUARD RAIL TERMINAL (TYPE I) TO BE INSTALLED ONLY AT LOCATIONS SHOWN ON PLANS.



ONE-WAY TRAFFIC

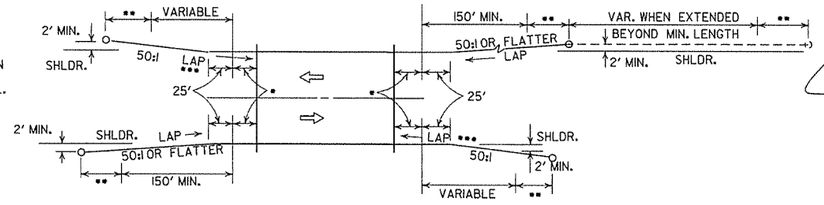
••• LAP OF GUARD RAIL SHALL BE AS SHOWN FOR A DISTANCE OF UP TO 200', CHANGE TO LAP IN DIRECTION OF TRAVEL.



TWO-WAY TRAFFIC

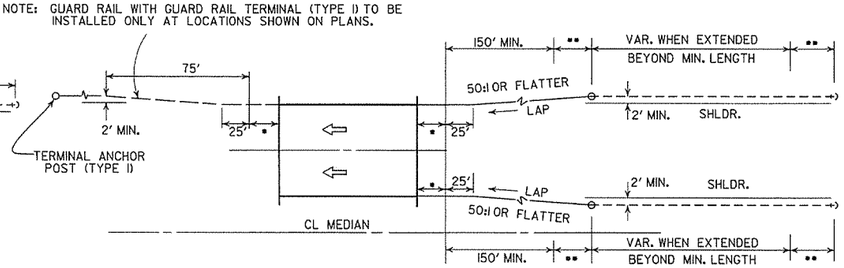
METHODS OF INSTALLATION OF GUARD RAIL AT LESS THAN FULL SHOULDER WIDTH BRIDGES USING GUARD RAIL TERMINAL (TYPE 2)

••• 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

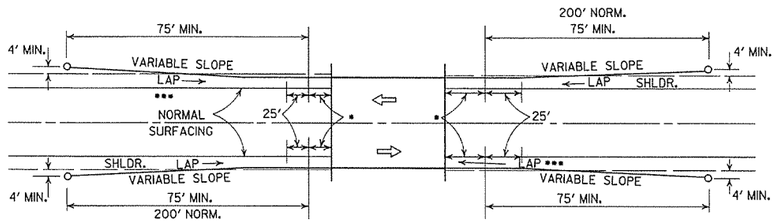
NOTE: GUARD RAIL WITH GUARD RAIL TERMINAL (TYPE I) TO BE INSTALLED ONLY AT LOCATIONS SHOWN ON PLANS.



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

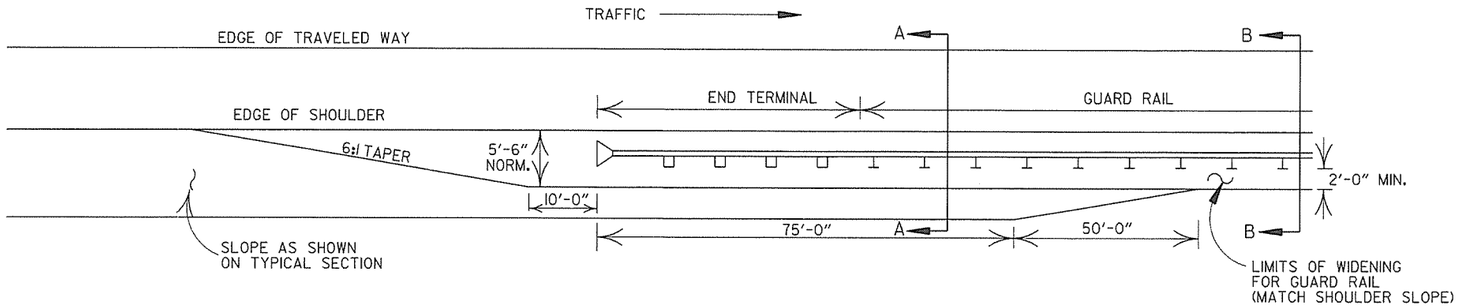
- • THRIE BEAM GUARD RAIL TERMINAL
- •• GUARD RAIL TERMINAL (TYPE 2)

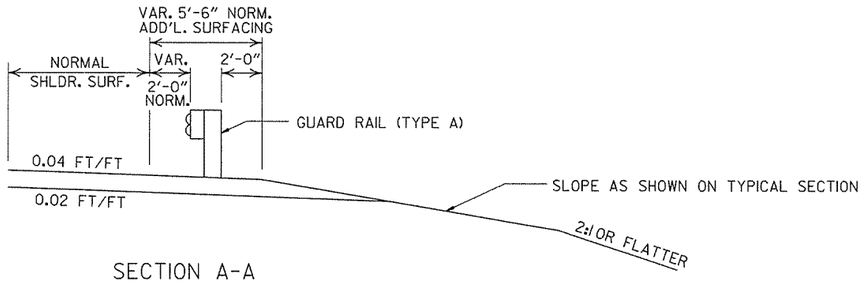
DATE	REVISION	DATE FILM
4-17-08	REVISED LAYOUTS	
11-10-05	REMOVED GUARD RAIL NOTES AND DETAILS	
11-16-01	DELETED NOTE-METHOD OF INSTALLATION OF GUARD RAIL USING GUARD RAIL TERM. (TY. I)	
1-12-00	ADDED CONSTRUCTION NOTE	1-12-00
6-26-97	REVISED LAYOUT	
10-1-92	REDRAWN & REVISED	10-1-92
	ADDED NOTE	
10-9-87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

ARKANSAS STATE HIGHWAY COMMISSION

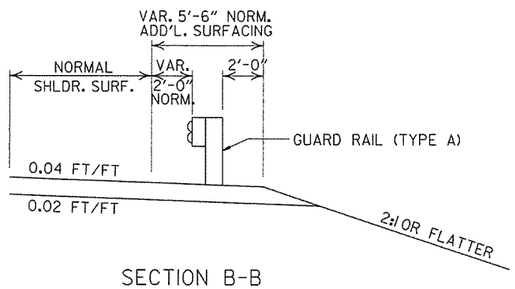
GUARD RAIL DETAILS

STANDARD DRAWING GR-9





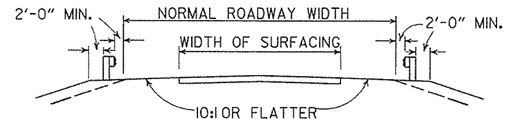
SECTION A-A



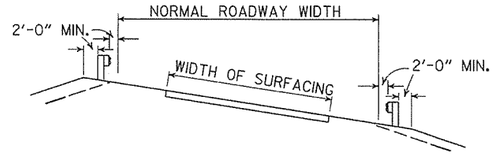
SECTION B-B

DETAILS OF WIDENING FOR GUARD RAIL

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

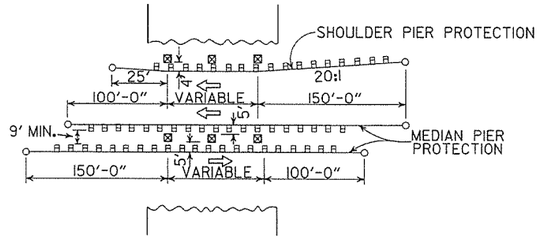


SECTION ON TANGENT



SECTION ON CURVE

DETAILS SHOWING POSITION OF GUARD RAIL ON HIGHWAY



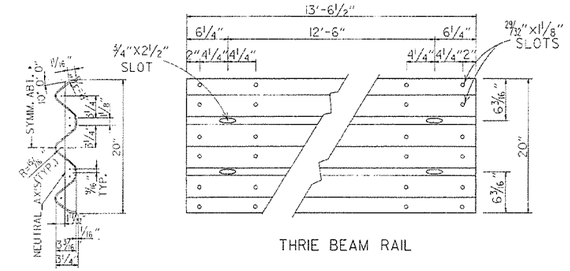
METHOD OF INSTALLATION OF GUARD RAIL AT FIXED OBSTACLE

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

ARKANSAS STATE HIGHWAY COMMISSION

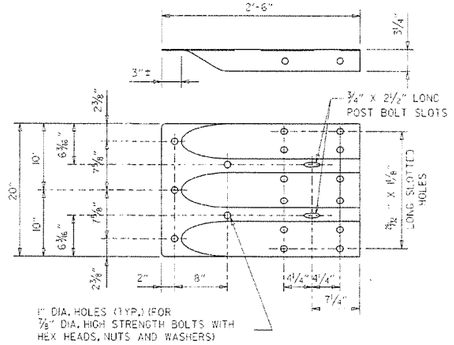
GUARD RAIL DETAILS

STANDARD DRAWING GR-9A



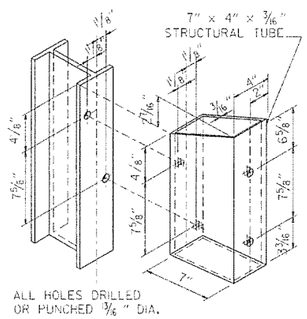
THRIE BEAM RAIL

SECTION THRU
THRIE BEAM RAIL



1" DIA. HOLES (TYP.) (FOR ⅞" DIA. HIGH STRENGTH BOLTS WITH HEX HEADS, NUTS AND WASHERS)

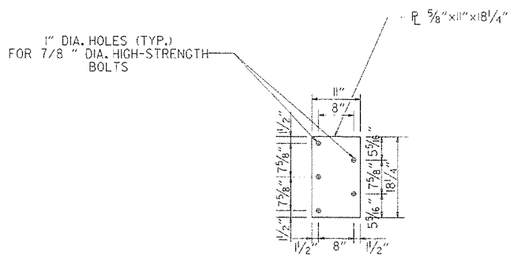
SPECIAL END SHOE



ALL HOLES DRILLED OR PUNCHED ⅜" DIA.

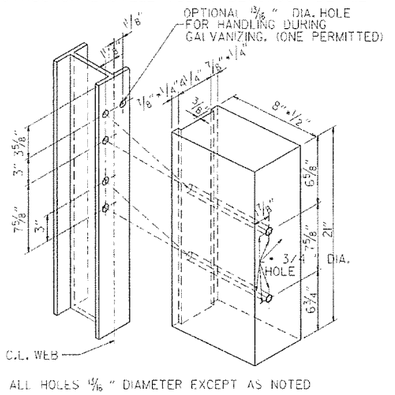
STRUCTURAL STEEL TUBING BLOCKOUT DETAIL

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



CONNECTOR PLATE

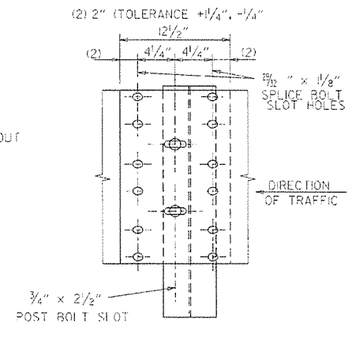
CONNECTOR PLATE SHALL BE AASHTO M270, GR. 36 AND SHALL BE GALVANIZED AFTER FABRICATION. GALVANIZING SHALL CONFORM TO SUBSECTION 807.19 OF THE STANDARD SPECIFICATIONS. CONNECTOR PLATE TO BE BOLTED TO SPECIAL END SHOE USING ⅞" DIA. HIGH STRENGTH BOLTS, WITH THE HEADS PLACED ON THE TRAFFIC FACE. WASHERS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



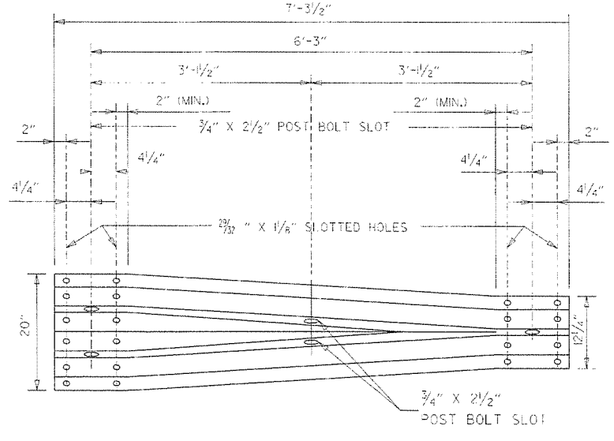
ALL HOLES 13/16" DIAMETER EXCEPT AS NOTED

HOLE PUNCHING DETAIL
FOR STEEL POST & WOOD
OR PLASTIC BLOCKOUTS

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

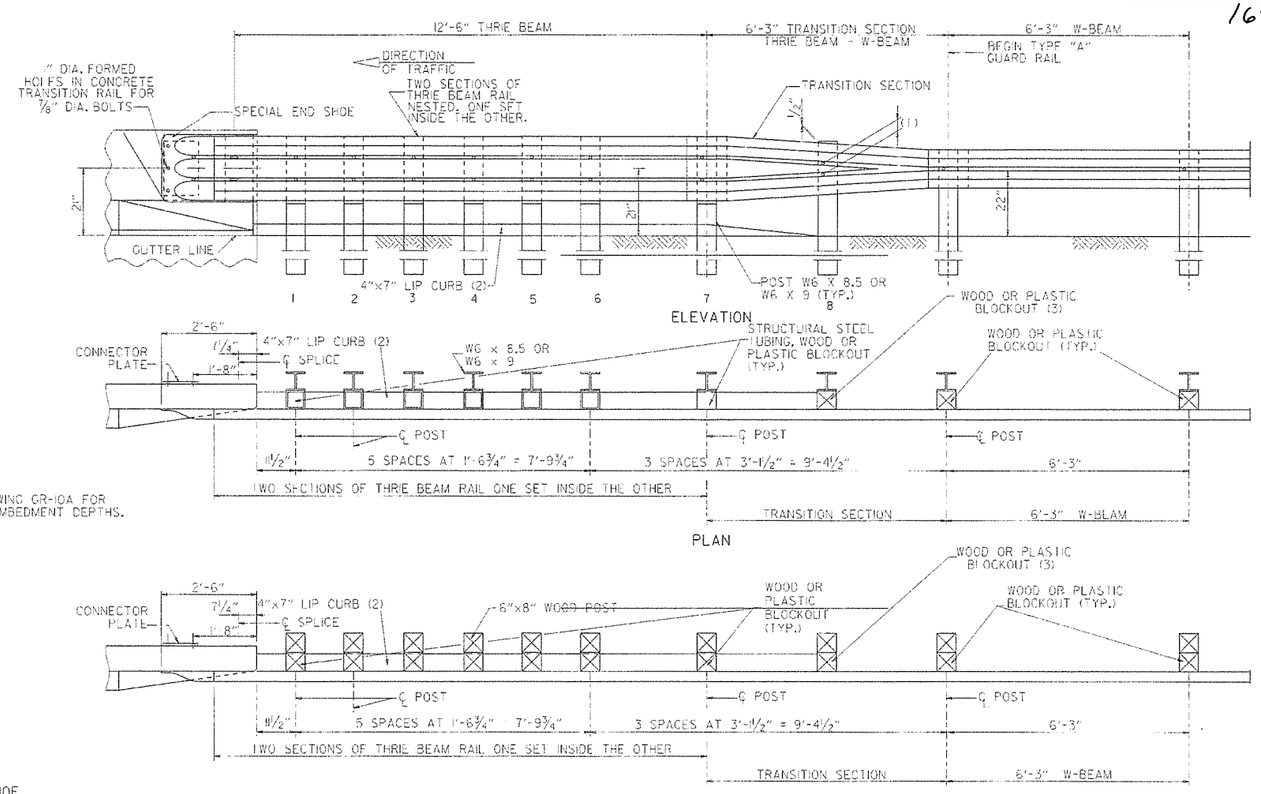


THRIE BEAM RAIL
SPLICE AT POST



TRANSITION SECTION

NOTE:
SEE STANDARD DRAWING GR-10A FOR GUARD RAIL POST EMBEDMENT DEPTHS.



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

THRIE BEAM GUARD RAIL CONNECTION AT BRIDGE ENDS

GENERAL NOTES:

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

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

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

ALL LAP SPLICES, INCLUDING SPECIAL END SHOES, SHALL BE MADE IN THE DIRECTION SHOWN ON STANDARD DRAWINGS GR-9 & GR-11.

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

REFER TO STD. DRWG. GR-10A FOR POST DETAILS.

USE THRIE BEAM GUARD RAIL COMPONENTS OF SAME MATERIAL FOR ENTIRE JOB.

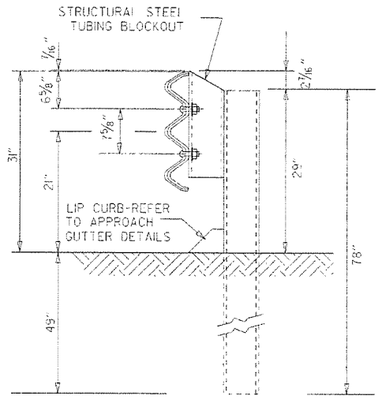
THRIE BEAM POSTS SHALL BE SAME MATERIAL AS W BEAM POSTS FOR ENTIRE JOB.

DATE	REVISION	DATE FILM
7-14-10	RAISED HEIGHT OF W-BEAM 1"	
11-29-07	ADDED PLASTIC BLOCKOUTS	
11-10-05	ADDED NOTE FOR ATTACHING STEEL BLOCKOUT	
11-18-04	REVISED GENERAL NOTES	
10-9-03	REVISED GENERAL NOTES	
4-10-03	REVISED GENERAL NOTES	
8-22-02	REVISED NOTE (2)	
6-29-00	MOVED DIMENSION LINES	
5-18-00	ADDED NOTE	
3-30-00	DRAWN & ISSUED	

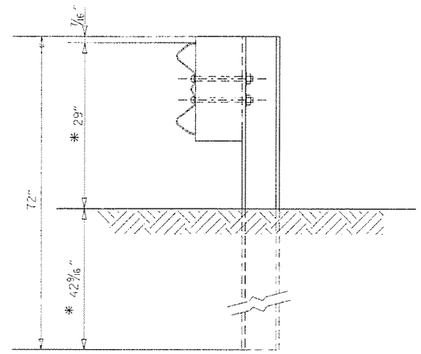
ARKANSAS STATE HIGHWAY COMMISSION

GUARD RAIL DETAILS

STANDARD DRAWING GR-10

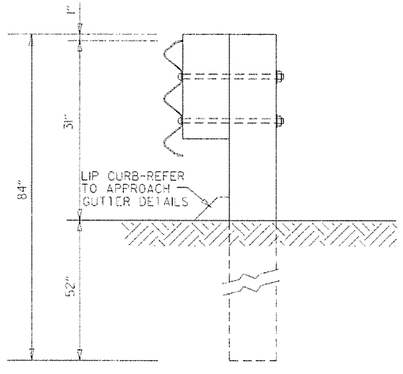


THRIE BEAM RAIL WITH STEEL TUBING BLOCKOUT
AND STEEL POST
POSTS 1-7

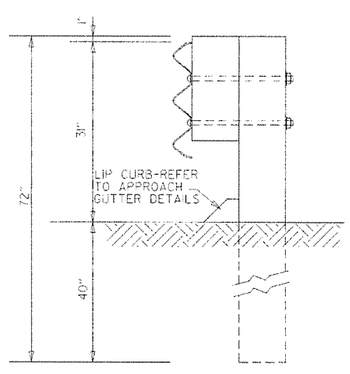


W-BEAM TO THRIE BEAM TRANSITION RAIL
WITH WOOD OR PLASTIC BLOCKOUT AND STEEL POST
POST 8

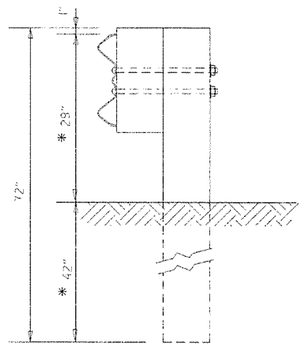
* NOTE:
THESE DIMENSIONS WILL NEED TO BE ADJUSTED IN THE FIELD TO MAKE THE TRANSITION FROM 21" MID POINT OF THRIE BEAM TO 22" MID POINT OF W-BEAM.



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.

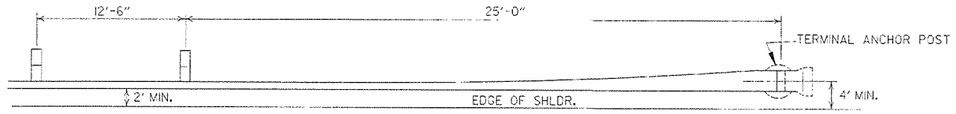
WOOD POSTS & WOOD BLOCKS SHALL BE EITHER DENSE NO. 1 STRUCTURAL OR BETTER 9.7 f (1400 f) OR NO. 1 (1350 f SOUTHERN PINE.

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	

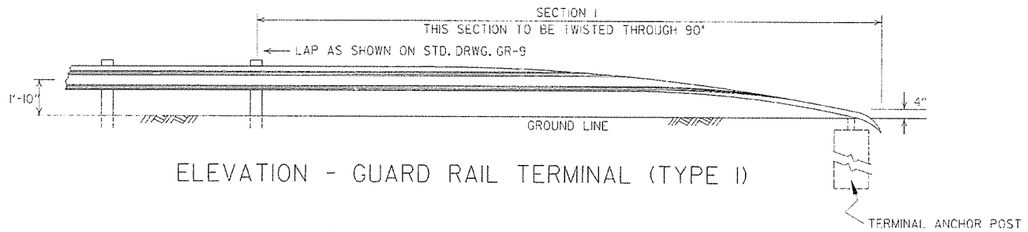
ARKANSAS STATE HIGHWAY COMMISSION

GUARD RAIL DETAILS

STANDARD DRAWING GR-10A

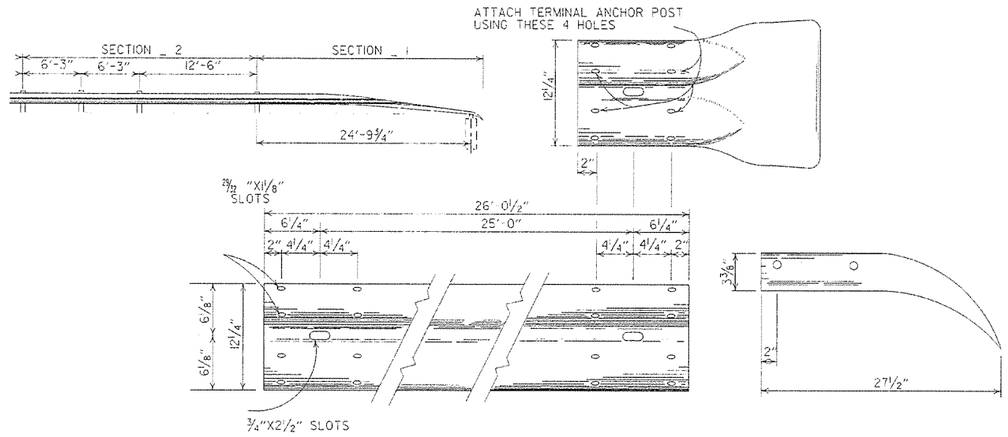


PLAN - GUARD RAIL TERMINAL (TYPE I)



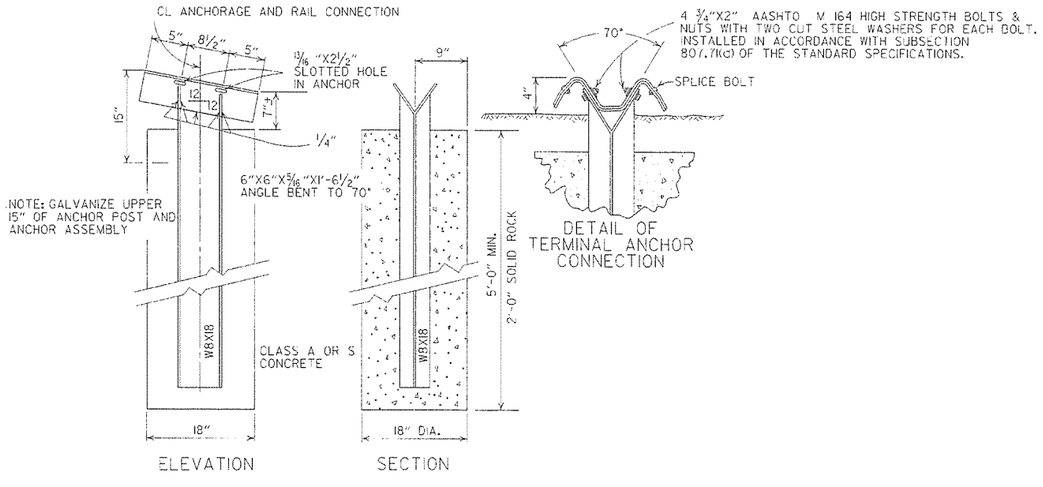
ELEVATION - GUARD RAIL TERMINAL (TYPE I)

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

CORRUGATED STEEL PIPE (ROUND)

PIPE DIAMETER (INCHES)	① MINUMUM COVER TOP OF PIPE TO TOP OF GROUND "H" (FEET)	MAX. FILL HEIGHT "H" ABOVE TOP OF PIPE (FEET)				
		METAL THICKNESS (INCHES)				
		0.064	0.079	0.109	0.138	0.168
2⅔ INCH BY ½ INCH CORRUGATION RIVETED, WELDED, OR HELICAL LOCK-SEAM						
12	1	84	91			
15	1	67	73			
18	1	56	61			
24	1	42	46	59		
30	2	34	36	47		
36	2		30	39	41	
42	2		43	67	70	73
48	2		37	58	61	64
② 3 INCH BY 1 INCH OR 5 INCH BY 1 INCH CORRUGATION RIVETED, WELDED, BOLTED, OR HELICAL LOCK-SEAM						
36	1	48	60	88	111	118
42	1	41	51	72	90	102
48	1	36	45	64	77	85
54	2	32	40	59	71	79
60	2	29	36	53	64	71
66	2	26	33	47	58	64
72	2	24	30	44	53	59
78	2		28	41	49	54
84	2		26	38	45	51
90	2		24	35	43	45
96	2		22	33	40	44
102	2			31	38	42
108	2			30	35	39
114	2			28	34	37
120	2			27	32	35

CORRUGATED ALUMINUM PIPE (ROUND)

PIPE DIAMETER (INCHES)	① MINUMUM COVER TOP OF PIPE TO TOP OF GROUND "H" (FEET)	MAX. FILL HEIGHT "H" ABOVE TOP OF PIPE (FEET)				
		METAL THICKNESS IN INCHES				
		0.060	0.075	0.105	0.135	0.164
		2 ⅔ INCH BY ½ INCH CORRUGATION RIVETED OR HELICAL LOCK-SEAM				
12	1	45	45			
18	2	30	30	52		
24	2	22	22	39	41	
30	2		18	31	32	34
36	2.5		15	26	27	28
42	2			43	43	44
48	2			40	41	43
54	2			35	37	38
60	2				33	34
66	2					31
72	2					29

CORRUGATED METAL PIPE ARCHES

EQUIV. DIA. (INCHES)	PIPE DIMENSION SPAN X RISE (INCHES)	MINUMUM CORNER RADIUS (INCHES)	STEEL			ALUMINUM		
			MIN. THICKNESS REQUIRED INCHES	① MIN. HEIGHT OF FILL, "H" (FT.) INSTALLATION TYPE 1	MAX. HEIGHT OF FILL, "H" (FT.) INSTALLATION TYPE 1	MIN. THICKNESS REQUIRED INCHES	① MIN. HEIGHT OF FILL, "H" (FT.) INSTALLATION TYPE 1	MAX. HEIGHT OF FILL, "H" (FT.) INSTALLATION TYPE 1
			2 ⅔ INCH BY ½ INCH CORRUGATION RIVETED, WELDED, OR HELICAL LOCK-SEAM			2 ⅔ INCH BY ½ INCH CORRUGATION RIVETED OR HELICAL LOCK-SEAM		
15	17x13	3	0.064	2	15	0.060	2	15
18	21x15	3	0.064	2	15	0.060	2	15
21	24x18	3	0.064	2.25	15	0.060	2.25	15
24	28x20	3	0.064	2.5	15	0.075	2.5	15
30	35x24	3	0.079	3	12	0.075	3	12
36	42x29	3½	0.079	3	12	0.105	3	12
42	49x33	4	0.079	3	12	0.105	3	12
48	57x38	5	0.109	3	13	0.135	3	13
54	64x43	6	0.109	3	14	0.135	3	14
60	71x47	7	0.138	3	15	0.164	3	15
66	77x52	8	0.168	3	15			
72	83x57	9	0.168	3	15			
			② 3 INCH BY 1 INCH OR 5 INCH BY 1 INCH CORRUGATION RIVETED, WELDED, OR HELICAL LOCK-SEAM					
				INSTALLATION TYPE 2	INSTALLATION TYPE 1	INSTALLATION TYPE 2	INSTALLATION TYPE 1	
36	40x31	5	0.079	3	2	12	15	
42	46x36	6	0.079	3	2	13	15	
48	53x41	7	0.079	3	2	13	15	
54	60x46	8	0.079	3	2	13	15	
60	66x51	9	0.079	3	2	13	15	
66	73x55	12	0.079	3	2	15	15	
72	81x59	14	0.079	3	2	15	15	
78	87x63	14	0.079	3	2	15	15	
84	95x67	16	0.109	3	2	15	15	
90	103x71	16	0.109	3	2	15	15	
96	112x75	18	0.109	3	2	15	15	
102	117x79	18	0.109	3	2	15	15	
108	128x83	18	0.138	3	2	15	15	

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. COMPLETE STRUCTURAL BACKFILL OPERATION BY WORKING FROM SIDE TO SIDE OF THE PIPE. THE SIDE TO SIDE STRUCTURAL BACKFILL DIFFERENTIAL SHALL NOT EXCEED 24 INCHES OR 1/3 THE SIZE OF THE PIPE, WHICHEVER IS LESS.

NOTE: STRUCTURAL BACKFILL 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 METAL PIPE.

INSTALLATION TYPE	MATERIAL REQUIREMENTS FOR STRUCTURAL BACKFILL AND STRUCTURAL BEDDING
TYPE 1	AGGREGATE BASE COURSE (CLASS 4, 5, 6, OR 7)
TYPE 2	SELECTED MATERIALS (CLASS SM-1, SM-2, OR SM-4) OR TYPE 1 INSTALLATION MATERIAL ③

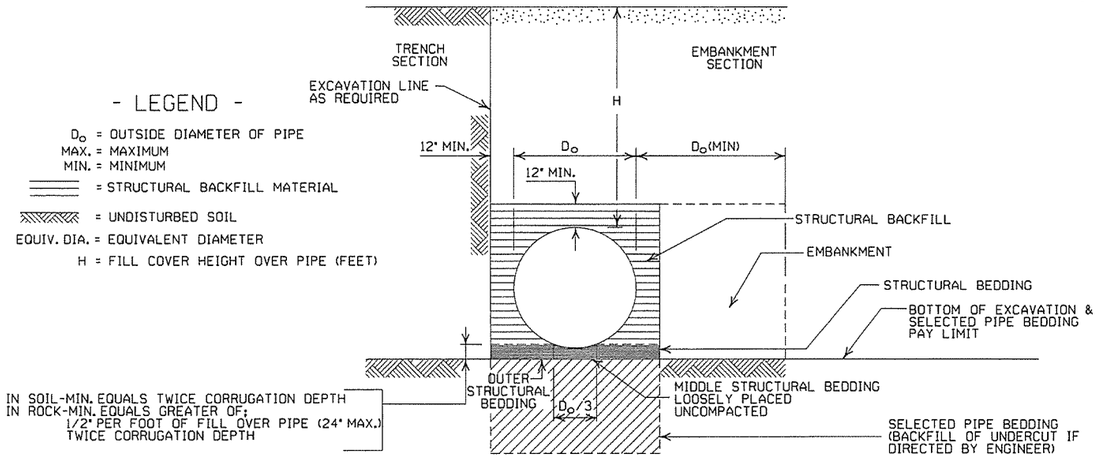
③ SM-3 WILL NOT BE ALLOWED.

EQUIVALENT METAL THICKNESSES AND GAUGES

METAL THICKNESS IN INCHES			GAUGE NUMBER
STEEL			
ZINC COATED	UNCOATED	ALUMINUM	
0.064	0.0598	0.060	16
0.079	0.0747	0.075	14
0.109	0.1046	0.105	12
0.138	0.1345	0.135	10
0.168	0.1644	0.164	8

- LEGEND -

D_o = OUTSIDE DIAMETER OF PIPE
MAX. = MAXIMUM
MIN. = MINIMUM
= STRUCTURAL BACKFILL MATERIAL
= UNDISTURBED SOIL
EQUIV. DIA. = EQUIVALENT DIAMETER
H = FILL COVER HEIGHT OVER PIPE (FEET)



EMBANKMENT AND TRENCH INSTALLATIONS

1. STRUCTURAL BACKFILL, EMBANKMENT, AND OUTER STRUCTURAL BEDDING MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.
2. INSTALLATION TYPE 1 OR 2 MAY BE USED FOR CORRUGATED STEEL OR ALUMINUM PIPE (ROUND).
3. INSTALALTION TYPE 1 SHALL BE USED FOR CORRUGATED STEEL OR ALUMINUM PIPE ARCHES WITH 2⅔" X ½" CORRUGATION.
4. INSTALLATION TYPE 1 OR 2 MAY BE USED FOR CORRUGATED STEEL OR ALUMINUM PIPE ARCHES WITH 3" X 1" OR 5" X 1" CORRUGATION.

GENERAL NOTES

1. METAL PIPE CULVERT CONSTRUCTION SHALL CONFORM TO ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION), WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS. UNLESS OTHERWISE NOTED IN THE PLANS, SECTION AND SUBSECTION REFER TO THE STANDARD CONSTRUCTION SPECIFICATIONS.
2. METAL PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
3. METAL PIPE CULVERT MATERIALS AND INSTALLATIONS SHALL CONFORM TO SECTION 606 AND JOB SPECIAL PROVISION "METAL PIPE".
4. ALL PIPE SHALL BE PROTECTED DURING CONSTRUCTION BY A COVER SUFFICIENT TO PREVENT DAMAGE FROM PASSAGE OF EQUIPMENT.
5. THE MINIMUM TRENCH WIDTH SHALL BE THE OUTSIDE DIAMETER OF THE PIPE PLUS 24 INCHES. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PRACTICABLE FOR WORKING CONDITIONS.
6. MULTIPLE PIPE CULVERTS SHALL BE INSTALLED WITH A MINIMUM CLEARANCE OF 24 INCHES BETWEEN STRINGS OF PIPE. REFER TO STD. DWG. FES-2 FOR MINIMUM CLEARANCE WHERE FLARED END SECTIONS ARE USED.
7. 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.
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 AS STRUCTURAL BACKFILL), 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."

① FOR MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM 12" OF PAVEMENT AND/OR BASE.

② WHERE THE STANDARD 2 2/3"x ½" CORRUGATION AND GAUGE IS SPECIFIED FOR A GIVEN DIAMETER, A PIPE OF THE SAME DIAMETER WITH A 3" x 1" OR 5" x 1" CORRUGATION MAY BE SUBSTITUTED, PROVIDING IT IS GAUGED FOR A FILL HEIGHT CONDITION EQUAL TO OR GREATER THAN THE MAXIMUM FILL HEIGHT CONDITION FOR THE SPECIFIED GAUGE AND CORRUGATION.

DATE	REVISION	DATE FILMED
2-27-14	REVISED GENERAL NOTE 1.	
12-15-11	REVISED FOR LRFD DESIGN SPECS	
3-30-00	REVISED INSTALLATIONS	
11-06-97	ISSUED	

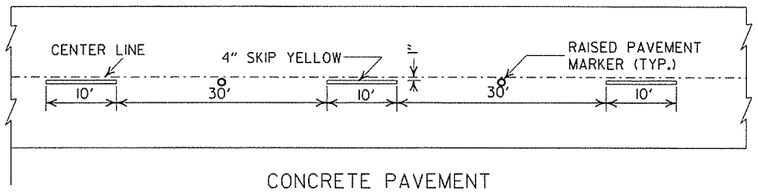
ARKANSAS STATE HIGHWAY COMMISSION

METAL PIPE CULVERT FILL HEIGHTS & BEDDING

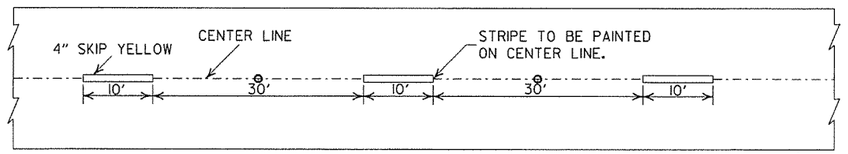
STANDARD DRAWING PCM-1

NOTES:

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

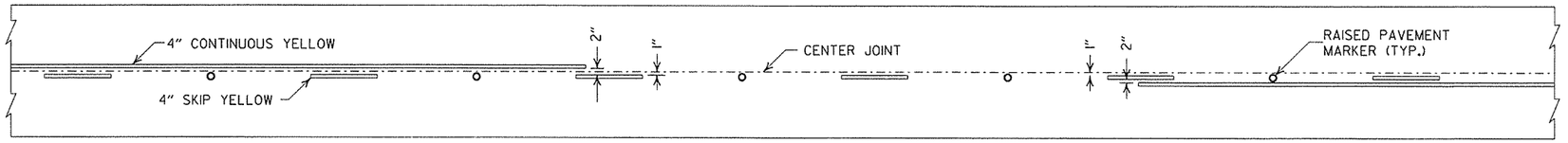


CONCRETE PAVEMENT

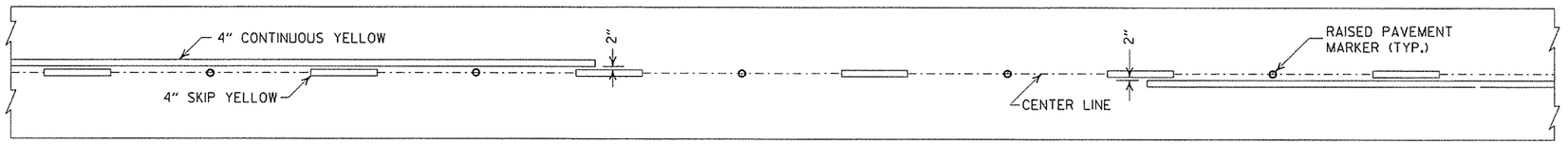


ASPHALT PAVEMENT

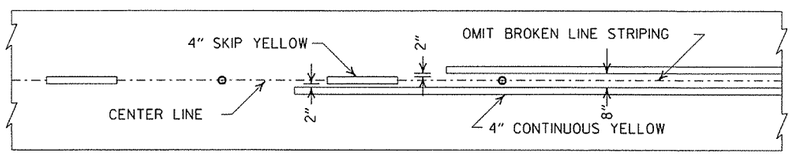
BROKEN LINE STRIPING



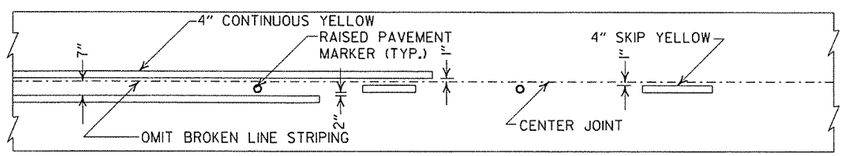
SOLID LINE STRIPING ON CONCRETE PAVEMENT



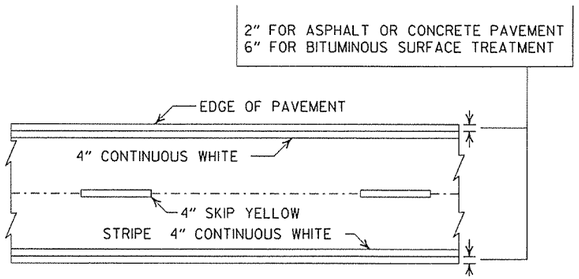
SOLID LINE STRIPING ON ASPHALT PAVEMENT



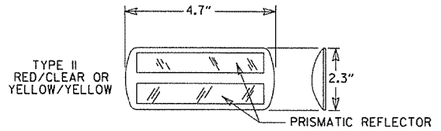
ASPHALT PAVEMENT



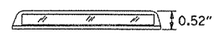
CONCRETE PAVEMENT



PAVEMENT EDGE LINE MARKING



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



DETAIL OF STANDARD RAISED PAVEMENT MARKERS

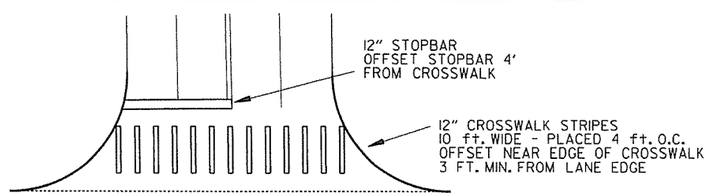
GENERAL NOTES:

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

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

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

STRIPING AT ADJACENT NO PASSING LANES



CROSSWALK AND STOPBAR DETAILS

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

ARKANSAS STATE HIGHWAY COMMISSION

PAVEMENT MARKING DETAILS

STANDARD DRAWING PM-1

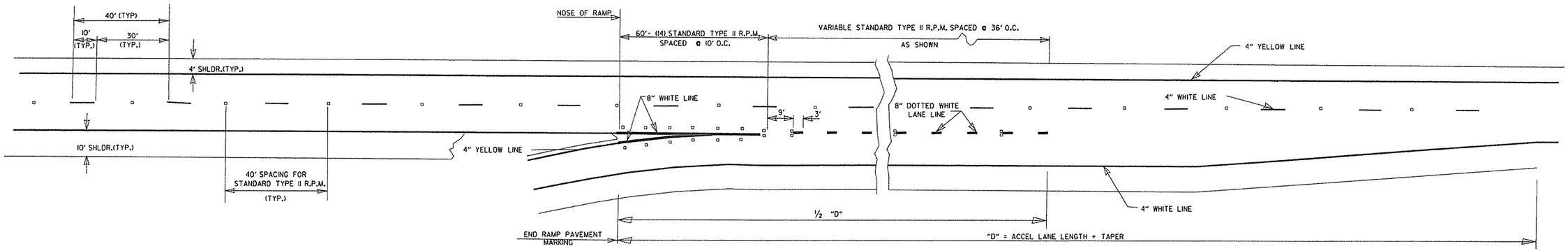
PAVEMENT MARKING QUANTITIES
(BASED ON 700' ACCEL. LANE + 300' TAPER)

ENTRANCE RAMP

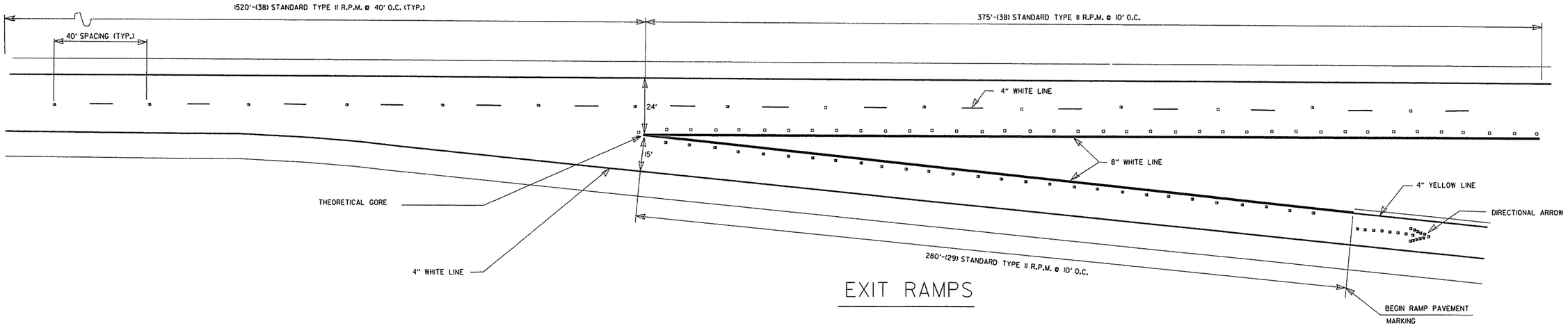
8" WHITE = 228 LIN. FT.
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED) = 38 EACH

EXIT RAMP

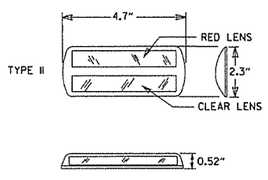
4" WHITE = 280 LIN. FT.
8" WHITE = 655 LIN. FT.
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED) = 38 EACH
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED) = 48 EACH
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED) = 38 EACH



ENTRANCE RAMPS

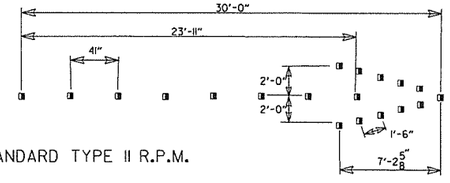


EXIT RAMPS



DETAIL OF
STANDARD
RAISED PAVEMENT MARKERS

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



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

DIRECTIONAL ARROWS

GENERAL NOTES:

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

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

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

DATE	REVISION	FILMED
9-12-13	REVISED DETAIL OF STANDARD RAISED PAVEMENT MARKERS	
7-26-12	REVISED RPM NOTATION	
12-15-11	REVISED RPMs ACCORDING TO LATEST POLICY	
11-17-10	REMOVED PLOWABLE PAVEMENT MARKERS	
6-3-10	REVISED PER 2009 MUTCD	
11-18-04	REVISED NOTES	
8-22-02	ADDED & REVISED NOTES; REV. ENTRANCE & EXIT RAMPS	
5-18-00	REMOVED HASHMARKS	
7-02-98	CHANGED TYPES TO ROMAN NUMERALS	
4-26-96	ADDED DIMENSIONS & QUANTITIES; REVISED LANE WIDTH ON EXIT RAMP	
2-2-95	PLACED IN USE	2-2-95

ARKANSAS STATE HIGHWAY COMMISSION

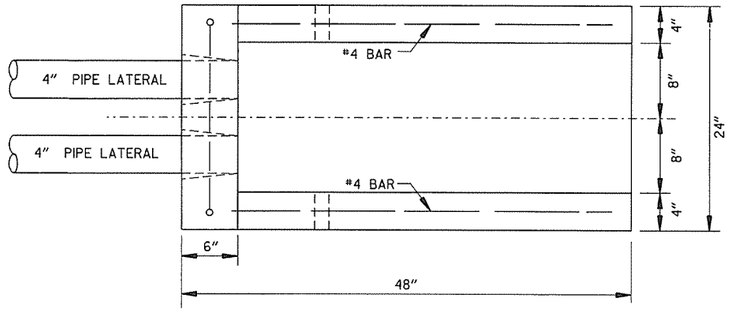
PERMANENT PAVEMENT MARKING
ON ACCESS CONTROLLED ROADWAYS

STANDARD DRAWING PM-2

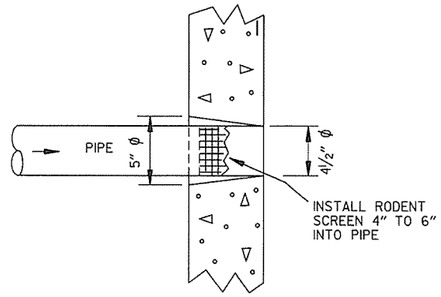
NOTE:
1. GRANULAR BACKFILL TO BE SUBSIDIARY TO PIPE UNDERDRAIN.

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

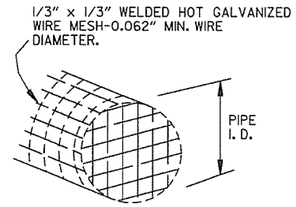
3. GRANULAR MATERIAL SHALL BE WRAPPED WITH GEOTEXTILE FABRIC. LAP FABRIC 12" OR THE WIDTH OF THE TRENCH AT THE TOP.



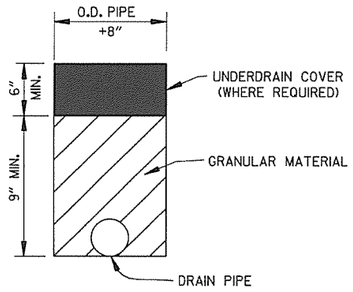
PLAN VIEW

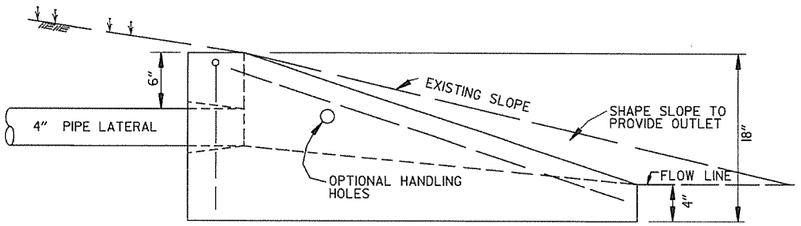


DETAIL OF HOLE FOR 4" PIPE

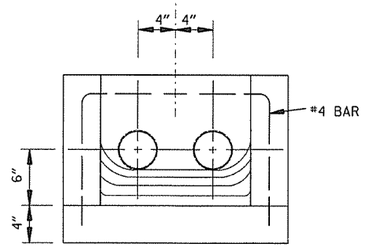


DETAIL OF RODENT SCREEN

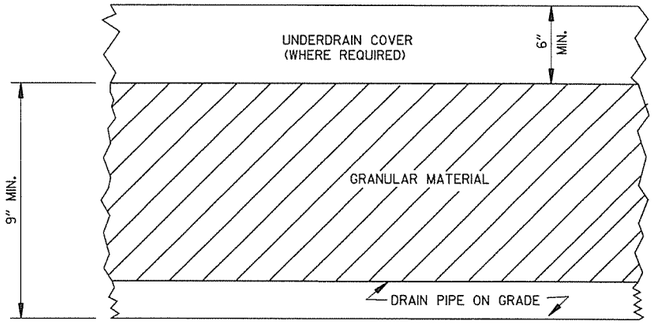




SIDE VIEW

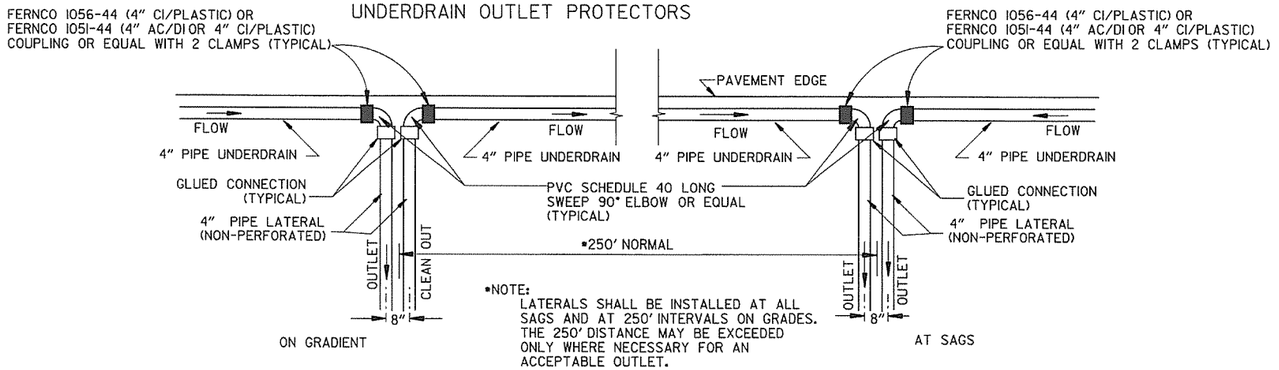


FRONT VIEW



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

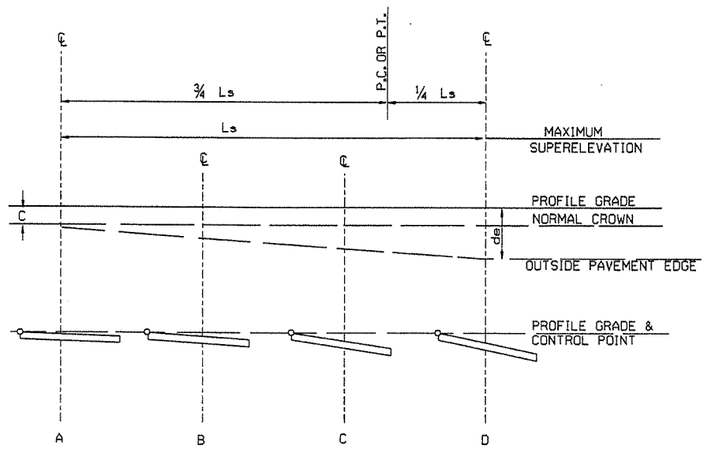
STANDARD DRAWING PU-1

7-20-95 INSTD.PUI

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.			N.C.			N.C.			N.C.		
0° 45′	N.C.			N.C.			R.C.			0.022			0.023			0.025			0.028		
1° 00′	N.C.			N.C.			0.021			0.026			0.030			0.033			0.037		
1° 15′	N.C.			R.C.			0.026			0.032			0.037			0.041			0.046		
1° 30′	N.C.			0.021			0.031			0.037			0.043			0.048			0.054		
1° 45′	N.C.			0.025			0.036			0.043			0.049			0.055			0.062		
2° 00′	R.C.			0.028	175		0.040	200		0.048	225		0.056	250		0.062	250		0.070	275	
2° 15′	R.C.			0.031			0.045			0.053			0.061			0.069			0.078		
2° 30′	0.021			0.034			0.049			0.058			0.067			0.075			0.085		
2° 45′	0.023			0.037			0.053			0.063			0.072			0.081			0.091		
3° 00′	0.025			0.040			0.057			0.067	230		0.077	260		0.087	315		0.096	350	
3° 15′	0.027	150		0.043			0.061			0.072	245		0.082	275		0.090	325		0.098	360	450
3° 30′	0.029			0.046			0.065	205		0.076	255		0.086	285		0.095	340	400	0.100	360	
3° 45′	0.031			0.049			0.069	215		0.080	265		0.090	295	400	0.097	345				
4° 00′	0.033			0.051			0.072	225		0.083	270		0.093	305		0.099	350				
4° 30′	0.037			0.056			0.078	240		0.087	280		0.096	315							
5° 00′	0.040			0.061			0.083	250		0.091	295	400	0.098	320							
5° 30′	0.043			0.066	185		0.088	260		0.094	300		0.100	325							
6° 00′	0.046			0.070	190		0.092	270		0.096	305										
6° 30′	0.050			0.074	200		0.095	280	350	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′



ONE-WAY TRAFFIC
INSIDE LANE

SUPERELEVATION FORMULA = $S = -\frac{L(de-C)}{Ls} - C$

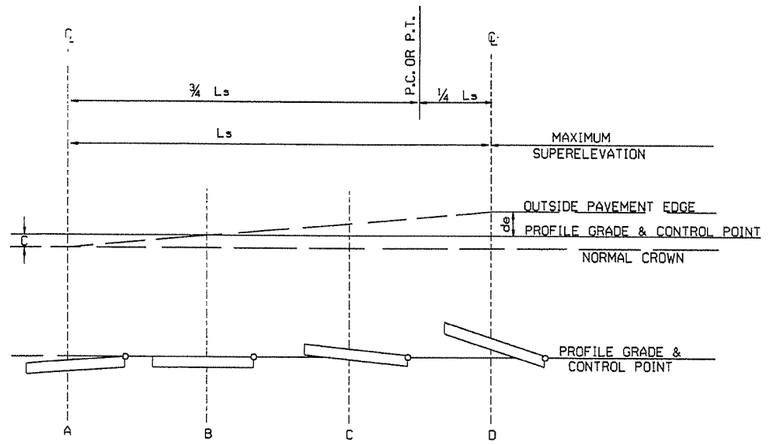
ABBREVIATIONS

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.)
Ls - LENGTH OF SUPERELEVATION TRANSITION (FT.)
C - NORMAL CROWN (FT.)

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 Ls MAY BE ROUNDED IN MULTIPLES OF 25 FT. OR 50 FT. TO PERMIT SIMPLER CALCULATIONS.
4. MINIMUM Ls 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%



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

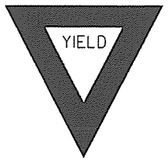
TABLES AND METHOD OF SUPERELEVATION FOR ONE-WAY TRAFFIC

STANDARD DRAWING SE-1

RI-1

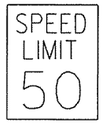
STANDARD 30"X30"
EXPRESSWAY 36"X36"
SPECIAL 48"X48"

RI-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"

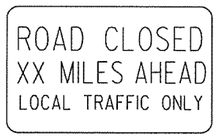
R5-1

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

RII-2

48"X30"

RII-3A



60"X30"

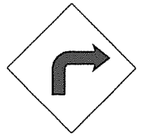
RII-4

60"X30"

RSP-1

48"X30"

WI-1



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

WI-2

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

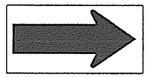
WI-3

STD. 48"X48"

WI-4

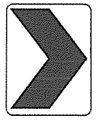
STD. 48"X48"

WI-6



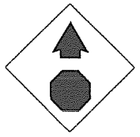
STD. 48"X24"
SPECIAL 60"X30"

WI-8



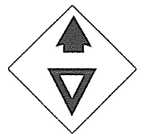
STD. 18"X24"
SPECIAL 24"X30"
EXPWY. 30"X36"
FWY. 36"X48"

W3-1



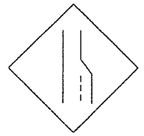
STD. 36"X36"
SPECIAL 48"X48"

W3-2



STD. 36"X36"
SPECIAL 48"X48"

W4-2

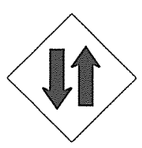


STD. 36"X36"
FWY. 48"X48"

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"

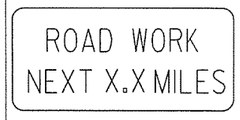
W8-11

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

W8-9

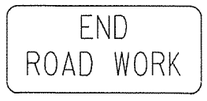
STD. 36"X36"
FWY. 48"X48"

G20-1



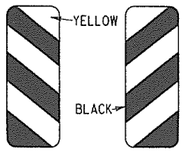
60"X24"

G20-2



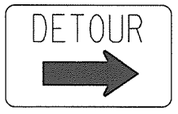
48"X24"

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	1/2 MILE
1000 FT	3/4 MILE
1500 FT	1 MILE
	AHEAD

GENERAL NOTES:

1. ALL TRAFFIC CONTROL DEVICES USED ON ROAD CONSTRUCTION SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION, AND TO THE STANDARD HIGHWAY SIGNS, LATEST EDITION, OR AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION.

2. TRAFFIC CONTROL DEVICES SHALL BE SET UP JUST BEFORE THE START OF CONSTRUCTION OPERATIONS AND SHALL BE PROPERLY MAINTAINED DURING THE TIME SUCH CONDITIONS EXIST. THEY SHALL REMAIN IN PLACE ONLY AS LONG AS NEEDED AND REMOVED THEREAFTER.

3. EXISTING SIGNS AND CONSTRUCTION SIGNS SHALL BE KEPT IN PROPER POSITION, AND BE CLEAN AND LEGIBLE AT ALL TIMES. SIGNS THAT DO NOT APPLY TO EXISTING CONDITIONS SHALL BE REMOVED. SIGNS THAT ARE DAMAGED, DEFACED, OR THAT ACCUMULATE DIRT DURING CONSTRUCTION SHALL BE CLEANED, REPAIRED, OR REPLACED.

• 4. SIGNS ARE USUALLY MOUNTED ON A SINGLE POST, ALTHOUGH THOSE WIDER THAN 36" OR LARGER THAN 10 SQ. FT. SHALL BE MOUNTED ON TWO POSTS OR ABOVE A TYPE III BARRICADE.

• 5. SIGN POSTS DIRECT BURIED IN SOIL SHALL BE 2 LB. MINIMUM CHANNEL POST OR 4"x4" WOOD POSTS. CHANNEL POSTS SHALL BE PAINTED GREEN. WOOD POSTS SHALL BE PAINTED WHITE. ALL POSTS SHALL BE NEATLY CONSTRUCTED, AND SHALL BE REPLUMBED, CLEANED, OR REPAIRED AS NEEDED FOR THE DURATION OF THE JOB. THERE SHALL NOT BE MORE THAN 2 POSTS IN A 7' PATH FOR WOOD OR CHANNEL POSTS. ANY CHANNEL POST SPLICE SHALL BE IN ACCORDANCE WITH STANDARD DRAWING TC-3.

6. POST MOUNTED SIGNS IN RURAL AREAS SHALL BE CONSTRUCTED WITH THE NEAR EDGE OF THE SIGN FROM 6 TO 12 FEET FROM THE PAVEMENT EDGE. SIGNS IN URBAN AREAS AND BARRICADE MOUNTED SIGNS SHALL BE MOUNTED A MINIMUM OF 2 FEET FROM THE PAVEMENT EDGE.

7. ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN URBAN AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE. ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN RURAL AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE, EXCEPT A MINIMUM OF 6' SHALL BE USED WHEN MOUNTING AN ADVISORY SIGN BELOW A WARNING SIGN. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR INTERMEDIATE TERM STATIONARY WORK CONDITIONS. THE SIGNS MINIMUM MOUNTING HEIGHT SHALL BE 5'. RETROREFLECTIVE DEVICES SHALL BE USED. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR SHORT-TERM, SHORT DURATION, AND MOBILE CONDITIONS. THEY SHALL BE NO LESS THAN ONE (1) FOOT ABOVE THE TRAVELED WAY. LONG-TERM STATIONARY SIGNS SHALL BE DIRECT BURIED IN SOIL, UNLESS CONDITIONS NECESSITATE THE USE OF PORTABLE SIGNS, OR AS APPROVED BY THE ENGINEER. CONCRETE PADS, CONCRETE OR ROCK BALLAST, OR OTHER SOLID MATERIALS SHALL NOT BE UTILIZED WITH PORTABLE SIGN SUPPORTS.

8. FLAGGERS SHALL USE REFLECTORIZED STOP-SLOW PADDLES. FLAGS MAY BE USED ONLY FOR EMERGENCY SITUATIONS.

9. MOST OF THE SIGNS SHOWN ARE ORIENTED TO THE RIGHT. HOWEVER, THIS DOES NOT PRECLUDE THE USE OF MIRROR IMAGES OF THESE SIGNS WHERE THE REVERSE ORIENTATION MIGHT BETTER CONVEY TO MOTORISTS THE PROPER DIRECTION OF MOVEMENT.

10. R55-1 SIGNS SHALL BE PLACED AT LEAST 1500' BUT NOT MORE THAN 1 MILE IN ADVANCE OF THE WORK ZONE. IF A SPEED LIMIT REDUCTION IS IN EFFECT, THE SIGN SHALL BE PLACED A MINIMUM OF 500' IN ADVANCE OF THE "REDUCED SPEED AHEAD" SIGN.

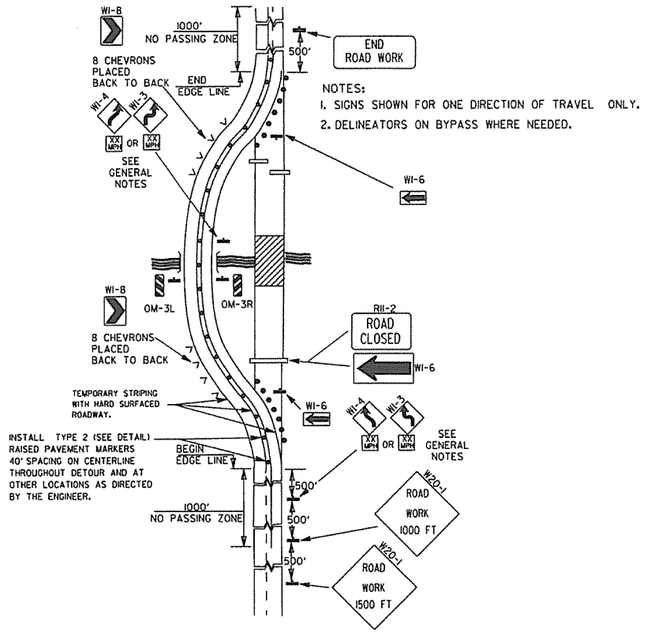
• NOTE: SUPPORTS FOR SIGNS, BARRICADES, AND VERTICAL PANELS THAT ARE DIFFERENT FROM THE REQUIREMENTS SHOWN IN NOTES 4 & 5, BUT MEET THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH), WILL BE ACCEPTED. COMPLIANCE WITH THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY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

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

ARKANSAS STATE HIGHWAY COMMISSION

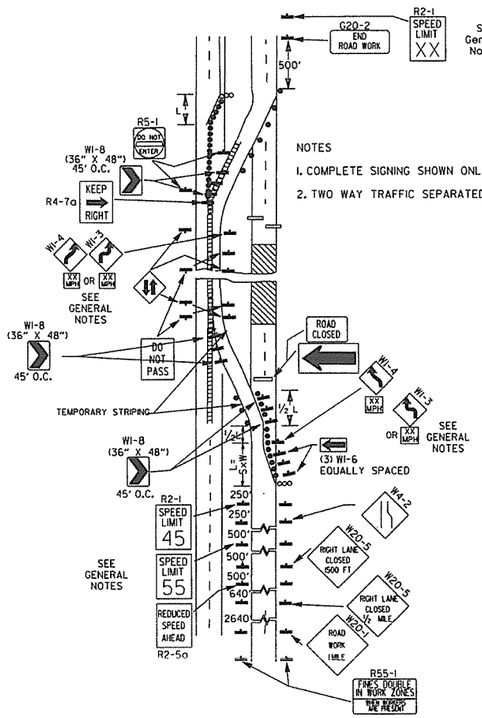
STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

STANDARD DRAWING TC-1



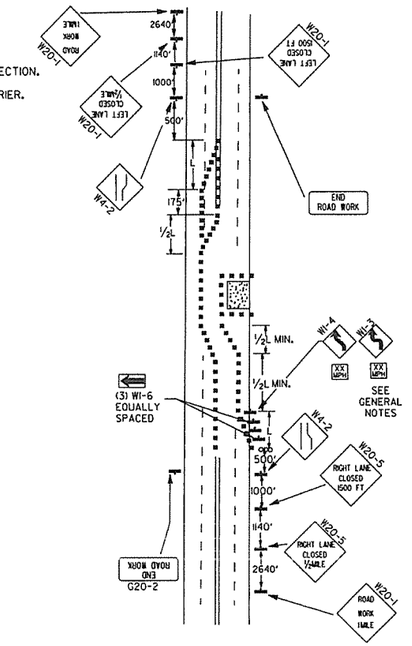
NOTES:
1. SIGNS SHOWN FOR ONE DIRECTION OF TRAVEL ONLY.
2. DELINEATORS ON BYPASS WHERE NEEDED.

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

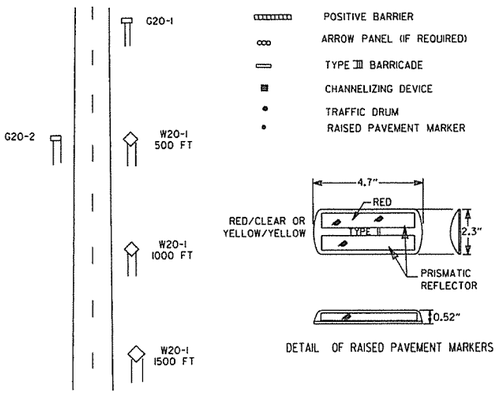


NOTES
1. COMPLETE SIGNING SHOWN ONLY IN CROSSOVER DIRECTION.
2. TWO WAY TRAFFIC SEPARATED WITH POSITIVE BARRIER.

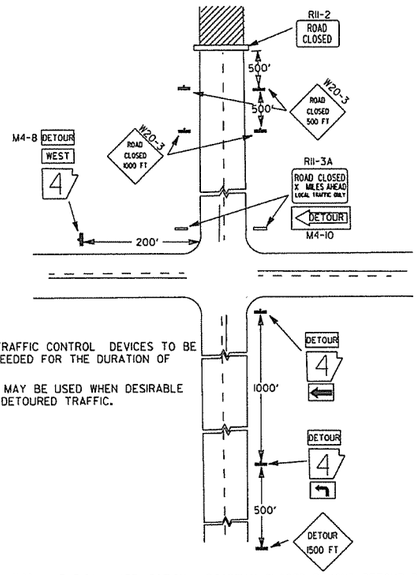
(B) TYPICAL APPLICATION - 4-LANE DIVIDED ROADWAY WHERE ONE ROADWAY IS CLOSED.



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

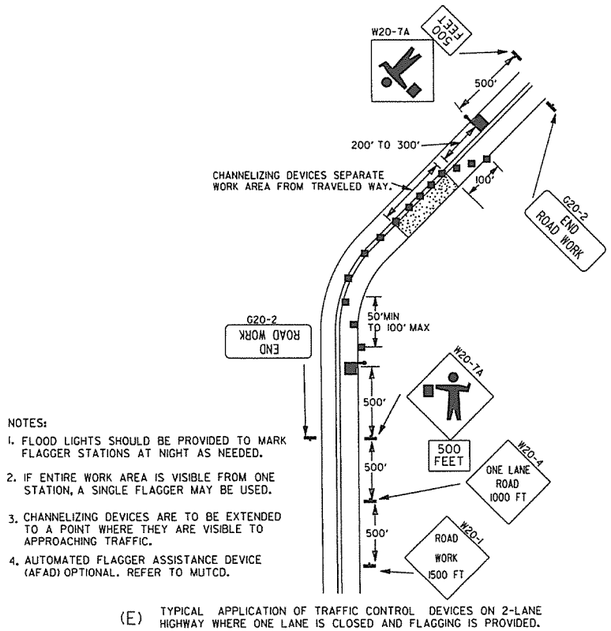


TYPICAL ADVANCE WARNING SIGN PLACEMENT



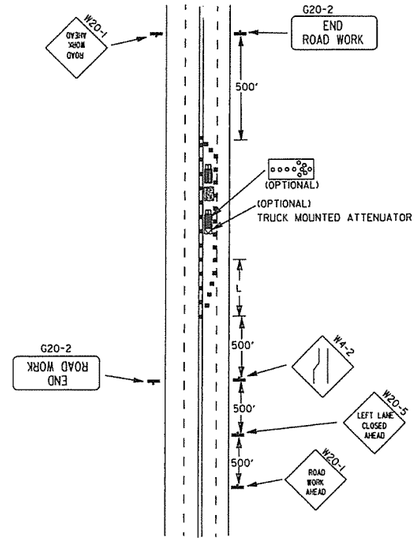
NOTES:
1. REGULATORY TRAFFIC CONTROL DEVICES TO BE MODIFIED AS NEEDED FOR THE DURATION OF THE DETOUR.
2. STREET NAMES MAY BE USED WHEN DESIRABLE FOR DIRECTING DETOURED TRAFFIC.

(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.

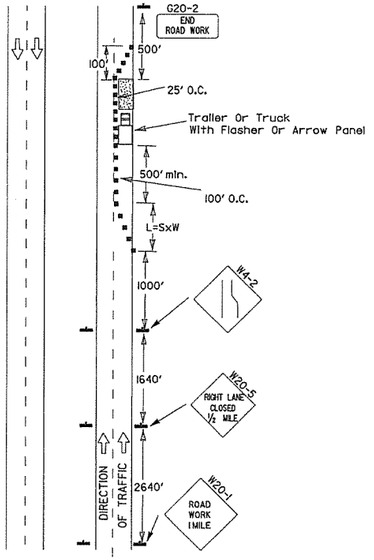
GENERAL NOTES:
1. ADVISORY SPEED POSTED ON WI-3 OR WI-4 CURVE WARNING SIGNS TO BE DETERMINED AT SITE. USE WI-4 WHEN SPEED IS GREATER THAN 30MPH AND WI-3 WHEN 30MPH OR LESS.
2. WHEN THE EXISTING SPEED LIMIT IS 55MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 45MPH, THE R2-1(55) SHALL BE OMITTED AND THE R2-5A SHALL BE INSTALLED AT THAT LOCATION. ADDITIONAL R2-1 45MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
3. WHEN THE EXISTING SPEED LIMIT IS 65MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 55MPH, THE R2-1(45) SHALL BE OMITTED. ADDITIONAL R2-1 55MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
4. THE MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES IN A TAPER SHOULD BE APPROXIMATELY EQUAL IN FEET TO THE SPEED LIMIT. BEYOND THE TAPER, MAXIMUM SPACING SHALL BE TWO TIMES THE SPEED LIMIT, OR AS DIRECTED BY THE ENGINEER.
5. WARNING LIGHTS AND/OR FLAGS MAY BE MOUNTED TO SIGNS OR CHANNELIZING DEVICES AT NIGHT AS NEEDED.
6. PAVEMENT MARKINGS NO LONGER APPLICABLE WHICH MIGHT CREATE CONFUSION IN THE MINDS OF VEHICLE OPERATORS SHALL BE REMOVED OR OBLITERATED AS SOON AS PRACTICABLE.
7. TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE DELINEATED BY AFFIXING CONSPICUITY MATERIAL IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER. WHEN PLACED ON OR ADJACENT TO THE SHOULDER AND NOT BEHIND A POSITIVE BARRIER, THESE DEVICES SHALL BE DELINEATED BY PLACING FIVE (5) TRAFFIC DRUMS, EQUALLY SPACED ALONG THE TRAFFIC SIDE OF THE DEVICE.

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

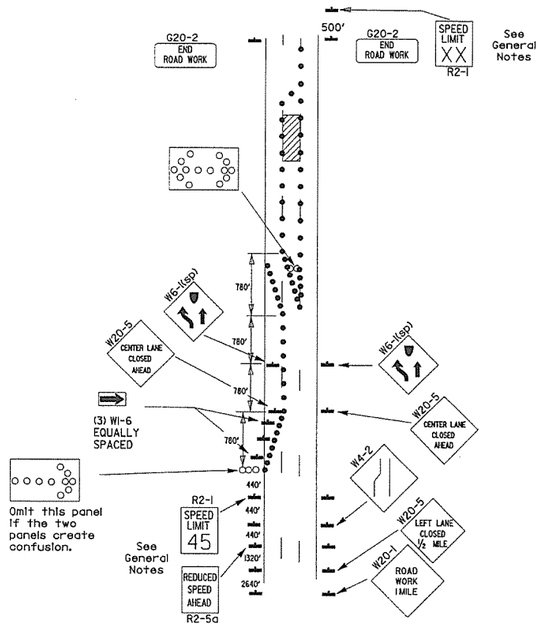
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

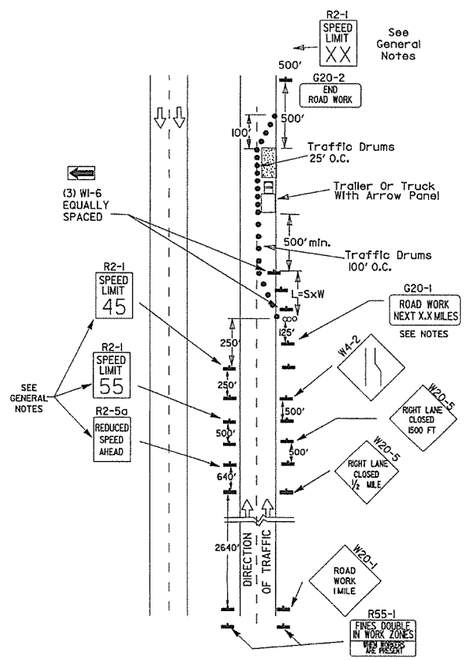
STANDARD DRAWING TC-2



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



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



(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)

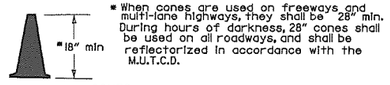
■ Channelizing Device

● Traffic drum

GENERAL NOTES:

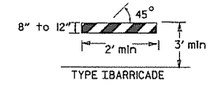
1. A speed limit reduction may be implemented ONLY when designated in the plan or when recommended by the Roadway Design Division.
2. When the existing speed limit is 55mph and the plans require a speed limit of 45mph, the R2-1(55) shall be omitted and the R2-5A shall be installed at that location. Additional 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



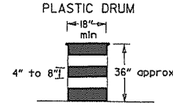
* When cones are used on freeways and multi-lane highways, they shall be 28" min. During hours of darkness, 28" cones shall be used on all roadways, and shall be reflectorized in accordance with the M.U.T.C.D.

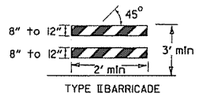
CONES



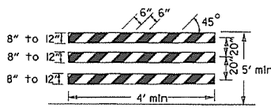
TYPE I BARRICADE

PLASTIC DRUM



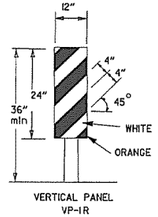


TYPE II BARRICADE



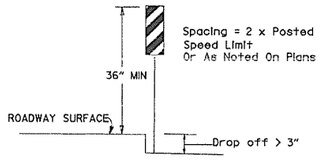
TYPE III BARRICADE

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



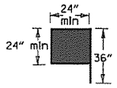
TRAFFIC CONTROL DEVICES
FOR
VERTICAL PAVEMENT DIFFERENTIALS

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.

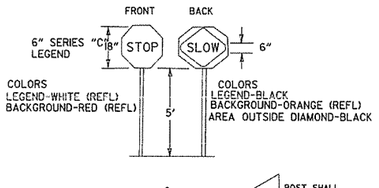
When the shoulder area is used as part of the traveled lane and there is insufficient width to place drums on the remaining shoulder width, then vertical panels shall be used.

FLAG

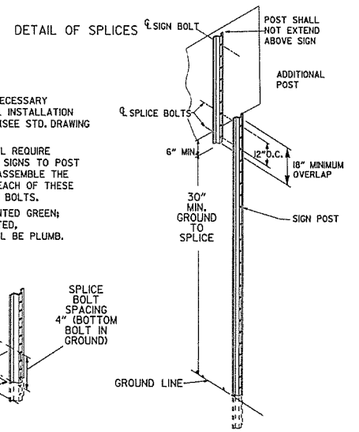


Flag shall be of good grade red material

STOP SLOW PADDLE



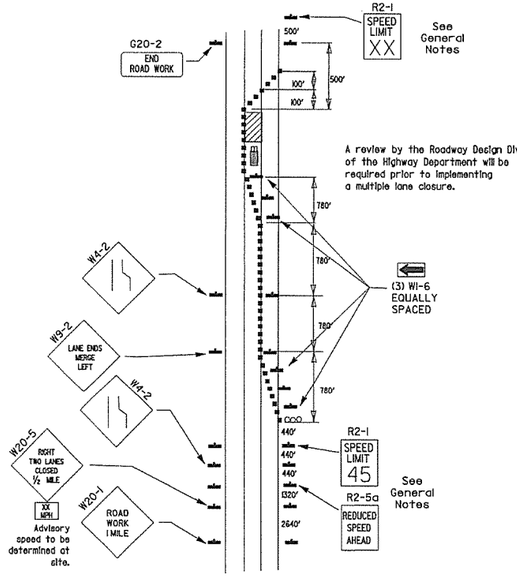
DETAIL OF SPLICES



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.



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

DATE	REVISION	FILMED
10-15-09	ADDED REFERENCE TO MASH	
11-20-08	REVISED SIGN DESIGNATIONS	
11-18-04	ADDED NOTE	
10-1-98	ADDED NOTE	
4-03-97	ADDED (SP) TO W6-1 & REVISED TRAFFIC CONTROL DEVICES NOTE	
10-18-96	ADDED R55-1	
10-12-95	MOVED UPPER SPLICE	
6-8-95	REVISED SPLICE DETAIL, TEXT	6-8-95
2-2-95	REVISED PER PART VI, MUTCD, SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	

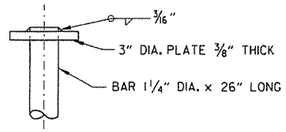
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

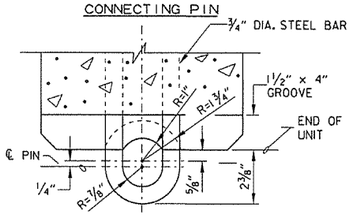
STANDARD DRAWING TC-3

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°, ±9 1/2", 2'-1 3/8", 4 3/8"

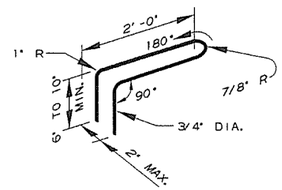


CONNECTING PIN

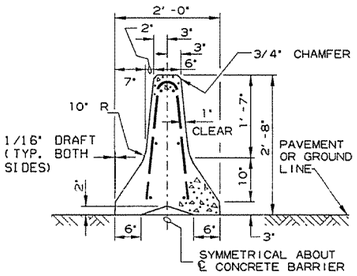


SECTION E-E

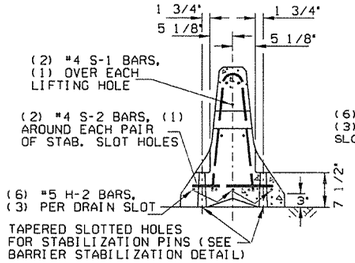
CONNECTION DETAILS



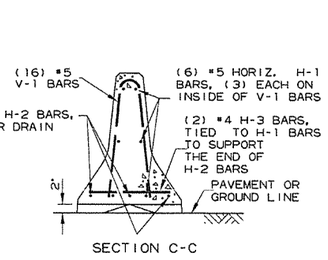
CONNECTION LOOP



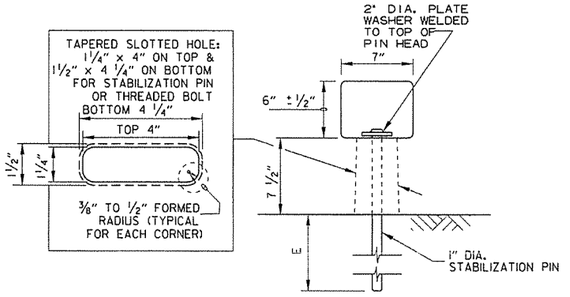
SECTION A-A



SECTION B-B



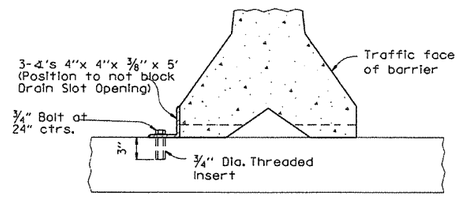
SECTION C-C



BARRIER STABILIZATION DETAIL

ROADWAY SECTION

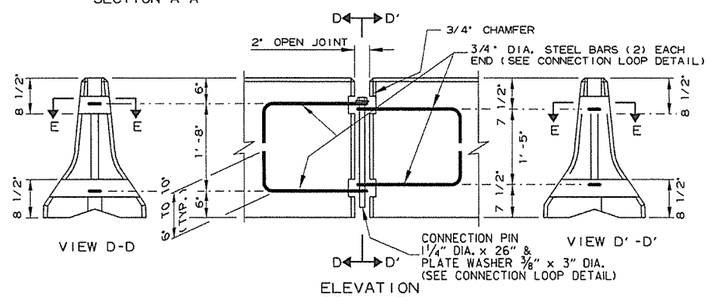
(E) 4" - Concrete Pavement
8" - Asphalt Pavement
12" - Shoulder Areas



NOTE: 3/4" Threaded Inserts shall be cast in place for all new bridge decks and drilled and grouted for existing bridge decks. 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

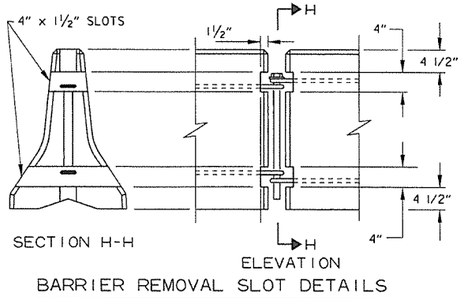
BRIDGE DECKS



VIEW D-D

VIEW D'-D'

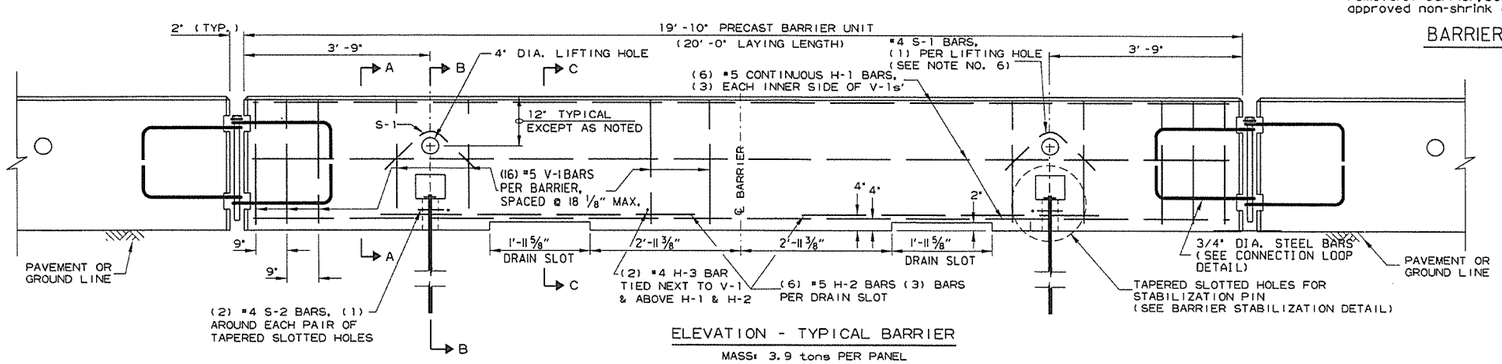
ELEVATION



SECTION H-H

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.

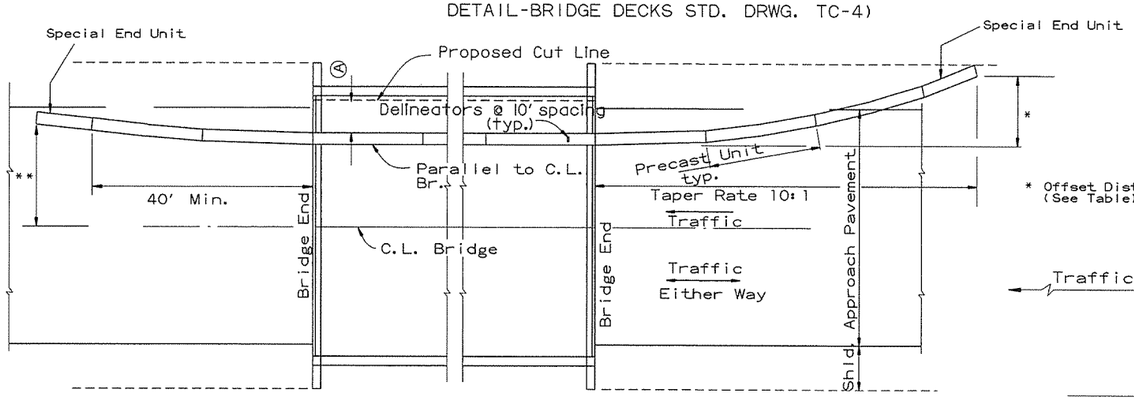
DATE	REVISION	FILMED
2-27-14	REVISED BARRIER STABILIZATION DETAIL	
10-15-09	ADDED REFERENCE TO MASH	
8-5-09	REV. NOTE 3 CONCERNING DRAIN SLOTS	
11-29-07	REVISED NOTE 3	
5-25-06	DELETED GENERAL NOTE 7	
11-18-04	REVISED BARRIER STABILIZATION DETAIL BRIDGE DECKS	
4-10-03	REVISED GENERAL NOTE 2	
8-22-02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

ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION - TEMPORARY PRECAST BARRIER

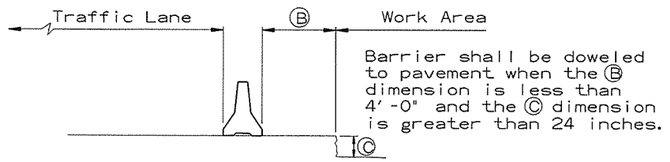
STANDARD DRAWING TC-4

Ⓐ 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)



BARRIER PLACEMENT ALONG BRIDGE WITH OFFSET

No Scale

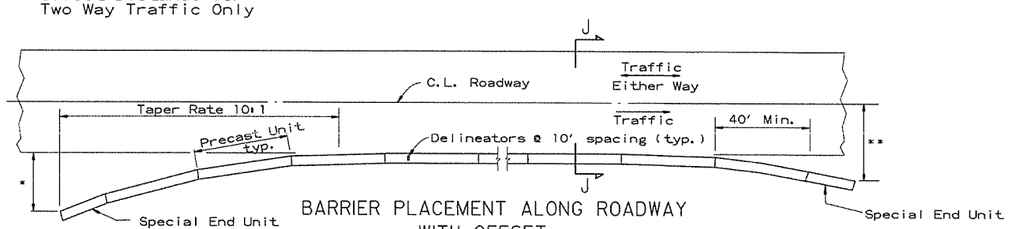


Barrier shall be doweled to pavement when the Ⓑ dimension is less than 4'-0" and the Ⓒ dimension is greater than 24 inches.

SECTION J-J

No Scale

** Offset Distance for Two Way Traffic Only



BARRIER PLACEMENT ALONG ROADWAY WITH OFFSET

No Scale

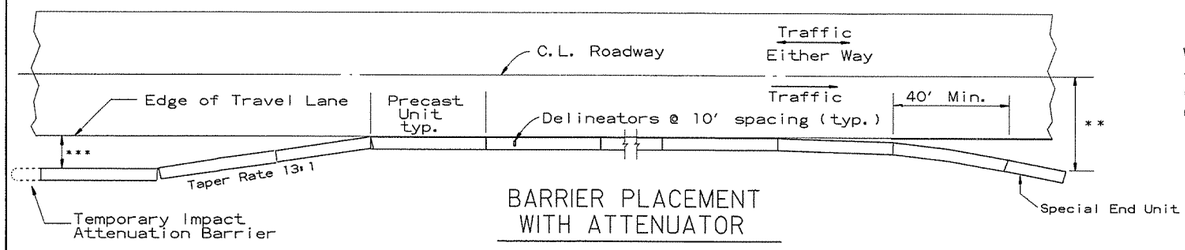
** Offset Distance For Two Way Traffic Only

* Offset Distance (See Table)

Offset Distance Table

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

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

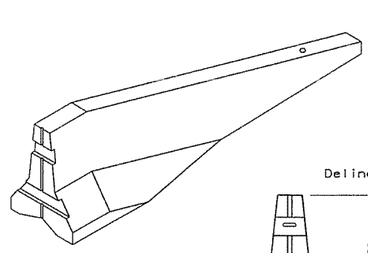


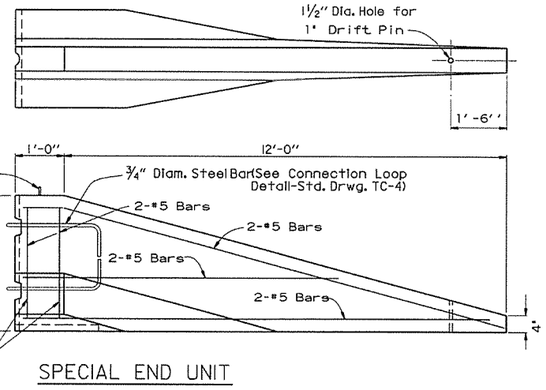
BARRIER PLACEMENT WITH ATTENUATOR

No Scale

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

** Offset Distance For Two Way Traffic Only





SPECIAL END UNIT

No Scale

General Notes

When shown on the Plans, the ends of the Temporary Precast Concrete Barrier shall be protected with 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	

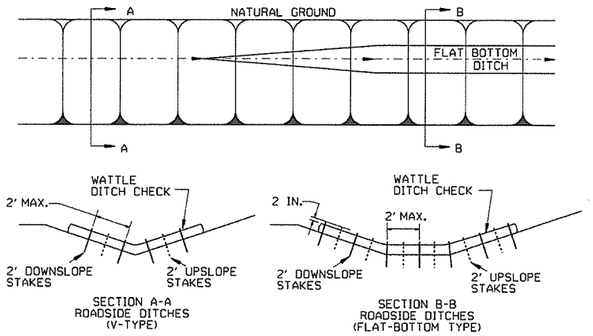
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION - TEMPORARY PRECAST BARRIER

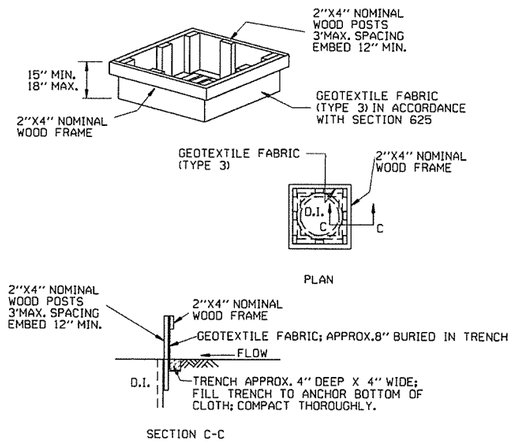
STANDARD DRAWING TC-5

GENERAL NOTES

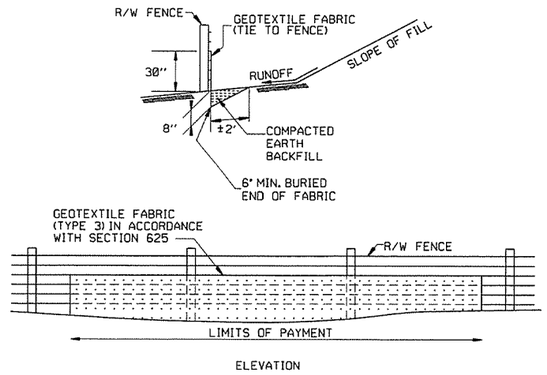
INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.



WATTLE DITCH CHECK (E-1)



DROP INLET SILT FENCE (E-7)



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

GENERAL NOTES

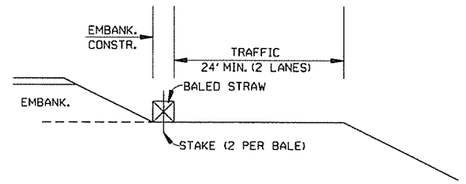
GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST, OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.

GENERAL NOTES

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

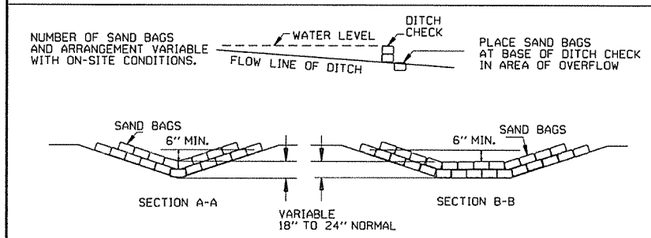
2. NO GAPS SHALL BE LEFT BETWEEN BALES.

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

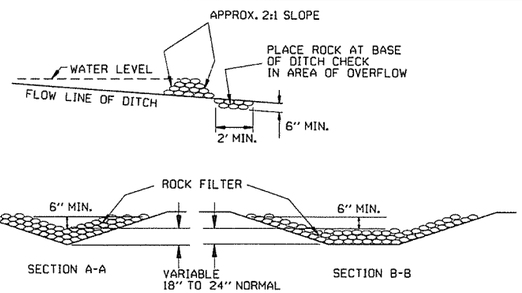


BALED STRAW FILTER BARRIER (E-2)

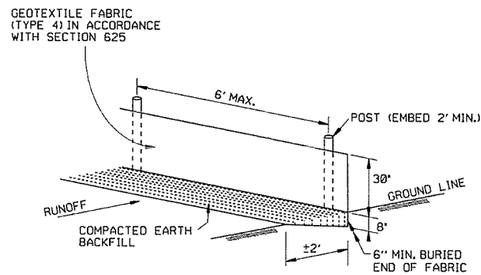
NUMBER OF SAND BAGS AND ARRANGEMENT VARIABLE WITH ON-SITE CONDITIONS.



SAND BAG DITCH CHECK (E-5)



ROCK DITCH CHECK (E-6)



SILT FENCE (E-11)

GENERAL NOTES

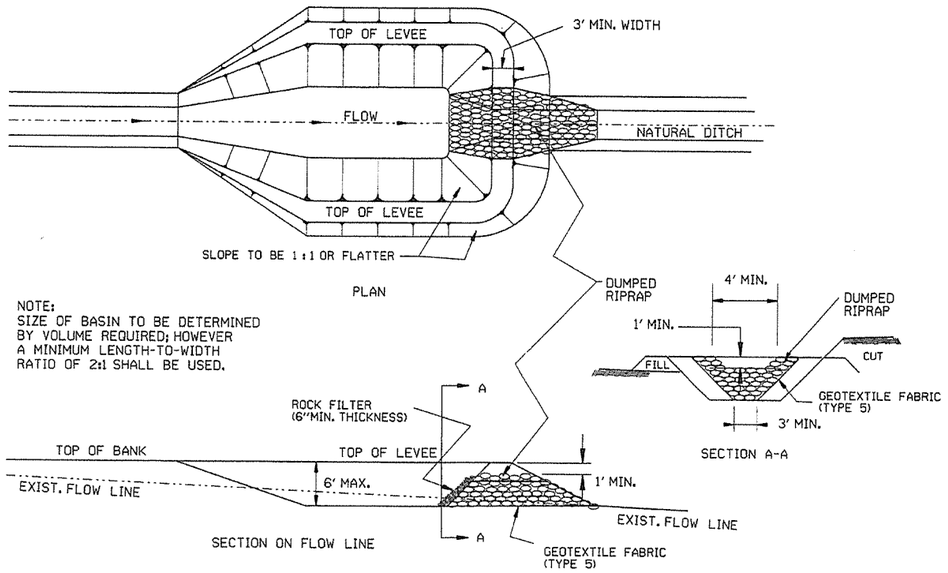
GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.

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

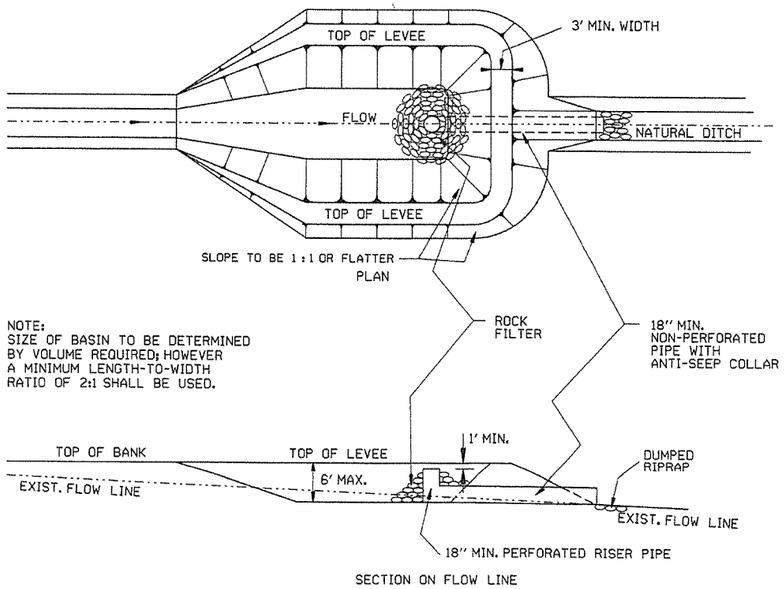
ARKANSAS STATE HIGHWAY COMMISSION

TEMPORARY EROSION CONTROL DEVICES

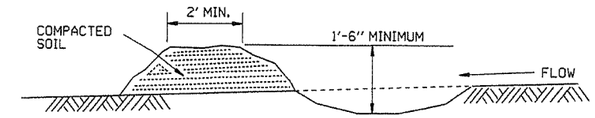
STANDARD DRAWING TEC-1



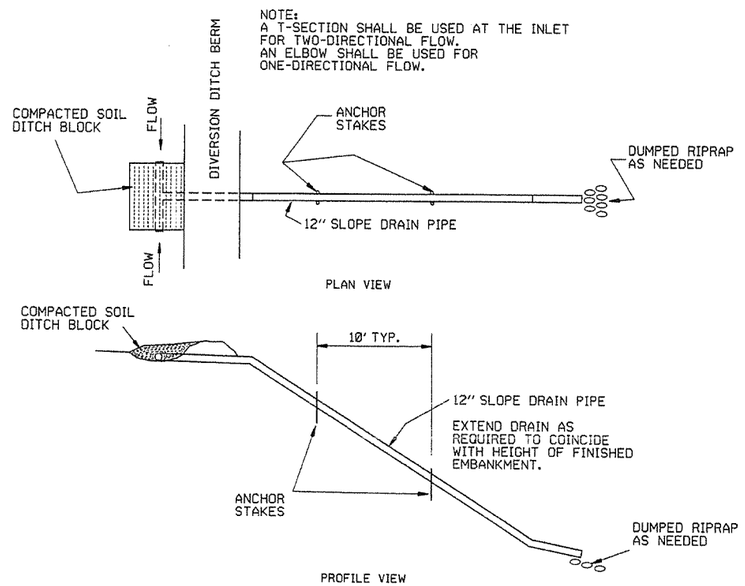
SEDIMENT BASIN WITH RIPRAP OUTLET (E-9)



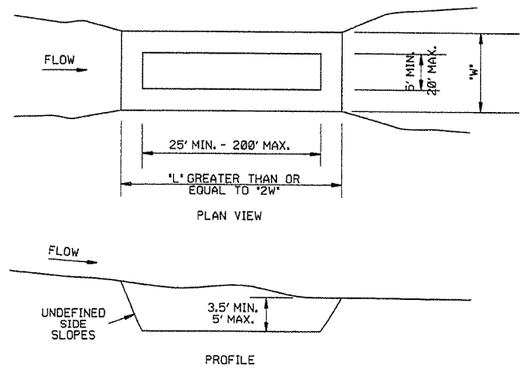
SEDIMENT BASIN WITH PIPE OUTLET (E-10)



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

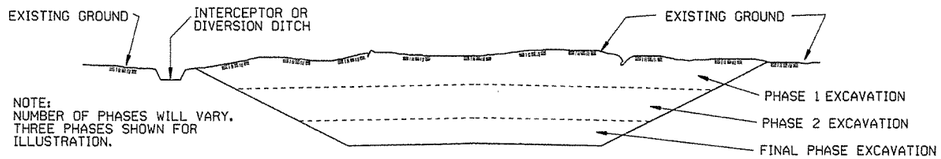
STANDARD DRAWING TEC-2

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



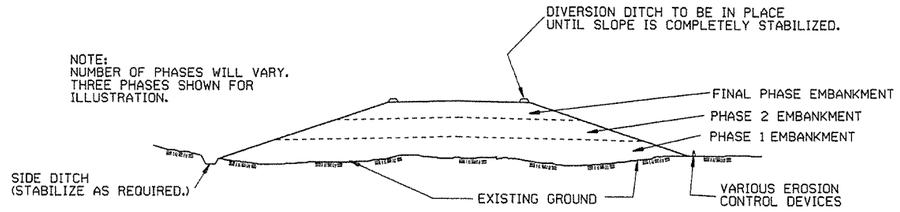
GENERAL NOTE

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

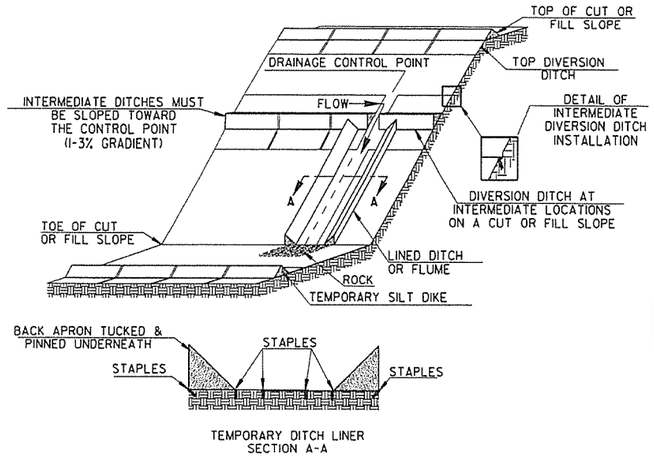
1. CONSTRUCT DIVERSION DITCHES, DITCH CHECKS, SEDIMENT BASINS, SILT FENCES, OR OTHER EROSION CONTROL DEVICES AS SPECIFIED.
2. PLACE PHASE 1 EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING. PROVIDE DIVERSION DITCHES AND SLOPE DRAINS IF EMBANKMENT CONSTRUCTION IS TO BE TEMPORARILY ABANDONED FOR A PERIOD 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

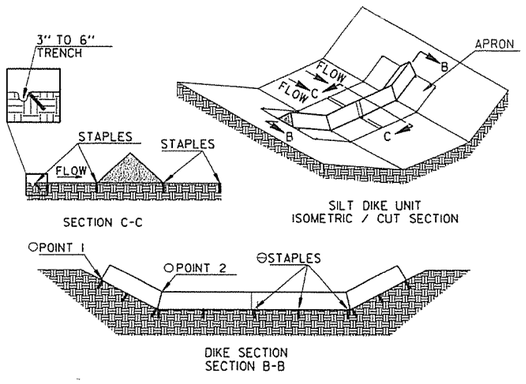
ARKANSAS STATE HIGHWAY COMMISSION

TEMPORARY EROSION CONTROL DEVICES

STANDARD DRAWING TEC-3



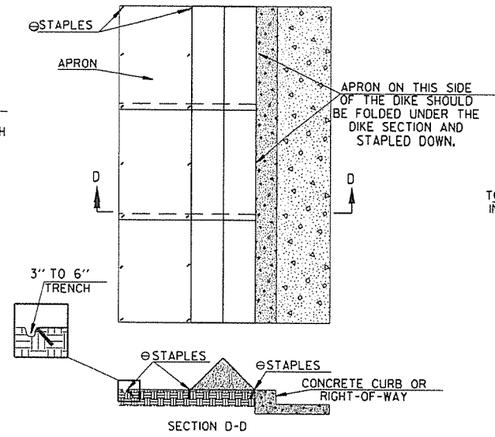
TRIANGULAR SILT DIKE INSTALLATION
FOR
DIVERSION DITCH AND/OR DITCH LINER



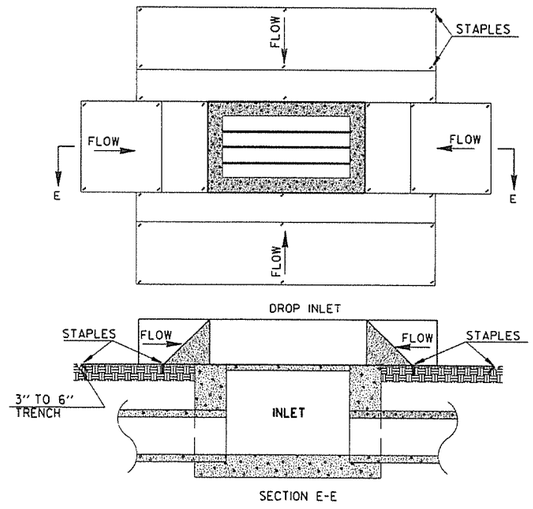
TRIANGULAR SILT DIKE INSTALLATION
FOR
ROADWAY DITCH OR DRAINAGE DITCH

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

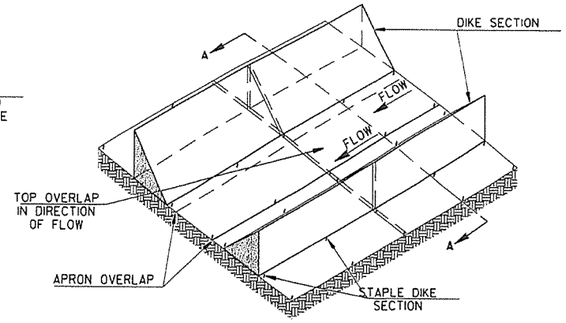
⊖ STAPLES SHALL BE PLACED WHERE THE UNITS OVERLAP AND IN THE CENTER OF THE UNIT AS SHOWN ON THE DIAGRAM.



TRIANGULAR SILT DIKE INSTALLATION
FOR
CONTINUOUS BARRIER



TRIANGULAR SILT DIKE INSTALLATION
FOR
DROP INLETS



TRIANGULAR SILT DIKE INSTALLATION
FOR
TEMPORARY DITCH LINER

GENERAL NOTES

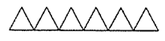
1. THIS WORK SHALL CONSIST OF FURNISHING, INSTALLING, AND MAINTAINING THE TRIANGULAR SILT DIKE. THE DIKES SHALL BE USED AS A CONTINUOUS LINE BARRIER AT THE TOE OF SLOPE OR ACROSS THE ROADWAY DITCH TO CONTAIN SEDIMENT AND MINIMIZE EROSION, OR AS DIRECTED BY THE ENGINEER. THESE DIKES SHALL BE INSTALLED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

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

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

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

SYMBOLOGY
SYMBOL TO BE USED TO DENOTE DEVICE ON PLANS



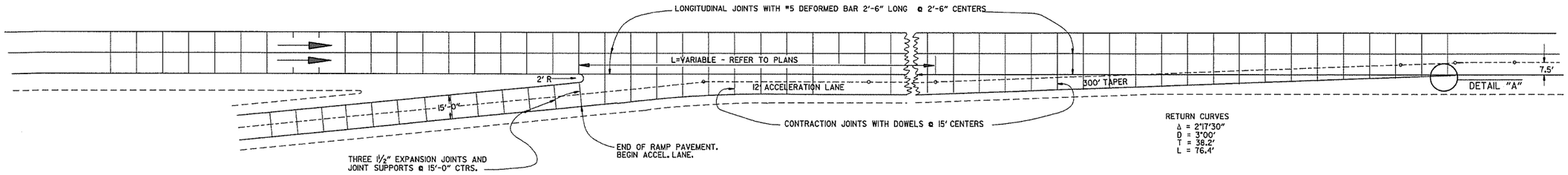
NOTE: SILT DIKE SHOULD ONLY BE USED FOR DROP INLETS IN SUMP LOCATIONS.

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

ARKANSAS STATE HIGHWAY COMMISSION

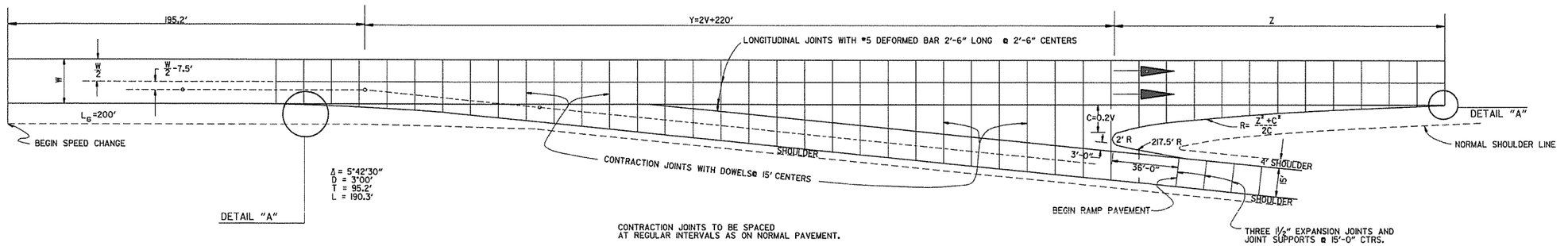
TEMPORARY EROSION CONTROL DEVICES

STANDARD DRAWING TEC-4



ENTRANCE RAMP

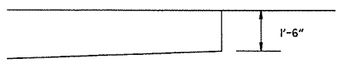
NOTE: JOINT SPACING ON THE MAIN LANES SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO THESE JOINT LAYOUTS. THE MAIN LANE JOINT SPACING MAY BE REDUCED TO A 12' MINIMUM.



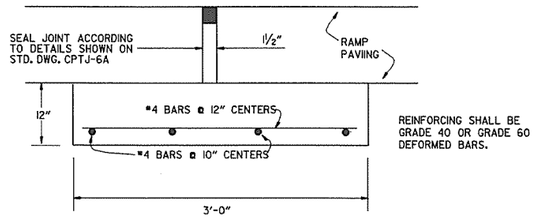
EXIT RAMP

EXIT RAMP

DESIGN SPEED V	Y	NOSE OFFSET C	LENGTH NOSE TAPER Z	RETURN RADIUS R	ADDITIONAL SURFACING SQ. YDS.
40	300.0	8.0	96.0	580.0	602.43
50	320.0	10.0	120.0	725.0	687.23
60	340.0	12.0	168.0	1182.0	790.55
70	360.0	14.0	210.0	1582.0	902.27



DETAIL "A"



DETAIL OF EXPANSION JOINT & JOINT SUPPORT

NOTE: THE EXPANSION JOINTS SHALL BE MEASURED AND PAID FOR AS P.C.C. PAVEMENT (RAMP THICKNESS). WHEN RAMP PAVING IS ASPHALT, EXPANSION JOINT IS NOT REQUIRED.
THE JOINT SUPPORT MAY BE CONSTRUCTED WITH CLASS "A", "S", OR PAVING CONCRETE. PAYMENT FOR THE JOINT SUPPORT SHALL BE FOR THE CONTRACT UNIT PRICE BID FOR THE CLASS OF CONCRETE USED. ALL OTHER WORK AND MATERIALS REQUIRED FOR THE CONSTRUCTION OF THE JOINT SUPPORT SHALL BE INCLUDED IN THE PRICE BID FOR THE ABOVE ITEMS.

DATE	REVISION	DATE FILM'D
8-22-02	DELETED NOTE	
11-16-01	CORRECTED SPELLING ON ENTRANCE RAMP NOTE	
5-13-99	ADDED, EDITED AND DELETED NOTES	
11-03-94	ADDED NOTE RE: REINF. BARS	
10-1-92	ADDED DETAIL A & OTHER MINOR CHANGES	10-1-92
1-25-90	REVISED EXPANSION JOINT	1-25-90
7-15-88	CONFORM'D TO 1988 SPECIFICATIONS	65C-7-15-88
3-2-81	ISSUED	511-10-2-72

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF STANDARD TURNOUT FOR ENTRANCE & EXIT RAMPS (NON-REINFORCED)

STANDARD DRAWING TR-1A