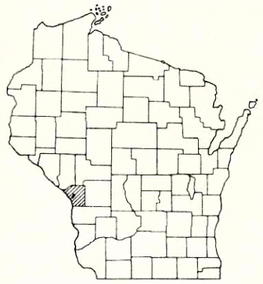
COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT		B.P.R. REGION DIVISION	SHEET NUMBER	TOTAL SHEETS
		STATE	FEDERAL			
32.1	8.3		12.39	4 WIS.	1	30

INDEX OF SHEETS



STATE OF WISCONSIN

STATE HIGHWAY COMMISSION OF WISCONSIN

PLAN AND PROFILE OF PROPOSED

LA CROSSE - ONALASKA ROAD

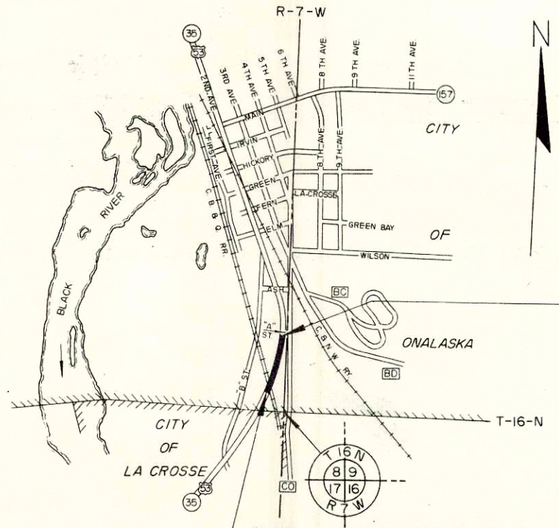
(ONALASKA OVERPASS)

U.S.H. 53

LA CROSSE COUNTY

PROJECT FG-08-3(39)

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



END OF PROJECT FG-08-3(39)
STA. 148+54.44 = STA. 148+26.38 PROJ. U 5101(6)(7)
1390' N & 95' W OF THE S.E. COR. OF SEC. 8, T 16 N, R 7 W

BEGINNING OF PROJECT FG-08-3(39)
STA. 135+68.58 = STA. 135+68.58 PROJ. I-90-1(22)2
142' N. & 365' W. OF THE S.E. COR. OF SEC. 8, T 16 N, R 7 W

CONTROL OF ACCESS

WITHIN LIMITS OF THE PROJECT WHERE CONTROL OF ACCESS LINE IS SHOWN THUS ——— ——— ———
NO ACCESS IS PERMITTED.

CONVENTIONAL SIGNS

STATE LINE	CULVERTS IN PLACE
COUNTY LINE	CULVERTS REQUIRED
TOWNSHIP OR RANGE LINE	DROP INLET
SECTION LINE	POWER POLE
NEW RIGHT OF WAY LINE	TELEPHONE OR TELEGRAPH POLE
PRESENT RIGHT OF WAY LINE	RIGHT OF WAY MARKERS
WIRE FENCE { WOVEN / BARBED	REFERENCE STAKE FOR HUBS ONLY (+51.7 / 25.9)
LOT LINE	MARSH
CORPORATE OR CITY LIMITS	HEDGE
PROPERTY LINE (P.L. + 32.6)	TREES
TRAVELED WAY OR P.E.	GROUND ELEVATION (DATUM LINE 73.9)
RAILROADS	
BASE OR SURVEY LINE (30)	GRADE ELEVATION (DATUM LINE 75.16)

LAYOUT

SCALE 0 1/4 1/2 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.244 MI.

STATE HIGHWAY COMMISSION OF WISCONSIN
MADISON, WIS

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

CORRECT
DATE 1-26-66 DISTRICT ENGINEER

RECOMMENDED FOR APPROVAL
DATE 1/28/66 CHIEF DESIGN ENGINEER

APPROVED
DATE 1/31/66 STATE HIGHWAY ENGINEER

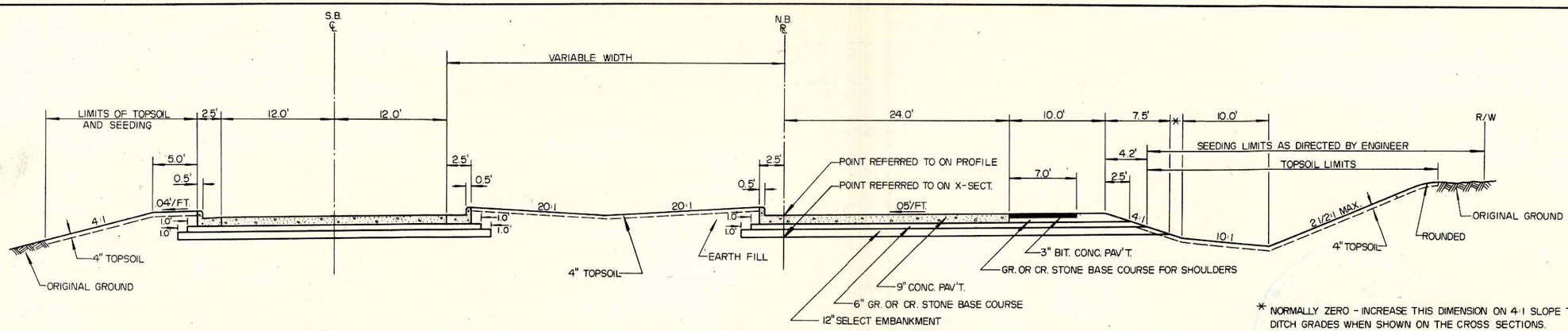
DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED

DATE

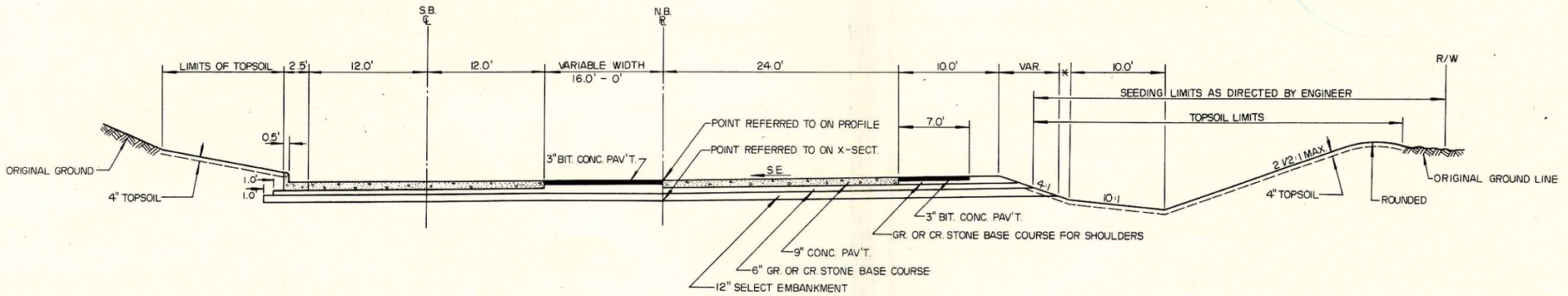
DIVISION ENGINEER

PROJECT	SHEET NUMBER	TOTAL SHEETS
FG-08-3(39)	2	30



* NORMALLY ZERO - INCREASE THIS DIMENSION ON 4:1 SLOPE TO ATTAIN SPECIAL DITCH GRADES WHEN SHOWN ON THE CROSS SECTIONS.

TYPICAL SUPERELEVATED SECTION - U.S.H. 53 N.B. & S.B.



TYPICAL TRANSITION SECTION - U.S.H. 53 N.B. & S.B.

GENERAL NOTES

1. TOPSOIL TO BE PLACED ON ALL CUT SLOPES AND ALL FILL SLOPES TO AN APPROXIMATE DEPTH OF 4" AT TIME OF PLACING.
2. ALL THE RIGHT OF WAY EXCLUSIVE OF THE ROADBED AND AREAS ALREADY COVERED WITH SUITABLE GRASSES SHALL BE FERTILIZED AND SEEDED.
3. RATE OF SUPERELEVATION AND LENGTH OF TRANSITION ARE SHOWN ON THE PLANS. TRANSITION LENGTHS SHALL BE ESTABLISHED TO PROVIDE TWO-THIRDS OF THE TOTAL LENGTH ON THE TANGENT AND ONE-THIRD WITHIN THE CURVE.
4. NO TREES OR SHRUBS SHALL BE REMOVED UNLESS SUCH TREES OR SHRUBS HAVE BEEN DESIGNATED FOR REMOVAL BY THE ENGINEER.
5. SHRINKAGE IS VARIABLE AND ESTIMATED AT 25% FOR EARTH EMBANKMENT.
6. CURVE DATA IS BASED ON ARC DEFINITION.
7. 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.
8. STRAW MULCH ALL SLOPES 3:1 AND STEEPER.
9. BASE COURSE, CONCRETE PAVEMENT AND CURB AND GUTTER ARE NOT A PART OF THIS CONTRACT.

APPLICABLE STANDARD DETAIL DRAWINGS

5-3.3.2 CATCH BASINS
5-3.4.7 CATCH BASINS & INLET COVERS
5-3.5.2 INLETS
6-2.6.4 APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH
7-1.3.4 MARKER POST AND MARKER POSTS FOR RIGHT OF WAY
7-4.1.4 CONSTRUCTION BARRICADE
7-2.4.10 STEEL PLATE BEAM GUARD & STEEL BEAM MEDIAN GUARD

TYPICAL CROSS SECTION
FOR

U.S.H. 53 - N.B. & S.B.

PROJECT	SHEET NUMBER	TOTAL SHEETS
FG-08-3(39)	2.1	30

CURVE DATA - EXISTING U.S.H. 53 ℄
P.I. = 138+17.17
Δ = 23°-58'-04"
D = 2°-30'
R = 2291.83'
T = 486.47'
L = 958.71'
S.E. = 0.02'/FT.

CURVE DATA U.S.H. 53 S.B. ℄
P.I. = 145+30.67
Δ = 14°-23'-57"
D = 3°-00'
R = 1909.86'
T = 241.26'
L = 479.97'
S.E. = 0.02'/FT.

B-32-8

B-32-67

EXISTING CATCH BASIN

VARIABLE WIDTH CONC. CURB & GUTTER

ADJUST EXISTING MANHOLE

CATCH BASIN, TYPE 5
INLET COVER, TYPE H

END OF FLOOR
139+65.19

EARTH DAM

666.8

6673

18"X54' STORM SEWER

674.5

18"X26' R.C.C.P.

673.0

666.3

GRATE 675.8

PLUG

18"X166' C.M.C.P. REQ'D.

P.C.C. 142+89.41

CATCH BASIN TO BE ADJUSTED
SEE SPECIAL PROVISIONS

12"X 6' STORM SEWER

INLET TYPE 3
INLET COVER TYPE "H"

EXISTING 18" STORM SEWER

2°-30'

TANGENT

5°R

677.49

30" CONCRETE CURB & GUTTER TYPE D

30" CONCRETE CURB & GUTTER, TYPE A

INLET TYPE 3
INLET COVER, TYPE "H"

674.1

18"X42' R.C.C.P.

673.3

140 141 142 143 144 145

PAVEMENT REMOVAL

PAVEMENT REMOVAL & REPLACEMENT

BITUMINOUS CONCRETE

CURVE DATA N.B. 53 ℞
P.I. = 140+62.36
Δ = 38°-22'
D = 3°-00'
R = 1909.86'
L = 1278.87'
T = 664.46'
S.E. = 0.05'/FT.

END PROJECT FG-08-3(39)
148+25.38 PROPOSED ℄ S.B. U.S.H. 53
148+26.38 EXISTING ℄ U.S.H. 53 =
148+54.44 N.B. ℞ U.S.H. 53

148+64.38 BK. =
148+65.38 AH.

EXISTING 12" STORM SEWER

12"X 10' STORM SEWER

EXISTING 18" STORM SEWER

CATCH BASIN TO BE ADJUSTED
SEE SPECIAL PROVISIONS

INLET TYPE 3
INLET COVER, TYPE H

P.T. 147+69.38

℄ S.B. 53

EXISTING 53 ℄

N.B. 53 ℞

TANGENT

EXISTING ℄
2°-30'

148+93.44 N.B. ℞
148+65.38 AH.

78.63
78.93
79.23
79.95
79.89
79.83

S.E. .047
S.E. .005
S.E. .002

10'
20'
24'
7'
3'

30" CONCRETE CURB & GUTTER
TYPE D

BEGIN TAPER

147+36

147+95

EDGE GRAVEL SHLDR.

P.T. 146+76.77 N.B.

EXISTING 12" STORM SEWER

145 146 147 148 149

DETAIL SHEET

U.S.H. 53 & S.T.H. 35

STA. 140 – STA. 149

SCALE: 1" = 20'

ESTIMATE OF QUANTITIES

CONTRACT NO. 1

B.P.R. REGION	PROJECT	SHEET NO.	TOTAL SHEETS
4	FG-08-3(39)	3	30

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 15, 1963, AND SPECIAL PROVISIONS AS ATTACHED TO PROPOSALS.

SEC. NO.	STATION TO STATION	NET LENGTH OF CENTER LINE	CLEARING	GRUBBING	REMOVING OLD CULVERT	REMOVING OLD BRIDGE	EXCAVATION				GRANULAR BACKFILL	TEST ROLLING	PREP. FOUNDATION FOR	GRANULAR SUBBASE COURSE	FINISHING ROADWAY	OBLITERATING OLD ROAD	GRAVEL OR CRUSHED STONE BASE COURSE		CONCRETE BASE COURSE		BITUM. MAT. FOR PRIME COAT	BITUMINOUS CONCRETE PAVEMENT	BITUM. MAT. FOR SURFACE COURSE	CONCRETE PAVEMENT		CONCRETE DRIVEWAY	CONCRETE HEADER	CONCRETE SURFACE DRAINS	CONCRETE PAVEMENT REINF
	ITEM NO.		20101	20102	20104	20105	20301		20351		20503	20502	20505	20801	20901	21001	211	21201	21301	21401	30401	30	30	30	4020	40701	4070	409	409	40931	40933	40934	40950
	UNIT	LIN. FT.	STA.	IN. DIA.	STA.	IN. DIA.	L.S.		L.S.		C.Y.	C.Y.	C.Y.	C.Y.	C.Y.	L.S.	L.S.	C.Y.	L.S.	STA.	C.Y.		S.Y.	S.Y.		TON		S.Y.	S.Y.	S.Y.	S.Y.	C.Y.	S.Y.
I	135+68.58-148+54.44	1285.86		53		39					2044			19,910							94											

BRIDGES (STRUCTURES OVER 20 FT. SPAN)

SEC. NO.	REMOVE OLD BRIDGE STA.	EXCAVATION FOR STRUCTURES	GRANULAR BACKFILL	CONCRETE MASONRY	PRESTRESSED GIRDER		BAR STEEL REINF	STRUCTURAL CARBON STEEL	STRUCTURAL LOW ALLOY STEEL	LUBRICATED BRONZE PLATES	SHEET ZINC	BEARING PADS	TR'T'D. LUMBER AND TIMBER	UNTR'D. TIMBER TEST PILING	UNTREATED TIMBER PILING		TREATED TIMBER PILING		CAST IN PLACE CONC. TEST PILING, B-32-67	CAST-IN-PLACE CONCRETE PILING		TUBULAR RAILING TYPE "G"	FLOOR DRAINS		DOWNSPOUT 6"	SLOPE PAVING CONCRETE	RIP-RAP
															DELIVERED	DRIVEN	DELIVERED	DRIVEN		DELIVERED	DRIVEN		TYPE "A"	TYPE			
	20351	20601	20901	50201	503	503	50501	50601	50605	50614	50616	50621	50702	50801	50810	50813	50816	50820	51001	51010	51015	51332	51401	5140	51426	60404	6060
	L.S.	C.Y.	C.Y.	C.Y.	L.F.	L.F.	LB.	LB.	LB.	LB.	LB.	S.F.	M.B.M.	L.S.	L.F.	L.F.	L.F.	L.F.	L.S.	L.F.	L.F.	L.F.	EACH	EACH	L.F.	S.F.	C.Y.
I		630		957.1			185,390	143,600	189,400	342		32							1	6690	6690	819	2		52		

CULVERTS (STRUCTURES 20 FT. SPAN & UNDER)

SEC. NO.	REMOVE OLD CULV'T. STA.	EXCAVATION FOR STRUCTURES	GRANULAR BACKFILL	CONCRETE MASONRY	BAR STEEL REINF	STRUCTURAL CARBON STEEL	TR'T'D. LUMBER AND TIMBER	UNTR'D. TIMBER TEST PILING	TREATED TIMBER PILING		FLOOR DRAINS TYPE	RIP-RAP
									DELIVERED	DRIVEN		
	20301	20602	20901	50401	50502	50601	50702	50801	50816	50820	5140	6060
	L.S.	C.Y.	C.Y.	C.Y.	LB.	LB.	M.B.M.	L.S.	L.F.	L.F.	EACH	C.Y.

SEC. NO.	RUBBLE MASONRY		CULVERT PIPE										FOR CULVERT PIPE						CONCRETE			SLOPE PAVING	DITCH CHECKS	RIP-RAP	HEAVY RIP-RAP	STORM SEWER					CATCH BASINS		MANHOLES		INLETS		CATCH BASINS COVERS		MANHOLES COVERS		INLET COVERS		ADJUST. MANHOLE COVERS	STEEL PLATE BEAM GUARD	MARKER POSTS	MARKER POSTS FOR R-O-W	CALCIUM CHLORIDE SURFACE TREATMENT	TOPSOIL	STRAW MULCH	FERTILIZER	SEEDING	SODDING	FIELD OFFICE
	MORTAR	DRY	CORR. METAL 18"	REINF. CONC. CL. III 18"									METAL APRON END-WALLS 18"	REINF. CONC. APRON END-WALLS 18"					CURB	CURB AND GUTTER	SIDE WALK					REINF. CONC. PIPE CL. III 18"					TYPE 5	TYPE	TYPE	TYPE	TYPE 3	TYPE	TYPE "H"	TYPE	TYPE	TYPE	TYPE "H"	TYPE	EACH												
	51801	51810	52105	52203	52	52	52	52	52	52	52	52	52145	52261	52	52	52	52	6010	601	6020	6040	6050	60601	60602	60827	60	60	60	60	61105	6110	6111	6111	61125	6112	61137	6113	6115	6115	61167	6116	61182	61410	61421	61422	62301	62501	62701	62901	63001	63101	90001
	C.Y.	C.Y.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	EACH	EACH	EACH	EACH	EACH	EACH	L.F.	L.F.	S.F.	S.F.	C.Y.	C.Y.	C.Y.	L.F.	L.F.	L.F.	L.F.	L.F.	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	L.F.	EACH	EACH	TON	S.Y.	S.Y.	CWT	S.Y.	S.Y.	L.S.
I			166	68									1	2										10		54					1				1		1				1		1	42	3	7		5300	1430	6	5900	1020	1

DETAIL SUMMARY OF MISCELLANEOUS QUANTITIES

CLEARING AND GRUBBING

Station	Location	Clearing I.D.	Grubbing I.D.
140+95	25' Rt.	14	-
141+20	60' Rt.	5	5
141+20	70' Rt.	34	34

STEEL PLATE BEAM GUARD

Station	Location	L.F.
140+00	Left Abutment (Between structure railings)	42

SODDING

Station	Location	S.Y.
139+00	Abutment Slope	1,020

ADJUSTING MANHOLE COVER

Station	Location	No.
140+35	40' Lt. of N.B. Ref. Line	1

RIPRAP

Station	Location	C.Y.
139+00	90' Rt. of N.B. Ref. Line	10

GRAVEL OR CRUSHED STONE BASE COURSE

Sta. - Sta.	Location	C.Y.
137+00 - 138+00	R.R. Grade Crossing	4
137+00 - 138+00	R.R. Driveway Approaches	90

CATCH BASINS, INLETS AND CONNECTIONS, APRON ENDWALLS AND MARKER POSTS

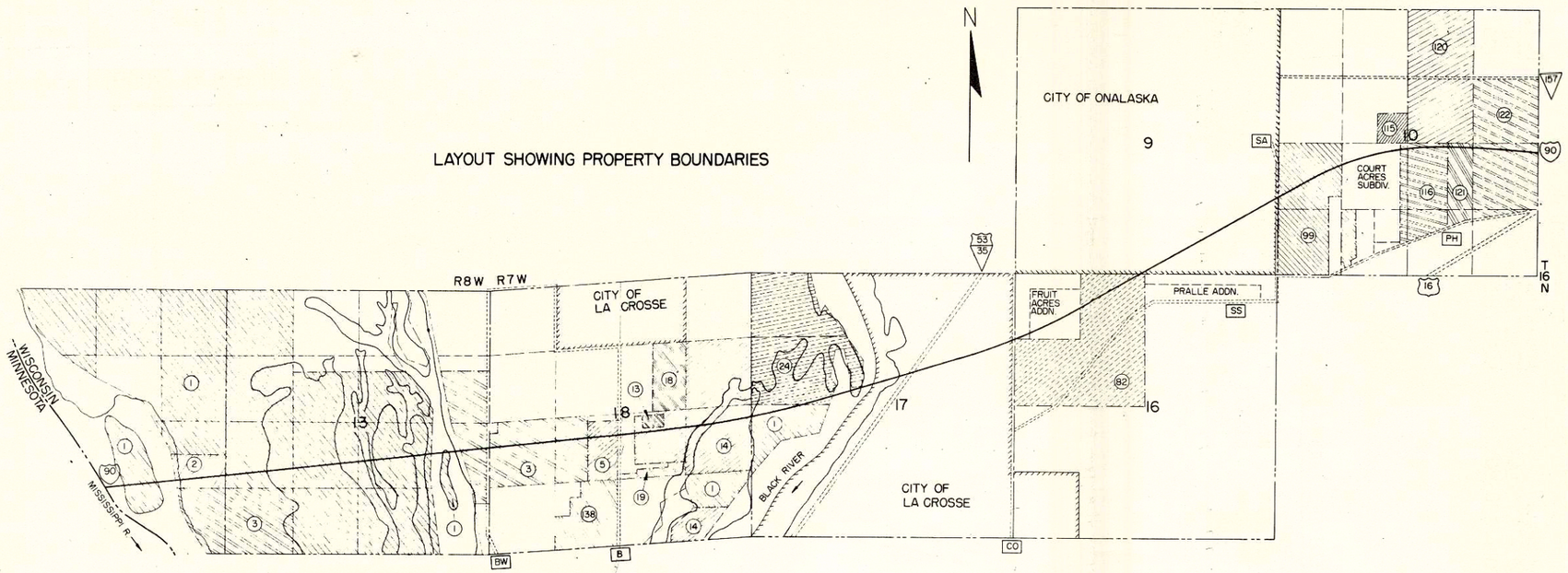
Station	Location.	Catch Basin Type	Inlet Type	Grate Elev.	Disch. Elev.	Depth	RCP Cl.III St.Sew. 18"	RCCP Cl.III 18"	CMCP 18"	Metal Apron Endw.	R.C. Apron Endw.	Marker Posts
139+94	4' Lt. of N.B. R.L.	5-H		675.8	666.3	11'-0"	54'	26'	166'	1	1	2
144+79	2' Lt. of N.B. R.L.		3-H	677.5	674.1	3'-6"		42'			1	1

PROJECT	SHEET NO.	TOTAL SHEETS
FG-08-3(39)	3A	30

COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT STATE	CLASS AND AGREEMENT FEDERAL	FEDERAL DIVISION OFFICE	SHEET NUMBER	TOTAL SHEETS
32.3	90.1		13.2	4	4.11	
CONST. PROJECT	FG08-3(39)				4.0	30

1

LAYOUT SHOWING PROPERTY BOUNDARIES



SCHEDULE OF LANDS AND INTERESTS REQUIRED

PARCEL NO.	SHEET NO.	OWNER	INTERESTS REQUIRED	ACRES

SCHEDULE OF LANDS AND INTERESTS REQUIRED

PARCEL NO.	SHEET NO.	OWNER	INTERESTS REQUIRED	ACRES
1	4.8&4.4	U.S.A. (DEPT. OF INTERIOR) FISH AND WILDLIFE SERVICE	HWY. EASE. ACCESS RTS.	87.61
2	4	JOLIVETTE INC.	FEE, ACCESS RIGHTS	7.45
3	4.1	RUTH BAUMGARTNER	"	18.96
4	4.1	NITA S. JOLIVETTE	FEE SIMPLE	0.14
5	4.1	MARGARET M. BENJAMIN ET AL	FEE, ACCESS RIGHTS	4.49
6	4.1	JOSEPH CALLAWAY ET AL	FEE SIMPLE	0.03
7	4.1	HENRY A. JOLIVETTE	"	0.05
8	4.2	GEORGE W. STANG	FEE, ACCESS RIGHTS	0.13
9	4.2	JACK E. YODER	"	0.97
10	4.2	OTTO G. HAGEN	FEE SIMPLE	1.50
11	4.2	LESLIE HOWARD	" "	1.00
12	4.2	WILLIAM H. TIMM	FEE, ACCESS RIGHTS	0.17
13	4.2	RALPH R. MITCHELL	FEE SIMPLE	2.00
14	4.2&4.3	SOPHIA RICHMOND	FEE, ACCESS RIGHTS & RIPARIAN RIGHTS	34.06
15	4.2&4.3	JOSEPH CALLAWAY ET AL	FEE, ACCESS RIGHTS	0.15
16	4.2&4.3	" " " "	"	0.10
17	4.2&4.3	" " " "	"	0.02
18	4.2&4.3	RAYMOND V. PFAFFLIN	"	8.87
19	4.2	CARL HAGEN SR.	"	1.62
20	4.2	ROBERT L.W. RIECK	FEE SIMPLE	0.02
21	4.5	LEWIS L. ALMETER	"	0.10
22	4.5	FRED R. SALEY	FEE SIMPLE	0.22
23	4.5	MARIE HAMRE	" "	0.22
24	4.4	DAVID A. RICHMOND ET AL	FEE, RIPARIAN RIGHTS	11.77
25	4.5	FRED R. SALEY	FEE SIMPLE	0.01
26	4.4	MYRTLE HOLWAY ET AL.	FEE, ACCESS RIGHTS & RIPARIAN RIGHTS	7.10
27	4.4	HUGH LEONARD GOODENOUGH	FEE SIMPLE	0.94
28	4.4	WILLIAM STARK	FEE SIMPLE	4.70
29	4.4 & 4.5	CITY OF LA CROSSE	FEE, ACCESS RIGHTS	3.40
30	4.4	EMIL C. PATROS ET. AL	"	2.01
31	4.4 & 4.5	FRED J. DOMKE	"	1.57
32	4.4	MILSON CORPORATION	"	0.11
33	4.4	AMERICAN OIL CO.	FEE, ACCESS RIGHTS	0.06
34	4.4	VANLAND CORP. ET AL.	FEE L.H.E. FOR SLOPES & ACCESS RIGHTS	0.13
36	4.5	DONALD F. KELLY	FEE SIMPLE	0.71
38	4.5	FRED R. SALEY	FEE SIMPLE	0.47
39	4.5	JOSEPH A. LORD	"	0.38
40	4.5	RICHARD M. FOSTER	"	0.44
41	4.5	HANS PRECHTER	"	1.10
42	4.5	RALPH G. BLUM	"	1.14
43	4.5	HARLAN R. DOMKE	FEE, & ACCESS RIGHTS	0.01
44	4.5	ROBERT ALLEN	FEE SIMPLE	1.81

SCHEDULE OF LANDS AND INTERESTS REQUIRED

PARCEL NO.	SHEET NO.	OWNER	INTERESTS REQUIRED	ACRES
45	4.5	RUMALI REALTY CO.	FEE, ACCESS RIGHTS	4.91
46	4.5	WESLEY M. DENNY	"	2.45
47	4.5	MELVIN P. JACOBSON	FEE SIMPLE	1.17
48	4.5	DONALD P. FERRIS	"	0.46
49	4.5	JOSEPH CALLAWAY	"	0.16
50	4.5	ORIN HANSON	"	0.46
51	4.5	BASIL F. REARDON	"	1.18
52	4.5	KNUTE NELSON	"	0.18
53	4.5	HOWARD C. GERLING	"	0.18
54	4.5	KNUTE NELSON	"	0.15
55	4.5	JAMES O. HOLSETH	"	0.23
56	4.5	BADGER LUMBER & COAL CO.	FEE, ACCESS RIGHTS	0.33
57	4.5	PAUL L. KING	"	0.05
58	4.5	WILLIAM F. BEITZ	"	0.31
59	4.5	JOHN I. MARCOU	"	0.02
60	4.6	C. B. & Q. RR. CO.	HWY. EASE.	5.41
61	4.6	GRETCHEN A. HAUSER	FEE, SIMPLE	0.09
62	4.6	CHARLES COLLINS	FEE, ACCESS RIGHTS	0.17
63	4.6	MARY G. COLLINS	"	0.75
64	4.6	OSCAR L. SAGEN	"	1.41
65	4.6	GERALD SAGEN	"	0.97
66	4.6	GLEN R. ULRY ET AL.	"	0.27
67	4.6	LESLIE C. JEROME	"	0.01
68	4.6	SADIE S. INFIELD	"	0.13
69	4.6	LE ROY T. BEIER	"	0.47
70	4.6	STANLEY V. SEVERSON	FEE SIMPLE	0.18
71	4.6	BEN STARCH	FEE, ACCESS RIGHTS	0.01
72	4.6	LESTER R. ROCHESTER	"	0.09
73	4.6	OSCAR D. GOSLIN JR.	FEE SIMPLE	0.17
74	4.6	MARCUS B. LARSON	"	0.18
75	4.6	WALTER J. VALLEY	"	0.14
76	4.6	MAURICE J. VALLEY	FEE, ACCESS RIGHTS	0.15
77	4.6	RAYMOND L. LAMB	"	0.13
78	4.6	WARREN D. HULETT	FEE SIMPLE	0.20
79	4.6	WILLIS M. CARRIER	FEE ACCESS RIGHTS	0.39
80	4.6	NORBERT B. LANDMEYER	FEE, ACCESS RIGHTS	0.32
81	4.6	MORRIS K. OLSON	"	0.03
82	4.6 & 4.7	EMIL HAUSER	"	13.03
83	4.7	CHICAGO & NORTHWESTERN RR.	AGREEMENT	—
84	4.7	LA CROSSE COUNTY	FEE, ACCESS RIGHTS	2.18
85	4.7	LEONARD W. PRALLE	"	4.40
86	4.7 & 4.8	JAMES JOHNSON	"	11.50
87	4.7	STATE OF WISCONSIN (ADJ. GEN.)	"	0.06
88	4.5 & 4.6	C. B. & Q. RR. CO.	AGREEMENT	—

SCHEDULE OF LANDS AND INTERESTS REQUIRED

PARCEL NO.	SHEET NO.	OWNER	INTERESTS REQUIRED	ACRES
89	4.8	ROSINA PERTZSCH ET AL	FEE, ACCESS RIGHTS	15.67
90	4.8	ROSINA PERTZSCH ET AL	"	8.92
91	4.8	LUTHER HIGH SCHOOL ASSOCIATION	FEE, L.H.E., & ACCESS RTS.	1.24
92	4.8	EUGENE JORGENSON	FEE SIMPLE	1.12
93	4.8	DONALD HAUSER	" "	0.78
94	4.8	FRANCIS A. FAAS	FEE, ACCESS RTS.	3.45
95	4.6	IVAN W. SMITH	FEE SIMPLE	0.05
96	4.8	AUGUST J. PRALLE JR.	FEE, ACCESS RTS.	3.53
98	4.8	CHARLES W. JAHIMIAK	" "	9.92
99	4.8	ALFRED GILSTER	FEE, ACCESS RTS	38.97
100	4.5	ROY SIVANICH	ACCESS RIGHTS	—
101	4.8	VIRGIL V. RUSSELL	FEE SIMPLE	0.40
102	4.13	FREDA HAWKINS	FEE & ACCESS RTS.	34.92
103	4.5	ANTON SALEY	FEE SIMPLE	0.04
104	4.13	VERNON C. CURTIS	FEE SIMPLE	0.02
105	4.13	ERVINE BUTZMAN	FEE & ACCESS RTS.	0.06
106	4.6	NORTHERN STATES POWER CO.	RELEASE OF RIGHTS	—
107	4.4	REPROCO INC.	FEE, ACCESS RIGHTS	0.07
108	4.9	WYMAN K. ENDER	FEE, ACCESS RIGHTS	0.88
109	4.9	ELLSWORTH M. ROBINSON	"	1.91
110	4.9	JOSEPH C. HENGEL	"	0.08
111	4.9	JOHN M. ROBINSON	"	0.68
112	4.9	HARRY G. OTTO	"	1.79
113	4.5	GEORGE H. SALEY ET AL.	FEE SIMPLE	0.19
114	4.9	GERALD L. HOLTER	FEE SIMPLE	0.76
115	4.9	AUGUST J. PRALLE JR.	FEE, ACCESS RIGHTS	1.18
116	4.9 & 4.10	GUSTAVE W. GENSCH	"	2.84
117	4.9	RICHARD E. AMMERMAN	"	0.12
118	4.9	JOSEPH C. HENGEL	"	0.10
119	4.9	JOSEPH B. HENGEL	"	0.04
120	4.10	MYRTLE JORSTAD	"	4.36
121	4.10	LA CROSSE OUTDOOR THEATRE CORP	"	1.68
122	4.10	BERNARD PRALLE	"	8.24
123	4.4, 4.5 46, 4.8 & 4.9	NORTHERN STATES POWER CO.	RELEASE OF RIGHTS	-
124	4.2 & 4.3	" " " "	"	
125	4.4	EMIL C. PATROS	FEE, ACCESS RIGHTS	0.01
126	4	THOMAS A. BAUMGARTNER ET AL	"	0.60
127	4.4	CITY OF LA CROSSE	RELEASE OF RIGHTS	—
129	4.2 & 4.3	LA CROSSE TELEPHONE CORP.	"	—
131	4.9 & 4.10	DAIRYLAND POWER CO-OP	"	—
132	4.6	DELBERT FREEMORE	FEE SIMPLE	0.36
133	4.6	JOHN PARK	" "	0.06

SCHEDULE OF LANDS AND INTERESTS REQUIRED

PARCEL NO.	SHEET NO.	OWNER	INTERESTS REQUIRED	ACRES
134	4.7	NORTHERN STATES POWER CO.	RELEASE OF RIGHTS	—
236	4.5	CITY OF LA CROSSE	DEDICATION	0.23
136	4.5	CITY OF LA CROSSE	L.H.E.	—
137	4.1	NORTHERN STATES POWER CO.	RELEASE OF EASEMENT	—
138	4.3	MAGDALENE A. DAWSON	FEE SIMPLE	3.65
139	4.5	WESLEY M. DENNY	FEE & ACCESS RTS.	0.12
140	4.12	ERNEST A. BAUER SR.	" " "	0.26
141	4.8 & 4.13	NORTHER STATES POWER CO.	RELEASE OF EASEMENT	—
142	4.8	WILLIAM H. SCHAFER EST.	FEE & ACCESS RTS.	4.32
143	4.12	C. B. & Q. RR. CO.	AGREEMENT	—
144	4.13	CLEMENTS J. SYMICEK	FEE & ACCESS RTS.	18.64
145	4.12	JACOB HANGARTNER	ACCESS RIGHTS	—
146	4.13	BENJAMIN E. EMERY	FEE & ACCESS RTS.	0.14
147	4.13	GEORGE H. ROELLICH	FEE SIMPLE	0.28
148	4.13	BETTY C. SCHMALTZ ET AL	FEE L.H.E. & ACCESS RTS.	9.50
149	4.13	ORA LA POINT	FEE & ACCESS RTS.	0.20
150	4.13	ADOLPH E. SCHMIT	FEE & L.H.E.	0.04
151	4.12	NORTHERN STATES POWER CO.	RELEASE OF RIGHTS	—
152	4.8	WISCONSIN TELEPHONE CO.	" " "	—
153	4.13	WISCONSIN TELEPHONE CO.	" " "	—
154	4.8	LA CROSSE TELEPHONE CO.	" " "	—
155	4.12	ONALASKA PICKLE & CANNING CO.	ACCESS RIGHTS	—
156	4.3	MAGDALENE A. DAWSON	FEE SIMPLE	0.12

STATE HIGHWAY COMMISSION OF WISCONSIN

PLAT OF RIGHT OF WAY REQUIRED

DEC 14, 1965
AUG. 25, 1965

PROJECT I 90-1(2)0

MARCH 17, 1965
AUGUST 17, 1964
APRIL 17, 1964

LA CROSSE - TOMAH **ROAD**
(MINNESOTA-WISCONSIN STATE LINE - U.S.H. 16)

NOVEMBER 26, 1963
AUGUST 14, 1963

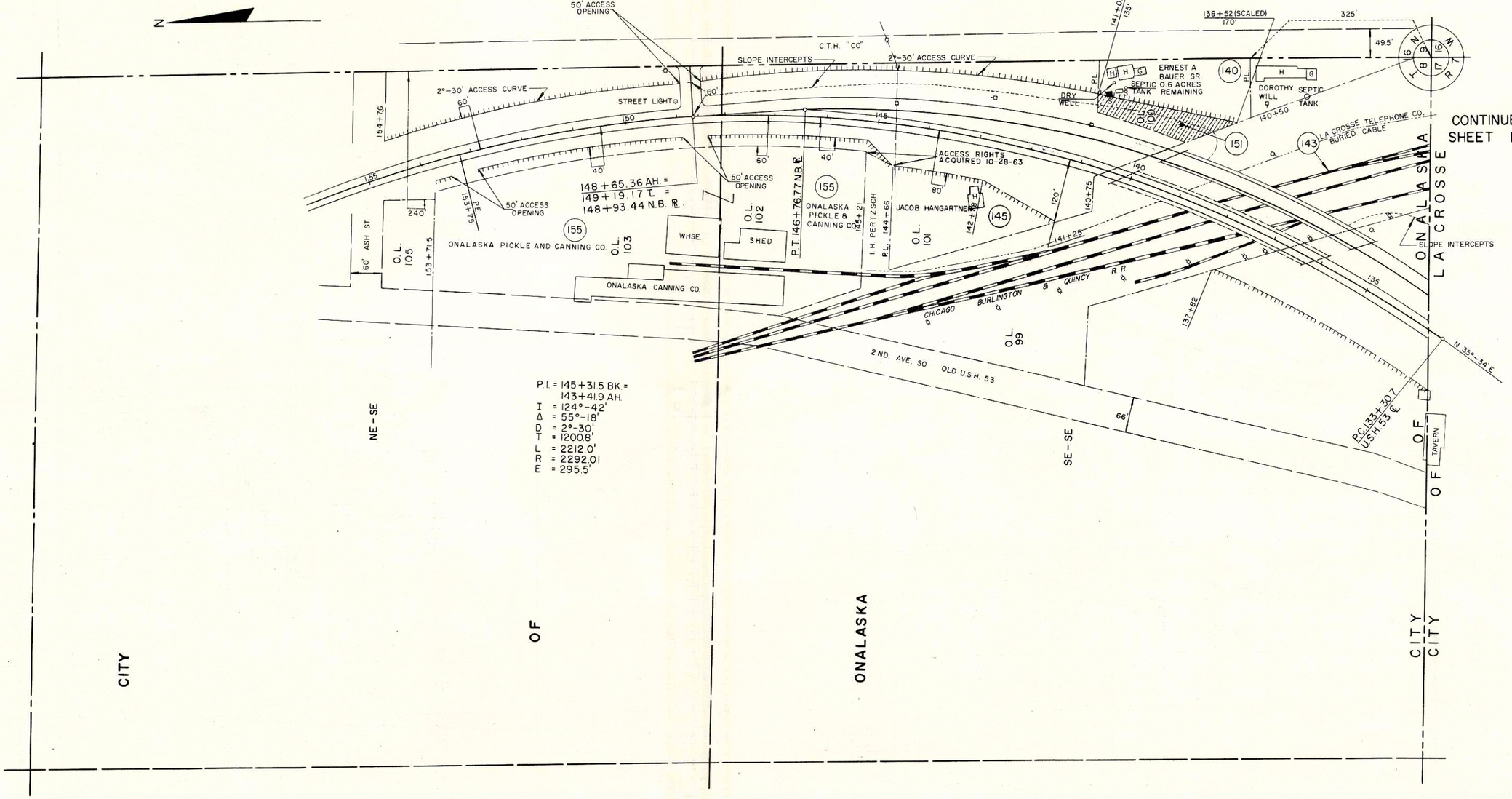
INTERSTATE HIGHWAY 90 LA CROSSE **COUNTY**

SCALE

MAY 20, 1963
MARCH 6, 1963
JANUARY 23, 1963
DECEMBER 5, 1962

DATED OCTOBER 31, 1962

COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT STATE	CLASS AND AGREEMENT FEDERAL	B. P. R. REGION DIVISION	SHEET NUMBER	TOTAL SHEETS
32.3	90.1		13.2	4 WIS	4.12	
CONST PROJECT			FG08-3(39)		4.1	30



REVISION DATE	
8-25-65	N.C.
12-14-65	

STATE HIGHWAY COMMISSION OF WISCONSIN

PLAT OF RIGHT OF WAY REQUIRED

PROJECT I 90-1(2)0

LA CROSSE - TOMAH RD.

(MINNESOTA - WISCONSIN STATE LINE - U.S.H. 16)

I.H. 90 LA CROSSE COUNTY

SCALE

0 100 200

LENGTH MILES FEET

DATED MARCH 17, 1965

B. P. R. DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
WIS 4	FG-08-3(39)	5	30

CURVE DATA-EXISTING U.S.H. 53 (S.B.)
P.I. = 138+17.17
Δ = 23°-58'-04"
D = 2°-30'
R = 2291.83'
T = 486.47'
L = 958.71'
S.E. = 0.02%

CURVE DATA U.S.H. 53 S.B.
P.I. = 145+30.67
Δ = 14°-23'-57"
D = 3°-00'
R = 1909.86'
T = 241.26'
L = 479.97'
S.E. = 0.02'/FT.

CURVE DATA N.B. 53
P.I. = 140+62.36
Δ = 38°-22'
D = 3°-00'
R = 1909.86
L = 1278.87
T = 664.46
S.E. = .050'/'

NOTE: SEE DETAIL SHEET FOR CONVERGING U.S.H. 53

BENCH MARKS

B.M.#1	STA. 138+75 N.B.	CHIS. □ N.E. COR. CONC. WELL PLATFORM 65' LT.	EL. 645.25
B.M.#2		CHIS. □ N.E. COR. CONC. BASE RELAY BOX	EL. 646.21
B.M.#3	STA. 145+15 N.B.	P.K. NAIL IN POWER POLE 79' RT.	EL. 679.03
B.M.#4	STA. 154+89 ℄ EXIST. 53	P.K. NAIL IN STREET LIGHT 27' LT.	EL. 682.39
B.M.#5	STA. 123+35	TOP OF FIRE HYDRANT 76' RT.	EL. 644.16
B.M.#6		CHIS. □ COR. TOP S.E. ABUT. COR. EXIST. STRUCTURE	EL. 673.02

UNCL. EXCAV. = 2,044 C.Y.
BORROW = 19,910 C.Y.
FILL = 17,562 C.Y. { 16,372 C.Y. @ 25%, 1190 C.Y. @ 25% SEL. EMB.

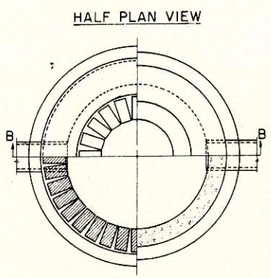
STA. 139+90 N.B. ℞
1-18"X 186' C.M.C.P. REQ'D.
SKEW 54° L.H.F.
1-APRON ENDWALL REQ'D. RT.
10 C.Y. RIP RAP REQ'D.

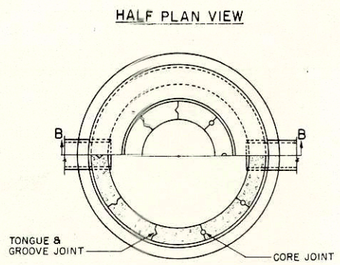
STA. 137+66.50, STRUCTURE B-32-67 REQ.
5 SPAN STEEL GIRDER, 397' 9 9/16" O.A.L.
33' CLEAR ROADWAY. SEE DRAWINGS X 32128-X 32149

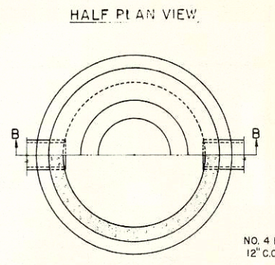
USH 53

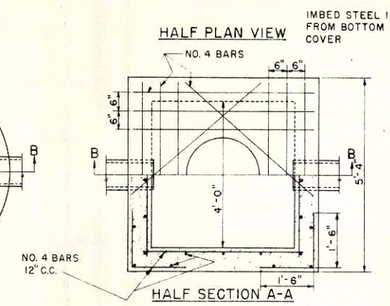
PLATE 1-PLAN-PROFILE O. P. R. & R. C.

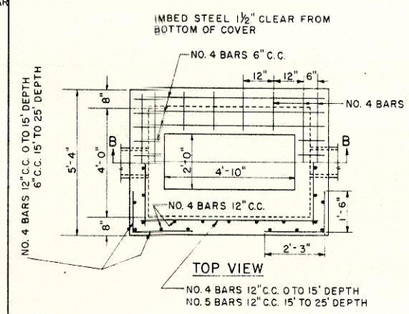
BRUNING NO. 42-161
MADE AND PRINTED IN U.S.A.
CHARLES BRUNING COMPANY, INC.

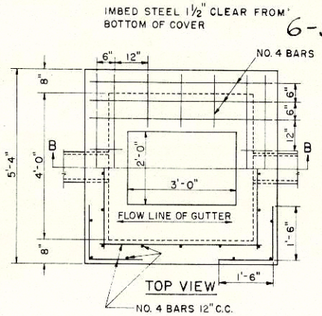


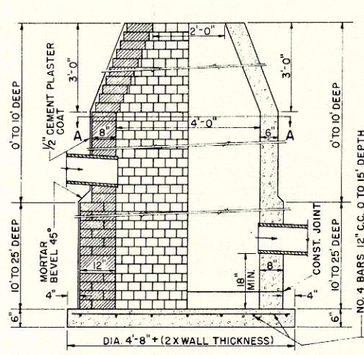


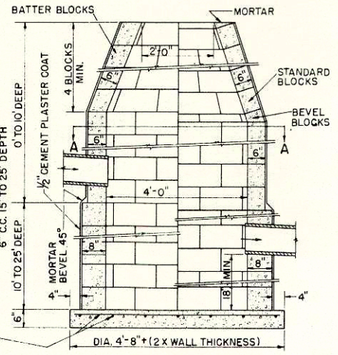


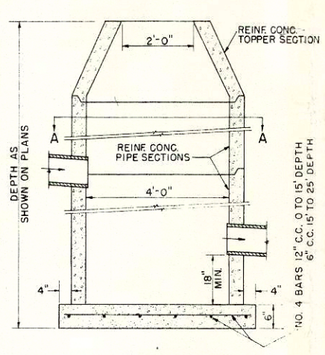


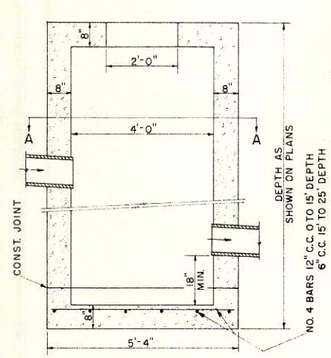


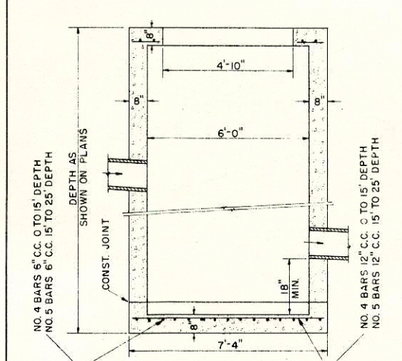


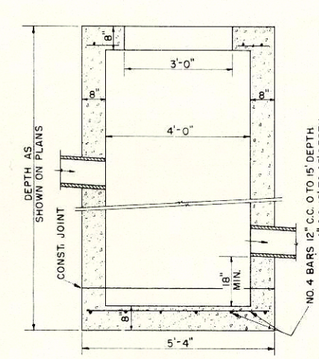








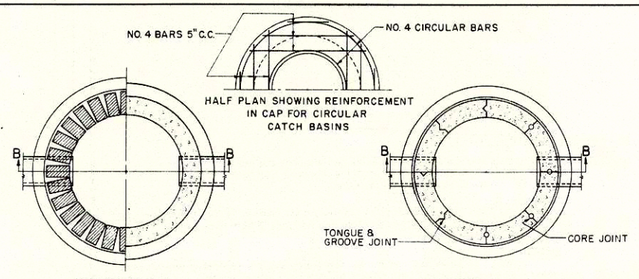


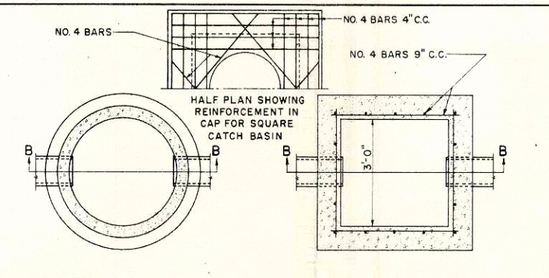


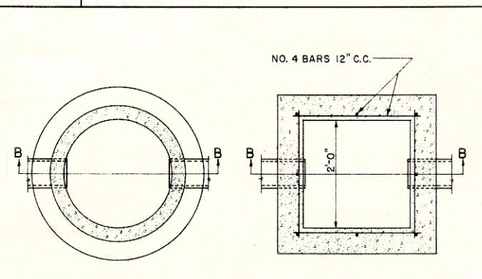
TYPE 1

TYPE 4

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 BASINS 1-A", "CATCH BASINS 2-C" ETC, THE NUMERAL DESIGNATES THE OPTIONAL MASONRY PORTION OF THE STRUCTURE AND THE LETTER DESIGNATES THE FIXTURE TO BE USED THEREON.

REINFORCED CONCRETE TOPPER SECTION, AS SHOWN FOR TYPE 1 REINF. CONC. CULV'T PIPE CATCH BASIN, MAY BE USED AS AN ALTERNATE CONE ON TYPE 1 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 1 1/2" 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

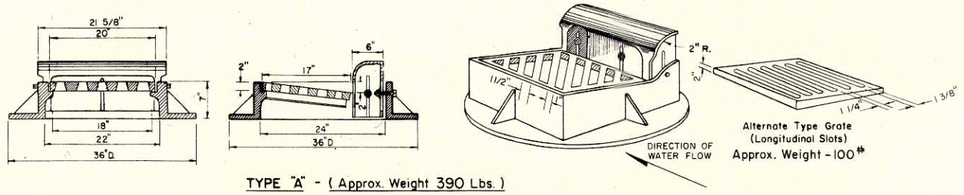
J. J. Piff
ENGINEER OF DESIGN

APPROVED:

2/6/63
DATE

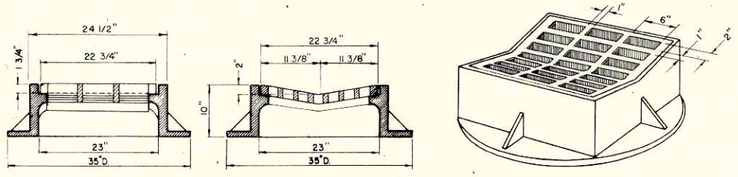
E. A. Ruettgen
STATE HIGHWAY ENGINEER

PLATE 5-3.3.2



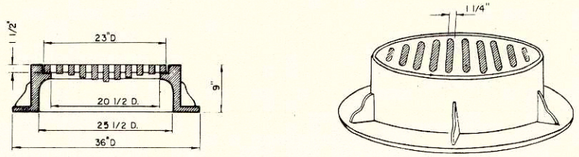
TYPE "A" - (Approx. Weight 390 Lbs.)

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



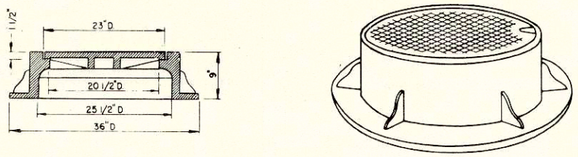
TYPE "B" - (Approx. Weight 414 Lbs.)

Frame Weight - 275 #
Grate " - 139#

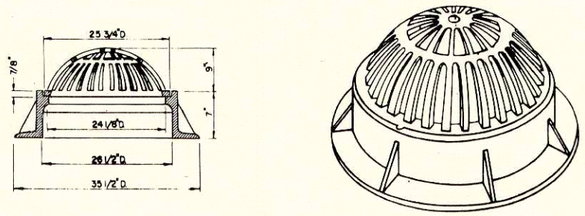


TYPE "C" - (Approx. Weight 370 Lbs.)

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")

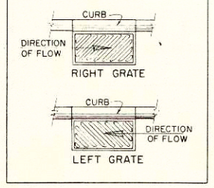


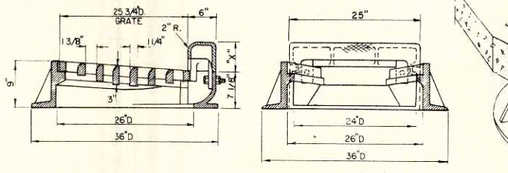
TYPE "E" - (Approx. Weight 325 Lbs.)

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)

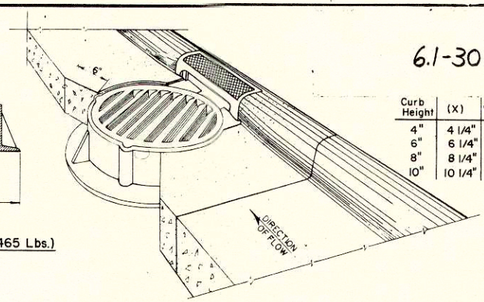
Longitudinal slot type grates may be used ONLY where bicycles are prohibited.





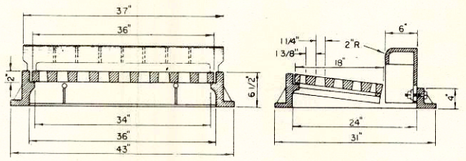
TYPE "G" - (Approx. Weight 425 - 465 Lbs.)

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



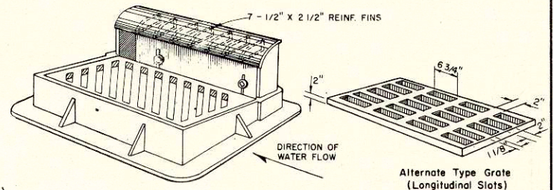
6.1-30

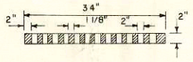
Curb Height	(X)	Weight
4"	4 1/4"	60#
6"	6 1/4"	70#
8"	8 1/4"	90#
10"	10 1/4"	100#



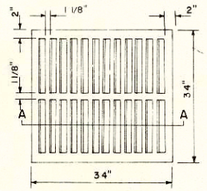
TYPE "H" - (Approx. Weight 530 Lbs.)

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



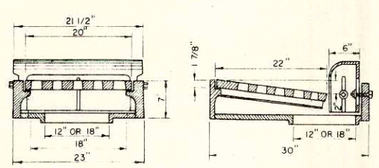


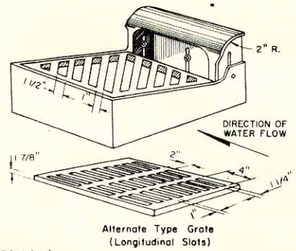
SECTION A - A



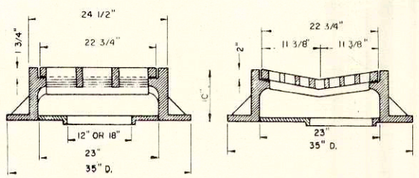
INLET COVER TYPE MS

GRATE WEIGHT 270#





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.

MATERIALS —
All Iron Castings shown on this drawing shall conform to the requirements for "Class 30" of the "Standard Specifications for Gray Iron Castings, A.S.T.M. Designation A 48," and the Standard Specifications.

BEARING SURFACES —
All Catch Basin and Inlet frames and grates which are placed in vehicular traffic areas shall be "Non-Rocking" type, or shall be "Bearing Surface" seated 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:

11-23-63
DATE

J. S. Gilt
ENGINEER OF DESIGN

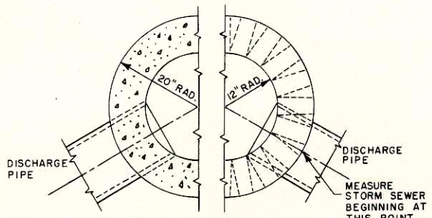
APPROVED:

12/3/63
DATE

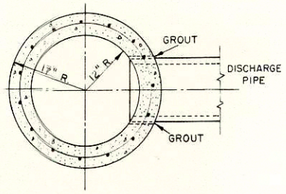
STATE HIGHWAY ENGINEER

PLATE NO. 5-3.4.7

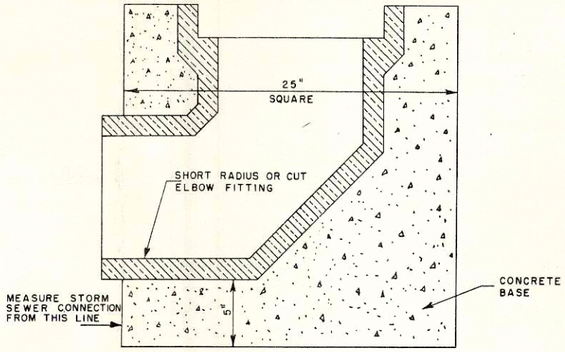
62-30



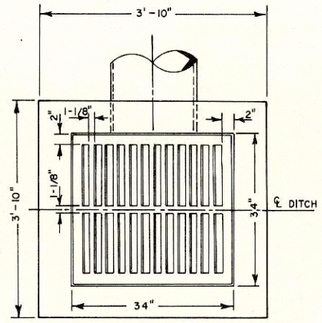
PLAN VIEW



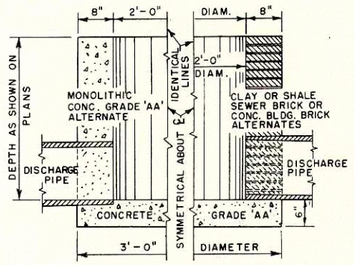
PLAN VIEW



INLET TYPE 2



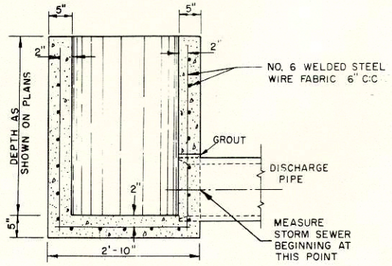
PLAN VIEW



ELEVATION VIEW

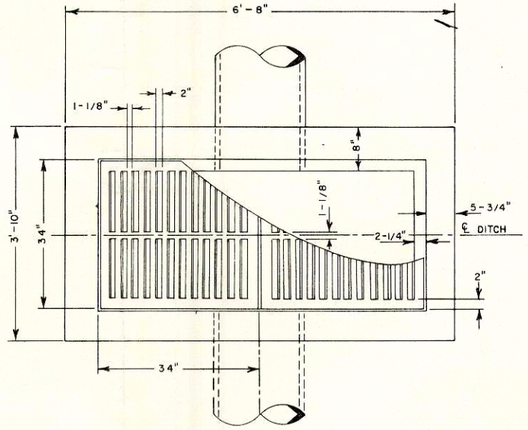
SHOWING DETAILS FOR MONOLITHIC CONCRETE, CLAY OR SHALE SEWER BRICK, OR CONCRETE BUILDING BRICK ALTERNATES FOR

INLET TYPE 1

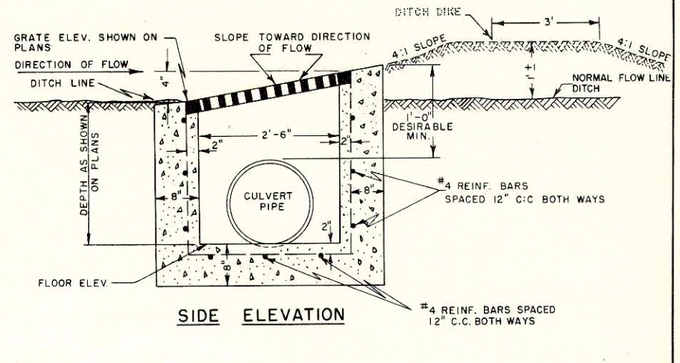


ELEVATION VIEW

SHOWING DETAILS FOR PRE-CAST CONCRETE ALTERNATE FOR



PLAN VIEW



SIDE ELEVATION

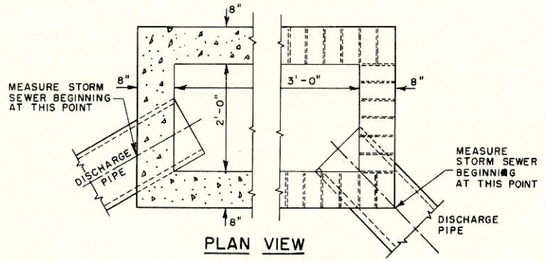
INLET TYPE 8

GENERAL NOTES:

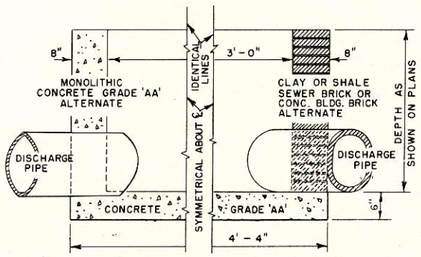
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.



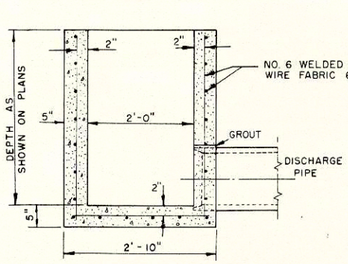
PLAN VIEW



ELEVATION VIEW

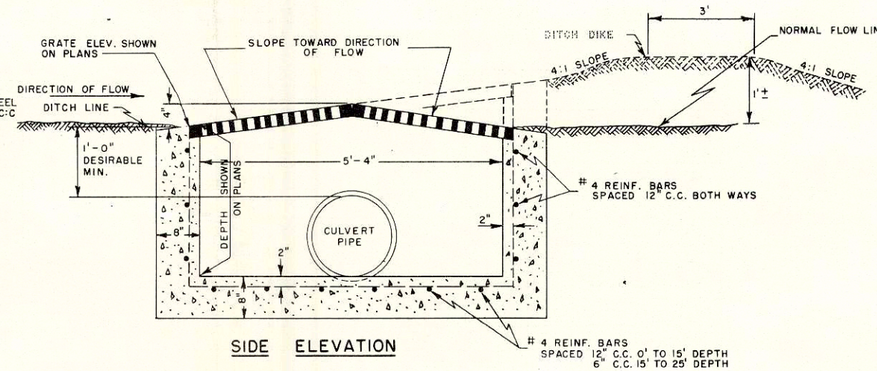
SHOWING DETAILS FOR MONOLITHIC CONCRETE, CLAY OR SHALE SEWER BRICK, OR CONCRETE BUILDING BRICK ALTERNATES FOR

INLET TYPE 3



ELEVATION VIEW

SHOWING DETAILS FOR PRE-CAST CONCRETE ALTERNATE FOR



SIDE ELEVATION

INLET TYPE 9

INLETS

STATE HIGHWAY COMMISSION OF WISCONSIN

RECOMMENDED FOR APPROVAL

11-21-63
DATE

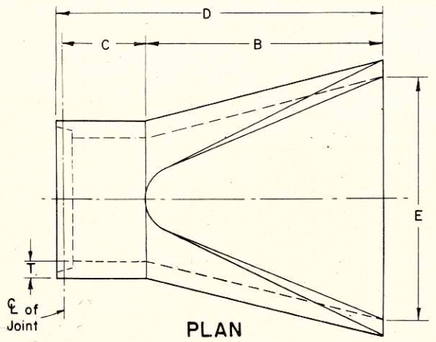
J. S. Pulf
ENGINEER OF DESIGN

APPROVED:

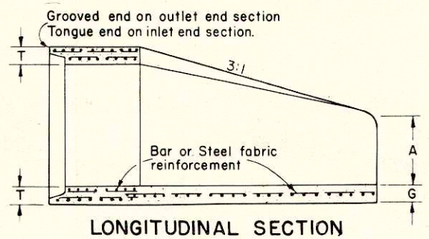
12/3/63
DATE

STATE HIGHWAY ENGINEER

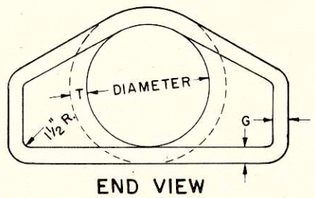
PLATE NO. 5-3.5.2



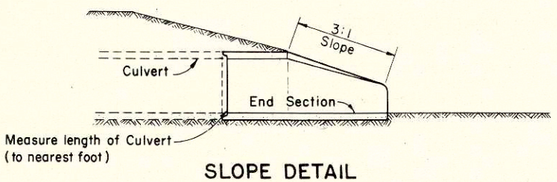
PLAN



LONGITUDINAL SECTION



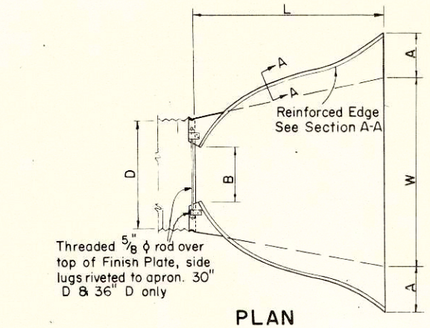
END VIEW



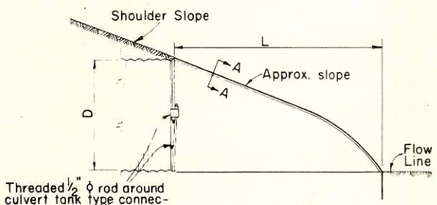
SLOPE DETAIL

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

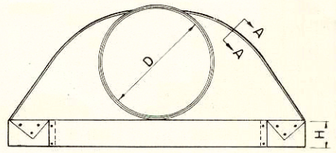
REINFORCED CONCRETE APRON ENDWALLS



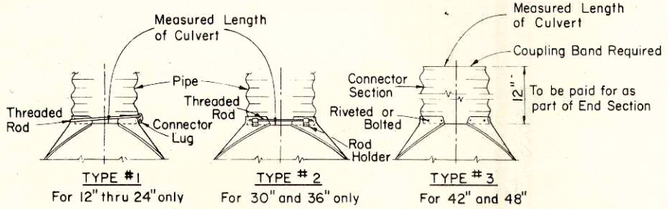
PLAN



SIDE ELEVATION



END VIEW

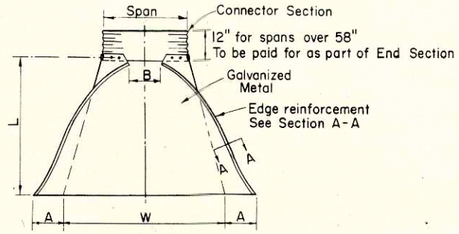


CONNECTION DETAILS

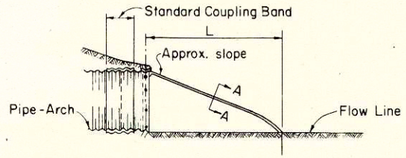
D Pipe Diam.	Gage Min.	Dimensions A ± 1"	B Max.	H ± 1"	L ± 1½"	W ± 2"	Approx. Slope	Fabrication Remarks
18"	16	8"	10"	6"	31"	36"	2½ to 1	1 Piece
21"	16	9"	12"	6"	36"	42"	"	"
24"	16	10"	13"	6"	41"	48"	"	"
30"	14	12"	16"	8"	51"	60"	"	"
36"	14	14"	19"	9"	60"	72"	"	2 Pieces, ℄ Splice
42"	12	16"	22"	11"	69"	84"	"	"
48"	12	18"	27"	12"	78"	90"	2¼ to 1	"

Note: All splices to be lap riveted or bolted.

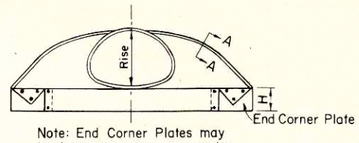
METAL AND ALUMINUM APRON ENDWALLS



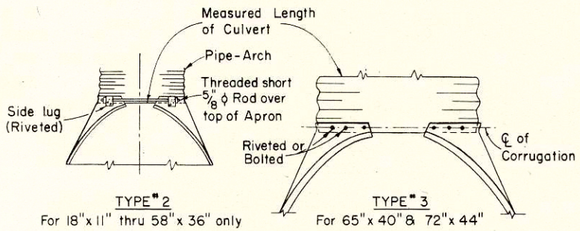
PLAN
showing alternate type with connector section



SIDE ELEVATION



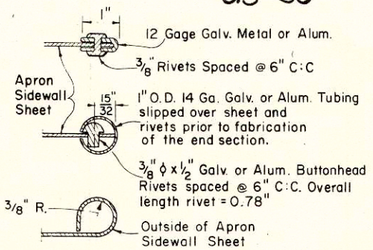
END VIEW



CONNECTION DETAILS

Pipe-Arch Dimensions Span	Rise	Gage Min.	Dimensions A ± 1"	B Max.	H ± 1"	L ± 1½"	W ± 2"	Approx. Slope	Fabrication Remarks
18"	11"	16	7"	9"	6"	19"	30"	2½ to 1	1 Piece
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"	"	2 Pieces, ℄ Splice
58"	36"	12	18"	26"	12"	63"	90"	"	"
65"	40"	12	18"	30"	12"	70"	102"	2¼ to 1	"
72"	44"	12	18"	33"	12"	77"	114"	"	3 Pieces, 2 Splics equal distance from ℄

Note: All splices to be lap riveted or bolted.



SECTION A-A

GENERAL NOTES

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

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

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

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

NOTE:

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

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

APRON ENDWALLS FOR CULVERT PIPE

APRON ENDWALLS FOR PIPE ARCH

APRON ENDWALLS FOR CULVERT PIPE & PIPE ARCH

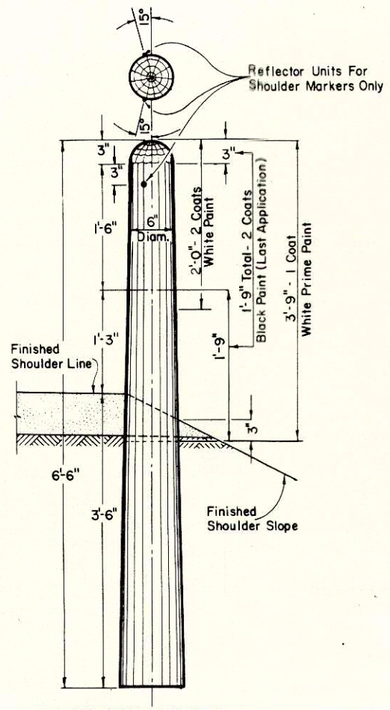
STATE HIGHWAY COMMISSION OF WISCONSIN

RECOMMENDED FOR APPROVAL:

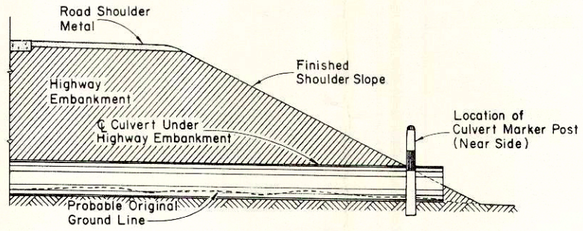
4/9/65 DATE — E. J. Bykiet, CHIEF DESIGN ENGINEER

4/12/65 DATE — E. C. Ruetten, STATE HIGHWAY ENGINEER

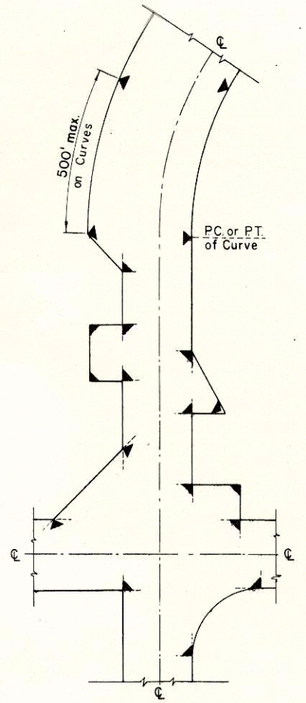
PLATE NO. 6-2.6.4.



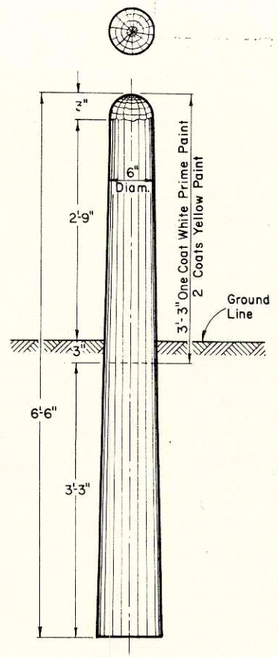
MARKER POST FOR
ROAD SHOULDERS AND CULVERTS



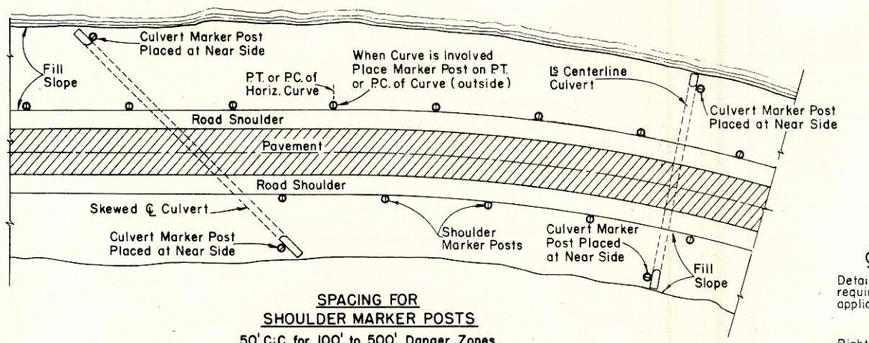
SECTION
SHOWING RELATIVE LOCATION OF
MARKER POST FOR CULVERTS



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



MARKER
POST
FOR
RIGHT OF WAY



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

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

MARKER POSTS FOR ROAD SHOULDERS AND CULVERTS

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

MARKER POSTS & MARKER POSTS FOR RIGHT OF WAY

STATE HIGHWAY COMMISSION OF WISCONSIN

RECOMMENDED FOR APPROVAL

2-5-63
DATE

J. J. Reitz
ENGINEER OF DESIGN

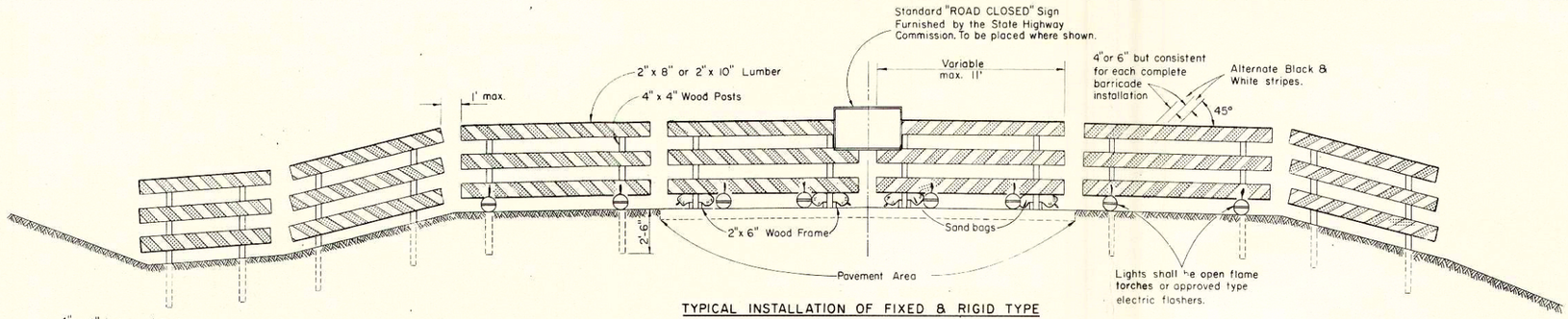
APPROVED:

2/6/63
DATE

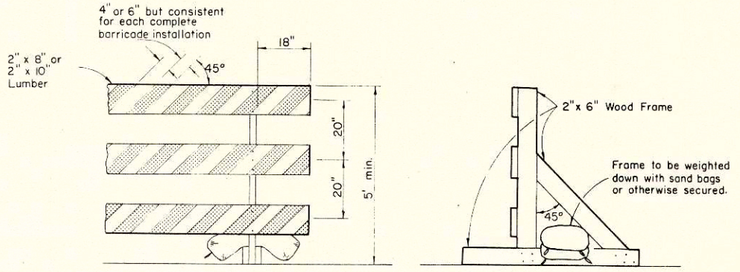
E. L. Rettinger
STATE HIGHWAY ENGINEER

PLATE NO. 7-1.3.4

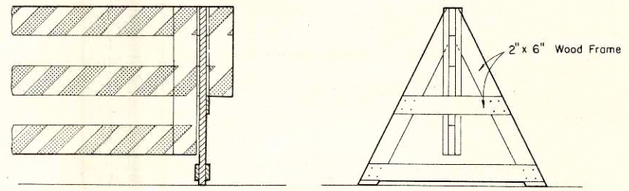
6.5-30



TYPICAL INSTALLATION OF FIXED & RIGID TYPE

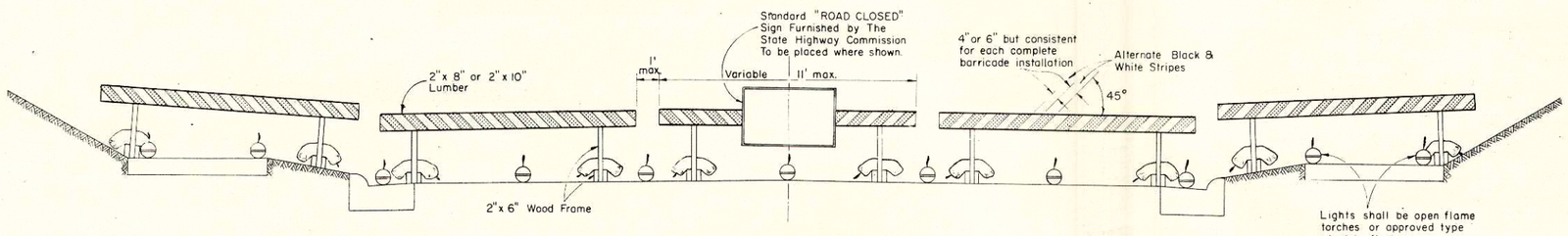


ALTERNATE TYPE INSTALLATION (RIGID)

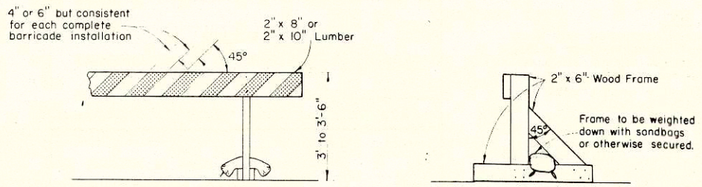


ALTERNATE TYPE INSTALLATION (DEMOUNTABLE)

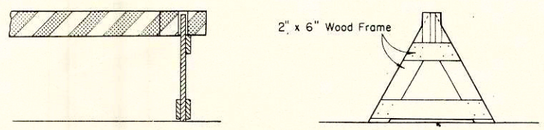
CLASS I BARRICADE



TYPICAL INSTALLATION OF RIGID TYPE



ALTERNATE TYPE INSTALLATION (RIGID)



ALTERNATE TYPE INSTALLATION (DEMOUNTABLE)

CLASS II BARRICADE

GENERAL NOTES:

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

CLASS I BARRICADE

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

CLASS II BARRICADE

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

LUMBER & FABRICATION

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

PAINTING

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

DIRECTION OF DIAGONAL STRIPES

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

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

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

MEASUREMENT & PAYMENT

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

NOTE:

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

NOTE:

All lumber or timber dimensions shown hereon are nominal.

CONSTRUCTION BARRICADE

STATE HIGHWAY COMMISSION OF WISCONSIN

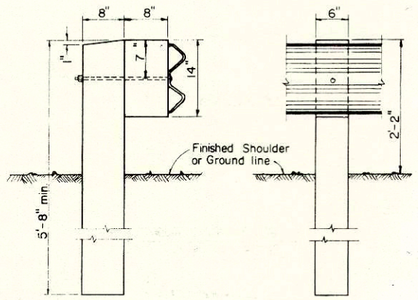
RECOMMENDED FOR APPROVAL:

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

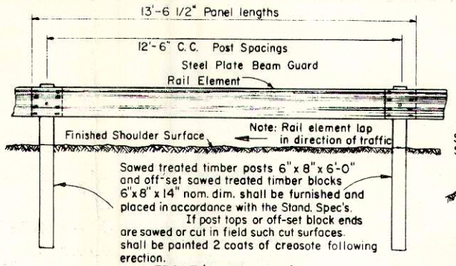
APPROVED:

5 May 63 DATE — E. C. Purtlyn STATE HIGHWAY ENGINEER

PLATE NO. 7-4.1.4

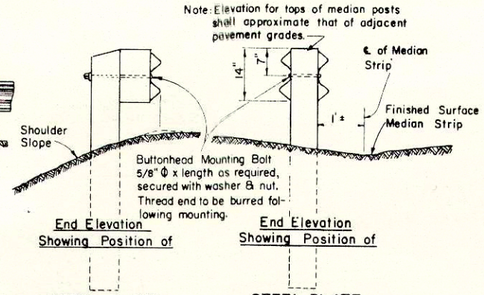


DETAIL OF POST & OFF-SET BLOCK



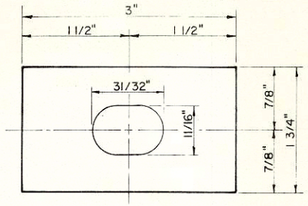
FRONT (Traffic Side) ELEVATION

STEEL PLATE BEAM GUARD OR STEEL PLATE BEAM (MEDIAN) GUARD

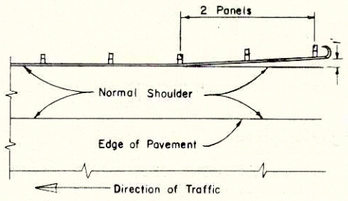


STEEL PLATE BEAM GUARD

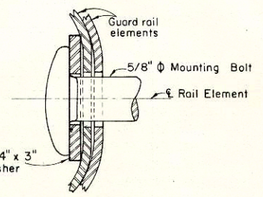
STEEL PLATE BEAM (MEDIAN) GUARD



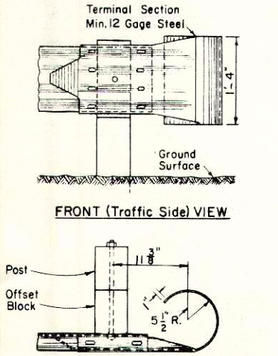
8 GAGE GALVANIZED - MOUNTING BOLT WASHER



LOCATION DIAGRAM FOR STEEL PLATE BEAM GUARD INTERMEDIATE SECTIONS



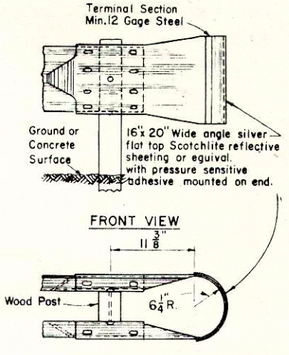
SECTION "B-B"



FRONT (Traffic Side) VIEW

PLAN VIEW

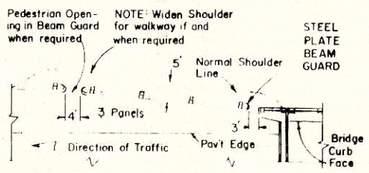
TERMINAL SECTION DETAILS FOR STEEL PLATE BEAM GUARD



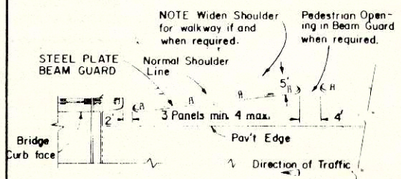
FRONT VIEW

PLAN VIEW

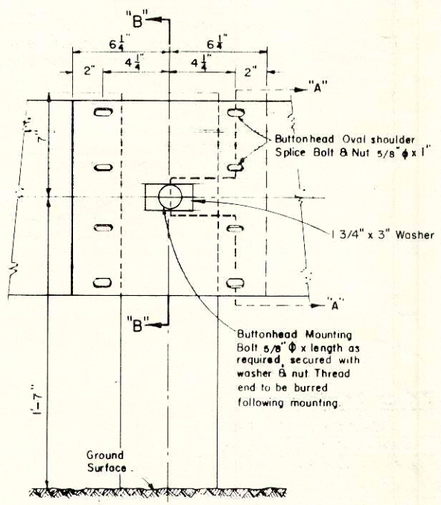
TERMINAL SECTION DETAILS FOR STEEL PLATE BEAM (MEDIAN) GUARD



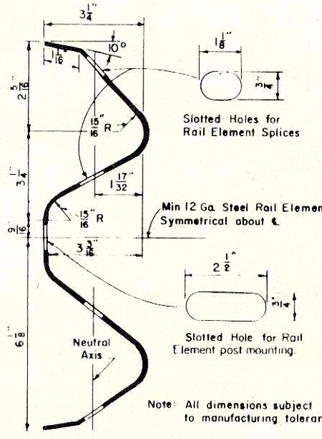
LOCATION DIAGRAM FOR STEEL PLATE BEAM GUARD AT BRIDGE EXITS



LOCATION DIAGRAM FOR STEEL PLATE BEAM GUARD AT BRIDGE APPROACHES



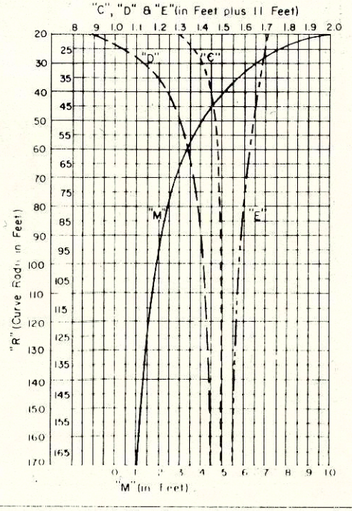
RAIL ELEMENT SPLICING & POST MOUNTING DETAILS

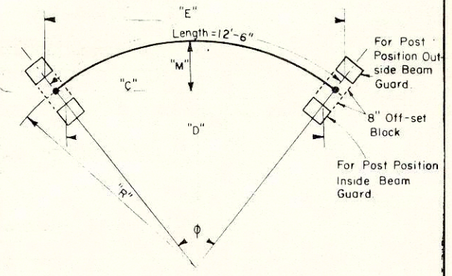


SECTION "A-A" RAIL ELEMENT SECTION (Min 12 GAGE STEEL)

CURVE DATA

Middle Ordinates for Beam Curving & Chord Lengths for Post Spacings.





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.

The Steel Plate Beam Guard or (Median) Guard shall consist of steel plate made of open hearth or electric furnace steel.

Plates shall be blanked to proper shape, fabricated and ready for assembly when received in the field. The plates shall be true to plan dimensions and of uniform section. Warped or deformed plates will be rejected. The edges of the plates shall be rolled or rounded so that they present no sharp edges. All connections and splices shall be formed with flat round headed bolts, or similar detail so that no appreciable projection will be presented on the road side of the guard. The rail element shall be spliced by lapping in the direction of traffic or by butt joint with splice plate. Plate ends in lap splices or plate ends and splice plate in butt splices shall make contact throughout the entire area of the splice.

TESTS

The elongation of a 2 inch specimen of the steel plate used in the rail element shall be not less than 12 percent tested in tension. The minimum tensile strength of the rail element shall, when tested in conjuntion with splices and end connections, be 80,000 lbs. The rail element when loaded as a simple beam, freely supported at each end on 12'-0" centers shall support a concentrated load at span center through a flat surface 3 inches long, in accord with the following –

BEAM ELEMENT

Traffic Face up		Traffic Face Down	
Load	Maximum Deflection	Load	Maximum Deflection
1500 lb.	2.0 in.	1200 lb.	2.0 in.
2000 lb.	3.0 in.	1600 lb.	3.0 in

GALVANIZED

The steel plate beam element and terminal sections shall be furnished galvanized. The spelter coating of the base metal sheets shall be in accordance with A.A.S.H.O. Designation: M 36. The beam element may be galvanized before or after fabrication.

Bolts, nuts, and washers shall be furnished galvanized in accordance with A.S.T.M. Designation: A153, Class C.

CIRCULAR STEEL PLATE ELEMENT

Steel plate beam elements for beam guard or (median) guard for radii of 20 ft. to 150 ft. shall be shop-curved. Steel plate beam elements shall be bent to true circular curvature, void of kinks. Kinks shall be cause for rejection. Steel plate beam elements shall have a minimum bending radius of 20 feet.

MEASUREMENT & PAYMENT

The items of Steel Plate Beam Guard and Steel Plate Beam (Median) Guard shall be measured and paid for at the contract unit price per linear foot, measured in place by length in linear feet from end to end - out to out of terminal sections, which price shall be full compensation for furnishing and placing all materials and performing all work to completion in accordance with the Stand. Spec's. the applicable Plans and Special Provisions.

STEEL PLATE BEAM GUARD & STEEL PLATE BEAM (MEDIAN) GUARD

STATE HIGHWAY COMMISSION OF WISCONSIN

RECOMMENDED FOR APPROVAL:

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

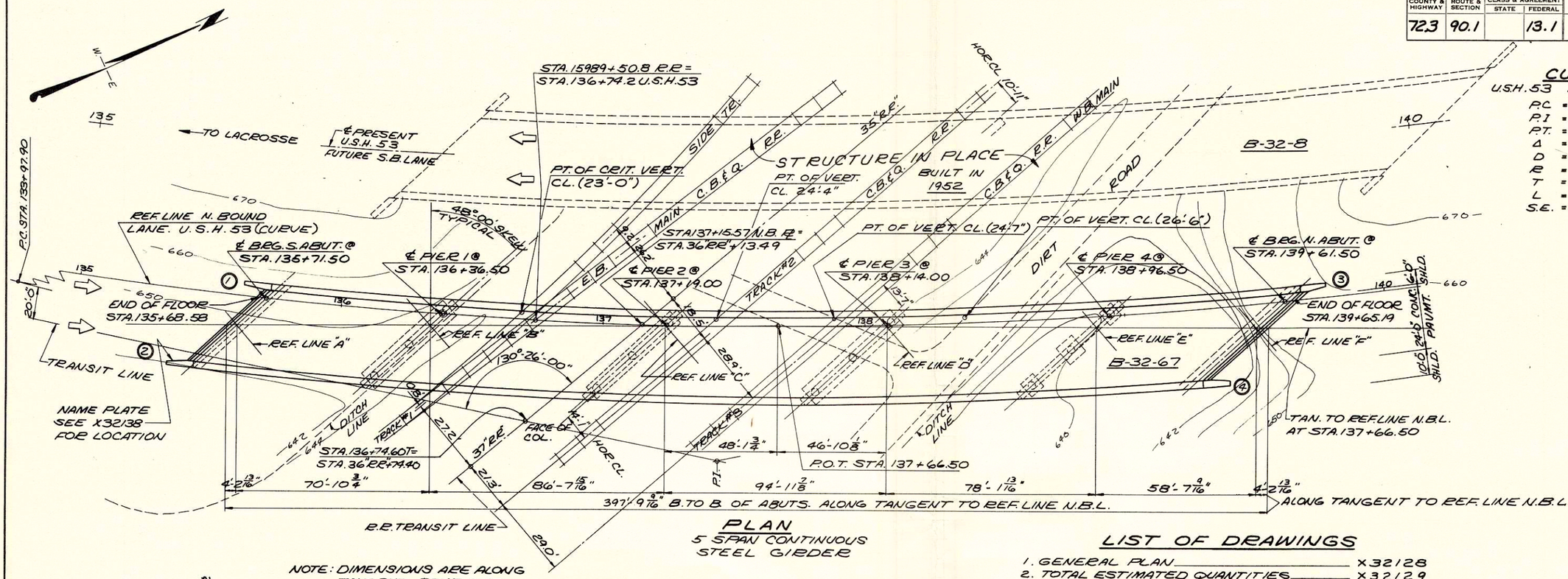
APPROVED:

2/6/63 DATE — E. L. Rossiter STATE HIGHWAY ENGINEER

PLATE NO. 7-2.4.10

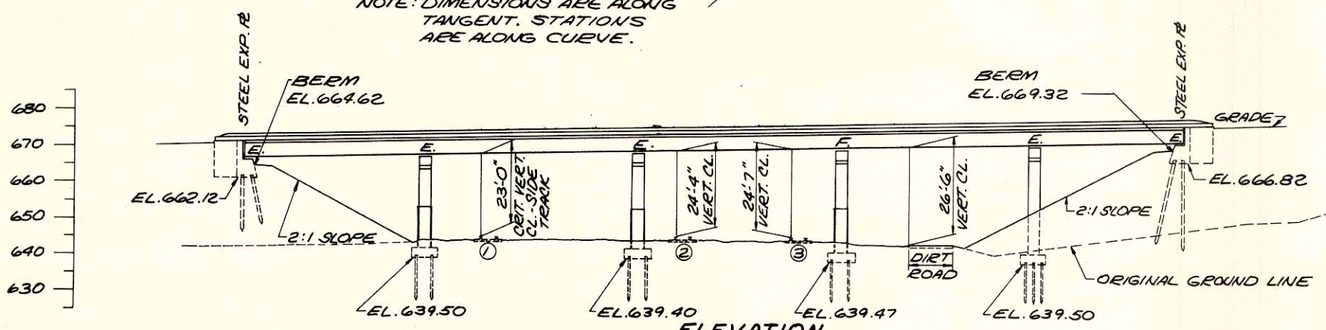
FORM E-B-11-62

COUNTY & HIGHWAY	ROUTE & SECTION	CLASS & AGREEMENT STATE	CLASS & AGREEMENT FEDERAL	B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
723	90.1		13.1	4	FG08-3(39)	7	30

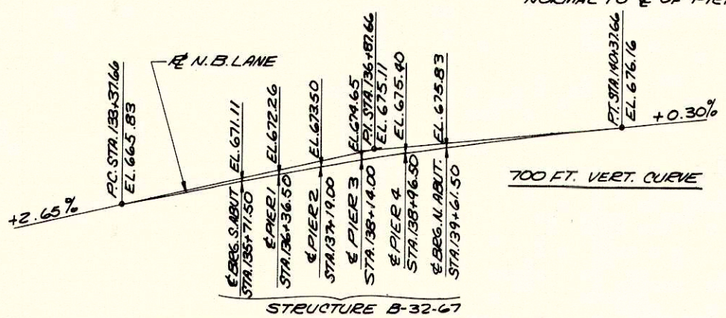


PLAN
5 SPAN CONTINUOUS STEEL GIRDER

NOTE: DIMENSIONS ARE ALONG TANGENT. STATIONS ARE ALONG CURVE.



ELEVATION
NORMAL TO ℄ OF PIERS



PROFILE GRADE LINE U.S.H. 53
NORTH BOUND LANE

CURVE DATA
U.S.H. 53 ℄ NORTH BOUND LANE

P.C. = STA. 133+97.90
P.I. = STA. 140+62.36
P.T. = STA. 146+76.77
Δ = 38°-22'-00"
D = 3°-00'-00"
R = 1909.86'
T = 664.46'
L = 1278.87'
S.E. = 0.050'/'

LIST OF DRAWINGS

RAIL ELEVATIONS RT. & LT. TO "RR" LINE

STATION	SIDE TRACK W. RAIL	SIDE TRACK E. RAIL	TRACK #1 W. RAIL	TRACK #1 E. RAIL	TRACK #2 W. RAIL	TRACK #2 E. RAIL	TRACK #3 W. RAIL	TRACK #3 E. RAIL
36"RR"	693.83	693.77	695.97	695.98	695.77	695.82	696.02	696.00
36"RR"	695.70	695.77	696.02	696.05	695.80	695.87	696.11	696.10
37"RR"	696.11	696.07	696.10	696.05	695.86	695.94	696.22	696.29
38"RR"	—	—	695.94	696.02	695.96	696.06	696.35	696.42

DESIGN DATA

LIVE LOAD - HS20

ALLOWABLE DESIGN STRESSES

CONC. MASONRY - GRADE AA f_c = 1,900 P.S.I.
BAR STEEL REINF. f_s = 20,000 P.S.I.
STRUCT. CARBON STEEL f_s = 20,000 P.S.I.
STRUCTURAL LOW ALLOY STEEL
TO ℄ INCL. ¾" THICK ____ f_s = 27,000 P.S.I.
OVER ¾" TO ℄ INCL. 1½" THICK f_s = 25,000 P.S.I.
OVER 1½" THICK ____ f_s = 23,000 P.S.I.

FOUNDATION DATA

PILING AT THE S. ABUT SHALL BE 10¾"ø C.I.P. CONC. PILING EST. 75'-0" LONG AND DRIVEN TO A MIN. BRG. VALUE OF 25 T./PILE.
PILING AT THE N. ABUT. SHALL BE 10¾"ø C.I.P. CONC. PILING EST. 75'-0" LONG AND DRIVEN TO A MIN. BRG. VALUE OF 25 T./PILE
PILING AT THE PIERS SHALL BE 10¾"ø C.I.P. CONC. PILING. EST. 60'-0" LONG AND DRIVEN TO A MIN. BRG. VALUE OF 43 T./PILE.

REVISED

STATE HIGHWAY COMMISSION OF WISCONSIN

GENERAL PLAN

CO. LACROSSE | CITY VIL. OR TOWN ONALASKA | STA. 137+66.50
SECTION 8 | TOWN 16N | RANGE 7W
DESIGN SPEC. A.A.S.H.O. '61 | LOADING H 20 | CONST. SPEC. 1963
DATE 8-2-65 | DESIGN D.F.S. | DRAWN L.H.G. | CKD. BHZ

RECOMMENDED: T. V. B. Schultz, CHIEF BRIDGE ENGINEER
APPROVED: H. J. Bruning, STATE HIGHWAY ENGINEER

STRUCTURE B-32-67 | SHEET 1 OF 22

X 32128

FORM E-B-12-62

B. P. R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	FG08-3(39)	8	30

TOTAL ESTIMATED QUANTITIES

BID ITEMS	UNIT	SUPER.	S. ABUT.	PIER 1	PIER 2	PIER 3	PIER 4	N. ABUT.	TOTAL
EXCAVATION FOR STRUCTURES	C.Y.	——	50	70	90	90	270	60	630
CONCRETE MASONRY	C.Y.	409.8	68.0	97.3	112.4	116.5	70.3	82.8	957.1
BAR STEEL REINFORCEMENT	LBS.	130,190	2,110	9,270	11,930	16,180	13,220	2,490	185,390
STRUCTURAL CARBON STEEL	LBS.	143,600	——	——	——	——	——	——	143,600
STRUCTURAL LOW ALLOY STEEL	LBS.	189,400	——	——	——	——	——	——	189,400
LUBRICATED BRONZE PLATES	LBS.	342	——	——	——	——	——	——	342
BEARING PADS	S.F.	32	——	——	——	——	——	——	32
CAST-IN-PLACE CONCRETE TEST PILING *	L.S.	——	——	——	——	——	——	——	1
CAST-IN-PLACE CONCRETE PILING, DELIVERED	L.F.	——	825	1020	1260	1260	1200	1125	6,690
CAST-IN-PLACE CONCRETE PILING, DRIVEN	L.F.	——	825	1020	1260	1260	1200	1125	6,690
TUBULAR RAILING, TYPE "S"	L.F.	819	——	——	——	——	——	——	819
FLOOR DRAINS, TYPE "A"	EACH	2	——	——	——	——	——	——	2
DOWNSPOUT, 6 INCH	L.F.	52	——	——	——	——	——	——	52
NON-BID ITEMS									
ALUMINUM OR ZINC PLATE	S.F.	56	——	——	——	——	——	——	56

* DRIVE ONE 85'-0" TEST PILE AT EACH ABUTMENT & ONE 70'-0" TEST PILE AT EACH PIER.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BEVEL EXPOSED EDGES OF CONCRETE 1" UNLESS OTHERWISE SPECIFIED.

IMBED ALL BAR STEEL 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

CYLINDRICAL TYPE STEEL PILE SHELLS IF USED SHALL HAVE A MINIMUM NOMINAL (AVERAGE) SHELL THICKNESS OF 0.188 INCH & CONFORM TO THE REQUIREMENTS OF A.S.T.M. DESIGNATION A 252, GRADE 2.

ALL FIELD CONNECTIONS SHALL BE MADE $\frac{3}{4}$"ϕ HIGH TENSILE STRENGTH FRICTION BOLTS UNLESS OTHERWISE SPECIFIED.

HOT POURED ELASTIC TYPE JOINT SEALER SHALL CONFORM TO A.S.T.M DESIGNATION, D 1190.

UPPER LIMITS OF "EXCAVATION FOR STRUCTURES" SHALL BE THE FINISHED GRADED SECTION FOR PIERS AND ELEVATION AS SHOWN ON SHEETS X32140 & X32145 FOR ABUTMENTS.

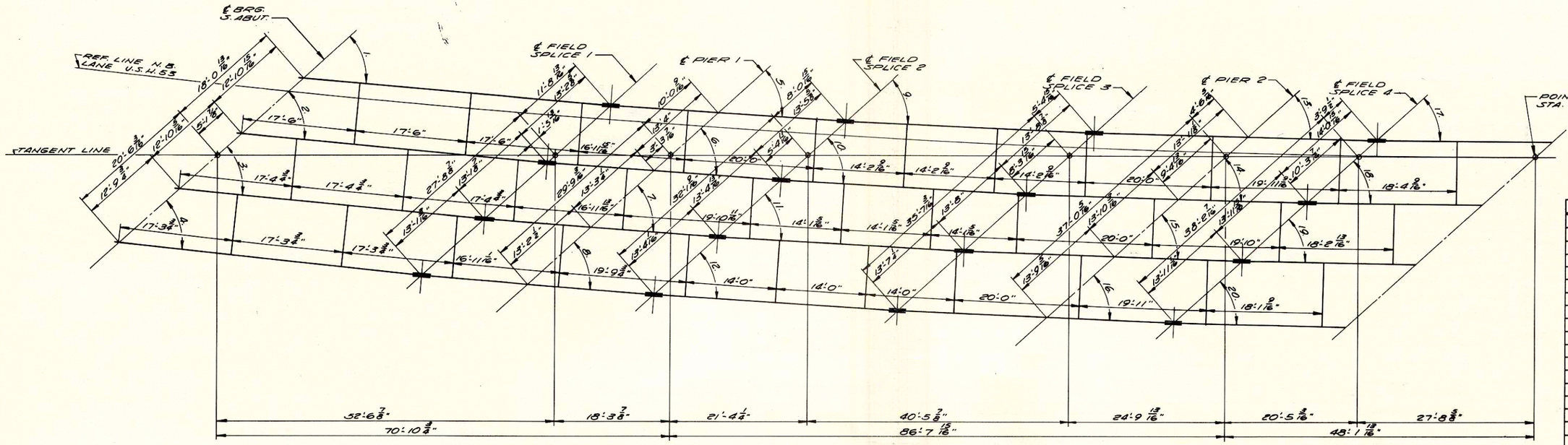
ABUTMENT PILING SHALL BE DRIVEN TO A MIN. TIP EL. 600.00.

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	TOTAL ESTIMATED QUANTITIES
	DESIGN SPEC. A.A.S.H.O.'61 | LOADING HS 20 | CONST. SPEC. 1963
	DATE 8-2-65 | DESIGN D.F.S. | DRAWN J.H.G. | CKD. EHZ
STRUCTURE B-32-67	SHEET 2 OF 22

X32129

FORM E-B-12-62

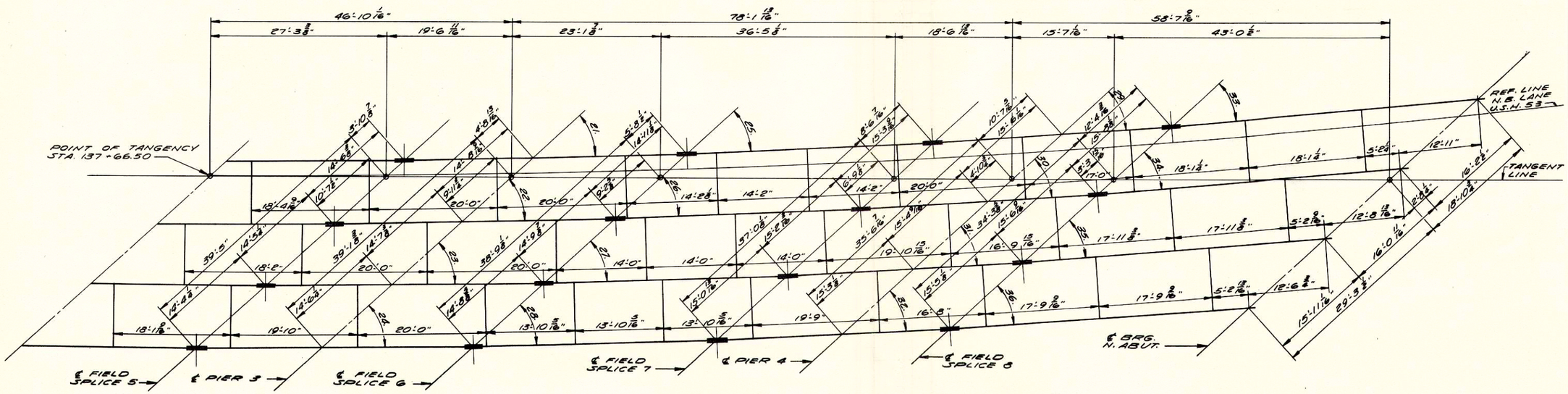
B. P. R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	FGOB-3(39)	9	30



HALF FRAMING PLAN

TABLE OF ANGLES

NO.	ANGLE
1	47° 03' 51.2"
2	47° 19' 47.4"
3	47° 35' 58.2"
4	47° 51' 03.8"
5	45° 47' 04.7"
6	46° 03' 50.9"
7	46° 20' 11.2"
8	46° 36' 27.5"
9	44° 38' 58.1"
10	44° 56' 23.2"
11	45° 13' 30.2"
12	45° 30' 18.4"
13	43° 24' 35.2"
14	43° 42' 35.2"
15	44° 00' 28.5"
16	44° 18' 05.8"
17	41° 35' 15.4"
18	42° 14' 19.1"
19	42° 33' 06.3"
20	42° 51' 36.0"
21	40° 25' 30.5"
22	40° 45' 56.2"
23	41° 05' 45.9"
24	41° 25' 08.9"
25	39° 11' 23.6"
26	39° 32' 25.5"
27	39° 53' 04.7"
28	40° 13' 19.5"
29	38° 03' 21.9"
30	38° 25' 03.5"
31	38° 46' 40.2"
32	39° 07' 43.5"
33	36° 46' 30.1"
34	37° 09' 22.0"
35	37° 31' 50.9"
36	37° 53' 54.5"



HALF FRAMING PLAN

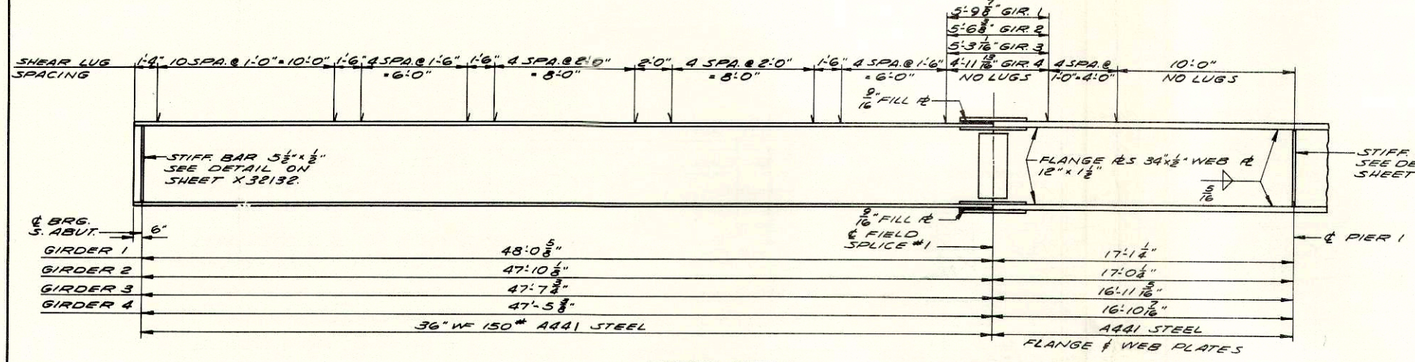
REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	SUPERSTRUCTURE
DESIGN SPEC. A.A.S.H.O. '61	LOADING H.S.20	CONST. SPEC. 1963
DATE 8-2-65	DESIGN D.F.S.	DRAWN H.E.A.	CKD. B.K.Z.
STRUCTURE B-32-67	SHEET 3 OF 22

X 32130

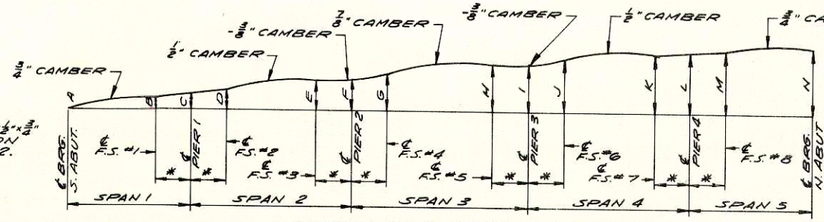
FORM E-B-12-62

B. P. R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	FCGB-3(39)	10	30

NOTE: FIELD WELDING ON TOP FLANGE FOR CONSTRUCTION PURPOSES IS PROHIBITED IN THE AREA OVER THE PIERS BETWEEN THE SHEAR LUGS.



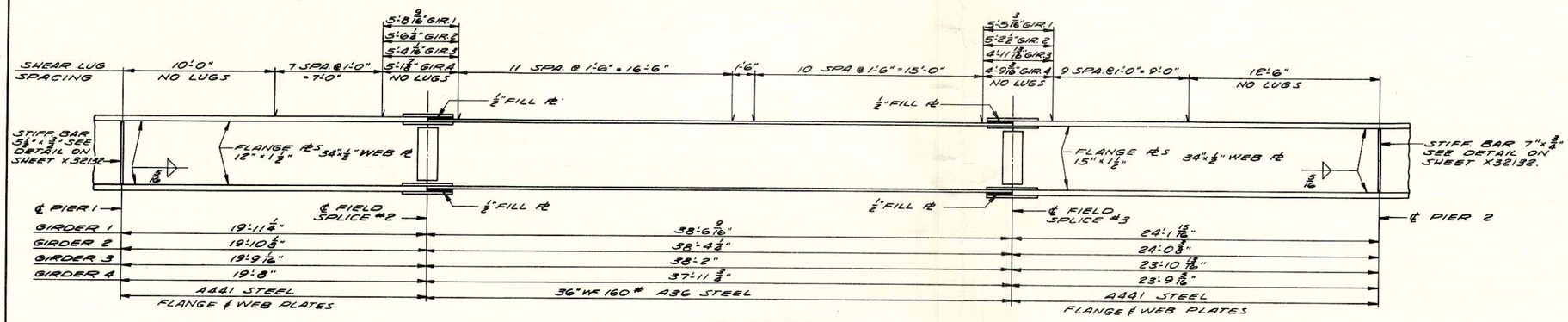
GIRDER DETAIL
SPAN 1



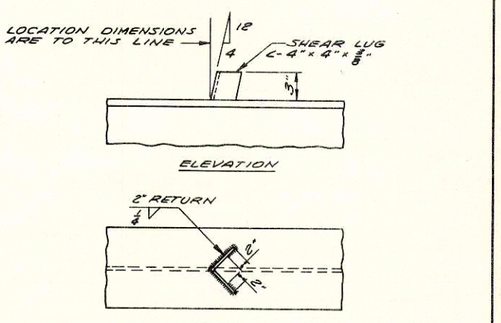
* SEE GIRDER DETAILS FOR DIMENSIONS

CAMBER & BLOCKING DIAGRAM

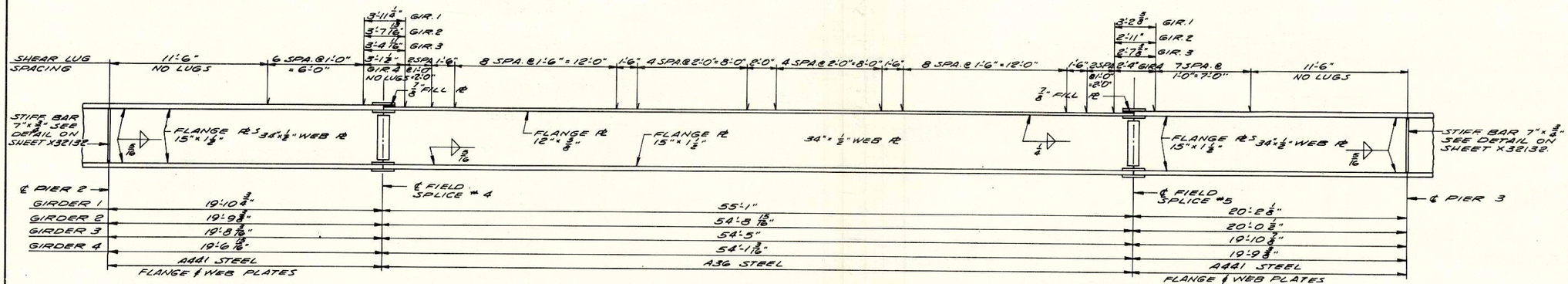
LOCATION	A	B	C	D	E	F	G	H	I	J	K	L	M	N
GIRDER 1	0	10 1/2"	1'-1 3/8"	1'-5 3/8"	2'-0 1/2"	2'-4 1/2"	2'-8 5/8"	3'-4 7/8"	3'-6 1/4"	3'-9 3/16"	4'-1 3/8"	4'-3 7/16"	4'-4 3/8"	4'-5 3/8"
GIRDER 2	0	10 15/16"	1'-1 11/16"	1'-5 11/16"	2'-0 3/8"	2'-4 3/8"	2'-8 1/16"	3'-4 5/16"	3'-6 3/8"	3'-9 5/16"	4'-2 1/16"	4'-4"	4'-5 3/8"	4'-9 7/16"
GIRDER 3	0	10 3/8"	1'-1 1/8"	1'-5 1/16"	2'-0 1/16"	2'-3"	2'-9 1/8"	3'-5 1/8"	3'-7 1/4"	3'-10 1/8"	4'-2 3/16"	4'-4 3/16"	4'-6 1/16"	4'-10 1/16"
GIRDER 4	0	10 1/2"	1'-1 3/8"	1'-5 1/16"	2'-1 1/8"	2'-3 1/4"	2'-9 1/16"	3'-5 1/16"	3'-7 1/8"	3'-10 1/8"	4'-3 1/16"	4'-5 1/8"	4'-7 1/16"	4'-11 1/16"



GIRDER DETAIL
SPAN 2



SHEAR LUG DETAIL



GIRDER DETAIL
SPAN 3

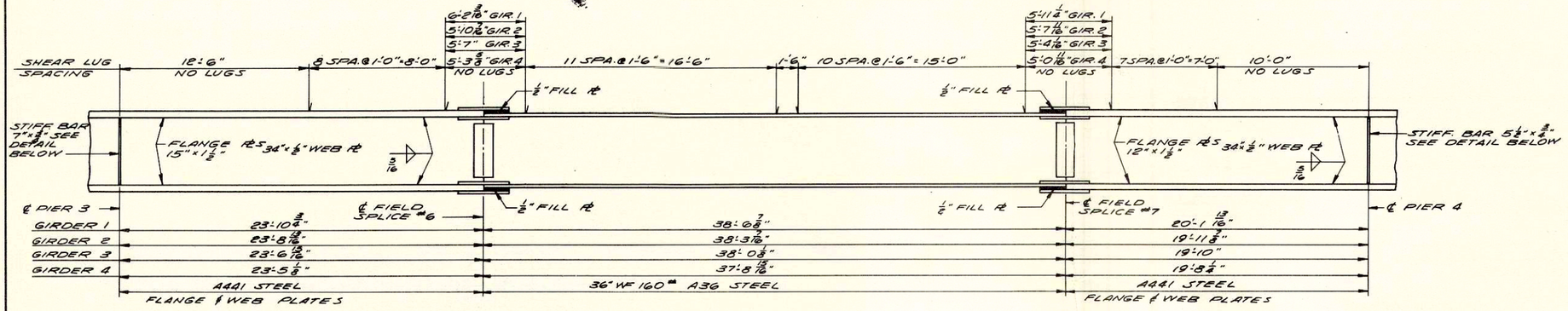
REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	SUPERSTRUCTURE
	DESIGN SPEC. A.A.S.H.O. '61 LOADING H20 CONST. SPEC. 1963
	DATE 8-2-65 DESIGN D.F.S. DRAWN W.E.A. CK'D. BWG
	STRUCTURE B-32-67 SHEET 4 OF 22

X32131

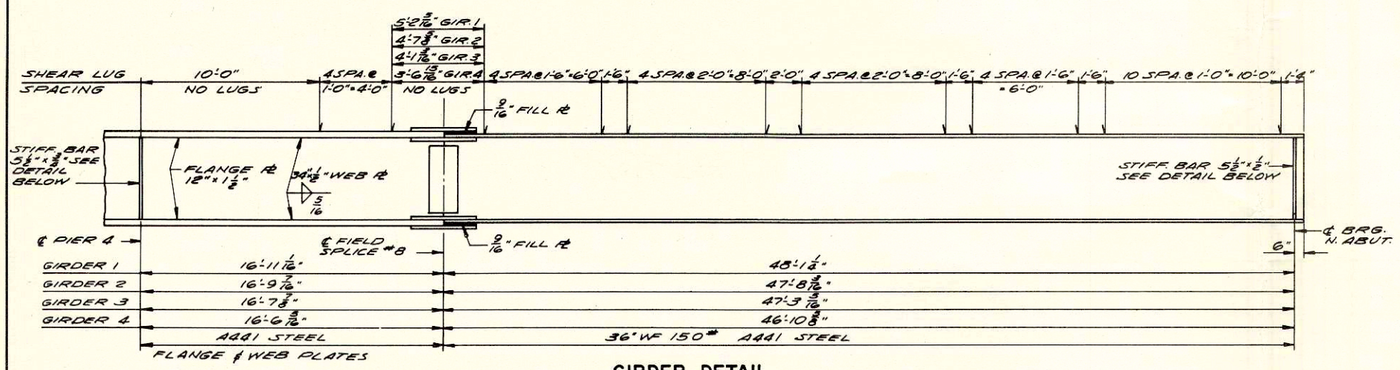
FORM E-B-12-62

B. P. R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	F608-3(39)	11	30

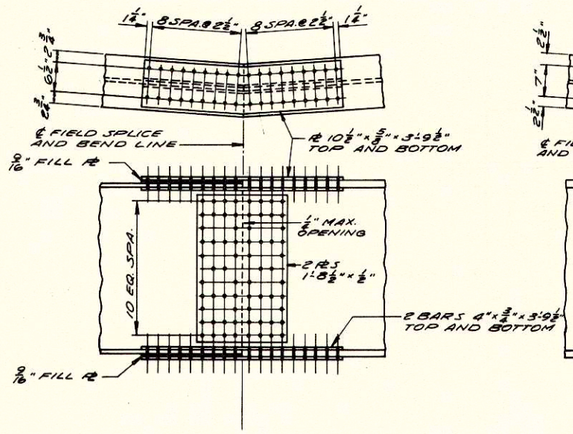
NOTE: FIELD WELDING ON TOP FLANGE FOR CONSTRUCTION PURPOSES IS PROHIBITED IN THE AREA OVER THE PIERS BETWEEN THE SHEAR LUGS.



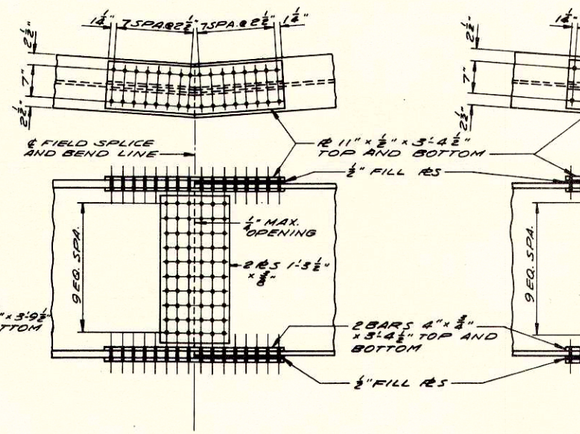
GIRDER DETAIL
SPAN 4



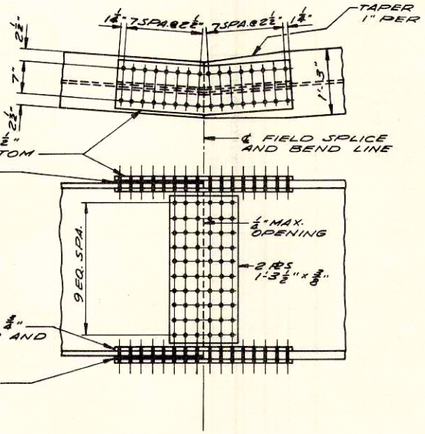
GIRDER DETAIL
SPAN 5



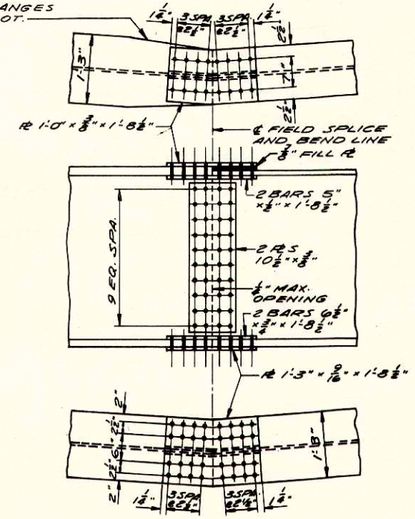
FIELD SPLICE 1 & 8



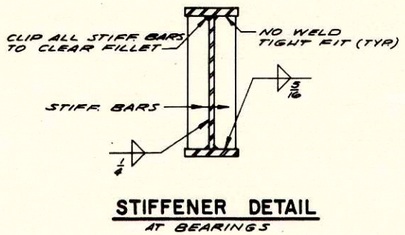
FIELD SPLICE 2 & 7



FIELD SPLICE 3 & 6



FIELD SPLICE 4 & 5



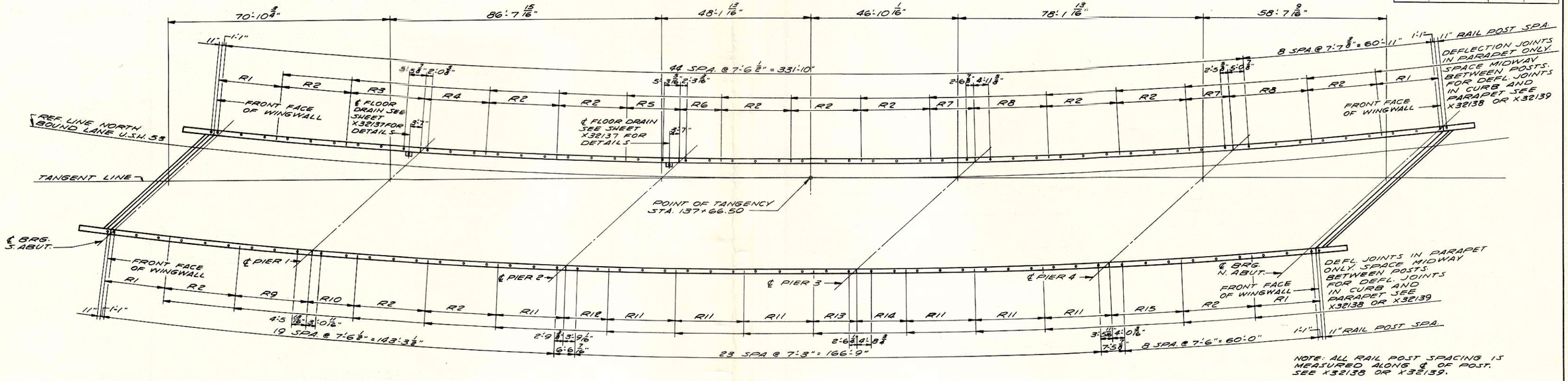
STIFFENER DETAIL
AT BEARINGS

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	SUPERSTRUCTURE
	DESIGN SPEC. A.A.S.H.O. '61 LOADING H S 20 CONST. SPEC. 1963
	DATE 8-2-65 DESIGN D.F.S. DRAWN H.E.A. CKD. B.M.Z.
	STRUCTURE B-32-67 SHEET 5 OF 22

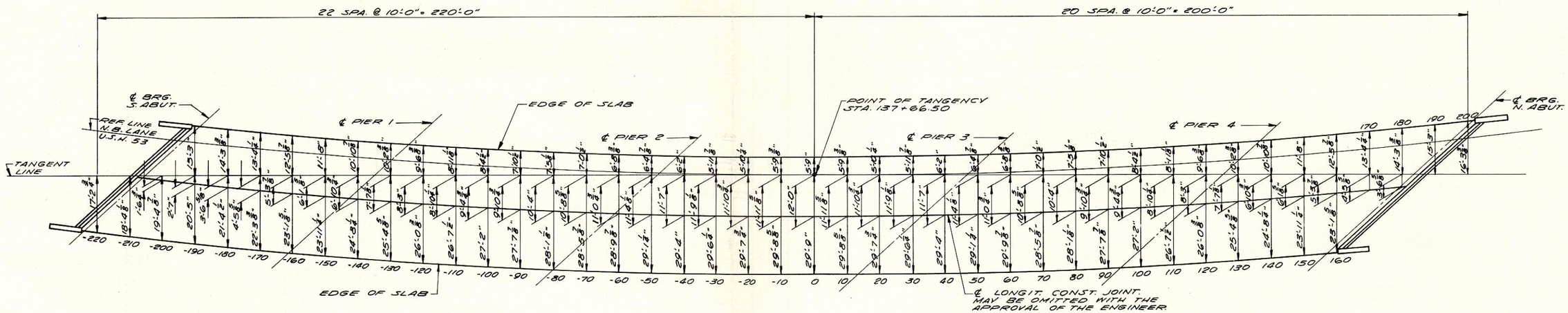
X32132

FORM E-B-12-62

B. P. R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	FG08-3(39)	12	30



PLAN



SLAB PLAN

SHOWING OFFSETS NORMAL TO TANGENT LINE

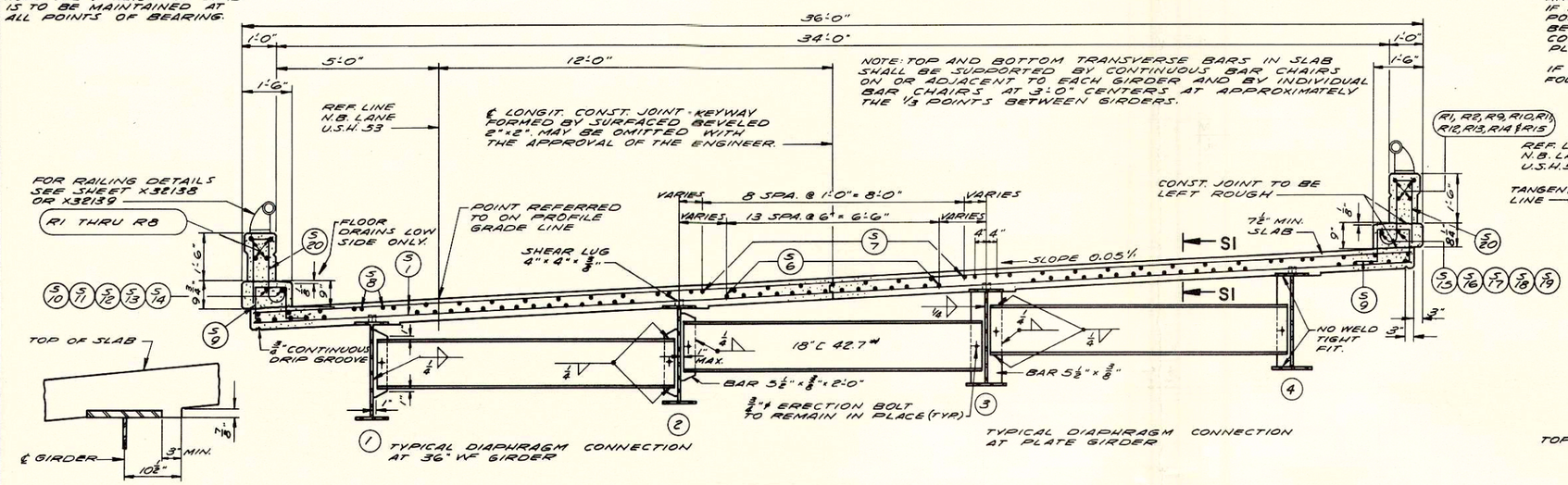
REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	SUPERSTRUCTURE
	DESIGN SPEC. A.A.S.H.O.'61 LOADING H S 20 CONST. SPEC. 1963
	DATE 8-2-65 DESIGN O.F.S. DRAWN W.E.A. CK'D. BAZ
STRUCTURE B-32-67	SHEET 6 OF 22

X32133

FORM E-B-12-62

B. P. R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	FG08-3(39)13		30

NOTE: THE 9" HEIGHT OF CURB IS TO BE MAINTAINED AT ALL POINTS OF BEARING.



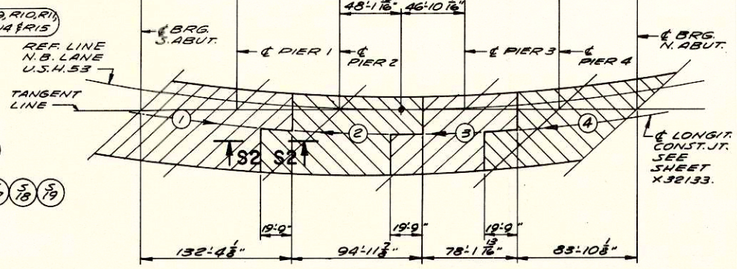
HAUNCH DETAIL

CROSS SECTION THRU ROADWAY

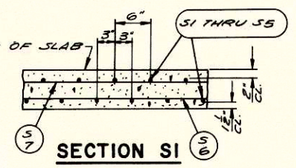
DIMENSIONS ARE AT RIGHT ANGLES TO REF. LINE @ STA. 137+66.50 - LOOKING NORTH

NOTE: TWO OR MORE POURS MAY BE COMBINED AND THE TRANSVERSE CONST. JOINTS OMITTED IF THE POUR FOR AN ENTIRE SPAN OR THE PORTION OF A SPAN TO A CONST. JOINT CAN BE COMPLETED WITHIN FOUR HOURS AFTER CONCRETE OVER THE ADJACENT PIER IS PLACED.

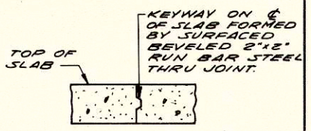
DIRECTION OF POUR MAY BE REVERSED IF PORTION OF POUR FROM THE PIER CAN BE COMPLETED IN A FOUR HOUR PERIOD.



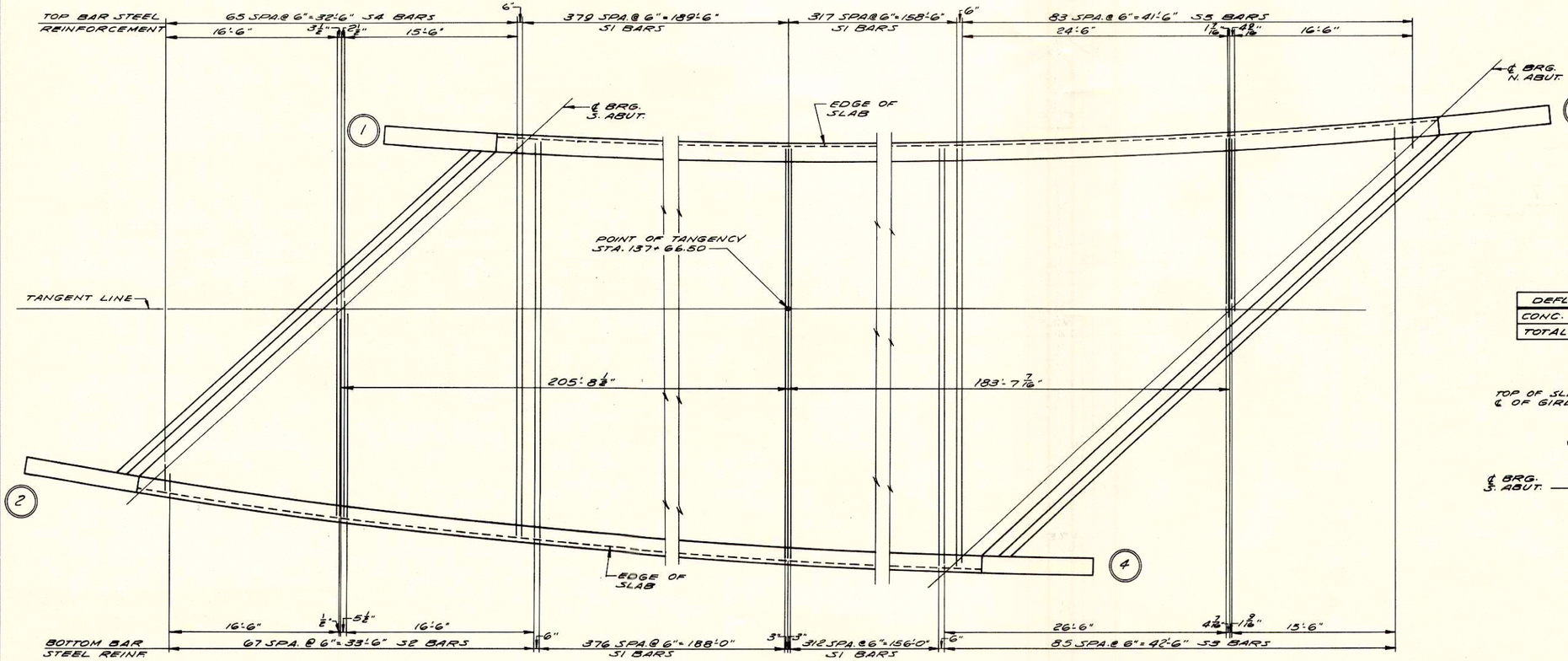
POURING DIAGRAM



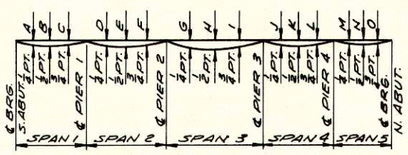
SECTION S1



SECTION S2



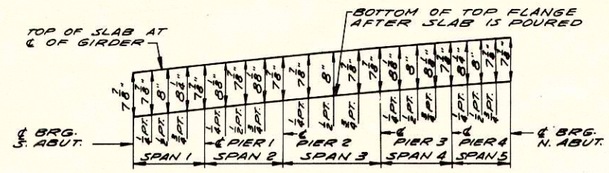
PART PLAN



DEFLECTION DIAGRAM

SHOWING DEAD LOAD DEFLECTION

DEFLECTION	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
CONC. ONLY	1/2"	9/16"	1/4"	3/16"	7/16"	1/8"	3/4"	1 3/16"	3/4"	1/8"	7/16"	3/16"	1/4"	3/16"	1/8"
TOTAL	9/16"	11/16"	3/16"	1/4"	1/2"	3/16"	7/8"	1 7/16"	7/8"	3/16"	1/2"	1/4"	1/4"	1 1/16"	9/16"



SLAB FORMING DIAGRAM

SLAB THICKNESS FIGURES SHOWN ARE THEORETICAL AND ARE SUBJECT TO CORRECTION TO MEET VARIABLE FIELD CONDITIONS AND CAMBER.

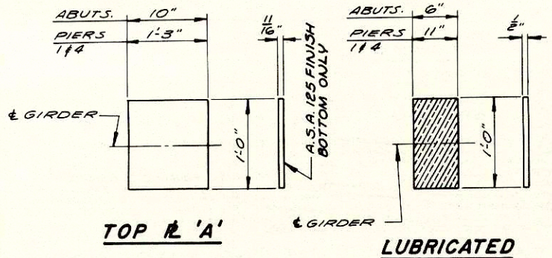
NOTE: FOR BILL OF BARS AND BAR DETAILS SEE SHEET X32146.

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN			
	SUPERSTRUCTURE			
	DESIGN SPEC. A.A.S.H.O. 61	LOADING H15 E0	CONST. SPEC. 1963	
	DATE 8-2-65	DESIGN D.F.S.	DRAWN H.E.A.	CKD. BMZ
STRUCTURE B-32-67			SHEET 7 OF 22	

X32134

FORM E-B-12-62

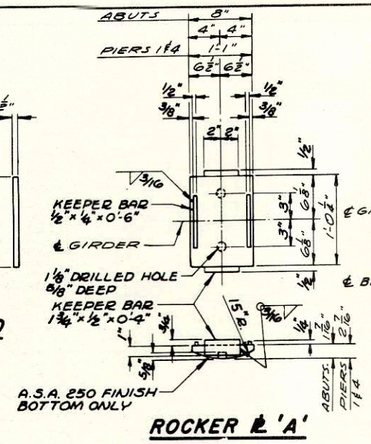
B P R DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	FCOB-3(39)	14	30



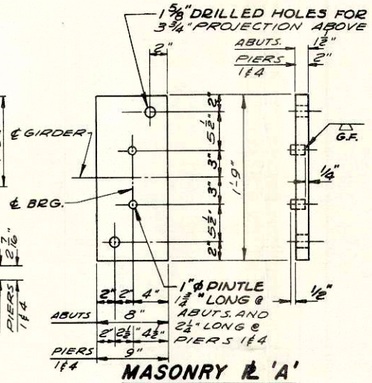
TOP ℄ 'A'

LUBRICATED BRONZE ℄

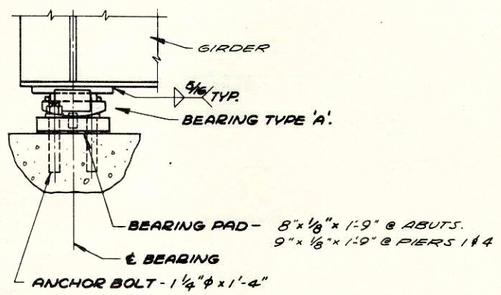
LUBRICATE TOP SURFACE ONLY



ROCKER ℄ 'A'



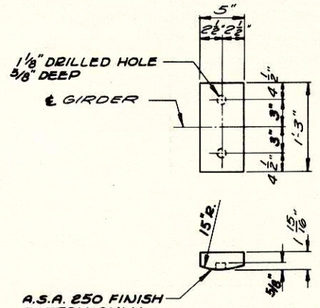
MASONRY ℄ 'A'



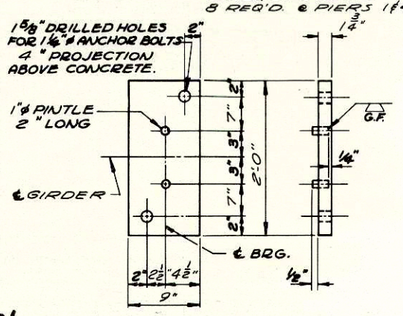
BEARING TYPE 'A' ASSEMBLY

BEARING TYPE 'A'

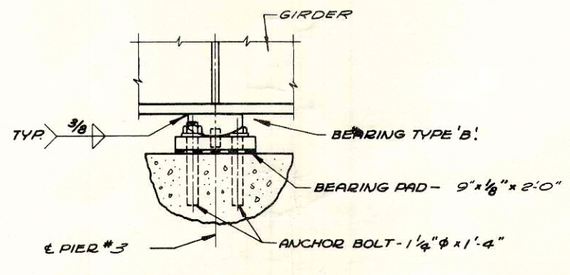
8 REQ'D. @ ABUTS.
8 REQ'D. @ PIERS 1 & 4



ROCKER ℄ 'B'



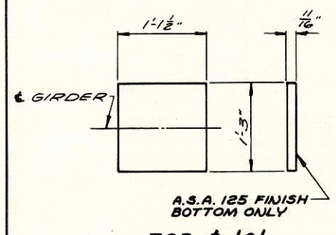
MASONRY ℄ 'B'



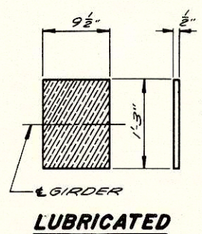
BEARING TYPE 'B' ASSEMBLY

BEARING TYPE 'B'

4 REQ'D @ PIER 3

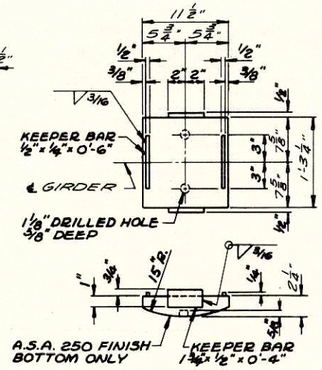


TOP ℄ 'C'

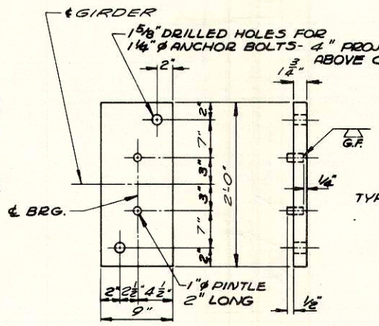


LUBRICATED BRONZE ℄

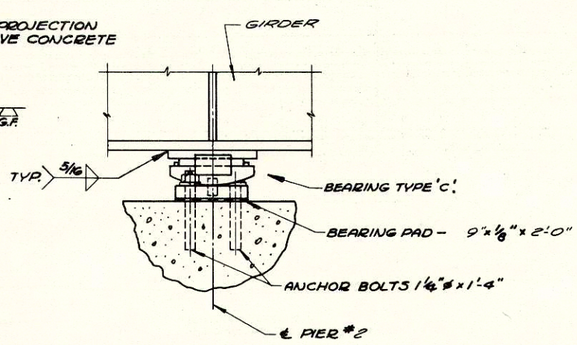
LUBRICATE TOP SURFACE ONLY



ROCKER ℄ 'C'



MASONRY ℄ 'C'



BEARING TYPE 'C' ASSEMBLY

BEARING TYPE 'C'

4 REQ'D @ PIER 2

NOTE: TOP PLATE OF EXPANSION BEARING TO BE FINISHED IN DIRECTION OF MOVEMENT.

BEARING NOTES

ALL STRUCTURAL STEEL BEARING PLATES SHALL BE FLAT ROLLED STEEL PLATES WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL.

ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ANCHOR BOLTS SHALL BE THREADED 3". PROVIDE ONE STANDARD WROUGHT WASHER AND ONE HEX. NUT PER BOLT.

ALL MATERIAL INCLUDING SHIMS BUT EXCLUDING ANCHOR BOLTS, NUTS AND WASHERS SHALL BE MADE OF A242 STEEL WITH A CORROSIVE RESISTANCE OF 4 OR MORE TIMES THAT OF A36 STEEL.

THE TOP 4 1/2" OF ANCHOR BOLTS, WASHERS AND NUTS SHALL BE GALVANIZED.

ALL MATERIAL IN BEARINGS, EXCLUDING BRONZE PLATES AND BEARING PADS SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STRUCTURAL LOW ALLOY STEEL."

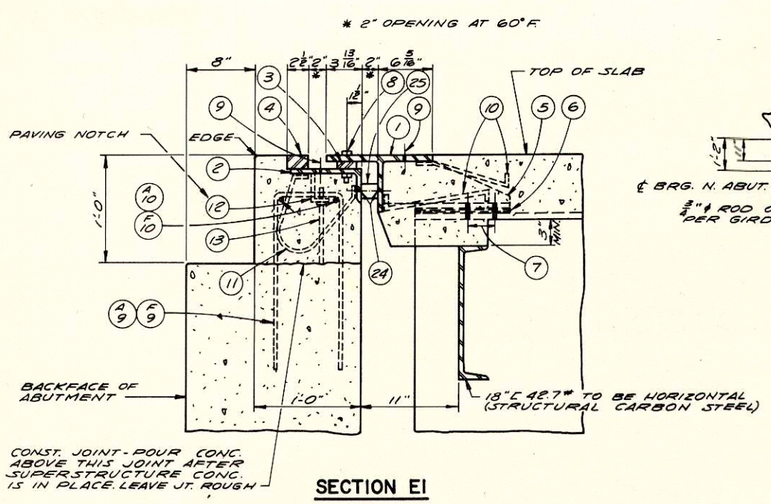
CHAMFER TOP OF PINTLES 1/8". DRILL HOLES FOR PINTLES IN ALL MASONRY PLATES FOR DRIVING FIT.

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN			
	BEARING DETAILS			
	DESIGN SPEC. A.A.S.H.O.'61	LOADING	CONST. SPEC. 1963	
	DATE 8-2-65	DESIGN D.F.S.	DRAWN W.E.A.	CKD. E.M.Z.
STRUCTURE B-32-67			SHEET 8 OF 22	

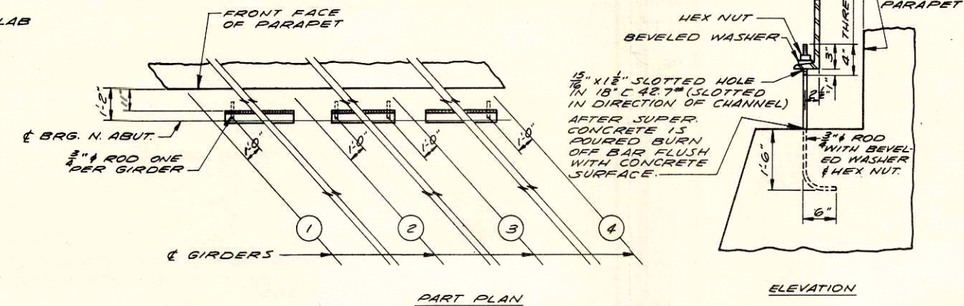
X 32135

FORM E-B-12-62

B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	FBUB-3(39)	15	30



SECTION E1



PART PLAN

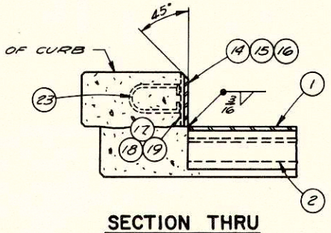
ELEVATION

TEMPORARY HOLD DOWN DEVICE

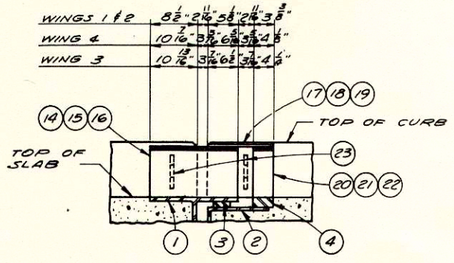
AT NORTH ABUT.

LEGEND

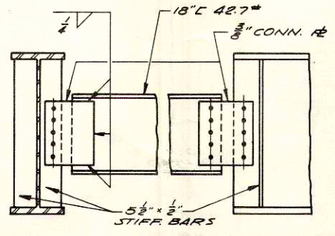
1. S.T. 6" WF 39.5# x ROADWAY WIDTH.
2. L 8" x 4" x 1/2 x ROADWAY WIDTH.
3. BAR 2" x ¾" x ROADWAY WIDTH. WELD TO L #2 WITH 2 LINES OF ¼" FILLET WELD. 2 @ 6".
4. BAR 2½" x 1½" x ROADWAY WIDTH. WELD TO L #2 WITH 2 LINES OF ¼" FILLET WELD 2 @ 6".
5. FABRICATE FROM ⅜" WELDED PLATE. WELD TO STEM AND FLANGE OF S.T. #1 WITH ¼" FILLET WELD NEAR AND FAR SIDE.
6. ⅛" MIN. LAMINATED AND SLOTTED SHIM.
7. DRILL HOLES IN GIRDER FLANGE IN FIELD FOR ¾"ϕ BOLTS.
8. ¾"ϕ BOLT WITH SQ. NUT @ 2'-0" CENTERS. TACK WELD NUT TO L #2. GREASE FOR EASY REMOVAL. 15/16" x 1½" SLOTTED HOLE IN ST. #1, LONG DIMENSION OF SLOTTED HOLE TO BE PARALLEL TO ℄ OF ROADWAY. ¾"ϕ HOLE IN BAR #3 & L #2.
9. VENT HOLES. ¾"ϕ PLACED @ 2'-0" CENTERS ON L #2 AND S.T. #1.
10. ⅝" ϕ BENT BAR @ 0'-9" ALTERNATE BETWEEN GIRDERS. 1'-3" LONG. WELD TO S.T. #1.
11. ⅝" ϕ BENT BAR @ 1'-0" CENTERS. 2'-0" LONG. WELD TO L #2.
12. 2 3" x 2½" x ⅜" @ 0'-3" @ 3'-0" CENTERS. WELD TO L #2. PROVIDE ¾"ϕ HOLE IN 2½" LEG FOR BOLT #13.
13. ¾"ϕ BOLT x 0'-9" LONG AND NUT. TACK WELD NUT TO L #12.
14. R 1'-4 ⅜" x ⅜" CHAMFER AS SHOWN. FIELD WELD TO S.T. #1. WINGS 1 & 2.
15. R 1'-8 ⅜" x ⅜" CHAMFER AS SHOWN. FIELD WELD TO S.T. #1. WING 3.
16. R 1'-3 ⅜" x ⅜" CHAMFER AS SHOWN. FIELD WELD TO S.T. #1. WING 4.
17. R 11 ⅜" x ⅜" CHAMFER AS SHOWN. WINGS 1 & 2.
18. R 12 ⅜" x ⅜" CHAMFER AS SHOWN. WING 3.
19. R 1'-1 ⅜" x ⅜" CHAMFER AS SHOWN. WING 4.
20. R 3 ⅜" x ⅜" CHAMFER AS SHOWN. WELD TO R #17 WITH ONE LINE OF 5/16" FILLET WELD. FIELD WELD TO BAR #4. WINGS 1 & 2.
21. R 4 ⅜" x ⅜" CHAMFER AS SHOWN. WELD TO R #18 WITH ONE LINE OF ⅝" FILLET WELD. FIELD WELD TO BAR #4. WING 3.
22. R 4 ⅜" x ⅜" CHAMFER AS SHOWN. WELD TO R #19 WITH ONE LINE OF ⅝" FILLET WELD. FIELD WELD TO BAR #4. WING 4.
23. ⅝" ϕ BENT BAR x 1'-9" LONG. WELD TO R'S #14, 15, 16, 17, 18, & 19.
24. PROVIDE ⅞"ϕ HOLES IN S.T. #1 AND L #2 @ 3'-0" CENTERS FOR ½"ϕ BOLT.
25. BLOCK AND BOLT FOR SHIPMENT WITH PIPE SLEEVE AND ½"ϕ BOLT.
26. ⅛" R CUT TO LIMITS SHOWN.
27. BAR 4" x ⅜" x 0'-6". PROVIDE ¾"ϕ HOLE FOR BOLT #29.
28. ¼" MIN. LAMINATED SHIM. PROVIDE ¾"ϕ HOLE FOR BOLT #29.
29. ½"ϕ BOLT WITH BEVELED WASHER. DRILL HOLES IN 18"C 42.7# IN FIELD FOR ½"ϕ BOLT.



SECTION THRU CURB



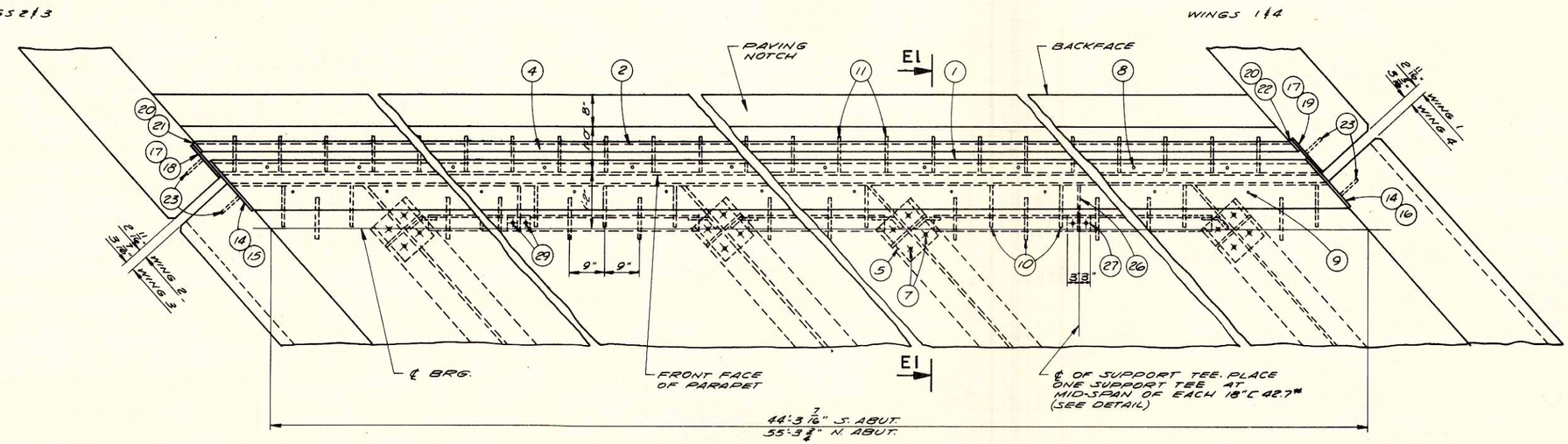
ELEVATION AT CURB



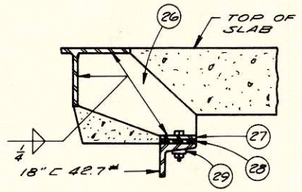
TYPICAL DIAPHRAGM CONNECTION AT ABUTMENTS

EXPANSION JOINT SHALL BE BUILT TO CONFORM TO ROADWAY CROWN AND GRADE.
AFTER CONCRETE HAS SET, REMOVE BOLT #8 AND FILL HOLES WITH HOT POURED ELASTIC TYPE JOINT SEALER.
AFTER CONCRETE HAS SET THE JOINT OPENING SHALL BE THOROUGHLY CLEANED.
APPLY ± ⅛" COAT OF BITUMASTIC TO METAL SURFACES FORMING THE JT. AND FILL OPENING WITH HOT POURED ELASTIC TYPE JOINT SEALER.
ONE FIELD SPLICE IS PERMITTED IN JOINT.

ALL MATERIAL IN EXPANSION JOINT SHALL BE PAID FOR AS STRUCTURAL CARBON STEEL.



PART PLAN



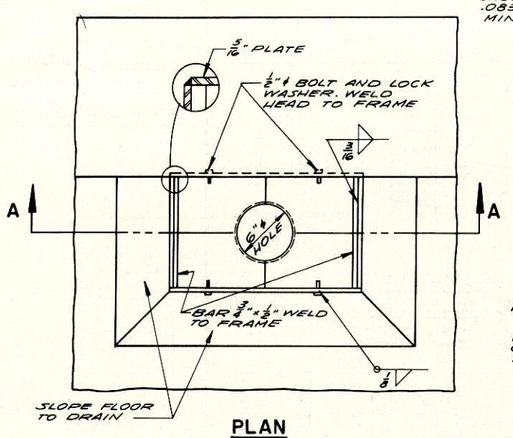
SUPPORT TEE

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	EXPANSION JOINT
	DESIGN SPEC. A.A.S.H.O. '61 LOADING H-20 CONST. SPEC. 1963
	DATE 8-863 DESIGN D.F.S. DRAWN W.E.A. CKD. B.H.Z.
	STRUCTURE B-32-67 SHEET 9 OF 22

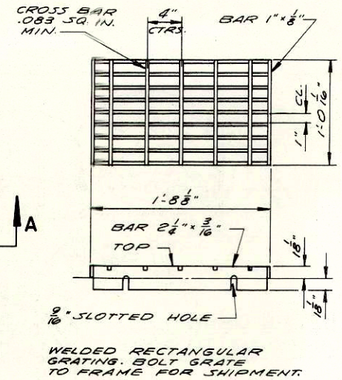
X32136

FORM E-B-12-62

B. P. R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	FG08-3(39) 16		30

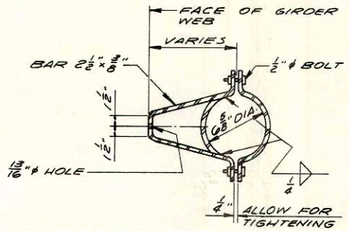


PLAN

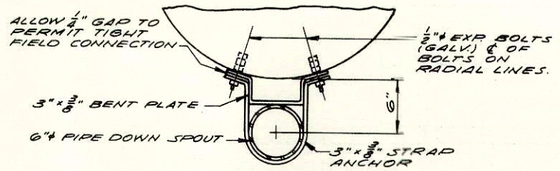


WELDED RECTANGULAR GRATING. BOLT GRATE TO FRAME FOR SHIPMENT.

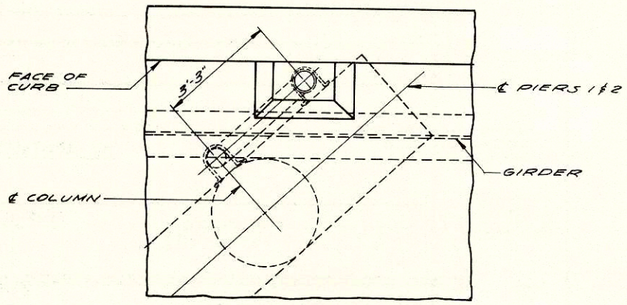
GRATE



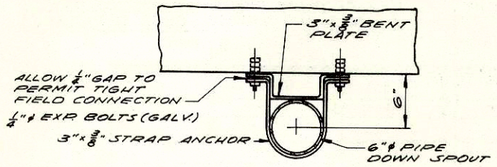
SECTION THRU BRACKET



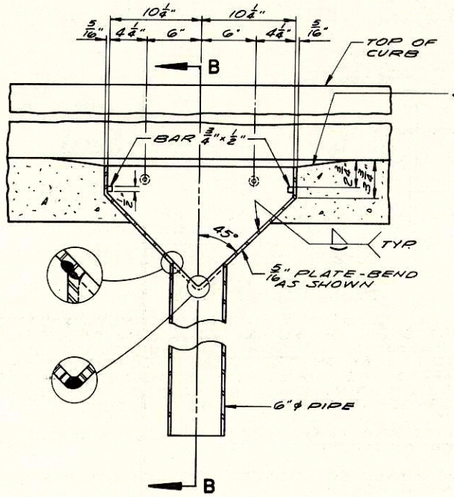
ANCHOR STRAP "B"



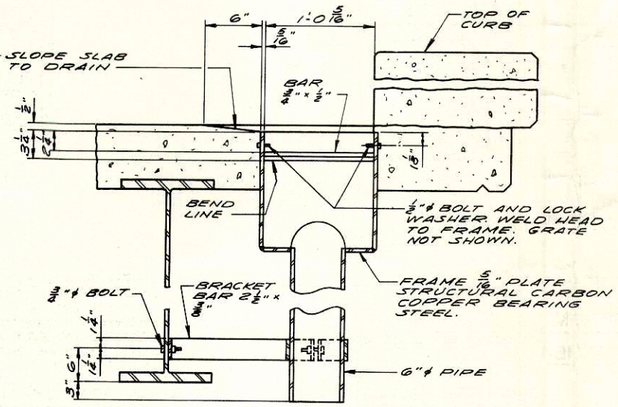
PLAN



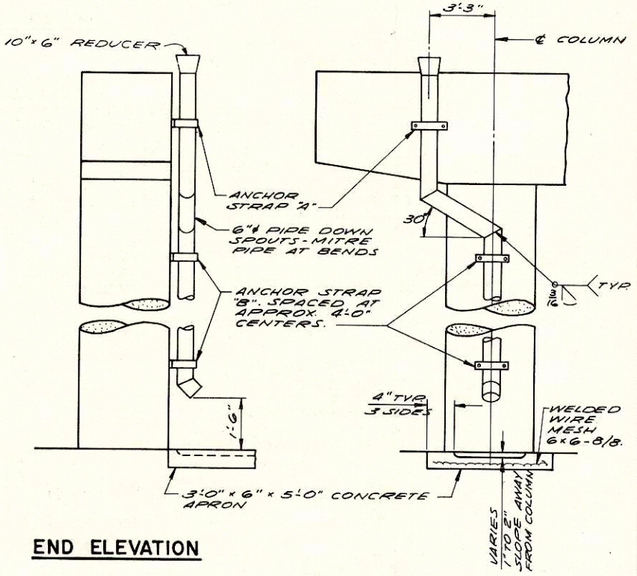
ANCHOR STRAP "A"



SECTION A



SECTION B



END ELEVATION

SIDE ELEVATION

COST OF CONCRETE APRON SHALL BE INCLUDED IN THE PRICE BID PER LIN. FEET FOR 6"ϕ PIPE DOWN SPOUT.

FLOOR DRAIN DETAILS - TYPE A

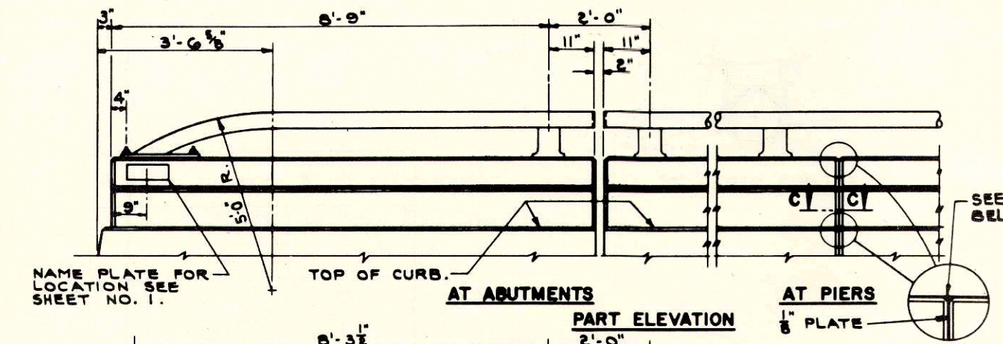
2 REQ'D.

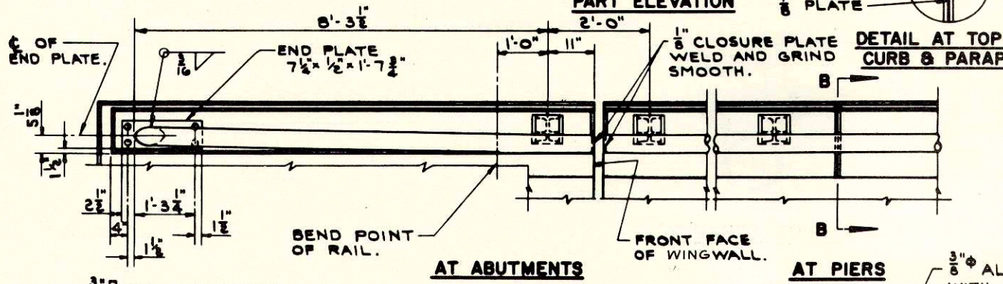
REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN			
	FLOOR DRAIN DETAILS			
	DESIGN SPEC. A.A.S.H.O.'64	LOADING H520	CONST. SPEC. 1963	
	DATE 8-2-65	DESIGN STD.	DRAWN HEA.	CKD. BKZ
STRUCTURE B-32-67			SHEET 10 OF 22	

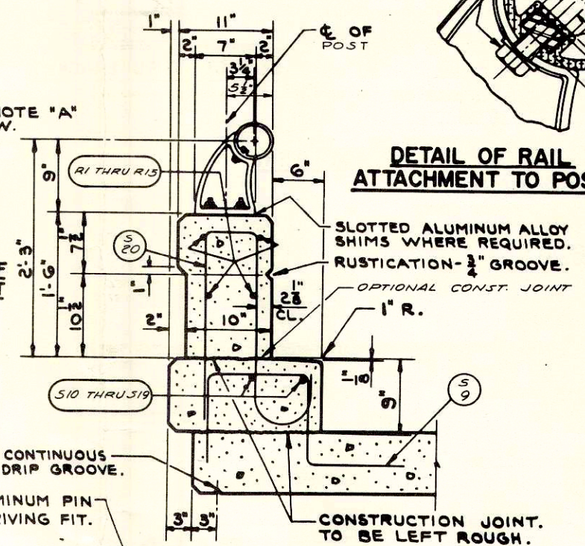
X32137

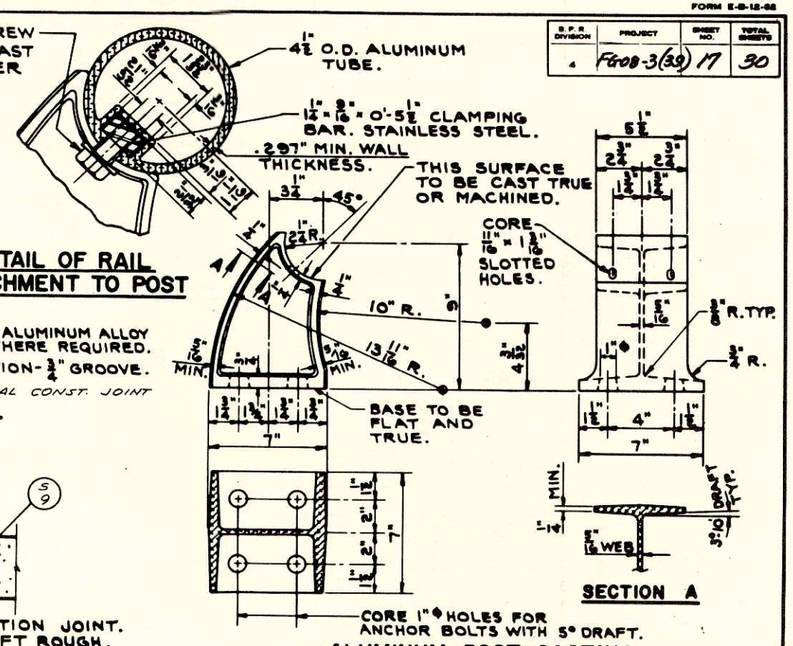
FORM E-8-12-66

S.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	F608-3(39)	17	30





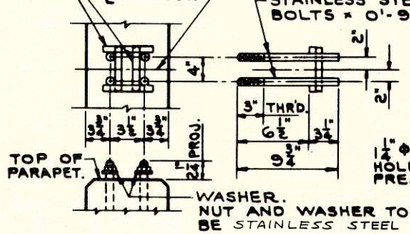


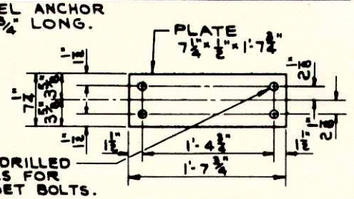


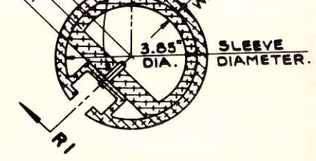
GENERAL NOTES

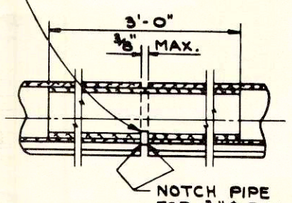
1. WHEN PARAPETS AND CURBS ARE POURED CONTINUOUSLY FROM END TO END THEY SHALL BE SEPARATED AT THE DEFLECTION JOINTS BY A PIECE OF 1/8" ZINC OR ALUMINUM PLATE CUT AS SHOWN IN SECTION "B" BY SHADED AREA. IF CONSTRUCTION JOINTS IN PARAPETS AND CURBS ARE USED AT THE DEFLECTION JOINTS ONE SIDE OF JOINT SHALL BE COATED WITH BITUMINOUS PAINT AND PLATE SEPARATORS MAY BE OMITTED.
2. ALL POST SPACINGS ARE TAKEN HORIZONTALLY ALONG ℄ OF RAILING AT BASE OF POSTS.
3. RAILING SPLICES SHALL BE LOCATED APPROXIMATELY AT 1/8 POINTS BETWEEN POSTS.
4. ALUMINUM SHIMS SHALL BE USED UNDER POSTS AND END PLATES WHERE REQUIRED FOR ALIGNMENT.
5. RAILING SHALL BE FABRICATED IN TWO AND THREE PANEL LENGTHS.

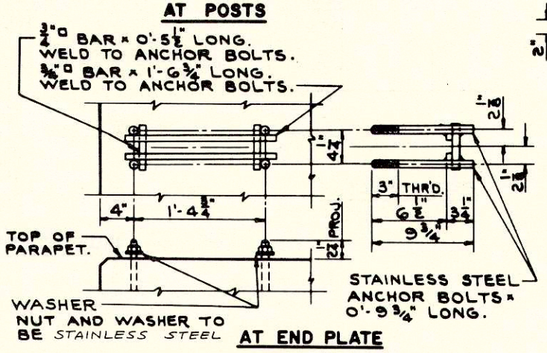
NOTE "A": FILL WITH NON-STAINING GRAY TWO COMPONENT POLYSULFIDE LIQUID POLYMER (GUN GRADE) WITH SURFACE PRIMER, MEETING APPROVAL OF THE ENGINEER.



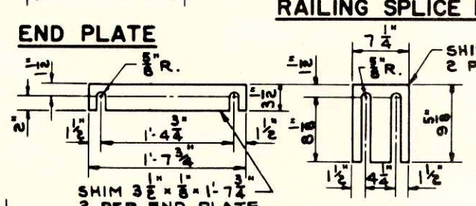


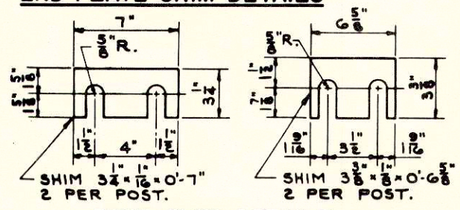


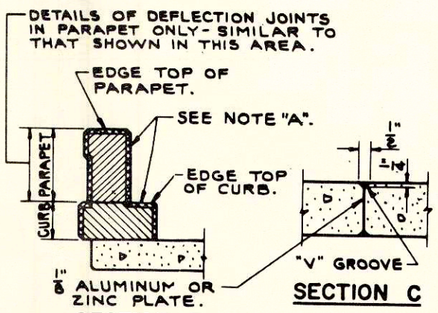




THE SHANK AND ROOT OF THREAD DIAMETER FOR ANCHOR BOLTS SHALL BE A MINIMUM OF 0.62 INCHES.





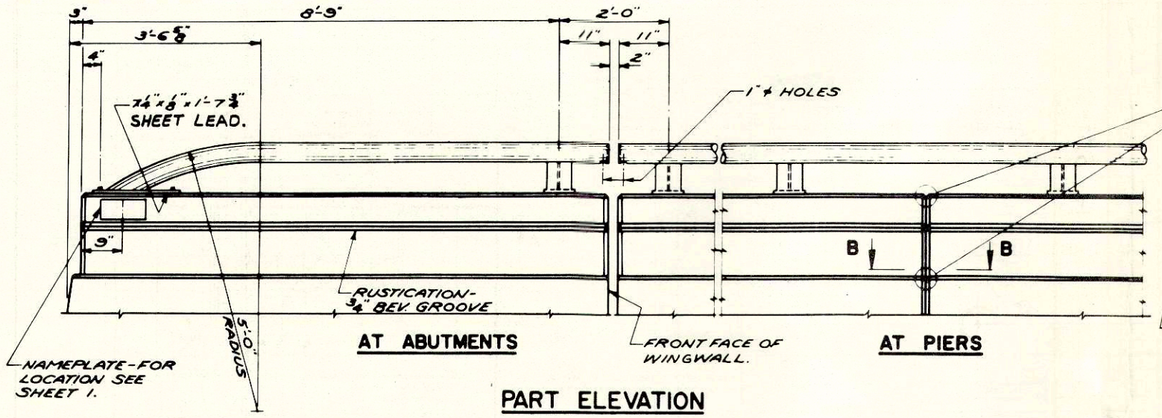


REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN		
	TUBULAR ALUMINUM RAILING TYPE "G"		
	DESIGN SPEC. A.A.S.H.O.'61	LOADING	SHEET DATE 1963
	DATE 8-8-65	DESIGN STD.	DRAWN HEA CHK. PRC
STRUCTURE B-32-67	SHEET 11 OF 22		

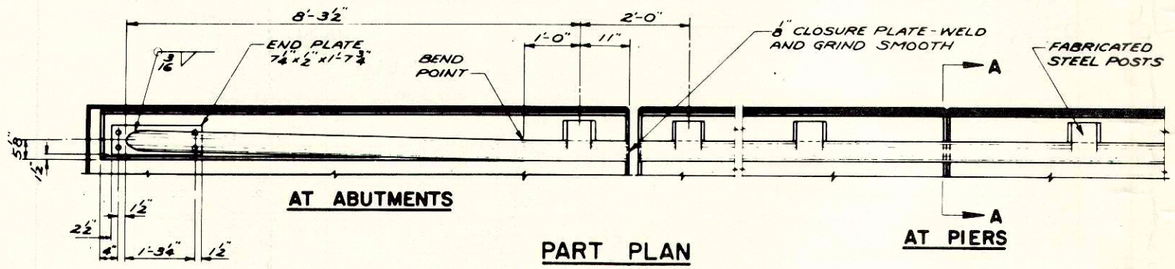
X 32138

FORM E-8-12-62

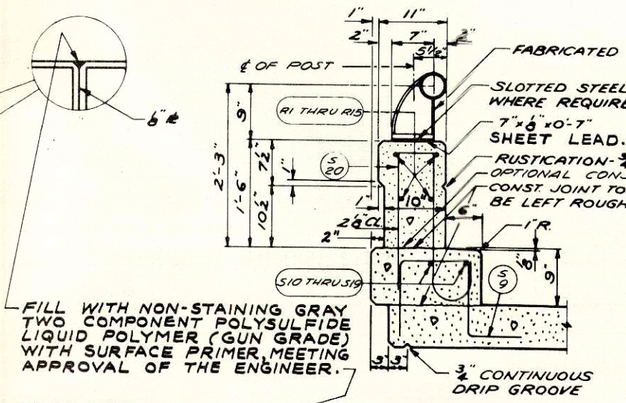
B.P.R. DIVISION	PROJECT	SHEET NO	TOTAL SHEETS
4	FG08-3(32)	18	30



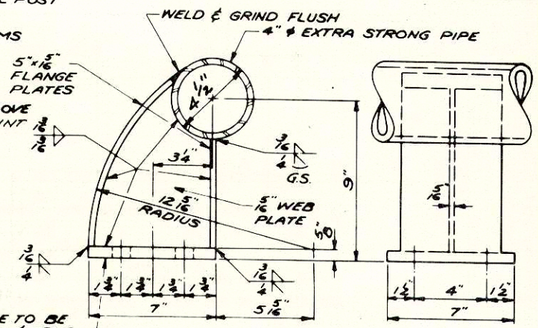
PART ELEVATION



PART PLAN

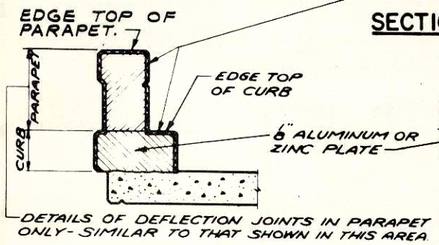


SECTION THRU CURB

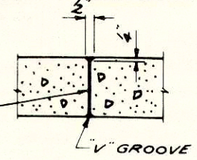


POST DETAILS

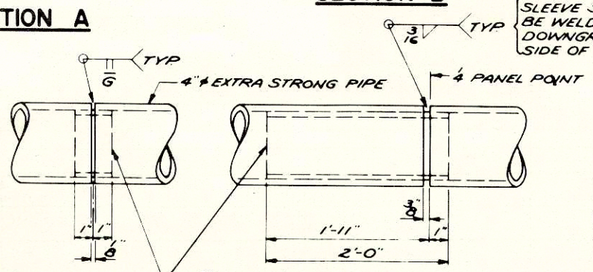
FILL WITH NON-STAINING GRAY TWO COMPONENT POLYSULFIDE LIQUID POLYMER (GUN GRADE) WITH SURFACE PRIMER, MEETING APPROVAL OF THE ENGINEER.



SECTION A



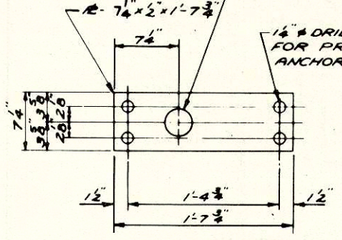
SECTION B



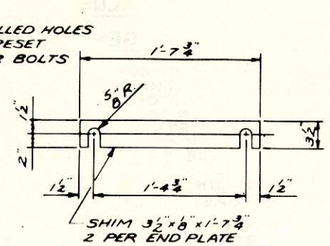
SHOP RAIL SPLICE DETAIL

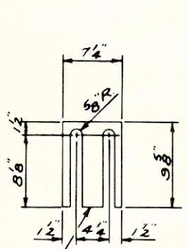
THE LOCATION OF THE SHOP SPLICE SHALL BE SHOWN ON THE SHOP DRAWINGS.

FIELD ERECTION JOINT DETAIL

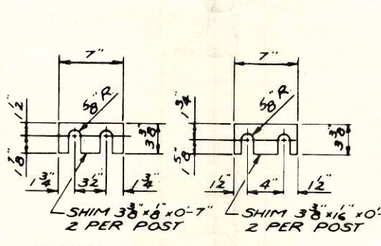


END PLATE

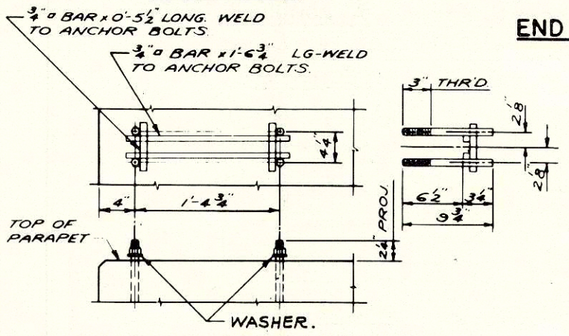




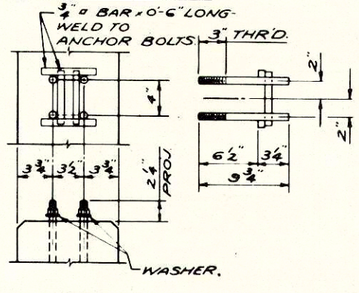
END PLATE SHIM DETAILS



POST SHIM DETAILS



AT END PLATE



AT POSTS

ANCHOR BOLT SETTING DETAILS

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

NOTES

1. STEEL RAIL POSTS SHALL BE SET NORMAL TO GRADE.
2. RAILING SHALL BE FABRICATED IN 2 & 3 PANEL LENGTHS.
3. STEEL SHIMS SHALL BE USED UNDER POSTS AND UNDER END PLATES WHERE REQUIRED FOR ALIGNMENT.
4. WHEN PARAPETS AND CURBS ARE POURED CONTINUOUSLY FROM END TO END THEY SHALL BE SEPARATED AT THE DEFLECTION JOINTS BY A PIECE OF ⅜" ZINC OR ALUMINUM PLATE CUT AS SHOWN IN SECTION "A" 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.
5. THE FOLLOWING MATERIALS SHALL BE USED:
   RAILING SHALL BE 4" ϕ EXTRA STRONG PIPE CONFORMING TO ASTM DESIGNATION A53, GRADE B.
   SLEEVES SHALL BE 3⅜" ϕ O.D. x.12" 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 ASTM DESIGNATION A36.
   ANCHOR BOLTS TO BE MADE FROM MATERIAL CONFORMING TO ASTM A307.
6. CAULK EXPOSED OPENINGS BETWEEN SHIMS WITH LEAD WOOL.
7. GALVANIZE ENTIRE RAILING AFTER FABRICATION INCLUDING NUTS, WASHERS, SHIMS AND TOP 3½" OF ANCHOR BOLTS.

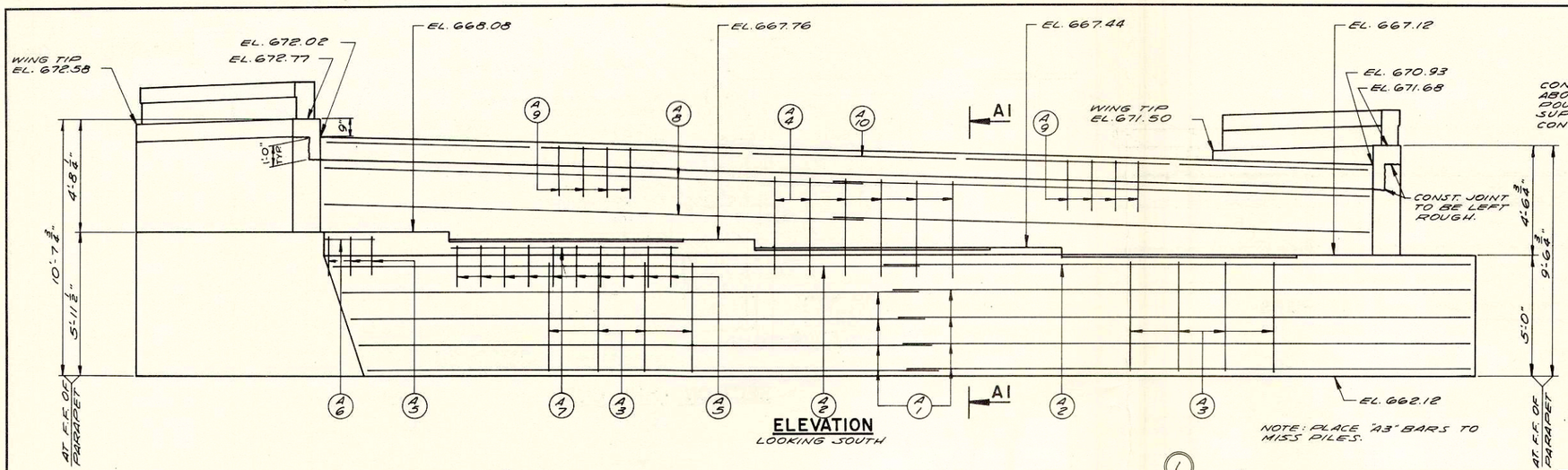
REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	TUBULAR STEEL RAILING TYPE "G"
	DESIGN SPEC. AASHO 61 · LOADING —— · CONST. SPEC. 1963
	DATE 8-2-65 · DESIGN STD. · DRAWN H.E.A. · CKD. EHZ
STRUCTURE B-32-67	SHEET 12 OF 22

X 32139

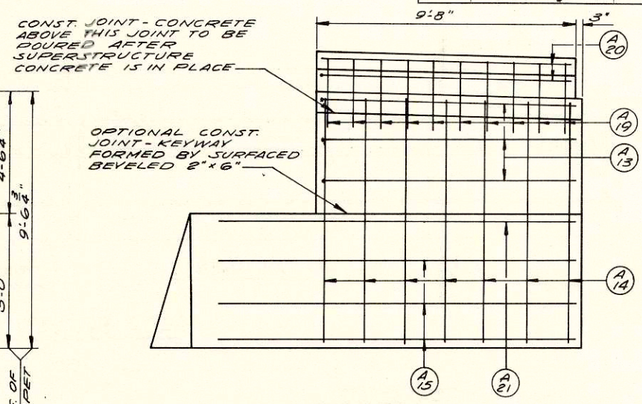
FORM E-B-12-62

B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	FBOB-3(39)	19	30

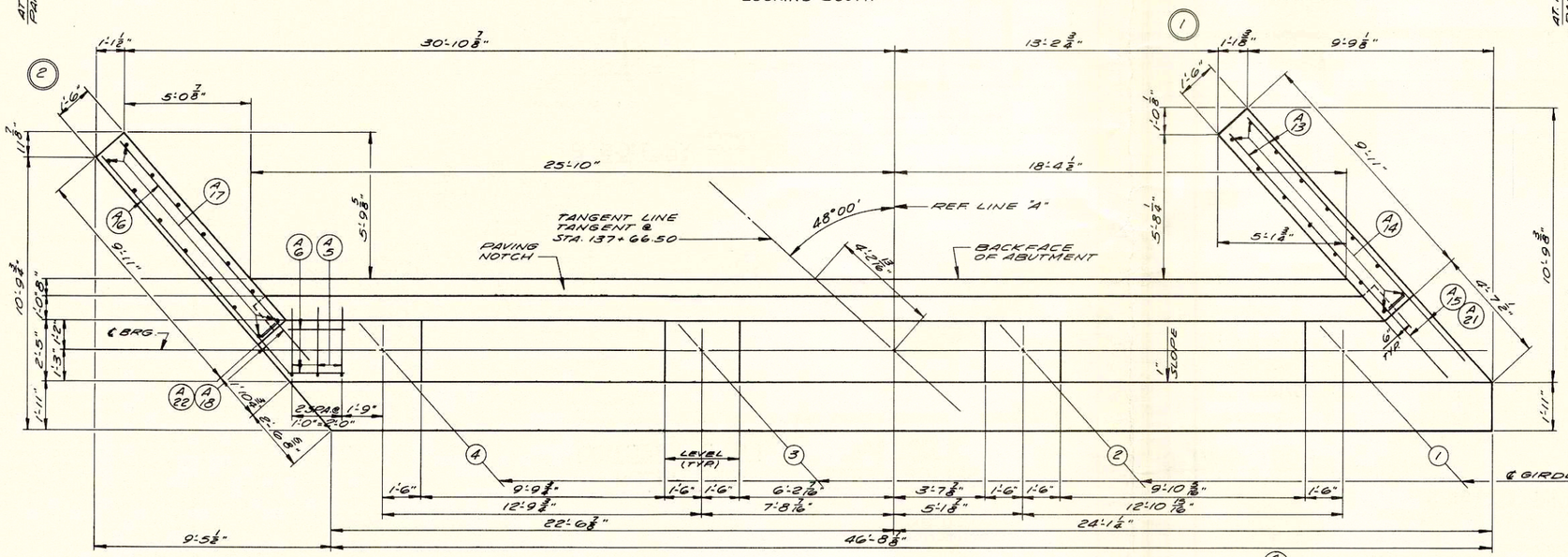
NOTE: FOR BILL OF BARS AND BAR DETAILS SEE SHEET X-32146.



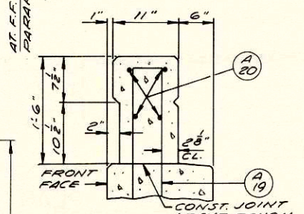
ELEVATION
LOOKING SOUTH



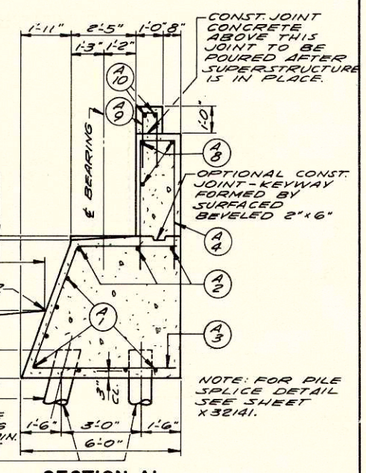
END VIEW
WING 1



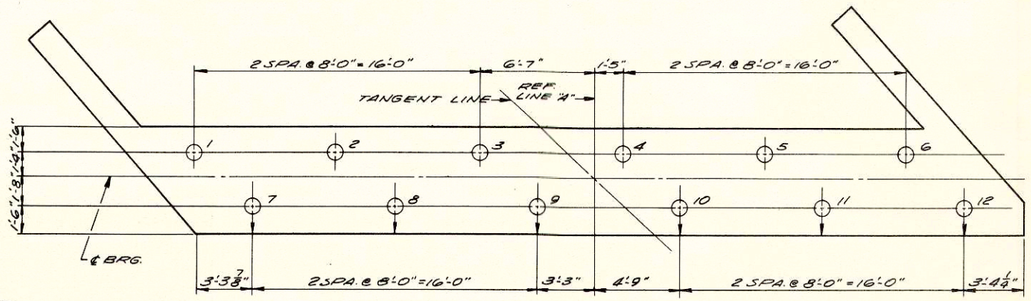
PLAN



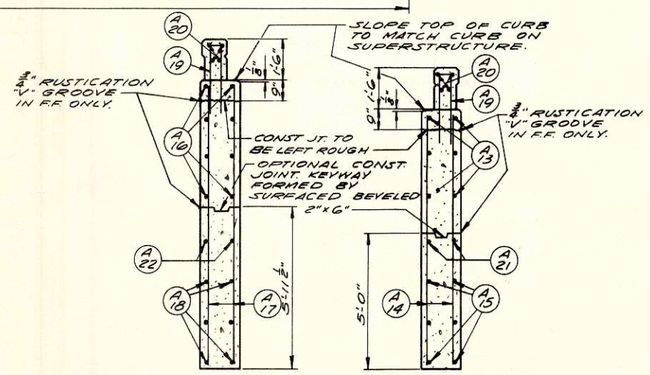
RAILING PARAPET



SECTION A1

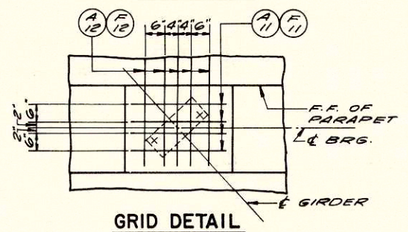


PILE PLAN



SECTION THRU WING 2

SECTION THRU WING 1



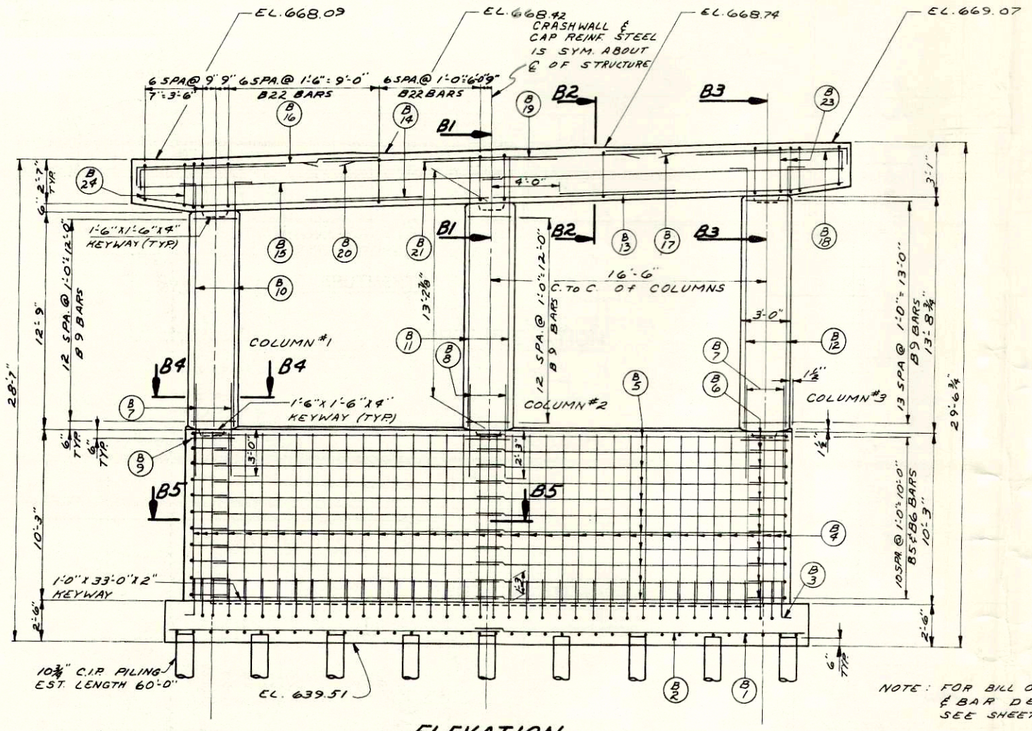
GRID DETAIL

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	SOUTH ABUTMENT
	DESIGN SPEC. A.A.S.H.O.'64 LOADING H-20 CONST. SPEC. 1963
	DATE 8-2-65 DESIGN D.F.S. DRAWN H.E.A. CKD. B.K.L.
	STRUCTURE B-32-67 SHEET 13 OF 22

X32140

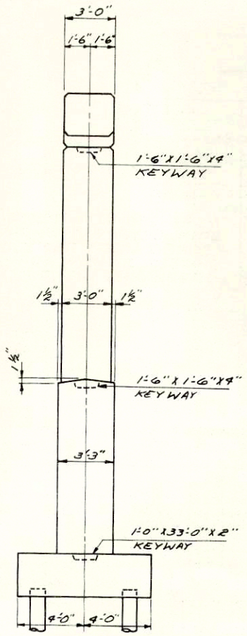
FORM E-B-12-62

B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	FAUS-3(39) 20	30	

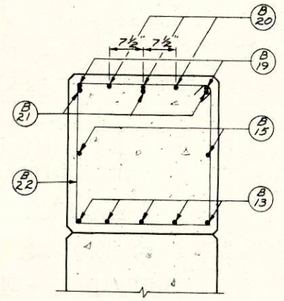


ELEVATION
LOOKING NORTH

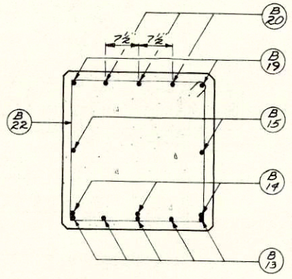
NOTE: FOR BILL OF BARS & BAR DETAILS SEE SHEET X.32147.



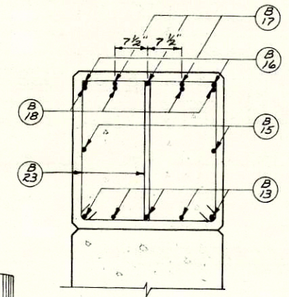
END VIEW



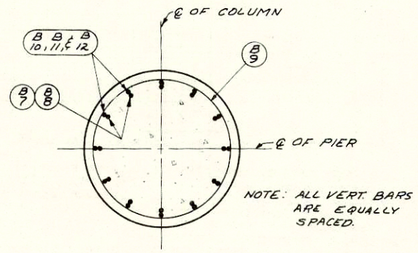
SECTION B1



SECTION B2

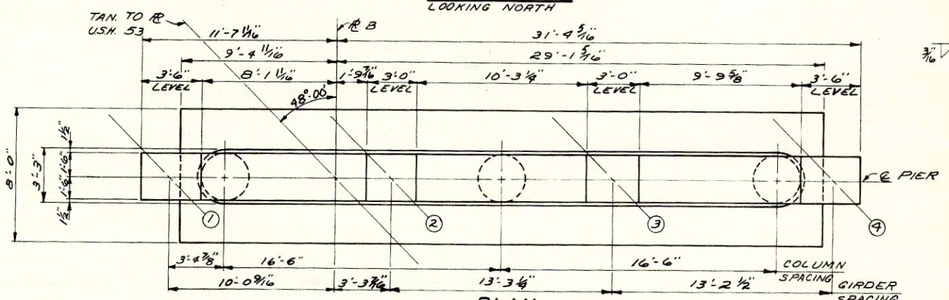


SECTION B3

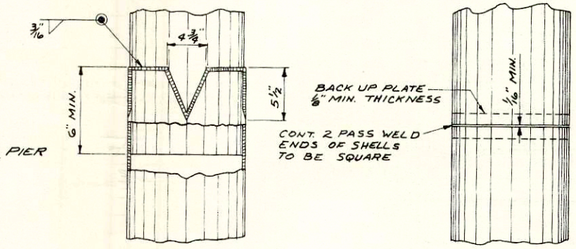


NOTE: ALL VERT. BARS ARE EQUALLY SPACED.

SECTION B4
TYP. ALL COLUMNS



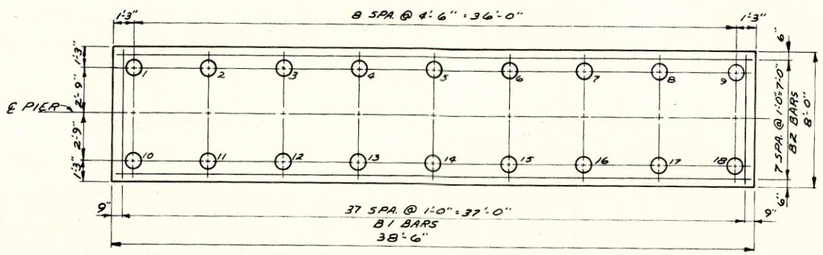
PLAN



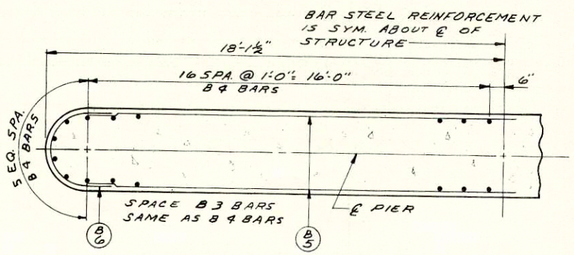
FLUTED PILE

PIPE PILE

PILE SPLICE DETAIL



FOOTING AND PILE PLAN



SECTION B5

ESTIMATED CONCRETE QUANTITIES

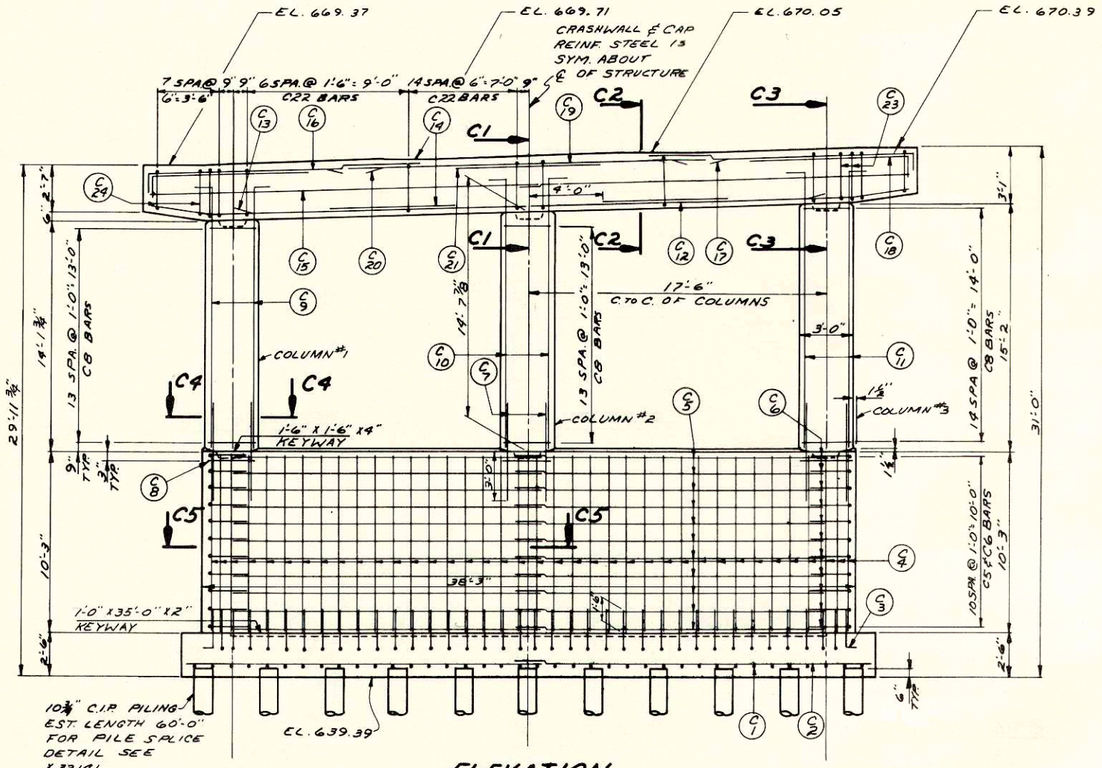
CAP	19.5 C.Y.
COLUMNS	10.4 C.Y.
CRASHWALL	44.1 C.Y.
FOOTING	28.3 C.Y.
TOTAL	97.3 C.Y.

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	PIER 1
	DESIGN SPEC. A.A.S.H.O.61 LOADING H.S.20 CONST. SPEC. 1963
	DATE 8-26-5 DESIGN J.J.Z. DRAWN A.M.D. CKD. E.M.Z.
STRUCTURE B-32-67	SHEET 14 OF 22

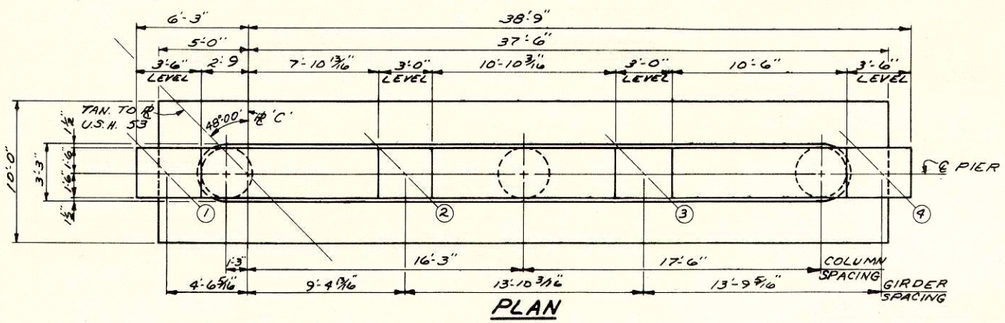
X 32141

FORM E-B-12-62

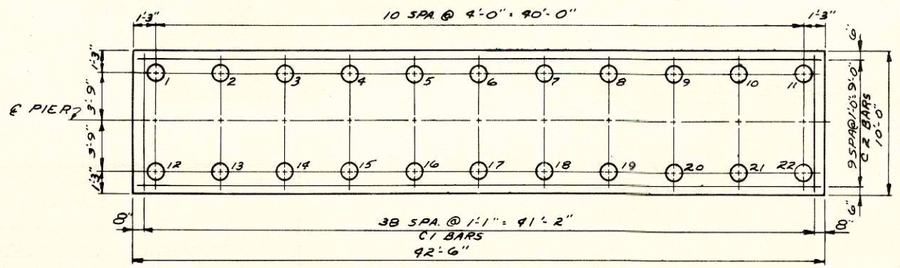
B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	F008-3(39)	21	30



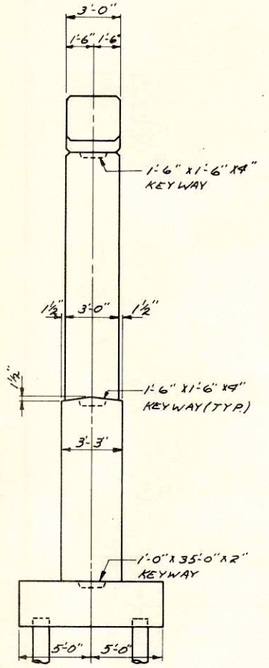
ELEVATION
LOOKING NORTH



PLAN

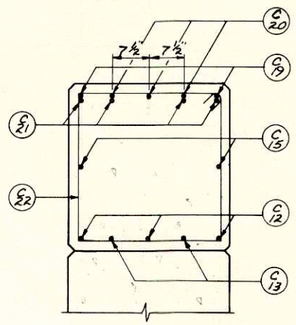


FOOTING AND PILE PLAN

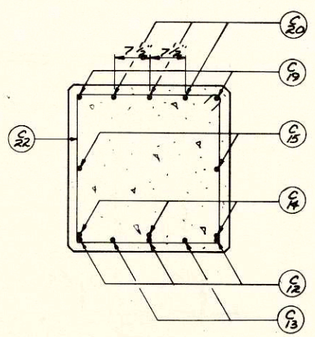


END VIEW

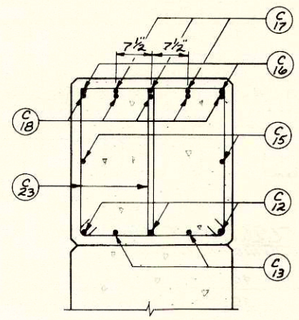
NOTE: FOR BILL OF BARS & BAR DETAILS, SEE SHEET X32197.



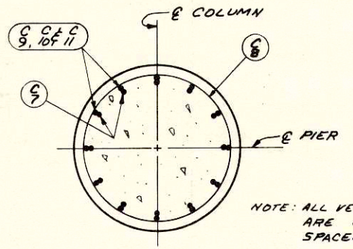
SECTION C1



SECTION C2

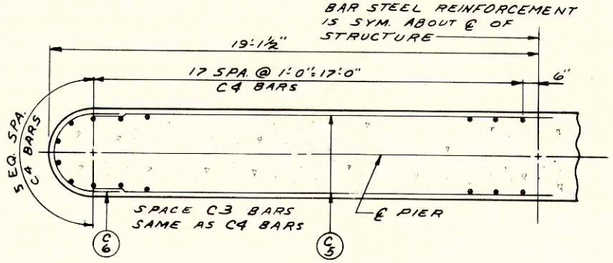


SECTION C3



NOTE: ALL VERT. BARS ARE EQUALLY SPACED

SECTION C4
TYP. ALL COLUMNS



SECTION C5

ESTIMATED CONCRETE QUANTITIES

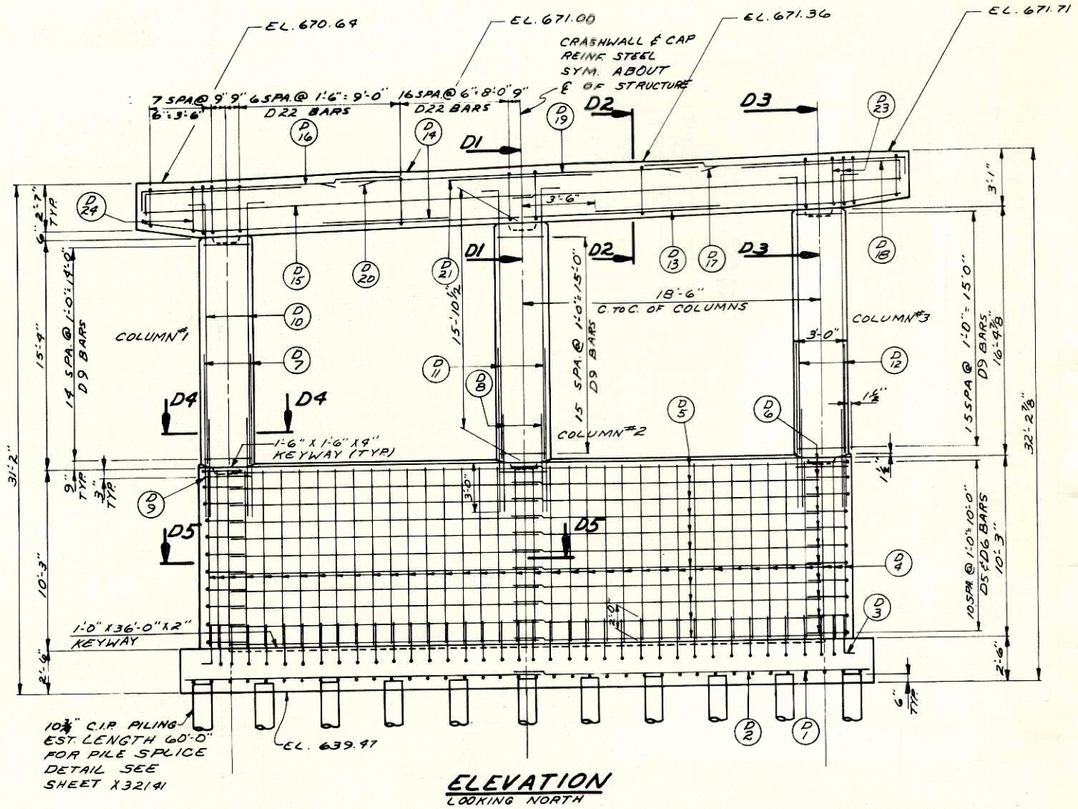
CAP	15.2	C.Y.
COLUMNS	11.5	C.Y.
CRASHWALL	96.6	C.Y.
FOOTING	39.1	C.Y.
TOTAL	112.4	C.Y.

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN	
	PIER 2	
	DESIGN SPEC. A.A.S.H.O. 61 LOADING H S-20	CONST. SPEC. 1963
	DATE 8-2-65 DESIGN J.J.Z. DRAWN [illegible] CKD. B.H.Z.	
STRUCTURE B-32-67	SHEET 15 OF 22	

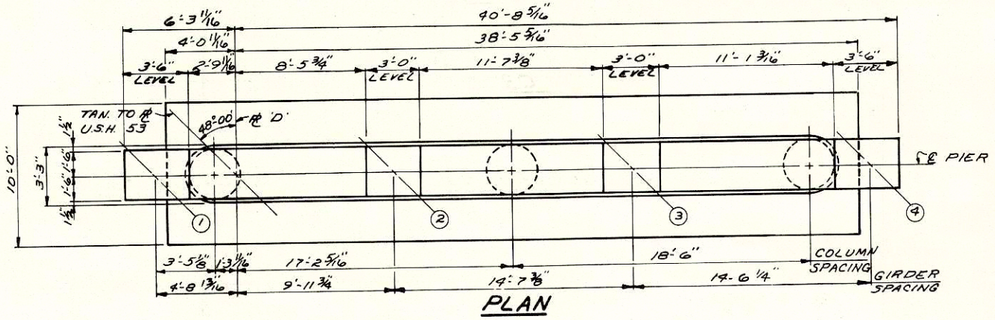
X32142

FORM E-B-12-62

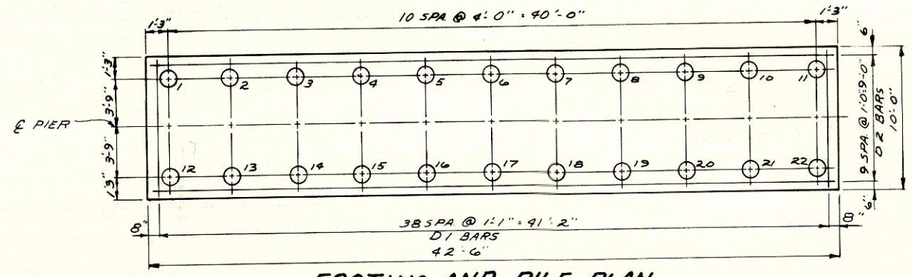
B P R DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	FG-08-3(85)	22	30



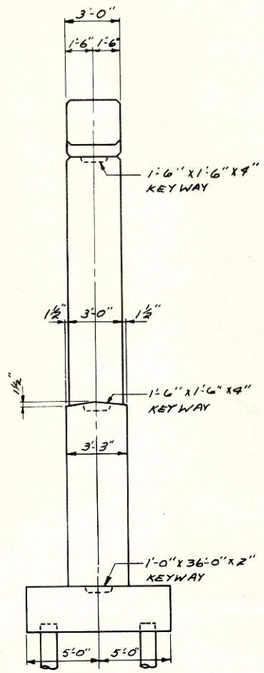
ELEVATION
LOOKING NORTH



PLAN

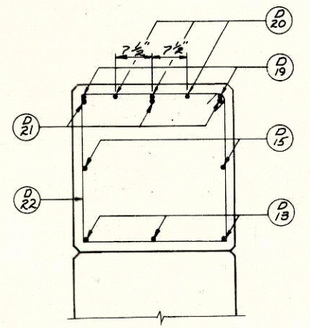


FOOTING AND PILE PLAN

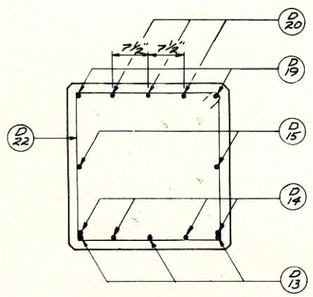


END VIEW

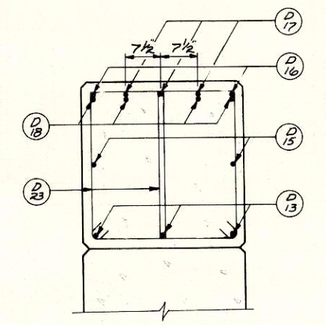
NOTE: FOR BILL OF BARS & BAR DETAILS, SEE SHEET X32147.



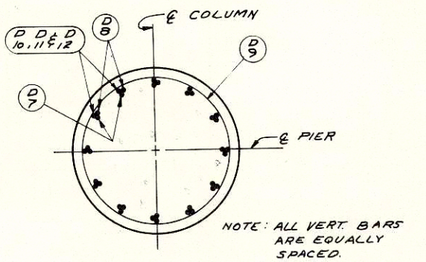
SECTION D1



SECTION D2

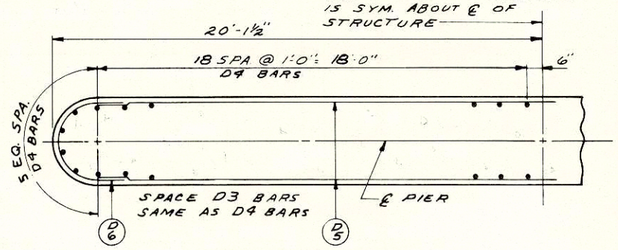


SECTION D3



NOTE: ALL VERT. BARS ARE EQUALLY SPACED.

SECTION D4
TYP. ALL COLUMNS



SECTION D5

ESTIMATED CONCRETE QUANTITIES

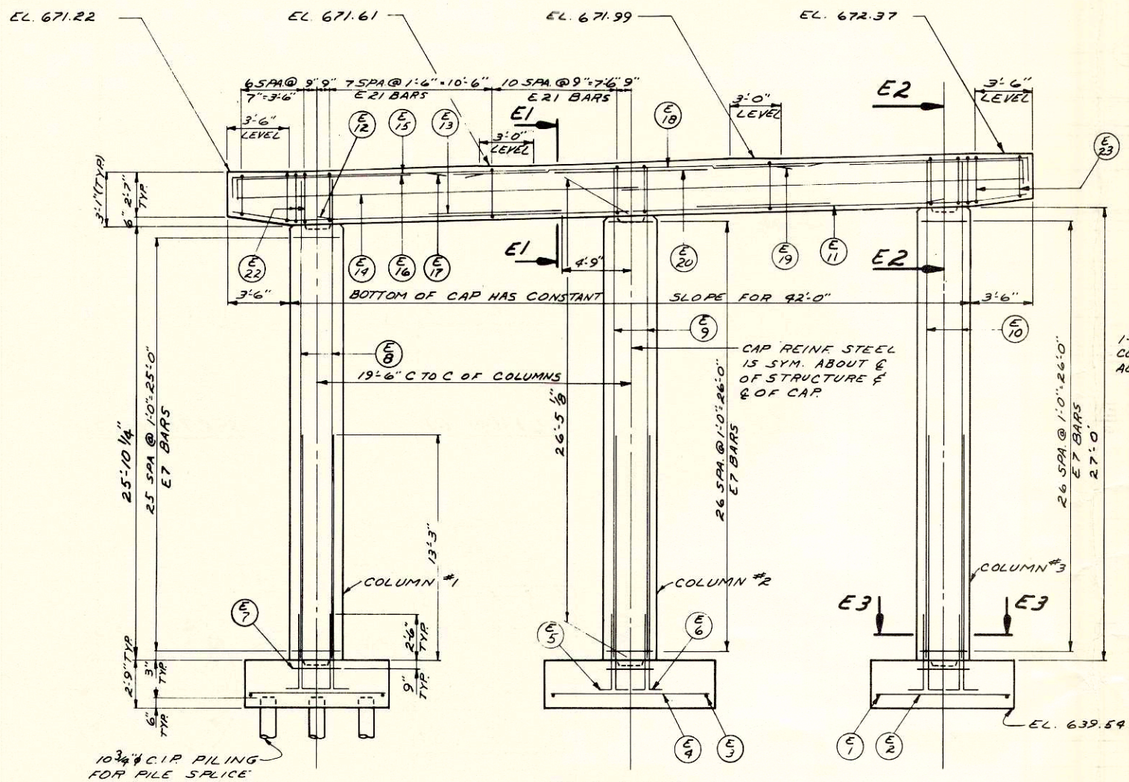
CAP	15.9 C.Y.
COLUMNS	12.5 C.Y.
CRASHWALL	49.0 C.Y.
FOOTING	39.1 C.Y.
TOTAL	116.5 C.Y.

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	PIER 3
	DESIGN SPEC. A.A.S.H.O. 61 LOADING H S 20 CONST. SPEC. 1963
	DATE 8-2-65 DESIGN U.J.Z. DRAWN A.D.W. CKD. E.H.Z.
STRUCTURE B-32-67	SHEET 16 OF 22

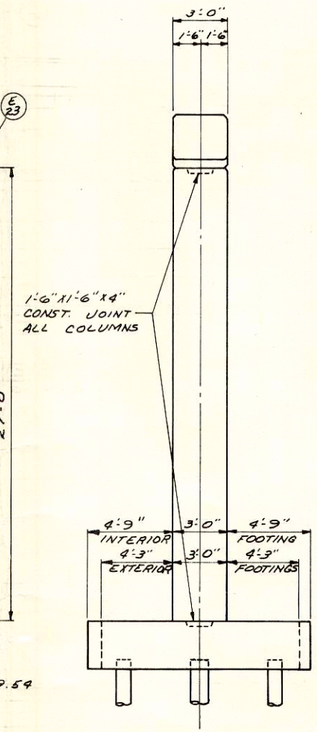
X 32143

FORM E-B-12-62

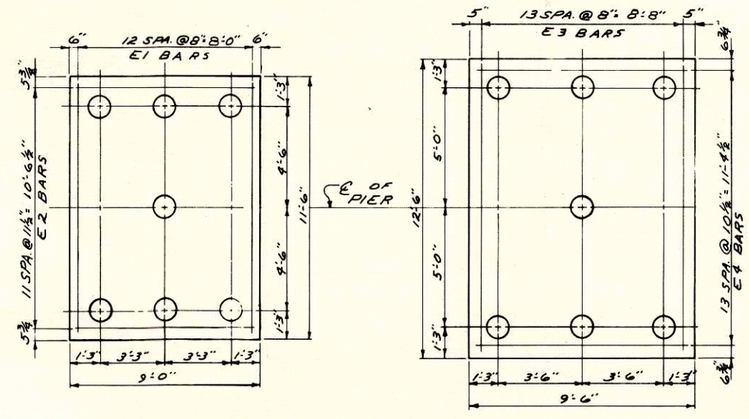
B P R DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	FG-08-3(39)	23	30



ELEVATION
LOOKING NORTH

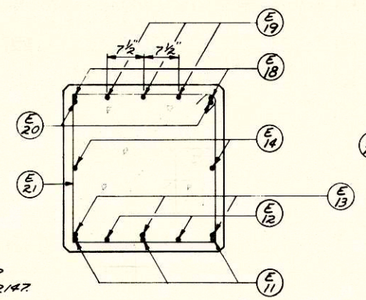


END VIEW

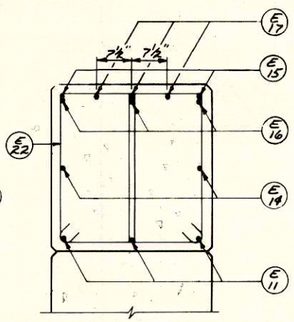


FOOTING & PILE PLAN

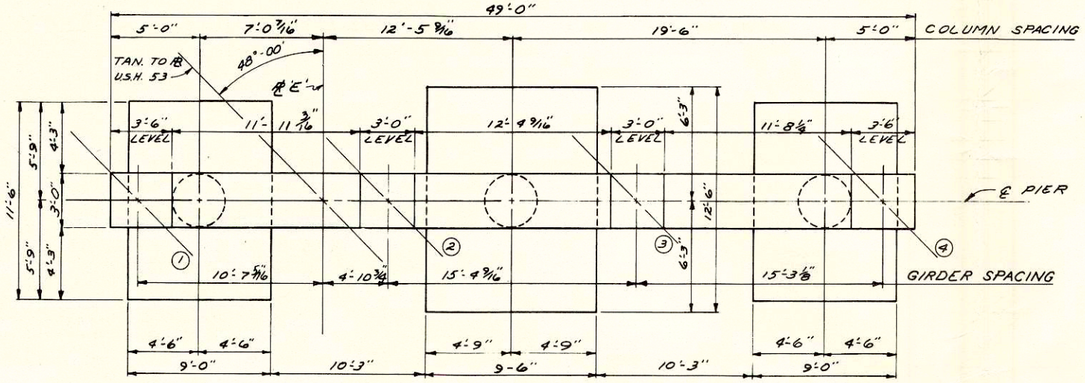
NOTE: FOR BILL OF BARS & BAR DETAILS, SEE SHEET X 32147



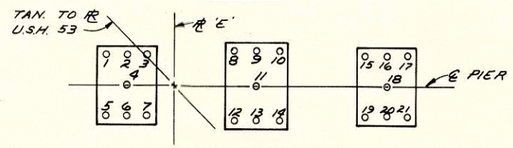
SECTION E1



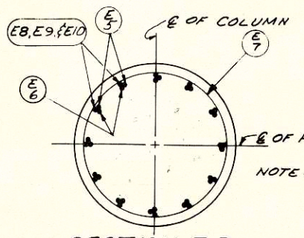
SECTION E2



PLAN



PILE PLAN



NOTE: ALL VERT. BARS ARE EQUALLY SPACED

SECTION E3
TYP. ALL COLUMNS

ESTIMATED CONCRETE QUANTITIES

CAP	16.6 C.Y.
COLUMNS	20.8 C.Y.
FOOTINGS	32.9 C.Y.
TOTAL	70.3 C.Y.

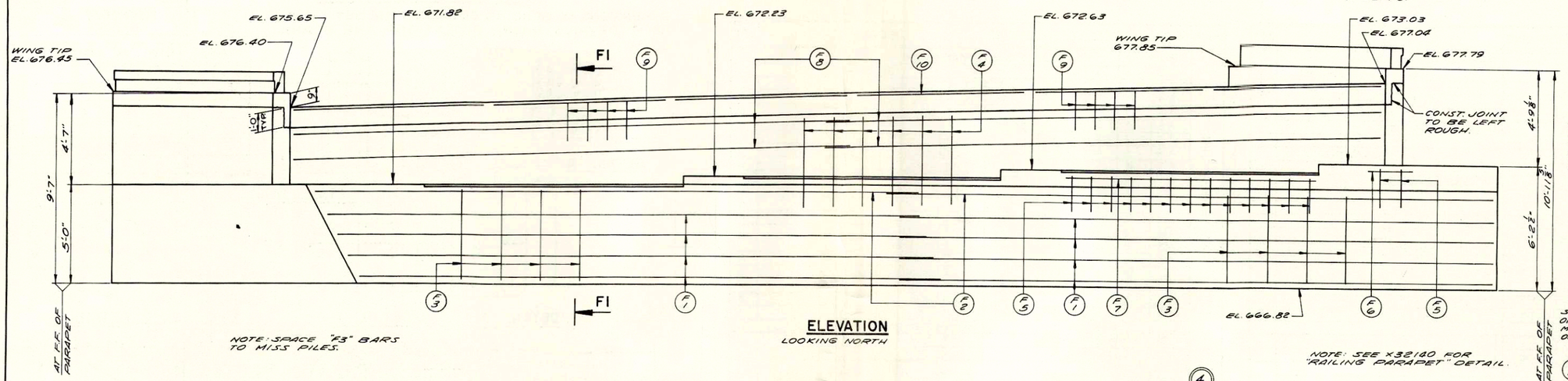
REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	PIER 4
	DESIGN SPEC. AASHO 61 / LOADING HS-20 / CONST SPEC. 1963
	DATE 8-2-65 / DESIGN JJZ / DRAWN JWW / CKD. EHZ
	STRUCTURE B-32-67 / SHEET 17 OF 22

X32144

FORM E-B-12-62

B. P. R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	FS-08-3(39)	24	30

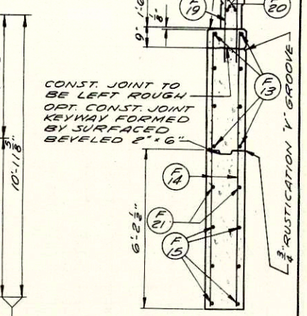
NOTE: FOR BILL OF BARS AND BAR DETAILS SEE SHEET X-32146.



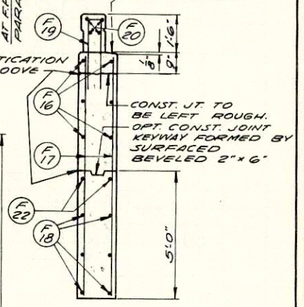
NOTE: SPACE "F3" BARS TO MISS PILES.

ELEVATION
LOOKING NORTH

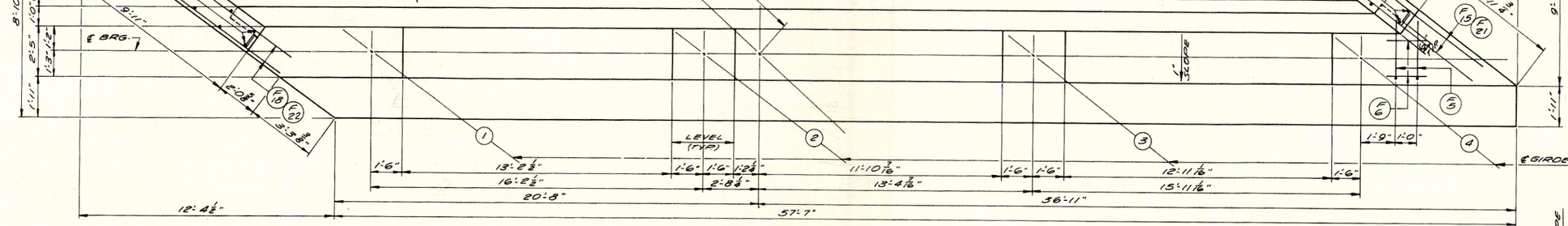
NOTE: SEE X32140 FOR "RAILING PARAPET" DETAIL.



SECTION THRU WING 4

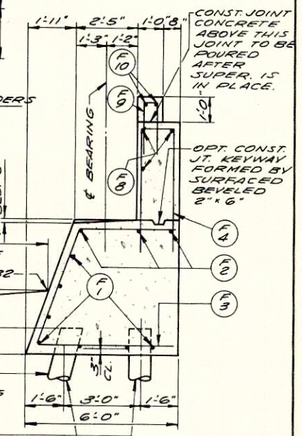


SECTION THRU WING 3

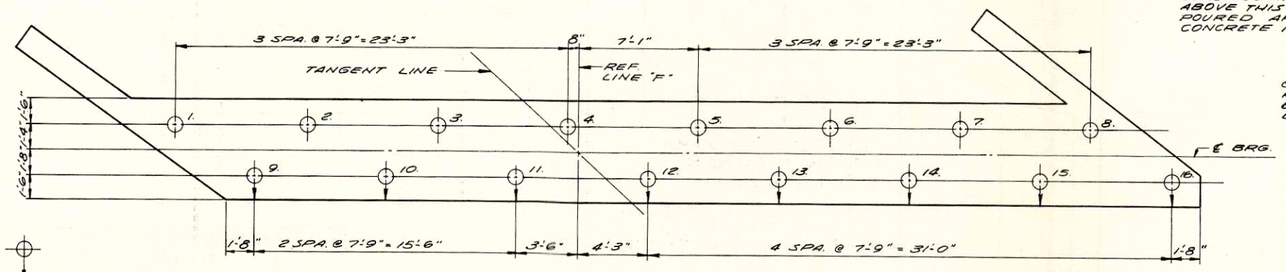


NOTE: FOR GRID DETAIL SEE SHEET X32140.

PLAN



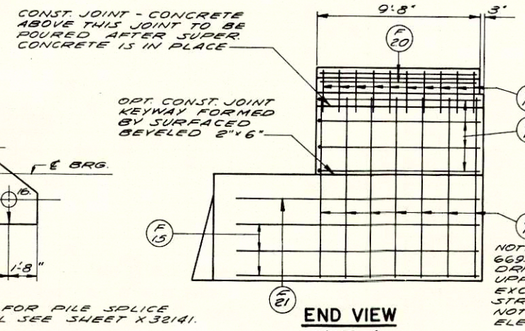
SECTION FI



DENOTE DIRECTION OF BATTERED PILING

PILE PLAN

NOTE: FOR PILE SPLICE DETAIL SEE SHEET X32141.



NOTE: FILL TO ELEV. 669.32 BEFORE DRIVING PILES. UPPER LIMITS OF EXCAVATION FOR STRUCTURES SHALL NOT EXCEED THIS ELEVATION.

END VIEW
WING 4

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	NORTH ABUTMENT
	DESIGN SPEC. A.A.S.H.O.'61 LOADING H 20 CONST. SPEC. 1963
	DATE 8-2-65 DESIGN D.F.S. DRAWN H.E.A. CK'D. B.M.Z.
	STRUCTURE B-32-67 SHEET 18 OF 22

X32145

FORM E-B-12-62

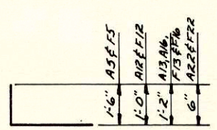
POUR	MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
SUPERSTRUCTURE 130, 190#	S 1	1387	6	35-0	Shown	Transverse-Slab-Top & Bottom	
	S 2	34	6	36-6	"	" " Bottom (South Abutment)	†
	S 3	43	6	36-6	"	" " (North Abutment)	†
	S 4	33	6	37-3	"	" " Top (South Abutment)	†
	S 5	42	6	36-0	"	" " (North Abutment)	†
	S 6	572	5	36-6	"	Longitudinal Slab-Bottom	
	S 7	385	5	36-6	"	" " Top	
	S 8	32	5	15-0	"	" " -Symmetrical about Piers	
	S 9	783	5	3-9	1-0	Curb and Slab	E
	S10	4	5	33-9	Shown	" Span 1-West Side	
	S11	6	5	28-3	"	" " 2 " "	
	S12	6	5	32-3	"	" " 3 " "	
	S13	6	5	28-3	"	" " 4 " "	
	S14	4	5	34-0	"	" " 5 " "	
	S15	4	5	33-3	"	" " 1-East Side	
	S16	6	5	27-9	"	" " 2 " "	
	S17	6	5	31-9	"	" " 3 " "	
	S18	6	5	27-6	"	" " 4 " "	
	S19	4	5	33-0	"	" " 5 " "	
	S20	783	5	5-0	1-0	" and Railing Parapet	D
	R 1	16	5	19-6	Shown	Railing Parapet	
	R 2	52	5	22-3	"	" "	
	R 3	4	5	24-0	"	" "	
	R 4	4	5	20-6	"	" "	
	R 5	4	5	16-3	"	" "	
	R 6	4	5	13-3	"	" "	
	R 7	8	5	13-6	"	" "	
	R 8	8	5	23-6	"	" "	
	R 9	4	5	23-0	"	" "	
	R10	4	5	14-0	"	" "	
	R11	28	5	21-3	"	" "	
	R12	4	5	14-3	"	" "	
	R13	4	5	13-0	"	" "	
	R14	4	5	15-3	"	" "	
	R15	4	5	22-6	"	" "	

POUR	MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
SOUTH ABUTMENT 2,110#	A 1	14	4	24-3	Shown	Body-Horizontal	
	A 2	6	6	24-9	"	" " -Top	
	A 3	23	4	13-9	2-0	"	F
	A 4	29	5	9-3	1-6	" Parapet	B
	A 5	13	4	5-0	1-0	Bridge Seat	A
	A 6	2	4	2-6	Shown	Tie	
	A 7	2	4	9-6	"	"	
	A 8	6	4	22-6	"	Body Parapet-Horizontal	
	A 9	44	5	5-0	1-0	Paving Block	B
	A10	10	4	8-6	Shown	" " -Horizontal	
	A11	16	4	2-6	"	Grid	
	A12	20	4	4-6	"	"	A
	A13	6	4	10-9	1-6	Wing 1-Horizontal	A
	A14	14	4	9-0	1-6	" 1-Vertical	
	A15	6	4	12-9	1-6	" 1-Horizontal	
	A16	8	4	10-9	1-6	" 2-Horizontal	A
	A17	14	4	10-0	1-6	" 2-Vertical	
	A18	6	4	11-3	1-6	" 2-Horizontal	
	A19	20	5	5-9	1-0	Railing Parapet	B
	A20	8	5	9-3	Shown	" "	
	A21	2	6	12-0	"	Wing 1-Horizontal-Top	
	A22	2	6	12-0	"	" 2 " "	A
NORTH ABUTMENT 2,490#	F 1	14	4	30-0	Shown	Body-Horizontal	
	F 2	6	6	30-6	"	" " -Top	
	F 3	29	4	13-9	2-0	"	F
	F 4	37	5	9-9	1-6	" Parapet	B
	F 5	15	4	5-0	1-0	Bridge Seat	A
	F 6	2	4	1-6	Shown	Tie	
	F 7	2	4	12-6	"	"	
	F 8	6	4	28-0	"	Body Parapet-Horizontal	
	F 9	56	5	5-0	1-0	Paving Block	B
	F10	12	4	9-0	Shown	" " -Horizontal	
	F11	16	4	2-6	"	Grid	
	F12	20	4	4-6	"	"	A
	F13	8	4	10-9	1-6	Wing 4-Horizontal	A
	F14	14	4	10-6	1-6	" 4-Vertical	
	F15	6	4	13-9	1-6	" 4-Horizontal	
	F16	6	4	10-9	1-6	" 3 "	A
	F17	14	4	9-3	1-6	" 3-Vertical	
	F18	6	4	11-9	1-6	" 3-Horizontal	
	F19	20	5	5-9	1-0	Railing Parapet	B
	F20	8	5	9-3	Shown	" "	
	F21	2	6	14-0	"	Wing 4-Horizontal-Top	
	F22	2	6	12-0	"	" 3 " "	A

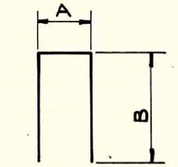
BAR BENDING DETAILS

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

B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	FG08-3(39)	25	30

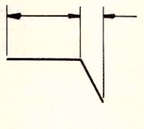


DETAIL A

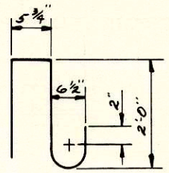


DETAIL B

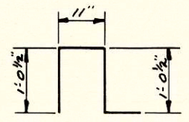
MARK	DIM. "A"	DIM. "B"
A4	1'-4"	4'-0"
A9 & F9	8"	2'-1"
A19 & F19	5 3/4"	2'-7"
F4	1'-4"	4'-3"



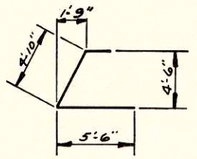
DETAIL C



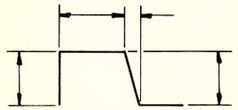
DETAIL D



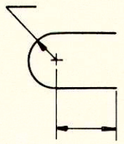
DETAIL E



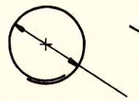
DETAIL F



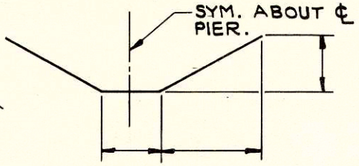
DETAIL G



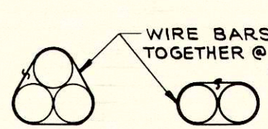
DETAIL H



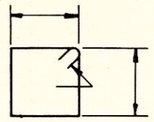
DETAIL J



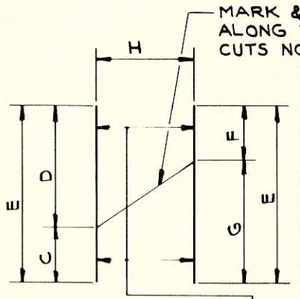
DETAIL K



BUNDLING DETAIL



DETAIL L



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

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

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

† CUTTING DIAGRAM

"H" IS NUMBER OF BARS, BEFORE CUTTING.

MARK		C	D	E	F	G	H	SETS REQ'D.
S2	SET 1	1'-5"	35'-1"	36'-6"	18'-6"	18'-0"	34	1 SET 1
S3	SET 2	1'-4 1/2"	35'-1 1/2"	36'-6"	18'-5 1/2"	18'-0 1/2"	43	1 SET 2
S4	SET 3	2'-3"	35'-0"	37'-3"	18'-10 1/2"	18'-4 1/2"	33	1 SET 3
S5	SET 4	1'-4 1/2"	34'-7 1/2"	36'-0"	18'-1 1/2"	17'-10 1/2"	42	1 SET 4

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	BILL OF BARS
	DESIGN SPEC. AASHO '61 LOADING H520 CONST SPEC 1963
	DATE 8-265 DESIGN DFS DRAWN AWW CKD. BKB
	STRUCTURE B-32-67 SHEET 19 OF 22

X 32146

FORM E-B-12-62

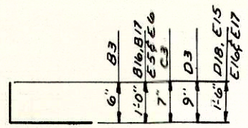
BAR BENDING DETAILS

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

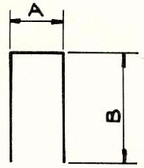
B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	F008-3(39)	26	30

POUR	MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
PIER 1 9,270#	B 1	38	7	7-6	Shown	Footing-Longitudinal	
	B 2	16	6	19-9	"	" Transverse	
	B 3	76	5	2-6	"	" & Crashwall Dowels	A
	B 4	76	5	10-0	"	Crashwall-Vertical	
	B 5	44	5	17-3	"	" Horizontal	
	B 6	22	5	7-3	"	" Ends	H
	B 7	24	11	6-0	"	" & Exterior Columns-Dowels	
	B 8	12	9	4-6	"	" & Interior Column -Dowels	
	B 9	43	4	9-6	"	" & Columns-Hoops	J
	B10	12	11	15-9	"	Column 1-Vertical	G
	B11	12	9	15-6	"	" 2 "	
	B12	12	11	16-9	"	" 3 "	G
	B13	10	8	21-3	"	Cap-Bottom	#C
	B14	6	8	7-0	"	" "	#
	B15	4	4	21-6	"	" Sides	
	B16	4	9	15-6	"	" Top-Ends	#A
	B17	6	9	12-3	"	" " "	#A
	B18	8	9	10-0	"	" " "	#K
	B19	2	9	20-0	"	" Top-Center	#
	B20	3	9	18-0	"	" " "	#
	B21	3	9	8-0	"	" " "	#
	B22	26	4	11-9	"	" Stirrups-Single	L
	B23	8	5	9-6	"	" " Double	L
	B24	10	5	17-9	"	" " "	†L
PIER 2 11,930#	C 1	39	10	9-6	Shown	Footing-Longitudinal	
	C 2	20	5	21-9	"	" Transverse	
	C 3	80	6	3-0	"	" & Crashwall-Dowels	A
	C 4	80	6	10-0	"	Crashwall-Vertical	
	C 5	44	4	18-0	"	" Horizontal	
	C 6	22	4	6-9	"	" Ends	H
	C 7	36	11	6-0	"	" & all Columns-Dowels	
	C 8	46	4	9-6	"	" & Columns-Hoops	J
	C 9	12	11	17-3	"	Column 1-Vertical	G
	C10	12	11	17-9	"	" 2 "	G
	C11	12	11	18-3	"	" 3 "	G
	C12	6	9	22-3	"	Cap-Bottom	#C
	C13	4	9	17-6	"	" "	
	C14	6	9	7-3	"	" "	#
	C15	4	4	22-6	"	" Sides	
	C16	4	9	17-6	"	" Top-Ends	#K
	C17	6	9	13-9	"	" " "	#K
	C18	10	9	11-0	"	" " "	#K
	C19	2	9	19-6	"	" "	#
	C20	3	9	18-6	"	" "	#
	C21	4	9	8-6	"	" "	#
	C22	42	4	11-9	"	" Stirrups-Single	L
	C23	8	5	9-6	"	" " Double	L
	C24	12	5	17-9	"	" " "	†L

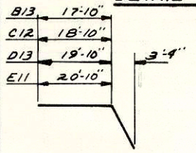
POUR	MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
PIER 3 16,180#	D 1	39	10	9-6	Shown	Footing-Longitudinal	
	D 2	20	5	21-9	"	" Transverse	
	D 3	80	8	4-0	"	" & Crashwall-Dowels	A
	D 4	80	8	10-0	"	Crashwall-Vertical	
	D 5	44	4	19-0	"	" Horizontal	
	D 6	22	4	6-9	"	" Ends	H
	D 7	36	11	11-3	"	All Columns-Vertical	
	D 8	36	11	6-0	"	" " & Crashwall-Dowels	
	D 9	50	4	9-6	"	" " " " Hoops	J
	D10	12	11	18-3	"	Column 1-Vertical	G
	D11	12	11	18-9	"	" 2 "	G
	D12	12	11	19-3	"	" 3 "	G
	D13	6	10	23-3	"	Cap-Bottom	#C
	D14	8	10	11-3	"	" "	#
	D15	4	4	23-6	"	" Sides	
	D16	4	10	16-9	"	" Top-Ends	#K
	D17	6	10	13-6	"	" " "	#K
	D18	8	10	10-9	"	" " "	#A
	D19	2	10	23-0	"	" " Outer	#
	D20	3	10	20-0	"	" " "	#
	D21	3	10	8-0	"	" " "	#
	D22	46	4	11-9	"	" Stirrups-Single	L
	D23	8	5	9-6	"	" " Double	L
	D24	12	5	17-9	"	" " "	†L
PIER 4 13,220#	E 1	26	9	11-0	Shown	Footings-Exterior	
	E 2	24	6	8-6	"	" "	
	E 3	14	9	12-0	"	Footing-Interior	
	E 4	14	5	9-0	"	" "	
	E 5	36	10	5-0	"	" & Column Dowels	A
	E 6	36	10	15-9	"	" " " "	A
	E 7	83	4	9-6	"	" " " Hoops	J
	E 8	12	10	28-6	"	Column 1-Vertical	
	E 9	12	10	29-0	"	" 2 "	
	E10	12	10	29-6	"	" 3 "	
	E11	6	9	24-3	"	Cap-Bottom	#C
	E12	4	9	19-6	"	" "	
	E13	6	9	7-6	"	" "	#
	E14	4	4	24-6	"	" Sides	
	E15	4	10	17-9	"	" Top	#A
	E16	6	10	10-6	"	" "	#A
	E17	6	10	14-0	"	" "	#A
	E18	2	10	23-6	"	" "	#
	E19	3	10	21-0	"	" "	
	E20	2	10	7-6	"	" "	#
	E21	36	4	11-9	"	Stirrups-Single	L
	E22	8	5	9-6	"	" Double	L
	E23	10	5	17-9	"	" "	†L



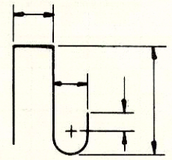
DETAIL A



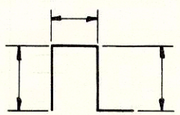
DETAIL B



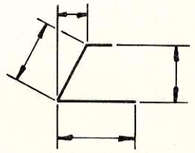
DETAIL C



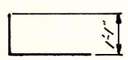
DETAIL D



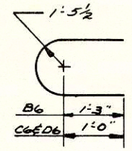
DETAIL E



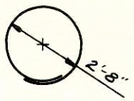
DETAIL F



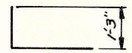
DETAIL G



DETAIL H



DETAIL J



DETAIL K

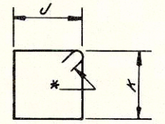
MARK	DIM. "A"	DIM. "B"

WIRE BARS TOGETHER @ 2'-0" CTRS.

#

BUNDLING DETAIL

MARK	DIM 'J'	DIM 'K'
B22, C22, D22, & E21	2'-8"	2'-9"
B23, C23, D23, & E22	1'-5½"	2'-9"
LONGEST B24 & E23 BAR	1'-5¼"	2'-8"
		2'-7"
SHORTEST B24 & E23 BAR		2'-6"
		2'-5"
LONGEST C24 & D24 BAR		2'-4"
	1'-5¼"	2'-8¼"
		2'-7¼"
		2'-7"
		2'-6"
SHORTEST C24 & D24 BAR		2'-5"
		2'-4¼"

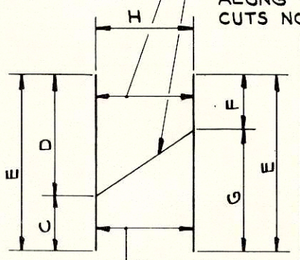


* 5" FOR SIZE 4 BARS
6" FOR SIZE 5 BARS

DETAIL L

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

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



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

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

† CUTTING DIAGRAM

"H" IS NUMBER OF BARS, BEFORE CUTTING.

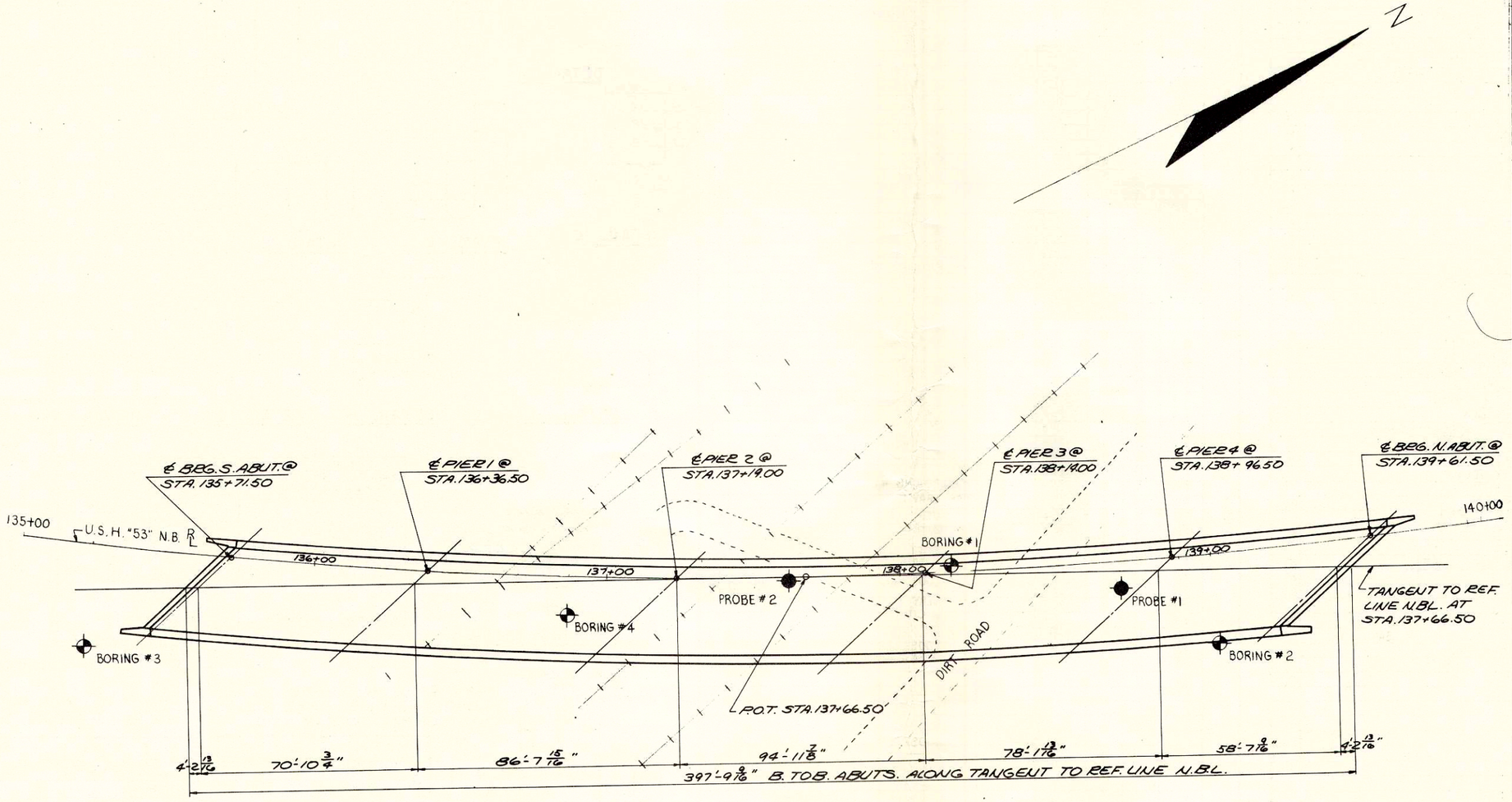
MARK		C	D	E	F	G	H	SETS REQ'D.
B24	SET 5	8'-6½"		17'-9"		9'-2½"	5	2 SET 5
	SET 6		9'-2½"		8'-6½"		5	2 SET 6
C24	SET 7	8'-6"		17'-3"		9'-3"	6	2 SET 7
	SET 8		9'-3"		8'-6"		6	2 SET 8
D24	SET 9	8'-6"		17'-9"		9'-3"	6	2 SET 9
	SET 10		9'-3"		8'-6"		6	2 SET 10
E23	SET 11	8'-6½"		17'-9"		9'-2½"	5	2 SET 11
	SET 12		9'-2½"		8'-6½"		5	2 SET 12

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	BILL OF BARS
	DESIGN SPEC. AASHO '61 LOADING H-20 CONST. SPEC. 1963
	DATE 8-26-65 DESIGN J.J.Z. DRAWN J.R.D.S. CKD.
	STRUCTURE B-32-67 SHEET 20 OF 22

X 32147

FORM E-B-12-62

B. P. R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	FGOB-3(39)	29	30

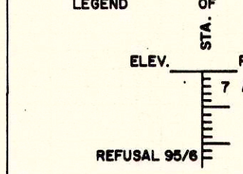


SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN

FOR THE DESIGN OF THE STRUCTURE FOUNDATION, TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT 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.

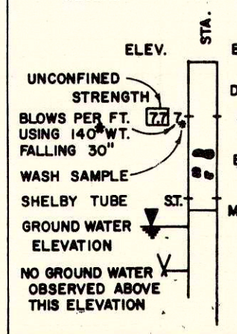
UNLESS OTHERWISE SPECIFIED THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" OD x 1.4" ID SPLIT SPOON SAMPLER WITH A 140 LB. HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE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

LEGEND OF PROBING



95/6 = 95 BLOWS FOR 6" PENETRATION
PROBING TAKEN WITH A 350# WT. FALLING 18" ON A 2" O.D. POINT

LEGEND OF BORING

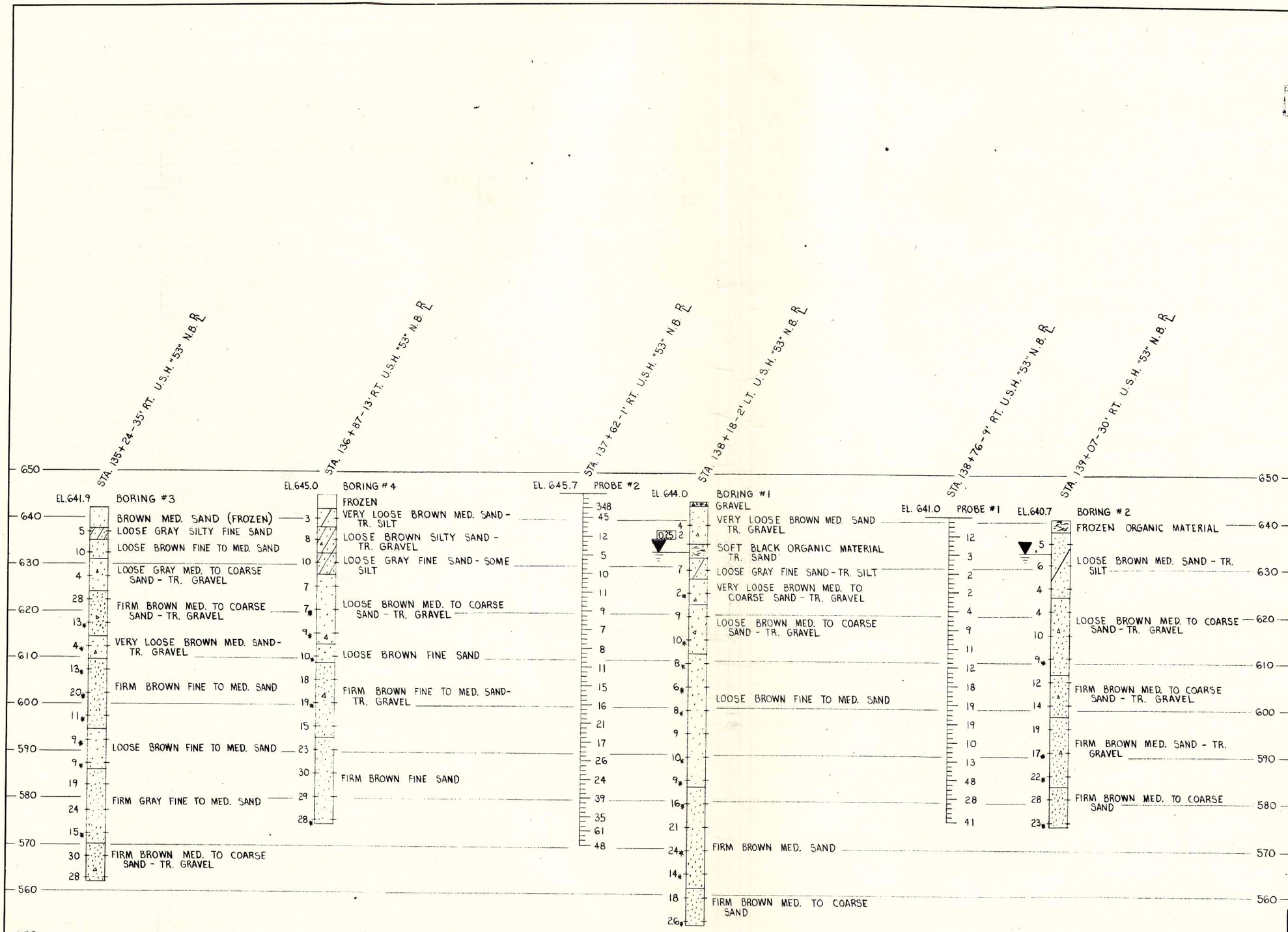


REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	SUBSURFACE EXPLORATION
	DESIGN SPEC. A.A.S.H.O. '61 LOADING H20 CONST. SPEC. 1963
	DATE 8-2-65 DESIGN D.F.S. DRAWN R.G.L. CKD. T.V.M.
STRUCTURE B-32-67	SHEET 21 OF 22

X 32148

FORM E-B-12-62

B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	FG-08-3(39)	28	30



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 MIGHT 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 PROBING

STA.
ELEV.
PROBE*
7 AVERAGE BLOWS PER FT.
REFUSAL 95/6

95/6 = 95 BLOWS FOR 6" PENETRATION
PROBING TAKEN WITH A 350* WT. FALLING 18" ON A 2" O.D. POINT

LEGEND OF BORING

STA.
ELEV.
BORING*
UNCONFINED STRENGTH
BLOWS PER FT. 7.7
USING 140* WT. FALLING 30"
WASH SAMPLE
SHELBY TUBE ST.
GROUND WATER ELEVATION
NO GROUND WATER OBSERVED ABOVE THIS ELEVATION
DESCRIPTION OF MATERIAL
BOULDERS OR COBBLES
MATERIAL CHANGE
UNCONFINED STRENGTH TAKEN WITH HAND PENETROMETER

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	SUBSURFACE EXPLORATION
	DESIGN SPEC. AASHO '61 | LOADING H520 | CONST. SPEC. 1963
	DATE 8-2-65 | DESIGN D.F.S. | DRAWN S.G.D. | CKD. T.E.M.
	STRUCTURE B-32-67 | SHEET 22 OF 22

X 32149

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	FG 08-3(39)	29	30

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.			SELECT EMB.	FILL
138 + 65						
	102.73	0			0	3919
139 + 68.73						
	34.27	0			65	2242
140						
	100	46			170	4508
141						
	100	75			170	2898
142						
	100	176			170	1620
143						

143+00 G10

4:1

7:1

74.70

N.B. ℄

22.32'

S.B. STA. 142+75.57 ℄

142+00 G10

2½:1

74.40

44.00'

S.B. STA. 141+77.62 ℄

141+00 G60

R/W

2½:1

74.10

49.05'

S.B. STA. 140+79.96 ℄

EXIST.

NOTE: THE COST OF C.M.C.P. ELBOWS SHALL BE CONSTRUED TO BE INCIDENTAL TO THE CONSTRUCTION COSTS OF THIS CULVERT.

140+00 G60

R/W

2½:1

2:1

73.70

52.54'

S.B. STA. 139+82.57 ℄

STRUCTURE

STA. 140+15 S.B. ℄
ADJUST CATCH BASIN IN PLACE

G44.0

STA. 139+90 N.B. ℄
18" X 1660' C.M.C.P. REQ'D. SKEW 54° L.H.F.
1 APRON ENDWALL REQ'D.
10 C.Y. RIPRAP REQ'D.

STA. 139+94 N.B. ℄
18" X 54' R.C.C.P. CL. III STORM SEWER REQ'D.
CATCH BASIN, TYPE S-H REQ'D. SKEW 55° L.H.F.
18" X 26' R.C.C.P. CL. III REQ'D.
1 APRON ENDWALL REQ'D.

139+65.73 G60

2½:1

73.60

55.07'

S.B. STA. 138+85.36 ℄

139+00 G40

SHEET TOTAL 287 575 15,188

ALL AREAS CHECKED 11-66

NO. AREAS CHECKED

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

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

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	FG 08-3(89)	30	30

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

ORIGINAL SURVEY	BY	DATE
SURVEYED	DEK	2-64
PLOTTED	DEK	2-64
TEMPLAT.	ZGS	6-65
AREAS	RGS	6-65
NO. L.L.	AREAS CHECKED	ALL

148+00 G80

147+00 G80

146+00 G80

145+00 G80

144+00 G70

77.00

76.50

76.00

75.50

75.08

74.1

72.1

N.B. ℄

S.B. STA. 147+10.04 ℄

12.00'

S.B. STA. 146+69.55 ℄

14.54'

S.B. STA. 145+71.43 ℄

20.84'

S.B. STA. 144+72.46 ℄

21.09'

S.B. STA. 143+73.86 ℄

23.25'

11.45'

STA. 144+80 N.B. ℄
18"x42' R.C.C.P. CL. III REQ'D.
1 APRON ENDWALL REQ'D.
1 INLET, TYPE S-1-H REQ'D.

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	SELECT EMB.	FILL
143				
	100	380	170	713
144				
	100	509	150	213
145				
	100	454	120	0
146				
	100	269	95	0
147				
	100	120	65	167
148				
	54.44	15	15	91
148 + 54.44				
SHEET TOTAL		1747	615	1184

PLATE 3 FUNCTIONAL CROSS SECTION - OPEN DOTTED

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

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

BLUEPRINTS, INC. MILWAUKEE