

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
FEDERAL AID HIGHWAY

SECTION	SEC.	COUNTY	TOTAL SHEETS	SHEET
FA 10	13-HB-2	TAZEWELL	28	1
FED. ROAD DIST. NO. 7		ILLINOIS PROJECT	U-13	(23)

SCALES
 PLAN 1 INCH = 30 FT.
 PROFILE HOR. 1 INCH = 30 FT.
 PROFILE VERT. 1 INCH = 3 FT.
 CROSS SECTIONS 1 INCH = 5 FT. VERT. 10 FT. HOR.

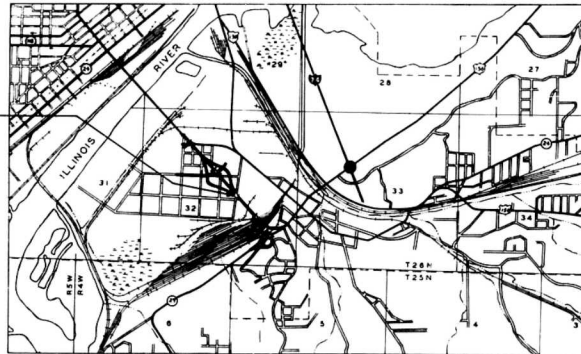
F.A. ROUTE 10 **SECTION 13-HB-2**
PROJECT U-131 (23)
TAZEWELL, COUNTY



PROPOSED IMPROVEMENT

INCLUDES ONE (1) 3 SPAN STEEL W/ BEAM SEPARATION STRUCTURE CARRYING F.A. ROUTE 10 OVER CENTER STREET SPANS 1 @ 46'-4", 1 @ 73'-9", AND 1 @ 52'-6" STA. 05+94.09

AND ALSO ONE REINFORCED CONCRETE BOX CULVERT 12'-0" x 5'-0" 1/4 FEET RIGHT OF STA. 00+88.83



LAYOUT
 APPROXIMATE SCALE 1" = 200'

LENGTH OF IMPROVEMENT = 17780 FT. = 0.034 MI.



STATE OF ILLINOIS DEPARTMENT OF PUBLIC WORKS AND BUILDINGS DIVISION OF HIGHWAYS	
DESIGNED BY	<i>John B. Mason</i>
APPROVED	<i>R. Ulan Goodall</i>
DRAWN BY	<i>Blair</i>
CHECKED BY	<i>R. P. Bartelme</i>
APPROVED	<i>E. A. ...</i>



DATE: **SEPT 23 60**
H. D. ...

PLANS PREPARED BY
WARREN & VAN PRAAG, INC.
 CONSULTING ENGINEERS
 DECATUR ILLINOIS
 SUBMITTED SEPTEMBER 18, 1960
Robert D. ...

DEPARTMENT OF COMMERCE
 BUREAU OF PUBLIC ROADS
 APPROVED

DIVISION ENGINEER: DATE:



Job No 20610

SUMMARY OF QUANTITIES

HIGHWAY CLASSIFICATION F.A. ROUTE 10

INDEX OF SHEETS

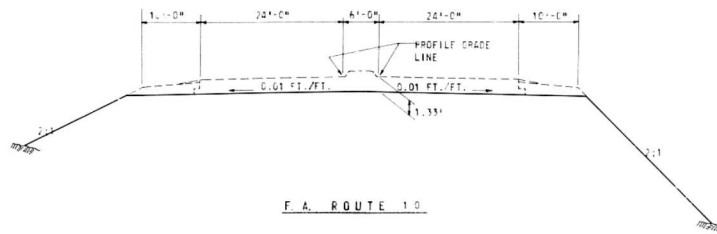
QUANTITY	UNITS	ITEM	CODE
510	IN. DIA	TREE REMOVAL, SPECIAL (6 TO 15 INCH DIAMETER)	010003
130	IN. DIA.	TREE REMOVAL, SPECIAL (OVER 15 INCH DIAMETER)	010004
1749	CU. YD.	CHANNEL EXCAVATION	012001
30481	CU. YD.	BORROW EXCAVATION	013001
185	CU. YD.	TRENCH BACKFILL	020001
185	CU. YD.	CLASS 4 EXCAVATION FOR STRUCTURES	050001
1068.8	CU. YD.	CLASS 1 CONCRETE	050003
264750	POUND	FURNISHING AND ERECTING STRUCTURAL STEEL	054001
96	LIN. FT.	PIPE CULVERTS, TYPE 1A, 60"	058015
102,770	POUND	REINFORCEMENT BARS	059001
1184	LIN. FT.	FURNISHING CPDUSTED PILES, 20.1 - 36 FEET	060005
1184	LIN. FT.	DRIVING TIMBER PILES	060008
7381	LIN. FT.	FURNISHING STEEL PILES, 8 HP 36	060027
7381	LIN. FT.	DRIVING STEEL PILES	060037
1	EACH	TEST PILE STEEL - 8" X 36"	060036
1	EACH	NAME PLATES	061001
150	SQ. YD.	BROKEN CONCRETE RIPRAP	062003
10	LIN. FT.	WATER MAIN, 8"	072001
730	LIN. FT.	WATER MAIN, 8"	072002
80	LIN. FT.	ADJUSTING SANITARY SEWERS, 8 INCH DIAMETER OR LESS	074001
5	EACH	MANHOLES, TYPE 2, 4' DIA., TYPE 1 FRAME, CLOSED LID	075001
7	EACH	FILLING EXISTING INLE	079003
50	LIN. FT.	COMBINATION CONCRETE CURB AND GUTTER, TYPE 3	080006
53	SO. YD.	DRIVEWAY PAVEMENT REMOVAL	082002
50	LIN. FT.	COMBINATION CURB AND GUTTER REMOVAL	082005
1160	SQ. FT.	SIDEWALK REMOVAL	082006
940	SO. YD.	SLOPE WALL, 4 INCH	083002
165	SO. YD.	PAVEMENT REMOVAL AND REPLACEMENT, TYPE 1A, 9 INCH	085007
50	SO. YD.	PAVEMENT REMOVAL AND REPLACEMENT, TYPE 3, 9 INCH	085009
96	SO. YD.	PAVEMENT REMOVAL AND REPLACEMENT, TYPE 4, 9 INCH	085010
740	SO. FT.	PORTLAND CEMENT CONCRETE SIDEWALK, 4 INCH	089002
50	LIN. FT.	PAVED DITCH, 3 FEET	091002
16	EACH	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	104001
0.4	ACRE	TEMPORARY SEEDING	110001
1	TON	STRAW FOR ASPHALT - COATED MULCH	111002
80	GAL.	EMULSIFIED ASPHALT	111003
630	SO. YD.	SODDING	112001
3	UNIT	SUPPLEMENTAL WATERING	112002
356	LIN. FT.	ALUMINUM HANDRAIL	200004
558	LIN. FT.	SANITARY SEWER, TYPE 2 (RCP CLASS II) 8"	200 2/17
234	LIN. FT.	SANITARY SEWER, TYPE 2 (RCP CLASS II) 15"	200 2/19

3172 - T - 50 - 1975
 MAXIMUM GRADE - 1.222 %
 LENGTH OF MAXIMUM GRADE - 587.5 FEET
 MINIMUM SIGHT DISTANCE (STOPPING) - UNLIMITED
 MINIMUM HORIZONTAL RADIUS - TANGENT

- SHEET NO. 1. COVER SHEET
 2. INDEX OF SHEETS, TYPICAL SECTION AND SUMMARY OF QUANTITIES
 3. PLAN AND PROFILE SHEET - F.A. RT. 10 - STA. 50+00 TO STA. 63+00
 4. PLAN AND PROFILE SHEET - F.A. RT. 10 - STA. 63+00 TO STA. 75+00
 5. RELOCATIONS OF SANITARY SEWERS AND WATER MAIN
 6. BRIDGE PLANS - GENERAL PLAN AND ELEVATION
 7. BRIDGE PLANS - WEST ABUTMENT
 8. BRIDGE PLANS - EAST ABUTMENT
 9. BRIDGE PLANS - PIER NO. 1
 10. BRIDGE PLANS - PIER NO. 2
 11. BRIDGE PLANS - SUPERSTRUCTURE
 12. BRIDGE PLANS - SUPERSTRUCTURE STRUCTURAL STEEL
 13. BRIDGE PLANS - MISCELLANEOUS DETAILS
 14. BRIDGE PLANS - HANDRAIL DETAILS
 15. BRIDGE PLANS - MISCELLANEOUS DETAILS
 16. BRIDGE PLANS - SOIL BORINGS
 17. REINFORCED CONCRETE BOX CULVERT AT CENTER ST.
 18. DETAILS - BORROW SITE, PAVED DITCH 3 FT., STUB DETAIL, AND TRANSITION FOR PAVED DITCH
 19. DETAILS - PROPOSED DITCH RELOCATION
 20.-21. CROSS SECTION SHEETS - F.A. ROUTE 10
 22.-23. CROSS SECTION SHEETS - BORROW EXCAVATION SITE
 24. STANDARDS - 1998
 25. STANDARDS - 1971-2, 2113
 26. STANDARDS - 1516S, 1527-2, 2136
 27. STANDARDS - 1790F, 2114, 1744-1
 28. STANDARDS - 1686/1717-4

GENERAL NOTES

- BUILDINGS SHOWN ON PLANS WITHIN CONSTRUCTION LIMITS ARE TO BE REMOVED BY OTHERS.
- TWO (2) SIGNS CONFORMING TO STANDARD 2136 SHALL BE ERECTED AT LOCATIONS DESIGNATED BY THE ENGINEER.



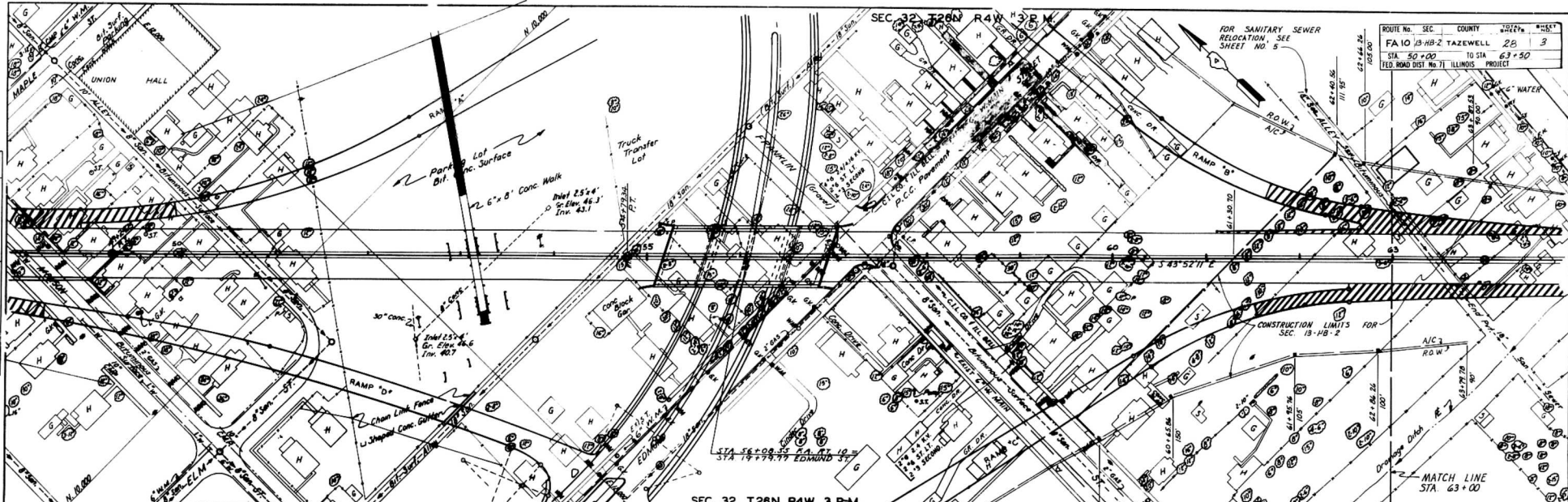
TYPICAL CROSS SECTION

SUBMITTED	<u>Sept 14 1960</u>
	<u>John D. Matson</u>
	DISTRICT DESIGN ENGINEER
EXAMINED	
	DISTRICT CONSTRUCTION ENGINEER
EXAMINED	<u>Sept 14 1960</u>
	<u>W. G. Jenkins</u>
	DISTRICT MAINTENANCE ENGINEER
EXAMINED	<u>14 Sept 60</u>
	<u>H. G. Titman</u>
	DISTRICT TRAFFIC ENGINEER
ENTIRE SECTION EXAMINED AND APPROVED AS TO POLICY	
	<u>Sept 15 1960</u>
	<u>John D. Matson</u>
	DISTRICT ENGINEER

ROUTE NO.	SEC.	COUNTY	TOWNSHIP	RANGE
FA 10	33-HB-2	TAZEWELL	2B	3
STA. 50+00			TO STA.	63+50
1/2" = 30' ROAD DIST. NO. 71 ILLINOIS PROJECT				

PLAN	DATE	BY
	SCALE	DATE
PROFILE	DATE	BY
	SCALE	DATE

PROFILE	DATE	BY
	SCALE	DATE
PLAN	DATE	BY
	SCALE	DATE



B.M. #19
P.R. Spike
Monrovia of Elm
Elev. 448.44

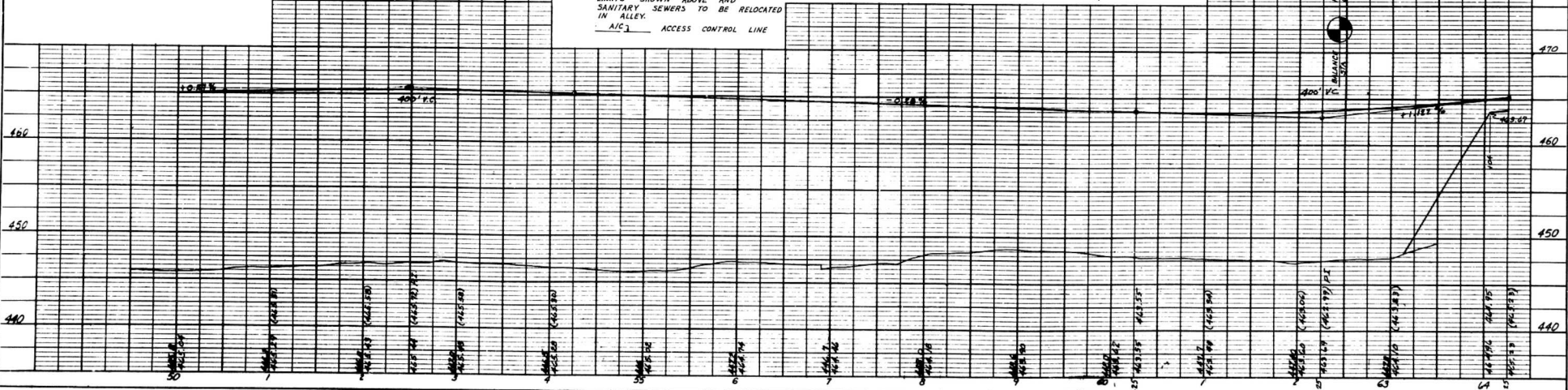
B.M. #19
Top E. Bolt F.H. Cap
Franklin of Edmund
Elev. 448.30

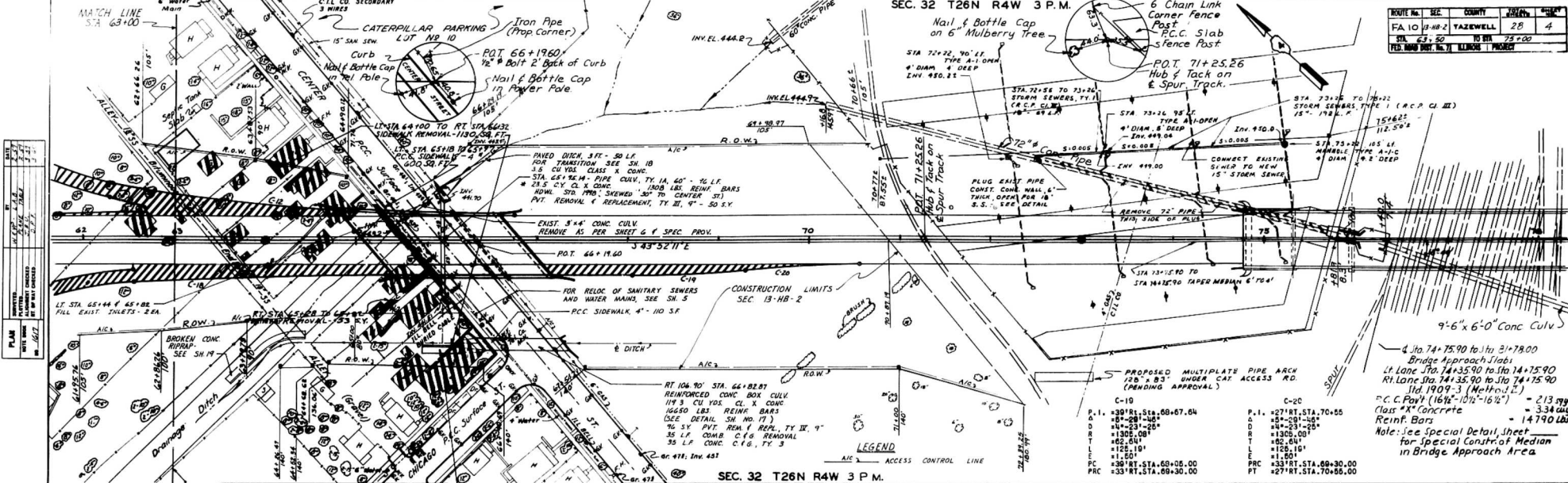
SEC. 32 T26N R4W 3 P.M.

NOTE: THIS SHEET INCLUDED FOR REFERENCE ONLY EXCEPT AS FOLLOWS: TREE REMOVAL, EMBANKMENT FROM STA. 62+48 AHEAD, AND OTHER WORK SHOWN ON FOLLOWING SHEETS LOCATED WITHIN THE CONSTRUCTION LIMITS SHOWN ABOVE AND SANITARY SEWERS TO BE RELOCATED IN ALLEY.
A/C 1 ACCESS CONTROL LINE

NOTE: FOR ADDITIONAL DETAIL ON EDMUND ST., SEE SHEETS

B.M. #19
Cms Sp. SE. Cor.
Bridge Floor Over
Drainage Ditch, Fran
King St. N. 448.88





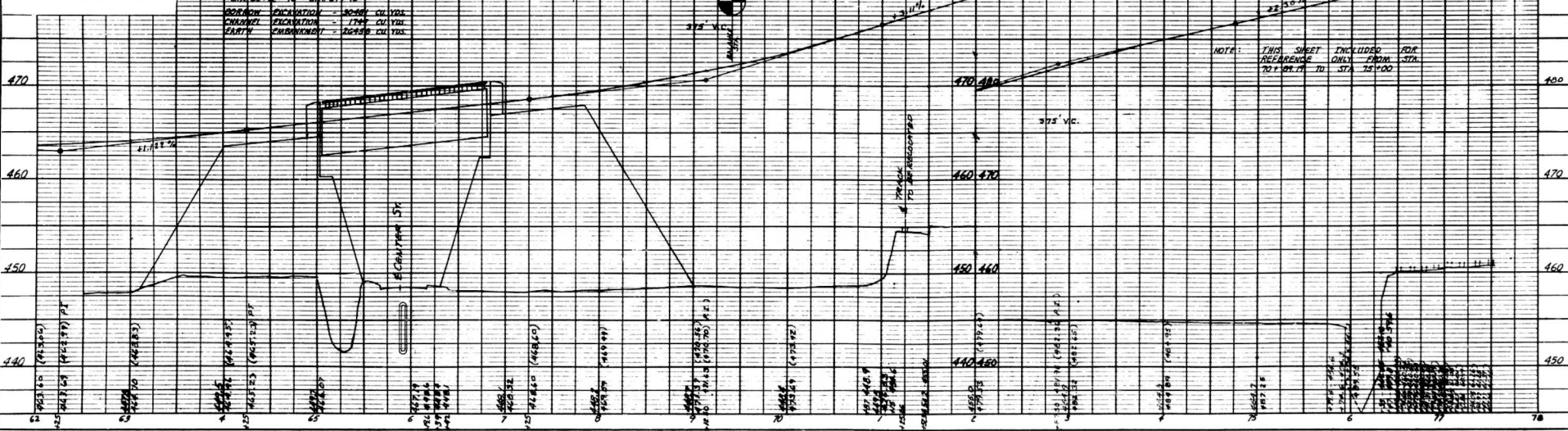
ROUTE No.	SEC.	COUNTY	TOWNSHIP	RANGE
FA 10 14-80-2		YAZERWELL	28	4
TR. 63-1-50				75-900
105-800 (PLOT NO. 7)				110-110

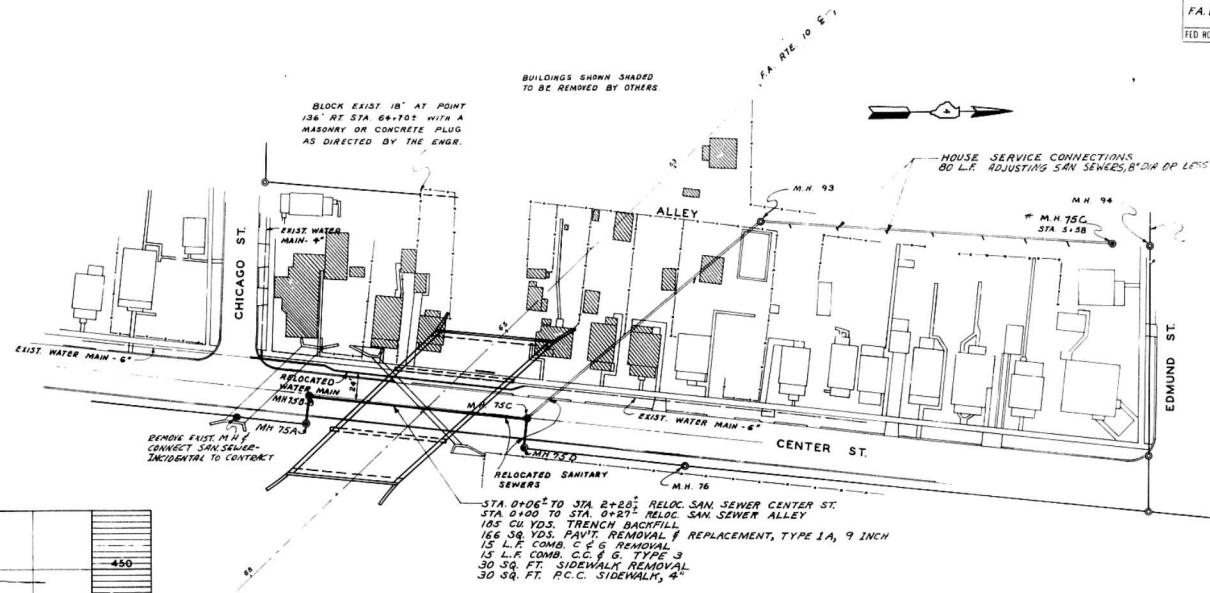
PLAN	DATE	BY	CHKD.
1	11-1-77	J.P.	J.P.
2	11-1-77	J.P.	J.P.
3	11-1-77	J.P.	J.P.
4	11-1-77	J.P.	J.P.
5	11-1-77	J.P.	J.P.
6	11-1-77	J.P.	J.P.
7	11-1-77	J.P.	J.P.
8	11-1-77	J.P.	J.P.
9	11-1-77	J.P.	J.P.
10	11-1-77	J.P.	J.P.

DM #9
CHS. 54. MIN. COR. of W. Hd. of
CHS. Drainage Ditch @
Center St.
Elev. 449.33

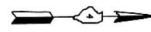
BROKEN CONC RIPRAP
SEE SHEET #19

NOTE: SEE DETAIL SHEET NO. 5 FOR PLAN AND PROFILES FOR RELOCATIONS OF EXISTING WATER MAINS AND SANITARY SEWERS FOR SEC. 13-HB-2





BUILDINGS SHOWN SHADED TO BE REMOVED BY OTHERS

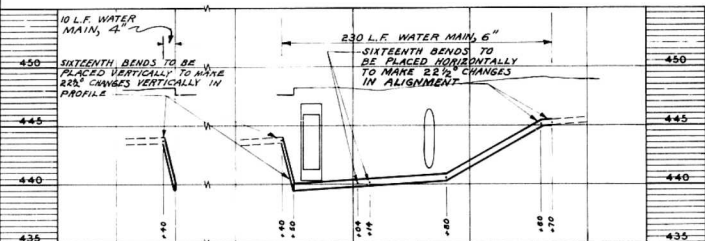


DO NOT DISTURB THE EXISTING SEWERS SHOWN BY SOLID LINE

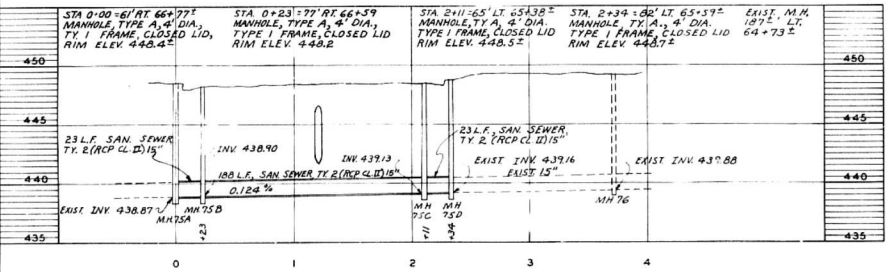
RELOCATED WATER MAIN M.H. 75C
 REMOVE EXIST. M.H. 75A - INCIDENTAL TO CONTRACT
 RELOCATED SANITARY SEWERS
 STA 0+06.6 TO STA 2+20.2: RELOC. SAN. SEWER CENTER ST. 185 CU. YDS. TRENCH BACKFILL
 STA 0+00 TO STA. 0+27.2: RELOC. SAN. SEWER ALLEY 166 SQ. YDS. PAVT. REMOVAL & REPLACEMENT, TYPE 1A, 9 INCH
 15 L.F. COMB. C.C. & G. TYPE 3
 30 SQ. FT. SIDEWALK REMOVAL
 30 SQ. FT. P.C.C. SIDEWALK, 4"

PLAN SCALE: 1" = 50'

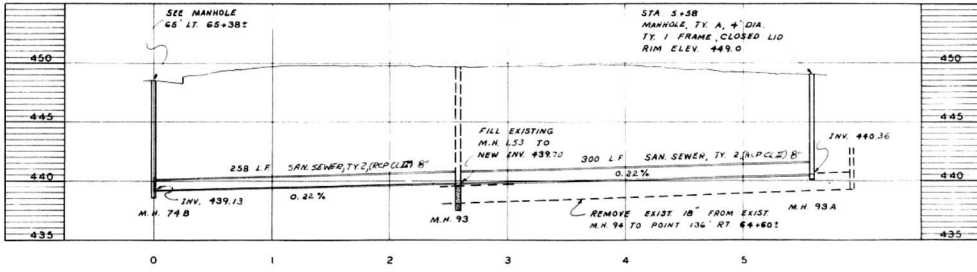
NOTE: VERIFY ELEVATION OF EXISTING HOUSE SERVICE CONNECTIONS ALONG ALLEY WEST OF CENTER ST. BEFORE LAYING NEW SANITARY SEWER



WATER MAIN RELOCATION
 SCALES: HOR. 1" = 50'
 VERT. 1" = 5'



SANITARY SEWER RELOCATION ON CENTER ST.
 SCALES: HOR. 1" = 50'
 VERT. 1" = 5'



SANITARY SEWER IN ALLEY W. OF CENTER ST.
 SCALES: HOR. 1" = 50'
 VERT. 1" = 5'

RELOCATIONS OF
 SANITARY SEWERS
 AND
 WATER MAINS

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

172'-9 3/8" BACK TO BACK OF ABUTMENTS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA 1013-HB-2		TAZEWELL	28	6
FED. ROAD DIST. NO. 7		ILLINOIS	PROJ. NO.	

GENERAL NOTES

CLASS "X" CONCRETE SHALL BE USED THROUGHOUT.

THE CONCRETE FLOOR SLAB SHALL BE FINISHED IN ACCORDANCE WITH ARTICLE 81.10 OF THE STANDARD SPECIFICATIONS AND SHALL BE POURED IN ONE CONTINUOUS OPERATION BETWEEN THE LIMITS OF THE CONSTRUCTION JOINTS SHOWN.

ALL CURBS AND SLABS OUTSIDE OF LONGITUDINAL BONDED CONSTRUCTION JOINTS SHALL BE POURED NONLITHICALLY.

RAILINGS SHALL BE ADJUSTED TO TRUE ALIGNMENT AFTER SAFETY WALKS HAVE BEEN POURED.

ALL ROCKERS, BOLSTERS, BEARING PLATE, LEAD PLATES, PINTLES AND ANCHOR BOLTS SHALL BE FABRICATED AND SET IN ACCORDANCE WITH ARTICLE 81.10 OF THE STANDARD SPECIFICATIONS AND ARE INCLUDED IN THE QUANTITIES OF STRUCTURAL STEEL. ESTIMATED WEIGHT 15,810 LBS.

ANCHOR BOLTS SHALL BE SET BEFORE RIVETING DIAPHRAGMS OVER SUPPORTS.

ROADWAY EXPANSION GUARDS SHALL BE ASSEMBLED IN THE SHOP IN THE PROPER POSITION WITH THE ADJACENT ENDS IN PLACE AND SHALL BE LEFT ASSEMBLED FOR SHOP INSPECTION.

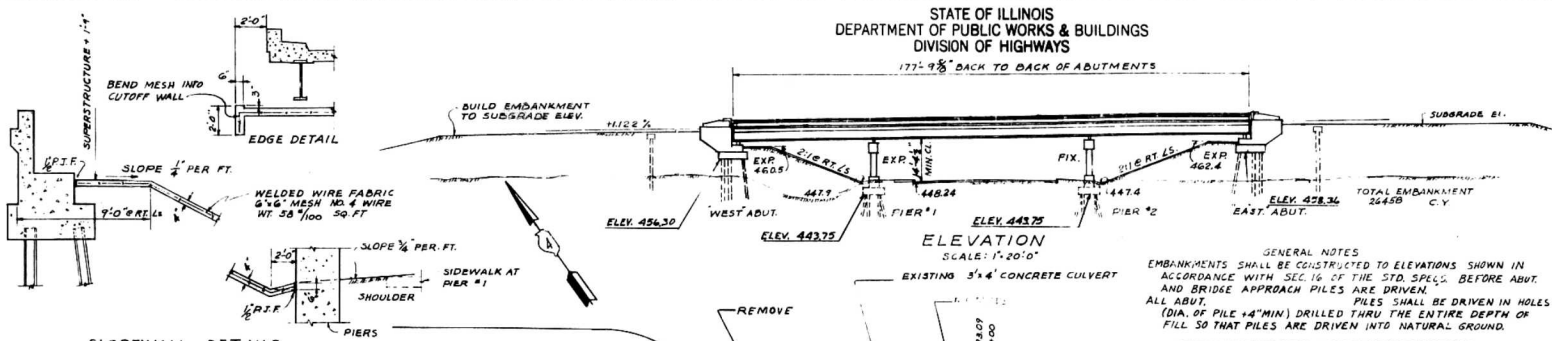
EXPANSION GUARDS SHALL BE FABRICATED AND ERRECTED IN ACCORDANCE WITH ARTICLE 81.13 (4) OF THE STANDARD SPECIFICATIONS AND ARE INCLUDED IN QUANTITIES OF STRUCTURAL STEEL.

EXCEPT AS OTHERWISE NOTED, ALL STRUCTURAL STEEL SHALL RECEIVE ONE SHOP COAT OF RED LEAD PAINT AND TWO FIELD COATS OF ALUMINUM PAINT. SEE ARTICLES 86.1 TO 86.6 OF THE STANDARD SPECIFICATIONS. ALL PAINT SHALL BE FURNISHED AND APPLIED BY THE CONTRACTOR.

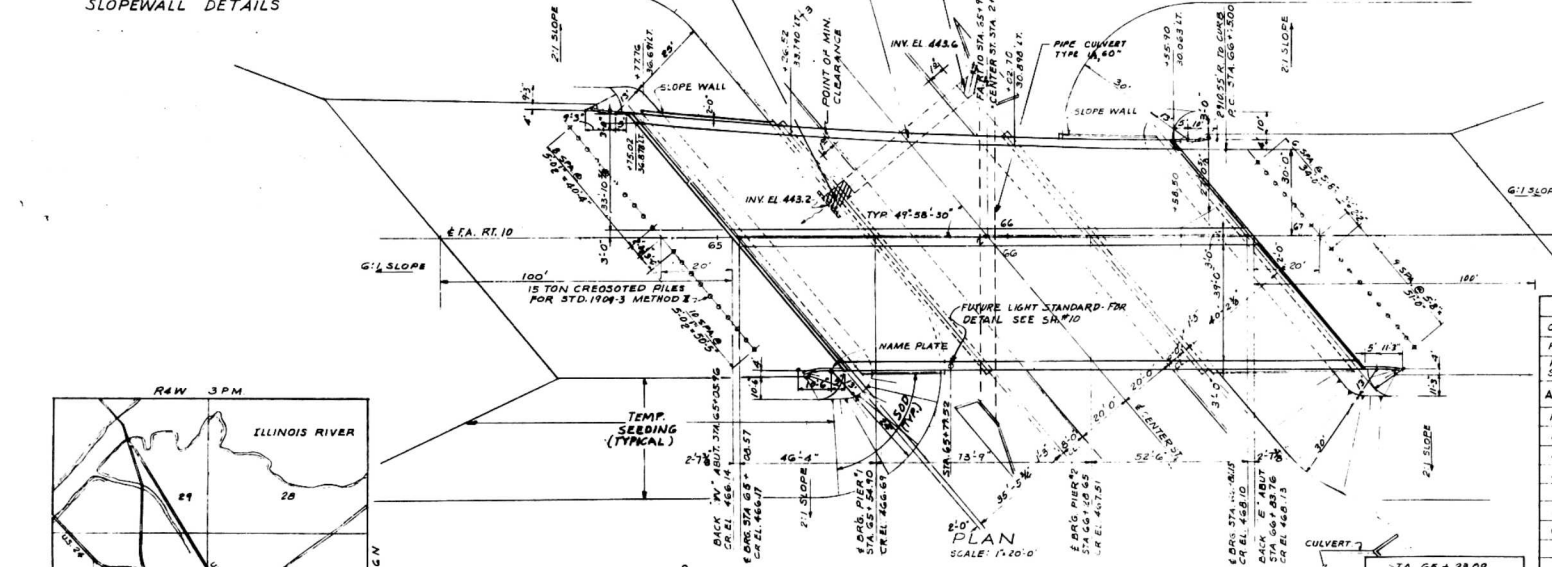
THE CONTRACTOR SHALL DRIVE ONE STEEL TEST PILE AT PERMANENT LOCATION, IN THE WEST ABUTMENT, AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMAINDER OF THE PILES.

THE CONTRACTOR SHALL DRIVE TWO STEEL TEST PILES AT PERMANENT LOCATIONS, ONE IN PIER NO. 1 AND ONE IN PIER NO. 2 AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMAINDER OF THE PILES.

UNLESS OTHERWISE SHOWN ON THE PLANS, REINFORCEMENT BARS SHALL BE LAPPED 20 BAR DIAMETERS.



GENERAL NOTES
EMBANKMENTS SHALL BE CONSTRUCTED TO ELEVATIONS SHOWN IN ACCORDANCE WITH SEC. 16 OF THE STD. SPECS. BEFORE ABUT. AND BRIDGE APPROACH PILES ARE DRIVEN.
ALL ABUT. AND BRIDGE APPROACH PILES SHALL BE DRIVEN IN HOLES (DIA. OF PILE +4" MIN) DRILLED THRU THE ENTIRE DEPTH OF FILL SO THAT PILES ARE DRIVEN INTO NATURAL GROUND.



TOTAL BILL OF MATERIAL

ITEM	SUPERST.	SUBST.	TOTAL	
CLASS "X" CONCRETE	CUYD.	379.8	342.7	922.5
REINFORCEMENT BARS	TONS	26.7	26.7	53.4
FURNISHING & ERECTING STRUCTURAL STEEL	TONS	36.750		36.750
ALUMINUM HANDRAIL	LN. FT.	356		356
FURNISHING STEEL PILES (80PF) IN FT.			7,380	7,380
DRIVING STEEL PILES	LN. FT.		7,380	7,380
FURNISHING CROSSEDOT PILES	LN. FT.		1,184	1,184
DRIVING TIMBER PILES	LN. FT.		1,184	1,184
TEST PILES (STEEL) (80PF36) EACH			3	3
SLOPE WALLS, 4 INCH	SQ YD		960	960
CLASS "A" EXCAVATION FOR STRUCT. CUTS			385	385
NAME PLATE	EACH		1	1
SODDING	SQ YD		630	630
TEMPORARY SEEDING	ACRE		0.4	0.4

STA 65 + 30.09
BUILT 196 BY
STATE OF ILLINOIS
FA RT10 SEC.13-HB-2
FA. PROJ. U-131 (8)
LOADING H20-S16

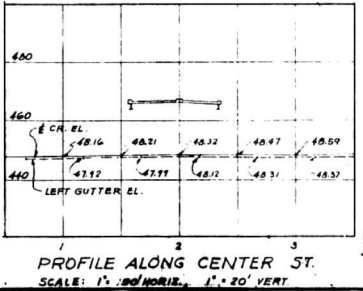
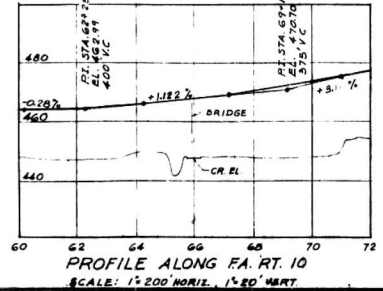
LETTERING FOR NAME PLATE
SEE STD. 2113
(For location see Sheet 9 of 11 sheets)

DESIGN STRESSES

- 1,400 PSI (SUPERST & SUBST WITHOUT EARTH PRESSURE)
- 1,000 PSI (SUBST) WITH EARTH PRES
- 10-10
- 20,000 PSI (REINFR)
- 18,000 PSI (STRUCT. STEEL)
- LOADING: H20-S16
- 75 PSI IN FOOTINGS



DESIGNED	H.Y. FUKUDA	EXAMINED	
CHECKED	M.E.K.	APPROVED	
DRAWN	H.Y. FUKUDA	APPROVED	
CHECKED	H.E.K. & R.H.M.		



GENERAL PLAN & ELEVATION

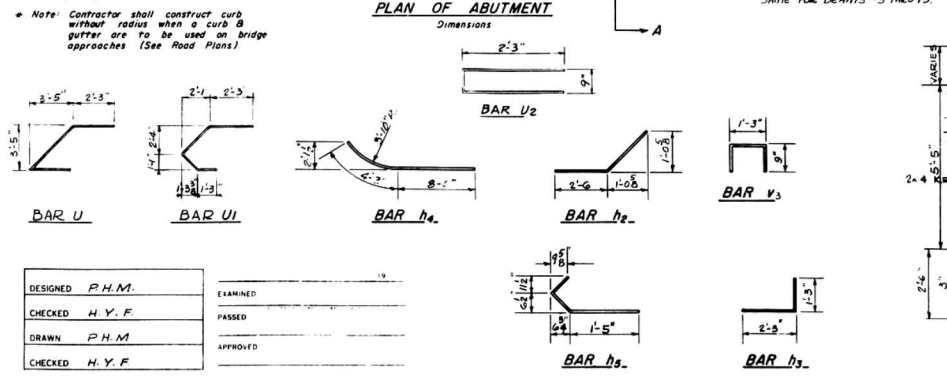
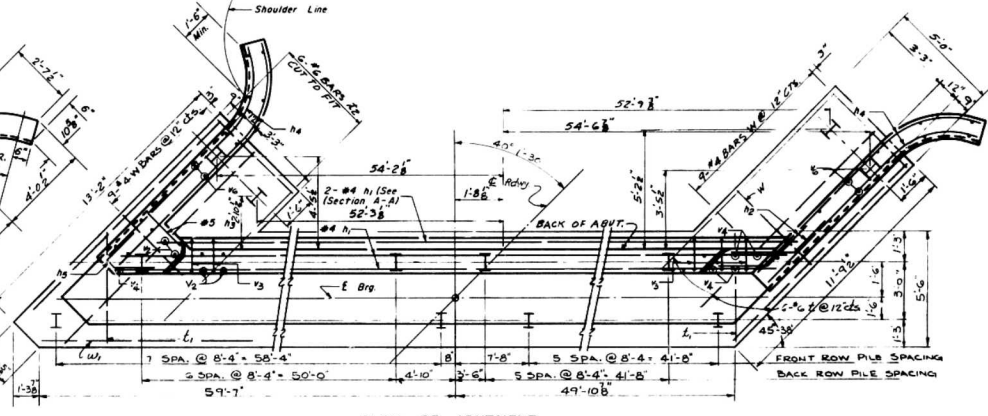
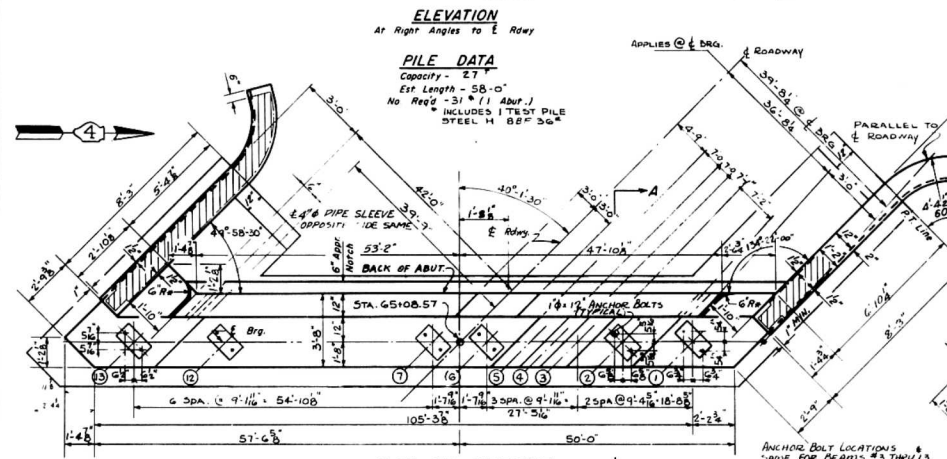
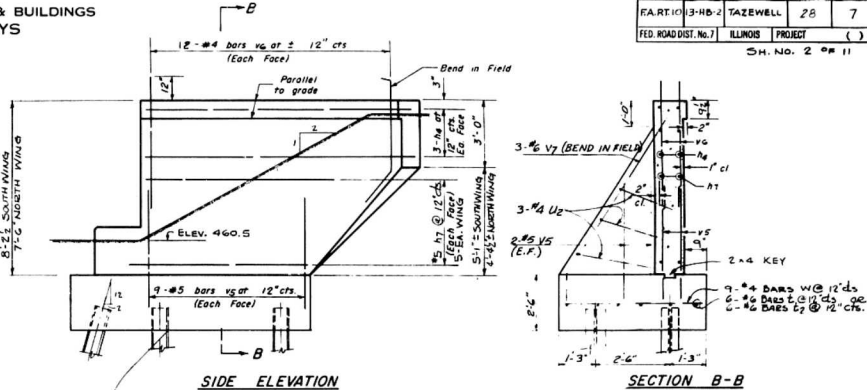
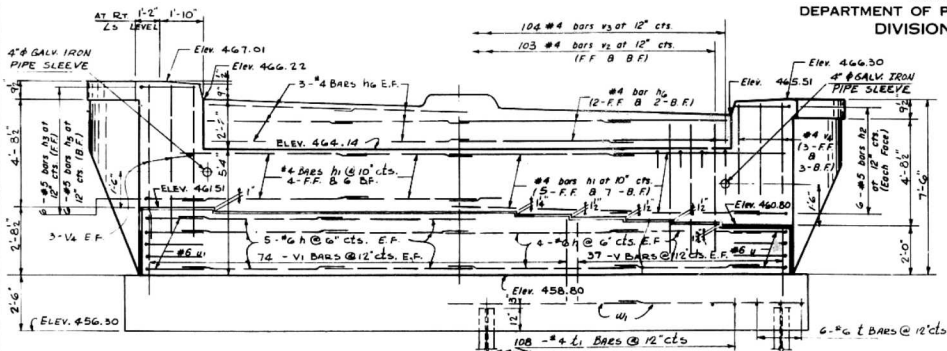
FA. ROUTE 10 SECTION 13-HB-2
F.A. PROJECT U-131 ()
F.A. ROUTE 10 OVER CENTER STREET
STATION 65 + 93.00
TAZEWELL COUNTY

WARREN AND VAN PRAAG, INC.
CONSULTING ENGINEERS - DECATUR, ILLINOIS

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE No.	SEC.	COUNTY	STATION	PIECE
F.A. RT. 10	13-HB-2	TAZEWELL	28	7
FED. ROAD DIST. No. 7	ILLINOIS	PROJECT	()	

SH. NO. 2 OF 11



BILL OF REINFORCEMENT

Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
h	36	#6	28'-9"	U	4	#4	9'-4"	L	
h ₁	44	#4	28'-9"	U	5	#6	8'-2"	C	
h ₂	12	#3	4'-0"	V	74	#4	5'-0"		
h ₃	6	#3	5'-6"	V	148	#4	5'-8"		
h ₄	12	#3	12'-3"	V	206	#4	5'-9"		
h ₅	6	#3	3'-6"	V	104	#4	2'-3"		
h ₆	20	#4	27'-10"	V	12	#4	8'-8"		
h ₇	20	#5	10'-2"	V	44	#5	5'-0"		
					v ₆	48	#6	4'-6"	
					v ₇	6	#6	9'-0"	
					u ₂	6	#4	5'-3"	
					w	18	#4	2'-3"	
					w ₁	44	#6	24'-0"	

BILL OF MATERIAL

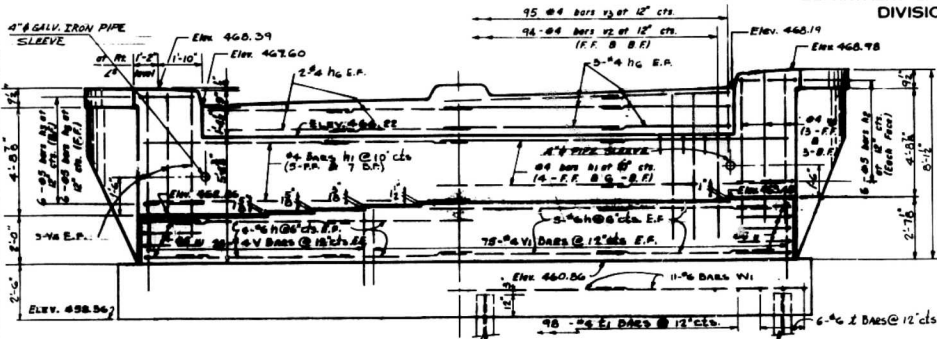
Item	Unit	Quantity
Class X Concrete	Cu. Yd	128.8
Reinforcement Bars	Lb.	7950
STEEL H PILE	L.F.	1740
TEST PILE	EA.	1

WEST ABUTMENT
F.A. ROUTE 10 SECTION 13 HB-2
F.A. ROUTE 10 OVER CENTER STREET
STATION 85 + 93.00
TAZEWELL COUNTY

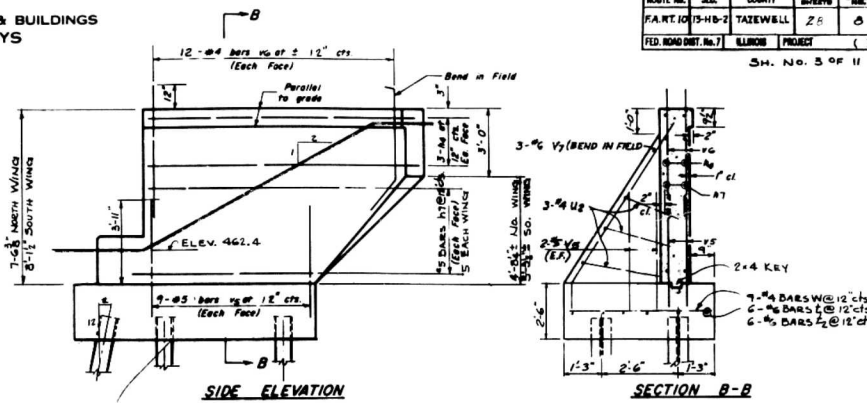
WARREN AND VAN PRAAG, INC.
CONSULTING ENGINEERS - DECATUR, ILLINOIS

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE No. SEC. COUNTY TOWNSHIP
F.A. RT. 10 13-HB-2 TAZEWELL 2 B. C.
FED. ROAD DIST. No. 11 ILLINOIS PROJECT ()
SH. No. 3 OF 11

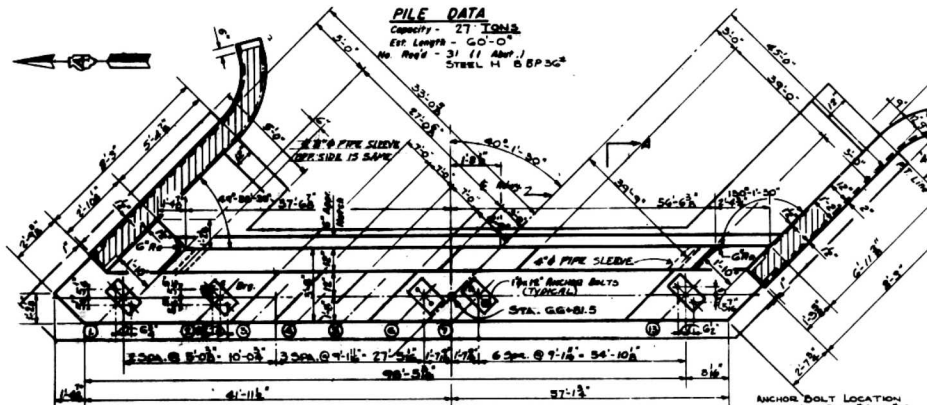


ELEVATION
At Right Angles to E. Pier

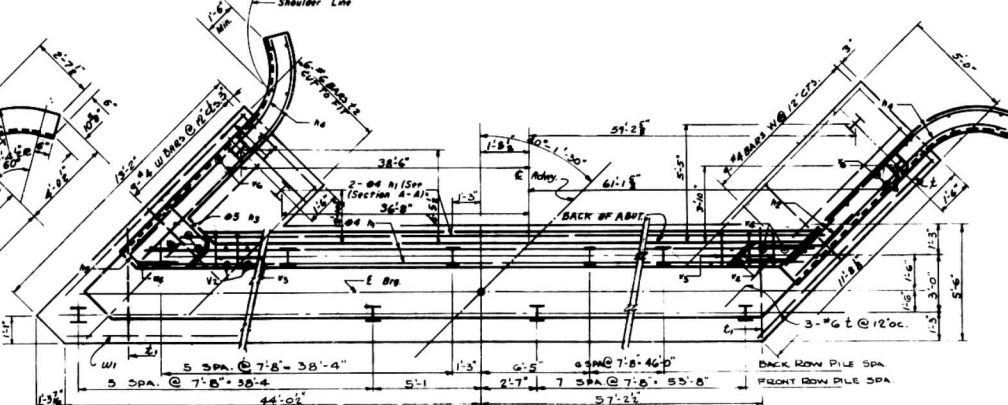


SIDE ELEVATION

SECTION B-B

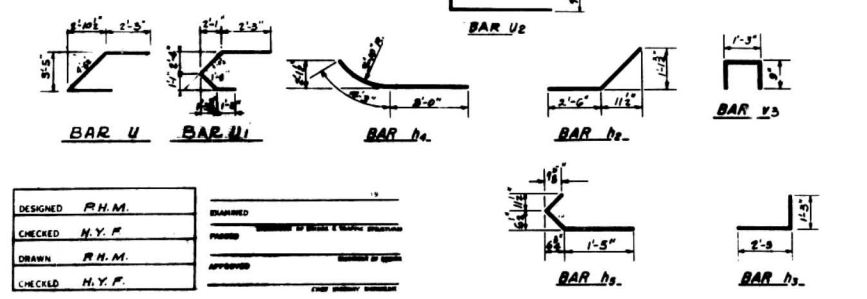


PLAN OF ABUTMENT
Dimensions

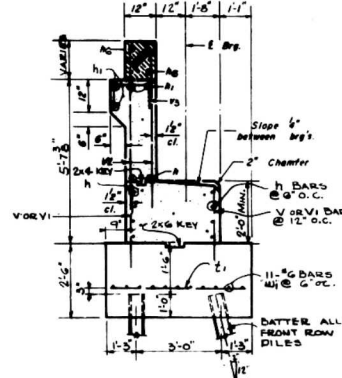


PLAN OF ABUTMENT
Reinforcement & Pile Spacing

Note: Contractor shall construct curb without radius where it meets & gutter are to be used as bridge approaches (See Road Plans).



DESIGNED	R.H.M.	DRAWN	
CHECKED	H.Y.F.	PROVED	
DRAWN	R.H.M.	APPROVED	
CHECKED	H.Y.F.		



SECTION A-A

BILL OF REINFORCEMENT

Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
A	36	#6	26'-4"	U	5	#6	9'-0"		
A1	44	#4	26'-4"	U	4	#6	8'-2"		
A2	12	#3	4'-0"	V	56	#4	3'-0"		
A3	6	#3	3'-6"	V	150	#4	3'-6"		
A4	12	#3	12'-3"	V	188	#4	5'-8"		
A5	6	#3	3'-6"	V	95	#4	2'-9"		
A6	20	#2	24'-3"	X	12	#4	6'-6"		
A7	20	#5	10'-2"	VS	44	#5	5'-0"		
					48	#4	4'-8"		
					46	#4	6'-3"		
					4	#4	9'-0"		
Z	6	#6	12'-10"	U	6	#4	5'-9"		
L	6	#6	11'-6"	W	18	#4	4'-8"		
L	98	#4	5'-3"	W	44	#6	26'-9"		

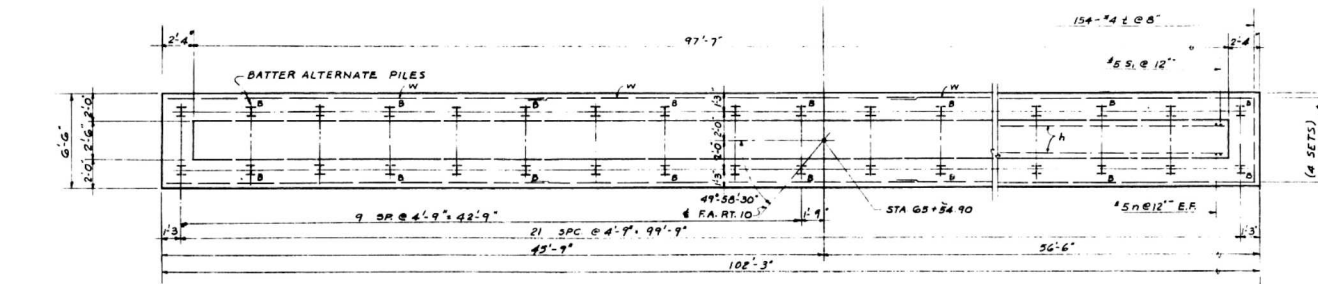
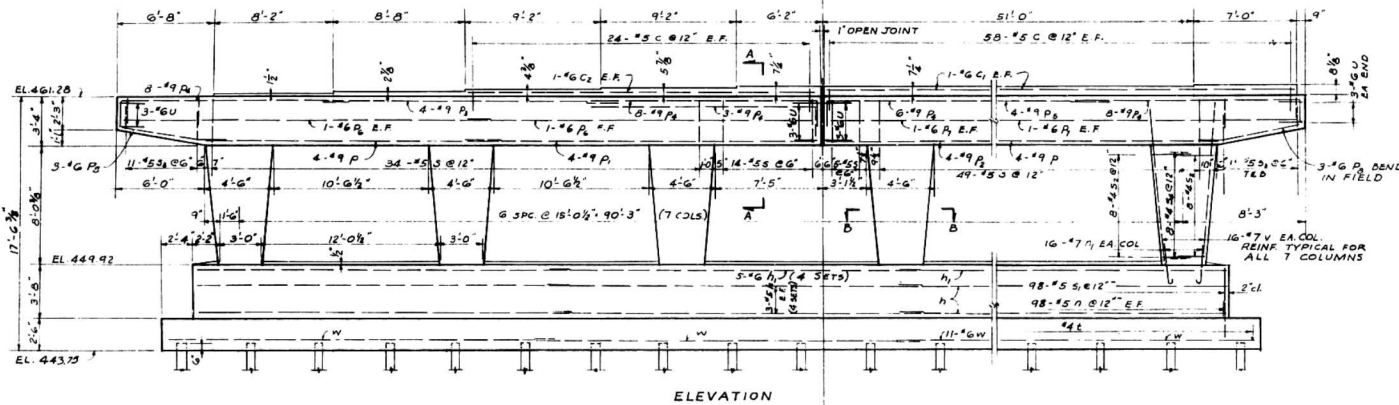
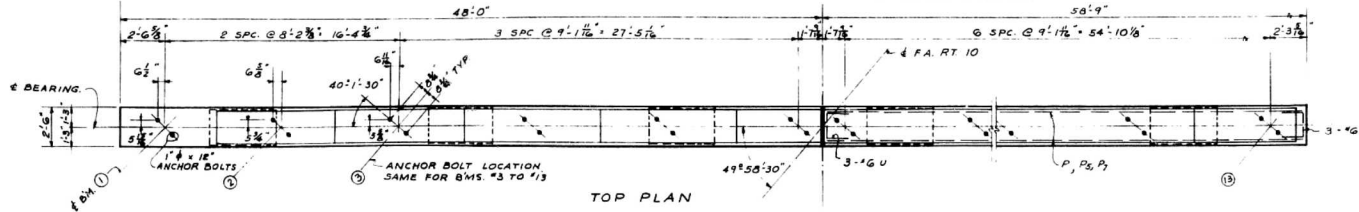
BILL OF MATERIAL

Item	Unit	Quantity
Class X Concrete	Cu. Yd.	120.3
Reinforcement Bars	Lb.	7,420
STEEL "H" PILE	L. F.	1,860

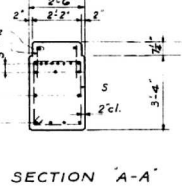
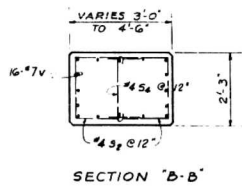
EAST ABUTMENT
F.A. ROUTE 10 SECTION 13 - HB - 2
F.A. ROUTE 10 OVER CENTER STREET
STATION 65 + 93.09
TAZEWELL COUNTY

WARREN AND VAN PRAAG, INC.
CONSULTING ENGINEERS
DECATUR ILLINOIS

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

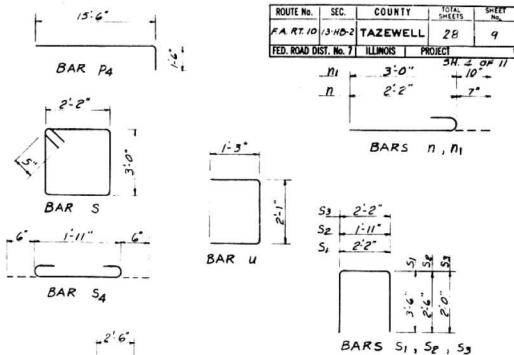


DESIGNED	H. Y. F.	EXAMINED	
CHECKED	R. H. M.	ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES	
DRAWN	H. Y. F.	ENGINEER OF DESIGN	
CHECKED	R. H. M.	CHIEF HIGHWAY ENGINEER	



PILE DATA

TYPE	STEEL H	8" P 36
CAPACITY		25 TONS
ESTIMATED LENGTH		45'
NO. REQ'D		44



ROUTE No.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. RT. 10	13-HB-2	TAZEWELL	28	9
FED. ROAD DIST. No. 7		ILLINOIS	PROJECT	

ALL BARS ARE DIMENSIONED OUT TO OUT.

BILL OF MATERIAL
PIER

BAR NO.	SIZE	LENGTH	SHAPE
ha	#5	25'-3"	
hb	#6	25'-3"	
c	#5	1'-2"	
cl	#6	30'-0"	
cr	#6	24'-2"	
n	#5	2'-9"	
nl	#7	3'-10"	
p	#9	20'-0"	
pa	#9	24'-5"	
pb	#9	30'-4"	
pc	#9	21'-0"	
pd	#9	17'-0"	
pe	#6	31'-9"	
pf	#6	24'-5"	
pg	#6	24'-10"	
ph	#6	7'-6"	
s	#5	11'-2"	
sl	#5	9'-2"	
se	#4	6'-11"	
sf	#5	6'-2"	
sg	#4	5'-11"	
ta	#4	6'-0"	
ua	#6	4'-7"	
va	#7	10'-0"	
wa	#7	26'-9"	

CLASS "A" CONCRETE CU. YDS. 148.8
REINFORCEMENT BARS LBS. 15,530
CLASS "A" EXCAVATION CU. YDS. 195
STEEL H PILES LIN. FT. 1935
TEST PILES 1 EACH

NOTE: BAR MARKS WITH SUBSCRIPT "a" ARE SHOWN ONLY IN BILL OF MATERIAL TO DIFFERENTIATE BETWEEN PIER AND ABUTMENT REINFORCEMENT.

PIER NO. 1

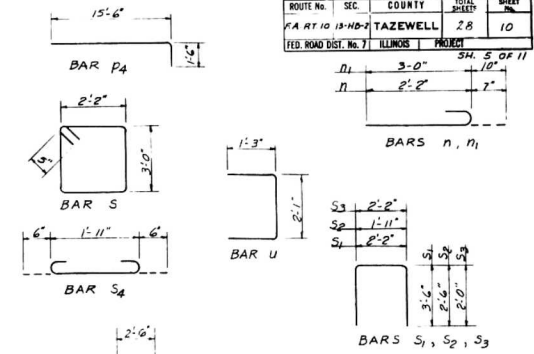
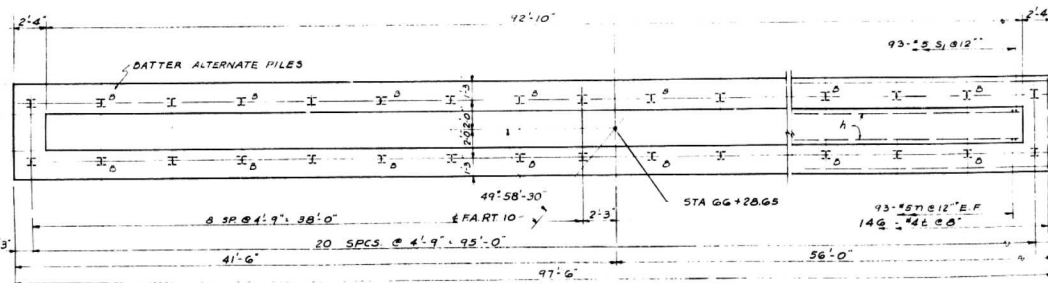
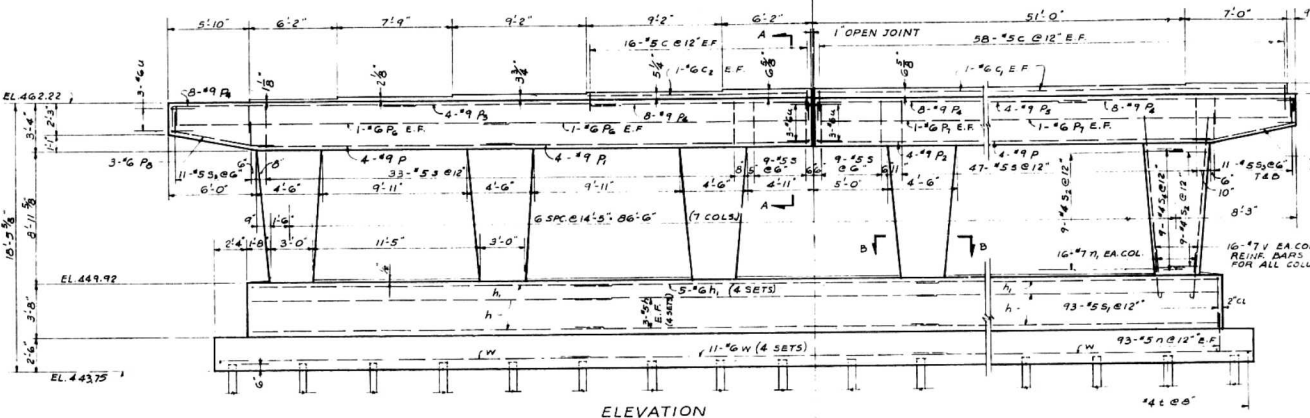
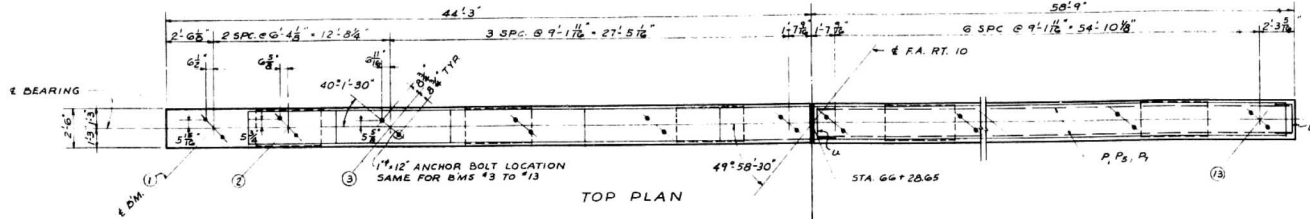
F.A. ROUTE 10 SECTION 13-HB-2
F.A. ROUTE 10 OVER CENTER STREET
STATION 65+93.09
TAZEWELL COUNTY

WARREN AND VAN PRAAG, INC.
CONSULTING ENGINEERS - DECATUR, ILLINOIS

REVISION: 9-29-60 - "PILE DATA" - REMOVED "MIN." FOLLOWING 25 TONS; REMOVED "INCLUDES 4'" FOR NEGATIVE SKIN FRICTION; PILES SHALL PENETRATE TO AT LEAST EL. 400.00'

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE No.	SEC.	COUNTY	TOTAL SHEETS	SHEET
FA RT 10 13-HB-7		TAZEWELL	28	10
FED. ROAD DIST. No. 7		ILLINOIS	PROJECT	



ALL BARS ARE DIMENSIONED OUT TO CUT.

BILL OF MATERIAL 1 PIER

BAR NO.	SIZE	LENGTH	SHAPE
Ha	24	#5	24'-8"
Hb	20	#6	24'-8"
C	14B	#5	17'-7"
C	4	#6	30'-0"
Cp	2	#6	15'-0"
h	18A	#5	8'-9"
h	112	#7	3'-10"
P	8	#9	17'-8"
P	4	#9	22'-5"
P2	4	#9	37'-0"
P2	4	#9	17'-0"
P2	32	#9	17'-0"
P2	4	#6	31'-9"
P2	4	#6	22'-8"
P2	4	#6	24'-10"
P2	6	#6	7'-6"
S	78	#5	11'-2"
S1	12	#5	9'-7"
S2	12	#5	6'-11"
S3	44	#5	6'-2"
S4	63	#4	2'-11"
Ua	146	#4	6'-0"
Ua	12	#6	4'-7"
Va	112	#7	10'-11"
Wa	44	#6	25'-8"

CLASS X CONCRETE C.U. NO. 144.8
REINFORCEMENT BARS L.B.S. 15,330
CLASS A EXCAVATION C.U. NO. 190
CLASS A PILES L.M.F.T. 1845
LAST PILES EACH
NOTE: BAR MARKS WITH SUBSCRIPT "2" ARE SHOWN ONLY IN BILL OF MATERIAL TO DIFFERENTIATE BETWEEN PIER AND ABUTMENT REINFORCEMENT.

PIER NO. 2

F.A. ROUTE 10 SECTION 13-HB-2

F.A. ROUTE 10 OVER CENTER STREET

STATION 65+93.09

TAZEWELL COUNTY

WARREN AND VAN PRAAG, INC.
CONSULTING ENGINEERS - DECATUR, ILLINOIS

DESIGNED H.Y.F.	EXAMINED	ENGINEER OF STRUCTURES
CHECKED P.H.M.	PASSED	ENGINEER OF DESIGN
DRAWN H.Y.F.	APPROVED	CHIEF INCHARGE ENGINEER
CHECKED P.H.M.		

SECTION "B-B"

SECTION "A-A"

PILE DATA

TYPE	STEEL H	8 BP 56
CAPACITY		25 TON
ESTIMATED LENGTH		45'
NO. REQ'D.		42

*** INCLUDES ONE TEST PILE

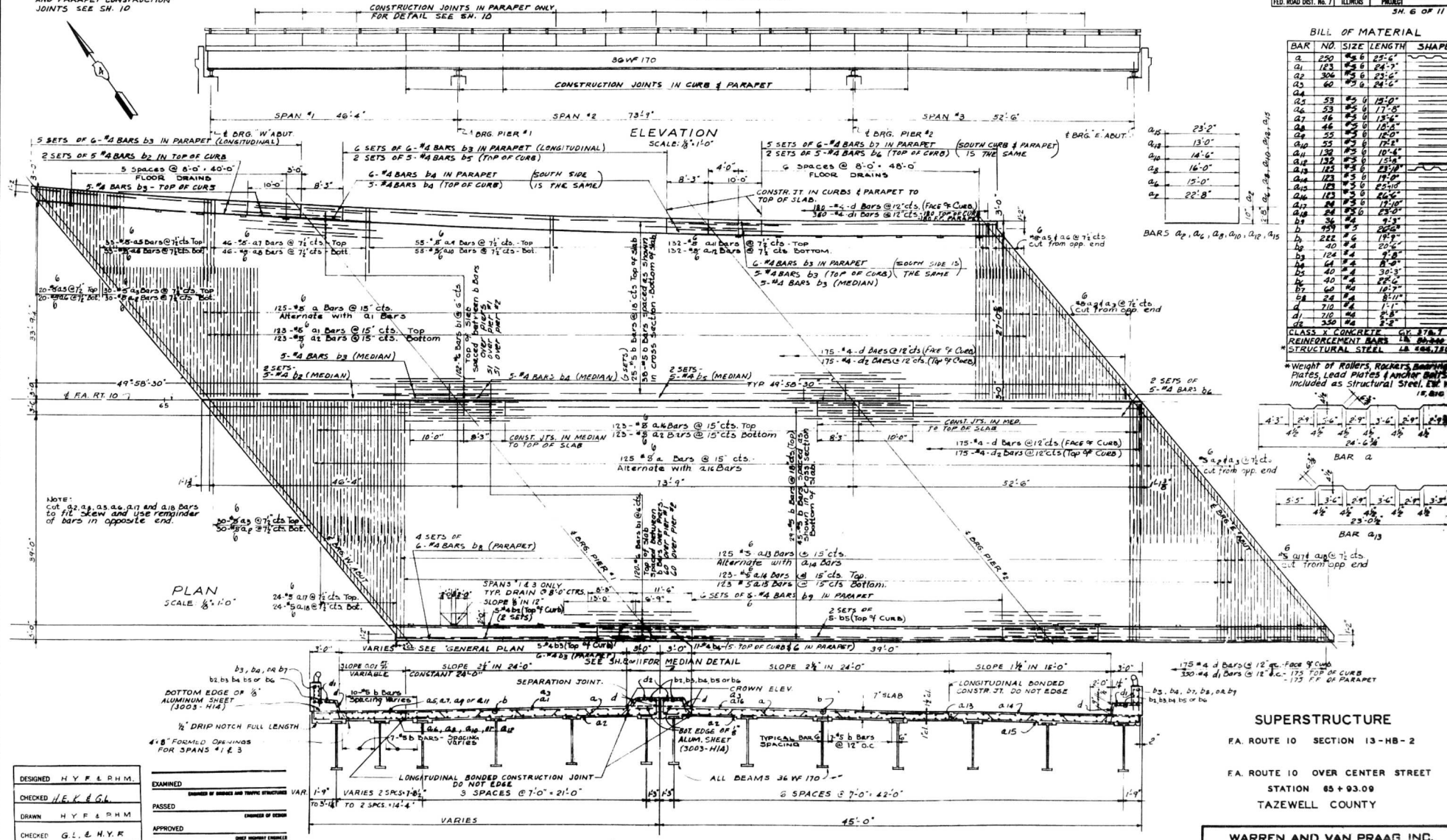
REVISION 9-29-60 - "PILE DATA" REMOVED "MIN." FOLLOWING 25 TONS; REMOVED "INCLUDES 4" NEGATIVE SKIN FRICTION"; PILES SHALL PENETRATE TO AT LEAST EL. 400.0'

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE No.	SEC.	COUNTY	ROAD SECTIONS	NO.
FA. 10	13-HB-2	TAZEWELL	28	11
FED. ROAD DIST. No. 7	ILLINOIS	PROJECT		

SH. 6 OF 11

NOTE:
FOR LOCATION OF ALL CURBS
AND PARAPET CONSTRUCTION
JOINTS SEE SH. 10

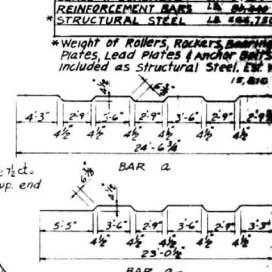


BILL OF MATERIAL

BAR NO.	SIZE	LENGTH	SHAPE
a	250	4.6	23'-6"
a1	123	4.6	24'-7"
a2	306	4.6	23'-6"
a3	60	4.6	24'-6"
a4	53	4.6	15'-0"
a5	53	4.6	17'-8"
a7	46	4.6	15'-6"
a8	46	4.6	15'-6"
a9	55	4.6	17'-8"
a10	55	4.6	17'-8"
a11	132	4.6	10'-4"
a12	123	4.6	15'-6"
a13	123	4.6	15'-6"
a14	123	4.6	24'-0"
a15	123	4.6	19'-0"
a16	123	4.6	19'-0"
a17	24	4.6	23'-0"
a18	24	4.6	23'-0"
b	282	4.6	25'-6"
b1	282	4.6	19'-0"
b2	40	4.6	20'-6"
b3	123	4.6	9'-8"
b4	61	4.6	8'-0"
b5	40	4.6	36'-3"
b6	40	4.6	22'-6"
b7	60	4.6	18'-0"
b8	24	4.6	8'-11"
b9	710	4.6	1'-1"
c	210	4.6	8'-8"
d	250	4.6	5'-8"

CLASS X CONCRETE C.Y. 374.7
REINFORCEMENT BARS 1# 20-200
STRUCTURAL STEEL 2# 200-120

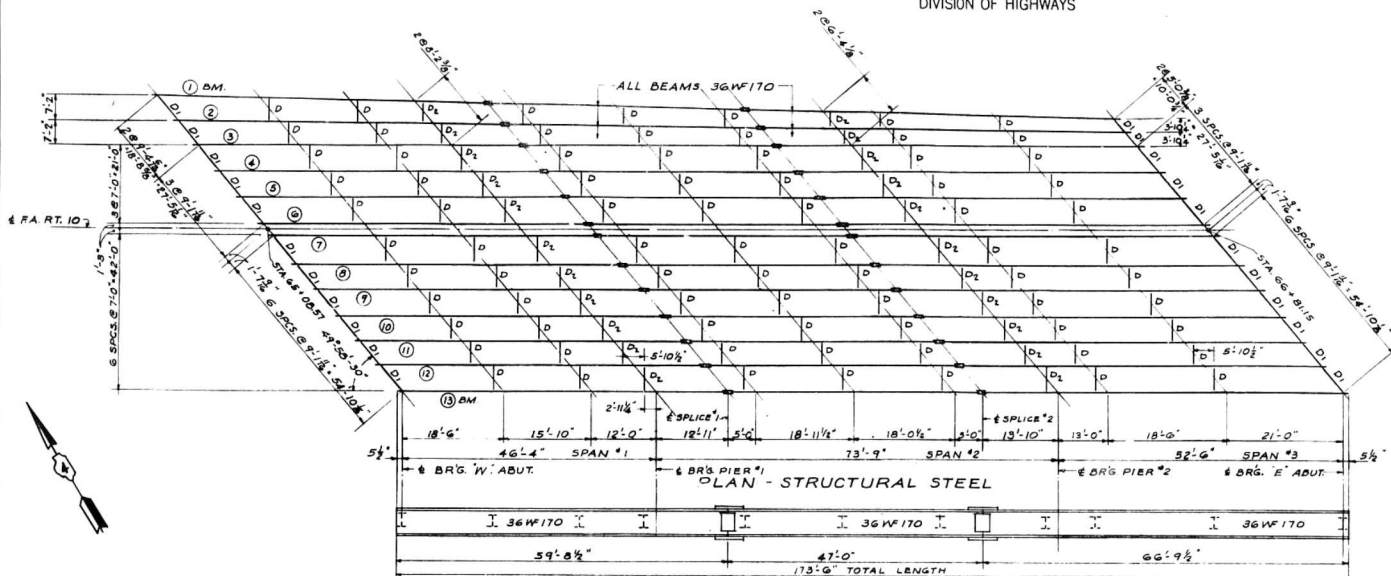
WEIGHT OF ROLLERS, ROCKETS, BRACING PLATES, LEAD PLATES & ANCHOR BARS INCLUDED AS STRUCTURAL STEEL. SEE SH. 15, 20 & 21



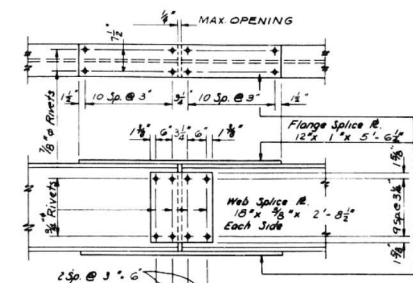
SUPERSTRUCTURE
FA. ROUTE 10 SECTION 13-HB-2
STATION 85+93.09
TAZEWELL COUNTY

DESIGNED	H.Y.F. & P.H.M.	EXAMINED	
CHECKED	H.E.K. & G.L.	DESIGNED BY BRIDGES AND TRAFFIC STRUCTURES	VAR.
DRAWN	H.Y.F. & P.H.M.	PASSED	
CHECKED	G.L. & H.Y.R.	APPROVED	

CROSS SECTION
NO SCALE



BEAM ELEVATION



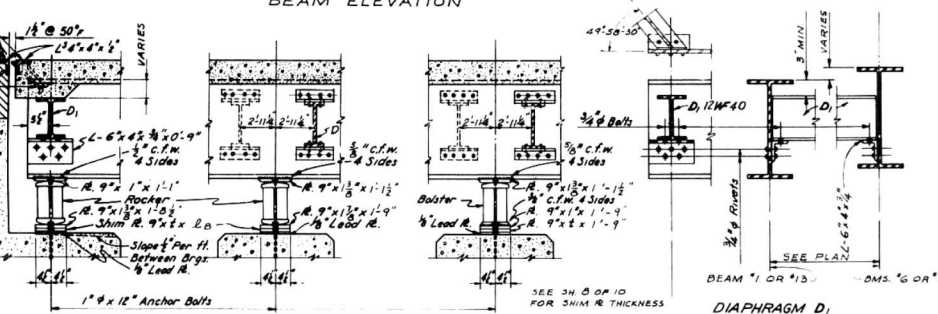
SPlice DETAIL

3/8" VENT HOLES @ ± 2'-0" CLS.
in diagonal top of angles full length of expansion
1/2" # Holes @ 12" for 3/8" Bolts. All Bolts
shall be burned, sawed or clipped off flush
with back of angles after forms are removed.

3/8" # x 8" x 2" or 1020 sll granular or solid flux
filled studs automatically and welded @ 12"
alternate center.

Shaded area to be poured after superstructure
form has been removed.

STRUCTURAL STEEL QUANTITIES
BILLED WITH SUPERSTRUCTURE



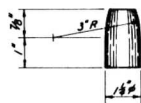
SECTION: AT ABUTMENTS

AT PIER # 1

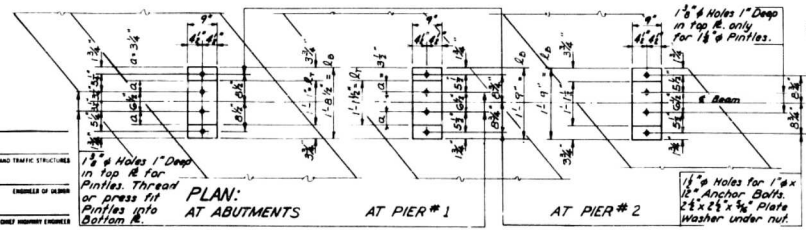
AT PIER # 2

DIAPHRAGM D₁

DIAPHRAGM D₂



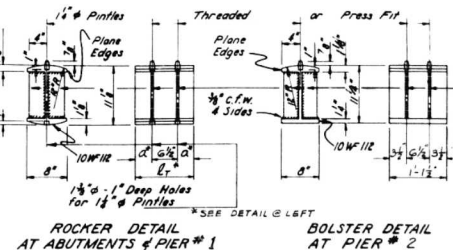
PINTLE DETAIL



PLAN:
AT ABUTMENTS

AT PIER # 1

AT PIER # 2



ROCKER DETAIL
AT ABUTMENTS & PIER # 1

BOLSTER DETAIL
AT PIER # 2

DESIGNED	H. Y. F.
CHECKED	P. H. M.
DRAWN	H. Y. F.
CHECKED	P. H. M.

EXAMINED	ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES
PASSED	ENGINEER OF DESIGN
APPROVED	DEPT. HIGHWAY ENGINEER

SUPERSTRUCTURE
STRUCTURAL STEEL

F.A. ROUTE 10 SECTION 13-HB-2

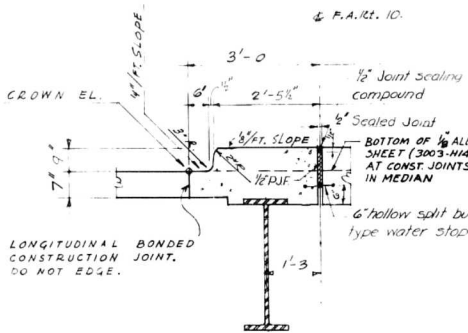
F.A. ROUTE 10 OVER CENTER STREET
STATION 65+93.09
TAZEWELL COUNTY

WARREN AND VAN PRAAG, INC.
CONSULTING ENGINEERS - DECATUR, ILLINOIS

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

NOTE:
FOR DETAIL OF CONST. JOINTS IN
PARAPET SEE SH. 10

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA RTD 13-HB-2	TAZEWELL	28	13	
FED. ROAD DIST. NO. 7	ILLINOIS	34	0	11

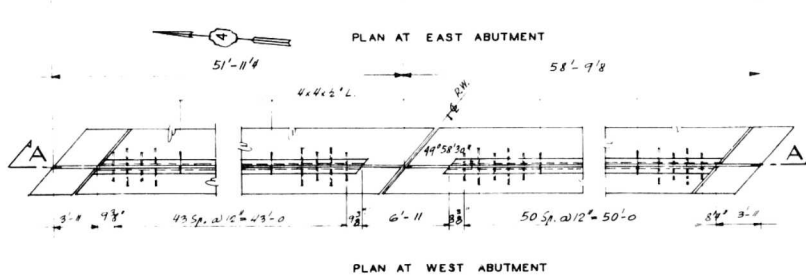
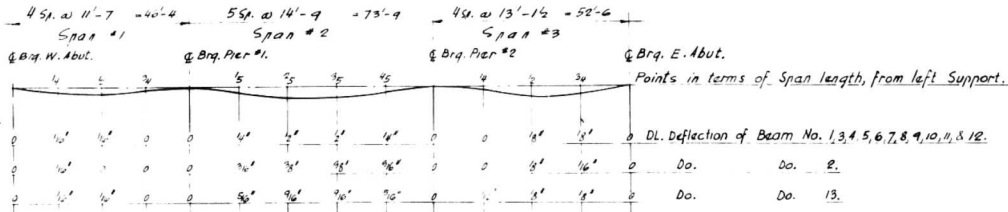
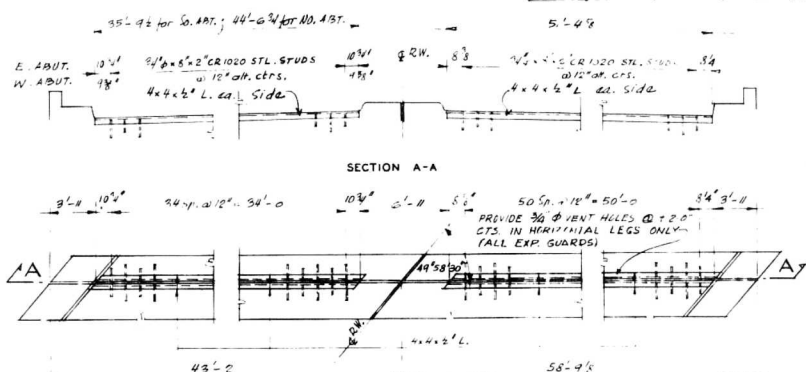
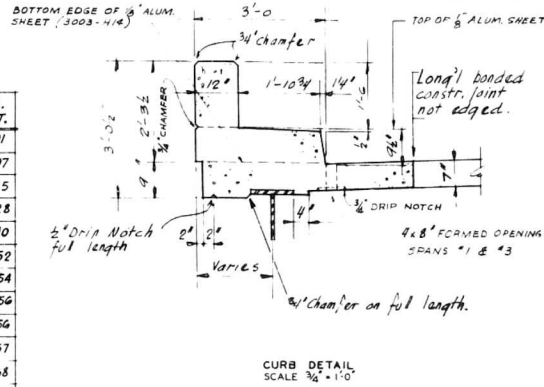


"4" DIMENSIONS OF SHIM PLATES IN INCHES
AS PER STRUCT. DETAIL ON SHEET NO. 7 OF 10
For beams not shown here, 1'-0"

BEAM No.	WEST ABUT.	PIER # 1	PIER # 2	EAST ABUT.
2	0	0	0	34'
7	4	4	4	14'
8	4	12	4	12
9	5	5	5	12
10	5	5	5	5
11	34	34	34	34
12	34	34	34	34

ELEVATIONS - TOP OF BEAMS

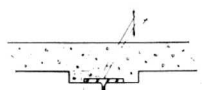
BEAM No.	W. ABUT.	PIER #1	SPLICE #1	SPLICE #2	PIER #2	E. ABUT.
1	464.95	465.50	465.66	466.21	466.38	467.01
2	465.09	465.62	465.78	466.31	466.47	467.07
3	465.22	465.74	465.88	466.41	466.56	467.15
4	465.34	465.86	466.01	466.53	466.69	467.28
5	465.47	465.99	466.13	466.66	466.82	467.40
6	465.58	466.10	466.25	466.77	466.93	467.52
7	465.60	466.12	466.27	466.80	466.95	467.54
8	465.62	466.14	466.29	466.82	466.97	467.56
9	465.63	466.15	466.29	466.82	466.98	467.56
10	465.63	466.15	466.30	466.83	466.98	467.57
11	465.64	466.16	466.30	466.83	466.99	467.58
12	465.64	466.16	466.31	466.84	466.99	467.58
13	465.66	466.18	466.32	466.84	467.01	467.60



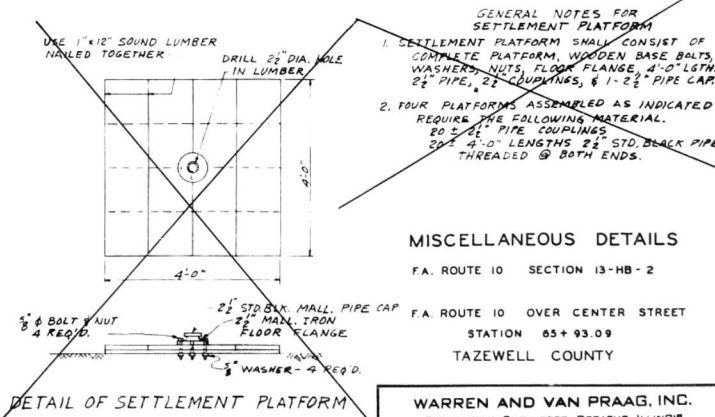
EXPANSION GUARD
REFER TO CROSS SECTION AT
ABUTMENT ON SHEET NO. 7 OF 11
NO SCALE

DESIGNED	P.H.M.	EXAMINED	ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES
CHECKED	Q.L.	PASSED	ENGINEER OF BRIDGE
DRAWN	S.L.	APPROVED	CHIEF HIGHWAY ENGINEER
CHECKED	P.H.M. & H.Y.F.		

DEAD LOAD DEFLECTION DIAGRAM



METHOD OF DETERMINING
FILLET HEIGHT "1"



MISCELLANEOUS DETAILS
F.A. ROUTE 10 OVER CENTER STREET
STATION 65+93.09
TAZEWELL COUNTY
WARREN AND VAN PRAAG, INC.
CONSULTING ENGINEERS - DECATUR, ILLINOIS

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOWNSHIP	RANGE
FA 10	13	TAZEWELL	Z.B.	15
PER. ROAD DIST. NO. 7	ILLINOIS			PROJECT
SH. NO. 10 OF 11				

TABLES
ELEVATIONS - TOP OF DECK
OVER BEAMS

STA. ALONG F.A. RT. 10	OFFSET FROM #	ELEV. TOP OF DECK	CORR. ELEV. TOP OF DECK	SPR. NO.	CORR. ELEV. TOP OF DECK	
					465.55	465.65
6600.804	23.249	465.795	465.795			
6600.783	12.289	465.783	465.783			
6600.662	8.249	465.682	465.682			
6600.571	1.289	465.671	465.671			
6600.411	0.000	465.611	465.611			
6600.370	15.251	465.289	465.289			
6600.227	0.000	465.227	465.227			
6600.154	15.251	465.154	465.154			
6599.985	26.251	464.985	464.985			
6599.904	43.251	464.904	464.904			
6599.850	20.249	464.850	464.850			
6599.733	12.251	464.733	464.733			
6599.650	15.249	464.650	464.650			
6599.509	21.251	464.509	464.509			
6599.430	15.251	464.430	464.430			
6599.309	21.251	464.309	464.309			
6599.257	15.249	464.257	464.257			
6599.146	43.251	464.146	464.146			
6599.040	20.249	464.040	464.040			
6598.950	15.249	463.950	463.950			
6598.811	15.251	463.811	463.811			
6598.724	1.249	463.724	463.724			
6598.644	0.000	463.644	463.644			
6598.573	1.251	463.573	463.573			
6598.430	15.251	463.430	463.430			
6598.309	21.251	463.309	463.309			
6598.257	15.249	463.257	463.257			
6598.146	43.251	463.146	463.146			
6598.040	20.249	463.040	463.040			
6597.950	15.249	462.950	462.950			
6597.811	15.251	462.811	462.811			
6597.724	1.249	462.724	462.724			
6597.644	0.000	462.644	462.644			
6597.573	1.251	462.573	462.573			
6597.430	15.251	462.430	462.430			
6597.309	21.251	462.309	462.309			
6597.257	15.249	462.257	462.257			
6597.146	43.251	462.146	462.146			
6597.040	20.249	462.040	462.040			
6596.950	15.249	461.950	461.950			
6596.811	15.251	461.811	461.811			
6596.724	1.249	461.724	461.724			
6596.644	0.000	461.644	461.644			
6596.573	1.251	461.573	461.573			
6596.430	15.251	461.430	461.430			
6596.309	21.251	461.309	461.309			
6596.257	15.249	461.257	461.257			
6596.146	43.251	461.146	461.146			
6596.040	20.249	461.040	461.040			
6595.950	15.249	460.950	460.950			
6595.811	15.251	460.811	460.811			
6595.724	1.249	460.724	460.724			
6595.644	0.000	460.644	460.644			
6595.573	1.251	460.573	460.573			
6595.430	15.251	460.430	460.430			
6595.309	21.251	460.309	460.309			
6595.257	15.249	460.257	460.257			
6595.146	43.251	460.146	460.146			
6595.040	20.249	460.040	460.040			
6594.950	15.249	459.950	459.950			
6594.811	15.251	459.811	459.811			
6594.724	1.249	459.724	459.724			
6594.644	0.000	459.644	459.644			
6594.573	1.251	459.573	459.573			
6594.430	15.251	459.430	459.430			
6594.309	21.251	459.309	459.309			
6594.257	15.249	459.257	459.257			
6594.146	43.251	459.146	459.146			
6594.040	20.249	459.040	459.040			
6593.950	15.249	458.950	458.950			
6593.811	15.251	458.811	458.811			
6593.724	1.249	458.724	458.724			
6593.644	0.000	458.644	458.644			
6593.573	1.251	458.573	458.573			
6593.430	15.251	458.430	458.430			
6593.309	21.251	458.309	458.309			
6593.257	15.249	458.257	458.257			
6593.146	43.251	458.146	458.146			
6593.040	20.249	458.040	458.040			
6592.950	15.249	457.950	457.950			
6592.811	15.251	457.811	457.811			
6592.724	1.249	457.724	457.724			
6592.644	0.000	457.644	457.644			
6592.573	1.251	457.573	457.573			
6592.430	15.251	457.430	457.430			
6592.309	21.251	457.309	457.309			
6592.257	15.249	457.257	457.257			
6592.146	43.251	457.146	457.146			
6592.040	20.249	457.040	457.040			
6591.950	15.249	456.950	456.950			
6591.811	15.251	456.811	456.811			
6591.724	1.249	456.724	456.724			
6591.644	0.000	456.644	456.644			
6591.573	1.251	456.573	456.573			
6591.430	15.251	456.430	456.430			
6591.309	21.251	456.309	456.309			
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6590.950	15.249	455.950	455.950			
6590.811	15.251	455.811	455.811			
6590.724	1.249	455.724	455.724			
6590.644	0.000	455.644	455.644			
6590.573	1.251	455.573	455.573			
6590.430	15.251	455.430	455.430			
6590.309	21.251	455.309	455.309			
6590.257	15.249	455.257	455.257			
6590.146	43.251	455.146	455.146			
6590.040	20.249	455.040	455.040			
6589.950	15.249	454.950	454.950			
6589.811	15.251	454.811	454.811			
6589.724	1.249	454.724	454.724			
6589.644	0.000	454.644	454.644			
6589.573	1.251	454.573	454.573			
6589.430	15.251	454.430	454.430			
6589.309	21.251	454.309	454.309			
6589.257	15.249	454.257	454.257			
6589.146	43.251	454.146	454.146			
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6588.573	1.251	453.573	453.573			
6588.430	15.251	453.430	453.430			
6588.309	21.251	453.309	453.309			
6588.257	15.249	453.257	453.257			
6588.146	43.251	453.146	453.146			
6588.040	20.249	453.040	453.040			
6587.950	15.249	452.950	452.950			
6587.811	15.251	452.811	452.811			
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6587.573	1.251	452.573	452.573			
6587.430	15.251	452.430	452.430			
6587.309	21.251	452.309	452.309			
6587.257	15.249	452.257	452.257			
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6587.040	20.249	452.040	452.040			
6586.950	15.249	451.950	451.950			
6586.811	15.251	451.811	451.811			
6586.724	1.249	451.724	451.724			
6586.644	0.000	451.644	451.644			
6586.573	1.251	451.573	451.573			
6586.430	15.251	451.430	451.430			
6586.309	21.251	451.309	451.309			
6586.257	15.249	451.257	451.257			
6586.146	43.251	451.146	451.146			
6586.040	20.249	451.040	451.040			
6585.950	15.249	450.950	450.950			
6585.811	15.251	450.811	450.811			
6585.724	1.249	450.724	450.724			
6585.644	0.000	450.644	450.644			
6585.573	1.251	450.573	450.573			
6585.430	15.251	450.430	450.430			
6585.309	21.251	450.309	450.309			
6585.257	15.249	450.257	450.257			
6585.146	43.251	450.146	450.146			
6585.040	20.249	450.040	450.040			
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6584.430	15.251	449.430	449.430			
6584.309	21.251	449.309	449.309			
6584.257	15.249	449.257	449.257			
6584.146	43.251	449.146	449.146			
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6583.811	15.251	448.811	448.811			
6583.724	1.249	448.724	448.724			
6583.644	0.000	448.644	448.644			
6583.573	1.251	448.573	448.573			
6583.430	15.251	448.430	448.430			
6583.309	21.251	448.309	448.309			
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6582.811	15.251	447.811	447.811			
6582.724	1.249	447.724	447.724			
6582.644	0.000	447.644	447.644			
6582.573	1.251					

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE No.	SEC.	COUNTY	FOOT SHEET	SHEET No.
1A 10	13-HB-2	TAZEWELL	2B	16
FED. ROAD DIST. No. 7 ILLINOIS PROJECT				

TEST BORING NO. 1
15 FT., LT., STA. 65+05.00

TEST BORING NO. 2
26 FT., RT., STA. 65+32.66

TEST BORING NO. 3
20 FT., LT., STA. 65+39.80

TEST BORING NO. 4
20 FT., RT., STA. 65+72.10

TEST BORING NO. 5
16 FT., LT., STA. 65+16.16

ELEV.	GROUND SURFACE ELEVATION 440.0	N	q _u	REMARKS
450	BROWN SILTY CLAY, TRACE SAND, GRAVEL AND ORGANIC, DRY.	16	-	STIFF
		7	0.60	MOIST, MED.
	BROWN SILTY CLAY, TRACE SAND AND GRAVEL, MOIST.	10	0.17	STIFF
		7	0.17	MEDIUM
440	GROUND WATER ELEVATION 442.0	5	0.20	
	BROWN SANDY CLAYEY SILT, MOIST	5	-	LOOSE
		4	-	
430	GRAY SANDY GRAVEL, TRACE SILT, CLAY, WET	3	-	VERY LOOSE
	GRAY GRAVELLY SAND, TRACE SILT, WET	6	-	LOOSE
		6	-	
	GRAY SILTY CLAY, TRACE SAND AND GRAVEL, MOIST	6	-	MEDIUM
		6	-	
	BROWN SANDY GRAVEL, WET	20	-	MEDIUM
		20	-	VERY DENSE
		61	-	
	BROWN SAND MOIST	78	-	
		80	-	
	BROWN SANDY GRAVEL, WET	80	-	
		99	-	
400	END OF BORING ELEVATION 401.0			
300				

* GRAY SANDY SILT, MOIST.

ELEV.	GROUND SURFACE ELEVATION 440.5	N	q _u	REMARKS
450	BROWN SILTY CLAY, TRACE SAND, GRAVEL, AND ORGANIC, DRY.	8	-	MEDIUM
		9	-	STIFF
	BROWN SILTY CLAY, TRACE OF SAND AND GRAVEL, MOIST.	13	1.00	
440	GROUND WATER ELEVATION 443.1	9	0.76	
	BROWN SILTY SAND, WET	9	0.80	LOOSE
		10	-	
430	GRAY SILTY SAND, WET	14	-	MEDIUM
		6	-	LOOSE
		32	-	DENSE
420	GRAY SANDY GRAVEL, WET	31	-	
		32	-	
	BROWN SANDY GRAVEL, WET.	66	-	VERY DENSE
		61	-	DENSE
		410	-	
		462	-	VERY DENSE
		130	-	
		04	-	
400	END OF BORING ELEVATION 398.0			
390				

* BROWN SILTY CLAY, TRACE SAND, GRAVEL AND ORGANIC, DRY.

ELEV.	GROUND SURFACE ELEVATION 448.5	N	q _u	REMARKS
450	BROWN ORGANIC SANDY CLAYEY SILT, MOIST	7	-	MEDIUM
		9	-	LOOSE
	YELLOW SILTY CLAY, MOIST	10	-	STIFF
440	BROWN SILTY CLAY, TRACE SAND AND GRAVEL, MOIST	7	0.55	MEDIUM
		4	0.50	SOFT
	GROUND WATER ELEVATION 438.8	4	-	
430	GRAY SILTY CLAY, TRACE SAND AND GRAVEL, MOIST.	4	1.28	
		5	1.07	MEDIUM
		6	2.93	
		5	2.00	
		5	1.07	
420		7	-	
		17	-	MEDIUM
	GRAY SANDY GRAVEL, WET	18	-	
	GRAY CLAYEY SILT, MOIST	25	-	
	BROWN SANDY GRAVEL, WET	26	-	
		42	-	DENSE
	GRAY SANDY SILT, WET	32	-	
	BROWN SANDY GRAVEL, WET	94	-	VERY DENSE
400	END OF BORING ELEVATION 393.0			
390				

* BROWN SILTY CLAY, TRACE SAND, GRAVEL AND ORGANIC, DRY.

ELEV.	GROUND SURFACE ELEVATION 440.5	N	q _u	REMARKS
450	BROWN ORGANIC SILTY CLAY, MOIST	10	1.00	STIFF
		13	0.75	
440	BROWN SILTY CLAY, TRACE SAND AND GRAVEL, MOIST	7	-	MEDIUM
		7	-	
	GROUND WATER ELEVATION 436.0	7	-	
	BROWN SAND, TRACE SILT, WET	8	-	LOOSE
430	GRAY SILT, TRACE SAND AND CLAY, MOIST	7	0.76	LOOSE
		9	1.28	STIFF
	GRAY SILTY CLAY, TRACE ORGANIC, MOIST.	9	1.28	
		10	1.00	
	GRAY SANDY SILTY CLAY, TRACE GRAVEL, MOIST	40	-	VERY STIFF
		20	-	MEDIUM
420	BROWN SANDY GRAVEL, WET	32	-	DENSE
		50	-	VERY DENSE
		65	-	
		61	-	
		99	-	VERY DENSE
		139	-	
		140	-	
400	END OF BORING ELEVATION 391.8			
390				

* BROWN SILTY CLAY, TRACE SAND, GRAVEL AND ORGANIC, DRY.

ELEV.	GROUND SURFACE ELEVATION 448.1	N	q _u	REMARKS
450	BROWN ORGANIC SILTY CLAY, TRACE SAND AND GRAVEL, MOIST	22	-	VERY STIFF
		13	-	STIFF
440	BROWN SILTY CLAY, MOIST	10	0.55	
		10	2.39	
	BROWN SILTY CLAY, TRACE SAND AND GRAVEL, MOIST	7	-	
		7	-	
430	GRAY SILT, TRACE SAND AND CLAY, MOIST	7	0.76	LOOSE
		9	1.28	STIFF
	GRAY SILTY CLAY, TRACE ORGANIC, MOIST.	9	1.28	
		10	1.00	
	GRAY SANDY SILTY CLAY, TRACE GRAVEL, MOIST	40	-	VERY STIFF
		20	-	MEDIUM
420	BROWN SANDY GRAVEL, WET	32	-	DENSE
		36	-	DENSE
		40	-	
		41	-	MEDIUM
		22	-	
		27	-	
		30	-	
		30	-	
		104	-	
		91	-	
400	END OF BORING ELEVATION 397.0			
390				

SOIL BORINGS
FA. ROUTE 10 SECTION 13-HB-2

FA. ROUTE 10 OVER CENTER STREET
STATION 85+93.09
TAZEWELL COUNTY

WARREN AND VAN PRAAG, INC.
CONSULTING ENGINEERS - DECATUR, ILLINOIS

TEST BORING NO. 6
30 FT., RT., STA. 66+24.25

TEST BORING NO. 7
20 FT., LT., STA. 66+55.76

TEST BORING NO. 8
20 FT., RT., STA. 66+39.35

ELEV.	GROUND SURFACE ELEVATION 448.0	N	q _u	REMARKS
450		13	-	STIFF
		13	1.80	
	BROWN SILTY CLAY, TRACE SAND AND GRAVEL, MOIST	10	1.89	
		7	0.97	MEDIUM
		6	0.75	
	GROUND WATER ELEVATION 435.0	6	-	
	BROWN SANDY SILTY CLAY, WET	7	1.27	
430	GRAY CLAYEY SILT, MOIST	5	1.16	LOOSE
		5	-	
	GRAY SILTY SAND, TRACE ORGANIC, MOIST	8	-	
	GRAY CLAYEY SANDY SILT, WET	7	-	
	GRAY SILTY SAND, TRACE CLAY, MOIST	13	-	MEDIUM
	GRAY SAND, TRACE SILT, WET	18	-	MEDIUM
		66	-	VERY DENSE
	BROWN SANDY GRAVEL, WET	75	-	
		72	-	
		78	-	
		83	-	
		93	-	
		137	-	
400	END OF BORING ELEVATION 396.5			
390				

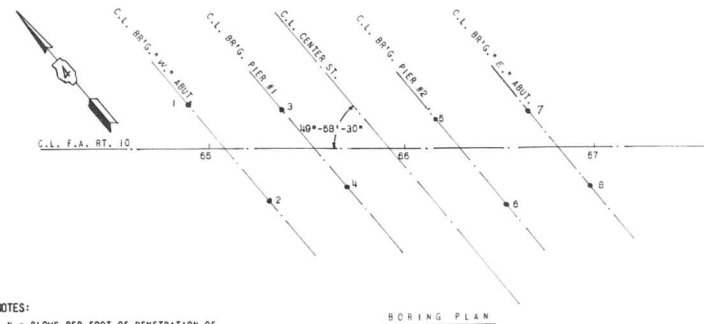
* BROWN SILTY CLAY, TRACE SAND, GRAVEL, AND ORGANIC, DRY.

ELEV.	GROUND SURFACE ELEVATION 448.2	N	q _u	REMARKS
450	BROWN SILTY CLAY, TRACE SAND AND GRAVEL, MOIST	9	2.00	STIFF
		12	2.00	
		16	3.17	VERY STIFF
440	GROUND WATER ELEVATION 438.2	6	1.15	MEDIUM
		6	0.25	
		7	-	
430	GRAY SILTY CLAY, TRACE SAND AND GRAVEL MOIST	9	1.78	STIFF
		10	2.00	
		6	1.78	MEDIUM
		7	0.50	
420	BROWN SANDY GRAVEL, WET	47	-	DENSE
		25	-	MEDIUM
		18	-	
		37	-	DENSE
		140	-	VERY DENSE
410		88	-	
		69	-	
		83	-	
		79	-	
400	END OF BORING ELEVATION 399.2			
390				

* BROWN SILTY CLAY, TRACE SAND, GRAVEL, AND ORGANIC, DRY.

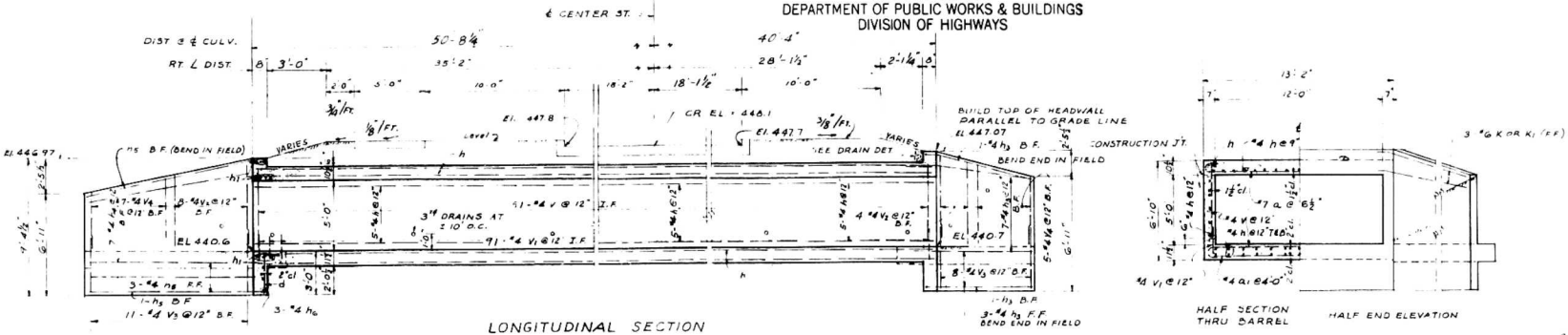
ELEV.	GROUND SURFACE ELEVATION 447.9	N	q _u	REMARKS
450	BROWN SILTY CLAY, TRACE SAND, AND GRAVEL, MOIST	14	-	STIFF
		15	1.10	
440	GROUND WATER ELEVATION 433.0	12	1.00	
		8	0.68	MEDIUM
		7	0.75	
	GROUND WATER ELEVATION 433.0	8	1.10	STIFF
430	BROWN CLAYEY SILTY SAND, WET	10	-	MEDIUM
		4	-	VERY LOOSE
	GRAY SILTY SAND, WET	5	-	MEDIUM
	GRAY SILTY CLAY, TRACE SAND, MOIST	6	-	LOOSE
	GRAY SILT, TRACE SAND AND CLAY, MOIST	7	-	
420	GRAY SAND, TRACE SILT, WET	6	-	
		11	-	
	GRAY SAND, TRACE SILT AND ORGANIC, WET	17	-	MEDIUM
		62	-	VERY DENSE
410	BROWN SANDY GRAVEL, WET	78	-	
		72	-	
		80	-	
		71	-	
400	END OF BORING ELEVATION 396.4			
390				

* BROWN SILTY CLAY, TRACE SAND, GRAVEL ORGANIC, DRY.

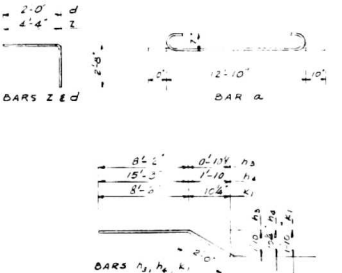
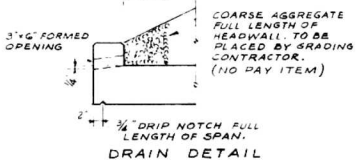
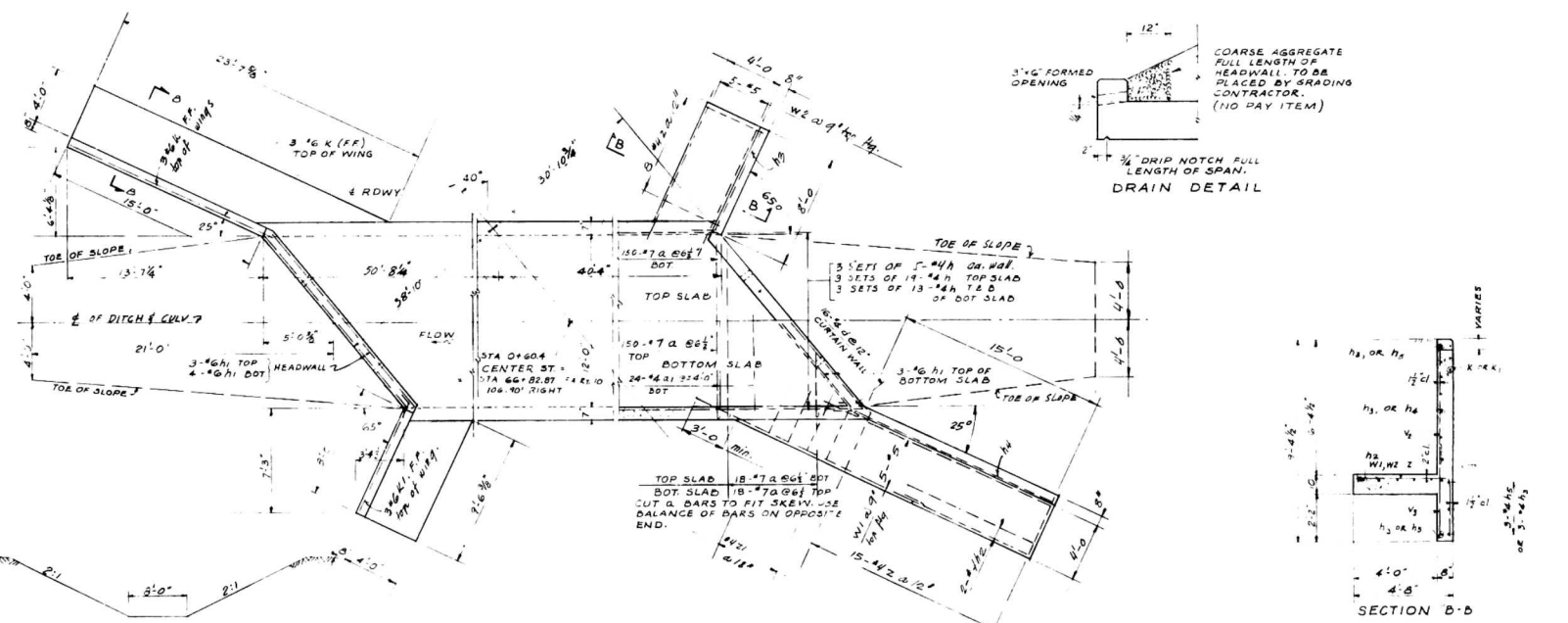


NOTES:
N = BLOWS PER FOOT OF PENETRATION OF SAMPLING SPOON. HAMMER WEIGHT = 140 LBS. DROP = 30 INCHES.
q_u = UNCONFINED COMPRESSIVE STRENGTH IN TONS PER SQUARE FOOT.

DESIGNED	HYF	EXAMINED	
CHECKED	HEX	ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES	
DRAWN	HYF	PASSED	
CHECKED	HEX	ENGINEER OF DESIGN	
		APPROVED	CHIEF SURVEY ENGINEER



GENERAL NOTES
CLASS X CONCRETE SHALL BE USED THROUGHOUT
EXPOSED EDGES SHALL BE BEVELED EXCEPT AS SHOWN
FOR BACKFILLING AND EMBANKMENT SEE STANDARD SPECIFICATIONS
ALL BARS SHALL BE LAPPED 20 DIA UNLESS OTHERWISE SHOWN
THE TOP OF CURBETS, THE BACKS OF THE EXTERIOR WALLS ABOVE THE LOWER CONSTRUCTION JOINT AND BACK OF THE WINGS ABOVE THE TOP OF THE FOOTINGS SHALL BE WATERPROOFED IN ACCORDANCE WITH STANDARD SPECIFICATIONS ARTICLE 5.02



BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	BAR	NO.	SIZE	LENGTH
X	336	#7	14'-5"	Y	182	#4	51'-3"
Z	24	#4	12'-10"	W	182	#4	51'-3"
K	6	#6	16'-0"	V	24	#4	41'-0"
K1	6	#6	10'-0"	U	24	#4	31'-0"
h	155	#4	31'-3"	d	32	#4	41'-0"
h1	20	#6	16'-0"	h2	4	#4	17'-0"
h2	4	#4	10'-0"	W1	10	#5	17'-0"
h3	24	#4	10'-2"	W2	10	#5	17'-0"
h4	14	#4	17'-3"	Z	48	#4	7'-0"
h5	10	#4	16'-0"	Z1	8	#4	4'-0"
h6	6	#4	17'-0"				
CLASS X CONCRETE			50.00	119.3			
REINFORCEMENT BAR				16,650			

DESIGN STRESSES
F_c = 20000 PSI REINFORCEMENT
F_s = 10000 PSI FOR WING & WALLS
F_s = 14000 PSI FOR SLABS
F_s = 10

LOADING 420 516

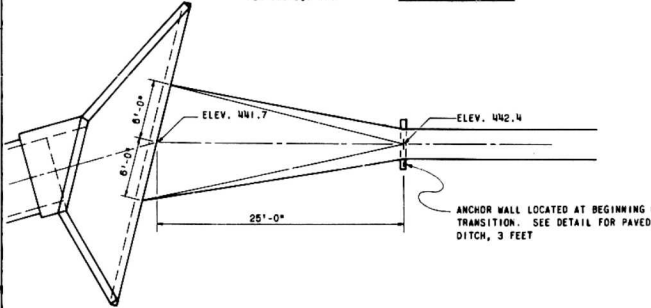
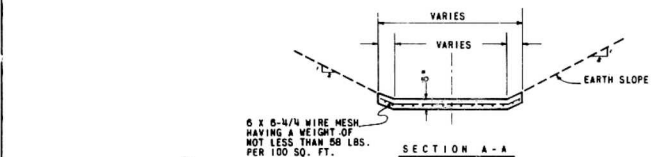
GENERAL PLAN & SECTION
F.A. ROUTE 10 SECTION 13
106.90' RT. OF STATION 66+52.87
REINFORCED CONCRETE BOX CULVERT
CENTER STREET
TAZEWELL COUNTY

DESIGNED	H.Y.F.	EXAMINED	
CHECKED	G.L.	ENGINEER OF BRIDGES AND TOWNSHIP ENGINEER	
DRAWN	H.Y.F.	PASSED	
CHECKED	G.L. & H.J.K.	ENGINEER OF DESIGN	
		APPROVED	
		DEPT. HIGHWAY ENGINEER	



LEGEND
T & D = TOP & BOTTOM OF FACE
I F = INSIDE FACE
B F = BOTTOM OF FACE
F F = FRONT FACE

WARREN AND VAN PRAAG, INC.
CONSULTING ENGINEERS - DECATUR, ILLINOIS

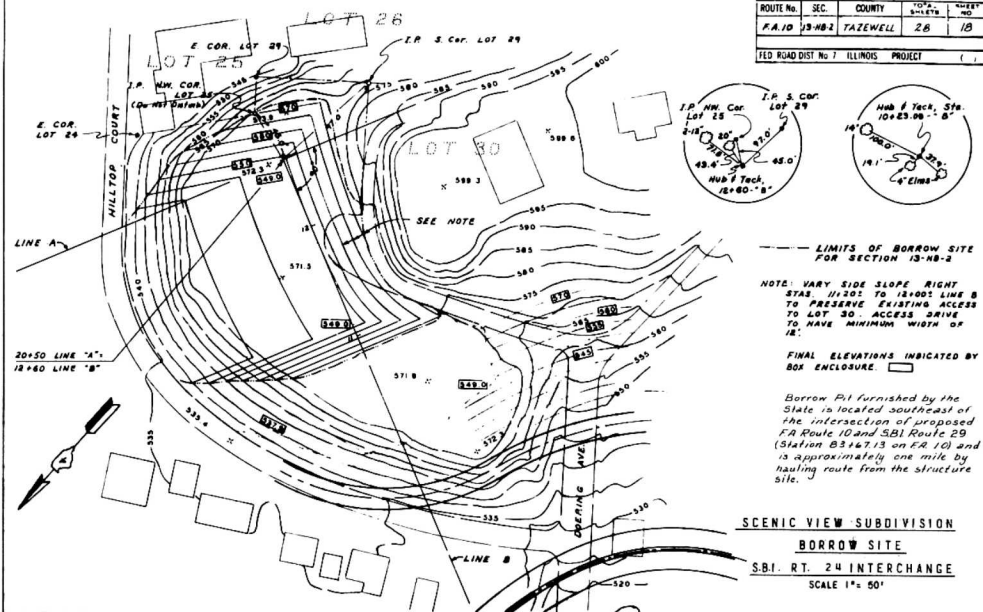


TRANSITION FOR PAVED DITCH
NO SCALE

GENERAL NOTES

CLASS "X" CONCRETE SHALL BE USED THROUGHOUT.
WIRE MESH SHOWN ON THE DETAIL SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE ITEMS OF WORK INVOLVED AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
TRANSITION WILL BE PAID FOR AS CLASS "X" CONCRETE WHICH SHALL BE FULL PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS TO COMPLETE THE TRANSITION IN PLACE AS SHOWN ON PLANS, DETAILS AND IN ACCORDANCE WITH THE SPECIFICATIONS.

ROUTE No.	SEC.	COUNTY	TOWNSHIP	RANGE
P.A. 10 13-40-2		TAZEWELL	28	1B
LED ROAD DIST No 7 ILLINOIS PROJECT				



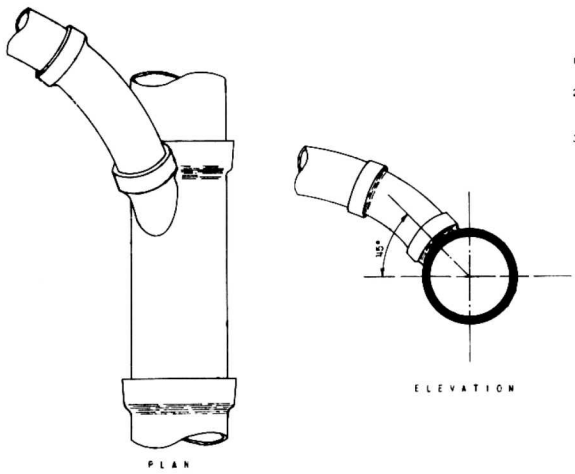
LIMITS OF BORROW SITE FOR SECTION 13-40-2

NOTE: VARY SIDE SLOPE RIGHT STAY 12:00 TO 12:00: LINE B TO PRESERVE EXISTING ACCESS TO LOT 30. ACCESS DRIVE TO HAVE MINIMUM WIDTH OF 12'.

FINAL ELEVATIONS INDICATED BY BOX ENCLOSURE.

Borrow Pit furnished by the State is located southeast of the intersection of proposed EA Route 10 and SR1 Route 29 (Station B3+7.13 on EA 10) and is approximately one mile by hauling route from the structure site.

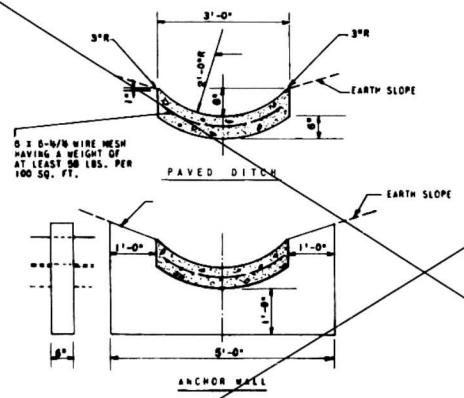
SCENIC VIEW SUBDIVISION BORROW SITE
S.B.I. RT. 24 INTERCHANGE
SCALE 1" = 50'



STUB CONNECTION DETAIL
NO SCALE

GENERAL NOTES

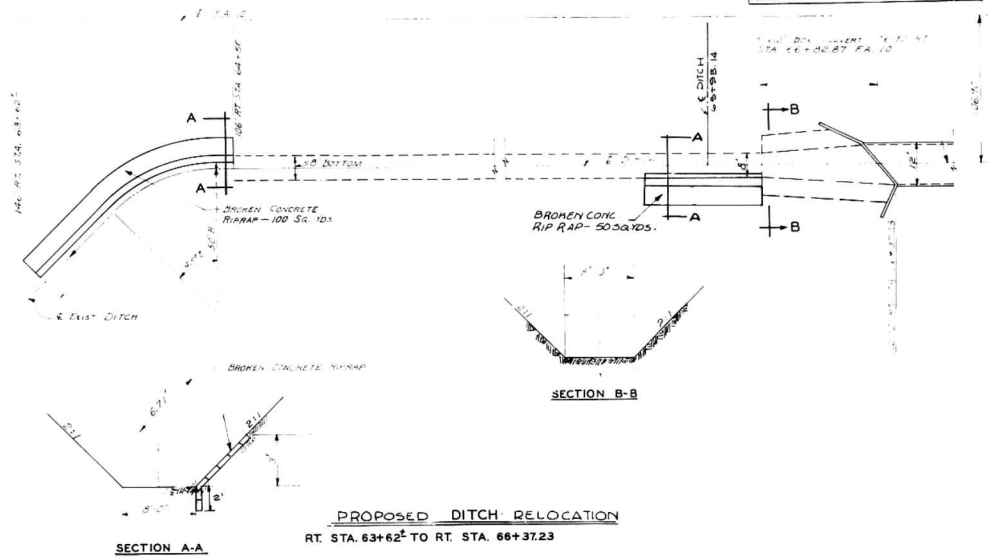
1. STUB SHALL CONSIST OF A STANDARD "Y" BRANCH AND SUITABLE STRAIGHT PIPE, CURVES AND STOPPERS.
2. NEW CONNECTIONS SHALL BE MADE WITH PIPE NOT LESS THAN THE SIZE EXISTING IN PRESENT CONNECTION.
3. WHERE DIFFERENCE IN ELEVATION BETWEEN THE EXISTING HOUSE CONNECTION, AT THE POINT WHERE CONNECTION TO LATERAL IS TO BE MADE, AND THE LATERAL IS EXCESSIVE: STRAIGHT LENGTHS OF PIPE MAY BE INSTALLED BETWEEN THE "Y" BRANCH AND THE FIRST CURVED SECTION.



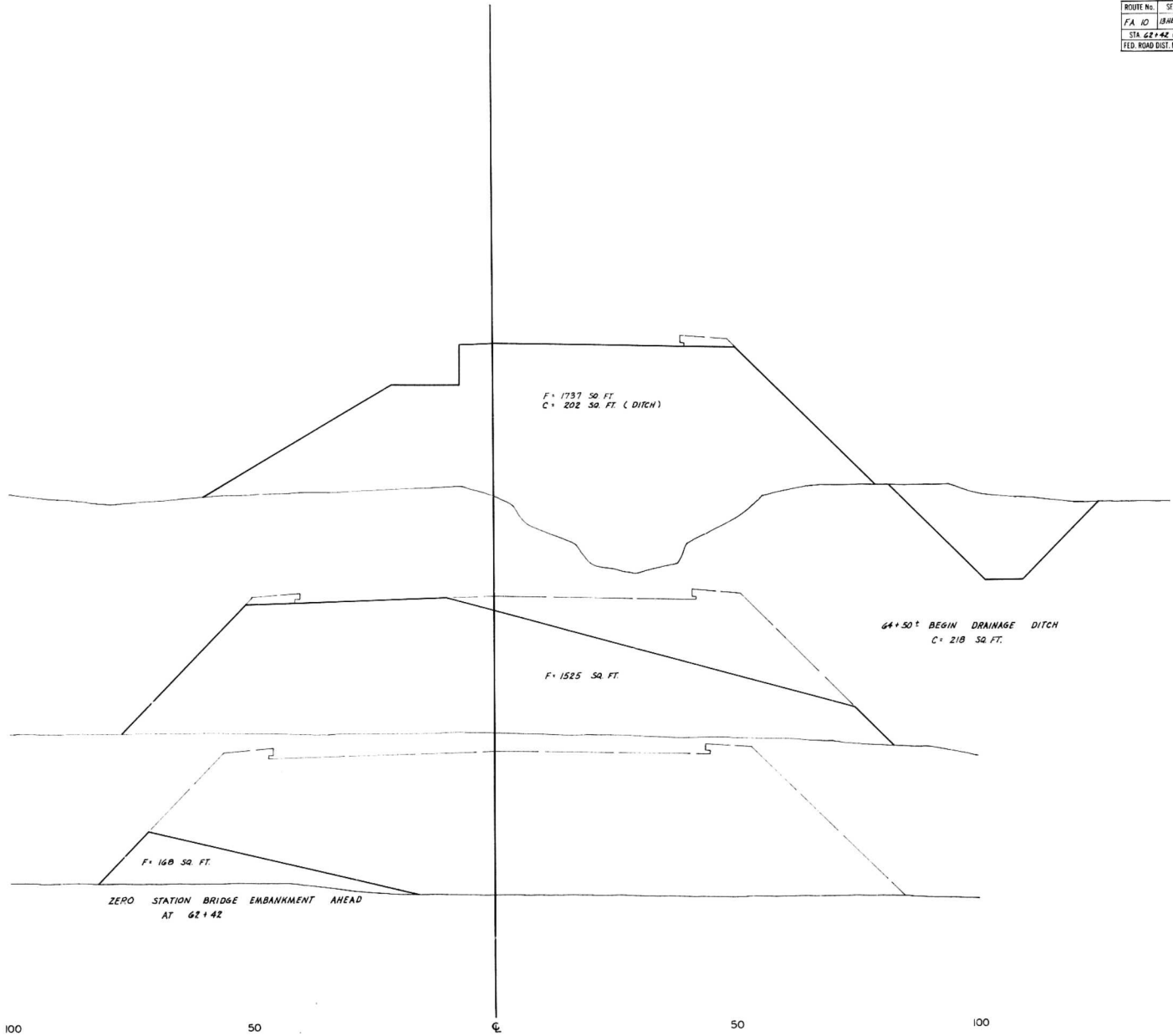
PAVED DITCH, 3 FEET
NO SCALE

GENERAL NOTES

CLASS "X" CONCRETE SHALL BE USED THROUGHOUT.
PAVED DITCH SHALL BE BUILT AT LOCATIONS SHOWN ON PLANS AND WHERE DESIGNATED BY THE ENGINEER. ANCHOR WALLS SHALL BE BUILT (1) AT THE BEGINNING AND END OF EACH SERIES AND (2) AT INTERVALS OF NOT MORE THAN 100 LIN. FT. ALONG PAVED DITCH.
ANCHOR WALLS AND WIRE MESH SHOWN ON THE DETAIL SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER LINEAL FOOT FOR PAVED DITCH, 3 FEET, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
3.5 CUBIC CLASS X CONCRETE



ROUTE No.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA 10	BHW-2	TAZEVELL	28	20
STA. 62+42 (P.A. 10) TO STA. 65+00 (P.A. 10)				
FED. ROAD DIST. No. 7 ILLINOIS PROJECT ()				



455

65

455

64

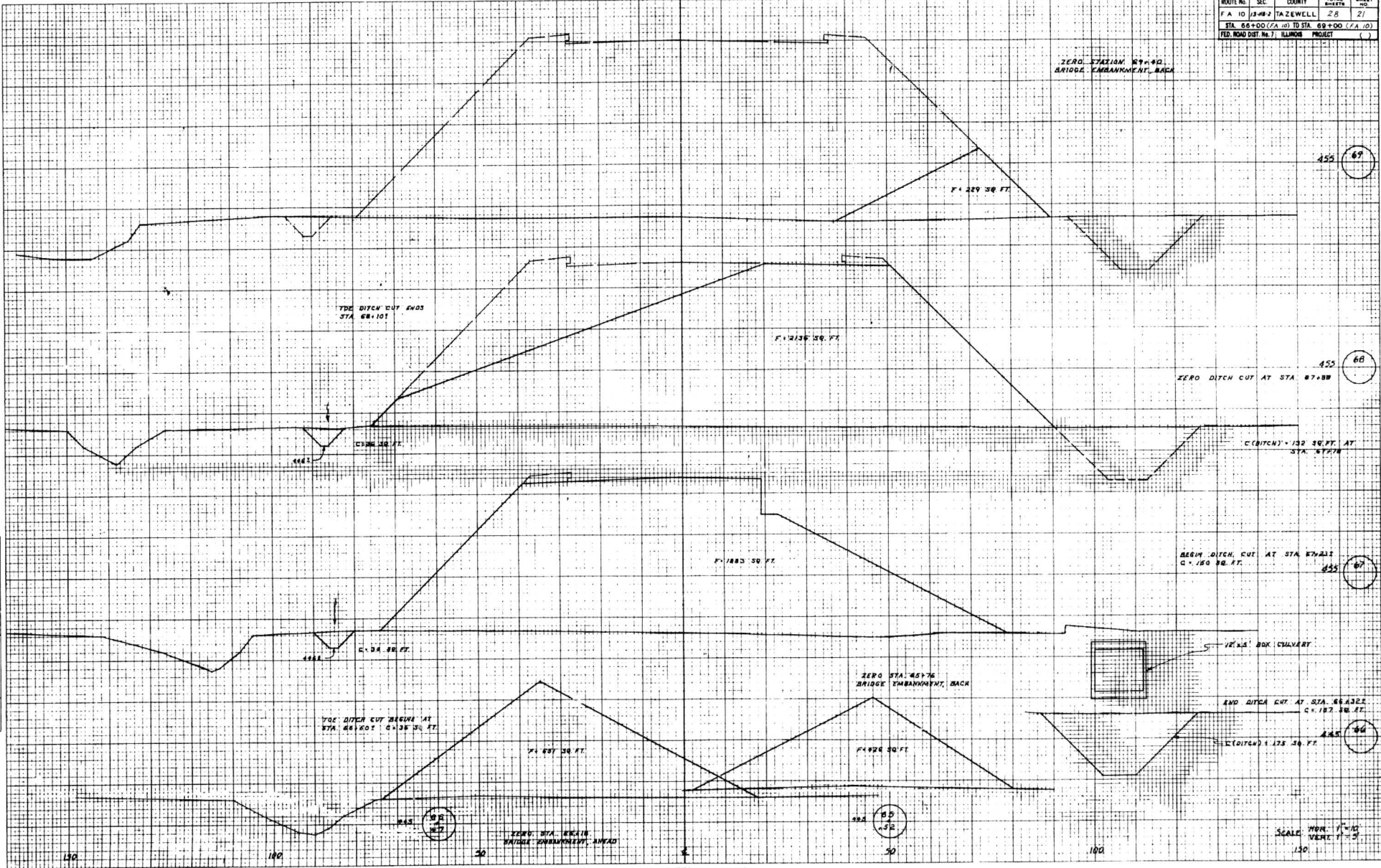
455

63

ROUTE No.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA 10	13-48-2	TAZEWELL	28	21
STA. 66+00 (FA 10) TO STA. 69+00 (FA 10)				
FED. ROAD DIST. No. 71 ILLINOIS PROJECT ()				

FINAL SURVEY QUANTITIES
 CHECKED BY: [Signature]
 DATE: [Date]

ORIGINAL SURVEY QUANTITIES
 CHECKED BY: [Signature]
 DATE: [Date]



ZERO STATION 67+00
 BRIDGE EMBANKMENT, BACK

THE DITCH CUT ENDS
 STA 68+101

ZERO DITCH CUT AT STA 67+88

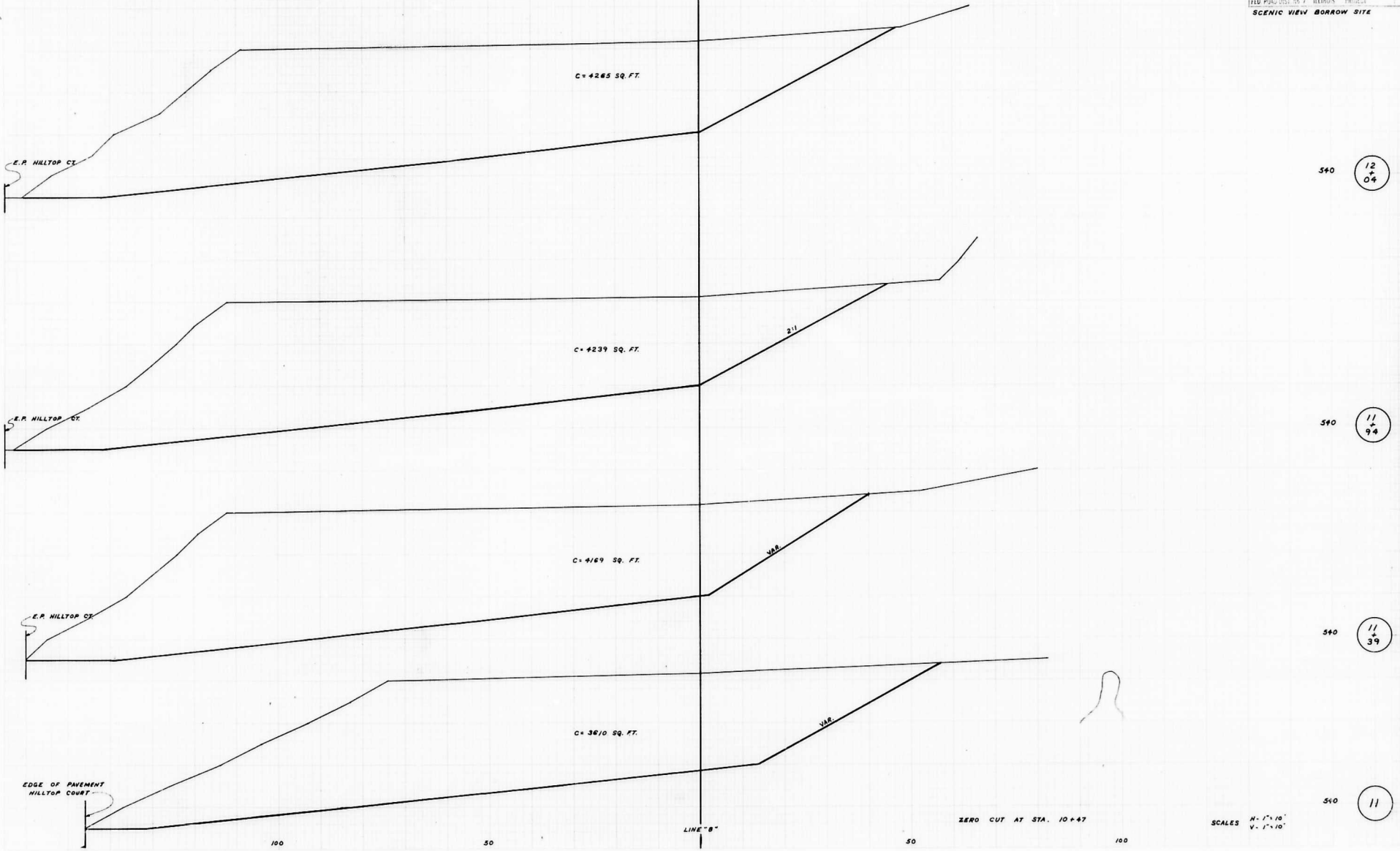
BEEM DITCH CUT AT STA 67+112
 C = 150.00 FT.

ZERO STA 66+76
 BRIDGE EMBANKMENT, BACK

END DITCH CUT AT STA 66+305
 C = 132.00 FT.

ZERO STA. BEEM
 BRIDGE EMBANKMENT, AHEAD

SCALE: HOR. 1"=40'
 VERT. 1"=5'



10 04
 11 04
 12 04
 13 04
 14 04
 15 04
 16 04
 17 04
 18 04
 19 04
 20 04
 21 04
 22 04
 23 04
 24 04
 25 04
 26 04
 27 04
 28 04
 29 04
 30 04
 31 04
 32 04
 33 04
 34 04
 35 04
 36 04
 37 04
 38 04
 39 04
 40 04

2

21
+
43

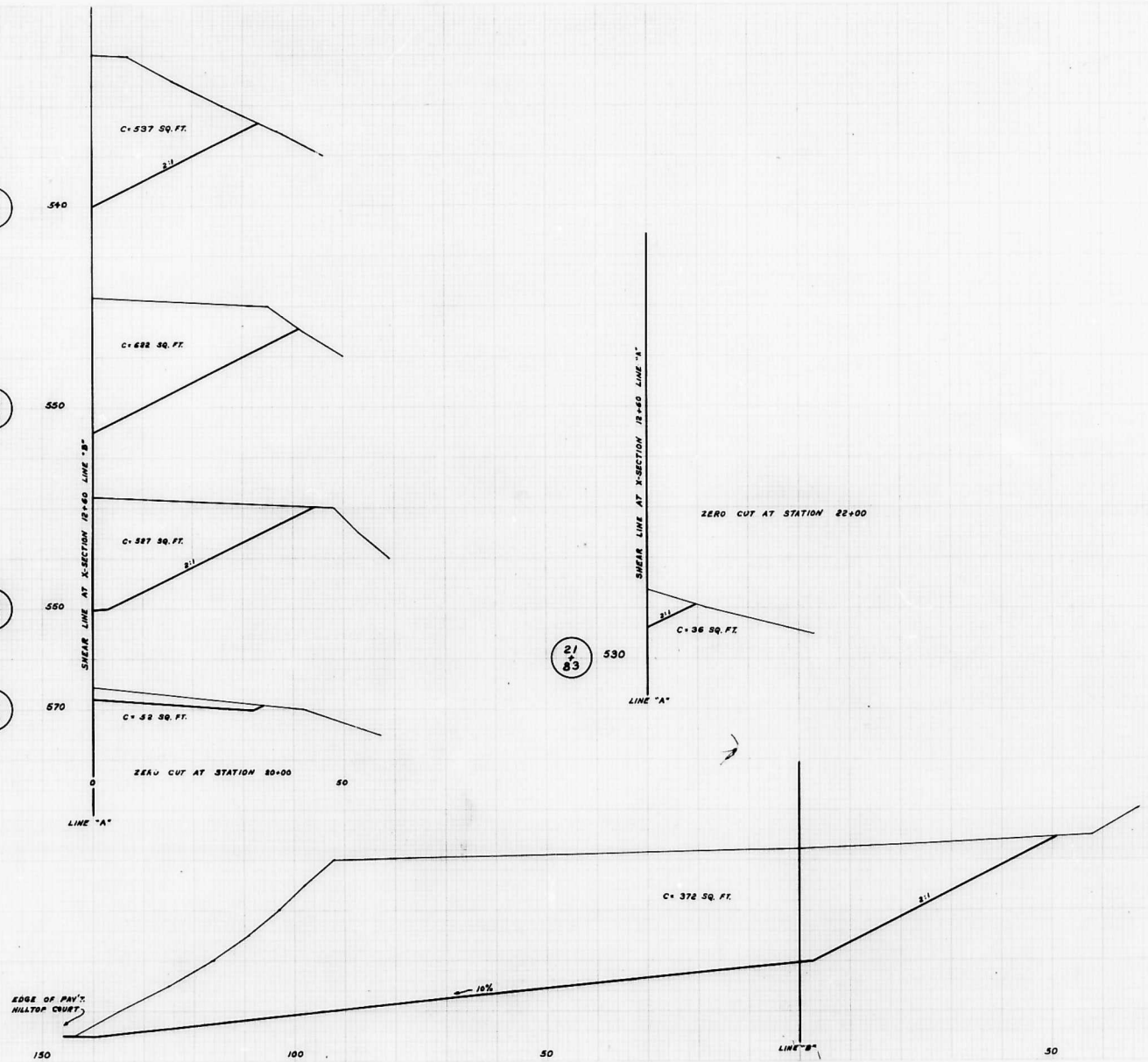
20
+
93

20
+
90

20
+
06

21
+
83

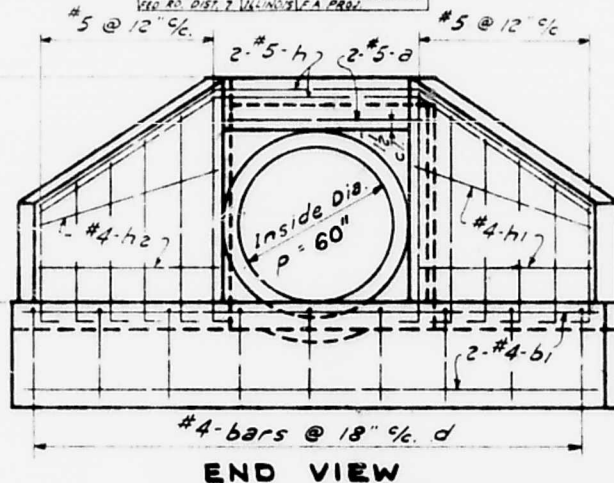
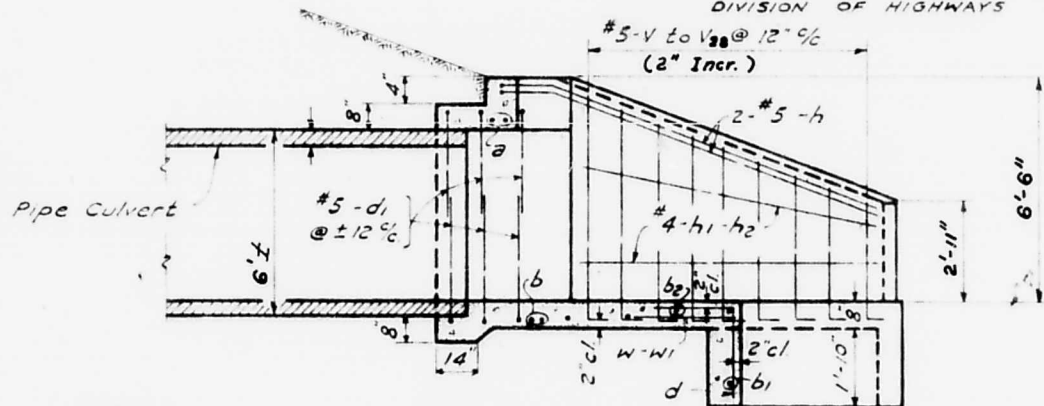
12
+
60



SCALE
1" = 10'
1/2" = 10'
1/4" = 10'
1/8" = 10'
1/16" = 10'

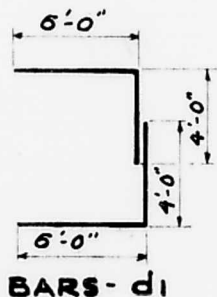
SCALE
H - 1" = 10'
V - 1" = 10'

ALTIMETER 5.28-22-22 01-A

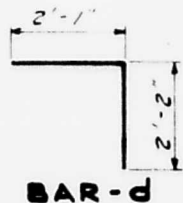


SECTION A-A

END VIEW



BARS-d1



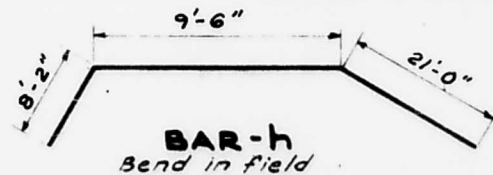
BAR-d

ONE HEADWALL
BILL OF MATERIAL

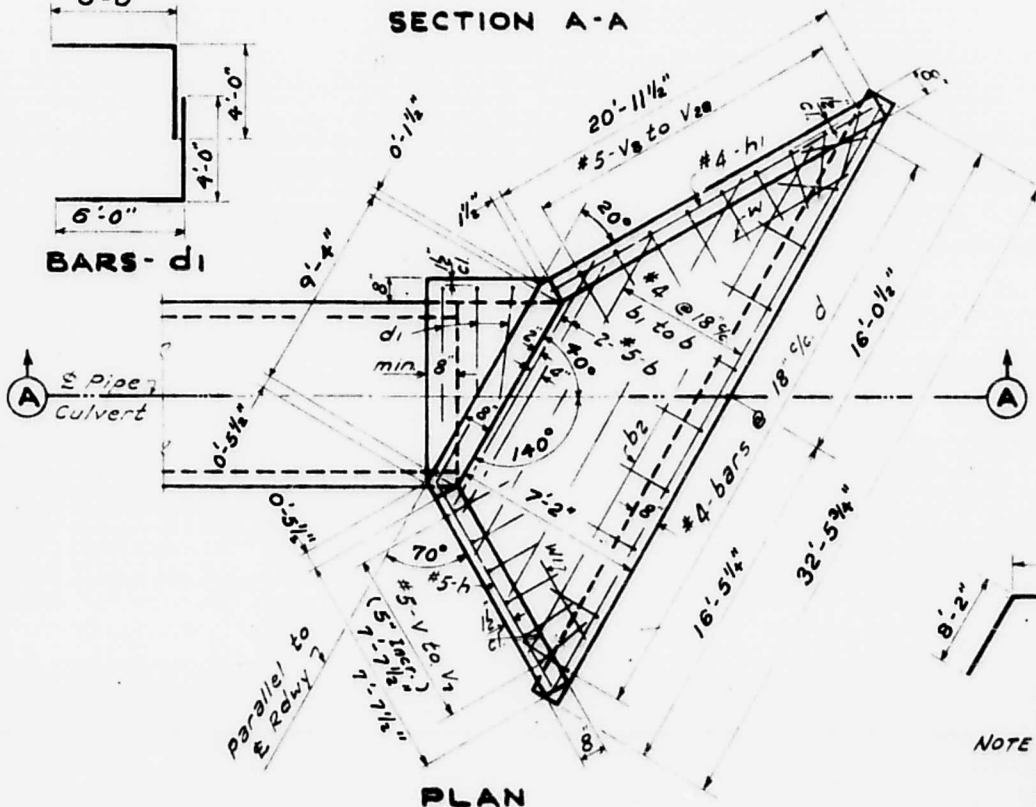
BAR	No.	SIZE	LENGTH
a	2	#5	10'-6"
b	2	#5	11'-11"
b1	2	#4	32'-3"
b2	1	#4	27'-8"
b3	1	#4	23'-1"
b4	1	#4	18'-6"
b5	1	#4	13'-11"
d	21	#4	4'-3"
d1	16	#5	10'-0"
h	2	#5	38'-6"
h1	2	#4	20'-7"
h2	2	#4	8'-8"
V to V7	8	#5	VARIES
V8 to V20	21	#5	VARIES
W	1	#4	7'-0"
W1	1	#4	3'-8"



BARS-V-V1 etc.



BAR-h
Bend in field



PLAN

NOTE - All bars shall be round
ASTM A305-49. The size
number is the number of
1/8 inches in the nominal diameter.

-NOTES-

Class X Concrete shall be
used throughout.
Build tops of headwalls
parallel to grade line.

REINFORCED CONC. HEADWALLS
60" DIAM.
PIPE CULVERTS
SKEWED WITH ROADWAY

COMPUTED	L. A. Wilson	EXAMINED	
CHECKED	L. E. Philbrook	PASSED	BRIDGE ENGINEER
DRAWN	J. S. Malecki	APPROVED	ENGINEER OF DESIGN
CHECKED	L. A. W.		CHIEF HIGHWAY ENGINEER
SPECIAL	ASSEMBLED		
	CHECKED		