

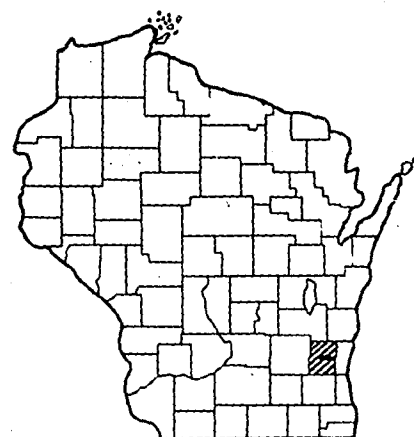
I.D. 1412-1-71

CONT. 1

1412-1-71

Index of Sheets

Sheet No. 1	Title
Sheet No. 2	Typical Cross Sections
Sheet No. 3	Estimate of Quantities
Sheet No. 3	Miscellaneous Quantities
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Sheet No. 5-6	Plan and Profile
Sheet No. 7-7.5	Standard Details
Sheet No. —	Structure Plans
Sheet No. 8-21	Cross Sections



STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

PLAN AND PROFILE OF PROPOSED S.T.H. 175-ALLENTON RD.

S.T.H. 33
WASHINGTON COUNTY

PROJECT IDENTIFICATION NUMBER

1412-1-71

Scales
Plan 1 in. = 100 ft.
Profile Hor. 1 in. = 100 ft. Vert. 1 in. = 10 ft.
Cross Sections Hor. 1 in. = 5' Vert. 1 in. = 5'

CONTRACTOR - EAST CENTRAL GRADING
SUB-CONT. - PAYNE & DOLAN; BIT. MATERIALS
SUB-CONT. - ED. KRAEMER & SON; AGGREGATE
SUB-CONT. - SWEENEY BROS., MULCH - FERT. - SEED - SOD

Sheet Number	Total Sheets
1	21

D. F. BAUMANN, PROJ. ENGR.
PERSONNEL - DIARY 1938 - P. 2

PROJ. STARTED - 5-22-72
PROJ. FINISHED - 9-6-72

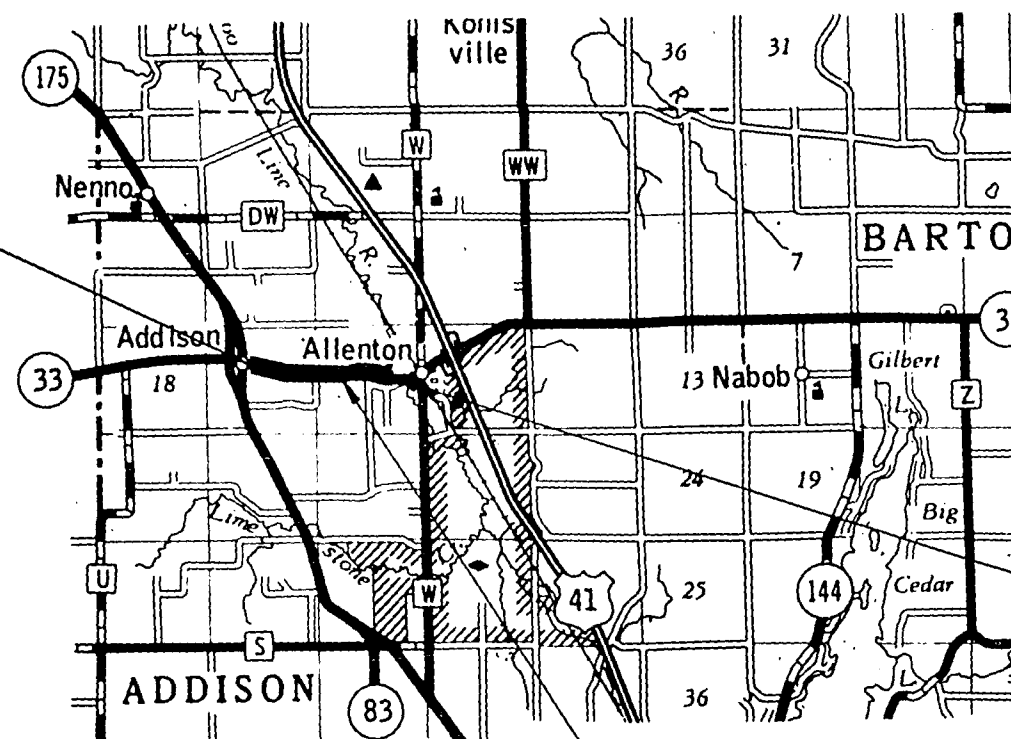
DIARY # 1938

Design Designation

A.D.T. (1969)	• 2400
A.D.T.	•
D.H.V. (1990)	• 315
D.	• 60-40%
T.	• 5%
V.	• 50 M.P.H.

BEGIN PROJECT 1412-1-71
STA. 1+00

N. 522,800 (±200)
E. 2,432,000 (±200)
1050' W. & 1900' S. OF N. 1/4 COR. SEC. 17, T-11-N, R-18-E



END PROJECT I.D. 1412-1-71
STA. 76+10

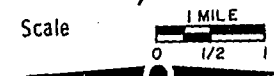
N. 522,200 (±200)
E. 2,439,300 (±200)
1206' E. & 31' S. OF CENTER-SEC. 16, T-11-N, R-18-E

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	-----
Traveled Way or P.E.	-----
Railroads	-----
Base or Survey Line	-----

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 73.9
Grade Elevation	Datum Line 76.16

Layout



Total Net Length of Centerline = 1.421 Mi.

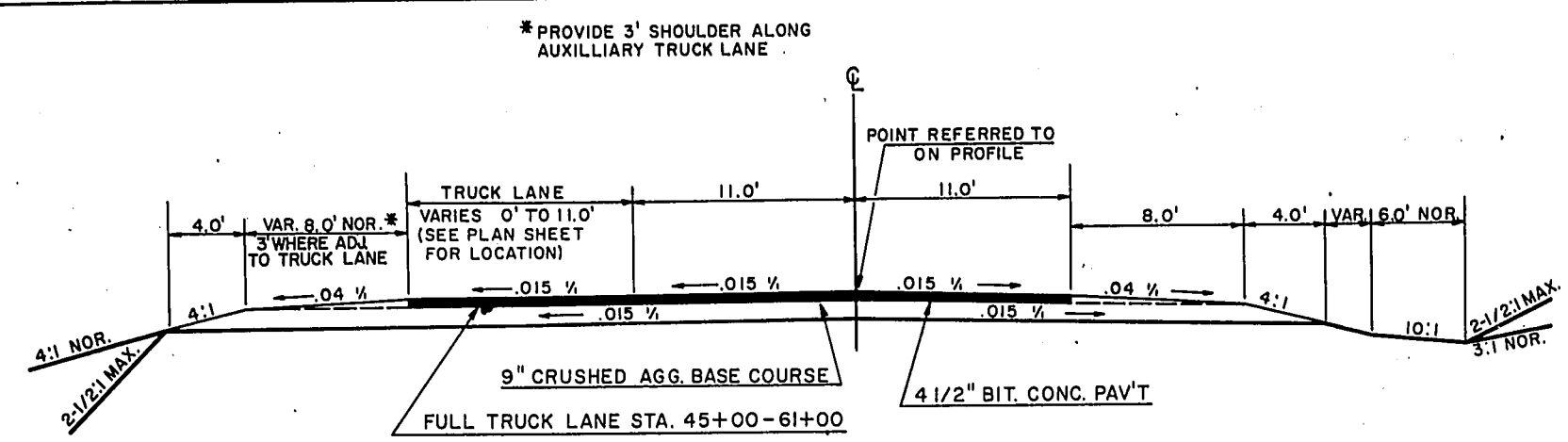
EQUATION
STA. 45+21.11 BK +
RC. 45+30.22 E. AH.

ALL COORDINATES SHOWN ARE REFERENCED TO THE WISCONSIN
COORDINATE SYSTEM, SOUTH ZONE.

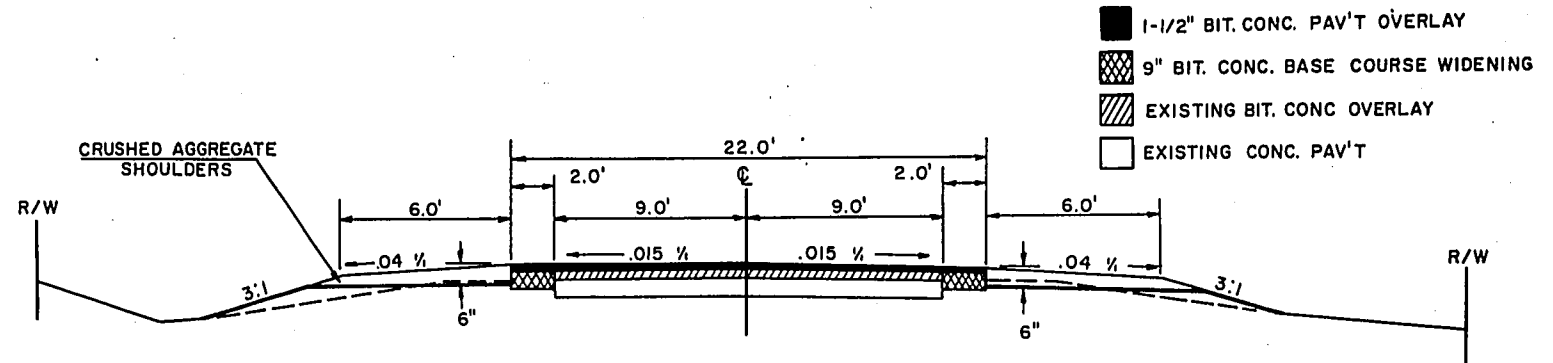
GRID COORDINATES ARE SCALED FROM U.S.G.S. TOPOGRAPHIC MAPS,
ALLENTON QUADRANGLES, FOR IDENTIFICATION ONLY.

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	
Supervisor D.T.	District Engineer J.E.Z.
Designer D.A.N.	C.D. Checker I.L.J.
Correct:	
Date 6/15/71	A.T. Banaszak District Engineer
Recommended for Approval:	
Date 6/22/71	J.P. Hennrich Chief Design Engineer
Approved:	Acting
Date 6/22/71	W.J. Baumeister State Highway Engineer
U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION BUREAU OF PUBLIC ROADS	
REGION 4	WISCONSIN DIVISION
Approved:	
Date	Division Engineer

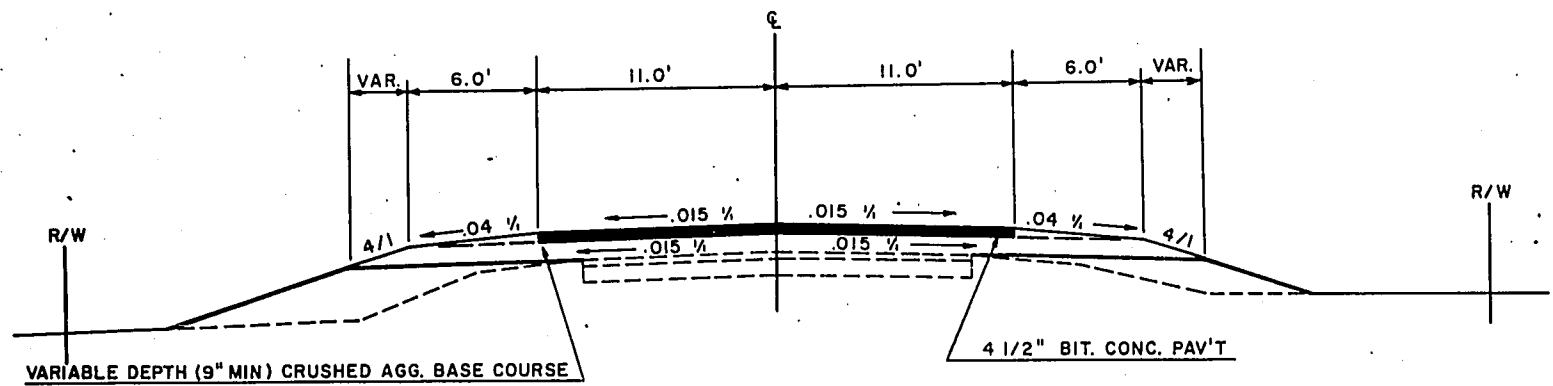
1412-1-71



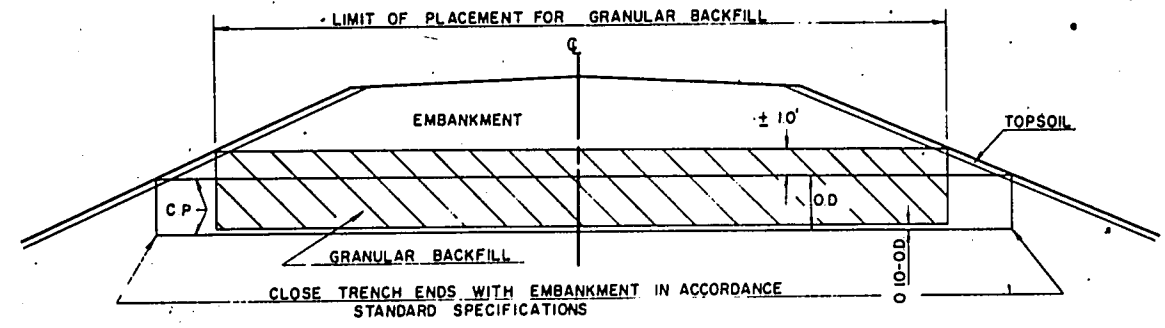
TYPICAL NORMAL SECTION
S.T.H. 33
STA. 35+50 TO STA. 65+00



TYPICAL WIDENING SECTION
S.T.H. 33
STA. 1+00 TO 29+00 - R/W = 66'
STA. 65+00 TO 76+10 - R/W = 60'



TYPICAL SECTION
S.T.H. 33
STA. 29+00 TO STA. 35+50



GRANULAR BACKFILL *- CUBIC YARDS PER FOOT													
PIPE SIZE	12	15	18	24	30	36	42	48	54	60	66	72	
CONCRETE	0.18	0.21	0.24	0.31	0.45	0.53	0.62	0.71	0.80	1.00	1.13	1.25	
METAL	0.15	0.17	0.20	0.25	0.37	0.44	0.51	0.58	0.66	0.74	0.93	1.02	

* THE GRANULAR BACKFILL DEPTH IS ASSUMED TO BE APPROXIMATELY ONE FOOT ABOVE THE TOP OF THE PIPE OR AS DIRECTED BY THE ENGINEER IN THE FIELD. TRENCH WIDTH IS ASSUMED TO BE IN ACCORD WITH THE STANDARD SPECIFICATIONS.

CULVERT BACKFILL DETAIL

GENERAL NOTES

- 4-1/2" Bituminous Concrete Pavement shall consist of 3" Binder (2 courses) and 1-1/2" Surface.
- When the quantity of the items of Subbase, Base, or Surface Course is measured for payment by the ton or cubic yard, the depth or thickness of the course shown on the plans is approximate, and the actual thickness will depend on the distribution of the material directed by the engineer.
- No trees or shrubs are to be removed unless they have been indicated for removal by the engineer.
- Shrinkage is variable and estimated at $\pm 20\%$.
- The exact location of private entrances is to be determined in the field by the engineer.
- All intersections to be of Type C.
- Waste material shall be used in ditching & shaping area as needed.
- The contractor shall not order or deliver the pipe culverts required until a corrected list of sizes and lengths is furnished him by the engineer in the field.
- Details of construction not shown shall be in accordance with the pertinent requirements of the standard specifications.
- Unless otherwise directed by the engineer, rural P. E. 's shall be constructed to a finished top width of 20 feet.
- SALVAGED TOPSOIL SHALL BE PLACED TO AN APPROXIMATE DEPTH OF 3" (INCHES) AT TIME OF PLACING.

STANDARD DETAIL DRAWINGS

PUBLIC UTILITY COMPANIES

Wisconsin Gas Co.
Wisconsin Electric Power Co.
General Telephone Co.

- 6-2.6.9 Apron Endwalls for Culvert Pipe and Pipe Arch
- 7-2.4.14 a b CLASS "A" STEEL PLATE BEAM GUARD
- 7-4.1.5 Construction Barricade
- 8-1.3.1 Ditch Checks, Mortar Rubble Masonry and Sod
- 9-1.1.5 Design and Layout Details for Side Road at Grade Intersections

ESTIMATE OF QUANTITIES

CONTRACT NO. 1
GRADE, BASE & BIT. CONC. PAV'T.

PROJECT ID	SHEET NUMBER	TOTAL SHEETS
1412-1-71	3	21
FEDERAL PROJECT DESIGNATION		

THIS PROJECT IS TO BE EXECUTED UNDER THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE WISCONSIN DIVISION OF HIGHWAYS — EDITION OF 1969 AND SPECIAL PROVISIONS AS ATTACHED TO PROPOSALS.

SEC. NO.	STATION TO STATION	NET LENGTH OF CENTER LINE	CLEARING	GRUBBING	PIPE UNDER-DRAIN 6"	REMOVING PAVEMENT	REMOVING GUARDRAIL	UNCLASSIFIED EXCAVATION	RIPRAP	GRANULAR BACKFILL	FINISHING ROADWAY	CRUSHED AGGREGATE BASE COURSE	CORRUGATED METAL CULVERT PIPE 54"	BITUMINOUS BASE COURSE WIDENING	BITUMINOUS MATERIAL FOR PRIME COAT	BITUMINOUS CONCRETE PAVEMENT	BITUMINOUS MATERIAL FOR SURFACE COURSE	CULVERT PIPE CLASS III		CORRUGATED METAL CULVERT PIPE 30"	STEEL PLATE BEAM GUARD, CLASS "A"	ANCHORAGES FOR STEEL PLATE BEAM GUARD	MAINTENANCE & REPAIR OF HAUL ROADS	APRON ENDWALLS FOR CULVERT PIPE		METAL APRON ENDWALLS FOR CULVERT PIPE 30"
																		18"	24"					18 INCH.	24 INCH.	
	ITEM NO		20102	20105	61201	20401	20411	20503	60601	20901	21301	30404	52114	30605	40201	40701	40702	52003	52005	52109	61408	61406	61801	52061	52063	52149
	UNIT	LIN FT	I.D.	I.D.	L.F.	S.Y.	L.F.	G.Y.	C.Y.	C.Y.	L.S.	TON	L.F.	S.Y.	TON	TON	TON	L.F.	L.F.	L.F.	L.F.	EACH	L.S.	EACH	EACH	EACH
I	1+00 - 76+10	7,500.89	85	85	440	6,785	790	19,000	10.5	29	1	12,000	20	1,740	16	3,600	216	196	120	16	592	2	1	14	6	2
	TOTALS	7,500.89	85	85	440	6,785	790	19,000	10.5	29	1	12,000	20	1,740	16	3,600	216	196	120	16	592	2	1	14	6	2

SEC. NO.	STATION TO STATION	DITCH RIPRAP	MULCHING	FERTILIZER	SEEDING	EROSION MAT	FIELD OFFICE TYPE "A"	FIELD LABORATORY	SALVAGED TOPSOIL	DITCHING & SHAPING	SODDING
		70002	62702	62901	63002	62802	64201	64210	62505	90001	63101
		C.Y.	S.Y.	C.W.T.	L.B.	S.Y.	L.S.	L.S.	S.Y.	STA.	S.Y.
I		360.3	6,800	15	580	4,000	1	1	29,000	80	4,000
		360.3	6,800	15	580	4,000	1	1	29,000	80	4,000

CLEARING AND GRUBBING			
STATION TO STATION	I. D.	I. D.	
1-50	X	X	
50-51	64"	64"	
51-62	X	X	
62-63	21"	21"	
63-76	X	X	
TOTAL	85	TOTAL 85	

REMOVING PAVEMENT	
LOCATION	S. Y.
Sta. 35+50 to 65+00	6785

REMOVING GUARDRAIL	
LOCATION	L. F.
Sta. 57+73 to 63+03 Lt.	530
Sta. 58+27 to 60+87 Rt.	260

ANCHORAGES FOR STEEL PLATE BEAM GUARD	
LOCATION	EACH
57+00 Lt.	1
62+92 Lt.	1

BITUMINOUS BASE COURSE WIDENING	
LOCATION	S. Y.
Sta. 1+00 - 29+00	1245
Sta. 65+00 - 76+10	495

BITUMINOUS MATERIAL FOR PRIME COAT	
LOCATION	TONS
Sta. 1+00 - 29+00	1
Sta. 29+00 - 65+00	14.7
Sta. 65+00 - 76+10	0.3

SODDING	
LOCATION	S. Y.
Sta. 46+00 to Sta. 66+00 Lt.	2,000
Sta. 46+00 to Sta. 66+00 Rt.	2,000

DITCHING AND SHAPING		
LOCATION	STA.	
1+00 to 29+00 Lt. & Rt.	58	
65+00 to 76+10 Lt. & Rt.	22	

LOCATION	SEED LB.	TOPSOIL SQ. YDS.	FERTILIZER CWT
Sta. 1+00 to 76+10	580	29,000	15

STEEL PLATE BEAM GUARD, CLASS "A"	
LOCATION	L. F.
Sta. 57+00 to Sta. 62+92 Lt.	592

MULCHING	
LOCATION	S. Y.
Sta. 47+00 to Sta. 62+00 Lt. & Rt.	6,800

EROSION MAT	
LOCATION	S. Y.
Sta. 46+00 to Sta. 66+00 Lt.	2,000
Sta. 46+00 to Sta. 66+00 Rt.	2,000

CROSS DRAIN PIPE					
STATION	DIAMETER INCHES	LENGTH	TYPE	CLASS	ENDWALLS
34+59	30	16	CMCP		2
SIDE ROAD, P.E.'s AND F.E.'s					
30+00 Lt.	18	28	CP	III	2
41+15 Rt.	18	28	CP	III	2
41+50 Lt.	18	28	CP	III	2
47+40 Rt.	18	28	CP	III	2
50+20 Lt.	18"	28	CP	III	2
50+20 Rt.	24	54	CP	III	2
57+48 Lt.	18	28	CP	III	2
62+00 Rt.	24	30	CP	III	2
63+75 Rt.	24	36	CP	III	2
64+00 Lt.	18	28	CP	III	2

LOCATION	CRUSHED AGGR. BASE COURSE TON	CRUSHED AGGR. SHOULDER MAT TON	BITUMINOUS CONCRETE PAVEMENT TON	BIT. MAT'L. FOR SURFACE COURSE TON
1+00 - 29+00		1140	565	34
29+00 - 35+50	1410	200	400	22
35+50 - 43+00	1625	210	447	29
43+00 - 45+00	500	60	151	5
45+00 - 61+00	4100	360	1431	98
61+00 - 63+00	500	60	150	5
63+00 - 65+00	435	60	121	4
65+00 - 76+10		450	224	13

SR's			
Sunset Hilltop	250	37	2
Blueberry	250	37	2
PE's & FE's	140		

ABANDON	ABND.	MAILING ADDRESS	00000
ABSTRACT	ABS.	MANHOLE	M. H.
ACCESS POINT	A. P.	MANUFACTURING	MFG.
ACRES	AC.	MAXIMUM	MAX.
ADDITION	ADD.	MEASURED	(M)
AGRICULTURAL	AGRI.	MILE	MI.
AHEAD	AH.	MILK ROOM	M. R.
AND OTHERS	ET. AL	MINIMUM	MIN.
AND WIFE	ET. UX.	MONUMENT	MON.
APARTMENT	APT.	MOTEL	MO.
ASSUMED	(A)	MUNICIPAL	MCPL
AUXILIARY REFERENCE LINE	A. R	NORTHEAST	NE
AVENUE	AVE.	NORTHWEST	NW
BACK	BK.	NUMBER	NO.
BARN	B.	OUTLOT	O. L.
BASE LINE	B	PARALLEL	PLL
BEARING LONG CHORD	B. L. C.	PAVEMENT	PAV'T.
BITUMINOUS	BIT.	PERMANENT	PERM.
BLOCK	BLK.	POINT OF CURVATURE	P. C.
BOULEVARD	BLVD.	POINT OF INTERSECTION	P. I.
BRICK	BRK.	POINT OF TANGENCY	P. T.
BUILDINGS	BLDGS.	POINT OF COMPOUND CURVE	P. C. C.
CATCH BASIN	C. B.	POINT OF REVERSE CURVE	P. R. C.
CEMETERY	CEM.	POINT ON CURVE	P. O. C.
CENTERLINE	C	PRIVATE DRIVE	P. D.
CENTRAL ANGLE	Δ	PROJECT	PROJ.
CHANNEL	CH.	PROPERTY LINE	P. L.
CHANNEL CHANGE	CH. CH.	QUIT CLAIM DEED	Q. C. D.
CHICKEN HOUSE	C. H.	RADIUS	R
COMMERCIAL	COMM.	RAILROAD	RR.
COMPANY	COM.	RAILWAY	RY.
COMPUTED	(C)	REFERENCE LINE	R
CONCRETE	CONC.	RELOCATED	REL
CONSTRUCTION	CONST.	REQUIRED	REQ'D.
CORN CRIB	C. C.	RESIDENTIAL	RES.
CORNER	COR.	RESTAURANT	REST.
CORPORATION	CORP.	RIGHT	RT.
CORRUGATED	CORR.	RIGHT OF WAY	R/W
COUNTY	CO.	ROAD	RD.
COUNTY TRUNK HIGHWAY	C. T. H.	ROADWAY	RDWY.
CREEK	CR.	SANITARY	SAN.
CULVERT	CULV.	SCALED	(S)
DEED	(D)	SCHOOL	SCH.
DEGREE OF CURVE	D	SECTION	SEC.
DISPOSAL	DISP.	SERVICE STATION	S. S.
DISTRICT	DIST.	SEPTIC TANK	SEP.
DRIVE	DR.	SIDEWALK	SWK.
DRIVEWAY	DWY.	SHED	S.
ESTATE	EST.	SOUTHEAST	SE
EXISTING	EX.	SOUTHWEST	SW
EXTERNAL DISTANCE	E	SPECIAL CROSSING	S. C.
FACTORY	FACT.	SPECIAL DRIVE	S. D.
FEDERAL AID PROJECT	F. A. P.	SQUARE	SQ.
FIELD ENTRANCE	F. E.	STANDARD	STD.
FIRE HYDRANT	F. H.	STATE TRUNK HIGHWAY	S. T. H.
FOOT (FEET)	FT.	STATION	STA.
FOUNDATION	FDN.	STORY	STY
FRAME	FR.	STREET	ST.
GARAGE	G.	SUBDIVISION	SUBD.
GOVERNMENT	GOV'T.	SURVEY	(S)
GREEN HOUSE	G. H.	TANGENT	TAN.
HIGHWAY	HWY.	TANGENT LENGTH OF CURVE	T
HOTEL	HO.	TAPER	TAP.
HOUSE	H.	TAVERN	TAV.
HOUSE TRAILER	H. T.	TEMPORARY	TEMP.
INCHES	IN.	TRANSIT LINE	I
INCORPORATED	INC.	TRANSMISSION TOWER	T. T.
INCLUSIVE	INCL.	UNITED STATES COAST & GEODETIC SURVEY	U. S. C. & G. S.
INTERSECTION ANGLE	I	UNITED STATES GEOLOGICAL SURVEY	U. S. G. S.
INTERSTATE HIGHWAY	I. H.	UNITED STATE HIGHWAY	U. S. Highway
IRON PIN	I. P.	VENDEE	VDE.
ISLAND	IS.	VENDOR	VDR.
LEFT	LT.	VITRIFIED	VIT.
LENGTH OF CURVE	L	WAREHOUSE	WH.
LESSEE	LSE.	WATER TOWER	W. T.
LESSOR	LSR.	WELL	W.
LIMITED HIGHWAY EASEMENT	L. H. E.	WINDMILL	WM.
MACHINERY SHED	M. S.	WOOD	WD.
MAGNETIC	MAG.		

* TO BE ACQUIRED IN THE NAME
OF THE STATE OF WISCONSIN.

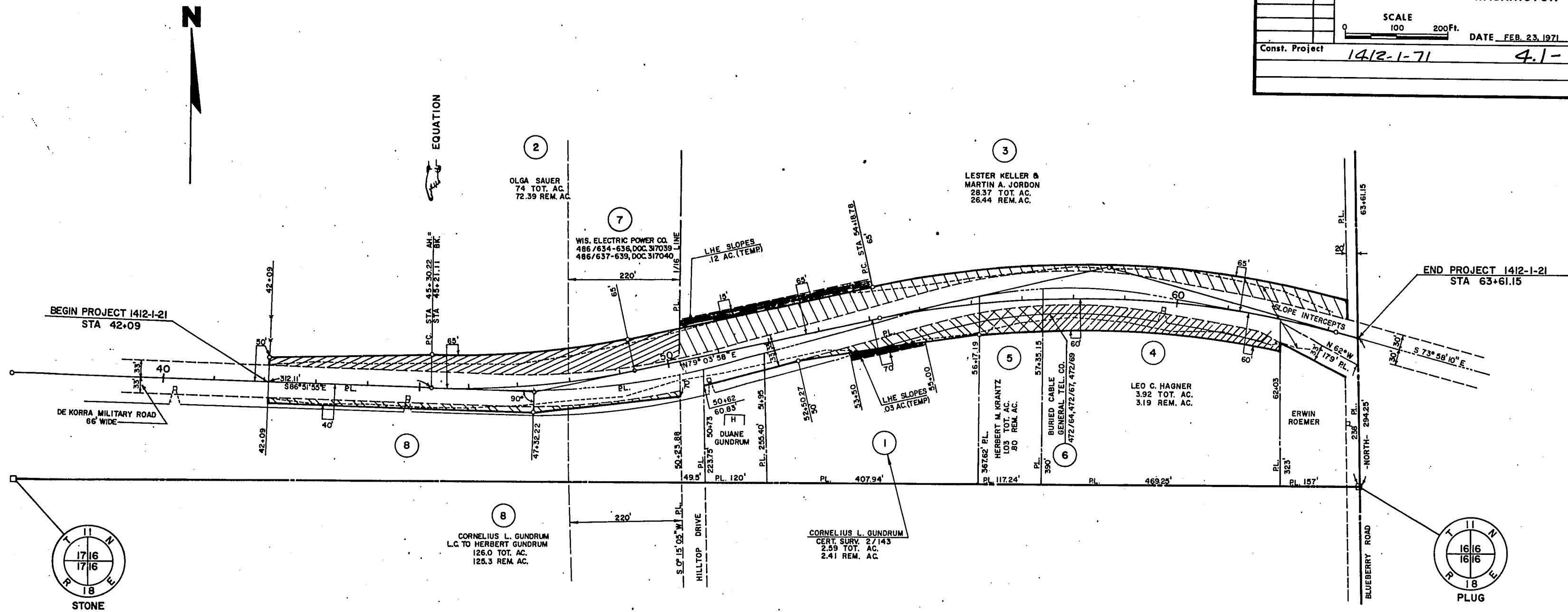
STATE LINE		HIGHWAY SEPARATION		CEMETERY	
COUNTY LINE		HIGHWAY OVERPASS		FOUNDATION	
TOWNSHIP AND RANGE LINES		RAIL LINE OVERPASS		GAS PUMP ISLAND	
SECTION LINE		ALL OTHER BRIDGES		BUILDING	
QUARTER LINE		STREAM OR RIVER		IRON PIN	
SIXTEENTH LINE		LAKE		POWER POLE	
NEW CENTERLINE		CATTLE PASS		TELEPHONE POLE	
NEW R/W LINE		RELOCATED STREAM OR RIVER		RAIL LINE	
OLD R/W LINE		TRAVELED WAY		TRANSMISSION TOWER AND LINE	
PROPERTY LINE		CORPORATE LIMITS		UNDERGROUND CABLE MARKER	
SLOPE INTERCEPTS		UNDERGROUND FACILITY (POWER, TELEPHONE, TELEGRAPH, GAS, ETC.)		WELL	
LOT, TIE AND OTHER MINOR DASHED LINES		NO ACCESS		STONE MONUMENT	
LIMITED HIGHWAY EASEMENT				SEPTIC TANK	
				WINDMILL	

A plat map of Section 16, Township 35N, Range 10E. The map shows five land parcels, each numbered in a circle and labeled with the owner's name and acreage. The parcels are: Parcel 2 (Olga Sauer, 74 AC.), Parcel 3 (Martin A. Jordon, 28.37 AC.), Parcel 4 (Leo C. Hagner, 3.92 AC.), Parcel 5 (Herbert M. Krantz, 1.03 AC.), and Parcel 8 (Cornelius L. Gundrum, L.C. to Herbert Gundrum, 126.0 AC.). A road labeled S.T.H. 33 runs horizontally across the middle of the section. A north arrow and a scale of 1" = 500' are located in the upper right. The map also shows a grid of section lines and a dashed line representing a boundary or easement.

Parcel Number	Owner	Acreage
2	OLGA SAUER	74 AC.
3	MARTIN A. JORDON	28.37 AC.
4	LEO C. HAGNER	3.92 AC.
5	HERBERT M. KRANTZ	1.03 AC.
8	CORNELIUS L. GUNDRUM L.C. TO HERBERT GUNDRUM	126.0 AC.

Catalog No. 2130-D175

REVISION DATE	PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
JUNE 3, 1971	1412-1-21	4.2	
	FEDERAL PROJECT DESIGNATION		
	PLAT OF RIGHT OF WAY REQUIRED		
	S.T.H. 33	WASHINGTON CO.	
	SCALE	DATE FEB. 23, 1971	
	0 100 200 Ft.		
Const. Project	1412-1-71	4.1-21	



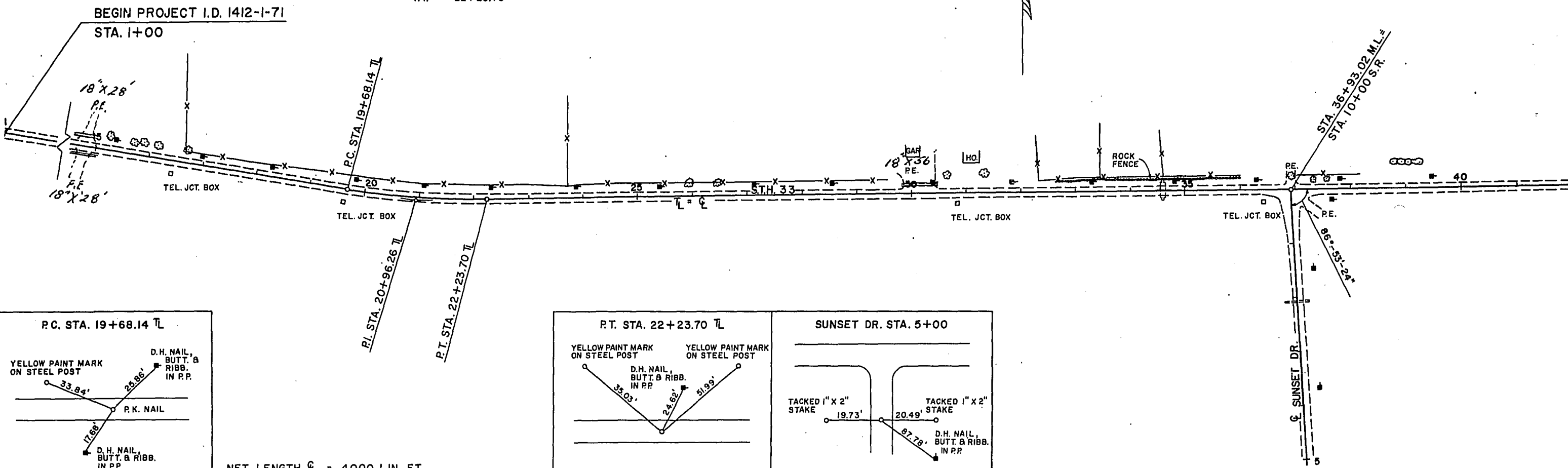
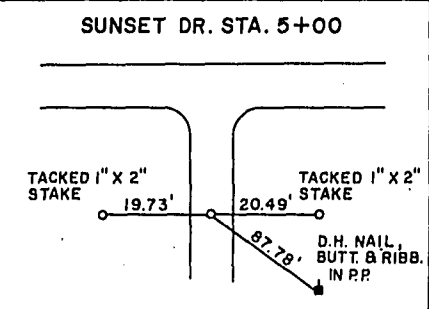
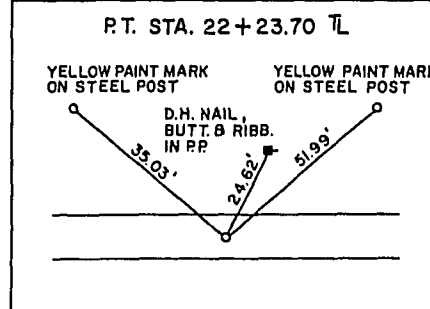
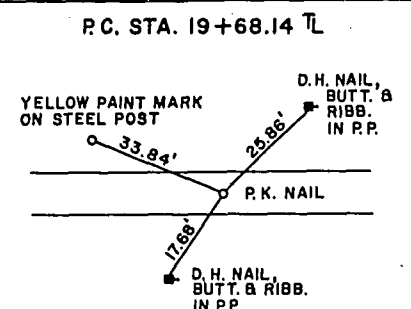
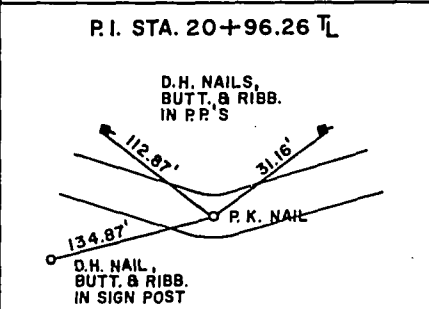
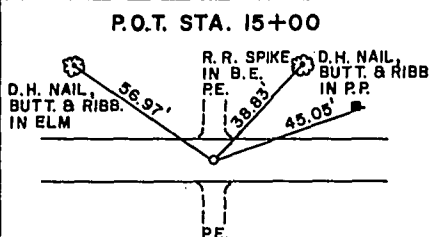
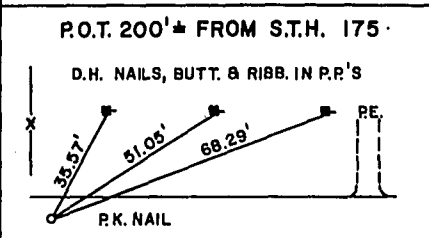
CURVE DATA
 P.I. = 47+32.22
 Δ = 14° 04' 07"
 D = 3° 30'
 T = 201.997'
 L = 401.962'
 R = 1637.022'
 P.C. = 45+30.22
 P.T. = 49+32.18

CURVE DATA
 P.I. = 58+76.67
 Δ = 26° 57' 53"
 D = 3° 00'
 T = 457.894'
 L = 898.822'
 R = 1909.859'
 P.C. = 54+18.78
 P.T. = 63+17.60

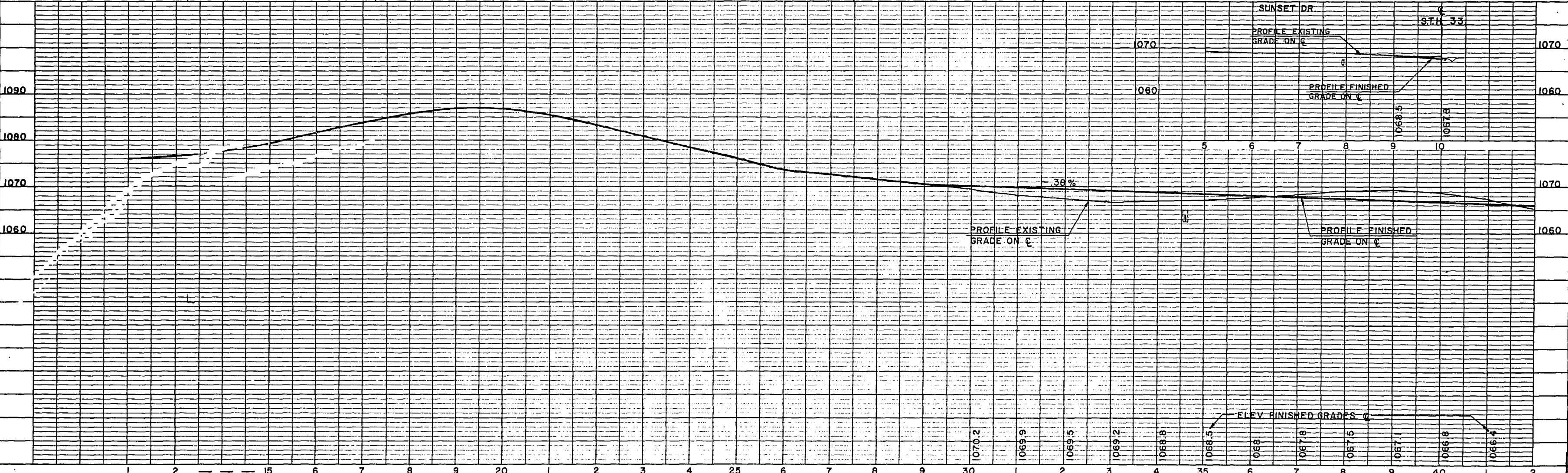
CURVE DATA
 P.I. = 20+96.26 TL
 Δ = 10°-13'-21"
 D = 4°-00'
 T = 128.12'
 L = 255.56'
 R = 1432.39'
 P.C. = 19+68.14
 P.T. = 22+23.70

BENCH MARKS		
NO. STATION	DESCRIPTION	ELEV.
1 28+44	R.R. SPIKE IN 16" ELM	23' LT. 1073.80

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
1412-1-71	5	21
FEDERAL PROJECT DESIGNATION		

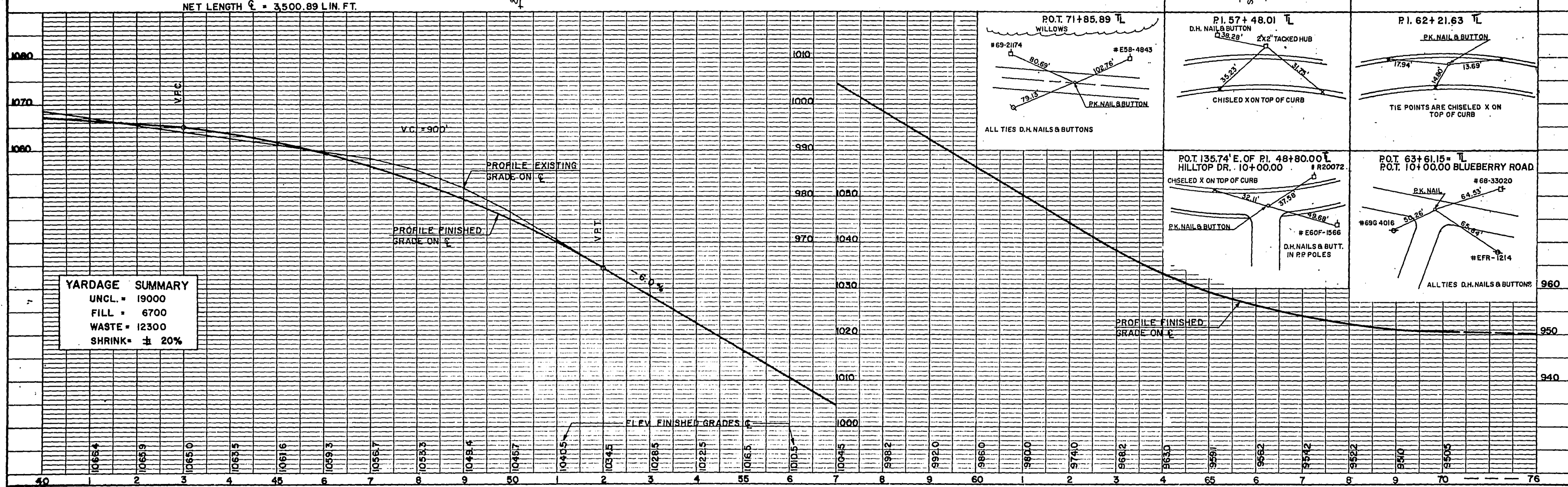
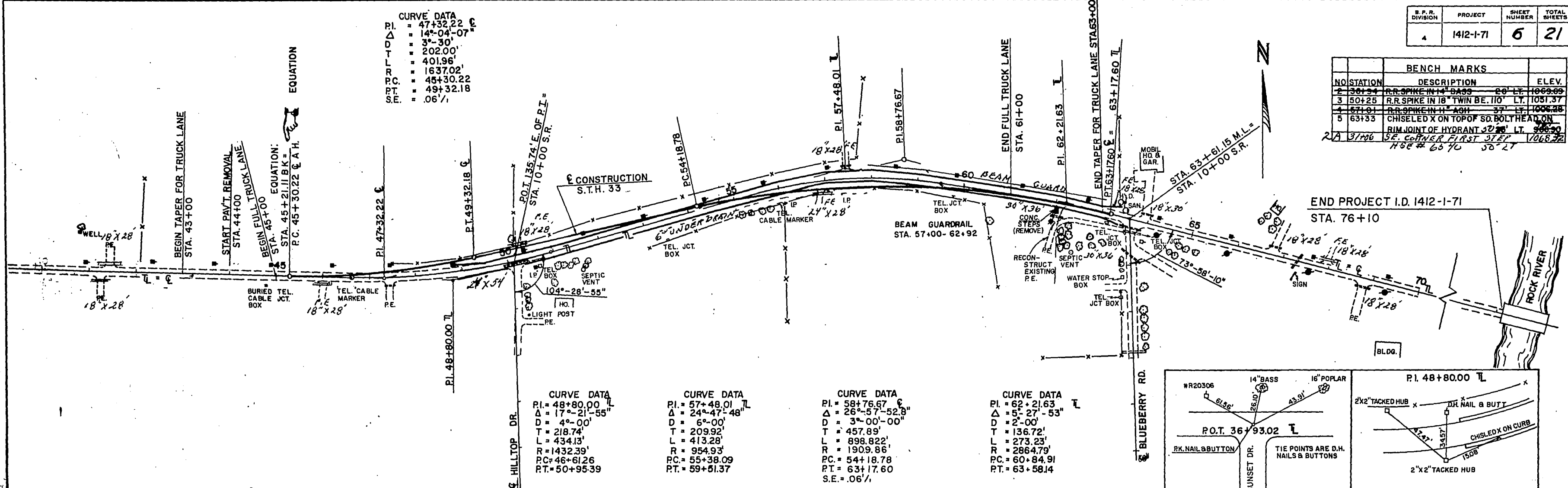


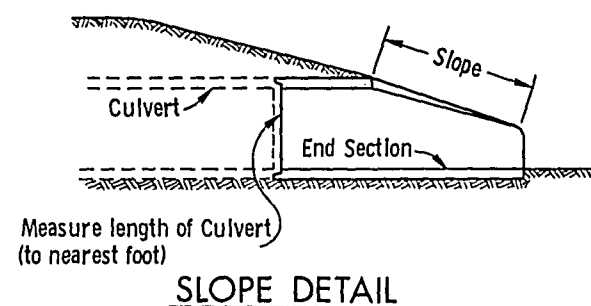
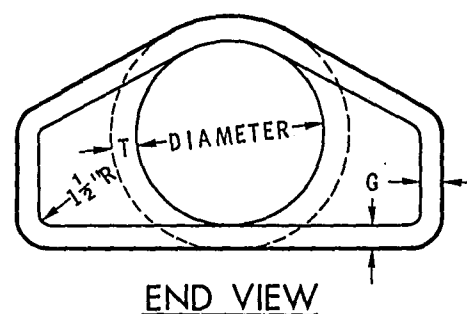
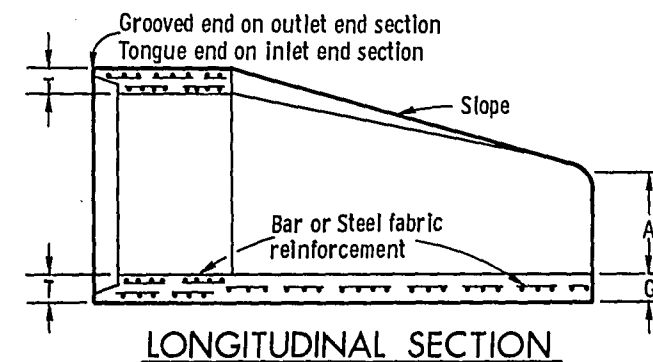
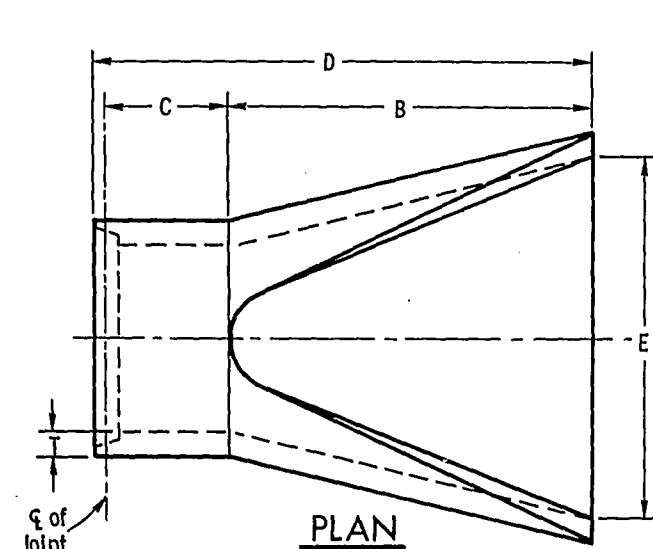
NET LENGTH ℓ = 4,000 LIN. FT.



S. P. R. DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4	1412-1-71	6	21

BENCH MARKS		
NO.	STATION	DESCRIPTION
2	36+34	R.R. SPIKE IN 14" BASS
3	50+25	R.R. SPIKE IN 18" TWIN BE. 110'
4	57+01	R.R. SPIKE IN 14" BASS
5	63+33	CHISELED X ON TOP OF S.D. BOLT HEAD ON RIM JOINT OF HYDRANT
2A	37+00	S.E. CORNER FIRST STEP
		HSE # 6370
		50' 21"
		1068.32

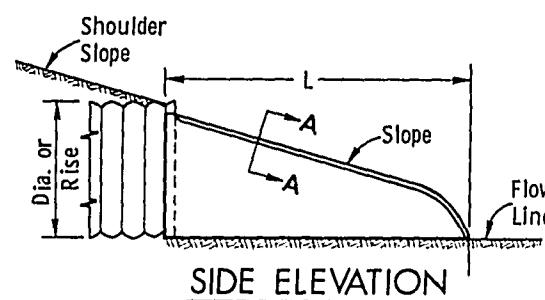
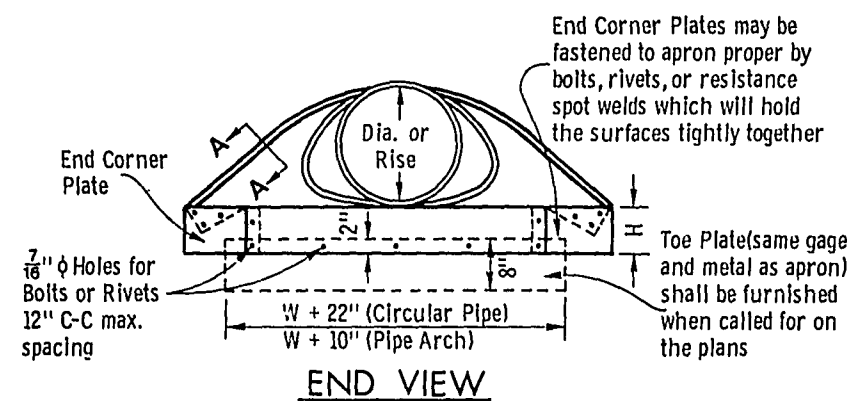
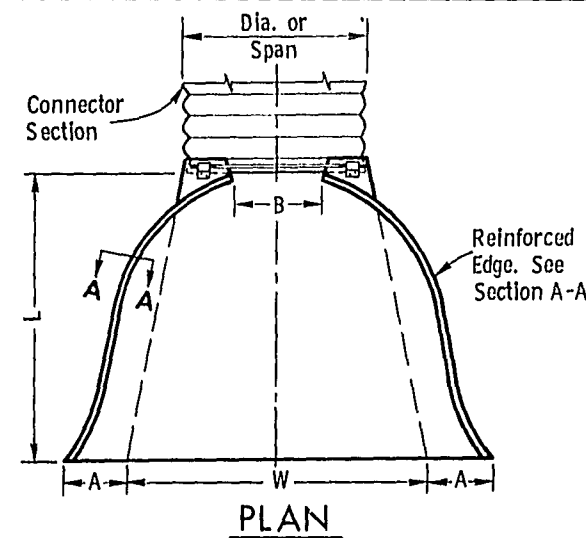




DIA.	APPROX. WEIGHT/SECTION	APPROX. SLOPE	T	A	B	C	D	E	G
12"	530	3 to 1	2"	4"	24"	48 7/8"	72 7/8"	24"	2"
15"	740	3 to 1	2 1/4"	6"	27"	46"	73"	30"	2 1/4"
18"	990	3 to 1	2 1/2"	9"	27"	46"	73"	36"	2 1/2"
21"	1,280	3 to 1	2 3/4"	9"	36"	37 1/2"	73 1/2"	42"	2 3/4"
24"	1,520	3 to 1	3"	9 1/2"	43 1/2"	30"	73 1/2"	48"	3"
27"	1,930	3 to 1	3 1/4"	10 1/2"	49 1/2"	24"	73 1/2"	54"	3 1/4"
30"	2,190	3 to 1	3 1/2"	12"	54"	19 3/4"	73 3/4"	60"	3 1/2"
36"	4,100	3 to 1	4"	15"	63"	34 3/4"	97 3/4"	72"	4"
42"	5,380	3 to 1	4 1/2"	21"	63"	35"	98"	78"	4 1/2"
48"	6,550	3 to 1	5"	24"	72"	26"	98"	84"	5"
54"	8,040	2 3/5 to 1	5 1/2"	27"	65"	33 1/2" - 35"	98 1/2" - 100"	90"	5"
60"	8,730	2 to 1	6"	30"	60"	39"	99"	96"	5"
66"	10,630	2 to 1	6 1/2"	30"	72"	21" - 27"	99"	102"	5 1/2"
72"	12,520	2 to 1	7"	36"	78"	21"	99"	108"	6"
78"	14,430	2 to 1	7 1/2"	36"	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"

** Minimum
* Maximum

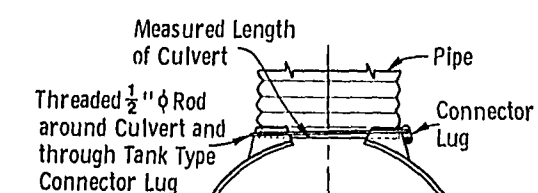
REINFORCED CONCRETE APRON ENDWALLS



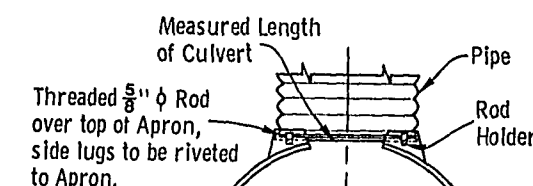
D PIPE DIAM.	MIN. METAL GAGE	MIN. ALUM. GAGE	DIMENSIONS					APPROX. SLOPE
			A ± 1"	B MAX.	H ± 1"	L ± 1½"	W ± 2"	
12"	16	16	6"	6"	6"	21"	24"	2½ to 1
15"	16	16	7"	8"	6"	26"	30"	"
18"	16	16	8"	10"	6"	31"	36"	"
21"	16	16	9"	12"	6"	36"	42"	"
24"	16	14	10"	13"	6"	41"	48"	"
30"	14	14	12"	16"	8"	51"	60"	"
36"	14	12	14"	19"	9"	60"	72"	"
42"	12	12	16"	22"	11"	69"	84"	"
48"	12	12	18"	27"	12"	78"	90"	2¼ to 1
54"	12	12	18"	30"	12"	84"	102"	2 to 1
60"	10	8	18"	33"	12"	87"	114"	1¾ to 1
66"	10	8	18"	36"	12"	87"	120"	1½ to 1
72"	10	8	18"	39"	12"	87"	126"	1⅓ to 1
78"	8	NA	18"	42"	12"	87"	132"	1¼ to 1
84"	8	NA	18"	45"	12"	87"	138"	1⅕ to 1

NOTE: All splices to be lap riveted or bolted

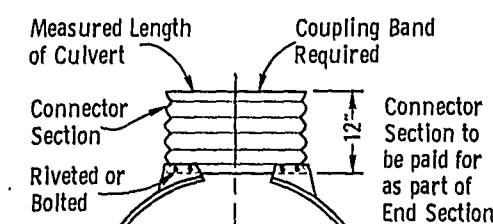
METAL OR ALUMINUM APRON ENDWALLS FOR CIRCULAR PIPES



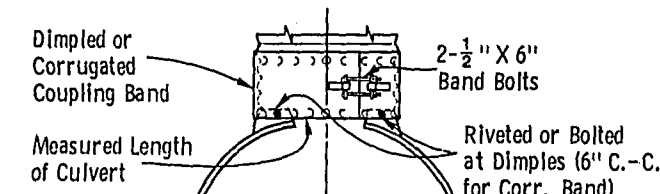
TYPE 1
For 12" thru 24" only (Circular Pipe)



TYPE 2
For 30" and 36" only (Circular Pipe)
For 18" X 11" thru 58" X 36" only (Pipe Arch)



TYPE 3
For 42" thru 84" only (Circular Pipe)
For 65" X 40" & 72" X 44" (Pipe Arch)



TYPE 5
Alternate for
All sizes Corrugated Circular Pipe and Pipe Arch

NOTE: Dimpled Band fits over Outside of Endwall, and Corr. Band fits Inside Endwall. Dimpled Band may be used with Helically Corrugated Pipe

CONNECTION DETAILS

CIRCULAR PIPE

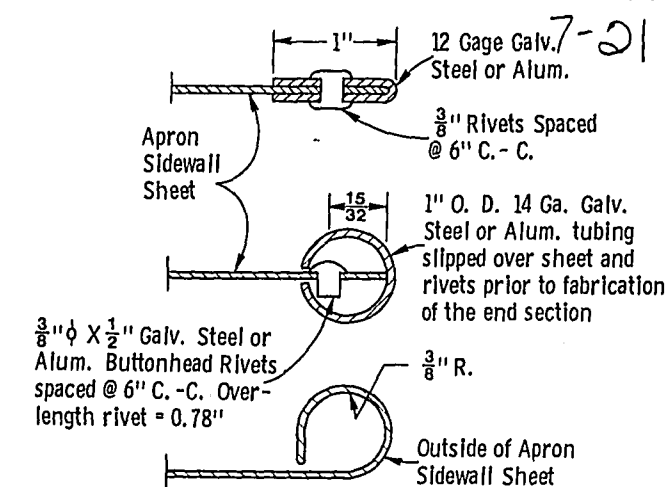
For Circumferentially Corrugated Pipe use Endwall Connection Details 1, 2, 3, or 5 as applicable.

For Helically Corrugated Pipe use Endwall Connection Details 1, 2 or 5.

For Helically Corrugated Pipes with two Circumferential Corrugations at each end use Endwall Connection Details 1, 2, or 3

PIPE ARCH

Use Endwall Connection Details 2, 3, or 5 as applicable.



SECTION A-A

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.

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.

Concrete culvert endwalls may not be used with metal or aluminum culvert pipe, nor may metal or aluminum culvert endwalls be used with concrete culvert pipe.

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 AND PIPE ARCH

State of Wisconsin
Department of Transportation
Division of Highways

RECOMMENDED FOR APPROVAL:

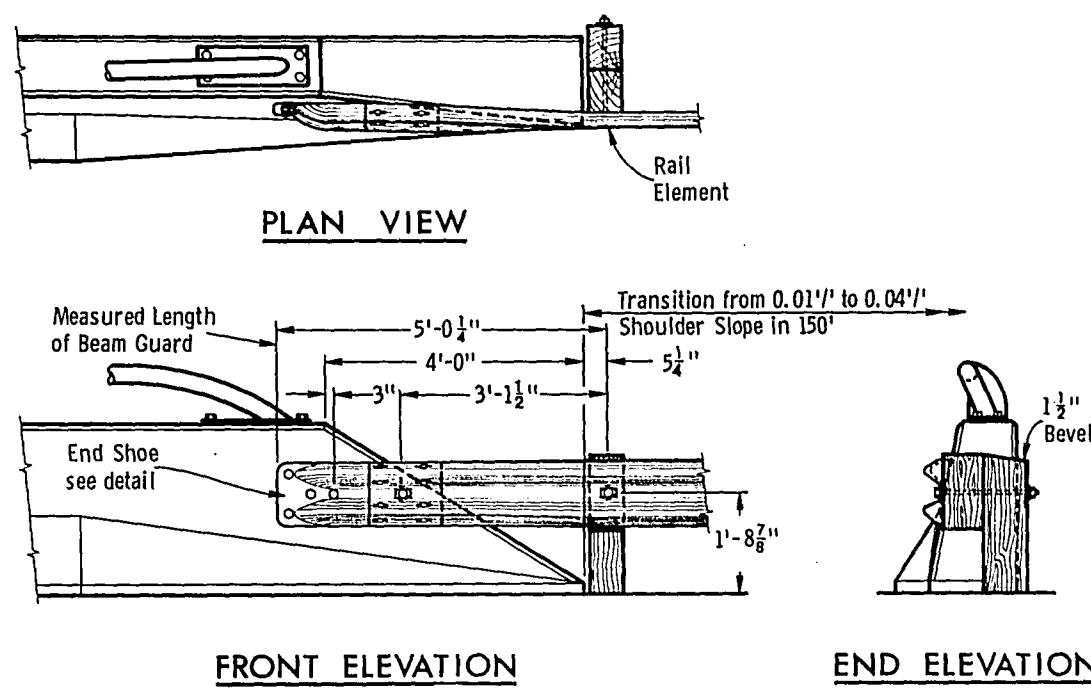
5/13/71
DATE

APPROVED:

5/13/71
DATE

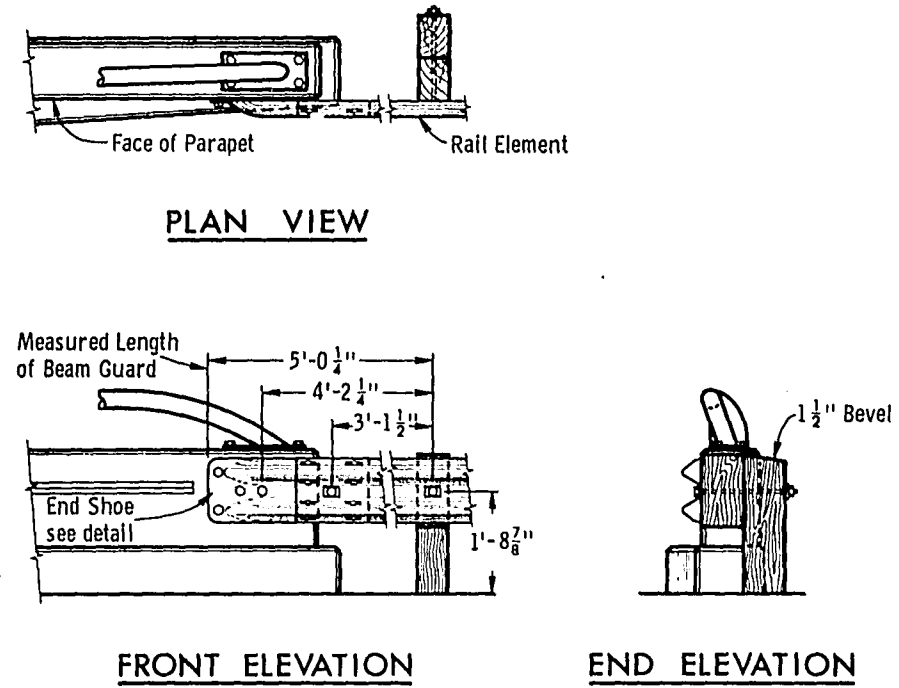
H. C. B. *H. C. B.*
ACTING CHIEF DESIGN ENGINEER

H. J. *H. J.*
STATE HIGHWAY ENGINEER



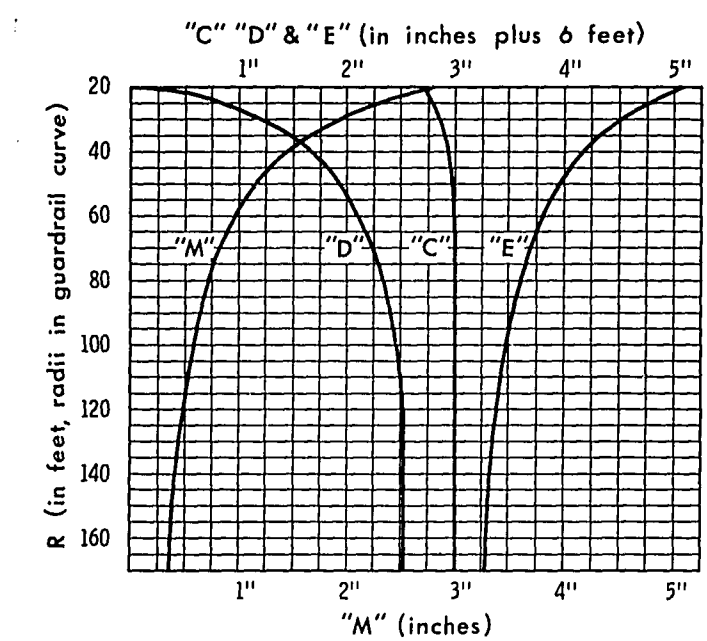
STRUCTURE MOUNTING DETAIL

SLOPING TYPE PARAPET WALL

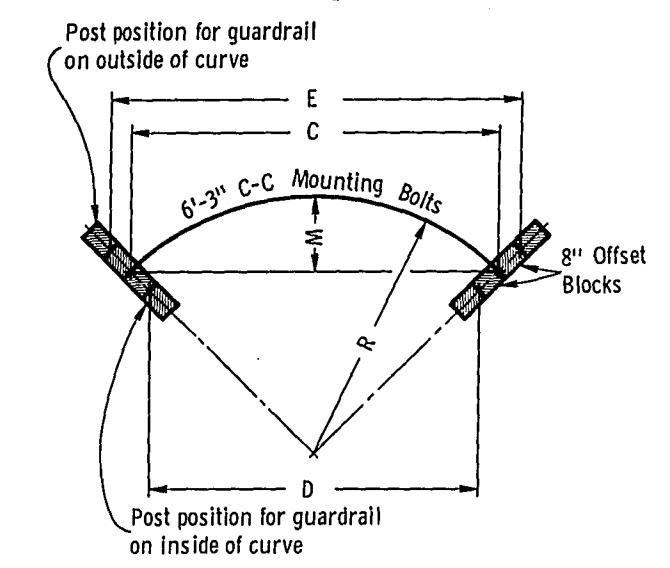


STRUCTURE MOUNTING DETAIL

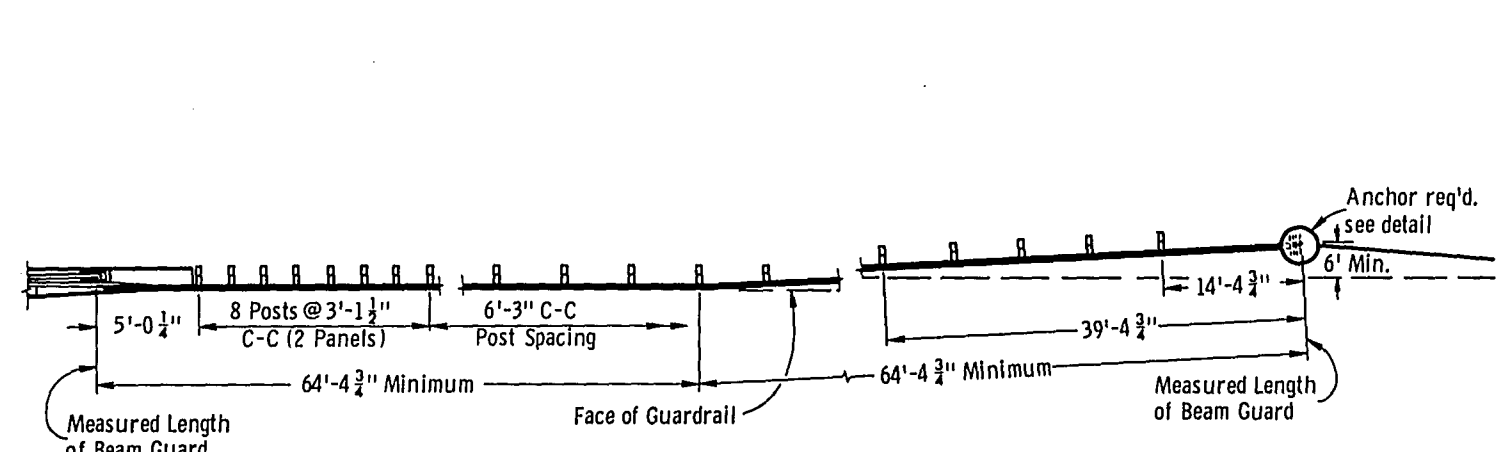
VERTICAL TYPE PARAPET WALL



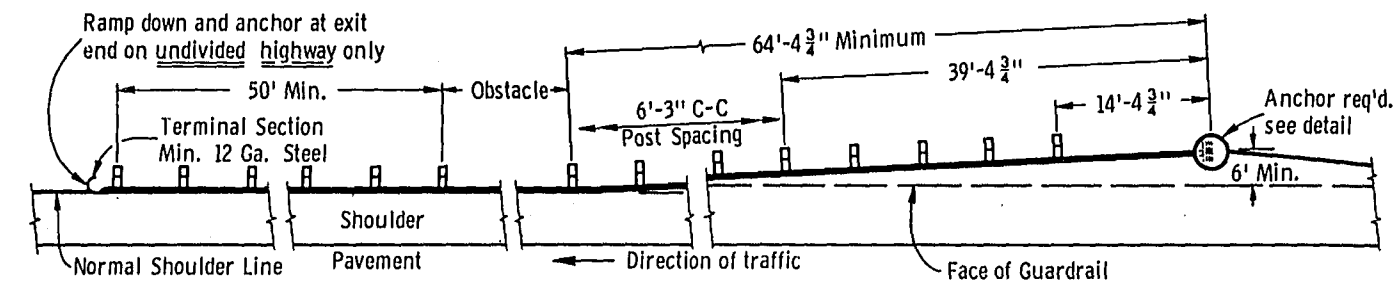
CURVE DATA FOR POST SPACING AND BEAM CURVING



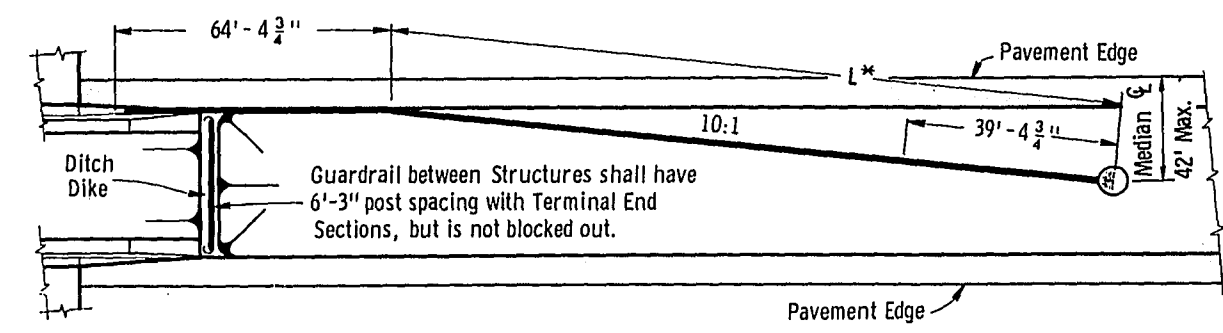
CHORD LENGTHS FOR POST SPACING AND MIDDLE ORDINATES FOR BEAM CURVING



TYPICAL OUTSIDE SHOULDER INSTALLATION AT STRUCTURES



TYPICAL INSTALLATION AT LOCATIONS OTHER THAN STRUCTURES



* Variable based on Median width

MEDIAN PROTECTION

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.

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.

Square anchor alternates will be permitted. Square anchors shall be a minimum of 24 inches x 24 inches.

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.

Upon approval of the Engineer, the 6 foot anchor offset may be reduced to 3 feet, for replacement installations where existing conditions will not permit the desirable offset.

The Post Footing Details at Piers shall be used when Guardrail Posts are over structure footings and less than 3'-6" of earth is provided over the top of the footing.

NOTE: This Standard Detail Drawing consists of two plates, 7-2.4.14a and 7-2.4.14b. Both plates are required when this Standard is called for in the plans.

CLASS "A"

STEEL PLATE BEAM GUARD & STEEL PLATE BEAM MEDIAN GUARD

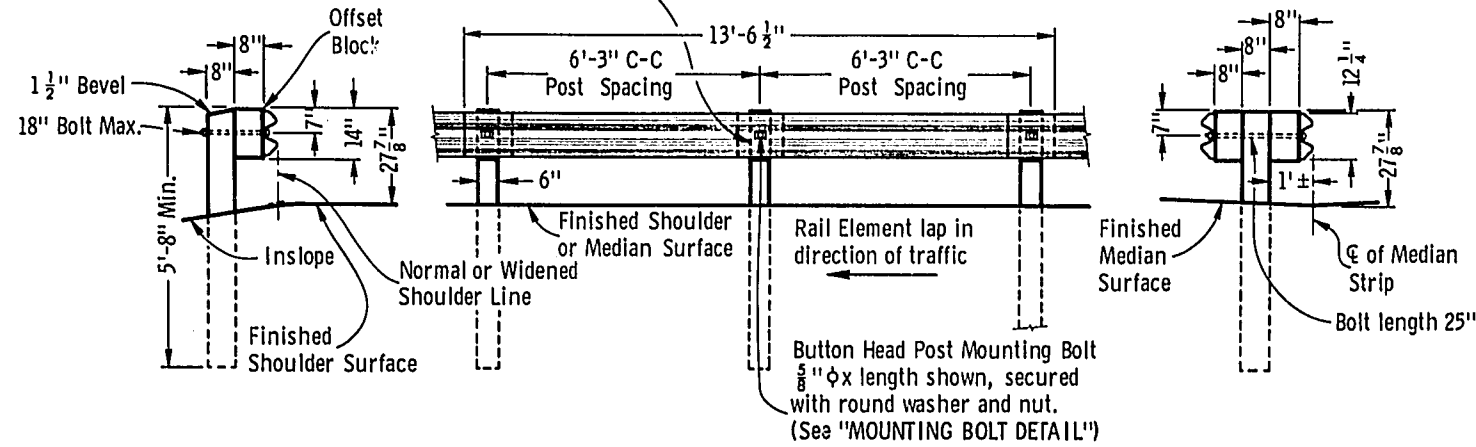
State of Wisconsin
Department of Transportation
Division of Highways

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

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.

NOTE: Eliminate offset blocks for medians less than 8 feet in width.

7.2-21



END ELEVATION

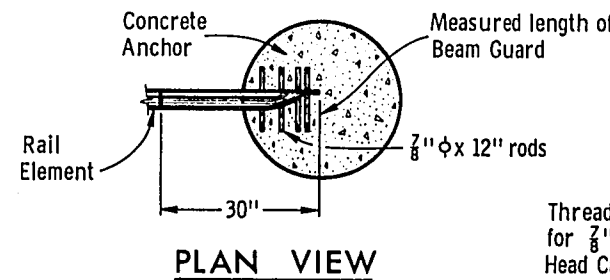
FRONT ELEVATION

END ELEVATION

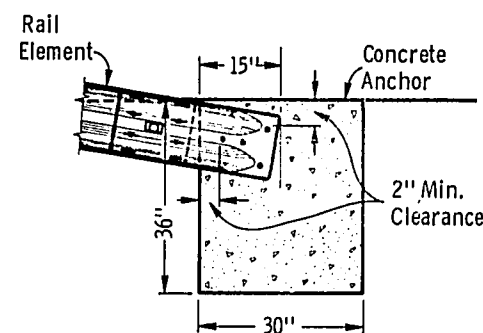
STEEL PLATE BEAM GUARD

STEEL PLATE BEAM MEDIAN GUARD

STEEL PLATE BEAM GUARD OR STEEL PLATE BEAM MEDIAN GUARD



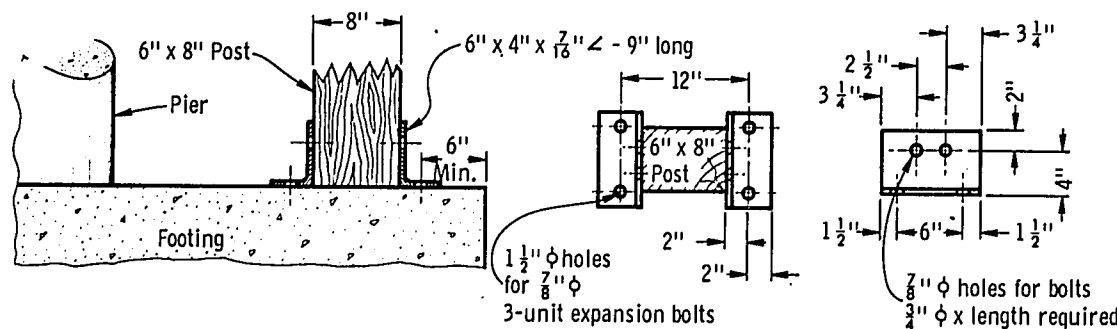
PLAN VIEW



SECTION VIEW

ANCHOR DETAIL

SINGLE RAIL ELEMENT INSTALLATION

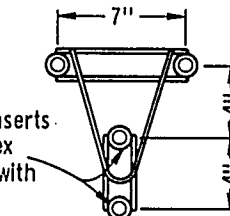


SECTION VIEW

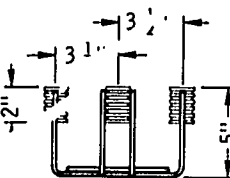
PLAN VIEW

ELEVATION

POST FOOTING DETAIL AT PIERS



PLAN VIEW

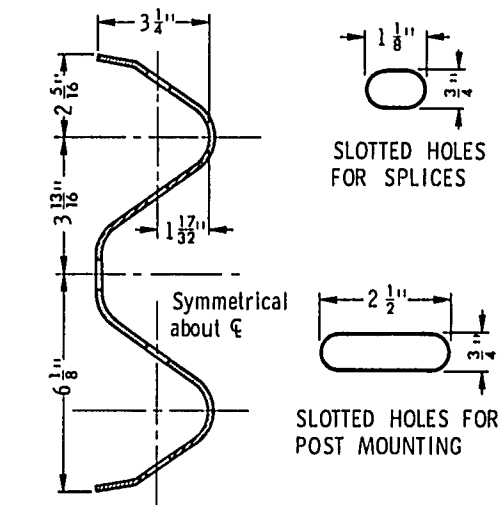


ELEVATION

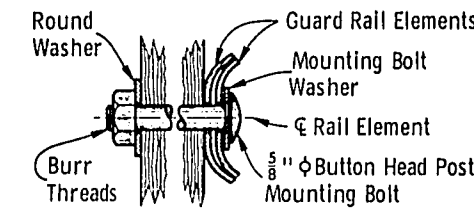
4 BOLT INSERT

ASSEMBLY

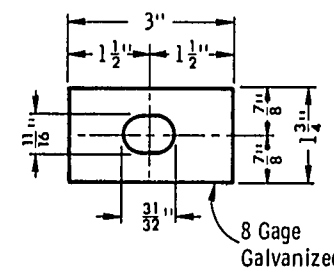
NOTE: Installation of 4 Bolt Insert Assembly (with Cap Screws inserted) to be part of Bridge Contract.



SECTION THRU RAIL ELEMENT

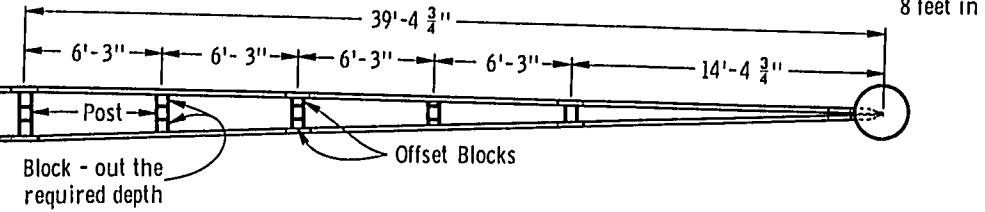


MOUNTING BOLT DETAIL

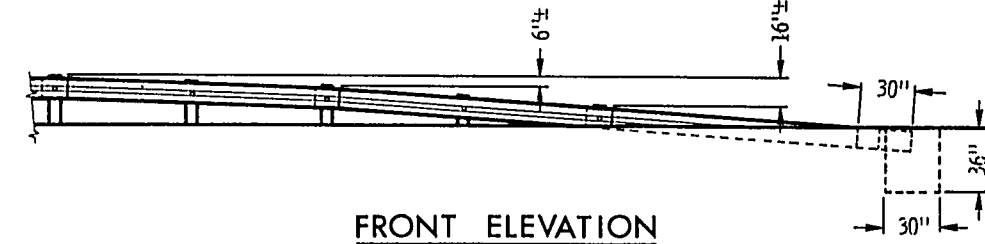


MOUNTING BOLT WASHER

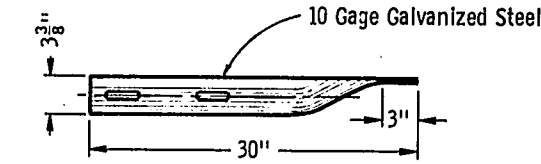
ANCHOR DETAIL FOR DOUBLE RAIL ELEMENT INSTALLATION



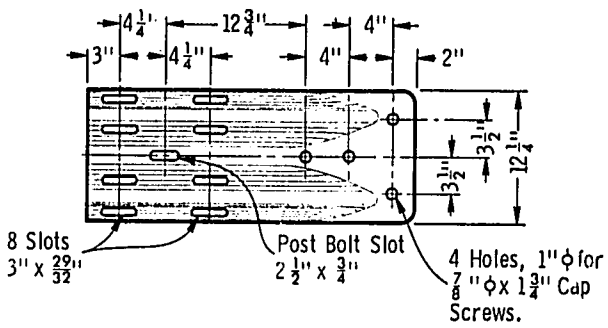
PLAN VIEW



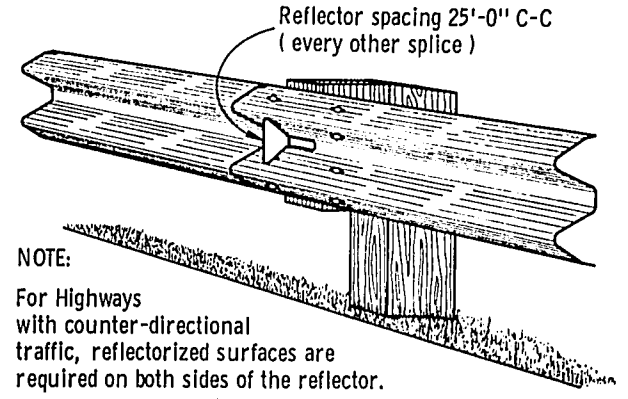
FRONT ELEVATION



END SHOE DETAIL

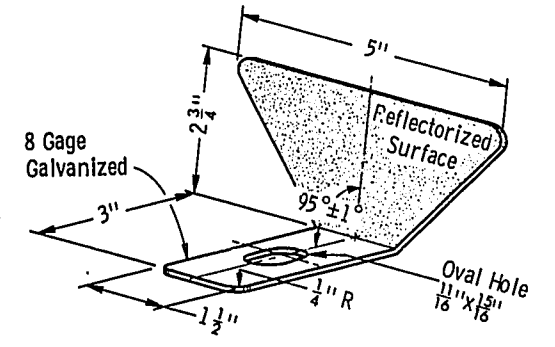


END SHOE DETAIL

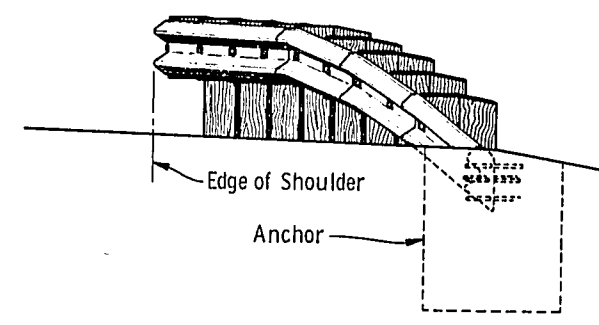


NOTE: For Highways with counter-directional traffic, reflectorized surfaces are required on both sides of the reflector.

TYPICAL INSTALLATION

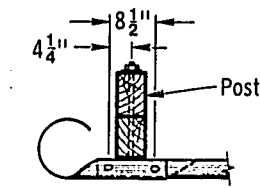


REFLECTOR DETAIL

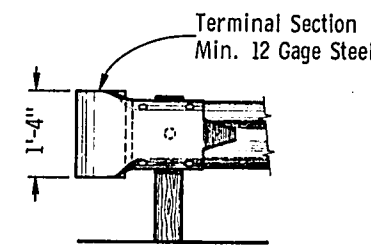


TYPICAL TERMINAL END ELEVATION

NOTE: This Standard Detail Drawing consists of two plates, 7-2.4.14a and 7-2.4.14b. Both plates are required when this Standard is called for in the plans.



PLAN VIEW



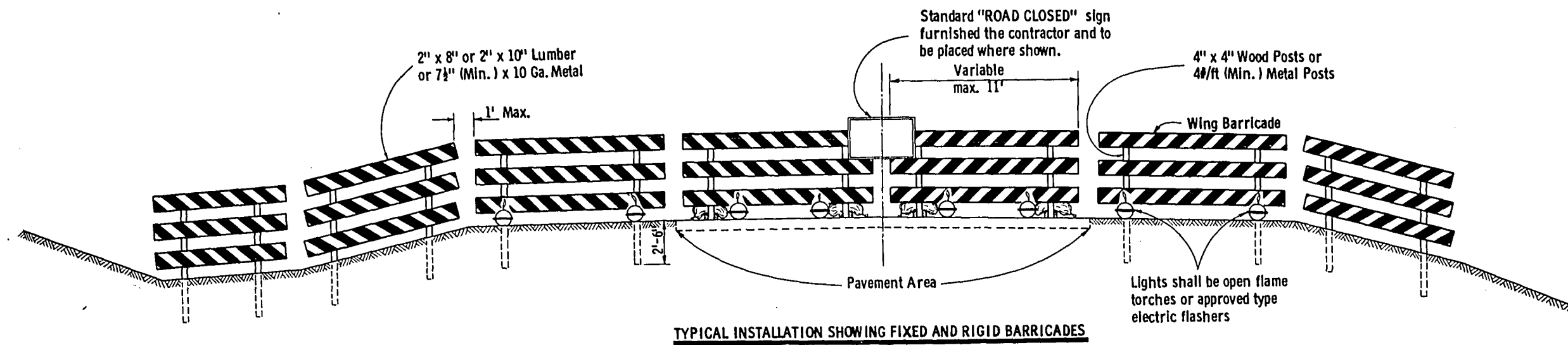
FRONT ELEVATION

TERMINAL SECTION DETAILS

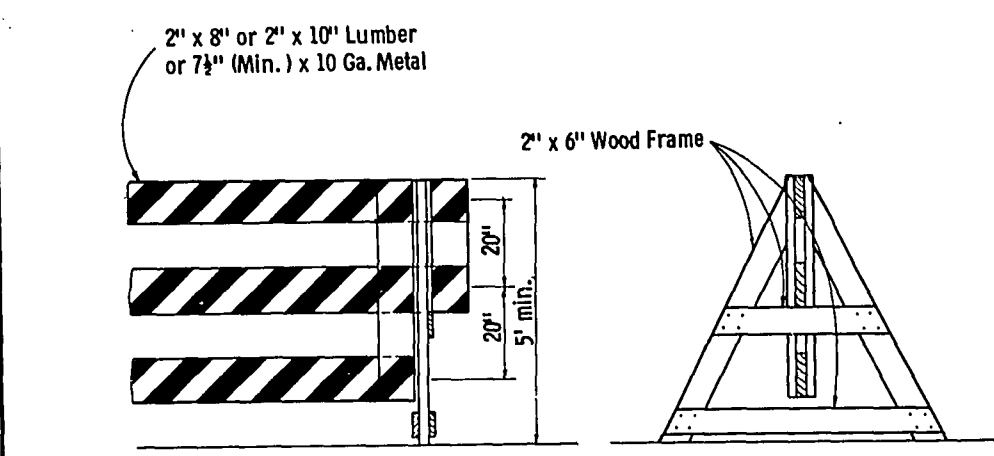
CLASS "A" STEEL PLATE BEAM GUARD & STEEL PLATE BEAM MEDIAN GUARD

State of Wisconsin
Department of Transportation
Division of Highways

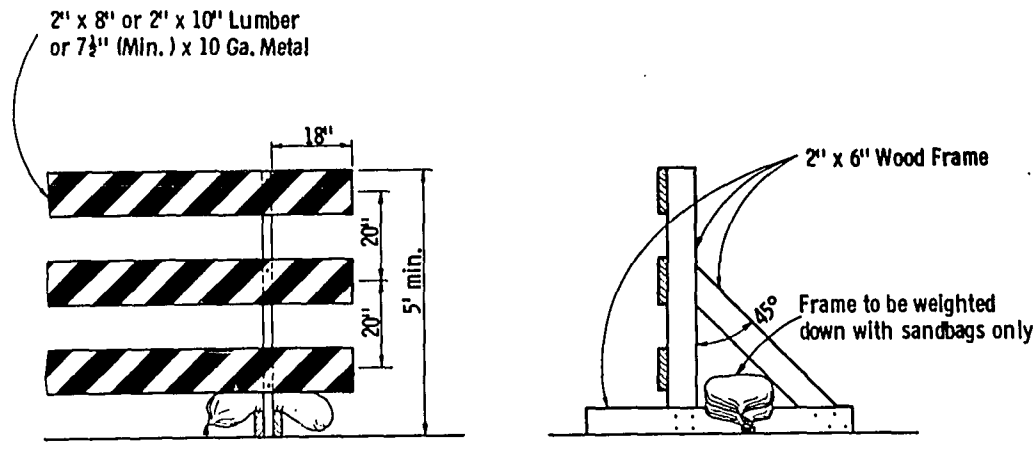
RECOMMENDED FOR APPROVAL:
DATE 5/13/71
APPROVED:
DATE 5/13/71
ACTING CHIEF DESIGN ENGINEER
STATE HIGHWAY ENGINEER



TYPICAL INSTALLATION SHOWING FIXED AND RIGID BARRICADES

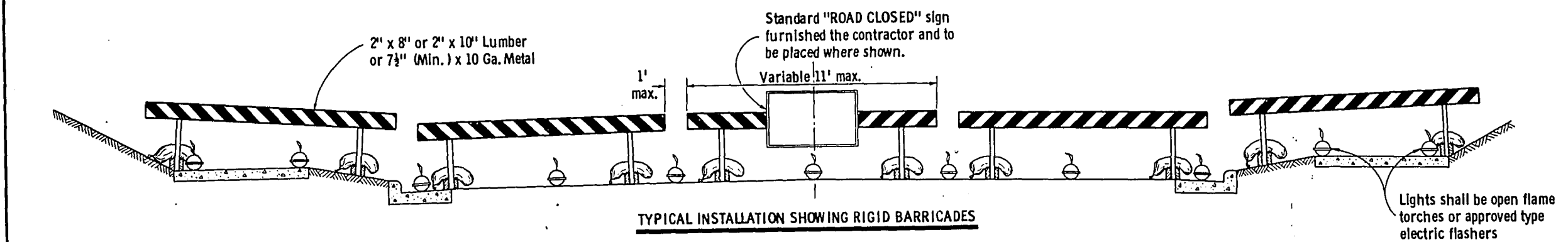


ALTERNATE TYPE INSTALLATION (DEMOUNTABLE)

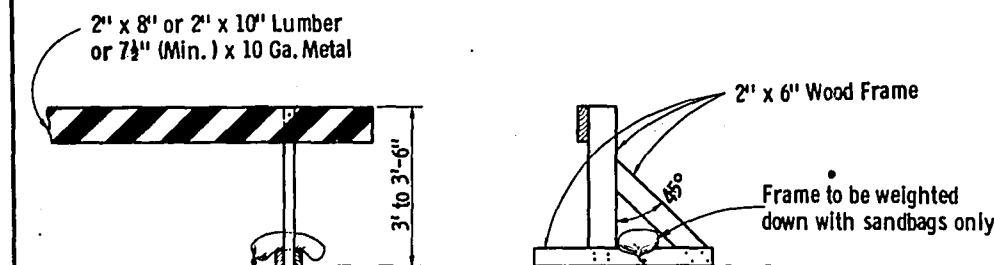


ALTERNATE TYPE INSTALLATION (RIGID)

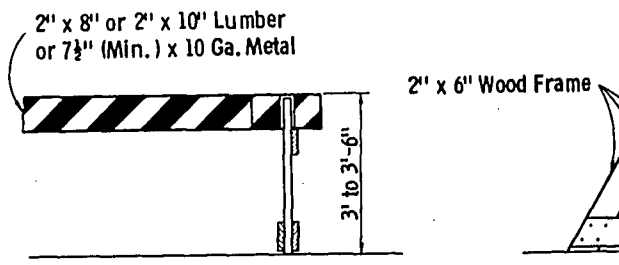
CLASS I BARRICADES



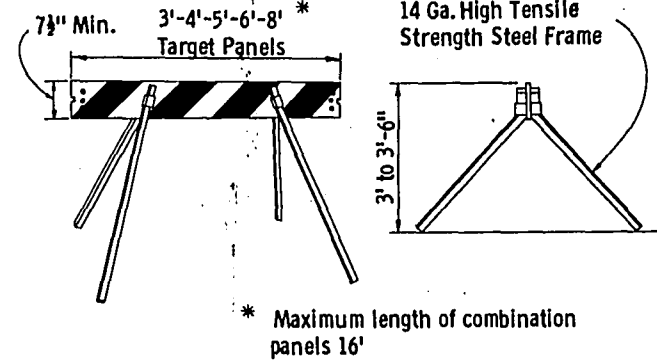
TYPICAL INSTALLATION SHOWING RIGID BARRICADES



ALTERNATE TYPE INSTALLATION (RIGID)



ALTERNATE TYPE INSTALLATION (DEMOUNTABLE)



ALTERNATE TYPE INSTALLATION (DEMOUNTABLE)

CLASS II BARRICADES

GENERAL NOTES

7.3-21

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:

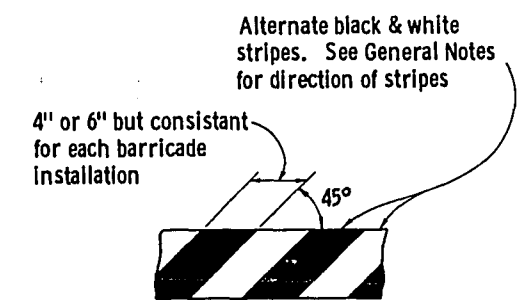
Where a barricade extends entirely across the roadway with no vehicle access provision, the stripes shall slope downward toward the highway centerline. Where vehicle access is permitted, the stripes shall slope downward in the direction toward which vehicles must turn in detouring. Where both right and 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:

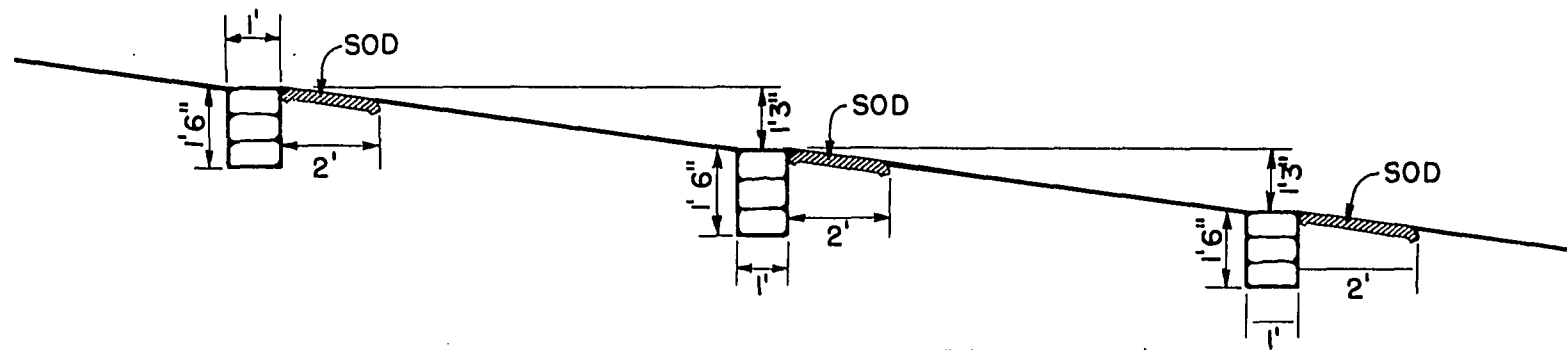
All barricades, unless otherwise provided for in the plans and/or special provisions shall be furnished, placed, and maintained as noted above, and no additional compensation will be allowed but shall be construed to be included in the price bid for other items.



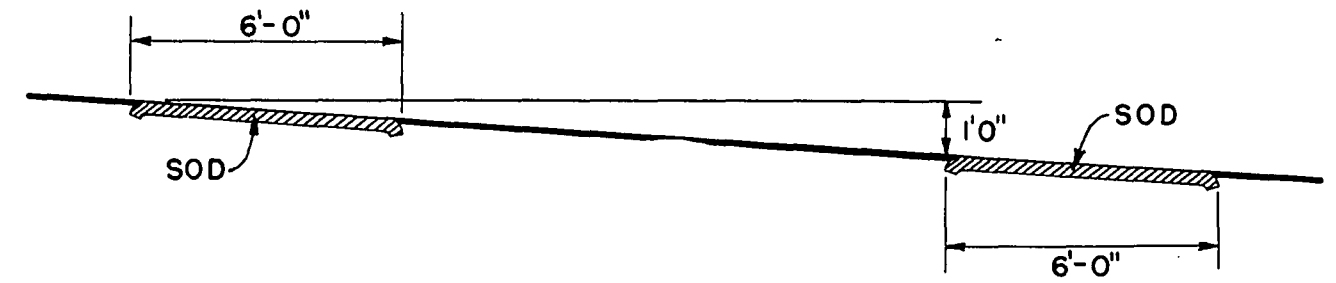
TYPICAL DIAGONAL STRIPES

Applies to all Classes & Types of Barricades

CONSTRUCTION BARRICADE	
State Highway Commission of Wisconsin	
RECOMMENDED FOR APPROVAL:	
DATE: 1/11/67	DESIGN ENGINEER: E.J. B... ..
APPROVED: 1/13/67	STATE HIGHWAY ENGINEER: W.J.

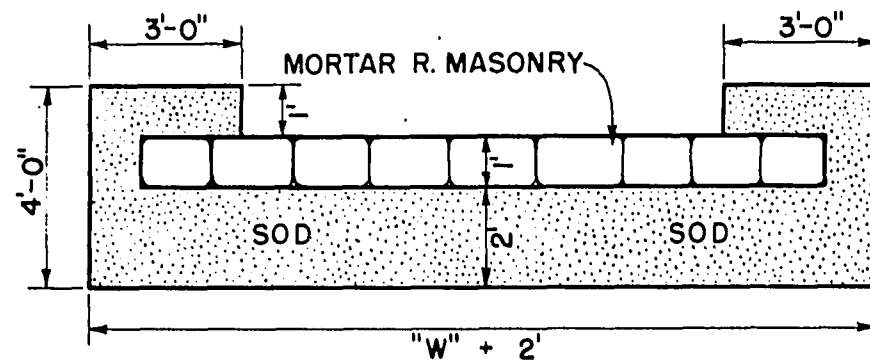


PROFILE OF DITCH GRADE

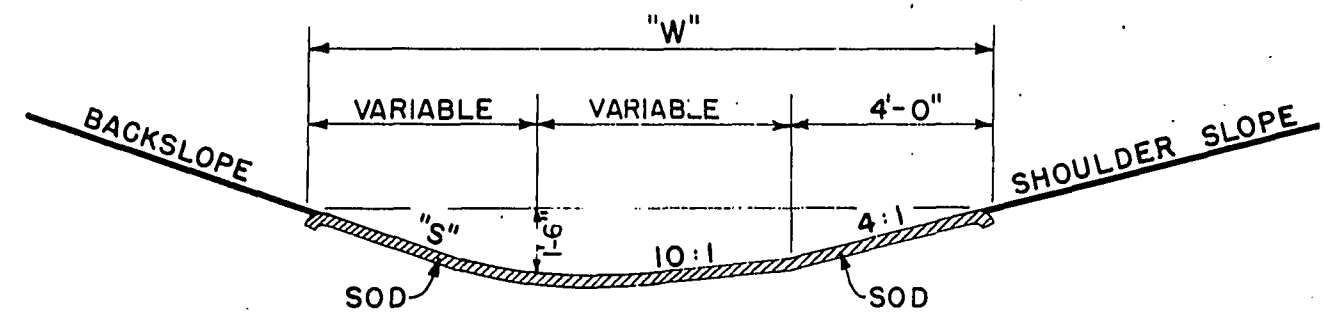


PROFILE OF DITCH GRADE

NOTE: NUMBER REQUIRED WILL BE DETERMINED BY VERTICAL SPACING.



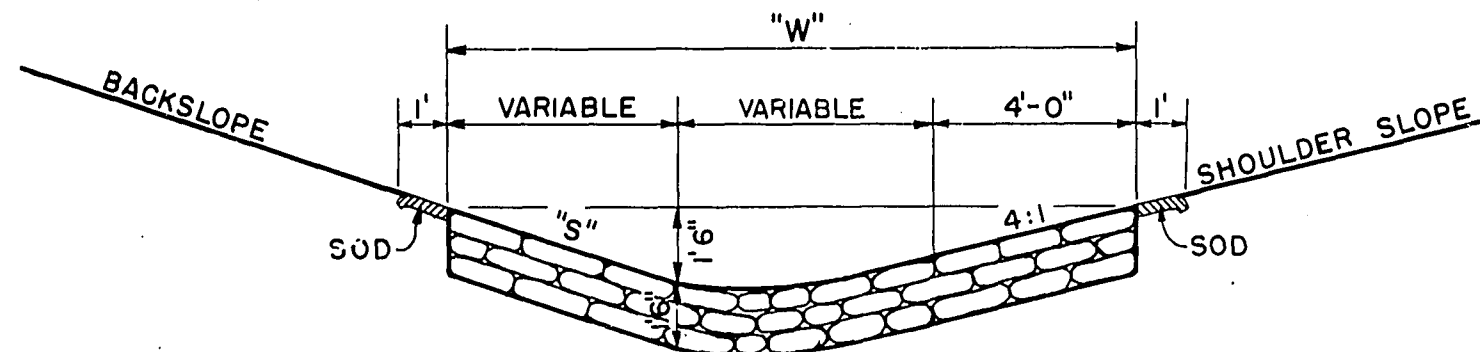
PLAN VIEW SHOWING SOD



SECTION

SOD DITCH CHECKS

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



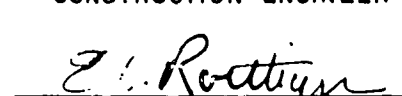
SECTION

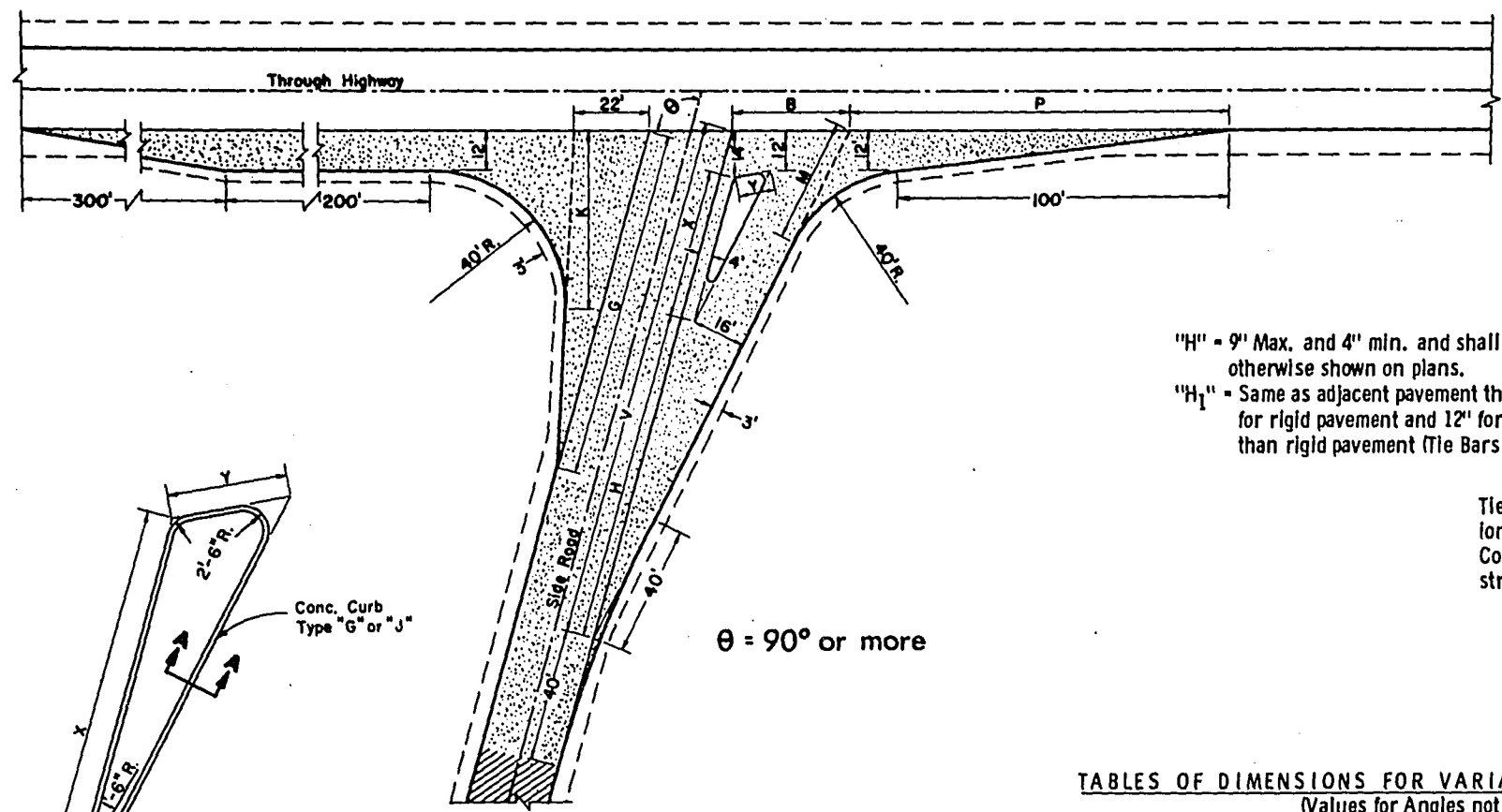
MORTAR RUBBLE MASONRY

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

CONSTRUCTION NOTES

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

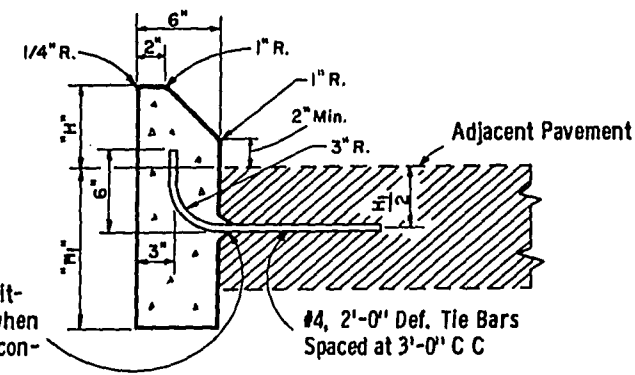
DITCH CHECKS	
MORTAR RUBBLE MASONRY & SOD	
STATE HIGHWAY COMMISSION OF WISC.	
RECOMMENDED FOR APPROVAL:	
 DESIGN ENGINEER	
 CONSTRUCTION ENGINEER	
DATE:	
APPROVED:	
DRAWN DIV. 9	
CHECKED	
 STATE HIGHWAY ENGINEER 8-1.3.1	



$\theta = 90^\circ$ or more

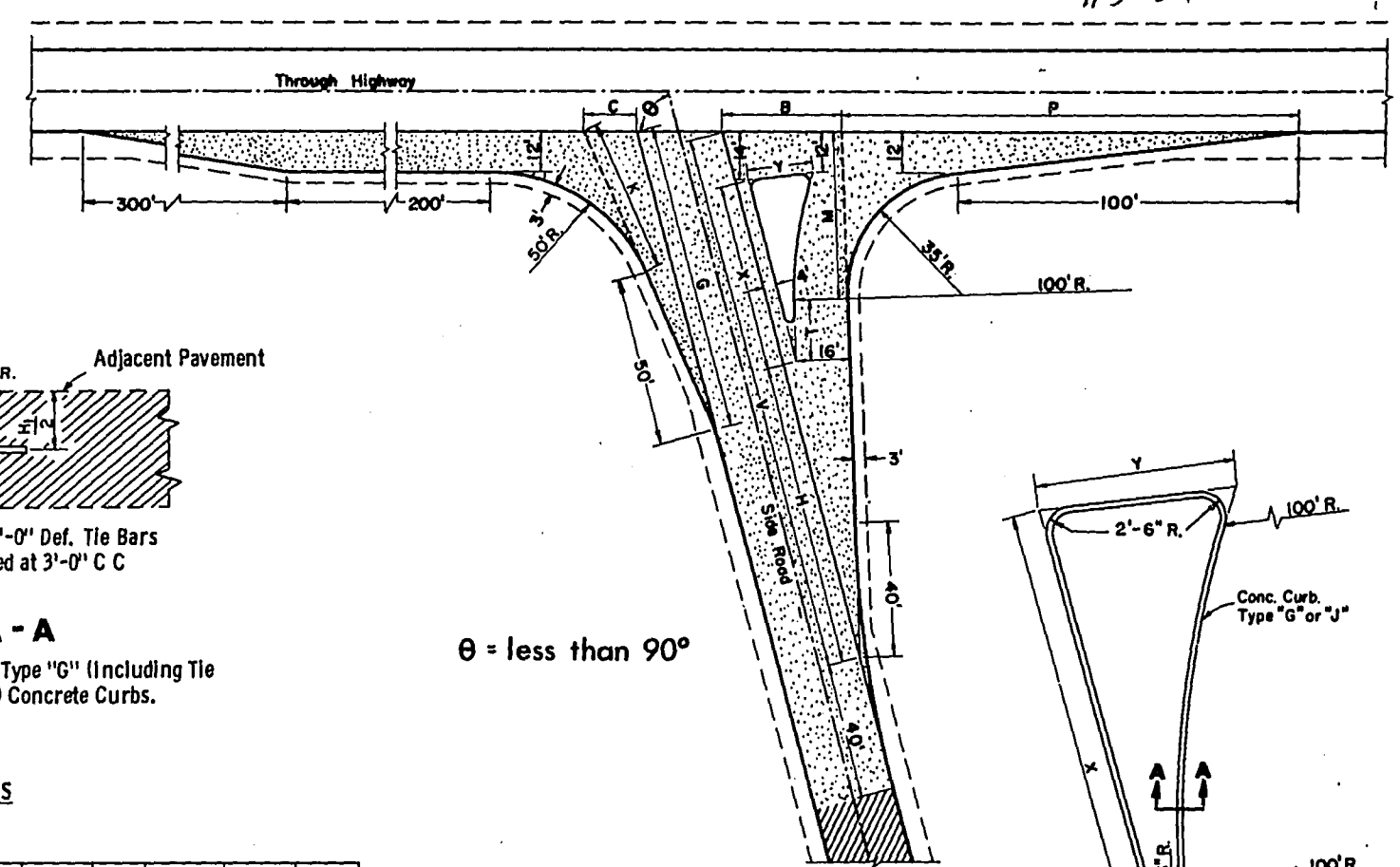
"H" = 9" Max. and 4" min. and shall be 6" unless otherwise shown on plans.
"H₁" = Same as adjacent pavement thickness for rigid pavement and 12" for other than rigid pavement (Tie Bars Omitted).

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.



$\theta = \text{less than } 90^\circ$

TABLES OF DIMENSIONS FOR VARIABLE SIDE ROAD INTERSECTION ANGLES
(Values for Angles not shown shall be interpolated)

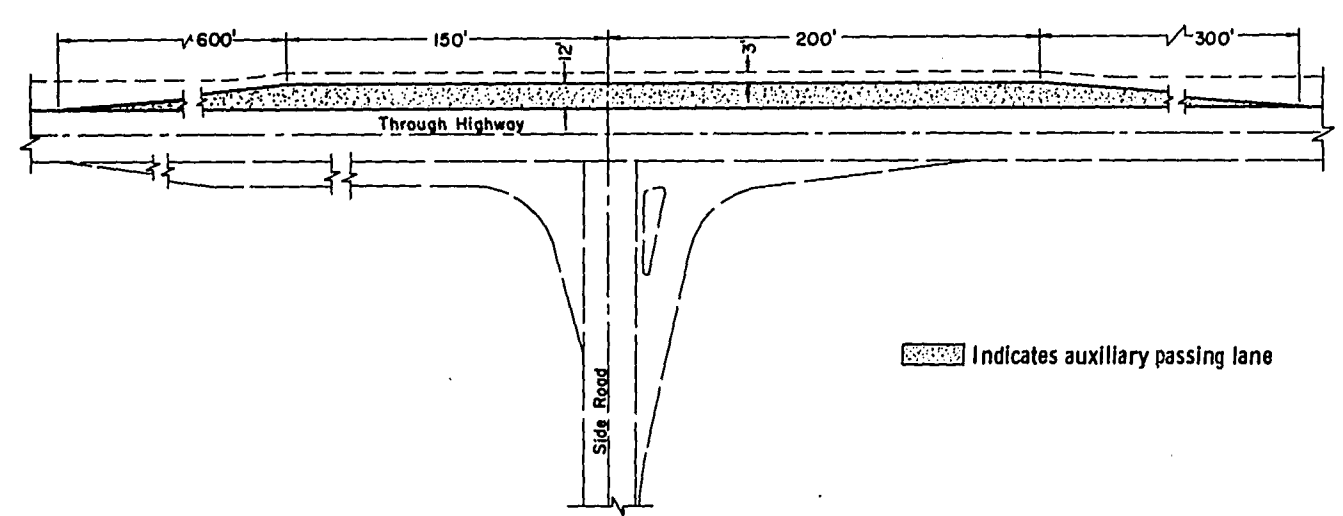
θ	G	K	B	V	H	X	Y	P	M
90	90	43.8	33.9	156.0	94	48.0	11.0	125.0	44.2
95	94	46.7	34.0	156.7	96	47.0	11.0	121.3	41.9
100	98	50.0	34.4	157.4	98	45.9	11.0	117.7	39.7
105	102	53.8	35.2	158.3	100	44.9	11.2	114.2	37.8
110	106	58.2	36.4	159.2	102	43.7	11.4	110.6	36.2
115	110	63.4	38.4	161.8	104	42.6	11.7	107.1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

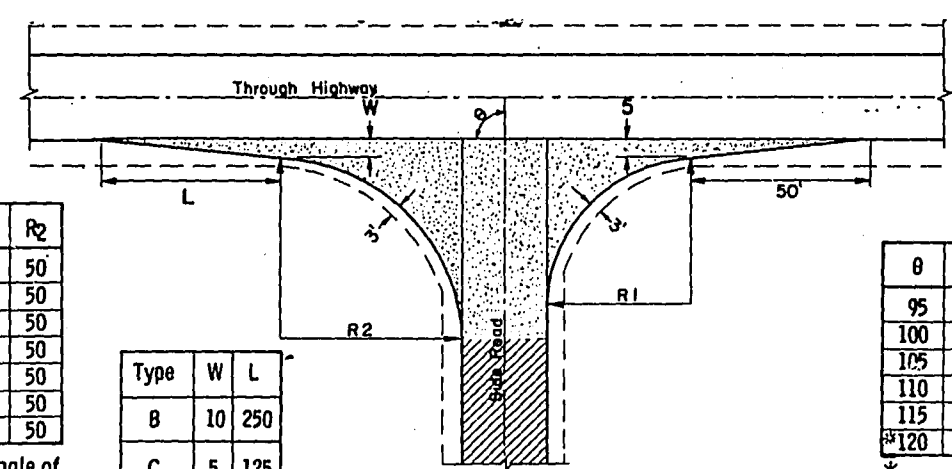
*Desirable Minimum angle of intersection

TYPE "A" SIDE ROAD INTERSECTION DETAILS



PASSING LANE DETAIL

Indicates auxiliary passing lane



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

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

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

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. Rybak
CHIEF DESIGN ENGINEER

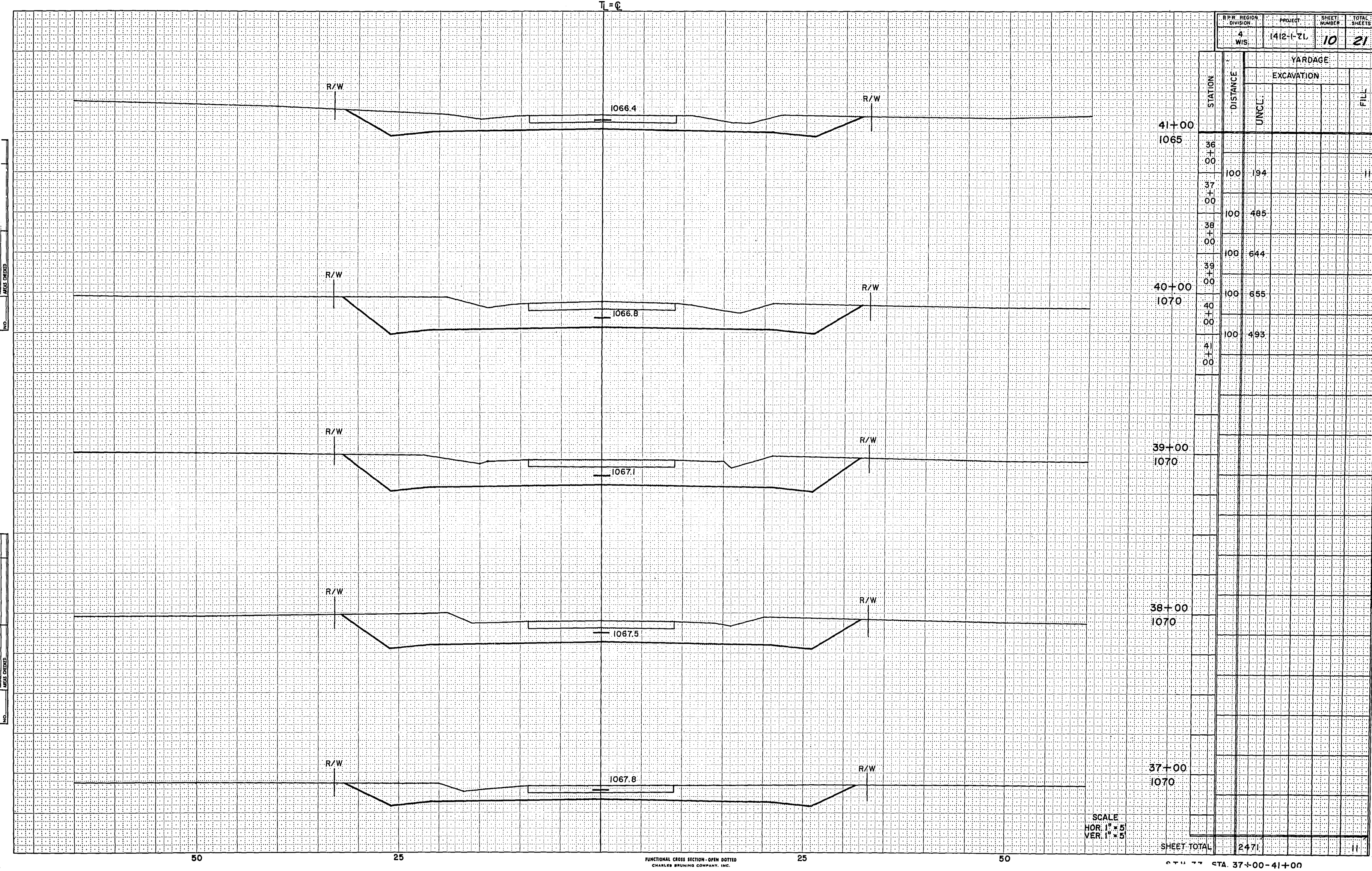
APPROVED:
6/9/67
DATE
J. J. Burmeister
STATE HIGHWAY ENGINEER

STATION	DISTANCE	YARDAGE				
		EXCAVATION				FILL
		UNCL				
2+0						
3+0	100					170
4+0	100					180
4+9	59					130
5+0	41					133
6+0	100	15				115
7+0						
8+0						
9+0						
10+0						
11+0						
12+0						
13+0						
14+0						
15+0						
16+0						
17+0						
18+0						
19+0						
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21+0						
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68+0						
69+0						
70+0						
71+0						
72+0						
73+0						
74+0						
75+0						
76+0						
77+0						
78+0						
79+0						
80+0						
81+0						
82+0						
83+0						
84+0						



SCALE
HOR. 1" = 5'
VER. 1" = 5'

R.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	1412-1-71	10	21



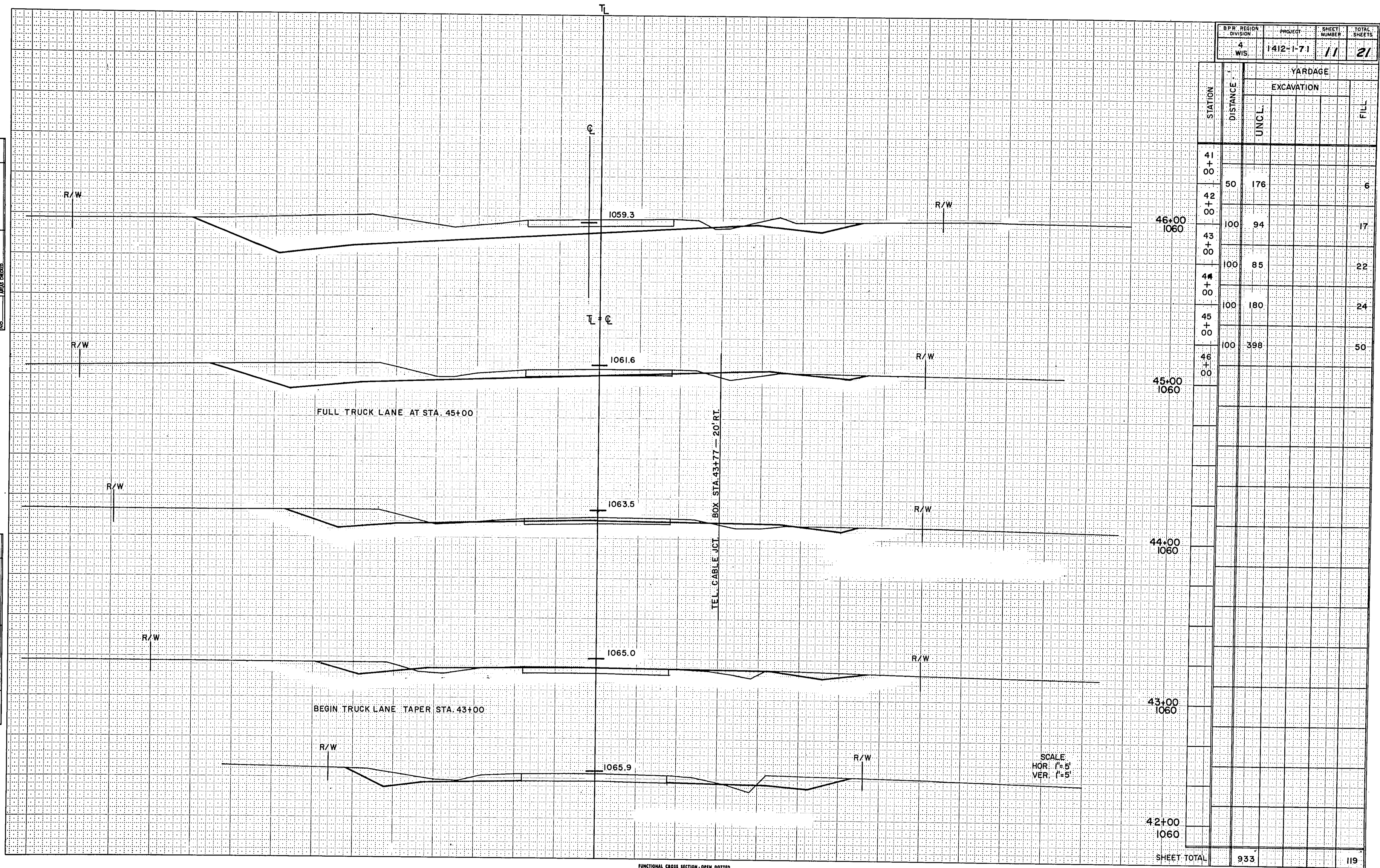
STATION	DISTANCE	YARDAGE			
		EXCAVATION			FILL
		UNCL.			
41+00 1065	36+00 100	194			11
	37+00 100	485			
	38+00 100	644			
40+00 1070	39+00 100	655			
	40+00 100	493			
	41+00 100				
39+00 1070					
38+00 1070					
37+00 1070					
SHEET TOTAL		2471			11

SCALE
HOR. 1" = 5'
VER. 1" = 5'

REVISION
NO. 1
DATE
10/1/71
BY
JMS
CHECKED
JMS

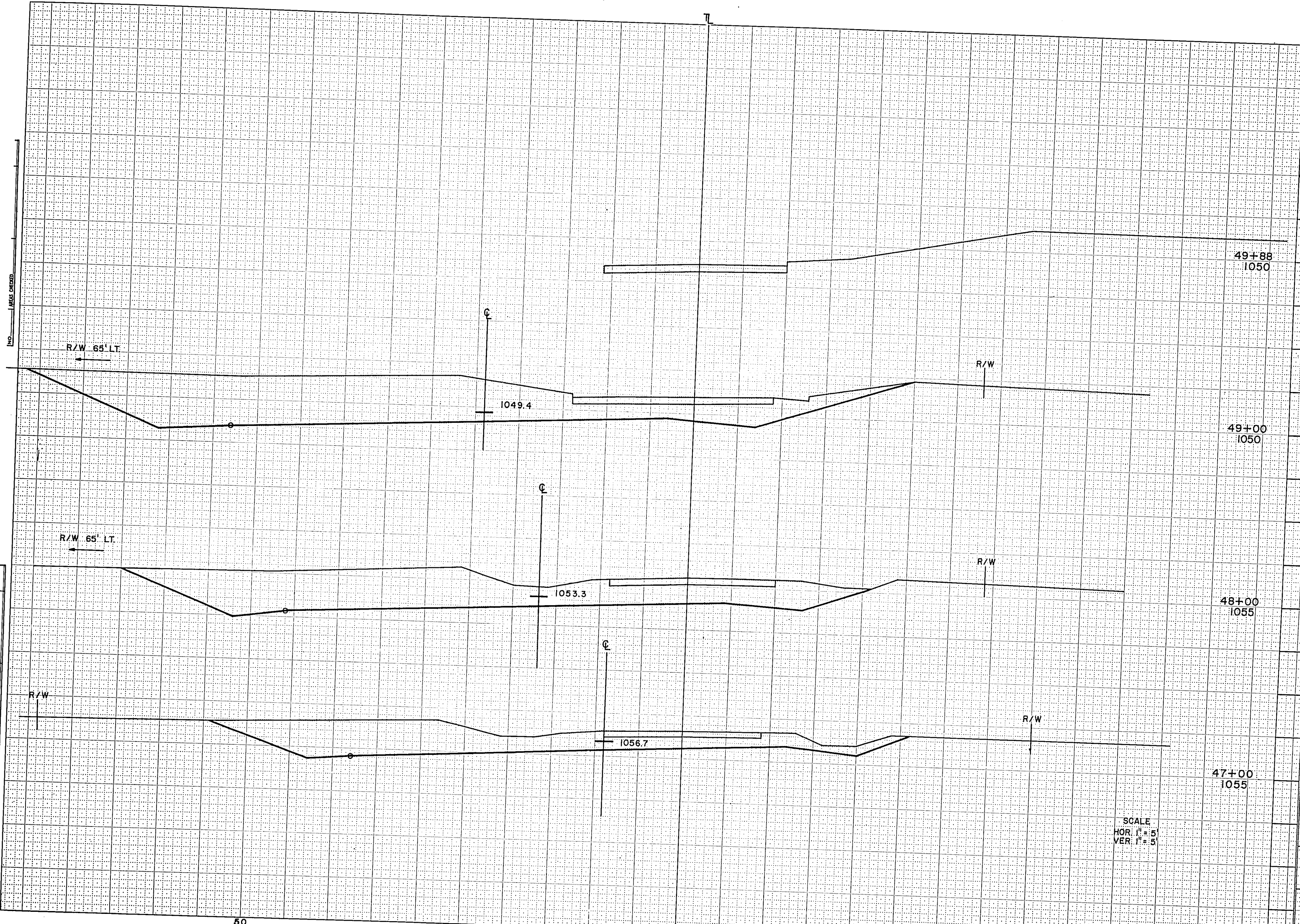
REVISION
NO. 1
DATE
10/1/71
BY
JMS
CHECKED
JMS

RPR. REGION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	1412-1-71	11	21



B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	1412-1-71	12	21

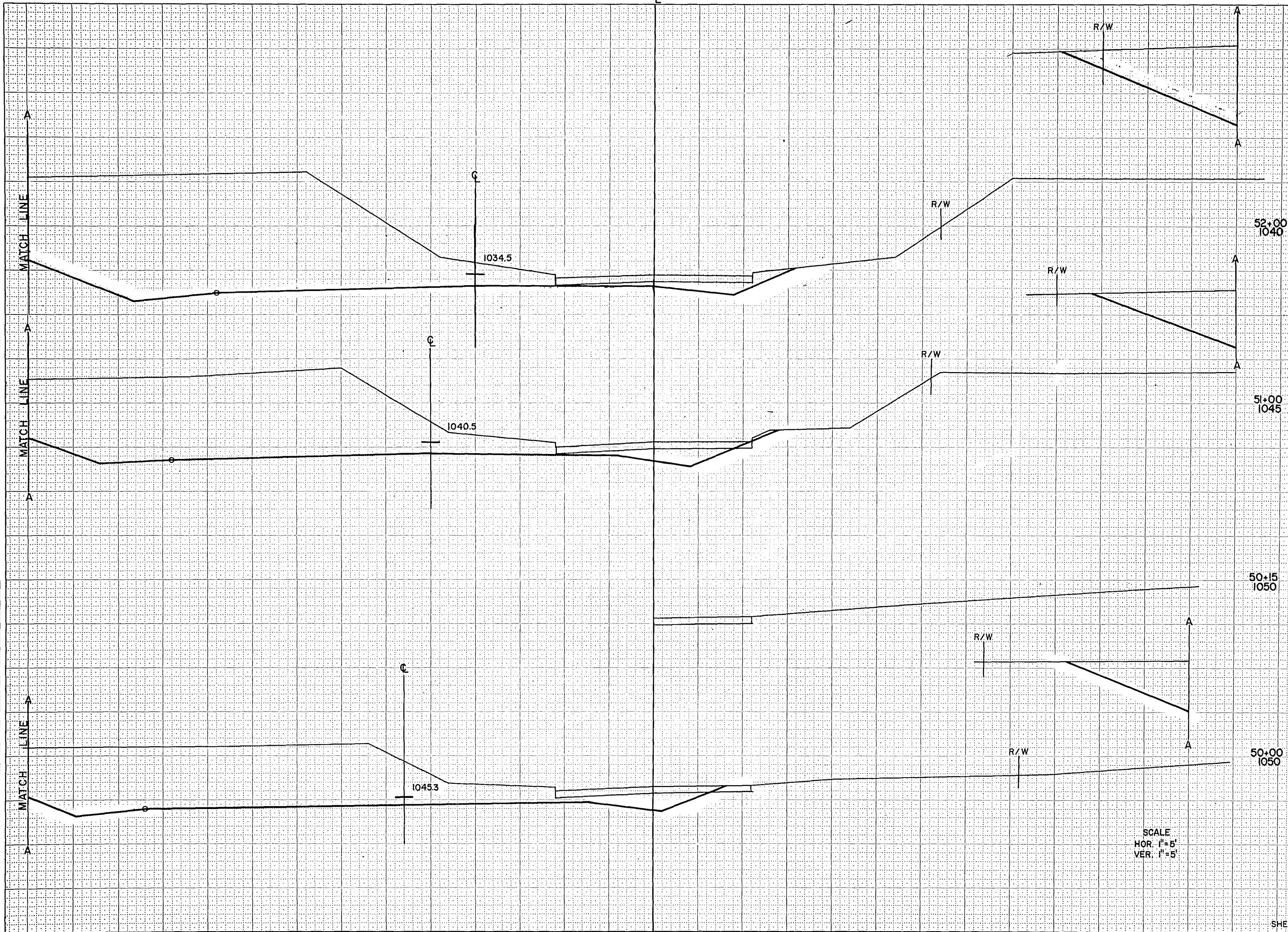
STATION	DISTANCE	YARDAGE		
		EXCAVATION		FILL
		UNCL		
46+00	100	324		19
47+00	100	805		
48+00	100	1152		
49+00				
49+88				
49+00				
48+00				
47+00				
46+00				
SHEET TOTAL		2281		19



FUNCTIONAL CROSS SECTION - OPEN DOTTED
CHARLES BRUNING COMPANY, INC.

R.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	1412-1-71	13	21

STATION	DISTANCE	YARDAGE				
		UNCL	EXCAVATION			FILL
49 + 00	100	1396				
50 + 00						
51 + 00	100	1629				
52 + 00	100	2175				

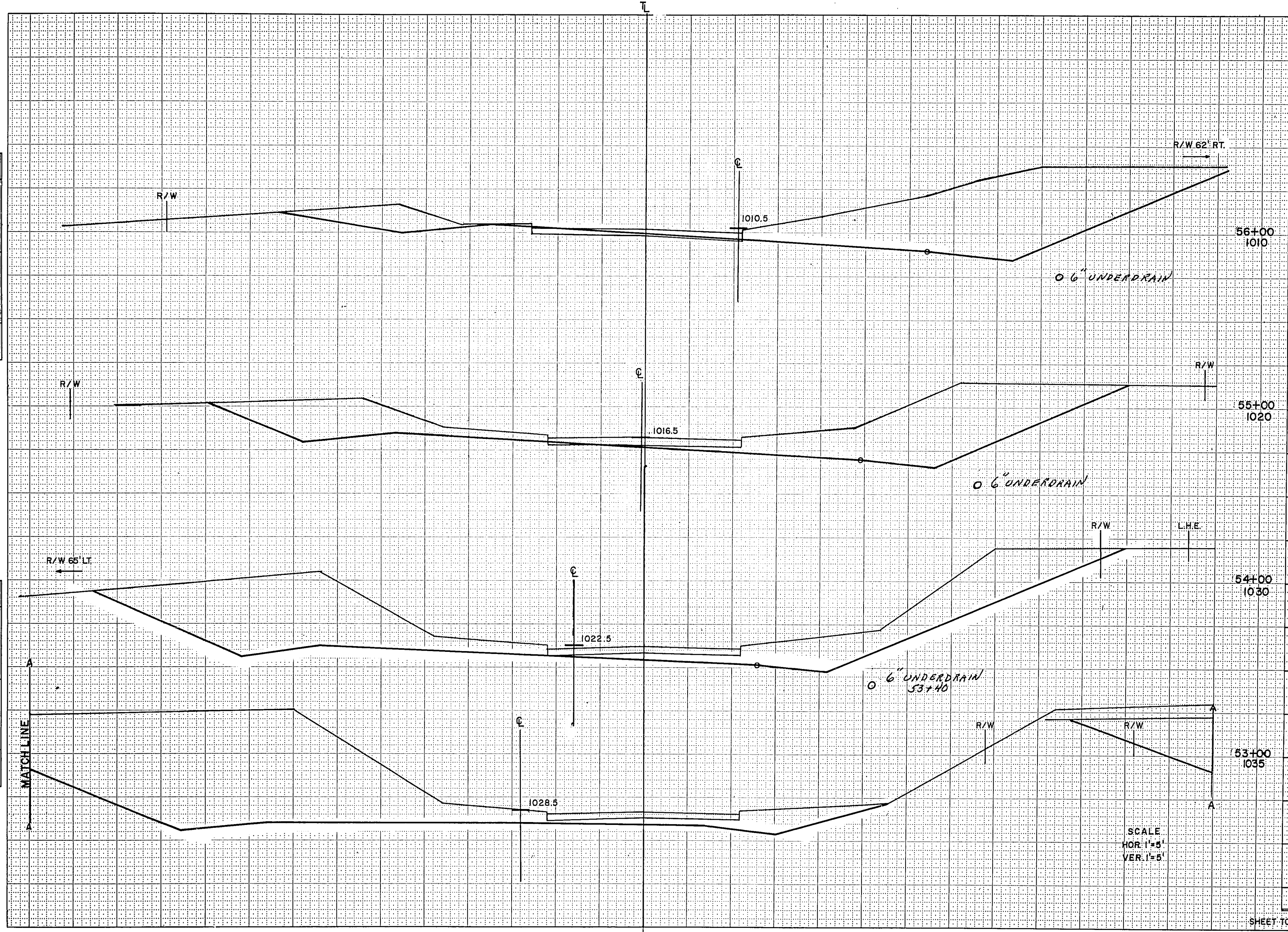


NOTE BOOK	1. NOTEBOOK	TEMPLATE	
		AREAS	
NO		AREAS CHECKED	

NOTE BOOK	FILE NO.
NOTE BOOK	TEMPLATE
NO	AREAS
	AREAS CHECKED

R.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	412-1-71	14	21

STATION	DISTANCE	YARDAGE			
		EXCAVATION			FILL
		UNCL			
52+00	100	2395			
53+00	100	1857			
54+00	100	1305			6
55+00	100	1161			46
56+00					
55+00					
54+00					
53+00					
52+00					
SHEET TOTAL		6718			52

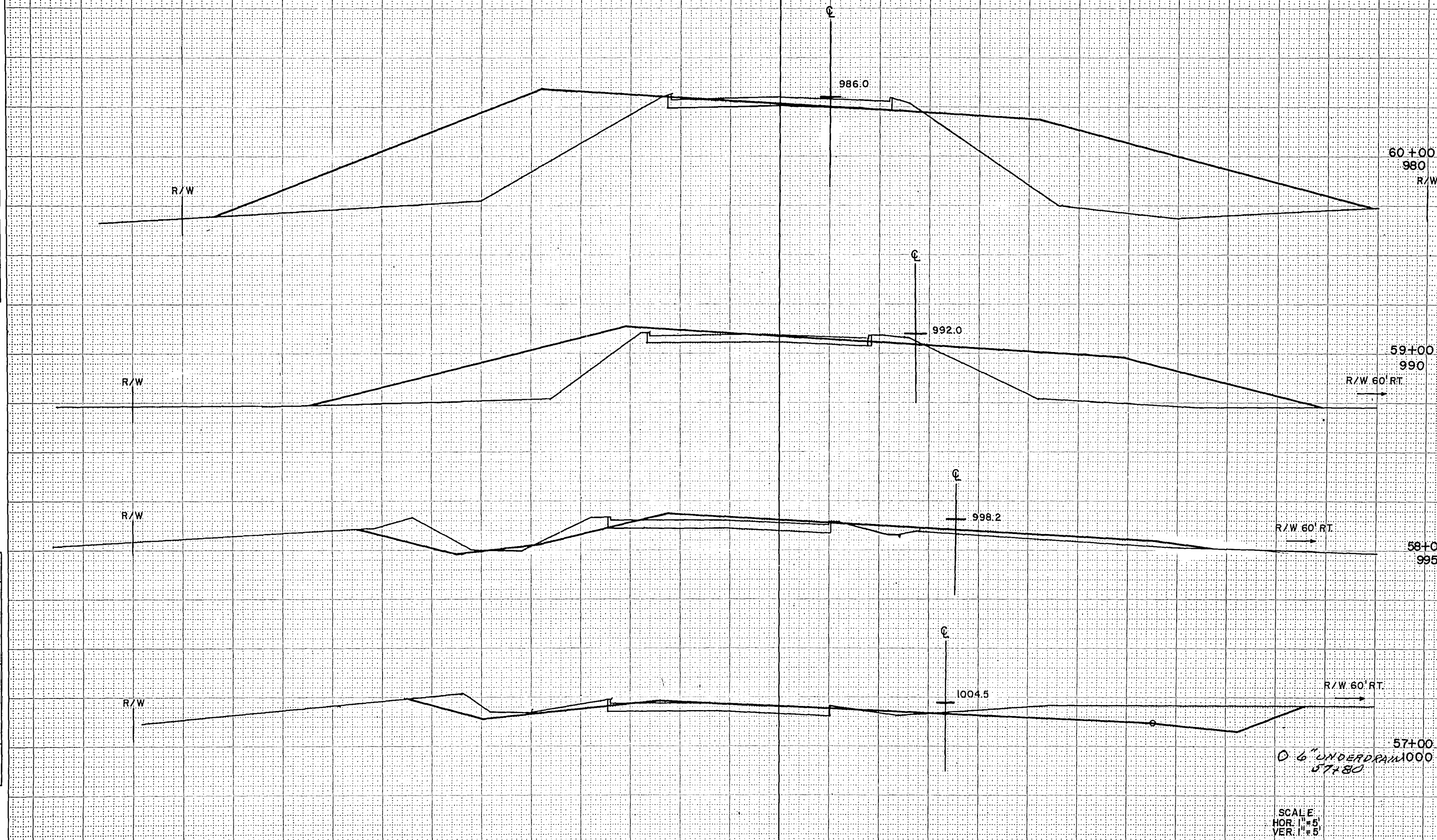


CAUTION
 TEMPLATE
 AREA
 NOT TO BE
 USED FOR
 RECORD

CAUTION
 TEMPLATE
 AREA
 NOT TO BE
 USED FOR
 RECORD

RPR. REGIONAL	PROJECT	SHEET	TOTAL
4	1412-1-71	15	21
WIS.			

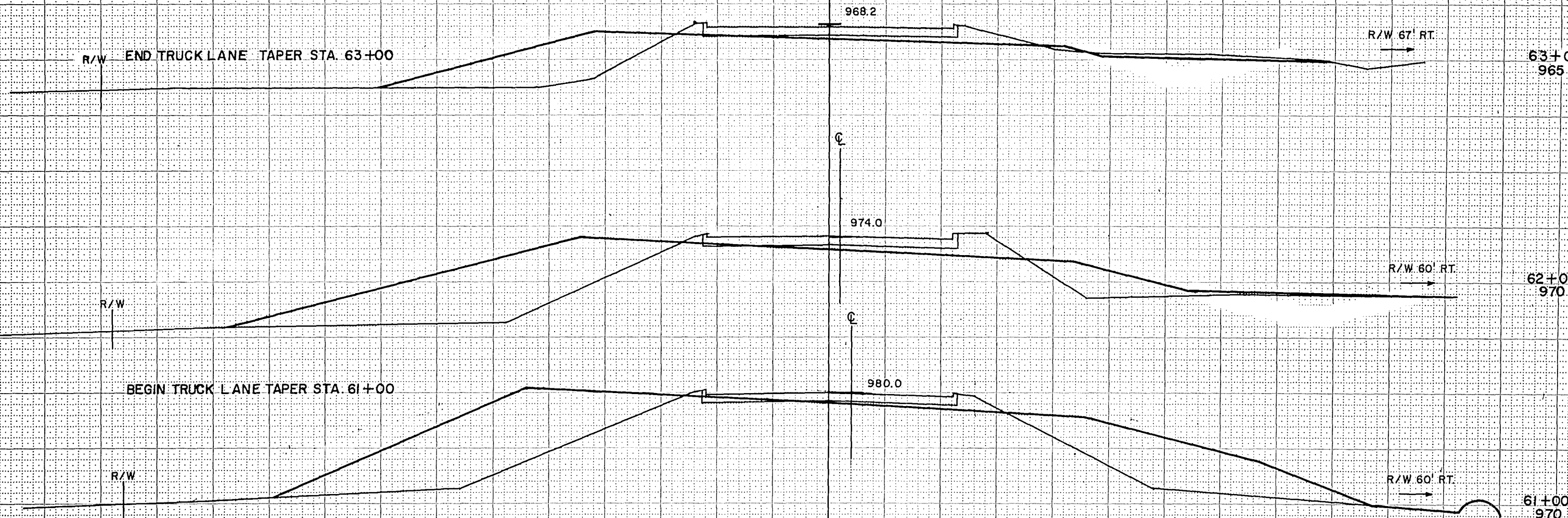
STATION	DISTANCE	YARDAGE			
		EXCAVATION			FILL
		UNCL.			
56+00	100	741			78
57+00	100	178			117
58+00	100	59			487
59+00	100	19			1207
60+00					
59+00					
58+00					
57+00					
56+00					
SHEET TOTAL		997			1889



T = C

R.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	1412-1-71	16	21

STATION	DISTANCE	YARDAGE			
		EXCAVATION			FILL
		UNCL.			
60+00					
61+00	100	24			1231
62+00	100	48			735
63+00	100	72			431
64+00					
65+00					
66+00					
67+00					
68+00					
69+00					
70+00					
71+00					
72+00					
73+00					
74+00					
75+00					
76+00					
77+00					
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81+00					
82+00					
83+00					
84+00					
85+00					
86+00					
87+00					
88+00					
89+00					
90+00					
91+00					
92+00					
93+00					
94+00					
95+00					
96+00					
97+00					
98+00					
99+00					
100+00					
SHEET TOTAL		144			2397



SCALE
HOR. 1"=5'
VER. 1"=5'

TL = C

B.P.R. REGION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4	1412-1-71	17	21
WIS.			

STATION	DISTANCE	YARDAGE			
		EXCAVATION			FILL
		UNCL.			
63+00	100	106			139
64+00	100	69			11
65+00					
66+00					
66+78					
950					
66+00					
955					
65+00					
955					
64+00					
960					
SHEET TOTAL		175			150

R/W

R/W

66+78
950

66+00
955

R/W

R/W

MEET EXISTING GRADE AT STA. 65+00

65+00
955

R/W

R/W

963.0

64+00
960

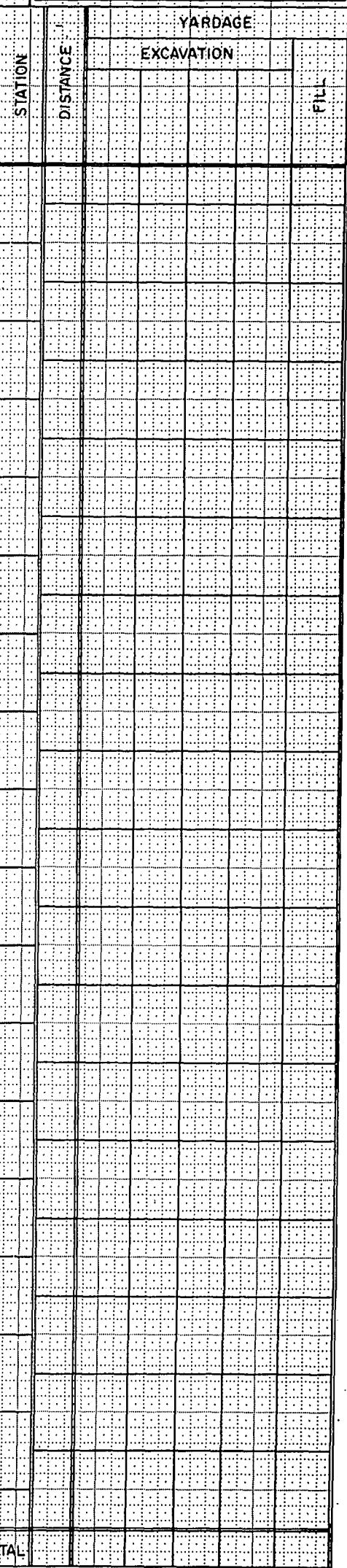
SCALE
HOR. 1"=6'
VER. 1"=5'

SHEET TOTAL

175

150

R.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	1412-1-71	18	21



SCALE
HOR. 1" = 5'
VER. 1" = 5'

·SHEET TOTAL·

CHINCHET RD STA. 5+00 - 7+92

FUNCTIONAL CROSS SECTION - OPEN DOTTED
CHARLES BRUNING COMPANY, INC.

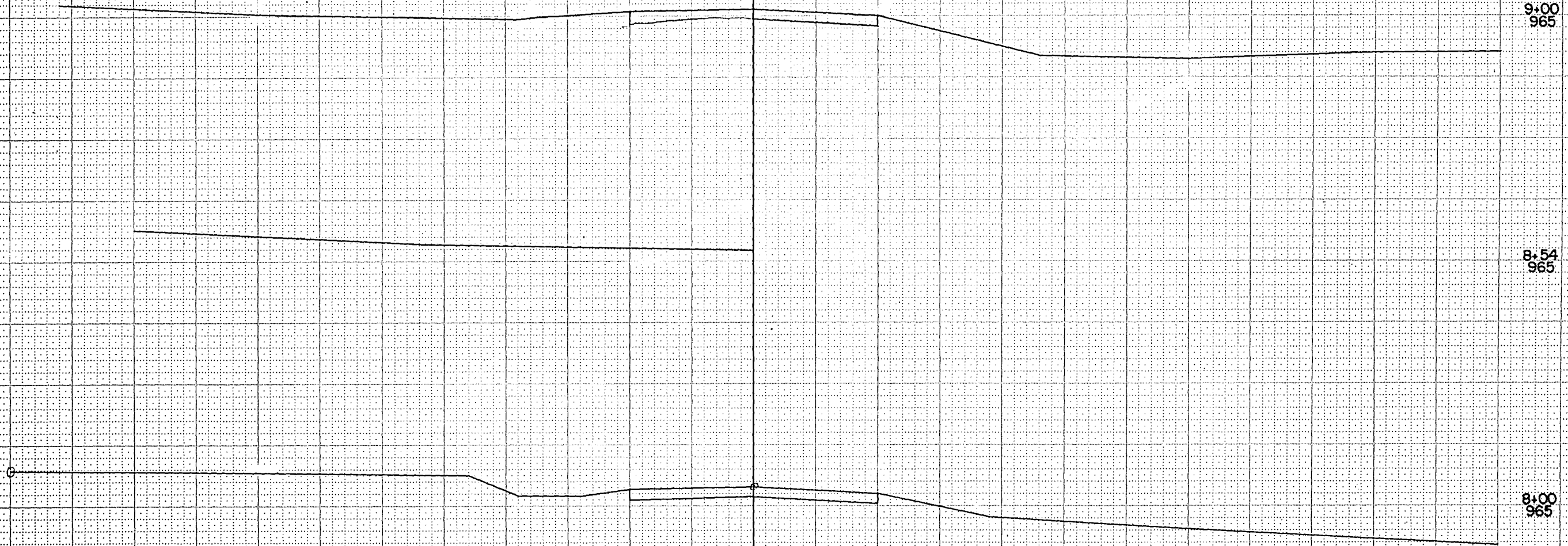
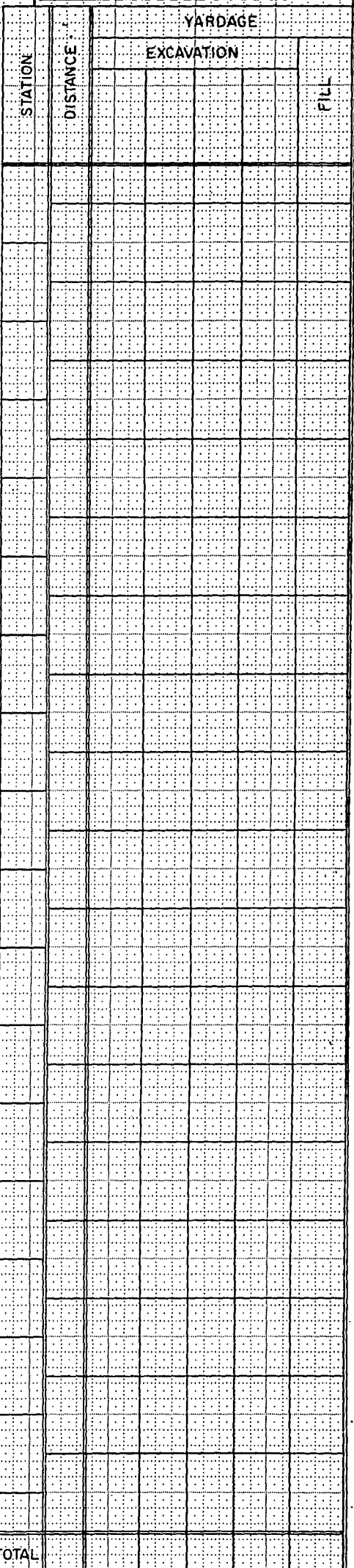
50

25

25

50

R.F. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	1412-1-71	20	21



CROSS SECTION NOTES

NAME: ST-11.33
PROJECT ID: 1412-0-00

PARTY: D. THOMPSON
G. NUTZEL PAGE 1
R. SIEGRIST DISTRICT 2
J. LANG 8/70

B.M. #2	485	1074.54			1069.69
35+00	Φ 7.47	36+00	Φ 8.92	37+00	Φ 6.14
38+00	Φ 5.55	39+00	Φ 5.37		
40+00	Lt. / $\overset{E}{100}$ 4.5	7.9 5.9	1.9 1.4	1.1 $\overset{E}{9}$	Φ 5.77
	$\overset{E}{9}$ 11	14 17	21 4.8	8.0 10.0	
	5.9 6.1	6.7 7.1	5.9 6.3	6.6 6.7	
41+00	Rt. / $\overset{E}{100}$ 7.2	7.7 4.9	2.2 1.8	1.6 1.1	$\overset{E}{9}$ 7.6
	Φ $\overset{E}{9}$	11 15	19 4.0	6.5 9.4	
	7.4 7.6	7.7 8.0	7.3 6.2	5.8 6.1	

CROSS SECTION NOTES

NAME: ST-11.33
PROJECT ID: 1412-0-00

PAGE 2
DISTRICT 2

		1074.54								
	P.E.L.T. (GRAVEL)									
41+22	<u>100</u>	<u>68.37</u>	<u>9</u>	<u>Φ</u>						
	7.0	7.0	7.7	7.9	7.85					
42+00	<u>L_T/100</u>	<u>75.46</u>	<u>28.20</u>	<u>17</u>	<u>14</u>	<u>9</u>				
	7.5	7.9	8.2	8.5	9.9	9.9	9.2	9.1		
	<u>Φ</u>	<u>9</u>	<u>12</u>	<u>16</u>	<u>19</u>	<u>21</u>	<u>40</u>	<u>60</u>	<u>87</u>	<u>100</u>
	9.13	9.2	9.4	10.2	10.0	8.9	9.4	9.9	10.2	10.2
T.P. 1	2.84	1069.34	8.04	1066.50						
T.P. 2	2.88	1069.34	8.08	1066.46						
43+00	<u>R_T/100</u>	<u>31.62</u>	<u>39.21</u>	<u>19</u>	<u>17</u>	<u>14</u>				
	6.6	6.6	6.5	6.1	5.6	6.6	6.3	5.8		
	<u>Φ</u>	<u>Φ</u>	<u>9</u>	<u>14</u>	<u>19</u>	<u>22</u>	<u>26</u>	<u>53</u>	<u>81</u>	<u>100</u>
	5.5	5.38	5.4	5.6	6.3	6.1	5.0	5.0	4.8	4.7

CROSS SECTION NOTES

NAME: 51133

PAGE 3

PROJECT ID. 1413-0-00

DISTRICT 2

		106934					
44+100	L _r /100	73 48	27 20	17 13		EP	
		60 60 60	59 77	75 71		9	
	£	9	12 17	20 23	42 64	100	
		674 68	69 79	79 76	77 82	84	
45+100	R _r /100	80 57	22 18	16 12		EP	
		94 91 90	85 92	94 83		9	
	£	9	15 18	20 21	50 76	100	
		824 84	88 93	93 76	80 82	83	
46+100	L _r /100	75 46	23 18	15 12		EP	
		102 100 97	92 106	104 102		9	
	£	9	12 14	16 22	24 45	70 100	
		962 95	97 107	106 91	99 96	99 100	

CROSS SECTION NOTES

NAME: ST-14, 33

PAGE 4

PROJECT ID. 1412-0-00

DISTRICT C[illegible]

		1061.67							
49+00	R ₁ /100	78.52	25.13	13	9	9	9	9	9
		7.9	7.8	7.7	7.3	9.3	9.75	9.6	9.79 10.1
	FL TOP CURB								
	14 14	27.52	76	100					
	10.36	100	8.2	9.0	9.1	9.1			
50+00	L ₁ /125	100	76	50	32	23	11	11	11
		11.2	10.9	10.9	10.7	10.4	14.3	15.3	15.67
	FL								
	11	20	44	72	100	125			
	15.17	15.01	14.4	13.9	11.8	10.5	9.5		
49+88	L ₁ /11	11	11	11	17	33	67		
		15.0	14.56	14.39	14.0	13.3	9.4	9.4	
	100	125							
	9.4	9.1							

[illegible]

CROSS SECTION NOTES

NAME: STI-1,33

PAGE 7

PROJECT ID. 1412-Q-00

DISTRICT 2[illegible]

CROSS SECTION NOTES

NAME: ST-1-33

PAGE 8

PROJECT ID. 1412-0-00

DISTRICT 0 + 2

		1032.60						
54+00	$L_{\pi}/125$	<u>100</u>	<u>71</u>	<u>37</u>	<u>24</u>	$\frac{TC}{11}$	$\frac{FL}{11}$	Φ
	6.7	58	44	1.6	90	100	1041	1015
	$\frac{FL}{11}$	$\frac{TC}{11}$	<u>27</u>	<u>40</u>	<u>65</u>	<u>100</u>	<u>125</u>	
	1035	100	8.3	26	6.8	6.6	5.1	3.3
			1030.0					
55+00	$R_{\pi}/125$	<u>100</u>	<u>72</u>	<u>36</u>	<u>24</u>	$\frac{TC}{11}$	$\frac{FL}{11}$	Φ
	8.4	92	100	9.7	150	16.1	16.46	16.17
	$\frac{FL}{11}$	$\frac{TC}{11}$	<u>23</u>	<u>32</u>	<u>60</u>	<u>100</u>	<u>125</u>	
	16.15	158	14.9	11.7	125	144	150	
TP1	1.06	1015.40	1826	1014.34				
TP2	0.77	1015.42	1795	1014.65				
		1015.41						

[illegible]

		1015.41						
← CONT. FROM PAGE 9								
57+00	64	100	125					
	13.1	16.4	18.1					
58+00	Li	125	100	80	56	41	37	31
		22.7	21.2	20.3	19.1	18.2	17.1	20.0
								20.4
	19	17	17	6	11	5	5	6
	17.1	17.0	17.6	17.3	17.6	17.8	17.5	17.5
	11	12	14	35	62	83	100	125
	18.7	18.7	18.4	19.7	20.8	18.9	19.5	20.0
BM #4				9.20	1006.21	1006.22		
BM #4	0.84	1007.12				1006.25		

CROSS SECTION NOTES

NAME: STI-133

PAGE 11

PROJECT ID. 1412-0-00

DISTRICT 2

[illegible]

CROSS SECTION NOTES

NAME: STH-1,33

PAGE 12

PROJECT ID. 1412-0-00

DISTRICT 2

		980.23							
61+00	L _T /	125	100	72	53	33	12	11	11
		13.2	11.8	10.6	9.8	8.9	0.1	0.0	0.33
	Φ	11	11	13	29	54	78	100	125
		0.14	0.55	0.2	0.5	8.9	10.7	10.8	9.7
62+00	R _T /	125	100	76	56	37	23	14	11
		9.5	10.7	11.3	11.5	11.4	11.7	5.9	5.9
	11	Φ	11	11	12	29	55	75	100
	63.5	60.3	62.3	5.9	6.1	13.9	14.5	15.1	15.8
63+00	L _T /	125	100	73	56	26	21	12	11
		19.3	18.7	18.1	17.7	17.7	16.9	12.0	11.9
	11	Φ	11	11	12	20	25	34	44
	12.26	12.17	12.38	12.1	12.2	14.2	14.7	14.7	15.2

[illegible][illegible]

CROSS SECTION NOTES

PAGE 15

DISTRICT C

PAGE 16

DISTRICT 2

		955.16							
68+00	Rt/	<u>100</u>	<u>71</u>	<u>67</u>	<u>56</u>	<u>17</u>	<u>13</u>	<u>9</u>	<u>4</u>
		3.1	4.1	4.3	3.9	4.4	3.3	3.1	2.4
	EP	<u>9</u>	<u>12</u>	<u>19</u>	<u>26</u>	<u>29</u>	<u>53</u>	<u>82</u>	<u>100</u>
		3.1	3.3	4.2	4.9	4.5	5.8	6.1	6.5
Profile RE Rt (GRAVEL)									
68+80		<u>4</u>	<u>4</u>	<u>35</u>	<u>71</u>	<u>100</u>			
		4.03	4.1	4.2	4.0	3.6			
69+00	Rt/	<u>100</u>	<u>86</u>	<u>75</u>	<u>48</u>	<u>21</u>	<u>15</u>	<u>9</u>	<u>4</u>
		3.3	3.8	5.1	6.1	6.7	4.7	4.2	4.2
	EP	<u>9</u>	<u>12</u>	<u>19</u>	<u>22</u>	<u>25</u>	<u>29</u>	<u>51</u>	<u>85</u>
		4.3	4.5	7.3	7.9	6.3	6.6	7.6	8.9

CROSS SECTION NOTES

Wisconsin Department of Transportation
E-D-31-67

NAME: STI-1.33

PAGE 17

PROJECT ID. 1412-0-00

DISTRICT 2

		955.16					
		58 95.1					
70+00	Lt./100	79	60	21	15	9	ER
	99	58	55	88	58	49	
	945.3						
	465	47	50	53	78	80	72 26
71+00	480						
72+00	49.1						
73+00	486						
74+00	441						
75+00	411						
BM #6		347	951.69	951.76			

CROSS SECTION NOTES

Wisconsin Department of Transportation
E-D-31-67

NAME: STI-1.33

PAGE 2

PROJECT ID. 1412-0-00

DISTRICT 2

		1412-0-00					
		HILLTOP DR					
PM #3	7.75	1059.12					1051.37
8+00	Lt./54	29	14	13	10	6	4 ER
	50	54	55	61	61	52	50
	2	ER					
	8	24	43				
	50	49	50	60	74		
8+73	PE 12- (SEAL CONT)						
	14	28	55				
	7.1	74	80	85			
9+00	Rt./30	34	15	6	ER	3	5 9
	92	89	80	780	79	80	86 72
	25	45					
	67	64					

PAGE 2

DISTRICT 2

[illegible]

PLAT OF SURVEY
FOR

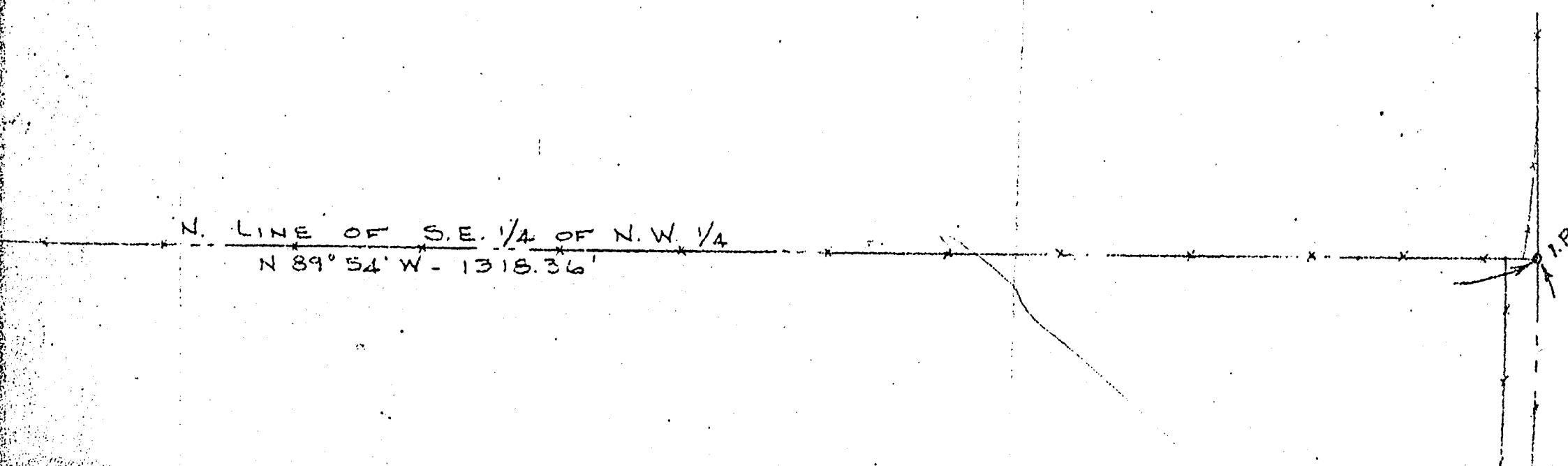
FLEISNER, KELLER & JORDAN, INC.

PART OF S.E. 1/4 OF THE N.W. 1/4 OF SEC. 16,
T. 11 N., R. 18 E., WASHINGTON COUNTY, WIS.

Capelle & Schmitz
West Bend, Wis.

Surveyors
Feb. 28, 1961.

N. LINE OF S.E. 1/4 OF N.W. 1/4
N 89° 54' W - 1318.36'



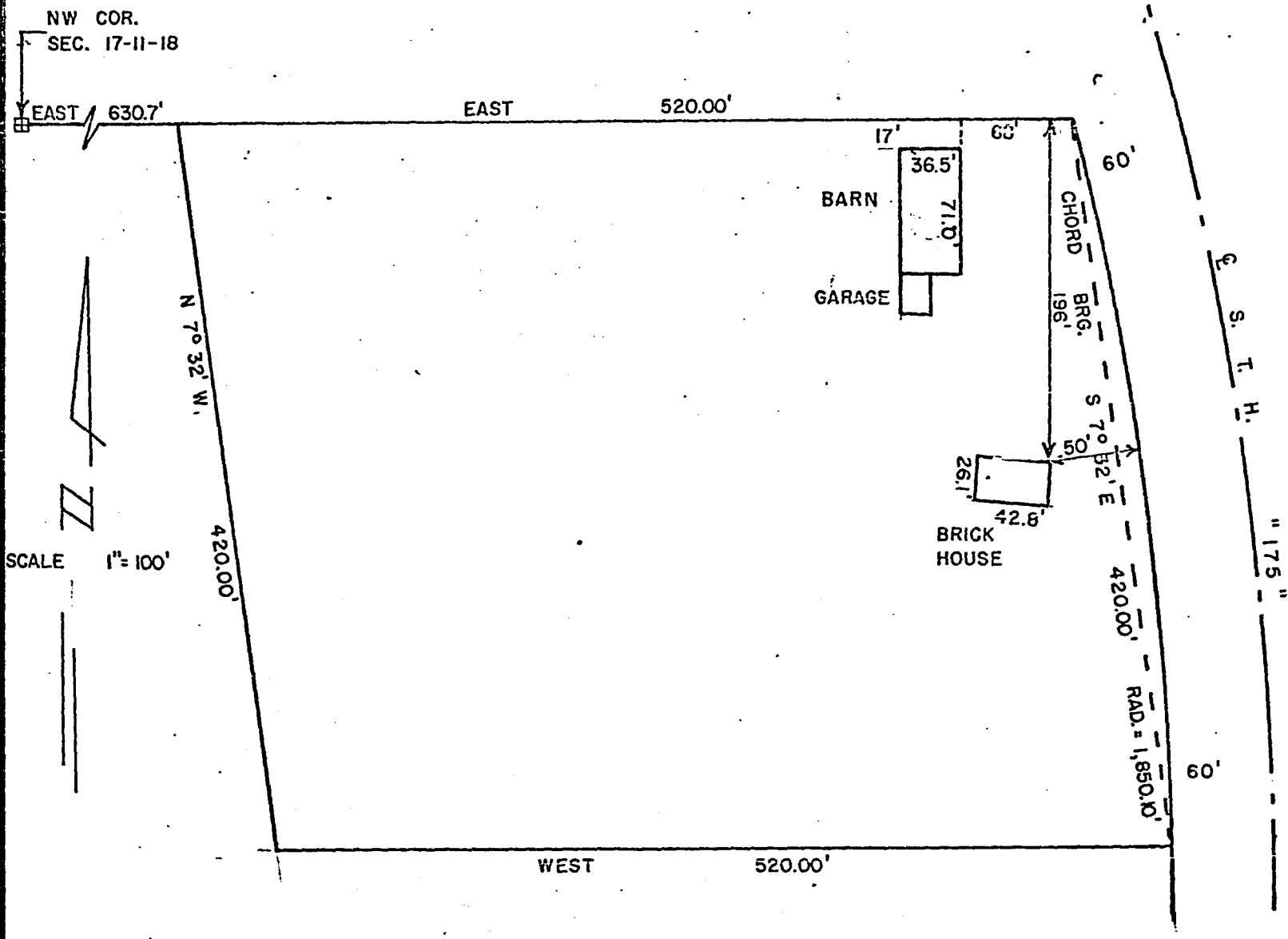
BAUDHUIN & ASSOCIATES, INC.

PROFESSIONAL ENGINEERS AND SURVEYORS
MENOMONEE FALLS, WISCONSIN

BOX 305

PHONE 251-1260

PLAT OF SURVEY

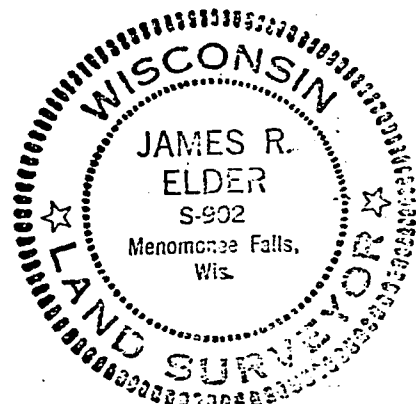


DESCRIPTION:

All that part of the NW 1/4 of the NW 1/4 of Section 17, Township 11 North, Range 18 East bounded and described as follows:
Town of Addison, Washington County, Wisconsin.

Commencing at the NW corner of said Section 17-11-18, thence East along the North section line 630.70 feet to the point of beginning; thence continuing East along said North section line 520.00 feet to the Westerly Right Of Way line of S.T.H. "175", thence Southerly along the highway Right of Way line which is on a curve to the right, with a Radius of 1,850.10 feet, and the chord of which bears S7°32'E 420.00 feet, thence West 520.00 feet, thence N7°32'W 420.00 feet to the point of beginning.

Said parcel contains 5.0 acres more or less.



STATE OF WISCONSIN) SS.
COUNTY OF WAUKESHA)

WE HEREBY CERTIFY THAT WE HAVE SURVEYED THE PROPERTY DESCRIBED ABOVE, AND THAT THE PLAT HEREON IS A TRUE REPRESENTATION THEREOF, AND CORRECTLY SHOWS THE EXTERIOR BOUNDARY LINES AND LOCATION OF BUILDINGS AND OTHER IMPROVEMENTS ON SAID PROPERTY AND THE CORRECT MEASUREMENTS THEREOF.

DATED THIS 7 th DAY OF December 19 68

James R. Elder
SURVEYOR

JOB NO. 20

Plat of Survey

For Mr. Cornelius Gundrum
Mr. Don Zuern, Purchaser

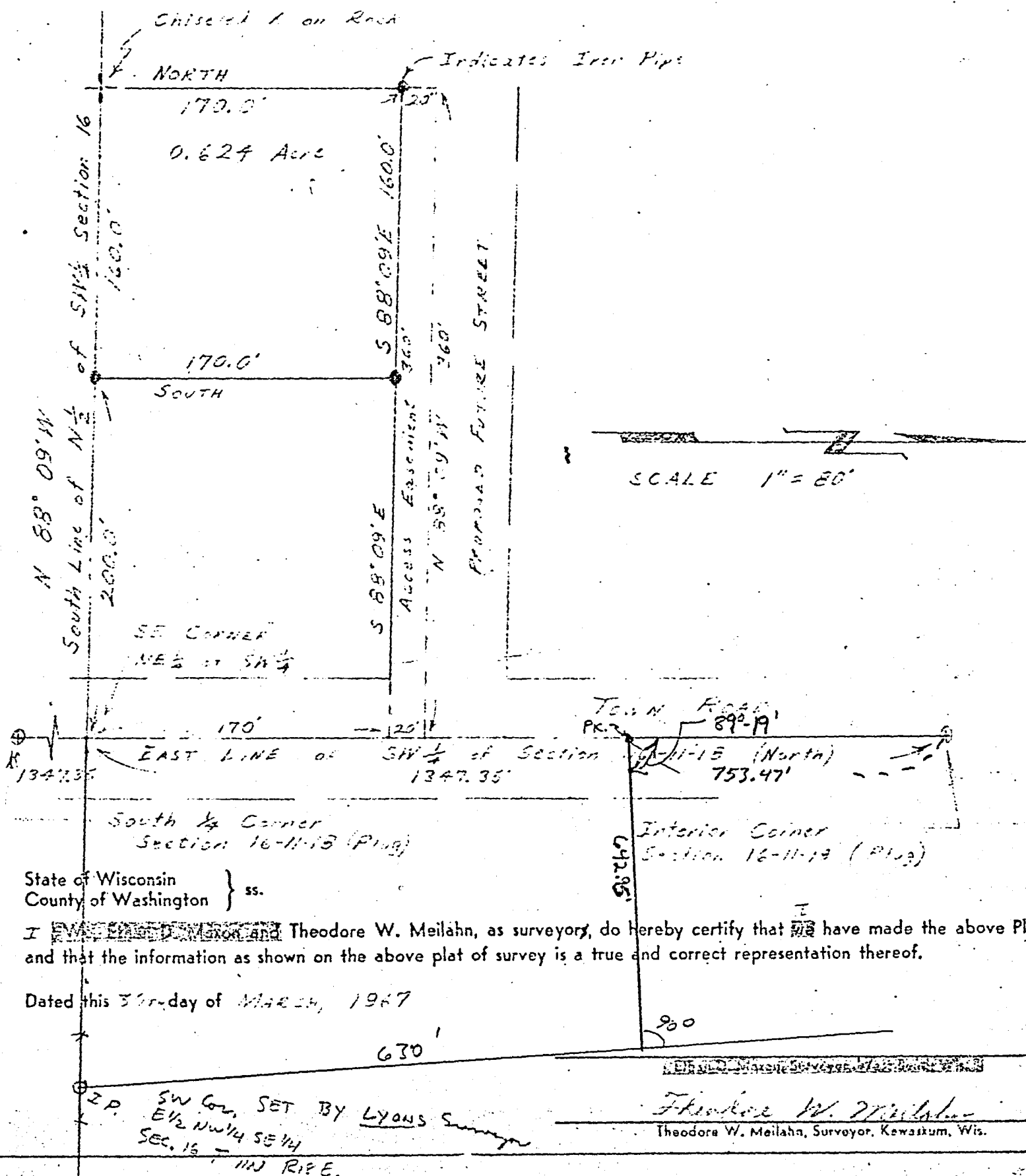
That part of the North East Quarter of the South West Quarter of Section 16, Town 11 North, Range 18 East, Town of Addison, Washington County, Wis., described as follows:

Commencing at the South East Corner of the North East Quarter of the South West Quarter of said Section 16; thence N 88° 09' W along the South line of the North One-half of said Quarter Section, 200.0 feet to the point of beginning of the parcel herein described; thence continuing N 88° 09' W, 160.0 feet; thence North parallel with the East line of said Quarter Section, 170.0 feet; thence S 88° 09' E, 160.0 feet; thence South 170.0 feet to the point of beginning.

Containing 0.624 Acre.

Also an easement for driveway purposes described as follows:

Commencing at the South East Corner of the North East Quarter of the South West Quarter of Section 16; thence North along the East line of said Quarter Section, 170.0 feet to the point of beginning of the easement herein described; thence continuing North 20 feet; thence N 88° 09' W, 360.0 feet; thence South 20 feet; thence S 88° 09' E, 360.0 feet to the point of beginning.



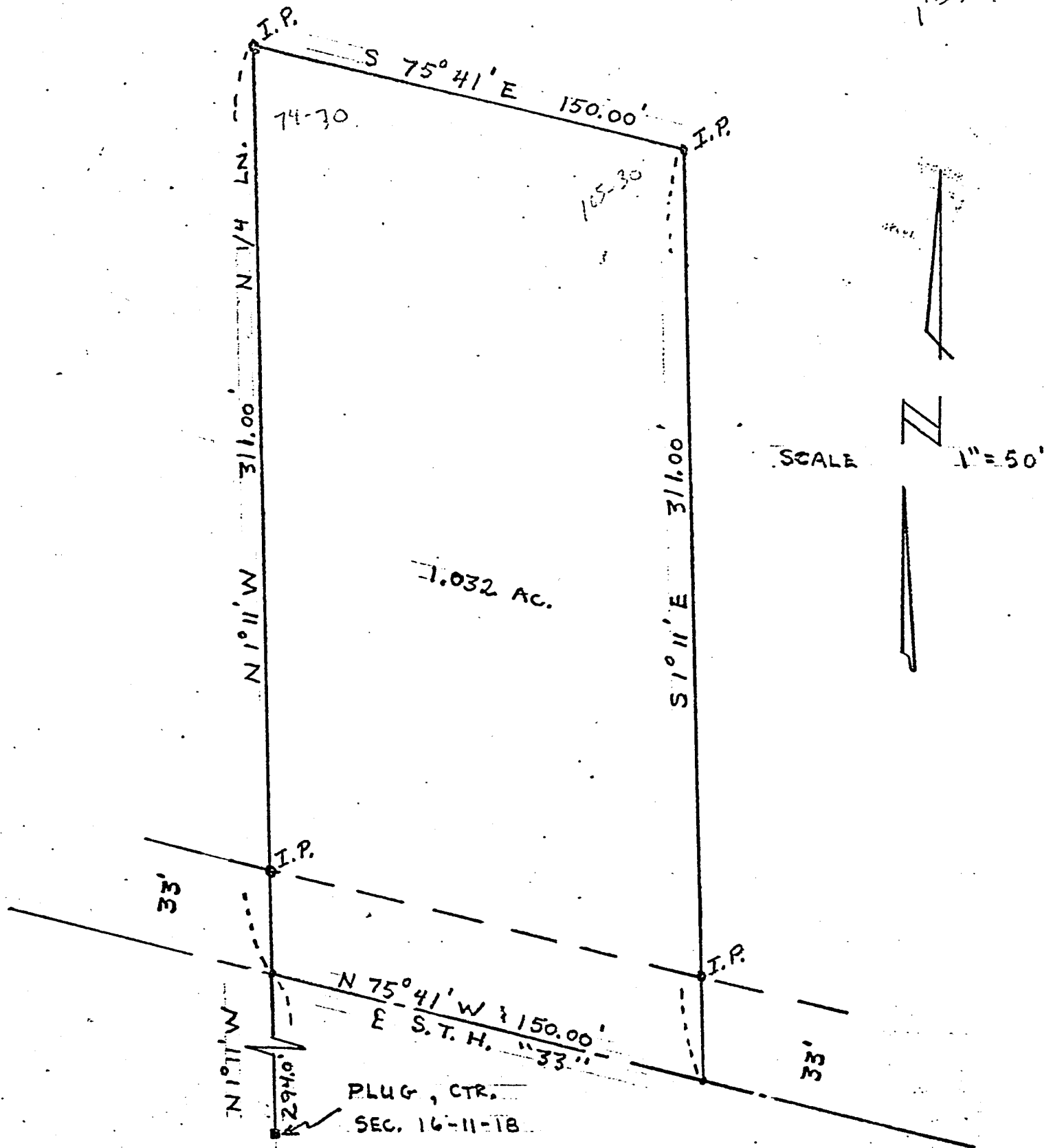
BAUDHUIN & ASSOCIATES, INC.

PROFESSIONAL ENGINEERS AND SURVEYORS
MENOMONEE FALLS, WISCONSIN

BOX 305

PHONE 251-1260

PLAT OF SURVEY



That part of the SW 1/4 of the NE 1/4 of sec. 16, township 11, north, Range 18 East, town of Addison, Washington Co., Wisconsin, described as follows:

Commencing at the center plug of said Sec. 16, thence N 1° 11' W along the N. One-quarter line-294.00' to the point of beginning and the centerline of S.T.H. "33"; thence continuing N 1° 11' W 311.00', thence S 75° 41' E 150', thence S 1° 11' E 311.00' to the centerline of S.T.H. "33", thence N 75° 41' W 150.00' along the centerline of S.T.H. "33" to the point beginning. Said parcel contains 1.032 acres.

STATE OF WISCONSIN) SS.
COUNTY OF WAUKESHA)

WE HEREBY CERTIFY THAT WE HAVE SURVEYED THE PROPERTY DESCRIBED ABOVE, AND THAT THE PLAT HEREON IS A TRUE REPRESENTATION THEREOF, AND CORRECTLY SHOWS THE EXTERIOR BOUNDARY LINES AND LOCATION OF BUILDINGS AND OTHER IMPROVEMENTS ON SAID PROPERTY AND THE CORRECT MEASUREMENTS THEREOF.

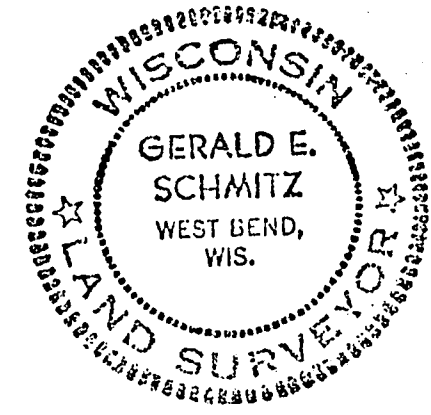
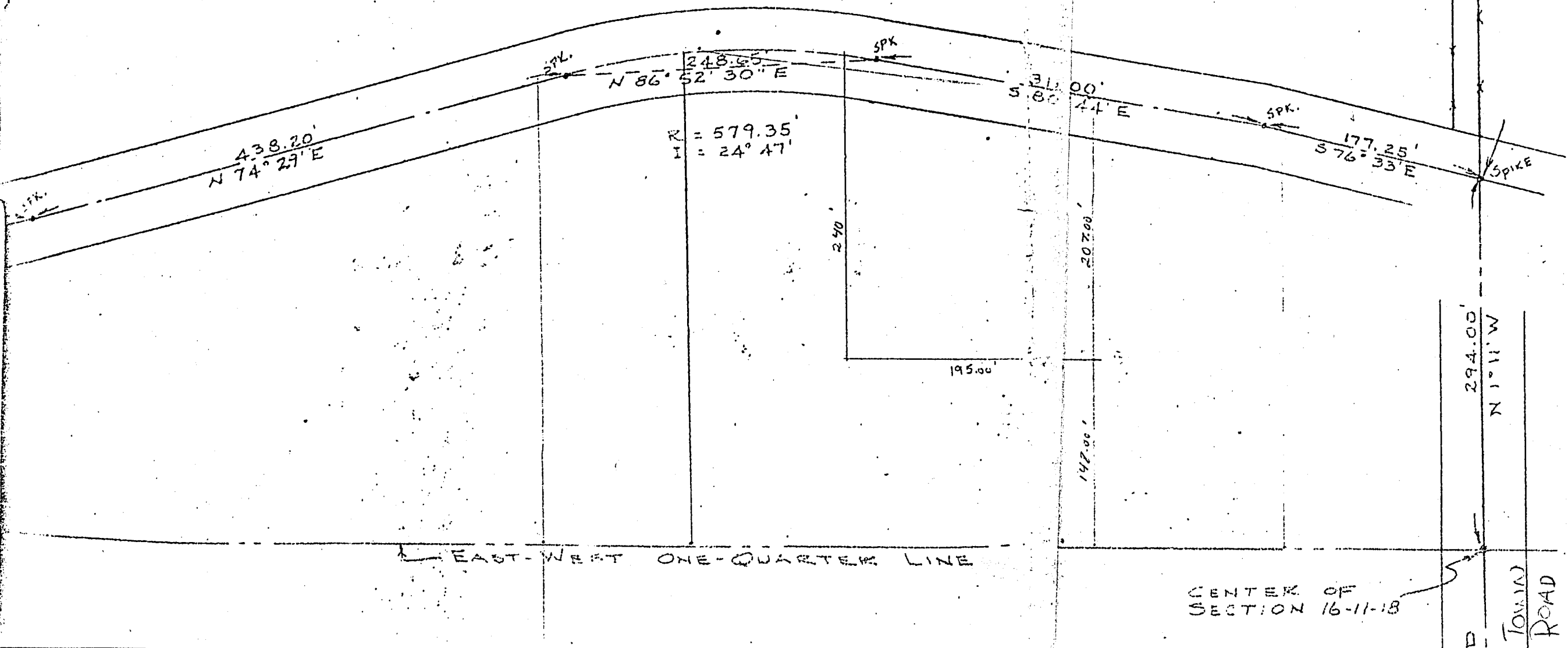
DATED THIS 13TH DAY OF Sept. 19 68

JAMES R. ELDER
SURVEYOR

JOB NO. 14

29.6 ACRES

SCALE 1" = 100'



W. LINE OF S.E. 1/4 OF N.W. 1/4, SEC. 16-11-18

210.38

TOWN ROAD

190.75

174.50'
N 75° 09' E

SPK.

SPK.

WEST 1/4 COR.
SEC. 16-11-18