COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT		B.P.R. REGION DIVISION	SHEET NUMBER	TOTAL SHEETS
		STATE	FEDERAL			
44.6	0.0	3.22		4 WIS.	1	

INDEX OF SHEETS

SHEET NO. 1 TITLE
SHEET NO. 2 TYPICAL CROSS SECTIONS
SHEET NO. 3 ESTIMATE OF QUANTITIES
SHEET NO. 3A MISCELLANEOUS QUANTITIES
SHEET NO. 4-4.5 RIGHT OF WAY PLAT
SHEET NO. 5- PLAN AND PROFILE STA. 47+09.7 TO STA. 310+29.11
SHEET NO. STANDARD DETAILS
SHEET NO. DRAINAGE STRUCTURES
SHEET NO. CROSS SECTIONS



"Plan 134 OUTAG

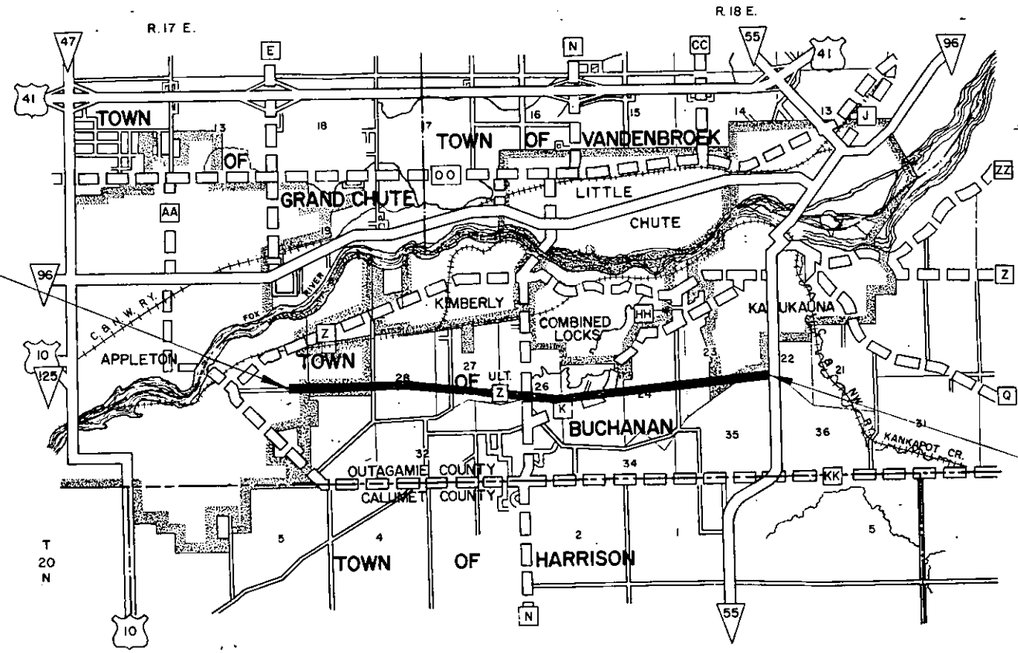
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLAN AND PROFILE OF PROPOSED

APPLETON – KAUKAUNA RD
C.T.H. "Z" "CE"

OUTAGAMIE COUNTY
PROJECT E 0-0 (22)

SCALES
PLAN 1 IN. 100 FT. & 20 FT.
PROFILE HOR. 1 IN. = 100 FT. & 20 FT. VERT. 1 IN. = 10 FT. & 2 FT.
CROSS SECTIONS HOR. 1 IN. = 5 FT. VERT. 1 IN. = 5 FT. SIDE ROADS
" " " 1 IN. = 10 FT. " 1 IN. = 10 FT. MAINLINE



STA. 47+09.70 BEGINNING OF PROJ.
4,850 FT. NORTH AND 1,606 FT. WEST OF THE SOUTHWEST CORNER OF GOVERMENT LOT 8, SECTION 29, T. 21 N., R. 18 E.

STA. 310+29.11 END OF PROJ.
43 FT. SOUTH AND 54 FT. WEST OF THE NORTHEAST CORNER OF SECTION 35, T. 21 N., R. 18 E.

CONTROL OF ACCESS

WITHIN THE LIMITS OF THE PROJECT, WHERE CONTROL OF ACCESS LINE IS SHOWN THUS . . . . . NO ACCESS IS PERMITTED TO THE HIGHWAY TRAFFIC LANES EXCEPT BY RAMPS AT INTERCHANGES.

DESIGN		DESIGNATION
1967 ADT	=	2,500 (AVERAGE)
1987 ADT	=	5,930 "
DHV	=	710
D	=	60%
T	=	10%
V	=	65 M.P.H.

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 ... PL + 32.6
TRAVELED WAY OR P.E.
RAILROADS
BASE OR SURVEY LINE ... 30
UNCLASSIFIED EXCAVATION ... UNCL. EXC.
CORRUGATED METAL CULVERT PIPE ... C.M.C.P.
REINF. CONC. PIPE CLASS III, (STORM SEWER) ... RCPC. III (SS)
CONCRETE SURFACE DRAIN ... C.S.D.

MINOR SIDE ROAD ... M.S.R.
CULVERTS IN PLACE
CULVERTS REQUIRED
DROP INLET
POWER POLE
TELEPHONE OR TELEGRAPH POLE
RIGHT OF WAY MARKERS
REFERENCE STAKE FOR HUBS ONLY
MARSH
HEDGE
TREES
GROUND ELEVATION ... DATUM LINE 739
GRADE ELEVATION ... DATUM LINE 756
CULVERT PIPE ... C.P.
RIGHT OF WAY ... R/W
CLASS III ... CL. III
SLOPE DRAIN ... S.D.

LAYOUT

SCALE — ONE MILE

NET LENGTH OF CENTERLINE = 1.218 MI. (MUNICIPAL)
" " " " = 3.767 MI. (RURAL)
TOTAL NET LENGTH OF CENTERLINE = 4.985 MI.

CE-3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
MADISON, WISCONSIN

SURVEYOR D.H. NOTE BOOK 385-386
DISTRICT COMPUTER W.E.S. M. C. CHECKER
DISTRICT CHECKER W.R.K. CORRECT

CORRECT:
DATE ... DISTRICT ENGINEER

RECOMMENDED FOR APPROVAL:
DATE ... CHIEF DESIGN ENGINEER

APPROVED:
DATE ... STATE HIGHWAY ENGINEER

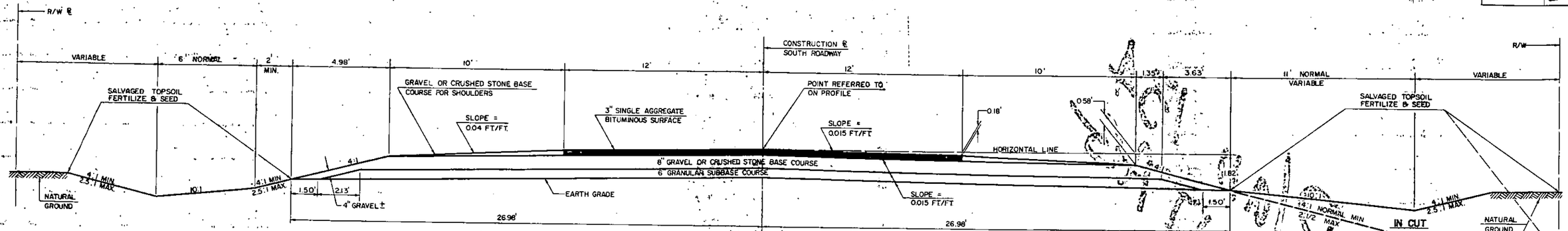
DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED:
DATE ... DIVISION ENGINEER

FIELD INSPECTED MAR. 30, 1966 C.C. EMMEL W.H.C.

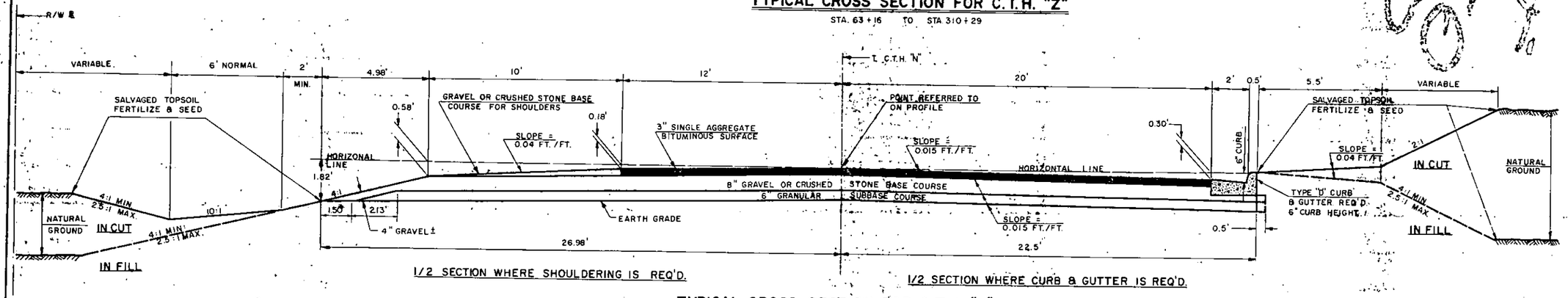
CE-3

PROJECT	SHEET NUMBER	TOTAL SHEETS
E 0-0 (22)	2	



TYPICAL CROSS SECTION FOR C.T.H. "Z"

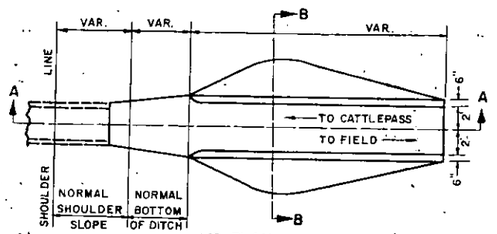
STA. 63 + 16 TO STA 310 + 29



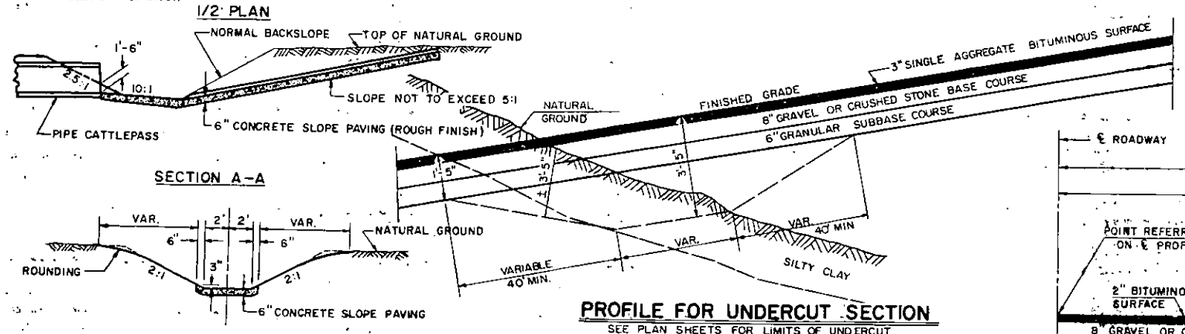
1/2 SECTION WHERE SHOULDERING IS REQ'D.

1/2 SECTION WHERE CURB & GUTTER IS REQ'D.

TYPICAL CROSS SECTION FOR C.T.H. "N"



1/2 PLAN



SECTION A-A

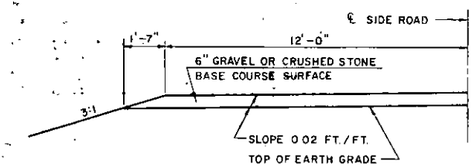
SECTION B-B

PROFILE FOR UNDERCUT SECTION

SEE PLAN SHEETS FOR LIMITS OF UNDERCUT

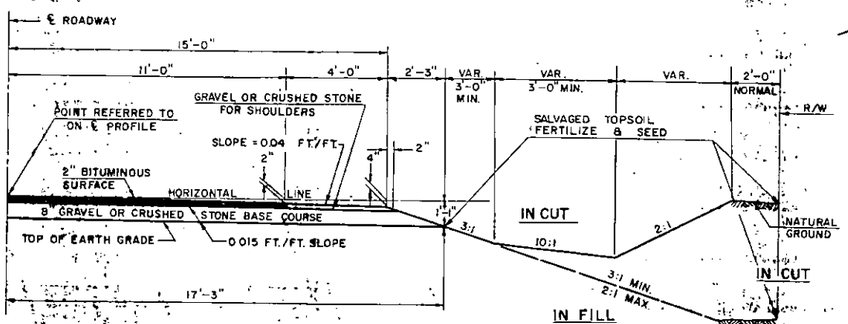
DETAILS FOR CATTLEPASS RAMPS

NOTE: ITEMS COMPOSING CATTLE PASS RAMPS ARE TO BE PAID FOR AT THE UNIT BID PRICES, INCLUDING UNCLASSIFIED EXCAVATION.



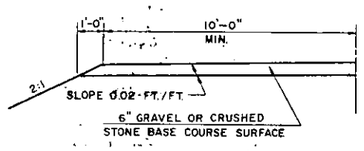
1/2 NORMAL SECTION FOR SIDE ROADS

STA. 96+58.8
STA. 138+57.68
STA. 259+63.07
STA. 212+05

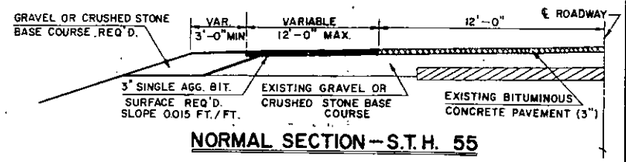


1/2 NORMAL SECTION FOR C.T.H. "K"

STA. 224+78.34 LT. & RT.



1/2 NORMAL SECTION FOR P.E.'S.

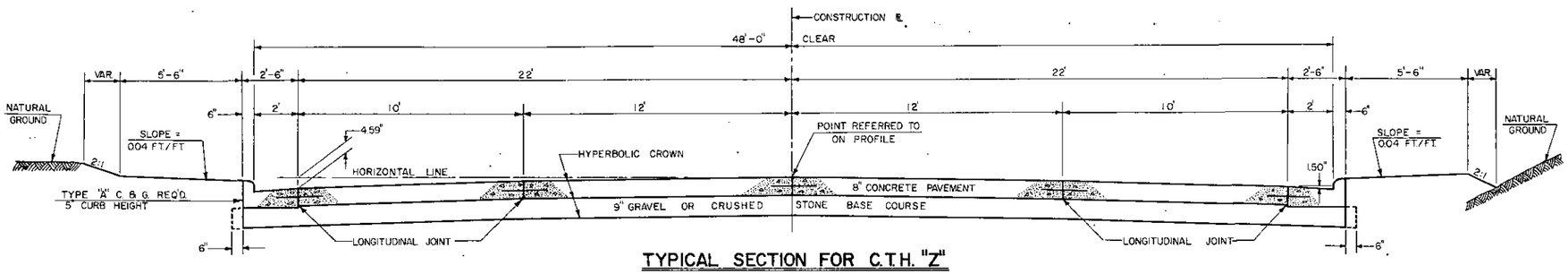


NORMAL SECTION - S.T.H. 55

TYPICAL CROSS SECTION FOR 44 FT. ROADBED — 24 FT. BIT. SURF. AND MISCELLANEOUS CONSTRUCTION DETAILS

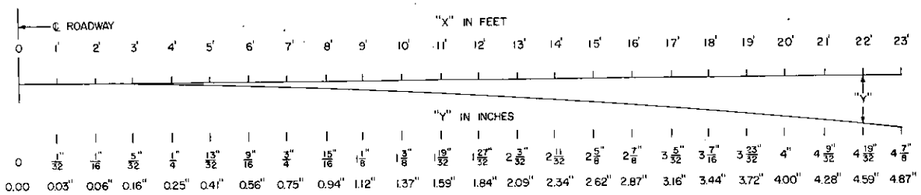
(SCALE VARIABLE)

B. P. R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
WIS. 5N	E0-0(22)	2.1	



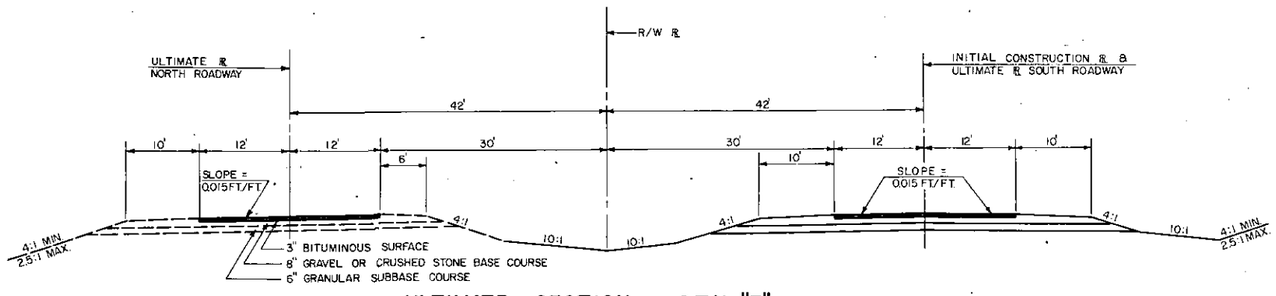
TYPICAL SECTION FOR C.T.H. "Z"

STA. 47+36 TO STA. 63+16

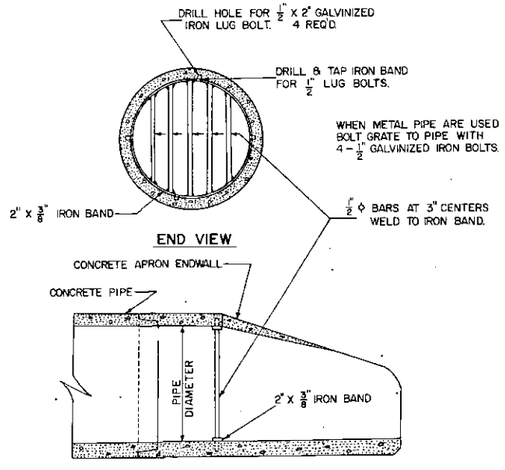


$$"Y" = \sqrt{\frac{X^2}{10} + 9} - 3$$

CO-ORDINATES FOR HYPERBOLIC CROWN



ULTIMATE SECTION - C.T.H. "Z"



LONGITUDINAL SECTION

THE COST FOR GRATE AND INSTALLATION SHALL BE INCLUDED IN THE BID PRICE FOR PIPE.

DETAIL FOR SPECIAL INLET GRATE

STA. 63+18 RT.

GENERAL NOTES

CUBIC YARDS OF FILL AS SHOWN ON PLAN PERTAINS TO EMBANKMENTS CONSTRUCTED FROM UNCLASSIFIED EXCAVATION. A 20 TO 30 % SHRINKAGE ALLOWANCE WAS USED BASED ON THE FILL EMBANKMENT.

WHEN THE QUANTITY OF THE ITEMS OF 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.

THE EXACT LOCATION AND LIMITS FOR DRIVEWAYS AND SIDEWALK SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

PRIVATE UTILITY COMPANIES SHALL ADJUST OR MOVE ALL PRIVATELY OWNED FACILITIES TO FIT THE NEW CONSTRUCTION (POWER POLES, TELEPHONE POLES, ETC.)

CURB AND GUTTER RADII SHOWN ARE TO FRONT FACE OF CURB.

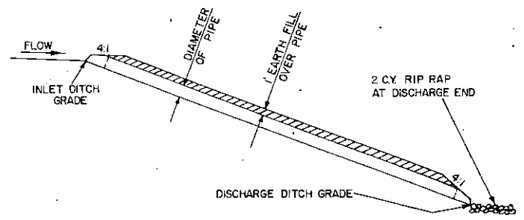
CATCH BASIN AND INLET COVERS TO HAVE DIAGONAL SLOTTED GRATES UNLESS OTHERWISE SHOWN.

THE EXACT ELEVATIONS FOR CURB AND GUTTER RETURNS AT SIDE STREETS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

CONTRACTION JOINTS FOR URBAN TYPE PAVEMENT SHALL HAVE MAXIMUM SPACING OF 50 FT. & MINUMUM SPACING OF 40 FT. MAXIMUM JOINT SPACING WILL NORMALLY BE USED. LOCATIONS TO BE DETERMINED IN THE FIELD.

STANDARD DRAWINGS

CONCRETE PAVEMENT REINFORCEMENT	2 - 1.1.12
CONCRETE CURB & GUTTER, SURFACE DRAIN	3 - 1.1.7
CONCRETE SURFACE DRAIN AT BRIDGES	3 - 2.2.1
LONGITUDINAL JOINTS - CONCRETE PAVEMENT	4 - 4.4.8
TRANSVERSE JOINTS - CONCRETE PAVEMENT	4 - 4.5.10
CATCH BASINS	5 - 3.3.2
CATCH BASIN & INLET COVERS	5 - 3.4.8
INLETS	5 - 3.5.2
MANHOLES	5 - 3.7.2
MANHOLE COVERS	5 - 3.8.3
MORTAR RUBBLE MASONRY FOR CULVERT PIPE ENDWALLS	6 - 2.4.3
APRON ENDWALLS FOR CULVERT PIPE	6 - 2.6.5
CATTLE PASS (72") REINF CONC & C.M.P. (ALTERNATES)	6 - 7.1.5
MARKER POSTS	7 - 1.3.5
STEEL PLATE BEAM GUARD	7 - 2.4.12
CONSTRUCTION BARRICADE	7 - 4.1.5
DITCH CHECKS, M.R.M. & SOD	8 - 1.3.1
DESIGN DETAILS FOR SIDE ROAD INTERSECTIONS	9 - 1.1.5
LANDMARK REFERENCE MONUMENTS	12 - 1.1.2



TYPICAL SLOPE DRAIN PIPE WITH APRON ENDWALLS

TYPICAL CROSS SECTION FOR

44 FT. CONCRETE PAVEMENT 48 FT. BETWEEN CURBS

AND

MISCELLANEOUS CONSTRUCTION DETAILS

SCALE VARIABLE

PROJECT	SHEET NUMBER	TOTAL SHEETS
E 0-0 (22)	2.2	

END TAPER
STA. 152+33.5

PC=STA. 162+83.50

NORTHWEST RAMP
CURVE NOTES
P.I. = 164+55.73
∠ = 166°-17'-16"
Δ = 13°-42'-44"
D = 4°-00'
T = 172.23'
L = 342.81'
R = 1,432.39'
S.E. = 0.06 FT/FT.
R.O. = 150 FT.

P.T. = STA. 166+26.31

EQUATION: 80.67 BACK = 81.00 AHEAD
STA. 169+70.55 AHEAD

N.W. RAMP ℄

SURVEY ℄ & R/W ℄

CONSTRUCTION ℄

P.C. = STA. 168+65.93

SOUTHWEST RAMP
CURVE NOTES
P.I. = 171+00
∠ = 198°-33'-42"
Δ = 18°-33'-42"
D = 4°-00'
T = 234.07'
L = 464.04'
R = 1,432.39'
S.E. = 0.060 FT./FT.
R.O. = 150 FT.

S.W. RAMP ℄

P.T. = STA. 173+29.97

N.E. RAMP ℄

EQUATION:
P.C. = STA. 186+44.97 BACK =
P.C. = STA. 186+33.85 AHEAD.

(SURVEY) P.C. = STA. 186+94.0
(CONST.) P.C. = STA. 186+94.03

NORTHEAST RAMP
CURVE NOTES
P.I. = STA. 188+79.19
∠ = 160°-33'-41"
Δ = 19°-26'-19"
D. = 4°-00'
T = 245.34'
LC = 485.97
R = 1,432.395'
S.E. = 0.06 FT./FT.
R.O. = 150 FT.

SURVEY ℄
CURVE NOTES
P.I. = STA. 192+51.2
∠ = 168°-53'-30"
Δ = 11°-06'-30"
D = 1°-00'
T = 557.2'
L = 1110.8'
R = 5729.58'

P.T. = STA. 191+19.82

SURVEY ℄ & R/W ℄

CONSTRUCTION ℄
CURVE NOTES
P.I. = STA. 192+55.28
Δ = 11°-06'-30"
D = 1°-00'
T = 561.25'
L = 1118.98'
R = 5,771.58'
SE. = 0.02 FT./FT.
R.O. = 175 FT.

(CONST.) P.T. = STA. 198+13.01 BACK =
(SURVEY) P.T. = STA. 198+04.80 AHEAD.

P.C. = STA. 183+93.63

S.E. RAMP ℄

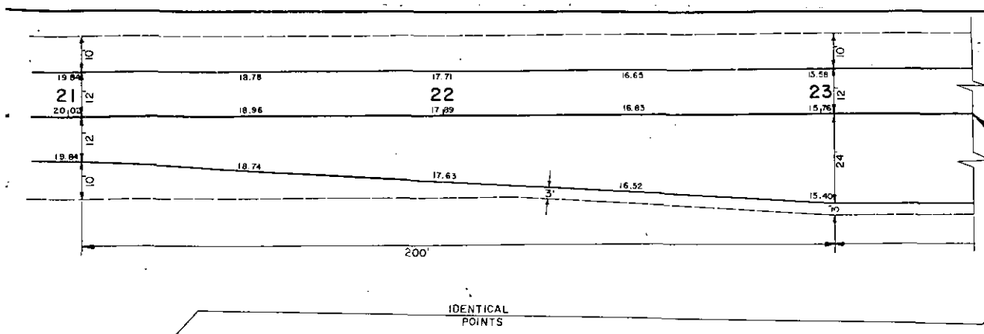
SOUTHEAST RAMP
CURVE NOTES
P.I. = STA. 186+02.94
∠ = 196°-37'-37"
Δ = 16°-37'-37"
D = 4°-00'
T = 209.31'
L = 415.67'
R = 1,432.39'
S.E. = 0.06 FT./FT.
R.O. = 150 FT.

P.T. = STA. 188+09.30

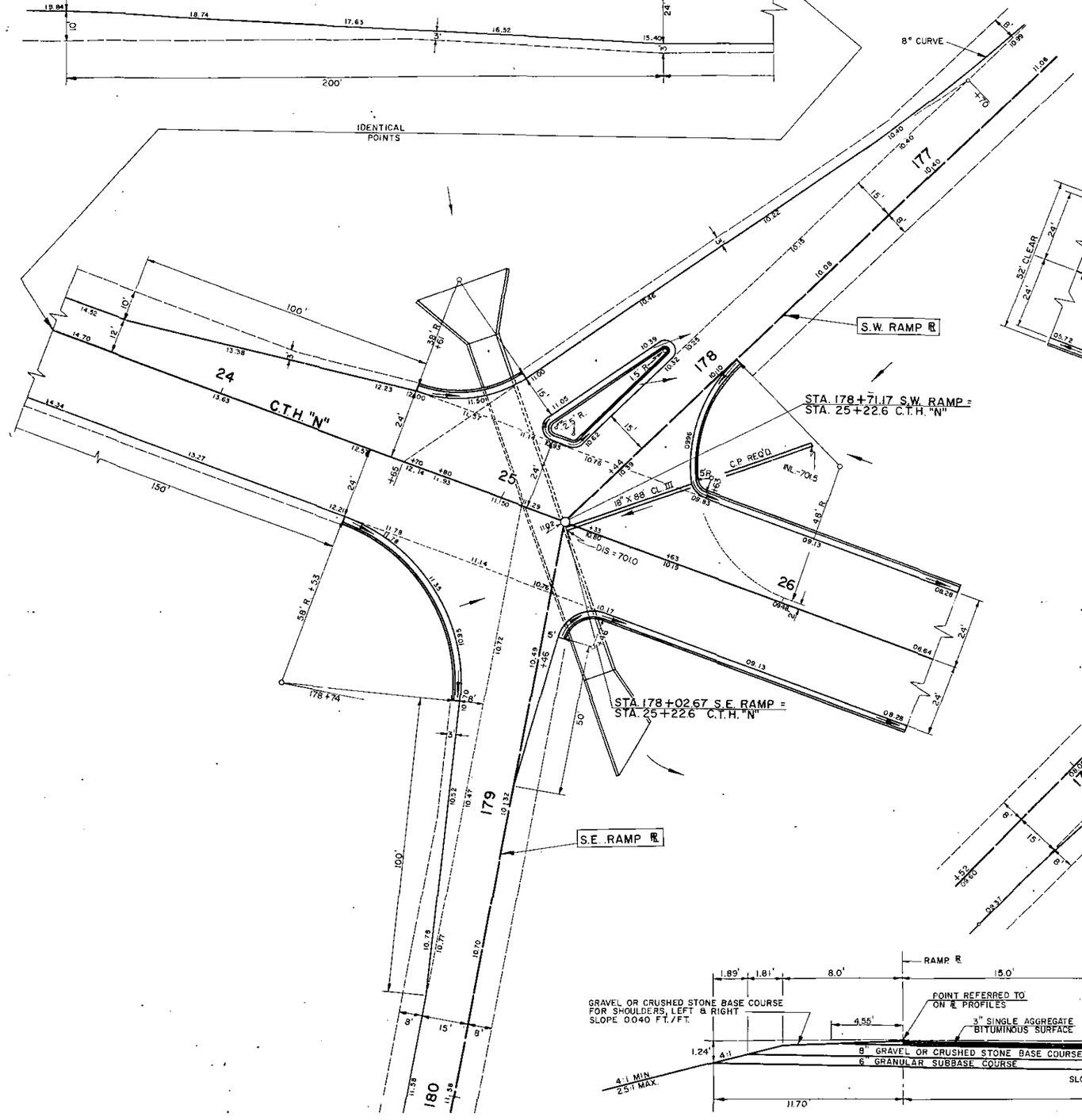
CONSTRUCTION ℄

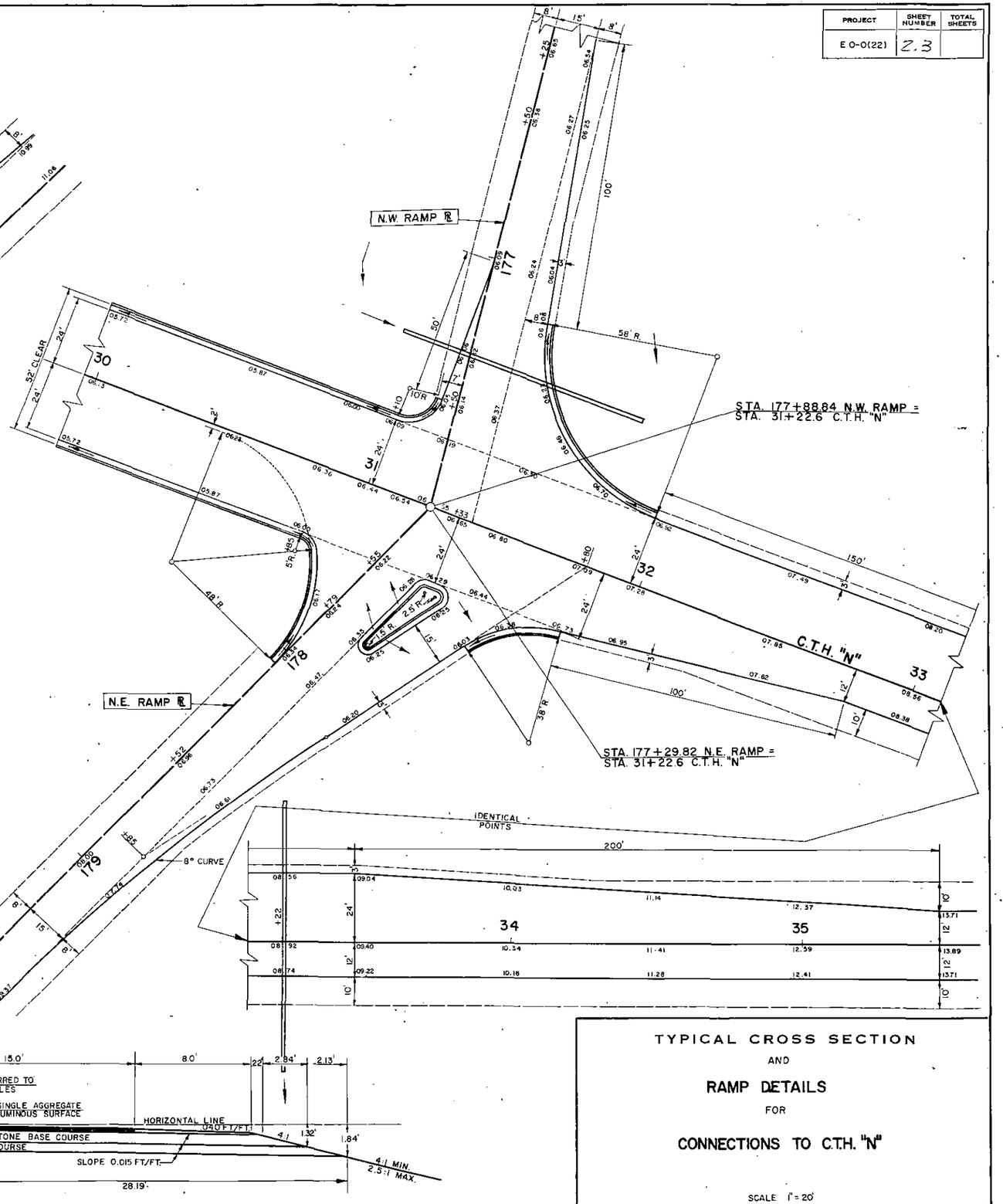
LAYOUT
AND
CONSTRUCTION DETAILS
FOR
C.T.H "Z" ENTRANCE & EXIT RAMPS
AT
C.T.H. "N"
SCALE 1" = 50'

PROJECT	SHEET NUMBER	TOTAL SHEETS
E 0-0(22)	2.3	

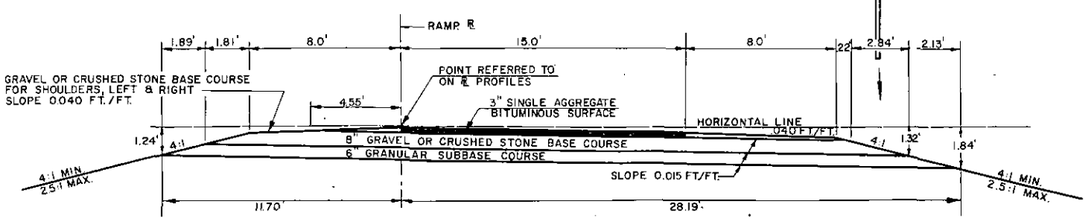


IDENTICAL POINTS





IDENTICAL POINTS



TYPICAL CROSS SECTION AND RAMP DETAILS FOR CONNECTIONS TO C.T.H. "N"

SCALE 1" = 20'

ESTIMATE OF QUANTITIES

CONTRACT NO. 1

B. P. R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	E 0-0(22)	3	

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		REMOVING PAV'T.	REMOVING CURB	REMOVING CONC. SIDE WALK	ABANDONING INLETS	ABANDONING WELLS	EXCAVATION: UNCLASSIFIED	EXCAVATION: BORROW	EXCAVATION: SELECTED BORROW	GRANULAR BACKFILL	GRANULAR SUB BASE COURSE	FINISHING ROADWAY	GRAVEL OR CRUSHED STONE BASE COURSE	APRON ENDWALLS FOR CULVERT PIPES: 18"	24"	30"	36"	METAL APRON ENDWALLS FOR CULVERT PIPES: 18"	24"	30"	BITUM. MAT. FOR PRIME COAT	SINGLE AGGREGATE BITUMINOUS SURFACE	BITUMINOUS MATERIALS FOR SURFACE COURSE	CONCRETE PAVEMENT 9"	CONCRETE SURFACE DRAINS	CONCRETE PAVEMENT REINFORCEMENT
	ITEM NO.		20101	20102	20104	20105	20401	20403	20406	20443	20444	20503	20801	20811	20901	21201	21301	30402	52061	52063	52065	52067	52145	52147	52149	40202	40601	40602	40909	40934	40950
	UNIT	LIN. FT.	STA.	IN. DIA.	STA.	IN. DIA.	S.Y.	LIN. FT.	S.Y.	EACH	EACH	C.Y.	C.Y.	C.Y.	C.Y.	C.Y.	L.S.	TON	EACH	EACH	EACH	EACH	EACH	EACH	EACH	GAL.	TON	TON	S.Y.	C.Y.	S.Y.
1	47+09.7 — 63+15.7	1,606.00	0	0	0	0	140	80	20	10	0	4,839				0	0.06	4,950	0	0	0	0	0	0	0	0	0	0	8,870	0	8,870
1	63+15.7 — 96+34.05	3,318.35	5	0	5	0	0	0	0	0	0	13,140	0			4,850	0.13	9,050	0	2	2	0	0	0	0	1,500	1,650	99	0	0	0
2	96+34.05 - 280+64.44	18,430.39	16	700	16	340	0	0	0	0	1	291,862	9,500			43,550	0.70	73,680	7	26	6	9	30	6	0	12,800	14,150	849	0	8	0
3	280+64.44 - 295+70.98	1,506.54	0	70	0	80	0	0	0	0	0	9,843	0			4,050	0.06	3,900	0	0	2	0	0	0	0	700	750	45	0	0	0
4	295+70.98 - 310+29.11	1,458.13	0	0	0	0	0	0	0	0	0	6,296	0			3,150	0.05	4,350	0	0	2	0	0	0	1	800	950	57	0	0	0
	TOTAL	26,319.41	21	770	21	410	140	80	20	10	1	325,980	9,500			55,600	1.00	95,930	7	28	12	9	30	6	1	15,800	17,500	1,050	8,870	8	8,870

BRIDGES (STRUCTURES OVER 20FT. SPAN)

SEC. NO.	REMOVE OLD BRIDGE STA.	COMMON EXC.	EXCAVATION FOR STRUCTURES	GRANULAR BACKFILL	CONCRETE MASONRY	BAR STEEL REINF.	STRUCTURAL CARBON STEEL	SHEET LEAD	SHEET ZINC	TR'T'D LUMBER AND TIMBER	TR'T'D TIMBER TEST PILING	UNTREATED TIMBER PILING: DELIVERED	UNTREATED TIMBER PILING: DRIVEN	TREATED TIMBER PILING: DELIVERED	TREATED TIMBER PILING: DRIVEN	STEEL TEST PILING	STEEL PILING: DELIVERED	STEEL PILING: DRIVEN	CAST-IN-PLACE CONC. TEST PILING	CAST-IN-PLACE CONCRETE PILING: DELIVERED	CAST-IN-PLACE CONCRETE PILING: DRIVEN	TUBULAR RAILING TYPE "G"	HEAVY RIP RAP	SLOPE PAVING CRUSHED STONE
			20601	20901	50201	50501	50601				50830			50816	50820	51101	51110	51115				51332	60602	90001
	L.S.	C.Y.	C.Y.	C.Y.	C.Y.	LB.	LB.	LB.	LB.	M.B.M.	L.S.	LIN.FT.	LIN.FT.	LIN.FT.	LIN.FT.	L.S.	LIN.FT.	LIN.FT.	L.S.	LIN.FT.	LIN.FT.	LIN.FT.	C.Y.	SQ.YD.
	B-44-53																							
2			1,150	90	420.9	75,220	0				0			0	0	0	0	0				0	45	0
	B-44-55																							
2			810	50	174.5	26,920	230				0			0	0	0	0	0				0	80	0
	B-44-56																							
2			170	120	475.5	90,290	0				1			360	360	1	1,050	1,050				273	0	366
			2,130	260	1,070.9	192,430	230				1			360	360	1	1,050	1,050				273	125	366

CULVERTS (STRUCTURES 20FT. SPAN & UNDER)

SEC. NO.	REMOVE OLD CULV'T STA.	COMMON EXC.	EXCAVATION FOR STRUCTURES	GRANULAR BACK FILL	CONCRETE MASONRY	BAR STEEL REINF.	STRUCTURAL CARBON STEEL	SHEET LEAD	SHEET ZINC	TR'T'D LUMBER AND TIMBER	UNTR'D TIMBER TEST PILING	TREATED TIMBER PILING: DELIVERED	TREATED TIMBER PILING: DRIVEN	FLOOR DRAINS	HEAVY RIP-RAP
			20602	20901	50401	50502									60602
	L.S.	C.Y.	C.Y.	C.Y.	C.Y.	LB.	LB.	LB.	LB.	M.B.M.	L.S.	LIN.FT.	LIN.FT.	EACH	C.Y.
	C-44-35														
2			520	40	143.5	19,420									30
	C-44-34														
2			700	100	172	26,180									20
	C-44-33														
2			500	155	230.8	34,510									40
	C-44-36														
2			177	35	119.3	17,460									20
			1,897	330	665.6	97,570									110

SEC. NO.	RUBBLE MASONRY: MORTAR	CULVERT PIPE: 12" C.M.C.P.	18" C.M.C.P.	24" C.M.C.P.	30" C.M.C.P.	18" CLASS III	24" CLASS III	30" CLASS III	36" CLASS III	60" CLASS III	72" PIPE CATTLE PASS	30" CLASS IV	RIP-RAP	SLOPE PAVING: CONCRETE	MORTAR RUBBLE DITCH CHECKS	CATCH BASINS TYPE 5	CATCH BASIN COVERS TYPE "H"	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER: 12"	15"	18"	36"	MANHOLES: TYPE 1	TYPE 3	INLETS TYPE 3	MANHOLE COVER TYPE "J"	INLET COVER TYPE "H"	ADJUSTING MANHOLE COVERS	CONCRETE: 30" CURB AND GUTTER TYPE "A"	30" CURB AND GUTTER TYPE "D"	SIDE WALKS 5"	CURB TYPE "J"	STEEL PLATE BEAM GUARD	MARKER POSTS	MAINT AND REPAIR OF HAUL ROADS	ANCHORAGES FOR STEEL PLATE BEAM GUARD	CALCIUM CHLORIDE SURFACE TREATMENT	LAND MARK REFERENCE MONUMENTS	SALVAGED TOPSOIL	FERTILIZER	SEEDING	SODDING	FIELD OFFICE
	51801	52103	52105	52107	52109	52003	52005	52007	52009	52013	52075	52027	60601	60404	60503	61105	61137	60825	60826	60827	60833	61111	61113	61125	61151	61167	61182	60123	60133	60205	60104	61410	61421	61801	61412	62301	62101	62505	62901	63001	63101	90002
	C.Y.	LIN.FT.	LIN.FT.	LIN.FT.	LIN.FT.	LIN.FT.	LIN.FT.	LIN.FT.	LIN.FT.	LIN.FT.	LIN.FT.	LIN.FT.	C.Y.	SQ.YD.	C.Y.	EACH	EACH	LIN.FT.	LIN.FT.	LIN.FT.	LIN.FT.	EACH	EACH	EACH	EACH	EACH	EACH	LIN.FT.	LIN.FT.	SQ.FT.	LIN.FT.	LIN.FT.	EACH	L.S.	EACH	TON	EACH	SQ.YD.	CWT.	SQ.YD.	SQ.YD.	L.S.
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1,073	281	309	121	2	1	32	3	32	7	2,975	0	100	0	0	0	0.06	0	4	0	1,500	2	1,500	0	0.06
1	0	0	0	0	0	64	76	72	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.13	0	7	0	26,900	17	26,900	40	0.13
2	15	104	884	132	0	728	932	0	440	124	162	486	95	70	175	0	0	88	0	0	0	0	0	2	0	2	0	0	1,620	0	484	5,644	111	0.70	26	39	15	216,000	195	216,000	1,940	0.70
3	0	0	0	0	0	0	0	66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.06	0	3	0	8,850	8	8,850	0	0.06
4	0	0	0	0	36	0	72	86	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	86	0	3	0.05	0	3	0	10,900	10	10,900	0	0.05
	15	104	884	132	36	792	1,080	224	440	124	162	486	97	70	175	1	1	1,161	281	309	121	2	1	34	3	34	7	2,975	1,620	100	570	5,644	114	1.00	26	56	15	264,150	232	264,150	1,980	1.00

DETAIL SUMMARY SHEET OF MISCELLANEOUS QUANTITIES

PROJECT	SHEET NUMBER	TOTAL SHEETS
E 0-0(22)	34	

CLEARING & GRUBBING

SEC. NO	STATION TO STATION	CLEARING L.D.	CLEARING STA.	GRUBBING L.D.	GRUBBING STA.
	MAINLINE				
1	47+09.7 - 79+00	*		*	
1	79+00 - 80+00		1		1
1	80+00 - 87+00	*		*	
1	87+00 - 91+00		4		4
1	91+00 - 96+34	*		*	
2	96+34 - 97+00		1		1
2	97+00 - 147+00	*		*	
2	147+00 - 191+00	300		170	
2	191+00 - 195+00		4		4
2	195+00 - 209+00	*		*	
2	209+00 - 211+00		2		2
2	211+00 - 224+00	*		*	
2	224+00 - 231+00	150		30	
2	231+00 - 232+00		1		1
2	232+00 - 263+00	170		60	
2	263+00 - 264+00		1		1
2	264+00 - 280+66	*		*	
	C.T.H. "N"				
2	15+00 - 16+00	*		*	
2	16+00 - 21+00		5		5
2	21+00 - 22+00	*		*	
2	22+00 - 24+00		2		2
2	24+00 - 45+00	60		60	
2	C.T.H. "K"	20		20	
	MAINLINE				
3	280+66 - 296+28	70		70	
4	296+28 - 310+29	*		*	

NOTE: * INDICATES BASIS OF PAYMENT

GRAVEL OR CRUSHED STONE BASE COURSE

SEC. NO.	STATION TO STATION	LOCATION	TONS
1	47+09.7-63+15.7	CURB & GUTTER SECTION	4,950
1	63+15.7-96+34.05	INITIAL SO. RDWY.	7,950
1	63+15.7-96+34.05	SHOULDERS	1,050
1	63+15.7-96+34.05	P.E.'S & F.E.'S	50
2	96+34.05-280+66.1	INITIAL SO. RDWY.	42,550
2	MISC. SIDE ROADS	LT. & RT.	2,500
2	C.T.H. "N" RAMPS	N.W., N.E., S.W., S.E.	10,900
2	C.T.H. "N"		7,200
2	C.T.H. "K"		2,850
2	96+34.05-280+66.1	SHOULDERS	5,950
2	RAMP & SIDE ROAD	SHOULDERS	1,450
2	P.E.'S & F.E.'S	LT. & RT.	280
3	280+66-296+27	INITIAL SO. RDWY.	3,500
3	280+66-296+27	SHOULDERS	400
4	296+27-310+29	INITIAL SO. RDWY.	3,200
4	S.T.H. 55	FLARES	800
4	296+27-310+29	SHOULDERS	350

EXCAVATION

SEC. NO.	STATION TO STATION	LOCATION	UNCLASSIFIED C.Y.	BORROW C.Y.
1	47+09.7-63+15.7	CURB & GUTTER SECTION	4,839	
1	63+15.7-96+34	MAINLINE	13,140	
2	96+34 - 280+64	MAINLINE	195,711	
2	138+57.68	RAILROAD ST.	540	
2	194+00	CHANNEL CHANGE	320	
2	28+60 - 34+50	CHANNEL CHANGE LEFT OF C.T.H. "N"	6,910	
2	15+00 - 45+60	C.T.H. "N"	16,114	9,500
2	172+00 - 184+00	C.T.H. "N" RAMPS	61,094	
2	224+78.4	C.T.H. "K"	9,853	
2	232+00	CHANNEL CHANGE	1,074	
2	259+63.07	DEBRUIN RD.	132	
2	262+80	CHANNEL CHANGE	114	
3	280+64-295+71	MAINLINE	9,843	
4	295+71-310+29	MAINLINE	6,252	
4	3+50 - 13+00	S.T.H. 55	44	

STEEL PLATE BEAM GUARD

SEC. NO.	STATION TO STATION	LOCATION	LIN. FT.
2	166 +80 - 174+96	S.W. RAMP OUTSIDE RT.	816
2	167 +90 - 172+07	N.W. RAMP OUTSIDE LT.	417
2	167 +90 - 172+07	N.W. RAMP INSIDE RT.	417
2	176 +42 - 177+45	M/L LT.	103
2	176 +44 - 177+47	M/L RT.	103
2	178 +71 - 180+49	M/L LT.	178
2	178 +73 - 182+01	M/L RT.	328
2	191 +00 - 196+04	M/L LT.	504
2	192 +00 - 197+04	M/L RT.	504
2	207+00 - 211+04	M/L RT.	404
2	209+00 - 211+54	M/L LT.	254
2	218+00 - 221+04	M/L RT.	304
2	217+00 - 219+54	M/L LT.	254
2	228+00 - 234+54	M/L RT.	654
2	230+00 - 234+04	M/L LT.	404

MINOR SIDE ROAD, PRIVATE ENTRANCE, & SLOPE DRAIN PIPES

SEC. NO.	STATION	LT.	RT	DIAMETER INCHES	LENGTH LIN. FT.	TYPE	M.S.R. P.E. S.D.	APRON END WALLS	RIP RAP C.Y.
1	66+00	X		18	32	CL. III	P.E.		
1	66+00		X	18	32	CL. III	P.E.		
2	114+00		X	18	32	CL. III	P.E.		
2	126+00	X		18	32	CL. III	P.E.		
2	126+00		X	24	32	CL. III	P.E.		
2	5+50 RAILROAD ST.	X		18	32	CL. III	P.E.		
2	149+00	X		18	32	CL. III	P.E.		
2	167+40 - 168+00		X	18	72	C.M.C.P.	S.D.®	2	2
2	167+40 - 168+00	X		18	72	C.M.C.P.	S.D.®	2	2
2	177+30	X		12	56	C.M.C.P.	S.D.®		1
2	177+35		X	12	48	C.M.C.P.	S.D.®		1
2	36+40 C.T.H. "N"	X		18	40	CL. III	P.E.		
2	39+50 C.T.H. "N"	X		18	32	CL. III	P.E.		
2	39+50 C.T.H. "N"		X	18	32	CL. III	P.E.		
2	179+12 - 180+00	X		18	96	C.M.C.P.	S.D.®	2	2
2	181+00 - 182+00		X	18	132	C.M.C.P.	S.D.®	2	2
2	192+30 - 192+50		X	18	24	C.M.C.P.	S.D.®	2	2
2	194+75 - 195+00	X		18	24	C.M.C.P.	S.D.®	2	2
2	197+00		X	18	32	CL. III	P.E.		
2	198+00	X		18	32	CL. III	P.E.		
2	209+00 - 209+45	X		18	40	C.M.C.P.	S.D.®	2	2
2	210+00 - 210+40		X	18	48	C.M.C.P.	S.D.®	2	2
2	218+00 - 218+50		X	18	48	C.M.C.P.	S.D.®	2	2
2	218+50 - 219+00	X		24	54	C.M.C.P.	S.D.®	2	2
2	6+85 C.T.H. "K"			18	56	CL. III	M.S.R.	2	
2	9+25 C.T.H. "K"			18	40	CL. III	M.S.R.	2	
2	12+60 C.T.H. "K"		X	18	32	CL. III	P.E.		
2	228+00 - 229+45		X	18	146	C.M.C.P.	S.D.®	2	2
2	230+36 - 230+50	X		18	16	C.M.C.P.	S.D.®	2	2
2	231+00 - 231+50	X		18	58	C.M.C.P.	S.D.®	2	2
2	239+00	X		18	32	CL. III	P.E.		
2	5+75 DEBRUIN RD.			24	52	CL. III	M.S.R.	2	
2	261+70 - 262+00		X	18	26	C.M.C.P.	S.D.®	2	2
2	263+31 - 263+50		X	18	16	C.M.C.P.	S.D.®	2	2
2	263+31 - 264+00	X		18	66	C.M.C.P.	S.D.®	2	2
2	UNDISTRIBUTED	X	X	18	3@32	CL. III	P.E.'S		

® INDICATES ALTERNATES OF STEEL OR ALUMINUM

CROSS DRAIN PIPES

SEC. NO.	STATION	DIAMETER INCHES	LENGTH LIN. FT.	TYPE	R RDY.	MORTAR RUBBLE ENDWALL	APRON END WALLS C.Y.	RIP RAP C.Y.
1	79+87	24	76	CL. III	"Z"		2	
1	86+30	30	72	CL. III	"Z"		2	
2	97+50	24	52	CL. III	"Z"		2	
2	110+20	36	74	CL. III	"Z"		2	2
2	134+45	36	96	CL. III	"Z"		2	2
2	139+50	24	72	CL. III	"Z"		2	
2	144+30	24	80	CL. III	"Z"		2	
2	154+00	24	66	CL. III	"Z"		2	
2	159+70	24	74	CL. III	"Z"		2	
2	170+07	30	112	CL. IV	N.W. RAMP		2	
2	170+45	30	190	CL. IV	"Z"		2	2
2	189+65	24	116	CL. III	"Z"		2	
2	201+77	72	78	CATTLE PASS	"Z"			
2	209+60	30	184	CL. IV	"Z"		2	2
2	214+00	24	66	CL. III	"Z"		2	
2	218+80	36	148	CL. III	"Z"		2	2
2	235+30	24	86	CL. III	"Z"		2	
2	239+60	36	122	CL. III	"Z"		2	2
2	248+60	24	66	CL. III	"Z"		2	
2	262+80	60	124	CL. III	"Z"	15 C.Y.		4
2	261+60	72	84	CATTLE PASS	"Z"			
2	280+00	24	78	CL. III	"Z"		2	
3	287+75	30	66	CL. III	"Z"		2	
4	296+25	30	86	CL. III	"Z"		2	2
4	309+50	24	72	CL. III	"Z"		2	
4	8+26	30	36	C.M.C.P.	STH 55, N.W. RAMP		1	
2	177+35	18	88	CL. III	C.T.H. "N"		2	
2	25+23	18	88	CL. III	C.T.H. "N"		1	
2	33+22	24	92	CL. III	C.T.H. "N"		2	
2	16+77	24	16-16	C.M.C.P.	C.T.H. "N"		2	
2	18+47	24	20-26	C.M.C.P.	C.T.H. "N"		2	

MARKER POSTS

SEC. NO.	FOR SHOULDER DELINEATION STATION TO STATION	SPACING	NO.
2	206+00 - 207+00 RT.	50' C-C	2
2	216+50 - 217+00 LT.	50' C-C	1
2	238+50 - 240+00 LT.	50' C-C	4
2	262+00 - 263+50 LT.	50' C-C	4
2	262+00 - 263+50 RT.	50' C-C	4
2	1+00 - 7+00 C.T.H. "K" RT.	100' C-C	7
2	8+00 - 14+00 C.T.H. "K" RT.	100' C-C	7
2	16+00 - 20+00 C.T.H. "K" LT & RT.	50' C-C	18
2	33+00 - 38+00 C.T.H. "N" RT.	50' C-C	11
2	33+00 - 37+00 C.T.H. "N" LT.	50' C-C	9
2	FOR TRAFFIC ISLANDS	—	18
2	BEAM GUARD ENDS	—	26
4	FOR TRAFFIC ISLAND	—	3

CONCRETE SLOPE PAVING

SEC. NO.	STATION	LOCATION	SQ YDS
2	201+77	CATTLE PASS RAMPS	40
2	261+60	CATTLE PASS RAMPS	30

MORTAR RUBBLE DITCH CHECKS

SEC. NO.	STATION TO STATION	LOCATION	C.Y.	S.Y.
2	159+00 - 160+00	DITCHES MAINLINE	2.32	14
2	165+00 - 167+00	DITCHES MAINLINE	4.37	25
2	167+50 - 168+00	DITCHES MAINLINE	3.58	19
2	168+00 - 170+50	DITCHES MAINLINE	13.70	80
2	176+00 - 177+00	DITCHES MAINLINE	4.92	28
2	180+00 - 182+00	DITCHES MAINLINE	16.30	94
2	192+50 - 195+00	DITCHES MAINLINE	9.30	51
2	207+00 - 209+00	DITCHES MAINLINE	9.95	56
2	208+00 - 209+00	DITCHES MAINLINE	6.64	38
2	219+00 - 222+00	DITCHES MAINLINE	8.63	47
2	5+00 - 7+00	RAILROAD ST.	9.30	52
2	229+45 - 230+00	DITCHES MAINLINE	1.32	10
2	230+00 - 231+00	DITCHES MAINLINE	2.66	14
2	233+00 - 233+37	DITCHES MAINLINE	1.99	10
2	235+00 - 236+60	DITCHES MAINLINE	5.58	33
2	239+00 - 241+00	DITCHES MAINLINE	12.60	70
2	261+00 - 261+70	DITCHES MAINLINE	3.98	23
2	263+50 - 264+00	DITCHES MAINLINE	1.33	10
2	172+00 - 174+00	DITCHES MAINLINE	7.30	42
2	177+00 - 178+00	DITCHES MAINLINE	4.12	23
2	172+00 - 175+00	DITCHES MAINLINE	5.82	33
2	182+00 - 183+00	DITCHES MAINLINE	2.00	10
2	185+00 - 186+00	DITCHES MAINLINE	2.32	14
2	179+00 - 183+00	DITCHES MAINLINE	12.92	75
2	15+60 - 16+00	C.T.H. "N"	1.33	10
2	17+50 - 18+00	C.T.H. "N"	3.65	19
2	23+00 - 26+00	C.T.H. "N"	9.98	56
2	37+00 - 39+00	C.T.H. "N"	7.30	44

SINGLE AGGREGATE BITUMINOUS SURFACE

SEC. NO.	LOCATION	TONS
1	MAINLINE STA. 63+15 - 96+34	1,625
1	SPEEL RD.	25
2	MAINLINE STA. 96+34 - 280+64	8,550
2	SPEEL RD.	40
2	RAILROAD ST.	400
2	N.W. RAMP & TAPERS	730
2	N.E. " " "	580
2	S.E. " " "	570
2	S.W. " " "	470
2	C.T.H. "N"	1,960
2	TOWN RD. @ STA. 212+05	60
2	C.T.H. "K"	730
2	DEBRUIN RD.	60
3	MAINLINE STA. 280+64 - 295+71	750
4	MAINLINE STA. 295+71 - 310+29	650
4	S.T.H. 55	300

GRANULAR SUB-BASE COURSE

SEC. NO.	LOCATION	C.Y.
1	MAINLINE STA. 63+15 - 96+34	3,750
1	UNDERCUT SECTIONS	1,100
2	MAINLINE STA. 96+34 - 280+64	20,600
2	SIDE ROAD FLARES	750
2	C.T.H. "N" RAMPS	4,950
2	C.T.H. "N" MAINLINE	3,500
2	UNDERCUT SECTIONS	13,750
3	MAINLINE STA. 280+64 - 295+71	1,750
3	UNDERCUT SECTIONS	2,300
4	MAINLINE STA. 295+71 - 310+29	1,600
4	S.T.H. 55 FLARES	250
4	UNDERCUT SECTIONS	1,300

STORM SEWER SYSTEM

SEC NO	LOCATION	MANHOLES TYPE 1	MANHOLES TYPE 3	MANHOLES TYPE 3 M.H.COVER	INLETS TYPE 3	INLETS TYPE 3 IN.COVER	C.B. TYPE 5	C.B. TYPE 5 IN.COVER	C.B. TYPE H	GRATES LT.	GRATES RT.	R.C.P. CLASS III (S.S.) 12"	15"	18"	36"	APRON END WALLS 36"	ADJUST MANHOLE COVERS
1	47+38.5 - 15' RT.				1	1											1
1	47+17 - 36' RT.				1	1					X	32					
1	49+61 - 23.5' LT.				1	1					X	47					
1	49+61 - 23.5' RT.				1	1				X		49					
1	49+82.5 - 45' LT.				1	1				X		31					
1	49+82.5 - 45' RT.				1	1					X	24					
1	50+00 - T.																1
1	50+09 - 22' LT.																1
1	50+09 - 40' RT.																1
1	50+17.5 - 50' LT.				1	1					X	25					
1	50+17.5 - 50' RT.				1	1				X		9					
1	52+56 - 23.5' LT.				1	1					X	0					
1	52+56 - 23.5' RT.				1	1				X		36					
1	52+82.5 - 50' LT.				1	1					X	34					
1	52+82.5 - 50' RT.				1	1					X	26					
1	53+10 - 25' LT.																1
1	53+10 - 39' RT.																1
1	53+17.5 - 50' LT.				1	1				X		23					
1	53+17.5 - 50' RT.				1	1				X		10					
1	53+37 - 15' RT.																1
1	55+56 - 23.5' LT.				1	1					X	48					
1	55+56 - 23.5' RT.				1	1				X		30					
1	55+82.5 - 50' LT.				1	1				X		36					
1	55+82.5 - 50' RT.				1	1					X	31					
1	55+88 - 16' RT.	1	1									281					

SEC NO	LOCATION	MANHOLES TYPE 1	MANHOLES TYPE 3	MANHOLES TYPE 3 M.H.COVER	INLETS TYPE 3	INLETS TYPE 3 IN.COVER	C.B. TYPE 5	C.B. TYPE 5 IN.COVER	C.B. TYPE H	GRATES LT.	GRATES RT.	R.C.P. CLASS III (S.S.) 12"	15"	18"	36"	APRON END WALLS 36"	ADJUST MANHOLE COVERS
1	56+17.5 - 50' LT.					1			1		X	32					
1	56+17.5 - 50' RT.					1			1	X		32					
1	58+46 - 23.5' LT.					1			1		X	48					
1	58+46 - 23.5' RT.					1			1	X		30					
1	58+72 - 50' LT.					1			1	X		35					
1	58+72 - 50' RT.					1			1		X	32					
1	58+78 - 16' RT.	1				1			1						309		
1	59+06.5 - 50' LT.					1			1		X	32					
1	59+06.5 - 50' RT.					1			1	X		32					
1	61+36 - 23.5' LT.					1			1		X	65					
1	61+36 - 23.5' RT.					1			1	X		53					
1	61+62 - 50' LT.					1			1	X		36					
1	61+62 - 50' RT.					1			1		X	36					
1	61+92 - 16' RT.	1	1			1			1								
1	61+97 - 50' LT.					1			1		X	36					
1	61+97 - 50' RT.					1			1	X		36					
1	62+24 - 23.5' LT.					1			1	X		47					
1	62+24 - 23.5' RT.				1	1					X				29		
1	63+18 - 33' RT.														92	1	
	(C.T.H. "N")																
2	29+75 - 25.5' LT.					1			1		X	48					
2	29+75 - 25.5' RT.					1			1	X		40					

SOD DITCH CHECKS

SEC. NO.	STATION TO STATION	LOCATION	S.Y.
1	77+00 - 79+00	MAINLINE DITCH CHECKS	40
2	142+00 - 143+00		20
2	143+00 - 144+00		20
2	149+00 - 150+00		20
2	162+00 - 164+00		40
2	165+00 - 167+00		30
2	169+00 - 170+00		20
2	180+00 - 181+00		20
2	182+00 - 184+00		60
2	201+00 - 202+00		190
2	205+00 - 207+00		30
2	214+00 - 215+00		20
2	229+00 - 230+00		20
2	240+00 - 242+00		30
2	258+00 - 259+00		20
2	260+00 - 261+00		30
2	264+00 - 265+00		20
2	175+00 - 176+00		30
2	183+00 - 185+00		40
2	21+00 - 24+00	C.T.H. "N"	50
2	8+00 - 13+00	C.T.H. "K"	210
2	7+00 - 8+00	RAILROAD ST.	20

B.P.R. DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4	E 0-0(22)	4	

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
1		PT. MK. RIM OF FIRE HYD. INTERSECTION EAST COLLEGE & CHRISTINE	757.92
2		SPIKE IN TELEPHONE POLE 80' RT.	756.05

STA. 47 + 09.70 BEGIN
PROJECT E 0-0(22)

NET LENGTH OF CENTERLINE		
STATION TO STATION		LIN. FT.
47+09.70	52+00	490.30

STA. 49+82.5, 45' LT.
TYPE 3-H INLET REQ'D(LT.GRATE)
DEPTH = 2.50'
DIS. = 750.08
12"X 31' R.C.P. CLASS III (S.S.)
INL. = 750.08 DIS. = 749.40

STA. 49+61, 23.5' LT.
TYPE 3-H INLET REQ'D.
(RT GRATE)
DEPTH = 2.50'
DIS. = 750.96
12"X 47' R.C.P. CLASS III (S.S.)
INL. = 750.96 DIS. = 750.40

STA. 50+17.5, 50' LT.
TYPE 3-H INLET REQ'D.(RT. GRATE)
DEPTH = 2.50'
DIS. = 750.08
12"X 25' R.C.P. CLASS III (S.S.)
INL. = 750.08 DIS. = 749.50

STA. 47+17, 36' RT.
TYPE 3-H INLET REQ'D.(LT. GRATE)
DEPTH = 2.50'
DIS. = 752.45
12"X 32' R.C.P. CLASS III (S.S.)
INL. = 752.45 DIS. = 751.95

STA. 49+61, 23.5' RT.
TYPE 3-H INLET REQ'D (LT. GRATE)
DEPTH = 2.50'
DIS. = 750.97
12"X 49' R.C.P. CLASS III (S.S.)
INL. = 750.97 DIS. = 749.47

STA. 49+82.5, 45' RT.
TYPE 3-H INLET REQ'D.(RT. GRATE)
DEPTH = 2.50'
DIS. = 749.78
12"X 24' R.C.P. CLASS III (S.S.)
INL. = 749.78 DIS. = 749.20

STA. 50+17.5, 50' RT.
TYPE 3-H INLET REQ'D.(LT. GRATE)
DEPTH = 2.50'
DIS. = 749.58
12" X 9' R.C.P. CLASS III (S.S.)
INL. = 749.58 DIS. = 749.15

46 47 48 49 50 51 52

C.T.H. "Z" (CONCRETE)
CHRISTINE ST. (CONCRETE)
JOSEPH ST. (BLACKTOP)
5' CONCRETE SIDEWALK
12" SANITARY
10" STORM
15" STORM
18" STORM
INLET
SAN. M.H.
TEL. M.H. (ADJUST COVER)
M.H. (ADJUST COVER)
INLET (ABANDON)
EXISTING (BLACKTOP)
EXPANSION JOINT
LONGITUDINAL JOINTS
STREET LINE
60' STREET
80' STREET
N. 88°-00'-20" E.
90°-25'
STA. 50 + 00.0 - ℄ JOSEPH ST.
2'-6" TYPE "A" CONCRETE CURB & GUTTER
22' CLEAR
48' CLEAR
20' R.
25' R.
I.P.

PROFILES ON LEFT
PROFILES ON TRANSIT LINE
PROFILES ON RIGHT
TOP OF CURB
EDGE OF PAVEMENT
GUTTER FLOWLINE
FINISHED GRADE
PRESENT PROFILE
NO V.C.
PARRALLEL
100' V.C.
P.T.+50 756.87
P.C.+20 755.15
P.T.+20 754.62
P.T.+70 754.82
-0.10%
-0.65%
0.40%

PROFILES ON JOSEPH ST. STA 49 +99.6
CONSTRUCTION ℞
FINISHED GRADE
PRESENT PROFILE
NORTH
754.41 754.32 754.70 754.32 753.70

| | | |

B.P.R. DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4	E.Q-0(22)	5	

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
2		SPIKE IN TELEPHONE POLE 80' RT.	756.05

STA. 52+56, 23.5' LT.
TYPE 3-H INLET REQ'D.
(RT. GRATE)
DEPTH = 4.96'
DIS. = 747.30
(TIE INTO 18" MAIN)

STA. 52+82.5, 50' LT.
TYPE 3-H INLET REQ'D.(RT. GRATE)
DEPTH = 2.50'
DIS. = 748.83
12" X 34' R.C.P. CLASS III (S.S.)
INL. = 748.83 DIS. = 748.00

STA. 53+17.5, 50' LT.
TYPE 3-H INLET REQ'D.(LT. GRATE)
DEPTH = 2.50'
DIS. = 748.83
12" X 23' R.C.P. CLASS III (S.S.)
INL. = 748.83 DIS. = 748.00

STA. 55+82.5, 50' LT.
TYPE 3-H INLET REQ'D.
(LT. GRATE)
DEPTH = 2.00
DIS. = 748.66
12" X 36' R.C.P. CLASS III (S.S.)
INL. = 748.66 DIS. = 748.56

STA. 55+56, 23.5' LT.
TYPE 3-H INLET REQ'D.
(RT. GRATE)
DEPTH = 2.50'
DIS. = 748.56
12" X 48' R.C.P. CLASS III (S.S.)
INL. = 748.56 DIS. = 748.06

STA. 56+17.5, 50' LT.
TYPE 3-H INLET REQ'D.
(RT. GRATE)
DEPTH = 2.00'
DIS. = 748.76
12" X 32' R.C.P. CLASS III (S.S.)
INL. = 748.76 DIS. = 748.66

60' STREET
18' 18'
25' R.
I.P.
+57
+43
30" CONC. STORM
WATER VALVE
INL. (ABANDON)
M.H. (ADJUST COVER)
18" CONC. STORM
STREET LINE
CULTIVATED
2'-6" TYPE "A" CONCRETE CURB & GUTTER
STA. 53+00 R BUCHANAN ST.
90°-25'
STA. 55+99.7 R MIDPARK DRIVE
89°-39'
LONGITUDINAL JOINTS
N. 88°-00'-20" E.
22'
52
53
54
55
56
57
58
C.T.H. "Z" (BLACKTOP) EXISTING
TEL. M.H. (ADJUST COVER)
INL. (ABANDON)
M.H. (ADJUST COVER)
(ABANDON) INL.
WATER VALVE
BUCHANAN ST. (BLACKTOP)
CLEAR
48'
16'
15" STORM -1.00%
80' STREET

STA. 52+56, 23.5' RT.
TYPE 3-H INLET REQ'D.
(LT. GRATE)
DEPTH = 2.50'
DIS. = 749.76
12" X 36' R.C.P. CLASS III (S.S.)
INL. = 749.76 DIS. = 748.76

STA. 52+82.5, 50' RT.
TYPE 3-H INLET REQ'D.(RT. GRATE)
DEPTH = 2.50'
DIS. = 748.58
12" X 26' R.C.P. CLASS III (S.S.)
INL. = 748.58 DIS. = 748.00

STA. 53+17.5, 50' RT.
TYPE 3-H INLET REQ'D.(LT. GRATE)
DEPTH = 2.50'
DIS. = 748.58
12" X 10' R.C.P. CLASS III (S.S.)
INL. = 748.58 DIS. = 748.15

STA. 55+56, 23.5' RT.
TYPE 3-H INLET REQ'D.
(LT. GRATE)
DEPTH = 2.50'
DIS. = 748.56
12" X 30' R.C.P. CLASS III (S.S.)
INL. = 748.56 DIS. = 748.06

STA. 55+82.5, 50' RT.
TYPE 3-H INLET REQ'D.
(RT. GRATE)
DEPTH = 2.00'
DIS. = 748.66
12" X 31' R.C.P. CLASS III (S.S.)
INL. = 748.66 DIS. = 748.06

STA. 55+88, 16' RT.
TYPE I-J MANHOLE REQ'D.
DEPTH = 2.83'
DIS. = 748.03
15" X 28' R.C.P. CLASS III, (S.S.)
INL. = 748.03 DIS. = 745.47

STA. 56+17.5, 50' RT.
TYPE 3-H INLET REQ'D.
(LT. GRATE)
DEPTH = 2.00'
DIS. = 748.78
12" X 32' R.C.P. CLASS III (S.S.)
INL. = 748.78 DIS. = 748.66

MIDPARK DR. (PROPOSED)

NET LENGTH OF CENTERLINE		
STATION TO STATION		LIN. FT.
52+00	58+00	600.00

PROFILES ON BUCHANAN ST. STA. 53+00
FINISHED GRADE
PRESENT PROFILE
CONSTRUCTION ℄
NORTH
753.00 753.12 753.50 753.12 752.90

PROFILES ON MIDPARK DR. STA. 55+99.7
FINISHED GRADE
PRESENT PROFILE
CONSTRUCTION ℄
NORTH
752.39 751.92 752.30 751.92 752.2

PROFILES ON LEFT
PROFILES ON TRANSIT LINE
PROFILES ON RIGHT
TOP OF CURB
EDGE OF PAVEMENT
GUTTER FLOWLINE
PARRALLEL
0.40%
FINISHED GRADE
PRESENT PROFILE

53.82		53.59		53.27		53.02	LT. TOP OF CURB	52.82		52.62		52.39		52.05		51.82		51.62	51.42
53.40		53.17		52.87		52.60	LT. GUTTER FLOWLINE	52.40		52.20		51.97		51.63		51.40		51.20	51.00
53.52		53.29		52.99		52.72	LT. EDGE OF PAVEMENT	52.52		52.32		52.09		51.75		51.52		51.32	51.12
53.90		53.67		53.33		53.10	LT. FINISHED GRADE	52.90		52.70		52.47		52.13		51.90		51.70	50.70
53.23		53.03		52.94		53.20	LT. PRESENT PROFILE			52.50				52.30		51.80			51.50
53.52		53.29		52.99		52.72	RT. EDGE OF PAVEMENT	52.52		52.32		52.09		51.75		51.52		51.32	51.12
53.40		53.17		52.87		52.60	RT. GUTTER FLOWLINE	52.40		52.20		51.97		51.63		51.40		51.20	51.00
53.82		53.59		53.27		53.02	RT. TOP OF CURB	52.82		52.62		52.39		52.05		51.82		51.62	51.42

52 +50 +57 53 +43 +50 54 +50 55 +57 56 +43 57 +50 58

K&E PLATE 1, PLAN-PROFILE

9

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
3	63+12	SPIKE IN CORNER FENCE POST 70' RT.	754.00

NET LENGTH OF CENTERLINE		
STATION TO STATION		LIN. FT.
58+00	63+15.70	515.70

D.F.R. DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4	E 0-0 (22)	6	

STA. 58+72, 50' LT.
TYPE 3-H INLET REQ'D.
(LEFT GRATE)
DEPTH = 2.50'
DIS. = 746.61
12" X 35' R.C.P. CLASS III (S.S.)
INL. = 746.61 DIS. = 746.41

STA. 58+46, 23.5' LT.
TYPE 3-H INLET REQ'D
(RIGHT GRATE)
DEPTH = 3.50'
DIS. = 746.41
12" X 48' R.C.P. CLASS III (S.S.)
INL. = 746.41 DIS. = 746.00

STA. 59+06.5, 50' LT.
TYPE 3-H INLET REQ'D.
(RIGHT GRATE)
DEPTH = 2.25'
DIS. = 746.73
12" X 32' R.C.P. CLASS III (S.S.)
INL. = 746.73 DIS. = 746.61

STA. 61+36, 23.5' LT.
TYPE 3-H INLET REQ'D.
(RIGHT GRATE)
DEPTH = 2.50'
DIS. = 746.24
12" X 65' R.C.P. CLASS III (S.S.)
INL. = 746.24 DIS. = 745.50

STA. 61+62, 50' LT.
TYPE 3-H INLET REQ'D(LT. GRATE)
DEPTH = 2.25'
DIS. = 746.44
12" X 36' R.C.P. CLASS III (S.S.)
INL. = 746.44 DIS. = 746.24

STA. 61+97, 50' LT.
TYPE 3-H INLET REQ'D.(RT. GRATE)
DEPTH = 2.25'
DIS. = 746.44
12" X 36' R.C.P. CLASS III (S.S.)
INL. = 746.44 DIS. = 746.00

STA. 62+24, 23.5' LT.
TYPE 3-H INLET REQ'D.(LT. GRATE)
DEPTH = 2.50'
DIS. = 746.00
12" X 47' R.C.P. CLASS III (S.S.)
INL. = 746.00 DIS. = 745.50

STA. 58+46, 23.5' RT.
TYPE 3-H INLET REQ'D.
(LEFT GRATE)
DEPTH = 2.50'
DIS. = 747.41
12" X 30' R.C.P. CLASS III (S.S.)
INL. = 747.41 DIS. = 747.00

STA. 58+72, 50' RT.
TYPE 3-H INLET REQ'D.
(RIGHT GRATE)
DEPTH = 3.00'
DIS. = 746.92
12" X 32' R.C.P. CLASS III (S.S.)
INL. = 746.92 DIS. = 746.00

STA. 58+78, 16' RT.
TYPE 1-J MANHOLE REQ'D.
DEPTH = 5.80'
DIS. = 745.15
18" X 309' R.C.P. CLASS III (S.S.)
INL. = 745.15 DIS. = 740.06

STA. 59+06.5, 50' RT.
TYPE 3-H INLET REQ'D.
(LEFT GRATE)
DEPTH = 2.50'
DIS. = 747.28
12" X 32' R.C.P. CLASS III (S.S.)
INL. = 747.28 DIS. = 746.92

STA. 61+36, 23.5' RT.
TYPE 3-H INLET REQ'D.(LT. GRATE)
DEPTH = 2.50'
DIS. = 746.24
12" X 53' R.C.P. CLASS III (S.S.)
INL. = 746.24 DIS. = 745.75

STA. 61+62, 50' RT.
TYPE 3-H INLET REQ'D(RT. GRATE)
DEPTH = 2.75'
DIS. = 746.33
12" X 36' R.C.P. CLASS III (S.S.)
INL. = 746.33 DIS. = 745.50

STA. 61+97, 50' RT.
TYPE 3-H INLET REQ'D.(LT. GRATE)
DEPTH = 2.75'
DIS. = 746.33
12" X 36' R.C.P. CLASS III (S.S.)
INL. = 746.33 DIS. = 745.50

STA. 62+24, 23.5' RT.
TYPE 5-H CATCH BASIN REQ'D. (RT. GRATE)
DEPTH = 4.50'
DIS. = 746.23
36" X 29' R.C.P. CLASS III (S.S.)
INL. = 746.23 DIS. = 746.00

STA. 61+92, 16' RT.
TYPE 3-J MANHOLE REQ'D.
DEPTH = 9.91'
DIS. = 739.85
INTO 54" PROPOSED STORM SEWER
BY CITY OF APPLETON

STA. 63+18, 33' RT.
36" X 92' R.C.P. CLASS III (S.S.)
INL. = 747.00 DIS. = 746.23
SPECIAL GRATE IN APRON
ENDWALL REQ'D.

STA. 58+89.7 R
FIDELIS ST.

STA. 61+79.7 R
MATTHIAS ST.

C.T.H. "Z"

STREET LINE

2'-6" TYPE "A" CONCRETE CURB & GUTTER

LONGITUDINAL JOINT

N. 88°-00'-20" E.

15" STORM — 1.00%

18" STORM — 1.70%

36" STORM

54" STORM

CULTIVATED

PROPOSED BY CITY OF APPLETON

FIDELIS ST. (PROPOSED)

MATTHIAS ST. (PROPOSED)

SHOULDER LINE

P.O.T. 63+15.7 @ P.L.

P.L. +157

P.L. +15.7

PROFILES ON LEFT

PROFILES ON TRANSIT LINE

PROFILES ON RIGHT

TOP OF CURB
EDGE OF PAVEMENT
GUTTER FLOWLINE

FINISHED GRADE
PRESENT PROFILE

PARALLEL

PC+50 750.10

PI+50 749.70

PT+150 750.46

200' V.C.

-0.40%

+0.76%

PROFILES ON FIDELIS ST. STA. 58+89.7

FINISHED GRADE
PRESENT PROFILE
CONSTRUCTION ℄
NORTH
751.08
750.76
751.14
750.76

PROFILES ON MATTHIAS ST. STA. 61+796

PRESENT PROFILE
CONSTRUCTION ℄
FINISHED GRADE
NORTH
+1.2%
-3.5%
750.10
749.63
750.01
749.63

| | | |

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
1		PT. IN N. RIM FIRE RYD. INTERS. E. COLLEGE AVE. & CHRISTINE	757.92
2		SPIKE IN TELE. POLE 80'RT.	756.05
3	63+12	" " COR. FENCE POST 70'RT.	754.00
4	71+70	" " 14" TRIPLE B.E. 210'RT.	758.81
5	75+85	" " 18" MAPLE 210'RT.	758.22

NET LENGTH OF CENTERLINE		
STATION TO STATION		LIN. FT.
47+09.70	75+00	2,790.30

STA. 47+09.7 BEGIN PROJECT E 0-0(22)

CHRISTINE ST. (CONC.) — 5' C.S.W. — 6" CURB — 5' C.S.W.

Ft. CHRISTINE ST. 46+99.60

C.T.H. "2" (CONC.) (BLACKTOP)

JOSEPH ST. (BLACKTOP) — P.O.T. STA. 50+30

BUCHANAN ST. (BLACKTOP) — FIRE PLUG — W.V.

MIDPARK DR. (PROPOSED) — FIDELIS ST. (PROPOSED) — MATTHIAS ST. (PROPOSED)

Ft. MATTHIAS ST. 61+79.70

P.O.T. STA. 63+15.7

Ft. JOSEPH ST. 50+00.00 — Ft. BUCHANAN ST. 53+00.00 — Ft. MIDPARK DR. 55+99.70 — Ft. FIDELIS ST. 58+89.70

90°-25' — 89°-59' — 89°-59' — 89°-59' — 89°-59'

60' — 80' — 40' — 24' — 12' — 150'

STA. 66+00 F.E. LT. 18" X 32' CLASS III C.P. REQ'D.

CULT. — SURV. ℄ & R/W ℞ — CULT.

P.O.T. STA. 71+44.7 — 110' — 110'

N.68°-00'-20"E.

CONST. P.C. = STA. 74+60.4

MATHIAS VAN HANDEL

CONST. CURVE NOTES

P.I.	=	77+00.9
L	=	177°-35'-42"
Δ	=	2°-24'-18"
D	=	0°-30"
T	=	240.5'
L.C.	=	481.0'
S.E.	=	0.015 FT./FT.
R.O.	=	180@ P.C., 150@ P.T.

LIMITS OF CITY — CONST. P.C. = STA. 64+59.5 — CULT. APPLETON — CONST. P.T. = STA. 69+40.5 — MATHIAS VAN HANDEL — CONST. ℞ — WOODS

CONST. ℞ CURVE NOTES

P.I.	=	67+00
L	=	182°-24'-16"
Δ	=	2°-24'-18"
D	=	0°-30'
T	=	240.5'
L.C.	=	481.0'
S.E.	=	0.015 FT./FT.
R.O.	=	180 FT.

STA. 66+00 F.E. RT. 18" X 32' CLASS III C.P. REQ'D.

+30 — +157

UNCL. EXC. = 4,839 C.Y.
FILL = 51 C.Y.
HAUL OUT 4,775 C.Y. TO ULTIMATE N. RDWY. STA. 77+00 TO 79+70; AND STA. 80+00 TO 89+00

UNCL. EXC. = 11,054 C.Y.
FILL = 11,946 C.Y.
HAUL IN 4,775 C.Y. FROM STA. 47+30 TO 63+15.7 TO ULTIMATE N. RDWY.

NO V.C. — -0.10% — -0.65% — P.I. +30 756.37 — P.C. +20 755.15 — 100' V.C. — P.T. +20 754.62 — P.I. +70 754.82 — -0.40% — PRESENT PROFILE SURVEY ℄ — 200' V.C. — P.C. +50 750.10 — P.T. +50 750.46 — P.I. +50 749.70 — +0.76% — FINISHED GRADE — DG. LT. +0.5% — DG. RT. +0.7% — P.C. +00 754.64 — DG. LT. & RT. +0.5% — 600' V.C. — P.I. +00 756.94 — DG. RT. -0.5% — DG. LT. -1.7% — P.T. +00 755.14 — -0.60% — PRESENT PROFILE CONSTRUCTION ℞

760 / 750 / 740

45 6 7 +37 +50 8 +50 9 +20 +50 +70 50 +20 +50 1 +50 2 +50 3 4 55 6 7 8 9 60 +50 2 +50 3 +50 4 65 6 7 8 9 70 +50 2 +50 3 4 75 6 7

756.39 756.25 755.93 755.60 755.28 755.15 754.96 754.85 754.70 754.62 754.50 754.30 754.10 753.90 753.70 753.50 753.10 752.70 752.30 751.90 751.50 751.10 750.70 750.30 750.10 749.97 749.99 750.15 750.46 750.84 751.60 752.36 753.12 753.88 754.64 755.29 755.71 755.91 756.39 755.63 755.14 754.54 753.94

E.P.P. DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4	E 0-0(22)	8	

BENCH MARKS

NO.	STATION	DESCRIPTION		ELEV.
5	75+85	SPIKE IN 18" MAPLE	210'RT.	758.22
6	88+70	" " 24" ASH	220'LT.	744.79
7	89+75	" " 30" MAPLE	50'LT.	746.74
8	96+80	" " 4" TWIN ELM	90'LT.	747.30

NET LENGTH OF CENTERLINE			
STATION TO STATION		LIN. FT.	
75+00	96+34.05	2,134.05	SECTION ①
96+3405	105+00	865.95	SECTION ②

MATHIAS VAN HANDEL
CULT.
CONST. P.T. EQUATION STA. 79+414 BK. = STA. 79+405 AH.
P.O.T. STA. 79+77.8
SURV. ℄ & R/W ℝ
CONST ℝ
DITCH DAMS REQ'D.
TREES, BRUSH & DITCH
MATHIAS VAN HANDEL
P.L.
WOODS
CULT.
AGNES TRACY
JOHN WELHOUSE
WOODS
P.O.T. STA. 87+98.5
P.O.T. STA. 90+01.2
TREE LINE
CULT.
JOHN WELHOUSE
CITY
TRI-COUNTY EXPRESSWAY SURVEY ℄
LIMITS
482+84
STA. 95+29.8 SURVEY ℄ = STA. 486+54.49 TRI.CO.EXP.
N. 88°-00'-20" E.
91+25
89°-57'
STA. 96+58.8 SURV. ℄ = STA. 25+13.4 SPEEL RD.
90°-03'
APPLETON
SMALL TREES & BRUSH
N 1°-56'-40" W
OF
SMALL TREES & BRUSH
SPEEL RD. (GRAV.)
P.O.T. STA. 20+00
HENRY RENN
CULT.
P.O.T. STA. 96+79.4
P.O.T. STA. 96+37.7
SMALL TREES & BRUSH
JOSEPH WITTMAN
RICHARD LAMERS
JOSEPH WITTMAN
CULT.
P.O.T. STA. 104+86.2
DRAINAGE DITCH
JOSEPH WITTMAN
P.L.
℄ CH. CH.
SEE X-SEC'S
CULT.
MIKE SPEEL
RICHARD LAMERS
STA. 96+58.76 CONST ℝ = STA. 24+714 SPEEL RD.
STA. 96+58.8 SPEEL RD. LT. & RT. TYPE "C" INTERSECTION REQ'D. (SEE ST'D. DRAWING 9-1.1.5)

SECTION 1 UNCL. EXC. = 2,086 C.Y.
FILL = 285 C.Y.
UNCL. EXC. = 6,235 C.Y.
FILL = 4,676 C.Y.

PROFILES OF SPEEL ROAD STA. 96+58.8 LT & RT.

SOUTH
STA. 96+58.76 CONST. ℝ = STA. 24+71.4 SD. RD.
STA. 96+58.8 SURV. ℄ = STA. 25+13.4 SD. RD.
NORTH
℄ FINISHED GRADE
PRESENT PROFILE
+1.50%
-2.78%
-1.50%
-2.60%
760
755
750
745
740
751.3 751.3
750.15
750.60
750.20
748.6 748.6
21 22 23 24 +41.4 +71.4 +98.4 +60 26 27 28

FINISHED GRADE, PRESENT PROFILE, CONSTRUCTION ℝ
UNDERCUT
DG. RT.-0.5% DG. LT.-0.5%
DG. LT.-1.7%
DG. RT.-2.3%
DG. LT.-0.9%
DG. RT.-0.9%
DG. LT & RT.-0.3%
-0.60 %
+0.38 %
600' V.C.
DG. RT. +0.5%
DG. LT. +0.3%
DG. RT. +0.3%
DG. LT. +0.4%
DG. RT. +0.2% DG. RT. & LT. +0.4%
DG. LT. & RT. -0.3%
600' V.C.
DG. RT.-0.6%
DG. RT.-0.3%
DG. RT.-0.3%
-0.47%
P.T. +00 755.14
P.C. +00 749.14
P.I. +00 747.34
P.T. +00 748.48
P.C. +00 750.76
P.I. +00 752.28
P.T. +00 750.40

STA. 79+87 CONST. ℝ
24" X 76' CLASS III C.P. REQ'D.
STA. 86+30 CONST. ℝ
30" X 72' CLASS III C.P. REQ'D.
SKEW 30° L.H.F.
STA. 97+50 CONST. ℝ
24" X 52' CLASS III C.P. REQ'D.

75	6	7	8	9	80	1	2	3	4	85	6	7	8	9	90	1	2	3	4	95	+59	6	7	8	9	100	1	2	3	4	105	6	7
755.14	754.54	753.94	753.34	752.74	752.14	751.54	750.94	750.34	749.74	749.14	748.62	748.27	748.08	748.05	748.18	748.48	748.86	749.24	749.62	750.00	750.22	750.38	750.76	751.09	751.31	751.42	751.43	751.33	751.13	750.82	750.40	749.93	749.46

EQUATION STA. 79+41.4 BACK = STA. 79+40.5 AHEAD

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
9	110+16	SPIKE IN 40" ELM 200'RT.	745.85
10	113+33	" " COR. FENCE POST. 195'RT.	747.78
11	121+82	" " FENCE POST 134'LT.	745.93
12	130+20	" " " " 146'LT.	742.42

NET LENGTH OF CENTERLINE		
STATION TO STATION		LIN. FT.
105+00	135+00	3,000.00

STA. 114+00 FE. LT
GRADE ENTRANCE REQ'D.
NO PIPE

JOSEPH WITTMANN
CULT.
JOHN HEIDEMANN
CULT.
JOHN BERGHUIS
CULT.
HARRY VAN ROY
CULT.

SURV. ℄ & R/W ℞
P.O.C. STA. 113+33.0
P.O.T. STA. 121+82.4
P.O.T. STA. 130+20.3
12" C.P. (REMOVE)
S. 85°-15'-10" E.
FILL 5' DRAINAGE DITCH
℄ CH. CH. SEE X-SECTIONS
42'
110'
115'
120'
105
110
115
120
125
130
135
P.I. +81
P.I. +22
+33
+00

CONST. ℞
SURV. ℄
CONST. P.T. = STA. 121+06.35 BK =
SURV. P.T. STA. 121+11.4 AHEAD

SURVEY
P.C. STA. 107+62.86
CONST. STA. 107+63.0 =
5' DRAINAGE DITCH
℄ CH. CH. SEE X-SECTIONS
JOSEPH WITTMANN
MIKE SPEEL

CONST. ℞ CURVE NOTES
P.I. = 114+35.43
Δ = 6°-44'-30"
R. = 11,417.15
D. = 0°-30'
T. = 672.47
L. = 1,343.39'
S.E. = 0.015 FT./FT.
R.O. = 150'@PC., 180'@PT.

SURVEY CURVE NOTES
P.I. = 114+37.9
L = 186°-44'-30"
Δ = 6°-44'-30"
D. = 0°-30'
T. = 674.9'
L. = 1348.4'
R. = 11,459.15'

STA. 114+00 FE. RT.
18" X 32' CLASS III C.P. REQ'D.

STA. 126+00 FE. LT.
18" X 32' CLASS III C.P. REQ'D.

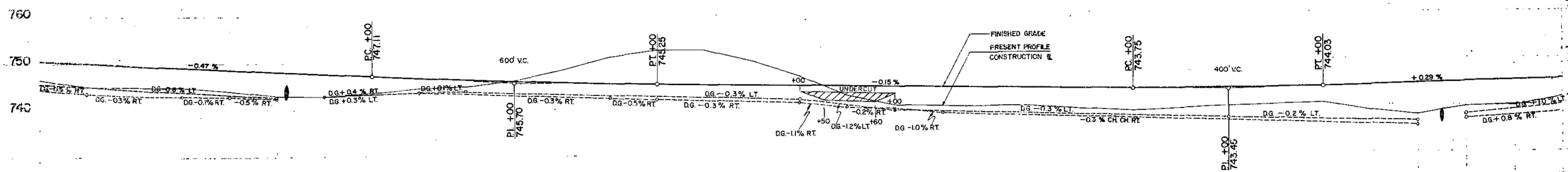
STA. 126+00 FE. RT
24" X 32' CLASS III C.P. REQ'D.

SECTION 2 UNCL. EXC. = 4,149 C.Y.
FILL = 4,391 C.Y.

UNCL. EXC. = 2,132 C.Y.
FILL = 1,747 C.Y.

UNCL. EXC. = 8,785 C.Y.
FILL = 0 C.Y.
HAUL OUT 7,885 C.Y. TO STA. 133+37 – 144+63 & 900 C.Y. TO RAILROAD ST.

UNCL. EXC. = 9,168 C.Y.
FILL = 7,080 C.Y.



STA. 110+20 CONST. ℞
36" X 74' CLASS III C.P. REQ'D.
SKEW 30° L.H.F.

STA. 134+45 CONST. ℞
36" X 96' CLASS III C.P. REQ'D.
SKEW 30° R.H.F.

| | | |

BENCH MARKS

NO.	STATION	DESCRIPTION		ELEV.
13	138+80	SPIKE IN 12" ELM	150' LT.	746.37
14	146+10	" " 24" ELM	81' RT.	746.75
15	151+10	" " 18" ASH	115' RT.	744.23
16	166+25	" " 8" ELM	130' RT.	733.37

B.P.R. DIVISION	PROJECT	UNCL. EXCAV.	TOTAL SHEETS
4	E0-0(22)	10	

STA. 138+57.68 RAILROAD ST.
TYPE "A" INTERSECTION REQ'D.
SEE STD. DRWG. 9-1.1.5

STA. 149+00 F.E. LT.
18" X 32' CLASS III C.P. REQ'D.

HOLY NAME CONGREGATION OF KIMBERLY
DEVELOPMENT RESTRICTION EASEMENT REQ'D.

HARRY VAN ROY — T.A. VAN HANDEL — THERESA EMONS — THEO. THELOSEN — CLARENCE WUNDROW

CEMETERY — BRICK BW. LARS

STA. 138+52.05 SURV. ℄ = STA. 8+25.55 RAILROAD ST.

P.O.T. STA. 138+29.0 — P.O.T. STA. 138+79.6 — P.O.T. STA. 151+21.0 — P.O.T. STA. 159+66.8

SURV. ℄ & R/W ℄

CULT. — UNCULT. — UNCULT. SCATTERED TREES & BRUSH — STUMP

STA. 138+57.68 CONST. ℄ = STA. 7+83.17 RAILROAD ST.

18" C.P. (REMOVE)

DITCH DAM REQ'D

CONST ℄

STA. 5+50 RAILROAD ST. F.E. LT.
18" X 32' CLASS III C.P. REQ'D.

STA. 149+00 F.E. RT.
GRADE ENTRANCE REQ'D.
NO PIPE

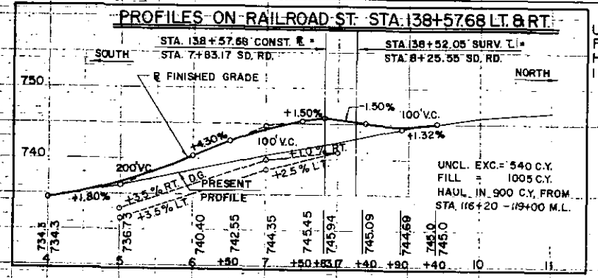
WILLIAM HARTZHEIM

NET LENGTH OF CENTERLINE		
STATION	TO STATION	LIN. FT.
135+00	165+00	3,000.00

UNCL. EXC. = 1,505 C.Y.
FILL = 7,905 C.Y.
HAUL IN 7,685 C.Y. FROM STA. 116+20 – 119+00

UNCL. EXC. = 7,808 C.Y.
FILL = 5,967 C.Y.

PROFILES ON RAILROAD ST. STA. 138+57.68 LT. & RT.



FINISHED GRADE
PRESENT PROFILE
CONSTRUCTION ℄

P.I. +00 750.41
P.C. +00 747.51
P.T. +00 735.95

2000' V.C.

UNDERCUT.

STA. 139+50 CONST. ℄
24" X 72' CLASS III C.P. REQ'D.

STA. 144+30 CONST. ℄
24" X 80' CLASS III C.P. REQ'D.

STA. 154+00 CONST. ℄
24" X 66' CLASS III C.P. REQ'D.

STA. 159+70 CONST. ℄
24" X 74' CLASS III C.P. REQ'D.
SKEW 30° R.H.F.

744.90 745.19 745.48 745.77 746.06 746.35 746.64 746.93 747.22 747.51 747.76 747.92 747.99 747.97 747.87 747.68 747.41 747.05 746.60 746.06 745.44 744.74 743.94 743.06 742.57 742.09 741.03 739.90 738.67 737.36 735.95 734.50 733.06 731.81

135 6 7 8 9 140 1 2 3 4 145 6 7 8 9 150 1 2 3 4 155 6 7 8 +52 9 160 1 2 3 4 165 6 7

E0-0(22) 11

BENCH MARKS

NO.	STATION	DESCRIPTION		ELEV.
16	166+25	SPIKE IN 8" ELM	130'RT.	733.37
17	178+63	" " 40" MAPLE	110'RT.	703.63
18	181+26	" " FENCE POST	130'RT.	733.05
19	192+40	" " " "	145'RT.	727.67
20	193+50	" " 20" OAK	160'RT.	718.54

STA. 167+40 – 168+00 LT. DITCH
88' LT. TO 139' LT.
18" X 72' C.M.C.P REQ'D.

CLARENCE WUNDROW

ULTIMATE N. RDWY. CONST. ℄

ULTIMATE N.W. RAMP

N.W. RAMP ℄

24" X 48' C.M.C.P (REMOVE)

10' C.T. R.I. REQ'D.

LIMITED HIGHWAY EASEMENT, REQ'D.

℄ CHANNEL CHANGE

REMOVE CULV'S

EXISTING DITCH

P.O.T. STA. 167+38.4

P.O.T. STA. 177+60.2

P.O.T. STA. 178+61.4

P.O.T. STA. 181+25.9

165 170 175 180 185 190 195

STA. 177+98.55 SURV. T. = STA. 28+22.6 C.T.H. "N"

5 C.Y. RIP RAP REQ'D.

STA. 179+00 ℄ B-44-53

STA. 178+03.68 CONST. ℄ = STA. 27+80.29 C.T.H. "N"

STA. 179+12 – 180+00 LT. INNER DITCH
52' LT. TO 5' LT.
18" X 96' C.M.C.P REQ'D.

JOHN SPIERINGS

ULTIMATE N. RDWY. CONST. ℄

ULTIMATE N. E. RAMP

N.E. RAMP ℄

EQUATION: P.C. = STA. 186+94.0 (SURVEY T.) = P.C. = STA. 186+94.03 (CONST. ℄)

P.I. OPP. 188+74.4

DRAINAGE DITCH

SURVEY T. CURVE NOTES
P.I. = 192+51.2
Δ = 168°-53'-30"
Δ = 11°-06'-30"
D. = 1°-00'
T. = 557.2'
L. = 410.8'
R. = 5,729.58'

CONST. ℄ CURVE NOTES
P.I. = 192+55.28
Δ = 11°-06'-30"
R. = 5,771.58
D. = 1°-00'
T. = 561.25'
L. = 1,118.98'
S.E. = 0.02 FT./FT.
R.O = 175'

LIMITED HIGHWAY EASEMENT REQ'D.

℄ CH. CH.

TREES & SHRUBS

STA. 197+00 FE. LT. GRADE ENTRANCE REQ'D. NO PIPE

P.O.C. STA. 194+94.0

P.O.C. STA. 191+40.0

LT. DITCH STA. 194+75 – 195+00 26' LT. TO 12' LT. 18" X 24' C.M.C.P REQ'D.

STA. 197+00 FE. RT. 18" X 32' CLASS III C.P. REQ'D.

STA. 192+30 – 192+50 RT. DITCH
98' RT. TO 117' RT.
18" X 24' C.M.C.P REQ'D.

CONST. ℄ S. RDWY.

S.W. RAMP ℄

S.E. RAMP ℄

GRAV. PARKING LOT

GRAV. RD.

SHOP

GO-KART TRACK

DITCH

18" X 40' C.P. (REMOVE)

ARTHUR HEMALER

6" X 6" STONE MONUMENT (PRESERVE)

℄ CH. CH. SEE X-SECTIONS

CLARENCE WUNDROW

STA. 167+40 – 168+00 RT. DITCH
89' RT. TO 135' RT.
18" X 72' C.M.C.P REQ'D.

3 LANDMARK REFERENCE MONUMENTS REQ'D.

C.T.H. "N" (REMOVE) R/W

R/W (REMOVE)

R/W (REMOVE) GAS LINE

UNCULT. / CULT.

FERTILIZE & SEED

2:1 LEVEL 6' 6' 2:1

TYPICAL SECTION OF CHANNEL CHANGE
RT. STA. 168+70 – STA. 178+00
STA. 181+00 – 182+00 RT. INNER DITCH
170' RT. TO 80' RT.
18" X 132' C.M.C.P REQ'D.

JOHN SPIERINGS

NATURAL GROUND

FERTILIZE & SEED

℄ CH. CH.

2:1 LEVEL 4.5 4.5 2:1

UNCL. EXC. = 320 C.Y.
WASTE IN OLD CHANNEL

TYPICAL SECTION OF CHANNEL CHANGE
STA. 194+00
UNCL. EXC. = 13,432 C.Y.
FILL = 11,065 C.Y.

FERTILIZE & SEED

℄

2:1 LEVEL 12' 12' 2:1

TYPICAL CHANNEL CHANGE
C.T.H. "N" STA. 28+60 RT. 34+50 RT.
UNCL. EXC. = 6,910 C.Y.
HAUL OUT 6,910 C.Y. TO STA. 15+00 – 33+77 C.T.H. "N"

NET LENGTH OF CENTERLINE		
STATION	TO STATION	LIN. FT.
165+00	195+00	3,00000

CH.CH. CURVE "A"
P.I. 171+61.48
Δ = 14°-40'-54"
D = 4°-19'-58"
T = 170.36'

CH.CH. CURVE "B"
P.I. 174+97.66
Δ = 24°-28'-48"
D = 10°-00'
T = 124.30'

CH.CH. CURVE "C"
P.I. 177+94.03
Δ = 90°-00'
D = 38°-11'-50"
T = 150.00'

UNCL. EXC. = 6,813 C.Y.
FILL = 5,017 C.Y.

UNCL. EXC. = 66,275 C.Y.
FILL = 78,592 C.Y.

HAUL IN 23,400 C.Y. FROM N.E. RAMP & 5,500 C.Y. FROM N.W. RAMP

CHANNEL CHANGE PROFILES

730 720 710 700 690 680

WEST NORTH

PRESENT PROFILE
FINISHED GRADE CHANNEL CHANGE

℄ STRUCTURE = ℄ C.T.H. "N"

P.I. +00 702.30

EQUATION: STA. 179+79.65 BACK = STA. 24+79.60 AHEAD

C-44-34

27+68.22 ℄ B-44-53

B-44-55

-0.30% -0.48% -1.31% -1.34% -0.42% -0.48% -0.64% -0.90%

703.9 703.8 703.5 703.2 702.9 702.6 702.3 701.82 701.34 700.86 700.40 699.57 699.30 698.80 698.37 697.30 697.30 696.88 696.62 696.43 695.95 695.80 695.46 695.40 694.74 693.84 692.94 692.70

165 169+50 170 171 172 173 174 175 176 177 178 179 25 +68.1 26 +80.1 27 28 +60.6 29 30 +30.6 31 +26.3 32 33 34 +80 35

800' V.C.

P.C. +00 728.72

P.I. +00 722.93

P.T. +00 724.17

STA. 178+03.68 ℄ B-44-56

PRESENT PROFILE CONSTRUCTION ℄
FINISHED GRADE CONSTRUCTION ℄

-1.446%

+0.31%

3.5% INNER LT. UNDERCUT 450 LT. -2.0% RT. -1.5% OUTER LT. -0.5% OUTER LT. DG.-2.5% OUTER LT. -10.8% INNER LT. DG.-2.5% LT. -31.6% RT. DG.-5.0% INNER LT. -3.0% OUTER LT. -2.0% LT. -1.0% RT. -3.7% RT. DG. +0.3% INNER LT. -0.3% CH. CH. RT. INNER LT. DG.+1.0% -0.5% CH. CH. INNER DG. LT. -1.7% UNDERCUT +60 +00 +20 +2.3% INNER DG. LT. +2.0% LT. INNER DG. +2.0% LT. +40% LT. OUTER +3.8% RT. +1.8% +0.5% RT. INNER DG. DG. +0.3% LT. INNER DG. +0.3% LT. OUTER DG. +0.5% RT. OUTER +1.0% LT. +0.3% LT. +85 +25 +45 +65 UNDERCUT DG. +0.6% RT. DG. -0.5% RT. -5.0% -5.0% DG.-3.2% RT. P.C. +50 729.28 +00 +40 +25 +79 UNDERCUT +1.78% LT. DG. +3.2% LT. DG. +6.0% RT. 730 720 710

STA. 179+00 ℄ B-44-53

STA. 170+45
CONST. ℄
30" X 190' CLASS III C.P. REQ'D.
SKEW 15° R.H.F.

STA. 178+03.68 CONST. ℄, B-44-56
3 SPAN, SLAB SPAN BRIDGE REQ'D.
40' CLEAR ROADWAY
SKEW 6°-57'-30" R.H.F.

STA. 179+00 B-44-53
+0.5% RT. TWIN-12'-X 8' R.C. BOX CULVERT
INNER DG. TYPE BRIDGE REQ'D.
INL. = 697.3 DIS. = 696.62

STA. 189+65 CONST. ℄
24" X 116' CLASS III C.P. REQ'D.

STA. 194+00 ℄ C-44-36
6' X 6' CONC. BOX CULVERT REQ'D.
INL. = 710.50 DIS. = 709.50
SKEW 30° R.H.F.

734.50 733.06 731.61 730.92 730.31 730.17 729.45 728.72 728.03 727.38 726.89 726.27 725.72 725.37 724.69 724.23 723.99 723.97 724.02 724.17 724.36 724.48 724.64 724.79 724.85 725.10 725.18 725.41 725.72 726.03 726.34 726.49 726.65 726.96 727.27 727.58 727.89 728.20 728.51 728.71 728.82 728.91 728.97 729.13 729.42 729.53 729.61 729.60 729.64 729.55

165 6 7 +48 +90 8 +50 9 +50 170 +50 1 +58 2 3 4 175 6 +40 7 +63 8 +82 9+20 180+27 1 2 3 4 +50 185 6 7 8 9 190 1 +65 2+39 +80 3 4 +50 +75 195 6 7

EQUATION:

1-5

C.T.H. "N"

B.P.R. Proj.	Project	Sheet Number	Total Sheets
4	E 0-0(22)	12	

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
17	178+63	SPIKE IN 40" MAPLE C.T.H. "Z" BURV. 110' RT.	703.63
18	181+26	" " FENCE POST " " 130' RT.	733.05

NET LENGTH OF CENTERLINE		
STATION TO STATION		LIN. FT.

UNCL. EXC. = 8,094 C.Y.
FILL = 27,147 C.Y.
BORROW = 9,500 C.Y.
USE 6,910 C.Y. FROM CH. CH. ON C.T.H. "N"
HAUL IN 3,600 C.Y. FROM N.W. RAMP
HAUL IN 4,850 C.Y. FROM S.E. RAMP

UNCL. EXC. = 8,020 C.Y.
FILL = 6,757 C.Y.

STA. 16+77
24"X 78' CMCP IN PLACE
EXTEND LT. & RT.
24"X 16' CL. III CMCP LT.
24"X 16' CL. III CMCP RT.

STA. 18+47
24"X78 C.M.C.P. IN PLACE
EXTEND LT. & RT.
24"X 20' CL. III C.M.C.P. LT.
24"X 26' CL. III C.M.C.P. RT.

STA. 25+15 C-44-34
10' X 8' R.C. BOX CULVERT REQ'D.
SKEW 40° R.H.F.
INL. 700.40 DIS. 698.80

STA. 33+22 REMOVE 24"X48' C.M.C.P.
24"X 92' CL. III C.P. REQ'D

STA. 36+40 P.E. LT.
18"X40' CL. III C.P. REQ'D

STA. 39+50 P.E. LT.
18"X32' CL. III C.P. REQ'D

STA. 36+00 F.E. RT.
REQ'D

STA. 39+50 P.E. RT.
18"X32' CL. III C.P. REQ'D

BENCH MARKS

NO.	STATION	DESCRIPTION		ELEV.
21	201+75	SPIKE IN 20" MAPLE	70'LT.	723.43
22	209+00	" " 24" ELM	380'LT.	719.12
23	211+90	" " POWER POLE	72'RT.	722.60
24	219+30	" " 12" ELM	200'LT.	713.47
25	226+50	" " 18" OAK	300'LT.	732.10

NET LENGTH OF CENTERLINE		
STATION TO STATION		LIN. FT.
195+00	225+00	3,000.00

JOHN SPIERINGS

SURVEY T.
CURVE NOTES
P.I. = 192.+51.2
L = 168°-53'-30"
Δ = 11°-06'-30"
D. = 1°-00'
T. = 557.2'
L. = 1,110.8'

STA. 198+00 P.E. LT.
18"X 32' CLASS III C.P. REQ'D.

(CONST.) P.T. STA. 198 + 13.01 BK. = P.T. STA. 198+04.8 AHEAD (SURVEY)

CULT.

SURV. T. & R/W ℄

P.O.T. STA. 201+71.4

RAVINE

I.P.

N. 83°-38'-20" E.

CONST. ℄

P.O.T. STA. 209+82.0

JOHN SPIERINGS

STA. 198+00 P.E. RT.
GRADE ENTRANCE REQ'D.
NO PIPE

HENRY KILSDONK

STA. 210+00 – 210+40 RT. DITCH
119' RT. TO 87' RT.
18"X 48' C.M.C.P. REQ'D.

HENRY KILSDONK

STA. 209+00 – 209+40 LT. DITCH
20' LT. 18"X 40' C.M.C.P. REQ'D.

TREES & BRUSH

STA. 212+05 TOWN RD. RT. & LT.
TYPE "C" INTERSECTION REQ'D.
(SEE STD. DWG. 9-11.5)

STA. 212+184
SURVEY T.

RADTKE REAL ESTATE

TOWN ROAD

STA. 212+05
CONSTR. ℄ =
STA. 0+00
TOWN RD.

NORTHEASTERN POWER COMPANY

STA. 218+00 – 218+50 RT. DITCH
91' RT. TO 105' RT.
18"X 48' C.M.C.P. REQ'D.

RADTKE REAL ESTATE

12 LANDMARK REFERENCE MONUMENTS REQ'D. FOR 4 LOT CORNERS – RADTKE PLAT.

TRANSMISSION LINE

KENNETH HAHNEMANN

STA. 218+50 – 219+00 LT. DITCH
42' LT. TO 9' LT.
24"X 54' C.M.C.P. REQ'D.

UNCULT.

℄ CHANNEL CHANGE

LIMITED HIGHWAY EASEMENT REQ'D.

KENNETH HAHNEMANN

STA. 12+60 P.E. RT.
18"X 32' CLASS III C.P. REQ'D.

CONST. PT.
STA. 13+30.2 AH
STA. 13+41.3 BK.
E 0-0(22)

C.T.H. "K" ARC. DEF.
CONST. CURVE NOTES
P.I. = STA. 11+26.1
L = 153°-43'
Δ = 26°-17'
D = 6°-0'
T = 222.9'
L.C. = 438.1'
S.E. = 0.050 FT./FT.
R.O. = 120'

CONST. P.C. STA. 9+03.3

12"X 32' C.M.C.P. (REMOVE)

CONST. P.T. STA. 7+54.32

CONST. ℄ = 224+78.4
EQUATION C.T.H. "K"
STA. 7+72.54 BACK =
STA. 7+51.2 AH. =
STA. 224+78.4 C.T.H. "K"

STA. 225+03.3 SURV. T. =
STA. 8+00 C.T.H. "K"

ESTHER DE GROOT

GRADE ENTRANCES REQ'D.

C.T.H. "K" ARC. DEF.
CONST. CURVE NOTES
P.I. = STA. 5+52.64
Δ = 132°-45'
Δ = 47°-15'
D = 11°-00'
T = 227.8'
L.C. = 429.5'
S.E. = 0.070 FT./FT.
R.O. = 150'

STA. 224+78.4 CONST. ℄
C.T.H. "K" LT. & RT.
TYPE "A" INTER. REQ'D.
(SEE ST D. D W G. NO. 9-11.5)

STONE MASONRY CULVERT (TO REMAIN)

SURV. T.

CONST. ℄

UNCL. EXC. = 4,758 C.Y.
FILL = 3,937 C.Y.

UNCL. EXC. = 3,122 C.Y.
FILL = 5,147 C.Y.
HAUL IN 3,100 C.Y. FROM STA. 216+50 – 226+18

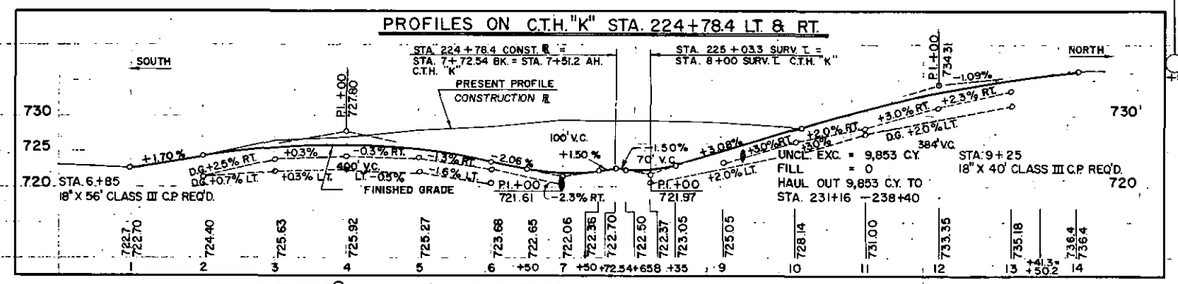
UNCL. EXC. = 7,939 C.Y.
FILL = 6,389 C.Y.

UNCL. EXC. = 14,379 C.Y.
FILL = 9,045 C.Y.
HAUL OUT 3,100 C.Y. TO STA. 209+65 – 216+50

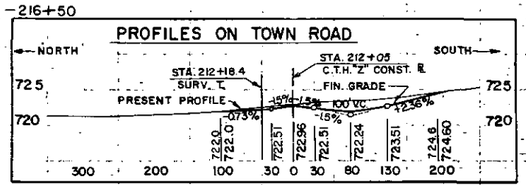
UNCL. EXC. = 9,853 C.Y.
FILL = 0
HAUL OUT 9,853 C.Y. TO STA. 231+16 – 238+40

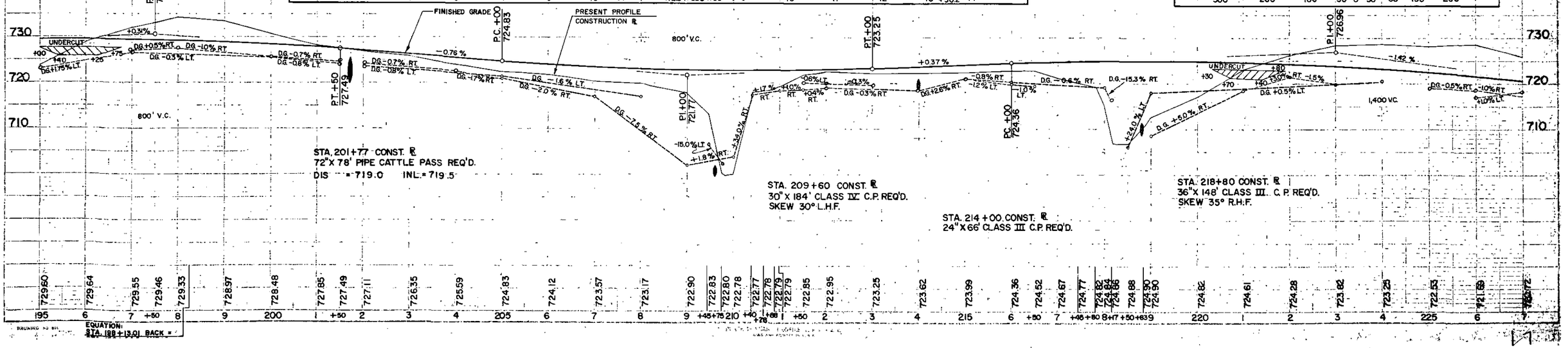
STA. 9+25
18"X 40' CLASS III C.P. REQ'D.

PROFILES ON C.T.H. "K" STA. 224+78.4 LT. & RT.



PROFILES ON TOWN ROAD





STA. 201+77 CONST. ℄
72"X 78' PIPE CATTLE PASS REQ'D.
DIS = 719.0 INL. = 719.5

STA. 209+60 CONST. ℄
30"X 184' CLASS IV C.P. REQ'D.
SKEW 30° L.H.F.

STA. 214+00 CONST. ℄
24"X 66' CLASS III C.P. REQ'D.

STA. 218+80 CONST. ℄
36"X 148' CLASS III. C.P. REQ'D.
SKEW 35° R.H.F.

EQUATION:
STA. 198+13.01 BACK =

B.P.R. DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4	E0-0122	14	

BENCH MARKS

NO.	STATION	DESCRIPTION		ELEV.
25	226+50	SPIKE IN 18" OAK	300'LT.	732.10
26	234+10	" " 12" "	94LT.	709.65
27	232+50	" " 24" ELM	50'LT	693.24
28	247+30	" " 14" OAK	52'RT.	713.62
29	250+50	" " 8" ELM	200'RT.	718.64
30	253+15	" " COR. POST	325'LT.	727.39

STA. 230+36 – 230+50 LT. DITCH
0' LT. TO 15' LT.
18" X 16' C.M.C.P. REQ'D.

STA. 231+00 – 231+50 LT. DITCH
14' LT. TO 49' LT.
18" X 58' C.M.C.P. REQ'D.

STA. 239+00 FE. LT.
18" X 32' CLASS III C.P. REQ'D.

LIMITED HIGHWAY EASEMENT REQ'D.

ESTHER DEGROOT

ROBERT BERGHUIS

HENRY COONEN

P.O.T. STA. 230+13.0

P.O.T. STA. 234+78.8

P.O.T. STA. 236+74.7

P.O.T. STA. 243+42.8

P.O.T. STA. 254+17.8

P.I. = STA. 251+58.0 R/W ℄
∠ = 180°-27'-04"

SURV. ℄ & R/W ℄

CHANNEL CHANGE ℄

DEEP RAVINE

BRUSH

WOODS

CULT.

UNCULT.

DRAINAGE DITCH (FILL)

6-POPLARS

STUMP

I.P.

N. 83°-38'-20" E.

R.O.W. LINE

STA. 225+03.3 SURV. ℄ = STA. 8+00 C.T.H. "R"

CH. CH. ℄

STA. 232+00 ℄ OF C-44-33

DITCH

RAVINE

CONST. ℄

R/W ℄

LIMITED HIGHWAY EASEMENT REQ'D.

STA. 228+00 – 229+45 RT. DITCH
80' RT. TO 121' RT.
18" X 146' C.M.C.P. REQ'D.

STA. 238+80 FE. RT.
GRADE ENTRANCE REQ'D.
NO PIPE

TYPICAL SECTION OF CHANNEL CHANGE
STA. 232+00

℄ CH. CH.
FERTILIZE & SEED
NATURAL GROUND
2:1
LEVEL 5' 5'
UNCL. EXC. = 1074 C.Y.
WASTE IN OLD CHANNEL

NET LENGTH OF CENTERLINE		
STATION	TO STATION	LIN. FT.
225+00	255+00	3,000.00

UNCL. EXC. = 6,967 C.Y.
FILL = 5,740 C.Y.

UNC. EXC. = 7,696 C.Y.
FILL = 19,988 C.Y.
HAUL IN 9,853 C.Y. FROM C.T.H. "K"
HAUL IN 8,000 C.Y. FROM STA. 244+10 – STA. 255+00

UNCL. EXC. = 4,432 C.Y.
FILL = 3,546 C.Y.

UNCL. EXC. = 9,311 C.Y.
FILL = 1,051 C.Y.
HAUL OUT 8,000 C.Y. TO STA. 231+16 – 238+40

730
720
710
700

P.I. +00 732.82
-0.585 %
FINISHED GRADE
PRESENT PROFILE
CONSTRUCTION ℄
UNDERCUTS
DG +0.6 % RT.
DG +0.7 % LT.
DG LT & RT -0.5%
1,400' V.C.

P.C. +00 722.13
+1.525 %
DG LT & RT +15%
DG LT & RT +10%
DG RT -0.5%
DG LT +1.0%
DG RT -1.0%
DG LT -2.0%
DG RT +1.7%
DG RT -10%
DG RT +2.3%
DG RT +10%
LT & RT +10%
LT & RT +4.0%
LT & RT +3.0%
DG -2.0% RT.
DG -2.0% LT.
DG +2.0% LT.
DG +2.0% RT.
LT & RT +3.0%
DG RT +3.0%
+1.9 %
-1.0% LT.
+0.4% RT.
+0.8% RT.
UNDERCUT
UNDERCUTS
800' V.C.

P.T. +00 716.03
P.I. +00 709.93
P.T. +00 717.03
P.C. +00 715.61
P.T. +00 728.73

STA. 232+00 ℄ OF C-44-33

STA. 235+30 CONST. ℄
24" X 86' CLASS III C.P. REQ'D.

STA. 239+60 CONST. ℄
36" X 122' CLASS III C.P. REQ'D.
SKEW 45° R.H.F.

STA. 248+60. CONST. ℄
24" X 66' CLASS III C.P. REQ'D.

STA. 232+00. CONST. ℄, C-44-33
10' X 10' R.C. BOX CULVERT REQ'D.
SKEW 20° L.H.F.
INL. = 689.0 DIS. = 687.33

| | | |

E 0-01(22) 15

BENCH MARKS

NO.	STATION	DESCRIPTION		ELEV.
31	257+22	SPIKE IN 14" TWIN ELM	300' LT.	724.29
32	260+80	" " 12" OAK	92' LT.	718.02
33	267+10	" " 10" MAPLE	234' RT.	722.66
34	280+60	" " COR. FENCE POST	LT.	718.10

HENRY COONEN

STA. 259+65.94 R/W ℝ =
STA. 6+72.12 DEBRUIN RD.

JOSEPH DEBRUIN

STA. 263+31 – 264+00 LT. DITCH
20' LT. TO 6' LT.
18" X 66' C.M.C.P. REQ'D.

STA. 259+66.4 SURVEY ℄ =
STA. 6+78.5 DEBRUIN RD.

SURV. ℄

HENRY WELHOUSE

STA. 283+23.35 R/W ℝ LINE =
STA. 280+33.23 S.T.H. 55 EXPRESSWAY

KAUKAUNA CITY LIMITS

STA. 259+63.07 CONST. ℝ =
STA. 6+30.02 DEBRUIN RD.

CONST ℝ

R/W ℝ

S.T.H. 55 EXPRESSWAY SURVEY ℄

STA. 263+31 – 263+50 RT. DITCH
108' RT. TO 101' RT.
18" X 16' C.M.C.P. REQ'D.

LIMITED HIGHWAY EASEMENT REQ'D.

NET LENGTH OF CENTERLINE			
STATION	TO STATION	LIN. FT.	
255+00	280+64.44	2,564.44	SEC. 2
280+64.44	285+00	435.56	SEC. 3

PICKET FENCE

STA. 259+63.07 SD. RD. LT. & RT.
TYPE "C" INTERSECTION REQ'D
SEE ST'D. D'W'G. NO. 9-1.1.5
24" X 52' CLASS III C.P. REQ'D.

STA. 261+70 – 262+00 RT. DITCH
98' RT. TO 104' RT.
18" X 26' C.M.C.P. REQ'D.

TYPICAL SECTION OF CHANNEL CHANGE
STA 262+80

NATURAL GROUND — FERTILIZE & SEED — ℄ CH. CH. — 2:1 — 2:1 — 3' 3'

UNCL. EXC. = 114 C.Y.
(WASTE IN OLD CHANNEL)

+00 to +55: UNCL. EXC. = 6,571 C.Y.; FILL = 5,096 C.Y.; HAUL OUT 200 C.Y. TO DE BRUIN RD.

+55 to +00: UNCL. EXC. = 3,173 C.Y.; FILL = 5,969 C.Y.; HAUL IN 4,290 C.Y. FROM STA. 274+63 TO STA. 282+90

+00 to +63: UNCL. EXC. = 2,442 C.Y.; FILL = 1,954 C.Y.

+63 to +64.44 SECTION (2 3): UNCL. EXC. = 7,385 C.Y.; FILL = 2,477 C.Y.; HAUL 4,290 C.Y. TO STA. 262+55 TO STA. 268+00

+64.44 SECTION (2 3) to +90: UNCL. EXC. = 7,390 C.Y.; FILL = 5,921 C.Y.

SECTION 2
UNCL. EXC. = 4,854 C.Y.
FILL = 2,215 C.Y.

SECTION 3
UNCL. EXC. = 2,531 C.Y.
FILL = 262 C.Y.

PROFILES ON SD. RD. STA. 259+63.07 LT. & RT.

SOUTH — STA. 259+63.07 CONST. ℝ = STA. 6+30.02 DEBRUIN RD. — STA. 259+66.4 SURV. ℄ = STA. 6+78.5 DEBRUIN RD. — NORTH

℄ FINISHED GRADE
PRESENT PROFILE
+0.56% +1.5% -1.5% -2.45%
UNCL. EXC. = 132 C.Y.
FILL = 296 C.Y.
HAUL IN 200 C.Y. FROM MAINLINE STA. 255+00 – 262+55

730 / 720 grade scale; 4 5 +50 6 +30+65 7 8 9 10
726.6 726.6 726.88 727.01 727.39 727.01 726.15 723.7 723.7

740 / 730 / 720 grade scale

FINISHED GRADE
PRESENT PROFILE
CONSTRUCTION ℝ

600' V.C. — P.T. +00 726.79 — P.I. +00 725.80 — P.C. +00 727.55 — P.I. +00 730.42 — P.C. +00 729.10 — P.T. +00 728.53 — P.C. +57 727.31 — 1000' V.C.

-0.56% +0.33% -0.475%

D.G. LT & RT. -0.5% — D.G. LT. -1.5% & RT. -2.0% — D.G. RT. -3.0% — D.G. LT. +1.0% — D.G. RT. +2.0% — D.G. LT. +0.5% — D.G. RT. +0.5% — D.G. LT. -1.5% — D.G. RT. -1.0% — D.G. LT. -1.0% — D.G. RT. +0.5% — D.G. LT. +2.5% — D.G. RT. -0.5% — D.G. LT. -1.5% — D.G. RT. -0.5%

UNDERCUT

STA. 261+60 CONST. ℝ
72"x84" PIPE CATTLE PASS REQ'D.
INLET 716.9 ℝ = 717.4 DIS = 716.9

STA. 262+80 CONST. ℝ
60"X 124' CLASS III C.P. REQ'D.

STA. 280+00 CONST. ℝ
24"X 78' CLASS III C.P. REQ'D.

729.60 729.23 728.72 728.14 727.55 727.05 726.69 726.54 726.49 726.46 726.43 726.45 726.46 726.47 726.54 726.79 727.12 727.45 727.78 728.11 728.44 728.77 729.10 729.38 729.56 729.64 729.62 729.49 729.27 728.95 728.53 728.05 727.58 727.31 727.11 726.73 726.45 726.26 726.18

255 6 7 8 9 260 1 +70 2 +35 3 +31+60 +80 4 265 6 7 8 9 270 1 2 3 4 275 6 7 8 9 280 1 2 +57 3 4 285 6 7

19

SHEET NO.	PROJECT	SHEET NUMBER	TOTAL SHEETS
4	E0-0(22)	16	

BENCH MARKS

NO.	STATION	DESCRIPTION		ELEV.
35	295+10	SPIKE IN 20" ELM	75'RT.	725.04
36	301+70	" " 12" HICKORY	100'LT.	733.00
37	306+36	" " POWER POLE	60'LT.	735.24
38	311+00	PT. MK. N.W. COR. BOT. STEP	200'RT.	733.25

HENRY WELHOUSE

SURV. ℄

CULT.

CLEAN TO DRAIN

285 290 295 300 305 310

P.O.T. STA. 293+33.55

P.O.T. STA. 296+27.8

P.O.T. STA. 300+36.15

CLEAN TO DRAIN

HENRY WELHOUSE CONC. MON.

KAUKAUNA

HENDRICKS AVE. (PROPOSED)

A.J. JONEN & R.M. BIES

MAIN AVE. (PROPOSED)

A.J. JONEN & R.M. BIES

18" C.P. (REMOVE)

STA. 310+40.5 SURVEY ℄
STA. 9+43.13 S.T.H. 55

P.C. = STA. 10+00

STA. 310+41.83 C.T.H. "Z"
TYPE "A" INTERSECTION REQ'D.
SEE ST'D. DRAWING NO. 9-1.1.5

STA. 310+41.11 R/W ℄
= STA. 8+96.80 S.T.H. 55

STA. 310+41.83 CONST. ℄
= STA. 8+54.80 S.T.H. 55

24" CULV. PIPE IN PLACE (TO REMAIN)

STA. 8+26 - S.T.H. 55
30" C.I.C.P. IN PLACE
30" X 36' C.M.C.P. EXTENSION REQ'D.

30" CULV. PIPE IN PLACE (TO REMAIN)

FREDERICK DICKVOSS

BOARD FENCE

SPECIAL 12' PASSING LANE REQ'D.

S.T.H. 55 (BLACKTOP)

STA. 310+29.11 END
PROJECT E0-0(22)

CONST. ℄

R/W ℄

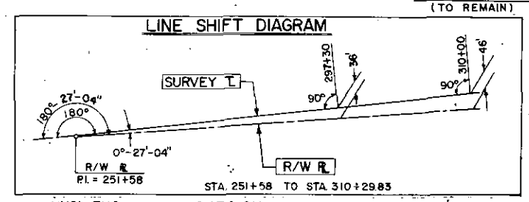
CITY LIMITS (S.T.H. "55" SURVEY) P.I. 273+45

HENRY WELHOUSE

℄ CHANNEL CHANGE SEE X-SECTIONS

MICHAEL BUCKINGER

LINE SHIFT DIAGRAM



NET LENGTH OF CENTERLINE			
STATION	TO STATION	LIN. FT.	
285+00	295+70.98	1,070.98	SEC. 3
295+70.98	310+29.11	1,458.13	SEC. 4

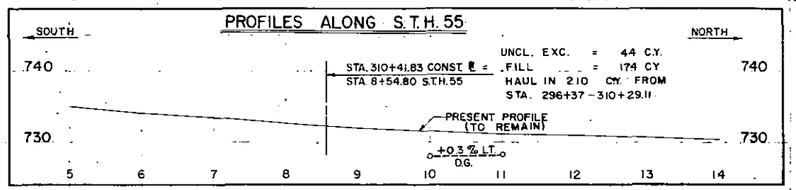
SEC. 3 UNCL. EXC. = 6,561 C.Y.
FILL = 5,843 C.Y.

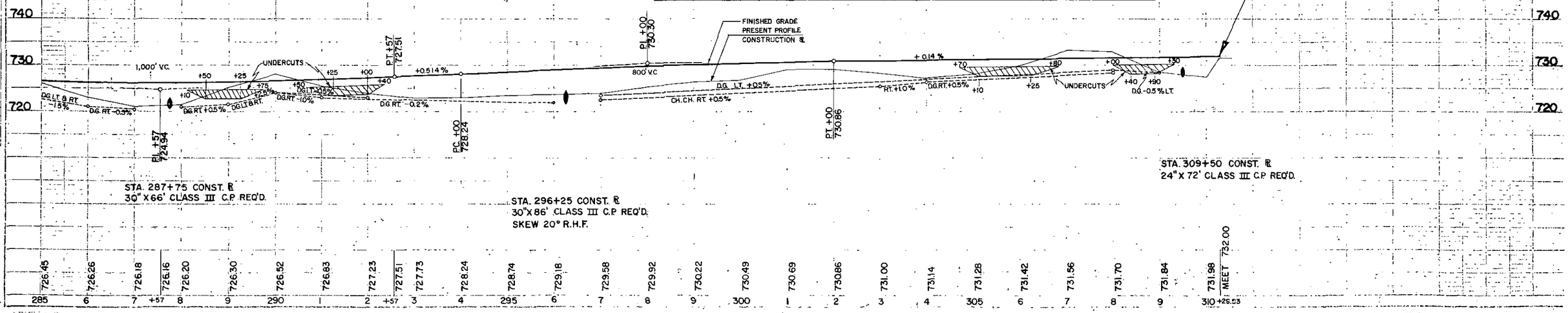
+70.98 SECTION 3 4 +37

UNCL. EXC. = 829 C.Y.
FILL = 78 C.Y.

UNCL. EXC. = 6,174 C.Y.
FILL = 4,664 C.Y.
HAUL 210 C.Y. TO S.T.H. 55
INTERSECTION & DECELERATION LANE

PROFILES ALONG S.T.H. 55





STA. 287+75 CONST. ℄
30" X 66' CLASS III C.P. REQ'D.

STA. 296+25 CONST. ℄
30" X 86' CLASS III C.P. REQ'D.
SKEW 20° R.H.F.

STA. 309+50 CONST. ℄
24" X 72' CLASS III C.P. REQ'D.

B.P.R. DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4	EO-0(22)	17	

NORTHWEST RAMP CURVE NOTES

P.I. = 164+55.73
∠ = 166°-17'-16"
Δ = 13°-42'-44"
D = 4°-00'
T = 172.23'
L = 342.81'
R = 1,432.39'
S.E. = 0.060 FT./FT.
R.O. = 150 FT

NORTHEAST RAMP CURVE NOTES

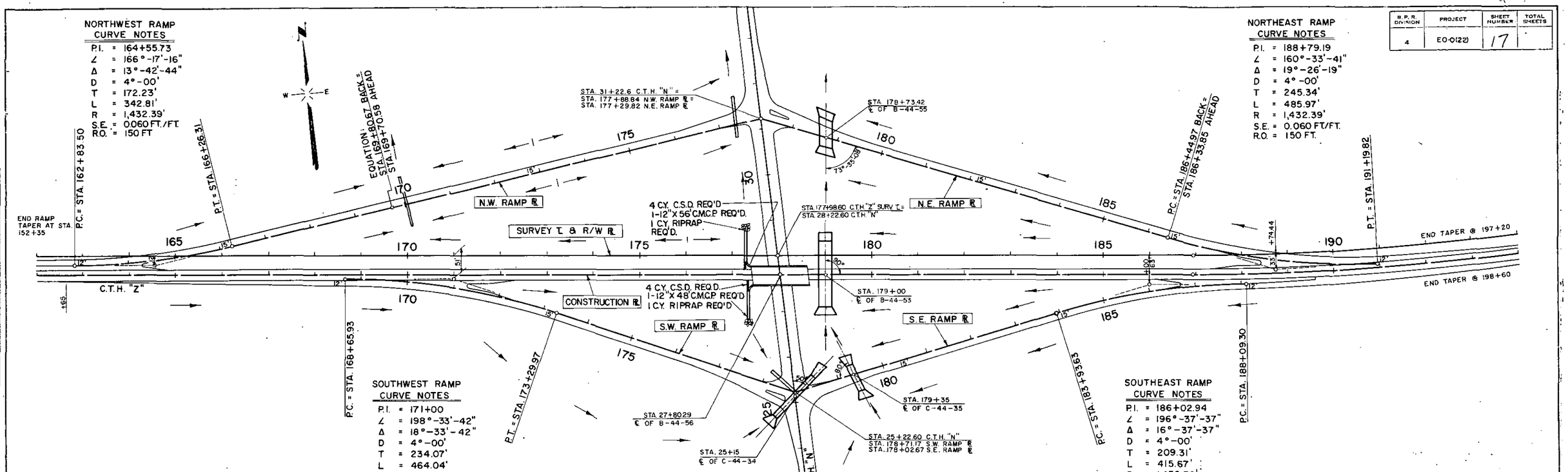
P.I. = 188+79.19
∠ = 160°-33'-41"
Δ = 19°-26'-19"
D = 4°-00'
T = 245.34'
L = 485.97'
R = 1,432.39'
S.E. = 0.060 FT/FT.
R.O. = 150 FT.

SOUTHWEST RAMP CURVE NOTES

P.I. = 171+00
∠ = 198°-33'-42"
Δ = 18°-33'-42"
D = 4°-00'
T = 234.07'
L = 464.04'
R = 1,432.39'
S.E. = 0.060 FT./FT.
R.O. = 150 FT.

SOUTHEAST RAMP CURVE NOTES

P.I. = 186+02.94
∠ = 196°-37'-37"
Δ = 16°-37'-37"
D = 4°-00'
T = 209.31'
L = 415.67'
R = 1,432.39'
S.E. = 0.060 FT./FT.
R.O. = 150 FT.



PROFILES ON NORTHWEST RAMP

UNCL. EXC. = 10,204 C.Y.
FILL = 900 C.Y.
HAUL OUT 5,500 C.Y TO MAINLINE STA. 168+22 – 186+80 & 3,600 C.Y. TO C.T.H. "N" STA. 15+00 – STA. 33+77

STA. 170+07 N.W. RAMP ℄
30" X 12' CLASS IV C.P. REQ'D

STA. 177+35 N.W. RAMP ℄
18" X 88' CLASS III CP REQ'D

PROFILES ON NORTHEAST RAMP

UNCL. EXC. = 25,714 C.Y.
FILL = 1,893 C.Y.
HAUL OUT 23,400 C.Y. TO MAINLINE STA. 168+22 – 186+80

STA. 178+73.42 ℄ OF B-44-55
STA. 178+73.42 B-44-55
TWIN 12' X 8' R.C. BOX CULVERT
SKEW 16°-24'-52" R.H.F.
TYPE BRIDGE REQUIRED
INL.= 695.80 DIS. = 695.40 SEE DRAWINGS X 34973, X 34974 & X 34975

PROFILES ON SOUTHWEST RAMP

UNCL. EXC. = 6,310 C.Y.
FILL = 10,694 C.Y.
HAUL IN 6,600 C.Y. FROM SOUTHEAST RAMP

PROFILES ON SOUTHEAST RAMP

UNCL. EXC. = 18,866 C.Y.
FILL = 6,128 C.Y.
HAUL OUT 4,850 C.Y. TO C.T.H. N STA. 15+00 TO STA. 33+77 & 6600 C.Y. TO S.W. RAMP

STA. 179+35 ℄ C-44-35
14' X 8' R.C. BOX CULVERT REQ'D.
SKEW 10° R.H.F. INL. 698.00 DIS. 697.60
SEE DRAWINGS X 34970, X 34971 & X 34972

PLATE 1-PLAN-PROFILE

21

C.T.H. "N"

B.P.R. DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4	EO-0(22)	18	

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
17	178+63, C.T.H. "N"	SPIKE IN 40" MAPLE 110' RT.	703.63

NET LENGTH OF CENTERLINE		
STATION	TO STATION	LIN. FT.

WOODS
UNCULTIVATED
R/W
SHOULDER LINE
22 C.T.H. "N" (BLACKTOP) EXISTING
SURVEY T. & CONSTRUCTION R.
N. 2°-12'-40" W.
GAS LINE
FILL DITCH
S.W. RAMP R.
STA. 178+71.17 S.W. RAMP = STA. 25+22.6 C.T.H. "N"
2'-6" TYPE "D" CONCRETE CURB & GUTTER
S.E. RAMP R.
STA. 178+02.67 S.E. RAMP = STA. 25+22.6 C.T.H. "N"
178
179

PROFILES ON LEFT
PROFILES ON TRANSIT LINE
PROFILES ON RIGHT
T. FINISHED GRADE
T. PRESENT PROFILE
PARALLEL TO T.
TOP OF CURB
EDGE OF PAVEMENT
GUTTER FLOWLINE
-2.13%-
P.C. +30 710.86
T.40' V.C.

| | | |

C.T.H. "N"

S.P.R. SECTION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4	E 0-0 (22)	19	

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
17	178+63.5 C.T.H. "Z"	SPIKE IN 40" MAPLE 110' RT.	703.63

STA. 29+75, 25.5' LT.
TYPE 3-H INLET REQ'D.
(RT. GRATE)
DEPTH = 2.76'
DIS. = 701.80
12"X 48' R.C.P. CLASS III (S.S.)
INL. = 701.80 DIS. = 701.56

STA. 177+88.84 N.W. RAMP =
STA. 31+22.6 C.T.H. "N"

N.W. RAMP

CULTIVATED

UNCULTIVATED

LANE

SHOULDER LINE

2-6" TYPE "D" CONCRETE CURB & GUTTER

P.E. (GRAVEL)

42'

63°-02'-50"

27 C.T.H. "N" (BLACKTOP) EXISTING

28 29 30 31 32 33

N. 2°-12'-40" W.

STA. 27+80.29 C.T.H. "N" = STA. 28+22.60 C.T.H. "Z"
℄ 8-44-56 (STRUCTURE)

STA. 177+98.60 C.T.H. "Z" = STA. 28+22.60 C.T.H. "N"

C.T.H. "Z" SURVEY ℄ & R/W ℞

℄ SOUTH ROADWAY C.T.H. "Z"

FILL EXISTING DITCH

DITCH

STA. 29+75, 25.5' RT.
TYPE 3-H INLET REQ'D.
(LT. GRATE)
DEPTH = 3.00'
DIS. = 701.56
12"X 40' R.C.P. CLASS III (S.S.)
INL. = 701.56 DIS. = 701.00
RIP-RAP TO CHANNEL CHANGE
5 C.Y. RIP-RAP REQ'D.

CHANNEL CHANGE

N.E. RAMP

STA. 177+29.82 N.E. RAMP =
STA. 31+22.6 C.T.H. "N"

200' TAPER

150'

100'

(REMOVE CP)

PRIVATE BRIDGE (REMOVE)

P.E.

NET LENGTH OF CENTERLINE	
STATION TO STATION	LIN. FT.

HO.

PROFILE ON LEFT

PROFILE ON TRANSIT LINE

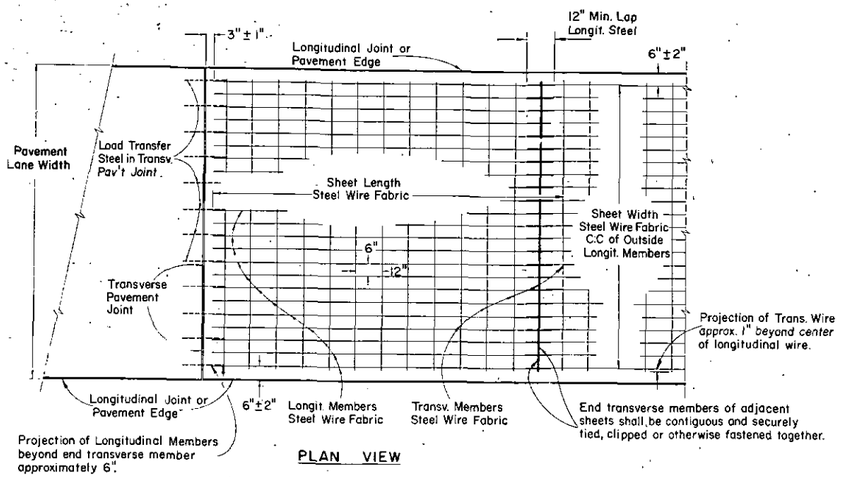
PROFILE ON RIGHT

TOP OF CURB
EDGE OF PAVEMENT
GUTTER FLOWLINE
PARALLEL TO ℄
℄ FINISHED GRADE
PRESENT PROFILE

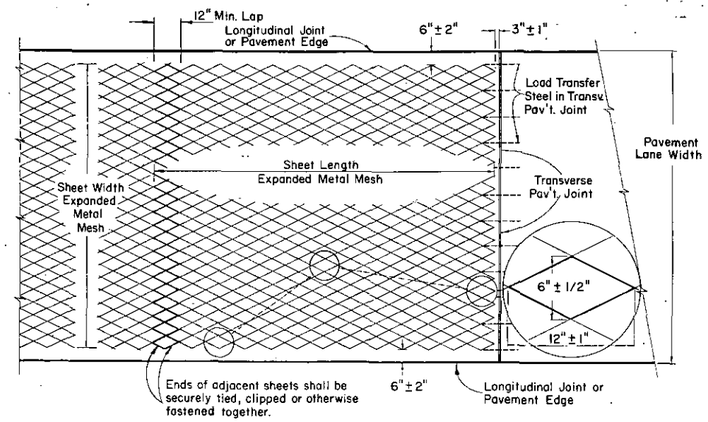
-0.30%
+0.30%
-2.13%
+3.30%
1,40' V.C.

PI+00
706.44

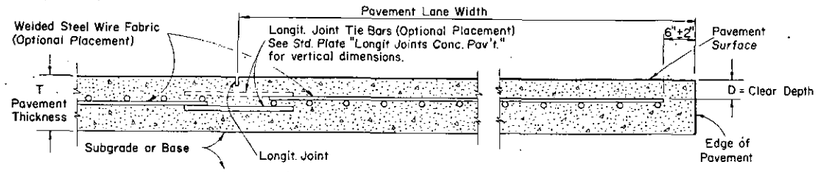
| | | |



PLAN VIEW

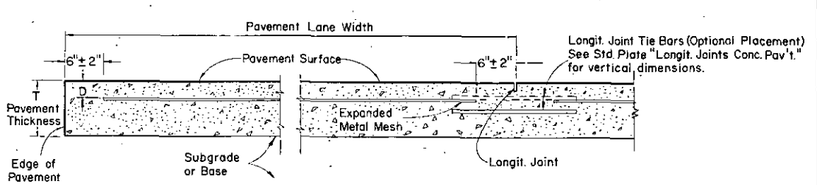


PLAN VIEW



CROSS SECTION

WELDED STEEL WIRE FABRIC



CROSS SECTION

EXPANDED METAL MESH

Pavement Thickness	"D"
8"	2"-4"
9"	2"-4 1/2"
10"	2"-5"

GENERAL NOTES-

Details of Construction and Materials not shown hereon shall conform to the pertinent requirements of the Standard Specifications and the applicable Special Provisions.

WELDED STEEL WIRE FABRIC

Manufacturer's No. 612-04
Approx. Weight per 100 Sq. Ft. = 69.0 lbs.
Longitudinal Steel - Gage No. 0 = 0.3065" D. at 6" C.C
Transverse Steel - Gage No. 4 = 0.2253" D. at 12" C.C

Welded Steel Wire Fabric shall conform to the requirements of the Standard Specifications for Welded Steel Wire Fabric for Concrete Reinforcement A.A.S.H.O. Designation M55.
Side lap of adjacent sheets approximate 6"

EXPANDED METAL MESH

Weight per 100 Sq. Ft. = 76.0 lbs. min.
Expanded Metal Mesh shall be manufactured from open hearth steel, having a phosphorus content of not more than 0.05 percent, and a yield point of not less than 55,000 p.s.i. The steel shall be sufficiently ductile to permit any strand to be bent through an angle of 180 degrees over one diam. without fracture.
The diamond shaped mesh shall be fabricated by a cold drawn process which will cut and draw the steel forming uniform dimensioned strands conforming to shape and weight as shown elsewhere hereon.
Side lap of adjacent sheets approximate 6"

SHIPPING REQUIREMENTS

Welded Steel Wire Fabric or Expanded Metal Mesh Concrete Pavement Reinforcement shall be shipped to the job site in flat sheets.

CONCRETE PAVEMENT REINFORCEMENT

STATE HIGHWAY COMMISSION OF WISCONSIN

RECOMMENDED FOR APPROVAL:

2/2/66
DATE

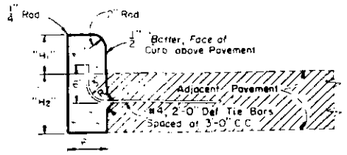
CHIEF DESIGN ENGINEER

APPROVED:

2/2/66
DATE

STATE HIGHWAY ENGINEER

PLATE NO. 2-1.1.12

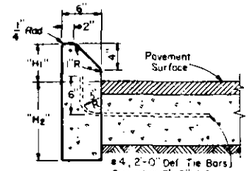


Tie Bar recess positioned in reverse when Concrete Curb is constructed first

"H1" = 9" max. and 3 1/2" min. and shall be 6" unless otherwise shown on the plans
"H2" = Same as adjacent pavement thickness for rigid pavement
"H2" = 12" For other than rigid pavement (Tie Bars Omitted)

TYPE "A" (Including Tie Bars) TYPE "D" (Excluding Tie Bars)

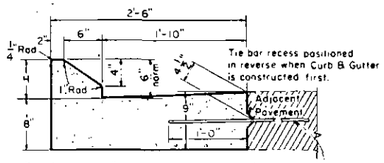
CONCRETE CURB



"H1" = 9" Max. and 4" min. and shall be 6" unless otherwise shown on plans.
"H2" = Same as adjacent pavement thickness for rigid pavement and 12" for other than rigid pavement (Tie Bars Omitted)

TYPE "G" (Including Tie Bars) TYPE "J" (Excluding Tie Bars)

CONCRETE CURB
(Mountable Type)



"H" = 9" max. and 4" min. & shall be 6" unless otherwise shown on the plans.

#4, 2'-0" Def Tie Bars or alternate Bolt Type instal. may be used, spaced at 3'-0" C.C.

TYPE "G" (Including Tie Bars) TYPE "J" (Excluding Tie Bars)

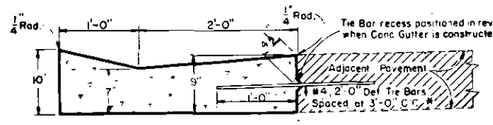
CONCRETE CURB AND GUTTER
(Mountable Type)

GENERAL NOTES

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

JOINTS -

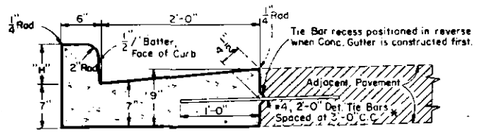
Joints shall not be sealed in concrete curb, concrete gutter, concrete curb and gutter, or concrete surface drains.



* Alternate Tie Bars or Bolt Type installations may be used as shown for Longitudinal Joints.

TYPE "A" (Including Tie Bars) TYPE "D" (Excluding Tie Bars)

CONCRETE GUTTER

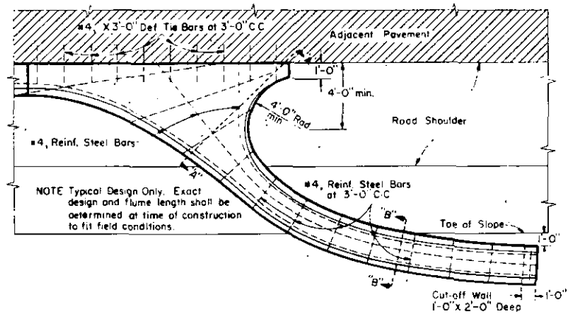


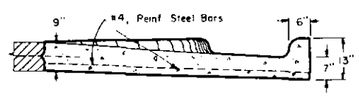
"H" = 9" Max., 3 1/2" Min. and shall be 6" unless otherwise shown on the plans.

* Alternate Tie Bars or Bolt Type installations may be used as shown for Longitudinal Joints

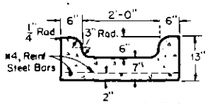
TYPE "A" (Including Tie Bars) TYPE "D" (Excluding Tie Bars)

CONCRETE CURB AND GUTTER
(Barrier Type)





SECTION "A"-"A"



SECTION "B"-"B"

CONCRETE INLET OR DISCHARGE FOR CURB AND GUTTER SURFACE DRAIN

CONCRETE CURB, CONCRETE GUTTER CONCRETE CURB AND GUTTER AND CONCRETE SURFACE DRAINS

STATE HIGHWAY COMMISSION OF WISCONSIN

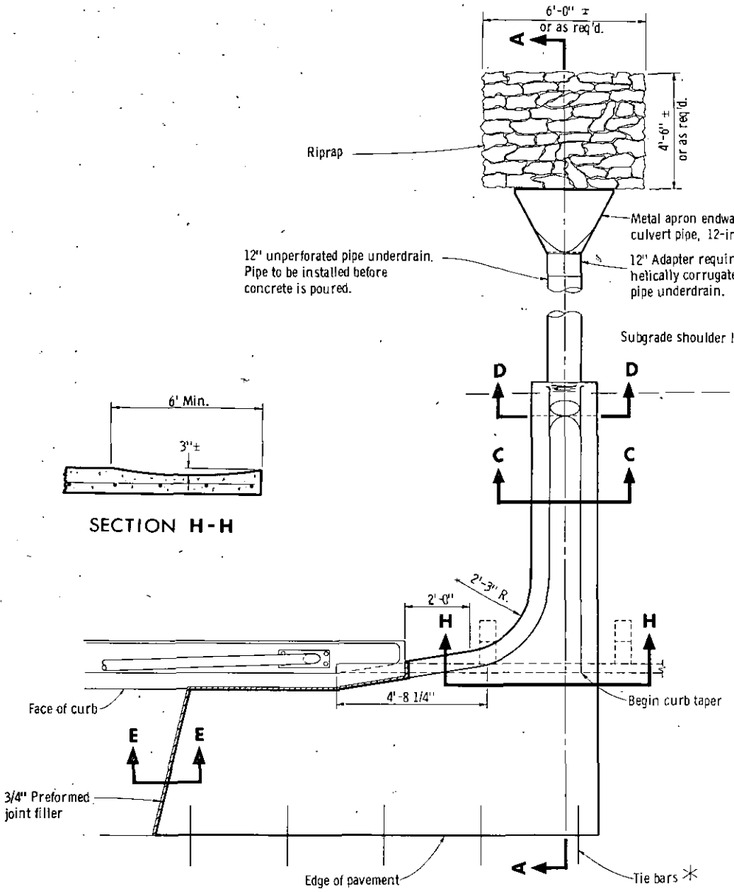
RECOMMENDED FOR APPROVAL

2-5-63 DATE — J. S. Pelt ENGINEER OF DESIGN

APPROVED:

2/6/63 DATE — E. C. Rustigan STATE HIGHWAY ENGINEER

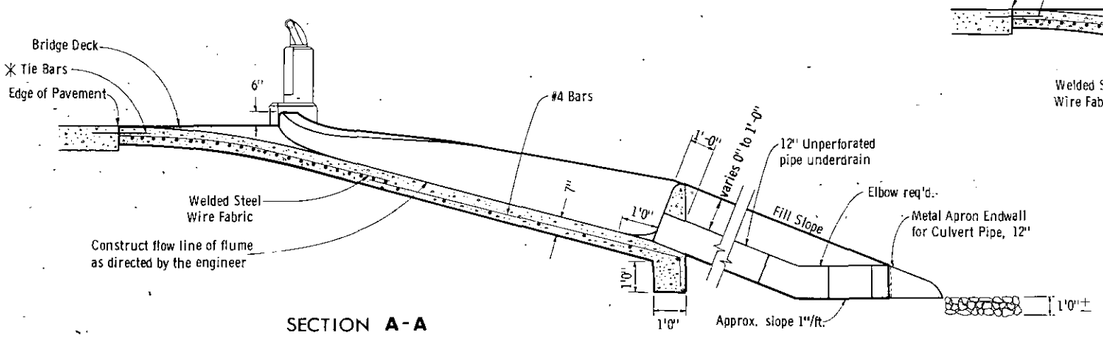
PLATE NO. 3-1.1.7



SECTION **H-H**

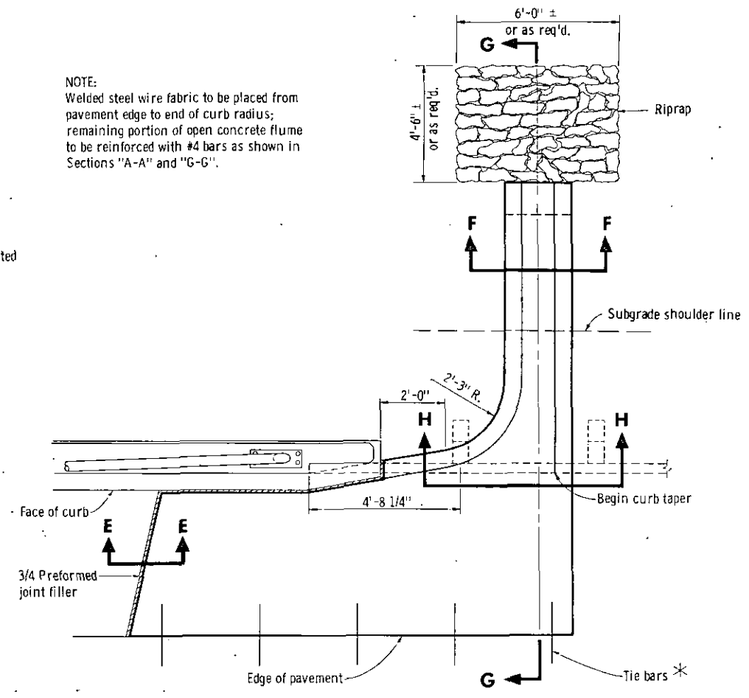
SURFACE DRAIN WITH PIPE

FOR FILL HEIGHTS GREATER THAN 4 FEET
(Measured at Subgrade Shoulder)



SECTION **A-A**

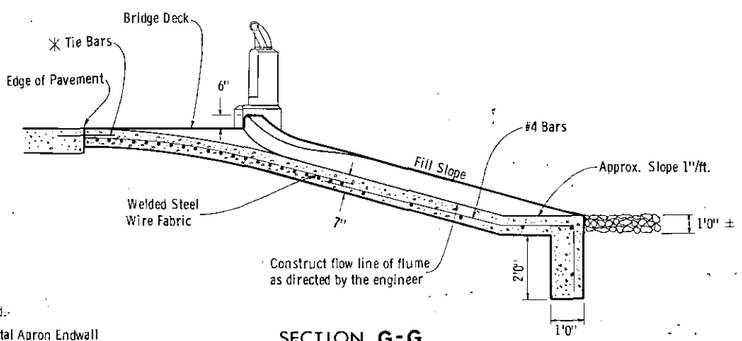
NOTE:
Welded steel wire fabric to be placed from pavement edge to end of curb radius; remaining portion of open concrete flume to be reinforced with #4 bars as shown in Sections "A-A" and "G-G".



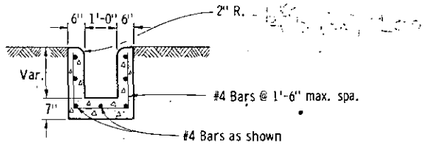
* TIE BARS
#4 x 2'-0" tie bars spaced at 3'-0" centers to be used only when adjacent to P.C. concrete.

SURFACE DRAIN WITHOUT PIPE

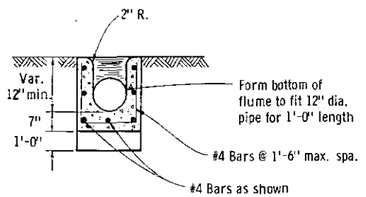
FOR FILL HEIGHTS OF 4 FEET OR LESS
(Measured at Subgrade Shoulder)



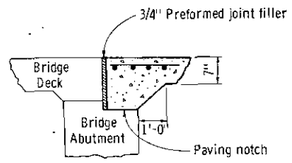
SECTION **G-G**



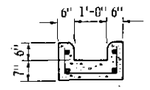
SECTION **C-C**



SECTION **D-D**



SECTION **E-E**



SECTION **F-F**

GENERAL NOTES

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

REINFORCEMENT

Welded Steel Wire Fabric shall conform to the Standard Specifications for Welded Steel Wire Fabric for concrete pavement.

BASIS OF PAYMENT

Concrete Surface Drains Flume Type shall be paid for as provided in the Standard Specifications for Concrete Surface Drains. Unperforated Pipe Underdrain, Metal Apron Endwall and Riprap shall be paid for under the pertinent Contract items.

CONCRETE SURFACE DRAINS FLUME TYPE

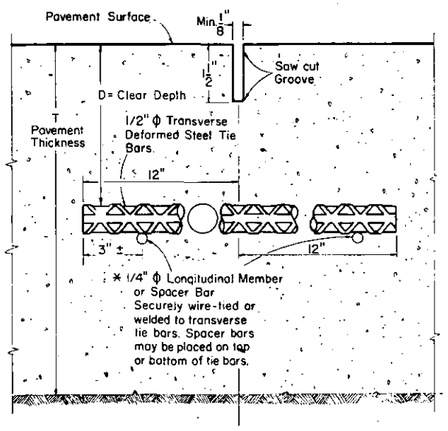
State of Wisconsin
Department of Transportation
Division of Highways

RECOMMENDED FOR APPROVAL
DATE 7/3/68 — CHIEF DESIGN ENGINEER

APPROVED:
DATE 7/3/68 — STATE HIGHWAY ENGINEER

Plate No. 3-2.2.3

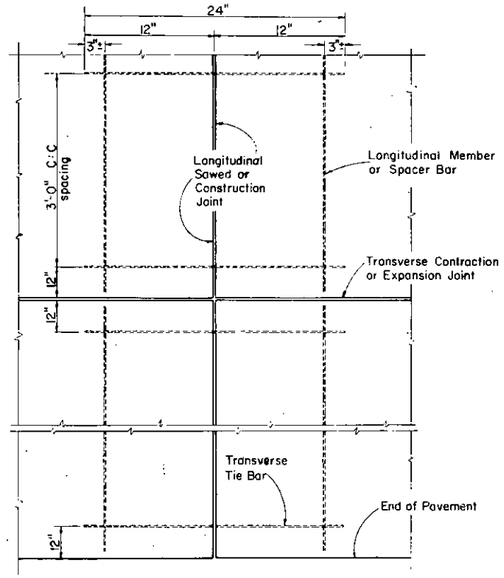
Plate No. 3-2.2.3



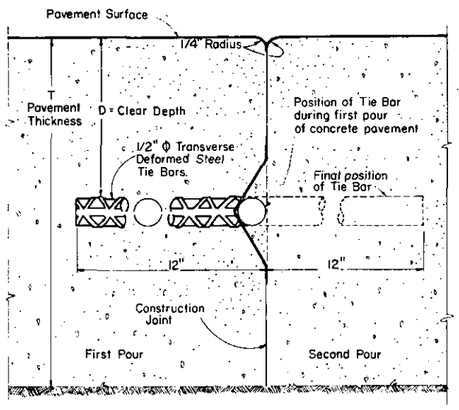
SAWED JOINT

ELEVATION, Showing Tie Bars and Positioning Details

Pavement Thickness	"D"
8"	2"-4 3/4"
9"	2"-5 1/2"
10"	2"-5 3/4"



PLAN VIEW, Showing Tie Bars and Location Details



CONSTRUCTION JOINT

ELEVATION, Showing Tie Bars and Positioning Details

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.

ALTERNATE DESIGNS -

Alternate designs of Bolt Type joint installations may be used upon written approval of the engineer.

SEALING JOINTS -

Longitudinal Joints shall not be sealed.

* TIE BARS

Tie bars shall be installed as shown (assembled ladder type pattern), or the longitudinal member spacer bar may be omitted if the transverse tie bars can be accurately placed and firmly held during the placing and setting of concrete by devices or methods approved by the engineer, or if mechanical means of placing the tie bars in the plastic concrete are approved by the engineer.

Devices may be omitted on the longitudinal construction joint type when in the opinion of the engineer the tie bars will be retained in their proper designated position.

LONGITUDINAL JOINTS CONCRETE PAVEMENT

STATE HIGHWAY COMMISSION OF WISCONSIN

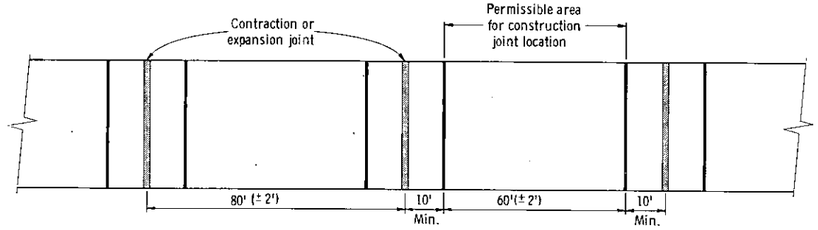
RECOMMENDED FOR APPROVAL:

2/3/66 DATE — E J Bykit CHIEF DESIGN ENGINEER

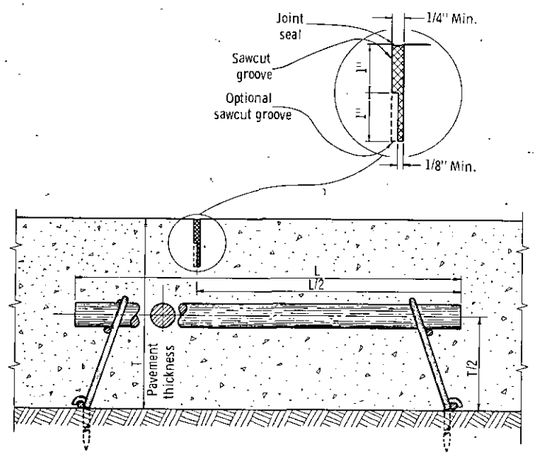
APPROVED:

2/3/66 DATE — STATE HIGHWAY ENGINEER

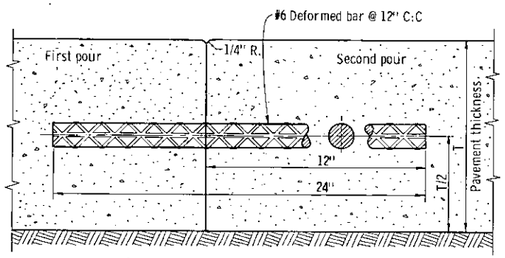
PLATE NO. 4-4.4.8



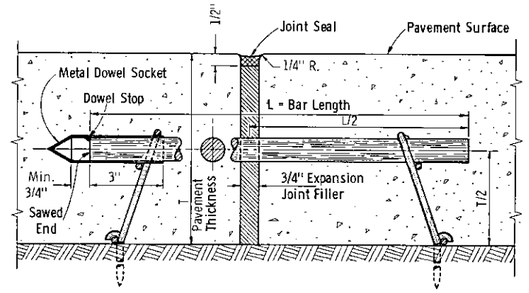
SCHEMATIC SHOWING JOINT LOCATIONS



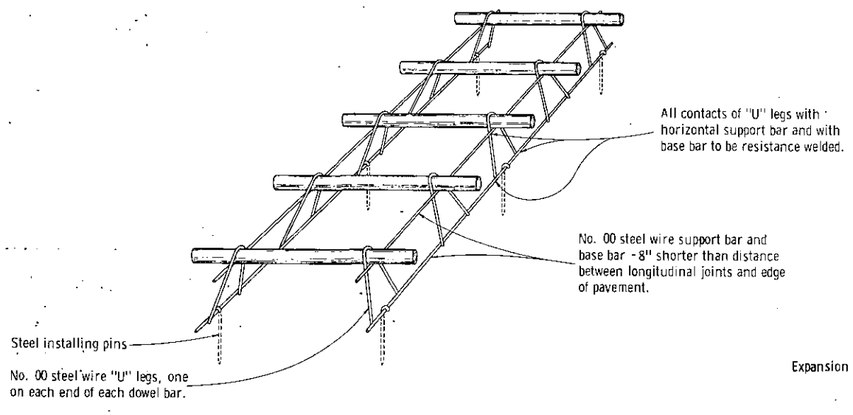
CONTRACTION JOINT



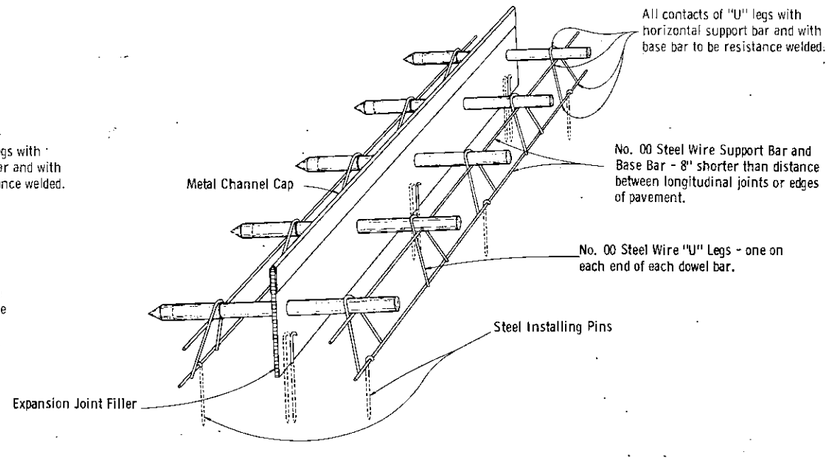
CONSTRUCTION JOINT



EXPANSION JOINT



INSTALLING DEVICE FOR LOAD TRANSFER DOWELS FOR CONTRACTION JOINTS



INSTALLING DEVICE FOR LOAD TRANSFER DOWELS AND EXPANSION JOINT ASSEMBLY

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.

Steel installing pins of sufficient number, length, and rigidity shall be placed so as to prevent movement of the joint assembly during construction operations.

Details shown hereon make provision for a minimum of structural adequacy and stability to satisfy Standard Specifications requirements.

ALTERNATE DESIGNS

Alternate designs for load transfer dowels for contraction and expansion joints and appurtenances other than shown hereon may be used upon written approval of the Engineer.

CONTRACTION JOINTS

Contraction joints shall be installed at 80' (±2') spacing from adjacent contraction or expansion joints, except that lesser spacings ranging to a minimum of 40' shall be used:

1. At locations or spacing indicated on the plans.
2. As extensions of transverse joints or cracks in abutting pavement lanes.
3. At locations designated by the Engineer where there are manholes or other fixtures in the pavement.

CONSTRUCTION JOINTS

Deformed bars shall be spaced at 12" C:C and 6" from each edge of pavement.

Deformed bars may be inserted after the concrete has been poured.

Construction joints shall be installed as necessary, except that a construction joint shall be not less than 10 feet from the nearest contraction or expansion joint.

EXPANSION JOINTS

Expansion joints are required only at structure approaches and/or where shown on the plans. The locations may be shifted to avoid stationary fixtures in the pavement.

Expansion joint filler shall be secured with sufficient number of steel pins to preclude any horizontal movement during the placing of concrete.

Metal dowel socket (CAP), 1 1/16" or 1 5/16" Dia., 24 gauge, closed on one end, shall be placed on the sawed end of each dowel bar as required for proper pavement expansion.

SEALING JOINTS

Joints shall be sealed as shown.

DOWEL BARS

Dowel bars shall be spaced at 12" C:C and 6" from each edge of pavement.

One end of each dowel bar shall be sawed and free of all burrs or protruding edges.

Dowel bars shall be painted with a rust inhibitive paint and coated for at least 2/3 their length with liquid asphalt MC 70 or MC 250, or other approved lubricant, to prevent bonding with concrete. The asphalt coating shall be applied to the sawed and capped end of the dowel bar and shall be sufficiently dry so that it will not be removed by the handling and placing of the dowel assembly.

Dowel bar dimensions:

For 7" P.C. Pavement - 1" Ø x 18"
For 8" P.C. Pavement - 1" Ø x 18"
For 9" P.C. Pavement - 1 1/4" Ø x 18"
For 10" P.C. Pavement - 1 1/4" Ø x 18"

TRANSVERSE JOINTS FOR CONCRETE PAVEMENT

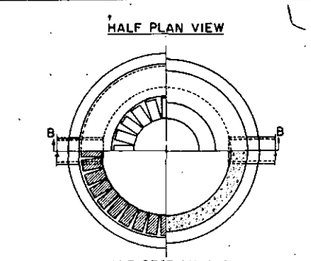
State of Wisconsin
Department of Transportation
Division of Highways

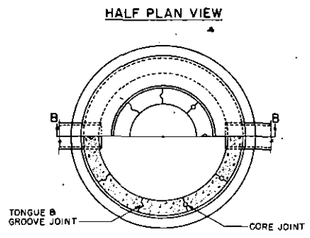
RECOMMENDED FOR APPROVAL:
5/24/68 DATE — E.J. Bykit CHIEF DESIGN ENGINEER

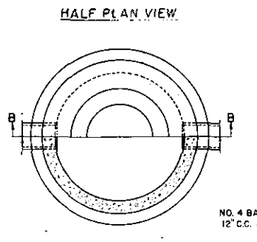
APPROVED:
5/27/68 DATE — W.J. Burmeister STATE HIGHWAY ENGINEER

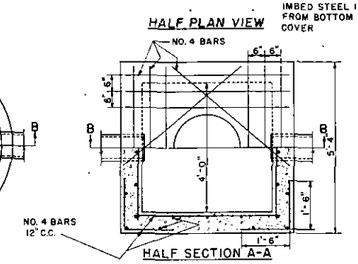
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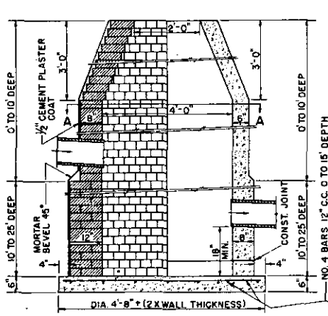
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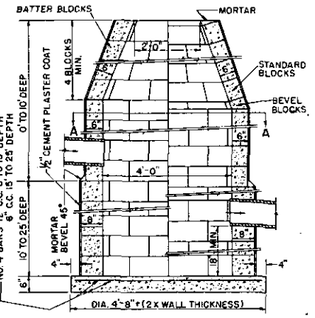


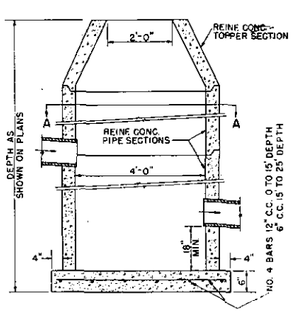


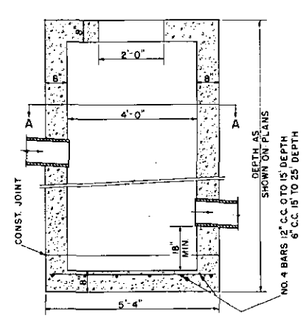




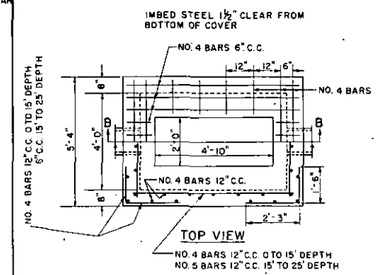


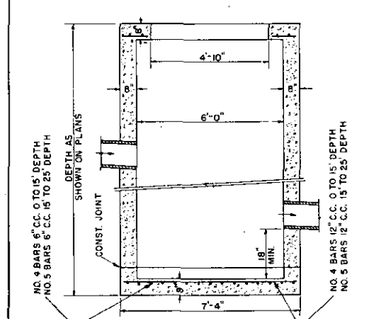




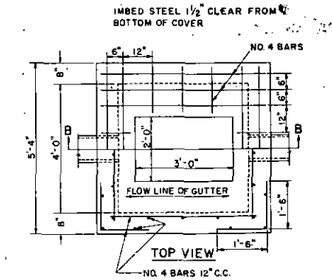


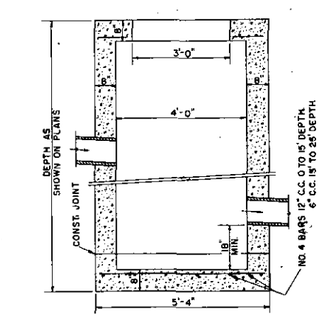
TYPE 1



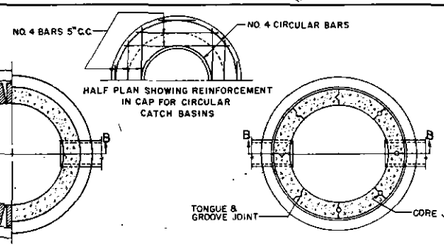


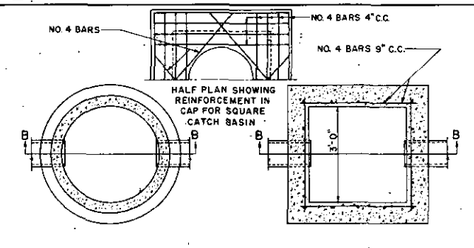
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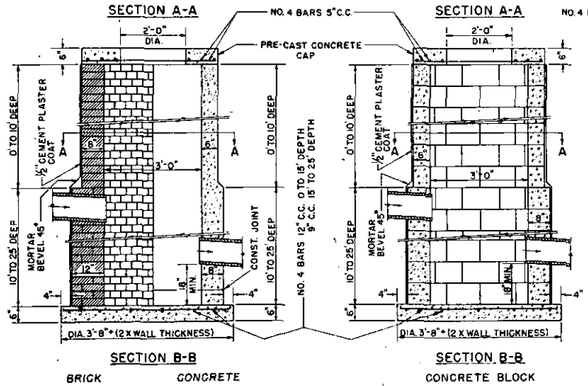


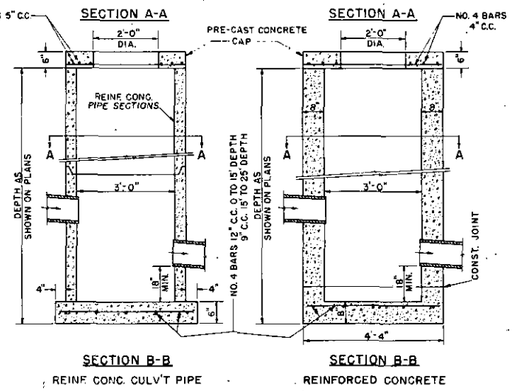


TYPE 5

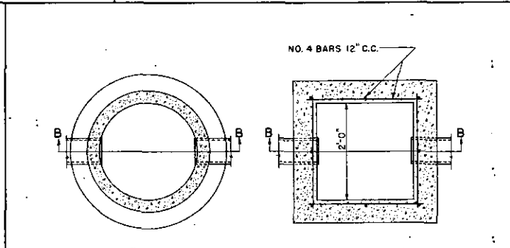


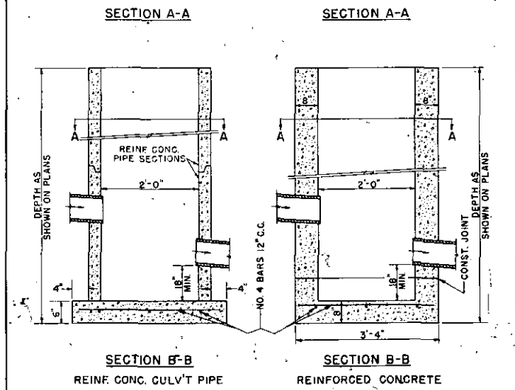






TYPE 2





TYPE 3

CONSTRUCTION NOTES

DETAILS RELATIVE TO THESE ITEMS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

VARIATIONS IN DIMENSIONS AND DESIGN WILL BE PERMISSABLE PROVIDING EQUIVALENT CAPACITY AND STRENGTH ARE ATTAINED.

ARRANGEMENT AND NUMBER OF INLETS AND DISCHARGE PIPES SHALL CONFORM TO THE NEEDS OF THE PERTINENT LOCATION.

STRUCTURES ARE CALLED FOR ON THE PLANS AS "CATCH BASIN", "CATCH BASINS 2-C" ETC, THE NUMERAL DESIGNATES THE OPTIONAL CONCRETE PORTION OF THE STRUCTURE AND THE LETTER DESIGNATES THE FIXTURE TO BE USED THEREON.

REINFORCED CONCRETE TOPPER SECTION, AS SHOWN FOR TYPE I REINF. CONC. CULV'T PIPE CATCH BASIN, MAY BE USED AS AN ALTERNATE FOR CONC ON TYPE I BRICK, CONCRETE OR CONCRETE BLOCK CATCH BASINS.

WHEN ANY STRUCTURE IS CONSTRUCTED OF CONCRETE, CONCRETE BLOCK OR REINF. CONC. CULV'T PIPE, THE TOP OF THE MASONRY SHALL BE LEFT SUFFICIENTLY LOW TO PERMIT PROPER ADJUSTMENT OF COVER TO GRADE BY THE USE OF MORTAR AND BRICK.

BAR STEEL REINFORCEMENT SHALL BE IMBEDDED 1½" CLEAR.

CONSTRUCTION JOINTS IN CONCRETE CATCH BASINS TO BE PLACED WHERE SHOWN OR AT TOP OF FLOOR.

CATCH BASINS

STATE HIGHWAY COMMISSION OF WISCONSIN

RECOMMENDED FOR APPROVAL:

2-5-63
DATE

J. J. Silf
ENGINEER OF DESIGN

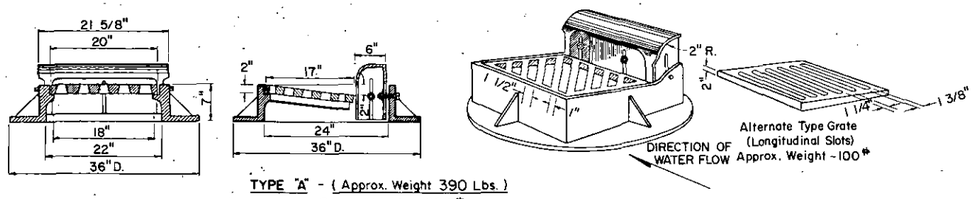
APPROVED:

2/6/63
DATE

P. C. Rihm
STATE HIGHWAY ENGINEER

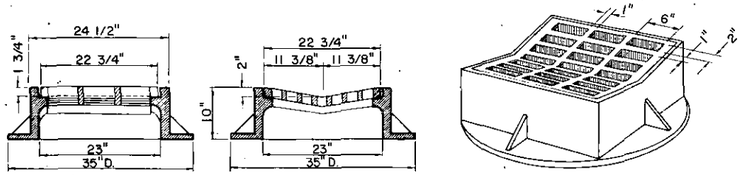
PLATE 5 OF 5

29



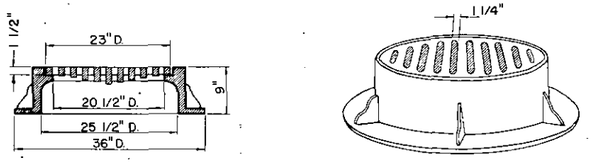
TYPE "A" - (Approx. Weight 390 Lbs.)

Frame Weight - 250#
Grate " - 90#
Box " - 50#



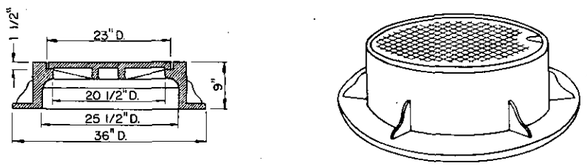
TYPE "B" - (Approx. Weight 414 Lbs.)

Frame Weight - 275#
Grate " - 139#

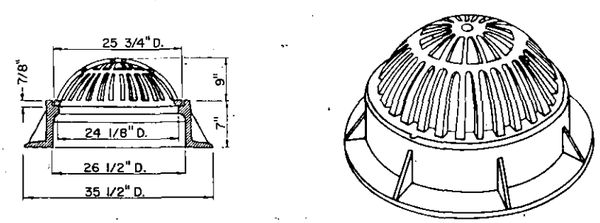


TYPE "C" - (Approx. Weight 370 Lbs.)

Frame Weight Type "C" & Type "D" - 255#
Slotted Grate Weight - 115#
Solid Cover Weight - 150#
(Note: Frame for Type "C" same as for Type "D")



TYPE "D" - (Approx. Weight 405 Lbs.)
(Note: Frame for Type "D" same as for Type "C")

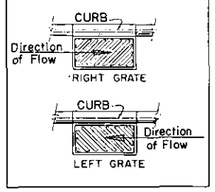


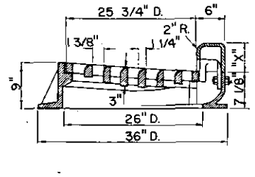
TYPE "E" - (Approx. Weight 325 Lbs.)

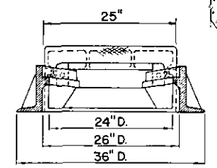
SPECIAL NOTE

Diagonal Slots shall be oriented to the direction of flow as shown hereon. Hence RIGHT and LEFT Grates shall be furnished depending on direction of flow. (See Sketch Below)

Longitudinal slot type grates may be used ONLY where bicycles are prohibited.

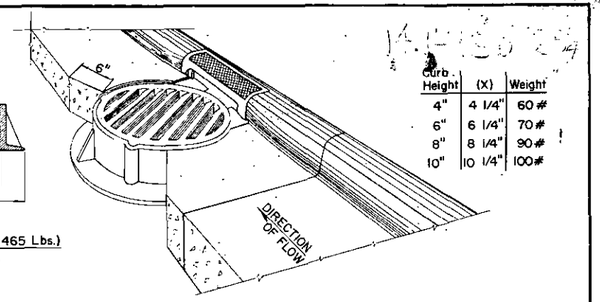




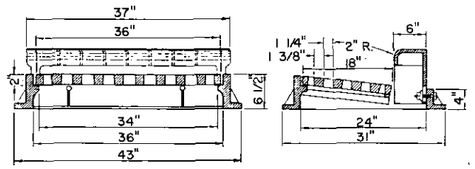


TYPE "G" - (Approx. Weight 425-465 Lbs.)

Frame Weight - 235#
Grate " - 130#
Box - See Table

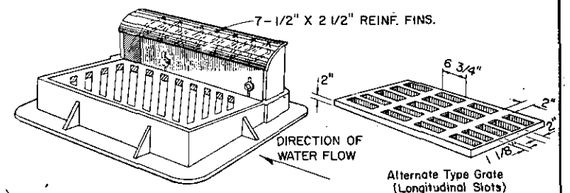


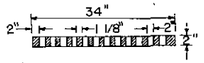
Curb Height	(X)	Weight
4"	4 1/4"	60#
6"	6 1/4"	70#
8"	8 1/4"	90#
10"	10 1/4"	100#



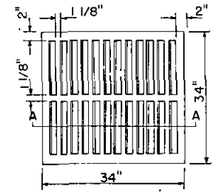
TYPE "H" - (Approx. Weight 530 Lbs.)

Frame Weight - 220#
Grate " - 200#
Box " - 110#



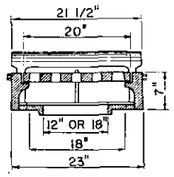


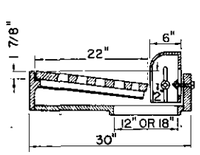
SECTION A - A

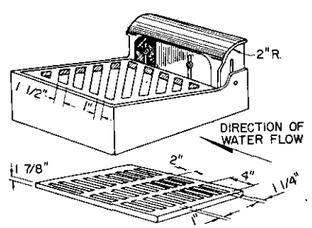


INLET COVER TYPE MS

GRATE WEIGHT 270#

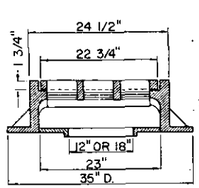


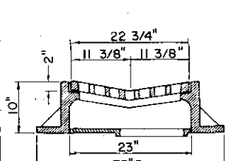


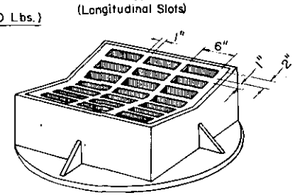


Alternate Type Grate
(Longitudinal Slots)

TYPE "R" - (Approx. Weight 450 Lbs.)







TYPE "S" - (Approx. Weight 450 Lbs.)

GENERAL NOTES

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

BEARING SURFACES

All Catch Basin and inlet frames and grates which are placed in vehicular traffic areas shall be "Non-Rocking" type, so as to prevent any or all cover noise under traffic.

NOMENCLATURE

All Catch Basin and inlet units are designated on the Plans as "Catch Basins 1-A", 2-B, etc., or "inlets 1-A", 3-H, etc. This designation is interpreted to mean that the number, or first digit designates the masonry portion of the structure, and the following letter or second digit designates the type of cover or iron casting (shown hereon) to be used therewith to comprise the complete unit "Catch Basin" or "Inlet" in place.

ADJUSTMENTS

Curb box height to be adjustable 4"-9" unless otherwise noted. Curb box height to be adjusted after curb form is in place.

ALTERNATE DESIGNS

Detailed drawings for proposed alternate designs for "Catch Basin" or "Inlet" covers may be submitted to the Engineer for approval providing that such alternate designs make provision for equivalent capacity and strength.

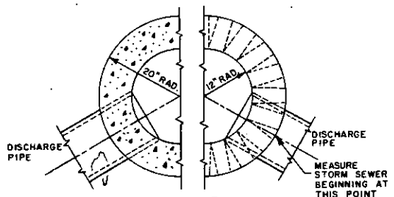
CATCH BASIN & INLET COVERS

State Highway Commission of Wisconsin

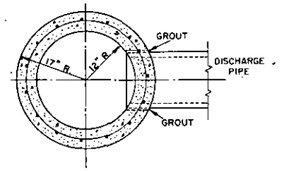
RECOMMENDED FOR APPROVAL:
DATE 11-2-67 — CHIEF DESIGN ENGINEER
APPROVED:
DATE 11/17/67 — STATE HIGHWAY ENGINEER

Plate No. 5-3.4.8

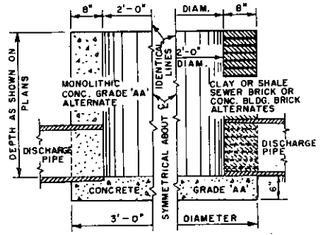
Plate No. 5-3.4.8



PLAN VIEW

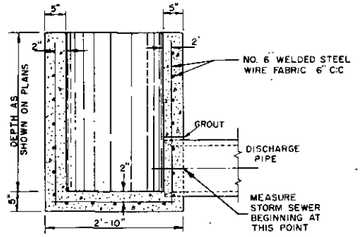


PLAN VIEW



ELEVATION VIEW

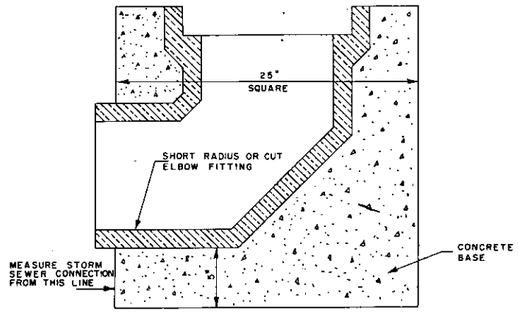
SHOWING DETAILS FOR MONOLITHIC CONCRETE, CLAY OR SHALE SEWER BRICK, OR CONCRETE BUILDING BRICK ALTERNATES FOR



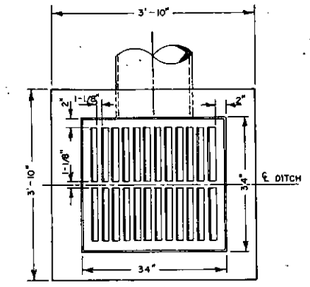
ELEVATION VIEW

SHOWING DETAILS FOR PRE-CAST CONCRETE ALTERNATE FOR

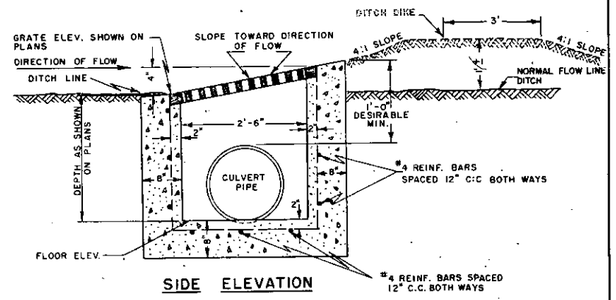
INLET TYPE 1



INLET TYPE 2

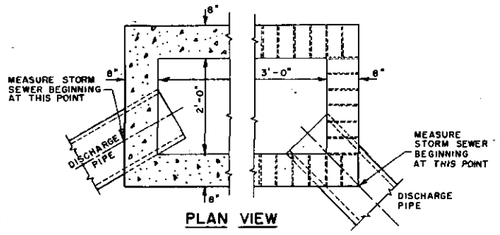


PLAN VIEW

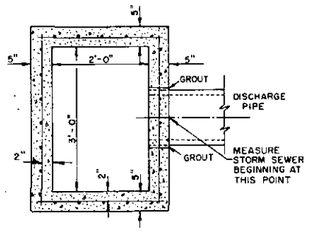


SIDE ELEVATION

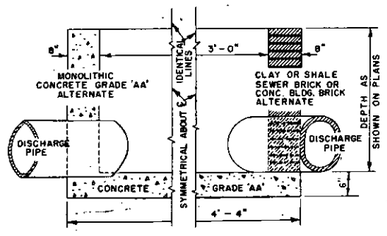
INLET TYPE 8



PLAN VIEW

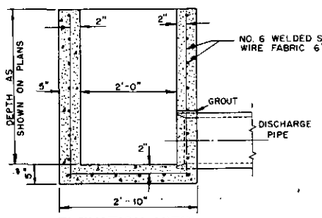


PLAN VIEW



ELEVATION VIEW

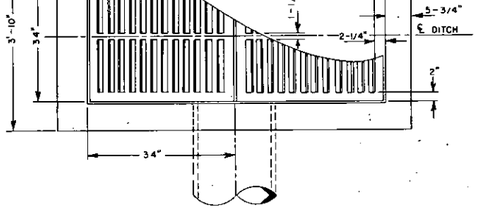
SHOWING DETAILS FOR MONOLITHIC CONCRETE, CLAY OR SHALE SEWER BRICK, OR CONCRETE BUILDING BRICK ALTERNATES FOR



ELEVATION VIEW

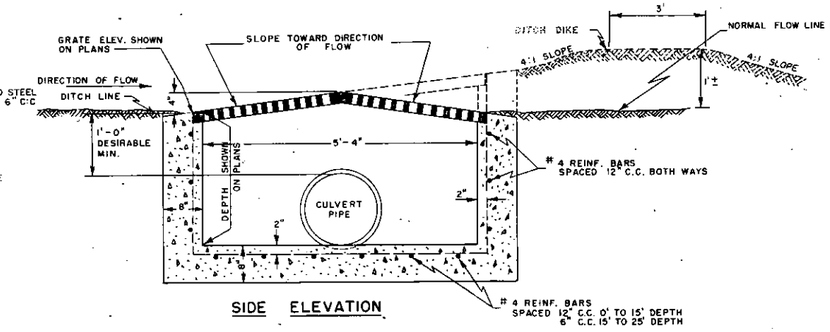
SHOWING DETAILS FOR PRE-CAST CONCRETE ALTERNATE FOR

INLET TYPE 3



PLAN VIEW

INLET TYPE 9



SIDE ELEVATION

GENERAL NOTES:

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

ARRANGEMENT, SIZE AND NUMBER OF INLET AND DISCHARGE PIPES SHALL CONFORM TO THE NEEDS OF THE PERTINENT LOCATION.

INLETS ARE CALLED FOR ON THE PLANS AS "INLETS 1-A, "INLETS 2-R", ETC., THE NUMBER DESIGNATES THE MASONRY PORTION OF THE STRUCTURE AND THE LETTER DESIGNATES THE COVER TO BE USED THEREON.

INLETS

STATE HIGHWAY COMMISSION OF WISCONSIN

RECOMMENDED FOR APPROVAL

11-21-63
DATE

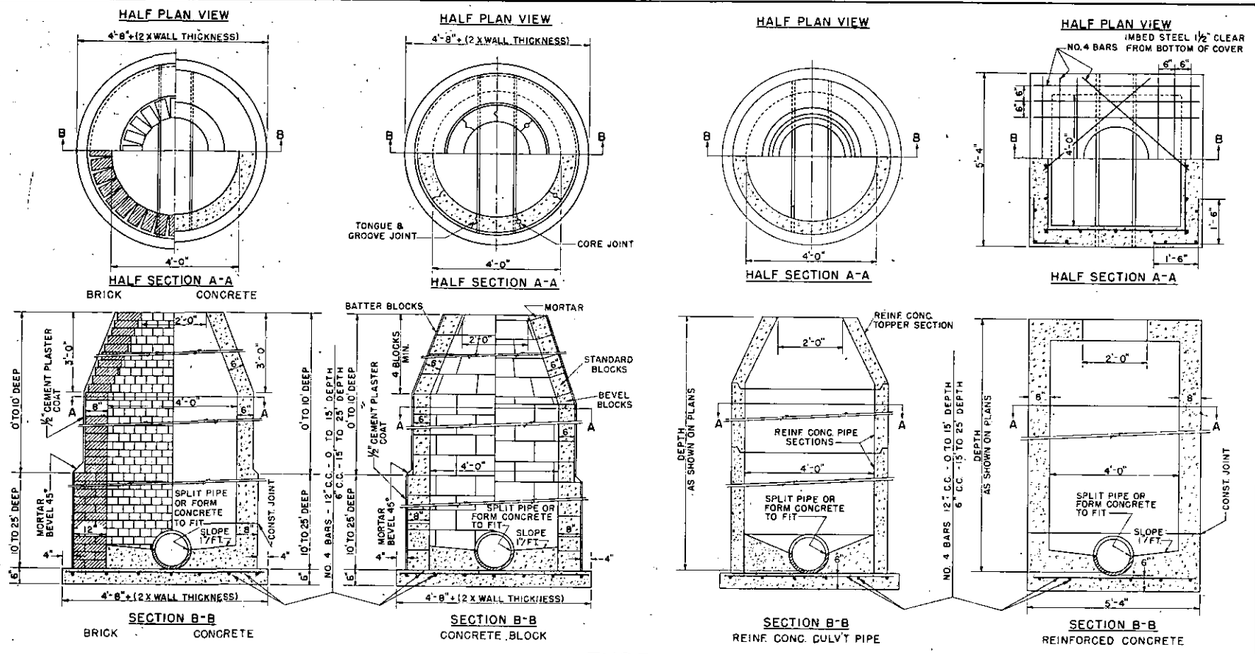
J. L. Pitt
ENGINEER OF DESIGN

APPROVED:

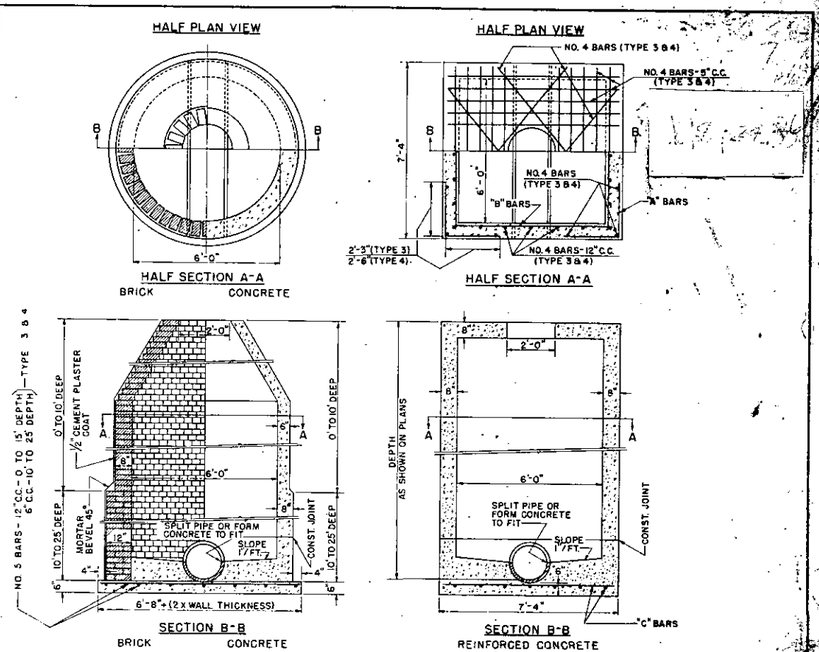
12/3/63
DATE

K. C. Fuller
STATE HIGHWAY ENGINEER

PLATE NO. 5-3.5.2



TYPE 1

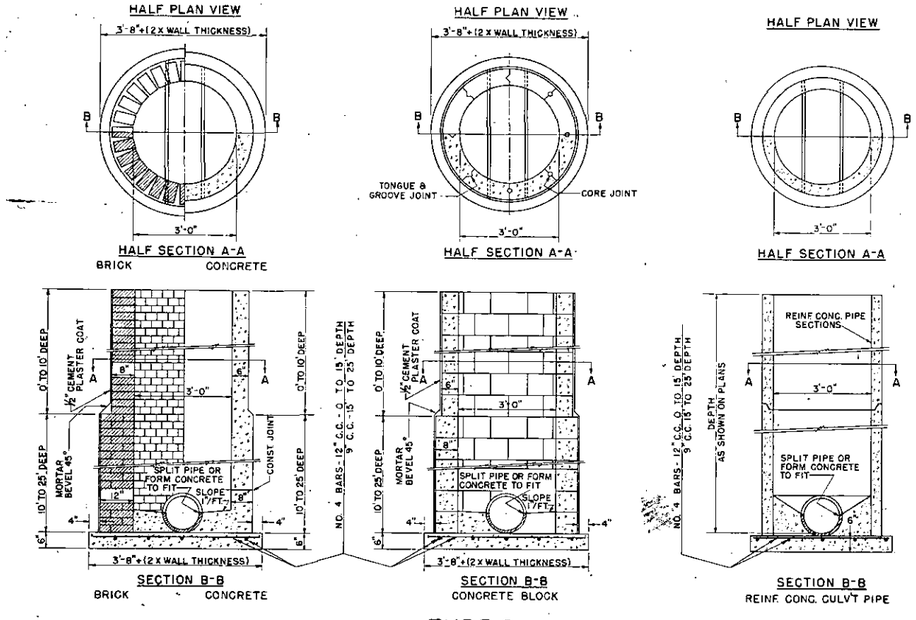


TYPE 3

"A" BARS - NO. 4 BARS - 12" C.C. - 0 TO 10' DEPTH
6" C.C. -10' TO 25' DEPTH

"B" BARS - NO. 4 BARS - 12" C.C. - 0 TO 25' DEPTH

"C" BARS - NO. 5 BARS - 12" C.C. - 0 TO 10' DEPTH
6" C.C. -10' TO 25' DEPTH



TYPE 2

CONSTRUCTION NOTES

DETAILS RELATIVE TO THESE ITEMS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

STEPS SHALL BE INSTALLED IN ALL MANHOLES.

VARIATIONS IN DIMENSIONS AND DESIGN WILL BE PERMISSABLE PROVIDING EQUIVALENT CAPACITY AND STRENGTH ARE ATTAINED.

STRUCTURES ARE CALLED FOR ON THE PLANS AS "MANHOLES 1'-1", "MANHOLES 2'-K" ETC, THE NUMERAL DESIGNATES THE OPTIONAL MASONRY PORTION OF THE STRUCTURE AND THE LETTER DESIGNATES THE COVER TO BE USED THEREON.

THE REINFORCED CONCRETE TOPPER SECTION AS SHOWN FOR TYPE I, REINF. CONC. CULV'T PIPE MANHOLE, MAY BE USED AS AN ALTERNATE CONE ON TYPE I BRICK, CONCRETE OR CONCRETE BLOCK MANHOLES.

WHEN ANY STRUCTURE IS CONSTRUCTED OF CONCRETE, CONCRETE BLOCK OR REINF. CONC. CULV'T PIPE, THE TOP OF THE MASONRY SHALL BE LEFT SUFFICIENTLY LOW TO PERMIT PROPER ADJUSTMENT OF COVER TO GRADE BY THE USE OF MORTAR AND BRICK.

DESIGN NOTES

INSIDE DIMENSIONS FOR MANHOLES:

USE 3' DIAMETER WHEN NECESSARY TO PLACE IN CONSTRICTED AREAS.

USE 4' DIAMETER WHEN SEWER IS UNDER 18" IN DIAMETER.

USE 6' DIAMETER OR 6' SQUARE WHEN SEWER IS 18" TO 54" DIAMETER.

TYPE 4

FOR SEWER GREATER THAN 54" DIAMETER SPECIAL DESIGN IS REQUIRED SHOWING INSIDE DIMENSION OF MANHOLE TO BE DIAMETER OF SEWER PLUS 18". SPECIAL DESIGN SHALL CONFORM TO THE GENERAL DETAILS FOR TYPE 3.

"A" BARS - NO. 5 BARS - 12" C.C. - 0 TO 10' DEPTH.
6" C.C. - 10' TO 25' DEPTH.

"B" BARS - NO. 4 BARS - 12" C.C. - 0 TO 10' DEPTH.
10" C.C. - 10' TO 25' DEPTH.

"C" BARS - NO. 5 BARS - 10" C.C. - 0 TO 10' DEPTH.
5" C.C. 10' TO 25' DEPTH.

MANHOLES

STATE HIGHWAY COMMISSION OF WISCONSIN

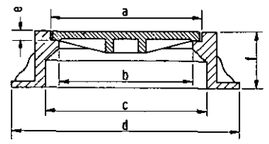
RECOMMENDED FOR APPROVAL:

DATE 2-5-63 — ENGINEER OF DESIGN

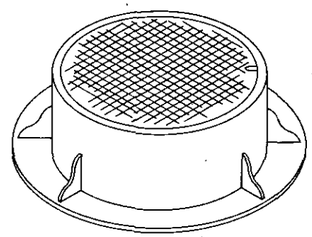
APPROVED:

DATE 2/6/63 — STATE HIGHWAY ENGINEER

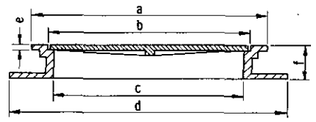
PLATE 5-3



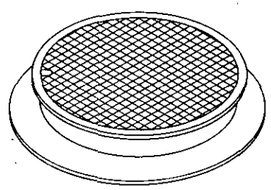
	a	b	c	d	e	f	Weight
TYPE "J"	23"	20½"	25½"	36"	1½"	9"	400 Lbs.
TYPE "K"	32½"	30"	36"	46"	1½"	10"	750 Lbs.



TYPE "J" & "K"



	a	b	c	d	e	f	Weight
TYPE "L"	28"	24"	22½"	33"	5/8"	4"	210 Lbs.
TYPE "M"	42"	37½"	36"	47"	3/4"	4"	475 Lbs.



TYPE "L" & "M"

GENERAL NOTES

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

BEARING SURFACES

All manhole covers which are placed in vehicular traffic areas shall be "Non-Rocking" type so as to prevent any or all cover noise under traffic.

NOMENCLATURE

All manholes are designated on the plans as "Manholes 1-J", "Manholes 2-K" etc. This designation is interpreted to mean that the numeral designates the masonry portion of the structure and the letter designates the type of cover or iron casting to be used therewith to comprise the complete unit "Manhole".

ALTERNATE DESIGNS

Detailed drawings for proposed alternate designs for "Manhole Covers" may be submitted to the Engineer for approval providing that such alternate designs make provision for equivalent capacity and strength.

DESIGN NOTES

Types "J" & "K" to be used where facility will be subject to traffic.

Types "L" & "M" to be used where facility will not be subject to traffic.

MANHOLE COVERS

State Highway Commission of Wisconsin

RECOMMENDED FOR APPROVAL:

1/5/67
DATE

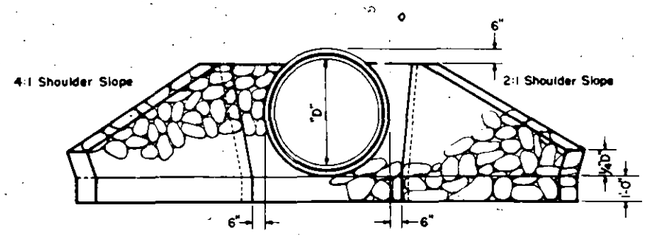
E. J. Bykat
CHIEF DESIGN ENGINEER

APPROVED:

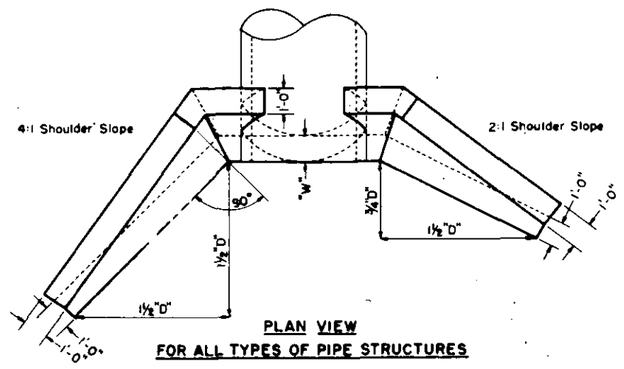
1/6/67
DATE

H. J. Durmeister
STATE HIGHWAY ENGINEER

Plate No. 5-3.8.3



END ELEVATION
SHOWING CONCRETE CIRCULAR PIPE INCL. CATTLE PASS



PLAN VIEW
FOR ALL TYPES OF PIPE STRUCTURES

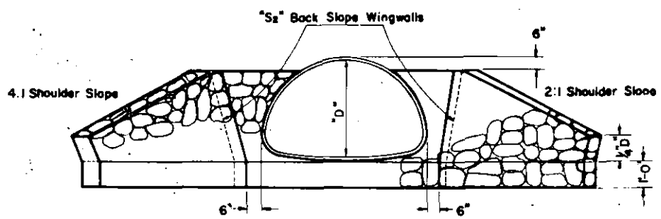
CIRCULAR PIPE		Cu. Yds Mortar Rubble Masonry or Riprap per Endwall		"A" (Feet)	"B" (Feet)	Front Slope "S1"	Back Slope "S2"	Width of Footing at "W" (Feet)
Size of Pipe	Type of Pipe	4:1 Slope	2:1 Slope	4:1 Slope	2:1 Slope			
24"	R.C.C.P.	1.2	1.0	3.4	0.8	½:1	½:1	1.0
	C.M.C.P.	1.0	0.8	2.8	0.6	"	"	"
30"	R.C.C.P.	1.5	1.3	5.1	1.5	"	"	"
	C.M.C.P.	1.3	1.0	4.6	1.3	"	"	"
36"	R.C.C.P.	2.0	1.6	6.9	2.3	"	"	"
	C.M.C.P.	1.7	1.3	6.3	2.1	"	"	"
42"	R.C.C.P.	2.6	2.1	8.9	3.1	"	"	"
	C.M.C.P.	2.2	1.7	8.1	2.9	"	"	"
48"	R.C.C.P.	3.2	2.6	10.7	3.9	"	"	"
	C.M.C.P.	2.8	2.2	9.8	3.6	"	"	"
60"	R.C.C.P.	8.4	6.9	14.5	5.5	"	¼:1	2.38
	C.M.C.P.	6.9	5.9	13.3	5.2	"	"	2.20
72"	R.C.C.P.	12.4	9.9	18.3	7.1	"	"	2.68
	C.M.C.P.	10.0	8.0	16.8	6.2	"	"	2.40

PIPE ARCH

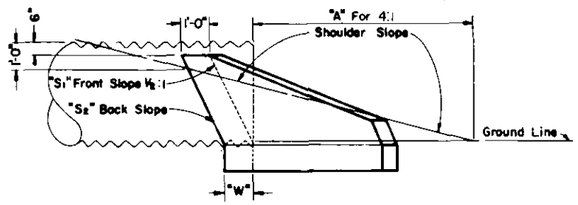
29"x18"	C.M.C.P.	1.0	0.8	1.1	0.3	½:1	½:1	1.0
36"x22"	"	1.3	1.0	2.2	0.5	"	"	"
43"x27"	"	1.7	1.2	3.7	1.0	"	"	"
50"x31"	"	1.9	1.4	4.9	1.5	"	"	"
58"x36"	"	2.1	1.7	6.3	2.1	"	"	"
65"x40"	"	2.5	2.0	7.5	2.6	"	"	"
72"x44"	"	2.9	2.4	8.6	3.1	"	"	"

CATTLE PASS

72"	ALTERNATE	12.4	9.9	18.3	7.1	"	"	2.68



END ELEVATION
SHOWING CORRUGATED METAL PIPE ARCH



SIDE ELEVATION

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.

CONCRETE MASONRY SUBSTITUTE

All items shown hereon may be constructed of Class "A" Concrete in which case all sizes and dimensions shown shall obtain. Concrete masonry substitute work shall conform to the pertinent requirements of the Standard Specifications.

MORTAR RUBBLE MASONRY OR RIPRAP FOR CULVERT & CATTLE PASS ENDWALLS

STATE HIGHWAY COMMISSION OF WISCONSIN

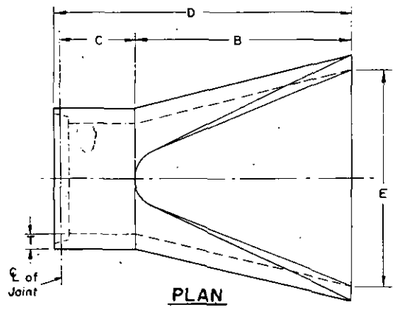
RECOMMENDED FOR APPROVAL:

DATE 2-5-63 — J. J. Pelt, ENGINEER OF DESIGN

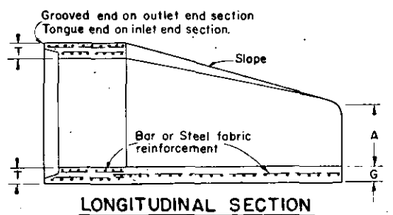
APPROVED:

DATE 2/6/63 — E. E. Ruzicka, STATE HIGHWAY ENGINEER

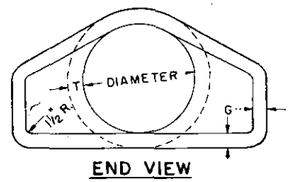
PLATE NO. 6-2.4.3



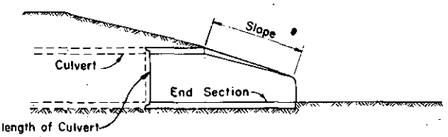
PLAN



LONGITUDINAL SECTION



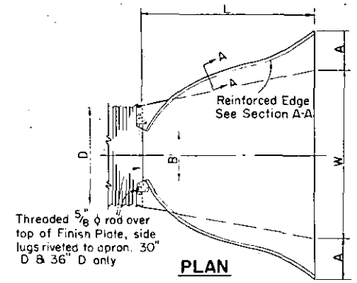
END VIEW



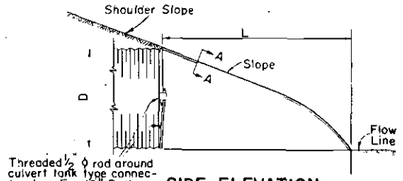
SLOPE DETAIL

DIA.	APPROX. WEIGHT/ SECTION	APPROX. SLOPE	T	A	B	C	D	E	G
12"	530	3 to 1	2"	4"	24"	48 7/8"	72 7/8"	24"	2"
15"	740	3 to 1	2 1/4"	6"	27"	46"	73"	30"	2 1/4"
18"	990	3 to 1	2 1/2"	9"	27"	46"	73"	36"	2 1/2"
21"	1280	3 to 1	2 3/4"	9"	36"	37 1/2"	73 1/2"	42"	2 3/4"
24"	1520	3 to 1	3"	9 1/2"	43 1/2"	30"	73 1/2"	48"	3"
27"	1930	3 to 1	3 1/4"	10 1/2"	49 1/2"	24"	73 1/2"	54"	3 1/4"
30"	2190	3 to 1	3 1/2"	12"	54"	19 3/4"	73 3/4"	60"	3 1/2"
36"	4100	3 to 1	4"	15"	63"	34 3/4"	97 3/4"	72"	4"
42"	5380	3 to 1	4 1/2"	21"	63"	35"	98"	78"	4 1/2"
48"	6550	3 to 1	5"	24"	72"	26"	98"	84"	5"
54"	8040	2 2/3 to 1	5 1/2"	27"	65"	33 3/4" min 35" max	98 1/4" min 100" max	90"	5"
60"	8730	2 to 1	6"	30" min 33" max	60"	39"	99"	96"	5"
66"	10,630	2 to 1	6 1/2"	24" min 30" max	72" min 78" max	21" min 27" max	99"	102"	5 1/2"
72"	12,520	2 to 1	7"	24" min 36" max	78"	21"	99"	108"	6"
78"	14,430	2 to 1	7 1/2"	24" min 36" max	78"	21"	99"	114"	6 1/2"
84"	18,160	1 1/2 to 1	8"	36"	90 1/2"	21"	111 1/2"	120"	6 1/2"

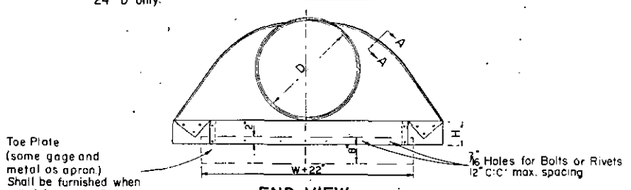
REINFORCED CONCRETE APRON ENDWALLS



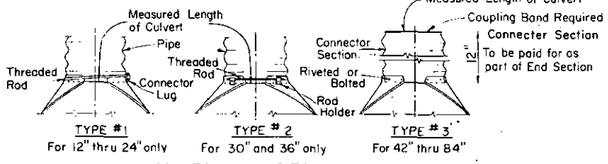
PLAN



SIDE ELEVATION



END VIEW

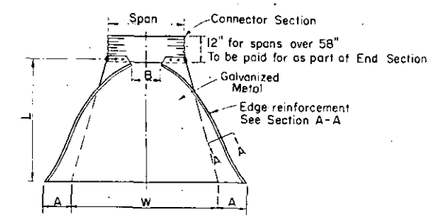


CONNECTION DETAILS

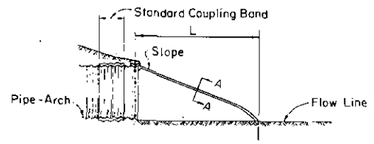
D Pipe Diam.	Gage Min.	Dimensions A ± 1"	B Max.	H ± 1"	L ± 1 1/2"	W ± 2"	Approx. Slope
12"	16	6"	6"	6"	21"	24"	2 1/2 to 1
15"	16	7"	8"	6"	26"	30"	"
18"	16	8"	10"	6"	31"	36"	"
21"	16	9"	12"	6"	36"	42"	"
24"	16	10"	13"	6"	41"	48"	"
30"	14	12"	16"	8"	51"	60"	"
36"	14	14"	19"	9"	60"	72"	"
42"	12	16"	22"	11"	69"	84"	"
48"	12	18"	27"	12"	78"	90"	2 1/4 to 1
54"	12	18"	30"	12"	84"	102"	2 to 1
60"	12	18"	33"	12"	87"	114"	1 3/4 to 1
66"	12	18"	36"	12"	87"	120"	1 1/2 to 1
72"	12	18"	39"	12"	87"	126"	1 1/3 to 1
78"	12	18"	42"	12"	87"	132"	1 1/4 to 1
84"	12	18"	45"	12"	87"	138"	1 1/6 to 1

Note: All splices to be lap riveted or bolted.

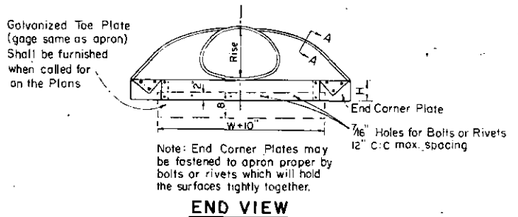
METAL APRON ENDWALLS



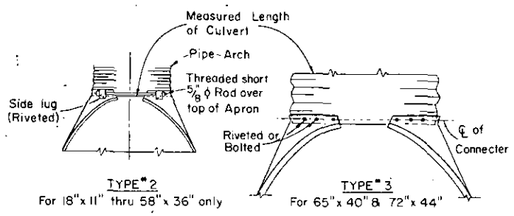
PLAN
showing alternate type with connector section



SIDE ELEVATION



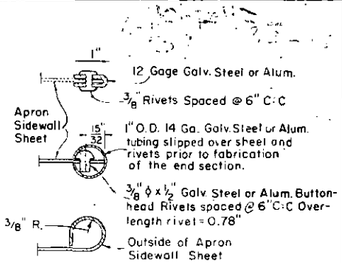
END VIEW



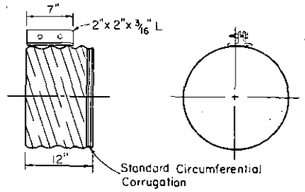
CONNECTION DETAILS

Pipe-Arch Dimensions Span	Rise	Gage Min.	Dimensions A ± 1"	B Max.	H ± 1"	L ± 1 1/2"	W ± 2"	Approx. Slope
18"	11"	16	7"	9"	6"	19"	30"	2 1/2 to 1
22"	13"	16	7"	10"	6"	23"	36"	"
25"	16"	16	8"	12"	6"	28"	42"	"
29"	18"	16	9"	14"	6"	32"	48"	"
36"	22"	14	10"	16"	6"	39"	60"	"
43"	27"	14	12"	18"	8"	46"	75"	"
50"	31"	12	13"	21"	9"	53"	85"	"
58"	36"	12	18"	26"	12"	63"	90"	"
65"	40"	12	18"	30"	12"	70"	102"	2 3/4 to 1
72"	44"	12	18"	33"	12"	77"	114"	"

Note: All splices to be lap riveted or bolted



SECTION A-A



END SECTION CONNECTION
For 12" thru 21" Diameter Helically Corrugated Metal Pipe

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.

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.

Reinforced concrete apron endwalls shall be used with concrete pipe culvert installations, steel apron endwalls shall be used with corrugated steel pipe culvert installations, and aluminum apron endwalls shall be used with corrugated aluminum pipe culvert installations, except that steel apron endwalls may be used on corrugated aluminum pipe culverts when a non-metalic insulation material is placed between the steel and aluminum. The non-metalic insulation material shall be so placed between the two metals so as to *prohibit galvanic action from occurring.*

When two or more pipes or pipe arches with apron endwalls are to be laid adjacent to each other, they shall be separated by the following amount:

Pipes: Total width of apron endwall less the diameter of pipe plus 6 inches.

Pipe Arches: Total width of apron endwall less the span dimension of the pipe arch plus 6 inches.

APRON ENDWALLS FOR CULVERT PIPE & PIPE ARCH

State of Wisconsin
Department of Transportation
Division of Highways

RECOMMENDED FOR APPROVAL:
11/7/68 DATE — E.J. Bikkt CHIEF DESIGN ENGINEER

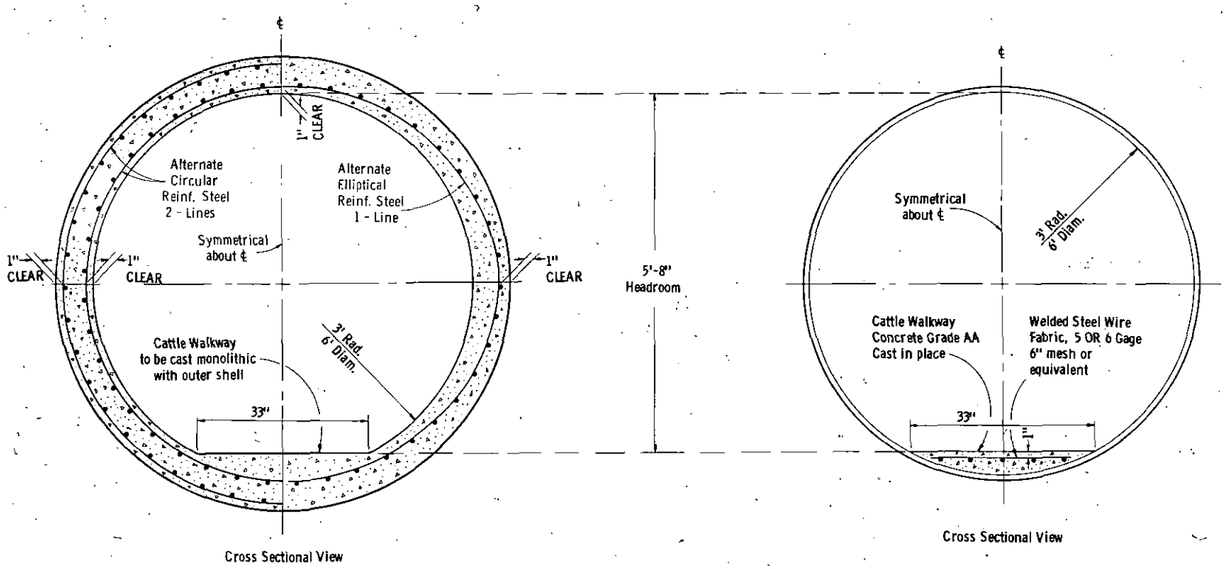
APPROVED:
11/9/68 DATE — H.J. Gunnicker STATE HIGHWAY ENGINEER

APRON ENDWALLS FOR CULVERT PIPE

APRON ENDWALLS FOR PIPE ARCH

Plate No. 6-2.6.6

Plate No. 6-2.6.6



REINFORCED CONCRETE PIPE CATTLE PASS
ALTERNATE

CORRUGATED METAL PIPE CATTLE PASS
ALTERNATE

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.

Alternate and special designs may be submitted to the Engineer for approval providing that such alternate or special designs make provision for equivalent strength.

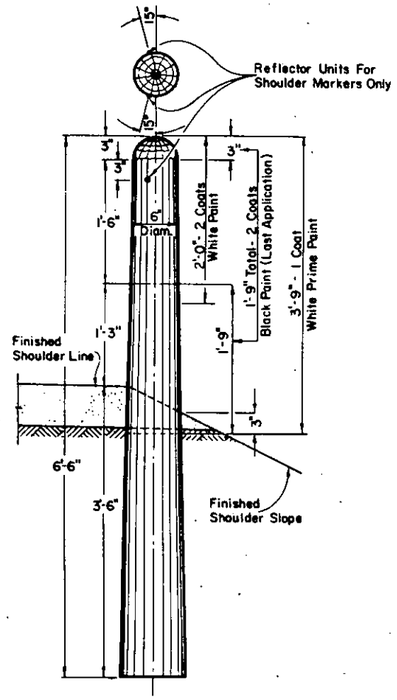
PIPE CATTLE PASS

State Highway Commission of Wisconsin

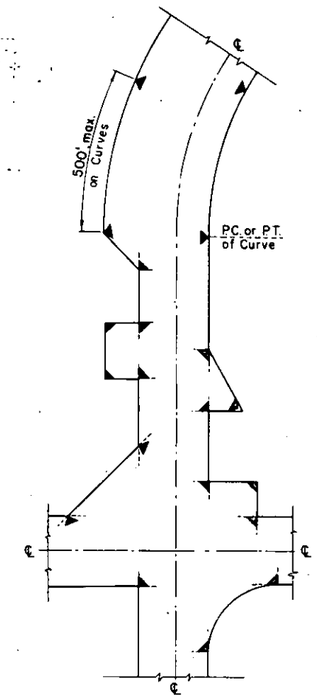
RECOMMENDED FOR APPROVAL:
1/11/67 DATE — E. J. Bobst CHIEF DESIGN ENGINEER
APPROVED:
2/6/67 DATE — H. J. Bruemmer STATE HIGHWAY ENGINEER

Plate No. 6-7.1.5

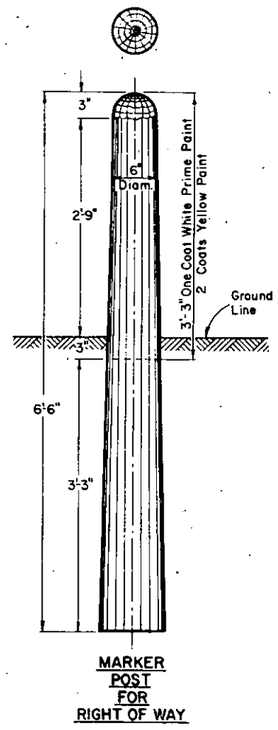
Plate No. 6-7.1.5



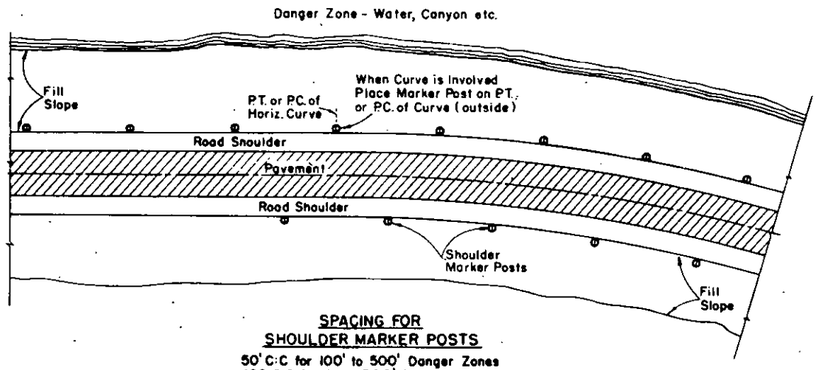
MARKER POST FOR ROAD SHOULDERS



LOCATION DIAGRAM SHOWING TYPICAL LOCATIONS OF MARKER POSTS 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

MARKER POSTS FOR ROAD SHOULDERS

MARKER POST FOR RIGHT OF WAY

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 be installed in road shoulder marker posts only. 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.

MARKER POSTS &
MARKER POSTS FOR RIGHT OF WAY

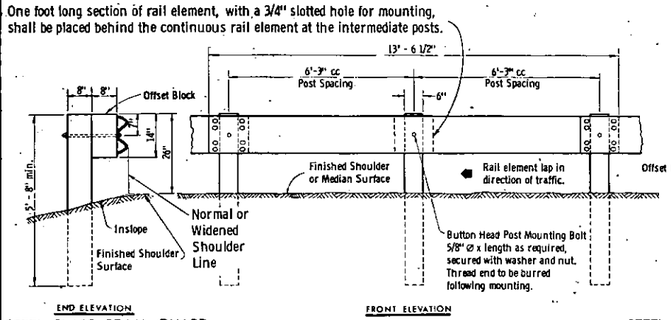
State Highway Commission of Wisconsin

RECOMMENDED FOR APPROVAL:
7/6/66 DATE — E.J. Bykit CHIEF DESIGN ENGINEER

APPROVED:
7/5/66 DATE — STATE HIGHWAY ENGINEER

Plate No. 7-1.3.5

One foot long section of rail element, with a 3/4" slotted hole for mounting, shall be placed behind the continuous rail element at the intermediate posts.

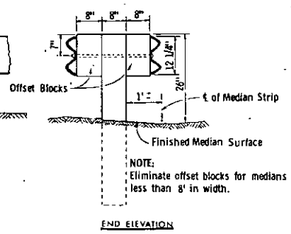


END ELEVATION

FRONT ELEVATION

STEEL PLATE BEAM GUARD

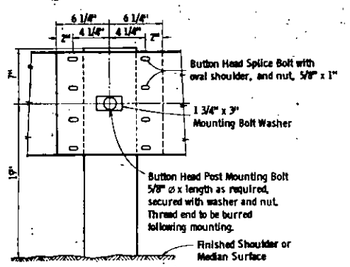
Sawed treated timber posts 6" x 8" x 6'-0" and sawed treated timber offset blocks 6" x 8" x 14" shall be furnished and placed in accordance with Standard Specifications.



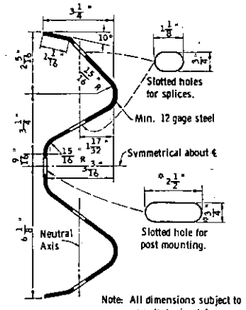
END ELEVATION

STEEL PLATE BEAM MEDIAN GUARD

STEEL PLATE BEAM GUARD OR STEEL PLATE BEAM MEDIAN GUARD



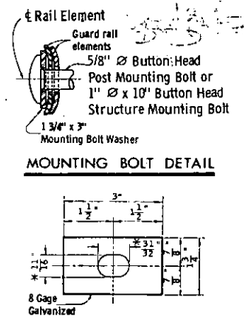
RAIL ELEMENT SPLICING AND POST MOUNTING DETAILS



Note: All dimensions subject to manufacturing tolerance.

SECTION THRU RAIL ELEMENT

* Holes for Structure Mounting shall be 1 1/16" dia.



MOUNTING BOLT DETAIL

MOUNTING BOLT WASHER

* Hole in Structure Mounting Bolt Washer to be 1 1/16" dia.

GENERAL NOTES 1242-193

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

The exact location of the beginning and end of each Guardrail installation shall be as shown on the plans or as directed by the engineer.

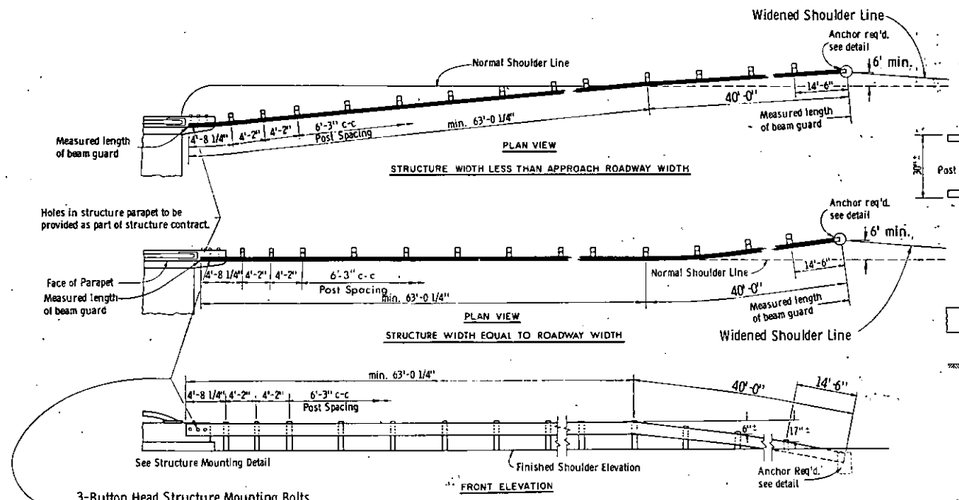
TERMINATION AT STRUCTURES NOT PROVIDED WITH A NOTCH
For those structures where a notch is not provided, the Guardrail will be terminated as directed by the engineer.

POST-FOOTING DETAIL AT PIERS
The Post-Footing Details shall be used when guard-rail posts are over structure footings and less than 3'-6" of earth is provided over the top of the footing.

STEEL PLATE BEAM MEDIAN GUARD
Eliminate offset blocks for medians less than 8 foot in width.

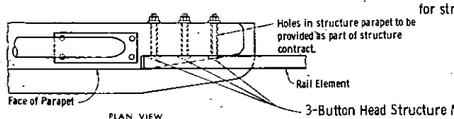
ALTERNATE ANCHORS
Square anchors will be permitted. Square anchors shall be a minimum of 24 inches x 24 inches.

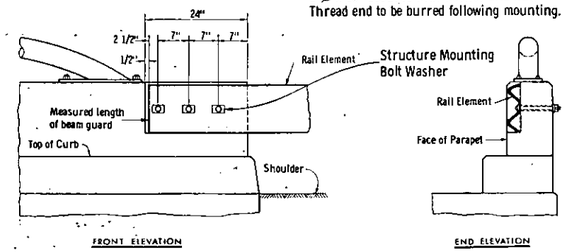
SHOULDER WIDENING
The shoulder widening to accommodate the anchored end of the Guardrail shall be accomplished at a rate of widening not to exceed 50 to 1.



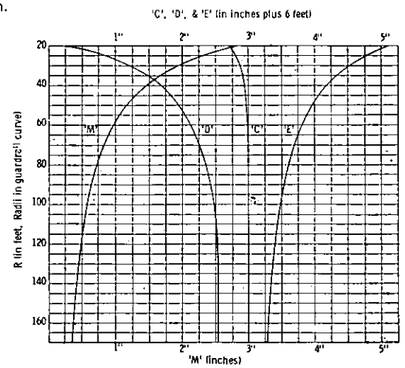
TYPICAL INSTALLATION AT STRUCTURES

For structures constructed with notch to receive beam guard. See General Notes for structures without notch.

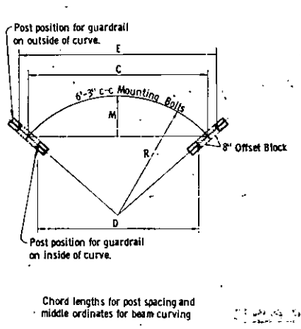


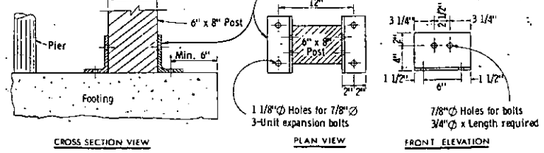


STRUCTURE MOUNTING DETAIL

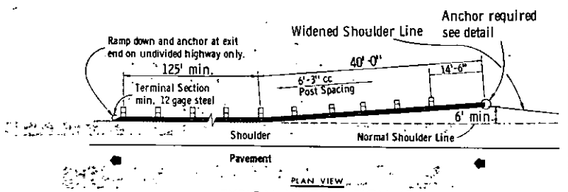


CURVE DATA FOR POST SPACING AND BEAM CURVING

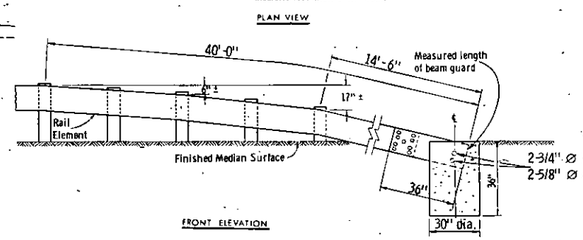




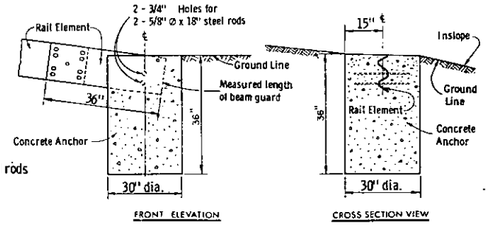
POST-FOOTING DETAIL AT PIERS



TYPICAL INSTALLATION AT LOCATIONS OTHER THAN STRUCTURES



ANCHOR DETAIL FOR DOUBLE RAIL ELEMENT INSTALLATION



ANCHOR DETAIL FOR SINGLE RAIL ELEMENT INSTALLATION

STEEL PLATE BEAM GUARD & STEEL PLATE BEAM MEDIAN GUARD

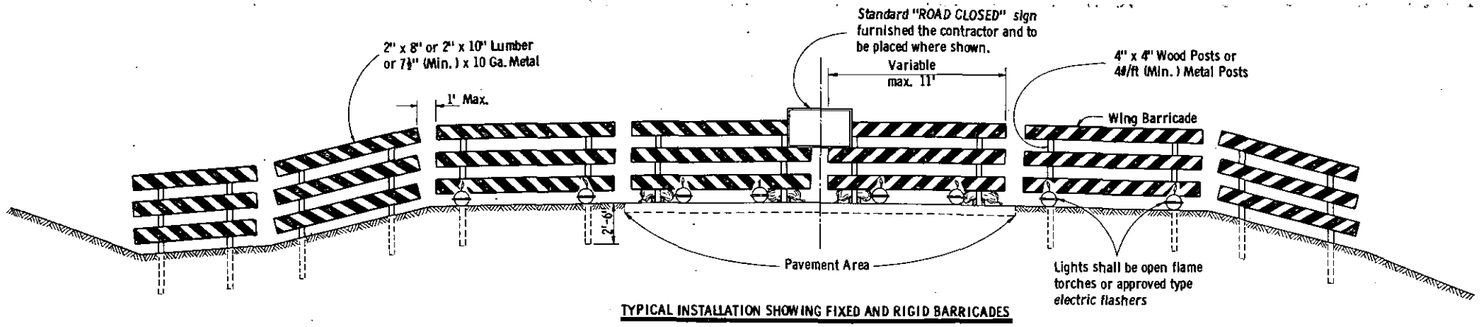
State of Wisconsin
Department of Transportation
Division of Highways

RECOMMENDED FOR APPROVAL:
1/25/68 DATE — E. J. Bobit, CHIEF DESIGN ENGINEER

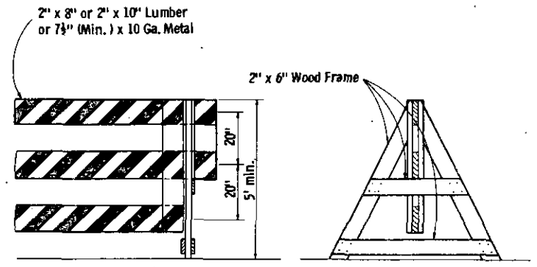
APPROVED:
1/29/68 DATE — K. F. Svencicki, STATE HIGHWAY ENGINEER

Plate No. 7-2.4.13

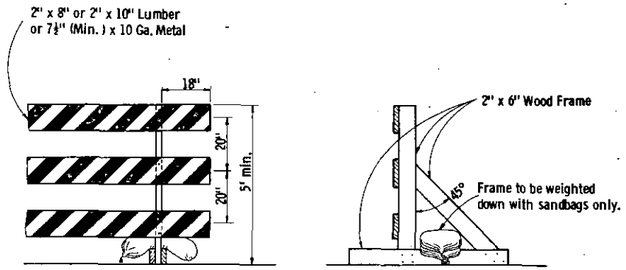
Plate No. 7-2.4.13



TYPICAL INSTALLATION SHOWING FIXED AND RIGID BARRICADES

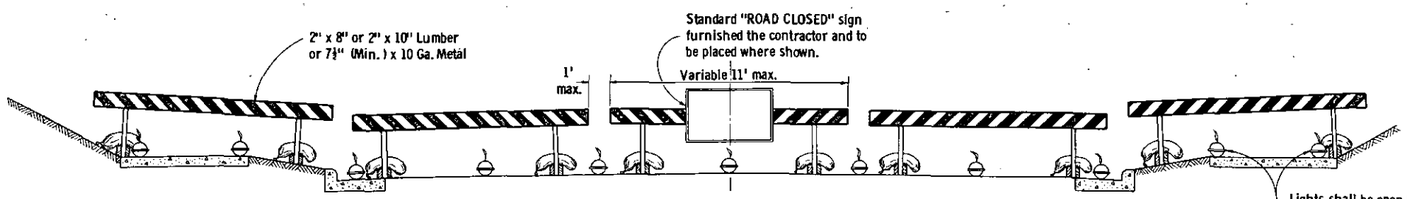


ALTERNATE TYPE INSTALLATION (DEMOUNTABLE)

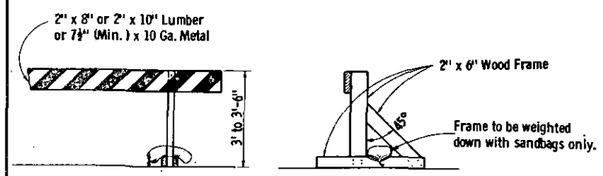


ALTERNATE TYPE INSTALLATION (RIGID)

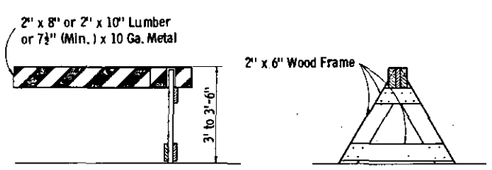
CLASS I BARRICADES



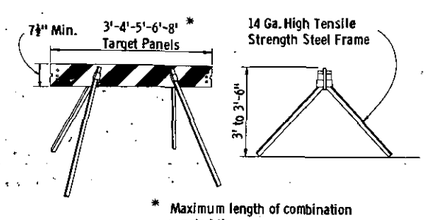
TYPICAL INSTALLATION SHOWING RIGID BARRICADES



ALTERNATE TYPE INSTALLATION (RIGID)



ALTERNATE TYPE INSTALLATION (DEMOUNTABLE)



* Maximum length of combination panels 16'

ALTERNATE TYPE INSTALLATION (DEMOUNTABLE)

CLASS II BARRICADES

GENERAL NOTES

The contractor shall construct, place and maintain barricades as shown on the drawing and as required by the Standard Specifications or applicable Special Provisions.

CLASS 1 BARRICADE:

Class 1 Barricades shall be of variable length as indicated, and long barricades shall be assembled from these units. The Class 1 Barricade is the type normally required for major operations, where the barricade will remain in place for extended periods. Class 1 Barricades shall be used at points where the road is closed to traffic. Gates or movable sections of a barricade shall be provided when necessary, for access of equipment or other authorized vehicles.
Wing Barricades are Class 1 Barricades erected on the shoulder on one or both sides of the pavement to give Traffic the perceptive effect of a narrowing or restricted roadway. The ends closest to traffic of all three members of a wing barricade shall be in a vertical line. If used in a series, they should start at the outer edge of the shoulder and be brought progressively closer to the pavement. Wing Barricades may be used as a mounting for the advance warning or guide signs or for flashers. When used on two-way roadways, the back of the wing barricade shall be painted reflectorized white.

CLASS 11 BARRICADE:

Class 11 Barricades 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.

MATERIAL & 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.
Metal shall be 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 and metalworking practices.
All lumber or timber dimensions stated are nominal.

PAINTING:

All barricades shall be painted in alternate 4" or 6" black and white stripes at a 45° angle. The width of stripe shall be consistent for each complete barricade installation.
Black stripes shall be painted with weather resistant and durable black paint. White stripes shall be primed, followed by two coats of white reflectorized paint or reflective wide angle sheeting.

DIRECTION OF DIAGONAL STRIPES:

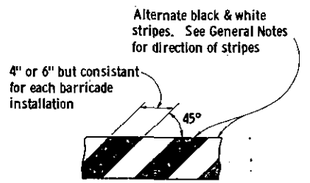
Where a barricade extends entirely across the roadway with no vehicle access provision, the stripes shall slope downward toward the highway centerline.
Where vehicle access is permitted, the stripes shall slope downward in the direction toward which vehicles must turn in detouring.
Where both right and left turns are provided for, the stripes shall slope downward in both directions from the center.
The stripes on wing barricades shall point downward toward the roadway.

LIGHTING:

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

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.



TYPICAL DIAGONAL STRIPES

Applies to all Classes & Types of Barricades

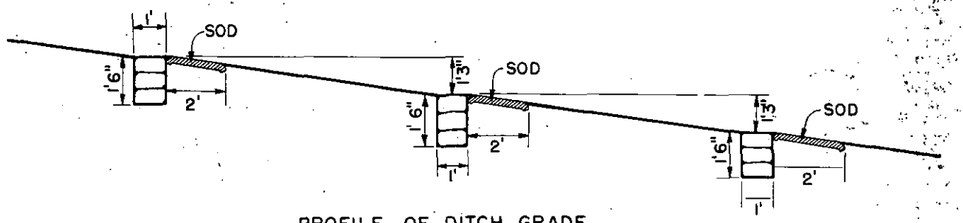
CONSTRUCTION BARRICADE

State Highway Commission of Wisconsin

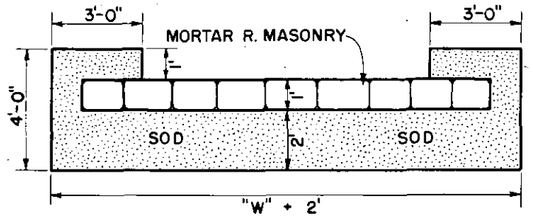
RECOMMENDED FOR APPROVAL:
1/11/67 DATE — E. J. Bobbitt CHIEF DESIGN ENGINEER
APPROVED:
1/13/67 DATE — STATE HIGHWAY ENGINEER

Plate No. 7-4.1.5

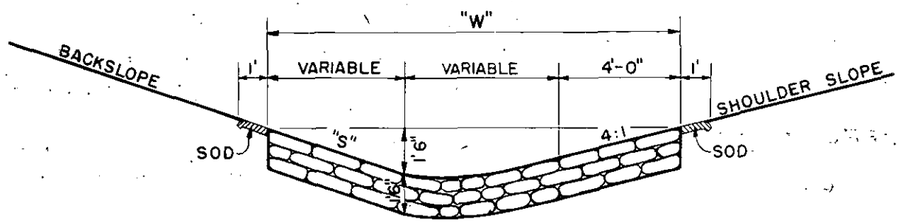
Plate No. 7-4.1.5



PROFILE OF DITCH GRADE



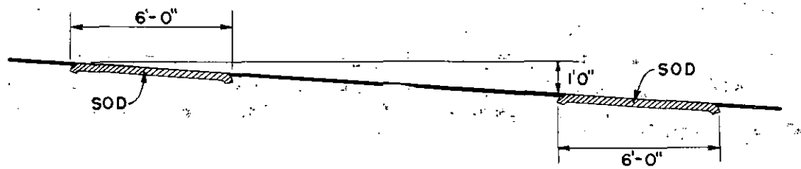
PLAN VIEW SHOWING SOD



SECTION

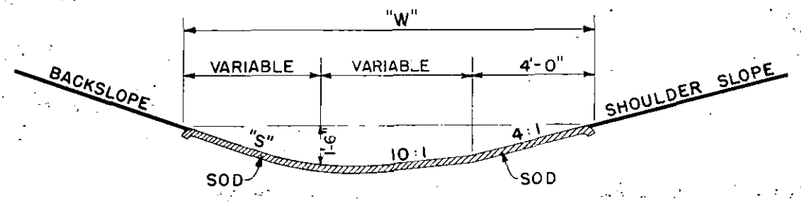
MORTAR RUBBLE MASONRY

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



PROFILE OF DITCH GRADE

NOTE: NUMBER REQUIRED WILL BE DETERMINED BY VERTICAL SPACING.



SECTION

SOD DITCH CHECKS

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

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

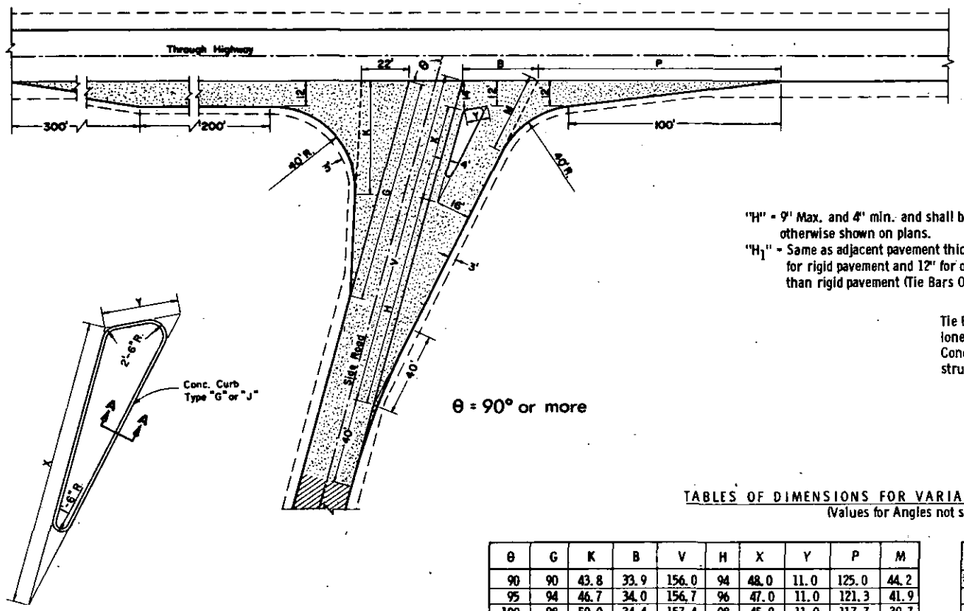
CONSTRUCTION ENGINEER

DATE:

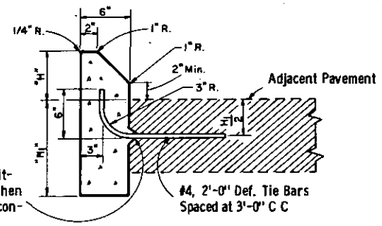
APPROVED:

E. Rettiger
STATE HIGHWAY ENGINEER 8-1.31

DRAWN DIV 9
CHECKED



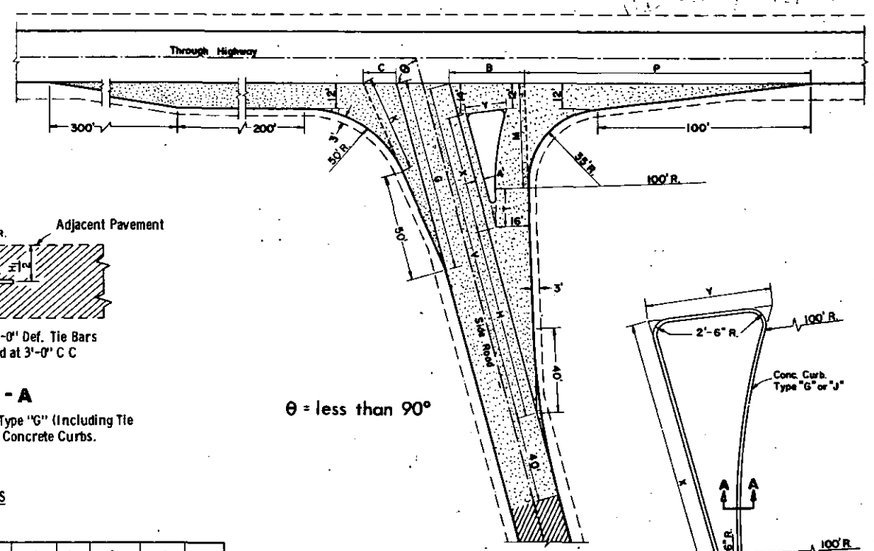
"H" = 9" Max. and 4" min. and shall be 6" unless otherwise shown on plans.
"H_1" = Same as adjacent pavement thickness for rigid pavement and 12" for other than rigid pavement (Tie Bars Omitted).

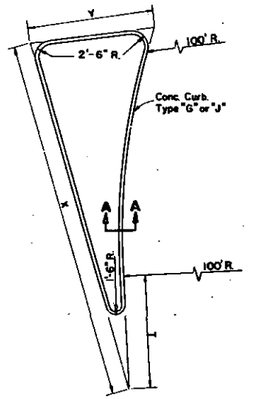


Tie Bar recess positioned in reverse when Concrete Curb is constructed first

SECTION **A - A**

Note: To be measured and paid for as Type "G" (Including Tie Bars) or Type "J" (Excluding Tie Bars) Concrete Curbs.





TABLES OF DIMENSIONS FOR VARIABLE SIDE ROAD INTERSECTION ANGLES

(Values for Angles not shown shall be interpolated)

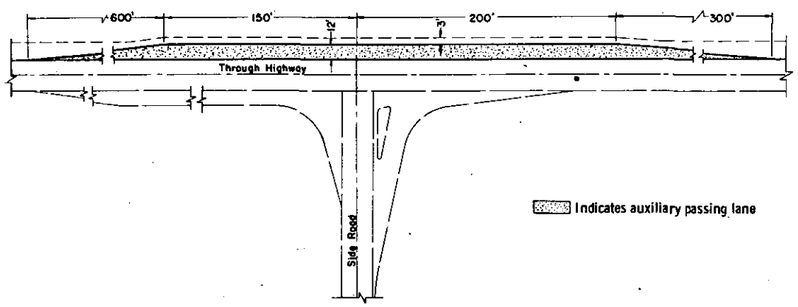
θ	G	K	B	V	H	X	Y	P	M
90	90	43.8	33.9	156.0	94	48.0	11.0	125.0	44.2
95	94	46.7	34.0	156.7	96	47.0	11.0	121.3	41.9
100	98	50.0	34.4	157.4	98	45.9	11.0	117.7	39.7
105	102	53.8	35.2	158.3	100	44.9	11.2	114.2	37.8
110	106	58.2	36.4	159.2	102	43.7	11.4	110.6	36.2
115	110	63.4	38.4	161.8	104	42.6	11.7	107.1	34.8
*120	114	69.4	40.1	161.2	106	41.4	12.2	103.4	33.7

*Maximum angle of intersection

θ	C	G	K	B	V	X	Y	H	P	M	T
*60	19.7	76.3	38.6	41.5	169.9	67.4	29.3	84	144.5	58.8	21.6
65	17.8	82.6	40.6	39.4	166.9	63.6	25.0	86	141.2	54.9	20.7
70	15.8	87.2	43.1	37.4	164.1	59.7	21.9	88	136.8	51.4	19.2
75	15.7	90.9	45.6	35.7	161.4	55.9	19.3	90	132.7	48.2	17.4
80	15.9	94.9	48.3	34.4	158.9	51.9	17.0	92	128.8	45.3	14.9
85	16.2	99.3	51.4	33.4	156.4	48.0	15.0	94	125.2	42.7	10.4

*Desirable Minimum angle of intersection

TYPE "A" SIDE ROAD INTERSECTION DETAILS

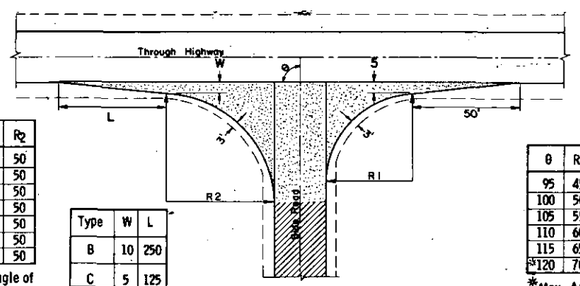


Indicates auxiliary passing lane

PASSING LANE DETAIL

θ	R_1	R_2
*60	40	50
65	40	50
70	40	50
75	40	50
80	40	50
85	40	50
90	40	50

*Min. Angle of Intersection



Type	W	L
B	10	250
C	5	125

θ	R_1	R_2
95	45	49
100	50	48
105	55	47
110	60	46
115	65	45
*120	70	44

*Max. Angle of Intersection

TYPE "B" & "C" SIDE ROAD INTERSECTION DETAILS

GENERAL NOTES

Designs may be used interchangeably in combination or separately for any one complete intersection depending upon intersection angle and surfacing of each approach roadway.

Details on this drawing are for minimum design only, and not applicable to special conditions, as shown elsewhere on the plans.

SIDE ROAD SURFACING NOTE

If the side road is not presently paved, pavement shall be placed to the limits shown. In the case where the construction limits are beyond the paving limits, gravel or crushed stone surfacing shall be placed between the *paving limits* and construction limits.

If the side road is presently paved, new pavement shall be placed to the limits of design as shown and beyond, if necessary, to meet existing pavement.

If side road is the construction project, the intersection surfacing shall be the same as for the project.

New Pavement

Existing Surface

LAYOUT DETAILS FOR AT-GRADE SIDE ROAD INTERSECTIONS

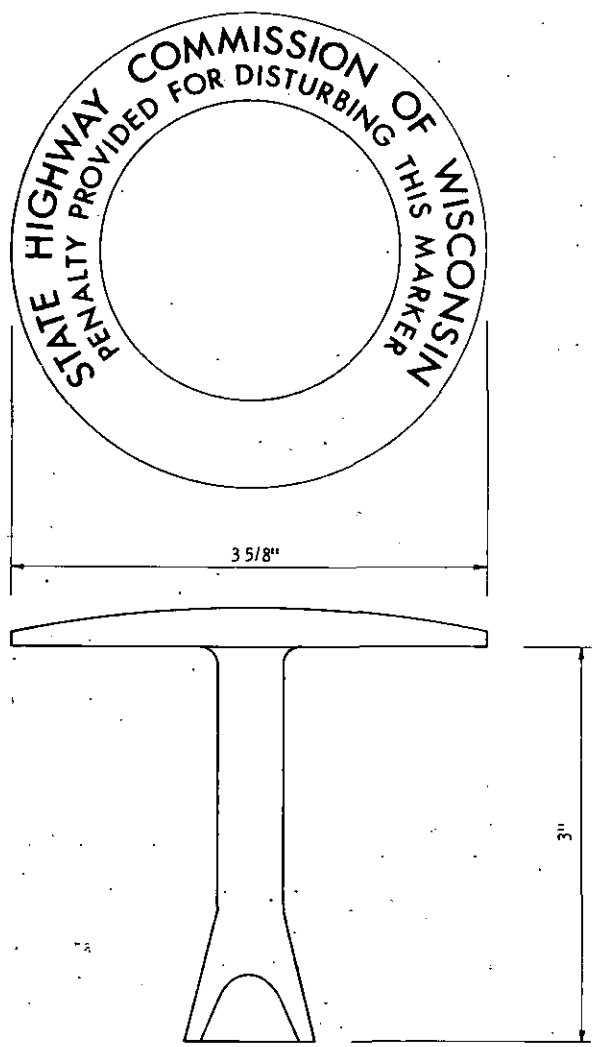
State Highway Commission of Wisconsin

RECOMMENDED FOR APPROVAL: 8/9/67 DATE — E. J. Bychinski CHIEF DESIGN ENGINEER

APPROVED: 8/9/67 DATE — A. D. Barrows STATE HIGHWAY ENGINEER

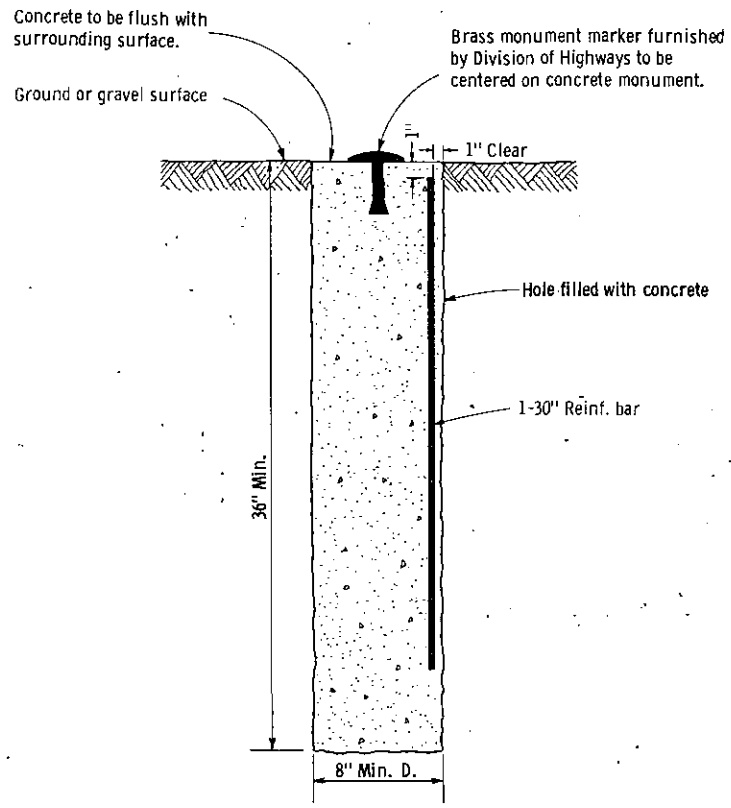
Plate No. 9-1.1.5

Plate No. 9-1.1.5



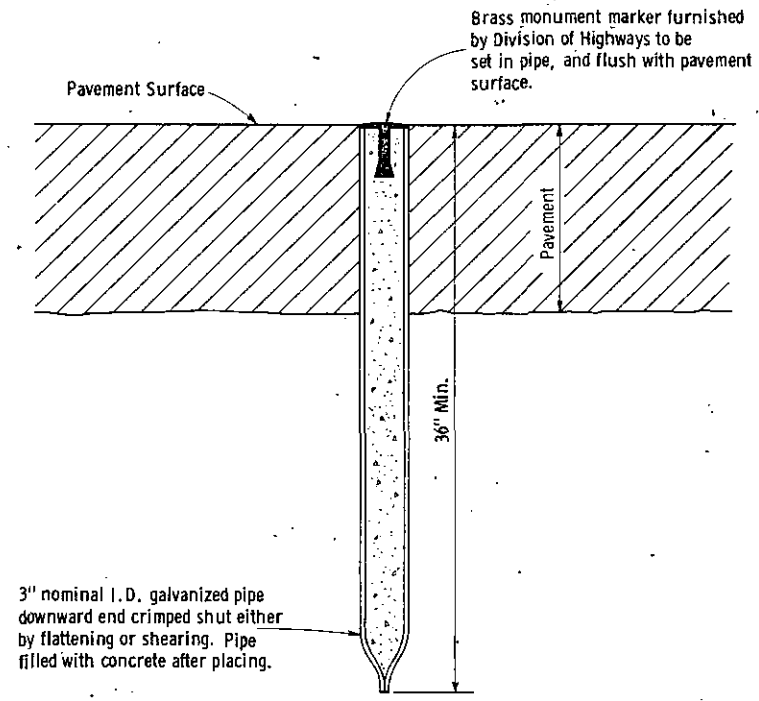
BRASS MONUMENT MARKER

To be furnished to contractor by Division of Highways



TYPE "A"

To be used only when monument is required outside of pavement surface.



TYPE "B"

To be used only when monument is required to be located within the limits of a pavement surface.

GENERAL NOTES

Details of construction, materials and workmanship not shown on this drawing shall conform to the Standard Specifications and the applicable Special Provisions.

Monuments conforming to Type "A" or Type "B", as shown hereon, shall be placed at the direction of the engineer.

LANDMARK REFERENCE MONUMENTS

State of Wisconsin
Department of Transportation
Division of Highways

RECOMMENDED FOR APPROVAL:
1/25/68 DATE — E. J. Ryckit CHIEF DESIGN ENGINEER

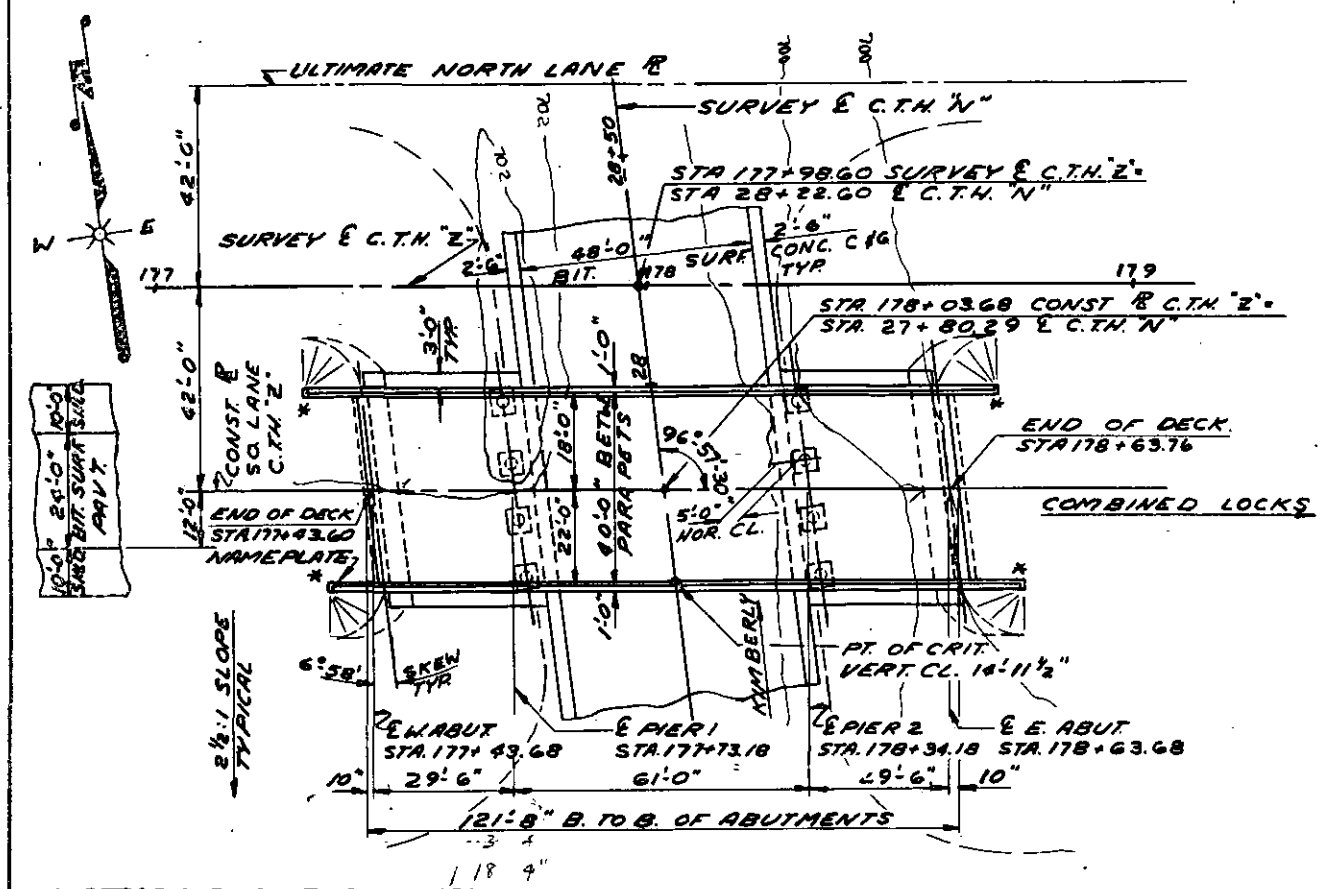
APPROVED:
2/9/68 DATE — H. K. Zimmerman STATE HIGHWAY ENGINEER

Plate No. 12-1.1.3

Plate No. 12-1.1.3

FORM E-B-11-62

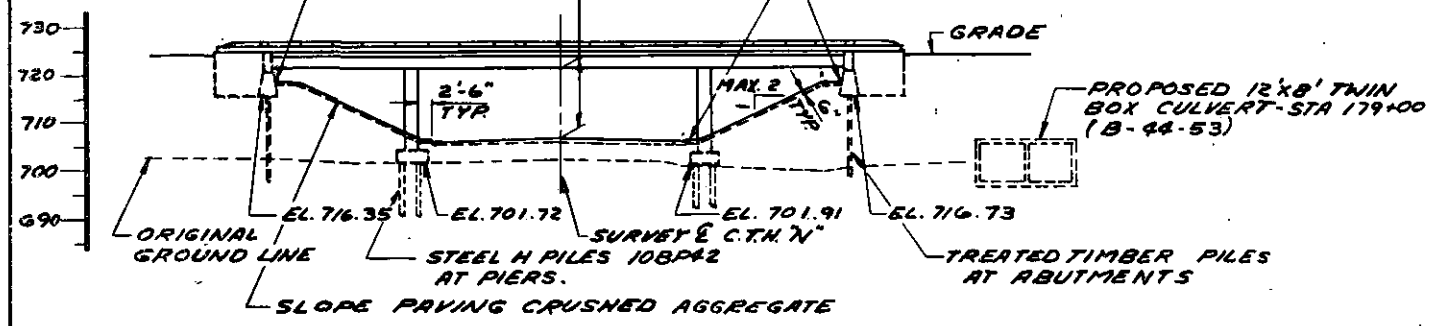
COUNTY & HIGHWAY	ROUTE & SECTION	CLASS & AGREEMENT STATE	CLASS & AGREEMENT FEDERAL	B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
44.6	0.0	3.22		4	4160-1-00	1	



*-ATTACH BEAM TYPE GUARD RAIL TO WING.

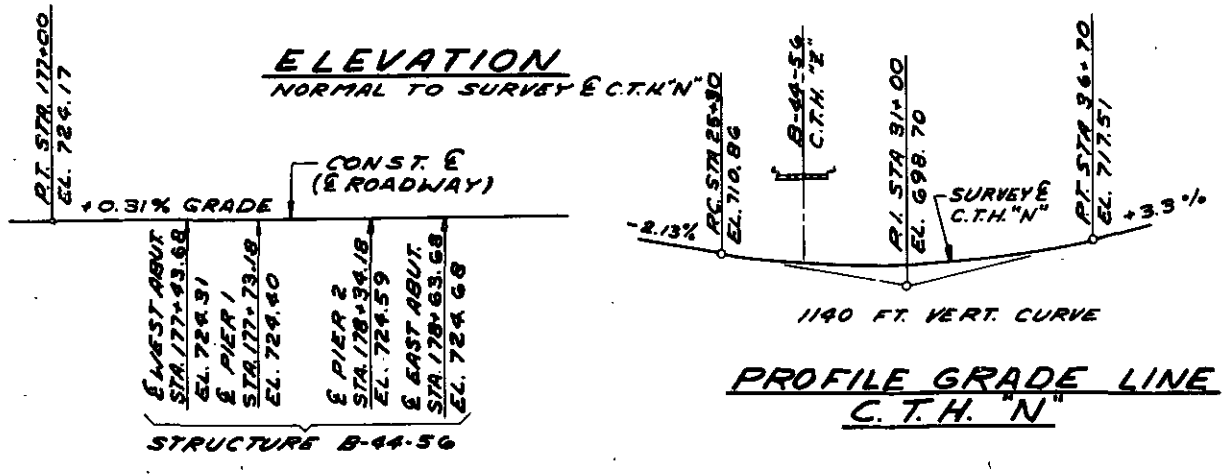
PLAN

3 SPAN FLAT VOIDED SLAB SUPERSTRUCTURE.



ELEVATION

NORMAL TO SURVEY ℄ C.T.H. "N"



PROFILE GRADE LINE C.T.H. "Z"

PROFILE GRADE LINE C.T.H. "N"

BENCH MARK

NO.	STATION	DESCRIPTION	ELEV.
17	178+63	SPIKE IN 40" MAPLE 110' RT.	703.63

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

JOINT FILLER SHALL CONFORM TO AASHO DESIGNATION M153, TYPE I.

AT ABUTMENTS AND PIERS, ALL SPACES EXCAVATED BUT NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH GRANULAR BACKFILL. PAYMENT WILL BE MADE ONLY FOR MATERIAL ACTUALLY PLACED WITHIN THE LIMITS SPECIFIED FOR "EXCAVATION FOR STRUCTURES."

UPPER LIMITS FOR "EXCAVATION FOR STRUCTURES" SHALL BE ELEVATION 718.35 AT THE WEST ABUTMENT, ELEVATION 718.73 AT THE EAST ABUTMENT AND THE FINISHED GRADED SECTION AT THE PIERS.

THE SLOPES IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH SLOPE PAVING AS SHOWN ON THIS SHEET AND ON SHEETS X35504 & X35506.

SEAL ALL HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY SINGLE COMPONENT NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE.)

DESIGN DATA

LIVE LOAD
HS-20

ALLOWABLE DESIGN STRESSES
CONCRETE, MASONRY, GRADE "AA" ____ f_c = 1,400 P.S.I.
BAR STEEL REINFORCEMENT ____ f_s = 20,000 P.S.I.

FOUNDATION DATA
ABUTMENTS TO BE SUPPORTED ON TREATED TIMBER PILES ESTIMATED 30'-0" LONG AND DRIVEN TO A MIN. BEARING CAPACITY OF 24 TONS / PILE.
PIERS TO BE SUPPORTED ON 10" BP 42# PILES. ESTIMATED 35'-0" LONG AND DRIVEN TO A MIN. BEARING CAPACITY OF 40 TONS / PILE.

TOTAL ESTIMATED QUANTITIES

BID ITEMS	UNIT	SUPER.	W. ABUT.	PIER 1	PIER 2	E. ABUT.	TOTAL
EXCAVATION FOR STRUCTURES	C.Y.		30	55	55	30	170
GRANULAR BACKFILL	C.Y.		20	40	40	20	120
CONCRETE MASONRY	C.Y.	366.1	30.4	24.3	24.3	30.4	475.5
BAR STEEL REINFORCEMENT	LB.	81,040	1,860	3,020	3,020	1,860	90,800
# TREATED TIMBER TEST PILING	LUMP SUM						1
TREATED TIMBER PILING, DELIVERED	L.F.		180			180	360
TREATED TIMBER PILING, DRIVEN	L.F.		180			180	360
## STEEL TEST PILING	LUMP SUM						1
STEEL PILING, DELIVERED	L.F.			525	525		1,050
STEEL PILING, DRIVEN	L.F.			525	525		1,050
TUBULAR RAILING, TYPE "G"	L.F.	273					273
SLOPE PAVING, CRUSHED AGGREGATE	S.Y.		183			183	366
STRUCTURAL CARBON STEEL	LB.	490					490
NON-BID ITEMS							
⅛" ALUMINUM OR ZINC PLATE	S.F.	21					21
FILLER	SIZE	½"					½"

2-45'-0" TREATED TIMBER TEST PILES REQ'D. DRIVE ONE 45'-0" TEST PILE AT EACH ABUTMENT.

2-48'-0" STEEL TEST PILES REQ'D. DRIVE ONE 45'-0" TEST PILE AT EACH PIER.

LIST OF DRAWINGS

1. GENERAL PLAN ____ X35500
2. SUPERSTRUCTURE ____ X35501
3. DETAILS FOR TYPE "G" TUBULAR ALUMINUM & STEEL RAILING ____ X35502
4. RAIL PARAPET DETAILS ____ X35503
5. WEST ABUTMENT ____ X35504
6. PIERS ____ X35505
7. EAST ABUTMENT ____ X35506
8. BILL OF BARS ____ X35507
9. SUBSURFACE EXPLORATION ____ X35508

REVISED

STATE HIGHWAY COMMISSION OF WISCONSIN

GENERAL PLAN

CO. OUTAGAMIE — TH. BUCHANAN — STA. 178+03.68
SECTION 26 — TOWN 21N — RANGE 18E
DESIGN SPEC. AASHO'65 — LOADING HS-20 — CONST. SPEC. 1963
DATE 6-28-66 — DESIGN C.R.D. — DRAWN PAG — CKD. L.J.S.

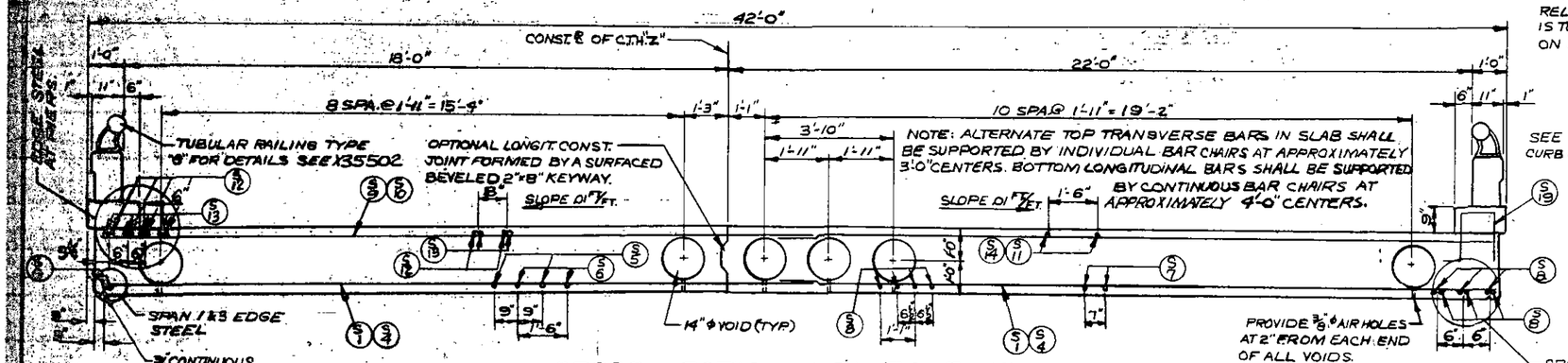
APPROVED: W. A. Kleiner
CHIEF BRIDGE ENGINEER

STRUCTURE B-44-56 — SHEET 1 OF 9

4/3

B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
14		2	

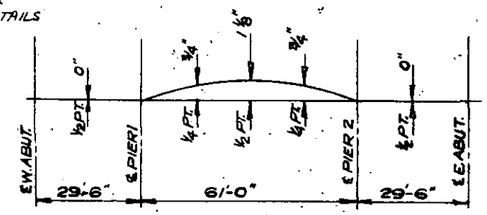
NOTE: CURB POUR SHALL BE MADE AFTER THE FALSEWORK HAS BEEN RELEASED. THE 9" HEIGHT OF CURB IS TO BE MAINTAINED AT ALL POINTS ON STRUCTURE.



CROSS SECTION THRU ROADWAY

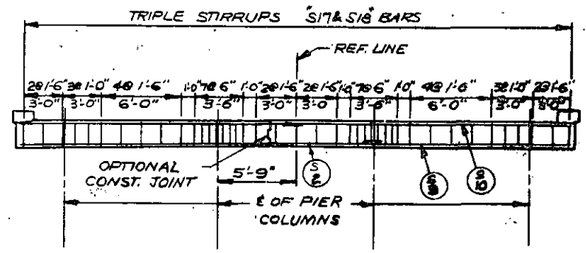
LOOKING EAST

SEE SHEET 4 FOR CURB & PARAPET DETAILS



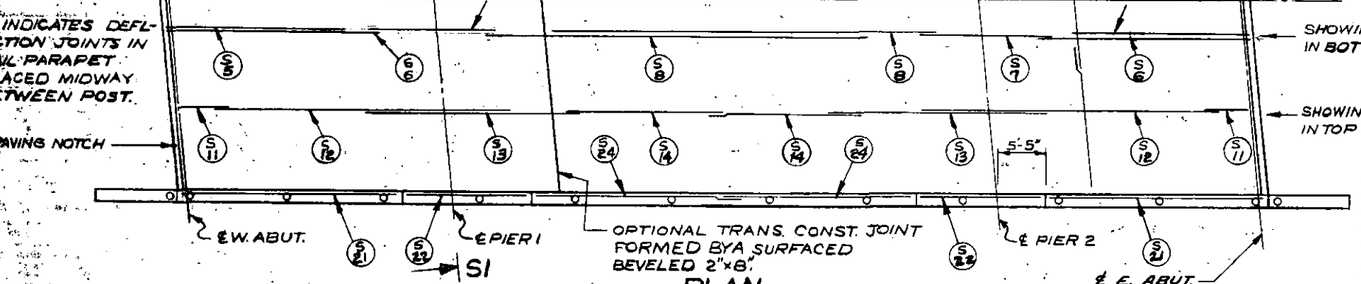
CAMBER SHOWN IS THAT COMPUTED FROM DESIGN CALCULATIONS AND PROVIDES FOR DEAD LOAD DEFLECTION AND FUTURE PLASTIC FLOW BUT INCLUDES NO PROVISION FOR FORM SETTLEMENT OR VERTICAL CURVE.
INITIAL DEAD LOAD DEFLECTION = 3/8 OF CAMBER SHOWN.

CAMBER DIAGRAM



SECTION S1

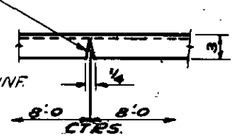
TYPICAL BOTH PIERS



PLAN

**OMIT CROSS-HATCHED SECTION OF VOIDS IF OPTIONAL TRANS. CONST. JOINT IS USED.

CUT 3" LEG OF ANGLE AS SHOWN. ONE CUT SHALL BE AT CENTER OF CROWN.

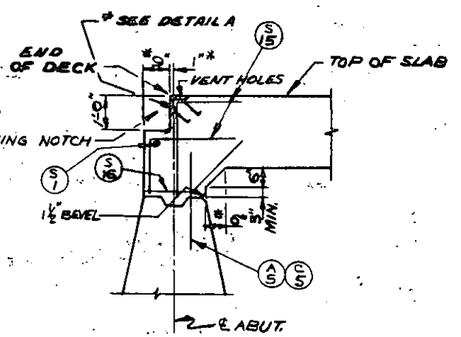


SHOWING BAR STEEL REINF. IN BOTTOM OF SLAB.

SHOWING BAR STEEL REINF. IN TOP OF SLAB.

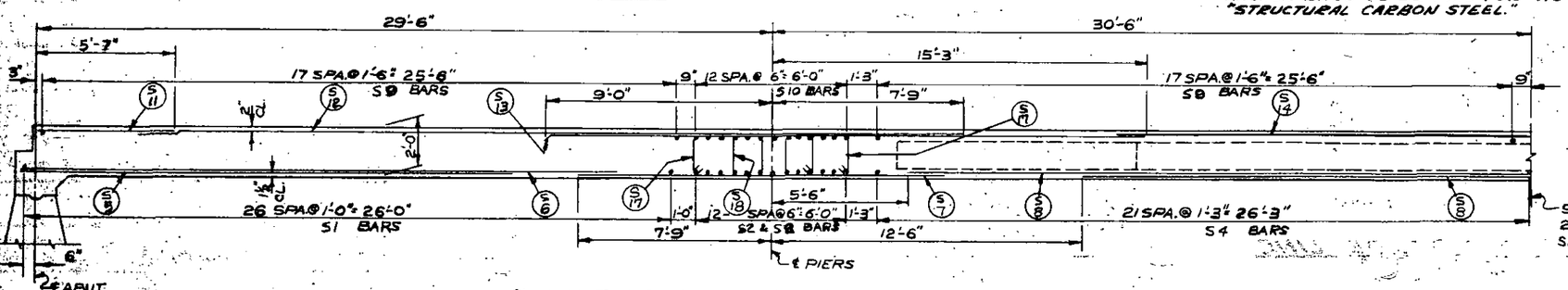
DETAIL A

*-L 3×2×5/16 × RDWY. WIDTH. PROVIDE 11/16" ϕ VENT HOLES AT 3'0 CTRS. IN 2" LEG. ATTACH ANGLE TO CONCRETE WITH ½"ϕ BARS 10'-9 LONG AT 0'-6 ALTERNATE CTRS. THE CONTRACTOR MAY PROPOSE AN ALTERNATE TYPE ANCHOR FOR ANGLE. THE PROPOSED ANCHORS SHALL BE SHOWN ON THE SHOP DRAWINGS AND WILL BE SUBJECT TO THE APPROVAL OF THE ENGINEER. ANGLE AND ANCHOR BARS TO BE PAID FOR AS "STRUCTURAL CARBON STEEL."



SECTION THRU ABUTMENTS

*NORMAL TO ℄ ABUTMENT.



HALF LONGITUDINAL SECTION

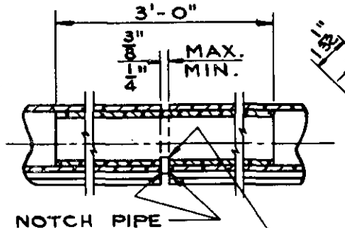
NOTE SLAB THICKNESS DIMENSION IS MIN. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	SUPERSTRUCTURE
	DESIGN SPEC. AASHO '65 LOADING H20 SHEET 1965
	DATE 6-29-66 DESIGN CRD DRAWN DEO CHK. L.J.S.
	STRUCTURE B-44-56 SHEET 2 OF 9

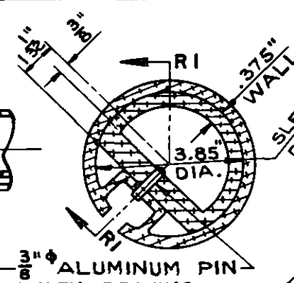
X35501

Form E-8-12-67

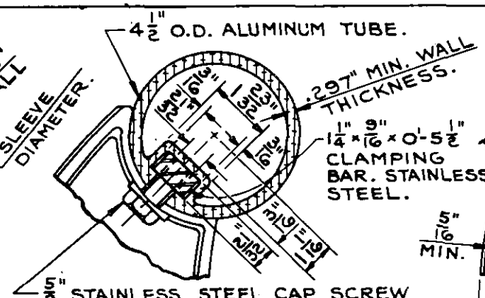
ALUMINUM RAILING DETAILS



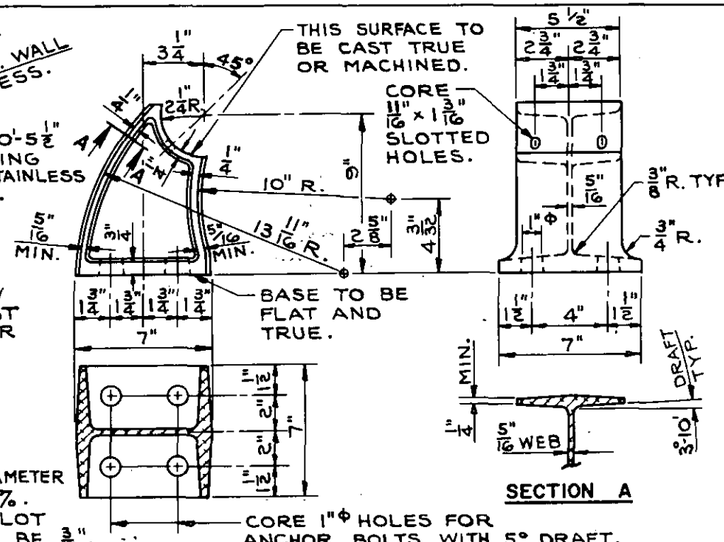
SECTION R1



RAIL SPLICE DETAIL



DETAIL OF RAIL ATTACHMENT TO POST



ALUMINUM POST CASTING

SECTION A

NOTES

MAXIMUM REDUCTION IN DIAMETER OF BENT SECTION SHALL BE 3%.

MAXIMUM REDUCTION IN SLOT WIDTH IN BENT TUBING SHALL BE 3/16".

RAILING SPLICES SHALL BE LOCATED SUCH THAT ℄ OF SPLICE IS 1/6 PANEL LENGTH ± 4" OFF NEAREST POST.

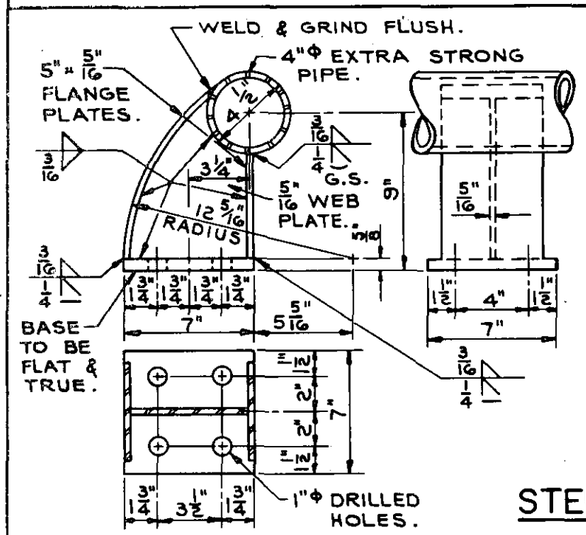
ALUMINUM SHIMS SHALL BE USED UNDER POSTS AND END PLATES WHERE REQUIRED FOR ALIGNMENT.

RAILING SHALL BE FABRICATED IN TWO AND THREE PANEL LENGTHS.

ANCHOR BOLTS, NUTS & WASHERS TO BE STAINLESS STEEL.

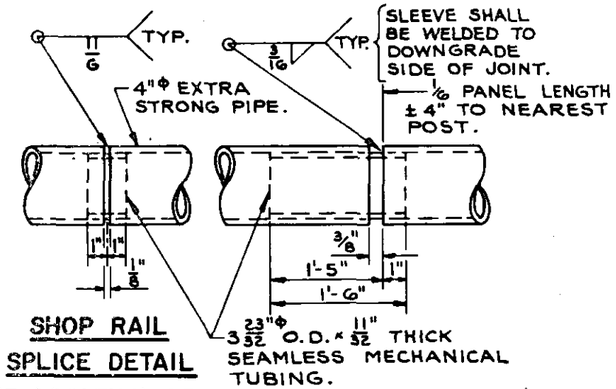
WALL THICKNESS OF TUBING SHOWN ABOVE SHALL BE MINIMUM NOMINAL AVERAGE WALL THICKNESS.

CAULK EXPOSED OPENINGS BETWEEN POST BASE, SHIMS, & TOP OF PARAPET WITH LEAD WOOL.



STEEL POST DETAILS

STEEL RAILING DETAILS



SHOP RAIL SPLICE DETAIL

THE LOCATION OF THE SHOP SPLICE SHALL BE SHOWN ON THE SHOP DRAWINGS.

FIELD ERECTION JOINT DETAIL

NOTES

RAILING SHALL BE FABRICATED IN 2 & 3 PANEL LENGTHS.

STEEL SHIMS SHALL BE USED UNDER POSTS AND UNDER END PLATES WHERE REQUIRED FOR ALIGNMENT.

THE FOLLOWING MATERIALS SHALL BE USED: RAILING SHALL BE 4"Φ EXTRA STRONG PIPE CONFORMING TO A.S.T.M. DESIGNATION A 53, GRADE "B".

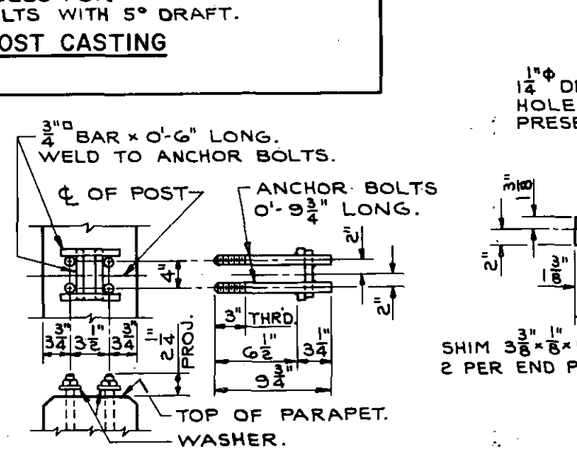
SLEEVES SHALL BE 3 23/32"Φ O.D. x 11/32" THICK SEAMLESS MECHANICAL TUBING MADE OF STEEL WITH A MINIMUM ULTIMATE TENSILE STRENGTH OF 60,000 P.S.I. AND A MINIMUM ELONGATION OF 10%.

POSTS SHALL BE FABRICATED FROM MATERIAL CONFORMING TO A.S.T.M. DESIGNATION A 36.

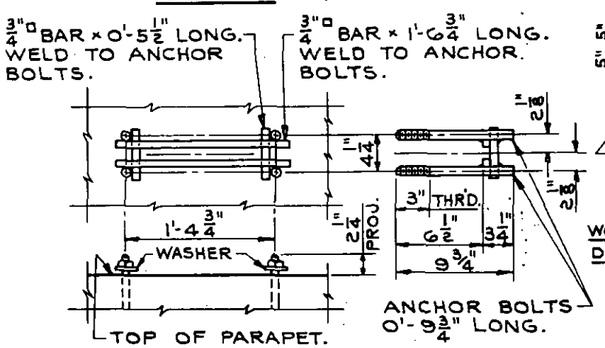
ANCHOR BOLTS TO BE MADE FROM MATERIAL CONFORMING TO A.S.T.M. A 307.

CAULK EXPOSED OPENINGS BETWEEN SHIMS WITH LEAD WOOL.

GALVANIZE ENTIRE RAILING AFTER FABRICATION INCLUDING NUTS, WASHERS, SHIMS AND TOP 3 1/2" OF ANCHOR BOLTS.



AT POSTS

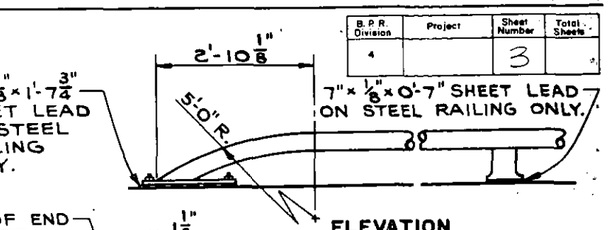


AT END PLATE

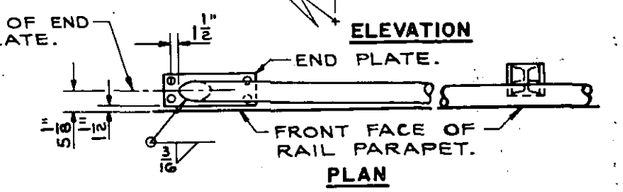
ANCHOR BOLT SETTING DETAILS

THE SHANK AND ROOT OF THREAD DIAMETER FOR ANCHOR BOLTS SHALL BE A MINIMUM OF 0.62 INCHES.

B.P.R. Division	Project	Sheet Number	Total Sheets
4		3	

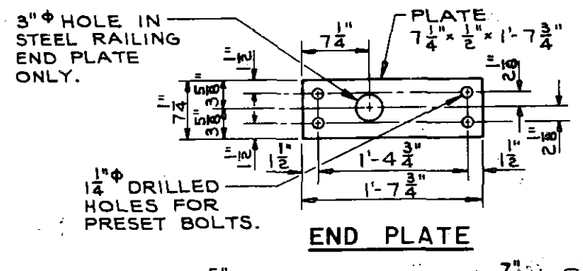


ELEVATION

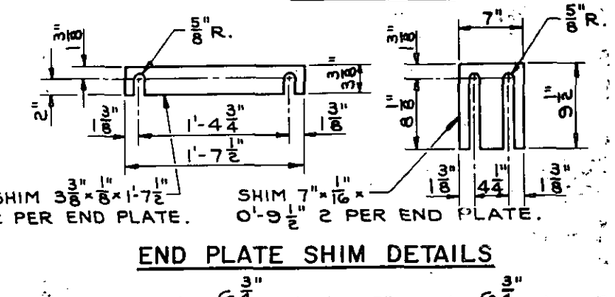


PLAN

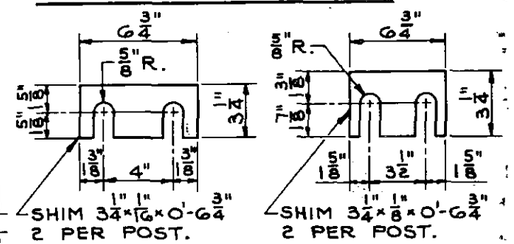
DETAIL OF RAIL BEND AT ABUTMENTS



END PLATE



END PLATE SHIM DETAILS



POST SHIM DETAILS

WORK THIS SHEET WITH SHEET TITLED "RAIL PARAPET DETAILS".

No.	Date	Revision	By

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-44-56

Const. Spec. 1968	Drawn By PAGE	Plans Checked STAND.

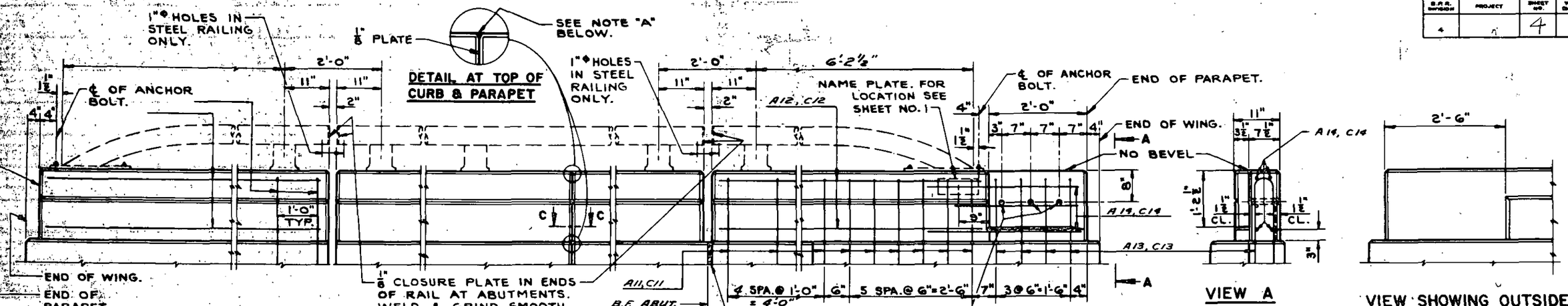
DETAILS FOR TYPE "G" TUBULAR ALUMINUM & STEEL RAILING

SHEET 3 OF 9

X35502

FORM E-8-18-67

B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4		4	

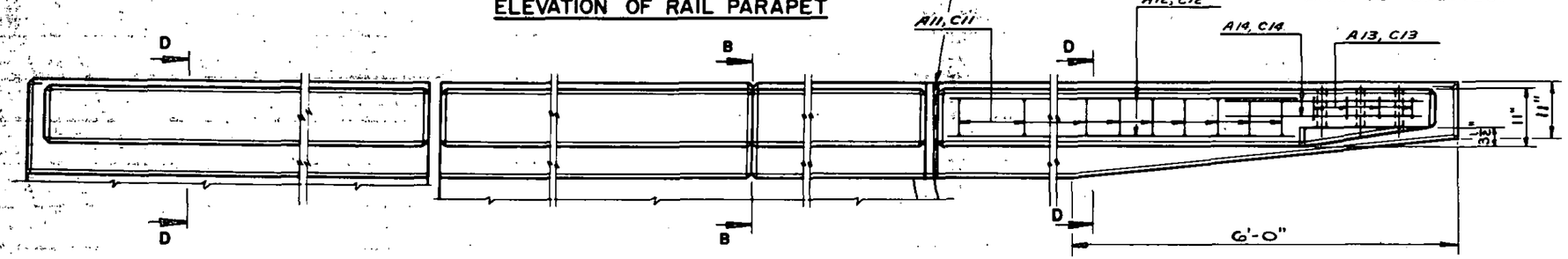


ELEVATION OF RAIL PARAPET

VIEW A

VIEW SHOWING OUTSIDE FACE OF RAIL PARAPET

TYPICAL ALL WINGS



PLAN OF RAIL PARAPET

NOTES

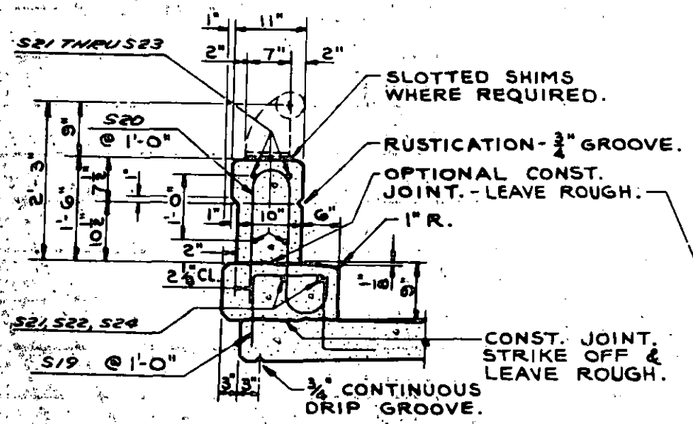
WHEN PARAPETS AND CURBS ARE POURED CONTINUOUSLY FROM END TO END THEY SHALL BE SEPARATED AT THE DEFLECTION JOINTS BY A PIECE OF ⅛" ZINC OR ALUMINUM PLATE CUT AS SHOWN IN SECTION "B" BY SHADED AREA. IF CONSTRUCTION JOINTS IN PARAPETS AND CURBS ARE USED AT THE DEFLECTION JOINTS ONE SIDE OF JOINT SHALL BE COATED WITH BITUMINOUS PAINT AND PLATE SEPARATORS MAY BE OMITTED.

COST OF 1¼" ◆ GALVANIZED PIPE SLEEVES AND ¾" ◆ BAR TO BE INCLUDED IN UNIT PRICE BID FOR CONCRETE MASONRY.

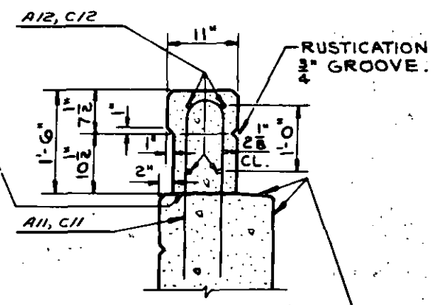
WORK THIS SHEET WITH SHEET TITLED "DETAILS FOR TYPE "G" TUBULAR ALUMINUM AND STEEL RAILING".

ALL POST SPACINGS ARE TAKEN HORIZONTALLY ALONG ℄ OF RAILING AT BASE OF POSTS. ALL POSTS SHALL BE SET NORMAL TO GRADE.

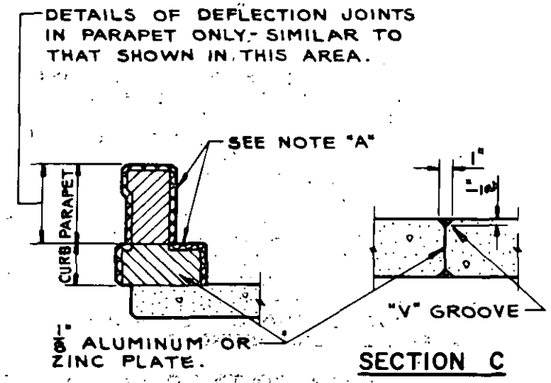
NOTE "A": FILL WITH NON-STAINING GRAY SINGLE COMPONENT NON-BITUMINOUS JOINT SEALER.



SECTION THRU PARAPET & CURB ON BRIDGE



SECTION D



SECTION B

SHOWING DEFLECTION JOINT IN CURB AND PARAPET.

SECTION C

No.	Date	Revision	By

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-44-56

Const. Spec. 1963	Drawn By PAGE	Plans Checked W.G.

RAIL PARAPET DETAILS

SHEET 4 OF 9

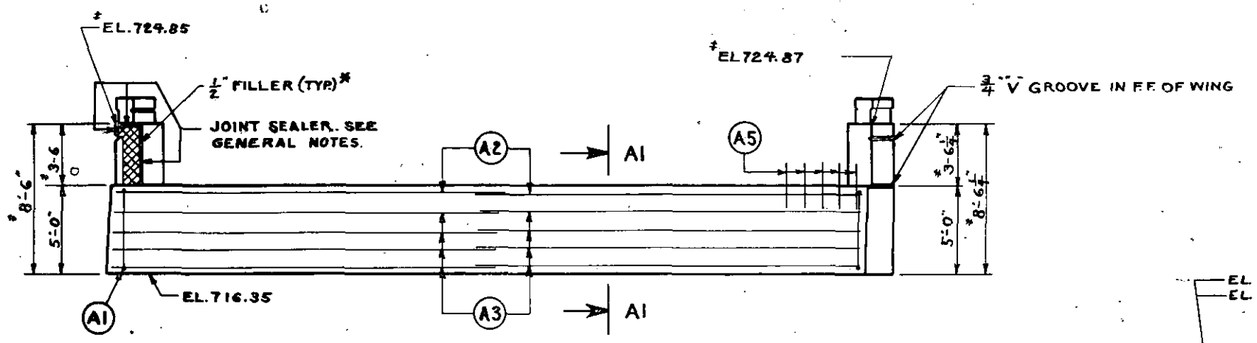
X35503

FORM E-9-12-62

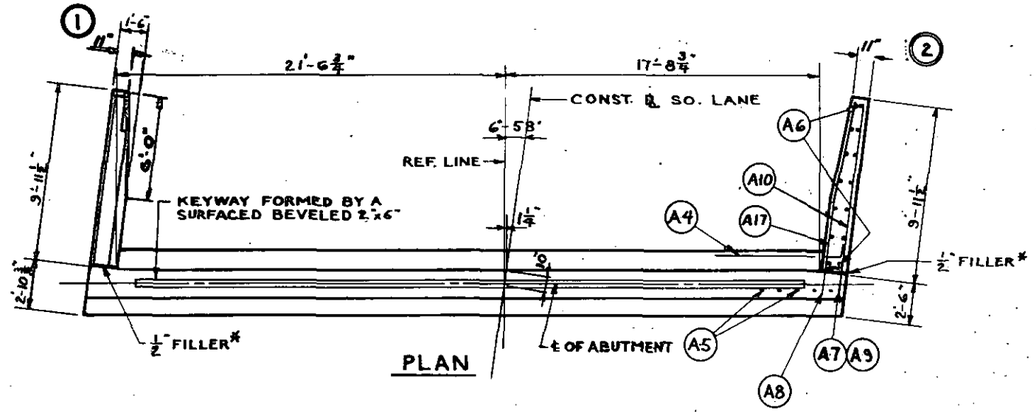
S.P.R. DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4		5	

‡ ELEVATIONS AND DIMENSIONS TAKEN AT END OF WING ADJOINING THE SUPER.

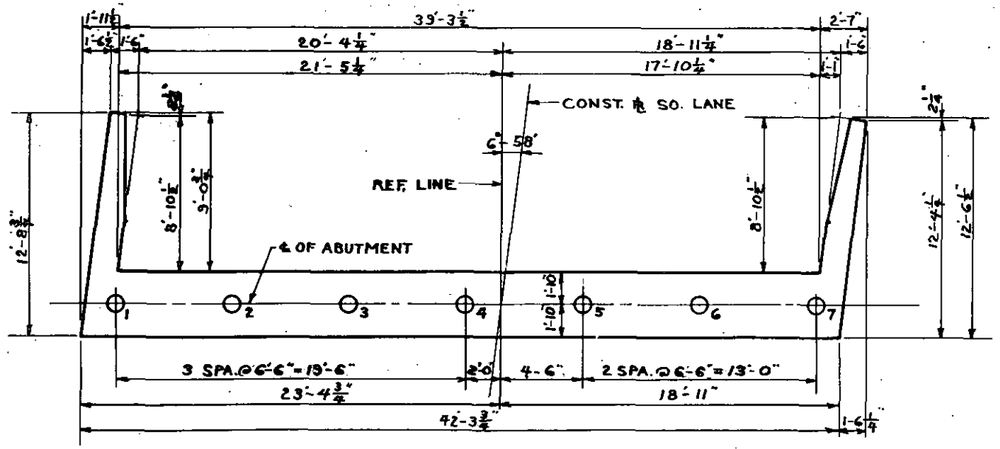
* EXTEND FILLER ½" BEYOND OUTLINE OF SUPERSTRUCTURE.



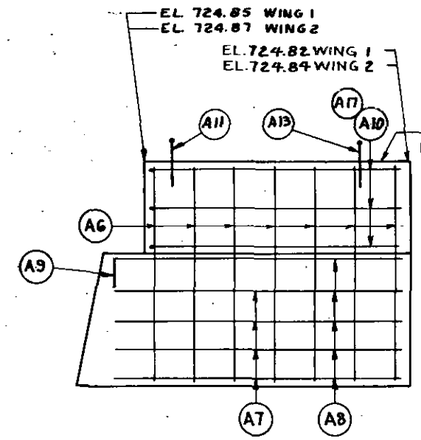
ELEVATION



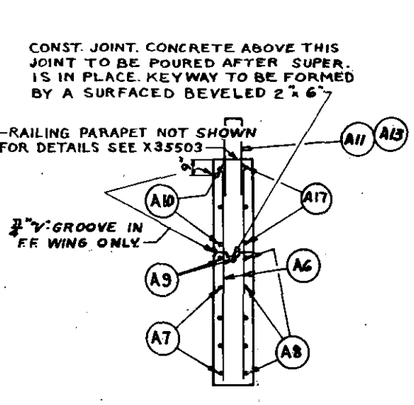
PLAN



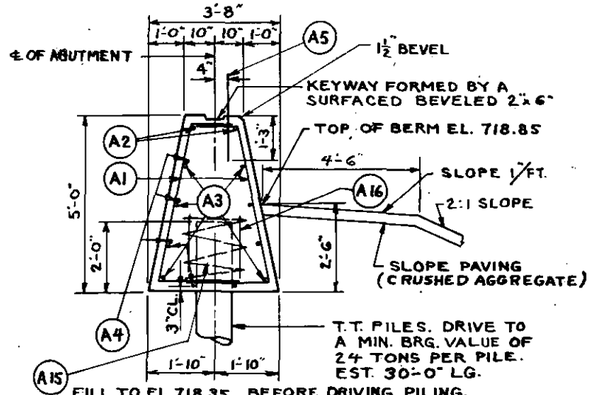
FOOTING PLAN



WING ELEVATION



SECTION THRU WING



FILL TO EL. 718.35 BEFORE DRIVING PILING. UPPER LIMIT OF "EXCAVATION FOR STRUCTURES" SHALL NOT EXCEED THIS ELEVATION.

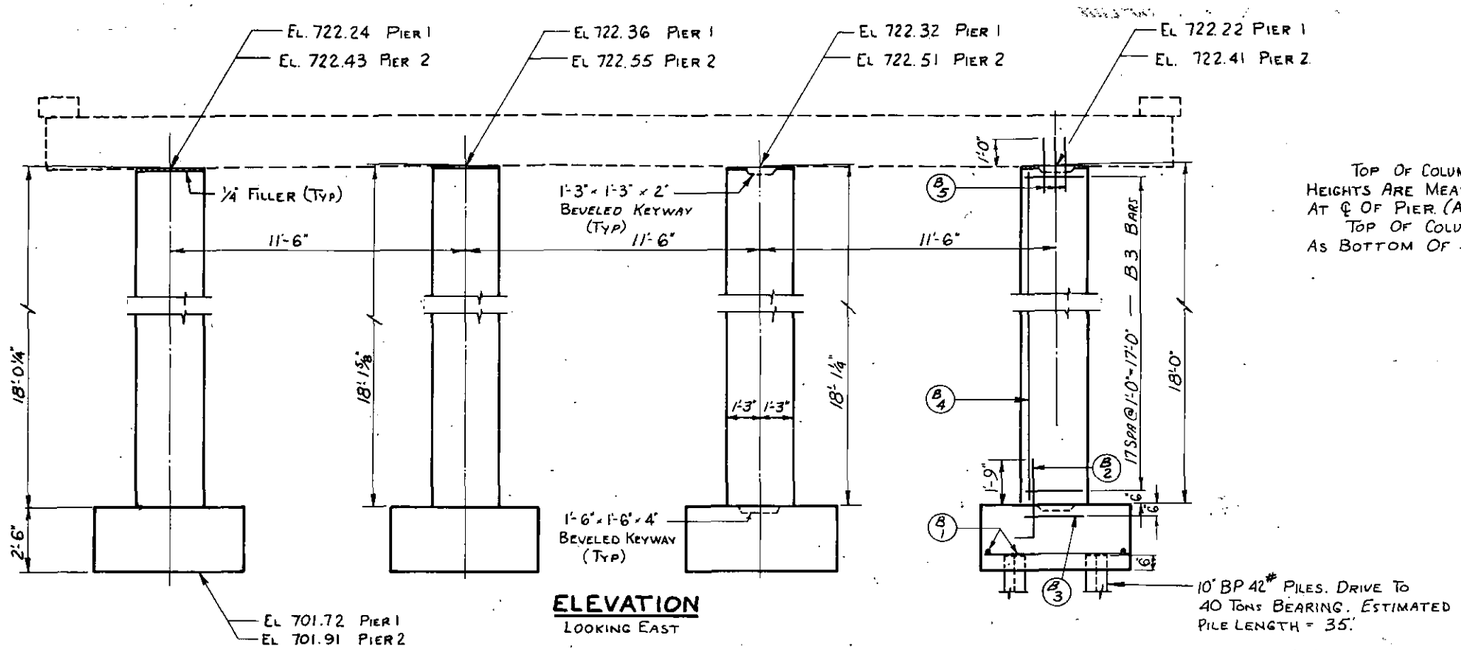
SECTION A1

NOTE: AB BARS MAY BE PLACED AFTER ABUTMENT CONCRETE IS POURED

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	WEST ABUTMENT
	DESIGN SPEC. AASHO '65 · LOADING HS20 · CONST. SPEC. 1963
	DATE 6-28-66 · DESIGN C.R.D. · DRAWN F.R.W. · CKD. L.J.S.
	STRUCTURE B-44-56 · SHEET 5 OF 9

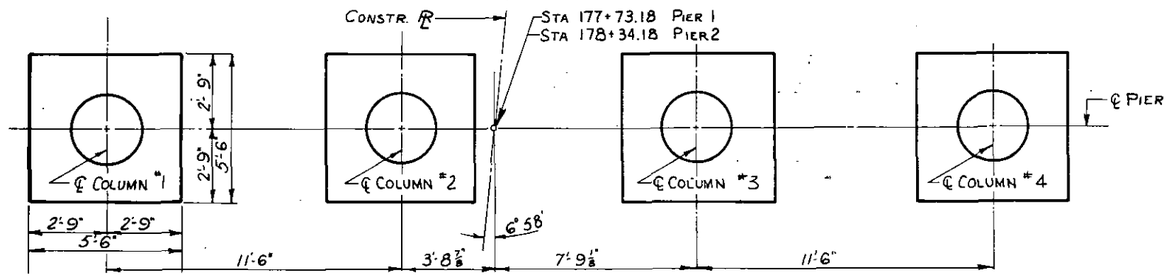
FORM E-D-12-62

S. P. R. DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4		6	

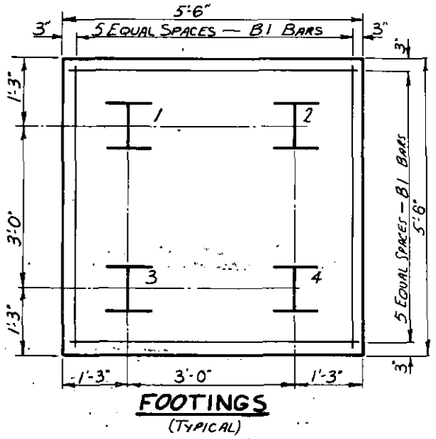


ELEVATION
LOOKING EAST

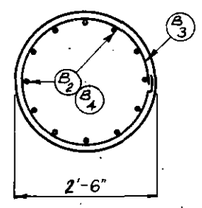
TOP OF COLUMN ELEVATIONS AND COLUMN HEIGHTS ARE MEASURED AT ℄ OF COLUMN AT ℄ OF PIER. (AT TOP OF FILLER)
TOP OF COLUMN TO HAVE SAME SLOPE AS BOTTOM OF SLAB.



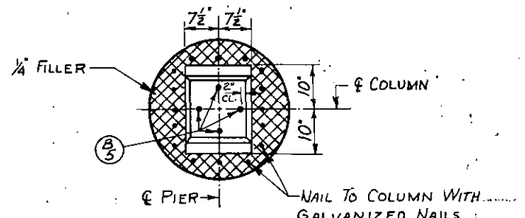
PLAN



FOOTINGS
(TYPICAL)



SECTION THRU COLUMN



SECTION THRU FILLER

CONCRETE MASONRY

	PIER 1	PIER 2
COLUMNS	13.1 C.Y.	13.1 C.Y.
FOOTINGS	11.2 C.Y.	11.2 C.Y.
TOTAL	24.3 C.Y.	24.3 C.Y.

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	PIERS
	DESIGN SPEC AASHO '65 LOADING H S 20 CONST. SPEC '1963
	DATE 6-28-66 DESIGN C.R.D. DRAWN J.R.P. CKD. L.J.S.
STRUCTURE B-44-56	SHEET 6 OF 9

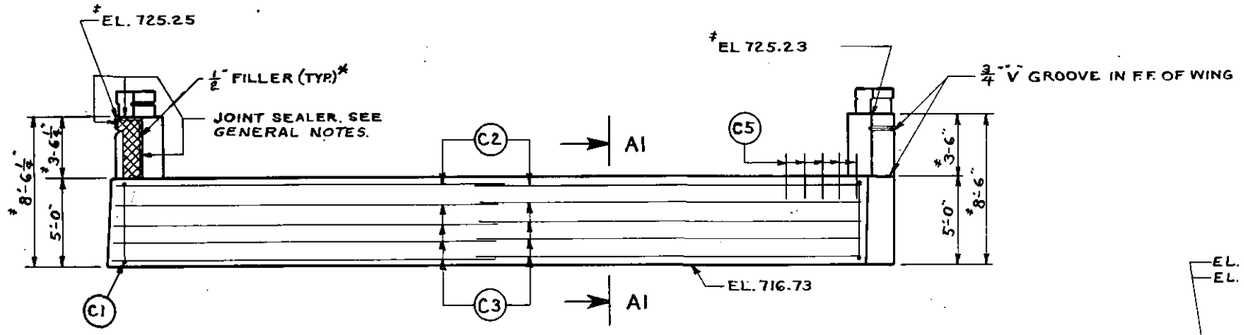
X35505

FORM E-8-12-62

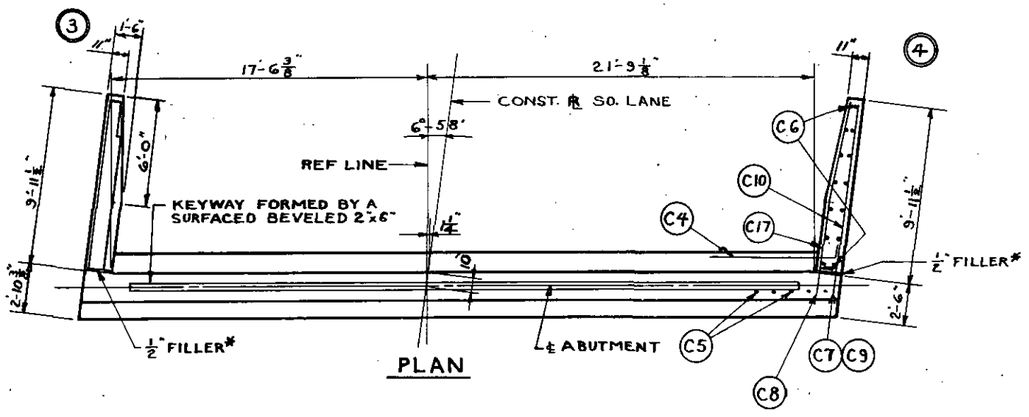
B.F.R. DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4		7	

* ELEVATIONS AND DIMENSIONS TAKEN AT END OF WING ADJOINING THE SUPER.

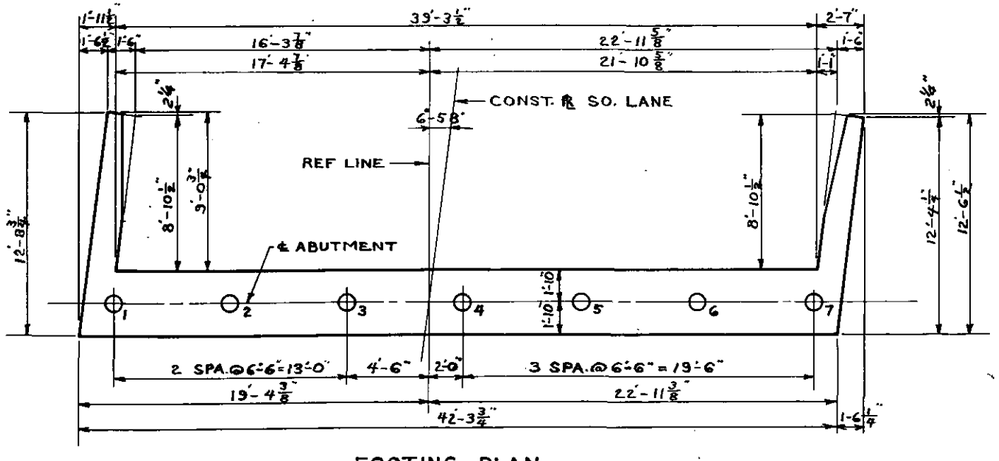
* EXTEND FILLER ½" BEYOND OUTLINE OF SUPERSTRUCTURE.



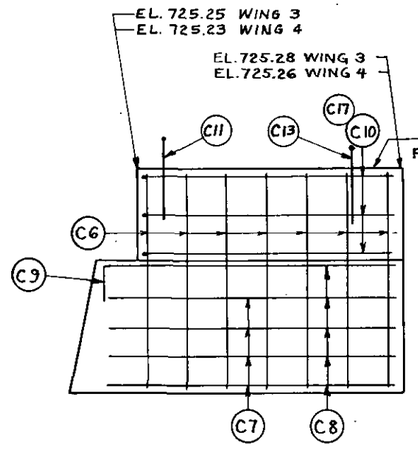
ELEVATION



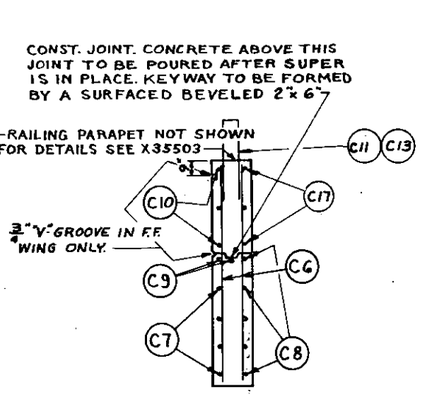
PLAN



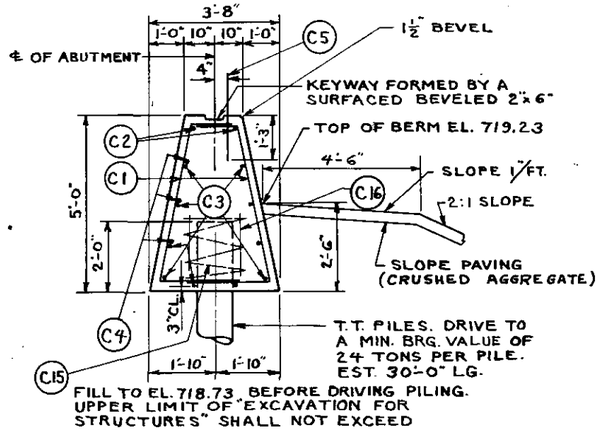
FOOTING PLAN



WING ELEVATION



SECTION THRU WING



FILL TO EL. 718.73 BEFORE DRIVING PILING. UPPER LIMIT OF "EXCAVATION FOR STRUCTURES" SHALL NOT EXCEED THIS ELEVATION.

SECTION A1

NOTE: C5 BARS MAY BE PLACED AFTER ABUTMENT CONCRETE IS POURED.

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	EAST ABUTMENT
	DESIGN SPEC. AASHO '65 | LOADING HS20 | CONST. SPEC. 1963
	DATE 6-28-66 | DESIGN C.R.D. | DRAWN F.R.W. | CKD. L.J.S.
STRUCTURE B-44-56	SHEET 7 OF 9

X 35506 49

90,800#

POUR	MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
	A 1	42	4	8-0	2-0	Body-Vertical-Stirrup	F.
	A 2	4	6	22-0	Shown	" Longitudinal	
	A 3	20	4	21-6	"	" "	
	A 4	6	4	11-0	"	" "	A
	A 5	42	5	2-6	1-0	" Superstructure-Dowels	
	A 6	28	4	8-0	1-6	Wings-Vertical-F.F. & B.F.	
	A 7	8	4	11-6	Shown	" Longitudinal-F.F.	
	A 8	10	6	11-6	"	" " B.F.	N
	A 9	4	4	12-9	"	" "	A
	A10	6	4	10-9	1-6	" " F.F.	A
	A11	22	5	6-0	Shown	Railing Parapet & Wing Vertical	B
	A12	8	5	7-3	"	" " Longitudinal	
	A13	8	5	6-0	"	" " & Wing Vertical	B
	A14	8	5	3-3	"	" " Longitudinal	
	A15	7	3	28-0	"	Body at Pile	**
	A16	14	4	2-3	"	" " "	
	A17	6	4	10-9	1-6	WINGS-LONGITUDINAL-B.F.	M
						8#5 Wrap Spiral-21" Diameter	
	B 1	96	6	5-0	Shown	Footings	
	B 2	96	7	4-6	"	" Dowels	A
	B 3	152	4	7-9	1-0	Columns	J
	B 4	96	7	17-9	Shown	" Vertical	
	B 5	32	8	2-0	"	" Dowels	
	C 1	42	4	8-0	2-0	Body-Vertical-Stirrup	F
	C 2	4	6	22-0	Shown	" Longitudinal	
	C 3	20	4	21-6	"	" "	
	C 4	6	4	11-0	"	" "	A
	C 5	42	5	2-6	1-0	" Superstructure Dowels	
	C 6	28	4	8-0	1-6	Wings-Vertical-F.F. & B.F.	
	C 7	8	4	11-6	Shown	" Longitudinal-F.F.	
	C 8	10	6	11-6	"	" " B.F.	N
	C 9	4	4	12-9	"	" "	A
	C10	6	4	10-9	1-6	" " F.F.	A
	C11	22	5	6-0	Shown	Railing Parapet & Wing Vertical	B
	C12	8	5	7-3	"	" " Longitudinal	
	C13	8	5	6-0	"	" " & Wing Vertical	B
	C14	8	5	3-3	"	" " Longitudinal	
	C15	7	3	28-0	"	Body at PILE	**
	C16	14	4	2-3	"	" " "	
	C17	6	4	10-9	1-6	WINGS-LONGITUDINAL-B.F.	M
						8#5 Wrap Spiral-21" Diameter	
	S 1	112	4	21-3	Shown	Slab-Bottom-Transverse	
	S 2	26	8	27-6	0-6	" " "	
	S 3	26	8	16-0	0-6	" " "	
	S 4	86	6	21-6	1-3	" " "	
	S 5	54	8	10-9	1-6	" " Longitudinal	
	S 6	60	8	24-0	Shown	" " "	
	S 7	142	6	14-9	0-7	" " " Over Piers	
	S 8	83	11	43-3	Shown	" " "	
	S 9	144	4	21-3	"	" Top-Transverse	
	S10	52	9	22-3	0-6	" " " Over Piers	
	S11	56	4	5-6	1-6	" " Longitudinal	
	S12	128	10	33-3	Shown	" " "	
	S13	128	10	24-3	"	" " "	
	S14	56	4	17-6	1-6	" " "	
	S15	168	5	4-0	1-0	" at Abutments	A
	S16	84	5	3-3	1-0	" " "	C
	S17	164	4	9-0	Shown	Stirrups-at Piers	L
	S18	82	4	10-0	"	" "	L
	S19	244	5	3-9	1-0	Curb & Slab-Transverse	G
	S20	244	5	5-0	1-0	" " "	D
	S21	24	5	24-6	Shown	" Parapet-Longitudinal	
	S22	24	5	13-6	"	" " "	
	S23	16	5	21-3	"	Parapet-Longitudinal	
	S24	8	5	22-0	"	Curb-Longitudinal	

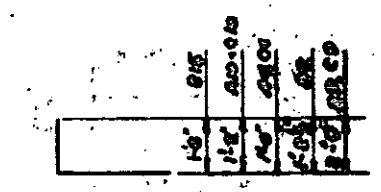
POUR	MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.

BAR BENDING DETAILS

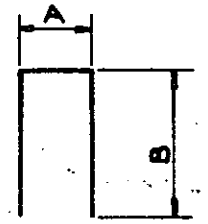
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.
OMIT DETAILS WHERE DIMENSIONS ARE BLANK.

S. P. R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4		8	

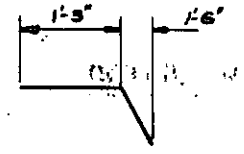
MARK	DIM. "A"	DIM. "B"
A14 & 11	8½"	2'-8"
A13-A18	4½"	2'-0½"



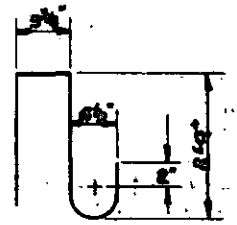
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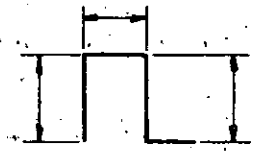
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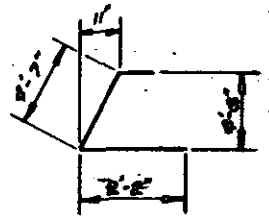
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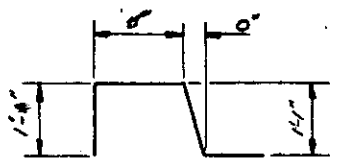
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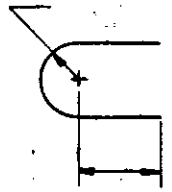
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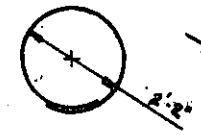
DETAIL F



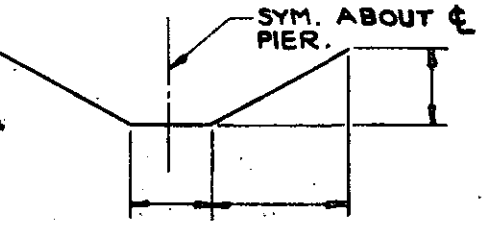
DETAIL G



DETAIL H



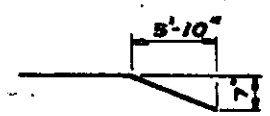
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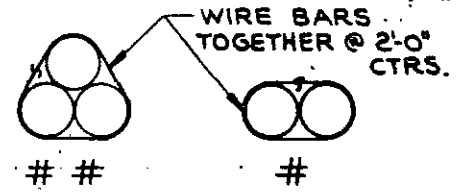
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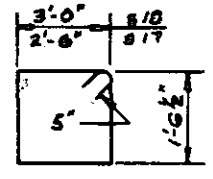
DETAIL M



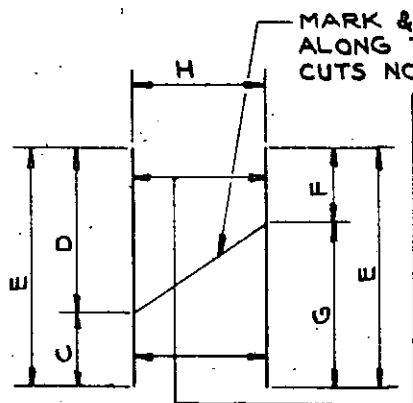
DETAIL N



BUNDLING DETAIL



DETAIL L



MARK & CUT ALL BARS ALONG THIS LINE. MAKE ALL CUTS NORMAL TO BAR AXIS.

"H" IS NUMBER OF BARS, BEFORE CUTTING.

MARK	C	D	E	F	G	H	SETS REQ'D.

CUT, BUNDLE & MARK. (MARK WITH BAR NO. & SET NO.)

BENT BARS, IF USED, IN CUTTING DIAGRAM SHALL BE BENT AFTER CUTTING.

CUTTING DIAGRAM

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	BILL OF BARS
	DESIGN SPEC AASHO '49 LOADING H20 CONC. STRESS 1500
	DATE 6-29-56 DESIGN CPO DRAWN DBO CKD. L.J.S.
	STRUCTURE B-44-56 SHEET 8 OF 8

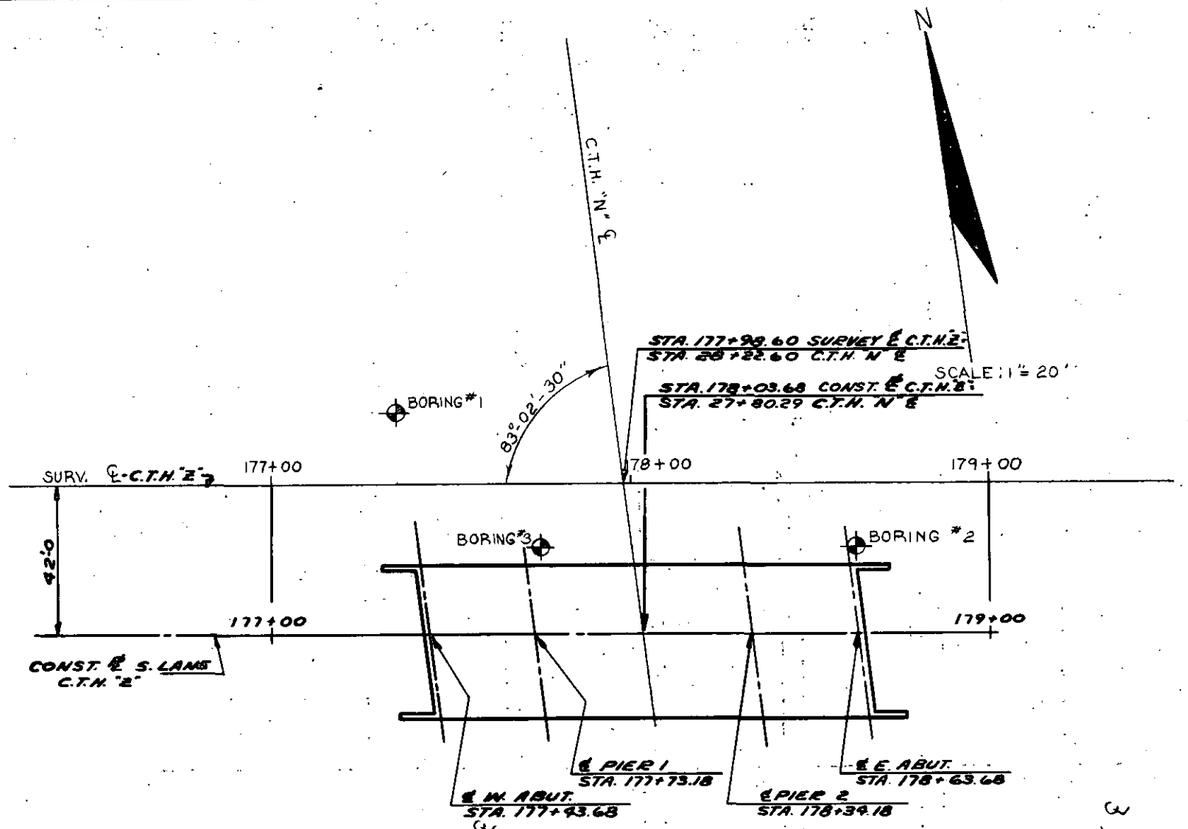
X35507

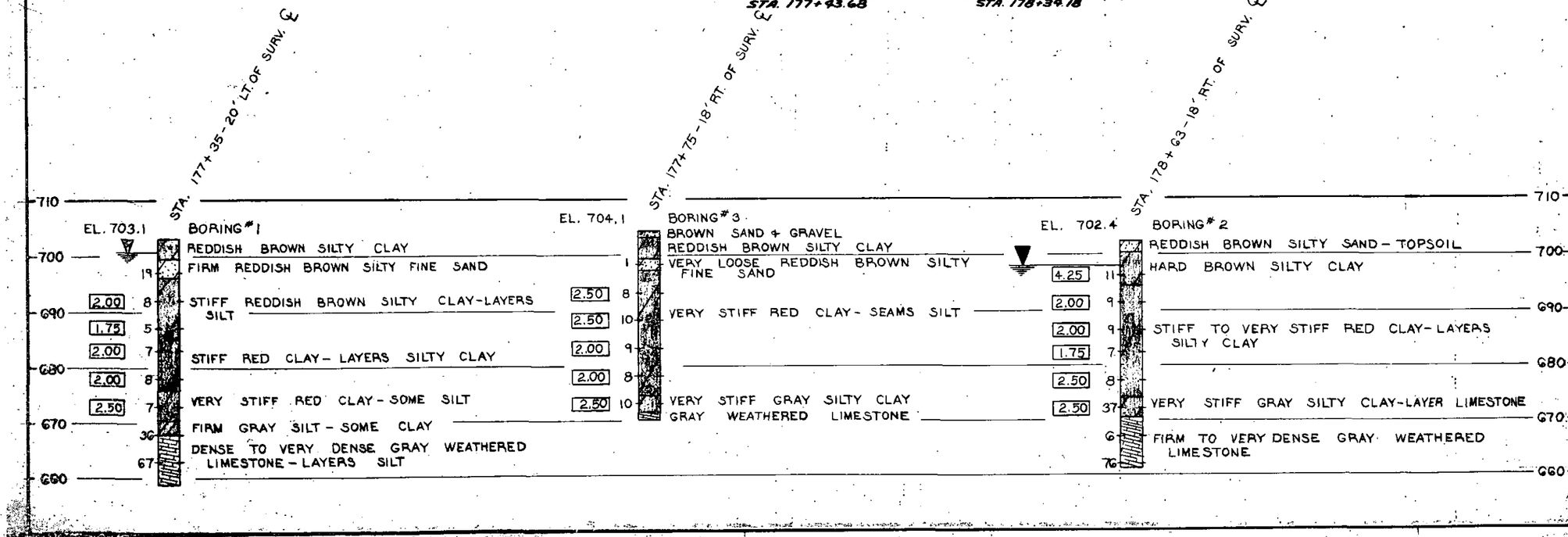
SUPERSTRUCTURE @ 40°

GRADE ABUTMENTS

FORM S-B-12-66

S.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4		9	



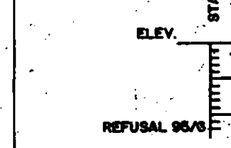


SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN

FOR THE DESIGN OF THE STRUCTURE FOUNDATION, TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MUST BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING WITH THE LOG OF SUCH EXPLORATION DATA AS INTERPRETED FOR SUCH DESIGN PURPOSE AS SHOWN. THE EXPLORATIONS WERE MADE BY ORDINARY AND CONVENTIONAL METHODS AND CARE DEEMED ADEQUATE FOR SUCH PURPOSE. HOWEVER, SINCE IT IS A MATTER OF COMMON KNOWLEDGE THAT THE EXACT CHARACTER OF ANY MATERIAL AND ITS REACTION IS DIFFICULT TO DETERMINE FROM SUCH SUBSURFACE EXPLORATION AND THAT THE KIND AND CHARACTER OF MATERIAL AT THE SITE WHERE THE FOUNDATIONS ARE BUILT MAY VARY SUBSTANTIALLY FROM THAT INDICATED BY THE LOG THEY ARE MADE AVAILABLE TO THE BIDDERS SIMPLY FOR WHAT THEY ARE WORTH, WITHOUT ANY WARRANTY, EXPRESSED OR IMPLIED THAT THE MATERIAL TO BE ENCOUNTERED IN BUILDING THE FOUNDATION WILL CONFORM THEREWITH. IF THE LOG IS USED BY THE CONTRACTOR IN MAKING HIS BID, IT IS HEREBY EXPRESSLY STIPULATED THAT THE COMMISSION ACCEPTS NO RESPONSIBILITY FOR SAID USE.

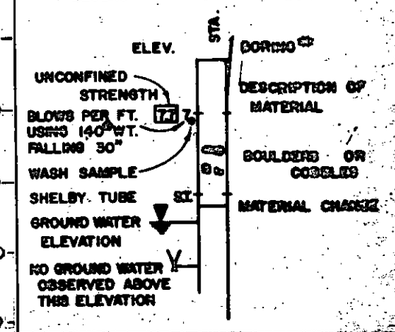
UNLESS OTHERWISE SPECIFIED THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" OD x 1.4" ID SPLIT SPOON SAMPLER WITH A 140 LB. HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

LEGEND OF PROBINGS



95/6 = 95 BLOWS FOR 6" PENETRATION
PROBING TAKEN WITH A 380# WT. FALLING 10" ON A 2" O.D. POINT

LEGEND OF BORINGS



STATE HIGHWAY COMMISSION OF WISCONSIN

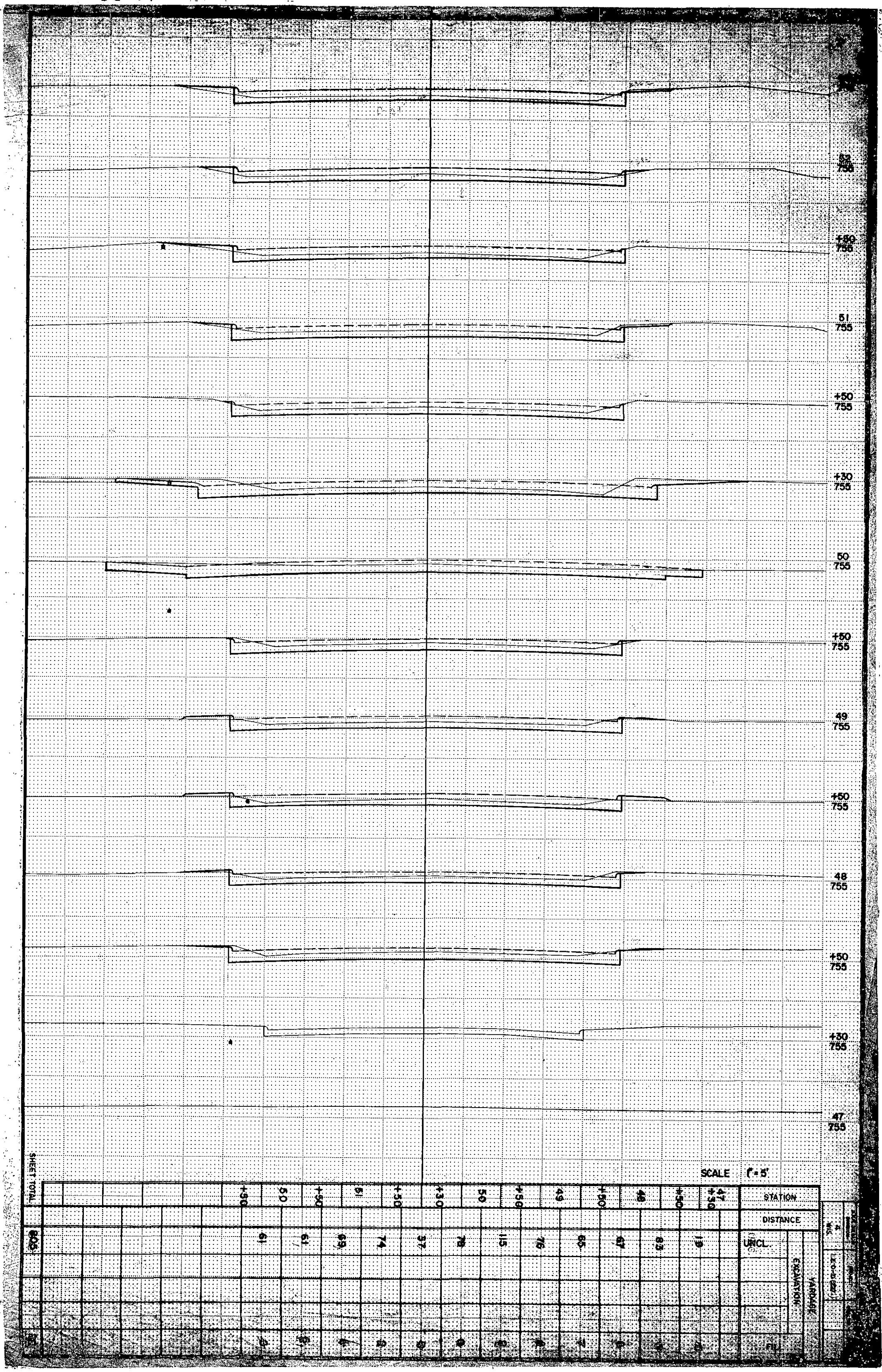
SUBSURFACE EXPLORATION

DESIGNED A.A.S. DRAWN CHECKED

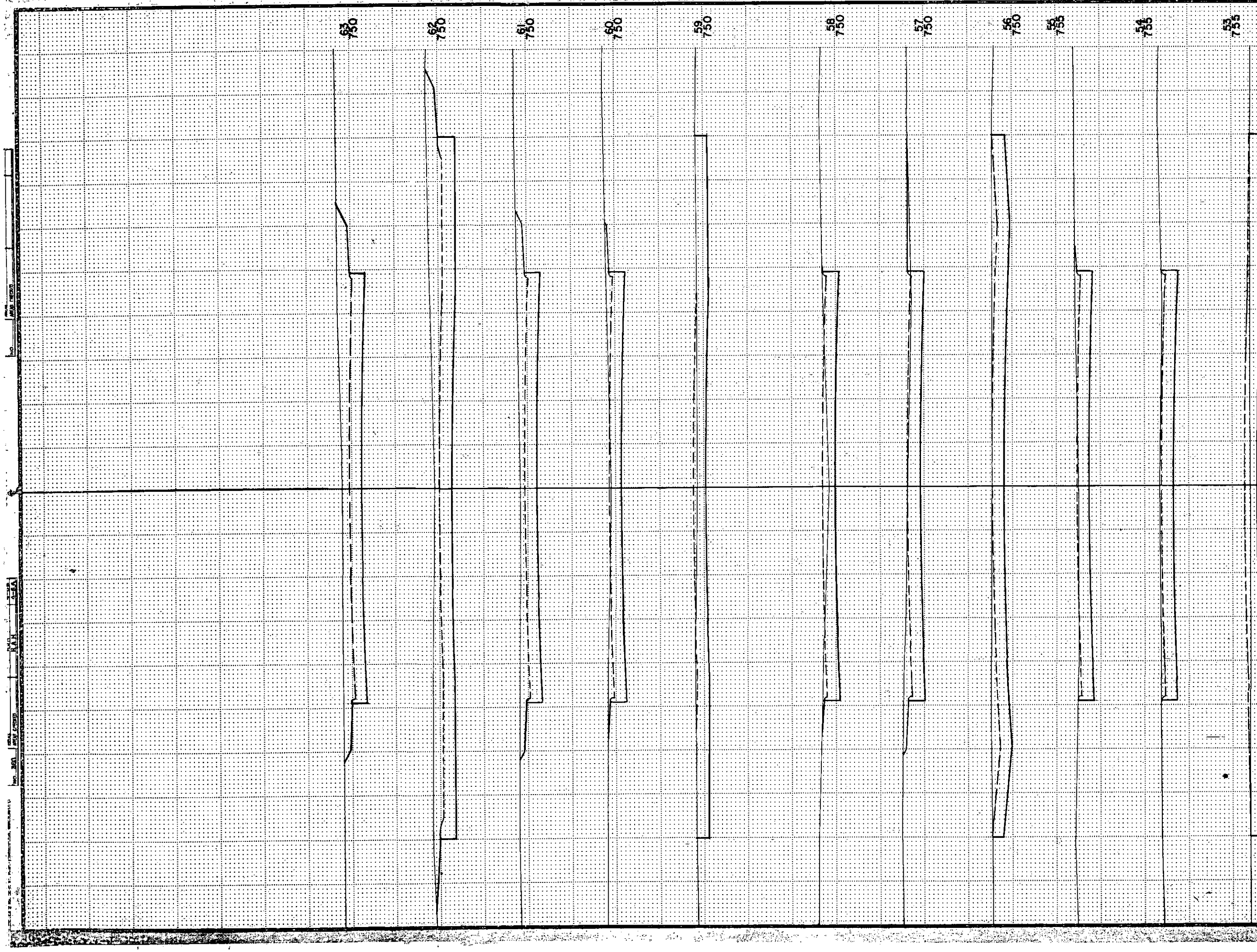
DATE 4-28-54

STRUCTURE B-44-56 SHEET 9 OF 9

51

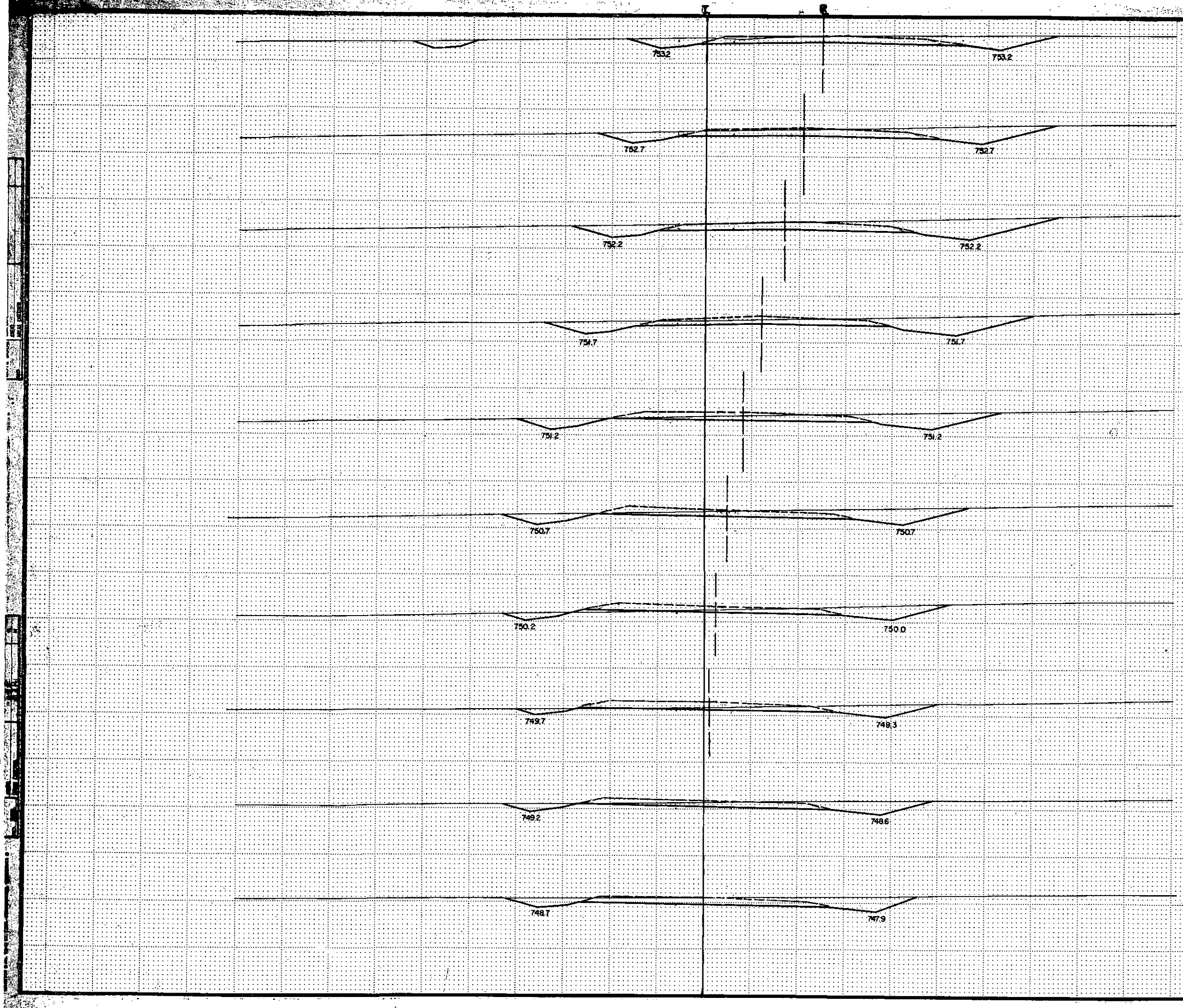

52
755
+50
755
51
755
+50
755
50
755
+50
755
49
755
+50
755
48
755
+50
755
+30
755
47
755
SCALE 1"=5'
STATION
DISTANCE
UNCL.
EXCAVATION
YARDAGE
FILL
SHEET TOTAL
805
+50
50
+50
51
+30
59
+50
49
+50
48
+50
47
+50
61
61
69
74
37
78
115
76
65
67
83
19

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	E 0-0122		



SCALE—1" = 5'

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	FILL
52 +50			
	111		4
53			
	319		0
54			
	289		0
55			
	387		0
56			
	402		6
57			
	263		5
58			
	300		0
59			
	328		0
60			
	350		0
61			
	598		0
62			
	637		0
63			
	50		0
HD			
SHEET TOTAL		4034	15



A.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 W.S.	E 0-0(22)		

STATION	DISTANCE	YARDAGE EXCAVATION UNCL	FILL
63 +10		533	
64		522	0
65		393	2
66		361	20
67		483	19
68		578	2
69		593	2
70		689	0
71		696	0
72		611	0
73			
SHEET TOTAL		5,659	65

1=10 HOR
1=10 VER

ULTIMATE ℄ NORTH RDWY

SURVEY ℄

CONSTRUCTION ℄ SOUTH RDWY

745.3

745.3

745.7

T R E E S & B R U S H

T R E E S & B R U S H

746.6

746.6

748.3

748.9

750.0

751.2

751.7

751.7

752.2

752.2

ULTIMATE

752.7

752.7

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	E-0-0(22)		

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	YARDAGE FILL
81+00	760		
73		828	0
74		994	0
80+00	750		
75		1219	0
76		1036	0
77		528	371
79+00	750		
78		87	1065
79		59	1217
80		52	1415
81			
79+00	750		
73+00	760		
74+00	760		
75+00	760		
76+00	760		
SHEET TOTAL		5003	4066

1=10 HOR
1=10 VER

55

NORTH RDWY

SOUTH RDWY

744.8

745.5

+05

744.4

745.3

WOODS

744.0

744.8

WOODS

743.9

744.3

743.4

743.8

743.3

743.3

743.7

744.1

744.1

744.5

744.5

ULTIMATE

744.9

744.9

R.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS	E.0-0.050		

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	YARDAGE FILL
81			
		54	1,348
82			
		65	1,281
83			
		96	1,157
84			
		82	1,069
85			
		69	1,082
86			
		67	796
87			
		59	756
88			
		100	345
89			
		126	44
90			
		280	6
91			
SHEET TOTAL		998	7,883

91+00 750

90+00 750

89+00 750

88+00 750

87+00 750

86+00 750

85+00 750

84+00 750

83+00 750

82+80 750

I=10 HOR
I=10 VER

57

SHEET TOTAL 292 2927

1"=10' HOR
1"=10' VERT

STATION	DISTANCE	UNCL.	FILL
91	343		0
92	350		0
93	509		0
94	341		74
95	89		146
96	230		72
97	454		0
98	611		0
99			

YARDAGE
EXCAVATION

BUR. OF RECLAMATION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WLS.	ED-D 622		

ULTIMATE & NORTH RDWY

CONSTRUCTION & SOUTH RDWY

SURVEY 1

745.9 745.2 745.6 746.2 746.5 746.0 746.8 746.4 746.9 747.1 747.3 747.4 746.6 746.0

SMALL TREES & BRUSH

SMALL TREES & BRUSH

SMALL TREES & BRUSH

SHEET TOTAL 2787 2800

I=10 HOR
I=10 VER

STATION	DISTANCE	EXCAVATION UNCL.	EXCAVATION FILL	YARDAGE
107+00 740				
99		643		0
100		648		0
101		589		0
102		369		41
103		180		133
104		119		367
105		102		744
106		85		815
107		52		705
108				
108+00 740				

A.R.E. DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
W.S. #	E.O.-0821		

SOUTH ROWY

NORTH ROWY

ULTIMATE

SMALL TREES & BRUSH

748.4 748.4
748.1 748.1
747.2 747.3
746.3 746.9
746.4 746.3
744.5 745.7
743.6 745.1
743.3 744.5
743.0 743.9

101+00 750
102+00 750
103+00 750
104+00 750
105+00 750
106+00 750
107+00 750
108+00 750
109+00 750
110+00 750
150+00 750

STATION	DISTANCE	EXCAVATION UNCL.	EXCAVATION FILL	VARDAGE
108	1276.00	54	715	
109		56	744	
110	1160.00	52	750	
111		35	615	
112	1154.00	65	309	
113		106	104	
114	1144.00	339	44	
115		1,098	0	
116	1134.00	220B	0	
117		4013	3201	
	1124.00	SHEET TOTAL		

BPR REGION DIVISION 4	PROJECT W15 E 0-0(22)	SHEET NUMBER	TOTAL SHEETS

1=10 HOR
1=10 VER

10940.00
740.00
1110+00
1160+00
1154+00
1144+00
1134+00
1124+00
1276+00

SURVEY L

CONSTRUCTION ℄ SOUTH RDWY.

ULTIMATE ℄ NORTH RDWY.

ULTIMATE

742.9 743.3 742.7 743.3 742.9 742.7 743.0 743.7 743.4 743.8 743.1 743.5 742.8 743.4 742.5 743.1

NORTH BOUND

SOUTH BOUND

CHAINAGE

STATION	DISTANCE	EXCAVATION UNCL.	FILL	VARDAGE
117				
124+00 740		3,232	0	
118				
		3,787	0	
119				
		3,400	0	
120				
123+00 740		2,145	0	
121				
		1,184	102	
122				
122+00 740		147	430	
123				
		54	709	
124				
125+00 740		82	743	
125				
		1,288	1,288	

SHEET TOTAL

DRAWING NO.	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS	E0+0021		

742.0 742.8 ULTIMATE

118+00 750

742.7 742.5

123+00 750

741.9 742.2

128+00 750

741.1 741.9

122+00 740

740.0 740.7

123+00 740

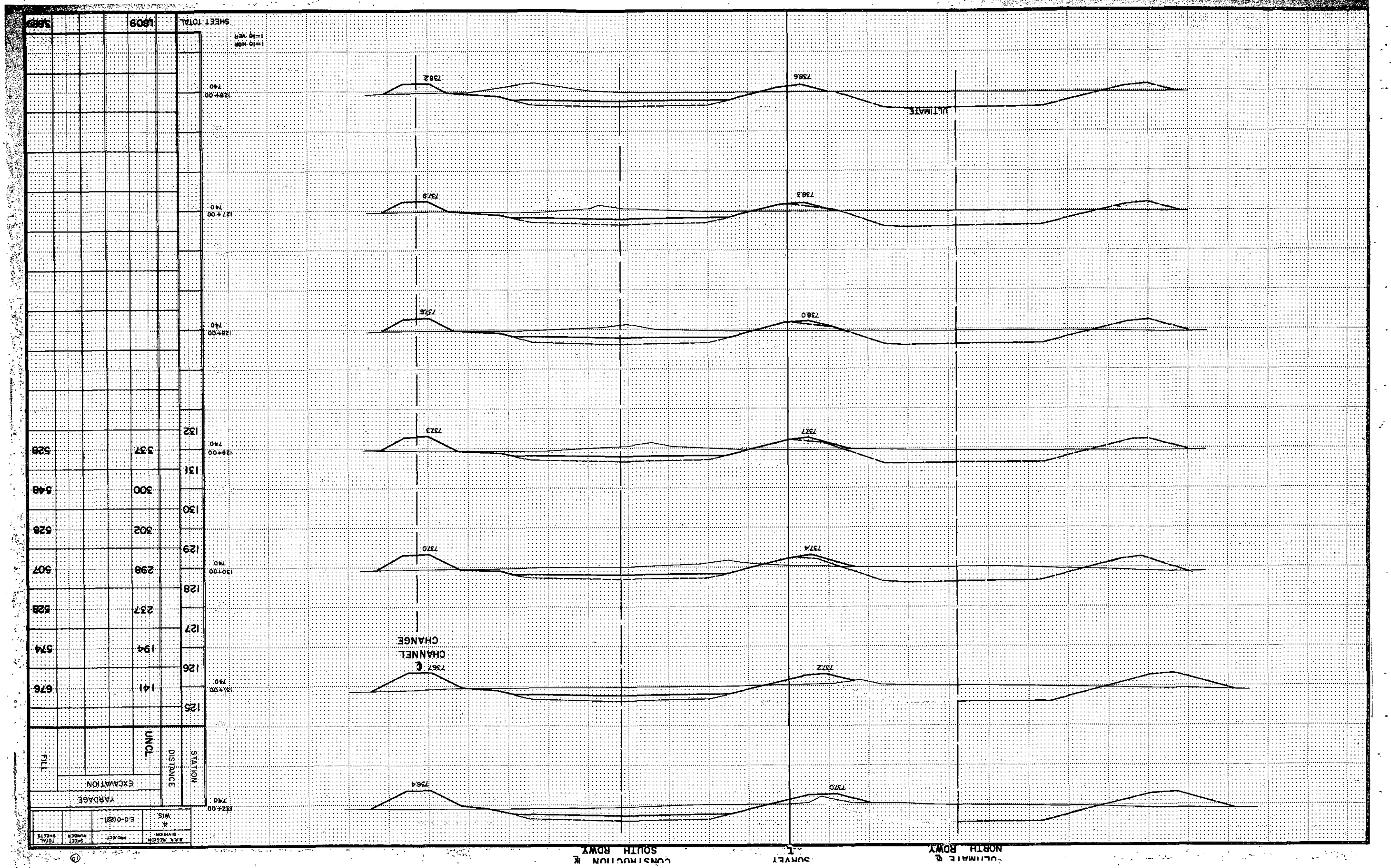
739.8 739.5

124+00 740

738.8 739.2

125+00 740

738.5 738.8


SHEET TOTAL
I=10 HOR
I=10 VER
128+00
740
127+00
740
126+00
740
125+00
740
124+00
740
STATION
DISTANCE
UNCL.
FILL
EXCAVATION
YARDAGE
125
126
127
128
129
130
131
132
141
194
237
298
302
300
337
676
574
528
507
528
548
528
7364
7373
7367
7374
7370
7386
7379
7382
7386
7382
7373
7377
7370
7374
7367
7372
7364
7370
ULTIMATE
CHANNEL CHANGE
CONSTRUCTION & SOUTH RDWY
SURVEY
ULTIMATE & NORTH RDWY
E.R.R. REGION
DIVISION
PROJECT
SHEET NUMBER
TOTAL SHEETS
WIS
4
E0-0(22)

NORTH ROWY. — SOUTH ROWY.

742.0 — 742.0

742.0 — 740.5

741.0 — 739.4

740.0 — 738.6

739.0 — 737.8

738.0 — 737.0

℄ CHANNEL CHANGE

ULTIMATE

736.6 — 735.8

736.8 — 736.1

U.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	EXO-0129		

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	FILL
140+00 740			
132			
		331	769
133			
		259	978
134			
138+00 740		172	1200
135			
		120	1081
136			
137+00 740		124	911
137			
		126	707
138			
139+00 740		76	800
139			
		104	574
140			
185+00 740			
184+00 740			
183+00 740			
1=10 HOR 1=10 VER			
SHEET TOTAL		1312	7220

PLATE 3 - FUNCTIONAL CROSS SECTION - OPEN DOTTED
NATIONAL TRAINING GRADE - DIVISION

SCALE 1" = 10'

SHEET TOTAL 931

STATION	DISTANCE	EXCAVATION	FILL	UNCL.
140	243	130		
148 740 41	194	44		
42	59	328		
147 740 43	69	607		
44	87	924		
146 740 45	83	665		
46	70	428		
145 740 47	70	209		
48				
144 740 49		56		124
143 740				
142 740				
141 740				

B.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	E.O.-0(22)		

ULTIMATE & NORTH RDWY
SURVEY
CONSTRUCTION & SOUTH RDWY

LARGE CHECKED

PLATE 3 - FUNCTIONAL CROSS SECTION - OPEN DOTTED
NATIONAL TRACING PAPER DIVISION

State Proj. No. Sheet No. of Sheets

SHEET TOTAL

STATION	DISTANCE	EXCAVATION UNCL.	EXCAVATION	FILL
158 740	149	57	220	
150				
157 740		65		365
151				
152 740		59		403
153				
156 740		48		559
154				
155 740		35		619
155				
154 740		22		665
156				
153 740		83		378
157				
154 740		98		185
158				
153 740		117		78

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	E0-0(22)		

+58-22" OAK
+57-16" OAK
+28-22" ELM
+20-24" ASH
+10-24" ELM
+07-18" ASH
+15-20" OAK
ULTIMATE
+98-30" STUMP

| | | | |

PLATE 3 - FUNCTIONAL BOSS SECTION - OPEN BOTTED

STATION	DISTANCE	EXCAVATION UNCL.	FILL
167			
730			
158		119	133
159			
166			
730		194	318
160			
		802	204
161			
165			
740		1284	0
162			
		2008	0
163			
164			
740		2483	0
164			
		2430	0
165			
163			
740		2302	0
166			
162			
740		1,581	7
167			
740			
161			
740			
160			
740			
159			
740			

SHEET TOTAL 1,150

B.P.R. REGION	PROJECT	SHEET	TOTAL SHEETS
DIVISION 4 WIS	E 0-0122	NUMBER	

ULTIMATE

739.0 739.0 737.0 736.6 736.7 735.3 735.4 734.0 733.2 732.7 731.0 729.4 730.7 729.8 728.0 727.4 727.4 727.5

ULTIMATE N.W. RAMP R

INITIAL N.W. RAMP R

ULTIMATE ℄ NORTH ROWY

SURVEY ℄

CONSTRUCTION ℄ SOUTH ROWY

CONSTRUCTION ℄
SOUTH RDWY

℄ LT.

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	S.O.-0(22)--		

NW RAMP
℄

+50 LT - 8" TWIN THORN APPLE

+95 LT - 6" TWIN THORN APPLE

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	YARDAGE FILL
167 +44	409		44
168 +50	150		2695
167 +40	37		5088
SHEET TOTAL	596		7907

67

PLATE 3 - FUNCTIONAL CROSS SECTION - OPEN DOTTED

SHEET TOTAL 1731

SURVEY ℄ LT

SURVEY ℄ RT

STATION	DISTANCE	FILL	EXCAVATION	UNCL.
			YARDAGE	
168	52			4086
+50				
169	348			2735
170				
+60	1331			7084
710				

B.P.R. REGION DIVISION	PROJECT	4 WIS
SHEET NUMBER		E-O-C (22)
TOTAL SHEETS		

169 710 — 715.5 — 710.0 — N.W. RAMP ℜ

170 710 — 710.5 — 708.0 — N.W. RAMP ℜ

+60 710 — 706.9 — 708.6 — N.W. RAMP ℜ

+50 710 — 703.8 — CHANNEL CHANGE ℄

168 710 — 703.6 — CHANNEL CHANGE ℄

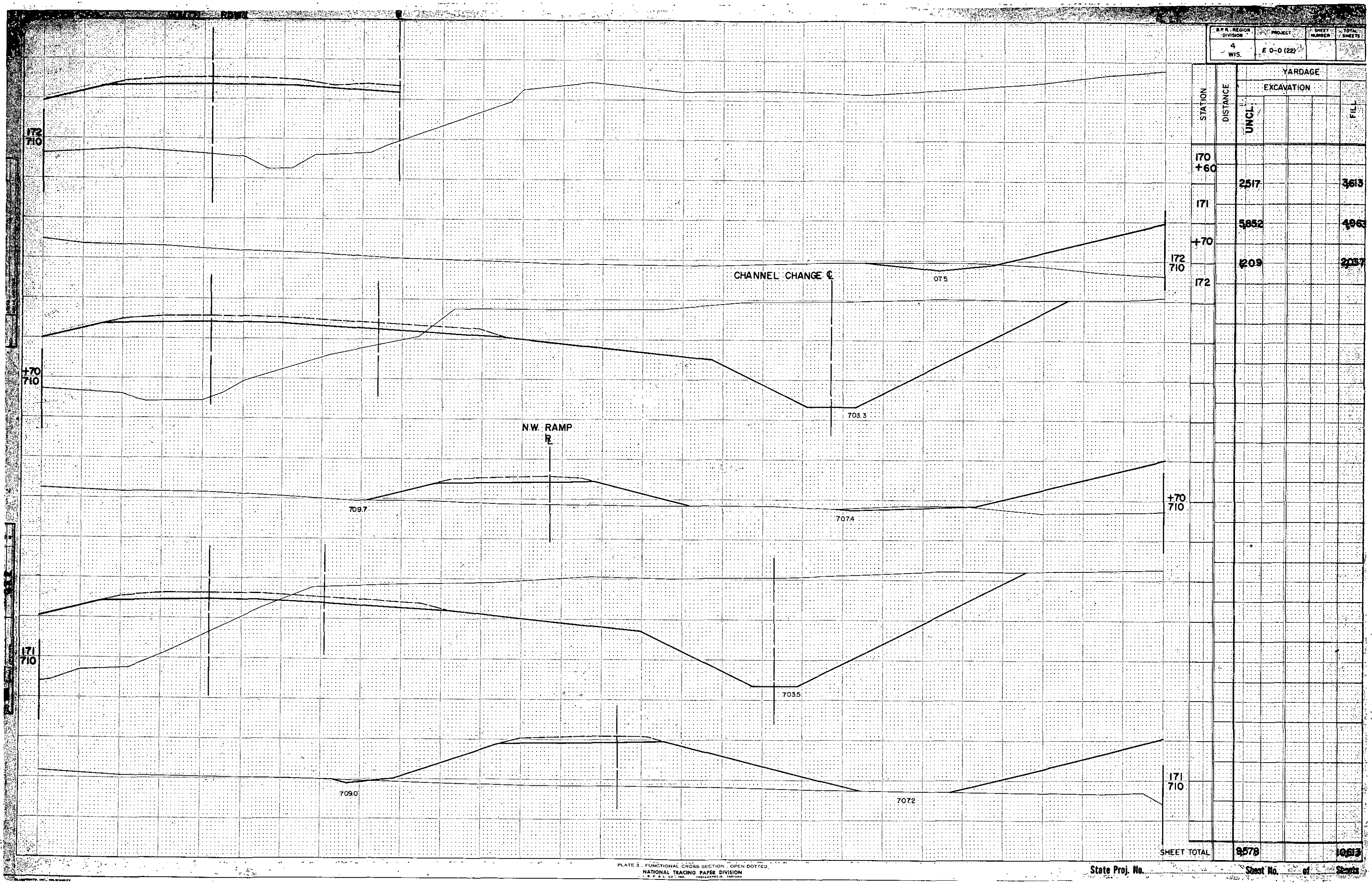
169 710 — 707.5 — S.W. RAMP ℜ

170 710 — 703.8 — CONSTRUCTION ℜ SOUTH BDWY

+60 710 — S.W. RAMP ℜ

LARSEN CHICKERING

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	E 0-0 (22)		



STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	YARDAGE FILL
170 +60			
	2517		3613
171			
	5852		4963
+70			
	1209		2037
172			
SHEET TOTAL	9578		10613

PLATE 3 . FUNCTIONAL CROSS SECTION . OPEN DOTTED.

NATIONAL TRACING PAPER DIVISION
I. R. P. L. CO., INC. INDIANAPOLIS, INDIANA

State Proj. No. ..... Sheet No. ..... of ..... Sheets

69

PLATE 3 FUNCTIONAL CHANGE SECTION - OPEN DOTTED

SHEET TOTAL

69

STATION	DISTANCE	EXCAVATION UNCL.	FILL
172	22	1683	
+25			
173	41	5223	
174	6	6971	

VARDAGE

SURVEY ℄ LT

SURVEY ℄ RT.

CONSTRUCTION ℄ SOUTH RDWY.

173 +25 710 — 707.6

173 710 — 707.8

174 710 — 708.1

MATCH LINE

SW RAMP ℄

722.5

173 710

+06 RT

SHOP

719.5

+22 RT

℄ RT

174 710

MATCH LINE

712.5

℄ LT

B P R REGION DIVISION	PROJECT	E 0-0 (22)	4 WIS.
SHEET NUMBER			
TOTAL SHEETS			

16

SOUTH BOUND

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	E 0-0 (22)		

+32 RT- 40" ELM

+21 RT- 42" ELM

MATCH LINE

176 710

175 710

MATCH LINE

174 +45 710

7094

7084

7082

176 710

175 710

174 +45 710

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	YARDAGE FILL
174			
	74		2909
+45			
	472		2315
175			
	1178		3169
176			
SHEET TOTAL		1,724	8393

PLATE 3 . FUNCTIONAL CROSS SECTION . OPEN DOTTED

NATIONAL TRACING PAPER DIVISION
I. B. P. & L. CO. INC. INDIANAPOLIS, INDIANA

State Proj. No. Sheet No. of Sheets

PLATE 3 - FUNCTIONAL CROSS SECTION - OPEN DOTTED

SHEET TOTAL 2639

SURVEY ℄ LT.

CONSTRUCTION ℄ SOUTH BDWY.

SURVEY ℄ RT.

MATCH LINE

MATCH LINE

STATION	176 / 178 / 442 / 138 / 177 / 710
DISTANCE	442 / 1042 / 1780 / 2639
YARDAGE EXCAVATION UNCL.	224 / 82 / 63
YARDAGE EXCAVATION TOTAL	1743 / 3278 / 2639
YARDAGE FILL	

B.P.R. REGION DIVISION 4 WIS.

PROJECT E 0-0 (22)

SHEET NUMBER

TOTAL SHEETS

PLATE 3 - FUNCTIONAL CROSS SECTION - OPEN DOTTED
NATIONAL TRACING PAPER DIVISION

State Proj. No.

SHEET TOTAL 230 8458

SHEET NO. OF SHEETS

YARDAGE	STATION	DISTANCE	EXCAVATION	FILL
	178			
	+50			
3483	179	80	UNCL.	
6006	180	150		
	179			
	700			
	180			
	720			

699.0
+90 LT-22' ELM
+77 LT-48' ELM
+25 LT
699.5
+90 RT-8' THORN APPLE
700.0
720.0
THORN APPLE SHRUB
+78 LT
+50 RT-8' THORN APPLE

SOUTH FORK

E.P.R. DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
WIS. 4	E.D-0(22)=		

SURVEY
℄ RT.

CONSTRUCTION ℄
SOUTH RDWY.

SURVEY
℄ LT.

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	E 0-0 (22)		

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	YARDAGE FILL
180			
		1,543	852
181			
		3791	0
182			
		5,764	0
183			
183 730			
182 730			
181 730			
SHEET TOTAL		11,098	

183
730

722.9

MATCH LINE

ULTIMATE ℄
NORTH RDWY.

182
730

722.6

722.0

MATCH LINE

ULTIMATE

181
730

722.3

+35 LT

SMALL
TREES
&
SHRUBS

+05 LT

181
730

PLATE 3 - FUNCTIONAL CROSS SECTION - OPEN DOTTED

SOUTH BDWY.

S.E. RAMP
℄

N.E. RAMP
℄

187
730
724.1
721.5
721.3
185
730
723.8
721.0
721.0
723.7
185
730
723.5
722.5
719.5
720.7
722.7
185
730
184
730
723.2
MATCH LINE
186
730
184
730

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	YARDAGE FILL
183			
187 730		6426	0
184		11274	0
185		14756	0
186		11222	0
187			
SHEET TOTAL		43678	0

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	E 0-0(22)		

PLATE 3 - FUNCTIONAL CROSS SECTION (OPEN DOTTED)
NATIONAL TRACING PAPER DIVISION
I. P. S. CO., INC., INDIANAPOLIS, INDIANA

State Proj. No. ..... Sheet No. ..... of ..... Sheets

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	E 0-0(22)		

SURVEY ℄ RT.

CONSTRUCTION ℄ SOUTH RDWY.

191 720

727.1

SURVEY ℄ LT.

TREES & SHRUBS LEFT

+08 LT.

N.E. RAMP ℄

190 720

726.5

N.E. RAMP ℄

S.E. RAMP ℄

189 730

722.5

722.6

S.E. RAMP ℄

188 730

722.0

N.E. RAMP ℄

722.3

AREAS CHECKED

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	YARDAGE FILL
187			
		6,878	0
188			
191 720		2,638	87
189			
		446	354
190			
		626	267
191			
190 720			
189 730			
188 730			
SHEET TOTAL		10,588	

PLATE 3 - FUNCTIONAL CROSS SECTION - OPEN DOTTED

NORTH ROWZ

SOUTH ROWZ

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	E 0-0 (22)		

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	YARDAGE FILL
+50 720			
191		389	4
+65			
194 710		91	144
192		19	335
+30			
18			911
+50		50	3,248
193 710			
193		59	6,271
194		37	2,885
+50			
+50 710			
+30 720			
192 720			
191 +65 720			
SHEET TOTAL		663	13,705

712.0

711.5

714.3

+53

714.5

TREES & SHRUBS

716.1

725.1

726.6

ULTIMATE

726.9

+40

PLATE 3 - FUNCTIONAL CROSS SECTION - OPEN DOTTED

NATIONAL TRACING PAPER DIVISION
I. P. P. L. CO., INC. INDIANAPOLIS, INDIANA

State Proj. No. ..... Sheet No. .... of .... Sheets

ULTIMATE ℄ NORTH RDWY

SURVEY ℄

CONSTRUCTION ℄ SOUTH RDWY

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	E 0-0 (22)		

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	YARDAGE FILL
199 730			
194 +50			
	22		1,224
+75			
	30		781
195			
198 730		452	965
196			
		1,107	70
197			
		2,115	0
198			
197 730		2,693	0
199			
196 730			
195 720			
194 +75 720			
SHEET TOTAL		6419	

7259 726.5

726.8 726.2 727.5

725.2 726.5 727.0

723.8 724.8

722.4 723.0 715.0

ULTIMATE

722.0 715.0 713.5

PLATE 3 - FUNCTIONAL CROSS SECTION - OPEN DOTTED

NORTH RDWY.

SOUTH RDWY.

A.P.A. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	F-9-9 (22)		

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	YARDAGE FILL
209 +75			
	91		197
210			
	26		178
+40			
	30		328
+78			
	11		87
+88			

718.2

210+88
720

718.0

210+78
720

717.4

210+40
710

ULTIMATE

BRUSH & TREES

BRUSH & TREES

703.8

210+00
710

1=10 HOR
1=10 VER

SHEET TOTAL 158 4/67

SHEET TOTAL 1269 4378

1=10 HOR
1=10 VERT

STATION	DISTANCE	EXCAVATION UNCL.	FILL
208+00	720		
	+75	130	1639
207+00	720		
	+45	63	1019
	209	328	861
208		413	400
	207	200	283
	206	135	176
	205		

YARDAGE

S.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
WIS 4	E.0-0(22)		

7180 7200 ULTIMATE

7170 7184

7095 7168

7020

208+00 720

7028 7057

208+45 720

7033 7022

208+78 710

BRUSH & TREES

CONSTRUCTION ℄ SURVEY ℄ ULTIMATE ℄

SOUTH ROWT NORTH ROWT

NORTH RDWY. ℄ SOUTH RDWY.

721.6 721.0

722.4 722.7

723.2 723.4

724.0 724.1

724.8 724.8

ULTIMATE

725.6 725.5

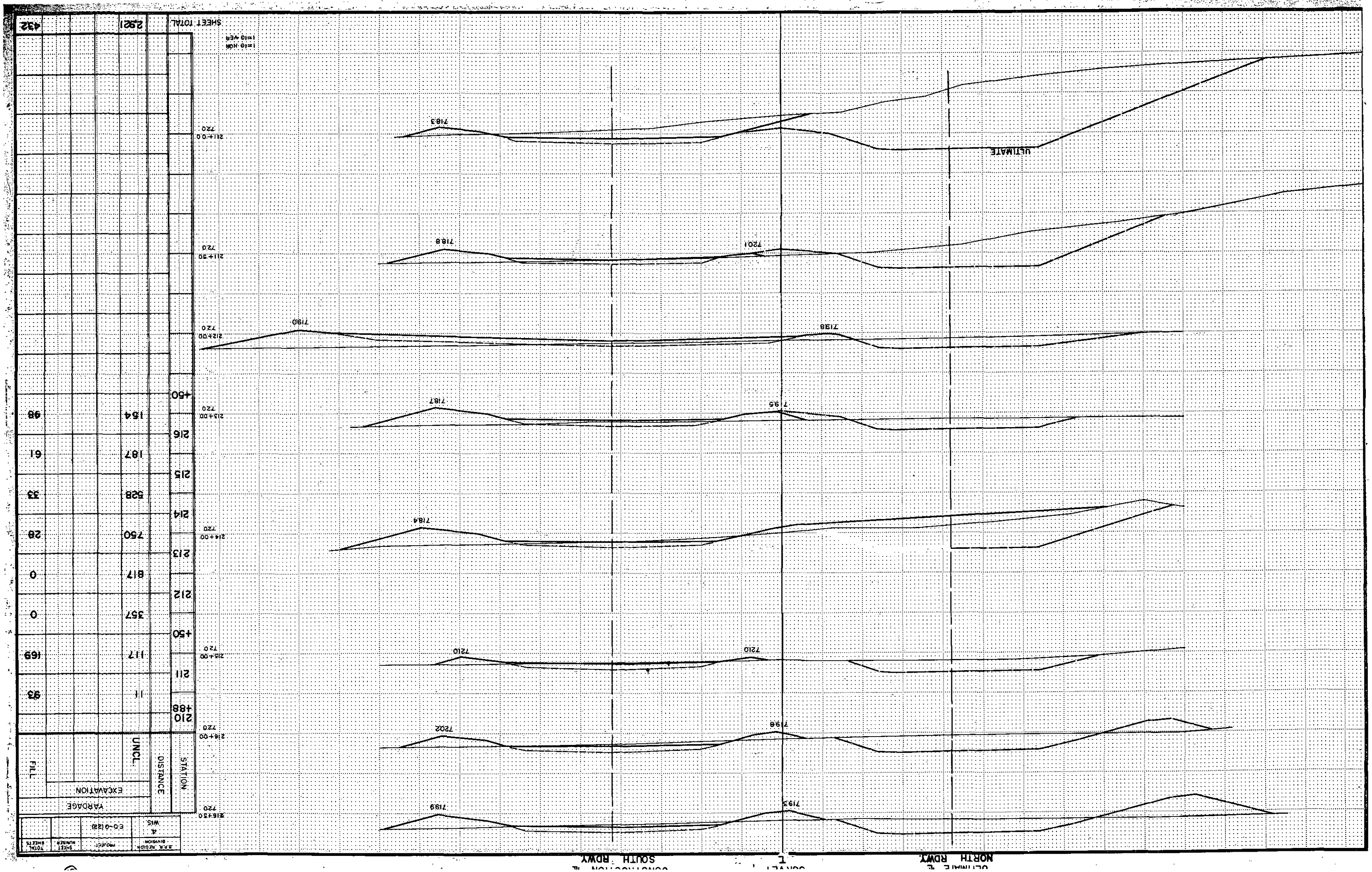
B.P.R. REGION - DIVISION -	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	S 0-0(28)		

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	YARDAGE FILL
205 720			
	199	2,056	0
	200	1,141	0
	1	748	0
204 720			
	2	643	0
	3	330	7
	4	93	100
203 720			
	205		
202 720			
201 730			
200 730			

(+10' HOR.
(+10' VER.

SHEET TOTAL 5011 107

81


ULTIMATE
NORTH RDWY
SOUTH RDWY
7183
7188
7201
7190
7198
7187
7195
7184
7210
7202
7198
7193
7193
SHEET TOTAL
432
2921
154
187
528
750
817
357
117
11
1
1
1

NORTH RDWY.

SOUTH RDWY.

7164

7190

7191

7193

7196

ULTIMATE

A.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	E0-0122		

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	YARDAGE FILL
288+17 720			
216 +50			
	146		130
217			
	83		302
+45			
	61		365
+80			
218+00 720			
	32		350
218			
	9		650
+17			
217+80 710			
217+65 720			
217+00 720			

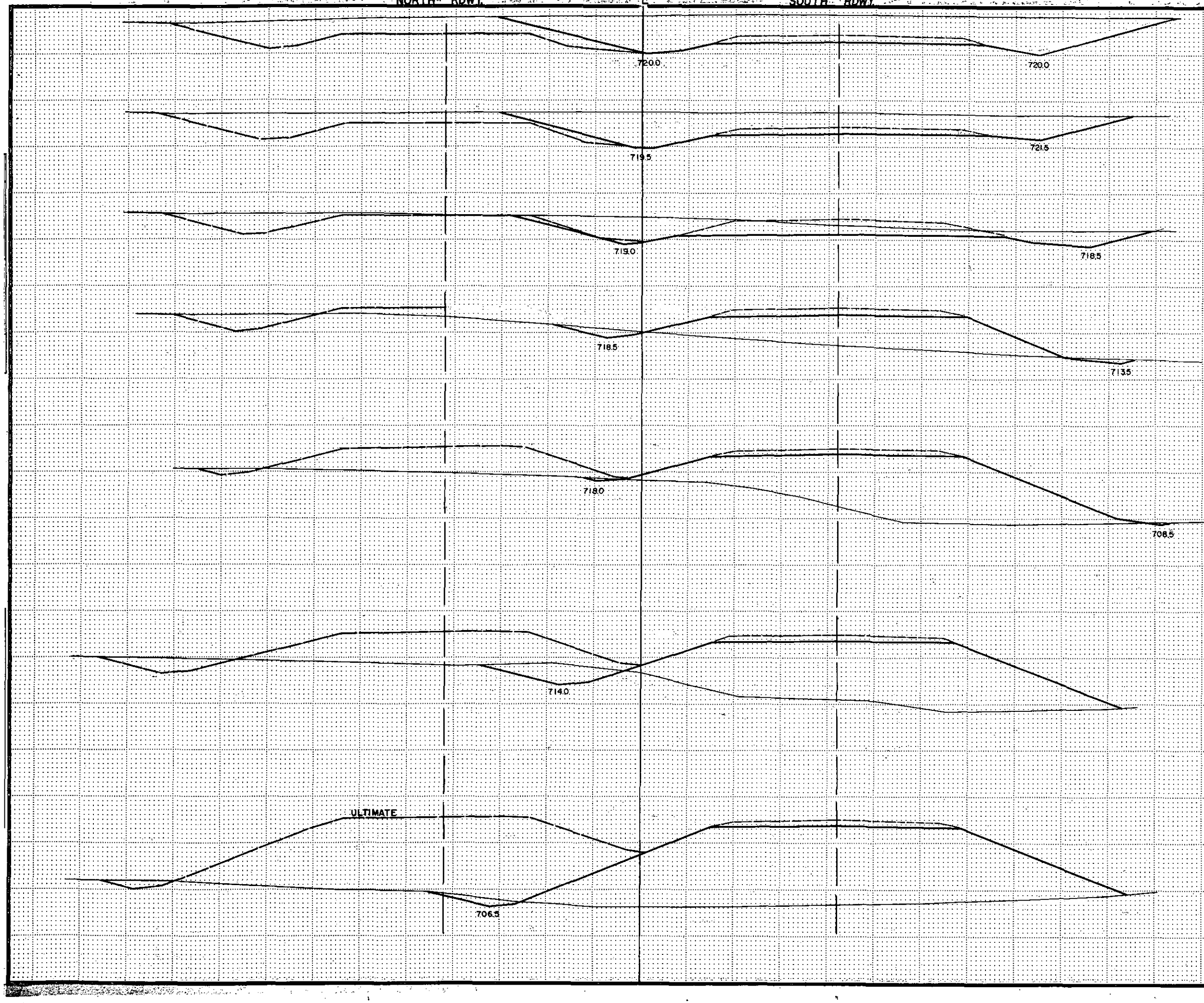
1=10 HOR
1=10 VER

SHEET TOTAL: 331 797

ULTIMATE ℄ NORTH RDWY.

SURVEY ℄

CONSTRUCTION ℄ SOUTH RDWY.



B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	E.O.- D1221		

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	FILL
218 +17			
		20	1,787
+50			
		35	1,537
+83			
		11	604
219			
		91	2,460
220			
		466	833
221			
		1,744	37
222			
		2441	0
223			
SHEET TOTAL		4808	7249

221+00 720

222+00 720

221+00 720

220+00 720

219+00 710

218+83 710

218+50 720

1"=10' HOR
1"=10' VER

8-3

NORTH ROWE — ℄ — SOUTH ROWE

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS	E 0-0(22)		

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	FILL
223			
		2,496	0
224			
		2754	0
225			
		3,464	0
226			
		3,267	0
227			
		2,245	0
228			
		941	161
229			
		291	200
+45			

7151 — 6980 — 2291+45 700

7160 — 2291+00 700

7170 — 7165 — 2281+00 720

718.0 — 717.5 — 2271+00 730

7170 — 718.5 — 2261+00 730

+99-10" ASH

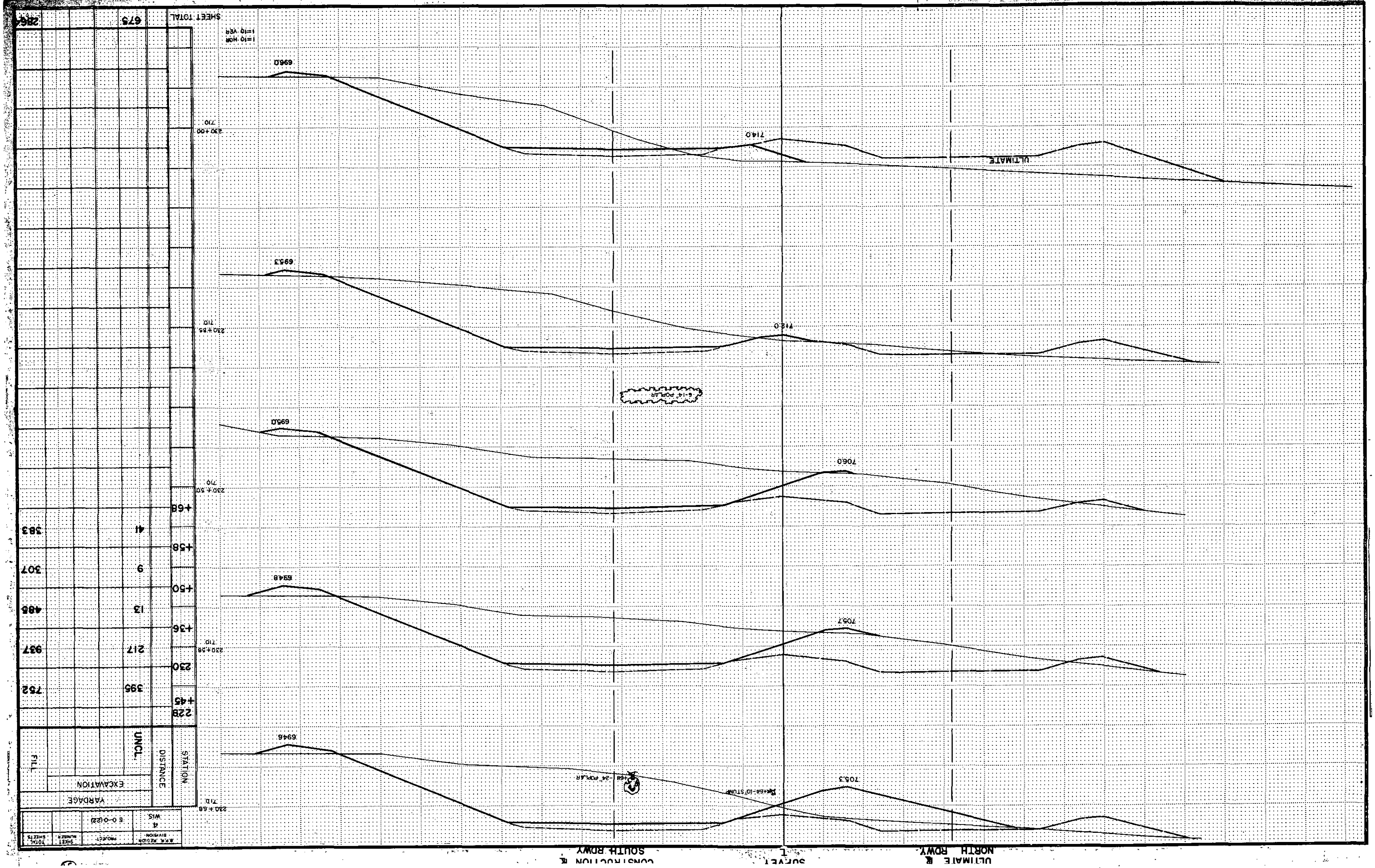
7190 — 2251+00 730

ULTIMATE

7205 — 2241+00 730

t=10 HOR
t=10 VER

SHEET TOTAL 1540 T-1


SHEET TOTAL
673
286
I=10 HOR
I=10 VER
696.0
714.0
ULTIMATE
230+00
710
695.3
716.0
6-14" POPLAR
695.0
706.0
230+50
710
694.8
705.7
230+58
710
694.6
705.3
230+68
710
STATION
DISTANCE
UNCL.
FILL
EXCAVATION
VARDAGE
228
+45
395
752
230
217
937
+36
13
486
+50
9
307
+58
41
383
+68
S.P.R. REGION
DIVISION
PROJECT
SHEET NUMBER
TOTAL SHEETS
4
WIS
E 0-0(22)
ULTIMATE
NORTH RDWY
SURVEY
CONSTRUCTION
SOUTH RDWY

SHEET TOTAL 189 6798

I=10 HOR
I=10 VER

68+40
231+00
710

69+37
231+18
710

69+30
231+50
720

68+98
231+73
720

STATION
DISTANCE
UNCL
FILL
EXCAVATION
YARDAGE

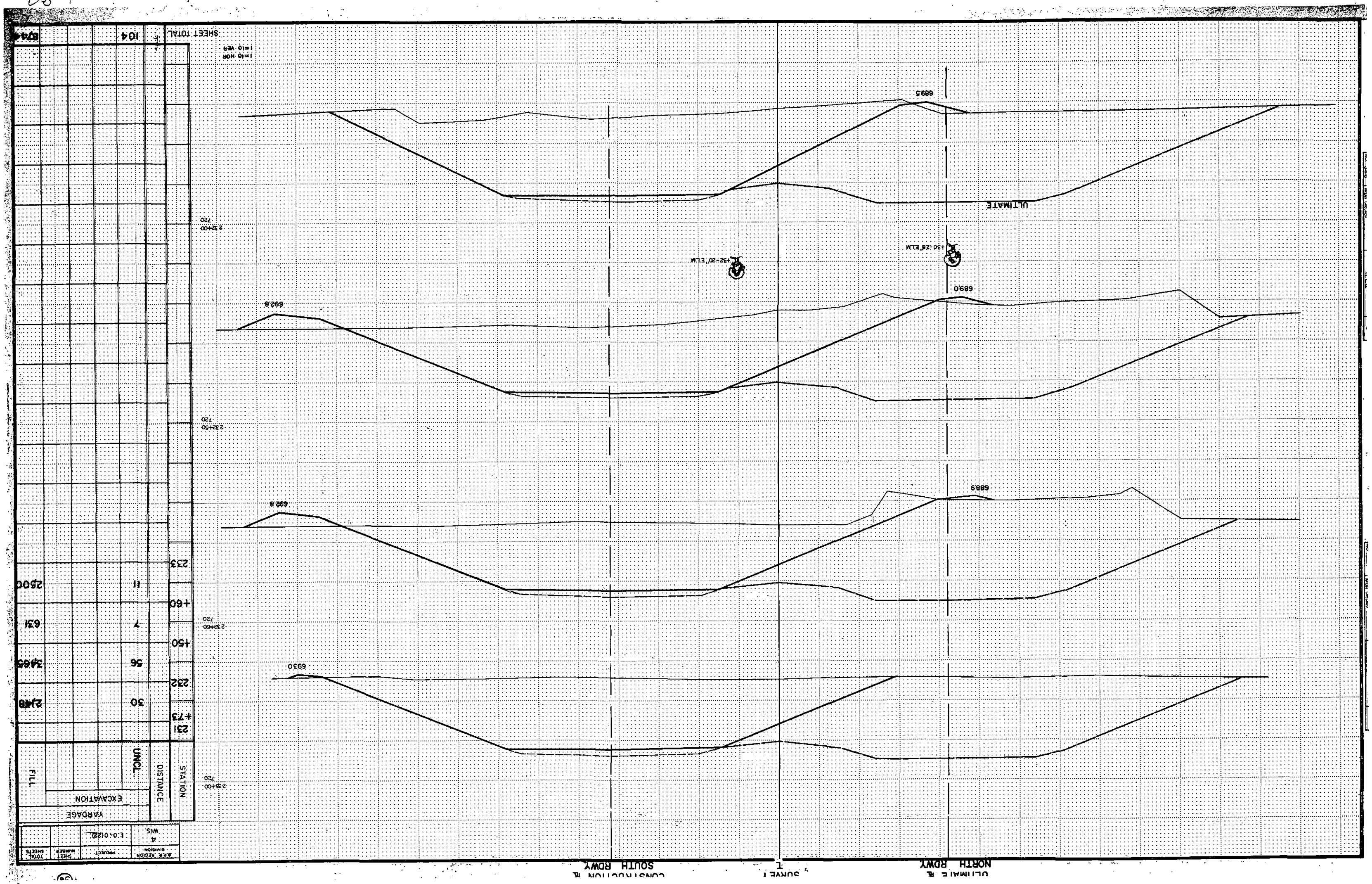
250 +68 1018 117
231 15 997
+16 25 2398
450 35
+73 22 1665

R.R. REGION
DIVISION
W.S.
E 0-0122
PROJECT
SHEET NUMBER
TOTAL SHEETS

SOUTH BOUND

NORTH BOUND

68+40
70+40
ULTIMATE
W 0006
69+37
70+00
6+37
69+30
68+98
BB- 18" OAK
4+03- 6" ELM


SHEET TOTAL 104 6744
1=10 HOR
1=10 VER
2 32+00
720
2 32+50
720
2 33+00
720
2 33+50
720
692.8
689.3
ULTIMATE
+32-20"ELM
+30-28"ELM
689.0
692.8
688.9
653.0
STATION
DISTANCE
UNCL.
FILL
EXCAVATION
YARDAGE
231
+73
232
150
+60
233
2500
2488
3465
631
30
56
7
4
WLS
E.O.-0122
SOUTH RDWY
CONSTRUCTION
SOUTH RDWY
ULTIMATE
NORTH RDWY

NORTH ROWY

℄

SOUTH ROWY

D.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS	E 0-0121		

709.7

709.9

710.5

710.0

696.0

ULTIMATE

2344+79 710	STATION	DISTANCE	YARDAGE EXCAVATION UNCL	YARDAGE FILL
	233			
2344+56 720		19		2,315
	+37			
		93		1,522
	+70			
		211		723
	234			
		419		728
	+56			
		78		204
	+79			
2344+00 720				
2339+70 720				
2339+37 720				
		SHEET TOTAL	820	5,437

1=10 HOR
1=10 VER

8-9

STATION	DISTANCE	FILL	EXCAVATION	UNCL.
234+79	217			13
235	815			7
236+60	322			11
236	17		U44	
236+60	0		1426	
237				
237+00				

YARDAGE

B.P.R. REGION / DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS	E0-0 (22)		

SHEET TOTAL 2601 137

1=10 HOR
1=10 VERT

ULTIMATE NORTH RDWY ℄

CONSTRUCTION ℄ SOUTH RDWY

SURVEY ℄

HEAVY BRUSH

HEAVY BRUSH

7095 7079 7103 7103 7103 7103

NORTH RDWY

℄

SOUTH RDWY

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	E.D.-D(122)		

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	FILL
237			
239+36 720		2,57	0
+70		852	0
238		691	113
+40		344	496
239		72	465
+36			
238+40 720			
238+00 720			
237+70 720			

707.5 713.6

705.0 712.5

711.9

HEAVY BRUSH

711.5 711.5

HEAVY BRUSH

ULTIMATE

711.2 711.2

1=10 HOR
1=10 VER

SHEET TOTAL 4530 106

STATION	DISTANCE	EXCAVATION UNCL.	FILL
239+36	50	913	
240	143	1,243	
241	587	235	
242	1,159	0	
243	1,156	0	
244	980	0	
245	1,118	0	
246	1,194	0	
247			

SHEET TOTAL 6,387 2,591

BR. REGION / DIVISION	PROJECT	SHEET NUMBER / SHEETS TOTAL
WIS 4	E0-0128	

YARDAGE

1=10 HOR
1=10 VER

ULTIMATE

CONSTRUCTION ℄ SOUTH RDWY

SURVEY L

ULTIMATE ℄ NORTH RDWY

STATION	DISTANCE	EXCAVATION UNCL.	FILL
247		1061	76
248		275	331
249		94	420
250		368	134
251		961	26
252		1,228	0
253		1572	0
254		1991	0
255		6,940	1,081

SHEET TOTAL

1=10 HOR
1=10 VER

25+00 730 — 7235 — 7233 — ULTIMATE
24+00 730 — 7240 — 7237
23+00 730 — 7246 — 7242
22+00 730 — 7252 — 7249
21+00 730 — 7258 — 7256
20+00 730 — 7264 — 7263
19+00 730 — 7270 — 7270
18+00 730 — 7276 — 7276

SURVEY L

SOUTH ROWY — NORTH ROWY

R.R. SECTION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
A WIS	E.O.-0821		

STATION	DISTANCE	CUT	EXCAVATION	FILL
255	50	1,563		0
256	50	1,834		0
257	50	1,601		0
258	50	953		70
259	50	381		263
260	50	180		480
261	50	57		736
170				

YARDAGE

SHEET TOTAL 6,569 1580

1=10 HOR
1=10 VER

26 H70 730
26 H00 730
25 H00 730
25 H00 730
25 H00 730
25 H00 730

726.0
725.5
724.0
722.5
720.0
718.9
718.6

SURVEY R / W

NORTH RDWY

SOUTH RDWY

-89-16"ASH

-67-20"Dak

-51-30"Dak

-39-20"Oak

S.P.R. REGION DIVISION 4 WIS	PROJECT E D-0822	SHEET NUMBER	TOTAL SHEETS

NORTH R/WAY SURVEY R/W SOUTH R/WAY

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	E.D-0128(2)		

STATION	DISTANCE	YARDAGE EXCAVATION CUM.	FILL
261 +70			
	2		87.5
262			
	0		166.3
+35			
	0		329.2
263			
	12		1,540
+31			
	12		701
+50			

263+50 730 — 715.0 — 716.2 — +43-24"OAK — +46-10" OAK — +45-14"OAK — +46-8"ELM

263+31 720 — 12.0 — +39-18"OAK — +36-8"MAPLE — +34-12"OAK — +32-24"ELM — +27-18"OAK

263+00 710 — +16-8"HICKORY — +10-8"HICKORY

262+35 710 — +93-16"OAK — +38-16"OAK — +84-8"OAK

262+00 710

1"=10' HOR
1"=10' VER

SHEET TOTAL 26 3059

95

STATION	DISTANCE	EXCAVATION		FILL	VARIAGE
		UNCL.			
263 +50	270+00 730	3	186		
+60	269+00 730	8	446		
264	268+00 730	148	526		
265	268+00 730	870	104		
266	267+00 730	1,395	0		
267	266+00 730	725	194		
268	266+00 730	68	949		
269	266+00 730	21	627		
270	266+00 730	53	486		
271	265+00 730				
272	264+00 730				
273	263+00 730				
274	262+00 730				
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530	6+00 730				
531	5+00 730				
532	4+00 730				
533	3+00 730				
534	2+00 730				
535	1+00 730				
536	0+00 730				

SHEET TOTAL 3,291 3,118

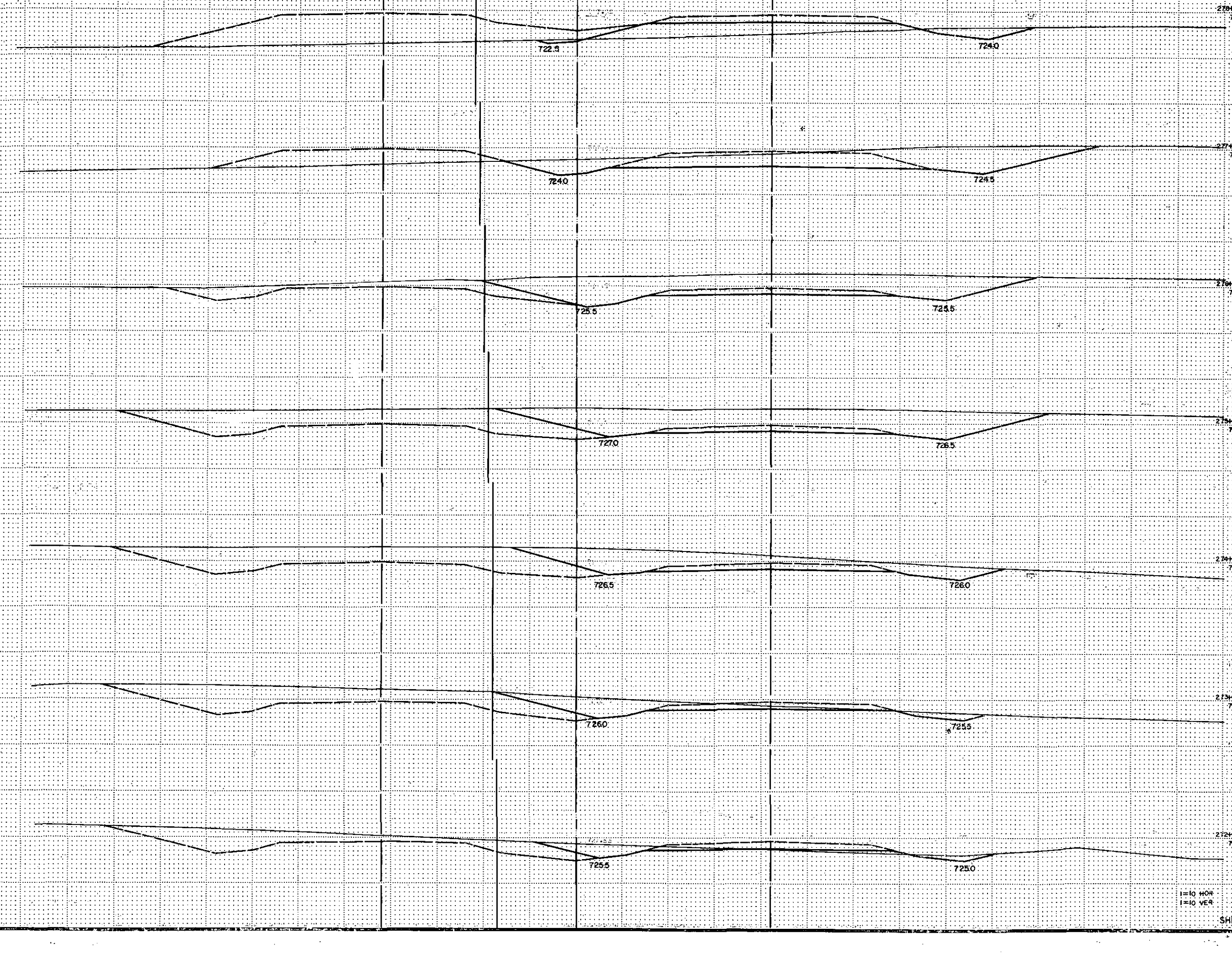
I=10 HOR
I=10 VERT

719.7
718.4
721.6
718.2
722.0
721.2
722.8
721.5
723.0
721.8
723.5
722.1
724.0
722.4
724.9
722.7
725.0
723.0

NORTH ROWY
SURVEY R&W
SOUTH ROWY

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
W.S. 4	E.O-01221		

NORTH ROWY. SURVEY R/W SOUTH ROWY.



U.S.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	E. D.-S.-1920		

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	YARDAGE FILL
271			
		146	253
272			
		373	39
273			
		837	0
274			
		1,509	0
275			
		1,824	0
276			
		1,437	0
277			
		583	341
278			

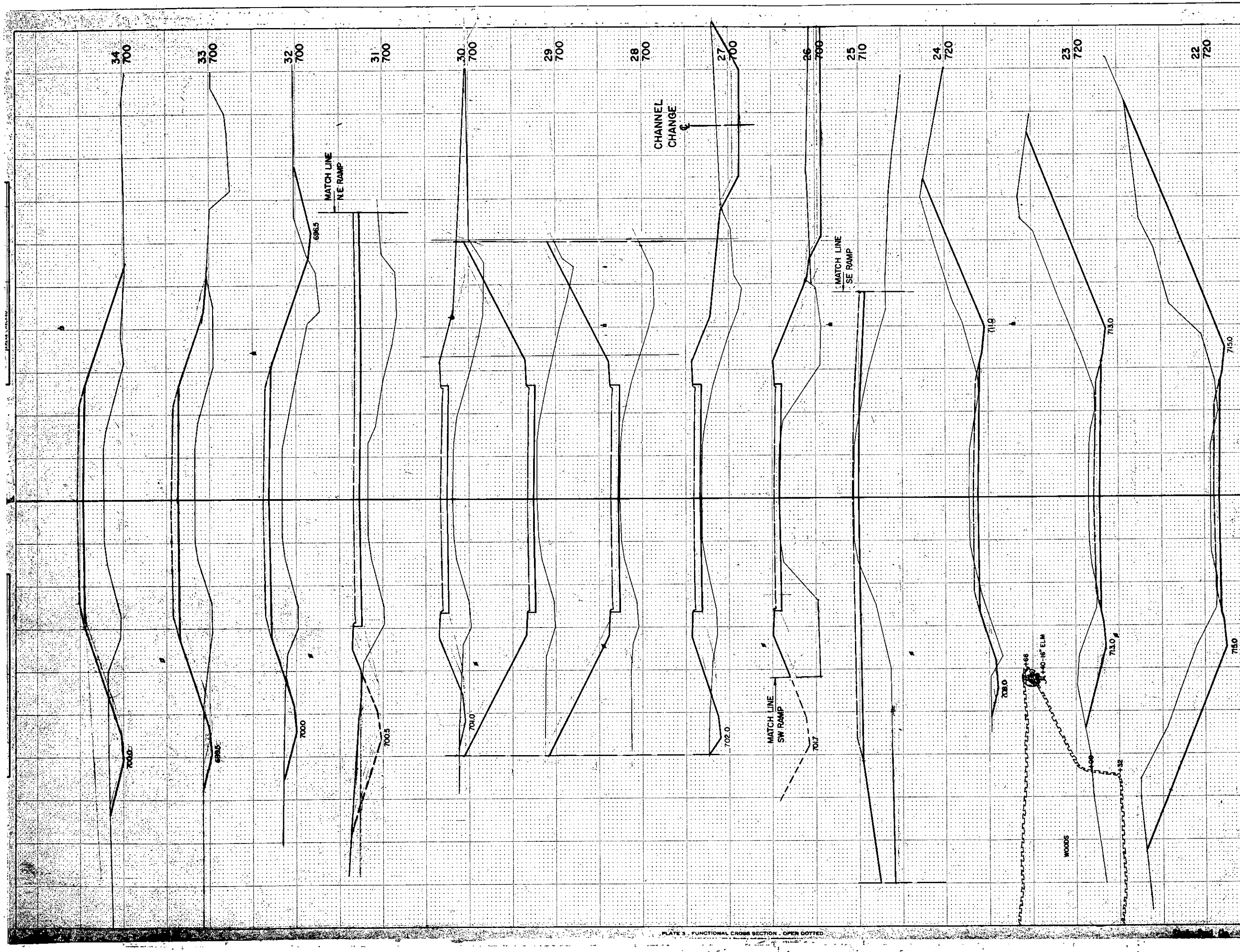
271+00 730
274+00 730
274+00 730
274+00 730
273+00 730
272+00 730

1=10 HOR
1=10 VER

SHEET TOTAL 6,709 633

C.T.H. "N"

B.R.R. REGION-DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	S 0-0128		



STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	YARDAGE FILL
21			
		1,856	32
22			
		2,432	0
23			
		1,515	33
24			
		522	869
25			
		69	1,852
26			
		0	1,341
27			
		0	2,498
28			
		0	3[illegible]
29			
		231	[illegible]
30			
		343	1,[illegible]
31			
		243	[illegible]
32			
		172	[illegible]
33			
		143	17[illegible]
34			
		SHEET TOTAL	7,525

PLATE 3 - FUNCTIONAL CROSS SECTION - OPEN DOTTED

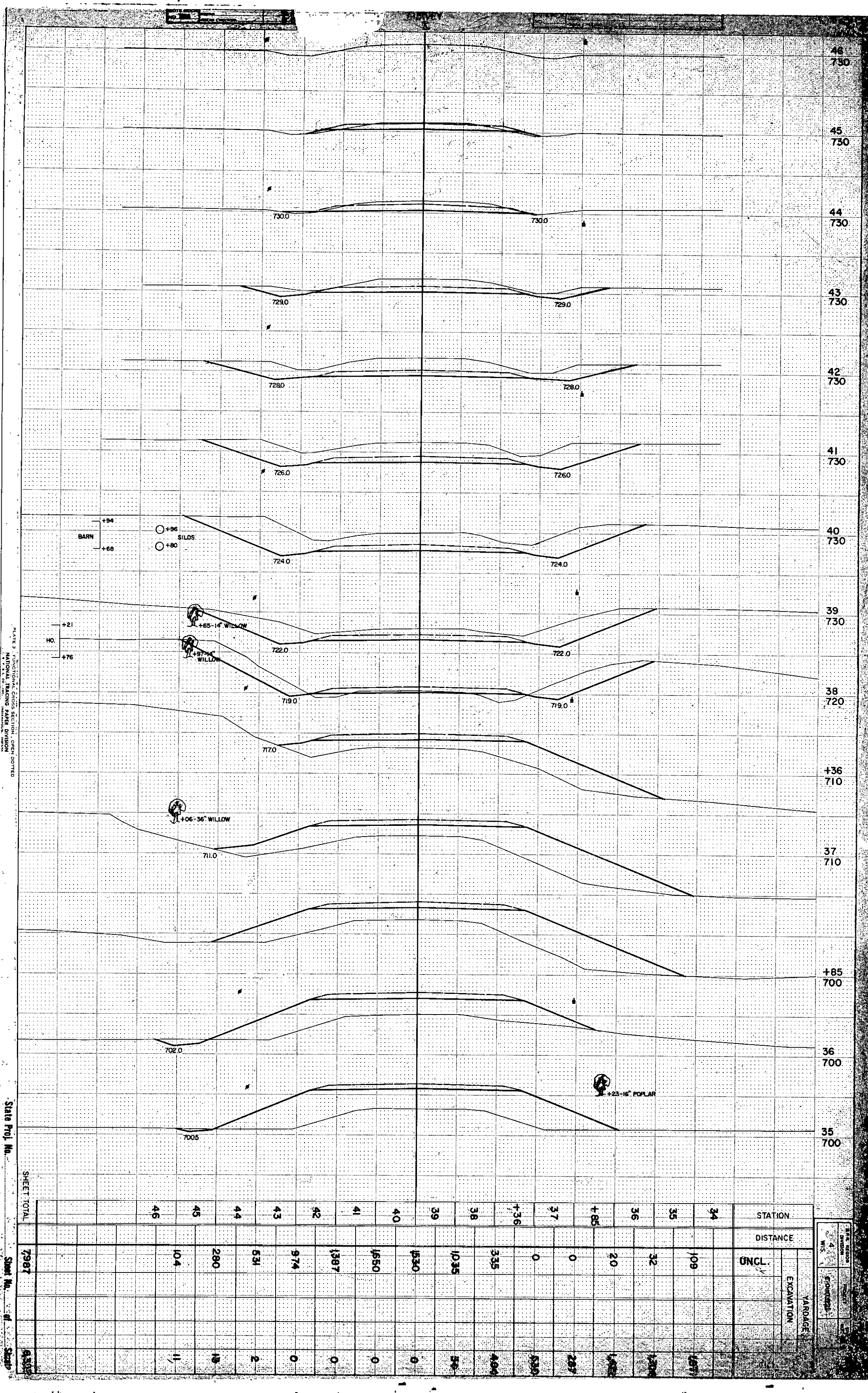


PLATE 3 - FUNCTIONAL CROSS SECTION - OPEN DOTTED

NATIONAL TRACING PAPER DIVISION
L. P. S. L. CO., INC.
INDIANAPOLIS, INDIANA

STATION	DISTANCE	EXCAVATION	YARDAGE
	UNCL.		
34	109	LEFT	
35	32		
36	20		
+85	0		
37	0	287	
+36	530		
38	335	404	
39	1035	56	
40	530	0	
41	650	0	
42	387	0	
43	974	0	
44	531	2	
45	280	18	
46	104	11	
SHEET TOTAL	7987	8,5[illegible]	

4 WIS. 1 | B.P.R. REGION | DIVISION | PROJECT | CONTRACT | DATE

State Proj. No. ____ Sheet No. ____ of ____ Sheets

bb

SCALE 1" = 10'

SHEET TOTAL 3994

STATION	DISTANCE	UNCL.	EXCAVATION	FILL
172		1A15		250
+25				
173		1B13		154
174		261		2B0E
+45		B5		1396
175		320		1367
172				
+25				
173				
174				
+45				
175				

YARDAGE

7026
7029
7031
7032
7024
7018
712.5
712D
711.5

CHANNEL ℄ CHANGE

MATCH LINE

R

S.W. RAMP

E4

DEPT. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS	E 0-0122		

S.W. RAMP (65)

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	E.O.-0(43)		

MATCH LINE

CHANNEL CHANGE ℄

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	YARDAGE FILL
178 700			
	175	985	136
	176	417	320
+42			
+45 700		491	204
+82			
	177	200	89
	217		343
+45			
177 710		106	944
	178		
+82 710			
+42 710			
	176		
176 710			
SHEET TOTAL		2,416	3,261

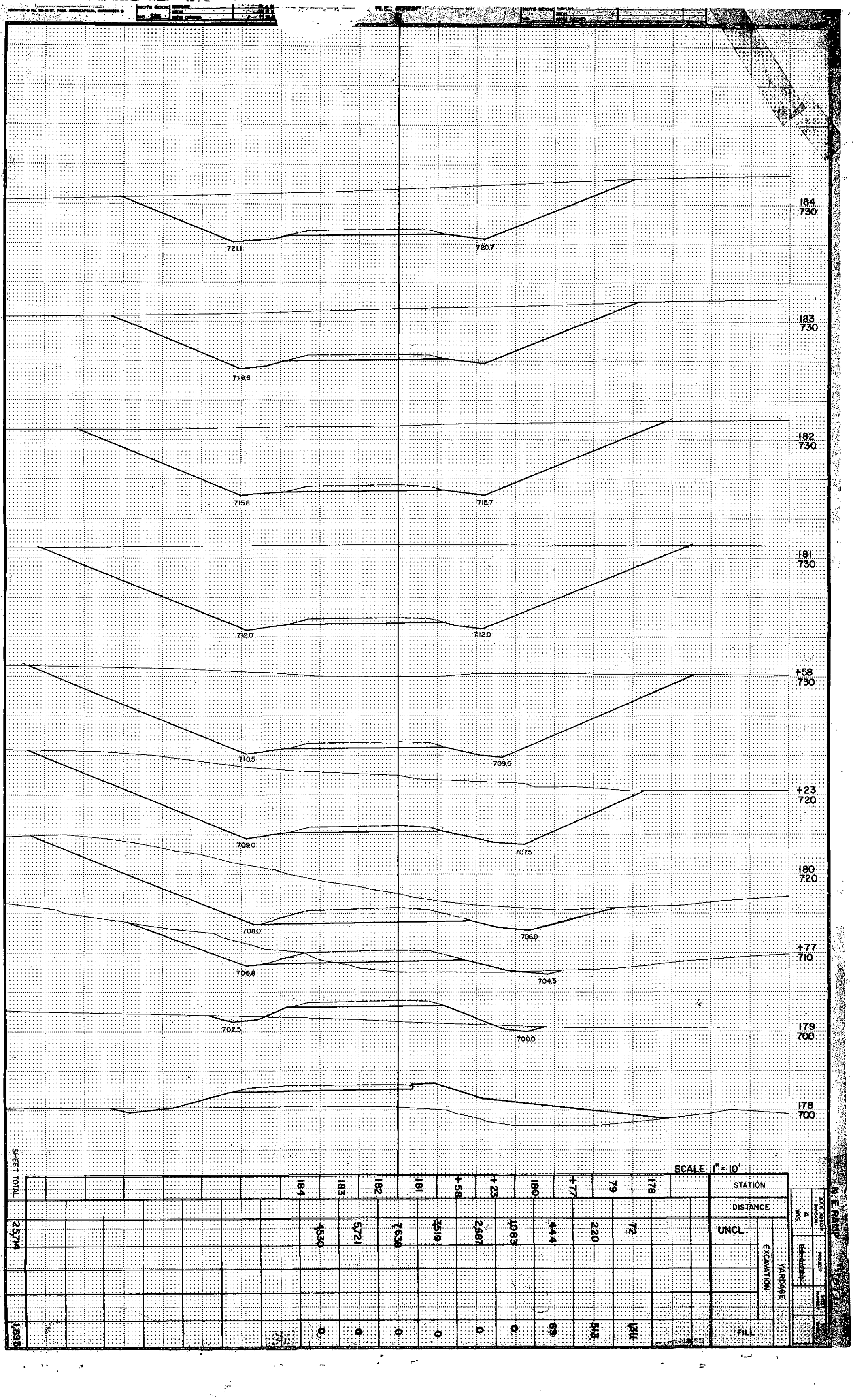
SCALE 1" = 10'

N.W. RAMP

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	SHEET SHEETS
4 WIS.	E.D-0122(8)		

SCALE 1" = 10'

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	YARDAGE FILL
172			
	7		394
+25			
	261		506
173			
	348		0
+28			
	2,463		0
174			
	2,039		0
+45			
	1,559		0
175			
	1,696		0
176			
	879		0
+42			
	752		0
177			
SHEET TOTAL		10,204	900


184
730
721.1
720.7
183
730
719.6
182
730
715.8
715.7
181
730
712.0
712.0
+58
730
710.5
709.5
+23
720
709.0
707.5
180
720
708.0
706.0
+77
710
706.8
704.5
179
700
702.5
700.0
178
700
SCALE 1" = 10'
STATION
DISTANCE
UNCL.
EXCAVATION
YARDAGE
FILL
184 0
183 0
182 0
181 0
+58 0
+23 69
180 513
+77 1311
79 72
178 220
444
1083
2487
3519
7630
5721
4530
SHEET TOTAL 25,714 1293
N. E. Rdwy

S.E. RAMP (68)

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	E 0-3(22)		

SCALE 1" = 10'

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	YARDAGE FILL
178 +46			
	28		1237
179			
	126		2343
180			
	89		201
+82			
	13		294
181			
	1,265		237
+58			
	2372		0
182			
	7451		0
183			
	7,522		0
184			
SHEET TOTAL	18,866		6,128

184 740 — 7180
183 740 — 7165
182 730 — 7140
+58 720 — 7110
181 710 — 7066
+82 700 — 7038
180 700 — 7028
179 700
178+46 700

MATCH LINE — 7180 — 7150 — 7002 — 6998

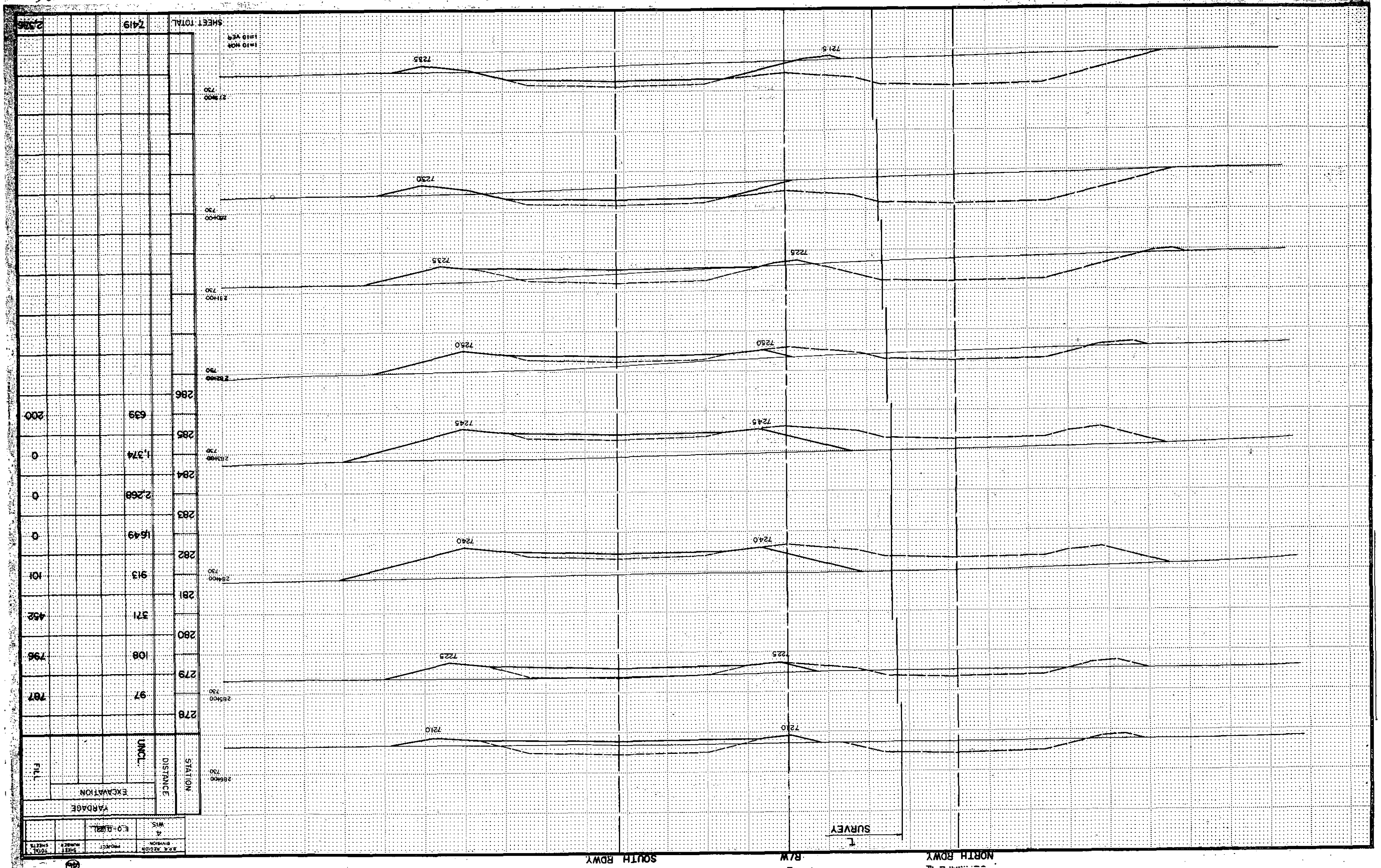
B.P.R. DISTRICT OFFICE	PROJECT	SURFACE	SHEET
WIS. 4	E 0-01(22)		

SCALE 1" = 5'

STATION	DISTANCES	GRADE	VARIANCE EXCAVATION	FILL
1				
		194		6
2				
		536		6
3				
		857		6
4				
		880		6
5				
		1,358		6
6				
		2,202		6
7				
		272		6
+50				

SHEET TOTAL 6040

105


SHEET TOTAL
2,536
2419
I=10 NOR
I=10 VER
7285
7215
27+00
730
7250
26+00
730
7235
7225
23+00
730
7250
7250
22+00
730
7245
7245
19+00
730
7240
7240
18+00
730
7225
7225
17+00
730
7210
7210
16+00
730
SURVEY
℄
R/W
SOUTH RDWY
NORTH RDWY
STATION
DISTANCE
UNCL.
FILL
EXCAVATION
YARDAGE
278
279
280
281
282
283
284
285
286
787
796
452
101
0
0
0
200
97
108
371
913
1649
2,268
1,374
639
E.O.-P.B.L.
WIS
4
S.C.R. REGION
DIVISION
PROJECT
SHEET NUMBER
TOTAL SHEETS

NORTH RDWY. R/W SOUTH RDWY.

SURVEY ℄

+15-20"ELM

+45-8"TWIN ELM

+21-14"ELM

295+00 730 — 722.2

294+00 730 — 722.4

293+00 730 — 722.6

292+00 730 — 723.0 — 722.8

291+00 730 — 723.5 — 723.0

290+00 730 — 724.0 — 724.0

289+00 730 — 721.5 — 721.5

288+00 730 — 720

287+00 730 — 720.6

1=10 HOR
1=10 VER

D.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	E 0-01221		

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	YARDAGE FILL
286	93		645
287	34		624
288	277		423
289	987		51
290	879		0
291	453		211
292	31		606
293	16		829
294	54		845
295			
SHEET TOTAL	2,824		4,440

SURVEY ℄ R/W CONSTRUCTION ℄ SOUTH RDWY CHANGE ℄

ULTIMATE ℄ NORTH RDWY

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	E 0-0122		

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	FILL
295			
		90	905
296			
		98	1,012
297			
		154	848
298			
		318	52
299			
		355	46
300			
		474	260	
301			
		611	75
302			
		448	141
303			
SHEET TOTAL		2,538	4,168

302+00 730 — 726.5 — 725.5

302+50 730 — 726.0 — 725.0

301+00 730 — 725.5 — 724.5

300+00 730 — 725.0 — 724.0

299+00 730 — 724.5 — 723.5

298+00 730 — 724.0 — 723.0

297+00 730 — 723.5 — 722.5

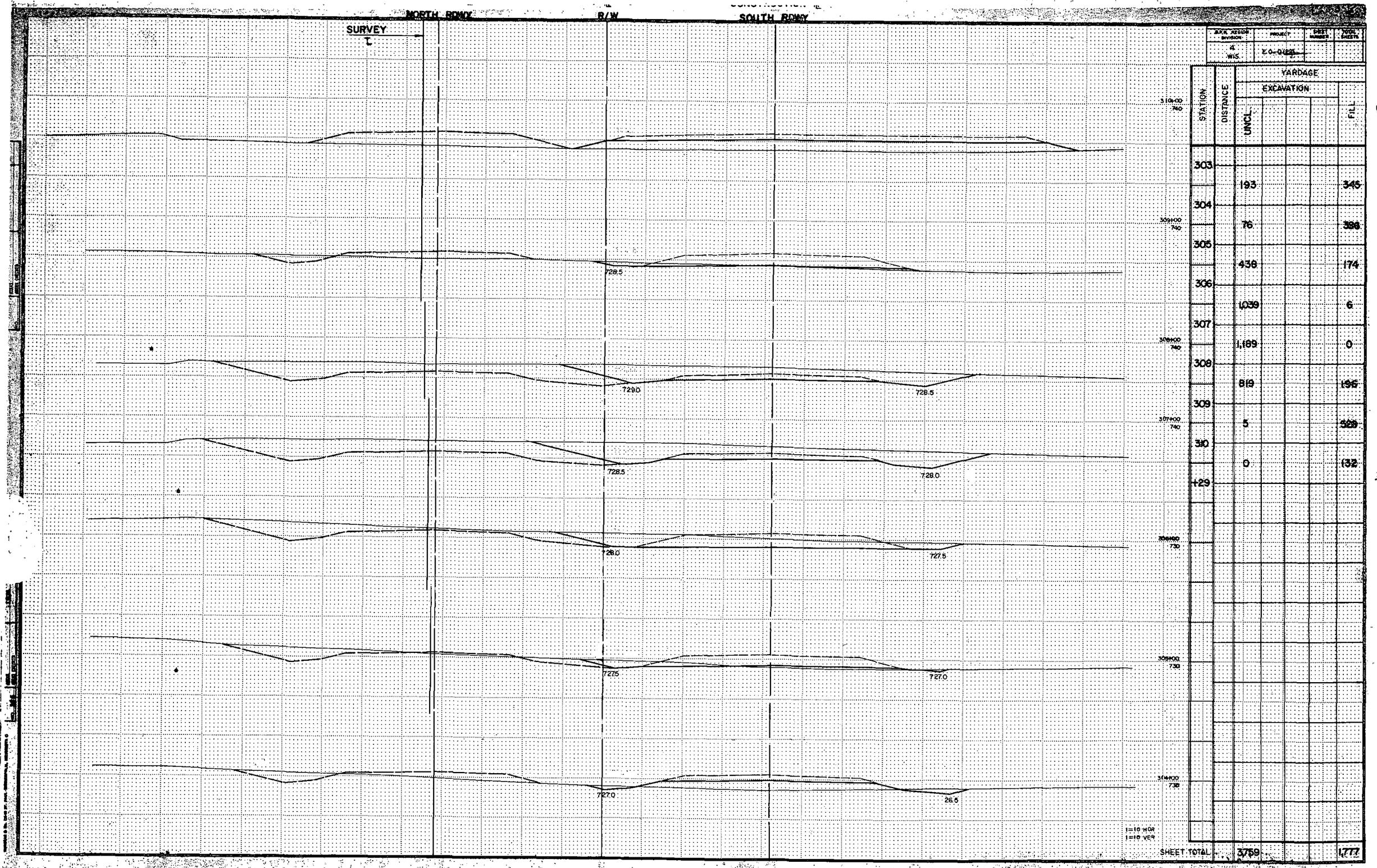
296+00 730 — 722.0

H02-6" TWIN ASH

H68-12" ASH

1=10 HOR
1=10 VER

107



STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	FILL
303			
		193	345
304			
		76	388
305			
		438	174
306			
		1039	6
307			
		1,189	0
308			
		819	195
309			
		5	529
310			
		0	132
+29			
SHEET TOTAL		3759	1777

U.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	EO-0(22)		

(50) RAILROAD STREET STA.0+00-12+00

B.P.R. DISTRICT OFFICE	PROJECT	SHEET NUMBER	TOTAL SHEETS
WIS. 4	E 0-0(22)		

SCALE 1"=5'

STATION	DISTANCE	UNGL	YARDAGE EXCAVATION	FILL
4		104		26
5		211		157
6		148		336
7		33		241
8		44		215
9				

SHEET TOTA. 540 + 1,075

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

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	YARDAGE EXCAVATION F.L.
15			
19	26		
+60			
15	48		
16			
6	288		
+50			
7	792		
17			
9	878		
+50			
0	1042		
18			
0	1215		
+50			
0	1230		
19			
30	1641		
20			
515	546		
21			
SHEET TOTAL		601	7711

SCALE 1" = 10'

21 720 · 20 720 · 19 710 · +50 710 · 18 720 · +50 720 · 17 720 · +50 720 · 16 730 · +60 730 · 15 730

7170 · 7175 · 7140 · 7216 · 7288 · 7220 · 7145 · 7150 · 7155 · 7160 · 7165 · 7170 · 7175 · 7180 · 7185 · 7190 · 7195 · 7200 · 7205 · 7210 · 7215 · 7220 · 7225 · 7230 · 7235 · 7240 · 7245 · 7250 · 7255 · 7260 · 7265 · 7270 · 7275 · 7280 · 7285 · 7290 · 7295 · 7300

WOODS · WOODS · WOODS · WOODS · WOODS

+35 · +38 · +79 · +68 · +72 · +15 · HD

PLATE 3 . FUNCTIONAL CROSS SECTION . OPEN DOTTED
NATIONAL TRACING PAPER DIVISION
B P A L CO. INC. INDIANAPOLIS, INDIANA

State Proj. No. ____ Sheet No. ____ of ____ Sheets

C.T.H. "K"

B.P.R. DISTRICT OFFICE	PROJECT	SHEET NUMBER	TOTAL SHEETS
WIS. 4	E 0-0(22)		

LINE ANGLES CHECKED

CONST. R/W

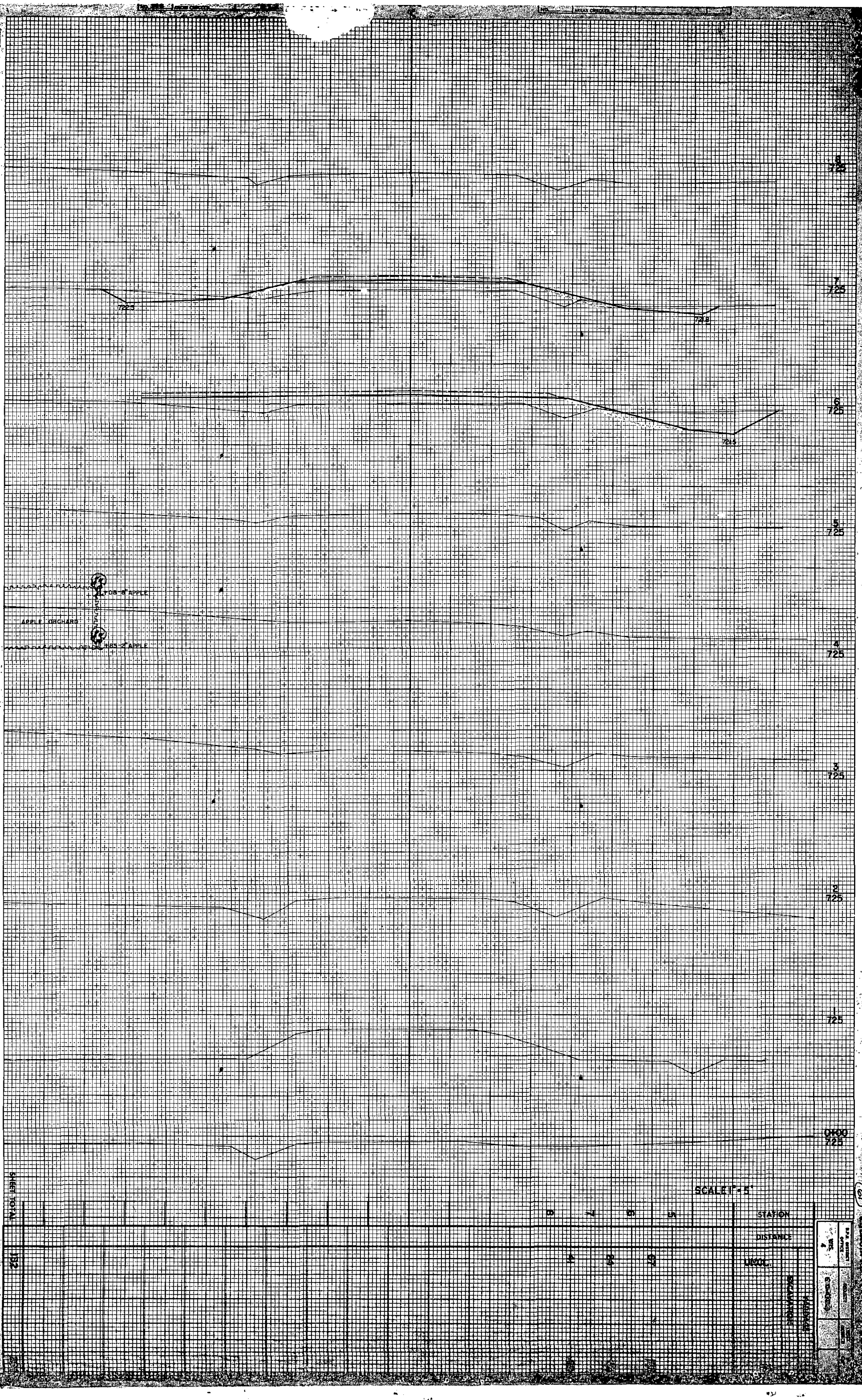
TBR PKNL

14 730 | 13 730 | 12 730 | 137.3 730 | 11 730 | 10 730 | 9 730 | 8 730

38-24" OAK

38-18" OAK

7234 7232 7232 7232


6
725
5
725
4
725
3
725
2
725
1
725
CHOO
725
725.5
728
725.4
TREE 6" APPLE
TREE 2" APPLE
APPLE ORCHARD
SCALE 1" = 5'
STATION
DISTANCE
CHOC.
EXCAVATION
FILL
SHEET TOTAL
PLATE 3 CROSS-SECTION OF PRAIRIE STANDARD

S.T.H. 55

S.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	RE-GEO(22)		

SCALE 1"=5'

STATION	DISTANCE	YARDAGE EXCAVATION UNC	YARDAGE FILL
7			
8	0		3
9	0		4
10	11		6
11	22		10
12	11		0

SHEET TOTAL 44

13 730 · 12 730 · 11 730 · 10 730 · 9 730 · 8 730 · 7 735 · 6 735 · 5 735

+66'-0" ELM
+42'-8" ELM
+11'-14" ELM

7285
7280

FUNCTIONAL CROSS SECTION - OPEN DITCH

113