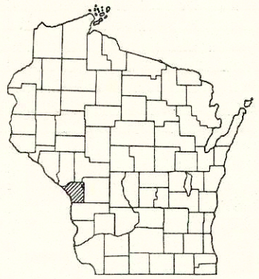
COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT		B.P.R. REGION DIVISION	SHEET NUMBER	TOTAL SHEETS
		STATE	FEDERAL			
32.6	1460.0		11.3	4 WIS.	1	12

INDEX OF SHEETS

SHEET NO. 1 TITLE
SHEET NO. 2 TYPICAL CROSS SECTIONS
SHEET NO. 2 ESTIMATE OF QUANTITIES
SHEET NO. 2A MISCELLANEOUS QUANTITIES
SHEET NO. — RIGHT OF WAY PLAT
SHEET NO. 3-4 PLAN AND PROFILE STA. 125+50 TO STA. 149+00
SHEET NO. 5-5.3 STANDARD DETAILS
SHEET NO. 6-7 DRAINAGE STRUCTURES
SHEET NO. 8-12 CROSS SECTIONS



STATE OF WISCONSIN

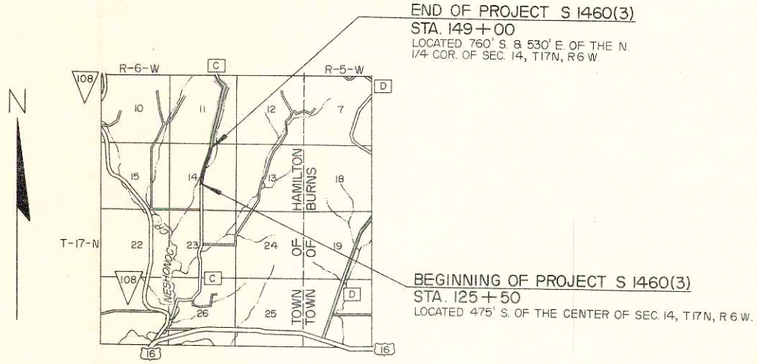
STATE HIGHWAY COMMISSION OF WISCONSIN

PLAN AND PROFILE OF PROPOSED

S.T.H. 108 - C.T.H. "D"

C.T.H. "C"
LA CROSSE COUNTY
PROJECT S 1460(3)

SCALES
PLAN 1 IN. = 100 FT.
PROFILE HOR. 1 IN. = 100 FT. VERT. 1 IN. = 10 FT.
CROSS SECTIONS HOR. 1 IN. = 10 FT. VERT. 1 IN. = 10 FT.



CONVENTIONAL SIGNS

STATE LINE
COUNTY LINE
TOWNSHIP OR RANGE LINE
SECTION LINE
NEW RIGHT OF WAY LINE
PRESENT RIGHT OF WAY LINE
WIRE FENCE { WOVEN, BARBED
LOT LINE
CORPORATE OR CITY LIMITS
PROPERTY LINE P.L. + 32.6
TRAVELED WAY OR P.E.
RAILROADS
BASE OR SURVEY LINE 30

CULVERTS IN PLACE
CULVERTS REQUIRED
DROP INLET
POWER POLE
TELEPHONE OR TELEGRAPH POLE
RIGHT OF WAY MARKERS
REFERENCE STAKE FOR HUBS ONLY 461.7 23.9
MARSH
HEDGE
TREES
GROUND ELEVATION DATUM LINE 739
GRADE ELEVATION DATUM LINE 756

LAYOUT

SCALE 1 MILE

TOTAL NET LENGTH OF CENTERLINE = 0.445 MI.

APPROVED FOR LA CROSSE COUNTY BY:

1-14-1965 DATE — Oscar N. Smith COMMISSIONER

STATE HIGHWAY
COMMISSION OF WISCONSIN
MADISON, WIS.

SURVEYOR D.E.K. NOTE BOOK L.L.
DIVISION COMPUTER W.H.T. M. O. CHECKER W.H.B.
DISTRICT CHECKER R.O.J. CORRECT

CORRECT:
DATE 1-15-65 — DISTRICT ENGINEER

RECOMMENDED FOR APPROVAL:
DATE 1/19/65 — E. J. Bydelt CHIEF DESIGN ENGINEER

APPROVED:
DATE 1/19/65 — STATE HIGHWAY ENGINEER

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED:
DATE
DIVISION ENGINEER

S 1460(3)

ESTIMATE OF QUANTITIES

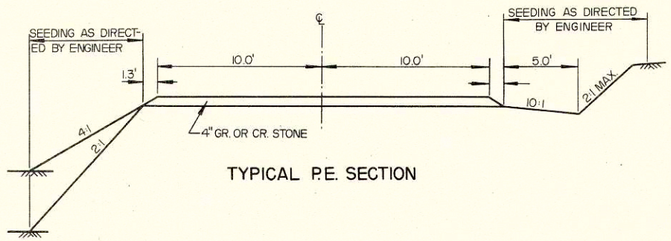
CONTRACT NO. 1

B.P.R. REGION	PROJECT	SHEET NO.	TOTAL SHEETS
4	S 1460(3)	2	12

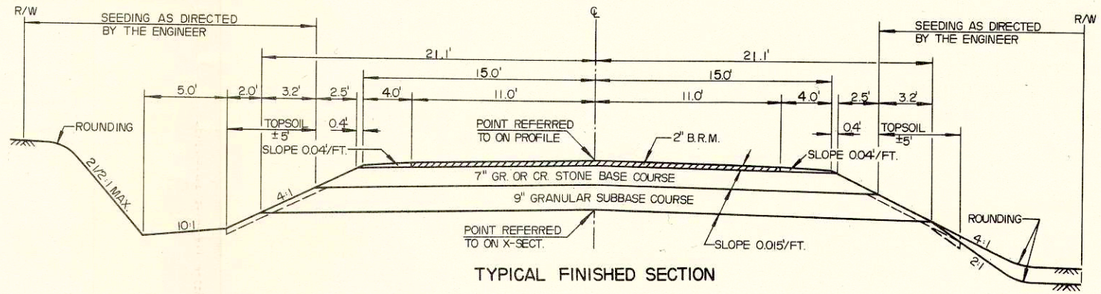
R 1 - 1-25-65

THIS PROJECT IS TO BE EXECUTED UNDER THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE STATE HIGHWAY COMMISSION OF WISCONSIN — EDITION OF 1963, APPROVED OCTOBER 16, 1963, FEDERAL AID REQUIRED CONTRACT PROVISIONS APPROVED OCTOBER 29, 1963, AND SPECIAL PROVISIONS AS ATTACHED TO PROPOSALS.

SEC. NO.	STATION TO STATION		NET LENGTH OF CENTER LINE	CLEARING	GRUBBING	EXCAVATION			GRANULAR SUBBASE COURSE	FINISHING ROADWAY	GR. OR CR. STONE BASE COURSE	CULVERT PIPE		CORR. METAL CULVERT PIPE 30"	RIPRAP	MARKER POSTS	MARKER POSTS FOR R/W	REMOVING OLD BRIDGE STA. 137+55	APRON ENDWALLS FOR CULVERT PIPE			CONCRETE MASONRY, CULVERTS	BAR STEEL REINF, CULVERTS	SALVAGED TOPSOIL	SEEDING	SODDING	MORTAR RUBBLE MASONRY	
		ITEM NO.		20101	20104	20503	20602	20801	21201	21301	30401	52003	52005	52109	60601	61421	61422	20351	52061	52063	52149	50401	50502	62505	63001	63101	51801	
		UNIT	LIN. FT.	STA.	STA.	C.Y.	C.Y.	C.Y.	C.Y.	L.S.	C.Y.	LIN. FT.	LIN. FT.	LIN. FT.	C.Y.	EACH	EACH	L.S.	EACH	EACH	EACH	C.Y.	LB.	SQ. YD.	SQ. YD.	SQ. YD.	C.Y.	
	125+50 - 149+00		2350.0	7	7	5036	80	1172	3150	1	2350	56	62	78	150	15	17	1	4	2	1	118.5	17,540	2600	14,000	230	5	

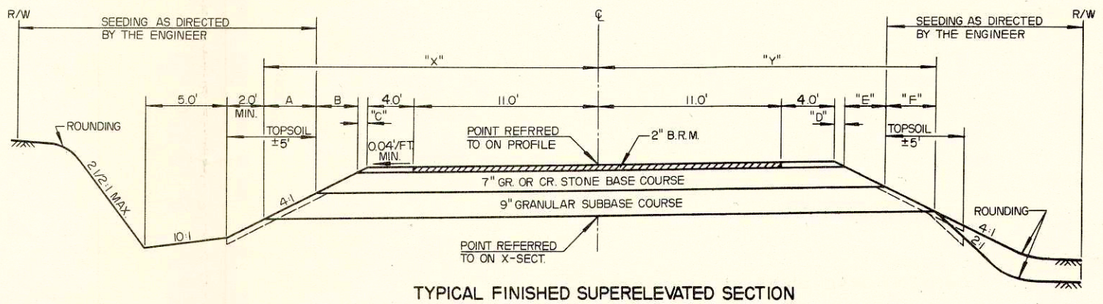


TYPICAL P.E. SECTION



TYPICAL FINISHED SECTION

NOTE: BITUMINOUS SURFACE NOT A PART OF THIS CONTRACT



TYPICAL FINISHED SUPERELEVATED SECTION

SUPERELEVATED SECTION VARIABLE DISTANCES										
DEG. OF CURVE	SUPERELEV. FT/FT.	"A"	"B"	"C"	"D"	"E"	"F"	"X"	"Y"	TRANS.
1°-00'	0.018	3.2'	2.5'	0.4'	0.6'	2.2'	2.8'	21.1'	20.6'	150'
3°-00'	0.042	3.6'	2.8'	0.8'	0.6'	2.0'	2.6'	22.2'	20.2'	175'

APPLICABLE STANDARD DETAIL DRAWINGS

6-2.6.3 APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH
7-1.3.4 MARKER POSTS & MARKER POSTS FOR RIGHT OF WAY
7-4.1.4 CONSTRUCTION BARRICADE
8-1.3.1 DITCH CHECKS, MORTAR RUBBLE MASONRY & SOD

NOTE: WHEN THE QUANTITY OF THE ITEMS OF SUBBASE, BASE, OR SURFACE COURSE IS MEASURED FOR PAYMENT BY THE TON OR CUBIC YARD, THE DEPTH OR THICKNESS OF THE COURSE SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL DIRECTED BY THE ENGINEER.

SALVAGED TOPSOIL SHALL BE PLACED AS DIRECTED ON TYPICAL SECTIONS TO AN APPROXIMATE DEPTH OF 3" AT TIME OF PLACING.

DETAIL SUMMARY OF MISCELLANEOUS QUANTITIES

CLEARING AND GRUBBING

Sta. - Sta.	Location	Stations Clearing	Grubbing
131 - 134	Centerline	3	3
136 - 139	Centerline	3	3
139"C" - 140"C"	Chan. Change	1	1

MARKER POSTS FOR SHOULDER DELINEATION

Sta. - Sta.	Location	Spacing	No.
132+75 - 137+55	Lt.	50'	11

GRAVEL OR CRUSHED STONE BASE COURSE

Sta. - Sta.	Location	C.Y.
125+00 - 125+50	Approach	40
125+50 - 149+00	Centerline	2,020
129+60	P.E., Left	15
131+80	P.E. Left	30
135+60	P.E., Right	15
143+10	P.E., Right	15
143+50	P.E., Right	15
147+00	P.E., Left	15
149+00 - 150+00	Approach	80
Undistributed		105

CULVERTS, MARKER POSTS AND APRON ENDWALLS

Sta.	Location	Size	Length L.F.	Type	Apron Endwalls	Marker Posts
131+35	Centerline	24"	62	C.P.	2	2
135+60	P.E. Rt.	18"	28	C.P.	2	-
137+48 - 138+26	Downdrain, Lt.	30"	78	C.M.C.P.	1 (Inlet)	-
177+25 (C-32-28)	Centerline	-	-	-	-	2
147+00	P.E. Lt.	18"	28	C.P.	2	-

RIPRAP AND SOD

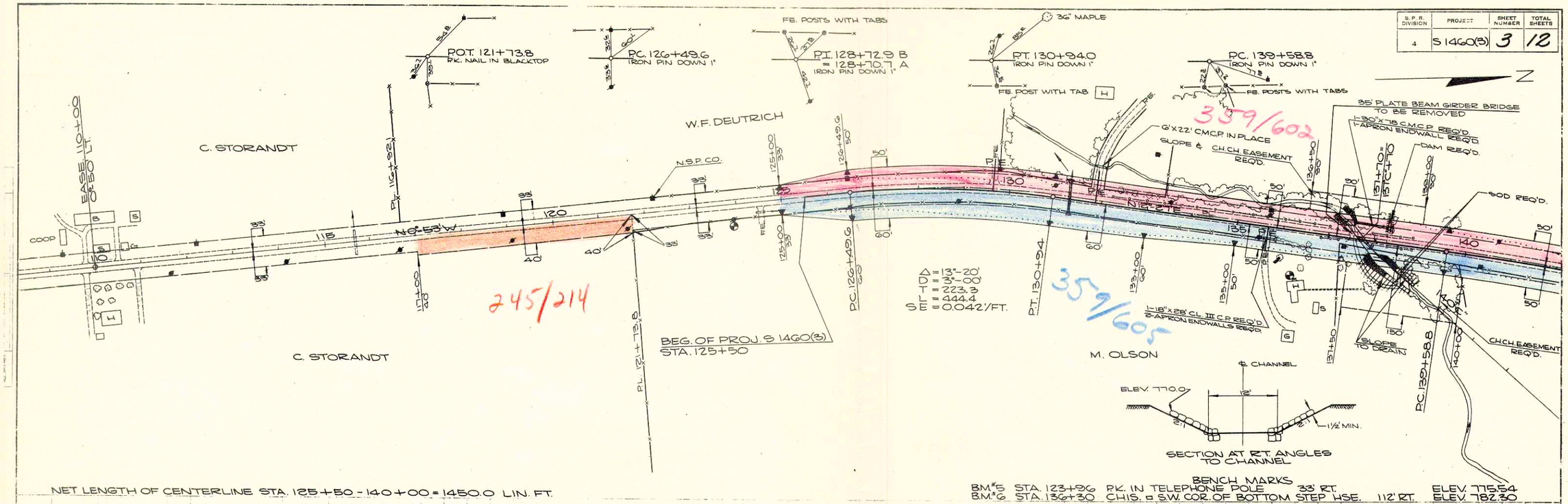
Station	Location	Riprap C.Y.	Sod S.Y.	Remarks
137+50	Lt.	55		Discharge of Culvert
138+00	Rt.	65	100	Inlet of Culvert
138+26	Lt.		30	Dam
Undistributed		30	70	

MORTAR RUBBLE MASONRY & SOD DITCH CHECKS

Sta. - Sta.	Location	No.	M.R.M. C.Y.	Sod S.Y.
138+30 - 141+00	Lt.	6	4.5	25
Undistributed			0.5	5

PROJECT	SHEET NO.	TOTAL SHEETS
S 1460 (3)	2A	12

S. P. R. DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4	S 1460(3)	3	12



NET LENGTH OF CENTERLINE STA. 125+50 - 140+00 = 1450.0 LIN. FT.

BENCH MARKS

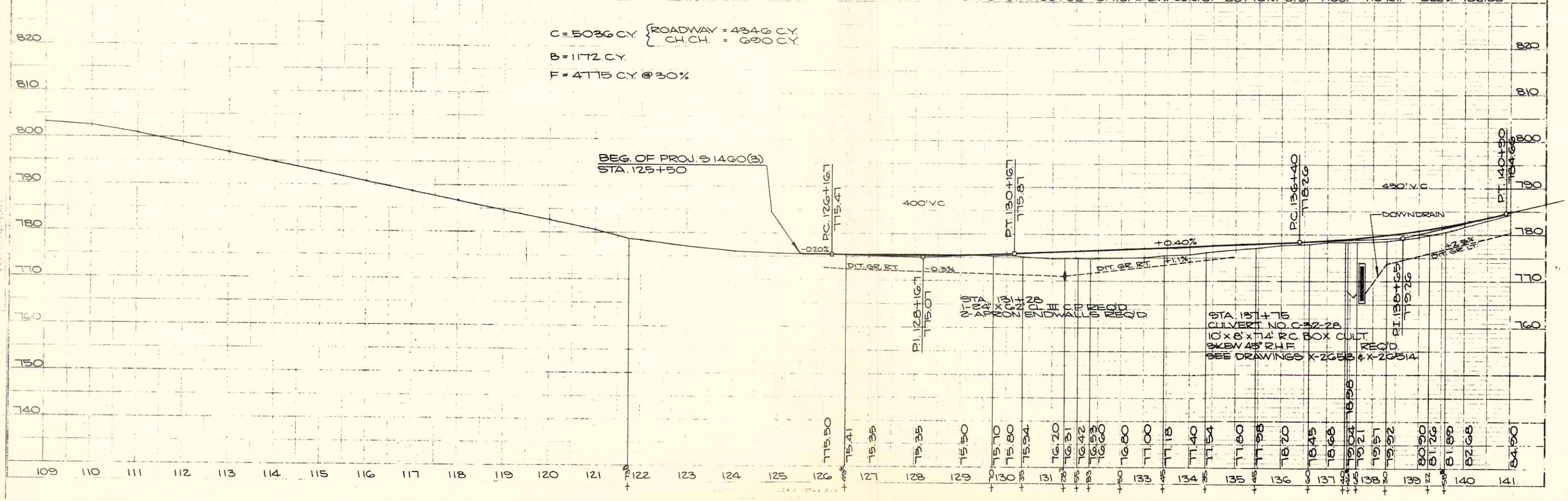
BM #5 STA. 123+96 PK. IN TELEPHONE POLE 33' RT. ELEV. 775.54

BM #6 STA. 136+30 CHIS. □ S.W. COR. OF BOTTOM STEP HSE. 112' RT. ELEV. 782.30

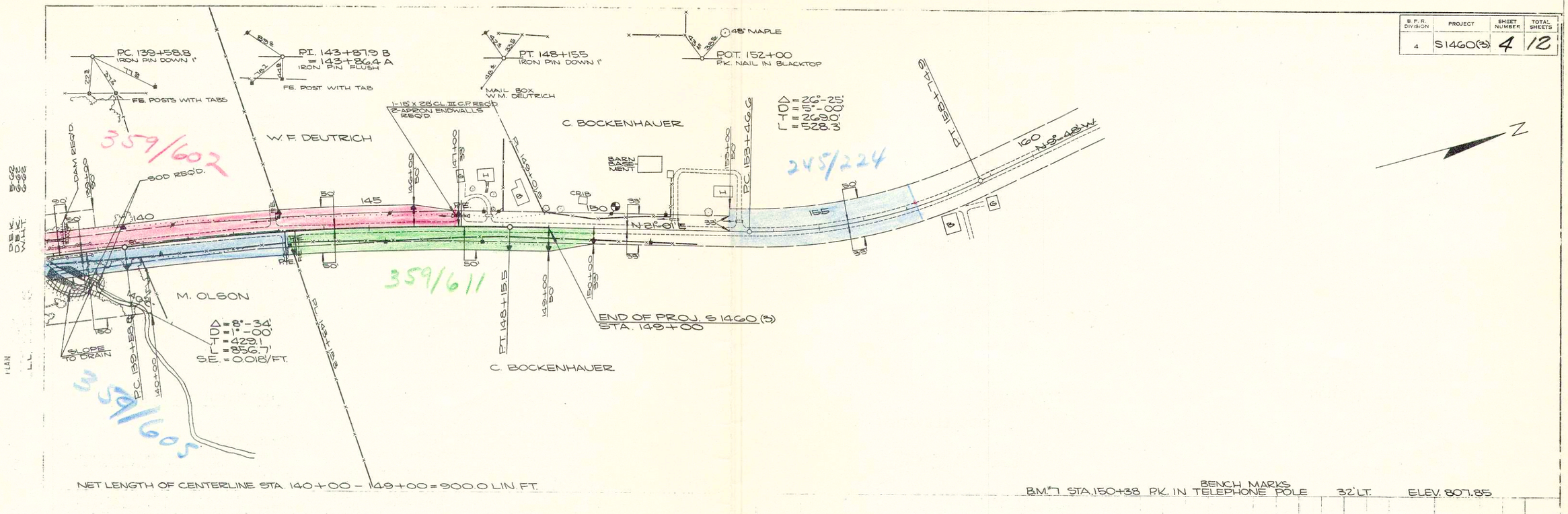
C = 5036 C.Y. { ROADWAY = 4346 C.Y. CH.CH. = 690 C.Y.

B = 1172 C.Y.

F = 4775 C.Y. @ 30%

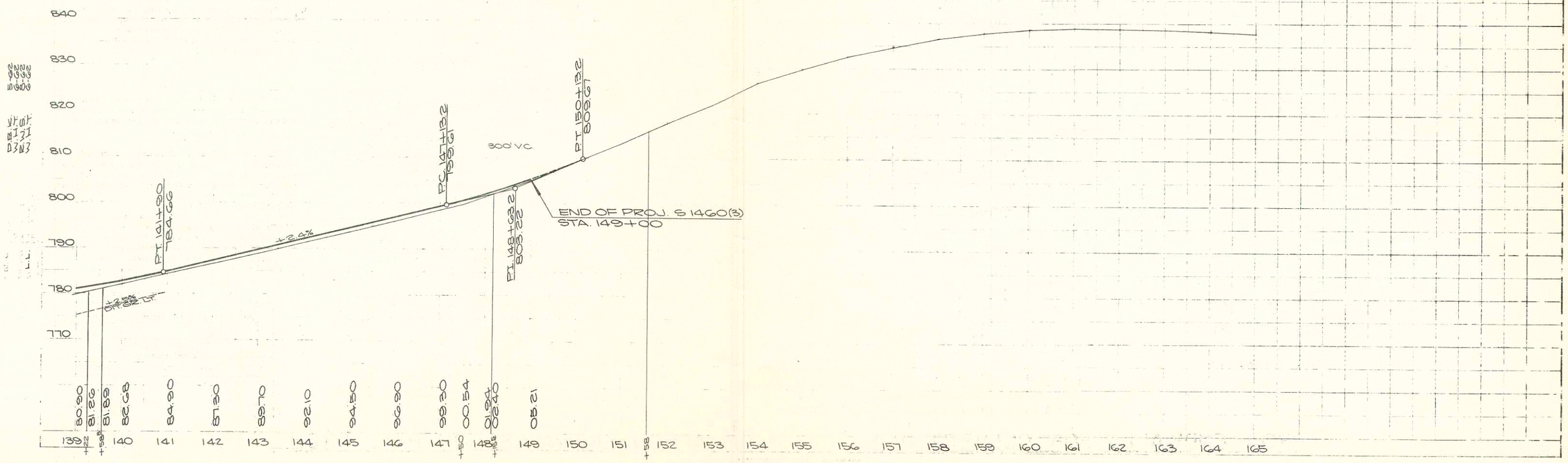


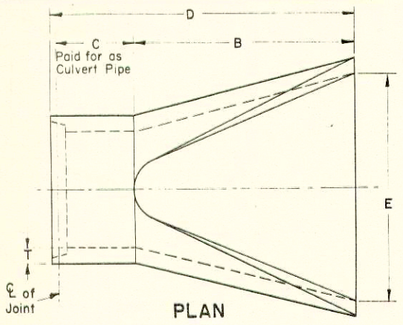
B.F.R. DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4	S1460(3)	4	12



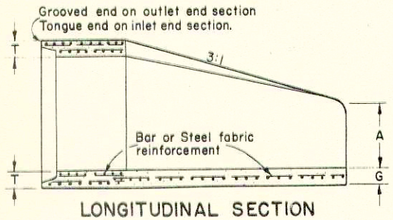
NET LENGTH OF CENTERLINE STA. 140+00 – 149+00 = 900.0 LIN. FT.

BENCH MARKS
B.M.#7 STA. 150+38 P.K. IN TELEPHONE POLE 32' LT. ELEV. 807.85

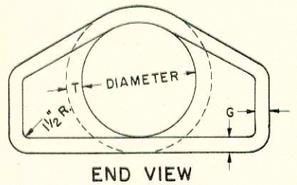




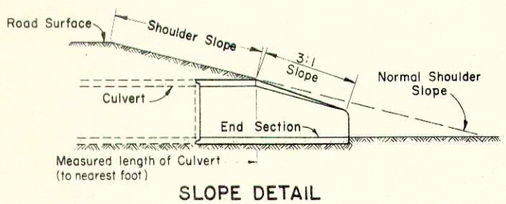
PLAN



LONGITUDINAL SECTION



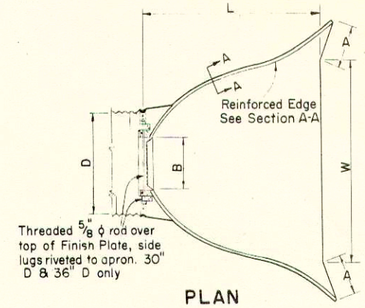
END VIEW



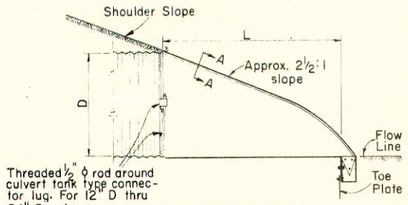
SLOPE DETAIL

DIA.	APPROX. WEIGHT/ SECTION	SLOPE	T	A	B	C	D	E	G
18"	990	3 to 1	2½"	9"	27"	46"	73"	36"	2½"
21"	1280	3 to 1	2¾"	9"	36"	37½"	73½"	42"	2¾"
24"	1520	3 to 1	3"	9½"	43½"	30"	73½"	48"	3"
27"	1930	3 to 1	3¼"	10½"	49½"	24"	73½"	54"	3¼"
30"	2190	3 to 1	3½"	12"	54"	19¾"	73¾"	60"	3½"
36"	4100	3 to 1	4"	15"	63"	34¾"	97¾"	72"	4"
42"	5380	3 to 1	4½"	21"	63"	35"	98"	78"	4½"
48"	6550	3 to 1	5"	24"	72"	26"	98"	84"	5"

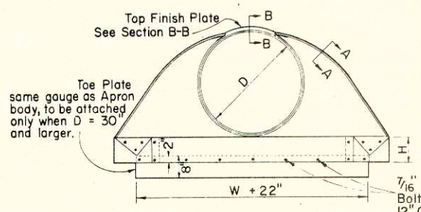
REINFORCED CONCRETE APRON ENDWALLS



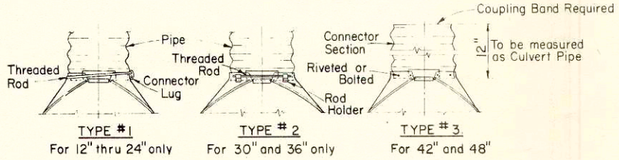
PLAN



SIDE ELEVATION



END VIEW



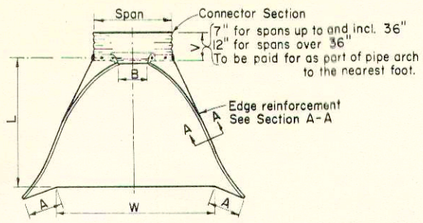
CONNECTION DETAILS

D Pipe Diam.	Gage	Dimensions A ± 1"	B Max.	H ± 1"	L ± 1½"	W ± 2"	Fabrication Remarks
18"	16	7"	9"	6"	31"	36"	1 Piece
21"	16	8¼"	11"	6"	36"	42"	"
24"	14	9½"	12"	6"	42"	48"	"
30"	14	12"	15"	7½"	52½"	60"	2 Pcs. ℄ Splice
36"	12	14"	18"	9"	63"	72"	" "
42"	12	16"	21"	10½"	73½"	84"	" "
48"	12	18"	27"	12"	84"	90"	" "

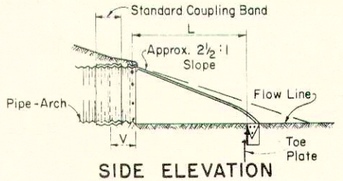
Note: All splices to be lap riveted or bolted.

METAL AND ALUMINUM APRON ENDWALLS

APRON ENDWALLS FOR CULVERT PIPE



PLAN
showing alternate type with connector section

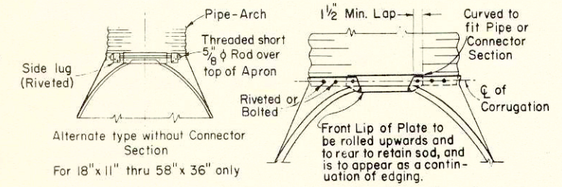


SIDE ELEVATION

Plate(gauge same as apron) shall be attached to all Aprons for Pipe Arches 36" x 22" and larger.

Note: End Corner Plates and Toe Plates may be fastened to apron proper by bolts or rivets which will hold the surfaces tightly together.

END VIEW

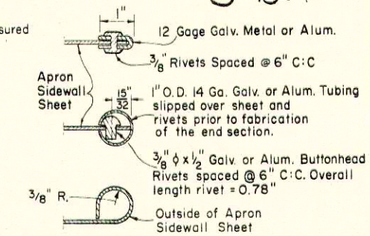


CONNECTION DETAILS

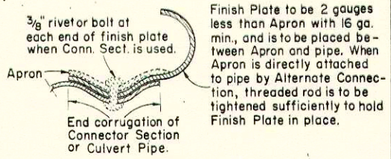
Pipe-Arch Dimensions Span	Rise	Gage	Dimensions A ± 1"	B Max.	H ± 1"	L ± 1½"	W ± 2"	Fabrication Remarks
18"	11"	16	4½"	9"	6"	19"	30"	1 Piece
22"	13"	16	5¼"	10"	6"	23"	36"	"
25"	16"	16	6¼"	11½"	6"	28"	42"	"
29"	18"	14	7"	14"	6"	31½"	48"	"
36"	22"	14	8¾"	16"	6"	38½"	60"	2 Pieces, ℄ Splice
43"	27"	12	10¾"	17½"	7⅝"	47"	75"	" "
50"	31"	12	12¼"	20"	9⅛"	54"	85"	" "
58"	36"	12	14"	26"	10⅝"	63"	96"	" "
65"	40"	12	15¾"	23	10⅝"	70"	112"	3 Pieces, 2 Splices equal distance from ℄
72"	44"	10	17¼"	24"	12⅛"	77"	128"	3 Pieces, 2 Splices equal distance from ℄

Note: All splices to be lap riveted or bolted.

APRON ENDWALLS FOR PIPE ARCH



SECTION A-A



SECTION B-B

TOP FINISH PLATE DETAIL

GENERAL NOTES

Details of construction not shown on this drawing shall conform to the pertinent requirements of the Standard Specifications and the applicable Special Provisions.

Reinforced concrete apron endwalls shall conform to the pertinent requirements of the Standard AASHO Designation: M170, Class II (Wall B).

Metal apron endwalls shall conform to the pertinent requirements of the Standard AASHO Designation: M36.

Aluminum apron endwalls shall conform to the pertinent requirements of the Standard AASHO Designation: M-196-62 I

NOTE:

Variations of the dimensions and designs shown hereon will be permitted providing equivalent capacity and structural integrity are attained, and prior approval of the Engineer is obtained.

Reinf. concrete apron endwalls shall be used with concrete pipe culvert installations, metal apron endwalls shall be used with corr. metal pipe culvert installations, and Aluminum endwalls shall be used with corr. aluminum culvert installations.

Measurement & Payment.

Apron Endwalls for Culvert Pipe or Apron Endwalls for Pipe Arches will be measured and paid for as units complete in place, at the contract unit price per each, which price shall be full compensation for all labor, tools, equipment, materials, and incidentals necessary to complete the work.

APRON ENDWALLS FOR CULVERT PIPE & PIPE ARCH

STATE HIGHWAY COMMISSION OF WISCONSIN

RECOMMENDED FOR APPROVAL

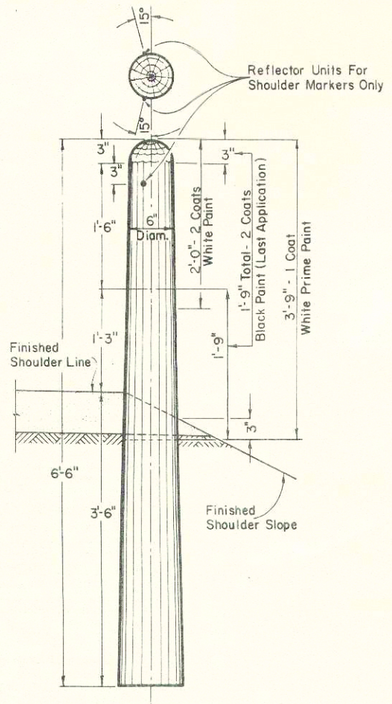
DATE 1-24-64 J. S. Pitt ENGINEER OF DESIGN

APPROVED:

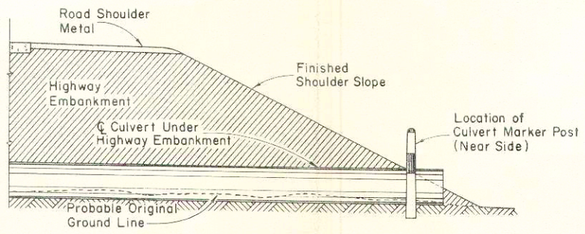
DATE 2/7/64 E. L. Ruettgen STATE HIGHWAY ENGINEER

PLATE NO. 6-2.63

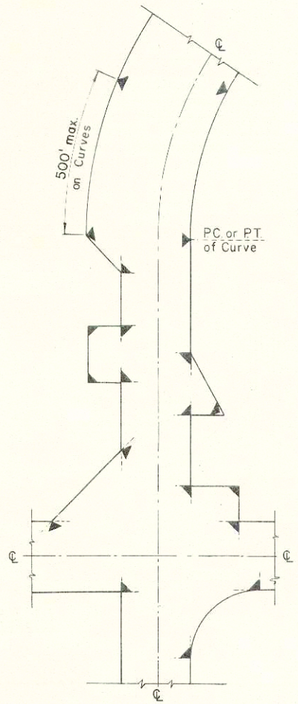
5.1-12



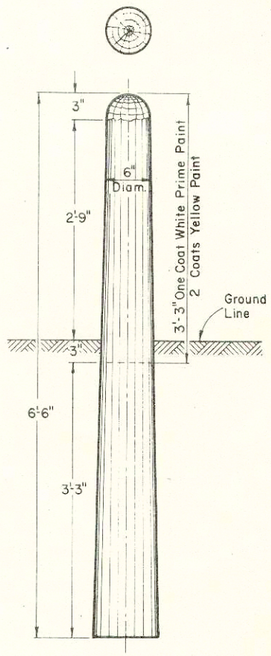
MARKER POST FOR
ROAD SHOULDERS AND CULVERTS



SECTION
SHOWING RELATIVE LOCATION OF
MARKER POST FOR CULVERTS

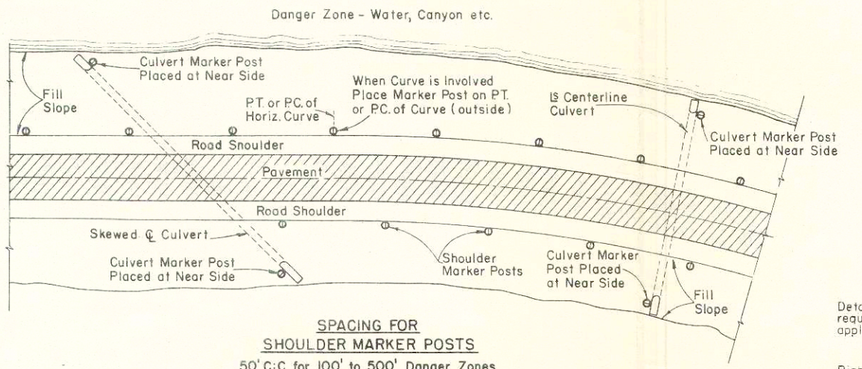


LOCATION DIAGRAM
SHOWING TYPICAL LOCATIONS OF
MARKER POSTS FOR RIGHT OF WAY



MARKER
POST
FOR
RIGHT OF WAY

MARKER POST FOR RIGHT OF WAY



SPACING FOR
SHOULDER MARKER POSTS
50' C:C for 100' to 500' Danger Zones
100 C:C for Over 500' Danger Zones

LOCATION DIAGRAM
SHOWING RELATIVE LOCATIONS OF SHOULDER MARKER POSTS
AND CULVERT MARKER POSTS

MARKER POSTS FOR ROAD SHOULDERS AND CULVERTS

GENERAL NOTES

Details of Construction not shown on this drawing shall conform to the pertinent requirements of the Standard Specifications and the applicable Special Provisions.

MARKER POSTS FOR RIGHT OF WAY

Right of Way Marker Posts shall be erected in advance of Grading Operations. Posts shall be placed at the outer limits of the Highway Right of Way, but entirely within the Right of Way and shall be so placed that the outer edge of the posts shall be tangent to the Right of Way line or lines extended. The exact location of all Right of Way Posts will be staked in the field by the Engineer.

REFLECTOR UNITS

Reflector Units shall have plastic crystal lens 7/8" in diameter. Unit assembly shall be a minimum of 7/8" in length. Reflector Units shall be furnished with flared expanding metal clips for wood mounting. Units shall be mounted in tightest fit possible and securely stayed in posts. Reflector Units shall be installed in Road Shoulder Marker Posts only.

MARKER POSTS &
MARKER POSTS FOR RIGHT OF WAY

STATE HIGHWAY COMMISSION OF WISCONSIN

RECOMMENDED FOR APPROVAL

2-5-63
DATE

J. J. Pelt
ENGINEER OF DESIGN

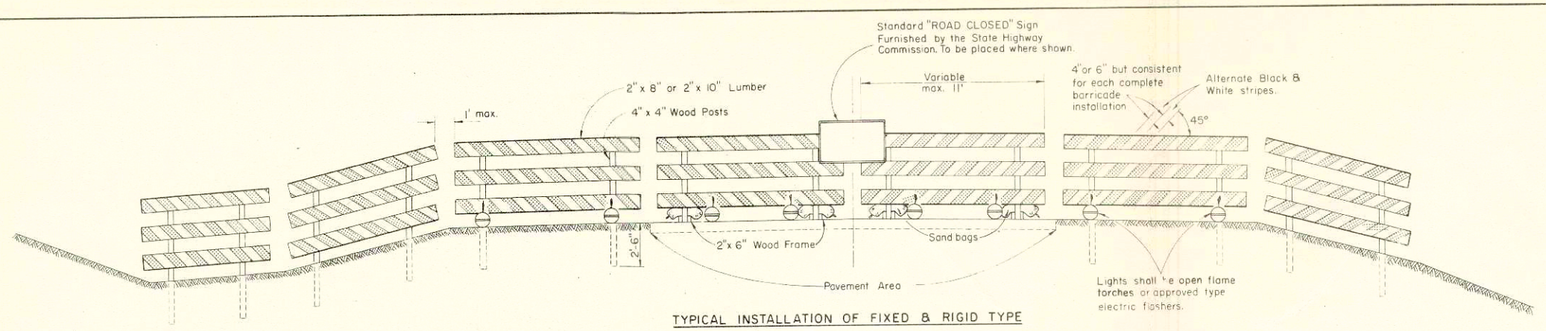
APPROVED:

2/6/63
DATE

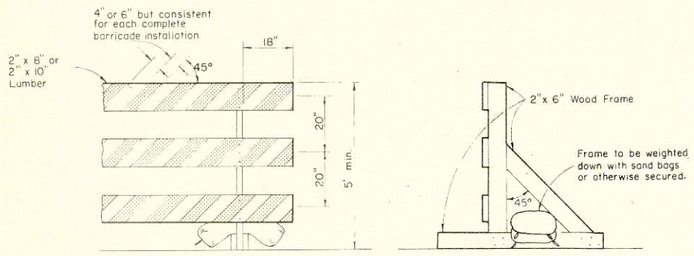
E. L. Rollings
STATE HIGHWAY ENGINEER

PLATE NO. 7-1.3.4

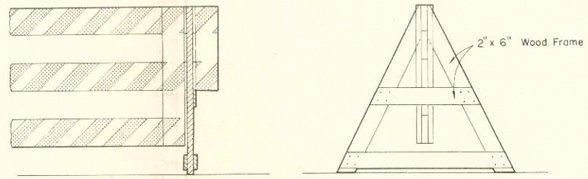
5.2-12



TYPICAL INSTALLATION OF FIXED & RIGID TYPE

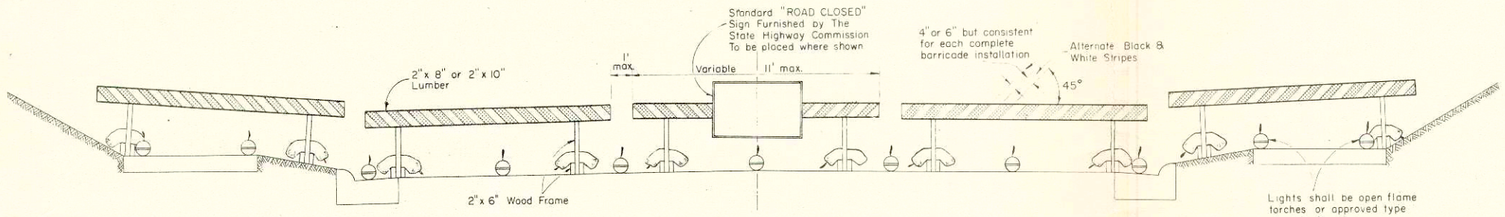


ALTERNATE TYPE INSTALLATION (RIGID)

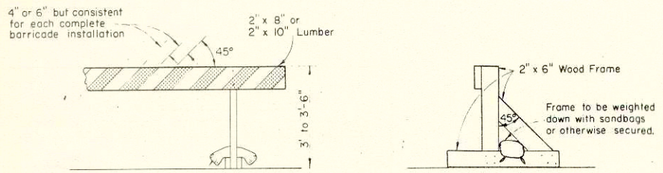


ALTERNATE TYPE INSTALLATION (DEMOUNTABLE)

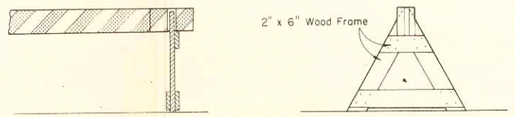
CLASS I BARRICADE



TYPICAL INSTALLATION OF RIGID TYPE



ALTERNATE TYPE INSTALLATION (RIGID)



ALTERNATE TYPE INSTALLATION (DEMOUNTABLE)

CLASS II BARRICADE

GENERAL NOTES:

The Contractor shall construct, place and maintain barricades as shown on this drawing and as required by the Standard Specifications for the duration of the project at all points of highway closure. Barricades shall be painted as shown hereon and structurally maintained for maximum visibility at all times, for the duration of the respective project.

CLASS I BARRICADE

Shall be used at points of closure where road is closed to traffic. Gates or movable sections of barricade shall be provided when necessary, for access of equipment or other authorized vehicles only.

CLASS II BARRICADE

May be used only where the hazard to traffic is relatively small, and for the more or less continuous delimiting of a restricted roadway, or for temporary daytime use.

LUMBER & FABRICATION

Lumber shall be of a grade structurally sound and sufficiently rigid to satisfactorily support and maintain the purpose and intent of a barricade facility. The fabrication of the barricade shall be in accord with good pertinent woodworking practices.

PAINTING

Barricades shall be painted as shown hereon in alternate black and white stripes. Black stripes shall be painted with weather resistant and durable black paint. White stripes shall be painted a prime coat of good grade wood primer, followed by two coats of white "Codit Reflective Liquid" (Minnesota Mining Co.) or equivalent, or reflective sheeting wide angle, flat top "Scotchlite" brand material (Minnesota Mining Co.) or equivalent.

DIRECTION OF DIAGONAL STRIPES

Where a barricade extends entirely across the roadway and no vehicle access provision, the stripes shall slope downward toward the highway centerline.

Where vehicle access is permitted, the stripes shall slope downward in the direction toward which vehicles must turn in detouring.

Where both right and left turns are provided for, the stripes shall slope downward in both directions from the center.

MEASUREMENT & PAYMENT

All barricades, unless otherwise provided for in the plans and/or special provisions shall be furnished, placed, and maintained as noted above, and no additional compensation will be allowed but shall be construed to be included in the price bid for other items.

NOTE:

Lighting devices for barricades shall conform to the requirements of the Standard Specifications.

NOTE:

All lumber or timber dimensions shown hereon are nominal.

CONSTRUCTION BARRICADE

STATE HIGHWAY COMMISSION OF WISCONSIN

RECOMMENDED FOR APPROVAL:

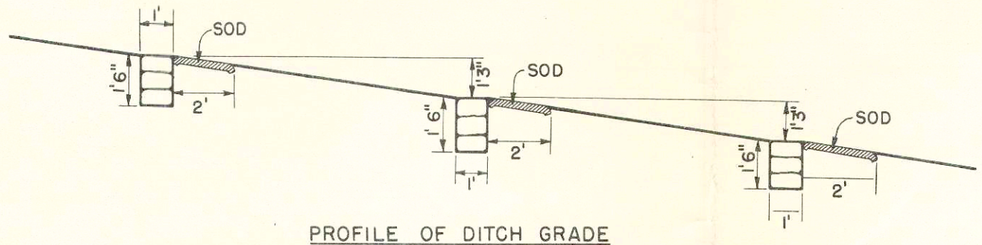
2-5-63 — DATE — J. J. Pitt — ENGINEER OF DESIGN

APPROVED:

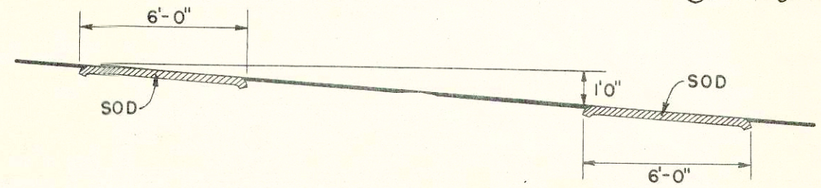
2/6/63 — DATE — E. G. Fontaine — STATE HIGHWAY ENGINEER

PLATE NO. 7-4.1.4

5.3-12

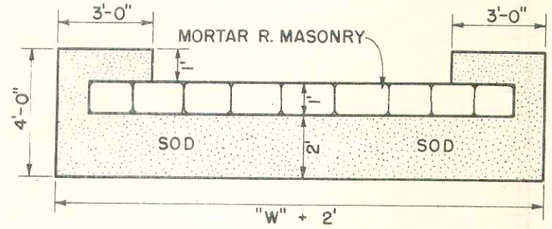


PROFILE OF DITCH GRADE

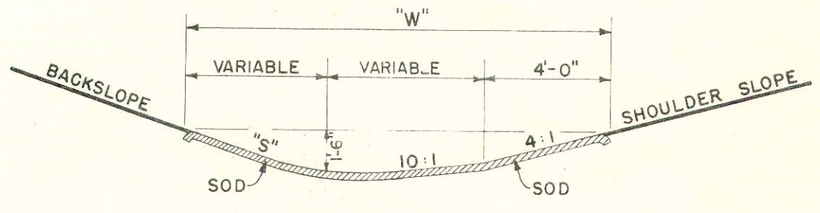


PROFILE OF DITCH GRADE

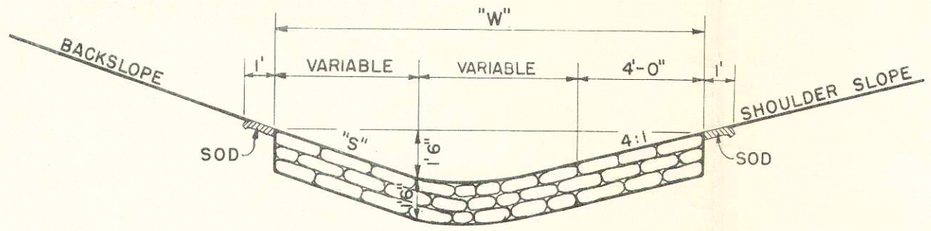
NOTE: NUMBER REQUIRED WILL BE DETERMINED BY VERTICAL SPACING.



PLAN VIEW SHOWING SOD



SECTION



SECTION

SOD DITCH CHECKS

QUANTITIES		
"S"	"W"	EACH SQ. YD.
2:1	12'	8
3:1	13.5'	9
4:1	15'	10

MORTAR RUBBLE MASONRY

QUANTITIES			
"S"	"W"	SOD SQ. YD.	EACH CU. YD.
2:1	12'	4.0	0.67
3:1	13.5'	4.33	0.75
4:1	15'	4.67	0.83

CONSTRUCTION NOTES

DETAILS OF CONSTRUCTION NOT SHOWN SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DITCH CHECKS
MORTAR RUBBLE MASONRY & SOD

STATE HIGHWAY COMMISSION OF WISC.

RECOMMENDED FOR APPROVAL:

Frank Crane
DESIGN ENGINEER

DATE:

CONSTRUCTION ENGINEER

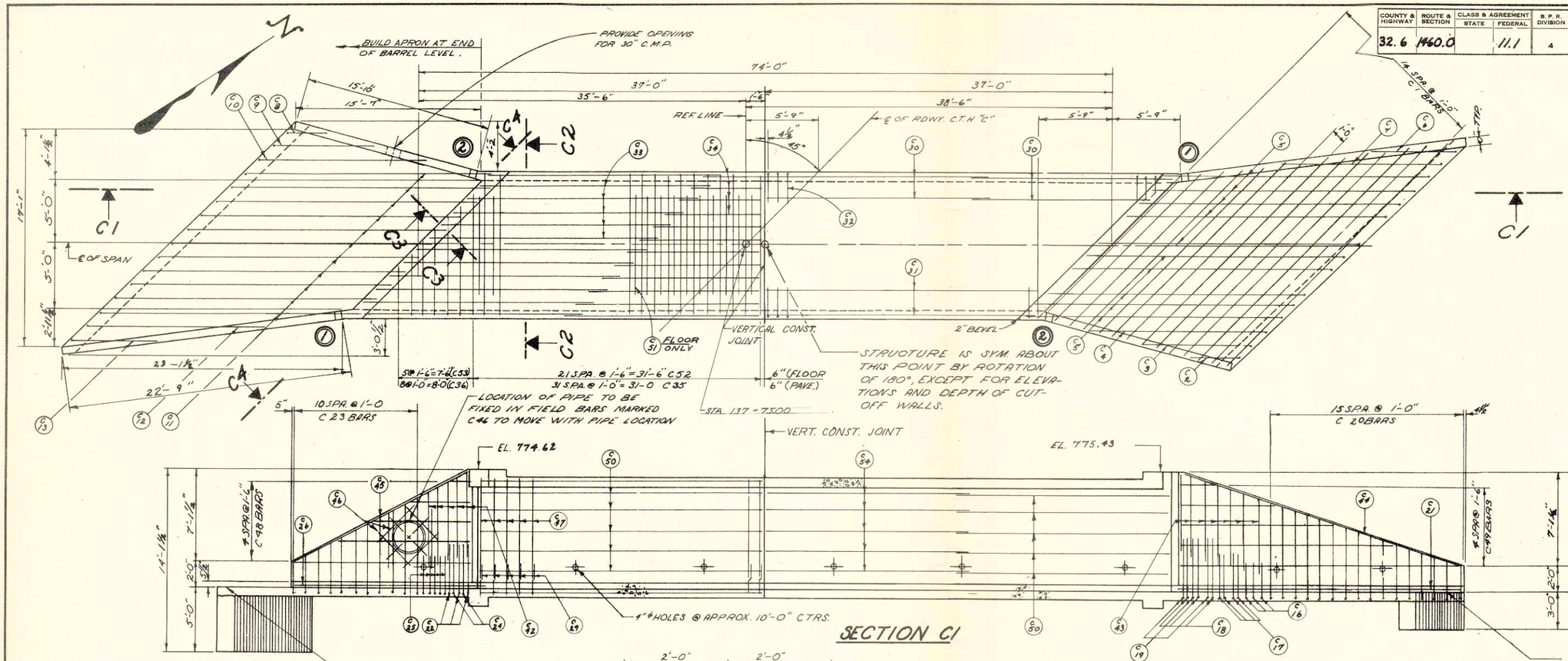
APPROVED:

DRAWN DIV. 9
CHECKED

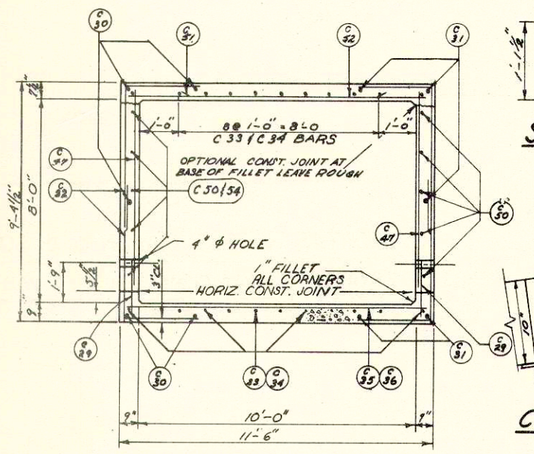
E. L. Roettger
STATE HIGHWAY ENGINEER 8-1.3.1

FORM E-B-11-62

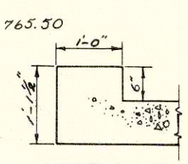
COUNTY & HIGHWAY	ROUTE & SECTION	CLASS & AGREEMENT STATE	CLASS & AGREEMENT FEDERAL	B. P. R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
32.6	1460.0		11.1	4	5146(3)	6	12



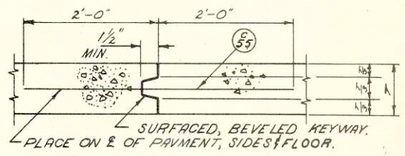
SECTION C1



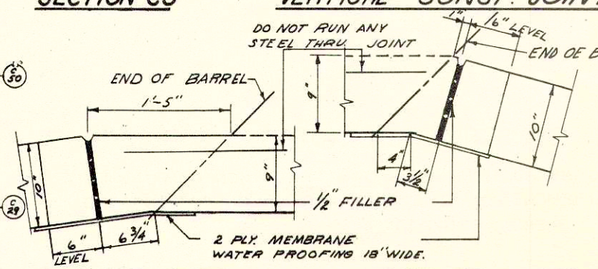
SECTION C2



SECTION C3



VERTICAL CONST. JOINT



CORNER DETAIL WING 1

CORNER DETAIL WING 2

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL CONCRETE MASONRY SHALL BE GRADE "AA" f'c 1400 P.S.I.

BAR STEEL REINFORCEMENT SHALL BE IMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

BEVEL EXPOSED EDGES OF CONCRETE 1" UNLESS OTHERWISE SPECIFIED.

UPPER LIMITS OF "EXCAVATION FOR STRUCTURES." SHALL BE THE FLOWLINE OF THE CULVERT.

INLET AND DISCHARGE ENDS SHALL BE RIPRAPPED AS SHOWN ON X 26514

LIST OF DRAWINGS

1. DETAILS — X 26513
2. DETAILS — X 26514

TOTAL ESTIMATED QUANTITIES

BID ITEMS

EXCAVATION FOR STRUCTURES	80 C.Y.
RIPRAP	120 C.Y.
CONCRETE MASONRY	118.5 C.Y.
BAR STEEL REINFORCEMENT	17,340 LBS.

NON-BID ITEMS

MEMBRANE WATERPROOFING	60 S.F.
FILLER	½ SIZE

REVISED

STATE HIGHWAY COMMISSION OF WISCONSIN

DETAILS

Co. LA CROSSE — VILL. TWN. HAMILTON — STA. 137+75.00

SECTION 14 — TOWN 17 N. — RANGE 6 W.

DESIGN SPEC. A.A.S.H.O. 61 — LOADING H 15 — CONST. SPEC. 1963

DATE 12-17-62 — DESIGN IBM — DRAWN R.T.R. — CKD. Eg.

RECOMMENDED W. B. Schultz, ENGINEER OF BRIDGES

APPROVED: E. C. Ruettiger, STATE HIGHWAY ENGINEER

STRUCTURE C-32-28 — SHEET 1 OF 2

X 26513

REVISED RUN 3-8 OF FILE

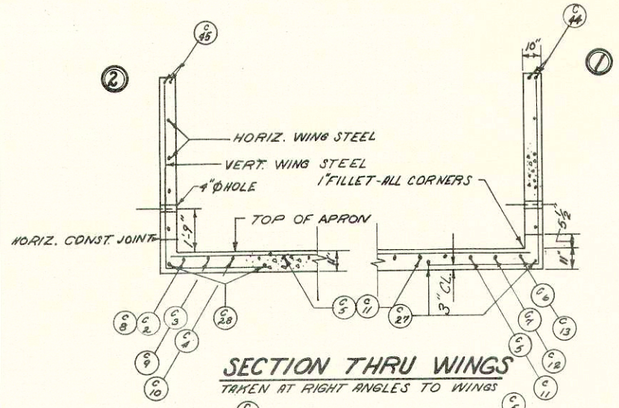
FORM E-B-12-62

B. P. R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
A	51460(3)	7	12

BILL OF BARS

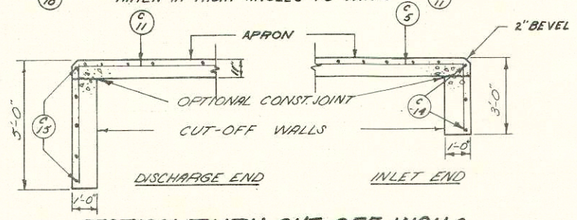
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT # 17,540

POUR	MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
PAVEMENT & APRONS	C1	14	4	41-3	1-0	APRONS (INLET & DISCH. ENDS)	C
	C2	1	4	11-0	1-0	APRON (INLET END)	D
	C3	1	4	15-6	1-0	" " "	D
	C4	1	4	20-3	1-0	" " "	D
	C5	11	4	24-0	1-0	" " "	D
	C6	1	4	13-6	1-0	" " "	D
	C7	1	4	20-3	1-0	" " "	D
	C8	1	4	13-0	1-0	" (DISCH. END)	D
	C9	1	4	17-6	1-0	" " "	D
	C10	1	4	22-3	1-0	" " "	D
	C11	11	4	26-0	1-0	" " "	D
	C12	1	4	22-3	1-0	" " "	D
	C13	1	4	15-6	1-0	" " "	D
	C14	3	4	25-6	1-0	CUT OFF WALL (INLET END)	
	C15	5	4	25-6	1-0	" " " (DISCH. END)	
	C16	6	4	6-9	6	WING #1	D
	C17	8	4	7-6	6	" "	D
	C18	6	5	8-6	1-0	" "	D
	C19	6	4	8-6	1-0	" "	D
	C20	16	4	19-0	1-0	" "	A&D
	C21	2	4	22-3	SHOWN	" "	
	C22	6	4	8-6	1-0	WING #2	D
	C23	11	4	19-0	1-0	" "	A&D
	C24	4	5	8-6	1-0	" "	D
	C25	10	4	7-3	6	" "	D
	C26	2	4	15-3	SHOWN	" "	
	C27	4	4	22-3	"	APRON-WING-1	
	C28	4	4	15-6	"	" " " -2	
	C29	148	4	2-0	1-0	SIDES	
	C30	8	4	21-0	SHOWN	TIE PAVE.	
	C31	4	4	30-6	"	" "	
	C32	192	7	8-6	9	PAVE. & SIDES	D
	C33	22	4	25-0	1-0	PAVE	
	C34	11	4	24-9	1-0	"	B
	C35	64	9	11-0	1-0	"	
	C36	9	9	13-0	1-0	"	B
	C37	6	7	15-6	SHOWN	HEADER	
	C38	6	4	9-9	"	"	
	C39	12	7	10-3	"	"	D
	C40	20	4	3-6	1-6	"	E
	C55	11	5	4-0	1-0	VERT. CONST. JOINT	
SIDES & FLOOR	C30	12	4	21-0	SHOWN	TIE FLOOR & SIDES	
	C31	6	4	30-6	"	" " " "	
	C32	192	7	8-6	9	FLOOR & SIDES	D
	C33	22	4	25-0	1-0	FLOOR	
	C34	11	4	24-9	1-0	"	B
	C37	6	7	15-6	SHOWN	HEADER	
	C38	6	4	9-9	"	"	
	C39	12	7	10-3	"	"	D
	C40	20	4	3-6	1-6	"	E
	C42	10	4	6-9	1-0	WING-2	
	C43	14	4	6-9	1-0	" -1	
	C44	4	4	23-3	SHOWN	" -1 (TOP)	
	C45	4	4	16-9	SHOWN	" -2 (TOP)	
	C46	8	4	4-0	"	" -2 (OPENING FOR 30" PIPE)	
	C47	148	4	8-0	1-0	SIDES	
	C48	5	4	17-6	SHOWN	WING-2	C
	C49	5	4	25-6	SHOWN	" -1	C
	C50	10	4	31-0	1-6	SIDES	
	C51	46	7	7-6	1-6	FLOOR	
	C52	44	7	11-0	1-6	"	
	C53	6	7	12-6	1-6	"	B
	C54	10	4	11-9	1-6	SIDES	
	C55	29	5	4-0	1-0	VERT. CONST. JOINT	



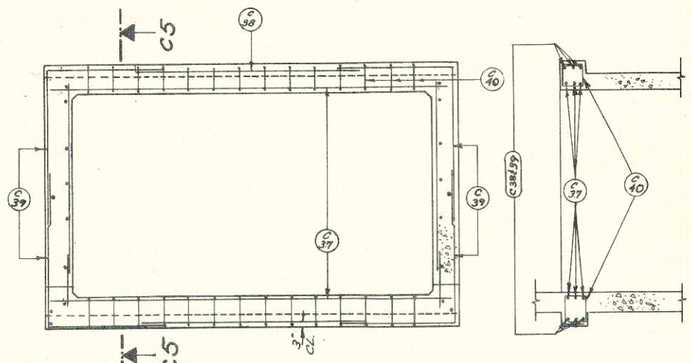
SECTION THRU WINGS

TAKEN AT RIGHT ANGLES TO WINGS



SECTION THRU CUT-OFF WALLS

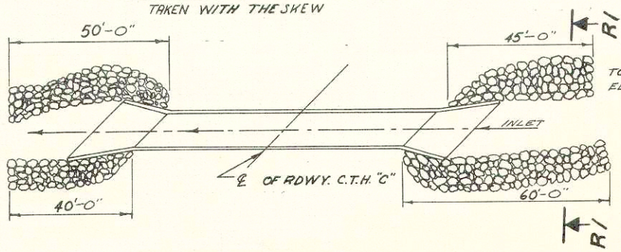
TAKEN AT RIGHT ANGLES



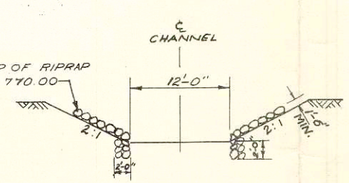
SECTION C4

TAKEN WITH THE SKEW

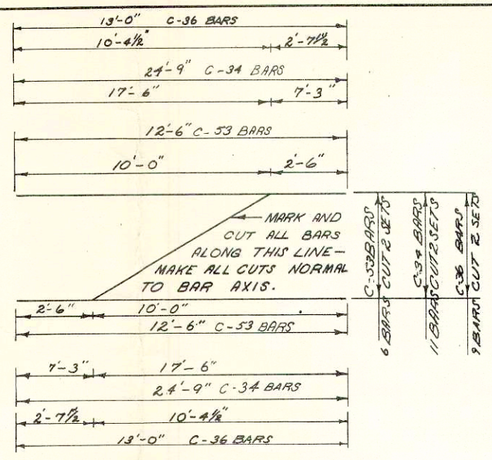
SECTION C5



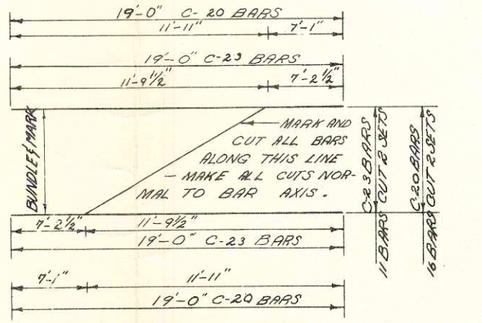
RIRRAP LAYOUT



SECTION R1

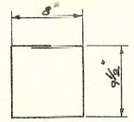


DETAIL - B

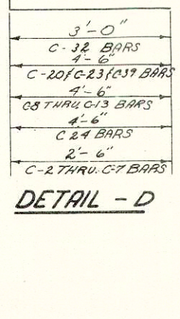


CUTTING DIAGRAM - A

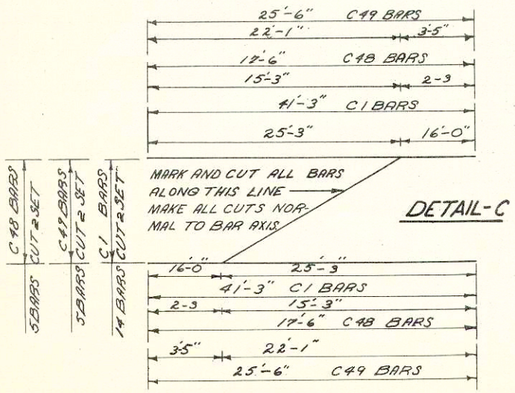
BEFORE BENDING - SEE DETAIL D



DETAIL - E



DETAIL - D

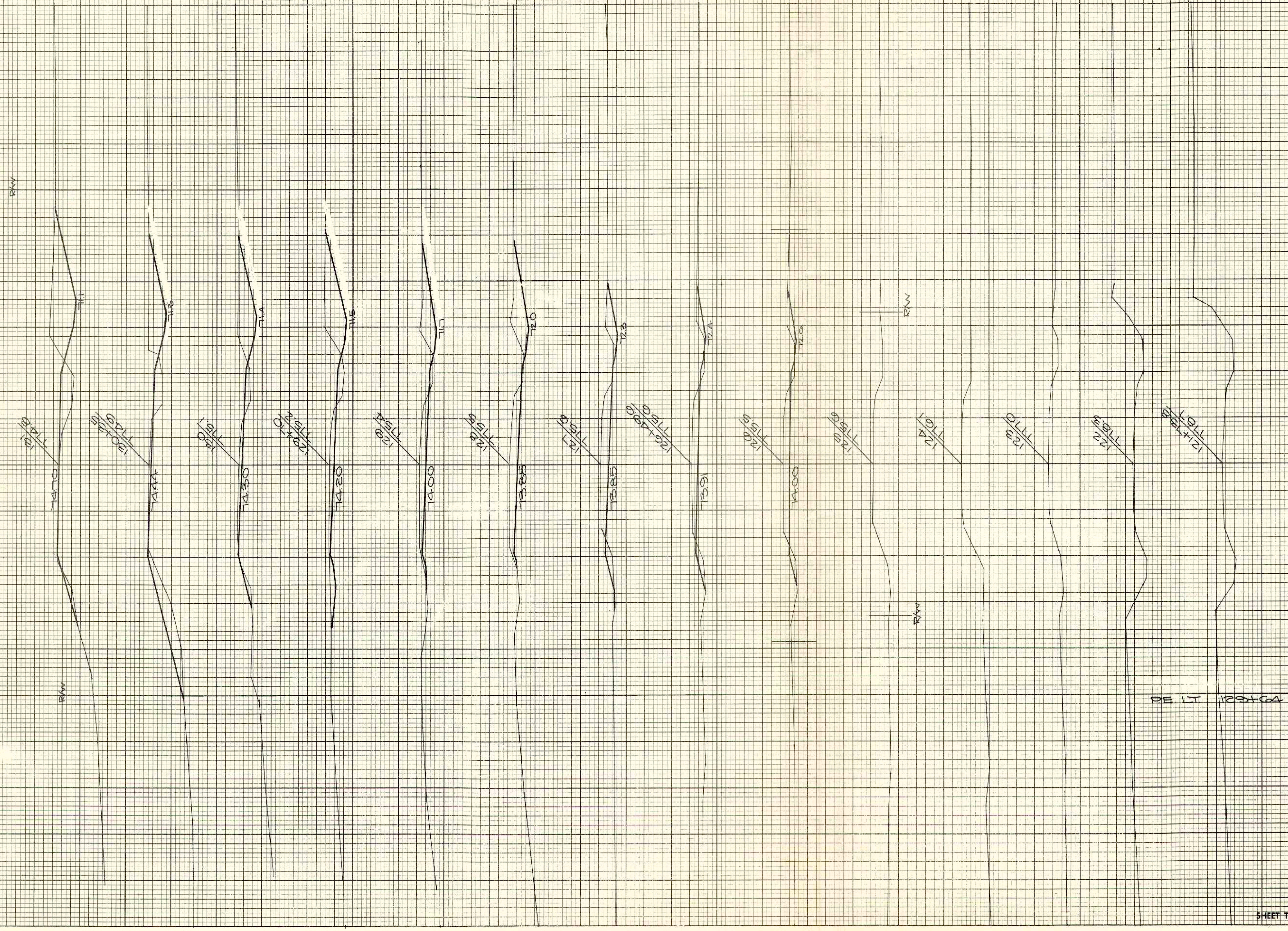


DETAIL - C

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	DETAILS
	DESIGN SPEC: AASHO 61 | LOADING H15 | CONST. SPEC. 1963
	DATE 12-17-62 | DESIGN I BM | DRAWN GTR | CKD. EK
STRUCTURE C-32-28	SHEET 2 OF 2

X26514

B.P.R. DISTRICT OFFICE	PROJECT	SHEET NUMBER	TOTAL SHEETS
WIS. 4	S 1460(3)	8	12

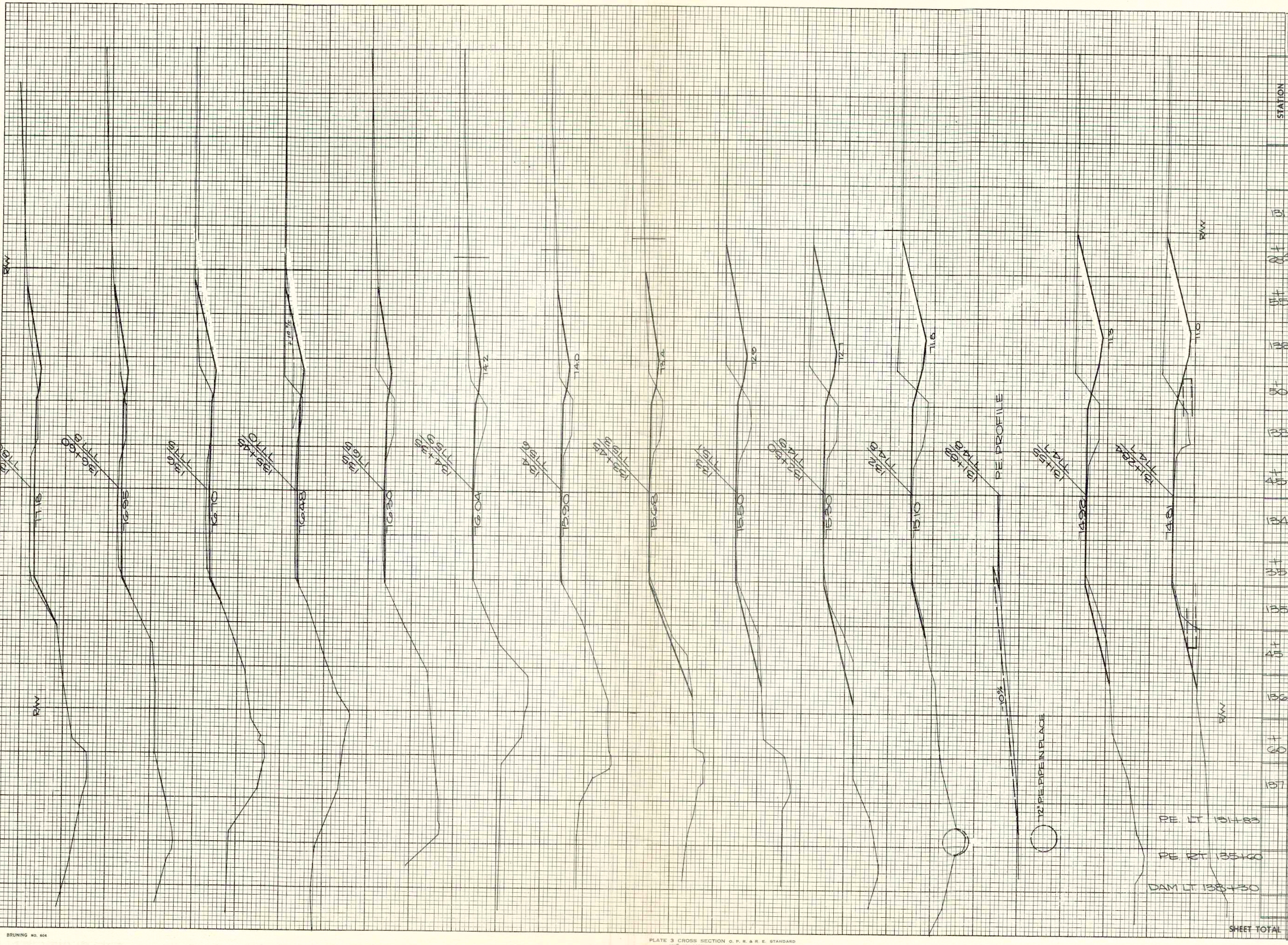


STATION	DISTANCE	YARDAGE EXCAVATION UNCL.				FILL
126						
		102				19
+49.6						
		115				19
127						
		315				20
128						
		339				11
129						
		248				20
+70						
		104				13
130						
		91				52
+35						
		206				143
131						
P.E. LT 129+64		0				45
SHEET TOTAL		1520				342

B.P.R. DISTRICT OFFICE	PROJECT	SHEET NUMBER	TOTAL SHEETS
WIS. 4	S 1460(3)	9	12

FINAL SURVEY — NOTE BOOK NO. ___ — SURVEYED ___ PLOTTED ___ TEMPLATE ___ AREAS ___ AREAS CHECKED ___ — BY — DATE

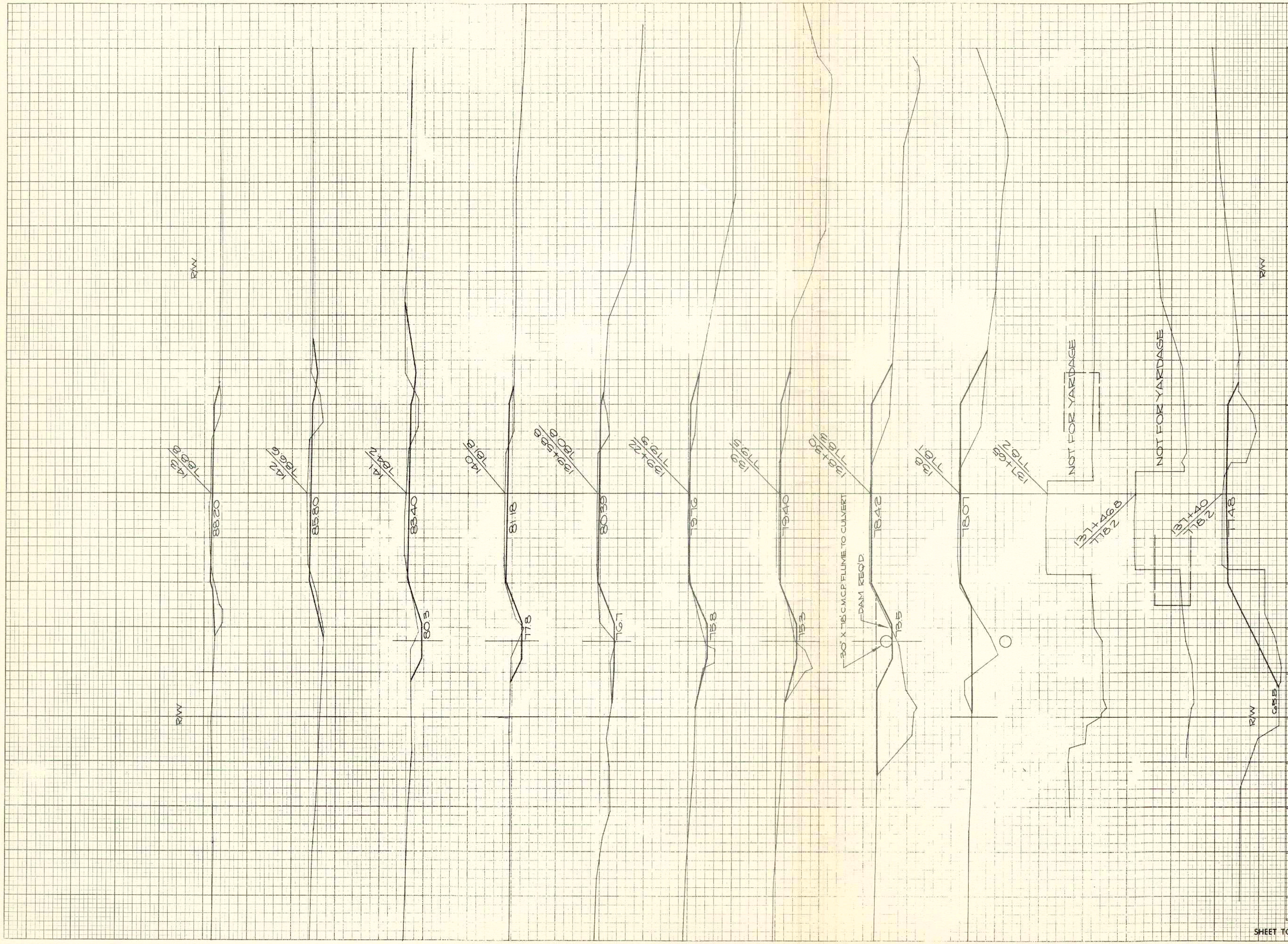
ORIGINAL SURVEY — NOTE BOOK NO. ___ — SURVEYED DEK — PLOTTED HHH — TEMPLATE 333 — AREAS RJS — AREAS CHECKED



STATION	DISTANCE	YARDAGE EXCAVATION UNCL	FILL
131			
		126	70
+28			
		124	76
+55			
		196	100
132			
		208	184
+50			
		176	148
133			
		98	120
+45			
		76	110
134			
		48	37
+35			
		100	59
135			
		98	20
+45			
		139	6
136			
		130	9
+60			
		76	9
137			
PE. LT. 131+83		0	50
PE. RT. 135+60		10	50
DAM LT. 138+30		0	180
SHEET TOTAL		1614	1168

BRUNING NO. 604

B.P.R. DISTRICT OFFICE	PROJECT	SHEET NUMBER	TOTAL SHEETS
WIS. 4	S 1460(3)	10	12



STATION	DISTANCE	YARDAGE EXCAVATION UNC.			FILL
137					
		63			165
137+40					
		13			380
138					
		9			196
138+30					
		20			365
139					
		9			30
139+22					
		35			22
139+58.8					
		56			24
140					
		174			65
141					
		153			96
142					
		67			118
143					
SHEET TOTAL		599			1461

B.P.R. DISTRICT OFFICE	PROJECT	SHEET NUMBER	TOTAL SHEETS
WIS. 4	S 1460(3)	11	12

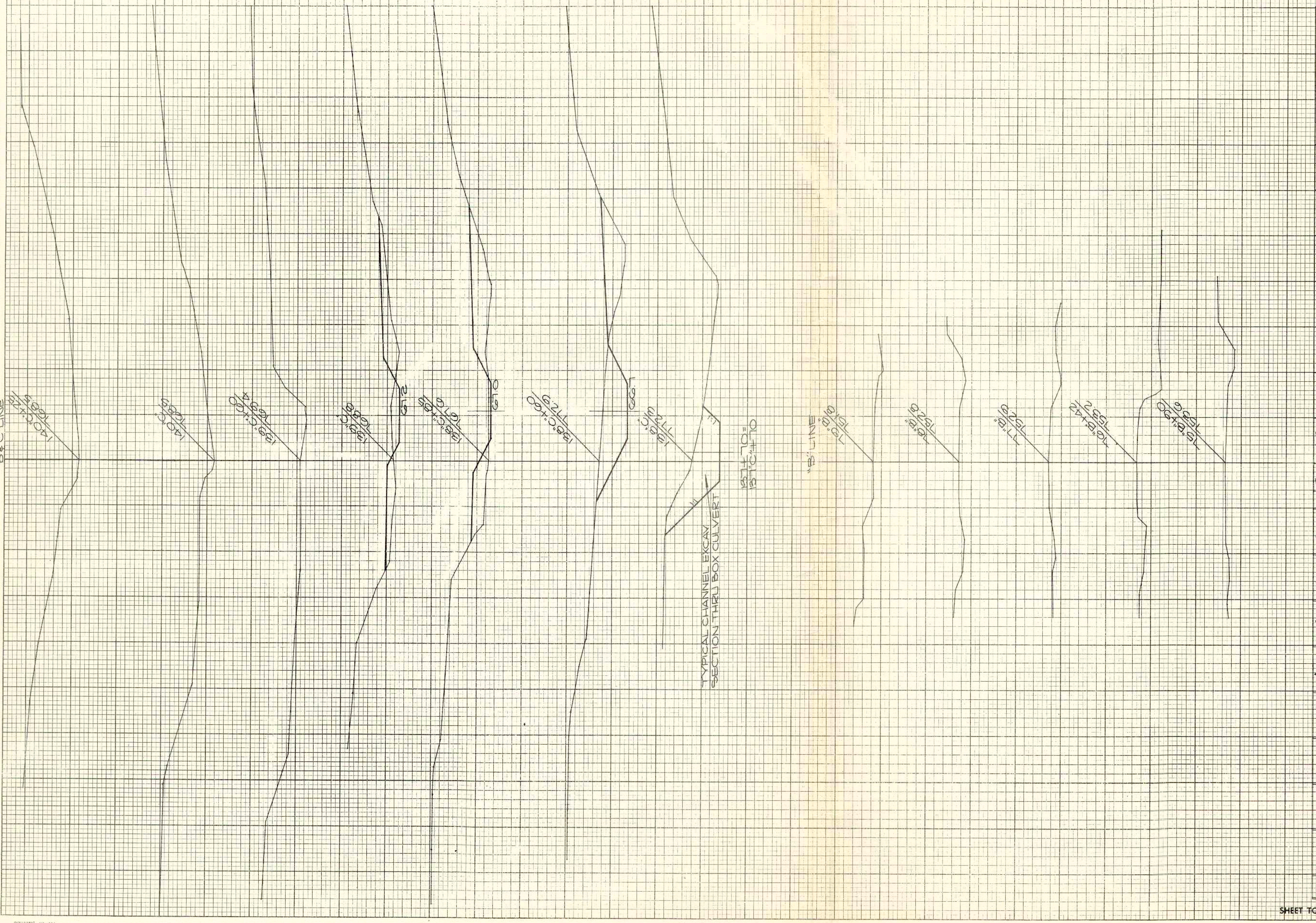
SURVEY	SURVEYED
	PLOTTED
NOTE BOOK	TEMPLATE
	AREAS
NO.	AREAS CHECKED

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	YARDAGE EXCAVATION FILL
143			
	68		104
144			
	69		120
145			
	116		34
146			
	122		39
147			
	28		56
+50			
	26		78
148			
	13		22
+42			
	106		139
149			
	70		34
150			
RWY			
PE RT 143+13	0		60
PE RT 143+32	0		50
PE LT 147+00	0		70
SHEET TOTAL	643		934

BRUNING NO. 604

PLATE 3 CROSS SECTION O. P. R. & R. E. STANDARD
100% RAG PAPER - MADE AND PRINTED IN U. S. A.
CHARLES BRUNING COMPANY, INC

B.P.R. DISTRICT OFFICE	PROJECT	SHEET NUMBER	TOTAL SHEETS
WIS. 4	S1460(3)	12	12



STATION	DISTANCE	YARDAGE EXCAVATION UNCL				FILL
137"C" +10						
		382				300
137"C" +90						
		228				285
+ 60						
		41				111
+ 85						
		15				70
139 "C"						
		24				104
+ 40						
SHEET TOTAL		690				870