

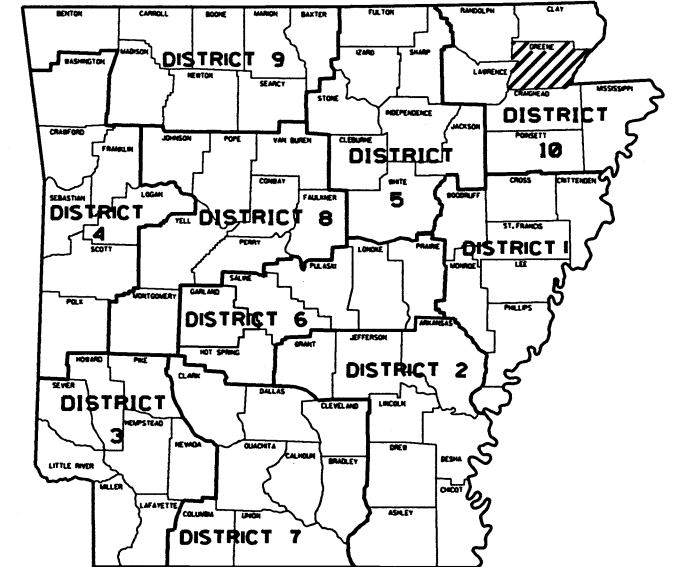
ARKANSAS DEPARTMENT OF TRANSPORTATION
CONSTRUCTION PLANS FOR STATE HIGHWAY

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 100841							1	44

② CACHE RIVER RELIEF STR. & APPRS. (S)

CACHE RIVER RELIEF
STR. & APPRS. (S)

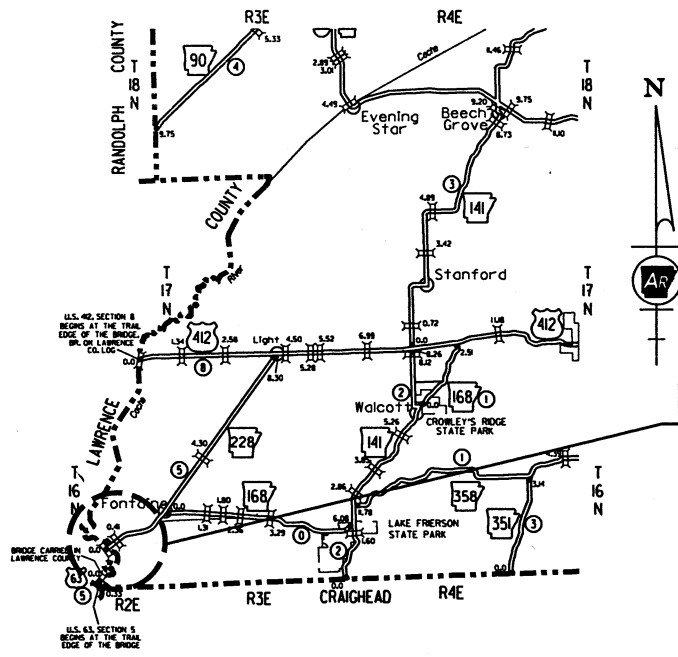
GREENE COUNTY
ROUTE 228 SECTION 5
JOB 100841
F.A.P. NHPP-0028(45)



ARKANSAS HWY. DIST. 10

• DESIGN TRAFFIC DATA •

DESIGN YEAR	-----	2039
2019 ADT	-----	740
2039 ADT	-----	900
2039 DHV	-----	99
DIRECTIONAL DISTRIBUTION	-----	0.60
TRUCKS	-----	7%
DESIGN SPEED	-----	55 MPH

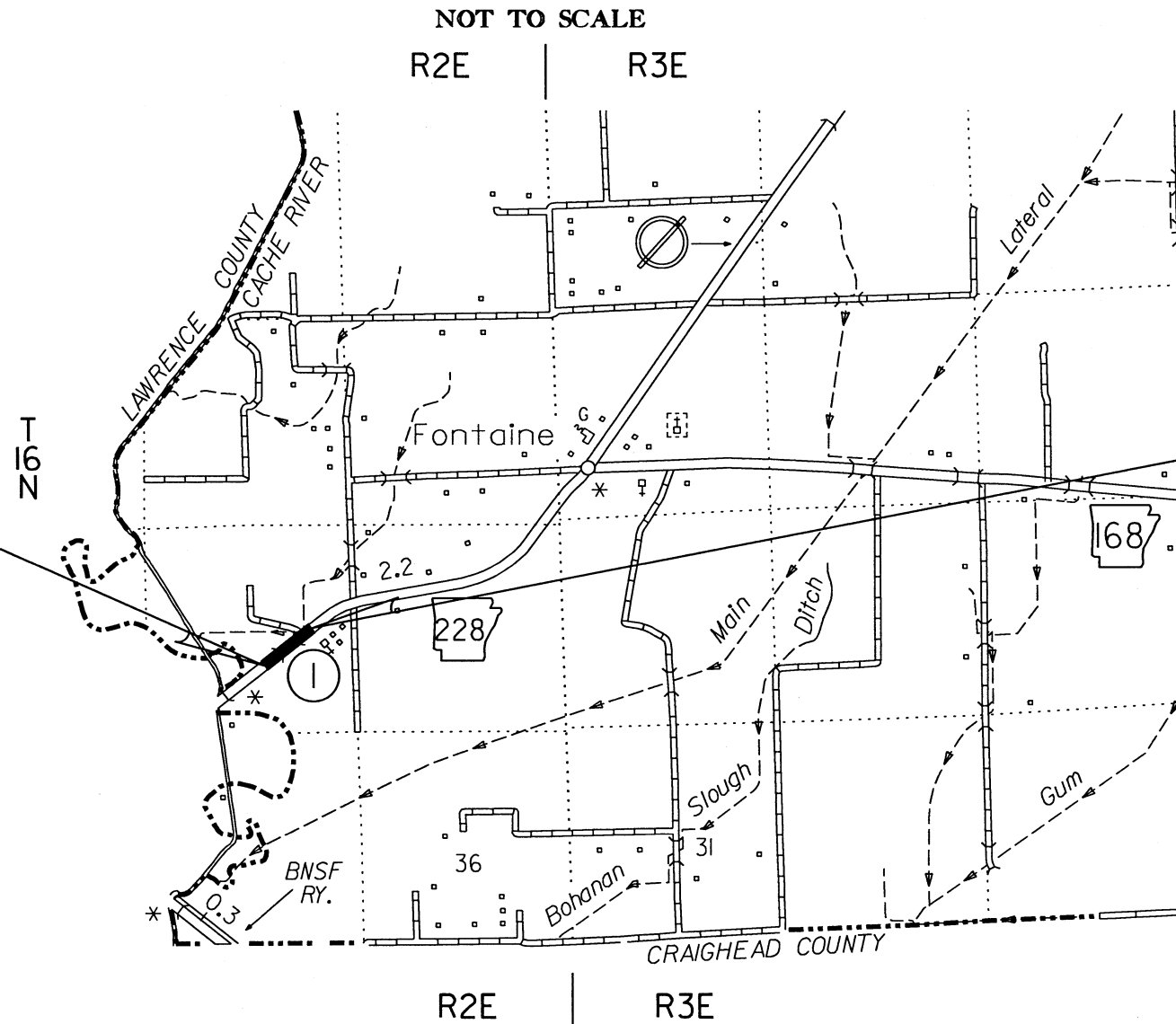


VICINITY MAP

BRIDGE DATA

- ① STA. 104+48.00 BRIDGE END
BRIDGE NO. 07438
164'-0" INTEGRAL COMPOSITE PRESTRESSED
CONCRETE GIRDER UNIT (54'-6", 55'-0", 54'-6")
30'-0" CLEAR ROADWAY
165.00' BRIDGE LENGTH
STA. 106+13.00 BRIDGE END

STA. 100+00.00
BEGIN JOB 100841
LOG MILE 0.32



STA. 110+65.00
END JOB 100841



APPROVED



5-2-19
DEPUTY DIRECTOR
AND CHIEF ENGINEER

PROJECT LENGTH CALCULATED ALONG C.L. CONSTRUCTION

GROSS LENGTH OF PROJECT	1065.00 FEET OR 0.202 MILES
NET : ROADWAY	900.00 : 0.171 MILES
NET : BRIDGES	165.00 : 0.031 MILES
NET : PROJECT	1065.00 : 0.202 MILES

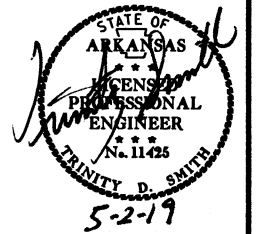
	BEGIN PROJECT	MID-POINT OF PROJECT	END PROJECT
LATITUDE	N35°59'15"	N35°59'18"	N35°59'21"
LONGITUDE	W90°50'34"	W90°50'29"	W90°50'24"

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2 INDEX OF SHEETS AND STANDARD DRAWINGS

INDEX OF SHEETS

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4 - 5	TYPICAL SECTIONS OF IMPROVEMENT		
6	SPECIAL DETAILS		
7 - 10	TEMPORARY EROSION CONTROL DETAILS		
11 - 14	MAINTENANCE OF TRAFFIC DETAILS		
15	PERMANENT PAVEMENT MARKING DETAILS		
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19	SCHEDULE OF BRIDGE QUANTITIES	07438	60471
20	SUMMARY OF QUANTITIES AND REVISIONS		
21 - 24	SURVEY CONTROL DETAILS		
25	PLAN AND PROFILE SHEET		
26	DETOUR PLAN AND PROFILE SHEET		
27	LAYOUT OF BRIDGE HIGHWAY 228 OVER CACHE RIVER RELIEF (SHEET 1 OF 2)	07438	60472
28	LAYOUT OF BRIDGE HIGHWAY 228 OVER CACHE RIVER RELIEF (SHEET 2 OF 2)	07438	60473
29	DETAILS OF END BENTS	07438	60474
30	DETAILS OF INTERMEDIATE BENTS	07438	60475
31	DETAILS OF 164'-0" INTEGRAL PRESTRESSED CONCRETE GIRDER UNIT (SHEET 1 OF 7)	07438	60476
32	DETAILS OF 164'-0" INTEGRAL PRESTRESSED CONCRETE GIRDER UNIT (SHEET 2 OF 7)	07438	60477
33	DETAILS OF 164'-0" INTEGRAL PRESTRESSED CONCRETE GIRDER UNIT (SHEET 3 OF 7)	07438	60478
34	DETAILS OF 164'-0" INTEGRAL PRESTRESSED CONCRETE GIRDER UNIT (SHEET 4 OF 7)	07438	60479
35	DETAILS OF 164'-0" INTEGRAL PRESTRESSED CONCRETE GIRDER UNIT (SHEET 5 OF 7)	07438	60480
36	DETAILS OF 164'-0" INTEGRAL PRESTRESSED CONCRETE GIRDER UNIT (SHEET 6 OF 7)	07438	60481
37	DETAILS OF 164'-0" INTEGRAL PRESTRESSED CONCRETE GIRDER UNIT (SHEET 7 OF 7)	07438	60482
38	DETAILS OF TYPE SPECIAL APPROACH SLAB	07438	60483
39 - 44	CROSS SECTIONS		



BRIDGE STANDARD DRAWINGS

DRWG. NO.	TITLE	DATE
55000	STANDARD DETAILS FOR EMBANKMENT CONSTRUCTION AND BACKFILL AT BRIDGE ENDS	02-27-14
55001	STANDARD DETAILS FOR DUMPED RIPRAP AND FILTER BLANKET AND COMPUTING EXCAVATION FOR STRUCTURES	02-27-14
55005	STANDARD DETAILS FOR PERMANENT STEEL BRIDGE DECK FORMS FOR STEEL & CONCRETE GIRDER SPANS	03-24-16
55010	STANDARD DETAILS FOR TYPE D BRIDGE NAME PLATE	01-15-19
55021	STANDARD DETAILS FOR CONCRETE FILLED STEEL SHELL PILES AND PILE ENCASEMENTS	03-24-16
55030C	STANDARD DETAILS FOR TYPE C APPROACH GUTTERS	02-27-14

ROADWAY STANDARD DRAWINGS

DRWG. NO.	TITLE	DATE
GR-8	GUARD RAIL DETAILS	11-16-17
GR-8A	GUARD RAIL DETAILS	11-16-17
GR-9	GUARD RAIL DETAILS	04-17-08
GR-9A	GUARD RAIL DETAILS	04-17-08
GR-10	GUARD RAIL DETAILS	11-16-17
GR-11	GUARD RAIL DETAILS	11-16-17
GR-12	GUARD RAIL DETAILS	11-16-17
PCC-1	CONCRETE PIPE CULVERT FILL HEIGHTS & BEDDING	02-27-14
PCM-1	METAL PIPE CULVERT FILL HEIGHTS & BEDDING	02-27-14
PM-1	PAVEMENT MARKING DETAILS	06-01-17
PU-1	DETAILS OF PIPE UNDERDRAIN	12-08-16
SE-2	TABLES AND METHOD OF SUPERELEVATION FOR TWO-WAY TRAFFIC	10-18-96
TC-1	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	04-13-17
TC-2	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	09-02-15
TC-3	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	09-02-15
TEC-1	TEMPORARY EROSION CONTROL DEVICES	11-16-17
TEC-2	TEMPORARY EROSION CONTROL DEVICES	06-02-94
TEC-3	TEMPORARY EROSION CONTROL DEVICES	11-03-94

INDEX OF SHEETS AND STANDARD DRAWINGS

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2 GOVERNING SPECIFICATIONS AND GEN. NOTES



GOVERNING SPECIFICATIONS

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

NUMBER	TITLE
ERRATA	ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS
FHWA-1273	REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS
FHWA-1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - NOTICE TO CONTRACTORS
FHWA-1273	SUPPLEMENT - SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES (23 U.S.C. 140)
FHWA-1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - GOALS AND TIMETABLES
FHWA-1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - FEDERAL STANDARDS
FHWA-1273	SUPPLEMENT - POSTERS AND NOTICES REQUIRED FOR FEDERAL-AID PROJECTS
FHWA-1273	SUPPLEMENT - WAGE RATE DETERMINATION
100-3	CONTRACTOR'S LICENSE
100-4	DEPARTMENT NAME CHANGE
102-2	ISSUANCE OF PROPOSALS
108-1	LIQUIDATED DAMAGES
108-2	WORK ALLOWED PRIOR TO ISSUANCE OF WORK ORDER
110-1	PROTECTION OF WATER QUALITY AND WETLANDS
303-1	AGGREGATE BASE COURSE
306-1	QUALITY CONTROL AND ACCEPTANCE
400-1	TACK COATS
400-4	DESIGN AND QUALITY CONTROL OF ASPHALT MIXTURES
400-5	PERCENT AIR VOIDS FOR ACHM MIX DESIGNS
400-6	LIQUID ANTI-STRIP ADDITIVE
410-1	CONSTRUCTION REQUIREMENTS AND ACCEPTANCE OF ASPHALT CONCRETE PLANT MIX COURSES
410-2	DEVICES FOR MEASURING DENSITY FOR ROLLING PATTERNS
600-2	INCIDENTAL CONSTRUCTION
604-1	RETROREFLECTIVE SHEETING FOR TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
617-1	GUARDRAIL TERMINAL (TYPE 2)
620-1	MULCH COVER
800-1	STRUCTURES
802-3	CONCRETE FOR STRUCTURES
804-2	REINFORCING STEEL FOR STRUCTURES
JOB 100841	BIDDING REQUIREMENTS AND CONDITIONS
JOB 100841	BROADBAND INTERNET SERVICE FOR ASPHALT CONCRETE PLANT
JOB 100841	BROADBAND INTERNET SERVICE FOR FIELD OFFICE
JOB 100841	CARGO PREFERENCE ACT REQUIREMENTS
JOB 100841	CLASS C FLY ASH IN PORTLAND CEMENT CONCRETE PAVEMENT AND CLASS S(AE) CONCRETE
JOB 100841	CONSTRUCTION IN SPECIAL FLOOD HAZARD AREAS
JOB 100841	DISADVANTAGED BUSINESS ENTERPRISE BIDDER'S RESPONSIBILITIES
JOB 100841	GOALS FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION
JOB 100841	MANDATORY ELECTRONIC CONTRACT
JOB 100841	MANDATORY ELECTRONIC DOCUMENT SUBMITTAL
JOB 100841	NESTING SITES OF MIGRATORY BIRDS
JOB 100841	OFF-SITE RESTRAINING CONDITIONS FOR INDIANA AND NORTHERN LONG-EARED BATS
JOB 100841	PARTNERING REQUIREMENTS
JOB 100841	PRICE ADJUSTMENT FOR ASPHALT BINDER
JOB 100841	SHORING FOR CULVERTS
JOB 100841	SOIL STABILIZATION
JOB 100841	STORM WATER POLLUTION PREVENTION PLAN
JOB 100841	SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS
JOB 100841	UTILITY ADJUSTMENTS
JOB 100841	VALUE ENGINEERING
JOB 100841	WARM MIX ASPHALT
JOB 100841	WELLHEAD PROTECTION

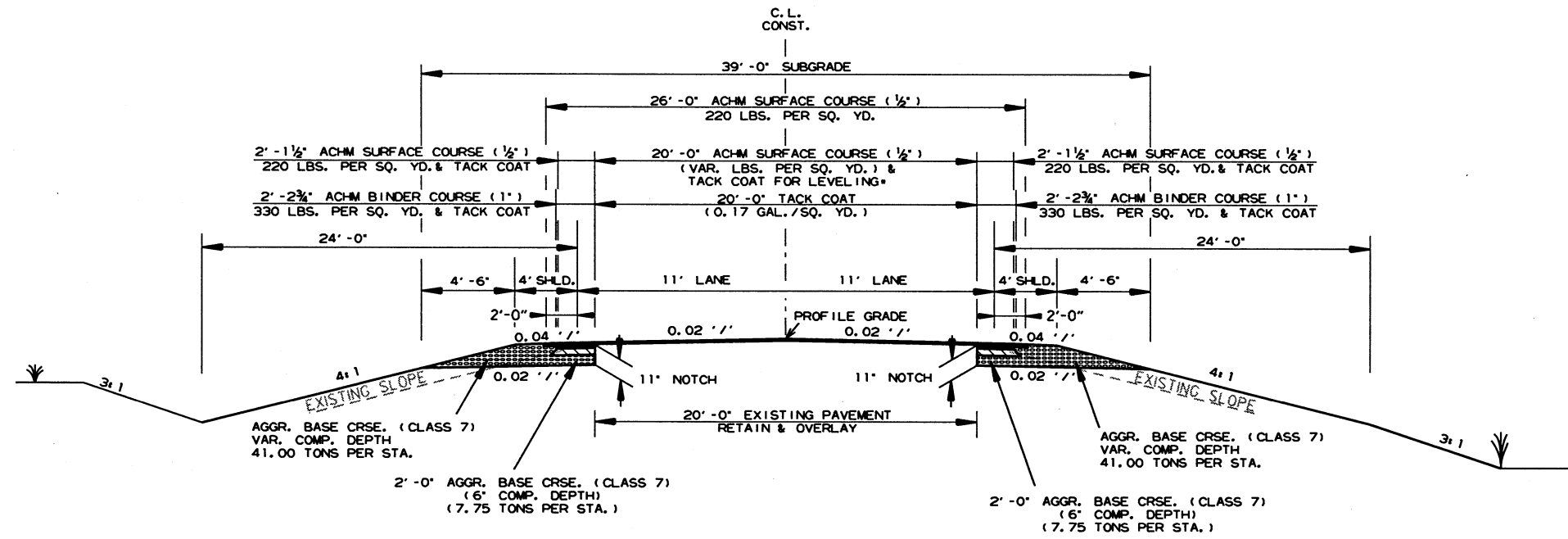
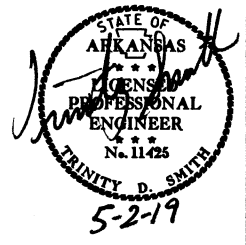
GENERAL NOTES

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. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING U. S. MAILBOXES WITHIN THE PROJECT LIMITS IN SUCH A MANNER THAT THE PUBLIC MAY RECEIVE CONTINUED MAIL SERVICE. PAYMENT WILL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS BID ITEMS.
5. ALL LAND MONUMENTS LOCATED WITHIN THE CONSTRUCTION AREA SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 107.12 OF THE STANDARD SPECIFICATIONS.
6. 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.
7. 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.
8. THE SEQUENCE AS SHOWN ON THE MAINTENANCE OF TRAFFIC PLANS IS A GENERAL OUTLINE FOR THE CONSTRUCTION OF THIS PROJECT, AND IN NO WAY IS IT INTENDED TO COVER EVERY ITEM IN THE PROJECT. ITEMS NOT CRITICAL TO THE CONSTRUCTION SEQUENCE MAY BE CONSTRUCTED IN ANY STAGE AS APPROVED BY THE RESIDENT ENGINEER.
9. THIS PROJECT IS COVERED UNDER A SECTION 404 NATIONWIDE 14 PERMIT. REFER TO SECTION 110 OF THE STANDARD SPECIFICATIONS, EDITION OF 2014, FOR PERMIT REQUIREMENTS.
10. ALL FLEXIBLE BASE AND ASPHALTIC PAVEMENTS REMOVED SHALL BE PAID FOR UNDER THE ITEM NO. 210 - UNCLASSIFIED EXCAVATION.
11. THE EXISTING ASPHALT PAVEMENT TO BE REMOVED FROM THE REMAINING PAVEMENT SHALL BE SEPARATED BY SAWING ALONG A NEAT LINE. AFTER SAWING, THE PAVEMENT TO BE REMOVED SHALL BE CAREFULLY REMOVED IN A MANNER THAT WILL NOT DAMAGE THE PAVEMENT THAT IS TO REMAIN. ANY DAMAGE OF THE ASPHALT PAVEMENT THAT IS TO REMAIN IN PLACE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

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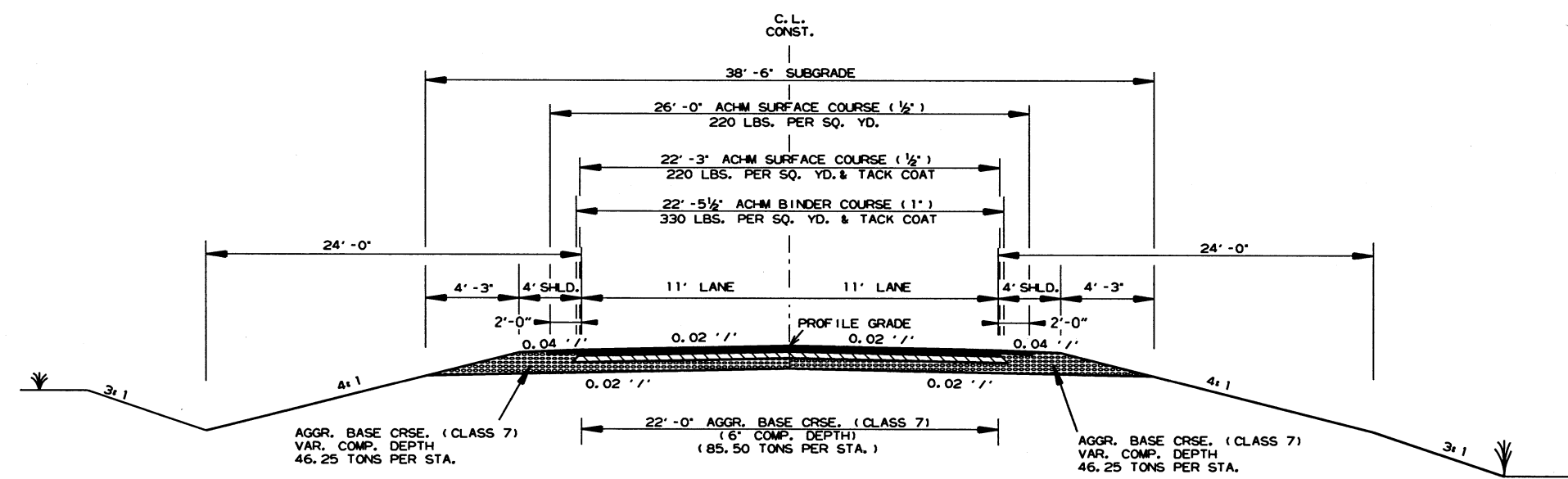
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2 TYPICAL SECTIONS OF IMPROVEMENT



HWY. 228 NOTCH AND WIDEN OPEN SHOULDER

STA. 100+00.00 - STA. 102+55.00
 STA. 108+95.00 - STA. 110+65.00



HWY. 228 FULL DEPTH OPEN SHOULDER

STA. 102+55.00 - STA. 104+11.50
 STA. 106+49.50 - STA. 108+95.00

NOTES:

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

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

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

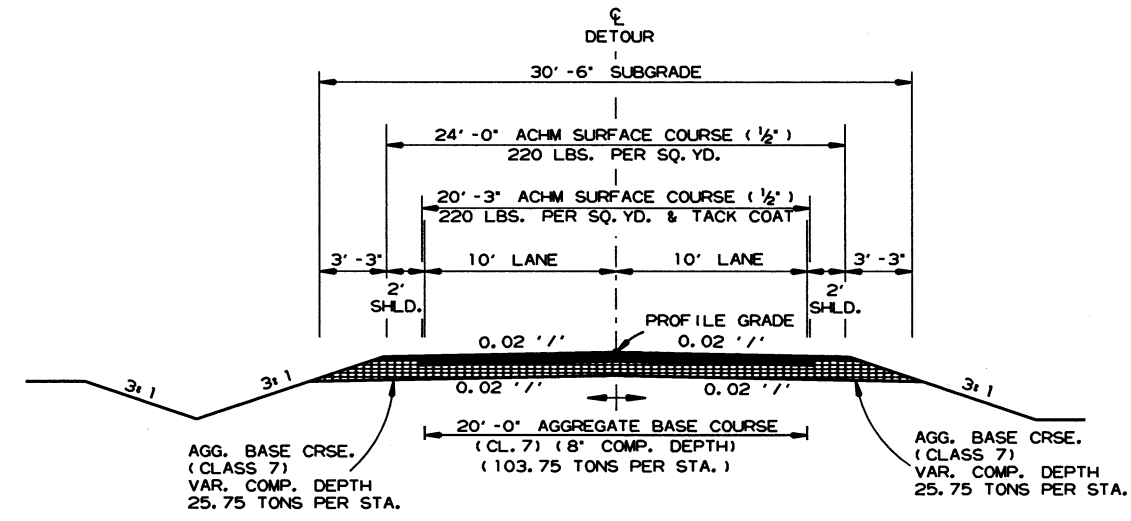
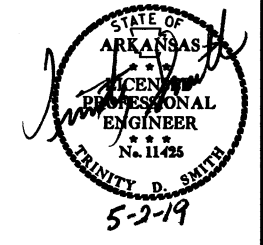
WITH THE APPROVAL OF THE ENGINEER, THE CONTRACTOR WILL BE ALLOWED TO SUBSTITUTE, AT NO ADDITIONAL COST TO THE DEPARTMENT, THE FIRST LIFT OF AC-11M SURFACE (1/2") IN LIEU OF AGGREGATE BASE COURSE ON THE SHOULDERS.

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

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② TYPICAL SECTIONS OF IMPROVEMENT

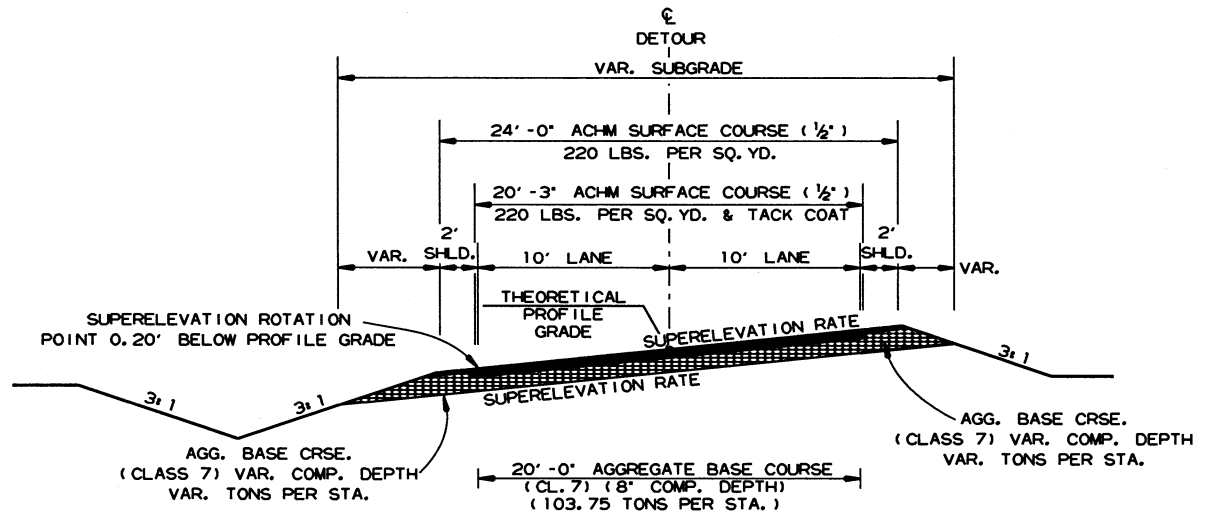


TYPICAL SECTIONS OF IMPROVEMENT
DETOUR ROAD

STA. 200+00.00 TO STA. 202+09.49
 STA. 205+06.73 TO STA. 205+66.23
 STA. 208+63.47 TO STA. 210+72.96

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

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



TYPICAL SECTIONS OF IMPROVEMENT
DETOUR ROAD - SUPERELEVATION

STA. 202+09.49 TO STA. 205+06.73
 STA. 205+66.23 TO STA. 208+63.47