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.		020354	1	156
				(2)	I-530-CO. RD. 35 (BS. & SURF.) (F)			

"A FULLY CONTROLLED ACCESS FACILITY"

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

CONSTRUCTION PLANS FOR STATE HIGHWAY

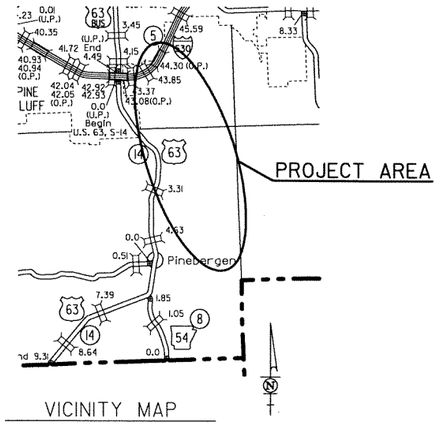
I-530-CO. RD. 35 (BS. & SURF.) (F)

JEFFERSON COUNTY

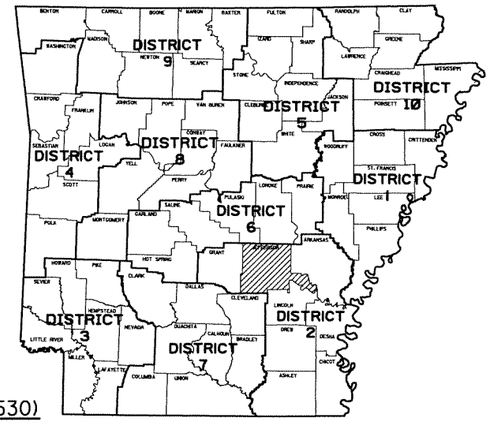
ROUTE 530 SECTION 6

FEDERAL AID PROJ. HPP2-3617(4)

JOB 020354



VICINITY MAP



ARK. HWY. DIST. NO. 2

EXCEPTIONS TO JOB

BRIDGE DATA

① HWY 530 NB - IN PLACE
STA. 2090+03.92 BR. END
206'-1⅞" TOTAL LENGTH
204'-0" CONT. W-BEAM UNIT (65,74,65)
BR. NO. B7129
40'-0" CLEAR ROADWAY
STA. 2092+10.08 BR. END
RETAIN

② HWY 530 NB - IN PLACE
STA. 2122+89.96 BR. END
148'-5" TOTAL LENGTH
146'-0" CONT. W-BEAM UNIT (41,64,41)
BR. NO. B7130
40'-0" CLEAR ROADWAY
STA. 2124+38.38 BR. END
RETAIN

③ HWY 530 NB - IN PLACE
STA. 2162+44.57 BR. END
1310'-6⅝" TOTAL LENGTH
1-326'-0" CONT. W-BEAM UNIT (67,96,96,67)
5-196'-0" CONT. W-BEAM UNIT (62,72,62)
BR. NO. 7131
40'-0" CLEAR ROADWAY
STA. 2175+53.15 BR.END
RETAIN

④ RAMP NW - IN PLACE
STA. 2297+56.96 BR. END
1392'-2¼" TOTAL LENGTH
460'-0" CONT. COMP. PLATE GIRDER UNIT (100'-130'-130'-100')
600'-0" CONT. COMP. PLATE GIRDER UNIT (130'-170'-170'-130')
330'-0" CONT. COMP. PLATE GIRDER UNIT (100'-130'-100')
BR. NO. 07102
47'-0" CLEAR ROADWAY
STA. 2311+49.15 BR. END
RETAIN

⑤ RAMP WS - IN PLACE
STA. 2295+79.55 BR. END
TOTAL LENGTH 1802'-2¼"
3 - 600'-0" CONT. COMP. PLATE GIRDER UNITS (130'-170'-170'-130')
BR. NO. 07101
31'-0" CLEAR ROADWAY
STA. 2313+81.73 BR. END
RETAIN

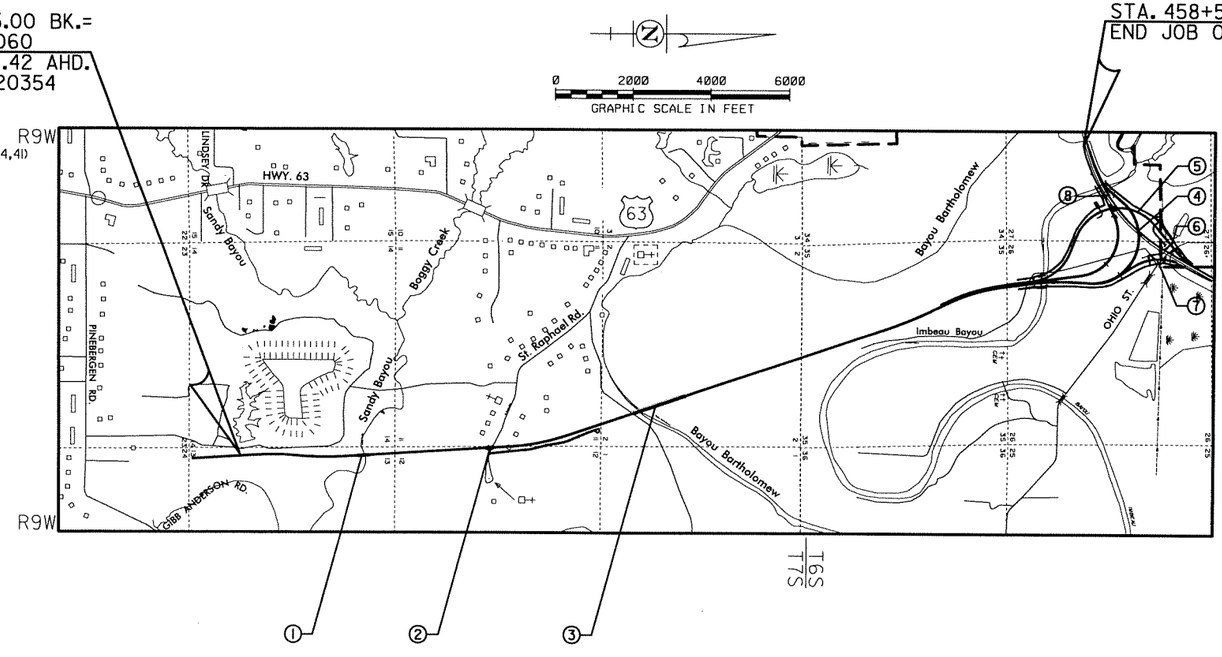
⑥ RAMP WS - IN PLACE
STA. 2318+47.93 BR. END
178'-1⅝" TOTAL LENGTH
176'-0" CONT. COMP. W-BEAM UNIT (52'-72'-52')
BR. NO. 07096
25'-0" CLEAR ROADWAY
STA. 2320+26.07 BR. END
RETAIN

⑦ RAMP NE - IN PLACE
STA. 2301+54.42 BR. END
398'-2" TOTAL LENGTH
396'-0" CONT. COMP. PLATE GIRDER UNIT (78'-120'-120'-78')
BR. NO. 07097
29'-0" CLEAR ROADWAY
STA. 2305+52.58 BR. END
RETAIN

TOTAL EXCEPTIONS = 5435.83' MEASURED ALONG ℄ MEDIAN/RAMP

STA. 2057+25.00 BK.=
END JOB 012060
STA. 2057+12.42 AHD.
BEGIN JOB 020354

STA. 458+54.00 (I-530)
END JOB 020354



STRUCTURES OVER 20'-0" SPAN

⑧ STA. 469+85 - IN PLACE
DBL. 10' x 10' x 213' R.C. BOX CULV'T.
RETAIN & EXTEND 28' LT. & 20' RT.
TO A COMPLETED LENGTH OF 261'
WITH 3:1 WINGWALLS LT. & RT.
(SPAN = 22.67')

BEGIN POINT OF PROJECT	MID POINT OF PROJECT	END POINT OF PROJECT
LATITUDE 34°06' 40" N	LATITUDE 34°08' 30" N	LATITUDE 34°10' 17" N
LONGITUDE 91°58' 15" W	LONGITUDE 91°58' 27" W	LONGITUDE 91°59' 51" W

EQUATION
STA. 2057+25.00 BK.=
STA. 2057+12.42 AHD.

LENGTH IS COMPUTED ALONG ℄ MEDIAN & IS SHOWN FOR INFORMATION ONLY

GROSS LENGTH OF PROJECT	26,602.37	FEET OR	5.038	MILES
NET " " ROADWAY	24,939.21	" "	4.723	"
NET " " BRIDGES	0.00	" "	0.000	"
NET " " PROJECT	24,939.21	" "	4.723	"

NOTE: STA. 471+87.64 I-530 = 2309+81.15 RAMP ES

DESIGN TRAFFIC DATA

DESIGN YEAR	2028
2008 ADT	19,500
2028 ADT	54,400
2028 DHV	5,984
DIRECTIONAL DISTRIBUTION	0.60
TRUCKS	20%
DESIGN SPEED	70 MPH

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8940
MARK ASHER
5-10-11

P.E. JOB 020364
5620-0018-032

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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.		020354	2	156

(2) INDEX OF SHEETS, GOVERNING SPECIFICATIONS AND GENERAL NOTES

INDEX OF SHEETS

SHEET NO.		TITLE	BRIDGE NO.	DRWG.NO.	DATE
1	_____	TITLE SHEET			
2	_____	INDEX OF SHEETS, GOVERNING SPECIFICATIONS AND GENERAL NOTES			
3 - 19	_____	TYPICAL SECTIONS OF IMPROVEMENT			
20 - 26	_____	SPECIAL DETAILS			
27 - 37	_____	TEMPORARY EROSION CONTROL			
38 - 47	_____	MAINTENANCE OF TRAFFIC			
48 - 51	_____	PERMANENT PAVEMENT MARKING DETAILS			
52 - 57	_____	QUANTITY SHEETS			
58	_____	SUMMARY OF QUANTITIES AND REVISIONS			
59 - 69	_____	SURVEY CONTROL DETAILS			
70	_____	INTERCHANGE LAYOUT I-69 CONNECTOR / I-530			
71 - 87	_____	PLAN AND PROFILE SHEETS			
88	_____	CROSSOVER PLAN			
89	_____	CULVERT DIAGRAM			
90	_____	LAYOUT OF NORTHBOUND HWY. 530 BRIDGE OVER SANDY BAYOU - FOR INFORMATION ONLY	B7129		
91	_____	LAYOUT OF NORTHBOUND HWY. 530 BRIDGE OVER ST. RAPHAEL ROAD - FOR INFORMATION ONLY	B7130		
92	_____	LAYOUT OF NORTHBOUND HWY. 530 BRIDGE OVER BAYOU BARTHOLOMEW (SHEET 1 OF 4) - FOR INFORMATION ONLY	B7131		
93	_____	LAYOUT OF NORTHBOUND HWY. 530 BRIDGE OVER BAYOU BARTHOLOMEW (SHEET 2 OF 4) - FOR INFORMATION ONLY	B7131		
94	_____	LAYOUT OF NORTHBOUND HWY. 530 BRIDGE OVER BAYOU BARTHOLOMEW (SHEET 3 OF 4) - FOR INFORMATION ONLY	B7131		
95	_____	LAYOUT OF NORTHBOUND HWY. 530 BRIDGE OVER BAYOU BARTHOLOMEW (SHEET 4 OF 4) - FOR INFORMATION ONLY	B7131		
96	_____	LAYOUT OF RAMP WS OVER OHIO STREET - FOR INFORMATION ONLY	07096		
97	_____	LAYOUT OF RAMP NE OVER OHIO STREET (SHEET 1 OF 2) - FOR INFORMATION ONLY	07097		
98	_____	LAYOUT OF RAMP NE OVER OHIO STREET (SHEET 2 OF 2) - FOR INFORMATION ONLY	07097		
99	_____	LAYOUT OF RAMP WS OVER I-530 (SHEET 1 OF 5) - FOR INFORMATION ONLY	07101		
100	_____	LAYOUT OF RAMP WS OVER I-530 (SHEET 2 OF 5) - FOR INFORMATION ONLY	07101		
101	_____	LAYOUT OF RAMP WS OVER I-530 (SHEET 3 OF 5) - FOR INFORMATION ONLY	07101		
102	_____	LAYOUT OF RAMP WS OVER I-530 (SHEET 4 OF 5) - FOR INFORMATION ONLY	07101		
103	_____	LAYOUT OF RAMP WS OVER I-530 (SHEET 5 OF 5) - FOR INFORMATION ONLY	07101		
104	_____	LAYOUT OF RAMP NW OVER I-530 (SHEET 1 OF 4) - FOR INFORMATION ONLY	07102		
105	_____	LAYOUT OF RAMP NW OVER I-530 (SHEET 2 OF 4) - FOR INFORMATION ONLY	07102		
106	_____	LAYOUT OF RAMP NW OVER I-530 (SHEET 3 OF 4) - FOR INFORMATION ONLY	07102		
107	_____	LAYOUT OF RAMP NW OVER I-530 (SHEET 4 OF 4) - FOR INFORMATION ONLY	07102		
108	_____	DETAILS OF TYPE SPECIAL 1 APPROACH GUTTERS RAMP NW OVER I-530	07102	50271	
109	_____	DETAILS OF TYPE SPECIAL 2 APPROACH GUTTERS NB BRIDGE OVER SANDY BAYOU	B7129	50272	
110	_____	DETAILS OF TYPE SPECIAL 3 APPROACH GUTTERS NB BRIDGE OVER ST. RAPHAEL ROAD	B7130	50273	
111	_____	DETAILS OF TYPE SPECIAL 1 APPROACH SLABS NB BRIDGE OVER ST. RAPHAEL ROAD	B7130	50274	
112	_____	DETAILS OF TYPE SPECIAL 4 APPROACH GUTTERS NB BRIDGE OVER BAYOU BARTHOLOMEW	B7131	50275	
113	_____	DETAILS OF TYPE SPECIAL 2 APPROACH SLABS NB BRIDGE OVER BAYOU BARTHOLOMEW	B7131	50276	
114	_____	DETAILS OF STANDARD TYPE C APPROACH GUTTERS		2016C_____	7-14-10
115	_____	DETAILS OF APPROACH SLAB		2018_____	7-14-10
116	_____	GUARD RAIL DETAILS		GR-8_____	7-14-10
117	_____	GUARD RAIL DETAILS		GR-8A_____	7-14-10
118	_____	GUARD RAIL DETAILS		GR-9_____	4-17-08
119	_____	GUARD RAIL DETAILS		GR-9A_____	4-17-08
120	_____	GUARD RAIL DETAILS		GR-10_____	7-14-10
121	_____	GUARD RAIL DETAILS		GR-10A_____	7-14-10
122	_____	CONCRETE BARRIER WALL (PIER PROTECTION TYPE A)		GR-11_____	7-14-10
123	_____	PAVEMENT MARKING DETAILS		PM-1_____	11-17-10
124	_____	PERMANENT PAVEMENT MARKING ON ACCESS CONTROLLED ROADWAYS		PM-2_____	11-17-10
125	_____	REINFORCED CONCRETE BOX CULVERT DETAILS		RCB-1_____	5-25-06
126	_____	EXCAVATION PAY LIMITS, BACKFILL, & SOLID SODDING FOR BOX CULVERTS		RCB-2_____	11-20-03
127	_____	METHOD OF EXTENDING EXISTING R.C. BOX CULVERTS		RCB-3_____	10-12-95
128	_____	TABLES AND METHOD OF SUPERELEVATION FOR ONE-WAY TRAFFIC		SE-1_____	1-09-87
129	_____	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION		TC-1_____	11-17-10
130	_____	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION		TC-2_____	3-11-10
131	_____	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION		TC-3_____	10-15-09
132	_____	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION-TEMPORARY PRECAST BARRIER		TC-4_____	10-15-09
133	_____	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION-TEMPORARY PRECAST BARRIER		TC-5_____	10-15-09
134	_____	TEMPORARY EROSION CONTROL DEVICES		TEC-1_____	11-18-98
135	_____	DETAILS OF STANDARD TURNOUT FOR ENTRANCE AND EXIT RAMPS (NON-REINFORCED)		TR-1A_____	8-22-02
136	_____	WIRE FENCE TYPE A AND B		WF-1_____	8-22-02
137	_____	DETAILS OF STANDARD WINGS FOR REINFORCED CONCRETE BOX CULVERTS		W-X003-2__	12-31-62
138	_____	DETAILS OF STANDARD BARREL SECTIONS FOR REINFORCED CONCRETE BOX CULVERTS		R-200X-X2_	1-14-63
139 - 156	_____	CROSS SECTIONS			

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

GOVERNING SPECIFICATIONS

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

NUMBER	TITLE
ERRATA_____	ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS
FHWA-1273__	FHWA-1273 REVISIONS
FHWA-1273__	REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS
FHWA-1273__	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - NOTICE TO CONTRACTORS
FHWA-1273__	SUPPLEMENT - SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES (23 U.S.C. 140)
FHWA-1273__	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - GOALS AND TIMETABLES
FHWA-1273__	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - FEDERAL STANDARDS
FHWA-1273__	SUPPLEMENT - TRAINING PROGRAM - JOB 020354
FHWA-1273__	SUPPLEMENT - POSTERS AND NOTICES REQUIRED FOR FEDERAL-AID PROJECTS
FHWA-1273__	SUPPLEMENT - WAGE RATE DETERMINATION
100-2_____	MANUAL FOR ASSESSING SAFETY HARDWARE (MASH)
103-1_____	DETERMINATION OF DBE PARTICIPATION
105-1_____	CONSTRUCTION CONTROL MARKINGS
105-2_____	EQUIPMENT AND MATERIAL STORAGE ON BRIDGE STRUCTURES
107-1_____	WORKER VISIBILITY
108-1_____	LIQUIDATED DAMAGES
110-1_____	PROTECTION OF WATER QUALITY AND WETLANDS
303-1_____	AGGREGATE BASE COURSE
404-1_____	PRODUCTION VERIFICATION OF ASPHALT CONCRETE HOT MIX
409-1_____	MINERAL AGGREGATES
410-3_____	DENSITY TESTING FOR ACHM LEVELING COURSES AND BOND BREAKERS
600-1_____	WATER FOR VEGETATION
603-1_____	MAINTENANCE OF TRAFFIC
604-1_____	RETROREFLECTIVE SHEETING FOR TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
719-2_____	THERMOPLASTIC PAVEMENT MARKING MATERIAL
JOB 020354__	ASPHALT CONCRETE HOT MIX SURFACE COURSE SURFACE TOLERANCE AND INCENTIVE PAYMENTS
JOB 020354__	APPROACH SLABS AND GUTTERS
JOB 020354__	BROADBAND INTERNET SERVICE FOR ASPHALT CONCETE PLANT
JOB 020354__	BROADBAND INTERNET SERVICE FOR FIELD OFFICE
JOB 020354__	CONSTRUCTION IN SPECIAL FLOOD HAZARD AREA
JOB 020354__	COORDINATION OF WORK
JOB 020354__	GOALS FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION
JOB 020354__	HIGH PERFORMANCE PAVEMENT MARKING
JOB 020354__	INTERNET BIDDING
JOB 020354__	MAINTENANCE OF TRAFFIC
JOB 020354__	MOWING OF HIGHWAY RIGHT-OF-WAY
JOB 020354__	PARTNERING REQUIREMENTS
JOB 020354__	SOIL STABILIZATION
JOB 020354__	STORM WATER POLLUTION PREVENTION PLAN
JOB 020354__	SUBGRADE PREPARATION
JOB 020354__	SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS
JOB 020354__	TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
JOB 020354__	TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES LEFT IN PLACE
JOB 020354__	UTILITY ADJUSTMENTS
JOB 020354__	VALUE ENGINEERING
JOB 020354__	WARM MIX ASPHALT

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. THIS PROJECT IS COVERED UNDER A SECTION 404 INDIVIDUAL PERMIT. REFER TO SECTION 110 OF THE STANDARD SPECIFICATIONS, EDITION OF 2003, FOR PERMIT REQUIREMENTS.
8. ALL FLEXIBLE BASE AND ASPHALTIC PAVEMENTS REMOVED SHALL BE PAID FOR UNDER THE ITEM NO. 210 - UNCLASSIFIED EXCAVATION.
9. 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
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENNY
7-13-11

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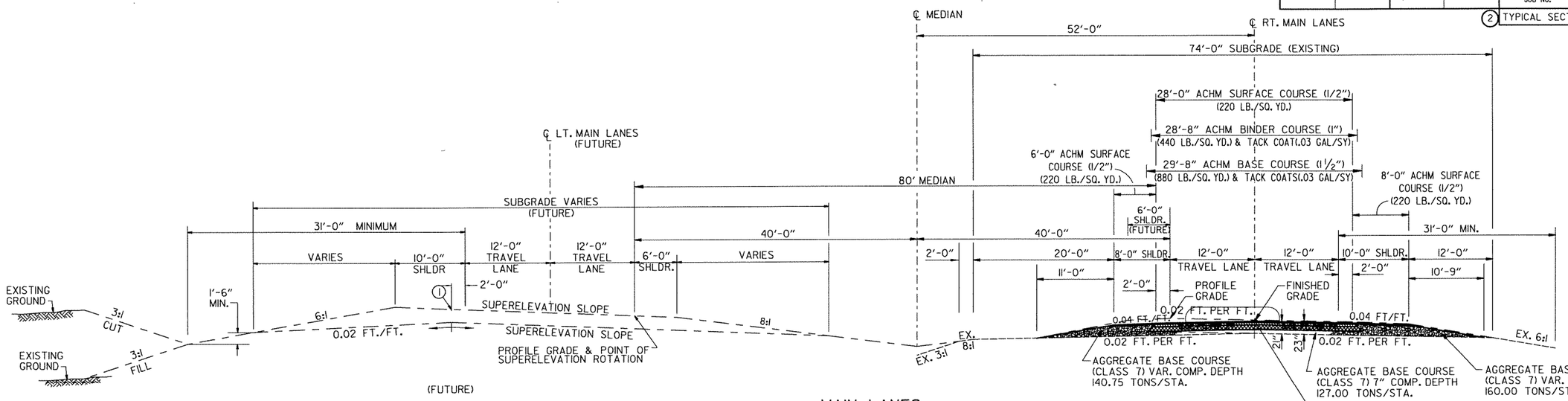
				6	ARK.			
				JOB NO.		020354	3	156

(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 8817 PAUL DAVID PENNY

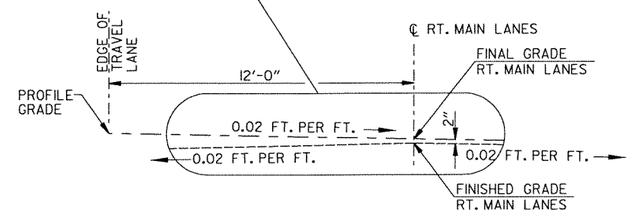
5-9-11



(1) ON ALL SUPERELEVATED CURVES AND THROUGH SUPERELEVATION TRANSITIONS, THE ALGEBRAIC DIFFERENCE BETWEEN THE PAVEMENT SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8.00%

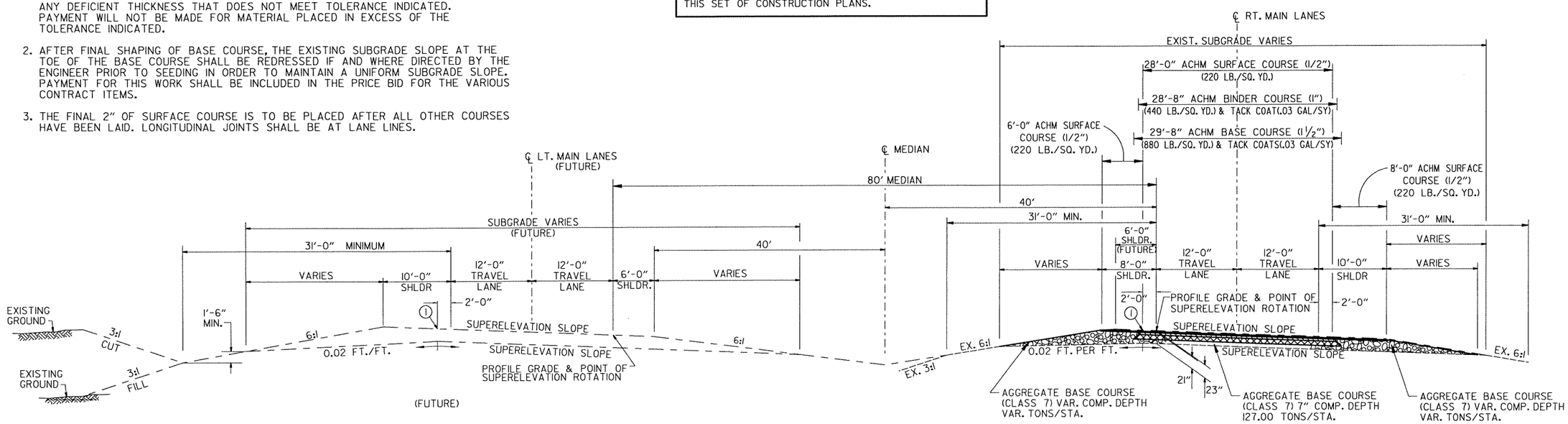
MAIN LANES
80' MEDIAN
SUPERELEVATION (LT. LANES), TANGENT (RT. LANES)
STA. 2057+12.42 TO STA. 2057+96.12 C.L. MEDIAN

TANGENT SECTION 80' MEDIAN ONLY
THE PROFILE GRADE SHOWN ON THE PLAN & PROFILE SHEETS FOR THE RT. MAIN LANES IS 0.41' ABOVE THE FINISHED GRADE AT THE CENTERLINE OF THE RT. MAIN LANES. TO CALCULATE FINISHED GRADE ELEVATIONS AT THE CENTERLINE OF THE RT. MAIN LANES SUBTRACT 0.41' FROM THE PROFILE GRADE ELEVATION SHOWN IN THIS SET OF CONSTRUCTION PLANS.



NOTE:

1. 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.
2. AFTER FINAL SHAPING OF BASE COURSE, THE EXISTING SUBGRADE SLOPE AT THE TOE OF THE BASE COURSE SHALL BE REDRESSED IF AND WHERE DIRECTED BY THE ENGINEER PRIOR TO SEEDING IN ORDER TO MAINTAIN A UNIFORM SUBGRADE SLOPE. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT 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.



(1) ON ALL SUPERELEVATED CURVES AND THROUGH SUPERELEVATION TRANSITIONS, THE ALGEBRAIC DIFFERENCE BETWEEN THE PAVEMENT SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8.00%

MAIN LANES
80' MEDIAN
SUPERELEVATION (LT. & RT. LANES)
STA. 2057+96.12 TO STA. 2059+58.12 C.L. MEDIAN

——— JOB 020354 PAVING LIMITS
- - - - - - - EXISTING SUBGRADE & SIDE SLOPES
— - — ULTIMATE 4 LANE SECTION

TYPICAL SECTIONS OF IMPROVEMENT

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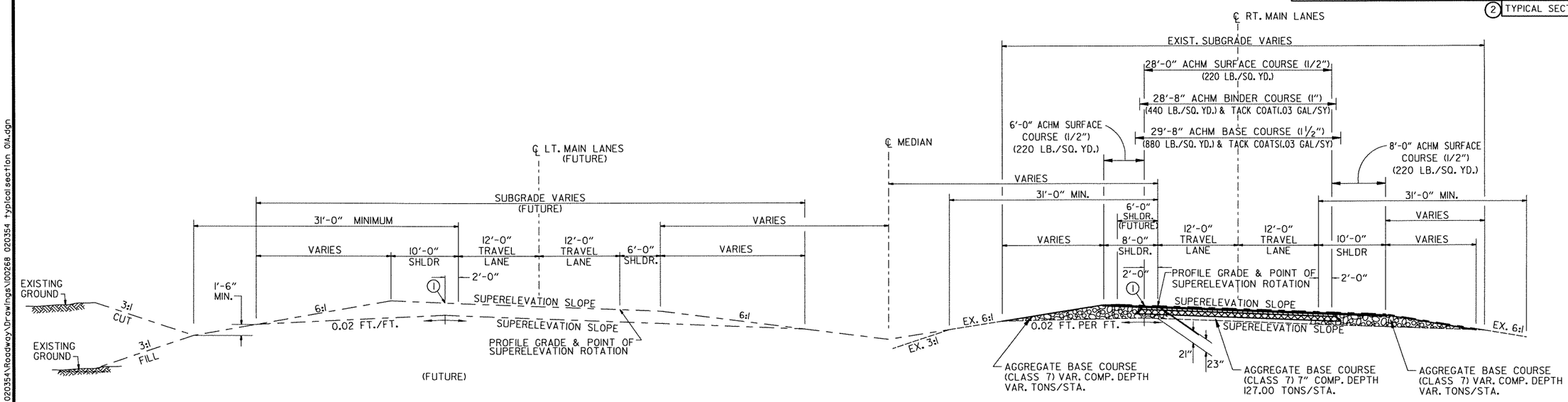
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		020354	4	156

(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11



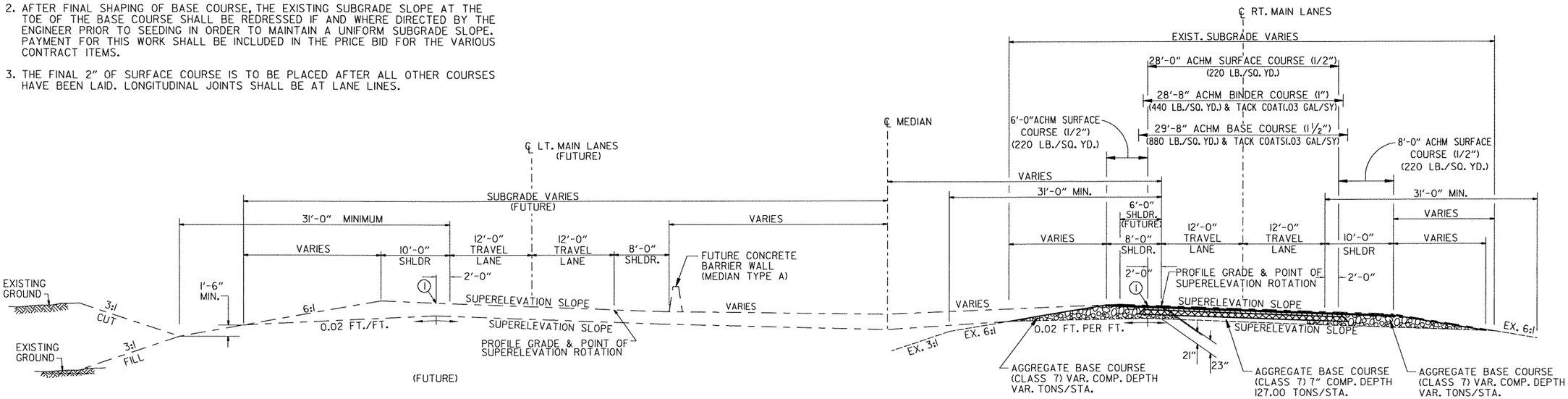
(1) ON ALL SUPERELEVATED CURVES AND THROUGH SUPERELEVATION TRANSITIONS, THE ALGEBRAIC DIFFERENCE BETWEEN THE PAVEMENT SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8.00%

MAIN LANES
VARIABLE WIDTH MEDIAN
SUPERELEVATION (LT. & RT. LANES)
STA. 2059+58.12 TO STA. 2066+76.00 C.L. MEDIAN

——— JOB 020354 PAVING LIMITS
- - - - - - - EXISTING SUBGRADE & SIDE SLOPES
— - — ULTIMATE 4 LANE SECTION

NOTE:

1. 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.
2. AFTER FINAL SHAPING OF BASE COURSE, THE EXISTING SUBGRADE SLOPE AT THE TOE OF THE BASE COURSE SHALL BE REDRESSED IF AND WHERE DIRECTED BY THE ENGINEER PRIOR TO SEEDING IN ORDER TO MAINTAIN A UNIFORM SUBGRADE SLOPE. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT 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.



(1) ON ALL SUPERELEVATED CURVES AND THROUGH SUPERELEVATION TRANSITIONS, THE ALGEBRAIC DIFFERENCE BETWEEN THE PAVEMENT SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8.00%

MAIN LANES
VARIABLE MEDIAN WITH BARRIER
SUPERELEVATION (LT. & RT. LANES)
STA. 2066+76.00 C.L. MEDIAN TO STA. 2069+62.69 C.L. R.M.L.

——— JOB 020354 PAVING LIMITS
- - - - - - - EXISTING SUBGRADE & SIDE SLOPES
— - — ULTIMATE 4 LANE SECTION

TYPICAL SECTIONS OF IMPROVEMENT

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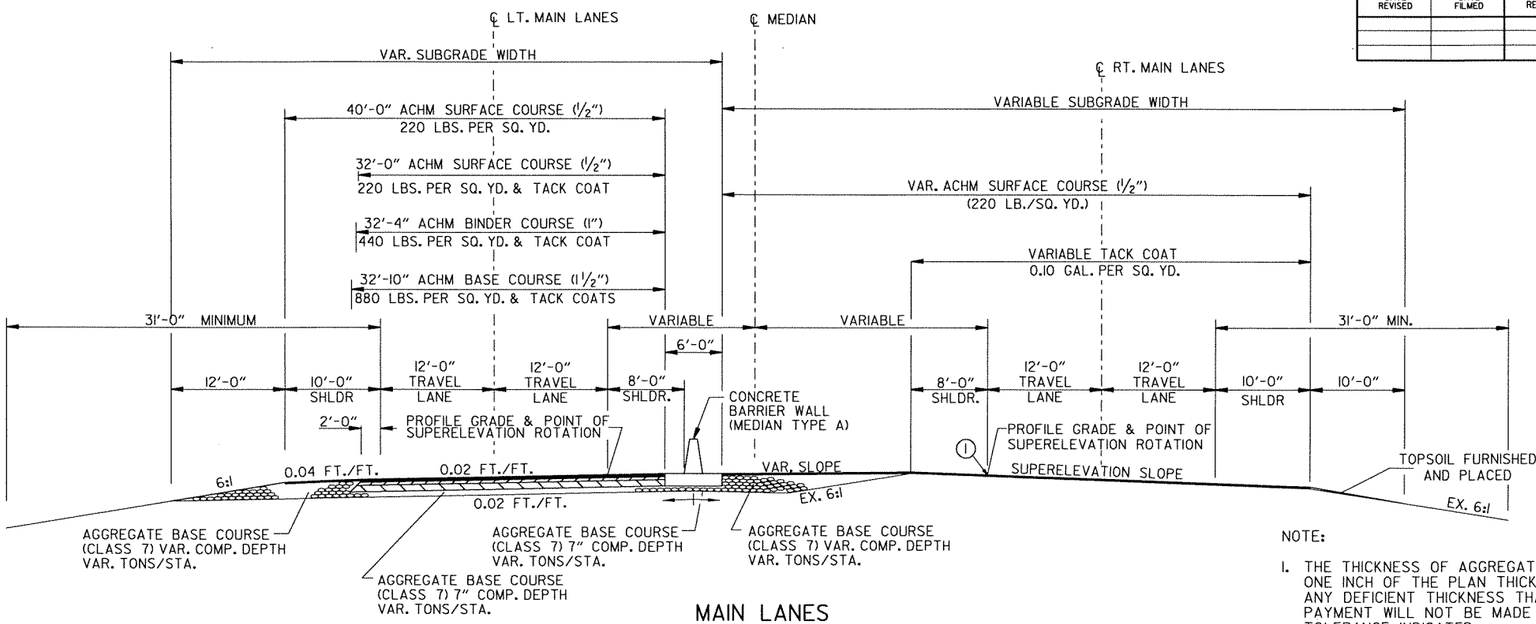
				JOB NO.		020354	5	156

(2) TYPICAL SECTIONS OF IMPROVEMENT



MAIN LANES
VARIABLE MEDIAN WITH BARRIER
TANGENT (LT. LANES), SUPERELEVATION (RT. LANES)
STA. 2069+62.69 C.L. R.M.LTO STA. 2071+81.04 C.L. MEDIAN

(1) ON ALL SUPERELEVATED CURVES AND THROUGH SUPERELEVATION TRANSITIONS, THE ALGEBRAIC DIFFERENCE BETWEEN THE PAVEMENT SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8.00%

NOTE:

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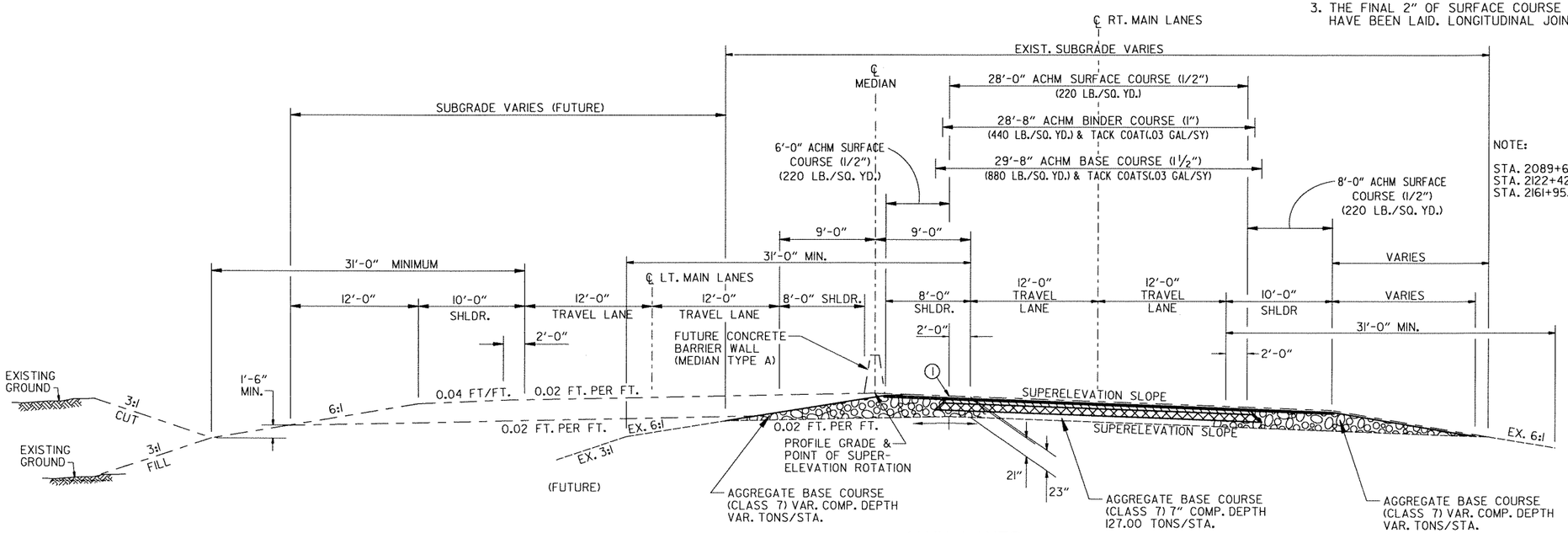

NOTE:

STA. 2089+67.42 TO STA. 2092+46.58 - BRIDGE & APPR. SLABS
STA. 2122+42.26 TO STA. 2124+84.04 - BRIDGE & APPR. SLABS
STA. 2161+95.47 TO STA. 2176+05.05 - BRIDGE & APPR. SLABS

MAIN LANES
18' MEDIAN WITH BARRIER
TANGENT (LT. LANES), SUPERELEVATION (RT. LANES)
STA. 2071+81.04 TO STA. 2074+43.54 STA. 2179+75.00 TO STA. 2181+25.00

——— JOB 020354 PAVING LIMITS
------- EXISTING SUBGRADE & SIDE SLOPES
— — — ULTIMATE 4 LANE SECTION

TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENNY
5-9-11

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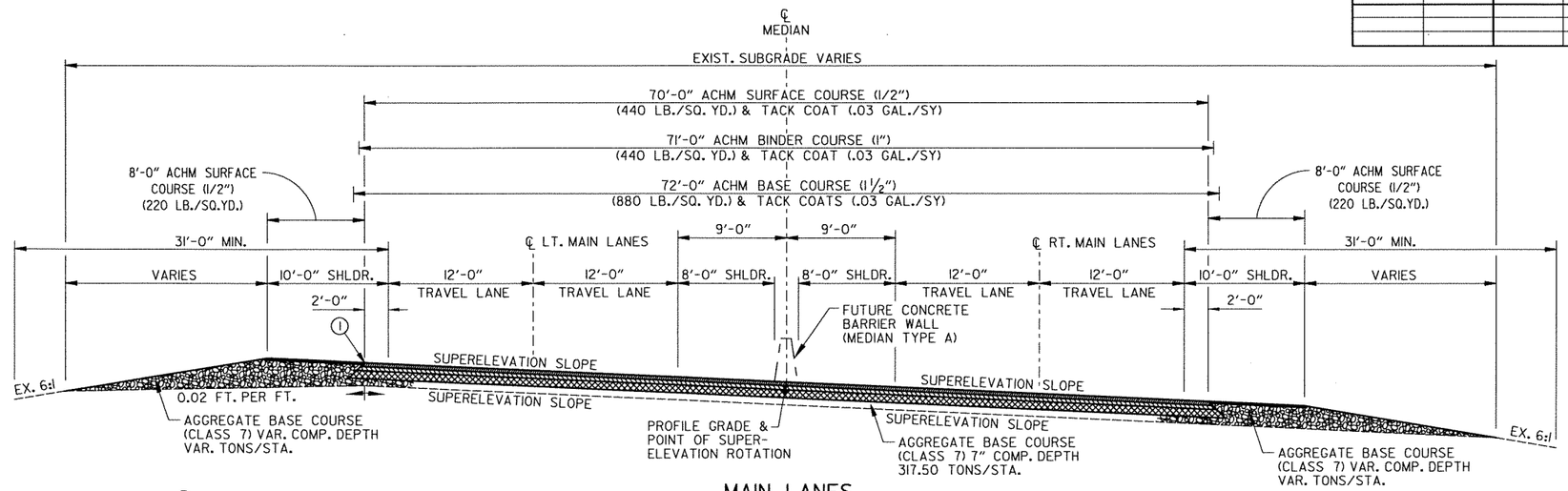
				6	ARK.			
				JOB NO.		020354	6	156

(2) TYPICAL SECTIONS OF IMPROVEMENT

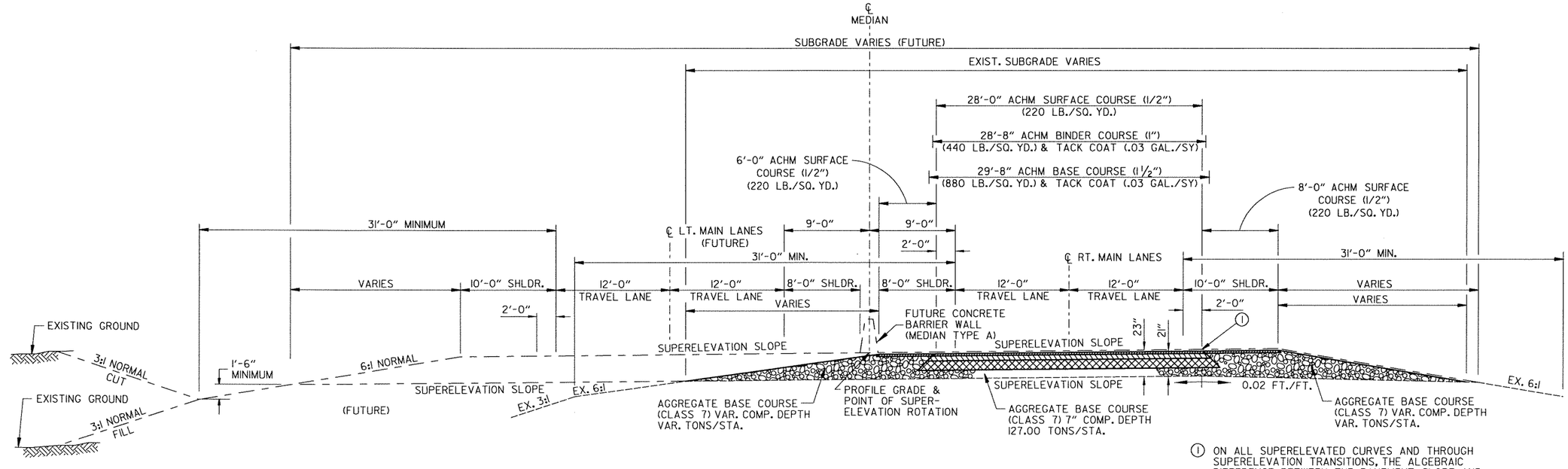
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11



JOB 020354 PAVING LIMITS
EXISTING SUBGRADE & SIDE SLOPES

(1) ON ALL SUPERELEVATED CURVES AND THROUGH SUPERELEVATION TRANSITIONS, THE ALGEBRAIC DIFFERENCE BETWEEN THE PAVEMENT SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8.00%

MAIN LANES
18' MEDIAN WITH BARRIER
SUPERELEVATION (LT. & RT. LANES)
STA. 2245+86.80 TO STA. 2261+00.00



(1) ON ALL SUPERELEVATED CURVES AND THROUGH SUPERELEVATION TRANSITIONS, THE ALGEBRAIC DIFFERENCE BETWEEN THE PAVEMENT SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8.00%

JOB 020354 PAVING LIMITS
EXISTING SUBGRADE & SIDE SLOPES
ULTIMATE 4 LANE SECTION

NOTE:

1. THE THICKNESS OF AGGREGATE BASE COURSE SHALL BE WITHIN PLUS OR MINUS ONE INCH OF THE PLAN THICKNESS SHOWN. THE CONTRACTOR WILL CORRECT ANY DEFICIENT THICKNESS THAT DOES NOT MEET TOLERANCE INDICATED. PAYMENT WILL NOT BE MADE FOR MATERIAL PLACED IN EXCESS OF THE TOLERANCE INDICATED.
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MAIN LANES
18' MEDIAN WITH BARRIER
SUPERELEVATION (LT. & RT. LANES)
STA. 2074+88.93 TO STA. 2084+08.06
STA. 2130+38.32 TO STA. 2146+03.24

TYPICAL SECTIONS OF IMPROVEMENT

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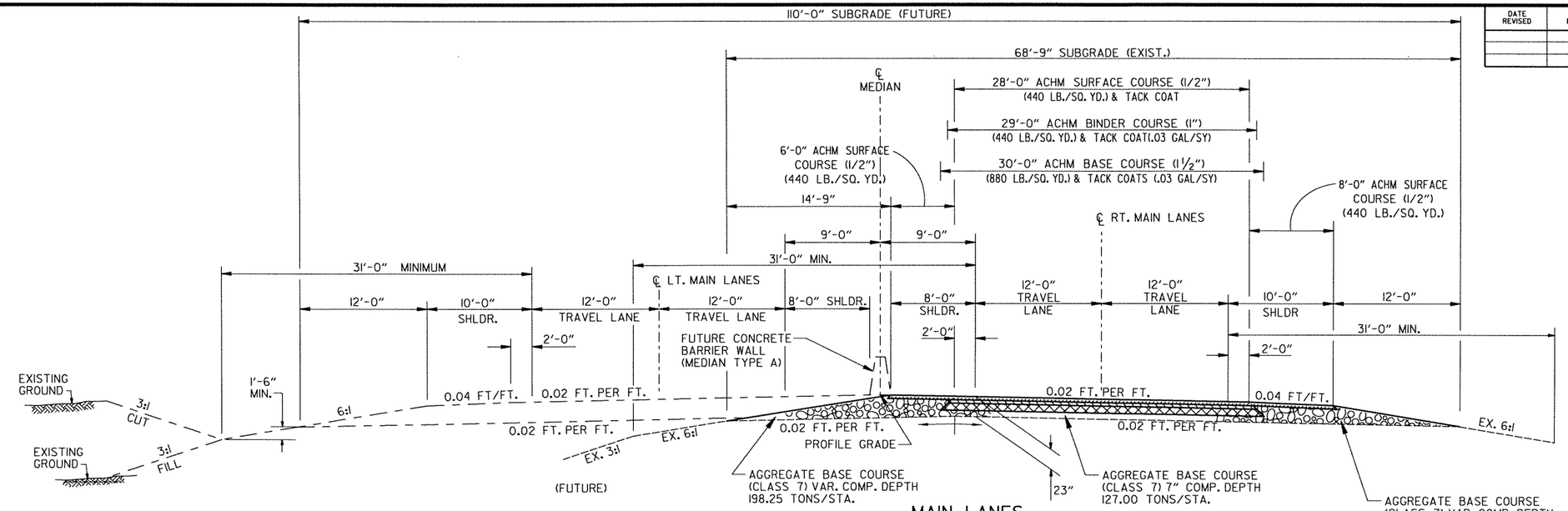
				6	ARK.			
				JOB NO.		020354	7	156

(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID DENN
5-9-11

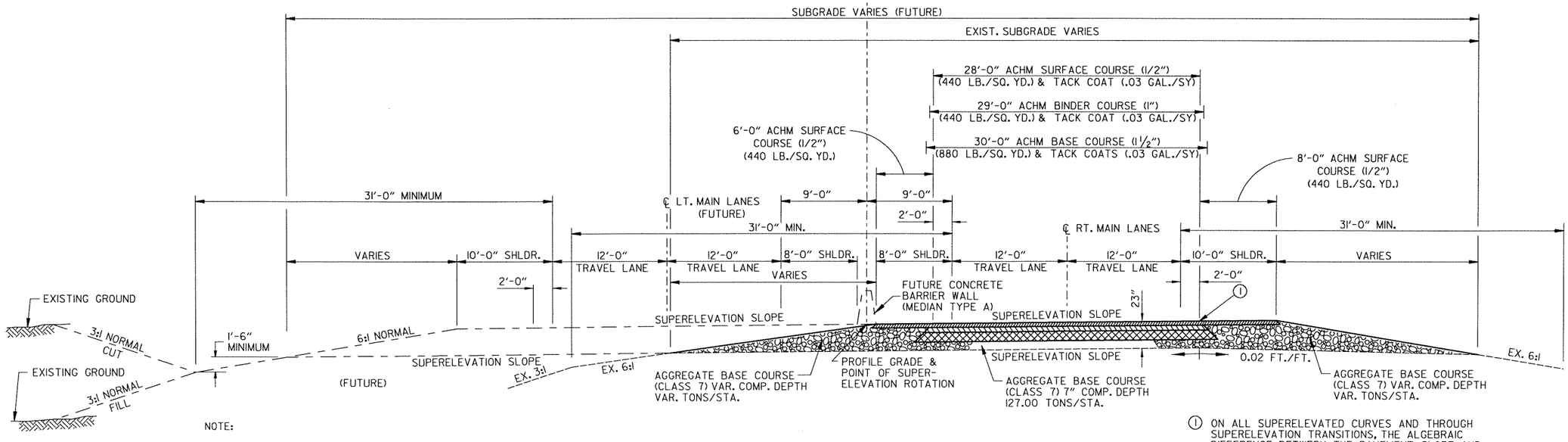


NOTE:
STA. 2096+00.00 TO STA. 2099+50.00:
PAVEMENT DEPTH TRANSITIONS FROM 23" TO 21". (REFER TO SHEET 20)
STA. 2115+50.00 TO STA. 2119+00.00:
PAVEMENT DEPTH TRANSITIONS FROM 21" TO 23". (REFER TO SHEET 20)
STA. 2156+65.00 TO STA. 2158+65.00:
PAVEMENT DEPTH TRANSITIONS FROM 21" TO 23". (REFER TO SHEEET 21)
STA. 2177+75.00 TO STA. 2181+25.00:
PAVEMENT DEPTH TRANSITIONS FROM 23" TO 21". (REFER TO SHEET 20)

——— JOB 020354 PAVING LIMITS
- - - - - - - EXISTING SUBGRADE & SIDE SLOPES
— — — ULTIMATE 4 LANE SECTION

MAIN LANES
18' MEDIAN WITH BARRIER-TANGENT (PLANAR)

STA. 2087+08.06 TO STA. 2089+67.42
STA. 2092+46.58 TO STA. 2096+00.00
STA. 2119+00.00 TO STA. 2122+42.26
STA. 2124+84.04 TO STA. 2126+38.32
STA. 2158+65.00 TO STA. 2161+95.47
STA. 2176+05.05 TO STA. 2177+75.00



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MAIN LANES
18' MEDIAN WITH BARRIER
SUPERELEVATION (LT. & RT. LANES)
STA. 2086+08.06 TO STA. 2087+08.06
STA. 2126+38.32 TO STA. 2128+38.32

(1) ON ALL SUPERELEVATED CURVES AND THROUGH SUPERELEVATION TRANSITIONS, THE ALGEBRAIC DIFFERENCE BETWEEN THE PAVEMENT SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8.00%.

——— JOB 020354 PAVING LIMITS
- - - - - - - EXISTING SUBGRADE & SIDE SLOPES
— — — ULTIMATE 4 LANE SECTION

NOTE:
STA. 2084+08.06 TO STA. 2086+08.06:
PAVEMENT DEPTH TRANSITIONS FROM 21" TO 23".
STA. 2128+38.32 TO STA. 2130+38.32:
PAVEMENT DEPTH TRANSITIONS FROM 23" TO 21".

TYPICAL SECTIONS OF IMPROVEMENT

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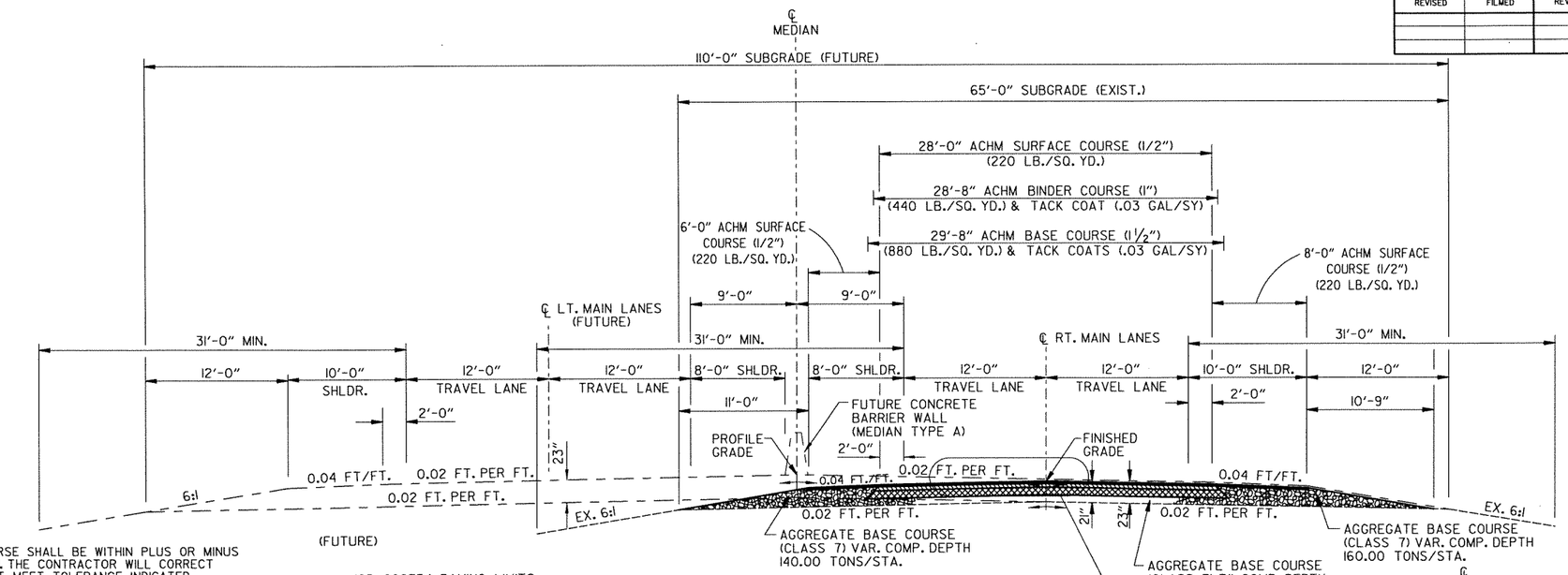
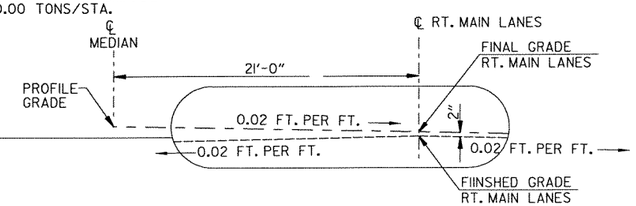
				JOB NO.		020354	8	156

(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11



TANGENT SECTION 18' MEDIAN + BARRIER ONLY
THE PROFILE GRADE SHOWN ON THE PLAN & PROFILE SHEETS FOR THE RT. MAIN LANES IS 0.59' ABOVE THE FINISHED GRADE AT THE CENTERLINE OF THE RT. MAIN LANES. TO CALCULATE FINISHED GRADE ELEVATIONS AT THE CENTERLINE OF THE RT. MAIN LANES SUBTRACT 0.59' FROM THE PROFILE GRADE ELEVATION SHOWN IN THIS SET OF CONSTRUCTION PLANS.



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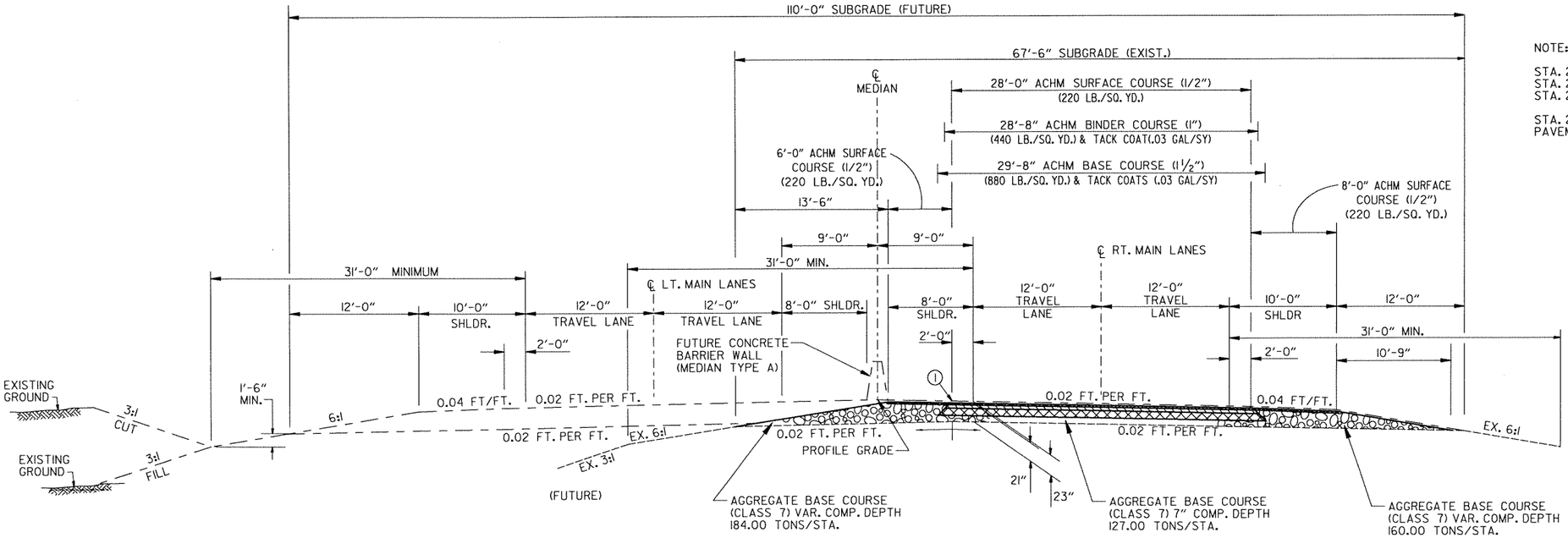
——— JOB 020354 PAVING LIMITS
- - - - - - - EXISTING SUBGRADE & SIDE SLOPES
— — — ULTIMATE 4 LANE SECTION

MAIN LANES
18' MEDIAN WITH BARRIER
TANGENT (LT. & RT. LANES)
STA. 2099+50.00 TO STA. 2115+50.00
STA. 2181+25.00 TO STA. 2242+36.80



NOTE:

STA. 2089+67.42 TO STA. 2092+46.58 - BRIDGE & APPR. SLABS
STA. 2122+42.26 TO STA. 2124+84.04 - BRIDGE & APPR. SLABS
STA. 2161+95.47 TO STA. 2176+05.05 - BRIDGE & APPR. SLABS

STA. 2242+36.80 TO STA. 2245+86.80:
PAVEMENT DEPTH TRANSITIONS FROM 21" TO 23". (REFER TO SHEET 20)

——— JOB 020354 PAVING LIMITS
- - - - - - - EXISTING SUBGRADE & SIDE SLOPES
— — — ULTIMATE 4 LANE SECTION

MAIN LANES
18' MEDIAN WITH BARRIER-TANGENT (PLANAR)
STA. 2074+43.54 TO STA. 2074+88.93 STA. 2146+03.24 TO STA. 2156+65.00

TYPICAL SECTIONS OF IMPROVEMENT

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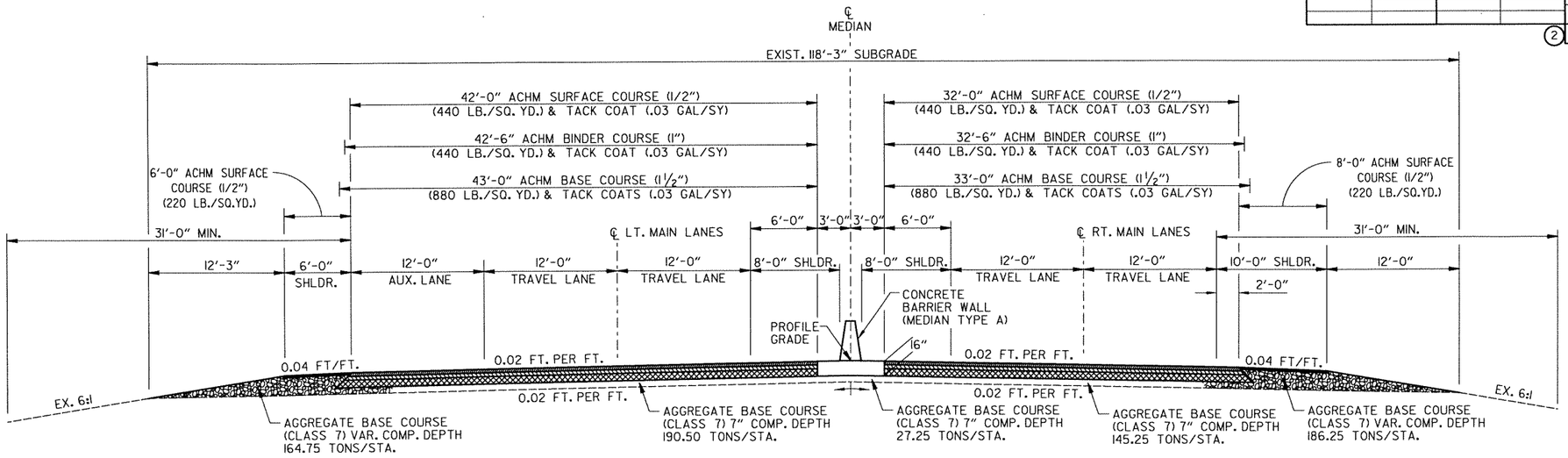
(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11



MAIN LANES
18' MEDIAN WITH BARRIER
TANGENT (LT. & RT. LANES)
STA. 2264+78.54 TO STA. 2266+46.02

———— JOB 020354 PAVING LIMITS
- - - - - - - EXISTING SUBGRADE & SIDE SLOPES

NOTE:

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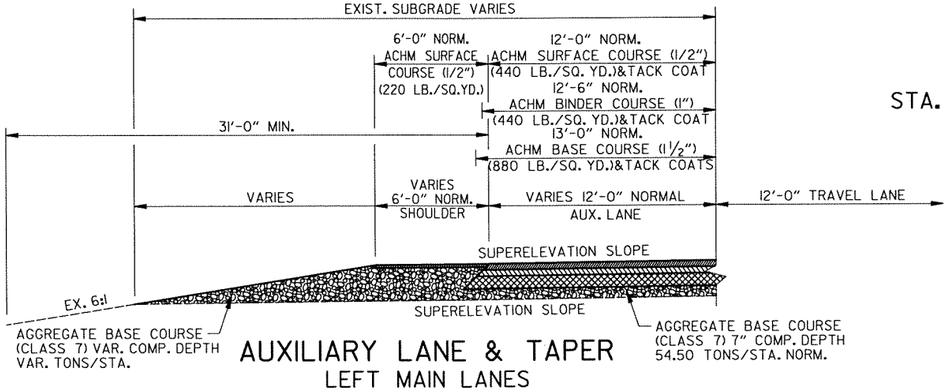
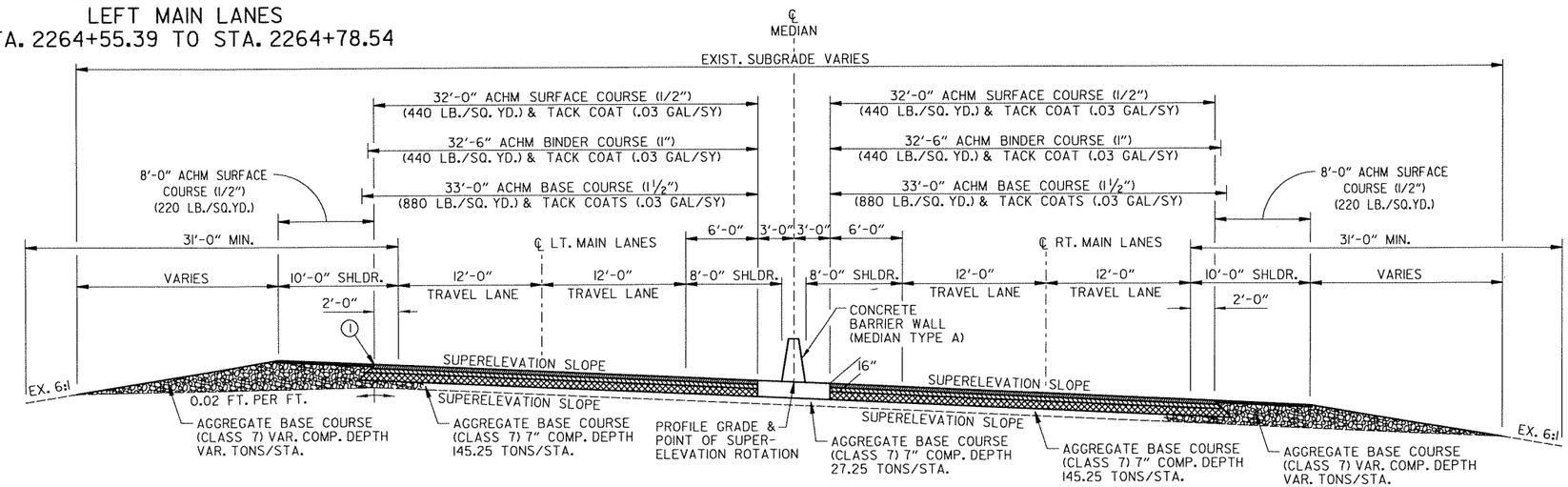


AUXILIARY LANE & TAPER
LEFT MAIN LANES
STA. 2264+55.39 TO STA. 2264+78.54



(1) ON ALL SUPERELEVATED CURVES AND THROUGH SUPERELEVATION TRANSITIONS, THE ALGEBRAIC DIFFERENCE BETWEEN THE PAVEMENT SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8.00%

MAIN LANES
18' MEDIAN WITH BARRIER
SUPERELEVATION (LT. & RT. LANES)
STA. 2261+00.00 TO STA. 2264+78.54

———— JOB 020354 PAVING LIMITS
- - - - - - - EXISTING SUBGRADE & SIDE SLOPES

TYPICAL SECTIONS OF IMPROVEMENT

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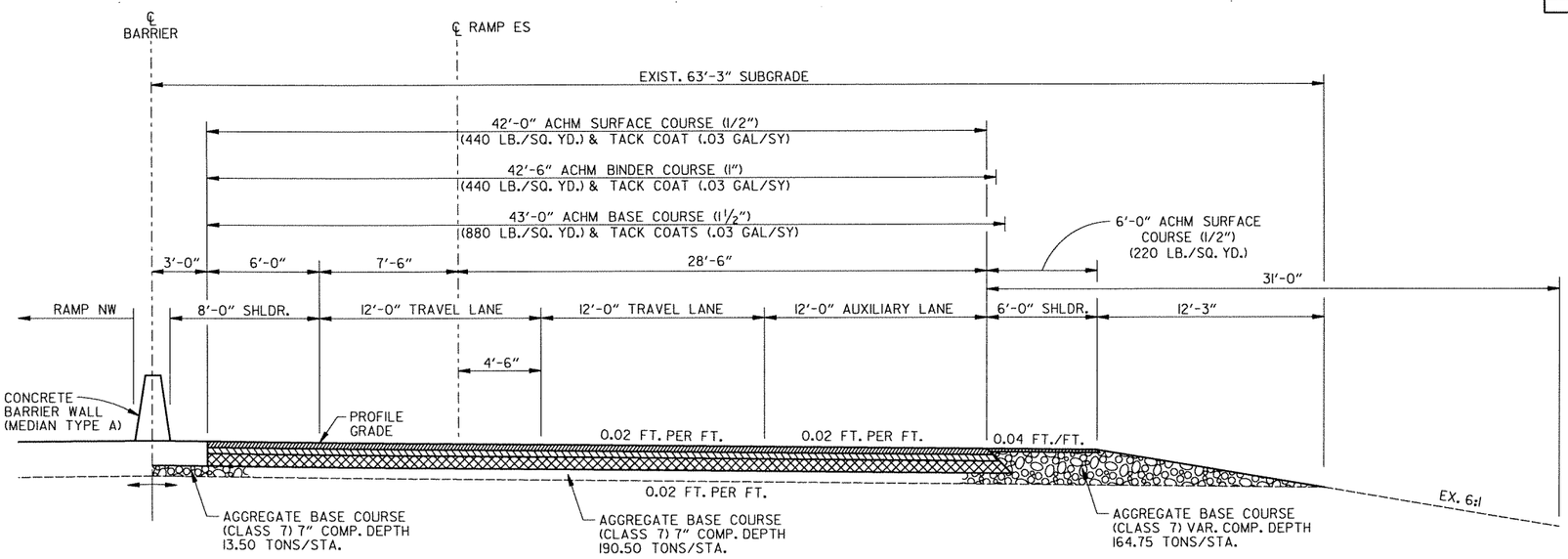
(2) TYPICAL SECTIONS OF IMPROVEMENT



JOB 020354 PAVING LIMITS
EXISTING SUBGRADE & SIDE SLOPES

RAMP ES
TANGENT SECTION
STA. 2266+46.02 TO STA. 2268+78.35
(SHOWN IN DIRECTION OF TRAFFIC)

NOTE:

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STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 8817 PAUL DAVID PENN
5-9-11

TYPICAL SECTIONS OF IMPROVEMENT

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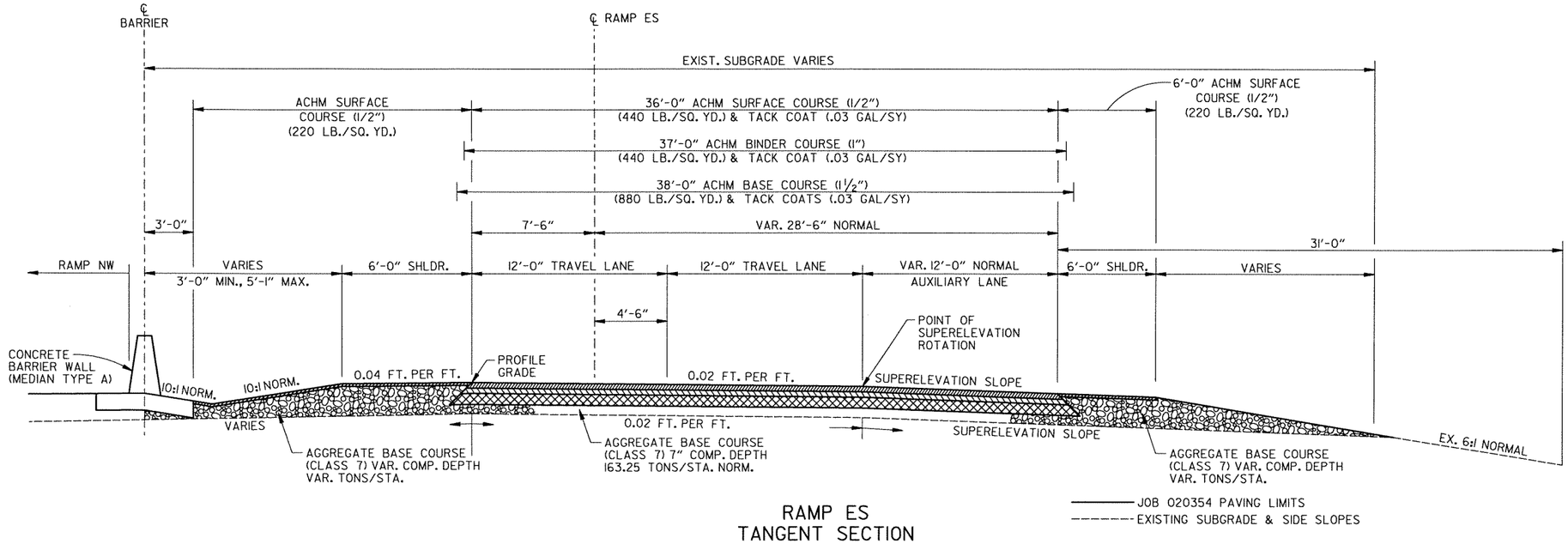
2 TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID DENN
5-9-11



RAMP ES
TANGENT SECTION
STA. 2270+28.35 TO STA. 2271+55.40
(SHOWN IN DIRECTION OF TRAFFIC)

NOTE:

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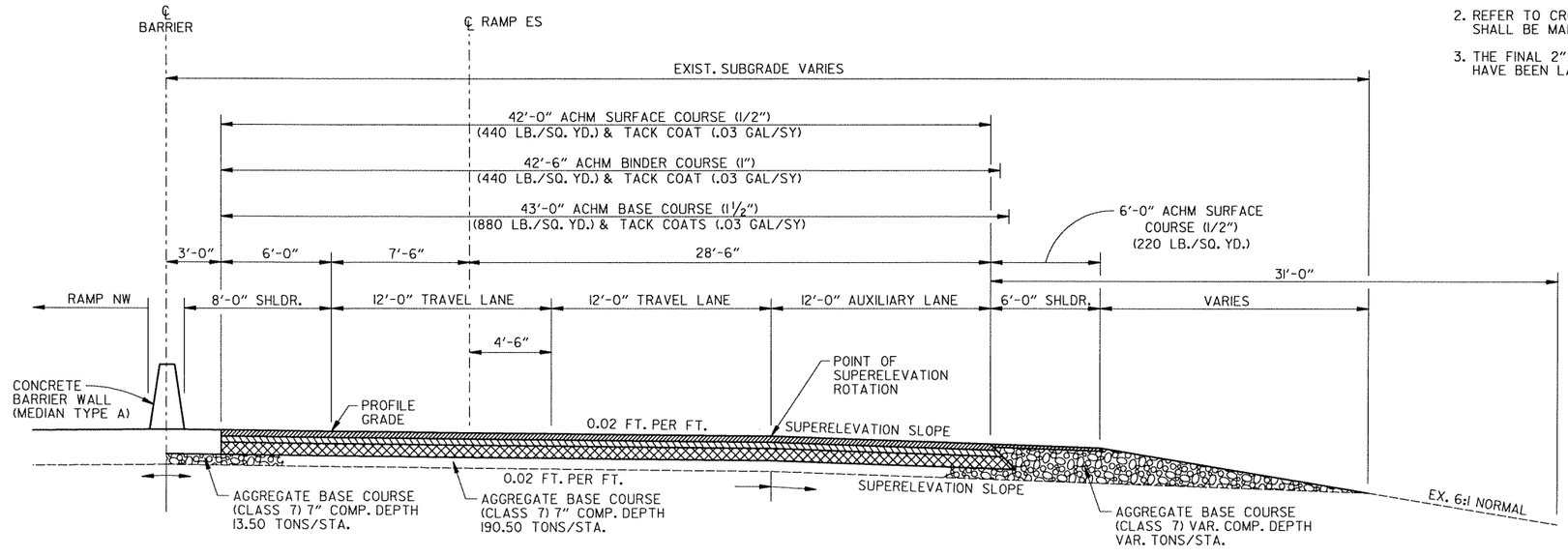

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TANGENT SECTION
STA. 2268+78.35 TO STA. 2270+28.35
(SHOWN IN DIRECTION OF TRAFFIC)

TYPICAL SECTIONS OF IMPROVEMENT

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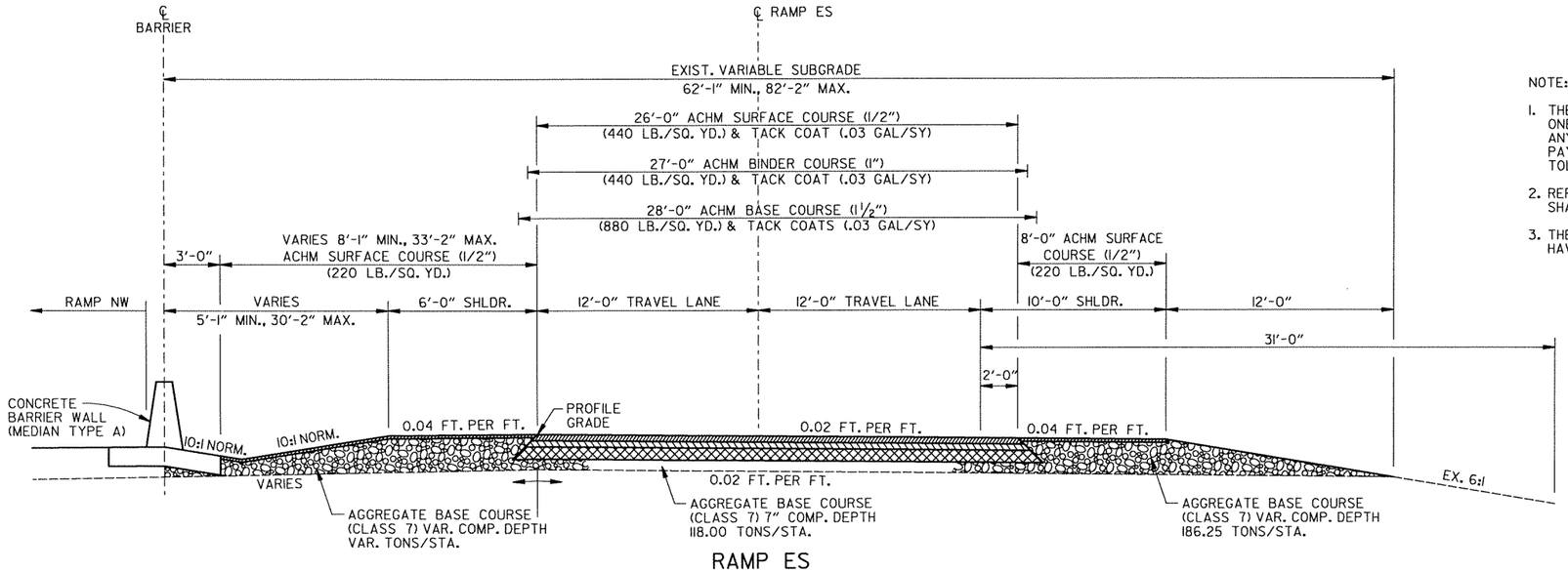
(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID HENRY
5-9-11



RAMP ES
TANGENT SECTION
STA. 2271+55.40 TO STA. 2275+59.92
(SHOWN IN DIRECTION OF TRAFFIC)

——— JOB 020354 PAVING LIMITS
- - - - - - - EXISTING SUBGRADE & SIDE SLOPES

NOTE:

1. 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.
2. REFER TO CROSS SECTIONS FOR DEVIATION FROM THE NORMAL SLOPES. NO CHANGES SHALL BE MADE FROM THE PLANNED SLOPES WITHOUT THE APPROVAL OF THE ENGINEER.
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.

NOTE: CONCRETE BARRIER WALL TRANSITION STA. 2275+08.53 TO STA. 2275+59.92

TYPICAL SECTIONS OF IMPROVEMENT

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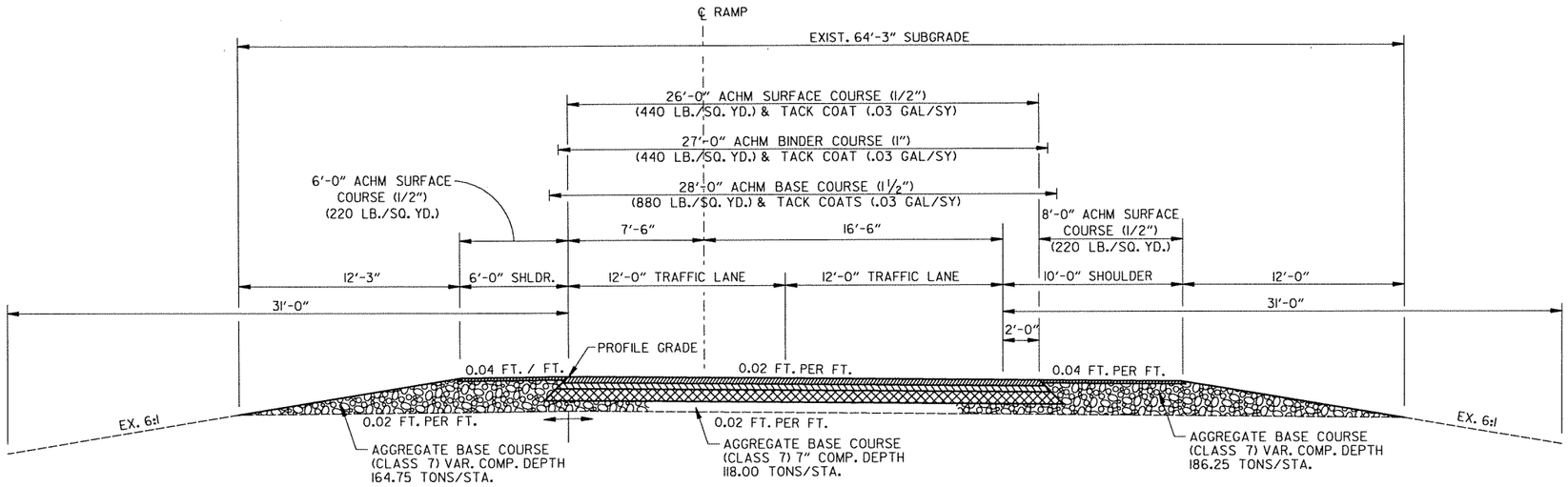
				6	ARK.			
				JOB NO.		020354	13	156

(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENNY
5-9-11



JOB 020354 PAVING LIMITS
EXISTING SUBGRADE & SIDE SLOPES

TWO LANE RAMP
TANGENT SECTION
RAMP ES STA. 2275+59.92 TO STA. 2280+18.12
(SHOWN IN DIRECTION OF TRAFFIC)

NOTE:

1. THE THICKNESS OF AGGREGATE BASE COURSE SHALL BE WITHIN PLUS OR MINUS ONE INCH OF THE PLAN THICKNESS SHOWN. THE CONTRACTOR WILL CORRECT ANY DEFICIENT THICKNESS THAT DOES NOT MEET TOLERANCE INDICATED. PAYMENT WILL NOT BE MADE FOR MATERIAL PLACED IN EXCESS OF THE TOLERANCE INDICATED.
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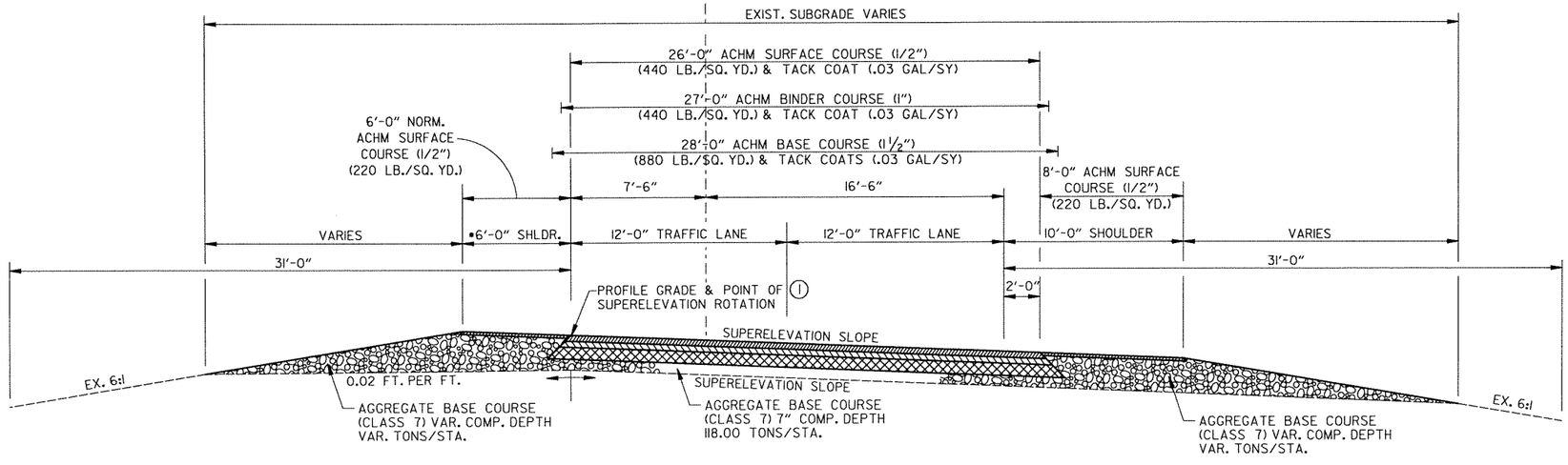
3. THE FINAL 2" OF SURFACE COURSE IS TO BE PLACED AFTER ALL OTHER COURSES HAVE BEEN LAID. LONGITUDINAL JOINTS SHALL BE AT LANE LINES.



JOB 020354 PAVING LIMITS
EXISTING SUBGRADE & SIDE SLOPES

•TRANSITION SHOULDER FROM 8'-0' TO 6'-0"
RAMP NW STA. 2275+50 TO STA. 2276+00

(1) ON ALL SUPERELEVATED CURVES AND THROUGH SUPERELEVATION TRANSITIONS, THE ALGEBRAIC DIFFERENCE BETWEEN THE PAVEMENT SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8.00%

TWO LANE RAMP
SUPERELEVATION
RAMP ES STA. 2280+18.12 TO STA. 2304+00.00
RAMP NW STA. 2275+50.00 TO STA. 2281+45.49
RAMP NW STA. 2316+63.27 TO STA. 2319+00.00
(SHOWN IN DIRECTION OF TRAFFIC)

TYPICAL SECTIONS OF IMPROVEMENT

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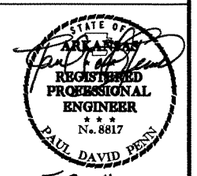
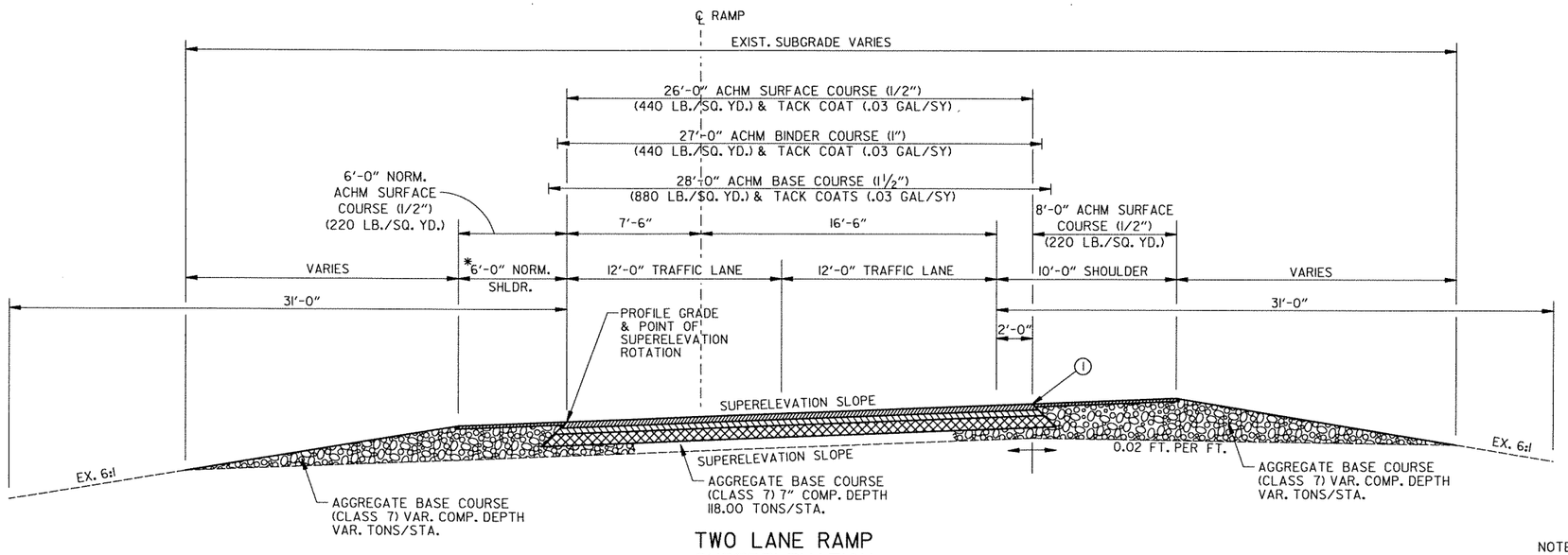
				JOB NO.		020354	14	156

(2) TYPICAL SECTIONS OF IMPROVEMENT





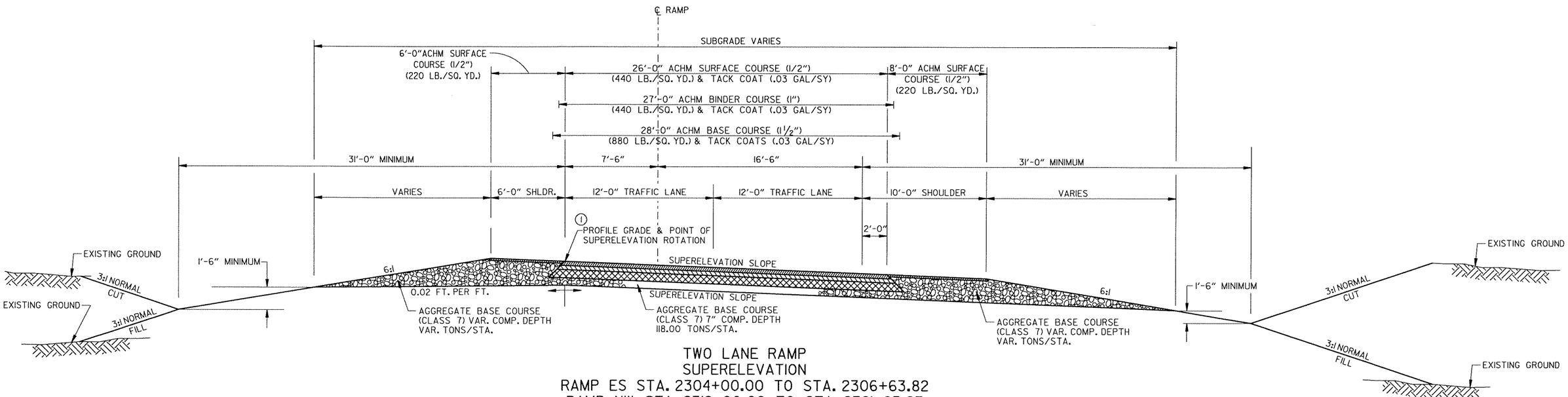
TWO LANE RAMP
SUPERELEVATION
RAMP NW STA. 2281+45.49 TO STA. 2297+20.46
RAMP NW STA. 2311+85.65 TO STA. 2316+63.27
(SHOWN IN DIRECTION OF TRAFFIC)

——— JOB 020354 PAVING LIMITS
- - - - - - - EXISTING SUBGRADE & SIDE SLOPES

NOTE:

1. 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.
2. REFER TO CROSS SECTIONS FOR DEVIATION FROM THE NORMAL SLOPES. NO CHANGES SHALL BE MADE FROM THE PLANNED SLOPES WITHOUT THE APPROVAL OF THE ENGINEER.
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.

NOTE: RAMP NW BRIDGE & APPROACH SLABS-STA. 2297+20.46 TO STA. 2311+85.65



TWO LANE RAMP
SUPERELEVATION
RAMP ES STA. 2304+00.00 TO STA. 2306+63.82
RAMP NW STA. 2319+00.00 TO STA. 2321+85.23
(SHOWN IN DIRECTION OF TRAFFIC)

(1) ON ALL SUPERELEVATED CURVES AND THROUGH SUPERELEVATION TRANSITIONS, THE ALGEBRAIC DIFFERENCE BETWEEN THE PAVEMENT SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8.00%

TYPICAL SECTIONS OF IMPROVEMENT

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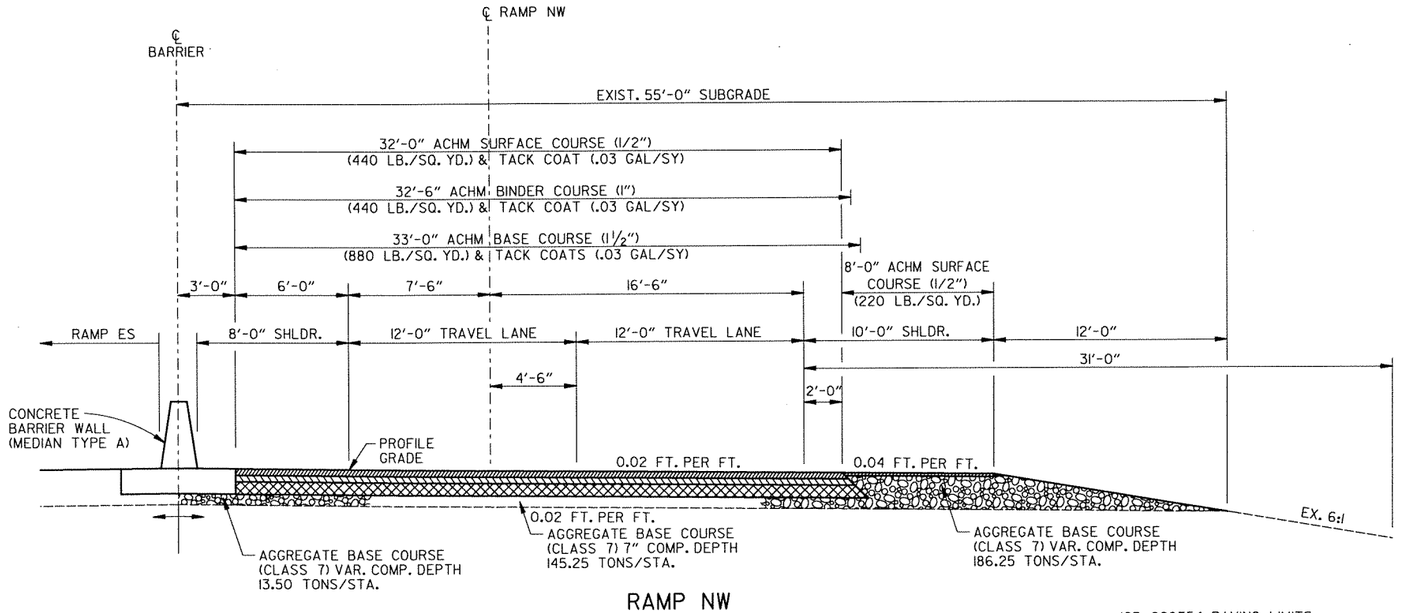
				JOB NO.		020354	15	156

(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENNY
5-9-11

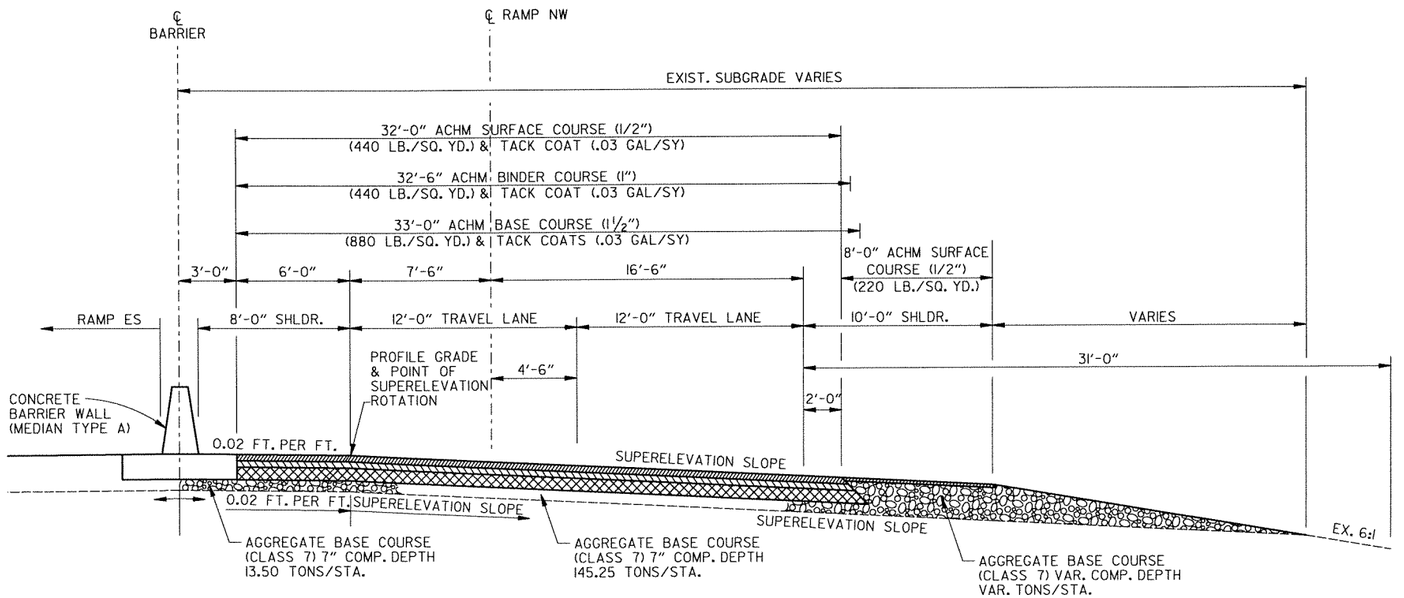


RAMP NW
TANGENT SECTION
STA. 2266+36.83 TO STA. 2267+30.39
(SHOWN IN DIRECTION OF TRAFFIC)

——— JOB 020354 PAVING LIMITS
- - - - - - - EXISTING SUBGRADE & SIDE SLOPES

NOTE:

1. 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.
2. REFER TO CROSS SECTIONS FOR DEVIATION FROM THE NORMAL SLOPES. NO CHANGES SHALL BE MADE FROM THE PLANNED SLOPES WITHOUT THE APPROVAL OF THE ENGINEER.
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.



RAMP NW
SUPERELEVATION
STA. 2267+30.39 TO STA. 2275+50.00
(SHOWN IN DIRECTION OF TRAFFIC)

——— JOB 020354 PAVING LIMITS
- - - - - - - EXISTING SUBGRADE & SIDE SLOPES

NOTE: CONCRETE BARRIER WALL TRANSITION STA. 2275+25 TO STA. 2275+50 (REFER TO SHEET 23)

TYPICAL SECTIONS OF IMPROVEMENT

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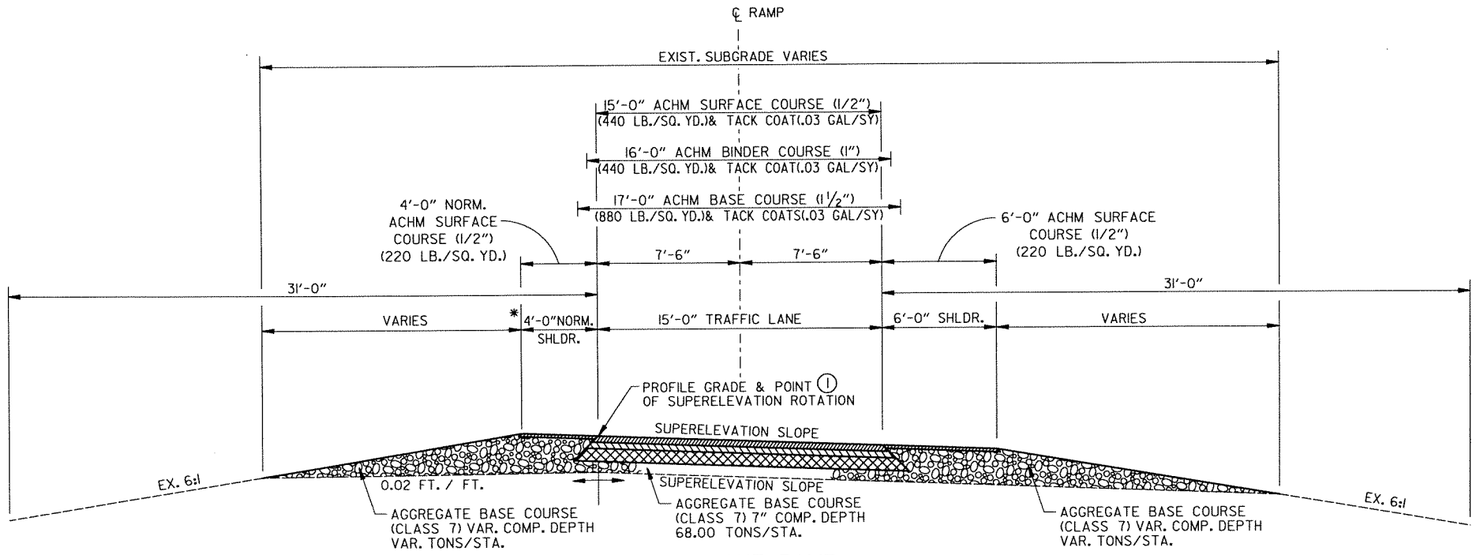
(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENNY
5-9-11



(1) ON ALL SUPERELEVATED CURVES AND THROUGH SUPERELEVATION TRANSITIONS, THE ALGEBRAIC DIFFERENCE BETWEEN THE PAVEMENT SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8.00%

* SHOULDER WIDTH VARIES. SEE PLAN & PROFILE SHEETS FOR LOCATIONS.

ONE LANE RAMP SUPERELEVATION

RAMP WS STA. 2271+54.84 TO STA. 2285+13.76
RAMP WS STA. 2320+62.57 TO STA. 2322+00.00
RAMP NE STA. 2296+01.65 TO STA. 2301+17.92
RAMP NE STA. 2305+89.08 TO STA. 2306+00.00
(SHOWN IN DIRECTION OF TRAFFIC)

NOTE: RAMP NE BRIDGE & APPROACH SLABS- STA. 2301+17.92 TO STA. 2305+89.08
RAMP WS BRIDGE & APPROACH SLABS- STA. 2318+11.43 TO STA. 2320+62.57

——— JOB 020354 PAVING LIMITS
- - - - - - - EXISTING SUBGRADE & SIDE SLOPES

NOTE:

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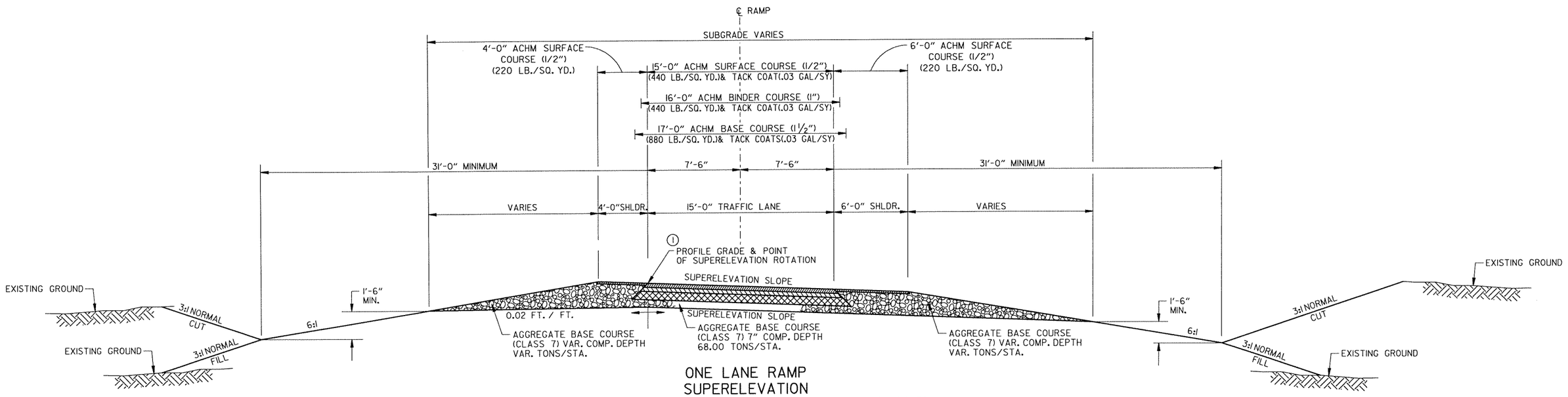

(1) ON ALL SUPERELEVATED CURVES AND THROUGH SUPERELEVATION TRANSITIONS, THE ALGEBRAIC DIFFERENCE BETWEEN THE PAVEMENT SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8.00%

ONE LANE RAMP SUPERELEVATION

RAMP WS STA. 2322+00.00 TO STA. 2324+44.61
RAMP NE STA. 2306+00.00 TO STA. 2308+64.68
(SHOWN IN DIRECTION OF TRAFFIC)

TYPICAL SECTIONS OF IMPROVEMENT

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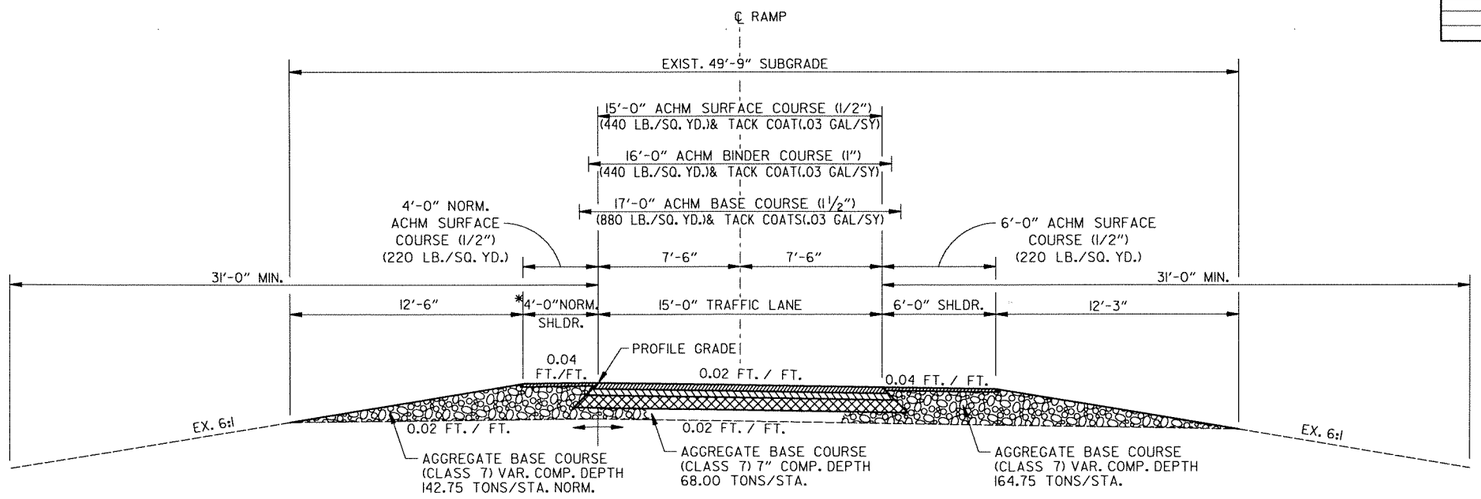
				6	ARK.			
				JOB NO.		020354	17	156

(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11



ONE LANE RAMP
TANGENT SECTION
RAMP WS STA. 2314+21.61 TO STA. 2318+11.43
(SHOWN IN DIRECTION OF TRAFFIC)

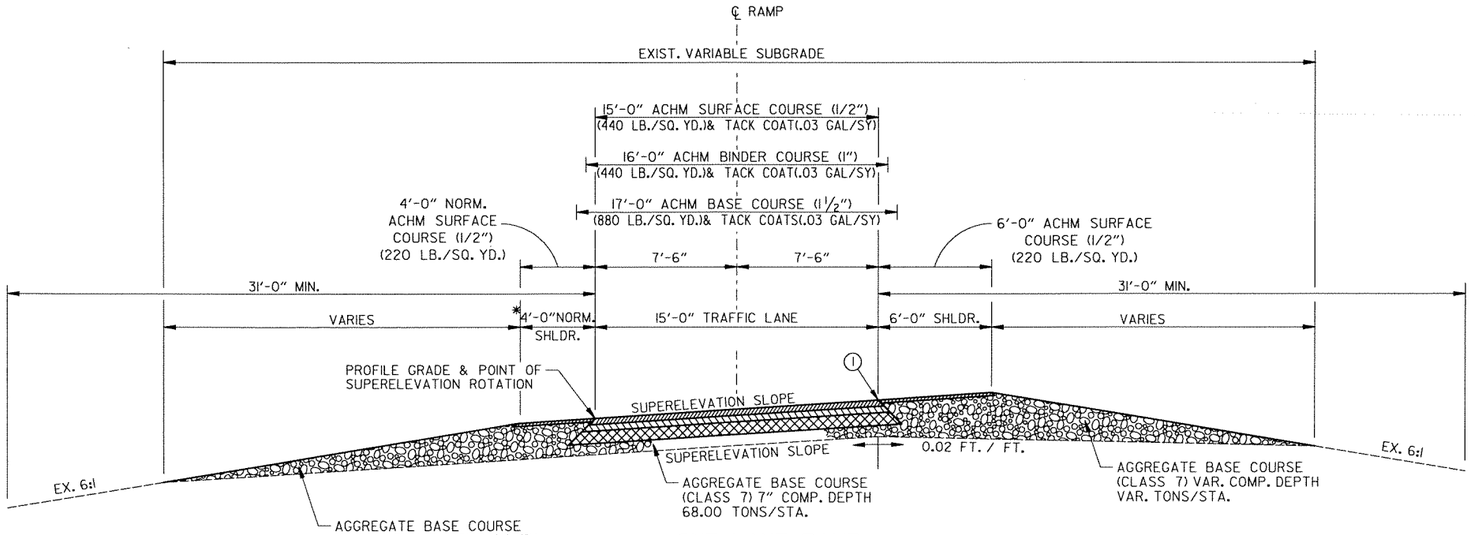
——— JOB 020354 PAVING LIMITS
- - - - - - - EXISTING SUBGRADE & SIDE SLOPES

NOTE:

1. 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.
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.

* SHOULDER WIDTH VARIES. SEE PLAN & PROFILE SHEETS AND CROSS SECTIONS FOR LOCATIONS.

NOTE: RAMP WS BRIDGE & APPROACH SLABS - STA. 2295+43.06 TO STA. 2314+21.61



(1) ON ALL SUPERELEVATED CURVES AND THROUGH SUPERELEVATION TRANSITIONS, THE ALGEBRAIC DIFFERENCE BETWEEN THE PAVEMENT SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8.00%

ONE LANE RAMP
SUPERELEVATION
RAMP WS STA. 2285+13.76 TO STA. 2295+43.05
RAMP NE STA. 2294+62.21 TO STA. 2296+01.65
(SHOWN IN DIRECTION OF TRAFFIC)

——— JOB 020354 PAVING LIMITS
- - - - - - - EXISTING SUBGRADE & SIDE SLOPES

TYPICAL SECTIONS OF IMPROVEMENT

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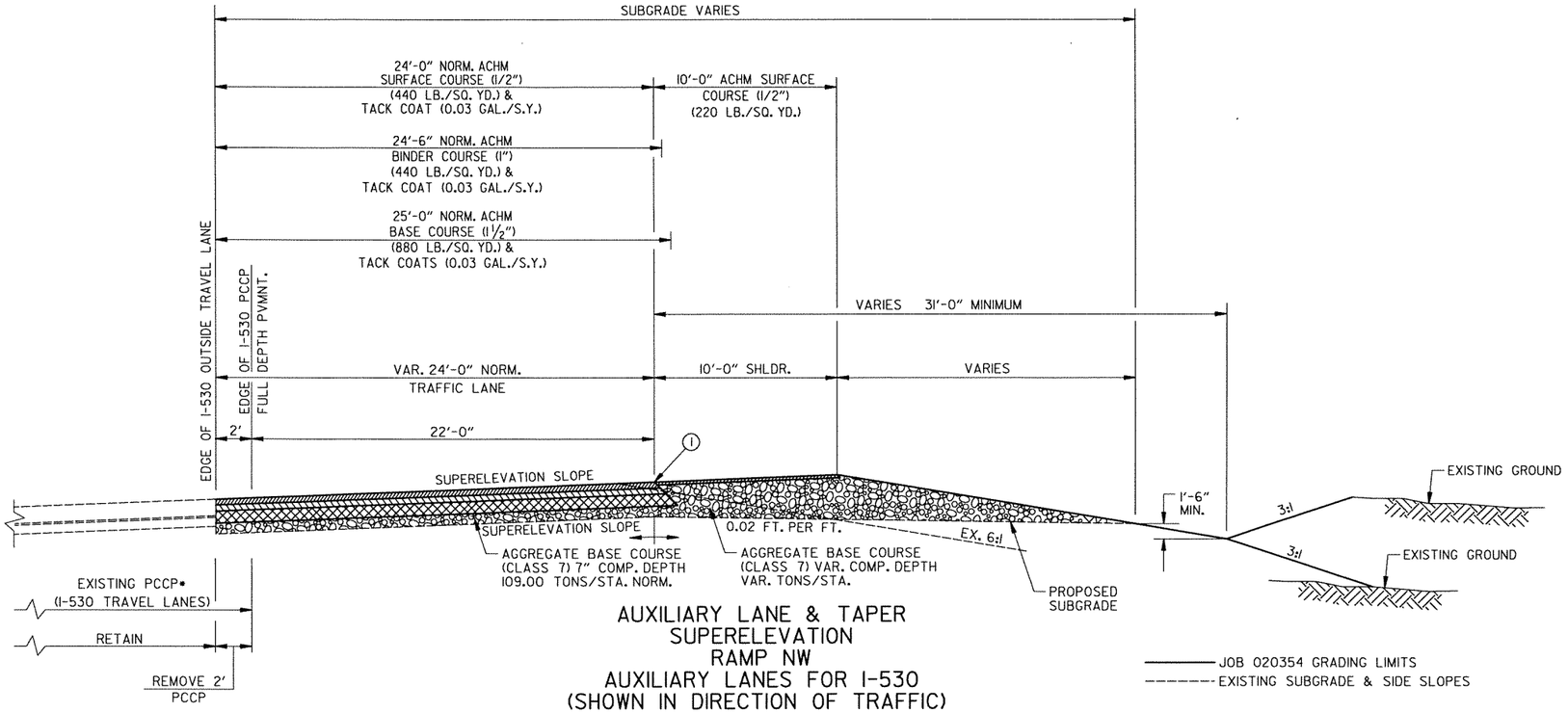
				6	ARK.			
				JOB NO.		020354	18	156

(2) TYPICAL SECTIONS OF IMPROVEMENT

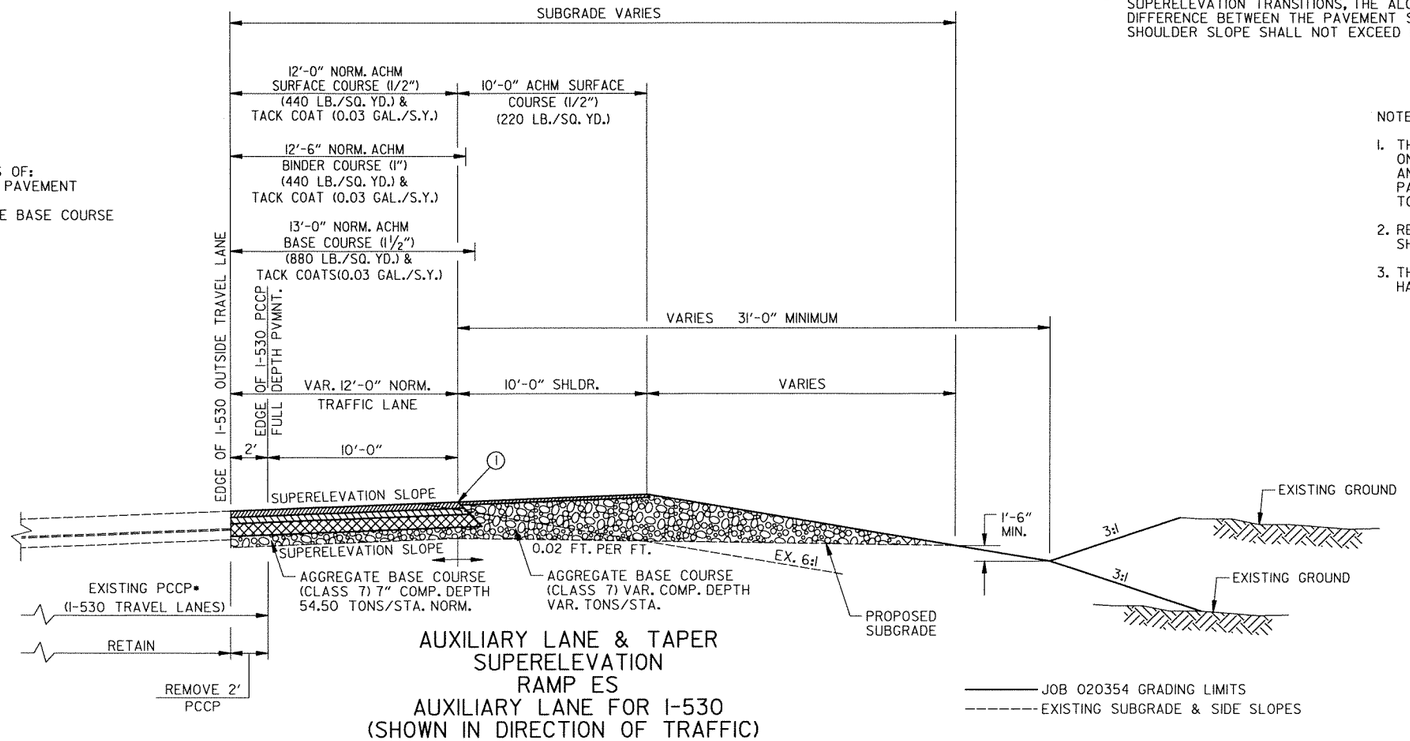
STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 8817 PAUL DAVID PENNY

5-9-11



AUXILIARY LANE & TAPER
SUPERELEVATION
RAMP NW
AUXILIARY LANES FOR I-530
(SHOWN IN DIRECTION OF TRAFFIC)

(1) ON ALL SUPERELEVATED CURVES AND THROUGH SUPERELEVATION TRANSITIONS, THE ALGEBRAIC DIFFERENCE BETWEEN THE PAVEMENT SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8.00%



•EXISTING PCCP SECTION CONSISTS OF:
11" PORTLAND CEMENT CONCRETE PAVEMENT
1" ACHM SURFACE COURSE
6" CEMENT STAB. CRUSHED STONE BASE COURSE

AUXILIARY LANE & TAPER
SUPERELEVATION
RAMP ES
AUXILIARY LANE FOR I-530
(SHOWN IN DIRECTION OF TRAFFIC)

NOTE:

1. 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.
2. REFER TO CROSS SECTIONS FOR DEVIATION FROM THE NORMAL SLOPES. NO CHANGES SHALL BE MADE FROM THE PLANNED SLOPES WITHOUT THE APPROVAL OF THE ENGINEER.
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.

TYPICAL SECTIONS OF IMPROVEMENT

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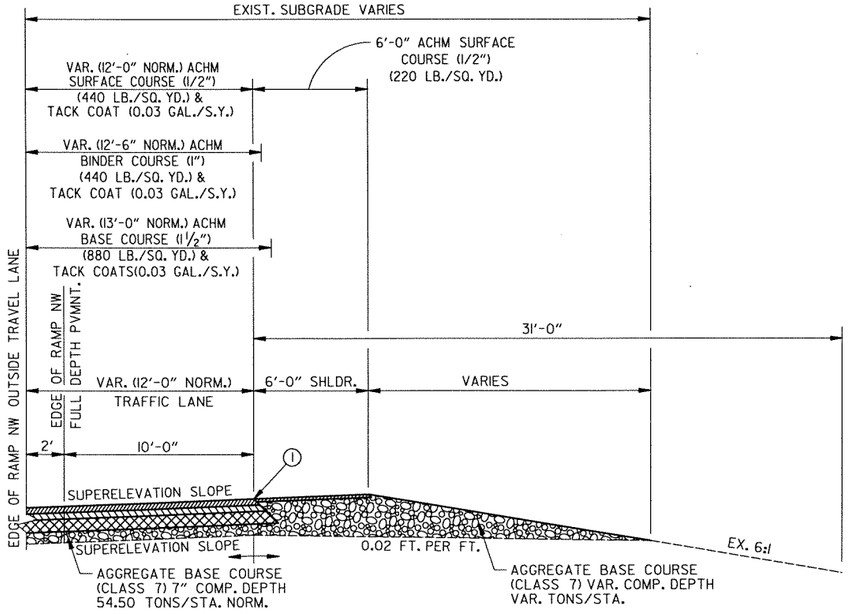
				JOB NO.		020354	19	156

(2) TYPICAL SECTIONS OF IMPROVEMENT

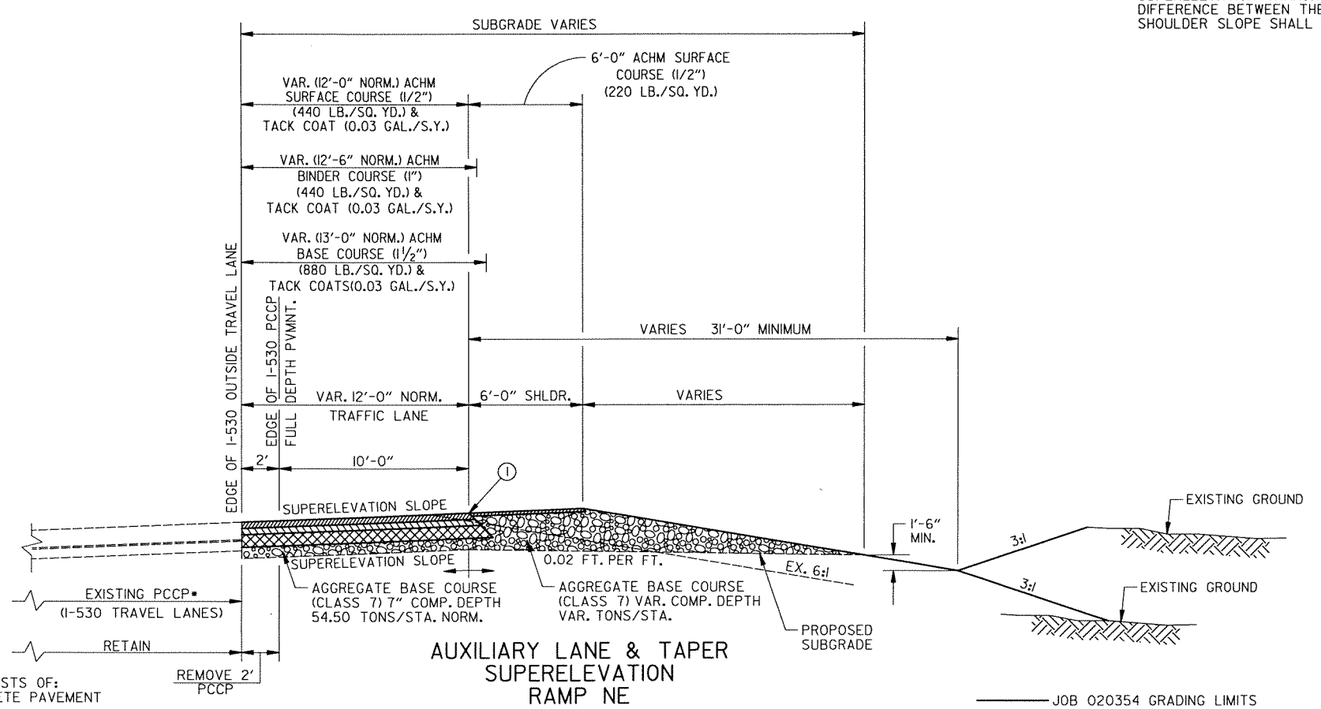
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENNY
5-9-11



AUXILIARY LANE & TAPER
SUPERELEVATION
RAMP NW STA. 2286+94.06 TO STA. 2294+57.40
(SHOWN IN DIRECTION OF TRAFFIC)

——— JOB 020354 PAVING LIMITS
- - - - - - - EXISTING SUBGRADE & SIDE SLOPES

(1) ON ALL SUPERELEVATED CURVES AND THROUGH SUPERELEVATION TRANSITIONS, THE ALGEBRAIC DIFFERENCE BETWEEN THE PAVEMENT SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8.00%



*EXISTING PCCP SECTION CONSISTS OF:
11" PORTLAND CEMENT CONCRETE PAVEMENT
1" ACHM SURFACE COURSE
6" CEMENT STAB. CRUSHED STONE BASE COURSE

AUXILIARY LANE & TAPER
SUPERELEVATION
RAMP NE
AUXILIARY LANES FOR I-530
(SHOWN IN DIRECTION OF TRAFFIC)

——— JOB 020354 GRADING LIMITS
- - - - - - - EXISTING SUBGRADE & SIDE SLOPES

NOTE:

1. 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.
2. REFER TO CROSS SECTIONS FOR DEVIATION FROM THE NORMAL SLOPES. NO CHANGES SHALL BE MADE FROM THE PLANNED SLOPES WITHOUT THE APPROVAL OF THE ENGINEER.
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. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS.

TYPICAL SECTIONS OF IMPROVEMENT

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				JOB NO.		020354	20	156
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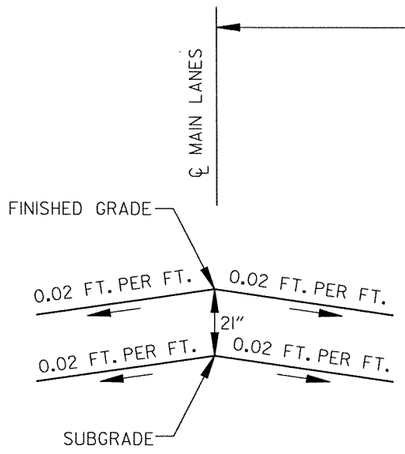
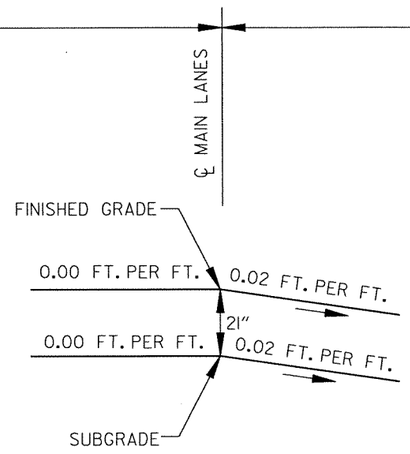
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11



(1)

2-WAY TRAFFIC
NORMAL CROWN
BEGIN TRANSITION



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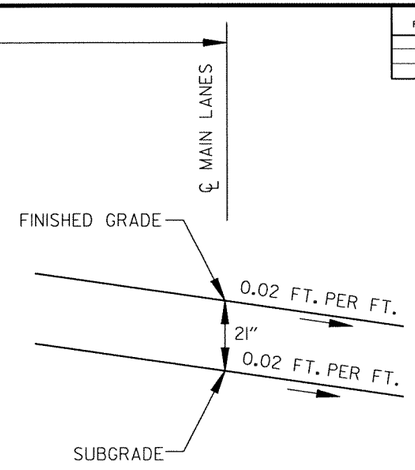


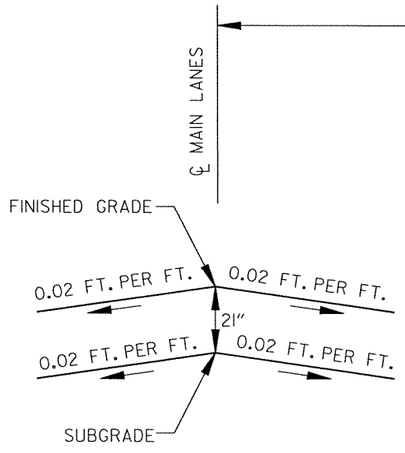
(3)

REVERSE
CROWN

NORMAL CROWN TO REVERSE CROWN TRANSITION

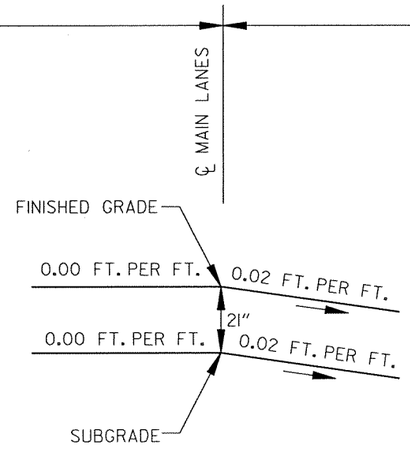
STA. 2057+96.12 TO STA. 2059+58.12

(1) FINISHED GRADE = PROFILE GRADE MINUS 0.41'
(2) FINISHED GRADE = PROFILE GRADE MINUS 0.41'
(3) FINISHED GRADE = PROFILE GRADE MINUS 0.41'



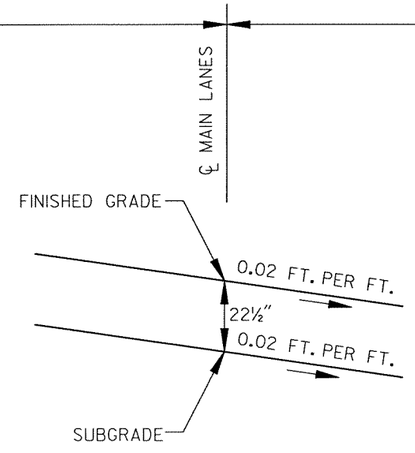
(1)

2-WAY TRAFFIC
NORMAL CROWN
BEGIN TRANSITION



(2)

TANGENT RUNOUT



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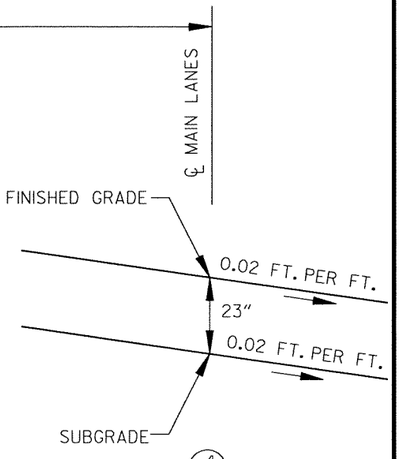
REVERSE
CROWN



(4)

FULL
DEPTH

BRIDGE PROFILE TRANSITION

STA. 2096+00 TO STA. 2099+50 (4-1)
STA. 2115+50 TO STA. 2119+00 (1-4)
STA. 2177+75 TO STA. 2181+25 (4-1)
STA. 2242+36.80 TO STA. 2245+86.80 (1-4)

(1) FINISHED GRADE = PROFILE GRADE MINUS 0.59'
(2) FINISHED GRADE = PROFILE GRADE MINUS 0.59'
(3) FINISHED GRADE = PROFILE GRADE MINUS 0.46'
(4) FINISHED GRADE = PROFILE GRADE MINUS 0.42'

SPECIAL DETAILS

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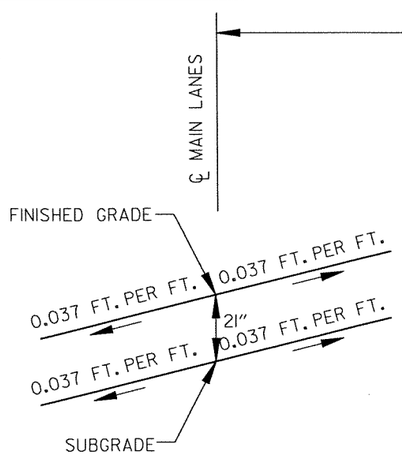
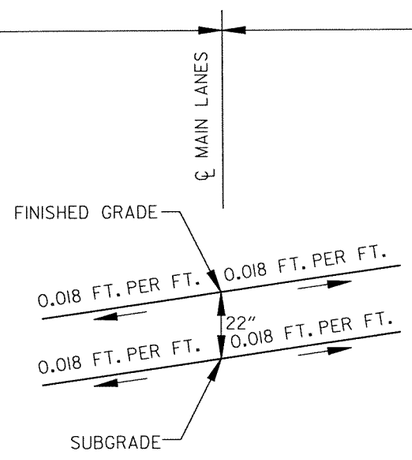
(2) SPECIAL DETAILS



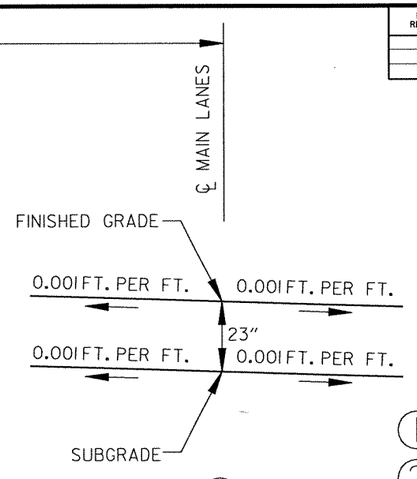
(1)

STA. 2084+08.06
END MAX SUPER-E
BEGIN PAVEMENT TRANSITION



(2)

STA. 2085+08.06



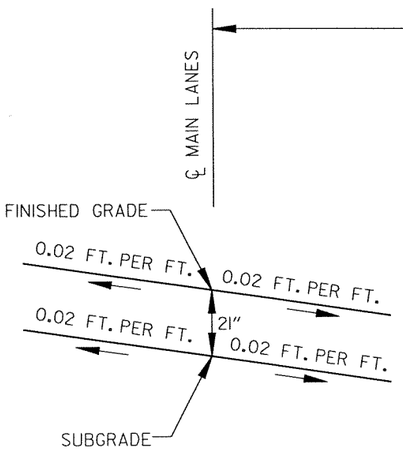
(3)

STA. 2086+08.06
END PAVEMENT TRANSITION

PAVEMENT TRANSITION IN SUPER-E TRANSITION

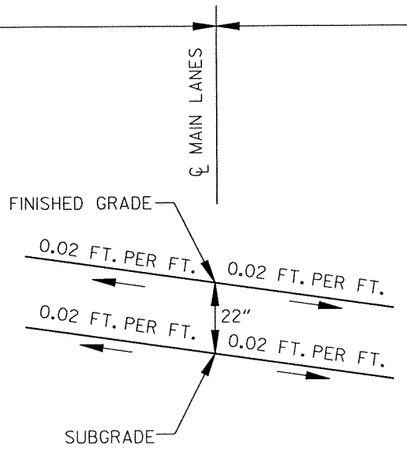
STA. 2084+08.06 TO STA. 2086+08.06 (1-3)
STA. 2128+38.33 TO STA. 2130+38.33 (3-1)

(1) FINISHED GRADE = PROFILE GRADE PLUS 0.610'
(2) FINISHED GRADE = PROFILE GRADE PLUS 0.295'
(3) FINISHED GRADE = PROFILE GRADE MINUS 0.021'



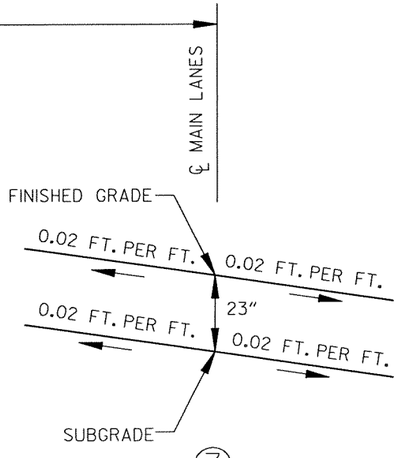
(1)

STA. 2156+65.00
BEGIN PAVEMENT TRANSITION



(2)

STA. 2157+65.00



(3)

STA. 2158+65.00
END PAVEMENT TRANSITION

PAVEMENT TRANSITION PLANAR SECTION

STA. 2156+50 TO STA. 2158+50

(1) FINISHED GRADE = PROFILE GRADE MINUS 0.587'
(2) FINISHED GRADE = PROFILE GRADE MINUS 0.503'
(3) FINISHED GRADE = PROFILE GRADE MINUS 0.420'

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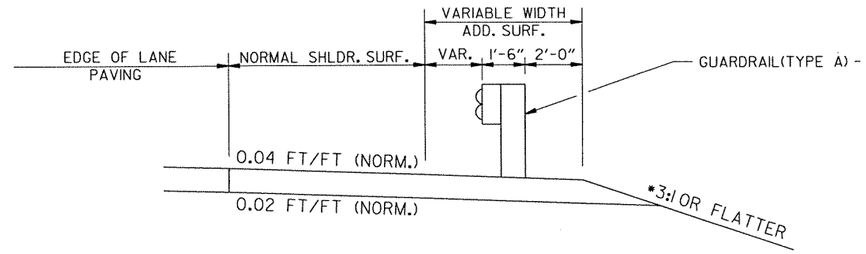
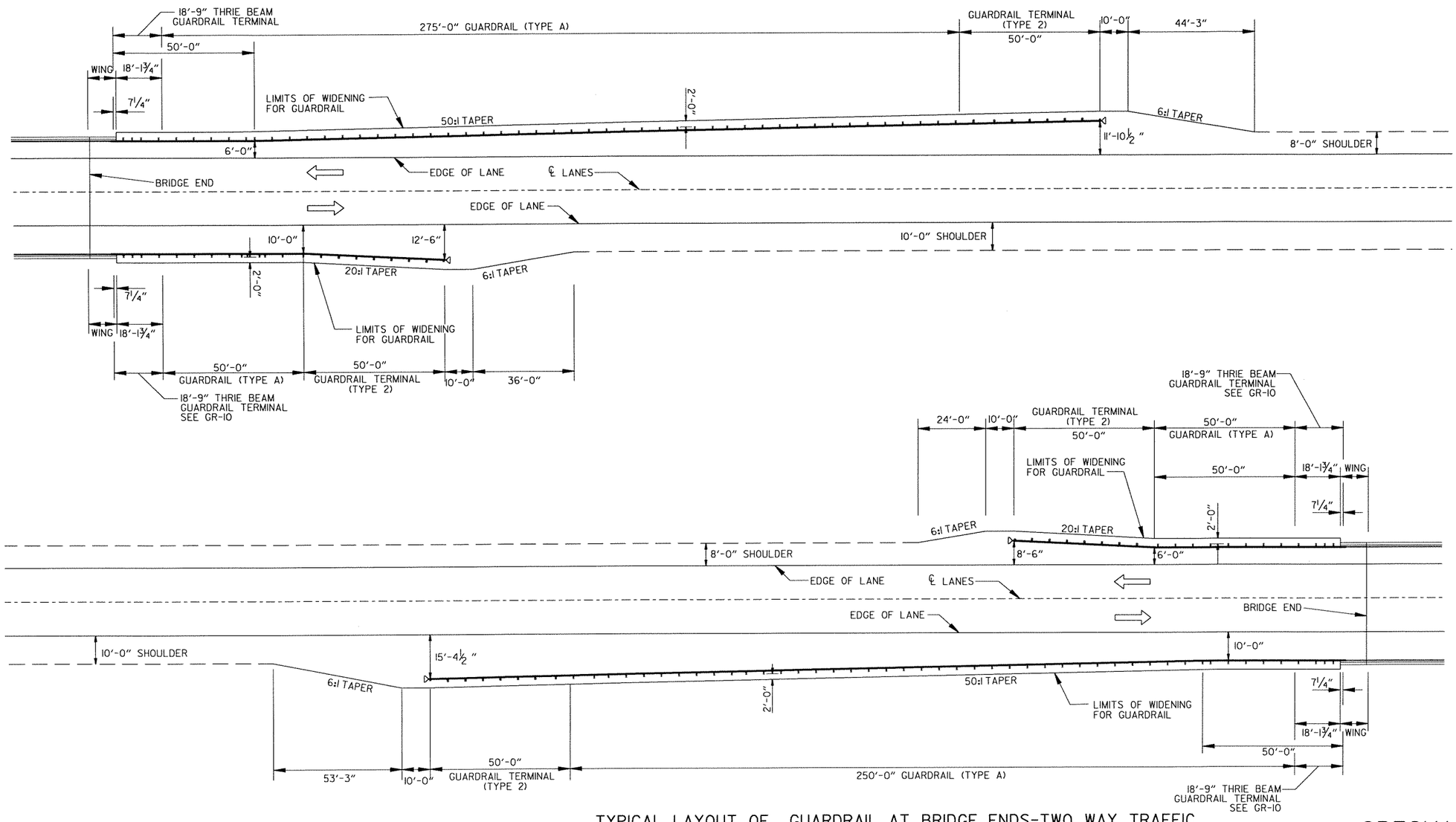


TYPICAL SECTION OF WIDENING FOR GUARDRAIL

NOTE: REFER TO STANDARD DRAWINGS, GR-8, GR-8A, GR-9, GR-9A, GR-10 & GR-10A FOR ADDITIONAL INFORMATION.
*REFER TO STANDARD DRAWING GR-9A AND CROSS SECTIONS FOR SLOPE REQUIREMENTS BEHIND GUARDRAIL



TYPICAL LAYOUT OF GUARDRAIL AT BRIDGE ENDS-TWO WAY TRAFFIC

SPECIAL DETAILS

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(2) SPECIAL DETAILS

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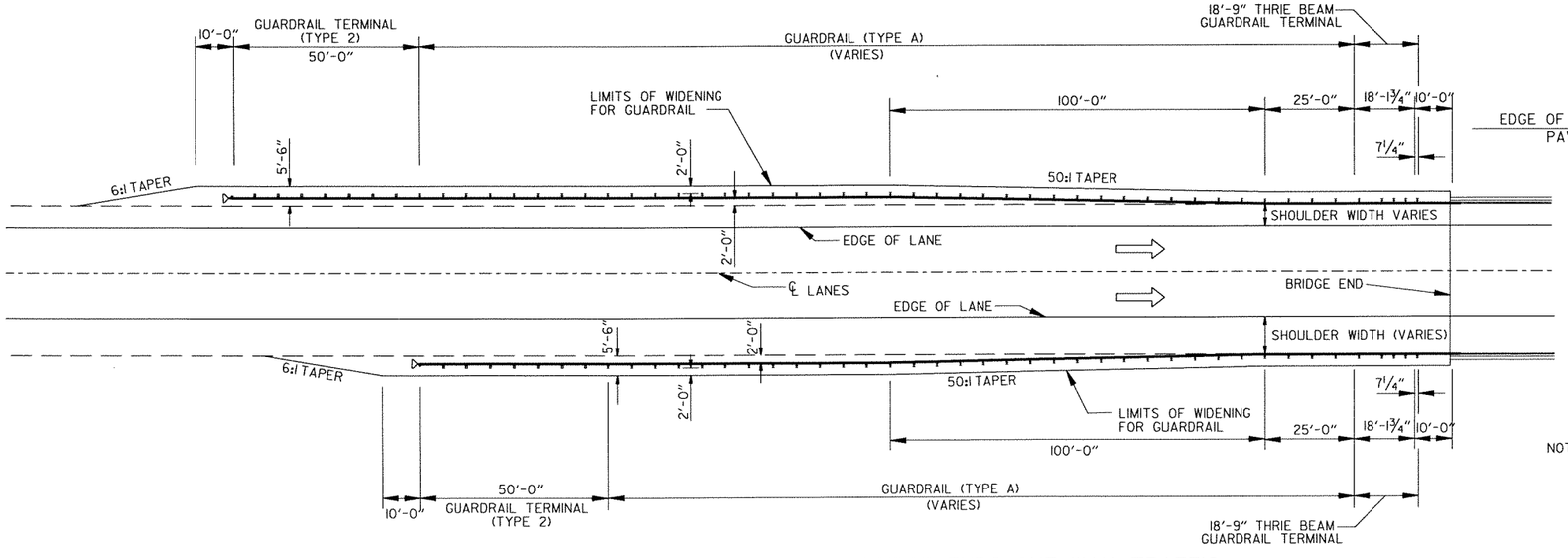
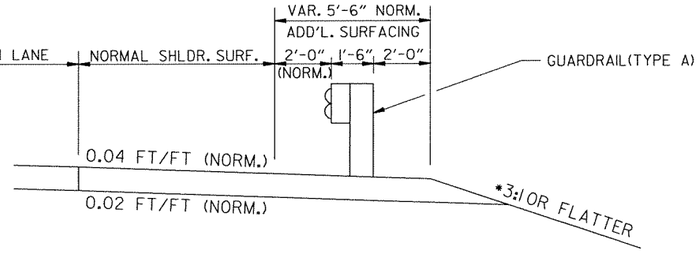
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENNY

5-9-11



TYPICAL LAYOUT OF GUARDRAIL AT BRIDGE ENDS-ONE WAY TRAFFIC

NOTE: REFER TO PLAN SHEETS FOR LOCATION OF GUARDRAIL (TYPE A)



TYPICAL SECTION OF WIDENING FOR GUARDRAIL

NOTE: REFER TO STANDARD DRAWINGS, GR-8, GR-8A, GR-9, GR-9A, GR-10 & GR-10A FOR ADDITIONAL INFORMATION.
*REFER TO STANDARD DRAWING GR-9A AND CROSS SECTIONS FOR SLOPE REQUIREMENTS BEHIND GUARDRAIL

SPECIAL DETAILS

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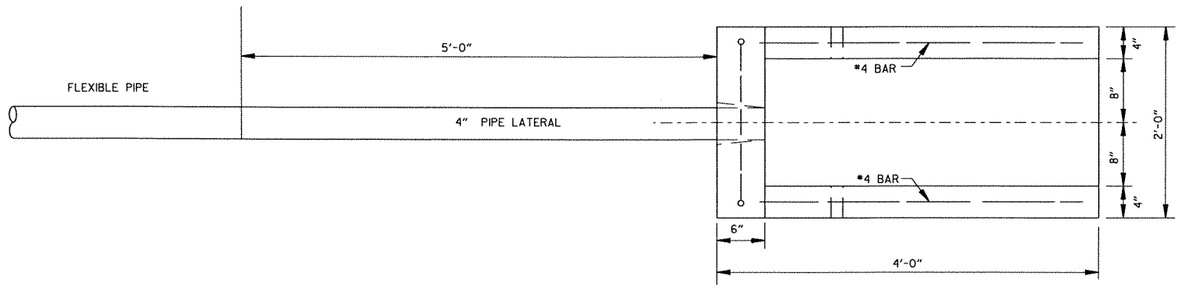
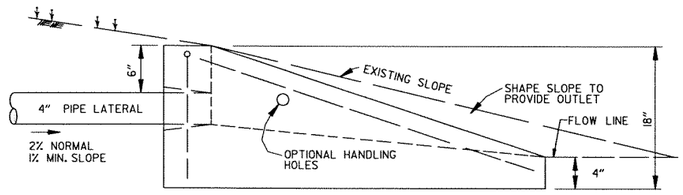
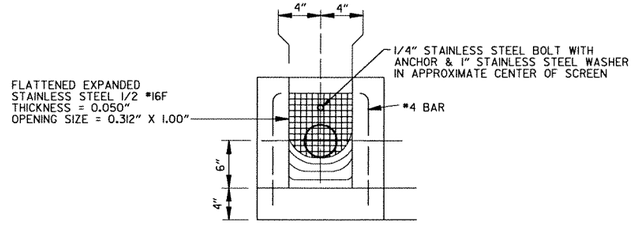


PLAN VIEW

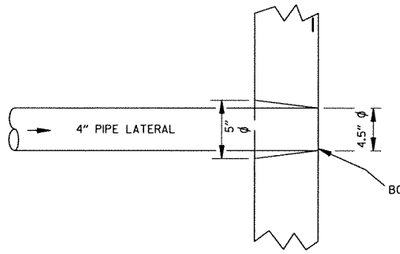


SIDE VIEW



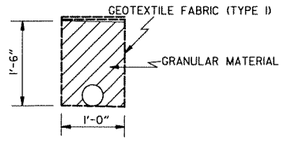
FRONT VIEW

UNDERDRAIN OUTLET PROTECTORS

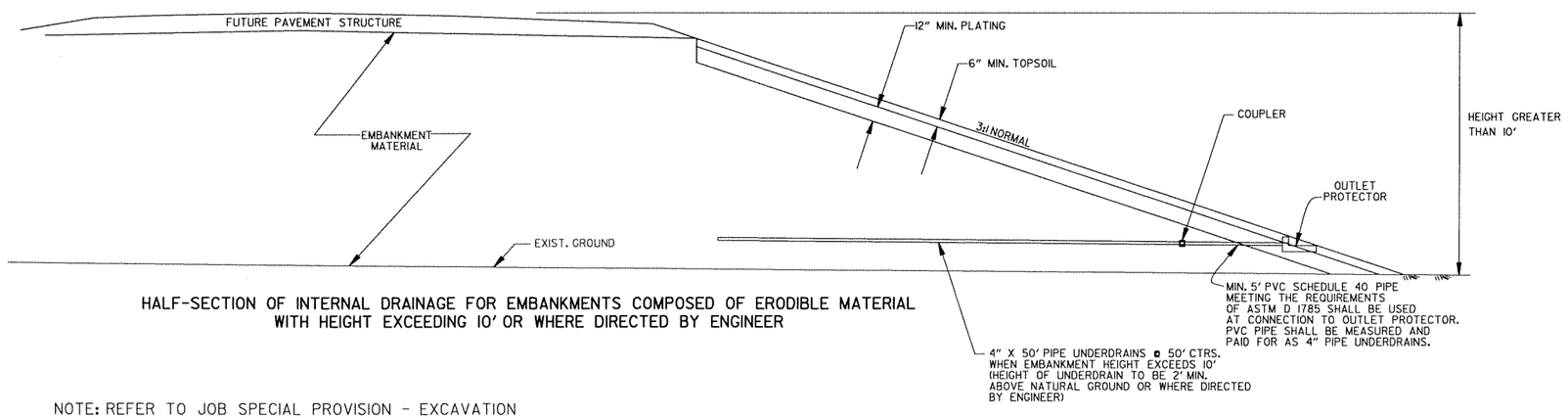


DETAIL OF HOLE FOR 4" PIPE

NOTE: GEOTEXTILE FABRIC SHALL MEET THE REQUIREMENTS OF SECTION 625 FOR TYPE I. GEOTEXTILE FABRIC SHALL BE PLACED ON BOTTOM AND SIDES OF TRENCH AND LAPPED ON TOP.



DETAILS OF PIPE UNDERDRAINS



HALF-SECTION OF INTERNAL DRAINAGE FOR EMBANKMENTS COMPOSED OF ERODIBLE MATERIAL WITH HEIGHT EXCEEDING 10' OR WHERE DIRECTED BY ENGINEER

NOTE: REFER TO JOB SPECIAL PROVISION - EXCAVATION AND EMBANKMENT FOR ADDITIONAL INFORMATION

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(2) SPECIAL DETAILS

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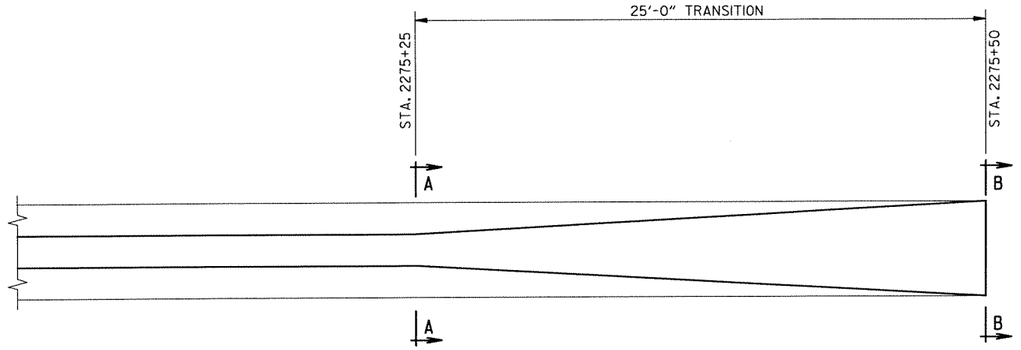
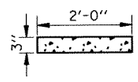
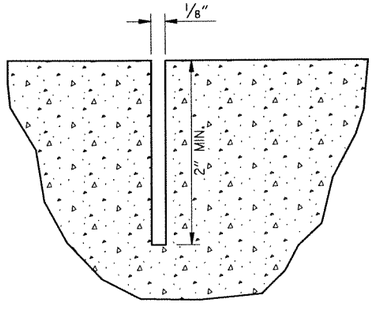


PLAN VIEW
CONCRETE BARRIER WALL (MEDIAN TYPE A) TRANSITION

NOTE: 25'-0" TRANSITION SECTION WILL BE MEASURED AND PAID FOR AS CONCRETE BARRIER WALL (MEDIAN TYPE A). TO BE CONSTRUCTED AT END OF BARRIER WALL (RAMP NW STA. 2275+25 TO STA. 2275+50)

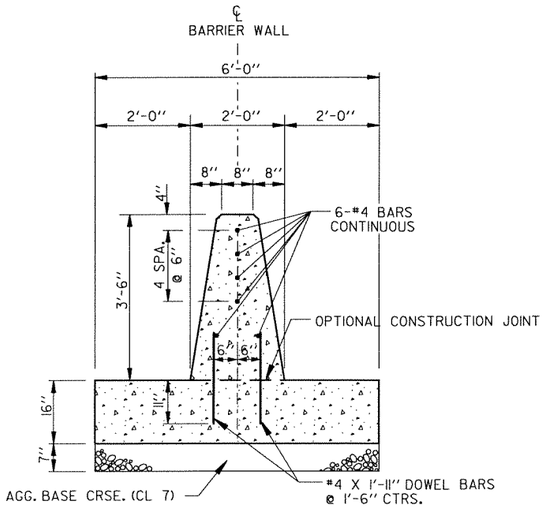


CONCRETE BARRIER WALL (MEDIAN TYPE A)
SECTION B-B



CONTRACTION JOINT DETAIL

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



CONCRETE BARRIER WALL (MEDIAN TYPE A)
(STA. 2261+00 I-69 CONN. TO STA. 2275+25 RAMP NW)
SECTION A-A

SPECIAL DETAILS

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No. 8817
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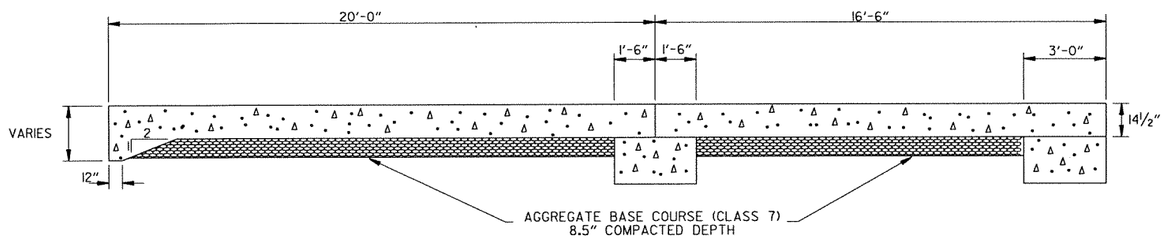
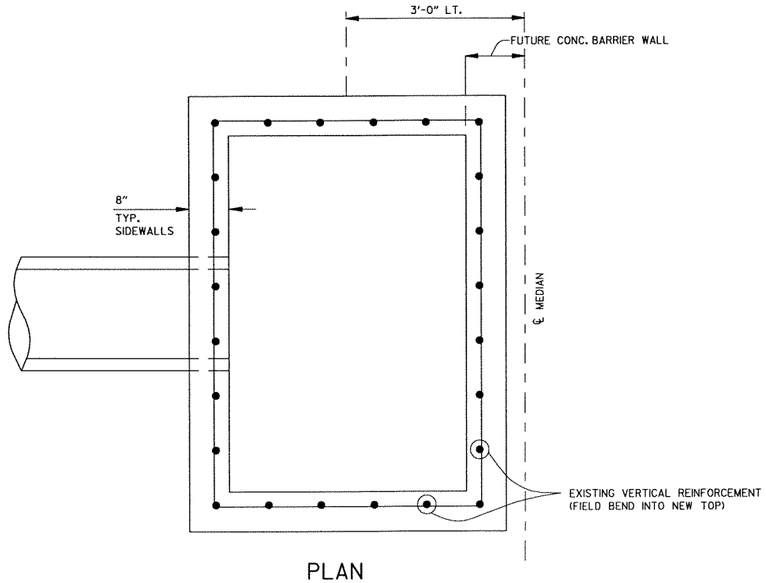
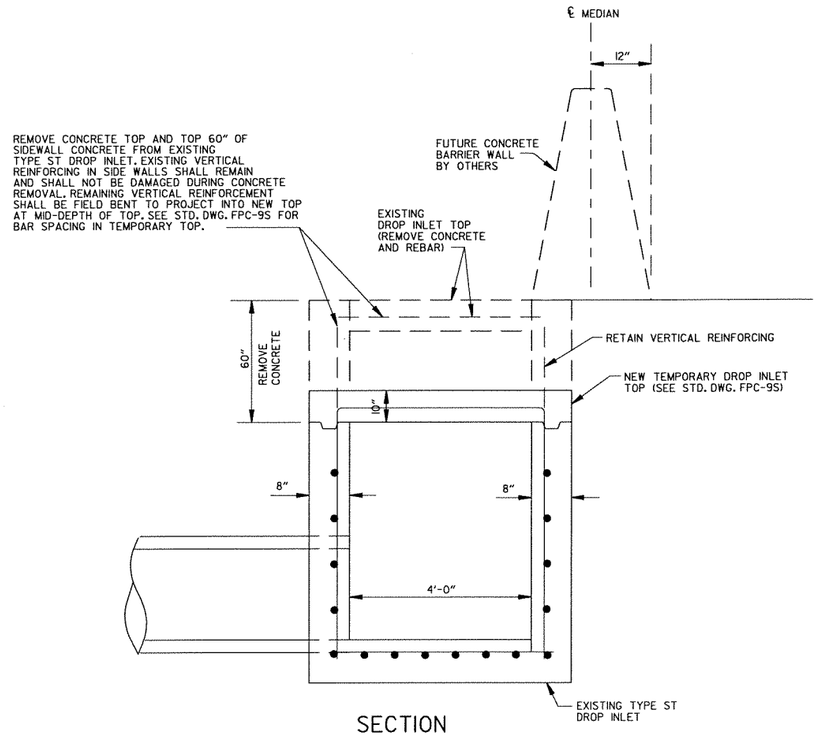
5-9-11



SPECIAL DETAIL OF APPROACH SLAB



PLAN



SECTION

DETAILS OF TYPE ST DROP INLET MODIFICATIONS
STA. 2252+50

SPECIAL DETAILS

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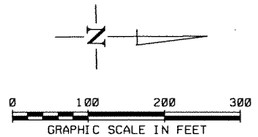

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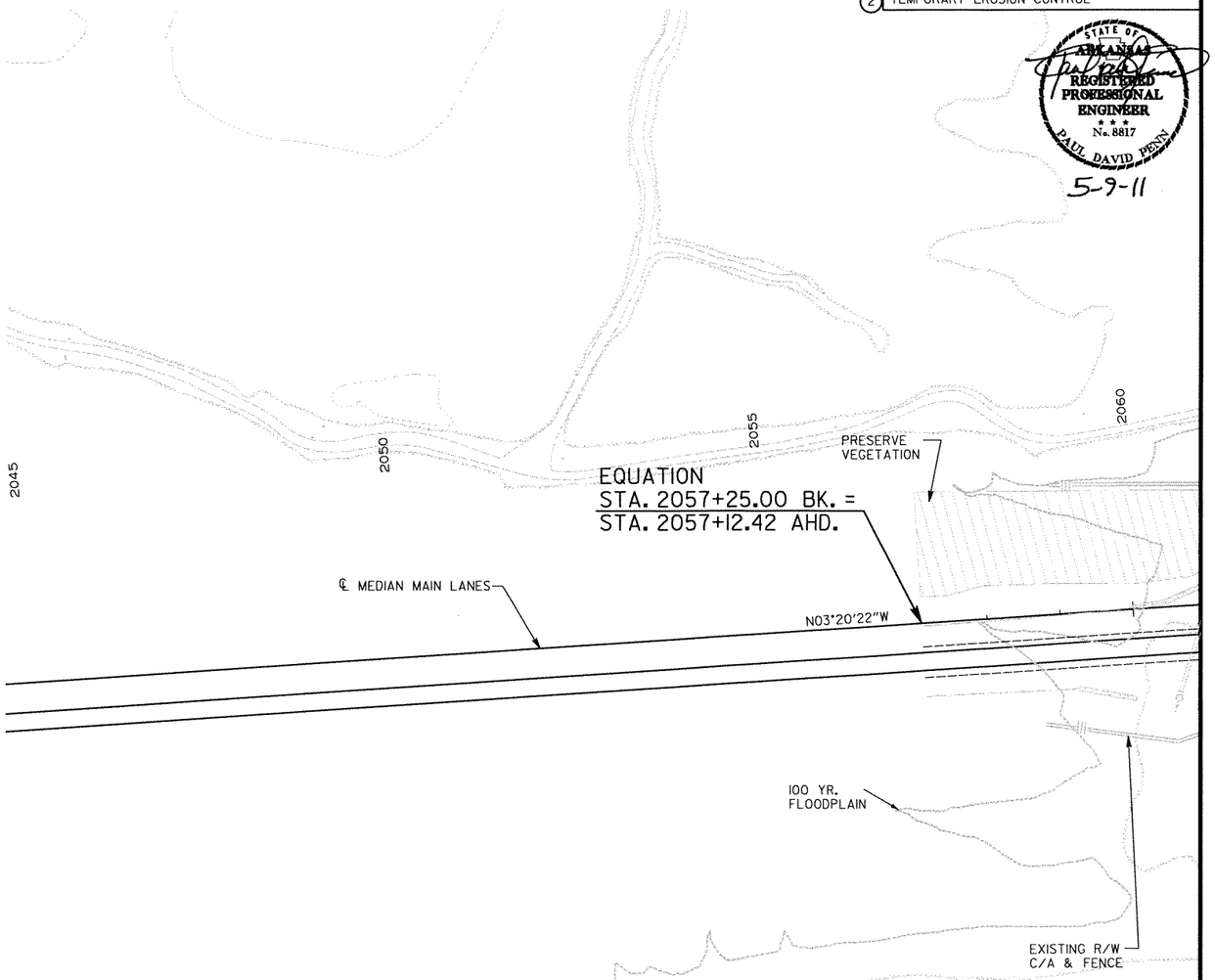

REVISIONS

DATE	REVISION

TEMPORARY EROSION CONTROL
SHEET 1 OF 11

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(2) TEMPORARY EROSION CONTROL

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11

0 100 200 300
GRAPHIC SCALE IN FEET

N

PRESERVE VEGETATION

2060 2065 2070 2075 2080 2085 2090

PI 2065+67.73

PI 2068+01.85

EXISTING R/W C/A & FENCE

℄ MEDIAN MAIN LANES

PC 2077+13.93

PT 2084+83.06

100 YR. FLOODPLAIN

N03°20'22"W

N04°09'34"E

N03°31'55"W

PRESERVE VEGETATION

PC 2061+92.25 MEDIAN = 206I+92.25, 52' LT. R.M.L.

PC 2064+26.38

PT 2067+07.99

100 YR. FLOODPLAIN

PT 2069+42.13

EXISTING R/W C/A & FENCE

PT 2071+76.26 R.M.L. 21' LT. =2071+81.04 C.L. MEDIAN

PI 2080+99.07

REVISIONS

DATE	REVISION

TEMPORARY EROSION CONTROL
SHEET 2 OF II

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2 TEMPORARY EROSION CONTROL

0 100 200 300
GRAPHIC SCALE IN FEET

STATE OF ARKANSAS
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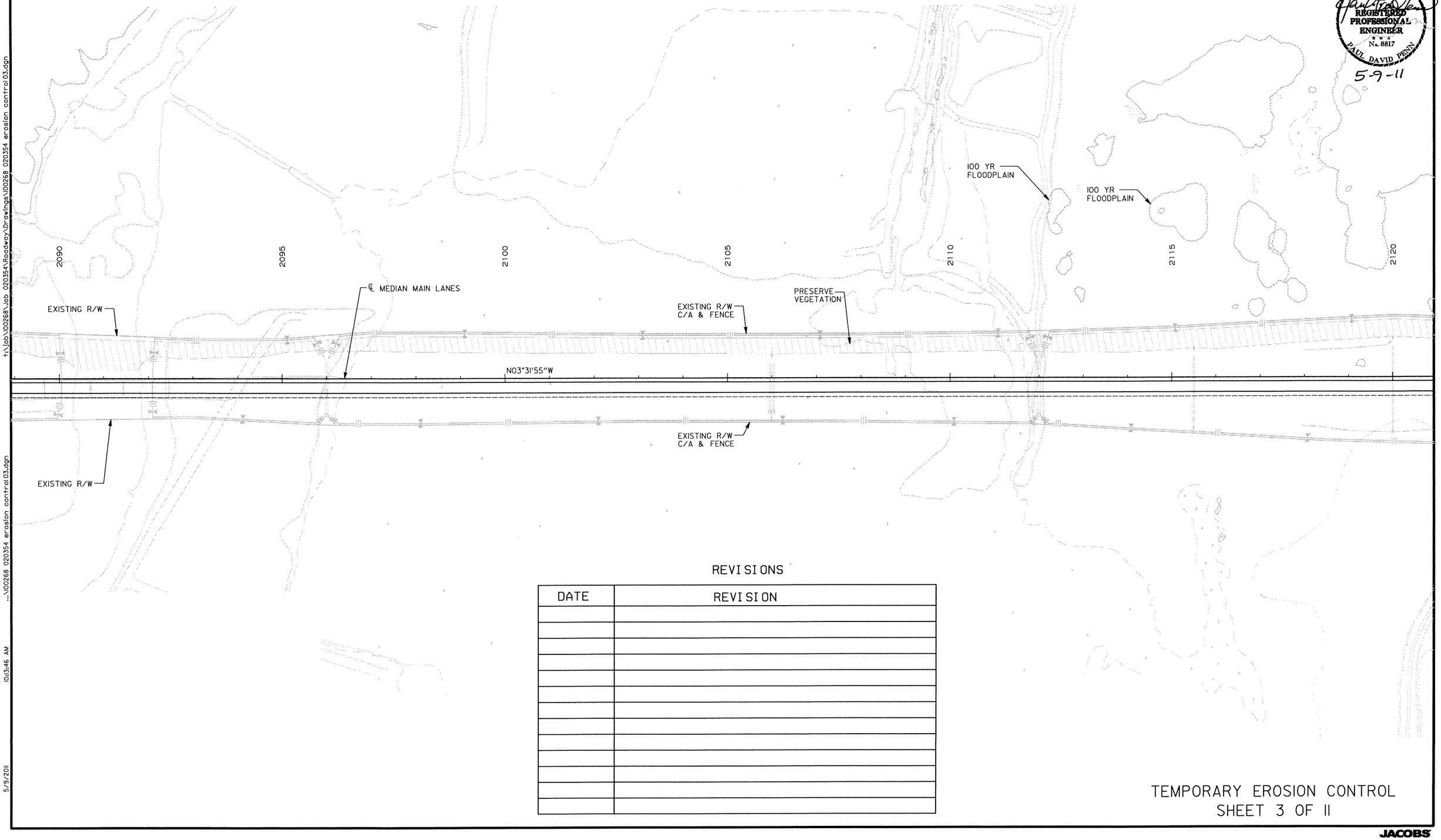
No. 8817
PAUL DAVID DENNY
5-9-11



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TEMPORARY EROSION CONTROL
SHEET 3 OF 11

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STATE OF ARKANSAS
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No. 8817
PAUL DAVID DENNY
5-9-11

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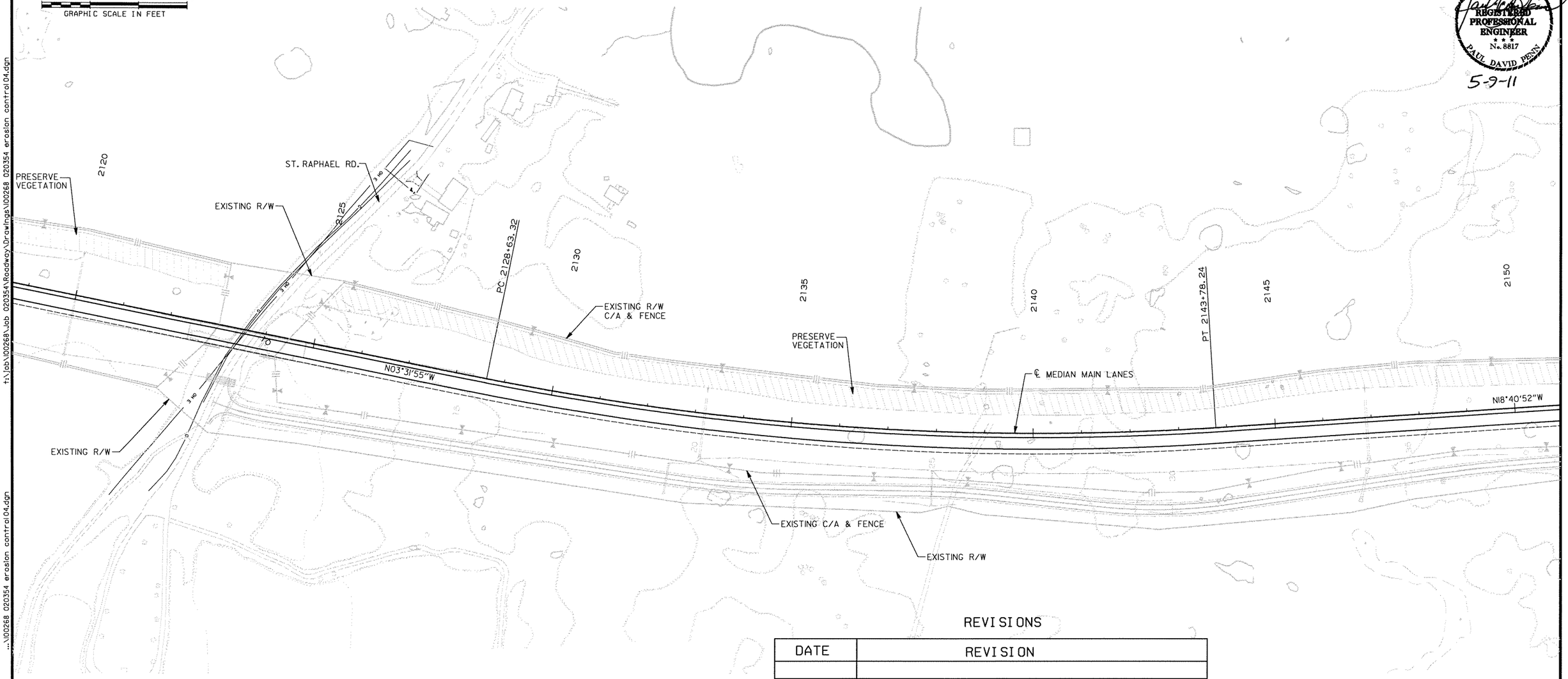
GRAPHIC SCALE IN FEET



REVISIONS

DATE	REVISION

TEMPORARY EROSION CONTROL
SHEET 4 OF 11

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				JOB NO.		020354	31	156
				(2)	TEMPORARY EROSION CONTROL			

0 100 200 300
GRAPHIC SCALE IN FEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11

2150 2155 2160 2165 2170 2175 2180

FLOODWAY LIMIT
100 YR FLOODPLAIN
PRESERVE VEGETATION
100 YR FLOODPLAIN
EXISTING R/W C/A & FENCE
℄ MEDIAN MAIN LANES
BM
EXISTING R/W
PRESERVE VEGETATION
N18°40'52"W
EXISTING R/W C/A & FENCE
EXISTING R/W
Bayou Bartholomew
100 YR FLOODPLAIN

REVISIONS

DATE	REVISION

TEMPORARY EROSION CONTROL
SHEET 5 OF 11

JACOBS

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				JOB NO.		020354	32	156

(2) TEMPORARY EROSION CONTROL

0 100 200 300
GRAPHIC SCALE IN FEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11

2180 2185 2190 2195 2200 2205 2210

PRESERVE VEGETATION

EXISTING R/W C/A & FENCE

℄ MEDIAN MAIN LANES

N18°40'52"W

EXISTING R/W C/A & FENCE

FLOODWAY LIMIT

PRESERVE VEGETATION

CM E

CM E

REVISIONS

DATE	REVISION

TEMPORARY EROSION CONTROL
SHEET 6 OF 11

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				JOB NO.		020354	33	156
				(2) TEMPORARY EROSION CONTROL				

0 100 200 300
GRAPHIC SCALE IN FEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11

2210 2215 2220 2225 PC 2229+33.24 2230 2235 2240

EXISTING R/W C/A & FENCE

℄ MEDIAN MAIN LANES

N18°40'52"W

N25°28'40"W

PI 2236+13.69

Imbeau Bayou

REVISIONS

DATE	REVISION

TEMPORARY EROSION CONTROL
SHEET 7 OF 11

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				(2)	TEMPORARY EROSION CONTROL			

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11

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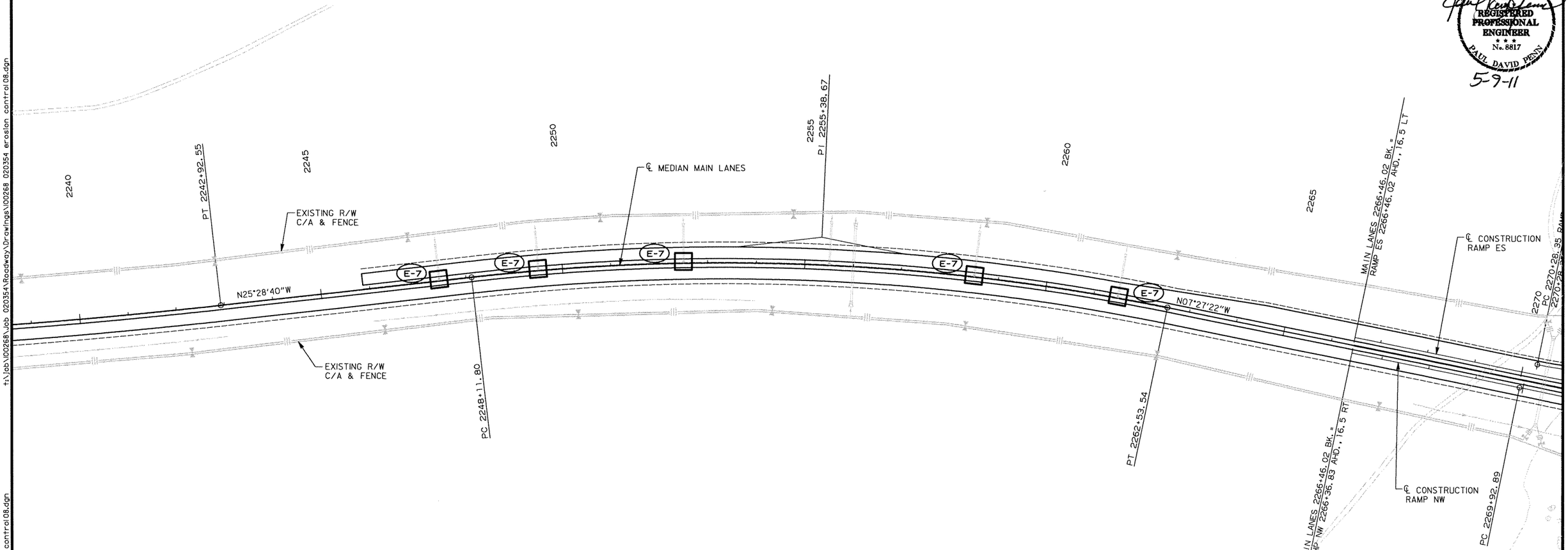

LEGEND

(E-7) DROP INLET SILT FENCE

NOTES:
1. SILT FENCE SHALL BE PLACED AS THE CLEARING AND GRUBBING OPERATIONS ARE STARTED.

REVISIONS

DATE	REVISION

TEMPORARY EROSION CONTROL
SHEET 8 OF 11

JACOBS

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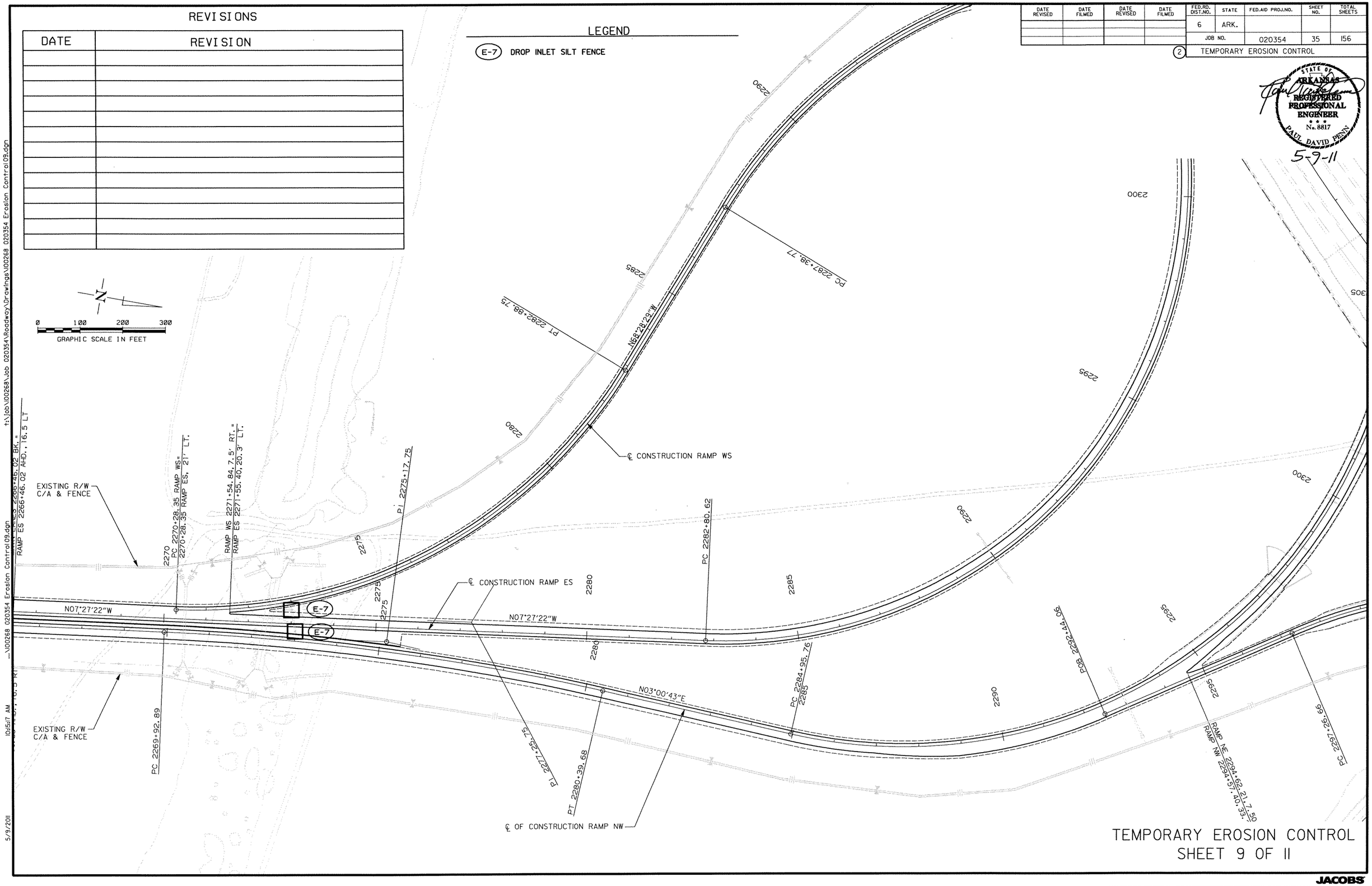
				(2)	TEMPORARY EROSION CONTROL			

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11

LEGEND

(E-7) DROP INLET SILT FENCE



TEMPORARY EROSION CONTROL
SHEET 9 OF 11

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GRAPHIC SCALE IN FEET

REVISIONS

DATE	REVISION

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				(2)	TEMPORARY EROSION CONTROL			

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENNY

5-9-11

PC 2287+38.77

2290

℄ CONSTRUCTION RAMP WS

EXISTING R/W & C/A

2295

RAMP ES 2306+63.82 7.50' RT. 1-530 474+99.92 74.73' RT.

PC 2307+50.47

EXISTING PDE

PT 2309+61.15

IMBEAU BAYOU

E-11

CONSTRUCTION LIMITS

SILT FENCE

EXIST. R/W & C/A

460

465

℄ EXISTING I-530

CONSTRUCTION LIMITS

SILT FENCE

PT 2303+38.99

STA. 2304+00 BEGIN RAMP ES EARTHWORK

℄ CONSTRUCTION RAMP ES

2295

2300

2305

470

2320

EXIST. R/W & C/A

RAMP NW 2321+85.23 2.5' LT. 1-530 469+26.19 57.84' LT.

PT 2322+74.55

℄ CONSTRUCTION RAMP NW

PC 2319+28.19

STA. 2319+00 BEGIN RAMP NW EARTHWORK END JOB 020352

PT 2308+88.88

EXISTING R/W & C/A

475

2315

480

2310

PT 2314+36.31

MATCHLINE SHEET II

LEGEND

(E-11) SILT FENCE

NOTES:
1. SILT FENCE SHALL BE PLACED AS THE CLEARING AND GRUBBING OPERATIONS ARE STARTED.

TEMPORARY EROSION CONTROL
SHEET 10 OF 11

JACOBS

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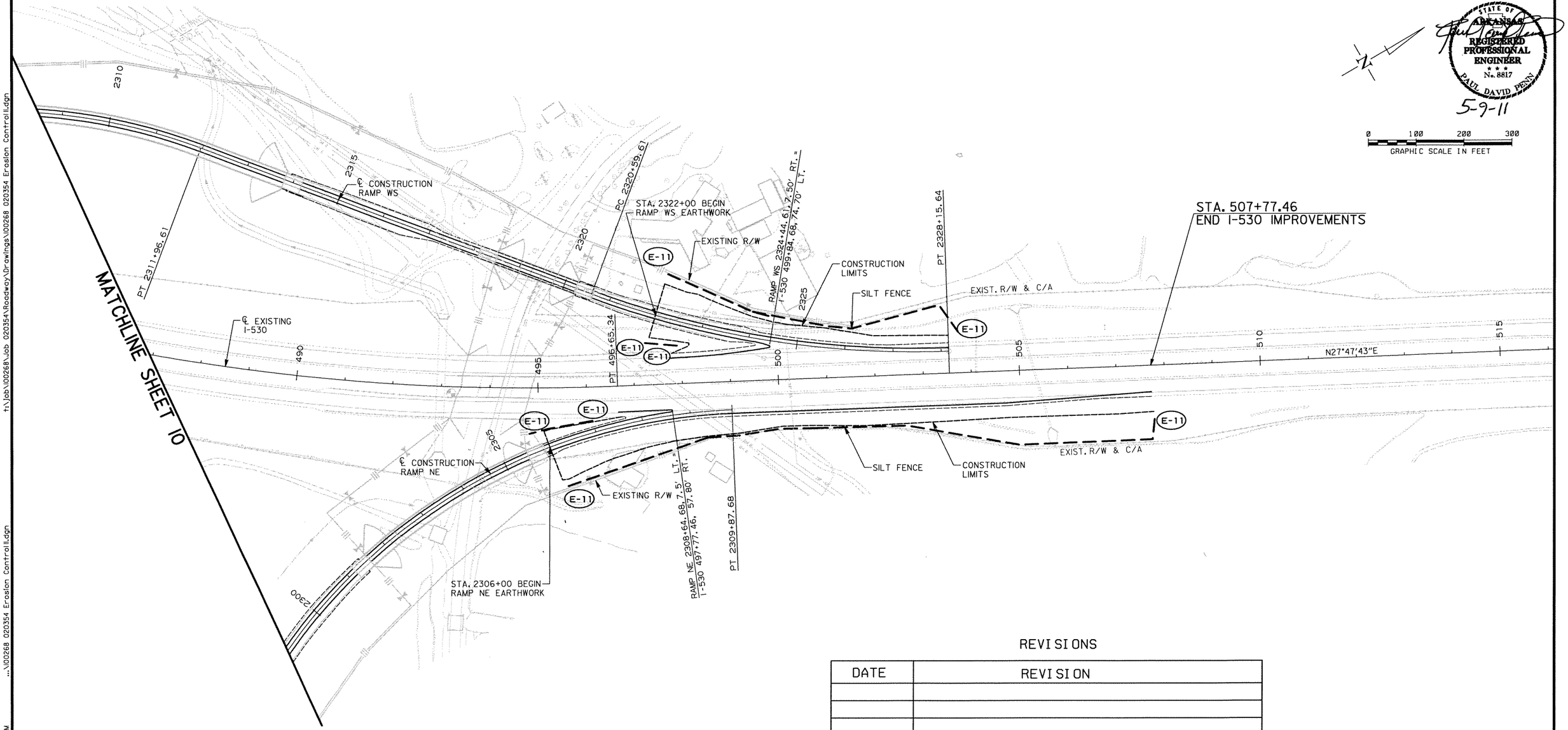
				JOB NO.		020354	37	156

(2) TEMPORARY EROSION CONTROL

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN

5-9-11

0 100 200 300
GRAPHIC SCALE IN FEET



LEGEND

(E-11) SILT FENCE

NOTES:
1. SILT FENCE SHALL BE PLACED AS THE CLEARING AND GRUBBING OPERATIONS ARE STARTED.

REVISIONS

DATE	REVISION

TEMPORARY EROSION CONTROL
SHEET II OF II

JACOBS

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				6	ARK.			
				JOB NO.		020354	38	156

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11

0 100 200 300
GRAPHIC SCALE IN FEET

℄ CONSTRUCTION RAMP NW
℄ CONSTRUCTION RAMP NE
℄ EXISTING I-530
℄ CONSTRUCTION RAMP WS
WILBUR WEST ROAD
OHIO STREET
EXIST. R/W
PT 496+65.34
2295
2300
2303
2315
2320
2325
490
495
500
505

END ROAD WORK (I) G20-2 (48" X 24")
500'
ROAD WORK 1500 FT (I) W20-1 (48" X 48")
ROAD WORK 1000 FT (I) W20-1 (48" X 48")
ROAD WORK 500 FT (I) W20-1 (48" X 48")

END ROAD WORK (I) G20-2 (48" X 24")
ROAD WORK 500 FT (I) W20-1 (48" X 48")
ROAD WORK 1000 FT (I) W20-1 (48" X 48")
ROAD WORK 1500 FT (I) W20-1 (48" X 48")

MAINTENANCE OF TRAFFIC - ADVANCE WARNING WILBUR WEST ROAD/OHIO STREET

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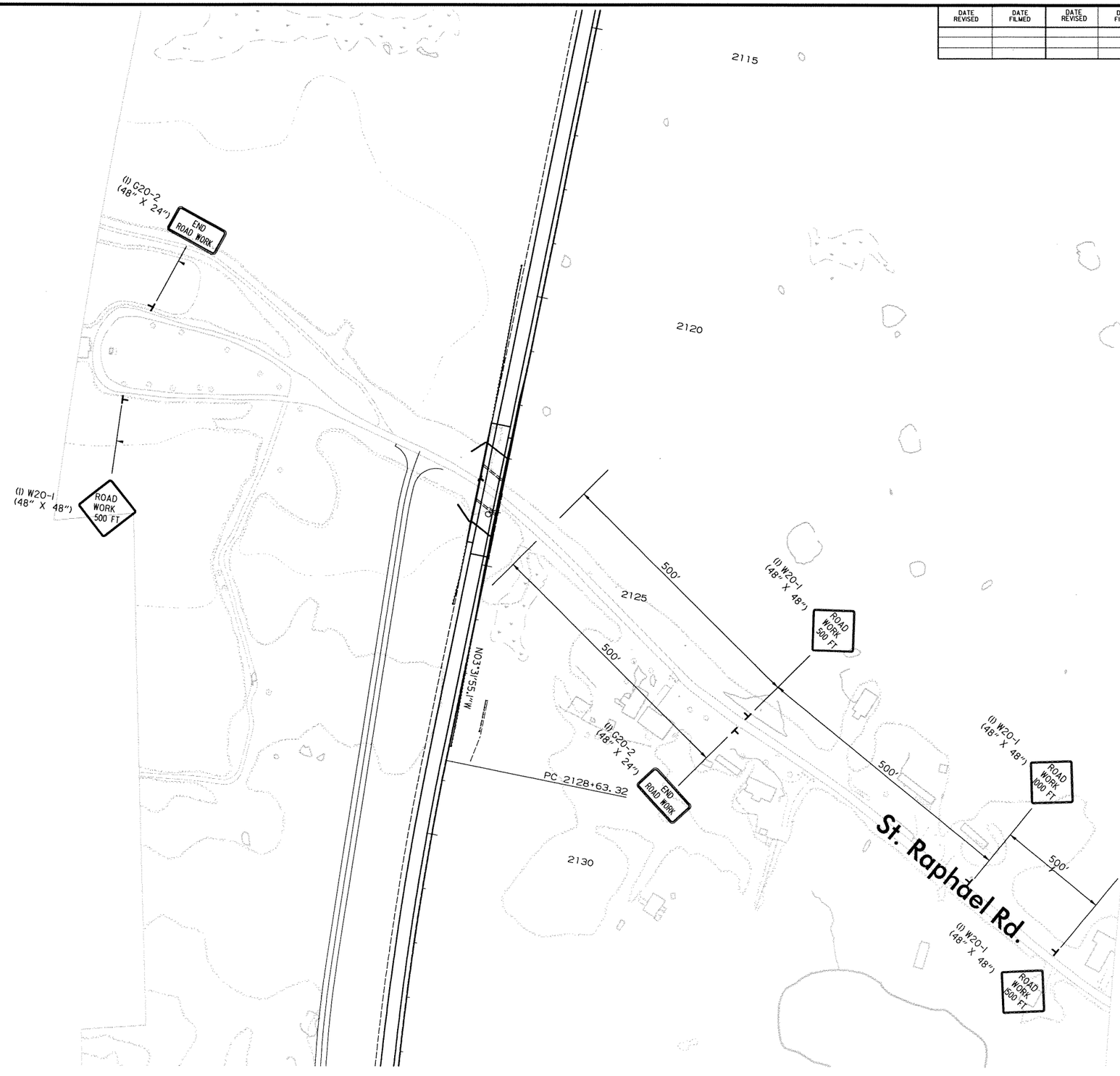
				JOB NO.		020354	39	156

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN

5-9-11



MAINTENANCE OF TRAFFIC - ADVANCE WARNING
ST. RAPHAEL RD.

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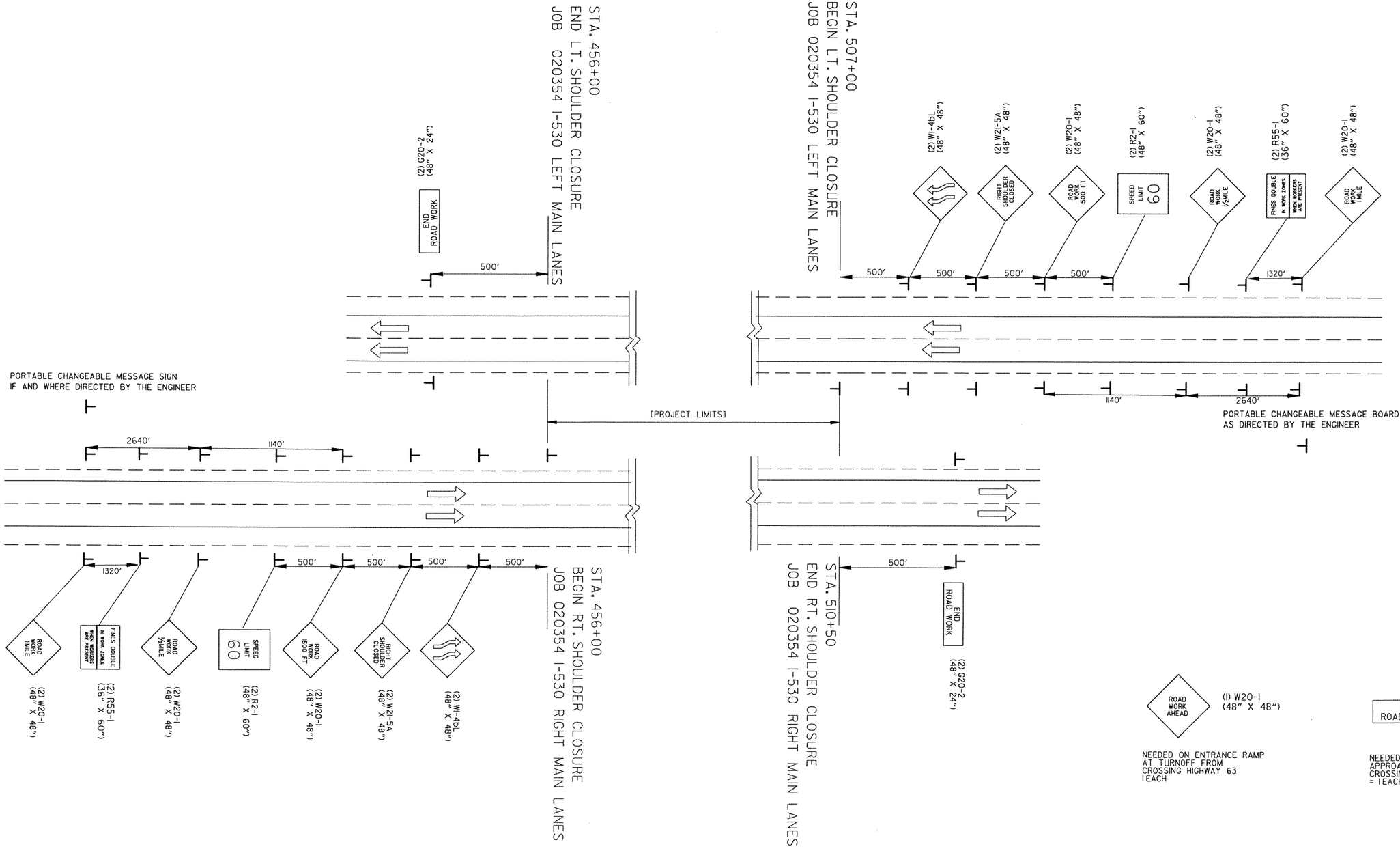
6	ARK.			
JOB NO.		020354	40	156

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENNY
5-9-11



ADVANCE SIGNS ON I-530 AT BEGINNING AND END OF WORK AREA

ROAD WORK AHEAD — (1) W20-1 (48" X 48")

NEEDED ON ENTRANCE RAMP AT TURNOFF FROM CROSSING HIGHWAY 63
1 EACH

END ROAD WORK — (1) G20-2 (48" X 24")

NEEDED ON EXIT RAMP APPROACHING JUNCTION WITH CROSSING HIGHWAY 63
= 1 EACH

MAINTENANCE OF TRAFFIC - ADVANCE WARNING I-530

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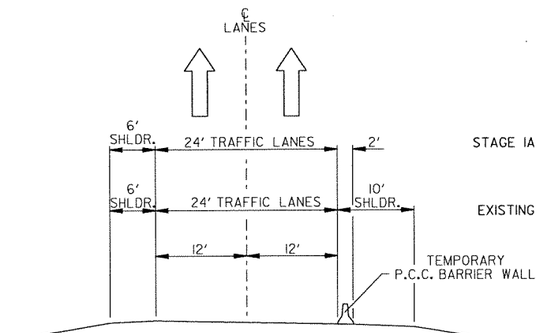
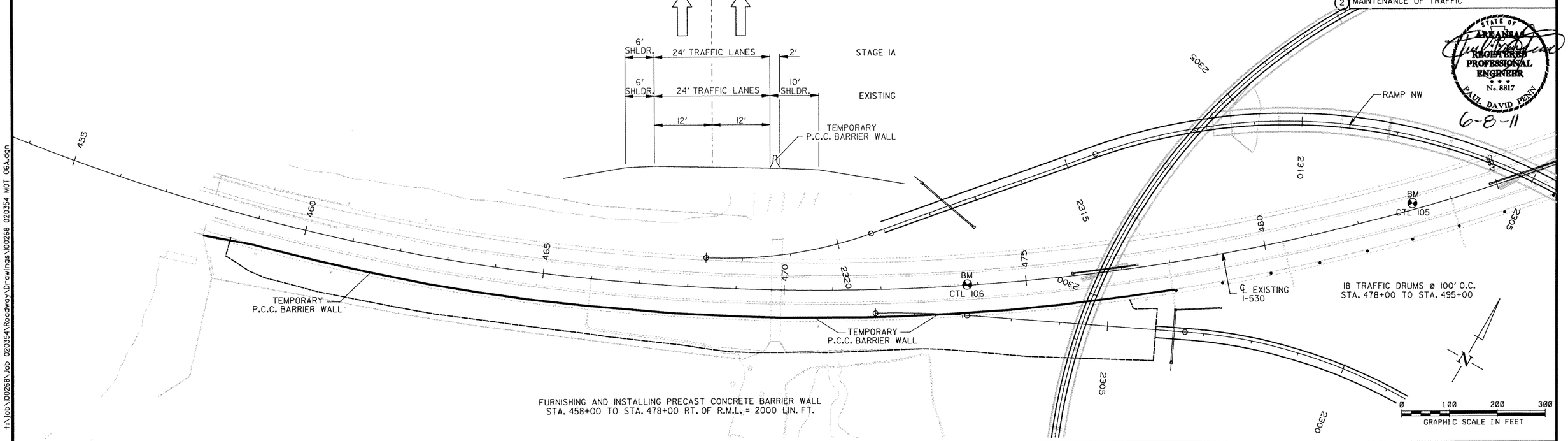
				6	ARK.			
				JOB NO.		020354	41	156

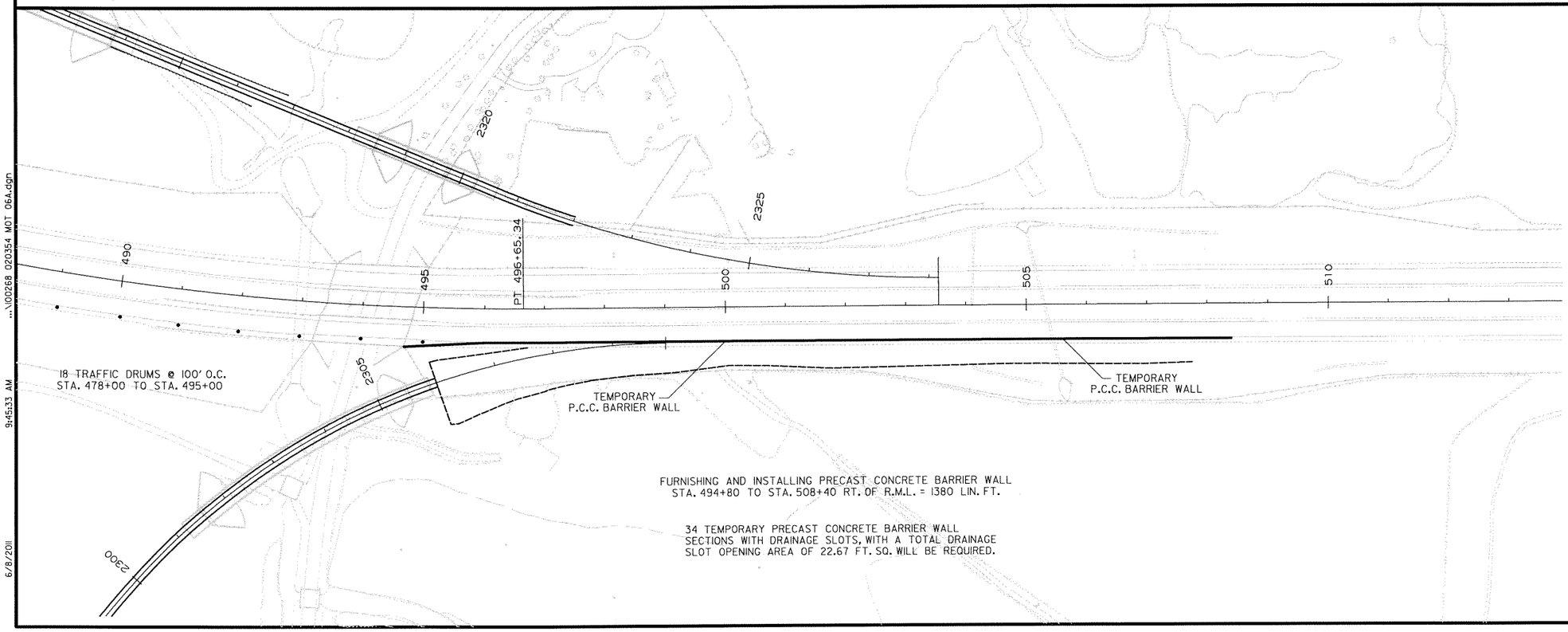
2 MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
6-8-11





FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER WALL
STA. 458+00 TO STA. 478+00 RT. OF R.M.L. = 2000 LIN. FT.



FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER WALL
STA. 494+80 TO STA. 508+40 RT. OF R.M.L. = 1380 LIN. FT.

34 TEMPORARY PRECAST CONCRETE BARRIER WALL SECTIONS WITH DRAINAGE SLOTS, WITH A TOTAL DRAINAGE SLOT OPENING AREA OF 22.67 FT. SQ. WILL BE REQUIRED.

SEQUENCE OF CONSTRUCTION:
(RIGHT MAIN LANES)
STAGE IA: PLACE CONCRETE BARRIER WALL ALONG PAVEMENT EDGE & CONSTRUCT EMBANKMENT
STAGE IB: FOR AUXILIARY LANE/EXIT RAMP ONLY
RELOCATE CONCRETE BARRIER WALL.
REMOVE P.C.C. PAVEMENT & PLACE PAVEMENT THRU FINAL LAYER OF SURFACE COURSE.
RELOCATE CONCRETE BARRIER WALL AND REPLACE WITH TRAFFIC DRUMS
STAGE IC: FOR ACCELERATION LANE ONLY
RELOCATE CONCRETE BARRIER WALL
REMOVE P.C.C. PAVEMENT & PLACE PAVEMENT THRU FINAL LAYER OF SURFACE COURSE
RELOCATE CONCRETE BARRIER WALL AND REPLACE WITH TRAFFIC DRUMS
(LEFT MAIN LANES)
STAGE IIA: RELOCATE CONCRETE BARRIER WALL ALONG PAVEMENT EDGE & CONSTRUCT EMBANKMENT.
STAGE IIB: FOR ACCELERATION LANE ONLY
RELOCATE CONCRETE BARRIER WALL
REMOVE P.C.C. PAVEMENT & PLACE PAVEMENT THRU FINAL LAYER OF SURFACE COURSE.
REMOVE CONCRETE BARRIER WALL AND REPLACE WITH TRAFFIC DRUMS
STAGE IIC: FOR TURNOUT ONLY
RELOCATE CONCRETE BARRIER WALL
REMOVE P.C.C. PAVEMENT & PLACE PAVEMENT THRU FINAL LAYER OF SURFACE COURSE
REMOVE CONCRETE BARRIER WALL AND REPLACE WITH TRAFFIC DRUMS

MAINTENANCE OF TRAFFIC STAGE IA

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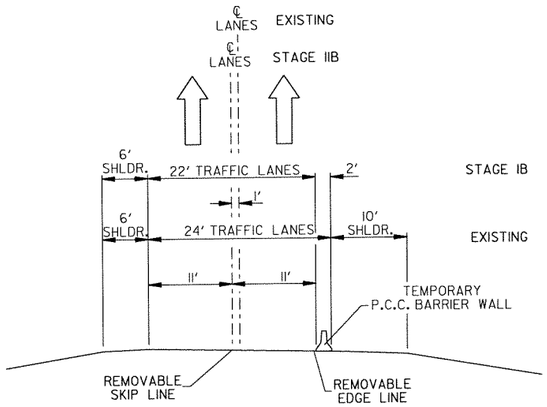
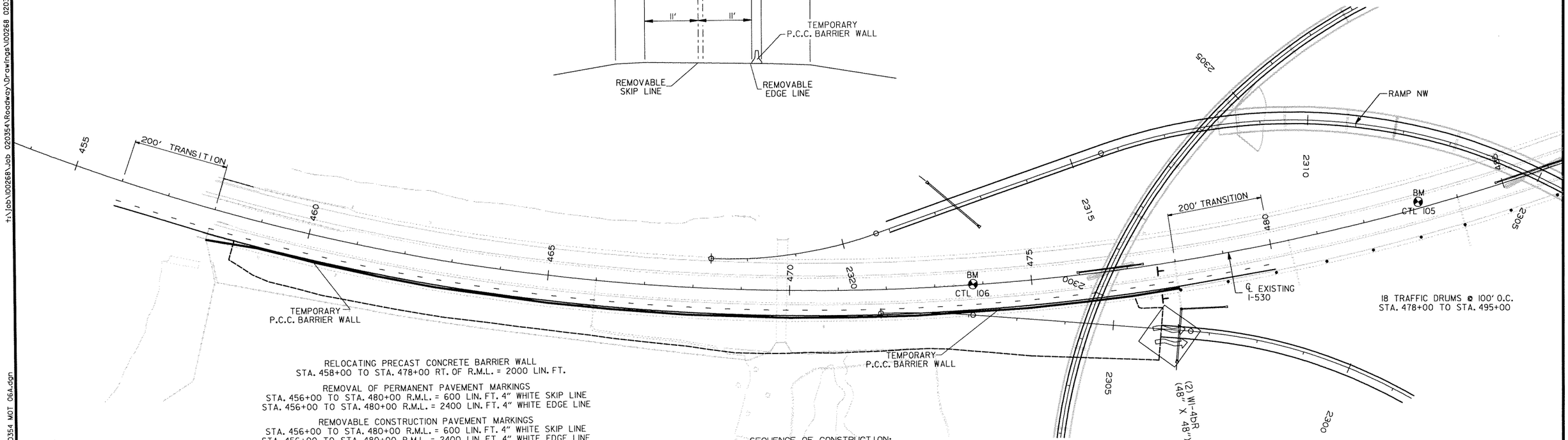
				JOB NO.		020354	42	156

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
6-2-11





RELOCATING PRECAST CONCRETE BARRIER WALL
STA. 458+00 TO STA. 478+00 RT. OF R.M.L. = 2000 LIN. FT.

REMOVAL OF PERMANENT PAVEMENT MARKINGS
STA. 456+00 TO STA. 480+00 R.M.L. = 600 LIN. FT. 4" WHITE SKIP LINE
STA. 456+00 TO STA. 480+00 R.M.L. = 2400 LIN. FT. 4" WHITE EDGE LINE

REMOVABLE CONSTRUCTION PAVEMENT MARKINGS
STA. 456+00 TO STA. 480+00 R.M.L. = 600 LIN. FT. 4" WHITE SKIP LINE
STA. 456+00 TO STA. 480+00 R.M.L. = 2400 LIN. FT. 4" WHITE EDGE LINE

SEQUENCE OF CONSTRUCTION:
(RIGHT MAIN LANES)
STAGE IA: PLACE CONCRETE BARRIER WALL ALONG PAVEMENT EDGE & CONSTRUCT EMBANKMENT
STAGE IB: FOR AUXILIARY LANE/EXIT RAMP ONLY
RELOCATE CONCRETE BARRIER WALL.
REMOVE P.C.C. PAVEMENT & PLACE PAVEMENT THRU FINAL LAYER OF SURFACE COURSE.
RELOCATE CONCRETE BARRIER WALL AND REPLACE WITH TRAFFIC DRUMS
STAGE IC: FOR ACCELERATION LANE ONLY
RELOCATE CONCRETE BARRIER WALL
REMOVE P.C.C. PAVEMENT & PLACE PAVEMENT THRU FINAL LAYER OF SURFACE COURSE
RELOCATE CONCRETE BARRIER WALL AND REPLACE WITH TRAFFIC DRUMS
(LEFT MAIN LANES)
STAGE IIA: RELOCATE CONCRETE BARRIER WALL ALONG PAVEMENT EDGE & CONSTRUCT EMBANKMENT.
STAGE IIB: FOR ACCELERATION LANE ONLY
RELOCATE CONCRETE BARRIER WALL
REMOVE P.C.C. PAVEMENT & PLACE PAVEMENT THRU FINAL LAYER OF SURFACE COURSE.
REMOVE CONCRETE BARRIER WALL AND REPLACE WITH TRAFFIC DRUMS
STAGE IIC: FOR TURNOUT ONLY
RELOCATE CONCRETE BARRIER WALL
REMOVE P.C.C. PAVEMENT & PLACE PAVEMENT THRU FINAL LAYER OF SURFACE COURSE
REMOVE CONCRETE BARRIER WALL AND REPLACE WITH TRAFFIC DRUMS

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GRAPHIC SCALE IN FEET

MAINTENANCE OF TRAFFIC STAGE IB

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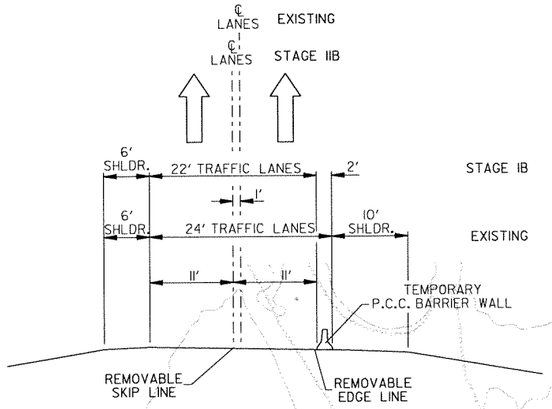
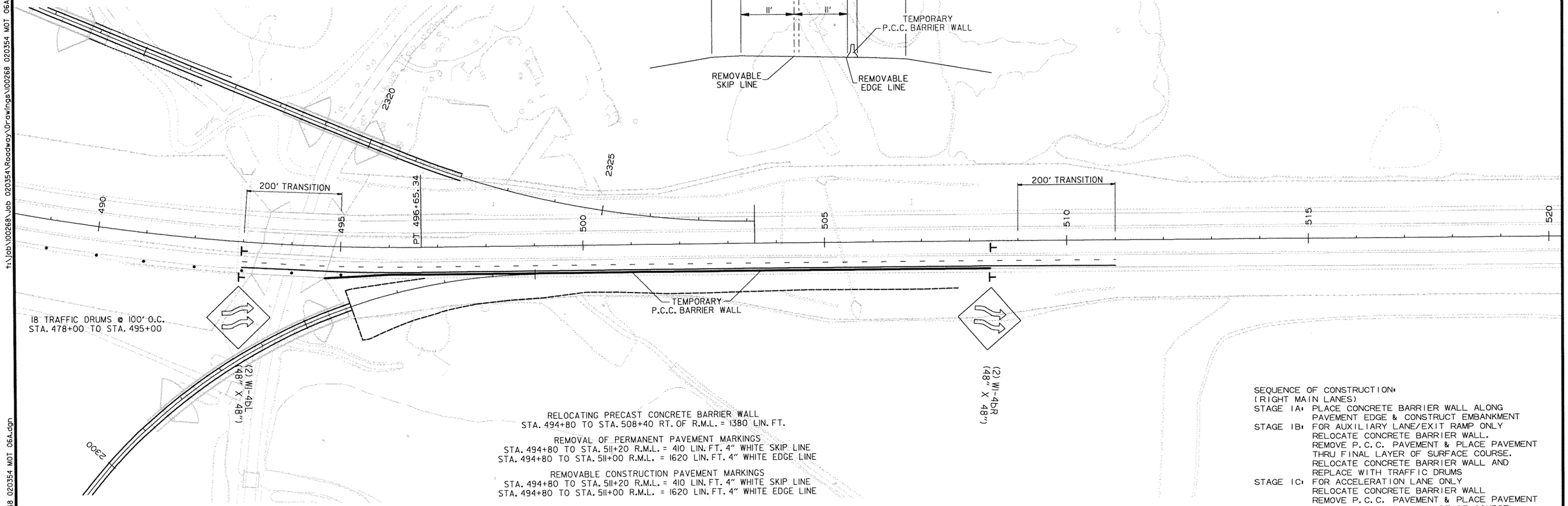
				6	ARK.			
				JOB NO.		020354	43	156

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN

6-8-11





RELOCATING PRECAST CONCRETE BARRIER WALL
STA. 494+80 TO STA. 508+40 RT. OF R.M.L. = 1380 LIN. FT.

REMOVAL OF PERMANENT PAVEMENT MARKINGS
STA. 494+80 TO STA. 511+20 R.M.L. = 410 LIN. FT. 4" WHITE SKIP LINE
STA. 494+80 TO STA. 511+00 R.M.L. = 1620 LIN. FT. 4" WHITE EDGE LINE

REMOVABLE CONSTRUCTION PAVEMENT MARKINGS
STA. 494+80 TO STA. 511+20 R.M.L. = 410 LIN. FT. 4" WHITE SKIP LINE
STA. 494+80 TO STA. 511+00 R.M.L. = 1620 LIN. FT. 4" WHITE EDGE LINE

34 TEMPORARY PRECAST CONCRETE BARRIER WALL SECTIONS WITH DRAINAGE SLOTS, WITH A TOTAL DRAINAGE SLOT OPENING AREA OF 22.67 FT. SQ. WILL BE REQUIRED.

SEQUENCE OF CONSTRUCTION:
(RIGHT MAIN LANES)
STAGE IA: PLACE CONCRETE BARRIER WALL ALONG PAVEMENT EDGE & CONSTRUCT EMBANKMENT
STAGE IB: FOR AUXILIARY LANE/EXIT RAMP ONLY
RELOCATE CONCRETE BARRIER WALL.
REMOVE P.C.C. PAVEMENT & PLACE PAVEMENT THRU FINAL LAYER OF SURFACE COURSE.
RELOCATE CONCRETE BARRIER WALL AND REPLACE WITH TRAFFIC DRUMS
STAGE IC: FOR ACCELERATION LANE ONLY
RELOCATE CONCRETE BARRIER WALL
REMOVE P.C.C. PAVEMENT & PLACE PAVEMENT THRU FINAL LAYER OF SURFACE COURSE
RELOCATE CONCRETE BARRIER WALL AND REPLACE WITH TRAFFIC DRUMS
(LEFT MAIN LANES)
STAGE IIA: RELOCATE CONCRETE BARRIER WALL ALONG PAVEMENT EDGE & CONSTRUCT EMBANKMENT.
STAGE IIB: FOR ACCELERATION LANE ONLY
RELOCATE CONCRETE BARRIER WALL
REMOVE P.C.C. PAVEMENT & PLACE PAVEMENT THRU FINAL LAYER OF SURFACE COURSE.
REMOVE CONCRETE BARRIER WALL AND REPLACE WITH TRAFFIC DRUMS
STAGE IIC: FOR TURNOUT ONLY
RELOCATE CONCRETE BARRIER WALL
REMOVE P.C.C. PAVEMENT & PLACE PAVEMENT THRU FINAL LAYER OF SURFACE COURSE
REMOVE CONCRETE BARRIER WALL AND REPLACE WITH TRAFFIC DRUMS

MAINTENANCE OF TRAFFIC STAGE IC

JACOBS

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6/8/2011

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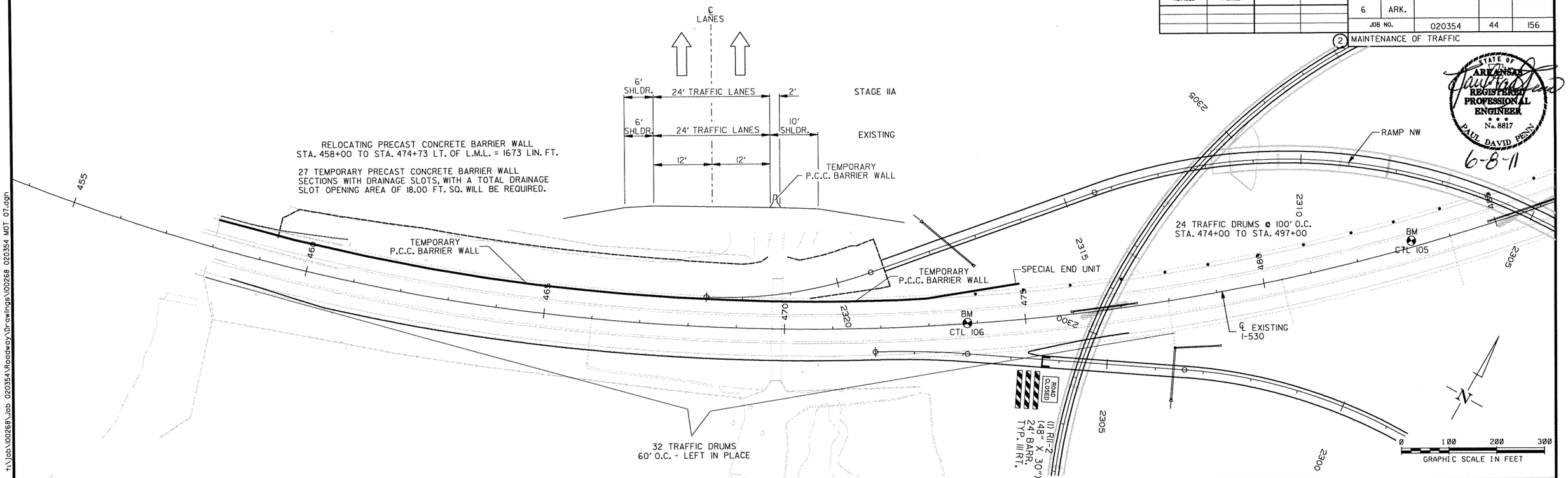
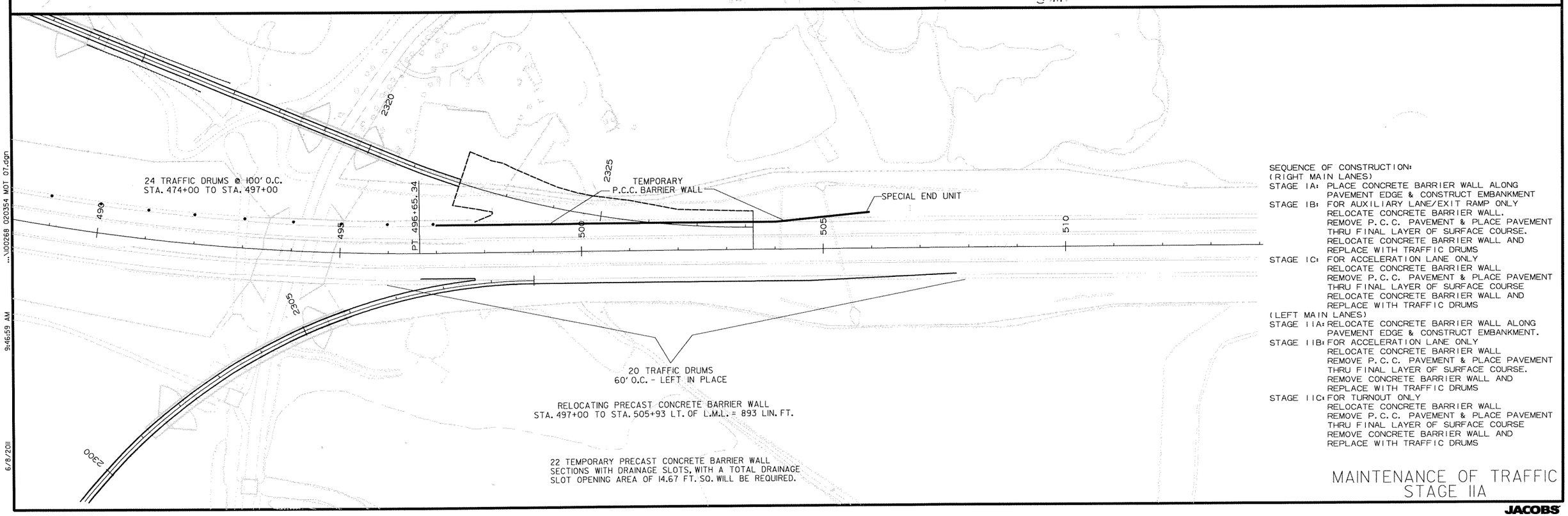
				6	ARK.			
				JOB NO.		020354	44	156

2 MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 8817 PAUL DAVID PENN
6-8-11





SEQUENCE OF CONSTRUCTION:
(RIGHT MAIN LANES)
STAGE IA: PLACE CONCRETE BARRIER WALL ALONG PAVEMENT EDGE & CONSTRUCT EMBANKMENT
STAGE IB: FOR AUXILIARY LANE/EXIT RAMP ONLY
RELOCATE CONCRETE BARRIER WALL.
REMOVE P.C.C. PAVEMENT & PLACE PAVEMENT THRU FINAL LAYER OF SURFACE COURSE.
RELOCATE CONCRETE BARRIER WALL AND REPLACE WITH TRAFFIC DRUMS
STAGE IC: FOR ACCELERATION LANE ONLY
RELOCATE CONCRETE BARRIER WALL
REMOVE P.C.C. PAVEMENT & PLACE PAVEMENT THRU FINAL LAYER OF SURFACE COURSE
RELOCATE CONCRETE BARRIER WALL AND REPLACE WITH TRAFFIC DRUMS
(LEFT MAIN LANES)
STAGE IIA: RELOCATE CONCRETE BARRIER WALL ALONG PAVEMENT EDGE & CONSTRUCT EMBANKMENT.
STAGE IIB: FOR ACCELERATION LANE ONLY
RELOCATE CONCRETE BARRIER WALL
REMOVE P.C.C. PAVEMENT & PLACE PAVEMENT THRU FINAL LAYER OF SURFACE COURSE.
REMOVE CONCRETE BARRIER WALL AND REPLACE WITH TRAFFIC DRUMS
STAGE IIC: FOR TURNOUT ONLY
RELOCATE CONCRETE BARRIER WALL
REMOVE P.C.C. PAVEMENT & PLACE PAVEMENT THRU FINAL LAYER OF SURFACE COURSE
REMOVE CONCRETE BARRIER WALL AND REPLACE WITH TRAFFIC DRUMS

MAINTENANCE OF TRAFFIC STAGE IIA

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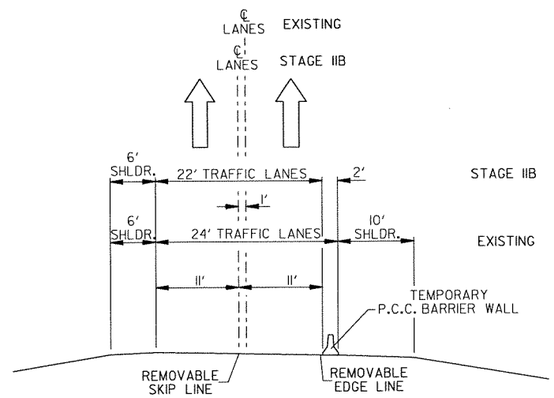
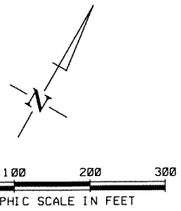
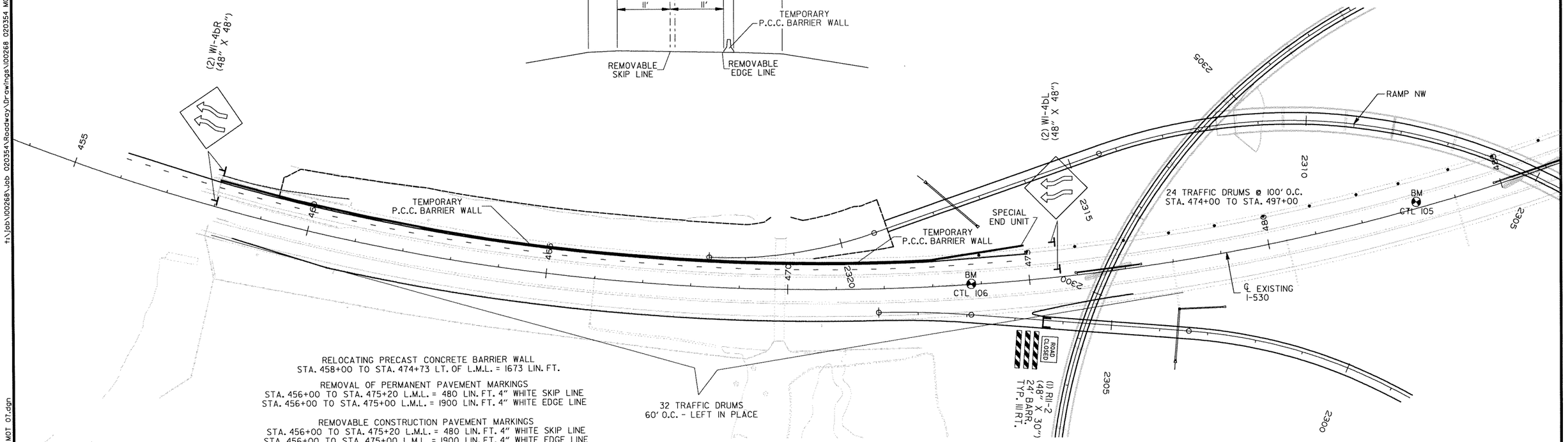
FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		020354	45	156

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
6-8-11







RELOCATING PRECAST CONCRETE BARRIER WALL
STA. 458+00 TO STA. 474+73 LT. OF L.M.L. = 1673 LIN. FT.

REMOVAL OF PERMANENT PAVEMENT MARKINGS
STA. 456+00 TO STA. 475+20 L.M.L. = 480 LIN. FT. 4" WHITE SKIP LINE
STA. 456+00 TO STA. 475+00 L.M.L. = 1900 LIN. FT. 4" WHITE EDGE LINE

REMOVABLE CONSTRUCTION PAVEMENT MARKINGS
STA. 456+00 TO STA. 475+20 L.M.L. = 480 LIN. FT. 4" WHITE SKIP LINE
STA. 456+00 TO STA. 475+00 L.M.L. = 1900 LIN. FT. 4" WHITE EDGE LINE

27 TEMPORARY PRECAST CONCRETE BARRIER WALL SECTIONS WITH DRAINAGE SLOTS, WITH A TOTAL DRAINAGE SLOT OPENING AREA OF 18.00 FT. SQ. WILL BE REQUIRED.

SEQUENCE OF CONSTRUCTION:
(RIGHT MAIN LANES)
STAGE IA: PLACE CONCRETE BARRIER WALL ALONG PAVEMENT EDGE & CONSTRUCT EMBANKMENT
STAGE IB: FOR AUXILIARY LANE/EXIT RAMP ONLY
RELOCATE CONCRETE BARRIER WALL.
REMOVE P.C.C. PAVEMENT & PLACE PAVEMENT THRU FINAL LAYER OF SURFACE COURSE.
RELOCATE CONCRETE BARRIER WALL AND REPLACE WITH TRAFFIC DRUMS
STAGE IC: FOR ACCELERATION LANE ONLY
RELOCATE CONCRETE BARRIER WALL
REMOVE P.C.C. PAVEMENT & PLACE PAVEMENT THRU FINAL LAYER OF SURFACE COURSE
RELOCATE CONCRETE BARRIER WALL AND REPLACE WITH TRAFFIC DRUMS
(LEFT MAIN LANES)
STAGE IIA: RELOCATE CONCRETE BARRIER WALL ALONG PAVEMENT EDGE & CONSTRUCT EMBANKMENT.
STAGE IIB: FOR ACCELERATION LANE ONLY
RELOCATE CONCRETE BARRIER WALL
REMOVE P.C.C. PAVEMENT & PLACE PAVEMENT THRU FINAL LAYER OF SURFACE COURSE.
REMOVE CONCRETE BARRIER WALL AND REPLACE WITH TRAFFIC DRUMS
STAGE IIC: FOR TURNOUT ONLY
RELOCATE CONCRETE BARRIER WALL
REMOVE P.C.C. PAVEMENT & PLACE PAVEMENT THRU FINAL LAYER OF SURFACE COURSE
REMOVE CONCRETE BARRIER WALL AND REPLACE WITH TRAFFIC DRUMS

MAINTENANCE OF TRAFFIC STAGE IIB

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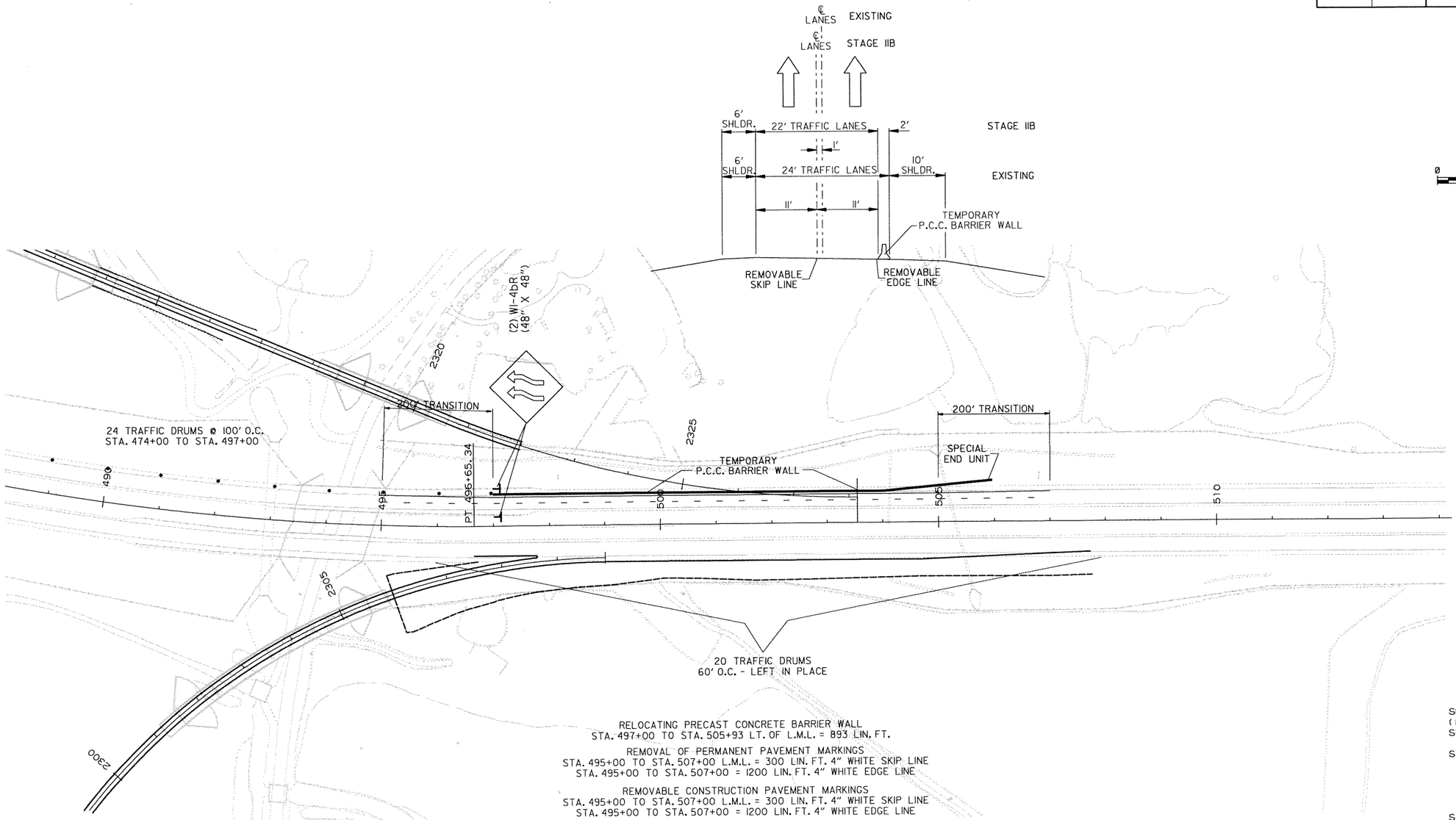
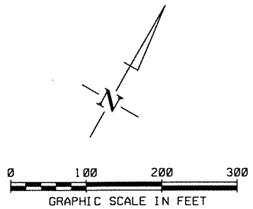
				6	ARK.			
				JOB NO.		020354	46	156

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
6-8-11





RELOCATING PRECAST CONCRETE BARRIER WALL
STA. 497+00 TO STA. 505+93 LT. OF L.M.L. = 893 LIN. FT.

REMOVAL OF PERMANENT PAVEMENT MARKINGS
STA. 495+00 TO STA. 507+00 L.M.L. = 300 LIN. FT. 4" WHITE SKIP LINE
STA. 495+00 TO STA. 507+00 = 1200 LIN. FT. 4" WHITE EDGE LINE

REMOVABLE CONSTRUCTION PAVEMENT MARKINGS
STA. 495+00 TO STA. 507+00 L.M.L. = 300 LIN. FT. 4" WHITE SKIP LINE
STA. 495+00 TO STA. 507+00 = 1200 LIN. FT. 4" WHITE EDGE LINE

22 TEMPORARY PRECAST CONCRETE BARRIER WALL SECTIONS WITH DRAINAGE SLOTS, WITH A TOTAL DRAINAGE SLOT OPENING AREA OF 14.67 FT. SQ. WILL BE REQUIRED.

SEQUENCE OF CONSTRUCTION:
(RIGHT MAIN LANES)
STAGE IA: PLACE CONCRETE BARRIER WALL ALONG PAVEMENT EDGE & CONSTRUCT EMBANKMENT
STAGE IB: FOR AUXILIARY LANE/EXIT RAMP ONLY
RELOCATE CONCRETE BARRIER WALL.
REMOVE P.C.C. PAVEMENT & PLACE PAVEMENT THRU FINAL LAYER OF SURFACE COURSE.
RELOCATE CONCRETE BARRIER WALL AND REPLACE WITH TRAFFIC DRUMS
STAGE IC: FOR ACCELERATION LANE ONLY
RELOCATE CONCRETE BARRIER WALL
REMOVE P.C.C. PAVEMENT & PLACE PAVEMENT THRU FINAL LAYER OF SURFACE COURSE
RELOCATE CONCRETE BARRIER WALL AND REPLACE WITH TRAFFIC DRUMS
(LEFT MAIN LANES)
STAGE IIA: RELOCATE CONCRETE BARRIER WALL ALONG PAVEMENT EDGE & CONSTRUCT EMBANKMENT.
STAGE IIB: FOR ACCELERATION LANE ONLY
RELOCATE CONCRETE BARRIER WALL
REMOVE P.C.C. PAVEMENT & PLACE PAVEMENT THRU FINAL LAYER OF SURFACE COURSE.
REMOVE CONCRETE BARRIER WALL AND REPLACE WITH TRAFFIC DRUMS
STAGE IIC: FOR TURNOUT ONLY
RELOCATE CONCRETE BARRIER WALL
REMOVE P.C.C. PAVEMENT & PLACE PAVEMENT THRU FINAL LAYER OF SURFACE COURSE
REMOVE CONCRETE BARRIER WALL AND REPLACE WITH TRAFFIC DRUMS

MAINTENANCE OF TRAFFIC STAGE IIC

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				6	ARK.			
				JOB NO.		020354	47	156

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 8817 PAUL DAVID PENN

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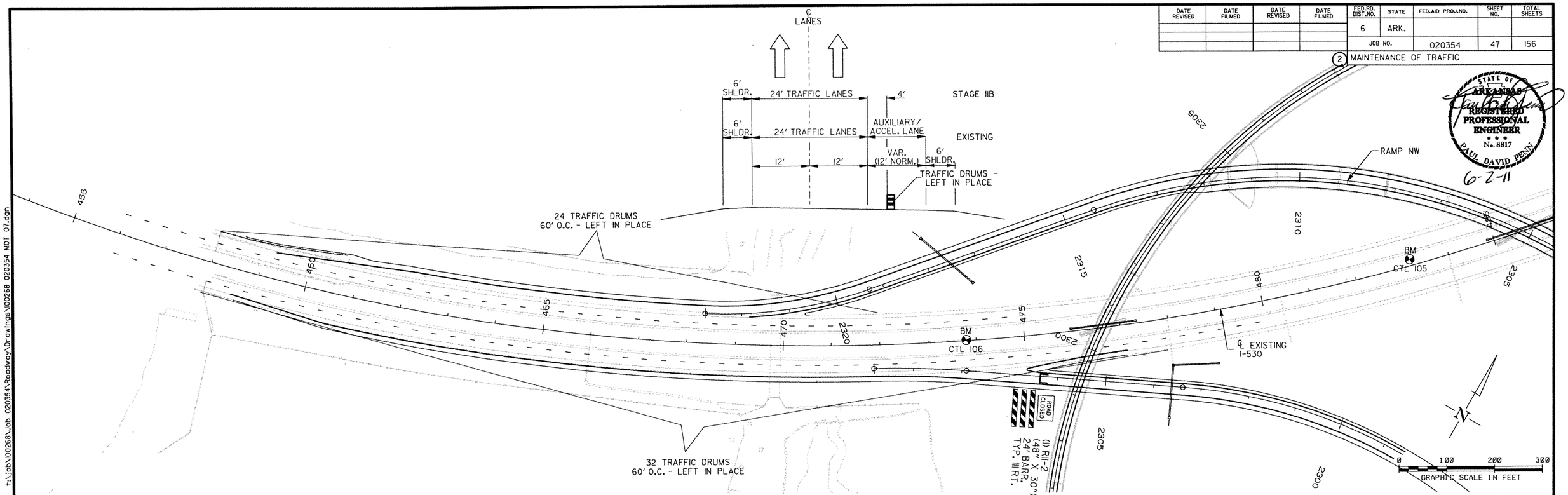

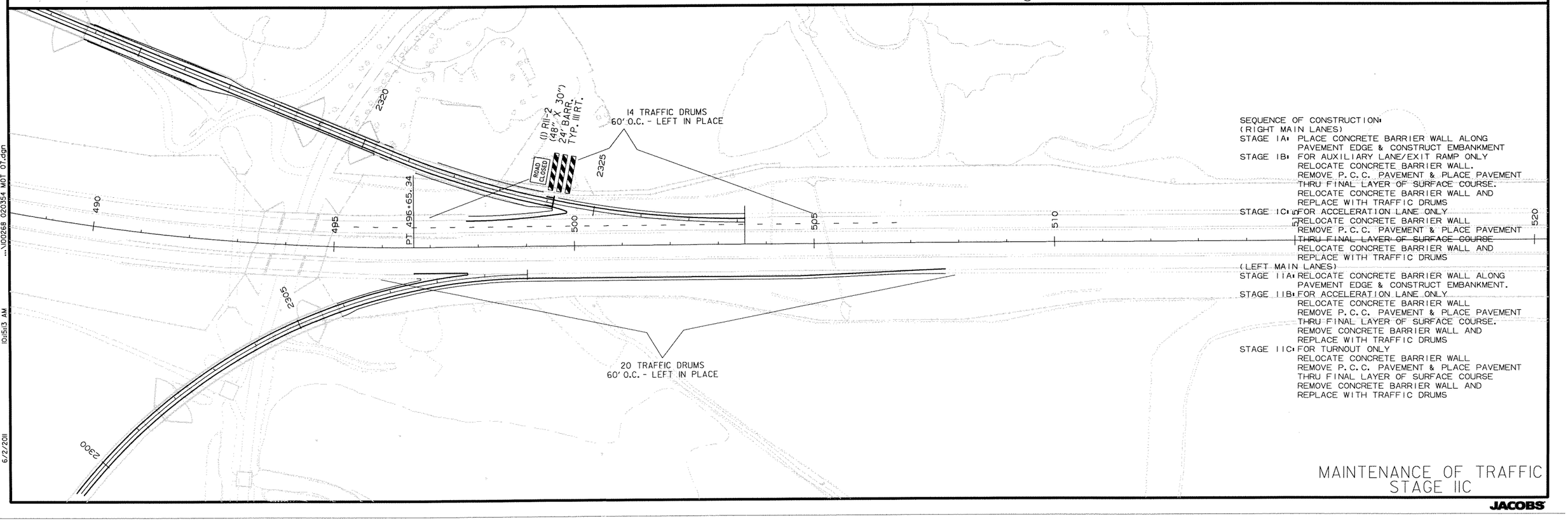

SEQUENCE OF CONSTRUCTION:
(RIGHT MAIN LANES)
STAGE IA: PLACE CONCRETE BARRIER WALL ALONG PAVEMENT EDGE & CONSTRUCT EMBANKMENT
STAGE IB: FOR AUXILIARY LANE/EXIT RAMP ONLY
RELOCATE CONCRETE BARRIER WALL.
REMOVE P.C.C. PAVEMENT & PLACE PAVEMENT THRU FINAL LAYER OF SURFACE COURSE.
RELOCATE CONCRETE BARRIER WALL AND REPLACE WITH TRAFFIC DRUMS
STAGE IC: FOR ACCELERATION LANE ONLY
RELOCATE CONCRETE BARRIER WALL
REMOVE P.C.C. PAVEMENT & PLACE PAVEMENT THRU FINAL LAYER OF SURFACE COURSE
RELOCATE CONCRETE BARRIER WALL AND REPLACE WITH TRAFFIC DRUMS
(LEFT MAIN LANES)
STAGE IIA: RELOCATE CONCRETE BARRIER WALL ALONG PAVEMENT EDGE & CONSTRUCT EMBANKMENT.
STAGE IIB: FOR ACCELERATION LANE ONLY
RELOCATE CONCRETE BARRIER WALL
REMOVE P.C.C. PAVEMENT & PLACE PAVEMENT THRU FINAL LAYER OF SURFACE COURSE.
REMOVE CONCRETE BARRIER WALL AND REPLACE WITH TRAFFIC DRUMS
STAGE IIC: FOR TURNOUT ONLY
RELOCATE CONCRETE BARRIER WALL
REMOVE P.C.C. PAVEMENT & PLACE PAVEMENT THRU FINAL LAYER OF SURFACE COURSE
REMOVE CONCRETE BARRIER WALL AND REPLACE WITH TRAFFIC DRUMS

MAINTENANCE OF TRAFFIC STAGE IIC

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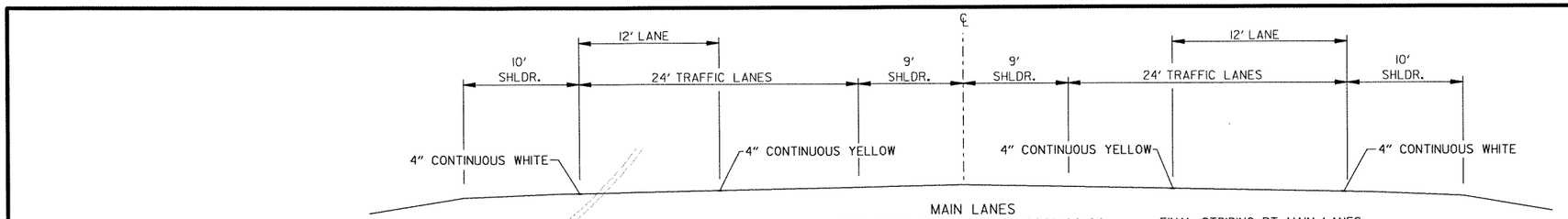
				6	ARK.			
				JOB NO.		020354	48	156

(2) PERMANENT PAVEMENT MARKING DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11



MAIN LANES
STA. 2248+11.80 TO STA. 2261+00.00

FINAL STRIPING LT. MAIN LANES
RT. & LT. EDGE LINES STA. 2248+11.80 - STA. 2261+00.00

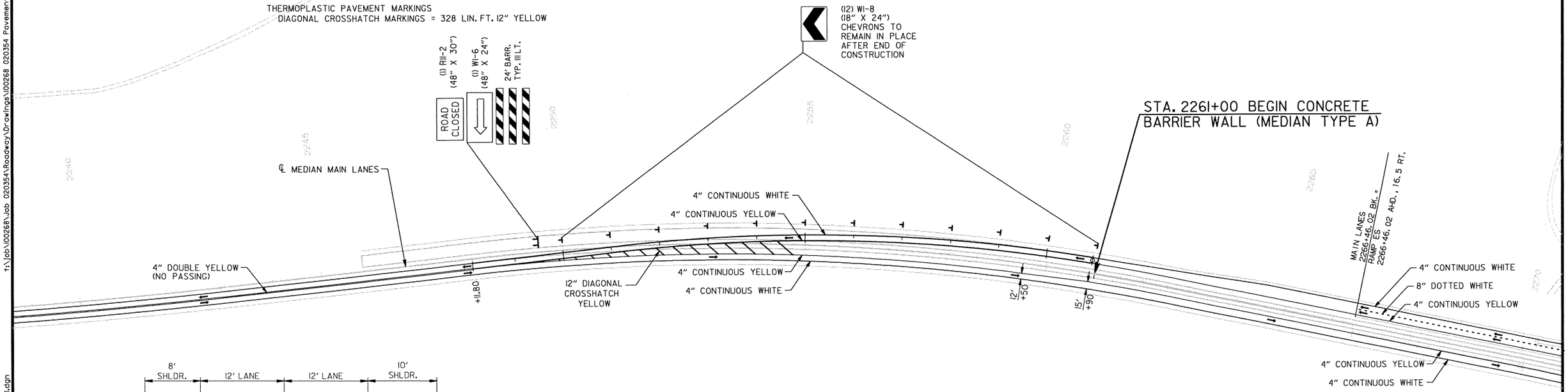
HIGH PERFORMANCE PAVEMENT MARKINGS = 1288 LIN. FT. 4" WHITE
HIGH PERFORMANCE PAVEMENT MARKINGS = 1288 LIN. FT. 4" YELLOW

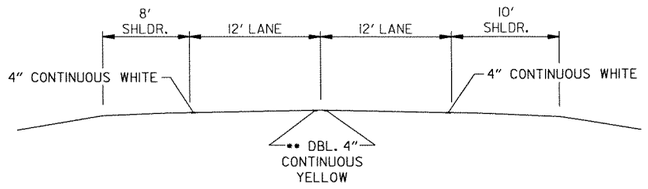
THERMOPLASTIC PAVEMENT MARKINGS
DIAGONAL CROSSHATCH MARKINGS = 328 LIN. FT. 12" YELLOW

FINAL STRIPING RT. MAIN LANES
RT. & LT. EDGE LINES STA. 2248+11.80 - STA. 2261+00.00

HIGH PERFORMANCE PAVEMENT MARKINGS = 1288 LIN. FT. 4" WHITE
HIGH PERFORMANCE PAVEMENT MARKINGS = 1288 LIN. FT. 4" YELLOW

0 100 200 300
GRAPHIC SCALE IN FEET





RIGHT MAIN LANES
STA. 2059+58.12 TO STA. 2248+11.80

FINAL STRIPING RT. MAIN LANES
RT. & LT. EDGE LINES STA. 2059+58.12 - STA. 2248+11.80

HIGH PERFORMANCE PAVEMENT MARKINGS = 37707 LIN. FT. 4" WHITE

FINAL STRIPING RT. MAIN LANES
••DBL. CENTERLINE ON OVERPASSES

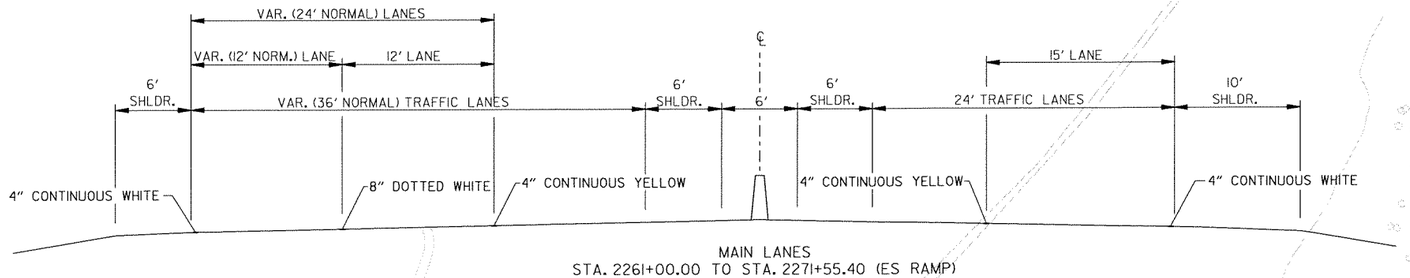
HIGH PERFORMANCE CONTRAST PAVEMENT MARKINGS
MAIN LANE BRIDGE OVER SANDY BAYOU = 558 LIN. FT. 4" YELLOW
OVERPASS AT ST. RAPHAEL RD. = 484 LIN. FT. 4" YELLOW
MAIN LANE BRIDGE OVER BAYOU BARTHOLOMEW = 2819 LIN. FT. 4" YELLOW

FINAL STRIPING RT. MAIN LANES
••DBL. CENTERLINE BETWEEN OVERPASSES

HIGH PERFORMANCE PAVEMENT MARKINGS
STA. 2059+58.12 - BRIDGE OVER SANDY BAYOU = 6019 LIN. FT. 4" YELLOW
BRIDGE OVER SANDY BAYOU - ST. RAPHAEL BAYOU OVERPASS = 5991 LIN. FT. 4" YELLOW
ST. RAPHAEL BAYOU OVERPASS - BRIDGE OVER BAYOU BARTHOLOMEW = 10138 LIN. FT. 4" YELLOW
BRIDGE OVER BAYOU BARTHOLOMEW - STA. 2248+11.80 = 14414 LIN. FT. 4" YELLOW

FINAL STRIPING RT. MAIN LANES
RAISED PAVEMENT MARKERS ON DBL. CENTERLINE STA. 2059+58.12 - STA. 2248+11.80
TYPE II (YEL/YEL) 80' O.C. = 236 EACH

•• SIGHT DISTANCE FOR PASSING TO BE DETERMINED IN THE FIELD



MAIN LANES
STA. 2261+00.00 TO STA. 2271+55.40 (ES RAMP)

FINAL STRIPING RT. MAIN LANES
RT. & LT. EDGE LINES STA. 2261+00.00 - STA. 2271+55.40 (ES RAMP)

HIGH PERFORMANCE PAVEMENT MARKINGS = 1055 LIN. FT. 4" WHITE
HIGH PERFORMANCE PAVEMENT MARKINGS = 1055 LIN. FT. 4" YELLOW

FINAL STRIPING LT. MAIN LANES
RT. & LT. EDGE LINES STA. 2261+00.00 - STA. 2271+55.40 (ES RAMP)

HIGH PERFORMANCE PAVEMENT MARKINGS = 1055 LIN. FT. 4" WHITE
HIGH PERFORMANCE PAVEMENT MARKINGS = 1055 LIN. FT. 4" YELLOW
THERMOPLASTIC PAVEMENT MARKINGS
DOTTED LANE DIVIDER AND GORE STRIPING = 228 LIN. FT. 8" WHITE

RAISED PAVEMENT MARKERS
TYPE II (WHITE/RED) = 38 EACH

NOTE: REFER TO STD. DWG. PM-2 FOR ADDITIONAL INFORMATION

PERMANENT PAVEMENT MARKING DETAILS

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				6	ARK.			
				JOB NO.		020354	49	156

(2) PERMANENT PAVEMENT MARKING DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11

0 100 200 300
GRAPHIC SCALE IN FEET

MATCH LINE SHEET 50

Imbeau

2290

15'

℄ CONSTRUCTION RAMP WS

4" CONTINUOUS WHITE
4" CONTINUOUS YELLOW

4" CONTINUOUS WHITE
8" DOTTED WHITE
4" CONTINUOUS YELLOW

8" CONTINUOUS WHITE

24'

℄ CONSTRUCTION RAMP ES

4" CONTINUOUS YELLOW
4" CONTINUOUS WHITE

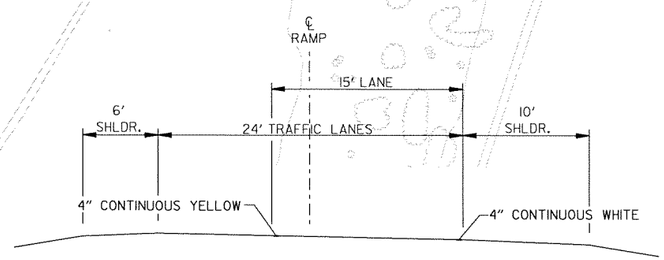
4" CONTINUOUS WHITE
4" CONTINUOUS YELLOW

4" CONTINUOUS WHITE
4" CONTINUOUS YELLOW

8" CONTINUOUS WHITE

4" CONTINUOUS YELLOW
8" DOTTED WHITE
4" CONTINUOUS WHITE

℄ OF CONSTRUCTION RAMP NW



NW RAMP
STA. 2271+46.21 TO STA. 2286+94.06
STA. 2294+57.40 TO STA. 2321+85.23
(SHOWN IN DIRECTION OF TRAFFIC)

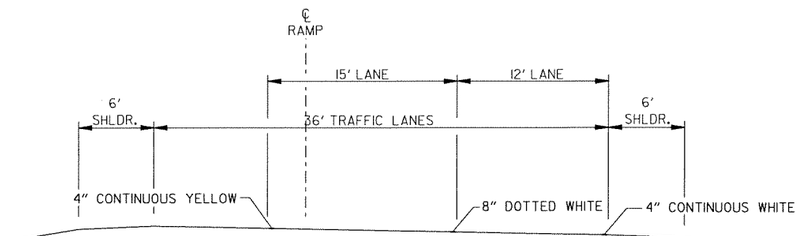
ES RAMP
STA. 2271+55.40 TO STA. 2306+63.82
(SHOWN IN DIRECTION OF TRAFFIC)

FINAL STRIPING NW RAMP
RT. & LT. EDGE LINES STA. 2271+46.21 - STA. 2286+94.06
RT. & LT. EDGE LINES STA. 2294+57.40 - STA. 2321+85.23

HIGH PERFORMANCE PAVEMENT MARKINGS = 4276 LIN. FT. 4" WHITE
HIGH PERFORMANCE PAVEMENT MARKINGS = 4276 LIN. FT. 4" YELLOW

FINAL STRIPING ES RAMP
RT. & LT. EDGE LINES STA. 2271+55.40 - STA. 2306+63.82

HIGH PERFORMANCE PAVEMENT MARKINGS = 3508 LIN. FT. 4" WHITE
HIGH PERFORMANCE PAVEMENT MARKINGS = 3508 LIN. FT. 4" YELLOW



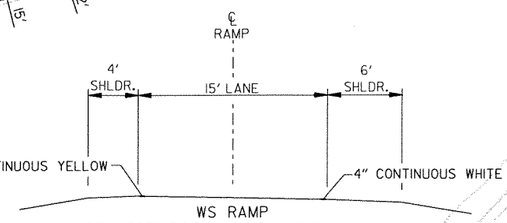
NW RAMP
STA. 2286+94.06 TO STA. 2294+57.40
(SHOWN IN DIRECTION OF TRAFFIC)

FINAL STRIPING NW RAMP
RT. & LT. EDGE LINES STA. 2286+94.06 - STA. 2294+57.40

HIGH PERFORMANCE PAVEMENT MARKINGS = 937 LIN. FT. 4" WHITE
HIGH PERFORMANCE PAVEMENT MARKINGS = 763 LIN. FT. 4" YELLOW
THERMOPLASTIC PAVEMENT MARKINGS
DOTTED LANE DIVIDER AND GORE STRIPING = 829 LIN. FT. 8" WHITE

RAISED PAVMENT MARKERS
TYPE II (WHITE/RED) = 38 EACH
TYPE II (WHITE/RED) = 48 EACH

NOTE: REFER TO STD. DWG. PM-2 FOR ADDITIONAL INFORMATION



WS RAMP
STA. 2271+54.84 TO STA. 2324+44.61
(SHOWN IN DIRECTION OF TRAFFIC)

NE RAMP
STA. 2294+62.21 TO STA. 2308+64.68
(SHOWN IN DIRECTION OF TRAFFIC)

FINAL STRIPING WS RAMP
RT. & LT. EDGE LINES STA. 2271+54.84 - STA. 2324+44.61

HIGH PERFORMANCE PAVEMENT MARKINGS = 5290 LIN. FT. 4" WHITE
HIGH PERFORMANCE PAVEMENT MARKINGS = 5290 LIN. FT. 4" YELLOW

FINAL STRIPING NE RAMP
RT. & LT. EDGE LINES STA. 2294+62.21 - STA. 2308+64.68

HIGH PERFORMANCE PAVEMENT MARKINGS = 1402 LIN. FT. 4" WHITE
HIGH PERFORMANCE PAVEMENT MARKINGS = 1402 LIN. FT. 4" YELLOW

PERMANENT PAVEMENT MARKING DETAILS

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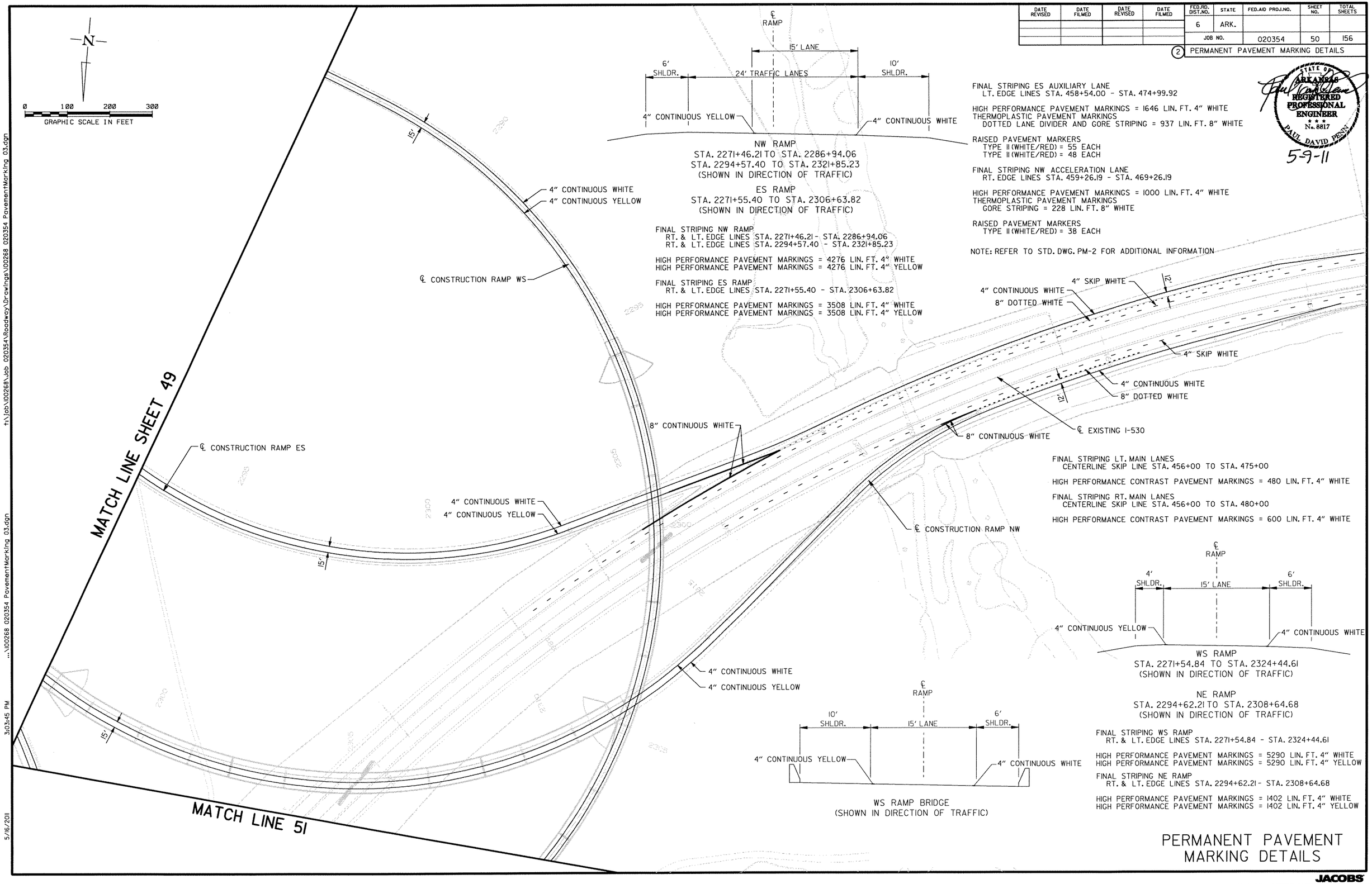
				6	ARK.			
				JOB NO.		020354	50	156

(2) PERMANENT PAVEMENT MARKING DETAILS



℄ RAMP

15' LANE

6' SHLDR. | 24' TRAFFIC LANES | 10' SHLDR.

4" CONTINUOUS YELLOW — 4" CONTINUOUS WHITE

NW RAMP
STA. 2271+46.21 TO STA. 2286+94.06
STA. 2294+57.40 TO STA. 2321+85.23
(SHOWN IN DIRECTION OF TRAFFIC)

ES RAMP
STA. 2271+55.40 TO STA. 2306+63.82
(SHOWN IN DIRECTION OF TRAFFIC)

FINAL STRIPING NW RAMP
RT. & LT. EDGE LINES STA. 2271+46.21 - STA. 2286+94.06
RT. & LT. EDGE LINES STA. 2294+57.40 - STA. 2321+85.23

HIGH PERFORMANCE PAVEMENT MARKINGS = 4276 LIN. FT. 4" WHITE
HIGH PERFORMANCE PAVEMENT MARKINGS = 4276 LIN. FT. 4" YELLOW

FINAL STRIPING ES RAMP
RT. & LT. EDGE LINES STA. 2271+55.40 - STA. 2306+63.82

HIGH PERFORMANCE PAVEMENT MARKINGS = 3508 LIN. FT. 4" WHITE
HIGH PERFORMANCE PAVEMENT MARKINGS = 3508 LIN. FT. 4" YELLOW

FINAL STRIPING ES AUXILIARY LANE
LT. EDGE LINES STA. 458+54.00 - STA. 474+99.92

HIGH PERFORMANCE PAVEMENT MARKINGS = 1646 LIN. FT. 4" WHITE
THERMOPLASTIC PAVEMENT MARKINGS
DOTTED LANE DIVIDER AND GORE STRIPING = 937 LIN. FT. 8" WHITE

RAISED PAVEMENT MARKERS
TYPE II (WHITE/RED) = 55 EACH
TYPE II (WHITE/RED) = 48 EACH

FINAL STRIPING NW ACCELERATION LANE
RT. EDGE LINES STA. 459+26.19 - STA. 469+26.19

HIGH PERFORMANCE PAVEMENT MARKINGS = 1000 LIN. FT. 4" WHITE
THERMOPLASTIC PAVEMENT MARKINGS
GORE STRIPING = 228 LIN. FT. 8" WHITE

RAISED PAVEMENT MARKERS
TYPE II (WHITE/RED) = 38 EACH

NOTE: REFER TO STD. DWG. PM-2 FOR ADDITIONAL INFORMATION

FINAL STRIPING LT. MAIN LANES
CENTERLINE SKIP LINE STA. 456+00 TO STA. 475+00

HIGH PERFORMANCE CONTRAST PAVEMENT MARKINGS = 480 LIN. FT. 4" WHITE

FINAL STRIPING RT. MAIN LANES
CENTERLINE SKIP LINE STA. 456+00 TO STA. 480+00

HIGH PERFORMANCE CONTRAST PAVEMENT MARKINGS = 600 LIN. FT. 4" WHITE

℄ RAMP

4' SHLDR. | 15' LANE | 6' SHLDR.

4" CONTINUOUS YELLOW — 4" CONTINUOUS WHITE

WS RAMP
STA. 2271+54.84 TO STA. 2324+44.61
(SHOWN IN DIRECTION OF TRAFFIC)

NE RAMP
STA. 2294+62.21 TO STA. 2308+64.68
(SHOWN IN DIRECTION OF TRAFFIC)

FINAL STRIPING WS RAMP
RT. & LT. EDGE LINES STA. 2271+54.84 - STA. 2324+44.61

HIGH PERFORMANCE PAVEMENT MARKINGS = 5290 LIN. FT. 4" WHITE
HIGH PERFORMANCE PAVEMENT MARKINGS = 5290 LIN. FT. 4" YELLOW

FINAL STRIPING NE RAMP
RT. & LT. EDGE LINES STA. 2294+62.21 - STA. 2308+64.68

HIGH PERFORMANCE PAVEMENT MARKINGS = 1402 LIN. FT. 4" WHITE
HIGH PERFORMANCE PAVEMENT MARKINGS = 1402 LIN. FT. 4" YELLOW

℄ RAMP

10' SHLDR. | 15' LANE | 6' SHLDR.

4" CONTINUOUS YELLOW — 4" CONTINUOUS WHITE

WS RAMP BRIDGE
(SHOWN IN DIRECTION OF TRAFFIC)

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11

PERMANENT PAVEMENT MARKING DETAILS

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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.		020354	51	156

(2) PERMANENT PAVEMENT MARKING DETAILS

FINAL STRIPING WS RAMP TURNOUT
LT. EDGE LINES STA. 499+84.68 - STA. 503+54.81

HIGH PERFORMANCE PAVEMENT MARKINGS = 370 LIN. FT. 4" WHITE
THERMOPLASTIC PAVEMENT MARKINGS
GORE STRIPING = 655 LIN. FT. 8" WHITE

RAISED PAVEMENT MARKERS
TYPE II(WHITE/RED) = 38 EACH
TYPE II(WHITE/RED) = 48 EACH

FINAL STRIPING NE ACCELERATION LANE
RT. EDGE LINES STA. 497+77.46 - STA. 507+77.46

HIGH PERFORMANCE PAVEMENT MARKINGS = 1000 LIN. FT. 4" WHITE
THERMOPLASTIC PAVEMENT MARKINGS
DOTTED LANE DIVIDER AND GORE STRIPING= 228 LIN. FT. 8" WHITE

RAISED PAVEMENT MARKERS
TYPE II(WHITE/RED) = 38 EACH

FINAL STRIPING LT. MAIN LANES
CENTERLINE SKIP LINE STA. 495+00 TO STA. 507+00

HIGH PERFORMANCE CONTRAST PAVEMENT MARKINGS = 300 LIN. FT. 4" WHITE

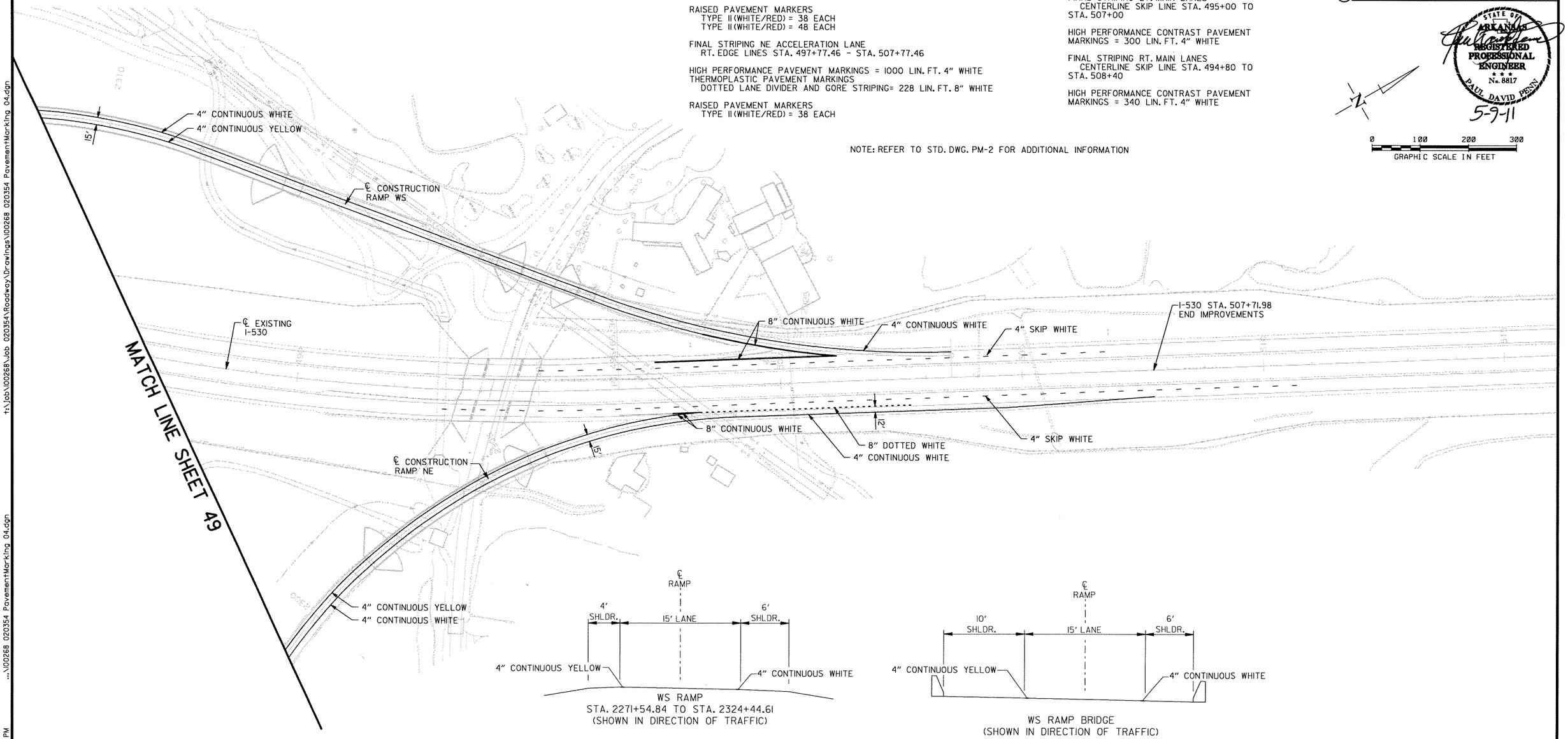
FINAL STRIPING RT. MAIN LANES
CENTERLINE SKIP LINE STA. 494+80 TO STA. 508+40

HIGH PERFORMANCE CONTRAST PAVEMENT MARKINGS = 340 LIN. FT. 4" WHITE

NOTE: REFER TO STD. DWG. PM-2 FOR ADDITIONAL INFORMATION

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 8817 PAUL DAVID PENNY
5-9-11

0 100 200 300
GRAPHIC SCALE IN FEET



WS RAMP
STA. 2271+54.84 TO STA. 2324+44.61
(SHOWN IN DIRECTION OF TRAFFIC)

NE RAMP
STA. 2294+62.21 TO STA. 2308+64.68
(SHOWN IN DIRECTION OF TRAFFIC)

FINAL STRIPING WS RAMP
RT. & LT. EDGE LINES STA. 2271+54.84 - STA. 2324+44.61

HIGH PERFORMANCE PAVEMENT MARKINGS = 5290 LIN. FT. 4" WHITE
HIGH PERFORMANCE PAVEMENT MARKINGS = 5290 LIN. FT. 4" YELLOW

FINAL STRIPING NE RAMP
RT. & LT. EDGE LINES STA. 2294+62.21 - STA. 2308+64.68

HIGH PERFORMANCE PAVEMENT MARKINGS = 1402 LIN. FT. 4" WHITE
HIGH PERFORMANCE PAVEMENT MARKINGS = 1402 LIN. FT. 4" YELLOW

WS RAMP BRIDGE
(SHOWN IN DIRECTION OF TRAFFIC)

PERMANENT PAVEMENT MARKING DETAILS

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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.		020354	52	156
				(2)	QUANTITIES			

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENNY
6-2-11

ADVANCE WARNING SIGNS AND DEVICES

SIGN NUMBER	DESCRIPTION	SIGN SIZE	ST. RAPHAEL ROAD	WILBUR WEST ROAD/OHIO STREET	I-69	I-530	I-530 STAGE IA	I-530 STAGE IB	I-530 STAGE IC	I-530 STAGE IIA	I-530 STAGE IIB	I-530 STAGE IIC	MAXIMUM NUMBER REQUIRED	SIGNS		SIGNS - LEFT IN PLACE		TRAFFIC DRUMS - LEFT IN PLACE	BARRICADES (TYPE III) LEFT IN PLACE		FURNISHING & INSTALLING PRECAST CONC. BARRIER	RELOCATING PRECAST CONCRETE BARRIER	PORTABLE CHANGEABLE MESSAGE SIGN	TRAFFIC DRUMS
			SQ. FT. - LIN. FT. - EACH											NO.	SQ. FT.	NO.	SQ. FT.	EACH	LT.	RT.	LIN. FT.	LIN. FT.	WEEK	EACH
																			LIN. FT.					
G20-2	END ROAD WORK	(48" X 24")	2	2		5	5	5	5	5	5	5	9	9	72									
R2-1	SPEED LIMIT	(48" X 60")				4	4	4	4	4	4	4	4	4	80									
R11-2	ROAD CLOSED	(48" X 30")		2									2	2	20									
R11-2	ROAD CLOSED - LEFT IN PLACE	(48" X 30")			1				1			1	3	3		3	30							
R55-1	FINES DOUBLE IN WORK ZONES WHEN WORKERS ARE PRESENT	(36" X 60")				4	4	4	4	4	4	4	4	4	60									
W1-4BL	REVERSE CURVE LEFT (2 LANES)	(48" X 48")				4	4	4	5	4	5	4	5	5	80									
W1-4BR	REVERSE CURVE RIGHT (2 LANES)	(48" X 48")						1	1		1	1	1	1	16									
W1-6	ONE-DIRECTION LARGE ARROW - LEFT IN PLACE	(48" X 24")			1								1			1	8							
W1-8	CHEVRON - LEFT IN PLACE	(18" X 24")			12								12			12	36							
W20-1	ROAD WORK AHEAD	(48" X 48")				1	1	1	1	1	1	1	1	1	16									
W20-1	ROAD WORK 500 FT.	(48" X 48")	2	2									4	4	64									
W20-1	ROAD WORK 1000 FEET	(48" X 48")	1	2									3	3	48									
W20-1	ROAD WORK 1500 FEET	(48" X 48")	1	2		4	4	4	4	4	4	4	7	7	112									
W20-1	ROAD WORK 1/2 MILE	(48" X 48")				4	4	4	4	4	4	4	4	4	64									
W20-1	ROAD WORK 1 MILE	(48" X 48")				4	4	4	4	4	4	4	4	4	64									
W21-5A	RIGHT SHOULDER CLOSED	(48" X 48")				4	4	4	4	4	4	4	4	4	64									
	TRAFFIC DRUMS						18	18	18	24	24	24	24											24
	TRAFFIC DRUMS - LEFT IN PLACE								52			38	90					90						
	TYPE III BARRICADE - LT. (24') - LEFT IN PLACE				1								1						24					
	TYPE III BARRICADE - RT. (24') - LEFT IN PLACE								1			1	2							48				
	PORTABLE CHANGEABLE MESSAGE SIGN					2	2	2	2	2	2	2	2										18	
	FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER						3380						3380								3380			
	RELOCATING PRECAST CONCRETE BARRIER							2000	1380	2566	1673	893	8512									8512		
TOTALS															760		74	90	24	48	3380	8512	18	24

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

CONSTRUCTION PAVEMENT MARKINGS AND PERMANENT PAVEMENT MARKINGS

DESCRIPTION	STAGE IB	STAGE IIB	END OF JOB	REMOVAL OF PERMANENT PAVEMENT MARKINGS	REMOVABLE CONSTRUCTION PAVEMENT MARKINGS	RAISED PAVEMENT MARKERS		THERMOPLASTIC PAVEMENT MARKINGS		HIGH PERFORMANCE CONTRAST PAVEMENT MARKING (4")		HIGH PERFORMANCE PAVEMENT MARKING (4")	
						TYPE II (YEL/YEL)	TYPE II (WHITE/RED)	8" WHITE	12" YELLOW	WHITE	YELLOW	WHITE	YELLOW
	LIN.FT.					EACH		LIN.FT.					
REMOVAL OF PERMANENT PAVEMENT MARKINGS	4090	3130		7220									
REMOVABLE CONSTRUCTION PAV'T MARKINGS	940	780			1720								
RAISED PAVEMENT MARKERS TYPE II (WHITE)			245				245						
RAISED PAVEMENT MARKERS TYPE II (YEL/YEL)			235			235							
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED)			144				144						
THERMOPLASTIC PAVEMENT MARKINGS WHITE (8")			3105					3105					
THERMOPLASTIC PAVEMENT MARKINGS YELLOW (12")			328						328				
HIGH PERFORMANCE CONTRAST PAVEMENT MARKING WHITE (4")			1720							1720			
HIGH PERFORMANCE CONTRAST PAVEMENT MARKING YELLOW (4")			3861								3861		
HIGH PERFORMANCE PAVEMENT MARKING WHITE (4")			61822									61822	
HIGH PERFORMANCE PAVEMENT MARKING YELLOW (4")			56487										56487
TOTALS				7220	1720	235	389	3105	328	1720	3861	61822	56487

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

SUBGRADE PREPARATION

STATION	STATION	LOCATION	STATION
2057+12.42	2090+03.92	RIGHT MAIN LANES	32.92
2092+10.08	2122+89.96	RIGHT MAIN LANES	30.80
2124+38.38	2162+44.57	RIGHT MAIN LANES	38.06
2175+53.15	2245+86.80	RIGHT MAIN LANES	70.34
2245+86.80	2266+46.02	RIGHT MAIN LANES	20.59
2245+86.80	2266+46.02	LEFT MAIN LANES	20.59
2266+46.02	2304+00.00	ES RAMP	37.54
2266+36.83	2297+56.96	NW RAMP	31.20
2311+49.15	2319+00.00	NW RAMP	7.51
2271+54.84	2295+79.55	WS RAMP	24.25
2313+81.73	2318+47.93	WS RAMP	4.66
2320+26.07	2322+00.00	WS RAMP	1.74
2294+62.21	2301+54.42	NE RAMP	6.92
2305+52.58	2306+00.00	NE RAMP	0.47
TOTAL			327.59

REMOVAL & DISPOSAL OF PORTLAND CEMENT CONCRETE PAVEMENT

STATION	STATION	LOCATION	LENGTH	AVG. WIDTH	SQ. YD.
			LIN. FT.	FEET	
458+54.00	469+26.19	LEFT MAIN LANES - I-530	1072.19	2	238.26
497+74.68	503+54.81	LEFT MAIN LANES - I-530	580.13	2	128.92
458+54.00	477+09.92	RIGHT MAIN LANES - I-530	1855.92	2	412.43
497+77.46	507+77.46	RIGHT MAIN LANES - I-530	1000.00	2	222.22
TOTAL					1001.83

REMOVAL & DISPOSAL OF FENCE

STATION	STATION	LOCATION	LIN. FT.
469+20	469+64	RT. OF R.M.L. I-530	44
470+08	472+85	RT. OF R.M.L. I-530	277
469+14	469+61	LT. OF L.M.L. I-530	47
469+98	471+75	LT. OF L.M.L. I-530	177
TOTAL			545

SOIL STABILIZATION

LOCATION	TON
ENTIRE PROJECT - IF AND WHERE DIRECTED BY THE ENGINEER.	100
TOTAL	100

NOTE: QUANTITY ESTIMATED.
SEE SECTION 104.03 OF THE STANDARD SPECIFICATIONS.

EARTHWORK

STATION	STATION	LOCATION	UNCLASSIFIED EXCAVATION	COMPACTED EMBANKMENT
			CU. YD.	
2304+00.00	2306+63.82	ES RAMP	22	5701
2319+00.00	2321+85.22	NW RAMP	235	3021
2322+00.00	2324+44.61	WS RAMP	58	4137
2306+00.00	2308+64.68	NE RAMP	102	3967
		I-530	4240	14762
TOTALS			4657	31588

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

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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.		020354	53	156

(2) QUANTITIES

STRUCTURES OVER 20'-0" SPAN - BOX CULVERT

STATION	LOCATION/DESCRIPTION	CLASS 'S' CONCRETE ROADWAY		REINFORCING STEEL - RDWY. (GRADE 60)		UNCLASSIFIED EXCAVATION FOR STRS. -	SOLID SODDING	WATER	STANDARD DRAWING
		CU.YD./LIN.FT.	CU.YD.	POUND/LIN. FT.	POUND	CU. YD.	SQ. YD.	M. GAL.	
469+85	EXTEND 28' LT.	2.544	76.96	308.86	9343.02	44.0	17.29	0.22	R-200X-X2, RCB-1, RCB-2, RCB-3
469+85	EXTEND 20' RT.	2.544	56.60	308.86	6872.14	37.7	17.29	0.22	R-200X-X2, RCB-1, RCB-2, RCB-3
469+85	3:1 WINGS LT. & RT.				2651.50				W-X003-2
469+85	HEADWALLS AND APRONS		42.37		320.42				W-X003-2, R-200X-X2
TOTALS			**175.93**		**19187.08**	**81.7**	**34.58**	**0.44**	

BASIS OF ESTIMATE: WATER - 12.6 GALS. PER SQ. YD. SOLID SODDING

4" PIPE UNDERDRAINS

STATION	LOCATION	4" PIPE UNDERDRAINS	UNDERDRAIN OUTLET PROTECTORS
		LIN. FT.	EACH
2304+00	ES RAMP	50	1
2304+50	ES RAMP	50	1
2305+00	ES RAMP	50	1
2305+50	ES RAMP	50	1
* 475+00	ES RAMP AUXILIARY LANE	50	1
* 474+50	ES RAMP AUXILIARY LANE	50	1
* 474+00	ES RAMP AUXILIARY LANE	50	1
2322+00	WS RAMP	50	1
2322+50	WS RAMP	50	1
2323+00	WS RAMP	50	1
2306+00	NE RAMP	50	1
2306+50	NE RAMP	50	1
2307+00	NE RAMP	50	1
ENTIRE PROJECT	TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.	150	3
TOTALS		**800**	**16**

NOTE: QUANTITIES ARE ESTIMATED.
SEE SECTION 104.03 OF THE STANDARD SPECIFICATIONS.

* NOTE: STATIONING ALONG I-530

MOWING

STATION	STATION	LOCATION	LENGTH	AVG. WIDTH	ACRE
			LIN. FT.	FEET	
2057+12.42	2266+46.02	LEFT OF SOUTHBOUND MAIN LANES	19270.44	30	13.27
2057+12.42	2266+46.02	RIGHT OF SOUTHBOUND MAIN LANES	19270.44	30	13.27
2266+46.02	2306+63.82	LEFT OF ES RAMP	4017.80	30	2.77
2275+62.86	2306+63.82	RIGHT OF ES RAMP	3100.96	30	2.14
2271+54.84	2324+44.61	LEFT OF WS RAMP	3275.91	30	2.26
2271+54.84	2324+44.61	RIGHT OF WS RAMP	3275.91	30	2.26
2275+50.00	2321+85.23	LEFT OF NW RAMP	3243.04	30	2.23
2266+36.83	2321+85.23	RIGHT OF NW RAMP	4156.21	30	2.86
2294+62.21	2308+64.68	LEFT OF NE RAMP	1004.31	30	0.69
2294+62.21	2308+64.68	RIGHT OF NE RAMP	1004.31	30	0.69
459+26.19	469+26.19	LEFT OF I-530 - NW AUXILIARY LANE	1000.00	30	0.69
458+54.00	474+99.92	RIGHT OF I-530 - ES AUXILIARY LANE	1645.92	30	1.13
499+84.68	503+54.81	LEFT OF I-530 - WS TURNOUT	370.13	30	0.25
497+77.46	507+77.46	RIGHT OF I-530 - NE ACCELERATION LANE	1000.00	30	0.69
TOTAL					**45.20**

APPROACH SLABS AND GUTTERS

STATION	STATION	LOCATION	APPROACH SLABS (TYPE 1)	APPROACH SLABS (TYPE 2)	APPROACH SLABS	APPROACH GUTTERS (TYPE C)	APPROACH GUTTERS (TYPE 1)	APPROACH GUTTERS (TYPE 2)	APPROACH GUTTERS (TYPE 3)	APPROACH GUTTERS (TYPE 4)	REINFORCING STEEL - RDWY. (GRADE 60)	AGGREGATE BASE COURSE (CL. 7)
			CU. YD.								LBS.	TON
2089+67.42	2090+03.92	RIGHT MAIN LANES			49.15						5556	48.3
2089+67.42	2090+03.92	RIGHT MAIN LANES - LEFT SHOULDER						12.81			1334	12.1
2089+67.42	2090+03.92	RIGHT MAIN LANES - RIGHT SHOULDER				18.06					991	20.1
2092+10.08	2092+46.58	RIGHT MAIN LANES			49.15						5556	48.3
2092+10.08	2092+46.58	RIGHT MAIN LANES - LEFT SHOULDER						12.81			1334	12.1
2092+10.08	2092+46.58	RIGHT MAIN LANES - RIGHT SHOULDER				18.06					991	20.1
2122+42.25	2122+89.96	RIGHT MAIN LANES	65.91								7663	63.1
2122+59.57	2122+96.07	RIGHT MAIN LANES - LEFT SHOULDER							12.40		1337	12.1
2122+42.25	2122+78.75	RIGHT MAIN LANES - RIGHT SHOULDER				18.06					991	20.1
2124+38.38	2124+84.05	RIGHT MAIN LANES	63.72								7369	60.4
2124+47.55	2124+84.05	RIGHT MAIN LANES - LEFT SHOULDER							13.22		1371	12.1
2124+32.27	2124+68.77	RIGHT MAIN LANES - RIGHT SHOULDER				18.06					991	20.1
2161+95.47	2162+44.57	RIGHT MAIN LANES		67.41							7867	64.9
2161+95.47	2162+31.97	RIGHT MAIN LANES - LEFT SHOULDER								13.33	1386	12.1
2162+16.47	2162+52.97	RIGHT MAIN LANES - RIGHT SHOULDER				18.06					991	20.1
2175+53.15	2176+05.05	RIGHT MAIN LANES		70.42							8277	68.6
2175+44.75	2175+81.25	RIGHT MAIN LANES - LEFT SHOULDER								12.20	1336	12.1
2175+68.55	2176+05.05	RIGHT MAIN LANES - RIGHT SHOULDER				18.06					991	20.1
2295+43.05	2295+79.55	WS RAMP			30.72						3502	30.2
2295+43.05	2295+79.55	WS RAMP - LEFT SHOULDER				11.52					623	12.1
2295+43.05	2295+79.55	WS RAMP - RIGHT SHOULDER				18.06					991	20.1
2313+81.73	2314+18.23	WS RAMP			30.72						3502	30.2
2313+81.73	2314+18.23	WS RAMP - LEFT SHOULDER				11.52					623	12.1
2313+81.73	2314+18.23	WS RAMP - RIGHT SHOULDER				18.06					991	20.1
2318+11.43	2318+47.93	WS RAMP			30.72						3502	30.2
2318+11.43	2318+47.93	WS RAMP - LEFT SHOULDER				11.52					623	12.1
2318+11.43	2318+47.93	WS RAMP - RIGHT SHOULDER				8.25					439	20.1
2320+26.07	2320+62.57	WS RAMP			30.72						3502	30.2
2320+26.07	2320+62.57	WS RAMP - LEFT SHOULDER				11.52					623	12.1
2320+26.07	2320+62.57	WS RAMP - RIGHT SHOULDER				8.25					439	20.1
2297+20.46	2297+56.96	NW RAMP			49.15						5556	48.3
2297+20.46	2297+56.96	NW RAMP - LEFT SHOULDER					22.18				1254	26.1
2297+20.46	2297+56.96	NW RAMP - RIGHT SHOULDER				18.06					991	20.1
2311+49.15	2311+85.65	NW RAMP			49.15						5556	48.3
2311+49.15	2311+85.65	NW RAMP - LEFT SHOULDER					22.18				1254	26.1
2311+49.15	2311+85.65	NW RAMP - RIGHT SHOULDER				18.06					991	20.1
2301+17.92	2301+54.42	NE RAMP			30.72						3502	30.2
2301+17.92	2301+54.42	NE RAMP - LEFT SHOULDER				8.25					439	8.0
2301+17.92	2301+54.42	NE RAMP - RIGHT SHOULDER				18.06					991	20.1
2305+52.58	2305+89.08	NE RAMP			30.72						3502	30.2
2305+52.58	2305+89.08	NE RAMP - LEFT SHOULDER				8.25					439	8.0
2305+52.58	2305+89.08	NE RAMP - RIGHT SHOULDER				18.06					991	20.1
TOTALS			**129.63**	**137.83**	**380.92**	**295.80**	**44.36**	**25.62**	**25.62**	**25.53**	**101158**	**1102.0**

NOTE: APPROACH SLABS AND GUTTERS AT WS RAMP, NW RAMP & NE RAMP SHALL BE CONSTRUCTED ON ARCS CONCENTRIC TO C.L. CONSTRUCTION.

CONCRETE BARRIER WALL (MEDIAN TYPE A)

FROM STATION	FROM LOCATION	TO STATION	TO LOCATION	LIN. FT.	AGGREGATE BASE COURSE (CL. 7) TONS/STA.	AGGREGATE BASE COURSE (CL. 7) TONS
2261+00	C.L. MEDIAN MAIN LANES	2275+50	LT. OF NW RAMP	1459	27.25	397.6
TOTALS				**1459**		**397.6**

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11

TEMPORARY EROSION CONTROL

LOCATION	TEMPORARY SEEDING	MULCH COVER	WATER	SAND BAG DITCH CHECK (E-5)	ROCK DITCH CHECK (E-6)	DROP INLET SILT FENCE (E-7)	SILT FENCE (E-11)	SEDIMENT REMOVAL & DISPOSAL
	ACRE		M. GAL.	BAG	CU. YD.	LIN. FT.		CU. YD.
ENTIRE PROJECT	1.69	1.69	34.5	110	11	112	5568	100
* ENTIRE PROJECT - IF AND WHERE DIRECTED BY THE ENGINEER.	1.00	1.00	20.4	44	4	48	1000	25
TOTALS	**2.69**	**2.69**	**54.9**	**154**	**15**	**160**	**6568**	**125**

BASIS OF ESTIMATE: WATER = 20.4 M. GAL. PER ACRE OF TEMPORARY SEEDING

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

*NOTE: QUANTITIES ESTIMATED.
SEE SECTION 104.03 OF THE STANDARD SPECIFICATIONS.

EROSION CONTROL

STATION	STATION	LOCATION	LIME	SEEDING	MULCH COVER	WATER	SECOND SEEDING APPLICATION
			TON	ACRE		M. GAL.	ACRE
2304+00	2306+64	ES RAMP	0.5	0.27	0.27	27.5	0.27
458+54	475+00	ES RAMP AUXILIARY LANE AND TAPER	3.6	1.81	1.81	184.6	1.81
2319+00	2321+85	NW RAMP	0.7	0.33	0.33	33.7	0.33
459+26	469+26	NW RAMP ACCELERATION LANE AND TAPER	1.9	0.97	0.97	98.9	0.97
2322+00	2324+45	WS RAMP	0.4	0.21	0.21	21.4	0.21
499+85	503+55	WS RAMP TURNOUT	0.3	0.17	0.17	17.3	0.17
2306+00	2308+65	NE RAMP	0.6	0.30	0.30	30.6	0.30
497+77	504+77	NE ACCELERATION LANE AND TAPER	1.4	0.69	0.69	70.4	0.69
*ENTIRE PROJECT - IF AND WHERE DIRECTED BY THE ENGINEER.			4.0	2.00	2.00	204.0	2.00
TOTALS			**13.4**	**6.75**	**6.75**	**688.4**	**6.75**

BASIS FOR ESTIMATE: LIME = 2 TONS PER ACRE OF SEEDING
WATER = 102 M. GAL. PER ACRE OF SEEDING

*NOTE: QUANTITIES ESTIMATED.
SEE SECTION 104.03 OF THE STANDARD SPECIFICATIONS.

MODIFYING DROP INLETS

STATION	LOCATION	EACH
2252+50	C.L. MEDIAN MAIN LANES	1
TOTAL		**1**

CRASH CUSHION

STATION	LOCATION	EACH
2261+00	C.L. MEDIAN MAIN LANES	1
TOTAL		**1**

FENCE

STATION	STATION	LOCATION	WIRE FENCE (TYPE A)	*16'-0" GATE
			LIN. FT	EACH
469+20.00	469+66.00	RT. OF R.M.L. I-530	46	
470+04.00	472+85.00	RT. OF R.M.L. I-530	265	1
469+13.00	469+60.00	LT. OF L.M.L. I-530	31	1
TOTALS			**342**	**2**

*DENOTES ALTERNATE BID ITEM.

GUARDRAIL

STATION	STATION	LOCATION	GUARDRAIL TYPE A	GUARDRAIL TERMINAL (TYPE 2)	THRIE BEAM GUARDRAIL TERMINAL
			LIN. FT	EACH	EACH
2086+76.77	2089+95.52	RT. OF RIGHT MAIN LANES	250	1	1
2088+66.27	2089+85.02	LT. OF RIGHT MAIN LANES	50	1	1
2092+28.98	2095+72.73	LT. OF RIGHT MAIN LANES	275	1	1
2092+18.48	2093+37.23	RT. OF RIGHT MAIN LANES	50	1	1
2119+51.73	2122+70.48	RT. OF RIGHT MAIN LANES	250	1	1
2121+61.61	2122+80.36	LT. OF RIGHT MAIN LANES	50	1	1
2124+66.32	2128+10.07	LT. OF RIGHT MAIN LANES	275	1	1
2124+35.44	2125+54.19	RT. OF RIGHT MAIN LANES	50	1	1
2159+32.06	2162+50.81	RT. OF RIGHT MAIN LANES	250	1	1
2160+93.55	2162+12.30	LT. OF RIGHT MAIN LANES	50	1	1
2175+60.23	2179+03.98	LT. OF RIGHT MAIN LANES	275	1	1
2175+77.73	2176+96.48	RT. OF RIGHT MAIN LANES	50	1	1
2294+53.62	2297+47.37	LT. OF NW RAMP	225	1	1
2295+79.06	2297+47.81	RT. OF NW RAMP	100	1	1
2313+91.12	2316+84.87	LT. OF WS RAMP	225	1	1
2313+91.12	2316+34.87	RT. OF WS RAMP	175	1	1
2320+35.47	2323+79.22	LT. OF WS RAMP	275	1	1
2320+35.47	2323+54.22	RT. OF WS RAMP	250	1	1
2298+26.38	2301+45.13	LT. OF NE RAMP	250	1	1
2298+26.10	2301+44.85	RT. OF NE RAMP	250	1	1
458+09.21	460+77.96	LT. OF LT. MAIN LANES - I-530	200	1	1
TOTALS			**3825**	**21**	**21**

JACOBS

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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.		020354	54	156

(2) QUANTITIES

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN

5-9-11

BASE AND SURFACING - MAIN LANES AND RAMPS (SHEET 1 OF 2)

STATION	STATION	LOCATION	LENGTH	AGGREGATE BASE COURSE (CLASS 7)		ACHM BASE COURSE (1 1/2") 880 LBS. PER SQ. YD.			ACHM BINDER COURSE (1") 440 LBS. PER SQ. YD.			ACHM SURFACE COURSE (1/2")				TACK COAT 0.03 GAL. PER SQ. YD.		
			LIN. FT	TONS/STA.	TONS	AVG. WIDTH FEET	SQ. YD.	TON	AVG. WIDTH FEET	SQ. YD.	TON	AVG. WIDTH FEET	SQ. YD.	LBS. PER SQ. YD.	TON	AVG. WIDTH FEET	SQ. YD.	GAL.
2057+12.42	2057+96.12	MAIN LANES	83.70	127.00	106.30	29.67	275.93	121.41	28.67	266.63	58.66	28.00	260.40	220	28.64	86.34	802.96	24.09
2057+96.12	2059+58.12	MAIN LANES - TRANSITION TO SINGLE SLOPE	162.00	127.00	205.74	29.67	534.06	234.99	28.67	516.06	113.53	28.00	504.00	220	55.44	86.34	1554.12	46.62
2059+58.12	2061+63.88	MAIN LANES - SINGLE SLOPE	205.76	127.00	261.32	29.67	678.32	298.46	28.67	655.46	144.20	28.00	640.14	220	70.42	86.34	1973.92	59.22
2061+63.88	2065+13.88	MAIN LANES - SUPERELEVATION TRANSITION	350.00	127.00	444.50	29.67	1153.83	507.69	28.67	1114.94	245.29	28.00	1088.89	220	119.78	86.34	3357.67	100.73
2065+13.88	2066+76.00	MAIN LANES - SUPERELEVATION	162.12	127.00	205.89	29.67	534.46	235.16	28.67	516.44	113.62	28.00	504.37	220	55.48	86.34	1555.27	46.66
2066+76.00	2069+62.69	MAIN LANES - SUPERELEVATION	286.69	127.00	364.10	29.67	945.12	415.85	28.67	913.27	200.92	28.00	891.92	220	98.11	86.34	2750.31	82.51
2069+62.69	2070+88.76	MAIN LANES - SUPERELEVATION	126.07	127.00	160.11	29.67	415.61	182.87	28.67	401.60	88.35	28.00	392.22	220	43.14	86.34	1209.43	36.28
2070+88.76	2071+76.26	MAIN LANES - SUPERELEVATION TRANSITION	87.50	127.00	111.13	29.67	288.46	126.92	28.67	278.74	61.32	28.00	272.22	220	29.94	86.34	839.42	25.18
2071+81.04	2074+43.54	MAIN LANES - SUPERELEVATION TRANSITION	262.50	127.00	333.38	29.67	865.38	380.77	28.67	836.21	183.97	28.00	816.67	220	89.83	86.34	2518.25	75.55
2074+43.54	2074+88.93	MAIN LANES - SINGLE SLOPE	45.39	127.00	57.65	29.67	149.64	65.84	28.67	144.59	31.81	28.00	141.21	220	15.53	86.34	435.44	13.06
2074+88.93	2077+88.93	MAIN LANES - SUPERELEVATION TRANSITION	300.00	127.00	381.00	29.67	989.00	435.16	28.67	955.67	210.25	28.00	933.33	220	102.67	86.34	2878.00	86.34
2077+88.93	2084+08.06	MAIN LANES - SUPERELEVATION	619.13	127.00	786.30	29.67	2041.07	898.07	28.67	1972.27	433.90	28.00	1926.18	220	211.88	86.34	5939.52	178.19
2084+08.06	2086+08.06	MAIN LANES - SUPERELEVATION TRANSITION W/ PAVEMENT TRANSITION	200.00	127.00	254.00	29.67	659.33	290.11	28.67	637.11	140.16	28.00	622.22	330	102.67	86.34	1918.67	57.56
2086+08.06	2087+08.06	MAIN LANES - SUPERELEVATION TRANSITION	100.00	127.00	127.00	29.67	329.67	145.05	28.67	318.56	70.08	28.00	311.11	440	68.44	114.34	1270.44	38.11
2087+08.06	2089+67.42	MAIN LANES - SINGLE SLOPE	259.36	127.00	329.39	29.67	855.02	376.21	28.67	826.21	181.77	28.00	806.90	440	177.52	114.34	3295.02	98.85
2092+46.58	2096+00.00	MAIN LANES - SINGLE SLOPE	353.42	127.00	448.84	29.67	1165.11	512.65	28.67	1125.84	247.68	28.00	1099.53	440	241.90	114.34	4490.00	134.70
2096+00.00	2098+00.00	MAIN LANES - TRANSITION TO CROWN W/ PAVEMENT TRANSITION	200.00	127.00	254.00	29.67	659.33	290.11	28.67	637.11	140.16	28.00	622.22	330	102.67	86.34	1918.67	57.56
2098+00.00	2099+50.00	MAIN LANES - TRANSITION TO CROWN	150.00	127.00	190.50	29.67	494.50	217.58	28.67	477.83	105.12	28.00	466.67	220	51.33	86.34	1439.00	43.17
2099+50.00	2115+50.00	MAIN LANES - CROWN SECTION	1600.00	127.00	2032.00	29.67	5274.67	2320.85	28.67	5096.89	1121.32	28.00	4977.78	220	547.56	86.34	15349.33	460.48
2115+50.00	2117+00.00	MAIN LANES - TRANSITION TO SINGLE SLOPE	150.00	127.00	190.50	29.67	494.50	217.58	28.67	477.83	105.12	28.00	466.67	220	51.33	86.34	1439.00	43.17
2117+00.00	2119+00.00	MAIN LANES - TRANSITION TO SINGLE SLOPE W/ PAVEMENT TRANSITION	200.00	127.00	254.00	29.67	659.33	290.11	28.67	637.11	140.16	28.00	622.22	330	102.67	86.34	1918.67	57.56
2119+00.00	2122+53.46	MAIN LANES - SINGLE SLOPE	353.46	127.00	448.89	29.67	1165.24	512.71	28.67	1125.97	247.71	28.00	1099.65	440	241.92	114.34	4490.51	134.72
2125+45.33	2126+38.32	MAIN LANES - SINGLE SLOPE	92.99	127.00	118.10	29.67	306.56	134.89	28.67	296.22	65.17	28.00	289.30	440	63.65	114.34	1181.39	35.44
2126+38.32	2128+38.32	MAIN LANES - SUPERELEVATION TRANSITION	200.00	127.00	254.00	29.67	659.33	290.11	28.67	637.11	140.16	28.00	622.22	440	136.89	114.34	2540.89	76.23
2128+38.32	2129+38.32	MAIN LANES - SUPERELEVATION TRANSITION W/ PAVEMENT TRANSITION	100.00	127.00	127.00	29.67	329.67	145.05	28.37	315.22	69.35	28.00	311.11	385	59.89	114.04	1267.11	38.01
2129+38.32	2130+38.32	MAIN LANES - SUPERELEVATION W/ PAVEMENT TRANSITION	100.00	127.00	127.00	29.67	329.67	145.05	28.67	318.56	70.08	28.00	311.11	275	42.78	86.34	959.33	28.78
2130+38.32	2143+03.24	MAIN LANES - SUPERELEVATION	1264.92	127.00	1606.45	29.67	4170.02	1834.81	28.67	4029.47	886.48	28.00	3935.31	220	432.88	86.34	12134.80	364.04
2143+03.24	2146+03.24	MAIN LANES - SUPERELEVATION TRANSITION	300.00	127.00	381.00	29.67	989.00	435.16	28.67	955.67	210.25	28.00	933.33	220	102.67	86.34	2878.00	86.34
2146+03.24	2156+65.00	MAIN LANES - SINGLE SLOPE	1061.76	127.00	1348.44	29.67	3500.27	1540.12	28.67	3382.30	744.11	28.00	3303.25	220	363.36	86.34	10185.82	305.57
2156+65.00	2158+65.00	MAIN LANES - SINGLE SLOPE W/ PAVEMENT TRANSITION	200.00	127.00	254.00	29.67	659.33	290.11	28.67	637.11	140.16	28.00	622.22	330	102.67	86.34	1918.67	57.56
2158+65.00	2162+08.07	MAIN LANES - SINGLE SLOPE	343.07	127.00	435.70	29.67	1130.99	497.64	28.67	1092.87	240.43	28.00	1067.33	440	234.81	114.34	4358.51	130.76
2175+89.65	2177+75.00	MAIN LANES - SINGLE SLOPE	185.35	127.00	235.39	29.67	611.04	268.86	28.67	590.44	129.90	28.00	576.64	440	126.86	114.34	2354.77	70.64
2177+75.00	2179+75.00	MAIN LANES - TRANSITION TO CROWN W/ PAVEMENT TRANSITION	200.00	127.00	254.00	29.67	659.33	290.11	28.67	637.11	140.16	28.00	622.22	330	102.67	86.34	1918.67	57.56
2179+75.00	2181+25.00	MAIN LANES - TRANSITION TO CROWN	150.00	127.00	190.50	29.67	494.50	217.58	28.67	477.83	105.12	28.00	466.67	220	51.33	86.34	1439.00	43.17
2181+25.00	2242+36.80	MAIN LANES - CROWN SECTION	6111.80	127.00	7761.99	29.67	20148.57	8865.37	28.67	19469.48	4283.29	28.00	19014.49	220	2091.59	86.34	58632.53	1758.98
2242+36.80	2243+86.80	MAIN LANES - TRANSITION TO SINGLE SLOPE	150.00	127.00	190.50	29.67	494.50	217.58	28.67	477.83	105.12	28.00	466.67	220	51.33	86.34	1439.00	43.17
2243+86.80	2245+86.80	MAIN LANES - TRANSITION TO SINGLE SLOPE W/ PAVEMENT TRANSITION	200.00	127.00	254.00	29.67	659.33	290.11	28.67	637.11	140.16	28.00	622.22	330	102.67	86.34	1918.67	57.56
2245+86.80	2248+86.80	MAIN LANES - SUPERELEVATION TRANSITION	300.00	317.50	952.50	72.00	2400.00	1056.00	71.00	2366.67	520.67	70.00	2333.33	440	513.33	283.00	9433.33	283.00
2248+86.80	2261+00.00	MAIN LANES - SUPERELEVATION	1213.20	317.50	3851.91	72.00	9705.60	4270.46	71.00	9570.80	2105.58	70.00	9436.00	440	2075.92	283.00	38148.40	1144.45
2261+00.00	2261+55.39	RIGHT MAIN LANES - SUPERELEVATION	55.39	145.25	80.45	33.00	203.10	89.36	32.50	200.02	44.00	32.00	196.94	440	43.33	129.50	797.00	23.91
2261+55.39	2261+78.54	LEFT MAIN LANES - SUPERELEVATION W/ TAPER	23.15	145.25	33.63	33.00	84.88	37.35	32.50	83.60	18.39	32.00	82.31	440	18.11	129.50	333.10	9.99
2261+78.54	2264+55.39	LEFT MAIN LANES - SUPERELEVATION TRANSITION W/ TAPER	276.85	168.00	465.11	38.00	1168.92	514.32	37.50	1153.54	253.78	37.00	1138.16	440	250.40	149.50	4598.79	137.96
2264+55.39	2264+78.54	LEFT MAIN LANES - SUPERELEVATION TRANSITION W/ ACCELERATION LANE	23.15	190.50	44.10	43.00	110.61	48.67	42.50	109.32	24.05	42.00	108.03	440	23.77	169.50	435.99	13.08
2264+78.54	2266+46.02	RIGHT MAIN LANES	167.48	145.25	243.26	33.00	614.09	270.20	32.50	604.79	133.05	32.00	595.48	440	131.01	129.50	2409.85	72.30
2264+78.54	2266+46.02	LEFT MAIN LANES W/ ACCELERATION LANE	167.48	190.50	319.05	43.00	800.18	352.08	42.50	790.88	173.99	42.00	781.57	440	171.95	169.50	3154.21	94.63
								0.00			0.00							

JACOBS

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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.		020354	55	156

(2) QUANTITIES

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID DENN

5-9-11

BASE AND SURFACING - MAIN LANES AND RAMPS (SHEET 2 OF 2)

	STATION	STATION	LOCATION	LENGTH	AGGREGATE BASE COURSE (CLASS 7)		ACHM BASE COURSE (1 1/2") 880 LBS. PER SQ. YD.			ACHM BINDER COURSE (1") 440 LBS. PER SQ. YD.			ACHM SURFACE COURSE (1/2")				TACK COAT 0.03 GAL. PER SQ. YD.		
				LIN. FT	TONS/STA.	TONS	AVG. WIDTH FEET	SQ. YD.	TON	AVG. WIDTH FEET	SQ. YD.	TON	AVG. WIDTH FEET	SQ. YD.	LBS. PER SQ. YD.	TON	AVG. WIDTH FEET	SQ. YD.	GAL.
	2266+46.02	2268+78.35	ES RAMP	232.33	190.50	442.59	43.00	1110.02	488.41	42.50	1097.11	241.36	42.00	1084.21	440	238.53	169.50	4375.55	131.27
	2268+78.35	2270+28.35	ES RAMP	150.00	190.50	285.75	43.00	716.67	315.33	42.50	708.33	155.83	42.00	700.00	440	154.00	169.50	2825.00	84.75
	2270+28.35	2271+55.40	ES RAMP	127.05	165.25	219.46	38.00	553.50	243.54	37.00	546.99	120.34	36.00	540.56	440	118.92	147.00	2181.61	65.45
	2271+55.40	2275+59.92	ES RAMP	404.52	118.00	477.33	28.00	1258.51	553.74	27.00	1213.56	266.98	26.00	1168.61	440	257.09	107.00	4809.29	144.28
	2275+59.92	2280+18.12	ES RAMP	458.20	118.00	540.68	28.00	1425.51	627.22	27.00	1374.60	302.41	26.00	1323.69	440	291.21	107.00	5447.49	163.42
	2280+18.12	2283+68.12	ES RAMP - SUPERELEVATION TRANSITION	350.00	118.00	413.00	28.00	1088.89	479.11	27.00	1050.00	231.00	26.00	1011.11	440	222.44	107.00	4161.11	124.83
	2283+68.12	2302+44.42	ES RAMP - SUPERELEVATION	1876.30	118.00	2214.03	28.00	5837.38	2568.45	27.00	5628.90	1238.36	26.00	5420.42	440	1192.49	107.00	22307.12	669.21
	2302+44.42	2304+00.00	ES RAMP - SUPERELEVATION TRANSITION	155.58	118.00	183.58	28.00	484.03	212.97	27.00	466.74	102.68	26.00	449.45	440	98.88	107.00	1849.67	55.49
	2304+00.00	2306+63.82	ES RAMP - SUPERELEVATION TRANSITION	263.82	118.00	311.31	28.00	820.77	361.14	27.00	791.46	174.12	26.00	762.15	440	167.67	107.00	3136.53	94.10
	2266+36.83	2267+30.39	NW RAMP W/ INSIDE SHOULDER	93.56	145.25	135.90	33.00	343.05	150.94	32.50	337.86	74.33	32.00	332.66	440	73.19	129.50	1346.22	40.39
	2267+30.39	2270+80.39	NW RAMP W/ INSIDE SHOULDER - SUPERELEVATION TRANSITION	350.00	145.25	508.38	33.00	1283.33	564.67	32.50	1263.89	278.06	32.00	1244.44	440	273.78	129.50	5036.11	151.08
	2270+80.39	2275+50.00	NW RAMP W/ INSIDE SHOULDER - SUPERELEVATION	469.61	145.25	682.11	33.00	1721.90	757.64	32.50	1695.81	373.08	32.00	1669.72	440	367.34	129.50	6757.17	202.72
	2275+50.00	2279+52.18	NW RAMP - SUPERELEVATION	402.18	118.00	474.57	28.00	1251.23	550.54	27.00	1206.54	265.44	26.00	1161.85	440	255.61	107.00	4781.47	143.44
	2279+52.18	2281+45.49	NW RAMP - SUPERELEVATION TRANSITION	193.31	118.00	228.11	28.00	601.41	264.62	27.00	579.93	127.58	26.00	558.45	440	122.86	107.00	2298.24	68.95
	2281+45.49	2285+70.76	NW RAMP - SUPERELEVATION TRANSITION	425.27	118.00	501.82	28.00	1323.06	582.15	27.00	1275.81	280.68	26.00	1228.56	440	270.28	107.00	5055.99	151.68
	2285+70.76	2286+94.06	NW RAMP - SUPERELEVATION	123.30	118.00	145.49	28.00	383.60	168.78	27.00	369.90	81.38	26.00	356.20	440	78.36	107.00	1465.90	43.98
	2286+94.06	2288+94.06	NW RAMP - SUPERELEVATION W/ TAPER	200.00	140.75	281.50	33.00	733.33	322.67	32.00	711.11	156.44	31.00	688.89	440	151.56	127.00	2822.22	84.67
	2288+94.06	2292+44.06	NW RAMP - SUPERELEVATION W/ AUXILIARY LANE	350.00	163.25	571.38	38.00	1477.78	650.22	37.00	1438.89	316.56	36.00	1400.00	440	308.00	147.00	5716.67	171.50
	2292+44.06	2294+57.40	NW RAMP - SUPERELEVATION W/ AUXILIARY LANE	213.34	VAR.	599.84	VAR.	1512.82	665.64	VAR.	1495.03	328.91	VAR.	1477.44	440	325.04	VAR.	5962.73	178.88
	2294+57.40	2297+20.46	NW RAMP - SUPERELEVATION	263.06	118.00	310.41	28.00	818.41	360.10	27.00	789.18	173.62	26.00	759.95	440	167.19	107.00	3127.49	93.82
	2311+85.65	2313+61.31	NW RAMP - SUPERELEVATION	175.66	118.00	207.28	28.00	546.50	240.46	27.00	528.98	115.94	26.00	507.46	440	111.64	107.00	2088.40	62.65
	2313+61.31	2316+63.27	NW RAMP - SUPERELEVATION TRANSITION	301.96	118.00	356.31	28.00	939.43	413.35	27.00	905.88	199.29	26.00	872.33	440	191.91	107.00	3589.97	107.70
	2316+63.27	2319+00.00	NW RAMP - SUPERELEVATION TRANSITION	236.73	118.00	279.34	28.00	736.49	324.06	27.00	710.19	156.24	26.00	683.89	440	150.46	107.00	2814.46	84.43
	2319+00.00	2320+15.69	NW RAMP - SUPERELEVATION TRANSITION	115.69	118.00	136.51	28.00	359.92	158.36	27.00	347.07	76.36	26.00	334.22	440	73.53	107.00	1375.43	41.26
	2320+15.69	2321+08.67	NW RAMP - SUPERELEVATION	92.98	118.00	109.72	28.00	289.27	127.28	27.00	278.94	61.37	26.00	268.61	440	59.09	107.00	1105.43	33.16
	2321+08.67	2321+85.23	NW RAMP - SUPERELEVATION TRANSITION	76.56	118.00	90.34	28.00	238.19	104.80	27.00	229.68	50.53	26.00	221.17	440	48.66	107.00	910.21	27.31
	2271+54.84	2271+78.35	WS RAMP - SUPERELEVATION TRANSITION	23.51	68.00	15.99	17.00	44.41	19.54	16.00	41.80	9.20	15.00	39.18	440	8.62	63.00	164.57	4.94
	2271+78.35	2282+13.75	WS RAMP - SUPERELEVATION	1035.40	68.00	704.07	17.00	1955.76	860.53	16.00	1840.71	404.96	15.00	1725.67	440	379.65	63.00	7247.80	217.43
	2282+13.75	2285+13.76	WS RAMP - SUPERELEVATION TRANSITION	300.01	68.00	204.01	17.00	566.69	249.34	16.00	533.35	117.34	15.00	500.02	440	110.00	63.00	2100.07	63.00
	2285+13.76	2288+13.77	WS RAMP - SUPERELEVATION TRANSITION	300.01	68.00	204.01	17.00	566.69	249.34	16.00	533.35	117.34	15.00	500.02	440	110.00	63.00	2100.07	63.00
	2288+13.77	2295+43.05	WS RAMP - SUPERELEVATION	729.28	68.00	495.91	17.00	1377.53	606.11	16.00	1296.50	285.23	15.00	1215.47	440	267.40	63.00	5104.96	153.15
	2314+18.23	2314+21.61	WS RAMP - SUPERELEVATION TRANSITION	3.38	68.00	2.30	17.00	6.38	2.81	16.00	6.01	1.32	15.00	5.63	440	1.24	63.00	23.66	0.71
	2314+21.61	2318+11.43	WS RAMP	389.82	68.00	265.08	17.00	736.33	323.99	16.00	693.01	152.46	15.00	649.70	440	142.93	63.00	2728.74	81.86
	2320+62.57	2321+34.61	WS RAMP - SUPERELEVATION TRANSITION	72.04	68.00	48.99	17.00	136.08	59.88	16.00	128.07	28.18	15.00	120.07	440	26.42	63.00	504.28	15.13
	2321+34.61	2322+00.00	WS RAMP - SUPERELEVATION	65.39	68.00	44.47	17.00	123.51	54.34	16.00	116.25	25.58	15.00	108.98	440	23.98	63.00	457.73	13.73
	2322+00.00	2324+44.61	WS RAMP - SUPERELEVATION	244.61	68.00	166.33	17.00	462.04	203.30	16.00	434.86	95.67	15.00	407.68	440	89.69	63.00	1712.27	51.37
	2294+62.21	2296+01.65	NE RAMP - SUPERELEVATION TRANSITION	139.44	68.00	94.82	17.00	263.39	115.89	16.00	247.89	54.54	15.00	232.40	440	51.13	63.00	976.08	29.28
	2296+04.65	2298+51.66	NE RAMP - SUPERELEVATION TRANSITION	247.01	68.00	167.97	17.00	466.57	205.29	16.00	439.13	96.61	15.00	411.68	440	90.57	63.00	1729.07	51.87
	2298+51.66	2301+17.92	NE RAMP - SUPERELEVATION	266.26	68.00	181.06	17.00	502.94	221.29	16.00	473.35	104.14	15.00	443.77	440	97.63	63.00	1863.82	55.91
	2305+89.08	2306+00.00	NE RAMP - SUPERELEVATION	10.92	68.00	7.43	17.00	20.63	9.08	16.00	19.41	4.27	15.00	18.20	440	4.00	63.00	76.44	2.29
	2306+00.00	2307+15.17	NE RAMP - SUPERELEVATION	115.17	68.00	78.32	17.00	217.54	95.72	16.00	204.75	45.05	15.00	191.95	440	42.23	63.00	806.19	24.19
	2307+15.17	2308+64.68	NE RAMP - SUPERELEVATION TRANSITION	149.51	68.00	101.67	17.00	282.41	124.26	16.00	265.80	58.48	15.00	249.18	440	54.82	63.00	1046.57	31.40
*	458+54.00	460+54.00	ES RAMP AUXILIARY LANE TAPER	200.00	27.25	54.50	7.00	155.56	68.45	6.50	144.44	31.78	6.00	133.33	440	29.33	25.50	566.67	17.00
*	460+54.00	471+87.64	ES RAMP AUXILIARY LANE	1133.64	54.50	617.83	13.00	1637.48	720.49	12.50	1574.50	346.39	12.00	1511.52	440	332.53	49.50	6235.02	187.05
*	471+87.64	474+99.92	ES RAMP TURNOUT	312.28	VAR.	382.36	VAR.	964.33	424.31	VAR.	952.98	209.66	VAR.	941.78	440	207.19	VAR.	3800.87	114.03
*	497+77.46	499+01.02	NE RAMP TURNOUT	123.56	VAR.	67.67	VAR.	170.66	75.09	VAR.	168.65	37.10	VAR.	166.67	440	36.67	VAR.	672.65	20.18
*	499+01.02	504+77.46	NE RAMP ACCELERATION LANE	576.44	54.50	314.16	13.00	832.64	366.36	12.50	800.61	176.13	12.00	768.59	440	169.09	49.50	3170.42	95.11
*	504+77.46	507+77.46	NE RAMP ACCELERATION LANE TAPER	300.00	27.25	81.75	7.00	233.33	102.67	6.50	216.67	47.67	6.00	200.00	440	44.00	25.50	850.00	25.50
*	459+26.19	462+26.19	NW RAMP ACCELERATION LANE TAPER	300.00	54.50	163.50	13.00	433.33	190.67	12.50	416.67	91.67	12.00	400.00	440	88.00	49.50	1650.00	49.50
*	462+26.19	468+35.11	NW RAMP ACCELERATION LANE	608.92	109.00	663.72	25.00	1691.44	744.23	24.50	1657.62	364.68	24.00	1623.79	440	357.23	97.50	6596.63	197.90
*	468+35.11	469+26.19	NW RAMP TURNOUT	91.08	VAR.	116.93	VAR.	233.46	102.72	VAR.	230.71	50.76	VAR.	228.00	440	50.16	VAR.	920.17	27.61
*	499+84.68	503+54.81	WS RAMP TURNOUT	370.13	VAR.	273.46	VAR.	689.68	303.46	VAR.	681.57	149.95	VAR.	673.56	440	148.18	VAR.	2718.37	81.55
	TOTALS					43699.67		113482.88	49932.49		109925.33	24183.60		106995.31		18635.16		390952.05	11728.55

BASIS OF ESTIMATE:
ACHM BASE COURSE (1 1/2") - MIN. AGG. = 96.4%, ASPH. BINDER (PG76-22) = 3.6%
ACHM BINDER COURSE (1") - MIN. AGG. = 95.7%, ASPH BINDER (PG76-22) = 4.3%
ACHM SURFACE COURSE (1/2") - MIN. AGG. = 94.9%, ASPH BINDER (PG76-22) = 5.1%
Nmax = 205

*STATIONING ALONG I-530

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BASE AND SURFACING - MAIN LANE AND RAMP SHOULDERS (LEFT)

	STATION	STATION	LOCATION	LENGTH	AGGREGATE BASE COURSE (CLASS 7)		ACHM SURFACE COURSE (1/2") 220 LBS. PER SQ. YD.		
				LIN. FT	TONS/STA.	TONS	AVG. WIDTH FEET	SQ. YD.	TON
	2057+12.42	2057+96.12	MAIN LANES - LEFT SHOULDER	83.70	140.75	117.81	6.00	55.80	6.14
	2057+96.12	2059+58.12	MAIN LANES - TRANSITION TO SINGLE SLOPE - LEFT SHOULDER	162.00	140.75	228.02	6.00	108.00	11.88
	2059+58.12	2061+63.88	MAIN LANES - SINGLE SLOPE - LEFT SHOULDER	205.76	140.75	289.61	6.00	137.17	15.09
	2061+63.88	2065+13.88	MAIN LANES - SUPERELEVATION TRANSITION - LEFT SHOULDER	350.00	140.75	492.63	6.00	233.33	25.67
	2065+13.88	2066+76.00	MAIN LANES - SUPERELEVATION - LEFT SHOULDER	162.12	140.75	228.18	6.00	108.08	11.89
	2066+76.00	2069+62.69	MAIN LANES - SUPERELEVATION - LEFT SHOULDER	286.69	140.75	403.52	6.00	191.13	21.02
	2069+62.69	2070+88.76	MAIN LANES - SUPERELEVATION - LEFT SHOULDER	126.07	140.75	177.44	6.00	84.05	9.25
	2070+88.76	2071+76.26	MAIN LANES - SUPERELEVATION TRANSITION - LEFT SHOULDER	87.50	140.75	123.16	6.00	58.33	6.42
	2071+81.04	2074+43.54	MAIN LANES - SUPERELEVATION TRANSITION - LEFT SHOULDER	262.50	140.75	369.47	6.00	175.00	19.25
	2074+43.54	2074+88.93	MAIN LANES - SINGLE SLOPE - LEFT SHOULDER	45.39	184.00	83.52	6.00	30.26	3.33
	2074+88.93	2077+88.93	MAIN LANES - SUPERELEVATION TRANSITION - LEFT SHOULDER	300.00	173.63	520.89	6.00	200.00	22.00
	2077+88.93	2084+08.06	MAIN LANES - SUPERELEVATION - LEFT SHOULDER	619.13	163.25	1010.73	6.00	412.75	45.40
	2084+08.06	2086+08.06	MAIN LANES - SUPERELEVATION TRANSITION W/ PAVEMENT TRANSITION - LEFT SHOULDER	200.00	163.75	327.50	6.00	133.33	14.67
	2086+08.06	2087+08.06	MAIN LANES - SUPERELEVATION TRANSITION - LEFT SHOULDER	100.00	198.25	198.25	6.00	66.67	7.33
	2087+08.06	2089+67.42	MAIN LANES - SINGLE SLOPE - LEFT SHOULDER	259.36	198.25	514.18	6.00	172.91	19.02
	2092+46.58	2096+00.00	MAIN LANES - SINGLE SLOPE - LEFT SHOULDER	353.42	198.25	700.66	6.00	235.61	25.92
	2096+00.00	2098+00.00	MAIN LANES - TRANSITION TO CROWN W/ PAVEMENT TRANSITION - LEFT SHOULDER	200.00	152.75	305.50	6.00	133.33	14.67
	2098+00.00	2099+50.00	MAIN LANES - TRANSITION TO CROWN - LEFT SHOULDER	150.00	140.00	210.00	6.00	100.00	11.00
	2099+50.00	2115+50.00	MAIN LANES - CROWN SECTION - LEFT SHOULDER	1600.00	140.00	2240.00	6.00	1066.67	117.33
	2115+50.00	2117+00.00	MAIN LANES - TRANSITION TO SINGLE SLOPE - LEFT SHOULDER	150.00	140.00	210.00	6.00	100.00	11.00
	2117+00.00	2119+00.00	MAIN LANES - TRANSITION TO SINGLE SLOPE W/ PAVEMENT TRANSITION - LEFT SHOULDER	200.00	152.75	305.50	6.00	133.33	14.67
	2119+00.00	2122+53.46	MAIN LANES - SINGLE SLOPE - LEFT SHOULDER	353.46	198.25	700.73	6.00	235.64	25.92
	2125+45.33	2126+38.32	MAIN LANES - SINGLE SLOPE - LEFT SHOULDER	92.99	198.25	184.35	6.00	61.99	6.82
	2126+38.32	2128+38.32	MAIN LANES - SUPERELEVATION TRANSITION - LEFT SHOULDER	200.00	176.75	353.50	6.00	133.33	14.67
	2128+38.32	2129+38.32	MAIN LANES - SUPERELEVATION TRANSITION W/ PAVEMENT TRANSITION - LEFT SHOULDER	100.00	176.50	176.50	6.00	66.67	7.33
	2129+38.32	2130+38.32	MAIN LANES - SUPERELEVATION W/ PAVEMENT TRANSITION - LEFT SHOULDER	100.00	170.00	170.00	6.00	66.67	7.33
	2130+38.32	2143+03.24	MAIN LANES - SUPERELEVATION - LEFT SHOULDER	1264.92	163.25	2064.98	6.00	843.28	92.76
	2143+03.24	2146+03.24	MAIN LANES - SUPERELEVATION TRANSITION - LEFT SHOULDER	300.00	152.00	456.00	6.00	200.00	22.00
	2146+03.24	2156+65.00	MAIN LANES - SINGLE SLOPE - LEFT SHOULDER	1061.76	140.00	1486.46	6.00	707.84	77.86
	2156+65.00	2158+65.00	MAIN LANES - SINGLE SLOPE W/ PAVEMENT TRANSITION - LEFT SHOULDER	200.00	152.75	305.50	6.00	133.33	14.67
	2158+65.00	2162+08.07	MAIN LANES - SINGLE SLOPE - LEFT SHOULDER	343.07	198.25	680.14	6.00	228.71	25.16
	2175+89.65	2177+75.00	MAIN LANES - SINGLE SLOPE - LEFT SHOULDER	185.35	198.25	367.46	6.00	123.57	13.59
	2177+75.00	2179+75.00	MAIN LANES - TRANSITION TO CROWN W/ PAVEMENT TRANSITION - LEFT SHOULDER	200.00	152.75	305.50	6.00	133.33	14.67
	2179+75.00	2181+25.00	MAIN LANES - TRANSITION TO CROWN - LEFT SHOULDER	150.00	140.00	210.00	6.00	100.00	11.00
	2181+25.00	2242+36.80	MAIN LANES - CROWN SECTION - LEFT SHOULDER	6111.80	140.00	8556.52	6.00	4074.53	448.20
	2242+36.80	2243+86.80	MAIN LANES - TRANSITION TO SINGLE SLOPE - LEFT SHOULDER	150.00	140.00	210.00	6.00	100.00	11.00
	2243+86.80	2245+86.80	MAIN LANES - TRANSITION TO SINGLE SLOPE W/ PAVEMENT TRANSITION - LEFT SHOULDER	200.00	152.75	305.50	6.00	133.33	14.67
	2245+86.80	2248+86.80	MAIN LANES - SUPERELEVATION TRANSITION - LEFT SHOULDER	300.00	218.25	654.75	8.00	266.67	29.33
	2248+86.80	2261+00.00	MAIN LANES - SUPERELEVATION - LEFT SHOULDER	1213.20	283.75	3442.46	8.00	1078.40	118.62
	2261+55.39	2261+78.54	LEFT MAIN LANES - SUPERELEVATION W/ TAPER - LEFT SHOULDER	23.15	283.75	65.69	8.00	20.58	2.26
	2261+78.54	2264+55.39	LEFT MAIN LANES - SUPERELEVATION TRANSITION W/ TAPER - LEFT SHOULDER	276.85	211.25	584.85	7.00	215.33	23.69
	2264+55.39	2264+78.54	LEFT MAIN LANES - SUPERELEVATION TRANSITION W/ ACCELERATION LANE - LEFT SHOULDER	23.15	164.75	38.14	6.00	15.43	1.70
	2264+78.54	2266+46.02	LEFT MAIN LANES W/ ACCELERATION LANE - LEFT SHOULDER	167.48	164.75	275.92	6.00	111.65	12.28
	ENTIRE PROJECT		WIDENING FOR GUARDRAIL	VAR.	VAR.	1170.00	VAR.	718.33	79.02
	2266+46.02	2268+78.35	ES RAMP - LEFT SHOULDER	232.33	164.75	382.76	6.00	154.89	17.04
	2268+78.35	2270+28.35	ES RAMP - LEFT SHOULDER	150.00	207.00	310.50	6.00	100.00	11.00
	2270+28.35	2271+55.40	ES RAMP - LEFT SHOULDER	127.05	249.25	219.46	6.00	84.70	9.32
	2271+55.40	2275+59.92	ES RAMP - LEFT SHOULDER	404.52	207.00	837.36	8.00	359.57	39.55
	2275+59.92	2280+18.12	ES RAMP - LEFT SHOULDER	458.20	164.75	754.88	8.00	407.29	44.80
	2280+18.12	2283+68.12	ES RAMP - SUPERELEVATION TRANSITION - LEFT SHOULDER	350.00	224.75	786.63	8.00	311.11	34.22
	2283+68.12	2302+44.42	ES RAMP - SUPERELEVATION - LT. SHOULDER	1876.30	284.75	5342.76	8.00	1667.82	183.46
	2302+44.42	2304+00.00	ES RAMP - SUPERELEVATION TRANSITION - LEFT SHOULDER	155.58	254.50	395.95	8.00	138.29	15.21
	2304+00.00	2306+63.82	ES RAMP - SUPERELEVATION TRANSITION - LEFT SHOULDER	263.82	244.50	645.04	8.00	234.51	25.80
	2266+36.83	2267+30.39	NW RAMP - LEFT SHOULDER	93.56	13.50	12.63			
	2267+30.39	2270+80.39	NW RAMP - SUPERELEVATION TRANSITION - LEFT SHOULDER	350.00	13.50	47.25			
	2270+80.39	2275+50.00	NW RAMP - SUPERELEVATION - LEFT SHOULDER	469.61	13.50	63.40			
	2275+50.00	2276+00.00	NW RAMP - SUPERELEVATION - LEFT SHOULDER	50.00	175.25	87.63	7.00	38.89	4.28
	2276+00.00	2279+52.18	NW RAMP - SUPERELEVATION - LEFT SHOULDER	352.18	175.25	617.20	6.00	234.79	25.83
	2279+52.18	2281+45.49	NW RAMP - SUPERELEVATION TRANSITION - LEFT SHOULDER	193.31	171.50	331.53	6.00	128.87	14.18
	2281+45.49	2285+70.76	NW RAMP - SUPERELEVATION TRANSITION - LEFT SHOULDER	425.27	208.50	886.69	6.00	283.51	31.19
	2285+70.76	2313+61.31	NW RAMP - SUPERELEVATION - LEFT SHOULDER	2790.55	249.25	6955.45	6.00	1860.37	204.64
	2313+61.31	2316+63.27	NW RAMP - SUPERELEVATION TRANSITION - LEFT SHOULDER	301.96	208.50	629.59	6.00	201.31	22.14
	2316+63.27	2319+00.00	NW RAMP - SUPERELEVATION TRANSITION - LEFT SHOULDER	236.73	228.50	540.93	6.00	157.82	17.36
	2319+00.00	2320+15.69	NW RAMP - SUPERELEVATION TRANSITION - LEFT SHOULDER	115.69	253.25	292.98	6.00	77.13	8.48
	2320+15.69	2321+08.67	NW RAMP - SUPERELEVATION - LEFT SHOULDER	92.98	278.00	258.48	6.00	61.99	6.82
	2321+08.67	2321+85.23	NW RAMP - SUPERELEVATION TRANSITION - LEFT SHOULDER	76.56	271.25	207.67	6.00	51.04	5.61
	ENTIRE PROJECT		WIDENING FOR GUARDRAIL	VAR.	VAR.	287.00	VAR.	417.78	45.96
	2271+54.84	2271+78.35	WS RAMP - SUPERELEVATION TRANSITION - LEFT SHOULDER	23.51	249.25	58.60	6.00	15.67	1.72
	2271+78.35	2282+13.75	WS RAMP - SUPERELEVATION - LEFT SHOULDER	1035.40	249.25	2580.73	6.00	690.27	75.93
	2282+13.75	2285+13.76	WS RAMP - SUPERELEVATION TRANSITION - LEFT SHOULDER	300.01	208.50	625.52	6.00	200.01	22.00
	2285+13.76	2288+13.77	WS RAMP - SUPERELEVATION TRANSITION - LEFT SHOULDER	300.01	216.25	648.77	6.00	200.01	22.00
	2288+13.77	2295+43.05	WS RAMP - SUPERELEVATION - LEFT SHOULDER	729.28	265.00	1932.59	6.00	486.19	53.48
	2314+18.23	2314+21.61	WS RAMP - SUPERELEVATION TRANSITION - LEFT SHOULDER	3.38	164.75	5.57	6.00	2.25	0.25
	2314+21.61	2318+11.43	WS RAMP - LEFT SHOULDER	389.82	164.75	642.23	6.00	259.88	28.59
	2320+62.57	2321+34.61	WS RAMP - SUPERELEVATION TRANSITION - LEFT SHOULDER	72.04	212.00	152.72	6.00	48.03	5.28
	2321+34.61	2322+00.00	WS RAMP - SUPERELEVATION - LEFT SHOULDER	65.39	212.00	138.63	6.00	43.59	4.79
	2322+00.00	2324+44.61	WS RAMP - SUPERELEVATION - LEFT SHOULDER	244.61	212.00	518.57	6.00	163.07	17.94
	ENTIRE PROJECT		WIDENING FOR GUARDRAIL	VAR.	VAR.	488.00	VAR.	409.78	45.08
	2294+62.21	2296+01.65	NE RAMP - SUPERELEVATION TRANSITION - LEFT SHOULDER	139.44	156.25	217.88	4.00	61.97	6.82
	2296+04.65	2298+51.66	NE RAMP - SUPERELEVATION TRANSITION - LEFT SHOULDER	247.01	172.00	424.86	4.00	109.78	12.08
	2298+51.66	2301+17.92	NE RAMP - SUPERELEVATION - LEFT SHOULDER	266.26	203.75	542.50	4.00	118.34	13.02
	2305+89.08	2306+00.00	NE RAMP - SUPERELEVATION - LEFT SHOULDER	10.92	203.75	22.25	4.00	4.85	0.53
	2306+00.00	2307+15.17	NE RAMP - SUPERELEVATION - LEFT SHOULDER	115.17	203.75	234.66	4.00	51.19	5.63
	2307+15.17	2308+64.68	NE RAMP - SUPERELEVATION TRANSITION - LEFT SHOULDER	149.51	195.25	291.92	4.00	66.45	7.31
	ENTIRE PROJECT		WIDENING FOR GUARDRAIL	VAR.	VAR.	244.00	VAR.	187.22	20.59
*	459+26.19	462+26.19	NW RAMP AUXILIARY LANE TAPER - SUPERELEVATION - LEFT SHOULDER	300.00	241.50	724.50	10.00	333.33	36.67
*	462+26.19	466+50.99	NW RAMP AUXILIARY LANE - SUPERELEVATION - LEFT SHOULDER	424.80	241.50	1025.89	10.00	472.00	51.92
*	466+50.99	468+35.11	NW RAMP AUXILIARY LANE - SUPERELEVATION TRANSITION - LEFT SHOULDER	184.12	272.25	501.27	10.00	204.58	22.50
*	468+35.11	469+26.19	NW RAMP TURNOUT - SUPERELEVATION TRANSITION - LEFT SHOULDER	91.08	302.75	275.74	10.00	101.20	11.13
	ENTIRE PROJECT		WIDENING FOR GUARDRAIL	VAR.	VAR.	195.00	VAR.	183.33	20.17
*	499+84.68	500+97.70	WS RAMP TURNOUT - SUPERELEVATION TRANSITION - LEFT SHOULDER	113.02	188.25	212.76	6.00	75.35	8.29
*	500+97.70	503+54.81	WS RAMP TURNOUT - LEFT SHOULDER	257.11	164.50	422.95	6.00	171.41	18.86
	TOTALS					**65843.40**		**25335.79**	**2786.97**

BASIS OF ESTIMATE: ACHM SURFACE COURSE (1/2") - MIN. AGG. = 94.9%, ASPH BINDER (PG76-22) = 5.1%
Nmax = 205

*STATIONING ALONG I-530

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8617
PAUL DAVID PENNY
5-9-11

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		56	156

(2) QUANTITIES

JOB NO. 020354

QUANTITIES

JACOBS

BASE AND SURFACING - MAIN LANE AND RAMP SHOULDERS (RIGHT)

STATION	STATION	LOCATION	LENGTH	AGGREGATE BASE COURSE (CLASS 7)		ACHM SURFACE COURSE (1/2") 220 LBS. PER SQ. YD.		
			LIN. FT	TONS/STA.	TONS	AVG. WIDTH FEET	SQ. YD.	TON
2057+12.42	2057+96.12	MAIN LANES - RIGHT SHOULDER	83.70	160.00	133.92	8.00	74.40	8.18
2057+96.12	2059+58.12	MAIN LANES - TRANSITION TO SINGLE SLOPE - RIGHT SHOULDER	162.00	160.00	259.20	8.00	144.00	15.84
2059+58.12	2061+63.88	MAIN LANES - SINGLE SLOPE - RIGHT SHOULDER	205.76	160.00	329.22	8.00	182.90	20.12
2061+63.88	2065+13.88	MAIN LANES - SUPERELEVATION TRANSITION - RIGHT SHOULDER	350.00	175.25	613.38	8.00	311.11	34.22
2065+13.88	2066+76.00	MAIN LANES - SUPERELEVATION - RIGHT SHOULDER	162.12	190.50	308.84	8.00	144.11	15.85
2066+76.00	2069+62.69	MAIN LANES - SUPERELEVATION - RIGHT SHOULDER	286.69	190.50	546.14	8.00	254.84	28.03
2069+62.69	2070+88.76	MAIN LANES - SUPERELEVATION - RIGHT SHOULDER	126.07	190.50	240.16	8.00	112.06	12.33
2070+88.76	2071+76.26	MAIN LANES - SUPERELEVATION TRANSITION - RIGHT SHOULDER	87.50	190.50	166.69	8.00	77.78	8.56
2071+81.04	2074+43.54	MAIN LANES - SUPERELEVATION TRANSITION - RIGHT SHOULDER	262.50	175.25	460.03	8.00	233.33	25.67
2074+43.54	2074+88.93	MAIN LANES - SINGLE SLOPE - RIGHT SHOULDER	45.39	160.00	72.62	8.00	40.35	4.44
2074+88.93	2077+88.93	MAIN LANES - SUPERELEVATION TRANSITION - RIGHT SHOULDER	300.00	160.00	480.00	8.00	266.67	29.33
2077+88.93	2084+08.06	MAIN LANES - SUPERELEVATION - RIGHT SHOULDER	619.13	160.00	990.61	8.00	550.34	60.54
2084+08.06	2086+08.06	MAIN LANES - SUPERELEVATION TRANSITION W/ PAVEMENT TRANSITION - RIGHT SHOULDER	200.00	189.50	379.00	8.00	177.78	19.56
2086+08.06	2087+08.06	MAIN LANES - SUPERELEVATION TRANSITION - RIGHT SHOULDER	100.00	175.75	175.75	8.00	88.89	9.78
2087+08.06	2089+67.42	MAIN LANES - SINGLE SLOPE - RIGHT SHOULDER	259.36	175.75	455.83	8.00	230.54	25.36
2092+46.58	2096+00.00	MAIN LANES - SINGLE SLOPE - RIGHT SHOULDER	353.42	175.75	621.14	8.00	314.15	34.56
2096+00.00	2098+00.00	MAIN LANES - TRANSITION TO CROWN W/ PAVEMENT TRANSITION - RIGHT SHOULDER	200.00	175.75	351.50	8.00	177.78	19.56
2098+00.00	2099+50.00	MAIN LANES - TRANSITION TO CROWN - RIGHT SHOULDER	150.00	160.00	240.00	8.00	133.33	14.67
2099+50.00	2115+50.00	MAIN LANES - CROWN SECTION - RIGHT SHOULDER	1600.00	160.00	2560.00	8.00	1422.22	156.44
2115+50.00	2117+00.00	MAIN LANES - TRANSITION TO SINGLE SLOPE - RIGHT SHOULDER	150.00	160.00	240.00	8.00	133.33	14.67
2117+00.00	2119+00.00	MAIN LANES - TRANSITION TO SINGLE SLOPE W/ PAVEMENT TRANSITION - RIGHT SHOULDER	200.00	175.75	351.50	8.00	177.78	19.56
2119+00.00	2122+53.46	MAIN LANES - SINGLE SLOPE - RIGHT SHOULDER	353.46	175.75	621.21	8.00	314.19	34.56
2125+45.33	2126+38.32	MAIN LANES - SINGLE SLOPE - RIGHT SHOULDER	92.99	175.75	163.43	8.00	82.66	9.09
2126+38.32	2128+38.32	MAIN LANES - SUPERELEVATION TRANSITION - RIGHT SHOULDER	200.00	175.75	351.50	8.00	177.78	19.56
2128+38.32	2129+38.32	MAIN LANES - SUPERELEVATION TRANSITION W/ PAVEMENT TRANSITION - RIGHT SHOULDER	100.00	175.00	175.00	8.00	88.89	9.78
2129+38.32	2130+38.32	MAIN LANES - SUPERELEVATION W/ PAVEMENT TRANSITION - RIGHT SHOULDER	100.00	175.75	175.75	8.00	88.89	9.78
2130+38.32	2143+03.24	MAIN LANES - SUPERELEVATION - RIGHT SHOULDER	1264.92	160.00	2023.87	8.00	1124.37	123.68
2143+03.24	2146+03.24	MAIN LANES - SUPERELEVATION TRANSITION - RIGHT SHOULDER	300.00	160.00	480.00	8.00	266.67	29.33
2146+03.24	2156+65.00	MAIN LANES - SINGLE SLOPE - RIGHT SHOULDER	1061.76	160.00	1698.82	8.00	943.79	103.82
2156+65.00	2158+65.00	MAIN LANES - SINGLE SLOPE W/ PAVEMENT TRANSITION - RIGHT SHOULDER	200.00	175.75	351.50	8.00	177.78	19.56
2158+65.00	2162+08.07	MAIN LANES - SINGLE SLOPE - RIGHT SHOULDER	343.07	175.75	602.95	8.00	304.95	33.54
2175+89.65	2177+75.00	MAIN LANES - SINGLE SLOPE - RIGHT SHOULDER	185.35	175.75	325.75	8.00	164.76	18.12
2177+75.00	2179+75.00	MAIN LANES - TRANSITION TO CROWN W/ PAVEMENT TRANSITION - RIGHT SHOULDER	200.00	175.75	351.50	8.00	177.78	19.56
2179+75.00	2181+25.00	MAIN LANES - TRANSITION TO CROWN - RIGHT SHOULDER	150.00	160.00	240.00	8.00	133.33	14.67
2181+25.00	2242+36.80	MAIN LANES - CROWN SECTION - RIGHT SHOULDER	6111.80	160.00	9778.88	8.00	5432.71	597.60
2242+36.80	2243+86.80	MAIN LANES - TRANSITION TO SINGLE SLOPE - RIGHT SHOULDER	150.00	160.00	240.00	8.00	133.33	14.67
2243+86.80	2245+86.80	MAIN LANES - TRANSITION TO SINGLE SLOPE W/ PAVEMENT TRANSITION - RIGHT SHOULDER	200.00	189.50	379.00	8.00	177.78	19.56
2245+86.80	2248+86.80	MAIN LANES - SUPERELEVATION TRANSITION - RIGHT SHOULDER	300.00	208.50	625.50	8.00	266.67	29.33
2248+86.80	2261+00.00	MAIN LANES - SUPERELEVATION - RIGHT SHOULDER	1213.20	227.25	2757.00	8.00	1078.40	118.62
2261+00.00	2261+78.54	RIGHT MAIN LANES - SUPERELEVATION - RIGHT SHOULDER	78.54	227.25	178.48	8.00	69.81	7.68
2261+78.54	2264+78.54	RIGHT MAIN LANES - SUPERELEVATION TRANSITION - RIGHT SHOULDER	300.00	206.75	620.25	8.00	266.67	29.33
2264+78.54	2266+46.02	RIGHT MAIN LANES - RIGHT SHOULDER	167.48	186.25	311.93	8.00	148.87	16.38
ENTIRE PROJECT		WIDENING FOR GUARDRAIL	VAR.	VAR.	1170.00	VAR.	718.33	79.02
2266+46.02	2268+78.35	ES RAMP - RIGHT SHOULDER	232.33	27.25	63.31			
2268+78.35	2270+28.35	ES RAMP - RIGHT SHOULDER	150.00	27.25	40.88			
2270+28.35	2271+55.40	ES RAMP - RIGHT SHOULDER	127.05	103.75	131.81	8.00	112.93	12.42
2271+55.40	2275+59.92	ES RAMP - RIGHT SHOULDER	404.52	332.00	1343.01	22.00	988.83	108.77
2275+59.92	2280+18.12	ES RAMP - RIGHT SHOULDER	458.20	164.75	754.88	6.00	305.47	33.60
2280+18.12	2283+68.12	ES RAMP - SUPERELEVATION TRANSITION - RIGHT SHOULDER	350.00	202.00	707.00	6.00	233.33	25.67
2283+68.12	2302+44.42	ES RAMP - SUPERELEVATION - RIGHT SHOULDER	1876.30	239.25	4489.05	6.00	1250.87	137.60
2302+44.42	2304+00.00	ES RAMP - SUPERELEVATION TRANSITION - RIGHT SHOULDER	155.58	192.50	299.49	6.00	103.72	11.41
2304+00.00	2306+63.82	ES RAMP - SUPERELEVATION TRANSITION - RIGHT SHOULDER	263.82	166.25	438.60	6.00	175.88	19.35
2266+36.83	2267+30.39	NW RAMP - RIGHT SHOULDER	93.56	186.25	174.26	8.00	83.16	9.15
2267+30.39	2270+80.39	NW RAMP - SUPERELEVATION TRANSITION - RIGHT SHOULDER	350.00	202.75	709.63	8.00	311.11	34.22
2270+80.39	2275+50.00	NW RAMP - SUPERELEVATION - RIGHT SHOULDER	469.61	219.00	1028.45	8.00	417.43	45.92
2275+50.00	2279+52.18	NW RAMP - SUPERELEVATION - RIGHT SHOULDER	402.18	219.00	880.77	8.00	357.49	39.32
2279+52.18	2281+45.49	NW RAMP - SUPERELEVATION TRANSITION - RIGHT SHOULDER	193.31	206.50	399.19	8.00	171.83	18.90
2281+45.49	2285+70.76	NW RAMP - SUPERELEVATION TRANSITION - RIGHT SHOULDER	425.27	246.25	1047.23	8.00	378.02	41.58
2285+70.76	2286+94.06	NW RAMP - SUPERELEVATION - RIGHT SHOULDER	123.30	297.75	367.13	8.00	109.60	12.06
2286+94.06	2288+94.06	NW RAMP - SUPERELEVATION W/ TAPER - RIGHT SHOULDER	200.00	266.00	532.00	7.00	155.56	17.11
2288+94.06	2292+44.06	NW RAMP - SUPERELEVATION W/ AUXILIARY LANE - RIGHT SHOULDER	350.00	235.50	824.25	6.00	233.33	25.67
2292+44.06	2294+57.40	NW RAMP - SUPERELEVATION W/ AUXILIARY LANE - RIGHT SHOULDER	213.34	235.50	502.42	6.00	142.23	15.65
2294+57.40	2297+20.46	NW RAMP - SUPERELEVATION - RIGHT SHOULDER	263.06	235.50	619.51	8.00	233.83	25.72
2311+85.65	2313+61.31	NW RAMP - SUPERELEVATION - RIGHT SHOULDER	175.66	235.50	413.68	8.00	156.14	17.18
2313+61.31	2316+63.27	NW RAMP - SUPERELEVATION TRANSITION - RIGHT SHOULDER	301.96	215.00	649.21	8.00	268.41	29.53
2316+63.27	2319+00.00	NW RAMP - SUPERELEVATION TRANSITION - RIGHT SHOULDER	236.73	251.25	594.78	8.00	210.43	23.15
2319+00.00	2320+15.69	NW RAMP - SUPERELEVATION TRANSITION - RIGHT SHOULDER	115.69	308.25	356.61	8.00	102.84	11.31
2320+15.69	2321+08.67	NW RAMP - SUPERELEVATION - RIGHT SHOULDER	92.98	308.25	286.61	8.00	82.65	9.09
2321+08.67	2321+85.23	NW RAMP - SUPERELEVATION TRANSITION - RIGHT SHOULDER	76.56	290.50	222.41	8.00	68.05	7.49
ENTIRE PROJECT		WIDENING FOR GUARDRAIL	VAR.	VAR.	120.33	VAR.	108.44	11.93
2271+54.84	2271+78.35	WS RAMP - SUPERELEVATION TRANSITION - RIGHT SHOULDER	23.51	202.50	47.61	4.00	10.45	1.15
2271+78.35	2282+13.75	WS RAMP - SUPERELEVATION - RIGHT SHOULDER	1035.40	203.75	2109.63	4.00	460.18	50.62
2282+13.75	2285+13.76	WS RAMP - SUPERELEVATION TRANSITION - RIGHT SHOULDER	300.01	172.00	516.02	4.00	133.34	14.67
2285+13.76	2288+13.77	WS RAMP - SUPERELEVATION TRANSITION - RIGHT SHOULDER	300.01	181.25	543.77	4.00	133.34	14.67
2288+13.77	2294+64.00	WS RAMP - SUPERELEVATION - RIGHT SHOULDER	650.23	222.00	1443.51	4.00	288.99	31.79
2294+64.00	2295+00.00	WS RAMP - SUPERELEVATION - RIGHT SHOULDER	36.00	263.00	94.68	7.00	28.00	3.08
2295+00.00	2295+43.05	WS RAMP - SUPERELEVATION - RIGHT SHOULDER	43.05	303.75	130.76	10.00	47.83	5.26
2314+18.23	2314+21.61	WS RAMP - SUPERELEVATION TRANSITION - RIGHT SHOULDER	3.38	182.50	6.17	4.00	1.50	0.17
2314+21.61	2318+11.43	WS RAMP - RIGHT SHOULDER	389.82	142.75	556.47	4.00	173.25	19.06
2320+62.57	2321+34.61	WS RAMP - SUPERELEVATION TRANSITION - RIGHT SHOULDER	72.04	190.25	137.06	4.00	32.02	3.52
2321+34.61	2322+00.00	WS RAMP - SUPERELEVATION - RIGHT SHOULDER	65.39	190.25	124.40	4.00	29.06	3.20
2322+00.00	2324+44.61	WS RAMP - SUPERELEVATION - RIGHT SHOULDER	244.61	190.25	465.37	4.00	108.72	11.96
ENTIRE PROJECT		WIDENING FOR GUARDRAIL	VAR.	VAR.	610.75	VAR.	534.44	58.79
2294+62.21	2296+01.65	NE RAMP - SUPERELEVATION TRANSITION - RIGHT SHOULDER	139.44	315.75	440.28	6.00	92.96	10.23
2296+04.65	2298+51.66	NE RAMP - SUPERELEVATION TRANSITION - RIGHT SHOULDER	247.01	208.50	515.02	6.00	164.67	18.11
2298+51.66	2301+17.92	NE RAMP - SUPERELEVATION - RIGHT SHOULDER	266.26	249.25	663.65	6.00	177.51	19.53
2305+89.08	2306+00.00	NE RAMP - SUPERELEVATION - RIGHT SHOULDER	10.92	249.25	27.22	6.00	7.28	0.80
2306+00.00	2307+15.17	NE RAMP - SUPERELEVATION - RIGHT SHOULDER	115.17	249.25	287.06	6.00	76.78	8.45
2307+15.17	2308+64.68	NE RAMP - SUPERELEVATION TRANSITION - RIGHT SHOULDER	149.51	227.25	339.76	6.00	99.67	10.96
ENTIRE PROJECT		WIDENING FOR GUARDRAIL	VAR.	VAR.	411.25	VAR.	333.89	36.73
* 458+54.00	460+54.00	ES RAMP AUXILIARY LANE TAPER - RIGHT SHOULDER	200.00	312.25	624.50	10.00	222.22	24.44
* 460+54.00	471+87.64	ES RAMP AUXILIARY LANE - RIGHT SHOULDER	1133.64	312.25	3539.79	10.00	1259.60	138.56
* 471+87.64	474+99.92	ES RAMP TURNOUT - RIGHT SHOULDER	312.28	3125.25	9759.53	10.00	346.98	38.17
* 497+77.46	499+01.02	NE RAMP TURNOUT - SUPERELEVATION TRANSITION - RIGHT SHOULDER	123.56	190.50	235.38	6.00	82.37	9.06
499+01.02	499+28.51	NE RAMP ACCELERATION LANE - SUPERELEVATION TRANSITION - RIGHT SHOULDER	27.49	164.50	45.22	6.00	18.33	2.02
* 499+01.02	504+77.46	NE RAMP ACCELERATION LANE - RIGHT SHOULDER	576.44	164.50	948.24	6.00	384.29	42.27
* 504+77.46	507+77.46	NE RAMP ACCELERATION LANE TAPER - RIGHT SHOULDER	300.00	185.75	557.25	8.00	266.67	29.33
TOTALS					**76774.70**		**29862.02**	**3284.91**

BASIS OF ESTIMATE: ACHM SURFACE COURSE (1/2") - MIN. AGG. = 94.9%, ASPH BINDER (PG76-22) = 5.1%
Nmax = 205

*STATIONING ALONG I-530

PAUL DAVID PENN
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
5-9-11

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

(2) QUANTITIES

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.		57	156

JOB NO. 020354

JACOBS

QUANTITIES

SUMMARY OF QUANTITIES

ITEM NUMBER	ITEM		QUANTITY	UNIT
202	REMOVAL OF EXISTING PORTLAND CEMENT CONCRETE PAVEMENT		1002	SQ. YD.
202	REMOVAL AND DISPOSAL OF FENCE		545	LIN. FT.
210	UNCLASSIFIED EXCAVATION		4657	CU. YD.
210	COMPACTED EMBANKMENT		31588	CU. YD.
SP & 210	SOIL STABILIZATION		100	TON
SP & 214	SUBGRADE PREPARATION		327.59	STATION
SS & 303	AGGREGATE BASE COURSE (CLASS 7)		187817	TON
401	TACK COAT		11729	GALLON
SP, SS & 405	MINERAL AGGREGATE IN ACHM BASE COURSE (1 1/2")		48134	TON
SP, SS & 405	ASPHALT BINDER PG(76-22) IN ACHM BASE COURSE (1 1/2")		1798	TON
SP, SS & 406	MINERAL AGGREGATE IN ACHM BINDER COURSE (1")		23144	TON
SP, SS & 406	ASPHALT BINDER PG(76-22) IN ACHM BINDER COURSE (1")		1040	TON
SP, SS & 407	MINERAL AGGREGATE IN ACHM SURFACE COURSE (1/2")		23447	TON
SP, SS & 407	ASPHALT BINDER PG(76-22) IN ACHM SURFACE COURSE (1/2")		1260	TON
SP & 504	APPROACH SLABS		648.38	CU. YD.
SP & 504	APPROACH GUTTERS		416.93	CU. YD.
601	MOBILIZATION		1.00	LUMP SUM
SP & 602	FURNISHING FIELD OFFICE		1	EACH
SP, SS & 603	MAINTENANCE OF TRAFFIC		1.00	LUMP SUM
SS & 604	SIGNS		760	SQ. FT.
SP, SS & 604	SIGNS LEFT IN PLACE		74	SQ. FT.
SS & 604	TRAFFIC DRUMS		24	EACH
SP, SS & 604	TRAFFIC DRUMS LEFT IN PLACE		90	EACH
SP, SS & 604	BARRICADES LEFT IN PLACE		72	LIN. FT.
SS & 604	FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER		3380	LIN. FT.
SS & 604	RELOCATING PRECAST CONCRETE BARRIER		8512	LIN. FT.
604	REMOVAL OF PERMANENT PAVEMENT MARKINGS		7220	LIN. FT.
604	REMOVABLE CONSTRUCTION PAVEMENT MARKINGS		1720	LIN. FT.
SP, SS & 604	PORTABLE CHANGEABLE MESSAGE SIGN		18	WEEK
611	4" PIPE UNDERDRAINS		800	LIN. FT.
611	UNDERDRAIN OUTLET PROTECTORS		16	EACH
SS & 617	GUARDRAIL (TYPE A)		3825	LIN. FT.
SS & 617	THRIE BEAM GUARDRAIL TERMINAL		21	EACH
SS & 617	GUARDRAIL TERMINAL (TYPE 2)		21	EACH
619	WIRE FENCE (TYPE A)		342	LIN. FT.
* 619	16' STEEL GATES	(ALTERNATE NO. 1)	2	EACH
* 619	16' ALUMINUM GATES	(ALTERNATE NO. 2)	2	EACH
620	LIME		13	TON
620	SEEDING		6.75	ACRE
620	MULCH COVER		9.44	ACRE
SS & 620	WATER		743.7	M. GALLON
621	TEMPORARY SEEDING		2.69	ACRE
621	SILT FENCE		6568	LIN. FT.
621	SAND BAG DITCH CHECKS		154	BAG
621	DROP INLET SILT FENCE		160	LIN. FT.
621	ROCK DITCH CHECKS		15	CU. YD.
621	SEDIMENT REMOVAL AND DISPOSAL		125	CU. YD.
623	SECOND SEEDING APPLICATION		6.75	ACRE
624	SOLID SODDING		35	SQ. YD.
631	CONCRETE BARRIER WALL (MEDIAN TYPE A)		1459	LIN. FT.
635	ROADWAY CONSTRUCTION CONTROL		1.00	LUMP SUM
640	MODIFYING DROP INLETS		1	EACH
SS & 719	THERMOPLASTIC PAVEMENT MARKING WHITE (8")		3105	LIN. FT.
SS & 719	THERMOPLASTIC PAVEMENT MARKING YELLOW (12")		328	LIN. FT.
* SP & 719	INVERTED PROFILE THERMOPLASTIC PAVEMENT MARKING WHITE (4")	(ALTERNATE NO. 1)	61822	LIN. FT.
* SP	HIGH PERFORMANCE MARKING TAPE WHITE (4")	(ALTERNATE NO. 2)	61822	LIN. FT.
* SP & 719	INVERTED PROFILE THERMOPLASTIC PAVEMENT MARKING YELLOW (4")	(ALTERNATE NO. 1)	56487	LIN. FT.
* SP	HIGH PERFORMANCE MARKING TAPE YELLOW (4")	(ALTERNATE NO. 2)	56487	LIN. FT.
* SP & 719	INVERTED PROFILE THERMOPLASTIC CONTRAST PAVEMENT MARKING WHITE (4")	(ALTERNATE NO. 1)	1720	LIN. FT.
* SP	HIGH PERFORMANCE CONTRAST MARKING TAPE WHITE (4")	(ALTERNATE NO. 2)	1720	LIN. FT.
* SP & 719	INVERTED PROFILE THERMOPLASTIC CONTRAST PAVEMENT MARKING YELLOW (4")	(ALTERNATE NO. 1)	3861	LIN. FT.
* SP	HIGH PERFORMANCE CONTRAST MARKING TAPE YELLOW (4")	(ALTERNATE NO. 2)	3861	LIN. FT.
721	RAISED PAVEMENT MARKER (TYPE II)		624	EACH
SS & 732	CRASH CUSHION		1	EACH
804	REINFORCING STEEL - ROADWAY (GRADE 60)		101158	POUND
SP	MOWING		45.20	ACRE
	STRUCTURES OVER 20'-0" SPAN			
801	UNCLASSIFIED EXCAVATION FOR STRUCTURES - ROADWAY		82	CU. YD.
802	CLASS S CONCRETE - ROADWAY		175.93	CU. YD.
804	REINFORCING STEEL - ROADWAY (GRADE 60)		19187	POUND

* DENOTES ALTERNATE BID ITEMS.

REVISIONS

DATE	REVISION	SHEET NUMBER

SUMMARY OF QUANTITIES AND REVISIONS

JACOBS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

(2) SUMMARY OF QUANTITIES AND REVISIONS

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.	020354	58	156

JOB NO.

STATE OF ARKANSAS PAUL DAVID PENN REGISTERED PROFESSIONAL ENGINEER No. 8817

6-02-11

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		020354	59	156

(2) SURVEY CONTROL DETAILS

CURVE NO.	ID	NO.	STATION	NORTHING	EASTING
1	PC	9000	2061+92.25	1838563.8094	1321261.5901
	PI	9001	2065+67.73	1838938.6454	1321239.7186
	PT	9002	2069+42.13	1839313.1301	1321266.9520
		R=	5729.58'	T= 375.47'	
		L=	749.88'	Δ= 7°29'56"	
2	PC	9003	2059+58.12	1838327.0460	1321223.3167
	PI	9004	2063+33.59	1838701.8821	1321201.4452
	PT	9005	2067+07.99	1839076.3668	1321228.6786
		R=	5729.58'	T= 375.47'	
		L=	749.87'	Δ= 7°29'56"	
3	PC	9006	2077+13.93	1840082.9004	1321322.9315
	PI	9007	2080+99.07	1840467.0304	1321350.8663
	PT	9008	2084+83.06	1840851.4433	1321327.1393
		R=	5729.58'	T= 385.14'	
		L=	769.13'	Δ= 7°41'29"	
4	PC	9009	2128+63.32	1845223.3857	1321057.2919
	PI	9010	2136+25.23	1845983.8426	1321010.3546
	PT	9011	2143+78.24	1846705.6062	1320766.3155
		R=	5729.58'	T= 761.91'	
		L=	1514.92'	Δ= 15°08'57"	
5	PC	9012	2229+33.24	1854809.8905	1318026.1356
	PI	9013	2236+13.69	1855454.4943	1317808.1855
	PT	9014	2242+92.55	1856068.7751	1317515.4818
		R=	11459.16'	T= 680.45'	
		L=	1359.31'	Δ= 6°47'48"	
6	PC	9015	2248+11.80	1856537.5287	1317292.1215
	PI	9016	2255+38.67	1857193.7137	1316979.4506
	PT	9017	2262+53.54	1857914.4391	1316885.1283
		R=	4583.66'	T= 726.87'	
		L=	1441.74'	Δ= 18°01'18"	
7	PC	8000	2282+80.62	1859922.2377	1316605.7245
	PI	8001	2297+84.50	1861413.4008	1316410.5740
	PT	8002	2303+38.99	1860765.4895	1315053.4218
		R=	1091.35'	T= 1503.88'	
		L=	2058.36'	Δ= 108°03'50"	
8	PC	8003	2307+90.47	1860570.9767	1314645.9840
	PI	8004	2308+85.89	1860529.8688	1314559.8769
	PT	8005	2309+81.15	1860480.3831	1314478.2959
		R=	1909.86'	T= 95.42'	
		L=	190.67'	Δ= 5°43'13"	
9	PC	8006	2269+92.89	1858658.7878	1316804.3552
	PI	8007	2275+17.75	1859179.2075	1316736.2472
	PT	8008	2280+39.68	1859703.3399	1316763.8253
		R=	5729.58'	T= 524.86'	
		L=	1046.79'	Δ= 10°28'05"	
10	PC	8009	2284+95.76	1860158.7864	1316787.7894
	PI	8010	2319+68.15	1863626.3842	1316970.2428
	PT	8011	2314+36.31	1860991.9998	1314708.0441
		R=	1183.50'	T= 3472.39'	
		L=	2940.55'	Δ= 142°21'31"	
11	PC	8012	2319+28.19	1860618.8271	1314387.5932
	PI	8013	2321+03.63	1860485.7271	1314273.2976
	PT	8014	2322+74.55	1860406.5335	1314116.7491
		R=	881.47'	T= 175.44'	
		L=	346.35'	Δ= 22°30'47"	
12	PC	8015	2270+28.35	1858677.8285	1316747.4028
	PI	8016	2277+25.75	1859369.3276	1316656.9054
	PT	8017	2282+88.75	1859625.2099	1316008.1488
		R=	1183.50'	T= 697.40'	
		L=	1260.40'	Δ= 61°01'07"	
13	PC	8018	2287+38.77	1859790.3253	1315589.5198
	PI	8019	2307+47.54	1860527.3659	1313720.8480
	PT	8020	2311+96.61	1861804.6973	1315271.1988
		R=	1183.50'	T= 2008.77'	
		L=	2457.85'	Δ= 118°59'23"	
14	PC	8021	2320+59.61	1862353.4547	1315937.2486
	PI	8022	2324+42.64	1862597.0168	1316232.8701
	PT	8023	2328+15.64	1862935.7351	1316411.7118
		R=	1909.86'	T= 383.03'	
		L=	756.04'	Δ= 22°40'52"	
15	PC	8024	2297+26.66	1861284.5276	1316349.2777
	PI	8025	2304+24.47	1861868.3328	1315967.0313
	PT	8026	2309+87.68	1862485.4111	1316292.8459
		R=	1183.50'	T= 697.81'	
		L=	1261.02'	Δ= 61°02'55"	
16	PC	8027	443+92.45	1859867.7771	1311779.6824
	PI	8028	473+64.07	1859675.6734	1314745.0832
	PT	8029	496+65.34	1862304.4219	1316130.7913
		R=	4583.66'	T= 2971.62'	
		L=	5272.89'	Δ= 65°54'40"	

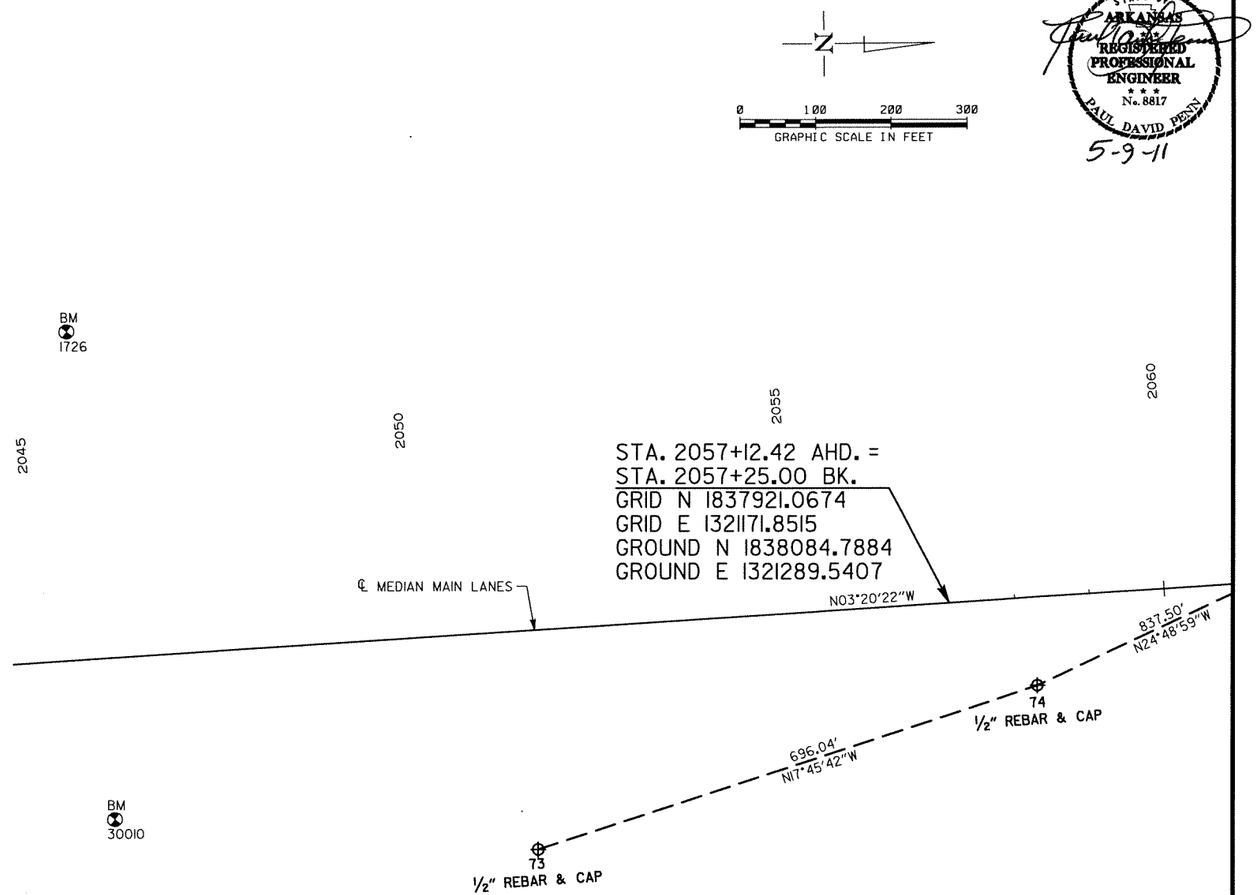
TRAVERSE POINT TABLE

POINT	NORTHING	EASTING	ELEVATION	FEATURE	DESCRIPTION
73	1837539.3878	1321612.3703	218.12	CTL	½" REBAR & CAP
74	1838202.2511	1321400.0363	208.16	CTL	½" REBAR & CAP
75	1838962.4189	1321048.5272	214.03	CTL	½" REBAR & CAP
76	1839579.5999	1321026.5488	215.64	CTL	½" REBAR & CAP
77	1840303.1201	1321033.3725	216.08	CTL	½" REBAR & CAP
78	1840886.6912	1321165.6256	202.85	CTL	½" REBAR & CAP
79	1841366.0584	1321240.0598	197.22	CTL	½" REBAR & CAP
80	1841730.7941	1320988.2622	196.74	CTL	½" REBAR & CAP
81	1842410.6618	1320801.6076	194.27	CTL	½" REBAR & CAP
82	1843221.7734	1320885.9665	195.61	CTL	½" REBAR & CAP
83	1844116.0442	1320880.6475	201.92	CTL	½" REBAR & CAP
84	1844934.0904	1320711.4625	202.07	CTL	½" REBAR & CAP
85	1845567.7775	1320811.6581	203.69	CTL	½" REBAR & CAP
86	1846230.7502	1320630.5992	206.72	CTL	½" REBAR & CAP
87	1846799.8873	1320262.7797	201.18	CTL	½" REBAR & CAP
88	1847535.2799	1320259.9507	204.76	CTL	½" REBAR & CAP
89	1848267.4170	1319997.0676	206.27	CTL	½" REBAR & CAP
90	1848818.5251	1319784.1046	201.22	CTL	½" REBAR & CAP
91	1849258.6933	1319651.0525	201.27	CTL	½" REBAR & CAP
92	1850322.4150	1319122.7912	199.33	CTL	½" REBAR & CAP
93	1851354.5669	1319433.6629	199.39	CTL	½" REBAR & CAP
94	1852684.9984	1318708.1583	202.63	CTL	½" REBAR & CAP
95	1853774.2395	1318672.3781	203.71	CTL	½" REBAR & CAP
96	1854557.2582	1318300.0446	204.02	CTL	½" REBAR & CAP
97	1855316.7331	1318023.2070	204.63	CTL	½" REBAR & CAP
98	1856633.3651	1318187.2279	201.42	CTL	½" REBAR & CAP
99	1857850.9105	1317919.5326	200.88	CTL	½" REBAR & CAP
100	1858352.6421	1317320.4668	200.42	CTL	½" REBAR & CAP
101	1858730.5151	1316551.0562	198.90	CTL	½" REBAR & CAP
102	1859591.2316	1316405.2194	202.59	CTL	½" REBAR & CAP
103	1860477.2151	1316150.5476	201.78	CTL	½" REBAR & CAP
9749	1859080.1561	1315754.2292	201.56	BM	½" REBAR & CAP
1726	1836918.9831	1320921.9135	216.37	BM	½" REBAR & CAP
30010	1836979.0934	1321568.3111	215.12	BM	½" REBAR & CAP
30016	1839218.6092	1321090.3174	215.26	BM	½" REBAR & CAP
30019	1840553.8084	1321212.1310	213.96	BM	½" REBAR & CAP
30030	1843718.6243	1321028.9462	201.39	BM	½" REBAR & CAP
1736	1844631.7521	1321415.8675	202.77	BM	½" REBAR & CAP
30056	1845756.4416	1320884.7520	201.66	BM	½" REBAR & CAP
30063	1848596.4283	1319947.7802	193.42	BM	½" REBAR & CAP
30075	1853751.0829	1318690.0080	203.49	BM	½" REBAR & CAP
1746	1855347.4116	1317708.8483	202.56	BM	½" REBAR & CAP
30080	1856486.9583	1318175.1335	201.99	BM	½" REBAR & CAP
30081	1857281.4923	1318260.0883	199.27	BM	½" REBAR & CAP
104	1861998.4920	1315970.2894	224.09	CTL	AHTD GPS MONUMENT 350018
105	1861231.3390	1315328.9998	209.67	CTL	½" REBAR & CAP
106	1860626.5318	1314613.8156	206.76	CTL	AHTD GPS MONUMENT 350018-A
107	1859283.8172	1312936.2532	199.93	CTL	½" REBAR & CAP
108	1863368.4113	1316690.2704	214.81	CTL	½" REBAR & CAP
9087	1861182.0770	1315401.2438	210.45	BM	BM ½" REBAR & CAP
9755	1859908.3768	1314610.8354	199.60	BM	BM ½" REBAR & CAP

HORIZONTAL SITE CONTROL ESTABLISHED BY CONVENTIONAL SURVEYING METHODS FROM ARKANSAS HIGHWAY AND TRANSPORTATION DEPARTMENT GPS MONUMENTS 350018 AND 350018-A.
VERTICAL CONTROL ESTABLISHED FROM ARKANSAS HIGHWAY AND TRANSPORTATION DEPARTMENT GPS MONUMENTS 350018 AND 350018-A.

HORIZONTAL DATUM: NAD 83
VERTICAL DATUM: NAVD88
NGS BENCH MARK: POINT ID EH1566 ELEVATION = 203.97 LOCATED AT GRIDER FIELD AIRPORT
BASIS OF BEARINGS
GRID NORTH BASED ON GPS CONTROL AT POINT NUMBER 350018-A
ARKANSAS STATE PLANE GRID COORDINATES SOUTH ZONE
NORTHING 1860626.52956. EASTING 1314613.82330
CONVERGENCE ANGLE 0°00'15.19" RIGHT
GRID AZIMUTH = ASTRONOMICAL AZIMUTH - CONVERGENCE ANGLE.

USE CAF OF 1.0 FOR STAKEOUT FOR THIS PROJECT
A PROJECT CAF OF 0.9999109285 HAS BEEN USED TO COMPUTE
THE ABOVE GROUND COORDINATES.
THIS CAF IS INTENDED FOR USE WITHIN THE PROJECT LIMITS.
GRID DISTANCE = GROUND DISTANCE X CAF.



STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENNY
5-9-11

SURVEY CONTROL DETAILS

JACOBS

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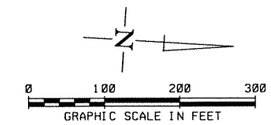
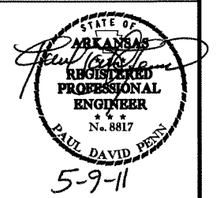
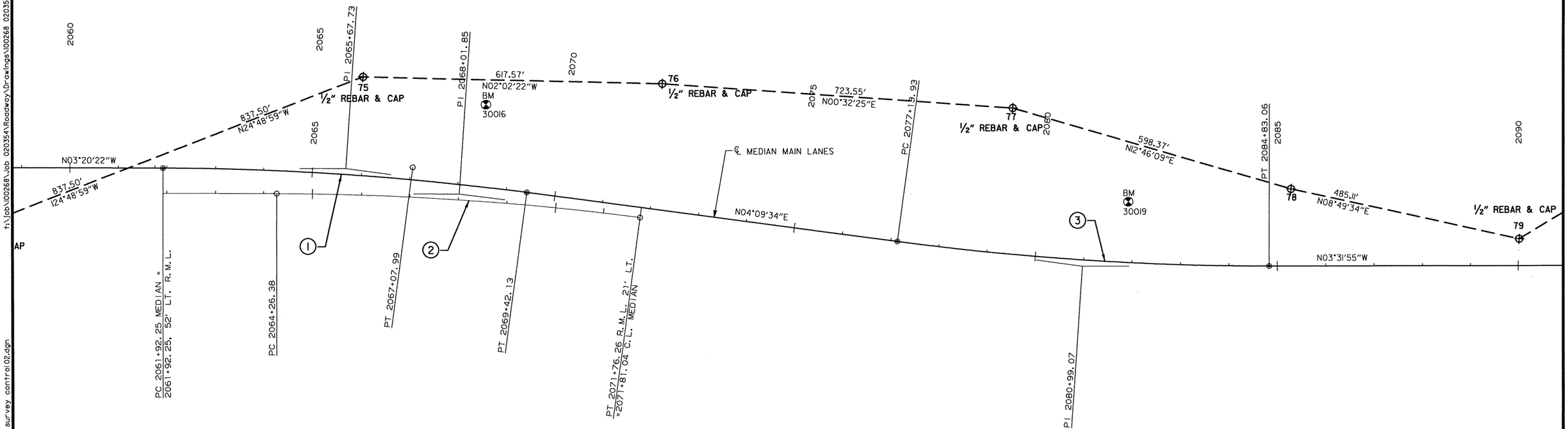
				6	ARK.			
				JOB NO.		020354	60	156
				(2)	SURVEY CONTROL DETAILS			







CURVE NO.	ID	NO.	STATION	NORTHING	EASTING
1	PC	9000	2061+92.25	1838563.8094	1321261.5901
	PI	9001	2065+67.73	1838938.6454	1321239.7186
	PT	9002	2069+42.13	1839313.1301	1321266.9520
		R= 5729.58'		T= 375.47'	
		L= 749.88'		Δ= 7°29'56"	
2	PC	9003	2064+26.38	1838800.5726	1321299.8636
	PI	9004	2068+01.85	1839175.4087	1321277.9921
	PT	9005	2071+76.26	1839549.8935	1321305.2254
		R= 5729.58'		T= 375.47'	
		L= 749.88'		Δ= 7°29'56"	
3	PC	9006	2077+13.93	1840082.9004	1321322.9315
	PI	9007	2080+99.07	1840467.0304	1321350.8663
	PT	9008	2084+83.06	1840851.4433	1321327.1393
		R= 5729.58'		T= 385.14'	
		L= 769.13'		Δ= 7°41'29"	

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SURVEY CONTROL DETAILS

JACOBS

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.		020354	61	156

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11

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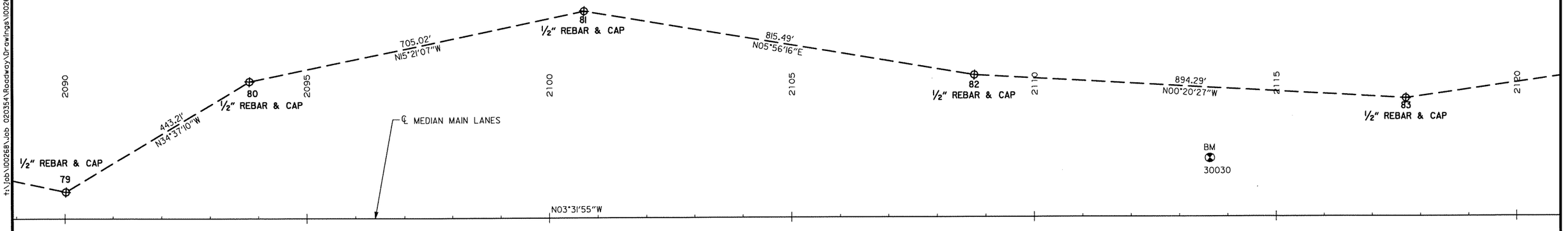
GRAPHIC SCALE IN FEET



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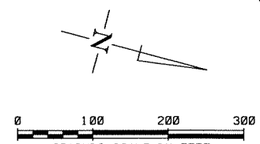
SURVEY CONTROL DETAILS

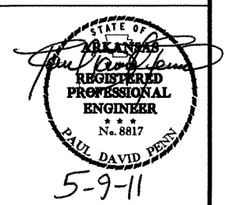
JACOBS

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.		020354	62	156

(2) SURVEY CONTROL DETAILS





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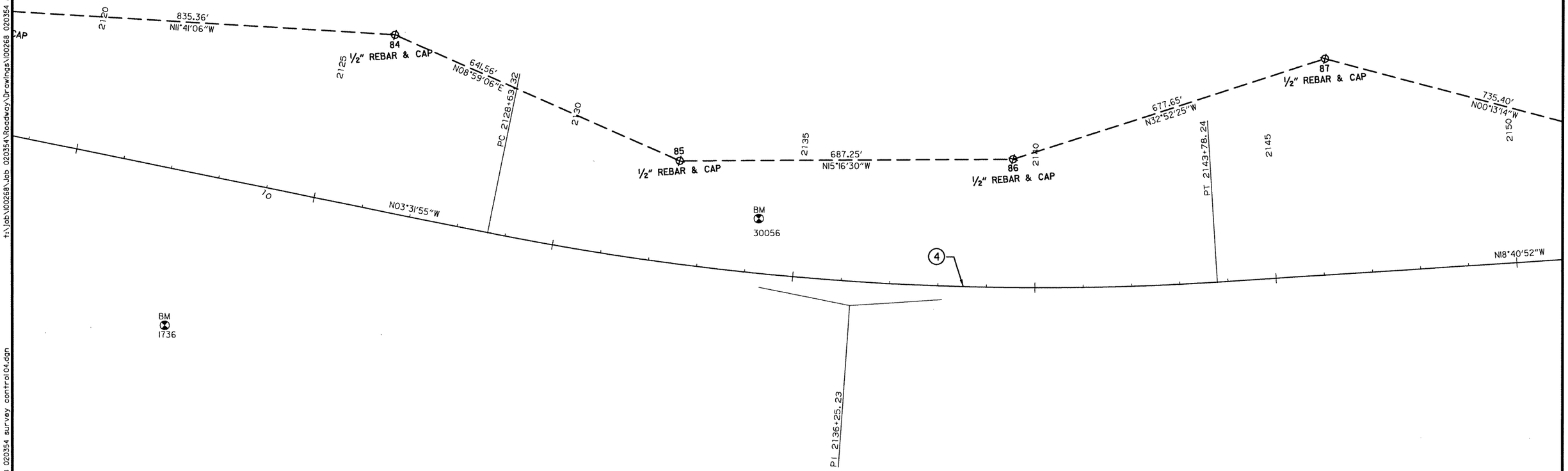

CURVE NO.	ID	NO.	STATION	NORTHING	EASTING
4	PC	9009	2128+63.32	1845223.3857	1321057.2919
	PI	9010	2136+25.23	1845983.8426	1321010.3546
	PT	9011	2143+78.24	1846705.6062	1320766.3155
		R= 5729.58'		T= 761.91'	
		L= 1514.92'		Δ= 15°08'57"	

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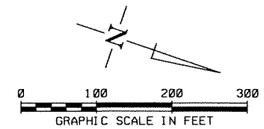
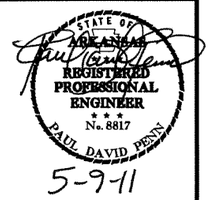
SURVEY CONTROL DETAILS

JACOBS

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.		020354	63	156

(2) SURVEY CONTROL DETAILS





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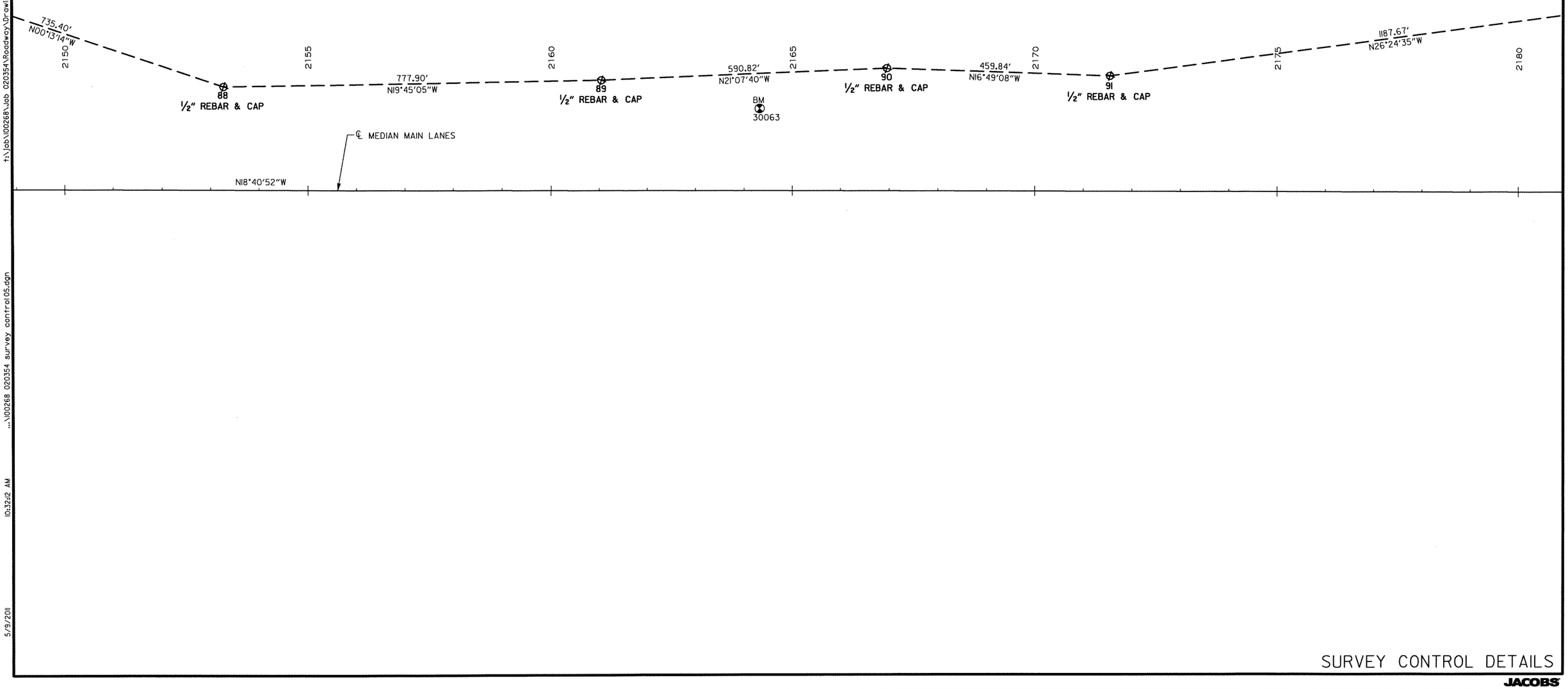

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5/9/2011

SURVEY CONTROL DETAILS

JACOBS

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.		020354	64	156

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11

0 100 200 300
GRAPHIC SCALE IN FEET

2180 2185 2190 2195 2200 2205 2210

½" REBAR & CAP
92

1077.95'
N16°45'42"E

℄ MEDIAN MAIN LANES

N18°40'52"W

½" REBAR & CAP
94

1515.39'
N28°36'16"W

93
½" REBAR & CAP

SURVEY CONTROL DETAILS

JACOBS

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5/9/2011

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		020354	65	156

(2) SURVEY CONTROL DETAILS

0 100 200 300
GRAPHIC SCALE IN FEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11

2210 2215 2220 2225 PC 2229+33.24 2230 2235 2240

℄ MEDIAN MAIN LANES

BM ⊗ 1746

(5)

N18°40'52"W

N25°28'40"W

1089.83'
N01°52'53"W

BM
30075 ⊗ 95
½" REBAR & CAP

867.04'
N25°25'54"W

96
½" REBAR & CAP

808.36'
N20°01'39"W

97
½" REBAR & CAP

PI 2236+13.69

1326.81'
N07°06'04"E

CURVE NO.	ID	NO.	STATION	NORTHING	EASTING
5	PC	9012	2229+33.24	1854809.8905	1318026.1356
	PI	9013	2236+13.69	1855454.4943	1317808.1855
	PT	9014	2242+92.55	1856068.7751	1317515.4818
		R=	11459.16'	T= 680.45'	
		L=	1359.31'	Δ= 6°47'48"	

SURVEY CONTROL DETAILS

JACOBS

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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.		020354	66	156

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
PAUL DAVID PENNY
REGISTERED PROFESSIONAL ENGINEER
No. 8817
5-9-11

0 100 200 300
GRAPHIC SCALE IN FEET

2240 2245 2250 2255 2260 2265

PT 2242+92.55

℄ MEDIAN MAIN LANES

PI 2255+38.67

(5) N25°28'40"W

(6) N07°27'22"W

PC 2248+11.80

PT 2262+53.54

MAIN LANES 2266+46.02 BK. = RAMP ES 2266+46.02 AHD., 16.5 LT

℄ CONSTRUCTION RAMP ES

2270 PC 2270+28.35 RAMP

MAIN LANES 2266+46.02 BK. = RAMP NW 2266+36.83 AHD., 16.5 RT

N63°50'36"W 857.19'

℄ CONSTRUCTION RAMP NW

PC 2269+92.89

1326.81' N07°06'04"E

BM 30080

98 ½" REBAR & CAP

1246.63' N12°24'00"W

99 ½" REBAR & CAP

781.42' N50°03'11"W

100 ½" REBAR & CAP

BM 30081

CURVE NO.	ID	NO.	STATION	NORTHING	EASTING
5	PC	9012	2229+33.24	1854809.8905	1318026.1356
	PI	9013	2236+13.69	1855454.4943	1317808.1855
	PT	9014	2242+92.55	1856068.7751	1317515.4818
		R=	11459.16'	T= 680.45'	
		L=	1359.31'	Δ= 6°47'48"	
6	PC	9015	2248+11.80	1856537.5287	1317292.1215
	PI	9016	2255+38.67	1857193.7137	1316979.4506
	PT	9017	2262+53.54	1857914.4391	1316885.1283
		R=	4583.66'	T= 726.87'	
		L=	1441.74'	Δ= 18°01'18"	

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SURVEY CONTROL DETAILS

JACOBS

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.		020354	67	156

(2) SURVEY CONTROL DETAILS

BM 9749

MATCH LINE SHEET 68

0 100 200 300
GRAPHIC SCALE IN FEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11

MAIN LANES 2266+46.02 BK. = RAMP ES 2266+46.02 AHD., 16.5 LT

2270 PC 2270+28.35 RAMP WS = 2270+28.35 RAMP ES, 21' LT.

RAMP WS 2271+54.84, 7.5' RT. = RAMP ES 2271+55.40, 20.3' LT.

101 1/2" REBAR & CAP

N09°37'00"W 872.98'

2275

PI 2275+17.75

102 1/2" REBAR & CAP

PC 2282+80.62

N16°02'13"W 921.86'

103 1/2" REBAR & CAP

N06°45'27"W 1531.92'

2290

℄ CONTRUCTION RAMP WS

2280

PT 2282+88.75

N68°28'29"W

2285

12

℄ CONSTRUCTION RAMP ES

N07°27'22"W

2275

2280

7

2285

10

2295

MAIN LANES 2266+46.02 BK. = RAMP NW 2266+36.83 AHD., 16.5 RT

N63°50'36"W 857.19'

PC 2269+92.89

100 1/2" REBAR & CAP

9

N07°27'22"W

2280

PC 2284+95.76

2285

2290

POB 2282+44.06

N33°12'53"W

2295

RAMP NE 2294+62.21, 7.50' LT. = RAMP NW 2294+57.40, 33.22' RT.

PI 2277+25.75

PT 2280+39.68

℄ OF CONSTRUCTION RAMP NW

N03°00'43"E

10

CURVE NO.	ID	NO.	STATION	NORTHING	EASTING
7	PC	8000	2282+80.62	1859922.2377	1316605.7245
	PI	8001	2297+84.50	1861413.4008	1316410.5740
	PT	8002	2303+38.99	1860765.4895	1315053.4218
		R= 1091.35'		T= 1503.88'	
		L= 2058.36'		Δ= 108°03'50"	
9	PC	8006	2269+92.89	1858658.7878	1316804.3552
	PI	8007	2275+17.75	1859179.2075	1316736.2472
	PT	8008	2280+39.68	1859703.3399	1316763.8253
		R= 5729.58'		T= 524.86'	
		L= 1046.79'		Δ= 10°28'05"	
10	PC	8009	2284+95.76	1860158.7864	1316787.7894
	PI	8010	2319+68.15	1863626.3842	1316970.2428
	PT	8011	2314+36.31	1860991.9998	1314708.0441
		R= 1183.50'		T= 3472.39'	
		L= 2940.55'		Δ= 142°21'31"	
12	PC	8015	2270+28.35	1858677.8285	1316747.4028
	PI	8016	2277+25.75	1859369.3276	1316656.9054
	PT	8017	2282+88.75	1859625.2099	1316008.1488
		R= 1183.50'		T= 697.40'	
		L= 1260.40'		Δ= 61°01'07"	

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SURVEY CONTROL DETAILS

JACOBS

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.		020354	68	156
				(2)	SURVEY CONTROL DETAILS			

STATE OF ARKANSAS
PAUL DAVID PENN
REGISTERED PROFESSIONAL ENGINEER
No. 8817
5-9-11

N

0 100 200 300
GRAPHIC SCALE IN FEET

MATCH LINE SHEET 67

MATCH LINE 69

PI 473+64.07

PC 2287+38.77

℄ CONSTRUCTION RAMP WS

℄ CONSTRUCTION RAMP ES

℄ CONSTRUCTION RAMP NW

℄ EXISTING I-530

EXIST. R/W

PI 2307+47.54

PDE

PT 2303+38.99

PC 2307+90.47

PT 2309+81.15

PI 2321+03.63

PT 2322+74.55

PC 2319+28.19

PT 2314+36.31

PI 2308+85.89

RAMP ES 2306+63.82, 7.50' RT. = I-530 474+99.92, 74.73' RT.

RAMP NW 2321+85.23, 7.5' LT. = I-530 469+26.19, 57.84' LT.

9755

9087

105

106

(7) (8) (10) (11) (13)

2290 2295 2300 2305 2310 2315 2220

460 465 470 475 480 485

S64°28'48"W

S49°46'48"W 936.63'

S40°39'12"W

S5°19'34.9"W 2148.74'

S39°53'47"W 999.89'

N06°45'27"W 153.92'

CURVE NO.	ID	NO.	STATION	NORTHING	EASTING
7	PC	8000	2282+80.62	1859922.2377	1316605.7245
	PI	8001	2297+84.50	1861413.4008	1316410.5740
	PT	8002	2303+38.99	1860765.4895	1315053.4218
		R= 1091.35'		T= 1503.88'	
		L= 2058.36'		Δ= 108°03'50"	
8	PC	8003	2307+90.47	1860570.9767	1314645.9840
	PI	8004	2308+85.89	1860529.8688	1314559.8769
	PT	8005	2309+81.15	1860480.3831	1314478.2959
		R= 1909.86'		T= 95.42'	
		L= 190.67'		Δ= 5°43'13"	
10	PC	8009	2284+95.76	1860158.7864	1316787.7894
	PI	8010	2319+68.15	1863626.3842	1316970.2428
	PT	8011	2314+36.31	1860991.9998	1314708.0441
		R= 1183.50'		T= 3472.39'	
		L= 2940.55'		Δ= 142°21'31"	
11	PC	8012	2319+28.19	1860618.8271	1314387.5932
	PI	8013	2321+03.63	1860485.7271	1314273.2976
	PT	8014	2322+74.55	1860406.5335	1314116.7491
		R= 881.47'		T= 175.44'	
		L= 346.35'		Δ= 22°30'47"	
13	PC	8018	2287+38.77	1859790.3253	1315589.5198
	PI	8019	2307+47.54	1860527.3659	1313720.8480
	PT	8020	2311+96.61	1861804.6973	1315271.1988
		R= 1183.50'		T= 2008.77'	
		L= 2457.85'		Δ= 118°59'23"	

SURVEY CONTROL DETAILS

JACOBS

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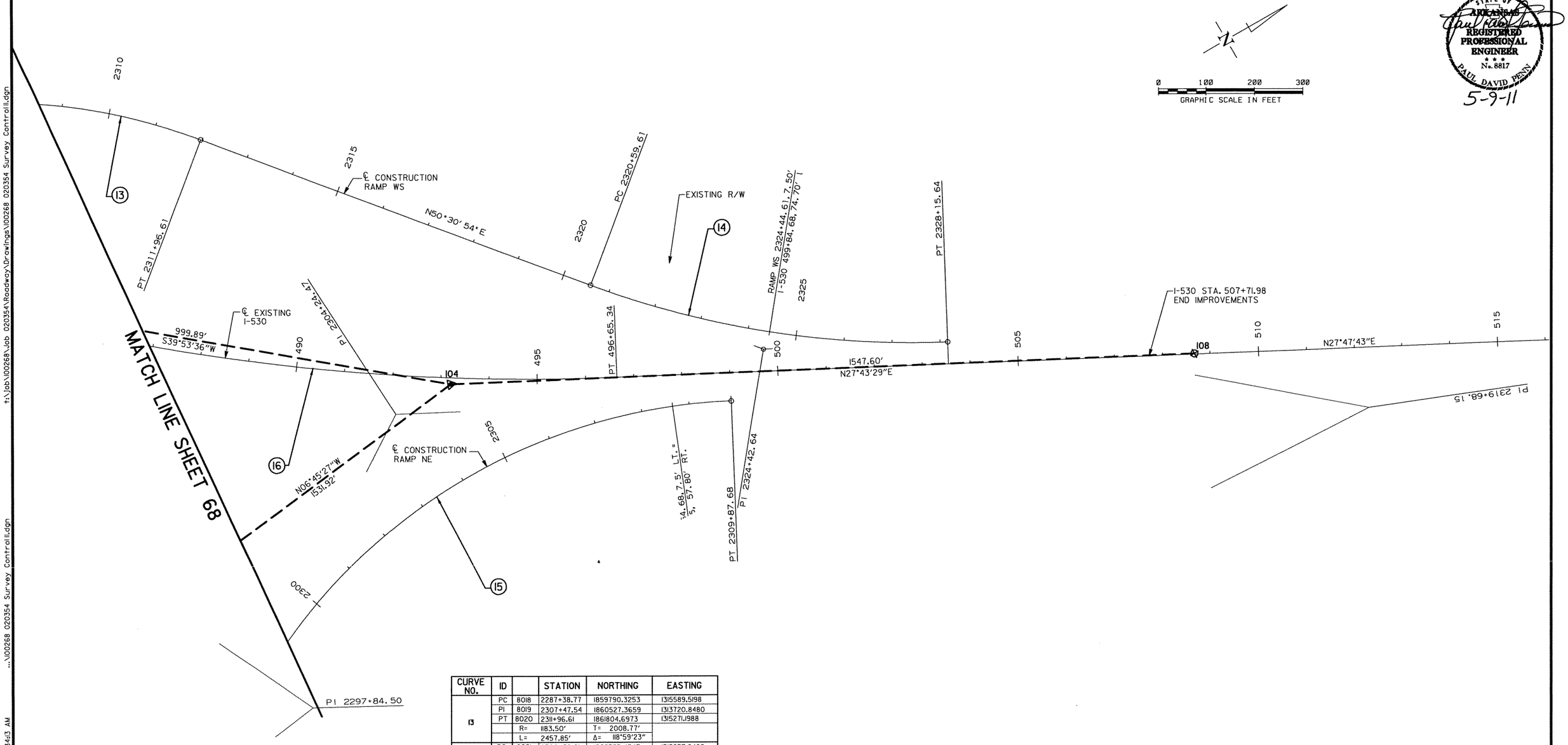
5/9/2011

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		020354	69	156
				(2)	SURVEY CONTROL DETAILS			

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11

0 100 200 300
GRAPHIC SCALE IN FEET



CURVE NO.	ID		STATION	NORTHING	EASTING
13	PC	8018	2287+38.77	1859790.3253	1315589.5198
	PI	8019	2307+47.54	1860527.3659	1313720.8480
	PT	8020	2311+96.61	1861804.6973	1315271.1988
		R= 1183.50'		T= 2008.77'	
		L= 2457.85'		Δ= 118°59'23"	
14	PC	8021	2320+59.61	1862353.4547	1315937.2486
	PI	8022	2324+42.64	1862597.0168	1316232.8701
	PT	8023	2328+15.64	1862935.7351	1316411.7118
		R= 1909.86'		T= 383.03'	
		L= 756.04'		Δ= 22°40'52"	
15	PC	8024	2297+26.66	1861284.5276	1316349.2777
	PI	8025	2304+24.47	1861868.3328	1315967.0313
	PT	8026	2309+87.68	1862485.4111	1316292.8459
		R= 1183.50'		T= 697.81'	
		L= 1261.02'		Δ= 61°02'55"	
16	PC	8027	443+92.45	1859867.7771	1311779.6824
	PI	8028	473+64.07	1859675.6734	1314745.0832
	PT	8029	496+65.34	1862304.4219	1316130.7913
		R= 4583.66'		T= 297.62'	
		L= 5272.89'		Δ= 65°54'40"	

SURVEY CONTROL DETAILS

JACOBS

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5/9/2011

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		020354	70	156

2 INTERCHANGE LAYOUT I-69 CONNECTOR/I-530

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11

NW-1
PI = 2275+17.75
R = 5729.58'
L = 1046.79'
T = 524.86'
Delta = 10°28'05"
Dc = 1°00'00"
e = 0.037
Ls @ PC = 300'
Ls @ PT = 300'

NW-2
PI = 2319+68.15
R = 1183.50'
L = 2940.55'
T = 3472.39'
Delta = 142°21'31"
Dc = 4°50'28.37"
e = 0.0814
Ls @ PC = 300'
Ls @ PT = 300'

NW-3
PI = 2321+03.63
R = 881.47'
L = 346.35'
T = 175.44'
Delta = 22°30'47"
Dc = 6°30'00"
e = 0.095
Ls @ PC = 350'
Ls @ PT = 350'

530-1
PI = 473+64.06
R = 4583.66'
L = 5272.89'
T = 2971.61'
Delta = 65°54'40"
Dc = 1°15'00"

WS-1
PI = 2277+25.75
R = 1183.50'
L = 1260.40'
T = 697.40'
Delta = 61°01'07"
Dc = 4°50'28.37"
e = 0.0814
Ls @ PC = 300'
Ls @ PT = 300'

WS-2
PI = 2307+47.54
R = 1183.50'
L = 2457.85'
T = 2008.77'
Delta = 118°59'23"
Dc = 4°50'28.37"
e = 0.0814
Ls @ PC = 300'
Ls @ PT = 300'

WS-3
PI = 2324+42.64
R = 1909.86'
L = 756.04'
T = 383.03'
Delta = 22°40'52"
Dc = 3°00'00"
e = 0.057
Ls @ PC = 300'
Ls @ PT = 114.14'

ES-1
PI = 2297+84.50
R = 1091.35'
L = 2058.36'
T = 1503.88'
Delta = 108°03'50"
Dc = 5°15'00"
e = 0.0855
Ls @ PC = 350'
Ls @ PT = 350'

NE-1
PI = 2304+24.47
R = 1183.50'
L = 1261.02'
T = 697.81'
Delta = 61°02'55"
Dc = 4°50'28.37"
e = 0.0814
Ls @ PC = 500'
Ls @ PT = 300'

ES-2
PI = 2308+85.89
R = 1909.86'
L = 190.67'
T = 95.42'
Delta = 5°43'13"
Dc = 3°00'00"
e = MATCH EXIST. I-530

STA. 458+54.00 (I-530)
END JOB 020354

GRAPHIC SCALE IN FEET 0 200 400 600

EXISTING R/W & C/A
EXISTING R/W C/A & FENCE
EXISTING P.D.E.
PI 2307+47.54
PT 2322+74.55
RAMP NW 2321+85.23 7.5' LT.= I-530 469+26.19 57.84' LT.
PC 2319+28.19
PI 2321+03.63
PI 2308+85.89
PT 2309+81.48
PC 2307+90.48
S40°39'12"W
PT 2314+36.31
S64°28'48"E
PI 473+64.06
RAMP ES 2306+63.82 7.50' RT.= I-530 474+99.92 74.73' RT.
PT 2303+38.99
N89°31'48"E
PT 2311+96.61
N50°30'54"E
PI 2304+24.47
RAMP WS 2324+14.61 7.50' RT.= I-530 499+84.68 74.70' LT.
PC 2320+59.61
PT 2328+15.64
N27°50'02"E
PI 2324+42.64
PI 2319+68.15
EXIST I-530
EXISTING R/W & C/A
EXISTING R/W C/A & FENCE
EXISTING P.D.E.
℄ CONSTRUCTION RAMP WS
℄ CONSTRUCTION RAMP ES
℄ CONSTRUCTION RAMP NW
℄ CONSTRUCTION RAMP NE
PC 2287+38.77
PT 2282+88.75
N68°28'29"W
Imbeau Bayou
I-69 CONNECTOR 2266+46.02 BK.= 9' LT.
RAMP ES 2266+46.02 AHD., 7.5 RT.
PC 2270+28.35 RAMP WS= 21' LT.
2270+28.35 RAMP ES, 21' LT.
RAMP WS 2271+54.84 7.5' RT.=
RAMP ES 2271+55.40 20.3' LT.
PC 2282+80.62
PI 2275+17.75
PC 2284+95.76
POB 2292+44.06
PI 2297+84.50
N35°12'53"W
RAMP NE 2294+62.21 7.50' LT.= RAMP NW 2294+57.40 33.22' RT.
PC 2297+26.66
PT 2280+39.68
PC 2269+92.89
PT 2262+53.54
PI 2277+29.75
N07°27'22"W
N03°00'43"E
℄ CONSTRUCTION I-69 CONNECTOR
℄ CONSTRUCTION RAMP ES
INTERCHANGE LAYOUT
I-69 CONNECTOR/I-530

JACOBS

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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.		020354	71	156

(2) PLAN & PROFILE STA. 2057+12.42 TO 2060+00

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PERRY
5-9-11

BM 1726

EQUATION
STA. 2057+25.00 BK.
END JOB 012060
STA. 2057+12.42 AHD.
BEGIN JOB 020354

℄ MEDIAN MAIN LANES

N03°20'22"W

PRESERVE VEGETATION

EXISTING R/W
C/A & FENCE
2058+96.35
177.66' RT.

40'
8'
24'
10'

BM 74
2058+71.65
150'

100 YR. FLOODPLAIN

2060+50
185'

EXISTING R/W
C/A & FENCE

BM 30010

BM 73

N

0 100 200 300
GRAPHIC SCALE IN FEET

STA. 2057+12.42 AHD.
BEGIN JOB 020354
Elev. 205.00

PROPOSED GRADE

PVI 2057+12.42
ELEV. 205.00
PVC 2057+50.00
Elev 205.00
0.00%

2057+96.12
R.M.L. 21" SECTION

VC=300.00

2058+77.12
0.0
-02"/'
R.M.L. 21" SECTION

PVI 2059+00.00
ELEV. 205.00
P.G. 205.49

2059+58.12
R.M.L. 21" SECTION

BM: # 1726 SET REBAR W/ CAP
434.91' LT. OF STA. 2045+82.58 BK.
ELEV. 216.37

BM: #30010 SET REBAR W/ CAP
213.90' RT. OF STA. 2046+04.94 BK.
ELEV. 215.12

BM: #CTL 73 - SET REBAR W/ CAP
290.51' RT. OF STA. 2051+61.72 BK.
ELEV. 218.12

BM: #CTL 74 - SET REBAR W/ CAP
117.15' RIGHT OF STA. 2058+23.24
ELEV. 208.16

250 240 230 220 210 200 190 180 170 160

2030+00 2035+00 2040+00 2045+00 2050+00 2055+00 2060+00

JACOBS

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5/9/2011

DATE REVISED	DATE FR.MED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		020354	72	156

(2) PLAN & PROFILE STA.2060+00 TO 2090+00

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID DENNY
5-9-11

STA. 2061+00.00 - IN PLACE
54" x 131' R.C. PIPE CULVERT
AT 20° 0' 0" LT. FWD SKEW
(CLASS III) WITH TYPE 3 BEDDING &
F.E.S. LT. & RT.
WITH 125 C.Y. DUMPED RIPRAP
AT OUTLET END
Q_{50}= 141.8 cfs
D.A. = 108.76 Ac.
RETAIN

PRESERVE VEGETATION

C.L. MEDIAN 2066+76
BEGIN FUTURE MEDIAN
TYPE A BARRIER WALL

2058+96.35
177.66'

2064+50
150.94'

2065+50
110'

PI 2065+67.73

PI 2068+01.85

BM
30016

2067+50
90'

EXISTING R/W
C/A & FENCE

2071+97.12
100'

℄ MEDIAN MAIN LANES

PC 2077+13.93

2078+00
115'

PRESERVE VEGETATION

BM
30019

2084+00
110'

PT 2084+83.06

BM
78

100 YR.
FLOODPLAIN

2085+34.25
90'

2090+00
101.25'

2089+00
105'

N03°20'22"W

N04°09'34"E

N03°31'55"W

10'
8'
24'
10'

2062+00
140'

2063+50
120'

2060+50
185'

I-R.M.L.

2066+50
105'

PT 2067+07.99

2069+00
100'

PT 2069+42.13

EXISTING R/W
C/A & FENCE

PT 2071+76.26 R.M.L. 21' LT.
=2071+81.04 C.L. MEDIAN

2072+08.33
100'

2079+00
110'

PI 2080+99.07

2083+00
115'

2085+18.70
105'

2087+50
105'

2089+00
95'

2089+95
93.81'

BEGIN BRIDGE
STA. 2090+03.92

PC 2061+92.25 MEDIAN =
2061+92.25, 52' LT. R.M.L.

PC 2064+26.38

100 YR.
FLOODPLAIN

STA. 2086+00.00 - IN PLACE
65" x 40" x 110' R.C. ARCH PIPE CULVERT
(CLASS III) WITH TYPE 3 BEDDING &
F.E.S. LT. & RT.
RETAIN

0 100 200 300
GRAPHIC SCALE IN FEET

(1)
PI 2065+67.73
R 5729.58'
L 749.88'
T 375.47'
Delta 7°29'56" RT.
Dc 1°00'00"

(I-R.M.L.)
PI 2068+01.85
R 5729.58'
L 749.88'
T 375.47'
Delta 7°29'56" RT.
Dc 1°00'00"
e 0.037
L 350'

(2)
PI 2080+99.07
R 5729.58'
L 769.13'
T 385.14'
Delta 7°41'29" LT.
Dc 1°00'00"
e 0.037
L 300'

GUARDRAIL (TYPE A)	THRIE BEAM GUARDRAIL TERMINAL	GUARDRAIL TERMINAL (TYPE 2)
STA. 2086+76.77 TO STA. 2089+95.52 RT. OF R.M.L. = 250 LIN. FT.	1 EACH	1 EACH
STA. 2088+66.27 TO STA. 2089+85.02 LT. OF R.M.L. = 50 LIN. FT.	1 EACH	1 EACH

C.L. R.M.L. STA. 2061+63.88 BEGIN SUPERELEVATION
C.L. R.M.L. STA. 2065+13.88 MAX. SUPERELEVATION (0.037 FT./FT.)
C.L. R.M.L. STA. 2070+88.76 MAX. SUPERELEVATION (0.037 FT./FT)
C.L. R.M.L. STA. 2071+76.26 NB=STA. 2071+81.04 C.L. MEDIAN
C.L. MEDIAN STA. 2074+43.54 END SUPERELEVATION

STA. 2074+88.93 BEGIN SUPERELEVATION
STA. 2077+88.93 MAX. SUPERELEVATION (0.037 FT./FT)
STA. 2084+08.06 MAX. SUPERELEVATION (0.037 FT./FT.)
STA. 2087+08.06 END SUPERELEVATION

SEE R.M.L. PROFILE BELOW

PVI 2060+50.00
Elev 206.95

PVC 2060+50.00
Elev 206.95

1.30%

PVC 2065+80.00
Elev 213.86

PVI 2068+80.00
ELEV. 217.77
P.G. 216.29

VC=600.00'

PVT 2071+80.00
Elev 215.76

2074+43.54

2074+88.93

-0.02"/'

-0.02"/'

-0.67%

PROPOSED GRADE

PVC 2078+55.00
Elev 211.24

VC=300.00'

PVI 2081+55.00
Elev 209.91

PVI 2080+05.00
ELEV. 210.24
P.G. 210.41

2084-08.06
21' SECTION

R.M.L.

+.037

2086-08.06
23' SECTION

R.M.L.

-0.001

-.02"/'

2087+08.06

0.22%

+00.00
IN PLACE
F.L. IN (LT.) = 192.21
F.L. OUT (RT.) = 191.53
RETAIN

C.L. MEDIAN
C.L. R.M.L.

+00.00
IN PLACE
F.L. IN (LT.) = 197.80
F.L. OUT (RT.) = 197.20
RETAIN

PVI 2059+58.12 R.M.L. =
2059+58.12 MAIN LANES
ELEV. 205.94
VC= 91.88'

PVC 2059+58.12
Elev 205.94

PVI 2060+04.06
ELEV. 206.36
P.G. 206.41

PVT 2060+50.00
Elev 206.95

0.30%

2061+92.25 MEDIAN 40' RT.+
2061+92.25 R.M.L. 12' LT.
ELEV. 208.76

PROPOSED GRADE

1.30%

PVC 2065+63.59
Elev 213.65

PVI 2068+63.59
ELEV. 217.55
P.G. 216.07

VC=600.00'

PVT 2071+63.59
Elev 215.54

(PVI) 2071+76.26 R.M.L.
=2071+81.04 MAIN LANES
ELEV. 215.46

PVC 2071+63.59
ELEV. 215.75

BM: #30016 SET REBAR W/ CAP
170.29' LEFT OF STA. 2068+38.13
ELEV. 215.26

BM: #30019 SET REBAR W/ CAP
125.62' LEFT OF STA. 2081+86.44
ELEV. 213.96

BM: #CTL 78 - SET REBAR W/ CAP
159.04' LEFT OF STA. 2085+28.19
ELEV. 202.85

230
220
210
200
190
240

2060+00
2065+00
2070+00
2075+00
2080+00
2085+00
2090+00

JACOBS

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10:17:24 AM
5/9/2011

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		020354	73	156

(2) PLAN & PROFILE STA. 2090+00 TO 2120+00

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 8817 PAUL DAVID PENNY 5-9-11

Sandy Bayou

STA. 2096+00.00 - IN PLACE
65" x 40" x 114' R.C. ARCH PIPE CULVERT
(CLASS III) WITH TYPE 3 BEDDING &
F.E.S. LT. & RT.
RETAIN

STA. 2106+00.00 - IN PLACE
DBL. 44" x 27" x 110' R.C. ARCH PIPE
CULVERT
(CLASS III) WITH TYPE 3 BEDDING &
F.E.S. LT. & RT.
WITH 29 C.Y. DUMPED RIPRAP
AT OUTLET END
Q_{50}= 90 cfs
D.A. = 37.10 Ac.
RETAIN

100 YR FLOODPLAIN

100 YR FLOODPLAIN

STA. 2112+00.00 - IN PLACE
65" x 40" x 106' R.C. ARCH PIPE CULVERT
(CLASS III) WITH TYPE 3 BEDDING &
F.E.S. LT. & RT. (RELIEF STRUCTURE)
RETAIN

BM 80

2090 2095 2100 2105 2110 2115 2120

2090+00 101.25'
2089+00 105'
2092+15 93.19'
2093+00 90'
2095+00 90'
2097+00 105'
2098+62.64 105'
2103+00 100'
2107+79.70 100'
2111+98.83 105'
2115+00 115'
2120+00 140'

PRESERVE VEGETATION
℄ MEDIAN MAIN LANES
EXCEPTION TO JOB 020354
EXISTING R/W C/A & FENCE
BM 30030
PRESERVE VEGETATION

N03°31'55"W

8' 10' 24'

2089+00 95'
2089+95 93.81'
2092+10 91.12'
2093+00 90'
END BRIDGE STA. 2092+10.08
2096+00 105'
2098+45.60 105'
2103+00 100'
EXISTING R/W C/A & FENCE
2107+00 100'
2111+81.56 105'
2118+50 145'

STA. 2115+50.00 - IN PLACE
24" x 136' R.C. PIPE CULVERT
(CLASS III) WITH TYPE 3 BEDDING &
F.E.S. LT. & RT.
WITH 44 C.Y. DUMPED RIPRAP
AT OUTLET END
Q_{50}= 17.6 cfs
D.A. = 6.29 Ac.
RETAIN

STA. 2120+00.00 - IN PLACE
36" x 178' R.C. PIPE CULVERT
(CLASS V) WITH TYPE 3 BEDDING &
F.E.S. LT. & RT.
Q_{50}= 23.2 cfs
D.A. = 10.83 Ac.
RETAIN

0 100 200 300
GRAPHIC SCALE IN FEET

	GUARDRAIL (TYPE A)	THRIE BEAM GUARDRAIL TERMINAL	GUARDRAIL TERMINAL (TYPE 2)
STA. 2092+28.98 TO STA. 2095+72.73 LT. OF R.M.L. =	275 LIN. FT.	1 EACH	1 EACH
STA. 2092+18.48 TO STA. 2093+37.23 RT. OF R.M.L. =	50 LIN. FT.	1 EACH	1 EACH

STA. 2090+03.92 TO STA. 2092+10.08 - IN PLACE
206'-1⅞" X 40' CLEAR ROADWAY BRIDGE NO. B7129
204' CONTINUOUS COMPOSITE W-BEAM UNIT
RETAIN

250 240 230 220 210 200 190 180 170 160

NOTE: THIS STREAM IS CLASSIFIED AS PERENNIAL. THE STREAM BANK ELEVATION IS 197.0 FT. MSL

STA. 2090+03.92
BEGIN BRIDGE
P.C. ELEV. 208.07
JOB 020353
BRIDGE NO. B7129

EXCEPTION TO JOB 020354

STA. 2092+10.08
END BRIDGE
P.C. ELEV. 207.62
JOB 020353
BRIDGE NO. B7129

HW_{100} = 201.31
HW_{50} = 200.81
1:2 2:1

2096+00 23' SECTION 2096+50
R.M.L.

+00.00
IN PLACE
F.L. IN (LT.) = 195.03
F.L.OUT (RT.) = 194.52
RETAIN

2098+00 21' SECTION
R.M.L.

2099+50

PROPOSED GRADE
-0.22%

PVC 2104+75.00
Elev 204.87

+00.00
IN PLACE
F.L. IN (LT.) = 193.61
F.L.OUT (RT.) = 192.87
RETAIN

VC=1300.00'

PVI 2111+25.00
ELEV. 203.46
P.C.G. 207.06

+00.00
IN PLACE
F.L. (LT.) = 196.00
F.L. (RT.) = 196.00
RETAIN

2115+50

2117+00 21' SECTION
R.M.L.

+50.00
IN PLACE
F.L. IN (LT.) = 197.91
F.L. OUT (RT.) = 196.50
RETAIN

PVRC 2117+75.00
Elev 216.43

2.00%

2118+50

2119+00 23' SECTION
R.M.L.

+00.00
IN PLACE
F.L. IN (LT.) = 198.00
F.L. OUT (RT.) = 197.42
RETAIN

BM: #CTL 80 - SET REBAR W/ CAP
284.06' LEFT OF STA. 2093+81.63
ELEV. 196.74

BM: #30030 SET REBAR W/ CAP
120.99' LEFT OF STA. 2113+63.17
ELEV. 201.39

BM: #CTL 83 - SET REBAR W/ CAP
244.53' LEFT OF STA. 2117+68.97
ELEV. 201.92

2090+00 2095+00 2100+00 2105+00 2110+00 2115+00 2120+00

JACOBS

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5/9/2011

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		020354	74	156

(2) PLAN & PROFILE STA. 2120+00 TO 2150+00

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11

PRESERVE VEGETATION
ST. RAPHAEL RD.
2120+00 140'
2123+00 130'
2125+37.20 140'
EXCEPTION TO JOB 020354
2128+68.67 125.01'
PC 2128+63.32
EXISTING R/W C/A & FENCE
2131+16.65 100.05'
2133+32.29 100' BM 30056
PRESERVE VEGETATION
2136+73.76 91.23'
2138+91.29 90'
℄ MEDIAN MAIN LANES
2143+50 85'
2146+00 105'
2148+00 110'
PT 2143+78.24
PI 2136+25.23
R 5729.58'
L 1514.92'
T 761.91'
Delta 15°08'57" LT.
Dc 1°00'00"
e 0.037
Ls 300'
BM 86
STA. 2146+90.00 - IN PLACE
48" x 108' R.C. PIPE CULVERT
(CLASS III) (TYPE 3 BEDDING)
& FES LT. & RT.
WITH 26 C.Y. DUMPED RIPRAP
AT OUTLET END
Q_{50} = 100.20 cfs
D.A. = 49.68 Ac.
RETAIN
N03°31'55"W
N18°40'52"W
BEGIN BRIDGE STA. 2122+89.96
2122+00 155'
END BRIDGE STA. 2124+38.38
2123+20 225'
2124+50 135'
2125+08.83 210'
BM 1736
STA. 2123+25.00 - IN PLACE
4-18" x 54' R.C. PIPE CULVERT
(CLASS III) (TYPE 3 BEDDING)
& FES LT. & RT.
Q_{50} = 26.6 cfs
D.A. = 15.79 Ac.
RETAIN
2129+50 190'
EXISTING C/A & FENCE
2133+00 190'
EXISTING R/W
STA. 2133+20.00 - IN PLACE
42" x 110' R.C. PIPE CULVERT
(CLASS III) (TYPE 3 BEDDING)
& FES LT. & RT.
Q_{50} = 40.00 cfs
D.A. = 17.18 Ac.
RETAIN
STA. 2122+89.96 TO STA. 2124+38.38 - IN PLACE
148'-5" X 40'-0" CLEAR ROADWAY BRIDGE NO. B7130
146'-0" CONTINUOUS COMPOSITE W-BEAM UNIT
RETAIN
PI 2136+25.23
2137+75 170'
2138+30.53 154.43'
2138+97.23 170'
2142+50 205'
2146+45 195'
2147+80 175'
℄ FRONTAGE ROAD
0 100 200 300
GRAPHIC SCALE IN FEET

	GUARDRAIL (TYPE A)	THRIE BEAM GUARDRAIL TERMINAL	GUARDRAIL TERMINAL (TYPE 2)
STA. 2119+51.73 TO STA. 2122+70.48 RT. OF R.M.L. =	250 LIN. FT.	1 EACH	1 EACH
STA. 2121+61.61 TO STA. 2122+80.36 LT. OF R.M.L. =	50 LIN. FT.	1 EACH	1 EACH
STA. 2124+66.32 TO STA. 2128+10.07 LT. OF R.M.L. =	275 LIN. FT.	1 EACH	1 EACH
STA. 2124+35.44 TO STA. 2125+54.19 RT. OF R.M.L. =	50 LIN. FT.	1 EACH	1 EACH

STA. 2126+38.32 BEGIN SUPERELEVATION
STA. 2129+38.32 MAX. SUPERELEVATION (0.037 FT./FT.)
STA. 2143+03.24 MAX. SUPERELEVATION (0.037 FT./FT.)
STA. 2146+03.24 END SUPERELEVATION

EXCEPTION TO JOB 020354
STA. 2122+89.96
BEGIN BRIDGE
P.G. ELEV. 222.31
JOB 020353
BRIDGE NO. B7130
PVI 2123+75.00
ELEV. 228.41
P.G. 222.43
VC=1200.00'
e=-5.98'
2126+38.32 23' SECTION
R.M.L.
STA. 2124+38.38
END BRIDGE
P.G. ELEV. 222.36
JOB 020353
BRIDGE NO. B7130
2128+38.32 23' SECTION
PVRC 2129+75.00
Elev 216.47
2130+38.32 21' SECTION
-1.99%
VC=900.00'
PVT 2138+75.00
Elev 208.42
PROPOSED GRADE
0.20%
PVI 2134+25.00
ELEV. 207.51
P.G. 209.98
2146+03.24
+25.00 (RT.)
IN PLACE
F.L. IN (RT.) = 198.54
F.L. OUT (LT.) = 198.40
RETAIN
+20.00
IN PLACE
F.L. IN (LT.) = 200.17
F.L. OUT (RT.) = 199.81
RETAIN
+90.00
IN PLACE
F.L. IN (LT.) = 197.53
F.L. OUT (RT.) = 197.01
RETAIN
BM: "1736 SET REBAR W/ CAP
321.45' RIGHT OF STA. 2122+50.72
ELEV. 202.77
BM: "30056 SET REBAR W/ CAP
113.09' LEFT OF STA. 2134+17.79
ELEV. 201.66
BM: "CTL 86 - SET REBAR W/ CAP
265.53' LEFT OF STA. 2139+51.73
ELEV. 206.72

250 240 230 220 210 200 190 180 170 160
2120+00 2125+00 2130+00 2135+00 2140+00 2145+00 2150+00

JACOBS

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5/9/2011

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		020354	75	156

(2) PLAN & PROFILE STA. 2150+00 TO 2180+00

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11

FLOODWAY LIMIT
100 YR FLOODPLAIN
BM 88
BM 30063
BM 91
PRESERVE VEGETATION
EXISTING R/W C/A & FENCE
℄ MEDIAN MAIN LANES
2152+96.20 90′
2161+00 90′
2161+50 90′
2166+92.78 90′
2173+89.09 90′
2175+25 120′
2178+50 125′
EXCEPTION TO JOB 020354
N18°40′52″W
EXISTING C/A & FENCE
8′ 10′ 24′
2152+33.75 90′
EXISTING R/W C/A & FENCE
2158+00 90′
2162+50 95′
2166+28.47 95′
END BRIDGE STA. 2175+53.15
2176+00 125′
2180+16.93 119.62′
BEGIN BRIDGE STA. 2162+44.57
Bayou Bartholomew
2150+90 155′
2151+15 210′
2152+50 190′
EXISTING R/W
2151+83.45 235′
100 YR FLOODPLAIN

	GUARDRAIL (TYPE A)	THRIE BEAM GUARDRAIL TERMINAL	GUARDRAIL TERMINAL (TYPE 2)
STA. 2159+32.06 TO STA. 2162+50.81 RT. OF R.M.L. =	250 LIN. FT.	1 EACH	1 EACH
STA. 2160+93.55 TO STA. 2162+12.30 LT. OF R.M.L. =	50 LIN. FT.	1 EACH	1 EACH
STA. 2175+60.23 TO STA. 2179+03.98 LT. OF R.M.L. =	275 LIN. FT.	1 EACH	1 EACH
STA. 2175+77.73 TO STA. 2176+96.48 RT. OF R.M.L. =	50 LIN. FT.	1 EACH	1 EACH

STA. 2162+44.57 TO STA. 2175+53.15 - IN PLACE
1308′-6 5/16″ X 40′-0″ CLEAR ROADWAY BRIDGE NO. B7131
I-326′ CONTINUOUS COMPOSITE W-BEAM UNITS & 5-196′
CONTINUOUS COMPOSITE W-BEAM UNITS
RETAIN

0 100 200 300
GRAPHIC SCALE IN FEET

NOTE: THIS STREAM IS CLASSIFIED AS PERENNIAL. THE STREAM BANK ELEVATION IS 200.0 FT. MSL

STA. 2162+44.57
BEGIN BRIDGE
P.G. ELEV. 212.61
JOB 020353
BRIDGE NO. B7131

STA. 2175+53.15
END BRIDGE
P.G. ELEV. 218.44
JOB 020353
BRIDGE NO. B7131

VC=300.00′
VC=400.00′
VC=500.00′
0.20%
0.10%
0.63%
-0.57%
PROPOSED GRADE
EXISTING GROUND
2.5:1
PVC 2153+50.00 Elev 211.41
PVI 2155+00.00 ELEV. 211.72 P.G. 211.68
PVT 2156+50.00 Elev 211.87
2156+65 R.M.L. 21′ SECTION
2158+65 R.M.L. 23′ SECTION
PVC 2161+00.00 Elev 212.32
PVT 2165+00.00 Elev 213.78
PVI 2163+00.00 ELEV. 212.53 P.G. 212.79
HW_{100} = 205.09
HW_{50} = 204.84
PVC 2171+50.00 Elev 217.88
PVI 2174+00.00 ELEV. 219.43 P.G. 218.68
PVT 2176+50.00 Elev 218.00
2177+75 R.M.L. 23′ SECTION
2178+25
2179+75 R.M.L. 21′ SECTION
EXCEPTION TO JOB 020354

BM: #CTL 88 - SET REBAR W/ CAP
213.95′ LEFT OF STA. 2153+26.42
ELEV. 204.76

BM: #30063 SET REBAR W/ CAP
169.79′ LEFT OF STA. 2164+31.61
ELEV. 193.42

BM: #CTL 91- SET REBAR W/ CAP
238.75′ LEFT OF STA. 2171+54.04
ELEV. 201.27

250 240 230 220 210 200 190 180 170 160

2150+00 2155+00 2160+00 2165+00 2170+00 2175+00 2180+00

JACOBS

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5/9/2011

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		020354	76	156

(2) PLAN & PROFILE STA. 2180+00 TO 2210+00

STA. 2206+39.00 - IN PLACE
48" x 132' R.C. PIPE CULVERT
29°00'00" LT. FWD. SKEW
(CLASS III) WITH TYPE 3 BEDDING &
F.E.S. LT. & RT.
Q_{50} = 54.26 cfs
D.A. = 49.82 Ac.
RETAIN

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11

BM 92

PRESERVE VEGETATION

2181+00.40
120'

2185+00
115'

EXISTING R/W
C/A & FENCE

2189+00
115'

℄ MEDIAN MAIN LANES

2194+00
111.52'

2194+96.34
115'

PRESERVE VEGETATION

2201+00
110'

2206+76.02
100'

2210+00
100'

N18°40'52"W

8'
10'
24'

2180+16.93
119.62'

2185+00
115'

EXISTING R/W
C/A & FENCE

2190+00
110'

2194+16.07
115'

2200+60.39
110'

2206+07.06
104.99'

BM 93

FLOODWAY LIMIT

STA. 2192+75.00 - IN PLACE
65" x 40" x 114' R.C. ARCH PIPE CULVERT
(CLASS III) WITH TYPE 3 BEDDING &
F.E.S. LT. & RT.
RETAIN

STA. 2193+35.00 - IN PLACE
60" x 132' R.C. PIPE CULVERT
22°00'00" LT. FWD. SKEW
(CLASS III) WITH TYPE 3 BEDDING &
F.E.S. LT. & RT.
WITH 31 C.Y. DUMPED RIPRAP
AT OUTLET END
Q_{50} = 104.12 cfs
D.A. = 222.60 Ac.
RETAIN

OVERHEAD ELECTRIC (3 LINES)

0 100 200 300
GRAPHIC SCALE IN FEET

2181+25

PVC 2184+00.00
Elev 213.70

PVI 2186+00.00
ELEV. 212.56
P.G. 212.79

PVT 2188+00.00
Elev 212.35

0.57%

VC=400.00'
e=0.23'

-0.10%

PROPOSED GRADE

-0.10%

+75.00
IN PLACE
F.L. IN (LT.) = 198.51
F.L. OUT (RT.) = 198.16
RETAIN

+35.00
IN PLACE
F.L. IN (LT.) = 194.56
F.L. OUT (RT.) = 194.30
RETAIN

+39.00
IN PLACE
F.L. IN (LT.) = 195.71
F.L. OUT (RT.) = 195.45
RETAIN

BM: "CTL 92 - SET REBAR W/ CAP
398.47' LEFT OF STA. 2183+30.96
ELEV. 199.33

BM: "CTL 93 - SET REBAR W/ CAP
226.62' RIGHT OF STA. 2192+09.15
ELEV. 199.39

250 240 230 220 210 200 190 180 170 160

2180+00 2185+00 2190+00 2195+00 2200+00 2205+00 2210+00

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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.		020354	77	156

(2) PLAN & PROFILE STA. 2210+00 TO 2240+00

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11

STA. 2211+00.00 - IN PLACE
51" x 31" x 86' R.C. ARCH PIPE CULVERT
(CLASS III) (TYPE 3 BEDDING)
WITH FES LT. & RT.
RETAIN

STA. 2235+00.00 - IN PLACE
30"x88' R.C. PIPE CULVERT
(CLASS III) (TYPE 3 BEDDING)
WITH FES LT. & RT.
Q_{50} = 15.2 cfs
D.A. = 8.2 Ac.
RETAIN

(4)
PI 2236+13.70
R 11459.16'
L 1359.31'
T 680.45'
Delta 6°47'48" LT.
Dc 0°30'00"
e NORMAL CROWN

PC 2229+33.24

OVERHEAD ELECTRIC (3 LINES)
OVERHEAD ELECTRIC (3 LINES)

2210+00 100'
2214+30.56 95'
EXISTING R/W C/A & FENCE
2220+70.34 100'
2225+00 95'
℄ MEDIAN MAIN LANES
2230+00 90'
2234+67.34 90.02'
BM 1746 (4)
2237+00 95'
EXISTING R/W C/A & FENCE
2240

N18°40'52"W

8' 10' 24'

2113+00 95'
EXISTING R/W C/A & FENCE
2220+05.33 94.96'
2225+00 95'
2230+00 90'
2233+99.01 90'
2237+00 95'
EXISTING R/W C/A & FENCE

N25°28'40"W

8' 10' 24'

BM 96
BM 30075
PI 2236+13.69

0 100 200 300
GRAPHIC SCALE IN FEET

PVC 2218+50.00
E lev 209.16
VC=300.00'
e=0.05'
PVT 2221+50.00
E lev 209.09
PVI 2220+00.00
ELEV. 209.00
e. g. 209.05
-0.10%
PROPOSED GRADE
0.04%

+00.00
IN PLACE
F.L. IN (RT.) = 201.90
F.L. OUT (LT.) = 200.56
RETAIN

+00.00
IN PLACE
F.L. 30" IN (RT.) = 201.95
F.L. 30" OUT (LT.) = 201.82
RETAIN

BM: #30075 SET REBAR W/ CAP
289.76' RIGHT OF STA. 2217+17.58
ELEV. 203.49

BM: #CTL 96 - SET REBAR W/ CAP
178.56' RIGHT OF STA. 2226+06.19
ELEV. 204.02

BM: #1746 SET REBAR W/ CAP
111.95' LEFT OF STA. 2235+50.40
ELEV. 202.56

250 240 230 220 210 200 190 180 170 160

2210+00 2215+00 2220+00 2225+00 2230+00 2235+00 2240+00

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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.		020354	78	156

(2) PLAN & PROFILE STA. 2240+00 TO 2266+46.02

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PERRY
5-9-11

STA. 2261+00 BEGIN CONCRETE BARRIER WALL (MEDIAN TYPE A)

EXISTING R/W C/A & FENCE

2242+00 95'

PT 2242+92.55

STA. 2245+86.80 BEGIN 4-LANE SECTION

N25°28'40"W

2249+30.41 104.94'

2251+07.32 104.97'

CROSSOVER

PI 2255+38.67

2256+00 115'

STA. 2261+00 INSTALL CRASH CUSHION AT BEGIN CONCRETE BARRIER WALL

℄ MEDIAN MAIN LANES

2259+00 120'

300' TAPER

+55.39

2262+81.89 115'

700'

2270+00 155'

2270+28.35 PC

2266+36.83 145'

℄ CONSTRUCTION RAMP ES

MAIN LANES 2266+46.02 BK. = RAMP ES 2266+46.02 AHD., 16.5 RT.

N07°27'22"W

2262+54.79 105'

PT 2262+53.54

2266+36.83 100'

2270+00 105'

℄ CONSTRUCTION RAMP NW

MAIN LANES 2266+46.02 BK. = RAMP NW 2266+36.83 AHD., 16.5 RT.

PC 2269+92.89

2248+11.80 PC

2248+43.24 90.03'

2254+04.60 100'

2258+01.38 105.01'

EXISTING R/W C/A & FENCE

2242+00 95'

STA. 2252+50.00 - 3.0' LT.
IN PLACE - TYPE ST DROP INLET
(6'-0"x4'-0"x7'-3")
W/ 18"x71' R.C. PIPE CULVERT
(CLASS III) (TYPE 3 BEDDING)
WITH FES LT.
MODIFY PER SPECIAL DETAIL SHEET 26

STA. 2255+50.00 - 3.0' LT.
IN PLACE - TYPE ST DROP INLET
(7'-0"x4'-0"x9'-11")
W/ 18"x79' R.C. PIPE CULVERT
(CLASS III) (TYPE 3 BEDDING)
WITH FES LT.
RETAIN

STA. 2256+00.00 - IN PLACE
48"x150' R.C. PIPE CULVERT
(CLASS III) (TYPE 3 BEDDING)
WITH FES LT. & RT.
Q_{50} = 43.60 cfs
D.A. = 27.30 Ac.
RETAIN

STA. 2258+50.00 - 3.0' LT.
IN PLACE - TYPE ST DROP INLET
(7'-0"x4'-0"x11'-6")
W/ 18"x85' R.C. PIPE CULVERT
(CLASS III) (TYPE 3 BEDDING)
WITH FES LT.
RETAIN

STA. 2247+44.69 - 3.0' LT.
IN PLACE - TYPE ST DROP INLET
(7'-0"x4'-0"x7'-0")
W/ 18"x68' R.C. PIPE CULVERT
(CLASS III) (TYPE 3 BEDDING)
WITH FES LT.
RETAIN

STA. 2249+50.00 - 2.5' LT.
IN PLACE - TYPE ST DROP INLET
(5'-0"x3'-0"x7'-0")
W/ 18"x71' R.C. PIPE CULVERT
(CLASS III) (TYPE 3 BEDDING)
WITH FES LT.
RETAIN

(5)
PI 2255+38.67
R 4583.66'
L 1441.74'
T 726.87'
Delta 18°01'18" RT.
Dc 1°15'00"
e 0.046
L = 300'

STA. 2261+50.00 - 2.5' LT.
IN PLACE - TYPE ST DROP INLET
(5'-0"x3'-0"x10'-9")
W/ 18"x82' R.C. PIPE CULVERT
(CLASS III) (TYPE 3 BEDDING)
WITH FES LT.
RETAIN

GRAPHIC SCALE IN FEET 0 100 200 300

STA. 2245+86.80 BEGIN SUPERELEVATION
STA. 2248+86.80 MAX. SUPERELEVATION (0.046 FT./FT.)
STA. 2261+78.54 MAX. SUPERELEVATION (0.046 FT./FT.)
STA. 2264+78.54 END SUPERELEVATION

2242+36.80 -.02'/' -.02'/'

PVC 2243+50.00 Elev 209.94

2243+86.80 R.M.L. 21' SECTION -.02'/' 0.0 -.02'/'

VC=300.00' e=0.06

2245+36.80 -.02'/' -.02'/'

2245+86.80 R.M.L. 23' SECTION -.02'/'

PVT 2246+50.00 Elev 210.30

PVI 2245+00.00 ELEV. 210.00 P.G. 210.06

0.04%

PROPOSED GRADE

0.20%

18"x68' @ 1.07%

18"x71' @ 1.04%

18"x71' @ 1.06%

18"x79' @ 1.05%

18"x85' @ 1.04%

18"x82' @ 1.05%

+44.69
IN PLACE
TOP = 210.54
F.L. 18" INVERT = 203.56
F.L. D.I. = 203.56
F.L. OUT = 202.83
RETAIN

+50.00
IN PLACE
TOP = 211.05
F.L. 18" INVERT = 204.03
F.L. D.I. = 204.03
F.L. OUT = 203.29
RETAIN

+50.00
IN PLACE
TOP = 211.55
F.L. 18" INVERT = 204.42
F.L. D.I. = 204.42
F.L. OUT = 203.67
RETAIN

+00.00
IN PLACE
F.L. 48" IN (RT.) = 200.40
F.L. 48" OUT (LT.) = 200.25
RETAIN

+50.00
IN PLACE
TOP = 212.25
F.L. 18" INVERT = 202.34
F.L. D.I. = 202.34
F.L. OUT = 201.51
RETAIN

+50.00
IN PLACE
TOP = 212.85
F.L. 18" INVERT = 201.34
F.L. D.I. = 201.34
F.L. OUT = 200.46
RETAIN

+50.00
IN PLACE
TOP = 213.45
F.L. 18" INVERT = 202.72
F.L. D.I. = 202.72
F.L. OUT = 201.86
RETAIN

PVC 2264+00.00 Elev 213.80

VC=200.00' e=-0.07'

PVI 2265+00.00 ELEV. 214.00 P.G. 213.93

-0.08%

STA. 2266+46.02 ELEV. 213.88

PVT 2266+00.00 Elev 213.91

I-69 CONN. STA. 2266+46.02, 9' LT.= RAMP ES STA. 2266+46.02, 7.5' RT. ELEV. 213.70

I-69 CONN. STA. 2266+46.02, 9' RT.= RAMP NW STA. 2266+36.83, 7.5' LT. ELEV. 213.70

BM: "30080 SET REBAR W/ CAP
775.39' RIGHT OF STA. 2243+86.31
ELEV. 201.99

BM: "30081 SET REBAR W/ CAP
1184.26' RIGHT OF STA. 2251+56.28
ELEV. 199.27

BM: "CTL 100 - SET REBAR W/CAP
488.52' RIGHT OF STA. 2266+31.55
ELEV. 200.42

250 240 230 220 210 200 190 180 170 160

2240+00 2245+00 2250+00 2255+00 2260+00 2265+00 2270+00

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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.		020354	79	156

(2) RAMP ES P/P STA. 2266+46.02 TO 2290+00

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11

GRAPHIC SCALE IN FEET 0 100 200 300

STA. 2261+00 CONSTRUCT IMPACT ATTENUATION BARRIER (TYPE A) AT BEGIN CONCRETE BARRIER WALL

STA. 2261+00 BEGIN CONCRETE BARRIER WALL (MEDIAN TYPE A)

MAIN LANES 2266+46.02 BK. = RAMP ES 2266+46.02 AHD., 16.5 LT

2266+36.83 145'

300' TAPER

700' ACCEL. LANE

℄ CONSTRUCTION I-69 CONNECTOR

CROSSOVER

N07°27'22"W

PT 2262+54.54

MAIN LANES 2266+46.02 BK. = RAMP NW 2266+36.83 AHD., 16.5 RT

2266+36.83 100'

STA. 2273+10.00 - IN PLACE
TYPE ST DROP INLET
18.0' RT. (3'-0"x3'-0"x9'-0")
W/ 18"x50' R.C. PIPE CULVERT
(CLASS III) (TYPE 3 BEDDING)
STA. 2273+00.00 - IN PLACE
TYPE RM DROP INLET
31.5' LT. (4'-0"x3'-0"x10'-0")
W/ 18"x41' R.C. PIPE CULVERT
(CLASS V) (TYPE 3 BEDDING)
STA. 2272+45.37 - IN PLACE
DBL. 10'x10'x222' R.C. BOX CULVERT
8°28'38" LT. FWD. SKEW
(RELIEF STRUCTURE) W/3:1 WINGWALLS LT. & RT.
(SPAN = 22.92')
RETAIN

STA. 2270+50.00 RAMP ES
IN PLACE 65" x 40" x 174'
R.C. ARCH PIPE CULVERT
(CLASS III) (TYPE 3 BEDDING)
WITH FES LT. & RT.
RETAIN

PC 2269+92.89 RAMP NW = 2270+02.08 RAMP ES, 33' RT.

2270+00 155'

PC 2270+28.35 RAMP WS= 2270+28.35 RAMP ES, 21' LT.

BM CTL 101

RAMP WS 2271+54.84, 7.5' RT. = RAMP ES 2271+55.40, 20.3' LT.

2272+00 120'

2274+00 115'

IMBEAU BAYOU

EXISTING R/W C/A & FENCE

2280+00 85' 0822

2278+00 100'

2276+00 105'

℄ CONTRUCTION RAMP WS

ES-1
PI = 2297+84.50
R = 1091.35'
L = 2058.36'
T = 1503.88'
Delta = 108°03'50"
Dc = 5°15'00"
e = 0.0855
Ls ⌀ PC = 350'
Ls ⌀ PT = 350'

BM CTL 102

PC 2282+80.62

℄ CONSTRUCTION RAMP ES

N07°27'22"W

STA. 2290+00.00 - IN PLACE
30"x109' R.C. PIPE CULVERT (CLASS III)
(TYPE 3 BEDDING) & FES LT. & RT.
D.A.=9.80 ACRES
Q50=24.7 C.F.S.
RETAIN

PC 2284+95.76

N03°00'43"E

EXISTING R/W C/A & FENCE

2280+00 105'

PT 2280+39.68

℄ CONSTRUCTION RAMP NW

2285+00 110'

2288+00 120'

2290+00 130'

STA. 2275+50 (RAMP NW) END CONCRETE BARRIER WALL (MEDIAN TYPE A)

STA. 2266+46.02 (0.020 FT./FT. LT.)
STA. 2268+78.35 BEGIN SUPERELEVATION AUXILIARY LANE (0.020 FT./FT. LT.)
STA. 2271+55.40 END SUPERELEVATION AUXILIARY LANE (0.077 FT./FT. LT.)
(SEE SH. 74 FOR SUPERELEVATION TRANSITION ON RAMP WS)

STA. 2280+18.12 BEGIN SUPERELEVATION (0.020 FT./FT. LT.)
STA. 2283+68.12 MAX. SUPERELEVATION (0.0855 FT./FT. LT.)

RAMP ES

MAIN LANES 2266+46.02 9' LT. = RAMP ES 2266+46.02 7.5' RT. ELEV 213.70

RAMP WS 2271+54.84 7.5' RT. = RAMP ES 2271+55.40 20.3' LT.

NOTE: THIS STREAM IS CLASSIFIED AS PERENNIAL. THE STREAM BANK ELEVATION IS 199.0 FT. MSL

PROPOSED GRADE -0.09%

+50
IN PLACE
65" x 40" R.C. ARCH PIPE CULVERT
F.L. IN (LT.) = 199.17
F.L. OUT (RT.) = 198.78
RETAIN

+10.00 RT.
IN PLACE
TOP = 212.73
F.L. 18" INVERT = 203.73
F.L. D.I. = 203.73
RETAIN
+00.00 LT.
IN PLACE
TOP = 211.75
F.L. 18" INVERT = 201.75
F.L. D.I. = 201.75
F.L. OUT = 197.25
RETAIN

+00.00
IN PLACE
F.L. 30" IN (LT) = 200.85
F.L. 30" OUT(RT) = 200.33
RETAIN

BM: *CTL 101 - REBAR W/CAP
208.85' LEFT OF STA. 2271+06.07
ELEV. 198.90

+45.37
IN PLACE
F.L. DBL. 10'x10' BOX IN (LT) = 189.00
F.L. DBL. 10'x10' BOX OUT (RT) = 189.00
RETAIN

BM: *CTL 102 - REBAR W/ CAP
241.76' LEFT OF STA. 2279+78.44
ELEV. 202.59

250 240 230 220 210 200 190 180 170 160

2265+00 2270+00 2275+00 2280+00 2285+00 2290+00

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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.		020354	80	156

(2) RAMP ES P/P STA. 2290+00 TO 2306+63.82

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11

STA. 2303+62.40 - IN PLACE
TYPE E JUNCTION BOX 46.50' RT
(3'-0" x 3'-0" x 3'-6")
W/24"x90' R.C. PIPE INLET (CLASS III)
(TYPE 3 BEDDING) & FES
& 30"x 101' R.C. PIPE OUTLET
(CLASS III) (TYPE 3 BEDDING) & FES
CONNECT J.B. TO EXISTING 18" R.C.P.
D.A. = 5.96 ACRES
Q50 = 19.0 C.F.S.
RETAIN

STA. 2290+00.00 - IN PLACE
30"x109' R.C. PIPE CULVERT (CLASS III)
(TYPE 3 BEDDING) & FES LT. & RT.
D.A. = 9.80 ACRES
Q50 = 24.7 C.F.S.
RETAIN

BM CTL 103

ES-1
PI = 2297+84.50
R = 1091.35'
L = 2058.36'
T = 1503.88'
Delta = 108°03'50"
Dc = 5°15'00"
e = 0.0855
Ls @ PC = 350'
Ls @ PT = 350'

ES-2
PI = 2308+85.89
R = 1909.86'
L = 190.67'
T = 95.42'
Delta = 5°43'13"
Dc = 3°00'00"
MATCH EXIST. I-530 SUPER

℄ CONSTRUCTION RAMP WS
℄ CONSTRUCTION RAMP ES
EXISTING R/W C/A & FENCE
EXIST. PDE
2295+50 140'
2296+25 131.88'
2296+15 275'
2296+75 129.44'
2296+55 280'
474+35
185'
472+85
137.13'
RAMP ES 2306+63.82, 7.50' RT. I-530 474+99.92, 74.73' RT.
PC 2307+61.47
PT 2309+61.15
IMBEAU BAYOU
16' GATE
CONSTRUCTION LIMITS
AUXILIARY LANE
700' ACCEL. LANE & 300' TAPER
EXIST. R/W & C/A
℄ EXISTING I-530
CONSTRUCTION LIMITS
STA. 2304+00 BEGIN RAMP ES EARTHWORK
PT 2303+38.99
S64°28'48"W
BM CTL 106
100 YR. FLOODPLAIN LIMITS
EXISTING R/W C/A & FENCE
100 YR. FLOODPLAIN LIMITS
STA. 2319+00 BEGIN RAMP NW EARTHWORK
16' GATE
469+98.27
161.72'
℄ CONSTRUCTION RAMP NW
PC 2319+28.15
PT 2308+28.68
471+75
205'
RAMP NW 2321.85, 23.7.5' LT. I-530 469+26.19, 57.84' LT.
PT 2322+74.55

STA. 469+85 - IN PLACE DBL. 10'x10'x213' R.C. BOX CULVERT RETAIN & EXTEND 28' LT. & 20' RT. TO A COMPLETED LENGTH OF 261' WITH 3:1 WINGWALLS LT. & RT. (SPAN = 22.67')

N

0 100 200 300
GRAPHIC SCALE IN FEET

STA. 2302+44.42 MAX. SUPERELEVATION (0.0855 FT./FT. LT.)

TRANSITION SUPER FROM
STA. 2302+44.42 (0.0855 FT./FT. LT.) TO
STA. 2306+63.82 (0.0310 FT./FT. RT.) (MATCH I-530 SUPERELEVATION)
WITH LINEAR TRANSITION

RAMP ES

PROPOSED GRADE
-0.09%
PVC 2301+39.48
Elev 210.73
VC=200.00'
e=0.07'
K=701
PVT 2303+39.48
Elev 210.84
0.20%
RAMP ES 2306+53.82, 7.50' RT. I-530 474+99.92, 74.73' RT. ELEV. 211.49
STA. 2304+00 BEGIN RAMP ES EARTHWORK
EXISTING
EXISTING GROUND
PVI 2302+39.48
ELEV. 210.64
Avg. G. 2.07%
+62.40
IN PLACE
F.L. IN (RT.) = 201.80
F.L. 24" INVERT = 201.40
F.L. JUNCTION BOX (RT.)= 201.40
TOP = 204.90
F.L. 30" OUT (LT.)= 200.90
RETAIN

BM: "CTL 103 - REBAR W/ CAP
154.17' LEFT OF STA. 2290+53.13
ELEV. 201.78

BM: "CTL 106 - REBAR W/ CAP
64.00' RIGHT OF STA. 2307+95.40
ELEV. 206.76

250 240 230 220 210 200 190 180 170 160

2290+00 2295+00 2300+00 2305+00 2310+00 2315+00

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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.		020354	81	156

(2) RAMP NW P/P STA. 2266+36.83 TO 2295+00

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PERRY
5-9-11

MAIN LANES 2266+46.02 BK. * RAMP ES 2266+46.02 AHD., 16.5 LT

MAIN LANES 2266+46.02 BK. * RAMP NW 2266+36.83 AHD., 16.5 RT

MAIN LANES 2266+46.02 9' RT. * RAMP NW 2266+36.83, 7.5' LT

RAMP WS 2271+54.84, 7.5' RT. RAMP ES 2271+55.40, 20.3' LT

2270+28.35 RAMP WS= 2270+28.35 RAMP ES, 21' LT.

EXISTING R/W C/A & FENCE

℄ CONSTRUCTION RAMP WS

℄ CONSTRUCTION RAMP ES

℄ CONSTRUCTION RAMP NW

℄ I-69 CONNECTOR

BM CTL 101

BM CTL 102

2266+36.83 145′

2270+00 155′

2272+00 120′

2274+00 115′

2276+00 105′

2278+00 100′

PC 2269+92.89

PC 2270

PC 2275

PI 2275+17.75

PC 2280+39.68

PT 2280+39.68

PC 2282+80.62

PC 2284+95.76

PC 2288+22.44

2280+00 105′

2285+00 110′

2286+94.06

2288+00 120′

2288+94.06

2290+00 130′

2294+70 165′

2294+62.21, 7.50′ LT. *

2294+57.40, 33.22′ RT.

2266+36.83 100′

2270+00 105′

2272+70 140′

2274+00 110′

N07°27′22″W

N03°00′43″E

N33°12′53″W

RAMP NE RAMP NW

NW-1

NW-2

10′ 24′ 18 8′ 6′ 9′ 36′

2265 2270 2275 2280 2285 2290 2295

STA. 2275+50 TO STA. 2276+00
TRANSITION LEFT SHOULDER FROM 8′ TO 6′

STA. 2275+50 END
CONCRETE BARRIER WALL
(MEDIAN TYPE A)

NW-1
PI = 2275+17.75
R = 5729.58′
L = 1046.79′
T = 524.86′
Delta = 10°28′05″
Dc = 1°00′00″
e = 0.037
Ls ℄ PC = 350′
Ls ℄ PT = 350′

STA. 2293+00.00 - IN PLACE
42″x149′ R.C. PIPE CULVERT (CLASS III)
(TYPE 3 BEDDING) & FES LT. & RT.
D.A. = 23.69 ACRES
Q50 = 55.7 C.F.S.
RETAIN

NW-2
PI = 2319+68.15
R = 1183.50′
L = 2940.55′
T = 3472.39′
Delta = 142°21′31″
Dc = 4°50′28.37″
e = 0.0814
Ls ℄ PC = 300′
Ls ℄ PT = 300′

0 100 200 300
GRAPHIC SCALE IN FEET

STA. 2267+30.39 BEGIN SUPERELEVATION (0.020 FT./FT. RT.)
STA. 2270+80.39 MAX. SUPERELEVATION (0.037 FT./FT. RT.)
STA. 2279+52.18 MAX. SUPERELEVATION (0.037 FT./FT. RT.)

TRANSITION SUPER FROM STA. 2279+52.18 (0.037 FT./FT. RT.) TO STA. 2285+70.76 (0.0814 FT./FT. LT.) WITH LINEAR TRANSITION

STA. 2285+70.76 MAX. SUPERELEVATION (0.0814 FT./FT. LT.)

RAMP NE AUX LANE: TRANSITION SUPER FROM STA. 2293+51.66 (RAMP NE) (0.0814 FT./FT. LT.) TO STA. 2294+62.21 (RAMP NE) (0.0454 FT./FT. LT.) WITH LINEAR TRANSITION

RAMP NW

MAIN LANES 2266+46.02 9' RT. * RAMP NW 2266+36.83, 7.5' LT ELEV. 213.70

-0.09%

PROPOSED GRADE

PVC 2290+53.39 E lev 211.65

VC=400.00′ e=1.54′ K=130

PVT 2294+53.39 E lev 217.48

3.90%

PVI 2292+53.39 ELEV. 211.48 P.G. 213.02

RAMP NE 2294+62.21, 7.50′ LT. * RAMP NW 2294+57.40, 33.22′ RT. ELEV. 217.60

HW_{100} = 205.09 HW_{50} = 204.84

IN PLACE
65″ x 40″ R.C. ARCH PIPE CULVERT
F.L. IN (LT.) = 199.17
F.L. OUT (RT.) = 198.78
RETAIN

IN PLACE
F.L. DBL. 10′x10′ BOX IN (LT) = 189.00
F.L. DBL. 10′x10′ BOX OUT (RT) = 189.00
RETAIN

+00.00
IN PLACE
F.L. 42″ IN (LT.)= 199.22
F.L. 42″ OUT (RT.) = 198.50
RETAIN

BM: *CTL 101 - REBAR W/CAP
208.85′ LEFT OF STA. 2271+06.07
ELEV. 198.90

BM: *CTL 102 - REBAR W/ CAP
241.76′ LEFT OF STA. 2279+78.44
ELEV. 202.59

260 250 240 230 220 210 200 190 180 170

2265+00 2270+00 2275+00 2280+00 2285+00 2290+00 2295+00

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PRELIMINARY
SUBJECT TO REVISION

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.		020354	82	156

(2) RAMP NW P/P STA. 2295+00 TO 2321+85.23

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11

STA. 2293+68.62 - STA. 2294+43.62 TRANSITION
LT. SHOULDER FROM 6' TO 18.5'
STA. 2295+36.06 - STA. 2295+69.06 TRANSITION
RT. SHOULDER FROM 10' TO 15.5'
STA. 2312+00 - STA. 2312+42 TRANSITION
LT. SHOULDER FROM 13' TO 6'

℄ CONSTRUCTION RAMP ES
CONSTRUCTION LIMITS
STA. 2304+00 BEGIN RAMP ES EARTHWORK
BEGIN BRIDGE STA. 2297+56.96
2297+00 260'
2298+20 360'
℄ CONSTRUCTION RAMP NE
℄ CONSTRUCTION RAMP NW
100 YR. FLOODPLAIN LIMITS
EXCEPTION TO JOB 020354
℄ CONSTRUCTION RAMP WS
BM CTL 105
BM CTL 106
EXISTING R/W C/A & FENCE
EXIST. R/W & C/A
AUXILIARY LANE
700' ACCEL. LANE & 300' TAPER
CONSTRUCTION LIMITS
2296+55 280.00' 16' GATE
PDE
2296+75 129.44'
472+85 137.13'
474+35 185'
469+98.27 161.72' 16' GATE
471+75 205'
476+90 365'
479+10 415'
END BRIDGE STA. 2311+49.15
STA. 2319+00 BEGIN RAMP NW EARTHWORK
STA. 2317+57.00 - IN PLACE
30"x134' R.C. PIPE CULVERT AT
30° RT. FWD. SKEW (CLASS III)
(TYPE 3 BEDDING) & FES LT. & RT.
D.A.=3.81 ACRES
Q50=19.2 C.F.S.
RETAIN
STA. 2297+56.96 - STA. 2311+49.15 IN PLACE
1392'-2¼" x 47'-0" CLEAR ROADWAY BRIDGE NO. 07102
460', 600' & 330' CONTINUOUS COMPOSITE PLATE GIRDER UNITS
RETAIN
STA. 469+85 - IN PLACE DBL. 10'x10'x213'
R.C. BOX CULVERT RETAIN & EXTEND 28' LT.
& 20' RT. TO A COMPLETED LENGTH OF 261'
WITH 3:1 WINGWALLS LT. & RT.
(SPAN = 22.67')

NW-2
PI = 2319+68.15
R = 1183.50'
L = 2940.55'
T = 3472.39'
Delta = 142°21'31"
Dc = 4°50'28.37"
e = 0.0814
Ls ℄ PC = 300'
Ls ℄ PT = 300'

NOTE: APPROACH SLABS AND GUTTERS AT NW RAMP SHALL BE CONSTRUCTED ON ARCS CONCENTRIC TO C.L. CONSTRUCTION

NW-3
PI = 2321+03.63
R = 881.47'
L = 346.35'
T = 175.44'
Delta = 22°30'47"
Dc = 6°30'00"
e = 0.095
Ls ℄ PC = 350'
Ls ℄ PT = 350'

	GUARDRAIL (TYPE A)	THRIE BEAM GUARDRAIL TERMINAL	GUARDRAIL TERMINAL (TYPE 2)
STA. 2294+53.62 TO STA. 2297+47.37 LT.	225 LIN. FT.	1 EACH	1 EACH
STA. 2295+79.06 TO STA. 2297+47.81 RT.	100 LIN. FT.	1 EACH	1 EACH

0 100 200 300
GRAPHIC SCALE IN FEET

STA. 2313+61.31 MAX. SUPERELEVATION (0.0814 FT./FT. LT.)
TRANSITION SUPER FROM STA. 2313+61.31 (0.0814 FT./FT. LT.) TO STA. 2320+15.69 (0.095 FT./FT. RT.) WITH LINEAR TRANSITION
STA. 2320+15.69 MAX. SUPERELEVATION (0.095 FT./FT. RT.)
STA. 2321+08.67 MAX. SUPERELEVATION (0.095 FT./FT. RT.)
STA. 2321+85.23 END SUPERELEVATION (0.08 FT./FT. RT.)
(SEE SH. NO. 34 FOR SUPER ELEVATION TRANSITION ON ACCEL. LANE)

RAMP NW

STA. 2297+56.96
BEGIN BRIDGE
P.G. ELEV. 226.58
BRIDGE NO. 07102
PVI 2304+58.00
ELEV. 247.62
P.G. 242.89
PROPOSED GRADE
VC=630.00'
e=-4.73
K=105
PVC 2301+43.00
Elev 238.16
PVT 2307+73.00
Elev 238.16
3.00%
3:1
EXISTING GROUND
STA. 2311+49.15
END BRIDGE
P.G. ELEV. 226.88
BRIDGE NO. 07102
PCVC 2313+89.54
Elev 219.67
STA. 2319+00 BEGIN RAMP NW EARTHWORK
VC=700.00'
e=2.80'
K=219
PVT 2320+89.54
Elev 209.87
+0.20%
3:1 (EXIST.)
PVI 2317+39.54
ELEV 206.17
P.G. 211.97
+57.00
IN PLACE
F.L. 30" IN (LT.) = 200.05
F.L. 30" OUT (RT.)= 199.67
RETAIN
RAMP NW 2321+85.23 7.5 LT.
ELEV 210.06
+27.43
IN PLACE
F.L. DBL. 10'x10' BOX IN (RT.)= 189.00
RETAIN & EXTEND

260 250 240 230 220 210 200 190 180 170
2295+00 2300+00 2305+00 2310+00 2315+00 2320+00 2325+00

BM: *CTL 105 - REBAR W/ CAP
135.87' LEFT OF STA. 2307+33.61
ELEV. 209.67

BM: *CTL 106 - REBAR W/ CAP
166.61' LEFT OF STA. 2317+74.97
ELEV. 206.76

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				6	ARK.			
				JOB NO.		020354	83	156

(2) RAMP WS P/P STA. 2271+54.84 TO 2300+00

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11

Imbeau Bayou

BM

WS-1
PI = 2277+25.75
R = 1183.50'
L = 1260.40'
T = 697.40'
Delta = 61°01'07"
Dc = 4°50'28.37"
e = 0.0814
Ls @ PC = 300'
Ls @ PT = 300'

STA. 2294+64 - STA. 2295+00 TRANSITION
RT. SHOULDER FROM 4' TO 10'

NOTE: APPROACH SLABS AND GUTTERS AT WS RAMP SHALL BE CONSTRUCTED ON ARCS CONCENTRIC TO C.L. CONSTRUCTION.

2270+00 155'
2270 PC 2270+28.35 RAMP WS
2270+28.35 RAMP ES, 21' LT.
RAMP WS 2271+54.84 7.5' RT.
RAMP ES 2271+55.40 20.3' LT.
2272+00 120'
2274+00 115'
2276+00 105'
2278+00 100'
2280+00 85'
2283+00 80'
2289+00 85'
2291+00 85'
2293+00 105'
2295+50 140'
2296+25 131.88'
2296+75 129.44'
474+35 185'

EXISTING R/W C/A & FENCE
PT 2282+88.75
PC 2281+38.77
N68°28'29"W
N07°27'22"W
100' ACCEL. LANE & 300' TAPER
℄ CONSTRUCTION RAMP WS
℄ CONSTRUCTION RAMP ES
WS-1
WS-2
4'
6'
15'
10'
2270
2272
2273
2275
2280
2282
2285
2290
2295
BM
BM

BEGIN BRIDGE STA. 2295+79.55

STA. 2304+00 BEGIN RAMP ES EARTHWORK

PDE
PC 2307+90.47
RAMP ES 2306+63.82 7.50' RT.
I-530 474+99.92 74.73' RT.
PT 2303+38.99
EXCEPTION TO JOB 020354

WS-2
PI = 2307+47.54
R = 1183.50'
L = 2457.85'
T = 2008.77'
Delta = 118°59'23"
Dc = 4°50'28.37"
e = 0.0814
Ls @ PC = 300'
Ls @ PT = 300'

℄ CONSTRUCTION RAMP ES
℄ EXISTING I-530
100 YR. FLOOD PLAIN LIMITS

475
480
2300
2315
2305

STA.2295+79.55 - STA. 2313+81.73 IN PLACE
1802'-2¼" x 31'-0" CLEAR ROADWAY BRIDGE NO. 07101
3 @ 600' CONTINUOUS COMPOSITE PLATE GIRDER UNITS
RETAIN

2272+70 140'
℄ CONSTRUCTION RAMP NW
EXISTING R/W C/A & FENCE
2274+00 110'
N07°27'21.6"W
2277+25.15

0 100 200 300
GRAPHIC SCALE IN FEET

STA. 2271+54.84 BEGIN SUPERELEVATION (0.077 FT./FT. LT.)
STA. 2271+78.35 MAX. SUPERELEVATION (0.0814 FT./FT. LT.)
STA. 2282+13.75 MAX. SUPERELEVATION (0.0814 FT./FT. LT.)

TRANSITION SUPER FROM STA. 2282+13.75 (0.0814 FT./FT. LT.) TO STA. 2288+13.77 (0.0814 FT./FT. RT.) WITH LINEAR TRANSITION

STA. 2288+13.77 MAX. SUPERELEVATION (0.0814 FT./FT. RT.)

RAMP WS

RAMP WS 2271+54.84 7.5' RT.
RAMP ES 2271+55.40 20.3' LT.
ELEV. 212.71

-0.08%

HW_{100} = 205.09
HW_{50} = 204.84

IN PLACE
65" x 40" R.C. ARCH PIPE CULVERT
F.L. IN (LT) = 199.17
F.L. OUT (RT.) = 198.78
RETAIN

IN PLACE
F.L. DBL. 10'x10' BOX IN (LT) = 189.00
F.L. DBL. 10'x10' BOX OUT (RT) = 189.00
RETAIN

BM: SET REBAR W/ CAP
103.22' LEFT OF STA. 2275+66.66
ELEV. 201.58

PVC 2280+00.00
Elev 211.99
PVI 2281+00.00
ELEV. 211.91
P.G. 211.84
VC=200.00'
e=-0.07'
K=715
PVT 2282+00.00
Elev 211.54
-0.36%
PVC 2284+00.00
Elev 210.81
PVI 2285+00.00
ELEV. 210.60
P.G. 210.53
VC=200.00'
e=-0.07'
K=679
PVT 2286+00.00
Elev 210.38
PROPOSED GRADE
-0.07%
PVC 2288+99.31
Elev 210.17

BM: SET REBAR W/ CAP
600.20' LEFT OF STA. 2283+24.98
ELEV. 201.56

VC=500.00'
e=2.54'
K=123
PVT 2293+99.31
Elev 219.99
PVI 2291+49.31
ELEV. 209.99
P.G. 212.53
4.00%
PVC 2291+49.31
Elev 209.99

STA. 2295+79.55
BEGIN BRIDGE
P.G. ELEV. 227.20
BRIDGE NO. 07101

EXCEPTION TO JOB 020354

RAMP ES
FL
EXISTING GROUND

BM: *CTL 106 - REBAR W/ CAP
251.08' LEFT OF STA. 2299+33.51
ELEV. 206.76

270 260 250 240 230 220 210 200 190 180

2270+00 2275+00 2280+00 2285+00 2290+00 2295+00 2300+00

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				6	ARK.			
				JOB NO.		020354	84	156

(2) RAMP WS P/P STA. 2300+00 TO 2324+44.61

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11

WS-2
PI = 2307+47.54
R = 1183.50'
L = 2457.85'
T = 2008.77'
Delta = 118°59'23"
Dc = 4°50'28.37"
e = 0.0814
Ls @ PC = 300'
Ls @ PT = 300'

STA. 2295+79.55 - STA. 2313+81.73 IN PLACE
1802'-2 1/4" x 31'-0" CLEAR ROADWAY BRIDGE NO. 07101
30600' CONTINUOUS COMPOSITE PLATE GIRDER UNITS
RETAIN

STA. 2311+50.00, 180' LT. TO STA. 2318+00.00, 130' RT. IN PLACE - 6' FLAT BOTTOM DITCH WITH 2:1 SIDE SLOPES RETAIN

STA. 2316+94.87 - STA. 2317+27.87 TRANSITION
LT. SHOULDER FROM 11.5' TO 6'
STA. 2316+44.87 - STA. 2317+13.87 TRANSITION
RT. SHOULDER FROM 15.5' TO 4'

WS-3
PI = 2324+42.64
R = 1909.86'
L = 756.04'
T = 383.03'
Delta = 22°40'52"
Dc = 3°00'00"
e = 0.057
Ls @ PC = 300'
Ls @ PT = 114.14'

STA. 2323+89.22 - STA. 2324+22.22 TRANSITION
LT. SHOULDER FROM 11.5' TO 6'
STA. 2323+64.22 - STA. 2323+97.22 TRANSITION
RT. SHOULDER FROM 9.5' TO 4'

STA. 2322+00 BEGIN RAMP WS EARTHWORK

RAMP WS 2324+44.61, 7.50' RT. = I-530 499+84.68, 74.70' LT.

STA. 2318+47.93 - STA. 2320+26.07 IN PLACE
178'-1 5/8" x 25'-0" CLEAR ROADWAY BRIDGE NO. 07096
176'-0" CONTINUOUS COMPOSITE PLATE GIRDER
RETAIN

	GUARDRAIL (TYPE A)	THRIE BEAM GUARDRAIL TERMINAL	GUARDRAIL TERMINAL (TYPE 2)
STA. 2313+91.12 TO STA. 2316+84.87 LT. =	225 LIN. FT.	1 EACH	1 EACH
STA. 2313+91.12 TO STA. 2316+34.87 RT. =	175 LIN. FT.	1 EACH	1 EACH
STA. 2320+35.47 TO STA. 2323+79.22 LT. =	275 LIN. FT.	1 EACH	1 EACH
STA. 2320+35.47 TO STA. 2323+54.22 RT. =	250 LIN. FT.	1 EACH	1 EACH

NOTE: APPROACH SLABS AND GUTTERS AT WS RAMP SHALL BE CONSTRUCTED ON ARCS CONCENTRIC TO C.L. CONSTRUCTION.

STA. 2306+00 BEGIN RAMP NE EARTHWORK

BM CTL 105
BM CTL 106

0 100 200 300
GRAPHIC SCALE IN FEET

STA. 2311+21.61 MAX. SUPERELEVATION (0.0814 FT./FT. RT.)
STA. 2314+21.61 END SUPERELEVATION (0.020 FT./FT. LT.)
STA. 2318+34.61 BEGIN SUPERELEVATION (0.020 FT./FT. LT.)
STA. 2321+34.61 MAX. SUPERELEVATION (0.057 FT./FT. LT.)
STA. 2324+44.61 MAX SUPERELEVATION (0.057 FT./FT. LT.)
STA. 2325+58.75 END SUPERELEVATION (0.020 FT./FT. LT.)

RAMP WS

PVI 2304+68.00
ELEV. 262.74
P.G. 259.54

EXCEPTION TO JOB 020354

+4.00%

PVC 2300+08.00
Elev 244.34

VC=920.00'
e=-9.20'
K=115

RAMP NW

PVT 2309+28.00
Elev 244.34

-4.00%

PVC 2312+00.00
Elev 233.46

STA. 2313+81.73
END BRIDGE
P.G. ELEV. 227.59
BRIDGE NO. 07101

PVI 2314+50.00
ELEV. 223.46
P.G. 226.11

3:1

EXISTING GROUND

VC=500.00'
e=2.65'
K=118

PROPOSED GRADE

PVT 2317+00.00
Elev 224.04

+0.23%

PVC 2319+33.74
Elev 224.58

EXCEPTION TO JOB 020354

STA. 2318+47.93
BEGIN BRIDGE
P.C. ELEV. 224.39
BRIDGE NO. 07096

3:1

10H:1V ST.

-1.07%

PVI 2321+33.74
ELEV. 225.65
P.G. 224.02

VC=400.00'
e=-1.03'
K=194

STA. 2322+00 BEGIN RAMP WS EARTHWORK

1:5 EXISTING

PVT 2323+33.74
Elev 221.39

STA. 2320+26.07
END BRIDGE
P.C. ELEV. 224.58
BRIDGE NO. 07096

RAMP WS 2324+44.61, 7.50' RT. = I-530 499+84.68, 74.70' LT.
ELEV. 219.36

270 260 250 240 230 220 210 200 190 180

2300+00 2305+00 2310+00 2315+00 2320+00 2325+00 2330+00

BM: #CTL 105 - REBAR W/ CAP
409.98' RIGHT OF STA. 2306+91.88
ELEV. 209.67

BM: #CTL 106 - REBAR W/ CAP
294.97' RIGHT OF STA. 2318+59.40
ELEV. 224.09

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				6	ARK.			
				JOB NO.		020354	85	156

(2) RAMP NE P/P STA. 2294+62.21 TO 2308+64.68

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENNY
5-9-11

STA. 2306+00 - STA. 2306+24 TRANSITION
RT. SHOULDER FROM 10' TO 6'

STA. 2297+83.38 - STA. 2298+16.38 TRANSITION
LT. SHOULDER FROM 4' TO 9.5'
STA. 2297+59.10 - STA. 2298+16.10 TRANSITION
RT. SHOULDER FROM 6' TO 15.5'

	GUARDRAIL (TYPE A)	THRIE BEAM GUARDRAIL TERMINAL	GUARDRAIL TERMINAL (TYPE 2)
STA. 2298+26.38 TO STA. 2301+45.13 LT. = 250 LIN. FT.	1 EACH	1 EACH	
STA. 2298+26.10 TO STA. 2301+44.85 RT. = 250 LIN. FT.	1 EACH	1 EACH	

NE-1
PI = 2304+24.47
R = 1183.50'
L = 1261.02'
T = 697.81'
Delta = 61°02'55"
Dc = 4°50'28.37"
e = 0.0814
Ls @ PC = 500'
Ls @ PT = 300'

STA. 2301+54.42 - STA. 2305+52.58 - IN PLACE
398'-2" x 29'-0" CLEAR ROADWAY BRIDGE NO. 07097
396'-0" CONTINUOUS COMPOSITE PLATE GIRDER UNIT
RETAIN

STA. 2294+62.21 BEGIN SUPERELEVATION (0.0454 FT./FT. LT.)
STA. 2298+51.66 MAX. SUPERELEVATION (0.0814 FT./FT. RT.)
STA. 2307+15.17 MAX. SUPERELEVATION (0.0814 FT./FT. RT.)
STA. 2308+64.68 END SUPERELEVATION (0.0508 FT./FT. RT.)

BM: *CTL 106 - REBAR W/ CAP
187.21' LEFT OF STA. 2304+69.47
ELEV. 224.09

RAMP NE

GRAPHIC SCALE IN FEET
0 100 200 300

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				6	ARK.			
				JOB NO.		020354	86	156

2 I-530 P/P STA. 458+00 TO 485+00

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11

STA. 458+54.00 BEGIN
I-530 IMPROVEMENTS
END JOB 020354

STA. 466+00 - IN PLACE
TYPE RM DROP INLET IN
MEDIAN (4'-0"x3'-0"x3'-3") W/
18"x90' R.C. PIPE CULVERT
& FES RT. - REMOVE FES &
EXTEND 18" R.C.P 16' RT.
(CLASS III) (TYPE 3 BEDDING) W/FES RT.

STA. 476+61.74 - IN PLACE
24 L.F. OF CONCRETE BARRIER WALL
(PIER PROTECTION TYPE A) &
TWO IMPACT ATTENUATION
BARRIERS (TYPE A) RETAIN
IN PLACE 18"x128'
R.C. PIPE CULVERT (CLASS III)
(TYPE 3 BEDDING) & SES LT. & RT.
RETAIN

530-1
PI = 473+64.06
R = 4583.66'
L = 5272.89'
T = 2971.61'
Delta = 65°54'40"
Dc = 1°15'00"

STA. 478+00 - IN PLACE
TYPE RM DROP INLET IN
MEDIAN (4'-0"x3'-0"x3'-0") W/
18"x94' R.C. PIPE CULVERT
RETAIN

NW-3
PI = 2321+03.63
R = 881.47'
L = 346.35'
T = 175.44'
Delta = 22°30'47"
Dc = 6°30'00"
e = 0.095
Ls @ PC = 350'
Ls @ PT = 350'

STA. 480+40 - IN PLACE
TYPE RM DROP INLET IN
MEDIAN (4'-0"x3'-0"x2'-10") W/
18"x92' R.C. PIPE CULVERT
& FES RT. - RETAIN

STA. 484+00 - IN PLACE
TYPE RM DROP INLET IN
MEDIAN (4'-0"x3'-0"x4'-0") W/
18"x100' R.C. PIPE CULVERT
& FES RT. - RETAIN

STA. 469+74.77 - IN PLACE
TYPE TM DROP INLET IN
MEDIAN (3'-0"x2'-6½"x7'-2") ON
DBL. 10'x10' R.C. BOX CULVERT
RETAIN

STA. 469+85 - IN PLACE DBL. 10'x10'x213'
R.C. BOX CULVERT RETAIN & EXTEND 28' LT.
& 20' RT. TO A COMPLETED LENGTH OF 261'
WITH 3:1 WINGWALLS LT. & RT.
(SPAN = 22.67')

100 YR. FLOODPLAIN LIMITS
STA. 459+26.19
STA. 462+26.19
300' TAPER
EXIST. R/W & C/A
CONSTRUCTION LIMITS
700' ACCEL. LANE
PT 2322+74.55 = 530 468+36.11
RAMP NW 2321+85.23 7.5' LT. = I-530 469+26.19 57.84' LT.
PC 2319+28.19
STA. 2319+00 BEGIN RAMP NW EARTHWORK
EXISTING R/W C/A & FENCE
16' GATE
469+98.27
161.72'
471+75
205'
PT 2314+36.31
479+10
415'
476+90
365'
℄ CONSTRUCTION RAMP WS
℄ CONSTRUCTION RAMP NW
BM CTL 105
℄ EXISTING I-530
BM CTL 106
100 YR. FLOODPLAIN LIMITS
STA. 458+54.00
200' TAPER
AUXILIARY LANE
EXIST. R/W & C/A
STA. 460+54.00
CONSTRUCTION LIMITS
ES-2
PI = 2308+85.89
R = 1909.86'
L = 190.67'
T = 95.42'
Delta = 5°43'13"
Dc = 3°00'00"
MATCH I-530 EXIST. SUPER
16' GATE
PT 2309+81.15 = I-530 471+87.64
472+85
137.13'
EXISTING R/W C/A & FENCE
474+35
185'
PC 2307+90.47
RAMP ES 2306+63.82 7.50' RT. = I-530 474+99.92 74.73' RT.
STA. 2304+00 BEGIN RAMP ES EARTHWORK
PT 2303+38.99
℄ CONSTRUCTION RAMP ES

	GUARDRAIL (TYPE A)	THRIE BEAM GUARDRAIL TERMINAL	TERMINAL ANCHOR POST (TYPE 2)
STA. 458+09.21 TO STA. 460+77.96 LT. OF LT. LANES =	200 LIN. FT.	1 EACH	1 EACH

0 100 200 300
GRAPHIC SCALE IN FEET

(RIGHT AUXILIARY LANE)
STA. 458+54.00 MAX. SUPERELEVATION (0.03IFT./FT. LT.)
STA. 474+99.92 MAX. SUPERELEVATION (0.03IFT./FT. LT.)

(LEFT AUXILIARY LANE)
STA. 459+00.20 MAX. SUPERELEVATION (0.03IFT./FT. LT.)
STA. 466+50.99 MAX. SUPERELEVATION (0.03IFT./FT. LT.)
TRANSITION FROM STA. 466+50.99 TO STA. 469+26.19 W/ LINEAR TRANSTITION
STA. 469+26.19 MAX. SUPERELEVATION (0.08IFT./FT. LT.)

I-530

*NOTE: PROFILE GRADE IS SHOWN FOR INFORMATION ONLY. ACTUAL ELEVATIONS MAY VARY.

*EXIST. I-530 PROFILE GRADE
-0.20%
EXISTING GROUND AT ℄ MEDIAN

IN PLACE
F.L. 18" IN = 204.35
F.L. 18" OUT = 204.30
EXTEND RT.
F.L. 18' OUT = 204.29

IN PLACE
DBL. 10'x10' R.C. BOX CULVERT
F.L. IN (LT.)= 189.00
F.L. OUT (RT.) = 189.00
EXTEND LT. & RT.

IN PLACE
F.L. 18" IN = 206.39
RETAIN

IN PLACE
F.L. 18" OUT = 206.14
RETAIN

IN PLACE
F.L. 18" IN = 202.4
F.L. 18" OUT = 201.4
RETAIN

PVC 480+00.00 ELEV 209.24

IN PLACE
F.L. 18" IN = 202.10
F.L. 18" OUT = 201.80
RETAIN

PVI 482+00.00 ELEV 206.84 P.G. 209.88

VC=400.00'
e=1.04'
K=92

PVT 484+00.00 ELEV 212.60

GF 1.88%

IN PLACE
F.L. 18" IN = 204.36
F.L. 18" OUT = 202.86
RETAIN

IN PLACE
F.L. 18" OUT = 210.37
RETAIN

BM: *CTL 106 REBAR W/ CAP
1.39' LEFT OF STA. 473+79.41
ELEV. 206.76

BM: *CTL 105 REBAR W/ CAP
13.17' LEFT OF STA. 483+19.10
ELEV. 209.67

455+00 460+00 465+00 470+00 475+00 480+00 485+00

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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.		020354	87	156

(2) I-530 P/P STA. 485+00 TO 510+00

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENNY
5-9-11

530-I
PI = 473+64.06
R = 4583.66'
L = 5272.89'
T = 2971.61'
Delta = 65°54'40"
Dc = 1°15'00"

100 YR. FLOODPLAIN LIMITS
℄ CONSTRUCTION RAMP WS
℄ EXISTING I-530
℄ CONSTRUCTION RAMP NW
℄ CONSTRUCTION RAMP NE
BM CTL 104
EXISTING R/W C/A & FENCE
STA. 2322+00 BEGIN RAMP WS EARTHWORK
STA. 2306+00 BEGIN RAMP NE EARTHWORK
CONSTRUCTION LIMITS
EXIST. R/W & C/A
STA. 507+77.46
END I-530 IMPROVEMENTS
N27°47'43"E
100' ACCEL. LANE
300' TAPER
STA. 504+77.46
STA. 507+77.46

STA. 485+63.01 - IN PLACE
87 L.F. OF CONCRETE BARRIER WALL (PIER PROTECTION TYPE A) & TWO IMPACT ATTENUATION BARRIERS (TYPE A). RETAIN
IN PLACE - 18"x156'
R.C. PIPE CULVERT (CLASS III) (TYPE 3 BEDDING) &
SES (CLASS 2) LT. & RT.- RETAIN

STA. 493+00 - IN PLACE
DBL. 8'x6'x278' R.C. BOX CULVERT W/ WINGWALLS LT. & RT. -RETAIN

STA. 504+10 - IN PLACE
TYPE RM DROP INLET IN MEDIAN (4'-0"x3'-0"x2'-8") W/ 18"x90' R.C. PIPE CULVERT & FES LT. - RETAIN

STA. 505+30 - IN PLACE
DBL. 5'x4'x250' R.C. BOX CULVERT W/ WINGWALLS LT. & RT. -RETAIN

NE-I
PI = 2304+24.47
R = 1183.50'
L = 1261.02'
T = 697.81'
Delta = 61°02'55"
Dc = 4°50'28.37"
e = 0.0814
Ls @ PC = 500'
Ls @ PT = 300'

0 100 200 300
GRAPHIC SCALE IN FEET

(LEFT RAMP TURNOUT)
STA. 499+84.68 MAX. SUPERELEVATION (0.057 FT./FT. LT.)
STA. 500+97.70 END SUPERELEVATION (0.020 FT./FT. LT.)

(RIGHT AUXILIARY LANE)
STA. 497+77.46 MAX. SUPERELEVATION (0.0508 FT./FT. RT.)
TRANSITION FROM STA. 497+77.46 TO STA. 499+28.51 W/ LINEAR TRANSTITION
STA. 499+28.51 END SUPERELEVATION (0.0200 FT./FT. RT.)

I-530

* NOTE: PROFILE GRADE IS SHOWN FOR INFORMATION ONLY. ACTUAL ELEVATIONS MAY VARY.

EXIST. I-530 PROFILE GRADE
EXISTING GROUND AT ℄ MEDIAN

PVC 488+00.00 Elev 220.12
PVI 494+00.00 ELEV. 231.40 P.G. 225.76
VC=1200.00'
e= 5.64'
K=319
PVC 500+50.00 Elev 219.18
PVT 500+00.00 Elev 220.12
PVI 503+00.00 ELEV. 214.48 P.G. 216.11
VC=500.00'
e=1.62'
K=192
PVT 505+50.00 Elev 216.28
PVI 510+00.00 ELEV. 219.32
0.72%

IN PLACE F.L. IN = 213.71 RETAIN
IN PLACE F.L. IN = 195.90 F.L. OUT = 195.50 RETAIN
IN PLACE F.L. IN = 208.88 F.L. OUT = 208.65 RETAIN
IN PLACE F.L. IN = 198.00 F.L. OUT = 198.00 RETAIN

BM: * CTL 104 - REBAR W/ CAP 13.67' RIGHT OF STA. 493+20.57 ELEV. 224.09

250 240 230 220 210 200 190 180 170 160
485+00 490+00 495+00 500+00 505+00 510+00 515+00

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				6	ARK.			
				JOB NO.		020354	88	156

(2) CROSSOVER PLAN

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11

0 100 200 300
GRAPHIC SCALE IN FEET

STA. 2261+00 INSTALL
CRASH CUSHION AT BEGIN
CONCRETE BARRIER WALL

STA. 2261+00 BEGIN CONCRETE BARRIER WALL (MEDIAN TYPE A)

EXISTING R/W
C/A & FENCE
2242+00
95'

PT 2242+92.55

STA. 2245+86.80
BEGIN 4-LANE
SECTION

℄ MEDIAN MAIN LANES

N25°28'39.8"W

℄ CROSSOVER

POT 2248+11.80 CROSSOVER
= 2248+11.80, 15.00' RT.
MAIN LANES

2249+30.41
104.94'

2251+07.32
104.97'

℄ MED. PI 2255+38.67

℄ X-OVER PI 2256+06.12

2256+00
115'

2259+00
120'

2248+43.24
90.03'

2254+04.60
100'

2258+01.38
105.01'

℄ MED.
PC 2248+11.80

PC 2251+10.73

EXISTING R/W
C/A & FENCE
2242+00
95'

+55.39

300' TAPER

2262+81.89
115'

+55.39

MAIN LANES 2266+46.02 BK. = RAMP ES 2266+46.02 AHD., 16.5 RT.

700'

℄ CONSTRUCTION RAMP ES

2270+00
155'

PC 2270+28.35

N07°27'21.6"W

2266+36.83
145'

℄ X-OVER
PT 2260+95.08 BK
= 2260+91.46 AHD.
℄ MED., LT.
27.00' LT.
MAIN LANES

℄ MED.
PT 2262+53.54

2262+54.79
105'

2266+36.83
100'

MAIN LANES 2266+46.02 BK. = RAMP NW 2266+36.83 AHD., 16.5 RT.

℄ CONSTRUCTION RAMP NW

2270+00
105'

PC 2269+92.89

℄ MEDIAN
(5)
PI 2255+38.67
R 4583.66'
L 1441.74'
T 726.87'
Delta 18°01'18.2" RT.
Dc 1°15'00"
e 0.046
L = 300'

℄ X-OVER
(6)
PI 2256+06.12
R 3525.89
L 984.35
T 495.40
DELTA 15°59'44.7" Rt
Dc 1°37'30.01"
MATCH EXISTING SUPER

CROSSOVER PLAN

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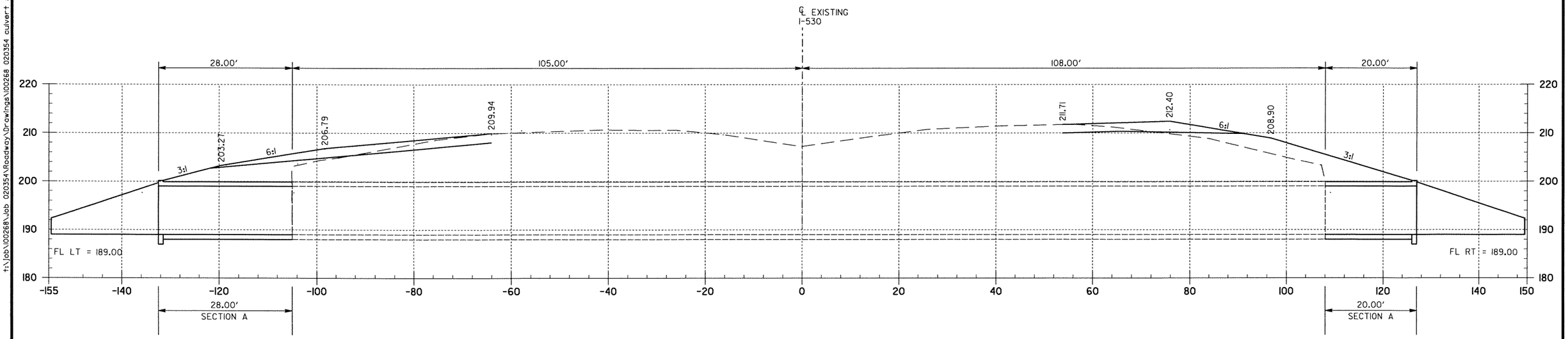
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		020354	89	156

(2) CULVERT DIAGRAM

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8817
PAUL DAVID PENN
5-9-11

STA. 469+85 (I-530) - IN PLACE DBL. 10' x 10' x 213' R.C. BOX CULVERT
(RELIEF STRUCTURE) RETAIN & EXTEND 28' LT. & 20' RT. TO A COMPLETED
LENGTH OF 261' WITH 3:1 WINGWALLS LT. & RT. (SPAN = 22.67')



LOCATION/DESCRIPTION	CLASS "S" CONCRETE ROADWAY		REINFORCING STEEL - RDWY. (GRADE 60)		UNCLASSIFIED EXCAV. FOR STRS. - ROADWAY	SOLID SODDING	WATER	STANDARD DRAWING
	CU. YD./LIN. FT.	CU. YD.	POUND/LIN. FT.	POUND	CU. YD.	SQ. YD.	M. GAL.	
28.00' SECTION A	2.544	76.96	308.86	9343.02	44.03	17.29	0.22	R-200X-X2, RCB-1, RCB-2, RCB-3
20.00' SECTION A	2.544	56.60	308.86	6872.14	37.69	17.29	0.22	R-200X-X2, RCB-1, RCB-2, RCB-4
3:1 WINGS LEFT & RIGHT				2651.50				W-X003-2
HEADWALLS AND APRONS		42.37		320.42				W-X003-2, R-200X-X2
TOTALS		175.93		19187.08	81.72	34.58	0.44	

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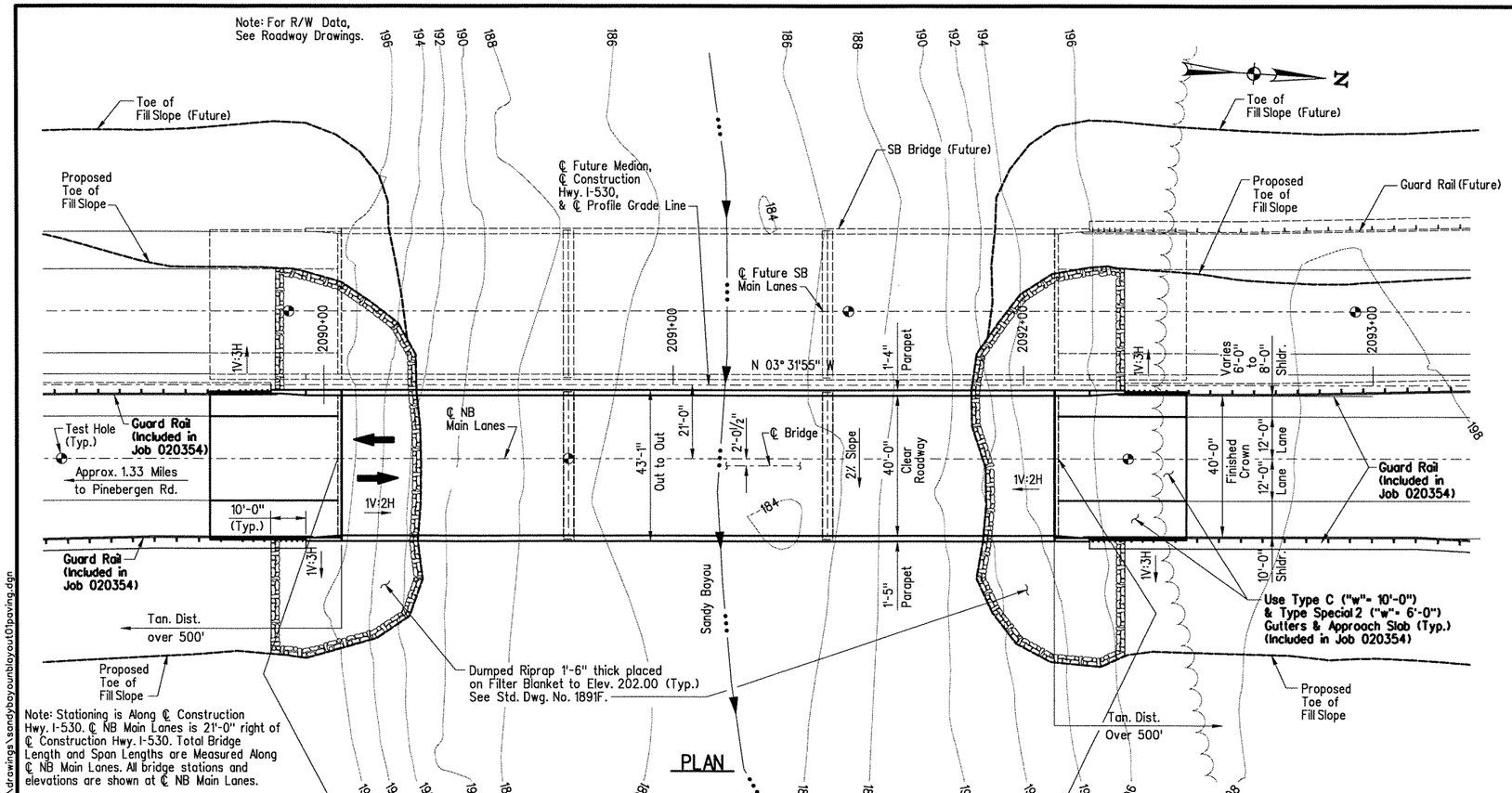
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		020354	90	156

(1) **B7129 - LAYOUT**

Note: For R/W Data, See Roadway Drawings.



GENERAL NOTES

BENCH MARK: Set Rebar with cap 284.06' left of Sta. 2093+81.63, Elev. 196.74

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (2003 edition) with applicable supplemental specifications and special provisions. Unless otherwise noted in the plans, section and subsection refer to the Standard Construction Specifications.

DESIGN SPECIFICATIONS: AASHTO Standard Specifications for Highway Bridges (2002 edition) with current interim specifications.

LIVE LOADING: HS20 and Alternate Military Load METHOD OF DESIGN: Load Factor

SEISMIC PERFORMANCE CATEGORY: A

MATERIALS AND STRENGTHS:

Class S(AE) Concrete (superstructure)	f'c=4,000 psi
Class S Concrete (substructure)	f'c=3,500 psi
Reinforcing Steel (AASHTO M 31 or M 53, Gr.60)	fy=60,000 psi
Structural Steel (AASHTO M 270, Gr. 36)	Fy=36,000 psi
Structural Steel (AASHTO M 270, Gr. 50W)	Fy=50,000 psi

BORING LOGS: Boring logs may be obtained from the Programs and Contracts Division.

EMBANKMENT: The north embankment at Bent No.4 shall be constructed and in place 18 months prior to driving the piles at Bent No.4. Embankment construction at Bent No. 4 shall be as specified in SP JOB 020353 "Embankment Construction - Bent 4, Br. No. B7129"

CONCRETE PILING: Piling for Bents 1 and 4 shall be 18" square precast concrete and shall be driven to a minimum ultimate bearing capacity of 165 tons per pile. Piling for Bents 2 and 3 shall be 24" square precast concrete and shall be driven to a minimum ultimate bearing capacity of 165 tons per pile. All piling shall be driven with an approved air, steam, or diesel hammer. Piling in end bents shall be driven after embankment to bottom of cap is in place. Piling in Bents 1 and 4 shall have a minimum penetration of 15' below natural ground. Piling in Bents 2 and 3 shall have a minimum penetration of 30' below the bottom of channel. Lengths of piling shown are assumed for estimating quantities only. Actual lengths to be determined in the field. Drive one 35' test pile in Bent 1 and one 70' test pile in Bent 3.

PILE DESIGN CAPACITY: 18" Square Precast Concrete: 60 tons
24" Square Precast Concrete: 60 tons

DRIVING SYSTEM: The driving system approval and the ultimate bearing capacity determination for piling shall be based on the requirements of Section 805.09(b) "Method B- Wave Equation Analysis (WEAP)" of the Standard Specifications. It is estimated that the minimum required rated energy of the hammer to obtain the minimum ultimate bearing capacity will be 25,000 foot pounds per blow at all Bents.

PREBORING: Preboring may be required to obtain the minimum penetration requirements. Initially, the test piles shall be driven without preboring. The Engineer shall use the results of these test piles to determine the need for preboring. If preboring is required, additional test piles with preboring shall be driven as directed by the Engineer. The actual size and depth of preboring shall be determined by the Engineer. Preboring will be paid for at the unit price bid for "Preboring" and additional test piles will be paid for at the unit price for "Test Piles (18" sq.)" and "Test Piles (24"sq.)".

The Contractor shall be responsible for keeping prebored holes free from debris prior to backfilling which may require the use of a temporary casing or other methods. The cost of keeping the prebored hole free from debris will not be paid for directly but shall be considered subsidiary to the pay item "Preboring".

BRIDGE DECK: The concrete bridge deck shall be given a tine finish as specified for final finishing in Subsection 802.19 for Class 5 Tined Bridge Roadway Surface Finish.

PROTECTIVE SURFACE TREATMENT: Class 1 Protective Surface Treatment shall be applied as required in the details. Class 1 Protective Surface Treatment shall meet the requirements of Section 803.

DETAIL DRAWINGS: DRAWING NO.

End Bents	49757 - 49761
Intermediate Bents	49762
W-Beam Unit	49764 - 49771
Elastomeric Bearings	49772 - 49773
Concrete Piles	2383 & 49763

Note: For Boring Logs, Boring Blow Counts, and Boring Legend See Drawing No. 49756

FOR INFORMATION ONLY

LAYOUT OF NORTHBOUND HWY. 530 BRIDGE OVER SANDY BAYOU I-530 - CO. RD. 35 (BS. & SURF.) (F) JEFFERSON COUNTY

ROUTE 530 SECTION 6

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARKANSAS

BRIDGE ENGINEER
PRINT DATE: 5/5/2011

DRAWN BY: WEG DATE: 6/12/07
CHECKED BY: RLW DATE: 6/14/07
DESIGNED BY: JRS DATE: 6/9/07
BRIDGE NO. B7129 DRAWING NO.

FILENAME: B020353B2.LX1
SCALE: 1"=20'

Carter-Burgess

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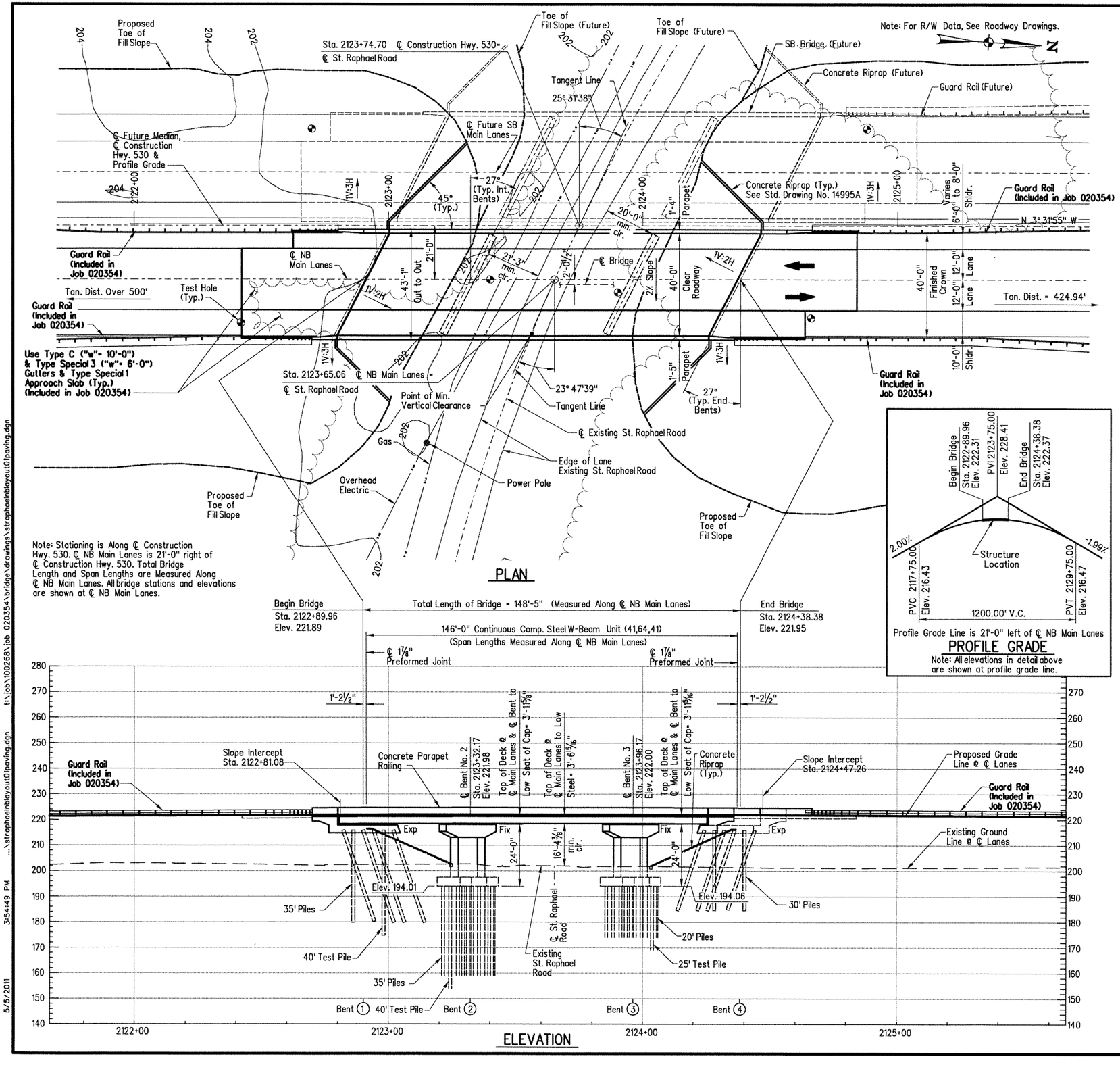
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		020354	91	156
				(1)	B7130 - LAYOUT			



GENERAL NOTES

BENCH MARK: Set Rebar with cap 321.45' right of Sta. 2122+50.72, Elev. 202.77

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (2003 edition) with applicable supplemental specifications and special provisions. Unless otherwise noted in the plans, section and subsection refer to the Standard Construction Specifications.

DESIGN SPECIFICATIONS: AASHTO Standard Specifications for Highway Bridges (2002 edition) with current interim specifications.

LIVE LOADING: HS20 and Alternate Military Load — METHOD OF DESIGN: Load Factor

SEISMIC PERFORMANCE CATEGORY: A

MATERIALS AND STRENGTHS:

Class S(AE) Concrete (superstructure)	f'c=4,000 psi
Class S Concrete (substructure)	f'c=3,500 psi
Reinforcing Steel (AASHTO M 31 or M 53, Gr.60)	fy=60,000 psi
Structural Steel (AASHTO M 270, Gr. 36)	Fy=36,000 psi
Structural Steel (AASHTO M 270, Gr. 50)	Fy=50,000 psi

BORING LOGS: Boring logs may be obtained from the Programs and Contracts Division.

CONCRETE PILING: Piling for Bents 1 through 4 shall be 18" square precast concrete and shall be driven to a minimum ultimate bearing capacity of 165 tons per pile. All piling shall be driven with an approved air, steam, or diesel hammer. Piling in end bents shall be driven after embankment to bottom of cap is in place. Piling in Bents 1 and 4 shall have a minimum penetration of 10' below natural ground. Piling in Bents 2 and 3 shall have a minimum penetration of 10' below the bottom of footing. Lengths of piling shown are assumed for estimating quantities only. Actual lengths to be determined in the field. Drive one 40' test pile in Bent 1, one 40' test pile in Bent 2, and one 25' test pile in Bent 3.

PILE DESIGN CAPACITY: 18" Square Precast Concrete: 60 tons

DRIVING SYSTEM: The driving system approval and the ultimate bearing capacity determination for piling shall be based on the requirements of Section 805.09(b) "Method B- Wave Equation Analysis (WEAP)" of the Standard Specifications. It is estimated that the minimum required rated energy of the hammer to obtain the minimum ultimate bearing capacity will be 25,000 foot pounds per blow at all Bents.

PREBORING: Preboring shall be required for all piles at Bents 1 through 4 to obtain minimum penetration requirements. Quantities of preboring shown are bidding purposes only. Actual size and length to be determined in the field by the Engineer. Preboring will be paid for at the unit price bid for "Preboring".

The contractor shall be responsible for keeping prebored holes free from debris prior to backfilling which may require the use of temporary casing or other methods. The cost of keeping the prebored hole free from debris, if necessary, will not be paid for directly but will be considered subsidiary to the pay item "PREBORING".

FOOTINGS: The top of footings for Bents 2 & 3 shall be set a minimum of 2'-0" below top of natural ground. Foundations for footings shall be prepared in accordance with Section 801.04 and shall be backfilled in accordance with Section 801.08.

TEXTURED COATING FINISH: Class 3 Textured Coating Finish shall be applied to bridge surfaces as specified in SP Job 020353 "Textured Coating Finish" and in accordance with Section 802.19.

BRIDGE DECK: The concrete bridge deck shall be given a tine finish as specified for final finishing in Subsection 802.19 for Class 5 Tined Bridge Roadway Surface Finish.

PROTECTIVE SURFACE TREATMENT: Class 1 Protective Surface Treatment shall be applied as required in the details. Class 1 Protective Surface Treatment shall meet the requirements of Section 803.

PAINTING: All structual steel except galvanized members and some members and some surfaces in contact with concrete and as otherwise noted shall be painted as specified in section 807.75. The color of the paint shall match the Federal Standard 595B, Color Chip No. 24097, Green.

DETAIL DRAWINGS: — DRAWING NO.

End Bents ---------- 49776 - 49780
Intermediate Bents ---------- 49781
W-Beam Unit ---------- 49782 - 49789
Elastomeric Bearings ---------- 49790 & 49791
Concrete Piles ---------- 2383

Note: For Boring Logs, Boring Blow Counts, and Boring Legend See Drawing No. 49775.

FOR INFORMATION ONLY

LAYOUT OF NORTHBOUND HWY.530 BRIDGE OVER ST. RAPHAEL ROAD I-530 - CO. RD. 35 (BS. & SURF.) (F) JEFFERSON COUNTY

ROUTE 530 SECTION 6

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARKANSAS

BRIDGE ENGINEER
PRINT DATE: 5/5/2011

DRAWN BY: WEG DATE: 6/12/07
CHECKED BY: RLW DATE: 6/13/07
DESIGNED BY: JRS DATE: 6/9/07
BRIDGE NO.B7130
DRAWING NO.
FILENAME: B020353B3.LX1
SCALE: 1"=20'

Carter-Burgess

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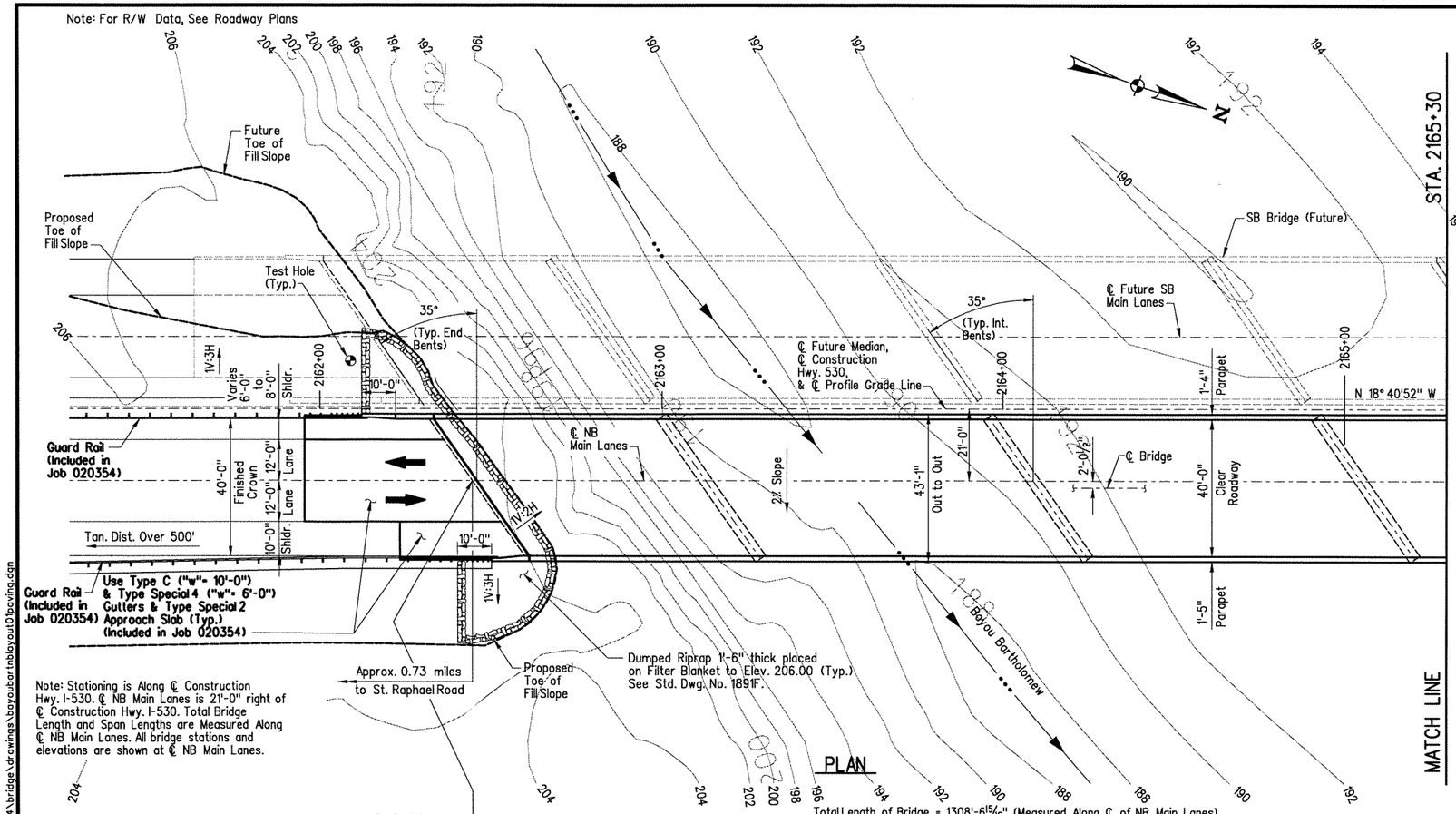
				6	ARK.			
				JOB NO.		020354	92	156

(1) **B7131 - LAYOUT**

Note: For R/W Data, See Roadway Plans



GENERAL NOTES

BENCH MARK: Set Rebar with Cap, 169.79' Left of ℄ Ramp Sta. 2164+31.61, Elev. 193.42.

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (2003 edition) with applicable supplemental specifications and special provisions. Unless otherwise noted in the plans, section and subsection refer to the Standard Construction Specifications.

DESIGN SPECIFICATIONS: AASHTO Standard Specifications for Highway Bridges (2002 edition) with current interim specifications.

LIVE LOADING: HS20 and Alternate Military Load — METHOD OF DESIGN: Load Factor

SEISMIC PERFORMANCE CATEGORY: A

MATERIALS AND STRENGTHS:

Class S(AE) Concrete (superstructure)	f'c=4,000 psi
Class S Concrete (substructure)	f'c=3,500 psi
Seal Concrete (substructure)	f'c = 2,100 psi
Reinforcing Steel (AASHTO M 31 or M 53, Gr.60)	fy=60,000 psi
Structural Steel (AASHTO M 270, Gr. 36)	Fy=36,000 psi
Structural Steel (AASHTO M 270, Gr. 50W)	Fy=50,000 psi

BORING LOGS: Boring logs may be obtained from the Programs and Contracts Division.

CONCRETE PILING: Piling for Bents 1 and 20 shall be 18" square precast concrete and shall be driven to a minimum ultimate bearing capacity of 165 tons per pile. Piling for bents 6 through 19 shall be 24" square precast prestressed concrete and shall be driven to a minimum ultimate bearing capacity of 165 tons per pile. All piling shall be driven with an approved air, steam, or diesel hammer. Piling in end bents shall be driven after embankment to bottom of cap is in place. Piling in Bents 1 and 6 through 20 shall have a minimum penetration of 20' below natural ground.

Piling for Bents 2-5 shall be 18" square precast concrete and shall be driven with an approved air, steam, or diesel hammer to a minimum penetration of 15' below bottom of seal. Three piles in each bent designated as long piles in the Standard Specifications shall be driven without a follower to a minimum ultimate bearing capacity of 165 tons per pile. These long piles shall serve as test piles to establish the tip elevation of the production piles. See the details for Bents 2-5 for the locations of these test piles. The production piles shall be driven to the tip elevation established by the Engineer and may be driven with a follower.

Lengths of piling shown are assumed for estimating quantities only. Actual lengths to be determined in the field. Payment for cut-off or build-up shall be in accordance with the Standard Specifications. See elevation view for test piles lengths.

PILE DESIGN CAPACITY: 18" Square Precast Concrete: 60 tons
24" Square Precast Concrete: 60 tons

DRIVING SYSTEM: The driving system approval and the ultimate bearing capacity determination for piling shall be based on the requirements of Section 805.09(b) "Method B- Wave Equation Analysis (WEAP)" of the Standard Specifications. It is estimated that the minimum required rated energy of the hammer to obtain the minimum ultimate bearing capacity will be 25,000 foot pounds per blow at all Bents.

PREBORING/JETTING: For Bents 1 and 6 through 20, preboring may be reqired to obtain the minimum pile penetration requirements. Initially, a test pile shall be driven without preboring. The Engineer shall use the results of the test pile to determine the need for preboring. If preboring is required, an additional test pile with preboring shall be driven as directed by the Engineer. The actual size and depth of preboring shall be determined by the Engineer. Preboring will be paid for at the unit price bid for "Preboring" and additional test piles will be paid for at the unit price bid for "Test Pile (18" Sq.)" and "Test Pile (24" Sq.)". Jetting will not be allowed to achieve the minimum pile penetration requirements for Bents 1 and 6 through 20.

For Bents 2 through 5, preboring or jetting may be required to obtain the minimum pile penetration requirements. Initially, a test pile shall be driven without preboring or jetting. The Engineer shall use the results of the test pile to determine the need for preboring or jetting. If preboring or jetting is required, an additional test pile with preboring or jetting shall be driven as directed by the Engineer. The method used to achieve the minimum pile penetration shall not be mixed. The actual size and depth of preboring or the depth of jetting shall be determined by the Engineer. The size and depth of preboring or the pressure and depth of jetting used for driving the test piles shall be the same for driving the production piles. Preboring will be paid for at the unit price bid for "Preboring" and additional test piles will be paid for at the unit price bid for "Test Pile (18" Sq.)". All labor equipment, tools, and incidentals necessary for jetting will not be paid for directly but will be considered subsidiary to the price bid for "Test Pile (18" Sq.)" and "Concrete Piling (18" Sq.)".

For all preboring operations, the Contractor shall be responsible for keeping prebored holes free from debris prior to backfilling which may require the use of a temporary casing or other methods. The cost of keeping the prebored hole free from debris will not be paid for directly but shall be considered subsidiary to the pay item "Preboring".

Note: For additional General Notes, See Drawing No. 49793.

Note: For Boring Logs, Boring Blow Counts, and Boring Legend See Drawing No. 49794. For Profile Grade See Drawing No. 49793.

FOR INFORMATION ONLY

SHEET 1 OF 4

LAYOUT OF NORTHBOUND HWY. 530 BRIDGE OVER BAYOU BARTHOLOMEW I-530 - CO. RD. 35 (BS. & SURF.) (F) JEFFERSON COUNTY

ROUTE 530 SECTION 6

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARKANSAS

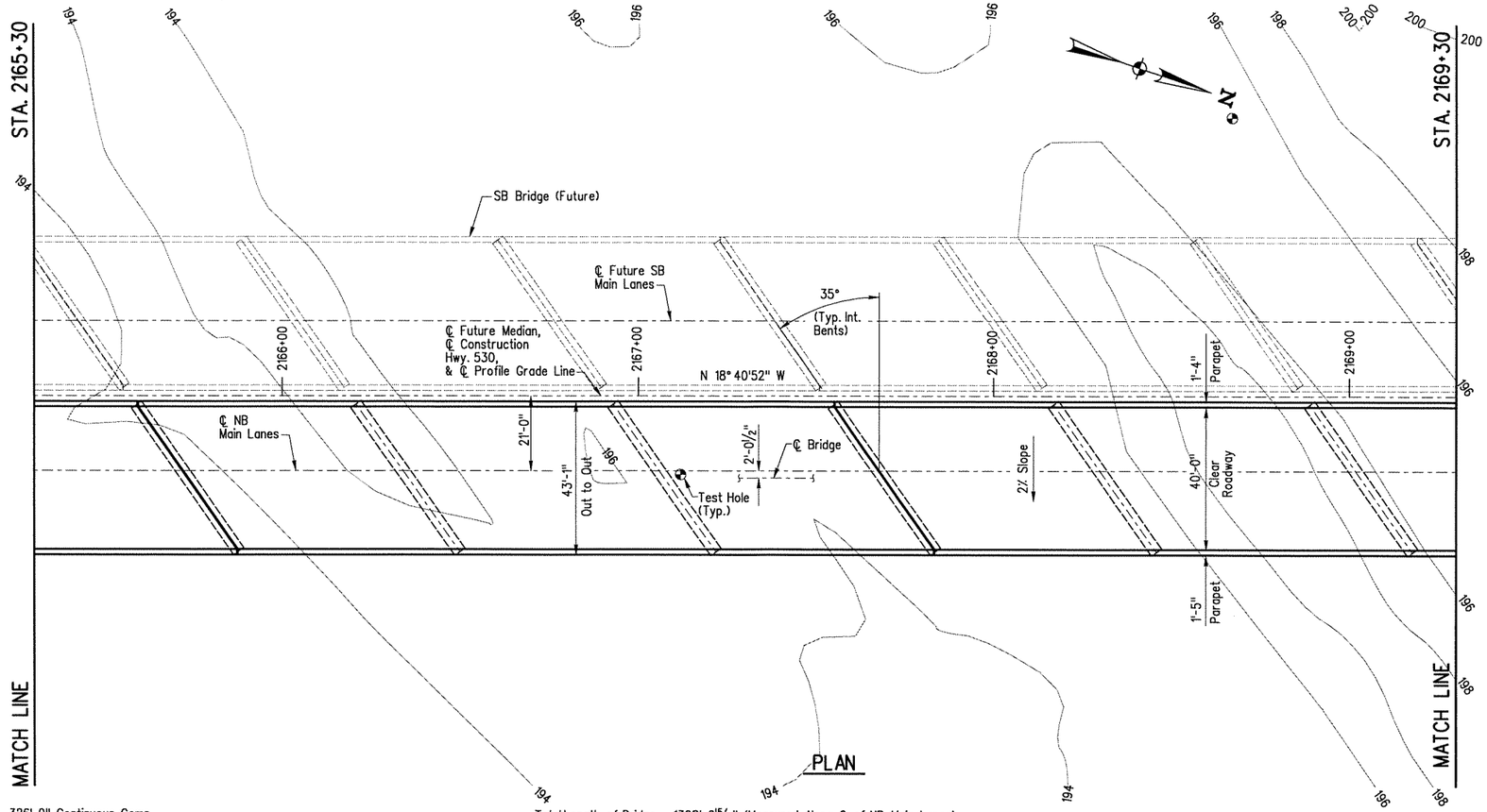
BRIDGE ENGINEER
PRINT DATE: 5/5/2011

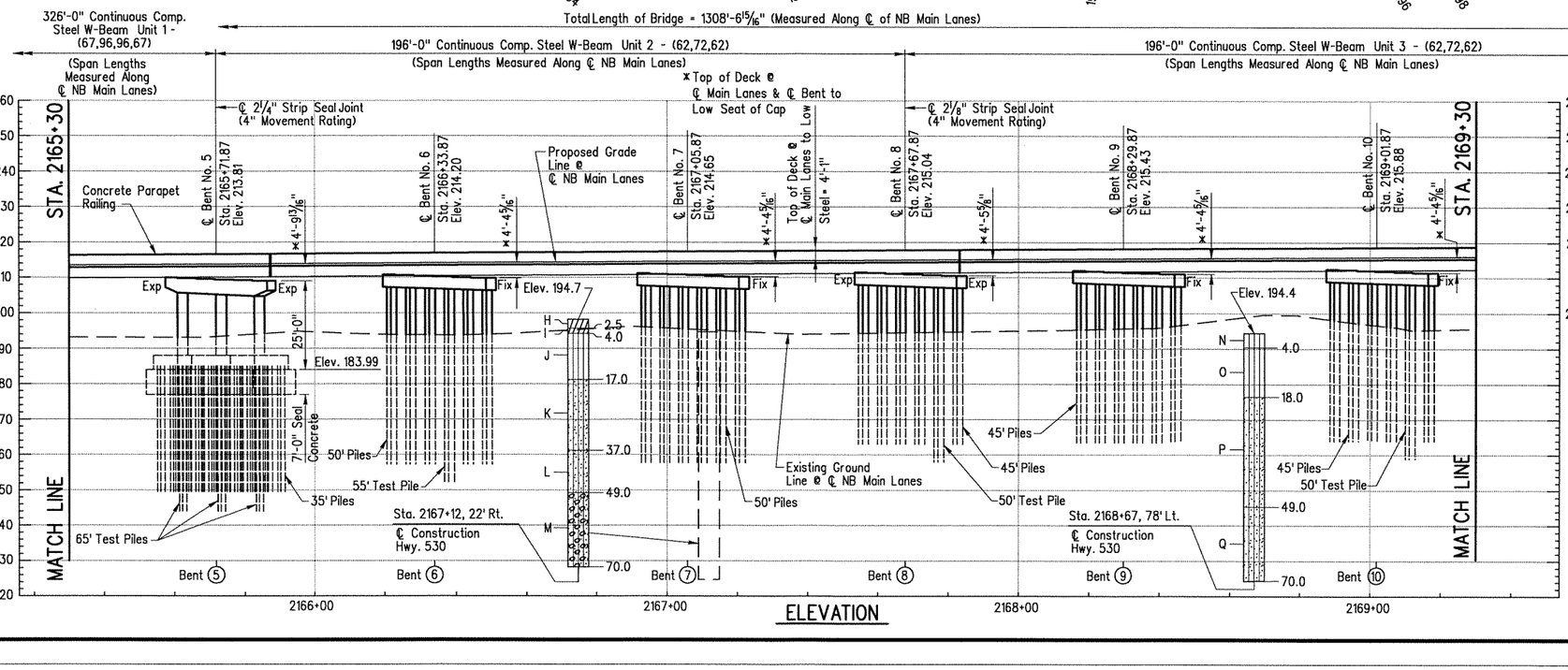
DRAWN BY: WEG DATE: 6/4/07 FILENAME: B020353B4.LX1
CHECKED BY: RLW DATE: 6/14/07
DESIGNED BY: JRS DATE: 6/1/07 SCALE: 1"=20'
BRIDGE NO. B7131 DRAWING NO.

Carter-Burgess

t:\job\100268\job 020354\bridge\drawings\bayoubartbloyout01paving.dgn ...\bayoubartbloyout01paving.dgn 3:54:51 PM 5/5/2011

Note: For R/W Data, See Roadway Plans





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.		020354	93	156
				(1)	B7131 - LAYOUT			

GENERAL NOTES (CONT'D)

FOOTINGS: The top of footings for Bents 2 through 5 shall be set a minimum of 5'-0" below top of channel bottom or natural ground. Foundations for footings shall be prepared in accordance with Section 801.08. For dewatering cofferdam, maximum water surface elevation is 195.0. Provisions shall be made for flooding the cofferdams when design water surface elevation of 195.0 is exceeded.

BRIDGE DECK: The concrete bridge deck shall be given a tine finish as specified for final finishing in Subsection 802.19 for Class 5 Tined Bridge Roadway Surface Finish.

PROTECTIVE SURFACE TREATMENT: Class 1 Protective Surface Treatment shall be applied as required in the details. Class 1 Protective Surface Treatment shall meet the requirements of Section 803.

DETAIL DRAWINGS: DRAWING NO.

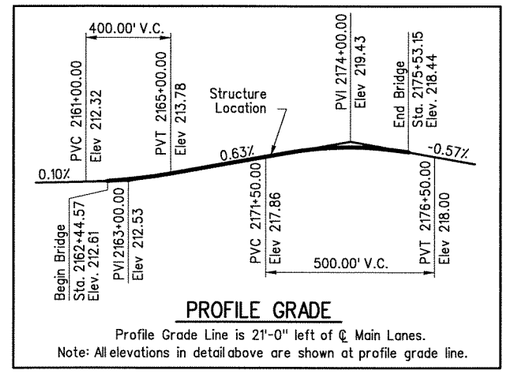
End Bents	49796 - 49800
Intermediate Bents	49801 - 49804
W-Beam Unit	49806 - 49820
Elastomeric Bearings	49821 - 49823
Concrete Piles	2383 & 49805

HYDRAULIC DATA

FLOOD DESCRIPTION	FREQUENCY (YEARS)	DISCHARGE (CFS)	*NATURAL WATER SURFACE ELEVATION (ft)	WATER SURFACE ELEV. WITH BACKWATER (ft)
DESIGN	Q50	6250	204.84	204.84
BASIC	Q100	7131	205.09	205.09
EXTREME	Q500	11750	206.51	206.51
OVERTOPPING	>Q500	------	-----	-----

DRAINAGE AREA = 67.51 sq. mi

* Unconstricted water surface without proposed structure or roadway approaches.



PROFILE GRADE

Profile Grade Line is 21'-0" left of ℄ Main Lanes.
Note: All elevations in detail above are shown at profile grade line.

Note: For Boring Logs, Boring Blow Counts, and Boring Legend See Drawing No. 49794

Note: Stationing is Along ℄ Construction Hwy. I-530. ℄ NB Main Lanes is 21'-0" right of ℄ Construction Hwy. I-530. Total Bridge Length and Span Lengths are Measured Along ℄ NB Main Lanes. All bridge stations and elevations are shown at ℄ NB Main Lanes.

FOR INFORMATION ONLY

SHEET 2 OF 4

LAYOUT OF NORTHBOUND HWY. 530 BRIDGE OVER BAYOU BARTHOLOMEW I-530 - CO. RD. 35 (BS. & SURF.) (F) JEFFERSON COUNTY

ROUTE 530 SECTION 6

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARKANSAS

BRIDGE ENGINEER
PRINT DATE: 5/5/2011

DRAWN BY: WEG DATE: 6/4/07
CHECKED BY: RLW DATE: 6/14/07
DESIGNED BY: JRS DATE: 6/1/07
BRIDGE NO. B7131
DRAWING NO.
FILENAME: B020353B4.LX2
SCALE: 1"=20'

Carter::Burgess

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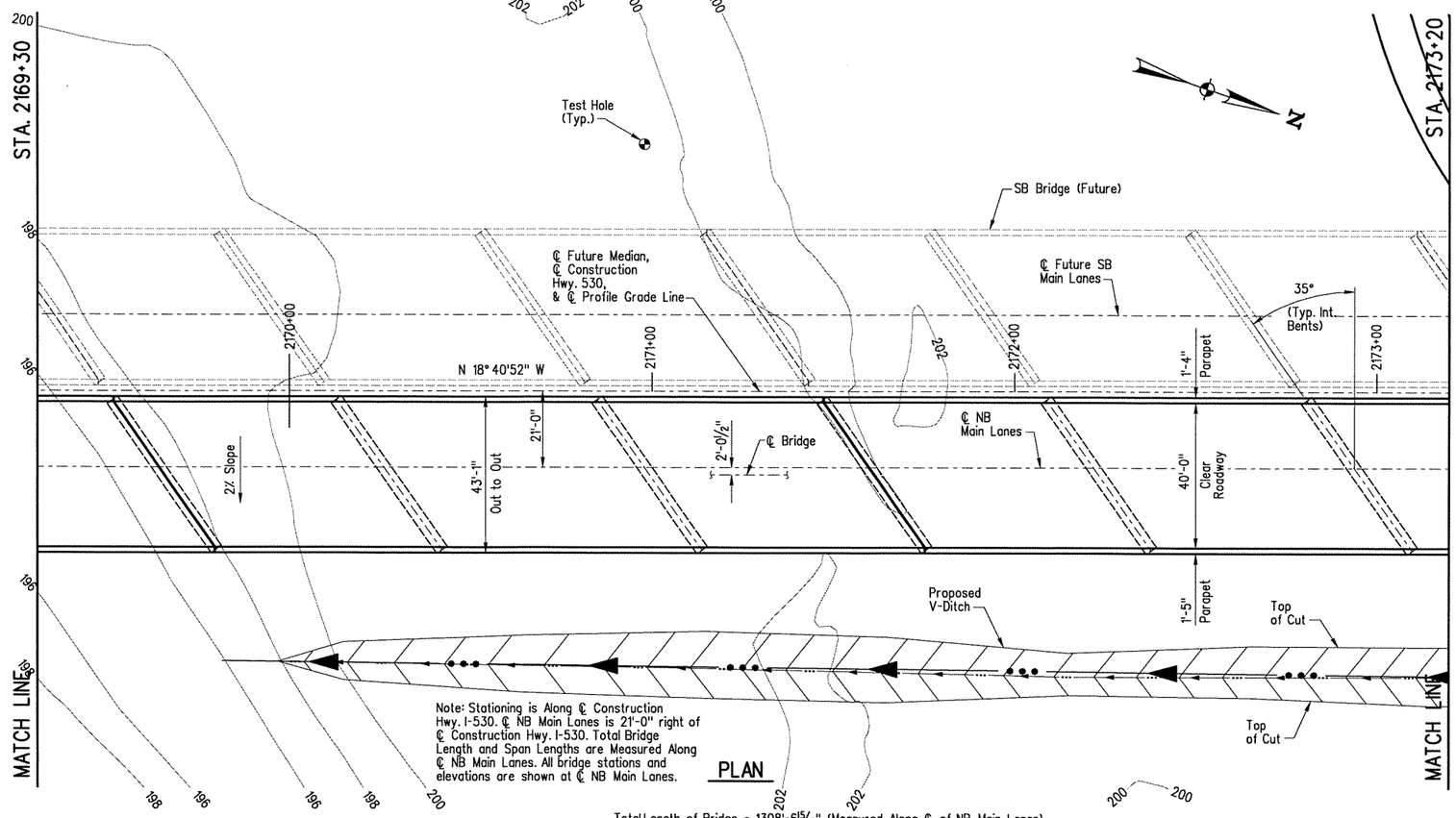
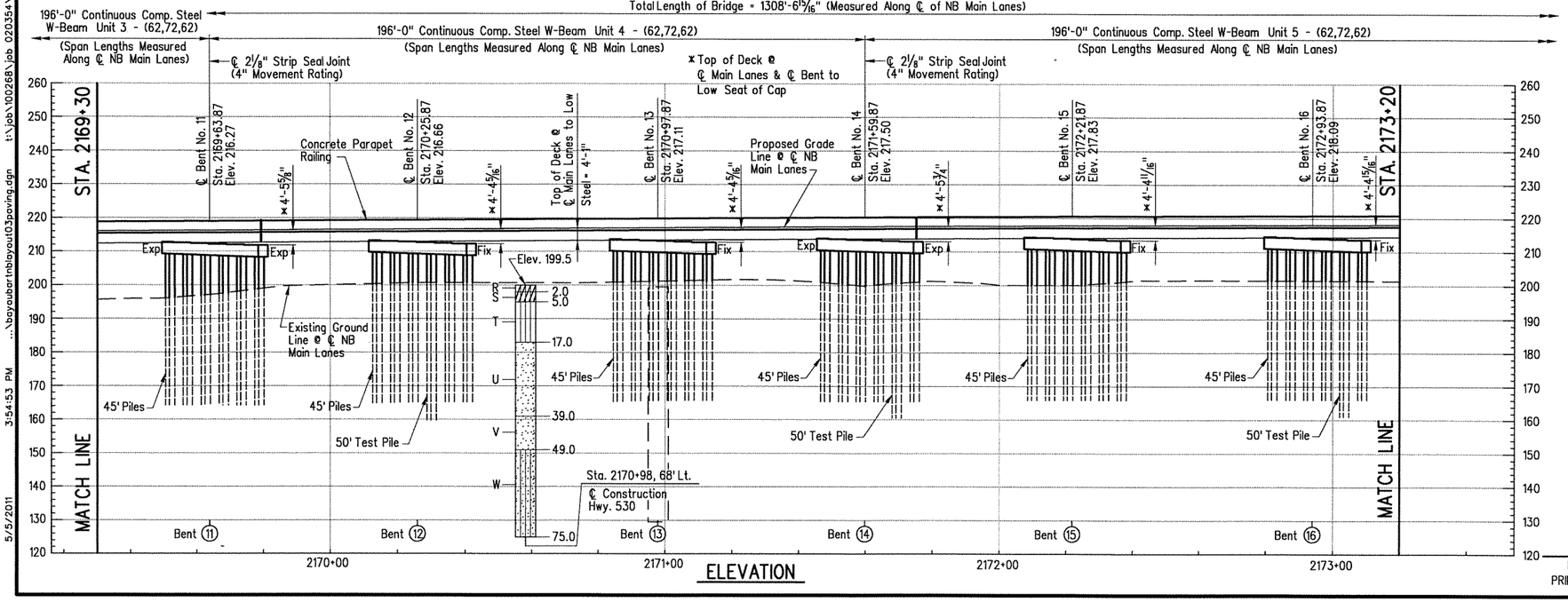
Note: For R/W Data, See Roadway Plans





BORING LEGEND

A - Firm tan clayey silt
B - Stiff to very stiff brown and gray silty clay w/trace fine sand
C - Medium dense tan silty fine sand
D - Medium dense gray silty fine sand w/clay pockets
E - Dense gray fine to medium sand, slightly silty
F - Firm gray silty clay
G - Very dense gray and tan medium to coarse sand, slightly silty w/some fine to coarse gravel
H - Soft brown clay w/rootlets
I - Firm brown fine sandy clay
J - Loose to very loose brown fine sandy silt, slightly clayey
K - Medium dense brown silty fine sand w/clay pockets
L - Medium dense gray and tan silty medium to coarse sand w/trace fine gravel
M - Dense to very dense gray and brown silty fine sand w/some fine gravel
N - Loose brown fine sandy silt w/organics and clay seams
O - Loose brown fine sandy silt w/clay seams
P - Medium dense to dense brown silty fine sand
Q - Medium to very dense gray, brown and tan silty fine to medium sand w/clay pockets and trace fine gravel
R - Very soft brown clayey silt w/organics and fine sand
S - Soft brown silty clay, slightly sandy
T - Loose brown fine sandy silt
U - Medium dense brown and tan fine sand
V - Dense to very dense gray fine sand, slightly silty
W - Medium dense to very dense gray, brown and tan silty fine to coarse sand w/clay pockets and trace fine gravel
X - Firm brown clay w/organic stains and some fine sand
Y - Loose to dense tan silty fine sand w/fine to coarse gravel
Z - Dense gray and tan fine sand w/a little fine to coarse gravel
AA - Medium dense to very dense tan and gray medium to coarse sand w/some fine to coarse gravel
BB - Loose to medium dense brown fine sandy silt, slightly clayey
CC - Medium dense brown silty fine sand w/some fine to coarse gravel
DD - Dense to very dense tan and gray fine sand, slightly silty
EE - Medium dense gray medium sand slightly silty w/fine to coarse gravel
FF - Dense to very dense gray and brown fine sand, slightly silty w/some fine to coarse gravel

BORING BLOW COUNTS

℄ Construction & ℄ Future Median Hwy. 530 Sta. 2162+09, 14' ft Left	℄ Construction & ℄ Future Median Hwy. 530 Sta. 2167+12, 22' ft Right	℄ Construction & ℄ Future Median Hwy. 530 Sta. 2168+67, 78' ft Left
0.5-1.5, N-9	0.5-1.5, N-6	0.5-1.5, N-6
2.5-3.5,N-17	2.5-3.5,N-7	2.5-3.5,N-5
4.5-5.5, N-28	4.5-5.5, N-5	4.5-5.5, N-6
6.5-7.5, N-32	6.5-7.5, N-4	6.5-7.5, N-8
9.0-10.0, N-(50/8")	9.0-10.0, N-3	9.0-10.0, N-4
14.0-15.0, N-(50/8")	14.0-15.0, N-3	14.0-15.0, N-4
19.0-20.0, N-17	19.0-20.0, N-17	19.0-20.0, N-17
24.0-25.0, N-25	24.0-25.0, N-26	24.0-25.0, N-19
29.0-30.0, N-22	29.0-30.0, N-24	29.0-30.0, N-22
34.0-35.0, N-30	34.0-35.0, N-26	34.0-35.0, N-24
39.0-40.0, N-34	39.0-40.0, N-18	39.0-40.0, N-46
44.0-45.0, N-38	44.0-45.0, N-25	44.0-45.0, N-50
49.0-50.0, N-9	49.0-50.0, N-40	49.0-50.0, N-23
54.0-55.0, N-10	54.0-55.0, N-39	54.0-55.0, N-32
59.0-60.0, N-(50/11")	59.0-60.0, N-54	59.0-60.0, N-47
64.0-65.0, N-(50/10")	64.0-65.0, N-(50/11")	64.0-65.0, N-(50/11")
69.0-70.0, N-(50/10")	69.0-70.0, N-(50/9")	69.0-70.0, N-(50/10")

℄ Construction & ℄ Future Median Hwy. 530 Sta. 2170+98, 68' ft Left	℄ Construction & ℄ Future Median Hwy. 530 Sta. 2173+90, 37' ft Left	℄ Construction & ℄ Future Median Hwy. 530 Sta. 2175+17, 34' ft Left
0.5-1.5, N-3	0.5-1.5, N-7	0.5-1.5, N-6
2.5-3.5,N-4	2.5-3.5,N- 9	2.5-3.5,N-11
4.5-5.5, N-6	4.5-5.5, N-10	4.5-5.5, N-11
6.5-7.5, N-4	6.5-7.5, N-5	6.5-7.5, N-4
9.0-10.0, N-5	9.0-10.0, N-5	9.0-10.0, N-5
14.0-15.0, N-4	14.0-15.0, N-6	14.0-15.0, N-5
19.0-20.0, N-20	19.0-20.0, N-17	19.0-20.0, N-21
24.0-25.0, N-21	24.0-25.0, N-24	24.0-25.0, N-24
29.0-30.0, N-18	29.0-30.0, N-29	29.0-30.0, N-28
34.0-35.0, N-24	34.0-35.0, N-31	34.0-35.0, N-28
39.0-40.0, N-45	39.0-40.0, N-53	39.0-40.0, N-50
44.0-45.0, N-(50/10")	44.0-45.0, N-(50/7")	44.0-45.0, N-(50/8")
49.0-50.0, N-28	49.0-50.0, N-23	49.0-50.0, N-27
54.0-55.0, N-27	54.0-55.0, N-28	54.0-55.0, N-29
59.0-60.0, N-48	59.0-60.0, N-41	59.0-60.0, N-48
64.0-65.0, N-(50/10")	64.0-65.0, N-(50/10")	64.0-65.0, N-(50/10")
69.0-70.0, N-(50/11")	69.0-70.0, N-(50/9")	69.0-70.0, N-(50/11")
74.0-75.0, N-(50/10")		

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.		020354	94	156

(1) B7131 - LAYOUT

SHEET 3 OF 4

LAYOUT OF NORTHBOUND HWY. 530 BRIDGE OVER BAYOU BARTHOLOMEW I-530 - CO. RD. 35 (BS. & SURF.) (F) JEFFERSON COUNTY

ROUTE 530 SECTION 6

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARKANSAS

FOR INFORMATION ONLY

BRIDGE ENGINEER
PRINT DATE: 5/5/2011

DRAWN BY: WEG DATE: 6/4/07
CHECKED BY: RLW DATE: 6/14/07
DESIGNED BY: JRS DATE: 6/1/07
BRIDGE NO. B7131
DRAWING NO.
FILENAME: B020353B4.LX3
SCALE: 1"=20'

Carter-Burgess

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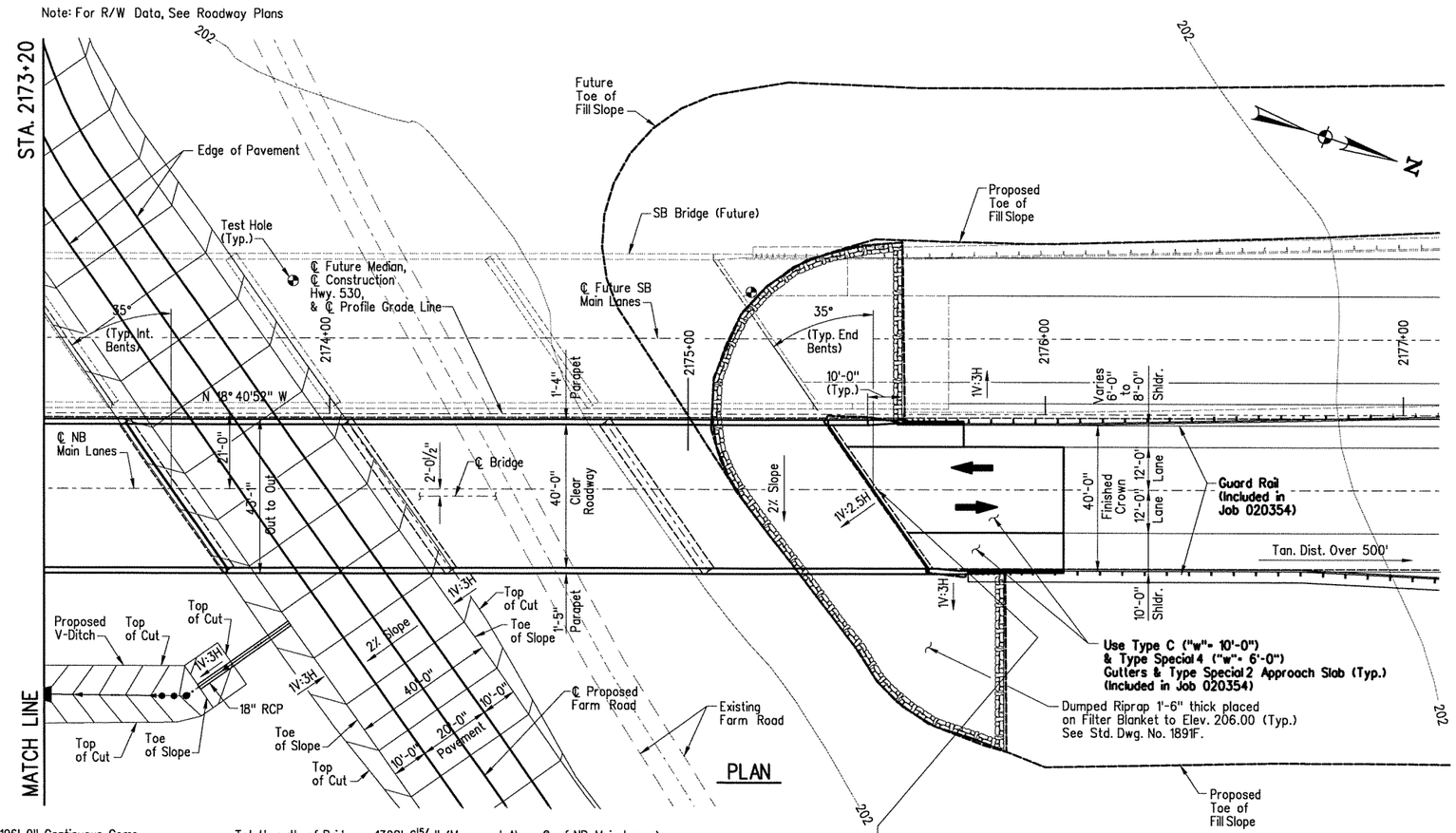
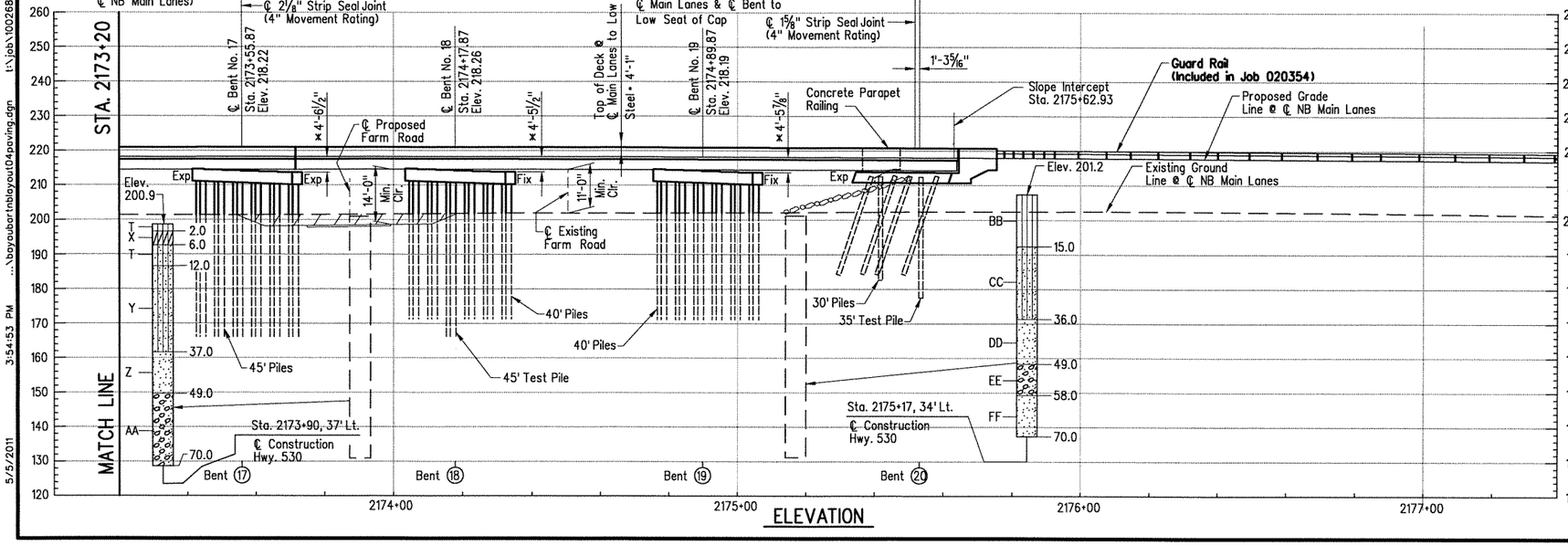
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		020354	95	156
				(1)	B7131 - LAYOUT			

Note: For R/W Data, See Roadway Plans



Note: Stationing is Along ℄ Construction Hwy. I-530. ℄ NB Main Lanes is 21'-0" right of ℄ Construction Hwy. I-530. Total Bridge Length and Span Lengths are Measured Along ℄ NB Main Lanes. All bridge stations and elevations are shown at ℄ NB Main Lanes.



Note: Excavation for construction of proposed farm road shall be completed prior to driving piles at bents 17 & 18. For details of proposed farm road, See Roadway Plans.

Note: For Boring Logs, Boring Blow Counts, and Boring Legend See Drawing No. 49794

FOR INFORMATION ONLY

SHEET 4 OF 4

LAYOUT OF
NORTHBOUND HWY. 530
BRIDGE OVER BAYOU BARTHOLOMEW
I-530 - CO. RD. 35 (BS. & SURF.) (F)
JEFFERSON COUNTY
ROUTE 530 SECTION 6
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARKANSAS

BRIDGE ENGINEER
PRINT DATE: 5/5/2011

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CHECKED BY: RLW DATE: 6/14/07
DESIGNED BY: JRS DATE: 6/1/07 SCALE: 1"=20'
BRIDGE NO. B7131 DRAWING NO.

Carter-Burgess

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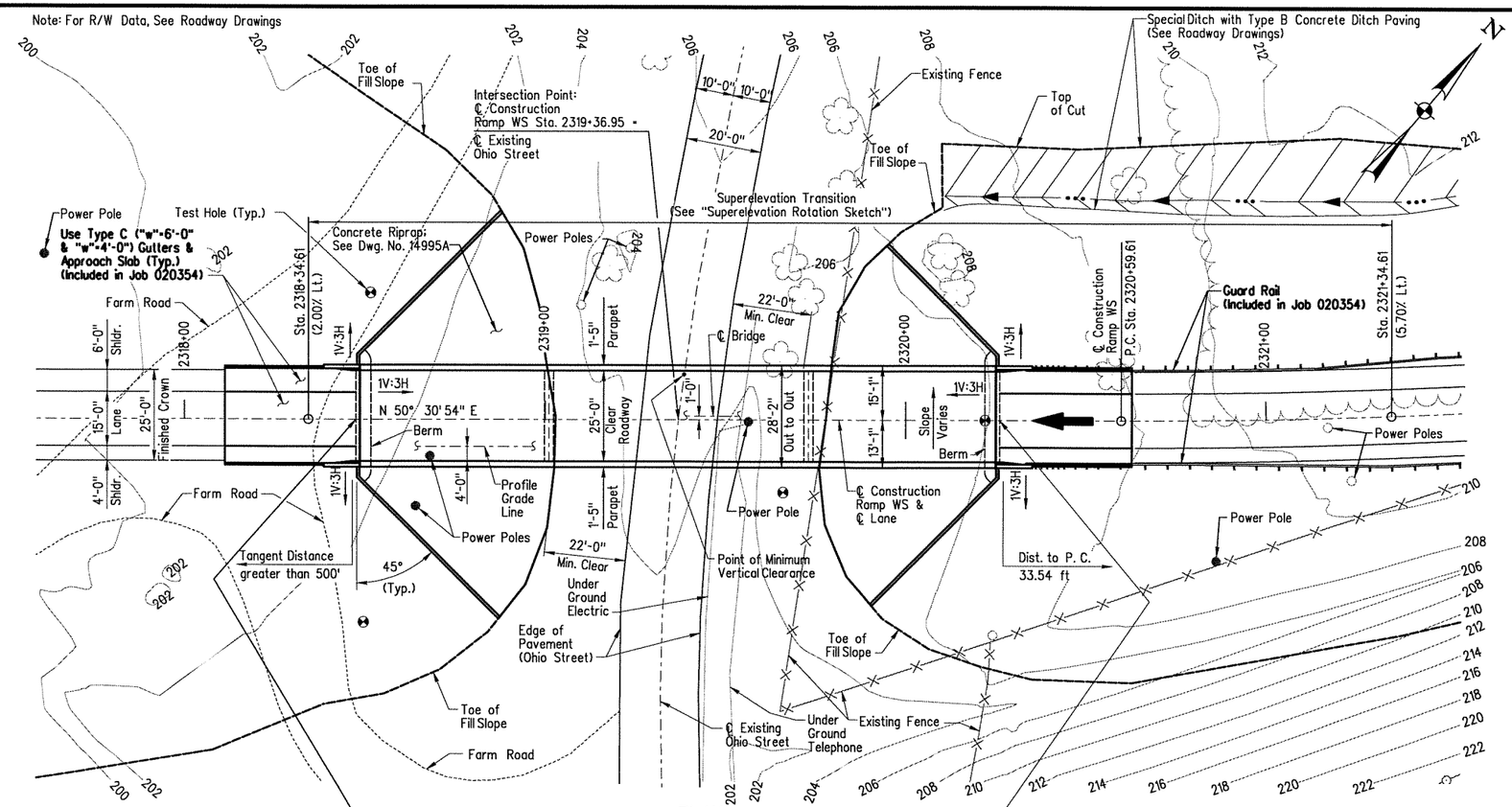
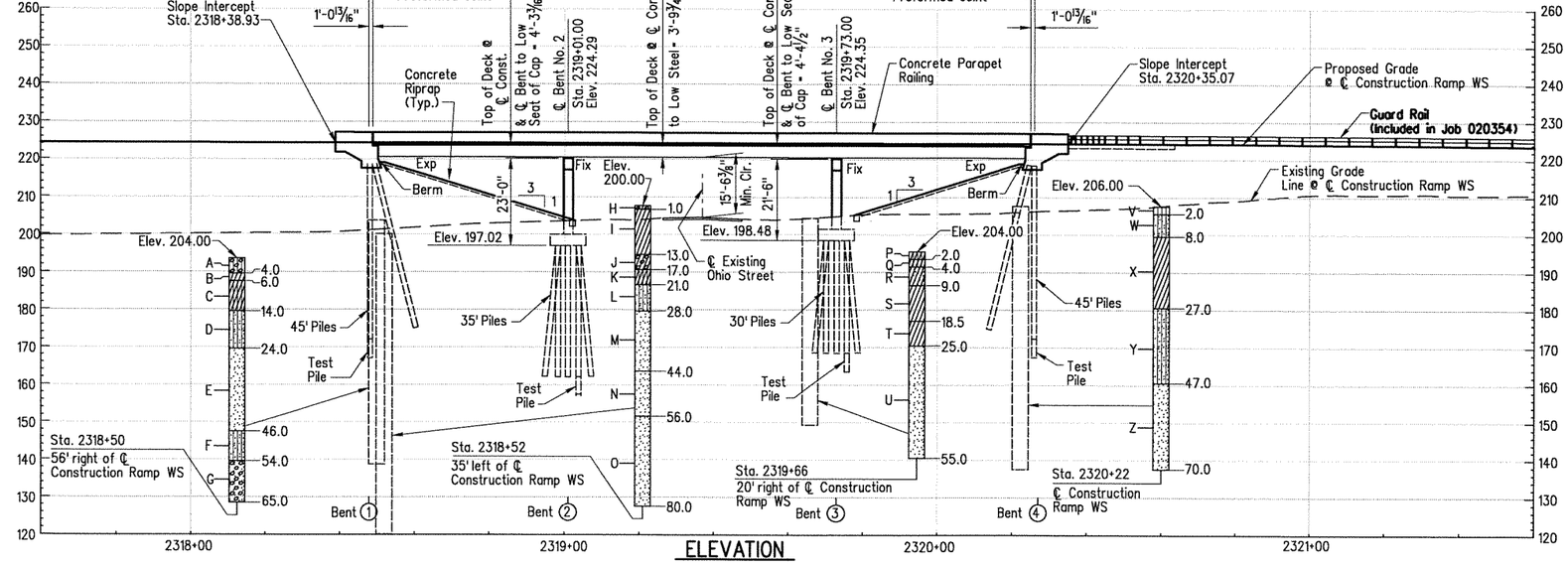
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		020354	96	156
				1	07096 - LAYOUT			

Note: For R/W Data, See Roadway Drawings

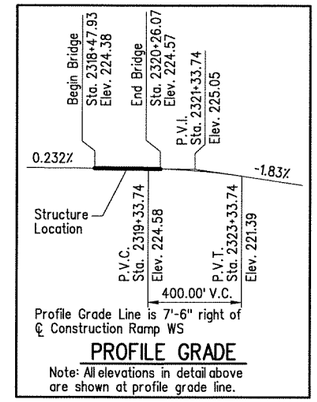


PLAN

Note: All Stations and Elevations are shown at ℄ Construction Ramp WS.



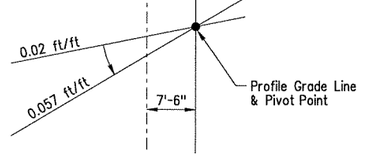
ELEVATION



PROFILE GRADE

Note: All elevations in detail above are shown at profile grade line.

Note: For General Notes, Boring Legend, and Boring Blow Counts See Drawing No. 49064



Note: Superelevation varies from 0.02 ft/ft at Sta. 2318+34.61 to 0.057 ft/ft at Sta. 2321+34.61

SUPERELEVATION ROTATION SKETCH

(Looking Ahead)

FOR INFORMATION ONLY

LAYOUT OF
RAMP WS OVER OHIO STREET
I-530-CO. RD. 35 (BS. & SURF.) (F)
JEFFERSON COUNTY
ROUTE 530 SECTION 6
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARKANSAS

BRIDGE ENGINEER
PRINT DATE: 5/5/2011

DRAWN BY: WEG DATE: 2/10/06
CHECKED BY: RLW DATE: 6/12/06
DESIGNED BY: JRS DATE: 1/23/05
BRIDGE NO. 07096
FILENAME: B020352X1.LX1
SCALE: 1"=20'
DRAWING NO.

Carter-Burgess

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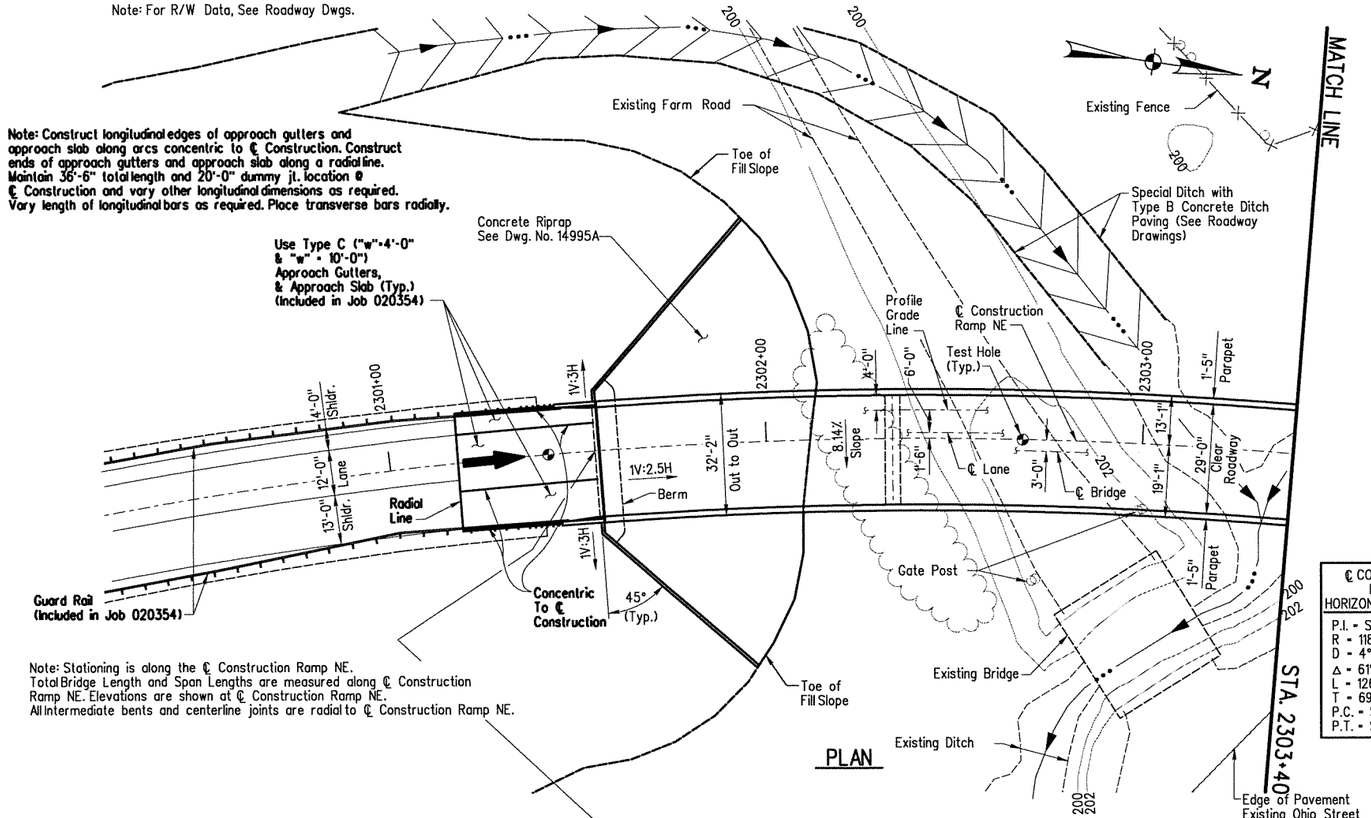
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		020354	97	156
				(1)		07097 - LAYOUT		

Note: For R/W Data, See Roadway Dwgs.



℄ CONSTRUCTION RAMP N-E HORIZONTAL CURVE DATA
P.I. = STA. 2304+24.47
R = 1183.50'
D = 4° 50'28.37"
Δ = 61° 02'55"
L = 1261.02'
T = 697.81'
P.C. = STA. 2297+26.66
P.T. = STA. 2309+87.68

GENERAL NOTES

BENCH MARK: Set Rebar with Cap, 187.21' Left of ℄ Construction Ramp NE Sta. 2304+69.47, Elev. 224.09.

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (2003 edition) with applicable supplemental specifications and special provisions. Unless otherwise noted in the plans, section and subsection refer to the Standard Construction Specifications.

DESIGN SPECIFICATIONS: AASHTO Standard Specifications for Highway Bridges (2002 edition) with current interim specifications and AASHTO Guide Specifications for Horizontally Curved Steel Girder Highway Bridges (2003 Edition).

LIVE LOADING: HS20 and Alternate Military Load METHOD OF DESIGN: Load Factor SEISMIC PERFORMANCE CATEGORY: A

MATERIALS AND STRENGTHS:
Class S(AE) Concrete (superstructure)----------f'c=4,000 psi Class S Concrete (substructure) ----------f'c=3,500 psi
Reinforcing Steel (AASHTO M 31 or M 53, Gr.60) ---fy=60,000 psi Structural Steel (AASHTO M 270, Gr. 36) ------Fy=36,000 psi
Structural Steel (AASHTO M 270, Gr. 50) ---------- Fy=50,000 psi

BORING LOGS: Boring logs may be obtained from the Programs and Contracts Division.

CONCRETE PILING: Piling for Bents 1 through 5 shall be 16" square precast concrete and shall be driven with an approved air, steam, or diesel hammer to a minimum safe bearing capacity of 55 tons per pile. Drive all piles to a minimum penetration of 15' below natural ground at Bents 1 and 5 and 15' below bottom of footing at Bents 2 through 4. Lengths of piling shown are assumed for estimating quantities only. Actual lengths to be determined in the field. Drive one 50' test pile in Bent 1, one 55' test pile in Bent 2, one 45' test pile in Bent 3, one 40' test pile in Bent 4, and one 50' test pile in Bent 5. See Bent details for location of test piles. Pile in end bents shall be driven after embankment to bottom of cap is in place.

PREBORING: Preboring shall be required for all piles at Bent 5 to obtain minimum penetration requirements. Quantities of preboring shown are for bidding purposes only. Actual size and length to be determined in the field by the Engineer.

Preboring may be required at Bents 1 through 4 to obtain minimum penetration requirements. Test piles at Bents 1 through 4 shall be driven without preboring. The Engineer shall determine the need for preboring for all other piles to be driven in that bent. Preboring, if directed by the Engineer, will be paid for at the unit price bid for the pay item "Preboring".

The contractor shall be responsible for keeping prebored holes free from debris prior to backfilling which may require the use of temporary casings or other methods. Temporary casing, if necessary, will not be paid for directly but will be considered subsidiary to the pay item "PREBORING".

FOOTINGS: The top of footings for Bents 2 and 4 shall be set a minimum of 2'-0" below top of natural ground and the top of footings for Bent 3 shall be set a minimum of 2'-0" below bottom of channel. Foundations for footings shall be prepared in accordance with Section 801.04 and shall be backfilled in accordance with Section 801.08.

PROTECTIVE SURFACE TREATMENT: Class 1 Protective Surface Treatment shall be applied as required in the details. Class 1 Protective Surface Treatment shall meet the requirements of Section 803.

TEXTURED COATING FINISH: Class 3 Textured Coating Finish shall be applied to bridge surfaces as specified in SP Job 020352 "Textured Coating Finish" and in accordance with Section 802.19.

BRIDGE DECK: The concrete bridge deck shall be given a tine finish as specified for final finishing in Subsection 802.19 for Class 5 Tined Bridge Roadway Surface Finish.

PAINTING: All structural steel except galvanized members and some surfaces in contact with concrete shall be painted as specified in Section 807.75 unless otherwise noted. The color shall match the Federal Standard 595B, Color Chip No. 24097, green.

DETAIL DRAWINGS:

	DRAWING NO.
End Bents	49080 - 49083
Intermediate Bents	49084
396 ft Plate Girder Unit	49085 - 49094
Elastomeric Bearings	49095 - 49096
Concrete Piles	2383

Note: For Boring Legend and Boring Blow Counts, See Drawing No. 49079

FOR INFORMATION ONLY

SHEET 1 OF 2
LAYOUT OF
RAMP NE OVER OHIO STREET
I-530 - CO. RD. 35 (BS. & SURF.) (F)
JEFFERSON COUNTY
ROUTE 530 SECTION 6
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARKANSAS

BRIDGE ENGINEER
PRINT DATE: 5/5/2011

DRAWN BY: WEG DATE: 2/10/06 FILENAME: B020352X2.LX1
CHECKED BY: RLW DATE: 7/13/06
DESIGNED BY: JRS DATE: 2/07/06 SCALE: 1"=20'
BRIDGE NO. 07097 DRAWING NO.

Carter-Burgess

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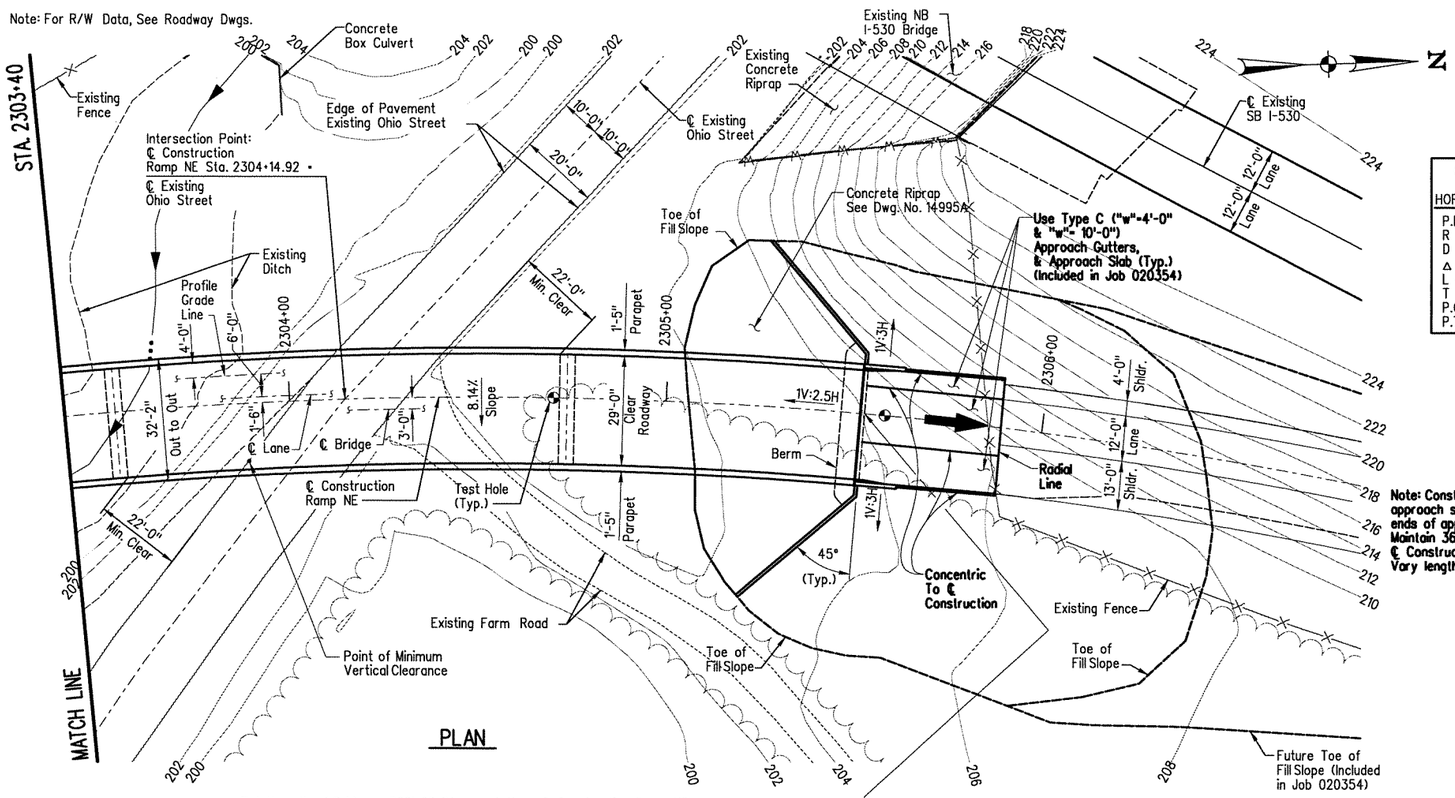
5/5/2011

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		020354	98	156
				(1)	07097 - LAYOUT			

Note: For R/W Data, See Roadway Dwgs.



℄ CONSTRUCTION RAMP N-E HORIZONTAL CURVE DATA
P.I. = STA. 2304+24.47
R = 1183.50'
D = 4° 50'28.37"
Δ = 61° 02'55"
L = 1261.02'
T = 697.81'
P.C. = STA. 2297+26.66
P.T. = STA. 2309+87.68

Note: Construct longitudinal edges of approach gutters and approach slab along arcs concentric to ℄ Construction. Construct ends of approach gutters and approach slab along a radial line. Maintain 36'-6" total length and 20'-0" dummy jt. location @ ℄ Construction and vary other longitudinal dimensions as required. Vary length of longitudinal bars as required. Place transverse bars radially.

Note: Stationing is along the ℄ Construction Ramp NE.
Total Bridge Length and Span Lengths are measured along ℄ Construction Ramp NE. Elevations are shown at ℄ Construction Ramp NE.
All intermediate bents and centerline joints are radial to ℄ Construction Ramp NE.

BORING LEGEND

A - Firm to stiff brown clay w/surface organics, ferrous stains and deposits
B - Stiff brown fine sandy clay
C - Medium dense to dense brown and gray silty fine sand w/occasional clay seams and layers
D - Dense gray and brown fine to medium sand, slightly silty with trace fine gravel
E -Dense brownish gray silty fine sand
F - Medium dense dark brown fine sand w/fine gravel
G - Stiff tan and gray fine sandy clay
H - Firm to stiff brown and gray clay w/ organic inclusions
I - Loose dark brown fine sandy silt
J - Firm dark brown clayey silt
K - Loose to medium dense dark brown silty fine sand
L - Medium dense to dense brown silty fine sand w/greenish gray clay seams
M - Very dense brown and gray silty fine sand
N - Very dense tan and gray fine to medium sand
O - 2.5 inches: Asphalt pavement
P - Medium dense brown silty fine sand w/fine to coarse gravel and organics
Q - Soft brown silty clay, slightly sandy
R - Firm brown and gray clay w/trace fine sand
S - Firm brown and gray fine sandy clay
T - Medium dense brown and gray fine sandy silt w/clay seams
U - Medium dense gray silty fine sand
V - Medium dense gray and yellowish red fine to medium sand, slightly silty w/fine to coarse gravel
W - Very dense gray fine to medium sand, slightly silty, w/trace fine gravel
X - Loose brown fine sandy silt
Y - Firm tan fine sandy clay w/fine gravel and organics
Z - Very stiff brown, reddish brown and gray silty clay w/organics
AA - Very dense tan and gray fine sandy silt w/ferrous stains
BB - Medium dense brown and gray medium to coarse sand w/decayed organics
CC - Medium dense to loose light gray and tan silty fine sand, slightly clayey
DD - Medium dense to dense gray and brown fine to coarse sand, slightly silty w/fine to coarse gravel
EE - Dense yellowish red and brown silty fine sand
FF - Medium dense to very dense gray medium to coarse sand w/clay seams and fine gravel
GG - Very dense gray fine to medium sand, slightly silty w/fine to coarse gravel

BORING BLOW COUNTS

Ramp NE Sta. 2301+42, ℄ Ramp	Ramp NE Sta. 2302+68, ℄ Ramp	Ramp NE Sta. 2304+70, ℄ Ramp	Ramp NE Sta. 2305+58, ℄ Ramp
0.5-1.5, N=10	0.5-1.5, N=25	0.5-1.5, N=15	0.5-1.5, N=7
2.5-3.5,N= 12	2.5-3.5,N= 16	2.5-3.5,N= 4	2.5-3.5,N= 21
4.5-5.5, N=14	24.0-25.0, N=8	4.5-5.5, N=7	4.5-5.5, N=50(7")
6.5-7.5, N=14	29.0-30.0, N=6	6.5-7.5, N=6	6.5-7.5, N=50(7")
9.0-10.0, N=13	34.0-35.0, N=8	9.0-10.0, N=6	9.0-10.0, N=28
14.0-15.0, N=15	39.0-40.0, N=10	14.0-15.0, N=9	14.0-15.0, N=12
19.0-20.0, N=17	44.0-45.0, N=12	19.0-20.0, N=13	19.0-20.0, N=5
24.0-25.0, N=18	49.0-50.0, N=9	24.0-25.0, N=11	24.0-25.0, N=7
29.0-30.0, N=23	54.0-55.0, N=13	29.0-30.0, N=27	29.0-30.0, N=26
34.0-35.0, N=28	59.0-60.0, N=20	34.0-35.0, N=31	34.0-35.0, N=31
39.0-40.0, N=37	64.0-65.0, N=34	39.0-40.0, N=28	39.0-40.0, N=33
44.0-45.0, N=38	69.0-70.0, N=50(8")	44.0-45.0, N=30	44.0-45.0, N=33
49.0-50.0, N=32	74.0-75.0, N=50(10")	48.5-49.5, N=50(10")	49.0-50.0, N=28
54.0-55.0, N=36	79.0-80.0, N=50(9")	53.5-54.5, N=50(9")	54.0-55.0, N=50(10")
59.0-60.0, N=37		58.5-59.5, N=50(10")	59.0-60.0, N=50(10")
64.0-65.0, N=41		64.0-65.0, N=50(9")	64.0-65.0, N=50(12")
69.0-70.0, N=39			69.0-70.0, N=50(11")
74.0-75.0, N=50(10")			
79.0-80.0, N=50(11")			

Note: For General Notes, See Drawing No. 49078

FOR INFORMATION ONLY

SHEET 2 OF 2
LAYOUT OF
RAMP NE OVER OHIO STREET
I-530 - CO. RD. 35 (BS. & SURF.) (F)
JEFFERSON COUNTY
ROUTE 530 SECTION 6
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARKANSAS

BRIDGE ENGINEER
PRINT DATE: 5/5/2011

DRAWN BY: WEG DATE: 2/10/06
CHECKED BY: RLW DATE: 7/13/06
DESIGNED BY: JRS DATE: 2/07/06
BRIDGE NO. 07097
FILENAME: B020352X2.LX2
SCALE: 1"=20'
DRAWING NO.

Carter-Burgess

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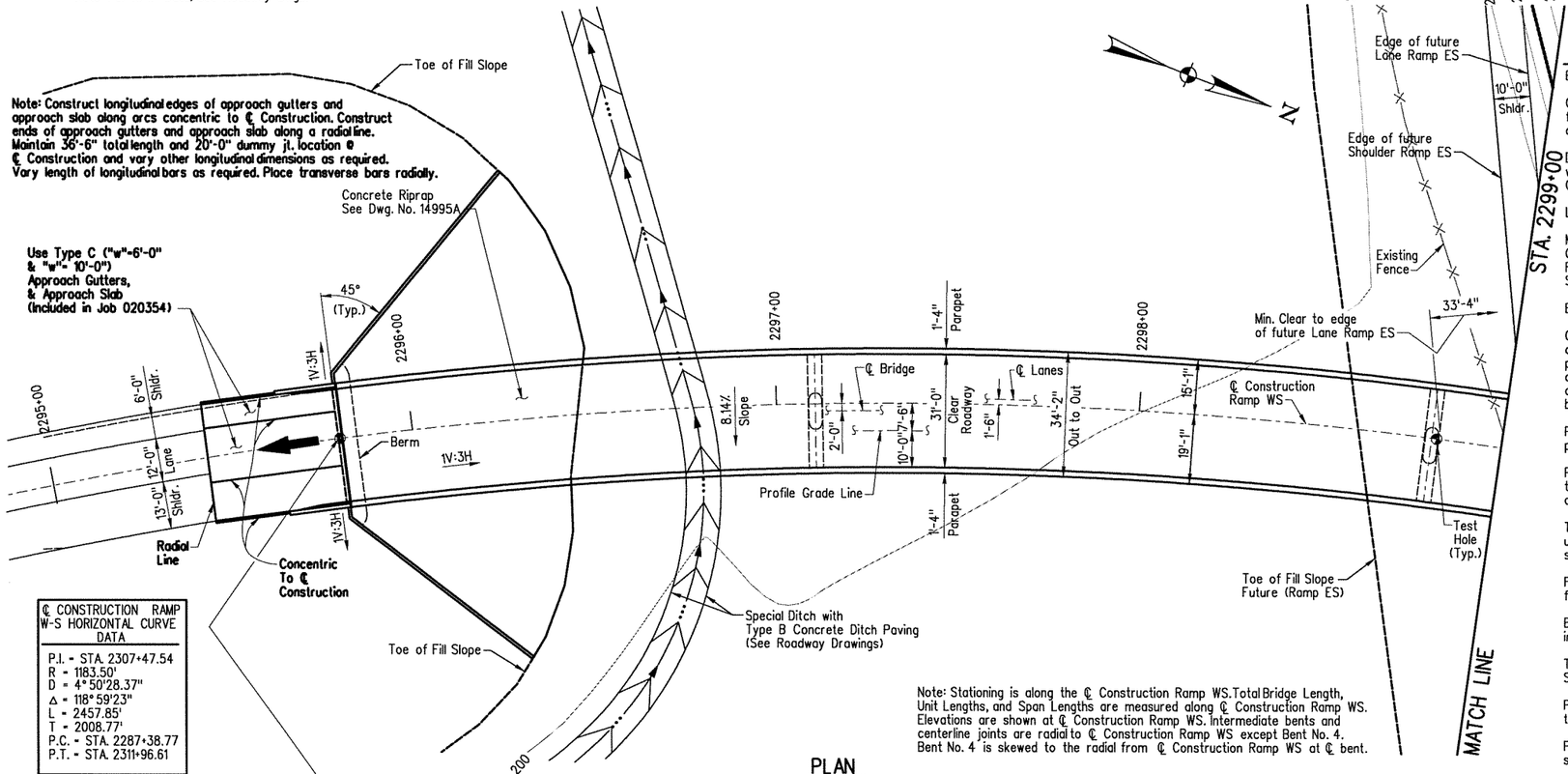
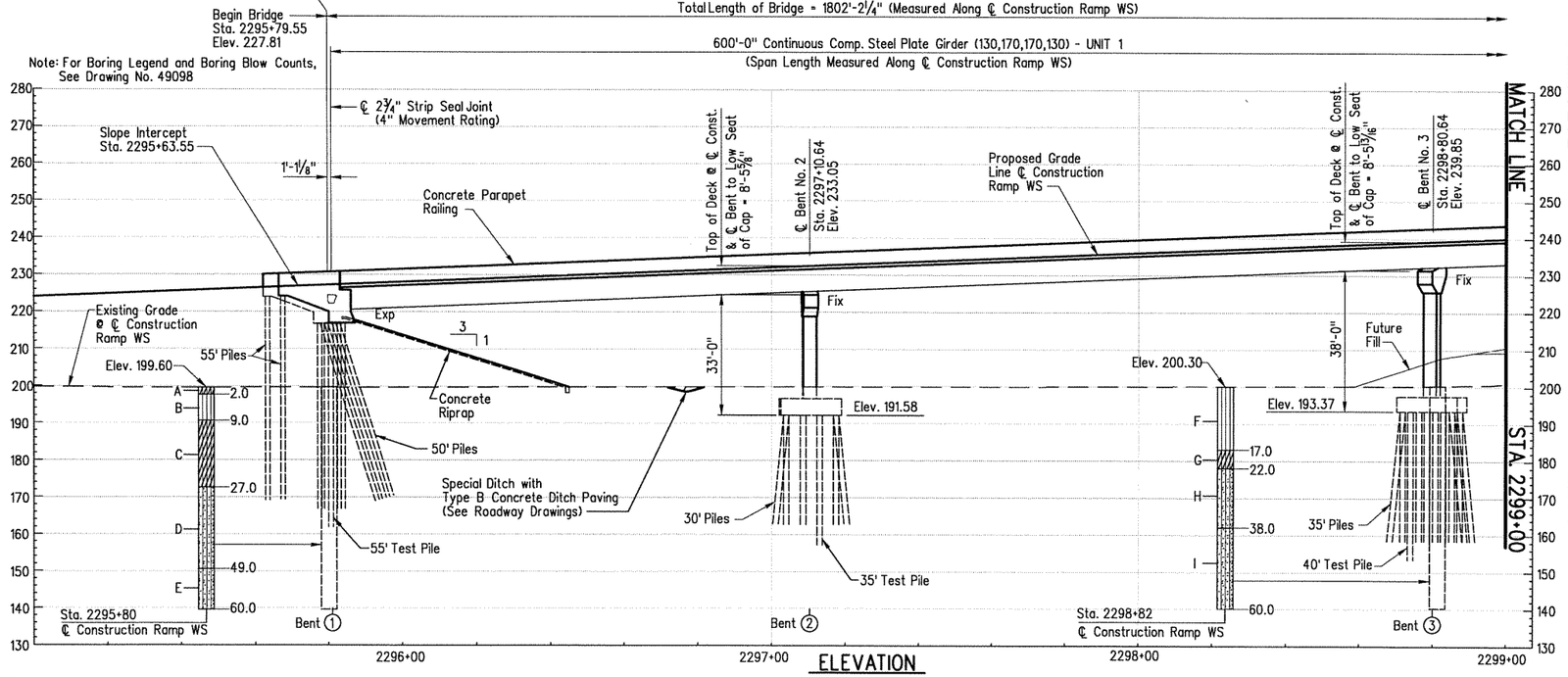
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		020354	99	156

Note: For R/W Data, See Roadway Dwgs.



Note: Stationing is along the ℄ Construction Ramp WS. Total Bridge Length, Unit Lengths, and Span Lengths are measured along ℄ Construction Ramp WS. Elevations are shown at ℄ Construction Ramp WS. Intermediate bents and centerline joints are radial to ℄ Construction Ramp WS except Bent No. 4. Bent No. 4 is skewed to the radial from ℄ Construction Ramp WS at ℄ bent.

PLAN



ELEVATION

GENERAL NOTES

(1) 07101 - LAYOUT

BENCH MARK: Set rebar with Cap, 251.08' left of ℄ Construction Ramp WS Sta. 2299+33.51, Elev. 206.76

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (2003 edition) with applicable supplemental specifications and special provisions. Unless otherwise noted in the plans, section and subsection refer to the Standard Construction Specifications.

DESIGN SPECIFICATIONS: AASHTO Standard Specifications for Highway Bridges (2002 edition) with current interim specifications, and AASHTO Guide Specifications for Horizontally Curved Steel Girder Highway Bridges (2003 Edition).

LIVE LOADING: HS20 and Alternate Military Load METHOD OF DESIGN: Load Factor SEISMIC PERFORMANCE CATEGORY: A

MATERIALS AND STRENGTHS:
Class S(AE) Concrete (superstructure)----------f'c=4,000 psi
Reinforcing Steel (AASHTO M 31 or M 53, Gr.60) ---fy=60,000 psi
Structural Steel (AASHTO M 270, Gr. 50) ---------- Fy=50,000 psi
Class S Concrete (substructure) ----------f'c=3,500 psi
Structural Steel (AASHTO M 270, Gr. 36) -----Fy=36,000 psi

BORING LOGS: Boring logs may be obtained from the Programs and Contracts Division.

CONCRETE PILING: Piling for Bents 1 through 13 shall be 16" square precast concrete. All piles shall be driven with an approved air, steam, or diesel hammer to a minimum safe bearing capacity of 55 tons per pile. Drive all piles to a minimum penetration of 15' below natural ground at Bents 1 and 13 and 15' below bottom of footing at Bents 2 through 12. Lengths of piling shown are assumed for estimating quantities only. Actual lengths to be determined in the field. A test pile shall be driven at each bent. See Elevation view for test pile lengths. See bent details for location of test piles. Piles in end bents shall be driven after embankment to bottom of cap is in place.

PREBORING: Preboring shall be required for all piles at Bent 13 to obtain minimum penetration requirements. Quantities of preboring shown are for bidding purposes only. Actual size and length to be determined in the field by the Engineer.

Preboring may be required at Bents 1 through 12 to obtain minimum penetration requirements. Test piles at Bents 1 through 12 shall be driven without preboring. The Engineer shall determine the need for preboring for all other piles to be driven in that bent. Preboring, if directed by the Engineer, will be paid for at the unit price bid for the pay item "Preboring".

The Contractor shall be responsible for keeping prebored holes free from debris prior to backfilling which may require the use of temporary casings or other methods. Temporary casings, if necessary, will not be paid for directly but will be considered subsidiary to the pay item "PREBORING".

FOOTINGS: The top of footings for Bents 2 through 12 shall be set a minimum of 2'-0" below top of natural ground. Foundations for footings shall be prepared in accordance with Section 801.04 and shall be backfilled in accordance with Section 801.08.

BRIDGE DECK: The concrete bridge deck shall be given a tine finish as specified for final finishing in Subsection 802.19 for Class S Tined Bridge Roadway Surface Finish.

TEXTURED COATING FINISH: Class 3 Textured Coating Finish shall be applied to bridge surfaces as specified in SP Job 020352 "Textured Coating Finish" and in accordance with Section 802.19.

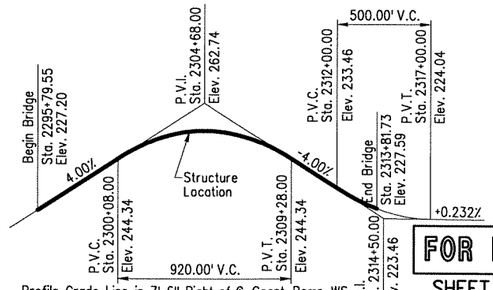
PROTECTIVE SURFACE TREATMENT: Class 1 Protective Surface Treatment shall be applied as required in the details. Class 1 Protective Surface Treatment shall meet the requirements of Section 803.

PAINTING: All structural steel except galvanized members, some surfaces in contact with concrete, and as otherwise noted shall be painted as specified in Section 807.75 . The color shall match the Federal Standard 595B, Color Chip No. 24097, Green.

FORM INSERT: State of Arkansas form insert shall be used at end bent wing walls (4 locations) See Dwg. No. 49174

DETAIL DRAWINGS:

	DRAWING NO.
End Bents	49102 -49105
Intermediate Bents	49106 - 49114
600 ft Plate Girder Unit 1	49118 - 49122
600 ft Plate Girder Unit 2	49123 - 49127
600 ft Plate Girder Unit 3	49128 - 49132
Elastomeric Bearings	49173 & 49173A
Concrete Piles	2383
Form Insert	49174



Profile Grade Line is 7'-6" Right of ℄ Const. Ramp WS.

PROFILE GRADE

Note: All elevations in detail above are shown at profile grade line.

FOR INFORMATION ONLY

SHEET 1 OF 5

LAYOUT OF
RAMP WS OVER I-530
I-530 - CO. RD. 35 (BS. & SURF.) (F)
JEFFERSON COUNTY
ROUTE 530 SECTION 6
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARKANSAS

BRIDGE ENGINEER
PRINT DATE: 5/5/2011

DRAWN BY: WEG DATE: 2/22/06 FILENAME: B020352X3.LX1
CHECKED BY: RLW DATE: 8/7/06
DESIGNED BY: JRS DATE: 2/10/06 SCALE: 1"=20'
BRIDGE NO. 07101 DRAWING NO.

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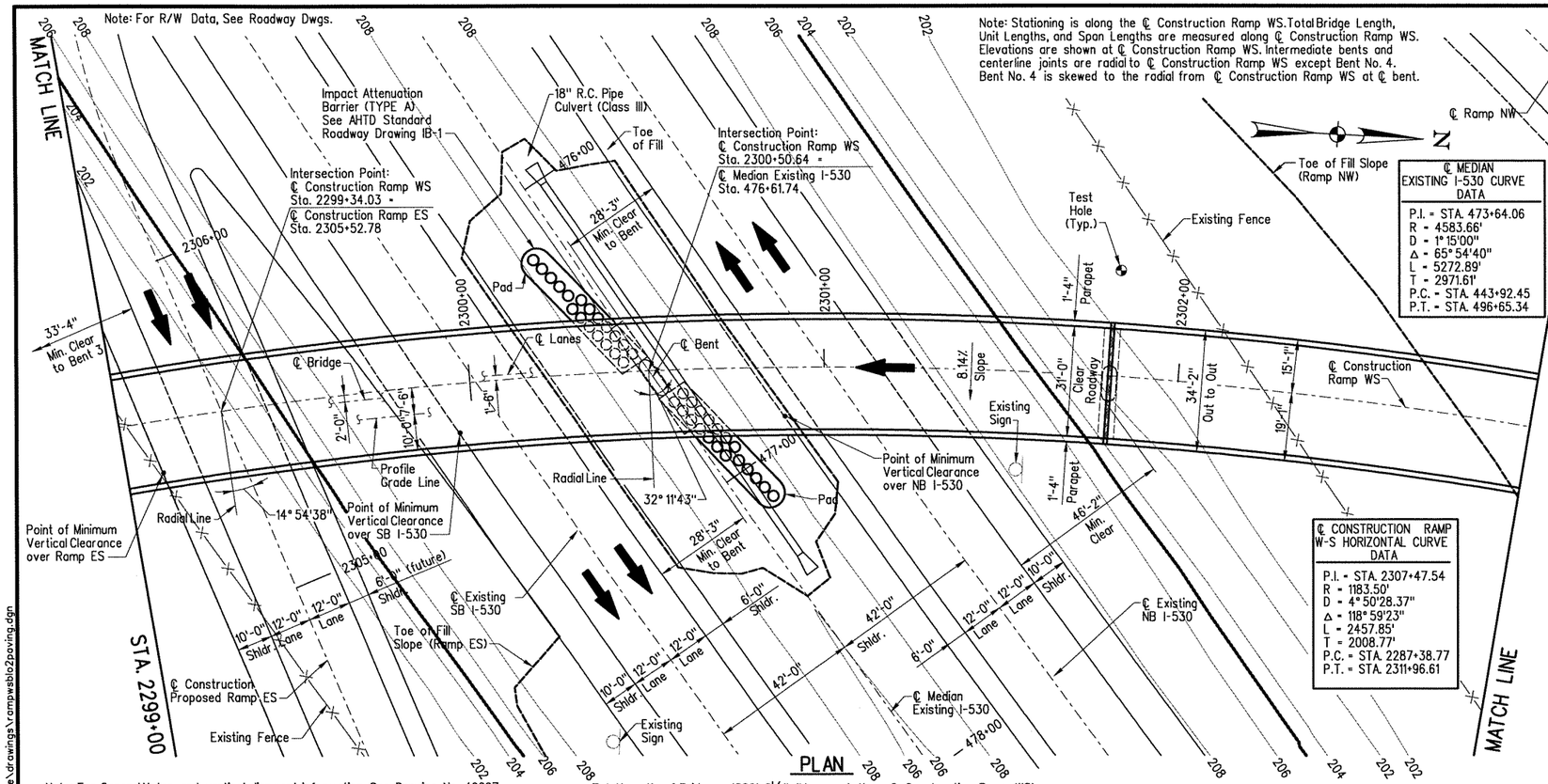
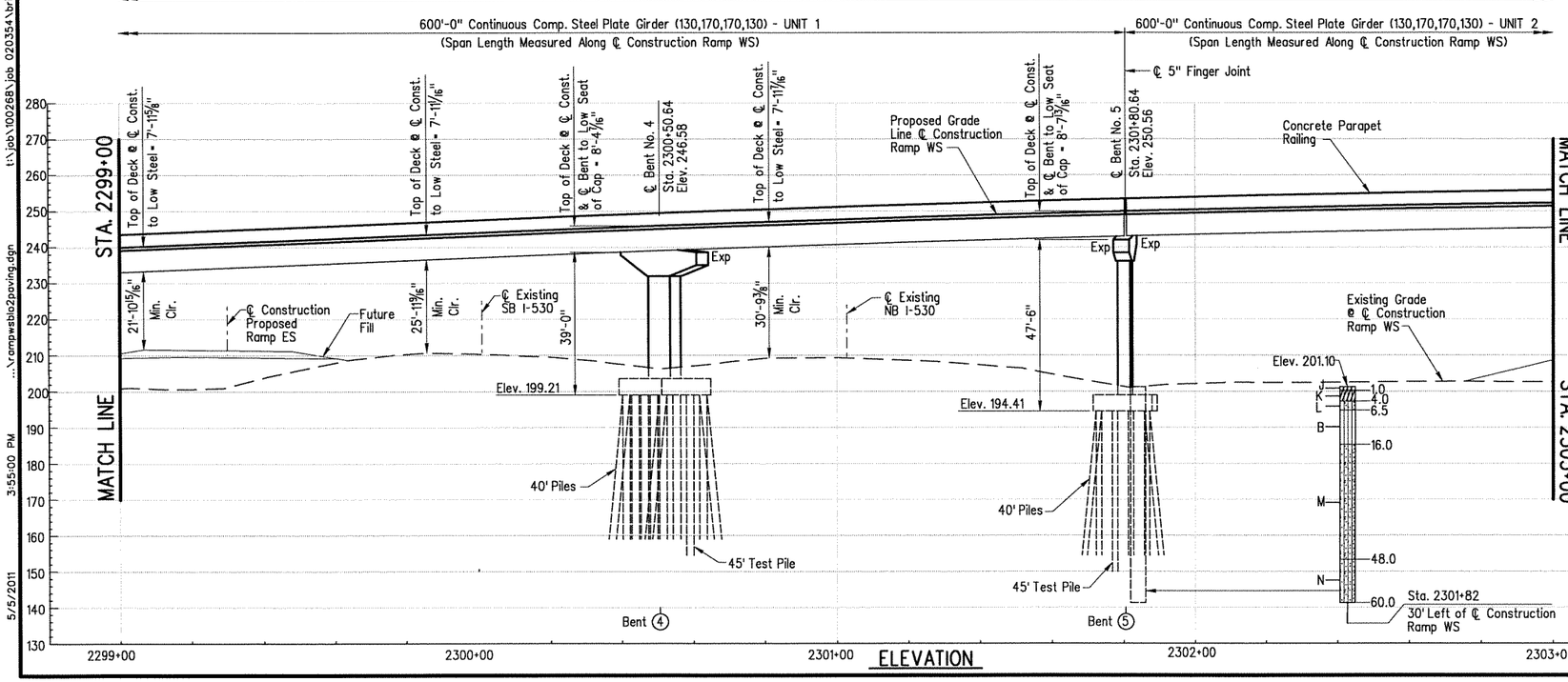
Carter-Burgess

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.		020354	100	156
				(1)		07101 - LAYOUT		





BORING LEGEND

A - Loose brown fine sandy silt, clayey w/organics
B - Loose brown fine sandy silt
C - Firm brown to dark brown clayey silt, sandy
D - Dense to very dense gray and brown silty fine sand
E - Very dense brownish gray to dark brown silty fine sand
F - Loose to very loose brown silt, sandy
G - Firm dark brown clayey silt
H - Medium dense dark brown silty fine sand w/clay pockets
I - Dense to very dense gray and brown silty fine sand with trace fine gravel
J - Soft brown clayey silt w/organics
K - Stiff tan silty clay w/ferrous stains
L - Loose brown silty fine sand, slightly clayey
M - Medium dense to dense brown silty fine sand
N - Dense gray fine sand w/clay pockets
O - Firm brown silty clay w/organics
P - Loose brown fine sandy silt w/clay seams
Q - Firm brown clay, sandy
R - Firm gray and tan clayey silt, sandy clay w/seams
S - Stiff reddish brown and tan silty clay w/fine sand
T - Stiff to very stiff reddish brown and tan clay w/sand pockets
U - Medium dense to dense gray and brown silty fine sand w/clay pockets
V - Very dense gray and brown fine to medium sand slightly silty w/decayed organics
W - Firm to stiff brown and tan silty clay w/ferrous stains, fine sand and organics
X - Medium dense tan and gray clayey fine sand w/ferrous stains
Y - Medium dense to dense gray and tan silty fine sand
Z - Medium dense to dense tan and gray fine to coarse sand w/fine gravel and decayed organics
AA - Very dense tan silty fine sand
BB - Very dense gray and tan medium to coarse sand
CC - Soft brown silty clay
DD - Firm to stiff brown to dark brown clay
EE - Very stiff gray and brown clay
FF - Stiff to very stiff gray and brown silty clay w/ferrous stains
GG - Medium dense light gray and tan silty fine sand
HH - Medium dense tan and gray fine to medium sand, slightly silty w/some fine to coarse gravel
II - Hard gray silty clay
JJ - Very dense tan and gray silty fine sand
KK - Stiff brown clay w/organics
LL - Very stiff light gray and brown fine sandy clay w/ferrous stains
MM - Very dense light gray and tan silty fine sand
NN - Very stiff light gray and tan clay
OO - Dense light gray and tan clayey fine to medium sand w/silty clay pockets
PP - Medium dense gray and tan silty fine sand
QQ - Medium dense to dense gray fine to medium sand, slightly silty w/lignite inclusions, clay seams and gravel
RR - Very dense gray and tan medium to coarse sand, w/gravel and decayed organics

BORING BLOW COUNTS

Ramp WS Sta. 2295+80 ℄ Ramp	Ramp WS Sta. 2298+82 ℄ Ramp	Ramp WS Sta. 2301+82, 30' Left ℄ Ramp
4.5-5.5, N=6	4.5-5.5, N=5	4.5-5.5, N=5
6.5-7.5, N=5	6.5-7.5, N=5	6.5-7.5, N=6
9.0-10.0, N=8	9.0-10.0, N=3	9.0-10.0, N=5
14.0-15.0, N=7	14.0-15.0, N=3	14.0-15.0, N=8
19.0-20.0, N=9	19.0-20.0, N=12	19.0-20.0, N=15
24.0-25.0, N=7	24.0-25.0, N=16	24.0-25.0, N=21
29.0-30.0, N=36	29.0-30.0, N=21	29.0-30.0, N=24
34.0-35.0, N=42	34.0-35.0, N=24	34.0-35.0, N=33
39.0-40.0, N=(50/10")	39.0-40.0, N=41	39.0-40.0, N=30
44.0-45.0, N=50	44.0-45.0, N=47	44.0-45.0, N=42
49.0-50.0, N=(50/10")	49.0-50.0, N=(50/10")	49.0-50.0, N=50
54.0-55.0, N=(50/7")	54.0-55.0, N=(50/7")	54.0-55.0, N=50
59.0-60.0, N=(50/10")	59.0-60.0, N=(50/9")	59.0-60.0, N=50

Ramp NW Sta. 2311+59 ℄ Ramp NW	Ramp WS Sta. 2307+82 ℄ Ramp	Ramp WS Sta. 2310+82 ℄ Ramp	Ramp WS Sta. 2313+83 ℄ Ramp
4.5-5.5, N=9	6.5-7.5, N=28	9.0-10.0, N=17	14.0-15.0, N=(50/9")
6.5-7.5, N=8	9.0-10.0, N=32	14.0-15.0, N=15	19.0-20.0, N=25
9.0-10.0, N=7	14.0-15.0, N=24	19.0-20.0, N=21	24.0-25.0, N=32
14.0-15.0, N=5	19.0-20.0, N=28	24.0-25.0, N=24	29.0-30.0, N=26
19.0-20.0, N=7	24.0-25.0, N=28	29.0-30.0, N=24	34.0-35.0, N=21
24.0-25.0, N=9	29.0-30.0, N=29	34.0-35.0, N=28	39.0-40.0, N=29
29.0-30.0, N=7	34.0-35.0, N=33	39.0-40.0, N=20	44.0-45.0, N=35
34.0-35.0, N=14	39.0-40.0, N=22	44.0-45.0, N=29	49.0-50.0, N=34
39.0-40.0, N=22	44.0-45.0, N=34	49.0-50.0, N=(50/9")	54.0-55.0, N=33
44.0-45.0, N=26	49.0-50.0, N=(50/8")	54.0-55.0, N=(50/10")	59.0-60.0, N=(50/9")
49.0-50.0, N=29	54.0-55.0, N=(50/7")	59.0-60.0, N=(50/9")	64.0-65.0, N=(50/9")
54.0-55.0, N=48	59.0-60.0, N=(50/7")		69.0-70.0, N=(50/8")
59.0-60.0, N=(50/11")			
64.0-65.0, N=(50/10")			
69.0-70.0, N=(50/10")			

FOR INFORMATION ONLY

SHEET 2 OF 5
LAYOUT OF
RAMP WS OVER I-530
I-530 - CO. RD. 35 (BS. & SURF.) (F)
JEFFERSON COUNTY
ROUTE 530 SECTION 6
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARKANSAS

BRIDGE ENGINEER
PRINT DATE: 5/5/2011

DRAWN BY: WEG DATE: 2/22/06
CHECKED BY: RLW DATE: 8/7/06
DESIGNED BY: JRS DATE: 2/10/06
BRIDGE NO. 07101
DRAWING NO.
FILENAME: B020352X3.LX2
SCALE: 1"=20'

Carter::Burgess

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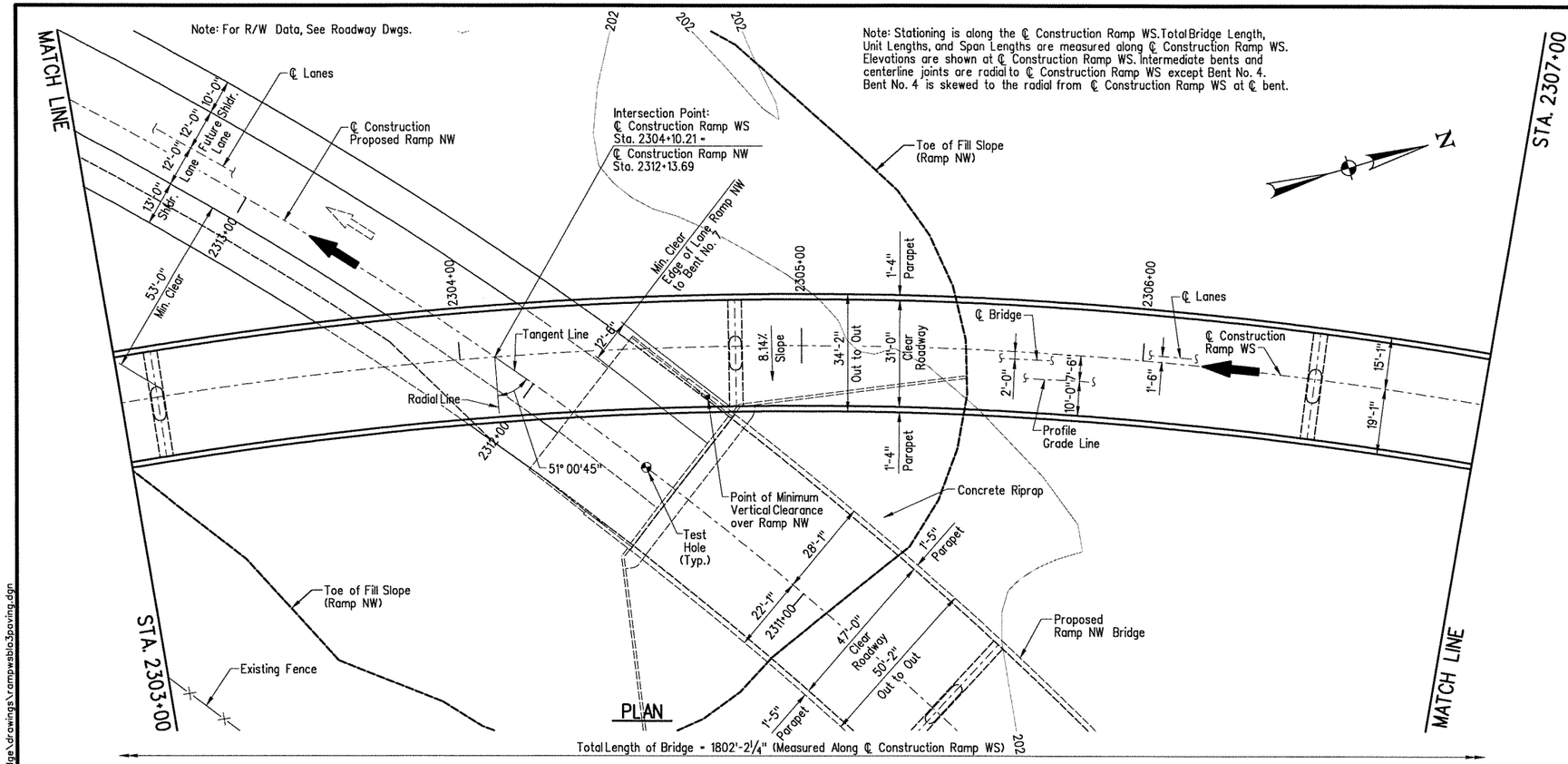
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		020354	101	156
				(1)	07101 - LAYOUT			

Note: For R/W Data, See Roadway Dwgs.

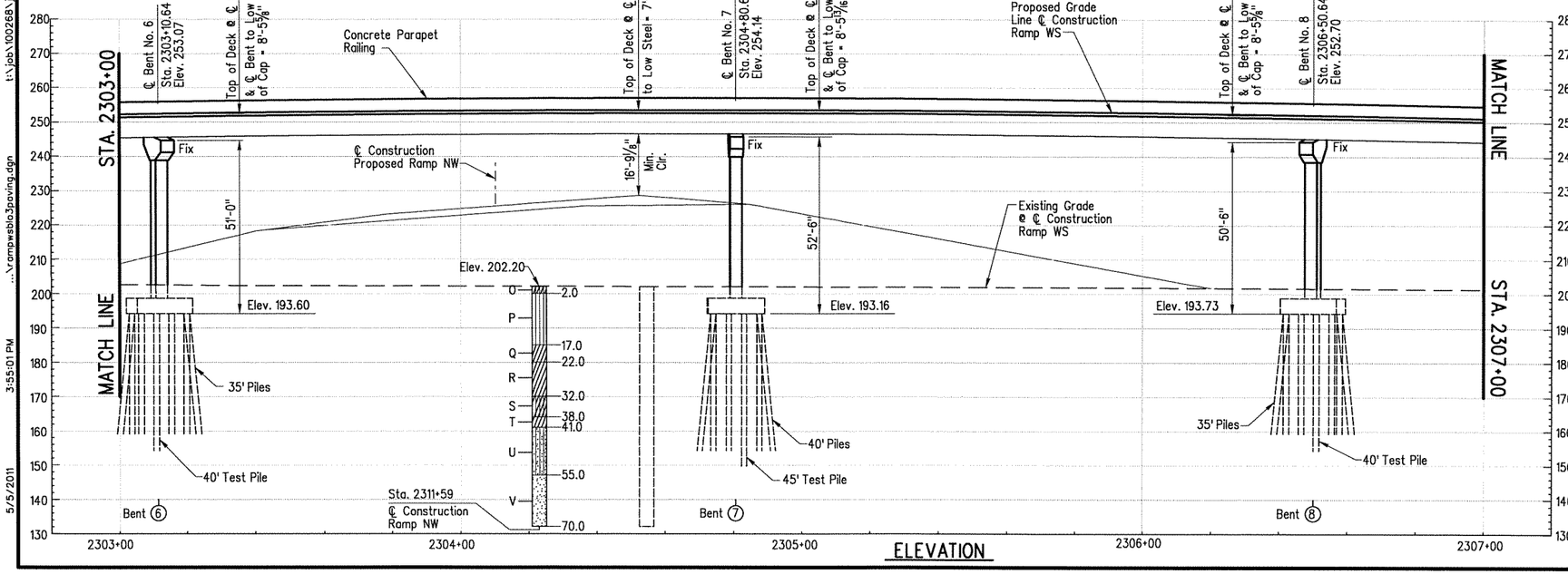
Note: Stationing is along the ℄ Construction Ramp WS. Total Bridge Length, Unit Lengths, and Span Lengths are measured along ℄ Construction Ramp WS. Elevations are shown at ℄ Construction Ramp WS. Intermediate bents and centerline joints are radial to ℄ Construction Ramp WS except Bent No. 4. Bent No. 4 is skewed to the radial from ℄ Construction Ramp WS at ℄ bent.



℄ CONSTRUCTION RAMP W-S HORIZONTAL CURVE DATA
P.I. = STA. 2307+47.54
R = 1183.50'
D = 4° 50'28.37"
Δ = 118° 59'23"
L = 2457.85'
T = 2008.77'
P.C. = STA. 2287+38.77
P.T. = STA. 2311+96.61

℄ CONSTRUCTION RAMP N-W HORIZONTAL CURVE DATA
P.I. = STA. 2319+68.15
R = 1183.50'
D = 4° 50'28.37"
Δ = 142° 21'31"
L = 2940.55'
T = 3472.39'
P.C. = STA. 2284+95.76
P.T. = STA. 2314+36.31

Note: For General Notes, and vertical alignment information. See Drawing No. 49097
For Boring Legend and Boring Blow Counts, See Drawing No. 49098



FOR INFORMATION ONLY

SHEET 3 OF 5
LAYOUT OF
RAMP WS OVER I-530
I-530 - CO. RD. 35 (BS. & SURF.) (F)
JEFFERSON COUNTY
ROUTE 530 SECTION 6
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARKANSAS

DRAWN BY: WEG DATE: 2/22/06
CHECKED BY: RLW DATE: 8/7/06
DESIGNED BY: JRS DATE: 2/10/06
BRIDGE NO. 07101
FILENAME: B020352X3.LX3
SCALE: 1"=20'
DRAWING NO.

BRIDGE ENGINEER
PRINT DATE: 5/5/2011

Carter-Burgess

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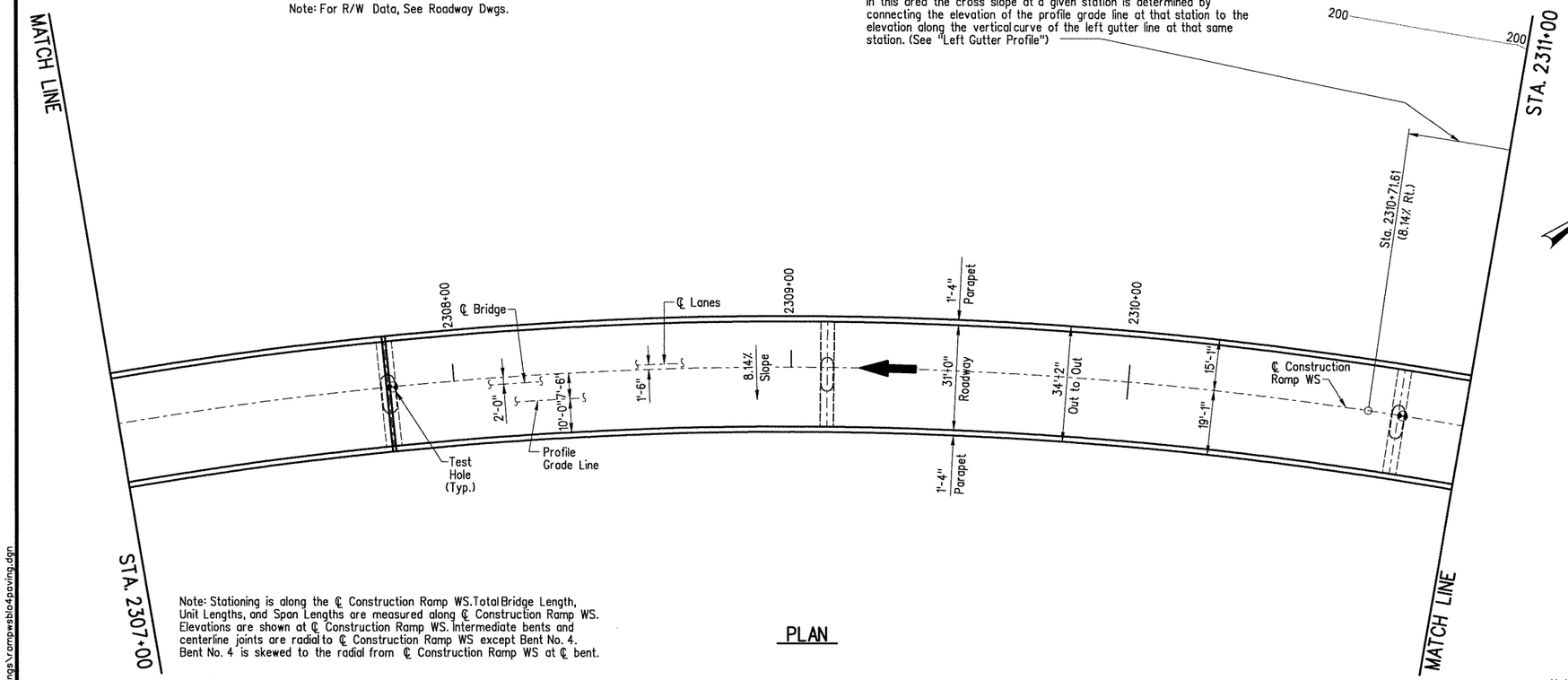
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		020354	102	156
				(1)	07101 - LAYOUT			

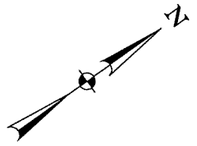
Note: For R/W Data, See Roadway Dwgs.

In this area the cross slope at a given station is determined by connecting the elevation of the profile grade line at that station to the elevation along the vertical curve of the left gutter line at that same station. (See "Left Gutter Profile")

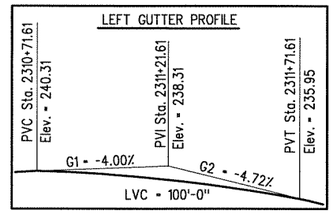


Note: Stationing is along the ℄ Construction Ramp WS. Total Bridge Length, Unit Lengths, and Span Lengths are measured along ℄ Construction Ramp WS. Elevations are shown at ℄ Construction Ramp WS. Intermediate bents and centerline joints are radial to ℄ Construction Ramp WS except Bent No. 4. Bent No. 4 is skewed to the radial from ℄ Construction Ramp WS at ℄ bent.

PLAN



℄ CONSTRUCTION RAMP W-S HORIZONTAL CURVE DATA
P.I. = STA. 2307+47.54
R = 1183.50'
D = 4°50'28.37"
Δ = 118°59'23"
L = 2457.85'
T = 2008.77'
P.C. = STA. 2287+38.77
P.T. = STA. 2311+96.61

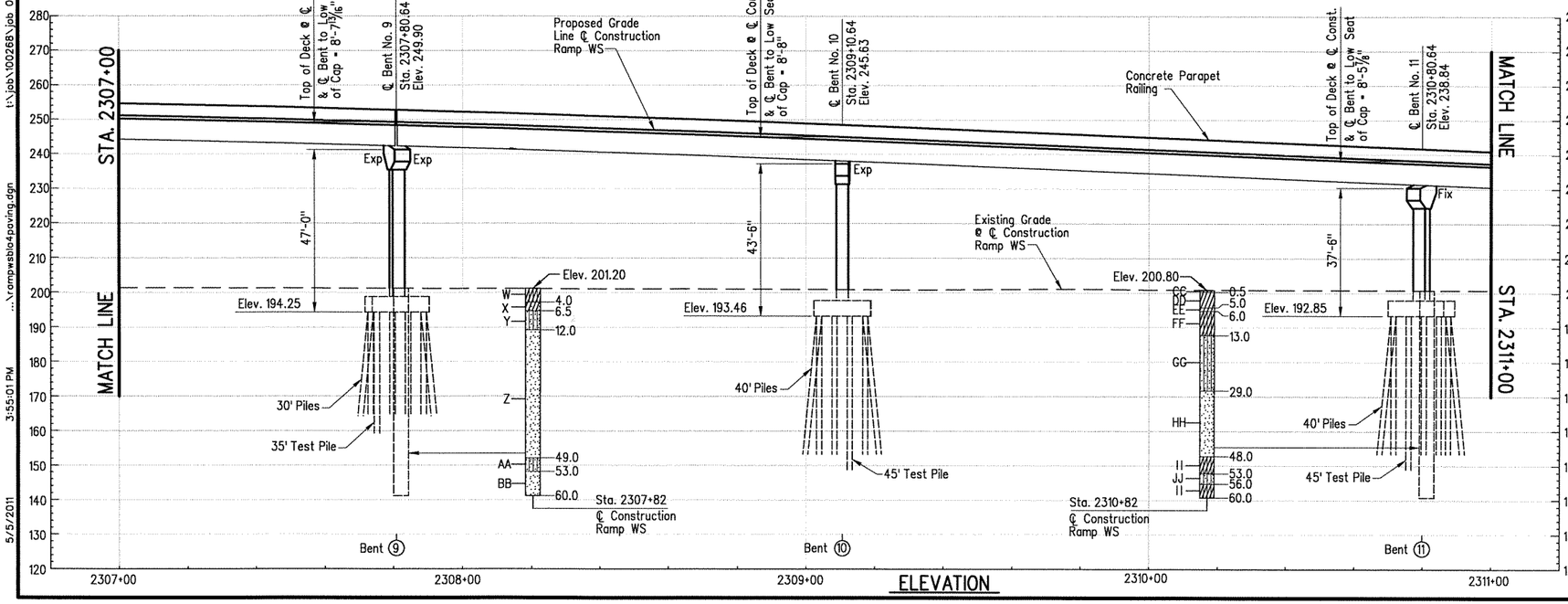


Note: The left gutter designation is in the direction of stationing.

Total Length of Bridge = 1802'-2¼" (Measured Along ℄ Construction Ramp WS)

600'-0" Continuous Comp. Steel Plate Girder (130,170,170,130) - UNIT 2 (Span Length Measured Along ℄ Construction Ramp WS)

600'-0" Continuous Comp. Steel Plate Girder (130,170,170,130) - UNIT 3 (Span Length Measured Along ℄ Construction Ramp WS)



ELEVATION

Note: For General Notes, and vertical curve information. See Drawing No. 49097
For Boring Legend and Boring Blow Counts, See Drawing No. 49098

FOR INFORMATION ONLY

SHEET 4 OF 5
LAYOUT OF
RAMP WS OVER I-530
I-530 - CO. RD. 35 (BS. & SURF.) (F)
JEFFERSON COUNTY
ROUTE 530 SECTION 6
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARKANSAS

BRIDGE ENGINEER
PRINT DATE: 5/5/2011

DRAWN BY: WEG DATE: 2/22/06 FILENAME: B020352X3.LX4
CHECKED BY: RLW DATE: 8/7/06
DESIGNED BY: JRS DATE: 2/10/06 SCALE: 1"=20'
BRIDGE NO. 07101 DRAWING NO.

Carter-Burgess

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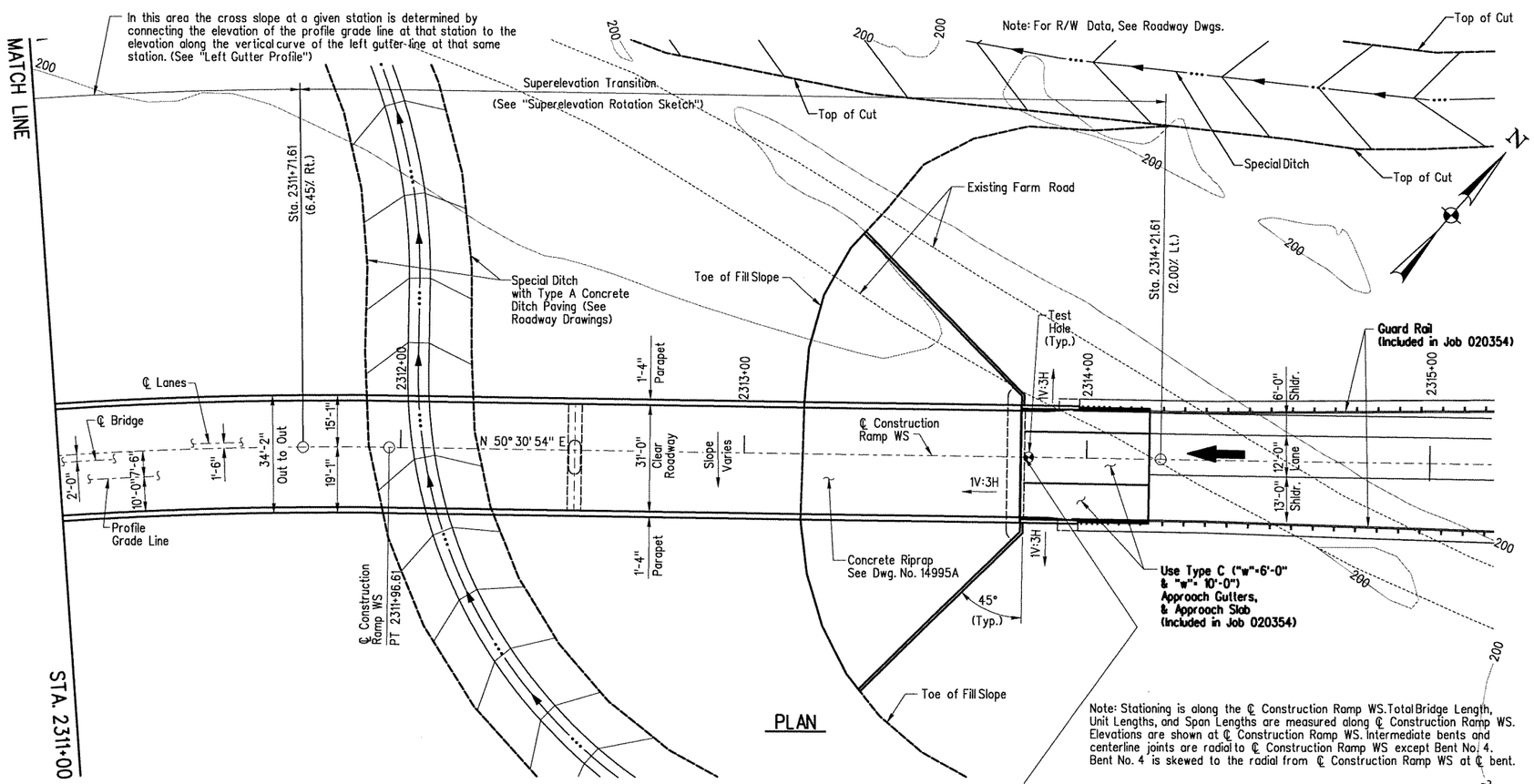
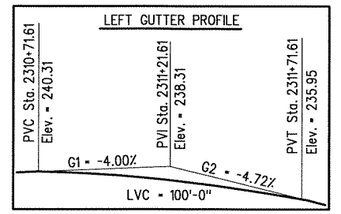
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		020354	103	156
				(1)	07101 - LAYOUT			



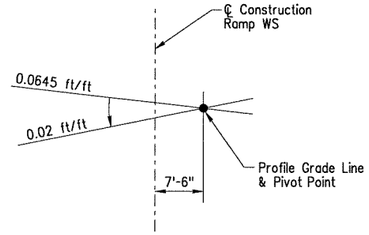
Note: Stationing is along the ℄ Construction Ramp WS. Total Bridge Length, Unit Lengths, and Span Lengths are measured along ℄ Construction Ramp WS. Elevations are shown at ℄ Construction Ramp WS. Intermediate bents and centerline joints are radial to ℄ Construction Ramp WS except Bent No. 4. Bent No. 4 is skewed to the radial from ℄ Construction Ramp WS at ℄ bent.

℄ CONSTRUCTION RAMP W-S HORIZONTAL CURVE DATA
P.I. = STA. 2307+47.54
R = 1183.50'
D = 4° 50'28.37"
Δ = 118° 59'23"
L = 2457.85'
T = 2008.77'
P.C. = STA. 2287+38.77
P.T. = STA. 2311+96.61



Note: The left gutter designation is in the direction of stationing.

Note: For General Notes, and vertical curve information. See Drawing No. 49097
For Boring Legend and Boring Blow Counts, See Drawing No. 49098



Note: Superelevation varies from 0.0645 ft/ft right at Sta. 2311+71.61 to 0.02 ft/ft left at Sta. 2314+21.61
See plan view for determing x-slope between Sta. 2310+71.61 to Sta. 2311+71.61

SUPERELEVATION ROTATION SKETCH

(Looking Ahead)

FOR INFORMATION ONLY

SHEET 5 OF 5

LAYOUT OF
RAMP WS OVER I-530
I-530 - CO. RD. 35 (BS. & SURF.) (F)
JEFFERSON COUNTY
ROUTE 530 SECTION 6
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARKANSAS

BRIDGE ENGINEER
PRINT DATE: 5/5/2011

DRAWN BY: WEG DATE: 2/22/06 FILENAME: B020352X3.LX5
CHECKED BY: RLW DATE: 8/7/06
DESIGNED BY: JRS DATE: 2/10/06 SCALE: 1"=20'
BRIDGE NO.07101 DRAWING NO.

Carter-Burgess

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3:55:02 PM
5/5/2011

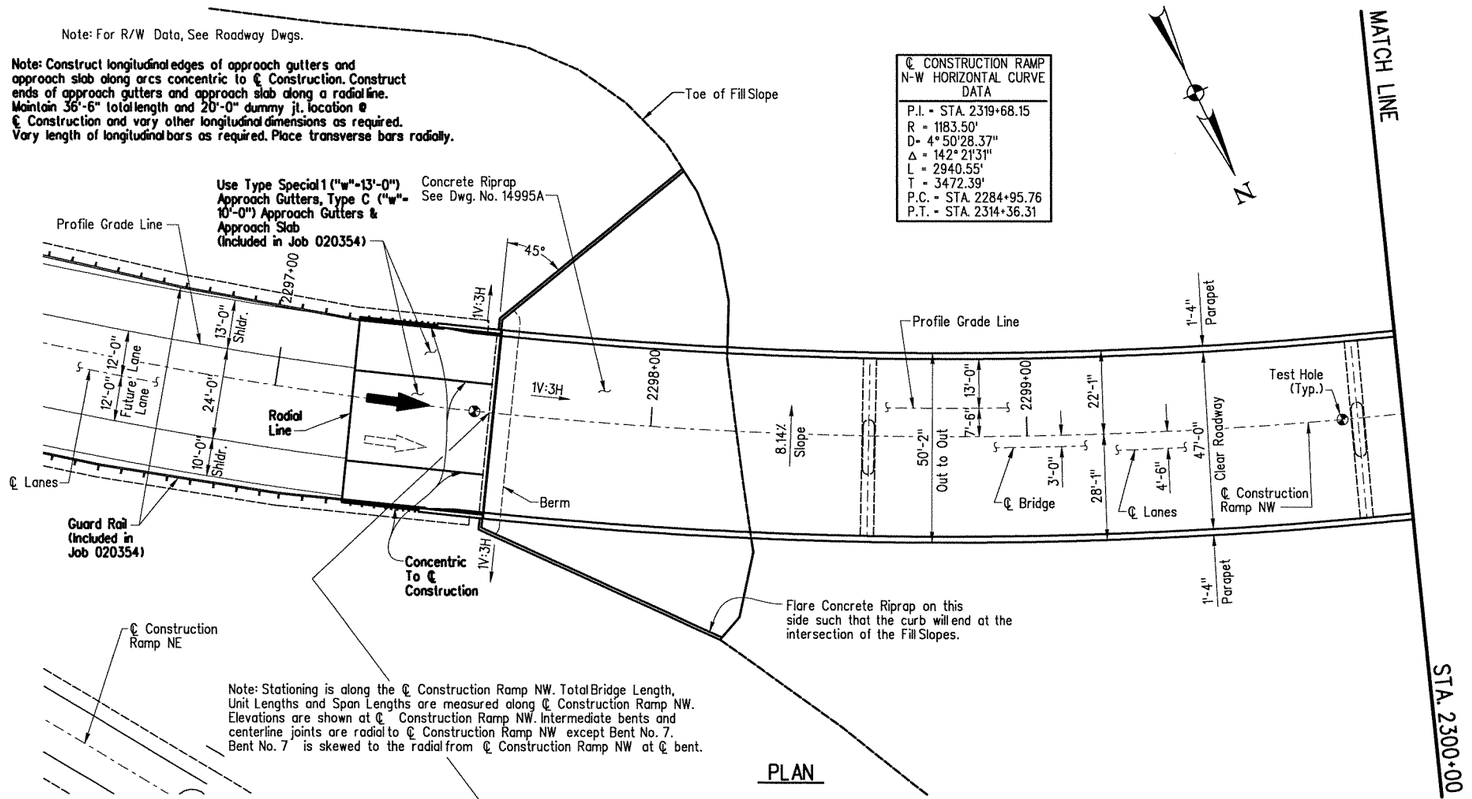
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		020354	104	156

(1) **07102 - LAYOUT**

Note: For R/W Data, See Roadway Dwgs.

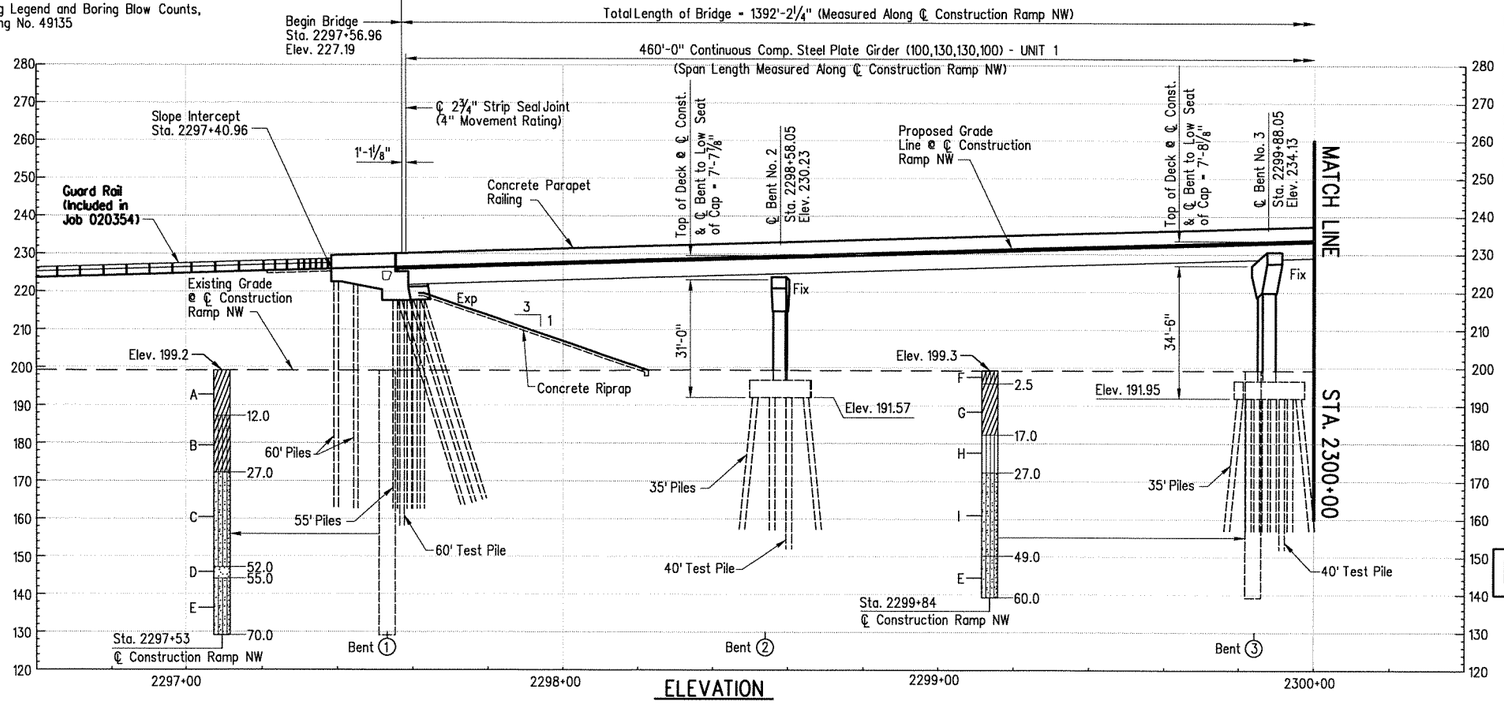
Note: Construct longitudinal edges of approach gutters and approach slab along arcs concentric to ℄ Construction. Construct ends of approach gutters and approach slab along a radial line. Maintain 36'-6" total length and 20'-0" dummy jt. location @ ℄ Construction and vary other longitudinal dimensions as required. Vary length of longitudinal bars as required. Place transverse bars radially.

℄ CONSTRUCTION RAMP N-W HORIZONTAL CURVE DATA
P.I. = STA. 2319+68.15
R = 1183.50'
D = 4°50'28.37"
Δ = 142°21'31"
L = 2940.55'
T = 3472.39'
P.C. = STA. 2284+95.76
P.T. = STA. 2314+36.31



PLAN

Note: For Boring Legend and Boring Blow Counts, See Drawing No. 49135



ELEVATION

GENERAL NOTES

BENCH MARK: Set rebar with Cap, 135.87' left of ℄ Construction Ramp N-W Sta. 2307+33.61, Elev. 209.67

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (2003 edition) with applicable supplemental specifications and special provisions. Unless otherwise noted in the plans, section and subsection refer to the Standard Construction Specifications.

DESIGN SPECIFICATIONS: AASHTO Standard Specifications for Highway Bridges (2002 edition) with current interim specifications, and AASHTO Guide Specifications for Horizontally Curved Steel Girder Highway Bridges (2003 Edition).

LIVE LOADING: HS20 and Alternate Military Load METHOD OF DESIGN: Load Factor SEISMIC PERFORMANCE CATEGORY: A

MATERIALS AND STRENGTHS:
Class S(AE) Concrete (superstructure)----------f'c=4,000 psi Class S Concrete (substructure) ----------f'c=3,500 psi
Reinforcing Steel (AASHTO M 31 or M 53, Gr.60) ---fy=60,000 psi Structural Steel (AASHTO M 270, Gr. 36) -----Fy=36,000 psi
Structural Steel (AASHTO M 270, Gr. 50) ---------- Fy=50,000 psi

BORING LOGS: Boring logs may be obtained from the Programs and Contracts Division.

CONCRETE PILING: Piling for Bents 1 through 12 shall be 16" square precast concrete. All piles shall be driven with an approved air, steam, or diesel hammer to a minimum safe bearing capacity of 55 tons per pile. Drive all piles to a minimum penetration of 15' below natural ground at Bents 1 and 12 and 15' below bottom of footing at Bents 2 through 11. Lengths of piling shown are assumed for estimating quantities only. Actual lengths to be determined in the field. A test pile shall be driven at each bent. See Elevation view for test pile lengths. See bent details for location of test piles. Piles in end bents shall be driven after embankment to bottom of cap is in place.

PREBORING: Preboring shall be required for all piles at Bent 7 to obtain minimum penetration requirements. Quantities of preboring shown are for bidding purposes only. Actual size and length to be determined in the field by the Engineer.

Preboring may be required at Bents 1 through 6 and 8 through 12 to obtain minimum penetration requirements. Test piles at Bents 1 through 6 and 8 through 12 shall be driven without preboring. The Engineer shall determine the need for preboring for all other piles to be driven in that bent. Preboring, if directed by the Engineer, will be paid for at the unit price bid for the pay item "Preboring".

The Contractor shall be responsible for keeping prebored holes free from debris prior to backfilling which may require the use of temporary casings or other methods. Temporary casings, if necessary, will not be paid for directly but will be considered subsidiary to the pay item "PREBORING".

FOOTINGS: The top of footings for Bents 2 through 11 shall be set a minimum of 2'-0" below top of natural ground. Foundations for footings shall be prepared in accordance with Section 801.04 and shall be backfilled in accordance with Section 801.08.

BRIDGE DECK: The concrete bridge deck shall be given a tine finish as specified for final finishing in Subsection 802.19 for Class 5 Tined Bridge Roadway Surface Finish.

TEXTURED COATING FINISH: Class 3 Textured Coating Finish shall be applied to bridge surfaces as specified in SP Job 020352 "Textured Coating Finish" and in accordance with Section 802.19.

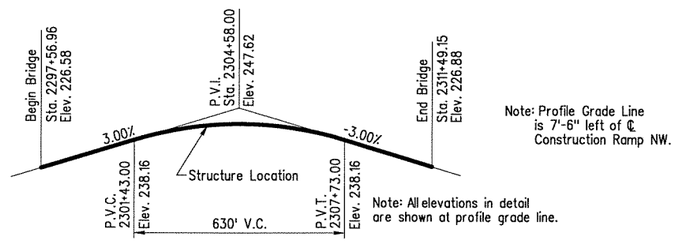
PROTECTIVE SURFACE TREATMENT: Class 1 Protective Surface Treatment shall be applied as required in the details. Class 1 Protective Surface Treatment shall meet the requirements of Section 803.

PAINTING: All structural steel except galvanized members, and some surfaces in contact with concrete, and as otherwise noted shall be painted as specified in Section 807.75. The color shall match the Federal Standard 595B, Color Chip No. 24097, Green.

FORM INSERT: State of Arkansas form insert shall be used at end bent wing walls (4 locations) See Dwg. No. 49174

DETAIL DRAWINGS:

	DRAWING NO.
End Bents	49138 - 49141
Intermediate Bents	49142 - 49153
460 ft Plate Girder Unit 1	49157 - 49160
600 ft Plate Girder Unit 2	49161 - 49165
330 ft Plate Girder Unit 3	49166 - 49169
Elastomeric Bearings	49173 & 49173B
Concrete Piles	2383
Form Insert	49174



PROFILE GRADE

FOR INFORMATION ONLY

SHEET 1 OF 4
LAYOUT OF RAMP NW OVER I-530
I-530 - CO. RD. 35 (BS. & SURF.) (F)
JEFFERSON COUNTY
ROUTE 530 SECTION 6
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARKANSAS

BRIDGE ENGINEER
PRINT DATE: 5/5/2011

DRAWN BY: WEG DATE: 2/15/06 FILENAME: B020352X4.LX1
CHECKED BY: RLW DATE: 2/17/06
DESIGNED BY: JRS DATE: 2/10/06 SCALE: 1"=20'
BRIDGE NO.07102 DRAWING NO.

Carter-Burgess

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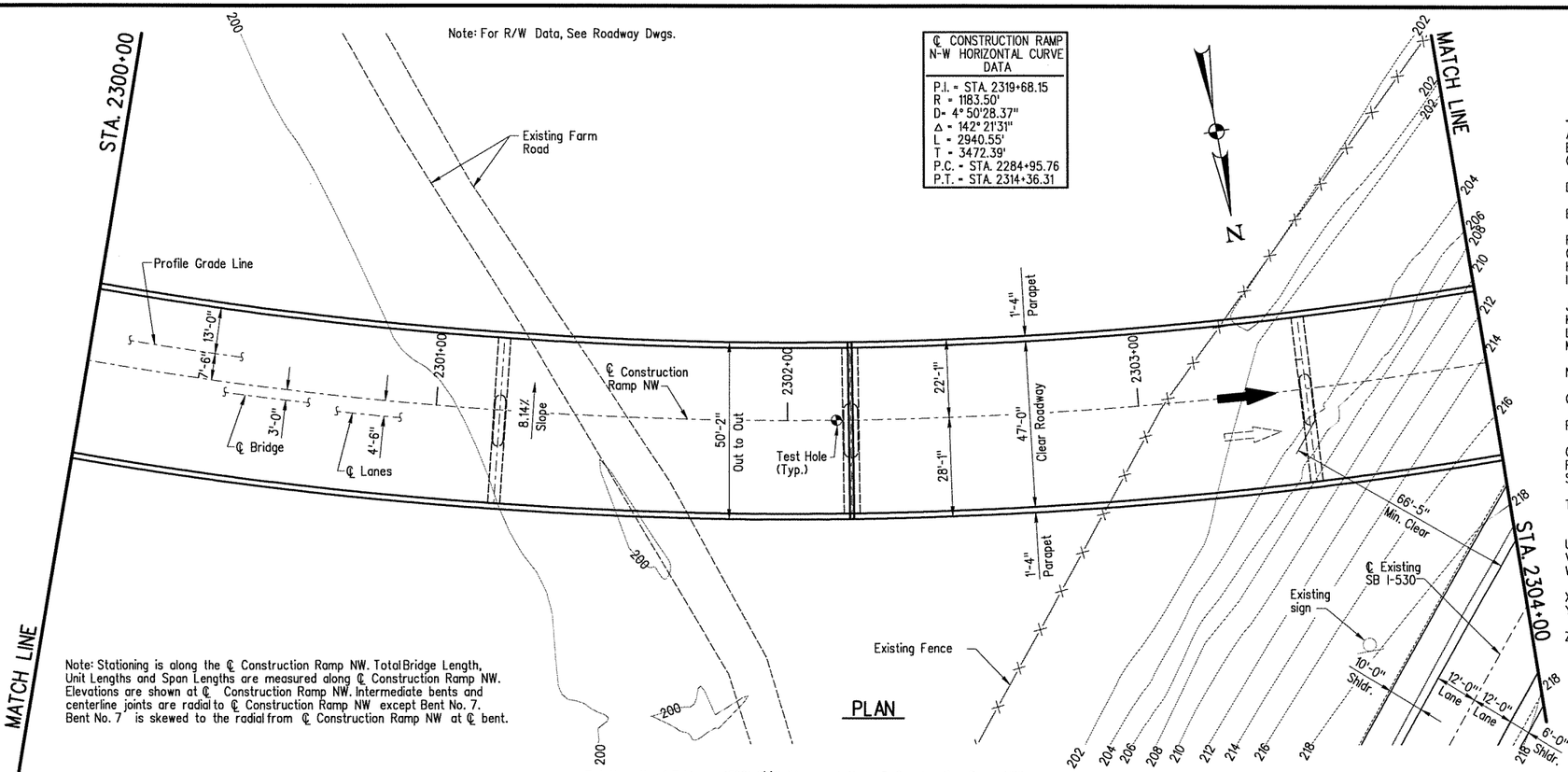
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		020354	105	156
				(1)	07102 - LAYOUT			

Note: For R/W Data, See Roadway Dwgs.

℄ CONSTRUCTION RAMP N-W HORIZONTAL CURVE DATA

P.I. = STA. 2319+68.15
R = 1183.50'
D= 4°50'28.37"
Δ = 142°21'31"
L = 2940.55'
T = 3472.39'
P.C. = STA. 2284+95.76
P.T. = STA. 2314+36.31



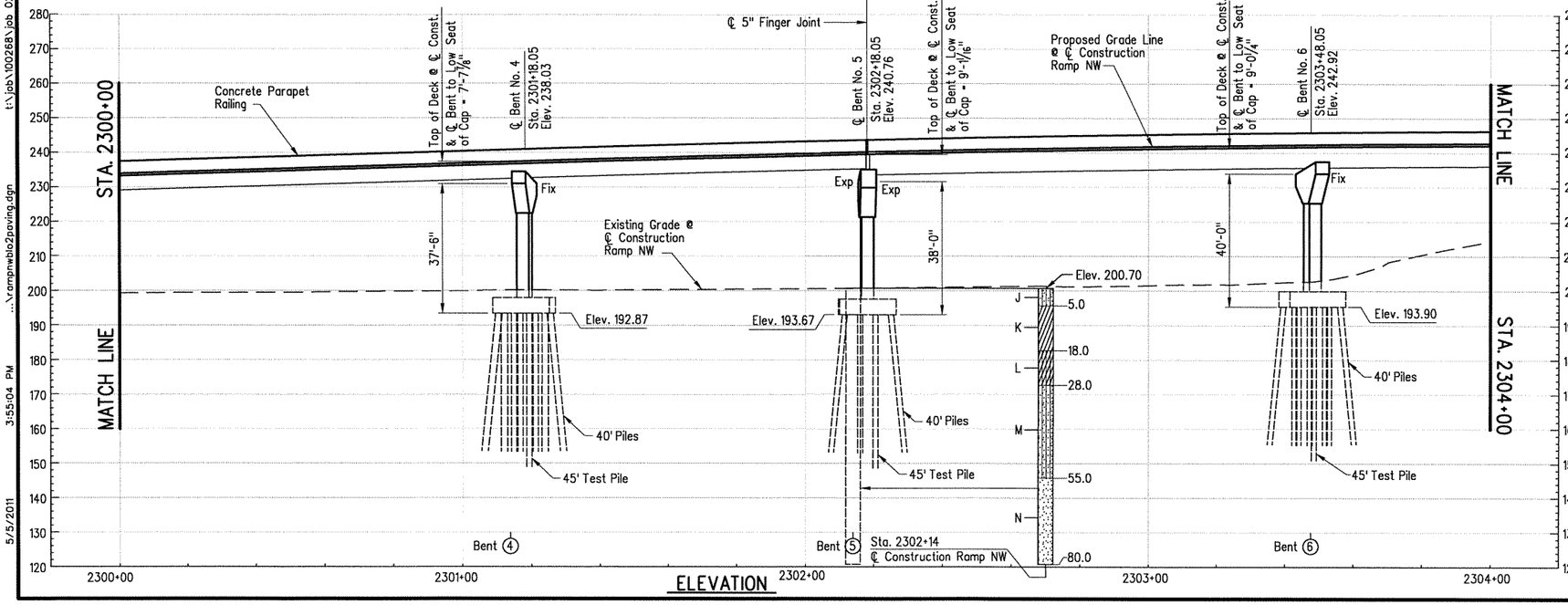
PLAN

Note: Stationing is along the ℄ Construction Ramp NW. Total Bridge Length, Unit Lengths and Span Lengths are measured along ℄ Construction Ramp NW. Elevations are shown at ℄ Construction Ramp NW. Intermediate bents and centerline joints are radial to ℄ Construction Ramp NW except Bent No. 7. Bent No. 7 is skewed to the radial from ℄ Construction Ramp NW at ℄ bent.

Total Length of Bridge = 1392'-2¼" (Measured Along ℄ Construction Ramp NW)

460'-0" Continuous Comp. Steel Plate Girder (100,130,130,100) - UNIT 1
(Span Length Measured Along ℄ Construction Ramp NW)

600'-0" Continuous Comp. Steel Plate Girder (130,170,170,130) - UNIT 2
(Span Length Measured Along ℄ Construction Ramp NW)



ELEVATION

BORING LEGEND

A - Stiff dark brown to brown clay w/rootlets
B - Firm brown and gray silty clay
C - Medium dense to dense brown and gray silty fine sand w/ clay seams
D - Very dense gray and brown fine to coarse sand
E - Very dense brown and gray silty fine sand w/ trace fine gravel
F - Firm to stiff dark brown silty clay w/organics
G - Stiff brown and gray clay
H - Loose brown silt w/ clay seams and pockets
I - Medium dense to very dense dark brown and gray silty fine sand w/clay pockets
J - Loose reddish brown silty fine sand, damp
K - Stiff dark brown to brown and gray clay
L - Soft to firm brown clayey silt
M - Medium dense to dense brown and gray silty fine sand w/gravel and decayed organics
N - Dense to very dense brownish gray fine to medium sand, slightly silty w/ fine gravel
O - Firm to stiff brown and gray silty clay, sandy w/ surface organics
P - Very stiff grayish brown and tan clay w/fine sand pockets
Q - Very dense brown silty fine sand
R - Stiff to firm brown and gray clay
S - Loose to medium dense brown and gray silt, slightly sandy w/decayed organics
T - Medium dense to very dense tan and gray medium to coarse sand, slightly silty w/ gravel and clay seams
U - Soft brown silty clay
V - Stiff to very stiff brown clay
W - Medium dense gray and brown clayey fine sand w/decayed organics and ferrous stains
X - Medium dense gray silty fine sand w/fine gravel
Y - Medium dense gray and tan fine to medium sand w/fine to coarse gravel
Z - Very dense reddish brown and tan silty fine to medium sand w/ fine to coarse gravel

AA - Soft brown clay w/ rootlets
BB - Medium dense brown silty fine sand, slightly clayey
CC - Stiff brown clay w/ferrous stains and fine sand seams
DD - Soft gray clay
EE - Medium dense gray silty fine sand
FF - Medium dense brown, gray, and tan silty fine to medium sand w/ fine to coarse gravel
GG - Dense to very dense gray, brown and tan fine to medium sand slightly silty
HH - Firm brown silty clay w/ organics
II - Loose brown fine sandy silt w/ clay seams
JJ - Firm brown clay, sandy
KK - Firm gray and tan clayey silt
LL - Stiff reddish brown and tan silty clay w/ fine sand
MM - Stiff to very stiff reddish brown and tan clay w/ sand pockets
NN - Medium dense to dense gray and brown silty fine sand w/ clay pockets
OO - Very dense gray and brown fine to medium sand, slightly silty w/ decayed organics

BORING BLOW COUNTS

Ramp NW Sta. 2297+53, ℄ Ramp

19.0-20.0, N=10
24.0-25.0, N=9
29.0-30.0, N=23
34.0-35.0, N=31
39.0-40.0, N=33
44.0-45.0, N=37
49.0-50.0, N=45
54.0-55.0, N=50(11")
59.0-60.0, N=50(12")
64.0-65.0, N=50(10")
69.0-70.0, N=50(11")

Ramp NW Sta. 2299+84, ℄ Ramp

19.0-20.0, N=7
24.0-25.0, N=10
29.0-30.0, N=25
34.0-35.0, N=30
39.0-40.0, N=34
44.0-45.0, N=50(12")
49.0-50.0, N=50(12")
54.0-55.0, N=50(11")
59.0-60.0, N=50(11")

Ramp NW Sta. 2302+14, ℄ Ramp

4.5-5.5, N=14
29.0-30.0, N=16
34.0-35.0, N=23
39.0-40.0, N=25
44.0-45.0, N=34
49.0-50.0, N=34
54.0-55.0, N=43
59.0-60.0, N=47
64.0-65.0, N=50(12")
69.0-70.0, N=50(11")
74.0-75.0, N=50(10")
79.0-80.0, N=50(10")

Ramp NW Sta. 2305+14, ℄ Ramp

0.5-1.5, N=7
2.5-3.5, N=17
4.0-5.0, N=10
6.5-7.5, N=29
9.0-10.0, N=50(10")
14.0-15.0, N=14
19.0-20.0, N=11
24.0-25.0, N=5
29.0-30.0, N=11
34.0-35.0, N=9
39.0-40.0, N=18
44.0-45.0, N=21
49.0-50.0, N=50
54.0-55.0, N=50
59.0-60.0, N=50(9")
64.0-65.0, N=50(11")
69.0-70.0, N=50(8")

Ramp NW Sta. 2306+84, ℄ Ramp

4.5-5.5, N=17
6.5-7.5, N=20
19.0-20.0, N=23
24.0-25.0, N=28
29.0-30.0, N=26
34.0-35.0, N=37
39.0-40.0, N=50(11")
44.0-45.0, N=50(11")
49.0-50.0, N=50(10")
54.0-55.0, N=36
59.0-60.0, N=50(12")

Ramp NW Sta. 2309+14, ℄ Ramp

9.0-10.0, N=16
34.0-35.0, N=20
39.0-40.0, N=33
44.0-45.0, N=26
49.0-50.0, N=17
54.0-55.0, N=43
59.0-60.0, N=50(11")
64.0-65.0, N=50(9")
69.0-70.0, N=50(9")

Ramp NW Sta. 2311+59, ℄ Ramp

4.5-5.5, N=9
6.5-7.5, N=8
9.0-10.0, N=7
14.0-15.0, N=5
19.0-20.0, N=7
24.0-25.0, N=9
29.0-30.0, N=7
34.0-35.0, N=14
39.0-40.0, N=22
44.0-45.0, N=26
49.0-50.0, N=29
54.0-55.0, N=48
59.0-60.0, N=50(11")
64.0-65.0, N=50(10")
69.0-70.0, N=50(10")

Note: For General Notes, and vertical alignment information. See Drawing No. 49134

SHEET 2 OF 4
LAYOUT OF
RAMP NW OVER I-530
I-530 - CO. RD. 35 (BS. & SURF.) (F)
JEFFERSON COUNTY
ROUTE 530 SECTION 6
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARKANSAS

FOR INFORMATION ONLY

BRIDGE ENGINEER
PRINT DATE: 5/5/2011

DRAWN BY: WEG DATE: 2/15/06
CHECKED BY: RLW DATE: 2/17/06
DESIGNED BY: JRS DATE: 2/10/06
BRIDGE NO. 07102 DRAWING NO.
FILENAME: B020352X4.LX2
SCALE: 1"=20'

Carter-Burgess

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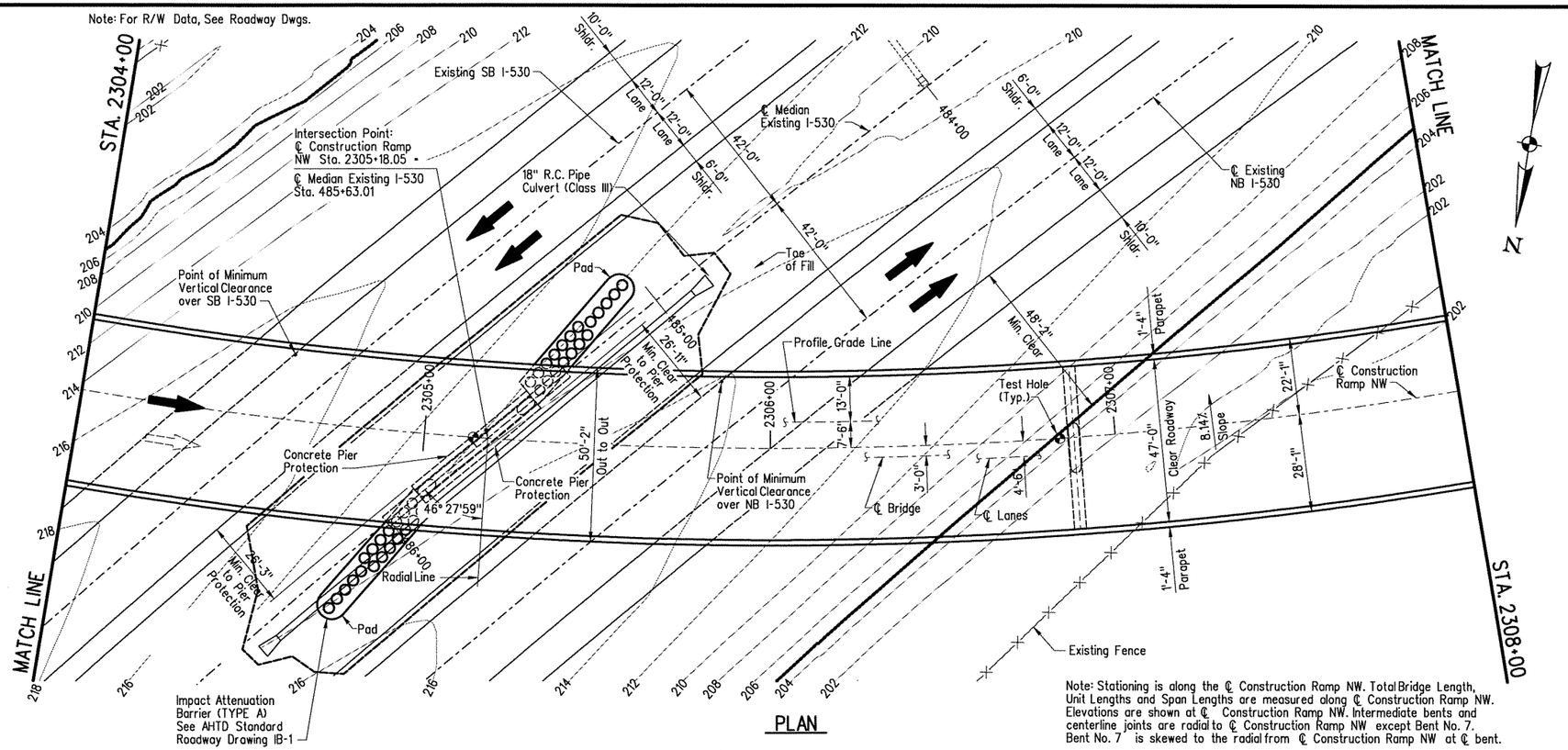
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		020354	106	156
				(1)	07102 - LAYOUT			

Note: For R/W Data, See Roadway Dwgs.



PLAN

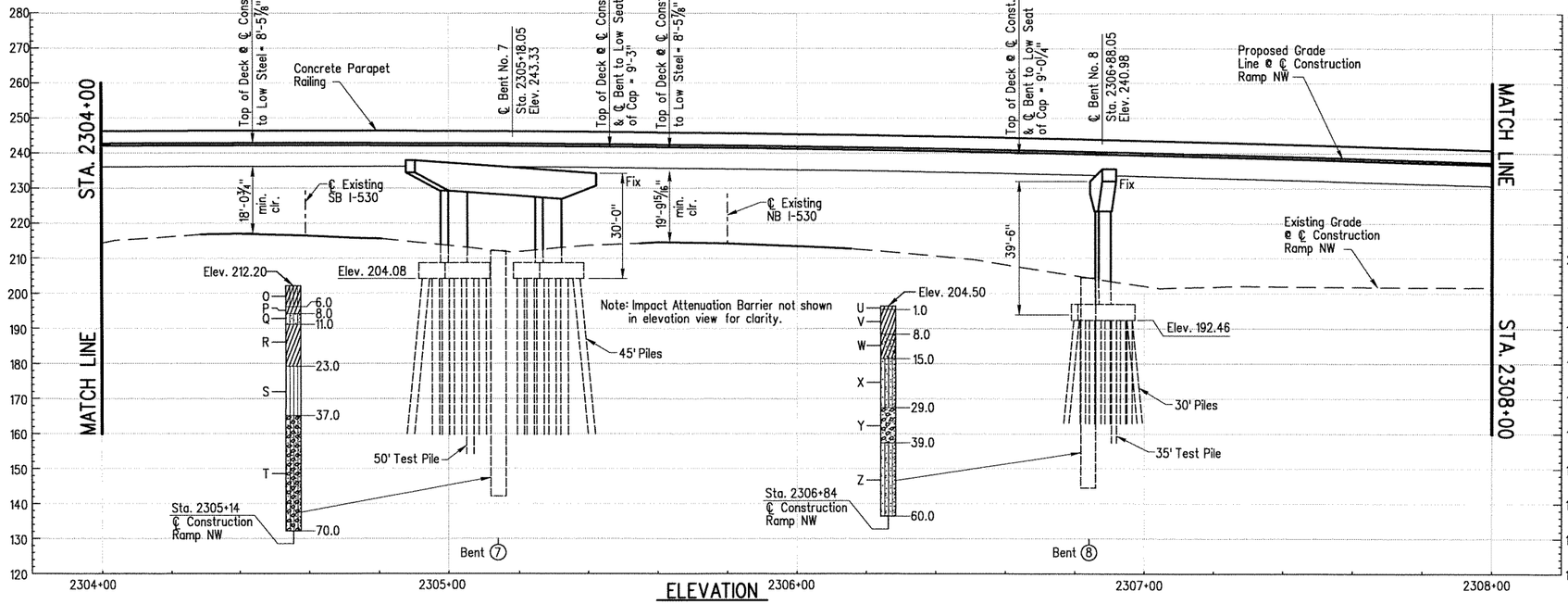
Note: Stationing is along the ℄ Construction Ramp NW. Total Bridge Length, Unit Lengths and Span Lengths are measured along ℄ Construction Ramp NW. Elevations are shown at ℄ Construction Ramp NW. Intermediate bents and centerline joints are radial to ℄ Construction Ramp NW except Bent No. 7. Bent No. 7 is skewed to the radial from ℄ Construction Ramp NW at ℄ bent.

℄ CONSTRUCTION RAMP N-W HORIZONTAL CURVE DATA
P.I. = STA. 2319+68.15
R = 1183.50'
D = 4° 50'28.37"
Δ = 142° 21'31"
L = 2940.55'
T = 3472.39'
P.C. = STA. 2284+95.76
P.T. = STA. 2314+36.31

℄ MEDIAN EXISTING I-530 CURVE DATA
P.I. = STA. 473+64.06
R = 4583.66'
D = 1° 15'00"
Δ = 65° 54'40"
L = 5272.89'
T = 2971.61'
P.C. = STA. 443+92.45
P.T. = STA. 496+65.34

Total Length of Bridge = 1392'-2¼" (Measured Along ℄ Construction Ramp NW)

600'-0" Continuous Comp. Steel Plate Girder (130,170,170,130) - UNIT 2
(Span Length Measured Along ℄ Construction Ramp NW)



ELEVATION

Note: For General Notes and vertical alignment information See Drawing No. 49134
For Boring Legend and Blow Counts See Drawing No. 49135

FOR INFORMATION ONLY

SHEET 3 OF 4
LAYOUT OF
RAMP NW OVER I-530
I-530 - CO. RD. 35 (BS. & SURF.) (F)
JEFFERSON COUNTY
ROUTE 530 SECTION 6
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARKANSAS

BRIDGE ENGINEER
PRINT DATE: 5/5/2011

DRAWN BY: WEG DATE: 2/15/06
CHECKED BY: RLW DATE: 2/17/06
DESIGNED BY: JRS DATE: 2/10/06
BRIDGE NO.07102
DRAWING NO.
FILENAME: B020352X4.LX3
SCALE: 1"=20'

Carter::Burgess

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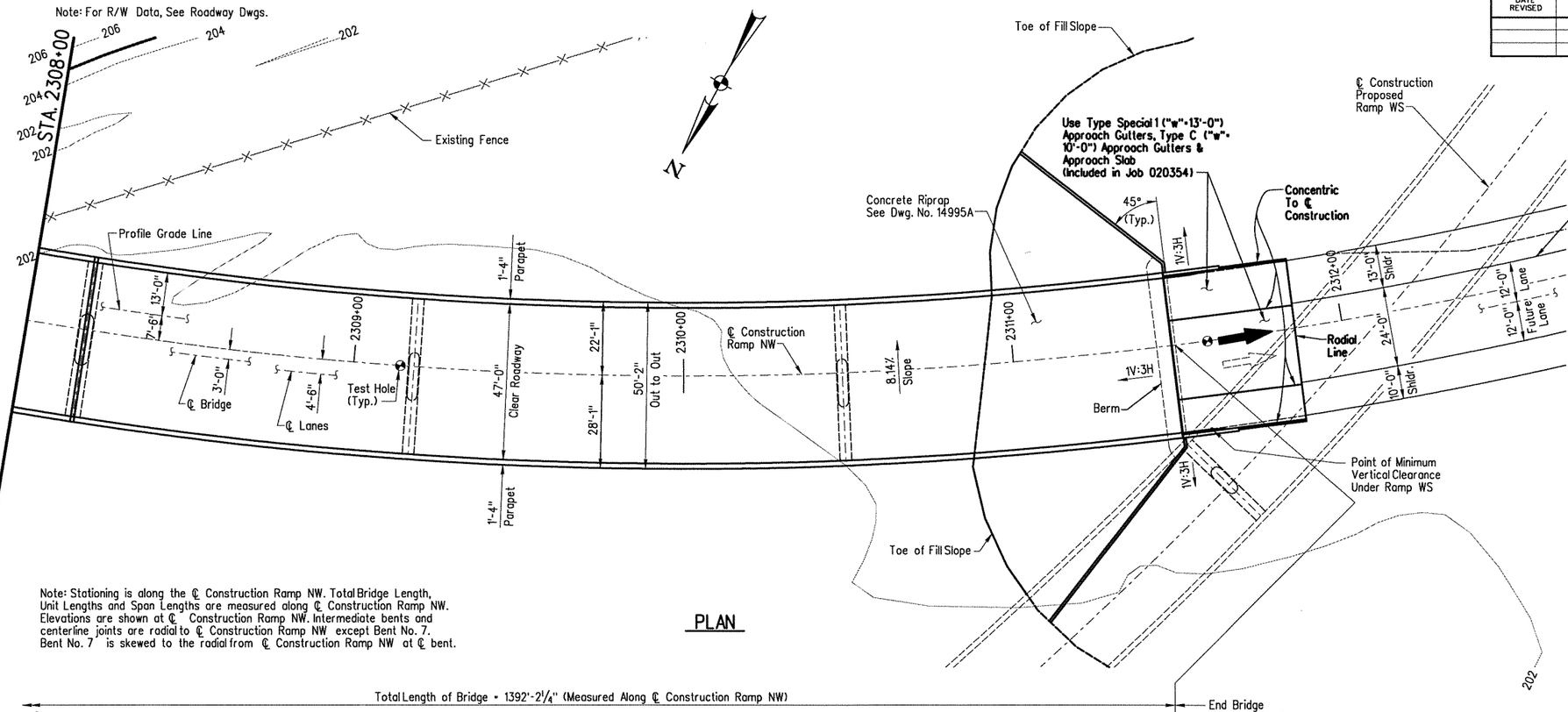
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		020354	107	156
				(1)	07102 - LAYOUT			

Note: For R/W Data, See Roadway Dwgs.



PLAN

Note: Stationing is along the ℄ Construction Ramp NW. Total Bridge Length, Unit Lengths and Span Lengths are measured along ℄ Construction Ramp NW. Elevations are shown at ℄ Construction Ramp NW. Intermediate bents and centerline joints are radial to ℄ Construction Ramp NW except Bent No. 7. Bent No. 7 is skewed to the radial from ℄ Construction Ramp NW at ℄ bent.

Note: Construct longitudinal edges of approach gutters and approach slab along arcs concentric to ℄ Construction. Construct ends of approach gutters and approach slab along a radial line. Maintain 36'-6" total length and 20'-0" dummy jt. location @ ℄ Construction and vary other longitudinal dimensions as required. Vary length of longitudinal bars as required. Place transverse bars radially.

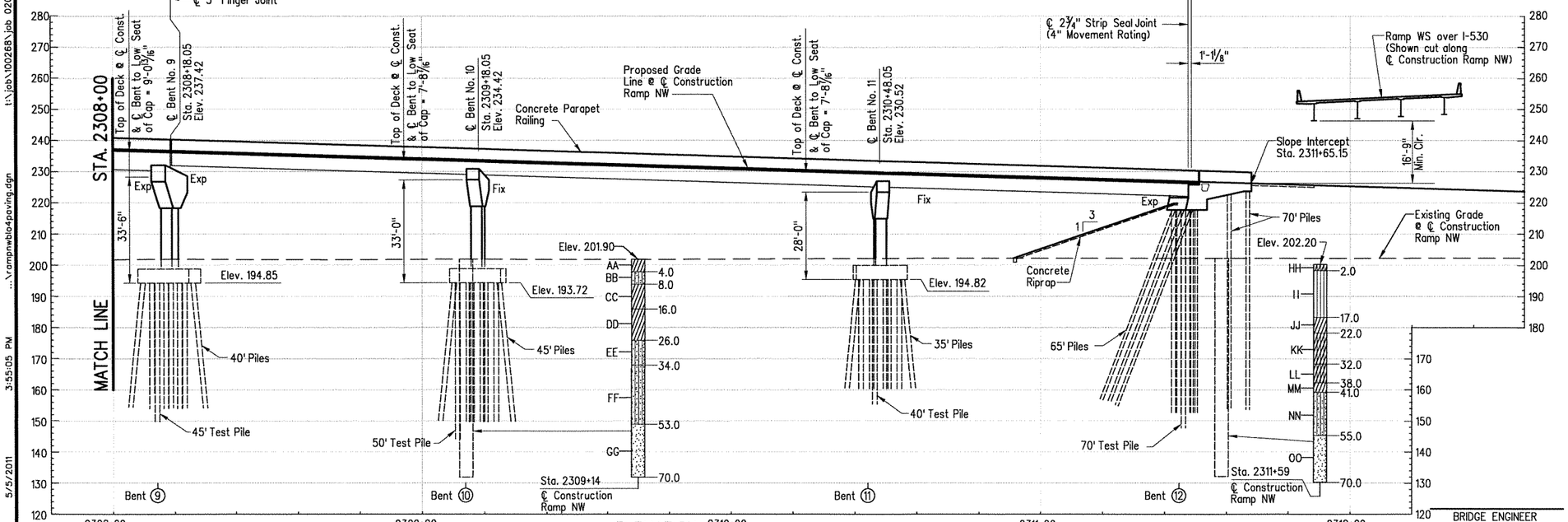
℄ CONSTRUCTION RAMP W-S HORIZONTAL CURVE DATA
P.I. = STA. 2307+47.54
R = 1183.50'
D = 4°50'28.37"
Δ = 118°59'23"
L = 2457.85'
T = 2008.77'
P.C. = STA. 2287+38.77
P.T. = STA. 2311+96.61

Total Length of Bridge = 1392'-2¼" (Measured Along ℄ Construction Ramp NW)

End Bridge Sta. 2311+49.15 Elev. 227.49

600'-0" Continuous Comp. Steel Plate Girder (130,170,170,130) - UNIT 2

330'-0" Continuous Comp. Steel Plate Girder (100,130,100) - UNIT 3 (Span Length Measured Along ℄ Construction Ramp NW)



ELEVATION

℄ CONSTRUCTION RAMP N-W HORIZONTAL CURVE DATA
P.I. = STA. 2319+68.15
R = 1183.50'
D = 4°50'28.37"
Δ = 142°21'31"
L = 2940.55'
T = 3472.39'
P.C. = STA. 2284+95.76
P.T. = STA. 2314+36.31

Note: For General Notes and vertical curve information See Drawing No. 49134.
For Boring Legend and Blow Counts See Drawing No. 49135.

FOR INFORMATION ONLY

BRIDGE ENGINEER
PRINT DATE: 5/5/2011

SHEET 4 OF 4
LAYOUT OF
RAMP NW OVER I-530
I-530 - CO. RD. 35 (BS. & SURF.) (F)
JEFFERSON COUNTY
ROUTE 530 SECTION 6
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARKANSAS

DRAWN BY: WEG DATE: 2/15/06 FILENAME: B020352X4.LX4
CHECKED BY: RLW DATE: 2/17/06
DESIGNED BY: JRS DATE: 2/10/06 SCALE: 1"=20'
BRIDGE NO. 07102 DRAWING NO.

Carter-Burgess

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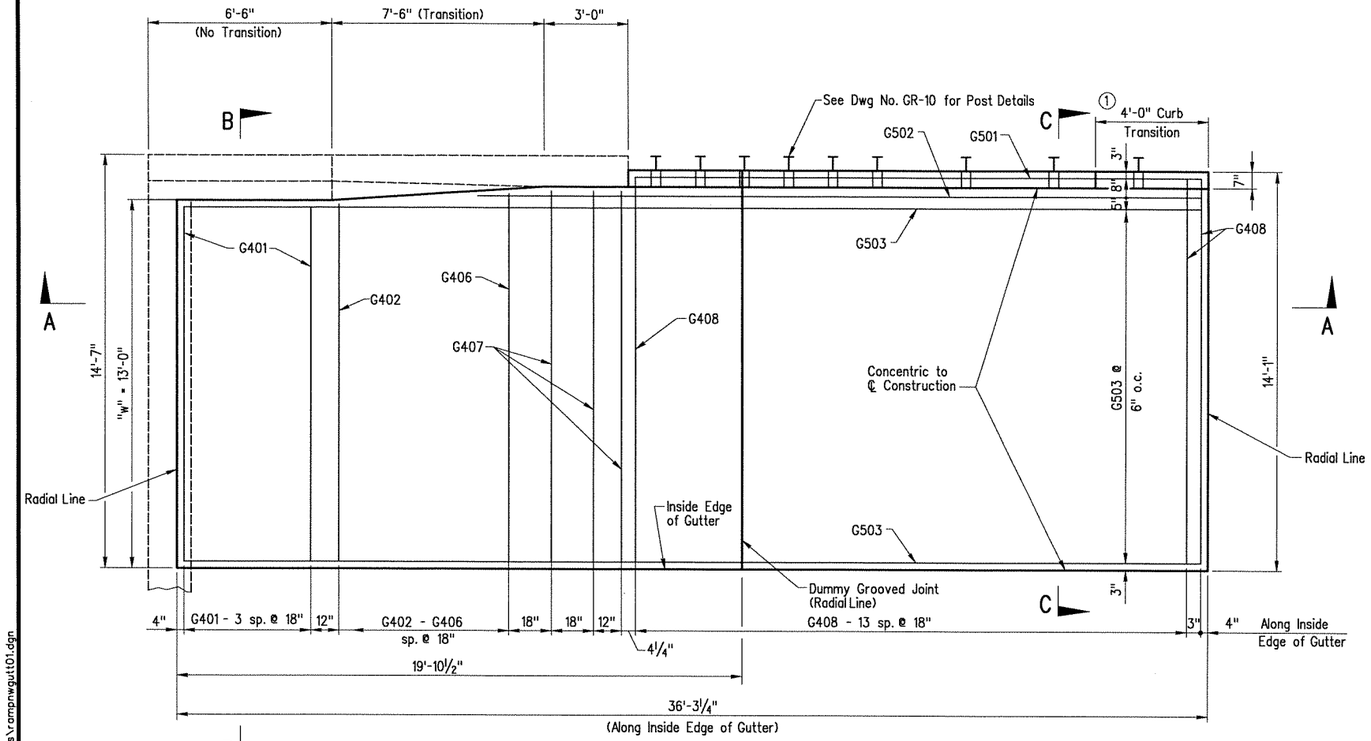
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		020354	108	156

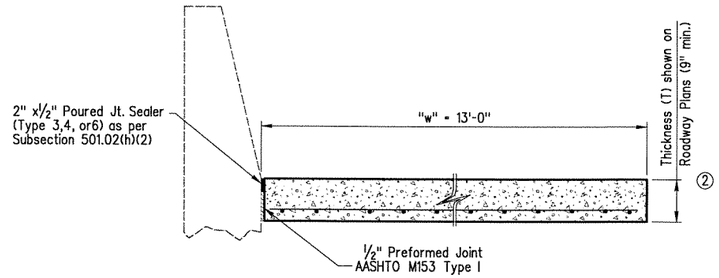
① 07102 - TYPE SPEC GUTTER - 50271



PLAN OF APPROACH GUTTERS

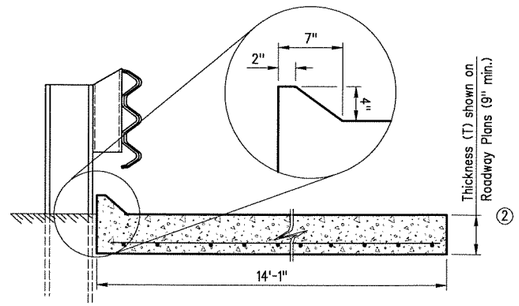
(No Scale)

Note: Construct gutters on arcs concentric to ℄ Construction. Place longitudinal bars on arcs concentric to ℄ Construction. Place transverse bars radially.



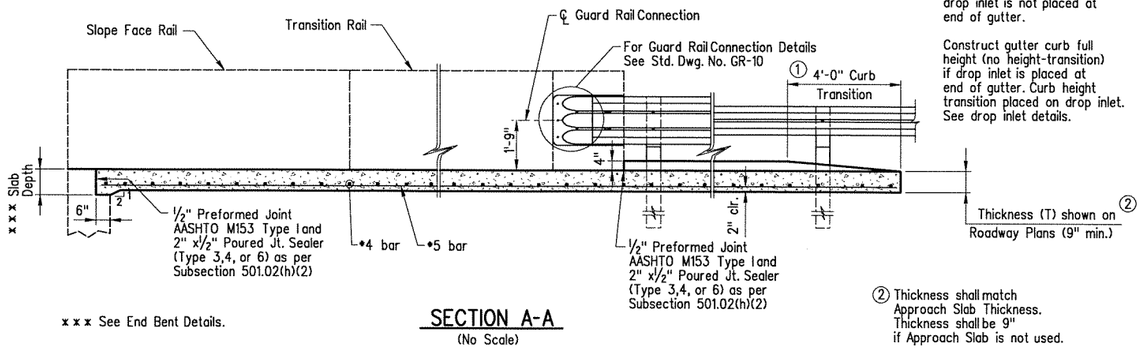
SECTION B-B

(No Scale)



SECTION C-C

(No Scale)



xxx See End Bent Details.

SECTION A-A

(No Scale)

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

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

② Thickness shall match Approach Slab Thickness. Thickness shall be 9" if Approach Slab is not used.

QUANTITIES FOR TYPE SPECIAL APPROACH GUTTER

Bridge	Bent	Shoulder Width (ft.)	Reinforcing Steel (lbs.)	Concrete (cubic yds) T-14½"
07102	Bent 1	13'-0"	1254	22.18
	Bent 12	13'-0"	1254	22.18

BARS LIST FOR ONE TYPE SPECIAL APPROACH GUTTER

Mark	Bridge No. 07102			
	Bt.1		Bt.12	
	No.	Length	No.	Length
G401	4	12'-8"	4	12'-8"
G402 to G406	1 Each	12'-7" to 13'-0"	1 Each	12'-7" to 13'-0"
G407	3	13'-1"	3	13'-1"
G408	15	13'-9"	15	13'-9"
G501	1	19'-6"	1	19'-6"
G502	1	25'-1"	1	25'-1"
G503	26	35'-8"	26	35'-8"

GENERAL NOTES

Concrete shall be Class S or Class S(AE) or mixture used for Portland Cement Concrete Pavement (f'c = 4,000 psi).

Reinforcement Steel shall conform to AASHTO M31 or M53, Grade 60 (fy = 60,000 psi).

Approach Gutters will be measured and paid for in accordance with Section 504 of the Standard Specifications.

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 8975 ROBERT L. WILCOXON

BRIDGE ENGINEER
PRINT DATE: 5/6/2011

DETAILS OF TYPE SPECIAL 1 APPROACH GUTTERS RAMP NW OVER I-530 I-530 - CO. RD. 35 (BS. & SURF.) (F) JEFFERSON COUNTY ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARKANSAS

DRAWN BY: WEG DATE: 2/26/08 FILENAME: B020354X2.GX4
CHECKED BY: JRS DATE: 8/19/08
DESIGNED BY: WEG DATE: 2/26/08 SCALE: No Scale
BRIDGE NO. 07102 DRAWING NO. 50271

Carter::Burgess

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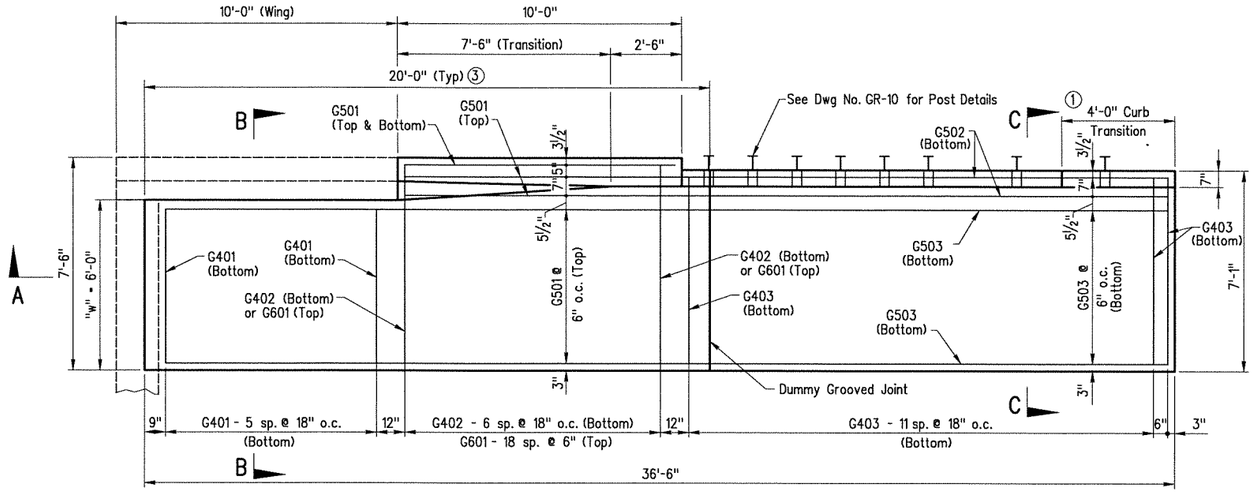
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		020354	109	156

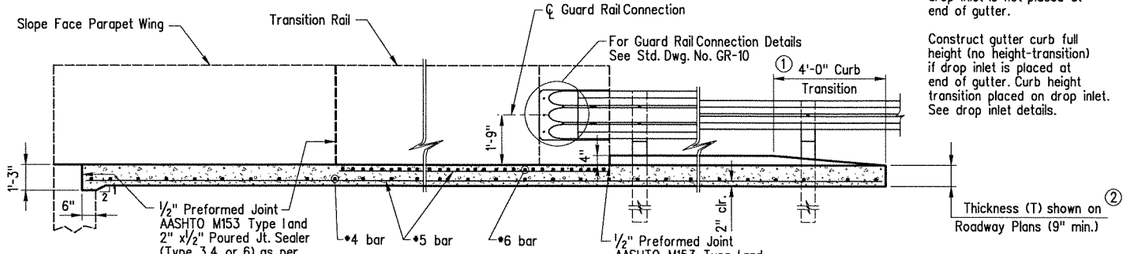
(1) B7129 - TYPE SPEC GUTTER - 50272



PLAN OF APPROACH GUTTERS

(No Scale)

③ Dummy Groove Joints in Approach Gutters shall align with the Dummy Groove Joints in the Approach Slabs.



SECTION A-A

(No Scale)

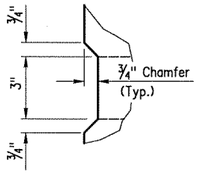
① Construct gutter curb with height-transition as shown if drop inlet is not placed at end of gutter.

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

② Thickness shall match Approach Slab Thickness. Thickness shall be 9" if Approach Slab is not used.

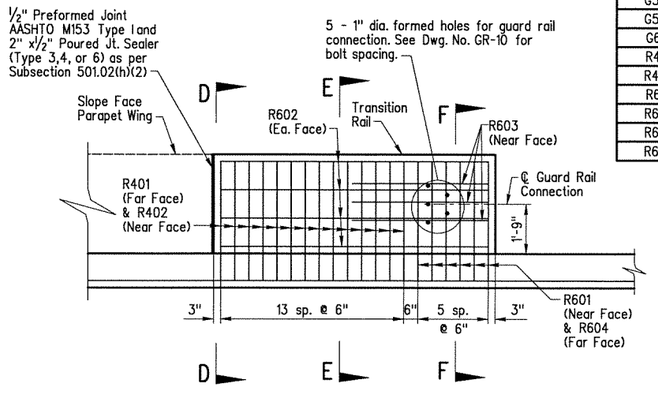
QUANTITIES FOR ONE TYPE SPECIAL APPROACH GUTTER

Bridge	Bent	Shoulder Width (ft.)	Reinforcing Steel (lbs.)	Concrete (cubic yds)
				T=14½"
B7129	Bent 1	6'-0"	1334	12.81
	Bent 4	6'-0"	1334	12.81



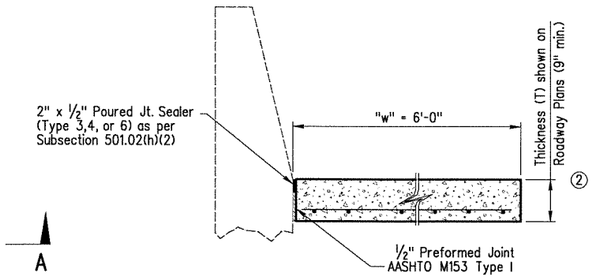
DETAIL Y

(No Scale)



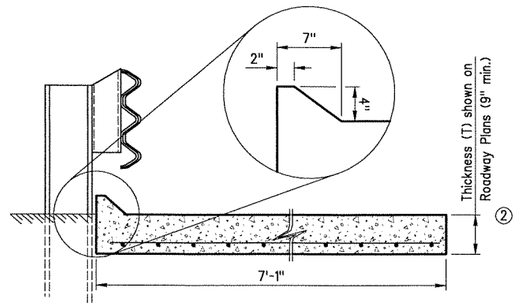
ELEVATION OF TRANSITION RAIL

(No Scale)



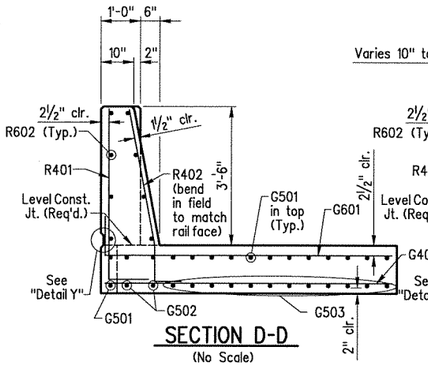
SECTION B-B

(No Scale)



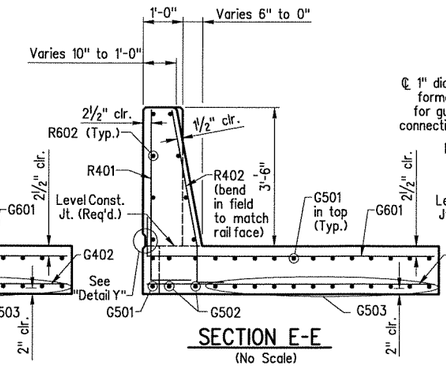
SECTION C-C

(No Scale)



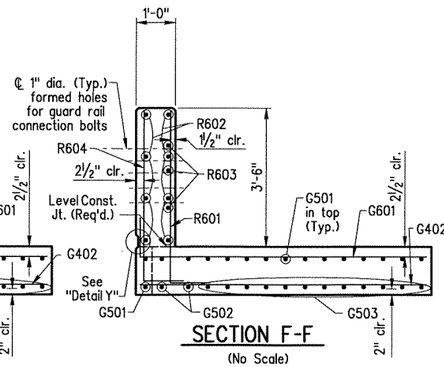
SECTION D-D

(No Scale)



SECTION E-E

(No Scale)

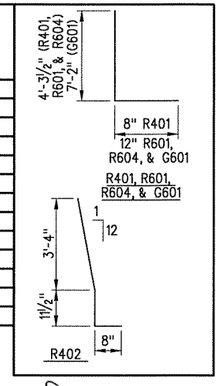


SECTION F-F

(No Scale)

BARS LIST FOR ONE TYPE SPECIAL APPROACH GUTTER

Mark	Bridge No. B7129 Bt.1 No.	Bt.1 Length	Bt.4 No.	Bt.4 Length	Pin Dia.
G401	6	5'-8"	6	5'-8"	----
G402	7	7'-2"	7	7'-2"	----
G403	13	6'-9"	13	6'-9"	----
G501	16	9'-8"	16	9'-8"	----
G502	2	27'-2"	2	27'-2"	----
G503	12	36'-2"	12	36'-2"	----
G601	19	8'-0"	19	8'-0"	4½"
R401	14	4'-10"	14	4'-10"	3"
R402	14	4'-10"	14	4'-10"	3"
R601	6	5'-1"	6	5'-1"	4½"
R602	8	9'-8"	8	9'-8"	----
R603	3	4'-11"	3	4'-11"	----
R604	6	5'-1"	6	5'-1"	4½"



GENERAL NOTES

Concrete shall be Class S or Class S(AE) or mixture used for Portland Cement Concrete Pavement (f'c = 4,000 psi).

Reinforcement Steel shall conform to AASHTO M31 or M53, Grade 60 (fy = 60,000 psi).

Approach Gutters will be measured and paid for in accordance with Section 504 of the Standard Specifications.

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 8975 ROBERT L. WILCOX, JR. 5/11

BRIDGE ENGINEER
PRINT DATE: 5/6/2011

DETAILS OF TYPE SPECIAL 2 APPROACH GUTTERS NB BRIDGE OVER SANDY BAYOU I-530 - CO. RD. 35 (BS. & SURF.) (F) JEFFERSON COUNTY ARKANSAS STATE HIGHWAY COMMISSION LITTLE ROCK, ARKANSAS

DRAWN BY: WEG DATE: 2/26/08 FILENAME: B020354X2.GX3
CHECKED BY: JRS DATE: 8/11/08
DESIGNED BY: WEG DATE: 2/26/08 SCALE: No Scale
BRIDGE NO. B7129 DRAWING NO. 50272

Carter-Burgess

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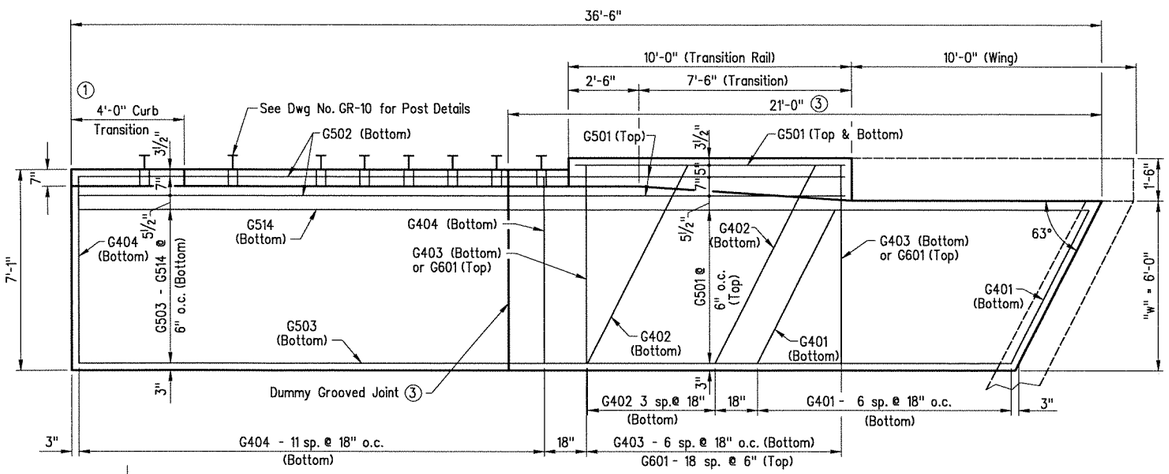
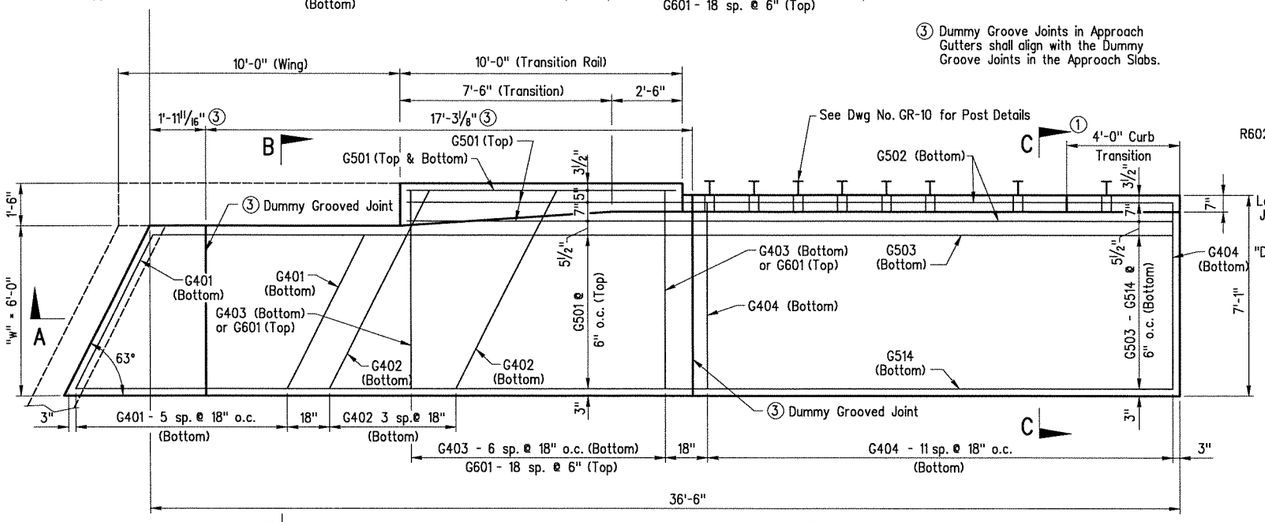
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		020354	110	156

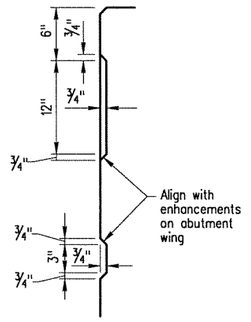
(1) B7130 - TYPE SPEC GUTTER - 50273



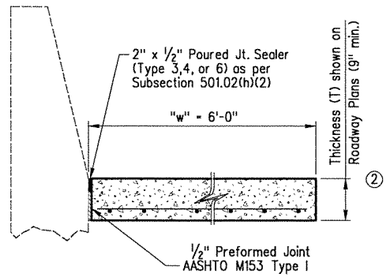
(3) Dummy Groove Joints in Approach Gutters shall align with the Dummy Groove Joints in the Approach Slabs.



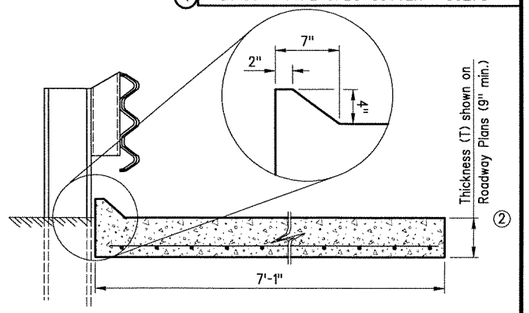
PLAN OF APPROACH GUTTERS



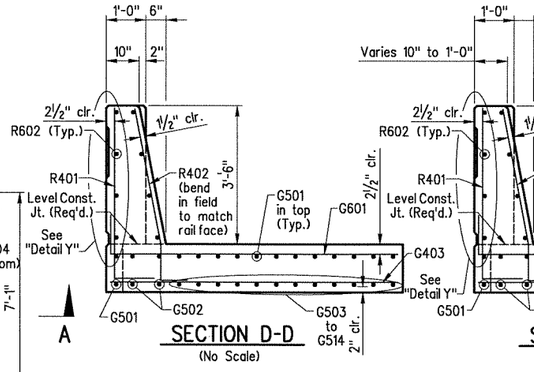
DETAIL Y
(No Scale)



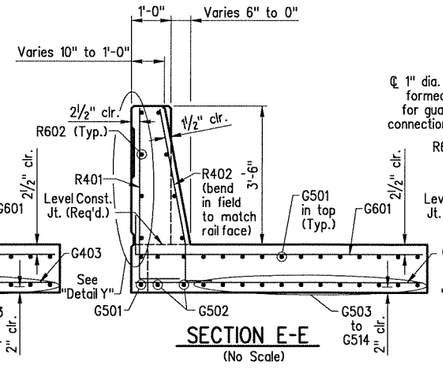
SECTION B-B
(No Scale)



SECTION C-C
(No Scale)



SECTION D-D
(No Scale)



SECTION E-E
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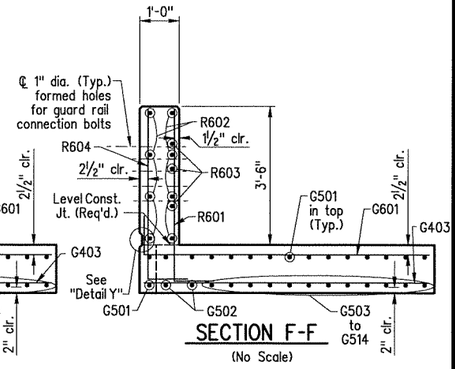


SECTION F-F
(No Scale)

GENERAL NOTES

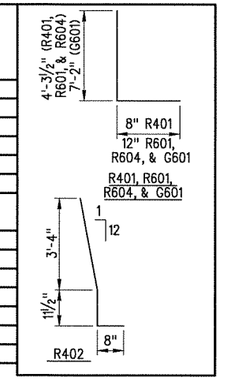
Concrete shall be Class S or Class S(AE) or mixture used for Portland Cement Concrete Pavement (f'c = 4,000 psi).

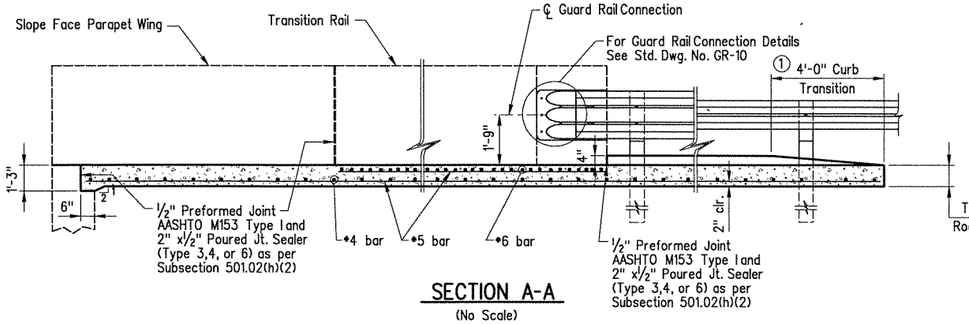
Reinforcement Steel shall conform to AASHTO M31 or M53, Grade 60 (fy = 60,000 psi).

Approach Gutters will be measured and paid for in accordance with Section 504 of the Standard Specifications.

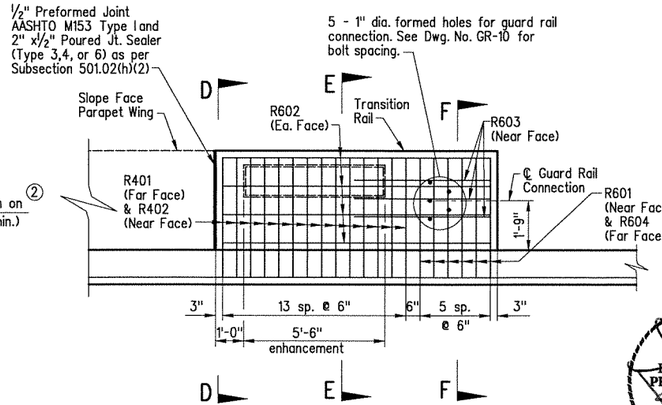
BARS LIST FOR ONE TYPE SPECIAL APPROACH GUTTER

Mark	Bridge No. B7130 Bt.1 No.	Bt.1 Length	Bt.4 No.	Bt.4 Length	Pin Dia.
G401	7	6'-4"	6	6'-4"	----
G402	4	8'-0"	4	8'-0"	----
G403	7	7'-2"	7	7'-2"	----
G404	12	6'-9"	12	6'-9"	----
G501	16	9'-8"	16	9'-8"	----
G502	2	27'-2"	2	27'-2"	----
G503 to G514	1 each	33'-1" to 35'-11"	1 each	36'-2" to 38'-11"	----
G601	19	8'-0"	19	8'-0"	4½"
R401	14	4'-10"	14	4'-10"	3"
R402	14	4'-10"	14	4'-10"	3"
R601	6	5'-1"	6	5'-1"	4½"
R602	8	9'-8"	8	9'-8"	----
R603	3	4'-11"	3	4'-11"	----
R604	6	5'-1"	6	5'-1"	4½"





SECTION A-A
(No Scale)



ELEVATION OF TRANSITION RAIL
(No Scale)

QUANTITIES FOR ONE TYPE SPECIAL APPROACH GUTTER

Bridge	Bent	Shoulder Width (ft.)	Reinforcing Steel (lbs.)	Concrete (cubic yds) T=14½"
B7130	Bent 1	6'-0"	1337	12.40
	Bent 4	6'-0"	1371	13.22

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

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

(2) Thickness shall match Approach Slab Thickness. Thickness shall be 9" if Approach Slab is not used.

STATE OF ARKANSAS * REGISTERED PROFESSIONAL ENGINEER * No. 8975 * ROBERT L. WILCOX JR.

BRIDGE ENGINEER
PRINT DATE: 5/6/2011

DETAILS OF TYPE SPECIAL 3 APPROACH GUTTERS NB BRIDGE OVER ST. RAPHAEL ROAD I-530 - CO. RD. 35 (BS. & SURF.) (F)

JEFFERSON COUNTY
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARKANSAS

DRAWN BY: WEG DATE: 3/4/08 FILENAME: B020354X2.GX2
CHECKED BY: JRS DATE: 8/11/08
DESIGNED BY: WEG DATE: 3/4/08 SCALE: No Scale
BRIDGE NO. B7130 DRAWING NO. 50273

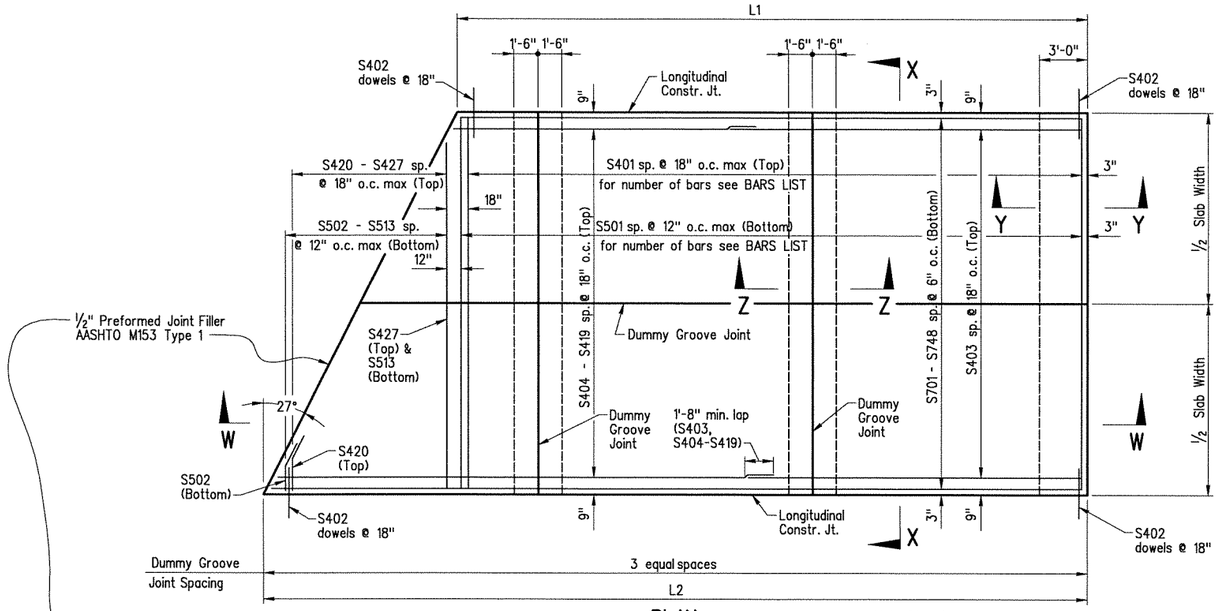
t:\job\100268\job 020354\bridge\drawings\strraphaelnbgut101.dgn ...\strraphaelnbgut101.dgn 8:35:34 AM 5/6/2011

Carter-Burgess

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.		020354	111	156

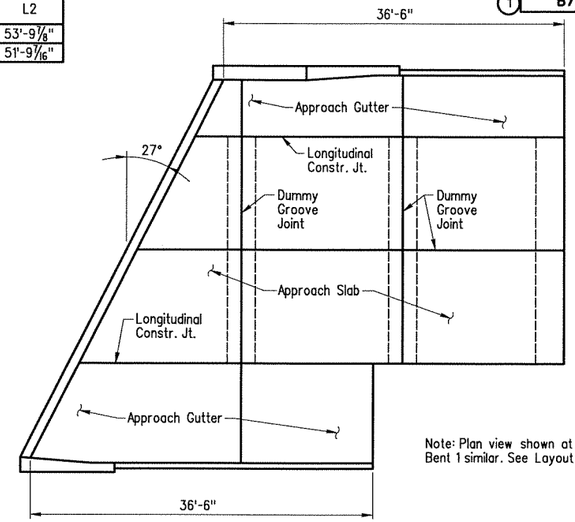
(1) B7130 - TYPE SPEC SLAB - 50274

Bridge	Bent	L1	L2
B7130	Bent 1	41'-7 1/8"	53'-9 7/8"
	Bent 4	39'-6 11/16"	51'-9 7/16"



PLAN
(No Scale)

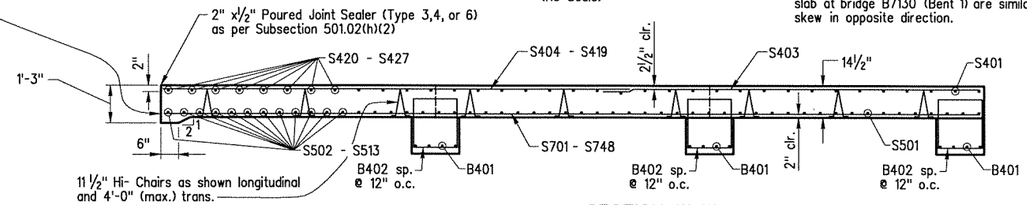
Note: Direction of skew as shown is applicable to bridge B7130 (Bent 4). Details for approach slab at bridge B7130 (Bent 1) are similar with skew in opposite direction.



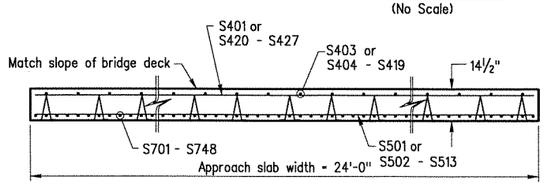
Note: Plan view shown at Bent 4. Bent 1 similar. See Layout on Sheet No. 88.

PLAN OF APPROACH SLABS AND APPROACH GUTTERS
(No Scale)

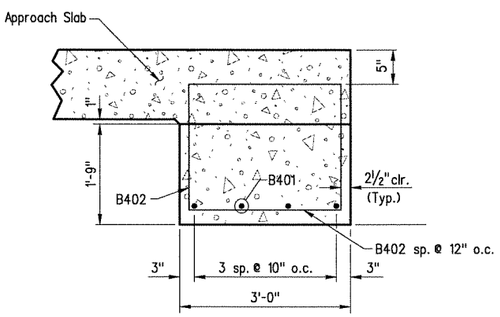
Note: Dummy Groove Joints in Approach Gutters shall align with the Dummy Groove Joints in the Approach Slabs.



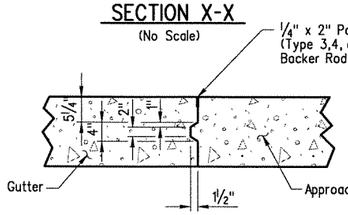
SECTION W-W
(No Scale)



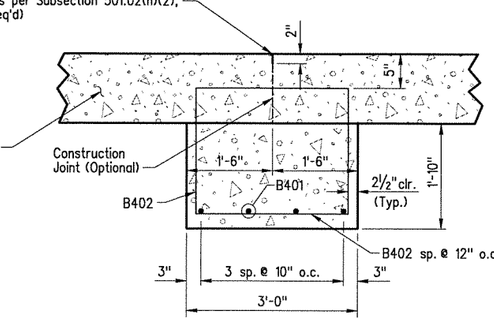
SECTION X-X
(No Scale)



SECTION Y-Y
(No Scale)



DETAILS OF LONGITUDINAL CONSTRUCTION JOINT
(No Scale)

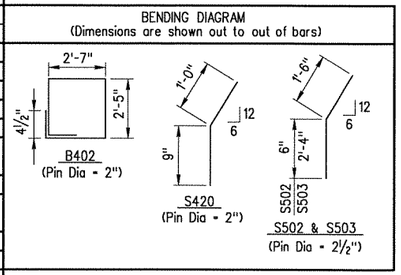


SECTION Z-Z
(No Scale)

BARS LIST FOR ONE TYPE SPECIAL APPROACH SLAB

Bridge No.					
B7130					
Mark	Bt.1		Mark	Bt.4	
	No.	Length		No.	Length
B401	12	23'-8"	B401	12	23'-8"
B402	72	10'-4"	B402	72	10'-4"
S401	28	23'-8"	S401	27	23'-8"
S402	65	3'-0"	S402	62	3'-0"
S403	16	20'-0"	S403	16	20'-0"
S404 to S419	1 each	23'-4" to 34'-9"	S404 to S419	1 each	21'-2" to 32'-9"
S420	1	1'-9"	S420	1	1'-9"
S421 to S427	1 each	4'-5" to 22'-2"	S421 to S427	1 each	3'-4" to 21'-1"
S501	42	23'-8"	S501	40	23'-8"
S502	1	2'-0"	S502	1	2'-0"
S503	1	3'-10"	S503	1	3'-10"
S504 to S513	1 each	4'-4" to 22'-1"	S504 to S513	1 each	4'-4" to 22'-0"
S701 to S748	1 each	41'-3" to 53'-3"	S701 to S748	1 each	39'-3" to 51'-3"

BENDING DIAGRAM
(Dimensions are shown out to out of bars)



QUANTITIES FOR ONE TYPE SPECIAL APPROACH SLAB

Bridge	Bent	Reinforcing Steel (lbs.)	Concrete (cubic yds)
			T=14 1/2"
B7130	Bent 1	7663	65.91
	Bent 4	7369	63.72

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8975
ROBERT L. WILLOCK, JR.

BRIDGE ENGINEER
PRINT DATE: 5/6/2011

GENERAL NOTES

Concrete shall be Class S or Class S(AE) or mixture used for Portland Cement Concrete Pavement (f'c = 4,000 psi).

Reinforcement Steel shall conform to AASHTO M31 o M53, Grade 60 (fy = 60,000 psi).

Approach Slabs will be measured and paid for in accordance with Section 504 of the Standard Specifications.

DETAILS OF TYPE SPECIAL 1 APPROACH SLABS NB BRIDGE OVER ST. RAPHAEL ROAD I-530 - CO. RD. 35 (BS. & SURF.) (F) JEFFERSON COUNTY ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARKANSAS

DRAWN BY: WEG DATE: 7/9/08 FILENAME: B020354X2.AS1
CHECKED BY: JRS DATE: 8/8/08
DESIGNED BY: WEG DATE: 7/9/08 SCALE: No Scale
BRIDGE NO. B7130 DRAWING NO. 50274

Carter-Burgess

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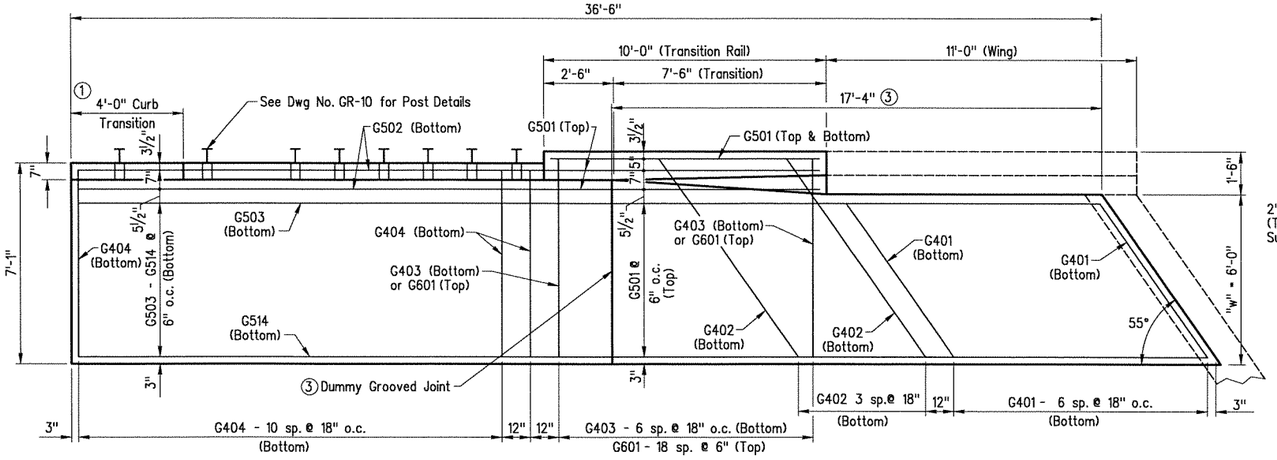
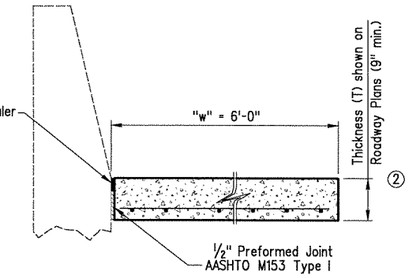
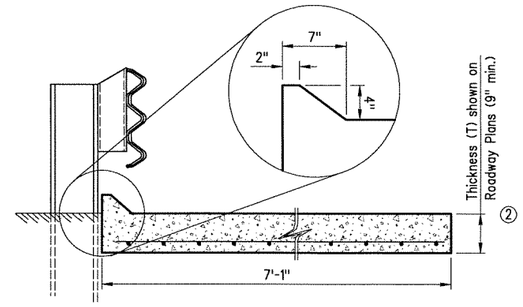
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		020354	112	156

① B7131 - TYPE SPEC GUTTER - 50275

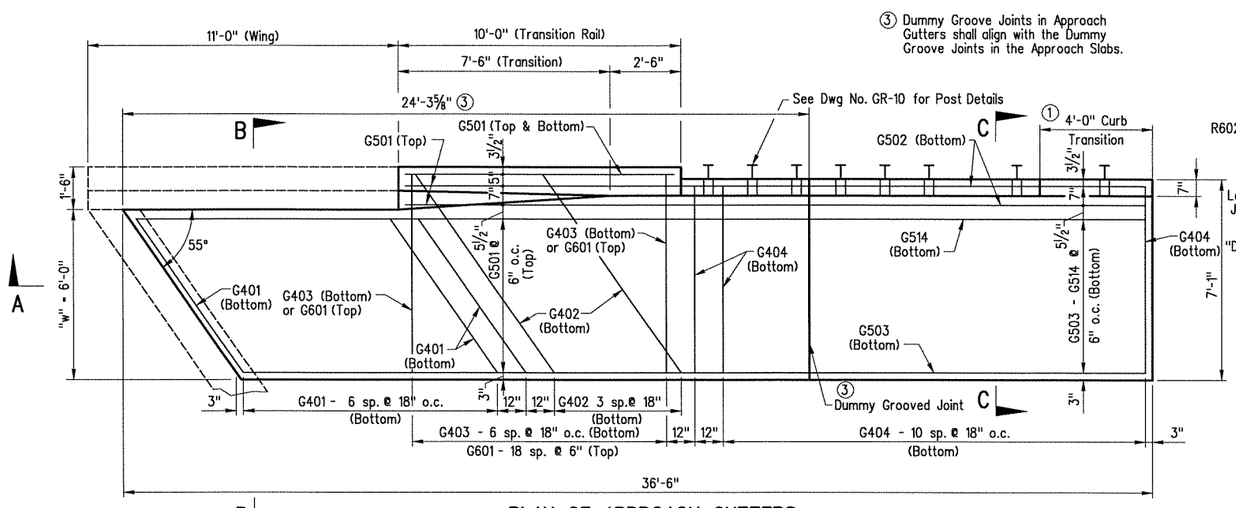




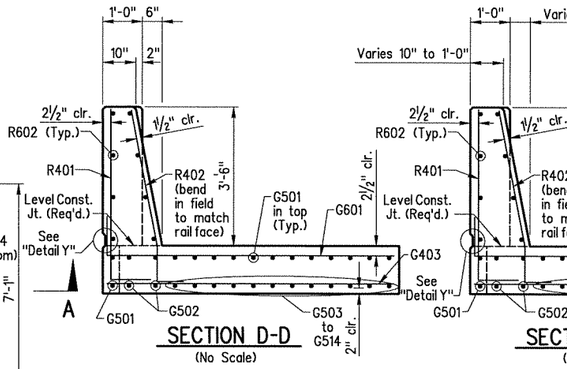
SECTION B-B
(No Scale)



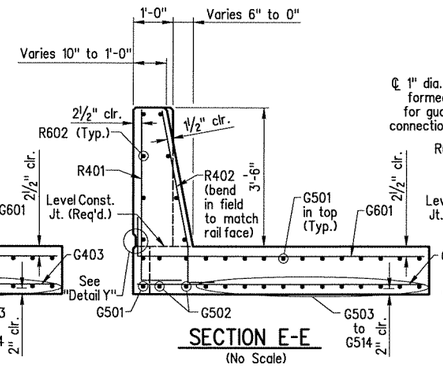
SECTION C-C
(No Scale)



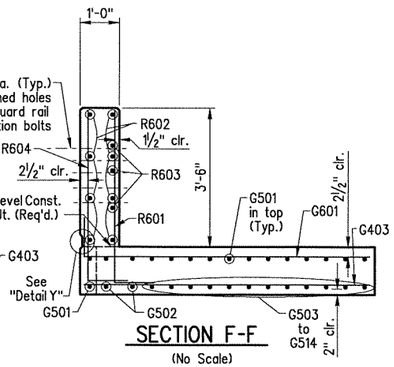
PLAN OF APPROACH GUTTERS



SECTION D-D
(No Scale)



SECTION E-E
(No Scale)



SECTION F-F
(No Scale)

GENERAL NOTES

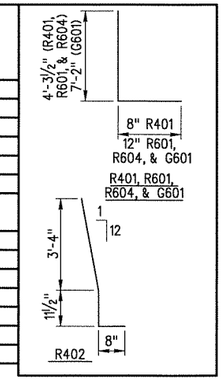
Concrete shall be Class S or Class S(AE) or mixture used for Portland Cement Concrete Pavement (f'c = 4,000 psi).

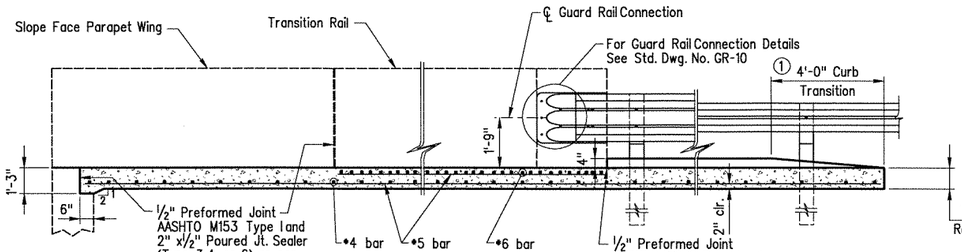
Reinforcement Steel shall conform to AASHTO M31 or M53, Grade 60 (fy = 60,000 psi).

Approach Gutters will be measured and paid for in accordance with Section 504 of the Standard Specifications.

BARS LIST FOR ONE TYPE SPECIAL APPROACH GUTTER

Mark	Bridge No. B7131 Bt.1 No.	Bt.1 Length	Bt.20 No.	Bt.20 Length	Pin Dia.
G401	7	6'-11"	8	6'-11"	----
G402	4	8'-8"	4	8'-8"	----
G403	7	7'-2"	7	7'-2"	----
G404	12	6'-9"	12	6'-9"	----
G501	16	9'-8"	16	9'-8"	----
G502	2	26'-3"	2	26'-3"	----
G503 to G514	1 each	36'-3" to 40'-1"	1 each	32'-0" to 35'-9"	----
G601	19	8'-0"	19	8'-0"	4½"
R401	14	4'-10"	14	4'-10"	3"
R402	14	4'-10"	14	4'-10"	3"
R601	6	5'-1"	6	5'-1"	4½"
R602	8	9'-8"	8	9'-8"	----
R603	3	4'-11"	3	4'-11"	----
R604	6	5'-1"	6	5'-1"	4½"



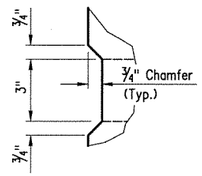


SECTION A-A
(No Scale)

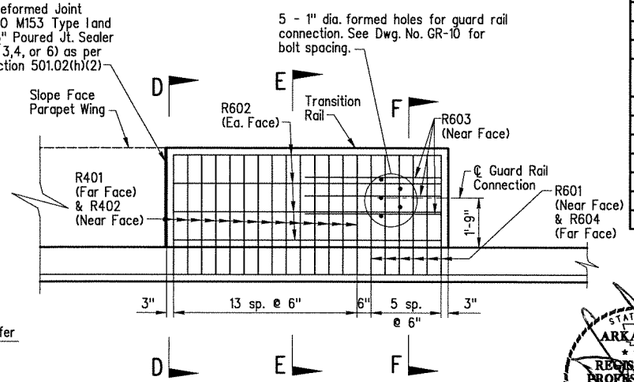
① Construct gutter curb with height-transition as shown if drop inlet is not placed at end of gutter.

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

② Thickness shall match Approach Slab Thickness. Thickness shall be 9" if Approach Slab is not used.



DETAIL Y
(No Scale)



ELEVATION OF TRANSITION RAIL
(No Scale)

QUANTITIES FOR ONE TYPE SPECIAL APPROACH GUTTER

Bridge	Bent	Shoulder Width (ft.)	Reinforcing Steel (lbs.)	Concrete (cubic yds) T-14½"
B7131	Bent 1	6'-0"	1386	13.33
	Bent 20	6'-0"	1336	12.20

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER ROBERT L. WILCOX No. 8975 5/6/11

BRIDGE ENGINEER
PRINT DATE: 5/6/2011

DETAILS OF TYPE SPECIAL 4 APPROACH GUTTERS NB BRIDGE OVER BAYOU BARTHOLOMEW I-530 - CO. RD. 35 (BS. & SURF.) (F) JEFFERSON COUNTY ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARKANSAS

DRAWN BY: WEG DATE: 3/3/08 FILENAME: B020354X2.GX1
CHECKED BY: JRS DATE: 8/11/08
DESIGNED BY: WEG DATE: 3/3/08 SCALE: No Scale
BRIDGE NO. B7131 DRAWING NO. 50275

Carter-Burgess

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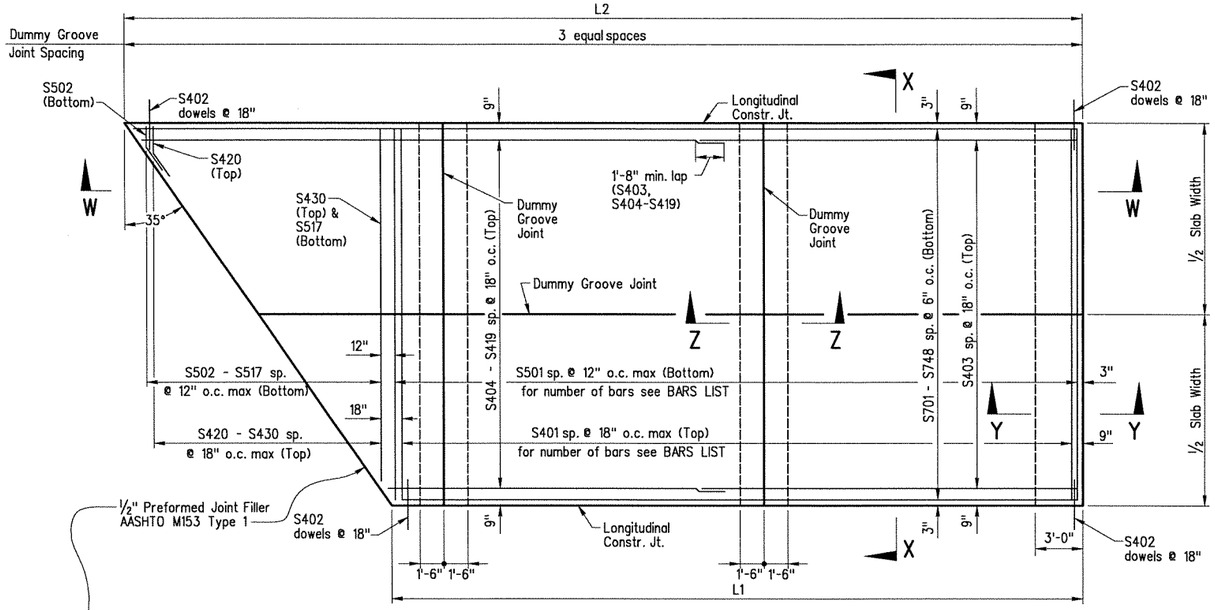
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		020354	113	156

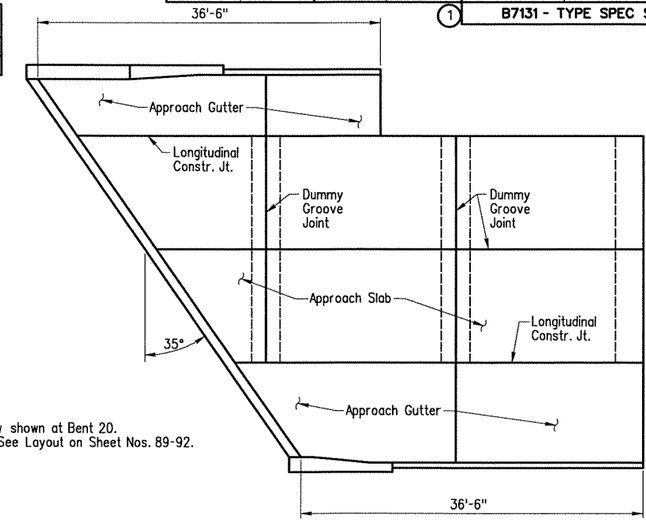
(1) **B7131 - TYPE SPEC SLAB - 50276**



PLAN
(No Scale)

Note: Direction of skew as shown is applicable to bridge B7131 (Bent 20). Details for approach slab at bridge B7131 (Bent 1) are similar with skew in opposite direction.

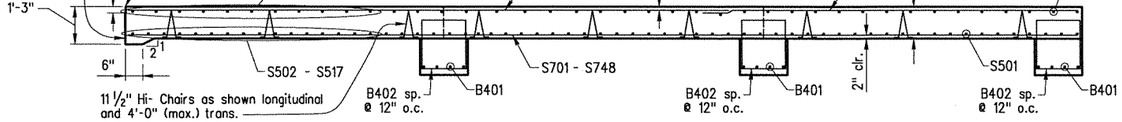
Bridge	Bent	L1	L2
B7131	Bent 1	40'-8 1/16"	57'-6 1/16"
	Bent 20	43'-6"	60'-3 11/16"



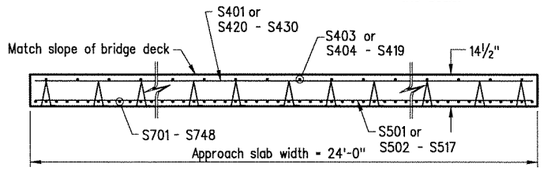
Note: Plan view shown at Bent 20.
Bent 1 similar. See Layout on Sheet Nos. 89-92.

PLAN OF APPROACH SLABS AND APPROACH GUTTERS
(No Scale)

Note: Dummy Groove Joints in Approach Gutters shall align with the Dummy Groove Joints in the Approach Slabs.



SECTION W-W
(No Scale)



SECTION X-X
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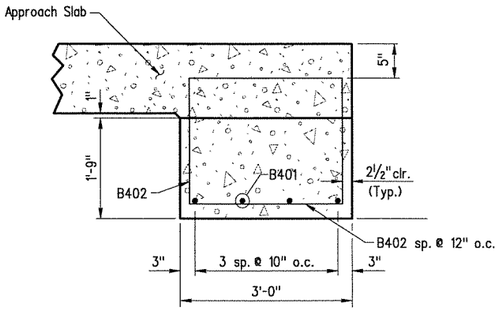
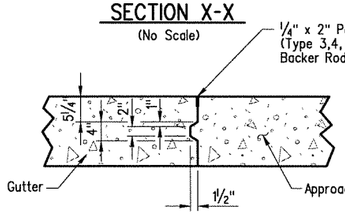
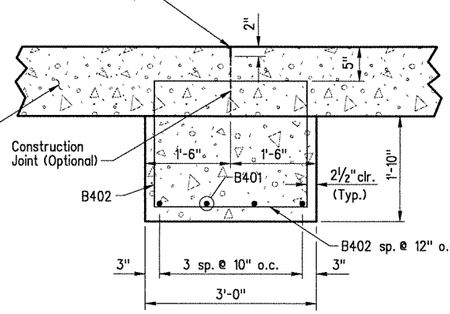


SECTION Y-Y
(No Scale)



DETAILS OF LONGITUDINAL CONSTRUCTION JOINT
(No Scale)

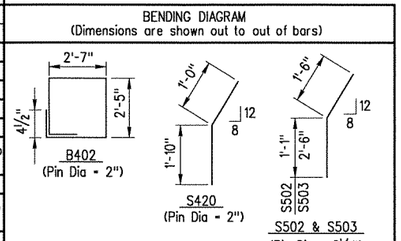


SECTION Z-Z
(No Scale)

BARS LIST FOR ONE TYPE SPECIAL APPROACH SLAB

Mark	Bt.1 No.	Bt.1 Length	Mark	Bt.20 No.	Bt.20 Length
	Bridge No. B7131				
B401	12	23'-8"	B401	12	23'-8"
B402	72	10'-4"	B402	72	10'-4"
S401	27	23'-8"	S401	29	23'-8"
S402	66	3'-0"	S402	70	3'-0"
S403	16	20'-0"	S403	16	20'-0"
S404 to S419	1 each	22'-7" to 38'-4"	S404 to S419	1 each	25'-4" to 41'-1"
S420	1	2'-10"	S420	1	2'-10"
S421 to S430	1 each	4'-2" to 23'-5"	S421 to S430	1 each	3'-10" to 23'-2"
S501	41	23'-8"	S501	44	23'-8"
S502	1	2'-7"	S502	1	2'-7"
S503	1	4'-0"	S503	1	4'-0"
S504 to S517	1 each	4'-0" to 22'-8"	S504 to S517	1 each	3'-10" to 22'-5"
S701 to S748	1 each	40'-5" to 56'-11"	S701 to S748	1 each	43'-3" to 59'-8"

BENDING DIAGRAM
(Dimensions are shown out to out of bars)



QUANTITIES FOR ONE TYPE SPECIAL APPROACH SLAB

Bridge	Bent	Reinforcing Steel (lbs.)	Concrete (cubic yds) T-14½"
B7131	Bent 1	7867	67.41
	Bent 20	8277	70.42

GENERAL NOTES

Concrete shall be Class S or Class S(AE) or mixture used for Portland Cement Concrete Pavement (f'c = 4,000 psi).

Reinforcement Steel shall conform to AASHTO M31 o M53, Grade 60 (fy = 60,000 psi).

Approach Slabs will be measured and paid for in accordance with Section 504 of the Standard Specifications.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8975
ROBERT L. WILCOX, JR.
5/6/11

BRIDGE ENGINEER
PRINT DATE: 5/6/2011

DETAILS OF TYPE SPECIAL 2 APPROACH SLABS NB BRIDGE OVER BAYOU BARTHOLOMEW I-530 - CO. RD. 35 (BS. & SURF.) (F) JEFFERSON COUNTY ARKANSAS STATE HIGHWAY COMMISSION

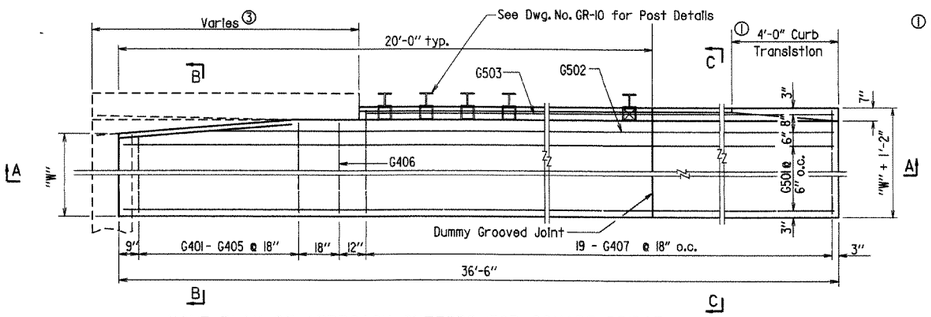
LITTLE ROCK, ARKANSAS

DRAWN BY: WEG DATE: 7/9/08
CHECKED BY: JRS DATE: 8/8/08
DESIGNED BY: WEG DATE: 7/9/08
BRIDGE NO. B7131
FILENAME: B020354X2.AS2
SCALE: No Scale
DRAWING NO. 50276

Carter-Burgess

t:\job\100268\job 020354\bridge\drawings\bayoubartnbapp01.dgn ...\bayoubartnbapp01.dgn 8:35:35 AM 5/6/2011

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
4-10-2003				6	ARK.		114	
07-14-2010				JOB NO.				
				① TYPE C GUTTERS - 2016C				

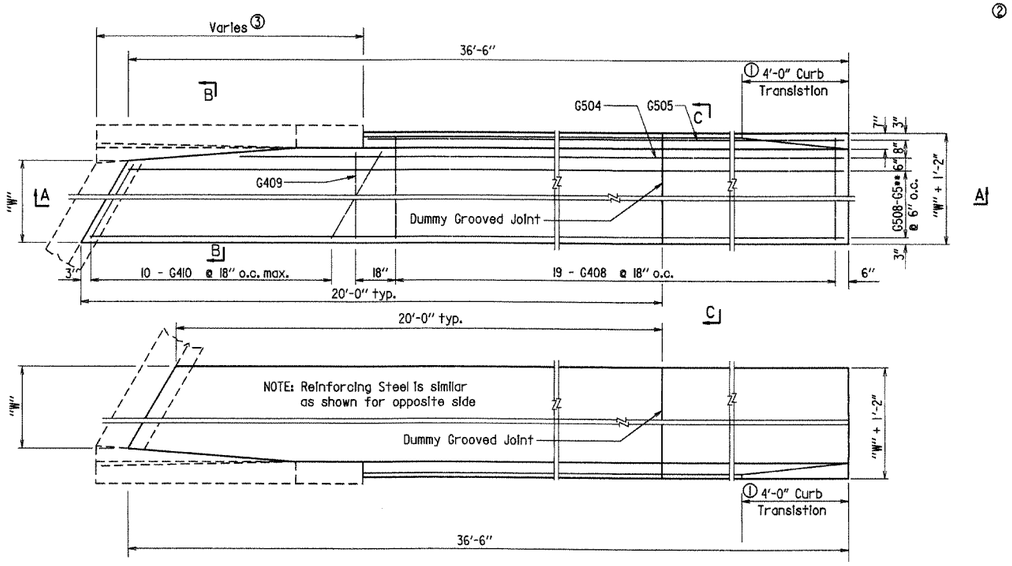


HALF PLAN OF APPROACH GUTTERS FOR SQUARE BRIDGE

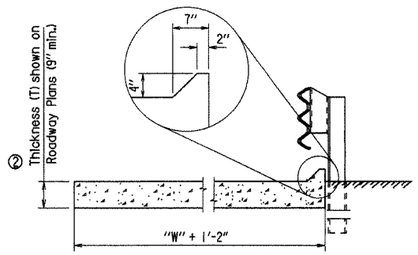
① Construct gutter curb with height-transition as shown if drop inlet is not placed at end of gutter.

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

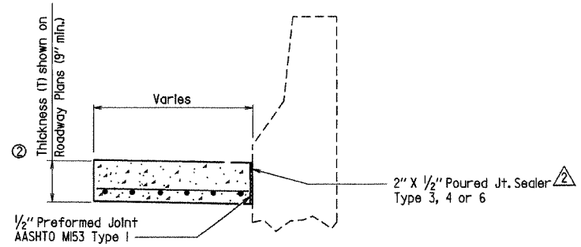
③ Length Varies See End Bt. Details for Actual Length. Quantities Shown are for 10'-0" Transition Rail.



PLAN OF APPROACH GUTTERS FOR SKEWED BRIDGE

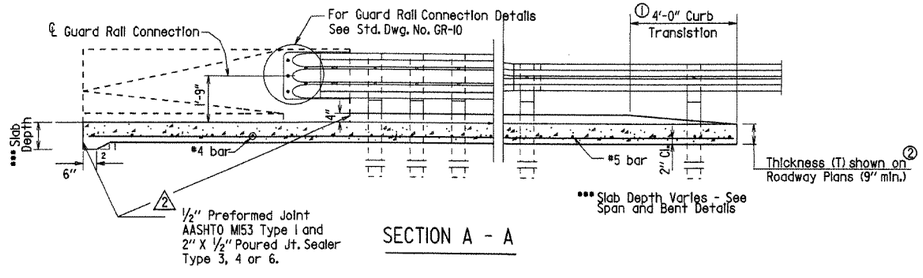


SECTION C - C
N.T.S.



SECTION B - B
N.T.S.

② Thickness shall match Approach Slab Thickness. Thickness shall be 9" if Approach Slab is not used.



SECTION A - A

***BAR LIST FOR ONE TYPE C GUTTER

Mark	No. Req'd. for Width "W" 4'-0"	6'-0"	8'-0"	10'-0"	Length	Square or Skewed
G401 - G405	1 each	1 each	1 each	1 each	"W"-3" to "W"+3"	Square
G406	1	1	1	1	"W"+3"	Square
G407	19	19	19	19	"W"+ 10"	Square
G408	19	19	19	19	"W"+ 10"	Skewed
G409	1	1	1	1	"W"+3"	Skewed
G410	10	10	10	10	*	Skewed
G501	8	12	16	20	36'-2"	Square
G502	1	1	1	1	31'-8"	Square
G503	1	1	1	1	27'-2"	Square
G504	1	1	1	1	*	Skewed
G505	1	1	1	1	*	Skewed
G508 - G5__ **	1 each	1 each	1 each	1 each	*	Skewed

*** Special bar list required when skew angle exceeds 35° for W = 10'; 40° for W = 8' ; 50° for W = 6'; or 60° for W = 4'.

* Bar Lengths vary with Skew.

** G515 for W = 4'
G519 for W = 6'
G523 for W = 8'
G527 for W = 10'

QUANTITIES FOR ONE SQUARE APPROACH GUTTER ③

"W" Width (ft.)	Reinforcing Steel (lbs.)	Concrete (cubic yards) T=9"	T=10"	T=11"	T=12"	T=14½"
4	439	5.19	5.75	6.31	6.88	8.25
6	623	7.24	8.02	8.80	9.59	11.52
8	807	9.28	10.29	11.30	12.32	14.79
10	991	11.33	12.56	13.79	15.03	18.06

GENERAL NOTES

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

Reinforcement Steel shall conform to AASHTO M31 or M53, Grade 60 (fy = 60,000 psi).

Approach Gutters will be measured and paid for in accordance with Section 504 of the Standard Specifications.

△1 Revised and redrawn 4-10-2003. By KDH Ck. By: CJF 4-10-2003

△2 Added joint sealer type 07-14-2010 by MJT Checked by: CJF 7-14-2010

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 4337
CHARLES P. BRAND
BRIDGE ENGINEER

DETAILS OF STANDARD TYPE C APPROACH GUTTERS

ROUTE SEC.

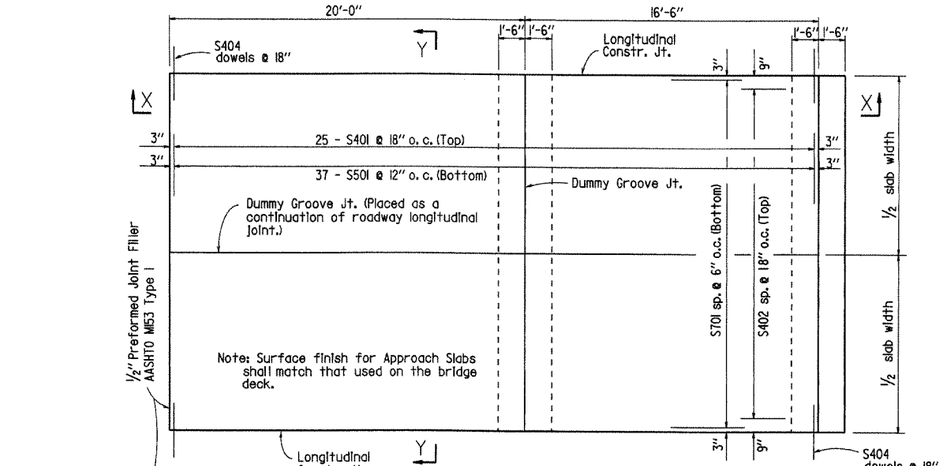
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: KDH DATE: 4-10-2003 FILENAME: B2016C.STD
CHECKED BY: CJF DATE: 4-10-2003 SCALE: 3/8" = 1'-0"
DESIGNED BY: STD. DATE:

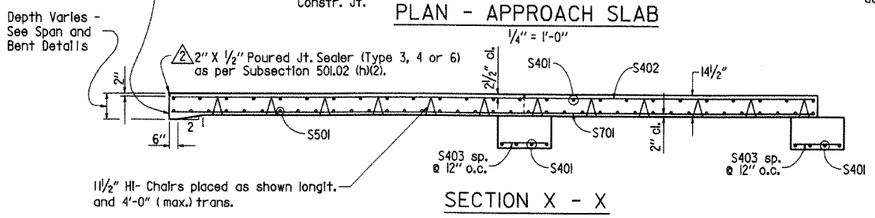
BRIDGE NO. DRAWING NO. 2016C

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
4-10-2003				6	ARK.		115	
07-14-2010				JOB NO.				
				①	APPROACH SLAB - 2018			



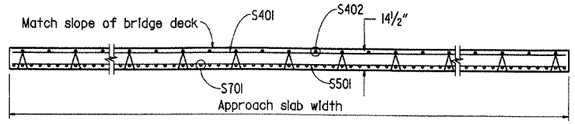
PLAN - APPROACH SLAB

1/4" = 1'-0"



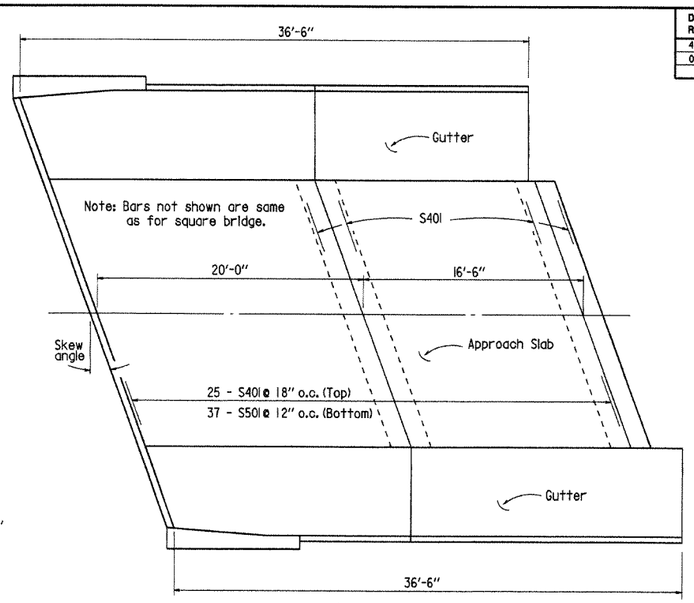
SECTION X - X

N.T.S.



SECTION Y - Y

N.T.S.



PLAN VIEW SHOWING APPROACH FOR SKEWED BRIDGE

3/16" = 1'-0"

BAR LISTS

(Square & Skewed Slabs)

	Mark	No. Req'd.	Length	
			Square	Skewed
15'-0" slab width	S401	33	14'-8"	14'-8" (secant skew angle)
	S402	10	36'-2"	
	S403	* 30	2'-8"	
	S404	* 50	3'-0"	
	S501	37	14'-8"	14'-8" (secant skew angle)
	S701	30	36'-2"	
24'-0" slab width	S401	33	23'-8"	23'-8" (secant skew angle)
	S402	16	36'-2"	
	S403	* 48	2'-8"	
	S404	* 50	3'-0"	
	S501	37	23'-8"	23'-8" (secant skew angle)
	S701	48	36'-2"	
36'-0" slab width	S401	33	35'-8"	35'-8" (secant skew angle)
	S402	24	36'-2"	
	S403	* 72	2'-8"	
	S404	* 50	3'-0"	
	S501	37	35'-8"	35'-8" (secant skew angle)
	S701	72	36'-2"	

* Varies with skew angle. The number shown is for square bridges.

GENERAL NOTES

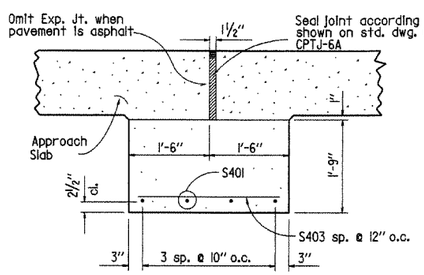
Concrete shall be Class S (AE) (f'c = 4,000 psi).

Reinforcement Steel shall conform to AASHTO M31 or M53, Grade 60 (fy = 60,000 psi).

Approach Slabs will be measured and paid for in accordance with Section 504 of the Standard Specifications.

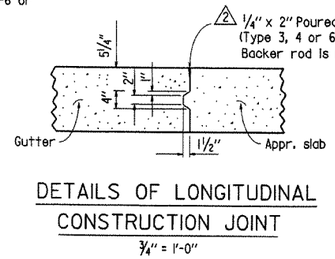
1 Revised and redrawn 4-10-2003. By KDH Ck. By: CJF 4-10-2003

2 Added joint sealer type 07-14-2010 By MJT Ck. By: CJF 07-14-2010



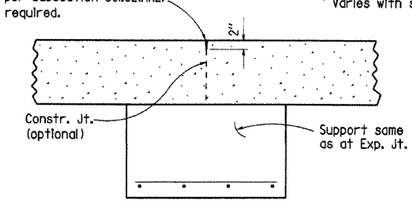
DETAILS OF SUPPORT AT EXPANSION JOINT

¾" = 1'-0"



DETAILS OF LONGITUDINAL CONSTRUCTION JOINT

¾" = 1'-0"



DETAILS OF DUMMY GROOVED JOINT

¾" = 1'-0"

TABLE OF QUANTITIES FOR ONE SQUARE APPROACH SLAB

Slab Width	Reinforcing Steel	Concrete (Cu. Yds.)
15'-0"	3502 lb.	30.72
24'-0"	5556 lb.	49.15
36'-0"	8294 lb.	73.73

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 4337
CHARLES P. BRAND

BRIDGE ENGINEER

DETAILS OF APPROACH SLAB

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

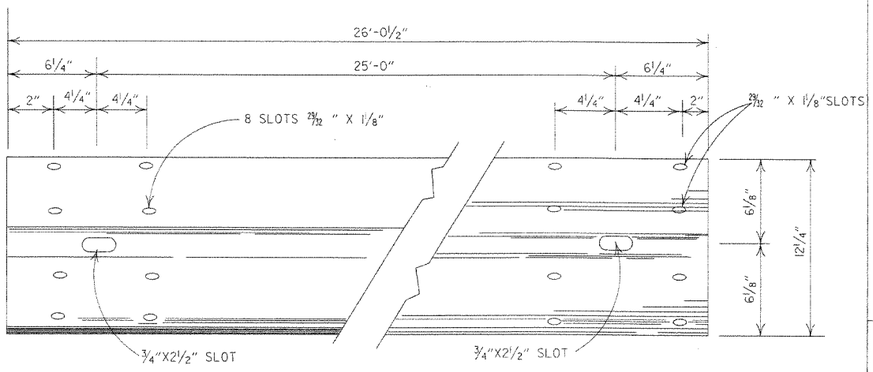
LITTLE ROCK, ARK.

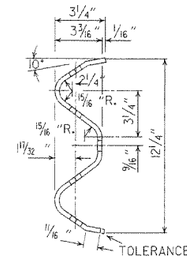
DRAWN BY: KDH DATE: 4-10-2003 FILENAME: B2018.STD

CHECKED BY: CJF DATE: 4-10-2003 SCALE: AS SHOWN

DESIGNED BY: Std. DATE:

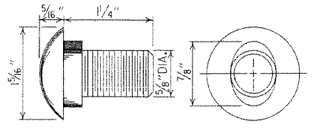
BRIDGE NO. DRAWING NO. 2018



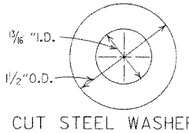


DETAILS OF W-BEAM GUARD RAIL

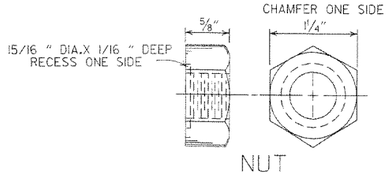
RAIL SECTION OF CLOSELY SIMILAR DIMENSIONS AND COMPARABLE STRENGTH MAY BE SUBSTITUTED IF APPROVED BY THE ENGINEER.



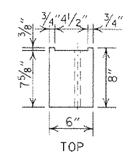
SPLICE BOLT
POST BOLT - SAME EXCEPT LENGTH



CUT STEEL WASHER

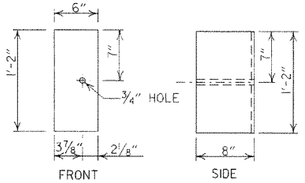


NUT

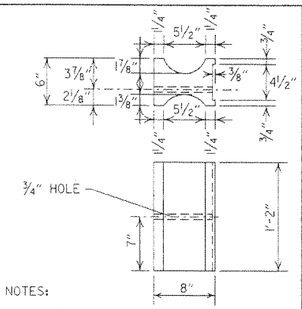


WOOD BLOCKOUT USED WITH WOOD POSTS SHALL BE 6"X8"X1'-2" WITH NO NOTCH REQUIRED.

TOP



WOOD BLOCKOUT (W-BEAM)

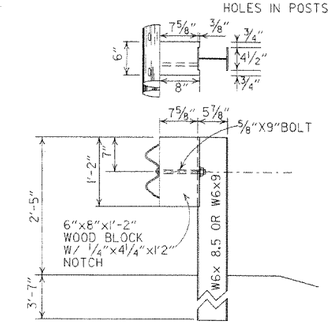


NOTES:

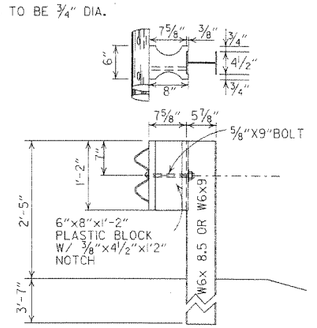
1. SIMILAR SHAPED PLASTIC BLOCKOUTS MAY BE USED AS LONG AS THEY MEET NCHRP-350 TEST LEVEL 3 SPECIFICATIONS OR REQUIREMENTS FOR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).
2. DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCES.

PLASTIC BLOCKOUT (W-BEAM)

HOLES IN POSTS AND BLOCKS TO BE 3/4" DIA.

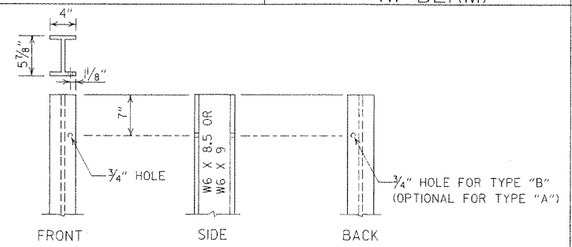


WOOD BLOCKOUT CONNECTIONS

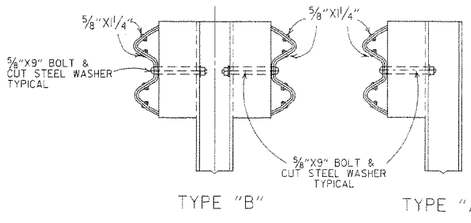


PLASTIC BLOCKOUT CONNECTIONS

DETAILS OF STEEL LINE POST CONNECTIONS (W-BEAM)



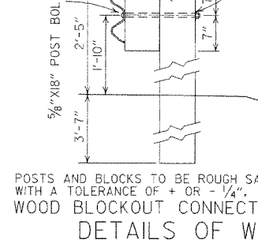
STEEL POST



TYPE "B" TYPE "A"

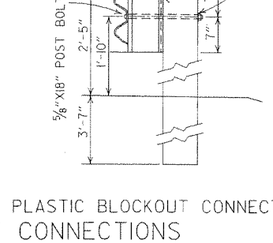
DETAILS OF STEEL LINE POST CONNECTIONS (W-BEAM)

HOLES IN POSTS AND BLOCKS TO BE 3/4" DIA.



POSTS AND BLOCKS TO BE ROUGH SAWN 6"X8" WITH A TOLERANCE OF + OR - 1/4".

WOOD BLOCKOUT CONNECTIONS



PLASTIC BLOCKOUT CONNECTIONS

DETAILS OF WOOD LINE POST CONNECTIONS (W-BEAM)

-GENERAL NOTES-

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

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

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

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

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

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

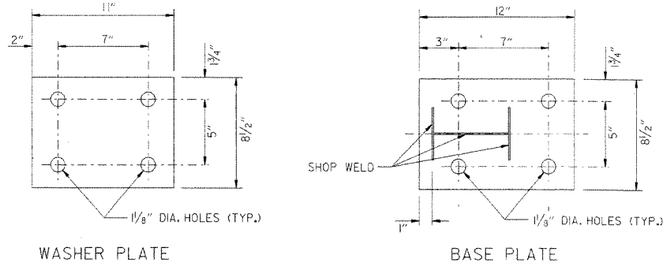
CONTRACTOR SHALL HAVE THE OPTION OF USING WOOD BLOCKOUTS FOR W-BEAM GUARD RAIL OR PLASTIC BLOCKOUTS. AS LONG AS BLOCKOUT USED MEETS NCHRP-350 TEST LEVEL 3 SPECIFICATIONS OR REQUIREMENTS FOR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) FOR W-BEAM GUARD RAIL.

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

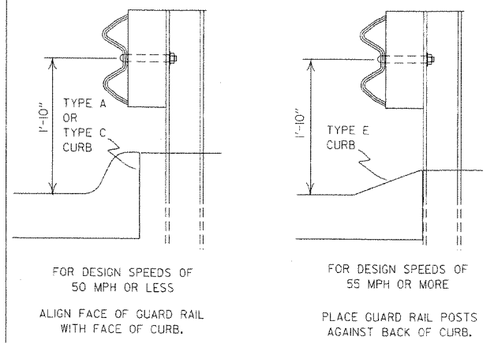
ARKANSAS STATE HIGHWAY COMMISSION

GUARD RAIL DETAILS

STANDARD DRAWING GR-8

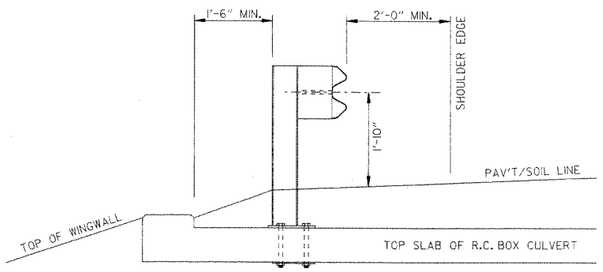


Note: Bolts, nuts, washers and plates shall be galvanized in accordance with Section 807 of the Standard Specifications.

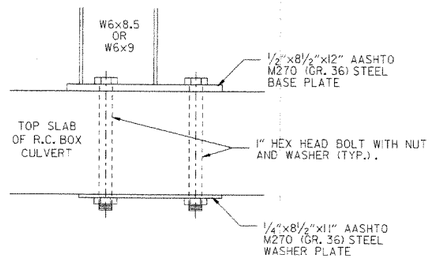


DETAIL OF GUARD RAIL PLACEMENT BEHIND CURB (W-BEAM)

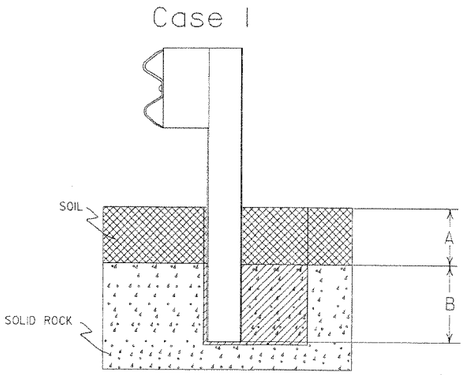
FOR DESIGN SPEEDS OF 50 MPH OR LESS ALL CURB FACES, AS SHOWN ON STD. DRWG. CG-1, MAY BE USED. FOR DESIGN SPEEDS OF 55 MPH OR MORE TYPE "E" CURB FACE SHALL BE USED.

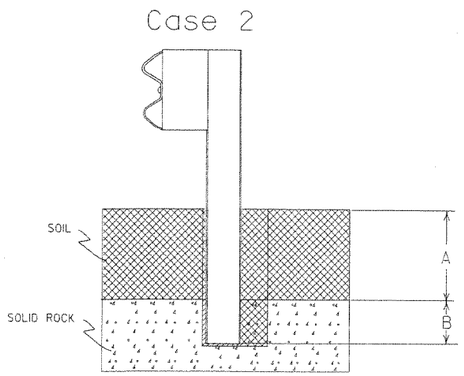


SECTION A-A



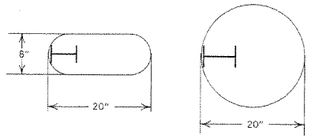
DETAIL OF CONNECTION





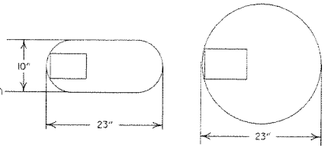
Plan View Steel Posts

Either hole configuration acceptable



Plan View Wood Posts

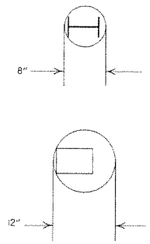
Either hole configuration acceptable



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).

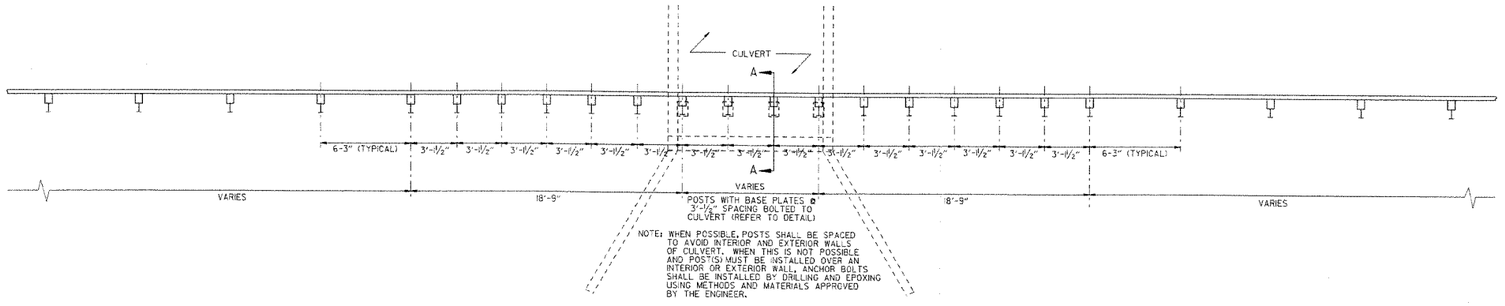
Zone B:
Backfill hole in 6" lifts with material meeting the requirements of Section 802.02(c) - Alternate gradation. Compact to 95% maximum dry density per ASTM D-698.



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)



NOTE: WHEN POSSIBLE, POSTS SHALL BE SPACED TO AVOID INTERIOR AND EXTERIOR WALLS OF CULVERT. WHEN THIS IS NOT POSSIBLE AND POST(S) MUST BE INSTALLED OVER AN INTERIOR OR EXTERIOR WALL, ANCHOR BOLTS SHALL BE INSTALLED BY DRILLING AND EPOXING USING METHODS AND MATERIALS APPROVED BY THE ENGINEER.

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	
11-10-05	ADDED GUARD RAIL PLACEMENT BEHIND CURB; REVISED DETAIL OF CONNECTION	
11-18-04	REVISED POST PLACEMENT IN ROCK & CULVERT CONNECTION DETAILS. ADDED DETAIL FOR GUARD RAIL PLACEMENT AT LOW-FILL CULVERTS	
3-30-00	REMOVED CONCRETE INSERT ANCHOR	
8-12-98	CHANGED STEEL SPACER BLOCK TO WOOD BLOCKOUT, ADD. DET. OF GUARD RAIL CONNECTION TO R.C. BOX CULV'T. DELETED DET. OF STEEL LINE POST CONN. & ADDED DET. OF GUARD RAIL PLACE. BEHIND CURB & DET. OF POST PLACE. IN SOLID ROCK	
4-3-96	PLACED ARROWS AT CUT STEEL WASHERS	4-3-96
10-18-96	REV. ASTM REF. TO AASHTO	
11-22-95	ADDED OPTIONAL HOLES	
6-2-94	REVISED ALTERNATE POST SIZE	
8-5-93	REVISED STEEL POST SIZE	
10-1-92	REDRAWN & REVISED	10-1-92
8-2-90	DEL. WASHER ON ANCHOR ASSEMBLY	8-2-90
7-15-88	CONFORMED TO 1988 SPECS	
3-4-88	REVISED ANCHOR NOTE	
10-30-87	REVISED ANCHOR ASSEMBLY	712-10-30-87
10-30-87	REVISED PLACEMENT BEHIND CURB	547-10-30-87
10-9-87	REDRAWN & REVISED	803-10-9-87

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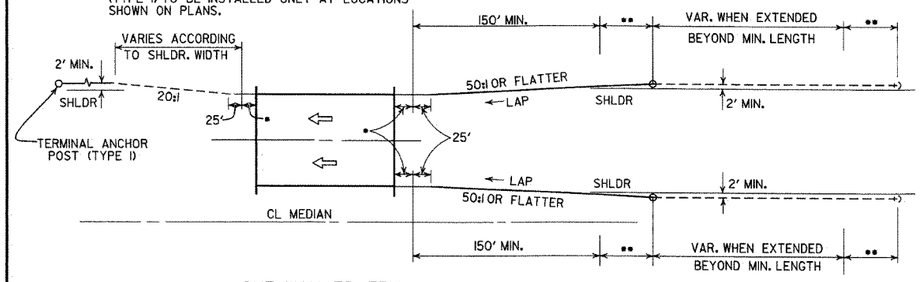
GUARD RAIL DETAILS

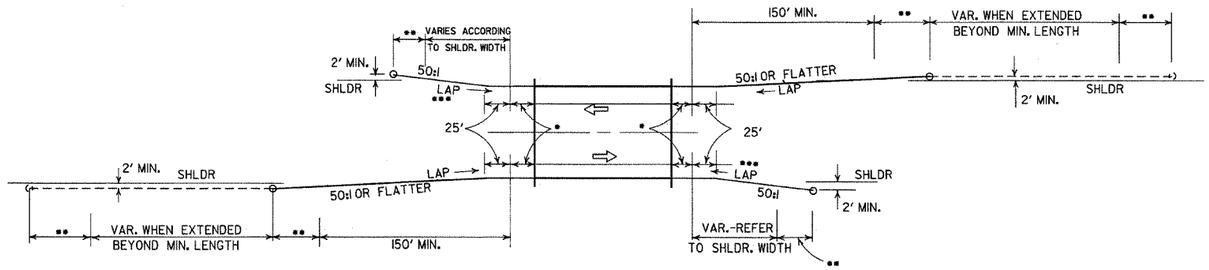
STANDARD DRAWING GR-8A

NOTE: GUARD RAIL WITH GUARD RAIL TERMINAL (TYPE I) TO BE INSTALLED ONLY AT LOCATIONS SHOWN ON PLANS.



ONE-WAY TRAFFIC

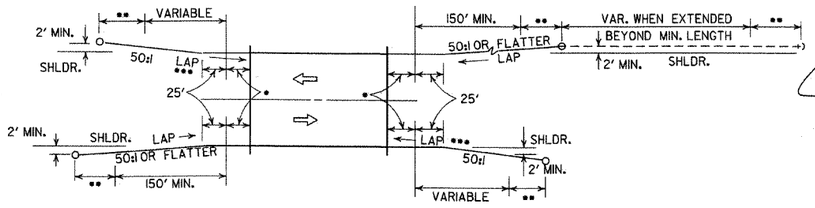
••• LAP OF GUARD RAIL SHALL BE AS SHOWN FOR A DISTANCE OF UP TO 200', CHANGE TO LAP IN DIRECTION OF TRAVEL.



TWO-WAY TRAFFIC

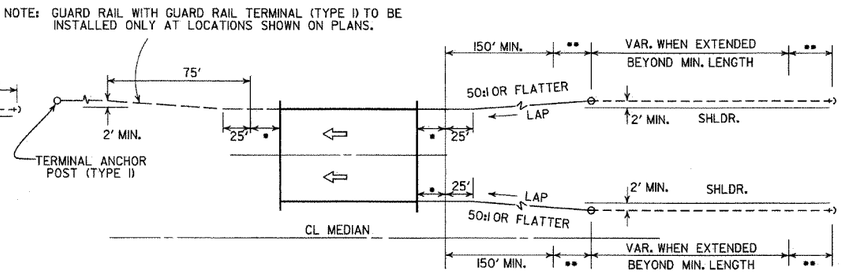
METHODS OF INSTALLATION OF GUARD RAIL AT LESS THAN FULL SHOULDER WIDTH BRIDGES USING GUARD RAIL TERMINAL (TYPE 2)

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



TWO-WAY TRAFFIC

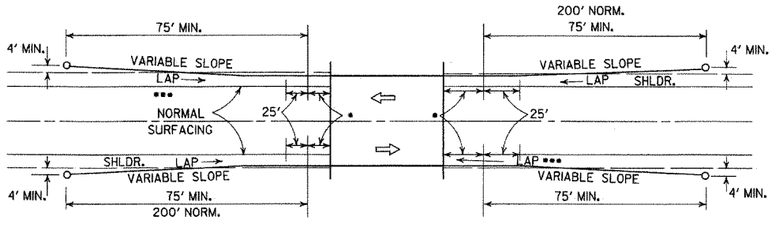
NOTE: GUARD RAIL WITH GUARD RAIL TERMINAL (TYPE I) TO BE INSTALLED ONLY AT LOCATIONS SHOWN ON PLANS.



ONE-WAY TRAFFIC

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

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



LEGEND

- • THRIE BEAM GUARD RAIL TERMINAL
- •• GUARD RAIL TERMINAL (TYPE 2)

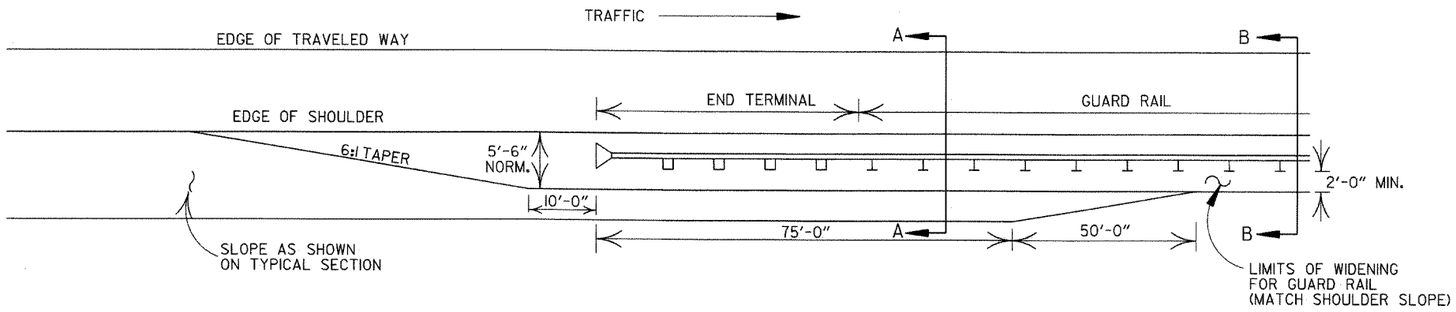
METHOD OF INSTALLATION OF GUARD RAIL USING GUARD RAIL TERMINAL (TYPE I) (FULL SHOULDER WIDTH OR LESS BRIDGES)

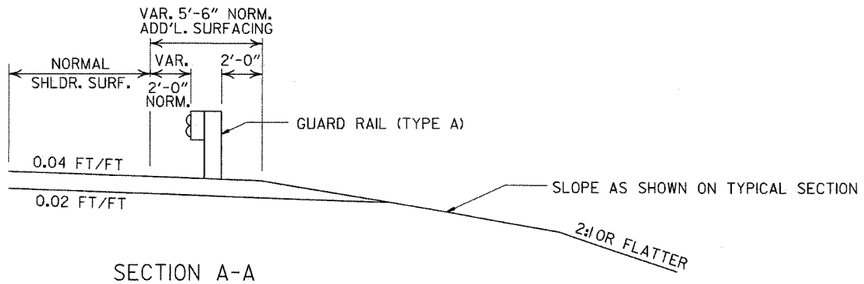
DATE	REVISION	DATE FILM
4-17-08	REVISED LAYOUTS	
11-10-05	REMOVED GUARD RAIL NOTES AND DETAILS	
11-16-01	DELETED NOTE-METHOD OF INSTALLATION OF GUARD RAIL USING GUARD RAIL TERM. (TY. I)	
1-12-00	ADDED CONSTRUCTION NOTE	1-12-00
6-26-97	REVISED LAYOUT	
10-1-92	REDRAWN & REVISED	10-1-92
	ADDED NOTE	
10-9-87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

ARKANSAS STATE HIGHWAY COMMISSION

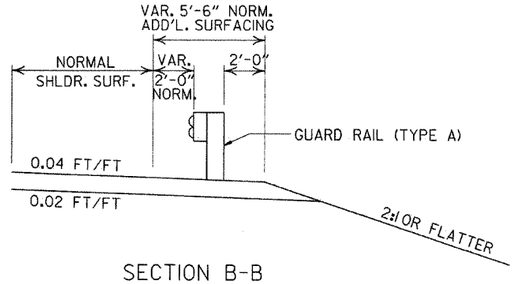
GUARD RAIL DETAILS

STANDARD DRAWING GR-9





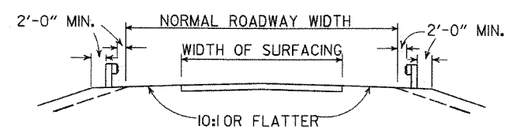
SECTION A-A



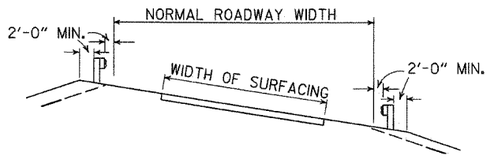
SECTION B-B

DETAILS OF WIDENING FOR GUARD RAIL

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

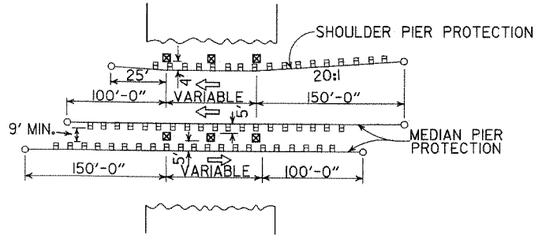


SECTION ON TANGENT



SECTION ON CURVE

DETAILS SHOWING POSITION OF GUARD RAIL ON HIGHWAY



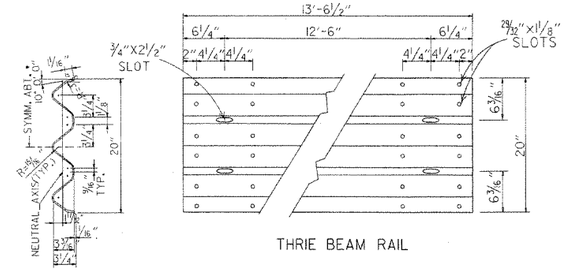
METHOD OF INSTALLATION OF GUARD RAIL AT FIXED OBSTACLE

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

ARKANSAS STATE HIGHWAY COMMISSION

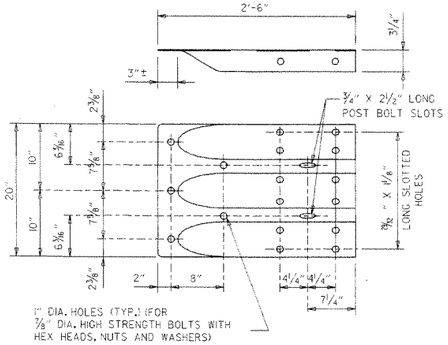
GUARD RAIL DETAILS

STANDARD DRAWING GR-9A

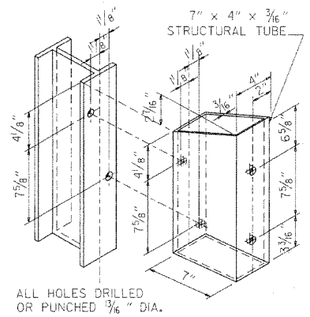


THRIE BEAM RAIL

SECTION THRU
THRIE BEAM RAIL

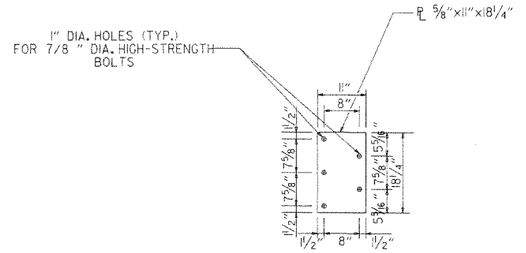


SPECIAL END SHOE



STRUCTURAL STEEL TUBING BLOCKOUT DETAIL

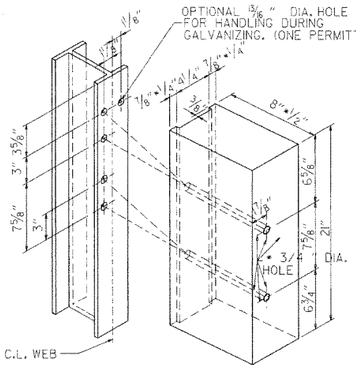
ATTACH BLOCKOUT TO POST USING ⅝" DIA. HEX HEAD BOLTS WITH 1½" O.D. CUT STEEL WASHERS AND NUT.



CONNECTOR PLATE

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

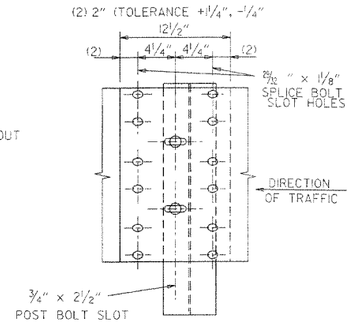
NOTE:
SEE STANDARD DRAWING GR-10A FOR GUARD RAIL POST EMBEDMENT DEPTHS.



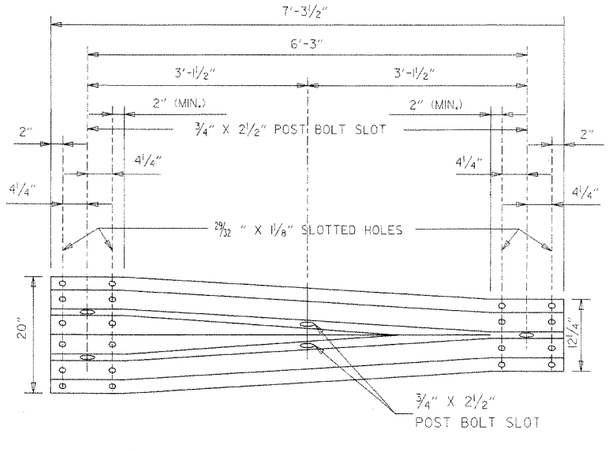
ALL HOLES 13/16" DIAMETER EXCEPT AS NOTED

HOLE PUNCHING DETAIL
FOR STEEL POST & WOOD
OR PLASTIC BLOCKOUTS

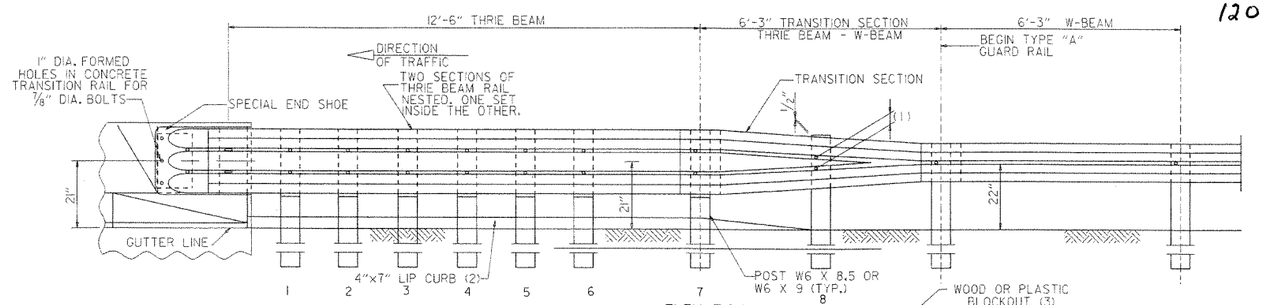
NOTE: BLOCKS SHALL BE THE SAME TYPE THROUGHOUT THE PROJECT LIMITS.



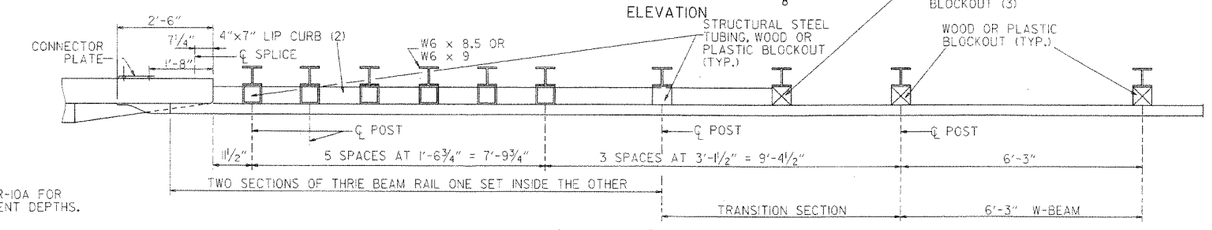
THRIE BEAM RAIL
SPLICE AT POST



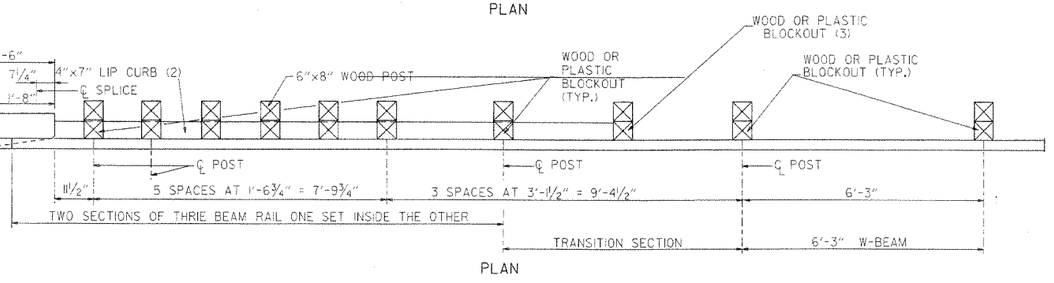
TRANSITION SECTION



ELEVATION



PLAN



PLAN

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

THRIE BEAM GUARD RAIL CONNECTION AT BRIDGE ENDS

GENERAL NOTES:

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

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

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

ALL LAP SPLICES, INCLUDING SPECIAL END SHOES, SHALL BE MADE IN THE DIRECTION SHOWN ON STANDARD DRAWINGS GR-9 & GR-11.

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

REFER TO STD. DRWG. GR-10A FOR POST DETAILS.

USE THRIE BEAM GUARD RAIL COMPONENTS OF SAME MATERIAL FOR ENTIRE JOB.

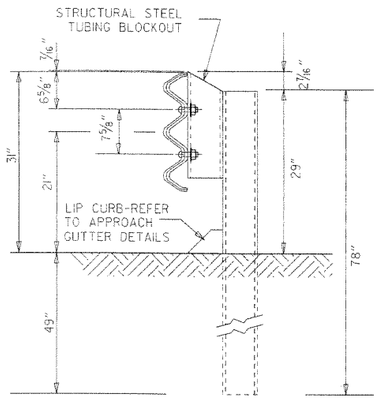
THRIE BEAM POSTS SHALL BE SAME MATERIAL AS W-BEAM POSTS FOR ENTIRE JOB.

DATE	REVISION	DATE FILM
7-14-10	RAISED HEIGHT OF W-BEAM 1"	
11-29-07	ADDED PLASTIC BLOCKOUTS	
11-10-05	ADDED NOTE FOR ATTACHING STEEL BLOCKOUT	
11-18-04	REVISED GENERAL NOTES	
10-9-03	REVISED GENERAL NOTES	
4-10-03	REVISED GENERAL NOTES	
8-22-02	REVISED NOTE (2)	
6-29-00	MOVED DIMENSION LINES	
5-18-00	ADDED NOTE	
3-30-00	DRAWN & ISSUED	

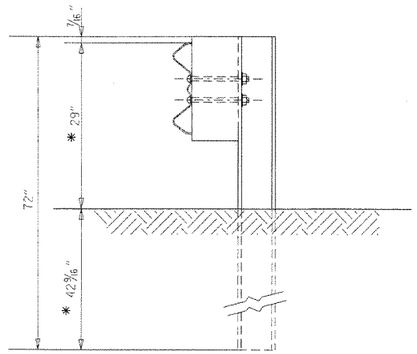
ARKANSAS STATE HIGHWAY COMMISSION

GUARD RAIL DETAILS

STANDARD DRAWING GR-10

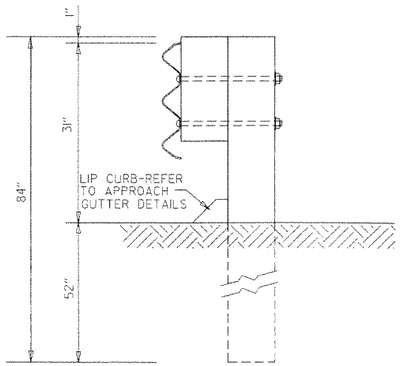


THRIE BEAM RAIL WITH STEEL TUBING BLOCKOUT
AND STEEL POST
POSTS 1-7

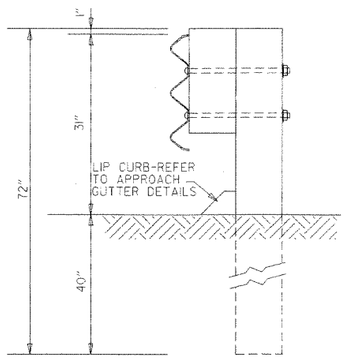


W-BEAM TO THRIE BEAM TRANSITION RAIL
WITH WOOD OR PLASTIC BLOCKOUT AND STEEL POST
POST 8

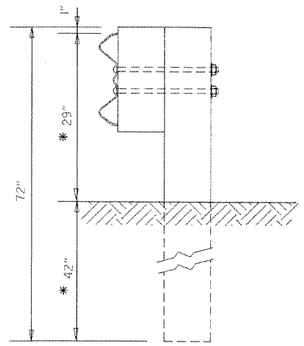
* NOTE:
THESE DIMENSIONS WILL NEED TO BE ADJUSTED IN THE FIELD TO MAKE THE TRANSITION FROM 21" MID POINT OF THRIE BEAM TO 22" MID POINT OF W-BEAM.



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



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



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

GENERAL NOTES:

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

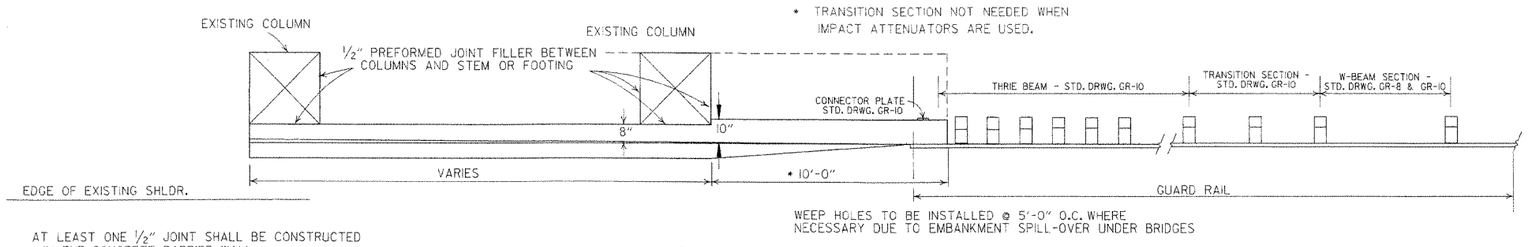
WOOD POSTS & WOOD BLOCKS SHALL BE EITHER DENSE NO. 1 STRUCTURAL OR BETTER 9.7f (1400 f) OR NO. 1 1350 f SOUTHERN PINE.

DATE	REVISION	DATE FILM
7-14-10	REVISED POST 8 DIMENSIONS	
11-29-07	ADDED PLASTIC BLOCKOUTS	
8-22-02	REVISED LIP CURB NOTE	
3-30-00	DRAWN & ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

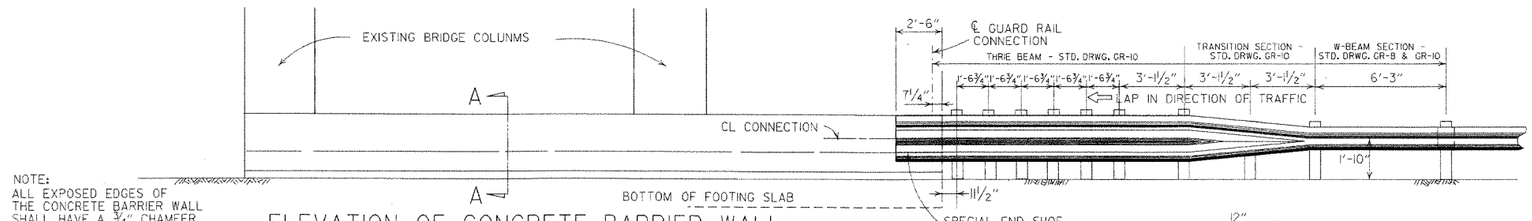
GUARD RAIL DETAILS

STANDARD DRAWING GR-10A



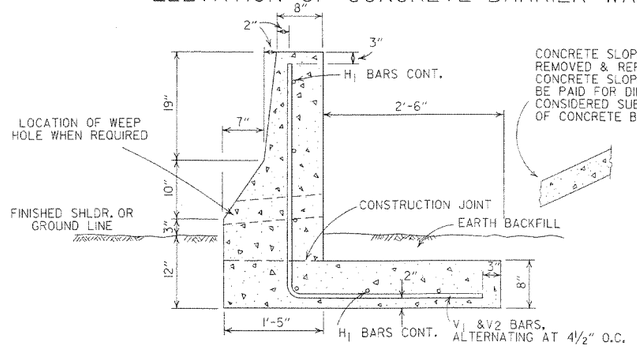
AT LEAST ONE ½" JOINT SHALL BE CONSTRUCTED IN THE CONCRETE BARRIER WALL. JOINTS SHALL BE EQUALLY SPACED AT A MAXIMUM OF 25'-0" O.C. FILL JOINT WITH PREFORMED JOINT FILLER.

PLAN OF CONCRETE BARRIER WALL



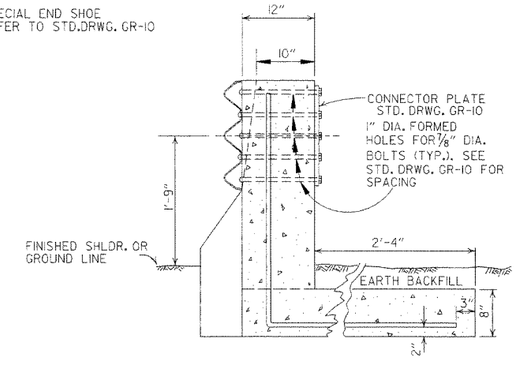
NOTE:
ALL EXPOSED EDGES OF THE CONCRETE BARRIER WALL SHALL HAVE A ¾" CHAMFER.

ELEVATION OF CONCRETE BARRIER WALL



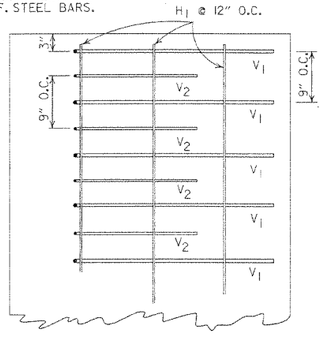
CONCRETE SLOPE PAVING TO BE REMOVED & REPLACED WHERE REQ'D. CONCRETE SLOPE PAVING WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED SUBSIDIARY TO THE ITEM OF CONCRETE BARRIER WALL.

SECTION A-A



SECTION THRU CONNECTION

IF FOR ANY REASON IT IS NECESSARY TO CONSTRUCT THE FOOTING AT A LOWER ELEVATION THAN IS SHOWN, THE STEM MAY BE LENGTHENED 1'-0" BETWEEN FIN. SHLDR. AND TOP OF FOOTING WITHOUT REQUIRING HEAVIER REINF. STEEL BARS.

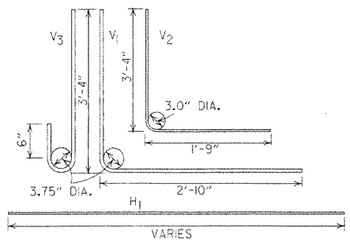


PLAN OF REINFORCING STEEL IN FOOTING

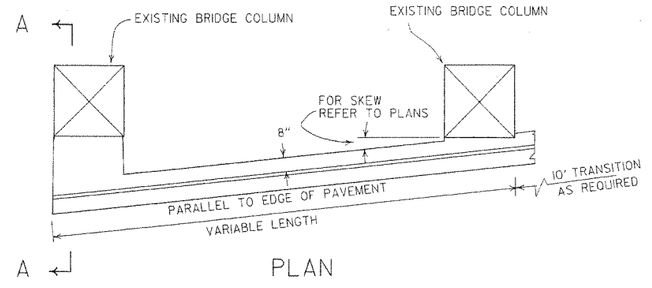
BAR LIST

MARK	NO.	SIZE	LENGTH
V1		#5	6'-2¼"
V2		#4	5'-1"
V3		#5	4'-1⅛"
H1	6	4	VAR.

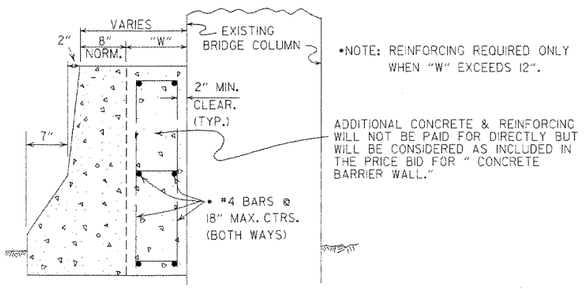
THE V3 BARS SHALL BE USED IN PLACE OF THE V1 & V2 BARS IN FRONT OF PIERS.



BEND DIAGRAMS



PLAN



SECTION A-A

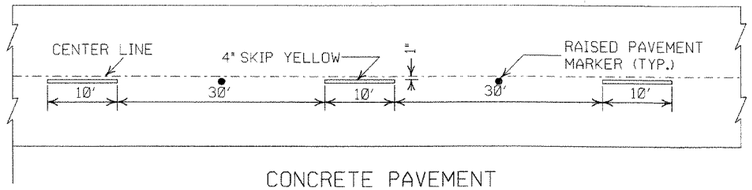
DETAILS OF CONCRETE BARRIER WALL WHEN PIERS ARE SKEWED TO ROADWAY

DATE	REVISION	DATE FILM
7-14-10	RAISED HEIGHT OF W-BEAM 1"	
8-22-02	REV. SECTION A-A OF DETAILS OF CONCRETE BARRIER WALL	
6-29-00	MOVED DIMENSION LINE	
5-18-00	ADDED NOTE	
3-30-00	REVISED TO INCLUDE THRIE BEAM	
6-2-94	ADDED TRANSITION SECTION NOTE	
10-1-92	REDRAWN & REVISED	10-1-92
8-15-91	REVISED DRAWING PLAN CONC. BARR.	8-15-91
2-16-89	ADDED SKEWED DETAILS	594-2-16-89
7-14-88	CHANGED TITLE	
10-9-87	REDRAWN & REVISED	

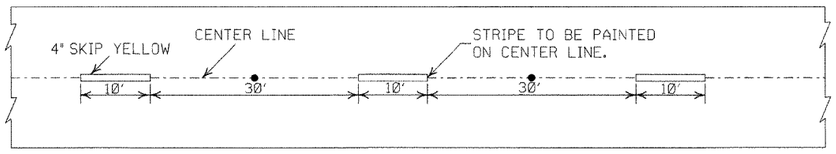
ARKANSAS STATE HIGHWAY COMMISSION

CONCRETE BARRIER WALL (PIER PROTECTION TYPE A)

STANDARD DRAWING GR-11

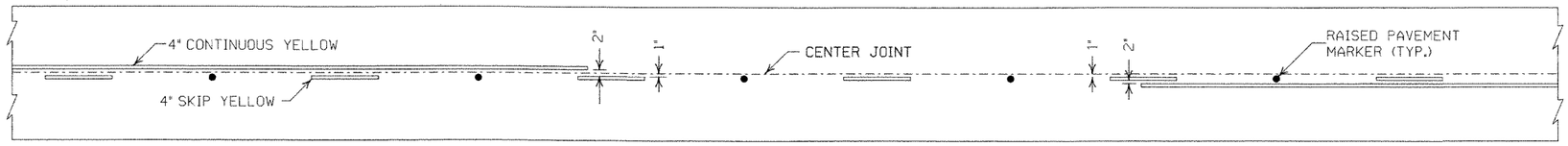


CONCRETE PAVEMENT

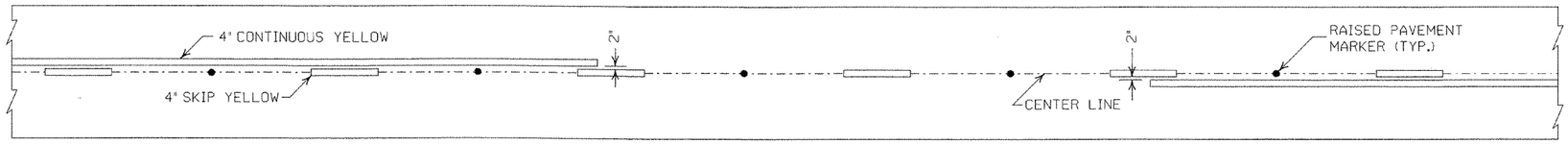


ASPHALT PAVEMENT

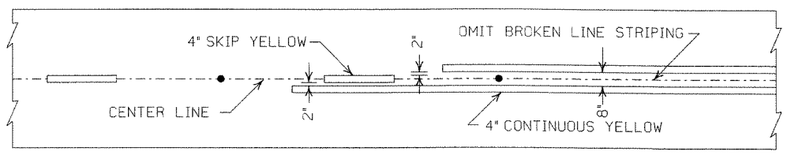
BROKEN LINE STRIPING



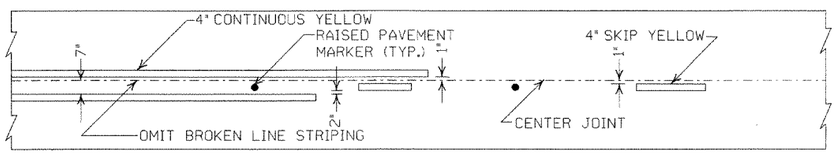
SOLID LINE STRIPING ON CONCRETE PAVEMENT



SOLID LINE STRIPING ON ASPHALT PAVEMENT

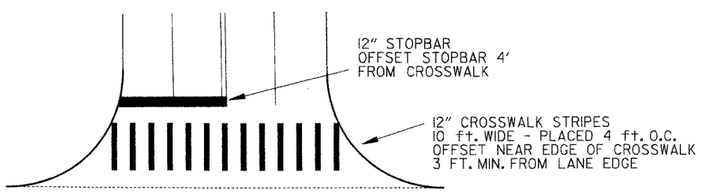


ASPHALT PAVEMENT



CONCRETE PAVEMENT

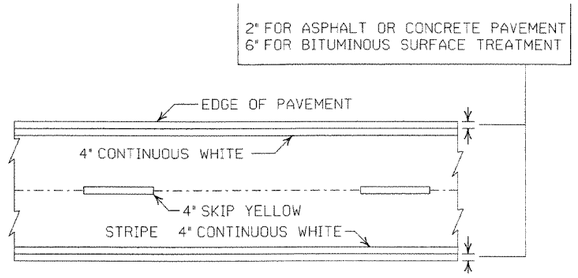
STRIPING AT ADJACENT NO PASSING LANES



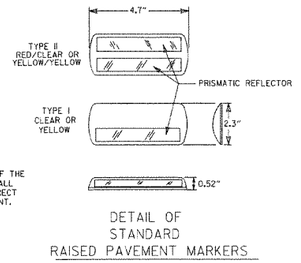
CROSSWALK AND STOPBAR DETAILS

NOTES:

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



PAVEMENT EDGE LINE MARKING



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

DETAIL OF STANDARD RAISED PAVEMENT MARKERS

GENERAL NOTES:

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

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

NOTE:

DIMENSIONS SHOWN FOR RAISED PAVEMENT MARKERS ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR MARKERS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR SIMILAR MARKERS MAY BE MADE BY REFERRING TO THE AHTD QUALIFIED PRODUCTS LIST.

DATE	REVISION	FILMED
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)

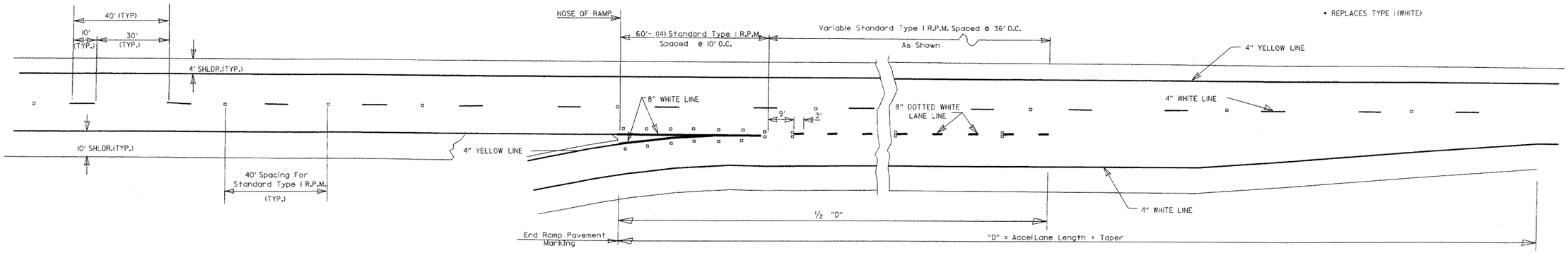
ENTRANCE RAMP

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

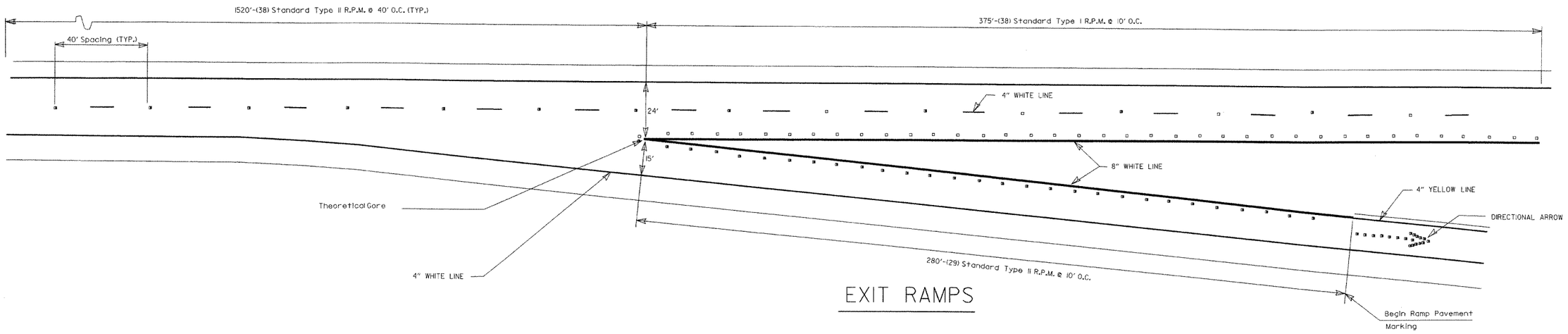
EXIT RAMP

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

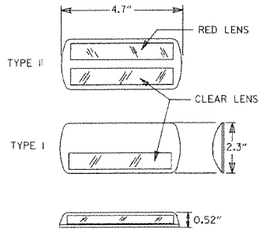
• REPLACES TYPE I (WHITE)



ENTRANCE RAMPS

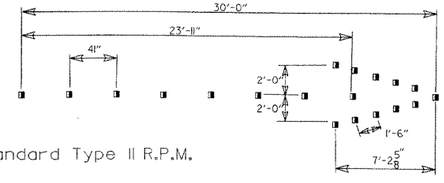


EXIT RAMPS



DETAIL OF STANDARD RAISED PAVEMENT MARKERS

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



(19) Standard Type II R.P.M.

DIRECTIONAL ARROWS

GENERAL NOTES:

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

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

NOTE:
DIMENSIONS SHOWN FOR RAISED PAVEMENT MARKERS ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR MARKERS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR SIMILAR MARKERS MAY BE MADE BY REFERRING TO THE AHTD QUALIFIED PRODUCTS LIST.

11-17-10	REMOVED PLOWABLE PAVEMENT MARKERS	
6-3-10	REVISED PER 2009 MUTCD	
11-18-04	REVISED NOTES	
8-22-02	ADDED & REVISED NOTES; REV. ENTRANCE & EXIT RAMPS	
5-18-00	REMOVED HASHMARKS	
7-02-98	CHANGED TYPES TO ROMAN NUMERALS	
4-26-96	ADDED DIMENSIONS & QUANTITIES; REVISED LANE WIDTH ON EXIT RAMP	
2-2-95	PLACED IN USE	2-2-95
DATE	REVISION	FILMED

ARKANSAS STATE HIGHWAY COMMISSION

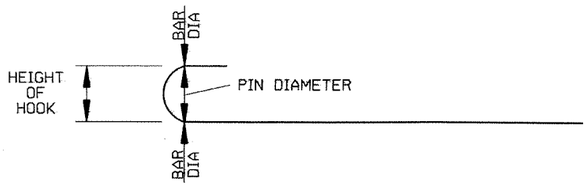
PERMANENT PAVEMENT MARKING ON ACCESS CONTROLLED ROADWAYS

STANDARD DRAWING PM-2

STEEL FABRICATION: REINFORCING STEEL FABRICATION SHALL CONFORM TO THE DIMENSIONS LISTED IN THE TABLE BELOW:

BAR SIZE	PIN DIAMETER	HOOK EXTENSION "K"
3	2¼"	4"
4	3 "	4½"
5	3¾"	5"
6	4½"	6"
7	5¼"	7"
8	6"	8"

IF THE OVERALL HEIGHT OF THE HOOK (SEE DIAGRAM BELOW) FOR A "b", "b1", "b2" or "b3" BENT BAR IS GREATER THAN THE CORRESPONDING TOP OR BOTTOM SLAB THICKNESS, LESS 2¾ INCHES, EACH BENT BAR SHALL BE REPLACED WITH ONE HOOKED BAR AND ONE STRAIGHT BAR, USING LENGTHS AS SHOWN IN THE TABLE BELOW. THE TWO BARS SHALL BE THE SAME DIAMETER AS, AND PLACED AT THE SAME SPACING AS, THE "b", "b1", "b2" OR "b3" BENT BARS THEY REPLACE.



NOTE: DIMENSIONS OF BARS ARE MEASURED OUT TO OUT OF BARS.

OVERALL HEIGHT OF HOOKED BAR DIAGRAM

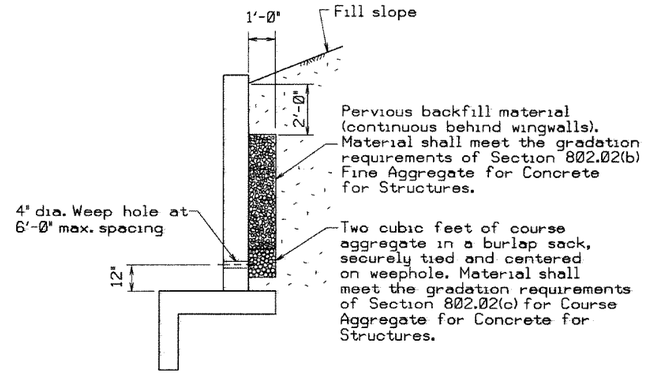
THE HOOKED BARS SHALL BE PLACED IN THE BOTTOM OF THE TOP SLAB AND THE TOP OF THE BOTTOM SLAB. THE STRAIGHT BARS SHALL BE PLACED IN THE TOP OF THE TOP SLAB AND THE BOTTOM OF THE BOTTOM SLAB. SEE TABLE BELOW FOR LENGTHS OF REPLACEMENT HOOKED AND STRAIGHT BARS.

FOR SKEWED CULVERTS, THE REPLACEMENT STRAIGHT BAR MAY HAVE TO BE CUT IN FIELD TO FIT.

REPLACEMENT BAR LENGTHS TABLE

BAR SIZE: "b", "b1", "b2" OR "b3"	LENGTH OF HOOKED BAR	LENGTH OF STRAIGHT BAR
#4	L + 1'-0"	SEE "c" BAR LENGTH
#5	L + 1'-2"	SEE "c" BAR LENGTH
#6	L + 1'-4"	SEE "c" BAR LENGTH
#7	L + 1'-8"	SEE "c" BAR LENGTH
#8	L + 1'-10"	SEE "c" BAR LENGTH
#9	L + 2'-6"	SEE "c" BAR LENGTH

L = "OW" - 3 INCHES



WINGWALL DRAINAGE DETAIL

REINFORCED CONCRETE BOX CULVERT GENERAL NOTES

CONCRETE SHALL BE CLASS S WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3500 PSI.

REINFORCING STEEL SHALL BE AASHTO M 31 OR M 53, GRADE 60.

CONSTRUCTION AND MATERIALS FOR WINGWALL DRAINAGE, INCLUDING WEEP HOLES AND GRANULAR MATERIAL, SHALL BE SUBSIDIARY TO THE BID ITEM, "CLASS S CONCRETE".

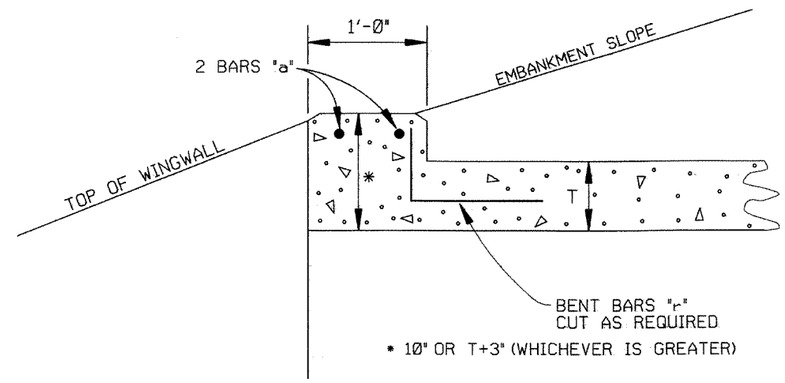
MEMBRANE WATERPROOFING SHALL CONFORM TO THE REQUIREMENTS OF SECTION 815 OF THE STANDARD SPECIFICATIONS.

MEMBRANE WATERPROOFING SHALL BE APPLIED TO ALL CONSTRUCTION JOINTS IN THE TOP SLAB AND THE SIDEWALLS OF R.C. BOX CULVERTS AS DIRECTED BY THE ENGINEER. NO PAYMENT SHALL BE MADE FOR THIS ITEM, BUT PAYMENT WILL BE CONSIDERED TO BE INCLUDED IN THE VARIOUS ITEMS BID FOR THE R.C. BOX CULVERT.

REINFORCING STEEL TOLERANCES: THE TOLERANCES FOR REINFORCING STEEL SHALL MEET THOSE LISTED IN "MANUAL OF STANDARD PRACTICE" PUBLISHED BY CONCRETE REINFORCING STEEL INSTITUTE (CRSI) EXCEPT THAT THE TOLERANCE FOR TRUSS BARS SUCH AS FIGURE 3 ON PAGE 7-4 OF THE CRSI MANUAL SHALL BE MINUS ZERO TO PLUS ½ INCH.

WEEP HOLES IN WINGWALLS: THE MAXIMUM HORIZONTAL SPACING OF WEEP HOLES IN WINGWALLS SHALL BE 6'-0" AND SHALL BE SPACED TO CLEAR ALL REINFORCING STEEL. THE DRAIN OPENING SHALL BE 4" DIAMETER AND PLACED 12" ABOVE TOP OF WINGWALL FOOTING.

THE REQUIREMENTS SHOWN ON THIS DRAWING SHALL SUPERCEDE THE CORRESPONDING REQUIREMENTS ON ALL REINFORCED CONCRETE BOX CULVERT STANDARD DRAWINGS.



* 10" OR T+3" (WHICHEVER IS GREATER)

NOTE: FOR ALL SKEWED R.C. BOX CULVERTS THE LENGTH "K" OF THE MODIFIED HEADWALL SHALL BE EQUAL TO THE ROADWAY LENGTH "RL". THE ENDS OF THE HEADWALL SHALL BE CONSTRUCTED PARALLEL TO THE SKEW ANGLE OF THE BOX CULVERT.

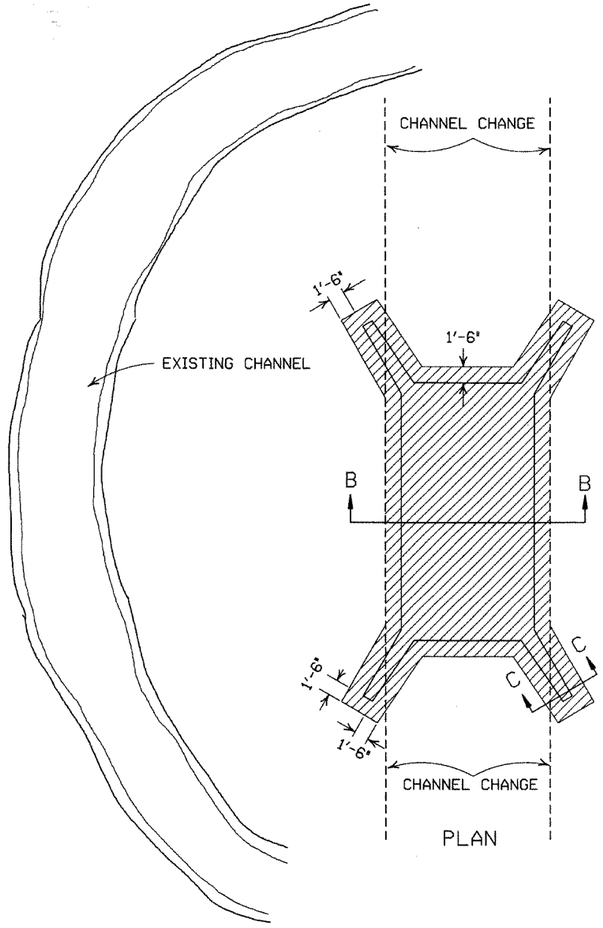
R.C. BOX CULVERT HEADWALL MODIFICATIONS

DATE	REVISION	DATE FILMED
05-25-06	REV. GEN. NOTES AND DETAILS FOR WEEP HOLES; BAR DIAGRAM	
11-16-01	ADDED WINGWALL DRAINAGE DETAIL/EDITED GEN. NOTES	
10-18-96	REV. ASTM REF. TO AASHTO & ADDED BAR DIAGRAM	
10-12-95	MOVED SOLID SODDING DETAIL TO RCB-2	
6-2-94	ADDED SOLID SODDING PLAN DETAIL	
8-5-93	REVISED PIN DIAMETER TO SPECS.	
8-15-91	DRAWN AND ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

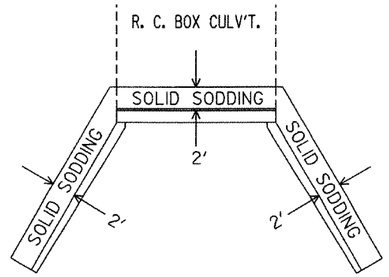
REINFORCED CONCRETE BOX CULVERT DETAILS

STANDARD DRAWING RCB-1



PLAN

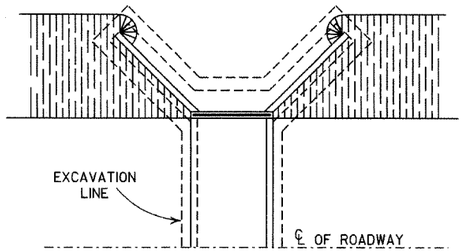
SOLID SODDING



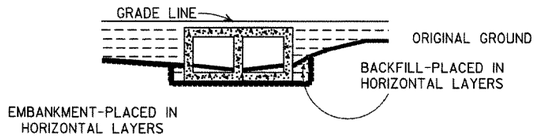
PLAN

PARTIAL SECTION SHOWING SOLID SODDING AT HEADWALLS AND WING WALLS

NOTE: LENGTH MEASURED ALONG THE CENTER OF 2' STRIP OF SOLID SODDING.

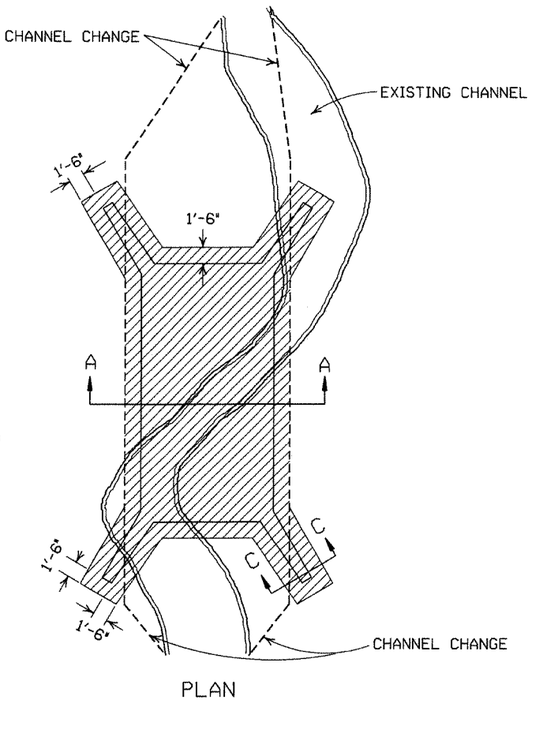


PLAN

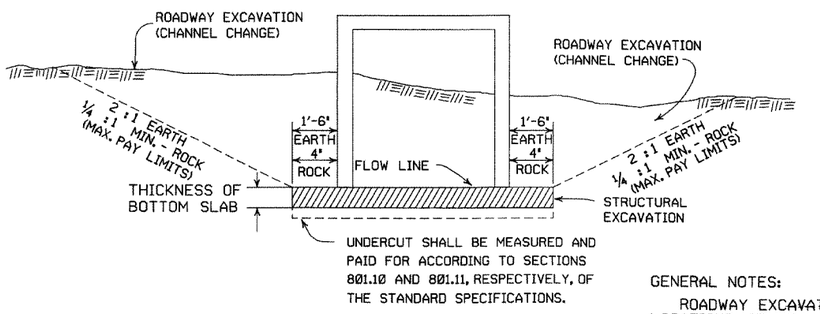


LONGITUDINAL SECTION

BACKFILL DETAILS FOR BOX CULVERT

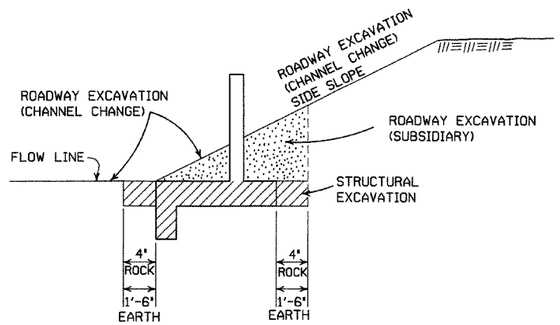


PLAN

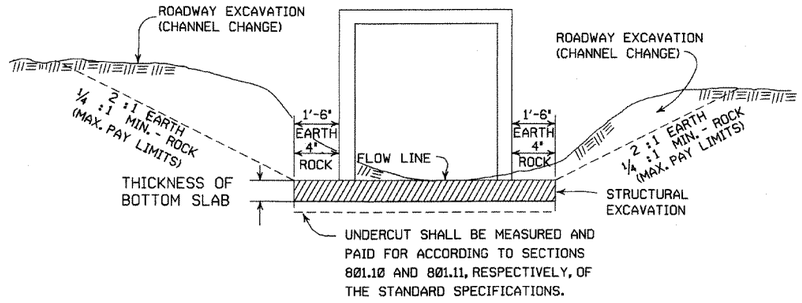


SECTION B-B

DETAILS FOR NEW CHANNELS



SECTION C-C



SECTION A-A

DETAILS THROUGH EXISTING CHANNELS

GENERAL NOTES:

ROADWAY EXCAVATION (CHANNEL CHANGE) WILL BE PAID FOR AT R.C. BOX CULVERT LOCATIONS. IT WILL BE PAID TO THE LIMITS ACTUALLY CUT AND WILL BE CONFINED TO THAT PORTION OF THE INDICATED AREA THAT IS ABOVE THE FLOW LINE. ROADWAY EXCAVATION (CHANNEL CHANGE) SHALL BE MEASURED BY CROSS SECTIONS AND VOLUMES COMPUTED BY AVERAGE END AREA METHOD. ALL CHANNEL CHANGES SHALL BE BROUGHT TO GRADE PRIOR TO MAKING ANY EXCAVATION FOR STRUCTURES.

EXCAVATION FOR STRUCTURES WILL BE PAID FOR AT ALL R.C. BOX CULVERT LOCATIONS. IT WILL BE PAID TO THE LIMITS SHOWN AND SHALL BE CONFINED TO THAT PORTION OF THE INDICATED AREA THAT IS BELOW THE CHANNEL FLOW LINE.

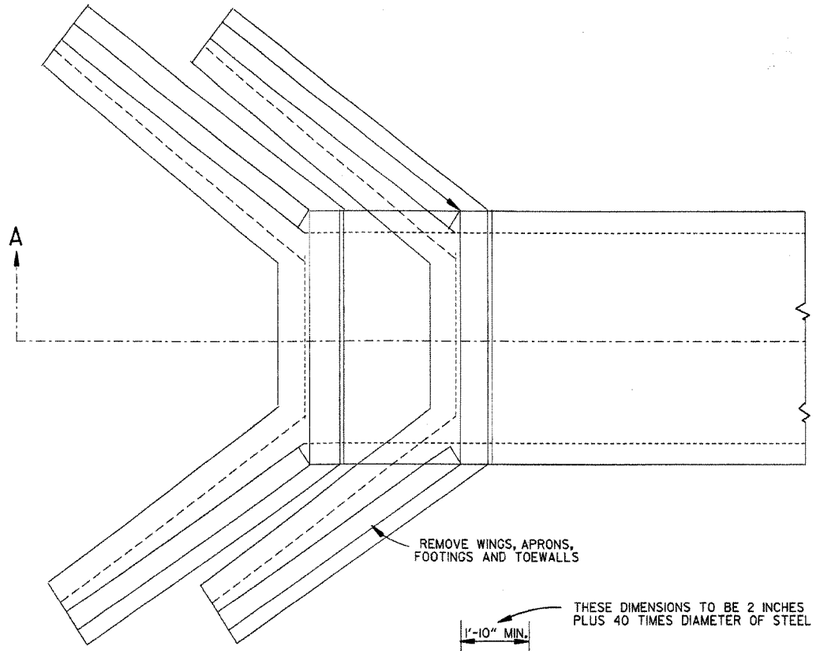
ROADWAY EXCAVATION SHOWN IN SECTION C-C ABOVE AS SUBSIDIARY WILL NOT BE MEASURED OR PAID FOR DIRECTLY, BUT PAYMENT WILL BE CONSIDERED TO BE INCLUDED IN THE VARIOUS ITEMS OF EXCAVATION.

DATE	REVISION	FILMED
11-20-03	REVISED SECTION A-A NOTE	
8-22-02	REVISED SECTION B-B NOTE	
10-12-95	COMBINED 1891B AND 1888A	
1-4-83	REVISED GENERAL NOTES	674-1-4-83
	AND ADDED MAXIMUM PAY	
	LIMIT NOTES.	
2-2-76	EXCAV. PAY LIMITS	917-2-2-76
10-2-72	REVISED AND REDRAWN	564-10-16-72

ARKANSAS STATE HIGHWAY COMMISSION

EXCAVATION PAY LIMITS, BACKFILL, & SOLID SODDING FOR BOX CULVERTS

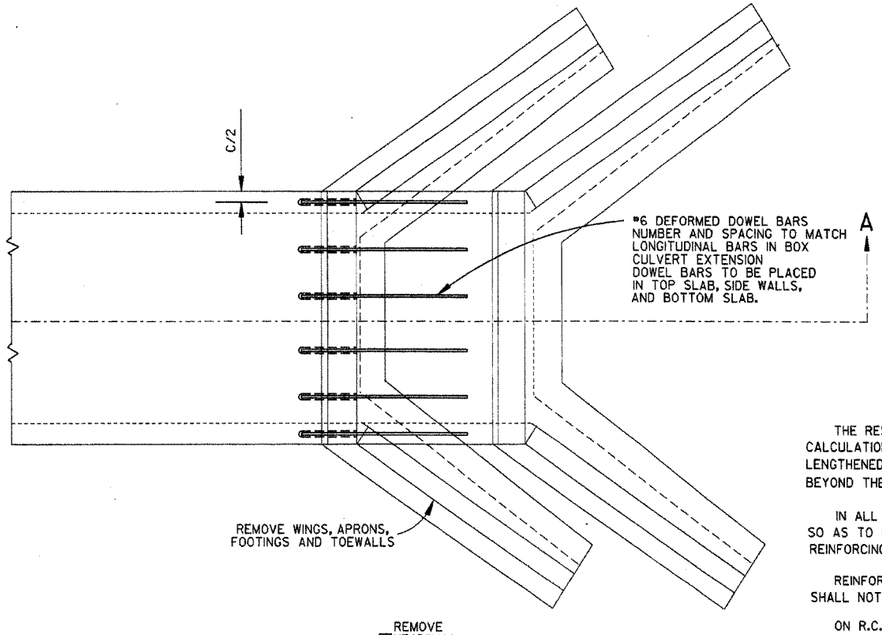
STANDARD DRAWING RCB-2



TOP VIEW
R.C. BOX CULVERT

SECTION A-A

METHOD 1



TOP VIEW
R.C. BOX CULVERT

SECTION A-A

METHOD 2

GENERAL NOTES

	USE FOR METHOD
THE RESIDENT ENGINEER WILL MAKE INDIVIDUAL CALCULATIONS OF QUANTITIES FOR EACH STRUCTURE LENGTHENED, MAKING NO ALLOWANCE FOR OVERBREAKAGE BEYOND THE LINES INDICATED.	1
IN ALL INSTANCES CONCRETE SHALL BE REMOVED SO AS TO PERMIT FULL 40 DIAMETER SPLICE OF REINFORCING STEEL.	1
REINFORCING STEEL REMOVED FROM EXISTING STRUCTURE SHALL NOT BE REUSED IN CONSTRUCTING EXTENSION.	1&2
ON R.C. BOX CULVERTS THAT HAVE AN EXISTING CONCRETE APRON; THE CONCRETE APRON SHALL BE REMOVED WITH THE WINGS. THE COST OF REMOVING ALL OLD CONCRETE WILL BE INCLUDED IN THE PRICE BID PER CUBIC YARD FOR NEW CONCRETE OF THE CLASS SPECIFIED AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.	1&2
MATERIALS FOR SECURING DOWEL BARS SHALL MEET THE REQUIREMENTS OF SECTION 507.02 OF THE STANDARD SPECIFICATIONS.	2
DOWEL BARS SHALL BE INSTALLED AS FOLLOWS: THE DRILLING PROCEDURE SHALL BE APPROVED BY THE ENGINEER, THE FILLING SYSTEM SHALL BE APPROVED BY THE ENGINEER, AND SHALL BE AN INJECTION-TYPE SYSTEM WHICH WILL INSURE THAT SUFFICIENT MATERIAL IS INJECTED SO IT COMPLETELY SURROUNDS THE BARS AND FILLS THE HOLES.	2
THE CONTRACTOR SHALL HAVE THE OPTION OF USING EITHER METHOD 1 OR METHOD 2, REGARDLESS OF WHICH METHOD IS USED, PAY QUANTITIES WILL BE CALCULATED BASED ON METHOD 1.	1&2

NOTE:
NO PART OF THIS STANDARD IS TO BE USED FOR ANY DETAILS RELATIVE TO NEW CONSTRUCTION.

SEE STANDARD DRAWING LISTED IN TABULATION OF STRUCTURES FOR ALL NEW CONSTRUCTION DETAILS.

DATE	REVISION	DATE FILM
10-12-95	CHANGED DRAWING # FROM 144-A	
4-1-93	ADDED GENERAL NOTE	
10-1-92	ADDED ALT. METHOD OF EXTENSION	
11-30-89	REDRAWN	
1-4-83	ELIMINATED CONCRETE CLASS	
12-20-56	RETRACED	

ARKANSAS STATE HIGHWAY COMMISSION

METHOD OF EXTENDING EXISTING R.C. BOX CULVERTS

STANDARD DRAWING RCB-3

FILE STDrcb3.dgn

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.			R.C.			N.C.			N.C.		
1° 00′	N.C.			N.C.			0.021			0.022			0.023			0.025			0.028		
1° 15′	N.C.			R.C.			0.026			0.026			0.030			0.033	250		0.037	275	
1° 30′	N.C.			0.021			0.031	200		0.032			0.037	250		0.041		350	0.046		350
1° 45′	N.C.			0.025			0.036			0.037			0.043			0.048			0.054		
2° 00′	R.C.			0.028	175		0.040			0.043	225		0.049			0.055			0.062		
2° 15′	R.C.			0.031			0.045			0.048		350	0.055			0.062			0.070		
2° 30′	0.021			0.034			0.049			0.053			0.061			0.069	265		0.078	300	
2° 45′	0.023			0.037			0.053			0.058			0.067			0.075	280		0.085	315	400
3° 00′	0.025			0.040			0.057			0.063			0.072			0.081	300		0.091	335	
3° 15′	0.027	150		0.043		250	0.061			0.067	230		0.077	260		0.087	315		0.096	350	
3° 30′	0.029			0.046			0.065	205		0.072	245		0.082	275		0.093	325	400	0.098	360	450
3° 45′	0.031			0.049			0.069	215		0.076	255		0.086	285		0.095	340		0.100	360	
4° 00′	0.033			0.051			0.072	225		0.080	265		0.090	295	400	0.097	345				
4° 30′	0.037			0.056			0.078	240		0.083	270		0.093	305		0.099	350				
5° 00′	0.040			0.061			0.083	250		0.087	280		0.096	315							
5° 30′	0.043			0.066	185		0.088	260		0.091	295	400	0.098	320							
6° 00′	0.046			0.070	190		0.092	270		0.094	300										
6° 30′	0.050			0.074	200		0.095	280	350	0.096	305										
7° 00′	0.053			0.078	210		0.098	285		0.100	315										
7° 30′	0.056			0.081	215		0.099	290													
8° 00′	0.058			0.084	220	300	0.100	290													
8° 30′	0.061			0.087	225																
9° 00′	0.063			0.089	230																
10° 00′	0.068	160		0.094	235																
11° 00′	0.072	170		0.097	250																
12° 00′	0.076	175		0.099	250																
13° 00′	0.080	180		0.100	250																
14° 00′	0.083	190																			
15° 00′	0.086	195																			
16° 00′	0.089	200																			
17° 00′	0.091	200																			
18° 00′	0.093	205																			
19° 00′	0.095	210																			
20° 00′	0.097	215	300																		
21° 00′	0.098	215																			
22° 00′	0.099	215																			
23° 00′	0.099	215																			
24° 00′	0.100	220																			

D MAX = 24° 45′ | D MAX = 13° 15′ | D MAX = 8° 15′ | D MAX = 6° 30′ | D MAX = 5° 15′ | D MAX = 4° 15′ | D MAX = 3° 30′

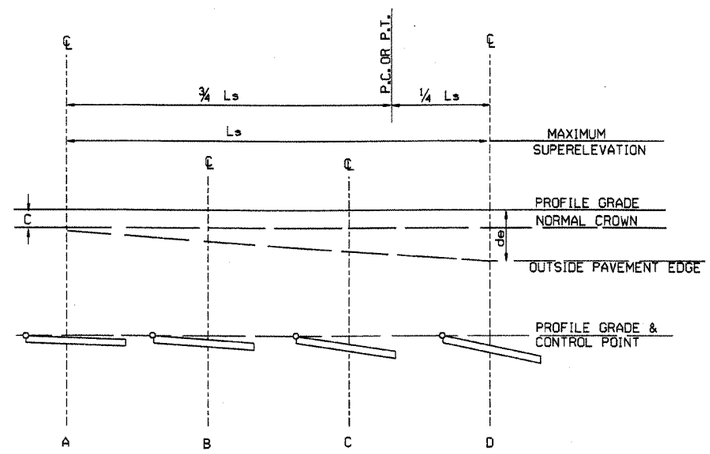
GENERAL NOTES

1. ON PAVEMENT WITH ONE-WAY TRAFFIC, THE SUPERELEVATION SHALL BE REVOLVED ON THE PROFILE GRADE POINT.
2. SUPERELEVATION VALUES SHOWN ON THE CROSS SECTIONS ARE VALUES (+) OR (-) TO BE ADDED OR SUBTRACTED FROM THE POINT OF CONTROL.
3. LENGTHS FOR L_s MAY BE ROUNDED IN MULTIPLES OF 25 FT. OR 50 FT. TO PERMIT SIMPLER CALCULATIONS.
4. MINIMUM L_s VALUES MAY BE USED FOR RAMPS; DESIRABLE VALUES SHALL APPLY TO MAIN LANES.
5. DIVIDED PAVEMENTS WIDER THAN 4 LANES SHALL HAVE ADDITIONAL TRANSITION LENGTHS AS FOLOWS:

6 LANE DIVIDED---------+20%
8 LANE DIVIDED---------+50%

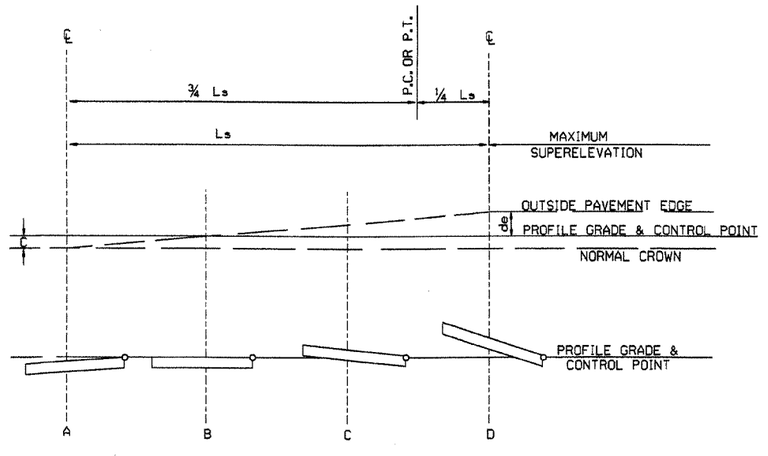
ABBREVIATIONS

NC - NORMAL CROWN
RC - REVERSE CROWN, SUPERELEVATION AT NORMAL CROWN SLOPE
S - SUPERELEVATION
L - DISTANCE FROM BEGINNING OF SUPERELEVATION TRANSITION TO ANY POINT (FT.)
d - WIDTH OF PAVEMENT
e - MAXIMUM RATE OF SUPERELEVATION (FT. PER FT.)
L_s - LENGTH OF SUPERELEVATION TRANSITION (FT.)
C - NORMAL CROWN (FT.)



ONE-WAY TRAFFIC
INSIDE LANE

SUPERELEVATION FORMULA = $S = -\frac{L(de+C)}{L_s} - C$



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

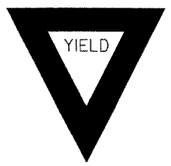
TABLES AND METHOD OF SUPERELEVATION FOR ONE-WAY TRAFFIC

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"

R2-5A

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

R2-5C

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

R4-1

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

R4-2

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

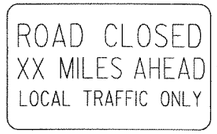
R5-1

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

R11-2

48"X30"

R11-3A



60"X30"

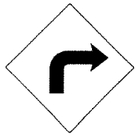
R11-4

60"X30"

RSP-1

48"X30"

W1-1



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

W1-2

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

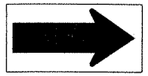
W1-3

STD. 48"X48"

W1-4

STD. 48"X48"

W1-6

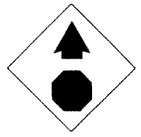


STD. 48"X24"
SPECIAL 60"X30"

W1-8

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

W3-1

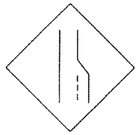


STD. 36"X36"
SPECIAL 48"X48"

W3-2

STD. 36"X36"
SPECIAL 48"X48"

W4-2



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

W5-1

STD. 36"X36"
SPECIAL 48"X48"

W6-3

EXPWY. 36"X36"
SPECIAL 48"X48"

W8-7

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

W9-2

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

W13-1

STD. 24"X24"

W20-1

STD. 48"X48"

W20-2

STD. 48"X48"

W20-3

STD. 48"X48"

W20-4

STD. 48"X48"

W20-5

STD. 48"X48"

W20-7a

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

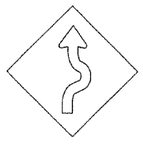
W21-2

STD. 30"X30"
SPECIAL 36"X36"

W21-5

STD. 30"X30"
SPECIAL 36"X36"

W24-1



STD. 36"X36"

W1-4b

STD. 48"X48"

R56-1

STD. 18"X18"

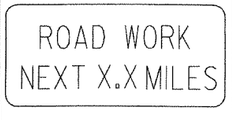
W8-11

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

W8-9

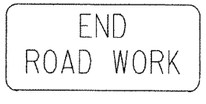
STD. 36"X36"
FWY. 48"X48"

G20-1



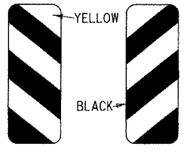
60"X24"

G20-2



48"X24"

OM-3L OM-3R



12"X36"

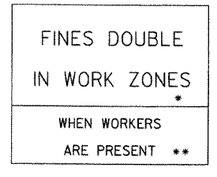
M4-9

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

M4-10

48"X18"

R55-1



36"X60"

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

ADVANCE DISTANCES
(XXXX)

500 FT	1/2 MILE
1000 FT	3/4 MILE
1500 FT	1 MILE
	AHEAD

GENERAL NOTES:

1. ALL TRAFFIC CONTROL DEVICES USED ON ROAD CONSTRUCTION SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION, AND TO THE STANDARD HIGHWAY SIGNS, LATEST EDITION, OR AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION.

2. TRAFFIC CONTROL DEVICES SHALL BE SET UP JUST BEFORE THE START OF CONSTRUCTION OPERATIONS AND SHALL BE PROPERLY MAINTAINED DURING THE TIME SUCH CONDITIONS EXIST. THEY SHALL REMAIN IN PLACE ONLY AS LONG AS NEEDED AND REMOVED THEREAFTER.

3. EXISTING SIGNS AND CONSTRUCTION SIGNS SHALL BE KEPT IN PROPER POSITION, AND BE CLEAN AND LEGIBLE AT ALL TIMES. SIGNS THAT DO NOT APPLY TO EXISTING CONDITIONS SHALL BE REMOVED. SIGNS THAT ARE DAMAGED, DEFACED, OR THAT ACCUMULATE DIRT DURING CONSTRUCTION SHALL BE CLEANED, REPAIRED, OR REPLACED.

• 4. SIGNS ARE USUALLY MOUNTED ON A SINGLE POST, ALTHOUGH THOSE WIDER THAN 36" OR LARGER THAN 10 SQ. FT. SHALL BE MOUNTED ON TWO POSTS OR ABOVE A TYPE III BARRICADE.

• 5. SIGN POSTS DIRECT BURIED IN SOIL SHALL BE 2 LB. MINIMUM CHANNEL POST OR 4"x4" WOOD POSTS. CHANNEL POSTS SHALL BE PAINTED GREEN. WOOD POSTS SHALL BE PAINTED WHITE. ALL POSTS SHALL BE NEATLY CONSTRUCTED, AND SHALL BE REPLUMBED, CLEANED, OR REPAIRED AS NEEDED FOR THE DURATION OF THE JOB. THERE SHALL NOT BE MORE THAN 2 POSTS IN A 7' PATH FOR WOOD OR CHANNEL POSTS. ANY CHANNEL POST SPLICE SHALL BE IN ACCORDANCE WITH STANDARD DRAWING TC-3.

6. POST MOUNTED SIGNS IN RURAL AREAS SHALL BE CONSTRUCTED WITH THE NEAR EDGE OF THE SIGN FROM 6 TO 12 FEET FROM THE PAVEMENT EDGE. SIGNS IN URBAN AREAS AND BARRICADE MOUNTED SIGNS SHALL BE MOUNTED A MINIMUM OF 2 FEET FROM THE PAVEMENT EDGE.

7. ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN URBAN AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE. ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN RURAL AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE, EXCEPT A MINIMUM OF 6' SHALL BE USED WHEN MOUNTING AN ADVISORY SIGN BELOW A WARNING SIGN. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR INTERMEDIATE TERM STATIONARY WORK CONDITIONS. THE SIGNS MINIMUM MOUNTING HEIGHT SHALL BE 5'. RETROREFLECTIVE DEVICES SHALL BE USED. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR SHORT-TERM, SHORT DURATION, AND MOBILE CONDITIONS. THEY SHALL BE NO LESS THAN ONE (1) FOOT ABOVE THE TRAVELED WAY. LONG-TERM STATIONARY SIGNS SHALL BE DIRECT BURIED IN SOIL, UNLESS CONDITIONS NECESSITATE THE USE OF PORTABLE SIGNS, OR AS APPROVED BY THE ENGINEER. CONCRETE PADS, CONCRETE OR ROCK BALLAST, OR OTHER SOLID MATERIALS SHALL NOT BE UTILIZED WITH PORTABLE SIGN SUPPORTS.

8. FLAGGERS SHALL USE REFLECTORIZED STOP-SLOW PADDLES. FLAGS MAY BE USED ONLY FOR EMERGENCY SITUATIONS.

9. MOST OF THE SIGNS SHOWN ARE ORIENTED TO THE RIGHT. HOWEVER, THIS DOES NOT PRECLUDE THE USE OF MIRROR IMAGES OF THESE SIGNS WHERE THE REVERSE ORIENTATION MIGHT BETTER CONVEY TO MOTORISTS THE PROPER DIRECTION OF MOVEMENT.

10. R55-1 SIGNS SHALL BE PLACED AT LEAST 1500' BUT NOT MORE THAN 1 MILE IN ADVANCE OF THE WORK ZONE. IF A SPEED LIMIT REDUCTION IS IN EFFECT, THE SIGN SHALL BE PLACED A MINIMUM OF 500' IN ADVANCE OF THE "REDUCED SPEED AHEAD" SIGN.

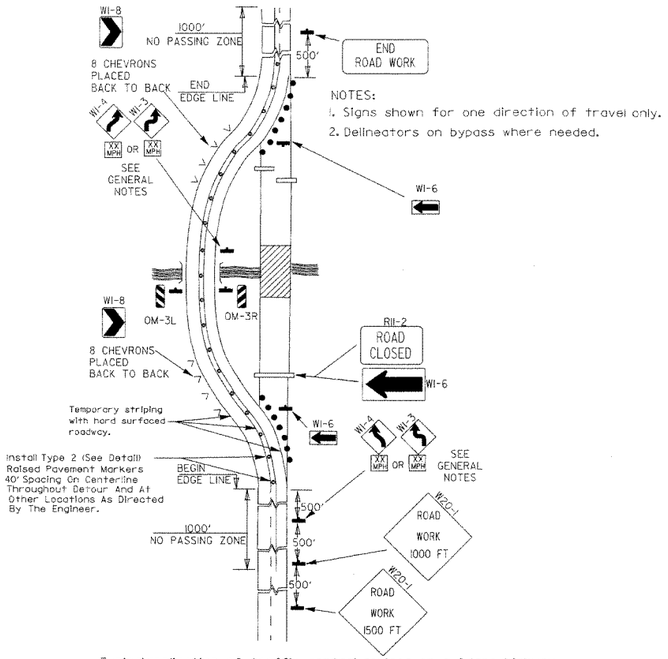
* NOTE: SUPPORTS FOR SIGNS, BARRICADES, AND VERTICAL PANELS THAT ARE DIFFERENT FROM THE REQUIREMENTS SHOWN IN NOTES 4 & 5, BUT MEET THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH), WILL BE ACCEPTED. COMPLIANCE WITH THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY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

DATE	REVISION	FILMED
11-17-10	DELETED W8-9a & ADDED W8-9	
10-15-09	ADDED REFERENCE TO MASH & ADDED SIGN W24-1	
4-17-08	REVISED SIGN DESIGNATIONS	
11-18-04	REVISED NOTES	
10-9-03	REVISED NOTE 1	
11-16-01	REVISED NOTE 7	
9-28-00	REVISED NOTE	
11-18-98	ADDED NOTE	
6-26-97	REVISED NOTE 5	
4-03-97	REVISED NOTE 5	
10-18-96	ADDED CONTROLLED ACCESS HWY. SIGN & TO NOTE 7	
10-12-95	ADDED R55-1	
6-8-95	REVISED TO CORRECT SIGN ILLUSTRATIONS	6-8-95
2-2-95	REVISED PER PART VI, MUTCD SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	

ARKANSAS STATE HIGHWAY COMMISSION

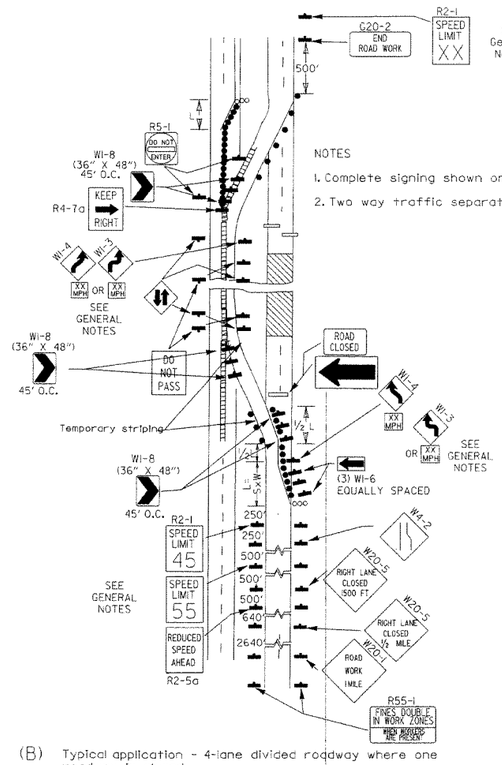
STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

STANDARD DRAWING TC-1



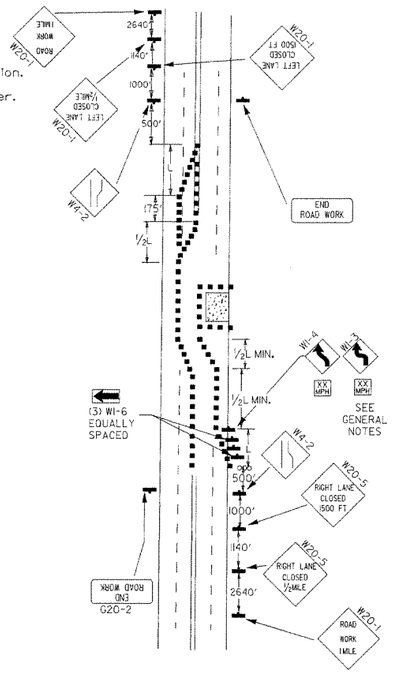
NOTES:
1. Signs shown for one direction of travel only.
2. Delineators on bypass where needed.

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

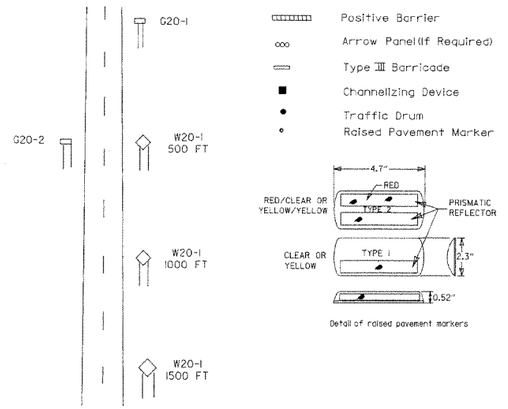


NOTES
1. Complete signing shown only in crossover direction.
2. Two way traffic separated with positive barrier.

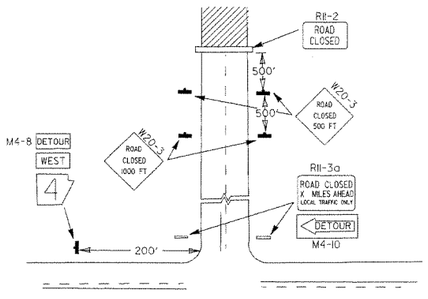
(B) Typical application - 4-lane divided roadway where one roadway is closed.



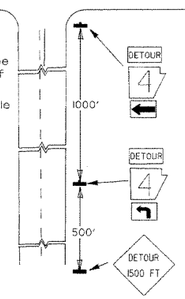
(C) Typical application - 4-lane undivided roadway where half of the roadway is closed.



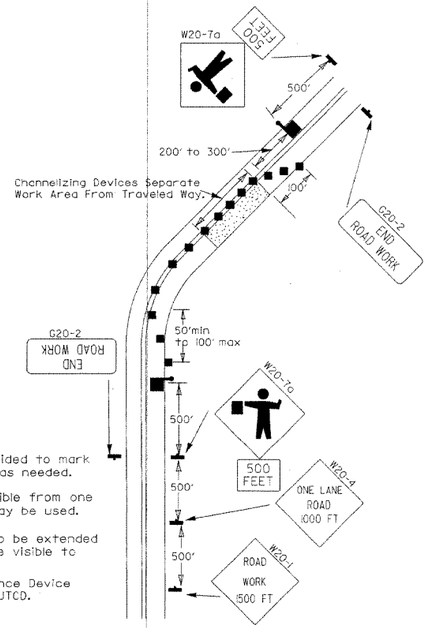
Typical advance warning sign placement



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

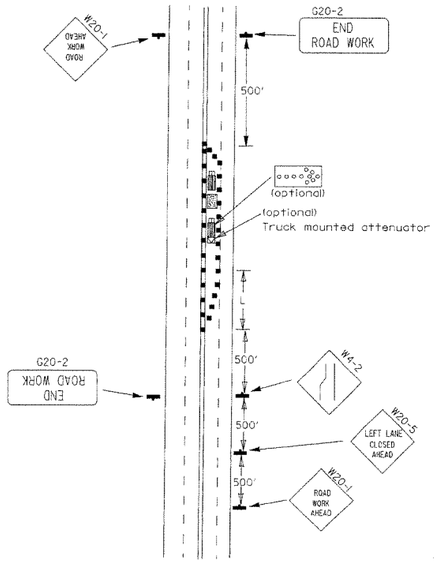


(D) Typical application - roadway closed beyond detour point.



NOTES:
1. Flood lights should be provided to mark flagger stations at night as needed.
2. If entire work area is visible from one station, a single flagger may be used.
3. Channelizing devices are to be extended to a point where they are visible to approaching traffic.
4. Automated Flagger Assistance Device (AFAD) optional. Refer to MUTCD.

(E) Typical application of traffic control devices on 2-lane highway where one lane is closed and flagging is provided.



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

Taper formulae:

$L = S \times W$ for speeds of 45mph or more.

$L = \frac{WS^2}{60}$ for speeds of 40mph or less.

Where:
L= Minimum length of taper.
S= Numerical value of posted speed limit prior to work or 85th percentile speed.
W= Width of offset.

GENERAL NOTES:

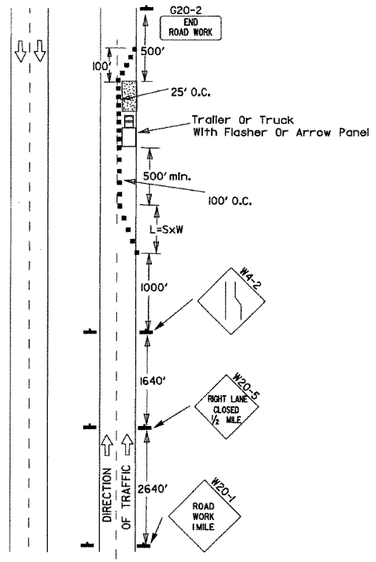
1. Advisory speed posted on WI-3 or WI-4 curve warning signs to be determined at site. Use WI-4 when speed is greater than 30mph and WI-3 when 30mph or less.
2. When the existing speed limit is 55mph and the plans require a speed limit of 45mph, the R2-1(55) shall be omitted and the R2-5A shall be installed at that location. Additional R2-1 45mph speed limit signs shall be installed at a maximum of 1mile intervals. At the end of the work area a R2-1(xx) shall be installed to match original speed limit.
3. When the existing speed limit is 65mph and the plans require a speed limit of 55mph, the R2-1(45) shall be omitted. Additional R2-1 55mph speed limit signs shall be installed at a maximum of 1mile intervals. At the end of the work area a R2-1(xx) shall be installed to match original speed limit.
4. The maximum spacing between channelizing devices in a taper should be approximately equal in feet to the speed limit. Beyond the taper, maximum spacing shall be two times the speed limit, or as directed by the Engineer.
5. Warning lights and/or flags may be mounted to signs or channelizing devices at night as needed.
6. Pavement markings no longer applicable which might create confusion in the minds of vehicle operators shall be removed or obliterated as soon as practicable.
7. Trailer mounted devices such as arrow panels and portable changeable message signs shall be delineated by affixing conspicuity material in a continuous line on the face of the trailer. When placed on or adjacent to the shoulder and not behind a positive barrier, these devices shall be delineated by placing five (5) traffic drums, equally spaced along the traffic side of the device.

DATE	REVISION	FILMED
3-11-16	ADDED (AFAD)	
11-20-08	REVISED SIGN DESIGNATIONS	
11-18-04	ADDED GENERAL NOTE	
10-18-96	ADDED R55-1	
4-26-96	CORRECTED (a) BEHIND G20-2	
6-8-95	CORRECTED SIGN IDENT. ON WI-4A	6-8-95
2-2-95	REVISED PER PART VI, MUTCD, SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	

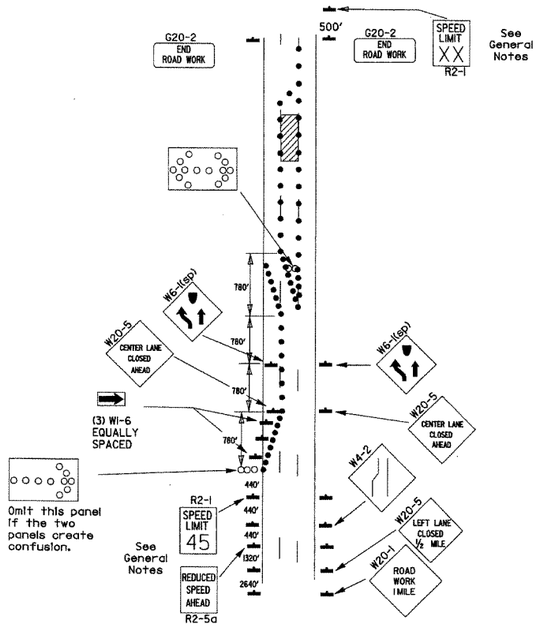
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

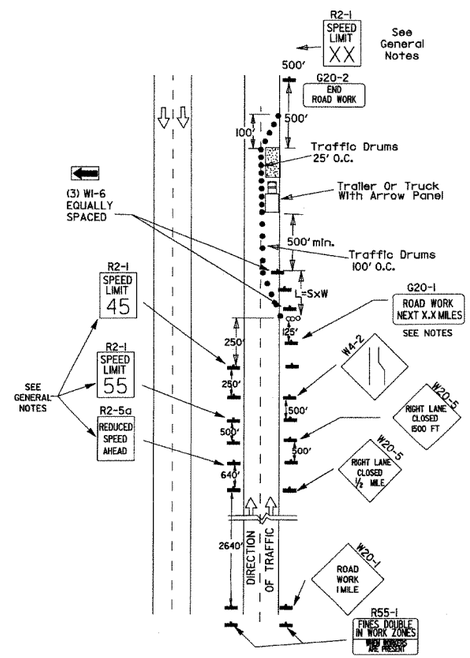
STANDARD DRAWING TC-2



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



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



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

KEY:

ooo Arrow Panel (If Required)

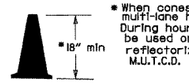
■ Channelizing Device

● Traffic drum

GENERAL NOTES:

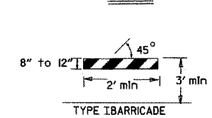
1. A speed limit reduction may be implemented ONLY when designated in the plan or when recommended by the Roadway Design Division.
2. When the existing speed limit is 55mph and the plans require a speed limit of 45mph, the R2-1(55) shall be omitted and the R2-5A shall be installed at that location. Additional R2-1 45mph speed limit signs shall be installed at a maximum of 1mile intervals. At the end of the work area a R2-1(XX) shall be installed to match original speed limit.
3. When the existing speed limit is 65mph and the plans require a speed limit of 55mph, the R2-1(45) shall be omitted. Additional R2-1 55mph speed limit signs shall be installed at a maximum of 1mile intervals. At the end of the work area a R2-1(XX) shall be installed to match original speed limit.
4. The maximum spacing between channelizing devices in a taper should be approximately equal in feet to the speed limit. Beyond the taper, maximum spacing shall be two times the speed limit or as directed by the Engineer.
5. Warning lights and/or flags may be mounted to signs or channelizing devices at night as needed.
6. Pavement markings no longer applicable which might create confusion in the minds of vehicle operators shall be removed or obliterated as soon as practicable.
7. 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

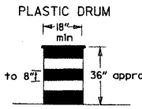


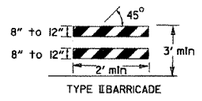
CONES

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

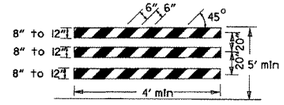


TYPE I BARRICADE



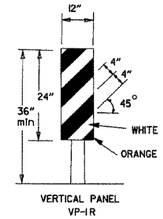


TYPE II BARRICADE



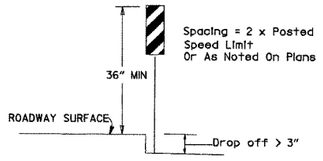
TYPE III BARRICADE

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



VERTICAL PANEL
VP-1R

VERTICAL PANEL PLACEMENT



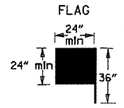
TRAFFIC CONTROL DEVICES
FOR
VERTICAL PAVEMENT DIFFERENTIALS

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

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

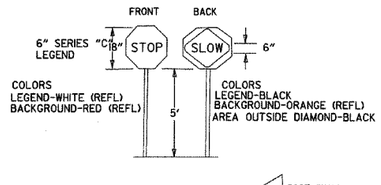
When the shoulder area is used as part of the traveled lane and there is insufficient width to place drums on the remaining shoulder width, then vertical panels shall be used.

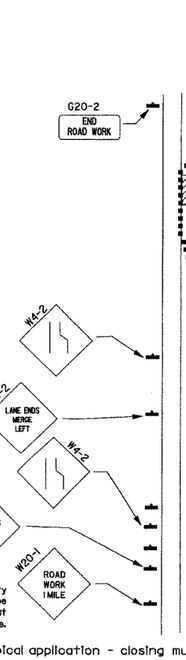
FLAG



Flag shall be of good grade red material

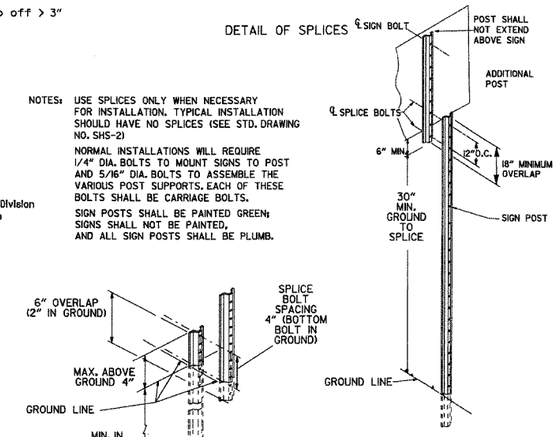
STOP SLOW PADDLE





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

DETAIL OF SPLICES



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

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

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

DATE	REVISION	FILMED
10-15-09	ADDED REFERENCE TO MASH	
11-20-08	REVISED SIGN DESIGNATIONS	
11-18-04	ADDED NOTE	
10-1-98	ADDED NOTE	
4-03-97	ADDED (SP) TO W6-1 & REVISED TRAFFIC CONTROL DEVICES NOTE	
10-18-96	ADDED R55-1	
10-12-95	MOVED UPPER SPLICE	
6-8-95	REVISED SPLICE DETAIL, TEXT	6-8-95
2-2-95	REVISED PER PART VI, MUTCD, SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	

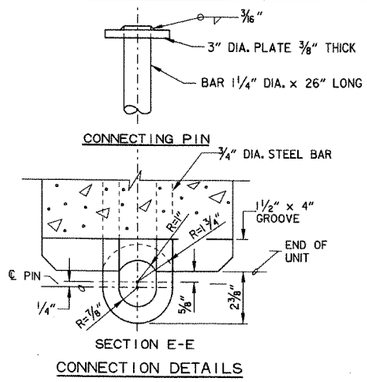
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

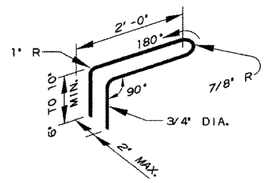
STANDARD DRAWING TC-3

REINFORCING BAR TABLE PER BARRIER UNIT

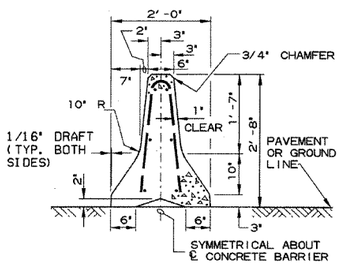
MARK	LOCATION	BAR SIZE	(NO. BARS)	SKETCH
H-1	HORIZONTAL IN BARRIER TIED INSIDE V-1 BARS	#5	(6)	19'-3"
H-2	CENTERED ABOVE DRAIN SLOTS LONG. & TRANSVERSELY	#5	(6)	6'-6"
H-3	TIED ABOVE H-1 BARS TO SUPPORT H-2, TIED TO V-1	#4	(2)	1'-6"
S-1	OVER LIFT HOLES	#4	(2)	2'-5", LIFTING HOLE, 90°, 3 3/8" R
S-2	HORIZ. AROUND SLOTS BETWEEN V-1'S @ DRAIN SLOTS	#4	(2)	1 1/2" R, SLOTS, 7", 1" MIN. CLEAR TO BAR, 1'-6", 5'-1" BAR W/(4) 1 1/2" R BENDS & MIN. 1'-0" OVERLAP
V-1	VERTICAL IN BARRIER(3) EACH END & (2) AT EACH DRAIN SLOTS	#5	(16)	TOTAL LENGTH 4'-9", 2 3/16" R, 12°, 1 1/2", 19", 2'-1 3/8", 4 3/8"



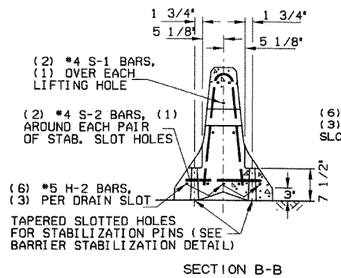
CONNECTION DETAILS



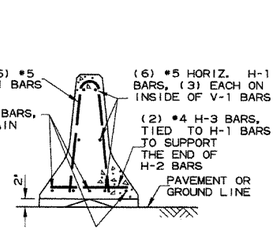
CONNECTION LOOP



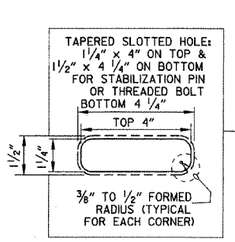
SECTION A-A

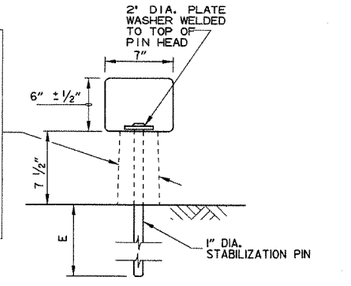


SECTION B-B



SECTION C-C

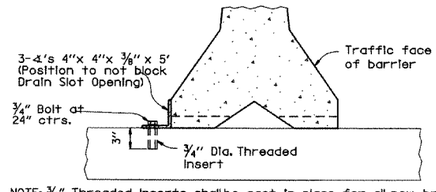




BARRIER STABILIZATION DETAIL

ROADWAY SECTION

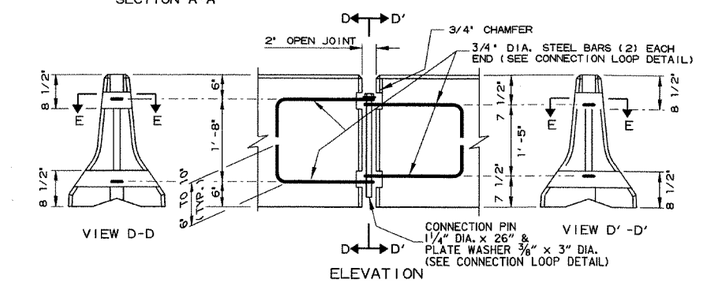
(E) 4" - Concrete Pavement
8" - Asphalt Pavement
12" - Shoulder Areas



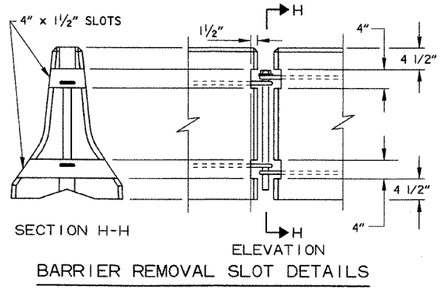
NOTE: 3/4" Threaded Inserts shall be cast in place for all new bridge decks and drilled and grouted for existing bridge decks to be retained. Inserts shall have a minimum ultimate load capacity of 8000 lbs. in tension. After removal of barrier, bolts, and angles, the Inserts shall be filled with approved non-shrink epoxy.

BARRIER STABILIZATION DETAIL

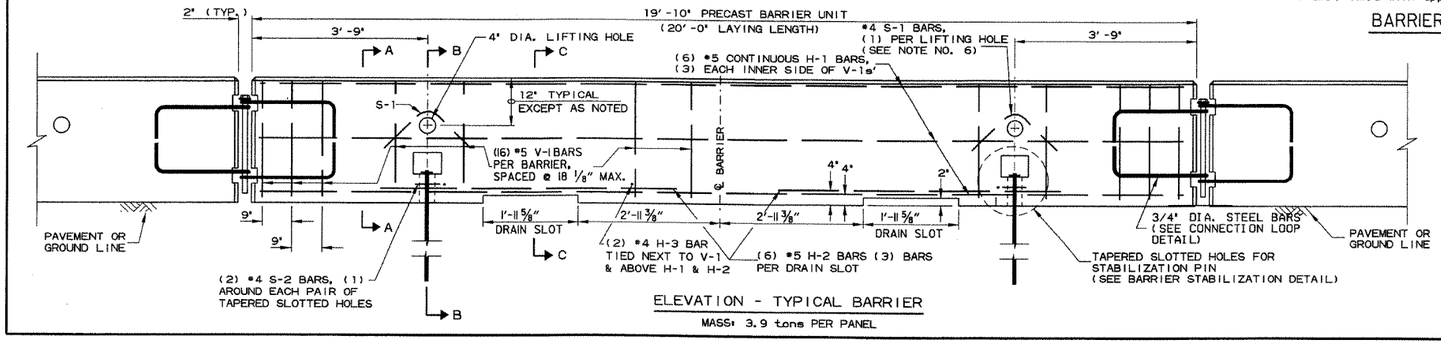
BRIDGE DECKS



ELEVATION



BARRIER REMOVAL SLOT DETAILS



ELEVATION - TYPICAL BARRIER

MASS: 3.9 tons PER PANEL

General Notes

(1) The contractor shall furnish the Precast Concrete Barrier Units and shall be responsible for the manufacture, shipment, storage, placement and removal. At the completion of the project, the precast units will remain the property of the contractor.

(2) Materials shall meet the following minimum requirements:
Concrete: 2500 psi compressive strength at 28 days.
Reinforcing Steel: AASHTO M 31 or M 53, Grade 60
Structural Steel: AASHTO-M270 Grade 36 shall be used for the Connection Pin, Connection Loops, and Stabilization Pins. A One Piece Pin with a 3" rounded top may be used in place of the detailed Connection Pin.
Delineators: Delineators shall be mounted at 10' spacing on top of precast barrier.

In applications where barrier wall is within 6 feet of a traffic lane, additional delineators shall be placed on the barrier at 10' spacing approximately one (1) foot from the top of the barrier. Delineators shall be on the AHTD Qualified Products List for Construction Concrete Barrier Markers.
Delineator color shall be in accordance with the Manual on Uniform Traffic Control Devices.
Payment for delineators shall be considered included in the price bid per Lin. Ft. for "Furnishing and Installing Precast Concrete Barrier". The contractor shall certify to the Engineer that the material and the design used in the precast barrier units meets the requirements as shown on this standard drawing.

(3) Other Precast Concrete Barriers that have been crash tested and approved by the Federal Highway Administration to meet the requirements of NCHRP-350 test level 3 or Manual For Assessing Safety Hardware (MASH) will be accepted in lieu of the barrier shown. Drain slots shall be provided as needed or as directed by the Engineer. The Contractor shall furnish a certification of NCHRP Report 350 or Manual For Assessing Safety Hardware (MASH) compliance for any other types of precast barrier to be used. The certification shall state that the precast concrete barrier meets the requirements of NCHRP Report 350 or Manual For Assessing Safety Hardware (MASH) and include a copy of the Federal Highway Administration's (FHWA) approval letter with all attachments. Precast concrete barrier units shall be fabricated and installed in accordance with crash testing and documentation provided in the FHWA approval letter. Mixing of shapes will not be allowed in a continuous line of units.

(4) Dowel holes in pavement or bridge slabs that are to remain in place shall be filled. Holes in concrete pavement and bridge slabs shall be filled with an approved non-shrink epoxy grout. Holes in asphalt pavement shall be filled with an approved asphalt joint filler. Payment for drilling and filling holes to be included in the price for various barrier items.

(5) Attach Units To Roadway Surface with Stabilization Pins and to Deck Slabs using bolts when required.

(6) A 4" White PVC Sleeve may be used to form the Lifting Hole and if used the Sleeve is to be left in place.

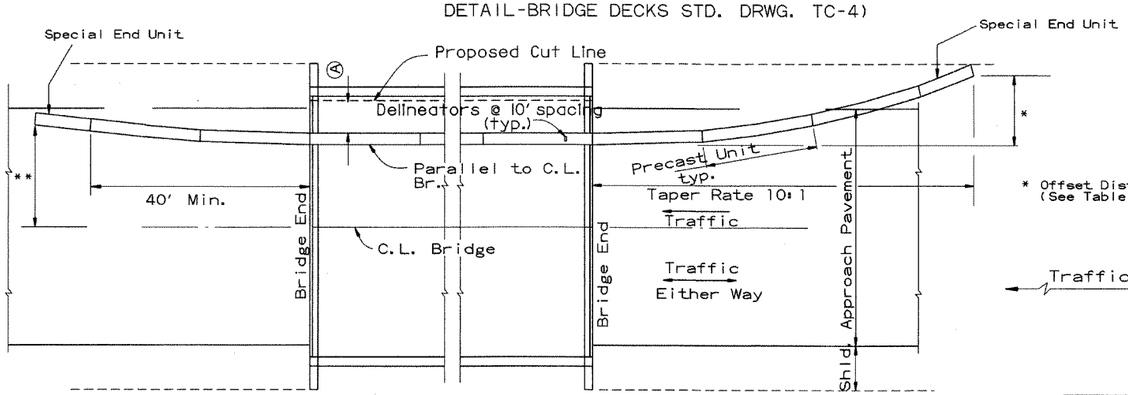
DATE	REVISION	FILMED
10-15-09	ADDED REFERENCE TO MASH	
8-5-09	REV. NOTE 3 CONCERNING DRAIN SLOTS	
11-29-07	REVISED NOTE 3	
5-25-06	DELETED GENERAL NOTE 7	
11-18-04	REVISED BARRIER STABILIZATION DETAIL BRIDGE DECKS	
4-10-03	REVISED GENERAL NOTE 2	
8-22-02	ISSUED NEW DRAWING	

ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION - TEMPORARY PRECAST BARRIER

STANDARD DRAWING TC-4

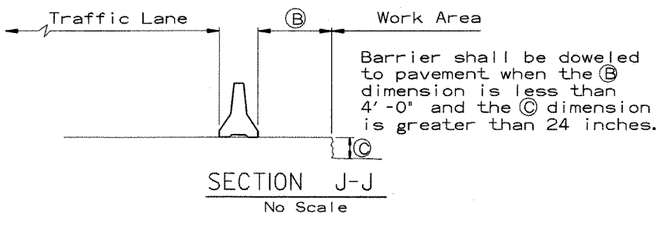
Ⓐ 4 feet or greater preferred. If less than 4 feet, Precast Units shall be connected to slab (SEE BARRIER STABILIZATION DETAIL-BRIDGE DECKS STD. DRWG. TC-4)



BARRIER PLACEMENT ALONG BRIDGE WITH OFFSET

No Scale

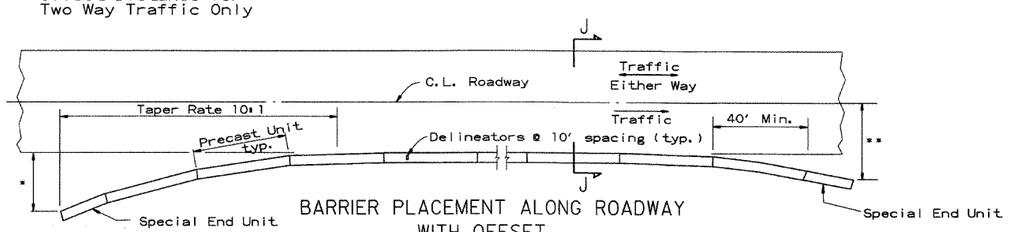
** Offset Distance for Two Way Traffic Only



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



BARRIER PLACEMENT ALONG ROADWAY WITH OFFSET

No Scale

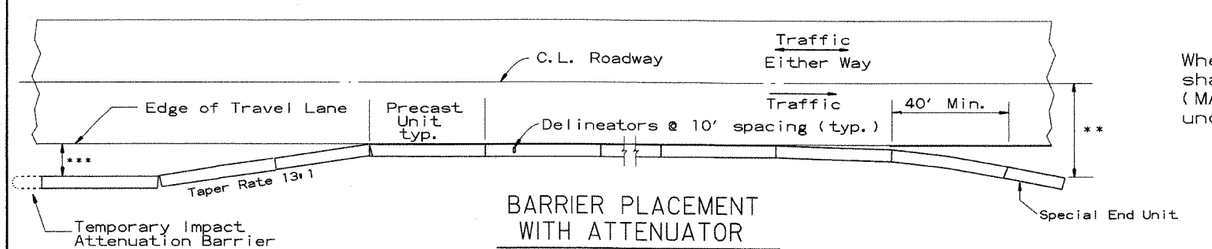
** Offset Distance For Two Way Traffic Only

* 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.

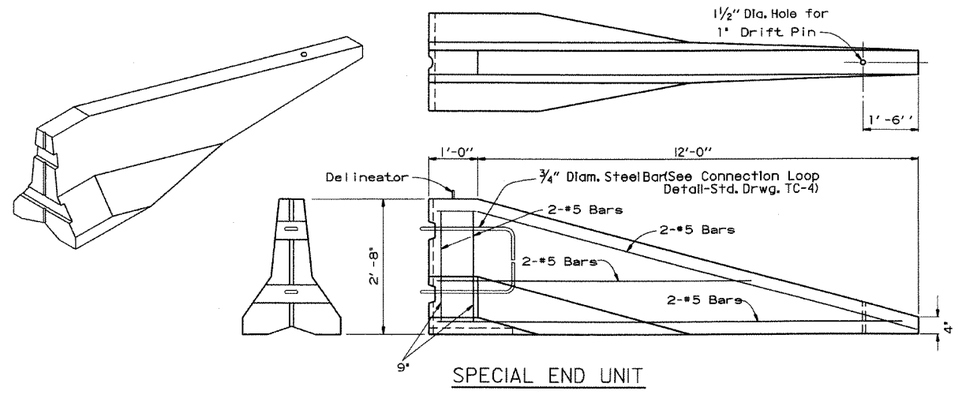


BARRIER PLACEMENT WITH ATTENUATOR

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

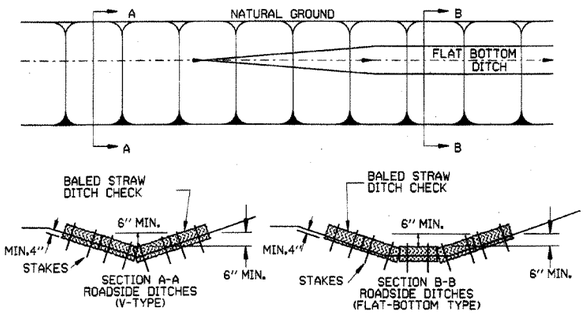
STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION - TEMPORARY PRECAST BARRIER

STANDARD DRAWING TC-5

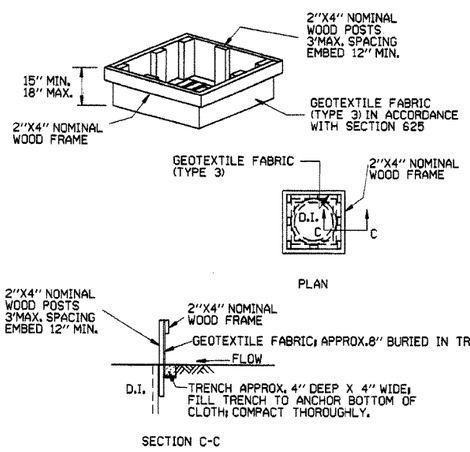
GENERAL NOTES

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

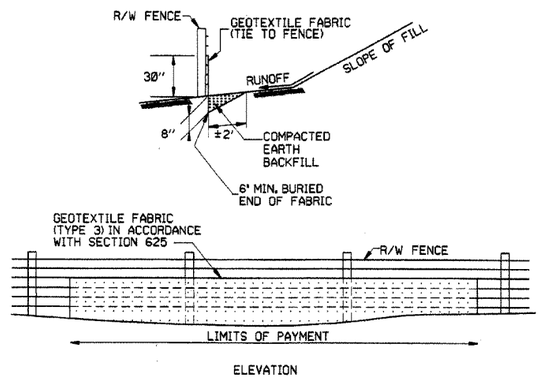
2. STRAW BALES SHALL BE KEYED INTO SOIL A MINIMUM OF 4' AND NO GAPS SHALL BE LEFT BETWEEN BALES.



BALED STRAW DITCH CHECK (E-1)



DROP INLET SILT FENCE (E-7)



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

GENERAL NOTES

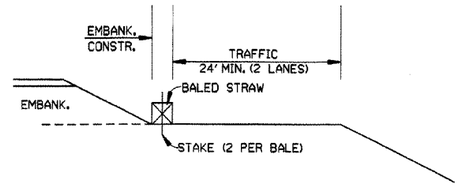
GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST, OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.

GENERAL NOTES

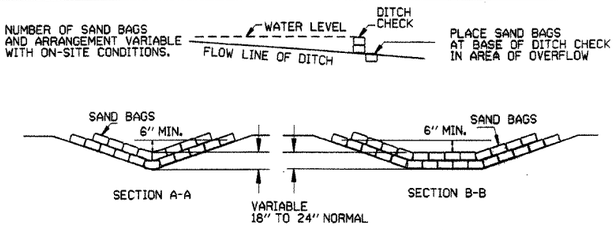
1. STRAW BALES SHALL BE INSTALLED SO THAT THE BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES. THE BALES SHALL BE A MINIMUM OF 30 INCHES IN LENGTH.

2. NO GAPS SHALL BE LEFT BETWEEN BALES.

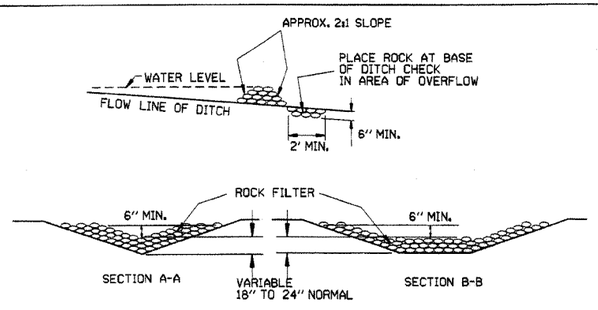
3. BALED STRAW FILTER BARRIERS COMPLETED AND ACCEPTED WILL BE MEASURED BY THE BALE IN PLACE AS AUTHORIZED BY THE ENGINEER AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER BALE FOR BALED STRAW DITCH CHECKS.



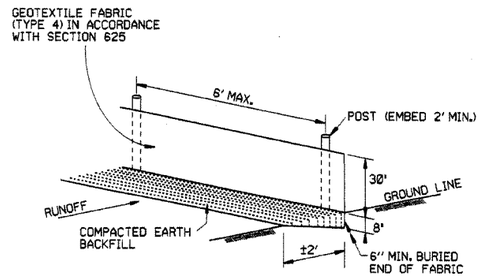
BALED STRAW FILTER BARRIER (E-2)



SAND BAG DITCH CHECK (E-5)



ROCK DITCH CHECK (E-6)



SILT FENCE (E-11)

GENERAL NOTES

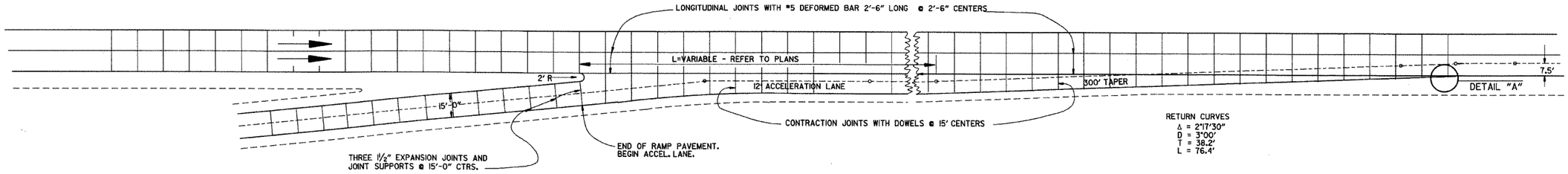
GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST, OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.

DATE	REVISION	FILMED
11-18-98	ADDED NOTES	11-18-98
7-02-98	ADDED BALED STRAW FILTER BARRIER (E-2)	
7-20-95	REVISED SILT FENCE E-4 AND E-11	7-20-95
7-15-94	Rev. E-4 & E-11 Min. 13' Buried End of Fabric	
6-2-94	Revised E-1,4,7, & 11; Deleted E-2 & 3	6-2-94
4-1-93	REDRAWN	
10-1-92	REDRAWN	
8-2-76	ISSUED R.D.M.	298-7-28-76

ARKANSAS STATE HIGHWAY COMMISSION

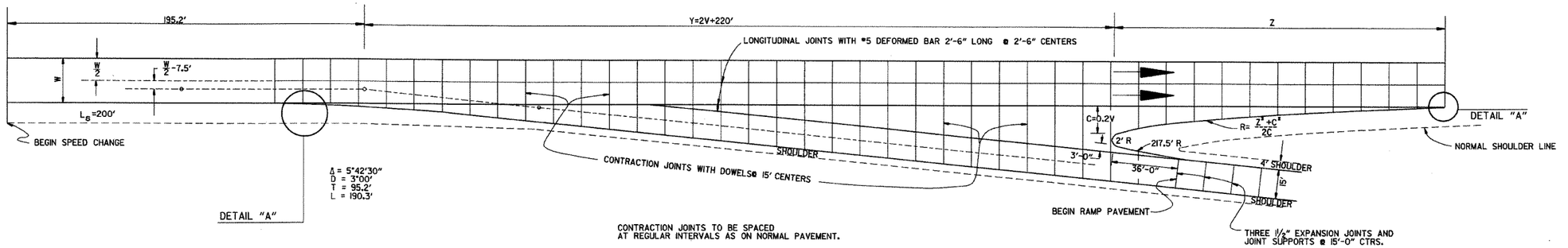
TEMPORARY EROSION CONTROL DEVICES

STANDARD DRAWING TEC-1



ENTRANCE RAMP

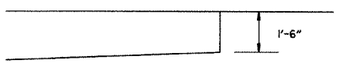
NOTE: JOINT SPACING ON THE MAIN LANES SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO THESE JOINT LAYOUTS. THE MAIN LANE JOINT SPACING MAY BE REDUCED TO A 12' MINIMUM.



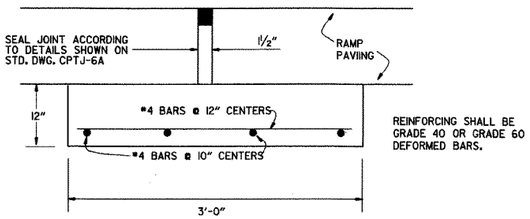
EXIT RAMP

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

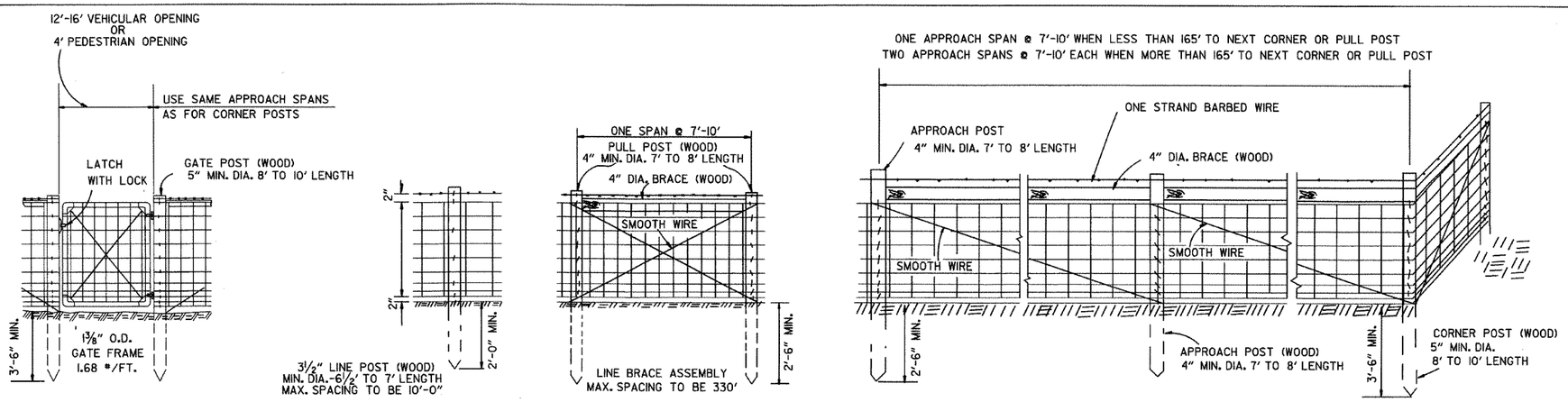
NOTE: THE EXPANSION JOINTS SHALL BE MEASURED AND PAID FOR AS P.C.C. PAVEMENT (RAMP THICKNESS). WHEN RAMP PAVING IS ASPHALT, EXPANSION JOINT IS NOT REQUIRED.
THE JOINT SUPPORT MAY BE CONSTRUCTED WITH CLASS "A", "S", OR PAVING CONCRETE. PAYMENT FOR THE JOINT SUPPORT SHALL BE FOR THE CONTRACT UNIT PRICE 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
1-26-90	REVISED EXPANSION JOINT	1-25-90
7-15-88	CONFORMED TO 1988 SPECIFICATIONS	65C-7-15-88
3-2-81	ISSUED	511-10-2-72

ARKANSAS STATE HIGHWAY COMMISSION

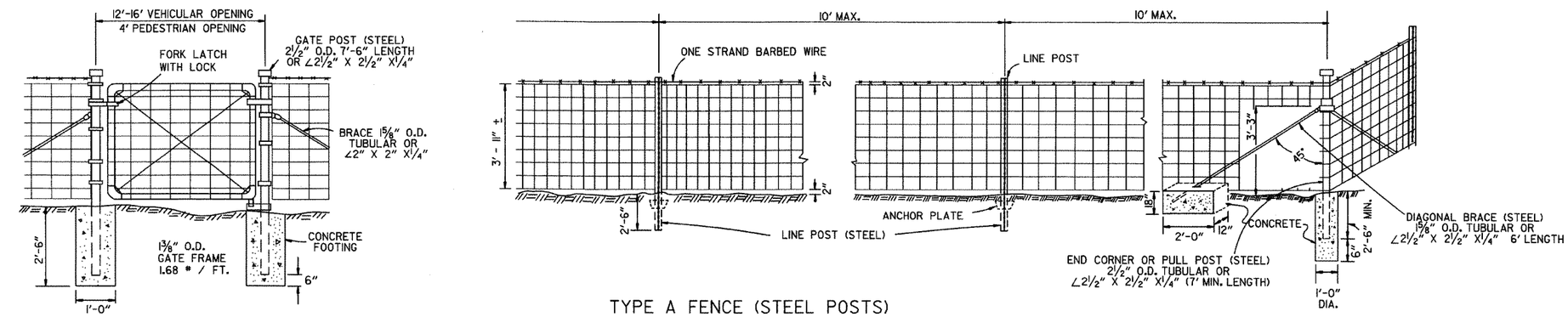
DETAILS OF STANDARD TURNOUT FOR ENTRANCE & EXIT RAMPS (NON-REINFORCED)

STANDARD DRAWING TR-1A

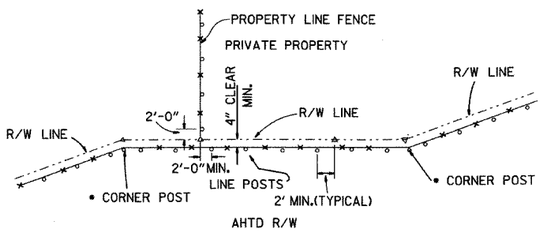


NOTE: STAPLE AT LEAST TOP, BOTTOM AND ALTERNATE WIRES OF WOVEN FABRIC FOR WOOD LINE POSTS.

TYPE A FENCE (WOOD POSTS)



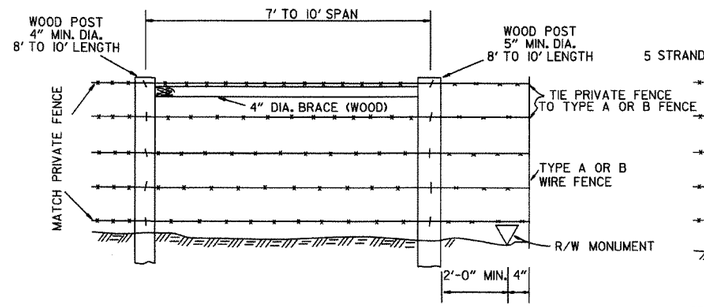
TYPE A FENCE (STEEL POSTS)



•NOTE: RIGHT-OF-WAY MONUMENTS SHALL NOT BE DISTURBED BY FENCE CONSTRUCTION. CORNER POSTS SHALL BE CONSTRUCTED 2' FROM THE RIGHT-OF-WAY MONUMENT OR AS DIRECTED BY THE ENGINEER.

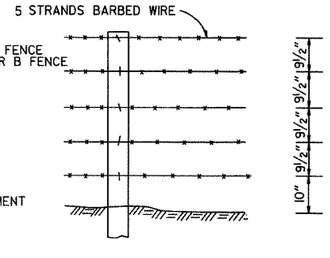
△ - R/W MONUMENTS
○ - FENCE POSTS

RIGHT-OF-WAY FENCE LOCATION



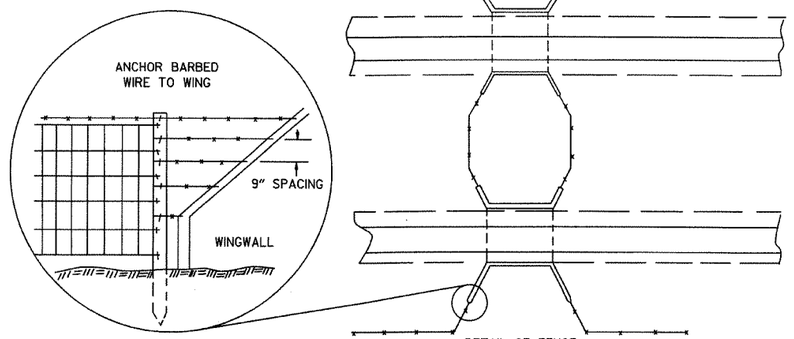
WHERE EXISTING PRIVATE FENCE CONSISTS OF STEEL POSTS, USE END POST ASSEMBLY AS SHOWN WITH TYPE A FENCE OR OTHER END POST ASSEMBLY AS APPROVED BY THE ENGINEER.

PRIVATE FENCE TERMINAL INSTALLATION



SPACING AND SIZE OF POSTS FOR TYPE B FENCE SHALL BE THE SAME AS TYPE A FENCE.

TYPE B FENCE



DETAIL OF FENCE CONSTRUCTION AT LARGE CULVERTS (5' IN HEIGHT AND OVER)

GENERAL NOTES:

STEEL LINE POSTS SHALL BE GALVANIZED, 7 FT. IN LENGTH.

TUBULAR END, CORNER, PULL, OR DIAGONAL BRACES MUST CONFORM TO THE DIMENSIONS AND WEIGHTS SPECIFIED ON STANDARD DRAWING WF-3 (CHAIN LINK).

THE CONTRACTOR SHALL FURNISH AT LEAST 25% OF WOOD LINE POSTS OF 7' LENGTHS IN ORDER TO PROVIDE SUFFICIENT SET IN SOFT GROUND OR SMALL DEPRESSIONS.

GATE HINGES AND LATCHES WITH LOCKS TO BE OF A TYPE APPROVED BY THE ENGINEER. DRIVEWAY GATES, EITHER SINGLE 12' OR 16' OR DOUBLE 6' TO 8' OPENINGS OF THE SAME TYPE AS THE PEDESTRIAN GATE, SHALL BE INSTALLED ON THE RIGHT SIDE OF EACH THROUGH LANE ROAD AT LARGE CULVERTS OR BRIDGE CROSS FENCE FOR USE BY MAINTENANCE EQUIPMENT. LOCATION OF GATES TO BE SHOWN ON THE PLANS OR AS DESIGNATED BY THE ENGINEER.

AT STREAM CROSSINGS THE FENCE SHALL NOT BE CONSTRUCTED ACROSS LARGE STREAMS. WHERE CLEARANCE IS SUFFICIENT FROM THE TOP OF BANK TO THE BRIDGE STRUCTURE, A CROSS CONNECTION SHALL BE CONSTRUCTED BETWEEN THE FENCE ON EACH SIDE OF THE ROAD. WHERE THE CLEARANCE IS NOT SUFFIEICNT, THE FENCE SHALL BE TERMINATED WITH CROSS CONNECTIONS AND END POSTS ADJACENT TO THE BRIDGE ABUTMENTS OR CULVERT WINGWALLS.

SPLICE FOR WOVEN WIRE BETWEEN PULL POST SHALL BE BY THE "WESTERN UNION METHOD" AS DESCRIBED AS FOLLOWS: THE VERTICAL WIRES FOR EACH END OF THE FENCE FABRIC SHALL BE PLACED SIDE BY SIDE AND THE PROJECTING HORIZONTAL WIRES SHALL BE WRAPPED A MINIMUM OF 4 TIMES AROUND THE HORIZONTAL WIRES OF THE FIRST WEB.

SPLICE FOR BARBED WIRE BETWEEN PULL POST ASSEMBLY SHALL BE BY THE "EYE METHOD": AS DESCRIBED AS FOLLOWS: THE ENDS OF THE BARBED WIRE SHALL BE BENT TO FORM A LOOP. THE LOOPS SHALL BE CONNECTED. AFTER THE LOOPS ARE CONNECTED THE ENDS OF THE WIRE SHALL BE WRAPPED AROUND THE PROJECTING WIRE A MINIMUM OF 4 TIMES FOR EACH WIRE LOOP.

DATE	REVISION	DATE FILMED
8-22-02	REVISED GENERAL NOTES	
10-18-96	REVISED ASTM REF. TO AASHTO	
11-22-95	REVISED R-O-W LOCATION DETAIL	
6-2-94	ADDED CORNER POST NOTE	6-2-94
8-5-93	REVISED R-O-W LOCATION DETAIL	8-5-93
10-1-92	ADDED STAPLE NOTE	
8-2-90	REV'D PULL POST LENGTH	
11-30-89	DELETED CLASS CONC.	
7-15-88	ADDED SPLICE NOTES	
7-15-88	ADDED HEIGHT DIMENSION	
4-3-87	REVISED VARIOUS NOTES AND GENERAL NOTES	
11-1-84	MAX. POST SPACING	
1-4-83	MIN. DIA. LINE POST	
10-2-72	REVISED & REDRAWN	

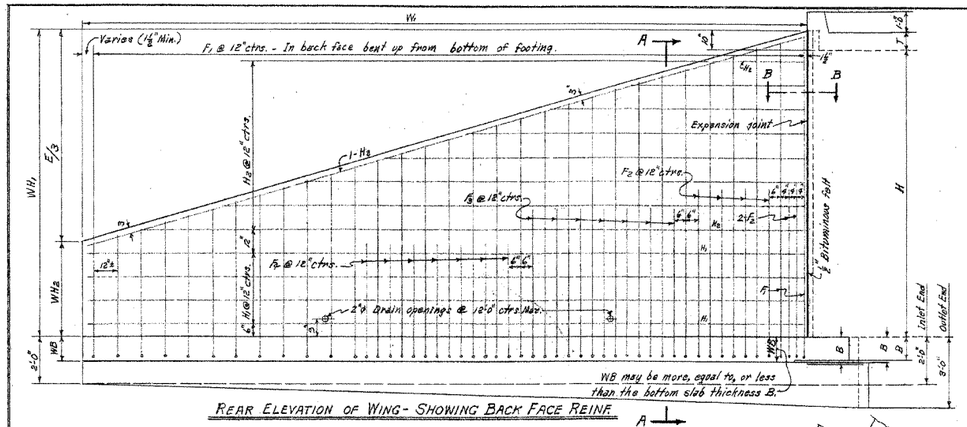
ARKANSAS STATE HIGHWAY COMMISSION

WIRE FENCE
TYPE A AND B

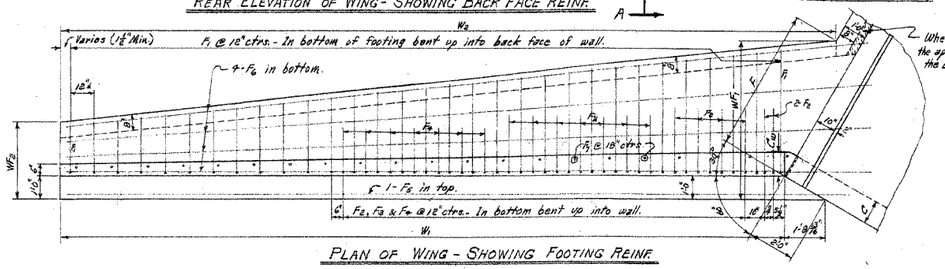
STANDARD DRAWING WF-1

RESHOT 3-4-93

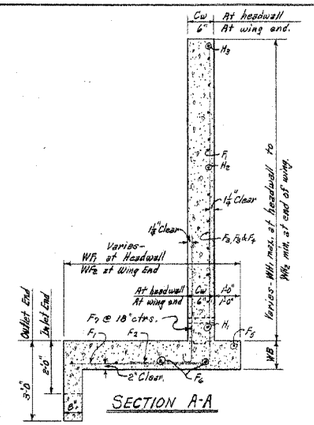
FED. ROAD No.	STATE	FED. AID PROJECT	FISCAL YEAR	SHEET No.	TOTAL SHEETS
6	ARK.			137	
JOB No.					



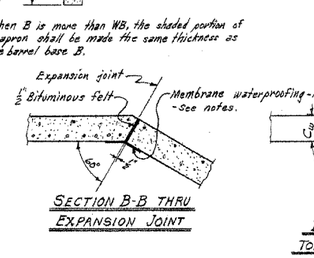
REAR ELEVATION OF WING - SHOWING BACK FACE REINF.



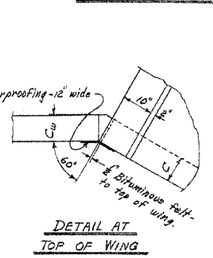
PLAN OF WING - SHOWING FOOTING REINF.



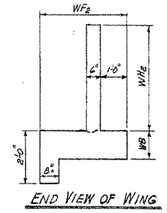
SECTION A-A



SECTION B-B THRU EXPANSION JOINT



DETAIL AT TOP OF WING



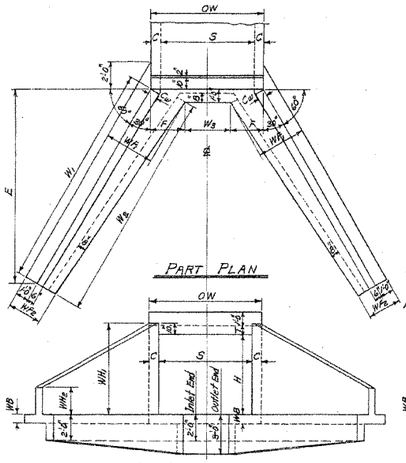
END VIEW OF WING

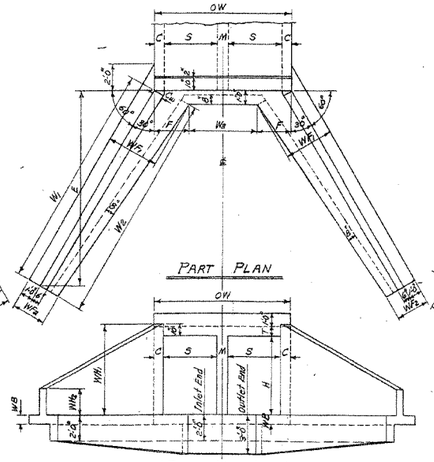
WING DIMENSIONS

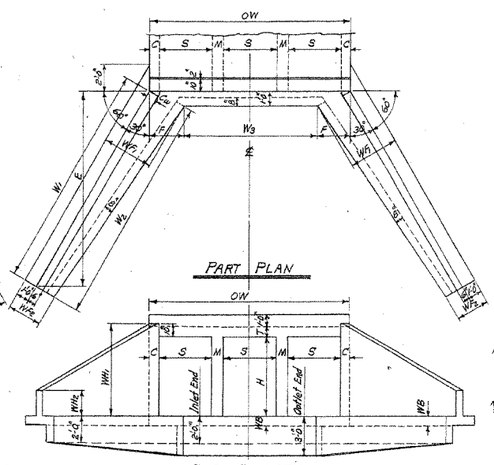
CLEAR HEIGHT OF BOX	THICKNESS OF WING FOOTING	THICKNESS OF WING AT HEADWALL = C	WINGWALL HEIGHTS		WIDTHS OF WING FOOTINGS		PERPENDICULAR FOOTING DIMENSION	PERPENDICULAR DIST. FROM H2WL TO END OF WING	LENGTH OF WINGWALLS	INSIDE FOOTING DIMENSION	* QUANTITY PER WING	
			AT HEADWALL	AT END OF WING	AT HEADWALL	AT END OF WING					CLASS S CONCRETE	
H	WB	Cw	WH1	WH2	WF1	WF2	F	E	W1	W2	INLET END Cu.Yd.	OUTLET END Cu.Yd.
9'	10"	9"	9'-15"	3'-0"	5'-12"	2'-0⅝"	4'-3"	20'-6"	23'-8"	24'-11"	7.492	7.810
10'	11"	10"	10'-10"	3'-4"	5'-8"	3'-0"	4'-10"	22'-6"	25'-11⅝"	27'-4⅝"	9.554	9.905
11'	12"	11"	11'-10"	3'-8"	6'-2"	3'-1⅛"	5'-5"	24'-6"	28'-3⅜"	30'-1⅛"	11.977	12.361
12'	13"	12"	12'-16"	4'-0"	6'-8"	3'-3"	6'-0"	26'-6"	30'-7⅝"	32'-8⅝"	14.791	15.206

* Quantity per wing does not include headwall or that portion of apron or toewall for the length W3.

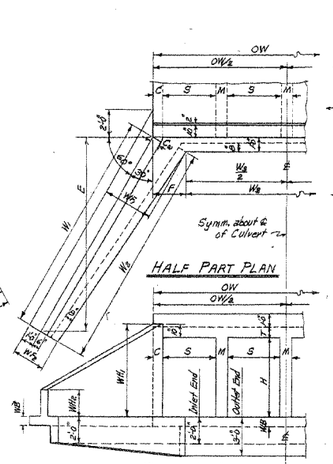
CLEAR SPAN	CLEAR HEIGHT	FOOTING DIMENSION	W3 = (OW - 2F)									
			SINGLE BARREL CULVERT		DOUBLE BARREL CULVERT		TRIPLE BARREL CULVERT		QUADRUPLE BARREL CULVERT		QUINTUPLE BARREL CULVERT	
S	H	2F	OW	W3	OW	W3	OW	W3	OW	W3	OW	W3
7'	9'	6'-6"	8'-6"	0'-0"	16'-5"	7'-11"	24'-4"	15'-10"	32'-3"	23'-9"	40'-2"	31'-8"
8'	9'	8'-6"	9'-6"	1'-0"	18'-5"	9'-11"	27'-4"	18'-10"	36'-3"	27'-9"	45'-2"	36'-8"
	10'	9'-8"	9'-8"	0'-0"	18'8"	9'-2"	27'8"	18'-10"	36'-8"	27'-8"	45'-8"	36'-0"
9'	9'	8'-6"	10'-6"	2'-0"	20'-5"	11'-11"	30'-4"	21'-10"	40'-3"	31'-9"	50'-2"	41'-8"
	10'	9'-8"	10'-8"	1'-0"	20'-8"	11'-0"	30'-8"	21'-0"	40'-8"	31'-0"	50'-8"	41'-0"
	11'	10'-10"	10'-10"	0'-0"	20'10"	10'-2"	30'-10"	20'-2"	40'-10"	30'-0"	50'-10"	40'-0"
10'	9'	8'-6"	11'-6"	3'-0"	22'-5"	13'-11"	33'-4"	24'-10"	44'-3"	35'-9"	55'-2"	46'-8"
	10'	9'-8"	11'-8"	2'-0"	22'-8"	13'-0"	33'-8"	24'-0"	44'-8"	35'-0"	55'-8"	46'-0"
	11'	10'-10"	11'-10"	1'-0"	22'10"	12'-2"	33'-10"	23'-2"	44'-10"	34'-0"	55'-10"	45'-0"
	12'	12'-0"	12'-0"	0'-0"	23'-0"	11'-0"	34'-0"	22'-0"	46'-0"	33'-0"	56'-0"	44'-0"
11'	9'	8'-6"	12'-6"	4'-0"	24'-5"	15'-11"	36'-4"	27'-10"	48'-3"	39'-9"		
	10'	9'-8"	12'-8"	3'-0"	24'-8"	15'-0"	36'-8"	27'-0"	48'-8"	39'-0"		
	11'	10'-10"	12'-10"	2'-0"	24'10"	14'-2"	36'-10"	26'-2"	48'-10"	38'-0"		
	12'	12'-0"	13'-0"	1'-0"	25'-0"	13'-0"	37'-0"	26'-0"	49'-0"	37'-0"		
12'	9'	8'-6"	13'-6"	5'-0"	26'-5"	17'-11"	39'-4"	30'-10"	52'-3"	43'-9"		
	10'	9'-8"	13'-8"	4'-0"	26'-8"	17'-0"	39'-8"	30'-0"	52'-8"	43'-0"		
	11'	10'-10"	13'-10"	3'-0"	26'10"	16'-0"	39'-10"	29'-0"	52'-10"	42'-0"		
	12'	12'-0"	14'-0"	2'-0"	27'-0"	15'-0"	40'-0"	28'-0"	53'-0"	41'-0"		

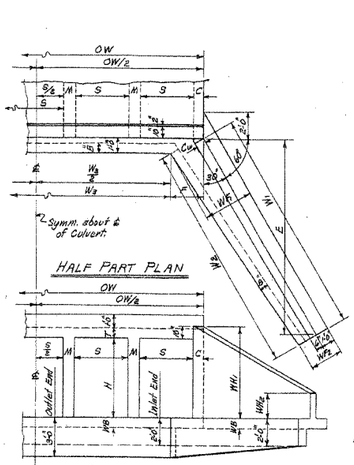






NOTE:- Plans and Elevations are not to scale.





QUANTITIES

CLEAR SPAN	CLEAR HEIGHT	THICKNESS OF WING AT HEADWALL	THICKNESS OF WING FOOTING	REINFORCING STEEL - FOR 4 WINGS ©	CLASS S CONCRETE - 4 WINGS				
					HEADWALLS, WINGWALLS, FOOTINGS, TOEWALLS AND APRONS				
S	H	Cw	WB	LB.	SINGLE BARREL CULVERT Cu.Yd.	DOUBLE BARREL CULVERT Cu.Yd.	TRIPLE BARREL CULVERT Cu.Yd.	QUADRUPLE BARREL CULVERT Cu.Yd.	QUINTUPLE BARREL CULVERT Cu.Yd.
7'	9'	9"	10"	2133.2	31.16	32.84	34.51	36.19	37.87
8'	9'	9"	10"	2133.2	31.39	33.25	35.16	37.05	38.94
	10'	10"	11"	2651.5	39.56	41.98	43.90	45.33	47.25
9'	9'	9"	10"	2133.2	31.61	33.73	35.81	37.91	40.01
	10'	10"	11"	2651.6	39.78	41.93	44.05	46.20	48.33
	11'	11"	12"	3293.1	49.39	51.55	53.70	55.87	58.02
10'	9'	9"	10"	2133.2	31.83	34.17	36.47	38.73	41.12
	10'	10"	11"	2651.5	40.01	42.37	44.70	47.05	49.41
	11'	11"	12"	3293.1	49.62	52.00	54.36	56.73	59.11
	12'	12"	13"	4099.2	60.79	63.19	65.57	67.97	70.37
11'	9'	9"	10"	2133.2	32.04	34.64	37.15	39.68	
	10'	10"	11"	2651.5	40.22	42.83	45.37	47.99	
	11'	11"	12"	3293.1	49.84	52.45	55.02	57.61	
	12'	12"	13"	4099.2	61.01	63.64	66.24	68.85	
12'	9'	9"	10"	2133.2	32.27	35.11	37.84	40.69	
	10'	10"	11"	2651.5	40.44	43.30	46.06	48.82	
	11'	11"	12"	3292.1	50.06	52.92	55.68	58.98	
	12'	12"	13"	4099.2	61.24	64.10	66.90	69.73	

© For reinforcing steel in Headwalls and Aprons, see Details of Standard Barrel Sections for R.C. Box Culverts for the desired Span and Height.

GENERAL NOTES:-

CONCRETE:- All concrete to be Class S, and shall be poured in the dry. All exposed corners to have ¾ chamfers.

REINFORCING STEEL:- Reinforcing steel to be deformed bars of intermediate or hard grade.

CONSTRUCTION JOINTS:- Construction joints between wingwalls, footings and sidewalls shall be only where shown on plans.

MEMBRANE:- A membrane waterproofing 12" wide, consisting of three moppings of waterproofing asphalt and two alternate layers of treated cotton fabric shall be applied to the back face of wing to cover the expansion joints.

Payment for the membrane waterproofing and bituminous felt shall be included in unit price bid for Class S Concrete.

SPECIFICATIONS:- Arkansas State Highway Commission Standard Specifications for Highway Construction and applicable Special Provisions.

UNIT STRESSES:-

Class S Concrete (n=10) 1200#/□"

Reinforcing Steel 20,000#/□"

NOTE:- This drawing to be used in conjunction with Standard Barrel Sections, Drawing Nos. as listed below.

SINGLES	DOUBLES	TRIPLES	QUADRUPLES	QUINTUPLES
R-100X-0	R-200X-0	R-300X-0	R-400X-0	R-500X-0
R-100X-X2	R-200X-X2	R-300X-X2	R-400X-X2	
	R-200X-X3	R-300X-X3		

BAR LIST FOR ONE WING - 4 REQUIRED

| CLEAR HEIGHT | F1 BENT: In bottom of footing, bent up into back face of wing. One bar of each length. | | | | | | | F2 BENT: In bottom of footing, bent up into back face of wing. Alt. with F1 bars. | | | | | F3 BENT: In bottom of footing, bent up into back face of wing. Alt. with F1 bars. | | | | | F4 BENT: In bottom of footing, bent up into back face of wing. Alt. with F1 bars. | | | | | F5 STRAIGHT: Longitudinal in top of wing footing heel. | | | F6 STRAIGHT: Longitudinal in bottom of wing footing toe. | | | H1 STRAIGHT: Horizontal in back face of wing. | | | H2 STRAIGHT: Horizontal in back face of wing. One bar of each length | | | | H3 STRAIGHT: In back face of wing at top on slope | | | F7 BENT: Footing dowels extending up into front face of wing. | | | | | QUANTITY REINFORCING STEEL PER WING | BAR BENDING DIAGRAMS |
|---|---|---|---|---|---|---|---|---|---|---|---|---

RESHOT 3-5-93

FED. ROAD No.	STATE	FED. AID PROJECT	FISCAL YEAR	SHEET No.	TOTAL SHEETS
6	ARK.			138	
JOB No.					

BAR LIST FOR VARIOUS SECTIONS OF BARREL

Note:- Bars for each Section to be marked with the Section letter, thus for Section B, the bars should be marked b1, B1, B2, B3, B4, B5, B6, B7, B8, B9 and B10.

Designed by:- W.C. Height 6-26-62 Checked by:- R.H.S. 7-20-62
Drawn by:- W.C. Height 7-5-62 Checked by:- R.H.S. 7-19-62
Quantities by:- W.C. Height 7-5-62 Checked by:- R.H.S. 7-19-62

SECTION "A" & BAR GROUP "A"

SECTION "A" & BAR GROUP "A" — 3:1 = 22'-0" — 9:1 = 12'-0" — LENGTHS OF SECTION — DEPTH OF COVER D: 0' TO 10'-0" — CLEAR SPANS S: 8', 10', 12' — CLEAR HEIGHT H: 2 @ 8', 2 @ 10', 2 @ 12'

	"a" bars STRAIGHT			"b" bars BENT - See Diagram below.							"b2" bars BENT - See Diagram below							"c" bars STRAIGHT				"d" bars Longitudinal in Top Slab of Barrel			"d1" bars Longitudinal in Sidewalls and Division Walls			"e" bars Longitudinal in Bottom Slab of Barrel			"f" bars Vertical in Sidewalls and Division Walls			
	In Top and Bottom Slab of Barrel & Roof in Apron and Headwall. Each.			In Bottom of Top Slab bent up over Division Wall - hooked. Alternate with "a" and "c" bars.							In Top of Bottom Slab bent down under Division Wall - hooked. Alternate with "a" and "c" bars.							In Top and Bottom Slab of Barrel - Alternate with "b" and "b2" bars.				STRAIGHT			STRAIGHT			STRAIGHT			STRAIGHT			
	SIZE	SPACING	NUMBER REQ'D 3:1	NUMBER REQ'D 9:1	LENGTH	X	Y	Z	SIZE	SPACING	NUMBER REQ'D 3:1	NUMBER REQ'D 9:1	LENGTH	X	Y	Z	SIZE	SPACING	NUMBER REQ'D 3:1	NUMBER REQ'D 9:1	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NUMBER REQ'D 3:1	NUMBER REQ'D 9:1	LENGTH
D S H																																		
2 @ 8' 5'	#5	13"	46	64	17'-8"	0'-5"	3'-8"	6'-6"	#6	12"	20	28	19'-2"	0'-6"	3'-7"	6'-6"	#6	13"	20	28	19'-2"	0'-6"	3'-7"	6'-6"	#7	11"	42	60	8'-9"	#4	12"	20	#4	12"	23	#4	12"	23	#4	12"	23	#4	12"	23	#4	12"	88	128	6'-6"
6'			46	64	17'-8"						20	28	19'-2"						20	28	19'-2"				42	60	8'-9"			20			23			23			23			23		7'		88	128	7'-4"
7'			46	64	17'-10"						20	28	19'-5"	0'-6"	3'-8"	6'-6"			20	28	19'-5"	0'-6"	3'-8"	6'-6"			42	60	8'-10"			24			28			28			28		8'		88	128	8'-1"
8'			46	64	17'-11"						20	28	19'-5"	0'-6"	3'-8"	6'-6"			20	28	19'-5"	0'-6"	3'-8"	6'-6"			42	60	8'-11"			28			32			32			32		9'		88	128	8'-9"
9'			46	64	18'-2"						20	28	19'-7"	0'-6"	3'-8"	6'-6"			20	28	19'-7"	0'-6"	3'-8"	6'-6"			42	60	9'-0"			32			36			36			36		10'		88	128	9'-4"
10'			46	64	18'-5"						20	28	19'-10"	0'-6"	3'-9"	6'-6"			20	28	19'-10"	0'-6"	3'-9"	6'-6"			42	60	9'-2"			36			40			40			40		11'		88	128	9'-11"
2 @ 10' 6'	#5	12"	49	68	21'-10"				#6	12"	22	32	23'-9"	0'-7"	4'-3"	7'-11"	#6	12"	22	32	23'-5"	0'-8"	4'-6"	7'-11"	#8	12"	44	64	10'-10"	#4	12"	24	#4	12"	27	#4	12"	27	#4	12"	27	#4	12"	27	#4	12"	96	140	12'-7"
7'			49	68	21'-10"						22	32	23'-9"	0'-7"	4'-3"	7'-11"			22	32	23'-5"	0'-8"	4'-6"	7'-11"			44	64	10'-10"			28			32			32			32		10'		96	140	12'-7"
8'			49	68	21'-11"						22	32	23'-10"	0'-7"	4'-3"	7'-11"			22	32	23'-6"	0'-8"	4'-6"	8'-0"			44	64	10'-11"			32			36			36			36		11'		96	140	12'-7"
9'			49	68	22'-2"						22	32	23'-10"	0'-7"	4'-3"	8'-0"			22	32	24'-0"	0'-8"	4'-6"	8'-0"			44	64	11'-0"			36			40			40			40		12'		96	140	12'-7"
10'			49	68	22'-5"						22	32	23'-11"	0'-7"	4'-3"	8'-0"			22	32	24'-1"	0'-8"	4'-6"	8'-0"			44	64	11'-0"			40			44			44			44						
11'			49	68	22'-7"						22	32	24'-1"	0'-7"	4'-3"	8'-0"			22	32	24'-2"	0'-8"	4'-6"	8'-0"			44	64	11'-0"			44			48			48			48						
12'			49	68	22'-9"						22	32	24'-3"	0'-7"	4'-3"	8'-0"			22	32	24'-3"	0'-8"	4'-6"	8'-0"			44	64	11'-0"			48			52			52			52						
2 @ 8' 6'	#5	13"	52	74	25'-11"				#7	11"	24	35	27'-8"	0'-8"	5'-0"	9'-1"	#7	11"	24	35	27'-3"	0'-9"	5'-2"	9'-1"	#8	11"	48	70	16'-10"	#4	12"	24	#4	12"	31	#4	12"	31	#4	12"	31	#4	12"	31	#4	12"	88	128	7'-1"
7'			52	74	25'-11"						24	35	27'-8"	0'-8"	5'-0"	9'-1"			24	35	27'-5"	0'-9"	5'-2"	9'-1"			48	70	16'-10"			28			31			31			31					88	128	8'-4"
8'			52	74	26'-1"						24	35	27'-8"	0'-8"	5'-0"	9'-1"			24	35	27'-5"	0'-9"	5'-2"	9'-1"			48	70	16'-10"			32			36			36			36						
9'			52	74	26'-5"						24	35	28'-0"	0'-8"	5'-0"	9'-1"			24	35	27'-5"	0'-9"	5'-2"	9'-1"			48	70	16'-10"			36			40			40			40						
10'			52	74	26'-8"						24	35	28'-0"	0'-8"	5'-0"	9'-1"			24	35	28'-0"	0'-9"	5'-2"	9'-1"			48	70	16'-10"			40			44			44			44						
11'			52	74	26'-11"						24	35	28'-1"	0'-8"	5'-0"	9'-1"			24	35	28'-1"	0'-9"	5'-2"	9'-1"			48	70	16'-10"			44			48			48			48						
12'			52	74	26'-9"						24	35	28'-2"	0'-8"	5'-0"	9'-1"			24	35	28'-2"	0'-9"	5'-2"	9'-1"			48	70	16'-10"			48			52			52			52						
2 @ 10' 6'	#5	12"	22	32	17'-8"				#6	12"	11	16	19'-2"	0'-6"	3'-6"	6'-6"	#6	12"	11	16	19'-3"	0'-7"	3'-6"	6'-6"	#7	12"	22	32	8'-9"	#4	12"	20	#4	12"	23	#4	12"	23	#4	12"	23	#4	12"	23	#4	12"	44	64	6'-6"
7'			22	32	17'-8"						11	16	19'-2"	0'-6"	3'-6"	6'-6"			11	16	19'-3"	0'-7"	3'-6"	6'-6"			22	32	8'-10"			24			28			28			28		7'		44	64	7'-4"
8'			22	32	17'-10"						11	16	19'-3"	0'-6"	3'-6"	6'-6"			11	16	19'-5"	0'-7"	3'-6"	6'-6"			22	32	8'-10"			28			32			32			32		8'		44	64	8'-1"
9'			22	32	17'-11"						11	16	19'-5"	0'-6"	3'-6"	6'-6"			11	16	19'-5"	0'-7"	3'-6"	6'-6"			22	32	8'-11"			32			36			36			36		9'		44	64	8'-9"
10'			22	32	18'-2"						11	16	19'-6"	0'-6"	3'-7"	6'-6"			11	16	19'-6"	0'-7"	3'-6"	6'-6"			22	32	9'-0"			36			40			40			40		10'		44	64	9'-4"
11'			22	32	18'-5"						11	16	19'-8"	0'-6"	3'-7"	6'-6"			11	16	19'-8"	0'-7"	3'-6"	6'-6"			22	32	9'-2"			40			44			44			44		11'		44	64	9'-11"
12'			22	32	18'-8"						11	16	19'-9"	0'-6"	3'-7"	6'-6"			11	16	19'-9"	0'-7"	3'-6"	6'-6"			22	32	9'-4"			44			48			48			48		12'		44	64	10'-5"
2 @ 12' 6'	#5	12"	22	32	21'-10"				#6	12"	11	16	23'-7"	0'-8"	4'-6"	7'-11"	#6	12"	11	16	23'-8"	0'-9"	4'-9"	7'-11"	#8	12"	22	32	10'-8"	#4	12"	20	#4	12"	27	#4	12"	27	#4	12"	27	#4	12"	27	#4	12"	44	64	7'-4"
7'			22	32	21'-10"						11	16	23'-7"	0'-8"	4'-6"	7'-11"			11	16	23'-8"	0'-9"	4'-9"	7'-11"			22	32	10'-8"			24			28			28			28		7'		44	64	8'-1"
8'			22	32	21'-11"						11	16	23'-8"	0'-8"	4'-6"	8'-0"			11	16	23'-9"	0'-9"	4'-9"	8'-0"			22	32	10'-10"			28			32			32			32		8'		44	64	8'-10"
9'			22	32	22'-2"						11	16	23'-9"	0'-8"	4'-6"	8'-0"			11	16	24'-0"	0'-9"	4'-9"	8'-0"			22	32	10'-11"			32			36			36			36		9'		44	64	9'-6"
10'			22	32	22'-5"						11	16	24'-2"	0'-8"	4'-6"	8'-0"			11	16	24'-2"	0'-9"	4'-9"	8'-0"			22	32	11'-0"			36			40			40			40		10'		44	64	10'-1"
11'			22	32	22'-7"						11	16	24'-4"	0'-8"	4'-6"	8'-0"			11	16	24'-5"	0'-9"	4'-9"	8'-0"			22	32	11'-0"			40			44			44			44		11'		44	64	10'-8"
12'			22	32	22'-9"						11	16	24'-6"	0'-8"	4'-6"	8'-0"			11	16	24'-7"	0'-9"	4'-9"	8'-0"			22	32	11'-0"			44			48			48			48		12'		44	64	11'-3"
2 @ 8' 6'	#5	13"	20	30	20'-11"				#6	12"	10	15	23'-10"	0'-10"	5'-1"	9'-6"	#6	12"	10	15	23'-11"	0'-10"	5'-1"	9'-6"	#8	12"	20	30	12'-10"	#4	12"	24	#4	12"	31	#4	12"	31	#4	12"	31	#4	12"	31	#4	12"	96	140	12'-7"
7'			20	30	21'-11"						10	15	23'-11"	0'-10"	5'-1"	9'-6"			10	15	24'-0"	0'-10"	5'-1"	9'-6"			20	30	12'-10"			28			32			32			32						
8'			20	30	22'-0"						10	15	24'-0"	0'-10"	5'-1"	9'-6"			10	15	24'-1"	0'-10"	5'-1"	9'-6"			20	30	10'-10"			32			36			36			36						
9'			20	30	22'-3"						10	15	24'-0"	0'-10"	5'-1"	9'-6"			10	15	24'-1"	0'-10"	5'-1"	9'-6"			20	30	10'-10"			36			40			40			40						
10'			20	30	22'-5"						10	15	24'-2"	0'-10"	5'-1"	9'-6"			10	15	24'-2"	0'-10"	5'-1"	9'-6"			20	30	11'-0"			40			44			44			44						
11'			20	30	22'-7"						10	15	24'-3"	0'-10"	5'-1"	9'-6"			10	15	24'-3"	0'-10"	5'-1"	9'-6"			20	30	11'-0"			44			48			48			48						
12'			20	30	22'-9"						10	15	24'-5"	0'-10"	5'-1"	9'-6"			10	15	24'-5"	0'-10"	5'-1"	9'-6"			20	30	11'-0"			48			52			52			52						
2 @ 10' 6'	#5	12"	22	32	17'-8"				#6	12"	11	16	19'-9"	0'-7"	3'-6"	6'-6"	#6	12"	11	16	19'-8"	0'-8"	3'-5"	6'-6"	#8	12"	22	32	8'-9"	#4	12"	20	#4	12"	23	#4	12"	23	#4	12"	23	#4	12"	23	#4	12"	44	64	6'-6"
7'			22	32	17'-8"						11	16	19'-9"	0'-7"	3'-6"	6'-6"			11	16	19'-8"	0'-8"	3'-5"	6'-6"			22	32	8'-10"			24			28			28			28		7'		44	64	7'-4"
8'			22	32	17'-10"						11	16	19'-10"	0'-7"	3'-6"	6'-6"			11	16	19'-8"	0'-8"	3'-5"	6'-6"			22	32	8'-10"			28			32			32			32		8'		44	64	8'-1"
9'			22	32	18'-1"						11	16	19'-10"	0'-7"	3'-6"	6'-6"			11	16	19'-9"	0'-8"	3'-5"	6'-6"			22	32	8'-11"			32			36			36			36		9'		44	64	8'-9"
10'			22	32	18'-4"						11	16	19'-11"	0'-7"	3'-6"	6'-6"			11	16	19'-11"	0'-8"	3'-5"	6'-6"			22	32	9'-0"			36			40			40			40		10'		44	64	9'-4"
11'			22	32	18'-7"						11	16	20'-0"	0'-7"	3'-6"	6'-6"			11	16	20'-0"	0'-8"	3'-5"	6'-6"			22	32	9'-2"			40			44			44			44		11'		44	64	9'-11"
12'			22	32	18'-10"						11	16	20'-1"	0'-7"	3'-6"	6'-6"			11	16	20'-1"	0'-8"	3'-5"	6'-6"			22	32	9'-4"			44			48			48			48		12'		44	64	10'-5"
2 @ 12' 6'	#5	12"	22	32	21'-11"				#6	12"	11	16	23'-8"	0'-9"	4'-6"	7'-11"	#6	12"	11	16	23'-8"	0'-9"	4'-6"	7'-11"	#8	12"	22	32	10'-8"	#4	12"	20	#4	12"	27	#4	12"	27	#4	12"	27	#4	12"	27	#4	12"	44	64	7'-4"
7'			22	32	21'-11"						11	16	23'-8"	0'-9"	4'-6"	7'-11"			11	16	23'-8"	0'-9"	4'-6"	7'-11"			22	32	10'-8"			24			28			28			28		7'		44	64	8'-1"
8'			22	32	22'-1"						11	16	23'-8"	0'-9"	4'-6"	8'-0"			11	16	23'-8"	0'-9"	4'-6"	8'-0"			22	32	10'-10"			28			32			32			32		8'		44	64	8'-10"
9'			22	32	22'-3"						11	16	23'-9"	0'-9"	4'-6"	8'-0"			11	16	23'-9"	0'-9"	4'-6"	8'-0"			22	32	10'-11"			32			36			36			36		9'		44	64	9'-6"
10'			22	32	22'-5"						11	16	24'-0"	0'-9"	4'-6"	8'-0"			11	16	24'-0"	0'-9"	4'-6"	8'-0"			22	32	11'-0"			36			40			40			40		10'		44	64	10'-1"
11'			22	32	22'-7"						11	16	24'-2"	0'-9"	4'-6"	8'-0"			11	16	24'-2"	0'-9"	4'-6"	8'-0"			22	32	11'-0"			40			44			44			44		11'		44	64	10'-8"
12'			22	32	22'-9"						11	16	24'-3"	0'-9"	4'-6"	8'-0"			11	16	24'-3"	0'-9"	4'-6"	8'-0"			22	32	11'-0"			44			48			48			48		12'		44	64	11'-3"

SECTION "B" & BAR GROUP "B"

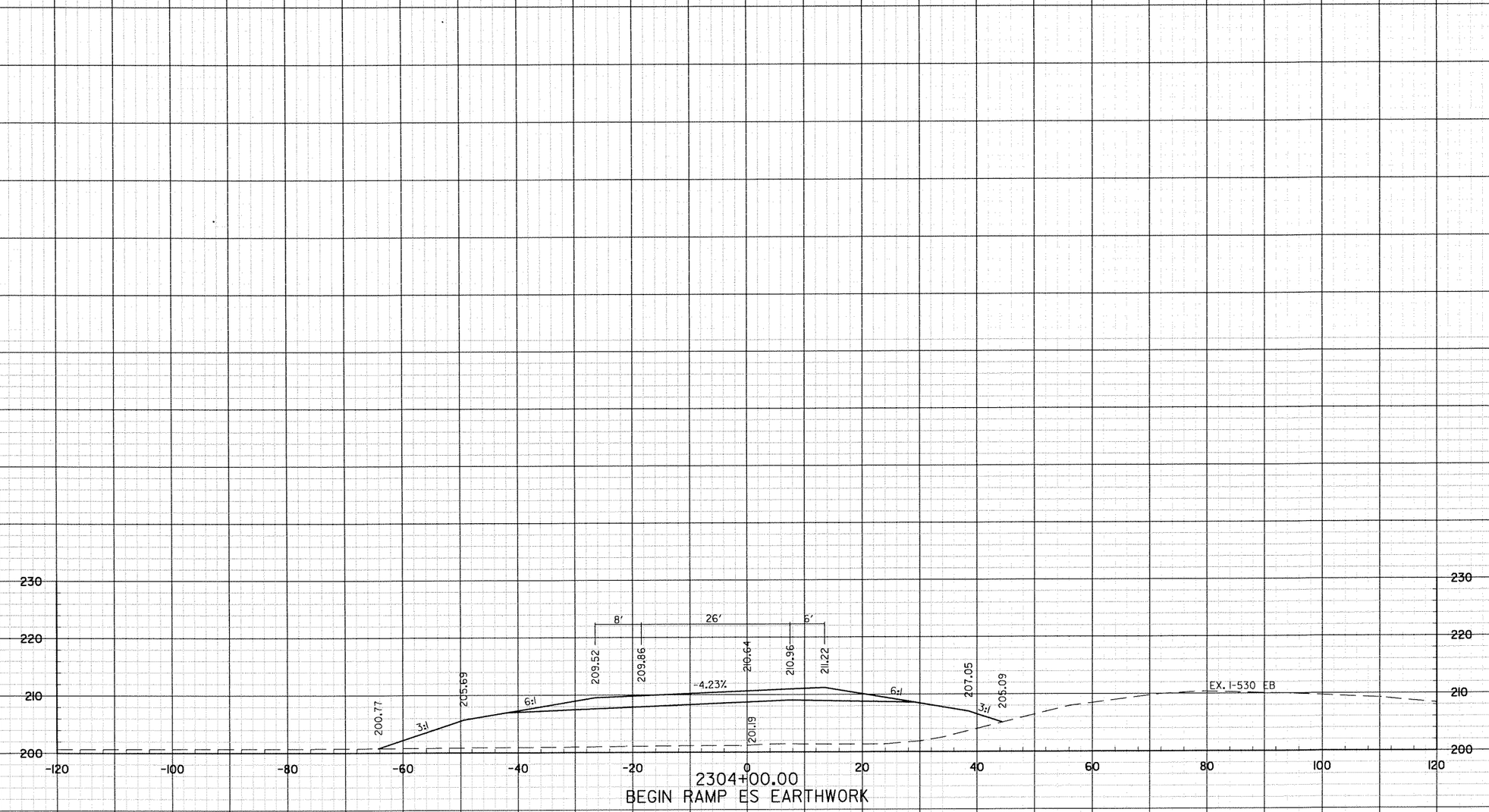
SECTION "B" & BAR GROUP "B" — 3:1 = 11'-0" — 9:1 = 16'-0" — LENGTHS OF SECTION — DEPTH OF COVER D: 0' TO 15'-0" — CLEAR SPANS S: 8', 10', 12' — CLEAR HEIGHT H: 2 @ 8', 2 @ 10', 2 @ 12'

	"a" bars STRAIGHT			"b" bars BENT - See Diagram below.							"b2" bars BENT - See Diagram below							"c" bars STRAIGHT				"d" bars Longitudinal in Top Slab of Barrel			"d1" bars Longitudinal in Sidewalls and Division Walls			"e" bars Longitudinal in Bottom Slab of Barrel			"f" bars Vertical in Sidewalls and Division Walls			
	In Top and Bottom Slab of Barrel & Roof in Apron and Headwall. Each.			In Bottom of Top Slab bent up over Division Wall - hooked. Alternate with "a" and "c" bars.							In Top of Bottom Slab bent down under Division Wall - hooked. Alternate with "a" and "c" bars.							In Top and Bottom Slab of Barrel - Alternate with "b" and "b2" bars.				STRAIGHT			STRAIGHT			STRAIGHT			STRAIGHT			
	SIZE	SPACING	NUMBER REQ'D 3:1	NUMBER REQ'D 9:1	LENGTH	X	Y	Z	SIZE	SPACING	NUMBER REQ'D 3:1	NUMBER REQ'D 9:1	LENGTH	X	Y	Z	SIZE	SPACING	NUMBER REQ'D 3:1	NUMBER REQ'D 9:1	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NUMBER REQ'D 3:1	NUMBER REQ'D 9:1	LENGTH
D S H																																		
2 @ 8' 6'	#5	13"	46	64	17'-8"	0'-5"	3'-8"	6'-6"	#6	12"	20	28	19'-2"	0'-6"	3'-7"	6'-6"	#6	13"	20	28	19'-2"	0'-6"	3'-7"	6'-6"	#7	11"	42	60	8'-9"	#4	12"	20	#4	12"	23	#4	12"	23	#4	12"	23	#4	12"	23	#4	12"	88	128	6'-6"
7'			46	64	17'-8"						20	28	19'-2"						20	28	19'-2"				42	60	8'-9"			20			23			23			23			23		7'		88	128	7'-4"
8'			46	64	17'-10"						20	28	19'-5"	0'-6"	3'-8"	6'-6"			20	28	19'-5"	0'-6"	3'-8"	6'-6"			42	60	8'-10"			24			28			28			28		8'		88	128	8'-1"
9'			46	64	17'-11"						20	28	19'-5"	0'-6"	3'-8"	6'-6"			20	28	19'-5"	0'-6"	3'-8"	6'-6"			42	60	8'-11"			28			32			32			32		9'		88	128	8'-9"
10'			46	64	18'-2"						20	28	19'-7"	0'-6"	3'-8"	6'-6"			20	28	19'-7"	0'-6"	3'-8"	6'-6"			42	60	9'-0"			32			36			36			36		10'		88	128	9'-4"
11'			46	64	18'-5"						20	28	19'-10"	0'-6"	3'-9"	6'-6"			20	28	19'-10"	0'-6"	3'-9"	6'-6"			42	60	9'-2"			36			40			40			40		11'		88	128	9'-11"
2 @ 10' 6'	#5	12"	49	68	21'-10"				#6	12"	22	32	23'-9"	0'-7"	4'-3"	7'-11"	#6	12"	22	32	23'-5"	0'-8"	4'-6"	7'-11"	#8	12"	44	64	10'-10"	#4	12"	24	#4	12"	27	#4	12"	27	#4	12"	27	#4	12"	27	#4	12"	96	140	12'-7"
7'			49	68	21'-10"						22	32	23'-9"	0'-7"	4'-3"	7'-11"			22	32	23'-5"	0'-8"	4'-6"	7'-11"			44	64	10'-10"			28			32			32			32		10'		96	140	12'-7"
8'			49	68	21'-11"						22	32	23'-10"	0'-7"	4'-3"	7'-11"			22	32	23'-6"	0'-8"	4'-6"	8'-0"			44	64	10'-11"			32			36			36			36		11'		96	140	12'-7"
9'			49	68	22'-2"						22	32	23'-10"	0'-7"	4'-3"	8'-0"			22	32	24'-0"	0'-8"	4'-6"	8'-0"			44	64	11'-0"			36			40			40			40		12'		96	140	12'-7"
10'			49	68	22'-5"						22	32	23'-11"	0'-7"	4'-3"	8'-0"			22	32	24'-1"	0'-8"	4'-6"	8'-0"			44	64	11'-0"			40			44			44			44						
11'			49	68	22'-7"						22	32	24'-1"	0'-7"	4'-3"	8'-0"			22	32	24'-2"	0'-8"	4'-6"	8'-0"			44	64	11'-0"			44			48			48			48						
12'			49	68	22'-9"						22	32	24'-3"	0'-7"	4'-3"	8'-0"			22	32	24'-3"	0'-8"	4'-6"	8'-0"			44	64	11'-0"			48			52			52			52						
2 @ 8' 6'	#5	13"	52	74	25'-11"				#7	11"	24	35	27'-8"	0'-8"	5'-0"	9'-1"	#7	11"	24	35	27'-3"	0'-9"	5'-2"	9'-1"	#8	11"	48	70	16'-10"	#4	12"	24	#4	12"	31	#4	12"	31	#4	12"	31	#4	12"	31	#4	12"	88	128	7'-1"
7'			52	74	25'-11"						24	35	27'-8"	0'-8"	5'-0"	9'-1"			24	35	27'-5"	0'-9"	5'-2"	9'-1"			48	70	16'-10"			28			31			31			31					88	128	8'-4"
8'			52	74	26'-1"						24	35	27'-8"	0'-8"	5'-0"	9'-1"			24	35	27'-5"	0'-9"	5'-2"	9'-1"			48	70	16'-10"			32			36			36			36						
9'			52	74	26'-5"						24	35	28'-0"	0'-8"	5'-0"	9'-1"			24	35	27'-5"	0'-9"	5'-2"	9'-1"			48	70	16'-10"			36			40			40			40						
10'			52	74	26'-8"						24	35	28'-0"	0'-8"	5'-0"	9'-1"			24	35	28'-0"	0'-9"	5'-2"	9'-1"			48	70	16'-10"			40			44			44			44						
11'			52	74	26'-11"						24	35	28'-1"	0'-8"	5'-0"	9'-1"			24	35	28'-1"	0'-9"	5'-2"	9'-1"			48	70	16'-10"			44			48			48			48						
12'			52	74	26'-9"						24	35	28'-2"	0'-8"	5'-0"	9'-1"			24	35	28'-2"	0'-9"	5'-2"	9'-1"			48	70	16'-10"			48			52			52			52						
2 @ 10' 6'	#5	12"	22	32	17'-8"				#6	12"	11	16	19'-2"	0'-6"	3'-6"	6'-6"	#6	12"	11	16	19'-3"	0'-7"	3'-6"	6'-6"	#7	12"	22	32	8'-9"	#4	12"	20	#4	12"	23	#4	12"	23	#4	12"	23	#4	12"	23	#4	12"	44	64	6'-6"
7'			22	32	17'-8"						11	16	19'-2"	0'-6"	3'-6"	6'-6"			11	16	19'-3"	0'-7"	3'-6"	6'-6"			22	32	8'-10"			24			28			28			28		7'		44	64	7'-4"
8'			22	32	17'-10"						11	16	19'-3"	0'-6"	3'-6"	6'-6"			11	16	19'-5"	0'-7"	3'-6"	6'-6"			22	32	8'-10"			28			32			32			32		8'		44	64	8'-1"
9'			22	32	17'-11"						11	16	19'-5"	0'-6"	3'-6"	6'-6"			11	16	19'-5"	0'-7"	3'-6"	6'-6"			22	32	8'-11"			32			36			36			36		9'		44	64	8'-9"
10'			22	32	18'-2"						11	16	19'-6"	0'-6"	3'-7"	6'-6"			11	16	19'-6"	0'-7"	3'-6"	6'-6"			22	32	9'-0"			36			40			40			40		10'		44	64	9'-4"
11'			22	32	18'-5"						11	16	19'-8"	0'-6"	3'-7"	6'-6"			11	16	19'-8"	0'-7"	3'-6"	6'-6"			22	32	9'-2"			40			44			44			44		11'		44	64	9'-11"
12'			22	32	18'-8"						11	16	19'-9"	0'-6"	3'-7"	6'-

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.		020354	139	156

(2) CROSS SECTIONS

END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	639	0	2320



2304+00.00
BEGIN RAMP ES EARTHWORK

RAMP ES

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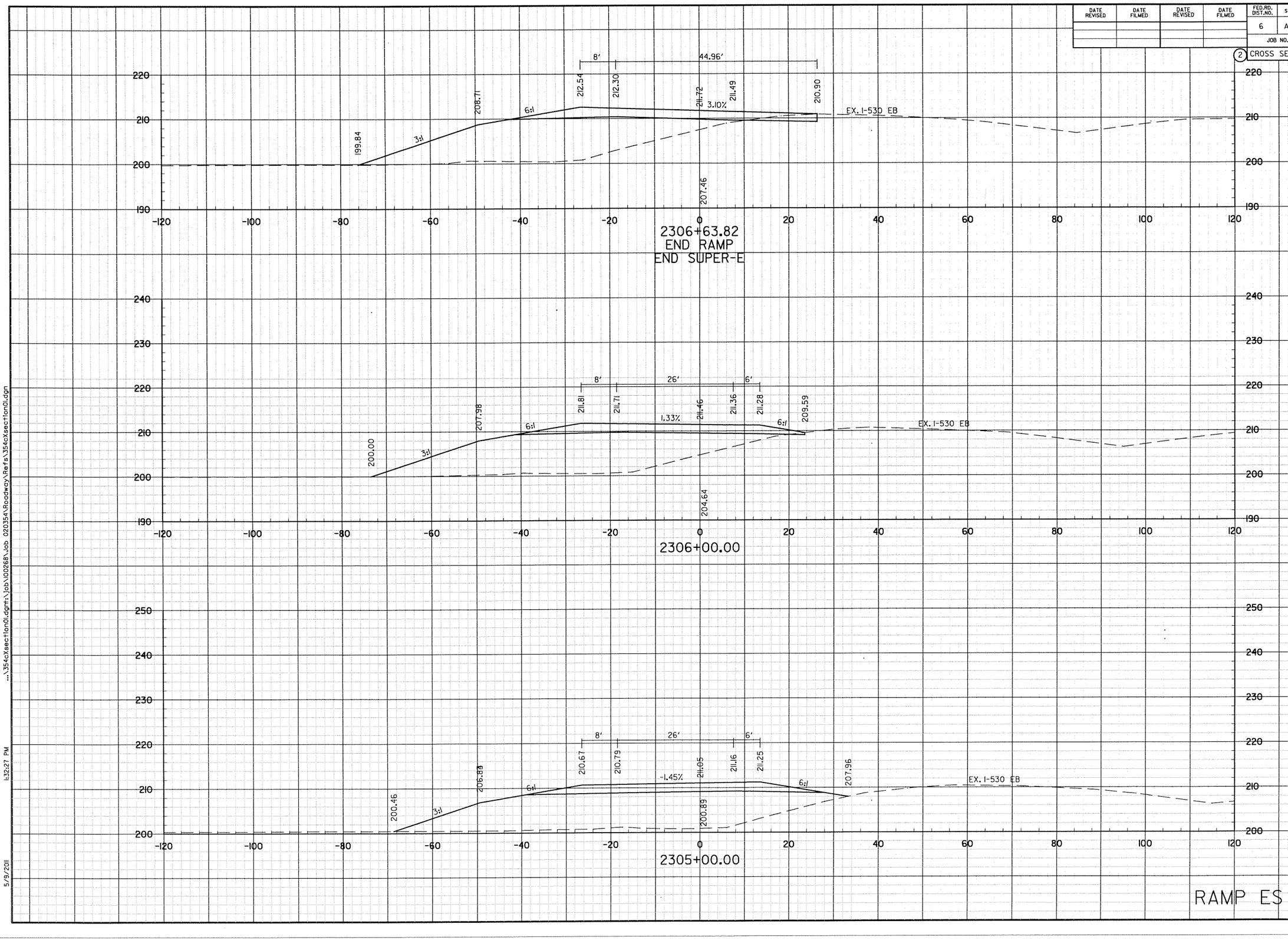
JACOBS

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.		020354	140	156

(2) CROSS SECTIONS



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
16	495		
		20	1231
1	547		
		2	2150
0	614		

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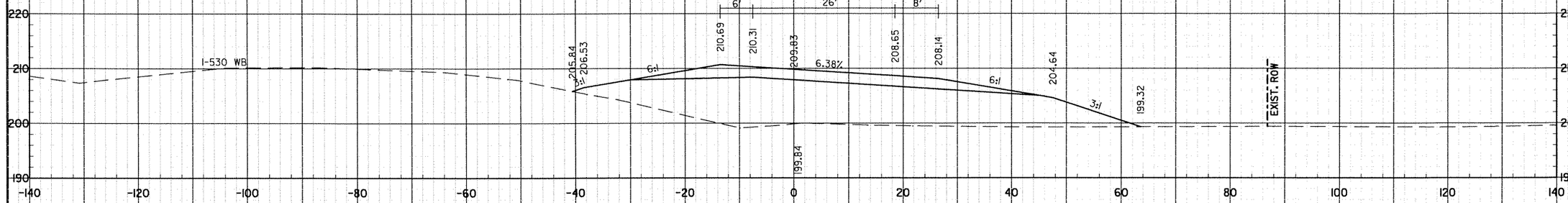
JACOBS

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.		020354	141	156

(2) CROSS SECTIONS



2319+00.00
BEGIN RAMP NW EARTHWORK

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		6	1811
0	614		

140
RAMP NW

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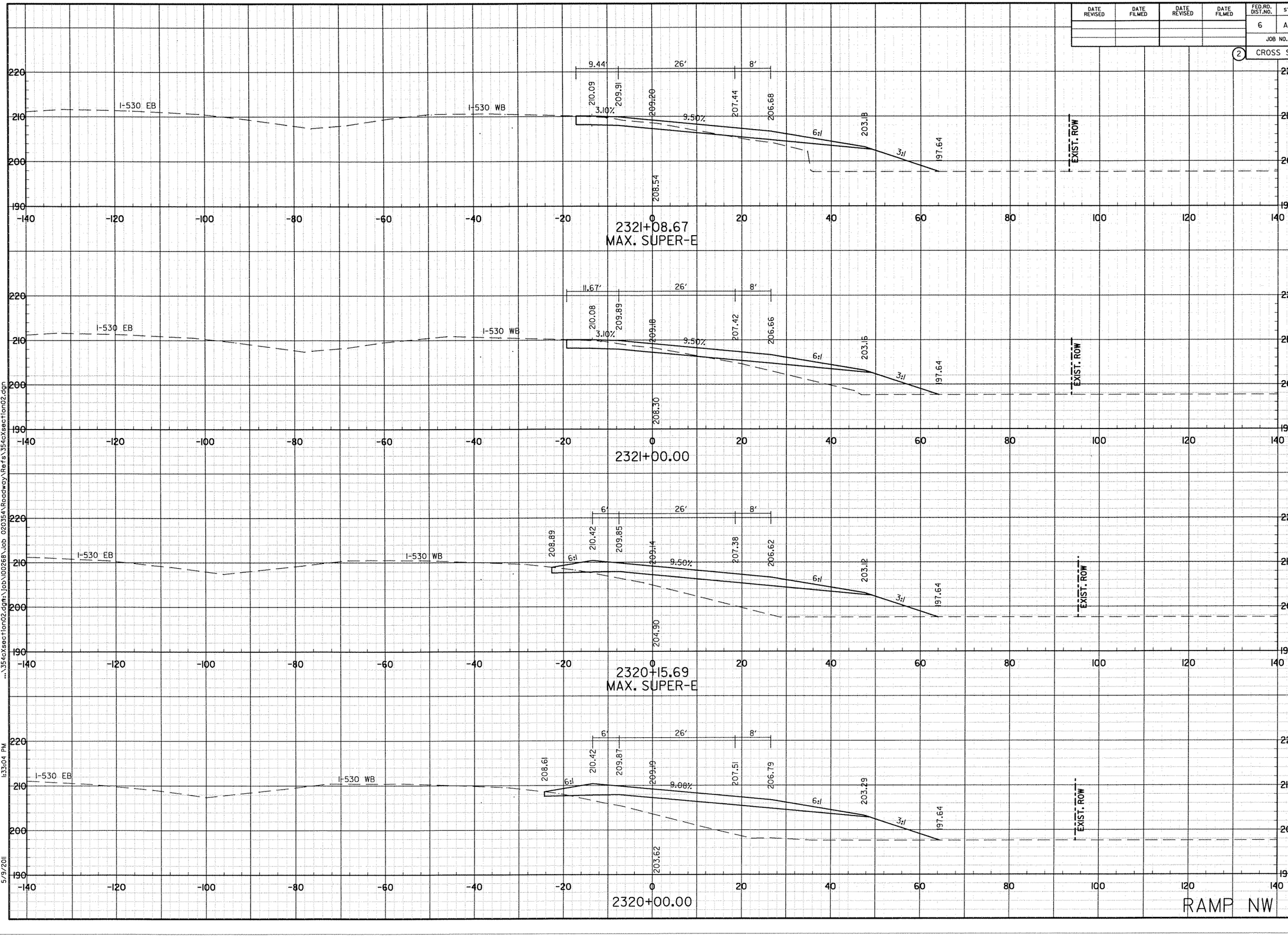
JACOBS

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.		020354	142	156

(2) CROSS SECTIONS



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		28	98
37	131		
		11	41
33	125		
		61	676
6	308		
		3	195
3	364		

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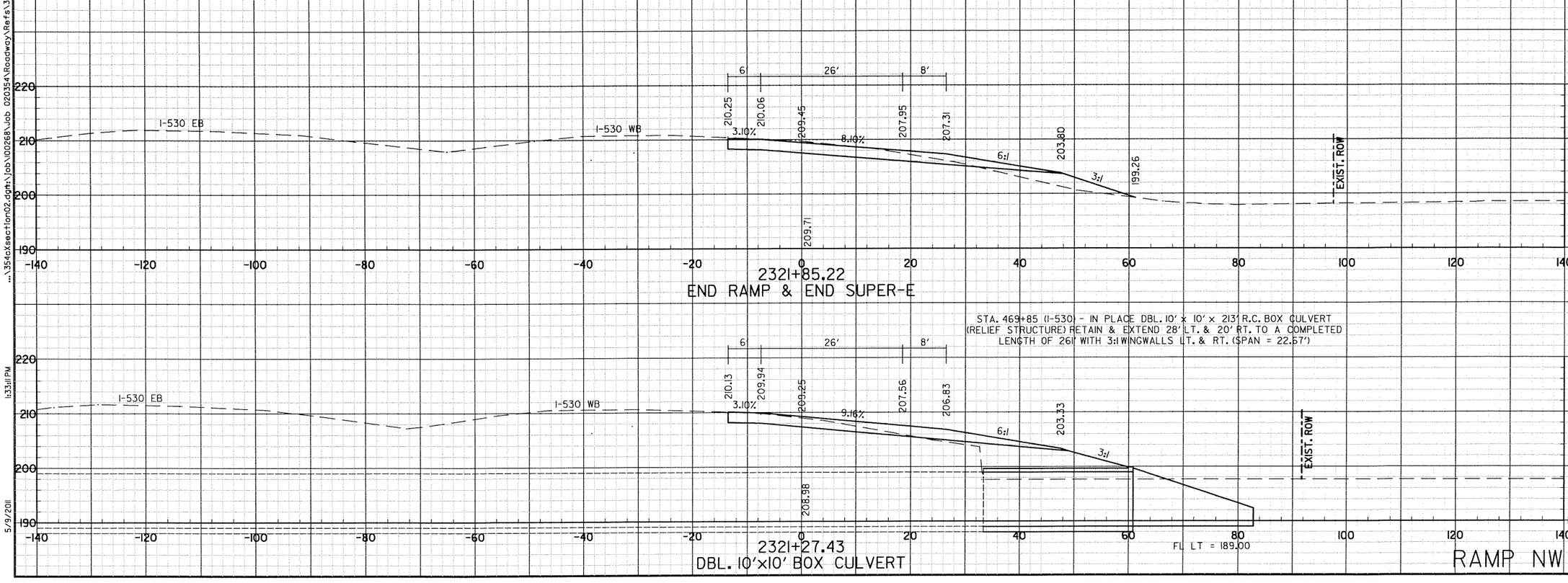
JACOBS

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.		020354	143	156

(2) CROSS SECTIONS

END AREA		VOLUME	
CUT	FILL	CUT	FILL
74	37		
		126	200
44	150		



2321+85.22
END RAMP & END SUPER-E

STA. 469+85 (I-530) - IN PLACE DBL. 10' x 10' x 213' R.C. BOX CULVERT (RELIEF STRUCTURE) RETAIN & EXTEND 28' LT. & 20' RT. TO A COMPLETED LENGTH OF 261' WITH 3:1 WINGWALLS LT. & RT. (SPAN = 22.67')

2321+27.43
DBL. 10'x10' BOX CULVERT

FL LT = 189.00

RAMP NW

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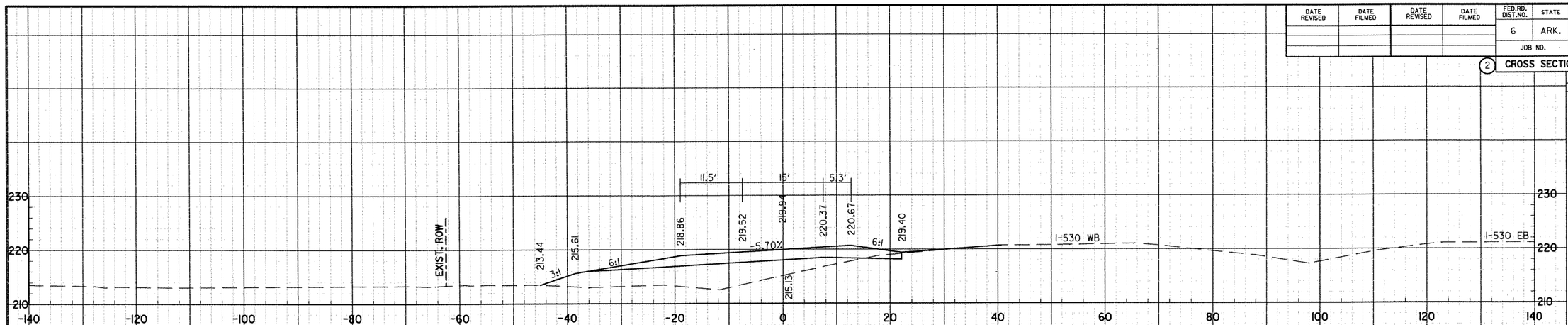
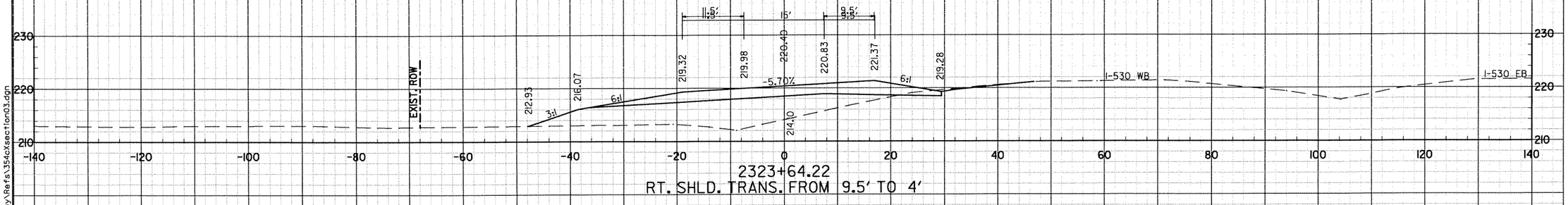
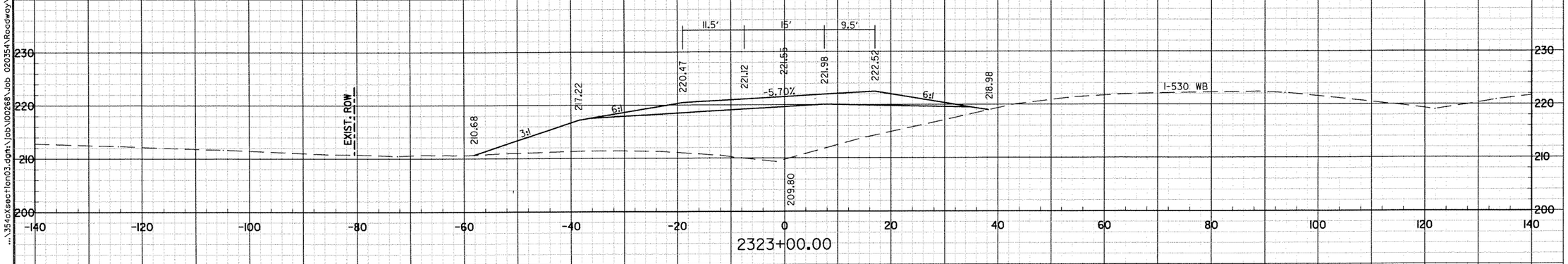
JACOBS

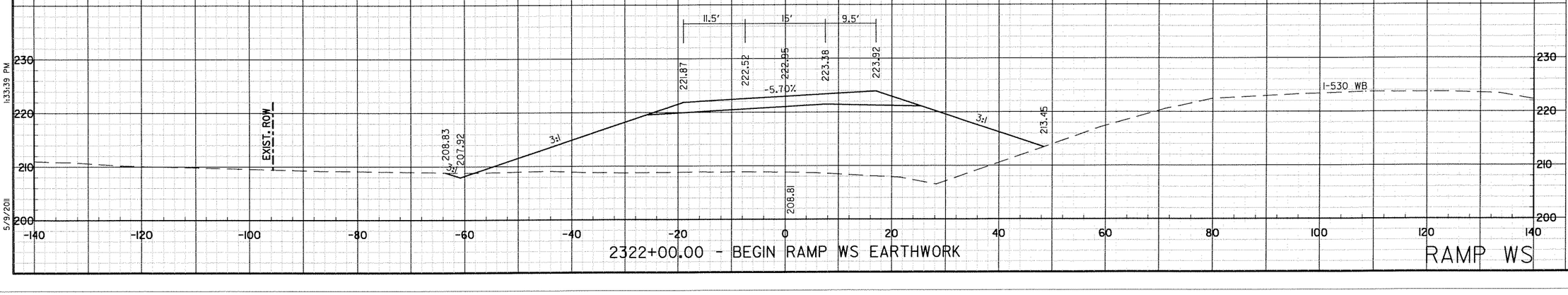
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		020354	144	156

(2) CROSS SECTIONS









	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
			1	48
	4	170		
			6	187
	8	234		
			10	936
	0	553		
			4	2833
	2	977		

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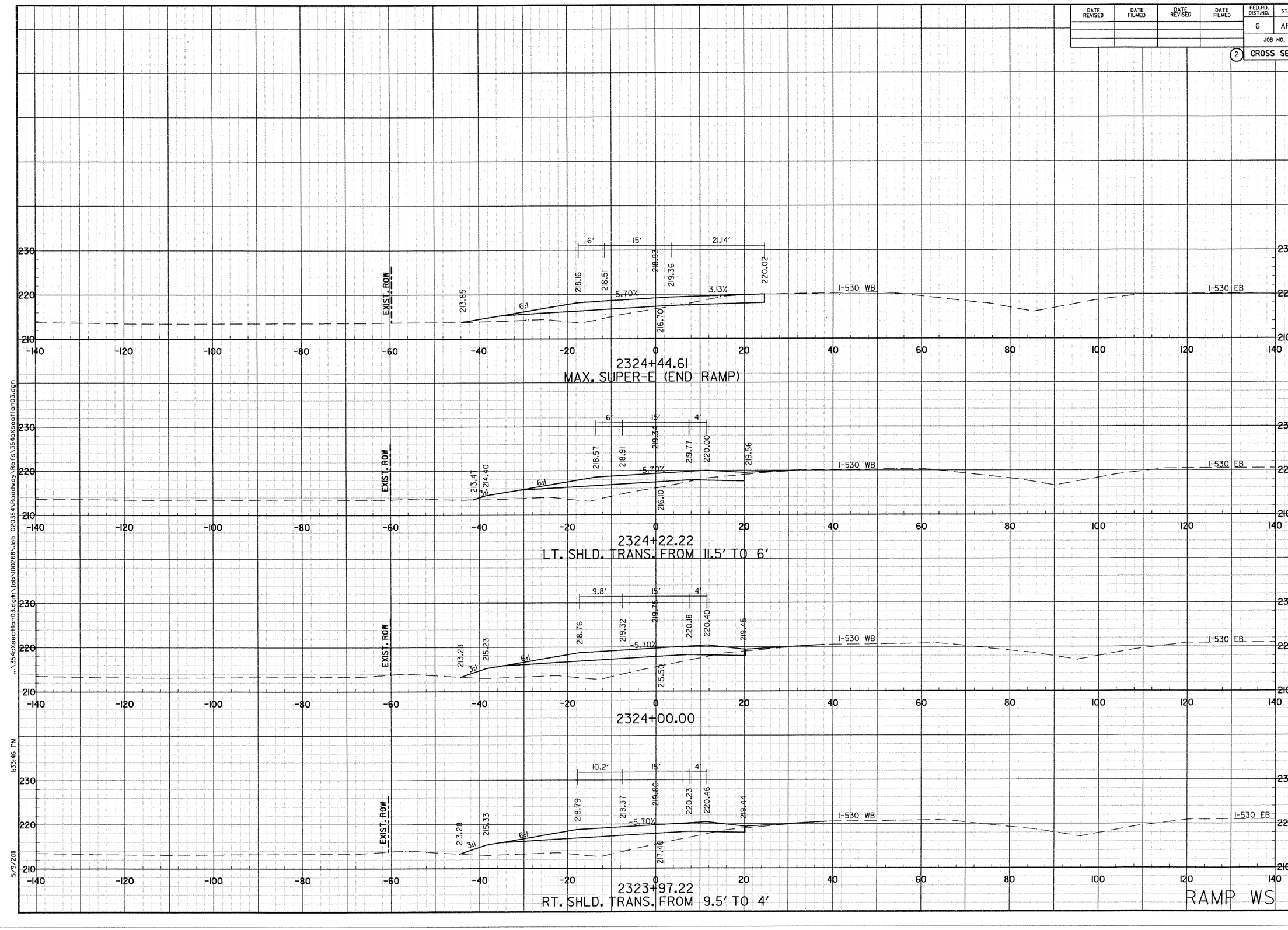
JACOBS

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.		020354	145	156

(2) CROSS SECTIONS



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
26	65		
		22	54
9	96		
		14	66
4	149		
		1	13
4	156		

RAMP WS

...\354cXsection03.dgn \Job\100268\Job 020354\Roadway\Refs\354cXsection03.dgn 5/9/2011 1:33:46 PM

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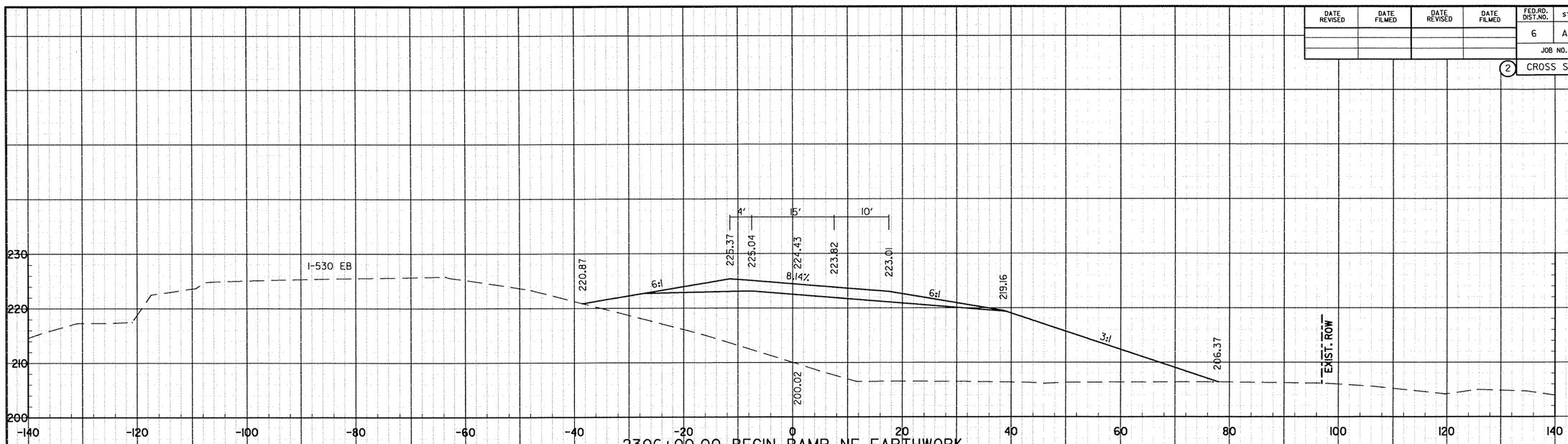
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		020354	146	156

(2) CROSS SECTIONS



2306+00.00 BEGIN RAMP NE EARTHWORK
BEGIN RT. SHOULDER TRANSITION

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		0	854
0	1063		

RAMP NE

JACOBS

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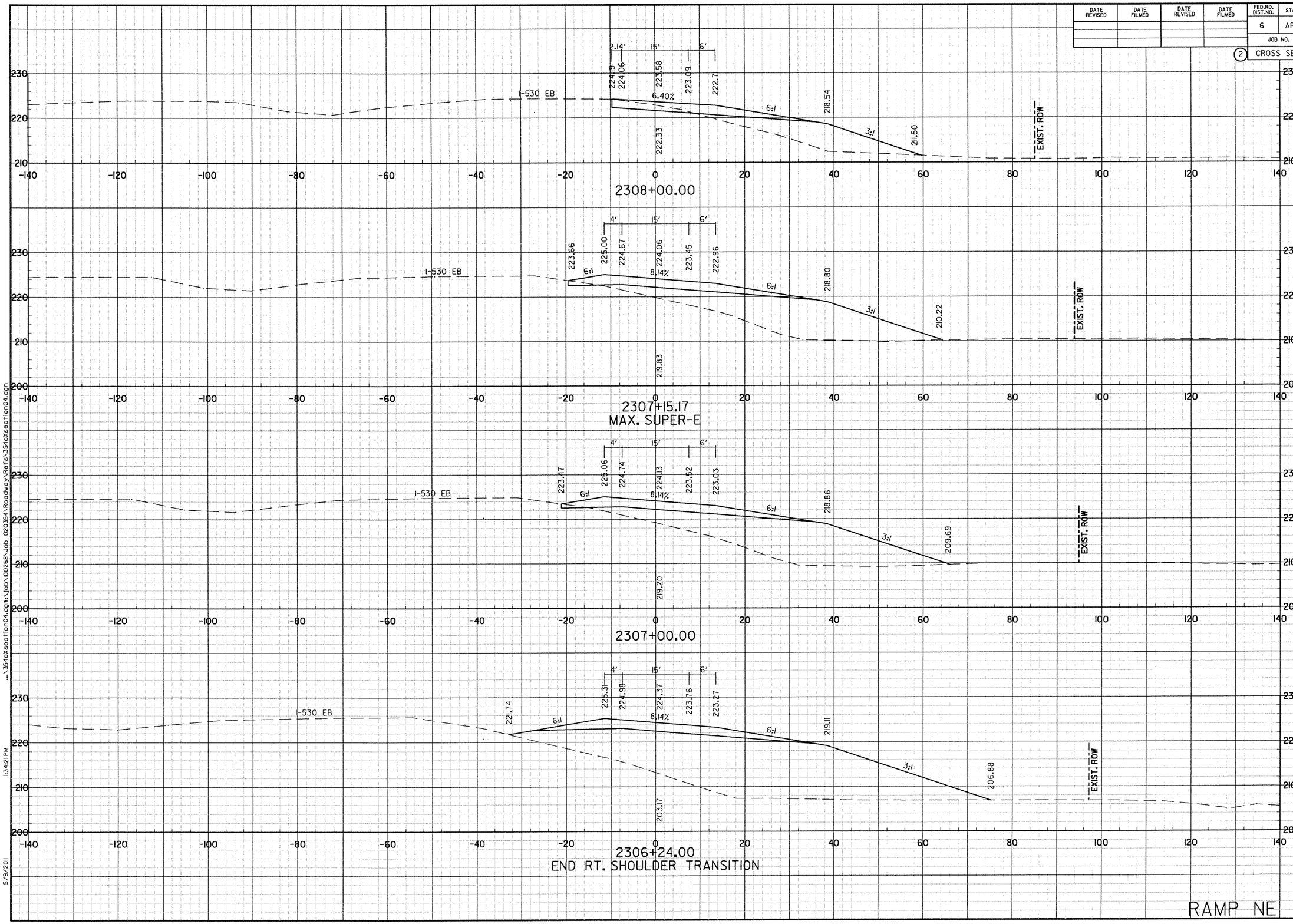
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		020354	147	156

(2) CROSS SECTIONS



	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
			57	284
	21	152		
			39	803
	4	359		
			2	220
	3	424		
			4	1806
	0	859		

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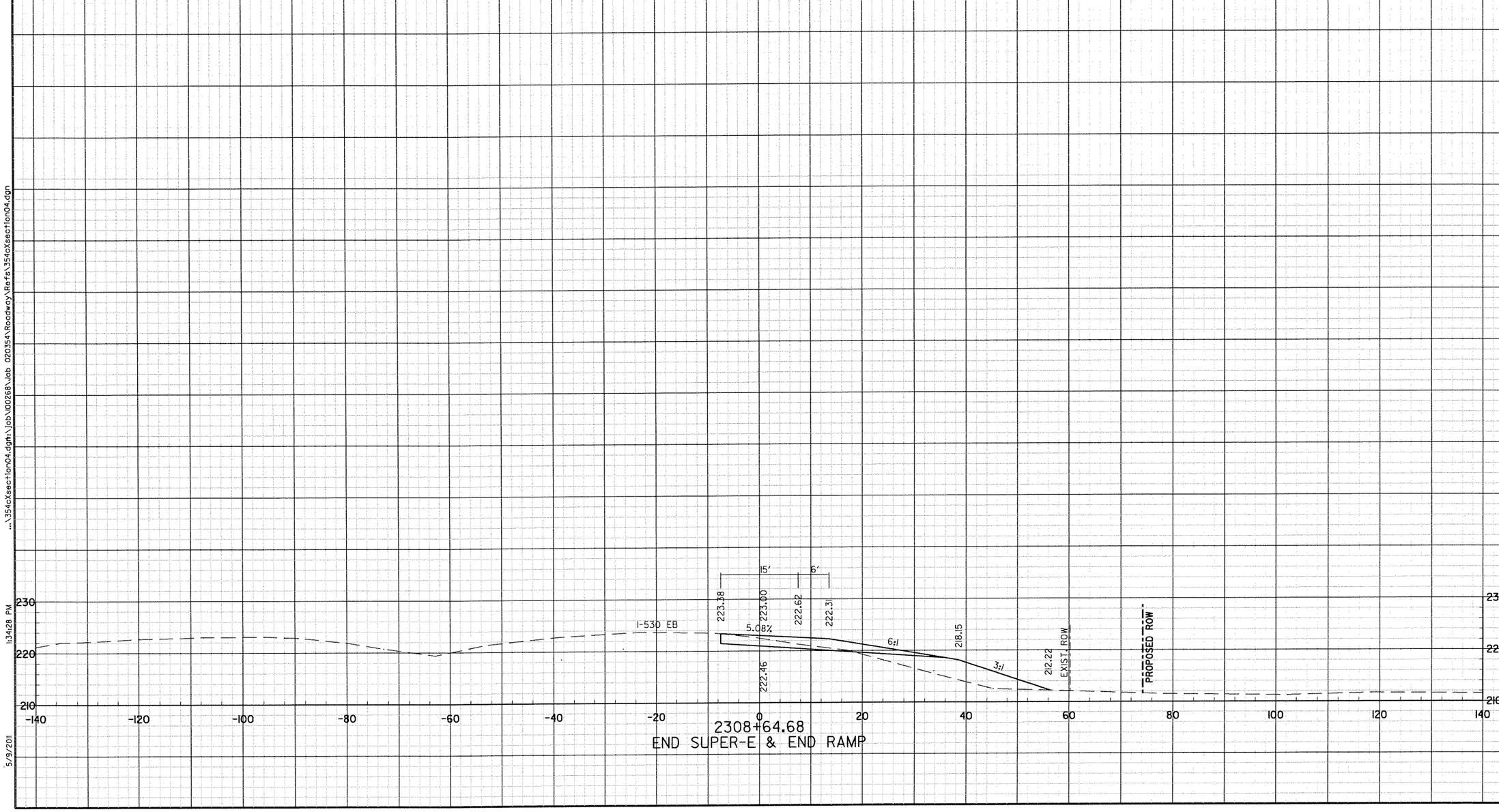
FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		020354	148	156

(2) CROSS SECTIONS

END AREA		VOLUME	
CUT	FILL	CUT	FILL
27	85		



2308+64.68
END SUPER-E & END RAMP

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JACOBS

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.		020354	149	156

(2) CROSS SECTIONS

460+54.00
END RT. AUX. LANE TAPER

460+00.00

459+26.19
BEGIN LT. AUX. LANE TAPER

459+00.00

458+54.00
BEGIN RT. AUX. LANE TAPER

I-530 WB
I-530 EB
MATCH EXISTING SLOPE
EXIST. ROW
18′ 12.5′ 12′ 10′
18′ 7.38′ 8.76′ 10′
18′ 4.33′ 10′
2.76′ 10′
10′
6:1
3:1

	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
			97	361
	59	221		
			116	384
	57	163		
			157	332
	58	80		
			44	49
	32	22		
			61	21
	40	3		

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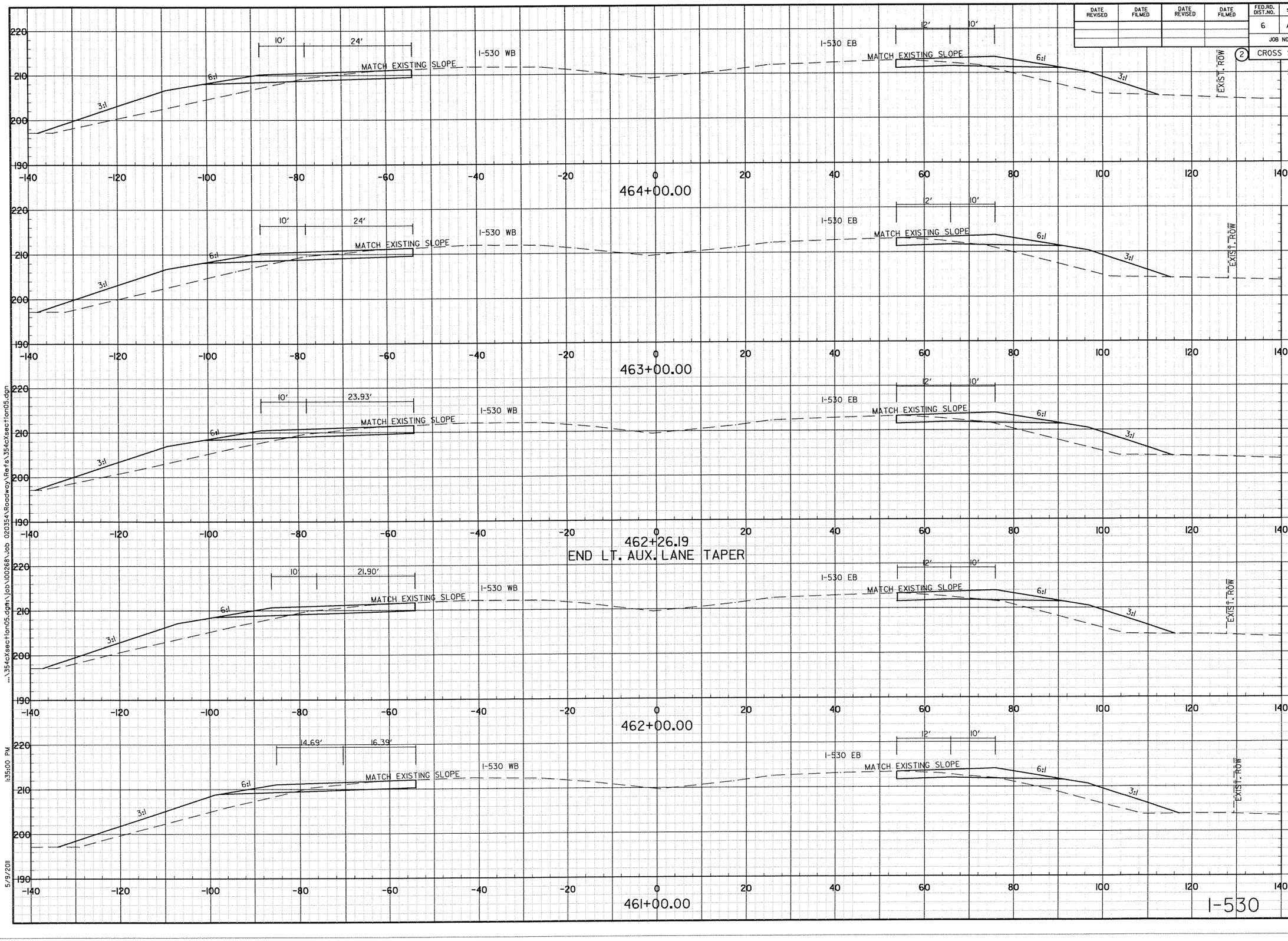
I-530

JACOBS

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.		020354	150	156

(2) CROSS SECTIONS



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		198	900
53	230		
		194	900
52	256		
		142	663
52	229		
		50	216
51	216		
		196	776
55	203		

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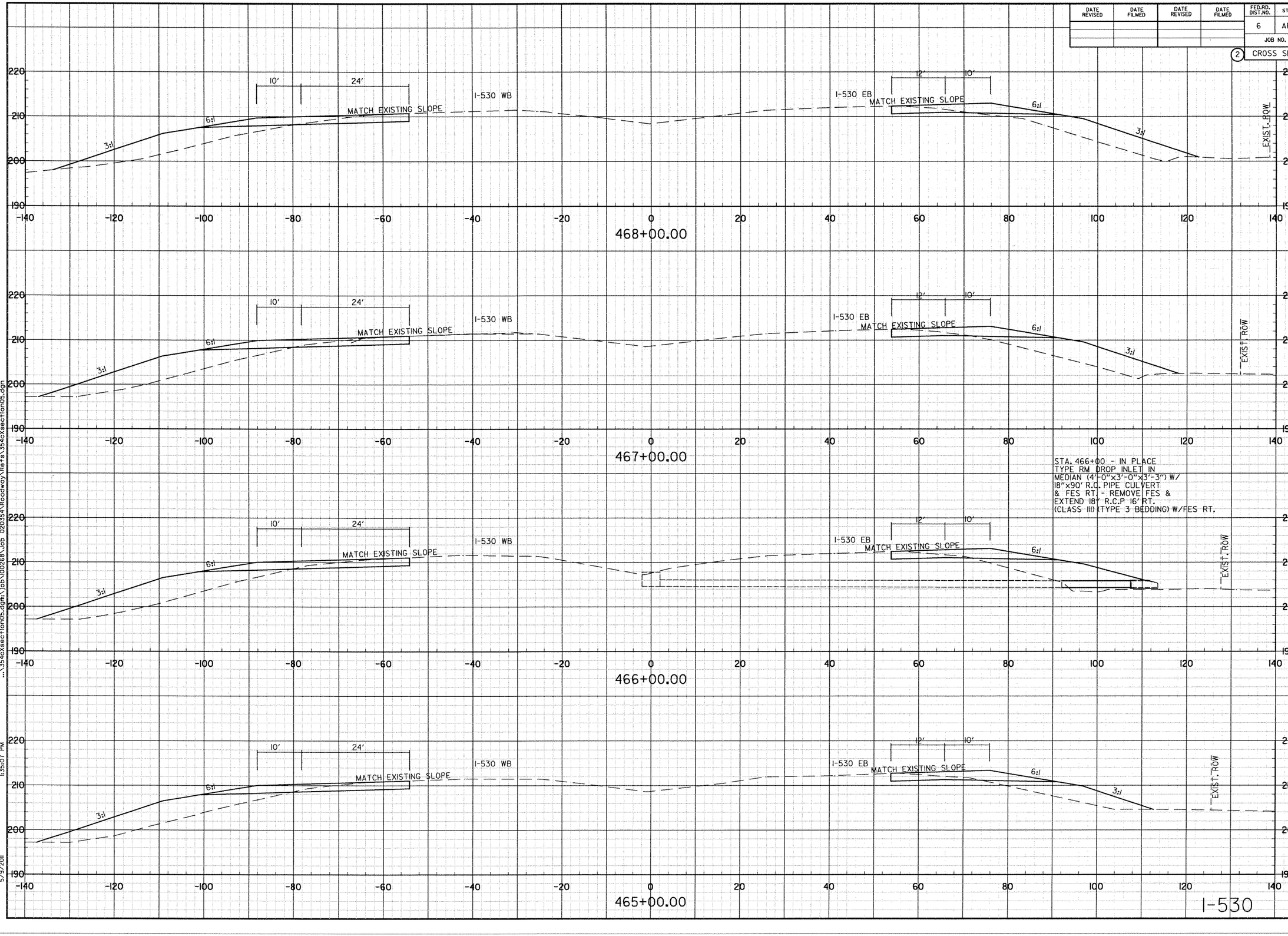
JACOBS

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.		020354	151	156

(2) CROSS SECTIONS



STA. 466+00 - IN PLACE TYPE RM DROP INLET IN MEDIAN (4'-0"x3'-0"x3'-3") W/ 18"x90' R.C. PIPE CULVERT & FES RT. - REMOVE FES & EXTEND 18" R.C.P 16' RT. (CLASS III) (TYPE 3 BEDDING) W/FES RT.

	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
			181	954
	48	263		
			180	1074
	49	317		
			183	1202
	50	332		
			193	1089
	54	256		

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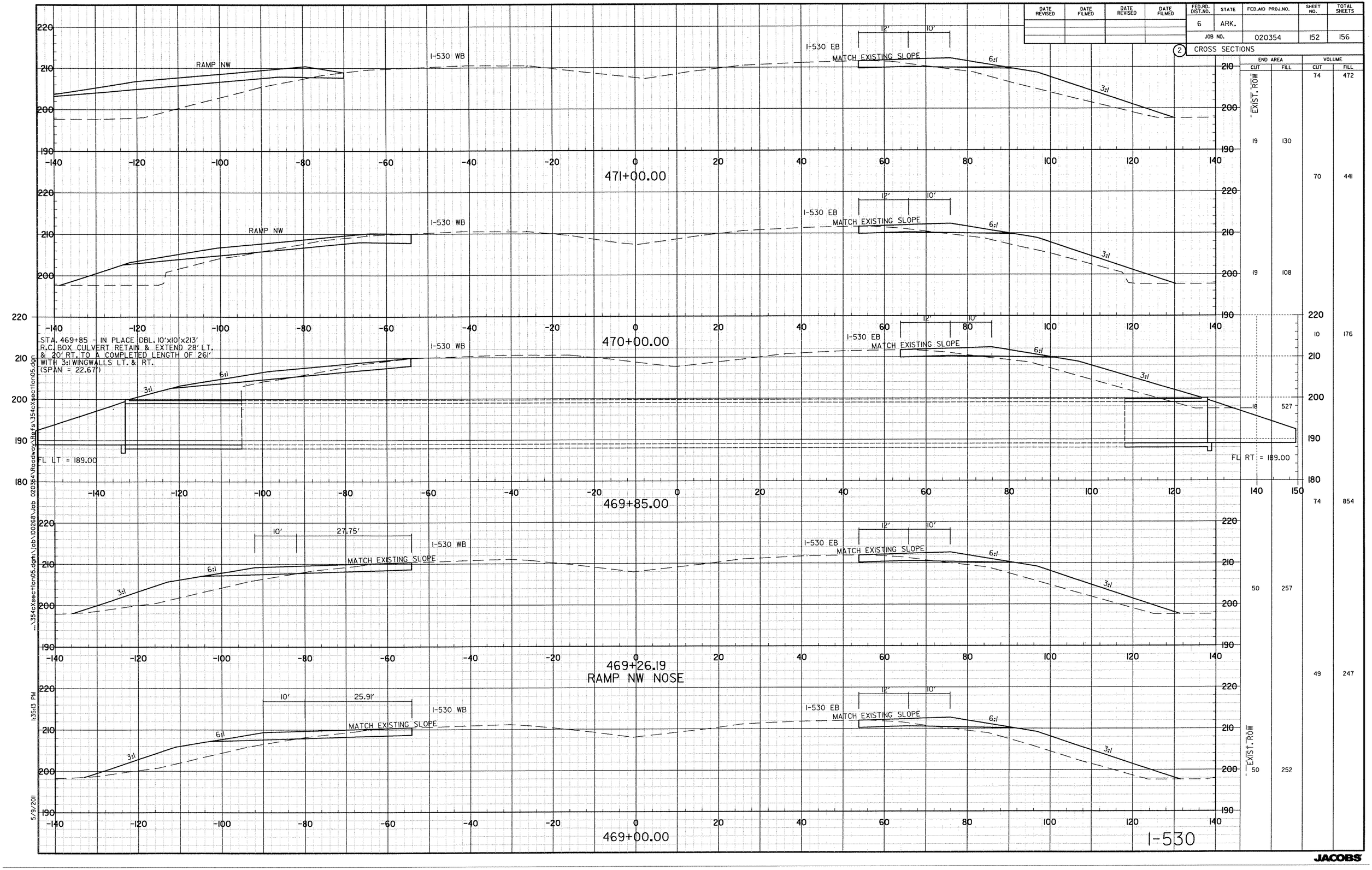
FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		020354	152	156

2 CROSS SECTIONS



	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
			74	472
EXIST. ROW	19	130		
			70	441
	19	108		
	10	176		
	18	527		
			74	854
	50	257		
			49	247
EXIST. ROW	50	252		

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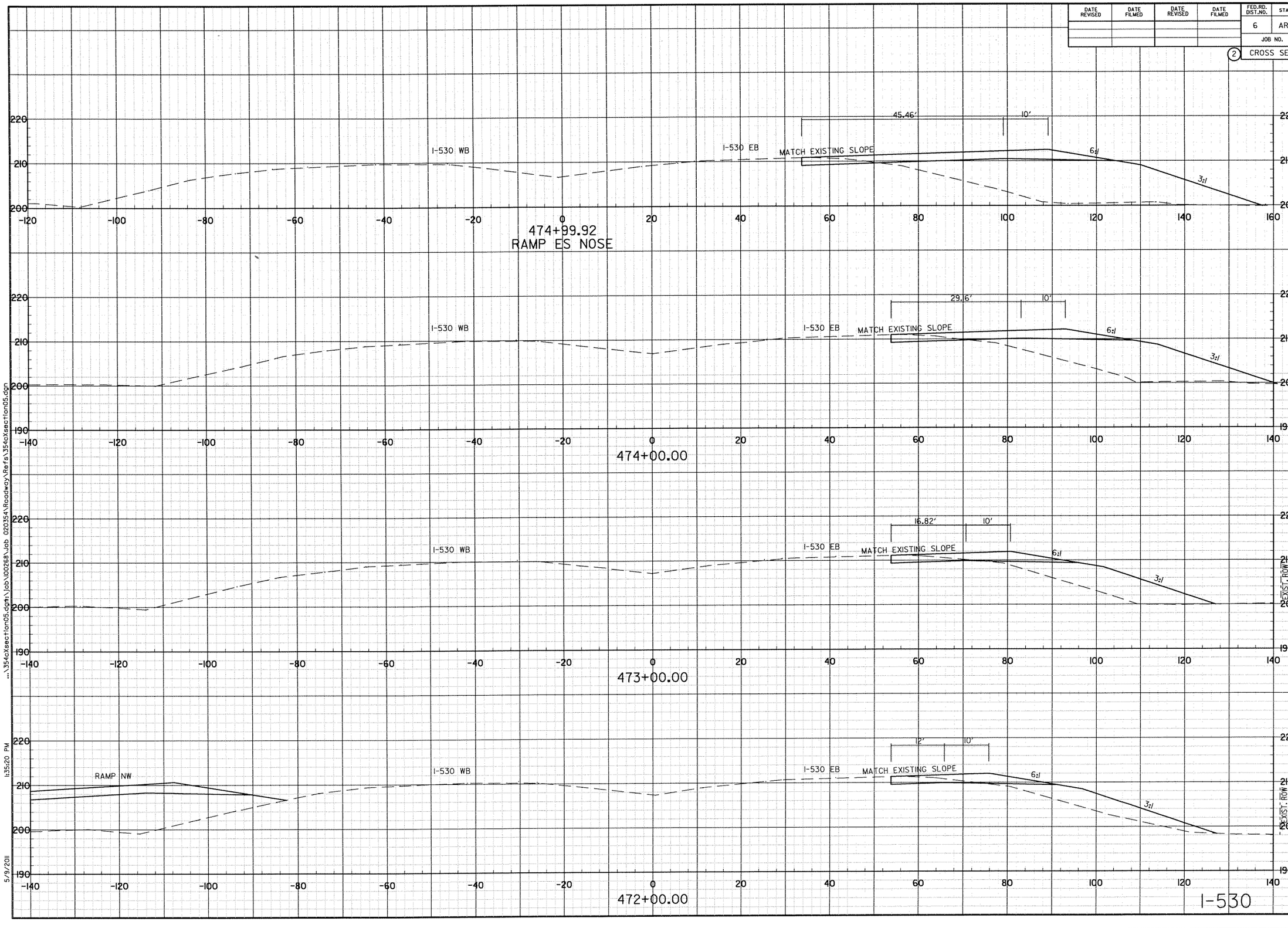
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		020354	153	156

(2) CROSS SECTIONS



	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
			0	0
	19	496		
			70	1501
	19	315		
			72	911
	20	177		
			76	559
	21	125		

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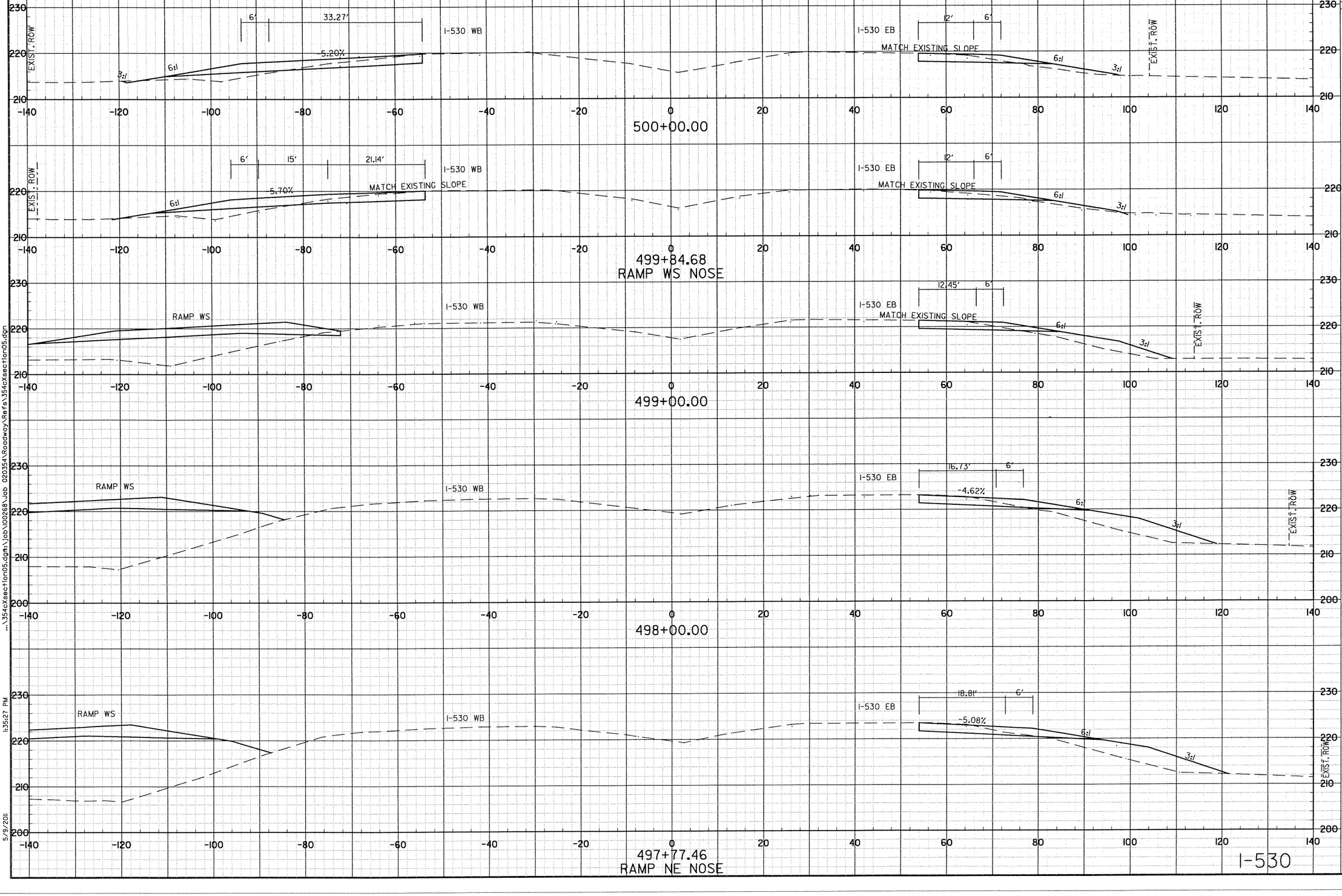
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		020354	154	156

(2) CROSS SECTIONS



	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
			230	104
	60	93		
			29	33
	42	73		
			110	187
	28	46		
			109	246
	31	87		
			26	56
	32	48		

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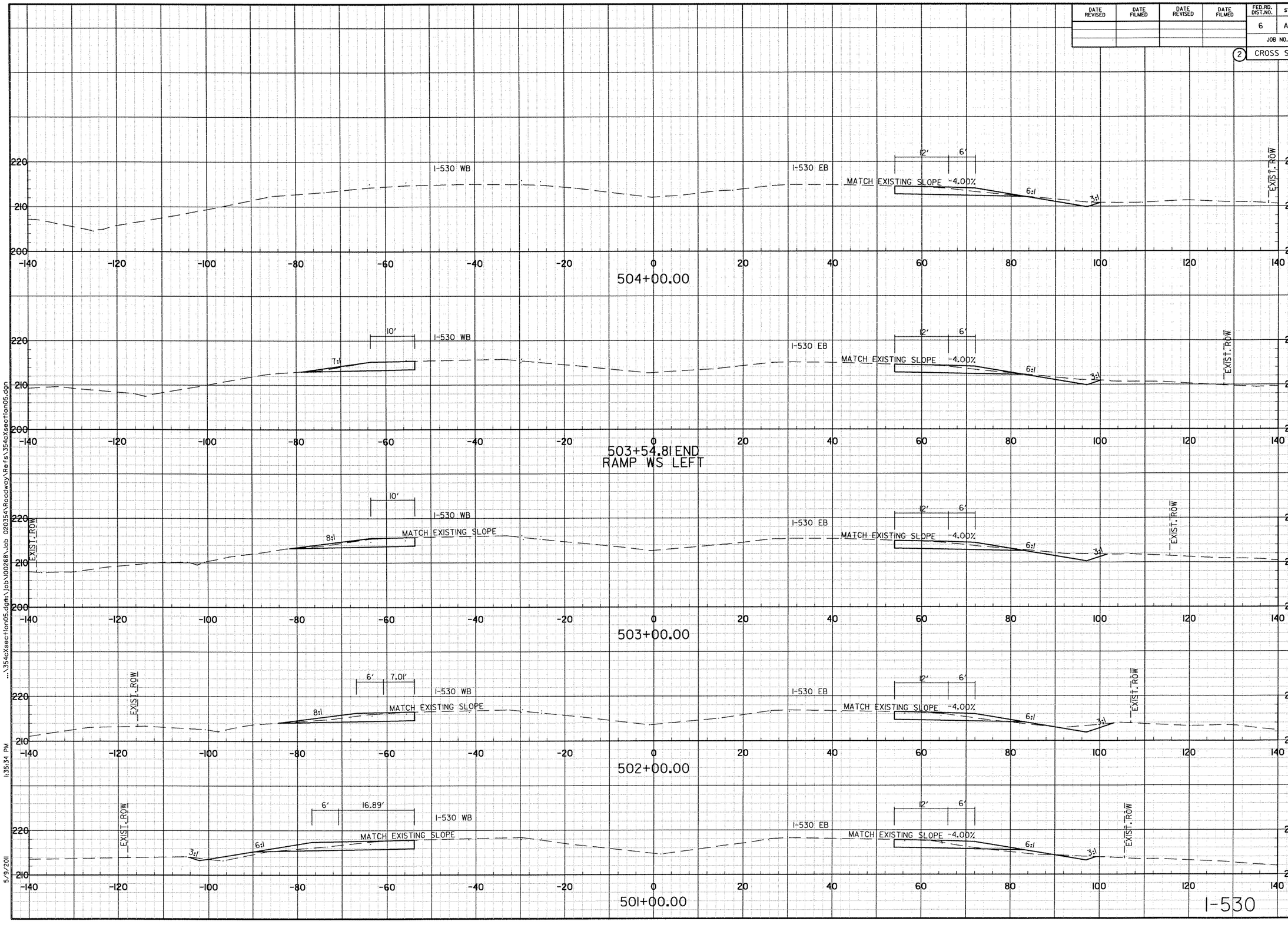
JACOBS

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.		020354	155	156

(2) CROSS SECTIONS



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		106	0
41	0		
		96	0
74	0		
		155	0
79	0		
		272	6
68	3		
		244	31
64	14		

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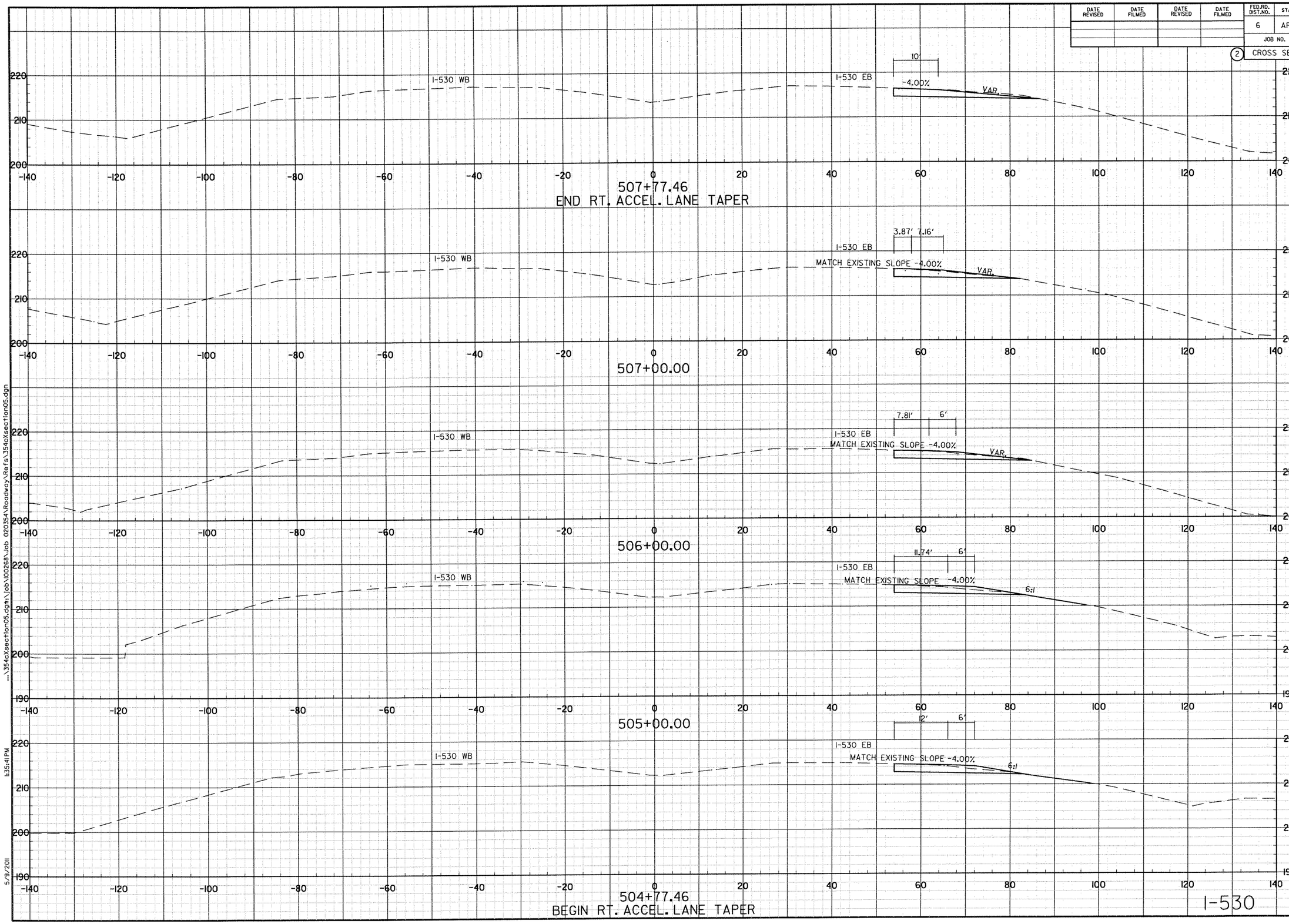
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		020354	156	156

(2) CROSS SECTIONS



	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
			0	0
	43	0		
			103	6
	29	4		
			120	9
	36	1		
			126	2
	32	0		
			27	0
	33	0		

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