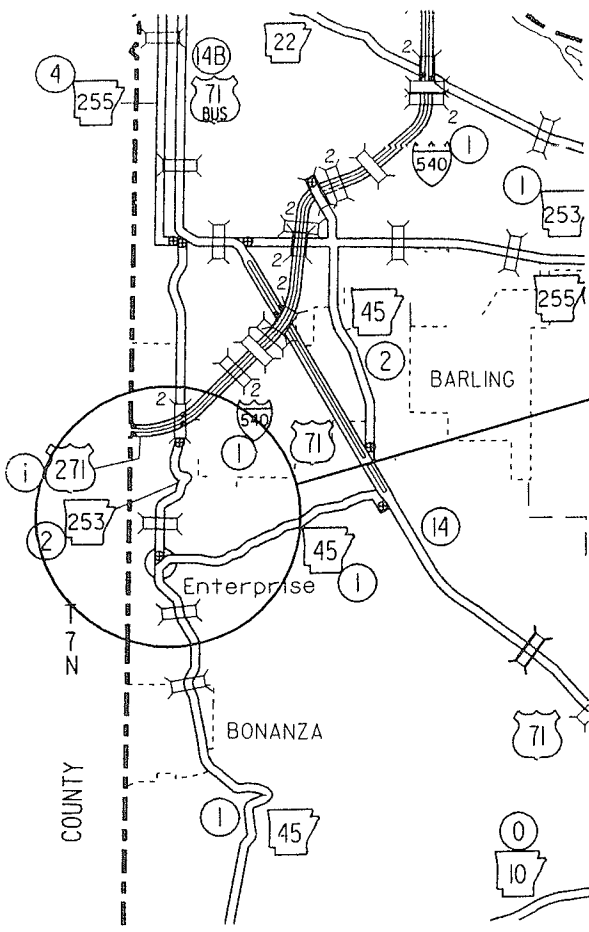


ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
CONSTRUCTION PLANS

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.		040184	1	
				HWY. 45 - NORTH (WIDENING) (S)				

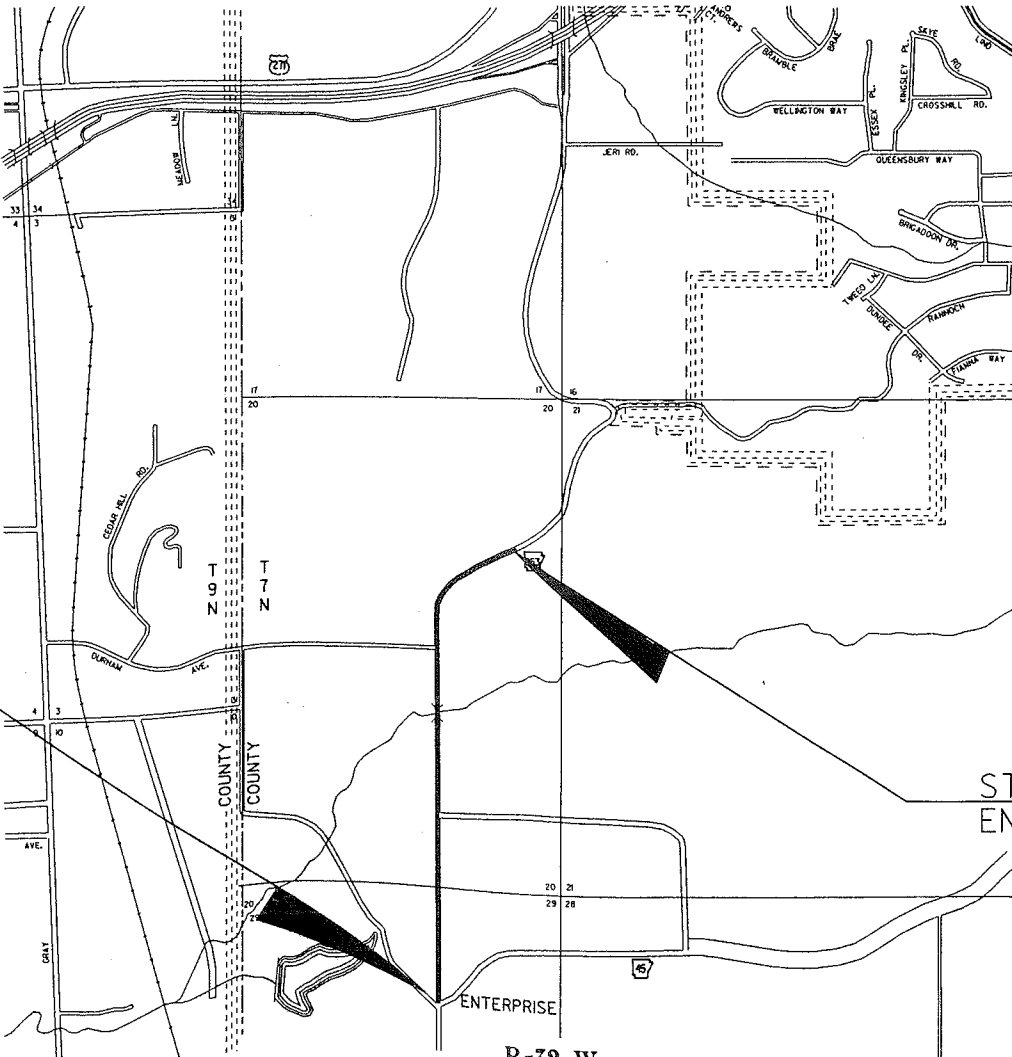


PROJECT
LOCATION

SEBASTIAN COUNTY

HWY. 45 - NORTH (WIDENING) (S)
SEBASTIAN COUNTY
ROUTE 253 SECTION 2
F.A.P. STPH-0065(24)
JOB 040184

NOT TO SCALE



STA. 108+00
BEGIN JOB 040184

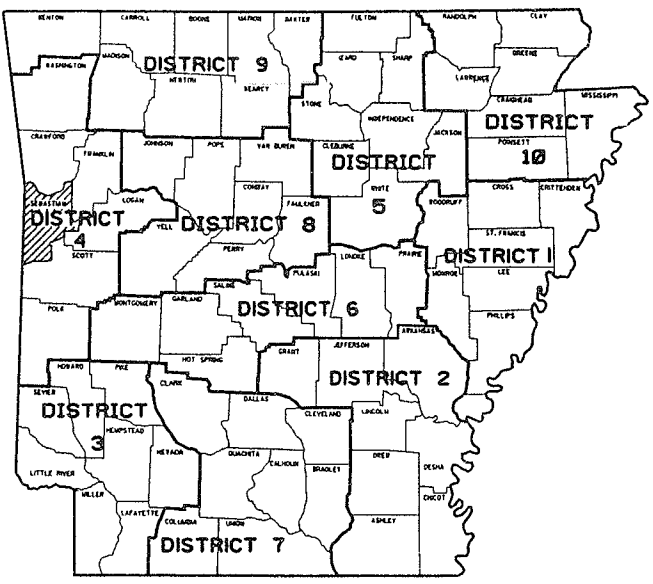
STA. 159+64
END JOB 040184

STRUCTURES OVER 20'-0" SPAN

STATION	DESCRIPTION	SPAN
117+40	DBL. 9' X 6' XII7' R.C. BOX	20.08'
139+12	TRIPLE 7' X 8' X 110' R.C. BOX	24.00'

GROSS LENGTH OF PROJECT 5164.00
NET LENGTH OF ROADWAY 5119.92
NET LENGTH OF BRIDGES 44.08
NET LENGTH OF PROJECT 5164.00
R-32-W
FEET OR 0.978 MILES
FEET OR 0.970 MILES
FEET OR 0.008 MILES
FEET OR 0.978 MILES

P.E. JOB 040184
NON-PART.



VICINITY MAP

DESIGN TRAFFIC DATA

DESIGN YEAR-----2019
1999 ADT-----5973
2019 ADT-----9753
2019 DHV-----1073
DIRECTIONAL DISTRIBUTION-----60%
TRUCKS-----8.03% DURING DHV
DESIGN SPEED-----50 MPH

PRELIMINARY
SUBJECT TO REVISION



RECOMMENDED FOR APPROVAL

BRIDGE DESIGN ENGINEER

ROADWAY DESIGN ENGINEER

DISTRICT ENGINEER

APPROVED

CHIEF ENGINEER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
RECOMMENDED FOR APPROVAL

APPROVED

DIVISION ENGINEER



SOIL LOG						Date Revised	Date Filmed	Date Revised	Date Filmed	Fed. Rd. Dist. No.	State	JOB NO.	Sheet No.	Total Sheets
										6	AR	040184	26	
						QUANTITY SHEET								

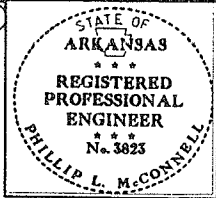
STATION	LOCATION	DEPTH	A.A.S.H.T.O. SOIL CLASS.	LIQUID LIMIT	PLASTICITY INDEX
		FEET			
108+00	12' LT.	0-4	A-6(7)	35	13
116+00	5' RT.	0-4	A-6(7)	31	13
124+00	5' LT.	0-4	A-7-6(21)	47	22
132+00	5' RT.	0-4	A-6(8)	26	13
140+00	5' LT.	0-4	A-6(9)	35	14
148+00	8' RT.	0-4	A-7-6(34)	56	36
156+00	5' LT.	0-4	A-6(10)	39	19
164+00	5' LT.	0-4	A-6(8)	36	16

NOTE: SOIL CHARACTERISTICS TABULATED ABOVE ARE REPRESENTATIVE AT THE LOCATION OF THE SAMPLE, AND FROM SURFACE INDICATIONS ARE TYPICAL FOR THE LIMITS SHOWN. THESE DATA ARE SHOWN FOR INFORMATION ONLY. THE STATE WILL NOT BE RESPONSIBLE FOR VARIATIONS IN THE SOIL CHARACTERISTICS AND/OR EXTENT OF SAME DIFFERING FROM THE ABOVE TABULATIONS.

EARTHWORK

LOCATION	UNCLASS. EXCAV.	COMPACTED EMBANK.	*STONE BACKFILL
	CU. YD.		TON
STAGE I	7017	27824	
STAGE II	9978	18649	
STAGE III	545	6160	
ENTIRE PROJECT			10000
ENTIRE PROJECT-INLETS & OUTLETS	2582		
ENTIRE PROJECT-APPROACHES		224	
TOTALS	20122	52857	10000

* QUANTITY ESTIMATED - USE AS DIRECTED BY THE ENGINEER.
EARTHWORK QUANTITIES SHOWN ABOVE SHALL BE PAID AS PLAN QUANTITY.



PIPE UNDERDRAINS

LOCATION	4" PIPE UNDERDRAINS	OUTLET PROTECTORS
	LIN. FT.	EACH
ENTIRE PROJECT - AS DIRECTED BY THE ENGINEER.	5000	10
TOTAL	5000	10

NOTE: QUANTITY ESTIMATED

CLEARING AND GRUBBING

STATION	STATION	SIDE	CLEARING	GRUBBING
			STATION	
119+00	160+00	LT. & RT.	41.00	41.00
108+50	110+00	RT.	2.00	2.00
TOTALS			43.00	43.00

REINF. CONC. BOX CULVERTS - STRUCTURES OVER 20'-0" SPAN

STATION	DESCRIPTION	SPAN	HEIGHT	LENGTH	CLASS S CONC.	REINF. STEEL (GR. 60) ROADWAY	UNCL. EXCAV. STRUCT. ROADWAY	SOLID SODDING	WATER
					CU. YD.	POUND	CU. YD.	SQ. YD.	M.G.
117+40	DBL. 9'X6'X117' R.C. BOX CULVT.	9'	6'	117'	222.67	27764	96	24	0.40
139+12	TRIPLE 7'X8'X110' R.C. BOX (15° SKEW)	7'	8'	110'	255.36	38720	98	32	0.53
TOTALS					478.03	66484	194	56	0.93

STANDARD DRAWING:

W-X15 W-X003-1
W-X153-1 R-200X-X3
R-315X-0

BASIS OF ESTIMATE:

WATER--16.7 GALS. PER SQ. YD. SOLID SODDING

SPECIAL DRAWING - CULVERT DIAGRAM

STA. 139+12-CONST.
TRIPLE 7' X 8' X 110'
R.C. BOX CULVT.
(15° RT. FWD. SKEW)
D.A.=666 Ac. Q50=1440cfs
CLEAN INLET AND OUTLET= 1929 C.Y.
(REFER TO STAGE CONST.)

STA. 145+48-ON LT.
12' X 40' RCP CULVT.
REMOVE

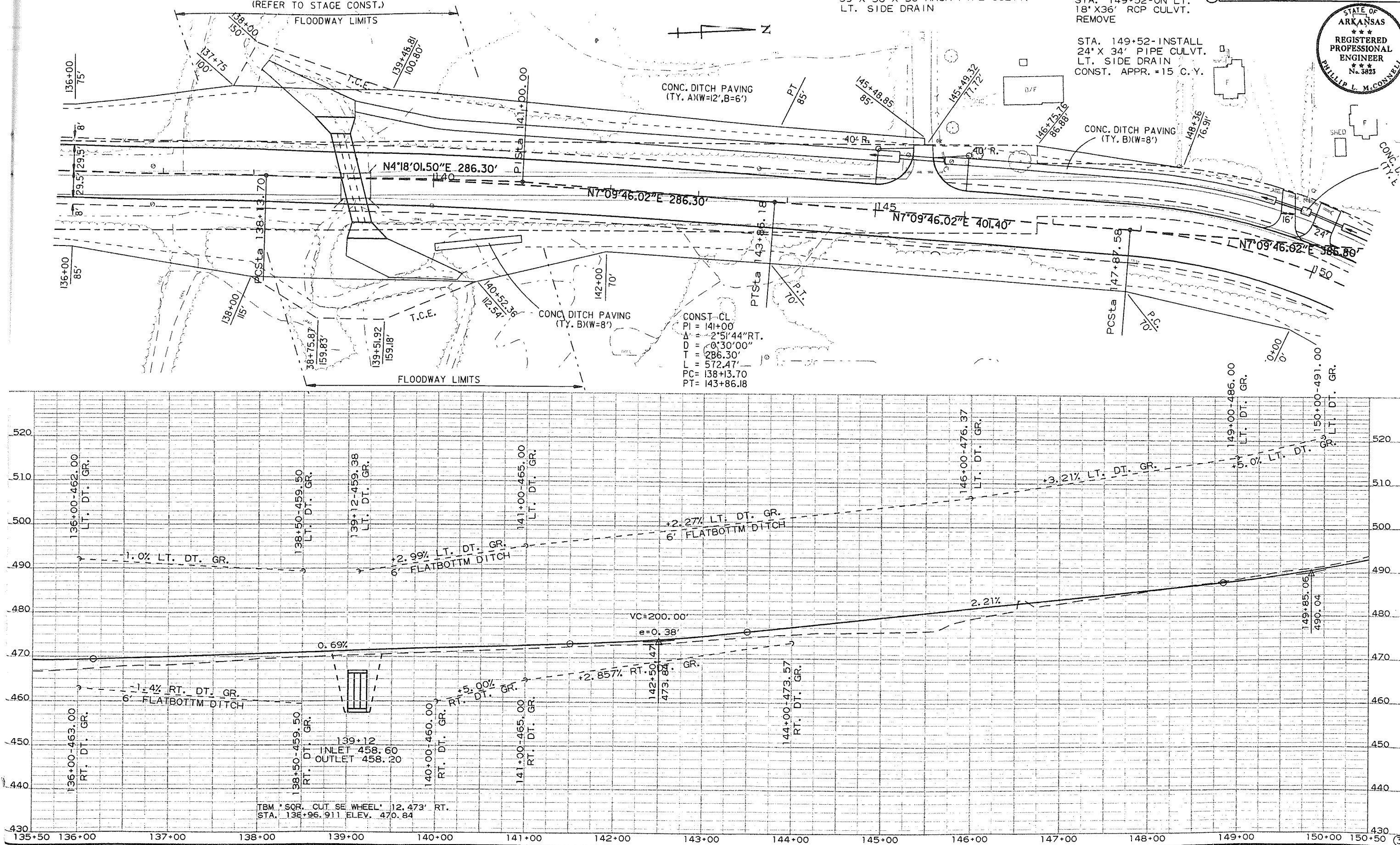
STA. 145+48-INSTALL
59' X 36' X 50' ARCH PIPE CULVT.
LT. SIDE DRAIN

STA. 149+52-ON LT.
18'X36' RCP CULVT.
REMOVE

STA. 149+52-INSTALL
24' X 34' PIPE CULVT.
LT. SIDE DRAIN
CONST. APPR. = 15 C.Y.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AG PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		040184	36	

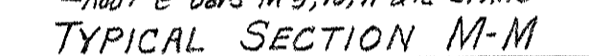
PLAN & PROFILE STA. 150 TO 165



BAR LIST FOR BARREL SECTION 60'-0" IN LENGTH

DIMENSIONS *QUANTITIES*

NOTE:- For details of wings and bar lists see Drawing Nos.



15° Skew Right Forward is reversed

CLASS S CONCRETE

GENERAL NOTES:-

CONCRETE:- All concrete to be Class S, and shall be poured in the dry.
All exposed corners to have $\frac{3}{4}$ chamfers.

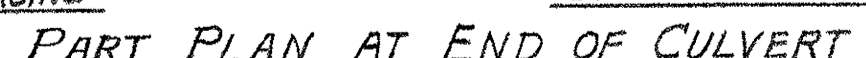
REINFORCING STEEL:- Reinforcing to be deformed bars of intermediate or hard grade.

BAR LAP:- In computing the quantities of steel from the tables add one lap for each additional 38" length of barrel over 38". Lap longitudinal bars 30 diameters.

CONSTRUCTION JOINTS:- Construction joints between abutments, side walls, division walls and slabs shall be only where shown on plans.

SPECIFICATIONS:- Arkansas State Highway Commission Standard Specifications for Highway Construction and applicable Special Provisions.

DESIGN LIVE LOAD
H20-S16 LOADING A.A.S.H.O. 1961
 AND
SPECIAL MILITARY LOADING.
 Two 24000 Lb. Axles @ 4'-0" ctrs.
UNIT STRESSES:-
 Class 5 Concrete ($n=10$) 1200 $\frac{\text{psi}}{\text{ksi}}$
 Reinforcing Steel 20000 $\frac{\text{psi}}{\text{ksi}}$



NOTE:- The "a", "b", "c" bars are placed parallel with the headwall.
The "d" bars in top of top slab, and "e" bars in bottom of bottom slab are not shown.

NOTE:- Dimensions are to centers of base

S SPANS & GRADE	SIZE	SPACING	NO. REIN.	LENGTH	X
4'	#4	12"	30	2'-5"	1-2 $\frac{1}{2}$ "
5'	#4	12"	36	2'-6"	1-3"
6'	#4	12"	42	2'-7"	1-3 $\frac{1}{2}$ "
7'	#4	12"	48	2'-8"	1-4"
8'	#4	12"	54	2'-9"	1-4 $\frac{1}{2}$ "
9'	#4	12"	62	2'-10"	1-5"
10'	#4	12"	69	2'-11"	1-5 $\frac{1}{2}$ "
11'	#4	12"	74	3'-0"	1-6"
12'	#4	12"	80	3'-0"	1-6 $\frac{1}{2}$ "

*Bars ^{"n"}
Dowel bars in headwalls.*

Designed By:- W.C.H.	1-22-63.	Checked By:- R.H.S.	5-17-63
Drawn By:- W.C.H.	8-28-63.	Checked By:- F.H.S.	10-7-63
Quantitying By:- W.C.H.	8-30-63.	Checked By:- R.G.	12-30-63