

SEE SHEET 1A

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING AND DEVELOPMENT
MADISON COUNTY

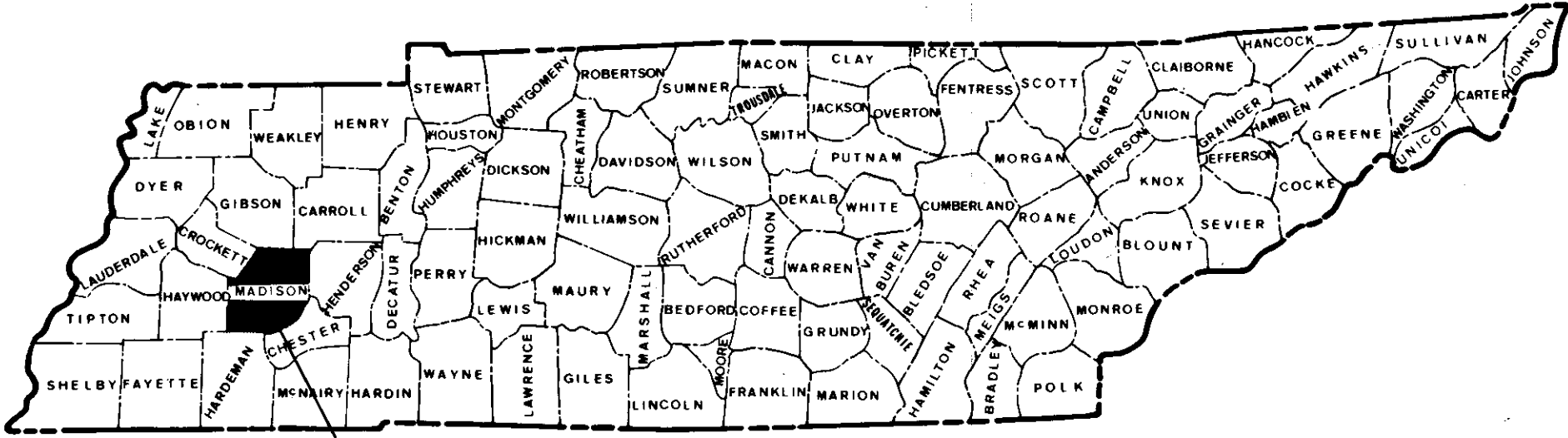
STATE ROUTE 138
BRIDGE AND APPROACHES OVER BIG BLACK CK. @ L.M. 4.79

CONSTRUCTION

BRIDGE REPLACEMENT

STATE HIGHWAY NO. 138 F.A.H.S. NO. N.S.

TENN.	YEAR	SHEET NO.
	1990	1
FED. AID PROJ. NO.	BRS-138(2)	
STATE PROJ. NO.	57014-3210-94	



BRS-138(2)
57014-3210-94

EQUATIONS		
DESCRIPTION		NET EFFECT ON NUMERATION
P.L. @ STA. 13+95.00 BK.	=SURV. @ STA. 14+19.34 AH.	0.00
TOTAL		0.00

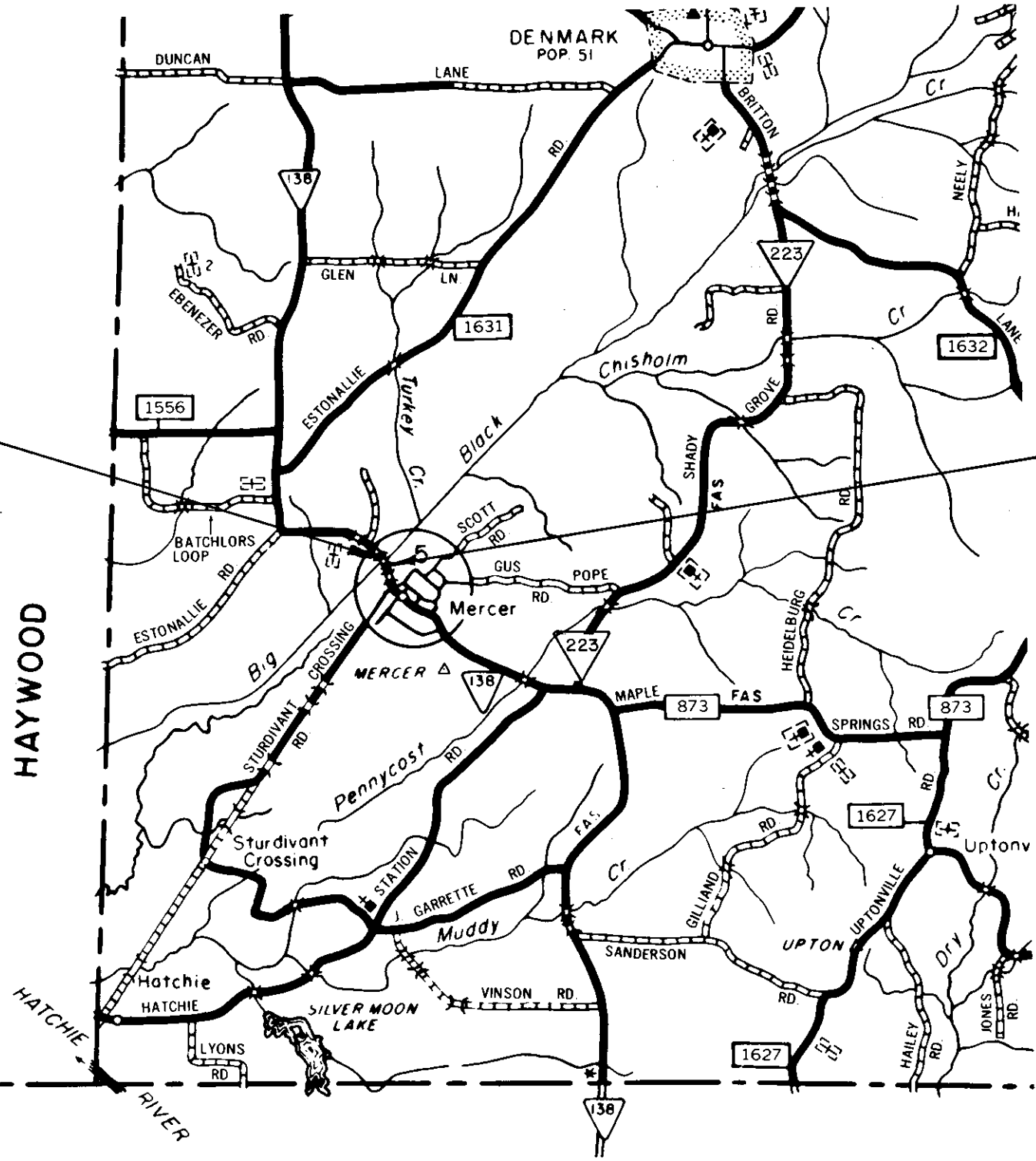
NO EXCLUSIONS

NOTE: S.R. 138 TO REMAIN OPEN DURING CONSTRUCTION.

404 PERMIT IS
REQUIRED FOR
THIS PROJECT.

57014-3210-94
END. PROJ. BRS-138(2) CONST.
STA. 13+95.00 P.L. @

57014-3210-94
BEG. PROJ. BRS-138(2) CONST.
STA. 5+32.02 P.L. @



SPECIAL NOTES

PROPOSALS MAY BE REJECTED BY THE COMMISSIONER IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE.

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED MARCH 1, 1981 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

TDOT DES. ENG. SV. BOGUSKIE

DESIGNED BY PICKERING FIRM, INC.

DESIGNER GARY SCRUGGS

CHECKED BY BOB BAILEY

P. E. NO. 57014-1207-94

SITE PLAN
SCALE: 1" = 1 MILE

ROADWAY LENGTH 0.144 MILES
BRIDGE LENGTH 0.019 MILES
BOX BRIDGE LENGTH 0.000 MILES
PROJECT LENGTH. 0.163 MILES

TRAFFIC DATA	
ADT (1990)	660
ADT (2010)	1122
DHV (2010)	146
D	—
T	—
V	40 M.P.H.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR DATE

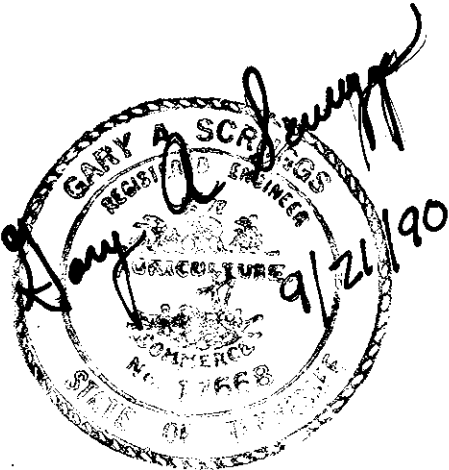
APPROVED:

DESIGN DIVISION

DATE

APPROVED:

COMMISSIONER



TENNESSEE D. O. T.
DESIGN DIVISION
FILE NO. 110

INDEX OF SHEETS

SHEET NO. SHEET NAME

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- 2..... ESTIMATED BRIDGE QUANTITIES
- 2A..... ESTIMATED ROADWAY QUANTITIES
- 2B..... TYPICAL SECTIONS AND PAVEMENT SCHEDULE
- 2C..... GENERAL NOTES, SPECIAL NOTES
- 3..... PRESENT LAYOUT
- 3A..... PROPOSED LAYOUT
- 4..... EROSION CONTROL PLAN
- 5..... TRAFFIC CONTROL PLAN
- 6..... UTILITY PLAN
- 7-10... ROADWAY CROSS-SECTIONS

STANDARD ROADWAY DRAWINGS

DWG. NO.	REV.	DESCRIPTION
<u>ROADWAY DESIGN STANDARDS</u>		
RD-A-1	2-22-88	STANDARD ABBREVIATIONS
RD-L-1	3-15-76	STANDARD LEGEND
RD-L-2	8-21-89	STANDARD LEGEND
RD-S-11	6-11-89	ROADSIDE SLOPE DEVELOPMENT
RD-S-11A	11-02-89	ROADSIDE DITCH DETAILS FOR DESIGN & CONSTRUCTION
RD-SE-3	4-01-88	RURAL SUPERELEVATION DETAILS
RD-TS-1	11-09-88	DESIGN STANDARDS FOR LOCAL ROADS AND STREETS
<u>DRAINAGE - CATCH BASINS AND MANHOLES</u>		
D-BE-1	11-25-87	BRIDGE END DRAIN (2'x3')
D-CBB-12	3-20-86	TYPE "B" STRUCTURAL STEEL FRAME, GRATE AND INLET FOR NOS. 10, 12, 14, AND 15 CATCH BASINS
<u>SAFETY APPURTENANCES AND FENCE</u>		
S-RP-2	4-18-90	CONCRETE RIGHT-OF-WAY POST
S-GR-11	3-09-90	V-BEAM BARRIER RAIL AND RUB RAIL
S-GR-12	11-04-87	BARRIER RAIL MOUNTING, POST BLOCK-OUTS, POST BASE DETAILS
S-GR-13	11-04-87	V-BEAM BARRIER POST DETAILS AND SPECIFICATIONS
S-GR-14	11-04-87	V-BEAM BARRIER FASTENING HARDWARE AND BRIDGE APPROACH DELINEATORS
S-GR-15	12-29-89	V-BEAM BARRIER TERMINAL ELEMENT DETAILS
S-GR-17A	7-01-84	TABLES OF OFFSETS FOR STAKING-OUT GUARDRAIL FLARE
S-GR-18	10-28-88	DETAILS FOR BREAK-AWAY POST ANCHOR PLATE AND SWAG FITTING
S-GR-18A	5-28-86	GUARDRAIL TERMINAL ANCHOR (TYPE 11)
S-GR-20	3-09-90	GUARDRAIL ANCHOR (TYPE IN-LINE)
		PROTECTIVE GUARDRAIL FOR BRIDGE ENDS AND MEDIAN DIVIDER GUARDRAIL
<u>TRAFFIC CONTROL APPURTENANCES</u>		
T-M-1	2-22-88	DETAILS OF PAVEMENT MARKING FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS
<u>EROSION CONTROL AND LANDSCAPING</u>		
EL-P-1	7-19-88	TYPICAL TEMPORARY POLLUTION CONTROL STRUCTURES
EL-P-2	1-11-82	TYPICAL TEMPORARY POLLUTION CONTROL STRUCTURES
EL-P-3	7-19-88	TYPICAL TEMPORARY POLLUTION CONTROL STRUCTURES

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1990	BRS-138(2)	1A

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

INDEX AND
STANDARD
DRAWINGS

SCANNED

TECHNICAL D.O.T.

PROJECT NO.

FILE NO.

CONSTRUCTION NO. 57014-3210-94

TYPE	YEAR	PROJECT NO.	SHEET NO.
	1990	BRS-138(2)	2

REV. I-23-91: DELETED STANDARD DRAWINGS M-175-150 AND RD-SA-1.

MADISON COUNTY

X131

STATE ROUTE 138
OVER
BIG BLACK CREEK

SIMPLE PRECAST
PRESTRESSED
CONCRETE BOX WITH
CONCRETE DECK SLAB

3 SPAN BRIDGE
TOTAL LENGTH=102'-7½"
SPAN 1 = 34'-4½"
SPAN 2 = 38'-10½"
SPAN 3 = 34'-4½"

28'-0" ROADWAY WITH
M-28-1 BRIDGERAIL.

75'-00'-00" SKEW

LAYOUT DRAWING NO.
M-246-102

ESTIMATED BRIDGE QUANTITIES		QUANTITY	UNIT
ITEM NO.	DESCRIPTION		
202-04.01	REMOVAL OF STRUCTURES (BR.No. 57-138-4.79)	1	L.S.
204-02.01	DRY EXCAVATION (BRIDGES)	72	C.Y.
204-03.01	WET EXCAVATION (BRIDGES)	218	C.Y.
204-10.01	FOUNDATION PREPARATION (PIER No.1, STA. 9+67.36)	1	L.S.
204-10.02	FOUNDATION PREPARATION (PIER No.2, STA. 10+01.23)	1	L.S.
604-01.12	CLASS 'A' CONCRETE (BRIDGE DECK)	86	C.Y.
604-02.03	EPOXY COATED REINFORCING STEEL	23,110	LB.
604-03.01	CLASS 'A' CONCRETE (BRIDGES)	134	C.Y.
604-03.02	STEEL BAR REINFORCEMENT (BRIDGES)	27,326	LB.
604-04.01	APPLIED TEXTURE FINISH (NEW STRUCTURES)	368	S.Y.
606-09.01	TEST PILES (PRECAST CONCRETE, SIZE I)	200	L.F.
606-09.02	LOADING TEST (PRECAST CONCRETE, SIZE I)	1	EA.
606-09.03	PRECAST CONCRETE PILES (SIZE I)	1,200	L.F.
615-02.02	PRESTRESSED CONCRETE BOX BEAM (17" X 36")	295	L.F.
620-03	CONCRETE PARAPET	233	L.F.
709-05.06	MACHINED RIP-RAP (CLASS A-1)	400	TON
710-09.01	6" PERF. PIPE WITH VERTICAL DRAIN SYSTEM	74	L.F.
710-09.02	6" PIPE UNDERDRAIN	34	L.F.

LIST OF DRAWINGS

LAYOUT THRU BILL OF STEEL	DWG. NO.	LAST REV. DATE
-----	M-246-102	-----
-----	M-246-110	-----

LIST OF STANDARD DRAWINGS

REINFORCING BAR SUPPORT DETAILS FOR CONCRETE SLAB	K-80-14	8-27-76
MISCELLANEOUS ABUTMENT AND DRAINAGE DETAILS	K-85-150	6-25-87
* BRIDGE RAILING CONCRETE PARAPET	M-28-1	11-01-88
STD. PRECAST, PRESTRESSED BRIDGE DECK PANELS DESIGN CRITERIA	M-164-24	12-18-89
STD. PRECAST, PRESTRESSED BRIDGE DECK PANELS GENERAL DETAILS	M-164-25	12-18-89
STD. PRECAST, PRESTRESSED BRIDGE DECK PANELS CONSTRUCTION DETAILS	M-164-25A	12-18-89
* STD. PILE DETAILS	M-174-150	-----
* STANDARD SEISMIC DETAILS	M-246-70	-----
-----	D-BE-1	-----

* THESE STANDARDS ARE TO BE PRINTED WITH PLANS

LIST OF SPECIAL PROVISIONS

APPROVAL OF SHOP DRAWINGS	105A	7-21-87
CONCRETE STRUCTURES	604	5-14-90
STRUCTURAL CONCRETE	604C	8-01-89
PRECAST PRESTRESSED BRIDGE DECK PANELS	604P	5-08-89
RIDEABILITY OF BRIDGE DECKS AND ROADWAY APPROACHES	604R	5-14-90
MACHINED RIP-RAP	709	5-04-87
EPOXY COATED REINFORCING STEEL	907A	3-25-85
PRECAST PRESTRESSED CONCRETE BRIDGE MEMBERS	615	12-11-89

LIST OF SPECIAL PROVISIONS

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

ESTIMATED
BRIDGE
QUANTITIES

CL 7

RECEIVED

LIBRARY

REV. 11-26-90: REVISED UNIT FOR
ITEM NO. 604-03.06.

①

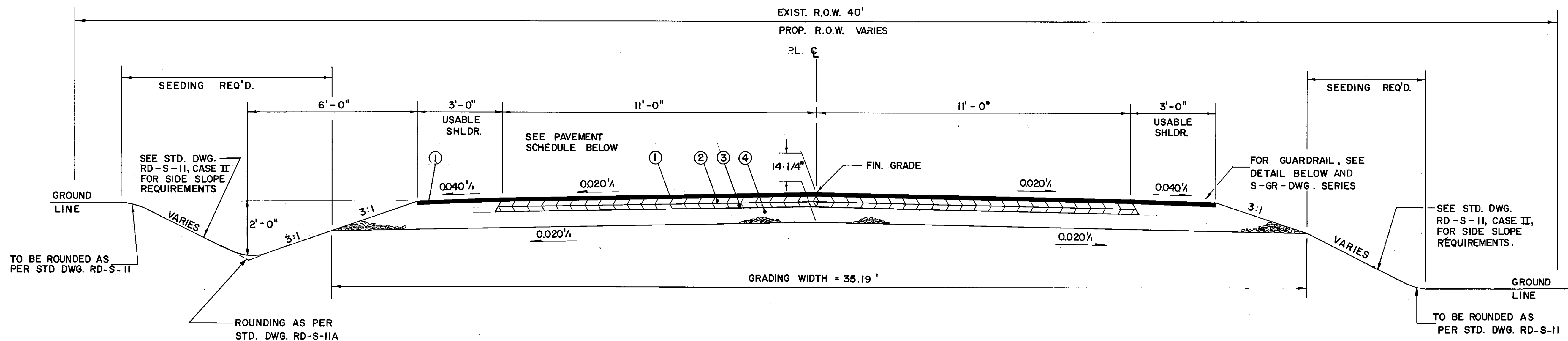
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

ESTIMATED
ROADWAY
QUANTITIES

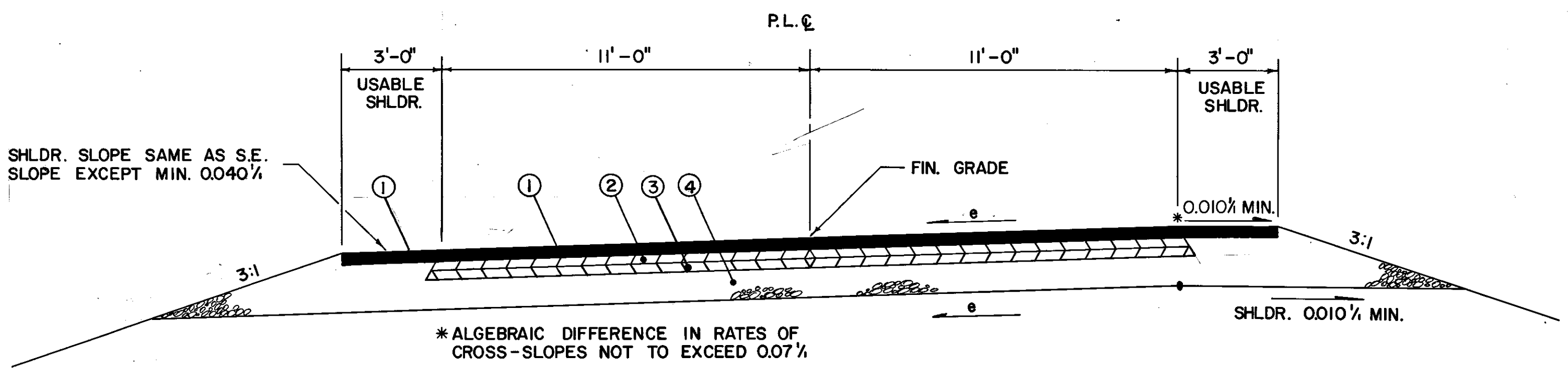
SCANNED

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	1990	BRS-138(2)	2
CONST.	1990	BRS-138(2)	2B

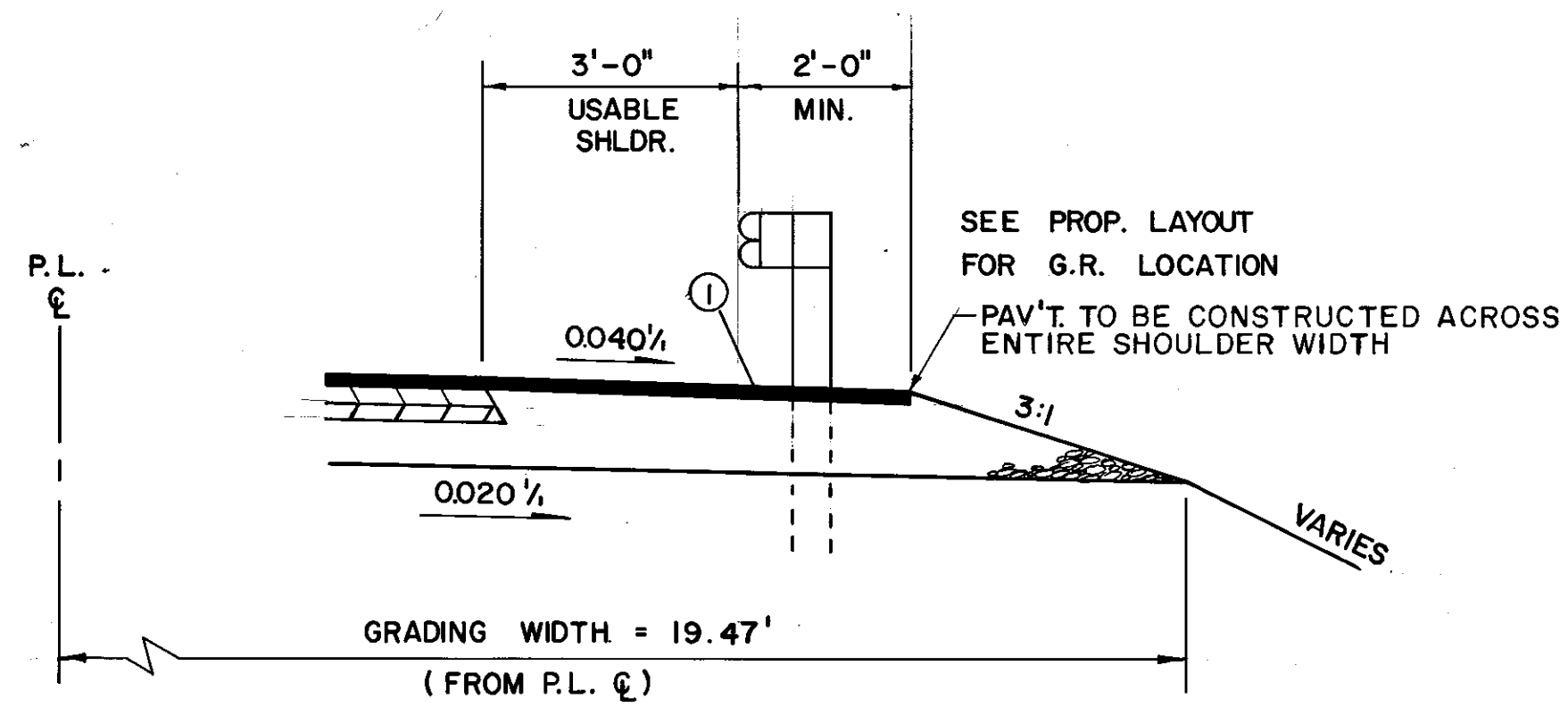
REV. 9/21/90: PAVEMENT THICKNESS



MAINLINE TANGENT SECTION
STA. 9+03.94 TO STA. 10+45.00



MAINLINE SUPERELEVATED SECTION
STA. 5+32.02 TO STA. 9+03.94
STA. 10+45.00 TO STA. 13+95.00



DETAIL OF SHOULDER WITH GUARDRAIL

PROPOSED PAVEMENT SCHEDULE			
① ASPHALTIC CONCRETE SURFACE (HOT MIX) ① 1 1/2" THICK (APPROX. 32.5 LBS./SQ.YD.) 411-01.01 MINERAL AGGREGATE FOR ASPHALTIC CONCRETE SURFACE (ACS) GRADING "D" 411-01.02 ASPHALTIC CEMENT FOR ASPHALTIC CONCRETE SURFACE (ACS) GRADING "D" W/403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC) @ 0.02 GAL./SQ.YD.		② BITUMINOUS PLANT MIX BINDER (HOT MIX) ② 2" THICK (APPROX. 226 LBS./SQ.YD.) 307-03.15 BITUMINOUS PLANT MIX BASE (HOT MIX) (BPMB-HM) GRADING "B" MODIFIED. W/403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC) @ 0.02 GAL./SQ.YD.	
④ MINERAL AGGREGATE BASE ④ 8"± THICK 303-01 MINERAL AGGREGATE, TYPE "A" BASE GRADING "D"		③ BITUMINOUS PLANT MIX BASE (HOT MIX) ③ 3" THICK (APPROX. 345 LBS./SQ.YD.) 307-01.01 MINERAL AGGREGATE FOR BITUMINOUS PLANT MIX BASE (HOT MIX) (BPMB-HM) GRADING "A" 307-01.02 ASPHALTIC CEMENT FOR BITUMINOUS PLANT MIX BASE (HOT MIX) (BPMB-HM) GRADING "A" W/402-01 BITUMINOUS MATERIAL FOR PRIME COAT (PC) @ 0.30-0.35 GAL./SQ.YD. 402-02 AGGREGATE FOR COVER MATERIAL (PC) @ 8-12 LBS./SQ.YD.	

GRADING

ANY AREA THAT IS DISTURBED OUTSIDE LIMITS OF CONSTRUCTION DURING THE LIFE OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.

GUARDRAIL

THE PROPOSED GUARDRAIL, INCLUDING ANY ANCHOR SYSTEM, SHALL BE INSTALLED QUICKLY TO MINIMIZE TRAFFIC EXPOSURE TO ANY HAZARD. NO PAYMENT WILL BE MADE FOR A SECTION OF PROPOSED GUARDRAIL, INCLUDING ANCHORS, UNTIL IT IS COMPLETE IN PLACE.

IF ANY APPROACH END OF A SECTION OF GUARDRAIL OR BRIDGERAIL MUST TEMPORARILY BE LEFT INCOMPLETE AND EXPOSED TO TRAFFIC,THE CONTRACTOR SHALL USE TWO(2) TEMPORARY BARRICADES OR DRUMS WITH TYPE A LIGHTS AND ROUNDED END ELEMENTS AS MINIMUM MEASURES TO PROTECT TRAFFIC FROM THE HAZARD OF AN EXPOSED END. ALL COST OF FURNISHING AND INSTALLING A TEMPORARY ROUNDED END ELEMENT SHALL BE INCLUDED IN THE COST OF THE PROPOSED GUARDRAIL.

DRAINAGE

THE CONTRACTOR SHALL SHAPE DITCHES TO THE SPECIFIED DESIGN. THIS WORK WILL NOT BE MEASURED AND PAID FOR DIRECTLY BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS.
THE CUTTING OF INLET AND OUTLET DITCHES WHERE SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER WILL BE MEASURED AND PAID FOR AS ITEM No.203-01 ROAD AND DRAINAGE EXCAVATION (UNCL).

UTILITIES

THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE PLANS ARE APPROXIMATE ONLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD BY CONTACTING THE UTILITY COMPANIES INVOLVED.

UNLESS OTHERWISE NOTED, ALL UTILITY ADJUSTMENTS WILL BE PERFORMED BY THE UTILITY OR ITS REPRESENTATIVE. THE CONTRACTOR AND UTILITY OWNERS WILL BE REQUIRED TO CO-OPERATE WITH EACH OTHER IN ORDER TO EXPEDITE THE WORK REQUIRED BY THIS CONTRACT.

THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FURNISHING SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.

THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR CONTACTING ALL AFFECTED UTILITIES PRIOR TO SUBMITTING HIS BID, IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF THE WORK FOR THE PROJECT. SOME UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS, WHILE SOME WORK MAY BE REQUIRED 'AROUND' UTILITY FACILITIES THAT WILL REMAIN IN PLACE. IT IS UNDERSTOOD AND AGREED THAT THE CONTRACTOR WILL RECEIVE NO ADDITIONAL COMPENSATION FOR ANY DELAYS OR INCONVENIENCE CAUSED BY THE UTILITY ADJUSTMENTS.

THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT THREE(3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY.

SOME UTILITIES CAN BE LOCATED BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC. AT 1-800-351-1111.

PAVEMENT MARKINGS

TEMPORARY PAVEMENT LINE MARKINGS ON INTERMEDIATE LAYERS OF PAVEMENT SHALL BE REFLECTIVE TAPE OR REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK. SHORT, UNMARKED SECTIONS SHALL NOT BE ALLOWED. THESE MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM No. 716-05.01 PAINTED PAVEMENT MARKING (LINE) PER LIN. MI.

PERMANENT PAVEMENT LINE MARKINGS SHALL BE REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK. SHORT, UNMARKED SECTIONS SHALL NOT BE ALLOWED. THESE MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM No. 716-05.01 PAINTED PAVEMENT MARKING (LINE) PER LIN. MI.

FENCING

THE CONTRACTOR SHALL GIVE THE AFFECTED PROPERTY OWNERS TWO WEEKS NOTICE PRIOR TO CUTTING FENCES.

SPECIAL NOTES

THE TOP THREE (3) INCHES OF SOIL PLACED ON ALL AREAS THAT WILL BE SEEDED SHALL BE A TYPE THAT WILL SUPPORT VEGETATION GROWTH.

SEEDING AND SODDING

ALL EXISTING ROADS WITHIN THE RIGHT-OF WAY AND NOT IN THE GRADED AREA THAT ARE TO BE ABANDONED SHALL BE SCARIFIED, OBLITERATED, AND SEEDED. SCARIFYING AND OBLITERATING THE PAVEMENT WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS. SEEDING, IN ACCORDANCE WITH SECTION 801 OF THE STANDARD SPECIFICATIONS, WILL BE MEASURED AND PAID FOR UNDER ITEM 801-01.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1990	BRS-138(2)	2C

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

GENERAL NOTES
AND
SPECIAL NOTES

DEZ 24 1964

- TUNING 44-142 60742**

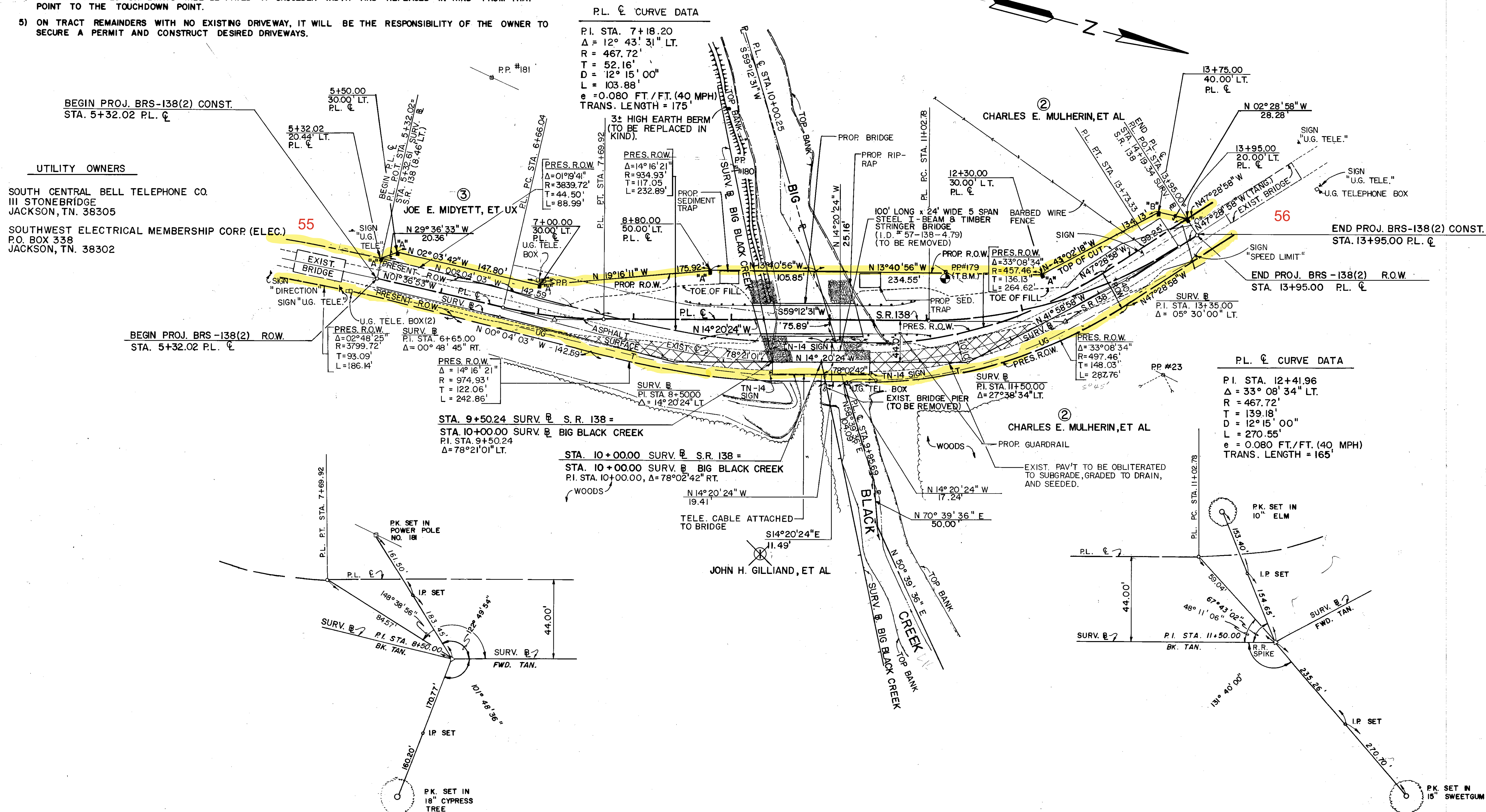
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	1990	BRS - 138(2)	3
CONST.	1990	BRS - 138(2)	3

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PRESENT LAYOUT

S.R. 138 OVER
BIG BLACK CREEK

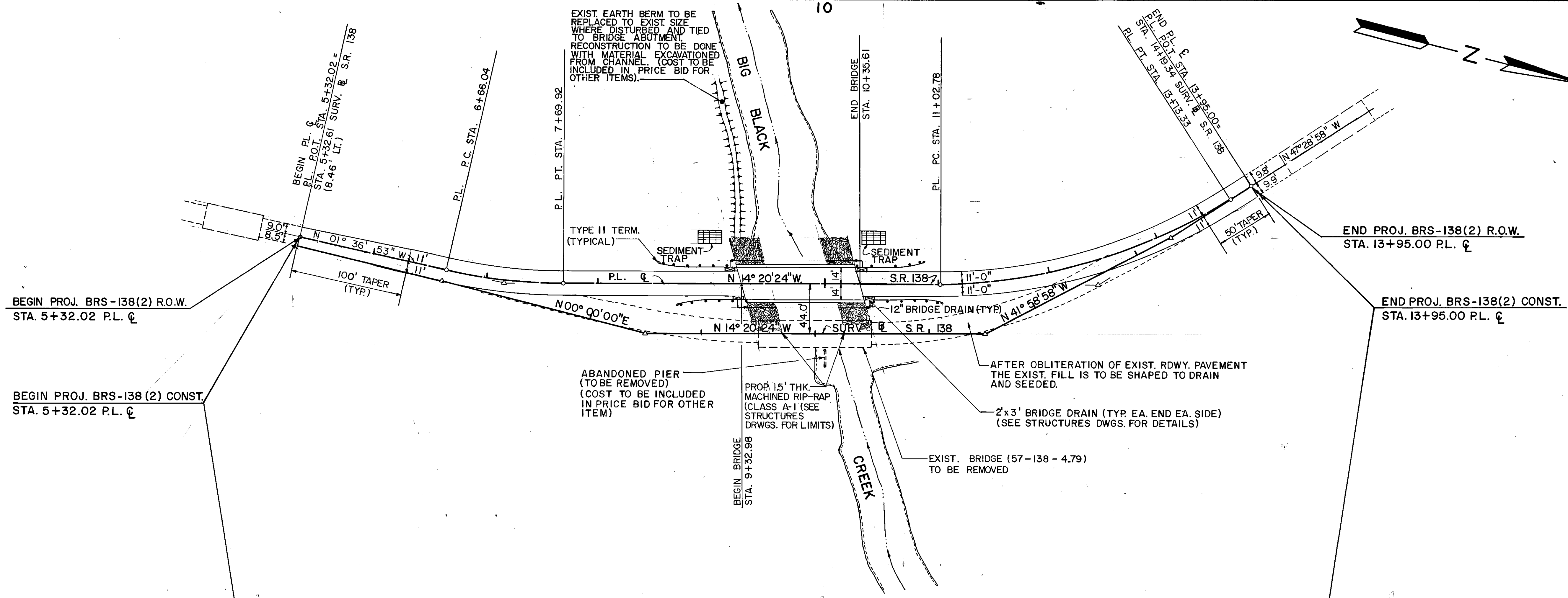
SCALE: 1" = 50'



TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	1990	BRS-138(2)	3A
CONST.	1990	BRS-138(2)	3A

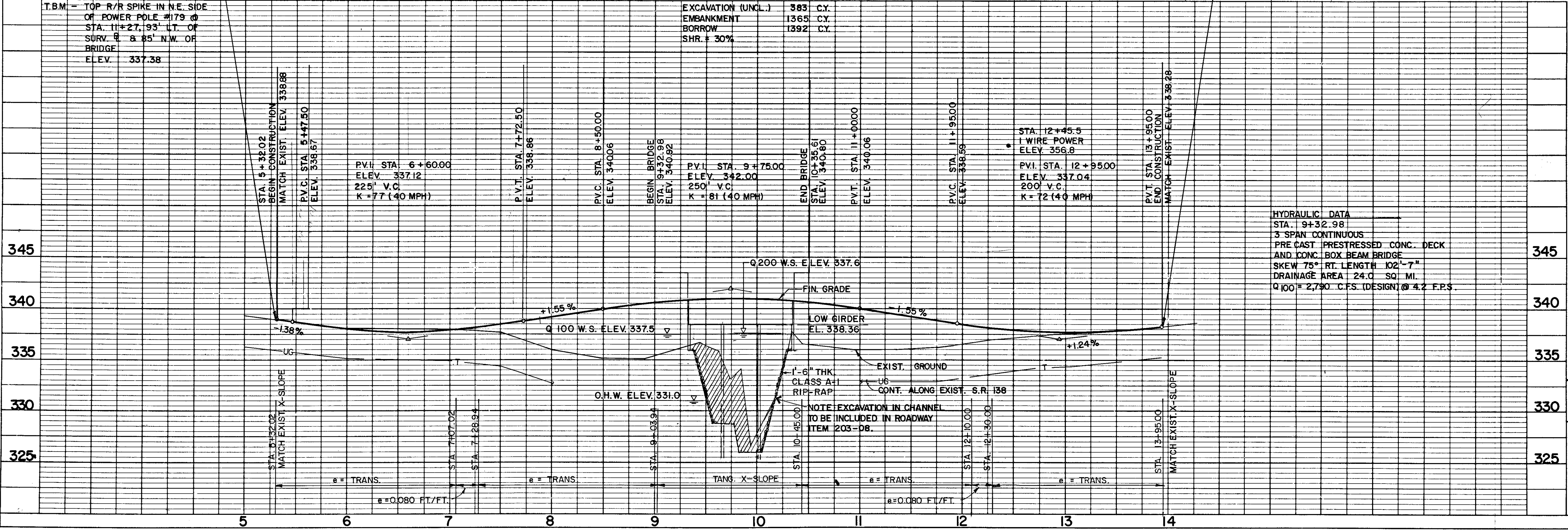
PLAN	DATE
SURVEYED	
NOTED	
NOTE BOOK	
NO.	

PROFILE	DATE
SURVEYED	
NOTED	
NOTE BOOK	
NO.	



T.B.M. - TOP R/R SPIKE IN N.E. SIDE OF POWER POLE #179 @ STA. 11+27.93' LT. OF SURV. 8 & 85' N.W. OF BRIDGE ELEV. 337.38

EXCAVATION (UNCL.) 583 C.Y.
EMBANKMENT 1365 C.Y.
BORROW 1392 C.Y.
SHR. = 30%



HYDRAULIC DATA
STA. 9+32.98
3 SPAN CONTINUOUS
PRE CAST PRESTRESSED CONC. DECK
AND CONC. BOX BEAM BRIDGE
SKEW 75° RT. LENGTH 102'-7"
DRAINAGE AREA 24.0 SQ. MI.
Q 100 = 2,790 C.F.S. (DESIGN) @ 4.2 F.P.S.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

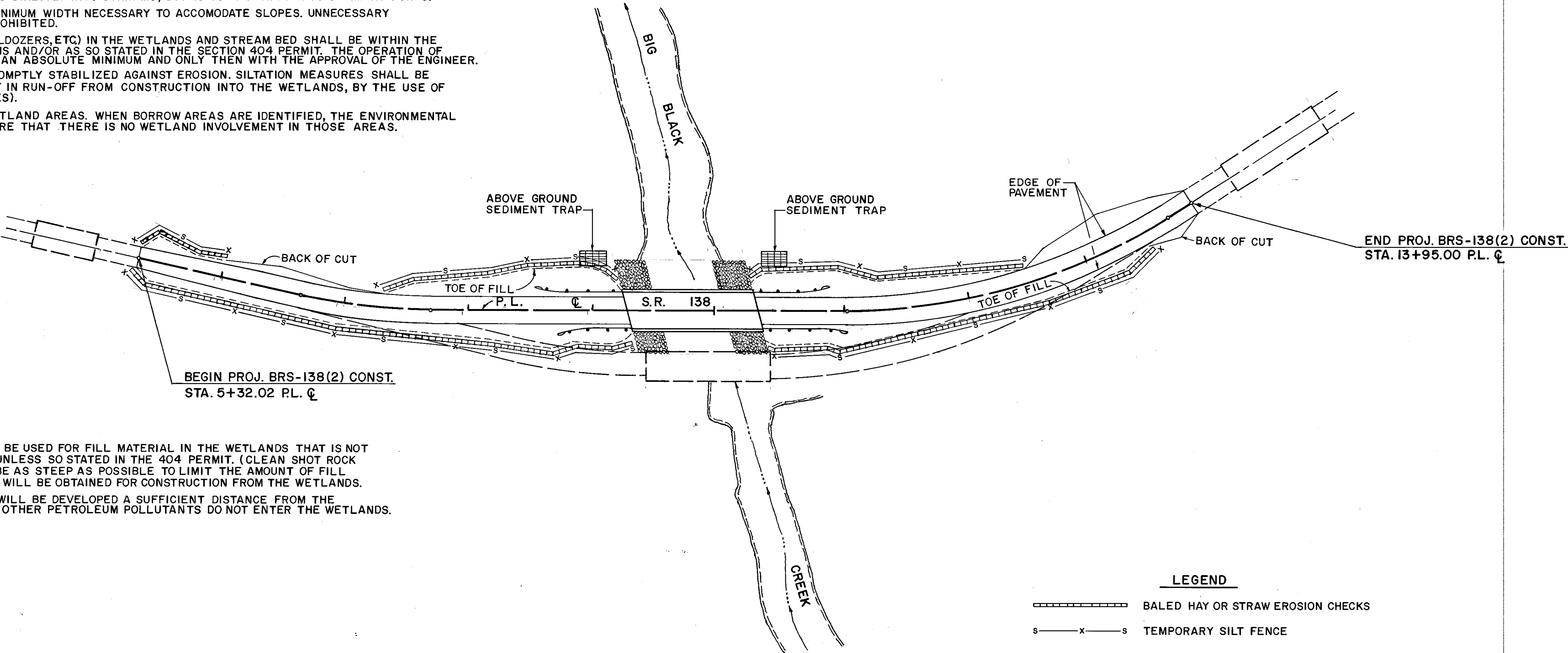
PROPOSED LAYOUT
S.R. 138 OVER
BIG BLACK CREEK

SCALE: 1" = 50' H
5' V

WETLANDS MITIGATION NOTES

1. THE PURPOSE OF THIS MITIGATION PLAN IS TO PREVENT SILTATION AND OTHER POLLUTANTS, DUE TO CONSTRUCTION, FROM ENTERING PERMANENTLY AND SEASONALLY FLOODED WETLANDS, AS WELL AS ADJACENT STREAMS.
2. TO ACHIEVE THIS END, THE FOLLOWING CONSTRAINTS AND REQUIREMENTS HAVE BEEN IMPOSED.
3. TO REDUCE SEDIMENT IN RUNOFF, EROSION CONTROL STRUCTURES SHALL BE INSTALLED PROMPTLY DURING ALL CONSTRUCTION PHASES.
4. SEDIMENT TRAPS SHALL BE LOCATED WITHIN THE RIGHT-OF-WAY AND/OR CONSTRUCTION LIMITS BUT OUTSIDE OF THE SLOPE STAKES.
5. TO INSURE EROSION CONTROL STRUCTURES WORK PROPERLY, IT IS IMPERATIVE THE SEDIMENT BE REMOVED; THEREFORE, "INSPECTION" AND "MAINTENANCE" OF STRUCTURES IS TO BE PERFORMED ON A REGULAR BASIS.
6. DURING SEDIMENT REMOVAL, THE CONTRACTOR SHALL TAKE CARE TO INSURE THAT STRUCTURAL COMPONENTS OF EROSION CONTROL STRUCTURES ARE NOT DAMAGED AND THUS MADE INEFFECTIVE. IF DAMAGE DOES OCCUR, THE CONTRACTOR SHALL REPAIR THE STRUCTURES AT THE CONTRACTORS OWN EXPENSE.
7. SEDIMENT REMOVED FROM SEDIMENT CONTROL STRUCTURES IS TO BE PLACED AT A SITE APPROVED BY THE ENGINEER. IT SHALL BE TREATED IN A MANNER SO THAT THE AREA AROUND THE DISPOSAL SITE WILL NOT BE CONTAMINATED OR DAMAGED BY THE SEDIMENT IN RUN-OFF. COST FOR THIS TREATMENT IS TO BE INCLUDED IN PRICE BID FOR ITEM NO. 209-05 SEDIMENT REMOVAL PER CUBIC YARD.
8. UPON COMPLETE REMOVAL OF SEDIMENT TRAPS, SPECIAL DITCHES, ETC., THE AREA WHERE THEY WERE CONSTRUCTED IS TO BE SEEDED AND MULCHED.
9. STOCKPILED TOPSOIL OR FILL MATERIAL IS TO BE TREATED SO THE SEDIMENT RUN-OFF WILL NOT CONTAMINATE SURROUNDING AREAS OR ENTER NEARBY STREAMS.
10. WATER FROM COFFERDAMS IS NOT TO BE PUMPED DIRECTLY INTO STREAMS, BUT IS TO BE PUMPED INTO SEDIMENT PONDS.
11. CLEARING AND GRUBBING IS TO BE HELD TO A MINIMUM WIDTH NECESSARY TO ACCOMODATE SLOPES. UNNECESSARY CANOPY REMOVAL (TREES, SHRUBS, ETC.) IS PROHIBITED.
12. THE OPERATION OF MOTORIZED EQUIPMENT (BULLDOZERS, ETC) IN THE WETLANDS AND STREAM BED SHALL BE WITHIN THE RIGHT-OF-WAY AS SHOWN ON THE PROJECT PLANS AND/OR AS SO STATED IN THE SECTION 404 PERMIT. THE OPERATION OF EQUIPMENT IN THE WETLAND IS TO BE KEPT TO AN ABSOLUTE MINIMUM AND ONLY THEN WITH THE APPROVAL OF THE ENGINEER.
13. SHOULDERS AND EXCAVATED AREAS WILL BE PROMPTLY STABILIZED AGAINST EROSION. SILTATION MEASURES SHALL BE IMPLEMENTED PROMPTLY TO REDUCE SEDIMENT IN RUN-OFF FROM CONSTRUCTION INTO THE WETLANDS, BY THE USE OF SILT FENCES (FABRIC AND STRAW OR HAY BALES).
14. BORROW AREAS SHALL BE LOCATED IN NON-WETLAND AREAS. WHEN BORROW AREAS ARE IDENTIFIED, THE ENVIRONMENTAL PLANNING OFFICE SHALL BE NOTIFIED TO INSURE THAT THERE IS NO WETLAND INVOLVEMENT IN THOSE AREAS.

15. NO EARTH OR OTHER ERODIBLE MATERIAL WILL BE USED FOR FILL MATERIAL IN THE WETLANDS THAT IS NOT ABSOLUTELY NEEDED TO WIDEN APPROACHES, UNLESS SO STATED IN THE 404 PERMIT. (CLEAN SHOT ROCK WITH NO FINES MAY BE USED.) SLOPES SHALL BE AS STEEP AS POSSIBLE TO LIMIT THE AMOUNT OF FILL PLACED IN THE WETLANDS. NO FILL MATERIAL WILL BE OBTAINED FOR CONSTRUCTION FROM THE WETLANDS.
16. EQUIPMENT STAGING AND MAINTENANCE AREAS WILL BE DEVELOPED A SUFFICIENT DISTANCE FROM THE WETLAND TO INSURE THAT OIL, GASOLINE AND OTHER PETROLEUM POLLUTANTS DO NOT ENTER THE WETLANDS.



TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1990	BRS-138(2)	4

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1990	BRS-138(2)	5

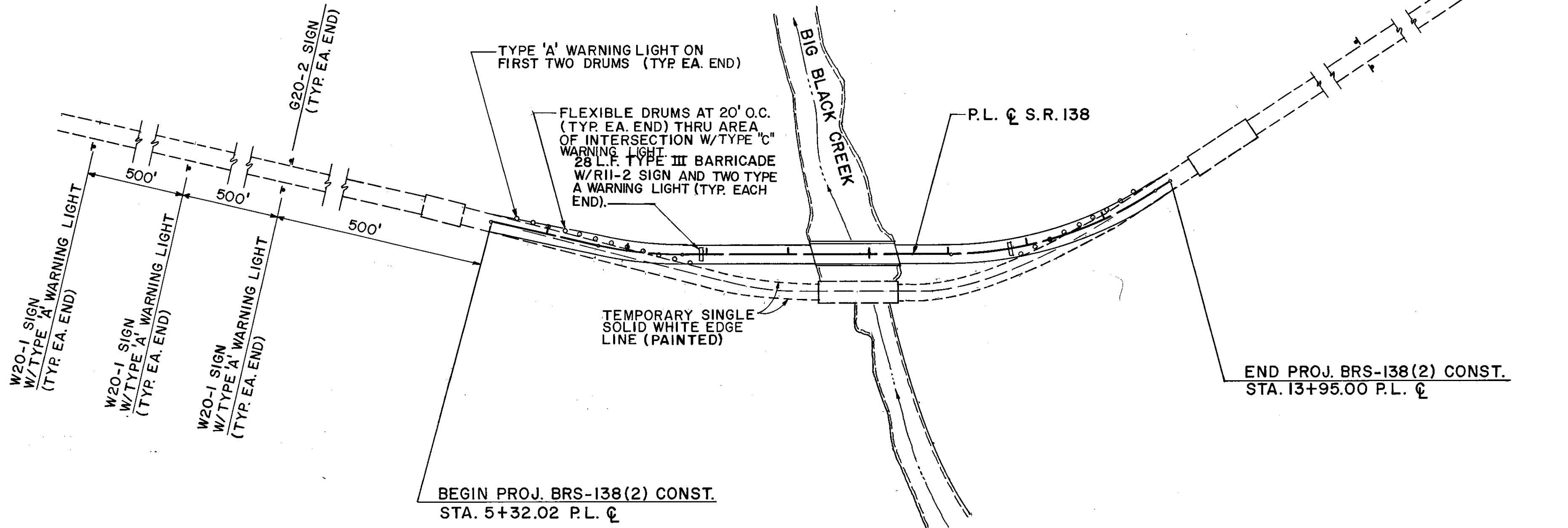
NOTES

THIS CONSTRUCTION SIGNING PLAN IS TO SERVE AS A GUIDE ONLY. OTHER SIGNS MAY BE REQUIRED DURING VARIOUS PHASES OF CONSTRUCTION.

THE TRAFFIC CONTROL PLAN DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF INSTALLING TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE CURRENT EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."

TWO WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES.

10



TABULATED QUANTITIES (TRAFFIC CONTROL)				
SIGN NO.	DESCRIPTION	SIZE	TOTAL NO.	SQ. FT.
W20-1	ROAD CONST. 500 FT.	48" x 48"	2	32
W20-1	ROAD CONST. 1000 FT.	48" x 48"	2	32
W20-1	ROAD CONST. 1500 FT.	48" x 48"	2	32
G20-2	END CONST.	60" x 24"	2	20
R11-2	ROAD CLOSED	48" x 30"	2	20
TOTAL (ITEM 712-06)				136

CONST. SIGNS

BARRICADES	TYPE	TOTAL NO.	TOTAL LIN. FT.	ITEM NO.
	III	2	56	712-07.03

WARNING LIGHTS	TYPE	TOTAL (EACH)	ITEM NO.
	A	22	712-05.01
	C	18	712-05.03
(INCLUDES 8 FOR INSTALLATION AT UNCOMPLETED G.R. TERMINALS)			
	FLEXIBLE DRUMS	TOTAL (EACH)	ITEM NO.
		29	712-04.01
(INCLUDES 8 FOR INSTALLATION AT UNCOMPLETED G.R. TERMINALS)			

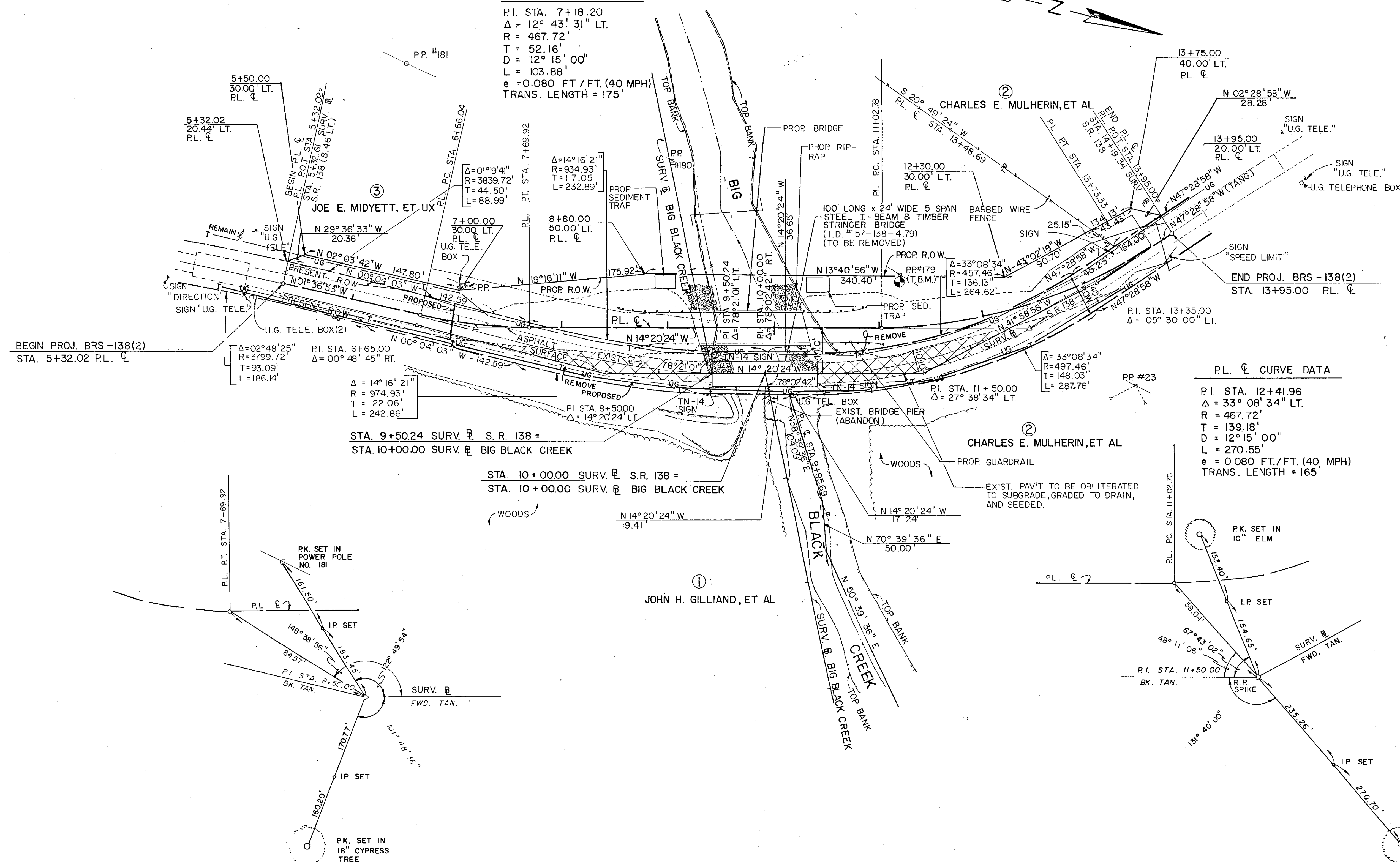
NOTE: THE R11-2 SIGN MUST BE MOUNTED ON TOP OF THE TYPE III BARRICADE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

TRAFFIC CONTROL PLAN
S.R. 138 OVER
BIG BLACK CREEK
SCALE : 1" = 100'

TENNESSEE
 DEPARTMENT OF REVENUE
 FILE NO. 10

P.I. STA. 7+18.20
 $\Delta = 12^\circ 43' 31''$ LT.
 $R = 467.72'$
 $T = 52.16'$
 $D = 12^\circ 15' 00''$
 $L = 103.88'$
 $e = 0.080$ FT / FT. (40 MPH)
 TRANS. LENGTH = 175'



P.L. C CURVE DATA

P.I. STA. 12+41.96
 $\Delta = 33^\circ 08' 34''$ LT.
 $R = 467.72'$
 $T = 139.18'$
 $D = 12^\circ 15' 00''$
 $L = 270.55'$
 $e = 0.080$ FT./FT. (40 MPH)
 TRANS. LENGTH = $165'$

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

UTILITIES

S.R. 138 OVER
BIG BLACK CREEK

SCALE: 1" = 50'