Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

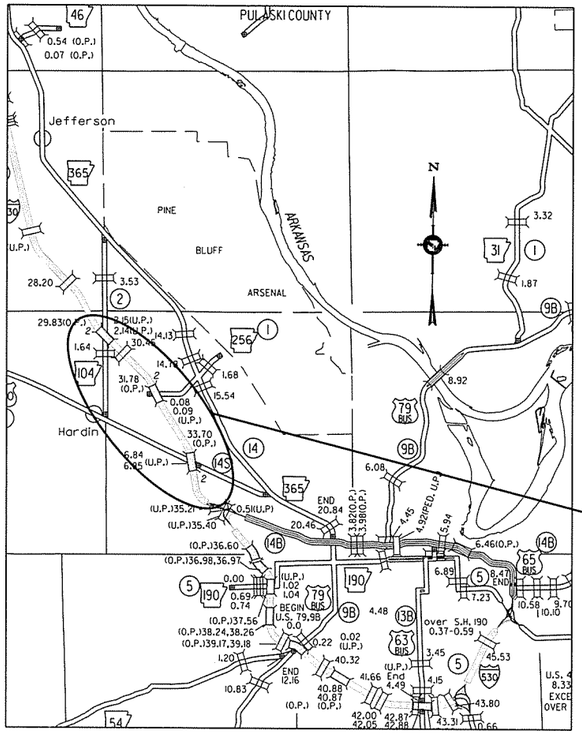
FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	1	235
(2)	HWY. 104-HWY. 65B (F)			

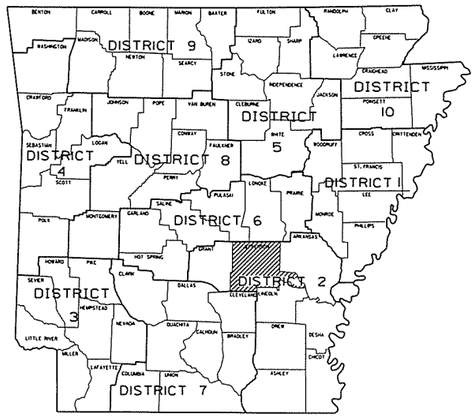
"A FULLY CONTROLLED ACCESS FACILITY"
ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
CONSTRUCTION PLANS FOR STATE HIGHWAY

HWY. 104-HWY. 65B (F)

JEFFERSON COUNTY
ROUTE 530 SECTION 5
FED. AID PROJ. BIM-B530(202) &
BIM-HSIP-B530(202)

JOB BB0202

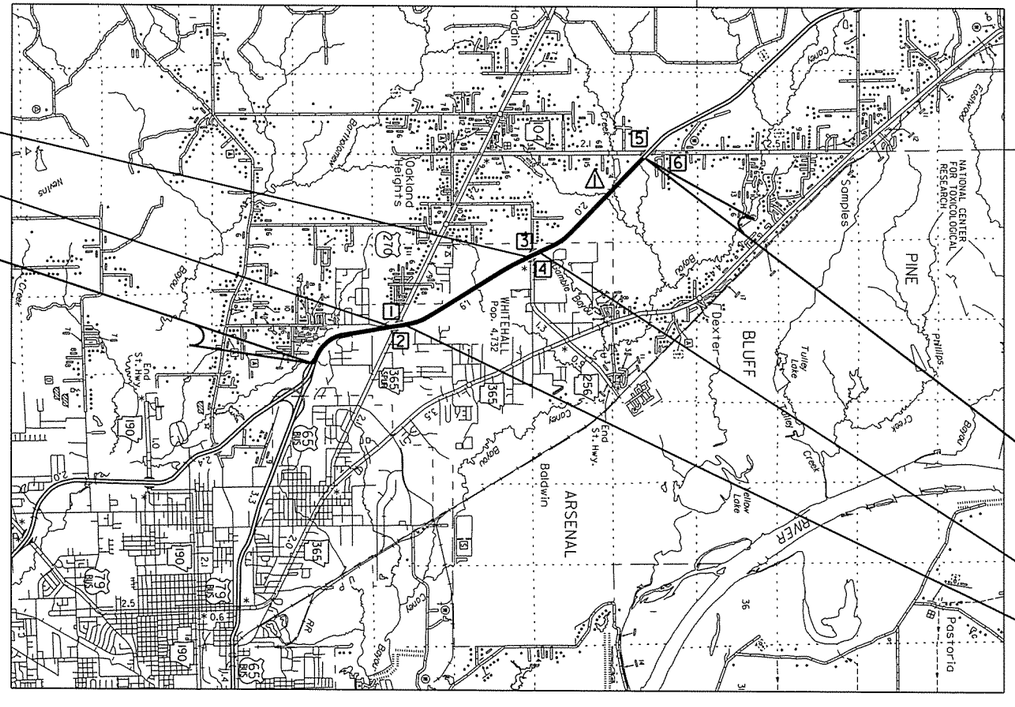




ARK. HWY. DIST. NO. 2

NOT TO SCALE

T 5 S | T 4 S



DESIGN TRAFFIC DATA

DESIGN YEAR	2036
2016 ADT	23,500
2036 ADT	33,000
2036 DHV	3,630
DIRECTIONAL DISTRIBUTION	0.60
TRUCKS	11%
DESIGN SPEED	70 MPH

BRIDGE DATA (FOR INFORMATION ONLY)

[1] STA. 243+18.26 BRIDGE END
BRIDGE NO. A5500 IN PLACE
226'-0" CONTINUOUS PLATE GIRDER UNITS
39' CLEAR ROADWAY
228'-8 3/16" BRIDGE LENGTH
STA. 245+46.95 BRIDGE END
RETAIN

[2] STA. 242+59.76 BRIDGE END
BRIDGE NO. B5500 IN PLACE
226'-0" CONTINUOUS PLATE GIRDER UNITS
39' CLEAR ROADWAY
228'-8 3/16" BRIDGE LENGTH
STA. 244+88.44 BRIDGE END
RETAIN

[3] STA. 345+29.22 BRIDGE END
BRIDGE NO. A5501 IN PLACE
168'-0" CONTINUOUS COMPOSITE W-BEAM UNITS
39' CLEAR ROADWAY
170'-5 1/4" BRIDGE LENGTH
STA. 346+99.58 BRIDGE END
RETAIN

[4] STA. 344+90.40 BRIDGE END
BRIDGE NO. B5501 IN PLACE
168'-0" CONTINUOUS COMPOSITE W-BEAM UNITS
39' CLEAR ROADWAY
170'-5 1/4" BRIDGE LENGTH
STA. 346+60.76 BRIDGE END
RETAIN

[5] STA. 447+89.13 BRIDGE END
BR. NO. A5611 IN PLACE
242'-0" CONTINUOUS GIRDER UNITS
39'-0" CLEAR ROADWAY
245'-1 1/8" BRIDGE LENGTH
STA. 450+34.22 BRIDGE END
RETAIN

[6] STA. 448+73.18 BRIDGE END
BR. NO. B5611 IN PLACE
242'-0" CONTINUOUS PLATE GIRDER UNITS
39'-0" CLEAR ROADWAY
245'-1 1/8" BRIDGE LENGTH
STA. 451+18.27 BRIDGE END
RETAIN

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

⚠ STA. 417+05
IN PLACE TRIP. 8'X6'X25'
R.C. BOX CULVERT 45° LT. FWD. SKEW
L.M. 30.59
SPAN = 37.71'
RETAIN

	BEGIN OF PROJECT	MID-POINT OF PROJECT	END PROJECT
LATITUDE	N 34°14'45"	N 34°16'41"	N 34°18'28"
LONGITUDE	W 92°05'43"	W 92°06'49"	W 92°08'25"

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

GROSS	LENGTH OF	PROJECT	27256.06	FEET OR	5.162	MILES
NET	"	ROADWAY	26857.02	"	5.087	"
NET	"	BRIDGES	0.00	"	0.00	"
NET	"	PROJECT	26857.02	"	5.087	"

P.E. JOB BB0202

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

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 10887
SCOTT P. THORNSBERRY
6-24-2016

Scott.Thornsberry 6/24/2016 10:22:27 AM
WORKSPACE: scott.thornsberry
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Michael Baker INTERNATIONAL	DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
					2	ARK.			
					JOB NO.		BB0202	2	235
					(2)	INDEX OF SHEETS			

INDEX OF SHEETS

SHEET NO.	TITLE	BRIDGE NO.	DRWG.NO.	DATE
1	TITLE SHEET			
2	INDEX OF SHEETS			
3	GOVERNING SPECIFICATIONS AND GENERAL NOTES			
4 - 8	TYPICAL SECTIONS OF IMPROVEMENT			
9 - 19	SPECIAL DETAILS			
20 - 82	TEMPORARY EROSION CONTROL DETAILS			
83 - 141	MAINTENANCE OF TRAFFIC			
142	PERMANENT PAVEMENT MARKING DETAILS			
143 - 152	SIGN LAYOUT SHEETS			
153 - 169	SIGN PLACEMENT SHEETS			
170 - 172	SIGN QUANTITIES SHEETS			
173 - 182	QUANTITIES			
183	SUMMARY OF QUANTITIES AND REVISIONS			
184 - 204	PLAN SHEETS			
205	LAYOUT OF BRIDGES OVER HWY. 270 - FOR INFORMATION ONLY	5500 A&B		
206	LAYOUT OF BRIDGES OVER HOLLAND STREET - FOR INFORMATION ONLY	5501 A&B		
207	STANDARD DETAILS FOR TYPE 'AT' APPROACH GUTTERS (BRIDGES WITH 6" CURB WIDTH & TYPE A RAILING)		55036	9-02-15
208	STANDARD DETAILS FOR TYPE C1 APPROACH SLAB		55040C1	2-27-14
209	CONCRETE DITCH PAVING		CDP-1	11-17-10
210	TRANSVERSE & LONGITUDINAL JOINTS FOR CONCRETE PAVEMENT (NON-REINFORCED)		CPTJ-6A	5-25-06
211	DETAILS OF DROP INLETS & JUNCTION BOXES		FPC-9	11-16-01
212	DETAILS OF DROP INLETS		FPC-9D	8-22-02
213	DETAILS OF DROP INLETS AND SPILLWAY OUTLET		FPC-9N	7-02-98
214	GUARD RAIL DETAILS		GR-8	7-14-10
215	GUARD RAIL DETAILS		GR-8A	7-14-10
216	GUARD RAIL DETAILS		GR-9	4-17-08
217	GUARD RAIL DETAILS		GR-9A	4-17-08
218	GUARD RAIL DETAILS		GR-10	7-14-10
219	GUARD RAIL DETAILS		GR-10A	7-14-10
220	GUARD RAIL DETAILS		GRT-1	7-14-10
221	METAL PIPE CULVERT FILL HEIGHTS & BEDDING		PCM-1	2-27-14
222	PAVEMENT MARKING DETAILS		PM-1	5-12-16
223	PERMANENT PAVEMENT MARKING ON ACCESS CONTROLLED ROADWAYS		PM-2	9-12-13
224	DETAILS OF PIPE UNDERDRAIN		PU-1	4-10-03
225	TABLES AND METHOD OF SUPERELEVATION FOR ONE-WAY TRAFFIC		SE-1	1-09-87
226	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION		TC-1	9-02-15
227	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION		TC-2	9-02-15
228	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION		TC-3	9-02-15
229	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION-TEMPORARY PRECAST BARRIER		TC-4	2-27-14
230	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION-TEMPORARY PRECAST BARRIER		TC-5	10-15-09
231	TEMPORARY EROSION CONTROL DEVICES		TEC-1	12-15-11
232	TEMPORARY EROSION CONTROL DEVICES		TEC-2	6-02-94
233	TEMPORARY EROSION CONTROL DEVICES		TEC-3	11-03-94
234	TEMPORARY EROSION CONTROL DEVICES		TEC-4	7-26-12
235	DETAILS OF STANDARD TURNOUT FOR ENTRANCE & EXIT RAMPS (NON-REINFORCED)		TR-1A	8-22-02

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

Michael Baker INTERNATIONAL

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				2	ARK.			
				JOB NO.		BB0202	3	235
				(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 BB0202
FHWA-1273___	SUPPLEMENT - POSTERS AND NOTICES REQUIRED FOR FEDERAL-AID PROJECTS
FHWA-1273___	SUPPLEMENT - WAGE RATE DETERMINATION
100-3_____	CONTRACTOR'S LICENSE
108-1_____	LIQUIDATED DAMAGES
108-2_____	WORK ALLOWED PRIOR TO ISSUANCE OF WORK ORDER
303-1_____	AGGREGATE BASE COURSE
400-1_____	TACK COATS
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 BB0202__	AUTOMATED WORK ZONE INFORMATION SYSTEM
JOB BB0202__	BIDDING REQUIREMENTS AND CONDITIONS
JOB BB0202__	BORROW
JOB BB0202__	BROADBAND INTERNET SERVICE FOR ASPHALT CONCRETE PLANT
JOB BB0202__	BROADBAND INTERNET SERVICE FOR FIELD OFFICE
JOB BB0202__	CARGO PREFERENCE ACT REQUIREMENTS
JOB BB0202__	CHANNEL POST SIGN SUPPORT
JOB BB0202__	CONCRETE DITCH PAVING
JOB BB0202__	COORDINATION OF WORK
JOB BB0202__	CULVERT CLEAN OUT
JOB BB0202__	DISADVANTAGED BUSINESS ENTERPRISE BIDDER'S RESPONSIBILITIES
JOB BB0202__	EMPLOYMENT REPORTING
JOB BB0202__	FURNISH AND OPERATION OF MOBILE SPEED NOTIFICATION SYSTEM
JOB BB0202__	GOALS FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION
JOB BB0202__	HIGH PERFORMANCE PAVEMENT MARKING
JOB BB0202__	ISSUANCE OF PROPOSALS
JOB BB0202__	MAINTENANCE OF TRAFFIC
JOB BB0202__	MANDATORY ELECTRONIC CONTRACT
JOB BB0202__	MANDATORY ELECTRONIC DOCUMENT SUBMITTAL
JOB BB0202__	MODIFYING DROP INLETS
JOB BB0202__	MODULAR GLARE SHIELD
JOB BB0202__	OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORT
JOB BB0202__	PARTNERING REQUIREMENTS
JOB BB0202__	PERCENT WITHIN LIMITS/PAVEMENT SMOOTHNESS
JOB BB0202__	PORTABLE CONSTRUCTION LIGHTING
JOB BB0202__	PROSECUTION AND PROGRESS - CALENDAR DAY CONTRACT WITH CPM
JOB BB0202__	REMOVAL AND DISPOSAL OF GUARDRAIL
JOB BB0202__	REMOVAL AND DISPOSAL OF IMPACT ATTENUATION BARRIERS
JOB BB0202__	REMOVAL AND DISPOSAL OF WIRE ROPE SAFETY FENCE
JOB BB0202__	REMOVING EXISTING PORTLAND CEMENT CONCRETE PAVEMENT
JOB BB0202__	ROADWAY CONSTRUCTION CONTROL
JOB BB0202__	RUMBLE STRIP REMOVAL
JOB BB0202__	SCARIFYING CONCRETE PAVEMENT
JOB BB0202__	SEQUENCE OF CONSTRUCTION
JOB BB0202__	SITE USE (A+C METHOD) - CALENDAR DAY CONTRACT
JOB BB0202__	SOIL STABILIZATION
JOB BB0202__	STORM WATER POLLUTION PREVENTION PLAN
JOB BB0202__	SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS
JOB BB0202__	TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
JOB BB0202__	TRAFFIC CONTROL SUPERVISOR
JOB BB0202__	TRENCHING AND SHOULDER PREPARATION FOR TEMPORARY WIDENING
JOB BB0202__	UTILITY ADJUSTMENTS
JOB BB0202__	VALUE ENGINEERING
JOB BB0202__	WARM MIX ASPHALT
JOB BB0202__	WELLHEAD PROTECTION
JOB BB0202__	WIRE ROPE SAFETY FENCE END TERMINAL
JOB BB0202__	WIRE ROPE SAFETY FENCE (POST REPAIR)
JOB BB0202__	WIRE ROPE SAFETY FENCE (WRSF) SPECIFICATIONS

GENERAL NOTES

1. GRADE LINE DENOTES FINISHED GRADE WHERE SHOWN ON PLANS.
2. ALL PIPE LINES, POWER, TELEPHONE, AND TELEGRAPH LINES TO BE MOVED OR LOWERED BY THE RESPECTIVE OWNERS AS PER AGREEMENT WITH SUCH OWNERS.
3. ANY EQUIPMENT OR APPURTENANCE THAT INTERFERES WITH THE PROPOSED CONSTRUCTION AND WHICH MAY BE THE PROPERTY OF UTILITY SERVICE ORGANIZATIONS SHALL BE MOVED BY THE OWNERS UNLESS OTHERWISE PROVIDED.
4. ALL LAND MONUMENTS LOCATED WITHIN THE CONSTRUCTION AREA SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 107.12 OF THE STANDARD SPECIFICATIONS.
5. ALL TREES THAT DO NOT DIRECTLY INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE SPARED AS DIRECTED BY THE ENGINEER. CARE AND DISCRETION SHALL BE USED TO INSURE THAT ALL TREES NOT TO BE REMOVED SHALL BE HARMED AS LITTLE AS POSSIBLE DURING THE CONSTRUCTION OPERATIONS.
6. 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 No.10887 SCOTT P. THORNSBERRY 6-24-2016

GOVERNING SPECIFICATIONS & GENERAL NOTES

Michael Baker INTERNATIONAL

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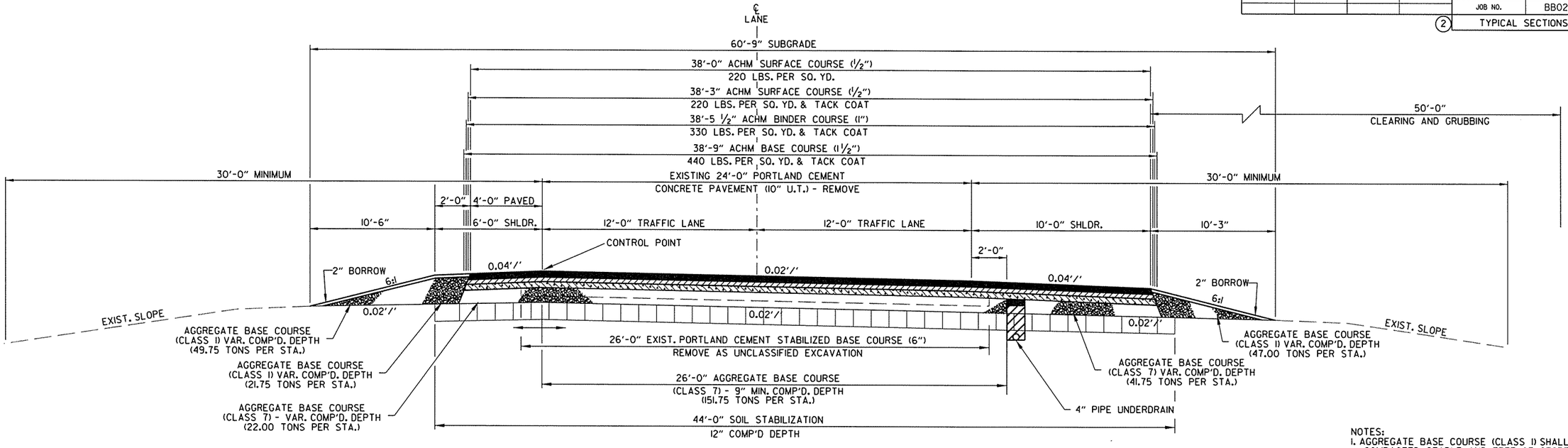
				2	ARK.			
				JOB NO.		BB0202	4	235

(2) TYPICAL SECTIONS OF IMPROVEMENT



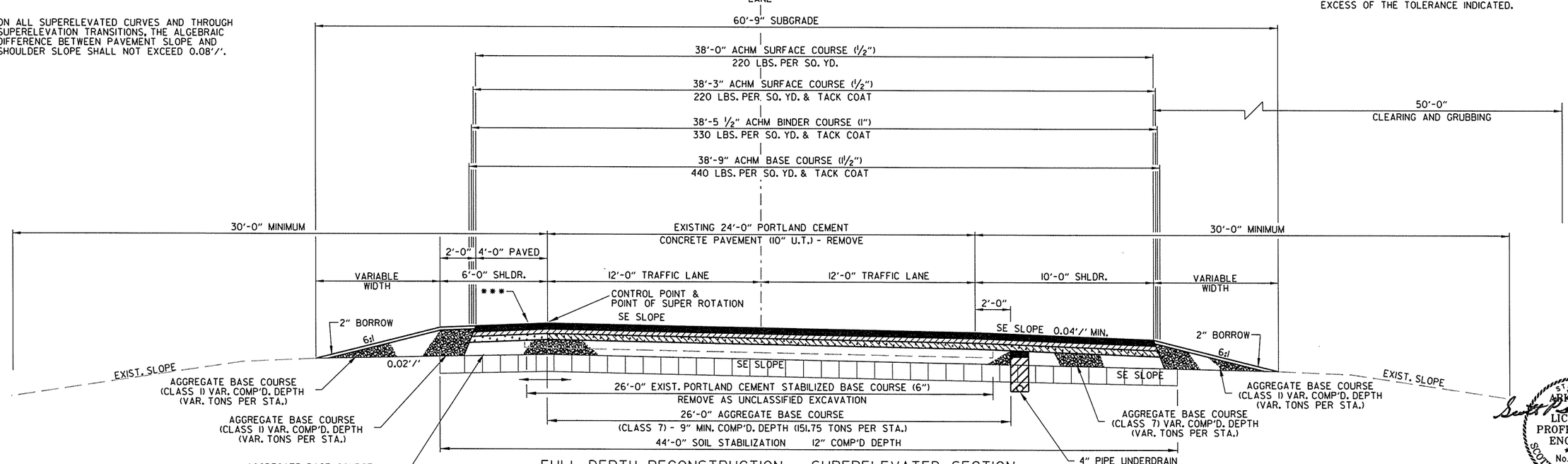
FULL-DEPTH RECONSTRUCTION - TANGENT SECTION

(SHOWN IN DIRECTION OF TRAFFIC)

STA. 175+90.50 TO 181+80.04 LT.	STA. 175+90.50 TO 181+80.04 RT.
STA. 231+73.40 TO 242+73.40 LT.	STA. 231+14.91 TO 242+14.91 RT.
STA. 245+91.81 TO 250+73.89 LT.	STA. 245+33.30 TO 250+73.89 RT.
STA. 333+87.17 TO 344+87.14 LT.	STA. 333+48.36 TO 344+48.36 RT.
STA. 347+41.62 TO 358+41.62 LT.	STA. 347+02.80 TO 358+08.81 RT.
STA. 437+40.77 TO 447+40.77 LT.	STA. 438+24.82 TO 448+24.82 RT.

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. THE FINAL 2" OF SURFACE COURSE IS TO BE PLACED AFTER ALL OTHER COURSES HAVE BEEN LAID. LONGITUDINAL JOINTS SHALL BE AT LANE LINES.
3. 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.

*** 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

STA. 175+14.73 TO 175+90.50 LT.	STA. 175+14.73 TO 175+90.50 RT.
STA. 181+80.04 TO 186+14.73 LT.	STA. 181+80.04 TO 186+14.73 RT.
STA. 250+73.89 TO 256+91.81 LT.	STA. 250+73.89 TO 256+33.30 RT.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
SCOTT P. THORNSBERRY
No.10887
6-21-2016

TYPICAL SECTIONS OF IMPROVEMENT

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Michael Baker INTERNATIONAL

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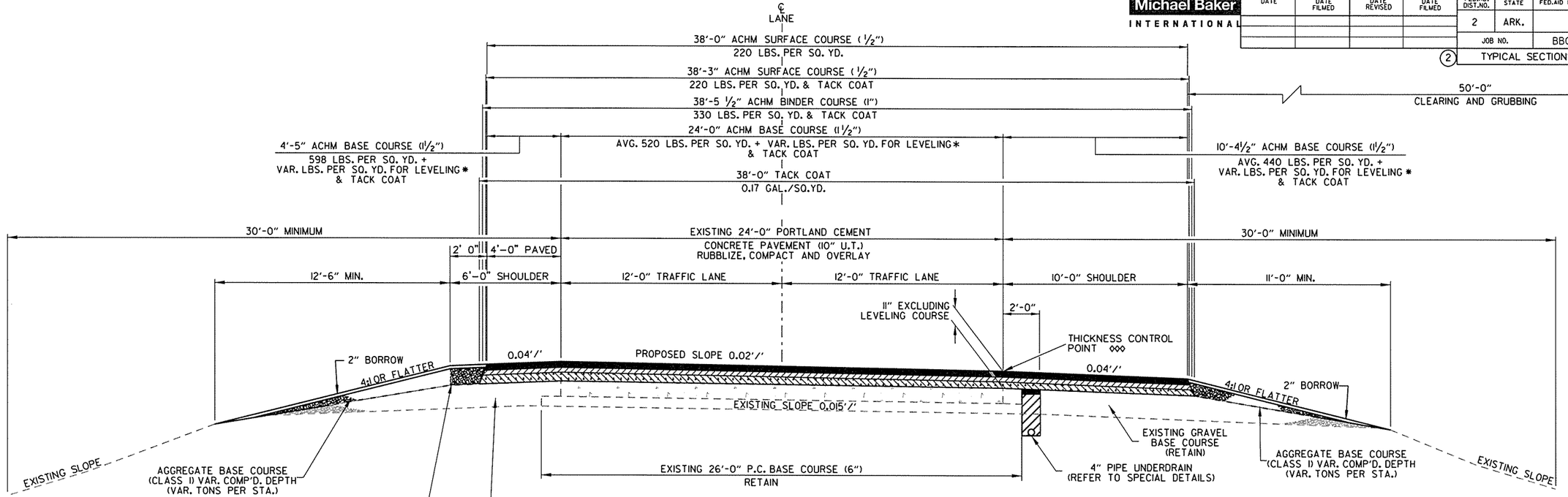
				JOB NO.		BB0202	5	235

(2) TYPICAL SECTIONS OF IMPROVEMENT



RUBBLIZE & OVERLAY - TANGENT SECTION

(SHOWN IN DIRECTION OF TRAFFIC)

STA. 211+49.38 TO 231+73.40 LT.
STA. 267+25.57 TO 333+87.14 LT.
STA. 358+41.62 TO 358+48.43 LT.
STA. 377+60.20 TO 437+40.77 LT.

STA. 211+49.38 TO 231+14.91 RT.
STA. 267+25.57 TO 333+48.36 RT.
STA. 358+08.81 TO 358+48.43 RT.
STA. 377+60.20 TO 438+24.82 RT.

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.

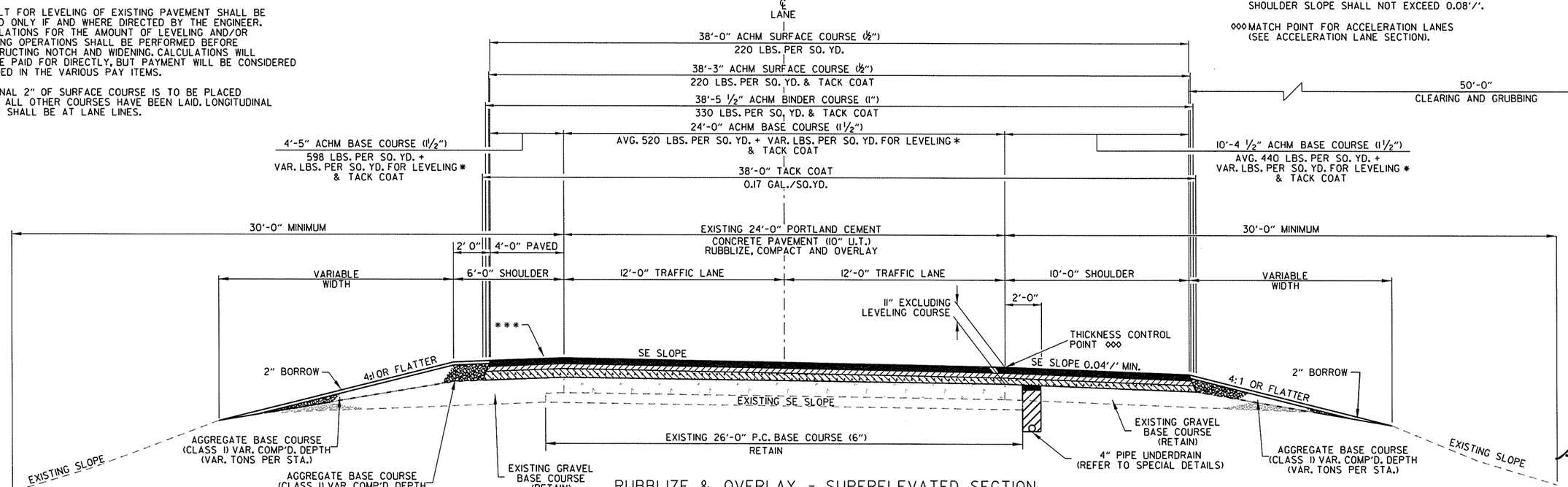
2. ASPHALT FOR LEVELING OF EXISTING PAVEMENT SHALL BE PLACED ONLY IF AND WHERE DIRECTED BY THE ENGINEER. CALCULATIONS FOR THE AMOUNT OF LEVELING AND/OR LEVELING OPERATIONS SHALL BE PERFORMED BEFORE CONSTRUCTING NOTCH AND WIDENING. CALCULATIONS WILL NOT BE PAID FOR DIRECTLY, BUT PAYMENT WILL BE CONSIDERED 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.

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

***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).



RUBBLIZE & OVERLAY - SUPERELEVATED SECTION

(SHOWN IN DIRECTION OF TRAFFIC)

STA. 186+14.73 TO 211+49.38 LT.
STA. 256+91.81 TO 267+25.57 LT.
STA. 358+48.43 TO 377+60.20 LT.

STA. 186+14.73 TO 211+49.38 RT.
STA. 256+33.30 TO 267+25.57 RT.
STA. 358+48.43 TO 377+60.20 RT.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
SCOTT P. THORNSBERRY
No.10887
6-21-2016

TYPICAL SECTIONS OF IMPROVEMENT

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Michael Baker INTERNATIONAL

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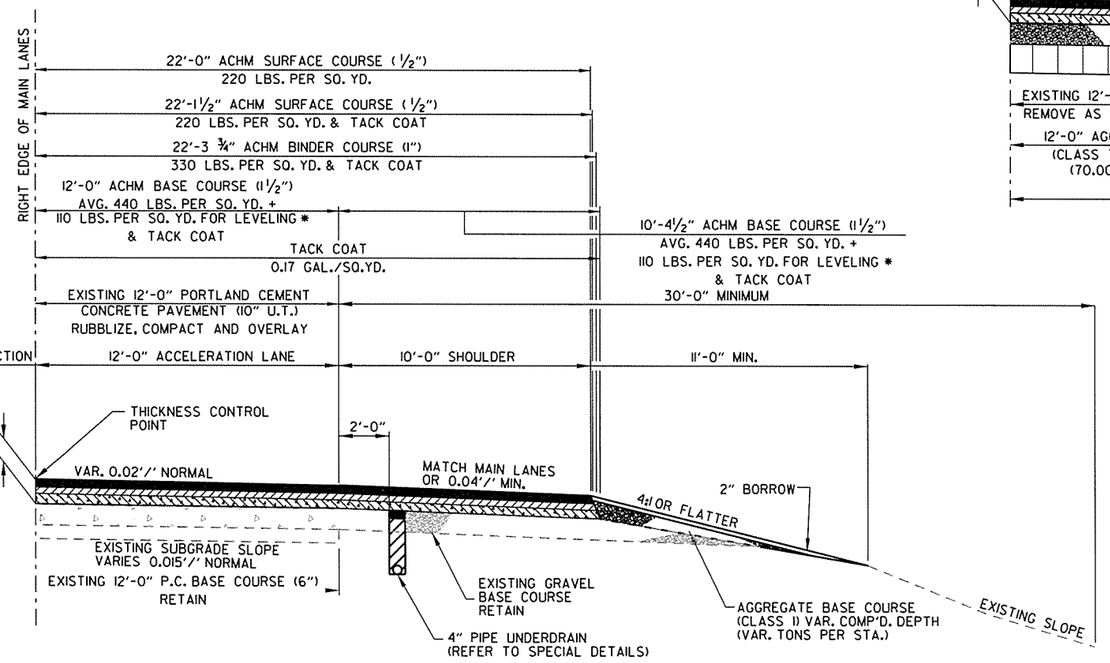
				JOB NO.		BB0202	6	235

(2) TYPICAL SECTIONS OF IMPROVEMENT

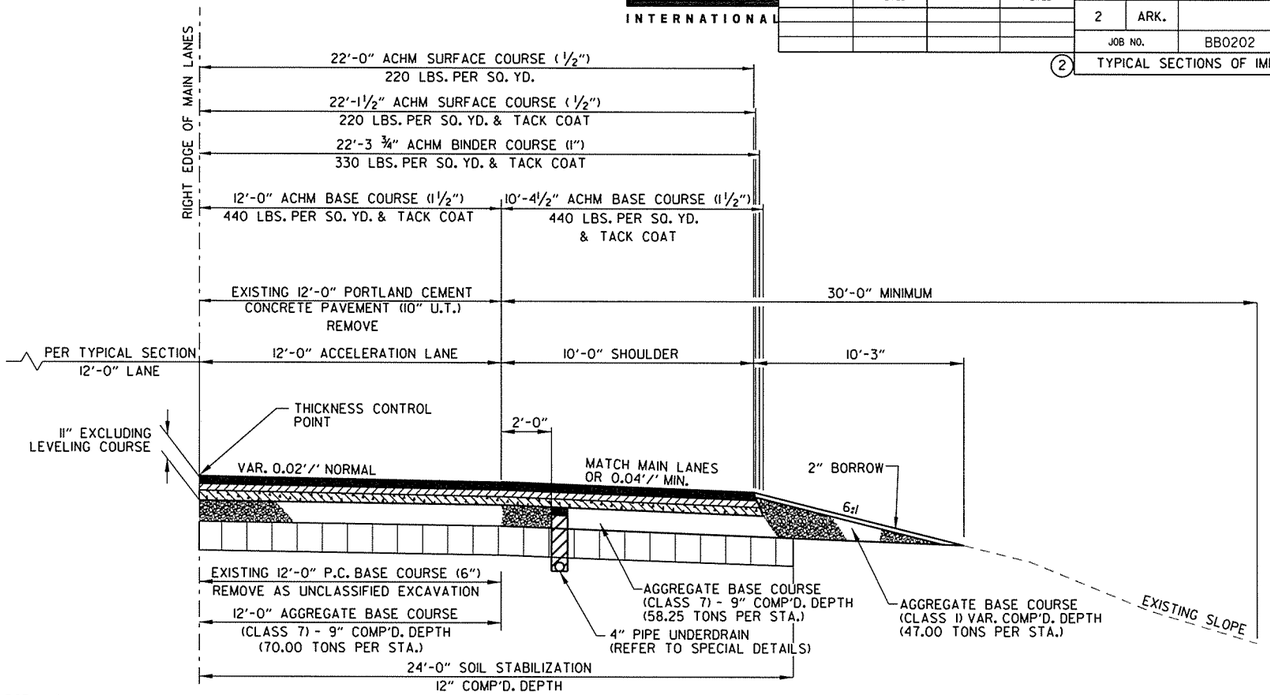


* LEVELING TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.

ACCELERATION LANE & TAPER
RUBBLIZE & OVERLAY SECTION

(SHOWN IN DIRECTION OF TRAFFIC)

STA. 222+54.01 TO STA. 231+73.40
STA. 256+33.30 TO STA. 266+08.85
STA. 322+54.09 TO STA. 332+54.09
STA. 359+12.68 TO STA. 369+12.68
STA. 425+76.51 TO STA. 435+76.51



ACCELERATION LANE & TAPER
FULL DEPTH RECONSTRUCTION SECTION

(SHOWN IN DIRECTION OF TRAFFIC)

STA. 175+78.49 TO STA. 185+78.49
STA. 231+73.40 TO STA. 232+54.01
STA. 256+08.85 TO STA. 256+33.30

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.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
SCOTT P. THORNSBERRY
No.10887
6-21-2016

TYPICAL SECTIONS OF IMPROVEMENT

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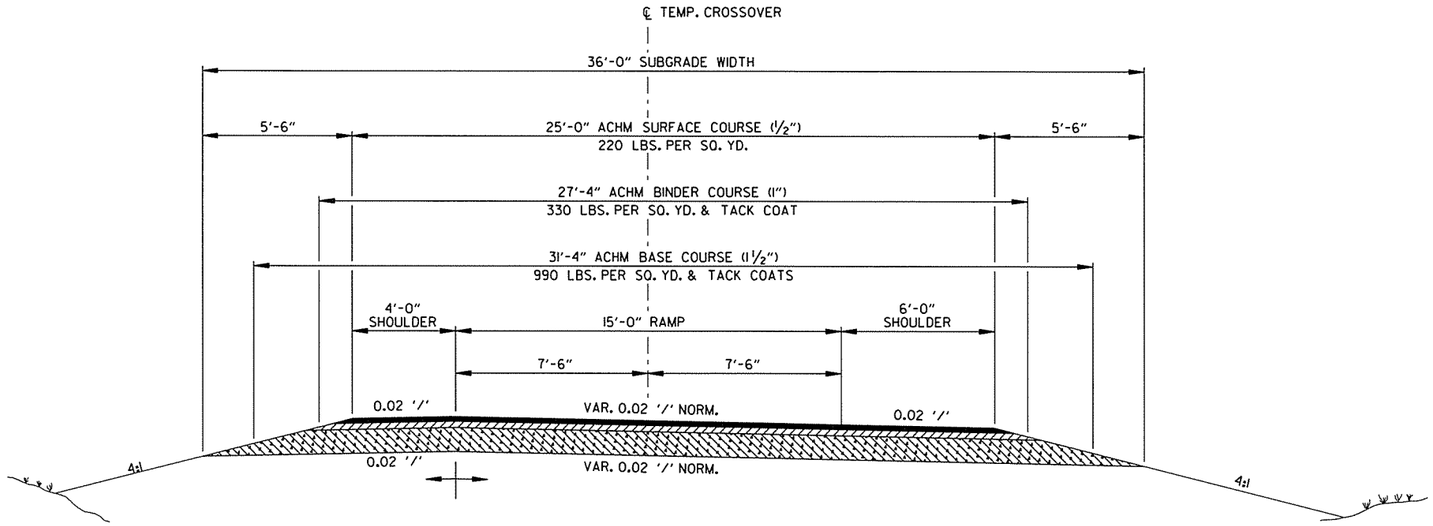
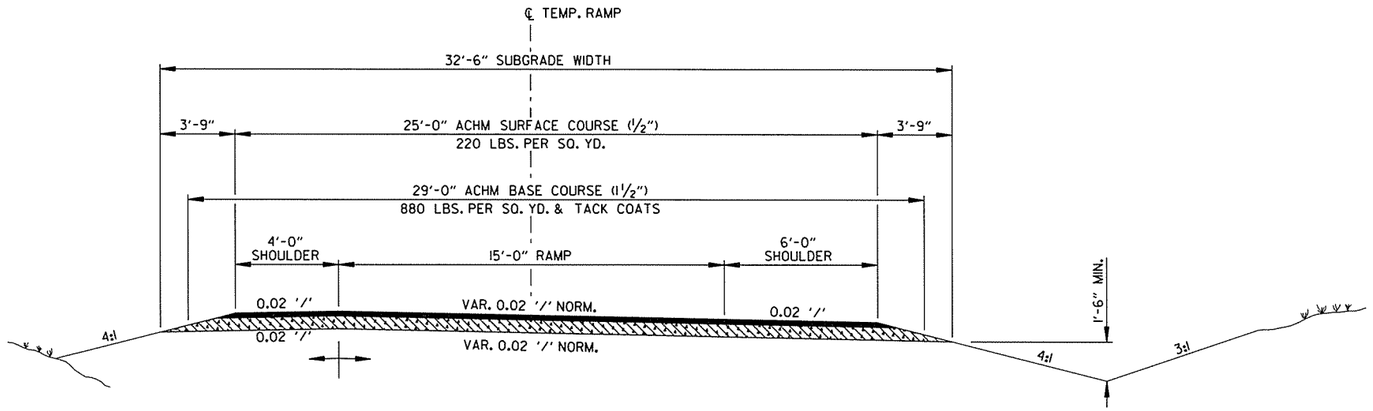
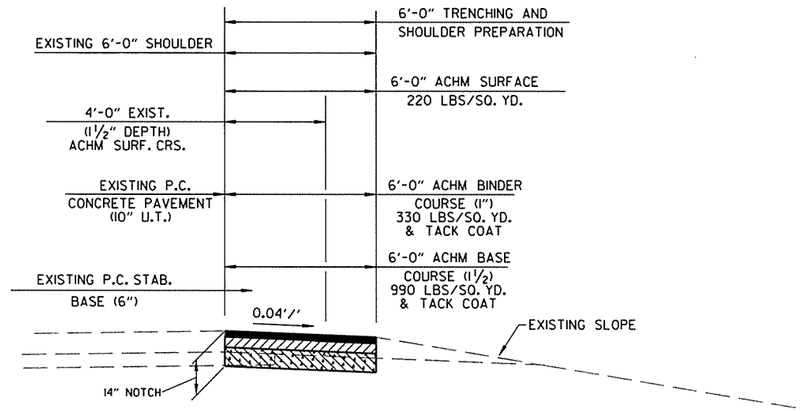
				2	ARK.			
				JOB NO.		BB0202	7	235
				(2)	TYPICAL SECTIONS OF IMPROVEMENT			



MAIN LANE TEMP. CROSSOVER FOR MAINTENANCE OF TRAFFIC



TEMPORARY INTERCHANGE RAMPS FOR MAINTENANCE OF TRAFFIC



TRENCH AND SHOULDER PREPARATION
FOR MAINTENANCE OF TRAFFIC
(SOUTHBOUND MAIN LANES INSIDE SHOULDER)

STA. 172+60.00 TO STA. 242+69.57 RT. - L.M.L.
STA. 245+71.26 TO STA. 344+84.63 RT. - L.M.L.
STA. 347+27.99 TO STA. 447+69.33 RT. - L.M.L.

NOTES:

1. THE FINAL 2" OF SURFACE COURSE IS TO BE PLACED AFTER ALL OTHER COURSES HAVE BEEN LAID. LONGITUDINAL JOINTS SHALL BE AT LANE LINES.
2. ALL FLEXIBLE BASE AND ASPHALTIC PAVEMENTS REMOVED SHALL BE PAID FOR UNDER ITEM NO. 210 - UNCLASSIFIED EXCAVATION.
3. THE EXISTING ASPHALT PAVEMENT TO BE REMOVED FROM THE REMAINING PAVEMENT SHALL BE SEPARATED BY SAWING ALONG A NEAT LINE. AFTER SAWING, THE PAVEMENT TO BE REMOVED SHALL BE CAREFULLY REMOVED IN A MANNER THAT WILL NOT DAMAGE THE PAVEMENT THAT IS TO REMAIN. ANY DAMAGE OF THE ASPHALT PAVEMENT THAT IS TO REMAIN IN PLACE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

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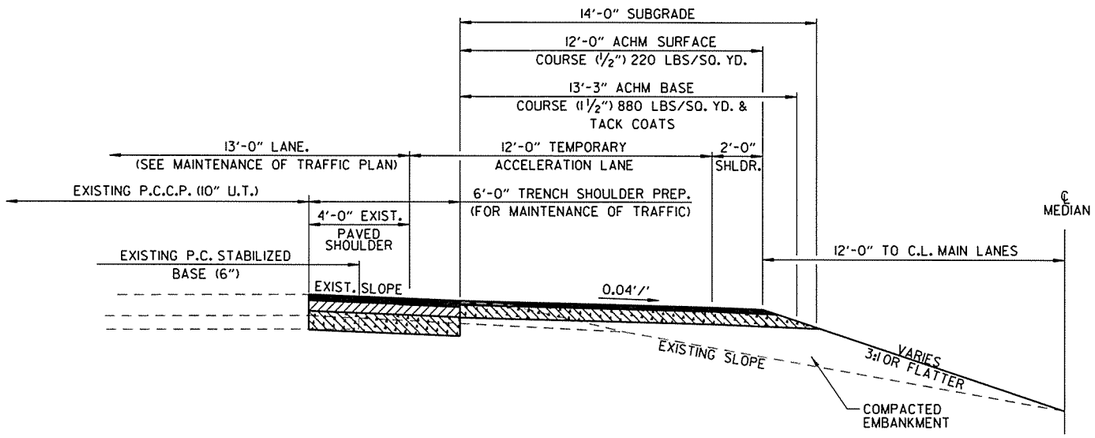
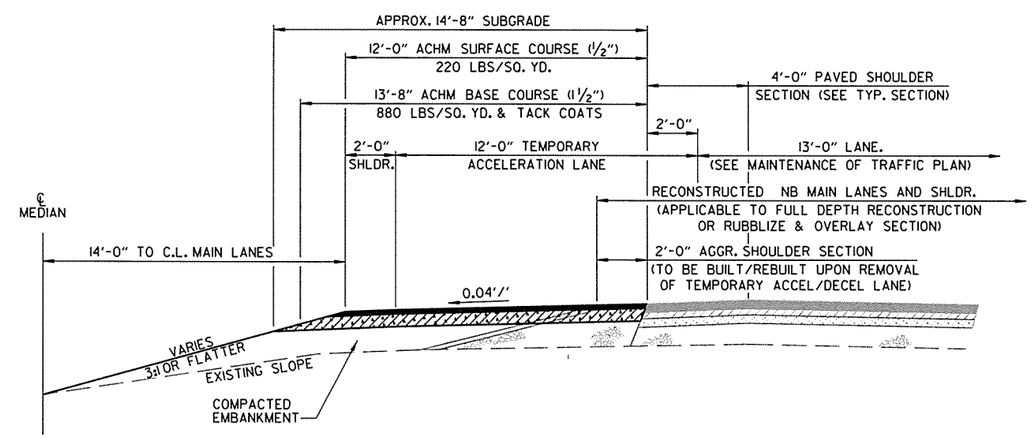
2	ARK.			
JOB NO.		BB0202	8	235

(2) TYPICAL SECTIONS OF IMPROVEMENT



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

STA. 175+64.09 TO STA. 186+82.41
STA. 255+82.62 TO STA. 270+14.81
STA. 359+39.03 TO STA. 372+96.78



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

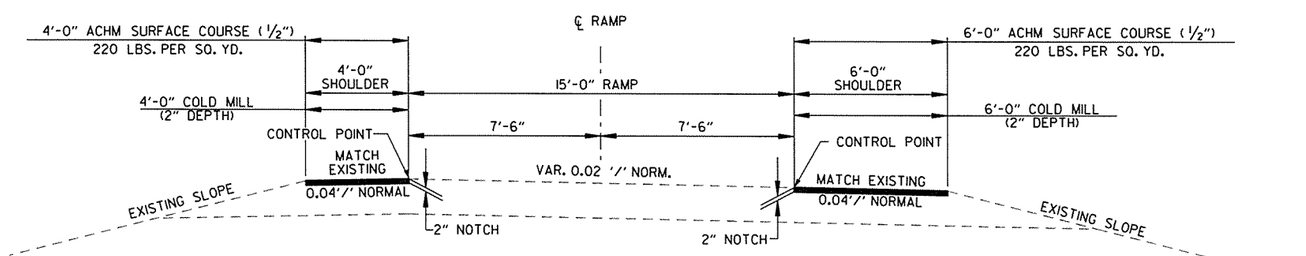
STA. 216+75.00 TO STA. 232+07.91
STA. 318+79.10 TO STA. 332+18.71
STA. 422+00.86 TO STA. 435+51.48

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 REHAB. TYPICAL FOR RAMPS

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TYPICAL SECTIONS OF IMPROVEMENT

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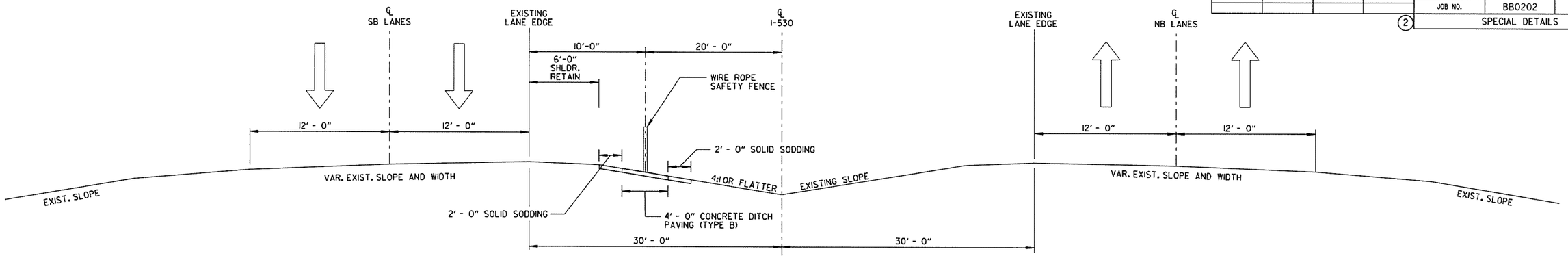
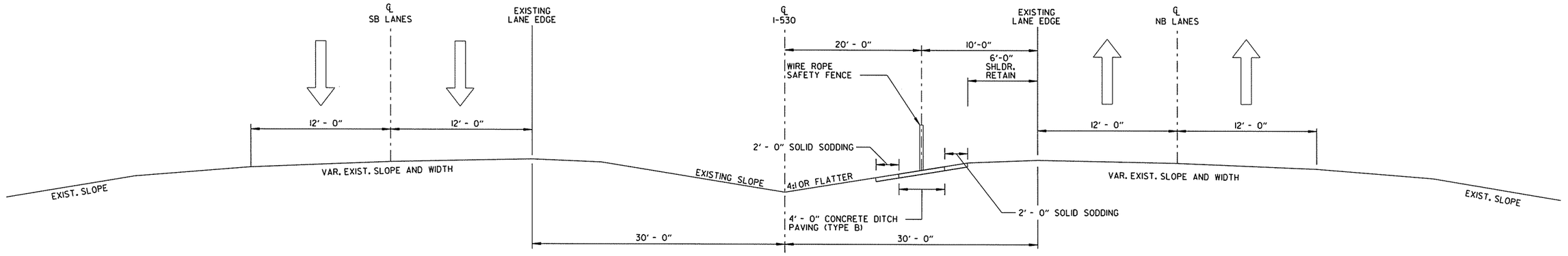
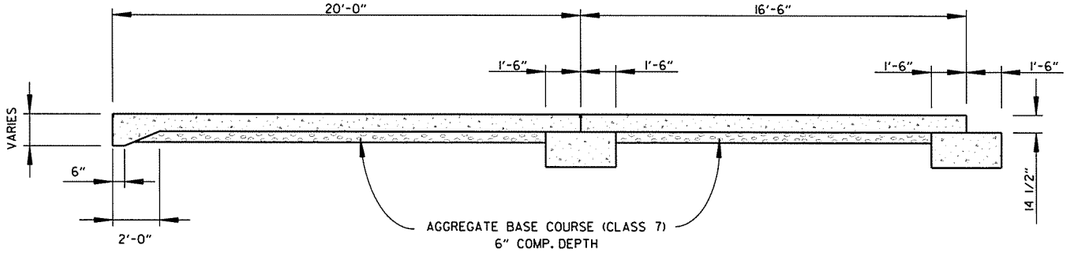
JOB NO.		BB0202	9	235
(2) SPECIAL DETAILS				



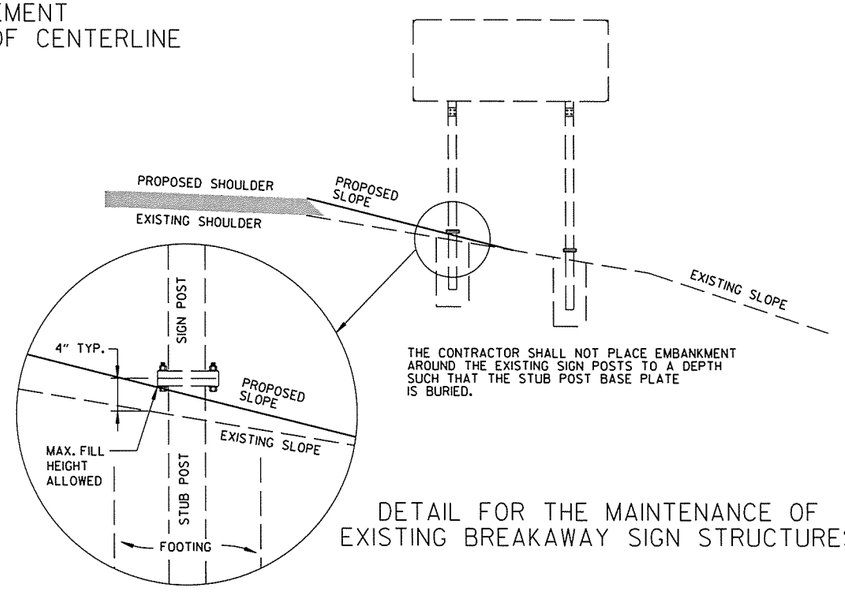
TYPICAL SECTION OF IMPROVEMENT
FOR WIRE ROPE SAFETY FENCE LEFT OF CENTERLINE



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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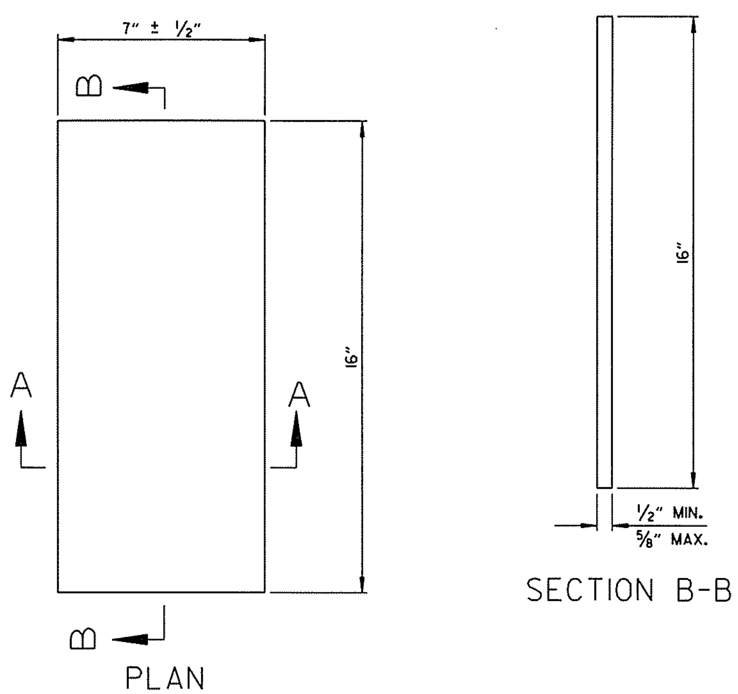
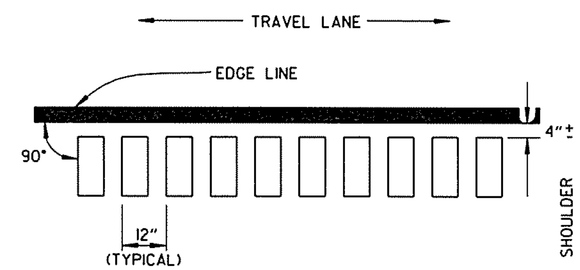
NOTES:

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.

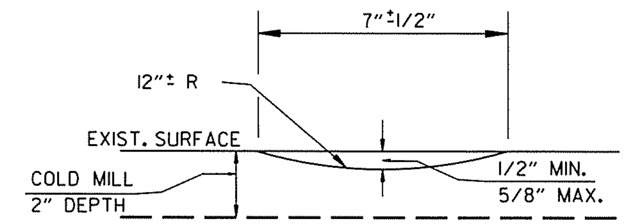


DETAILS OF RUMBLE STRIPS



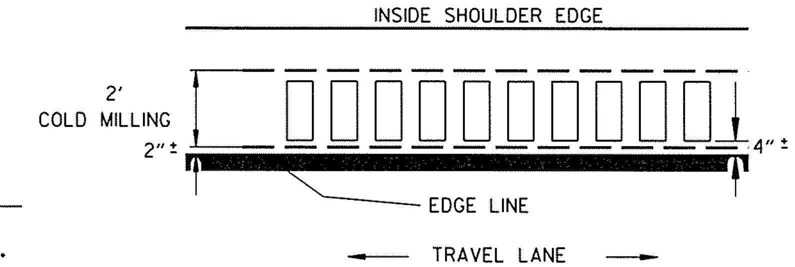
LOCATION PLAN OF RUMBLE STRIPS

LEFT OR RIGHT SHOULDER

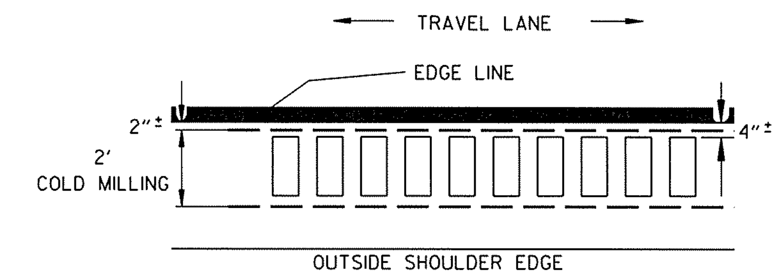


2' STRIP TO BE MILLED & INLAID WITH ACHM SURFACE COURSE (1/2") (PG 76-22) (220 LBS. PER SQ. YD.) & 2'-0" TACK COAT (0.17 GAL. PER SQ. YD.)

ELEVATION VIEW

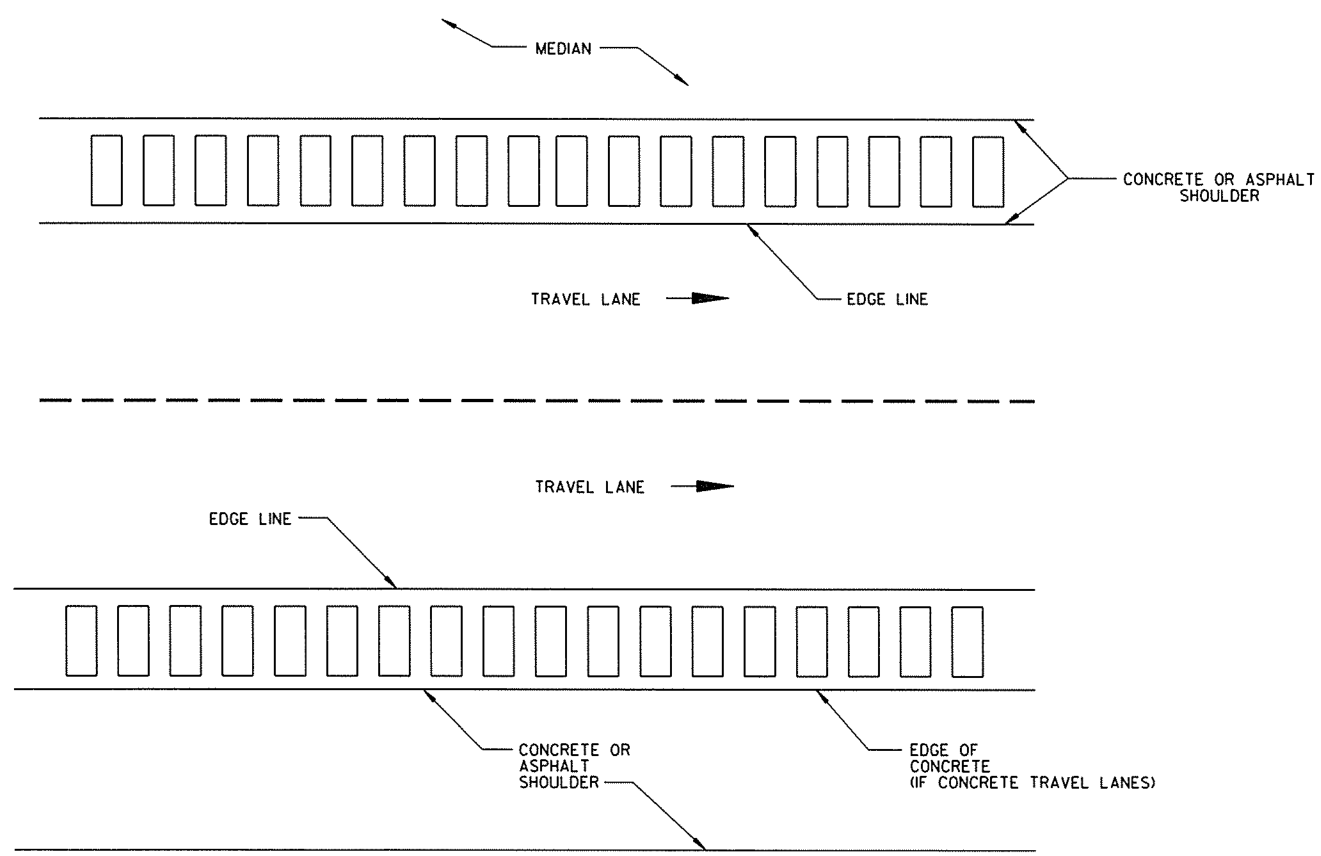


PLAN VIEW



PLAN VIEW

DETAIL OF RUMBLE STRIP REMOVAL IN INSIDE AND OUTSIDE SHOULDERS (ASPHALT)



PLAN VIEW

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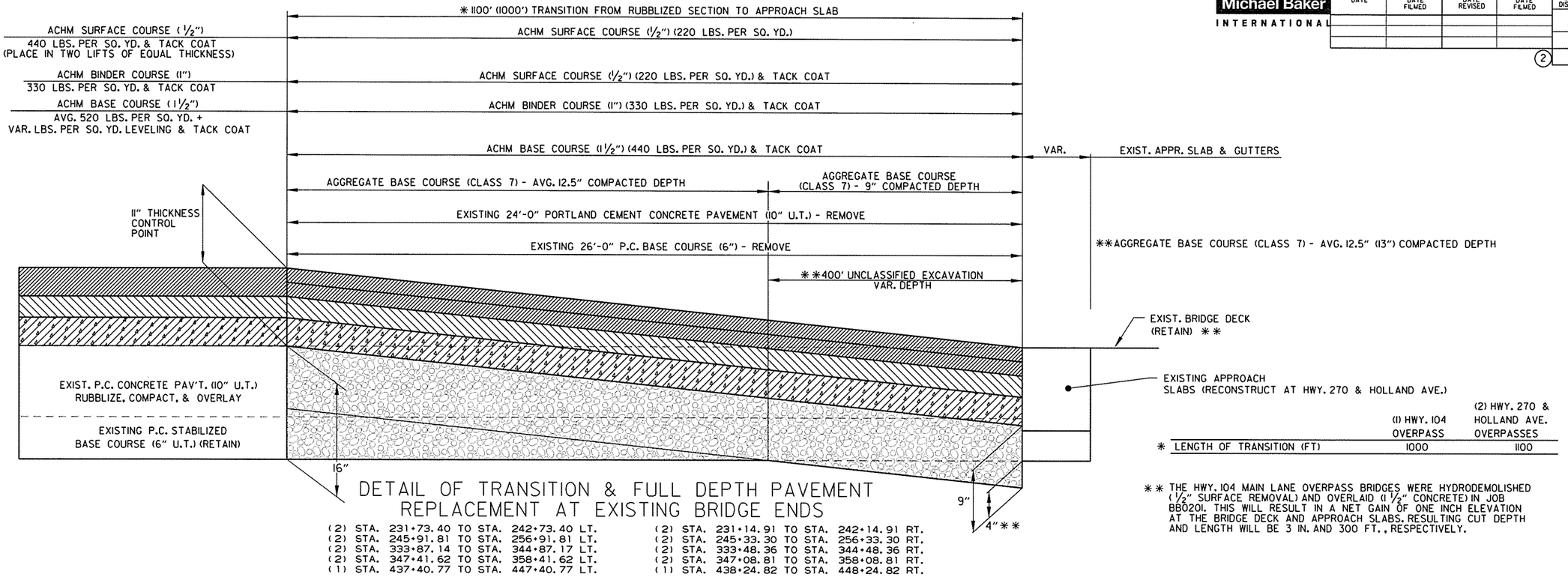
(2) SPECIAL DETAILS



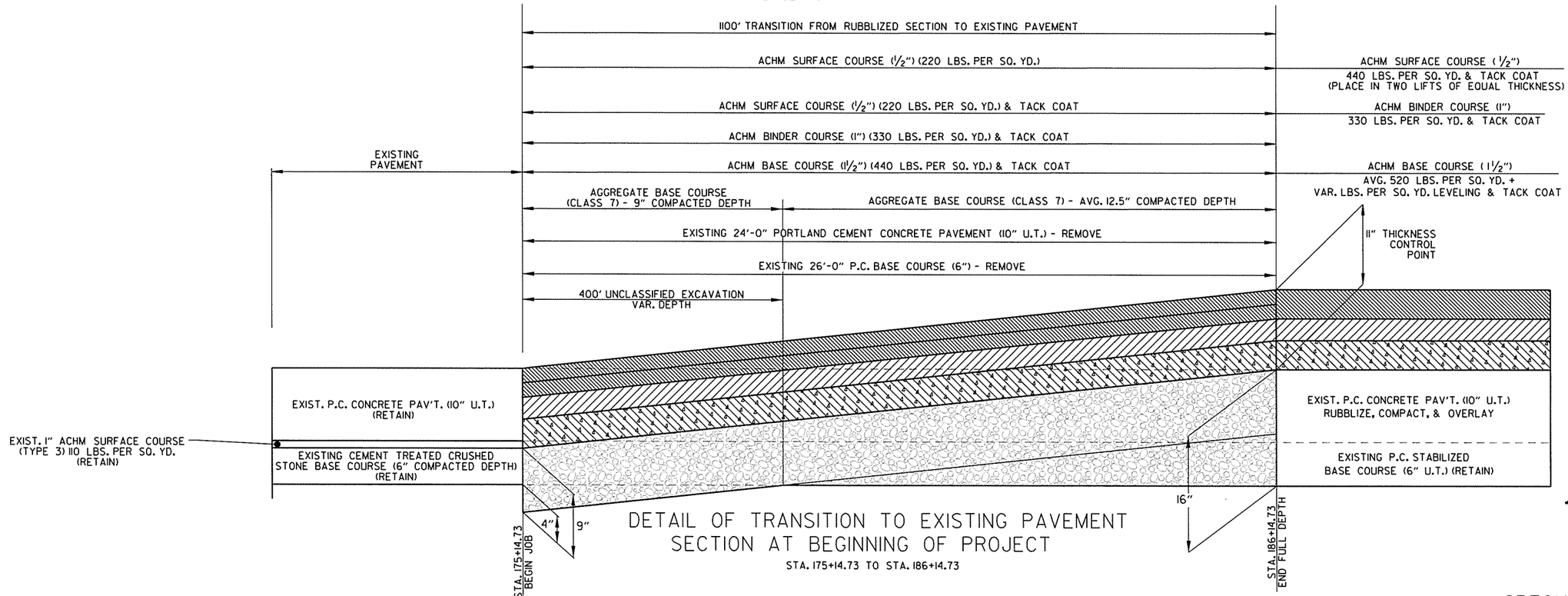
	(1) HWY. 104 OVERPASS	(2) HWY. 270 & HOLLAND AVE. OVERPASSES
* LENGTH OF TRANSITION (FT)	1000	1100

** THE HWY. 104 MAIN LANE OVERPASS BRIDGES WERE HYDRODEMOLISHED (1/2" SURFACE REMOVAL) AND OVERLAID (1 1/2" CONCRETE) IN JOB BB0201. THIS WILL RESULT IN A NET GAIN OF ONE INCH ELEVATION AT THE BRIDGE DECK AND APPROACH SLABS. RESULTING CUT DEPTH AND LENGTH WILL BE 3 IN. AND 300 FT., RESPECTIVELY.

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

(2) STA. 231+73.40 TO STA. 242+73.40 LT.
(2) STA. 245+91.81 TO STA. 256+91.81 LT.
(2) STA. 333+87.14 TO STA. 344+87.17 LT.
(2) STA. 347+41.62 TO STA. 358+41.62 LT.
(1) STA. 437+40.77 TO STA. 447+40.77 LT.

(2) STA. 231+14.91 TO STA. 242+14.91 RT.
(2) STA. 245+33.30 TO STA. 256+33.30 RT.
(2) STA. 333+48.36 TO STA. 344+48.36 RT.
(2) STA. 347+08.81 TO STA. 358+08.81 RT.
(1) STA. 438+24.82 TO STA. 448+24.82 RT.



DETAIL OF TRANSITION TO EXISTING PAVEMENT SECTION AT BEGINNING OF PROJECT

STA. 175+14.73 TO STA. 186+14.73

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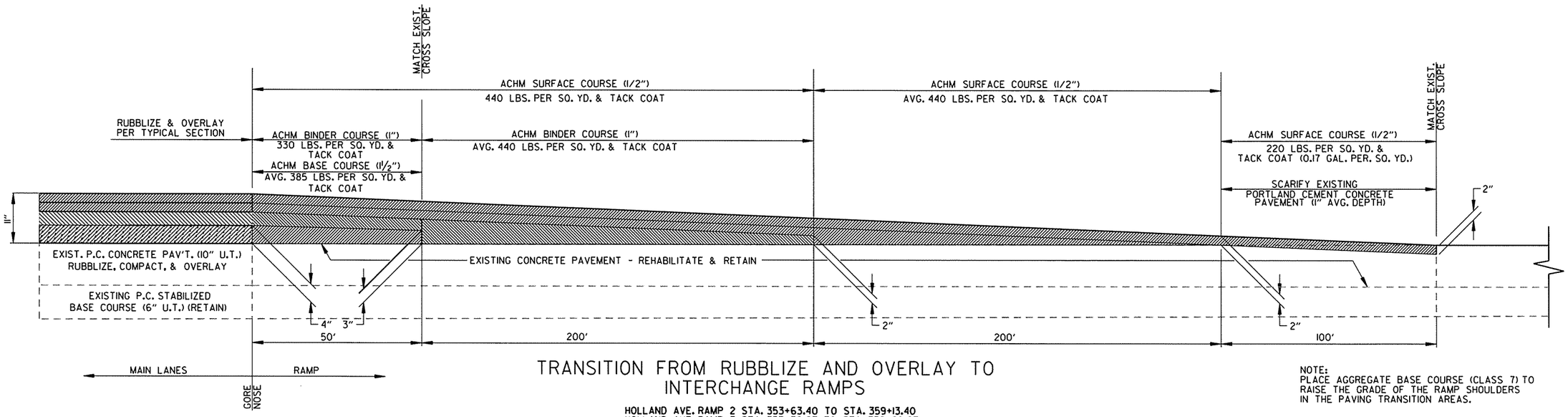
JOB NO.		BB0202	12	235

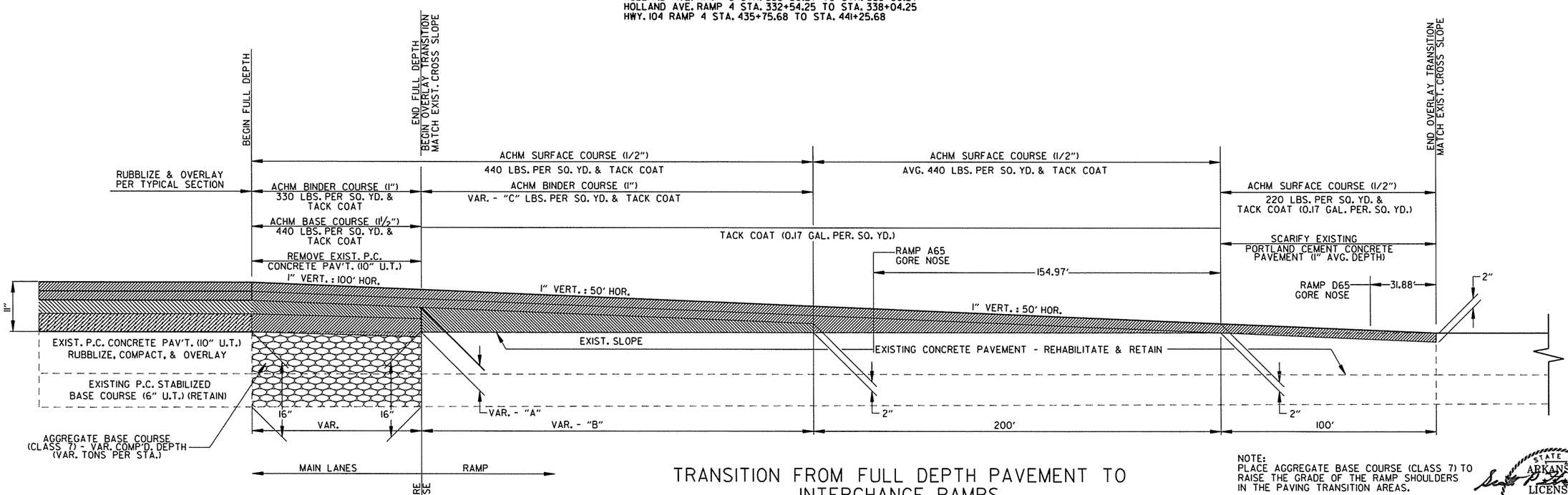
(2) SPECIAL DETAILS



TRANSITION FROM RUBBLIZE AND OVERLAY TO INTERCHANGE RAMPS

HOLLAND AVE. RAMP 2 STA. 353+63.40 TO STA. 359+13.40
HOLLAND AVE. RAMP 3 STA. 353+30.27 TO STA. 358+80.27
HOLLAND AVE. RAMP 4 STA. 332+54.25 TO STA. 338+04.25
HWY. 104 RAMP 4 STA. 435+75.68 TO STA. 441+25.68

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



TRANSITION FROM FULL DEPTH PAVEMENT TO INTERCHANGE RAMPS

	"A" (IN.)	"B" (FT.)	"C" (LBS./SQ.YD.)
HWY. 270 RAMP 1 STA. 232+09.90 TO STA. 237+12.60	6.05	202.70	442.97
HWY. 270 RAMP 2 STA. 250+67.11 TO STA. 256+04.89	6.76	237.78	481.55
HWY. 270 RAMP 3 STA. 251+25.45 TO STA. 256+49.50	6.48	224.05	466.46
HWY. 270 RAMP 4 STA. 232+53.30 TO STA. 237+63.00	6.19	209.70	450.66
HOLLAND AVE. RAMP 1 STA. 335+08.82 TO STA. 339+77.53	5.37	168.71	405.58
HWY. 104 RAMP 1 STA. 439+61.27 TO STA. 444+43.24	5.64	181.97	420.17

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

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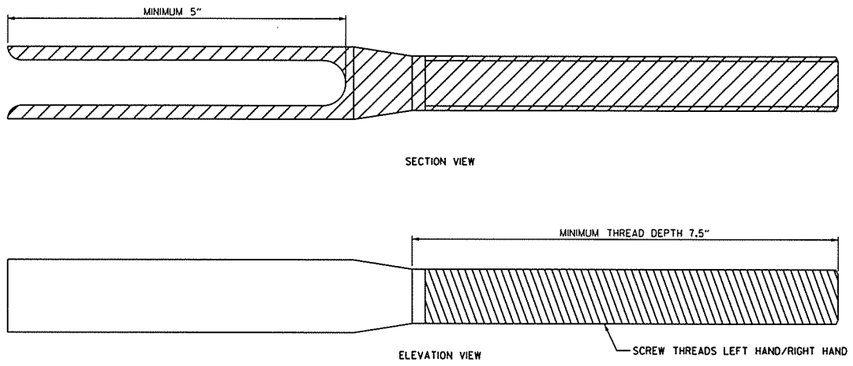
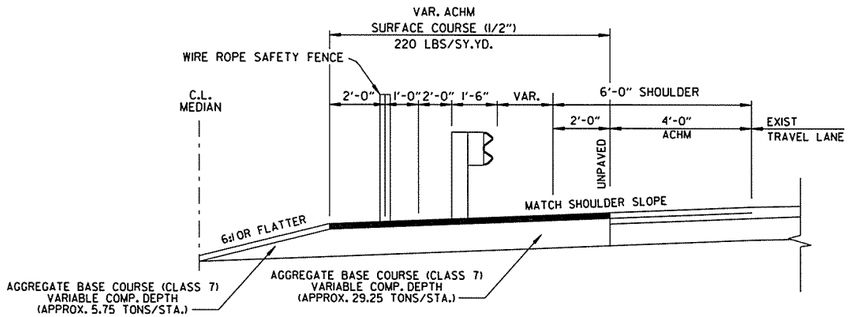


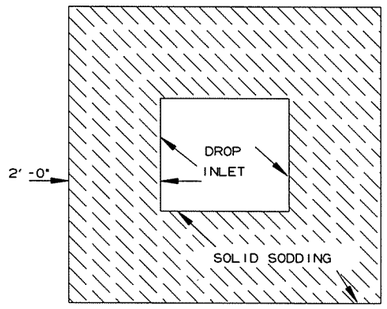
NOTE:
REFER TO "WIRE ROPE SAFETY FENCE (WRSF) SPECIFICATIONS" SPECIAL PROVISION FOR ADDITIONAL REQUIREMENTS.

THREADED TERMINAL DETAIL

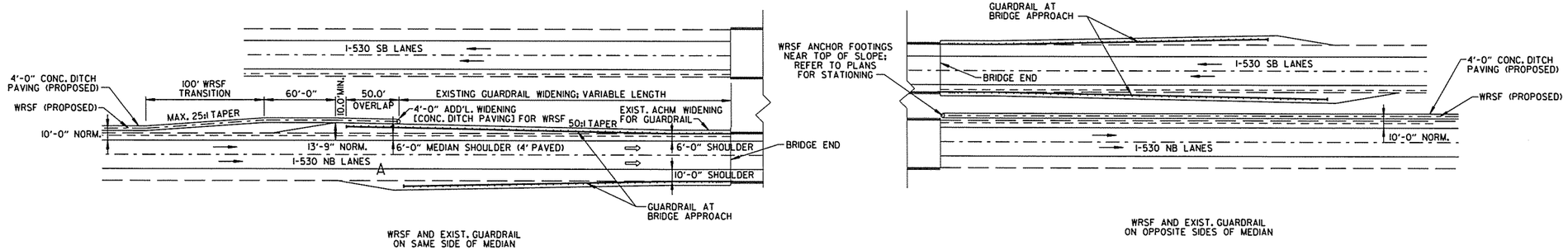


SECTION DETAIL OF SHOULDER WIDENING FOR GUARDRAIL
& OVERLAP ENDS OF WIRE ROPE SAFETY FENCE - INSIDE SHOULDER

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



DETAIL FOR SOLID SODDING
AROUND DROP INLETS



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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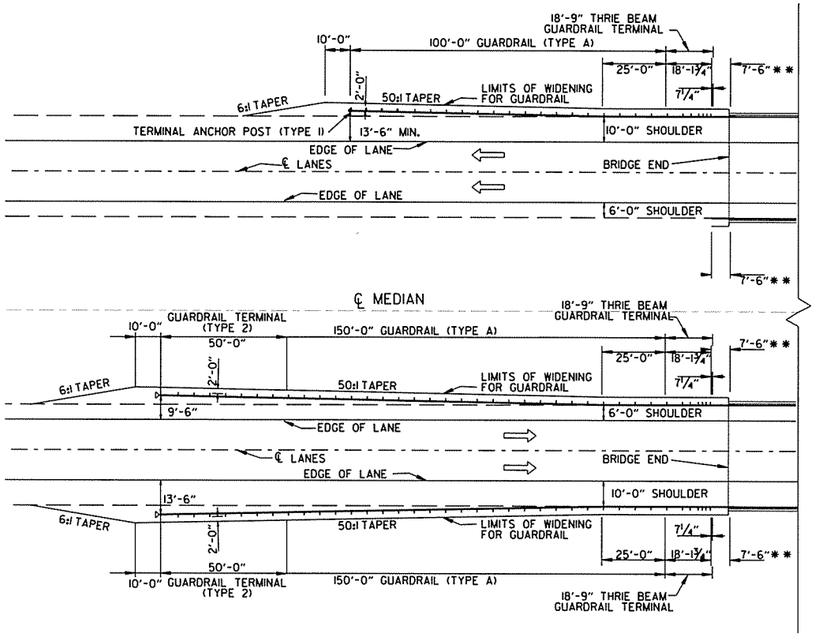
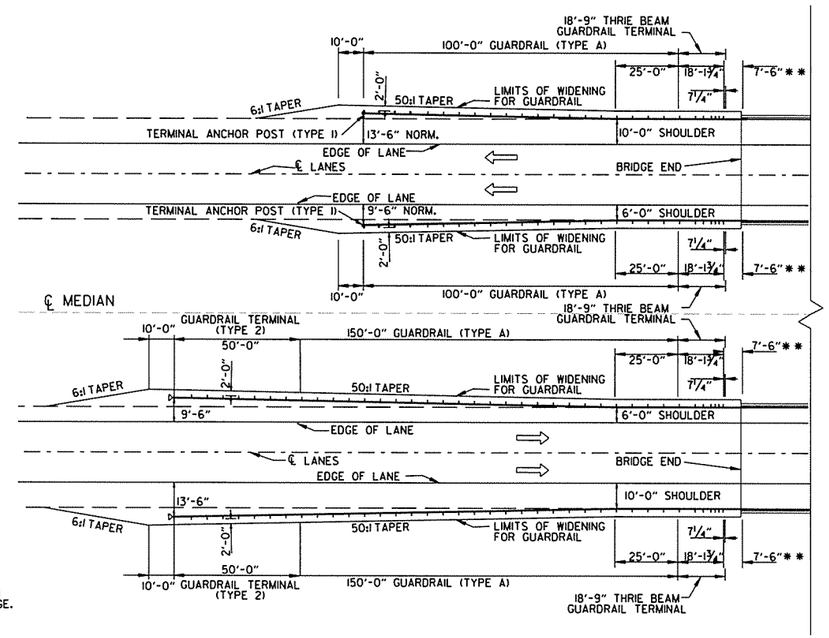


** PARAPET WALL WITH THRIE BEAM GUARDRAIL CONNECTION AT BRIDGE. SEE STD. DWG. GR-10.

GUARDRAIL DETAIL FOR MAIN LANES AT HWY. 104 OVERPASS

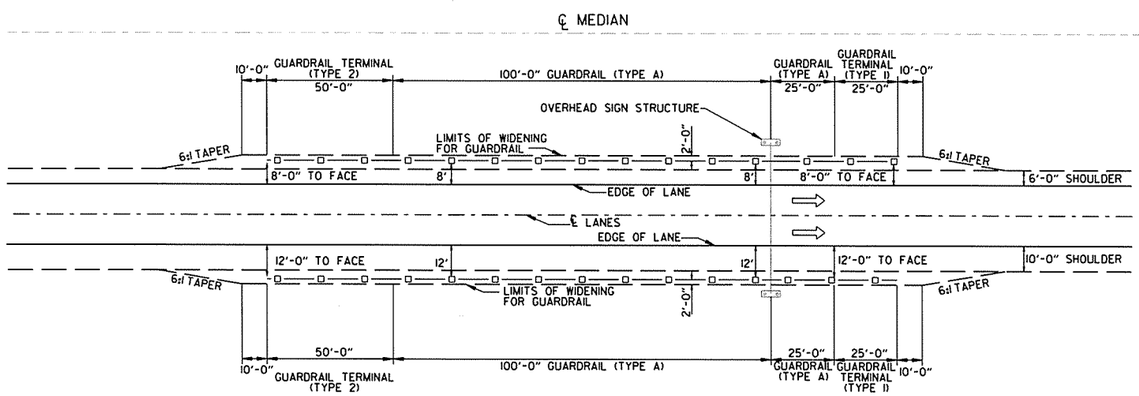
NOTE: REFER TO STANDARD DRAWINGS GR-8, GR-8A, GR-9, GR-10 & GR-10A FOR ADDITIONAL INFORMATION.



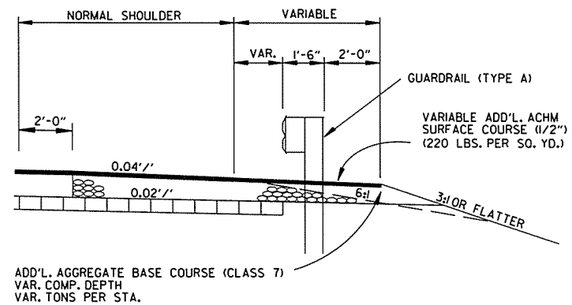
** PARAPET WALL WITH THRIE BEAM GUARDRAIL CONNECTION AT BRIDGE. SEE STD. DWG. GR-10.

GUARDRAIL DETAIL FOR MAIN LANES AT HWY. 270 AND HOLLAND AVE. OVERPASSES

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



GUARDRAIL DETAIL FOR MAIN LANES AT OVERHEAD SIGN STRUCTURE (STA. 212+20)



WIDENING FOR GUARDRAIL

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

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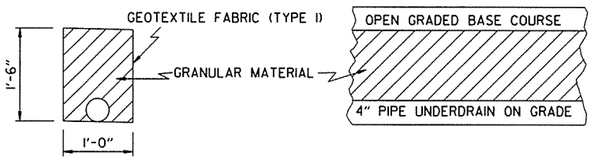
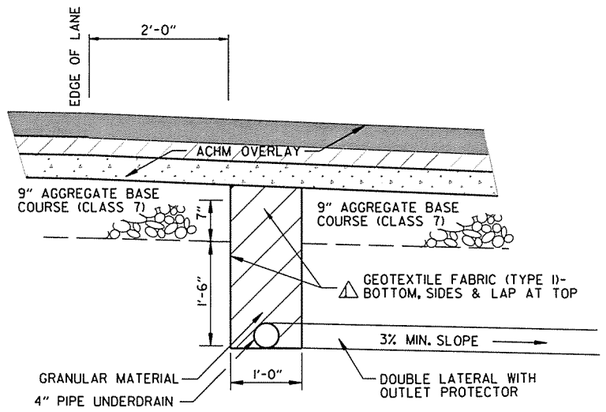
DETAILS OF PIPE UNDERDRAINS

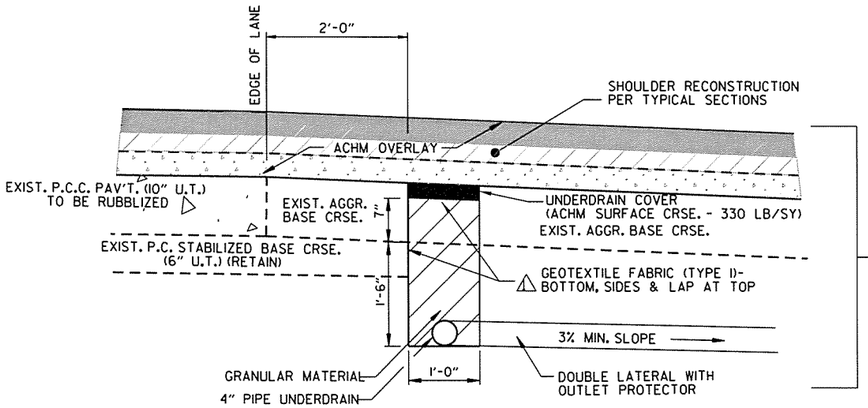


NOTE: GEOTEXTILE FABRIC SHALL MEET THE REQUIREMENTS OF SECTION 625 FOR TYPE I.

⚠ 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

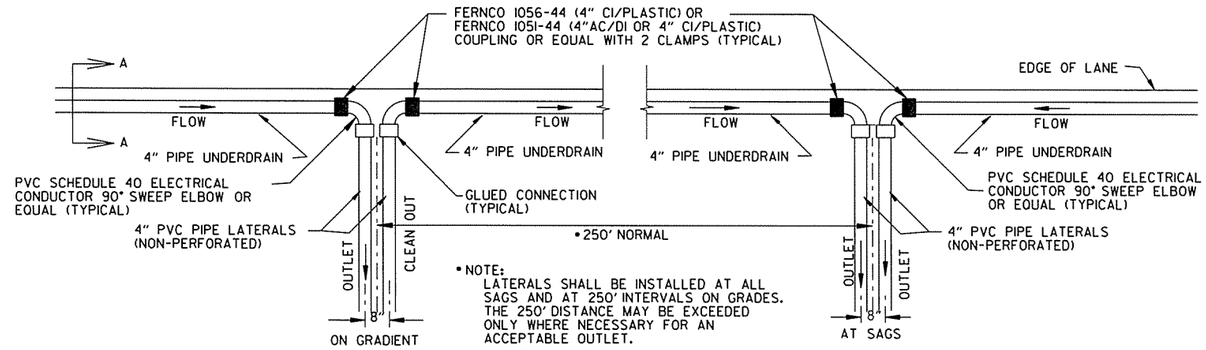


FOR WIDTH OF EXISTING SHOULDER, TRENCH FOR LATERALS SHALL BE BACKFILLED WITH GRANULAR MATERIAL OR AGGREGATE BASE COURSE (CLASS 7). PAYMENT SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS.

SECTION A-A
RUBBLIZE & OVERLAY

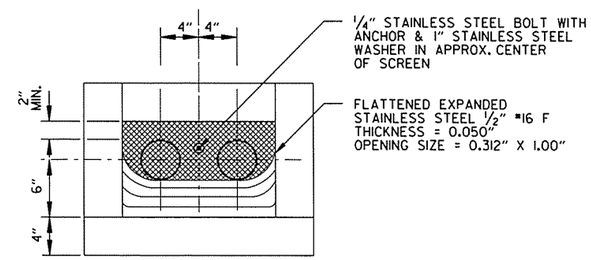
NOTES FOR PIPE UNDERDRAINS

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

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No.10887 SCOTT P. THORNSBERRY 6-21-2016

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.		BB0202	15	235
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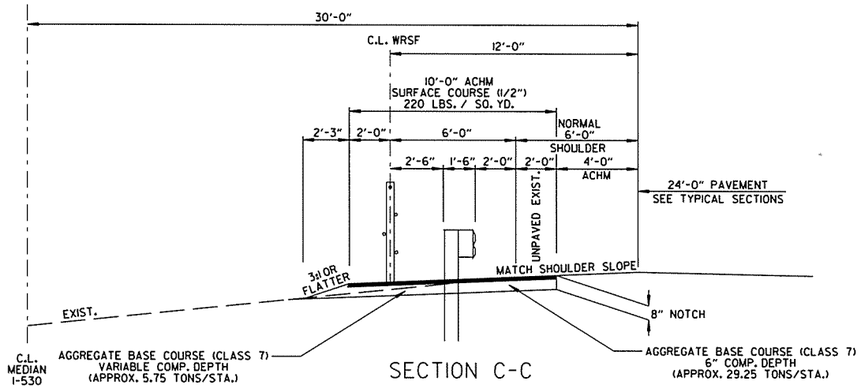
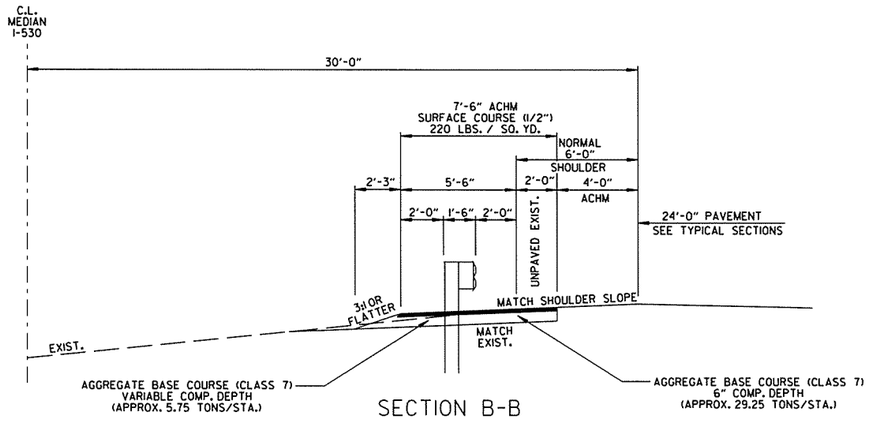
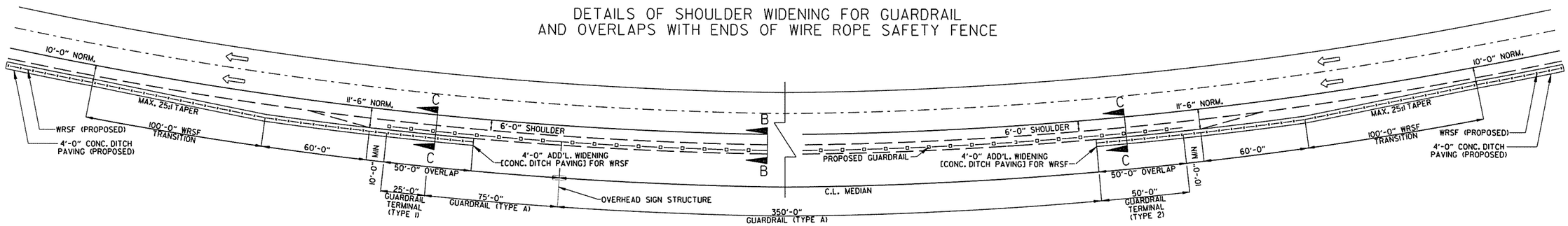


SECTION C-C

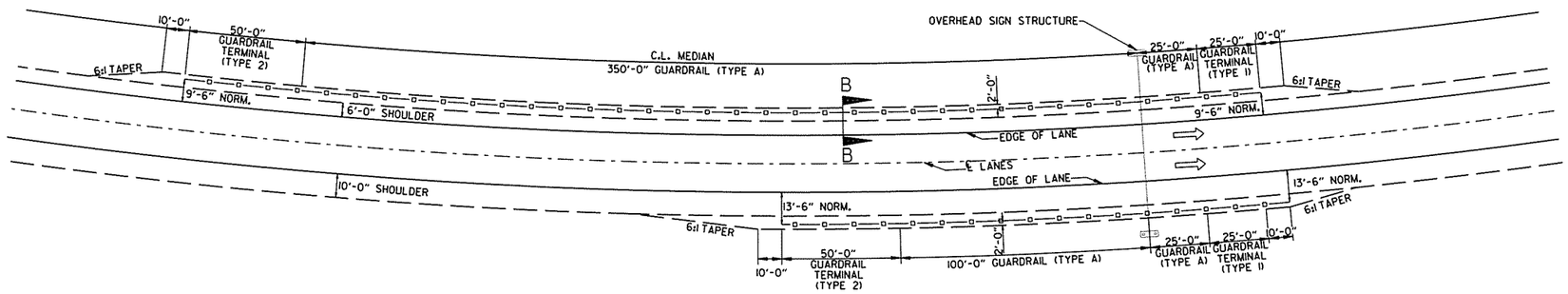


SECTION B-B

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



DETAIL OF NORTHBOUND GUARDRAIL & WIRE ROPE SAFETY FENCE AT OVERHEAD SIGN STRUCTURE (STA. 189+78.00)



DETAIL OF SOUTHBOUND GUARDRAIL AT OVERHEAD SIGN STRUCTURE (STA. 189+78.00)

REFER TO PLANS FOR RELATIVE PLACEMENT OF GUARDRAIL AND WIRE ROPE SAFETY FENCE

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No.10887 SCOTT P. THORNSBERRY 6-21-2016

SPECIAL DETAILS

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Michael Baker INTERNATIONAL

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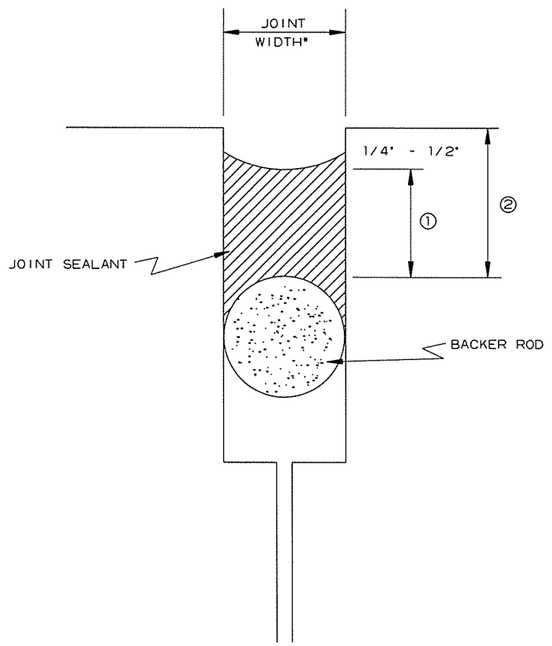
				JOB NO.		BB0202	17	235

(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
4/8	7/16	1	11/16
1	1/2	1 1/4	3/4
1 TO 1 1/2	1/2	1 1/4*	3/4

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

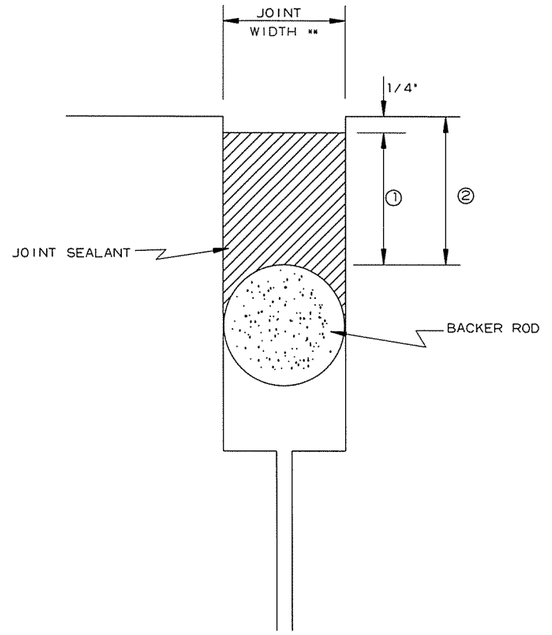


DETAILS OF TYPE A OR TYPE B
JOINT REHABILITATION

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

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+



DETAILS OF TYPE B
JOINT REHABILITATION

** 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.

REFER TO SECTION 509 OF THE STANDARD SPECIFICATIONS FOR ADDITIONAL INFORMATION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

SPECIAL DETAILS

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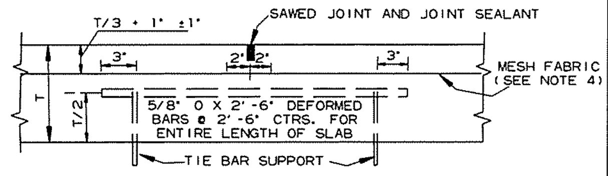
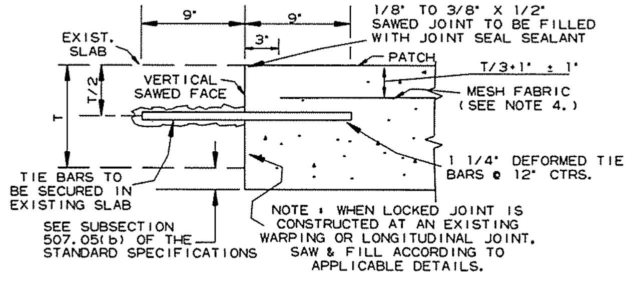


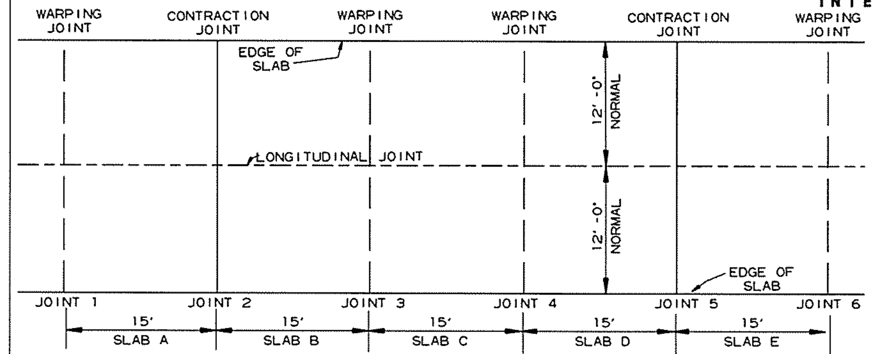
SECTION A-A

TIED LONGITUDINAL JOINT



SECTION D-D

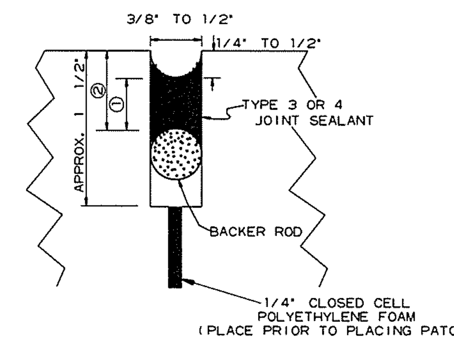
LOCKED JOINT



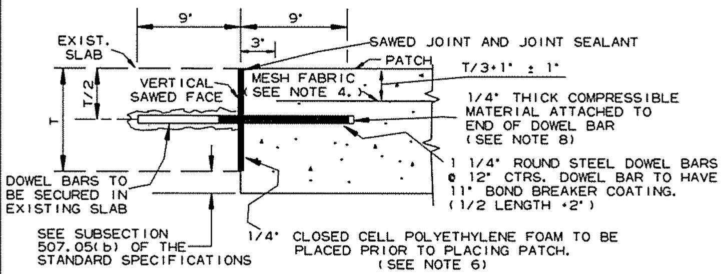
PLAN OF PAVEMENT REPAIR
(FULL SLABS)

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		

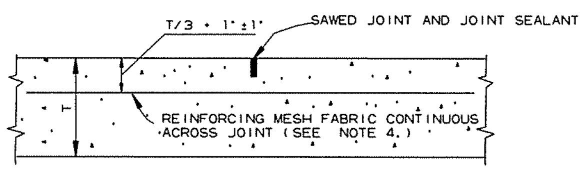


DETAIL OF SAWED FREE TRANSVERSE & FREE LONGITUDINAL JOINT



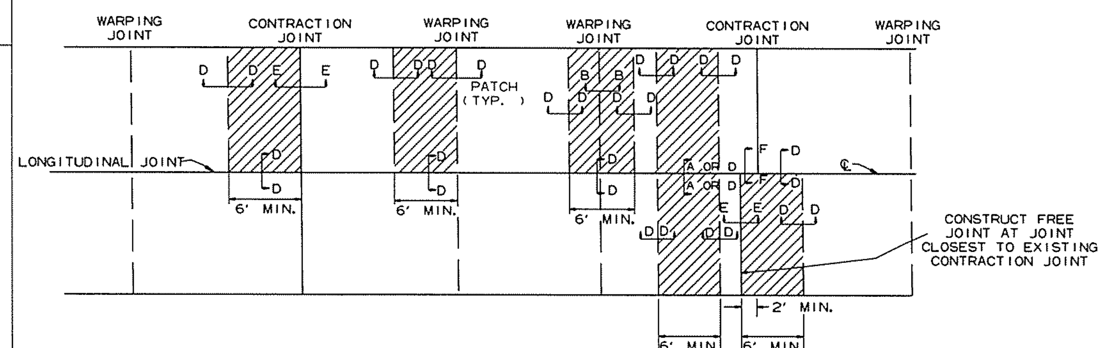
SECTION E-E

FREE TRANSVERSE JOINT

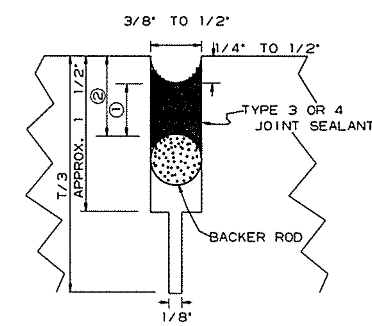


SECTION B-B

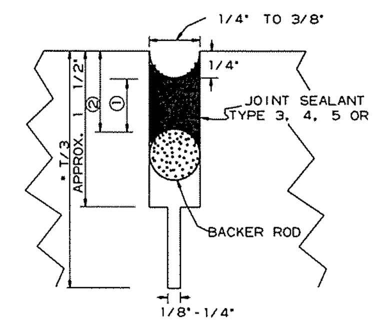
WARPING JOINT



PLAN OF PAVEMENT REPAIR
(PARTIAL SLABS)

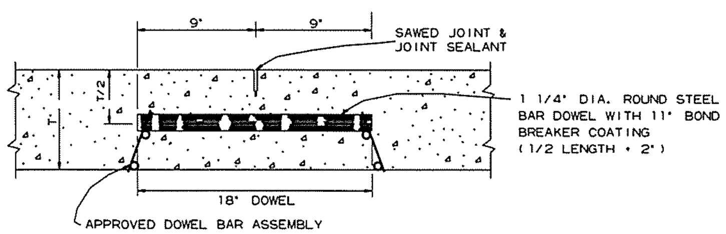


DETAIL OF SAWED CONTRACTION JOINT

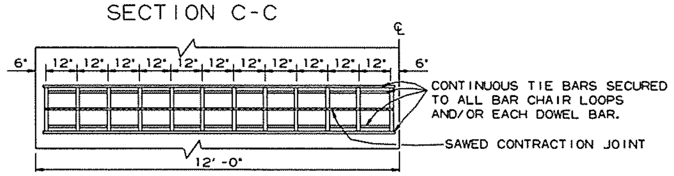


*NOTE: T/3 SAW CUT NOT REQUIRED FOR LONGITUDINAL CONSTRUCTION JOINT.

DETAIL OF SAWED TIED LONGITUDINAL JOINT AND WARPING JOINT



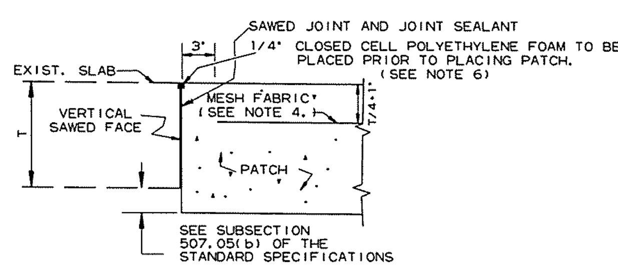
SECTION C-C



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

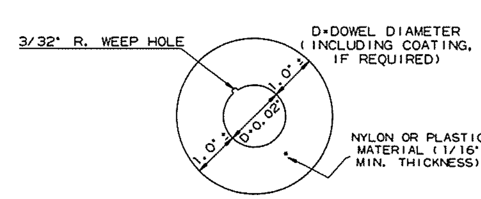
NOTE: FOR 20' PAVEMENT USE 20 DOWELS @ 12" CTRS. WITH 6" SPACING FROM C.L. AND EDGE OF SLAB TO FIRST BAR. FOR 15' PAVEMENT USE 15 DOWELS @ 12" CTRS. WITH 6" SPACING FROM C.L. AND EDGE OF SLAB TO FIRST BAR. FOR 26' PAVEMENT USE 26 DOWELS @ 12" CTRS. WITH 6" SPACING FROM C.L. AND EDGE OF SLAB TO FIRST 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



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

JOINT CONFIGURATION FOR TYPE 3 OR 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

JOINT CONFIGURATION FOR TYPE 5 OR 7 JOINT SEALANT

JOINT WIDTH	SEALANT THICKNESS ①	BACKER ROD DIAMETER	BACKER ROD PLACEMENT DEPTH ②
INCHES			
1/4	1/2	3/8	3/4
3/8	3/4	1/2	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 FENCE (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. 1/4" 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 OF 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 1/4" WILL BE ALLOWED FOR THE TILT AND SKEW.

STATE OF ARKANSAS
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No.10887
SCOTT P. THORNSBERRY
6-21-2016

DETAILS OF PORTLAND CEMENT CONCRETE PAVEMENT PATCHING (MAIN LANES)

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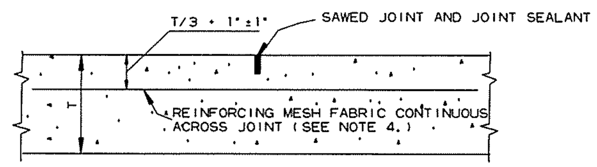
				JOB NO.		BB0202	19	235

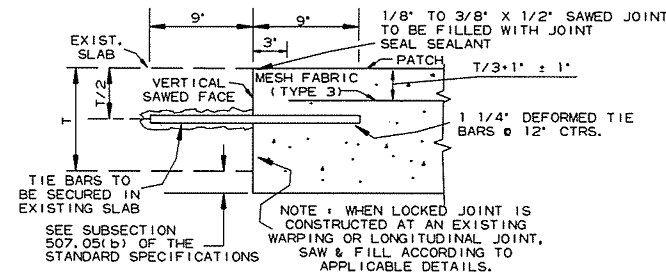
Michael Baker INTERNATIONAL

② SPECIAL DETAILS

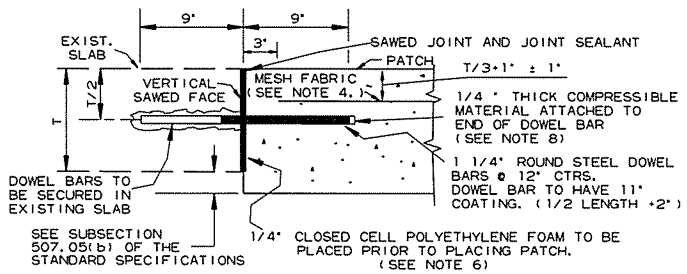


SECTION B-B

WARPING JOINT

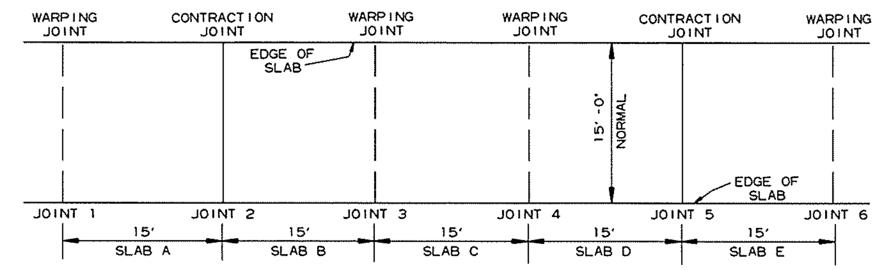


SECTION D-D



SECTION E-E

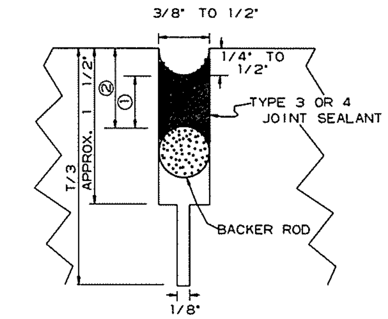
FREE TRANSVERSE JOINT



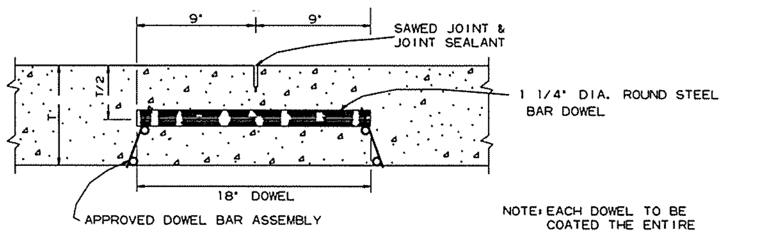
PLAN OF PAVEMENT REPAIR
(FULL SLABS)

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		

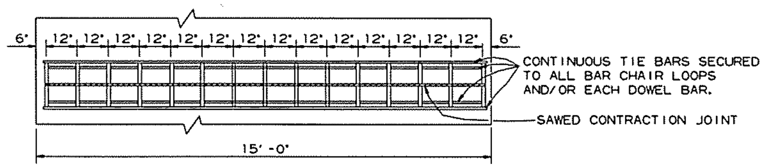


DETAIL OF SAWED CONTRACTION JOINT



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

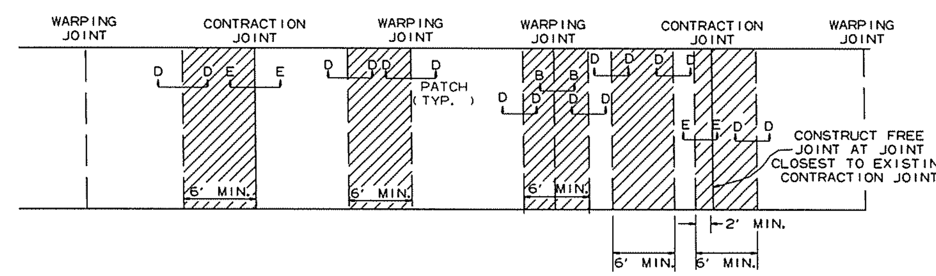
SECTION C-C



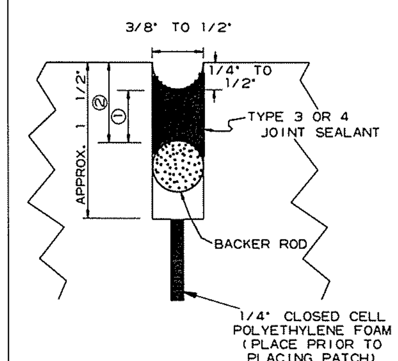
15' PAVEMENT
15 DOWELS
PLAN - CONTRACTION JOINT

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

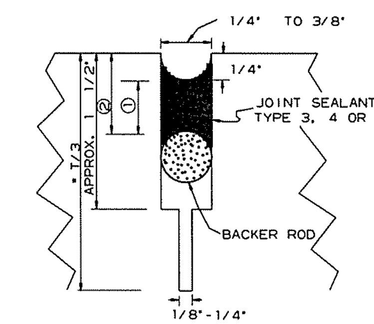
CONTRACTION JOINT DETAILS



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

NOTES FOR PAVEMENT REPAIR

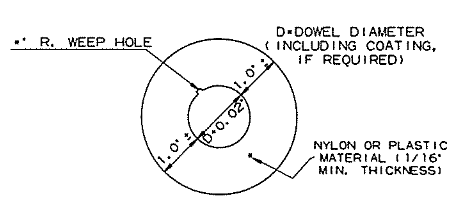
1. EXACT SIZE AND LOCATION OF AREA TO BE REPAIRED SHALL BE DETERMINED BY THE ENGINEER. ALL PATCHES SHALL EXTEND ACROSS THE FULL WIDTH OF THE SLAB AS SHOWN IN THESE DETAILS.
2. THE FINAL SURFACE FINISH FOR PATCHES SHALL MATCH THAT OF THE EXISTING PAVEMENT.
3. WHEN AREA TO BE REPAIRED INCLUDES AN EXISTING 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 ±INCH. MESH FABRIC SHALL BE 12 X 12 - W4 X W4 WELDED WIRE FENCE (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. 1/4" 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 OF 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 1/4" WILL BE ALLOWED FOR THE TILT AND SKEW.

JOINT CONFIGURATION FOR TYPE 3 OR 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

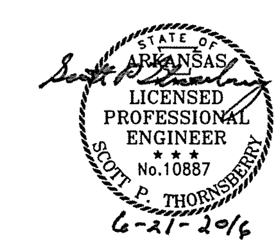
JOINT CONFIGURATION FOR TYPE 5 JOINT SEALANT

JOINT WIDTH	SEALANT THICKNESS ①	BACKER ROD DIAMETER	BACKER ROD PLACEMENT DEPTH ②
INCHES			
1/4	1/2	3/8	3/4
3/8	3/4	1/2	1



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



DETAILS OF PORTLAND CEMENT CONCRETE PAVEMENT PATCHING FOR RAMPS

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Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	20	235

(2) TEMPORARY EROSION CONTROL DETAILS

APPROXIMATE 100 YR FLOODPLAIN LIMITS

EXISTING R/W & C/A

STA. 179+50 LT.
SEDIMENT BASIN (TYPE E-14)
202 CU. YDS.

STA. 178+40 TO STA. 180+00 LT.
160 L.F. SILT FENCE (TYPE E-11)

C.L. TEMPORARY RAMP A65A

C.L. I-530

C.L. TEMPORARY RAMP D65

STA. 175+14.73
BEGIN JOB BB0202
LOG MILE 34.99

STA. 175+60 TO STA. 180+00 RT.
440 L.F. SILT FENCE (TYPE E-11)

STA. 178+50 1EACH
SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)

STA. 178+50 RT.
SEDIMENT BASIN (TYPE E-14)
202 CU. YDS.

APPROXIMATE 100 YR FLOODPLAIN LIMITS

LEGEND

- E-5 = SAND BAG DITCH CHECKS
- E-7 = DROP INLET SILT FENCE
- E-11 = SILT FENCE
- E-14 = SEDIMENT BASIN (TYPE E-14)
- = CONSTRUCTION AREA
- = TEMPORARY SEEDING

REVISIONS

DATE OF REVISION	REVISION

EROSION CONTROL MEASURES PLACED IN STAGE IA SHALL BE RETAINED THROUGHOUT STAGE IB OR UNTIL FINAL STABILIZATION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE IA

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Michael Baker INTERNATIONAL

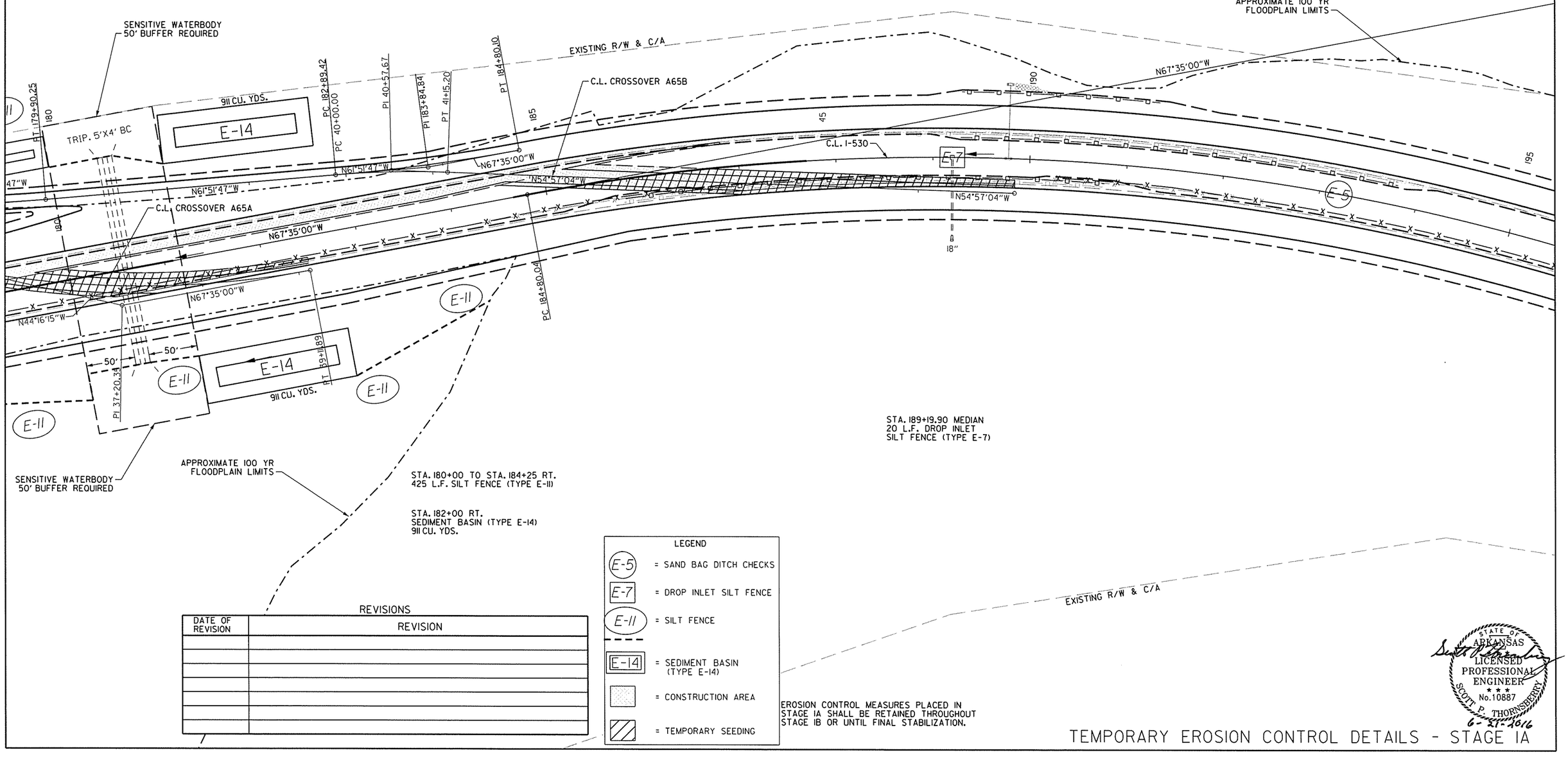
DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	21	235

(2) TEMPORARY EROSION CONTROL DETAILS

STA. 180+00 TO STA. 181+16 LT.
116 L.F. SILT FENCE (TYPE E-11)

STA. 182+00 LT.
SEDIMENT BASIN (TYPE E-14)
911 CU. YDS.



STA. 180+00 TO STA. 184+25 RT.
425 L.F. SILT FENCE (TYPE E-11)

STA. 182+00 RT.
SEDIMENT BASIN (TYPE E-14)
911 CU. YDS.

STA. 189+19.90 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- E-5 = SAND BAG DITCH CHECKS
- E-7 = DROP INLET SILT FENCE
- E-11 = SILT FENCE
- E-14 = SEDIMENT BASIN (TYPE E-14)
- = CONSTRUCTION AREA
- = TEMPORARY SEEDING

EROSION CONTROL MEASURES PLACED IN STAGE IA SHALL BE RETAINED THROUGHOUT STAGE IB OR UNTIL FINAL STABILIZATION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
SCOTT P. THORNSBERRY
No.10887
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE IA

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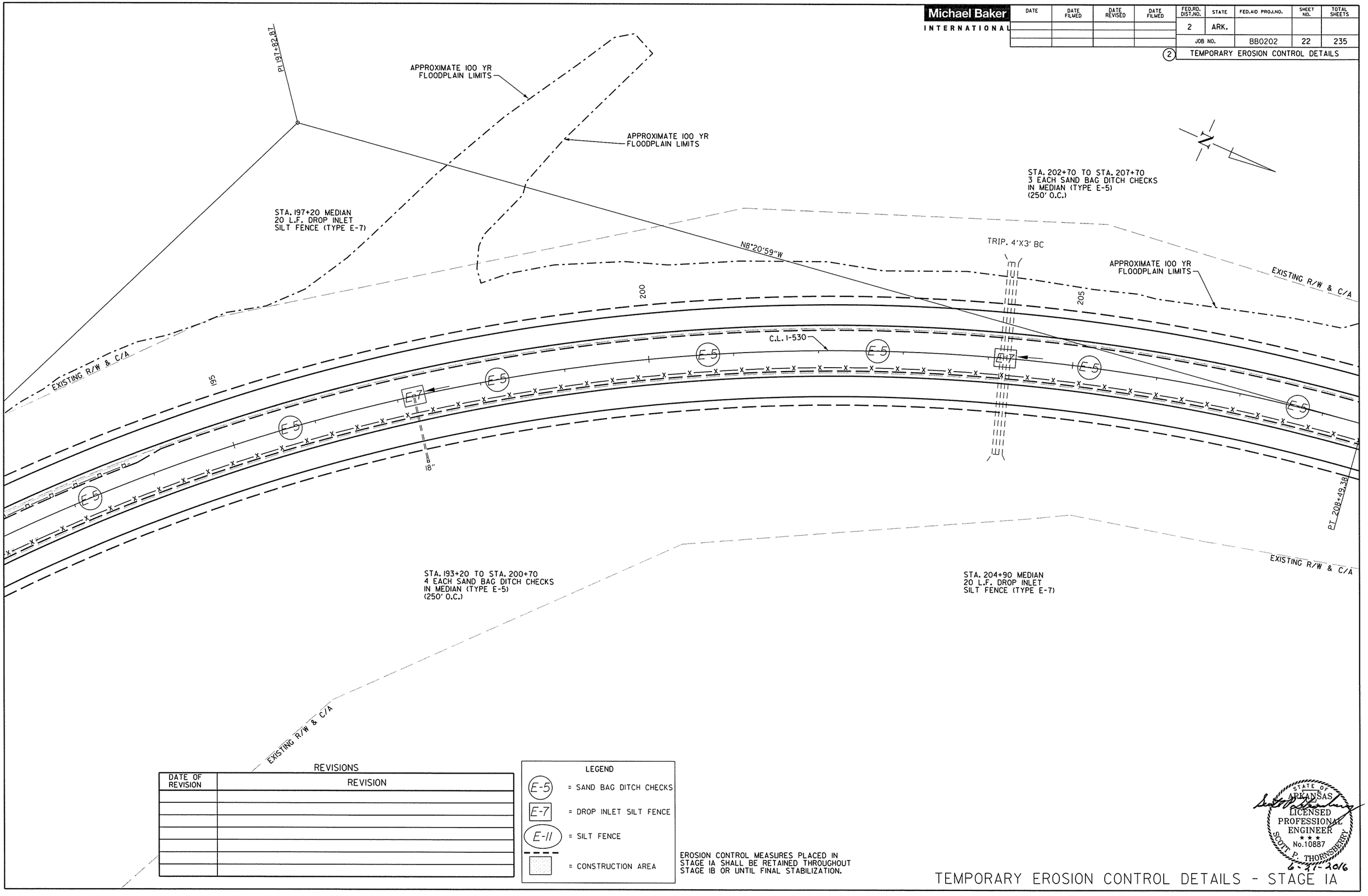
Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	22	235

(2) TEMPORARY EROSION CONTROL DETAILS



REVISIONS

DATE OF REVISION	REVISION

LEGEND

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

EROSION CONTROL MEASURES PLACED IN STAGE IA SHALL BE RETAINED THROUGHOUT STAGE IB OR UNTIL FINAL STABILIZATION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
SCOTT P. THORNSBERRY
No.10887
6-27-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE IA

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Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	23	235

(2) TEMPORARY EROSION CONTROL DETAILS

APPROXIMATE 100 YR. FLOODPLAIN LIMITS

STA. 213+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

STA. 217+00
1 EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)

EXISTING R/W & C/A

EXISTING R/W & C/A

210 18" 215 220

E15 E5 E7 E15 E5 N08°20'59"W

EXISTING R/W & C/A

EXISTING R/W & C/A

STA. 210+00 TO STA. 215+00
3 EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)
(250' O.C.)

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- E-5 = SAND BAG DITCH CHECKS
- E-7 = DROP INLET SILT FENCE
- E-11 = SILT FENCE
- = CONSTRUCTION AREA
- = TEMPORARY SEEDING

EROSION CONTROL MEASURES PLACED IN STAGE IA SHALL BE RETAINED THROUGHOUT STAGE IB OR UNTIL FINAL STABILIZATION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-27-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE IA

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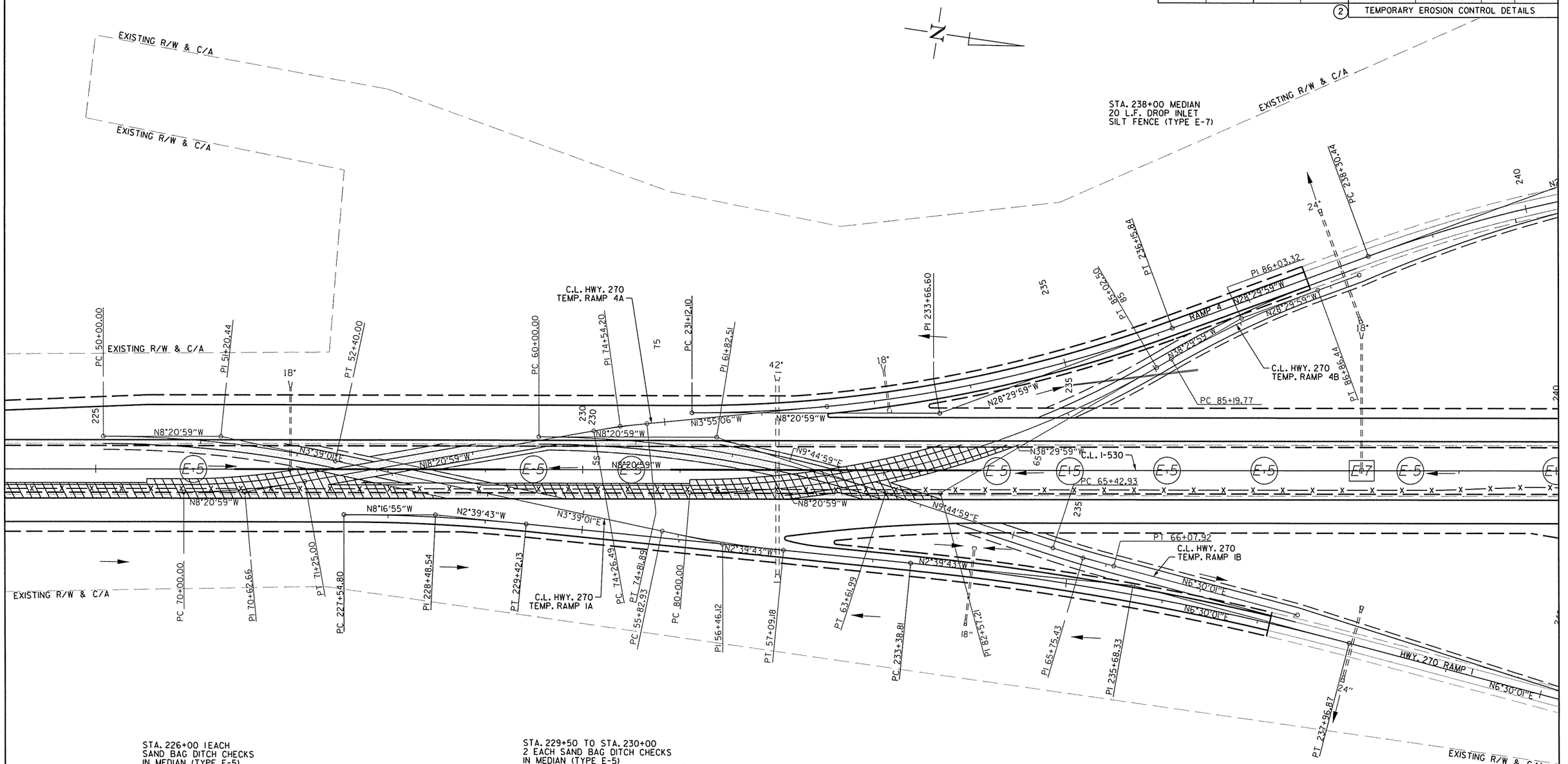
Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	24	235

(2) TEMPORARY EROSION CONTROL DETAILS



REVISIONS

DATE OF REVISION	REVISION

LEGEND

- E-5 = SAND BAG DITCH CHECKS
- E-7 = DROP INLET SILT FENCE
- E-11 = SILT FENCE
- = CONSTRUCTION AREA
- = TEMPORARY SEEDING

EROSION CONTROL MEASURES PLACED IN STAGE IA SHALL BE RETAINED THROUGHOUT STAGE IB OR UNTIL FINAL STABILIZATION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
SCOTT P. THORNSBERRY
No.10887
6-27-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE IA

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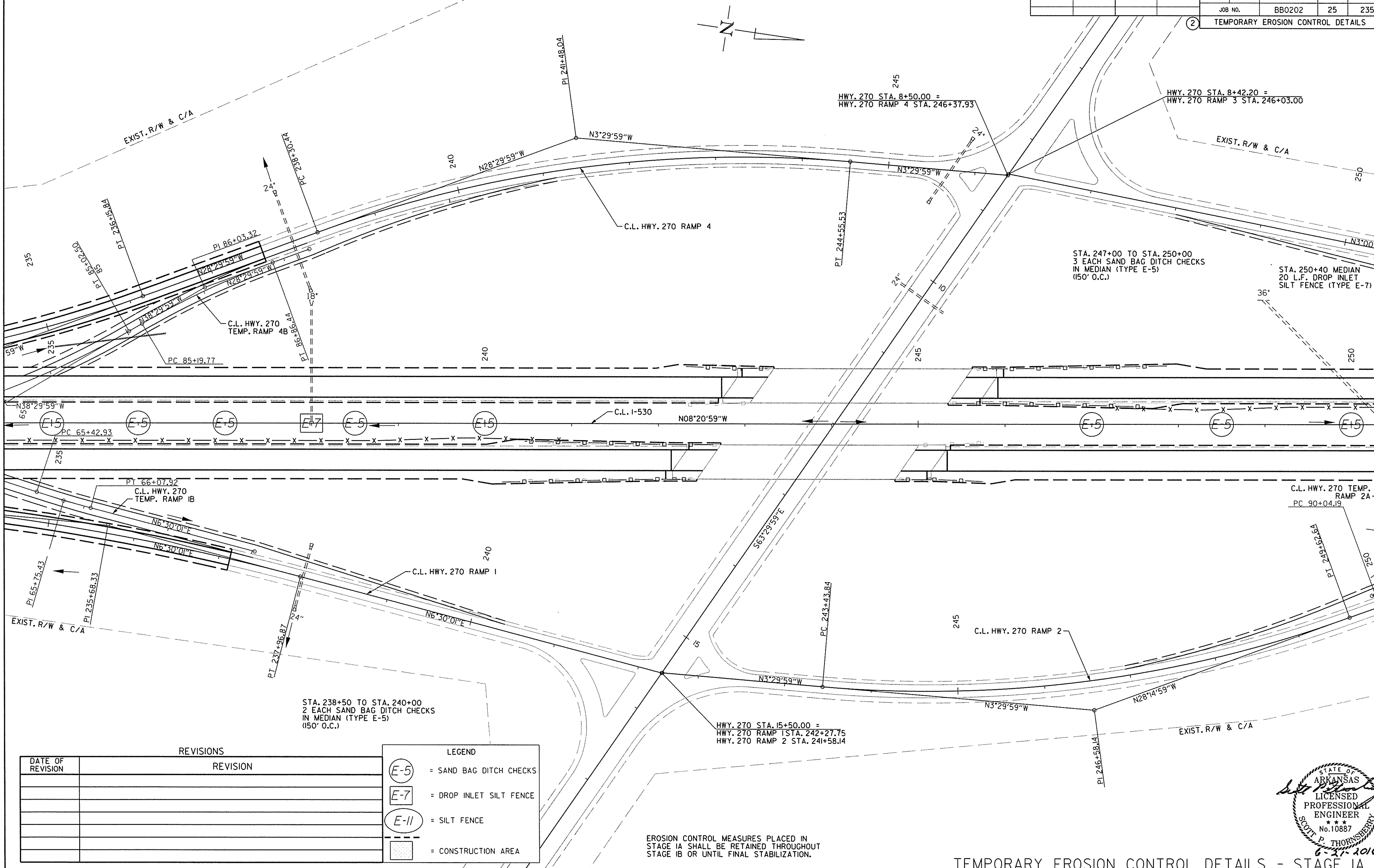
Michael Baker INTERNATIONAL	DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
					2	ARK.			
					JOB NO.		BB0202	25	235
					(2)	TEMPORARY EROSION CONTROL DETAILS			



EROSION CONTROL MEASURES PLACED IN STAGE IA SHALL BE RETAINED THROUGHOUT STAGE IB OR UNTIL FINAL STABILIZATION.

LEGEND

- E-5 = SAND BAG DITCH CHECKS
- 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 6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE IA

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Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	26	235

(2) TEMPORARY EROSION CONTROL DETAILS

STA. 251+00 TO STA. 252+50
3 EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)
(75' O.C.)

STA. 253+00 TO STA. 253+75
2 EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)
(75' O.C.)

STA. 258+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

EXIST. R/W & C/A

C.L. HWY. 270 RAMP 3

RAMP 3

N3°00'17"E

PI 112+20.83

PC 254+37.80

PC 113+54.26

PC 111+29.78

C.L. HWY. 270
TEMP. RAMP 3A
PT 113+10.92

NI7°45'46"E

C.L. I-530

N39°38'39"W

PI 94+29.32

NI4°41'23"W

PT 96+75.25

PI 257+78.60

5'x3' BC

C.L. HWY. 270
TEMP. RAMP 3B

PI 104+10.06

PT 104+77.21

PT 261+06.96

N6°04'40"W

N23°45'43"W

N23°06'16"W

N33°52'51"W

N30°53'00"W

N27°15'16"W

N8°20'59"W

NI7°29'46"E

NI8°59'55"W

NI7°45'59"W

PC 90+04.19

C.L. HWY. 270
TEMP. RAMP 2A
PT 91+66.97

PT 249+62.64

N28°14'59"W

N32°18'39"W

RAMP 2

PI 90+85.85

PC 91+76.16

PC 253+36.39

PI 253+30.53

PC 251+55.33

PT 255+04.76

PC 100+00.00
PI 115+90.39

PI 101+01.39

C.L. HWY. 270 RAMP 2

C.L. HWY. 270
TEMP. RAMP 2B

PT 102+01.43

PT 118+10.44

PI 259+07.11

PC 103+42.51

PC 123+68.00

PI 125+01.88

PT 126+32.71

EXIST. R/W & C/A

APPROXIMATE 100 YR
FLOODPLAIN LIMITS

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- E-7 = DROP INLET SILT FENCE
- (E-11) = SILT FENCE
- = CONSTRUCTION AREA
- = TEMPORARY SEEDING

EROSION CONTROL MEASURES PLACED IN STAGE IA SHALL BE RETAINED THROUGHOUT STAGE IB OR UNTIL FINAL STABILIZATION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-27-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE IA

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Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

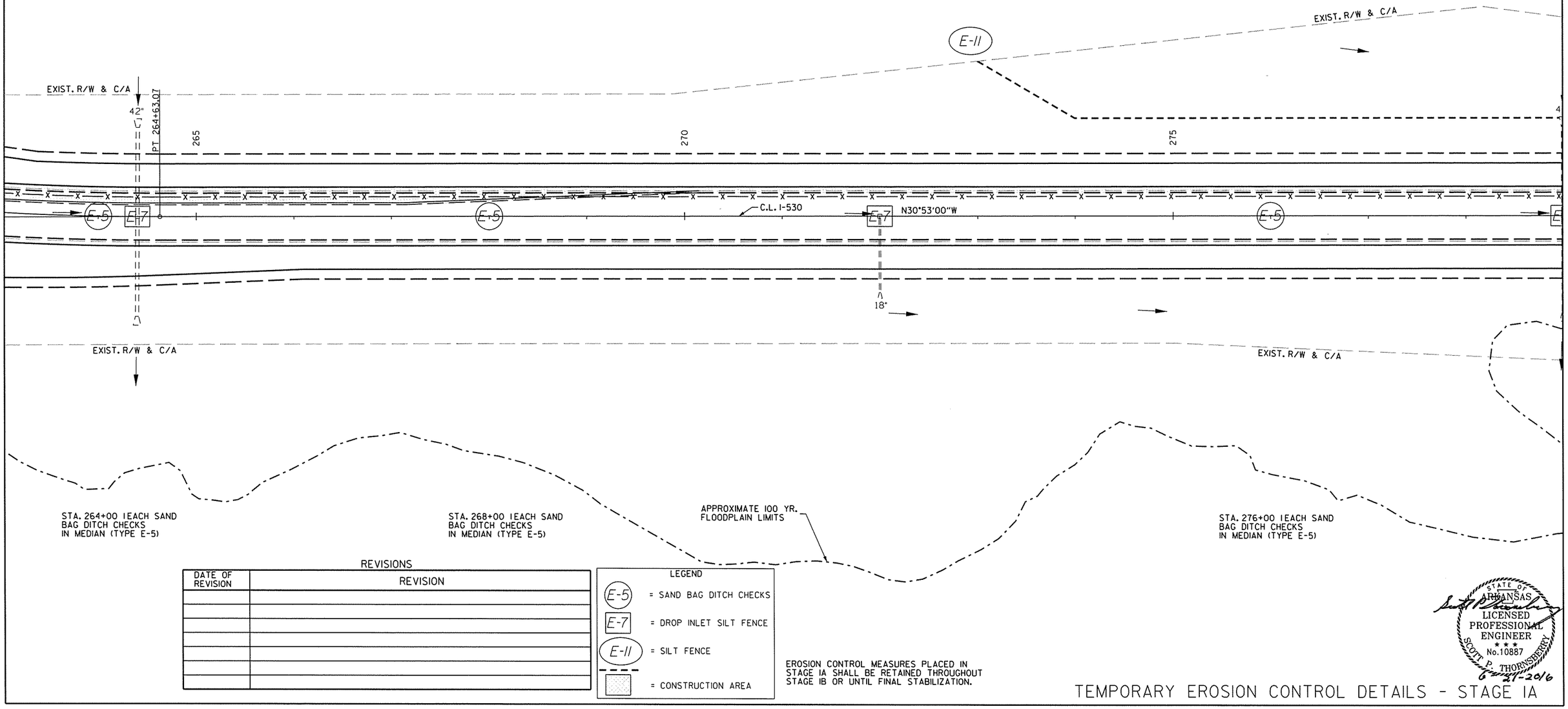
FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	27	235

(2) TEMPORARY EROSION CONTROL DETAILS

STA. 264+40 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

STA. 272+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

STA. 273+00 TO STA. 279+00 LT.
612 L.F. SILT FENCE (TYPE E-11)



REVISIONS

DATE OF REVISION	REVISION

LEGEND

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

EROSION CONTROL MEASURES PLACED IN STAGE IA SHALL BE RETAINED THROUGHOUT STAGE IB OR UNTIL FINAL STABILIZATION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE IA

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Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	28	235

(2) TEMPORARY EROSION CONTROL DETAILS

APPROXIMATE 100 YR. FLOODPLAIN LIMITS

STA. 279+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

STA. 283+45 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

STA. 290+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

EXIST. R/W & C/A

DBL 9'x5' BC

42"

E-11

280

285

290

E-7 E-5 E-7 C.L. I-530 N30°53'00"W E-5 E-7 E-5

18"

EXIST. R/W & C/A

EXIST. R/W & C/A

APPROXIMATE 100 YR. FLOODPLAIN LIMITS

STA. 280+00 1EACH
SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)

STA. 289+00 1EACH
SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)

STA. 294+00 1EACH
SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)

REVISIONS

DATE OF REVISION	REVISION

LEGEND

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

EROSION CONTROL MEASURES PLACED IN STAGE IA SHALL BE RETAINED THROUGHOUT STAGE IB OR UNTIL FINAL STABILIZATION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-24-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE IA

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Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	29	235

(2) TEMPORARY EROSION CONTROL DETAILS

APPROXIMATE 100 YR. FLOODPLAIN LIMITS

STA. 296+75 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

STA. 303+24 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

EXIST. R/W & C/A

EXIST. R/W & C/A

8'X5' BC

295

300

305

E-5

E-7

E-5

C.L. I-530

E-7

E-5

E-5

N30°53'00"W

18°

EXIST. R/W & C/A

EXIST. R/W & C/A

STA. 299+00 IEACH SAND BAG
DITCH CHECKS
IN MEDIAN (TYPE E-5)

STA. 304+00 IEACH SAND BAG
DITCH CHECKS
IN MEDIAN (TYPE E-5)

STA. 309+00 IEACH SAND BAG
DITCH CHECKS
IN MEDIAN (TYPE E-5)

REVISIONS

DATE OF REVISION	REVISION

LEGEND

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

EROSION CONTROL MEASURES PLACED IN STAGE IA SHALL BE RETAINED THROUGHOUT STAGE IB OR UNTIL FINAL STABILIZATION.

APPROXIMATE 100 YR. FLOODPLAIN LIMITS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-27-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE IA

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Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

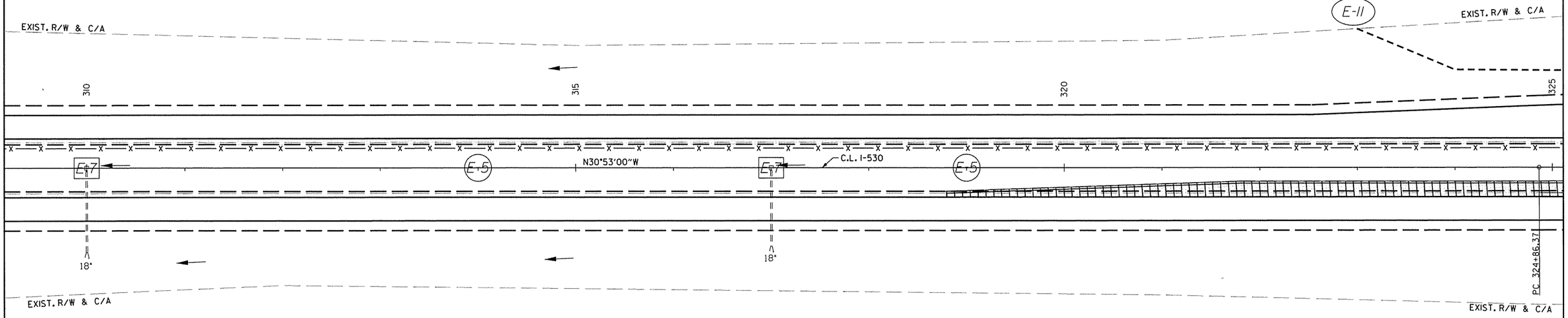
FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	30	235

(2) TEMPORARY EROSION CONTROL DETAILS

STA. 310+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

STA. 317+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

STA. 323+00 TO STA. 327+18 LT.
431 L.F. SILT FENCE (TYPE E-11)



STA. 314+00 1EACH
SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)

STA. 319+00 1EACH
SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- E-5 = SAND BAG DITCH CHECKS
- E-7 = DROP INLET SILT FENCE
- E-11 = SILT FENCE
- = CONSTRUCTION AREA
- = TEMPORARY SEEDING

EROSION CONTROL MEASURES PLACED IN STAGE IA SHALL BE RETAINED THROUGHOUT STAGE IB OR UNTIL FINAL STABILIZATION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-24-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE IA

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Michael Baker INTERNATIONAL

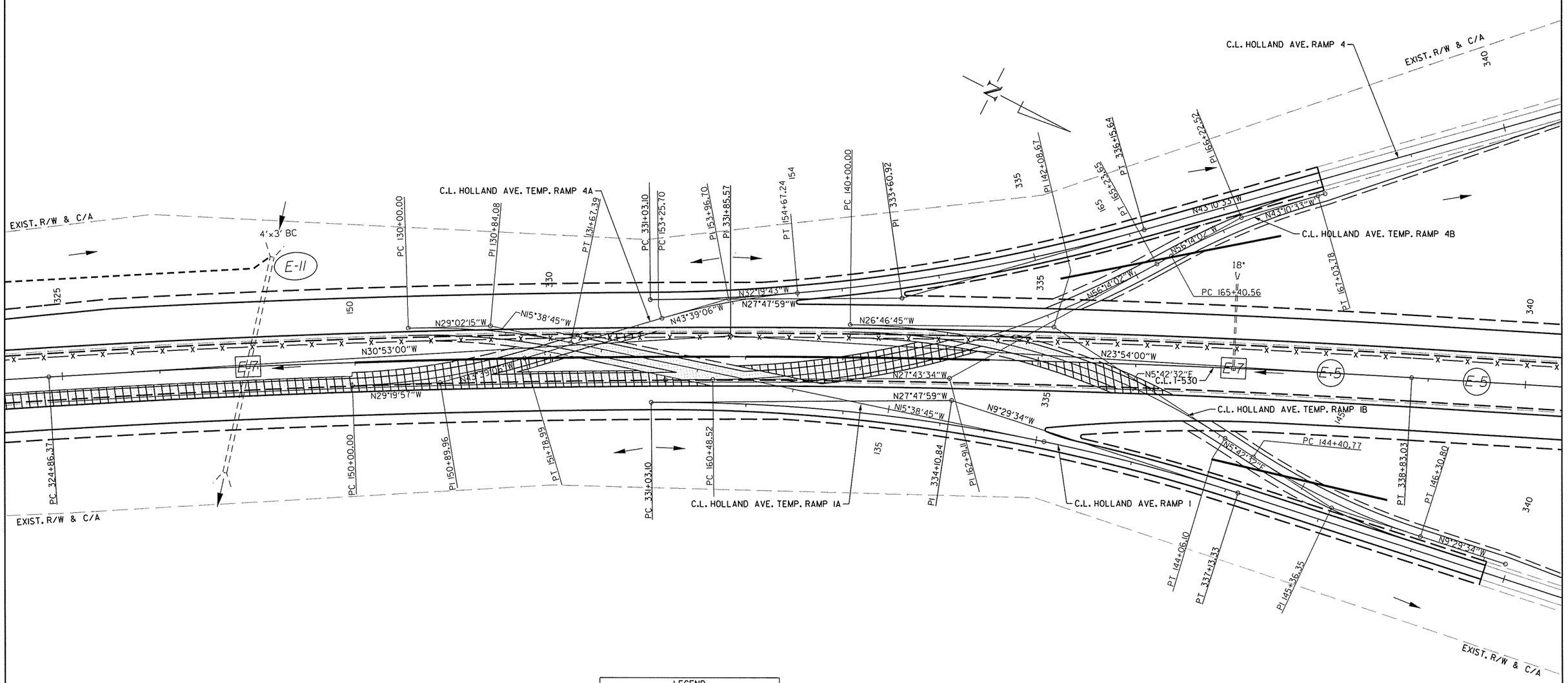
DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	31	235

(2) TEMPORARY EROSION CONTROL DETAILS

STA. 326+90 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

STA. 337+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)



STA. 338+00 TO STA. 339+50
2 EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)
(150' O.C.)

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- E-7 = DROP INLET SILT FENCE
- (E-11) = SILT FENCE
- = CONSTRUCTION AREA
- = TEMPORARY SEEDING

EROSION CONTROL MEASURES PLACED IN STAGE IA SHALL BE RETAINED THROUGHOUT STAGE IB OR UNTIL FINAL STABILIZATION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-17-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE IA

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Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	32	235

(2) TEMPORARY EROSION CONTROL DETAILS

APPROXIMATE 100 YR. FLOODPLAIN LIMITS

EXIST. R/W & C/A

PI 344+45.72

345

N23°53'59"W

4'X4' BC

N43°10'33"W

EXIST. R/W & C/A

340

PC 342+02.47

C.L. HOLLAND AVE. RAMP 4

APPROXIMATE 100 YR. FLOODPLAIN LIMITS

PT 346+84.37

(2) 36"

C.L. HOLLAND AVE.

STA. 341+00 1EACH SAND BAG DITCH CHECKS IN MEDIAN (TYPE E-5)

PT 167+03.18

340

345

350

E-5

E-5

E-5

E-5

E-5

E-5

E-5

E-7

C.L. I-530

N23°54'00"W

145

20

144+40.77

PT 338+83.03

PT 146+30.80

C.L. HOLLAND AVE. TEMP. RAMP 1B

340

N9°29'34"W

N9°29'34"W

EXIST. R/W & C/A

B

18"

S89°06'00"E

345

PC 346+41.55

C.L. HOLLAND AVE. RAMP 2

STA. 348+00 1EACH SAND BAG DITCH CHECKS IN MEDIAN (TYPE E-5)

PT 349+95.71

350

STA. 350+00 TO STA. 352+00 3 EACH SAND BAG DITCH CHECKS IN MEDIAN (TYPE E-5) (100' O.C.)

N38°04'00"W

18"

N23°54'00"W

N23°54'00"W

N38°04'00"W

PI 348+19.54

HOLLAND AVE. STA. 23+50.00 = RAMP 1 STA. 344+73.49
RAMP 2 STA. 344+19.54

EXIST. R/W & C/A

EROSION CONTROL MEASURES PLACED IN STAGE 1A SHALL BE RETAINED THROUGHOUT STAGE 1B OR UNTIL FINAL STABILIZATION.

C.L. HOLLAND AVE. RAMP 3

N6°39'35"W

N6

EXIST. R/W & C/A

15

350

N

STA. 353+00 MEDIAN 20 L.F. DROP INLET SILT FENCE (TYPE E-7)

REVISIONS

DATE OF REVISION	REVISION

LEGEND

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

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE 1A

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Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	33	235

(2) TEMPORARY EROSION CONTROL DETAILS

APPROXIMATE 100 YR. FLOODPLAIN LIMITS

EXIST. R/W & C/A

C.L. HOLLAND AVE. RAMP 3

STA. 355+00 TO STA. 356+28 LT.
133 L.F. SILT FENCE (TYPE E-II)

N6°39'35"W

4'×4' BC

355

E-II

PI 192+55.51

PC 356+56.30

DBL. 6'×5' BC

PC 193+86.92

C.L. HOLLAND AVE. TEMP. RAMP 3A

N7°59'32"E

PC 191+63.43

PT 193+46.58

PI 174+89.38

174

360

PI 360+07.53

PT 176+65.56

PC 361+10.93

C.L. HOLLAND AVE. TEMP. RAMP 3B

EXIST. R/W & C/A

PI 183+81.97

18"

PT 363+51.00

PT 184+53.35

205

365

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

C.L. I-530

N23°54'00"W

N6°39'35"W

N13°23'22"W

N27°30'03"W

N27°35'56"W

PT 172+80.01

N52°42'41"W

N39°03'26"W

N23°54'00"W

N38°04'00"W

N29°33'03"W

N13°23'22"W

N30°27'24"W

C.L. HOLLAND AVE. TEMP. RAMP 2A

PI 195+91.56

PI 358+78.42

PC 180+00.00

PI 180+59.55

PT 181+18.83

PT 360+54.60

PT 197+85.57

PC 183+10.12

PC 204+66.97

PI 205+74.44

PT 206+80.31

EXIST. R/W & C/A

PC 170+36.95

PI 171+88.98

PC 173+02.41

PC 357+00.43

18"

C.L. HOLLAND AVE. TEMP. RAMP 2B

C.L. HOLLAND AVE. RAMP 2

EXIST. R/W & C/A

STA. 354+00 TO STA. 356+00
3 EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)
(100' O.C.)

APPROXIMATE 100 YR. FLOOD LIMITS

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- E-5 = SAND BAG DITCH CHECKS
- E-7 = DROP INLET SILT FENCE
- E-II = SILT FENCE
- = CONSTRUCTION AREA
- = TEMPORARY SEEDING

EROSION CONTROL MEASURES PLACED IN STAGE IA SHALL BE RETAINED THROUGHOUT STAGE IB OR UNTIL FINAL STABILIZATION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
SCOTT P. THORNSBERRY
No.10887
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE IA

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Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

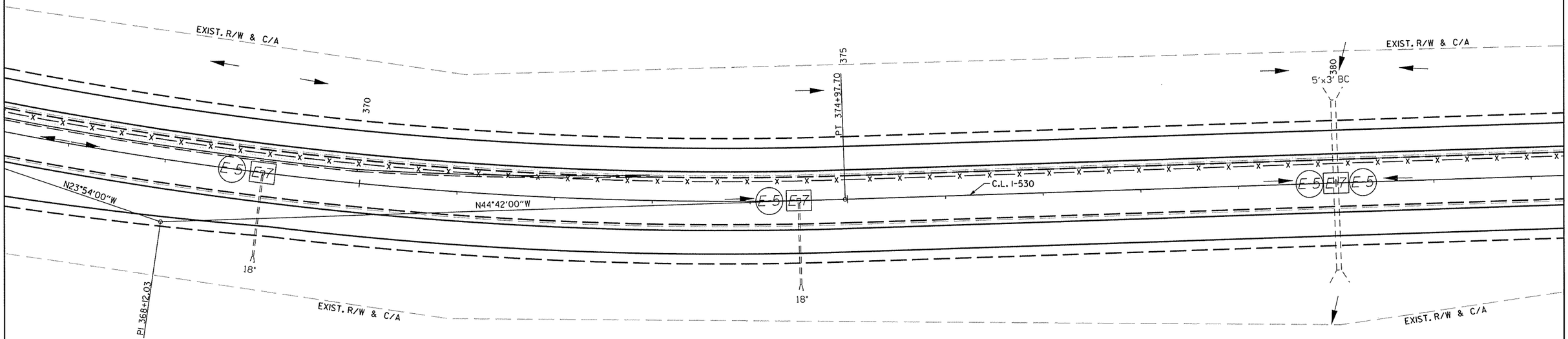
FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	34	235

(2) TEMPORARY EROSION CONTROL DETAILS

STA. 369+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

STA. 375+50 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

STA. 380+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)



STA. 368+70 1EACH
SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)

STA. 375+20 1EACH
SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)

STA. 379+70 1EACH
SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)

STA. 380+30 1EACH
SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5 = SAND BAG DITCH CHECKS

E-7 = DROP INLET SILT FENCE

E-11 = SILT FENCE

= CONSTRUCTION AREA

EROSION CONTROL MEASURES PLACED IN STAGE IA SHALL BE RETAINED THROUGHOUT STAGE IB OR UNTIL FINAL STABILIZATION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-27-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE IA

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Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	35	235

(2) TEMPORARY EROSION CONTROL DETAILS

STA. 386+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

STA. 393+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

EXIST. R/W & C/A

385 390 395

E-5 E-7 N44°42'00"W C.L. I-530 E-5 E-7 E15 E-5

18" 18"

EXIST. R/W & C/A EXIST. R/W & C/A

STA. 385+75 1EACH
SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)

STA. 392+75 1EACH
SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)

STA. 395+00 1EACH
SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)

REVISIONS

DATE OF REVISION	REVISION

LEGEND

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

EROSION CONTROL MEASURES PLACED IN STAGE IA SHALL BE RETAINED THROUGHOUT STAGE IB OR UNTIL FINAL STABILIZATION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-27-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE IA

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Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	36	235

(2) TEMPORARY EROSION CONTROL DETAILS

APPROXIMATE 100 YR. FLOODPLAIN LIMITS

STA. 397+50 1EACH
SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)

STA. 402+00 TO STA. 407+00
3 EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)
(250' O.C.)

EXIST. R/W & C/A

400

36"

405

DBL 6'x5' BC

410

EXIST. R/W & C/A

E-5 E-7 N44°42'00"W E-5 E-5 C.L. I-530 E-7 E-5

18"

EXIST. R/W & C/A

EXIST. R/W & C/A

STA. 400+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

APPROXIMATE 100 YR. FLOODPLAIN LIMITS

STA. 406+50 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

REVISIONS

DATE OF REVISION	REVISION

LEGEND

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

EROSION CONTROL MEASURES PLACED IN STAGE IA SHALL BE RETAINED THROUGHOUT STAGE IB OR UNTIL FINAL STABILIZATION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE IA

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WORKSPACE: Leonard.Speed
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Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	37	235

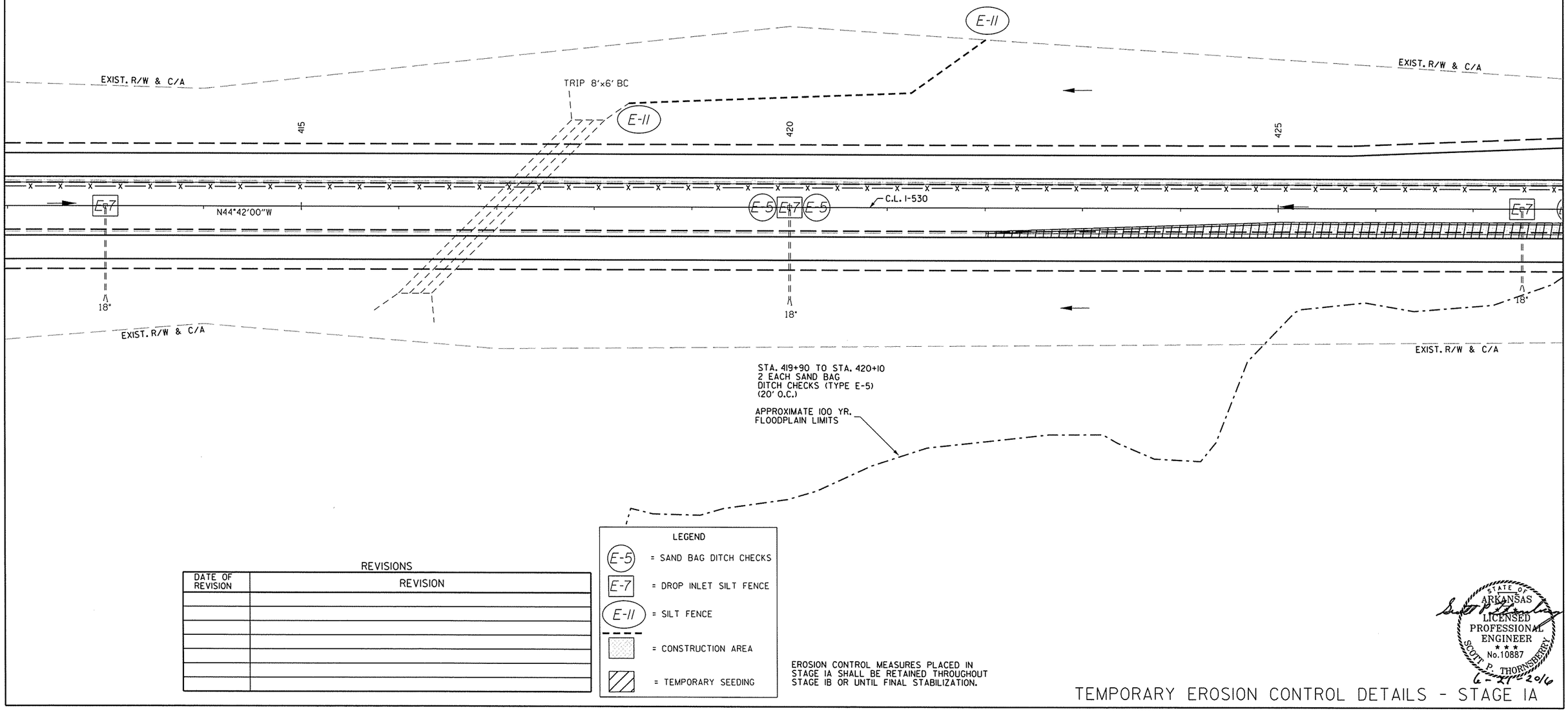
(2) TEMPORARY EROSION CONTROL DETAILS

STA. 413+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

STA. 420+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

STA. 427+50 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

STA. 418+35 TO STA. 422+00 LT.
383 L.F. SILT FENCE (TYPE E-11)



REVISIONS

DATE OF REVISION	REVISION

LEGEND

- E-5 = SAND BAG DITCH CHECKS
- E-7 = DROP INLET SILT FENCE
- E-11 = SILT FENCE
- = CONSTRUCTION AREA
- = TEMPORARY SEEDING

EROSION CONTROL MEASURES PLACED IN STAGE IA SHALL BE RETAINED THROUGHOUT STAGE IB OR UNTIL FINAL STABILIZATION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-XX-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE IA

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Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	38	235

(2) TEMPORARY EROSION CONTROL DETAILS

APPROXIMATE 100 YR. FLOODPLAIN LIMITS

STA. 428+00 1EACH SAND BAG DITCH CHECKS IN MEDIAN (TYPE E-5)

STA. 430+00 1EACH SAND BAG DITCH CHECKS IN MEDIAN (TYPE E-5)

STA. 438+00 TO STA. 439+00
2 EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)
(100' O.C.)

EXIST. R/W & C/A

C.L. HWY. 104 TEMP. RAMP 4A

C.L. HWY. 104 RAMP 4

C.L. HWY. 104 TEMP. RAMP 4B

C.L. HWY. 104 TEMP. RAMP 1A

C.L. HWY. 104 RAMP 1

C.L. I-530

PC 210+00.00
PC 230+00.00
PC 233+62.13
PI 234+15.82
PI 234+69.31
PI 436+51.56
PT 244+03.78
PT 438+49.50
PI 245+72.82
PI 443+08.14
PC 441+06.10
PI 222+85.72
PT 245+93.40
PC 244+45.64
PC 220+47.62
PI 230+93.53
PT 231+86.01
PC 240+00.00
PC 435+04.80
PT 212+01.22
PI 436+00.02
PI 242+07.41
PT 436+95.08
PC 213+76.29
PI 214+80.48
PT 215+84.10
PC 440+31.83
PI 442+07.27
PC 225+32.44
PT 225+14.31
PI 226+06.43

N44°42'00"W
N59°34'50"W
N28°36'09"W
N44°42'04"W
N77°00'09"W
N64°42'04"W
N16°41'55"W
N38°59'34"W

8'x5' BC

E-5 E-7 E-11

STA. 435+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

LEGEND

E-5	= SAND BAG DITCH CHECKS
E-7	= DROP INLET SILT FENCE
E-11	= SILT FENCE
	= CONSTRUCTION AREA
	= TEMPORARY SEEDING

REVISIONS

DATE OF REVISION	REVISION

EROSION CONTROL MEASURES PLACED IN STAGE IA SHALL BE RETAINED THROUGHOUT STAGE IB OR UNTIL FINAL STABILIZATION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THOFNSBERRY
6-27-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE IA

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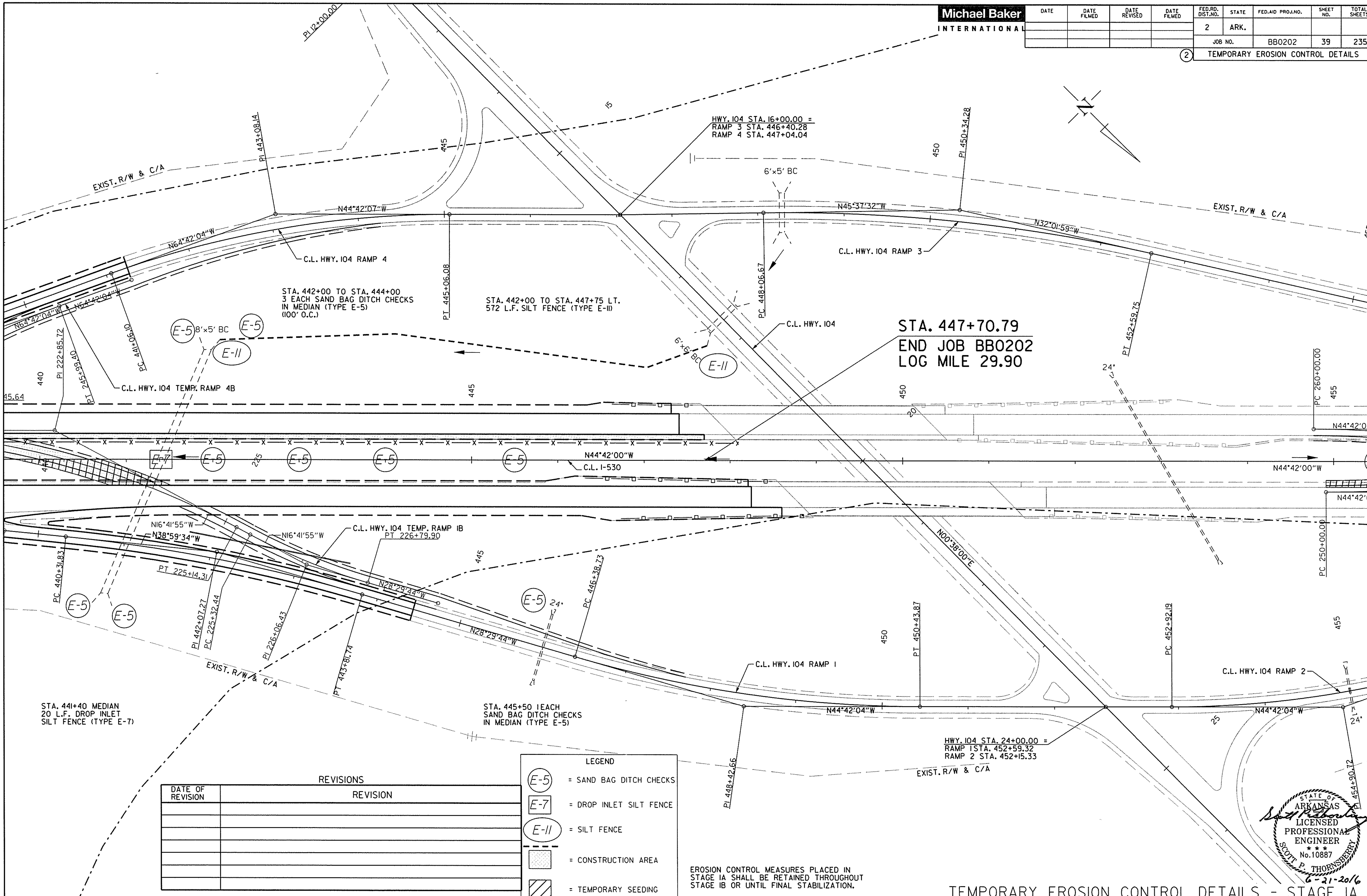
Michael Baker INTERNATIONAL	DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
					2	ARK.			
					JOB NO.		BB0202	39	235

(2) TEMPORARY EROSION CONTROL DETAILS



REVISIONS

DATE OF REVISION	REVISION

LEGEND

Symbol	Description
(E-5)	= SAND BAG DITCH CHECKS
E-7	= DROP INLET SILT FENCE
(E-11)	= SILT FENCE
(shaded area)	= CONSTRUCTION AREA
(hatched area)	= TEMPORARY SEEDING

EROSION CONTROL MEASURES PLACED IN STAGE 1A SHALL BE RETAINED THROUGHOUT STAGE 1B OR UNTIL FINAL STABILIZATION.

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No.10887 SCOTT P. THORNSBERRY
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE 1A

Leonard.Speed 6/20/2016 2:29:30 PM
WORKSPACE: Leonard.Speed
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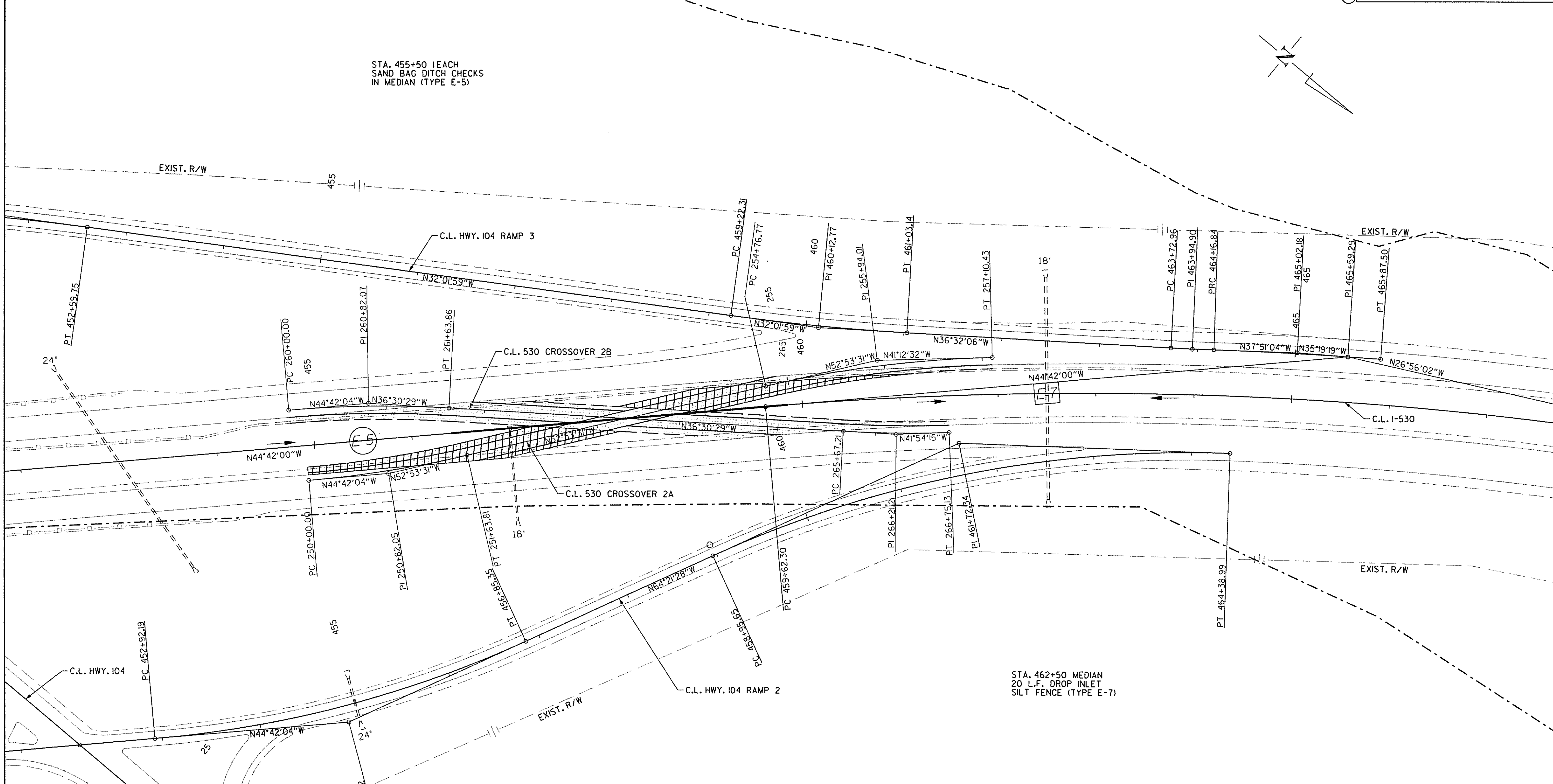
Michael Baker INTERNATIONAL	DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
					2	ARK.			
					JOB NO.		BB0202	40	235
					(2) TEMPORARY EROSION CONTROL DETAILS				



LEGEND

Symbol	Description
E-5	= SAND BAG DITCH CHECKS
E-7	= DROP INLET SILT FENCE
E-11	= SILT FENCE
(dashed line / stippled area)	= CONSTRUCTION AREA
(hatched area)	= TEMPORARY SEEDING

EROSION CONTROL MEASURES PLACED IN STAGE 1A SHALL BE RETAINED THROUGHOUT STAGE 1B OR UNTIL FINAL STABILIZATION.

REVISIONS

DATE OF REVISION	REVISION

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No.10887 SCOTT P. THORNSBERRY
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE 1A

Leonard.Speed 6/20/2016 2:29:31 PM
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Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	41	235

(2) TEMPORARY EROSION CONTROL DETAILS

APPROXIMATE 100 YR FLOODPLAIN LIMITS

EXISTING R/W & C/A

RAMP A65 STA. 176+52 2 EACH SAND BAG DITCH CHECKS IN MEDIAN (TYPE E-5)

C.L. TEMPORARY RAMP A65A

C.L. I-530

C.L. TEMPORARY RAMP D65

RAMP D65 STA. 169+59 2 EACH SAND BAG DITCH CHECKS IN MEDIAN (TYPE E-5)

STA. 175+14.73
BEGIN JOB BB0202
LOG MILE 34.99

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- E-5 = SAND BAG DITCH CHECKS
- E-7 = DROP INLET SILT FENCE
- E-11 = SILT FENCE
- = CONSTRUCTION AREA
- = TEMPORARY SEEDING

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE 1B

Leonard.Speed 6/20/2016 2:29:31 PM
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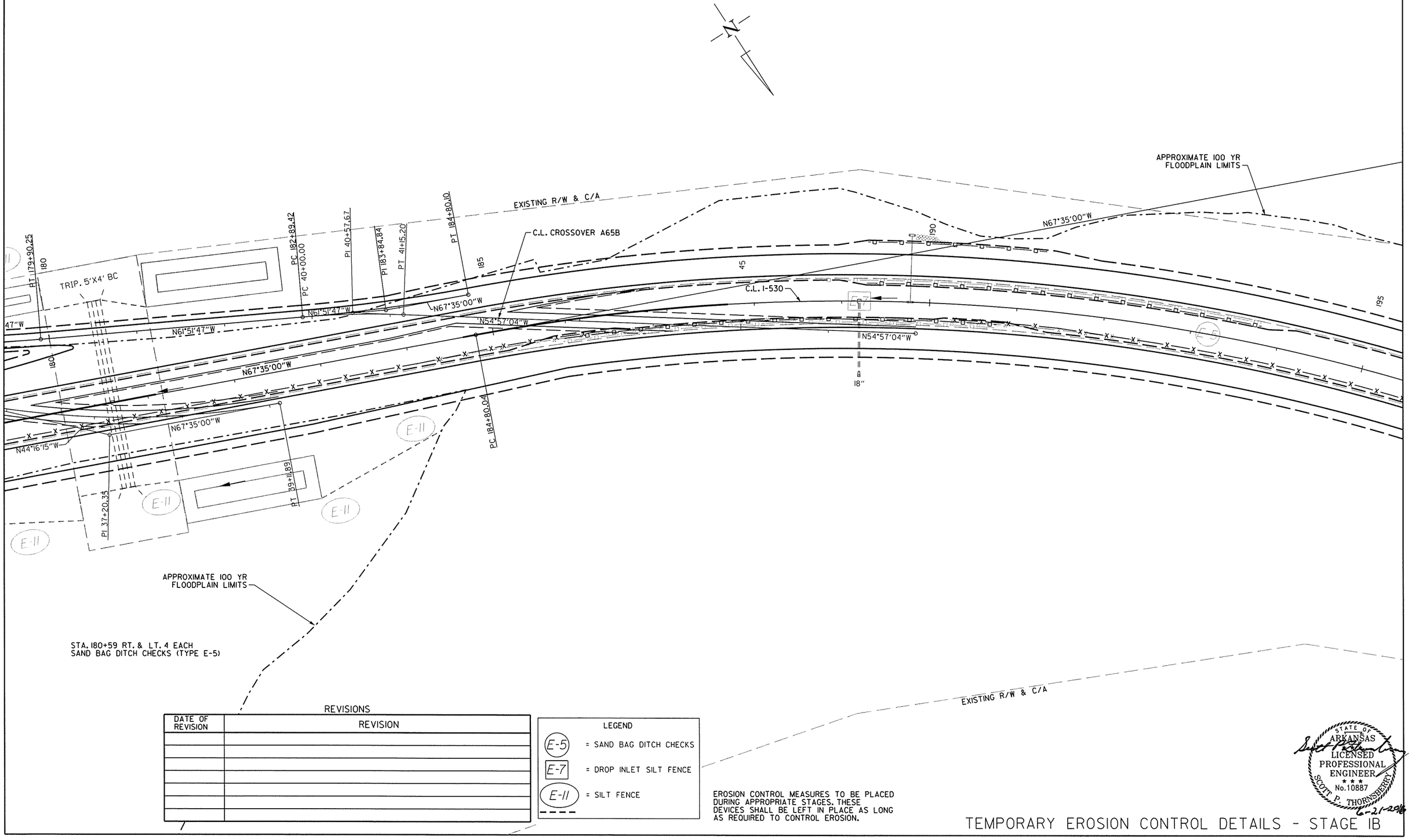
Michael Baker
INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	42	235

(2) TEMPORARY EROSION CONTROL DETAILS



REVISIONS

DATE OF REVISION	REVISION

LEGEND

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

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE IB

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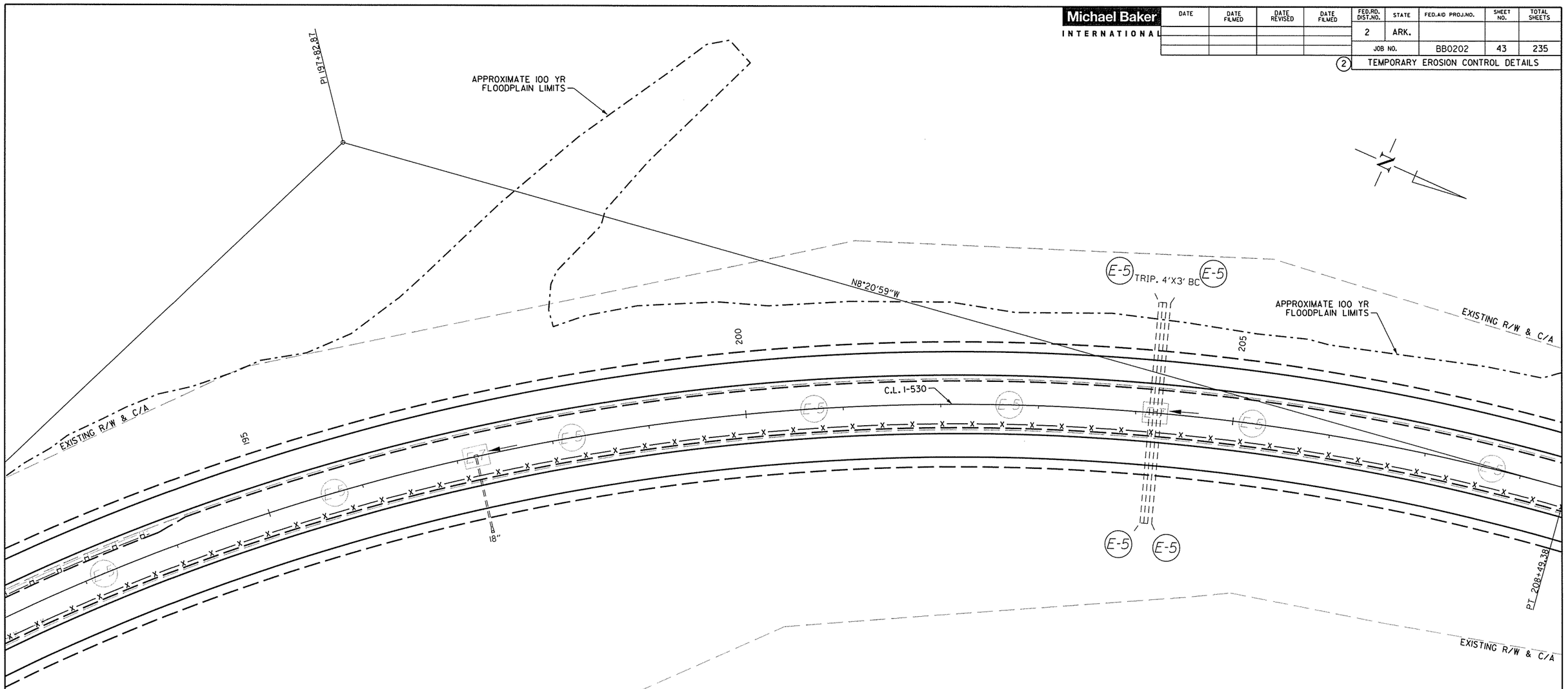
Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	43	235
				(2)	TEMPORARY EROSION CONTROL DETAILS			



REVISIONS

DATE OF REVISION	REVISION

LEGEND

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

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

STA. 204+20 RT. & LT. 4 EACH
SAND BAG DITCH CHECKS (TYPE E-5)

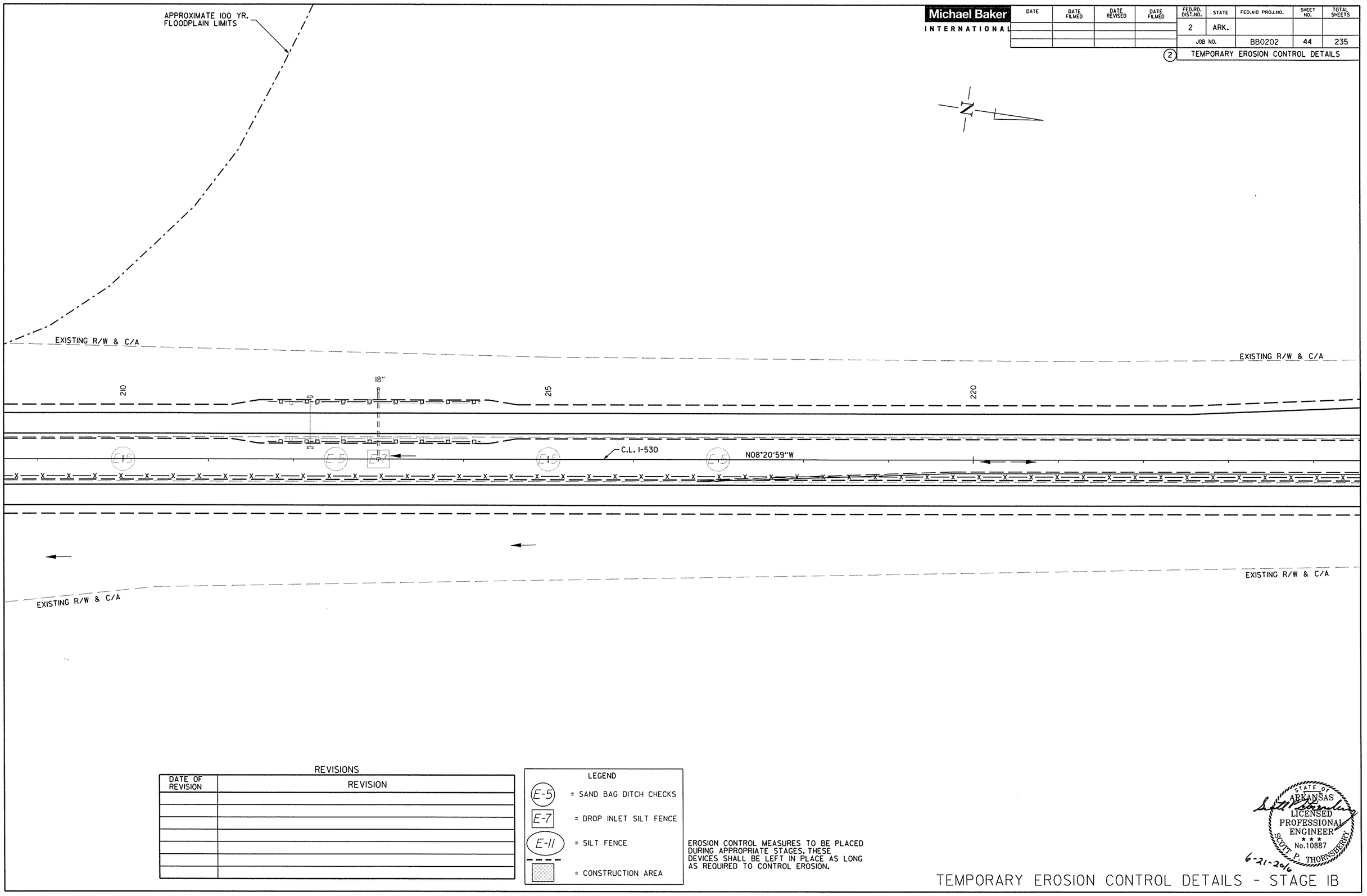
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE IB

Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	44	235

(2) TEMPORARY EROSION CONTROL DETAILS



REVISIONS

DATE OF REVISION	REVISION

LEGEND

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

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE IB

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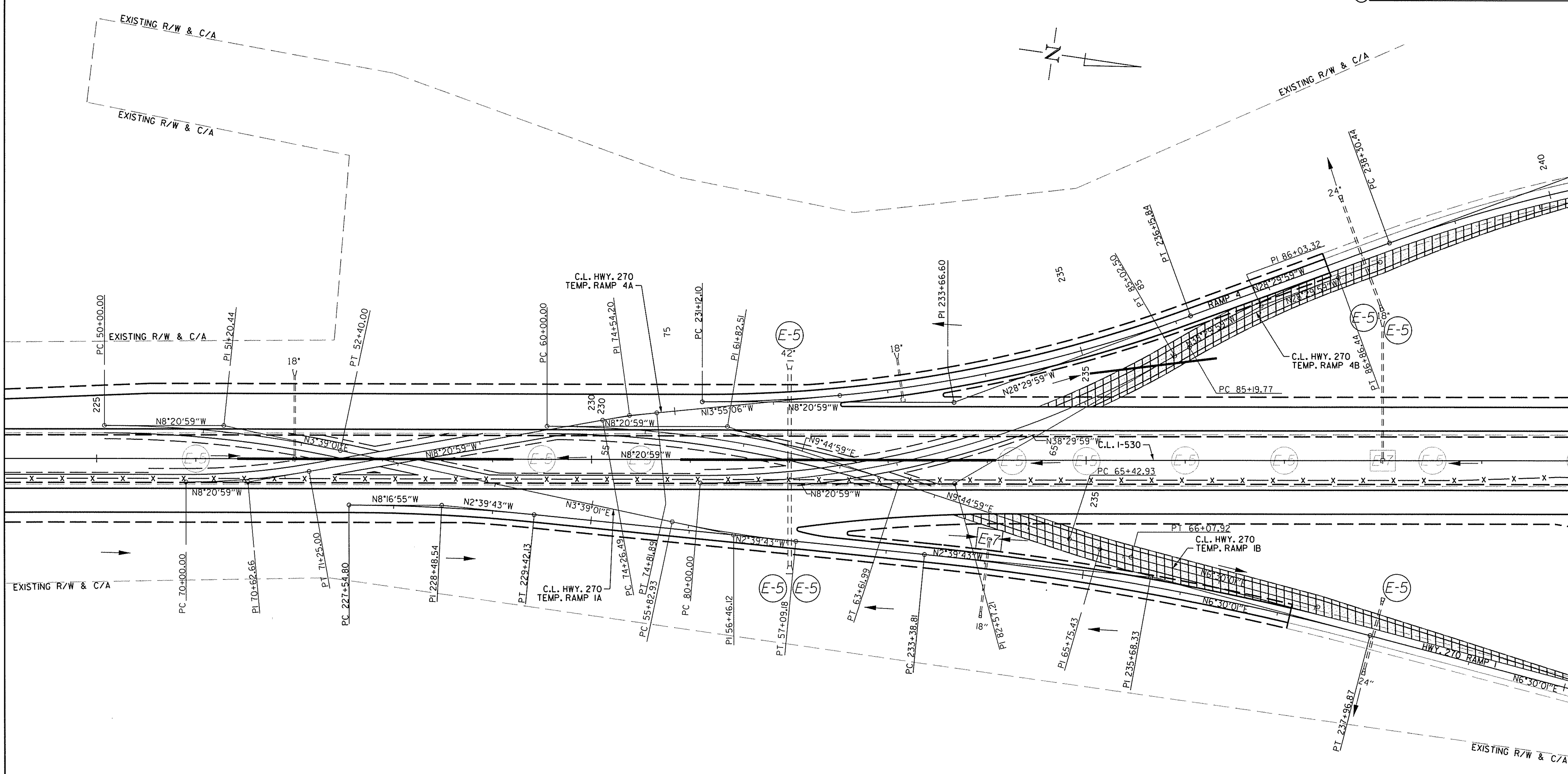
Michael Baker INTERNATIONAL	DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
					2	ARK.			
					JOB NO.		BB0202	45	235
					(2) TEMPORARY EROSION CONTROL DETAILS				



LEGEND

Symbol	Description
E-5	= SAND BAG DITCH CHECKS
E-7	= DROP INLET SILT FENCE
E-11	= SILT FENCE
	= CONSTRUCTION AREA
	= TEMPORARY SEEDING

STA. 232+00 LT. AND RT. 3 EACH
SAND BAG DITCH CHECKS (TYPE E-5)

HWY. 270 RAMP 1
STA. 234+02 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE OF REVISION	REVISION

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE IB

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Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	46	235

(2) TEMPORARY EROSION CONTROL DETAILS

EXIST. R/W & C/A

STA. 238+00 LT. 2 EACH
SAND BAG DITCH CHECKS (TYPE E-5)

PC 238+30.24

PI 241+48.04

N3°29'59"W

N28°29'59"W

C.L. HWY. 270 RAMP 4

PT 236+15.84

PI 86+03.32

PT 85+02.50

N28°29'59"W

N28°29'59"W

C.L. HWY. 270
TEMP. RAMP 4B

PT 86+86.44

PC 85+19.77

N38°29'59"W

PT 66+07.92

C.L. HWY. 270
TEMP. RAMP IB

N6°30'01"E

N6°30'01"E

PI 65+75.43

PI 235+68.33

PT 237+96.87

C.L. HWY. 270 RAMP I

N6°30'01"E

EXIST. R/W & C/A

HWY. 270 RAMP I
STA. 238+00 LT. IEACH
SAND BAG DITCH CHECKS (TYPE E-5)

HWY. 270 STA. 8+50.00 =
HWY. 270 RAMP 4 STA. 246+37.93

HWY. 270 STA. 8+42.20 =
HWY. 270 RAMP 3 STA. 246+03.00

PT 244+55.53

N3°29'59"W

N3°29'59"W

EXIST. R/W & C/A

N3°00'17"

C.L. I-530

N08°20'59"W

C.L. HWY. 270

S63°29'59"E

PC 243+43.84

C.L. HWY. 270 RAMP 2

N3°29'59"W

N3°29'59"W

N28°14'59"W

C.L. HWY. 270 TEMP.
RAMP 2A

PC 90+04.19

PI 248+92.94

EXIST. R/W & C/A

HWY. 270 STA. 15+50.00 =
HWY. 270 RAMP ISTA. 242+27.75
HWY. 270 RAMP 2 STA. 241+58.14

PI 246+58.141

LEGEND

E-5	= SAND BAG DITCH CHECKS
E-7	= DROP INLET SILT FENCE
E-11	= SILT FENCE
	= CONSTRUCTION AREA
	= TEMPORARY SEEDING

REVISIONS

DATE OF REVISION	REVISION

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE IB

Leonard.Speed 6/20/2016 2:29:34 PM
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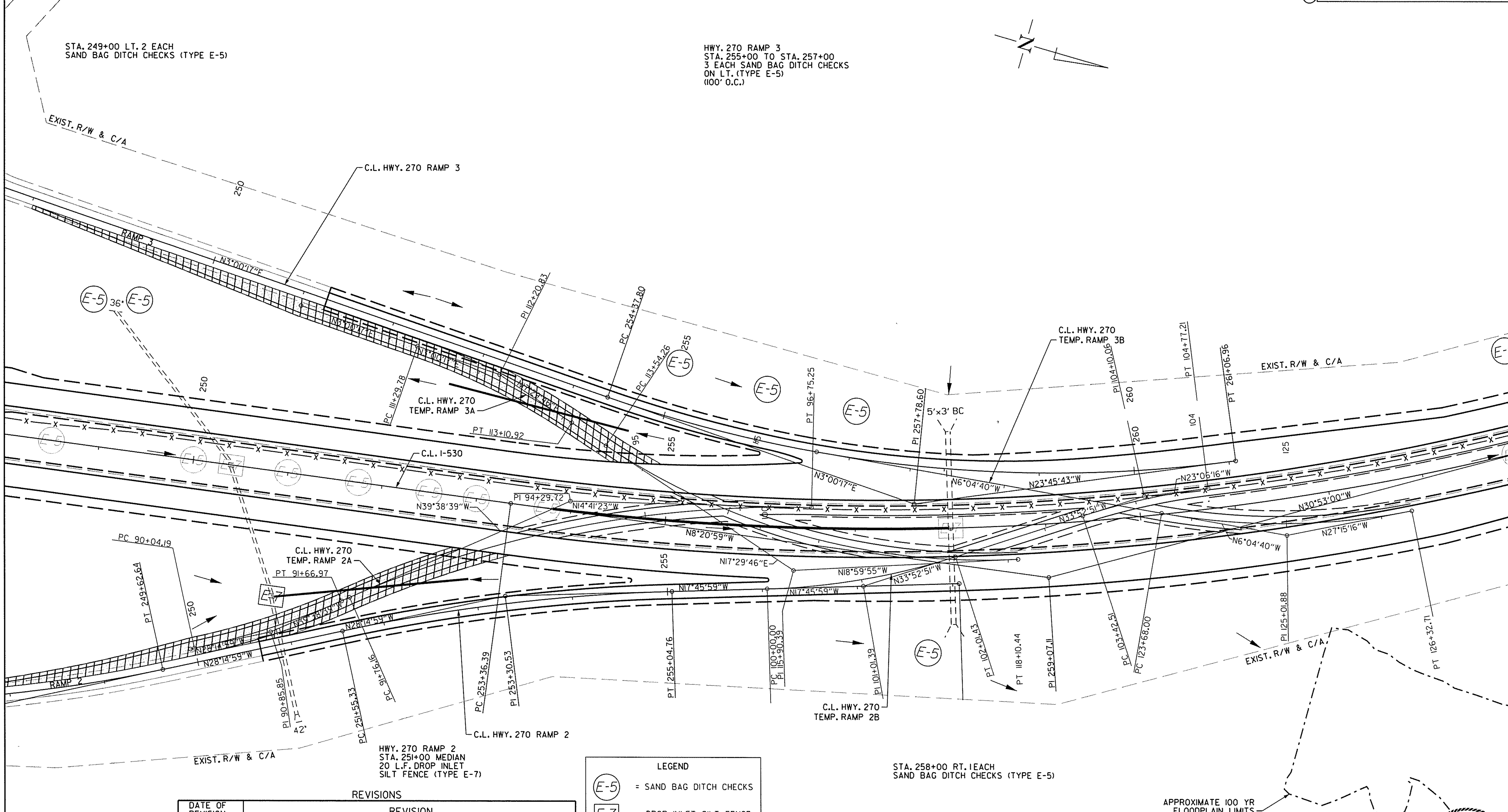
Michael Baker INTERNATIONAL	DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
					2	ARK.			
					JOB NO.		BB0202	47	235

(2) TEMPORARY EROSION CONTROL DETAILS



REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5	= SAND BAG DITCH CHECKS
E-7	= DROP INLET SILT FENCE
E-11	= SILT FENCE
(dotted area)	= CONSTRUCTION AREA
(hatched area)	= TEMPORARY SEEDING

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No.10887 SCOTT P. THORNSBERRY
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE 1B

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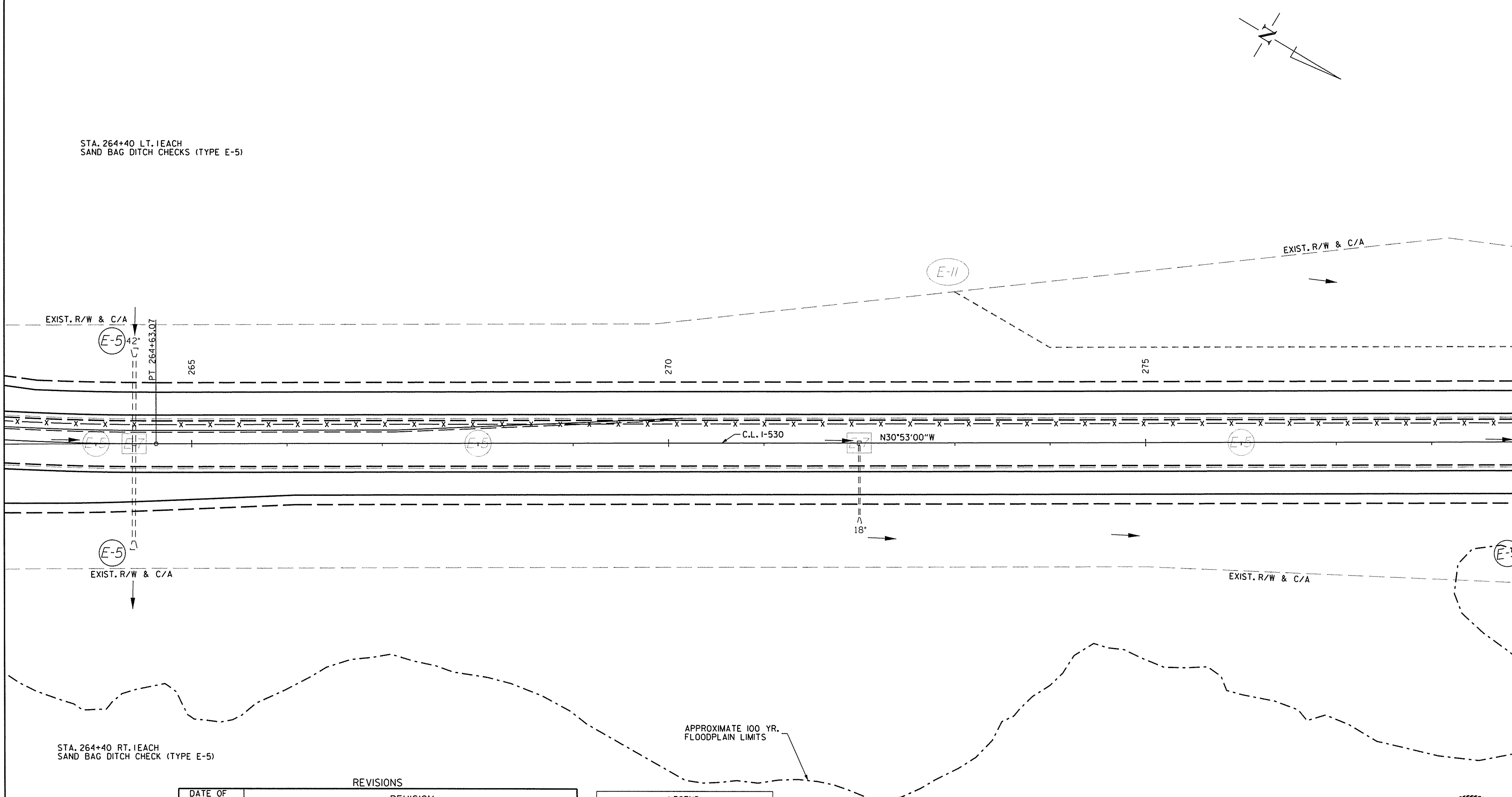
Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	48	235

(2) TEMPORARY EROSION CONTROL DETAILS



REVISIONS

DATE OF REVISION	REVISION

LEGEND

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

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

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

6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE IB

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Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	49	235

(2) TEMPORARY EROSION CONTROL DETAILS

APPROXIMATE 100 YR. FLOODPLAIN LIMITS

STA. 279+00 LT 1EACH
SAND BAG DITCH CHECKS (TYPE E-5)

STA. 283+10 LT. 2 EACH
SAND BAG DITCH CHECKS (TYPE E-5)

EXIST. R/W & C/A

DBL 9'x5' BC

42"

E-5 E-11

280 285 290

C.L. I-530

N30°53'00"W

18"

STA. 279+00 RT. 2 EACH
SAND BAG DITCH CHECKS (TYPE E-5)

STA. 283+80 RT. 2 EACH
SAND BAG DITCH CHECKS (TYPE E-5)

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5 = SAND BAG DITCH CHECKS

E-7 = DROP INLET SILT FENCE

E-11 = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 10887
SCOTT P. THORNSBERRY
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE 1B

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Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	50	235

(2) TEMPORARY EROSION CONTROL DETAILS

APPROXIMATE 100 YR. FLOODPLAIN LIMITS

EXIST. R/W & C/A

EXIST. R/W & C/A

E-5 8'X5' BC E-5

295

300

305

C.L. I-530

N30°53'00"W

18°

E-5 E-5

EXIST. R/W & C/A

EXIST. R/W & C/A

STA. 303+24 LT. & RT. 4 EACH
SAND BAG DITCH CHECKS (TYPE E-5)

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5 = SAND BAG DITCH CHECKS

E-7 = DROP INLET SILT FENCE

E-11 = SILT FENCE

APPROXIMATE 100 YR. FLOODPLAIN LIMITS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE IB

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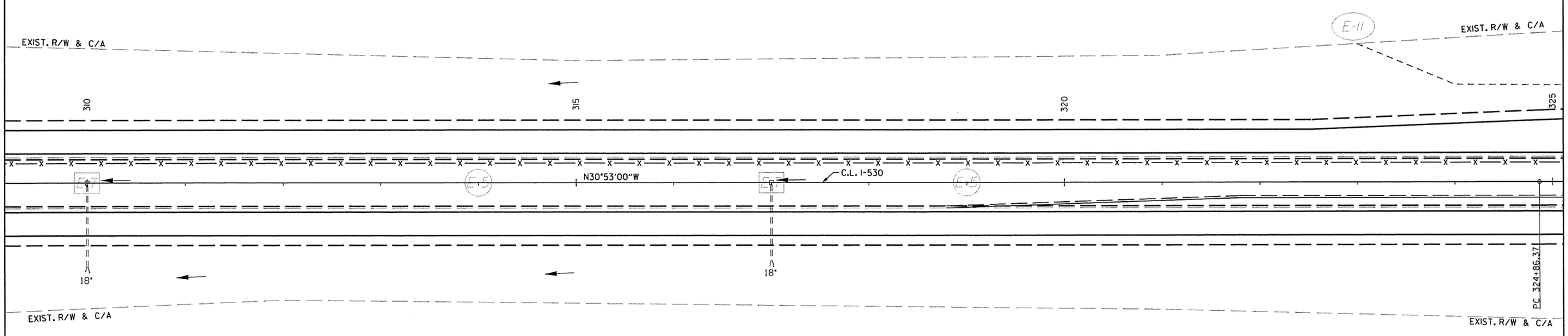
Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	51	235

(2) TEMPORARY EROSION CONTROL DETAILS



REVISIONS

DATE OF REVISION	REVISION

LEGEND

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

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE IB

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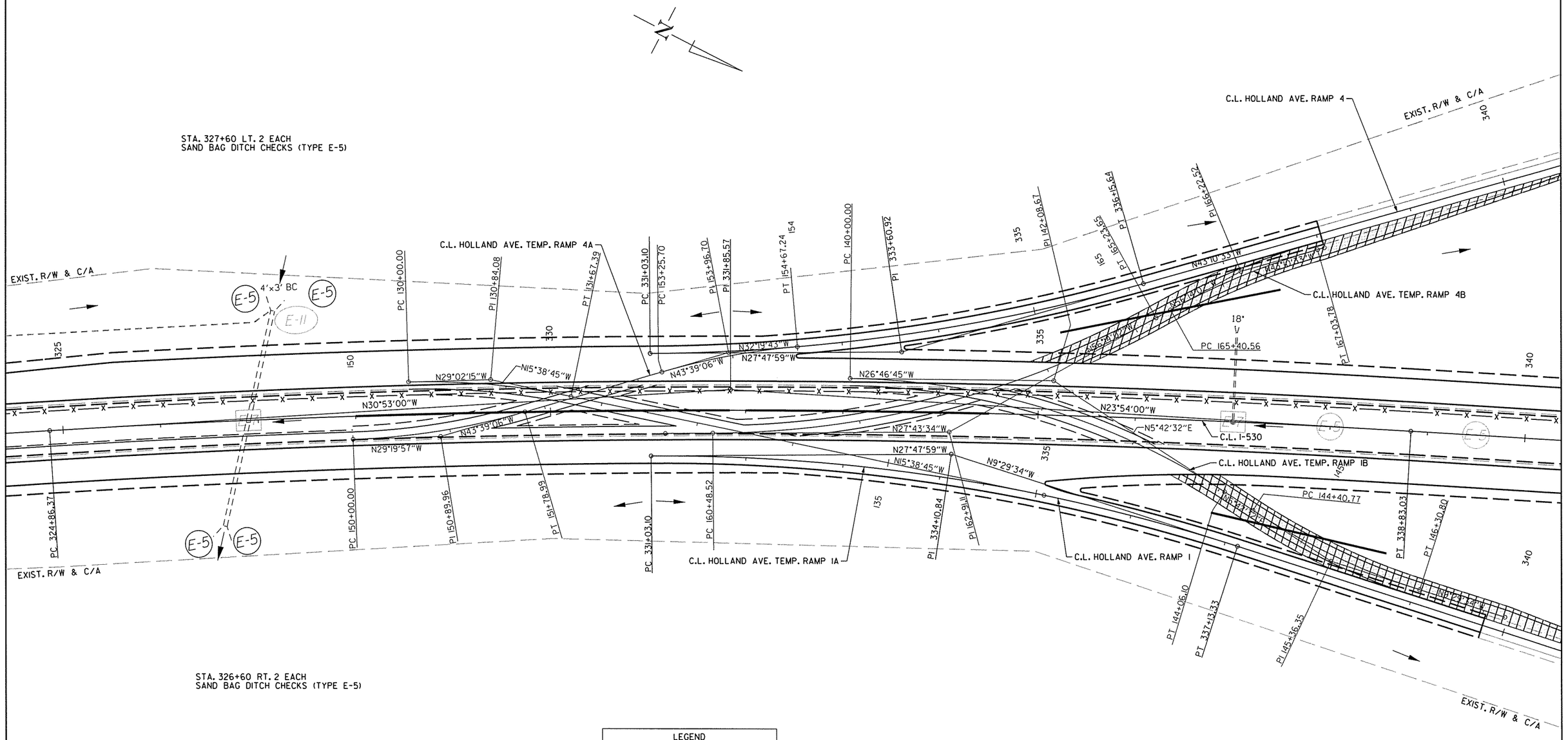
Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	52	235

(2) TEMPORARY EROSION CONTROL DETAILS



REVISIONS

DATE OF REVISION	REVISION

LEGEND

- E-5 = SAND BAG DITCH CHECKS
- E-7 = DROP INLET SILT FENCE
- E-11 = SILT FENCE
- = CONSTRUCTION AREA
- = TEMPORARY SEEDING

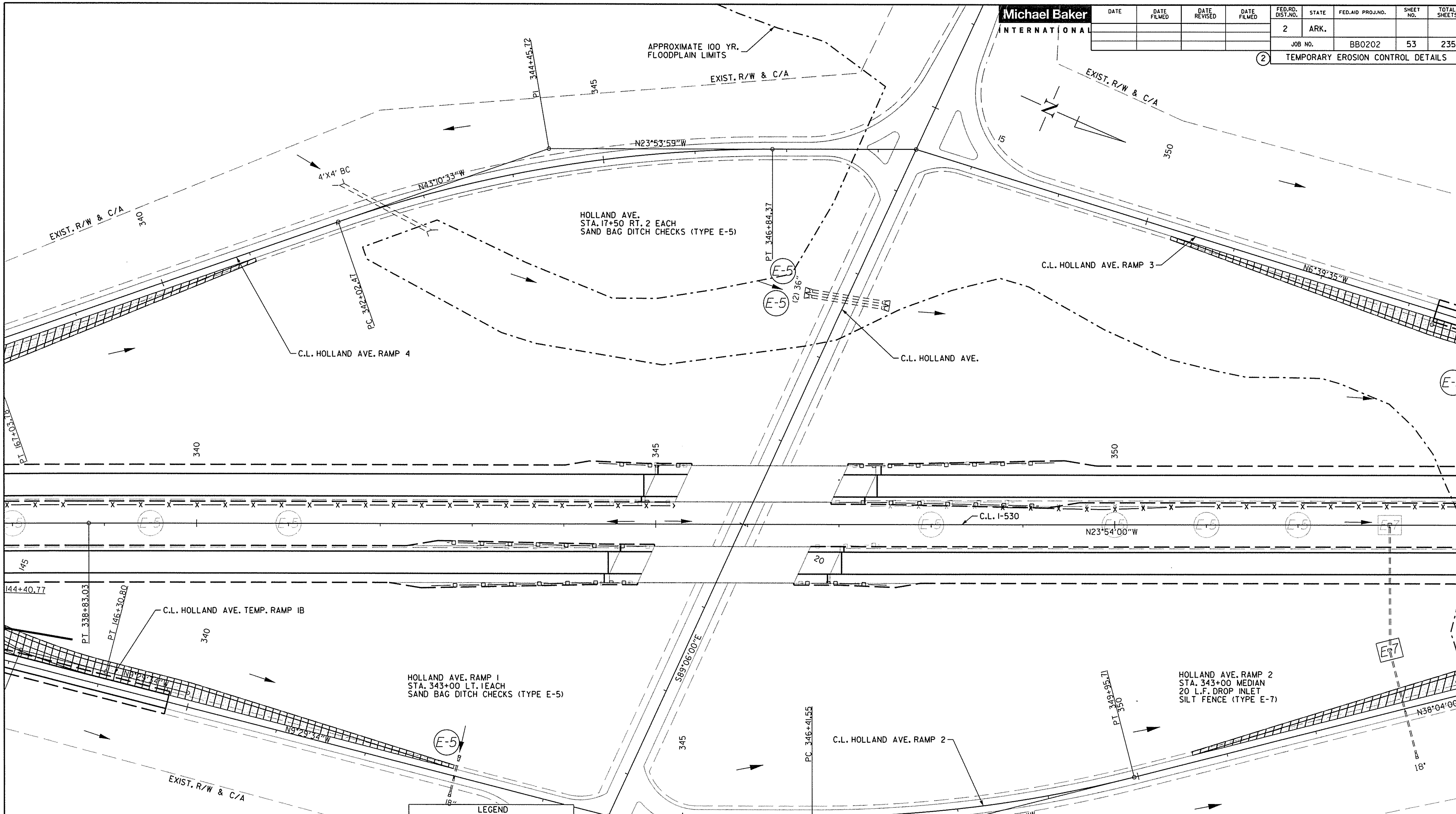
EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE IB

Michael Baker INTERNATIONAL	DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
					2	ARK.			
					JOB NO.		BB0202	53	235

(2) TEMPORARY EROSION CONTROL DETAILS



REVISIONS

DATE OF REVISION	REVISION

LEGEND

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

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No.10887 SCOTT P. THORNSBERRY
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE 1B

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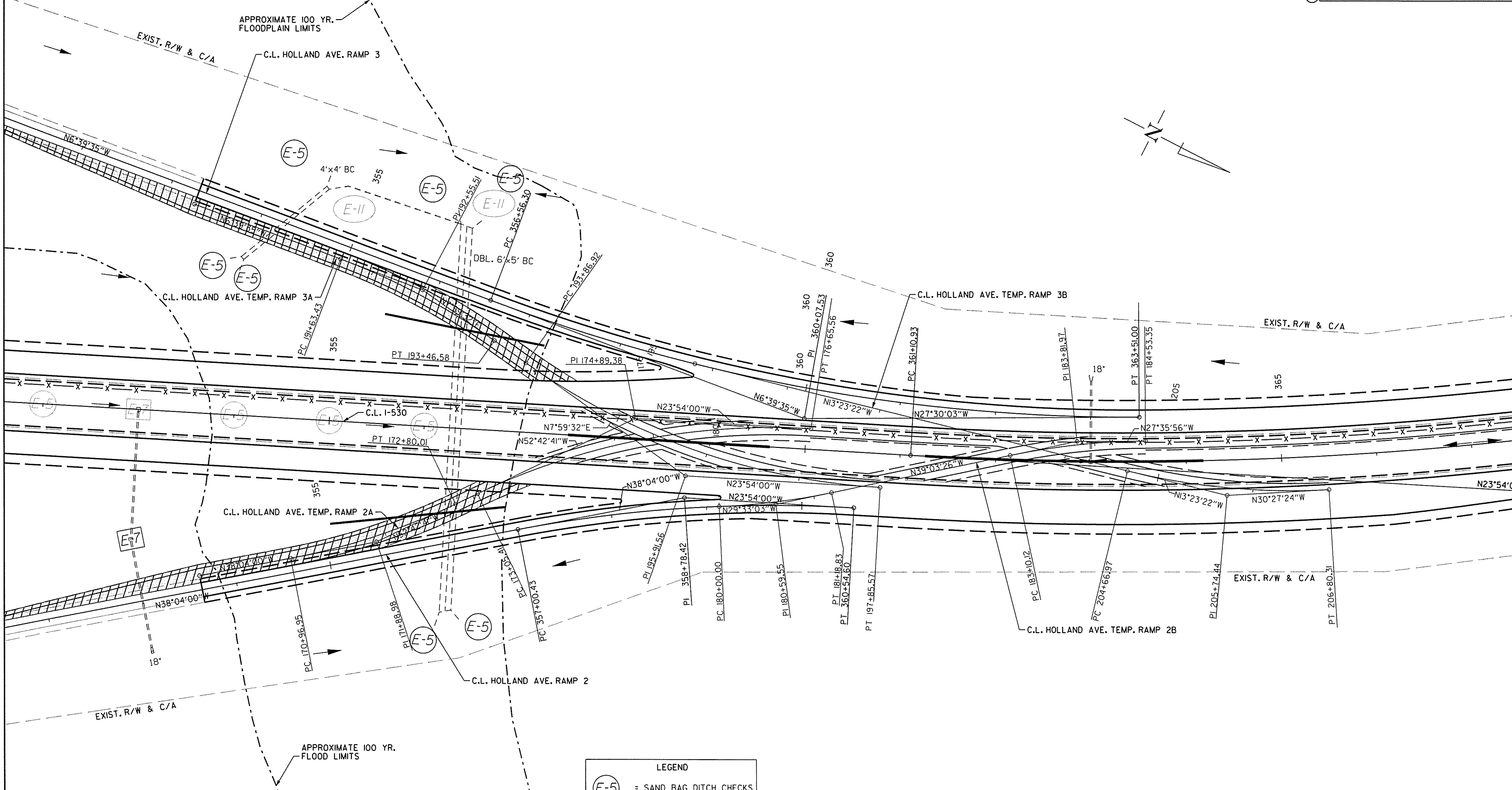
Michael Baker INTERNATIONAL	DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
					2	ARK.		54	235
					JOB NO.		BB0202		

(2) TEMPORARY EROSION CONTROL DETAILS



REVISIONS

DATE OF REVISION	REVISION

LEGEND

Symbol	Description
E-5	= SAND BAG DITCH CHECKS
E-7	= DROP INLET SILT FENCE
E-11	= SILT FENCE
(stippled area)	= CONSTRUCTION AREA
(hatched area)	= TEMPORARY SEEDING

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No.10887 SCOTT P. THORNSBERRY
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE 1B

Leonard.Speed 6/20/2016 2:29:39 PM
WORKSPACE: Leonard.Speed
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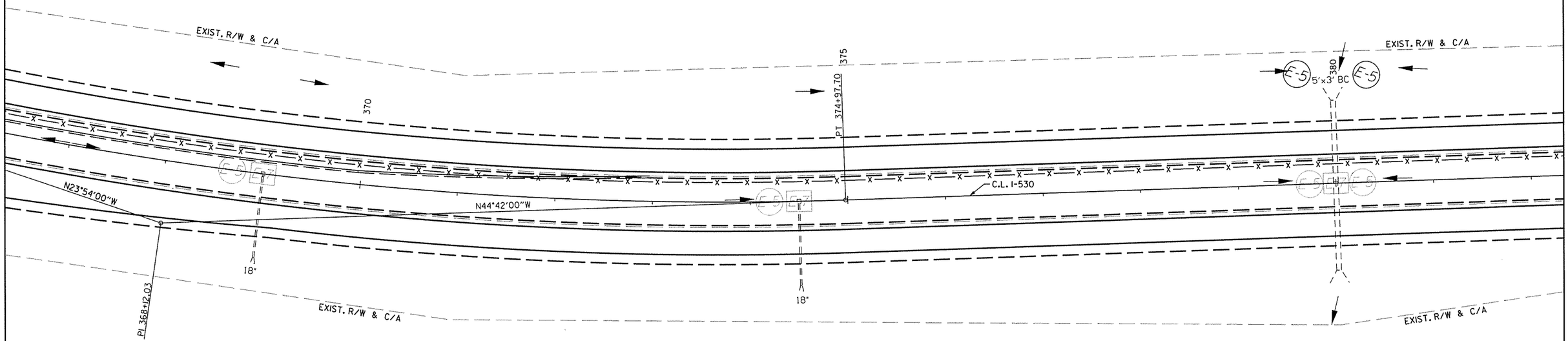
Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	55	235

(2) TEMPORARY EROSION CONTROL DETAILS

STA. 380+00 LT. 2 EACH
SAND BAG DITCH CHECKS (TYPE E-5)



REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5 = SAND BAG DITCH CHECKS

E-7 = DROP INLET SILT FENCE

E-11 = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE IB

Leonard.Speed 6/20/2016 2:29:39 PM
WORKSPACE: Leonard.Speed
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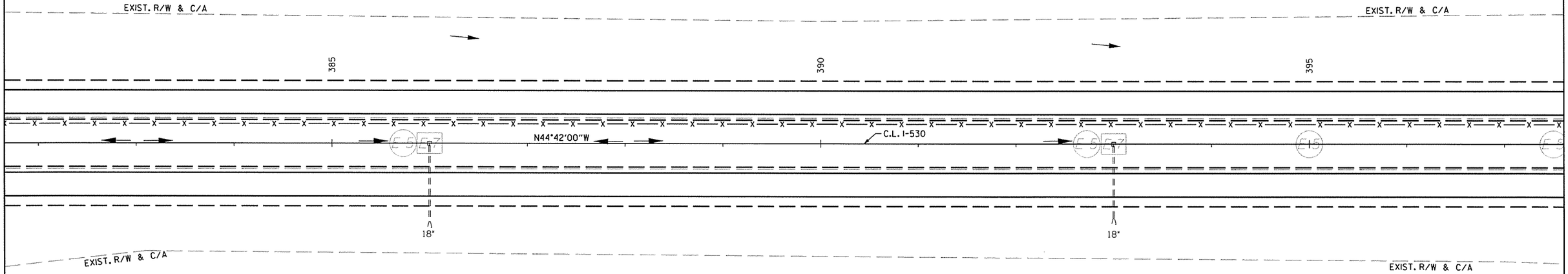
Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	56	235

(2) TEMPORARY EROSION CONTROL DETAILS



REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5 = SAND BAG DITCH CHECKS

E-7 = DROP INLET SILT FENCE

E-11 = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE IB

Leonard.Speed 6/20/2016 2:29:40 PM
WORKSPACE: Leonard.Speed
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Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	57	235

(2) TEMPORARY EROSION CONTROL DETAILS

APPROXIMATE 100 YR. FLOODPLAIN LIMITS

STA. 400+00 LT. 1 EACH
SAND BAG DITCH CHECKS (TYPE E-5)

STA. 409+60 LT. & RT. 4 EACH
SAND BAG DITCH CHECKS (TYPE E-5)

EXIST. R/W & C/A

E-5 400 36"

405

DBL 6'x5' BC

E-5 410

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

N44°42'00"W

C.L. I-530

18"

E-5 E-5

EXIST. R/W & C/A

EXIST. R/W & C/A

APPROXIMATE 100 YR. FLOODPLAIN LIMITS

REVISIONS

DATE OF REVISION	REVISION

LEGEND

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

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 10887
SCOTT P. THORNSBERRY
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE IB

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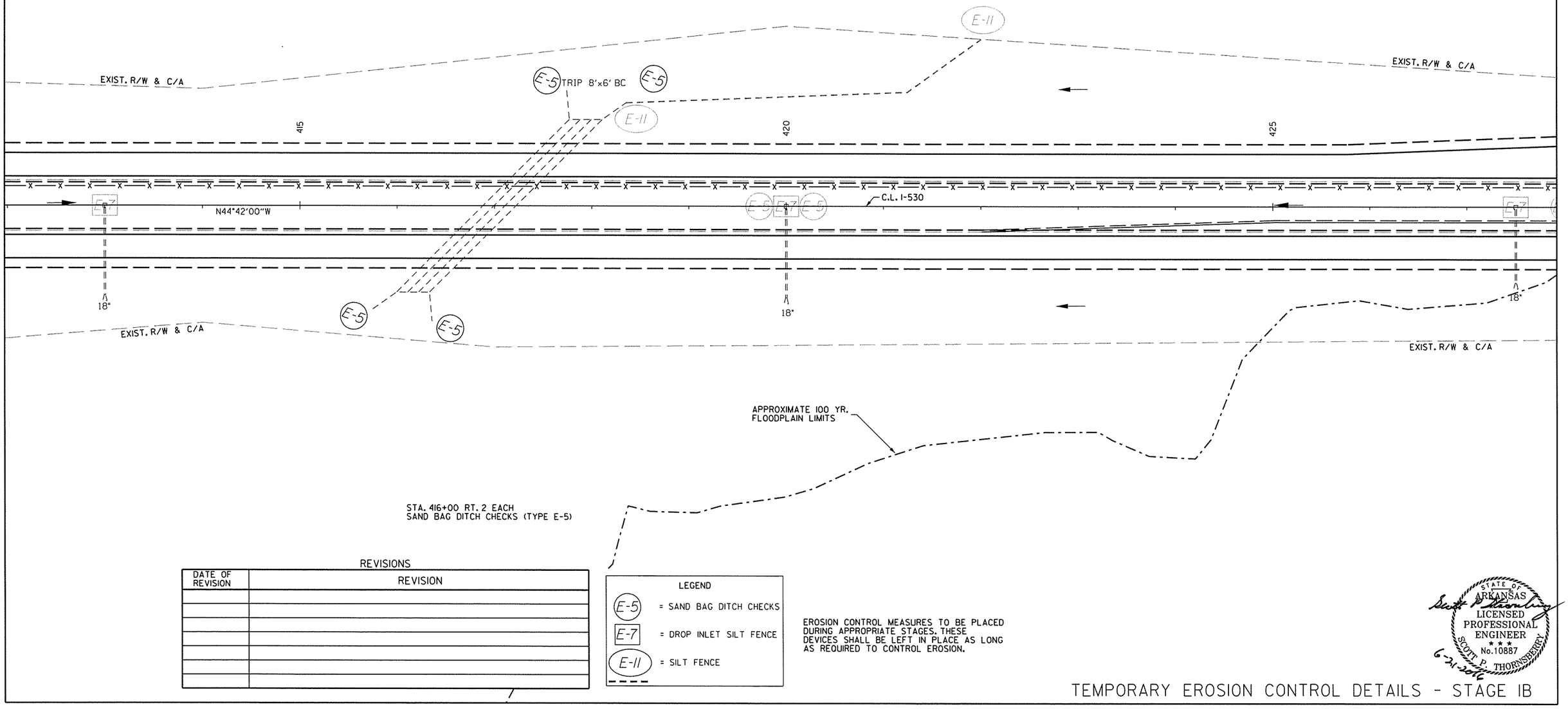
Michael Baker
INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	58	235

(2) TEMPORARY EROSION CONTROL DETAILS

STA. 416+50 LT. 2 EACH
SAND BAG DITCH CHECKS (TYPE E-5)



STA. 416+00 RT. 2 EACH
SAND BAG DITCH CHECKS (TYPE E-5)

REVISIONS

DATE OF REVISION	REVISION

LEGEND

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

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE IB

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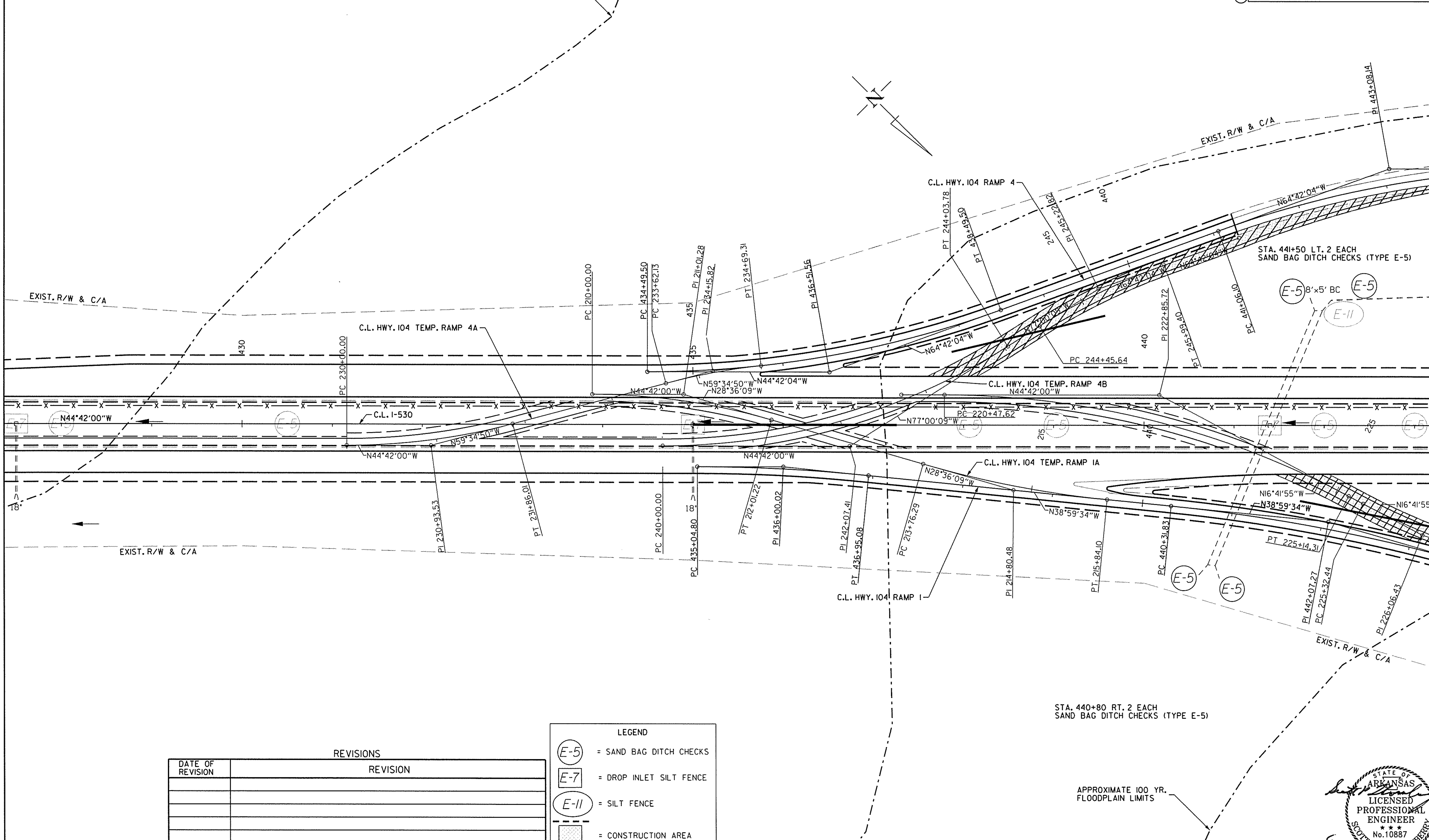
Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	59	235

(2) TEMPORARY EROSION CONTROL DETAILS



DATE OF REVISION	REVISION

REVISIONS

LEGEND

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

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No.10887 SCOTT P. THORNSBERRY 6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE 1B

Leonard.Speed 6/20/2016 2:29:41 PM
WORKSPACE: Leonard.Speed
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Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	60	235

(2) TEMPORARY EROSION CONTROL DETAILS

PI 12+00

EXIST. R/W & C/A

PI 443+08.14

N64°42'04"W

N44°42'07"W

C.L. HWY. 104 RAMP 4

PT 445+06.08

HWY. 104 STA. 16+00.00 =
RAMP 3 STA. 446+40.28
RAMP 4 STA. 447+04.04

6'x5' BC

N45°37'32"W

PI 450+34.28

N32°01'59"W

C.L. HWY. 104 RAMP 3

EXIST. R/W & C/A

PC 448+06.67

C.L. HWY. 104

6'x5' BC

PT 452+59.75

STA. 447+70.79
END JOB BB0202
LOG MILE 29.90

PI 222+85.72

PT 245+99.40

PC 441+11.10

C.L. HWY. 104 TEMP. RAMP 4B

8'x5' BC

E-5 E-11

PC 260+00.00

N44°42'04"W

N44°42'00"W

C.L. I-530

N16°41'55"W

N38°59'34"W

C.L. HWY. 104 TEMP. RAMP 1B

PT 226+79.90

PT 225+14.31

PC 440+31.83

PI 442+07.27

PC 225+32.44

PI 226+06.43

N28°29'44"W

PC 446+38.13

PT 443+81.74

N00°38'00"E

PC 250+00.00

PI 450+43.87

PC 452+92.19

EXIST. R/W & C/A

C.L. HWY. 104 RAMP 1

C.L. HWY. 104 RAMP 2

HWY. 104 RAMP 1
STA. 446+00 LT. 1EACH
SAND BAG DITCH CHECKS
(TYPE E-5)

HWY. 104 STA. 24+00.00 =
RAMP 1STA. 452+59.32
RAMP 2 STA. 452+15.33

PI 448+42.66

PI 454+90.12

LEGEND

E-5	= SAND BAG DITCH CHECKS
E-7	= DROP INLET SILT FENCE
E-11	= SILT FENCE
	= CONSTRUCTION AREA
	= TEMPORARY SEEDING

REVISIONS

DATE OF REVISION	REVISION

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE IB

Leonard.Speed 6/20/2016 2:29:42 PM
WORKSPACE: Leonard.Speed
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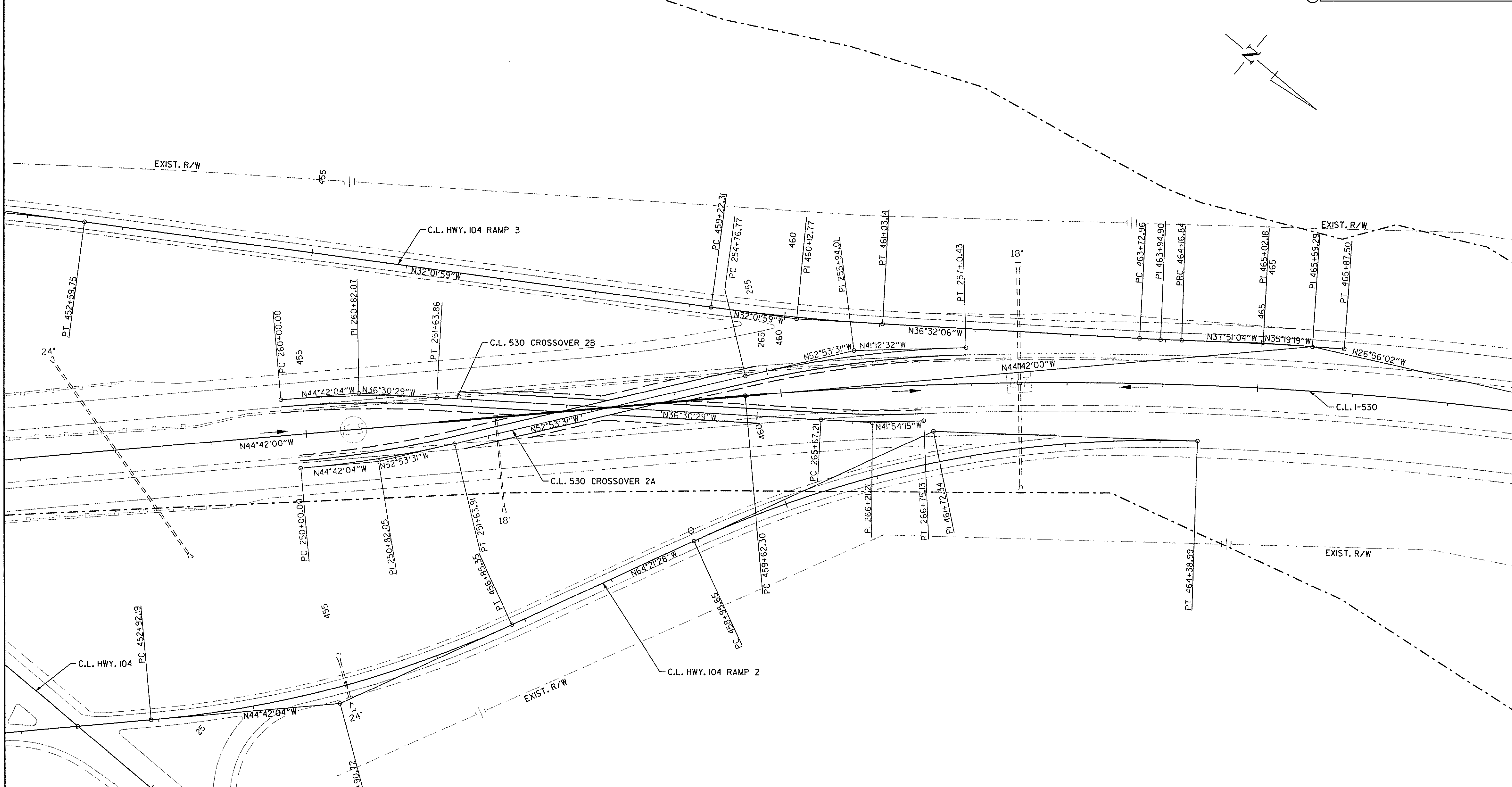
Michael Baker INTERNATIONAL	DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
					2	ARK.			
					JOB NO.		BB0202	61	235

(2) TEMPORARY EROSION CONTROL DETAILS



REVISIONS

DATE OF REVISION	REVISION

LEGEND

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

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

6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE 2B

Leonard.Speed 6/20/2016 2:29:43 PM
WORKSPACE: Leonard.Speed
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Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	62	235

(2) TEMPORARY EROSION CONTROL DETAILS

STA. STA. 258+50
1EACH SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)

EXIST. R/W & C/A
C.L. HWY. 270 RAMP 3
RAMP 3
N3°00'17"E
36"
250
PI 112+20.83
PC 254+37.80
PC 113+54.26
255
PC 111+29.78
C.L. HWY. 270 TEMP. RAMP 3A
PT 113+10.92
N17°29'46"E
C.L. I-530
95
PT 96+75.25
PI 257+78.60
5'x3' BC
C.L. HWY. 270 TEMP. RAMP 3B
PI 104+10.90
PT 104+77.21
PT 261+06.96
260
104
125
N3°00'17"E
N6°04'40"W
N23°45'43"W
N23°06'16"W
N30°53'00"W
N27°15'16"W
N39°38'39"W
PI 94+29.72
N14°41'23"W
N8°20'59"W
N61°45'59"W
PC 90+04.19
C.L. HWY. 270 TEMP. RAMP 2A
PT 91+66.97
PT 249+62.64
N39°38'39"W
N28°14'59"W
N17°29'46"E
N18°59'55"W
N33°52'51"W
N17°45'59"W
RAMP 2
PI 90+85.85
I = 42°
PC 91+76.49
PC 251+55.33
PC 253+36.39
PI 253+30.53
PT 255+04.76
PC 100+00.00
PI 116+90.39
PI 101+01.39
C.L. HWY. 270 TEMP. RAMP 2B
PT 102+01.43
PT 118+10.44
PI 259+07.11
PC 103+42.51
PC 123+68.00
PI 125+01.88
PT 126+32.71
EXIST. R/W & C/A

APPROXIMATE 100 YR FLOODPLAIN LIMITS

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- E-7 = DROP INLET SILT FENCE
- E-11 = SILT FENCE
- = CONSTRUCTION AREA
- = TEMPORARY SEEDING

EROSION CONTROL MEASURES PLACED IN STAGE IA SHALL BE RETAINED THROUGHOUT STAGE IB OR UNTIL FINAL STABILIZATION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE 2B

Leonard.Speed 6/20/2016 2:29:43 PM
WORKSPACE: Leonard.Speed
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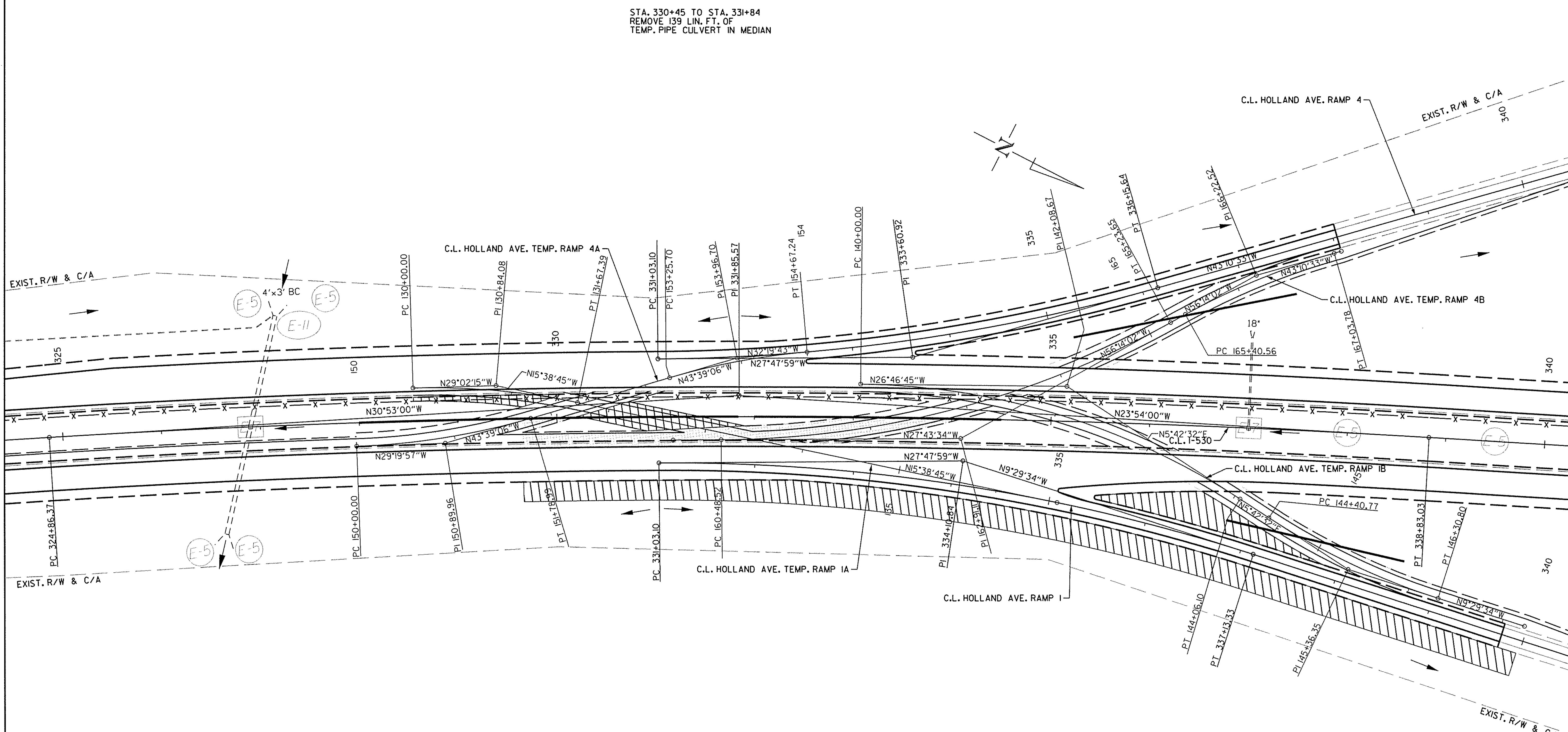
Michael Baker INTERNATIONAL	DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
					2	ARK.			
					JOB NO.		BB0202	63	235

(2) TEMPORARY EROSION CONTROL DETAILS



LEGEND

E-5	= SAND BAG DITCH CHECKS
E-7	= DROP INLET SILT FENCE
E-11	= SILT FENCE
(shaded)	= CONSTRUCTION AREA
(hatched)	= TEMPORARY SEEDING

REVISIONS

DATE OF REVISION	REVISION

EROSION CONTROL MEASURES PLACED IN STAGE IA SHALL BE RETAINED THROUGHOUT STAGE IB OR UNTIL FINAL STABILIZATION.

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No.10887 SCOTT P. THORNSBERRY
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE 2B

Leonard.Speed 6/20/2016 2:29:44 PM
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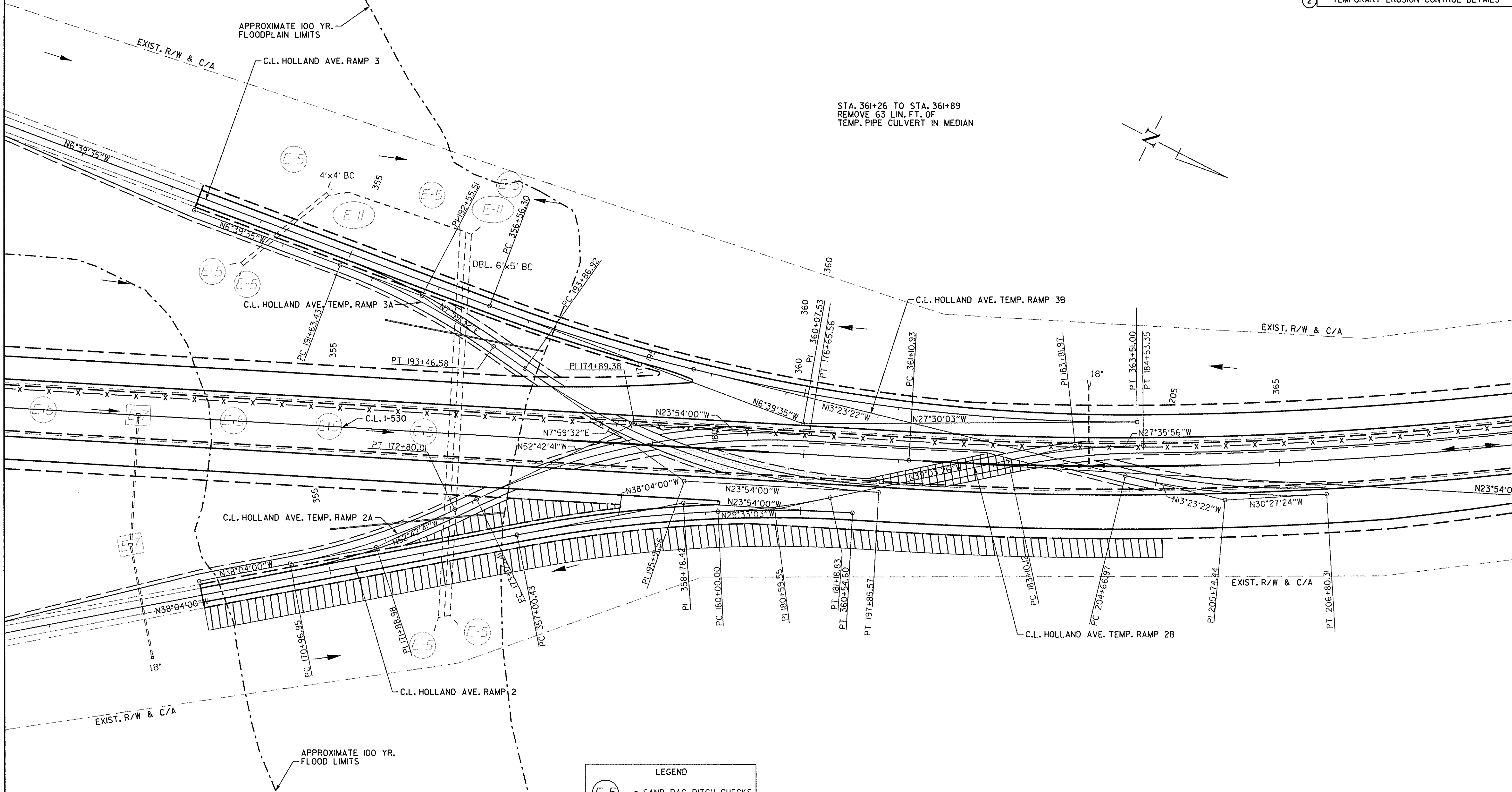
Michael Baker INTERNATIONAL	DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
					2	ARK.			
					JOB NO.		BB0202	64	235

(2) TEMPORARY EROSION CONTROL DETAILS



LEGEND	
E-5	= SAND BAG DITCH CHECKS
E-7	= DROP INLET SILT FENCE
E-11	= SILT FENCE
- - - -	
(shaded)	= CONSTRUCTION AREA
(hatched)	= TEMPORARY SEEDING

REVISIONS

DATE OF REVISION	REVISION

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No.10887 SCOTT P. THORNSBERRY
6-21-2016

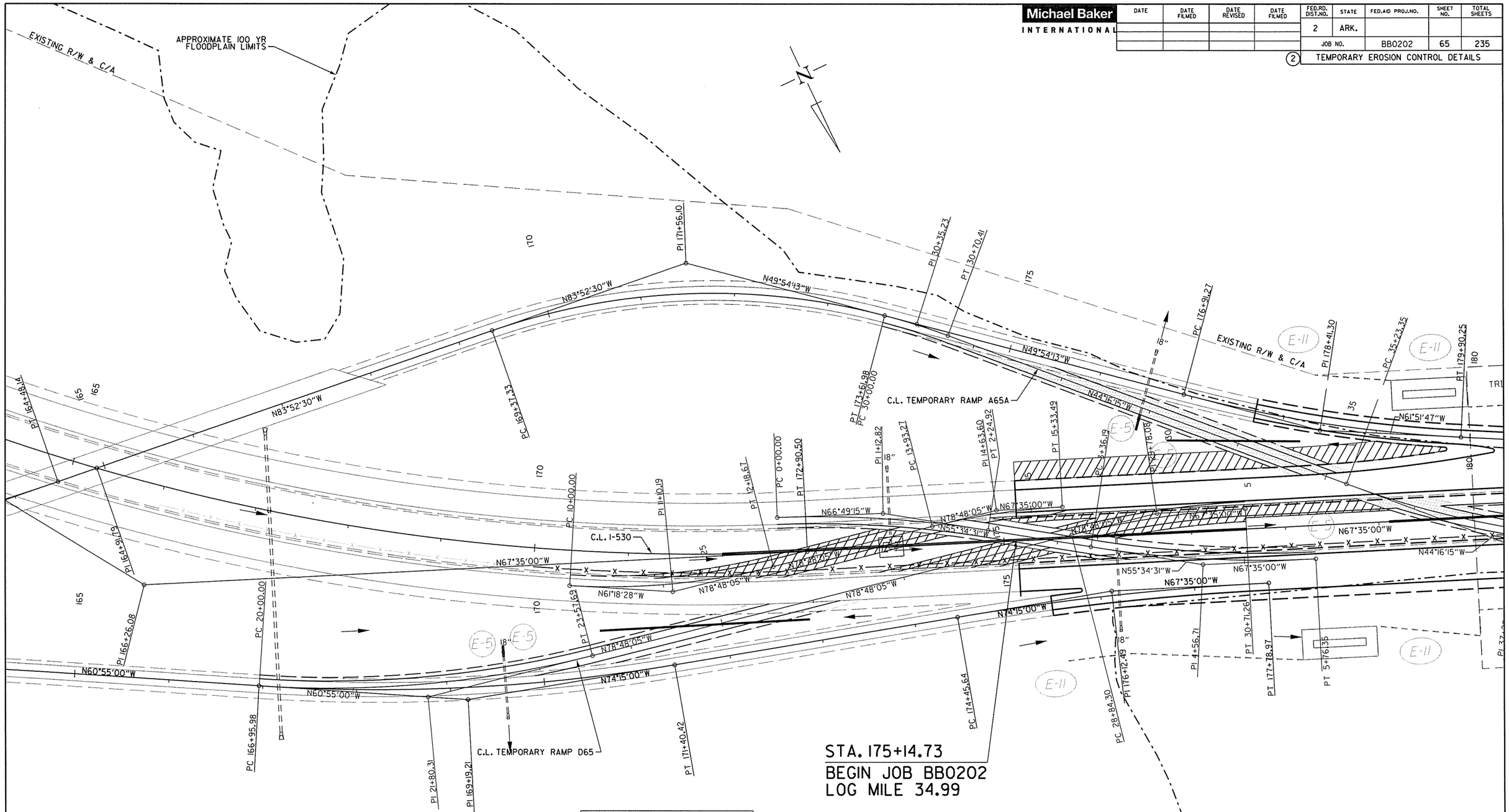
TEMPORARY EROSION CONTROL DETAILS - STAGE 2B

Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	65	235

(2) TEMPORARY EROSION CONTROL DETAILS



STA. 172+00 TO STA. 174+21
REMOVE 231 LIN. FT. OF
TEMP. PIPE CULVERT IN MEDIAN

STA. 176+80 TO 177+59
REMOVE 79 LIN. FT. OF
TEMP. PIPE CULVERT IN MEDIAN

STA. 173+80 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

APPROXIMATE 100 YR FLOODPLAIN LIMITS

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- E-5 = SAND BAG DITCH CHECKS
- E-7 = DROP INLET SILT FENCE
- E-11 = SILT FENCE
- = CONSTRUCTION AREA
- = TEMPORARY SEEDING

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE 3A

Leonard Speed 6/20/2016 2:29:45 PM
WORKSPACE: Leonard Speed
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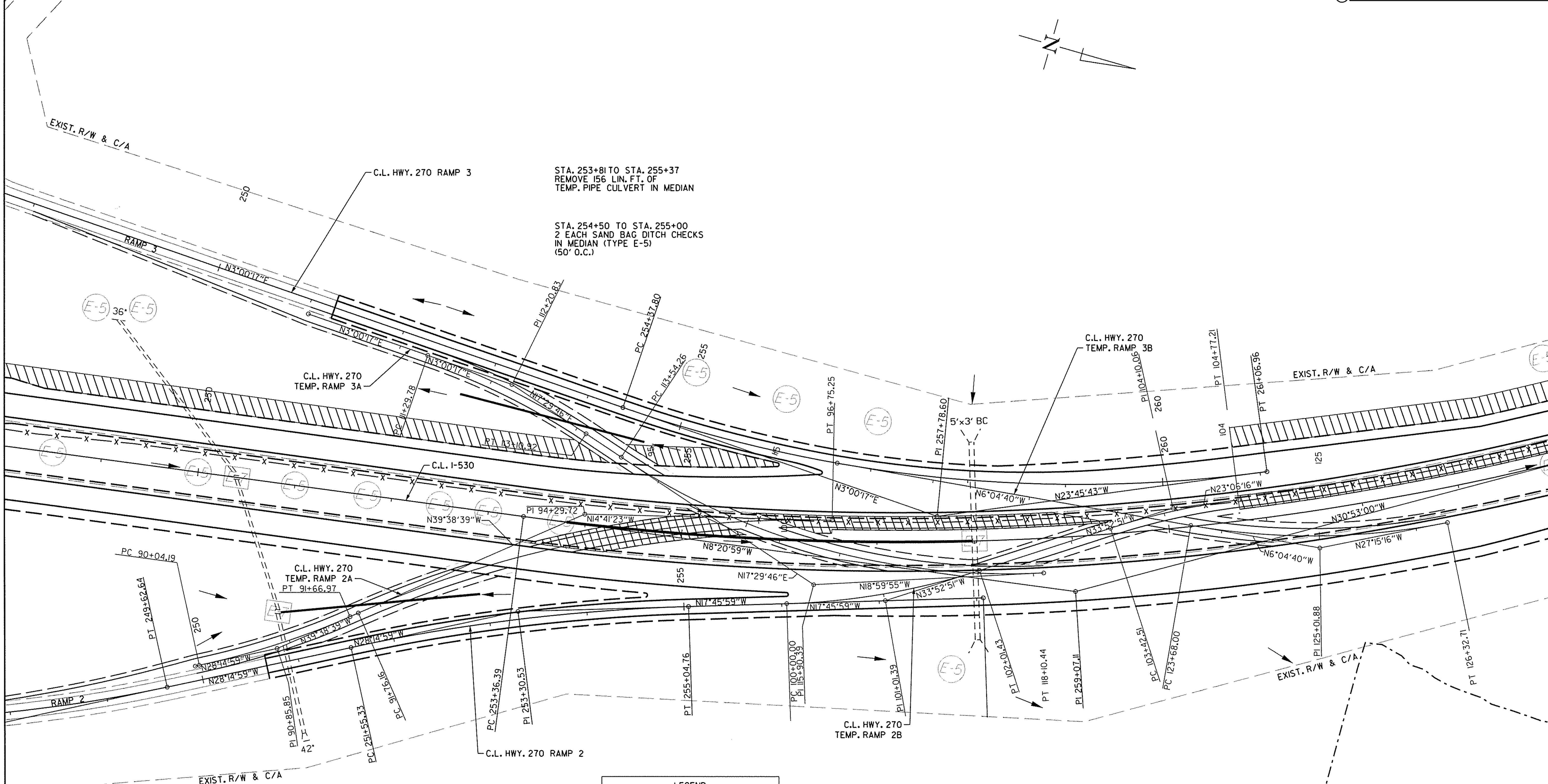
Michael Baker INTERNATIONAL	DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
					2	ARK.			
					JOB NO.		BB0202	66	235

(2) TEMPORARY EROSION CONTROL DETAILS



REVISIONS

DATE OF REVISION	REVISION

LEGEND

Symbol	Description
E-5	= SAND BAG DITCH CHECKS
E-7	= DROP INLET SILT FENCE
E-11	= SILT FENCE
	= CONSTRUCTION AREA
	= TEMPORARY SEEDING

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

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

6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE 3A

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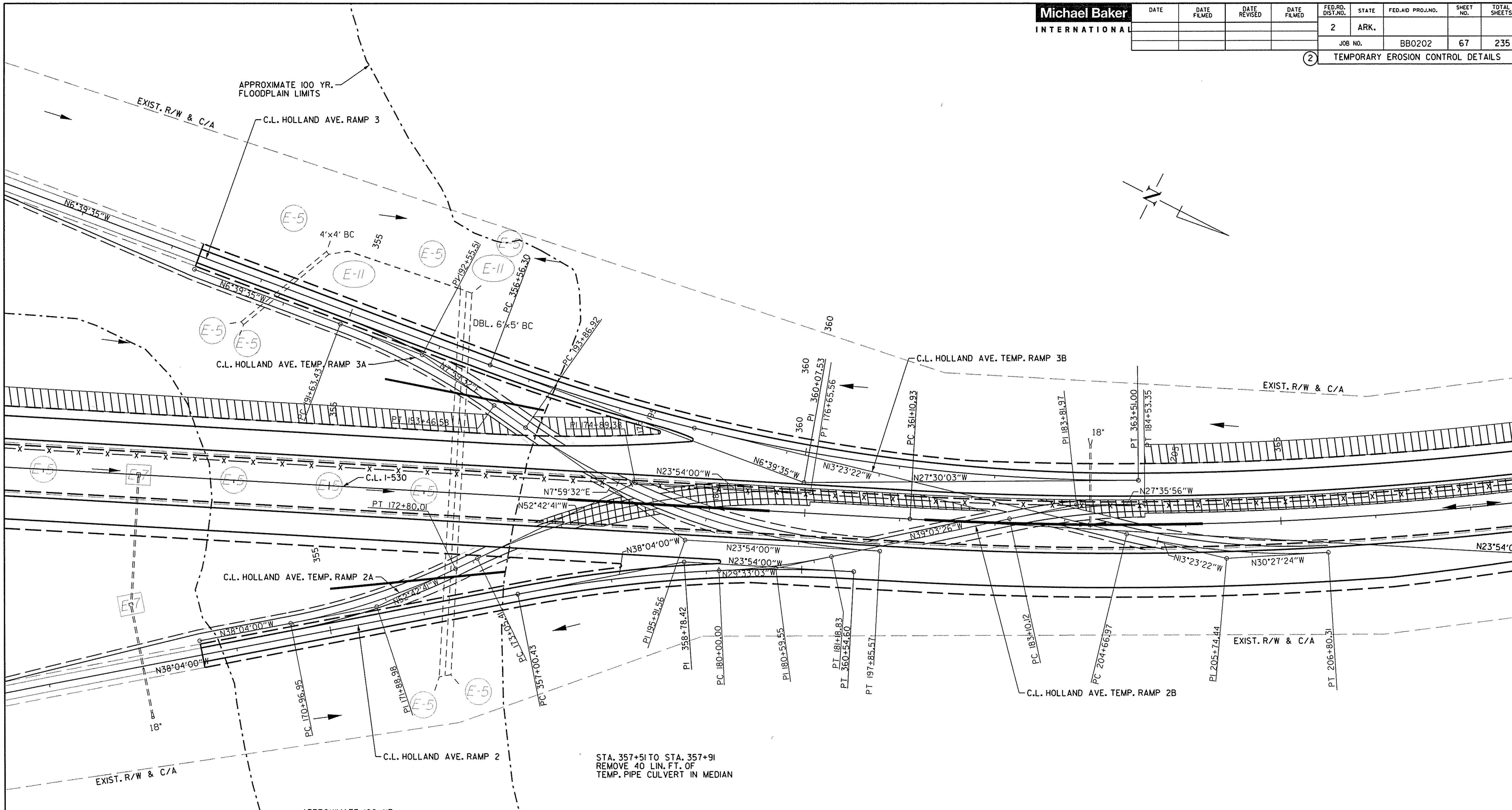
Michael Baker INTERNATIONAL	DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
					2	ARK.			
					JOB NO.		BB0202	67	235

(2) TEMPORARY EROSION CONTROL DETAILS



LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- [E-7] = DROP INLET SILT FENCE
- (E-11) = SILT FENCE
- (dashed line) / (stippled) = CONSTRUCTION AREA
- (hatched) = TEMPORARY SEEDING

REVISIONS

DATE OF REVISION	REVISION

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

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

6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE 3A

Leonard.Speed 6/20/2016 2:29:46 PM
WORKSPACE: Leonard.Speed
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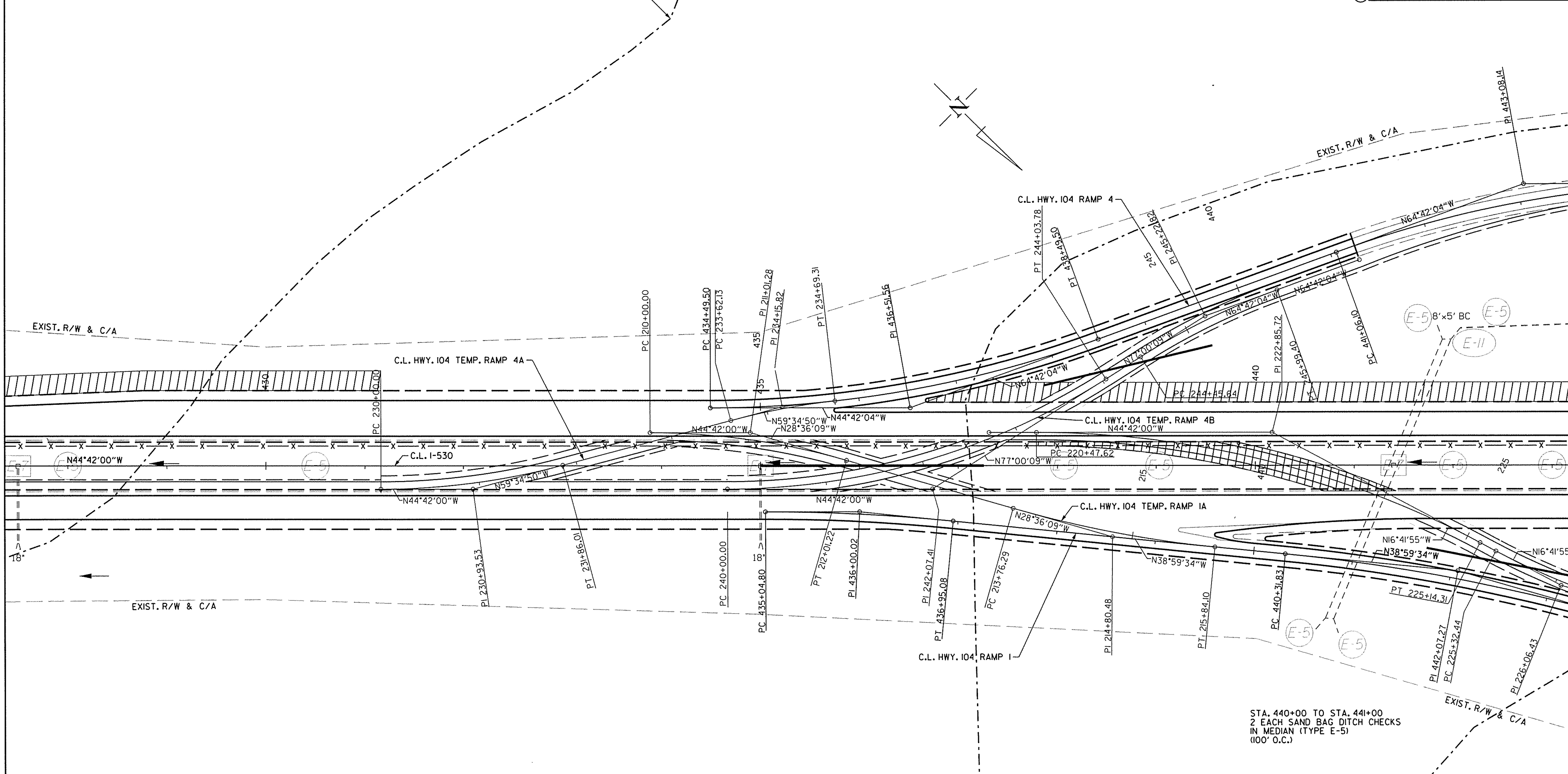
Michael Baker INTERNATIONAL	DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
					2	ARK.			
					JOB NO.		BB0202	68	235

(2) TEMPORARY EROSION CONTROL DETAILS



REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5	= SAND BAG DITCH CHECKS
E-7	= DROP INLET SILT FENCE
E-11	= SILT FENCE
(dashed line)	= CONSTRUCTION AREA
(stippled)	= CONSTRUCTION AREA
(hatched)	= TEMPORARY SEEDING

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No.10887 SCOTT P. THORNSBERRY
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE 3A

Leonard.Speed 6/20/2016 2:29:47 PM
WORKSPACE: Leonard.Speed
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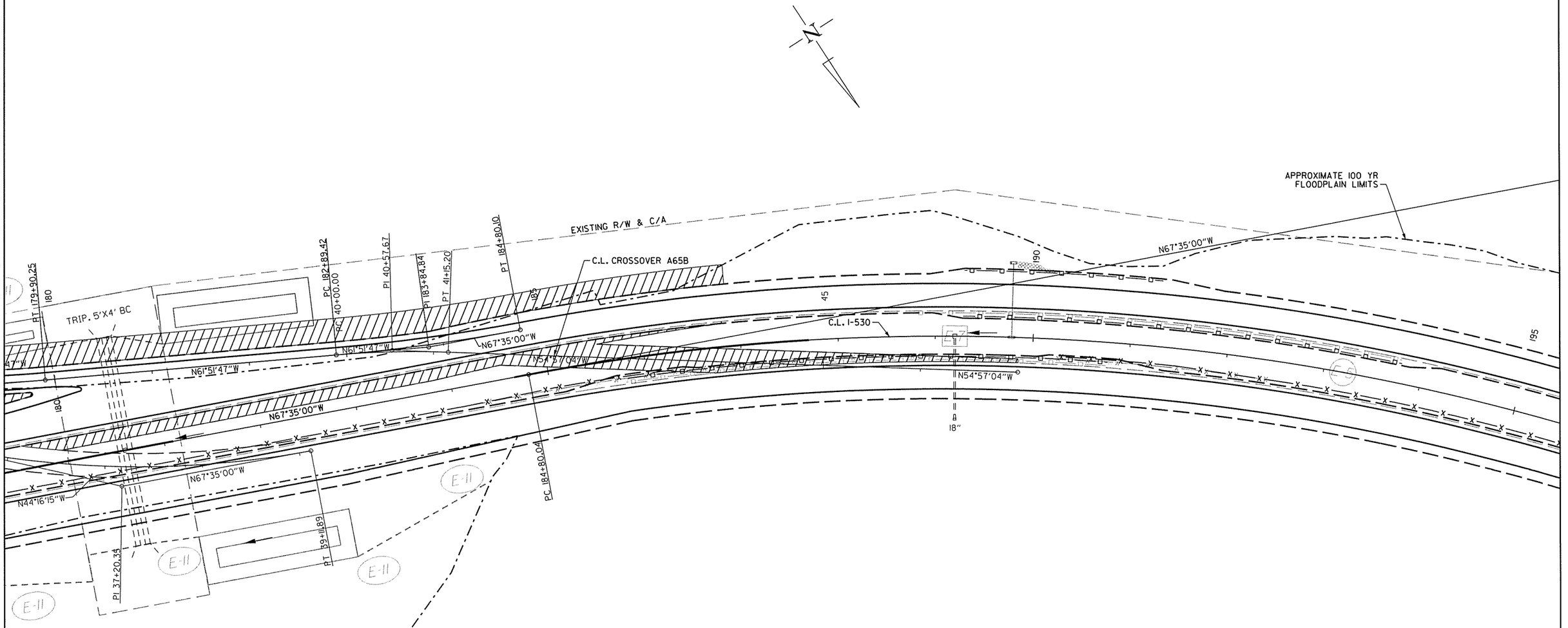
Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	69	235

(2) TEMPORARY EROSION CONTROL DETAILS



APPROXIMATE 100 YR FLOODPLAIN LIMITS

STA. 184+65 TO STA. 187+70
REMOVE 305 LIN. FT. OF
TEMP. PIPE CULVERT IN MEDIAN

STA. 186+25 1 EACH
SAND BAG DITCH CHECKS
IN MEDIAN (TYPE E-5)

LEGEND

- E-5 = SAND BAG DITCH CHECKS
- E-7 = DROP INLET SILT FENCE
- E-11 = SILT FENCE
- = CONSTRUCTION AREA
- = TEMPORARY SEEDING

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE OF REVISION	REVISION

EXISTING R/W & C/A

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 10887
SCOTT P. THORNSBERRY
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE 3B

Leonard.Speed 6/20/2016 2:29:47 PM
WORKSPACE: Leonard.Speed
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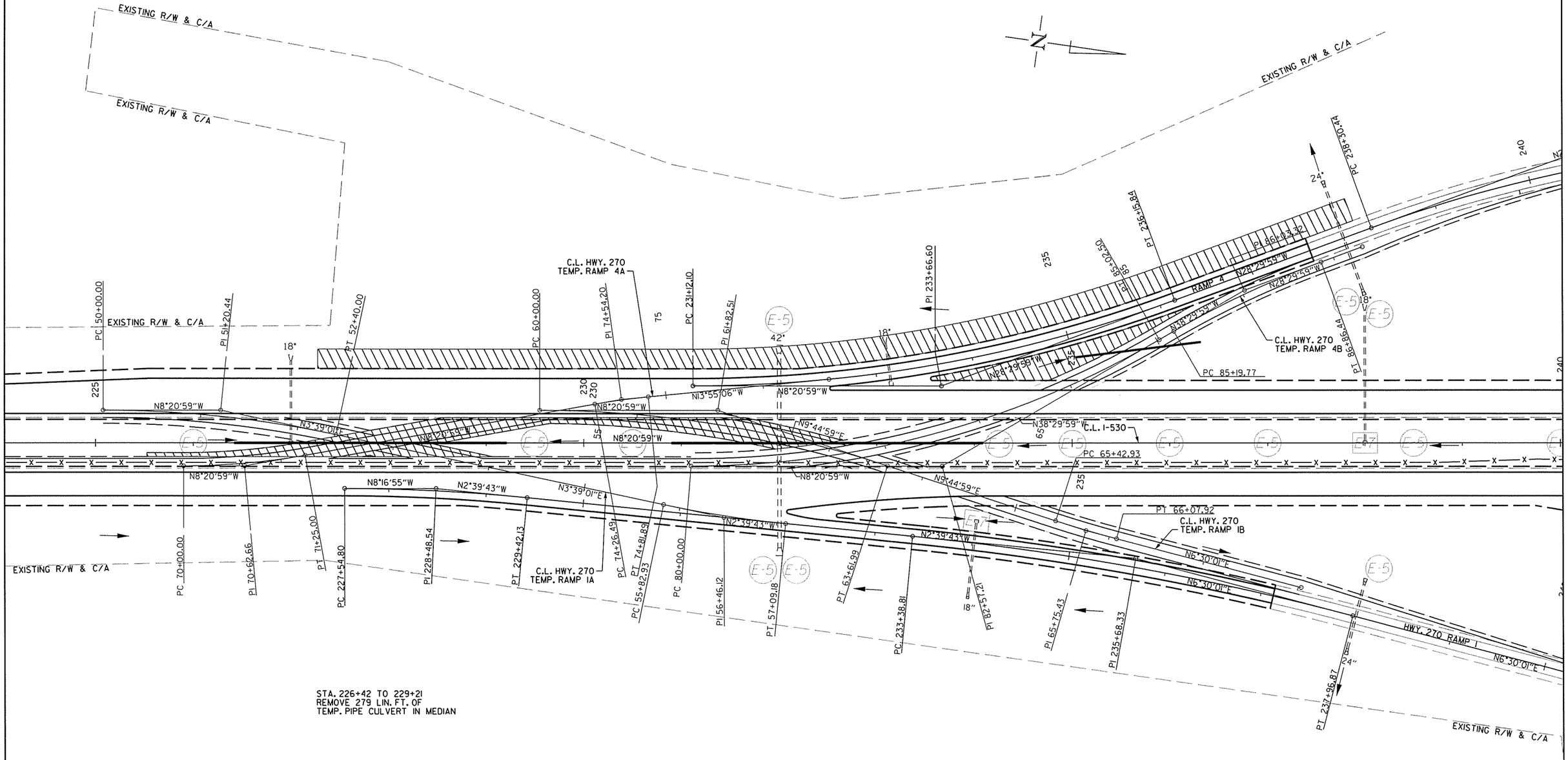
Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	70	235

(2) TEMPORARY EROSION CONTROL DETAILS



STA. 226+42 TO 229+21
REMOVE 279 LIN. FT. OF
TEMP. PIPE CULVERT IN MEDIAN

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- E-5 = SAND BAG DITCH CHECKS
- E-7 = DROP INLET SILT FENCE
- E-11 = SILT FENCE
- = CONSTRUCTION AREA
- = TEMPORARY SEEDING

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE 3B

Leonard.Speed 6/20/2016 2:29:48 PM
WORKSPACE: Leonard.Speed
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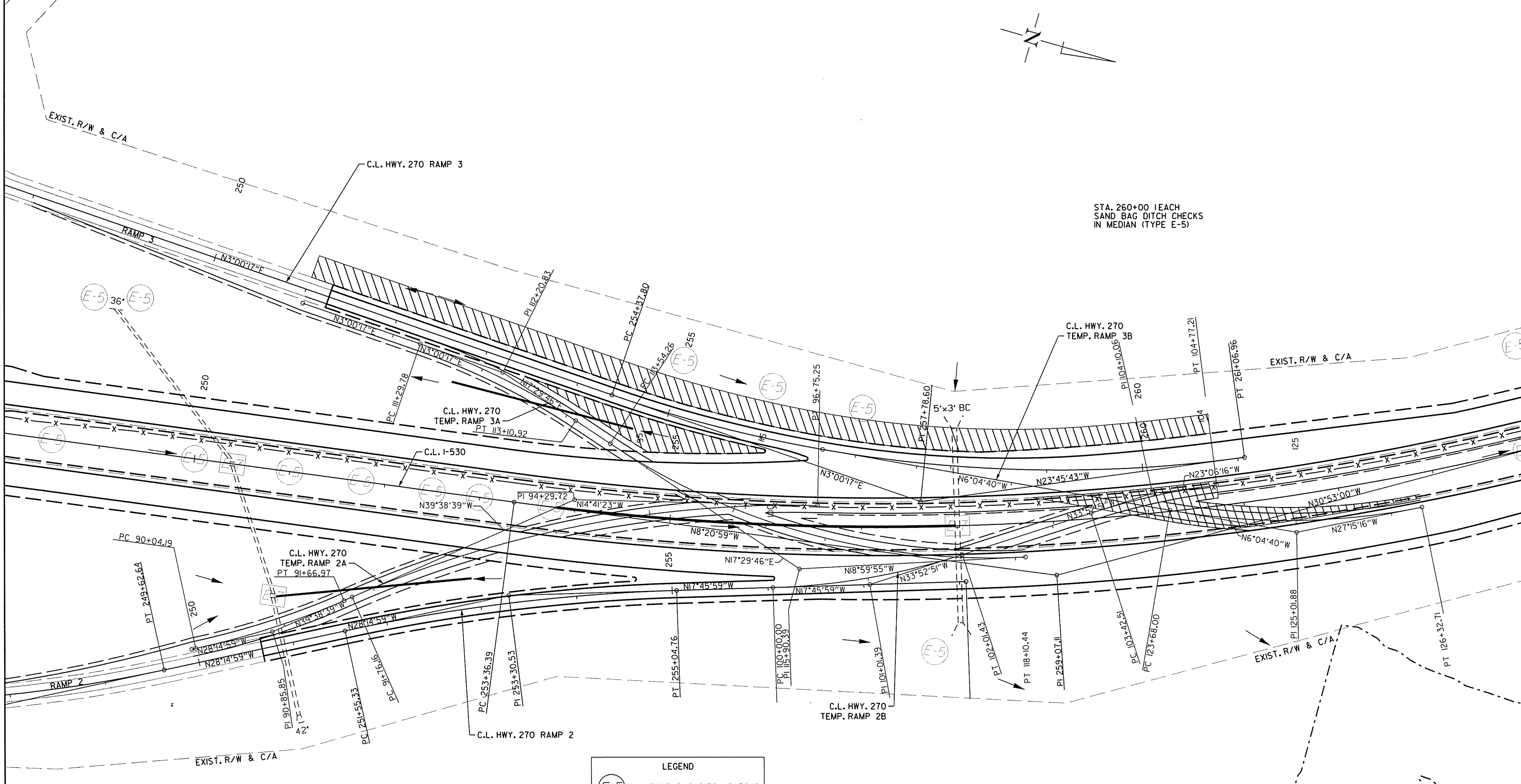
Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	71	235

(2) TEMPORARY EROSION CONTROL DETAILS



LEGEND

E-5	= SAND BAG DITCH CHECKS
E-7	= DROP INLET SILT FENCE
E-11	= SILT FENCE
	= CONSTRUCTION AREA
	= TEMPORARY SEEDING

REVISIONS

DATE OF REVISION	REVISION

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

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

6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE 3B

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Michael Baker INTERNATIONAL	DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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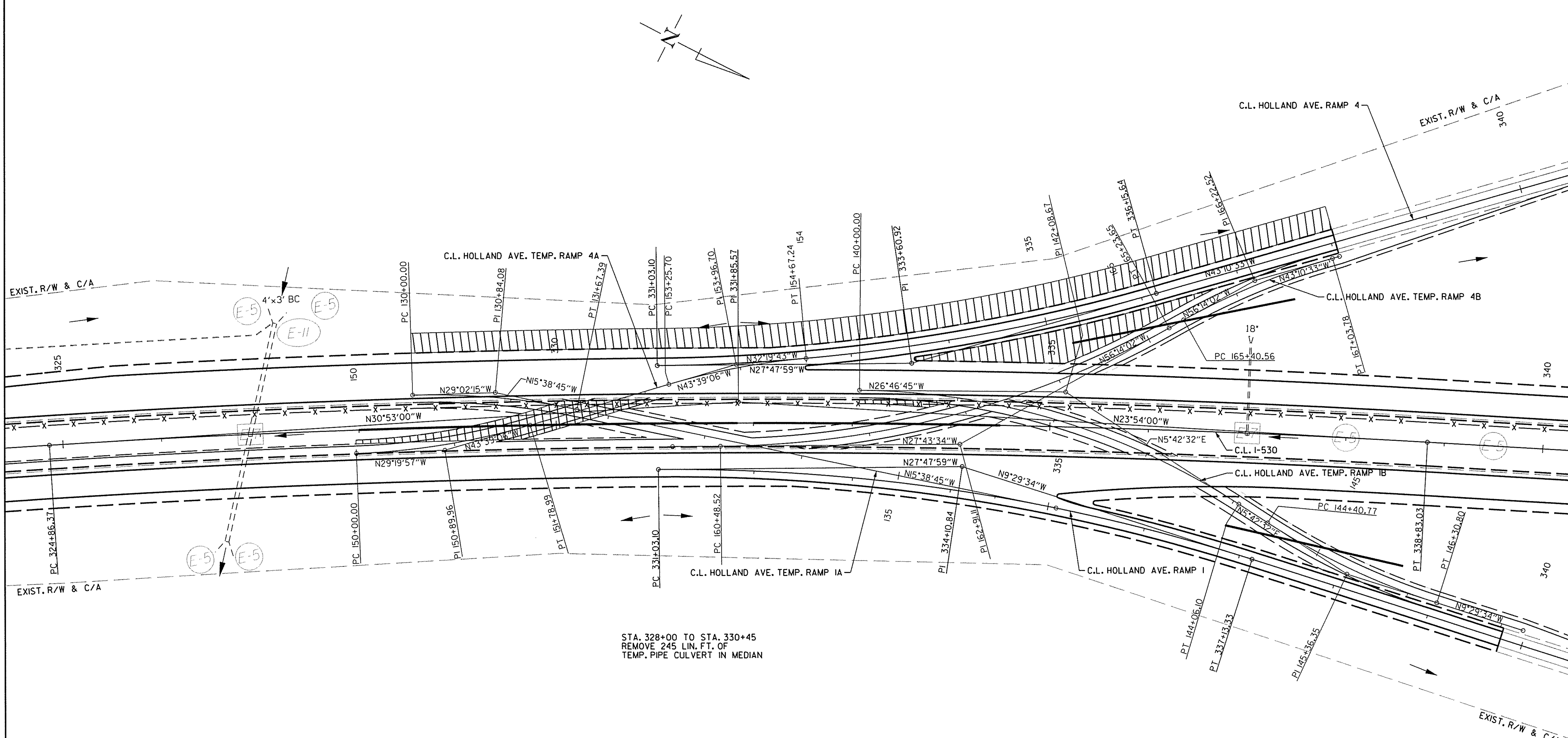
					JOB NO.		BB0202	72	235
					(2)	TEMPORARY EROSION CONTROL DETAILS			



REVISIONS

DATE OF REVISION	REVISION

LEGEND

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

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

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

6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE 3B

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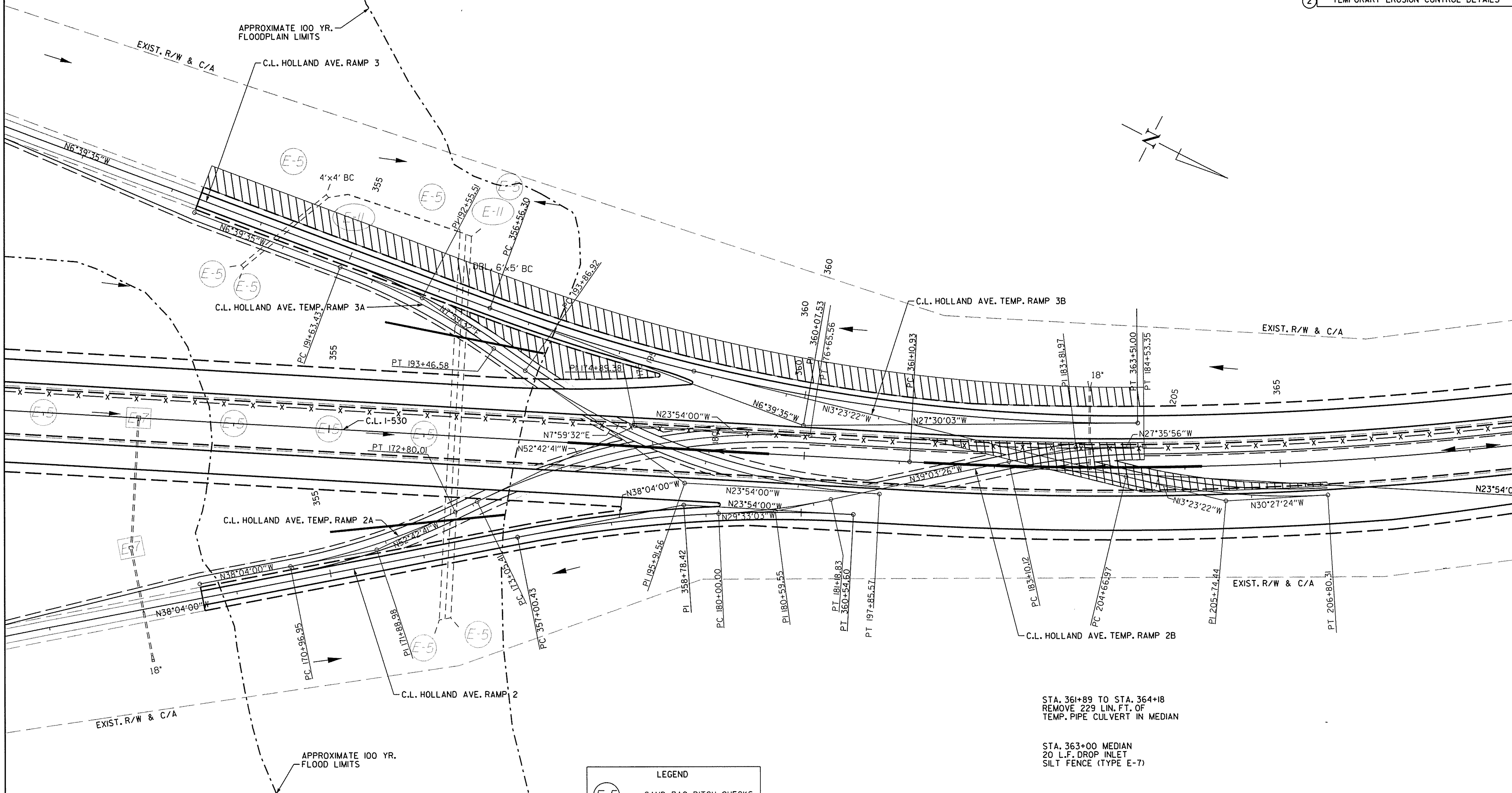
Michael Baker INTERNATIONAL	DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
					2	ARK.			
					JOB NO.		BB0202	73	235

(2) TEMPORARY EROSION CONTROL DETAILS



APPROXIMATE 100 YR. FLOODPLAIN LIMITS
EXIST. R/W & C/A
C.L. HOLLAND AVE. RAMP 3
N6°39'35"W
4'×4' BC
355
PI 192+55.51
PC 356+56.30
DBL. 6'×5' BC
PC 193+86.92
C.L. HOLLAND AVE. TEMP. RAMP 3A
PC 191+63.43
PT 193+46.58
PI 174+89.38
360
PI 360+07.53
PT 176+65.56
PC 361+10.93
C.L. HOLLAND AVE. TEMP. RAMP 3B
PI 183+81.97
18"
PT 363+51.00
PT 184+53.35
205
365
N23°54'00"W
N13°23'22"W
N27°30'03"W
N27°35'56"W
C.L. I-530
N7°59'32"E
PT 172+80.01
N52°42'41"W
N39°03'26"W
N38°04'00"W
N23°54'00"W
N29°33'03"W
N13°23'22"W
N30°27'24"W
C.L. HOLLAND AVE. TEMP. RAMP 2A
PI 195+91.56
PI 358+78.42
PC 180+00.00
PI 180+59.55
PT 181+18.83
PT 360+54.60
PT 197+85.57
PC 183+10.12
PC 204+66.97
PI 205+74.44
PT 206+80.31
EXIST. R/W & C/A
C.L. HOLLAND AVE. TEMP. RAMP 2B
PC 170+96.95
PI 171+88.98
PC 173+02.41
PC 357+00.43
C.L. HOLLAND AVE. RAMP 2
APPROXIMATE 100 YR. FLOOD LIMITS
E-5
E-7
E-11

STA. 361+89 TO STA. 364+18
REMOVE 229 LIN. FT. OF
TEMP. PIPE CULVERT IN MEDIAN

STA. 363+00 MEDIAN
20 L.F. DROP INLET
SILT FENCE (TYPE E-7)

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- E-5 = SAND BAG DITCH CHECKS
- E-7 = DROP INLET SILT FENCE
- E-11 = SILT FENCE
- = CONSTRUCTION AREA
- = TEMPORARY SEEDING

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

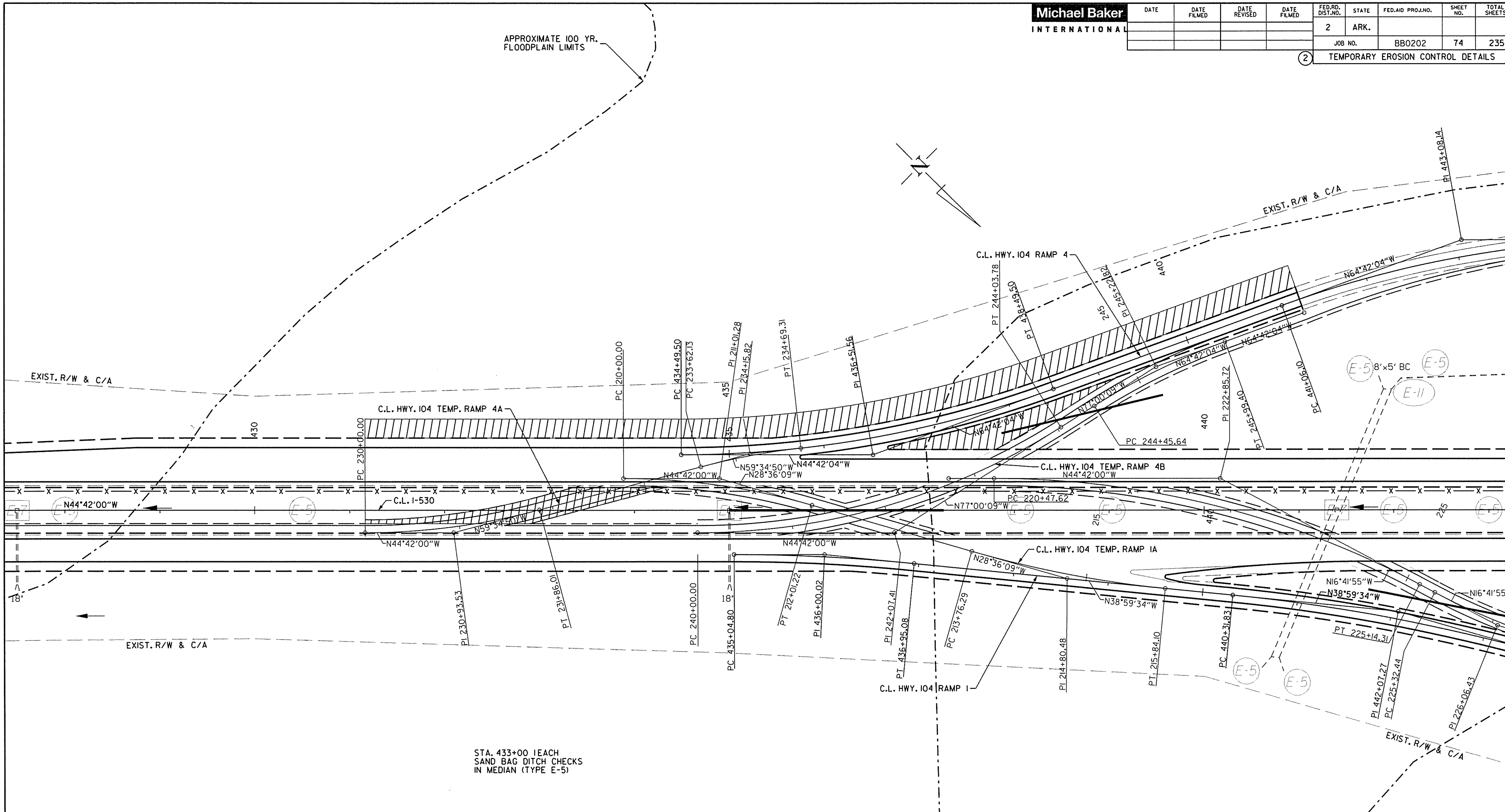
STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No.10887 SCOTT P. THORNSBERRY

6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE 3B

Michael Baker INTERNATIONAL	DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
					2	ARK.			
					JOB NO.		BB0202	74	235

(2) TEMPORARY EROSION CONTROL DETAILS



STA. 433+00 1 EACH SAND BAG DITCH CHECKS IN MEDIAN (TYPE E-5)

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- E-5 = SAND BAG DITCH CHECKS
- E-7 = DROP INLET SILT FENCE
- E-11 = SILT FENCE
- = CONSTRUCTION AREA
- = TEMPORARY SEEDING

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

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

6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE 3B

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Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	75	235

(2) TEMPORARY EROSION CONTROL DETAILS

APPROXIMATE 100 YR FLOODPLAIN LIMITS

EXISTING R/W & C/A

STA. 174+21 TO STA. 177+59
REMOVE 338 LIN. FT. OF
TEMP. PIPE CULVERT IN MEDIAN

RAMP A65 STA. 176+52 RT.
REMOVE 17 LIN. FT. OF
TEMP. PIPE CULVERT

TEMP. RAMP A65 A STA. 33+92
REMOVE 142 LIN. FT. OF
TEMP. PIPE CULVERT

C.L. TEMPORARY RAMP A65A

C.L. I-530

RAMP D65 STA. 169+60 LT.
REMOVE 12 LIN. FT. OF
TEMP. PIPE CULVERT

TEMP. RAMP D65 STA. 24+94
REMOVE 224 LIN. FT. OF
TEMP. PIPE CULVERT

C.L. TEMPORARY RAMP D65

STA. 175+14.73
BEGIN JOB BB0202
LOG MILE 34.99

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- E-5 = SAND BAG DITCH CHECKS
- E-7 = DROP INLET SILT FENCE
- E-11 = SILT FENCE
- = OBLITERATION
- = PERMANENT SEEDING

EROSION CONTROL MEASURES IN MEDIAN TO BE PLACED DURING STAGE 4A.

EROSION CONTROL MEASURE IN GORE AREA TO BE PLACED DURING STAGE 4B.

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

APPROXIMATE 100 YR FLOODPLAIN LIMITS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 10887
SCOTT P. THORNSBERRY
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE 4 A&B

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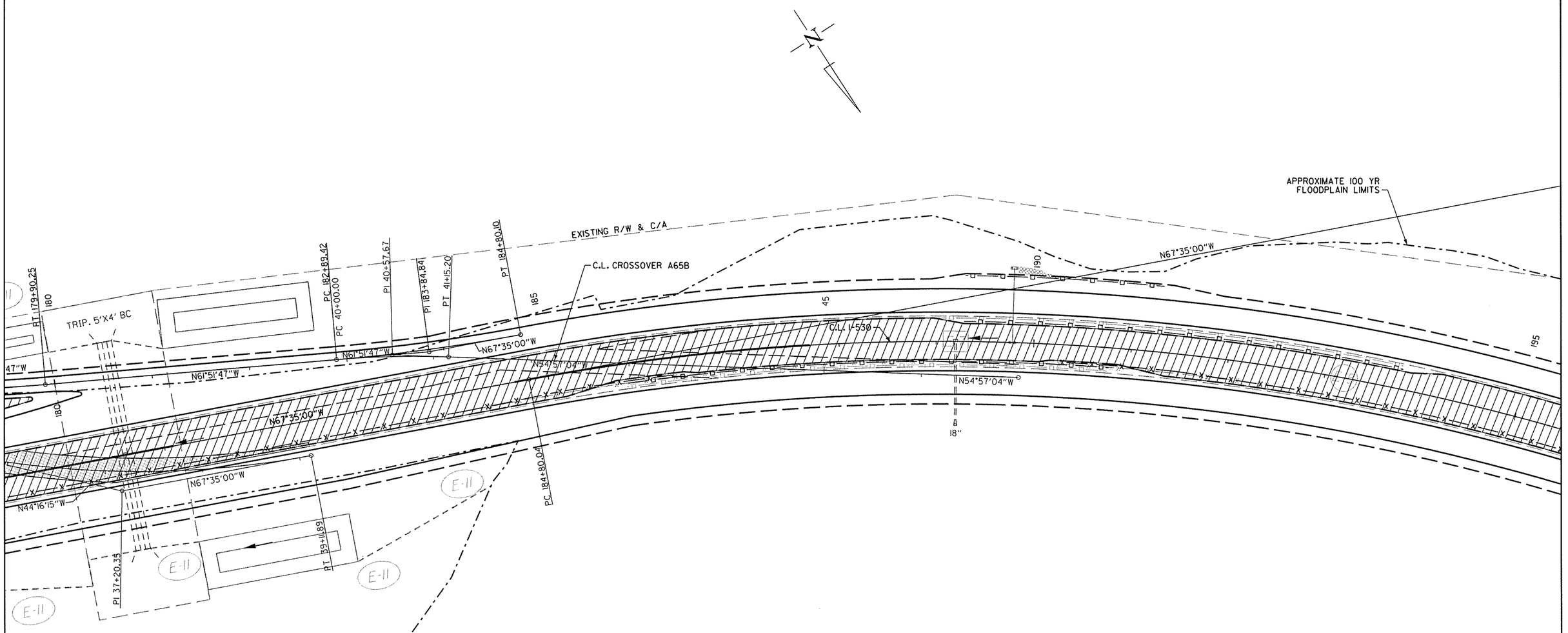
Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	76	235

(2) TEMPORARY EROSION CONTROL DETAILS



APPROXIMATE 100 YR FLOODPLAIN LIMITS

STA. 179+11 TO STA. 181+09
REMOVE 198 LIN. FT. OF
TEMP. PIPE CULVERT IN MEDIAN

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- E-5 = SAND BAG DITCH CHECKS
- E-7 = DROP INLET SILT FENCE
- E-11 = SILT FENCE
- = OBLITERATION
- = PERMANENT SEEDING

EROSION CONTROL MEASURES IN MEDIAN TO BE PLACED DURING STAGE 4A.

EROSION CONTROL MEASURE IN GORE AREA TO BE PLACED DURING STAGE 4B.

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE 4 A&B

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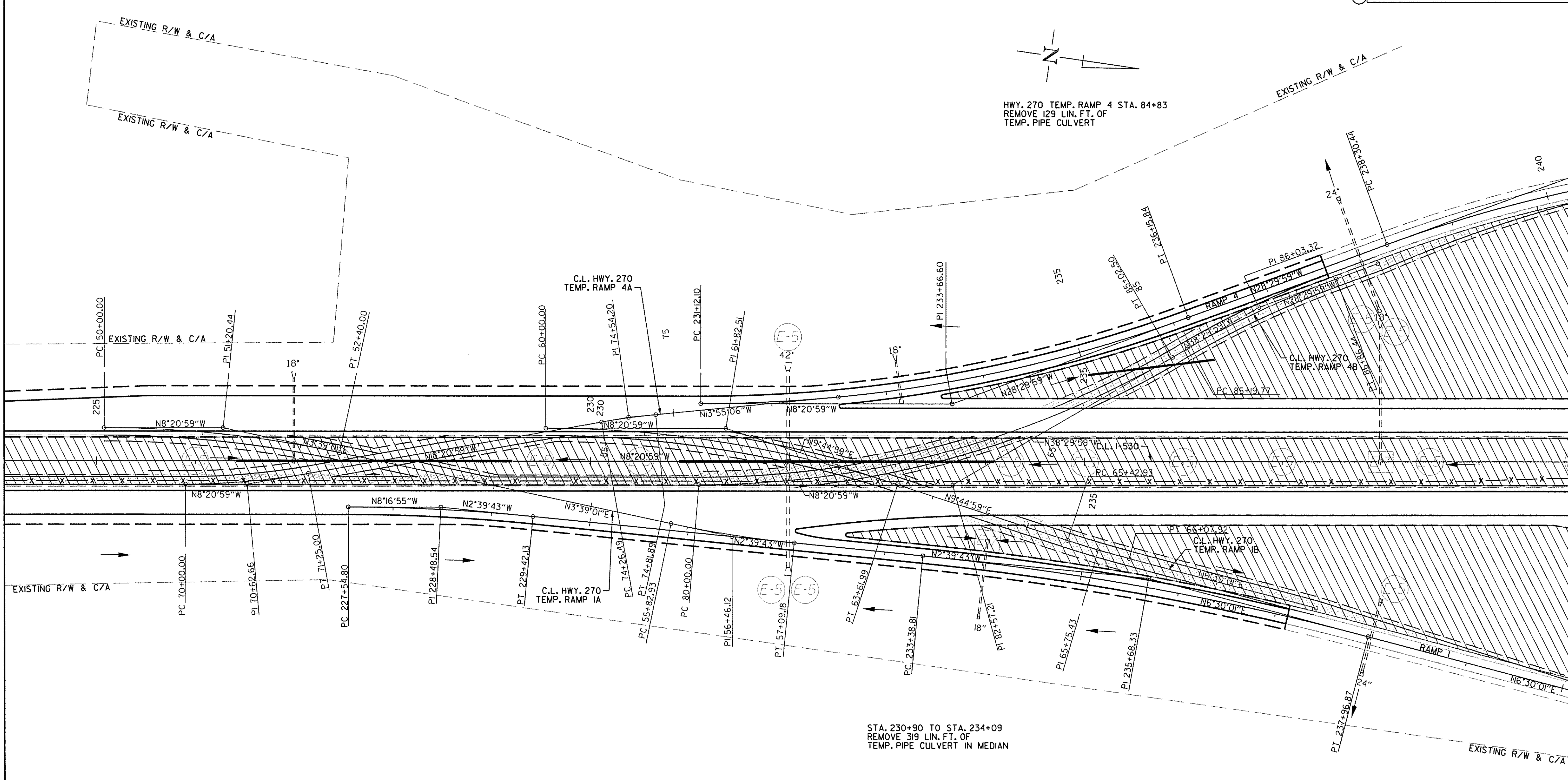

REVISIONS

DATE OF REVISION	REVISION

LEGEND

Symbol	Description
E-5	= SAND BAG DITCH CHECKS
E-7	= DROP INLET SILT FENCE
E-11	= SILT FENCE
(stippled)	= OBLITERATION
(hatched)	= PERMANENT SEEDING

EROSION CONTROL MEASURES IN MEDIAN TO BE PLACED DURING STAGE 4A.

EROSION CONTROL MEASURE IN GORE AREA TO BE PLACED DURING STAGE 4B.

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

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

6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE 4 A&B

Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	78	235

(2) TEMPORARY EROSION CONTROL DETAILS

HWY. 270 TEMP. RAMP 3A STA. 112+89
REMOVE 195 LIN. FT. OF
TEMP. PIPE CULVERT

STA. 255+37 TO STA. 257+98
REMOVE 261 LIN. FT. OF
TEMP. PIPE CULVERT IN MEDIAN

HWY. 270 TEMP. RAMP 2A STA. 92+87
REMOVE 205 LIN. FT. OF
TEMP. PIPE CULVERT

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- E-5 = SAND BAG DITCH CHECKS
- E-7 = DROP INLET SILT FENCE
- E-11 = SILT FENCE
- = OBLITERATION
- = PERMANENT SEEDING

EROSION CONTROL MEASURES IN MEDIAN TO BE PLACED DURING STAGE 4A.

EROSION CONTROL MEASURE IN GORE AREA TO BE PLACED DURING STAGE 4B.

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

APPROXIMATE 100 YR FLOODPLAIN LIMITS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
SCOTT P. THORNSBERRY
No. 10887
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE 4 A&B

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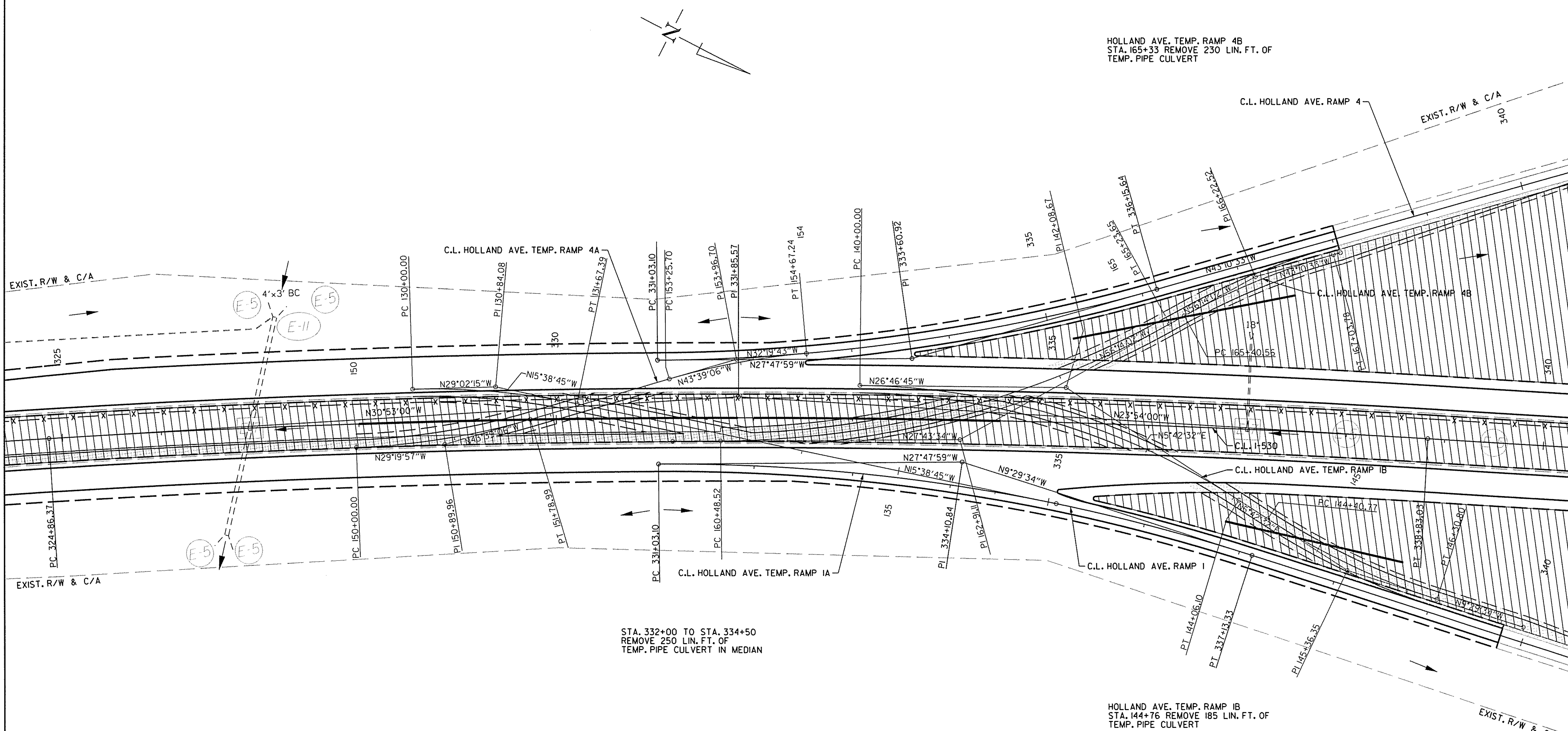
Michael Baker INTERNATIONAL	DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
					2	ARK.			
					JOB NO.		BB0202	79	235
				(2)	TEMPORARY EROSION CONTROL DETAILS				



LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- [E-7] = DROP INLET SILT FENCE
- (E-11) = SILT FENCE
- = OBLITERATION
- = PERMANENT SEEDING

EROSION CONTROL MEASURES IN MEDIAN TO BE PLACED DURING STAGE 4A.

EROSION CONTROL MEASURE IN GORE AREA TO BE PLACED DURING STAGE 4B.

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISIONS

DATE OF REVISION	REVISION

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

6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE 4 A&B

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Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	80	235

(2) TEMPORARY EROSION CONTROL DETAILS

APPROXIMATE 100 YR. FLOODPLAIN LIMITS

EXIST. R/W & C/A

C.L. HOLLAND AVE. RAMP 3

N6°39'35"W

4'x4' BC

355

E-5

E-11

PI 192+55.51

PC 356+56.30

HOLLAND AVE. TEMP. RAMP 3A
STA. 192+30 REMOVE 170 LIN. FT. OF
TEMP. PIPE CULVERT

C.L. HOLLAND AVE. TEMP. RAMP 3A

DBL. 6'x5' BC

PC 193+86.92

PC 194+63.43

PT 193+46.58

PI 174+89.38

C.L. HOLLAND AVE. TEMP. RAMP 3B

360

PI 360+07.53

PT 176+65.56

PC 361+10.93

PI 183+81.97

PT 363+51.00

PT 184+53.35

18°

205

365

EXIST. R/W & C/A

N27°30'03"W

N27°35'56"W

N13°23'22"W

N30°27'24"W

N23°54'00"W

N29°33'03"W

N19°01'26"W

C.L. I-530

N7°59'32"E

N52°42'14"W

PT 172+80.10

N38°04'00"W

PC 170+96.95

PI 171+88.98

PC 173+00.41

PC 357+00.43

PI 195+91.56

PI 358+78.42

PC 180+00.00

PI 180+59.55

PT 181+18.83

PT 360+54.60

PT 197+85.57

PC 183+10.12

PC 204+66.97

PI 205+74.44

PT 206+80.31

EXIST. R/W & C/A

C.L. HOLLAND AVE. TEMP. RAMP 2A

C.L. HOLLAND AVE. TEMP. RAMP 2B

C.L. HOLLAND AVE. RAMP 2

HOLLAND AVE. TEMP. RAMP 2A
STA. 172+19 REMOVE 185' OF
TEMP. PIPE CULVERT

STA. 357+91 TO STA. 359+63
REMOVE 172 LIN. FT. OF
TEMP. PIPE CULVERT IN MEDIAN

APPROXIMATE 100 YR. FLOOD LIMITS

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- E-5 = SAND BAG DITCH CHECKS
- E-7 = DROP INLET SILT FENCE
- E-11 = SILT FENCE
- = OBLITERATION
- = PERMANENT SEEDING

EROSION CONTROL MEASURES IN MEDIAN TO BE PLACED DURING STAGE 4A.

EROSION CONTROL MEASURE IN GORE AREA TO BE PLACED DURING STAGE 4B.

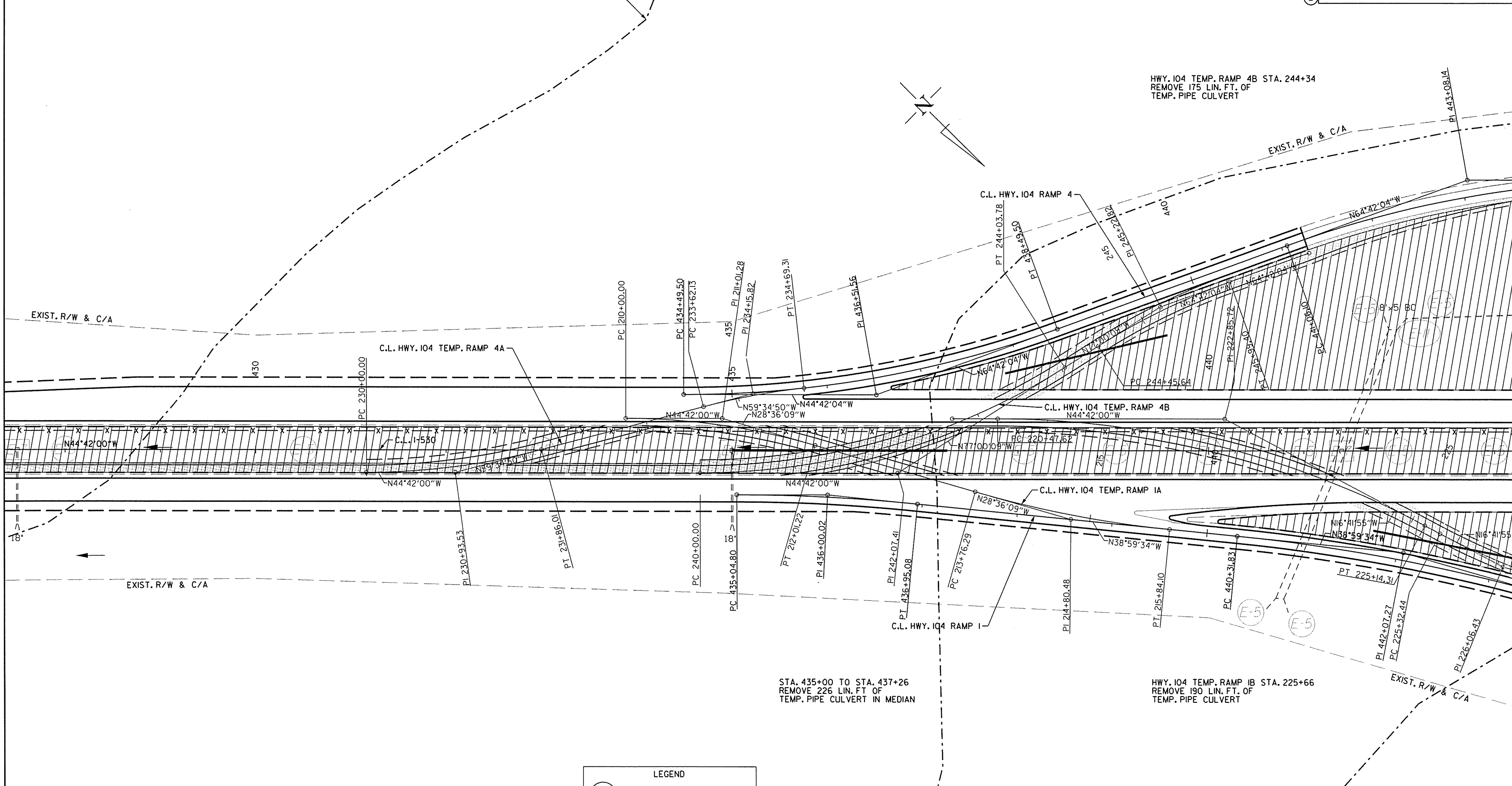
EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
SCOTT P. THORNSBERRY
No.10887
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE 4 A&B

Michael Baker INTERNATIONAL	DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
					2	ARK.			
					JOB NO.		BB0202	81	235

(2) TEMPORARY EROSION CONTROL DETAILS



DATE OF REVISION	REVISION

REVISIONS

LEGEND

- E-5 = SAND BAG DITCH CHECKS
- E-7 = DROP INLET SILT FENCE
- E-11 = SILT FENCE
- = OBLITERATION
- = PERMANENT SEEDING

EROSION CONTROL MEASURES IN MEDIAN TO BE PLACED DURING STAGE 4A.

EROSION CONTROL MEASURE IN GORE AREA TO BE PLACED DURING STAGE 4B.

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

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

6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE 4 A&B

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Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	82	235

(2) TEMPORARY EROSION CONTROL DETAILS

EXIST. R/W
C.L. HWY. 104 RAMP 3
N32°01'59"W
PT 452+59.75
PC 260+00.00
PI 260+82.07
PT 261+63.86
C.L. 530 CROSSOVER 2B
N44°42'04"W
N36°30'29"W
N44°42'00"W
N52°53'31"W
C.L. 530 CROSSOVER 2A
PC 459+22.31
PC 254+76.77
PI 460+12.77
PI 255+94.01
PT 461+03.14
PT 257+10.43
N36°32'06"W
N52°53'31"W
N41°12'32"W
PC 265+67.21
N41°54'15"W
PI 266+21.12
PT 266+75.13
PI 461+72.54
PC 463+72.96
PI 463+94.90
PRC 464+16.84
PI 465+02.18
PI 465+59.29
PT 465+87.50
N37°51'04"W
N35°19'19"W
N26°56'02"W
N44°42'00"W
C.L. I-530
EXIST. R/W
PC 250+00.00
PI 250+82.05
PT 251+63.81
PT 456+85.35
N64°21'28"W
PC 459+62.30
PC 459+85.95
PI 464+38.99
EXIST. R/W
C.L. HWY. 104
PC 452+92.19
N44°42'04"W
PI 454+90.12
EXIST. R/W
C.L. HWY. 104 RAMP 2
455
460
465
18"
24"
25

STA. 456+40 TO STA. 459+85
REMOVE 345 LIN. FT. OF
TEMP. PIPE CULVERT IN MEDIAN

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- E-5 = SAND BAG DITCH CHECKS
- E-7 = DROP INLET SILT FENCE
- E-11 = SILT FENCE
- = OBLITERATION
- = PERMANENT SEEDING

EROSION CONTROL MEASURES IN MEDIAN TO BE PLACED DURING STAGE 4A.

EROSION CONTROL MEASURE IN GORE AREA TO BE PLACED DURING STAGE 4B.

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
SCOTT P. THORNSBERRY
No.10887
6-21-2016

TEMPORARY EROSION CONTROL DETAILS - STAGE 4 A&B

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	83	235

(2) MAINTENANCE OF TRAFFIC

SUMMARY OF SEQUENCE OF CONSTRUCTION

STAGE 1A OPERATIONS:
INSTALL ADVANCE WARNING SIGNS.
CLOSE INSIDE LANE ON MAIN LANES.
REMOVE WIRE ROPE SAFTEY FENCE AND MEDIAN GUARDRAILS IN CONSTRUCTION AREAS.
GRADE IN CROSSOVERS, TEMPORARY RAMPS, AND ACCELERATION LANES IN MEDIAN AREA.
PAVE CROSSOVERS, TEMPORARY RAMPS, AND ACCELERATION LANES AS SHOWN.
TRENCH & SHOULDER PREPARATION OF THE INSIDE SOUTHBOUND SHOULDER OF THE SB I-530 LANES TO PROPOSED LIMITS SHOWN ON ROADWAY TYPICALS.

STAGE 1B OPERATIONS:
CLOSE OUTSIDE LANE ON MAIN LANES.
GRADE IN TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS.
PAVE TEMPORARY RAMPS AS SHOWN.

STAGE 2A OPERATIONS:
INSTALL PRIMARY MAIN LANE PRECAST CONCRETE BARRIER.
ROUTE NB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANE OF SB MAIN LANES.
REMOVE MAIN LANE GUARDRAILS WHERE ILLUSTRATED.
RECONSTRUCT NB LANES, APPROACH GUTTERS & SLABS.
MODIFY MEDIAN RAMPS AS INDICATED.
NOTE: MODIFICATIONS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY AND DO NOT INDICATE CONSTRUCTION LIMITS.

STAGE 2B OPERATIONS:
UTILIZE STAGE 2A TRAFFIC PATH FOR NB I-530 TRAFFIC.
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO ALTERNATE TEMPORARY RAMPS.
MODIFY MEDIAN RAMPS AS INDICATED.
RECONSTRUCT REMAINING SECTIONS OF I-530 NORTHBOUND LANES.

STAGE 3A OPERATIONS:
RELOCATE PRIMARY MAIN LANE PRECAST CONCRETE BARRIER TO NB LANES.
ROUTE SB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANE OF NB MAIN LANES.
REMOVE MAIN LANE GUARDRAILS WHERE ILLUSTRATED.
RECONSTRUCT SB LANES, APPROACH GUTTERS & SLABS.
MODIFY MEDIAN RAMPS AS INDICATED.
NOTE: MODIFICATIONS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY AND DO NOT INDICATE CONSTRUCTION LIMITS.

STAGE 3B OPERATIONS:
UTILIZE STAGE 3A TRAFFIC PATH FOR NB I-530 TRAFFIC.
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO ALTERNATE TEMPORARY RAMPS.
MODIFY MEDIAN RAMPS AS INDICATED.
RECONSTRUCT REMAINING SECTIONS OF I-530 NORTHBOUND LANES.

STAGE 4A OPERATIONS:
SHIFT SB TRAFFIC TO OUTSIDE SB LANE.
RETAIN NB TRAFFIC IN OUTSIDE NB LANE.
REMOVE PRIMARY MAIN LANE PRECAST CONCRETE BARRIER.
OBLITERATE REMAINING 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 OF MAIN LANES.
INSTALL RUMBLE STRIPS ON INSIDE SHOULDERS.
PLACE FINAL STRIPING ON INSIDE LANES.

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

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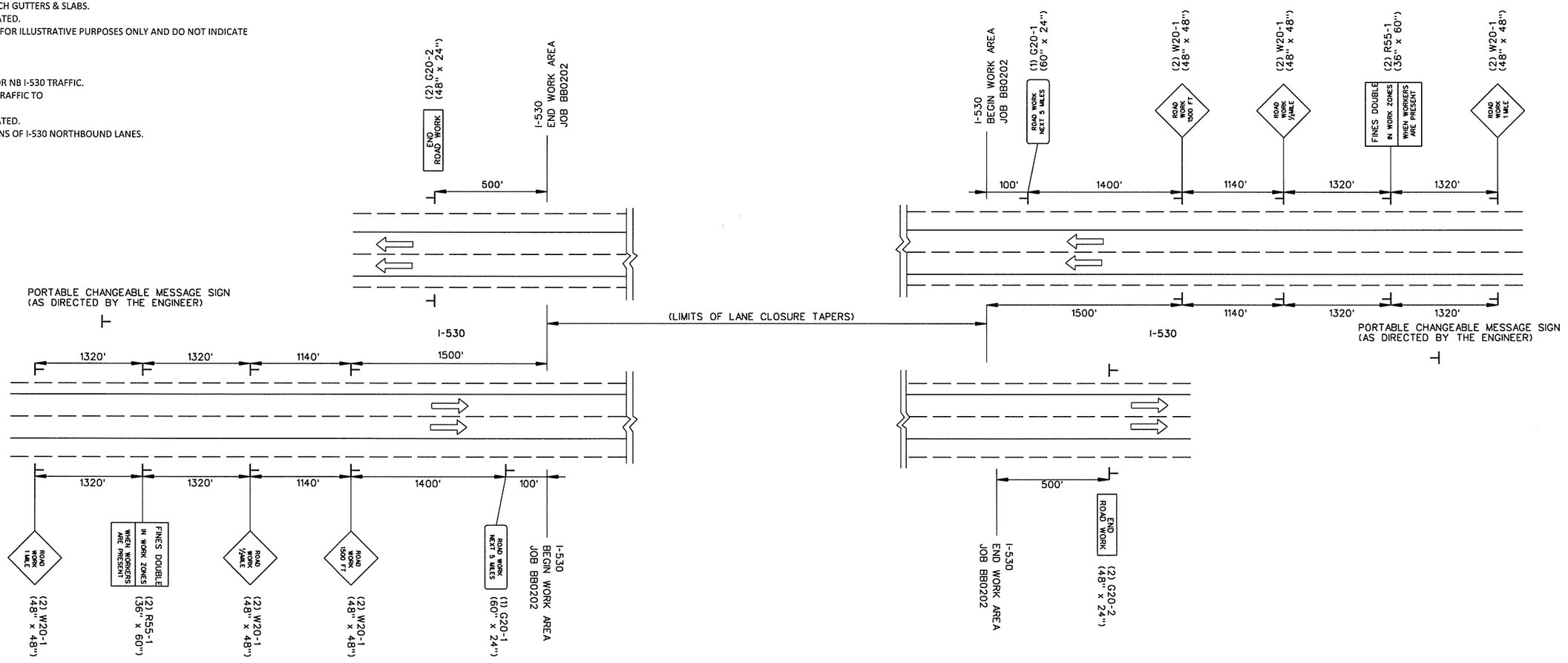
NOTE THAT THESE SIGNS MAY BE TEMPORARILY REPLACED BY SOME OF THE ADVANCE SIGNS FOR LANE CLOSURES WHILE WORK IS UNDERWAY IN THESE AREAS.



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

MAINTENANCE OF TRAFFIC

SUMMARY OF SEQUENCE OF CONSTRUCTION
STAGE 1A OPERATIONS:
INSTALL ADVANCE WARNING SIGNS.
CLOSE INSIDE LANE ON MAIN LANES.
REMOVE WIRE ROPE SAFTEY FENCE AND MEDIAN GUARDRAILS IN CONSTRUCTION AREAS.
GRADE IN CROSSOVERS, TEMPORARY RAMPS, AND ACCELERATION LANES IN MEDIAN AREA.
PAVE CROSSOVERS, TEMPORARY RAMPS, AND ACCELERATION LANES AS SHOWN.
TRENCH & SHOULDER PREPARATION OF THE INSIDE SOUTHBOUND SHOULDER OF THE SB I-530 LANES TO PROPOSED LIMITS SHOWN ON ROADWAY TYPICALS.

STAGE 1B OPERATIONS:
CLOSE OUTSIDE LANE ON MAIN LANES.
GRADE IN TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS.
PAVE TEMPORARY RAMPS AS SHOWN.

STAGE 2A OPERATIONS:
INSTALL PRIMARY MAIN LANE PRECAST CONCRETE BARRIER.
ROUTE NB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANE OF SB MAIN LANES.
REMOVE MAIN LANE GUARDRAILS WHERE ILLUSTRATED.
RECONSTRUCT NB LANES, APPROACH GUTTERS & SLABS.
MODIFY MEDIAN RAMPS AS INDICATED.
NOTE: MODIFICATIONS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY AND DO NOT INDICATE CONSTRUCTION LIMITS.

STAGE 2B OPERATIONS:
UTILIZE STAGE 2A TRAFFIC PATH FOR NB I-530 TRAFFIC.
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO ALTERNATE TEMPORARY RAMPS.
MODIFY MEDIAN RAMPS AS INDICATED.
RECONSTRUCT REMAINING SECTIONS OF I-530 NORTHBOUND LANES.

STAGE 3A OPERATIONS:
RELOCATE PRIMARY MAIN LANE PRECAST CONCRETE BARRIER TO NB LANES.
ROUTE SB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANE OF NB MAIN LANES.
REMOVE MAIN LANE GUARDRAILS WHERE ILLUSTRATED.
RECONSTRUCT SB LANES, APPROACH GUTTERS & SLABS.
MODIFY MEDIAN RAMPS AS INDICATED.
NOTE: MODIFICATIONS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY AND DO NOT INDICATE CONSTRUCTION LIMITS.

STAGE 3B OPERATIONS:
UTILIZE STAGE 3A TRAFFIC PATH FOR NB I-530 TRAFFIC.
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO ALTERNATE TEMPORARY RAMPS.
MODIFY MEDIAN RAMPS AS INDICATED.
RECONSTRUCT REMAINING SECTIONS OF I-530 NORTHBOUND LANES.

STAGE 4A OPERATIONS:
SHIFT SB TRAFFIC TO OUTSIDE SB LANE.
RETAIN NB TRAFFIC IN OUTSIDE NB LANE.
REMOVE PRIMARY MAIN LANE PRECAST CONCRETE BARRIER.
OBLITERATE REMAINING 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 OF MAIN LANES.
INSTALL RUMBLE STRIPS ON INSIDE SHOULDERS.
PLACE FINAL STRIPING ON INSIDE LANES.

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

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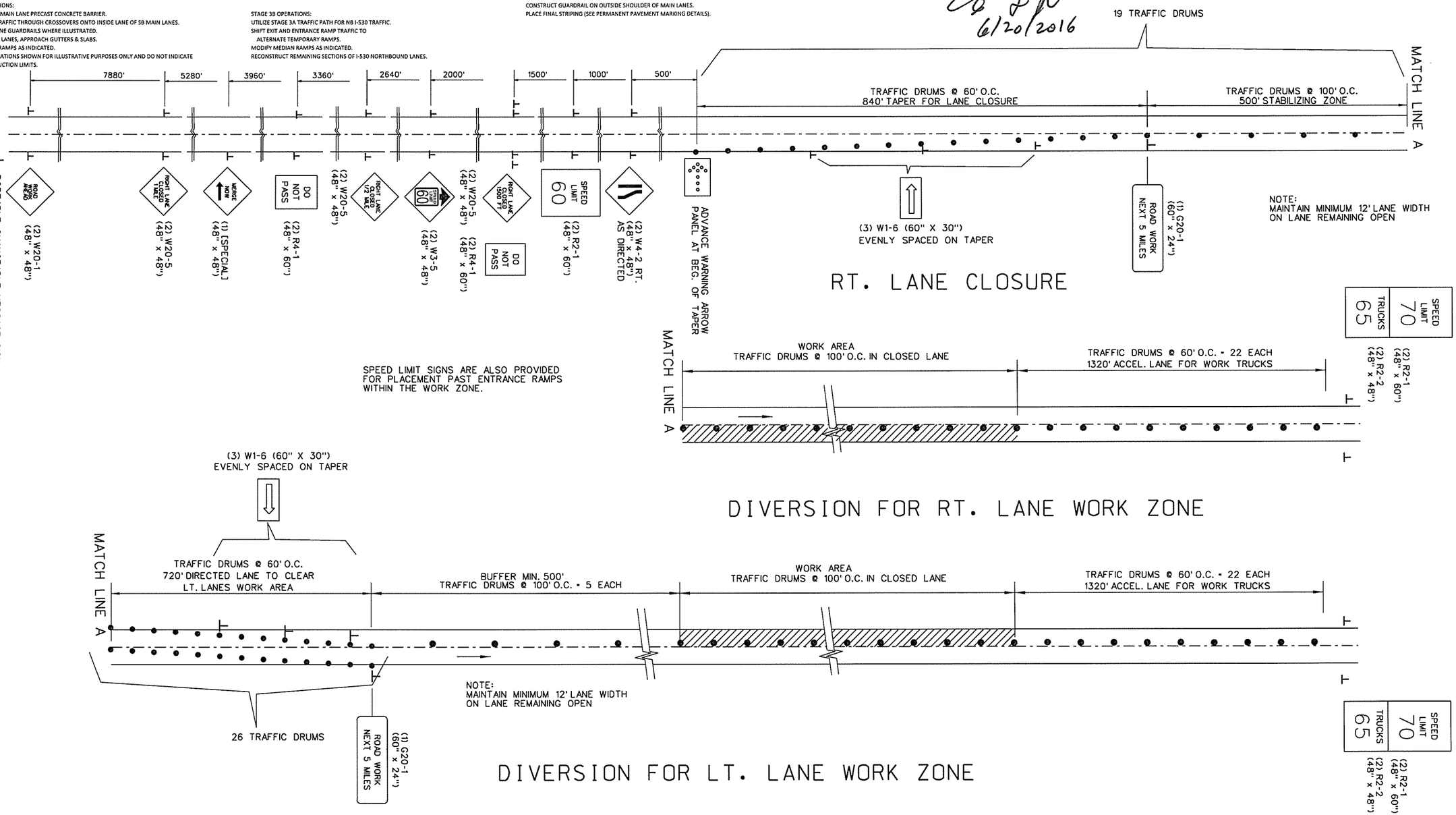
CLINTON D. JUMPER
No. 16728
6/20/2016

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	84	235

(2) MAINTENANCE OF TRAFFIC

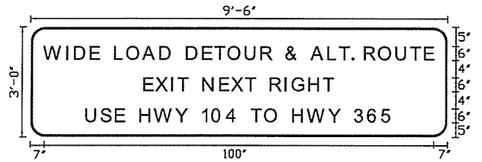


ADVANCE WARNING SIGNS AND LANE CLOSURES

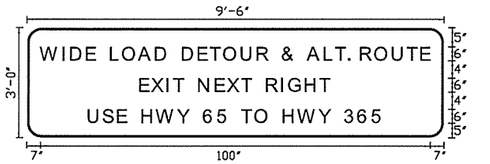
MAINTENANCE OF TRAFFIC

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	85	235
				(2) MAINTENANCE OF TRAFFIC				

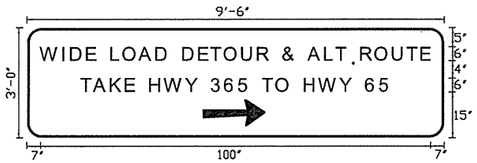
S-1



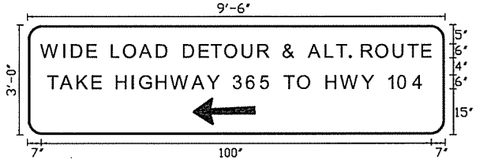
S-2



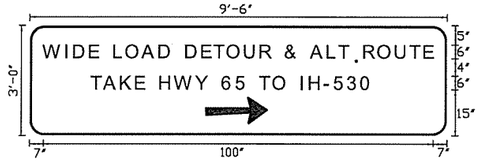
S-3



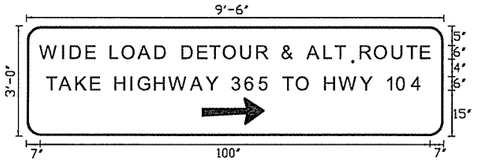
S-4



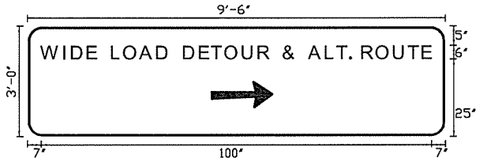
S-5



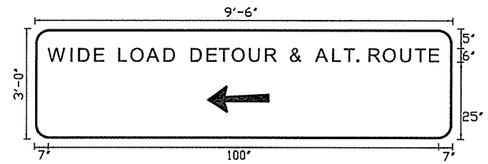
S-6



S-7, S-9



S-8



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.

SIGN TYPE	DESCRIPTION	SIGN SIZE	MAXIMUM NUMBER REQUIRED	SIGN AREA SQ. FT.
M1-5	HWY 65	(24" x 24")	2	8
M1-5	HWY 104	(30" x 24")	2	10
M3-1	NORTH	(24" x 12")	2	4
M3-3	SOUTH	(24" x 12")	2	4
M4-5	TO	(24" x 12")	4	8
M6-3	STRAIGHT AHEAD ARROW	(21" x 15")	4	8.8
S-1	WIDE LOAD DETOUR & ALT. ROUTE EXIT NEXT RIGHT USE HWY 104 TO HWY 365	(9.5' x 3')	1	28.5
S-2	WIDE LOAD DETOUR & ALT. ROUTE EXIT NEXT RIGHT USE HWY 65 TO HWY 365	(9.5' x 3')	1	28.5
S-3	WIDE LOAD DETOUR & ALT. ROUTE TAKE HWY 365 TO HWY 65	(9.5' x 3')	1	28.5
S-4	WIDE LOAD DETOUR & ALT. ROUTE TAKE HWY 365 TO HWY 104	(9.5' x 3')	1	28.5
S-5	WIDE LOAD DETOUR & ALT. ROUTE TAKE HWY 65 TO IH-530	(9.5' x 3')	1	28.5
S-6	WIDE LOAD DETOUR & ALT. ROUTE TAKE HWY 365 TO HWY 104	(9.5' x 3')	1	28.5
S-7	WIDE LOAD DETOUR & ALT. ROUTE	(9.5' x 3')	1	28.5
S-8	WIDE LOAD DETOUR & ALT. ROUTE	(9.5' x 3')	1	28.5
S-9	WIDE LOAD DETOUR & ALT. ROUTE	(9.5' x 3')	1	28.5
	TOTALS FOR JOB BB0202			299.3

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WIDE LOAD DETOUR AND ALT ROUTE AND TEMPORARY SIGNS

MAINTENANCE OF TRAFFIC

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	86	235
				② MAINTENANCE OF TRAFFIC				

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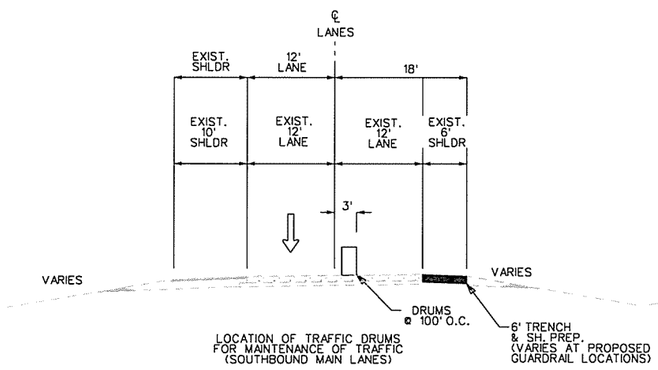
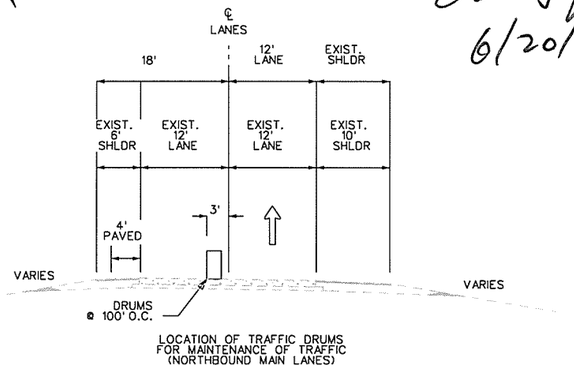
STAGE 1A OPERATIONS:
INSTALL ADVANCE WARNING SIGNS.
CLOSE INSIDE LANE ON MAIN LANES.
REMOVE WIRE ROPE SAFTEY FENCE AND MEDIAN GUARDRAILS IN CONSTRUCTION AREAS.
GRADE IN CROSSOVERS, TEMPORARY RAMPS, AND ACCELERATION LANES IN MEDIAN AREA.
PAVE CROSSOVERS, TEMPORARY RAMPS, AND ACCELERATION LANES AS SHOWN.
TRENCH & SHOULDER PREPARATION OF THE INSIDE SOUTHBOUND SHOULDER OF THE SB I-530 LANES TO PROPOSED LIMITS SHOWN ON ROADWAY TYPICALS.



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

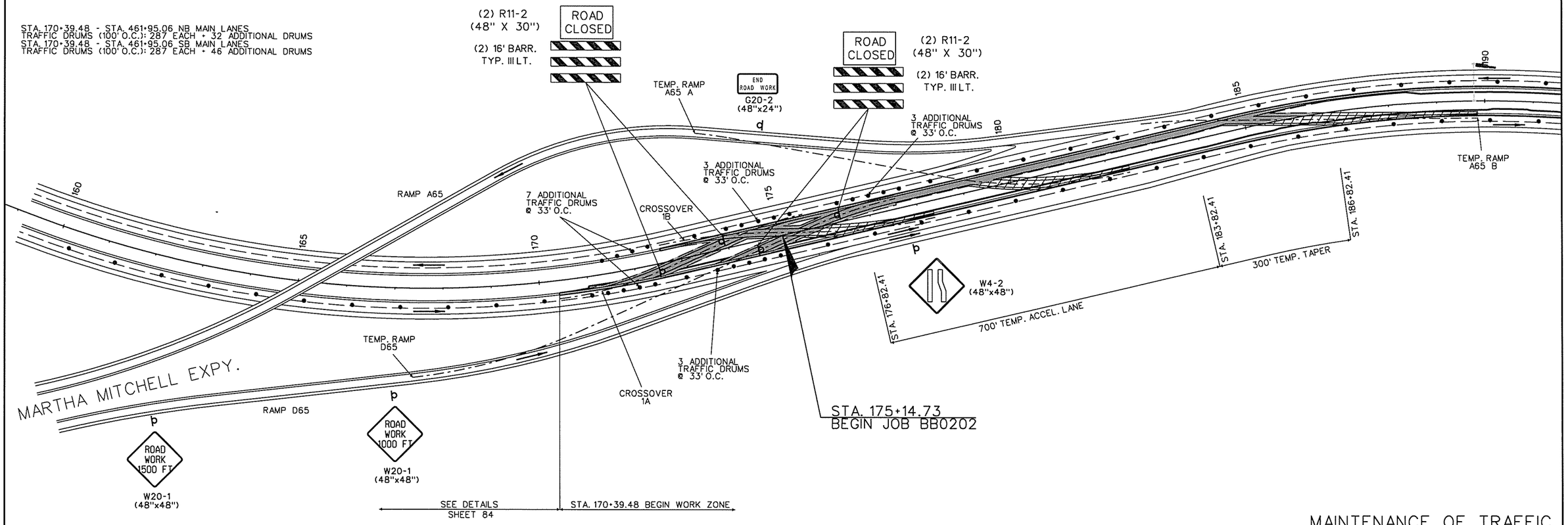


LOCATION OF TRAFFIC DRUMS FOR MAINTENANCE OF TRAFFIC (NORTHBOUND MAIN LANES)

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'

STA. 170+39.48 - STA. 461+95.06 NB MAIN LANES
TRAFFIC DRUMS (100' O.C.): 287 EACH + 32 ADDITIONAL DRUMS
STA. 170+39.48 - STA. 461+95.06 SB MAIN LANES
TRAFFIC DRUMS (100' O.C.): 287 EACH + 46 ADDITIONAL DRUMS



MAINTENANCE OF TRAFFIC STAGE 1A

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	87	235
				②	MAINTENANCE OF TRAFFIC			

STAGE 1A OPERATIONS:
INSTALL ADVANCE WARNING SIGNS.
CLOSE INSIDE LANE ON MAIN LANES.
REMOVE WIRE ROPE SAFTEY FENCE AND MEDIAN GUARDRAILS IN CONSTRUCTION AREAS.
GRADE IN CROSSOVERS, TEMPORARY RAMPS, AND ACCELERATION LANES IN MEDIAN AREA.
PAVE CROSSOVERS, TEMPORARY RAMPS, AND ACCELERATION LANES AS SHOWN.
TRENCH & SHOULDER PREPARATION OF THE INSIDE SOUTHBOUND SHOULDER OF THE SB I-530 LANES TO PROPOSED LIMITS SHOWN ON ROADWAY TYPICALS.

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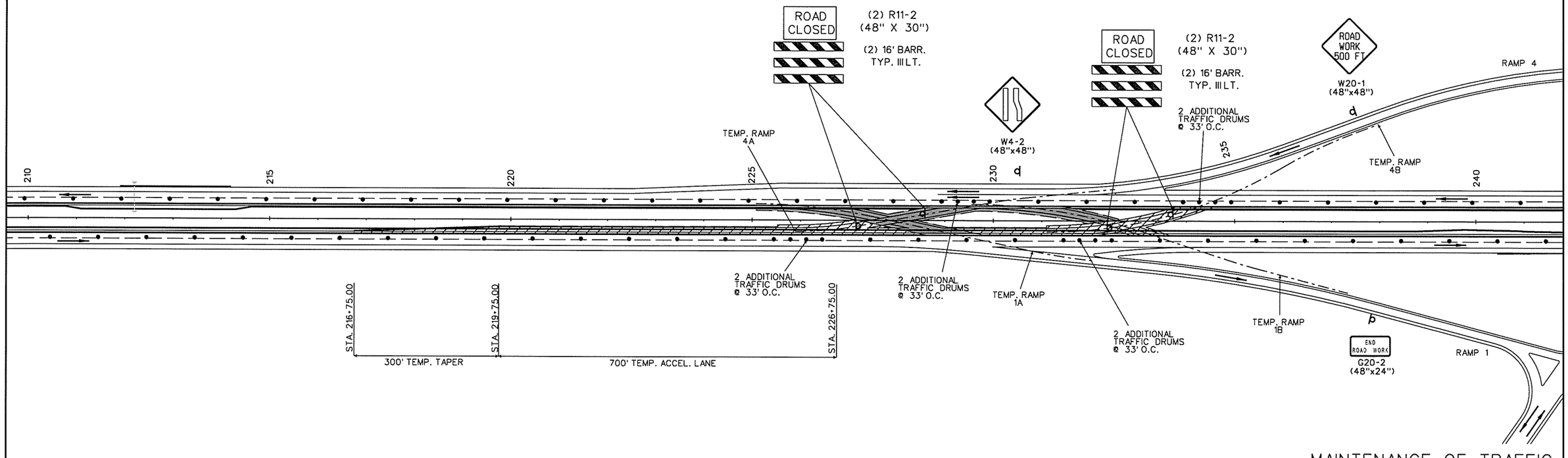
RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC
STAGE 1A

STAGE 1A OPERATIONS:
INSTALL ADVANCE WARNING SIGNS.
CLOSE INSIDE LANE ON MAIN LANES.
REMOVE WIRE ROPE SAFTEY FENCE AND MEDIAN GUARDRAILS IN CONSTRUCTION AREAS.
GRADE IN CROSSOVERS, TEMPORARY RAMPS, AND ACCELERATION LANES IN MEDIAN AREA.
PAVE CROSSOVERS, TEMPORARY RAMPS, AND ACCELERATION LANES AS SHOWN.
TRENCH & SHOULDER PREPARATION OF THE INSIDE SOUTHBOUND SHOULDER OF THE SB I-530 LANES TO PROPOSED LIMITS SHOWN ON ROADWAY TYPICALS.

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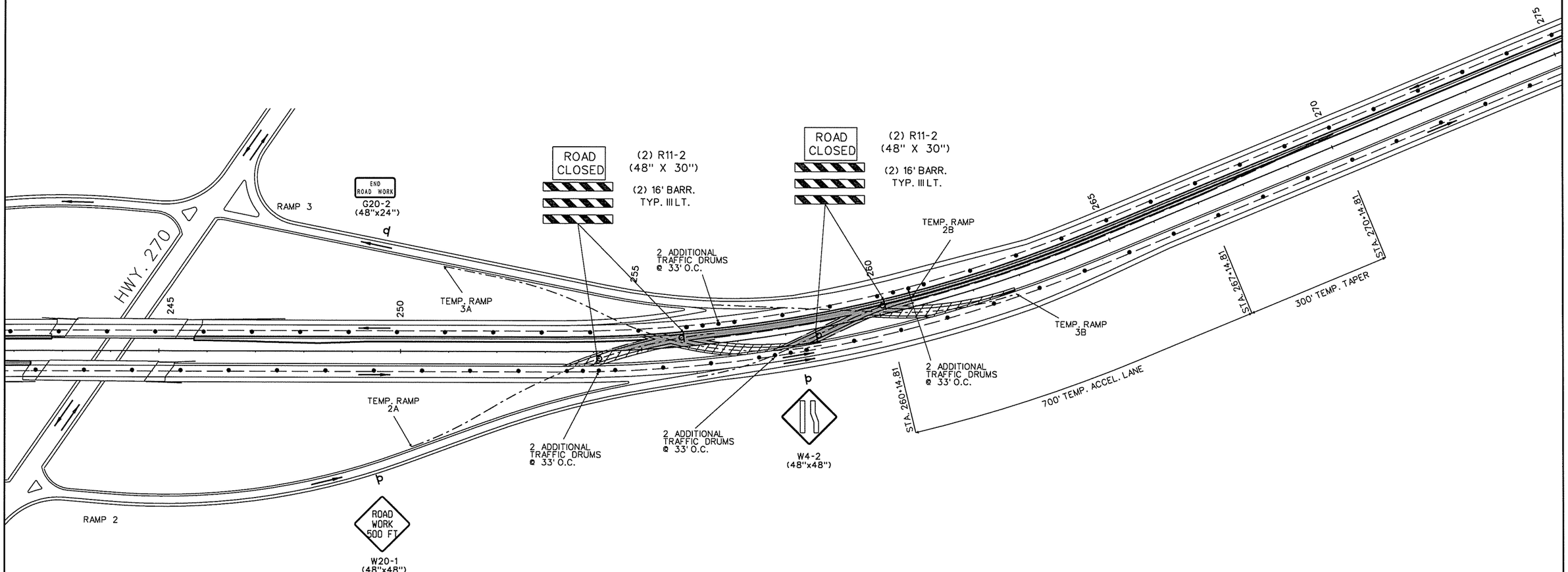
				6	ARK.			
				JOB NO.		BB0202	88	235
				(2)	MAINTENANCE OF TRAFFIC			

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC
STAGE 1A

STAGE 1A OPERATIONS:
INSTALL ADVANCE WARNING SIGNS.
CLOSE INSIDE LANE ON MAIN LANES.
REMOVE WIRE ROPE SAFTEY FENCE AND MEDIAN GUARDRAILS IN CONSTRUCTION AREAS.
GRADE IN CROSSOVERS, TEMPORARY RAMPS, AND ACCELERATION LANES IN MEDIAN AREA.
PAVE CROSSOVERS, TEMPORARY RAMPS, AND ACCELERATION LANES AS SHOWN.
TRENCH & SHOULDER PREPARATION OF THE INSIDE SOUTHBOUND SHOULDER OF THE SB I-530 LANES TO PROPOSED LIMITS SHOWN ON ROADWAY TYPICALS.

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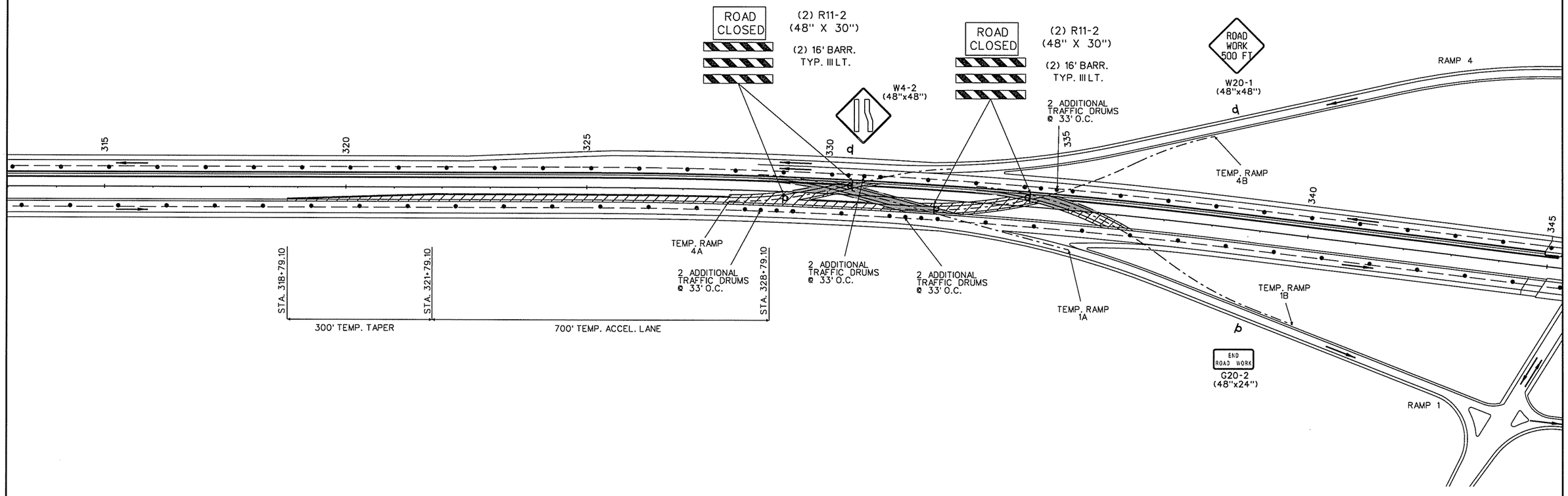
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	89	235
				(2)	MAINTENANCE OF TRAFFIC			

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC
STAGE 1A

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	90	235
				②	MAINTENANCE OF TRAFFIC			

STAGE 1A OPERATIONS:
INSTALL ADVANCE WARNING SIGNS.
CLOSE INSIDE LANE ON MAIN LANES.
REMOVE WIRE ROPE SAFTEY FENCE AND MEDIAN GUARDRAILS IN CONSTRUCTION AREAS.
GRADE IN CROSSOVERS, TEMPORARY RAMPS, AND ACCELERATION LANES IN MEDIAN AREA.
PAVE CROSSOVERS, TEMPORARY RAMPS, AND ACCELERATION LANES AS SHOWN.
TRENCH & SHOULDER PREPARATION OF THE INSIDE SOUTHBOUND SHOULDER OF THE SB I-530 LANES TO PROPOSED LIMITS SHOWN ON ROADWAY TYPICALS.

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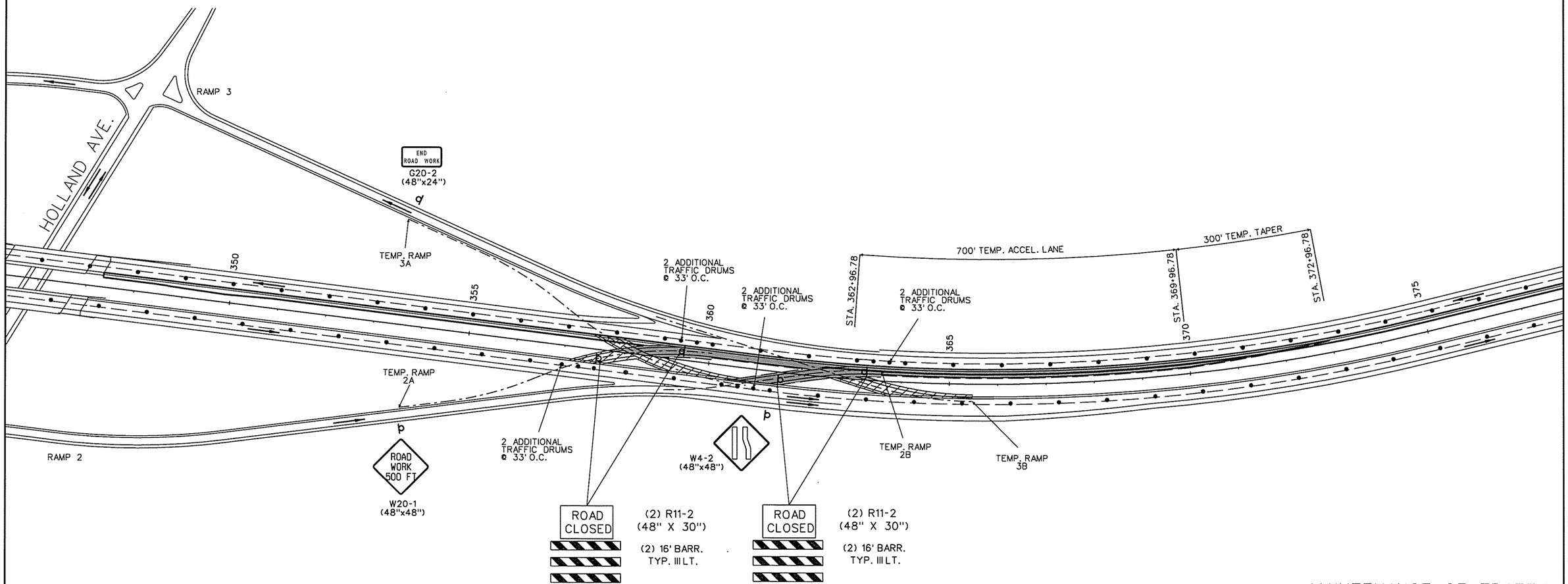
RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC
STAGE 1A

STAGE 1A OPERATIONS:
INSTALL ADVANCE WARNING SIGNS.
CLOSE INSIDE LANE ON MAIN LANES.
REMOVE WIRE ROPE SAFTEY FENCE AND MEDIAN GUARDRAILS IN CONSTRUCTION AREAS.
GRADE IN CROSSOVERS, TEMPORARY RAMPS, AND ACCELERATION LANES IN MEDIAN AREA.
PAVE CROSSOVERS, TEMPORARY RAMPS, AND ACCELERATION LANES AS SHOWN.
TRENCH & SHOULDER PREPARATION OF THE INSIDE SOUTHBOUND SHOULDER OF THE SB I-530 LANES TO PROPOSED LIMITS SHOWN ON ROADWAY TYPICALS.

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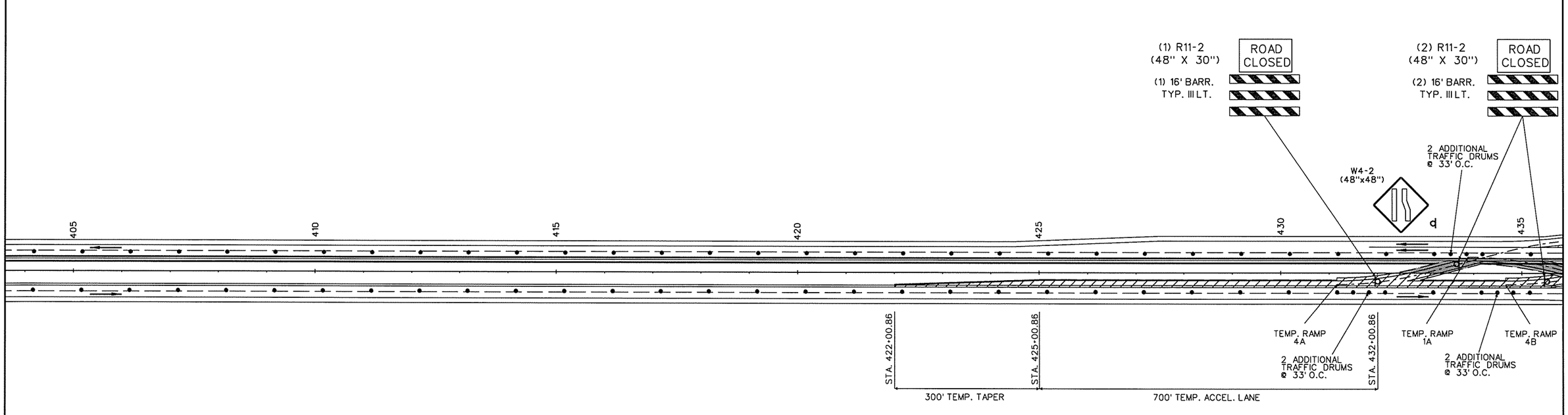
				6	ARK.			
				JOB NO.		BB0202	91	235
				(2) MAINTENANCE OF TRAFFIC				

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC STAGE 1A

STAGE 1A OPERATIONS:
INSTALL ADVANCE WARNING SIGNS.
CLOSE INSIDE LANE ON MAIN LANES.
REMOVE WIRE ROPE SAFTEY FENCE AND MEDIAN GUARDRAILS IN CONSTRUCTION AREAS.
GRADE IN CROSSOVERS, TEMPORARY RAMPS, AND ACCELERATION LANES IN MEDIAN AREA.
PAVE CROSSOVERS, TEMPORARY RAMPS, AND ACCELERATION LANES AS SHOWN.
TRENCH & SHOULDER PREPARATION OF THE INSIDE SOUTHBOUND SHOULDER OF THE SB I-530 LANES TO PROPOSED LIMITS SHOWN ON ROADWAY TYPICALS.

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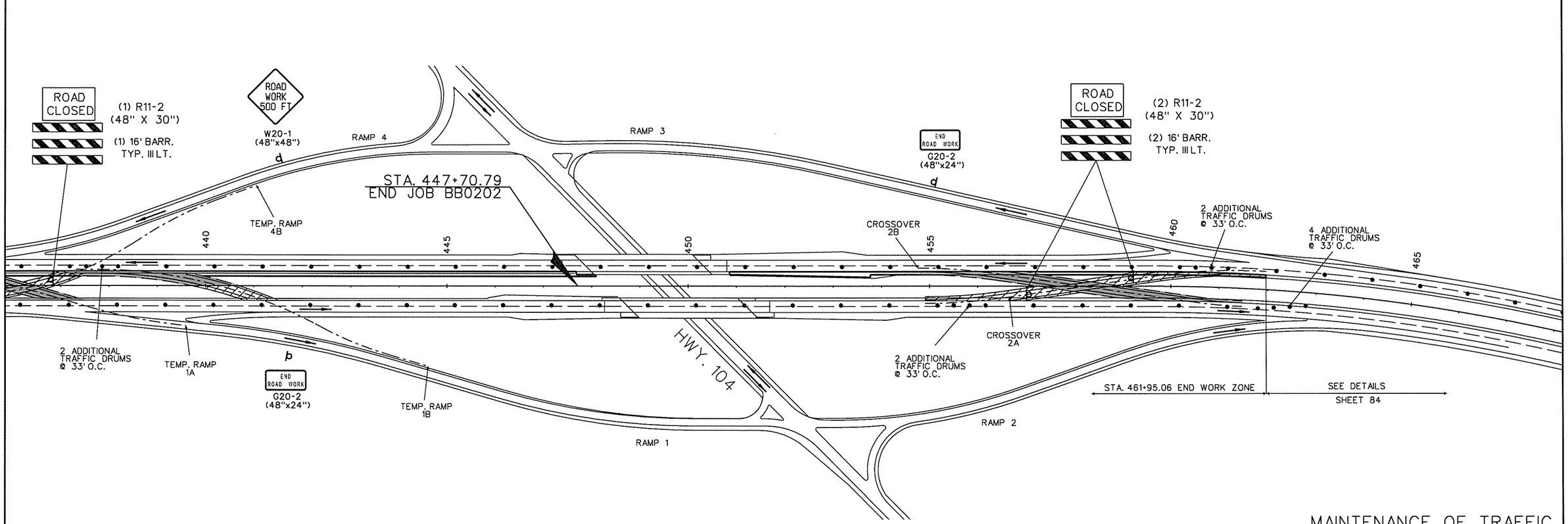
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	92	235
				(2)	MAINTENANCE OF TRAFFIC			

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC STAGE 1A

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	93	235
				(2) MAINTENANCE OF TRAFFIC				

STAGE 1B OPERATIONS:
CLOSE OUTSIDE LANE ON MAIN LANES.
GRADE IN TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS.
PAVE TEMPORARY RAMPS AS SHOWN.

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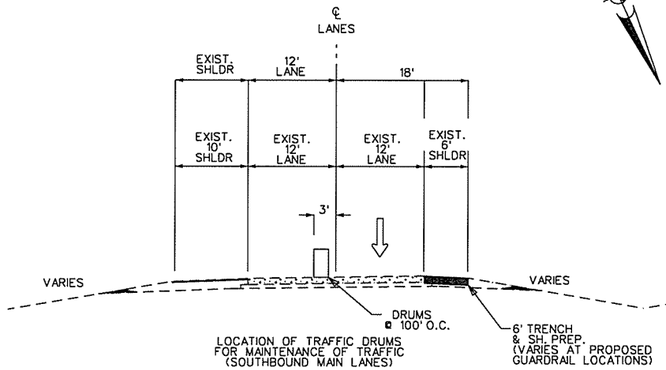
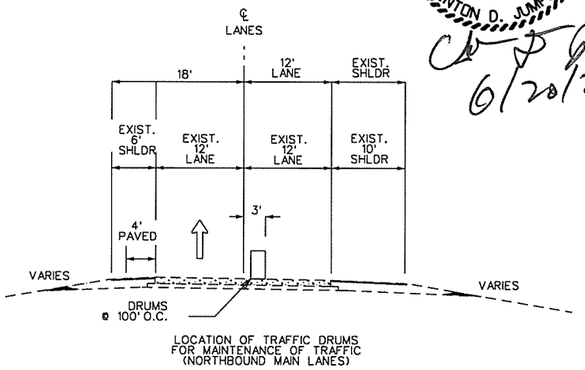
CLINTON D. JUMPER
6/20/2016



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



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

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'

STA. 170+39.48 - STA. 461+95.06 NB MAIN LANES
TRAFFIC DRUMS (100' O.C.): 289 EACH + 356 ADDITIONAL DRUMS
STA. 170+39.48 - STA. 461+95.06 SB MAIN LANES
TRAFFIC DRUMS (100' O.C.): 258 EACH + 388 ADDITIONAL DRUMS

NB MAIN LANES TEMPORARY PRECAST CONCRETE BARRIER: 1,200 LF WITH 3 TIABS
SB MAIN LANES TEMPORARY PRECAST CONCRETE BARRIER: 1,900 LF WITH 5 TIABS

(3) R11-2 (48" X 30")
ROAD CLOSED
(3) 16' BARR. TYP. III LT.
(2) R11-2 (48" X 30")
ROAD CLOSED
(2) 16' BARR. TYP. III LT.
END ROAD WORK
G20-2 (48"x24")
7 TRAFFIC DRUMS @ 33' O.C.
ROAD CLOSED
(1) R11-2 (48" X 30")
(1) 16' BARR. TYP. III RT.
9 ADDITIONAL TRAFFIC DRUMS @ 33' O.C.
2 ADDITIONAL TRAFFIC DRUMS @ 33' O.C.
9 ADDITIONAL TRAFFIC DRUMS @ 33' O.C.
23 TRAFFIC DRUMS @ 60' O.C.
FURNISH & INSTALL 400 LF OF TEMP. PRECAST CONCRETE BARRIER (TERM W/TIAB)
TEMP. RAMP A65 A
TEMP. RAMP A65 B
RAMP A65
4 ADDITIONAL TRAFFIC DRUMS @ 33' O.C.
CROSSOVER 1B
35 ADDITIONAL TRAFFIC DRUMS @ 33' O.C.
STA. 183+82.41
STA. 186+82.41
300' TEMP. TAPER
FURNISH & INSTALL 400 LF OF TEMP. PRECAST CONCRETE BARRIER (TERM W/TIAB)
13 ADDITIONAL TRAFFIC DRUMS @ 33' O.C.
STA. 176+82.41
W4-2 (48"x48")
700' TEMP. ACCEL. LANE
12 TRAFFIC DRUMS @ 33' O.C.
5 TRAFFIC DRUMS @ 33' O.C.
5 TRAFFIC DRUMS @ 33' O.C.
MARTHA MITCHELL EXPY.
RAMP D65
TEMP. RAMP D65
CROSSOVER 1A
STA. 175+14.73
BEGIN JOB BB0202
ROAD WORK 500 FT
W20-1 (48"x48")
SEE DETAILS SHEET 84
STA. 170+39.48 BEGIN WORK ZONE

MAINTENANCE OF TRAFFIC
STAGE 1B

STAGE 1B OPERATIONS:
CLOSE OUTSIDE LANE ON MAIN LANES.
GRADE IN TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS.
PAVE TEMPORARY RAMPS AS SHOWN.

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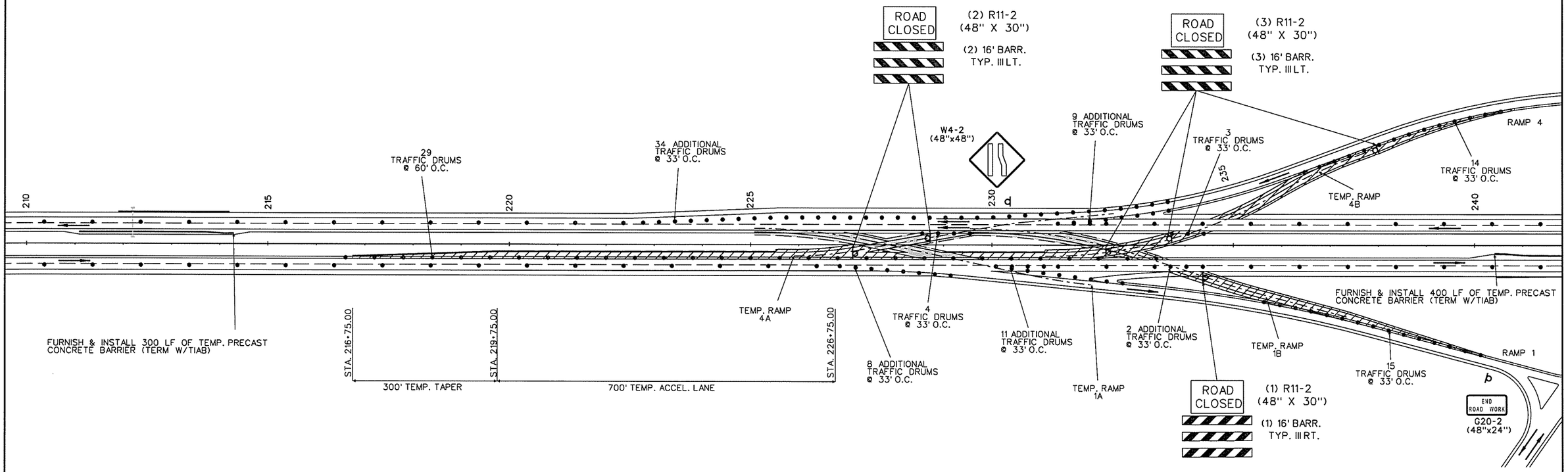
6/20/2016

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	94	235
				②	MAINTENANCE OF TRAFFIC			

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC STAGE 1B

STAGE 1B OPERATIONS:
CLOSE OUTSIDE LANE ON MAIN LANES.
GRADE IN TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS.
PAVE TEMPORARY RAMPS AS SHOWN.

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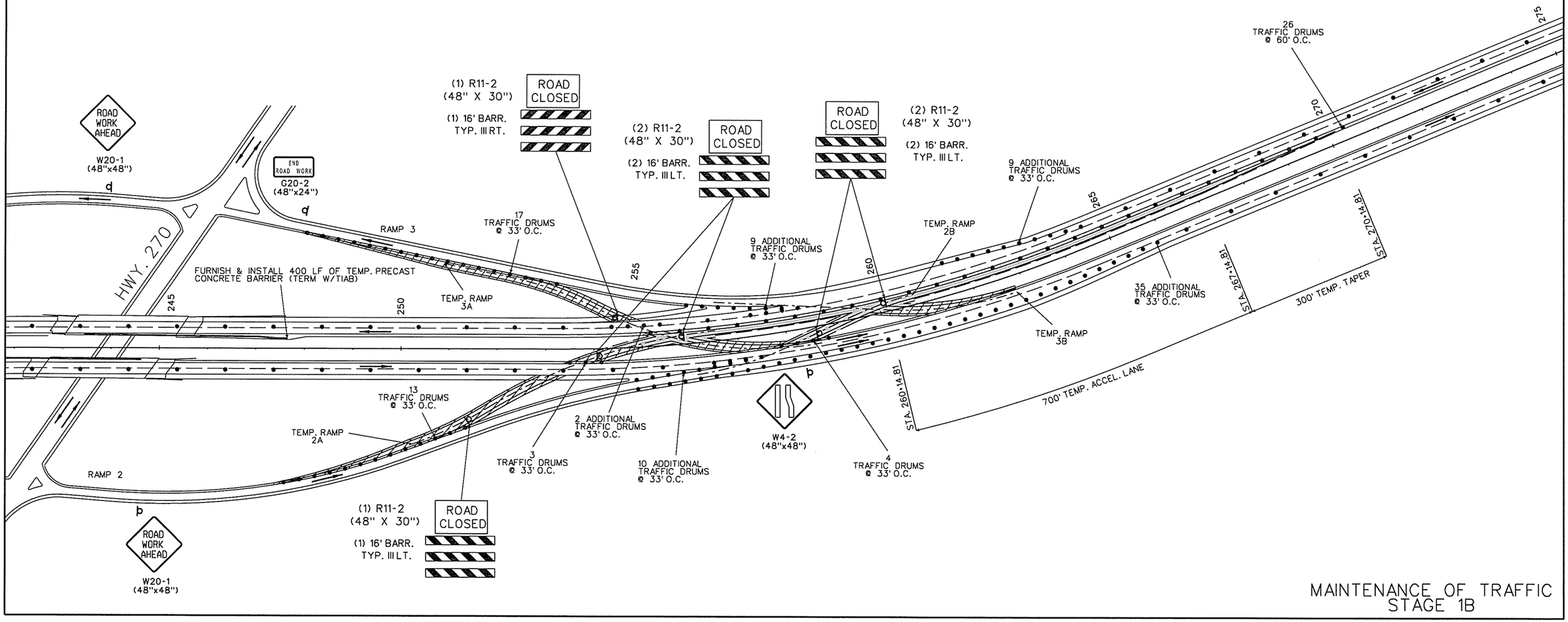
6/20/2016

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	95	235

(2) MAINTENANCE OF TRAFFIC

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC
STAGE 1B

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	96	235
				②	MAINTENANCE OF TRAFFIC			

STAGE 1B OPERATIONS:
CLOSE OUTSIDE LANE ON MAIN LANES.
GRADE IN TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS.
PAVE TEMPORARY RAMPS AS SHOWN.

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RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'

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

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

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

W4-2 (48"x48")

W20-1 (48"x48")
ROAD WORK 500 FT

500'

33 ADDITIONAL TRAFFIC DRUMS @ 33' O.C.

7 ADDITIONAL TRAFFIC DRUMS @ 33' O.C.

13 TRAFFIC DRUMS @ 33' O.C.

TEMP. RAMP 4B

RAMP 4

2 ADDITIONAL TRAFFIC DRUM @ 33' O.C.

315 320 325 330 335 340 345

STA. 318+79.10
STA. 321+79.10
STA. 328+79.10

24 TRAFFIC DRUMS @ 60' O.C.

TEMP. RAMP 4A

4 TRAFFIC DRUMS @ 33' O.C.

4 TRAFFIC DRUMS @ 33' O.C.

6 ADDITIONAL TRAFFIC DRUMS @ 33' O.C.

TEMP. RAMP 1A

7 ADDITIONAL TRAFFIC DRUMS @ 33' O.C.

TEMP. RAMP 1B

15 TRAFFIC DRUMS @ 33' O.C.

RAMP 1

300' TEMP. TAPER
700' TEMP. ACCEL. LANE

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

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

MAINTENANCE OF TRAFFIC
STAGE 1B

STAGE 1B OPERATIONS:
CLOSE OUTSIDE LANE ON MAIN LANES.
GRADE IN TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS.
PAVE TEMPORARY RAMPS AS SHOWN.

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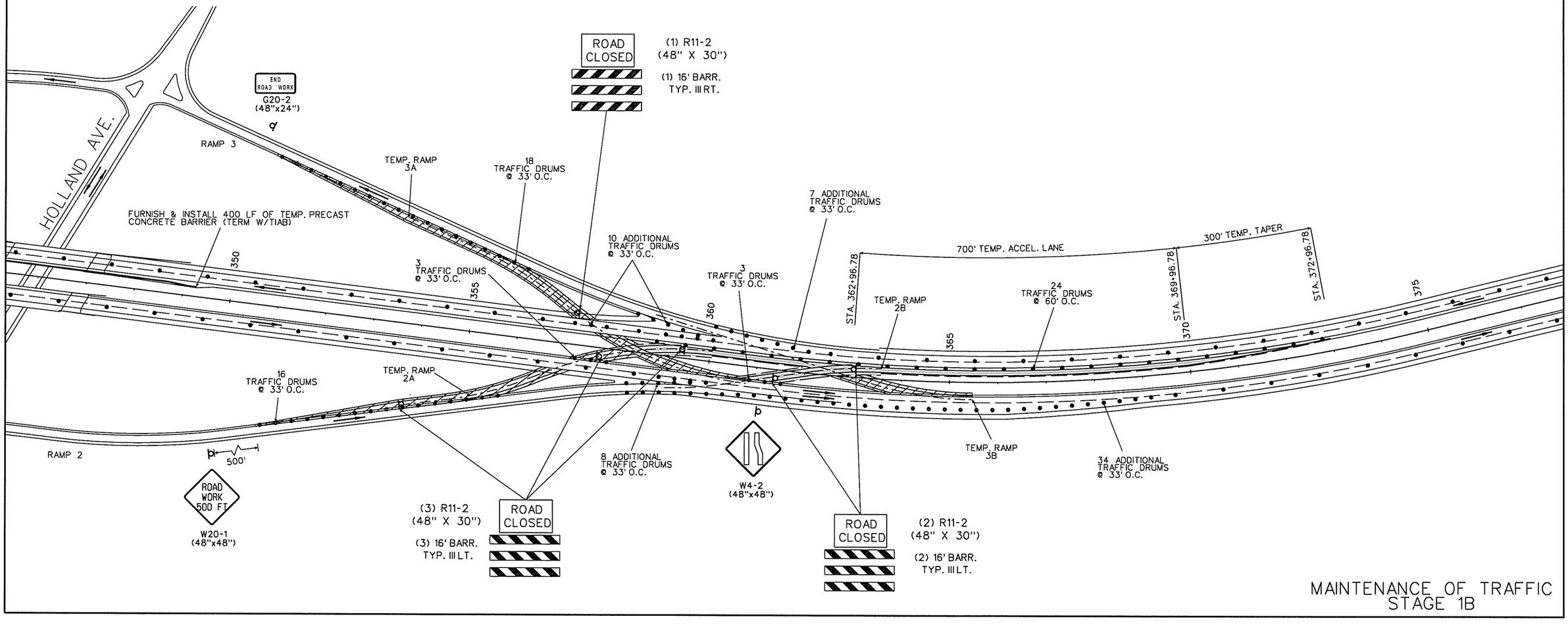
6/20/2016

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	97	235
				(2)	MAINTENANCE OF TRAFFIC			

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC
STAGE 1B

STAGE 1B OPERATIONS:
CLOSE OUTSIDE LANE ON MAIN LANES.
GRADE IN TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS.
PAVE TEMPORARY RAMPS AS SHOWN.

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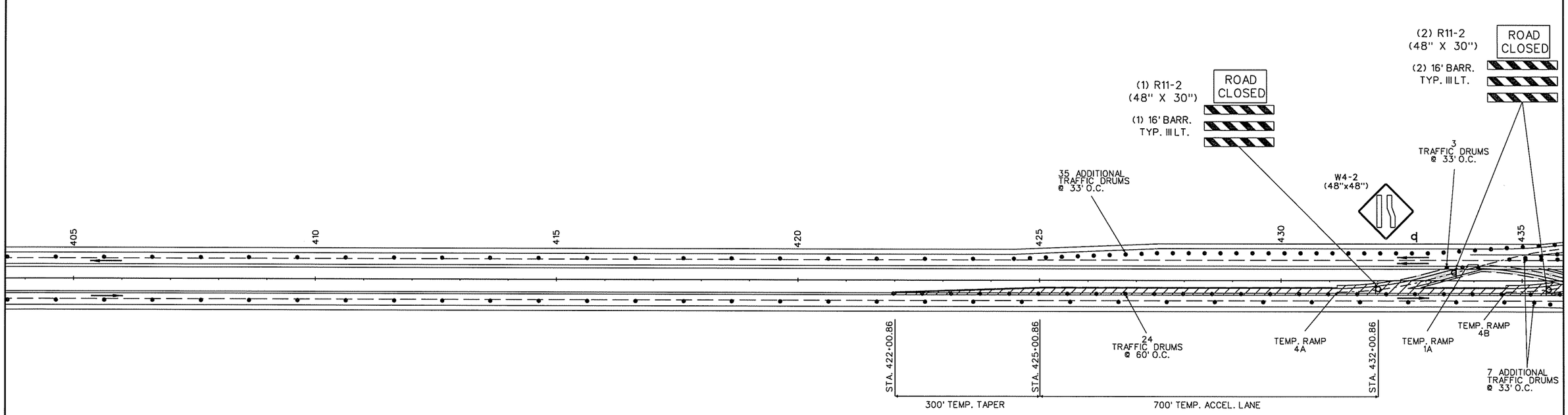
6/10/16

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	98	235

(2) MAINTENANCE OF TRAFFIC

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC
STAGE 1B

STAGE 1B OPERATIONS:
CLOSE OUTSIDE LANE ON MAIN LANES.
GRADE IN TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS.
PAVE TEMPORARY RAMPS AS SHOWN.

STATE OF ARKANSAS
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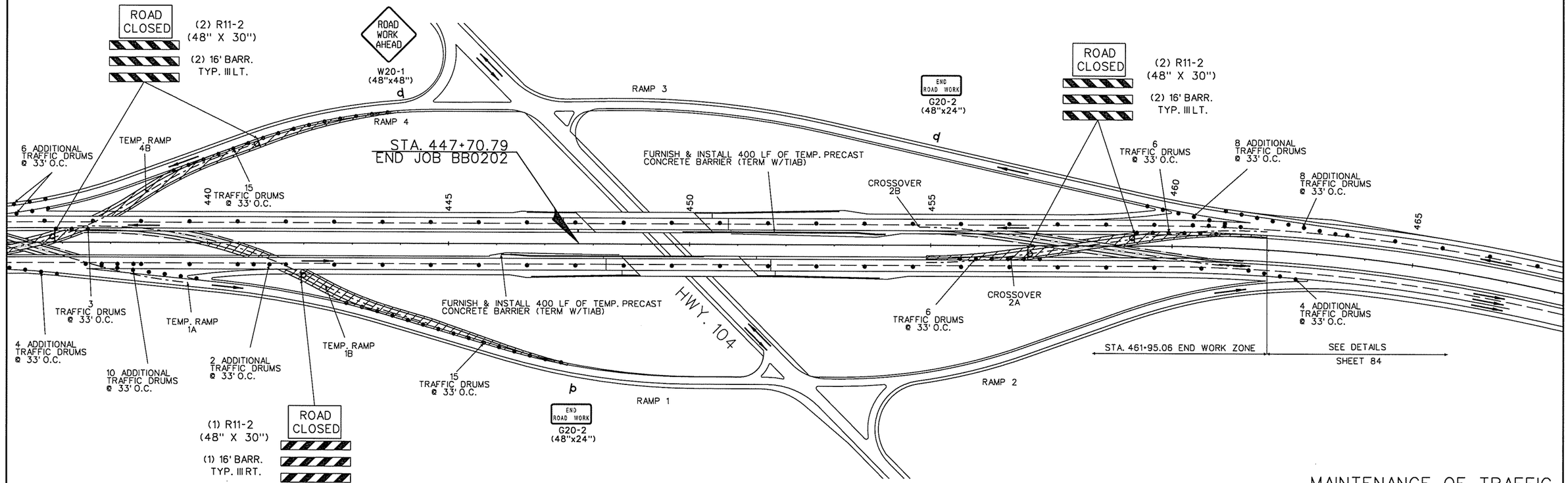
CLINTON D. JUMPER
6/20/2016

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	99	235
				(2) MAINTENANCE OF TRAFFIC				

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'

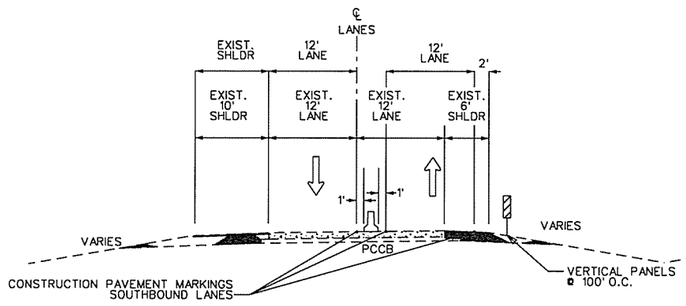


MAINTENANCE OF TRAFFIC STAGE 1B

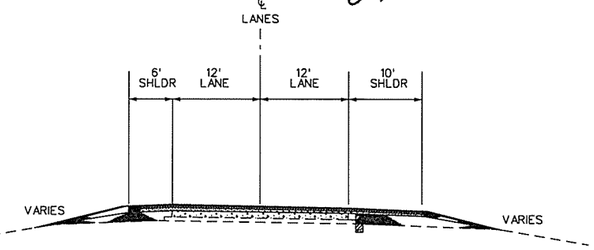
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	100	235
				②	MAINTENANCE OF TRAFFIC			

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 16728
CLINTON D. JUMPER
6/20/2016

STAGE 2A OPERATIONS:
INSTALL PRIMARY MAIN LANE PRECAST CONCRETE BARRIER.
ROUTE NB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANE OF SB MAIN LANES.
REMOVE MAIN LANE GUARDRAILS WHERE ILLUSTRATED.
RECONSTRUCT NB LANES, APPROACH GUTTERS & SLABS.
MODIFY MEDIAN RAMPS AS INDICATED.
NOTE: MODIFICATIONS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY AND DO NOT INDICATE CONSTRUCTION LIMITS.



LOCATION OF TEMPORARY PRECAST CONCRETE BARRIER WALL FOR MAINTENANCE OF TRAFFIC - SOUTHBOUND MAIN LANES (STA. 172+60.00 TO STA. 461+95.06)



RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'

STA. 170+39.48 - STA. 461+95.06 SB MAIN LANES
VERTICAL PANELS (100' O.C.): 294 EACH

STA. 170+39.48 - STA. 461+95.06 SB MAIN LANES
REMOVAL OF PERMANENT PAVEMENT MARKINGS: 56,580 LF

STA. 170+39.48 - STA. 461+95.06 SB MAIN LANES
CONSTRUCTION PAVEMENT MARKINGS: 101,440 LF

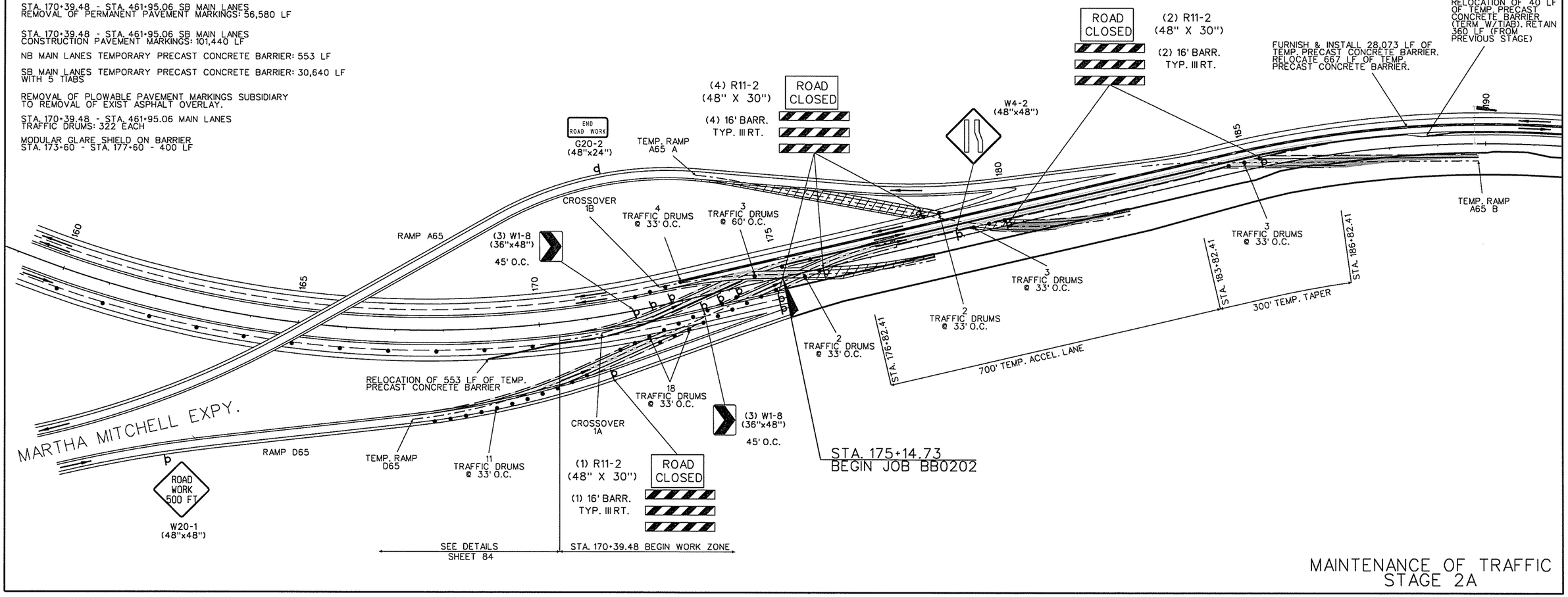
NB MAIN LANES TEMPORARY PRECAST CONCRETE BARRIER: 553 LF

SB MAIN LANES TEMPORARY PRECAST CONCRETE BARRIER: 30,640 LF WITH 5 TIABS

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

STA. 170+39.48 - STA. 461+95.06 MAIN LANES
TRAFFIC DRUMS: 322 EACH

MODULAR GLARE SHIELD ON BARRIER
STA. 173+60 - STA. 177+60 - 400 LF



MAINTENANCE OF TRAFFIC
STAGE 2A

STAGE 2A OPERATIONS:
INSTALL PRIMARY MAIN LANE PRECAST CONCRETE BARRIER.
ROUTE NB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANE OF SB MAIN LANES.
REMOVE MAIN LANE GUARDRAILS WHERE ILLUSTRATED.
RECONSTRUCT NB LANES, APPROACH GUTTERS & SLABS.
MODIFY MEDIAN RAMPS AS INDICATED.
NOTE: MODIFICATIONS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY AND DO NOT INDICATE CONSTRUCTION LIMITS.

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CLINTON D. JUMPER

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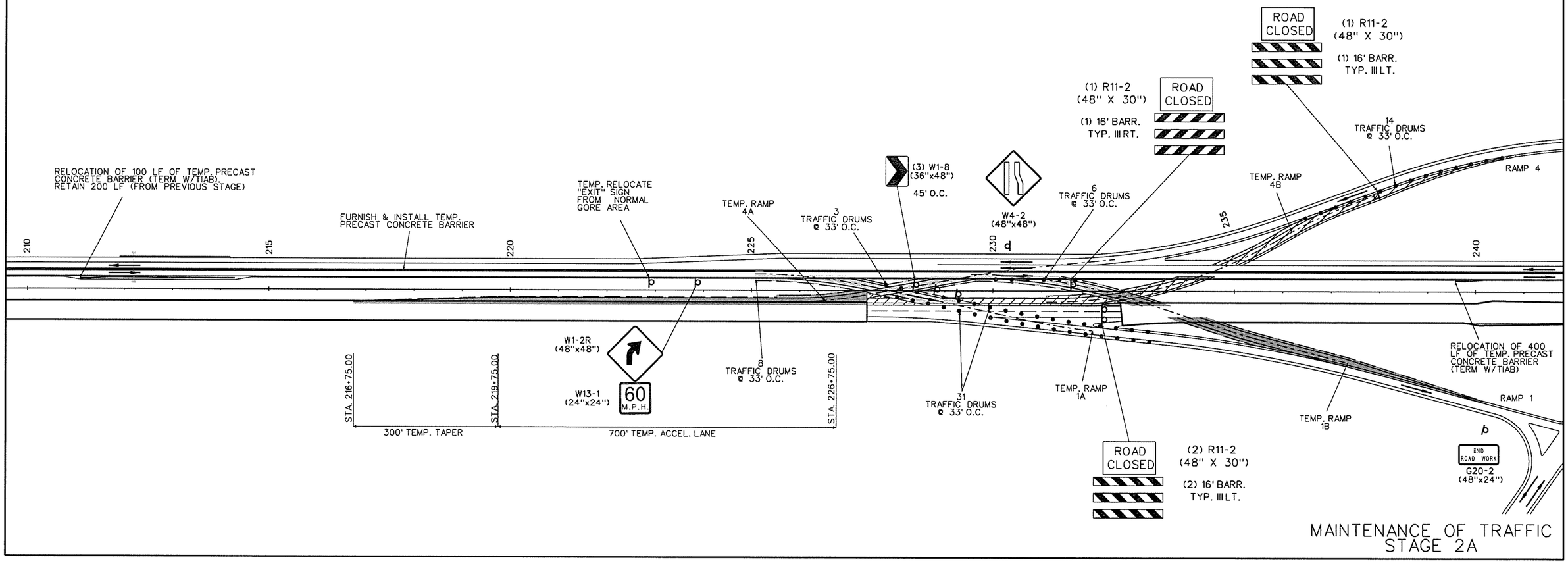
				6	ARK.			
				JOB NO.		BB0202	101	235

(2) MAINTENANCE OF TRAFFIC

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC STAGE 2A

STAGE 2A OPERATIONS:
INSTALL PRIMARY MAIN LANE PRECAST CONCRETE BARRIER.
ROUTE NB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANE OF SB MAIN LANES.
REMOVE MAIN LANE GUARDRAILS WHERE ILLUSTRATED.
RECONSTRUCT NB LANES, APPROACH GUTTERS & SLABS.
MODIFY MEDIAN RAMPS AS INDICATED.
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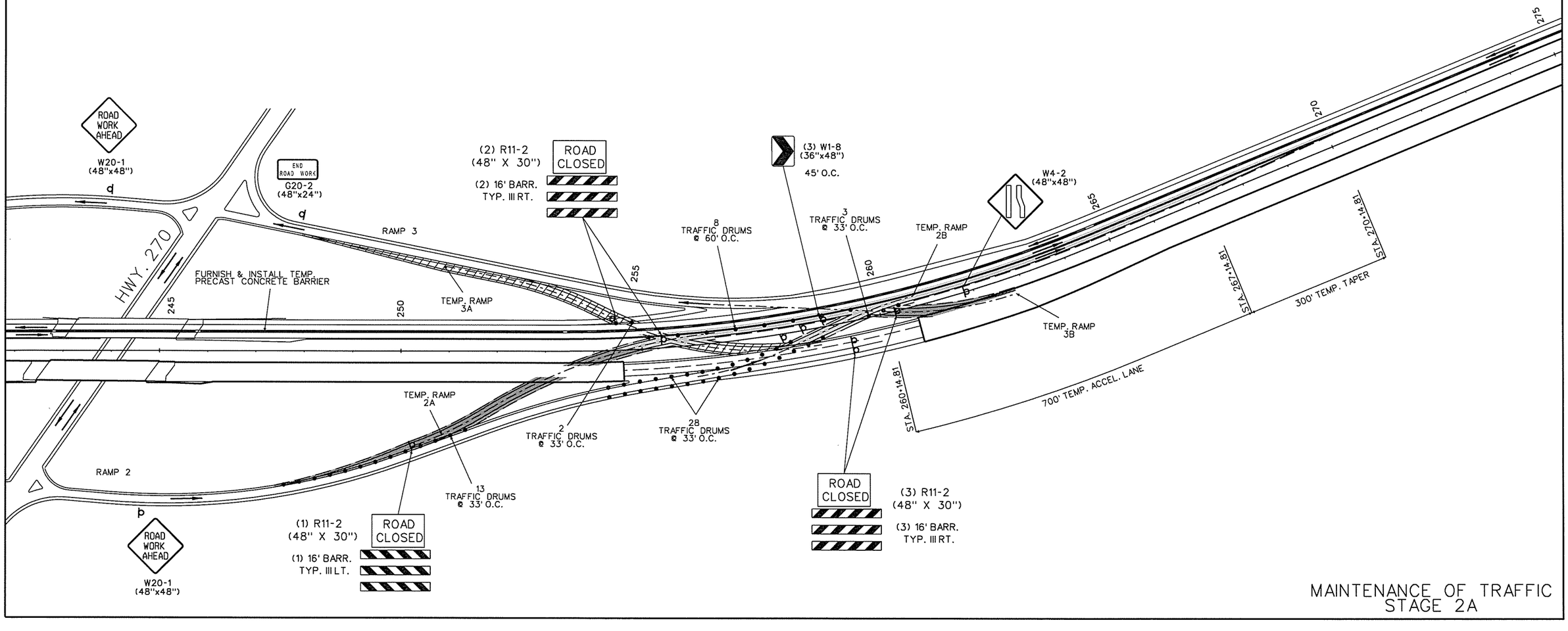
6/20/2016

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	102	235
				(2) MAINTENANCE OF TRAFFIC				

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC
STAGE 2A

STAGE 2A OPERATIONS:
INSTALL PRIMARY MAIN LANE PRECAST CONCRETE BARRIER.
ROUTE NB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANE OF SB MAIN LANES.
REMOVE MAIN LANE GUARDRAILS WHERE ILLUSTRATED.
RECONSTRUCT NB LANES, APPROACH GUTTERS & SLABS.
MODIFY MEDIAN RAMPS AS INDICATED.
NOTE: MODIFICATIONS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY AND DO NOT INDICATE CONSTRUCTION LIMITS.

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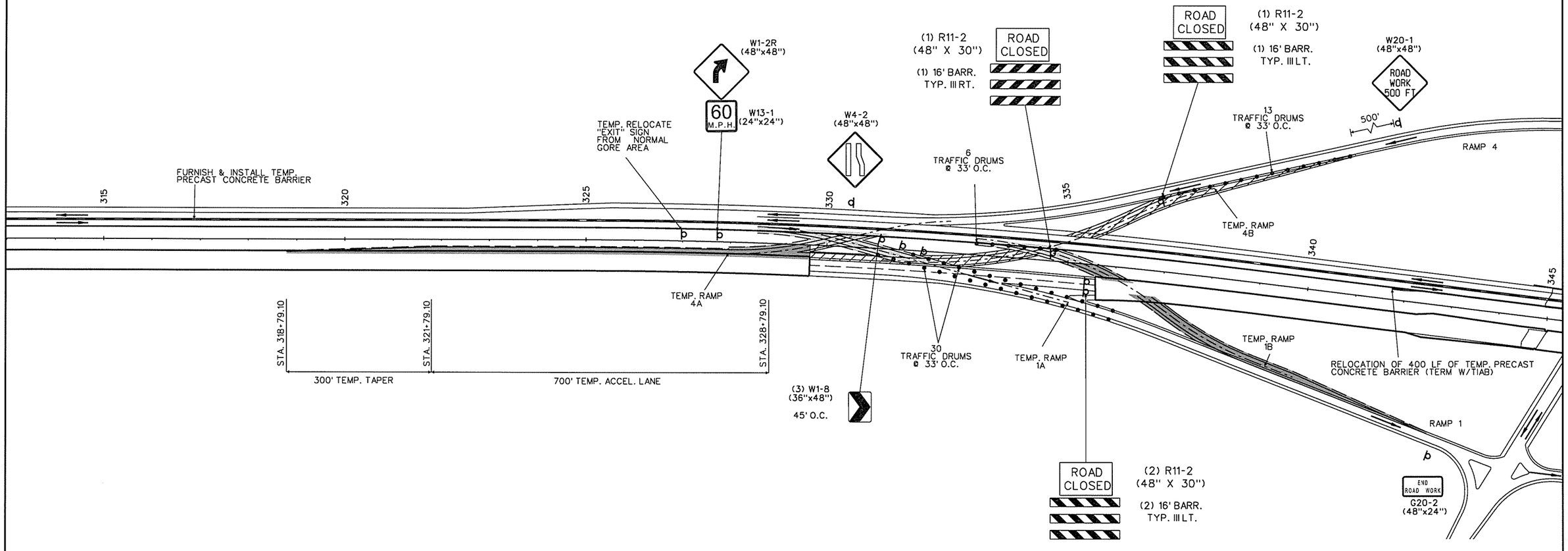
6/20/2016

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	103	235
				(2) MAINTENANCE OF TRAFFIC				

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC STAGE 2A

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	104	235
				(2) MAINTENANCE OF TRAFFIC				

STAGE 2A OPERATIONS:
INSTALL PRIMARY MAIN LANE PRECAST CONCRETE BARRIER.
ROUTE NB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANE OF SB MAIN LANES.
REMOVE MAIN LANE GUARDRAILS WHERE ILLUSTRATED.
RECONSTRUCT NB LANES, APPROACH GUTTERS & SLABS.
MODIFY MEDIAN RAMPS AS INDICATED.
NOTE: MODIFICATIONS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY AND DO NOT INDICATE CONSTRUCTION LIMITS.

STATE OF ARKANSAS
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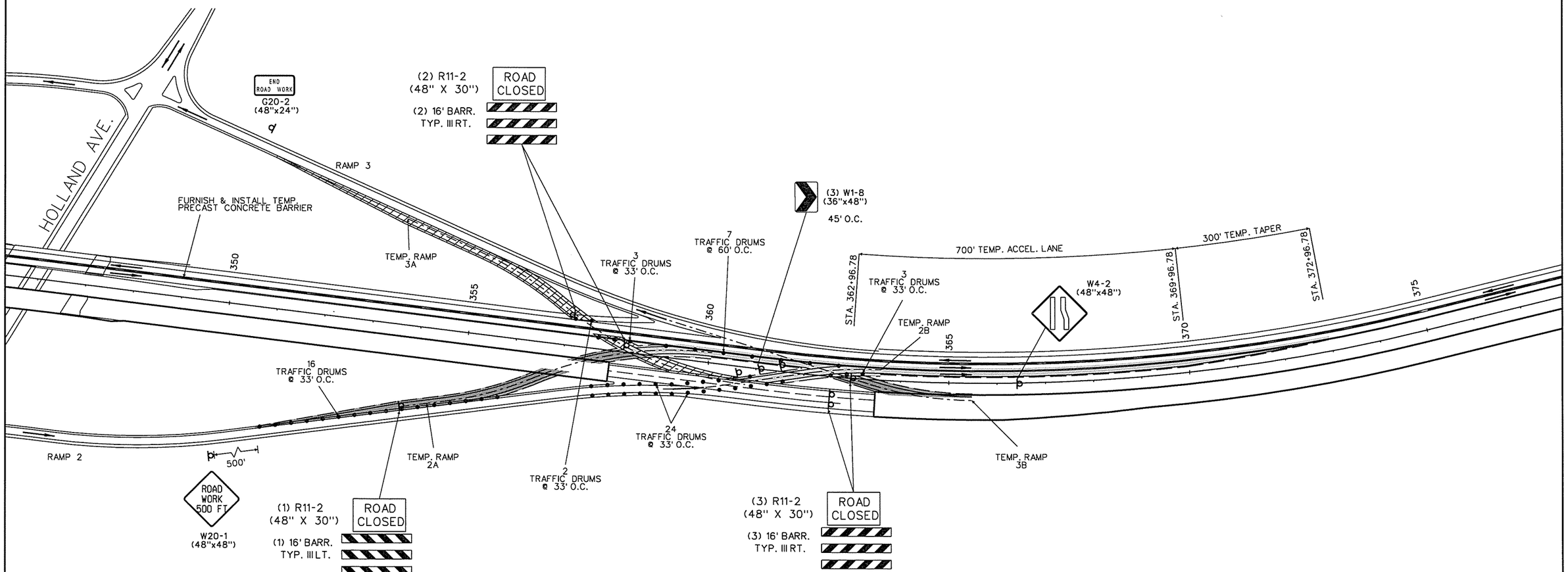
6/20/2016

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC
STAGE 2A

STAGE 2A OPERATIONS:
INSTALL PRIMARY MAIN LANE PRECAST CONCRETE BARRIER.
ROUTE NB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANE OF SB MAIN LANES.
REMOVE MAIN LANE GUARDRAILS WHERE ILLUSTRATED.
RECONSTRUCT NB LANES, APPROACH GUTTERS & SLABS.
MODIFY MEDIAN RAMPS AS INDICATED.
NOTE: MODIFICATIONS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY AND DO NOT INDICATE CONSTRUCTION LIMITS.

STATE OF ARKANSAS
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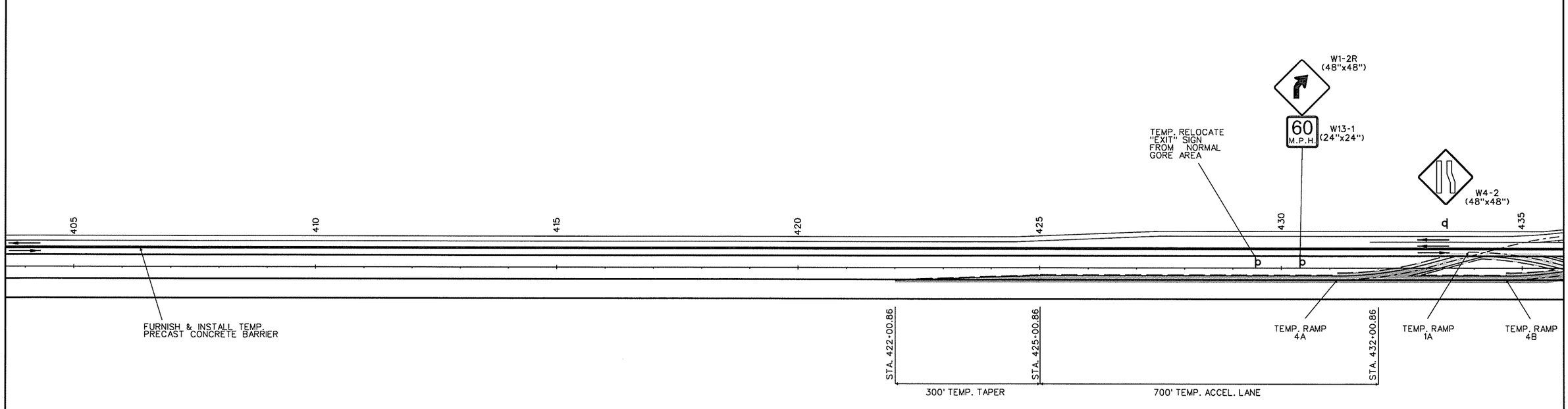
				6	ARK.			
				JOB NO.		BB0202	105	235
				(2) MAINTENANCE OF TRAFFIC				

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC
STAGE 2A

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	106	235
				②	MAINTENANCE OF TRAFFIC			

STAGE 2A OPERATIONS:
INSTALL PRIMARY MAIN LANE PRECAST CONCRETE BARRIER.
ROUTE NB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANE OF SB MAIN LANES.
REMOVE MAIN LANE GUARDRAILS WHERE ILLUSTRATED.
RECONSTRUCT NB LANES, APPROACH GUTTERS & SLABS.
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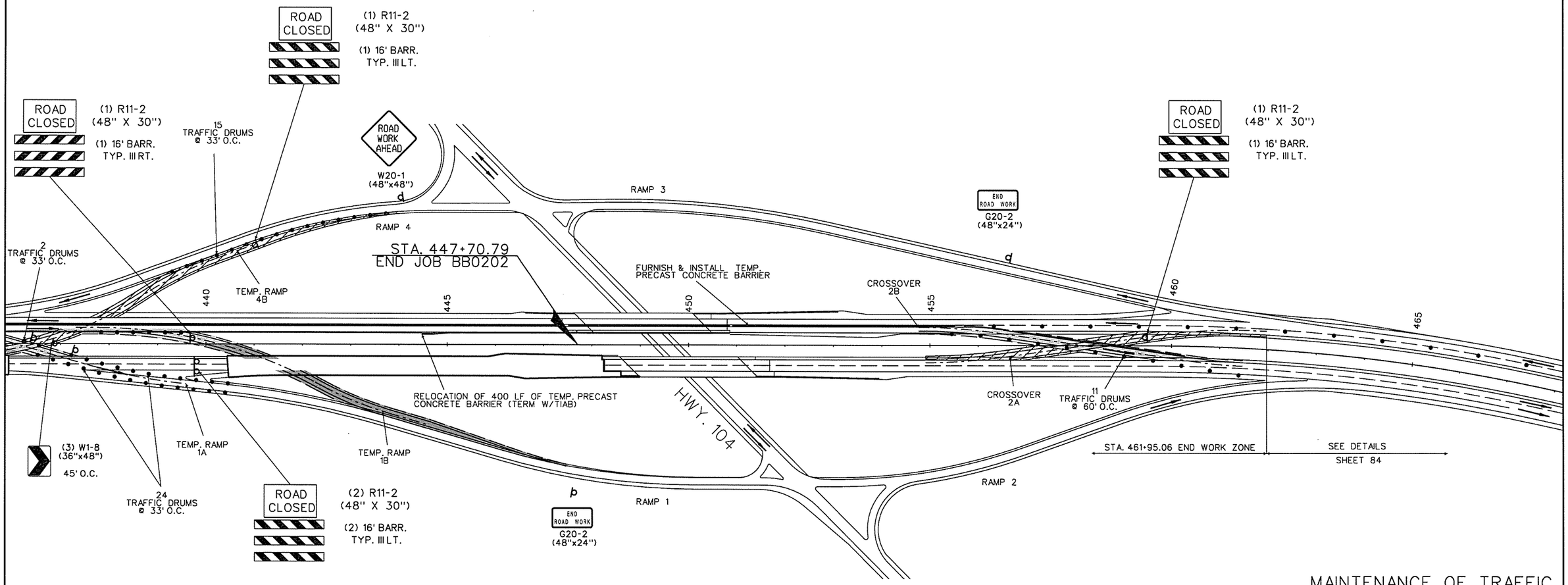
NOTE: MODIFICATIONS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY AND DO NOT INDICATE CONSTRUCTION LIMITS.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 16728
CLINTON D. JUMPER

6/20/2016

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



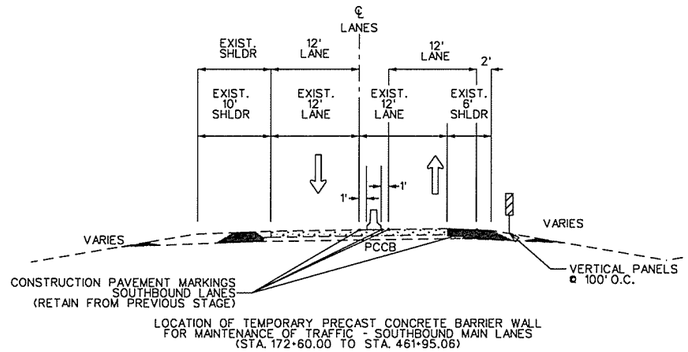
MAINTENANCE OF TRAFFIC
STAGE 2A

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	107	235

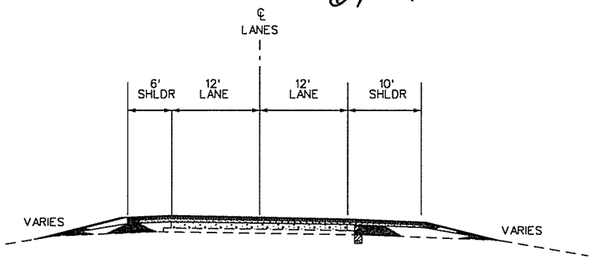
(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 16728
CLINTON D. JUMPER
6/20/2016

STAGE 2B OPERATIONS:
UTILIZE STAGE 2A TRAFFIC PATH FOR NB I-530 TRAFFIC.
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO
ALTERNATE TEMPORARY RAMPS.
MODIFY MEDIAN RAMPS AS INDICATED.
RECONSTRUCT REMAINING SECTIONS OF I-530 NORTHBOUND LANES.



LOCATION OF TEMPORARY PRECAST CONCRETE BARRIER WALL FOR MAINTENANCE OF TRAFFIC - SOUTHBOUND MAIN LANES (STA. 172+60.00 TO STA. 461+95.06)



RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'

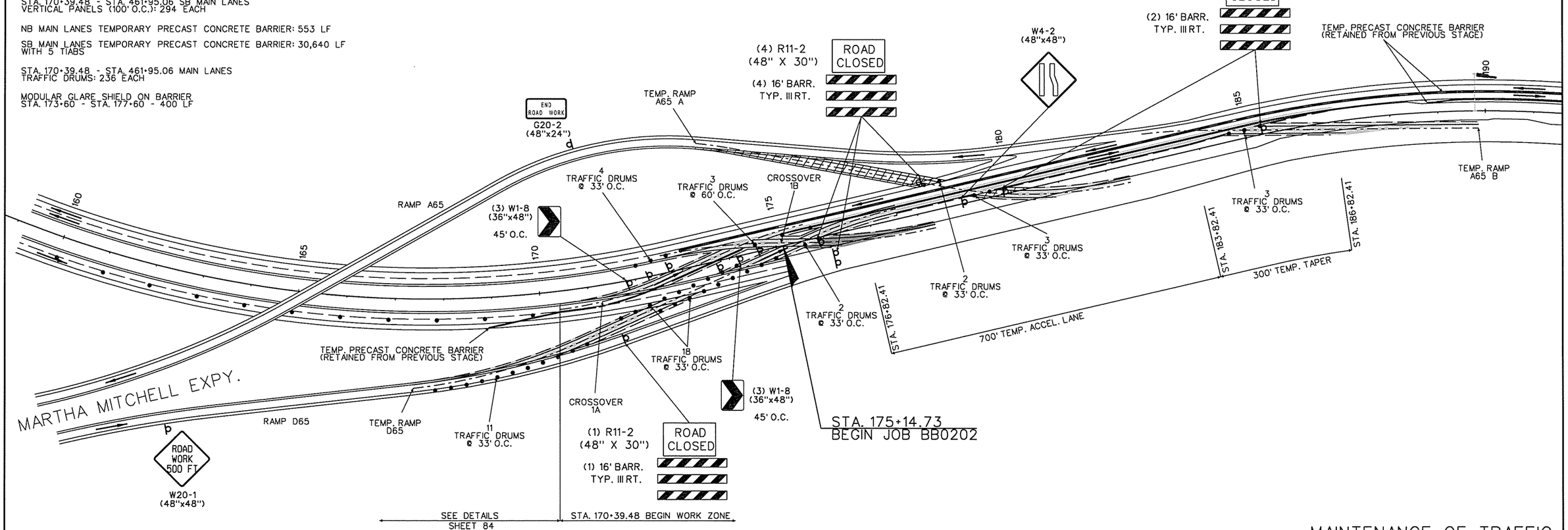
STA. 170+39.48 - STA. 461+95.06 SB MAIN LANES
VERTICAL PANELS (100' O.C.): 294 EACH

NB MAIN LANES TEMPORARY PRECAST CONCRETE BARRIER: 553 LF

SB MAIN LANES TEMPORARY PRECAST CONCRETE BARRIER: 30,640 LF
WITH 5 TIABS

STA. 170+39.48 - STA. 461+95.06 MAIN LANES
TRAFFIC DRUMS: 236 EACH

MODULAR GLARE SHIELD ON BARRIER
STA. 173+60 - STA. 177+60 - 400 LF



MAINTENANCE OF TRAFFIC
STAGE 2B

STAGE 2B OPERATIONS:
UTILIZE STAGE 2A TRAFFIC PATH FOR NB I-530 TRAFFIC.
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO
ALTERNATE TEMPORARY RAMPS.
MODIFY MEDIAN RAMPS AS INDICATED.
RECONSTRUCT REMAINING SECTIONS OF I-530 NORTHBOUND LANES.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 16728
CLINTON D. JUMPER

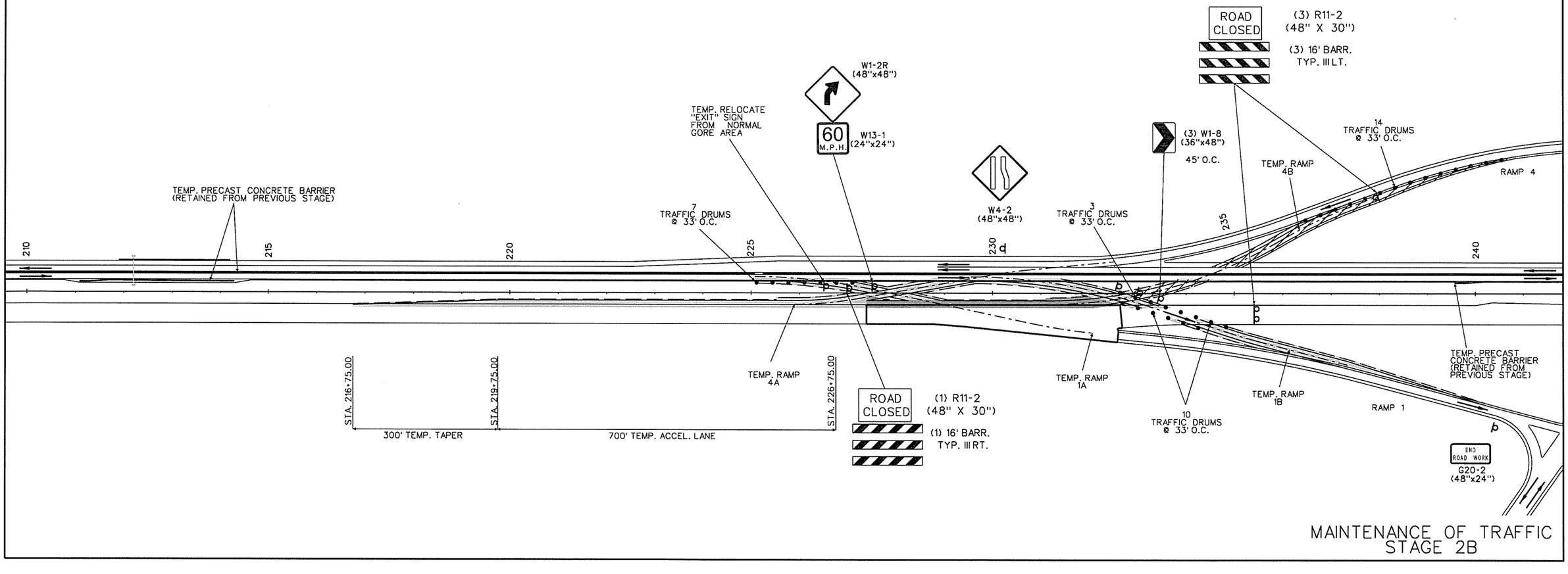
6/20/2016

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	108	235

(2) MAINTENANCE OF TRAFFIC

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC
STAGE 2B

STAGE 2B OPERATIONS:
UTILIZE STAGE 2A TRAFFIC PATH FOR NB I-530 TRAFFIC.
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO
ALTERNATE TEMPORARY RAMPS.
MODIFY MEDIAN RAMPS AS INDICATED.
RECONSTRUCT REMAINING SECTIONS OF I-530 NORTHBOUND LANES.

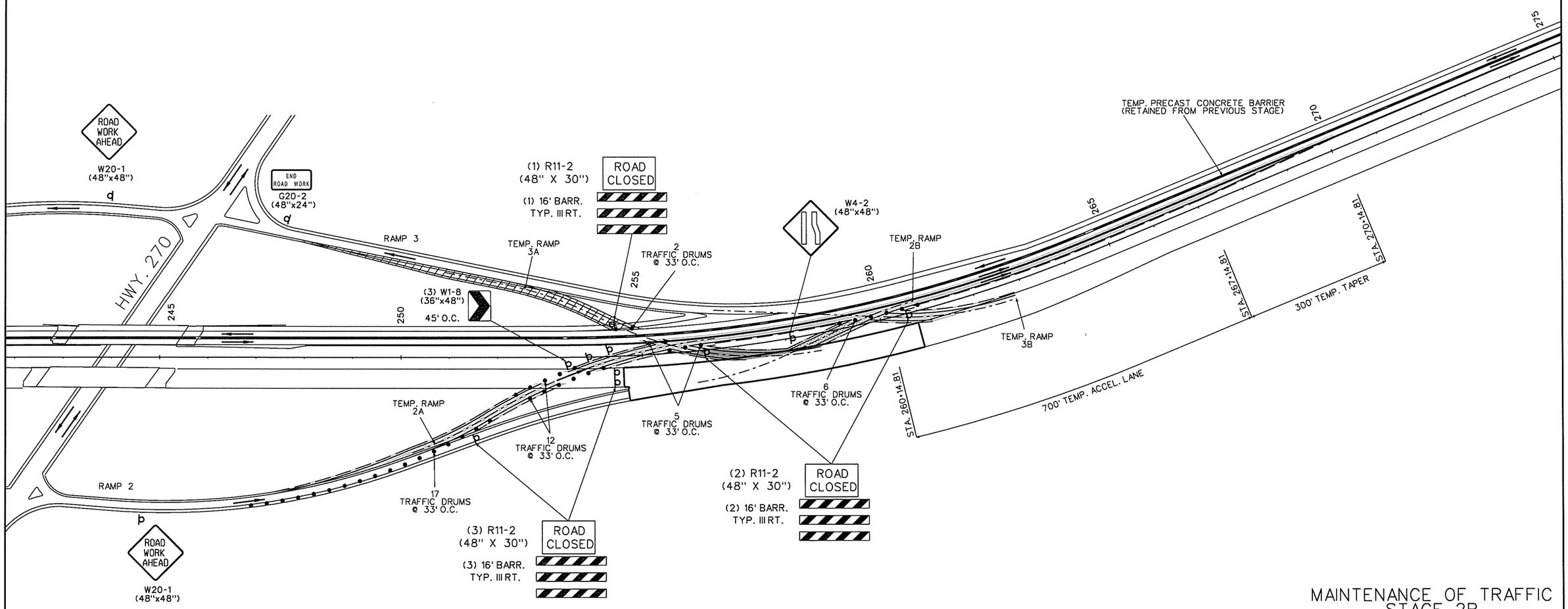
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 16728
CLINTON D. JUMPER
6/20/2016

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	109	235

(2) MAINTENANCE OF TRAFFIC

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC
STAGE 2B

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	110	235
				② MAINTENANCE OF TRAFFIC				

STAGE 2B OPERATIONS:
UTILIZE STAGE 2A TRAFFIC PATH FOR NB I-530 TRAFFIC.
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO
ALTERNATE TEMPORARY RAMPS.
MODIFY MEDIAN RAMPS AS INDICATED.
RECONSTRUCT REMAINING SECTIONS OF I-530 NORTHBOUND LANES.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
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CLINTON D. JUMPER
6/20/2016

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'

(1) R11-2 (48" X 30")
ROAD CLOSED
(1) 16' BARR. TYP. III RT.
W1-2R (48"x48")
W13-1 (24"x24")
60 M.P.H.
W4-2 (48"x48")
7 TRAFFIC DRUMS @ 33' O.C.
(3) W1-8 (36"x48") 45' O.C.
ROAD CLOSED
(3) R11-2 (48" X 30")
(3) 16' BARR. TYP. III LT.
W20-1 (48"x48")
ROAD WORK 500 FT
500'
13 TRAFFIC DRUMS @ 33' O.C.
RAMP 4
TEMP. PRECAST CONCRETE BARRIER (RETAINED FROM PREVIOUS STAGE)
315
320
325
330
335
340
345
TEMP. RAMP 4B
TEMP. PRECAST CONCRETE BARRIER (RETAINED FROM PREVIOUS STAGE)
TEMP. RAMP 4A
TEMP. RELOCATE "EXIT" SIGN FROM NORMAL GORE AREA
TEMP. RAMP 1A
TEMP. RAMP 1B
12 TRAFFIC DRUMS @ 33' O.C.
RAMP 1
STA. 318+79.10
STA. 321+79.10
STA. 328+79.10
300' TEMP. TAPER
700' TEMP. ACCEL. LANE
END ROAD WORK
G20-2 (48"x24")

MAINTENANCE OF TRAFFIC
STAGE 2B

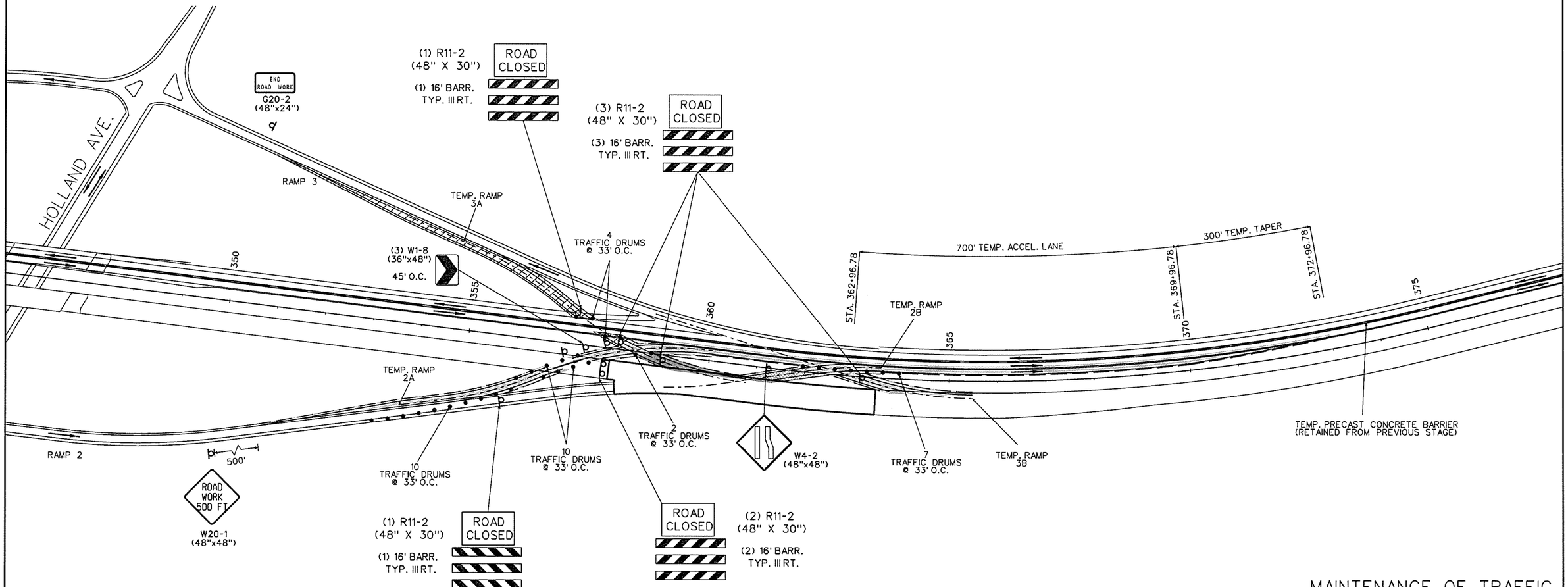
STAGE 2B OPERATIONS:
UTILIZE STAGE 2A TRAFFIC PATH FOR NB I-530 TRAFFIC.
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO
ALTERNATE TEMPORARY RAMPS.
MODIFY MEDIAN RAMPS AS INDICATED.
RECONSTRUCT REMAINING SECTIONS OF I-530 NORTHBOUND LANES.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 16728
CLINTON D. JUMPER
6/20/2016

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	111	235
				(2) MAINTENANCE OF TRAFFIC				

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC STAGE 2B

STAGE 2B OPERATIONS:
UTILIZE STAGE 2A TRAFFIC PATH FOR NB I-530 TRAFFIC.
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO
ALTERNATE TEMPORARY RAMPS.
MODIFY MEDIAN RAMPS AS INDICATED.
RECONSTRUCT REMAINING SECTIONS OF I-530 NORTHBOUND LANES.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
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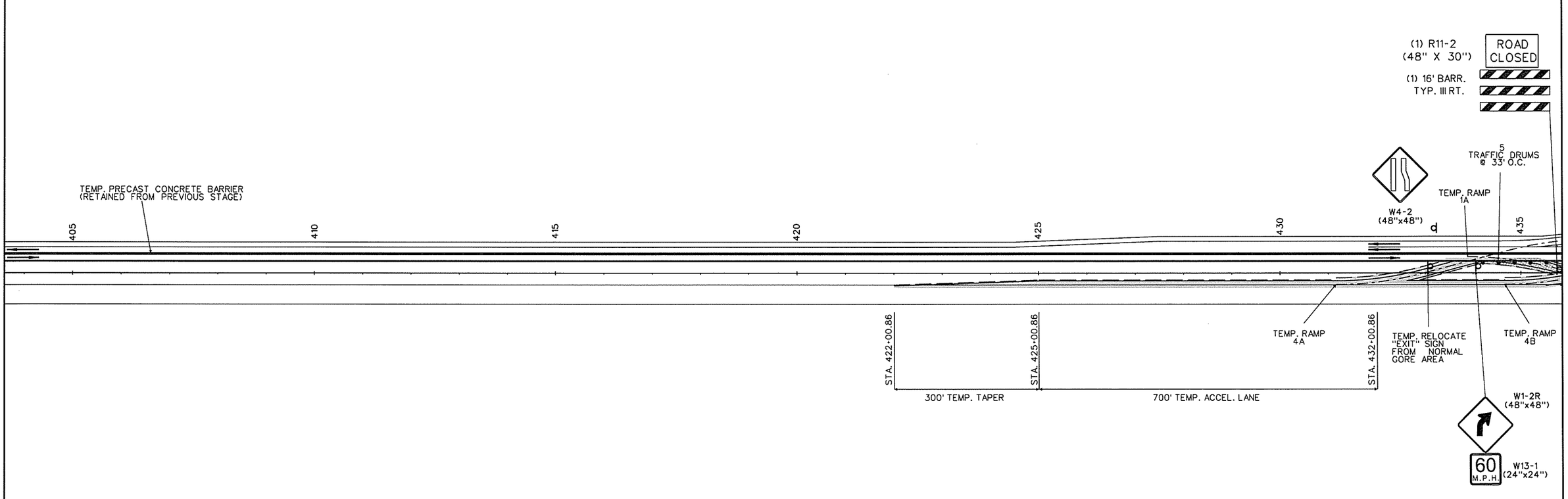
6/20/2016

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	112	235

(2) MAINTENANCE OF TRAFFIC

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC
STAGE 2B

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	113	235

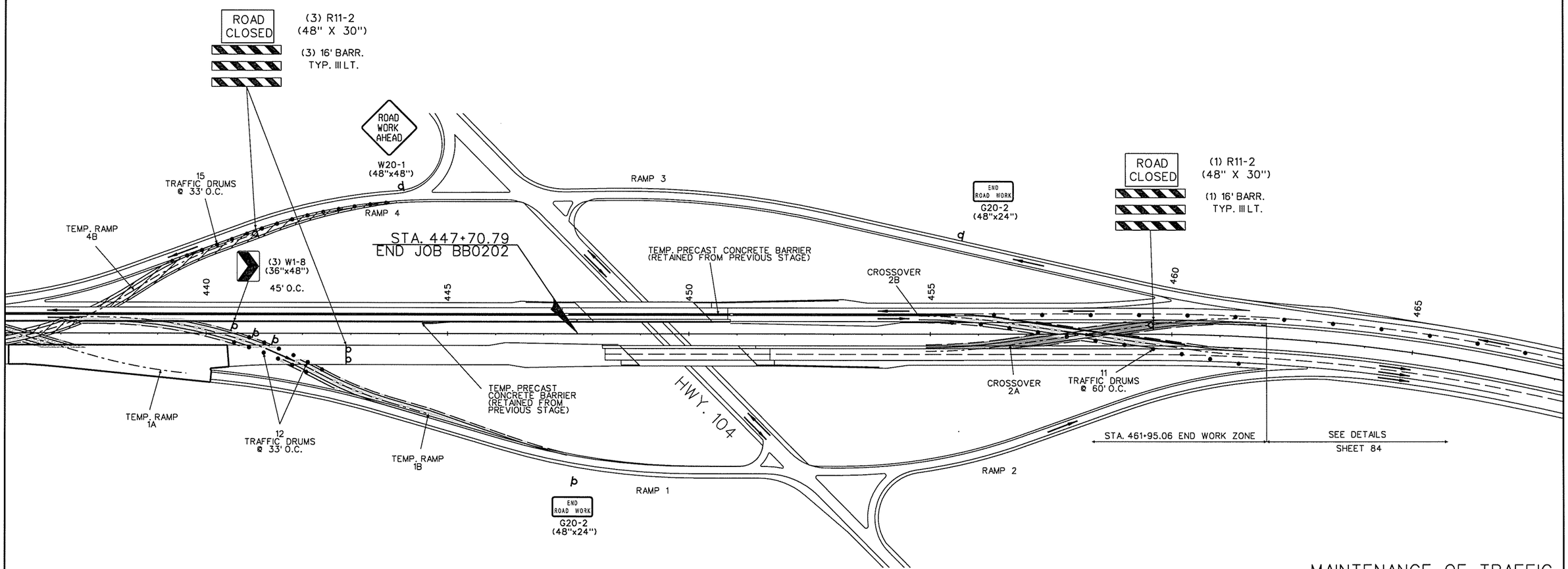
(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 16728
CLINTON D. JUMPER
6/20/2016

STAGE 2B OPERATIONS:
UTILIZE STAGE 2A TRAFFIC PATH FOR NB I-530 TRAFFIC.
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO
ALTERNATE TEMPORARY RAMPS.
MODIFY MEDIAN RAMPS AS INDICATED.
RECONSTRUCT REMAINING SECTIONS OF I-530 NORTHBOUND LANES.

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



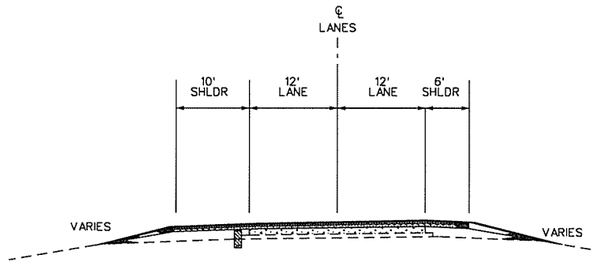
MAINTENANCE OF TRAFFIC
STAGE 2B

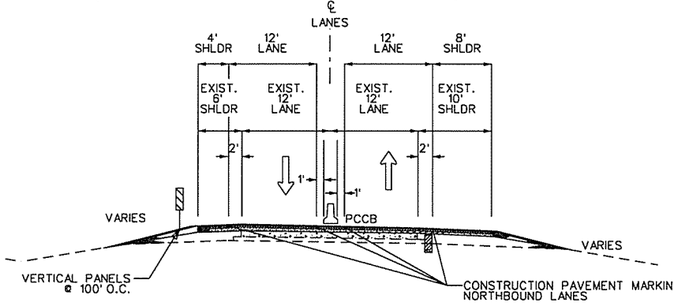
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	114	235

② MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
CLINTON D. JUMPER
No. 16728
6/20/2016

STAGE 3A OPERATIONS:
RELOCATE PRIMARY MAIN LANE PRECAST CONCRETE BARRIER TO NB LANES.
ROUTE SB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANE OF NB MAIN LANES.
REMOVE MAIN LANE GUARDRAILS WHERE ILLUSTRATED.
RECONSTRUCT SB LANES, APPROACH GUTTERS & SLABS.
MODIFY MEDIAN RAMPS AS INDICATED.
NOTE: MODIFICATIONS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY AND DO NOT INDICATE CONSTRUCTION LIMITS.





LOCATION OF TEMPORARY PRECAST CONCRETE BARRIER WALL FOR MAINTENANCE OF TRAFFIC - NORTHBOUND MAIN LANES (STA. 170+39.48 TO STA. 461+48.71)

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'

STA. 170+39.48 - STA. 461+95.06 NB MAIN LANES
VERTICAL PANELS (100' O.C.): 294 EACH

STA. 170+39.48 - STA. 461+95.06 NB MAIN LANES
REMOVAL OF PERMANENT PAVEMENT MARKINGS: 5,360 LF

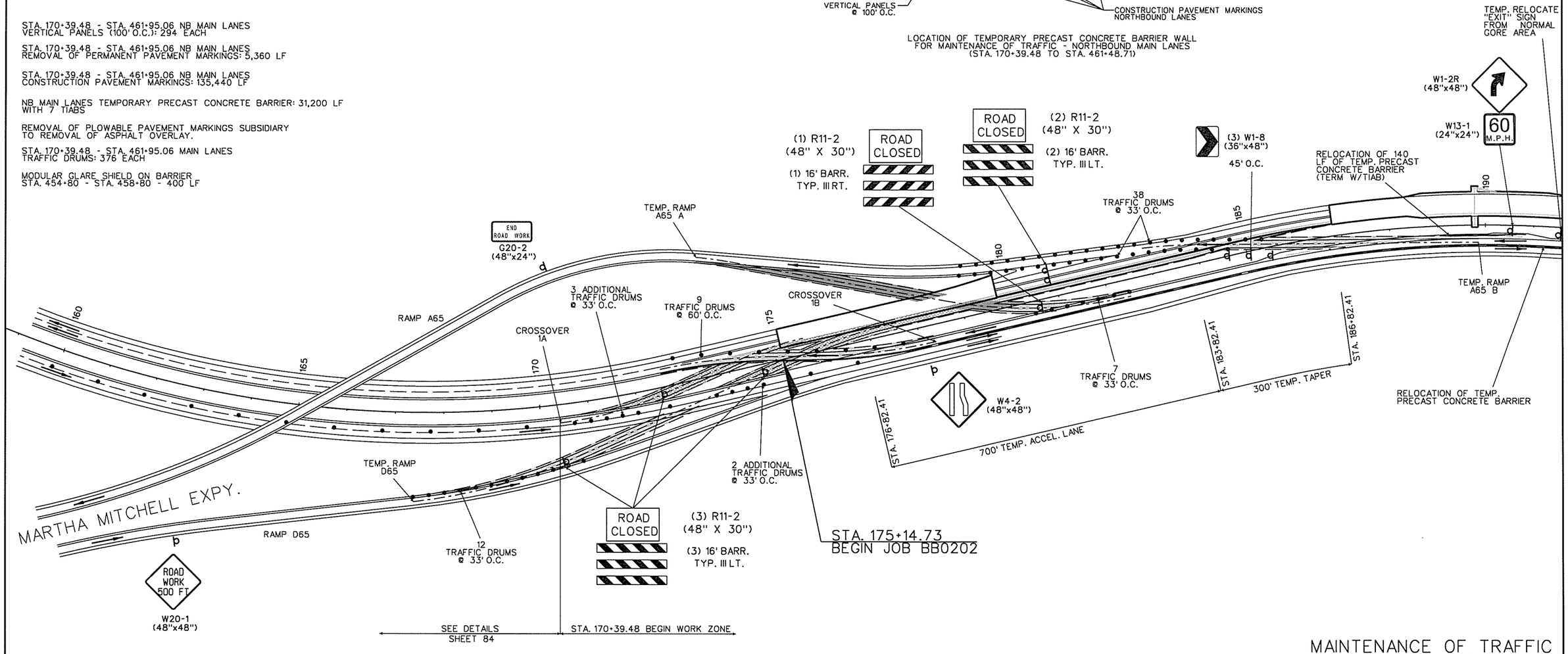
STA. 170+39.48 - STA. 461+95.06 NB MAIN LANES
CONSTRUCTION PAVEMENT MARKINGS: 135,440 LF

NB MAIN LANES TEMPORARY PRECAST CONCRETE BARRIER: 31,200 LF
WITH 7 TIABS

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

STA. 170+39.48 - STA. 461+95.06 MAIN LANES
TRAFFIC DRUMS: 376 EACH

MODULAR GLARE SHIELD ON BARRIER
STA. 454+80 - STA. 458+80 - 400 LF



MAINTENANCE OF TRAFFIC
STAGE 3A

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	115	235

(2) MAINTENANCE OF TRAFFIC

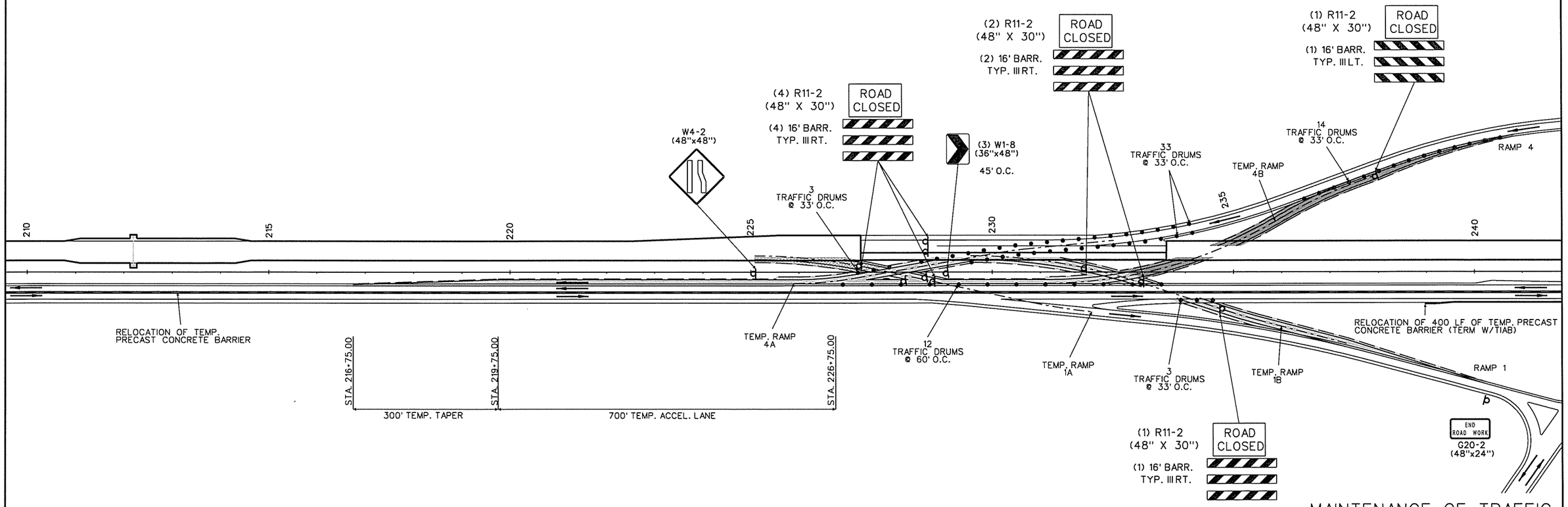
STAGE 3A OPERATIONS:
RELOCATE PRIMARY MAIN LANE PRECAST CONCRETE BARRIER TO NB LANES.
ROUTE SB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANE OF NB MAIN LANES.
REMOVE MAIN LANE GUARDRAILS WHERE ILLUSTRATED.
RECONSTRUCT SB LANES, APPROACH GUTTERS & SLABS.
MODIFY MEDIAN RAMPS AS INDICATED.
NOTE: MODIFICATIONS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY AND DO NOT INDICATE CONSTRUCTION LIMITS.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
CLINTON D. JUMPER
No. 16728

6/20/2016

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC
STAGE 3A

STAGE 3A OPERATIONS:
RELOCATE PRIMARY MAIN LANE PRECAST CONCRETE BARRIER TO NB LANES.
ROUTE SB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANE OF NB MAIN LANES.
REMOVE MAIN LANE GUARDRAILS WHERE ILLUSTRATED.
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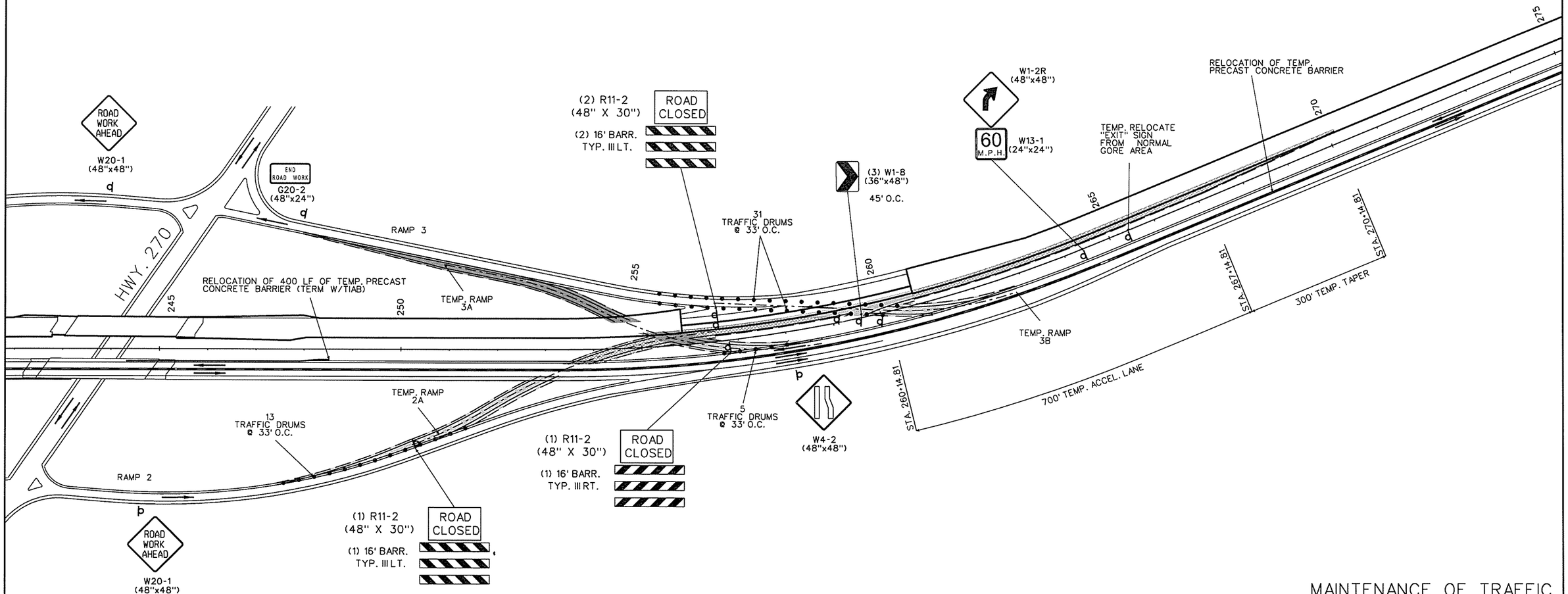
6/20/2016

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	116	235
				(2) MAINTENANCE OF TRAFFIC				

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC STAGE 3A

STAGE 3A OPERATIONS:
RELOCATE PRIMARY MAIN LANE PRECAST CONCRETE BARRIER TO NB LANES.
ROUTE SB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANE OF NB MAIN LANES.
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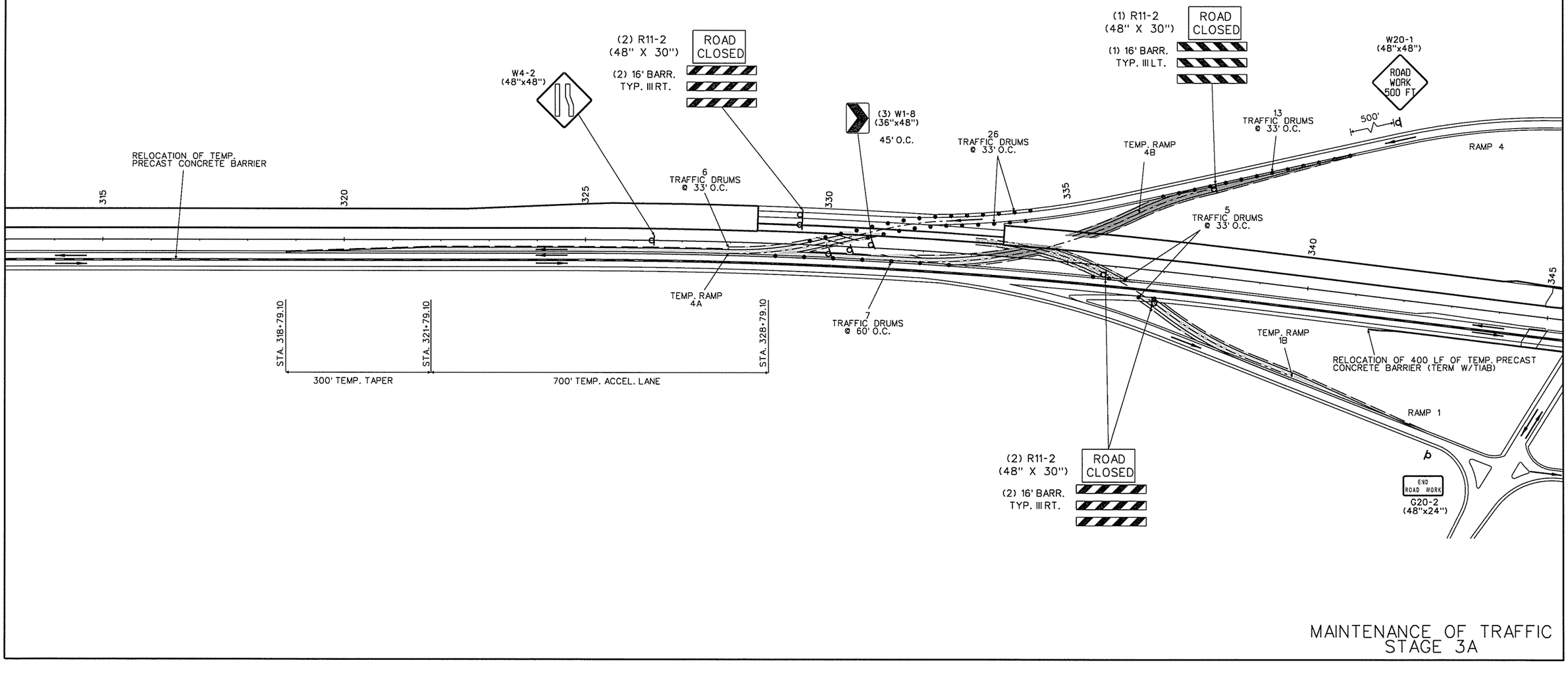
				6	ARK.			
				JOB NO.		BB0202	117	235

(2) MAINTENANCE OF TRAFFIC

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC STAGE 3A

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	118	235
				②	MAINTENANCE OF TRAFFIC			

STAGE 3A OPERATIONS:
RELOCATE PRIMARY MAIN LANE PRECAST CONCRETE BARRIER TO NB LANES.
ROUTE SB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANE OF NB MAIN LANES.
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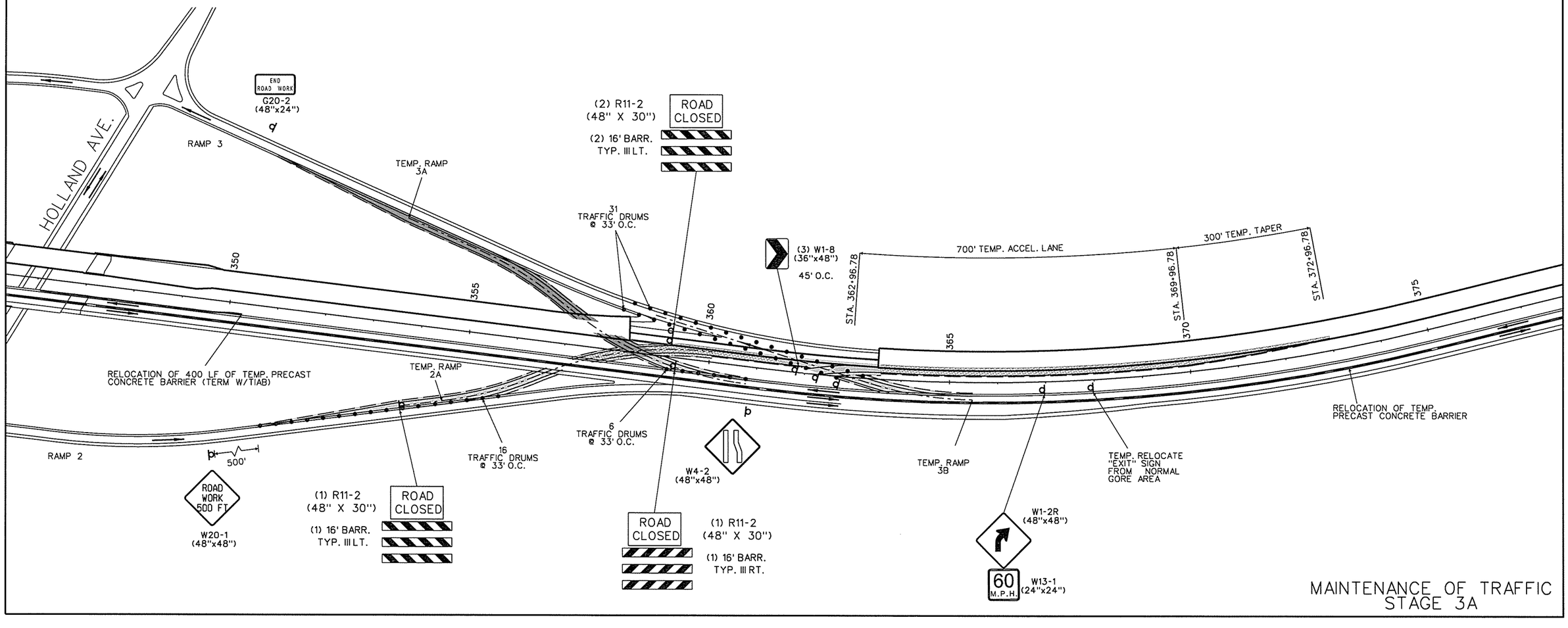
6/20/2016

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC
STAGE 3A

STAGE 3A OPERATIONS:
RELOCATE PRIMARY MAIN LANE PRECAST CONCRETE BARRIER TO NB LANES.
ROUTE SB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANE OF NB MAIN LANES.
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STATE OF ARKANSAS
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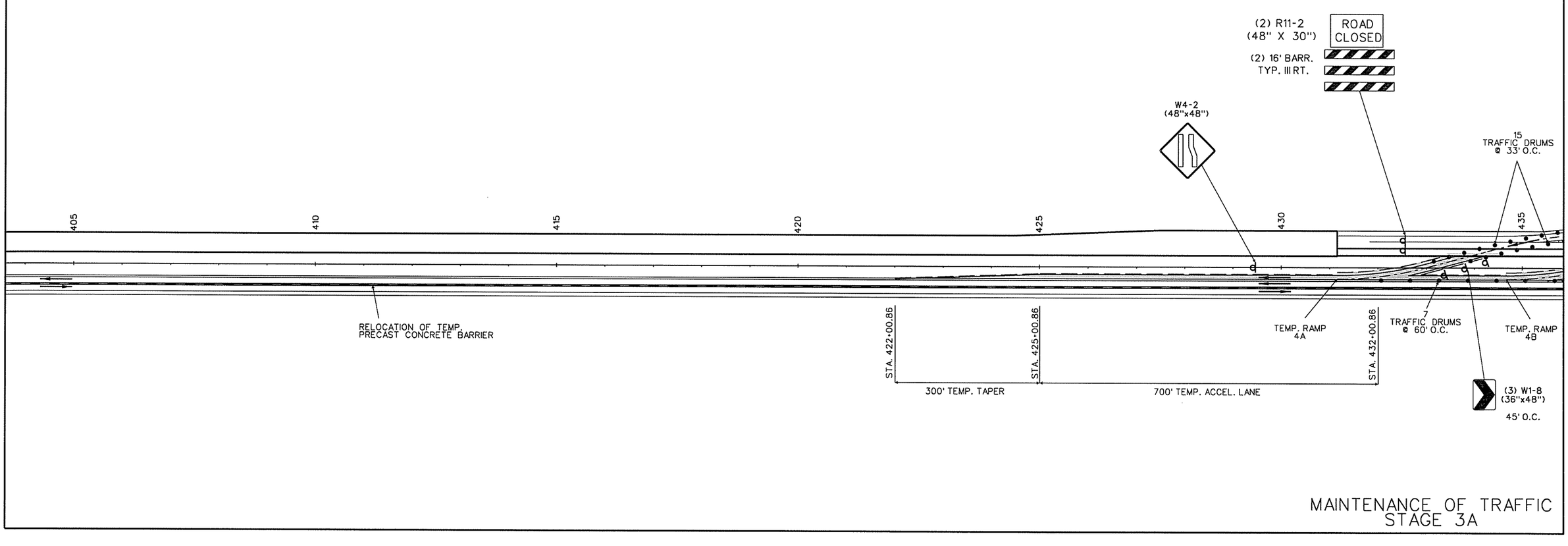
CLINTON D. JUMPER
6/20/2016

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	119	235
				(2)	MAINTENANCE OF TRAFFIC			

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC
STAGE 3A

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	120	235

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 16728
CLINTON D. JUMPER
6/20/2016

STAGE 3A OPERATIONS:
RELOCATE PRIMARY MAIN LANE PRECAST CONCRETE BARRIER TO NB LANES.
ROUTE SB I-530 TRAFFIC THROUGH CROSSOVERS ONTO INSIDE LANE OF NB MAIN LANES.
REMOVE MAIN LANE GUARDRAILS WHERE ILLUSTRATED.
RECONSTRUCT SB LANES, APPROACH GUTTERS & SLABS.
MODIFY MEDIAN RAMPS AS INDICATED.
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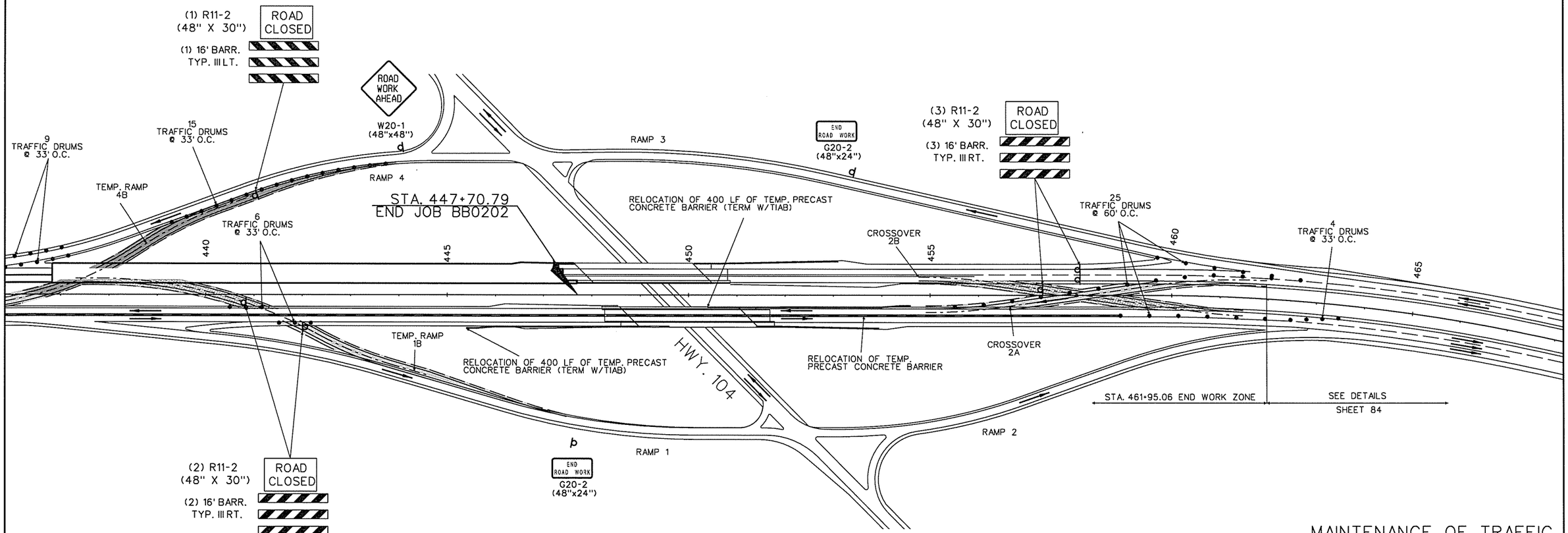
RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC STAGE 3A

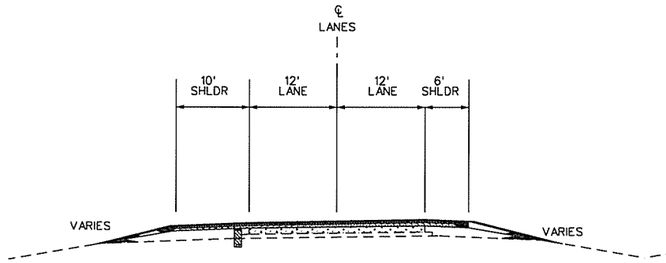
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	121	235
				②	MAINTENANCE OF TRAFFIC			

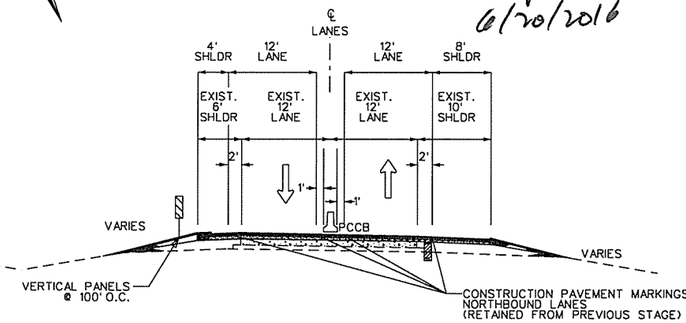
STAGE 3B OPERATIONS:
UTILIZE STAGE 3A TRAFFIC PATH FOR NB I-530 TRAFFIC.
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO
ALTERNATE TEMPORARY RAMPS.
MODIFY MEDIAN RAMPS AS INDICATED.
RECONSTRUCT REMAINING SECTIONS OF I-530 NORTHBOUND LANES.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 16728
CLINTON D. JUMPER
6/20/2016

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'





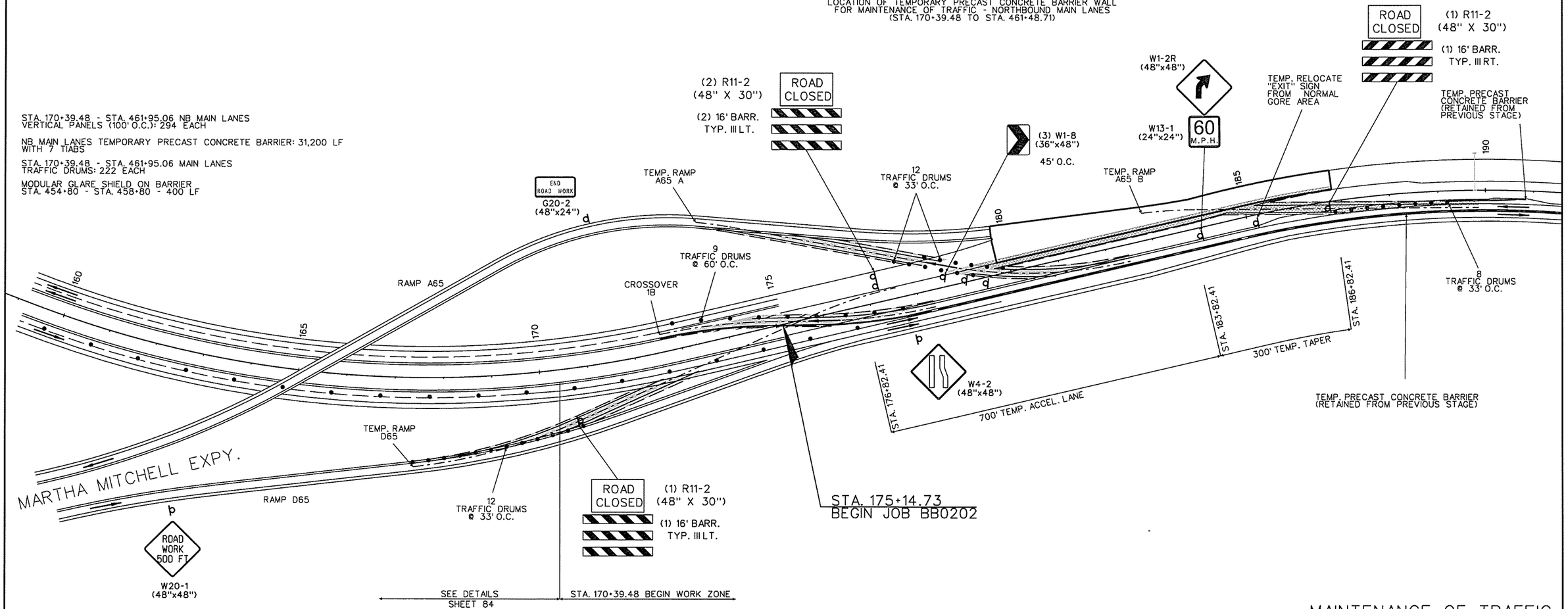
LOCATION OF TEMPORARY PRECAST CONCRETE BARRIER WALL
FOR MAINTENANCE OF TRAFFIC - NORTHBOUND MAIN LANES
(STA. 170+39.48 TO STA. 461+48.71)

STA. 170+39.48 - STA. 461+95.06 NB MAIN LANES
VERTICAL PANELS (100' O.C.): 294 EACH

NB MAIN LANES TEMPORARY PRECAST CONCRETE BARRIER: 31,200 LF
WITH 7 TIABS

STA. 170+39.48 - STA. 461+95.06 MAIN LANES
TRAFFIC DRUMS: 222 EACH

MODULAR GLARE SHIELD ON BARRIER
STA. 454+80 - STA. 458+80 - 400 LF



MAINTENANCE OF TRAFFIC
STAGE 3B

STAGE 3B OPERATIONS:
UTILIZE STAGE 3A TRAFFIC PATH FOR NB I-530 TRAFFIC.
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO
ALTERNATE TEMPORARY RAMPS.
MODIFY MEDIAN RAMPS AS INDICATED.
RECONSTRUCT REMAINING SECTIONS OF I-530 NORTHBOUND LANES.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
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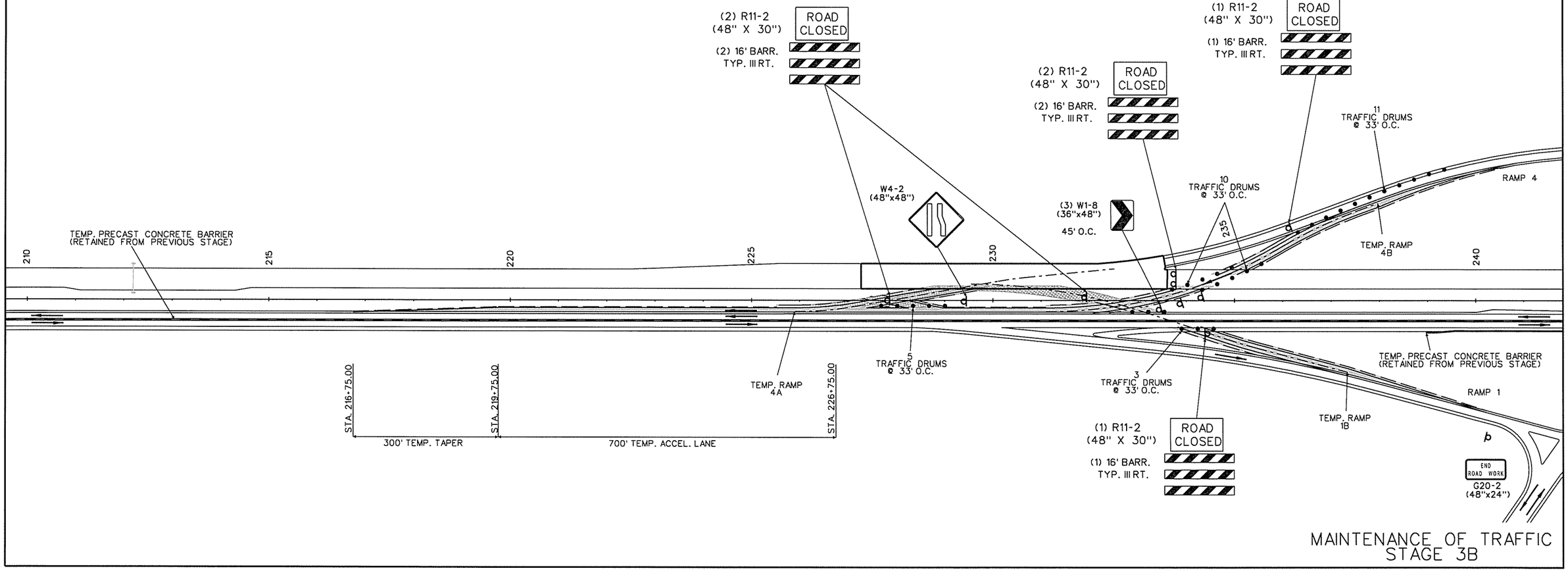
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	122	235

② MAINTENANCE OF TRAFFIC

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC
STAGE 3B

STAGE 3B OPERATIONS:
UTILIZE STAGE 3A TRAFFIC PATH FOR NB I-530 TRAFFIC.
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO
ALTERNATE TEMPORARY RAMPS.
MODIFY MEDIAN RAMPS AS INDICATED.
RECONSTRUCT REMAINING SECTIONS OF I-530 NORTHBOUND LANES.

STATE OF ARKANSAS
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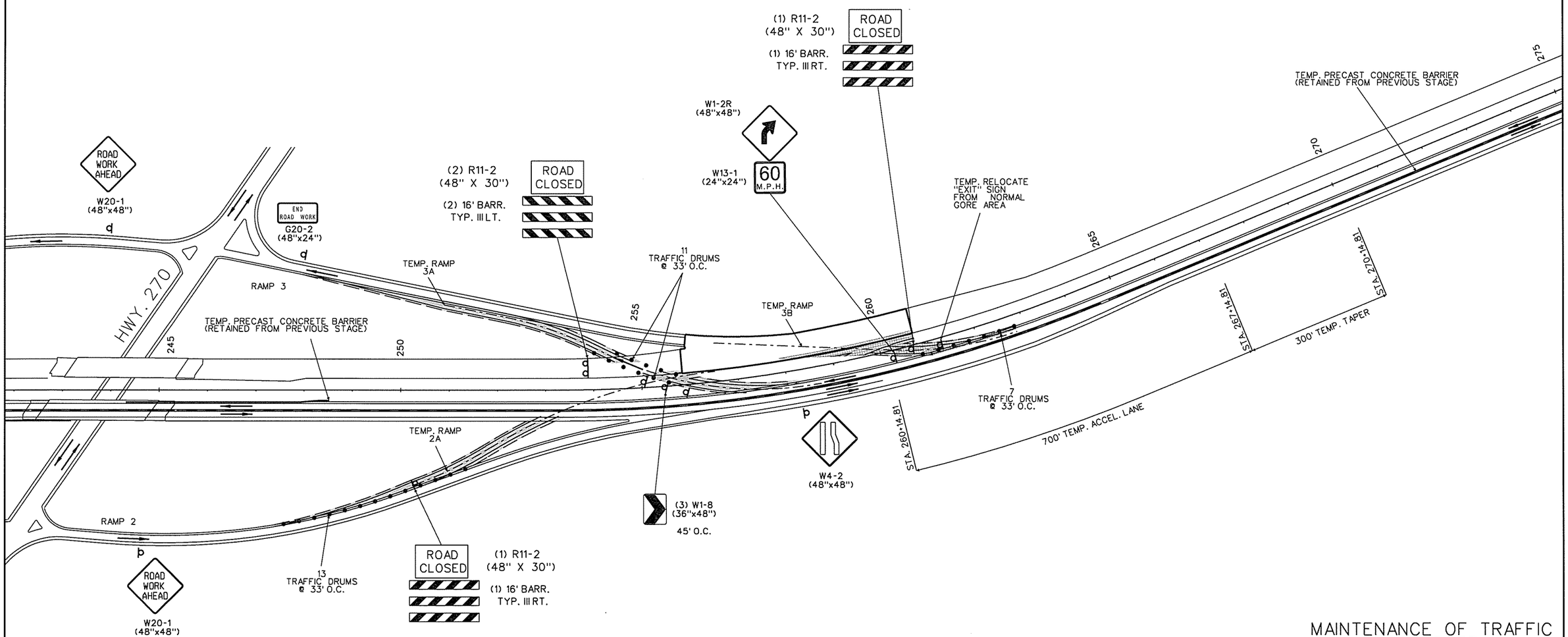
6/20/2016

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	123	235
				(2) MAINTENANCE OF TRAFFIC				

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC STAGE 3B

STAGE 3B OPERATIONS:
UTILIZE STAGE 3A TRAFFIC PATH FOR NB I-530 TRAFFIC.
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO
ALTERNATE TEMPORARY RAMPS.
MODIFY MEDIAN RAMPS AS INDICATED.
RECONSTRUCT REMAINING SECTIONS OF I-530 NORTHBOUND LANES.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
CLINTON D. JUMPER
No. 16728
6/20/2016

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	124	235

(2) MAINTENANCE OF TRAFFIC

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'

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

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

W20-1 (48"x48")
ROAD WORK 500 FT
500'

W4-2 (48"x48")

12 TRAFFIC DRUMS @ 33' O.C.

10 TRAFFIC DRUMS @ 33' O.C.

TEMP. PRECAST CONCRETE BARRIER (RETAINED FROM PREVIOUS STAGE)

RAMP 4

TEMP. RAMP 4A

TEMP. RAMP 4B

2 TRAFFIC DRUMS @ 33' O.C.

315 320 325 330 335 340 345

STA. 318+79.10
STA. 321+79.10
STA. 328+79.10
300' TEMP. TAPER
700' TEMP. ACCEL. LANE

(3) W1-8 (36"x48")
45' O.C.

TEMP. RAMP 1B

TEMP. PRECAST CONCRETE BARRIER (RETAINED FROM PREVIOUS STAGE)

RAMP 1

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

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

MAINTENANCE OF TRAFFIC STAGE 3B

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	125	235

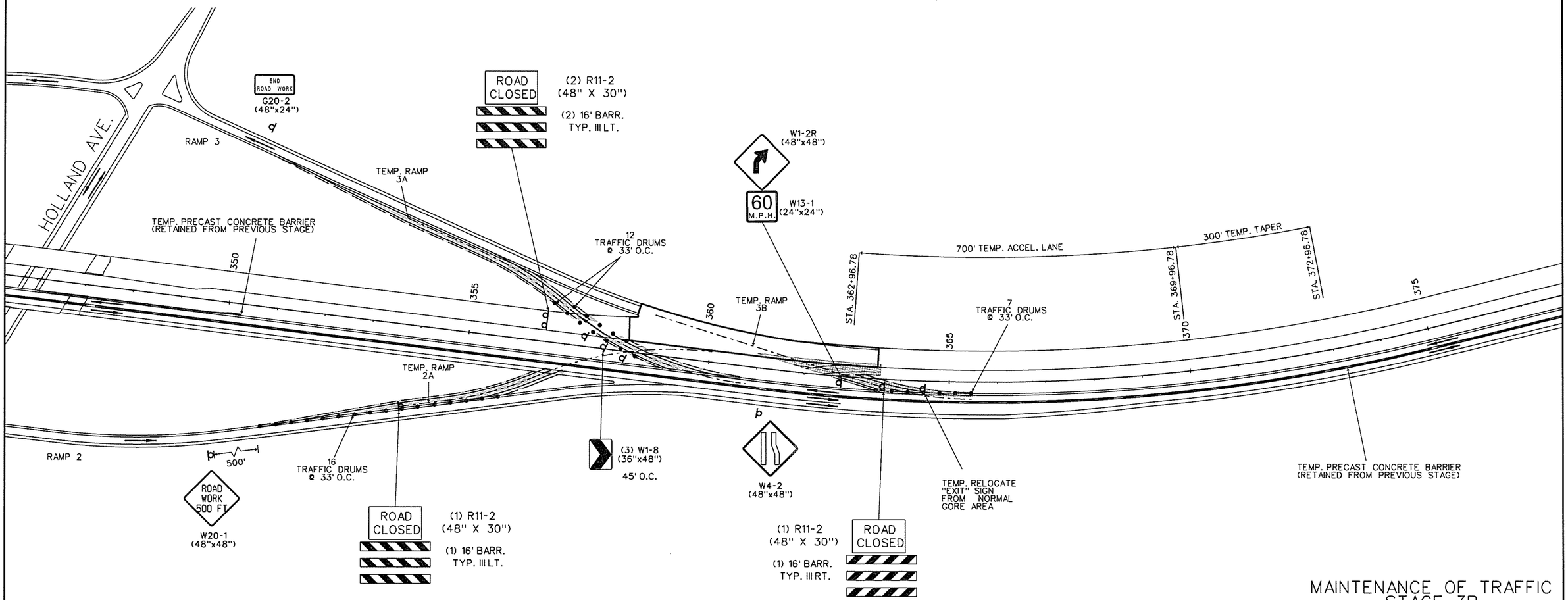
(2) MAINTENANCE OF TRAFFIC

STAGE 3B OPERATIONS:
UTILIZE STAGE 3A TRAFFIC PATH FOR NB I-530 TRAFFIC.
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO
ALTERNATE TEMPORARY RAMPS.
MODIFY MEDIAN RAMPS AS INDICATED.
RECONSTRUCT REMAINING SECTIONS OF I-530 NORTHBOUND LANES.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 16728
CLINTON D. JUMPER
6/20/2016

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC STAGE 3B

STAGE 3B OPERATIONS:
UTILIZE STAGE 3A TRAFFIC PATH FOR NB I-530 TRAFFIC.
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO
ALTERNATE TEMPORARY RAMPS.
MODIFY MEDIAN RAMPS AS INDICATED.
RECONSTRUCT REMAINING SECTIONS OF I-530 NORTHBOUND LANES.

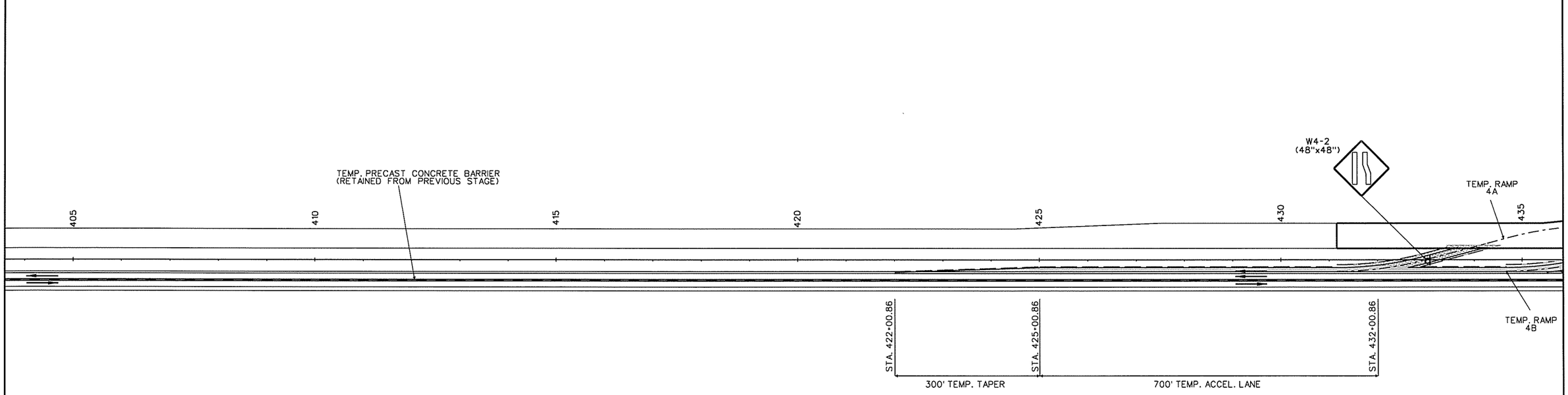
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 16728
CLINTON D. JUMPER

6/20/2016

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PRO.JNO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	126	235
				(2) MAINTENANCE OF TRAFFIC				

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC STAGE 3B

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	127	235
				(2) MAINTENANCE OF TRAFFIC				

STAGE 3B OPERATIONS:
UTILIZE STAGE 3A TRAFFIC PATH FOR NB I-530 TRAFFIC.
SHIFT EXIT AND ENTRANCE RAMP TRAFFIC TO
ALTERNATE TEMPORARY RAMPS.
MODIFY MEDIAN RAMPS AS INDICATED.
RECONSTRUCT REMAINING SECTIONS OF I-530 NORTHBOUND LANES.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 16728
CLINTON D. JUMPER

6/20/2016

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'

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

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

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

15 TRAFFIC DRUMS @ 33' O.C.

9 TRAFFIC DRUMS @ 33' O.C.

RAMP 4

TEMP. RAMP 4B

STA. 447+70.79
END JOB BB0202

RAMP 3

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

(2) R11-2 (48" X 30")
(2) 16' BARR. TYP. III RT.

ROAD CLOSED

24 TRAFFIC DRUMS @ 60' O.C.

TEMP. PRECAST CONCRETE BARRIER (RETAINED FROM PREVIOUS STAGE)

440 445 450 455 460 465

CROSSOVER 2A

HWY. 104

TEMP. PRECAST CONCRETE BARRIER (RETAINED FROM PREVIOUS STAGE)

TEMP. PRECAST CONCRETE BARRIER (RETAINED FROM PREVIOUS STAGE)

4 TRAFFIC DRUMS @ 33' O.C.

(3) W1-8 (36"x48") 45' O.C.

3 TRAFFIC DRUMS @ 33' O.C.

TEMP. RAMP 1B

RAMP 1

RAMP 2

STA. 461+95.06 END WORK ZONE

SEE DETAILS SHEET 84

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

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

MAINTENANCE OF TRAFFIC STAGE 3B

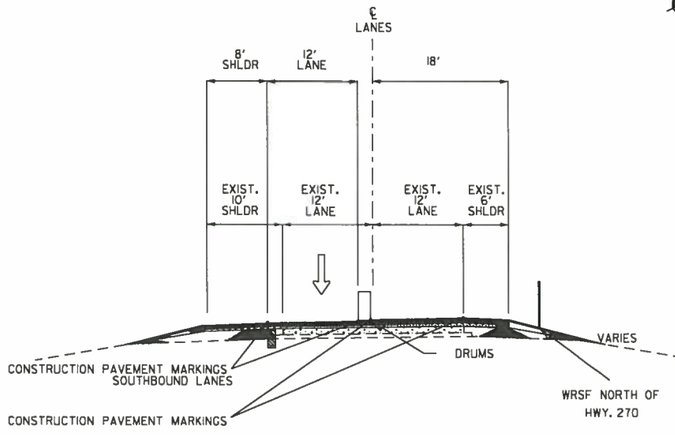
STAGE 4A OPERATIONS:
SHIFT SB TRAFFIC TO OUTSIDE SB LANE.
RETAIN NB TRAFFIC IN OUTSIDE NB LANE.
REMOVE PRIMARY MAIN LANE PRECAST CONCRETE BARRIER.
OBLITERATE REMAINING CROSSOVERS AND TEMPORARY RAMPS IN MEDIAN AREA.
CONSTRUCT FINAL GRADING IN MEDIAN AREA.
PLACE FINAL LIFT OF SURFACE ON INSIDE LANE AND SHOULDER.
CONSTRUCT WRSF AND GUARDRAIL ON MEDIAN SIDE OF MAIN LANES.
INSTALL RUMBLE STRIPS ON INSIDE SHOULDERS.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
7-28-2016				6	ARK.			
				JOB NO.		BB0202	128	235
				(2) MAINTENANCE OF TRAFFIC				

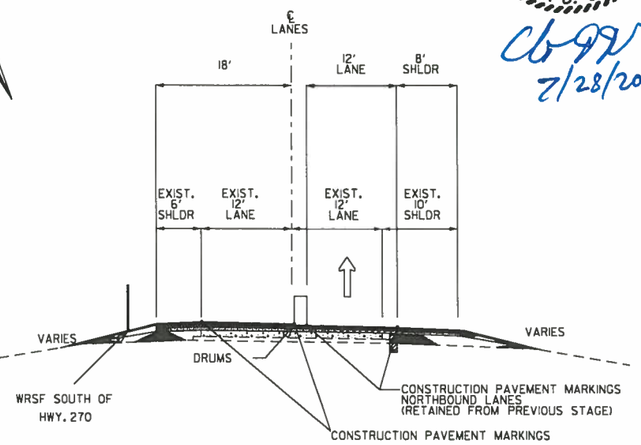
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 16728
CLINTON D. JUMPER
7/28/2016

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



LOCATION OF TRAFFIC DRUMS
FOR MAINTENANCE OF TRAFFIC
(SOUTHBOUND MAIN LANES)
(TRANSITIONS AT STA. 171+60.00 TO STA. 172+60.00
AND STA. 461+95.06 TO STA 462+95.06)



LOCATION OF TRAFFIC DRUMS
FOR MAINTENANCE OF TRAFFIC
(NORTHBOUND MAIN LANES)
(TRANSITIONS AT STA. 169+39.48 TO STA. 170+39.48
AND STA. 461+48.71 TO STA 462+48.71)

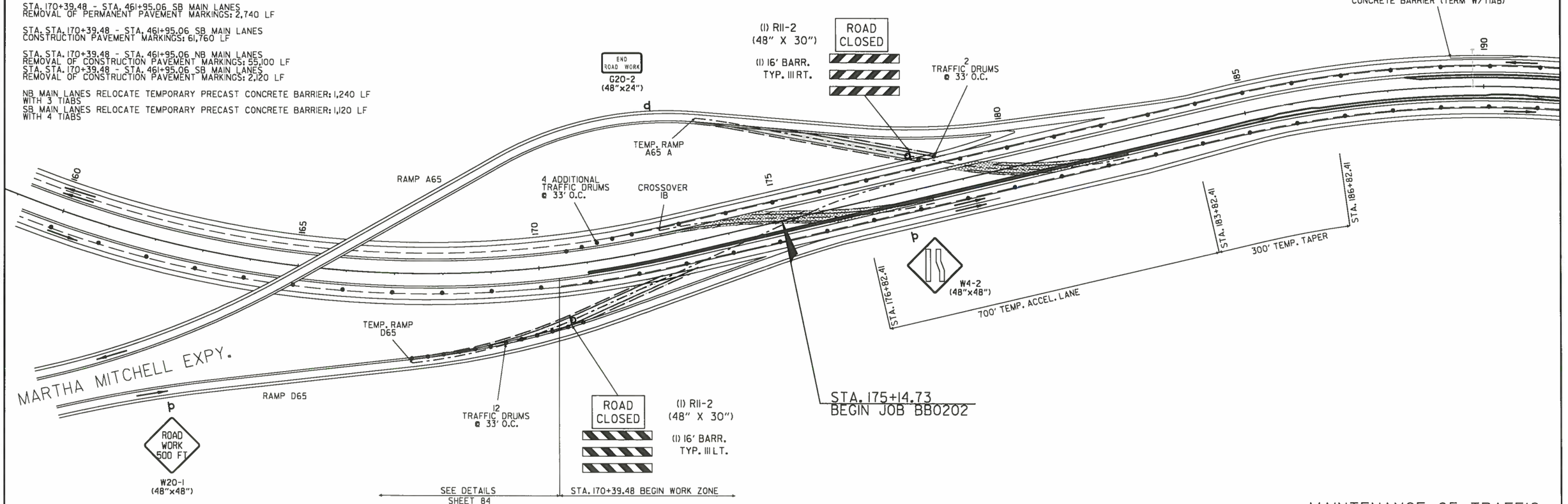
STA. STA. 170+39.48 - STA. 461+95.06 NB MAIN LANES
TRAFFIC DRUMS (100' O.C.): 292 EACH + 61 ADDITIONAL DRUMS
STA. STA. 170+39.48 - STA. 461+95.06 SB MAIN LANES
TRAFFIC DRUMS (100' O.C.): 290 EACH + 60 ADDITIONAL DRUMS

STA. 170+39.48 - STA. 461+95.06 SB MAIN LANES
REMOVAL OF PERMANENT PAVEMENT MARKINGS: 2,740 LF

STA. STA. 170+39.48 - STA. 461+95.06 SB MAIN LANES
CONSTRUCTION PAVEMENT MARKINGS: 61,760 LF

STA. STA. 170+39.48 - STA. 461+95.06 NB MAIN LANES
REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS: 55,100 LF
STA. STA. 170+39.48 - STA. 461+95.06 SB MAIN LANES
REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS: 2,120 LF

NB MAIN LANES RELOCATE TEMPORARY PRECAST CONCRETE BARRIER: 1,240 LF
WITH 3 TIABS
SB MAIN LANES RELOCATE TEMPORARY PRECAST CONCRETE BARRIER: 1,120 LF
WITH 4 TIABS



MAINTENANCE OF TRAFFIC
STAGE 4A

STAGE 4A OPERATIONS:
SHIFT SB TRAFFIC TO OUTSIDE SB LANE.
RETAIN NB TRAFFIC IN OUTSIDE NB LANE.
REMOVE PRIMARY MAIN LANE PRECAST CONCRETE BARRIER.
OBLITERATE REMAINING 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 OF MAIN LANES.
INSTALL RUMBLE STRIPS ON INSIDE SHOULDERS.
PLACE FINAL STRIPING ON INSIDE LANES.

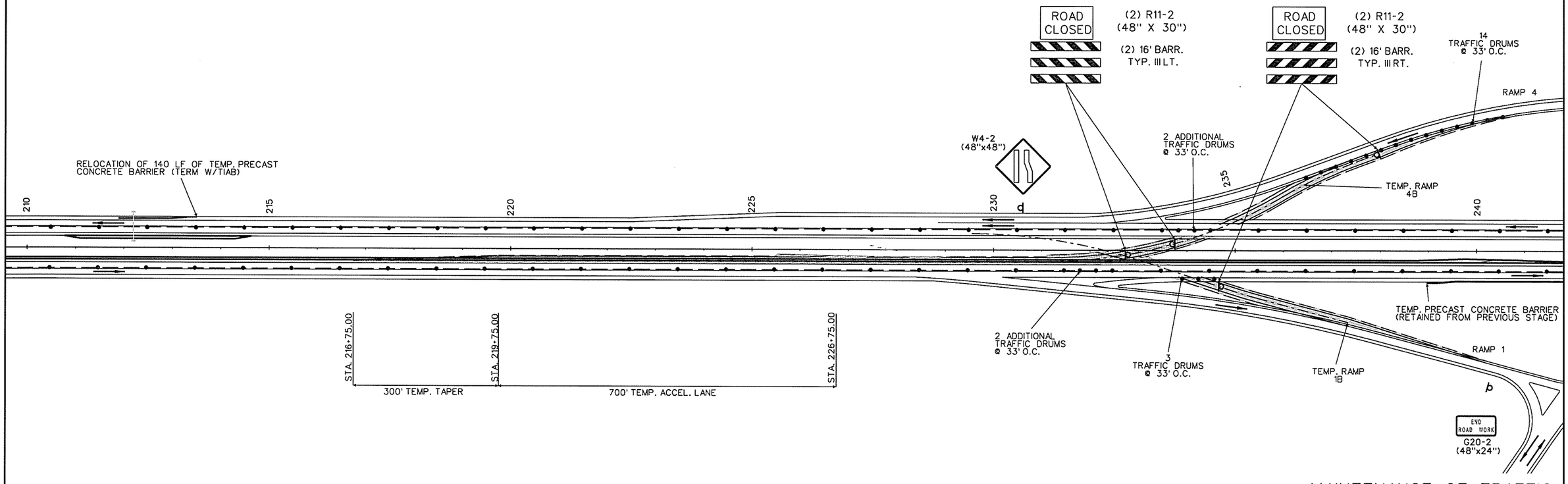
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 16728
CLINTON D. JUMPER
6/20/2016

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	129	235

(2) MAINTENANCE OF TRAFFIC

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC STAGE 4A

STAGE 4A OPERATIONS:
SHIFT SB TRAFFIC TO OUTSIDE SB LANE.
RETAIN NB TRAFFIC IN OUTSIDE NB LANE.
REMOVE PRIMARY MAIN LANE PRECAST CONCRETE BARRIER.
OBLITERATE REMAINING 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 OF MAIN LANES.
INSTALL RUMBLE STRIPS ON INSIDE SHOULDERS.
PLACE FINAL STRIPING ON INSIDE LANES.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 16728
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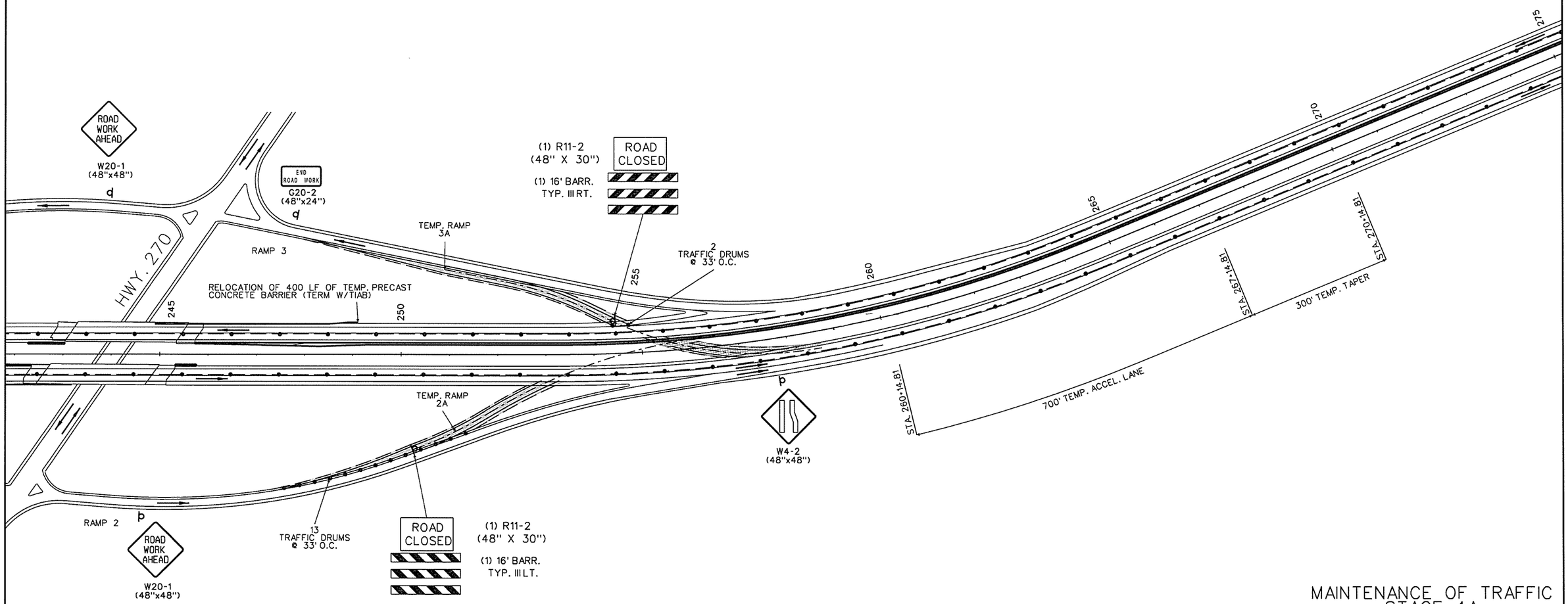
6/20/2016

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	130	235

(2) MAINTENANCE OF TRAFFIC

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC
STAGE 4A

STAGE 4A OPERATIONS:
SHIFT SB TRAFFIC TO OUTSIDE SB LANE.
RETAIN NB TRAFFIC IN OUTSIDE NB LANE.
REMOVE PRIMARY MAIN LANE PRECAST CONCRETE BARRIER.
OBLITERATE REMAINING 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 OF MAIN LANES.
INSTALL RUMBLE STRIPS ON INSIDE SHOULDERS.
PLACE FINAL STRIPING ON INSIDE LANES.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
CLINTON D. JUMPER
No. 16728

6/20/2016

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				6	ARK.			
				JOB NO.		BB0202	131	235

(2) MAINTENANCE OF TRAFFIC

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'

ROAD CLOSED
(3) R11-2 (48" X 30")
(3) 16' BARR. TYP. III LT.

W4-2 (48"x48")

W20-1 (48"x48")
ROAD WORK 500 FT

13 TRAFFIC DRUMS @ 33' O.C.

2 ADDITIONAL TRAFFIC DRUMS @ 33' O.C.

RAMP 4

500'

315 320 325 330 335 340 345

TEMP. RAMP 4B

TEMP. RAMP 1B

TEMP. PRECAST CONCRETE BARRIER (RETAINED FROM PREVIOUS STAGE)

RAMP 1

2 TRAFFIC DRUMS @ 33' O.C.

STA. 318+79.10
STA. 321+79.10
STA. 328+79.10
300' TEMP. TAPER
700' TEMP. ACCEL. LANE

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

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

MAINTENANCE OF TRAFFIC STAGE 4A

STAGE 4A OPERATIONS:
SHIFT SB TRAFFIC TO OUTSIDE SB LANE.
RETAIN NB TRAFFIC IN OUTSIDE NB LANE.
REMOVE PRIMARY MAIN LANE PRECAST CONCRETE BARRIER.
OBLITERATE REMAINING 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 OF MAIN LANES.
INSTALL RUMBLE STRIPS ON INSIDE SHOULDERS.
PLACE FINAL STRIPING ON INSIDE LANES.

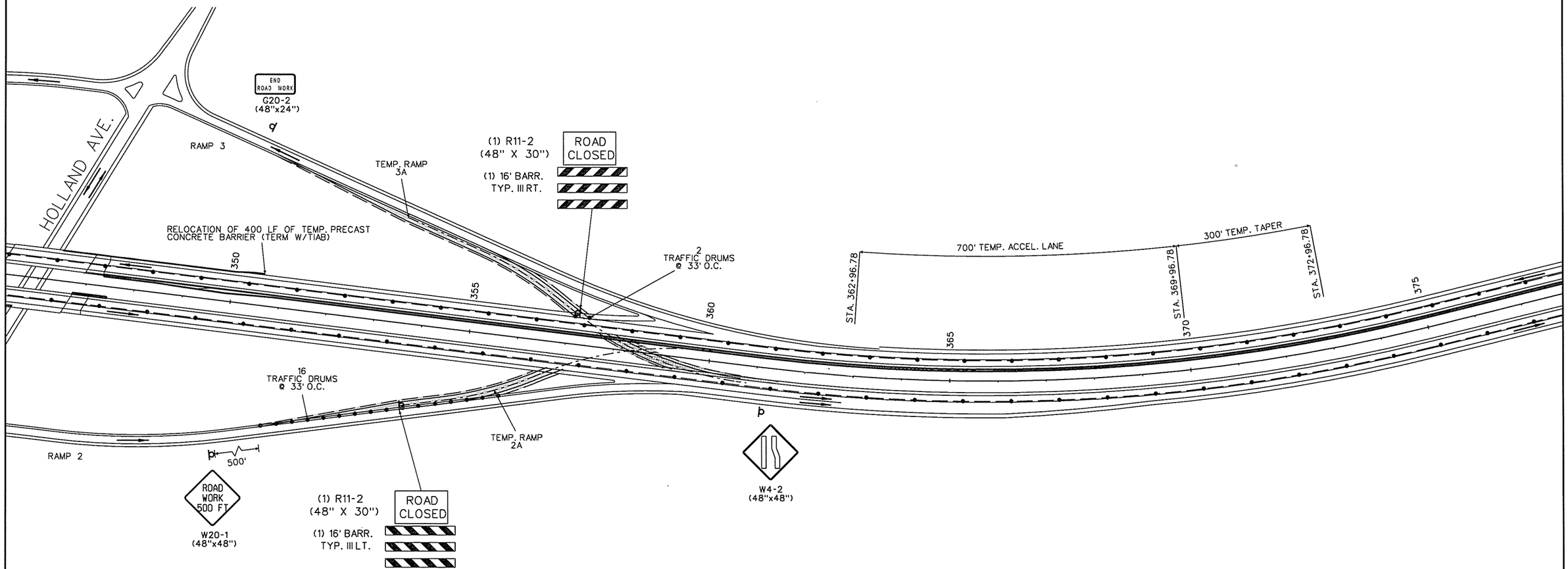
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 16728
CLINTON D. JUMPER

6/20/2016

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	132	235
				②	MAINTENANCE OF TRAFFIC			

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC
STAGE 4A

STAGE 4A OPERATIONS:
SHIFT SB TRAFFIC TO OUTSIDE SB LANE.
RETAIN NB TRAFFIC IN OUTSIDE NB LANE.
REMOVE PRIMARY MAIN LANE PRECAST CONCRETE BARRIER.
OBLITERATE REMAINING 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 OF MAIN LANES.
INSTALL RUMBLE STRIPS ON INSIDE SHOULDERS.
PLACE FINAL STRIPING ON INSIDE LANES.

STATE OF ARKANSAS
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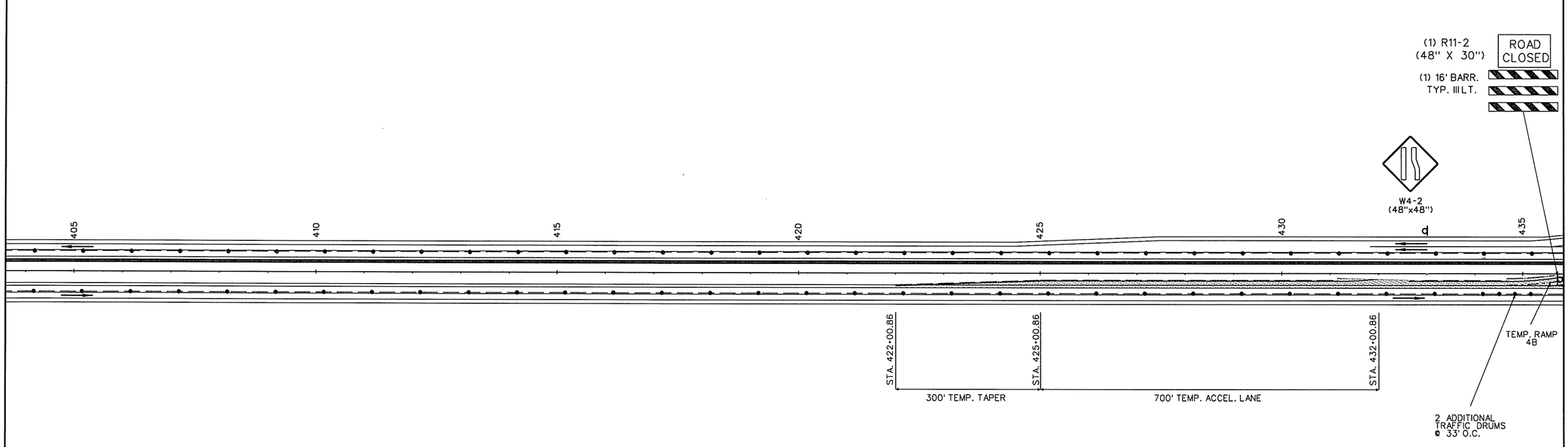
No. 16728
CLINTON D. JUMPER
6/20/2016

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	133	235

(2) MAINTENANCE OF TRAFFIC

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC STAGE 4A

STAGE 4A OPERATIONS:
SHIFT SB TRAFFIC TO OUTSIDE SB LANE.
RETAIN NB TRAFFIC IN OUTSIDE NB LANE.
REMOVE PRIMARY MAIN LANE PRECAST CONCRETE BARRIER.
OBLITERATE REMAINING 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 OF MAIN LANES.
INSTALL RUMBLE STRIPS ON INSIDE SHOULDERS.
PLACE FINAL STRIPING ON INSIDE LANES.

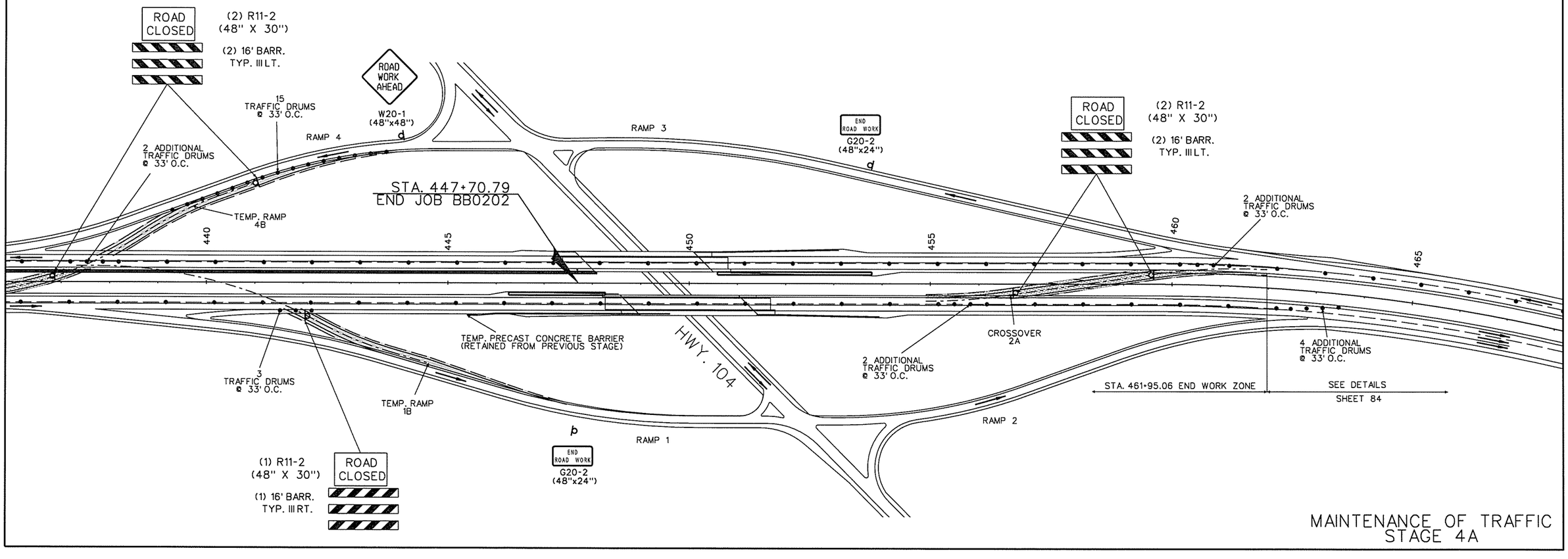
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 16728
CLINTON D. JUMPER
6/20/2016

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	134	235

(2) MAINTENANCE OF TRAFFIC

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'

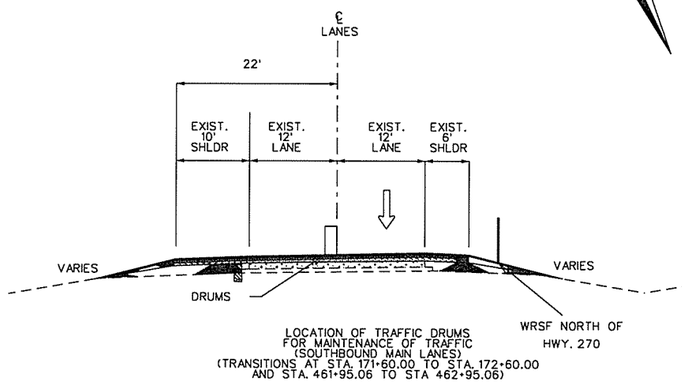


MAINTENANCE OF TRAFFIC
STAGE 4A

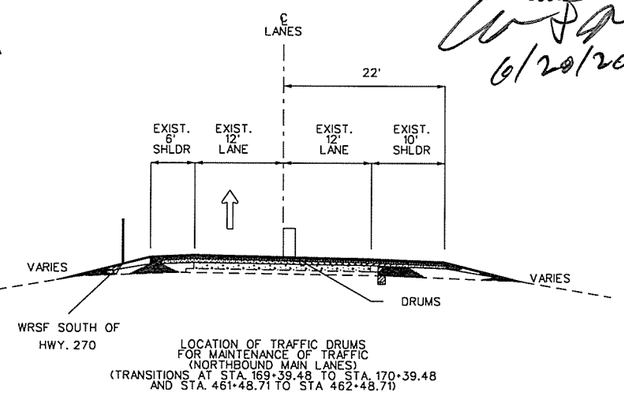
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	135	235
				②	MAINTENANCE OF TRAFFIC			

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

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 16728
CLINTON D. JUMPER
6/20/2016



LOCATION OF TRAFFIC DRUMS FOR MAINTENANCE OF TRAFFIC (SOUTHBOUND MAIN LANES) (TRANSITIONS AT STA. 171+60.00 TO STA. 172+60.00 AND STA. 461+95.06 TO STA 462+95.06)



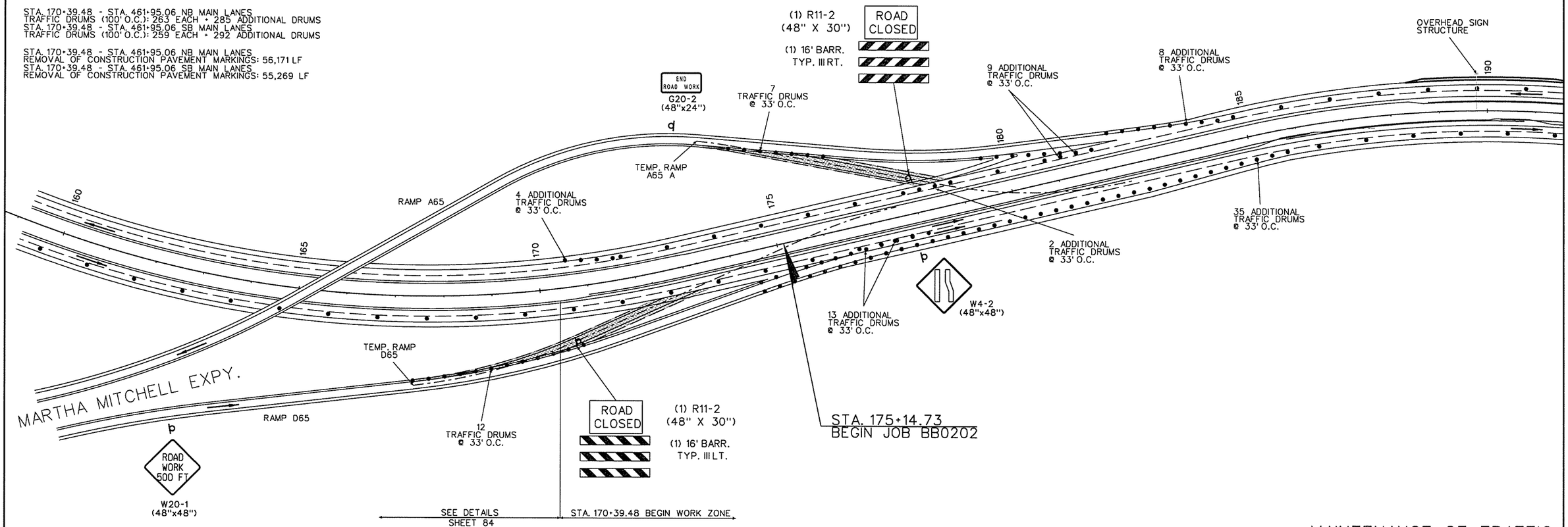
LOCATION OF TRAFFIC DRUMS FOR MAINTENANCE OF TRAFFIC (NORTHBOUND MAIN LANES) (TRANSITIONS AT STA. 169+39.48 TO STA. 170+39.48 AND STA. 461+48.71 TO STA 462+48.71)

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'

STA. 170+39.48 - STA. 461+95.06 NB MAIN LANES
TRAFFIC DRUMS (100' O.C.): 263 EACH + 285 ADDITIONAL DRUMS
STA. 170+39.48 - STA. 461+95.06 SB MAIN LANES
TRAFFIC DRUMS (100' O.C.): 259 EACH + 292 ADDITIONAL DRUMS

STA. 170+39.48 - STA. 461+95.06 NB MAIN LANES
REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS: 56,171 LF
STA. 170+39.48 - STA. 461+95.06 SB MAIN LANES
REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS: 55,269 LF



MAINTENANCE OF TRAFFIC
STAGE 4B

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

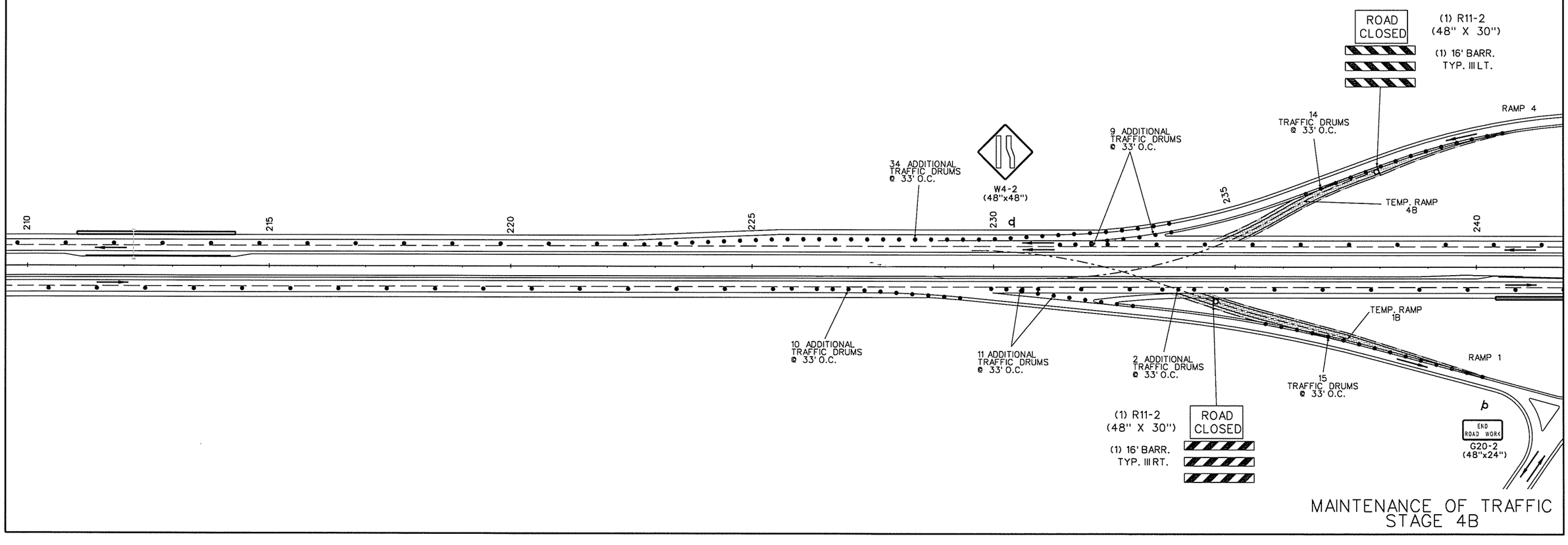
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 16728
CLINTON D. JUMPER

6/20/2016

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	136	235
				②	MAINTENANCE OF TRAFFIC			

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC
STAGE 4B

STAGE 4B OPERATIONS:
SHIFT TRAFFIC TO INSIDE LANES OF NB & SB LANES.
OBLITERATE TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS.
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PLACE FINAL STRIPING (SEE PERMANENT PAVEMENT MARKING DETAILS).

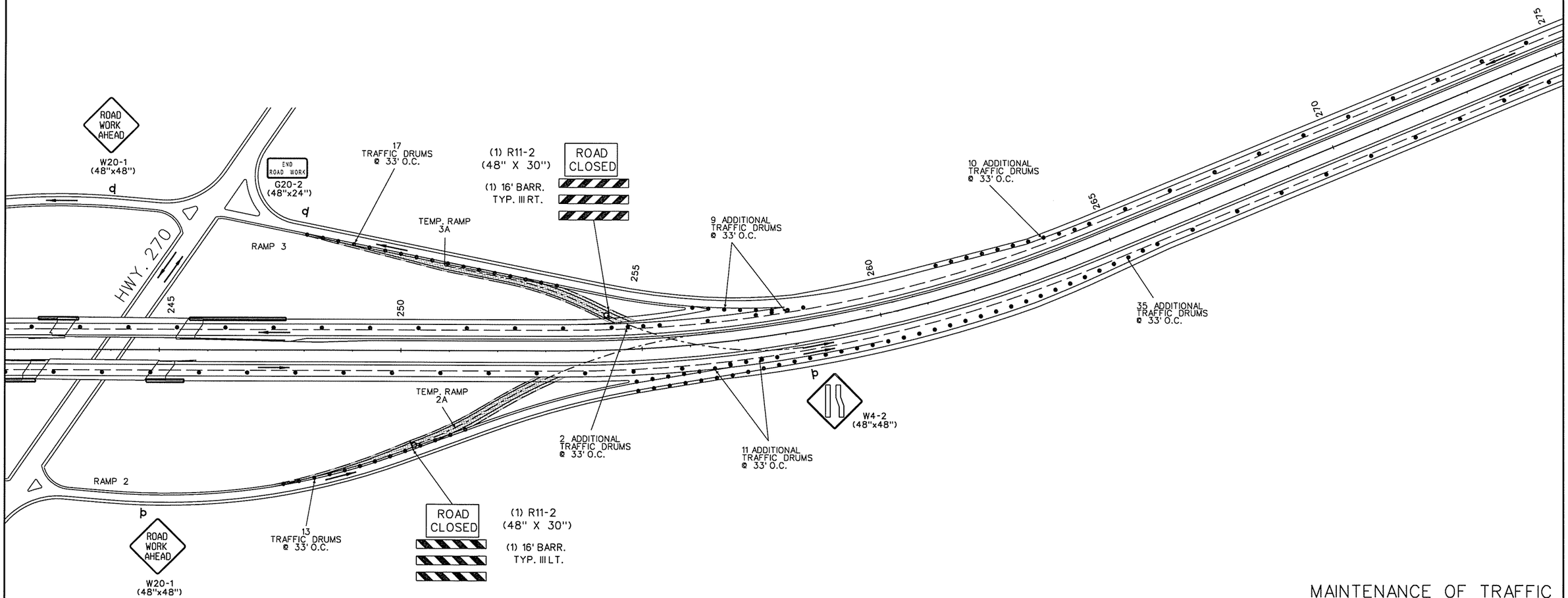
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 16728
CLINTON D. JUMPER
6/20/2016

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	137	235

(2) MAINTENANCE OF TRAFFIC

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC
STAGE 4B

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

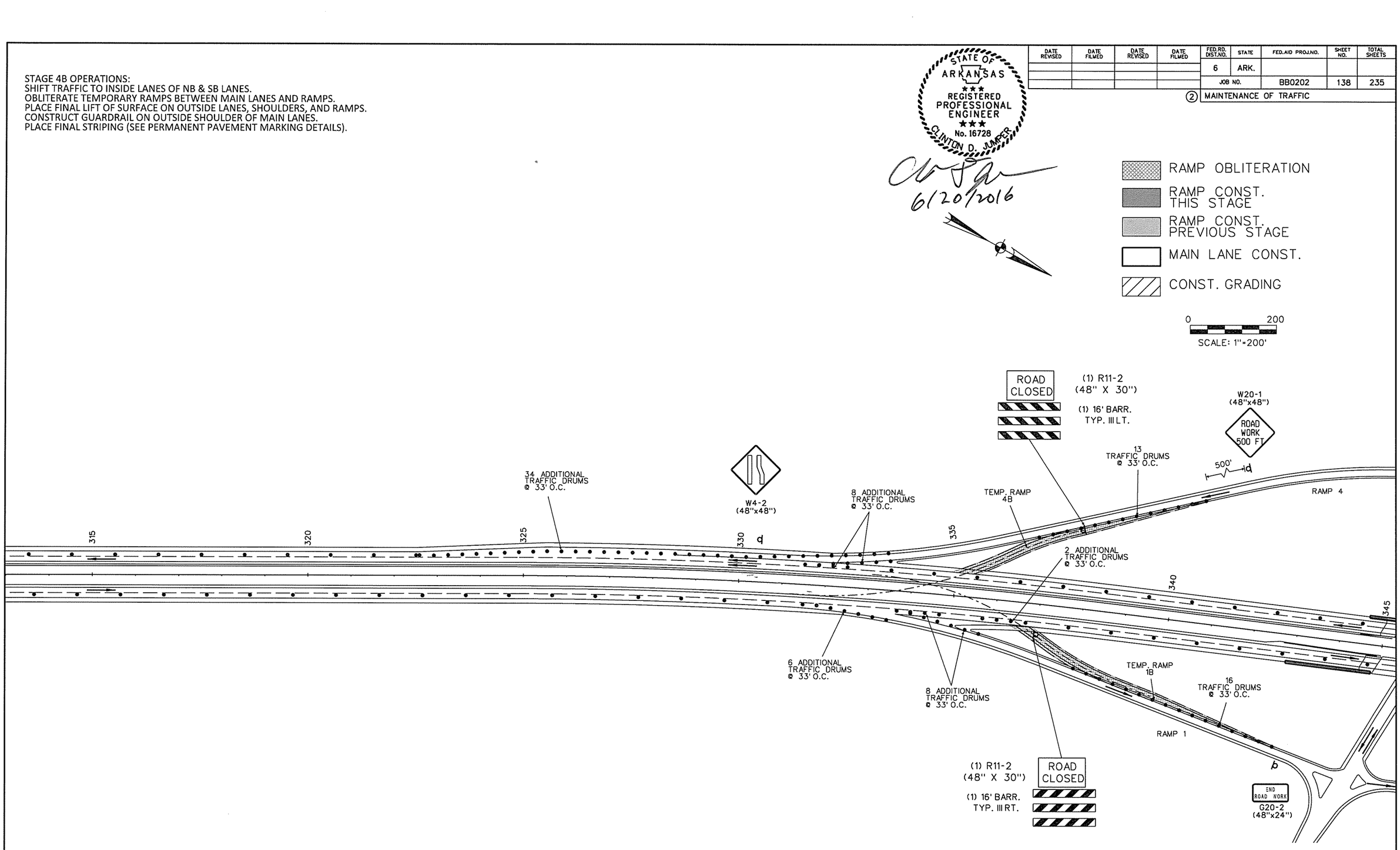
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 16728
CLINTON D. JUMPER
6/20/2016

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	138	235

(2) MAINTENANCE OF TRAFFIC

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC
STAGE 4B

STAGE 4B OPERATIONS:
SHIFT TRAFFIC TO INSIDE LANES OF NB & SB LANES.
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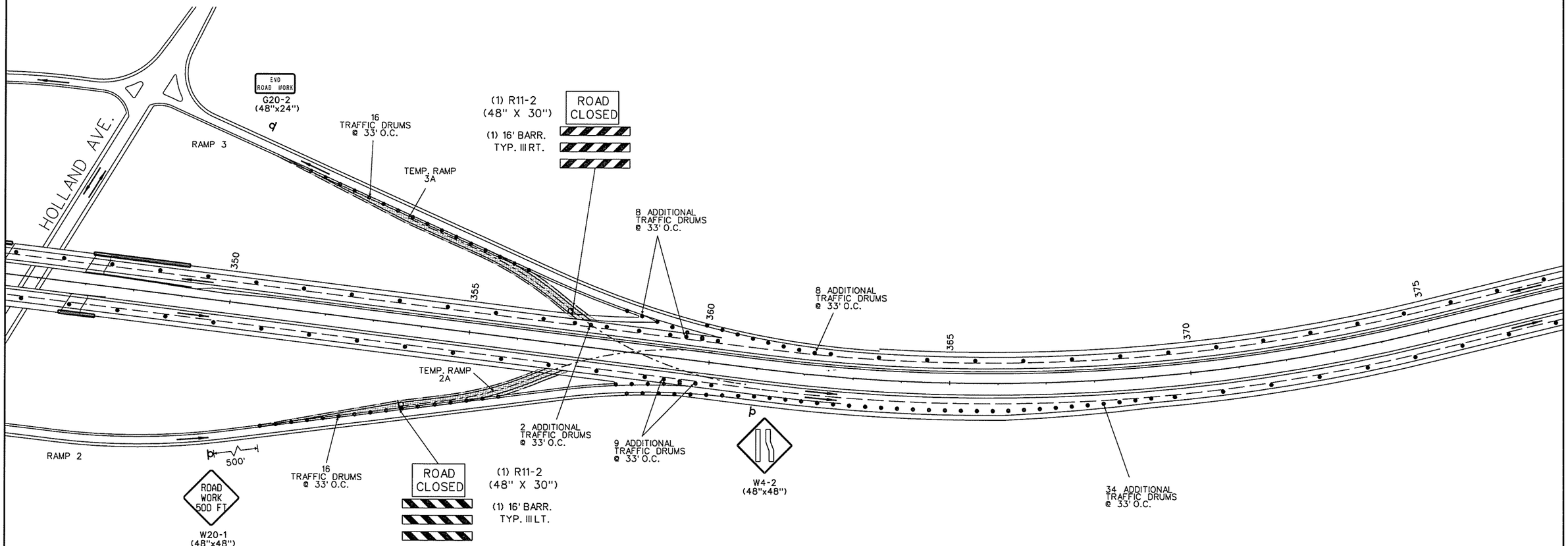
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 16728
CLINTON D. JUMPER
6/20/2016

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	139	235
				(2) MAINTENANCE OF TRAFFIC				

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC
STAGE 4B

STAGE 4B OPERATIONS:
SHIFT TRAFFIC TO INSIDE LANES OF NB & SB LANES.
OBLITERATE TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS.
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STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 16728
CLINTON D. JUMPER

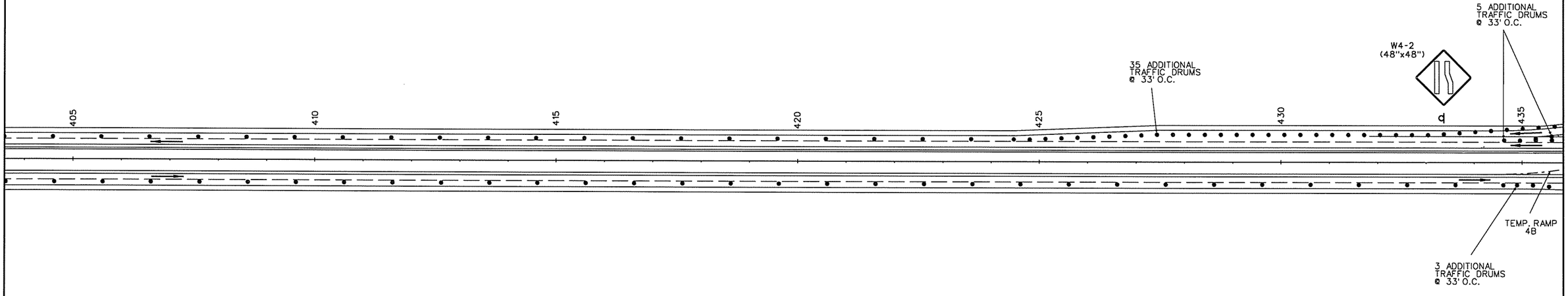
6/20/2016

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	140	235

(2) MAINTENANCE OF TRAFFIC

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC
STAGE 4B

STAGE 4B OPERATIONS:
SHIFT TRAFFIC TO INSIDE LANES OF NB & SB LANES.
OBLITERATE TEMPORARY RAMPS BETWEEN MAIN LANES AND RAMPS.
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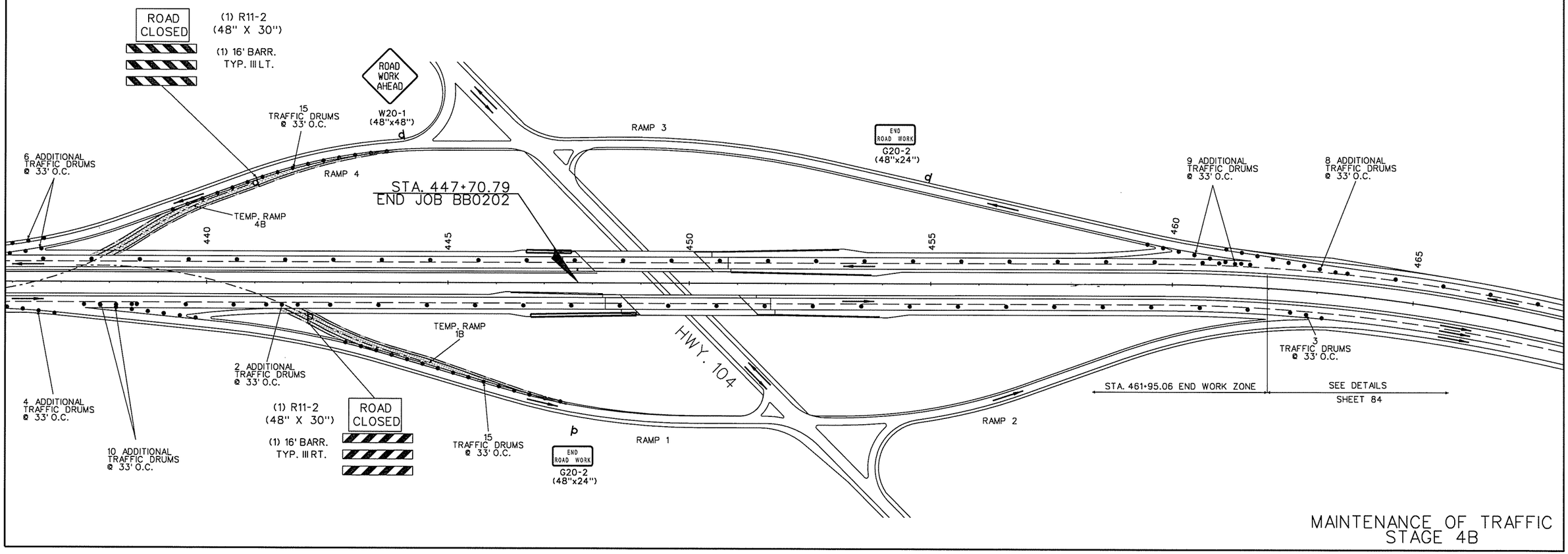
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 16728
CLINTON D. JUMPER
6/20/2016

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	141	235
				(2) MAINTENANCE OF TRAFFIC				

RAMP OBLITERATION
RAMP CONST. THIS STAGE
RAMP CONST. PREVIOUS STAGE
MAIN LANE CONST.
CONST. GRADING

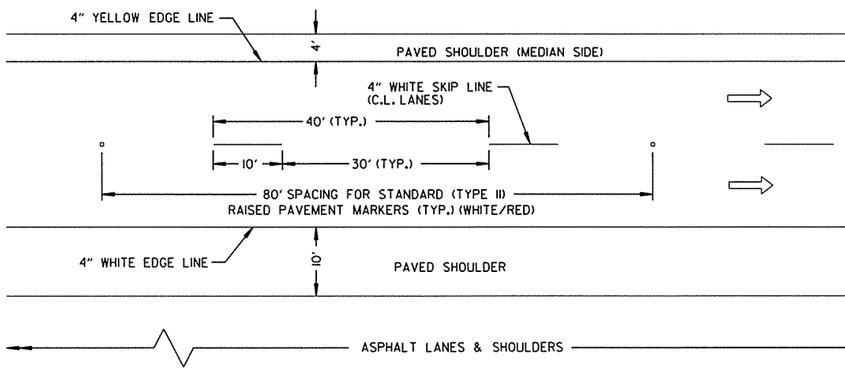
0 200
SCALE: 1"=200'



MAINTENANCE OF TRAFFIC
STAGE 4B

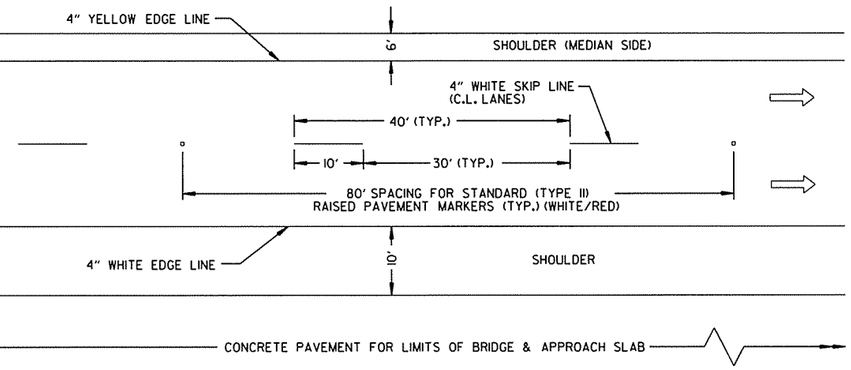
ASPHALT ROADWAY

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



NOTES:
1. REFER TO PM-2 FOR PERMANENT PAVEMENT MARKINGS AT INTERCHANGE.
2. NO PERMANENT PAVEMENT MARKINGS SHALL BE PLACED UNTIL A MINIMUM OF THREE DAYS AFTER ALL MAIN LANE PAVING HAS BEEN COMPLETED. IN ADDITION, NO PERMANENT PAVEMENT MARKINGS SHALL BE PLACED WITHIN THE PERIOD FROM DECEMBER 21 TO MARCH 15, INCLUSIVE.

PERMANENT PAVEMENT MARKING DETAILS

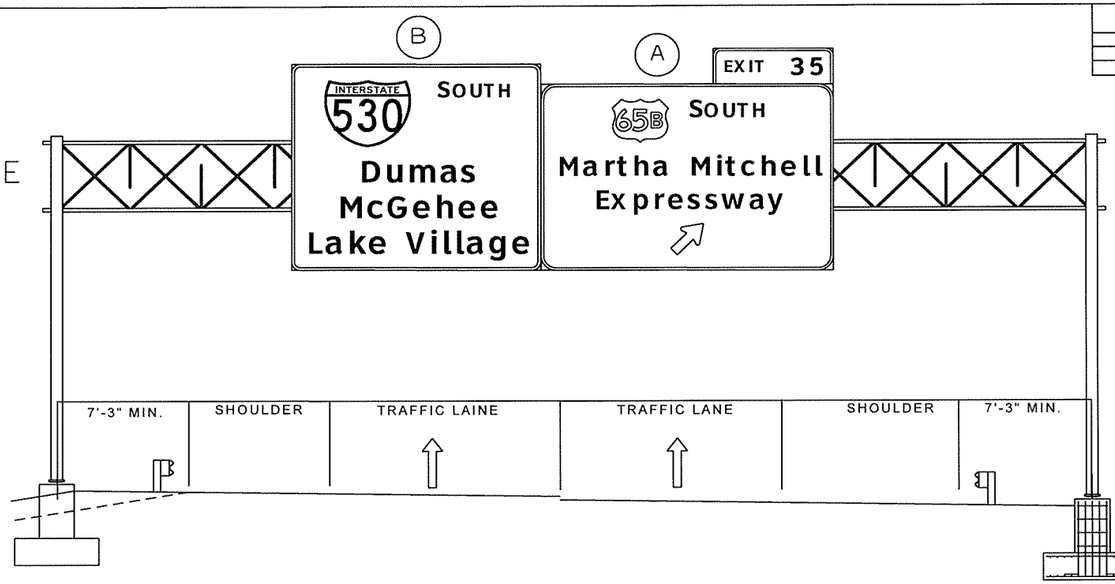
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

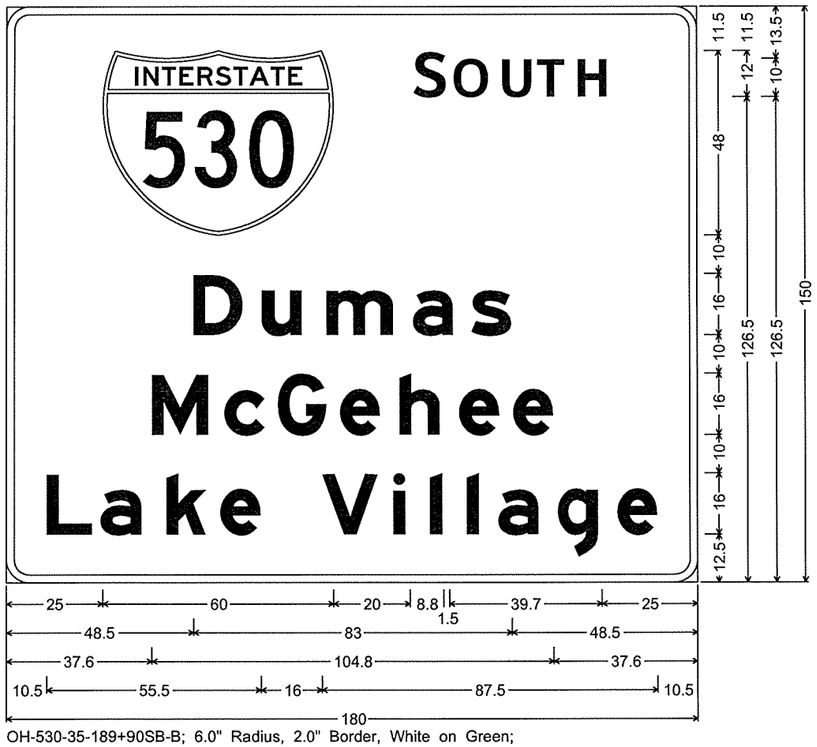
PERMANENT PAVEMENT MARKING DETAILS

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	143	235
				(2) SIGN LAYOUT SHEET				

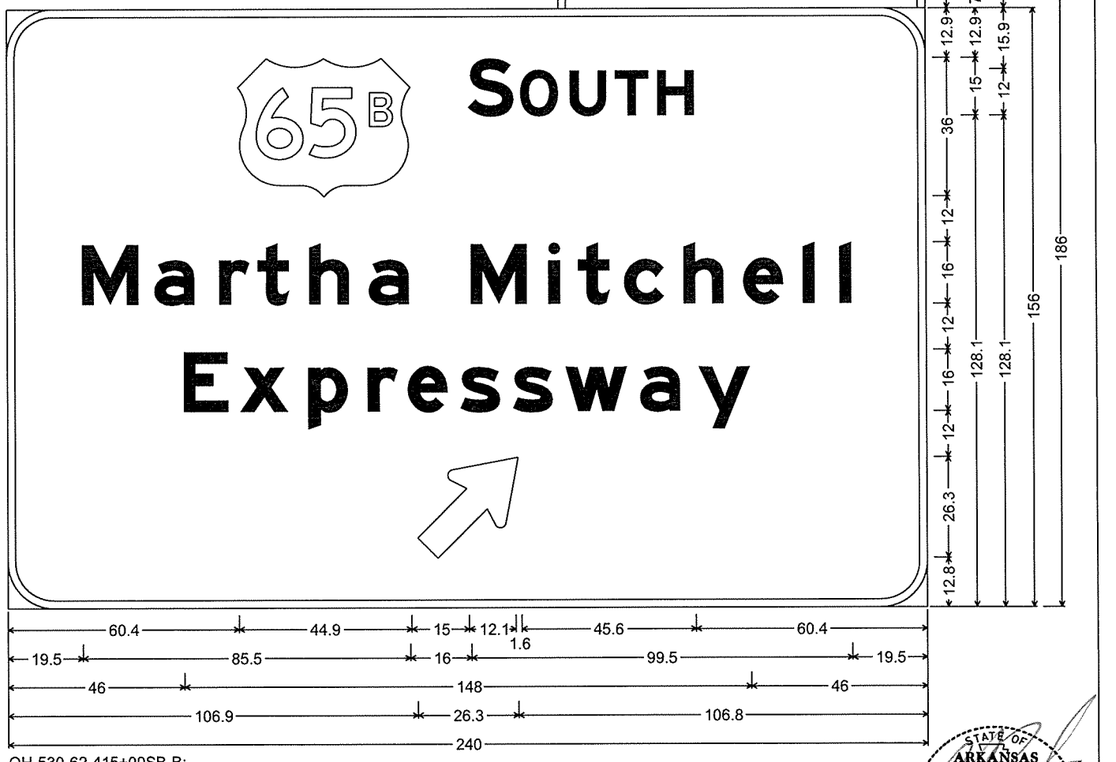
MAINTAIN
OVERHEAD SIGN STRUCTURE
REPLACE OVERHEAD SIGNS

OH-530-I89+90SB-A
OH-530-I89+90SB-B





OH-530-35-189+90SB-B; 6.0" Radius, 2.0" Border, White on Green;
[S OUTH] ClearviewHwy-5-W-R; [Dumas] E Mod 2K; [McGehee] E Mod 2K;
[Lake Village] E Mod 2K;

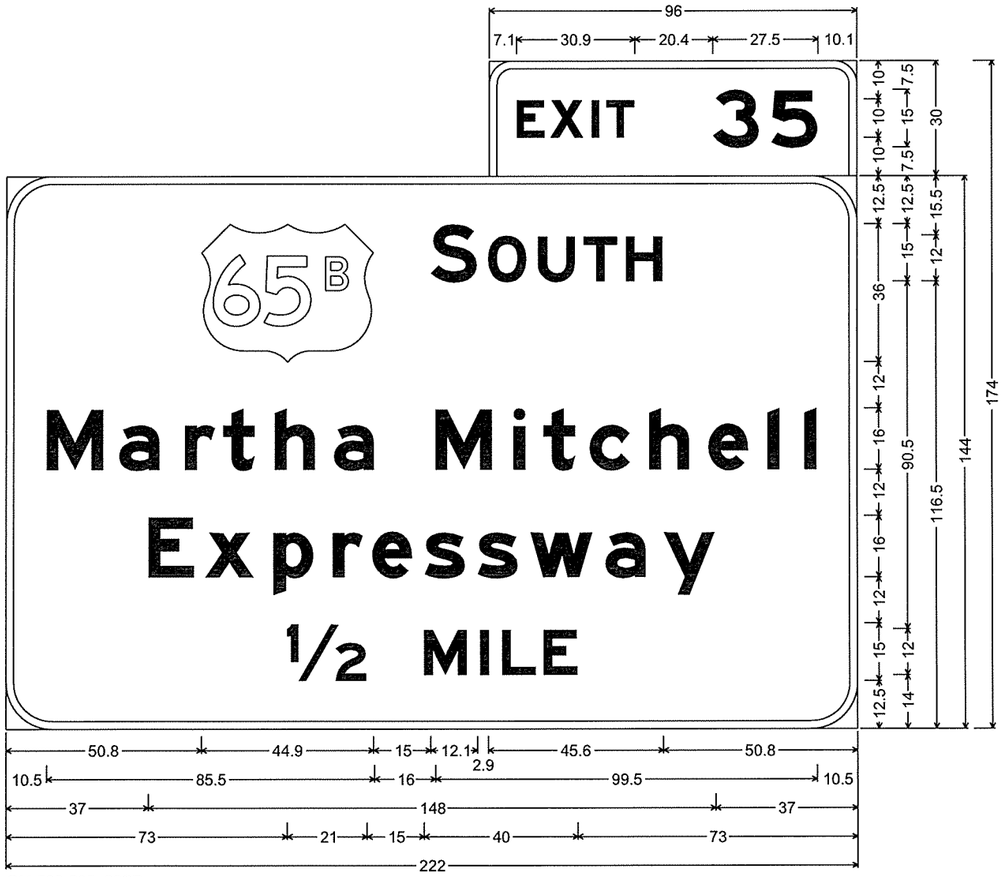


OH-530-62-415+00SB-B;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] E Mod 2K; [35] E Mod 2K;
12.0" Radius, 2.0" Border, White on Green;
[S] E Mod 2K [ ] ClearviewHwy-5-W [OUTH] E Mod 2K; [Martha Mitchell] E Mod 2K; [Expressway] E Mod 2K;
Standard Arrow Custom 33.4" X 20.3" 45°;

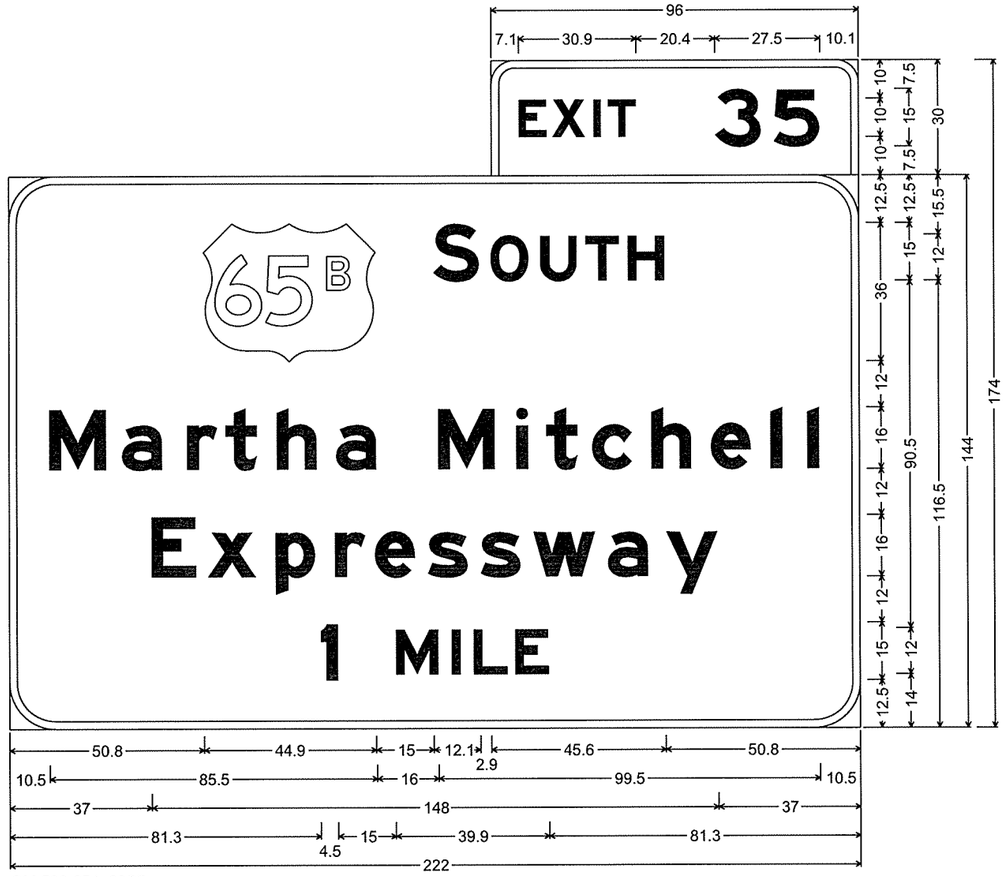
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTAIN
6/27/16

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	144	235

(2) SIGN LAYOUT SHEET



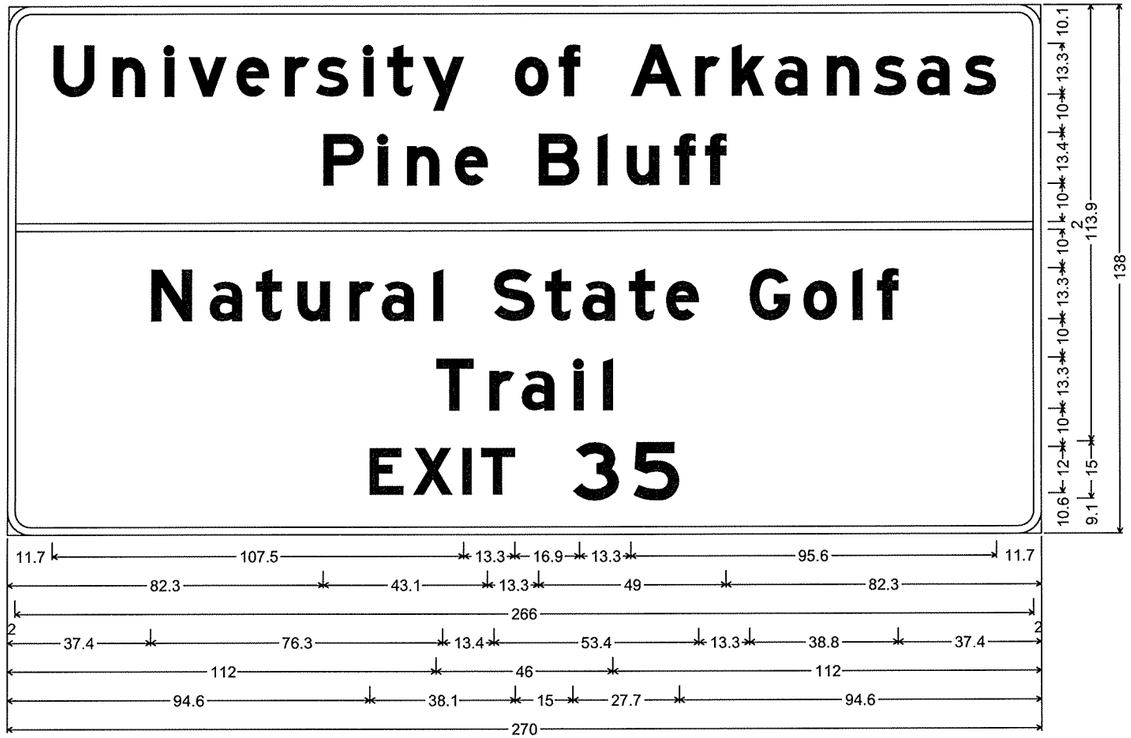
GM-530-205+00SB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] E Mod 2K; [35] E Mod 2K;
12.0" Radius, 2.0" Border, White on Green;
[SOUTH] E Mod 2K; [Martha Mitchell] E Mod 2K; [Expressway] E Mod 2K; [½ MILE] E Mod 2K;



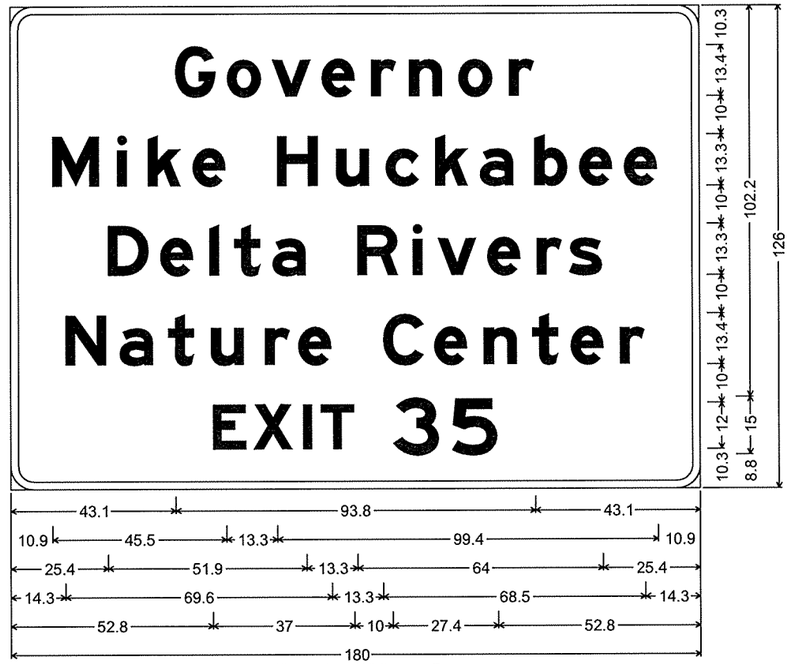
GM-530-251+00SB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] E Mod 2K; [35] E Mod 2K;
12.0" Radius, 2.0" Border, White on Green;
[SOUTH] E Mod 2K; [Martha Mitchell] E Mod 2K; [Expressway] E Mod 2K; [1 MILE] E Mod 2K;

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	145	235

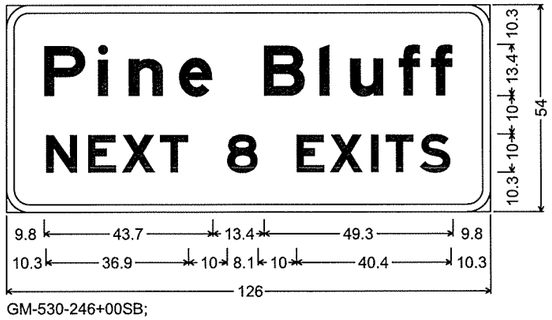
(2) SIGN LAYOUT SHEET



GM-530-198+00SB;
6.0" Radius, 2.0" Border, White on Green;
[University of Arkansas] E Mod; [Pine Bluff] E Mod; [Natural State Golf] E Mod; [Trail] E Mod; [EXIT 35] E Mod;



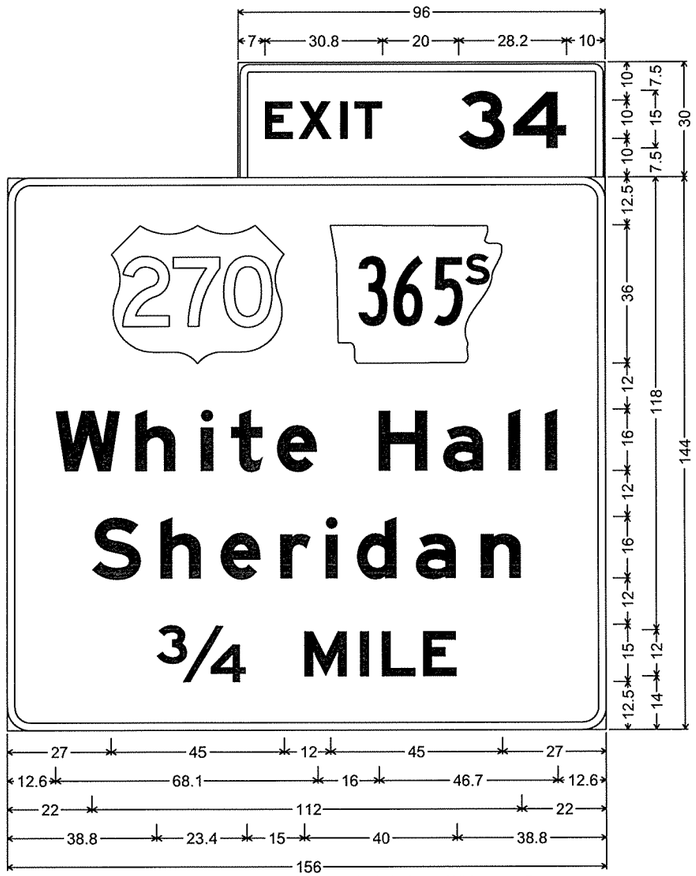
GM-530-240+00SB; 6.0" Radius, 2.0" Border, White on Brown;
[Governor] E Mod 2K; [Mike Huckabee] E Mod 2K; [Delta Rivers] E Mod 2K;
[Nature Center] E Mod 2K; [EXIT 35] E Mod 2K;



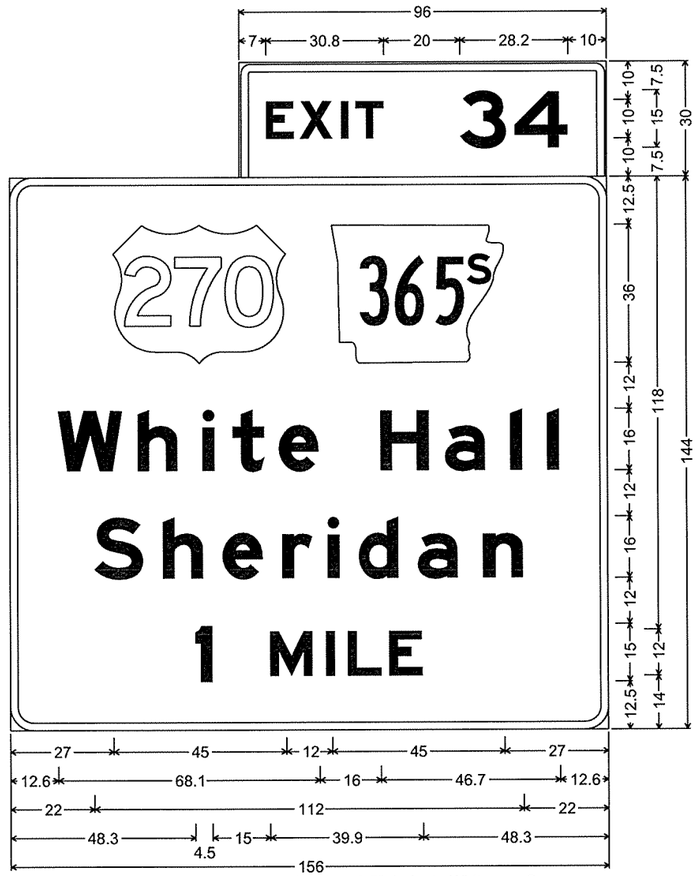
GM-530-246+00SB;
6.0" Radius, 2.0" Border, White on Green;
[Pine Bluff] E Mod 2K; [NEXT 8 EXITS] E Mod 2K;

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
4/27/16
JOSEPH A. SARTINI

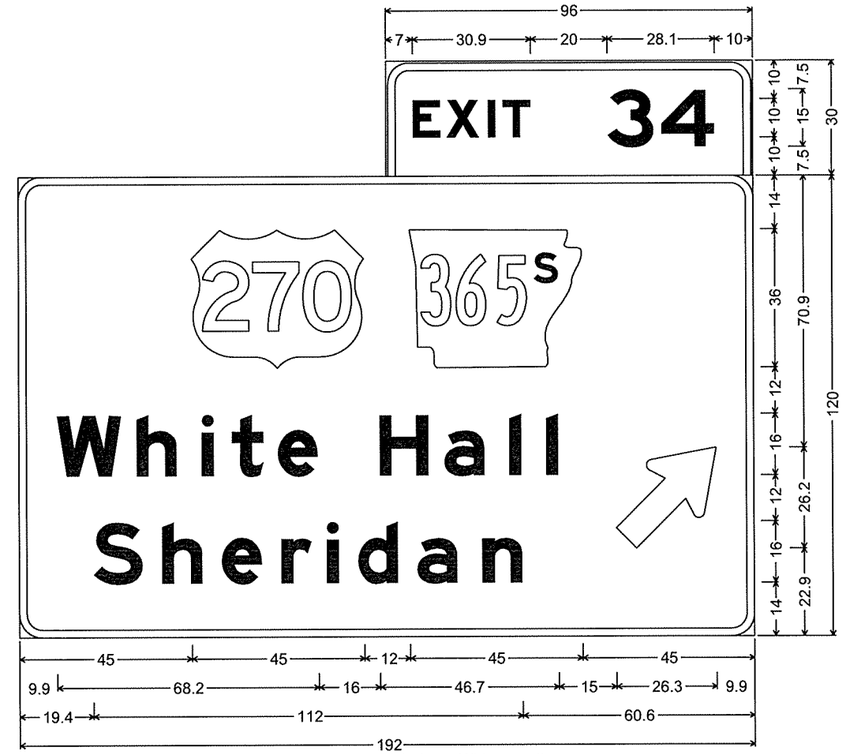
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	146	235
				(2)	SIGN LAYOUT SHEET			



GM-530-278+00SB; 3.0" Radius, 2.0" Border, 0.5" Indent, White on Green;
[EXIT] E Mod 2K; [34] E Mod 2K 105% spacing;
6.0" Radius, 2.0" Border, White on Green;
[White Hall] E Mod 2K; [Sheridan] E Mod 2K; [¾ MILE] E Mod 2K;



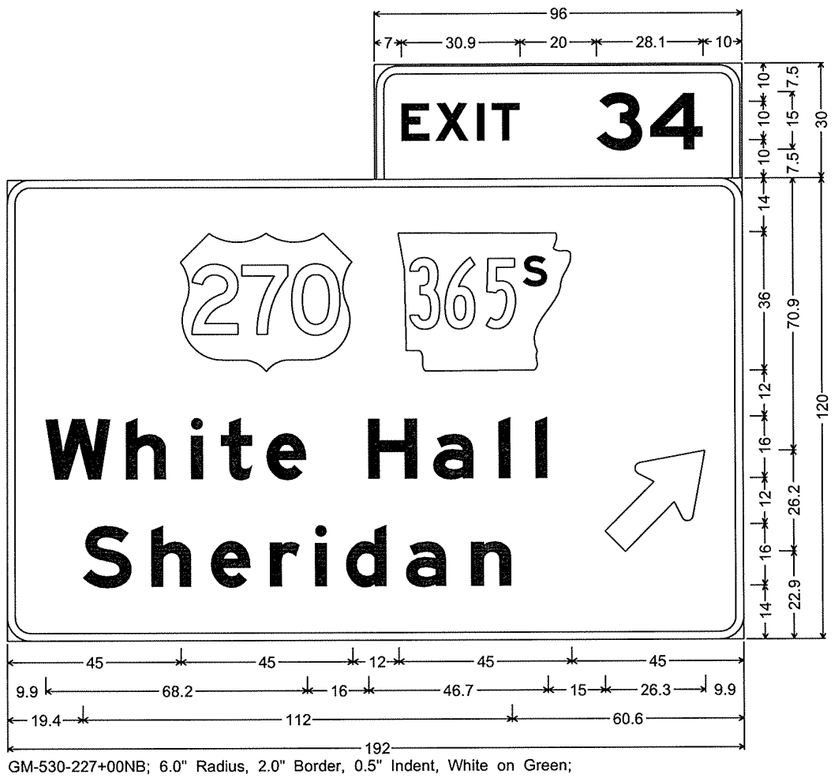
GM-530-317+00SB; 3.0" Radius, 2.0" Border, 0.5" Indent, White on Green;
[EXIT] E Mod 2K; [34] E Mod 2K 105% spacing;
6.0" Radius, 2.0" Border, White on Green;
[White Hall] E Mod 2K; [Sheridan] E Mod 2K; [1 MILE] E Mod 2K;



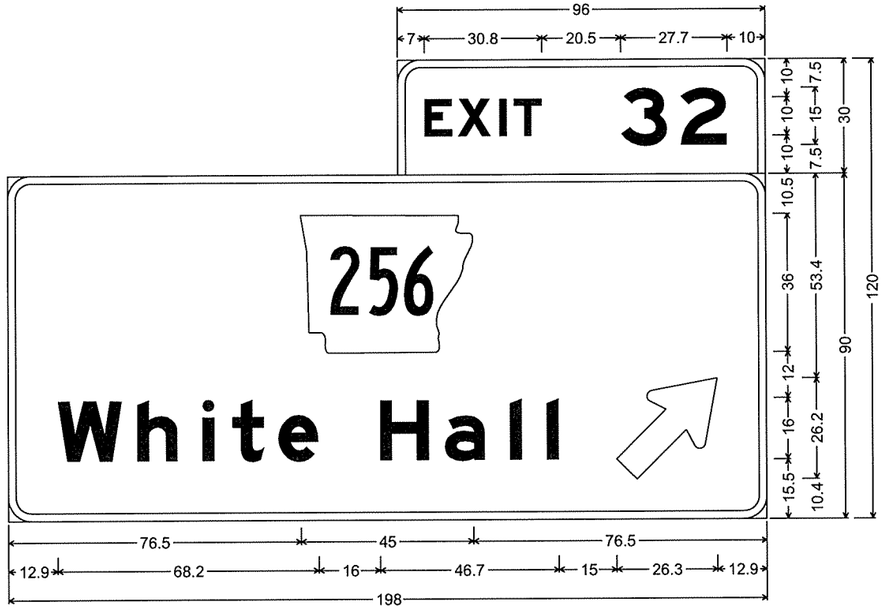
GM-530-265+00SB; 6.0" Radius, 2.0" Border, 0.5" Indent, White on Green;
[EXIT] E Mod 2K 102% spacing; [34] E Mod 2K;
6.0" Radius, 2.0" Border, White on Green;
[White Hall] E Mod 2K; [Sheridan] E Mod 2K; Standard Arrow Custom 0.0" X 20.3" 45°;

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	147	235

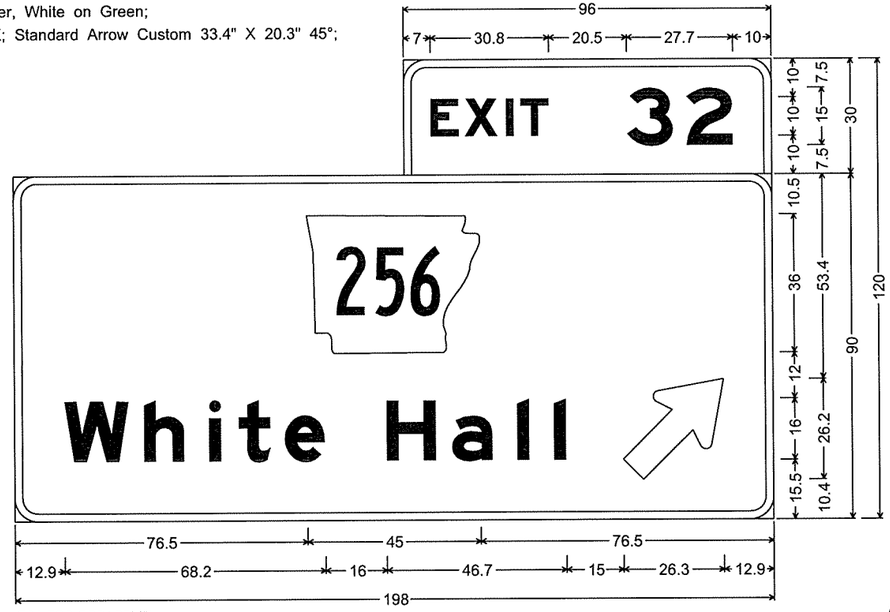
(2) SIGN LAYOUT SHEET



GM-530-227+00NB; 6.0" Radius, 2.0" Border, 0.5" Indent, White on Green;
[EXIT] E Mod 2K 102% spacing; [34] E Mod 2K;
6.0" Radius, 2.0" Border, White on Green;
[White Hall] E Mod 2K; [Sheridan] E Mod 2K; Standard Arrow Custom 0.0" X 20.3" 45°;



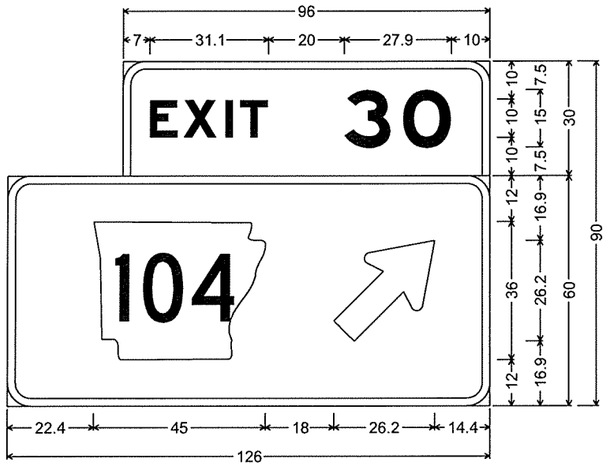
GM-530-364+00SB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] E Mod 2K; [32] E Mod 2K 108% spacing;
6.0" Radius, 2.0" Border, White on Green;
[White Hall] E Mod 2K; Standard Arrow Custom 33.4" X 20.3" 45°;



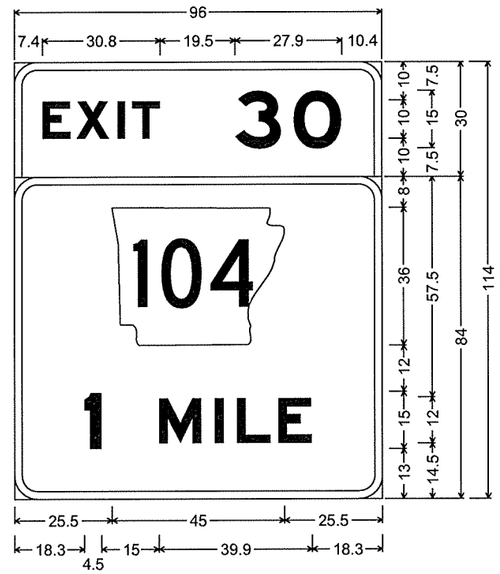
GM-530-330+00NB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] E Mod 2K; [32] E Mod 2K 108% spacing;
6.0" Radius, 2.0" Border, White on Green;
[White Hall] E Mod 2K; Standard Arrow Custom 33.4" X 20.3" 45°;

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	148	235

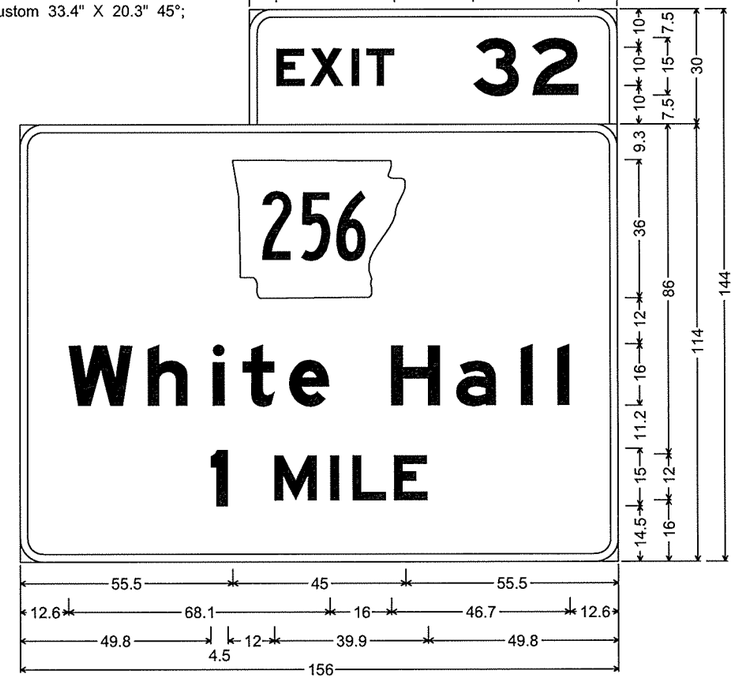
(2) SIGN LAYOUT SHEET



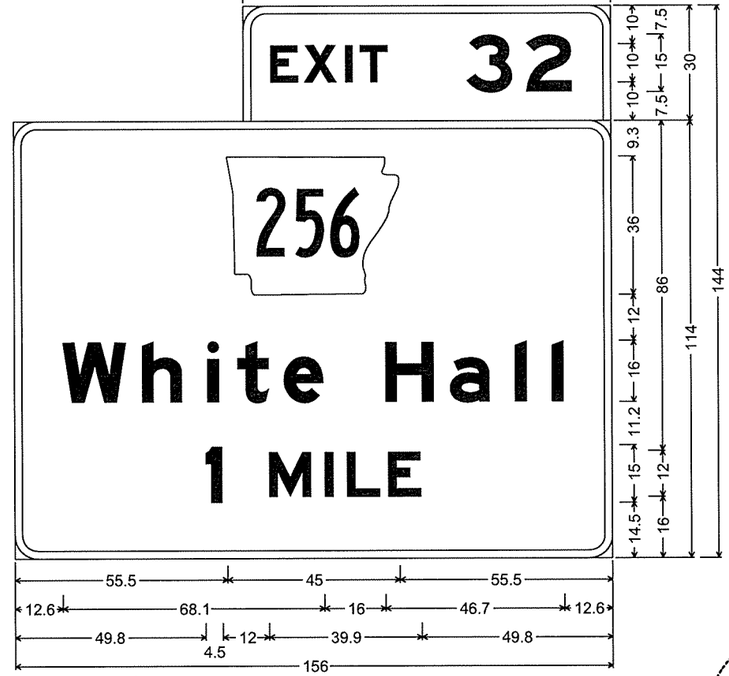
GM-530-434+90NB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] E Mod 2K 105% spacing;
[30] E Mod 2K 105% spacing;
6.0" Radius, 2.0" Border, White on Green;
Standard Arrow Custom 33.4" X 20.3" 45°;



GM-530-390+00NB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] E Mod 2K;
[30] E Mod 2K 105% spacing;
6.0" Radius, 2.0" Border, White on Green;
[1] E Mod 2K; [MILE] E Mod 2K;



GM-530-278+00NB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] E Mod 2K; [32] E Mod 2K 108% spacing;
6.0" Radius, 2.0" Border, White on Green;
[White Hall] E Mod 2K; [1 MILE] E Mod 2K;

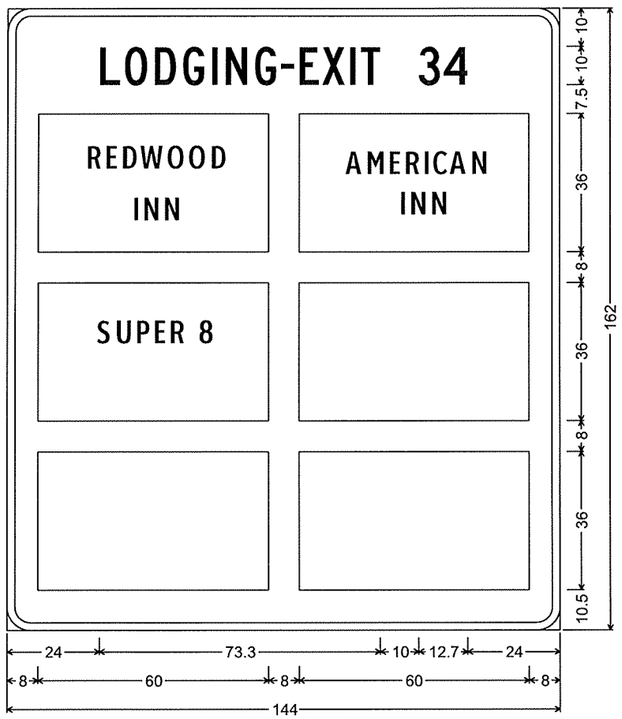


GM-530-413+00SB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] E Mod 2K; [32] E Mod 2K 108% spacing;
6.0" Radius, 2.0" Border, White on Green;
[White Hall] E Mod 2K; [1 MILE] E Mod 2K;

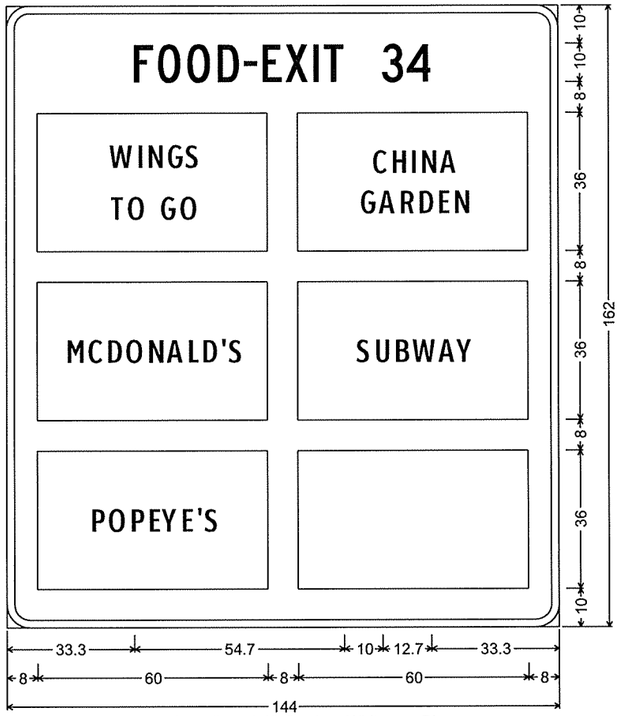
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI
5/27/16

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	149	235

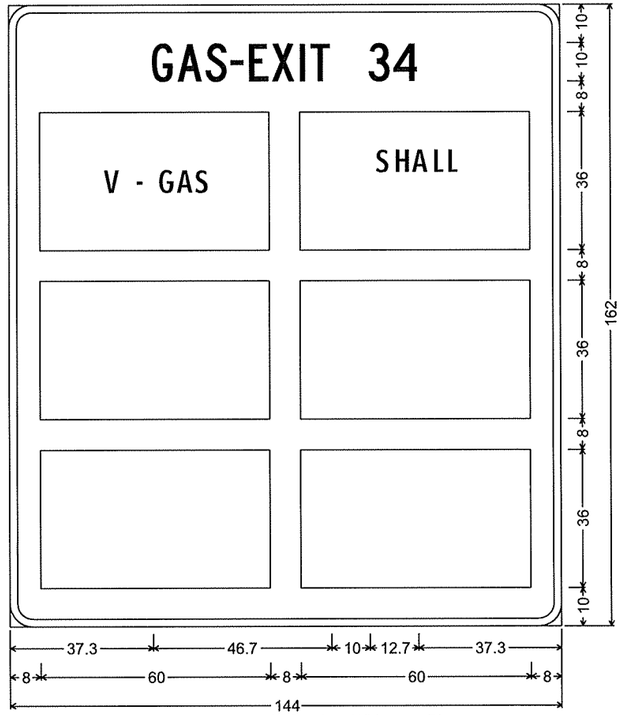
(2) SIGN LAYOUT SHEET



LL-530-195+00NB; 6.0" Radius, 2.0" Border, White on Blue;
[LODGING-EXIT 34] C 2K;



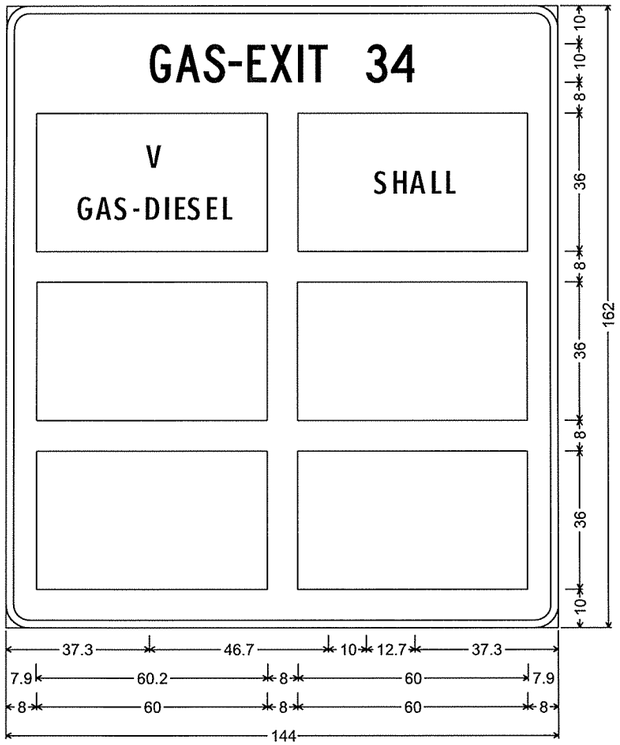
LF-530-203+00NB; 6.0" Radius, 2.0" Border, White on Blue;
[FOOD-EXIT 34] C 2K;



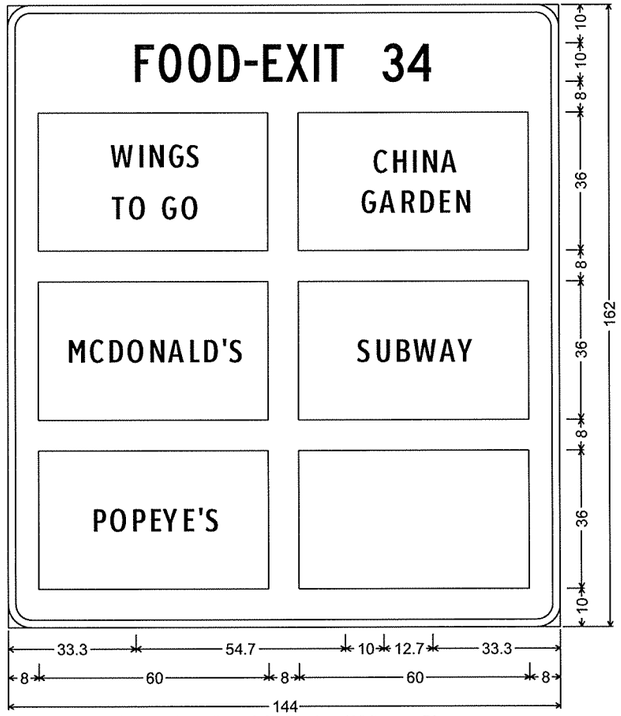
LG-530-211+00NB; 6.0" Radius, 2.0" Border, White on Blue;
[GAS-EXIT 34] C 2K;

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI
6/27/16

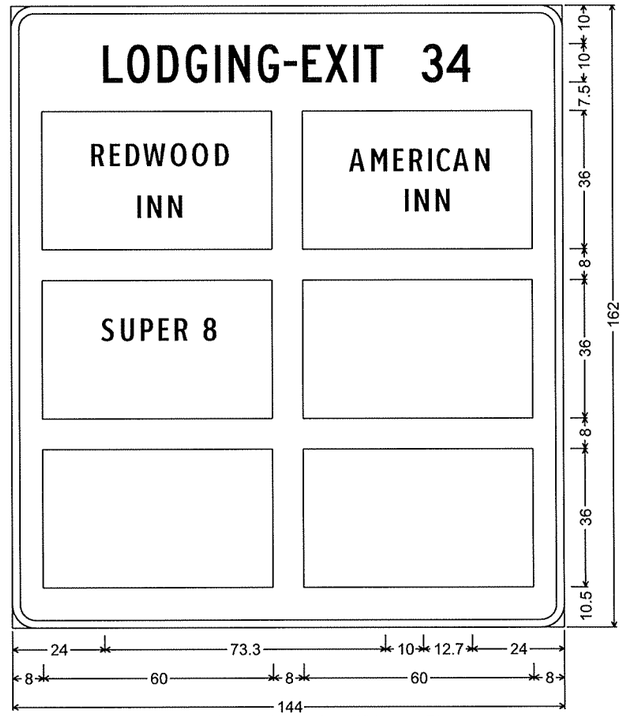
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	150	235
				(2)	SIGN LAYOUT SHEET			



LG-530-292+00SB; 6.0" Radius, 2.0" Border, White on Blue;
[GAS-EXIT 34] C 2K;

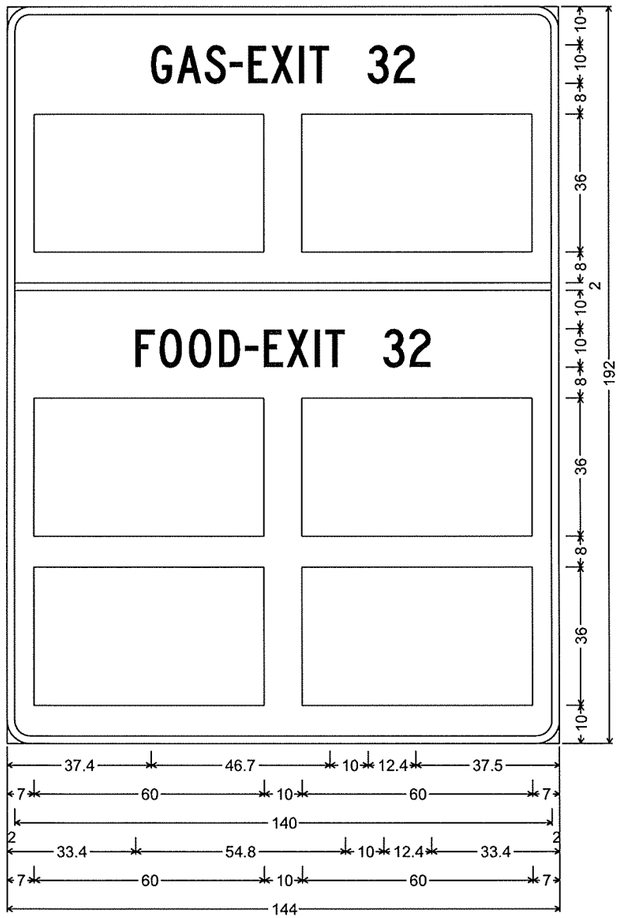


LF-530-299+00SB; 6.0" Radius, 2.0" Border, White on Blue;
[FOOD-EXIT 34] C 2K;

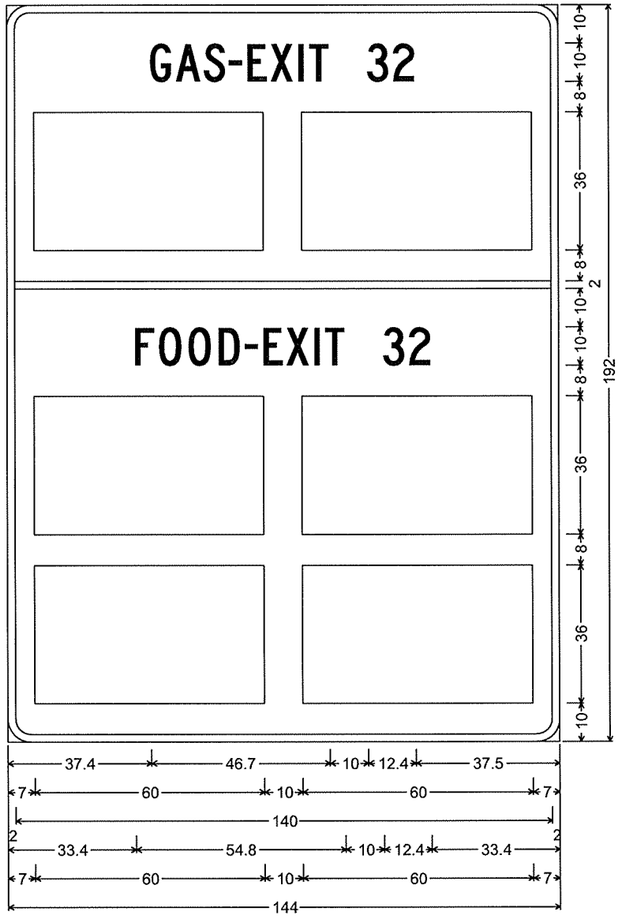


LL-530-306+00NB; 6.0" Radius, 2.0" Border, White on Blue;
[LODGING-EXIT 34] C 2K;

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	151	235
				(2)	SIGN LAYOUT SHEET			



LGF-530-285+00NB; 6.0" Radius, 2.0" Border, White on Blue;
[GAS-EXIT 32] C 2K; [FOOD-EXIT 32] C 2K;



LGF-530-404+00NB; 6.0" Radius, 2.0" Border, White on Blue;
[GAS-EXIT 32] C 2K; [FOOD-EXIT 32] C 2K;

STATE OF ARKANSAS
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No. 7527
JOSEPH A. SARTINI

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	152	235
				(2)	SIGN LAYOUT SHEET			

STANDARD SIGNS

G-2

M3-1 30"X15"

M1-1 45"X36"

SS-530-268+00NB
SS-530-372+00NB

G-2

M3-3 30"X15"

M1-1 45"X36"

SS-530-221+00SB
SS-530-322+00SB
SS-530-423+00SB

G-2

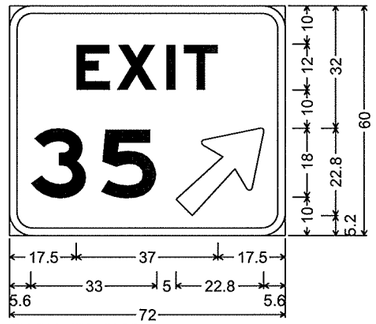
R2-1 48"X60"

SS-530-212+10SB
SS-530-274+00NB
SS-530-313+00SB
SS-530-383+00NB
SS-530-416+00SB

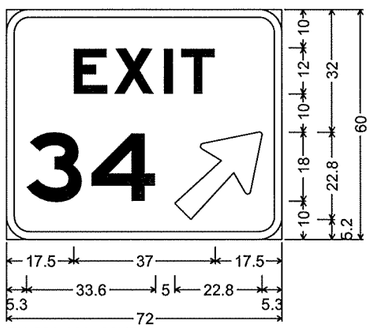
G-2

R4-3 48"X60"

SS-530-217+50SB
SS-530-271+00NB
SS-530-319+00SB
SS-530-377+00NB
SS-530-420+00SB

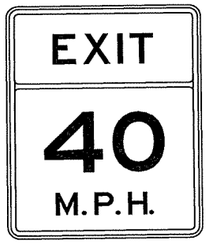


EX-530-179+50SB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] E Mod 2K; [35] E Mod 2K;
Arrow Custom - 29.0" 45°;



EX-530-233+00NB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] E Mod 2K; [34] E Mod 2K;
Arrow Custom - 29.0" 45°;

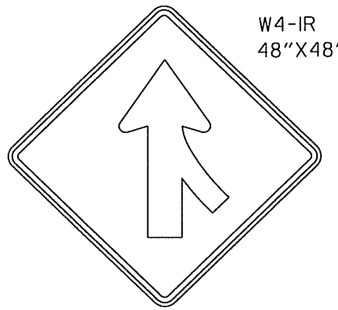
G-2



W13-3 48"X60"

SS-530-182+00SB
SS-530-231+00NB
SS-530-260+00SB
SS-530-332I+00NB
SS-530-436+00NB

G-2



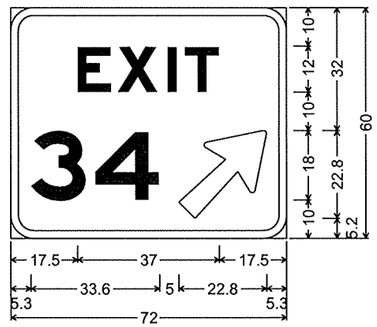
W4-1R 48"X48"

SS-530-171+00NB
SS-530-237+00SB
SS-530-252+00NB
SS-530-336+00SB
SS-530-354+00NB
SS-530-441+00SB

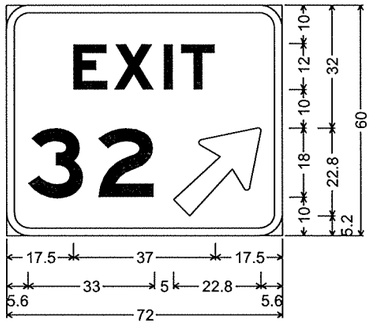
G-2

W8-13 48"X48"

SS-530-235+00NB
SS-530-253+00SB
SS-530-239+00NB
SS-530-354+00SB
SS-530-442+00NB



EX-530-255+90SB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] E Mod 2K; [34] E Mod 2K;
Arrow Custom - 29.0" 45°;

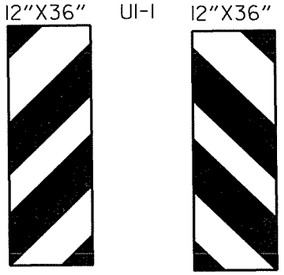


EX-530-335+60NB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] E Mod 2K; [32] E Mod 2K;
Arrow Custom - 29.0" 45°;

OM-3L 12"X36"

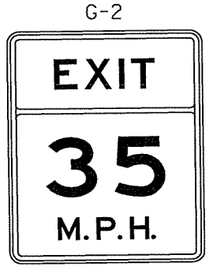
UI-1

OM-3R 12"X36"



SS 530-242+50NB-A
SS 530-242+50NB-B
SS 530-245+50SB-A
SS 530-245+50SB-B
SS 530-344+50NB-A
SS 530-344+50NB-B
SS 530-347+00SB-A
SS 530-347+00SB-B
SS-530-448+10NB-A
SS-530-448+10NB-B

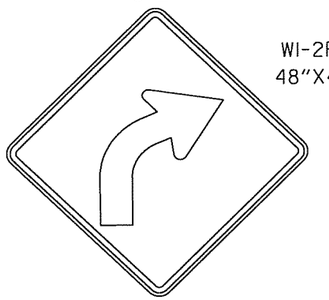
G-2



W13-3 48"X60"

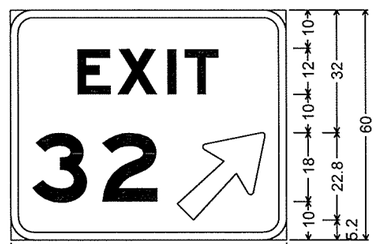
SS-530-362+00SB

G-2

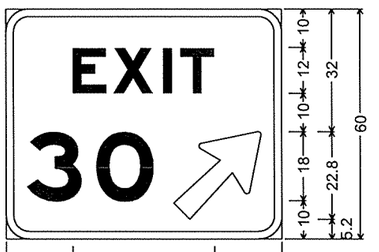


W1-2RT 48"X48"

SS-530-178+00SB-A
SS-530-178+00SB-B



EX-530-358+00SB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] E Mod 2K; [32] E Mod 2K;
Arrow Custom - 29.0" 45°;



EX-530-358+00SB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] E Mod 2K; [30] E Mod 2K;
Arrow Custom - 29.0" 45°;

DATE	DATE PLMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	153	235
				(2)	SIGN PLACEMENT SHEET			

STATE OF ARKANSAS
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No. 7527
JOSEPH A. SARTIN
5/27/16

N

REPLACE
SS-530-I78+00SB-A
SS-530-I78+00SB-B

REPLACE
EX-530-I79+50SB

EXIT 35

PI 171+56.10
N83°52'30"W
N49°54'43"W
C.L. RAMP A65
PC 169+37.33
PT 173+61.98
PC 176+91.27
STA. 177+24.21
PI 178+41.30
PT 179+90.25
N61°54'47"W
PT 172+90.50
18"
C.L. I-530
N67°35'00"W
PI 164+91.79
PI 166+26.08
PC 166+95.98
PI 169+19.21
PT 171+40.42
C.L. RAMP D65
STA. 173+98.99
PC 174+45.64
PI 176+12.49
PT 177+78.97
700'
ACCELERATION
LANE

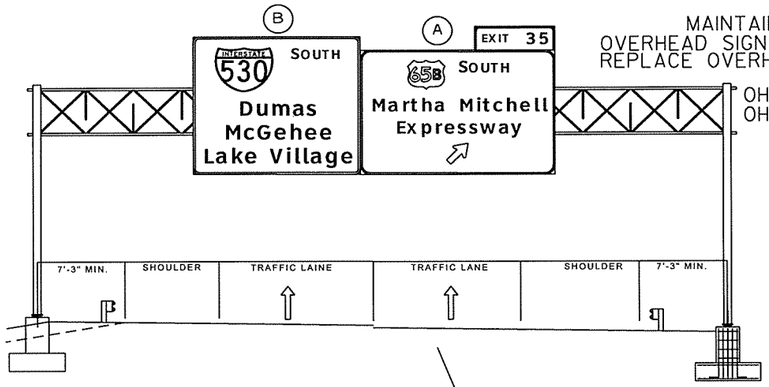
STA. 175+14.73
BEGIN JOB BB0202
L.M. 34.90

REPLACE
SS-530-I71+00NB

STA. I65+00 TO STA. I80+00

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	154	235

(2) SIGN PLACEMENT SHEET



MAINTAIN
OVERHEAD SIGN STRUCTURE
REPLACE OVERHEAD SIGNS

OH-530-189+90SB-A
OH-530-189+90SB-B

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI
6/21/16

REPLACE
SS-530-182+00SB

EXIT 40 M.P.H.

PT 179+90.25
180
TRIP. 5'X4' BC
180
N61°51'47"W
PC 182+89.42
PT 183+84.84
PT 184+80.10
185
N67°35'00"W
STA. 186+82.41
45
180
C.L. I-530
195
10'
24'
60'
6'
6'
24'
10'
18"

PC 182+90.04
STA. 185+78.49
STA. 182+78.49
300' TAPER
700' ACCELERATION LANE

270
White Hall
Sheridan
3/4 MILE
365
EXIT 34

REPLACE
SS-530-187+00NB
REMOVE EXISTING

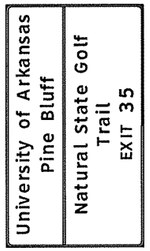
NOTE: EXISTING VERTICAL CLEARANCE UNDER SIGN AT STA. 189+78 IS 19'-2". A MINIMUM 17'-0" VERTICAL CLEARANCE IS REQUIRED FOR FINISHED ROADWAY.

STA. 180+00 TO STA. 195+00

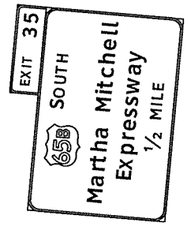
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	155	235
				(2)	SIGN PLACEMENT SHEET			

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTORI
12/27/11

INSTALL
GM-530-198+00SB
REMOVE EXISTING SIGNS



REPLACE
GM-530-205+00SB



TRIP. 4'X3' BC

200

195

Sta 205

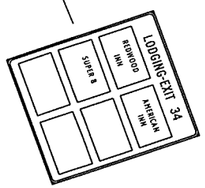
C.L. I-530

60'

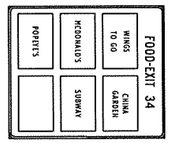
18"

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

PT 208+49.38



INSTALL
LL-530-195+00NB
REMOVE EXISTING



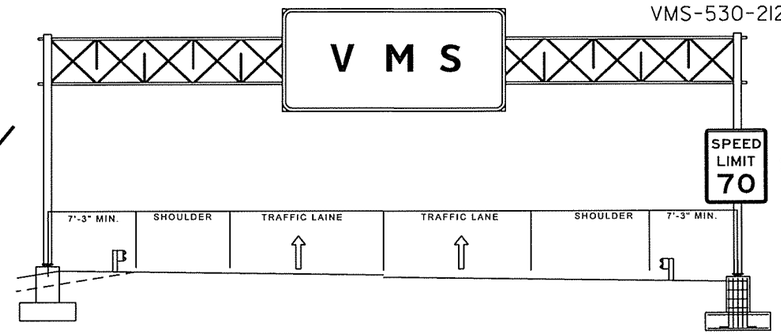
INSTALL
LF-530-203+00NB
REMOVE EXISTING

STA. 195+00 TO STA. 209+00

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	156	235
				(2)	SIGN PLACEMENT SHEET			

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTAIN

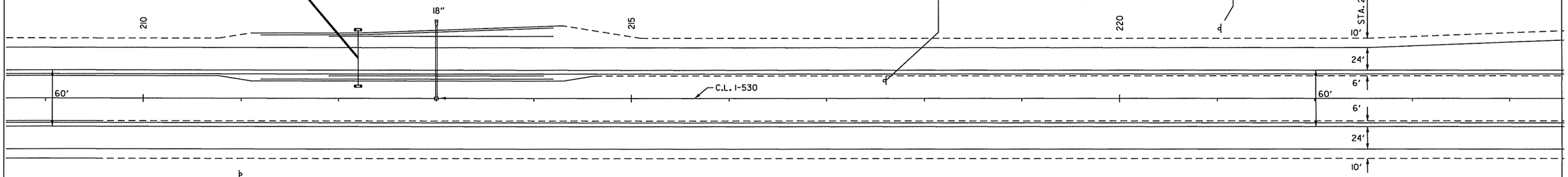
MAINTAIN
OVERHEAD SIGN & SIGN STRUCTURE
VMS-530-212+10SB

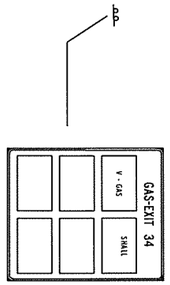


INSTALL
SS-530-212+10SB

INSTALL
SS-530-217+50SB

INSTALL
SS-530-221+00SB





INSTALL
LG-530-211+00NB

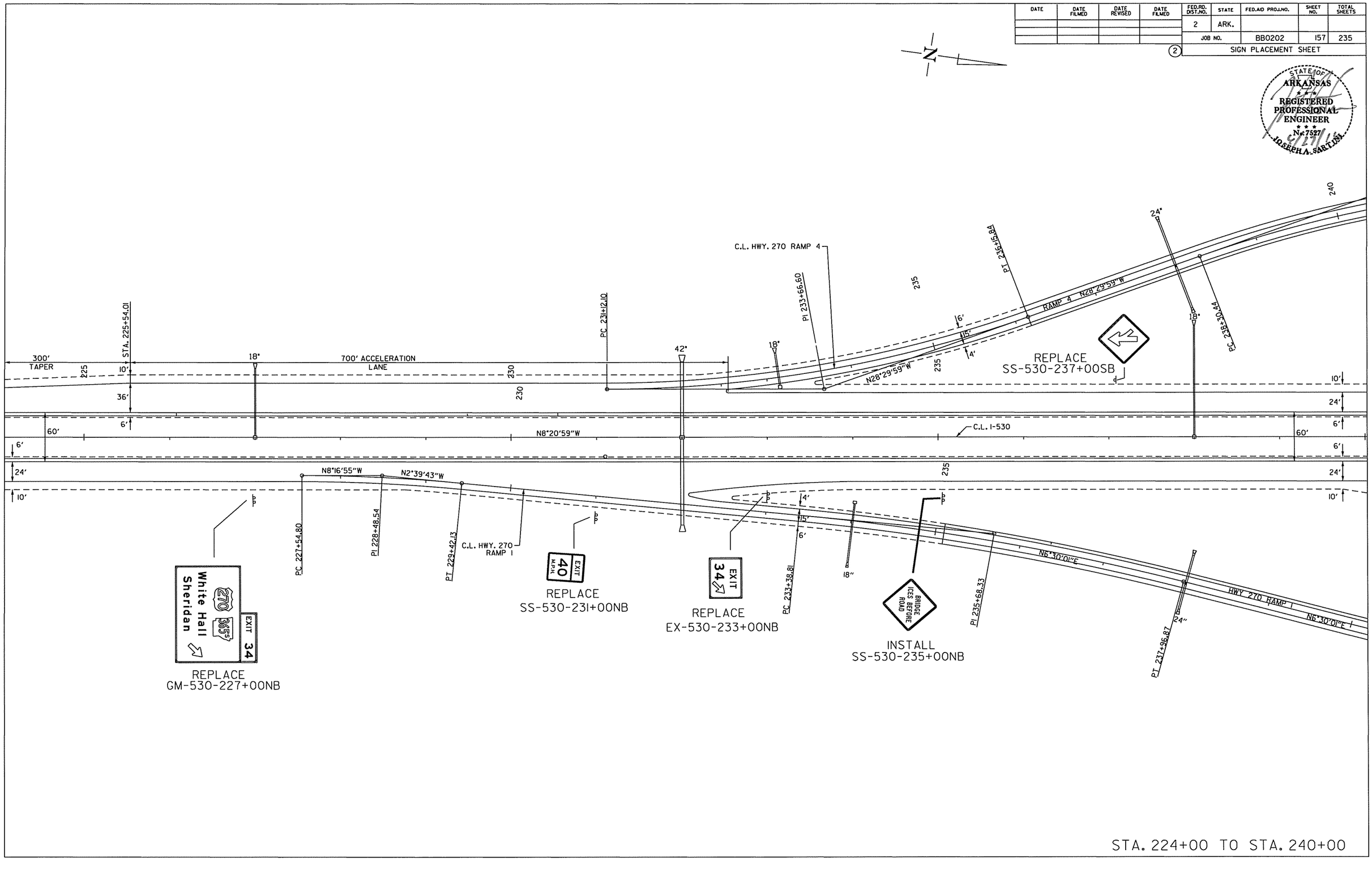
NOTE: EXISTING VERTICAL CLEARANCE OF OVERHEAD SIGN STRUCTURE AT STA. 212+20 IS 18'-3". A MINIMUM 17'-0" VERTICAL CLEARANCE IS REQUIRED FOR FINISHED ROADWAY.

STA. 209+00 TO STA. 224+00

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	157	235

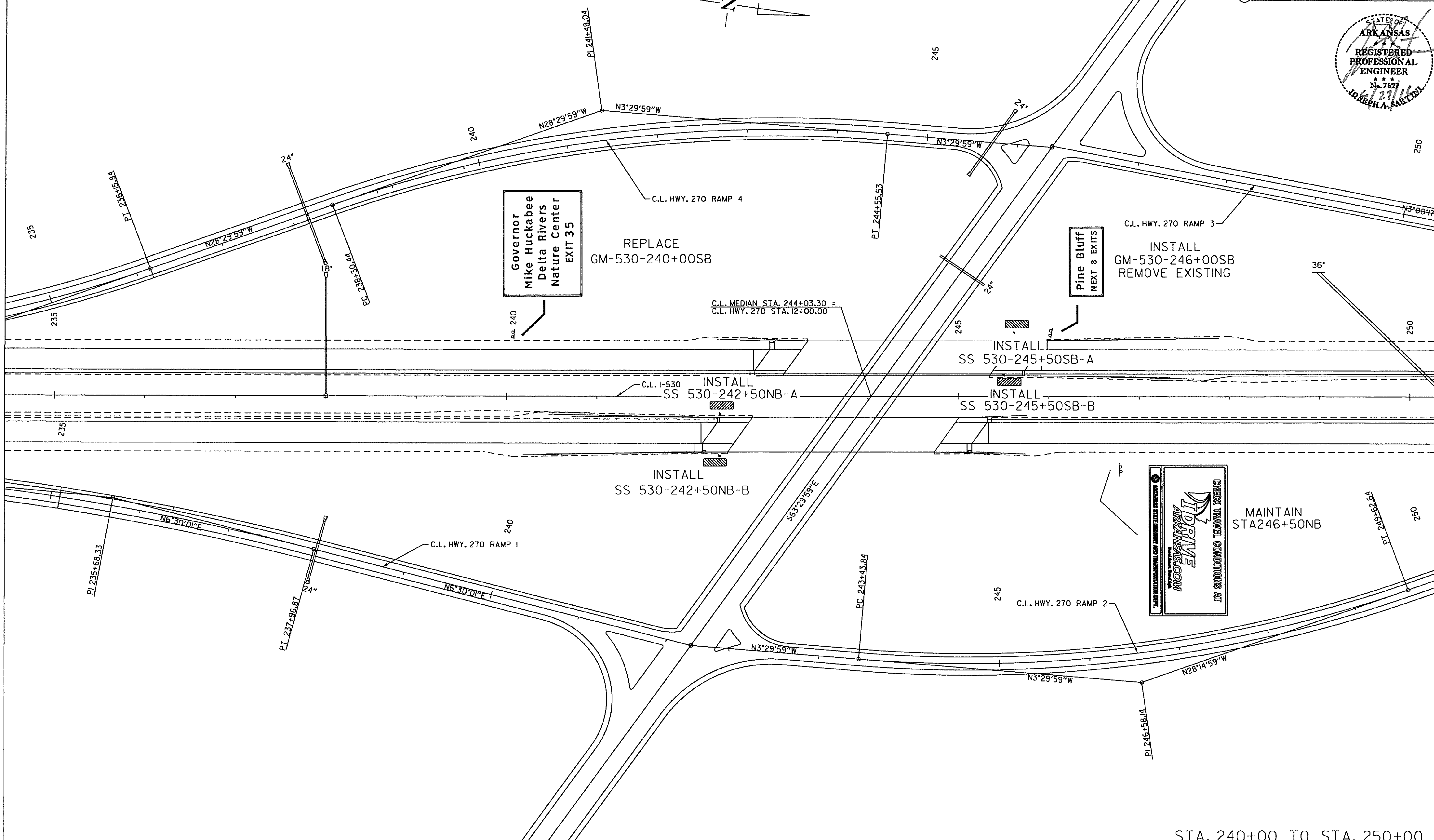
(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTIN



STA. 224+00 TO STA. 240+00

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	158	235
				(2)	SIGN PLACEMENT SHEET			



STA. 240+00 TO STA. 250+00

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	159	235

(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTAIN
6/27/14

INSTALL
GM-530-251+00SB

EXIT 35 SOUTH 65 Martha Mitchell Expressway 1 MILE

INSTALL
SS-530-253+00SB
REMOVE EXISTING

BRIDGE ICES BEFORE ROAD

REPLACE
EX-530-255+90SB

EXIT 34

REPLACE
SS-530-260+00SB

EXIT 40 M.P.H.

INSTALL
SS-530-252+00NB

C.L. HWY. 270 RAMP 3
RAMP 3
N3°00'17"E
250
36°
10'
24'
6'
60'
C.L. I-530
PC 254+37.80
255
PC
PI 257+78.60
5'x3' BC
PT
PT 261+06.96
260
N23°45'43"W
36'
N30°53'00"W
N8°20'59"W
N17°45'59"W
700' ACCEL. LANE
300' TAPER
STA. 263+08.98
PI 259+07.11
PT 255+04.76
PC 253+36.39
PI 253+30.53
PC 251+55.33
PT 249+62.64
N28°14'59"W
RAMP 2
42'
C.L. HWY. 270 RAMP 2

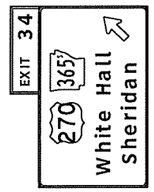
STA. 250+00 TO STA. 264+00

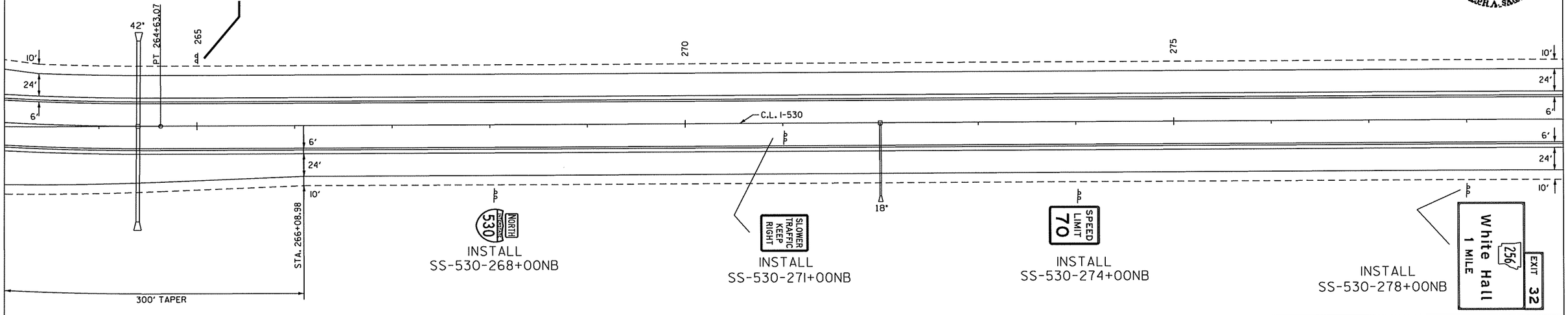
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	160	235

(2) SIGN PLACEMENT SHEET

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

INSTALL
GM-530-265+00SB





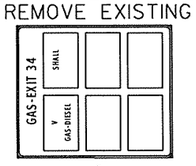
INSTALL
SS-530-268+00NB

INSTALL
SS-530-271+00NB

INSTALL
SS-530-274+00NB

INSTALL
SS-530-278+00NB

INSTALL
LG-530-292+00SB
REMOVE EXISTING

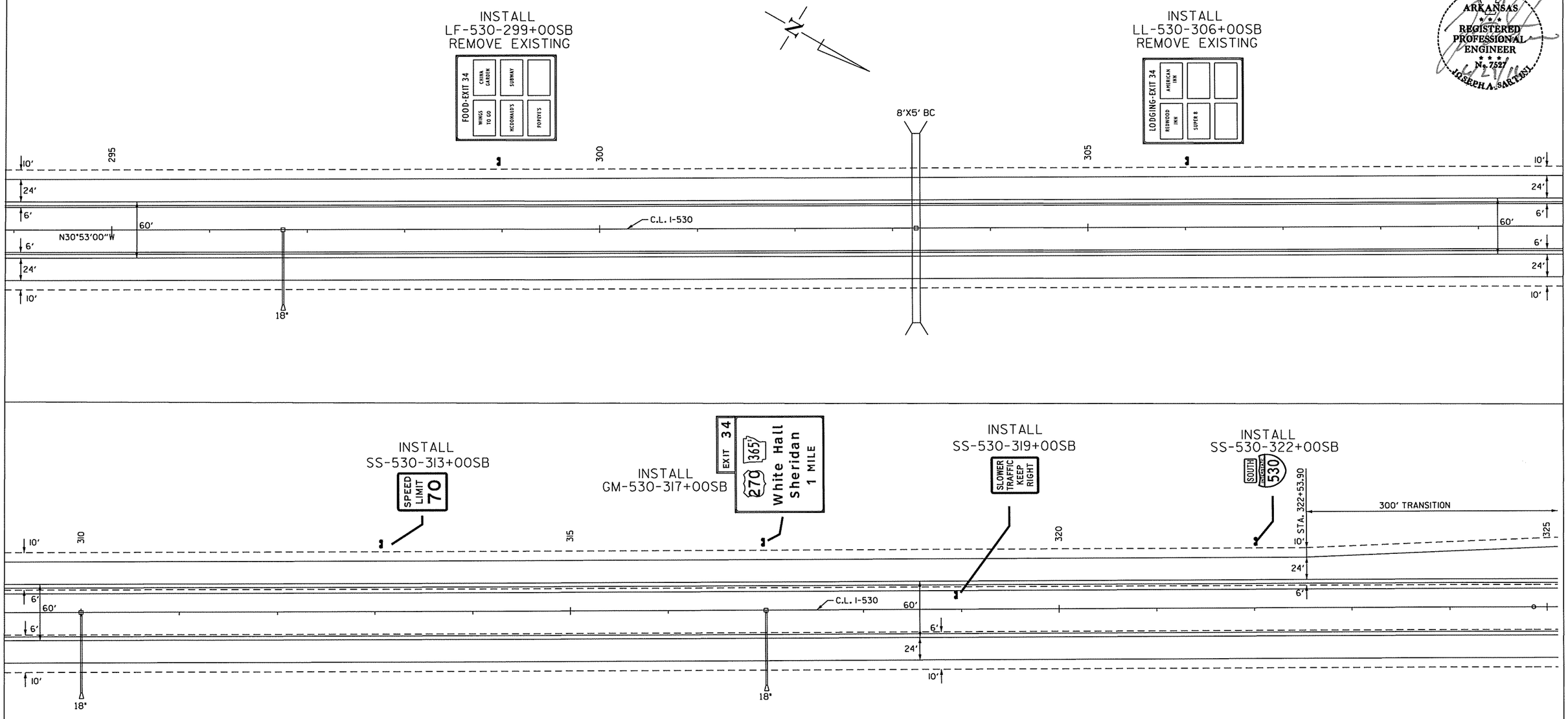


INSTALL
LFG-530-285+00NB
REMOVE EXISTING

STA. 264+00 TO STA. 294+00

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	161	235
				(2)	SIGN PLACEMENT SHEET			

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTAIN
6-27-11



STA. 294+00 TO STA. 325+00

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	162	235
(2)	SIGN PLACEMENT SHEET			

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

N

C.L. HOLLAND AVE. RAMP 4

REPLACE
SS-530-336+00SB

PT 336+15.64

N43°10'33"W

6'
15'
4'

4'×3' BC

700' ACCLERATION LANE

300' TRANS.

STA. 325+54.09

PC 331+03.10

PI 331+85.57

PI 353+60.92

325
330
335
340

10'
36'
6'

18"

C.L. HOLLAND AVE. TEMP. RAMP 4B

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

N27°47'59"W

N30°53'00"W

N23°54'00"W

C.L. I-530

60'

PC 324+86.37

PC 331+03.10

PI 334+10.84

N27°47'59"W

N9°29'34"W

PT 338+83.03

PT 337+13.33

C.L. HOLLAND AVE. RAMP 1

White Hall
256
EXIT 32

INSTALL
SS-530-330+00NB

40 MPH
EXIT

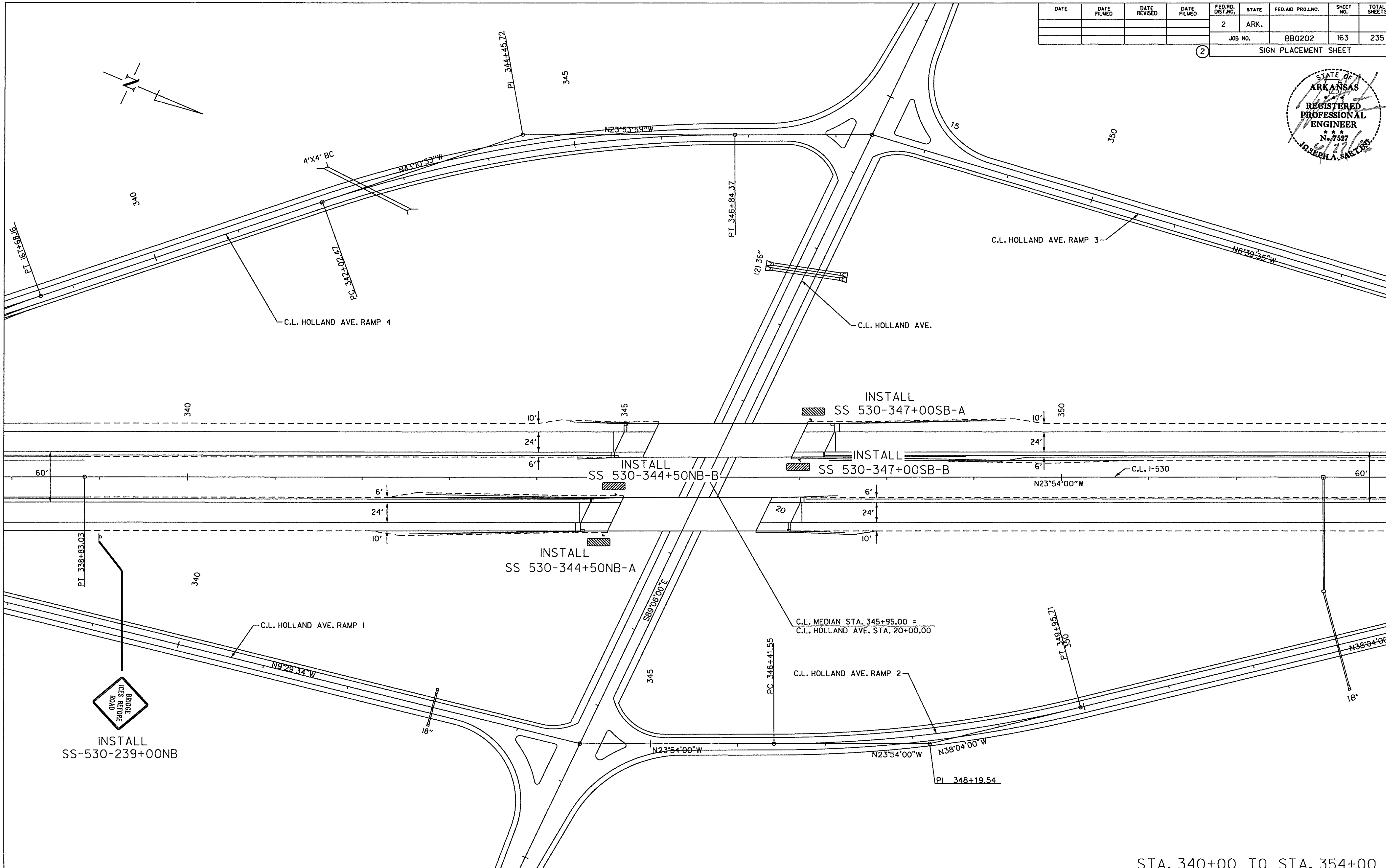
REPLACE
SS-530-332I+00NB

EXIT 32

REPLACE
EX-530-335+60NB

STA. 325+00 TO STA. 340+00

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	163	235
				(2) SIGN PLACEMENT SHEET				



STA. 340+00 TO STA. 354+00

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	164	235
				(2)	SIGN PLACEMENT SHEET			

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTORI

C.L. HOLLAND AVE. RAMP 3

C.L. HOLLAND AVE. RAMP 3 STA. 354+36.33 =
C.L. HOLLAND AVE. TEMP. RAMP 3A STA. 190+00.00

N6°39'35"W

4'x4' BC

355

DBL. 6'x5' BC

PC 356+56.30

300' OVERLAY TRANSITION TO EXISTING PAVEMENT

REPLACE
EX-530-358+00SB

EXIT 32

360

PI 360+07.53

REPLACE
SS-530-362+00SB

EXIT 35 M.P.H.

PC 361+10.53

N27°30'03"W

18"

PT 363+51.00

INSTALL
GM-530-364+00SB
REMOVE EXISTING

EXIT 32
256
White Hall

365

REPLACE
SS-530-354+00SB

BRIDGE ICES BEFORE ROAD

355

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

C.L. I-530

N6°39'35"W

INSTALL
SS-530-354+00NB

355

N38°04'00"W

N38°04'00"W

N23°54'00"W

PC 357+00.43

PI 358+78.42

PT 360+54.60

700' ACCELERATION LANE

300' TRANSITION

STA. 366+12.68

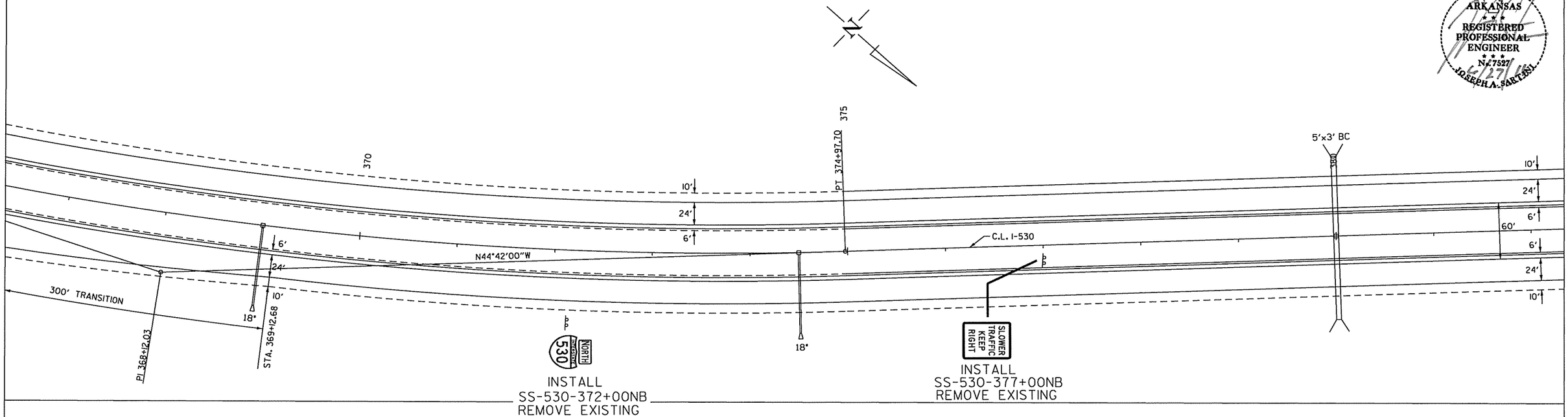
18"

C.L. HOLLAND AVE. RAMP 2

STA. 354+00 TO STA. 367+00

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	165	235
				(2)	SIGN PLACEMENT SHEET			

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 17527
JOSEPH A. SARTESKI
12/27/16

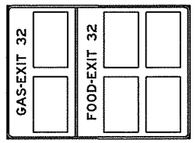


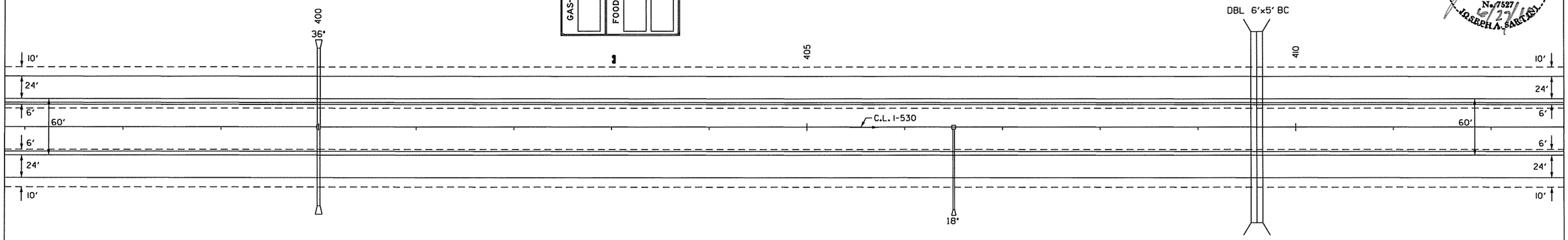
STA. 367+00 TO STA. 397+00

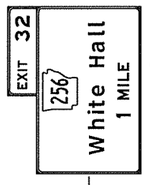
DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	166	235
				(2)	SIGN PLACEMENT SHEET			

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
6/27/14
JOSEPH A. SARTAIN

INSTALL
LFG-530-404+00SB
REMOVE EXISTING

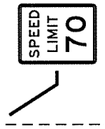






INSTALL
GM-530-413+00SB
REMOVE EXISTING

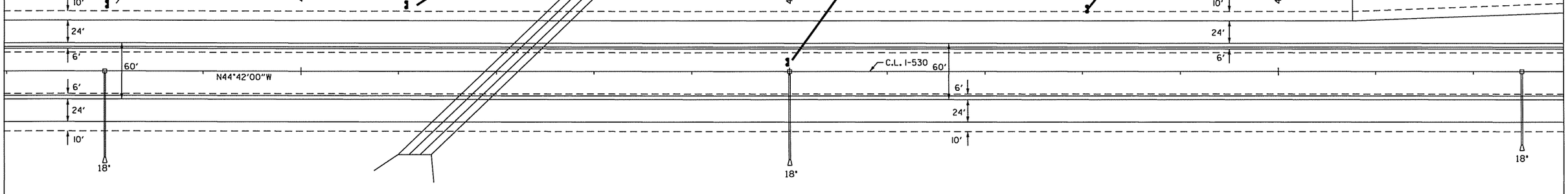
REPLACE
SS-530-416+00SB



TRIP 8'x6' BC

REPLACE
SS-530-420+00SB

REPLACE
SS-530-423+00SB



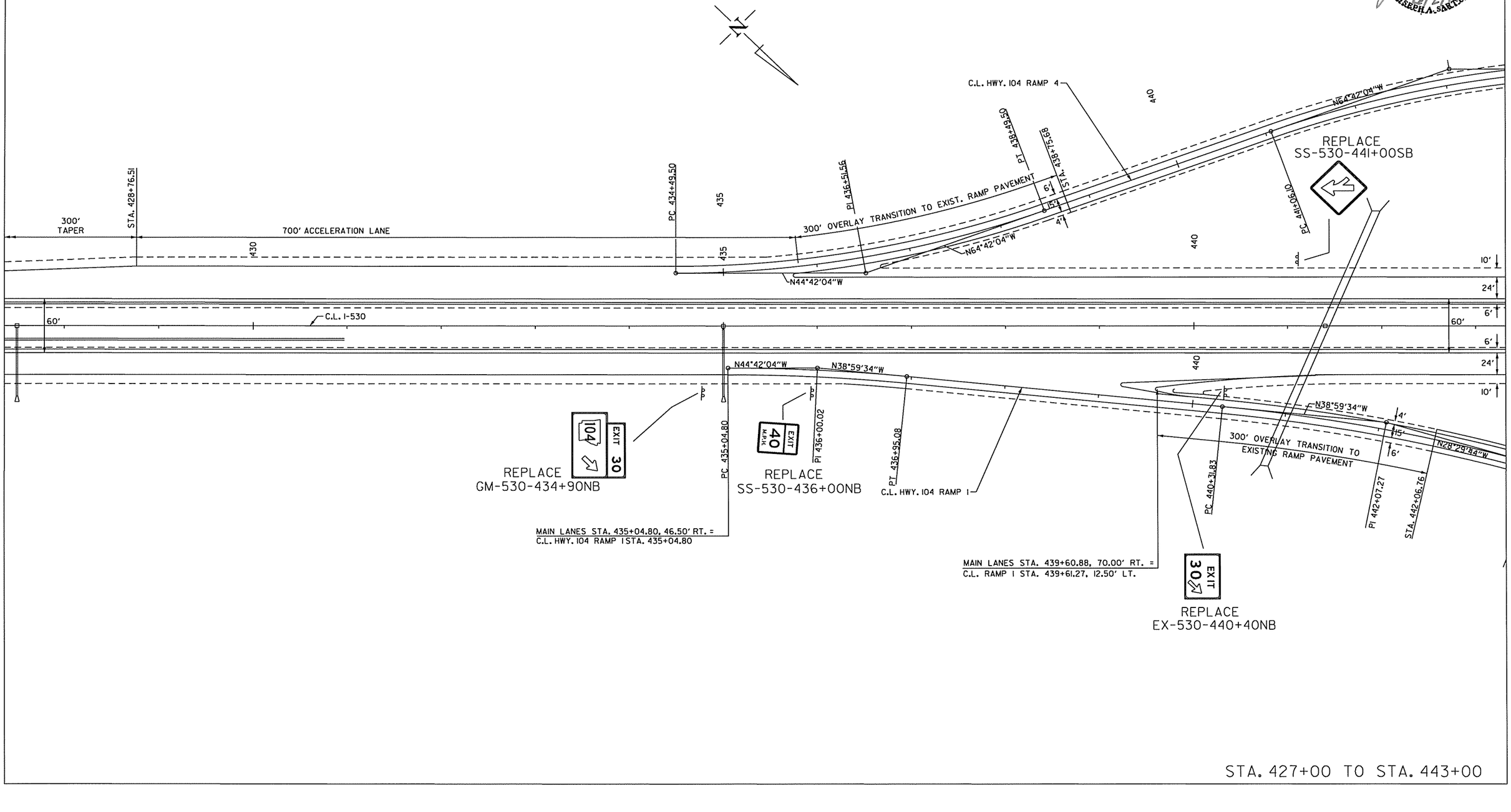
STA. 397+00 TO STA. 427+00

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	167	235

(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTAIN
6/23/16



STA. 427+00 TO STA. 443+00

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	168	235
				(2)	SIGN PLACEMENT SHEET			

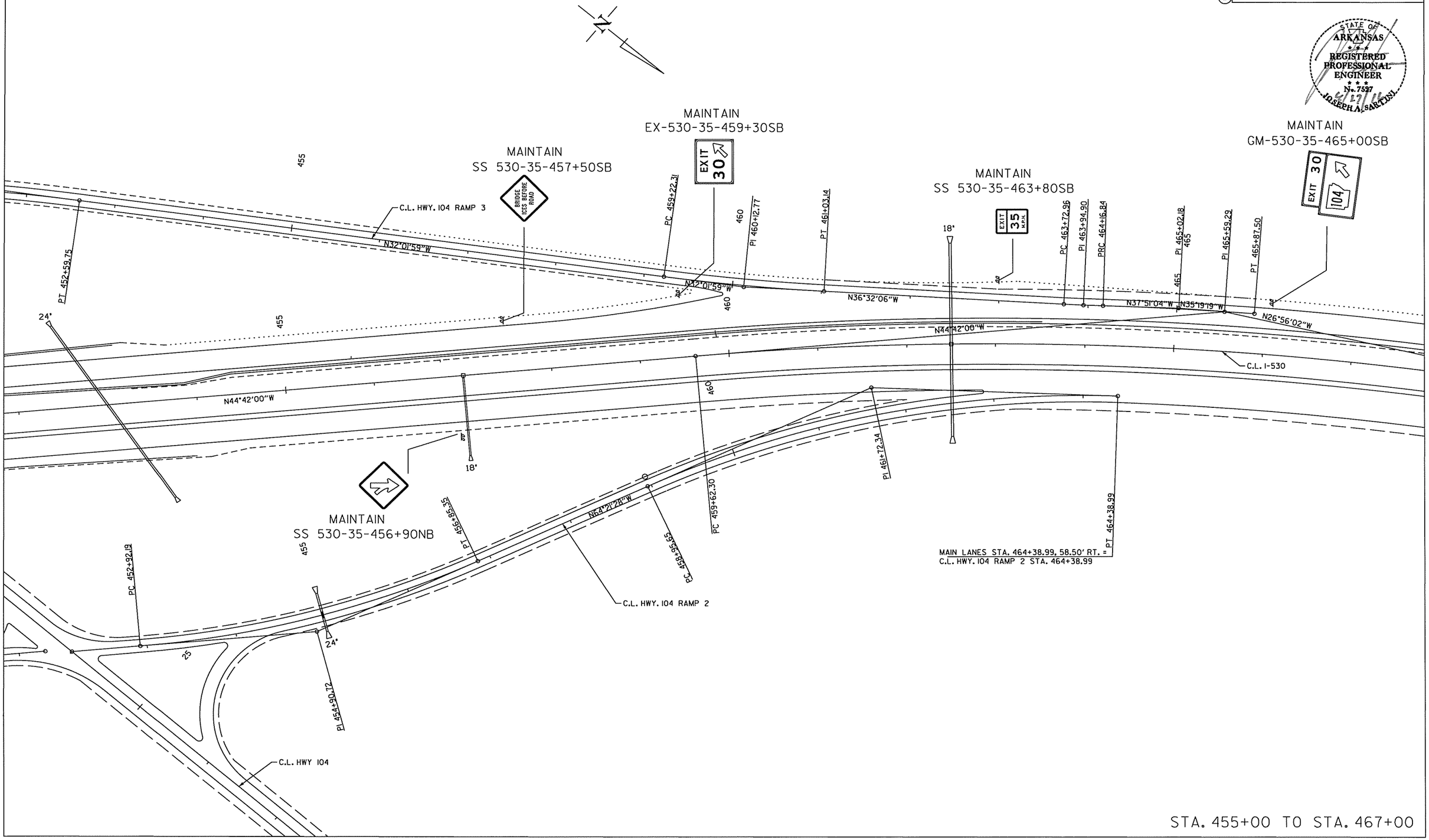
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTAIN

PI 443+08.14
445
POB 446+40.28
POE 447+04.04
I-530
6'x5' BC
450
PI 450+34.28
N44°42'07"W
N64°47'04"W
N44°42'07"W
N45°37'32"W
N45°37'32"W
N32°01'58"W
455
C.L. HWY. 104 RAMP 4
STA. 447+40.51 IN PLACE
TYPE N-2 DROP INLET
RETAIN
PT 445+06.08
PC 448+06.67
C.L. HWY. 104 RAMP 3
STA. 447+70.79
END JOB BB0202
L.M. = 29.9
PC 440+90.10
8'x5' BC
6'x6' BC
C.L. HWY. 104
PT 452+59.75
440
445
MAINTAIN
SS 530-35-451+SB-A
450
24"
455
20'
INSTALL
SS-530-448+10NB-B
C.L. I-530
MAINTAIN
SS 530-35-451+00NB-B
N44°42'00"W
440
INSTALL
SS-530-448+10NB-A
N38°59'34"W
445
300' OVERLAY TRANSITION TO
EXISTING RAMP PAVEMENT
N28°29'44"W
PC 446+28.13
C.L. MEDIAN STA. 449+53.70 =
C.L. HWY. 104 STA. 20+00
PC 440+31.83
PI 442+07.27
STA. 442+06.76
24"
450
PT 450+33.27
PC 452+32.19
455
C.L. HWY. 104 RAMP 2
PT 443+81.74
C.L. HWY. 104 RAMP 1
N28°29'44"W
N44°42'04"W
N44°42'04"W
25
24"
PI 448+32.06
PI 454+30.72
BRIDGE ICES BEFORE ROAD
INSTALL
SS-530-442+00NB

STA. 443+00 TO STA. 455+00

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	169	235
				(2)	SIGN PLACEMENT SHEET			

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
12/27/16
JOSEPH A. SARTINI



STA. 455+00 TO STA. 467+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.		BB0202	170	235
				(2)	SIGNING QUANTITIES SHEET			

SIGNING SUMMARY OF QUANTITIES

ITEM NUMBER	ITEM	TOTAL	UNIT
725	GUIDE SIGN - OVERHEAD MOUNTED (DEMOUNTABLE LEGEND)	448	SQ. FT.
725	GUIDE SIGN - ROADSIDE MOUNTED (DEMOUNTABLE LEGEND)	3682	SQ. FT.
726	STANDARD SIGN	574	SQ. FT.
727	EXIT NUMBER PANEL (TYPE A)	260	SQ. FT.
SP	OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS (TYPE G-2)	34	EACH
SP & 729	CHANNEL POST SIGN SUPPORT (TYPE U-1)	10	EACH
730	BREAKAWAY SIGN SUPPORT (TYPE G-2)	22889	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.

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).

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0202	171	235
				(2)	SIGNING QUANTITIES SHEET			

MAIN LANES SIGNING QUANTITIES

SIGN NO./ LOCATION	STRUCTURE TYPE ST	CL	OH	BM	G-2	GUIDE SIGN Length LIN. FT.	Height LIN. FT.	SQ. Ft.	BREAKAWAY SIGN SUPPORT STEEL SECT. A-572 BEAM	LBS	SIGN POST LENGTH H - 1 LIN FT	H - 2 LIN FT	H - 3	STUB POST H - 1 LIN FT	H - 2 LIN FT	H - 3	FOOTINGS DIA. LIN FT	DEPTH LIN FT	EMBED. LIN FT	SIGN POST AND STUB POUND	EXIT NUMBER PANEL LEGEND	TYPE A SQ. FT.	B SQ. FT.	C SQ. FT.
EXIT 30																								
EX-530-440+40NB					1	6.00	5.00	30.00	W6	9	12.00	13.00		2.33	2.33		1.50	3.00	2.00	266.94				
GM-530-434+90NB					1	10.50	5.00	52.50	W8	18	12.00	13.00		3.99	3.99		2.50	5.50	3.66	593.64	32	20.00		
GM-530-390+00NB					1	8.00	7.00	56.00	W8	18	14.00	15.00		3.99	3.99		2.50	5.50	3.66	665.64	32	20.00		
EXIT 32																								
EX-530-358+00SB					1	6.00	5.00	30.00	W6	9	12.00	13.00		3.99	3.99		2.00	5.50	3.66	296.82				
EX-530-335+60NB					1	6.00	5.00	30.00	W6	9	12.00	13.00		3.99	3.99		2.00	5.50	3.66	296.82				
GM-530-413+00SB					1	13.00	9.50	123.50	W8	21	16.50	17.50		4.99	4.99		2.50	7.00	4.66	923.58	32	20.00		
GM-530-330+00NB					1	16.50	7.60	125.40	W8	21	14.50	15.50		4.99	4.99		2.50	7.00	4.66	839.58	32	20.00		
GM-530-278+00NB					1	13.00	9.50	123.50	W8	21	16.50	17.50		4.99	4.99		2.50	7.00	4.66	923.58	32	20.00		
GM-530-364+00SB					1	16.50	7.60	125.40	W8	21	14.50	15.50		4.99	4.99		2.50	7.00	4.66	839.58	32	20.00		
LFG-530-404+00SB					1	12.00	16.00	192.00	W10	22	23.00	24.00		3.99	3.99		2.50	5.50	3.66	1209.56				
LFG-530-285+00NB					1	12.00	16.00	192.00	W10	22	23.00	24.00		3.99	3.99		2.50	5.50	3.66	1209.56				
EXIT 34																								
EX-530-255+90SB					1	6.00	5.00	30.00	W6	9	12.00	13.00		2.33	2.33		1.50	3.00	2.00	266.94				
EX-530-233+00NB					1	6.00	5.00	30.00	W6	9	12.00	13.00		2.33	2.33		1.50	3.00	2.00	266.94				
GM-530-317+00SB					1	13.00	12.00	156.00	W8	21	19.00	20.00		3.99	3.99		2.50	5.50	3.66	986.58	34	20.00		
GM-530-278+00SB					1	13.00	12.00	156.00	W8	21	19.00	20.00		3.99	3.99		2.50	5.50	3.66	986.58	34	20.00		
GM-530-265+00SB					1	16.00	10.00	160.00	W8	21	17.00	18.00		3.99	3.99		2.50	5.50	3.66	902.58	34	20.00		
GM-530-227+00NB					1	16.00	10.00	160.00	W8	21	17.00	18.00		3.99	3.99		2.50	5.50	3.66	902.58	34	20.00		
LG-530-292+00SB					1	12.00	13.50	162.00	W8	21	17.00	18.00		3.99	3.99		2.50	5.50	3.66	902.58				
LF-530-299+00SB					1	12.00	13.50	162.00	W8	21	17.00	18.00		3.99	3.99		2.50	5.50	3.66	902.58				
LL-530-306+00SB					1	12.00	13.50	162.00	W8	21	17.00	18.00		3.99	3.99		2.50	5.50	3.66	902.58				
LL-530-195+00NB					1	12.00	13.50	162.00	W8	21	17.00	18.00		3.99	3.99		2.50	5.50	3.66	902.58				
LF-530-203+00NB					1	12.00	13.50	162.00	W8	21	17.00	18.00		3.99	3.99		2.50	5.50	3.66	902.58				
LG-530-211+00NB					1	12.00	13.50	162.00	W8	21	17.00	18.00		3.99	3.99		2.50	5.50	3.66	902.58				
EXIT 35																								
EX-530-179+50SB					1	6.00	5.00	30.00	W6	9	12.00	13.00		2.33	2.33		1.50	3.00	2.00	266.94				
GM-530-251+00SB					1	18.50	12.00	222.00	W12	26	19.00	20.00		4.99	4.99		3.00	7.00	3.66	1273.48	35	20.00		
GM-530-205+00SB					1	18.50	12.00	222.00	W12	26	19.00	20.00		4.99	4.99		3.00	7.00	3.66	1273.48	35	20.00		
GM-530-198+00SB					1	22.50	11.50	258.75	W12	26	18.50	19.50		4.99	4.99		3.00	7.00	3.66	1247.48				
GM-530-246+00SB					1	10.50	4.50	47.25	W6	9	11.50	12.50		2.33	2.33		1.50	3.00	2.00	257.94				
GM-530-240+00SB					1	15.00	10.50	157.50	W8	21	14.00	15.00		3.99	3.99		2.50	5.50	3.66	776.58				
OH-530-189+90SB-A			1			20.00	13.00	260.00													35	20.00		
OH-530-189+90SB-B			1			15.00	12.50	187.50																
GUIDE SIGNS ROADSIDE MOUNTED TOTALS;								3,681.80																
GUIDE SIGNS OVERHEAD MOUNTED TOTALS; (SIGNS ONLY)								447.50																
TOTALS:	-	-	2	-	27			4,129.30												22,888.88		260.00	-	-

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI
12/27/24

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	172	235
				(2)	SIGNING QUANTITIES SHEET			

STANDARD SIGNS FLAT SHEET
OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS

SIGN NO./ LOCATION	TYPE G1 EA.	G2 EA.	G2-1 EA.	G2-2 EA.	G2-3 EA.	G2-4 EA.	G2-5 EA.	G2-6 EA.	G2-7 EA.	G2-8 EA.	G2-9 EA.	G2-10 EA.	STANDARD SIGN SQ. FT.
SS-530-268+00NB		1											3.13
SS-530-372+00NB		1											3.13
SS-530-221+00SB		1											3.13
SS-530-322+00SB		1											3.13
SS-530-423+00SB		1											3.13
SS-530-212+10SB		1											20.00
SS-530-274+00NB		1											20.00
SS-530-313+00SB		1											20.00
SS-530-383+00NB		1											20.00
SS-530-416+00SB		1											20.00
SS-530-217+50SB		1											20.00
SS-530-271+00NB		1											20.00
SS-530-319+00SB		1											20.00
SS-530-377+00NB		1											20.00
SS-530-420+00SB		1											20.00
SS-530-182+00SB		1											20.00
SS-530-231+00NB		1											20.00
SS-530-260+00SB		1											20.00
SS-530-3321+00NB		1											20.00
SS-530-436+00NB		1											20.00
SS-530-171+00NB		1											16.00
SS-530-237+00SB		1											16.00
SS-530-252+00NB		1											16.00
SS-530-336+00SB		1											16.00
SS-530-354+00NB		1											16.00
SS-530-441+00SB		1											16.00
SS-530-235+00NB		1											16.00
SS-530-253+00SB		1											16.00
SS-530-239+00NB		1											16.00
SS-530-354+00SB		1											16.00
SS-530-442+00NB		1											16.00
SS-530-178+00SB-A		1											16.00
SS-530-178+00SB-B		1											16.00
SS-530-362+00SB		1											20.00
TOTALS:		**34**											**543.65**

STANDARD SIGNS FLAT SHEET
CHANNEL POST SIGN SUPPORTS

SIGN NO./ LOCATION	TYPE U1 EA.	U2 EA.	U2-1 EA.	U2-2 EA.	U2-3 EA.	U2-4 EA.	U2-5 EA.	U2-6 EA.	U2-7 EA.	U2-8 EA.	U2-9 EA.	U2-10 EA.	STANDARD SIGN SQ. FT.
SS 530-242+50NB-A	1												3.00
SS 530-242+50NB-B	1												3.00
SS 530-245+50SB-A	1												3.00
SS 530-245+50SB-B	1												3.00
SS 530-344+50NB-A	1												3.00
SS 530-344+50NB-B	1												3.00
SS 530-347+00SB-A	1												3.00
SS 530-347+00SB-B	1												3.00
SS-530-448+10NB-A	1												3.00
SS-530-448+10NB-B	1												3.00
TOTALS:	**10**												**30.00**

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
6/27/16
JOSEPH A. SARTINI

Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
7-28-16				2	ARK.			
				JOB NO.		BB0202	173	235
				(2)	QUANTITIES			

MAINTENANCE OF TRAFFIC ITEMS

STATION	STATION	LOCATION	MOBILE SPEED NOTIFICATION SYSTEM	TRAFFIC CONTROL SUPERVISOR	PORTABLE CONSTRUCTION LIGHTING		ADVANCE WARNING ARROW PANEL		PORTABLE CHANGEABLE MESSAGE SIGN	MODULAR GLARE SHIELD
							SIGNS	DAY		
			EACH	LUMP SUM	TOTAL NO.	DAY	EACH		WEEK	LIN. FT.
ENTIRE PROJECT IF AND WHERE DIRECTED BY ENGINEER			2	1.00						400
ENTIRE PROJECT - CROSSOVER LOCATIONS					4	800				
WIDE LOAD DETOUR (REFER TO PLAN SHEET 85)							2		110	
BEG & END OF PROJECT							2	950	140	
TOTALS:			**2**	**1.00**	**4**	**800**		**950**	**250**	**400**

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	16						
ONE @ EXITS 30, 32, 34, AND 35		4					
NB - IN ADVANCE OF EXITS 39, 37, 36, 35, 34, & 32 SB - IN ADVANCE OF EXITS 34, 32, 30, & 27			10				
1 @ MI MARKER 28 & 1 @ EXIT 37				2			
					16		
						1.00	
ESTIMATED QUANTITY: IF AND WHERE DIRECTED BY THE ENGINEER							16
TOTALS:	**16**	**4**	**10**	**2**	**16**	**1.00**	**16**

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

ADVANCE WARNING SIGNS AND DEVICES

SIGN NUMBER	DESCRIPTION	SIGN SIZE	ADVANCED WARNING BEGINNING	ADVANCED LANE CONTINUES	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)	TEMP. IMPACT ATTEN.BARR. (RELOCATION)
																		RIGHT	LEFT					
			LIN. FT. - EACH											NO.	SQ. FT.	EACH				LIN. FT.		EACH		EACH
W20-1	ROAD WORK AHEAD	48"x48"		4		3	3	3	3	3	3	3	7	7	112.0									
W3-5	REDUCED SPEED AHEAD	48"x48"		4									4	4	64.0									
W20-1	ROAD WORK 1 MILE	48"x48"	4										4	4	64.0									
W20-1	ROAD WORK 1/2 MILE	48"x48"	4										4	4	64.0									
W20-1	ROAD WORK 1500 FT.	48"x48"	4			1							5	5	80.0									
W20-1	ROAD WORK 1000 FT.	48"x48"				1							1	1	16.0									
W20-1	ROAD WORK 500 FT.	48"x48"				5	3	3	3	3	3	3	5	5	80.0									
W20-5	RIGHT LANE CLOSED 1 MILE	48"x48"		4									4	4	64.0									
W20-5	RIGHT LANE CLOSED 1/2 MILE	48"x48"		4									4	4	64.0									
W20-5	RIGHT LANE CLOSED 1500 FT.	48"x48"		4									4	4	64.0									
G20-2	END ROAD WORK	48"x24"	4			7	7	7	7	7	7	7	11	11	88.0									
G20-1	ROAD WORK NEXT xx MILES	60"x24"	2	2									2	2	20.0									
W1-2R	CURVE RT.	48"x48"					3	3	3	3			3	3	48.0									
W13-1	SPEED LIMIT (ADVISORY)	24"x24"					3	3	3	3			3	3	12.0									
R11-2	ROAD CLOSED	48"x30"			26	38	32	33	35	27	20	12	38	38	380.0									
W1-6	LARGE ARROW	60"x30"		6									6	6	75.0									
W1-8	CHEVRONS	36"x48"					21	21	18	18			21	21	252.0									
R2-1	SPEED LIMIT	48"x60"		8									8	8	160.0									
R2-2	SPEED LIMIT TRUCKS	48"x48"		4									4	4	64.0									
R4-1	DO NOT PASS	48"x60"		8									8	8	160.0									
R55-1	FINES DOUBLE	36"x60"	4										4	4	60.0									
W4-2R	RIGHT LANE CLOSED	48"x48"		4	6	6	6	6	6	6	6	6	10	10	160.0									
SPECIAL	MERGE NOW	48"x48"		2									2	2	32.0									
	WIDE LOAD & ALT. ROUTE DETOUR SIGNS														299.3									
RSP-1	SHOULDER CLOSED (IF & WHERE DIRECTED)	48"x30"																						
	VERTICAL PANELS						294	294	294	294			294			294								
	TRAFFIC DRUMS				652	1291	322	235	376	222	703	1099	1291				1291							
	TYPE III BARRICADE-RT. (16')					6	20	23	21	19	7	6	23					368						
	TYPE III BARRICADE-LT. (16')				26	32	12	10	14	8	13	6	32						512					
	FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER					3120	28080						31200							31200				
	RELOCATING PRECAST CONCRETE BARRIER						3120		31200		1080		35400								35400			
	TEMPORARY IMPACT ATTENUATION BARRIER					8	5		7		7		8									8		
	TEMPORARY IMPACT ATTENUATION BARRIER (REPAIR)					8	5		7		7		8										8	
	TEMPORARY IMPACT ATTENUATION BARRIER (RELOCATION)						5		7		4		16											16
TOTALS:														**2482.3**		**294**	**1291**	**368**	**512**	**31200**	**35400**	**8**	**8**	**16**

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

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	RAISED PAVEMENT MARKERS	HIGH PERFORMANCE CONTRAST PAVEMENT MARKING	HIGH PERFORMANCE PAVEMENT MARKING			
												TYPE II (WHITE/RED)	4" WHITE	WHITE	4" SKIP WHITE	YELLOW	8" WHITE
	LIN. FT. - EACH								LIN. FT.		LIN. FT.	EACH	LIN. FT.	LIN. FT.			
REMOVAL OF PERMANENT PAVEMENT MARKINGS			56580		5360		2740		64680								
CONSTRUCTION PAVEMENT MARKINGS			101440		135440		63360			300240							
REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS							57220	111440			168660						
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED)								1333				1333					
HIGH PERFORMANCE CONTRAST PAVEMENT MARKING WHITE (4")								286					286				
HIGH PERFORMANCE PAVEMENT MARKING WHITE (4")								57931						57931			
HIGH PERFORMANCE MARKING TAPE (SKIP LINE) WHITE (4")								13348							13348		
HIGH PERFORMANCE PAVEMENT MARKING YELLOW (4")								59011								59011	
HIGH PERFORMANCE PAVEMENT MARKING WHITE (8")								3532									3532
TOTALS:									**64680**	**300240**	**168660**	**1333**	**286**	**57931**	**13348**	**59011**	**3532**

NOTES: THIS IS A HIGH TRAFFIC VOLUME ROAD AS DEFINED IN SECTION 604.03, STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
NO PERMANENT PAVEMENT MARKINGS SHALL BE PLACED UNTIL A MINNIMUM OF THREE DAYS AFTER MAIN LANE PAVING HAS BEEN COMPLETED. IN ADDITION, NO PERMANENT PAVEMENT MARKINGS SHALL BE PLACED DURING THE TIME PERIOD FROM DECEMBER 21 TO MARCH 15, INCLUSIVE.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
SCOTT P. THORNSBERRY
No.10887
7-28-2016

QUANTITIES

Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	174	235

(2) QUANTITIES

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 BASIN (E-14)	OBLITERATION OF SEDIMENT BASIN	*SEDIMENT REMOVAL & DISPOSAL
			ACRE	TON	ACRE	M.GAL.	ACRE	ACRE	ACRE	M.GAL.	BAG	LIN. FT.	LIN. FT.	CU. YDS.	CU.YD.	CU. YD.
ENTIRE	PROJECT	CLEARING AND GRUBBING						1.00	1.00	20.4						
ENTIRE	PROJECT	STAGE 1A						14.28	14.28	291.3	1694	660	3272	2226	2226	3354
ENTIRE	PROJECT	STAGE 1B						20.39	20.39	416.0	1474	60				69
ENTIRE	PROJECT	STAGE 2A	8.85	17.70	8.85	902.7	8.85	31.13	31.13	635.1						
ENTIRE	PROJECT	STAGE 2B	2.66	5.32	2.66	271.3	2.66	12.00	12.00	244.8	22					1
ENTIRE	PROJECT	STAGE 3A	8.00	16.00	8.00	816.0	8.00	31.13	31.13	635.1	88	20				5
ENTIRE	PROJECT	STAGE 3B	3.11	6.22	3.11	317.2	3.11	12.00	12.00	244.8	154	20				8
ENTIRE	PROJECT	STAGE 4A	31.13	62.26	31.13	3175.3	31.13									
ENTIRE	PROJECT	STAGE 4B	20.39	40.78	20.39	2079.8	20.39									
TOTALS:			74.14	148.28	74.14	7562.3	74.14	121.93	121.93	2487.5	3432	760	3272	2226	2226	3437

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.

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				
			LIN. FT.	FEET		LIN. FT.	EACH	LIN. FT.	LIN. FT.	EACH
170+00.00	189+00.00	LT. - R.M.L.	1900	4	844			1900		
190+00.00	242+72.00	LT. - R.M.L.	5272	4	2343			5272		
245+35.00	345+21.00	RT. - L.M.L.	9986	4	4438			9986		
346+91.00	448+06.00	RT. - L.M.L.	10115	4	4496			10115		
453+27.00	463+00.00	RT. - L.M.L.	973	4	432			973		
185+78.00	190+78.00	LT. - R.M.L.							500	
188+78.00	193+78.00	RT. - L.M.L.							500	
211+90.00	214+10.00	RT. - L.M.L.							220	
211+90.00	214+20.00	LT. - L.M.L.							230	
240+44.00	242+44.00	RT. - R.M.L.							200	
240+72.00	242+72.00	LT. - R.M.L.							200	
242+31.00	243+06.00	RT. - L.M.L.							75	
242+59.00	243+34.00	LT. - L.M.L.							75	
244+73.00	245+48.00	RT. - R.M.L.							75	
245+00.00	245+75.00	LT. - R.M.L.							75	
245+35.00	247+35.00	RT. - L.M.L.							200	
245+62.00	247+62.00	LT. - L.M.L.							200	
342+80.00	344+80.00	RT. - R.M.L.							200	
342+99.00	344+99.00	LT. - R.M.L.							200	
344+46.00	345+21.00	RT. - L.M.L.							75	
344+64.00	345+39.00	LT. - L.M.L.							75	
346+51.00	347+26.00	RT. - R.M.L.							75	
346+69.00	347+44.00	LT. - R.M.L.							75	
346+91.00	348+91.00	RT. - L.M.L.							200	
347+10.00	349+10.00	LT. - L.M.L.							200	
446+55.00	448+55.00	LT. - R.M.L.							200	
446+68.00	447+68.00	LT. - L.M.L.							100	
446+94.00	448+94.00	RT. - R.M.L.							200	
454+77.00	461+95.00	RT. - L.M.L.				718				
454+91.00	461+49.00	LT. - R.M.L.				658				
189+82.00	190+23.00	LT. - L.M.L.					1			
242+15	245+33	BRIDGE B5500 RT. MAIN LANES								2
242+73	245+92	BRIDGE A5500 LT. MAIN LANES								2
344+49	347+02	BRIDGE B5501 RT. MAIN LANES								2
344+87	347+42	BRIDGE A5501 LT. MAIN LANES								2
TOTALS:					12553	1376	1	28246	4150	8

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

CLEARING AND GRUBBING

STATION	STATION	LOCATION	CLEARING	GRUBBING
			STATION	
175+15	447+71	MAINLANES*	273	273
GORE AREAS TO BE USED IF AND WHERE DIRECTED BY ENGINEER			68	68
TOTALS:			341	341

*CLEARING AND GRUBBING WILL BE PERFORMED TO A MINIMUM OF 50 FEET FROM INSIDE AND OUTSIDE SHOULDER EDGES. TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER. SEE SECTION 201 OF THE STANDARD SPECIFICATIONS.

GUARDRAIL

STATION	STATION	LOCATION	GUARDRAIL (TYPE A)	THRIE BEAM GUARDRAIL TERMINAL	GUARDRAIL TERMINAL (TYPE 2)	TERMINAL ANCHOR POST (TYPE 1)
			LIN. FT.	EACH		
185+78.00	190+78.00	LT. - R.M.L.	425		1	1
188+78.00	191+28.00	LT. - L.M.L.	125		1	1
189+28.00	193+78.00	RT. - L.M.L.	375		1	1
211+20.00	213+20.00	LT. - L.M.L.	125		1	1
211+20.00	213+20.00	RT. - L.M.L.	125		1	1
240+18.00	242+37.00	RT. - R.M.L.	150	1	1	
240+46.00	242+65.00	LT. - R.M.L.	150	1	1	
242+32.00	243+26.00	LT. - L.M.L.	50	1		1
244+81.00	245+74.00	RT. - R.M.L.	50	1		1
245+42.00	247+61.00	RT. - L.M.L.	150	1	1	
245+70.00	247+89.00	LT. - L.M.L.	150	1	1	
342+54.00	344+73.00	RT. - R.M.L.	150	1	1	
342+72.00	344+91.00	LT. - R.M.L.	150	1	1	
344+38.00	345+32.00	LT. - L.M.L.	50	1		1
346+58.00	347+52.00	RT. - R.M.L.	50	1		1
346+99.00	349+18.00	RT. - L.M.L.	150	1	1	
347+17.00	349+36.00	LT. - L.M.L.	150	1	1	
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. - R.M.L.	150	1	1	
TOTALS:			2925	15	15	10

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

EARTHWORK

STATION	STATION	LOCATION / DESCRIPTION	UNCLASSIFIED EXCAVATION			COMPACTED EMBANKMENT
			LENGTH - FEET	CU. YD. / STA.	CU. YD.	CU. YD.
167+37.00	186+82.00	TEMP. RAMP D65 INSTALLATION	1945	15.53	302	1349
170+39.00	175+64.00	CROSSOVER 1A INSTALLATION	525	24.19	127	376
172+60.00	178+31.00	CROSSOVER 1B INSTALLATION	571	28.37	162	376
173+83.00	182+46.00	RAMP A65 TEMP. A INSTALLATION	863	11.59	171	1069
184+53.00	189+85.00	RAMP A65 TEMP. B INSTALLATION	532	18.98	101	480
216+75.00	240+84.00	HWY. 270 TEMP. RAMP 4B INSTALLATION	2409	23.41	564	1690
225+08.00	229+82.00	HWY. 270 TEMP. RAMP 1A INSTALLATION	474	9.70	46	415
225+52.00	230+22.00	HWY. 270 TEMP. RAMP 4A INSTALLATION	470	13.83	65	422
229+55.00	240+23.00	HWY. 270 TEMP. RAMP 1B INSTALLATION	1068	15.73	168	813
247+38.00	270+15.00	HWY. 270 TEMP. RAMP 2A INSTALLATION	2277	11.68	266	1909
247+97.00	258+69.00	HWY. 270 TEMP. RAMP 3A INSTALLATION	1072	19.12	205	946
258+00.00	260+74.00	HWY. 270 TEMP. RAMP 2B INSTALLATION	274	9.12	25	362
258+63.00	262+82.00	HWY. 270. TEMP. RAMP 3B INSTALLATION	419	15.51	65	328
318+79.00	340+65.00	HOLLAND AVE. TEMP. RAMP 4B INSTALLATION	2186	23.60	516	1631
327+97.00	331+10.00	HOLLAND AVE. TEMP. RAMP 4A INSTALLATION	313	16.61	52	390
328+56.00	332+92.00	HOLLAND AVE. TEMP. RAMP 1A INSTALLATION	436	10.09	44	385
333+07.00	342+80.00	HOLLAND AVE. TEMP. RAMP 1B INSTALLATION	973	20.04	195	941
350+61.00	360+81.00	HOLLAND AVE. TEMP. RAMP 3A INSTALLATION	1020	22.94	234	1059
350+84.00	372+97.00	HOLLAND AVE. TEMP. RAMP 2A INSTALLATION	2213	11.34	251	1550
360+38.00	363+58.00	HOLLAND AVE. TEMP. RAMP 2B INSTALLATION	320	10.00	32	371
361+31.00	365+48.00	HOLLAND AVE. TEMP. RAMP 3B INSTALLATION	417	15.59	65	381
422+01.00	443+95.00	HWY. 104 TEMP. RAMP 4B INSTALLATION	2194	22.88	502	1792
431+16.00	434+33.00	HWY. 104 TEMP. RAMP4A INSTALLATION	317	13.56	43	375
433+88.00	437+51.00	HWY. 104 TEMP. RAMP 1A INSTALLATION	363	8.26	30	299
437+31.00	447+48.00	HWY. 104 TEMP. RAMP 1B INSTALLATION	1017	18.09	184	748
454+77.00	461+95.00	CROSSOVER 2A/2B INSTALLATION	718	48.75	350	564
ENTIRE	PROJECT	CROSSOVERS/TEMP. RAMP REMOVAL			31567	
172+60.00	242+69.57	TRENCH AND SHOULDER PREP. RT. OF L.M.L.	7010	22.22	1558	
245+71.26	344+84.63	TRENCH AND SHOULDER PREP. RT. OF L.M.L.	9913	22.22	2203	
347+27.99	447+69.93	TRENCH AND SHOULDER PREP. RT. OF L.M.L.	10042	22.22	2231	
TOTALS:					42324	21021

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

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
SCOTT P. THORNSBERRY
No.10887
6-21-2016

QUANTITIES

Leonard.Speed 6/21/2016 10:59:28 AM
WORKSPACE: Leonard.Speed
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Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	175	235

(2) QUANTITIES

STRUCTURES

STATION	DESCRIPTION	TEMPORARY CULVERTS 12"	TEMPORARY CULVERTS 18"	* MODIFYING DROP INLET	SOLID SODDING	WATER	* YARD DRAINS
		LIN. FT.		EACH	SQ.YD.	M.GAL	EACH
169+60	RAMP D65		12				
24+94	TEMP. RAMP D65	224					
172+00	CENTER OF MEDIAN		559				
173+80	DROP INLET @ CENTERLINE MEDIAN				4.89	0.06	
176+20	DROP INLET @ CENTERLINE MEDIAN				4.89	0.06	
176+52	RAMP A65		17				
33+92	TEMP. RAMP A65 A	142					
179+77	CENTER OF MEDIAN		198				
180+59	DROP INLET @ CENTERLINE MEDIAN			1	4.22	0.05	
184+65	CENTER OF MEDIAN		305				
189+20	DROP INLET @ CENTERLINE MEDIAN				4.89	0.06	
197+20	DROP INLET @ CENTERLINE MEDIAN				4.89	0.06	
204+90	DROP INLET @ CENTERLINE MEDIAN				4.89	0.06	
213+00	DROP INLET @ CENTERLINE MEDIAN				4.89	0.06	
226+42	CENTER OF MEDIAN		279				
227+00	DROP INLET @ CENTERLINE MEDIAN			1	4.89	0.06	
230+90	CENTER OF MEDIAN		319				
232+00	DROP INLET @ CENTERLINE MEDIAN				5.00	0.06	
234+02	DROP INLET @ HWY. 270 RAMP 1				4.89	0.06	
84+83	HWY. 270 TEMP. RAMP 4B	129					
238+00	CENTER OF MEDIAN				4.89	0.06	
250+40	DROP INLET @ CENTERLINE MEDIAN				5.56	0.07	
251+00	DROP INLET @ HWY. 170 RAMP 2 IN GORE				5.11	0.06	
92+87	HWY. 270 TEMP. RAMP 2A	205					
112+20	HWY. 270 TEMP. RAMP 3A	195					
253+81	CENTER OF MEDIAN		419				
258+00	DROP INLET @ CENTERLINE MEDIAN			1	5.33	0.07	
264+40	DROP INLET @ CENTERLINE MEDIAN				5.00	0.06	
272+00	DROP INLET @ CENTERLINE MEDIAN				4.89	0.06	
279+00	DROP INLET @ CENTERLINE MEDIAN				5.00	0.06	
283+45	DROP INLET @ CENTERLINE MEDIAN				4.89	0.06	
296+75	DROP INLET @ CENTERLINE MEDIAN				4.89	0.06	
303+24	DROP INLET @ CENTERLINE MEDIAN				4.89	0.06	
310+00	DROP INLET @ CENTERLINE MEDIAN				4.89	0.06	
317+00	DROP INLET @ CENTERLINE MEDIAN				4.89	0.06	
326+90	DROP INLET @ CENTERLINE MEDIAN				4.89	0.06	
328+00	CENTER OF MEDIAN	384					
332+00	CENTER OF MEDIAN	250					
165+33	HOLLAND AVE. TEMP. RAMP 4B	230					
144+76	HOLLAND AVE. TEMP. RAMP 1B	185					
337+00	DROP INLET @ CENTERLINE MEDIAN			1	4.89	0.06	
353+00	DROP INLET @ CENTERLINE MEDIAN				4.89	0.06	
353+00	DROP INLET @ HOLLAND AVE. RAMP 2				4.89	0.06	
172+19	HOLLAND AVE. TEMP. RAMP 2A	185					
192+30	HOLLAND EVE. TEMP. RAMP 3A	170					
357+51	CENTER OF MEDIAN		212				
361+26	CENTER OF MEDIAN		292				
363+00	DROP INLET @ CENTERLINE MEDIAN				4.89	0.06	
369+00	DROP INLET @ CENTERLINE MEDIAN				4.89	0.06	
374+50	DROP INLET @ CENTERLINE MEDIAN				4.89	0.06	
380+00	DROP INLET @ CENTERLINE MEDIAN				4.89	0.06	
386+00	DROP INLET @ CENTERLINE MEDIAN				4.89	0.06	
393+00	DROP INLET @ CENTERLINE MEDIAN				4.89	0.06	
400+00	DROP INLET @ CENTERLINE MEDIAN				4.89	0.06	
406+50	DROP INLET @ CENTERLINE MEDIAN				4.89	0.06	
413+00	DROP INLET @ CENTERLINE MEDIAN				4.89	0.06	
420+00	DROP INLET @ CENTERLINE MEDIAN				4.89	0.06	
427+50	DROP INLET @ CENTERLINE MEDIAN				4.89	0.06	
435+00	CENTER OF MEDIAN		226				
435+00	DROP INLET @ CENTERLINE MEDIAN				4.89	0.06	
244+34	HWY. 104 TEMP. RAMP 4B	175					
441+40	DROP INLET @ CENTERLINE MEDIAN				4.89	0.06	
225+66	HWY. 104 TEMP. RAMP 1B	190					
456+40	CENTER OF MEDIAN		345				
457+00	DROP INLET @ CENTERLINE MEDIAN				4.89	0.06	
ENTIRE PROJECT	IF AND WHERE DIRECTED						14
TOTALS:		2664	3183	4	196.59	2.41	14

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.

WIRE ROPE SAFETY FENCE

BIM-HSIP-B530(202)

STATION	STATION	LOCATION	WIRE ROPE SAFETY FENCE	WRSF END TERMINAL	DITCH PAVING LENGTH	DITCH PAVING WIDTH	DITCH PAVING CONCRETE DITCH PAVING (TYPE B)	DITCH PAVING SOLID SODDING	DITCH PAVING WATER	WRSF POST REPAIR
			LIN. FT.	EACH	LIN. FT.	LIN. FT.	SQ. YD.	SQ. YD.	M. GAL.	EACH
170+00	186+28	LT. - R.M.L.	1628	* 2	1628	4	724	724	9.1	
190+28	240+96	LT. - R.M.L.	5068	* 2	5068	4	2252	2252	28.4	
247+11	345+19	RT. - L.M.L.	9808	* 2	9808	4	4359	4359	54.9	
348+68	448+10	RT. - L.M.L.	9942	* 2	9942	4	4419	4419	55.7	
453+28	463+00	RT. - L.M.L.	972	* 2	972	4	432	432	5.4	
169+39		END OF R&D WRSF SECTION		1						
462+95		END OF R&D WRSF SECTION		1						
ENTIRE PROJECT										** 50
TOTALS:			27418	2			12186	12186	153.5	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

APPROACH GUTTERS AND SLABS

STATION	STATION	LOCATION	APPROACH GUTTER (TYPE AT)	APPROACH SLAB (TYPE C1)	REINFORCING STEEL-RDWY. (GR. 60)	AGGREGATE BASE CRS. (CLASS 7)
			CU.YD.	CU.YD.	POUND	TON
242+14.91	242+59.76	BRIDGE B5500 RT. MAIN LANES - SOUTH	31.91	62.82	10175.00	58.65
242+73.40	243+18.26	BRIDGE A5500 LT. MAIN LANES - SOUTH	29.77	62.82	10175.00	57.02
244+88.44	245+33.30	BRIDGE B5500 RT. MAIN LANES - NORTH	29.77	62.82	10175.00	57.02
245+46.95	245+91.81	BRIDGE A5500 LT. MAIN LANES - NORTH	31.91	62.82	10175.00	58.65
344+48.36	344+90.40	BRIDGE B5501 RT. MAIN LANES - SOUTH	31.55	59.79	9712.00	55.75
344+87.17	345+29.22	BRIDGE A5501 LT. MAIN LANES - SOUTH	30.13	59.79	9712.00	54.67
346+60.76	347+02.80	BRIDGE B5501 RT. MAIN LANES - NORTH	30.13	59.79	9712.00	54.67
346+99.58	347+41.62	BRIDGE A5501 LT. MAIN LANES - NORTH	31.55	59.79	9712.00	55.75
TOTALS:			246.72	490.44	79548.00	452.18

4" PIPE UNDERDRAIN

STATION	STATION	LOCATIONS	4" PIPE UNDERDRAINS	UNDERDRAIN COVER	UNDERDRAIN VIDEO INSPECTION	UNDERDRAIN OUTLET PROTECTORS
			LIN. FT.	LIN. FT.	LIN. FT.	EACH
175+15	186+15	RT. - R.M.L. - FULL DEPTH	1380		1380	6
186+15	231+15	RT. - R.M.L.	4500	4500	4500	19
231+15	242+08	RT. - R.M.L. - FULL DEPTH	1093		1093	6
175+15	186+15	LT. - L.M.L. - FULL DEPTH	1380		1380	6
186+15	231+73	LT. - L.M.L.	4558	4558	4558	20
231+73	242+97	LT. - L.M.L. - FULL DEPTH	1124		1124	6
245+10	256+33	RT. - R.M.L. - FULL DEPTH	1403		1403	6
256+33	333+48	RT. - R.M.L.	7715	7715	7715	32
333+48	344+44	RT. - R.M.L. - FULL DEPTH	1096		1096	6
245+98	256+92	LT. - L.M.L. - FULL DEPTH	1374		1374	6
256+92	333+87	LT. - L.M.L.	7695	7695	7695	32
333+87	345+03	LT. - L.M.L. - FULL DEPTH	1116		1116	6
346+87	358+09	RT. - R.M.L. - FULL DEPTH	1402		1402	6
358+09	438+25	RT. - R.M.L.	8016	8016	8016	34
438+25	448+60	RT. - R.M.L. - FULL DEPTH	1035		1035	6
347+46	358+42	LT. - L.M.L. - FULL DEPTH	1376		1376	6
358+42	437+41	LT. - L.M.L.	7899	7899	7899	33
437+41	447+31	LT. - L.M.L. - FULL DEPTH	990		990	5
TOTALS:			55152	40383	55152	241

* 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.

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.

ACHM PATCHING OF EXISTING ROADWAY

LOCATION	ACHM PATCHING OF EXIST.
	TONS
ENTIRE PROJECT - TO BE USED IF AND WHERE	130
DIRECTED BY THE ENGINEER	
TOTAL:	130

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	130	260
DIRECTED BY THE ENGINEER		
TOTALS:	130	260

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

SCARIFYING CONCRETE PAVEMENT

STATION	STATION	LOCATION	AVG. WIDTH	SCARIFYING CONCRETE PAVEMENT
			FEET	SQ. YD.
174+78.99	175+78.99	RAMP D65	15	166.67
179+24.29	180+24.29	RAMP A65	15	166.67
232+09.90	233+09.90	HWY. 270 RAMP 1	15	166.67
232+53.30	233+53.30	HWY. 270 RAMP 4	15	166.67
255+04.89	256+04.89	HWY. 270 RAMP 2	15	166.67
255+49.50	256+49.50	HWY. 270 RAMP 3	15	166.67
335+08.82	336+08.82	HOLLAND AVE. RAMP 1	15	166.67
332+54.25	333+54.25	HOLLAND AVE. RAMP 4	15	166.67
358+13.40	359+13.40	HOLLAND AVE. RAMP 2	15	166.67
357+80.27	358+80.27	HOLLAND AVE RAMP 3	15	166.67
439+61.27	440+61.27	HWY. 104 RAMP 1	15	166.67
435+75.68	436+75.68	HWY. 104 RAMP 4	15	166.67
TOTAL:				2000.04

RUMBLE STRIPS IN ASPHALT SHOULDERS

STATION	STATION	LOCATION	* RUMBLE STRIPS IN ASPHALT SHOULDERS
			LIN.FT.
166+96	170+79	RAMP A65 LT.	383
170+39	242+35	LT. - R.M.L.	7196
172+60	242+70	RT. - L.M.L.	7010
175+15	175+79	RAMP A65 RT.	64
175+15	242+08	RT. - R.M.L.	6693
175+15	242+97	LT. - L.M.L.	6782
173+62	179+74	RAMP D65 RT.	612
177+44	179+74	RAMP D65 LT.	230
232+61	237+39	HWY. 270 RAMP 1 RT.	478
232+61	240+39	HWY. 270 RAMP 1 LT.	778
233+57	238+15	HWY. 270 RAMP 4 LT.	458
233+57	241+15	HWY. 270 RAMP 4 RT.	758
245+10	344+44	RT. - R.M.L.	9934
245+37	344+62	LT. - R.M.L.	9925
245+71	344+85	RT. - L.M.L.	9914
245+98	345+03	LT. - L.M.L.	9905
248+02	256+05	HWY. 270 RAMP 3 RT.	803
251+02	256+05	HWY. 270 RAMP 3 LT.	503
246+95	254+61	HWY. 270 RAMP 2 LT.	766
249+95	254+61	HWY. 270 RAMP 2 RT.	466
333+65	338+04	HOLLAND AVE. RAMP 4 LT.	439
333+65	341+04	HOLLAND AVE. RAMP 4 RT.	739
335+46	339+97	HOLLAND AVE. RAMP 1 RT.	451
335+46	342+97	HOLLAND AVE. RAMP 1 LT.	751
346+87	448+60	RT. - R.M.L.	10173
347+05	448+21	LT. - R.M.L.	10116
347+28	447+70	RT. - L.M.L.	10042
347+46	447+31	LT. - L.M.L.	9985
350+30	358+45	HOLLAND AVE. RAMP 3 RT.	815
350+63	358+10	HOLLAND AVE. RAMP 2 LT.	747
353+30	358+45	HOLLAND AVE. RAMP 3 LT.	515
353+63	358+10	HOLLAND AVE. RAMP 2 RT.	447
436+68	441+26	HWY. 104 RAMP 4 LT.	458
436+68	444+26	HWY. 104 RAMP 4 RT.	758
440+12	444+69	HWY. 104 RAMP 1 RT.	457
440+12	447+69	HWY. 104 RAMP 1 LT.	757
450+88	461+95	RT. - L.M.L.	1107
451+30	461+49	LT. - R.M.L.	1019
TOTAL:			123434

* 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.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

QUANTITIES

Leonard.Speed 6/21/2016 10:20:13 AM
WORKSPACE: Leonard.Speed
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Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	176	235

(2) QUANTITIES

RUBBLIZING & REMOVAL OF PORTLAND AND ASPHALT CEMENT CONCRETE PAVEMENTS

STATION	STATION	** LOCATION	LENGTH	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		WIDTH		WIDTH		
			LIN. FT.	FEET	SQ. YD.	FEET	SQ. YD.	FEET	CU. YD.	TON
175+14.73	186+14.73	FULL DEPTH MAIN LANE LT & SHOULDERS	1100.00	24.00	2933.33			38.00	774.07	193.60
175+14.73	186+14.73	FULL DEPTH MAIN LANE RT & SHOULDERS	1100.00	24.00	2933.33			38.00	774.07	193.60
186+14.73	231+73.40	RUBBLIZE & OVERLAY MAIN LANE LT	4558.67			24.00	12156.45			
186+14.73	231+14.91	RUBBLIZE & OVERLAY MAIN LANE RT	4500.18			24.00	12000.48			
231+73.40	256+91.81	FULL DEPTH MAIN LANE LT & SHOULDERS	2518.41	24.00	6715.76			38.00	1772.21	443.24
231+14.91	256+33.30	FULL DEPTH MAIN LANE RT & SHOULDERS	2518.39	24.00	6715.71			38.00	1772.20	443.24
256+91.81	333+87.14	RUBBLIZE & OVERLAY MAIN LANE LT	7695.33			24.00	20520.88			
256+33.30	333+48.36	RUBBLIZE & OVERLAY MAIN LANE RT	7715.06			24.00	20573.49			
333+87.14	358+41.62	FULL DEPTH MAIN LANE LT & SHOULDERS	2454.48	24.00	6545.28			38.00	1727.23	431.99
333+48.36	358+02.81	FULL DEPTH MAIN LANE RT & SHOULDERS	2454.45	24.00	6545.20			38.00	1727.21	431.98
358+41.62	437+40.77	RUBBLIZE & OVERLAY MAIN LANE LT	7899.15			24.00	21064.40			
358+02.81	438+24.82	RUBBLIZE & OVERLAY MAIN LANE RT	8022.01			24.00	21392.03			
437+40.77	447+40.77	FULL DEPTH MAIN LANE LT & SHOULDERS	1000.00	24.00	2666.67			38.00	703.70	176.00
438+24.82	448+24.82	FULL DEPTH MAIN LANE RT & SHOULDERS	1000.00	24.00	2666.67			38.00	703.70	176.00
178+14.81	184+80.04	LT ENTRANCE LANE TAPER & RETURN - FULL DEPTH	630.50	11.43	800.74			11.43	133.46	110.97
175+78.49	177+78.97	RT ENTRANCE LANE TAPER TO ACCEL LANE - FULL DEPTH	154.80	14.26	245.27			14.26	40.88	27.24
177+78.97	182+78.49	RT LANE ACCELERATION LANE - FULL DEPTH	695.20	12.00	926.93			12.00	154.49	122.36
182+78.49	185+78.49	RT LANE ACCELERATION LANE TAPER - FULL DEPTH	624.70	6.00	416.47			6.00	69.41	109.95
227+54.79	231+14.91	RT EXIT LANE TAPER & RETURN - OVERLAY	756.10			10.33	867.83			
231+14.91	234+23.79	RT EXIT LANE TAPER & RETURN - FULL DEPTH	93.90	12.68	132.29			12.68	22.05	16.53
222+54.01	225+54.01	LT LANE ACCELERATION LANE TAPER - OVERLAY	98.70			6.00	65.80			
225+54.01	231+12.10	LT LANE ACCELERATION LANE - OVERLAY	751.30			12.00	1001.73			
231+12.10	231+73.40	LT ENTRANCE LANE TAPER - OVERLAY	667.10			12.44	922.08			
231+73.40	232+54.01	LT ENTRANCE LANE TAPER - FULL DEPTH	667.10	15.57	1154.08			15.57	192.35	117.41
256+08.85	256+33.30	RT ENTRANCE LANE TAPER - FULL DEPTH	686.20	17.95	1368.59			17.95	228.10	120.77
256+33.30	258+07.00	RT ENTRANCE LANE TAPER - OVERLAY	692.57			14.10	1085.02			
258+07.00	263+08.98	RT LANE ACCELERATION LANE - OVERLAY	702.12			12.00	936.16			
263+08.98	266+08.98	RT LANE ACCELERATION LANE TAPER - OVERLAY	711.67			6.00	474.44			
253+27.19	256+91.81	LT EXIT LANE TAPER & RETURN - FULL DEPTH	721.22	8.46	677.94			8.46	112.99	126.93
256+91.81	263+35.00	LT EXIT LANE TAPER & RETURN - OVERLAY	730.77			12.42	1008.46			
331+03.06	333+48.36	RT ENTRANCE LANE TAPER & RETURN - FULL DEPTH	740.32	4.34	357.00			4.34	59.50	130.30
333+48.36	337+38.32	RT ENTRANCE LANE TAPER & RETURN - OVERLAY	749.87			12.43	1035.65			
322+53.90	325+53.90	LT LANE ACCELERATION LANE TAPER - OVERLAY	759.42			6.00	506.28			
325+53.90	331+03.08	LT LANE ACCELERATION LANE - OVERLAY	768.97			12.00	1025.29			
331+03.08	332+54.09	LT ENTRANCE LANE TAPER - OVERLAY	778.52			14.31	1237.84			
359+12.69	360+54.59	RT ENTRANCE LANE TAPER - OVERLAY	788.07			15.22	1332.71			
360+54.59	366+12.80	RT LANE ACCELERATION LANE - OVERLAY	797.62			12.00	1063.49			
366+12.80	369+12.80	RT LANE ACCELERATION LANE TAPER - OVERLAY	807.17			6.00	538.11			
356+67.13	358+41.62	LT EXIT LANE TAPER & RETURN - FULL DEPTH	816.72	3.21	291.30			3.21	48.55	143.74
358+41.62	363+51.03	LT EXIT LANE TAPER & RETURN - OVERLAY	826.27			10.75	986.93			
435+06.22	438+24.82	RT EXIT LANE TAPER & RETURN - OVERLAY	835.82			8.42	781.95			
438+24.82	441+70.75	RT EXIT LANE TAPER & RETURN - FULL DEPTH	845.37	14.27	1340.38			14.27	223.40	148.78
425+76.51	428+76.51	LT LANE ACCELERATION LANE TAPER - OVERLAY	854.92			6.00	569.94			
428+76.51	434+49.54	LT LANE ACCELERATION LANE - OVERLAY	864.47			12.00	1152.62			
434+49.54	435+76.51	LT ENTRANCE LANE TAPER - OVERLAY	163.80			14.19	258.26			
TOTALS:					**45432.94**		**124558.32**		**11239.57**	**3664.63**

NOTE: PAYMENT MADE FOR REMOVAL OF PLOWABLE PAVEMENT MARKERS WILL BE CONSIDERED SUBSIDIARY TO PRICE BID FOR 'RUBBLIZING PORTLAND CEMENT CONCRETE PAVEMENT.'
* 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.

CULVERT CLEAN OUT

STATION	LOCATION	EACH
ENTIRE PROJECT	TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER	39
TOTAL:		**39**

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		
185+14.76	185+67.93	LT. - R.M.L.	53.17	4.00	23.63	220.00	2.60	20.74	11.03
185+67.93	186+38.47	LT. - R.M.L.	70.54	8.00	62.70	220.00	6.90	82.96	58.52
186+38.47	186+53.86	LT. - R.M.L.	15.39	6.75	11.54	220.00	1.27	59.04	9.09
186+53.86	190+04.68	LT. - R.M.L.	350.82	5.50	214.39	220.00	23.58	39.21	137.56
188+34.13	188+68.25	LT. - L.M.L.	34.12	2.75	10.43	220.00	1.15	9.81	3.35
188+37.21	188+68.08	RT. - L.M.L.	30.87	2.75	9.43	220.00	1.04	9.80	3.03
188+68.08	193+86.83	RT. - L.M.L.	518.75	5.50	317.01	220.00	34.87	39.21	203.40
188+68.25	191+37.71	LT. - L.M.L.	269.46	5.50	164.67	220.00	18.11	39.21	105.66
190+04.68	190+17.53	LT. - R.M.L.	12.85	6.50	9.28	220.00	1.02	54.76	7.04
190+17.53	190+88.07	LT. - R.M.L.	70.54	7.50	58.78	220.00	6.47	72.91	51.43
190+88.07	191+36.21	LT. - R.M.L.	48.14	3.75	20.06	220.00	2.21	18.23	8.78
191+37.71	191+89.54	LT. - L.M.L.	51.83	2.75	15.84	220.00	1.74	9.81	5.08
193+86.83	194+18.04	RT. - L.M.L.	31.21	2.75	9.54	220.00	1.05	9.81	3.06
210+76.97	211+10.00	LT. - L.M.L.	33.03	2.75	10.09	220.00	1.11	9.80	3.24
210+77.03	211+10.00	RT. - L.M.L.	32.97	2.75	10.07	220.00	1.11	9.80	3.23
211+10.00	214+30.00	RT. - L.M.L.	320.00	5.50	195.56	220.00	21.51	39.21	125.47
211+10.00	214+30.14	LT. - L.M.L.	320.14	5.50	195.64	220.00	21.52	39.21	125.53
214+30.00	214+62.97	RT. - L.M.L.	32.97	2.75	10.07	220.00	1.11	9.80	3.23
214+30.14	214+63.19	LT. - L.M.L.	33.05	2.75	10.10	220.00	1.11	9.81	3.24
239+74.09	242+44.38	RT. - R.M.L. (HWY. 270 OVERPASS)	270.29	VAR.	101.27	220.00	11.14	14.74	39.84
240+01.89	242+72.30	LT. - R.M.L. (HWY. 270 OVERPASS)	270.41	VAR.	101.34	220.00	11.15	14.75	39.89
241+97.25	243+33.58	LT. - L.M.L. (HWY. 270 OVERPASS)	136.33	VAR.	55.62	220.00	6.12	17.48	23.83
244+73.13	246+11.48	RT. - R.M.L. (HWY. 270 OVERPASS)	138.35	VAR.	40.46	220.00	4.45	8.98	12.42
245+34.42	248+04.82	RT. - L.M.L. (HWY. 270 OVERPASS)	270.40	VAR.	101.34	220.00	11.15	14.75	39.88
245+62.27	248+32.89	LT. - L.M.L. (HWY. 270 OVERPASS)	270.62	VAR.	102.36	220.00	11.26	15.02	40.65
342+09.87	344+29.01	RT. - R.M.L. (HOLLAND AVE. OVERPASS)	219.14	VAR.	101.31	220.00	11.14	22.44	49.18
342+28.36	344+98.72	LT. - R.M.L. (HOLLAND AVE. OVERPASS)	270.36	VAR.	101.31	220.00	11.14	14.74	39.85
344+01.83	344+88.17	LT. - L.M.L. (HOLLAND AVE. OVERPASS)	86.34	VAR.	39.14	220.00	4.31	21.58	18.63
346+50.60	347+88.15	RT. - R.M.L. (HOLLAND AVE. OVERPASS)	137.55	VAR.	39.14	220.00	4.31	8.50	11.69
347+42.49	349+61.67	RT. - L.M.L. (HOLLAND AVE. OVERPASS)	219.18	VAR.	101.34	220.00	11.15	22.45	49.21
347+09.74	349+80.15	LT. - L.M.L. (HOLLAND AVE. OVERPASS)	270.41	VAR.	101.34	220.00	11.15	14.75	39.89
446+27.77	448+46.98	RT. - R.M.L. (HWY. 104 OVERPASS)	219.21	VAR.	92.97	220.00	10.23	18.89	41.41
445+85.88	448+21.11	LT. - R.M.L. (HWY. 104 OVERPASS)	235.23	VAR.	96.74	220.00	10.64	17.76	41.78
446+33.73	447+12.87	LT. - L.M.L. (HWY. 104 OVERPASS)	79.14	VAR.	24.79	220.00	2.73	10.30	8.15
TOTALS:					**2559.30**		**281.55**		**1367.27**

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

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-24-2016

QUANTITIES

Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	177	235

(2) QUANTITIES

BASE AND SURFACING - MAIN LANES

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	PG 76-22
			FEET							FEET				FEET			TON	FEET			TON	FEET			TON	FEET			TON	TON
175+90.50	181+80.04	MAIN LANES - FULL DEPTH NORMAL CROWN- LT.	589.54					151.75	894.63	72.00	4716.32	0.05	235.82	24.00	1572.11	440.00	345.86	24.00	1572.11	330.00	259.40	24.00	1572.11	220.00	172.93	24.00	1572.11	220.00	172.93	345.86
231+73.40	242+73.40	MAIN LANES - FULL DEPTH NORMAL CROWN- LT.	1100.00					151.75	1669.25	72.00	8800.00	0.05	440.00	24.00	2933.33	440.00	645.33	24.00	2933.33	330.00	484.00	24.00	2933.33	220.00	322.67	24.00	2933.33	220.00	322.67	645.34
245+91.81	250+73.89	MAIN LANES - FULL DEPTH NORMAL CROWN- LT.	482.08					151.75	731.56	72.00	3856.64	0.05	192.83	24.00	1285.55	440.00	282.82	24.00	1285.55	330.00	212.12	24.00	1285.55	220.00	141.41	24.00	1285.55	220.00	141.41	282.82
333+87.17	344+87.17	MAIN LANES - FULL DEPTH NORMAL CROWN- LT.	1100.00					151.75	1669.25	72.00	8800.00	0.05	440.00	24.00	2933.33	440.00	645.33	24.00	2933.33	330.00	484.00	24.00	2933.33	220.00	322.67	24.00	2933.33	220.00	322.67	645.34
347+41.62	358+41.62	MAIN LANES - FULL DEPTH NORMAL CROWN- LT.	1100.00					151.75	1669.25	72.00	8800.00	0.05	440.00	24.00	2933.33	440.00	645.33	24.00	2933.33	330.00	484.00	24.00	2933.33	220.00	322.67	24.00	2933.33	220.00	322.67	645.34
437+40.77	447+40.77	MAIN LANES - FULL DEPTH NORMAL CROWN- LT.	1000.00					151.75	1517.50	72.00	8000.00	0.05	400.00	24.00	2666.67	440.00	586.67	24.00	2666.67	330.00	440.00	24.00	2666.67	220.00	293.33	24.00	2666.67	220.00	293.33	586.66
175+90.50	181+80.04	MAIN LANES - FULL DEPTH NORMAL CROWN- RT.	589.54					151.75	894.63	72.00	4716.32	0.05	235.82	24.00	1572.11	440.00	345.86	24.00	1572.11	330.00	259.40	24.00	1572.11	220.00	172.93	24.00	1572.11	220.00	172.93	345.86
231+14.91	242+14.91	MAIN LANES - FULL DEPTH NORMAL CROWN- RT.	1100.00					151.75	1669.25	72.00	8800.00	0.05	440.00	24.00	2933.33	440.00	645.33	24.00	2933.33	330.00	484.00	24.00	2933.33	220.00	322.67	24.00	2933.33	220.00	322.67	645.34
245+33.30	250+73.89	MAIN LANES - FULL DEPTH NORMAL CROWN- RT.	540.59					151.75	820.35	72.00	4324.72	0.05	216.24	24.00	1441.57	440.00	317.15	24.00	1441.57	330.00	237.86	24.00	1441.57	220.00	158.57	24.00	1441.57	220.00	158.57	317.14
333+48.36	344+48.36	MAIN LANES - FULL DEPTH NORMAL CROWN- RT.	1100.00					151.75	1669.25	72.00	8800.00	0.05	440.00	24.00	2933.33	440.00	645.33	24.00	2933.33	330.00	484.00	24.00	2933.33	220.00	322.67	24.00	2933.33	220.00	322.67	645.34
347+08.81	358+08.81	MAIN LANES - FULL DEPTH NORMAL CROWN- RT.	1100.00					151.75	1669.25	72.00	8800.00	0.05	440.00	24.00	2933.33	440.00	645.33	24.00	2933.33	330.00	484.00	24.00	2933.33	220.00	322.67	24.00	2933.33	220.00	322.67	645.34
438+24.82	448+24.82	MAIN LANES - FULL DEPTH NORMAL CROWN- RT.	1000.00					151.75	1517.50	72.00	8000.00	0.05	400.00	24.00	2666.67	440.00	586.67	24.00	2666.67	330.00	440.00	24.00	2666.67	220.00	293.33	24.00	2666.67	220.00	293.33	586.66
175+14.73	175+90.50	MAIN LANES - FULL DEPTH SUPERELEVATED - LT.	75.77					151.75	114.98	72.00	606.16	0.05	30.31	24.00	202.05	440.00	44.45	24.00	202.05	330.00	33.34	24.00	202.05	220.00	22.23	24.00	202.05	220.00	22.23	44.46
181+80.04	186+14.73	MAIN LANES - FULL DEPTH SUPERELEVATED - LT.	434.69					151.75	659.64	72.00	3477.52	0.05	173.88	24.00	1159.17	440.00	255.02	24.00	1159.17	330.00	191.26	24.00	1159.17	220.00	127.51	24.00	1159.17	220.00	127.51	255.02
250+73.89	256+91.81	MAIN LANES - FULL DEPTH SUPERELEVATED - LT.	617.92					151.75	937.69	72.00	4943.36	0.05	247.17	24.00	1647.79	440.00	362.51	24.00	1647.79	330.00	271.89	24.00	1647.79	220.00	181.26	24.00	1647.79	220.00	181.26	362.52
175+14.73	175+90.50	MAIN LANES - FULL DEPTH SUPERELEVATED - RT.	75.77					151.75	114.98	72.00	606.16	0.05	30.31	24.00	202.05	440.00	44.45	24.00	202.05	330.00	33.34	24.00	202.05	220.00	22.23	24.00	202.05	220.00	22.23	44.46
181+80.04	186+14.73	MAIN LANES - FULL DEPTH SUPERELEVATED - RT.	434.69					151.75	659.64	72.00	3477.52	0.05	173.88	24.00	1159.17	440.00	255.02	24.00	1159.17	330.00	191.26	24.00	1159.17	220.00	127.51	24.00	1159.17	220.00	127.51	255.02
250+73.89	256+33.30	MAIN LANES - FULL DEPTH SUPERELEVATED - RT.	559.41					151.75	848.90	72.00	4475.28	0.05	223.76	24.00	1491.76	440.00	328.19	24.00	1491.76	330.00	246.14	24.00	1491.76	220.00	164.09	24.00	1491.76	220.00	164.09	328.18
211+49.38	231+73.40	MAIN LANES - RUBBLIZE & OVERLAY - NC - LT.	2024.02							72.00	16192.16	0.05	809.61	24.00	5397.39	520.00	1403.32	24.00	5397.39	330.00	890.57	24.00	5397.39	220.00	593.71	24.00	5397.39	220.00	593.71	1187.42
267+25.57	333+87.14	MAIN LANES - RUBBLIZE & OVERLAY - NC - LT.	6661.57							72.00	53292.56	0.05	2664.63	24.00	17764.19	520.00	4618.69	24.00	17764.19	330.00	2931.09	24.00	17764.19	220.00	1954.06	24.00	17764.19	220.00	1954.06	3908.12
358+41.62	358+48.43	MAIN LANES - RUBBLIZE & OVERLAY - NC - LT.	6.81							72.00	54.48	0.05	2.72	24.00	18.16	520.00	4.72	24.00	18.16	330.00	3.00	24.00	18.16	220.00	2.00	24.00	18.16	220.00	2.00	4.00
377+60.20	437+40.77	MAIN LANES - RUBBLIZE & OVERLAY - NC - LT.	5980.57							72.00	47844.56	0.05	2392.23	24.00	15948.19	520.00	4146.53	24.00	15948.19	330.00	2631.45	24.00	15948.19	220.00	1754.30	24.00	15948.19	220.00	1754.30	3508.60
211+49.38	231+14.91	MAIN LANES - RUBBLIZE & OVERLAY - NC - RT.	1965.53							72.00	15724.24	0.05	786.21	24.00	5241.41	520.00	1362.77	24.00	5241.41	330.00	864.83	24.00	5241.41	220.00	576.56	24.00	5241.41	220.00	576.56	1153.12
267+25.57	333+48.36	MAIN LANES - RUBBLIZE & OVERLAY - NC - RT.	6622.79							72.00	52982.32	0.05	2649.12	24.00	17660.77	520.00	4591.80	24.00	17660.77	330.00	2914.03	24.00	17660.77	220.00	1942.68	24.00	17660.77	220.00	1942.68	3885.36
358+02.81	358+48.43	MAIN LANES - RUBBLIZE & OVERLAY - NC - RT.	45.62							72.00	364.96	0.05	18.25	24.00	121.65	520.00	31.63	24.00	121.65	330.00	20.07	24.00	121.65	220.00	13.38	24.00	121.65	220.00	13.38	26.76
377+60.20	438+24.82	MAIN LANES - RUBBLIZE & OVERLAY - NC - RT.	6064.62							72.00	48516.96	0.05	2425.85	24.00	16172.32	520.00	4204.80	24.00	16172.32	330.00	2668.43	24.00	16172.32	220.00	1778.96	24.00	16172.32	220.00	1778.96	3557.92
186+14.73	211+49.38	MAIN LANES - RUBBLIZE & OVERLAY - SUPER E - LT.	2534.65							72.00	20277.20	0.05	1013.86	24.00	6759.07	520.00	1757.36	24.00	6759.07	330.00	1115.25	24.00	6759.07	220.00	743.50	24.00	6759.07	220.00	743.50	1487.00
256+91.81	267+25.57	MAIN LANES - RUBBLIZE & OVERLAY - SUPER E - LT.	1033.76							72.00	8270.08	0.05	413.50	24.00	2756.69	520.00	716.74	24.00	2756.69	330.00	454.85	24.00	2756.69	220.00	303.24	24.00	2756.69	220.00	303.24	606.48
358+48.43	377+60.20	MAIN LANES - RUBBLIZE & OVERLAY - SUPER E - LT.	1911.77							72.00	15294.16	0.05	764.71	24.00	5098.05	520.00	1325.49	24.00	5098.05	330.00	841.18	24.00	5098.05	220.00	560.79	24.00	5098.05	220.00	560.79	1121.58
186+14.73	211+49.38	MAIN LANES - RUBBLIZE & OVERLAY - SUPER E - RT.	2534.65							72.00	20277.20	0.05	1013.86	24.00	6759.07	520.00	1757.36	24.00	6759.07	330.00	1115.25	24.00	6759.07	220.00	743.50	24.00	6759.07	220.00	743.50	1487.00
256+33.30	267+25.57	MAIN LANES - RUBBLIZE & OVERLAY - SUPER E - RT.	1092.27							72.00	8738.16	0.05	436.91	24.00	2912.72	520.00	757.31	24.00	2912.72	330.00	480.60	24.00	2912.72	220.00	320.40	24.00	2912.72	220.00	320.40	640.80
358+48.43	377+60.20	MAIN LANES - RUBBLIZE & OVERLAY - SUPER E - RT.	1911.77							72.00	15294.16	0.05	764.71	24.00	5098.05	520.00	1325.49	24.00	5098.05	330.00	841.18	24.00	5098.05	220.00	560.79	24.00	5098.05	220.00	560.79	1121.58
RAMP OVERLAYS (TOP 2")																														
175+15.42	175+78.99	RAMP D65	63.57			0.27	0.17			15.00	105.95	0.17	18.01													15.00	105.95	220.00	11.65	11.65
177+44.16	180+24.29	RAMP A65	280.13	0.03	8.40	16.86	47.23			15.00	466.88	0.17	79.37													15.00	466.88	220.00	51.36	51.36
232+09.90	237+12.60	HWY. 270 RAMP 1	502.70	0.06	30.16	35.46	178.26			15.00	837.83	0.17	142.43													15.00	837.83	220.00	92.16	92.16
232+53.30	237+63.00	HWY. 270 RAMP 4	509.70	0.06	30.58	67.30	343.03			15.00	849.50	0.17	144.42													15.00	849.50	220.00	93.45	93.45
250+67.11	256+04.89	HWY. 270 RAMP 2	537.78	0.07	37.64	75.04	403.55			15.00	896.30	0.17	152.37													15.00	896.30	220.00	98.59	98.59
251+25.45	256+49.50	HWY. 270 RAMP 3	524.05	0.06	31.44	71.19	373.07			15.00	873.42	0.17	148.48													15.00	873.42	220.00	96.08	96.08
335+08.82	339+77.53	HOLLAND AVE. RAMP 1	468.71	0.06	28.12	56.91	266.74			15.00	781.18	0.17	132.80													15.00	781.18	220.00	85.93	85.93
332+54.25	338+04.25	HOLLAND AVE. RAMP 4	550.00	0.07	38.50	78.43	431.37			15.00	916.67	0.17	155.83													15.00	916.67	220.00	100.83	100.83
353+63.40	359+13.40	HOLLAND AVE. RAMP 2	550.00	0.07	38.50	78.43	431.37			15.00	916.67	0.17	155.83													15.00	916.67	220.00	100.83	100.83
353+30.27	358+80.27	HOLLAND AVE RAMP 3	550.00	0.07	38.50	78.43	431.37			15.00	916.67	0.17	155.83													15.00	916.67	220.00	100.83	100.83
439+61.27	444+43.24	HWY. 104 RAMP 1	481.97	0.06	28.92	60.23	290.29			15.00	803.28	0.17	136.56													15.00	803.28	220.00	88.36	88.36
435+75.68	441+25.68	HWY. 104 RAMP 4	550.00	0.07	38.50	78.43	431.37			15.00	916.67	0.17	155.83													15.00	916.67	220.00	100.83	100.83
RAMP OVERLAY ELEVATION TRANSITIONS																														
178+44.16	180+24.29	RAMP A65	180.13							15.00	300.22	0.05	15.01									15.00	300.22	198.14	29.74					29.74
232+09.90	234+12.60	HWY. 270 RAMP 1	202.70							30.00	675.67	0.05	33.78					15.00	337.83	442.97	74.82	15.00	337.83	220.00	37.16					37.16
234+12.60	236+12.60	HWY. 270 RAMP 1	200.00							15.00	333.33	0.05	16.67									15.00	333.33	220.00	36.67					36.67
232+53.30	234+63.00	HWY. 270 RAMP 4	209.70							30.00	699.00	0.05	34.95					15.00	349.50	450.66	78.75	15.00	349.50	220.00	38.45					38.45
234+63.00	236+63.00	HWY. 270 RAMP 4	200.00							15.00	333.33	0.05	16.67									15.00	333.33	220.00	36.67					36.67
251+67.11	253+67.11	HWY. 270 RAMP 2	200.00							15.00	333.33	0.05	16.67									15.00	333.33	220.00	36.67					36.67
253+67.11	256+04.89	HWY. 270 RAMP 2	237.78							30.00	792.60	0.05	39.63					15.00	396.30	481.55	95.42	15.00	396.30	220.00	43.59					43.59
252+25.45	254+25.45	HWY. 270 RAMP 3	200.00							15.00	333.33	0.05	16.67									15.00	333.33	220.00	36.67					36.67
254+25.45	256+49.50	HWY. 270 RAMP 3	224.05							30.00	746.83	0.05	37.34					15.00	373.42	466.46	87.09	15.00	373.42	220.00	41.08					41.08
335+08.82	336+77.53	HOLLAND AVE. RAMP 1	168.71							30.00	562.37	0.05	28.12					15.00	281.18	405.58	57.02	15.00	281.18	220.00	30.93					30.93
336+77.53	338+77.53	HOLLAND AVE. RAMP 1	200.00							15.00	333.33	0.05	16.67									15.00	333.33	220.00	36.67					36.67
332+54.25	333+04.25	HOLLAND AVE. RAMP 4	50.00							45.00	250.00	0.05	12.50	15.00	83.33	385.00	16.04	15.00	83.33	330.00	13.75	15.00	83.33	220.00	9.17					9.17
333+04.25	335+04.25	HOLLAND AVE. RAMP 4	200.00															15.00	333.33	440.00	73.33	15.00	333.33	220.00	36.67					36.67
335+04.25	337+04.25	HOLLAND AVE. RAMP 4	200.00																			15.00	333.33	220.00	36.67					36.67
353+63.40	354+13.40	HOLLAND AVE. RAMP 2	50.00							45.00	250.00	0.05	12.50	15.00	83.33	385.00	16.04	15.00	83.33	330.00	13.75	15.00	83.33	220.00	9.17					9.17
354+13.40	356+13.40	HOLLAND AVE. RAMP 2	200.00															15.00	333.33	440.00	73.33	15.00	333.33	220.00	36.67					36.67
356+13.40	358+13.40	HOLLAND AVE. RAMP 2	200.00																			15.00	333.33	220.00	36.67					36.67
353+30.27	353+80.27	HOLLAND AVE RAMP 3	50.00							45.00	250.00	0.05	12.50	15.00	83.33	385.00	16.04	15.00	83.33	330.00	13.75	15.00	83.33	220.00	9.17					9.17
353+80.27	355+80.27	HOLLAND AVE RAMP 3	200.00															15.00	333.33	440.00	73.33	15.00	333.33	220.00	36.67					36.67
355+80.27	357+80.27	HOLLAND AVE RAMP 3	200.00																			15.00	333.33	220.00	36.67					36.67
439+61.27	441+43.24	HWY. 104 RAMP 1	181.97							30.00	606.57	0.05	30.33					15.00	303.28	420.17	63.71	15.00	303.28	220.00	33.36					33.36
441+43.24	443+43.24	HWY. 104 RAMP 1	200.00							15.00	333.33	0.05	16.67									15.00	333.33	220.00	36.67					36.67
435+75.68	436+25.68	HWY. 104 RAMP 4	50.00							45.00	250.00	0.05	12.50	15.00	83.33	385.00	16.04	15.00	83.33	330.00	13.75	15.00	83.33	220.00	9.17					9.17
436+25.68	438+25.68	HWY. 104 RAMP 4	200.00															15.00	333.33	440.00	73.33	15.00	333.33	220.00	36.67					36.67
438+25.68	440+25.68	HWY. 104 RAMP 4	200.00																			15.00	333.33	220.00	36.67					36.67
TOTALS:						349.26		3627.82		19727.50		443787.46			23303.13		142707.70		35694.82		146082.53		24296.92		149716.05		16465.59		151655.40		16682.12	33147.71

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
6-21-2016

QUANTITIES

Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	178	235

(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")							
				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																											
175+90.50	181+80.04	OUTSIDE SHOULDER - FULL DEPTH NORMAL CROWN - LT.	589.54	0.19	112.01	47.00	277.08	41.75	246.13	30.74	2013.61	0.05	100.68	10.38	679.94	440.00	149.59	10.23	670.11	330.00	110.57	10.13	663.56	220.00	72.99	10.00	655.04	220.00	72.05	145.04
231+73.40	242+73.40	OUTSIDE SHOULDER - FULL DEPTH NORMAL CROWN - LT.	1100.00	0.19	209.00	47.00	517.00	41.75	459.25	30.74	3757.11	0.05	187.86	10.38	1268.67	440.00	279.11	10.23	1250.33	330.00	206.30	10.13	1238.11	220.00	136.19	10.00	1222.22	220.00	134.44	270.63
245+91.81	250+73.89	OUTSIDE SHOULDER - FULL DEPTH NORMAL CROWN - LT.	482.08	0.19	91.60	47.00	226.58	41.75	201.27	30.74	1646.57	0.05	82.33	10.38	556.00	440.00	122.32	10.23	547.96	330.00	90.41	10.13	542.61	220.00	59.69	10.00	535.64	220.00	58.92	118.61
333+87.17	344+87.17	OUTSIDE SHOULDER - FULL DEPTH NORMAL CROWN - LT.	1100.00	0.19	209.00	47.00	517.00	41.75	459.25	30.74	3757.11	0.05	187.86	10.38	1268.67	440.00	279.11	10.23	1250.33	330.00	206.30	10.13	1238.11	220.00	136.19	10.00	1222.22	220.00	134.44	270.63
347+41.62	358+41.62	OUTSIDE SHOULDER - FULL DEPTH NORMAL CROWN - LT.	1100.00	0.19	209.00	47.00	517.00	41.75	459.25	30.74	3757.11	0.05	187.86	10.38	1268.67	440.00	279.11	10.23	1250.33	330.00	206.30	10.13	1238.11	220.00	136.19	10.00	1222.22	220.00	134.44	270.63
437+40.77	447+40.77	OUTSIDE SHOULDER - FULL DEPTH NORMAL CROWN - LT.	1000.00	0.19	190.00	47.00	470.00	41.75	417.50	30.74	3415.56	0.05	170.78	10.38	1153.33	440.00	253.73	10.23	1136.67	330.00	187.55	10.13	1125.56	220.00	123.81	10.00	1111.11	220.00	122.22	246.03
175+90.50	181+80.04	OUTSIDE SHOULDER - FULL DEPTH NORMAL CROWN - RT.	589.54	0.19	112.01	47.00	277.08	41.75	246.13	30.74	2013.61	0.05	100.68	10.38	679.94	440.00	149.59	10.23	670.11	330.00	110.57	10.13	663.56	220.00	72.99	10.00	655.04	220.00	72.05	145.04
231+14.91	242+14.91	OUTSIDE SHOULDER - FULL DEPTH NORMAL CROWN - RT.	1100.00	0.19	209.00	47.00	517.00	41.75	459.25	30.74	3757.11	0.05	187.86	10.38	1268.67	440.00	279.11	10.23	1250.33	330.00	206.30	10.13	1238.11	220.00	136.19	10.00	1222.22	220.00	134.44	270.63
245+33.30	250+73.89	OUTSIDE SHOULDER - FULL DEPTH NORMAL CROWN - RT.	540.59	0.19	102.71	47.00	254.08	41.75	225.70	30.74	1846.42	0.05	92.32	10.38	623.48	440.00	137.17	10.23	614.47	330.00	101.39	10.13	608.46	220.00	66.93	10.00	600.66	220.00	66.07	133.00
333+48.36	344+48.36	OUTSIDE SHOULDER - FULL DEPTH NORMAL CROWN - RT.	1100.00	0.19	209.00	47.00	517.00	41.75	459.25	30.74	3757.11	0.05	187.86	10.38	1268.67	440.00	279.11	10.23	1250.33	330.00	206.30	10.13	1238.11	220.00	136.19	10.00	1222.22	220.00	134.44	270.63
347+08.81	358+08.81	OUTSIDE SHOULDER - FULL DEPTH NORMAL CROWN - RT.	1100.00	0.19	209.00	47.00	517.00	41.75	459.25	30.74	3757.11	0.05	187.86	10.38	1268.67	440.00	279.11	10.23	1250.33	330.00	206.30	10.13	1238.11	220.00	136.19	10.00	1222.22	220.00	134.44	270.63
438+24.82	448+24.82	OUTSIDE SHOULDER - FULL DEPTH NORMAL CROWN - RT.	1000.00	0.19	190.00	47.00	470.00	41.75	417.50	30.74	3415.56	0.05	170.78	10.38	1153.33	440.00	253.73	10.23	1136.67	330.00	187.55	10.13	1125.56	220.00	123.81	10.00	1111.11	220.00	122.22	246.03
175+14.73	175+90.50	OUTSIDE SHOULDER - FULL DEPTH SUPER E - LT.	75.77	0.13	9.85	132.28	100.23	46.67	35.36	30.36	255.60	0.05	12.78	10.38	87.39	440.00	19.23	10.23	86.13	330.00	14.21	10.13	85.28	220.00	9.38	10.00	84.19	220.00	9.26	18.64
181+80.04	186+14.73	OUTSIDE SHOULDER - FULL DEPTH SUPER E - LT.	434.69	0.13	56.51	132.28	575.01	46.67	202.87	30.36	1466.35	0.05	73.32	10.38	501.34	440.00	110.29	10.23	494.10	330.00	81.53	10.13	489.27	220.00	53.82	10.00	482.99	220.00	53.13	106.95
250+73.89	256+91.81	OUTSIDE SHOULDER - FULL DEPTH SUPER E - LT.	617.92	0.13	80.33	132.28	817.38	46.67	288.38	30.36	2084.45	0.05	104.22	10.38	712.67	440.00	156.79	10.23	702.37	330.00	115.89	10.13	695.50	220.00	76.51	10.00	686.58	220.00	75.52	152.03
175+14.73	175+90.50	OUTSIDE SHOULDER - FULL DEPTH SUPER E - RT.	75.77	0.13	9.85	132.28	100.23	46.67	35.36	30.36	255.60	0.05	12.78	10.38	87.39	440.00	19.23	10.23	86.13	330.00	14.21	10.13	85.28	220.00	9.38	10.00	84.19	220.00	9.26	18.64
181+80.04	186+14.73	OUTSIDE SHOULDER - FULL DEPTH SUPER E - RT.	434.69	0.13	56.51	132.28	575.01	46.67	202.87	30.36	1466.35	0.05	73.32	10.38	501.34	440.00	110.29	10.23	494.10	330.00	81.53	10.13	489.27	220.00	53.82	10.00	482.99	220.00	53.13	106.95
250+73.89	256+33.30	OUTSIDE SHOULDER - FULL DEPTH SUPER E - RT.	559.41	0.13	72.72	132.28	739.99	46.67	261.08	30.36	1887.08	0.05	94.35	10.38	645.19	440.00	141.94	10.23	635.86	330.00	104.92	10.13	629.65	220.00	69.26	10.00	621.57	220.00	68.37	137.63
211+49.38	231+73.40	OUTSIDE SHOULDER-RUBBLIZE & OVERLAY - NC - LT.	2024.02	0.07	141.68	39.21	793.62			30.36	6827.69	0.05	341.38	10.39	2336.62	520.00	607.52	10.23	2300.64	330.00	379.61	10.13	2278.15	220.00	250.60	10.00	2248.91	220.00	247.38	497.98
267+25.57	333+87.14	OUTSIDE SHOULDER-RUBBLIZE & OVERLAY - NC - LT.	6661.57	0.07	466.31	39.21	2612.00			30.36	22471.70	0.05	1123.59	10.39	7690.41	520.00	1999.51	10.23	7571.98	330.00	1249.38	10.13	7497.97	220.00	824.78	10.00	7401.74	220.00	814.19	1638.97
358+41.62	358+48.43	OUTSIDE SHOULDER-RUBBLIZE & OVERLAY - NC - LT.	6.81	0.07	0.48	39.21	2.67			30.36	22.97	0.05	1.15	10.39	7.86	520.00	2.04	10.23	7.74	330.00	1.28	10.13	7.67	220.00	0.84	10.00	7.57	220.00	0.83	1.67
377+60.20	437+40.77	OUTSIDE SHOULDER-RUBBLIZE & OVERLAY - NC - LT.	5980.57	0.07	418.64	39.21	2344.98			30.36	20174.46	0.05	1008.72	10.39	6904.24	520.00	1795.10	10.23	6797.91	330.00	1121.66	10.13	6731.46	220.00	740.46	10.00	6645.08	220.00	730.96	1471.42
211+49.38	231+14.91	OUTSIDE SHOULDER-RUBBLIZE & OVERLAY - NC - RT.	1965.53	0.07	137.59	39.21	770.68			30.36	6630.39	0.05	331.52	10.39	2269.10	520.00	589.97	10.23	2234.15	330.00	368.63	10.13	2212.31	220.00	243.35	10.00	2183.92	220.00	240.23	483.58
267+25.57	333+48.36	OUTSIDE SHOULDER-RUBBLIZE & OVERLAY - NC - RT.	6622.79	0.07	463.60	39.21	2596.80			30.36	22340.88	0.05	1117.04	10.39	7645.64	520.00	1987.87	10.23	7527.90	330.00	1242.10	10.13	7454.32	220.00	819.98	10.00	7358.66	220.00	809.45	1629.43
358+02.81	358+48.43	OUTSIDE SHOULDER-RUBBLIZE & OVERLAY - NC - RT.	45.62	0.07	3.19	39.21	17.89			30.36	153.89	0.05	7.69	10.39	52.67	520.00	13.69	10.23	51.85	330.00	8.56	10.13	51.35	220.00	5.65	10.00	50.69	220.00	5.58	11.23
377+60.20	438+24.82	OUTSIDE SHOULDER-RUBBLIZE & OVERLAY - NC - RT.	6064.62	0.07	424.52	39.21	2377.94			30.36	20457.98	0.05	1022.90	10.39	7001.27	520.00	1820.33	10.23	6893.45	330.00	1137.42	10.13	6826.07	220.00	750.87	10.00	6738.47	220.00	741.23	1492.10
186+14.73	211+49.38	OUTSIDE SHOULDER - RUBBLIZE & OVERLAY - SUPER E - LT.	2534.65	0.07	177.43	39.21	993.84			30.75	8660.05	0.05	433.00	10.39	2926.11	520.00	760.79	10.23	2881.05	330.00	475.37	10.13	2852.89	220.00	313.82	10.00	2816.28	220.00	309.79	623.61
256+91.81	267+25.57	OUTSIDE SHOULDER - RUBBLIZE & OVERLAY - SUPER E - LT.	1033.76	0.07	72.36	39.21	405.34			30.75	3532.01	0.05	176.60	10.39	1193.42	520.00	310.29	10.23	1175.04	330.00	193.88	10.13	1163.55	220.00	127.99	10.00	1148.62	220.00	126.35	254.34
358+48.43	377+60.20	OUTSIDE SHOULDER - RUBBLIZE & OVERLAY - SUPER E - LT.	1911.77	0.07	133.82	39.21	749.61			30.75	6531.88	0.05	326.59	10.39	2207.03	520.00	573.83	10.23	2173.05	330.00	358.55	10.13	2151.80	220.00	236.70	10.00	2124.19	220.00	233.66	470.36
186+14.73	211+49.38	OUTSIDE SHOULDER - RUBBLIZE & OVERLAY - SUPER E - RT.	2534.65	0.07	177.43	39.21	993.84			30.75	8660.05	0.05	433.00	10.39	2926.11	520.00	760.79	10.23	2881.05	330.00	475.37	10.13	2852.89	220.00	313.82	10.00	2816.28	220.00	309.79	623.61
256+33.30	267+25.57	OUTSIDE SHOULDER - RUBBLIZE & OVERLAY - SUPER E - RT.	1092.27	0.07	76.46	39.21	428.28			30.75	3731.92	0.05	186.60	10.39	1260.97	520.00	327.85	10.23	1241.55	330.00	204.86	10.13	1229.41	220.00	135.24	10.00	1213.83	220.00	133.50	268.74
358+48.43	377+60.20	OUTSIDE SHOULDER - RUBBLIZE & OVERLAY - SUPER E - RT.	1911.77	0.07	133.82	39.21	749.61			30.75	6531.88	0.05	326.59	10.39	2207.03	520.00	573.83	10.23	2173.05	330.00	358.55	10.13	2151.80	220.00	236.70	10.00	2124.19	220.00	233.66	470.36
		INSIDE SHOULDERS - MAIN LANES																											
175+90.50	181+80.04	INSIDE SHOULDER - FULL DEPTH NORMAL CROWN - LT.	589.54	0.23	135.59	71.50	421.52	22.00	129.70	12.36	809.63	0.05	40.48	4.38	286.91	440.00	63.12	4.23	277.08	330.00	45.72	4.13	270.53	220.00	29.76	4.00	262.02	220.00	28.82	58.58
231+73.40	242+73.40	INSIDE SHOULDER - FULL DEPTH NORMAL CROWN - LT.	1100.00	0.23	253.00	71.50	786.50	22.00	242.00	12.36	1510.67	0.05	75.53	4.38	535.33	440.00	117.77	4.23	517.00	330.00	85.31	4.13	504.78	220.00	55.53	4.00	488.89	220.00	53.78	109.31
245+91.81	250+73.89	INSIDE SHOULDER - FULL DEPTH NORMAL CROWN - LT.	482.08	0.23	110.88	71.50	344.69	22.00	106.06	12.36	662.06	0.05	33.10	4.38	234.61	440.00	51.61	4.23	226.58	330.00	37.39	4.13	221.22	220.00	24.33	4.00	214.26	220.00	23.57	47.90
333+87.17	344+87.17	INSIDE SHOULDER - FULL DEPTH NORMAL CROWN - LT.	1100.00	0.23	253.00	71.50	786.50	22.00	242.00	12.36	1510.67	0.05	75.53	4.38	535.33	440.00	117.77	4.23	517.00	330.00	85.31	4.13	504.78	220.00	55.53	4.00	488.89	220.00	53.78	109.31
347+41.62	358+41.62	INSIDE SHOULDER - FULL DEPTH NORMAL CROWN - LT.	1100.00	0.23	253.00	71.50	786.50	22.00	242.00	12.36	1510.67	0.05	75.53	4.38	535.33	440.00	117.77	4.23	517.00	330.00	85.31	4.13	504.78	220.00	55.53	4.00	488.89	220.00	53.78	109.31
437+40.77	447+40.77	INSIDE SHOULDER - FULL DEPTH NORMAL CROWN - LT.	1000.00	0.23	230.00	71.50	715.00	22.00	220.00	12.36	1373.33	0.05	68.67	4.38	486.67	440.00	107.07	4.23	470.00	330.00	77.55	4.13	458.89	220.00	50.48	4.00	444.44	220.00	48.89	99.37
175+90.50	181+80.04	INSIDE SHOULDER - FULL DEPTH NORMAL CROWN - RT.	589.54	0.23	135.59	71.50	421.52	22.00	129.70	12.36	809.63	0.05	40.48	4.38	286.91	440.00	63.12	4.23	277.08	330.00	45.72	4.13	270.53	220.00	29.76	4.00	262.02	220.00	28.82	58.58
231+14.91	242+14.91	INSIDE SHOULDER - FULL DEPTH NORMAL CROWN - RT.	1100.00	0.23	253.00	71.50	786.50	22.00	242.00	12.36	1510.67	0.05	75.53	4.38	535.33	440.00	117.77	4.23	517.00	330.00	85.31	4.13	504.78	220.00	55.53	4.00	488.89	220.00	53.78	109.31
245+33.30	250+73.89	INSIDE SHOULDER - FULL DEPTH NORMAL CROWN - RT.	540.59	0.23	124.34	71.50	386.52	22.00	118.93	12.36	742.41	0.05	37.12	4.38	263.09	440.00	57.88	4.23	254.08	330.00	41.92	4.13	248.07	220.00	27.29	4.00	240.26	220.00	26.43	53.72
333+48.36	344+48.36	INSIDE SHOULDER - FULL DEPTH NORMAL CROWN - RT.	1100.00	0.23	253.00	71.50	786.50	22.00	242.00	12.36	1510.67	0.05	75.53	4.38	535.33	440.00	117.77	4.23	517.00	330.00	85.31	4.13	504.78	220.00	55.53	4.00	488.89	220.00	53.78	109.31
347+08.81	358+08.81	INSIDE SHOULDER - FULL DEPTH NORMAL CROWN - RT.	1100.00	0.23	253.00	71.50	786.50	22.00	242.00	12.36	1510.67	0.05	75.53	4.38	535.33	440.00	117.77	4.23	517.00	330.00	85.31	4.13	504.78	220.00	55.53	4.00	488.89	220.00	53.78	109.31
438+24.82	448+24.82	INSIDE SHOULDER - FULL DEPTH NORMAL CROWN - RT.	1000.00	0.23	230.00	71.50	715.00	22.00	220.00	12.36	1373.33	0.05	68.67	4.38	486.67	440.00	107.07	4.23	470.00	330.00	77.55	4.13	458.89	220.00	50.48	4.00	444.44	220.00	48.89	99.37
175+14.73	175+90.50	INSIDE SHOULDER - FULL DEPTH SUPER E - LT.	75.77	0.11	8.33	173.95	131.80	29.86	22.62	12.36	104.06	0.05	5.20	4.38	36.87	458.00	8.44	4.23	35.61	330.00	5.88	4.13	34.77	220.00	3.82	4.00	33.68	220.00	3.70	7.52
181+80.04	186+14.73	INSIDE SHOULDER - FULL DEPTH SUPER E - LT.	434.69	0.11	47.82	173.95	756.14	29.86	129.80	12.38	597.94	0.05	29.90	4.42	213.48	458.00	48.89	4.25	205.27	330.00	33.87	4.13	199.47	220.00	21.94	4.00	193.20	220.00	21.25	43.19
250+73.89	256+91.81	INSIDE SHOULDER - FULL DEPTH SUPER E - LT.	617.92	0.11	67.97	173.95	1074.87	29.86	184.51	12.38	849.98	0.05	42.50	4.42	303.47	458.00	69.49	4.25	291.80	330.00	48.15	4.13	283.56	220.00	31.19	4.00	274.63	220.00	30.21	61.40
175+14.73	175+90.50	INSIDE SHOULDER - FULL DEPTH SUPER E - RT.	75.77	0.11	8.33	173.95	131.80	29.86	22.62	12.38	104.23	0.05	5.21	4.42	37.21	458.00	8.52	4.25	35.78	330.00	5.90	4.13	34.77	220.00	3.82	4.00	33.68	220.00	3.70	7.52
181+80.04	186+14.73	INSIDE SHOULDER - FULL DEPTH SUPER E - RT.	434.69	0.11	47.82	173.95	756.14	29.86	129.80	12.38	597.94	0.05	29.90	4.42	213.48	458.00	48.89	4.25	205.27	330.00	33.87	4.13	199.47	220.00	21.94	4.00	193.20	220.00	21.25	43.19
250+73.89	256+33.30	INSIDE SHOULDER - FULL DEPTH SUPER E - RT.	559.41	0.11	61.54	173.95	973.09	29.86	167.04	12.38	769.50	0.05	38.48	4.42	274.73	458.00	62.91	4.25	264.17	330.00	43.59	4.13	256.71	220.00	28.24	4.00	248.63	220.00	27.35	55.59
211+49.38	231+73.40	INSIDE SHOULDER-RUBBLIZE & OVERLAY - NC - LT.	2024.02	0.09	182.16	58.06	1175.15			12.36	2779.65	0.05	138.98	4.39	987.27	520.00	256.69	4.23	951.29	330.00	156.96	4.13	928.80	220.00	102.17	4.00	899.56	220.00	98.95	201.12
267+25.57	333+87.14	INSIDE SHOULDER-RUBBLIZE & OVERLAY - NC - LT.	6661.57	0.09	599.54	58.06	3867.71			12.36	9148.56	0.05	457.43	4.39	3249.37	520.00	844.84	4.23	3130.94	330.00	516.61	4.13	3056.92	220.00	336.26	4.00	2960.70	220.00	325.68	661.94
358+41.62	358+48.43	INSIDE SHOULDER-RUBBLIZE & OVERLAY - NC - LT.	6.81	0.09	0.61	58.06	3.95			12.36	9.35	0.05	0.47	4.39	3.32	520.00	0.86	4.23	3.20	330.00	0.53	4.13	3.13	220.00	0.34	4.00	3.03	220.00	0.33	0.67
377+60.20	437+40.77	INSIDE SHOULDER-RUBBLIZE & OVERLAY - NC - LT.	5980.57	0.09	538.25	58.06	3472.32			12.36	8213.32	0.05	410.67	4.39	2917.19	520.00	758.47	4.23	2810.87	330.00	463.79	4.13	2744.42	220.00	301.89	4.00	2658.03	220.00	292.38	594.27
211+49.38	231+14.91	INSIDE SHOULDER-RUBBLIZE & OVERLAY - NC - RT.	1965.53	0.09	176.90	58.06	1141.19			12.36	2699.33	0.05	134.97	4.39	958.74	520.00	249.27	4.23	923.80	330.00	152.43	4.13	901.96	220.00	99.22	4.00	873.57	220.00	96.09	195.31
267+25.57	333+48.36	INSIDE SHOULDER-RUBBLIZE & OVERLAY - NC - RT.	6622.79	0.09	596.05	58.06	3845.19			12.36	9095.30	0.05	454.77	4.39	3230.45	520.00	839.92	4.23	3112.71	330.00	513.60	4.13	3039.12	220.00	334.30	4.00	2943.46	220.00	323.78	658.08
358+02.81	358+48.43	INSIDE SHOULDER-RUBBLIZE & OVERLAY - NC - RT.	45.62	0.09	4.11	58.06	26.49			12.36	62.65	0.05	3.13	4.39	22.25	520.00	5.79	4.23	21.44	330.00	3.54	4.13	20.93	220.00	2.30	4.00	20.28	220.00	2.23	4.53
377+60.20	438+24.82	INSIDE SHOULDER-RUBBLIZE & OVERLAY - NC - RT.	6064.62	0.09	545.82	58.06	3521.12			12.36	8328.74	0.05	416.44	4.39	2958.19	520.00	769.13	4.23	2850.37	330.00	470.31	4.13	2782.99	220.00	306.13	4.00	2695.39	220.00	296.49	602.62
186+14.73	211+49.38	INSIDE SHOULDER - RUBBLIZE & OVERLAY - SUPER E - LT.	2534.65	0.09	228.12	58.06	1471.62			12.75	3590.75	0.05	179.54	4.39	1236.35	520.00	321.45	4.23	1191.29	330.00	196.56	4.13	1163.12	220.00	127.94	4.00	1126.51	220.00	123.92	251.86
256+91.81	267+25.57	INSIDE SHOULDER - RUBBLIZE & OVERLAY - SUPER E - LT.	1033.76	0.09	93.04	58.06	600.20			12.75	1464.49	0.05	73.22	4.39	504.25	520.00	131.11	4.23	485.87	330.00	80.17	4.13	474.38	220.00	52.18	4.00	459.45	220.00	50.54	102.72
358+48.43	377+60.20	INSIDE SHOULDER - RUBBLIZE & OVERLAY - SUPER E - LT.	1911.77	0.09	172.06	58.06	1109.97			12.75	2708.34	0.05	135.42	4.39	932.52	520.00	242.46	4.23	898.53	330.00	148.26	4.13	877.29	220.00	96.50	4.00	849.68	220.00	93.46	189.96
186+14.73	211+49.38	INSIDE SHOULDER - RUBBLIZE & OVERLAY - SUPER E - RT.	2534.65	0.09	228.12	58.06	1471.62			12.75	3590.75	0.05	179.54	4.39	1236.35	520.00	321.45	4.23	1191.29	330.00	196.56	4.13	1163.12	220.00	127.94	4.00	1126.51	220.00	123.92	251.86
256+33.30	267+25.57	INSIDE SHOULDER - RUBBLIZE & OVERLAY - SUPER E - RT.	1092.27	0.09	98.30	58.06	634.17			12.75	1547.38	0.05	77.37	4.39	532.79	520.00	138.53	4.23	513.37	330.00	84.71	4.13	501.23	220.00	55.14	4.00	485.45	220.00	53.40	108.54
358+48.43	377+60.20	INSIDE SHOULDER - RUBBLIZE & OVERLAY - SUPER E - RT.	1911.77	0.09	172.06	58.06	1109.97			12.75	2708.34	0.05	135.42	4.39	932.52	520.00	242.46	4.23	898.53	330.00	148.26	4.13	877.29	220.00	96.50	4.00	849.68	220.00	93.46	189.96
TOTALS:					**11526.78**		**58819.53**		**8568.43**		**254842.18**		**12742.13**		**87659.48**		**21948.03**		**85785.29**		**14154.61**		**84594.12**		**9305.37**		**83051.76**		**9135.63**	**18441.00**

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
6-21-2016

QUANTITIES

BASE AND SURFACING - ACCELERATION LANES AND RAMPS

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")								TOTAL PG 76-22
				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	
			FEET			FEET				FEET			TON	FEET			TON	FEET			TON	FEET			TON	TON
ACCELERATION LANES, TAPERS, GORE TAPERS & GORE RETURNS																										
178+14.81	184+80.04	LT ENTRANCE LANE TAPER & RETURN - FULL DEPTH	665.23	93.89	624.58	34.29	2534.53	0.05	126.73	11.43	844.84	440.00	185.86	11.43	844.84	330.00	139.40	11.43	844.84	220.00	92.93	11.43	844.84	220.00	92.93	185.86
175+78.49	177+78.97	RT ENTRANCE LANE TAPER TO ACCEL LANE - FULL DEPTH	200.48	83.18	166.76	42.78	952.95	0.05	47.65	14.26	317.65	440.00	69.88	14.26	317.65	330.00	52.41	14.26	317.65	220.00	34.94	14.26	317.65	220.00	34.94	69.88
177+78.97	182+78.49	RT LANE ACCELERATION LANE - FULL DEPTH	499.52	70.00	349.66	36.00	1998.08	0.05	99.90	12.00	666.03	440.00	146.53	12.00	666.03	330.00	109.89	12.00	666.03	220.00	73.26	12.00	666.03	220.00	73.26	146.52
182+78.49	185+78.49	RT LANE ACCELERATION LANE TAPER - FULL DEPTH	300.00	35.00	105.00	18.00	600.00	0.05	30.00	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
227+54.79	231+14.91	RT EXIT LANE TAPER & RETURN - OVERLAY	360.12			30.99	1240.01	0.05	62.00	10.33	413.34	440.00	90.93	10.33	413.34	330.00	68.20	10.33	413.34	220.00	45.47	10.33	413.34	220.00	45.47	90.94
231+14.91	234+23.79	RT EXIT LANE TAPER & RETURN - FULL DEPTH	308.88	73.97	228.48	38.04	1305.53	0.05	65.28	12.68	435.18	440.00	95.74	12.68	435.18	330.00	71.80	12.68	435.18	220.00	47.87	12.68	435.18	220.00	47.87	95.74
222+54.01	225+54.01	LT LANE ACCELERATION LANE TAPER - OVERLAY	300.00			18.00	600.00	0.05	30.00	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
225+54.01	231+12.10	LT LANE ACCELERATION LANE - OVERLAY	558.09			36.00	2232.36	0.05	111.62	12.00	744.12	440.00	163.71	12.00	744.12	330.00	122.78	12.00	744.12	220.00	81.85	12.00	744.12	220.00	81.85	163.70
231+12.10	231+73.40	LT ENTRANCE LANE TAPER - OVERLAY	61.30			37.32	254.19	0.05	12.71	12.44	84.73	440.00	18.64	12.44	84.73	330.00	13.98	12.44	84.73	220.00	9.32	12.44	84.73	220.00	9.32	18.64
231+73.40	232+54.01	LT ENTRANCE LANE TAPER - FULL DEPTH	80.61	90.83	73.22	46.71	418.37	0.05	20.92	15.57	139.46	440.00	30.68	15.57	139.46	330.00	23.01	15.57	139.46	220.00	15.34	15.57	139.46	220.00	15.34	30.68
256+08.85	256+33.30	RT ENTRANCE LANE TAPER - FULL DEPTH	24.45	104.71	25.60	53.85	146.29	0.05	7.31	17.95	48.76	440.00	10.73	17.95	48.76	330.00	8.05	17.95	48.76	220.00	5.36	17.95	48.76	220.00	5.36	10.72
256+33.30	258+07.00	RT ENTRANCE LANE TAPER - OVERLAY	173.70			42.30	816.39	0.05	40.82	14.10	272.13	440.00	59.87	14.10	272.13	330.00	44.90	14.10	272.13	220.00	29.93	14.10	272.13	220.00	29.93	59.86
258+07.00	263+08.98	RT LANE ACCELERATION LANE - OVERLAY	501.98			36.00	2007.92	0.05	100.40	12.00	669.31	440.00	147.25	12.00	669.31	330.00	110.44	12.00	669.31	220.00	73.62	12.00	669.31	220.00	73.62	147.24
263+08.98	266+08.98	RT LANE ACCLERATION LANE TAPER - OVERLAY	300.00			18.00	600.00	0.05	30.00	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
253+27.19	256+91.81	LT EXIT LANE TAPER & RETURN - FULL DEPTH	364.62	49.35	179.94	25.38	1028.23	0.05	51.41	8.46	342.74	440.00	75.40	8.46	342.74	330.00	56.55	8.46	342.74	220.00	37.70	8.46	342.74	220.00	37.70	75.40
256+91.81	263+35.00	LT EXIT LANE TAPER & RETURN - OVERLAY	643.19			37.26	2662.81	0.05	133.14	12.42	887.60	440.00	195.27	12.42	887.60	330.00	146.45	12.42	887.60	220.00	97.64	12.42	887.60	220.00	97.64	195.28
331+03.06	333+48.36	RT ENTRANCE LANE TAPER & RETURN - OVERLAY	245.30			13.02	354.87	0.05	17.74	4.34	118.29	440.00	26.02	4.34	118.29	330.00	19.52	4.34	118.29	220.00	13.01	4.34	118.29	220.00	13.01	26.02
333+48.36	337+38.32	RT ENTRANCE LANE TAPER & RETURN - FULL DEPTH	389.96	72.51	282.76	37.29	1615.73	0.05	80.79	12.43	538.58	440.00	118.49	12.43	538.58	330.00	88.87	12.43	538.58	220.00	59.24	12.43	538.58	220.00	59.24	118.48
322+53.90	325+53.90	LT LANE ACCELERATION LANE TAPER - OVERLAY	300.00			18.00	600.00	0.05	30.00	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
325+53.90	331+03.08	LT LANE ACCELERATION LANE - OVERLAY	549.18			36.00	2196.72	0.05	109.84	12.00	732.24	440.00	161.09	12.00	732.24	330.00	120.82	12.00	732.24	220.00	80.55	12.00	732.24	220.00	80.55	161.10
331+03.08	332+54.09	LT ENTRANCE LANE TAPER - OVERLAY	151.01			42.93	720.32	0.05	36.02	14.31	240.11	440.00	52.82	14.31	240.11	330.00	39.62	14.31	240.11	220.00	26.41	14.31	240.11	220.00	26.41	52.82
359+12.69	360+54.59	RT ENTRANCE LANE TAPER - OVERLAY	141.90			45.66	719.91	0.05	36.00	15.22	239.97	440.00	52.79	15.22	239.97	330.00	39.60	15.22	239.97	220.00	26.40	15.22	239.97	220.00	26.40	52.80
360+54.59	366+12.80	RT LANE ACCELERATION LANE - OVERLAY	558.21			36.00	2232.84	0.05	111.64	12.00	744.28	440.00	163.74	12.00	744.28	330.00	122.81	12.00	744.28	220.00	81.87	12.00	744.28	220.00	81.87	163.74
366+12.80	369+12.80	RT LANE ACCELERATION LANE TAPER - OVERLAY	300.00			18.00	600.00	0.05	30.00	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
356+67.13	358+41.62	LT EXIT LANE TAPER & RETURN - FULL DEPTH	174.49	18.73	32.68	9.63	186.70	0.05	9.34	3.21	62.23	440.00	13.69	3.21	62.23	330.00	10.27	3.21	62.23	220.00	6.85	3.21	62.23	220.00	6.85	13.70
358+41.62	363+51.03	LT EXIT LANE TAPER & RETURN - OVERLAY	509.41			32.25	1825.39	0.05	91.27	10.75	608.46	440.00	133.86	10.75	608.46	330.00	100.40	10.75	608.46	220.00	66.93	10.75	608.46	220.00	66.93	133.86
435+06.22	438+24.82	RT EXIT LANE TAPER & RETURN - OVERLAY	318.60			25.26	894.20	0.05	44.71	8.42	298.07	440.00	65.58	8.42	298.07	330.00	49.18	8.42	298.07	220.00	32.79	8.42	298.07	220.00	32.79	65.58
438+24.82	441+70.75	RT EXIT LANE TAPER & RETURN - FULL DEPTH	345.93	83.24	287.95	42.81	1645.47	0.05	82.27	14.27	548.49	440.00	120.67	14.27	548.49	330.00	90.50	14.27	548.49	220.00	60.33	14.27	548.49	220.00	60.33	120.66
425+76.51	428+76.51	LT LANE ACCELERATION LANE TAPER - OVERLAY	300.00			18.00	600.00	0.05	30.00	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
428+76.51	434+49.54	LT LANE ACCELERATION LANE - OVERLAY	573.03			36.00	2292.12	0.05	114.61	12.00	764.04	440.00	168.09	12.00	764.04	330.00	126.07	12.00	764.04	220.00	84.04	12.00	764.04	220.00	84.04	168.08
434+49.54	435+76.51	LT ENTRANCE LANE TAPER - OVERLAY	126.97			42.57	600.57	0.05	30.03	14.19	200.19	440.00	44.04	14.19	200.19	330.00	33.03	14.19	200.19	220.00	22.02	14.19	200.19	220.00	22.02	44.04
ACCELERATION LANES, TAPERS, GORE TAPERS & GORE RETURN LEVELING																										
178+14.81	184+80.04	LT ENTRANCE LANE TAPER & RETURN - FULL DEPTH	665.23	83.91	558.19																					
175+78.49	177+78.97	RT ENTRANCE LANE TAPER TO ACCEL LANE - FULL DEPTH	200.48	61.37	123.03																					
177+78.97	182+78.49	RT LANE ACCELERATION LANE - FULL DEPTH	499.52	78.87	393.97																					
182+78.49	185+78.49	RT LANE ACCELERATION LANE TAPER - FULL DEPTH	300.00	54.98	164.94																					
227+54.79	231+14.91	RT EXIT LANE TAPER & RETURN - OVERLAY	360.12			10.33	413.34	0.17	70.27	10.33	413.34	110.00	22.73													
231+14.91	234+23.79	RT EXIT LANE TAPER & RETURN - FULL DEPTH	308.88	118.80	366.95																					
222+54.01	225+54.01	LT LANE ACCELERATION LANE TAPER - OVERLAY	300.00			6.00	200.00	0.17	34.00	6.00	200.00	110.00	11.00													
225+54.01	231+12.10	LT LANE ACCELERATION LANE - OVERLAY	558.09			12.00	744.12	0.17	126.50	12.00	744.12	110.00	40.93													
231+12.10	231+73.40	LT ENTRANCE LANE TAPER - OVERLAY	61.30			12.44	84.73	0.17	14.40	12.44	84.73	110.00	4.66													
231+73.40	232+54.01	LT ENTRANCE LANE TAPER - FULL DEPTH	80.61	157.40	126.88																					
256+08.85	256+33.30	RT ENTRANCE LANE TAPER - FULL DEPTH	24.45	184.73	45.17																					
256+33.30	258+07.00	RT ENTRANCE LANE TAPER - OVERLAY	173.70			14.10	272.13	0.17	46.26	14.10	272.13	110.00	14.97													
258+07.00	263+08.98	RT LANE ACCELERATION LANE - OVERLAY	501.98			12.00	669.31	0.17	113.78	12.00	669.31	110.00	36.81													
263+08.98	266+08.98	RT LANE ACCLERATION LANE TAPER - OVERLAY	300.00			6.00	200.00	0.17	34.00	6.00	200.00	110.00	11.00													
253+27.19	256+91.81	LT EXIT LANE TAPER & RETURN - FULL DEPTH	364.62	77.74	283.46																					
256+91.81	263+35.00	LT EXIT LANE TAPER & RETURN - OVERLAY	643.19			12.42	887.60	0.17	150.89	12.42	887.60	110.00	48.82													
331+03.06	333+48.36	RT ENTRANCE LANE TAPER & RETURN - OVERLAY	245.30			4.34	118.29	0.17	20.11	4.34	118.29	110.00	6.51													
333+48.36	337+38.32	RT ENTRANCE LANE TAPER & RETURN - FULL DEPTH	389.96	113.20	441.43																					
322+53.90	325+53.90	LT LANE ACCELERATION LANE TAPER - OVERLAY	300.00			6.00	200.00	0.17	34.00	6.00	200.00	110.00	11.00													
325+53.90	331+03.08	LT LANE ACCELERATION LANE - OVERLAY	549.18			12.00	732.24	0.17	124.48	12.00	732.24	110.00	40.27													
331+03.08	332+54.09	LT ENTRANCE LANE TAPER - OVERLAY	151.01			14.31	240.11	0.17	40.82	14.31	240.11	110.00	13.21													
359+12.69	360+54.59	RT ENTRANCE LANE TAPER - OVERLAY	141.90			15.22	239.97	0.17	40.79	15.22	239.97	110.00	13.20													
360+54.59	366+12.80	RT LANE ACCELERATION LANE - OVERLAY	558.21			12.00	744.28	0.17	126.53	12.00	744.28	110.00	40.94													
366+12.80	369+12.80	RT LANE ACCELERATION LANE TAPER - OVERLAY	300.00			6.00	200.00	0.17	34.00	6.00	200.00	110.00	11.00													
356+67.13	358+41.62	LT EXIT LANE TAPER & RETURN - FULL DEPTH	174.49	31.47	54.91																					
358+41.62	363+51.03	LT EXIT LANE TAPER & RETURN - OVERLAY	509.41			10.75	608.46	0.17	103.44	10.75	608.46	110.00	33.47													
435+06.22	438+24.82	RT EXIT LANE TAPER & RETURN - OVERLAY	318.60			8.42	298.07	0.17	50.67	8.42	298.07	110.00	16.39													
438+24.82	441+70.75	RT EXIT LANE TAPER & RETURN - FULL DEPTH	345.93	131.99	456.59																					
425+76.51	428+76.51	LT LANE ACCELERATION LANE TAPER - OVERLAY	300.00			6.00	200.00	0.17	34.00	6.00	200.00	110.00	11.00													
428+76.51	434+49.54	LT LANE ACCELERATION LANE - OVERLAY	573.03			12.00	764.04	0.17	129.89	12.00	764.04	110.00	42.02													
434+49.54	435+76.51	LT ENTRANCE LANE TAPER - OVERLAY	126.97			14.19	200.19	0.17	34.03	14.19	200.19	110.00	11.01													
TOTALS:					**5372.15**		**44499.38**		**3187.01**		**20177.72**		**3116.31**		**12160.84**		**2006.55**		**12160.84**		**1337.67**		**12160.84**		**1337.67**	**2675.34**

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
6-21-2016

BASE AND SURFACING - MAIN LANES MISC.

STATION	STATION	LOCATION	LENGTH	AGGREGATE BASE COURSE (CLASS 1)		AGGREGATE BASE COURSE (CLASS 7)		TACK COAT				ACHM BASE COURSE (1 1/2")			
				TON / STATION	TON	TON / STATION	TON	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															
175+14.73	186+14.73	MAIN LANES - FULL DEPTH - LT.	1100.00	38.55	424.05	57.74	635.14					24.00	2933.33	110.00	161.33
231+73.40	242+73.40	MAIN LANES - FULL DEPTH - LT.	1100.00	38.55	424.05	57.74	635.14					24.00	2933.33	110.00	161.33
245+91.81	256+91.81	MAIN LANES - FULL DEPTH - LT.	1100.00	38.55	424.05	57.74	635.14					24.00	2933.33	110.00	161.33
333+87.17	344+87.17	MAIN LANES - FULL DEPTH - LT.	1100.00	38.55	424.05	57.74	635.14					24.00	2933.33	110.00	161.33
347+41.62	358+41.62	MAIN LANES - FULL DEPTH - LT.	1100.00	38.55	424.05	57.74	635.14					24.00	2933.33	110.00	161.33
437+40.77	447+40.77	MAIN LANES - FULL DEPTH - LT.	1000.00	42.41	424.10	63.52	635.20					24.00	2666.67	110.00	146.67
175+14.73	186+14.73	MAIN LANES - FULL DEPTH - RT.	1100.00	38.55	424.05	57.74	635.14					24.00	2933.33	110.00	161.33
231+14.91	242+14.91	MAIN LANES - FULL DEPTH - RT.	1100.00	38.55	424.05	57.74	635.14					24.00	2933.33	110.00	161.33
245+33.30	256+33.30	MAIN LANES - FULL DEPTH - RT.	1100.00	38.55	424.05	57.74	635.14					24.00	2933.33	110.00	161.33
333+48.36	344+48.36	MAIN LANES - FULL DEPTH - RT.	1100.00	38.55	424.05	57.74	635.14					24.00	2933.33	110.00	161.33
347+08.81	358+08.81	MAIN LANES - FULL DEPTH - RT.	1100.00	38.55	424.05	57.74	635.14					24.00	2933.33	110.00	161.33
438+24.82	448+24.82	MAIN LANES - FULL DEPTH - RT.	1000.00	42.41	424.10	63.52	635.20					24.00	2666.67	110.00	146.67
211+49.38	231+73.40	MAIN LANES - RUBBLIZE & OVERLAY - NC - LT.	2024.02					38.00	8545.86	0.17	1452.80	24.00	5397.39	110.00	296.86
267+25.57	333+87.14	MAIN LANES - RUBBLIZE & OVERLAY - NC - LT.	6661.57					38.00	28126.63	0.17	4781.53	24.00	17764.19	110.00	977.03
358+41.62	358+48.43	MAIN LANES - RUBBLIZE & OVERLAY - NC - LT.	6.81					38.00	28.75	0.17	4.89	24.00	18.16	110.00	1.00
377+60.20	437+40.77	MAIN LANES - RUBBLIZE & OVERLAY - NC - LT.	5980.57					38.00	25251.30	0.17	4292.72	24.00	15948.19	110.00	877.15
211+49.38	231+14.91	MAIN LANES - RUBBLIZE & OVERLAY - NC - RT.	1965.53					38.00	8298.90	0.17	1410.81	24.00	5241.41	110.00	288.28
267+25.57	333+48.36	MAIN LANES - RUBBLIZE & OVERLAY - NC - RT.	6622.79					38.00	27962.89	0.17	4753.69	24.00	17660.77	110.00	971.34
358+02.81	358+48.43	MAIN LANES - RUBBLIZE & OVERLAY - NC - RT.	45.62					38.00	192.62	0.17	32.75	24.00	121.65	110.00	6.69
377+60.20	438+24.82	MAIN LANES - RUBBLIZE & OVERLAY - NC - RT.	6064.62					38.00	25606.17	0.17	4353.05	24.00	16172.32	110.00	889.48
186+14.73	211+49.38	MAIN LANES - RUBBLIZE & OVERLAY - SUPER E - LT.	2534.65					38.00	10701.86	0.17	1819.32	24.00	6759.07	110.00	371.75
256+91.81	267+25.57	MAIN LANES - RUBBLIZE & OVERLAY - SUPER E - LT.	1033.76					38.00	4364.76	0.17	742.01	24.00	2756.69	110.00	151.62
358+48.43	377+60.20	MAIN LANES - RUBBLIZE & OVERLAY - SUPER E - LT.	1911.77					38.00	8071.92	0.17	1372.23	24.00	5098.05	110.00	280.39
186+14.73	211+49.38	MAIN LANES - RUBBLIZE & OVERLAY - SUPER E - RT.	2534.65					38.00	10701.86	0.17	1819.32	24.00	6759.07	110.00	371.75
256+33.30	267+25.57	MAIN LANES - RUBBLIZE & OVERLAY - SUPER E - RT.	1092.27					38.00	4611.81	0.17	784.01	24.00	2912.72	110.00	160.20
358+48.43	377+60.20	MAIN LANES - RUBBLIZE & OVERLAY - SUPER E - RT.	1911.77					38.00	8071.92	0.17	1372.23	24.00	5098.05	110.00	280.39
OUTSIDE SHOULDERS - MAIN LANES															
211+49.38	231+73.40	OUTSIDE SHOULDER-RUBBLIZE & OVERLAY - NC - LT.	2024.02									10.39	2336.62	110.00	128.51
267+25.57	333+87.14	OUTSIDE SHOULDER-RUBBLIZE & OVERLAY - NC - LT.	6661.57									10.39	7690.41	110.00	422.97
358+41.62	358+48.43	OUTSIDE SHOULDER-RUBBLIZE & OVERLAY - NC - LT.	6.81									10.39	7.86	110.00	0.43
377+60.20	437+40.77	OUTSIDE SHOULDER-RUBBLIZE & OVERLAY - NC - LT.	5980.57									10.39	6904.24	110.00	379.73
211+49.38	231+14.91	OUTSIDE SHOULDER-RUBBLIZE & OVERLAY - NC - RT.	1965.53									10.39	2269.10	110.00	124.80
267+25.57	333+48.36	OUTSIDE SHOULDER-RUBBLIZE & OVERLAY - NC - RT.	6622.79									10.39	7645.64	110.00	420.51
358+02.81	358+48.43	OUTSIDE SHOULDER-RUBBLIZE & OVERLAY - NC - RT.	45.62									10.39	52.67	110.00	2.90
377+60.20	438+24.82	OUTSIDE SHOULDER-RUBBLIZE & OVERLAY - NC - RT.	6064.62									10.39	7001.27	110.00	385.07
186+14.73	211+49.38	OUTSIDE SHOULDER - RUBBLIZE & OVERLAY - SUPER E - LT.	2534.65									10.39	2926.11	110.00	160.94
256+91.81	267+25.57	OUTSIDE SHOULDER - RUBBLIZE & OVERLAY - SUPER E - LT.	1033.76									10.39	1193.42	110.00	65.64
358+48.43	377+60.20	OUTSIDE SHOULDER - RUBBLIZE & OVERLAY - SUPER E - LT.	1911.77									10.39	2207.03	110.00	121.39
186+14.73	211+49.38	OUTSIDE SHOULDER - RUBBLIZE & OVERLAY - SUPER E - RT.	2534.65									10.39	2926.11	110.00	160.94
256+33.30	267+25.57	OUTSIDE SHOULDER - RUBBLIZE & OVERLAY - SUPER E - RT.	1092.27									10.39	1260.97	110.00	69.35
358+48.43	377+60.20	OUTSIDE SHOULDER - RUBBLIZE & OVERLAY - SUPER E - RT.	1911.77									10.39	2207.03	110.00	121.39
INSIDE SHOULDERS - MAIN LANES															
211+49.38	231+73.40	INSIDE SHOULDER-RUBBLIZE & OVERLAY - NC - LT.	2024.02									4.39	987.27	110.00	54.30
267+25.57	333+87.14	INSIDE SHOULDER-RUBBLIZE & OVERLAY - NC - LT.	6661.57									4.39	3249.37	110.00	178.72
358+41.62	358+48.43	INSIDE SHOULDER-RUBBLIZE & OVERLAY - NC - LT.	6.81									4.39	3.32	110.00	0.18
377+60.20	437+40.77	INSIDE SHOULDER-RUBBLIZE & OVERLAY - NC - LT.	5980.57									4.39	2917.19	110.00	160.45
211+49.38	231+14.91	INSIDE SHOULDER-RUBBLIZE & OVERLAY - NC - RT.	1965.53									4.39	958.74	110.00	52.73
267+25.57	333+48.36	INSIDE SHOULDER-RUBBLIZE & OVERLAY - NC - RT.	6622.79									4.39	3230.45	110.00	177.67
358+02.81	358+48.43	INSIDE SHOULDER-RUBBLIZE & OVERLAY - NC - RT.	45.62									4.39	22.25	110.00	1.22
377+60.20	438+24.82	INSIDE SHOULDER-RUBBLIZE & OVERLAY - NC - RT.	6064.62									4.39	2958.19	110.00	162.70
186+14.73	211+49.38	INSIDE SHOULDER - RUBBLIZE & OVERLAY - SUPER E - LT.	2534.65									4.39	1236.35	110.00	68.00
256+91.81	267+25.57	INSIDE SHOULDER - RUBBLIZE & OVERLAY - SUPER E - LT.	1033.76									4.39	504.25	110.00	27.73
358+48.43	377+60.20	INSIDE SHOULDER - RUBBLIZE & OVERLAY - SUPER E - LT.	1911.77									4.39	932.52	110.00	51.29
186+14.73	211+49.38	INSIDE SHOULDER - RUBBLIZE & OVERLAY - SUPER E - RT.	2534.65									4.39	1236.35	110.00	68.00
256+33.30	267+25.57	INSIDE SHOULDER - RUBBLIZE & OVERLAY - SUPER E - RT.	1092.27									4.39	532.79	110.00	29.30
358+48.43	377+60.20	INSIDE SHOULDER - RUBBLIZE & OVERLAY - SUPER E - RT.	1911.77									4.39	932.52	110.00	51.29
TOTALS:								**5088.70**		**7621.80**		**170537.25**		**28991.36**		**208704.41**		**11478.72**

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
6-21-2016

CROSSOVER & TEMP. ACCEL. LANE - BASE & SURFACING

STATION	STATION	LOCATION	LENGTH	*** SOIL STABILIZATION	TACK COAT 0.05 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 / 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
			FT.	TON	FEET			FEET			TON	FEET			TON	FEET			TON
175+64.09	185+32.41	TEMP. ACCEL. LANE - RT. - L.M.L. *	818.32	39.28	13.25	1204.75	60.24	13.25	1204.75	880.00	530.09					12.00	1091.09	220.00	120.02
218+25.00	231+09.94	TEMP. ACCEL. LANE - LT. - R.M.L. *	1134.94	54.48	13.75	1733.94	86.70	13.75	1733.94	880.00	762.93					12.00	1513.25	220.00	166.46
256+53.40	268+64.81	TEMP. ACCEL. LANE - RT. - L.M.L. *	1061.41	50.95	13.25	1562.63	78.13	13.25	1562.63	880.00	687.56					12.00	1415.21	220.00	155.67
320+29.10	331+23.99	TEMP. ACCEL. LANE - LT. - R.M.L. *	944.89	45.35	13.75	1443.58	72.18	13.75	1443.58	880.00	635.18					12.00	1259.85	220.00	138.58
360+04.86	369+96.78	TEMP. ACCEL. LANE - RT. - L.M.L. *	841.92	40.41	13.25	1239.49	61.97	13.25	1239.49	880.00	545.38					12.00	1122.56	220.00	123.48
423+50.86	436+08.65	TEMP. ACCEL. LANE - LT. - R.M.L. *	1107.79	53.17	13.75	1692.46	84.62	13.75	1692.46	880.00	744.68					12.00	1477.05	220.00	162.48
22+33.75	26+00.09	TEMP. RAMP D65	366.34	36.63	25.50	1037.96	51.90	25.50	1037.96	880.00	456.70					25.00	1017.61	220.00	111.94
27+44.00	29+51.38	TEMP. RAMP D65	207.38	20.74	25.50	587.58	29.38	25.50	587.58	880.00	258.54					25.00	576.06	220.00	63.37
11+67.08	14+29.61	530 CROSSOVER 1A	262.53	26.25	51.08	1490.00	74.50	25.79	752.29	990.00	372.38	25.29	737.71	330.00	121.72	25.00	729.25	220.00	80.22
2+22.59	2+67.83	530 CROSSOVER 1B	45.24	4.52	51.08	256.76	12.84	25.79	129.64	990.00	64.17	25.29	127.12	330.00	20.97	25.00	125.67	220.00	13.82
3+31.46	4+45.06	530 CROSSOVER 1B	113.60	11.36	51.08	644.74	32.24	25.79	325.53	990.00	161.14	25.29	319.22	330.00	52.67	25.00	315.56	220.00	34.71
31+31.86	34+73.51	TEMP. RAMP A65 A	341.65	34.17	25.50	968.01	48.40	25.50	968.01	880.00	425.92					25.00	949.03	220.00	104.39
35+72.66	36+15.61	TEMP. RAMP A65 A - TEMP RAMP OVERLAY	42.95		51.04	243.57	12.18	25.50	121.69	880.00	53.54	25.54	121.88	990.00	60.33	25.00	119.31	220.00	13.12
36+15.61	37+92.01	TEMP. RAMP A65 A	176.40	17.64	25.50	499.80	24.99	25.50	499.80	880.00	219.91					25.00	490.00	220.00	53.90
42+21.61	45+15.23	TEMP. RAMP A65 B	293.62	29.36	25.50	831.92	41.60	25.50	831.92	880.00	366.04					25.00	815.61	220.00	89.72
51+31.29	53+38.61	HWY. 270 TEMP. RAMP 1A	207.32	20.73	25.50	587.41	29.37	25.50	587.41	880.00	258.46					25.00	575.89	220.00	63.35
71+03.88	71+56.66	HWY. 270 TEMP. RAMP 4A	52.78	5.28	25.50	149.54	7.48	25.50	149.54	880.00	65.80					25.00	146.61	220.00	16.13
72+23.39	73+24.54	HWY. 270 TEMP. RAMP 4A	101.15	10.12	25.50	286.59	14.33	25.50	286.59	880.00	126.10					25.00	280.97	220.00	30.91
61+31.29	63+64.88	HWY. 270 TEMP. RAMP 1B	233.59	23.36	25.50	661.84	33.09	25.50	661.84	880.00	291.21					25.00	648.86	220.00	71.37
64+87.22	69+53.00	HWY. 270 TEMP. RAMP 1B	465.78	46.58	25.50	1319.71	65.99	25.50	1319.71	880.00	580.67					25.00	1293.83	220.00	142.32
80+00.00	81+20.63	HWY. 270 TEMP. RAMP 4B	120.63	12.06	25.50	341.79	17.09	25.50	341.79	880.00	150.39					25.00	335.08	220.00	36.86
81+81.08	82+96.28	HWY. 270 TEMP. RAMP 4B	115.20	11.52	25.50	326.40	16.32	25.50	326.40	880.00	143.62					25.00	320.00	220.00	35.20
84+07.61	88+81.66	HWY. 270 TEMP. RAMP 4B	474.05	47.41	25.50	1343.14	67.16	25.50	1343.14	880.00	590.98					25.00	1316.81	220.00	144.85
88+50.00	93+00.34	HWY. 270 TEMP. RAMP 2A	450.34	45.03	25.50	1275.96	63.80	25.50	1275.96	880.00	561.42					25.00	1250.94	220.00	137.60
94+00.54	96+75.25	HWY. 270 TEMP. RAMP 2A	274.71	27.47	25.50	778.35	38.92	25.50	778.35	880.00	342.47					25.00	763.08	220.00	83.94
108+50.00	113+71.32	HWY. 270 TEMP. RAMP 3A	521.32	52.13	25.50	1477.07	73.85	25.50	1477.07	880.00	649.91					25.00	1448.11	220.00	159.29
114+78.05	115+34.54	HWY. 270 TEMP. RAMP 3A - TEMP RAMP OVERLAY	56.49		25.50	160.06	8.00	25.50	160.06	880.00	70.43	25.54	160.31	990.00	79.35	25.00	156.92	220.00	17.26
115+34.54	116+90.82	HWY. 270 TEMP. RAMP 3A	156.28	15.63	25.50	442.79	22.14	25.50	442.79	880.00	194.83					25.00	434.11	220.00	47.75
102+40.66	103+84.29	HWY. 270 TEMP. RAMP 2B	143.63	14.36	25.50	406.95	20.35	25.50	406.95	880.00	179.06					25.00	398.97	220.00	43.89
123+60.89	125+13.08	HWY. 270 TEMP. RAMP 3B	152.19	15.22	25.50	431.21	21.56	25.50	431.21	880.00	189.73					25.00	422.75	220.00	46.50
151+00.80	151+99.07	HOLLAND AVE. TEMP. RAMP 4A	98.27	9.83	25.50	278.43	13.92	25.50	278.43	880.00	122.51					25.00	272.97	220.00	30.03
151+99.07	152+53.36	HOLLAND AVE. TEMP. RAMP 4A - TEMP RAMP OVERLAY	54.29		25.50	153.82	7.69	25.50	153.82	880.00	67.68					25.00	150.81	220.00	16.59
152+53.36	152+61.64	HOLLAND AVE. TEMP. RAMP 4A	8.28	0.83	25.50	23.46	1.17	25.50	23.46	880.00	10.32					25.00	23.00	220.00	2.53
131+07.31	133+54.67	HOLLAND AVE. TEMP. RAMP 1A	247.36	24.74	25.50	700.85	35.04	25.50	700.85	880.00	308.37					25.00	687.11	220.00	75.58
161+16.80	162+93.09	HOLLAND AVE. TEMP. RAMP 4B	176.29	17.63	25.50	499.49	24.97	25.50	499.49	880.00	219.78					25.00	489.69	220.00	53.87
162+93.09	163+35.62	HOLLAND AVE. TEMP. RAMP 4B - TEMP RAMP OVERLAY	42.53		25.50	120.50	6.03	25.50	120.50	880.00	53.02	25.54	120.69	990.00	59.74	25.00	118.14	220.00	13.00
164+36.68	168+61.21	HOLLAND AVE. TEMP. RAMP 4B	424.53	42.45	25.50	1202.84	60.14	25.50	1202.84	880.00	529.25					25.00	1179.25	220.00	129.72
141+07.31	142+98.57	HOLLAND AVE. TEMP. RAMP 1B	191.26	19.13	25.50	541.90	27.10	25.50	541.90	880.00	238.44					25.00	531.28	220.00	58.44
143+88.37	146+30.80	HOLLAND AVE. TEMP. RAMP 1B	242.43	24.24	25.50	686.89	34.34	25.50	686.89	880.00	302.23					25.00	673.42	220.00	74.08
146+30.80	148+72.35	HOLLAND AVE. TEMP. RAMP 1B	241.55	18.36	19.25	516.65	25.83	19.25	516.65	880.00	227.33					19.00	509.94	220.00	56.09
168+50.00	170+96.95	HOLLAND AVE. TEMP. RAMP 2A	246.95	18.77	19.25	528.20	26.41	19.25	528.20	880.00	232.41					19.00	521.34	220.00	57.35
170+96.95	173+15.77	HOLLAND AVE. TEMP. RAMP 2A	218.82	21.88	25.50	619.99	31.00	25.50	619.99	880.00	272.80					25.00	607.83	220.00	66.86
174+08.51	176+65.56	HOLLAND AVE. TEMP. RAMP 2A	257.05	25.71	25.50	728.31	36.42	25.50	728.31	880.00	320.46					25.00	714.03	220.00	78.54
181+95.13	183+58.00	HOLLAND AVE. TEMP. RAMP 2B	162.87	16.29	25.50	461.47	23.07	25.50	461.47	880.00	203.05					25.00	452.42	220.00	49.77
188+50.00	191+63.43	HOLLAND AVE. TEMP. RAMP 3A	313.43	23.82	19.25	670.39	33.52	19.25	670.39	880.00	294.97					19.00	661.69	220.00	72.79
191+63.43	194+05.22	HOLLAND AVE. TEMP. RAMP 3A	241.79	24.18	25.50	685.07	34.25	25.50	685.07	880.00	301.43					25.00	671.64	220.00	73.88
194+91.14	195+29.03	HOLLAND AVE. TEMP. RAMP 3A	37.89	3.79	25.50	107.36	5.37	25.50	107.36	880.00	47.24					25.00	105.25	220.00	11.58
195+29.03	195+78.07	HOLLAND AVE. TEMP. RAMP 3A - TEMP RAMP OVERLAY	49.04		25.50	138.95	6.95	25.50	138.95	880.00	61.14	25.54	139.16	990.00	68.88	25.00	136.22	220.00	14.98
195+78.07	196+81.69	HOLLAND AVE. TEMP. RAMP 3A	103.62	10.36	25.50	293.59	14.68	25.50	293.59	880.00	129.18					25.00	287.83	220.00	31.66
204+16.23	205+65.25	HOLLAND AVE. TEMP. RAMP 3B	149.02	14.90	25.50	422.22	21.11	25.50	422.22	880.00	185.78					25.00	413.94	220.00	45.53
231+03.88	232+69.92	HWY. 104 TEMP. RAMP 4A	166.04	16.60	25.50	470.45	23.52	25.50	470.45	880.00	207.00					25.00	461.22	220.00	50.73
211+28.34	213+21.49	HWY. 104 TEMP. RAMP 1A	193.15	19.32	25.50	547.26	27.36	25.50	547.26	880.00	240.79					25.00	536.53	220.00	59.02
241+03.93	242+62.70	HWY. 104 TEMP. RAMP 4B	158.77	15.88	25.50	449.85	22.49	25.50	449.85	880.00	197.93					25.00	441.03	220.00	48.51
243+54.06	245+99.40	HWY. 104 TEMP. RAMP 4B	245.34	24.53	25.50	695.13	34.76	25.50	695.13	880.00	305.86					25.00	681.50	220.00	74.97
245+99.40	248+38.28	HWY. 104 TEMP. RAMP 4B	238.88	18.15	19.25	510.94	25.55	19.25	510.94	880.00	224.81					19.00	504.30	220.00	55.47
221+67.51	223+81.07	HWY. 104 TEMP. RAMP 1B	213.56	21.36	25.50	605.09	30.25	25.50	605.09	880.00	266.24					25.00	593.22	220.00	65.25
224+78.80	226+79.90	HWY. 104 TEMP. RAMP 1B	201.10	20.11	25.50	569.78	28.49	25.50	569.78	880.00	250.70					25.00	558.61	220.00	61.45
226+79.90	229+14.50	HWY. 104 TEMP. RAMP 1B	234.60	17.83	19.25	501.78	25.09	19.25	501.78	880.00	220.78					19.00	495.27	220.00	54.48
250+89.57	252+76.09	530 CROSSOVER 2A	186.52	18.65	51.08	1058.60	52.93	25.79	534.48	990.00	264.57	25.29	524.12	330.00	86.48	25.00	518.11	220.00	56.99
253+64.72	255+00.65	530 CROSSOVER 2A	135.93	13.59	51.08	771.48	38.57	25.79	389.51	990.00	192.81	25.29	381.96	330.00	63.02	25.00	377.58	220.00	41.53
261+47.79	265+44.28	530 CROSSOVER 2B	396.49	39.65	51.08	2250.30	112.52	25.79	1136.16	990.00	562.40	25.29	1114.14	330.00	183.83	25.00	1101.36	220.00	121.15
TOTALS:				**1353.79**		**43237.04**	**2161.86**		**39910.89**		**17740.52**		**3746.31**		**796.99**		**38286.57**		**4211.52**

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

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	182	235
				(2)	QUANTITIES			

BASE AND SURFACING - SHOULDER RECONSTRUCTION

STATION	STATION	LOCATION	LENGTH	TRENCHING AND SHOULDER PREP		*** SOIL STABILIZATION	ACHM BASE COURSE (1-1/2")				ACHM BINDER COURSE (1")				ACHM SURFACE COURSE (1/2")				TACK COAT 0.05 GAL. PER SQ. YD.		
				AVG. WID.	STA.		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.	GALLONS
			FEET	FEET		TON	FEET			TON	FEET			TON	FEET			TON	FEET		
172+60.00	242+69.57	RT. - L.M.L. (FOR MOT)	7009.57	6.00	70.10	168.23	6.00	4673.05	990.00	2313.16	6.00	4673.05	330.00	771.05	6.00	4673.05	220.00	514.04	12.00	9346.09	467.30
245+71.26	344+84.63	RT. - L.M.L. (FOR MOT)	9913.37	6.00	99.13	237.92	6.00	6608.91	990.00	3271.41	6.00	6608.91	330.00	1090.47	6.00	6608.91	220.00	726.98	12.00	13217.83	660.89
347+27.99	447+69.33	RT. - L.M.L. (FOR MOT)	10041.34	6.00	100.41	240.99	6.00	6694.23	990.00	3313.64	6.00	6694.23	330.00	1104.55	6.00	6694.23	220.00	736.37	12.00	13388.45	669.42
166+96.25	175+78.99	RAMP D65 LT.	882.74	4.00	8.83	21.19									4.00	392.33	220.00	43.16			
175+15.42	175+78.99	RAMP D65 RT.	63.57	6.00	0.64	2.54									6.00	42.38	220.00	4.66			
173+61.98	180+24.29	RAMP A65 RT.	662.31	4.00	6.62	15.90									4.00	294.36	220.00	32.38			
177+44.16	180+24.29	RAMP A65 LT.	280.13	6.00	2.80	11.21									6.00	186.75	220.00	20.54			
232+09.90	237+38.56	HWY. 270 RAMP 1 LT.	528.66	4.00	5.29	12.69									4.00	234.96	220.00	25.85			
232+09.90	240+38.56	HWY. 270 RAMP 1 RT.	828.66	6.00	8.29	33.15									6.00	552.44	220.00	60.77			
232+53.30	238+14.97	HWY. 270 RAMP 4 RT.	561.67	4.00	5.62	13.48									4.00	249.63	220.00	27.46			
232+53.30	241+14.97	HWY. 270 RAMP 4 LT.	861.67	6.00	8.62	34.47									6.00	574.45	220.00	63.19			
246+95.37	256+04.89	HWY. 270 RAMP 2 LT.	909.52	4.00	9.10	21.83									4.00	404.23	220.00	44.47			
249+95.27	256+04.89	HWY. 270 RAMP 2 RT.	609.62	6.00	6.10	24.38									6.00	406.41	220.00	44.71			
248+01.77	256+49.50	HWY. 270 RAMP 3 RT.	847.73	4.00	8.48	20.35									4.00	376.77	220.00	41.44			
251+01.77	256+49.50	HWY. 270 RAMP 3 LT.	547.73	6.00	5.48	21.91									6.00	365.15	220.00	40.17			
335+08.82	339+96.82	HOLLAND AVE. RAMP 1 LT.	488.00	4.00	4.88	11.71									4.00	216.89	220.00	23.86			
335+08.82	342+96.78	HOLLAND AVE. RAMP 1 RT.	787.96	6.00	7.88	31.52									6.00	525.31	220.00	57.78			
332+54.25	338+04.25	HOLLAND AVE. RAMP 4 RT.	550.00	4.00	5.50	13.20									4.00	244.44	220.00	26.89			
332+54.25	341+04.25	HOLLAND AVE. RAMP 4 LT.	850.00	6.00	8.50	34.00									6.00	566.67	220.00	62.33			
350+63.40	359+13.40	HOLLAND AVE. RAMP 2 LT.	850.00	4.00	8.50	20.40									4.00	377.78	220.00	41.56			
353+63.40	359+13.40	HOLLAND AVE. RAMP 2 RT.	550.00	6.00	5.50	22.00									6.00	366.67	220.00	40.33			
350+30.27	358+80.27	HOLLAND AVE. RAMP 3 RT.	850.00	4.00	8.50	20.40									4.00	377.78	220.00	41.56			
353+30.27	358+80.27	HOLLAND AVE. RAMP 3 LT.	550.00	6.00	5.50	22.00									6.00	366.67	220.00	40.33			
440+12.09	444+68.94	HWY. 104 RAMP 1 LT.	456.85	4.00	4.57	10.96									4.00	203.04	220.00	22.33			
440+12.09	447+68.94	HWY. 104 RAMP 1 RT.	756.85	6.00	7.57	30.27									6.00	504.57	220.00	55.50			
435+75.68	441+25.68	HWY. 104 RAMP 4 RT.	550.00	4.00	5.50	13.20									4.00	244.44	220.00	26.89			
435+75.68	444+25.68	HWY. 104 RAMP 4 LT.	850.00	6.00	8.50	34.00									6.00	566.67	220.00	62.33			
TOTALS:					426.41	1143.90		17976.19		8898.21		17976.19		2966.07		26616.98		2927.88		35952.37	1797.61

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
*** 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

BASE AND SURFACING - SUMMARY (PG 76-22)

DESRIPTION	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")				
	CU. YD.	TON	TON	SQ.YD.	GALLON	SQ.YD.	PG 76-22 TON	SQ.YD.	PG 76-22 TON	SQ.YD.	PG 76-22 TON	SQ.YD.	PG 76-22 TON	TOTAL PG 76-22 TON
BASE AND SURFACING - MAIN LANES	349.26	3627.82	19727.50	443787.46	23303.13	142707.70	35694.82	146082.53	24296.92	149716.05	16465.59	151655.40	16682.12	33147.71
BASE AND SURFACING - SHOULDERS	11526.78	58819.53	8568.43	254842.18	12742.13	87659.48	21948.03	85785.29	14154.61	84594.12	9305.37	83051.76	9135.63	18441.00
BASE AND SURFACING - ACCELERATION LANES AND RAMPS			5372.15	44499.38	3187.01	20177.72	3116.31	12160.84	2006.55	12160.84	1337.67	12160.84	1337.67	2675.34
BASE AND SURFACING - MAIN LANES MISC.		5088.70	7621.80	170537.25	28991.36	208704.41	11478.72							
BASE AND SURFACING - SHOULDER RECONSTRUCTION				35952.37	1797.61	17976.19	8898.21	17976.19	2966.07	26616.98	2927.88			2927.88
CROSSOVER & TEMP. ACCEL. LANE - BASE & SURFACING				43237.04	2161.86	39910.89	17740.52	3746.31	796.99	38286.57	4211.52			4211.52
TOTALS	11876.04	67536.05	41289.88	992855.68	72183.10	517136.39	98876.61	265751.16	44221.14	311374.56	34248.03	246868.00	27155.42	61403.45

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
6-24-2016

QUANTITIES

SUMMARY OF QUANTITIES

ITEM NUMBER	ITEM		QUANTITY BIM-HSIP-B530(202)	QUANTITY BIM-B530(202)	TOTALS	UNIT
201	CLEARING			341	341	STATION
201	GRUBBING			341	341	STATION
202	REMOVAL AND DISPOSAL OF APPROACH SLAB AND GUTTERS			8	8	EACH
202	REMOVAL AND DISPOSAL OF CONCRETE DITCH PAVING			12553	12553	SQ. YD.
SP & 202	REMOVAL AND DISPOSAL OF WIRE ROPE SAFETY FENCE			28246	28246	LIN. FT.
SP & 202	REMOVAL AND DISPOSAL OF GUARDRAIL			4150	4150	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			45433	45433	SQ. YD.
210	UNCLASSIFIED EXCAVATION			53564	53564	CU. YD.
SP & 210	BORROW			11876	11876	CU. YD.
210	COMPACTED EMBANKMENT			21021	21021	CU. YD.
SP & 210	SOIL STABILIZATION			6162	6162	TON
SP & 215	TRENCHING AND SHOULDER PREPARATION			426	426	STATION
SS & 303	AGGREGATE BASE COURSE (CLASS 1)			67536	67536	TON
SS & 303	AGGREGATE BASE COURSE (CLASS 7)			43109	43109	TON
SS & 401	TACK COAT			72443	72443	GAL.
SP & 405	MINERAL AGGREGATE IN ACHM BASE COURSE (1 1/2")			95021	95021	TON
SP & 405	ASPHALT BINDER (PG 76-22) IN ACHM BASE COURSE (1 1/2")			3856	3856	TON
SP, SS, & 406	MINERAL AGGREGATE IN ACHM BINDER COURSE (1")			42231	42231	TON
SP, SS, & 406	ASPHALT BINDER (PG 76-22) IN ACHM BINDER COURSE (1")			1990	1990	TON
SP, SS, & 407	MINERAL AGGREGATE IN ACHM SURFACE COURSE (1/2")			58477	58477	TON
SP, SS, & 407	ASPHALT BINDER (PG 64-22) IN ACHM SURFACE COURSE (1/2")			15	15	TON
SP, SS, & 407	ASPHALT BINDER (PG 76-22) IN ACHM SURFACE COURSE (1/2")			3193	3193	TON
SP & 414	ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC			130	130	TON
SP & 415	ACHM PATCHING OF EXISTING ROADWAY			130	130	TON
504	APPROACH SLABS			490.44	490.44	CU. YD.
504	APPROACH GUTTERS			246.72	246.72	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			124558	124558	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			2664	2664	LIN. FT.
603	18" TEMPORARY CULVERT			3183	3183	LIN. FT.
SS & 604	SIGNS			2482	2482	SQ. FT.
SS & 604	BARRICADES			880	880	LIN. FT.
SS & 604	TRAFFIC DRUMS			1291	1291	EACH
604	FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER			31200	31200	LIN. FT.
604	RELOCATING PRECAST CONCRETE BARRIER			35400	35400	LIN. FT.
604	CONSTRUCTION PAVEMENT MARKINGS			300240	300240	LIN. FT.
604	REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS			168660	168660	LIN. FT.
604	REMOVAL OF PERMANENT PAVEMENT MARKINGS			64680	64680	LIN. FT.
604	ADVANCE WARNING ARROW PANEL			950	950	DAY
SS & 604	VERTICAL PANELS			294	294	EACH
SP & 604	PORTABLE CHANGEABLE MESSAGE SIGN			250	250	WEEK
SP & 605	CONCRETE DITCH PAVING (TYPE B)		12186		12186	SQ. YD.
606	SELECTED PIPE BEDDING			390	390	CU. YD.
609	YARD DRAINS			14	14	EACH
611	UNDERDRAIN OUTLET PROTECTORS			241	241	EACH
611	4" PIPE UNDERDRAINS			55152	55152	LIN. FT.
611	UNDERDRAIN COVER			40383	40383	LIN. FT.
611	UNDERDRAIN VIDEO INSPECTION			55152	55152	LIN. FT.
617	GUARDRAIL (TYPE A)			2925	2925	LIN. FT.
617	TERMINAL ANCHOR POSTS (TYPE 1)			10	10	EACH
617	GUARDRAIL TERMINAL (TYPE 2)			15	15	EACH
617	THRIE BEAM GUARDRAIL TERMINAL			15	15	EACH
620	LIME			148	148	TON
620	SEEDING			74.14	74.14	ACRE
SS & 620	MULCH COVER			196.07	196.07	ACRE
620	WATER		153.5	10052.2	10205.7	M.GAL.
621	TEMPORARY SEEDING			121.93	121.93	ACRE
621	SILT FENCE			3272	3272	LIN. FT.
621	SAND BAG DITCH CHECKS			3432	3432	BAG
621	DROP INLET SILT FENCE			760	760	LIN. FT.
621	SEDIMENT BASIN			2226	2226	CU. YD.
621	OBLITERATION OF SEDIMENT BASIN			2226	2226	CU. YD.
621	SEDIMENT REMOVAL AND DISPOSAL			3437	3437	CU. YD.
623	SECOND SEEDING APPLICATION			74.14	74.14	ACRE
624	SOLID SODDING		12186	197	12383	SQ. YD.
SP & 635	ROADWAY CONSTRUCTION CONTROL			1.00	1.00	LUMP SUM
SP & 640	MODIFYING DROP INLETS			4	4	EACH
642	RUMBLE STRIPS IN ASPHALT SHOULDERS			123434	123434	LIN. FT.
SP & 719	INVERTED PROFILE THERMOPLASTIC PAVEMENT MARKING WHITE (4")	(ALTERNATE NO. 1)		57931	57931	LIN. FT.
* SP	HIGH PERFORMANCE MARKING TAPE WHITE (4")	(ALTERNATE NO. 2)		57931	57931	LIN. FT.
SP & 719	INVERTED PROFILE THERMOPLASTIC PAVEMENT MARKING (SKIP LINE) WHITE (4")	(ALTERNATE NO. 1)		13348	13348	LIN. FT.
* SP	HIGH PERFORMANCE MARKING TAPE (SKIP LINE) WHITE (4")	(ALTERNATE NO. 2)		13348	13348	LIN. FT.
SP & 719	INVERTED PROFILE THERMOPLASTIC PAVEMENT MARKING WHITE (8")	(ALTERNATE NO. 1)		3532	3532	LIN. FT.
* SP	HIGH PERFORMANCE MARKING TAPE WHITE (8")	(ALTERNATE NO. 2)		3532	3532	LIN. FT.
SP & 719	INVERTED PROFILE THERMOPLASTIC PAVEMENT MARKING YELLOW (4")	(ALTERNATE NO. 1)		59011	59011	LIN. FT.
* SP	HIGH PERFORMANCE MARKING TAPE YELLOW (4")	(ALTERNATE NO. 2)		59011	59011	LIN. FT.
SP & 719	INVERTED PROFILE THERMOPLASTIC CONTRAST PAVEMENT MARKING WHITE (4")	(ALTERNATE NO. 1)		286	286	LIN. FT.
* SP	HIGH PERFORMANCE CONTRAST MARKING TAPE WHITE (4")	(ALTERNATE NO. 2)		286	286	LIN. FT.
721	RAISED PAVEMENT MARKERS (TYPE II)			1333	1333	EACH
725	GUIDE SIGN-OVERHEAD MOUNTED (DEMOUNTABLE LEGEND)			448	448	SQ. FT.
725	GUIDE SIGN-ROADSIDE MOUNTED (DEMOUNTABLE LEGEND)			3682	3682	SQ. FT.
726	STANDARD SIGN			574	574	SQ. FT.
727	EXIT NUMBER PANEL (TYPE A)			260	260	SQ. FT.
SP & 729	CHANNEL POST SIGN SUPPORT (TYPE U-1)			10	10	EACH
730	BREAKAWAY SIGN SUPPORT (TYPE G-2)			22889	22889	POUND
731	TEMPORARY IMPACT ATTENUATION BARRIER			8	8	EACH
731	TEMPORARY IMPACT ATTENUATION BARRIER (REPAIR)			8	8	EACH
731	TEMPORARY IMPACT ATTENUATION BARRIER (RELOCATION)			16	16	EACH
804	REINFORCING STEEL-ROADWAY (GRADE 60)			79548	79548	POUND
SP	REMOVAL AND DISPOSAL OF IMPACT ATTENUATION BARRIER			1	1	EACH
SP	MOBILE SPEED NOTIFICATION SYSTEM			2	2	EACH
SP	MODULAR GLARE SHIELD			400	400	LIN. FT.
SP	PORTABLE CONSTRUCTION LIGHTING			800	800	DAY
SP	REMOVAL OF RUMBLE STRIP			1376	1376	LIN. FT.
SP	SCARIFYING CONCRETE PAVEMENT			2000	2000	SQ. YD.
SP	WIRE ROPE SAFETY FENCE		27418		27418	LIN. FT.
SP	WIRE ROPE SAFETY FENCE (POST REPAIR)		50		50	EACH
SP	WIRE ROPE SAFETY FENCE END TERMINAL		2		2	EACH
SP	FURNISH AND INSTALL VEHICLE DETECTION SYSTEM			16	16	EACH
SP	FURNISH AND INSTALL CLOSED CIRCUIT TELEVISION SYSTEM			4	4	EACH
SP	FURNISH AND INSTALL VARIABLE MESSAGE SIGN			10	10	EACH
SP	FURNISH AND INSTALL PUBLIC NOTIFICATION SYSTEM			2	2	EACH
SP	AWIS OPERATION			16	16	MNTH
SP	AWIS MOBILIZATION			1.00	1.00	LUMP SUM
SP	DEVICE RELOCATION			16	16	EACH
SP	OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS (TYPE G-2)			34	34	EACH
SP	CULVERT CLEAN OUT			39	39	EACH

* DENOTES ALTERNATE BID ITEMS.

REVISIONS

DATE	REVISION	SHEET NUMBER
7/26/2016	REVISED "PORTABLE CONSTRUCTION LIGHTING" SP.	183
7/28/2016	REVISED MAINTENANCE OF TRAFFIC DETAILS. REVISED CONSTRUCTION PAVEMENT MARKINGS QUANTITY.	128, 173, 183
8/4/2016	ADDED WIRE ROPE SAFETY FENCE STA. 453+28 TO STA. 463+000.	128, 173, 183
		183, 204

SUMMARY OF QUANTITIES AND REVISIONS

SCOTT R. THORNSBERRY
LICENSED PROFESSIONAL ENGINEER
No. 10887
STATE OF ARKANSAS
8-4-2016

Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED
7-26-16			
7-28-16			
8-04-16			

(2) SUMMARY QUANTITIES & REVISIONS

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.	BB0202	183	235

JOB NO.

Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	184	235
(2) PLAN SHEET				

APPROXIMATE 100 YR. FLOODPLAIN LIMITS

EXIST. R/W & C/A

I-530 CROSSOVER IA
P.I. 14+63.60
Δ = 11°13'05" RT.
D = 8°00'00"
T = 70.34'
L = 140.22'
P.C. = 13+93.27
P.T. = 15+33.49
NO SUPER

RAMP A65
P.I. 171+56.10
Δ = 33°58'17" RT.
D = 8°00'00"
T = 218.77'
L = 424.64'
P.C. = 169+37.33
P.T. = 173+61.98
MATCH EXIST SUPER

RAMP A65
P.I. 178+41.30
Δ = 11°57'33" LT.
D = 4°00'00"
T = 150.04'
L = 298.98'
P.C. = 176+91.27
P.T. = 179+90.25
MATCH EXIST. SUPER

TEMP. RAMP A65 A
P.I. 30+35.23
Δ = 5°37'59" RT.
D = 8°00'00"
T = 35.23'
L = 70.41'
P.C. = 30+00.00
P.T. = 30+70.41
NO SUPER

TEMP. RAMP A65 A
P.I. 37+20.35
Δ = 23°18'45" LT.
D = 6°00'00"
T = 197.00'
L = 388.54'
P.C. = 35+23.35
P.T. = 39+11.89
NO SUPER

LEGEND
FULL DEPTH PAVEMENT TRANSITION

C.L. RAMP A65 STA. 173+61.98 =
C.L. TEMP. RAMP A65 A STA. 30+00.00

RAMP A65 STA. 176+52
IN PLACE 18"X 65' R.C. PIPE CULVERT
WITH FES LT. & RT.
Q50=12.4 CFS D.A.=3.7 ACRES
RETAIN
REMOVE FES RT. AND INSTALL
18"X17' TEMPORARY CULVERT
EXTENSION RT.

MAIN LANES STA. 180+24.67, 70.00' LT. =
RAMP A65 STA. 180+24.29, 12.50' RT.

MAIN LANES STA. 177+58.34, 21.50' LT. =
TEMP. RAMP D65 A STA. 30+71.26

STA. 177+69.32 BEGIN OVERLAY TRANSITION

254.97' OVERLAY TRANSITION TO EXIST. PAVEMENT

END OVERLAY TRANSITION AND BEGIN FULL DEPTH TRANSITION

C.L. RAMP A65

TEMP. RAMP A65 A STA. 33+92.00
70° LT. FWD. SKEW
INSTALL 12"X 142' TEMP. CULVERT

C.L. I-530 CROSSOVER IB

MAIN LANES STA. 172+60.00, 37.50' LT. =
C.L. 530 CROSSOVER IB STA. 0+00.00

C.L. I-530 CROSSOVER IA

C.L. TEMP. RAMP A65 A

MAIN LANES STA. 175+64.09, 33.50' LT. =
C.L. 530 CROSSOVER IA STA. 15+33.49

STA. 170+00.00 BEGIN WRSF
10' LT. OF R.M.L. (P.G.)
(L.M. 34.82)

C.L. I-530

C.L. TEMP. RAMP D65

TEMP. RAMP D65 STA. 24+94.00
79° RT. FWD. SKEW
INSTALL 12"X 224' TEMP. CULVERT

C.L. RAMP D65

RAMP D65
STA. 169+60 IN PLACE
18"X 60' R.C. PIPE CULVERT
WITH FES LT. & RT.
RETAIN
REMOVE FES LT. AND INSTALL
18"X 12' TEMPORARY CULVERT
EXTENSION LT.

C.L. RAMP D65 STA. 166+95.98 =
C.L. TEMP. RAMP D65 STA. 20+00.00

STA. 156+19.23 BEGIN SUPERELEVATION
STA. 160+19.23 MAX. SUPERELEVATION (0.085 '/')
STA. 171+90.50 MAX. SUPERELEVATION (0.085 '/')
STA. 175+90.50 END SUPERELEVATION

MAIN LANES STA. 170+39.48, 37.50' RT.=
C.L. 530 CROSSOVER IA STA. 10+00.00

MAIN LANES STA. 175+14.73 =
RAMP D65 STA. 175+15.42

MAIN LANES STA. 175+78.49, 56.00' RT. =
RAMP D65 STA. 175+78.99, 9.50' LT.
END RAMP OVERLAY TRANSITION
BEGIN FULL DEPTH TRANSITION

STA. 175+47.11
BEGIN OVERLAY TRANSITION

31.88' OVERLAY TRANSITION TO EXIST. PAVEMENT

FULL DEPTH RECONSTRUCTION MAIN LANES
STA. 175+14.73 TO STA. 186+14.73
SEE SPECIAL DETAILS

STA. 175+14.73
BEGIN JOB BB0202
LOG MILE 34.99

MAIN LANES STA. 177+78.97, 58.50' RT. =
C.L. RAMP D65 STA. 177+78.97

MAIN LANES STA. 178+30.91, 35.50' RT. =
C.L. 530 CROSSOVER IB STA. 5+76.35

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

APPROXIMATE 100 YR. FLOODPLAIN LIMITS

C.L. I-530
P.I. 166+26.08
Δ = 34°16'54" LT.
D = 2°30'00"
T = 706.85'
L = 1371.27'
P.C. = 159+19.23
P.T. = 172+90.50
e = 0.085
Ls = 400'

TEMP. RAMP D65 A
P.I. 21+80.31
Δ = 11°53'05" LT.
D = 5°00'00"
T = 180.31'
L = 357.69'
P.C. = 20+00.00
P.T. = 23+57.69
NO SUPER

TEMP. RAMP D65 A
P.I. 29+78.08
Δ = 11°13'05" RT.
D = 6°00'00"
T = 93.78'
L = 186.97'
P.C. = 28+84.30
P.T. = 30+71.26
NO SUPER

RAMP D65
P.I. 169+19.21
Δ = 13°20'00" LT.
D = 3°00'00"
T = 223.23'
L = 444.44'
P.C. = 166+95.98
P.T. = 171+40.42
MATCH EXIST. SUPER

RAMP D65
P.I. 176+12.49
Δ = 6°40'00" RT.
D = 2°00'00"
T = 166.85'
L = 333.33'
P.C. = 174+45.64
P.T. = 177+78.97
MATCH EXIST. SUPER

I-530 CROSSOVER IA
P.I. 11+10.19
Δ = 17°29'36" LT.
D = 8°00'00"
T = 110.19'
L = 218.67'
P.C. = 10+00.00
P.T. = 12+18.67
NO SUPER

STA. 173+80.04 IN PLACE
TYPE RM DROP INLET
IN MEDIAN (4' X 3' X H= 3'0")
WITH 18" X 78' R.C. PIPE OUTLET
ON LT. WITH FES
RETAIN

STA. 176+19.95 IN PLACE
TYPE RM DROP INLET
IN MEDIAN (4' X 3' X H= 3'0")
WITH 18" X 76' R.C. PIPE OUTLET
ON RT. WITH FES
RETAIN

STA. 172+00 TO 177+59 INSTALL
TEMPORARY 18"X 559' CULVERT IN MEDIAN.

COVER EXIST. DROP INLETS AT STA. 173+80.04 & STA. 176+19.95 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.

I-530 CROSSOVER IB
P.I. 1+12.82
Δ = 11°14'45" RT.
D = 5°00'00"
T = 112.82'
L = 224.92'
P.C. = 0+00.00
P.T. = 2+24.92
NO SUPER

I-530 CROSSOVER IB
P.I. 4+56.71
Δ = 12°00'29" LT.
D = 5°00'00"
T = 120.52'
L = 240.16'
P.C. = 3+36.19
P.T. = 5+76.35
NO SUPER

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

PLAN SHEET

Leonard.Speed 6/21/2016 10:25:56 AM
WORKSPACE\ Leonard.Speed
Y:\Projects\ARTD.35285.1-530_Hwy104-Hwy65B\Deliverables\ROADWAY\Drawings\RBB0202_12_PP_MAIN_01.dgn

Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	185	235
				(2)	PLAN SHEET			

TEMP. RAMP A65 B
P.I. 40+57.67
Δ = 6°54'43" RT.
D = 6°00'00"
T = 57.67'
L = 115.20'
P.C. = 40+00.00
P.T. = 41+15.20
NO SUPER

RAMP A65
P.I. 183+84.84
Δ = 5°43'13" LT.
D = 3°00'00"
T = 95.42'
L = 190.68'
P.C. = 182+89.42
P.T. = 184+80.10
MATCH EXIST. SUPER

STA. 189+19.90 IN PLACE
TYPE R DROP INLET
IN MEDIAN (4' X 3' X H=3'-0")
WITH 18"X76' R.C. PIPE OUTLET
TO RT. WITH FES
RETAIN

STA. 180+59.15 IN PLACE
TRIP. 5'X4'X173' R.C. BOX CULVERT
WITH TYPE T DROP INLET
IN MEDIAN (2'-6" X 3' X H=3'-5")
D.A.=577 ACRES Q50=588 CFS
RETAIN

STA. 184+65 TO 187+70 INSTALL
18"X 305' TEMPORARY PIPE CULVERT IN MEDIAN

STA. 179+11 TO 181+09 INSTALL
18"X 198' TEMPORARY CULVERT WITH
TEMP. CONNECTIONS TO MEDIAN DROP
INLET AT STA. 180+59.15

APPROXIMATE 100 YR.
FLOODPLAIN LIMITS

STA. 190+00.00 LT. OF LT. LANES
REMOVE AND DISPOSE OF IMPACT
ATTENUATION BARRIER (TYPE A) = 1 EACH

MAIN LANES STA. 184+80.10, 46.50' LT. =
C.L. RAMP A65 STA. 184+80.10

C.L. RAMP A65 STA. 182+89.42 =
C.L. TEMP. RAMP A65 B STA. 40+00.00

MAIN LANES STA. 180+24.67, 70.00' LT. =
RAMP A65 STA. 180+24.29, 12.50' RT.

EXIST. R/W & C/A

N67°35'00"W

PT 179+90.25

TRIP. 5'X4' BC

PC 182+89.42

PC 40+00.00

PI 40+57.67

STA. 183+82.41

PI 183+84.84

PT 41+15.20

PT 184+80.10

STA. 186+14.73 END FULL
DEPTH RECONSTRUCTION
BEGIN RUBBLIZE AND OVERLAY

STA. 186+82.41

300'
TAPER

N61°51'47"W

N54°57'04"W

700'
TEMP. ACCEL. LANE

C.L. I-530

STA. 186+28.00
END WRSF ON NB FORESLOPE
BEHIND GUARDRAIL
(L.M. 35.11)

STA. 190+28.00
BEGIN WRSF ON NB FORESLOPE
BEHIND GUARDRAIL
(L.M. 35.19)

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

60'
24'
6'
10'

PC 184+80.04

STA. 185+78.49

STA. 182+78.49

PT 39+11.89

PI 37+20.35

N44°16'15"W

C.L. TEMP. RAMP A65 A

700'
ACCELERATION LANE

FULL DEPTH RECONSTRUCTION MAIN LANES
STA. 175+14.73 TO STA. 186+14.73

MAIN LANES STA. 182+45.87, 35.50' RT. =
C.L. TEMP. RAMP A65 A STA. 39+11.89

MAIN LANES STA. 189+85.33, 35.50' RT. =
C.L. TEMP. RAMP A65 B STA. 46+99.43

C.L. I-530
P.I. 197+82.87
Δ = 59°14'01" RT.
D = 2°30'00"
T = 1302.83'
L = 2369.35'
P.C. = 184+80.04
P.T. = 208+49.38
e = 0.085 '/'
Ls = 400'

STA. 181+80.04 BEGIN SUPERELEVATION
STA. 185+80.04 MAX. SUPERELEVATION (0.085 '/')
STA. 207+49.38 MAX. SUPERELEVATION (0.085 '/')
STA. 211+49.38 END SUPERELEVATION

NOTE: EXISTING VERTICAL CLEARANCE UNDER SIGN AT STA. 189+78
IS 19'-2". A MINIMUM 17'-0" VERTICAL CLEARANCE IS
REQUIRED FOR FINISHED ROADWAY.

STA. 189+78.00 IN PLACE
19'-2" OVERHEAD SIGN STRUCTURE
RETAIN

TEMP. RAMP A65 A
P.I. 37+20.35
Δ = 23°18'45" LT.
D = 6°00'00"
T = 197.00'
L = 388.54'
P.C. = 35+23.35
P.T. = 39+11.89
NO SUPER

APPROXIMATE 100 YR.
FLOODPLAIN LIMITS

EXIST. R/W & C/A

REMOVAL AND DISPOSAL OF GUARDRAIL

	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE 2)	TERMINAL ANCHOR POST (TYPE 1)
STA. 185 +78 TO STA. 190 +78 LT. OF R.M.L.	= 425 LIN. FT.	1 EACH	1 EACH
STA. 188 +78 TO STA. 193 +78 RT. OF L.M.L.	= 425 LIN. FT.	1 EACH	1 EACH

GUARDRAIL

	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE 2)	TERMINAL ANCHOR POST (TYPE 1)
STA. 185 +78 TO STA. 190 +78 LT. OF R.M.L.	= 425 LIN. FT.	1 EACH	1 EACH
STA. 189 +28 TO STA. 193 +78 RT. OF L.M.L.	= 375 LIN. FT.	1 EACH	1 EACH
STA. 189 +28 TO STA. 191 +28 LT. OF L.M.L.	= 125 LIN. FT.	1 EACH	1 EACH

LEGEND

FULL DEPTH PAVEMENT TRANSITION

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

PLAN SHEET

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WORKSPACE: Leonard.Speed
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Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	186	235
(2)	PLAN SHEET			

C.L. I-530
P.I. 197+82.87
Δ = 59°14'01" RT.
D = 2°30'00"
T = 1302.83'
L = 2369.35'
P.C. = 184+80.04
P.T. = 208+49.38
e = 0.085'/'
Ls = 400'

APPROXIMATE 100 YR. FLOODPLAIN LIMITS

P.I. 197+82.87

N8°20'59"W

EXIST. R/W & C/A

TRIP. 4'X3' BC

200

205

C.L. I-530

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

18"

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

STA. 181+80.04 BEGIN SUPERELEVATION
STA. 185+80.04 MAX. SUPERELEVATION (0.085 '/')
STA. 207+49.38 MAX. SUPERELEVATION (0.085 '/')
STA. 211+49.38 END SUPERELEVATION

P.T. 208+49.38

EXIST. R/W & C/A

EXIST. R/W & C/A

STA. 197+20.00 IN PLACE
TYPE R DROP INLET
IN MEDIAN (4' X 3' X H=3'6")
WITH 18"X72' R.C PIPE OUTLET
ON RT. WITH FES
RETAIN

STA. 204+90.00 IN PLACE
TRIP. 4'X3' X 227' R.C. BOX CULVERT
WITH TYPE T DROP INLET
IN MEDIAN (4' X 3' X H=6'-2")
D.A.=87 ACRES Q50=209 CFS
RETAIN

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

PLAN SHEET

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WORKSPACE: Leonard.Speed
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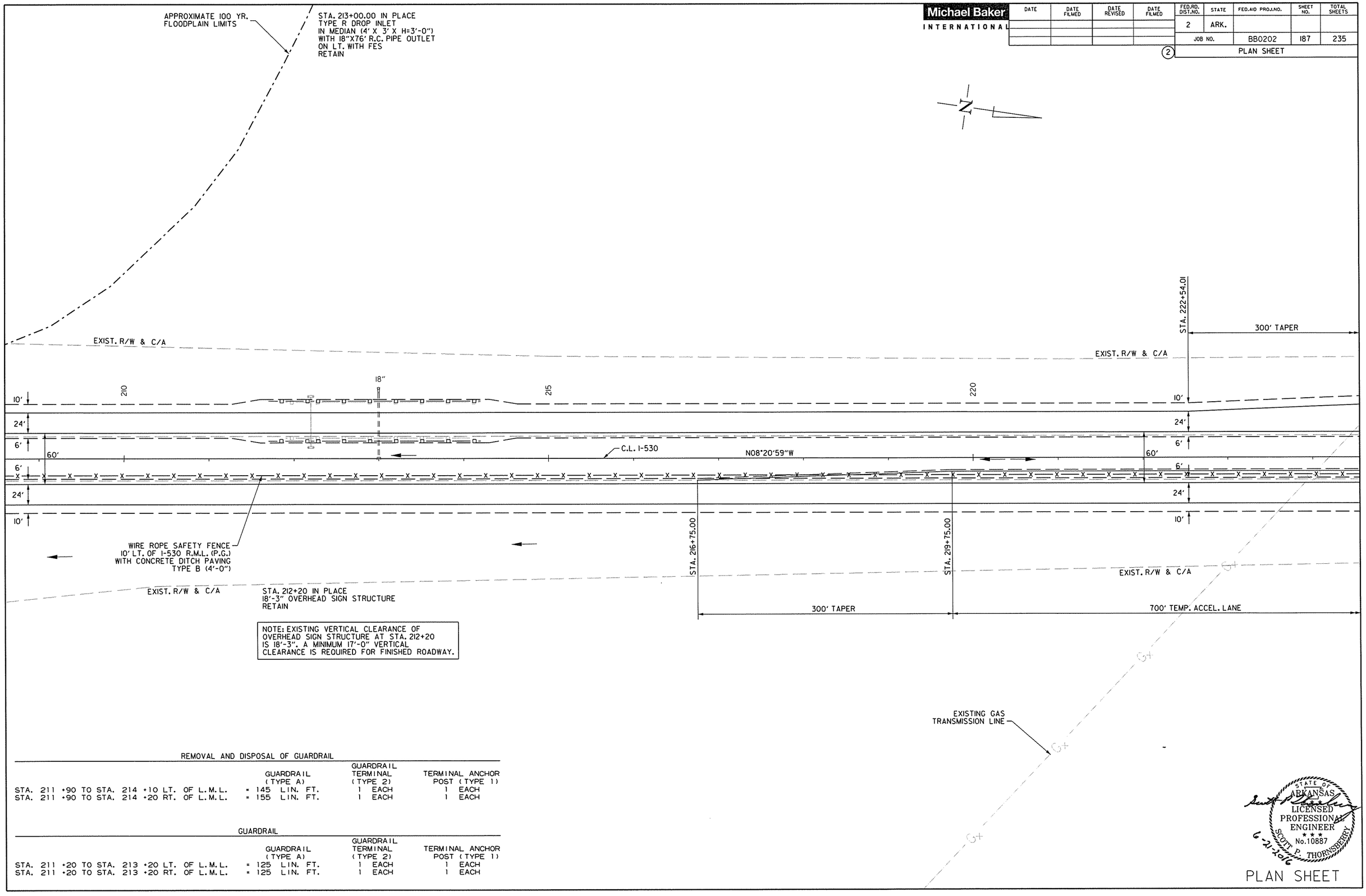
Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	187	235
				(2)	PLAN SHEET			



NOTE: EXISTING VERTICAL CLEARANCE OF OVERHEAD SIGN STRUCTURE AT STA. 212+20 IS 18'-3". A MINIMUM 17'-0" VERTICAL CLEARANCE IS REQUIRED FOR FINISHED ROADWAY.

REMOVAL AND DISPOSAL OF GUARDRAIL

	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE 2)	TERMINAL ANCHOR POST (TYPE 1)
STA. 211 +90 TO STA. 214 +10 LT. OF L.M.L.	= 145 LIN. FT.	1 EACH	1 EACH
STA. 211 +90 TO STA. 214 +20 RT. OF L.M.L.	= 155 LIN. FT.	1 EACH	1 EACH

GUARDRAIL

	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE 2)	TERMINAL ANCHOR POST (TYPE 1)
STA. 211 +20 TO STA. 213 +20 LT. OF L.M.L.	= 125 LIN. FT.	1 EACH	1 EACH
STA. 211 +20 TO STA. 213 +20 RT. OF L.M.L.	= 125 LIN. FT.	1 EACH	1 EACH

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

PLAN SHEET

Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	188	235
				(2)	PLAN SHEET			

HWY. 270 TEMP. RAMP 4A
P.I. 70+62.66
Δ = 10°00'00" LT.
D = 8°00'00"
T = 62.66'
L = 125.00'
P.C. = 70+00.00
P.T. = 71+25.00
NO SUPER

HWY. 270 TEMP. RAMP 4A
P.I. 74+54.20
Δ = 4°25'53" RT.
D = 8°00'00"
T = 27.71'
L = 55.39'
P.C. = 74+26.49
P.T. = 74+81.89
NO SUPER

RAMP 4
STA. 233+14 IN PLACE
TYPE E DROP INLET IN GORE
WITH 18"X40' R.C. PIPE OUTLET
ON LT. WITH FES
ADJUST TO GRADE

HWY. 270 RAMP 4
P.I. 241+48.04
Δ = 25°00'00" RT.
D = 4°00'00"
T = 317.60'
L = 625.09'
P.C. = 238+30.44
P.T. = 244+55.53
MATCH EXIST. SUPER

HWY. 270 TEMP. RAMP 4B
P.I. 82+57.21
Δ = 30°09'00" LT.
D = 6°00'00"
T = 257.21'
L = 502.50'
P.C. = 80+00.00
P.T. = 85+02.50
NO SUPER

HWY. 270 TEMP. RAMP 4B
P.I. 86+03.32
Δ = 10°00'00" RT.
D = 6°00'00"
T = 83.55'
L = 166.67'
P.C. = 85+19.77
P.T. = 86+86.44
NO SUPER

HWY. 270 RAMP 4
P.I. 233+66.60
Δ = 20°09'00" LT.
D = 4°00'00"
T = 254.50'
L = 503.74'
P.C. = 231+12.10
P.T. = 236+15.84
MATCH EXIST. SUPER

EXISTING GAS TRANSMISSION LINE

EXIST. R/W & C/A

STA. 227+00 IN PLACE
TYPE R DROP INLET IN MEDIAN
(4' X 3' X H=3'-0") WITH
18"X90' R.C. PIPE OUTLET
ON LT. WITH FES
RETAIN

STA. 226+42 TO 229+21 INSTALL
18"X 279' TEMPORARY CULVERT IN MEDIAN
WITH TEMP. CONNECTION TO MEDIAN
DROP INLET AT STA. 227+00

MAIN LANES STA. 232+54.01, 56.00' LT. =
RAMP 4 STA. 232+53.30, 9.50' RT.

C.L. HWY. 270 RAMP 4 STA. 232+51.31 =
C.L. HWY. 270 TEMP. RAMP 4A STA. 76+67.63

MAIN LANES STA. 231+73.40 =
HWY. 270 RAMP 4 STA. 231+73.42
END RUBBLIZE AND OVERLAY &
BEGIN FULL DEPTH TRANSITION

MAIN LANES STA. 231+12.10, 58.50' LT. =
HWY. 270 RAMP 4 STA. 231+12.10

HWY. 270 RAMP 4 STA. 232+53.30
END FULL DEPTH TRANSITION &
BEGIN OVERLAY TRANSITION

MAIN LANES STA. 225+07.91, 33.50' LT. =
C.L. HWY. 270 TEMP. RAMP 1A STA. 50+00.00

MAIN LANES STA. 229+54.96, 33.50' LT. =
C.L. HWY. 270 TEMP. RAMP 1B STA. 60+00.00

C.L. HWY. 270 TEMP. RAMP 4A

EXIST. R/W & C/A

PC 50+00.00
STA. 225+54.01
PI 51+20.44
PT 52+40.00
PC 60+00.00
PI 74+54.20
T5
PC 231+12.10
PI 61+82.51
PI 233+66.60
PT 236+15.84
PC 238+30.44
PI 86+03.32
PT 86+86.44
PC 85+19.77

300' TAPER
700' ACCELERATION LANE
509.70' OVERLAY TRANSITION TO EXIST. PAVEMENT
STA. 231+63.00 END OVERLAY TRANSITION

C.L. HWY. 270 RAMP 4
RAMP 4
C.L. HWY. 270 TEMP. RAMP 4B

RAMP 4
STA. 238+00 IN PLACE
24"XII2' R.C. PIPE CULVERT
WITH FES LT. AND RT.
RETAIN

STA. 238+00 IN PLACE
TYPE R DROP INLET IN MEDIAN
(4' X 3' X H=19-0") WITH
18"X134' R.C. PIPE OUTLET
TO LT. WITH FES
RETAIN

HWY. 270 RAMP 4 STA. 238+14.97, 15.00' RT. =
C.L. HWY. 270 TEMP. RAMP 4B STA. 87+31.66

HWY. 270 TEMP. RAMP 4B STA. 84+83
68° RT. FWD. SKEW
INSTALL 12"X 129' TEMPORARY CULVERT

FULL DEPTH RECONSTRUCTION MAIN LANES
STA. 231+73.40 TO STA. 242+73.40

C.L. I-530

PC 65+42.93

STA. 232+07.91
BEGIN 700' TEMP.
ACCEL. LANE

700' TEMP.
ACCEL. LANE

PT 66+07.92
C.L. HWY. 270
TEMP. RAMP 1B

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

HWY. 270 RAMP 1 STA. 237+38.56, 15.00' LT. =
C.L. HWY. 270 TEMP. RAMP 1B STA. 68+03.00

PC 70+00.00
PI 70+62.66
PT 71+25.00
STA. 226+75.00
PC 227+54.80
PI 228+48.54
PT 229+42.13
C.L. HWY. 270
RAMP 1
C.L. HWY. 270
TEMP. RAMP 1A
PC 55+82.93
PT 74+26.49
PT 74+81.89
PC 80+00.00
PI 56+46.12
PT 57+09.18
PC 233+38.81
PT 63+6.99
PI 182+57.21
PI 65+75.43
PI 235+68.33
PT 237+96.87

MAIN LANES STA. 227+54.80, 46.50' RT. =
C.L. HWY. 270 RAMP 4 STA. 227+54.80

MAIN LANES STA. 225+90.08, 23.50' RT. =
C.L. HWY. 270 TEMP. RAMP 4A STA. 70+00.00

MAIN LANES STA. 231+09.94, 23.50' RT.
C.L. HWY. 270 TEMP. RAMP 4B STA. 80+00.00

MAIN LANES STA. 231+14.91 =
HWY. 270 RAMP 1 STA. 231+16.08
END RUBBLIZE AND OVERLAY &
BEGIN FULL DEPTH TRANSITION

C.L. HWY. 270 RAMP 1 STA. 232+07.90 =
C.L. HWY. 270 TEMP. RAMP 1A STA. 57+09.18

HWY. 270 RAMP 1 STA. 232+09.90
END FULL DEPTH TRANSITION &
BEGIN OVERLAY TRANSITION

MAIN LANES STA. 232+09.51, 70.00' RT. =
HWY. 270 RAMP 1 STA. 232+09.90, 12.50' LT.

502.70' OVERLAY TRANSITION TO EXIST. PVMT.

HWY. 270 RAMP 1

EXIST. R/W & C/A

STA. 237+12.60
END OVERLAY TRANSITION

LEGEND
FULL DEPTH PAVEMENT TRANSITION

STA. 230+90 TO 234+09
INSTALL 18"X 319' TEMPORARY CULVERT IN MEDIAN

COVER EXISTING DROP INLET AT STA. 232+00 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. 232+00 IN PLACE
TYPE R DROP INLET IN MEDIAN
(4'-3" X 3'-0" X H=12'-6") WITH
42"X126' R.C. PIPE INLET &
42"XII4' R.C. PIPE OUTLET
WITH FES LT. AND RT.
D.A.=32 ACRES Q50=92 CFS
RETAIN

HWY. 270 TEMP. RAMP IA
P.I. 51+20.44
Δ = 12°00'00" RT.
D = 5°00'00"
T = 120.44'
L = 240.00'
P.C. = 50+00.00
P.T. = 52+40.00
NO SUPER

HWY. 270 TEMP. RAMP IA
P.I. 56+46.12
Δ = 6°18'44" LT.
D = 5°00'00"
T = 63.19'
L = 126.25'
P.C. = 55+82.93
P.T. = 57+09.18
NO SUPER

HWY. 270 TEMP. RAMP IB
P.I. = 61+82.51
Δ = 18°05'58" RT.
D = 5°00'00"
T = 182.51'
L = 361.99'
P.C. = 60+00.00
P.T. = 63+61.99
NO SUPER

HWY. 270 TEMP. RAMP IB
P.I. = 65+75.43
Δ = 3°14'58" LT.
D = 5°00'00"
T = 32.50'
L = 64.99'
P.C. = 65+42.93
P.T. = 66+07.92
NO SUPER

RAMP I
STA. 234+02 IN PLACE
TYPE R DROP INLET IN MEDIAN
(4' X 3' X H=13'-0") WITH
18"X72' R.C. PIPE OUTLET
ON RT. WITH FES
RETAIN

HWY. 270 RAMP I
P.I. 228+48.54
Δ = 5°37'12" RT.
D = 3°00'00"
T = 93.74'
L = 187.33'
P.C. = 227+54.80
P.T. = 229+42.13
MATCH EXIST. SUPER

HWY. 270 RAMP I
P.I. 235+68.33
Δ = 9°09'44" RT.
D = 2°00'00"
T = 229.52'
L = 458.06'
P.C. = 233+38.81
P.T. = 237+96.87
MATCH EXIST. SUPER

RAMP I
STA. 238+00 IN PLACE
24"X68' R.C. PIPE CULVERT
WITH FES RT. AND LT.
RETAIN

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
SCOTT P. THORNSBERRY
No.10887
6-21-2016

PLAN SHEET

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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.		BB0202	189	235

(2) PLAN SHEET

HWY. 270 RAMP 4
P.I. 233+66.60
Δ = 20°09'00" LT.
D = 4°00'00"
T = 254.50'
L = 503.74'
P.C. = 231+12.10
P.T. = 236+15.84
MATCH EXIST. SUPER

HWY. 270 TEMP. RAMP 4B
P.I. = 82+57.21
Δ = 30°09'00" LT.
D = 6°00'00"
T = 257.21'
L = 502.50'
P.C. = 80+00.00
P.T. = 85+02.50
NO SUPER

HWY. 270 TEMP. RAMP 4B
P.I. = 86+03.32
Δ = 10°00'00" RT.
D = 6°00'00"
T = 83.55'
L = 166.67'
P.C. = 85+19.77
P.T. = 86+86.44
NO SUPER

STA. 238+00 IN PLACE
TYPE R DROP INLET IN MEDIAN
(4' X 3' X H=19-0") WITH
18"X134' R.C. PIPE OUTLET
ON LT. WITH FES
RETAIN

RAMP 4
STA. 238+00 IN PLACE
24"X112' R.C. PIPE CULVERT
WITH FES LT. & RT.
RETAIN

HWY. 270 RAMP 4
P.I. 241+48.04
Δ = 25°00'00" RT.
D = 4°00'00"
T = 317.60'
L = 625.09'
P.C. = 238+30.44
P.T. = 244+55.53
MATCH EXIST. SUPER

STA. 250+40 IN PLACE
TYPE R DROP INLET IN MEDIAN
(5'-6" X 3'-0" X H=23'-8") WITH
36"X200' R.C. PIPE INLET WITH
(45° SKEW) HDWL. ON LT. &
36"X140' R.C. PIPE OUTLET TO
DROP INLET ON RT.
STA. 251+00
D.A.=15.5 ACRES Q50=56 CFS
RETAIN

RAMP 4
STA. 245+72 IN PLACE
24"X80' R.C. PIPE CULVERT
30° LT. FWD. SKEW
WITH FES LT. & RT.
RETAIN

STA. 251+00 IN PLACE
TYPE R DROP INLET IN MEDIAN (129' RT.)
(4'-6" X 3'-0" X H=8'-6") WITH
36" R.C. PIPE FROM D.I. AT STA. 250+40
WITH 42"X126' R.C. PIPE OUTLET
ON RT. WITH FES
D.A.=15.5 ACRES Q50=56 CFS
RETAIN

HWY. 270 TEMP. RAMP 4B STA. 84+83
68° RT. FWD. SKEW
INSTALL 12"X 129'
TEMPORARY CULVERT

EXIST. R/W & C/A

TRANSITION

END OVERLAY TRANS. STA. 233+30.44

PC 233+38.81

PI 241+48.04

STA. 241+14.91

N3°29'59"W

N28°29'59"W

300' TAPER

240

24"

PI 236+15.84

PI 86+03.32

N28°29'59"W

15'

4'

HWY. 270 RAMP 4 STA. 238+14.97, 15.00' RT. =
C.L. HWY. 270 TEMP. RAMP 4B STA. 87+31.66

458.45' TRANS. TO EXIST. PAVEMENT

C.L. HWY. 270 TEMP. RAMP 4B

PI 86+86.44

PC 85+19.77

C.L. MEDIAN STA. 244+03.30 =
C.L. HWY. 270 STA. 12+00.00

C.L. HWY. 270 RAMP 4

STA. 242+93.62 IN PLACE
TYPE N-2 DROP INLET
ADJUST TO GRADE

PT 244+55.53

HWY. 270 STA. 8+50.00 =
HWY. 270 RAMP 4 STA. 246+37.93

245

24"

HWY. 270 STA. 8+42.20 =
HWY. 270 RAMP 3 STA. 246+03.00

EXIST. R/W & C/A

C.L. HWY. 270 RAMP 3

250

STA. 245+88.31 IN PLACE
TYPE N-2 DROP INLET
ADJUST TO GRADE

STA. 248+01.77

N3°00'17"

300' TAPER

STA. 243+18.26 BRIDGE END
BRIDGE NO. A5500 IN PLACE
226'-0" CONTINUOUS PLATE GIRDER UNITS
39' CLEAR ROADWAY
228'-8 3/16" BRIDGE LENGTH
STA. 245+46.95 BRIDGE END
RETAIN

36"

STA. 247+11.00
BEGIN WRSF ON SB FORESLOPE
BEHIND GUARDRAIL
(L.M. 36.26)

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

STA. 242+73.40 END FULL DEPTH PVMT. TRANSITION

STA. 243+18.26

STA. 245+46.95

STA. 245+91.81 BEGIN FULL DEPTH PVMT. TRANSITION

FULL DEPTH RECONSTRUCTION MAIN LANES
STA. 231+73.40 TO STA. 242+73.40

FULL DEPTH RECONSTRUCTION MAIN LANES
STA. 245+91.81 TO STA. 256+91.81

55°09'00"

N38°29'59"W

C.L. I-530

N08°20'59"W

PC 65+42.93

FULL DEPTH RECONSTRUCTION MAIN LANES
STA. 231+14.91 TO STA. 242+14.91

FULL DEPTH RECONSTRUCTION MAIN LANES
STA. 245+33.30 TO STA. 256+33.30

HWY. 270

S63°29'59"E

PT 66+07.92

C.L. HWY. 270 TEMP. RAMP 1B

HWY. 270 RAMP 1 STA. 237+38.56, 15.00' LT. =
C.L. HWY. 270 TEMP. RAMP 1B STA. 68+03.00

STA. 242+18.41 IN PLACE
TYPE N-2 DROP INLET
ADJUST TO GRADE

STA. 242+14.91 END FULL DEPTH PVMT. TRANSITION

STA. 242+59.76

STA. 244+88.44

STA. 245+33.30 BEGIN FULL DEPTH PVMT. TRANSITION

C.L. HWY. 270 TEMP. RAMP 2A

PC 90+04.19

HWY. 270 RAMP 2 STA. 249+95.27, 15.00' LT. =
C.L. HWY. 270 TEMP. RAMP 2B STA. 90+00.00

PT 249+62.64

250

N6°30'01"E

477.52' OVERLAY TRANSITION TO EXIST. PVMT.

PI 65+75.43

PI 235+68.33

END OVERLAY TRANSITION

PT 237+96.87

24"

300' TAPER

N6°30'01"E

STA. 240+96.05 END
WRSF ON NB FORESLOPE
BEHIND GUARDRAIL
(L.M. 36.15)

STA. 242+59.76 BRIDGE END
BRIDGE NO. B5500 IN PLACE
226'-0" CONTINUOUS PLATE GIRDER UNITS
39' CLEAR ROADWAY
228'-8 3/16" BRIDGE LENGTH
STA. 244+88.44 BRIDGE END
RETAIN

PC 243+43.84

245

STA. 245+13.09 IN PLACE
TYPE N-2 DROP INLET
ADJUST TO GRADE

STA. 246+95.27

300' TAPER

EXIST. R/W & C/A

N3°29'59"W

N28°14'59"W

N3°29'59"W

C.L. HWY. 270 RAMP 2

HWY. 270 STA. 15+50.00 =
HWY. 270 RAMP 1 STA. 242+27.75
HWY. 270 RAMP 2 STA. 241+58.14

PI 246+58.14

HWY. 270 TEMP. RAMP 2A
P.I. = 90+85.85
Δ = 11°23'40" LT.
D = 7°00'00"
T = 81.66'
L = 162.78'
P.C. = 90+04.19
P.T. = 91+66.97
NO SUPER

LEGEND

REMOVE & RECONSTRUCT APPR. SLAB & GUTTERS

FULL DEPTH PAVEMENT TRANSITION

HWY. 270 RAMP 1
P.I. 235+68.33
Δ = 9°09'44" RT.
D = 2°00'00"
T = 229.52'
L = 458.06'
P.C. = 233+38.81
P.T. = 237+96.87
MATCH EXIST. SUPER

HWY. 270 TEMP. RAMP 1B
P.I. = 65+75.43
Δ = 3°14'58" LT.
D = 5°00'00"
T = 32.50'
L = 64.99'
P.C. = 65+42.93
P.T. = 66+07.92
NO SUPER

RAMP 1
STA. 238+00 IN PLACE
24"X60' R.C. PIPE CULVERT
WITH FES LT. & RT.
RETAIN

REMOVAL AND DISPOSAL OF GUARDRAIL

	GUARDRAIL (TYPE A)	TERMINAL ANCHOR POST (TYPE 1)
STA. 240 +44 TO STA. 242 +44 RT. OF R.M.L.	= 175 LIN. FT.	1 EACH
STA. 240 +72 TO STA. 242 +72 LT. OF L.M.L.	= 175 LIN. FT.	1 EACH
STA. 242 +31 TO STA. 243 +06 RT. OF L.M.L.	= 50 LIN. FT.	1 EACH
STA. 242 +59 TO STA. 243 +34 LT. OF L.M.L.	= 50 LIN. FT.	1 EACH
STA. 244 +73 TO STA. 245 +48 RT. OF R.M.L.	= 50 LIN. FT.	1 EACH
STA. 245 +01 TO STA. 245 +76 LT. OF R.M.L.	= 50 LIN. FT.	1 EACH
STA. 245 +34 TO STA. 247 +34 RT. OF L.M.L.	= 175 LIN. FT.	1 EACH
STA. 245 +62 TO STA. 247 +62 LT. OF L.M.L.	= 175 LIN. FT.	1 EACH

GUARDRAIL

	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE 2)	THRIE BEAM GUARDRAIL TERMINAL	TERMINAL ANCHOR POST (TYPE 1)
STA. 240 +18 TO STA. 242 +37 RT. OF R.M.L.	= 150 LIN. FT.	1 EACH	1 EACH	
STA. 240 +46 TO STA. 242 +65 LT. OF R.M.L.	= 150 LIN. FT.	1 EACH	1 EACH	
STA. 242 +32 TO STA. 243 +26 LT. OF L.M.L.	= 50 LIN. FT.		1 EACH	1 EACH
STA. 244 +81 TO STA. 245 +74 RT. OF R.M.L.	= 50 LIN. FT.		1 EACH	1 EACH
STA. 245 +42 TO STA. 247 +61 RT. OF L.M.L.	= 150 LIN. FT.	1 EACH	1 EACH	
STA. 245 +70 TO STA. 247 +89 LT. OF L.M.L.	= 150 LIN. FT.	1 EACH	1 EACH	

HWY. 270 RAMP 2
P.I. 246+58.14
Δ = 24°45'00" LT.
D = 4°00'00"
T = 314.30'
L = 618.80'
P.C. = 243+43.84
P.T. = 249+62.64
MATCH EXIST. SUPER

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
5-31-2016

PLAN SHEET

Leonard Speed 6/21/2016 10:25:59 AM
WORKSPACE: Leonard.Speed
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Michael Baker INTERNATIONAL	DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
					2	ARK.			
					JOB NO.		BB0202	190	235
					(2)	PLAN SHEET			

STA. 250+40 IN PLACE
TYPE R DROP INLET IN MEDIAN
(5'-6" X 3'-0" X H=23'8") WITH
36"X200' R.C. PIPE INLET WITH
(45° SKEW) HDWL. ON LT. &
36"X140' R.C. PIPE OUTLET TO
D.I. ON RT. STA. 251+00
D.A.=15.5 ACRES Q50=56 CFS
RETAIN

STA. 251+00 IN PLACE
TYPE R DROP INLET IN MEDIAN
(4'-6" X 3'-0" X H=8'-6") WITH
36" R.C. PIPE FROM D.I. AT STA. 250+40
WITH 42"X126' R.C. PIPE OUTLET
ON RT. WITH FES
D.A.=15.5 ACRES Q50=56 CFS
RETAIN

STA. 253+81 TO 258+00 INSTALL
18"X 419' TEMPORARY CULVERT
WITH TEMP. CONNECTION TO DROP
INLET AT STA. 258+00

STA. 258+00 IN PLACE
5'X3'X202.5' R.C. BOX CULVERT
WITH TYPE T DROP INLET
IN MEDIAN (5' X 3' X H=5'-0")
D.A.=37 ACRES Q50=134 CFS
RETAIN

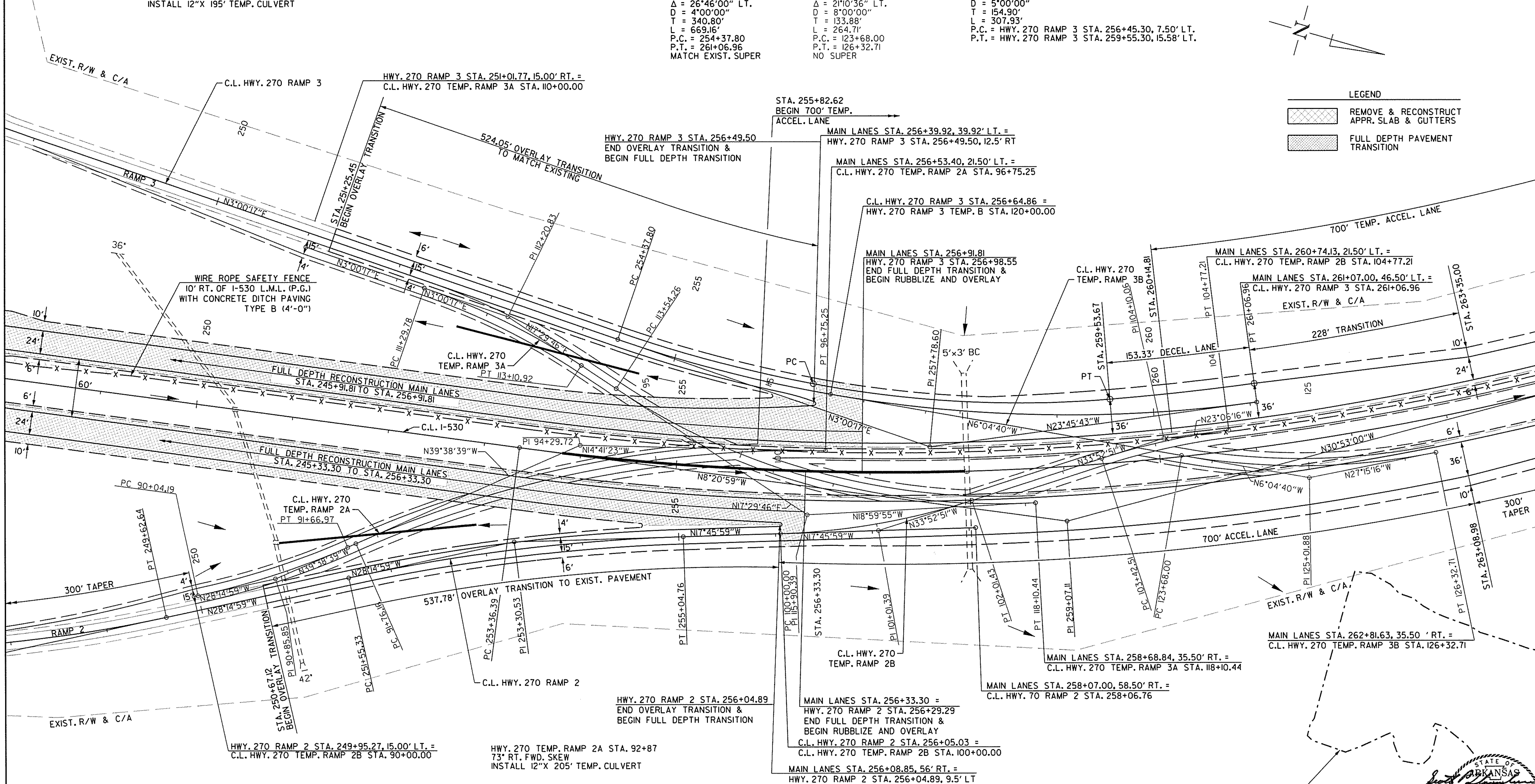
HWY. 270 TEMP. RAMP 3A STA. 112+89
54° LT. FWD. SKEW
INSTALL 12"X 195' TEMP. CULVERT

HWY. 270 RAMP 3
P.I. 257+78.60
Δ = 26°46'00" LT.
D = 4°00'00"
T = 340.80'
L = 669.16'
P.C. = 254+37.80
P.T. = 261+06.96
MATCH EXIST. SUPER

HWY. 270 TEMP. RAMP 3B
P.I. 125+01.88
Δ = 21°10'36" LT.
D = 8°00'00"
T = 133.88'
L = 264.71'
P.C. = 123+68.00
P.T. = 126+32.71
NO SUPER

HWY. 270 RAMP 3 EOP
Δ = 15°24'00" LT.
D = 5°00'00"
T = 154.90'
L = 307.93'
P.C. = HWY. 270 RAMP 3 STA. 256+45.30, 7.50' LT.
P.T. = HWY. 270 RAMP 3 STA. 259+55.30, 15.58' LT.

LEGEND
REMOVE & RECONSTRUCT APPR. SLAB & GUTTERS
FULL DEPTH PAVEMENT TRANSITION



N
EXIST. R/W & C/A
C.L. HWY. 270 RAMP 3
HWY. 270 RAMP 3 STA. 251+01.77, 15.00' RT. =
C.L. HWY. 270 TEMP. RAMP 3A STA. 110+00.00
STA. 251+25.45 BEGIN OVERLAY TRANSITION
524.05' OVERLAY TRANSITION TO MATCH EXISTING
STA. 255+82.62
BEGIN 700' TEMP. ACCEL. LANE
HWY. 270 RAMP 3 STA. 256+49.50
END OVERLAY TRANSITION &
BEGIN FULL DEPTH TRANSITION
MAIN LANES STA. 256+39.92, 39.92' LT. =
HWY. 270 RAMP 3 STA. 256+49.50, 12.5' RT
MAIN LANES STA. 256+53.40, 21.50' LT. =
C.L. HWY. 270 TEMP. RAMP 2A STA. 96+75.25
C.L. HWY. 270 RAMP 3 STA. 256+64.86 =
HWY. 270 RAMP 3 TEMP. B STA. 120+00.00
MAIN LANES STA. 256+91.81
HWY. 270 RAMP 3 STA. 256+98.55
END FULL DEPTH TRANSITION &
BEGIN RUBBLIZE AND OVERLAY
700' TEMP. ACCEL. LANE
MAIN LANES STA. 260+74.13, 21.50' LT. =
C.L. HWY. 270 TEMP. RAMP 2B STA. 104+77.21
MAIN LANES STA. 261+07.00, 46.50' LT. =
C.L. HWY. 270 RAMP 3 STA. 261+06.96
C.L. HWY. 270 TEMP. RAMP 3B
228' TRANSITION
153.33' DECEL. LANE
RAMP 3
N3°00'17"E
WIRE ROPE SAFETY FENCE
10' RT. OF I-530 L.M.L. (P.G.)
WITH CONCRETE DITCH PAVING
TYPE B (4'-0")
C.L. HWY. 270 TEMP. RAMP 3A
PT 113+10.92
PI 112+20.83
PC 254+37.80
PC 113+54.26
PC 111+29.78
PT 96+75.25
PI 257+78.60
5'x3' BC
PI 104+10.06
STA. 260+14.81
PT 104+77.21
PT 261+06.96
STA. 259+53.67
STA. 263+35.00
FULL DEPTH RECONSTRUCTION MAIN LANES
STA. 245+91.81 TO STA. 256+91.81
C.L. I-530
PI 94+29.72
N39°38'39"W
N14°41'23"W
N8°20'59"W
N6°04'40"W
N23°45'43"W
N23°06'16"W
N30°53'00"W
N33°52'51"W
N27°15'16"W
FULL DEPTH RECONSTRUCTION MAIN LANES
STA. 245+33.30 TO STA. 256+33.30
PC 90+04.19
PT 249+62.64
C.L. HWY. 270
TEMP. RAMP 2A
PT 91+66.97
N17°29'46"E
N17°45'59"W
N18°59'55"W
N28°14'59"W
300' TAPER
RAMP 2
537.78' OVERLAY TRANSITION TO EXIST. PAVEMENT
700' ACCEL. LANE
300' TAPER
EXIST. R/W & C/A
STA. 250+67.12 BEGIN OVERLAY TRANSITION
PI 90+85.85
PC 251+55.33
PC 91+16.16
PC 253+36.39
PI 253+30.53
PT 255+04.76
PC 100+00.00
PI 115+90.39
STA. 256+33.30
PI 101+01.39
PT 102+01.43
PT 118+10.44
PT 259+07.11
PC 103+42.51
PC 123+68.00
PI 125+01.88
PT 126+32.71
STA. 263+08.98
C.L. HWY. 270 RAMP 2
C.L. HWY. 270 TEMP. RAMP 2B
MAIN LANES STA. 262+81.63, 35.50 ' RT. =
C.L. HWY. 270 TEMP. RAMP 3B STA. 126+32.71
MAIN LANES STA. 258+68.84, 35.50' RT. =
C.L. HWY. 270 TEMP. RAMP 3A STA. 118+10.44
MAIN LANES STA. 258+07.00, 58.50' RT. =
C.L. HWY. 70 RAMP 2 STA. 258+06.76
HWY. 270 RAMP 2 STA. 256+04.89
END OVERLAY TRANSITION &
BEGIN FULL DEPTH TRANSITION
MAIN LANES STA. 256+33.30 =
HWY. 270 RAMP 2 STA. 256+29.29
END FULL DEPTH TRANSITION &
BEGIN RUBBLIZE AND OVERLAY
C.L. HWY. 270 RAMP 2 STA. 256+05.03 =
C.L. HWY. 270 TEMP. RAMP 2B STA. 100+00.00
MAIN LANES STA. 256+08.85, 56' RT. =
HWY. 270 RAMP 2 STA. 256+04.89, 9.5' LT
HWY. 270 RAMP 2 STA. 249+95.27, 15.00' LT. =
C.L. HWY. 270 TEMP. RAMP 2B STA. 90+00.00
APPROXIMATE 100 YR. FLOODPLAIN LIMITS

HWY. 270 TEMP. RAMP 2A STA. 92+87
73° RT. FWD. SKEW
INSTALL 12"X 205' TEMP. CULVERT

HWY. 270 RAMP 2
P.I. 246+58.14
Δ = 24°45'00" LT.
D = 4°00'00"
T = 314.30'
L = 618.80'
P.C. = 243+43.84
P.T. = 249+62.64
MATCH EXIST. SUPER

HWY. 270 TEMP. RAMP 2A
P.I. 90+84.20
Δ = 13°24'37" LT.
D = 8°00'00"
T = 84.20'
L = 167.63'
P.C. = 90+00.00
P.T. = 91+67.63
NO SUPER

HWY. 270 TEMP. RAMP 2A
P.I. 95+14.27
Δ = 24°57'16" RT.
D = 5°00'00"
T = 253.57'
L = 499.09'
P.C. = 92+60.71
P.T. = 97+59.79
NO SUPER

HWY. 270 RAMP 2
P.I. 253+30.53
Δ = 10°29'00" RT.
D = 3°00'00"
T = 175.20'
L = 349.42'
P.C. = 251+55.33
P.T. = 255+04.76
MATCH EXIST. SUPER

HWY. 270 TEMP. RAMP 2B
P.I. 101+01.39
Δ = 16°06'52" LT.
D = 8°00'00"
T = 101.39'
L = 201.43'
P.C. = 100+00.00
P.T. = 102+01.43
NO SUPER

HWY. 270 TEMP. RAMP 2B
P.I. 104+10.06
Δ = 10°46'35" RT.
D = 8°00'00"
T = 67.55'
L = 134.71'
P.C. = 103+42.51
P.T. = 104+77.21
NO SUPER

C.L. I-530
P.I. 259+07.11
Δ = 22°32'01" LT.
D = 2°00'00"
T = 570.72'
L = 1126.68'
P.C. = 253+36.39
P.T. = 264+63.07
e = 0.070 '/'
Ls = 350'

STA. 250+73.89 BEGIN SUPERELEVATION
STA. 254+23.89 MAX. SUPERELEVATION (0.070 '/')
STA. 263+75.57 MAX. SUPERELEVATION (0.070 '/')
STA. 267+25.57 END SUPERELEVATION

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER ★★★ No.10887 SCOTT P. THORNSBERRY
6-21-2016

PLAN SHEET

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WORKSPACE: Leonard.Speed
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STA. 264+40 IN PLACE
TYPE R DROP INLET IN MEDIAN
(4'-3" X 3' X H=9'-6") WITH
42"X89' R.C. PIPE INLET &
42"X100' R.C. PIPE OUTLET
WITH FES LT. & RT.
D.A.=23 ACRES Q50=98 CFS
RETAIN

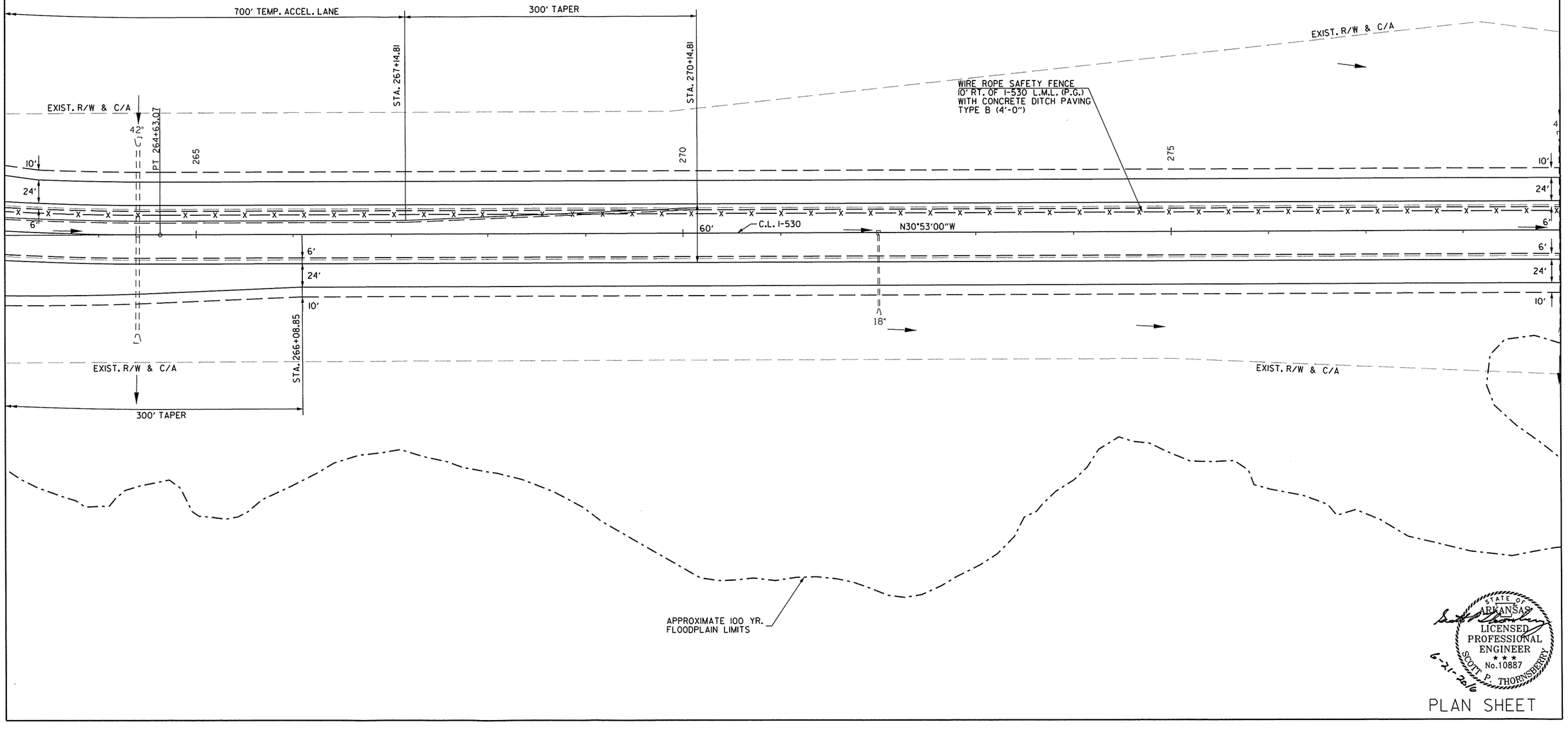
STA. 272+00 IN PLACE
TYPE R DROP INLET IN MEDIAN
(4' X 3' X H=2'-6") WITH
18"X76' R.X. PIPE OUTLET
ON RT. WITH FES
RETAIN

Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	191	235
				(2)	PLAN SHEET			

C.L. I-530
P.I. 259+07.11
Δ = 22°32'01" LT.
D = 2°00'00"
T = 570.72'
L = 1126.68'
P.C. = 253+36.39
P.T. = 264+63.07
e = 0.070 '/'
Ls = 350'

STA. 250+73.89 BEGIN SUPERELEVATION
STA. 254+23.89 MAX. SUPERELEVATION (0.070 '/')
STA. 263+75.57 MAX. SUPERELEVATION (0.070 '/')
STA. 267+25.57 END SUPERELEVATION



STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

PLAN SHEET

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Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	192	235
				(2)	PLAN SHEET			

STA. 279+00 IN PLACE
TYPE R DROP INLET IN MEDIAN
(4'-3" X 3' X H=10'-5") WITH
42"X90' R.C. PIPE INLET &
42"X97' R.C. PIPE OUTLET
WITH FES LT. & RT.
D.A.=33 ACRES Q50=113 CFS
RETAIN

APPROXIMATE 100 YR.
FLOODPLAIN LIMITS

STA. 283+45 IN PLACE
DBL. 9'X5'X219' R.C. BOX CULVERT
(15° RT. FWD. SKEW) WITH
TYPE T DROP INLET IN MEDIAN
(4' X 3' X H=9'-0")
D.A.=509 ACRES Q50=918 CFS
RETAIN

EXIST. R/W & C/A

DBL 9'x5' BC

42"

280

285

290

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'
C.L. I-530
N30°53'00"W
60'
6'
24'
10'

18"

EXIST. R/W & C/A

EXIST. R/W & C/A

APPROXIMATE 100 YR.
FLOODPLAIN LIMITS

STA. 296+75 IN PLACE
TYPE R DROP INLET IN MEDIAN
(4' X 3' X H=2'-6") WITH
18"X78' R.C. PIPE OUTLET
ON RT. WITH FES
RETAIN

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

PLAN SHEET

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STA . 296+75 IN PLACE
TYPE R DROP INLET IN MEDIAN
(4' X 3' X H=2'-6") WITH
18"X78' R.C. PIPE OUTLET
ON RT. WITH FES

APPROXIMATE 100 YR.
FLOODPLAIN LIMITS

STA. 303+24 IN PLACE
8'X5'X202' R.C. BOX CULVERT
WITH TYPE T DROP INLET
IN MEDIAN (4' X 3' X H=8'-6")
D.A.=213 ACRES Q50=384 CFS
RETAIN

Michael Baker
INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	193	235
(2) PLAN SHEET				

EXIST. 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")

8'X5' BC

295 300 305

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

C.L. I-530

N30°53'00"W

18"

EXIST. R/W & C/A

EXIST. R/W & C/A

EXIST. R/W & C/A

APPROXIMATE 100 YR.
FLOODPLAIN LIMITS

STATE OF ARKANSAS
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No.10887
SCOTT P. THORNSBERRY
6-21-2016

PLAN SHEET

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WORKSPACE: Leonard.Speed
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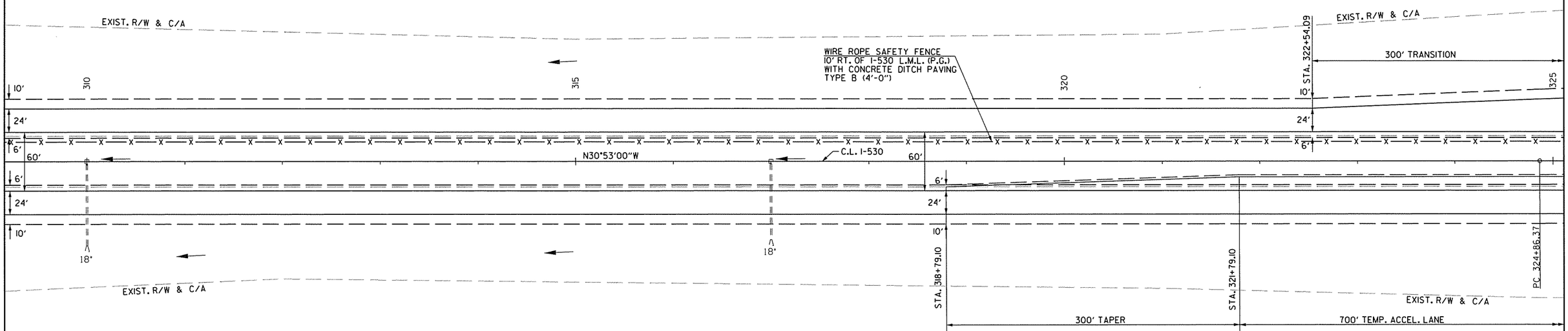
STA. 310+00 IN PLACE
TYPE R DROP INLET IN MEDIAN
(4' X 3' X H=2'-6") WITH
18"X84' R.C. PIPE OUTLET
ON RT. WITH FES RETAIN

STA. 317+00 IN PLACE
TYPE R DROP INLET IN MEDIAN
(4' X 3' X H=2'-6") WITH
18"X78' R.C. PIPE OUTLET
ON RT. WITH FES
RETAIN

Michael Baker
INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	194	235
(2) PLAN SHEET				



STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

PLAN SHEET

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Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	195	235
(2)	PLAN SHEET			

STA. 326+90 IN PLACE
4'X3'X226' R.C. BOX CULVERT
(15° LT. FWD. SKEW) WITH
TYPE T DROP INLET IN MEDIAN
(4' X 3' X H=6'-6")
D.A.=29 ACRES Q50=99 CFS
RETAIN

HOLLAND AVE. TEMP. RAMP 4A
P.I. 150+89.96
Δ = 14°19'09" LT.
D = 8°00'00"
T = 89.96'
L = 178.99'
P.C. = 150+00.00
P.T. = 151+78.99
NO SUPER

HOLLAND AVE. TEMP. RAMP 4A
P.I. 153+96.70
Δ = 11°19'23" RT.
D = 8°00'00"
T = 71.00'
L = 141.54'
P.C. = 153+25.70
P.T. = 154+67.24
NO SUPER

HOLLAND AVE. TEMP. RAMP 4B
P.I. = 162+91.11
Δ = 28°30'27" LT.
D = 8°00'00"
T = 242.59'
L = 475.13'
P.C. = 160+48.52
P.T. = 165+23.65
NO SUPER

HOLLAND AVE. TEMP. RAMP 4B
P.I. = 166+22.52
Δ = 13°03'29" RT.
D = 8°00'00"
T = 81.97'
L = 163.23'
P.C. = 165+40.56
P.T. = 167+03.78
NO SUPER

STA. 328+00 TO 331+84 INSTALL
12"X 384' TEMP. CULVERT IN MEDIAN

HOLLAND AVE. RAMP 4
P.I. 333+60.92
Δ = 15°22'34" LT.
D = 3°00'00"
T = 257.82'
L = 512.54'
P.C. = 331+03.10
P.T. = 336+15.64
MATCH EXIST. SUPER

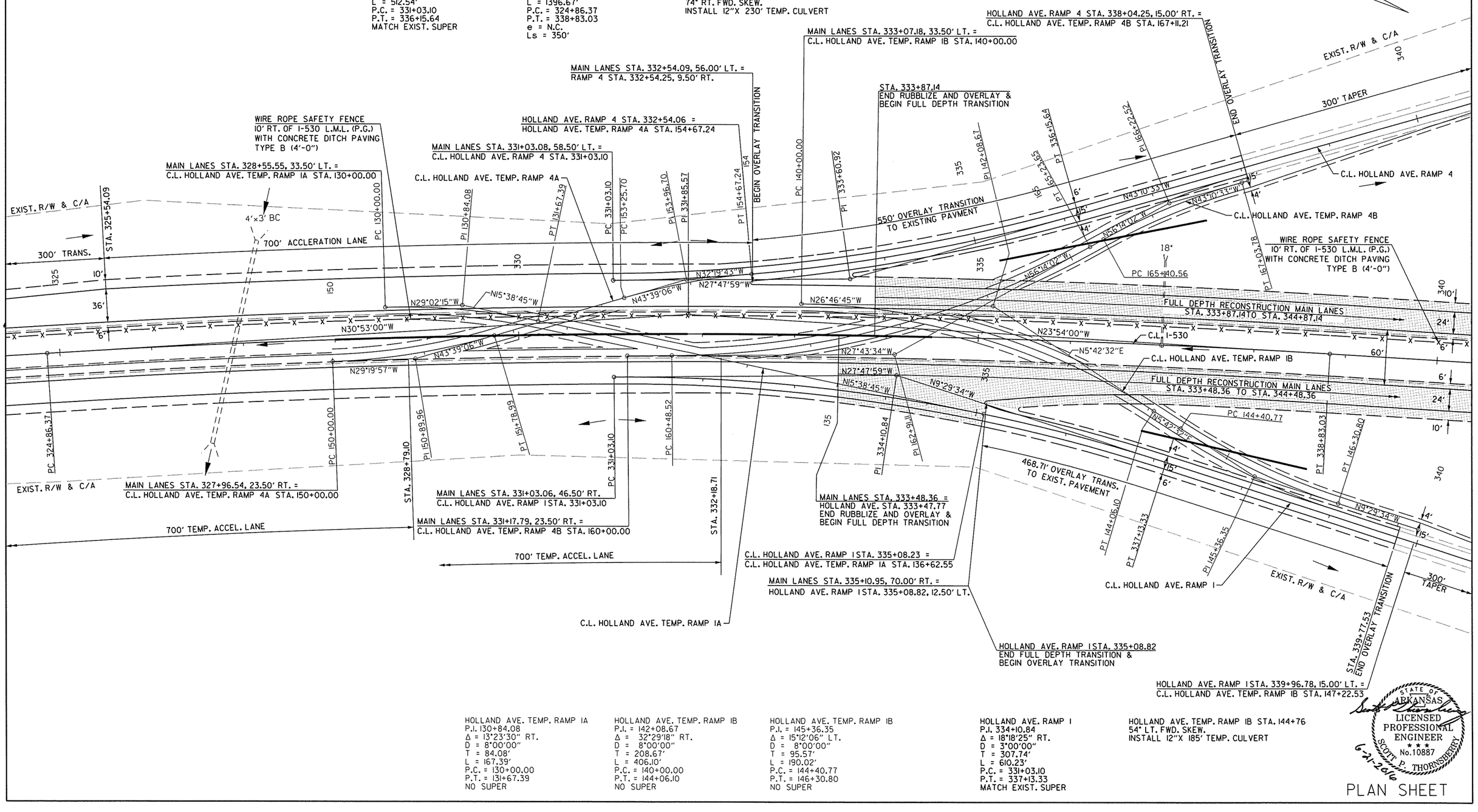
C.L. I-530
P.I. 331+85.57
Δ = 6°59'00" RT.
D = 0°30'00"
T = 699.20'
L = 1396.67'
P.C. = 324+86.37
P.T. = 338+83.03
e = N.C.
Ls = 350'

STA. 332+00 TO 334+50 INSTALL
12"X 250' TEMP. CULVERT IN MEDIAN

HOLLAND AVE. TEMP. RAMP 4B STA. 165+33
74° RT. FWD. SKEW.
INSTALL 12"X 230' TEMP. CULVERT

STA. 337+00 IN PLACE
TYPE R DROP INLET IN MEDIAN
(4' X 3' X H=3'-6") WITH
18"X90' R.C. PIPE OUTLET
ON LT. WITH FES
RETAIN

LEGEND
FULL DEPTH PAVEMENT TRANSITION



HOLLAND AVE. TEMP. RAMP 1A
P.I. 130+84.08
Δ = 13°23'30" RT.
D = 8°00'00"
T = 84.08'
L = 167.39'
P.C. = 130+00.00
P.T. = 131+67.39
NO SUPER

HOLLAND AVE. TEMP. RAMP 1B
P.I. = 142+08.67
Δ = 32°29'18" RT.
D = 8°00'00"
T = 208.67'
L = 406.10'
P.C. = 140+00.00
P.T. = 144+06.10
NO SUPER

HOLLAND AVE. TEMP. RAMP 1B
P.I. = 145+36.35
Δ = 15°12'06" LT.
D = 8°00'00"
T = 95.57'
L = 190.02'
P.C. = 144+40.77
P.T. = 146+30.80
NO SUPER

HOLLAND AVE. RAMP 1
P.I. 334+10.84
Δ = 18°18'25" RT.
D = 3°00'00"
T = 307.74'
L = 610.23'
P.C. = 331+03.10
P.T. = 337+13.33
MATCH EXIST. SUPER

HOLLAND AVE. TEMP. RAMP 1B STA. 144+76
54° LT. FWD. SKEW.
INSTALL 12"X 185' TEMP. CULVERT

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

PLAN SHEET

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WORKSPACE: Leonard.Speed
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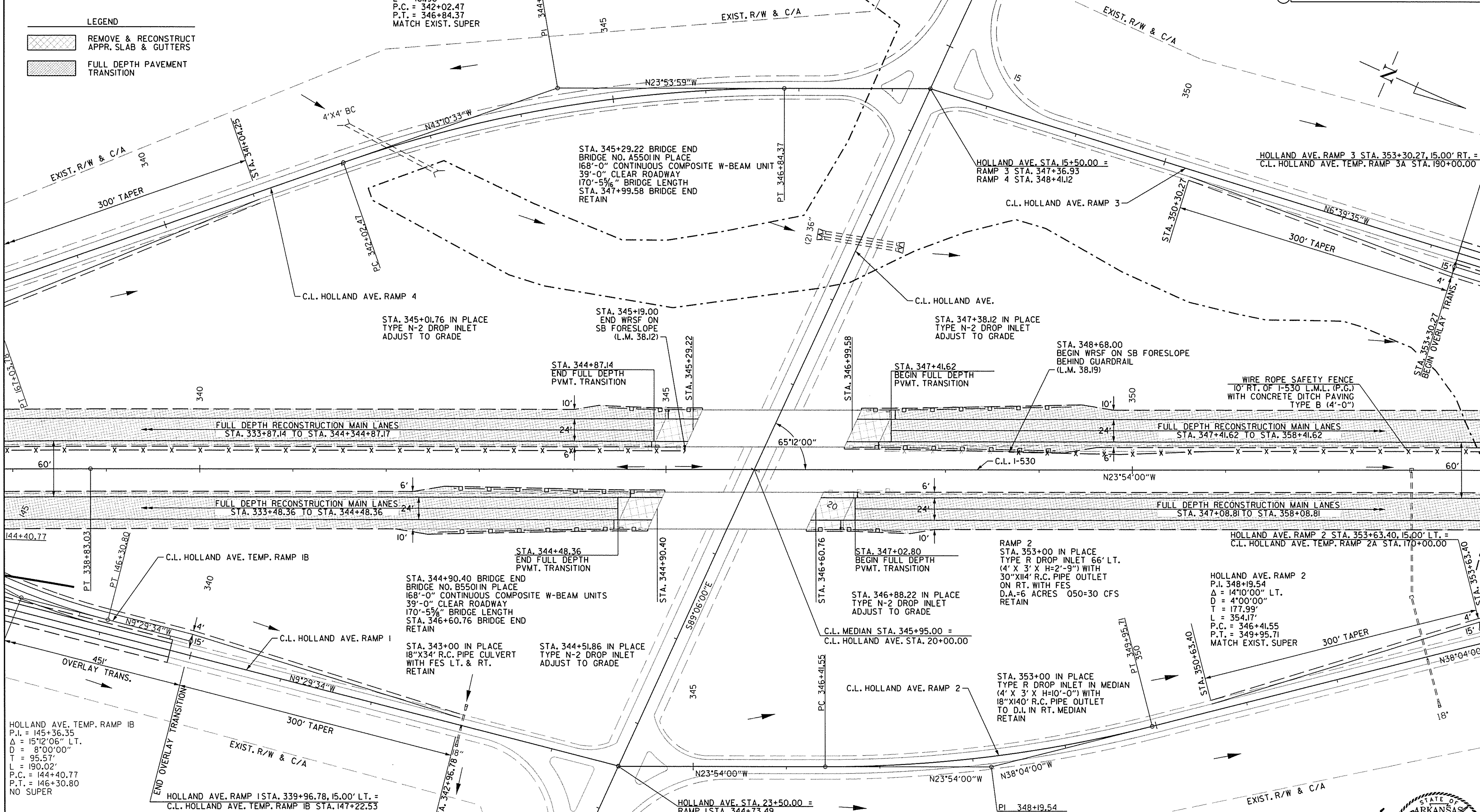
Michael Baker INTERNATIONAL	DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
					2	ARK.			
					JOB NO.		BB0202	196	235

(2) PLAN SHEET



REMOVAL AND DISPOSAL OF GUARDRAIL

	GUARDRAIL (TYPE A)	TERMINAL ANCHOR POST (TYPE 1)
STA. 342 +80 TO STA. 344 +80 RT. OF R.M.L.	= 175 LIN. FT.	1 EACH
STA. 342 +99 TO STA. 344 +99 LT. OF R.M.L.	= 175 LIN. FT.	1 EACH
STA. 344 +46 TO STA. 345 +21 RT. OF L.M.L.	= 50 LIN. FT.	1 EACH
STA. 344 +64 TO STA. 345 +39 LT. OF L.M.L.	= 50 LIN. FT.	1 EACH
STA. 346 +51 TO STA. 347 +26 RT. OF R.M.L.	= 50 LIN. FT.	1 EACH
STA. 346 +69 TO STA. 347 +44 LT. OF R.M.L.	= 50 LIN. FT.	1 EACH
STA. 346 +91 TO STA. 348 +91 RT. OF L.M.L.	= 175 LIN. FT.	1 EACH
STA. 347 +10 TO STA. 349 +10 LT. OF L.M.L.	= 175 LIN. FT.	1 EACH

GUARDRAIL

	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE 2)	THRIE BEAM GUARDRAIL TERMINAL	TERMINAL ANCHOR POST (TYPE 1)
STA. 342 +54 TO STA. 344 +73 RT. OF R.M.L.	= 150 LIN. FT.	1 EACH	1 EACH	
STA. 342 +72 TO STA. 344 +91 LT. OF R.M.L.	= 150 LIN. FT.	1 EACH	1 EACH	
STA. 344 +38 TO STA. 345 +32 LT. OF L.M.L.	= 50 LIN. FT.		1 EACH	1 EACH
STA. 346 +58 TO STA. 347 +52 RT. OF R.M.L.	= 50 LIN. FT.		1 EACH	1 EACH
STA. 346 +99 TO STA. 349 +18 RT. OF L.M.L.	= 150 LIN. FT.	1 EACH	1 EACH	
STA. 347 +17 TO STA. 349 +36 LT. OF L.M.L.	= 150 LIN. FT.	1 EACH	1 EACH	

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No.10887 SCOTT P. THORNSBERRY
6-21-2016

PLAN SHEET

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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.		BB0202	197	235

Michael Baker INTERNATIONAL

(2) PLAN SHEET

RAMP 3
STA. 354+26.20 IN PLACE
4'X4'X116' R.C. BOX CULVERT
(30° LT. FWD. SKEW)
D.A.=61 ACRS. Q50=119 CFS
RETAIN

STA. 356+32.50 IN PLACE
DBL. 6'X5'X404' R.C. BOX CULVERT
D.A.=602 ACRES Q50=650 CFS
RETAIN

HOLLAND AVE. TEMP RAMP 3A STA. 192+30.00
66° LT. FWD. SKEW
INSTALL 12"X 170' TEMP. CULVERT

STA. 363+00 IN PLACE
TYPE R DROP INLET IN MEDIAN
(4' X 3' X H=2'6") WITH
18"X82' R.C. PIPE OUTLET
ON RT. WITH FES
RETAIN

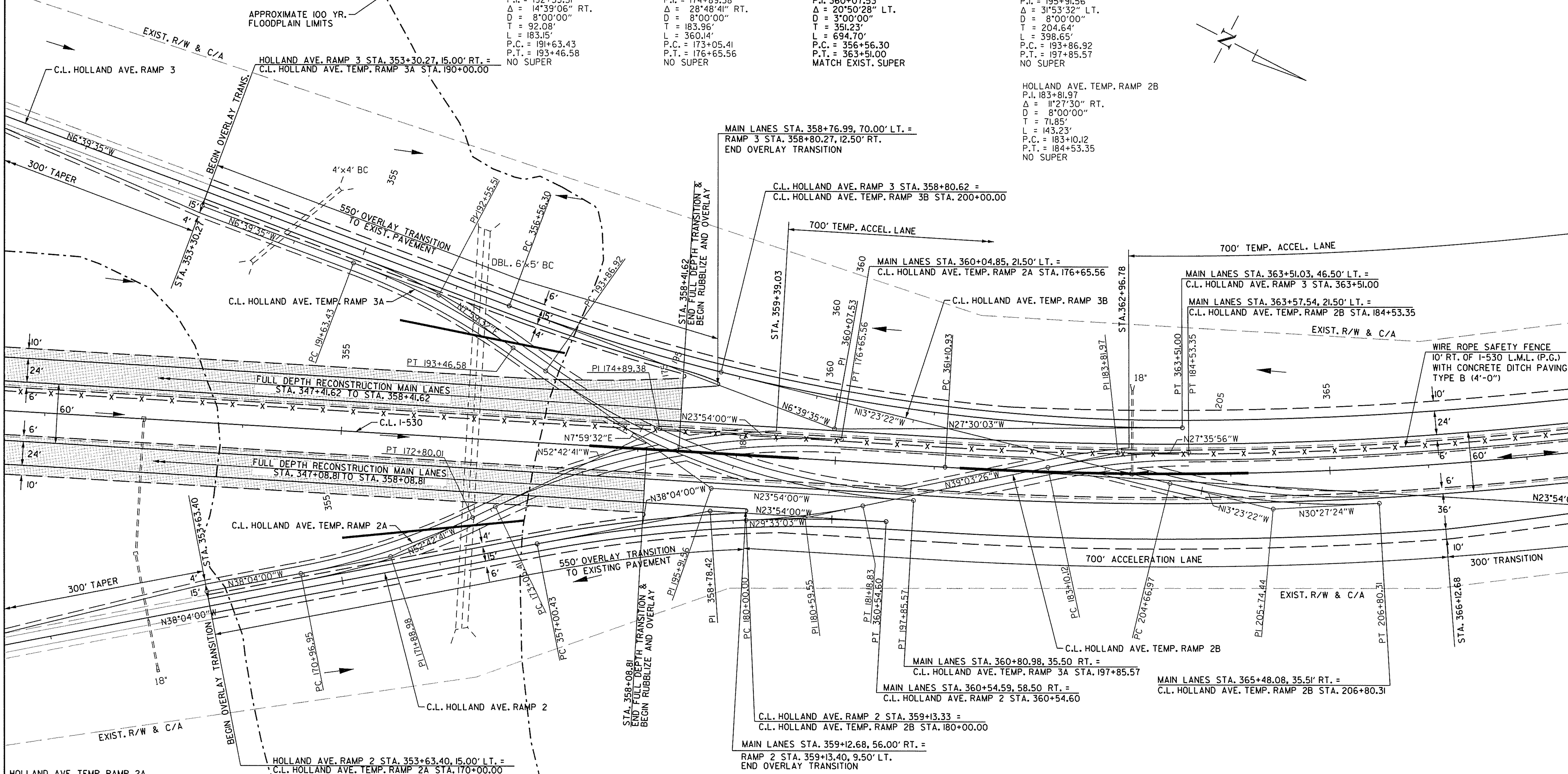
HOLLAND AVE. TEMP. RAMP 3A
P.I. = 192+55.51
Δ = 14°39'06" RT.
D = 8°00'00"
T = 92.08'
L = 183.15'
P.C. = 191+63.43
P.T. = 193+46.58
NO SUPER

HOLLAND AVE. TEMP. RAMP 1A
P.I. = 174+89.38
Δ = 28°48'41" RT.
D = 8°00'00"
T = 183.96'
L = 360.14'
P.C. = 173+05.41
P.T. = 176+65.56
NO SUPER

HOLLAND AVE. RAMP 3
P.I. 360+07.53
Δ = 20°50'28" LT.
D = 3°00'00"
T = 351.23'
L = 694.70'
P.C. = 356+56.30
P.T. = 363+51.00
MATCH EXIST. SUPER

HOLLAND AVE. TEMP. RAMP 2A
P.I. = 195+91.56
Δ = 31°53'32" LT.
D = 8°00'00"
T = 204.64'
L = 398.65'
P.C. = 193+86.92
P.T. = 197+85.57
NO SUPER

HOLLAND AVE. TEMP. RAMP 2B
P.I. 183+81.97
Δ = 11°27'30" RT.
D = 8°00'00"
T = 71.85'
L = 143.23'
P.C. = 183+10.12
P.T. = 184+53.35
NO SUPER



APPROXIMATE 100 YR. FLOODPLAIN LIMITS
EXIST. R/W & C/A
HOLLAND AVE. RAMP 3 STA. 353+30.27, 15.00' RT. =
C.L. HOLLAND AVE. TEMP. RAMP 3A STA. 190+00.00
C.L. HOLLAND AVE. RAMP 3
BEGIN OVERLAY TRANS.
300' TAPER
550' OVERLAY TRANSITION TO EXIST. PAVEMENT
DBL. 6'x5' BC
4'x4' BC
STA. 353+30.27
C.L. HOLLAND AVE. TEMP. RAMP 3A
PT 193+46.58
PI 174+89.38
STA. 358+41.62 END FULL DEPTH TRANSITION & BEGIN RUBBLIZE AND OVERLAY
MAIN LANES STA. 358+76.99, 70.00' LT. =
RAMP 3 STA. 358+80.27, 12.50' RT.
END OVERLAY TRANSITION
C.L. HOLLAND AVE. RAMP 3 STA. 358+80.62 =
C.L. HOLLAND AVE. TEMP. RAMP 3B STA. 200+00.00
700' TEMP. ACCEL. LANE
STA. 359+39.03
MAIN LANES STA. 360+04.85, 21.50' LT. =
C.L. HOLLAND AVE. TEMP. RAMP 2A STA. 176+65.56
C.L. HOLLAND AVE. TEMP. RAMP 3B
STA. 362+96.78
MAIN LANES STA. 363+51.03, 46.50' LT. =
C.L. HOLLAND AVE. RAMP 3 STA. 363+51.00
MAIN LANES STA. 363+57.54, 21.50' LT. =
C.L. HOLLAND AVE. TEMP. RAMP 2B STA. 184+53.35
WIRE ROPE SAFETY FENCE
10' RT. OF I-530 L.M.L. (P.G.)
WITH CONCRETE DITCH PAVING
TYPE B (4'-0")
FULL DEPTH RECONSTRUCTION MAIN LANES
STA. 347+41.62 TO STA. 358+41.62
C.L. I-530
PT 172+80.01
FULL DEPTH RECONSTRUCTION MAIN LANES
STA. 347+08.81 TO STA. 358+08.81
N6°39'35"W
N23°54'00"W
N7°59'32"E
N52°42'41"W
N13°23'22"W
N27°30'03"W
N27°35'56"W
N38°04'00"W
N39°03'26"W
N29°33'03"W
N30°27'24"W
C.L. HOLLAND AVE. TEMP. RAMP 2A
STA. 353+63.40
550' OVERLAY TRANSITION TO EXISTING PAVEMENT
700' ACCELERATION LANE
300' TRANSITION
EXIST. R/W & C/A
STA. 366+12.68
C.L. HOLLAND AVE. TEMP. RAMP 2B
C.L. HOLLAND AVE. RAMP 2
MAIN LANES STA. 360+80.98, 35.50 RT. =
C.L. HOLLAND AVE. TEMP. RAMP 3A STA. 197+85.57
MAIN LANES STA. 360+54.59, 58.50 RT. =
C.L. HOLLAND AVE. RAMP 2 STA. 360+54.60
MAIN LANES STA. 365+48.08, 35.51' RT. =
C.L. HOLLAND AVE. TEMP. RAMP 2B STA. 206+80.31
STA. 358+08.81 END FULL DEPTH TRANSITION & BEGIN RUBBLIZE AND OVERLAY
C.L. HOLLAND AVE. RAMP 2 STA. 359+13.33 =
C.L. HOLLAND AVE. TEMP. RAMP 2B STA. 180+00.00
MAIN LANES STA. 359+12.68, 56.00' RT. =
RAMP 2 STA. 359+13.40, 9.50' LT.
END OVERLAY TRANSITION
BEGIN OVERLAY TRANSITION
HOLLAND AVE. RAMP 2 STA. 353+63.40, 15.00' LT. =
C.L. HOLLAND AVE. TEMP. RAMP 2A STA. 170+00.00

HOLLAND AVE. TEMP. RAMP 2A
STA. 172+19.00
70° RT. FWD. SKEW
INSTALL 12"X 185' TEMP. CULVERT

STA. 353+00 IN PLACE
TYPE R DROP INLET IN MEDIAN
(4' X 3' X H=10'-0") WITH
18"X140' R.C. PIPE OUTLET
TO D.I. IN RT. MEDIAN
RETAIN

RAMP 2
STA. 353+00 IN PLACE
TYPE R DROP INLET 66' LT.
(4' X 3' X H=2'-9") WITH
30"X114' R.C. PIPE OUTLET
ON RT. WITH FES
D.A.=6 ACRES Q50=30 CFS
RETAIN

APPROXIMATE 100 YR. FLOOD LIMITS

STA. 357+51 TO 359+63
INSTALL 18"X 212' TEMP. CULVERT
IN MEDIAN

STA. 361+26 TO 364+18
INSTALL 18"X 292' TEMP. CULVERT IN MEDIAN
WITH TEMP. CONNECTION TO MEDIAN
DROP INLET AT STA. 363+00

STA. 358+48.43 BEGIN SUPERELEVATION
STA. 361+98.43 MAX. SUPERELEVATION (0.054 '/')
STA. 374+10.20 MAX. SUPERELEVATION (0.054 '/')
STA. 377+60.20 END SUPERELEVATION

LEGEND

FULL DEPTH PAVEMENT TRANSITION

HOLLAND AVE. TEMP. RAMP 1A
P.I. = 171+88.98
Δ = 14°38'41" LT.
D = 8°00'00"
T = 92.03'
L = 183.06'
P.C. = 170+96.95
P.T. = 172+80.01
NO SUPER

HOLLAND AVE. RAMP 2
P.I. 358+78.42
Δ = 14°10'00" RT.
D = 4°00'00"
T = 177.99'
L = 354.17'
P.C. = 357+00.43
P.T. = 360+54.60
MATCH EXIST. SUPER

HOLLAND AVE. TEMP. RAMP 2B
P.I. 180+59.55
Δ = 9°30'23" LT.
D = 8°00'00"
T = 59.55'
L = 118.83'
P.C. = 180+00.00
P.T. = 181+18.83
NO SUPER

HOLLAND AVE. TEMP. RAMP 3B
P.I. 205+74.44
Δ = 17°04'02" LT.
D = 8°00'00"
T = 107.47'
L = 213.34'
P.C. = 204+66.97
P.T. = 206+80.31
NO SUPER

C.L. I-530
P.I. 368+12.03
Δ = 20°48'00" LT.
D = 1°30'00"
T = 701.10'
L = 1386.77'
P.C. = 361+10.93
P.T. = 374+97.70
e = 0.054 '/'
Ls = 350'

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No.10887 SCOTT P. THORNSBERRY
6-21-2016

PLAN SHEET

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Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	198	235
				(2)	PLAN SHEET			

STA. 369+00 IN PLACE
TYPE R DROP INLET IN MEDIAN
(4' X 3' X H=2'-6") WITH
18"X84' R.C. PIPE OUTLET
ON RT. WITH FES
RETAIN

STA. 374+50 IN PLACE
TYPE R DROP INLET IN MEDIAN
(4' X 3' X H=2'-6") WITH
18"X84' R.C. PIPE OUTLET
ON RT. WITH FES
RETAIN

STA. 380+00 IN PLACE
5'X3'X174' R.C. BOX CULVERT
WITH TYPE T DROP INLET
IN MEDIAN (4' X 3' X H=3'-3")
D.A.=67 ACRES Q50=131 CFS
RETAIN

EXISTING GAS
TRANSMISSION LINE

700' TEMP. ACCEL. LANE

300' TAPER

EXIST. R/W & C/A

STA. 369+96.78

STA. 372+96.78

PT 374+97.70

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

5'x3' BC

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

N23°54'00"W

N44°42'00"W

C.L. I-530

300' TRANSITION

18"

PI 368+12.03

STA. 369+12.68

EXIST. R/W & C/A

C.L. I-530
P.I. 368+12.03
D = 20°48'00" LT.
D = 1°30'00"
T = 701.10'
L = 1386.77'
P.C. = 361+10.93
P.T. = 374+97.70
e = 0.054 '/'
Ls = 350'

STA. 358+48.43 BEGIN SUPERELEVATION
STA. 361+98.43 MAX. SUPERELEVATION (0.054 '/')
STA. 374+10.20 MAX. SUPERELEVATION (0.054 '/')
STA. 377+60.20 END SUPERELEVATION

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

PLAN SHEET

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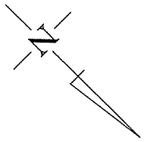
STA. 386+00 IN PLACE
TYPE R DROP INLET IN MEDIAN
(4' X 3' X H=2'-6") WITH
18"X78' R.C. PIPE OUTLET
ON RT. WITH FES
RETAIN

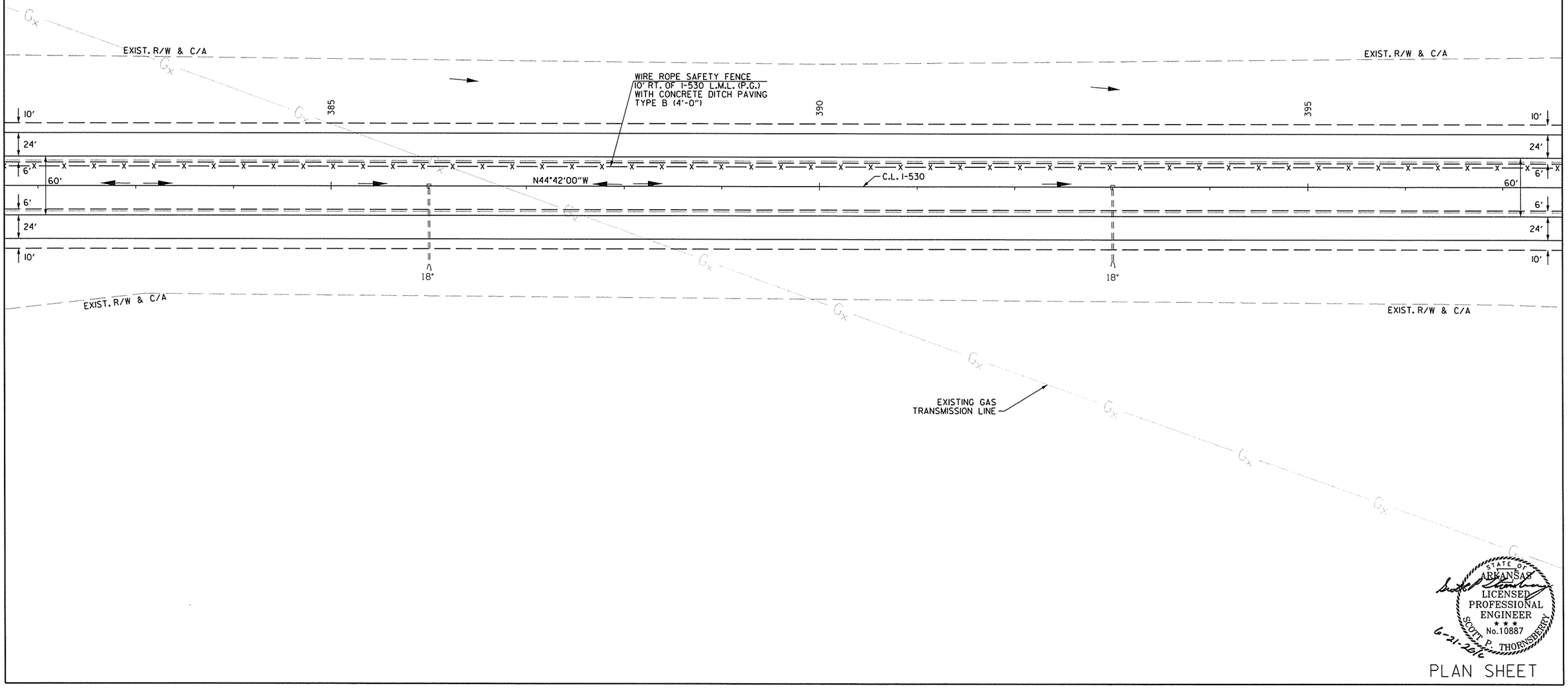
STA. 393+00 IN PLACE
TYPE R DROP INLET IN MEDIAN
(4' X 3' X H=2'-6") WITH
18"X74' R.C. PIPE OUTLET
ON RT. WITH FES
RETAIN

Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	199	235
(2) PLAN SHEET				





STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THOFNSBERRY
6-21-2016

PLAN SHEET

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STA. 400+00 IN PLACE
TYPE R DROP INLET IN MEDIAN
(4' X 3' X H=3'-9") WITH
36"X82' R.C. PIPE INLET &
36"X82' R.C. PIPE OUTLET
WITH FES LT. AND RT.
D.A.=24 ACRES Q50=54 CFS
RETAIN

APPROXIMATE 100 YR.
FLOODPLAIN LIMITS

STA. 406+50 IN PLACE
TYPE R DROP INLET IN MEDIAN
(4' X 3' X H=3'-9") WITH
18"X86' R.C. PIPE OUTLET
ON RT. WITH FES
RETAIN

Michael Baker
INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	200	235
(2) PLAN SHEET				

STA. 409+60 IN PLACE
DBL. 6'X5'X204' R.C. BOX CULVERT
D.A.=614 ACRES Q50=664 CFS
RETAIN

EXIST. R/W & C/A

EXIST. R/W & C/A

400

36"

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

405

DBL 6'x5' BC

410

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

N44°42'00"W

C.L. I-530

18"

EXIST. R/W & C/A

EXIST. R/W & C/A

APPROXIMATE 100 YR.
FLOODPLAIN LIMITS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
SCOTT P. THORNSBERRY
No.10887
6-21-2016

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WORKSPACE: Leonard.Speed
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STA. 413+00 IN PLACE
TYPE R DROP INLET IN MEDIAN
(4' X 3' X H=5'-3") WITH
18"X90' R.C. PIPE OUTLET
ON RT. WITH FES
RETAIN

STA. 417+05 IN PLACE
TRIP. 8'X6'X251' R.C. BOX CULVERT
(45° LT. FWD. SKEW)
D.A.=3.6 SQ. MI. Q50=1245 CFS
SPAN = 37.71'
RETAIN

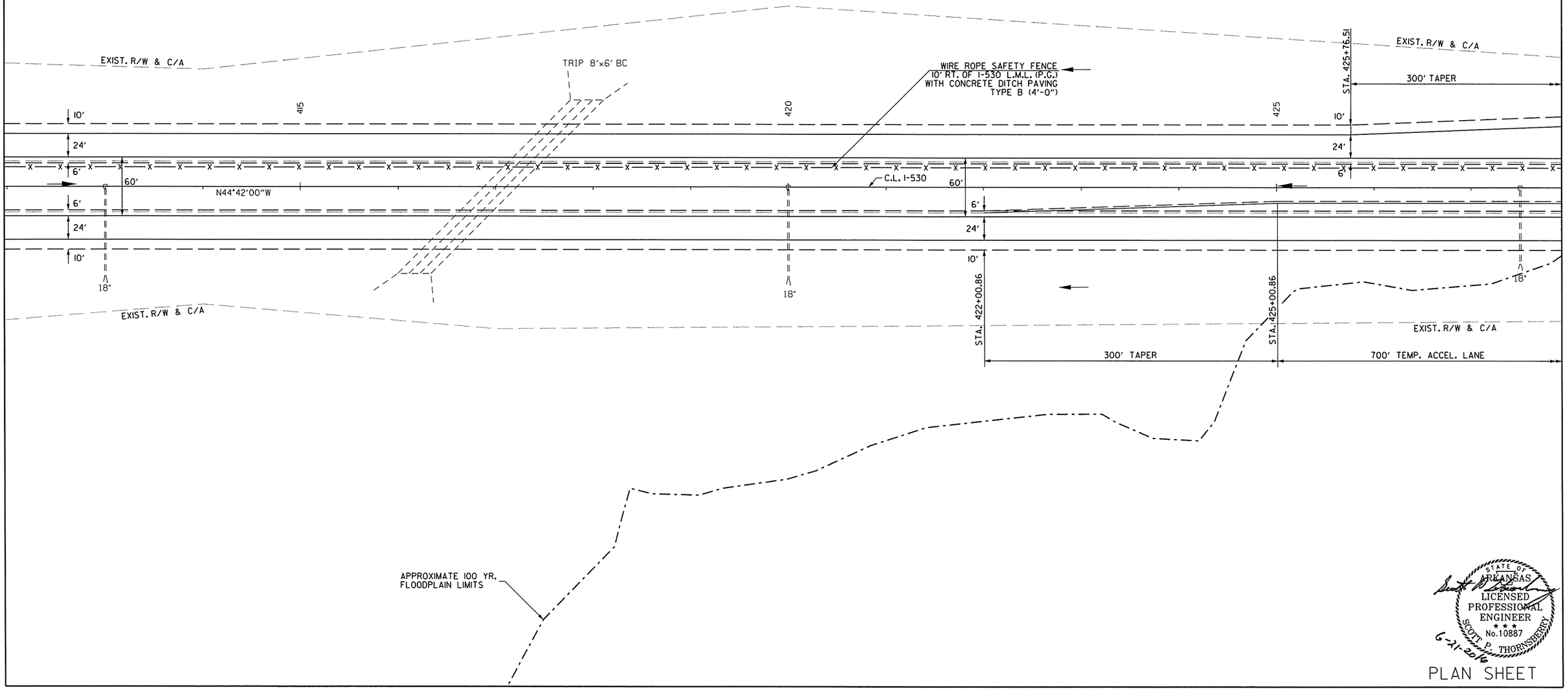
STA. 420+00 IN PLACE
TYPE R DROP INLET IN MEDIAN
(4' X 3' X H=5'-0") WITH
18"X92' R.C. PIPE OUTLET
ON RT. WITH FES
RETAIN

Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	201	235
(2)	PLAN SHEET			

STA. 427+50 IN PLACE
TYPE R DROP INLET IN MEDIAN
(4' X 3' X H=2'-6") WITH
18"X76' R.C. PIPE OUTLET
ON RT. WITH FES
RETAIN



STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
SCOTT P. THORNSBERRY
No.10887
6-21-2016

PLAN SHEET

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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.		BB0202	202	235
				(2)	PLAN SHEET			

STA. 427+50 IN PLACE
TYPE R DROP INLET IN MEDIAN
(4' X 3' X H=2'-6") WITH
18"X76' R.C. PIPE OUTLET
ON RT. WITH FES
RETAIN

APPROXIMATE 100 YR.
FLOODPLAIN LIMITS

STA. 435+00 IN PLACE
TYPE R DROP INLET IN MEDIAN
(4' X 3' X H=2'-6") WITH
18"X76' R.C. PIPE OUTLET
ON RT. WITH FES
RETAIN

HWY. 104 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

HWY. 104 TEMP. RAMP 4B
P.I. = 245+22.82
Δ = 12°18'05" RT.
D = 8°00'00"
T = 77.18'
L = 153.77'
P.C. = 244+45.64
P.T. = 245+99.40
NO SUPER

HWY. 104 RAMP 4
P.I. 443+08.14
Δ = 19°59'57" RT.
D = 5°00'00"
T = 202.05'
L = 399.99'
P.C. = 441+06.10
P.T. = 445+06.08
MATCH EXIST. SUPER

HWY. 104 TEMP. RAMP 1B
P.I. = 222+85.72
Δ = 28°00'05" RT.
D = 6°00'00"
T = 238.10'
L = 466.69'
P.C. = 220+47.62
P.T. = 225+14.31
NO SUPER

HWY. 104 TEMP. RAMP 4A
P.I. 234+15.82
Δ = 8°34'27" RT.
D = 8°00'00"
T = 53.69'
L = 107.18'
P.C. = 233+62.13
P.T. = 234+69.31
NO SUPER

HWY. 104 TEMP. RAMP 1A
P.I. 211+01.28
Δ = 16°05'51" RT.
D = 8°00'00"
T = 101.28'
L = 201.22'
P.C. = 210+00.00
P.T. = 212+01.22
NO SUPER

MAIN LANES STA. 437+31.24, 33.50' LT. =
C.L. HWY. 104 TEMP. RAMP 1B STA. 220+00.00

MAIN LANES STA. 435+76.51, 56.00' LT. =
RAMP 4 STA. 435+75.68, 9.50' RT.
BEGIN OVERLAY TRANSITION

C.L. HWY. 104 RAMP 4 STA. 435+75.61 =
C.L. HWY 104 TEMP. RAMP 4A 234+69.31

MAIN LANES STA. 434+49.54, 58.50' LT. =
C.L. HWY. 104 RAMP 4 STA. 434+49.50

MAIN LANES STA. 433+88.43, 33.50' LT. =
C.L. HWY. 104 TEMP. RAMP 1A STA. 210+00.00

HWY. 104 RAMP 4 STA. 441+25.68, 15.00' RT. =
C.L. HWY. 104 TEMP. RAMP 4B STA. 246+88.28

STA. 441+40 IN PLACE
8'X5'X306.5' R.C. BOX CULVERT
(23° LT. FWD. SKEW) WITH
TYPE T DROP INLET IN MEDIAN
(4' X 3' X H=16'-5")
D.A.=578 ACRES Q50=416 CFS
RETAIN

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

C.L. HWY. 104 TEMP. RAMP 4A

C.L. HWY. 104 RAMP 4

EXIST. R/W & C/A

300' TAPER

700' ACCELERATION LANE

550' OVERLAY TRANSITION TO EXIST. RAMP PAVEMENT

STA. 437+40.77
END RUBBLIZE AND OVERLAY &
BEGIN FULL DEPTH TRANSITION

HWY. 104 TEMP. RAMP 4B
STA. 244+34
71° RT. FWD. SKEW
INSTALL 12"X 175' TEMP. CULVERT

8'x5' BC

C.L. HWY. 104 TEMP. RAMP 4B

FULL DEPTH RECONSTRUCTION MAIN LANES
STA. 437+40.77 TO STA. 447+40.77

C.L. I-530

60' N44°42'00"W

C.L. HWY. 104 TEMP. RAMP 1B

C.L. HWY. 104 TEMP. RAMP 1A

FULL DEPTH RECONSTRUCTION MAIN LANES
STA. 438+24.82 TO STA. 448+24.82

MAIN LANES STA. 431+16.00, 23.50' RT. =
C.L. HWY 104 TEMP. RAMP 4A STA. 230+00.00

EXIST. R/W & C/A

700' TEMP. ACCEL. LANE

MAIN LANES STA. 434+66.56, 23.50' RT. =
C.L. HWY. 104 TEMP. RAMP 4B STA. 240+00.00

MAIN LANES STA. 435+04.80, 46.50' RT. =
C.L. HWY. 104 RAMP 1 STA. 435+04.80

700' TEMP. ACCEL. LANE

C.L. HWY. 104 RAMP 1

MAIN LANES STA. 438+24.82 =
HWY. 104 RAMP 1 STA. 438+25.75
END RUBBLIZE AND OVERLAY &
BEGIN FULL DEPTH TRANSITION

C.L. HWY. 104 RAMP 1 STA. 439+60.62
C.L. HWY. 104 TEMP. RAMP 1A STA. 215+84.10

MAIN LANES STA. 439+60.88, 70.00' RT. =
C.L. RAMP 1 STA. 439+61.27, 12.50' LT.

HWY. 104 RAMP 1 STA. 439+61.27
END FULL DEPTH TRANSITION &
BEGIN OVERLAY TRANSITION

481.97' OVERLAY TRANSITION TO
EXISTING RAMP PAVEMENT

EXIST. R/W & C/A

HWY. 104 TEMP. RAMP 1B
STA. 225+66
73° LT. FWD. SKEW
INSTALL 12"X 190' TEMP. CULVERT

HWY. 104 TEMP. RAMP 1B
P.I. = 226+06.43
Δ = 11°47'49" LT.
D = 8°00'00"
T = 73.99'
L = 147.46'
P.C. = 225+32.44
P.T. = 226+79.90
NO SUPER

STA. 435+00 TO 437+26 INSTALL
18"X 226' TEMP. CULVERT IN MEDIAN

LEGEND

FULL DEPTH PAVEMENT TRANSITION

HWY. 104 TEMP RAMP 4A
P.I. 230+93.53
Δ = 14°52'50" LT.
D = 8°00'00"
T = 93.53'
L = 186.01'
P.C. = 230+00.00
P.T. = 231+86.01
NO SUPER

HWY. 104 RAMP 1
P.I. 436+00.02
Δ = 5°42'30" RT.
D = 3°00'00"
T = 95.22'
L = 190.28'
P.C. = 435+04.80
P.T. = 436+95.08
MATCH EXIST. SUPER

HWY. 104 TEMP. RAMP 4B
P.I. = 242+07.41
Δ = 32°18'09" LT.
D = 8°00'00"
T = 207.41'
L = 403.78'
P.C. = 240+00.00
P.T. = 244+03.78
NO SUPER

APPROXIMATE 100 YR.
FLOODPLAIN LIMITS

HWY. 104 TEMP. RAMP 1A
P.I. 214+80.48
Δ = 10°23'25" LT.
D = 5°00'00"
T = 104.19'
L = 207.81'
P.C. = 213+76.29
P.T. = 215+84.10
NO SUPER

APPROXIMATE 100 YR.
FLOODPLAIN LIMITS

HWY. 104 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

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

PLAN SHEET

Leonard.Speed 6/21/2016 10:26:28 AM
WORKSPACE: Leonard.Speed
Y:\1-Projects\ARTD\30295.1-530_Hwy104-Hwy65B\Deliverables\ROADWAY\Drawings\RBB0202_12_PP_MAIN_19.dgn

Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2	ARK.			
JOB NO.		BB0202	203	235
(2) PLAN SHEET				

LEGEND

FULL DEPTH PAVEMENT TRANSITION

HWY. 104 TEMP. RAMP 4B
P.I. = 245+22.82
Δ = 12°18'05" RT.
D = 8°00'00"
T = 77.18'
L = 153.77'
P.C. = 244+45.64
P.T. = 245+99.40
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

HWY. 104 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

HWY. 104 RAMP 4 STA. 441+25.68, 15.00' RT. =
C.L. HWY. 104 TEMP. RAMP 4B STA. 246+88.28

HWY. 104 STA. 16+00.00 =
RAMP 3 STA. 446+40.28
RAMP 4 STA. 447+04.04

EXIST. R/W & C/A

END OVERLAY TRANSITION

300' TAPER

550' OVERLAY TRANSITION

C.L. HWY. 104 RAMP 4

C.L. HWY. 104 RAMP 3

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

STA. 447+40.51 IN PLACE
TYPE N-2 DROP INLET
RETAIN

STA. 447+89.13 BRIDGE END
BRIDGE NO. A5611 IN PLACE
242'-0" CONTINUOUS PLATE GIRDER UNITS
39'-0" CLEAR ROADWAY
245'-11/8" BRIDGE LENGTH
STA. 450+34.22 BRIDGE END
RETAIN

STA. 453+00 IN PLACE
24" X 244' R.C. PIPE CULVERT
WITH FES LT. & RT.
30° RT. FWD. SKEW
RETAIN

STA. 447+70.79
END JOB BB0202
LOG MILE 29.89

STA. 447+40.77 IN PLACE
APPROACH SLAB AND GUTTER
RETAIN

STA. 447+40.77
END FULL DEPTH
PVMT. TRANSITION

C.L. HWY. 104

STA. 448+10.00
END WRSF ON SB FORESLOPE
BEHIND GUARDRAIL
(L.M. 40.07)

STA. 450+54.04 IN PLACE
TYPE N-2 DROP INLET
RETAIN

MAIN LANES STA. 454+76.89, 37.52' LT. =
C.L. I-530 CROSSOVER 2B STA. 260+00.00

C.L. HWY. 104 TEMP. RAMP 4B

FULL DEPTH RECONSTRUCTION MAIN LANES
STA. 437+40.77 TO STA. 447+40.77

45°20'00"

C.L. I-530

FULL DEPTH RECONSTRUCTION MAIN LANES
STA. 438+24.82 TO STA. 448+24.82

C.L. HWY. 104 TEMP. RAMP 1B

STA. 448+24.82 IN PLACE
APPROACH SLAB AND GUTTER
RETAIN

STA. 448+24.82
END FULL DEPTH
PVMT. TRANSITION

APPROXIMATE 100 YR.
FLOODPLAIN LIMITS

481.97' OVERLAY TRANSITION TO
EXISTING RAMP PAVEMENT

STA. 439+61.27
END FULL DEPTH TRANSITION &
BEGIN OVERLAY TRANSITION

MAIN LANES STA. 439+60.88, 70.00' RT. =
C.L. RAMP 1STA. 439+61.27, 12.50' LT.

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

HWY. 104 RAMP 1STA. 444+68.94, 15.00' LT. =
C.L. HWY. 104 TEMP. RAMP 1B STA. 227+64.50

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

STA. 448+73.18 BRIDGE END
BRIDGE NO. A5611 IN PLACE
242'-0" CONTINUOUS PLATE GIRDER UNITS
39'-0" CLEAR ROADWAY
245'-11/8" BRIDGE LENGTH
STA. 451+18.27 BRIDGE END
RETAIN

C.L. HWY. 104 RAMP 1

STA. 448+52.30 IN PLACE
TYPE N-2 DROP INLET
RETAIN

STA. 451+62.68 IN PLACE
TYPE N-2 DROP INLET
RETAIN

MAIN LANES STA. 454+91.12, 35.50' RT. =
C.L. I-530 CROSSOVER 2A STA. 250+00.00

HWY. 104 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

C.L. HWY. 104 RAMP 2

HWY. 104 STA. 24+00.00 =
RAMP 1STA. 452+59.32
RAMP 2 STA. 452+15.33

EXIST. R/W & C/A

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.10887
SCOTT P. THORNSBERRY
6-21-2016

PLAN SHEET

HWY. 104 TEMP. RAMP 1B
P.I. = 222+85.72
Δ = 28°00'05" RT.
D = 6°00'00"
T = 238.10'
L = 466.69'
P.C. = 220+47.62
P.T. = 225+14.31
NO SUPER

HWY. 104 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

HWY. 104 TEMP. RAMP 1B
P.I. = 226+06.43
Δ = 11°47'49" LT.
D = 8°00'00"
T = 73.99'
L = 147.46'
P.C. = 225+32.44
P.T. = 226+79.90
NO SUPER

HWY. 104 RAMP 1
P.I. 448+42.66
Δ = 16°12'20" LT.
D = 4°00'00"
T = 203.93'
L = 405.14'
P.C. = 446+38.73
P.T. = 450+43.87
MATCH EXIST. SUPER

REMOVAL AND DISPOSAL OF 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	1 EACH
STA. 446 +63 TO STA. 447 +57 LT. OF L.M.L.	= 50 LIN. FT.		1 EACH	
STA. 446 +72 TO STA. 448 +91 RT. OF L.M.L.	= 150 LIN. FT.	1 EACH	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 R.M.L.	= 150 LIN. FT.	1 EACH	1 EACH	

Leonard.Speed 6/21/2016 10:26:29 AM
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Y:\Projects\AHTD_138215_I-530_Hwy104-Hwy65B\Deliverables\ROADWAY\Drawings\RBB0202_I2_PP_MAIN_20.dgn

Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
8-04-16				2	ARK.			
				JOB NO.		BB0202	204	235
				(2)	PLAN SHEET			

STA. 453+00 IN PLACE
24"X 264' R.C. PIPE CULVERT
WITH F.E.S. LT. & RT.
(30° RT. FWD. SKEW)

STA. 457+00 IN PLACE
TYPE R DROP INLET IN MEDIAN
18"X92' R.C. PIPE OUTLET
TO RT. WITH F.E.S.

STA. 462+50 IN PLACE
TYPE R DROP INLET IN MEDIAN
18"X118' R.C. PIPE OUTLET
TO LT. WITH F.E.S.

HWY. 104 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

CROSSOVER 2B
P.I. 260+82.07
Δ = 8°11'35" RT.
D = 5°00'00"
T = 82.07'
L = 163.86'
P.C. = 260+00.00
P.T. = 261+63.86
NO SUPER

HWY. 104 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

HWY. 104 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

HWY. 104 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°45'58" 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'

MAIN LANES STA. 461+95.06, 37.50' LT. =
C.L. I-530 CROSSOVER 2A STA. 257+10.43

STA. 463+00.00 END WRSF
10' RT. OF L.M.L. (P.G.)
(L.M. 40.37)

MAIN LANES STA. 465+87.50, 46.50' RT. =
C.L. HWY. 104 RAMP 3 STA. 465+87.50

EXIST. R/W & C/A

MAIN LANES STA. 454+76.89, 37.52' LT. =
C.L. I-530 CROSSOVER 2B STA. 260+00.00

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

C.L. HWY. 104 RAMP 3

STA. 453+28.00
BEGIN WRSF ON SB FORESLOPE
BEHIND GUARDRAIL
(L.M. 40.19)

C.L. CROSSOVER 2B

C.L. CROSSOVER 2A

C.L. I-530

MAIN LANES STA. 454+91.12, 35.50' RT. =
C.L. I-530 CROSSOVER 2A STA. 250+00.00

MAIN LANES STA. 461+48.71, 37.50' RT. =
C.L. I-530 CROSSOVER 2B STA. 266+75.13

MAIN LANES STA. 464+38.99, 58.50' RT. =
C.L. HWY. 104 RAMP 2 STA. 464+38.99

CROSSOVER 2A
P.I. 250+82.05
Δ = 8°11'27" LT.
D = 5°00'00"
T = 82.05'
L = 163.81'
P.C. = 250+00.00
P.T. = 251+63.81
NO SUPER

C.L. HWY. 104 RAMP 2

C.L. HWY. 104

HWY. 104 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

CROSSOVER 2A
P.I. 255+94.01
Δ = 11°40'59" RT.
D = 5°00'00"
T = 117.24'
L = 233.66'
P.C. = 254+76.77
P.T. = 257+10.43
NO SUPER

HWY. 104 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

CROSSOVER 2B
P.I. 266+21.21
Δ = 5°23'45" LT.
D = 5°00'00"
T = 54.00'
L = 107.92'
P.C. = 265+67.21
P.T. = 266+75.13
NO SUPER

HWY. 104 RAMP 2
STA. 455+00 IN PLACE
24"X40' R.C. PIPE CULVERT
W/F.E.S. LT. & RT.
RETAIN

STA. 456+40 TO 459+85 INSTALL
18"X 345' TEMP. CULVERT IN MEDIAN

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
SCOTT P. THORNSBERRY
No.10887
7-4-2016

PLAN SHEET

Scott.Thornsberry 6/4/2016 11:31:18 AM
WORKSPACE: AHTD
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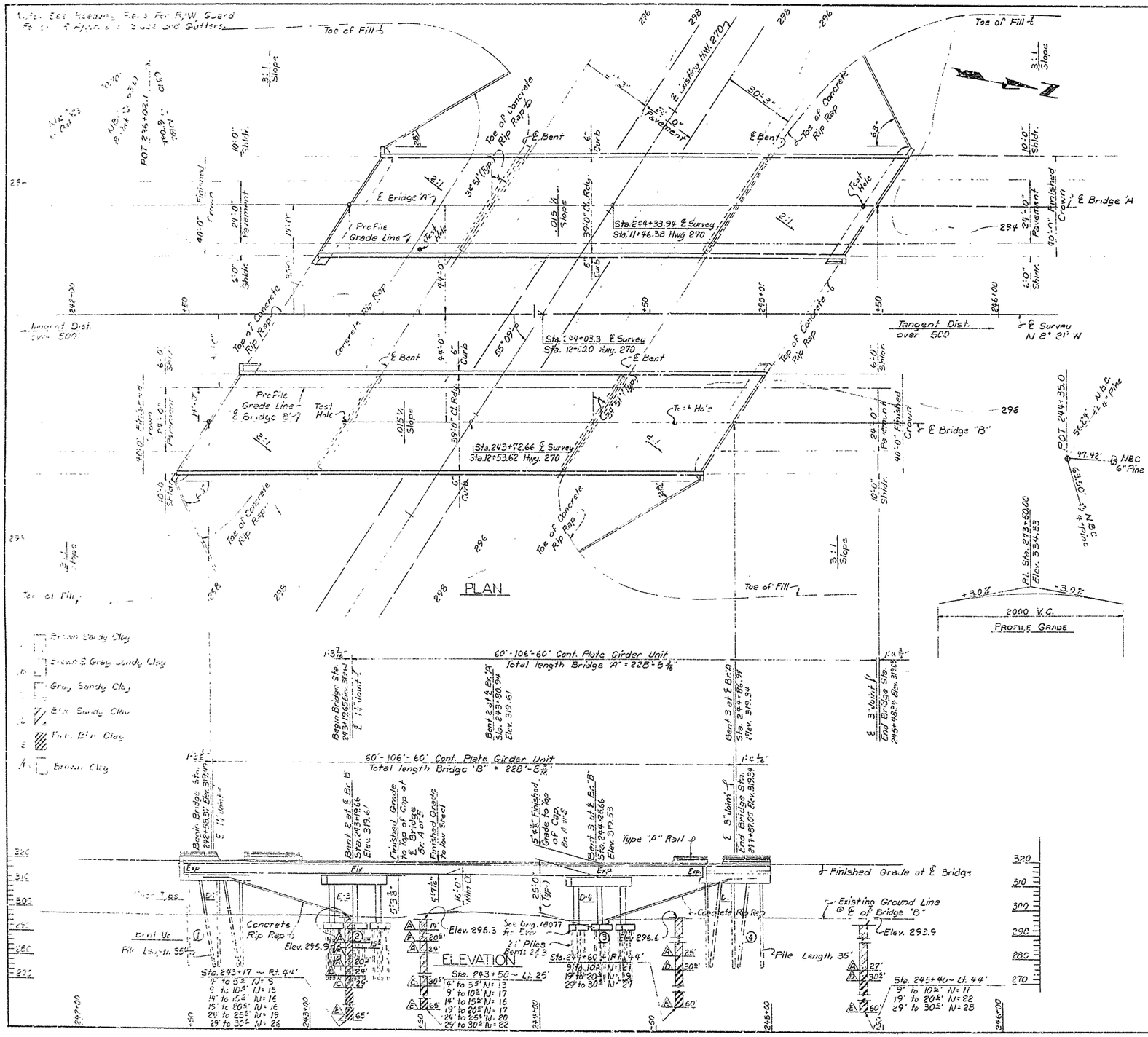
Michael Baker INTERNATIONAL

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				2	ARK.			
				JOB NO.		BB0202	205	235
				(2)	A&B 5500 - LAYOUT - XXXXX			

302 F18

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
9-18-73				6	ARK.	RP-025 -2(31)			
				JOB NO.		2182		17	87
				(1)	5500 A&B	Layout			18075



FOR INFORMATION ONLY

LAYOUT OF BRIDGES
OVER HWY. 270
HWY. 270 - HWY 104
JEFFERSON COUNTY
ROUTE 65 SEC. 14

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: [illegible] DATE: 4-24-73
TRACED BY: [illegible] DATE: [illegible]
CHECKED BY: [illegible] DATE: [illegible]

SCALE: 1" = 20'-0"

XXXXX

BRIDGE ENGINEER

BRIDGE NO. 5500A&B DRAWING NO. 18075

GENERAL NOTES

BENCH MARK - N.I.S. P. POLE 58' RT. STA. 243+92, ELEV. 298.12.

ALL PILING SHALL BE 16" PRECAST CONCRETE OR 16" CONCRETE FILLED METAL SHELL 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. 1 OF BRIDGE "B" AND ONE 26' 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. 18076
FOR DETAILS OF INTERMEDIATE BENTS, SEE DWG. NO. 18077
FOR DETAILS OF SUPERSTRUCTURE, SEE DWG. NO. 18078, 18079 & 18080
FOR DETAILS OF PRECAST CONCRETE PILING, SEE DWG. NO. 2382
FOR DETAILS OF CONCRETE FILLED METAL SHELL PILING, SEE DWG. NO. 2391A

SPECIFICATIONS: ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 1972, AND APPLICABLE SPECIAL PROVISIONS.

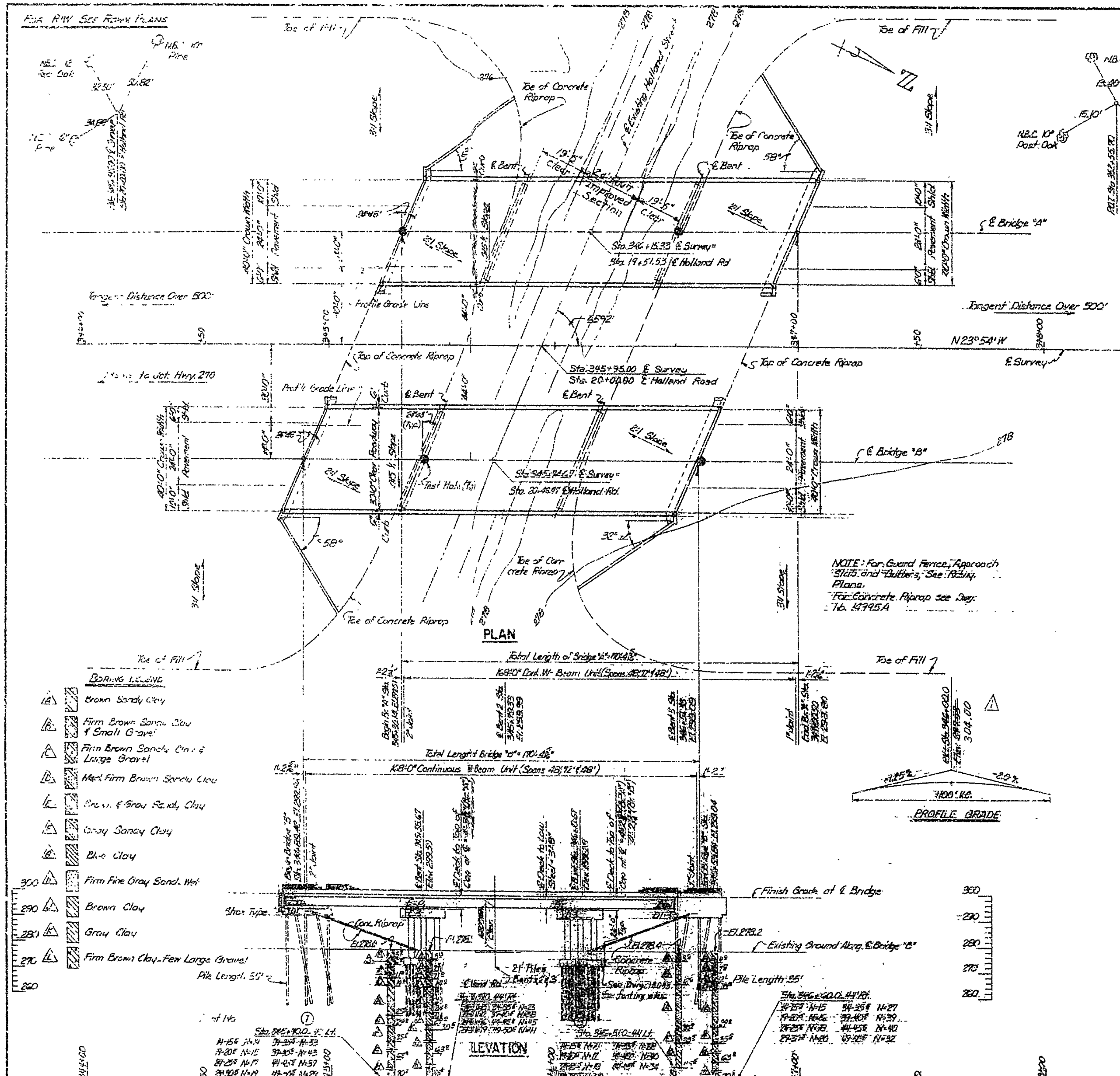
DESIGN SPECIFICATIONS: AASHO 1969
LIVE LOADING: HS20

UNIT STRESSES:		
	CLASS S AND S(AE) CONCRETE (N=10)	1,200 PSI
	REINFORCING STEEL	20,000 PSI
	STRUCTURAL STEEL (A36)	20,000 PSI
	STRUCTURAL STEEL (A572-50)	27,000 PSI

Michael Baker INTERNATIONAL	DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
					2	ARK.			
					JOB NO.		BB0202	206	235
					(2)	A&B 5501 - LAYOUT - XXXXX			

308 184

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3-11-74	5-27-3-3-74			6	ARK				
				JOB NO		2782		23	187
				5501 A&B LAYOUT - 18081					



GENERAL NOTES

BENCH MARK - R.R. SPIKE IN COMB. POLE 217' RT. STA. 345+20.0, ELEV. 278.64.

IN GENERAL, ALL CONSTRUCTION JOINTS SHALL BE HORIZONTAL AND SHALL BE PROVIDED WITH KEYS NOT LESS THAN 1-1/2" HIGH COVERING THE MIDDLE THIRD OF BOTH DIMENSIONS.

ALL PILING SHALL BE 16" OCTAGONAL PRECAST CONCRETE OR 16" CONCRETE FILLED METAL SHELLS AND SHALL BE DRIVEN WITH AN APPROVED AIR, STEAM OR DIESEL HAMMER TO A MINIMUM BEARING CAPACITY OF 44 TONS PER PILE AND TO A MINIMUM PENETRATION OF 20' BELOW THE GROUND LINE. LENGTHS OF PILES SHOWN ARE ASSUMED FOR ESTIMATING QUANTITIES ONLY. ACTUAL LENGTHS TO BE DETERMINED IN THE FIELD. DRIVE ONE 40' TEST PILE IN END BENT 1, BRIDGE "B", AND ONE 26' TEST PILE IN INTERIOR BENT 3, BRIDGE "A". PILES IN 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. 18082
FOR DETAILS OF INTERMEDIATE BENTS, SEE DWG. NO. 18083
FOR DETAILS OF SUPERSTRUCTURE, SEE DWG. NOS. 18084 THRU 18086
FOR DETAILS OF PRECAST CONCRETE PILING, SEE DWG. NO. 2382.
FOR DETAILS OF CONCRETE FILLED METAL SHELL PILING, SEE DWG. NO. 2381A.

SPECIFICATIONS: ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 1972, AND APPLICABLE SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: AASHO 1969
LIVE LOADING: HS20
UNIT STRESSES: CLASS S AND S(AE) CONCRETE (N=10) 1,200 PSI
REINFORCING STEEL 20,000 PSI
STRUCTURAL STEEL (A36) 20,000 PSI

FOR INFORMATION ONLY

△1 Revised - Changed Profile Grade Elev. - As Shown. 3-11-74 LDF

LAYOUT OF BRIDGES
OVER HOLLAND STREET
HWY. 270 - HWY. 104
JEFFERSON COUNTY

ROUTE 65 SEC. 14

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

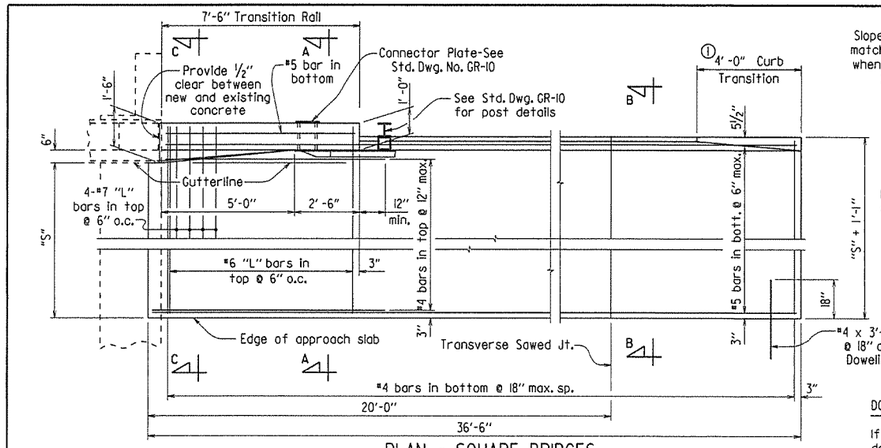
DRAWN BY KMG DATE 2 November 72
TRACED BY ___ DATE ___ SCALE 1" = 20'-0"
CHECKED BY GVA DATE 5 Feb 73

Veral Pinkerton
BRIDGE ENGINEER

XXXXX
BRIDGE NO. 5501 A & B DRAWING NO. ~~18081~~

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
9/2/15				6	ARK.		20	
				JOB NO.				

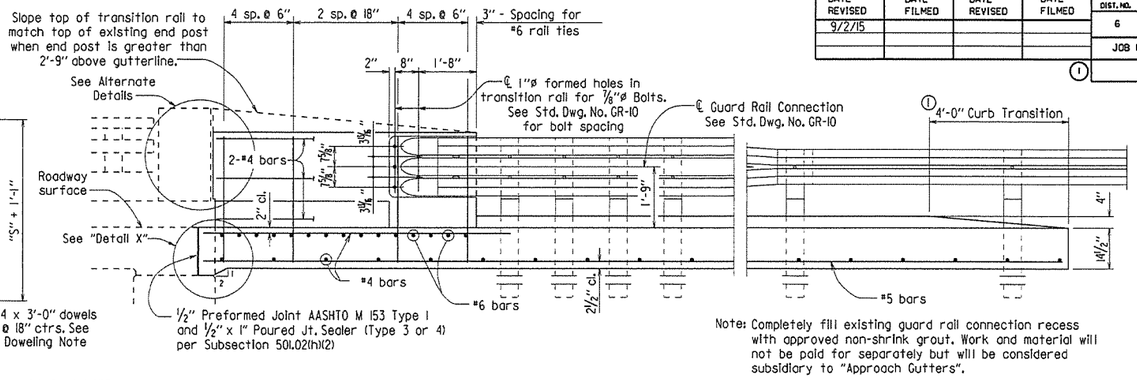
① TYPE AT GUTTERS 55036



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".

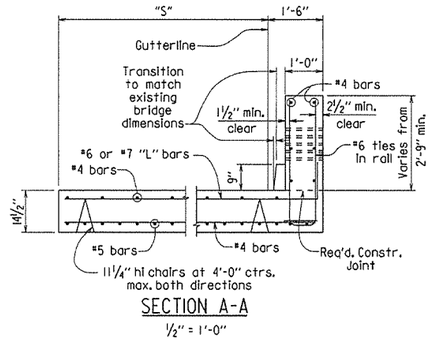
DOWELING NOTE

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".

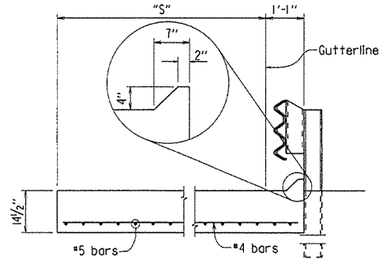
LONGITUDINAL SECTION THRU GUTTER

½" = 1'-0"



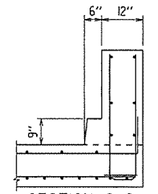
SECTION A-A

½" = 1'-0"



SECTION B-B

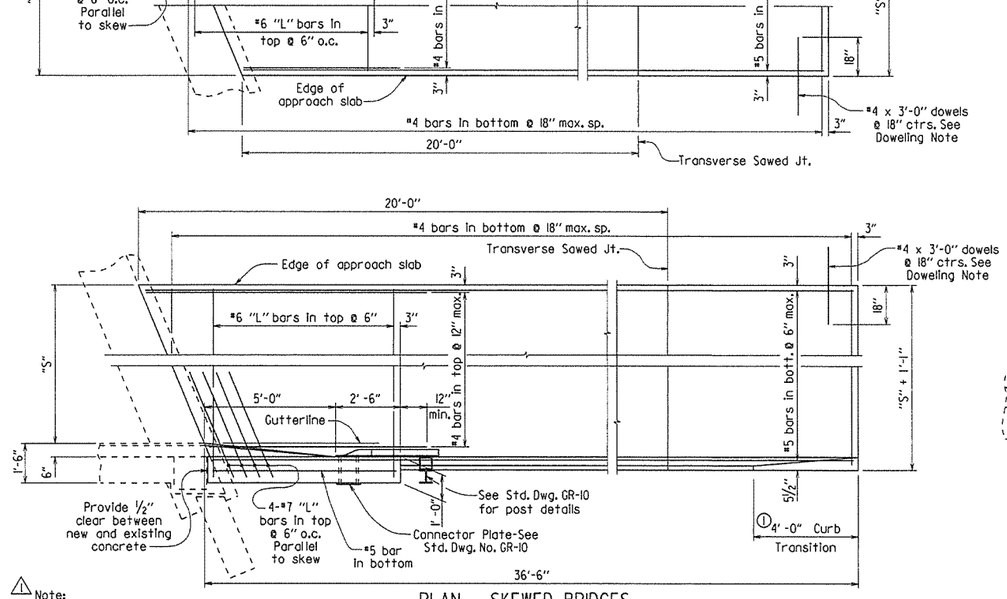
½" = 1'-0"



SECTION C-C

At end of Transition Rail

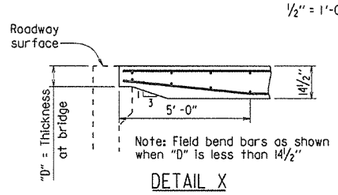
½" = 1'-0"



⚠ Note:
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.

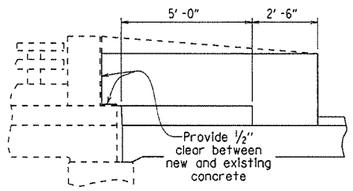
PLAN - SKEWED BRIDGES

⅜" = 1'-0"



DETAIL X

⅜" = 1'-0"

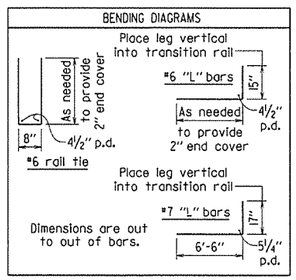


Bridge end may vary from that shown. Adjust gutter details as required to provide similar railing transition.

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.

⚠ Added note for gutters within the limits of horizontal curves. By: AMS
Checked By: KWY 9/2/15

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

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:

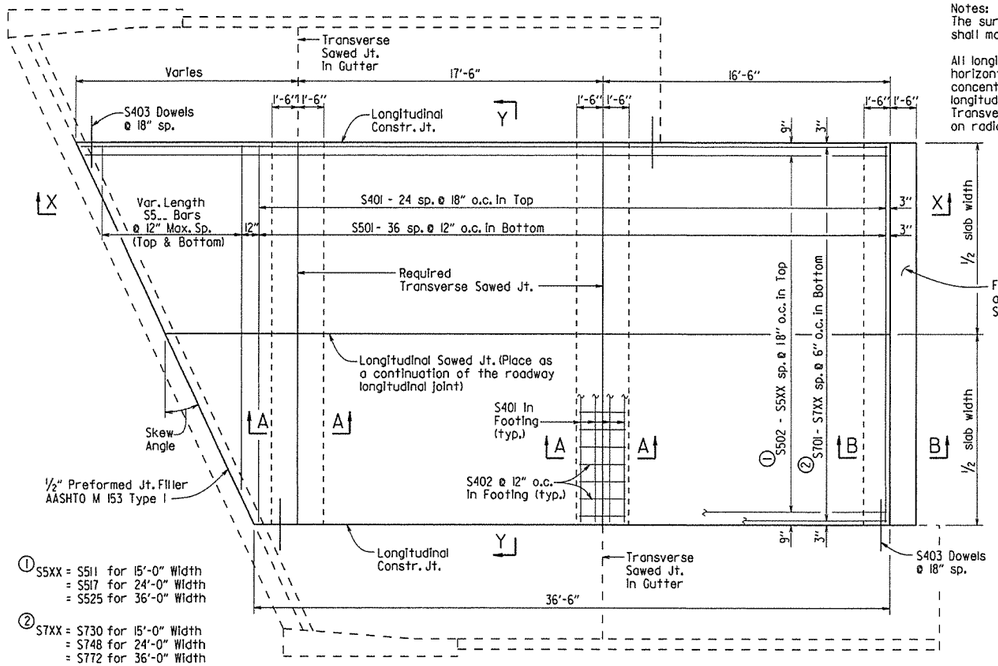
DRAWING NO. 55036

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

TYPE CI APPROACH SLAB 55040CI

Notes:
The surface finish for Approach Slabs shall match that used on the bridge deck.

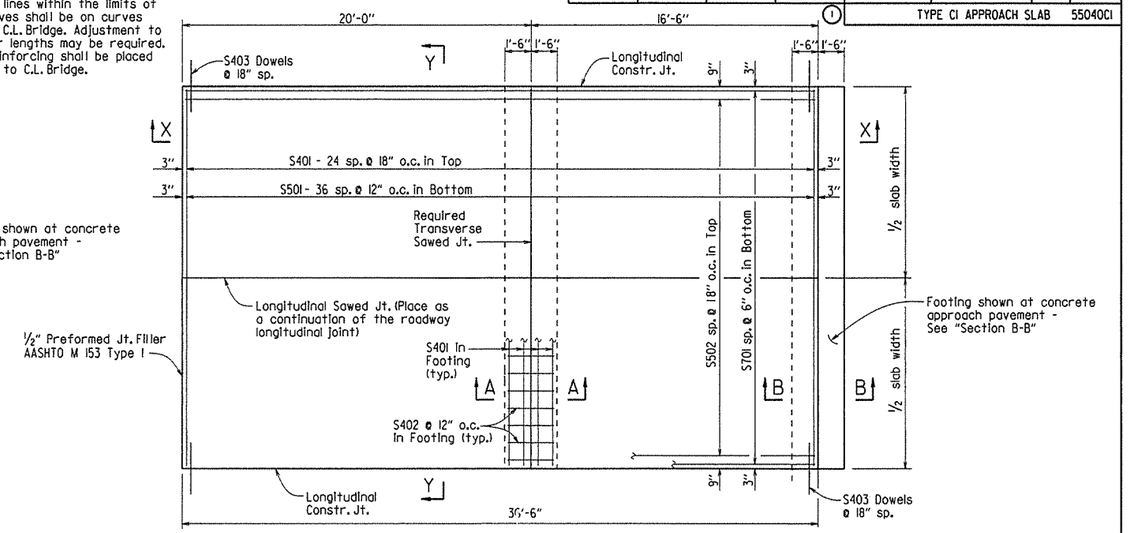
All longitudinal lines within the limits of horizontal curves shall be on curves concentric to C.L. Bridge. Adjustment to longitudinal bar lengths may be required. Transverse reinforcing shall be placed on radial lines to C.L. Bridge.



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
¼" = 1'-0"



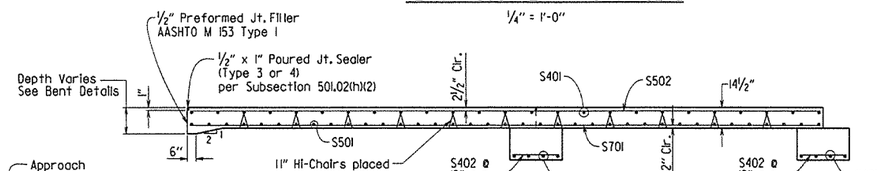
PLAN - SQUARE APPROACH SLAB
¼" = 1'-0"

BAR LIST

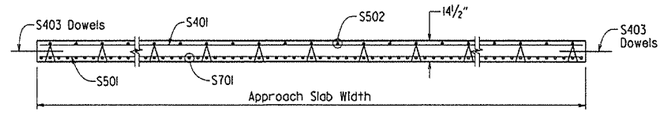
(Square & Skewed Approach Slabs)

	Mark	Square No. Req'd.	Square Length	Skewed No. Req'd.	Skewed 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)

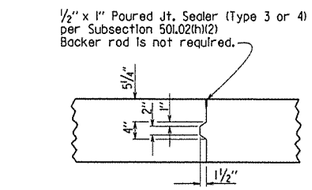
* Varies with skew angle



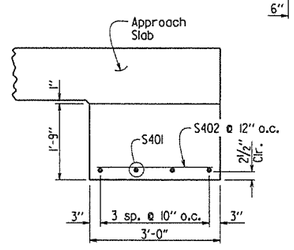
SECTION X-X
SQUARE APPROACH SLAB SHOWN
¼" = 1'-0"



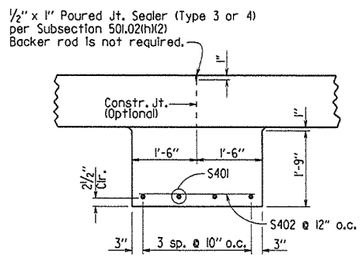
SECTION Y-Y
N.T.S.



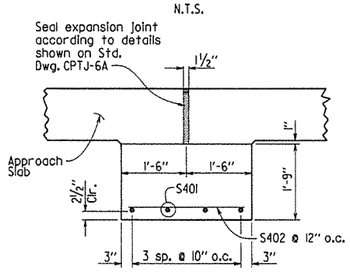
DETAILS OF LONGITUDINAL CONSTRUCTION JOINT
¾" = 1'-0"



SECTION B-B
AT ASPHALT APPROACH PAVEMENT
N.T.S.



SECTION A-A
N.T.S.



SECTION B-B
AT CONCRETE APPROACH PAVEMENT
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.

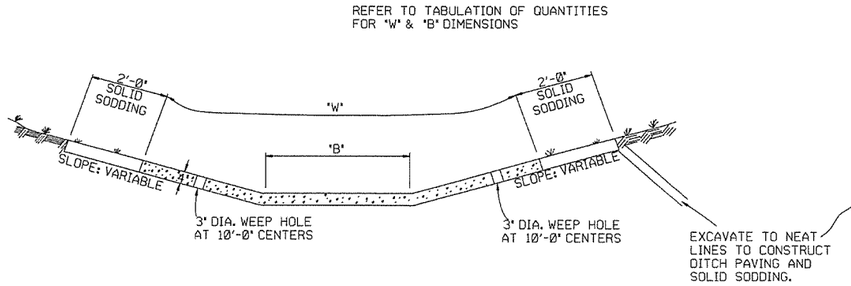
STANDARD DETAILS FOR TYPE CI APPROACH SLAB

ARKANSAS STATE HIGHWAY COMMISSION

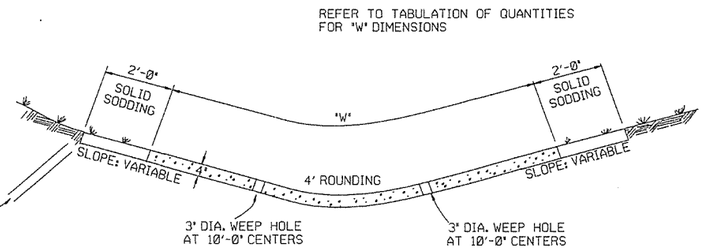
LITTLE ROCK, ARK.

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

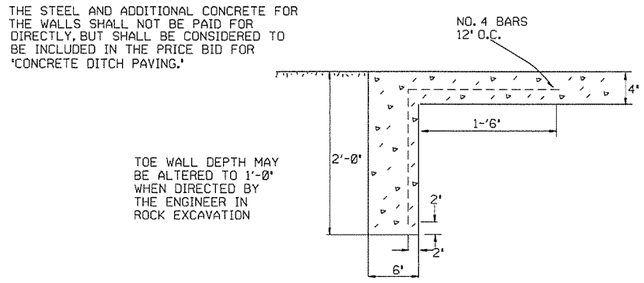


TYPE A



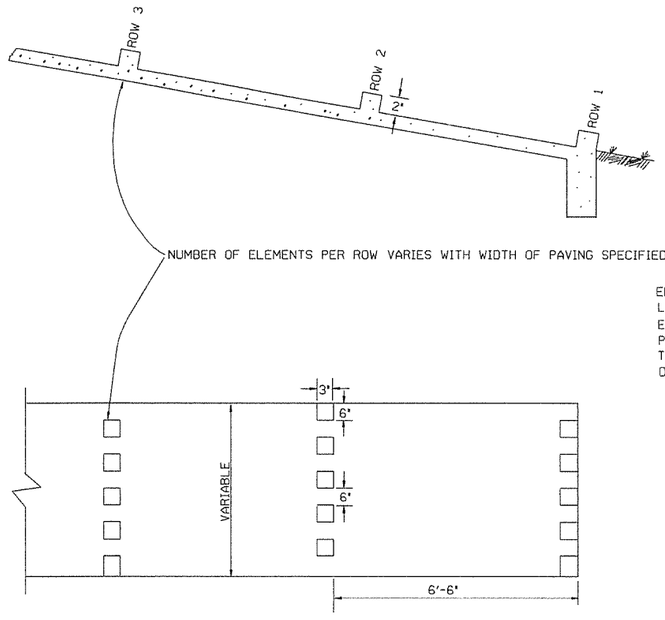
TYPE B

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



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

TOE WALL DETAIL FOR CONCRETE DITCH PAVING



ENERGY DISSIPATORS
(NO SCALE)

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

GENERAL NOTES:

THE FULL WIDTH OF EACH SECTION SHALL BE POURED MONOLITHICALLY.

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

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

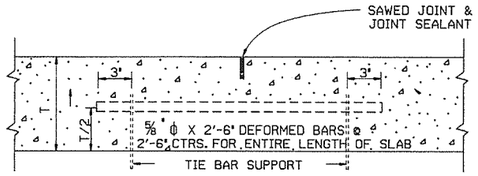
1" WIDE TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE DITCH PAVING AT 45' INTERVALS. THE SPACE SHALL BE FILLED WITH APPROVED JOINT FILLER COMPLYING WITH AASHTO M213.

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

ARKANSAS STATE HIGHWAY COMMISSION

CONCRETE DITCH PAVING

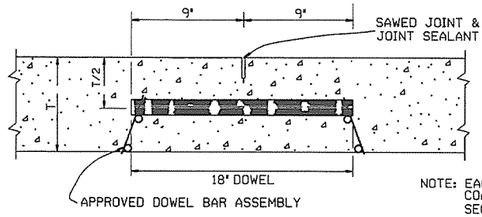
STANDARD DRAWING CDP-1



LONGITUDINAL JOINT

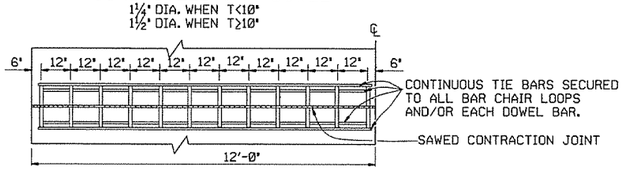
NOTE: THE TIE BAR SUPPORT SHOWN ABOVE MAY BE ELIMINATED IF OTHER APPROVED METHODS FOR PLACING AND SUPPORTING THE TIE BARS ARE PROVIDED.

TIE BARS SHALL BE 15' FROM TRANSVERSE JOINTS.



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

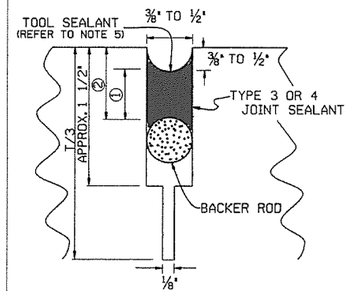
ROUND STEEL BAR DOWEL
1¼" DIA. WHEN T<10"
1½" DIA. WHEN T≥10"



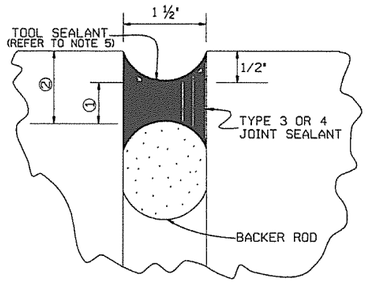
ONE-HALF 24' PAVEMENT
12 DOWELS
PLAN

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



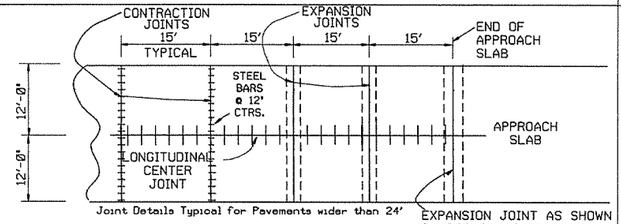
DETAIL OF EXPANSION JOINT

JOINT CONFIGURATION FOR TYPE 3 OR 4 JOINT SEALANT

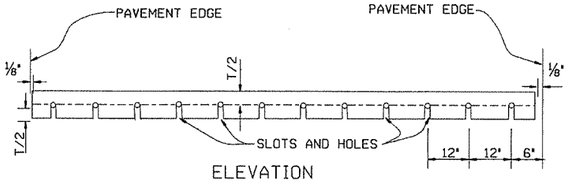
JOINT WIDTH	SEALANT THICKNESS ①	BACKER ROD DIAMETER	BACKER ROD PLACEMENT DEPTH ②
INCHES			
¼	¼	⅜	½
⅜	¼	½	½
½	¼	⅝	½
⅝	⅝	¾	⅝
¾	¾	⅞	⅞
1 ½	¾	2	1 ¼

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

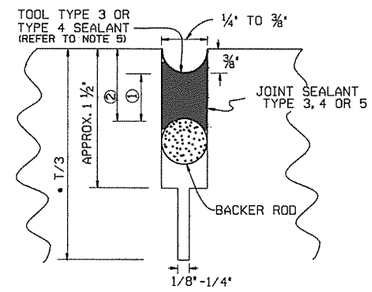


PLAN SHOWING EXPANSION JOINTS AT BRIDGE APPROACH SLABS



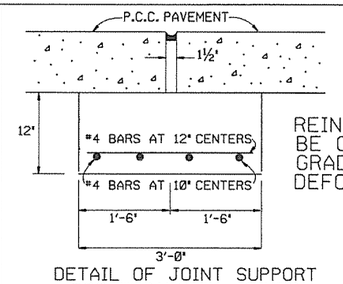
ELEVATION

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



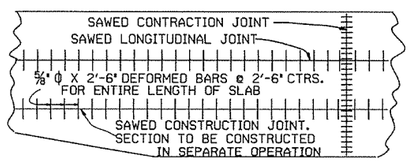
*NOTE: T/3 SAW CUT NOT REQUIRED FOR LONGITUDINAL CONSTRUCTION JOINT.

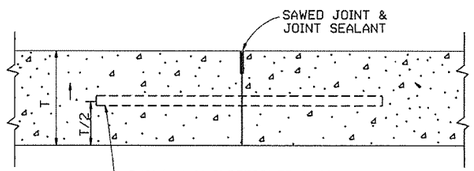
DETAIL OF SAWED LONGITUDINAL JOINT AND LONGITUDINAL CONSTRUCTION JOINT



DETAIL OF JOINT SUPPORT FOR EXPANSION JOINTS

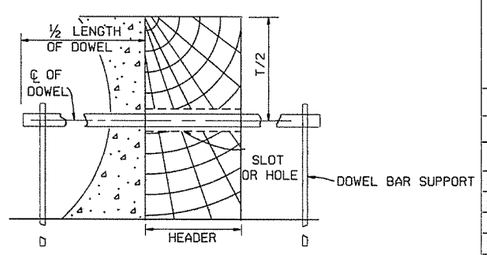
REINFORCING SHALL BE GRADE 40 OR GRADE 60 DEFORMED BARS.





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

LONGITUDINAL CONSTRUCTION JOINT



SECTION

TRANSVERSE CONSTRUCTION JOINT

GENERAL NOTES

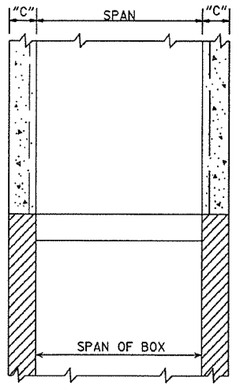
1. 'T' DENOTES THICKNESS OF SLAB.
2. DOWEL BARS SHALL BE PLACED IN ACCORDANCE WITH THE DIMENSIONS SHOWN. A TOLERANCE OF PLUS OR MINUS ONE INCH WILL BE ALLOWED FOR THE VERTICAL AND LATERAL PLACEMENT AND A TOLERANCE OF PLUS OR MINUS ¼" WILL BE ALLOWED FOR THE TILT AND SKEW. DOWEL BARS SHALL BE FIELD COATED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

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

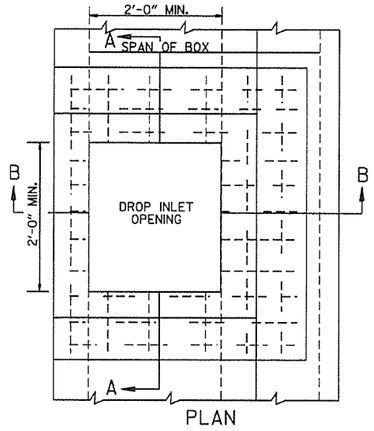
ARKANSAS STATE HIGHWAY COMMISSION

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

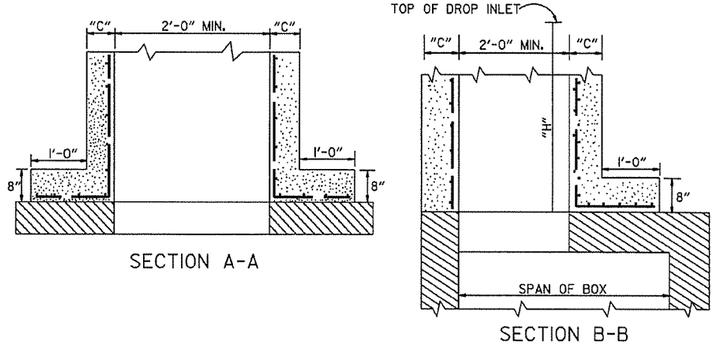
STANDARD DRAWING CPTJ - 6A



SECTION B-B



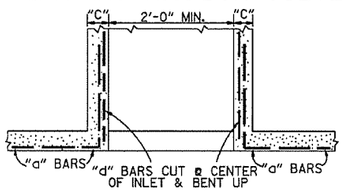
PLAN



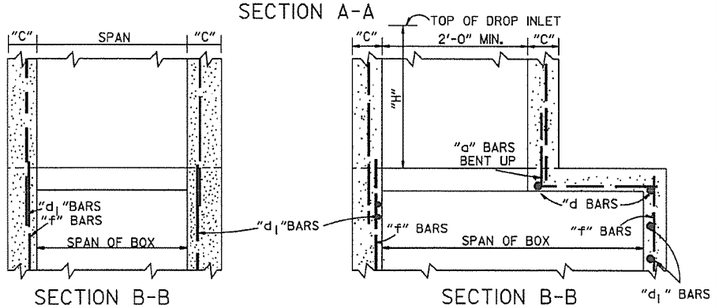
SECTION A-A

SECTION B-B

METHOD OF CONSTRUCTING DROP INLET ON EXISTING R.C. BOX CULVERT



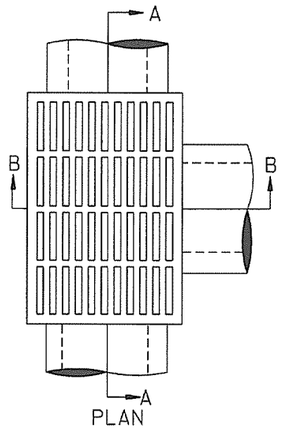
SECTION A-A



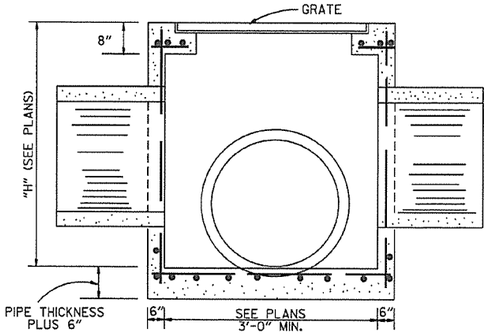
SECTION B-B SECTION B-B

METHOD OF CONSTRUCTING DROP INLET ON NEW R.C. BOX CULVERT

NOTE: "C" DIMENSIONS AND REINFORCING BAR SIZES, SHALL CONFORM TO THOSE SHOWN ON STANDARD DRAWING FOR DROP INLET.

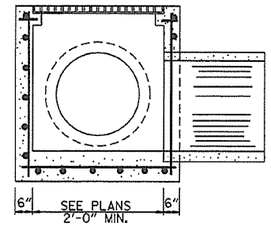


PLAN



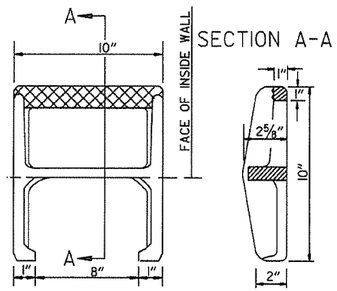
SECTION A-A

NOTE: REINF. BARS TO BE #4 BARS ON 6" CTRS. WITH 1½" MIN. COVER. THIS TYPE DROP INLET TO BE USED WHERE NOT SUBJECTED TO TRAFFIC.



SECTION B-B

DROP INLET (TYPE E)

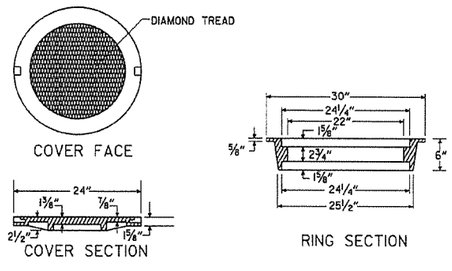


APPROX. WEIGHT = 11 LBS. (CAST IRON)

PLAN

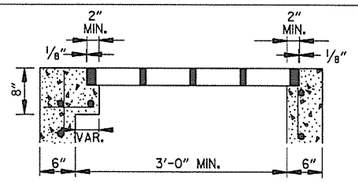
NOTE: THIS DETAIL IS TYPICAL. OTHERS MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER.

DETAIL OF STEP FOR DROP INLET

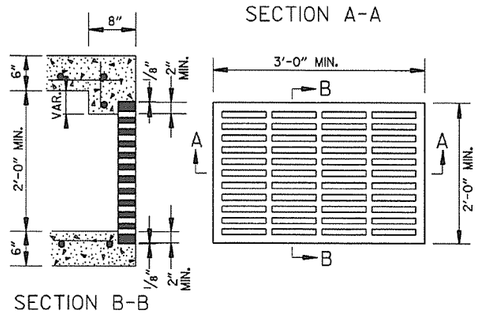


APPROXIMATE TOTAL WEIGHT = 333 LBS.

HEAVY DUTY RING & COVER



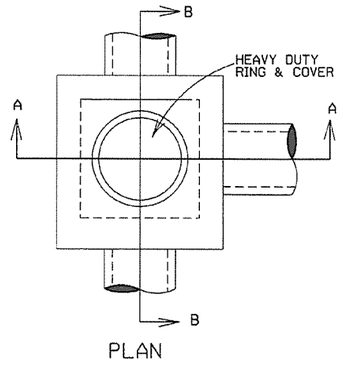
SECTION A-A



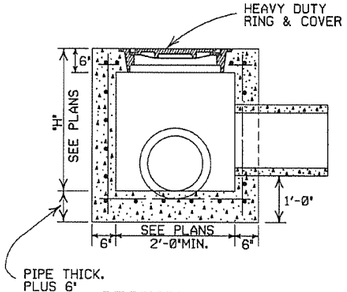
SECTION B-B

APPROXIMATE MINIMUM WATERWAY OPENING = 260 SQ. IN.

GRATE FOR TYPE E DROP INLET

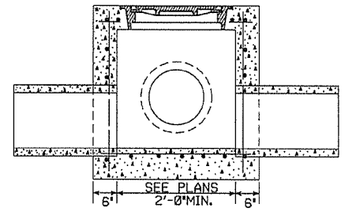


PLAN



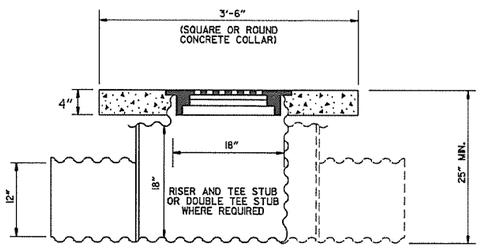
SECTION A-A

NOTE: REINF. BARS TO BE #4 BARS ON 6" CTRS. WITH 1½" MIN. COVER. THIS TYPE JUNCTION BOX TO BE USED WHERE NOT SUBJECTED TO TRAFFIC.

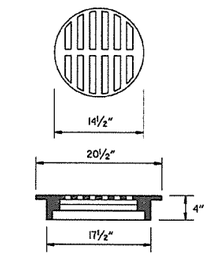


SECTION B-B

JUNCTION BOX (TYPE E)



NOTE: CONCRETE COLLAR TO BE CAST IN PLACE. 12" PIPE CULVERTS TO BE MEASURED AND PAID FOR AS " 12" SIDE DRAIN ".



USE NEENAH R-5901-C OR EQUIVALENT BICYCLE SAFE FRAME AND GRATE

DETAIL OF YARD DRAIN

GENERAL NOTES:

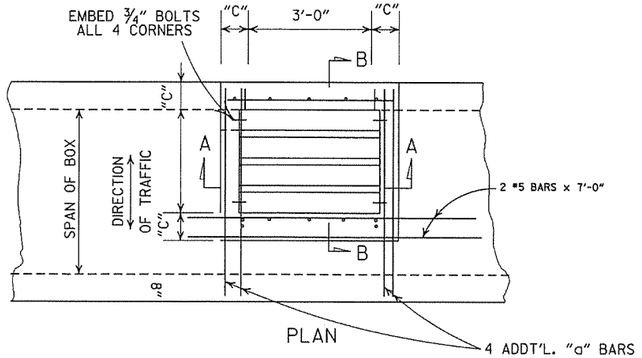
1. ALL EXPOSED CORNERS SHALL BE ¾" CHAMFERED.
2. STEPS SHALL BE INSTALLED ON 16" CENTERS ON ALL INLETS 4'-0" HIGH OR OVER, OR AS APPROVED BY THE ENGINEER.
3. EXPANSION JOINT MATERIAL SHALL BE ¾" PREFORMED FIBER.
4. GRATE OR GRATE AND FRAME SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M 105 CLASS 35B. GRATE MAY BE USED WITHOUT FRAME.
5. GRATE AND FRAME SHALL NOT BE PAINTED.
6. GRATE SHALL BE BICYCLE SAFE.
7. HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON TOP.
8. HEAVY DUTY RING AND COVER SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M105 CLASS 35B & AASHTO M306.
9. HEAVY DUTY RING AND COVER SHALL NOT BE PAINTED.
10. DIMENSIONS SHOWN FOR RING AND COVER ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR CASTINGS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR CASTING DESIGNS MAY BE MADE BY REFERRING TO PREVIOUSLY APPROVED DRAWINGS.

DATE REV.	REVISION	DATE FILMED
11-16-01	ADDED NOTE 10	
1-12-00	REVISED HEAVY DUTY RING & COVER	
7-02-98	CHANGED GRATE DETAIL, DELETED DI(TYPE D), REPLACED RING & COVER W/HEAVY DUTY RING & COVER, ADDED JUNCTION BOX (TYPE E)	
6-26-97	ADDED DIMENSION TO TYPE IV-A	
10-18-96	ADDED DETAIL OF YARD DRAIN	
8-15-91	DELETE TYPE IV GRATE	
7-15-88	REVISED STEP DETAIL	
5-20-83	REVISED DETAILS OF GRATES (TYPE IV & IV-A)	
2-4-83	ADDED GENERAL NOTE NO. 4	
3-2-81	ADDED TYPE IV-A GRATE	
5-22-74	DELETED INLET (TYPE F) & GRATE (TYPE III)	
10-2-72	REVISED AND REDRAWN	

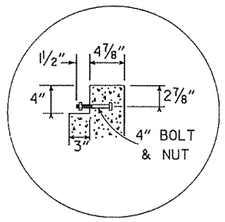
ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DROP INLETS & JUNCTION BOXES

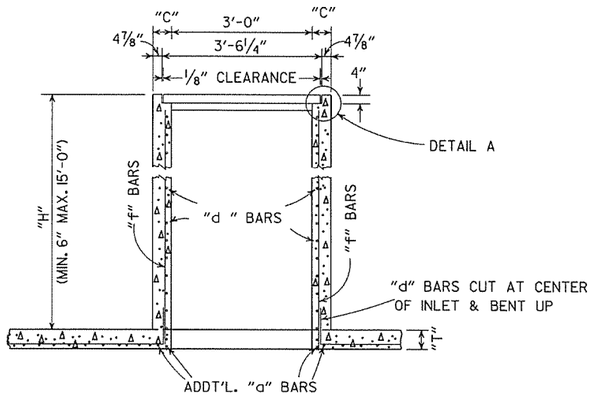
STANDARD DRAWING FPC-9



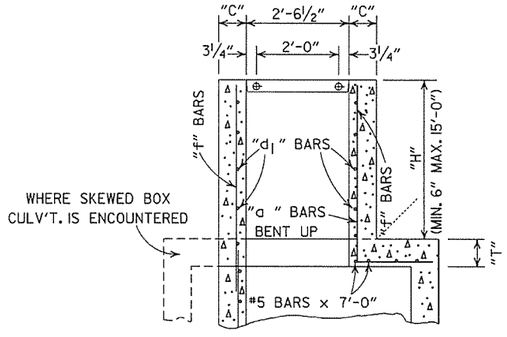
PLAN



DETAIL A



SECTION A-A

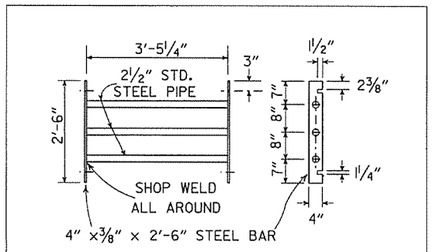


SECTION B-B

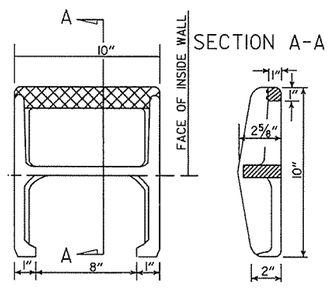
NOTE: ADDT'L.REINF. STEEL TO BE INCLUDED IN UNIT PRICE BID PER TYPE "TM" D.I.

DIMENSIONS & REINF. BARS FOR D.I. TO BE THE SAME AS THOSE SHOWN ON APPLICABLE STD. BARREL DRAWING FOR R.C. BOX CULVERTS.

DROP INLET TYPE "TM" FOR REINFORCED CONC. BOX CULVERTS



GRATE DETAIL



APPROX. WEIGHT = 11LBS. (CAST IRON)

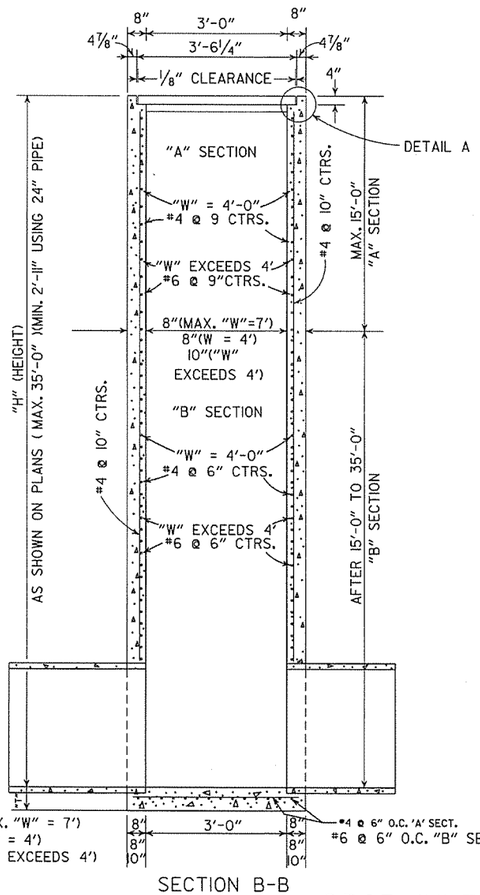
PLAN

NOTE: THIS DETAIL IS TYPICAL. OTHERS MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER.

DETAIL OF STEP FOR DROP INLET

GENERAL NOTES:

1. STEEL PIPE FOR GRATES AND BOLTS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 807. BOLTS SHALL CONFORM TO ONE OF THE FOLLOWING: ASTM A193, GRADE B8 CLASS 1OR 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.

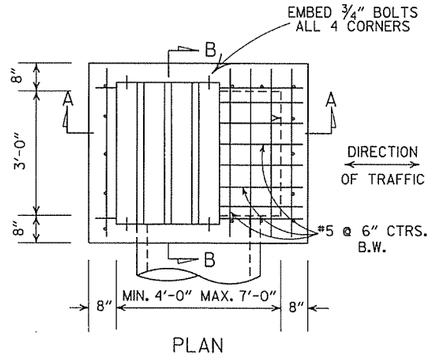


SECTION B-B

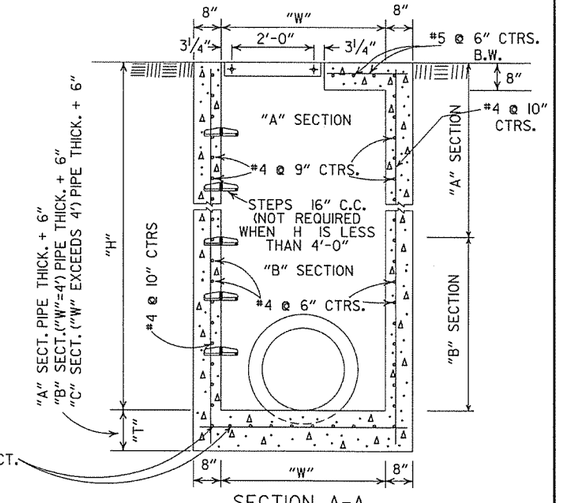
TABLE OF "W" DIMENSIONS

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

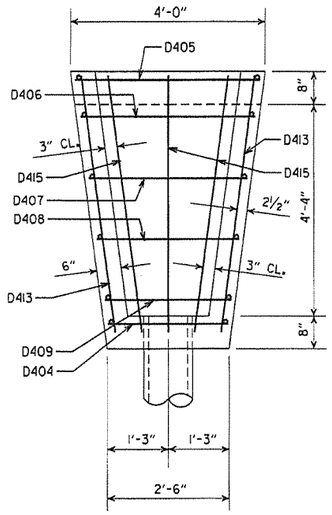
DROP INLET(TYPE RM)

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

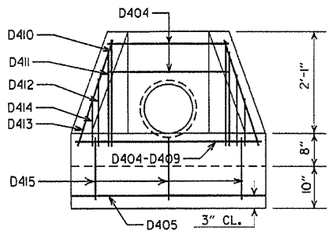
ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DROP INLETS

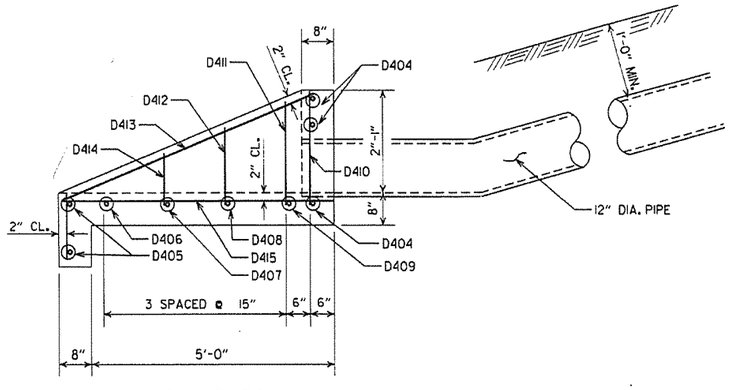
STANDARD DRAWING FPC-9D



PLAN



FRONT ELEVATION

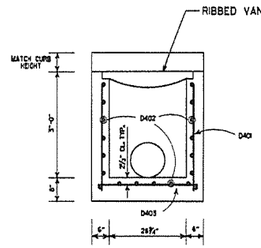


SIDE ELEVATION
CONCRETE SPILLWAY

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"	5'-4", 1'-2", 2" P.D., D415

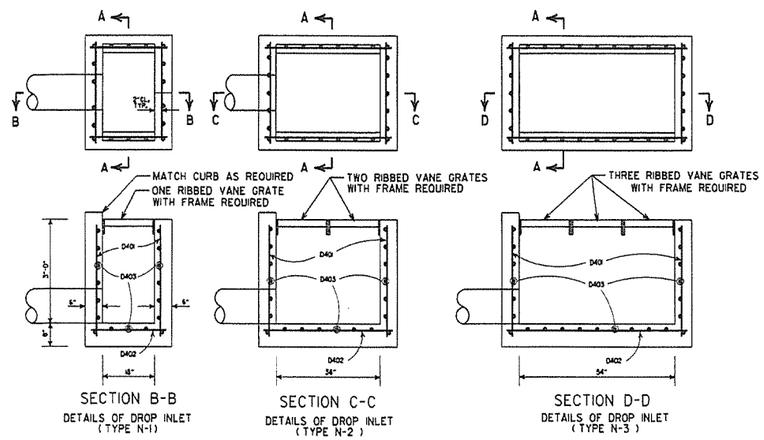


SECTION A-A

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)

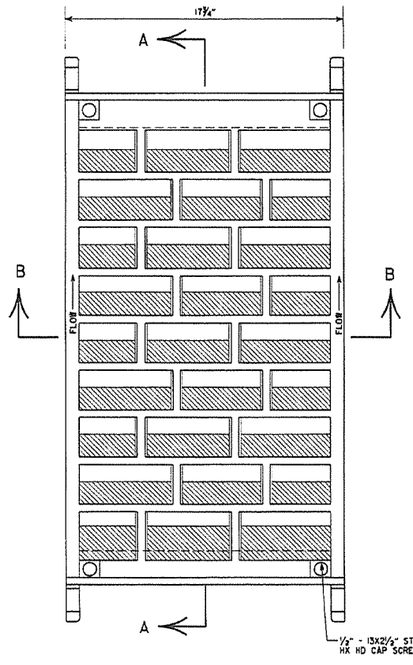
SECTION C-C
DETAILS OF DROP INLET
(TYPE N-2)

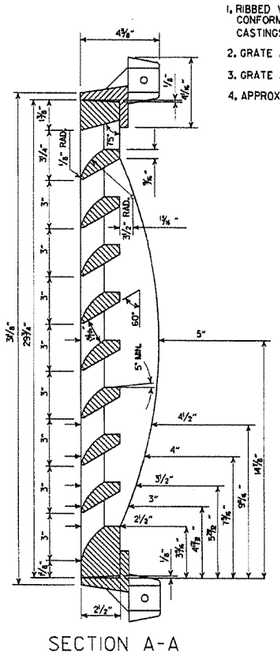
SECTION D-D
DETAILS OF DROP INLET
(TYPE N-3)

DETAILS OF DROP INLET

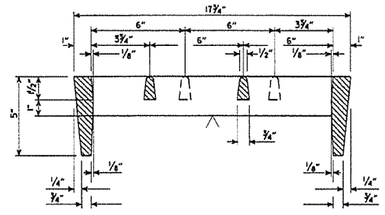
GENERAL NOTES (GRATE & FRAME)

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.

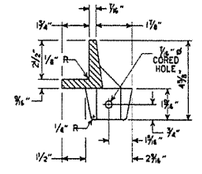




SECTION A-A



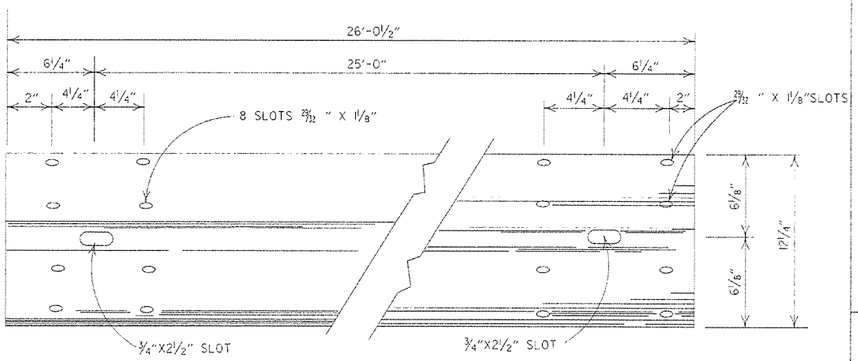
SECTION B-B

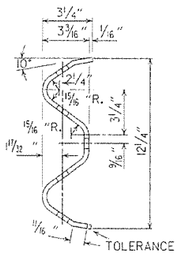


SECTION THRU FRAME

DETAILS OF RIBBED VANE GRATE AND FRAME

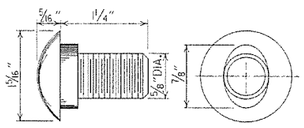
			ARKANSAS STATE HIGHWAY COMMISSION
7-02-98	7-2-98	REVISED SECT. A-A DETAIL OF DROP INLET & ADDED AASHTO REF. TO NOTE 1, REVISED GRATE	DETAILS OF DROP INLETS AND SPILLWAY OUTLET
10-18-96		REVISED ASTM REF. TO AASHTO	
8-15-91		ISSUED	
DATE REVISED	DATE FILMED	DESCRIPTION	STANDARD DRAWING FPC-9N



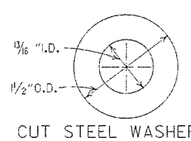


DETAILS OF W-BEAM GUARD RAIL

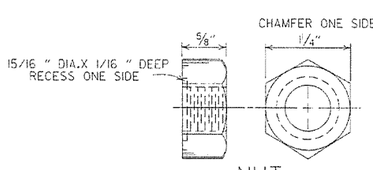
RAIL SECTION OF CLOSELY SIMILAR DIMENSIONS AND COMPARABLE STRENGTH MAY BE SUBSTITUTED IF APPROVED BY THE ENGINEER.



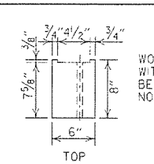
SPLICE BOLT
POST BOLT - SAME EXCEPT LENGTH



CUT STEEL WASHER

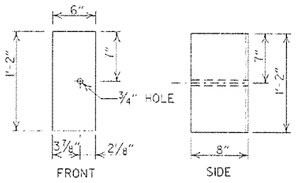


NUT

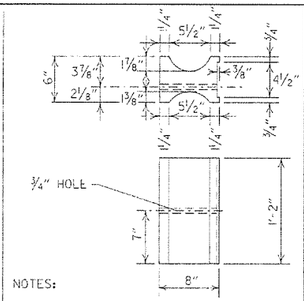


WOOD BLOCKOUT USED WITH WOOD POSTS SHALL BE 6"x8"x1'-2" WITH NO NOTCH REQUIRED.

TOP



WOOD BLOCKOUT (W-BEAM)

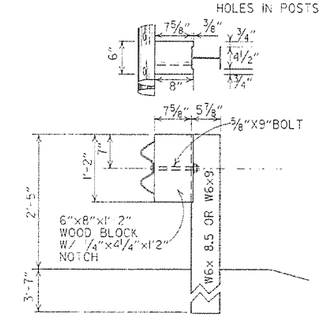


NOTES:

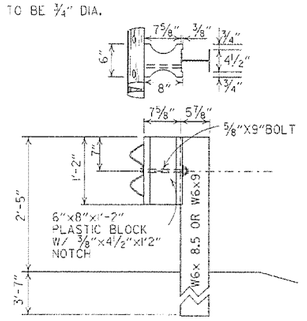
1. SIMILAR SHAPED PLASTIC BLOCKOUTS MAY BE USED AS LONG AS THEY MEET NCHRP-350 TEST LEVEL 3 SPECIFICATIONS OR REQUIREMENTS FOR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).
2. DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCES.

PLASTIC BLOCKOUT (W-BEAM)

HOLES IN POSTS AND BLOCKS TO BE ¾" DIA.

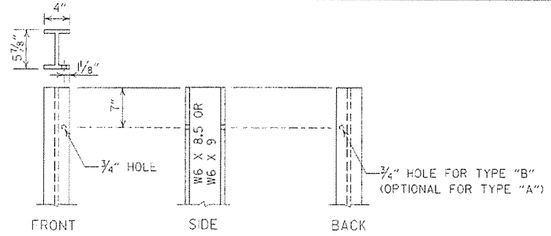


WOOD BLOCKOUT CONNECTIONS

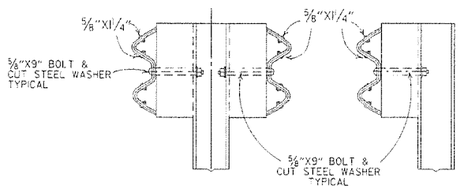


PLASTIC BLOCKOUT CONNECTIONS

DETAILS OF STEEL LINE POST CONNECTIONS (W-BEAM)

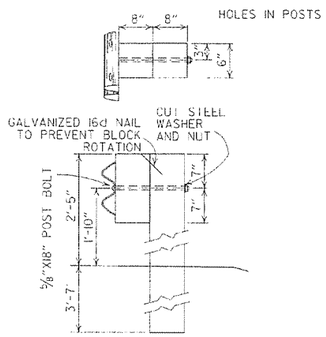


STEEL POST



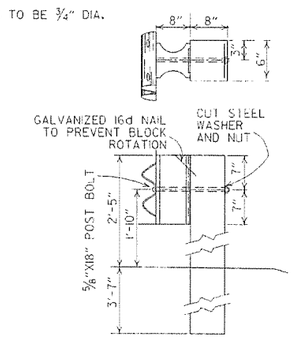
DETAILS OF STEEL LINE POST CONNECTIONS (W-BEAM)

HOLES IN POSTS AND BLOCKS TO BE ¾" DIA.



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

WOOD BLOCKOUT CONNECTIONS



PLASTIC BLOCKOUT CONNECTIONS

DETAILS OF WOOD LINE POST CONNECTIONS (W-BEAM)

-GENERAL NOTES-

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

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

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

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

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

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

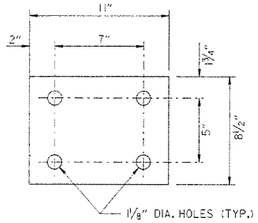
CONTRACTOR SHALL HAVE THE OPTION OF USING WOOD BLOCKOUTS FOR W-BEAM GUARD RAIL OR PLASTIC BLOCKOUTS, AS LONG AS BLOCKOUT USED MEETS NCHRP-350 TEST LEVEL 3 SPECIFICATIONS OR REQUIREMENTS FOR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) FOR W-BEAM GUARD RAIL.

DATE	REVISION	DATE FILM
7-14-10	RAISED HEIGHT OF GUARD RAIL 1"	
10-5-09	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	
3-2-88	REV. ANCHOR POST, ELEV. NOTES & POST IN ROCK	780-3-4-88
10-30-87	REVISED WOOD LINE POST DETAIL	546-10-30-87
10-9-87	REDRAWN & REVISED	802-10-9-87

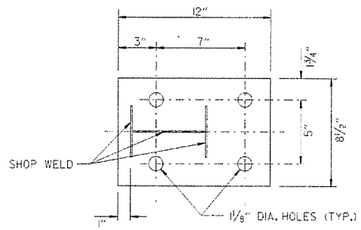
ARKANSAS STATE HIGHWAY COMMISSION

GUARD RAIL DETAILS

STANDARD DRAWING GR-8

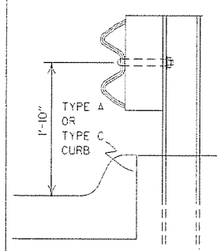


WASHER PLATE



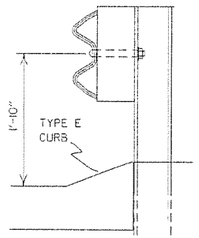
BASE PLATE

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



FOR DESIGN SPEEDS OF 50 MPH OR LESS

ALIGN FACE OF GUARD RAIL WITH FACE OF CURB.

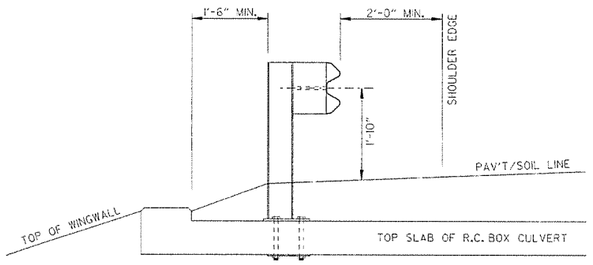


FOR DESIGN SPEEDS OF 55 MPH OR MORE

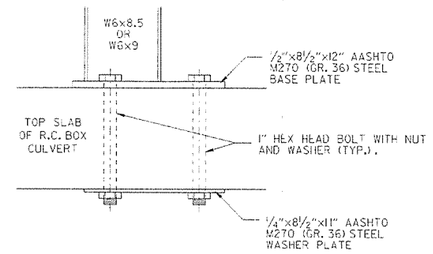
PLACE GUARD RAIL POSTS AGAINST BACK OF CURB.

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.

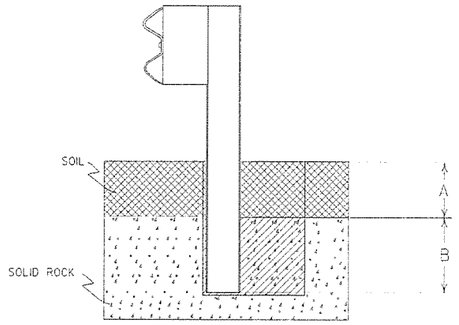


SECTION A-A

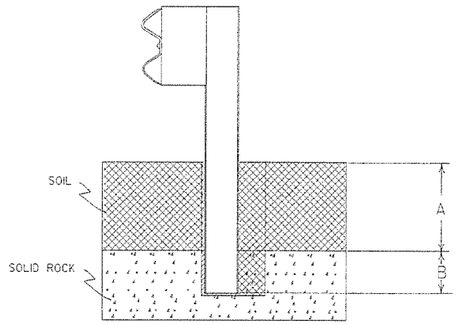


DETAIL OF CONNECTION

Case 1

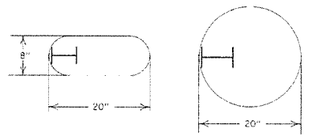


Case 2



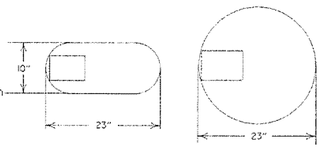
Plan View Steel Posts

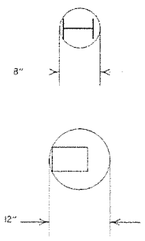
Either hole configuration acceptable



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".

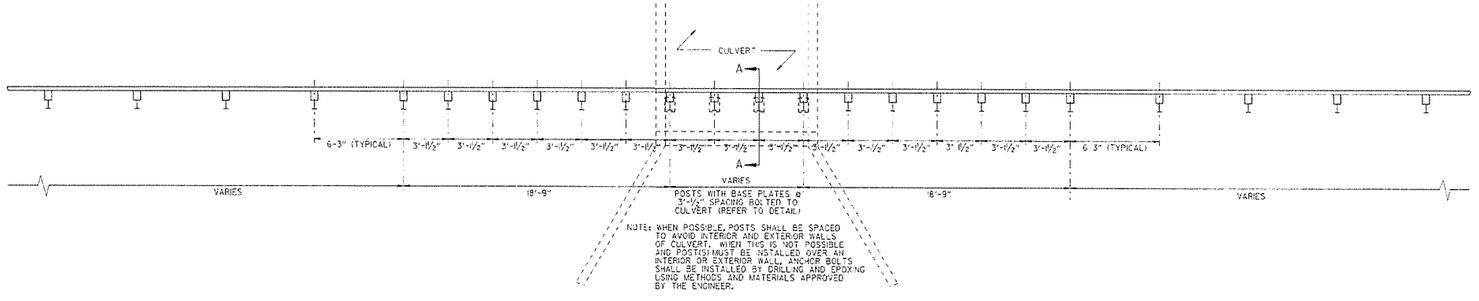
Zone A:
Backfill according to Section 617.03(a).

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)



PLAN LAYOUT OF TYPE A GUARD RAIL AT LOW-FILL CULVERTS

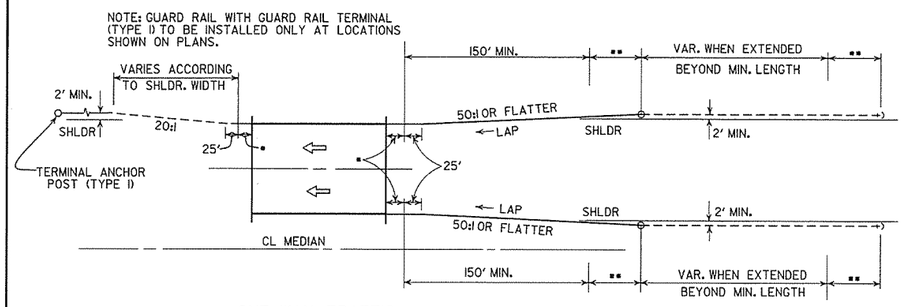
NOTE: THIS DETAIL IS TO BE USED ONLY WHEN THE COVER OVER THE CULVERT DOES NOT PERMIT FULL EMBEDMENT OF GUARD RAIL POSTS AS SHOWN ON STD. DWG. GR-8.

DATE	REVISION	DATE FILM
7-14-10	RAISED HEIGHT OF GUARD RAIL 1"	
4-12-07	REVISED DETAIL OF GUARD RAIL PLACEMENT BEHIND CURB	
1-10-05	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
1-15-88	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

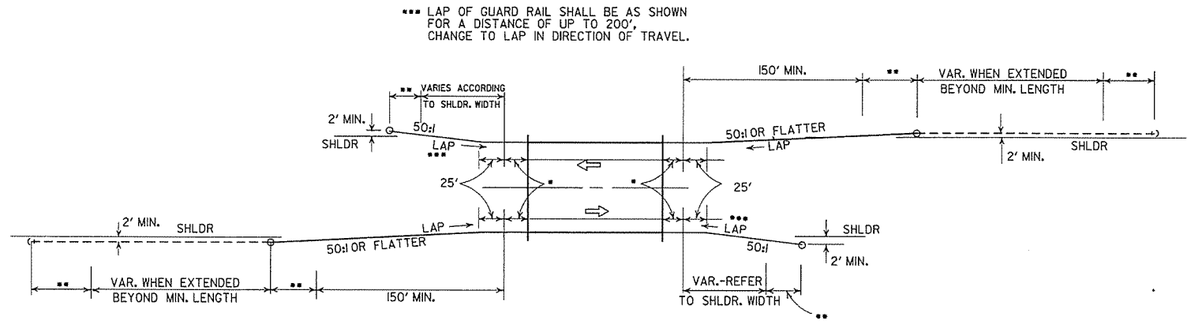
ARKANSAS STATE HIGHWAY COMMISSION

GUARD RAIL DETAILS

STANDARD DRAWING GR-8A

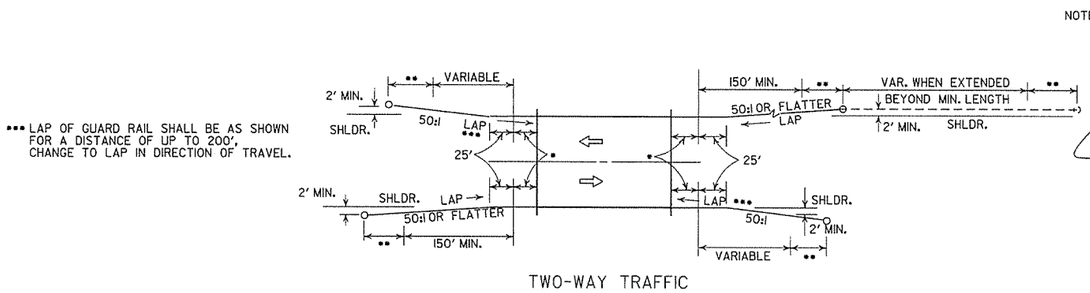


ONE-WAY TRAFFIC

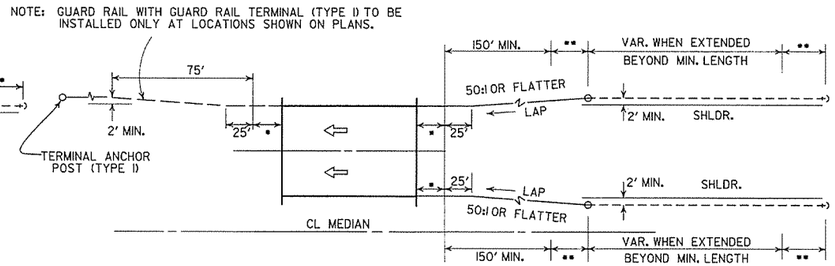


TWO-WAY TRAFFIC

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



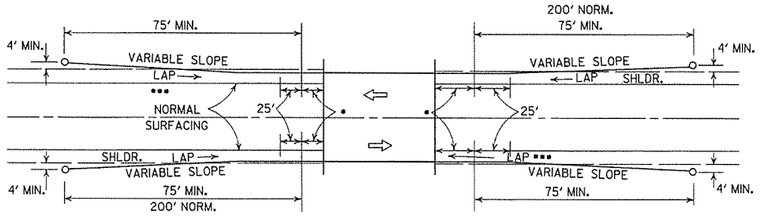
TWO-WAY TRAFFIC



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

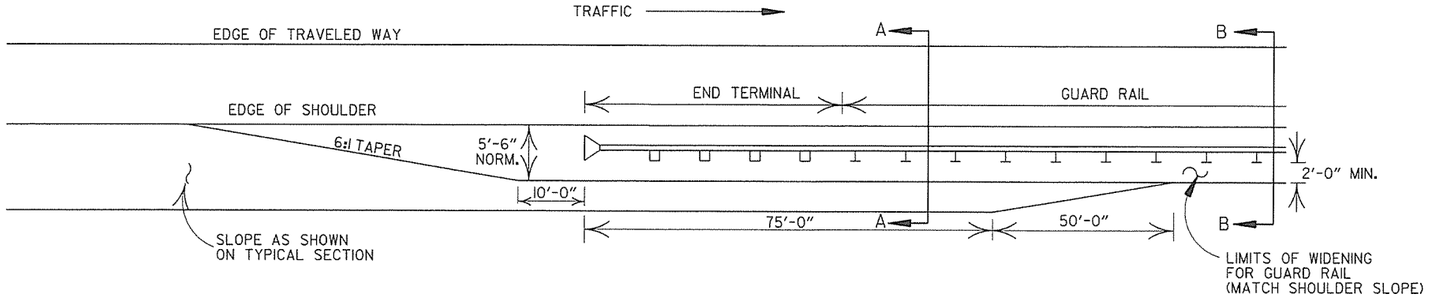
- • THRIE BEAM GUARD RAIL TERMINAL
- •• GUARD RAIL TERMINAL (TYPE 2)

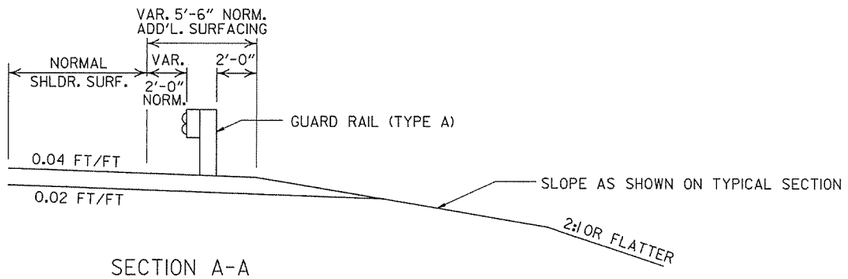
DATE	REVISION	DATE FILM
4-17-08	REVISED LAYOUTS	
11-10-05	REMOVED GUARD RAIL NOTES AND DETAILS	
11-16-01	DELETED NOTE-METHOD OF INSTALLATION OF GUARD RAIL USING GUARD RAIL TERM. (TY. I)	
1-12-00	ADDED CONSTRUCTION NOTE	1-12-00
6-26-97	REVISED LAYOUT	
10-1-92	REDRAWN & REVISED	10-1-92
	ADDED NOTE	
10-9-87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

ARKANSAS STATE HIGHWAY COMMISSION

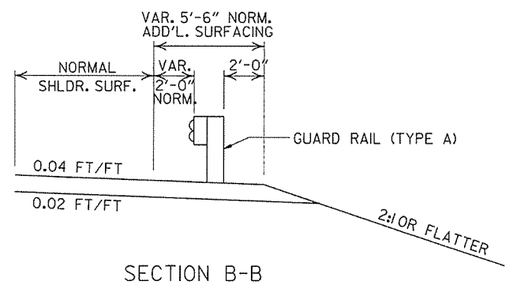
GUARD RAIL DETAILS

STANDARD DRAWING GR-9





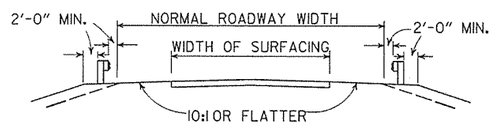
SECTION A-A



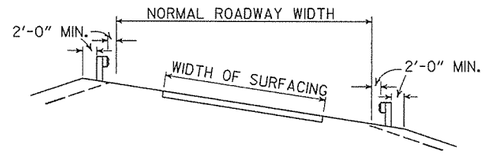
SECTION B-B

DETAILS OF WIDENING FOR GUARD RAIL

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

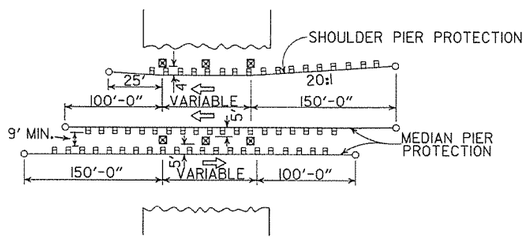


SECTION ON TANGENT



SECTION ON CURVE

DETAILS SHOWING POSITION OF GUARD RAIL ON HIGHWAY



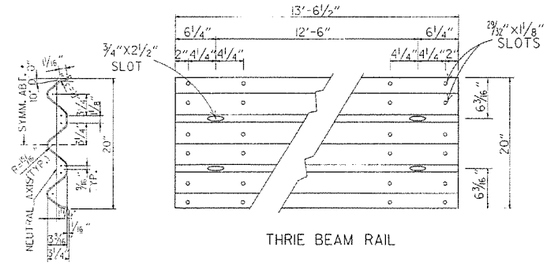
METHOD OF INSTALLATION OF GUARD RAIL AT FIXED OBSTACLE

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

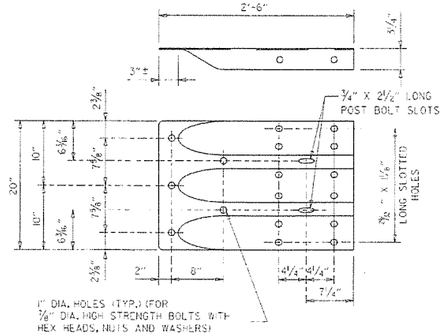
ARKANSAS STATE HIGHWAY COMMISSION

GUARD RAIL DETAILS

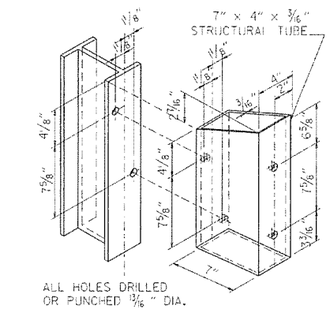
STANDARD DRAWING GR-9A



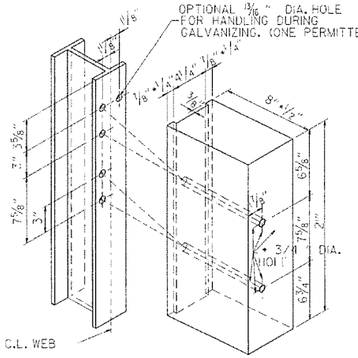
SECTION THRU
THRIE BEAM RAIL



SPECIAL END SHOE



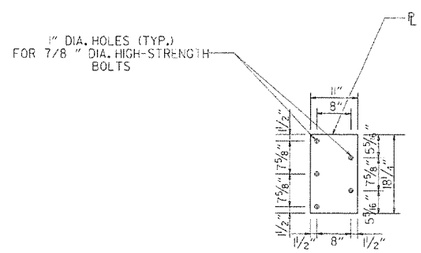
STRUCTURAL STEEL TUBING BLOCKOUT DETAIL



ALL HOLES ⅜" DIAMETER EXCEPT AS NOTED

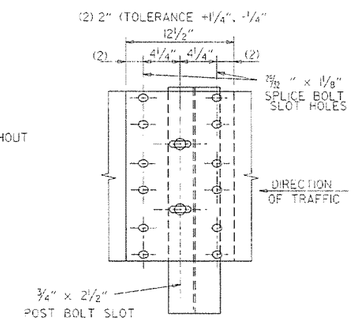
HOLE PUNCHING DETAIL
FOR STEEL POST & WOOD
OR PLASTIC BLOCKOUTS

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

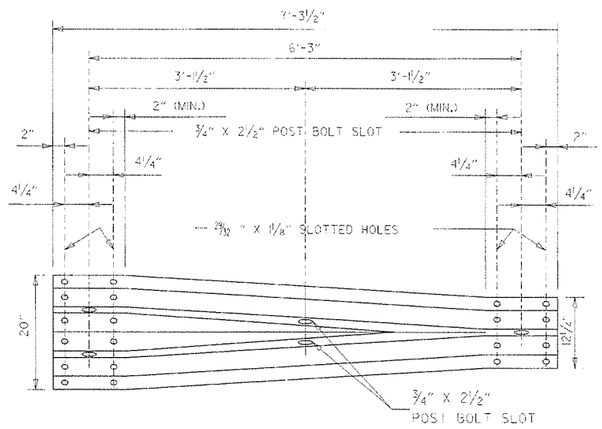


CONNECTOR PLATE

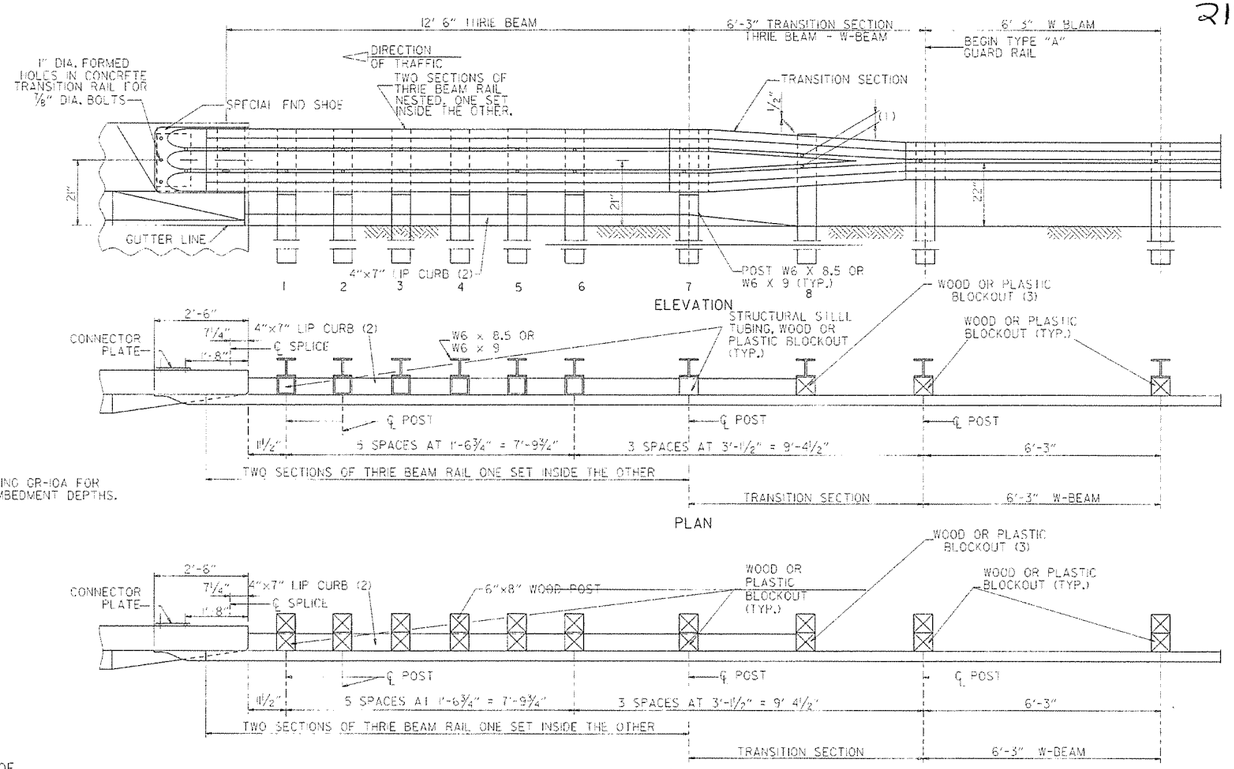
CONNECTOR PLATE SHALL BE AASHTO M270, GR. 36 AND SHALL BE GALVANIZED AFTER FABRICATION. GALVANIZING SHALL CONFORM TO SUBSECTION 807.19 OF THE STANDARD SPECIFICATIONS. CONNECTOR PLATE TO BE BOLTED TO SPECIAL END SHOE USING ⅞" DIA. HIGH STRENGTH BOLTS, WITH THE HEADS PLACED ON THE TRAFFIC FACE. WASHERS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



THRIE BEAM RAIL
SPLICE AT POST



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 VERTICALITY 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 f (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.

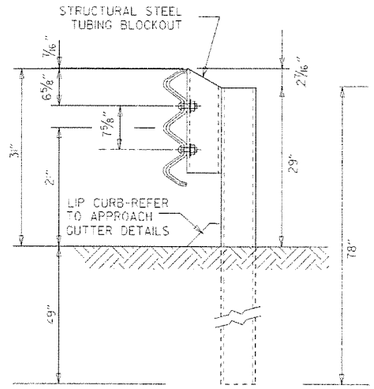
THRIE BEAM POSTS SHALL BE SAME MATERIAL AS W-BEAM POSTS FOR ENTIRE JOB.

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	

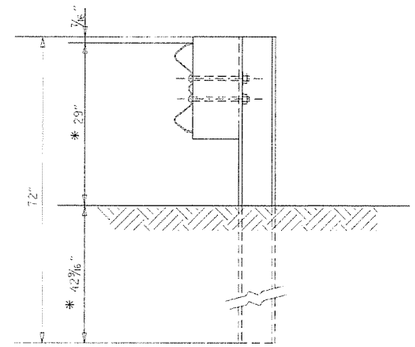
ARKANSAS STATE HIGHWAY COMMISSION

GUARD RAIL DETAILS

STANDARD DRAWING GR-10

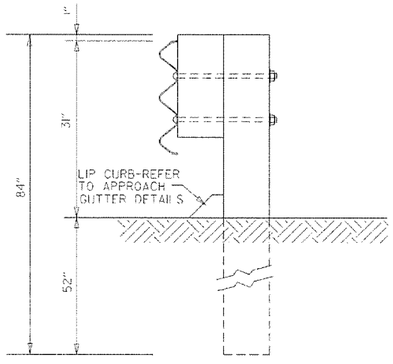


THRIE BEAM RAIL WITH STEEL TUBING BLOCKOUT
AND STEEL POST
POSTS 1-7

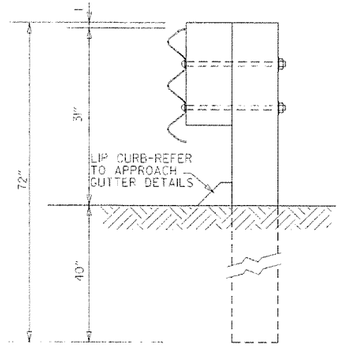


W-BEAM TO THRIE BEAM TRANSITION RAIL
WITH WOOD OR PLASTIC BLOCKOUT AND STEEL POST
POST 8

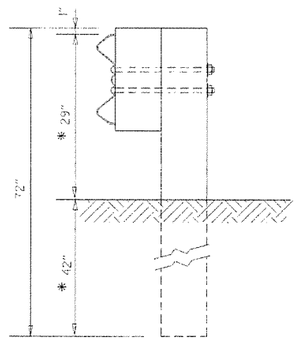
* NOTE:
THESE DIMENSIONS WILL NEED TO BE ADJUSTED IN THE FIELD TO MAKE THE TRANSITION FROM 21" MID POINT OF THRIE BEAM TO 22" MID POINT OF W-BEAM.



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.

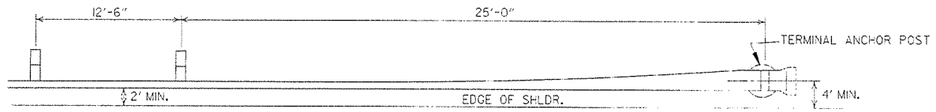
WOOD POSTS & WOOD BLOCKS SHALL BE EITHER DENSE NO. 1STRUCTURAL OR BETTER 9.7# @400 #1 OR NO.1 @350 # SOUTHERN PINE.

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	

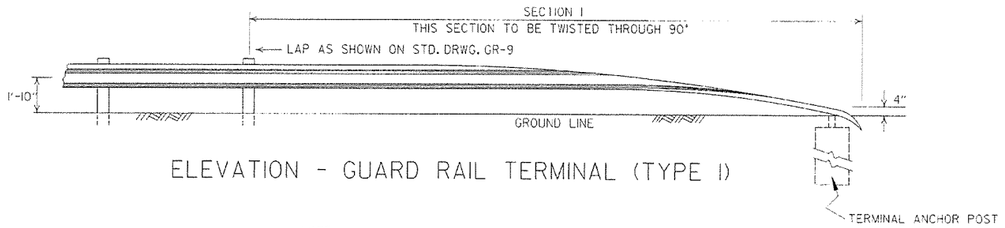
ARKANSAS STATE HIGHWAY COMMISSION

GUARD RAIL DETAILS

STANDARD DRAWING GR-10A

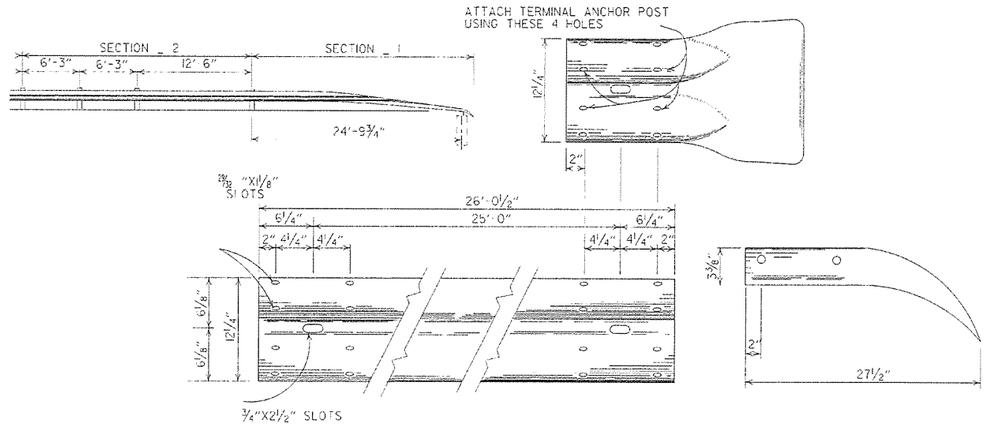


PLAN - GUARD RAIL TERMINAL (TYPE I)



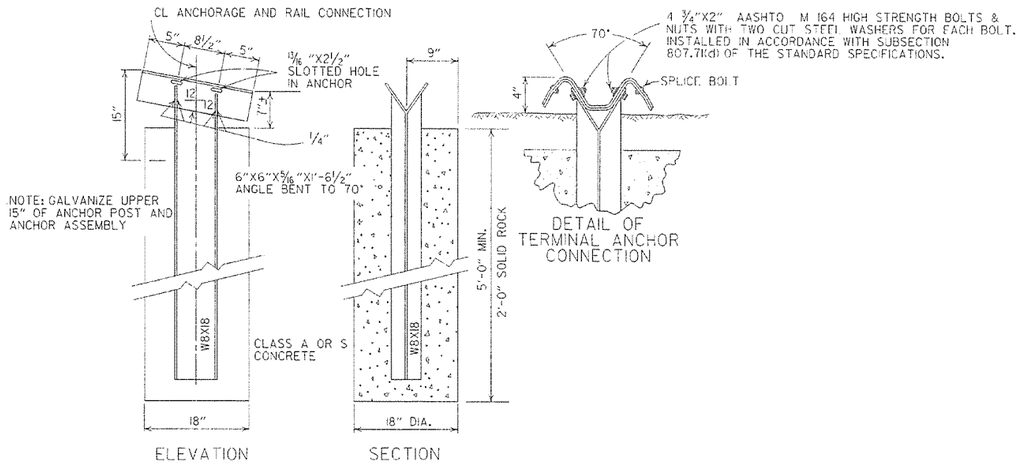
ELEVATION - GUARD RAIL TERMINAL (TYPE I)

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 10 16 96	REVISED LAP NOTE 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: MIN. THICKNESS REQUIRED INCHES	STEEL: ① MIN. HEIGHT OF FILL, "H" (FT.) INSTALLATION TYPE 1	STEEL: MAX. HEIGHT OF FILL, "H" (FT.) INSTALLATION TYPE 1	ALUMINUM: MIN. THICKNESS REQUIRED INCHES	ALUMINUM: ① MIN. HEIGHT OF FILL, "H" (FT.) INSTALLATION TYPE 1	ALUMINUM: 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.

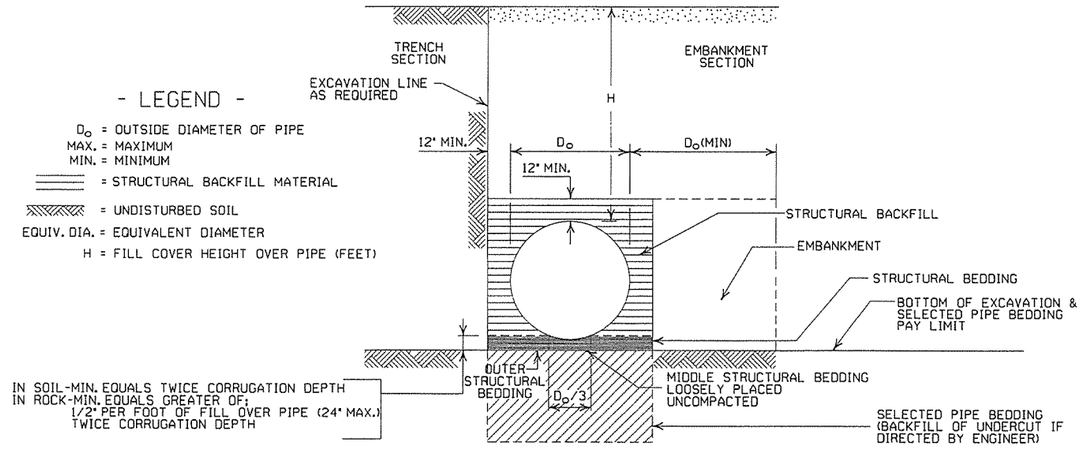
NOTE: STRUCTURAL BACKFILL AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF METAL PIPE.

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



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.

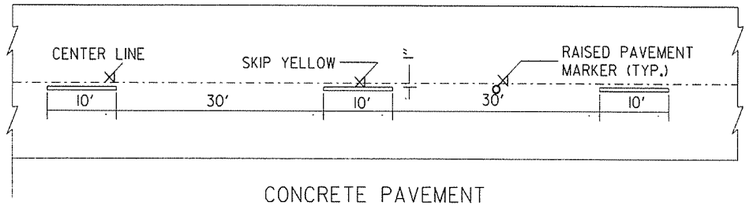
DATE	REVISION	DATE FILMED
2-27-14	REVISED GENERAL NOTE 1.	
12-15-11	REVISED FOR LRFD DESIGN SPECS	
3-30-00	REVISED INSTALLATIONS	
11-06-97	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

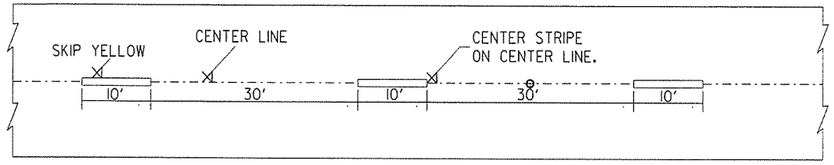
METAL PIPE CULVERT FILL HEIGHTS & BEDDING

STANDARD DRAWING PCM-1

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

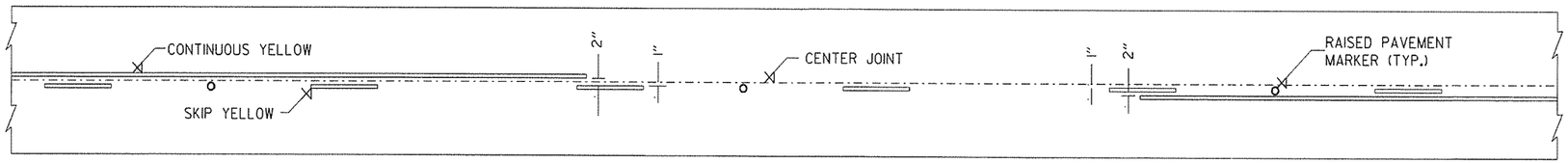


CONCRETE PAVEMENT

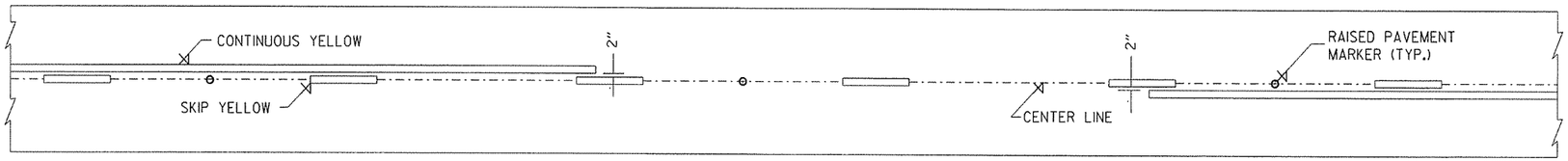


ASPHALT PAVEMENT

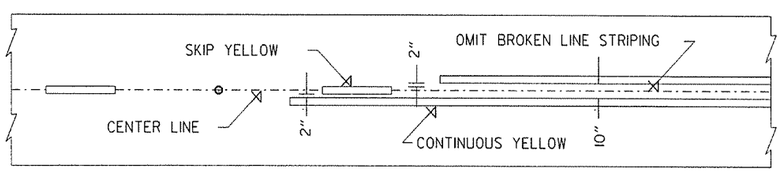
BROKEN LINE STRIPING



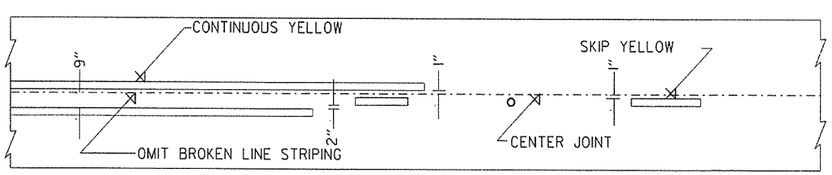
SOLID LINE STRIPING ON CONCRETE PAVEMENT



SOLID LINE STRIPING ON ASPHALT PAVEMENT

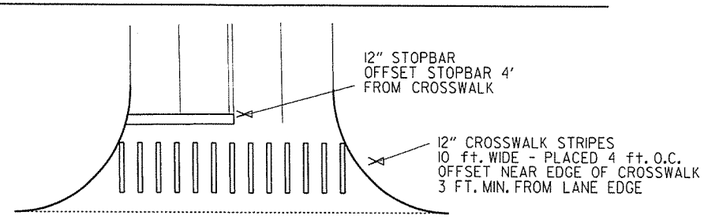


ASPHALT PAVEMENT



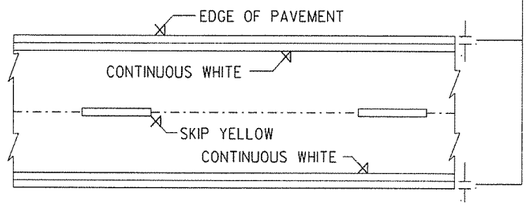
CONCRETE PAVEMENT

STRIPING AT ADJACENT NO PASSING LANES

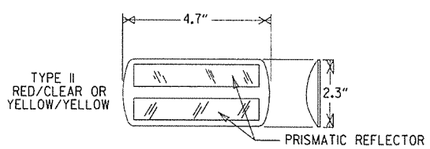


CROSSWALK AND STOPBAR DETAILS

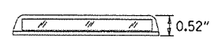
2" FOR ASPHALT OR CONCRETE PAVEMENT
6" FOR BITUMINOUS SURFACE TREATMENT



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

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

ARKANSAS STATE HIGHWAY COMMISSION

PAVEMENT MARKING DETAILS

STANDARD DRAWING PM-1

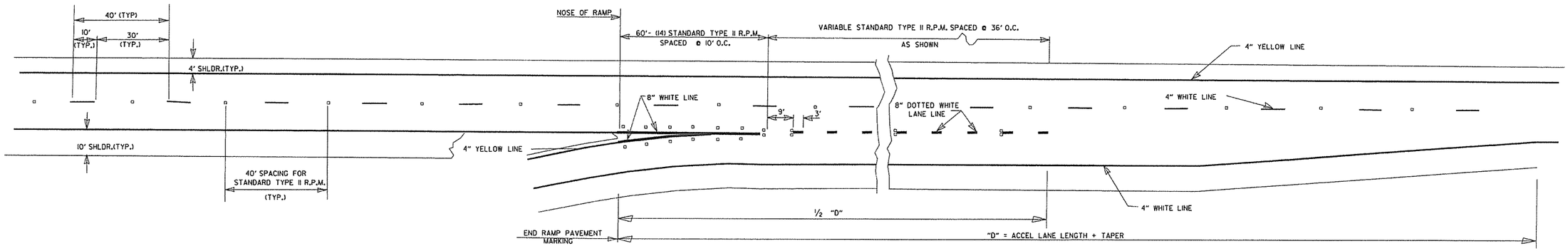
PAVEMENT MARKING QUANTITIES
(BASED ON 700' ACCEL. LANE + 300' TAPER)

ENTRANCE RAMP

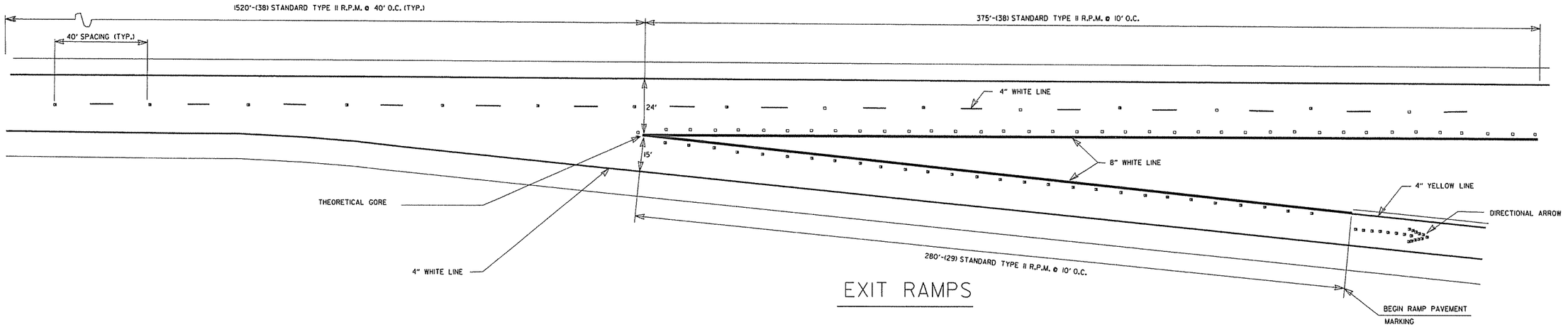
8" WHITE = 228 LIN. FT.
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED) = 38 EACH

EXIT RAMP

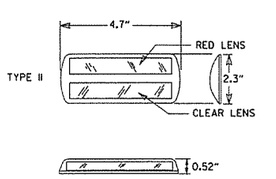
4" WHITE = 280 LIN. FT.
8" WHITE = 655 LIN. FT.
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED) = 38 EACH
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED) = 48 EACH
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED) = 38 EACH



ENTRANCE RAMPS

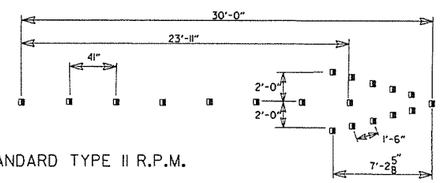


EXIT RAMPS



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

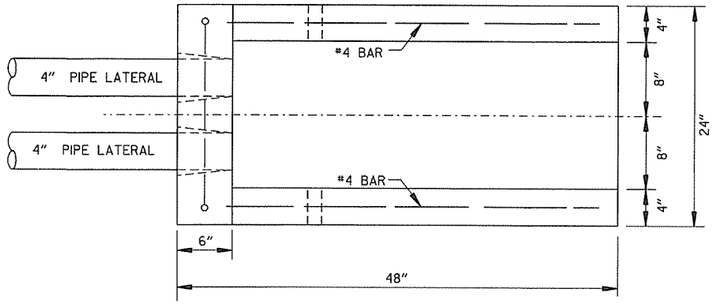
PERMANENT PAVEMENT MARKING
ON ACCESS CONTROLLED ROADWAYS

STANDARD DRAWING PM-2

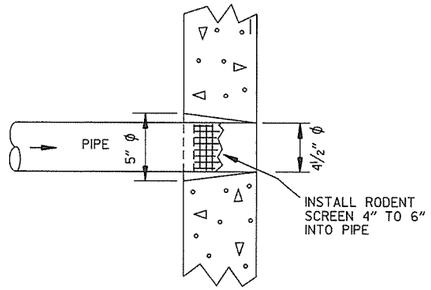
NOTE:
1. GRANULAR BACKFILL TO BE SUBSIDIARY TO PIPE UNDERDRAIN.

2. UNLESS OTHERWISE SPECIFIED ON THE PLANS, THE UNDERDRAIN COVER SHALL BE THOROUGHLY COMPACTED EARTH AND SHALL BE SUBSIDIARY TO PIPE UNDERDRAIN.

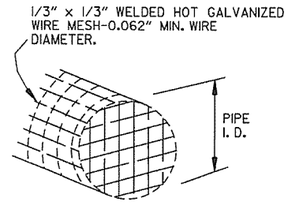
3. GRANULAR MATERIAL SHALL BE WRAPPED WITH GEOTEXTILE FABRIC. LAP FABRIC 12" OR THE WIDTH OF THE TRENCH AT THE TOP.



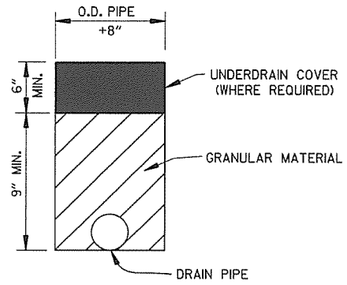
PLAN VIEW

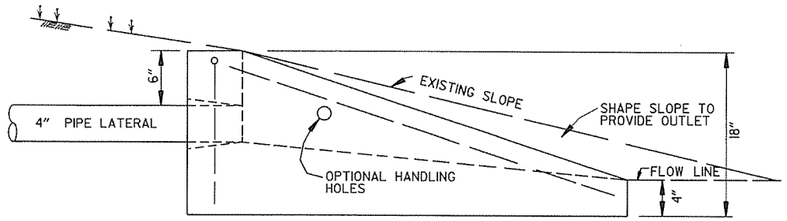


DETAIL OF HOLE FOR 4" PIPE

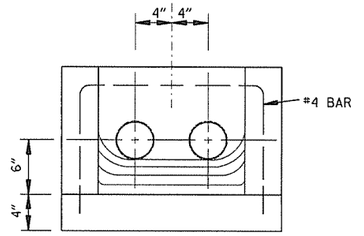


DETAIL OF RODENT SCREEN

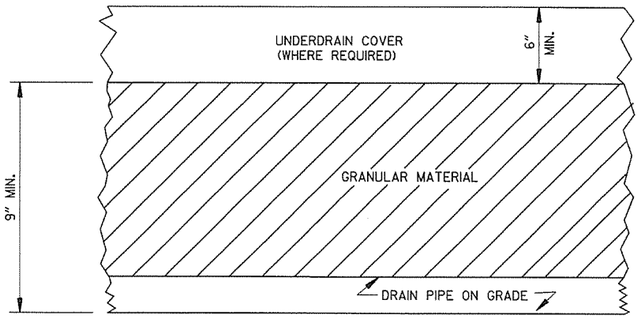




SIDE VIEW

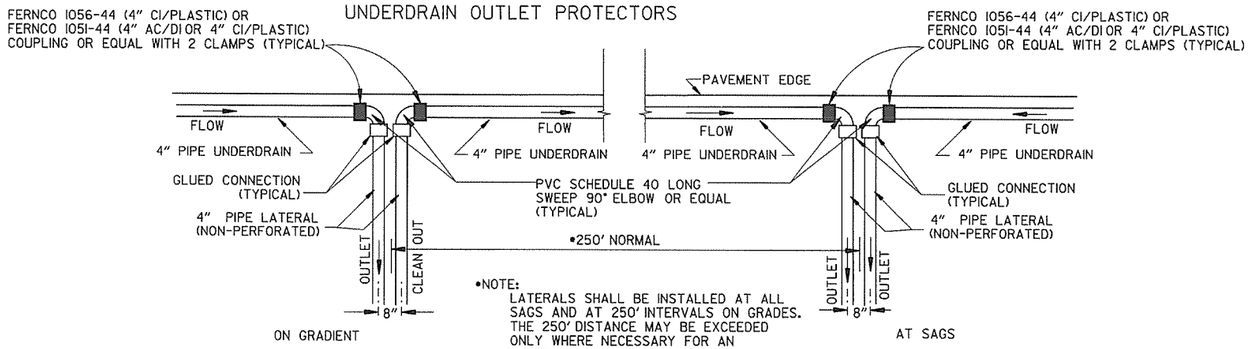


FRONT VIEW



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.			R.C.			0.023			0.025			0.028		
1° 00′	N.C.			R.C.			0.021			0.022			0.030			0.033	250		0.037	275	
1° 15′	N.C.			0.021			0.026			0.025			0.037			0.041			0.046		
1° 30′	N.C.			0.025			0.031	200		0.032			0.043			0.048			0.054		
1° 45′	N.C.			0.028	175		0.036			0.037	225		0.049	250		0.055			0.062		
2° 00′	R.C.			0.031			0.040			0.043			0.055			0.062			0.070		
2° 15′	R.C.			0.034			0.045		300	0.048			0.061			0.069	265		0.078	300	
2° 30′	0.021			0.037			0.049			0.053			0.067			0.075	280		0.085	315	400
2° 45′	0.023			0.040			0.053			0.058			0.072			0.081	300		0.091	335	
3° 00′	0.025	150		0.043			0.057			0.063			0.077	260		0.087	315		0.096	350	
3° 15′	0.027			0.046			0.061			0.067	230		0.082	275		0.090	325	400	0.098	360	450
3° 30′	0.029			0.049			0.065	205		0.072	245		0.086	285		0.095	340		0.100	360	
3° 45′	0.031			0.051			0.069	215		0.076	255		0.090	295		0.097	345				
4° 00′	0.033			0.056			0.072	225		0.080	265		0.093	305	400	0.099	350				
4° 30′	0.037			0.061			0.078	240		0.083	270		0.096	315							
5° 00′	0.040			0.066	185		0.083	250		0.087	280		0.098	320							
5° 30′	0.043			0.070	190		0.088	260		0.091	295	400									
6° 00′	0.046			0.074	200		0.092	270		0.094	300										
6° 30′	0.050			0.078	210		0.095	280	350	0.096	305										
7° 00′	0.053			0.081	215		0.098	285		0.100	315										
7° 30′	0.056			0.084	220		0.099	290													
8° 00′	0.058			0.087	225	300	0.100	290													
8° 30′	0.061			0.089	230																
9° 00′	0.063			0.094	235																
10° 00′	0.068	160		0.097	250																
11° 00′	0.072	170		0.099	250																
12° 00′	0.076	175		0.100	250																
13° 00′	0.080	180																			
14° 00′	0.083	190																			
15° 00′	0.086	195																			
16° 00′	0.089	200																			
17° 00′	0.091	200																			
18° 00′	0.093	205																			
19° 00′	0.095	210																			
20° 00′	0.097	215	300																		
21° 00′	0.098	215																			
22° 00′	0.099	215																			
23° 00′	0.099	215																			
24° 00′	0.100	220																			

D MAX = 24° 45′ | D MAX = 13° 15′ | D MAX = 8° 15′ | D MAX = 6° 30′ | D MAX = 5° 15′ | D MAX = 4° 15′ | D MAX = 3° 30′

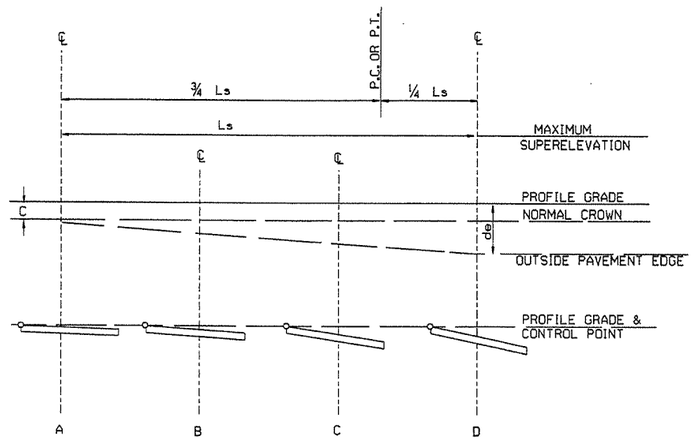
GENERAL NOTES

1. ON PAVEMENT WITH ONE-WAY TRAFFIC, THE SUPERELEVATION SHALL BE REVOLVED ON THE PROFILE GRADE POINT.
2. SUPERELEVATION VALUES SHOWN ON THE CROSS SECTIONS ARE VALUES (+) OR (-) TO BE ADDED OR SUBTRACTED FROM THE POINT OF CONTROL.
3. LENGTHS FOR L_s MAY BE ROUNDED IN MULTIPLES OF 25 FT. OR 50 FT. TO PERMIT SIMPLER CALCULATIONS.
4. MINIMUM L_s VALUES MAY BE USED FOR RAMPS; DESIRABLE VALUES SHALL APPLY TO MAIN LANES.
5. DIVIDED PAVEMENTS WIDER THAN 4 LANES SHALL HAVE ADDITIONAL TRANSITION LENGTHS AS FOLOWS:

6 LANE DIVIDED---------+20%
8 LANE DIVIDED---------+50%

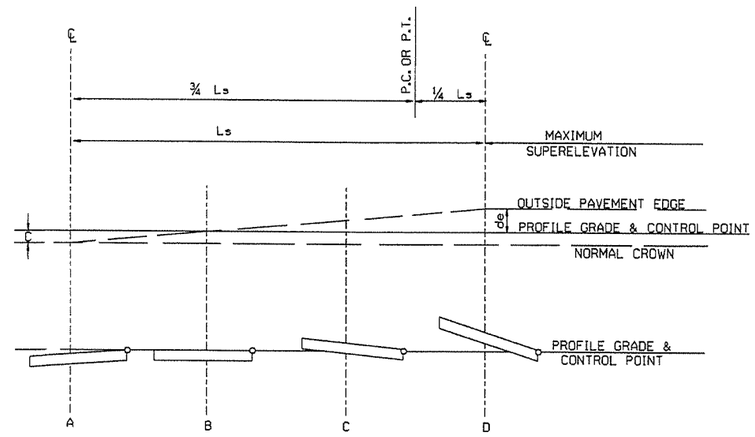
ABBREVIATIONS

NC - NORMAL CROWN
RC - REVERSE CROWN, SUPERELEVATION AT NORMAL CROWN SLOPE
S - SUPERELEVATION
L - DISTANCE FROM BEGINNING OF SUPERELEVATION TRANSITION TO ANY POINT (FT.)
d - WIDTH OF PAVEMENT
e - MAXIMUM RATE OF SUPERELEVATION (FT. PER FT.)
L_s - LENGTH OF SUPERELEVATION TRANSITION (FT.)
C - NORMAL CROWN (FT.)



ONE-WAY TRAFFIC
INSIDE LANE

SUPERELEVATION FORMULA = $S = -\frac{L(de-C)}{L_s} - C$



ONE-WAY TRAFFIC
OUTSIDE LANE

SUPERELEVATION FORMULA = $S = +\frac{L(de+C)}{L_s} - C$

DATE	REVISION	DATE FILMED
01-09-87	ISSUED	578-1-15-87

ARKANSAS STATE HIGHWAY COMMISSION

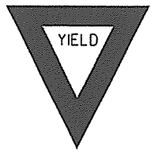
TABLES AND METHOD OF SUPERELEVATION FOR ONE-WAY TRAFFIC

STANDARD DRAWING SE-1

R1-1

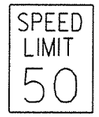
STANDARD 30"X30"
EXPRESSWAY 36"X36"
SPECIAL 48"X48"

R1-2



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

R2-1



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

W3-5

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

W3-5a

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

R4-1

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

R4-2

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

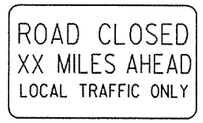
R5-1

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

R11-2

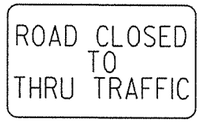
48"X30"

R11-3A



60"X30"

R11-4



60"X30"

RSP-1

48"X30"

W1-1

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

W1-2

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

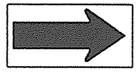
W1-3

STD. 48"X48"

W1-4

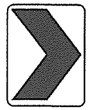
STD. 48"X48"

W1-6



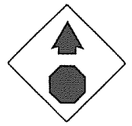
STD. 48"X24"
SPECIAL 60"X30"

W1-8



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

W3-1

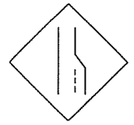


STD. 36"X36"
SPECIAL 48"X48"

W3-2

STD. 36"X36"
SPECIAL 48"X48"

W4-2



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

W5-1

STD. 36"X36"
SPECIAL 48"X48"

W6-3

EXPWY. 36"X36"
SPECIAL 48"X48"

W8-7

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

W9-2

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

W13-1

STD. 24"X24"

W20-1

STD. 48"X48"

W20-2

STD. 48"X48"

W20-3

STD. 48"X48"

W20-4

STD. 48"X48"

W20-5

STD. 48"X48"

W20-7a

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

W21-2

STD. 30"X30"
SPECIAL 36"X36"

W21-5

STD. 30"X30"
SPECIAL 36"X36"

W24-1

STD. 36"X36"

W1-4b

STD. 48"X48"

R56-1

STD. 18"X18"

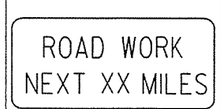
W8-11

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

W8-9

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

G20-1



60"X24"

G20-2

48"X24"

OM-3L OM-3R

12"X36"

M4-9

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

M4-10

48"X18"

R55-1

36"X60"

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

ADVANCE DISTANCES
(XXXX)

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

GENERAL NOTES:

1. ALL TRAFFIC CONTROL DEVICES USED ON ROAD CONSTRUCTION SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION, AND TO THE STANDARD HIGHWAY SIGNS, LATEST EDITION, OR AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION.

2. TRAFFIC CONTROL DEVICES SHALL BE SET UP JUST BEFORE THE START OF CONSTRUCTION OPERATIONS AND SHALL BE PROPERLY MAINTAINED DURING THE TIME SUCH CONDITIONS EXIST. THEY SHALL REMAIN IN PLACE ONLY AS LONG AS NEEDED AND REMOVED THEREAFTER.

3. EXISTING SIGNS AND CONSTRUCTION SIGNS SHALL BE KEPT IN PROPER POSITION, AND BE CLEAN AND LEGIBLE AT ALL TIMES. SIGNS THAT DO NOT APPLY TO EXISTING CONDITIONS SHALL BE REMOVED. SIGNS THAT ARE DAMAGED, DEFACED, OR THAT ACCUMULATE DIRT DURING CONSTRUCTION SHALL BE CLEANED, REPAIRED, OR REPLACED.

• 4. SIGNS ARE USUALLY MOUNTED ON A SINGLE POST, ALTHOUGH THOSE WIDER THAN 36" OR LARGER THAN 10 SQ. FT. SHALL BE MOUNTED ON TWO POSTS OR ABOVE A TYPE III BARRICADE.

• 5. SIGN POSTS DIRECT BURIED IN SOIL SHALL BE 2 LB. MINIMUM CHANNEL POST OR 4"x4" WOOD POSTS. CHANNEL POSTS SHALL BE PAINTED GREEN. WOOD POSTS SHALL BE PAINTED WHITE. ALL POSTS SHALL BE NEATLY CONSTRUCTED, AND SHALL BE REPLUMBED, CLEANED, OR REPAIRED AS NEEDED FOR THE DURATION OF THE JOB. THERE SHALL NOT BE MORE THAN 2 POSTS IN A 7' PATH FOR WOOD OR CHANNEL POSTS. ANY CHANNEL POST SPLICE SHALL BE IN ACCORDANCE WITH STANDARD DRAWING TC-3.

6. POST MOUNTED SIGNS IN RURAL AREAS SHALL BE CONSTRUCTED WITH THE NEAR EDGE OF THE SIGN FROM 6 TO 12 FEET FROM THE PAVEMENT EDGE. SIGNS IN URBAN AREAS AND BARRICADE MOUNTED SIGNS SHALL BE MOUNTED A MINIMUM OF 2 FEET FROM THE PAVEMENT EDGE.

7. ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN URBAN AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE. ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN RURAL AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE, EXCEPT A MINIMUM OF 6' SHALL BE USED WHEN MOUNTING AN ADVISORY SIGN BELOW A WARNING SIGN. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR INTERMEDIATE TERM STATIONARY WORK CONDITIONS. THE SIGNS MINIMUM MOUNTING HEIGHT SHALL BE 5'. RETROREFLECTIVE DEVICES SHALL BE USED. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR SHORT-TERM, SHORT DURATION, AND MOBILE CONDITIONS, THEY SHALL BE NO LESS THAN ONE (1) FOOT ABOVE THE TRAVELED WAY. LONG-TERM STATIONARY SIGNS SHALL BE DIRECT BURIED IN SOIL, UNLESS CONDITIONS NECESSITATE THE USE OF PORTABLE SIGNS, OR AS APPROVED BY THE ENGINEER. CONCRETE PADS, CONCRETE OR ROCK BALLAST, OR OTHER SOLID MATERIALS SHALL NOT BE UTILIZED WITH PORTABLE SIGN SUPPORTS.

8. FLAGGERS SHALL USE REFLECTORIZED STOP-SLOW PADDLES. FLAGS MAY BE USED ONLY FOR EMERGENCY SITUATIONS.

9. MOST OF THE SIGNS SHOWN ARE ORIENTED TO THE RIGHT. HOWEVER, THIS DOES NOT PRECLUDE THE USE OF MIRROR IMAGES OF THESE SIGNS WHERE THE REVERSE ORIENTATION MIGHT BETTER CONVEY TO MOTORISTS THE PROPER DIRECTION OF MOVEMENT.

10. R55-1 SIGNS SHALL BE PLACED AT LEAST 1500' BUT NOT MORE THAN 1 MILE IN ADVANCE OF THE WORK ZONE. IF A SPEED LIMIT REDUCTION IS IN EFFECT, THE SIGN SHALL BE PLACED A MINIMUM OF 500' IN ADVANCE OF THE "REDUCED SPEED AHEAD" SIGN.

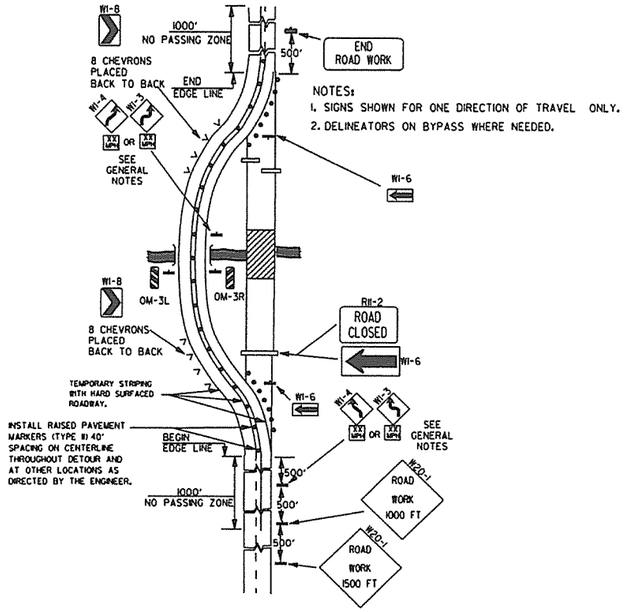
• NOTE: SUPPORTS FOR SIGNS, BARRICADES, AND VERTICAL PANELS THAT ARE DIFFERENT FROM THE REQUIREMENTS SHOWN IN NOTES 4 & 5, BUT MEET THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH), WILL BE ACCEPTED. COMPLIANCE WITH THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY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

DATE	REVISION	FILMED
9-2-15	REVISED REDUCED SPEED LIMIT AHEAD SIGNS REVISED ROAD WORK NEXT XX MILES	
12-15-11	REVISED W24-1	
11-17-10	DELETED W8-9a & ADDED W8-9	
10-15-09	ADDED REFERENCE TO MASH & ADDED SIGN W24-1	
4-17-08	REVISED SIGN DESIGNATIONS	
11-18-04	REVISED NOTES	
10-9-03	REVISED NOTE 1	
11-16-01	REVISED NOTE 7	
5-28-00	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

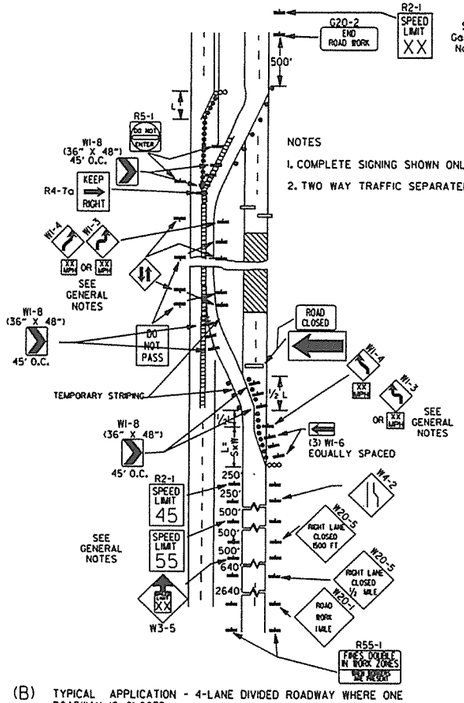
STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

STANDARD DRAWING TC-1



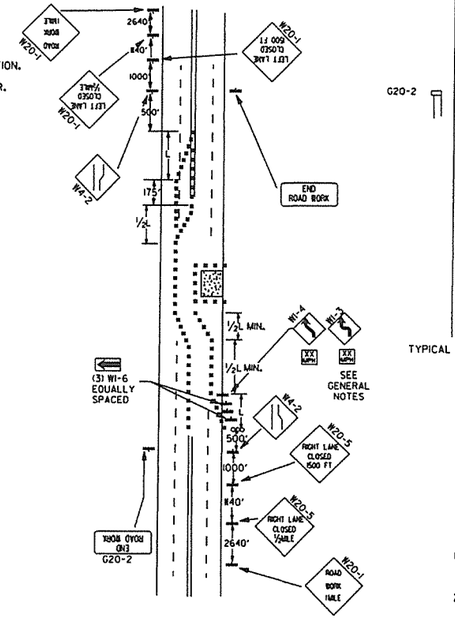
NOTES:
1. SIGNS SHOWN FOR ONE DIRECTION OF TRAVEL ONLY.
2. DELINEATORS ON BYPASS WHERE NEEDED.

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

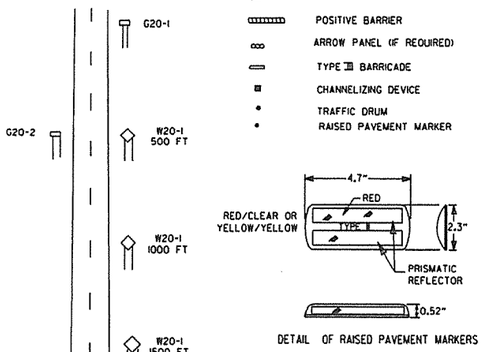


NOTES
1. COMPLETE SIGNING SHOWN ONLY IN CROSSOVER DIRECTION.
2. TWO WAY TRAFFIC SEPARATED WITH POSITIVE BARRIER.

(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

KEY:
- FLAGGER
- POSITIVE BARRIER
- ARROW PANEL (IF REQUIRED)
- TYPE III BARRICADE
- CHANNELIZING DEVICE
- TRAFFIC DRUM
- RAISED PAVEMENT MARKER

DETAIL OF RAISED PAVEMENT MARKERS

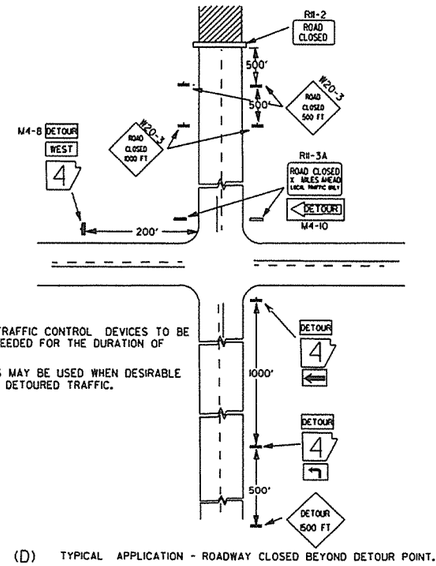
TAPER FORMULAE:

L=SXW FOR SPEEDS OF 45MPH OR MORE.

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

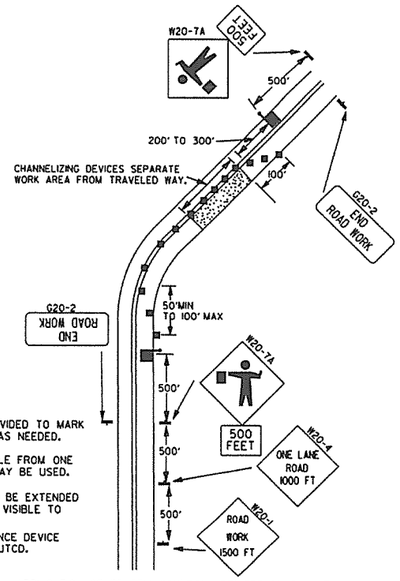
WHERE:
L= MINIMUM LENGTH OF TAPER.
S= NUMERICAL VALUE OF POSTED SPEED LIMIT PRIOR TO WORK OR 85TH PERCENTILE SPEED.
W= WIDTH OF OFFSET.

GENERAL NOTES:
1. ADVISORY SPEED POSTED ON W1-3 OR W1-4 CURVE WARNING SIGNS TO BE DETERMINED AT SITE. USE W1-4 WHEN SPEED IS GREATER THAN 30MPH AND W1-3 WHEN 30MPH OR LESS.
2. WHEN THE EXISTING SPEED LIMIT IS 55MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 45MPH, THE R2-1(55) SHALL BE OMITTED AND THE W3-5 SHALL BE INSTALLED AT THAT LOCATION. ADDITIONAL R2-1 45MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
3. WHEN THE EXISTING SPEED LIMIT IS 65MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 55MPH, THE R2-1(45) SHALL BE OMITTED. ADDITIONAL R2-1 55MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
4. THE MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES IN A TAPER SHOULD BE APPROXIMATELY EQUAL IN FEET TO THE SPEED LIMIT. BEYOND THE TAPER, MAXIMUM SPACING SHALL BE TWO TIMES THE SPEED LIMIT, OR AS DIRECTED BY THE ENGINEER.
5. WARNING LIGHTS AND/OR FLAGS MAY BE MOUNTED TO SIGNS OR CHANNELIZING DEVICES AT NIGHT AS NEEDED.
6. PAVEMENT MARKINGS NO LONGER APPLICABLE WHICH MIGHT CREATE CONFUSION IN THE MINDS OF VEHICLE OPERATORS SHALL BE REMOVED OR OBLITERATED AS SOON AS PRACTICABLE.
7. TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE DELINEATED BY AFFIXING CONSPICUITY MATERIAL IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER. WHEN PLACED ON OR ADJACENT TO THE SHOULDER AND NOT BEHIND A POSITIVE BARRIER, THESE DEVICES SHALL BE DELINEATED BY PLACING FIVE (5) TRAFFIC DRUMS, EQUALLY SPACED ALONG THE TRAFFIC SIDE OF THE DEVICE.
8. DIMENSIONS SHOWN FOR RAISED PAVEMENT MARKERS ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR MARKERS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR SIMILAR MARKERS MAY BE MADE BY REFERRING TO THE AHTD QUALIFIED PRODUCTS LIST.



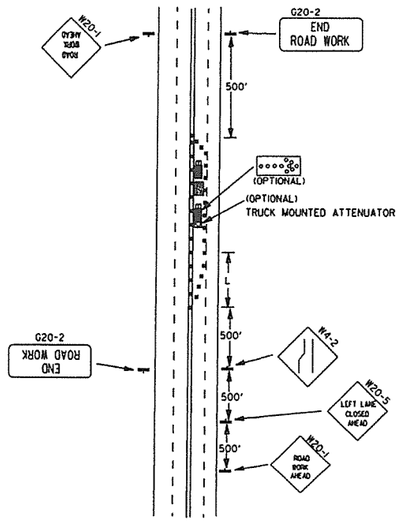
NOTES:
1. REGULATORY TRAFFIC CONTROL DEVICES TO BE MODIFIED AS NEEDED FOR THE DURATION OF THE DETOUR.
2. STREET NAMES MAY BE USED WHEN DESIRABLE FOR DIRECTING DETOURED TRAFFIC.

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



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

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



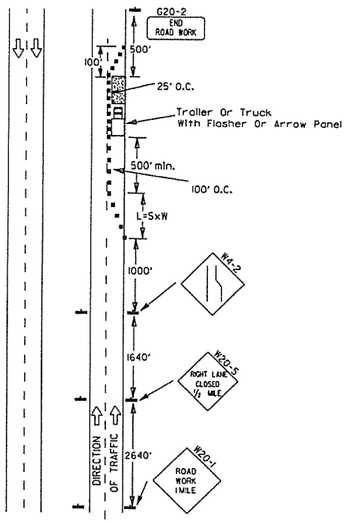
(F) TYPICAL APPLICATION - 4-LANE UNDIVIDED ROADWAY WITH INSIDE LANE CLOSED.

DATE	REVISION	FILMED
9-2-15	REVISED NOTE 2, ADDED NOTE 8, REVISED DRAWING (A) & REPLACED R2-5A WITH W3-5	
9-12-13	REVISED DETAIL OF RAISED PAVEMENT MARKERS	
3-8-10	ADDED (AFAD)	
8-20-08	REVISED SIGN DESIGNATIONS	
8-18-04	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	

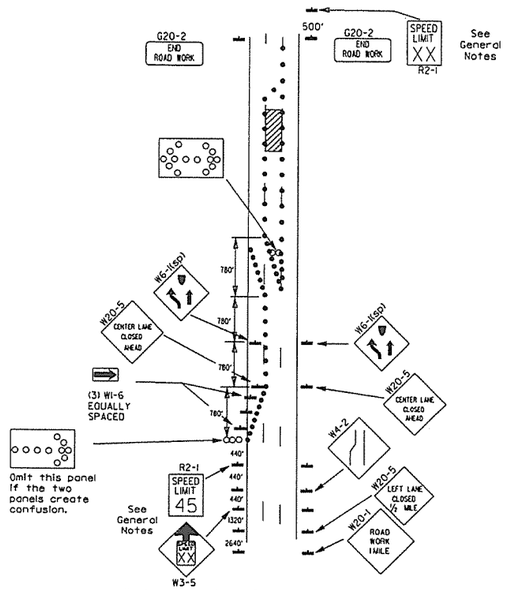
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

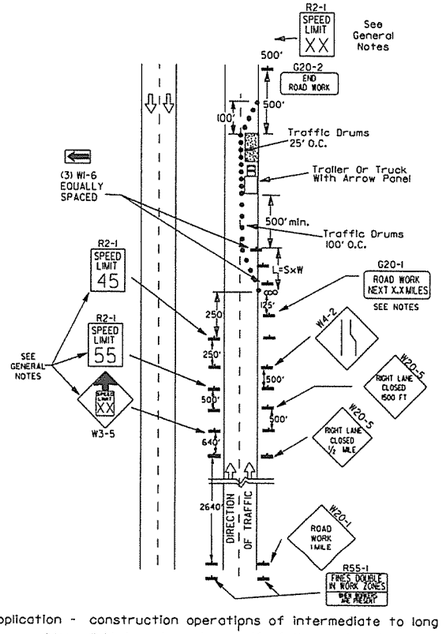
STANDARD DRAWING TC-2



(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:

ooo Arrow Panel (If Required)

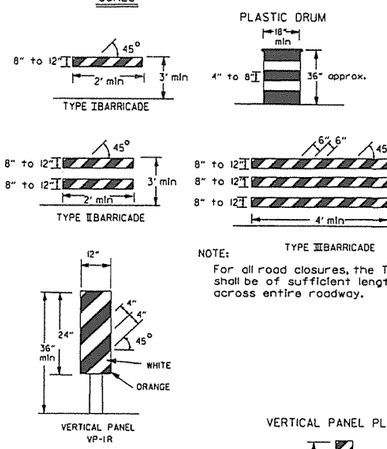
■ Channelizing Device

● Traffic drum

GENERAL NOTES:

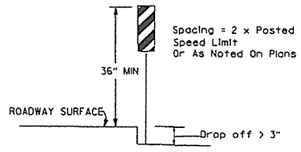
1. A speed limit reduction may be implemented ONLY when designated in the plan or when recommended by the Roadway Design Division.
2. When the existing speed limit is 55mph and the plans require a speed limit of 45mph, the R2-1(55) shall be omitted and the W3-5 shall be installed at that location. Additional R2-1 45mph speed limit signs shall be installed at a maximum of 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



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

VERTICAL PANEL PLACEMENT



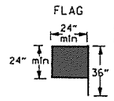
TRAFFIC CONTROL DEVICES
FOR
VERTICAL PAVEMENT DIFFERENTIALS

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

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

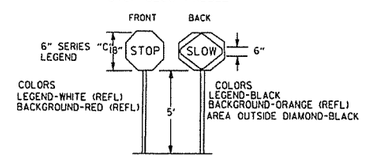
When the shoulder area is used as part of the traveled lane and there is insufficient width to place drums on the remaining shoulder width, then vertical panels shall be used.

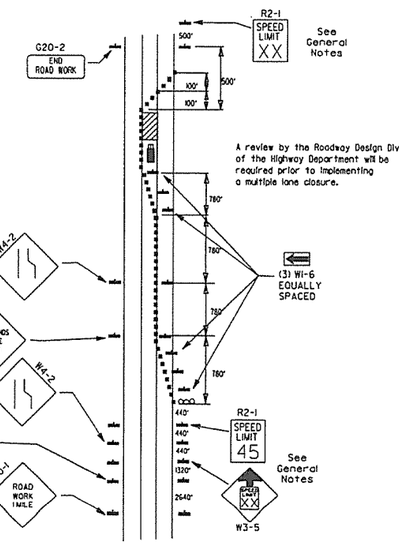
FLAG



Flag shall be of good grade red material

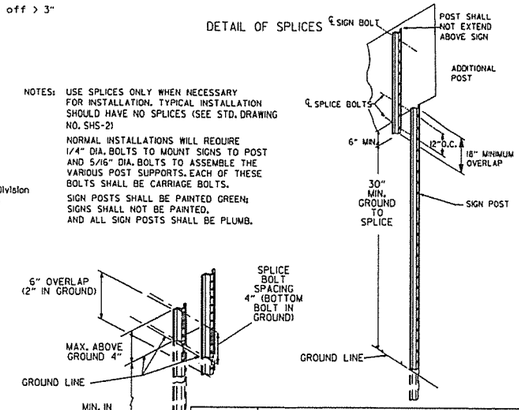
STOP SLOW PADDLE





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

DETAIL OF SPLICES



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

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

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

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

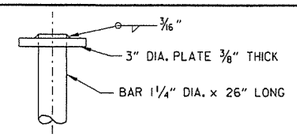
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

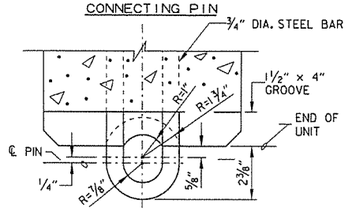
STANDARD DRAWING TC-3

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" MIN. CLEAR TO BAR, 5'-1" BAR W/(4) 1 1/2" R BENDS & MIN. 1'-0" OVERLAP, 1'-6"
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"

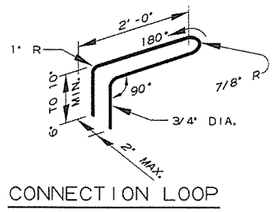


CONNECTING PIN

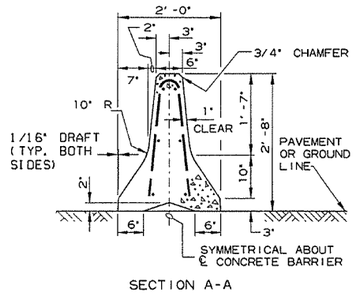


SECTION E-E

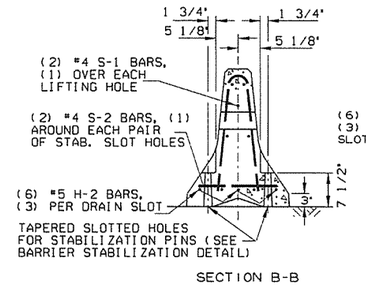
CONNECTION DETAILS



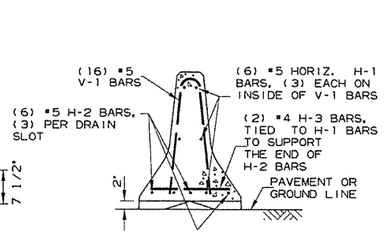
CONNECTION LOOP



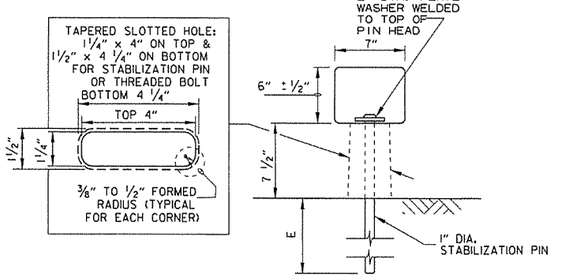
SECTION A-A



SECTION B-B



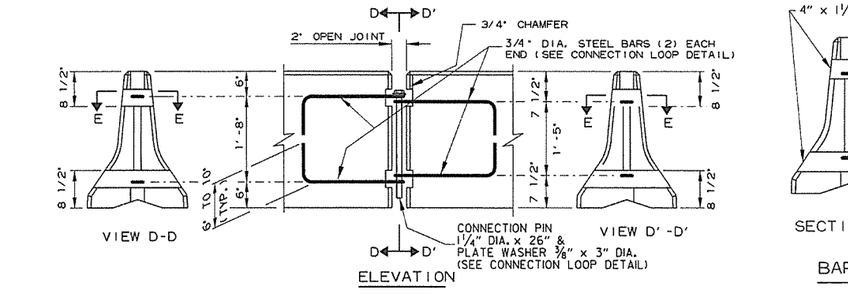
SECTION C-C



BARRIER STABILIZATION DETAIL

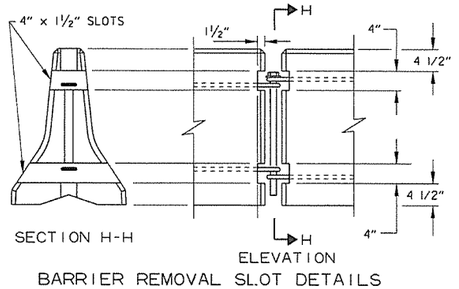
ROADWAY SECTION

(E) 4" - Concrete Pavement
8" - Asphalt Pavement
12" - Shoulder Areas



VIEW D-D VIEW D'-D'

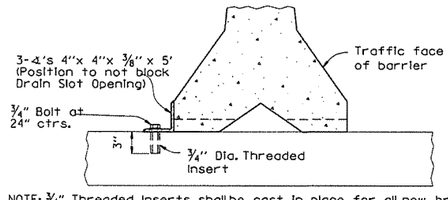
ELEVATION



SECTION H-H

ELEVATION

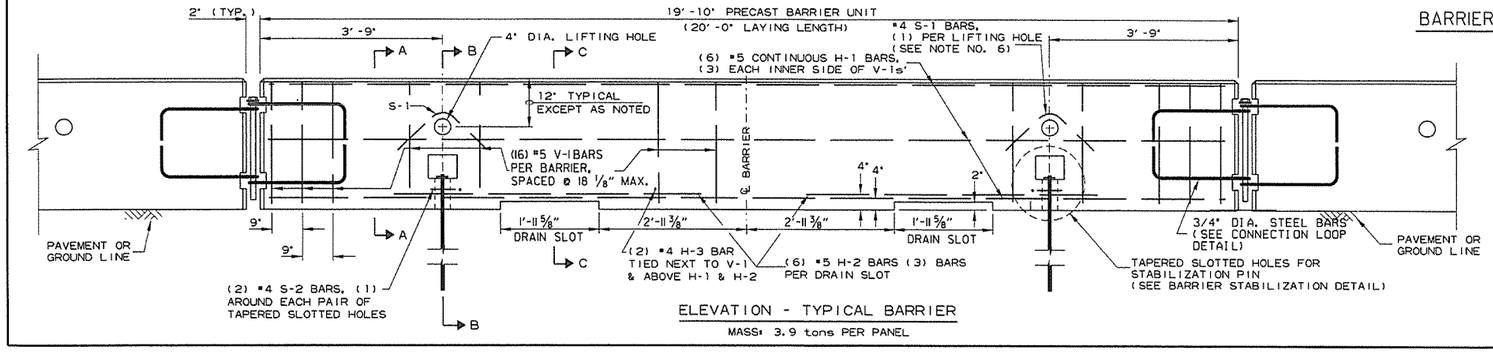
BARRIER REMOVAL SLOT DETAILS



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



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.

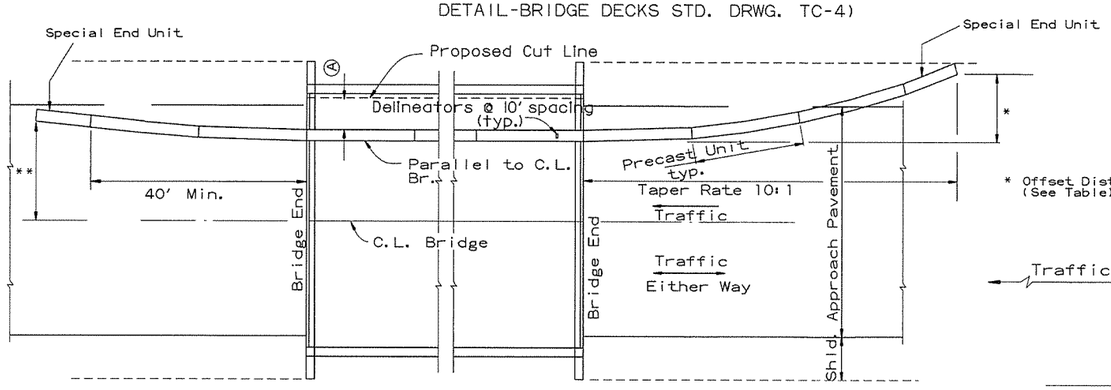
2-27-14	REVISED BARRIER STABILIZATION DETAIL	
10-15-09	ADDED REFERENCE TO MASH	
8-5-09	REV. NOTE 3 CONCERNING DRAIN SLOTS	
11-29-07	REVISED NOTE 3	
5-25-06	DELETED GENERAL NOTE 7	
11-18-04	REVISED BARRIER STABILIZATION DETAIL BRIDGE DECKS	
4-10-03	REVISED GENERAL NOTE 2	
8-22-02	ISSUED NEW DRAWING	
D.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

ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION - TEMPORARY PRECAST BARRIER

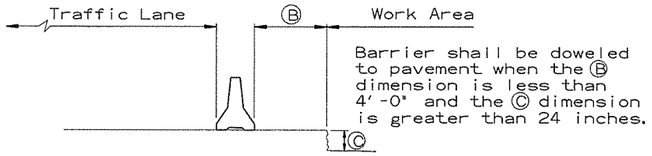
STANDARD DRAWING TC-4

Ⓐ 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

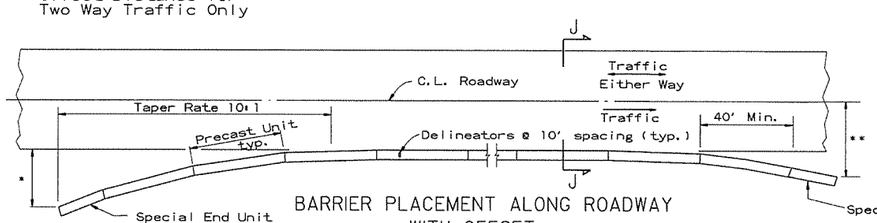


Barrier shall be doweled to pavement when the Ⓑ dimension is less than 4'-0" and the Ⓒ dimension is greater than 24 inches.

SECTION J-J

No Scale

** Offset Distance for Two Way Traffic Only



BARRIER PLACEMENT ALONG ROADWAY WITH OFFSET

No Scale

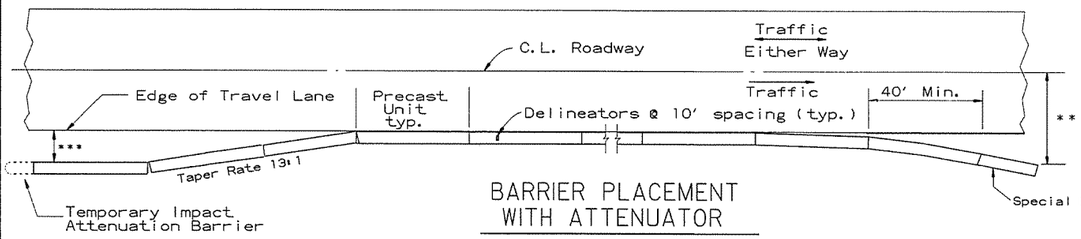
** Offset Distance For Two Way Traffic Only

* 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.

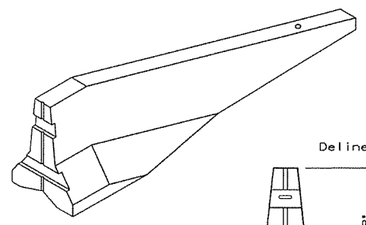


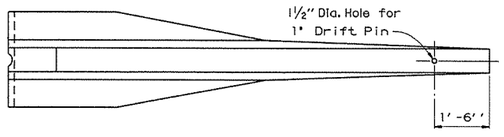
BARRIER PLACEMENT WITH ATTENUATOR

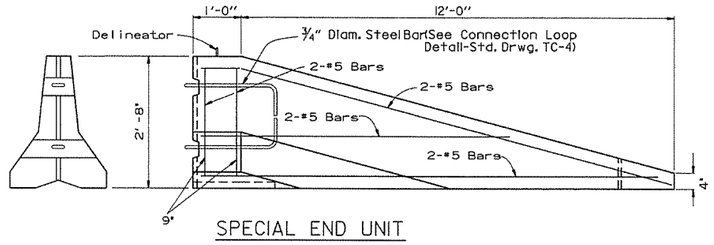
No Scale

*** 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	

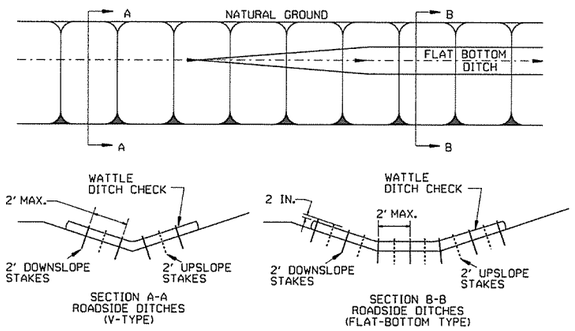
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION - TEMPORARY PRECAST BARRIER

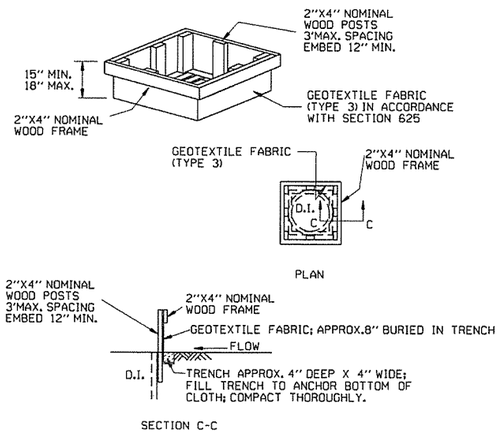
STANDARD DRAWING TC-5

GENERAL NOTES

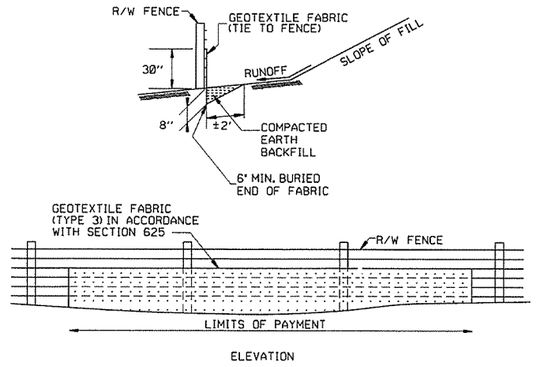
INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.



WATTLE DITCH CHECK (E-1)



DROP INLET SILT FENCE (E-7)



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

GENERAL NOTES

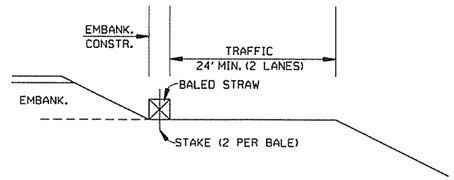
GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST, OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.

GENERAL NOTES

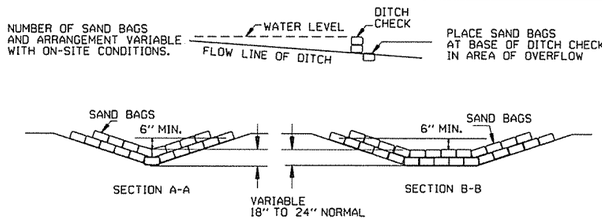
1. STRAW BALES SHALL BE INSTALLED SO THAT THE BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES. THE BALES SHALL BE A MINIMUM OF 30 INCHES IN LENGTH.

2. NO GAPS SHALL BE LEFT BETWEEN BALES.

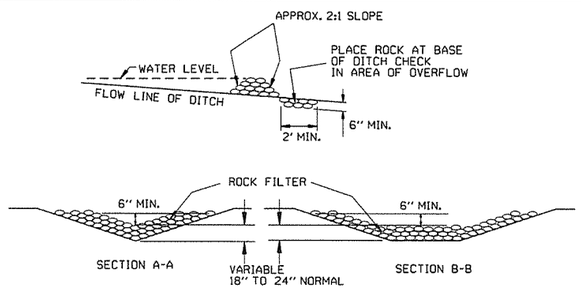
3. BALED STRAW FILTER BARRIERS COMPLETED AND ACCEPTED WILL BE MEASURED BY THE BALE IN PLACE AS AUTHORIZED BY THE ENGINEER AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER BALE FOR BALED STRAW DITCH CHECKS.



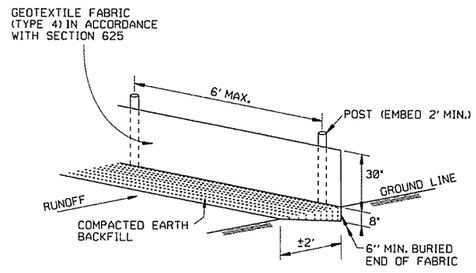
BALED STRAW FILTER BARRIER (E-2)



SAND BAG DITCH CHECK (E-5)



ROCK DITCH CHECK (E-6)



SILT FENCE (E-11)

GENERAL NOTES

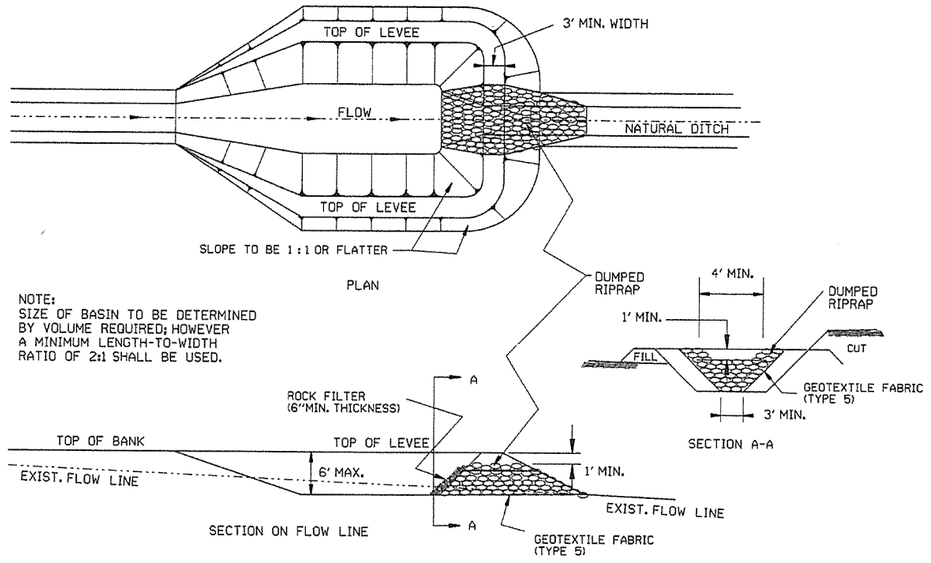
GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.

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

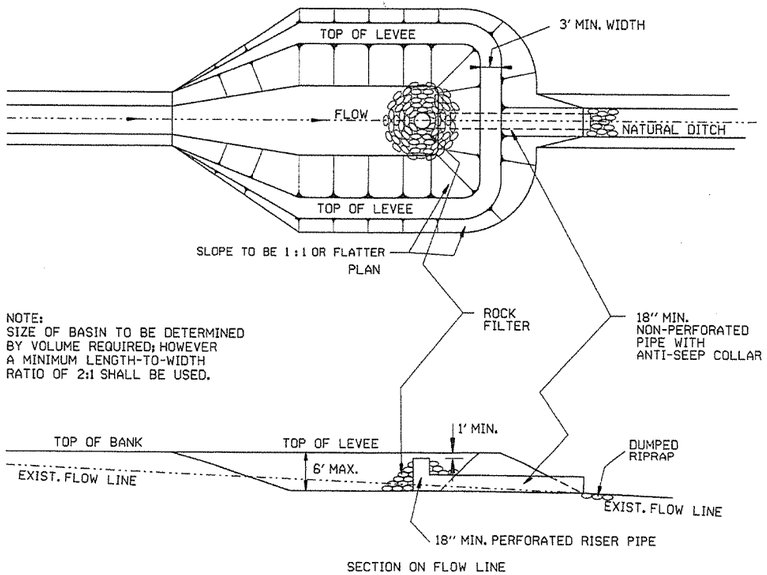
ARKANSAS STATE HIGHWAY COMMISSION

TEMPORARY EROSION CONTROL DEVICES

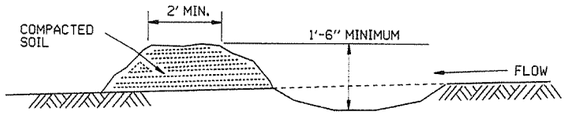
STANDARD DRAWING TEC-1



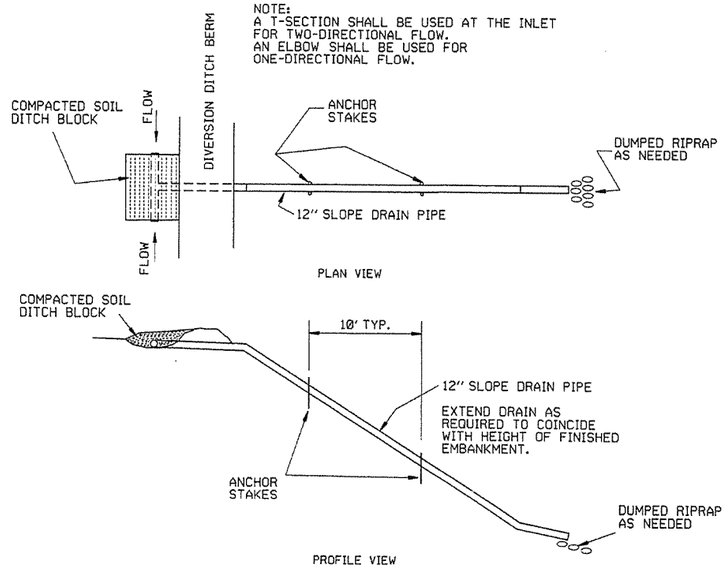
SEDIMENT BASIN WITH RIPRAP OUTLET (E-9)



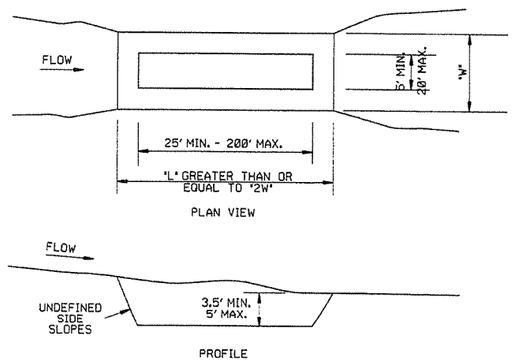
SEDIMENT BASIN WITH PIPE OUTLET (E-10)



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

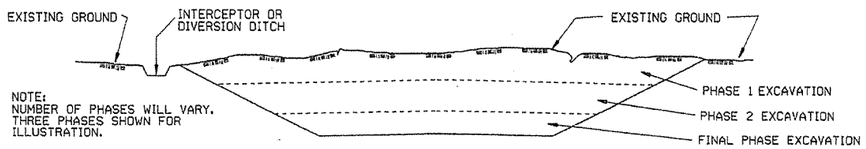
STANDARD DRAWING TEC-2

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



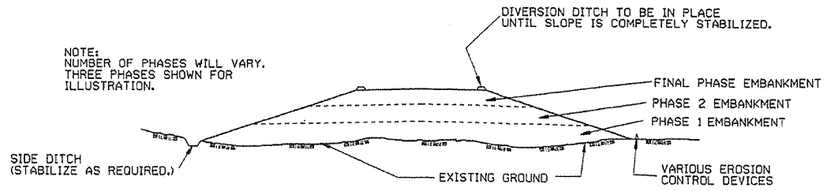
GENERAL NOTE

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.

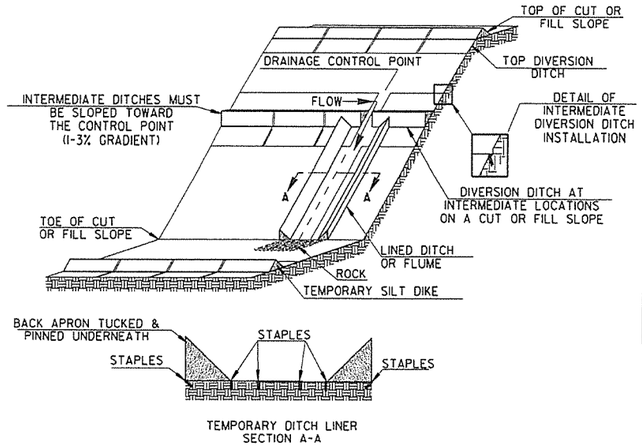
DATE	REVISION	FILMED
11-03-94	CORRECTED SPELLING	
6-2-94	Drawn & Issued	6-2-94

ARKANSAS STATE HIGHWAY COMMISSION

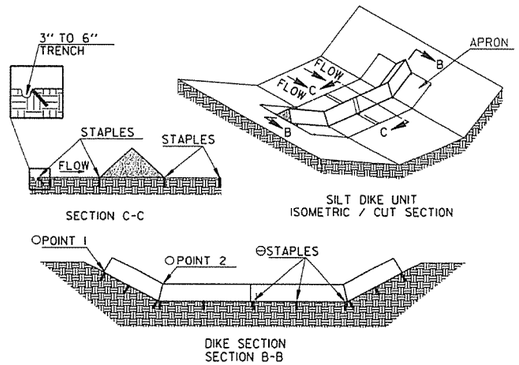
TEMPORARY EROSION CONTROL DEVICES

STANDARD DRAWING TEC-3

stdtec3.dgn



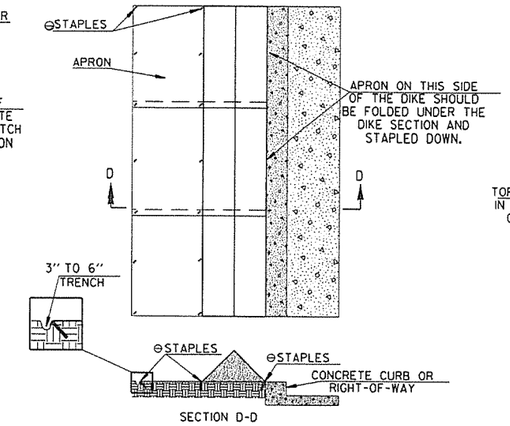
TRIANGULAR SILT DIKE INSTALLATION FOR DIVERSION DITCH AND/OR DITCH LINER



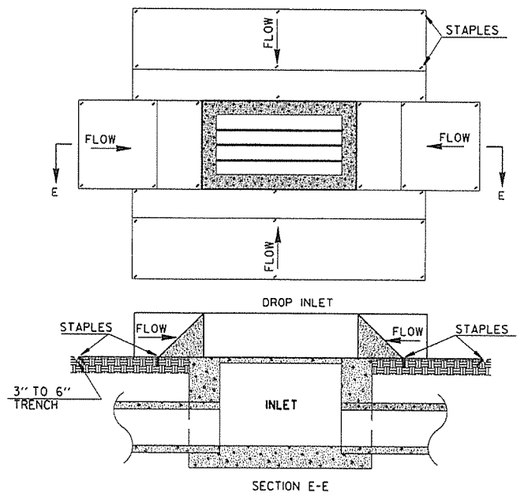
TRIANGULAR SILT DIKE INSTALLATION FOR ROADWAY DITCH OR DRAINAGE DITCH

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

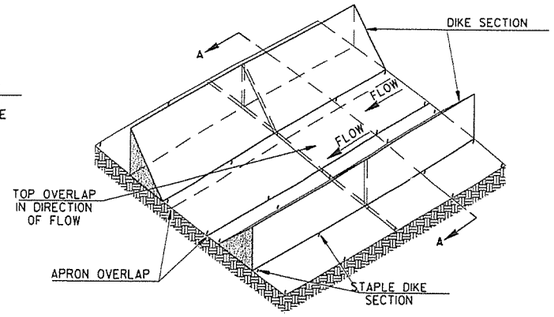
⊖ STAPLES SHALL BE PLACED WHERE THE UNITS OVERLAP AND IN THE CENTER OF THE UNIT AS SHOWN ON THE DIAGRAM.



TRIANGULAR SILT DIKE INSTALLATION FOR CONTINUOUS BARRIER



TRIANGULAR SILT DIKE INSTALLATION FOR DROP INLETS



TRIANGULAR SILT DIKE INSTALLATION FOR TEMPORARY DITCH LINER

SYMBOLOGY

SYMBOL TO BE USED TO DENOTE DEVICE ON PLANS

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

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.

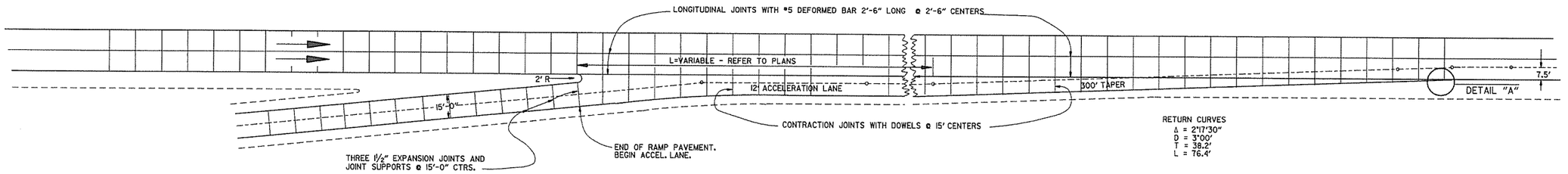
3. ACCEPTED TRIANGULAR SILT DIKE, MEASURED AS PROVIDED ABOVE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID FOR TRIANGULAR SILT DIKE. PRICE BID WILL INCLUDE THE COST OF FURNISHING THE DIKES, INSTALLING, MAINTAINING AND REMOVAL WHEN DIRECTED BY THE ENGINEER.

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

ARKANSAS STATE HIGHWAY COMMISSION

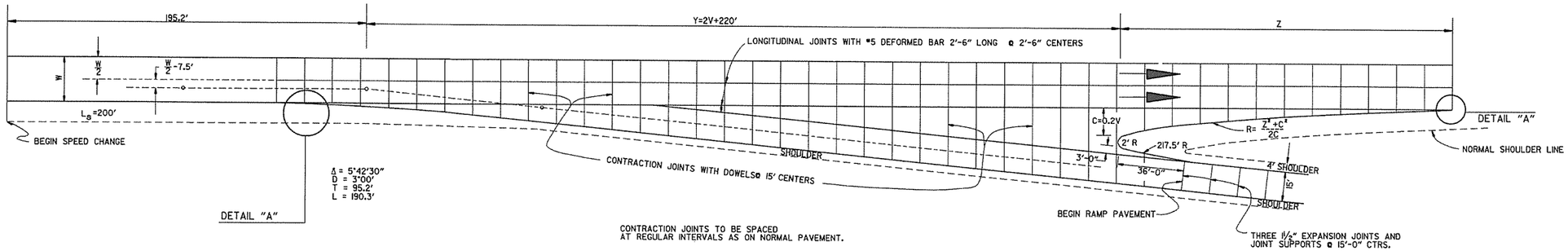
TEMPORARY EROSION CONTROL DEVICES

STANDARD DRAWING TEC-4



ENTRANCE RAMP

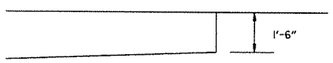
NOTE: JOINT SPACING ON THE MAIN LANES SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO THESE JOINT LAYOUTS. THE MAIN LANE JOINT SPACING MAY BE REDUCED TO A 12' MINIMUM.



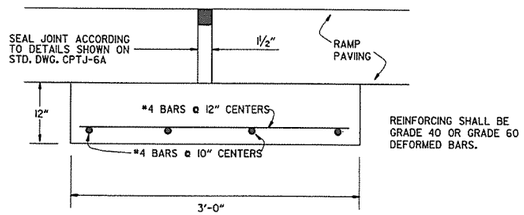
EXIT RAMP

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	687.29
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