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	90.8		11.3	4 WIS.	1	54

INDEX OF SHEETS

STATE OF WISCONSIN

STATE HIGHWAY COMMISSION OF WISCONSIN

STATE OF MINNESOTA

MINNESOTA DEPARTMENT OF HIGHWAYS

PLAN AND PROFILE OF PROPOSED

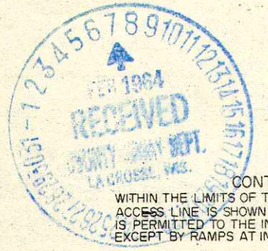
MISSISSIPPI RIVER INTERSTATE BRIDGES

(ROUND LAKE AND FRENCH SLOUGH CROSSINGS)

I. H. 90

LA CROSSE COUNTY

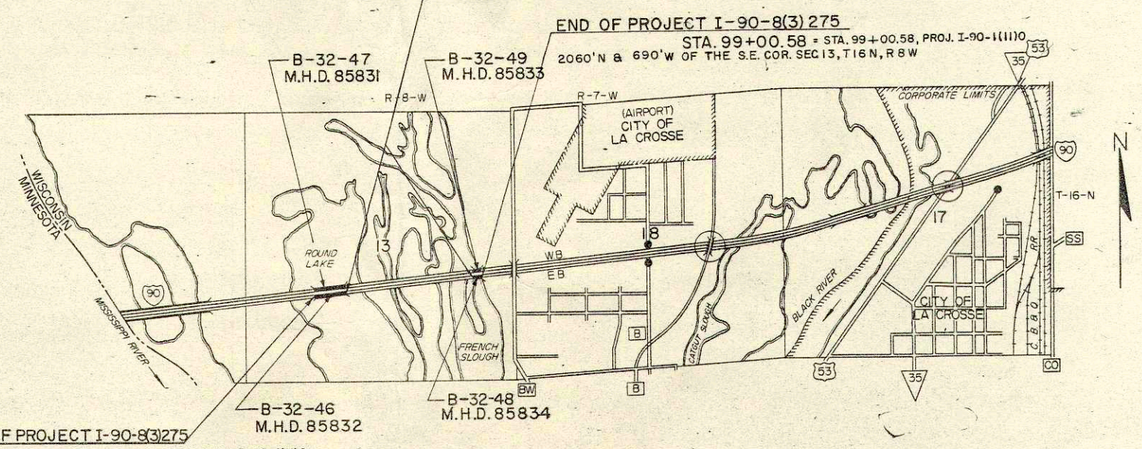
PROJECT - I-90-8(3)275



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

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.

EXCEPTION TO NET ℄ LENGTH
STA. 72+01.75 TO STA. 97+63.42



CONVENTIONAL SIGNS

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

CULVERTS IN PLACE
CULVERTS REQUIRED
DROP INLET
POWER POLE
TELEPHONE OR TELEGRAPH POLE
RIGHT OF WAY MARKERS
REFERENCE STAKE FOR HUBS ONLY — +81.7 / 23.9
MARSH
HEDGE
TREES
GROUND ELEVATION — DATUM LINE 739
GRADE ELEVATION — DATUM LINE 75.16

APPROVED INTERSTATE LOCATION
INTERCHANGE
HWY. GRADE SEPARATION (MAIN LINE UNDER)
BRIDGES (MAIN LINE OVER)
TERMINATED CROSS ROAD

LAYOUT

SCALE — 1 MILE

NET LENGTH OF CENTERLINE = 0.133 MI.

STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS
ST. PAUL, MINN.

APPROVED:
DATE 1-16-64 — G. C. Lee Boarts, BRIDGE ENGINEER

APPROVED:
DATE 1/16/64 — D. T. [illegible], DEPUTY CHIEF ENGINEER

STATE HIGHWAY
COMMISSION OF WISCONSIN
MADISON, WIS.

SURVEYOR D.E.K. NOTE BOOK
DIVISION COMPUTER A.E.J. M. O. CHECKER
DISTRICT CHECKER R.C.J. CORRECT

CORRECT:
DATE 1-10-64 — [illegible], DISTRICT ENGINEER

APPROVED:
DATE 1/17/64 — R. C. Rutter, STATE HIGHWAY ENGINEER

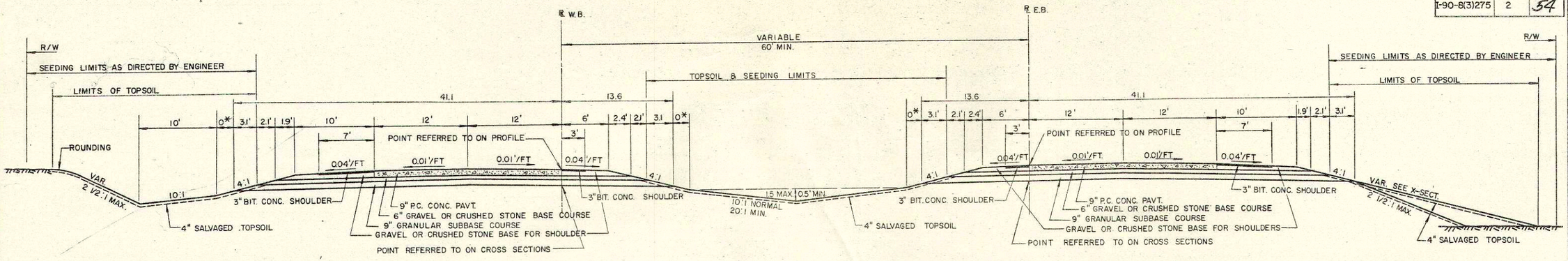
RECOMMENDED FOR APPROVAL:
DATE 1/13/64 — J. S. Petty, ENGINEER OF DESIGN

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED:
DATE

DIVISION ENGINEER

PROJECT	SHEET NUMBER	TOTAL SHEETS
I-90-8(3)275	2	54



* INCREASE THIS DIMENSION ON 4:1 SLOPE TO ATTAIN SPECIAL DITCH GRADES WHEN SHOWN ON CROSS SECTIONS

WEST BOUND ROADWAY

EAST BOUND ROADWAY

TYPICAL FINISHED SECTION
GRADED MEDIAN

TYPICAL CROSS SECTION
FOR
STRUCTURE APPROACHES

ESTIMATE OF QUANTITIES

CONTRACT NO. 1

B.P.R. REGION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3)275	3	54

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.

STATION TO STATION	ITEM NO.	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				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
							STA.		STA.		ROCK	MARSH	BORROW																								
	ITEM NO.		20101	20102	20104	20105	20301		20351		2050	20502	20505	20801	20901	21001	211		2120	21301	21401				30	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.			L.S.	STA.				S.Y.	S.Y.				TON		S.Y.	S.Y.	S.Y.	S.Y.	C.Y.	S.Y.
66+38.25 — 72+01.75		563.50																																		
97+63.42 — 99+00.58		137.16																																		
		700.66																																		

BRIDGES (STRUCTURES OVER 20 FT. SPAN)

	EXCAVATION FOR STRUCTURES	GRANULAR BACKFILL	CONCRETE MASONRY		BAR STEEL REINF.	STRUCTURAL CARBON STEEL	STRUCTURAL LOW ALLOY STEEL	CARBON STEEL FORGINGS	LUBRICATED BRONZE PLATES	SHEET ZINC	BEARING PADS	TR'T'D. LUMBER AND TIMBER	UNTR'D. TIMBER TEST PILING		UNTREATED TIMBER PILING		CAST IN PLACE CONC. TEST PILING B-32-46	CAST IN PLACE CONC. TEST PILING B-32-47	CAST IN PLACE CONC. TEST PILING B-32-48	CAST IN PLACE CONC. TEST PILING B-32-49	CAST-IN-PLACE CONCRETE PILING		TUBULAR RAILING TYPE "A"	FLOOR DRAINS		DOWNSPOUT 6"	SLOPE PAVING CONCRETE	HEAVY RIP-RAP	PIERS B-32-46	PIERS B-32-47
															DELIVERED	DRIVEN					DELIVERED	DRIVEN		TYPE "A"	TYPE "B"					
	20601	20901	50201		50501	50601	50605	50611	50614	50616	50621	50702	50801		50810	50813	51001	51002	51003	51004	51010	51015	51330	51401	51402	51426	60404	60602	90001	90002
	C.Y.	C.Y.	C.Y.		LB.	LB.	LB.	LB.	LB.	LB.	S.F.	M.B.M.	L.S.		L.F.	L.F.	L.S.	L.S.	L.S.	L.S.	L.F.	L.F.	L.F.	EACH	EACH	L.F.	S.F.	C.Y.	L.S.	L.S.
B-32-46847	40		1282		350,200	1,087,200	32,700	1020	866		90						1	1			12,270	12,270	2320	32				280	1	1
B-32-48849	400		1110.4		183,220					316									1	1	6540	6540	630		12			288		
TOTAL	440		2392.4		533,420	1,087,200	32,700	1020	866	316	90						1	1	1	1	18,810	18,810	2,950	32	12			568	1	1

CULVERTS (STRUCTURES 20 FT. SPAN & UNDER)

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.

	RUBBLE MASONRY		CULVERT PIPE										APRON ENDWALLS FOR						CONCRETE			SLOPE PAVING	DITCH CHECKS	RIP-RAP	HEAVY RIP-RAP	STORM SEWER					CATCH BASINS		MANHOLES		INLETS		CATCH BASINS COVERS		MANHOLE COVERS		INLET COVERS		PIPE UNDER DRAIN	STEEL PLATE BEAM GUARD	MARKER POSTS	MARKER POSTS FOR R-O-W	CALCIUM CHLORIDE SURFACE TREATMENT	TOPSOIL	SALVAGED TOPSOIL	FERTILIZER	SEEDING	SODDING	
	MORTAR	DRY																	CURB	CURB AND GUTTER	SIDE WALK									TYPE	TYPE	TYPE	TYPE	TYPE	TYPE	TYPE	TYPE	TYPE	TYPE	TYPE	TYPE											
	51801	51810	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	60101	601	6020	6040	6050	60601	60602	60	60	60	60	60	6110	6110	6111	6111	6112	6112	6113	6113	6115	6115	6116	6116	612	61410	61421	61422	62301	6250	62505	62901	63001	63101	
	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	L.F.	L.F.	EACH	EACH	TON		S.Y.	CWT.	S.Y.	S.Y.	

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	

I-90-8(3)275 4-54

BRONZE PLATE SET BY U.S. ENGRS IN CONC. ENDWALL CORNER LOCATED 3716.6' NORTH OF THE REFERENCE (℄ OF MEDIAN) (COMPUTED DISTANCE).

CORNER 3107.7' NORTH OF REFERENCE LINE
#WITNESS CONC. MON. 29.04' WEST OF CORNER

T16N R8W 12 7 13 18 T16N R7W

T16N R8W 11 12 14 13 T16N R7W

LOCK & DAM NO. 7

EARTH DAM

1000' SPILLWAY

EARTH DAM

LOT 1 U.S.A.

U.S.A. U.S.A. U.S.A.

C. JOLIVETTE

LOT 3 C. JOLIVETTE

T O W N O F C A M P B E L L

ORIG. GOVT. LOT MEANDER LINE

T16N - R8W - 4TH P.M.

T16N - R7W - 4TH P.M.

FRENCH IS. CEMETERY

STATE OF WISCONSIN / STATE OF MINNESOTA

M I S S I S S I P P I R I V E R

AMBROSE HICKEY ET AL LOT 2

U.S.A. U.S.A.

BESSIE LAWRENCE

P.L. P.L. P.L.

SE1/4-NW1/4 U.S.A.

LOT 5 U.S.A.

LOT-2 RUTH BAUMGARTNER

PL 53+02 NORTH

2" G.I. PIPE SET BY U.S.B.S. 1078.7 FT. NORTH OF REF. LINE

66+27.3

LOT 3 U.S.A. TRACT L-3

8.43 ACRES REMAINING

NW1/4-SW1/4 U.S.A. TRACT L-57

NE1/4-SW1/4 U.S.A.

LOT 6 U.S.A.

175' MEDIAN 30' R

SEC. 34-T10N-R4W 5TH P.M. MINNESOTA TOWNSHIP ORGS SURVEY

LOT 1 ISLAND 98

GEORGE W. JOLIVETTE 96°-41'-42"

N 83°-23'E

60+82

23.00

R/W REF. LINE ℄ OF MEDIAN

P.L. P.L. P.L.

175' 175' 175'

LANDLOCKED 0.11 ACRES

126

53+02

62.66 ACRES REMAINING

LOT 1 ALSO REFERRED TO AS SE1/4-SE1/4

ISLAND 98

LOT 4 23.32 ACRES

RUTH BAUMGARTNER SW1/4-SW1/4

T16N R8W 14 13 23 24

U.S.A. SE1/4-SW1/4

R O U N D L A K E

U.S.A. LOT 7

F R E N C H L A K E

T16N R7W 13 18 24 19

1230'

2485'

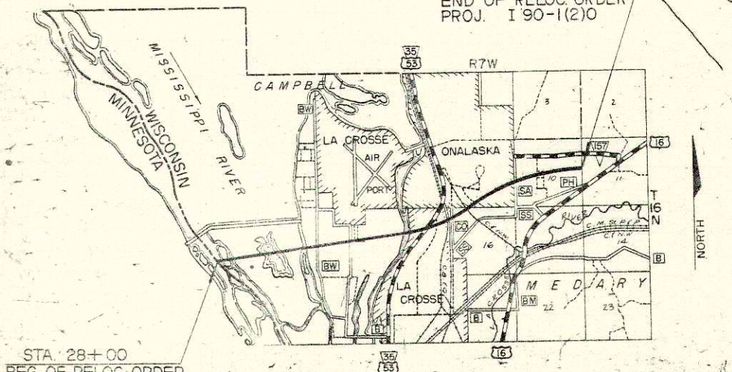
SEE SHEET 4 FOR DETAIL IN THIS AREA

INTERSTATE UNDERPASS

STA. 28+00
BEG. OF RELOC. ORDER
PROJ. I 90-1(2)0
= MINNESOTA STATIONING
520+47.3 FROM THE WEST.

STA 329+50.6
END OF RELOC. ORDER
PROJ. I 90-1(2)0

STA. 28+00
BEG. OF RELOC. ORDER
PROJ. I 90-1(2)0



LOCATION SKETCH

0 1/2 1 2 MILES

NORTH

SCHEDULE OF LANDS AND INTERESTS REQUIRED				
PAR.	OWNER	ACRES	INTEREST REQUIRED	NO ACCESS
1	U.S.A. (DEPT. OF INTERIOR FISH & WILD LIFE SERVICE)	87.61	HWY EASEMENT	✓
2	GEORGE W. JOLIVETTE	7.45	FEE SIMPLE	✓
126	THOMAS A. BAUMGARTNER ET AL	0.60	" "	✓

NOTE: NO DIRECT ACCESS PERMITTED BETWEEN THE MAIN ROADWAYS OR RAMPS OF THE INTERSTATE HIGHWAY, AND ABUTTING PROPERTIES.

SYMBOL TO SHOW ACCESS RIGHTS ACQUIRED IS SHOWN THUS: ——|——

BEARINGS SHOWN ON THIS PLAT ARE THE TRUE BEARINGS OF EACH TANGENT TO THE NEAREST MINUTE.

STATE HIGHWAY COMMISSION OF WISCONSIN

PLAT OF RIGHT OF WAY REQUIRED

PROJECT I 90-1(2)0

LA CROSSE - TOMAH - ROAD
(MINNESOTA-WISCONSIN STATE LINE - U.S.H. 16)
INTERSTATE HIGHWAY 90 LA CROSSE COUNTY

NOVEMBER 26, 1963
AUGUST 14, 1963
MAY 20, 1963
MARCH 6, 1963
JANUARY 23, 1963
DECEMBER 5, 1962
OCTOBER 31, 1962
SEPTEMBER 27, 1962
DATED AUGUST

SCALE 0 200 600 FT.

LENGTH 2.98 MILES

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	4.1	

I-90-8(3)275 4.1-54

SCHEDULE OF LANDS AND INTERESTS REQUIRED

PAR.	OWNER	ACRES	INTEREST REQUIRED	NO ACCESS
3	RUTH BAUMGARTNER	18.96	FEE SIMPLE	✓
4	NITA JOLIVETTE	0.14	" "	
5	MARGARET M. BENJAMIN ET AL	4.49	" "	✓
6	JOSEPH CALLAWAY ET AL	0.03	" "	
7	HENRY JOLIVETTE	0.05	" "	

T16N R8W 12 7 13 18 R7W T15N

CORNER 3107.7 FEET NORTH OF THE REFERENCE LINE

GOVT. LOT 2
29.00 ACRES

SW 1/4 - NW 1/4

SE 1/4 - NW 1/4

N 89°-50' E

℄ CALLAWAY BLVD.

JOSEPH CALLAWAY ET AL

RUTH BAUMGARTNER

26+34

N 0°-31' W

PL (FENCE)

24+68

S 86°-08' W

NITA JOLIVETTE

0.81 ACRES REMAINING

END ACCESS CONTROL

INTERSTATE ℄ STA 105+94.48
19+99.87 ℄ C.T.H. "BW"

PL 105+94.48

PL 236'

22+32

LANDLOCKED 10.02 ACRES

N 83°-22' E

83°-53'-20"

INTERSTATE UNDERPASS

℄ OF MEDIAN

R MEDIAN EDGE OF PAVEMENT EAST BOUND LANE

PL 99+65

GOVT. LOT 1
9.08 ACRES

RUTH BAUMGARTNER

16+00

15+00

81.0'

11+58

PL 11+58

IDENTICAL POINTS

C.T.H. "BW" ℄

SEVERED 33.3 ACRES

NW1/4 - SW1/4

W1/2 - NE1/4 - SW1/4

(FENCE)

HENRY JOLIVETTE

GOVT LOT 1

NW-SW

SYMBOL TO DENOTE NO ACCESS IS SHOWN THUS

BEARINGS SHOWN ON THIS PLAT ARE THE TRUE BEARINGS OF EACH TANGENT TO THE NEAREST MINUTE.

NOTE: NO DIRECT ACCESS PERMITTED BETWEEN THE MAIN ROADWAYS OR RAMPS OF THE INTERSTATE HIGHWAY, AND ABUTTING PROPERTIES.

1ST ADDN. WEST

2ND AVE. WEST

FIRST ADDITION TO ISLAND PARK ADDN. TOWN OF CAMPBELL

CALLAWAY BOULEVARD

BLK 6

1 2 3 4 5 6 7 8 9

RALPH M. JOHNSON

ROBERT ATKINSON

SEVERED 0.96 ACRES

ROAD CLOSED

PL 125+54

PL 132+14.64

C.T.H. "B"

S 02°-10' E

7+45.13

6+98.63

8+47.5

8+35.13

11.58 ACRES REMAINING

MARGARET M. BENJAMIN ET AL

E1/2 - NE1/4 - SW1/4

STATE HIGHWAY COMMISSION OF WISCONSIN

PLAT OF RIGHT OF WAY REQUIRED

PROJECT I 90-1(2)0

LA CROSSE - TOMAH ROAD
(MINNESOTA - WISCONSIN STATE LINE - U.S.H. 16) NOVEMBER 26, 1963
INTERSTATE HIGHWAY 90 LA CROSSE COUNTY AUGUST 14, 1963
MAY 20, 1963
MARCH 6, 1963
JANUARY 23, 1963
DECEMBER 5, 1962

SCALE 0 100 200 FT.

LENGTH MILES DATED OCTOBER 31, 1962

B.P.R. DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4	I-90-B(3)275	5	54

U.S.A.

WATER

66+27.3

ROUND LAKE

U.S.A.

SCATTERED TREES

POT 80+22.0 T.L.
2"x 2" STK.

Ø 57.5°

35.5°

8" ELM

10" MAPLE

175'

WATER

ISLAND TREES

N

WATER

U.S.A.

WATER

TREES

ISLAND

30.5°

15" POPLAR

2"x 2" STK

P.O.T. 91+38.35 T.

40° OAK

PT WB 64+02.29 BK
= 64+02.03 AH

B-32-47

W.B. R

DRAIN

TRANSIT LINE

DRAIN

DRAIN

N. 83° 22' E.

65

70

E.B. R

75

80

N. 83° 22' E.

85

90

PT EB 64+02.29 BK
= 64+02.03 AH

B-32-46

BEG. OF PROJ. I-90-8(3)275
STA. 66+38.25

P.L.

WATER

U.S.A.

EXCEPTION TO NET ℄ LENGTH
STA. 72+01.75 TO STA. 97+63.42

WATER

ISLAND

175'

WATER

TREES

WATER

ISLAND TREES

U.S.A.

WATER

ISLAND

TREES

BENCH MARKS

STA. 80+84 PK NAIL IN MULT. MAPLE 367' RT. T ELEV. 634.32
STA. 92+93 PK NAIL IN 15" BIRCH 425' RT. T ELEV. 637.67

NET LENGTH CENTERLINE STA 66+38.25 TO STA. 72+01.75 = 563.50 LIN. FT.

650.05 50.35 50.65 50.95 51.25 51.55 51.85 52.15 52.45 52.75 53.05 53.19 53.34 53.56 53.72 53.80 54.39 53.81 53.74 53.60 53.39 53.27 53.12 52.84 52.56 52.28 52.00 51.72 51.44 51.17 50.97 50.84 50.80 50.83 50.96

P.C.V.C. 72+46.55
P.I.V.C. 76+46.55
P.I.V.C. 80+46.55

660
650
640
630

+0.3%

B-32-47

800' V.C.

-0.28%

1,000' V.C.

P.C.V.C. 87+50
651.30

P.I.V.C. 92+50
649.92

HIGH WATER 644.5

WESTBOUND

STA. 69+20.00 B-32-47
80'-100'-100'-100'-100'-80' SPANS
30' ROADWAY I-BEAM BRIDGE
SEE DRAWINGS X 27772-X27786

NORMAL WATER 631.1

MARSH

+78

+58.5

+0.3%

B-32-46

STA. 73+00
1-18" X 84' C.M.C.P.
APRON ENDWALL INLET

800' V.C.

-0.28%

STA. 85+00
1-18" X 82' C.M.C.P.
APRON ENDWALL
INLET

STA. 91+00
1-18" X 78' C.M.C.P.
APRON ENDWALL INLET

HIGH WATER 644.5

EASTBOUND

STA. 69+20.00 B-32-46
80'-100'-100'-100'-100'-80' SPANS
30' ROADWAY I-BEAM BRIDGE
SEE DRAWINGS X 27756 - X27771

NORMAL WATER 631.1

MARSH

1 2 3 4 65 6 7 8 9 70 1 2 3 4 75 6 7 8 9 80 1 2 3 4 85 6 7 8 9 90 1 2 3

PLATE I—PLAN-PROFILE B.P.R. STANDARD

B.P.R. DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4	I-90-8(3)275	6	54

PLAN — SURVEYED 11/77; PLOTTED 4/78; ALIGNMENT CHECKED 4/78; FIELD CHECKED 4/78; NOTE BOOK —; NO. —

PROFILE — SURVEYED 11/77; PLOTTED 4/78; FIELD CHECKED 4/78; NOTE BOOK —; NO. —

U.S.A.

TREES

WATER

205'

145'

90

95

100

105

110

115

120

180'

30'

B-32-49

B-32-48

P.O.T. 92+81.10 ℄ 2"X2" STK. 13.5 9.2 12" TWIN MAPLE 8" MAPLE

P.O.T. 96+58.94 ℄ 2"X2" STK. 32.0 MULTIPLE OAK MULTIPLE OAK

FRENCH

P.L. 99+65

P.O.T. 100+54.20 ℄ 4" CONC. MON. WITH BOLT 16.8 8" OAK

P.O.T. 106+02.89 ℄ IRON PIN ▶38 POWER POLE TEL. POLE

RUTH BAUMGARTNER

STA. 100+55
END OF PROJ. I90-1(11)0

PAVED DITCH

CULT.

S.M.H.

DRY WELL

SEPTIC TANK

B-32-51
106+00.91 W.B. 90
= 20+60.21 C.T.H. "BW"

106+02.89 ℄ =

105+94.48 E.B. ℄ =
19+99.87 C.T.H. "BW"

N. 83° 22' E

W. B. ℄

E. B. ℄

TRANSIT LINE

END OF PROJ. I-90-8(3)275
STA. 99+00.58

ISLAND TREES

SLOUGH

NITA JOLIVETTE

C.T.H. "BW"

25

PL. +32

PL.

1,666,000 E

681,000 N

GATE

90'

FRENCH ISLAND ROAD

NET LENGTH OF CENTERLINE STA. 97+63.42 TO STA. 99+00.58 = 137.16 LIN. FT.

N

BENCH MARKS

STA 100+55	PK NAIL IN TREE 30' LT. OF EB ℄	ELEV.	660.58
STA 92+93	PK NAIL IN 15" BIRCH 425' RT. ℄	ELEV.	637.67
STA 97+10	PK NAIL IN 24" MAPLE 365' RT. ℄	ELEV.	633.73
STA 100+97	PK NAIL IN 30" ELM 185' RT. ℄	ELEV.	651.46

650.80 50.83 50.96 51.15 51.41 51.76 52.18 52.67 53.17 53.67 54.16 54.66 55.16 55.66 56.16 56.66 57.16 57.66 58.16 58.66 59.16 59.66 60.10 60.44 60.70 60.86 60.93 60.91 60.81 60.61 60.31 59.93

90 1 2 3 4 95 6 7 8 9 100 1 2 3 4 105 6 7 8 9 110 1 2 3 4 115 6 7 8 9 120 1 2

+91 +70.5 +55

P.I.V.C. 97+50 652.42

P.I.V.C. 92+50 649.92

1000' V.C.

1100' V.C.

0.50%

B-32-49

B-32-48

WESTBOUND

EASTBOUND

HIGH WATER 644.5

STA. 98+32.00 B-32-49
41'-55'-41' SPANS
39° ROADWAY CONTINUOUS R.C. SLAB
SEE DRAWINGS X27352-X27359

STA. 98+32.00 B-32-48
41'-55'-41' SPANS
39° ROADWAY CONTINUOUS R.C. SLAB
SEE DRAWINGS X27343-X27351

NORMAL WATER 631.1

STA. 97+91 100+55
FILL CY.
BORROW CY.

STA 100+00
-18" X 86' C.M.C.P.
APRON ENDWALL INLET

STA. 107+00
1-18" X 156' CLASS III C.P.
APRON ENDWALLS

STA. 119+00
-24" X 160' CLASS III C.P.
APRON ENDWALLS

P.C.V.C. 111+80 659.56

P.C.V.C. 111+80 659.57

+94.48

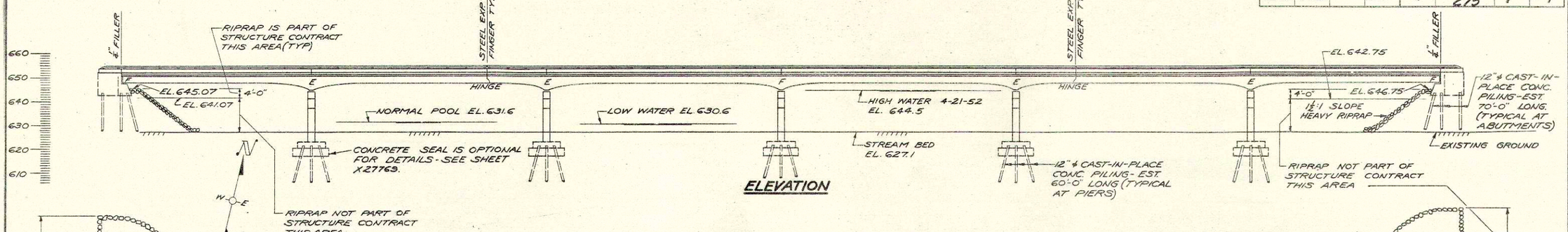
660 650 640 630

FRENCH SLOUGH

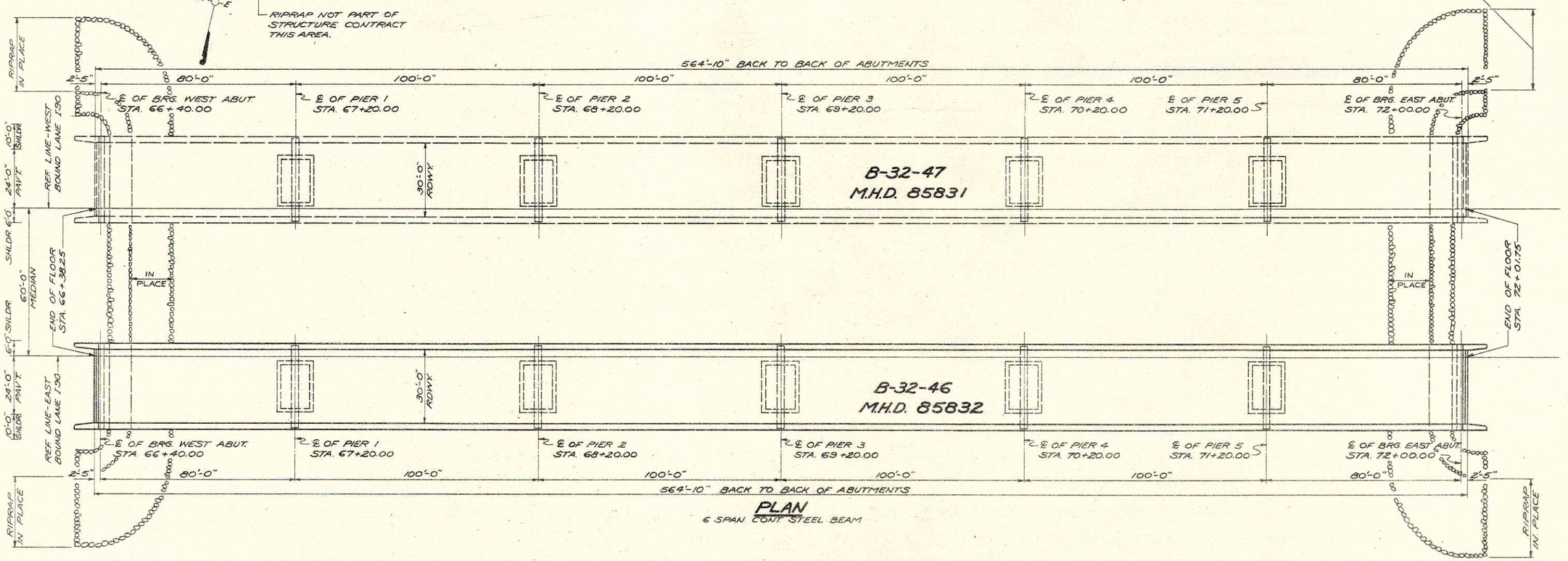
PLATE 1-PLAN-PROFILE B.P.R. STANDARD
DESIGN PROJECTS DEC. 1966

FORM E-B-11-62

COUNTY & HIGHWAY	ROUTE & SECTION	CLASS & AGREEMENT STATE	CLASS & AGREEMENT FEDERAL	B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
32	3908		12.1	4	I-90-8(3) 275	7	54

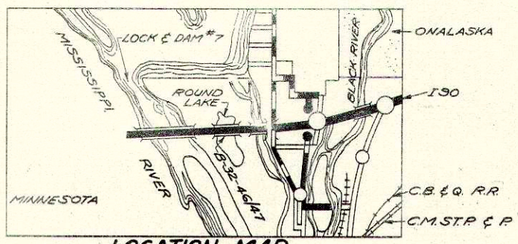


ELEVATION



PLAN

6 SPAN CONT. STEEL BEAM



LOCATION MAP

LIST OF DRAWINGS

REVISED

STATE HIGHWAY COMMISSION OF WISCONSIN

GENERAL PLAN

CO. LA CROSSE — CITY, VIL. OR TN. CAMPBELL — STA. 69+20.00

SECTION 13 — TOWN 16 N — RANGE 8 W

DESIGN SPEC. A.A.S.H.O. '61 — LOADING H20-S16 M90 — CONST. SPEC. 1963

DATE 9-13-63 — DESIGN JME — DRAWN BW — CKD. L. J. G.

RECOMMENDED: H. B. Schultz, WISCONSIN ENGINEER OF BRIDGES — A. E. La Doyle, MINN. STATE BRIDGE ENGINEER

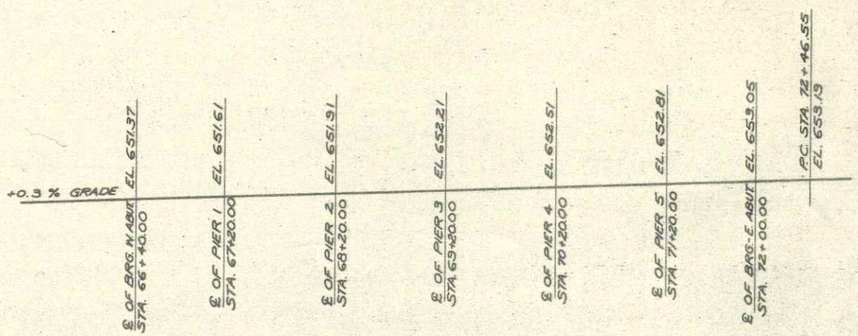
APPROVED: V. J. Fadden, WISCONSIN HIGHWAY ENGINEER — John S. Kranebitter, MINNESOTA CHIEF ENGINEER

WISCONSIN STRUCTURE B-32-46 — SHEET 1 OF 16

MINNESOTA STRUCTURE 85832 — X27756

FORM E-B-12-62

B. P. R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(9) 275	8	54



GRADE LINE EAST BOUND LANE B-32-46

INTERSTATE 190 ALONG REF. LINE EAST BOUND LANE

BENCH MARKS

STA.	DESCRIPTION	ELEV.
56+35	PK NAIL IN 16" MAPLE 225' LT.	633.51
80+84	PK NAIL IN MULT. MAPLE 367' RT. ℄	634.32

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BEVEL EXPOSED EDGES OF CONCRETE 1" UNLESS OTHERWISE SPECIFIED.

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

ALL CONCRETE MASONRY SHALL BE GRADE "AA"; f'_c = 1400 P.S.I. EXCEPT FOR CONCRETE MASONRY SEAL IF USED AT PIERS.

THE SUPERSTRUCTURE SHALL BE TREATED WITH WATER SOLUBLE SILICONE IN ACCORDANCE WITH SECTION 502.3.13 OF THE STANDARD SPECIFICATIONS.

ALL PILING SHALL BE 12"ϕ CAST-IN-PLACE CONC. PILING DRIVEN TO A MIN. BEARING VALUE OF 50 TONS PER PILE AT PIERS & 25 TONS PER PILE AT ABUTS. EST. LENGTH OF ABUT. PILES IS 70'-0" WITH A MIN. PENETRATION OF 50'-0" BELOW STREAMBED. ESTIMATED LENGTH OF PIER PILES IS 60'-0", WITH A MINIMUM PENETRATION OF 40'-0" BELOW BOTTOM OF FOOTINGS OR SEAL.

DRIVE ONE TEST PILE AT EACH OF THE FOLLOWING UNITS; PIER 1, PIER 3 & PIER 5. TEST PILES SHALL BE 90'-0" LONG.

ALL FIELD CONNECTIONS SHALL BE MADE WITH $\frac{3}{4}$"ϕ RIVETS OR HIGH TENSILE STRENGTH BOLTS UNLESS OTHERWISE NOTED.

THE TOP AND SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AS SHOWN ON SHEETS X27755, X27767 & X27770.

CYLINDRICAL TYPE STEEL PILE SHELLS SHALL HAVE A MINIMUM NOMINAL (AVERAGE) SHELL THICKNESS OF 0.188 INCH AND CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION A252, GRADE 2.

EXPANSION JOINT FILLER SHALL CONFORM TO AASHO DESIGNATION M153, TYPE II.

HOT POURED ELASTIC TYPE JOINT SEALER SHALL CONFORM TO ASTM DESIGNATION, D1190.

TOTAL ESTIMATED QUANTITIES

	BID ITEMS	UNIT	SUPER	W. ABUT.	PIER 1	PIER 2	PIER 3	PIER 4	PIER 5	E. ABUT.	TOTAL
	EXCAVATION FOR STRUCTURES	C.Y.	——	10	——	——	——	——	——	10	20
	CONCRETE MASONRY	C.Y.	533	54	——	——	——	——	——	54	641
	BAR STEEL REINFORCEMENT	LB.	171,920	1,590	——	——	——	——	——	1,590	175,100
	STRUCTURAL CARBON STEEL	LB.	543,600	——	——	——	——	——	——	——	543,600
	STRUCTURAL LOW ALLOY STEEL	LB.	16,350	——	——	——	——	——	——	——	16,350
	CARBON STEEL FORGINGS	LB.	510	——	——	——	——	——	——	——	510
*	LUBRICATED BRONZE PLATES	LB.	433	——	——	——	——	——	——	——	433
	BEARING PADS	S.F.	45	——	——	——	——	——	——	——	45
**	CAST-IN-PLACE CONC. TEST PILING	L.S.	——	——	——	——	——	——	——	——	1
	CAST-IN-PLACE CONC. PILING-DEL.	L.F.	——	310	840	900	840	900	840	910	6,140
	CAST-IN-PLACE CONC. PILING-DR.	L.F.	——	310	840	900	840	900	840	910	6,140
	TUBULAR RAILING-TYPE A	L.F.	1,160	——	——	——	——	——	——	——	1,160
	FLOOR DRAINS-TYPE A	EA.	16	——	——	——	——	——	——	——	16
	PIERS	L.S.	——	——	——	——	——	——	——	——	1
	HEAVY RIPRAP	C.Y.	——	70	——	——	——	——	——	70	140
	NON-BID ITEMS										
	AL. OR ZINC PLATE	S.F.	82	——	——	——	——	——	——	——	82
	FILLER	SIZE	——	——	——	——	——	——	——	——	¼"

* INCLUDES WEIGHT OF BRONZE WASHERS.

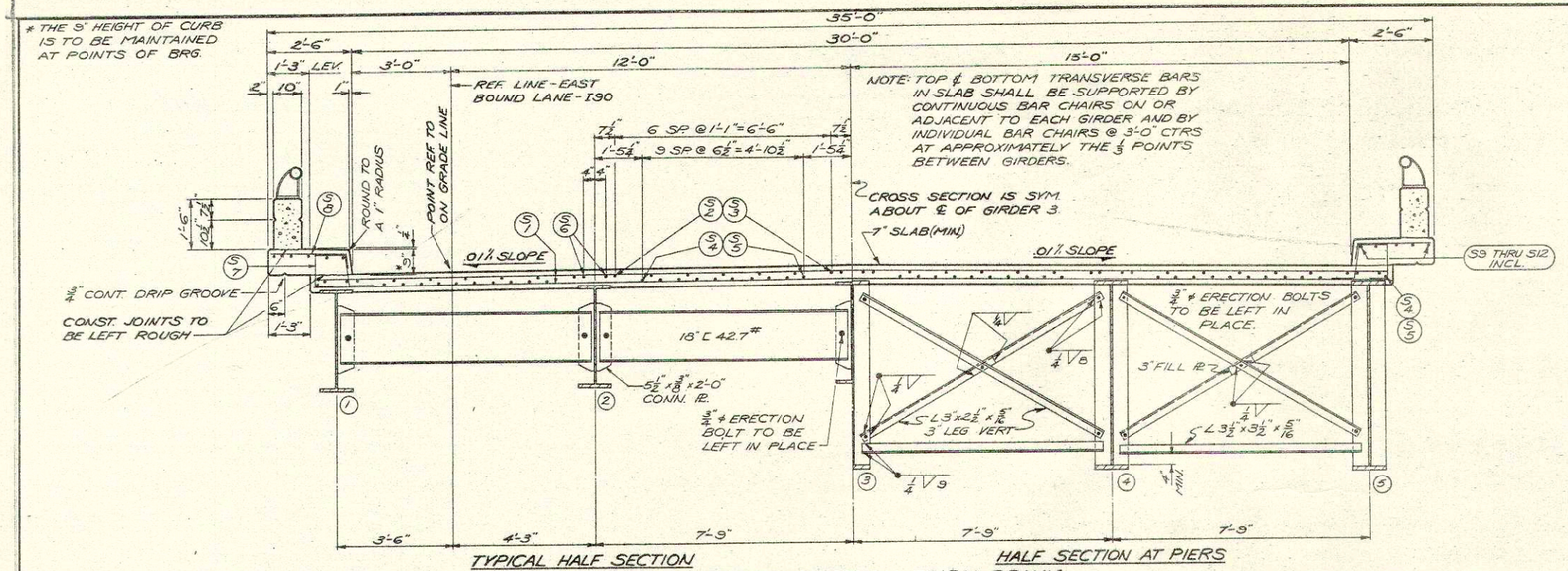
** SEE GENERAL NOTES FOR LENGTH, NUMBER AND LOCATION.

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	TOTAL ESTIMATED QUANTITIES
	DESIGN SPEC. A.A.S.H.O. '61 · LOADING H20-S16 MOD · CONST. SPEC. 1963
	DATE 9-13-63 · DESIGN JME · DRAWN BW · CKD. L. J. G.
	STRUCTURE B-32-46 · SHEET 2 OF 16

X 27757

FORM E-B-12-62

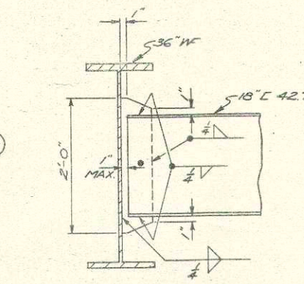
B. P. R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(13) 275	9	54



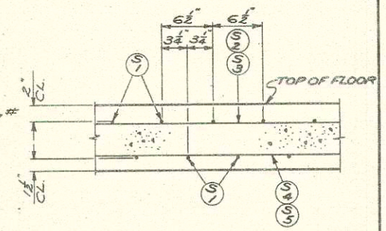
TYPICAL HALF SECTION

HALF SECTION AT PIERS

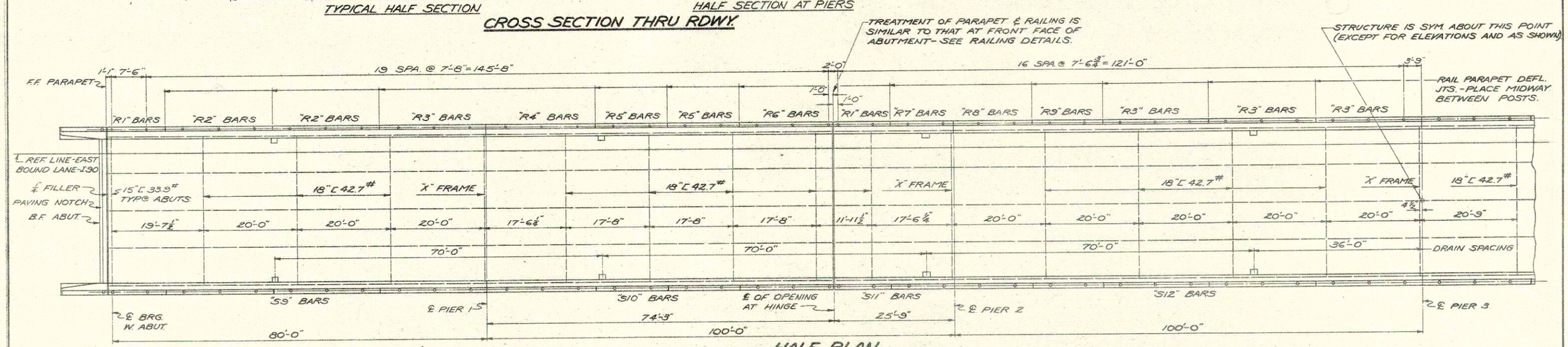
CROSS SECTION THRU RDWY.



CONNECTION DETAILS



LONG. SECTION THRU FLOOR



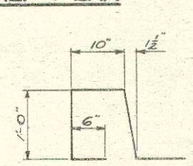
HALF PLAN

BILL OF BARS 171,920 #'s

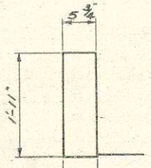
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

POUR	MK.	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
SUPERSTRUCTURE	S1	2069	6	32-0	6½	SLAB-TRANS.-TOP & BOTTOM	
	S2	280	5	32-3	SHOWN	" -LONG.-TOP-END SECTIONS	
	S3	196	5	37-3	"	" " " -MID SECTION	
	S4	420	5	32-3	"	" " -BOTTOM-END SECTIONS	
	S5	294	5	37-3	"	" " " -MID SECTION	
	S6	50	5	15-0	"	" " -TOP-SYM. ABOUT PIERS	
	S7	1122	5	4-3	1-0	CURB-TRANS	A
	S8	1122	6	2-6	1-0	" "	B
	S9	60	6	28-3	6	" -LONG.	
	S10	60	6	26-0	6	" "	
	S11	20	6	25-3	6	" "	
	S12	60	6	34-3	6	" "	
	S13	1122	5	5-6	1-0	" & RAILING PARAPET	C
	S14	8	4	6-9	SHOWN	END DIAPHRAGM	
	S15	40	5	2-9	1-6	" "	D

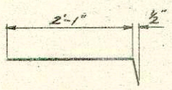
POUR	MK	NO	SIZE	LENGTH	SPACING	LOCATION
RAILING PARAPET	R1	32	5	12-0	SHOWN	RAILING PARAPET
	R2	32	5	22-9	"	" "
	R3	64	5	22-3	"	" "
	R4	16	5	23-0	"	" "
	R5	32	5	15-0	"	" "
	R6	16	5	13-9	"	" "
	R7	16	5	13-0	"	" "
	R8	16	5	16-6	"	" "
	R9	16	5	14-9	"	" "



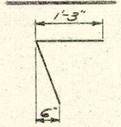
DETAIL A



DETAIL C



DETAIL B



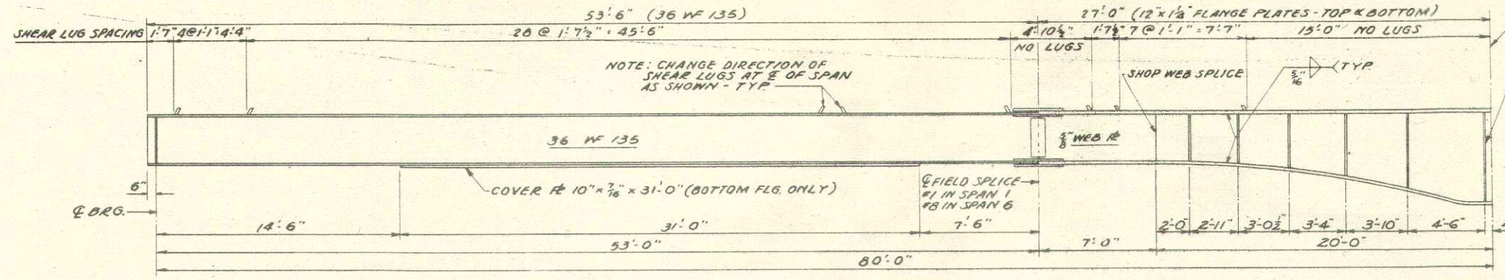
DETAIL D

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	SUPERSTRUCTURE
	DESIGN SPEC. A.A.S.H.O. '61 LOADING H20-S16 MOD. COMPT. SPEC. 1963
	DATE 5-1963 DESIGN B.M. DRAWN B.W. CKD. L.J.G.
STRUCTURE B-32-46	SHEET 3 OF 16

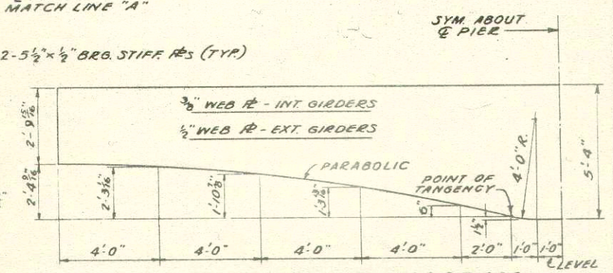
X 27758

FORM E-B-12-62

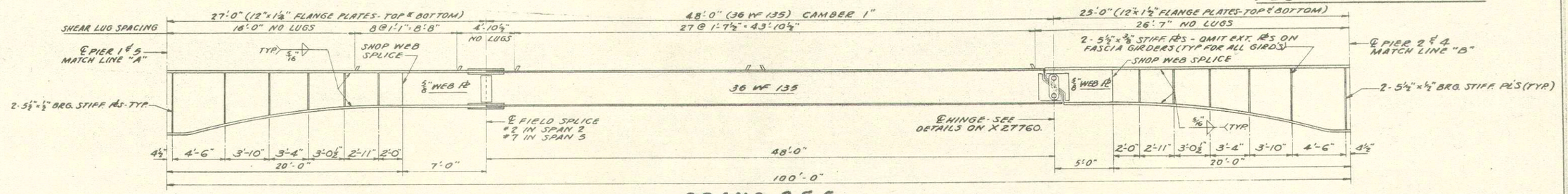
S.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3) 275	10	54



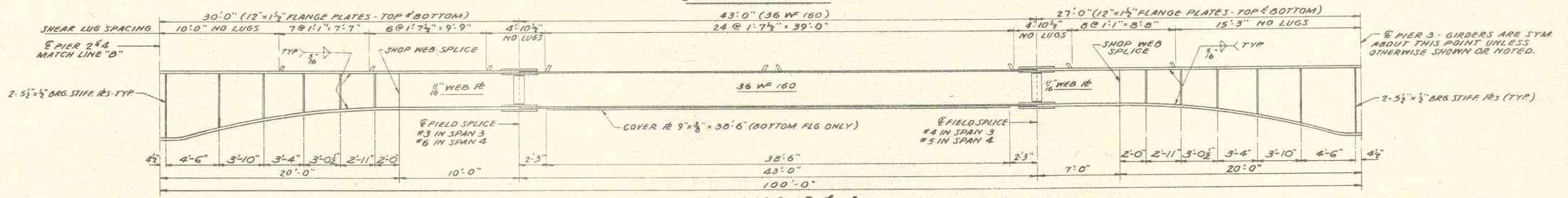
SPANS 1 & 6



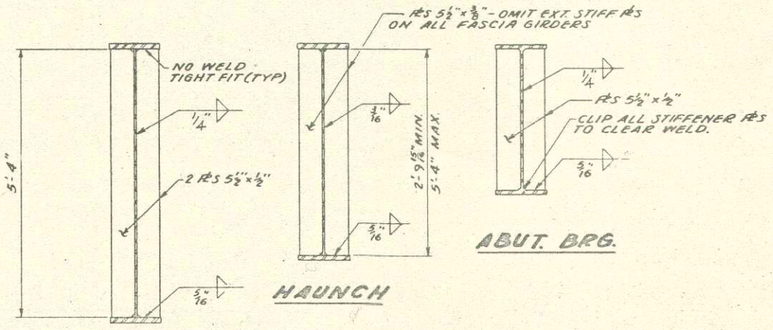
WEB CUTTING DIAGRAM



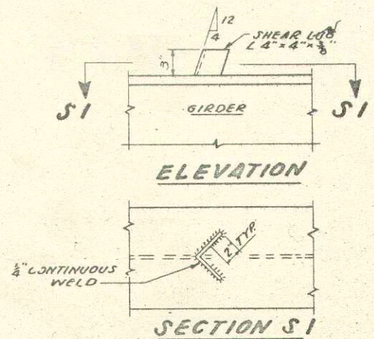
SPANS 2 & 5



SPANS 3 & 4

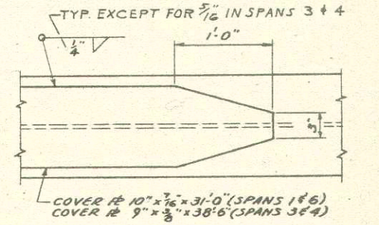


STIFFENER DETAILS



SHEAR LUG DETAILS

NOTES:
- DETAILS OF SHOP WEB SPLICES SHALL BE SHOWN ON THE SHOP DRAWINGS.
- HINGE DETAILS AND FIELD SPLICE DETAILS ARE SHOWN ON SHEET X27760.
- CAMBER 36 WF 135 1" IN SPANS 2 AND 5 ONLY. CAMBER SHALL CONFORM TO AN ARC OF A CIRCLE.



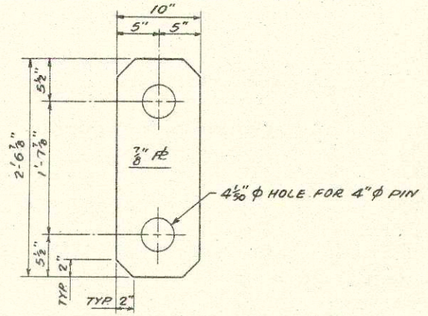
COVER PLATE DETAILS

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	GIRDER DETAILS
DESIGN SPEC A.A.S.H.O. '61	LOADING H20 S16 MOD	CONST. SPEC 1963
DATE 3-1963	DESIGN B.M.	DRAWN BW	CKD. L.J.G
STRUCTURE B-32-46	SHEET 4 OF 16

X 27759

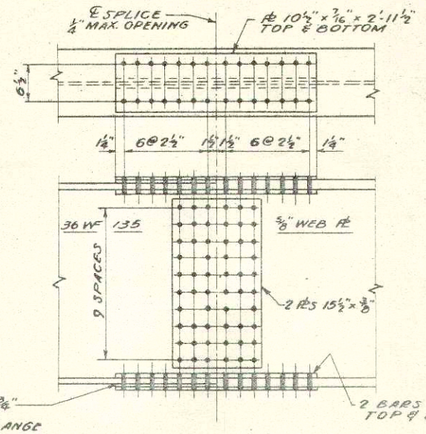
FORM E-B-12-62

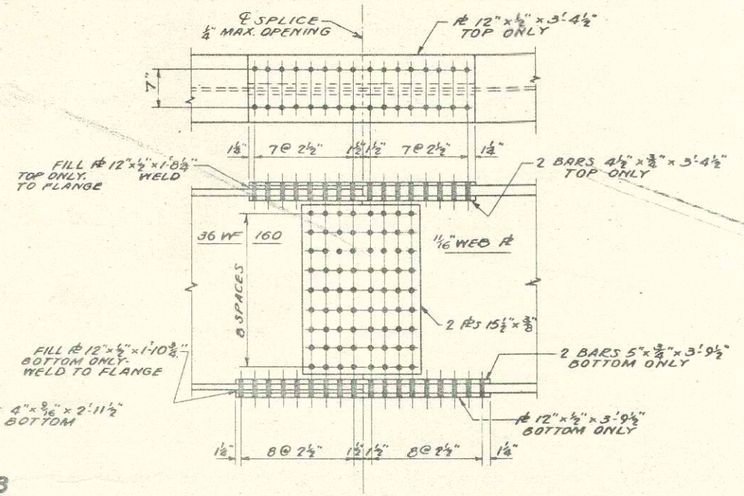
B P R DIVISION	PROJECT	SHEET NO	TOTAL SHEETS
4	I-90-8(3) 275	11	54



HANGER PLATE

2 REQ'D PER HINGE

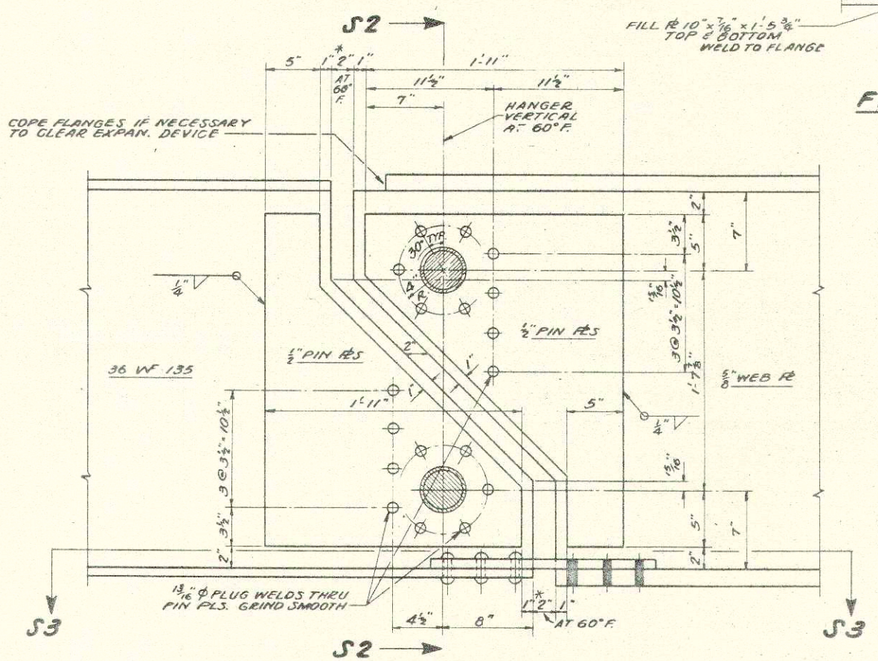




FIELD SPLICE 1, 2, 7 & 8

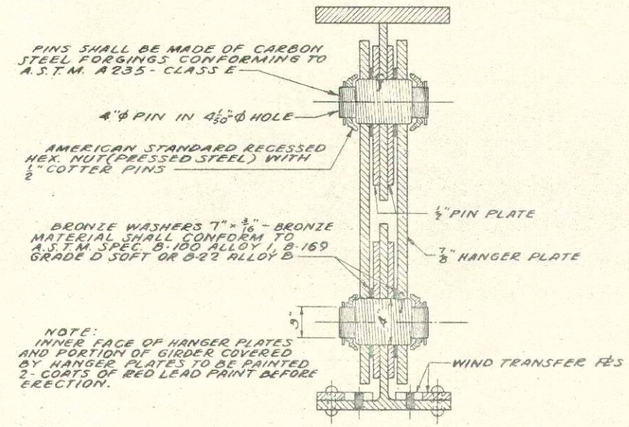
FIELD SPLICE 3, 4, 5 & 6

NOTE:
ALL FIELD SPLICE CONNECTIONS SHALL BE MADE WITH ¾" ϕ HIGH TENSILE STRENGTH BOLTS.



HINGE DETAIL

HANGER PLATES NOT SHOWN



SECTION S2

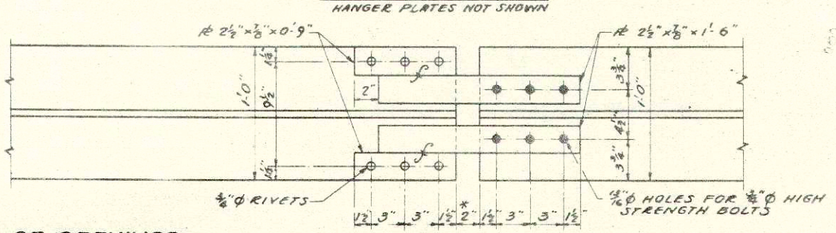


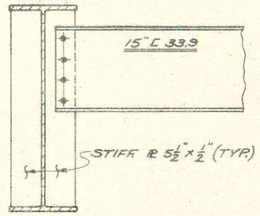
*TABLE OF OPENINGS

0° F.	20° F	40° F	60° F	80° F	100° F
3 5⁄16"	2⅞"	2 7⁄16"	2"	1 9⁄16"	1⅛"

CONTACT AREA OF WIND TRANSFER PLATES TO BE FINISHED.

SECTION S3

TYPICAL AT ALL HINGE LOCATIONS



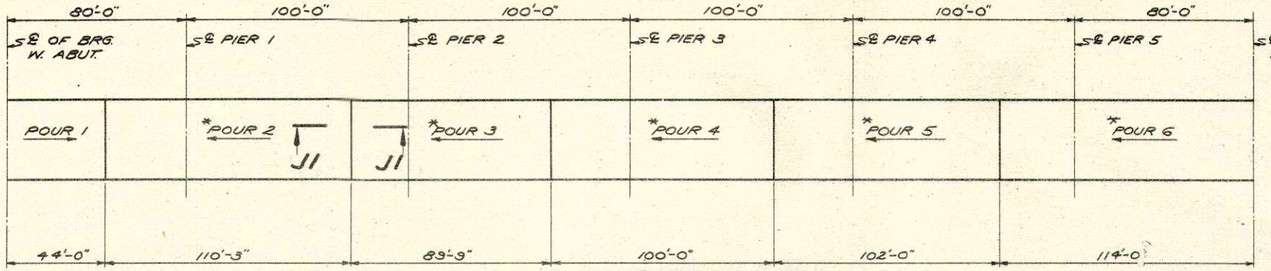
CHANNEL CONNECTION DETAIL AT ABUTMENTS

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	GIRDER DETAILS
	DESIGN SPEC. AASHO '61 SPECIFICATIONS M130.3.16 MOD CONST. SPEC. 1963
	DATE 9-1963 DESIGN D. M. DRAWN B.W. CKD. L.J.G.
STRUCTURE B-32-46	SHEET 5 OF 16

X 27760

FORM E-B-12-62

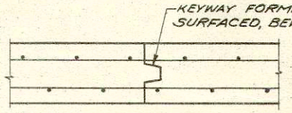
B. P. R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(31) 275	12	54



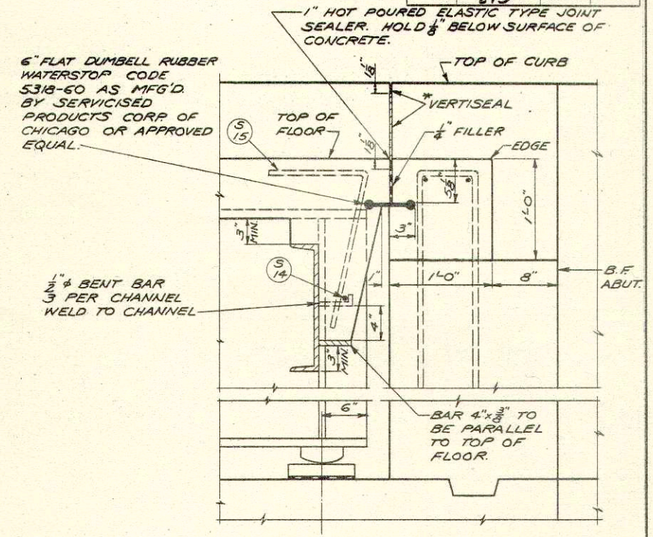
* DIRECTION OF POUR MAY BE REVERSED IF PORTION OF POUR FROM THE PIER CAN BE COMPLETED IN A 4 HOUR PERIOD.

POURING DIAGRAM

TWO OR MORE POURS MAY BE COMBINED AND TRANSVERSE CONSTRUCTION JOINTS OMITTED IF THE POUR FOR AN ENTIRE SPAN OR THE PORTION OF A SPAN TO A CONST. JOINT CAN BE COMPLETED WITHIN 4 HOURS AFTER CONCRETE OVER THE ADJACENT PIER IS PLACED.

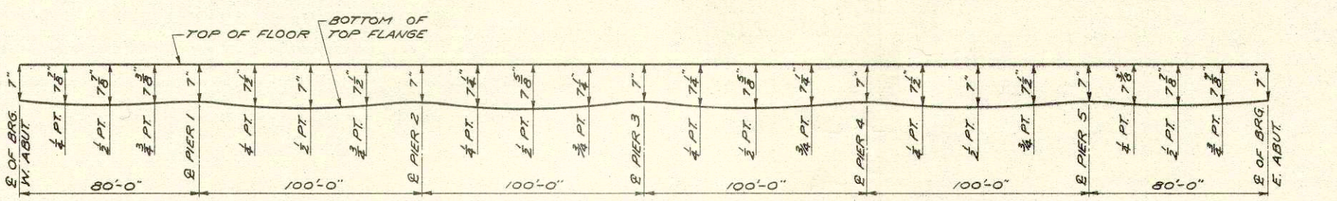


SECTION J1



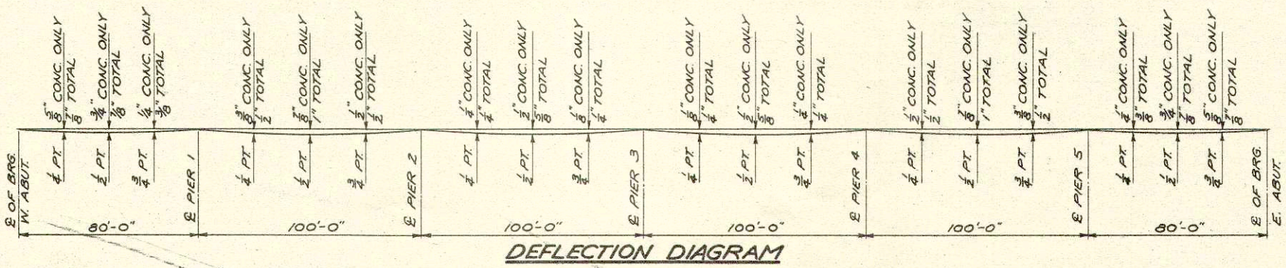
SECTION AT ABUTMENTS

* SEAL CURB JOINT WITH BLACK COLD APPLIED JOINT SEALER "VERTISEAL" AS MANUFACTURED BY THE SERVICISED PRODUCTS CORP. OF CHICAGO, ILL. OR AN APPROVED EQUAL.

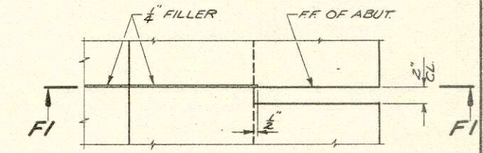


SLAB THICKNESS DIAGRAM

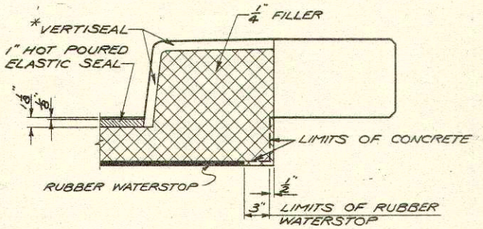
SLAB THICKNESS FIGURES SHOWN ARE THEORETICAL AND ARE SUBJECT TO CORRECTION TO MEET VARIABLE FIELD CONDITIONS.



DEFLECTION DIAGRAM



TOP VIEW OF CURB AT ABUTMENTS



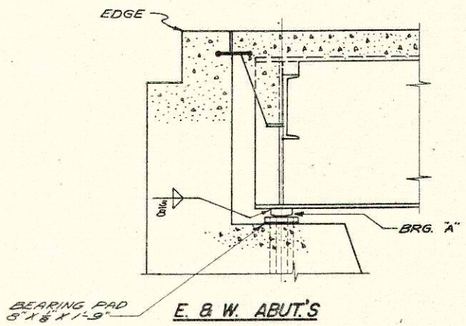
SECTION F1

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	POURING, SLAB THICKNESS & DEFLECTION DIAGRAMS
	DESIGN SPEC. A.A.S.H.O. '61 · LOADING H20-S16 MOD · CONST. SPEC. 1963
	DATE 3/13/63 · DESIGN JM · DRAWN BW · CKD. L. J. G.
	STRUCTURE B-32-46 · SHEET 6 OF 16

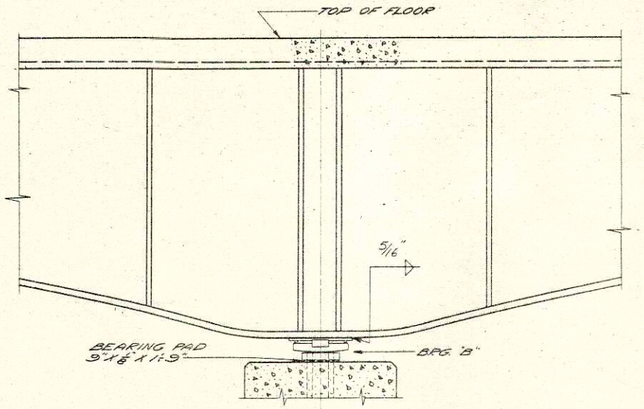
X 27761

FORM E-B-12-62

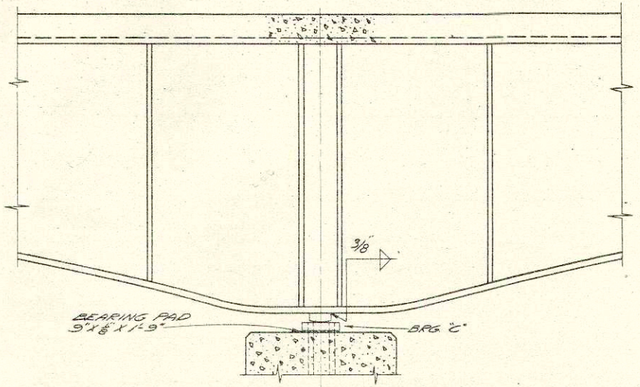
B. P. R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3) 275	13	54



E. & W. ABUT.'S

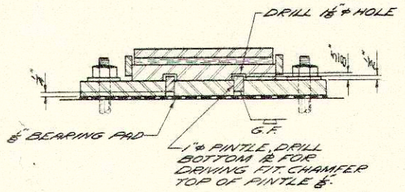


PIERS 1,2,4 & 5

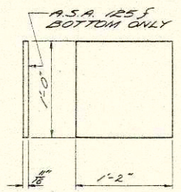


PIER 3

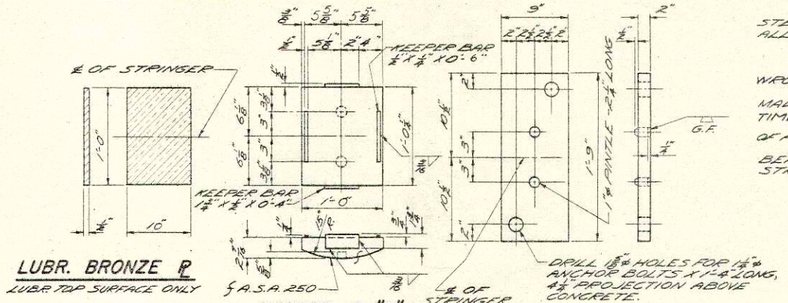
LONGITUDINAL SECTION



TYPICAL PINTLE DETAIL – ALL BRG.'S



TOP ℄ "B"



LUBR. BRONZE ℄ (LUBR. TOP SURFACE ONLY)

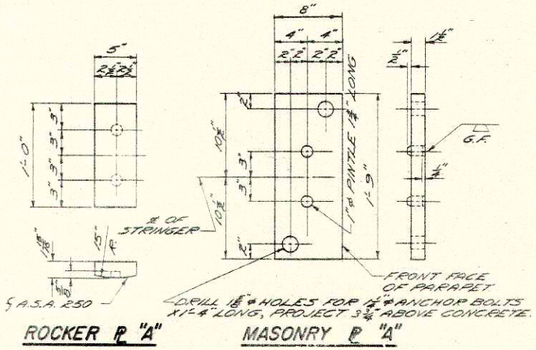
ROCKER ℄ "B"

MASONRY ℄ "B"

BEARING TYPE "B"

20 REQ'D.

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

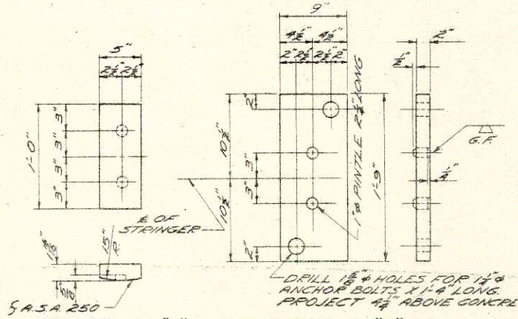


ROCKER ℄ "A"

MASONRY ℄ "A"

BEARING TYPE "A"

10 REQ'D.



ROCKER ℄ "C"

MASONRY ℄ "C"

BEARING TYPE "C"

5 REQ'D.

GENERAL NOTES

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

ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL SURFACES MARKED ƒ SHALL BE MACHINE FINISHED.

ANCHOR BOLTS SHALL BE THREADED 3". PROVIDE ONE 1¼" STANDARD WROUGHT WASHER & ONE HEX. NUT PER BOLT.

ALL MATERIAL EXCEPT ANCHOR BOLTS, NUTS & WASHERS SHALL BE MADE OF A242 STEEL WITH A CORROSIVE RESISTANCE OF 4 OR MORE TIMES THAT OF A36 STEEL.

THE TOP 4½" OF ANCHOR BOLTS, WASHERS & NUTS SHALL BE GALVANIZED.

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

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	LONG. SECTION & BEARINGS
	DESIGN SPEC. A.A.S.H.O. 61 LOADING H20-S16 MOD. CONST. SPEC. 1963
	DATE 9/15/63 DESIGN J.M. DRAWN BW CKD. L. J. G.
STRUCTURE B -32 -46	SHEET 7 OF 16

X27762

FORM E-B-12-62

B. P. R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3) 275	14	54

LEGEND

- # 1. FINGER ℞ 14" x 1/2"
- # 2 WEB ℞ 10" x 1/2"
- # 3 FLANGE ℞ 4" x 1/2"
- 4. DIAPHRAGM ℞ 3 1/2" x 3/8" @ ℄ OF GIRDERS AND 1/3 POINTS BETWEEN GIRDERS.
- 5 ℞ 9" x 3/8" x 2'-1"
- 6. 13/16" ϕ HOLES FOR 3/4" ϕ BOLTS. DRILL HOLES IN GIRDER FLANGES IN FIELD.
- 7 ℞ 9" x 3/8" x 1'-6 1/2"
- 8. 5/8" □ ANCHOR BARS @ 0'-9" ALTERNATE CTRS. EXTEND 1'-0" INTO FLOOR.
- # 9. MUD PLATES 5" x 1/4"
- 10. 3/8" SHAPED ℞
- 11. LAMINATED SHIMS - 1/4" MIN.
- # 12. ℞ 9" x 3/8" - CUT TO CURB LIMITS AS SHOWN.
- # 13. ℞ 8 3/8" x 3/8" - " " " " " " " " " "
- # 14. ℞ 12" x 3/16" - BEND DOWN FLUSH WITH FACE OF CURB AS SHOWN.
- # 15. ℞ 6 3/8" x 3/16" - " " " " " " " " " "
- # 16. ℞ 2" x 3/16" - " " " " " " " " " "
- 17. 5/8" □ ANCHOR BARS @ 0'-9" CTRS. 1'-6" LONG 6 PER JOINT.
- 18. 1/2" ϕ BOLT. TACK WELD NUT TO ℞ 15. GREASE FOR EASY REMOVAL. PROVIDE 9/16" x 1 1/2" SLOTTED HOLE IN ℞ 14 AND 9/16" ϕ HOLE IN ℞ 15.
- 19. BLOCK AND BOLT FOR SHIPMENT WITH PIPE SLEEVE AND 3/4" ϕ BOLT. PLACE AT 5'-0" CTRS.
- 20. L 3"x3"x 3/8" x 1'-4". PROVIDE 13/16" ϕ HOLES FOR 3/4" ϕ BOLTS EXCEPT FOR 13/16" x 2 1/16" SLOTTED HOLE IN END OF L. TACK WELD NUT TO FINGER ℞ 5 PER JOINT.
- 21. L 3 1/2" x 3 1/2" x 1'-0" - PROVIDE 13/16" ϕ HOLES FOR 2-3/4" ϕ BOLTS PER L. 6 PER JOINT.
- 22. 2 1/2" x 3/8" x 1'-0" ⌙ ANCHOR BAR. WELD TO ℞'S #14 & #15.

ALL ITEMS MARKED #, SHALL BE MADE OF A 242 STEEL WITH A CORROSIVE RESISTANCE OF 4 OR MORE TIMES THAT OF A36 STEEL.

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

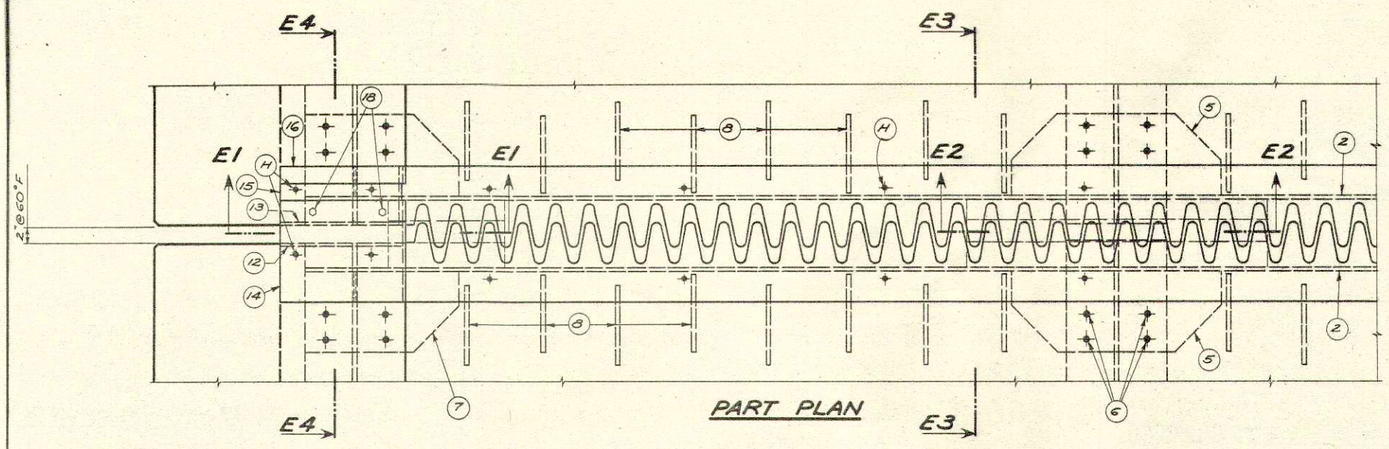
AT POINT MARKED "H", PROVIDE 13/16" ϕ VENT HOLES @ 2'-0" CTRS. IN FINGER ℞'S AND 3" CTRS. IN ℞'S 14 & 15.

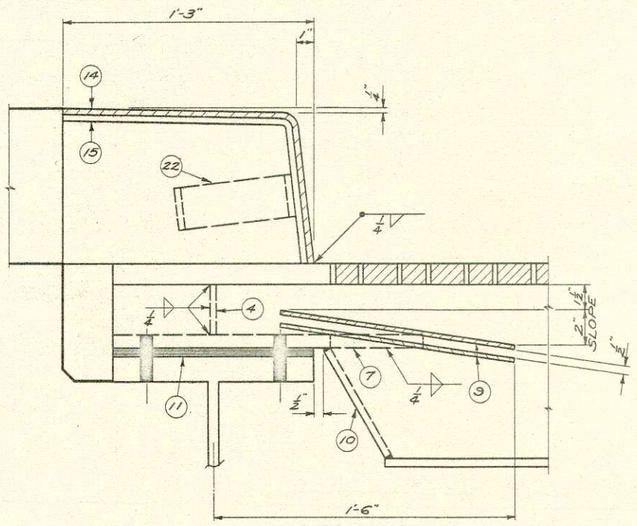
AFTER CONCRETE HAS SET REMOVE BOLT #18 AND FILL HOLES WITH HOT POURED ELASTIC TYPE JOINT SEALER.

EXPANSION JOINT SHALL BE BUILT TO CONFORM TO RDWY. CROWN AND GRADE.

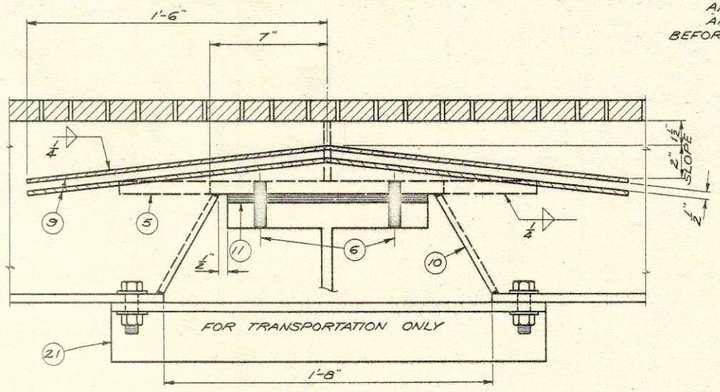
APPLY NO PAINT OTHER THAN TO EXPOSED SURFACES OF ℞'S 14 & 16.

APPLY 1/16" COAT OF BITUMASTIC TO EXPOSED SURFACE OF ℞ #15. CLEAN THROUGHLY BEFORE APPLICATION.

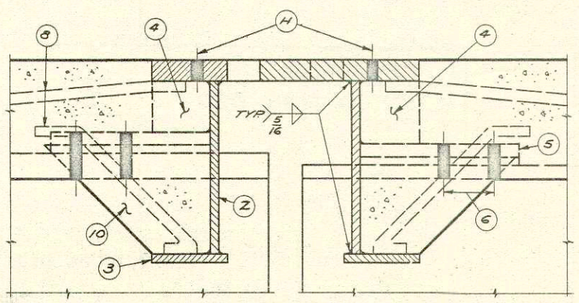




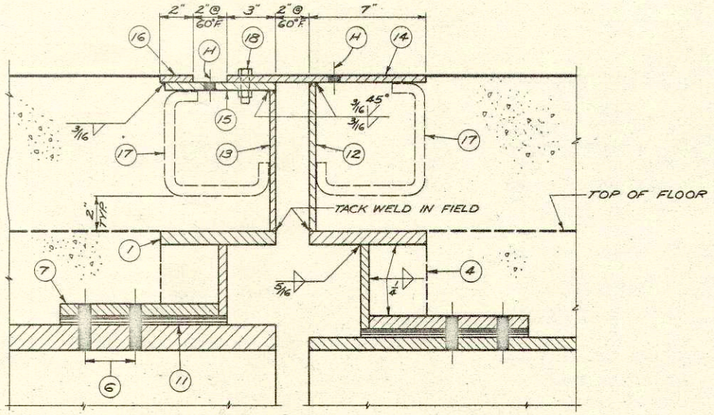
SECTION E1



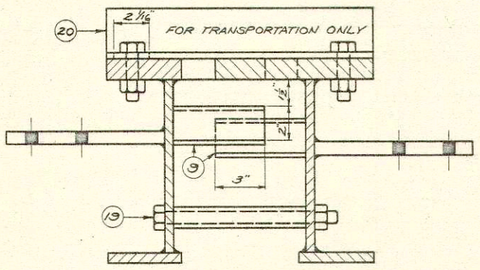
SECTION E2



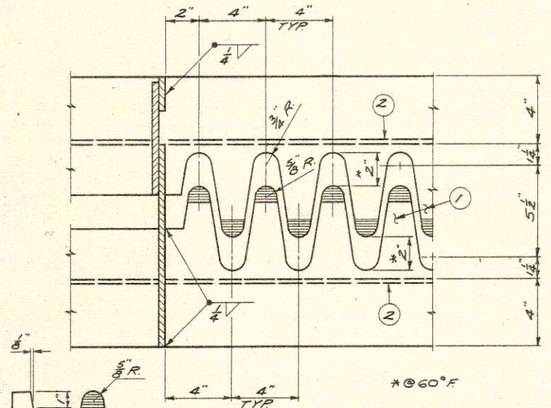
SECTION E3

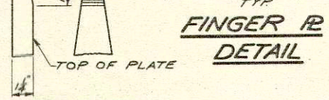


SECTION E4



SHIPPING DETAIL
SEE SECTION E2" ALSO





FINGER ℞ DETAIL

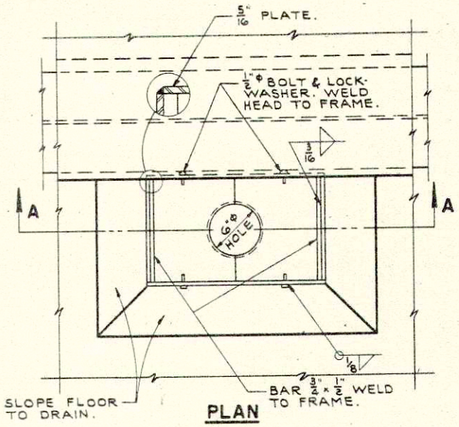
FINGER DETAIL

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	EXPANSION JOINTS
DESIGN SPEC. A.A.S.H.O. 61	LOADING H20-S16 MOD. CONST. SPEC. 1963
DATE 9/1963 DESIGN J.M.	DRAWN B.W. CKD. L. J. G.
STRUCTURE B-32-46	SHEET 8 OF 16

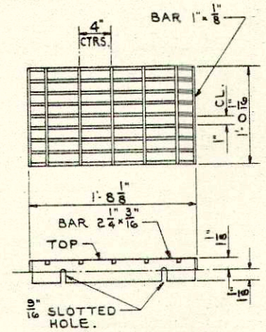
X 27763

FORM E-B-12-62

B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3) 275	15	54

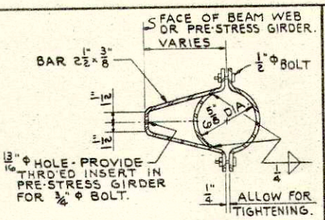


PLAN

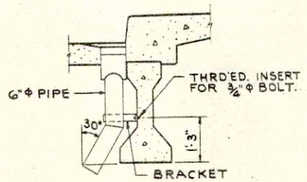


NOTE: RECTANGULAR GRATING AS SPECIFIED OR EQUIV. BOLT GRATE TO FRAME FOR SHIPMENT.

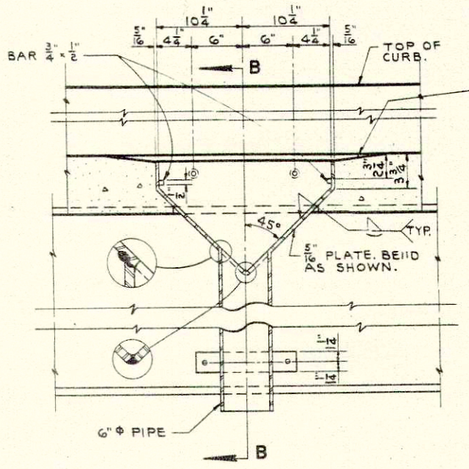
GRATE



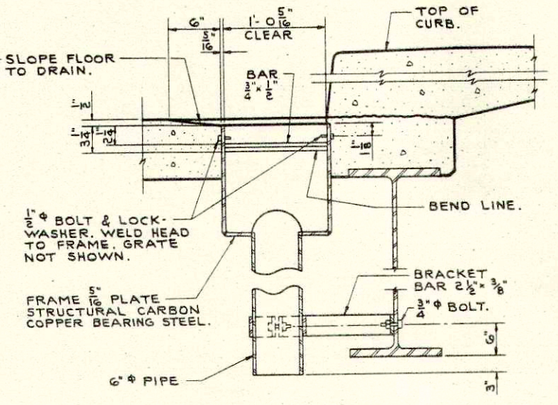
SECTION THRU BRACKET



SECTION AT PRE-STRESS GIRDER

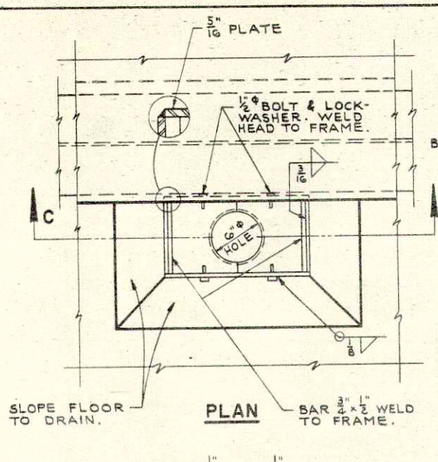


SECTION A

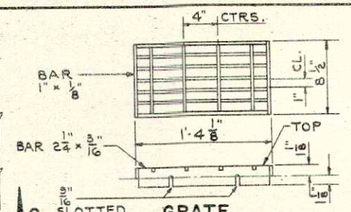


SECTION B

FLOOR DRAIN · TYPE "A"

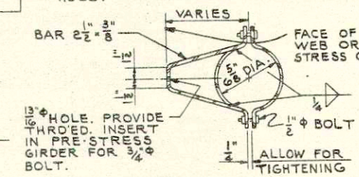


PLAN

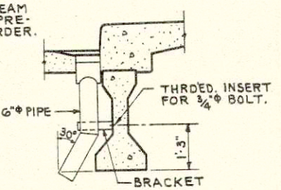


GRATE

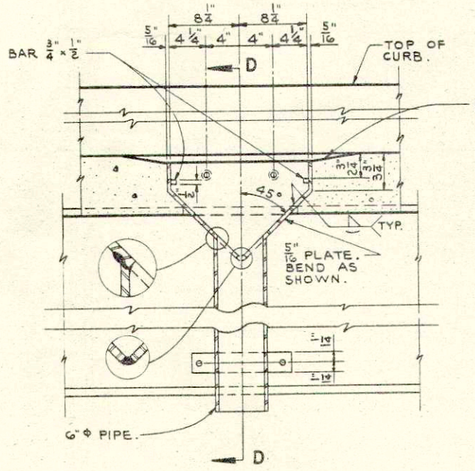
NOTE: RECTANGULAR GRATING AS SPECIFIED OR EQUIV. BOLT GRATE TO FRAME FOR SHIPMENT.



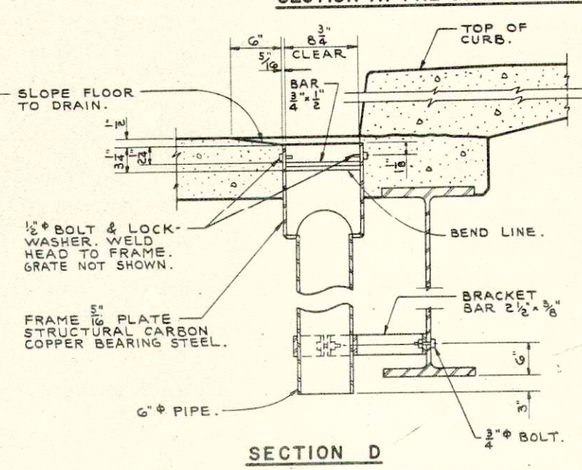
SECTION THRU BRACKET



SECTION AT PRE-STRESS GIRDER

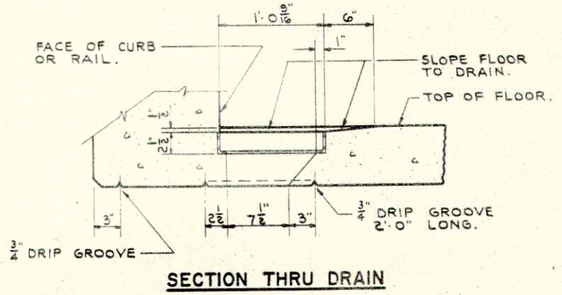


SECTION C

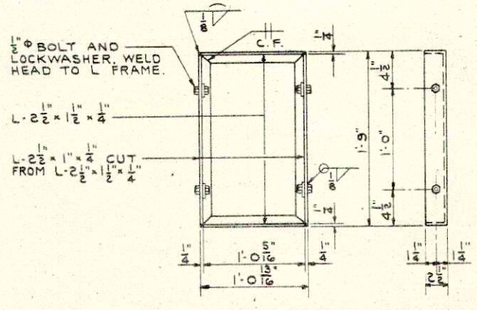


SECTION D

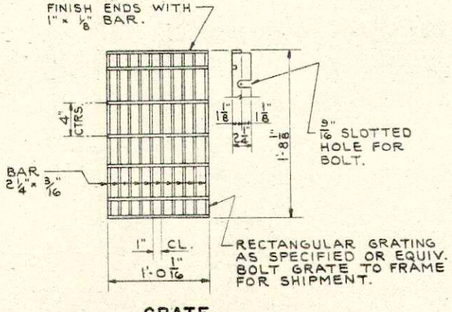
FLOOR DRAIN · TYPE "C"



SECTION THRU DRAIN



FRAME



GRATE

FLOOR DRAIN · TYPE "B"

NOTE: WELDS ON COPPER BEARING STEEL SHALL BE MADE WITH LOW HYDROGEN ELECTRODES.

FLOOR DRAIN · TYPE	A
FLOOR DRAINS REQ'D.	16

REVISED

STATE HIGHWAY COMMISSION OF WISCONSIN

FLOOR DRAIN DETAILS

DESIGN SPEC A.A.S.H.O. 1961 LOADING M20-S16 M00 CONST SPEC 1963

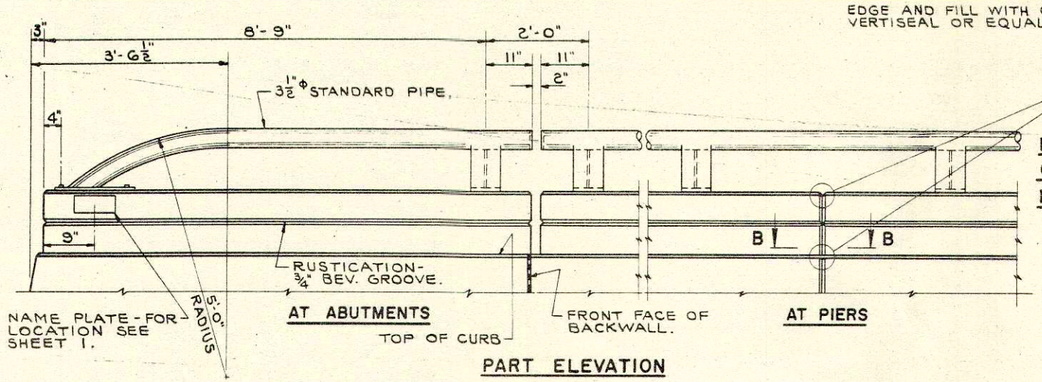
DATE 5-13-63 DESIGN ME DRAWN B.W. CKD. L.J.G.

STRUCTURE B-32-46 SHEET 9 OF 16

X27764

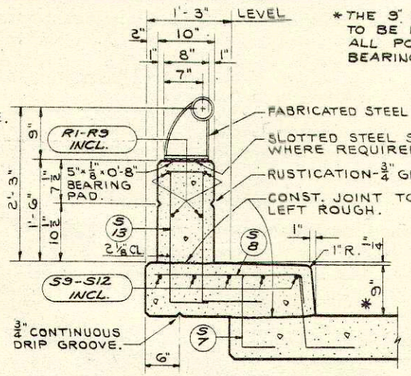
FORM E-B-12-62

B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3) 275	16	54



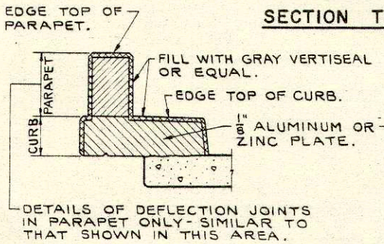
PART ELEVATION

DETAIL AT TOP OF CURB AND PARAPET

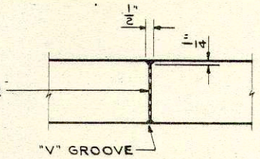


* THE 9" HEIGHT OF CURB TO BE MAINTAINED AT ALL POINTS OF BEARING.

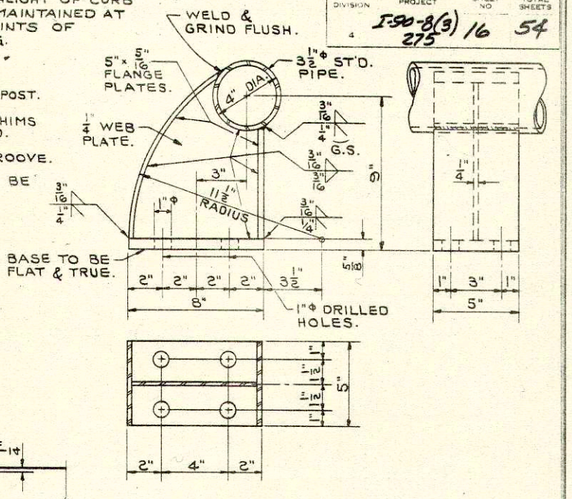
SECTION THRU CURB



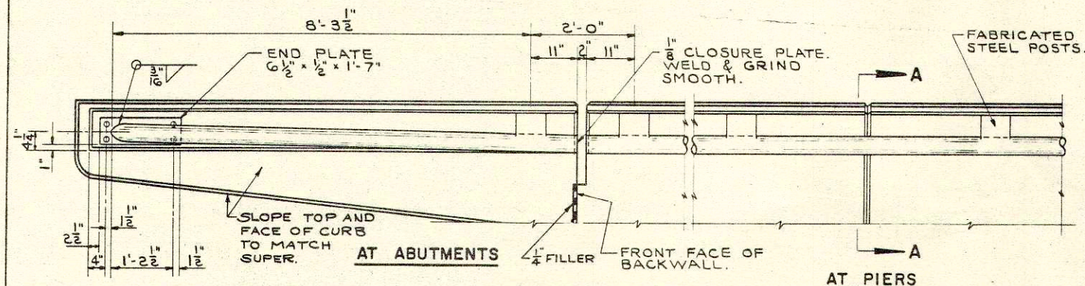
SECTION A



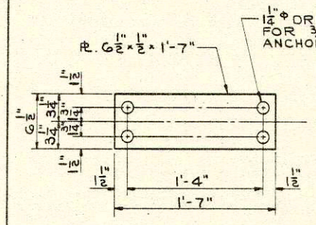
SECTION B



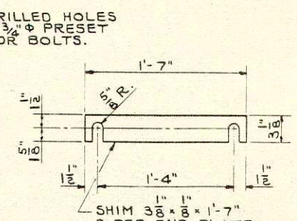
POST DETAILS

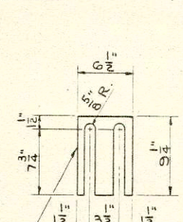


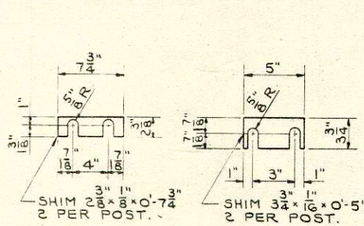
PART PLAN



END PLATE

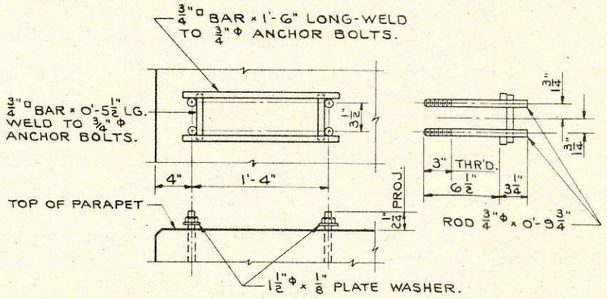




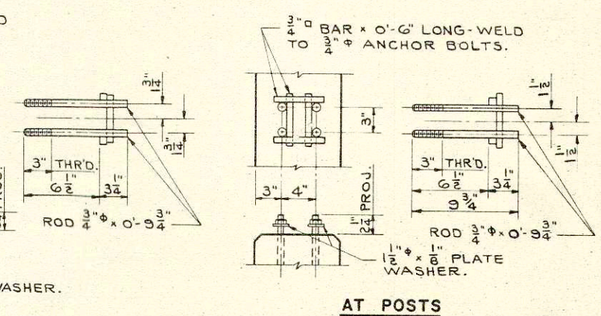


POST SHIM DETAILS

END PLATE SHIM DETAILS

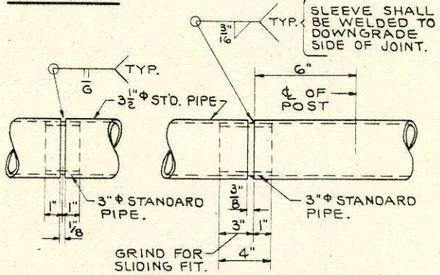


AT END PLATE



AT POSTS

ANCHOR BOLT SETTING DETAILS



SHOP RAIL SPLICE DETAIL

FIELD ERECTION JOINT DETAIL

RAILING SHALL BE FABRICATED IN 2 & 3 PANEL LENGTHS.

NOTES

1. STEEL RAIL POSTS SHALL BE SET NORMAL TO GRADE.
2. RAILING SHALL BE FABRICATED IN LENGTHS AS SHOWN.
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 ½" 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 3½" Φ STANDARD PIPE ASTM DESIGNATION A53.
   POST SHALL BE FABRICATED FROM MATERIAL CONFORMING TO ASTM DESIGNATION A36.
   ANCHOR BOLTS TO BE MADE FROM MATERIAL CONFORMING TO ASTM DESIGNATION A307.
   SLEEVES SHALL BE 3"Φ STANDARD PIPE ASTM DESIGNATION A53.
6. CAULK EXPOSED OPENINGS BETWEEN SHIMS WITH LEAD WOOL.

REVISED

STATE HIGHWAY COMMISSION OF WISCONSIN

TUBULAR STEEL RAILING TYPE "A"

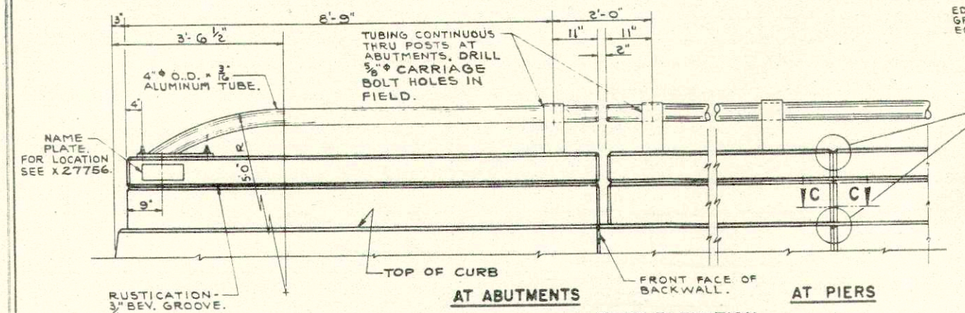
DESIGN SPEC A.A.S.H.O. '61 | LOADING M20-S16 MS20 | CONST. SPEC. 1963

DATE 9-18-63 | DESIGN ST'D. | DRAWN BW | CHK. L.J.G.

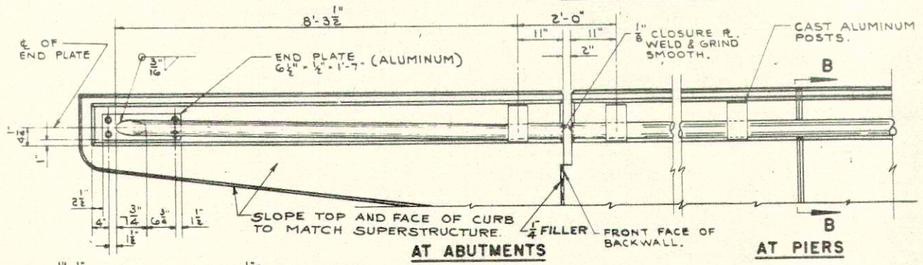
STRUCTURE B-32-46 | SHEET 10 OF 16

X27765

B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(9) 275	17	54

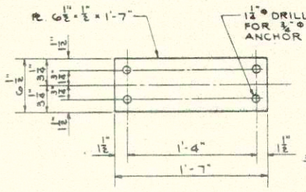


PART ELEVATION

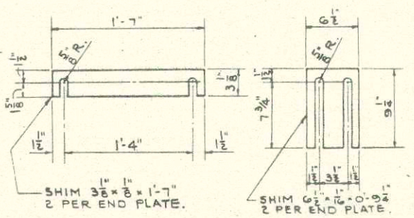


PART PLAN

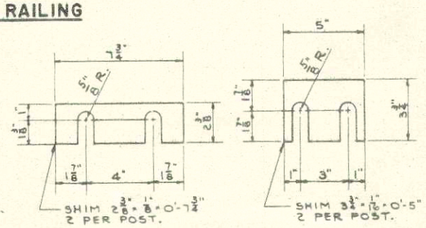
SINGLE LINE ALUMINUM RAILING



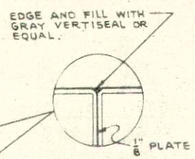
END PLATE
(ALUMINUM)



END PLATE SHIM DETAILS

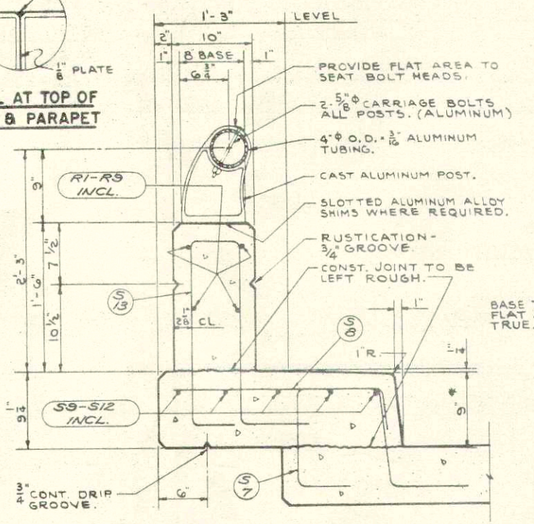


POST SHIM DETAILS

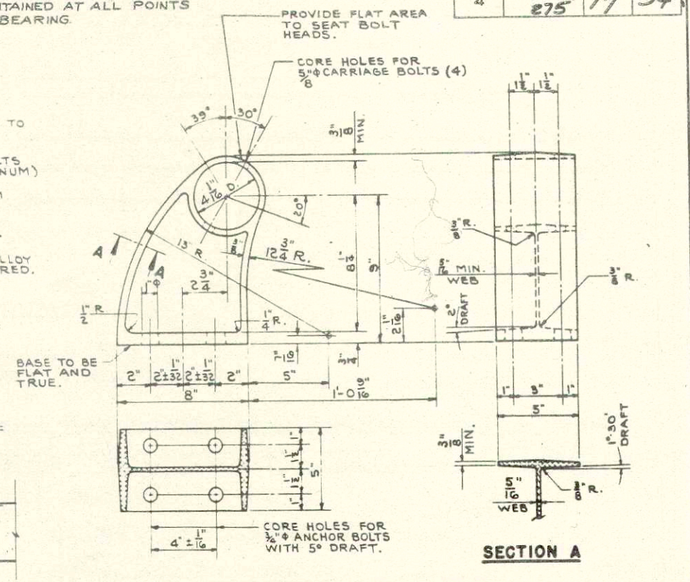


DETAIL AT TOP OF CURB & PARAPET

* THE 9" HEIGHT OF CURB TO BE MAINTAINED AT ALL POINTS OF BEARING.



SECTION THRU CURB

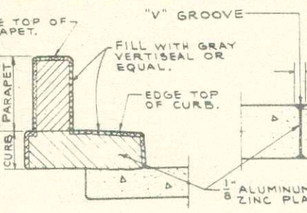


SECTION A

ALUMINUM POST CASTING

NOTES

1. ALUMINUM RAILING POSTS TO BE SET NORMAL TO GRADE.
2. THE HEX. NUTS, WASHERS AND THE UPPER 3" OF 3/4"Φ x 9 3/4" LONG ANCHOR BOLTS SHALL BE GALVANIZED OR CADMIUM PLATED. THE ANCHOR BOLT HOLES, BASE OF RAILING POSTS AND ANCHOR BOLTS, NUTS AND WASHERS SHALL BE COATED WITH AN ALUMINUM IMPREGNATED CAULKING COMPOUND. ANCHOR BOLTS, HEX. NUTS AND WASHERS TO BE STRUCTURAL CARBON STEEL.
3. ALUMINUM TUBING SHALL BE FABRICATED IN 2 OR 3 PANEL LENGTHS.
4. ALUMINUM ALLOY SHIMS SHALL BE USED UNDER POSTS AND UNDER END PLATES WHERE REQUIRED FOR ALIGNMENT.
5. 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 BITUMINUOUS PAINT AND PLATE SEPARATORS MAY BE OMITTED.

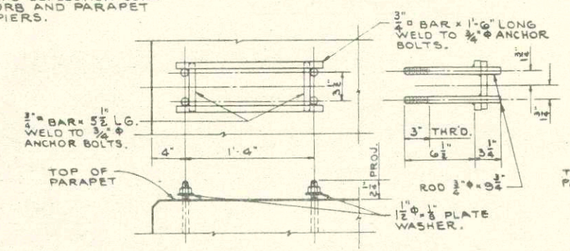


SECTION B

SHOWING DEFLECTION JOINT IN CURB AND PARAPET AT PIERS.

SECTION C

DETAILS OF DEFLECTION JOINTS IN PARAPET ONLY - SIMILAR TO THAT SHOWN IN THIS AREA.



AT END PLATE

AT POSTS

ANCHOR BOLT SETTING DETAILS

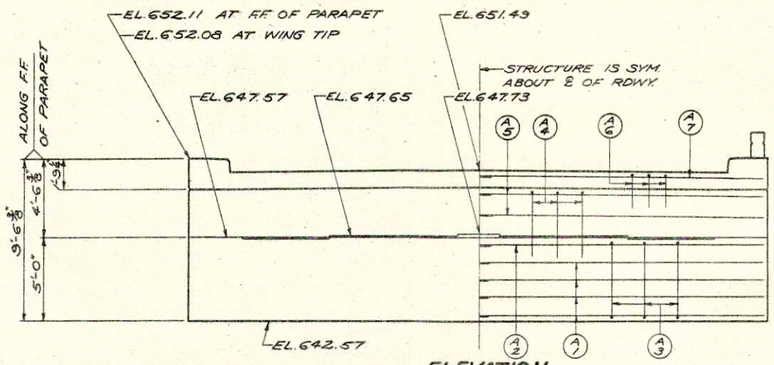
REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	TUBULAR ALUMINUM RAILING TYPE "A"
	DESIGN SPEC AASHO '61 LOADING H20-S16 MOD. FORMAT SPEC 1963
	DATE 9-13-63 DESIGN ST'D. DRAWN BW CKD L. J. G.
STRUCTURE B-32-46	SHEET 11 OF 16

X 27766

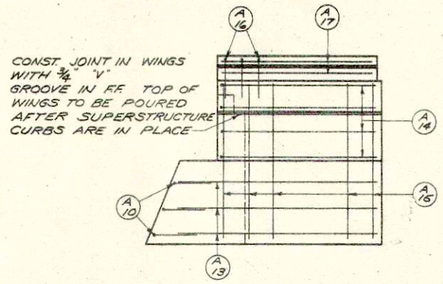
FORM E-B-12-62

B. P. R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3) 275	18	54

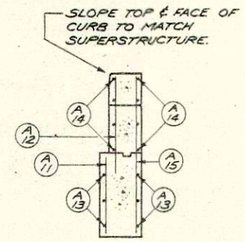
NOTE: FOR RAILING PARAPET DETAILS SEE SHEETS X27765 & X27766.



ELEVATION



END VIEW



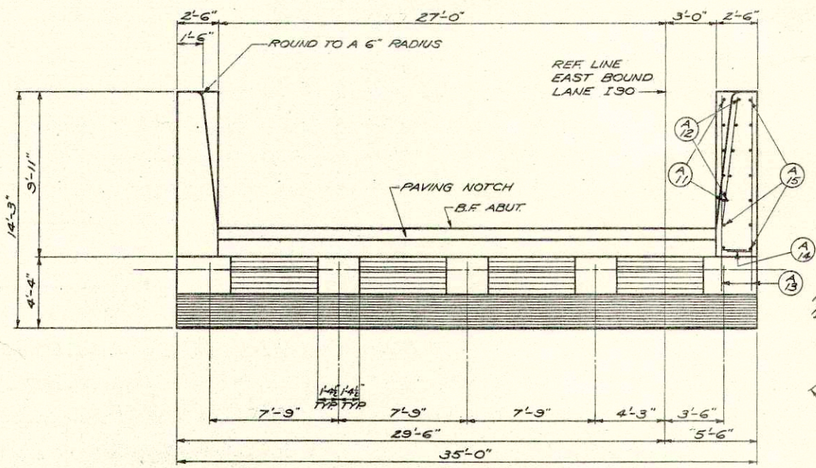
SECTION THRU WING

1,590 #'s BILL OF BARS

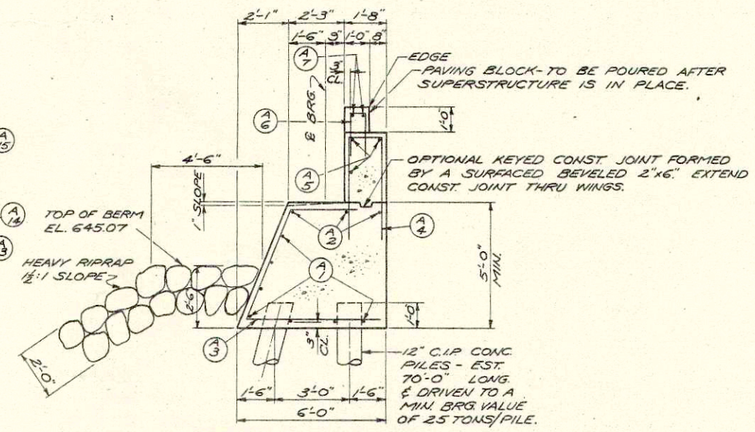
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
A1	14	4	17-9	SHOWN	BODY - HORIZ.	
A2	6	6	18-0	SHOWN	" "	
* A3	18	4	13-0	12-0	" - VERT.	A
A4	20	5	9-0	1-6	" & PARAPET	B
A5	6	4	17-6	SHOWN	PARAPET	
A6	30	5	4-6	1-0	PAVING BLOCK	B
A7	4	4	17-9	SHOWN	" "	
A8	15	4	2-6	SHOWN	GRID	
A9	20	4	3-6	SHOWN	"	C
A10	6	4	3-6	1-6	BODY CORNERS	C
A11	10	4	4-6	1-6	WINGS - VERT.	
A12	10	4	5-6	1-6	" "	
A13	12	4	11-3	1-6	" - HORIZ.	
A14	16	4	11-3	1-5	" "	C
A15	18	4	9-0	1-6	" - - VERT.	
A16	20	5	5-3	1-0	RAILING PARAPET	B
A17	8	5	9-3	SHOWN	" "	

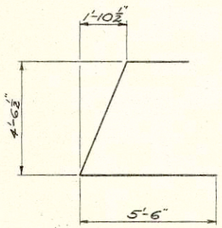
* SPACE TO MISS PILING.



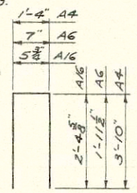
PLAN



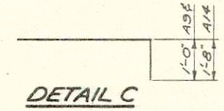
SECTION THRU BODY



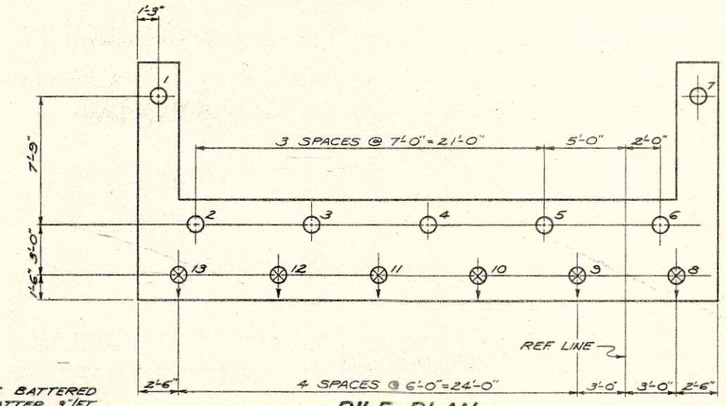
DETAIL A



DETAIL B

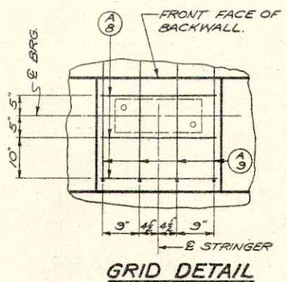


DETAIL C

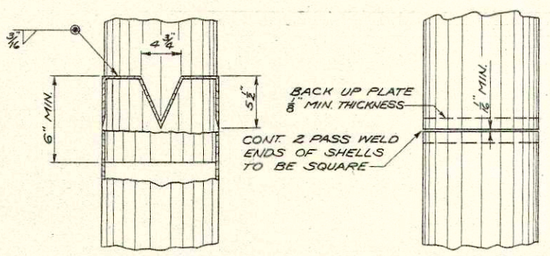


⊗ DENOTES BATTERED PILE. BATTER 3"/FT. IN DIRECTION SHOWN.

PILE PLAN



GRID DETAIL



FLUTED PILE PIPE PILE

PILE SPLICE DETAIL

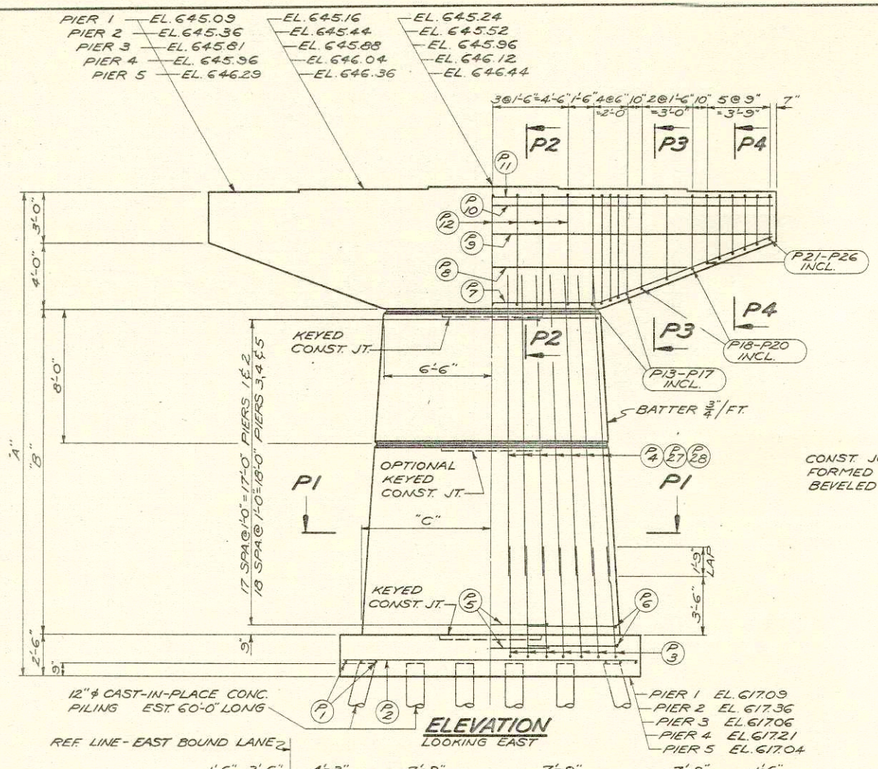
REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	WEST ABUTMENT
DESIGN SPEC. A.A.S.H.O. '61	LOADING M20-316 MOD.
CONST. SPEC. 1963	
DATE 3-13-63	DESIGN BHM
DRAWN BW	CKD. L. J. G.
STRUCTURE B-32-46	SHEET 12 OF 16

X 27767

FORM E-B-12-62

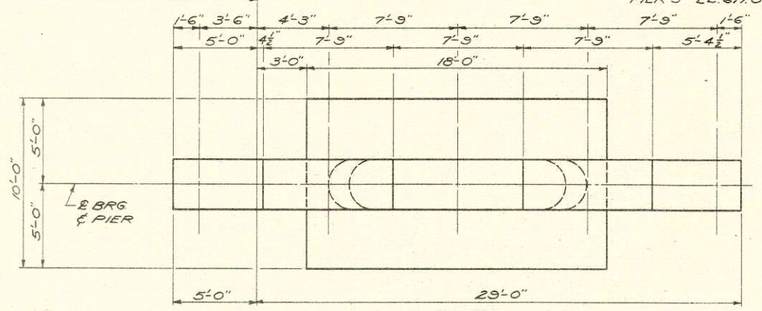
B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3) 275	19	54

PIER 1 — EL. 645.09 — EL. 645.16 — EL. 645.24
PIER 2 — EL. 645.36 — EL. 645.44 — EL. 645.52
PIER 3 — EL. 645.81 — EL. 645.88 — EL. 645.96
PIER 4 — EL. 645.96 — EL. 646.04 — EL. 646.12
PIER 5 — EL. 646.29 — EL. 646.36 — EL. 646.44

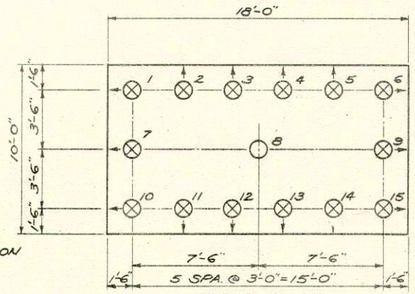


ELEVATION
LOOKING EAST

REF. LINE - EAST BOUND LANE

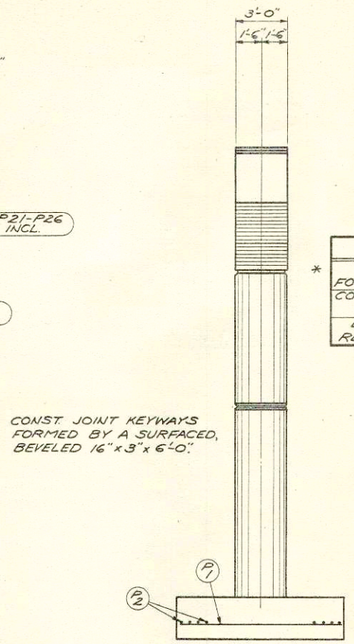


PLAN



PILE PLAN

⊗ DENOTES BATTERED PILE BATTER 1½"/FT. IN DIRECTION SHOWN.



END VIEW

CONST. JOINT KEYWAYS FORMED BY A SURFACED, BEVELED 16" x 3" x 6'-0".

DIMENSION	PIER 1	PIER 2	PIER 3	PIER 4	PIER 5
"A"	28'-0"	28'-0"	28'-9"	28'-9"	29'-3"
"B"	18'-6"	18'-6"	19'-3"	19'-3"	19'-9"
"C"	7'-7 7/8"	7'-7 7/8"	7'-8 3/8"	7'-8 3/8"	7'-8 3/4"

ITEM	PIER 1	PIER 2	PIER 3	PIER 4	PIER 5
EXCAVATION FOR STRUCTURES	100 C.Y.	100 C.Y.	100 C.Y.	100 C.Y.	100 C.Y.
CONC. MASONRY GRADE "AA"	66.1 C.Y.	66.1 C.Y.	67.4 C.Y.	67.4 C.Y.	68.2 C.Y.
BAR STEEL REINFORCEMENT	6540#	6540#	6620#	6620#	6640#

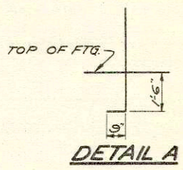
* DOES NOT INCLUDE EXCAVATION FOR SUB-FOUNDATION COURSE.

32,960 #'S

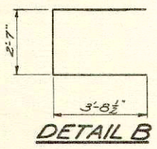
BILL OF BARS

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

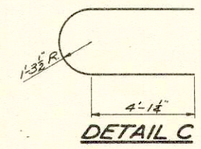
POUR	MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
FOOTING	P1	105	11	9-6	10½	FOOTING	
	P2	120	5	17-6	5	"	
	P3	150	9	7-6	SHOWN	" -VERT.	A
	P5	10	4	10-0	"	" -TIES	B
	P6	10	4	12-3	"	" "	C
STEM	P4	60	7	17-0	SHOWN	STEM-VERT.-PIERS 1 & 2	
	P5	186	4	10-0	"	" -TIES	B
	P6	186	4	12-3	"	" "	C
	P27	60	7	17-9	"	" -VERT.-PIERS 3 & 4	
	P28	30	7	18-3	"	" " -PIER 5	
CAP BEAM	P7	30	4	18-0	SHOWN	CAP BEAM	D
	P8	10	4	23-6	"	" "	
	P9	20	4	17-3	"	" "	
	P10	25	10	33-6	"	" "	
	P11	35	11	33-6	"	" "	
	P12	35	4	19-6	"	" -STIRRUP-SINGLE	E
	P13	20	4	17-0	"	" " " -DOUBLE	F
	P14	20	4	17-0	"	" " " "	F
	P15	20	4	16-9	"	" " " "	F
	P16	20	4	16-3	"	" " " "	F
	P17	20	4	16-0	"	" " " "	F
	P18	10	4	17-9	"	" " -SINGLE	E
	P19	10	4	16-6	"	" " "	E
	P20	10	4	15-3	"	" " "	E
	P21	20	4	12-3	"	" " -DOUBLE	F
	P22	20	4	11-9	"	" " "	F
	P23	20	4	11-3	"	" " "	F
	P24	20	4	10-6	"	" " "	F
	P25	20	4	10-0	"	" " "	F
	P26	20	4	9-6	"	" " "	F



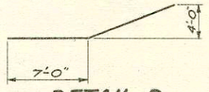
DETAIL A



DETAIL B

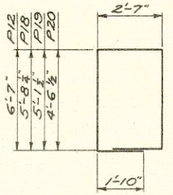


DETAIL C

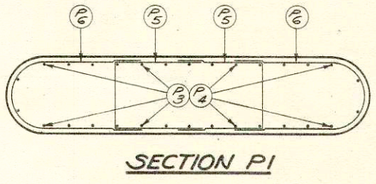


DETAIL D

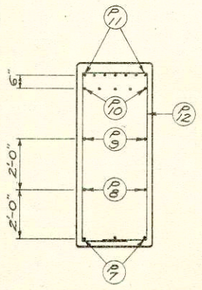
NOTE: UNLESS OTHERWISE SHOWN ALL BAR STEEL REINFORCEMENT SHALL BE IMBEDDED 2½" CLEAR.



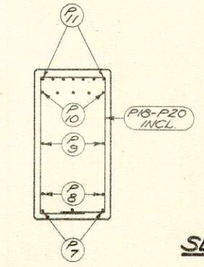
DETAIL E



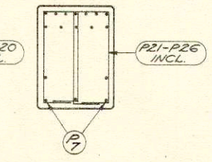
SECTION P1



SECTION P2



SECTION P3



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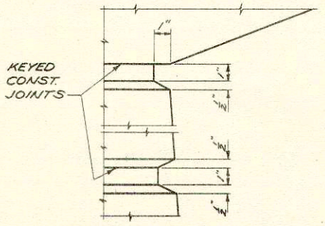
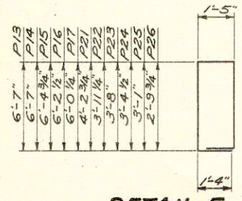


RUSTICATION DETAIL



DETAIL F

NOTE: FOR PILE SPLICE DETAILS - SEE SHEET X27770.

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
12-29-64 JJM 5-1-64 JJM	PIERS WITHOUT SEAL
	DESIGN SPEC. AASHO '61 LOADING H20-S16 M100 CONST. SPEC. 1963
	DATE 7-13-63 DESIGN ME DRAWN BW CKD. J.J.G.
	STRUCTURE B-32-46 SHEET 13 OF 16

X 27768

FORM E-B-12-62

34060 #'s

B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3) 275	20	54

BILL OF BARS

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

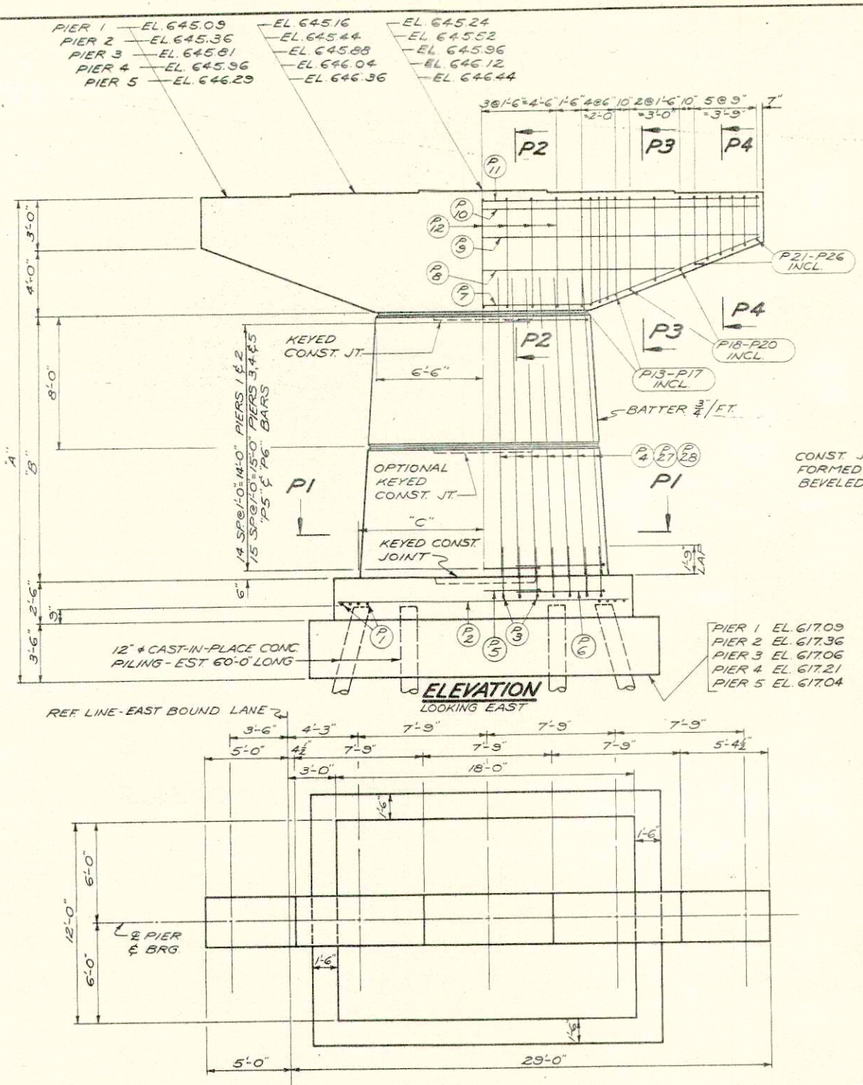
POUR	MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
FOOTING	P1	165	11	11-6	6½	FOOTING	
	P2	85	5	17-6	8½	"	
	P3	150	7	4-0	SHOWN	" -VERT.	A
	P5	10	4	10-0	"	" -TIES	B
	P6	10	4	12-3	"	" "	C
STEM	P4	60	7	17-0	SHOWN	STEM-VERT-PIERS 1 & 2	
	P5	156	4	10-0	"	" -TIES	B
	P6	156	4	12-3	"	" "	C
	P27	60	7	17-9	"	" -VERT.-PIERS 3 & 4	
	P28	30	7	18-3	"	" " -PIER 5	
CAP BEAM	P7	30	4	18-0	SHOWN	CAP BEAM	D
	P8	10	4	23-6	"	" "	
	P9	20	4	17-3	"	" "	
	P10	25	10	33-6	"	" "	
	P11	35	11	33-6	"	" "	
	P12	35	4	19-6	"	" " -STIRRUP-SINGLE	E
	P13	20	4	17-0	"	" " -DOUBLE	F
	P14	20	4	17-0	"	" " "	F
	P15	20	4	16-9	"	" " "	F
	P16	20	4	16-3	"	" " "	F
	P17	20	4	16-0	"	" " "	F
	P18	10	4	17-9	"	" " -SINGLE	E
	P19	10	4	16-6	"	" "	E
	P20	10	4	15-3	"	" "	E
	P21	20	4	12-3	"	" " -DOUBLE	F
	P22	20	4	11-9	"	" " "	F
	P23	20	4	11-3	"	" " "	F
	P24	20	4	10-6	"	" " "	F
	P25	20	4	10-0	"	" " "	F
	P26	20	4	9-6	"	" " "	F

DIMENSION	PIER 1	PIER 2	PIER 3	PIER 4	PIER 5
"A"	28'-0"	28'-0"	28'-9"	28'-9"	29'-3"
"B"	15'-0"	15'-0"	15'-9"	15'-9"	16'-3"
"C"	7'-5¼"	7'-5¼"	7'-5½"	7'-5¾"	7'-6⅛"

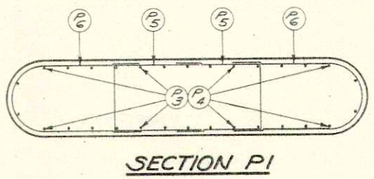
ESTIMATE OF QUANTITIES

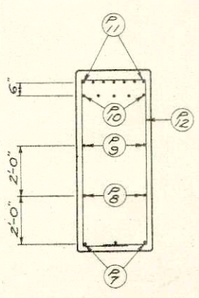
ITEM	PIER 1	PIER 2	PIER 3	PIER 4	PIER 5
* EXCAVATION FOR STRUCTURES	120 C.Y.	120 C.Y.	120 C.Y.	120 C.Y.	120 C.Y.
CONC. MASONRY SEAL	39.3 C.Y.	39.3 C.Y.	39.3 C.Y.	39.3 C.Y.	39.3 C.Y.
CONC. MASONRY GRADE "AA"	63.9 C.Y.	63.9 C.Y.	65.0 C.Y.	65.0 C.Y.	65.9 C.Y.
BAR STEEL REINFORCEMENT	6,760#	6,760#	6,835#	6,835#	6,870#

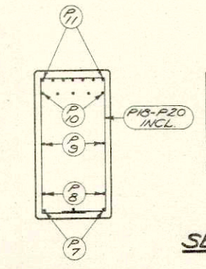
* DOES NOT INCLUDE EXCAVATION FOR SUB-FOUNDATION COURSE.

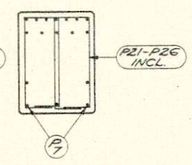


⊗ DENOTES BATTERED PILE BATTER 1½"/FT. IN DIRECTION SHOWN.

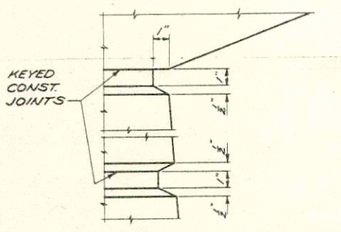




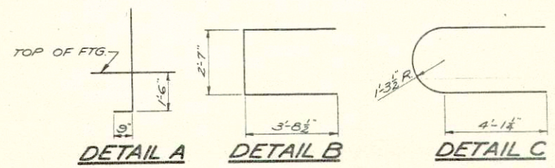


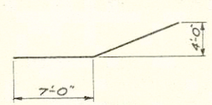


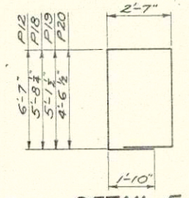
NOTE: UNLESS OTHERWISE SHOWN ALL BAR STEEL REINFORCEMENT SHALL BE IMBEDDED 2½" CLEAR.

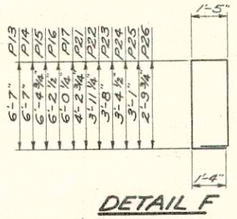


NOTE: FOR PILE SPLICE DETAILS - SEE SHEET X27770.







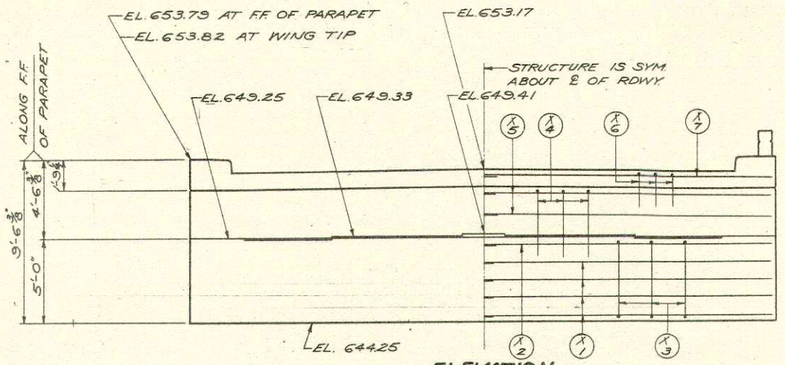


REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
7-23-63 BW JJH	PIERS WITH SEAL
	DESIGN SPEC. AASHO '61 LOADING H20-S16 M00 CONST. SPEC. 1963
	DATE 9-13-63 DESIGN ME DRAWN BW CKD. L.J.G.
	STRUCTURE B-32-46 SHEET 14 OF 16

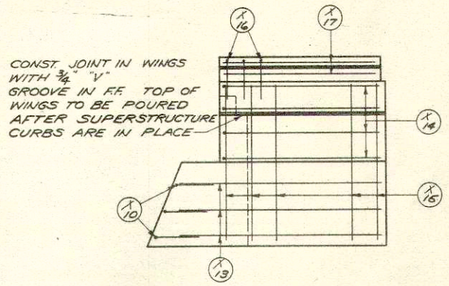
X27769

FORM E-B-12-62

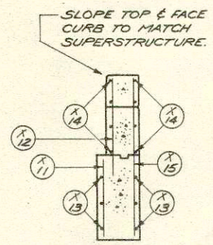
NOTE: FOR RAILING PARAPET DETAILS SEE SHEETS X27765 & X27766



ELEVATION



END VIEW



SECTION THRU WING

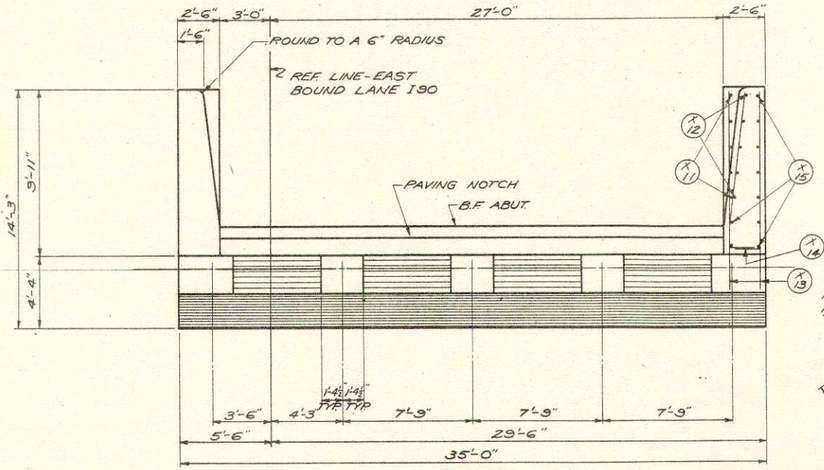
1,590 #'s BILL OF BARS

B. P. R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3) 275	21	54

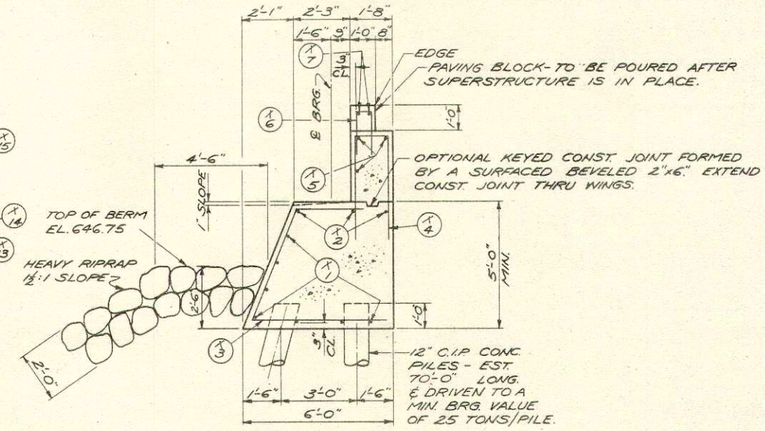
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
X1	14	4	17-9	SHOWN	BODY - HORIZ.	
X2	6	6	18-0	SHOWN	" "	
* X3	18	4	13-0	±2-0	" - VERT.	A
X4	20	5	9-0	1-6	" & PARAPET	B
X5	6	4	17-6	SHOWN	PARAPET	
X6	30	5	4-6	1-0	PAVING BLOCK	B
X7	4	4	17-9	SHOWN	" "	
X8	15	4	2-6	SHOWN	GRID	
X9	20	4	3-6	SHOWN	"	C
X10	6	4	3-6	1-6	BODY CORNERS	C
X11	10	4	4-6	1-6	WINGS - VERT.	
X12	10	4	5-6	1-6	" "	
X13	12	4	11-9	1-6	" - HORIZ.	
X14	16	4	11-3	1-5	" "	C
X15	18	4	9-0	1-6	" - - VERT.	
X16	20	5	5-3	1-0	RAILING PARAPET	B
X17	8	5	9-3	SHOWN	" "	

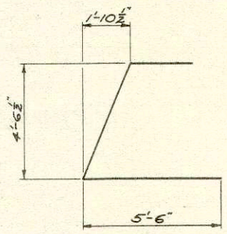
* SPACE TO MISS PILING.



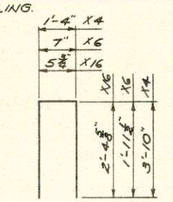
PLAN



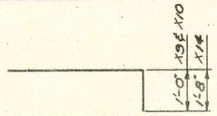
SECTION THRU BODY



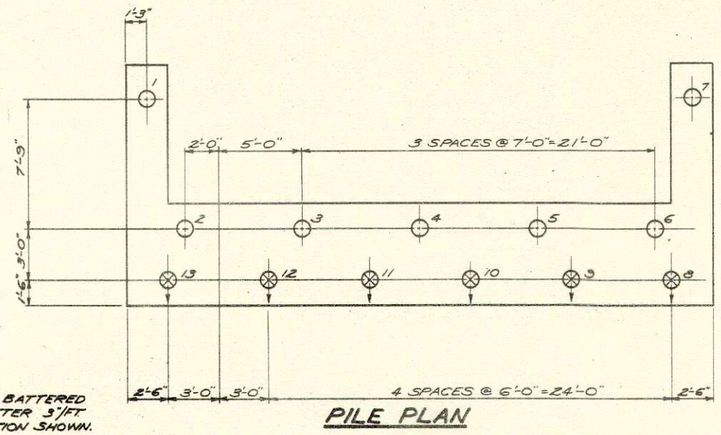
DETAIL A



DETAIL B

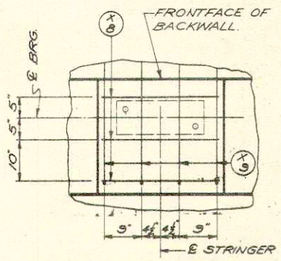


DETAIL C

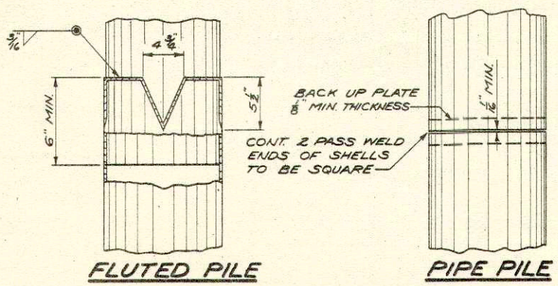


⊗ DENOTES BATTERED PILE. BATTER 3"/FT. IN DIRECTION SHOWN.

PILE PLAN



GRID DETAIL



FLUTED PILE

PIPE PILE

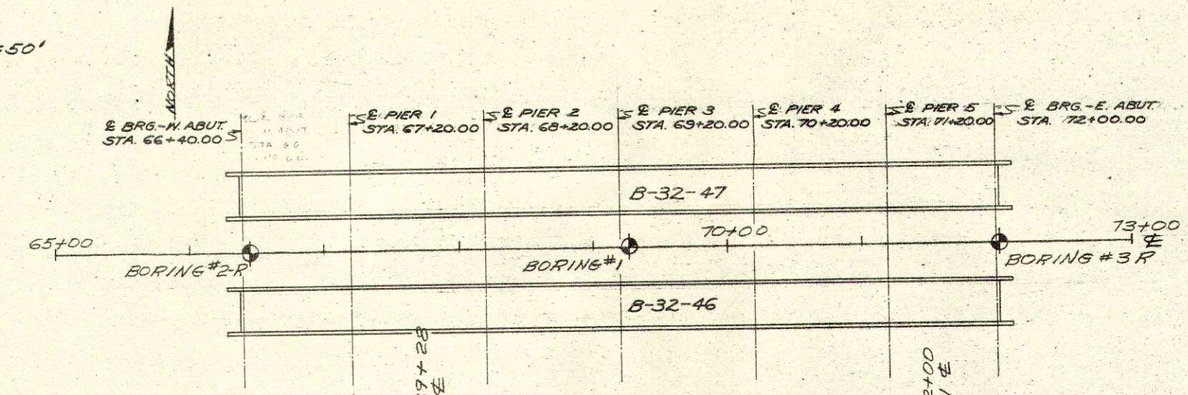
PILE SPLICE DETAIL

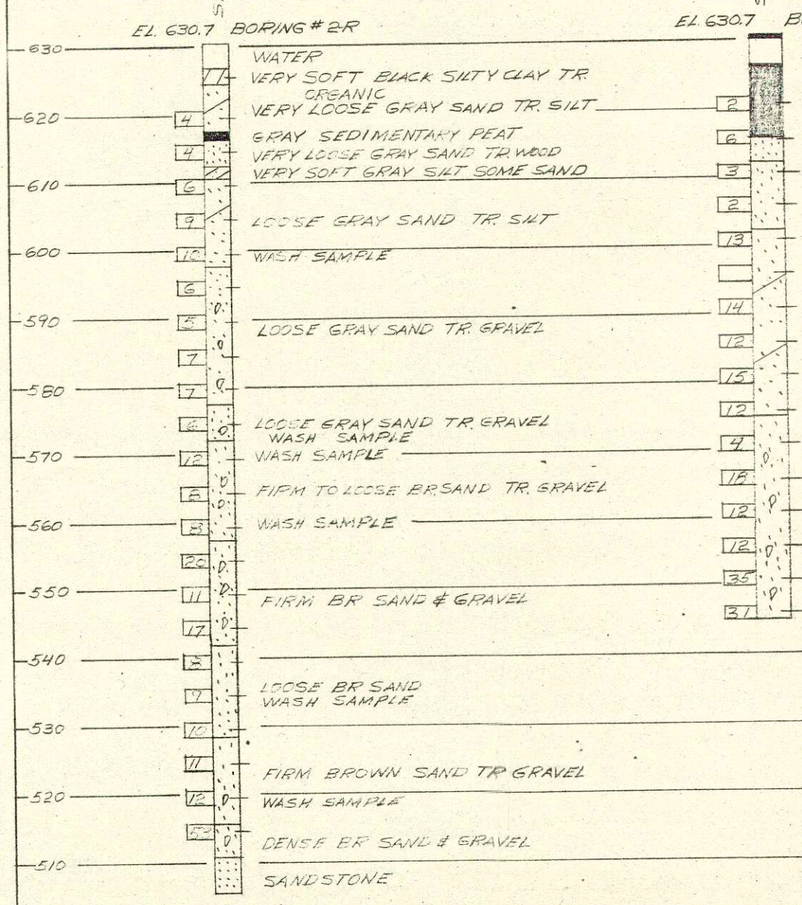
REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	EAST ABUTMENT
	DESIGN SPEC. A.A.S.H.O. '61 LOADING H20-S16 MOD. CONST. SPEC. 1963
	DATE 5/13/63 DESIGN BHM DRAWN BW CKD. L.J.G.
	STRUCTURE B-32-46 SHEET 15 OF 16

X27770

B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3) 275	22	54

SCALE 1"=50'





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 INCHES. THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

LEGEND OF BORINGS

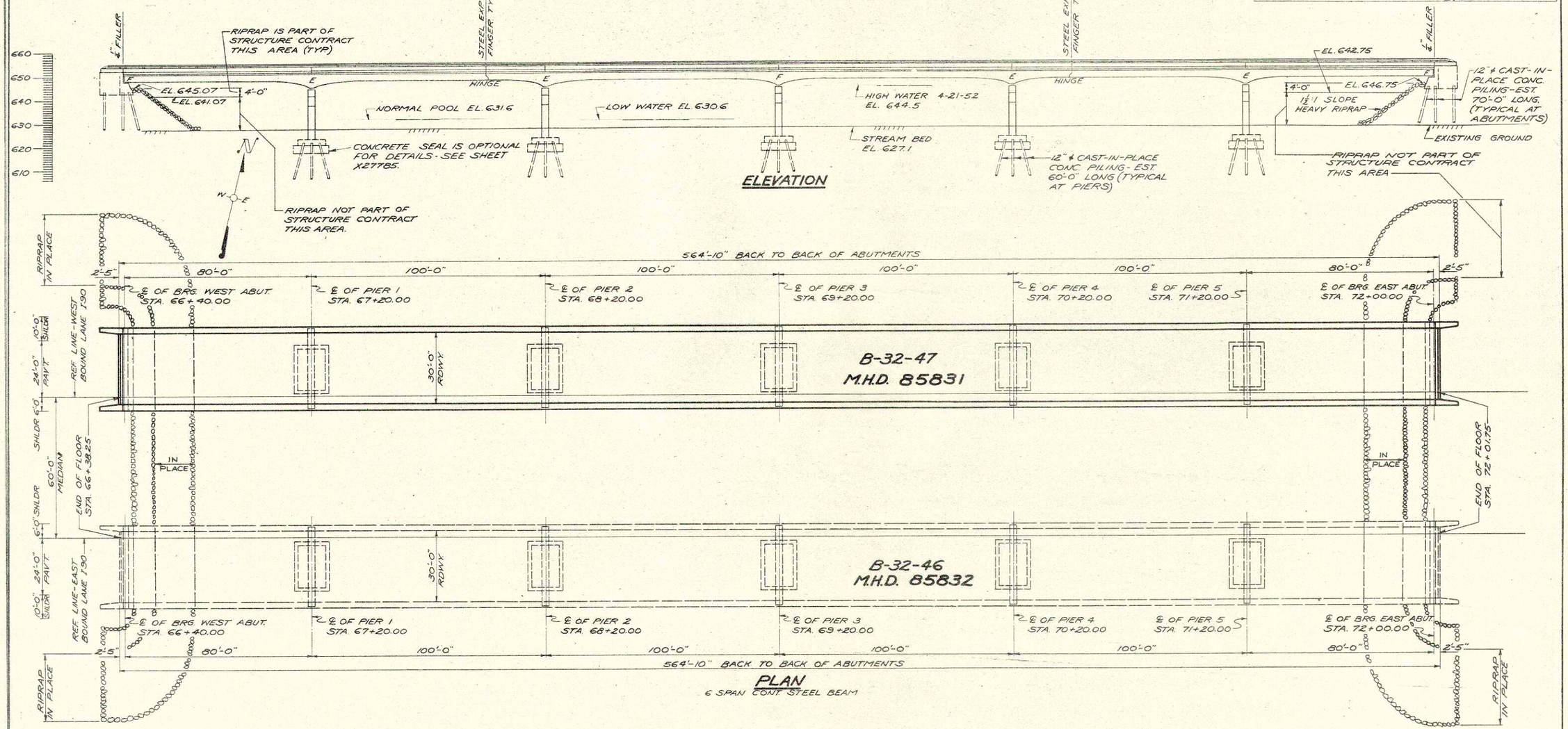
STATION
ELEV.
BORING #
BLOWS PER FT USING 140# WT FALLING 30"
DESCRIPTION OF MATERIAL
MATERIAL CHANGE

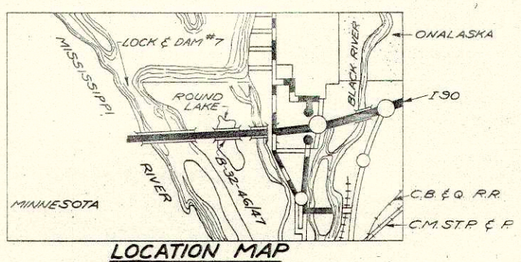
REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	SUBSURFACE EXPLORATION
	DESIGN SPEC. AASHO '61 — LOADING — CONST. SPEC. WISC. '63
	DATE 9-13-63 DESIGN — DRAWN RLB CKD. JLM
	STRUCTURE B-32-46/47 SHEET 16 OF 16

X 27771

FORM E-B-11-62

COUNTY & HIGHWAY	ROUTE & SECTION	CLASS & AGREEMENT STATE	CLASS & AGREEMENT FEDERAL	B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
323	908		12.1	4	I-90-8(3) 275	23	54





LOCATION MAP

LIST OF DRAWINGS

STATE HIGHWAY COMMISSION OF WISCONSIN

GENERAL PLAN

CO. LA CROSSE | CITY VIC. TN. CAMPBELL | STA. 63+20.00

SECTION 13 | TOWN 16 N | RANGE 8 W

DESIGN SPEC. A.A.S.H.O. '61 | LOADING H20-S16 MOD. | CONST. SPEC. 1963

DATE 9-13-63 | DESIGN J.M.E. | DRAWN B.W. | CKD. L.J.G.

REVISED

RECOMMENDED W. B. Schultz, HIGHWAY ENGINEER BRIDGES — A.C. La Bonte, MINNESOTA BRIDGE ENGINEER

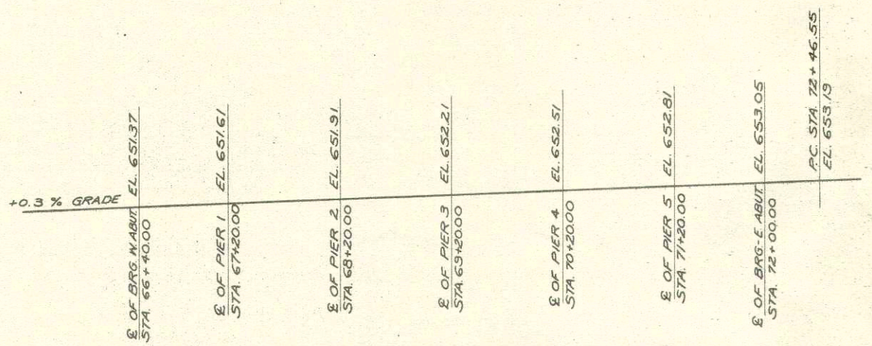
APPROVED V. F. Fredlund, WISCONSIN HIGHWAY ENGINEER — Jos. R. Crowley, MINNESOTA CHIEF ENGINEER

WISCONSIN STRUCTURE B-32-47 | SHEET 1 OF 15

MINNESOTA STRUCTURE 85831 | X27772

FORM E-B-12-62

B. P. R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3) 275	24	54



GRADE LINE WEST BOUND LANE B-32-47

INTERSTATE 190 ALONG REF. LINE WEST BOUND LANE

BENCH MARKS

STA.	DESCRIPTION	ELEV.
56+35	PK. NAIL IN 16" MAPLE 225' LT.	633.51
80+84	PK. NAIL IN MULT. MAPLE 367' RT. ℄	634.32

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BEVEL EXPOSED EDGES OF CONCRETE 1" UNLESS OTHERWISE SPECIFIED.

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

ALL CONCRETE MASONRY SHALL BE GRADE "AA", f'_c=1400 P.S.I. EXCEPT FOR CONCRETE MASONRY SEAL IF USED AT PIERS.

THE SUPERSTRUCTURE SHALL BE TREATED WITH WATER SOLUBLE SILICONE IN ACCORDANCE WITH SECTION 502.3.13 OF THE STANDARD SPECIFICATIONS.

ALL PILING SHALL BE 12"ϕ CAST-IN-PLACE CONC. PILING DRIVEN TO A MIN. BEARING VALUE OF 50 TONS PER PILE AT PIERS & 25 TONS PER PILE AT ABUTS. EST. LENGTH OF ABUT. PILES IS 70'-0" WITH A MIN. PENETRATION OF 50'-0" BELOW STREAMBED. ESTIMATED LENGTH OF PIER PILES IS 60'-0", WITH A MINIMUM PENETRATION OF 40'-0" BELOW BOTTOM OF FOOTINGS OR SEAL.

DRIVE ONE TEST PILE AT EACH OF THE FOLLOWING UNITS; PIER 2, PIER 4 & E. ABUT. TEST PILES SHALL BE 30'-0" LONG AT PIERS & 105'-0" AT E. ABUT.

ALL FIELD CONNECTIONS SHALL BE MADE WITH $\frac{3}{4}$"ϕ RIVETS OR HIGH TENSILE STRENGTH BOLTS UNLESS OTHERWISE NOTED.

THE TOP AND SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AS SHOWN ON SHEETS X27772, X27783 & X27786.

CYLINDRICAL TYPE STEEL PILE SHELLS SHALL HAVE A MINIMUM NOMINAL (AVERAGE) SHELL THICKNESS OF 0.188 INCH AND CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION A252, GRADE 2.

EXPANSION JOINT FILLER SHALL CONFORM TO AASHO DESIGNATION M153, TYPE III.

HOT POURED ELASTIC TYPE JOINT SEALER SHALL CONFORM TO ASTM DESIGNATION, D1190.

TOTAL ESTIMATED QUANTITIES

	BID ITEMS	UNIT	SUPER	W. ABUT.	PIER 1	PIER 2	PIER 3	PIER 4	PIER 5	E. ABUT.	TOTAL
	EXCAVATION FOR STRUCTURES	C.Y.	———	10	———	———	———	———	———	10	20
	CONCRETE MASONRY	C.Y.	533	54	———	———	———	———	———	54	641
	BAR STEEL REINFORCEMENT	LB.	171,920	1,590	———	———	———	———	———	1,590	175,100
	STRUCTURAL CARBON STEEL	LB.	543,600	———	———	———	———	———	———	———	543,600
	STRUCTURAL LOW ALLOY STEEL	LB.	16,350	———	———	———	———	———	———	———	16,350
	CARBON STEEL FORGINGS	LB.	510	———	———	———	———	———	———	———	510
*	LUBRICATED BRONZE PLATES	LB.	433	———	———	———	———	———	———	———	433
	BEARING PADS	S.F.	45	———	———	———	———	———	———	———	45
**	CAST-IN-PLACE CONC. TEST PILING	L.S.	———	———	———	———	———	———	———	———	1
	CAST-IN-PLACE CONC. PILING-DEL.	L.F.	———	910	900	840	900	840	900	840	6,130
	CAST-IN-PLACE CONC. PILING-DR.	L.F.	———	910	900	840	900	840	900	840	6,130
	TUBULAR RAILING-TYPE A	L.F.	1,160	———	———	———	———	———	———	———	1,160
	FLOOR DRAINS-TYPE A	EA.	16	———	———	———	———	———	———	———	16
	PIERS	L.S.	———	———	———	———	———	———	———	———	1
	HEAVY RIPRAP	C.Y.	———	70	———	———	———	———	———	70	140
	NON-BID ITEMS										
	AL. OR ZINC PLATE	S.F.	82	———	———	———	———	———	———	———	82
	FILLER	SIZE	———	———	———	———	———	———	———	———	℄"

* INCLUDES WEIGHT OF BRONZE WASHERS.
** SEE GENERAL NOTES FOR NUMBER, LENGTH & LOCATION.

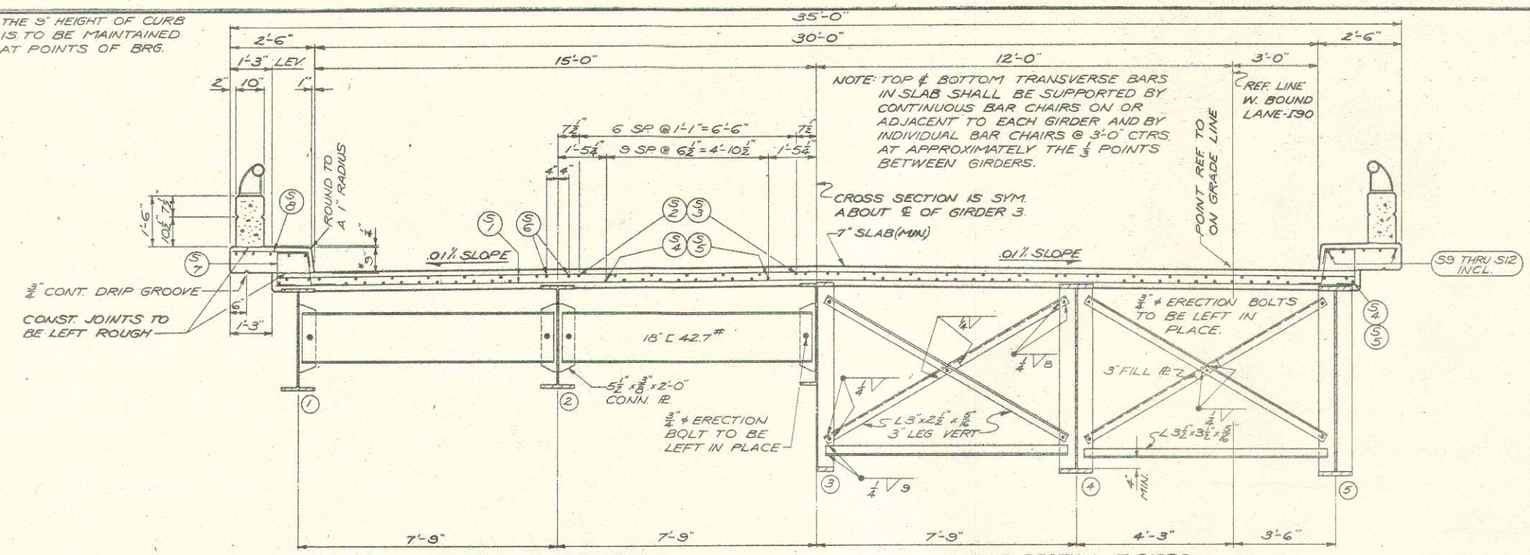
REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	TOTAL ESTIMATED QUANTITIES
	DESIGN SPEC. A.A.S.H.O. '61 | LOADING H20-S16 MOD | CONST. SPEC. 1963
	DATE 9-13-63 | DESIGN JME | DRAWN BW | CKD. L. J. G.
	STRUCTURE B-32-47 | SHEET 2 OF 15

X27773

FORM E-B-12-62

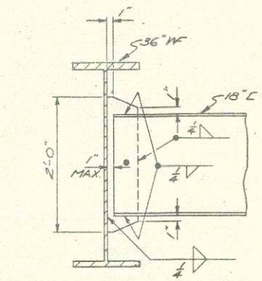
B. P. R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3) 275	25	54

* THE 9" HEIGHT OF CURB IS TO BE MAINTAINED AT POINTS OF BRG.

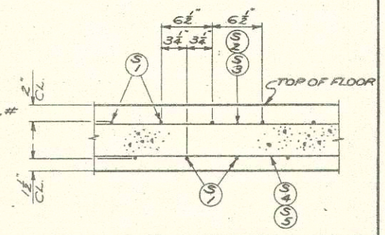


TYPICAL HALF SECTION — HALF SECTION AT PIERS

CROSS SECTION THRU RDWY.



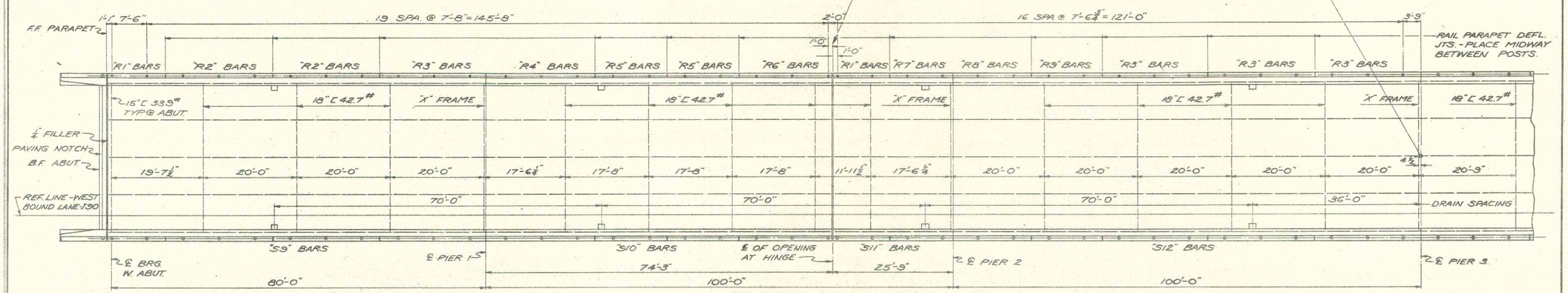
CONNECTION DETAILS



LONG. SECTION THRU FLOOR

TREATMENT OF PARAPET & RAILING IS SIMILAR TO THAT AT FRONT FACE OF ABUTMENT - SEE RAILING DETAILS.

STRUCTURE IS SYM. ABOUT THIS POINT (EXCEPT FOR ELEVATIONS AND AS SHOWN)



HALF PLAN

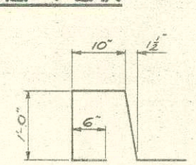
BILL OF BARS

171,920 #'s

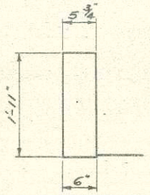
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

POUR	MK.	NO.	SIZE	LENGTH	SPACING	LOCATION	DET
STRUCTURE	S1	2069	6	32-0	6½	SLAB-TRANS.-TOP & BOTTOM	
	S2	280	5	32-3	SHOWN	" -LONG.-TOP-END SECTIONS	
	S3	196	5	37-3	"	" " " -MID SECTION	
	S4	420	5	32-3	"	" " -BOTTOM-END SECTIONS	
	S5	294	5	37-3	"	" " -MID SECTION	
	S6	50	5	15-0	"	" " -TOP-SYM. ABOUT PIERS	
	S7	1122	5	4-3	1-0	CURB-TRANS	A
	S8	1122	6	2-6	1-0	" "	B
	S9	60	6	28-3	6	" -LONG.	
	S10	60	6	26-0	6	" "	
	S11	20	6	25-3	6	" "	
	S12	60	6	34-3	6	" "	
	S13	1122	5	5-6	1-0		C
	S14	8	4	6-9	SHOWN		
	S15	40	5	2-9	1-6		D

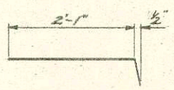
POUR	MK	NO	SIZE	LENGTH	SPACING	LOCATION
RAILING PARAPET	R1	32	5	12-0	SHOWN	RAILING PARAPET
	R2	32	5	22-9	"	" "
	R3	64	5	22-3	"	" "
	R4	16	5	23-0	"	" "
	R5	32	5	15-0	"	" "
	R6	16	5	13-9	"	" "
	R7	16	5	13-0	"	" "
	R8	16	5	16-6	"	" "
	R9	16	5	14-9	"	" "



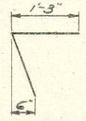
DETAIL A



DETAIL C



DETAIL B



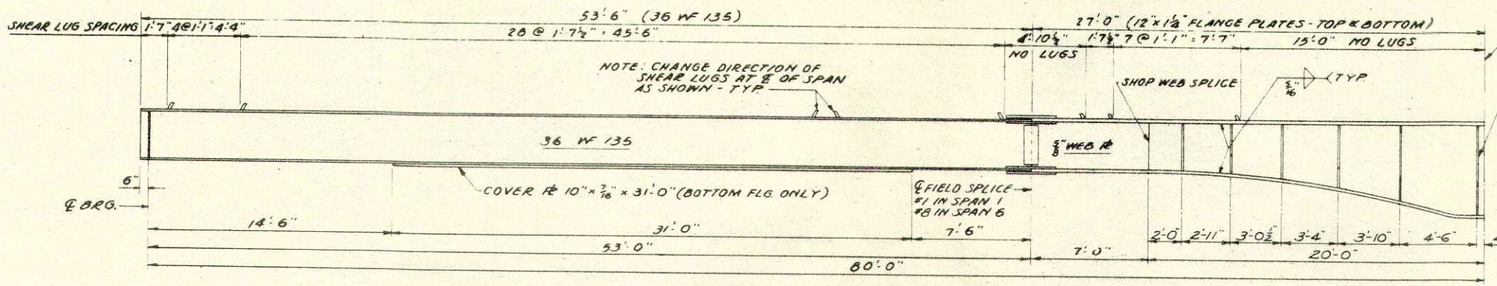
DETAIL D

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	SUPERSTRUCTURE
	DESIGN SPEC. A.A.S.H.O. '61 LOADING H20-S16 MOD. CONST. SPEC. 1963
	DATE 9-1963 DESIGN B.M. DRAWN B.W. END. L. J. G.
	STRUCTURE B-32-47 SHEET 3 OF 15

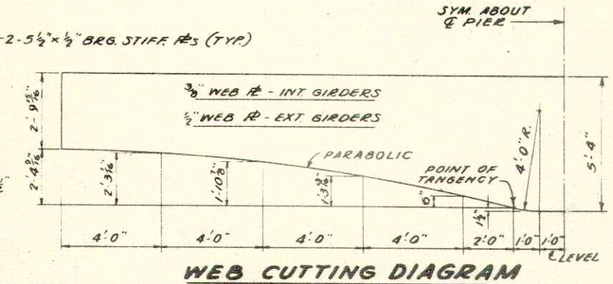
X 27774

FORM E-8-12-62

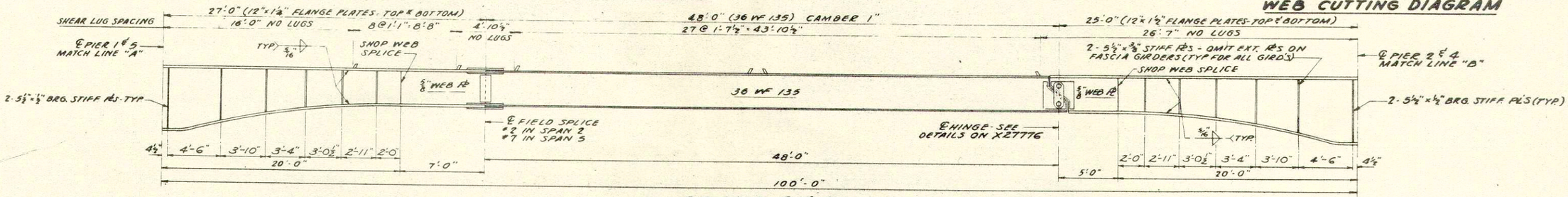
B P R DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(9) 275	26	54



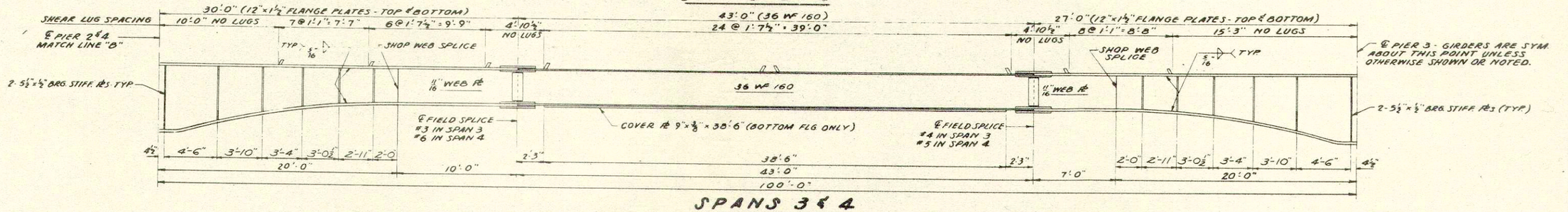
SPANS 1 & 6



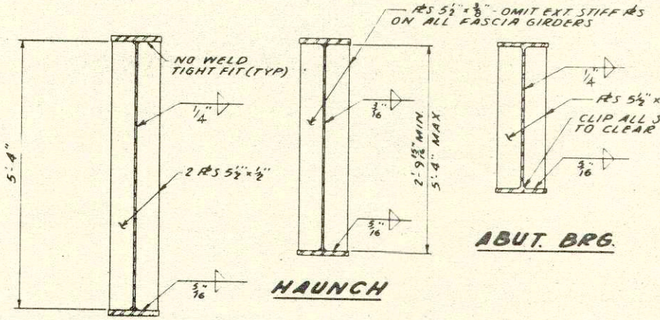
WEB CUTTING DIAGRAM



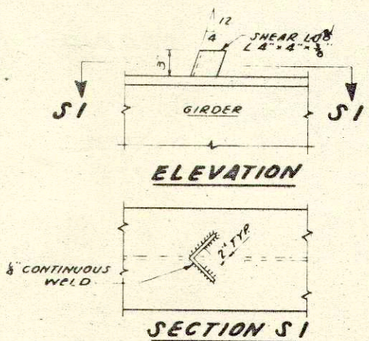
SPANS 2 & 5



SPANS 3 & 4

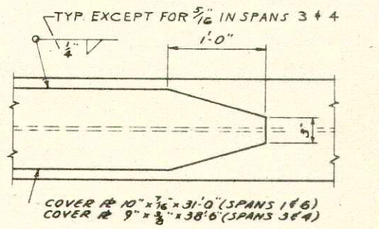


STIFFENER DETAILS



SHEAR LUG DETAILS

NOTES:
- DETAILS OF SHOP WEB SPLICES SHALL BE SHOWN ON THE SHOP DRAWINGS.
- HINGE DETAILS AND FIELD SPLICE DETAILS ARE SHOWN ON SHEET X27776.
- CAMBER 36 WF 135 IN SPANS 2 AND 5 ONLY. CAMBER SHALL CONFORM TO AN ARC OF A CIRCLE.



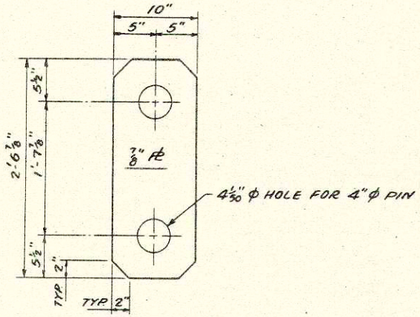
COVER PLATE DETAILS

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	GIRDER DETAILS
	AASHO '61 — HS 20-44 MOD — 1963
	DATE 9-13-63 — B.M. — B.W. — L.J.G.
STRUCTURE B-32-47	SHEET 4 OF 15

27775

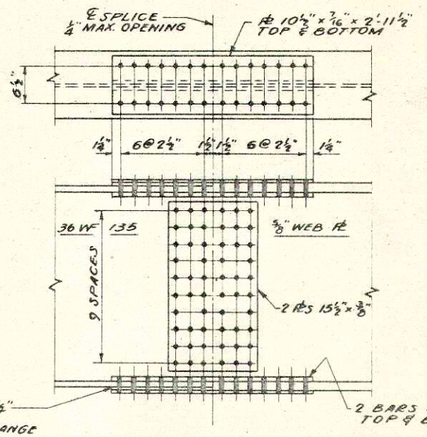
FORM E-B-12-62

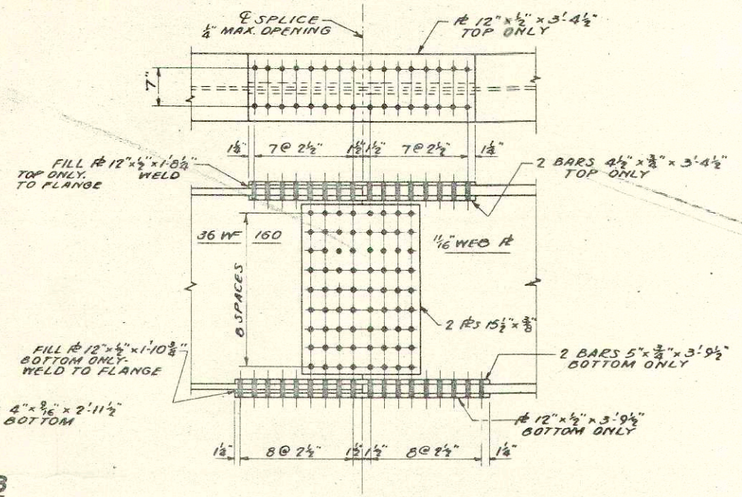
B P R DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3) 275	27	54



HANGER PLATE

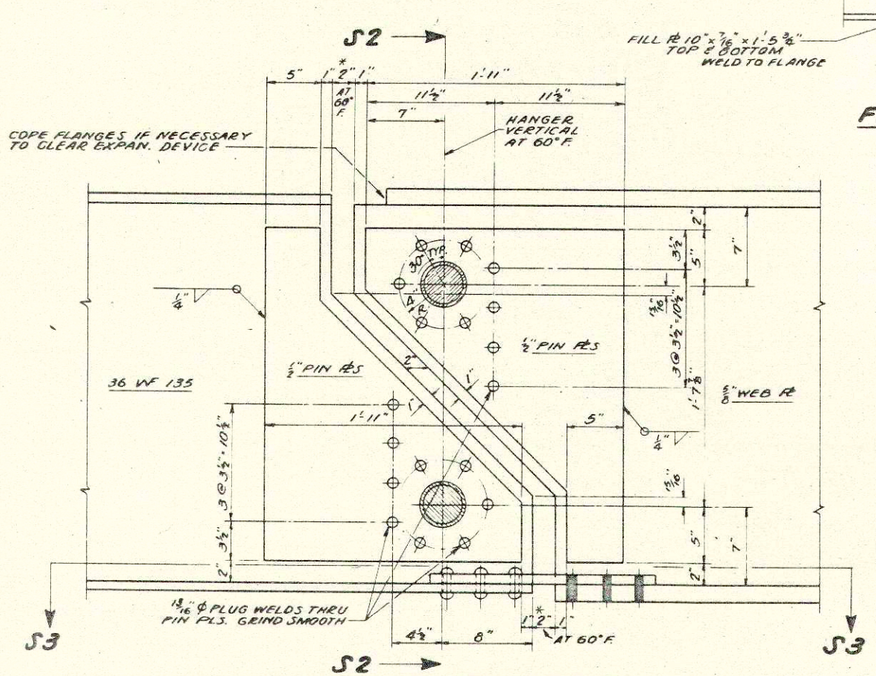
2 REQ'D PER HINGE





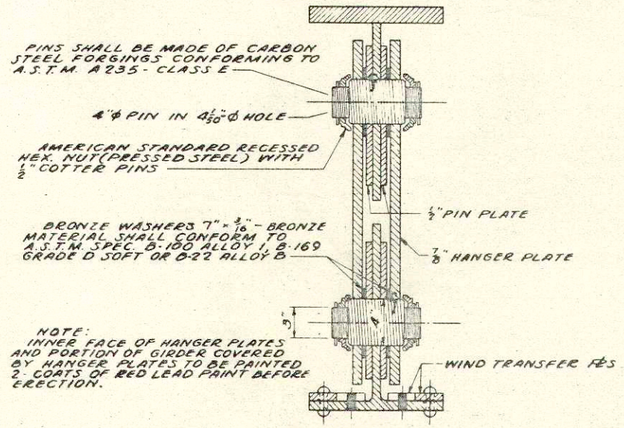
FIELD SPLICE 1, 2, 7 & 8

FIELD SPLICE 3, 4, 5 & 6



HINGE DETAIL

HANGER PLATES NOT SHOWN



SECTION S2

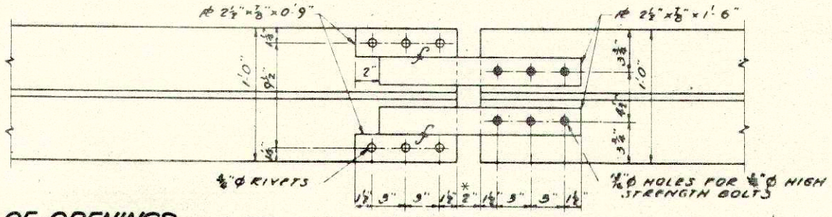


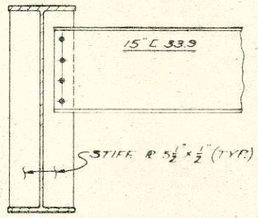
*TABLE OF OPENINGS

0°F	20°F	40°F	60°F	80°F	100°F
3 5/16"	2 7/8"	2 7/16"	2"	1 9/16"	1 1/8"

CONTACT AREA OF WIND TRANSFER PLATES TO BE FINISHED

SECTION S3

TYPICAL AT ALL HINGE LOCATIONS



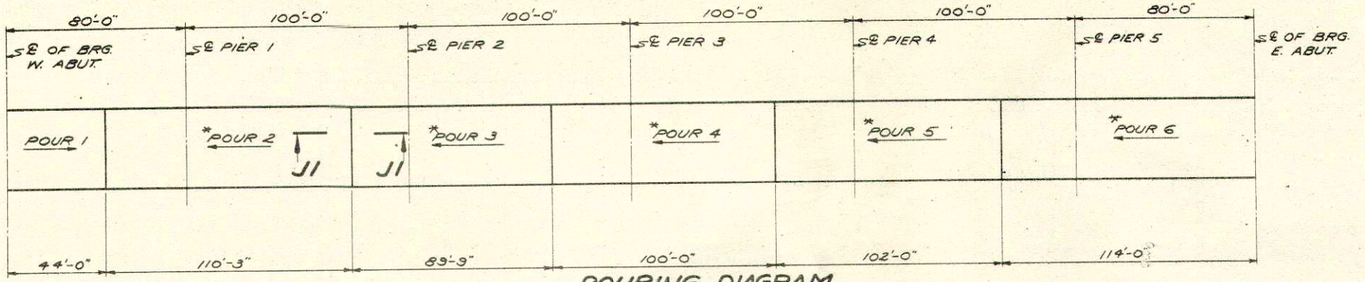
CHANNEL CONNECTION DETAIL AT ABUTMENTS

DESIGN	STATE HIGHWAY COMMISSION OF WISCONSIN
	GIRDER DETAILS
STANDARD SPEC	AASHO '61
STANDARD DET.	1963
DATE	9-1963
CHK.	D.M.
DRN.	B.W.
TRACED	L.J.G.
STRUCTURE	B-32-47
SHEET	5 OF 15

X 27776

FORM E-B-12-62

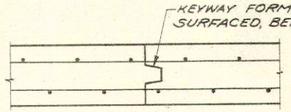
B. P. R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3) 275	28	54



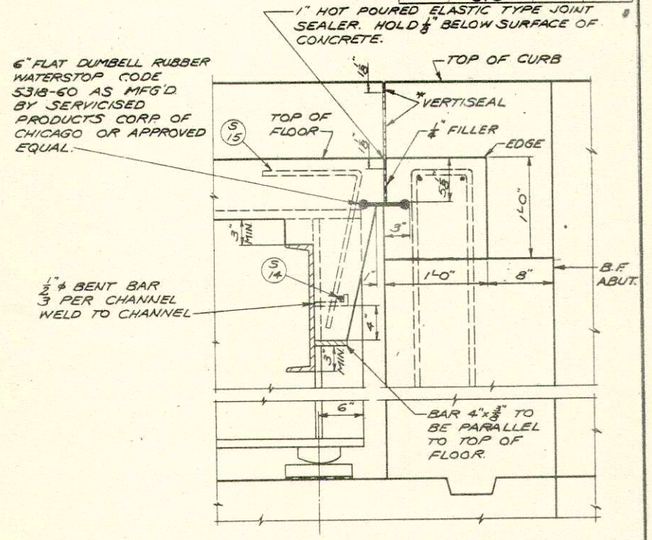
* DIRECTION OF POUR MAY BE REVERSED IF PORTION OF POUR FROM THE PIER CAN BE COMPLETED IN A 4 HOUR PERIOD.

POURING DIAGRAM

TWO OR MORE POURS MAY BE COMBINED AND TRANSVERSE CONSTRUCTION JOINTS OMITTED IF THE POUR FOR AN ENTIRE SPAN OR THE PORTION OF A SPAN TO A CONST. JOINT CAN BE COMPLETED WITHIN 4 HOURS AFTER CONCRETE OVER THE ADJACENT PIER IS PLACED.

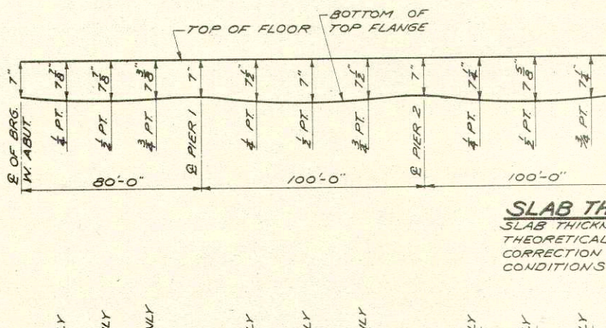


SECTION J1



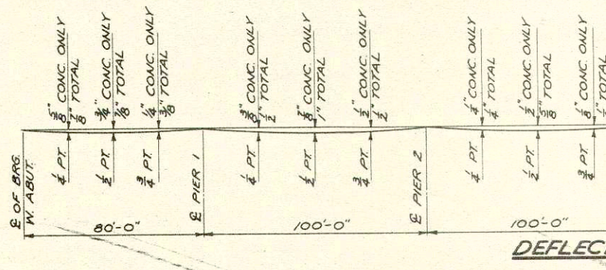
SECTION AT ABUTMENTS

* SEAL CURB JOINT WITH BLACK COLD APPLIED JOINT SEALER "VERTISEAL" AS MANUFACTURED BY THE SERVICISED PRODUCTS CORP. OF CHICAGO, ILL. OR AN APPROVED EQUAL.

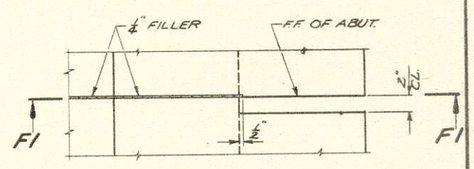


SLAB THICKNESS DIAGRAM

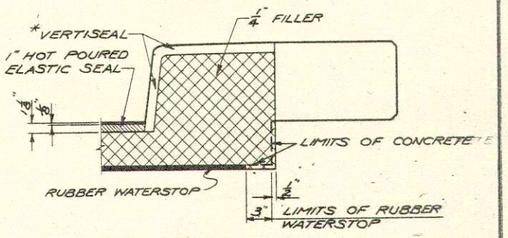
SLAB THICKNESS FIGURES SHOWN ARE THEORETICAL AND ARE SUBJECT TO CORRECTION TO MEET VARIABLE FIELD CONDITIONS.



DEFLECTION DIAGRAM



TOP VIEW OF CURB AT ABUTMENTS



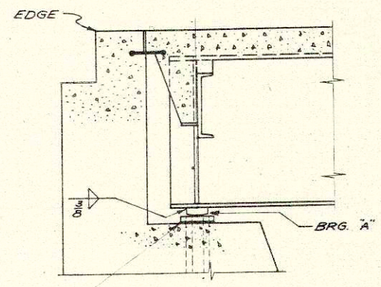
SECTION F1

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	POURING, SLAB THICKNESS & DEFLECTION DIAGRAMS
	DESIGN SPEC. A.A.S.H.O. '61 LOADING H20-S16 M03 CONST. SPEC. 1963
	DATE 9/13/63 DESIGN JM DRAWN BW CKD. L. J. G.
	STRUCTURE B-32-47 SHEET 6 OF 15

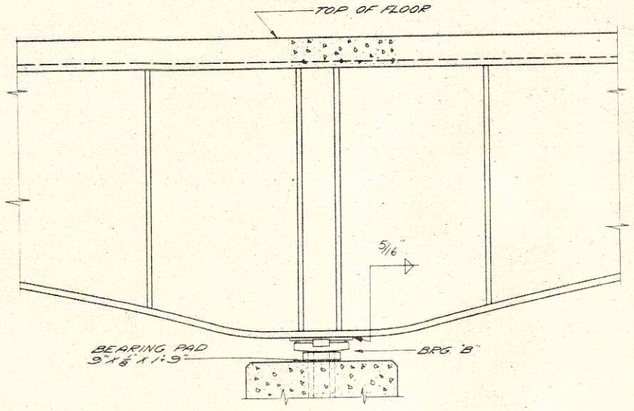
X27777

FORM E-B-12-62

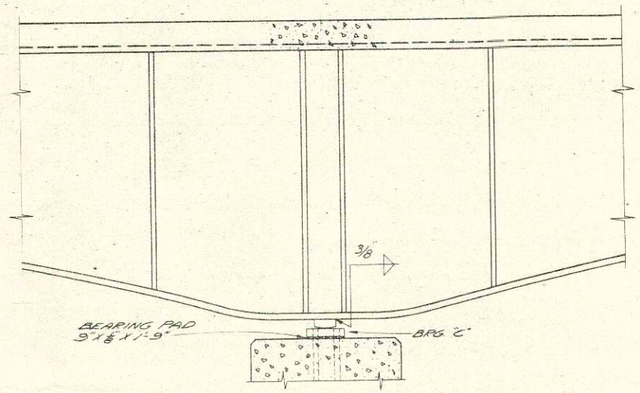
B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3) 275	29	54



E. & W. ABUT'S

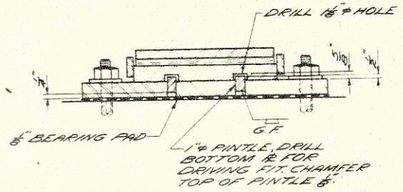


PIERS 1,2,4 & 5

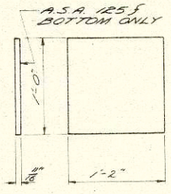


PIER 3

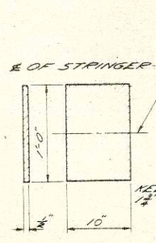
LONGITUDINAL SECTION



TYPICAL PINTLE DETAIL - ALL BRG.'S

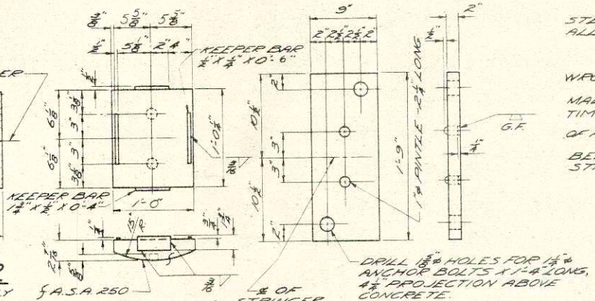


TOP ℄ "B"



LUBR. BRONZE ℄

LUBR. TOP SURFACE ONLY



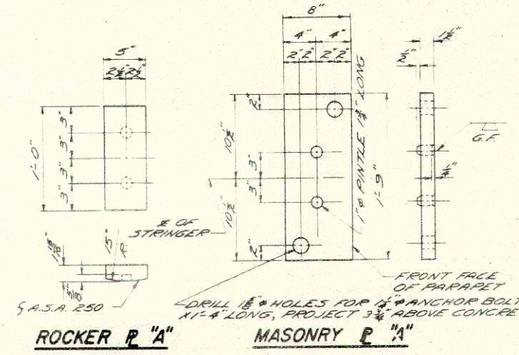
ROCKER ℄ "B"

MASONRY ℄ "B"

BEARING TYPE "B"

20 REQ'D.

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

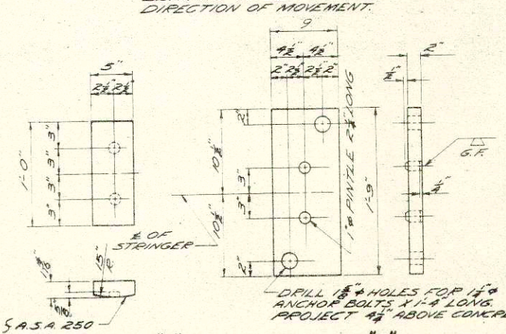


ROCKER ℄ "A"

MASONRY ℄ "A"

BEARING TYPE "A"

10 REQ'D.



ROCKER ℄ "C"

MASONRY ℄ "C"

BEARING TYPE "C"

5 REQ'D.

GENERAL NOTES

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

ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL SURFACES MARKED ƒ SHALL BE MACHINE FINISHED.

ANCHOR BOLTS SHALL BE THREADED 3", PROVIDE ONE 1¼ STANDARD W'POUGHT WASHER & ONE HEX NUT PER BOLT.

ALL MATERIAL EXCEPT ANCHOR BOLTS, NUTS & WASHERS SHALL BE MADE OF A242 STEEL WITH A CORROSIVE RESISTANCE OF 4 OR MORE TIMES THAT OF A36 STEEL.

THE TOP 4½" OF ANCHOR BOLTS, WASHERS & NUTS SHALL BE GALVANIZED.

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

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	LONG. SECTION & BEARINGS
	DESIGN SPEC A.A.S.H.O. 61 LOADING M 18 & MOD. CONST. SPEC. 1963
	DATE 3/13/63 DESIGN J.M. DRAWN B.W. CKD. L.J.G.
STRUCTURE B -32 -47	SHEET 7 OF 15

X27778

FORM E-B-12-62

B. P. R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3) 275	30	54

LEGEND

1. FINGER ℞ 14" x 1½"
2. WEB ℞ 10½ x ½
3. FLANGE ℞ 4½ x ½
4. DIAPHRAGM ℞ 3½ x ⅜ @ ℄ OF GIRDERS AND ⅓ POINTS BETWEEN GIRDERS.
5. ℞ 9½ x ⅜ x 2'-1"
6. 13/16 ϕ HOLES FOR ¾" ϕ BOLTS. DRILL HOLES IN GIRDER FLANGES IN FIELD.
7. ℞ 9½ x ⅜ x 1'-6½"
8. ⅝" □ ANCHOR BARS @ 0'-9" ALTERNATE CTRS. EXTEND 1'-0" INTO FLOOR.
9. MUD PLATES 5½ x ⅜
10. ⅜" SHAPED ℞
11. LAMINATED SHIMS - ¼" MIN.
12. ℞ 9" x ⅜ - CUT TO CURB LIMITS AS SHOWN.
13. ℞ 8⅝ x ⅜ - " " " " " " " " " "
14. ℞ 12" x ⅜ - BEND DOWN FLUSH WITH FACE OF CURB AS SHOWN.
15. ℞ 6⅝ x ⅜ - " " " " " " " " " "
16. ℞ 2" x ⅜ - " " " " " " " " " "
17. ⅝ □ ANCHOR BARS @ 0'-9" CTRS. 1'-6" LONG 8 PER JOINT.
18. ½" ϕ BOLT. TACK WELD NUT TO ℞ 15. GREASE FOR EASY REMOVAL. PROVIDE 3/16" x 1½" SLOTTED HOLE IN ℞ 14 AND 9/16" ϕ HOLE IN ℞ 15.
19. BLOCK AND BOLT FOR SHIPMENT WITH PIPE SLEEVE ⅞" ϕ AND ¾" ϕ BOLT. PLACE AT 5'-0" CTRS.
20. L 3" x 3" x ⅜ x 1'-4". PROVIDE 13/16" ϕ HOLES FOR ¾" ϕ BOLTS EXCEPT FOR 13/16" x 2 7/16" SLOTTED HOLE IN END OF L. TACK WELD NUT TO FINGER ℞. 5 PER JOINT.
21. L 3½ x 3½ x ½" - PROVIDE 13/16" ϕ HOLES FOR 2-¾" ϕ BOLTS PER L. 6 PER JOINT.
22. 2½ x ⅝ x 1'-0" ⌊ ANCHOR BAR. WELD TO ℞'S #14 & #15.

ALL ITEMS MARKED #, SHALL BE MADE OF A242 STEEL WITH A CORROSIVE RESISTANCE OF 4 OR MORE TIMES THAT OF A36 STEEL.

ALL MATERIAL IN EXPANSION JOINT SHALL BE PAID FOR AS STRUCTURAL LOW ALLOY STEEL

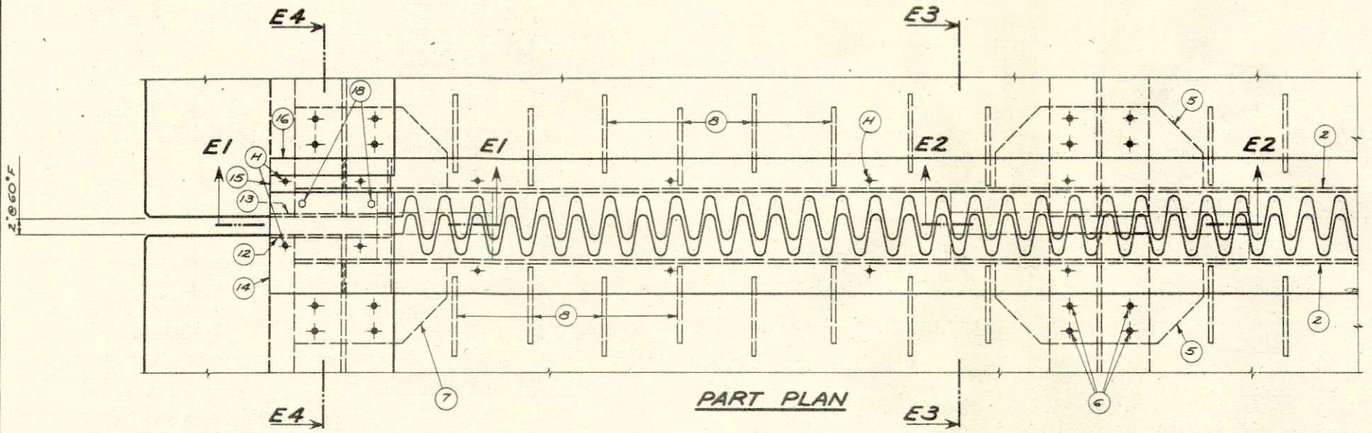
AT POINT MARKED "H", PROVIDE 13/16" ϕ VENT HOLES @ 2'-0" CTRS. IN FINGER ℞'S AND 9" CTRS. IN ℞'S 14 & 15.

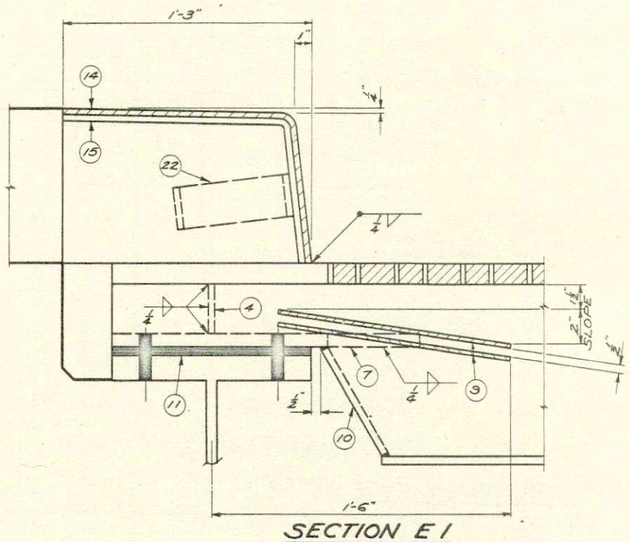
AFTER CONCRETE HAS SET REMOVE BOLT #18 AND FILL HOLES WITH HOT POURED ELASTIC TYPE JOINT SEALER.

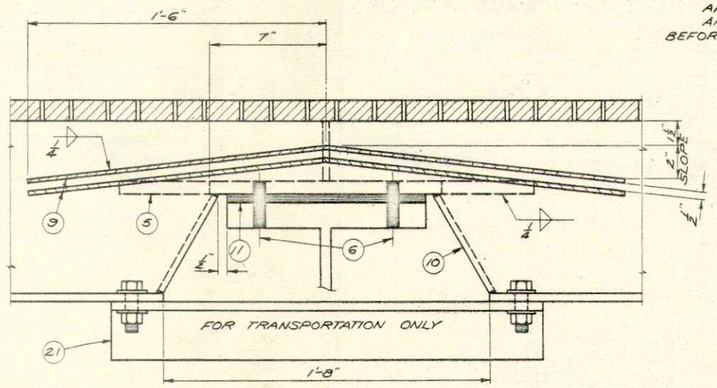
EXPANSION JOINT SHALL BE BUILT TO CONFORM TO RDWY. CROWN AND GRADE.

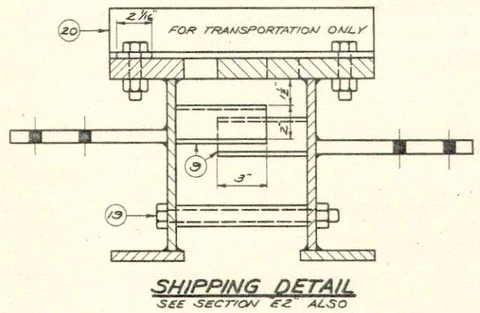
APPLY NO PAINT OTHER THAN TO EXPOSED SURFACES OF ℞'S 14 & 16.

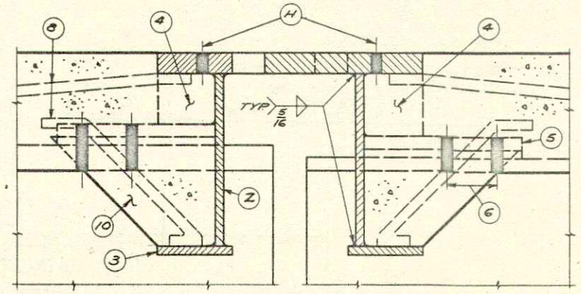
APPLY ± 1/16" COAT OF BITUMASTIC TO EXPOSED SURFACE OF ℞ #15. CLEAN THOUGHLY BEFORE APPLICATION.

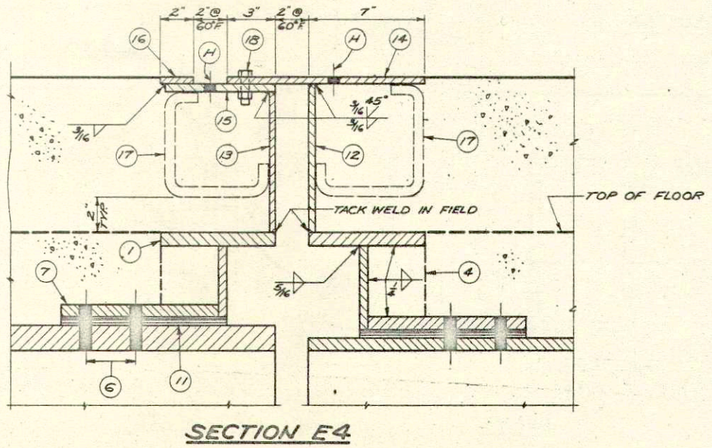


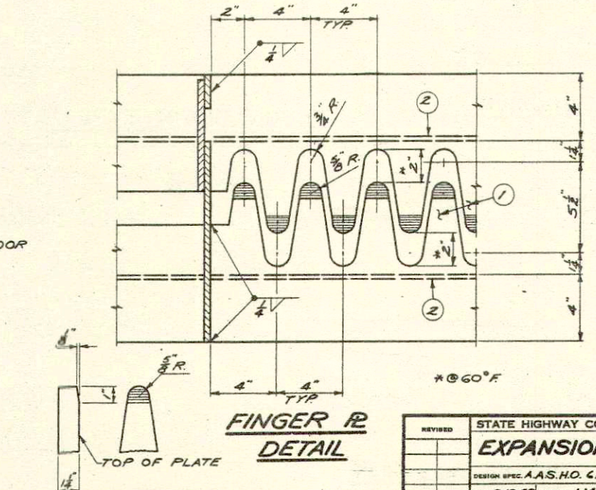










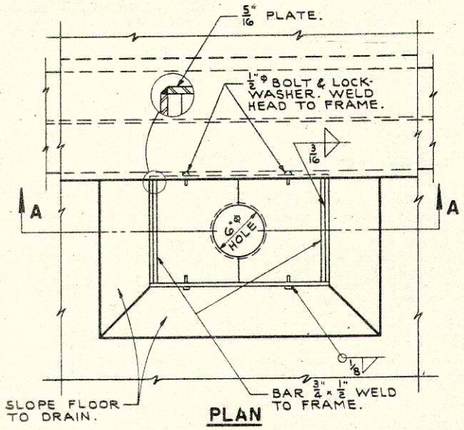


REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN			
	EXPANSION JOINTS			
	DESIGN SPEC. A.A.S.H.O. '61	LOADING H20-S16 MOD.	CONST. SPEC. 1963	
	DATE 9/1963	DESIGN J.M.	DRAWN B.W.	CKD. L. J.G.
	STRUCTURE B-32-47		SHEET 8 OF 15	

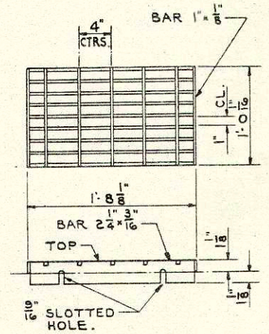
X 27779

FORM E-B-12-62

B P R DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3) 275	31	54

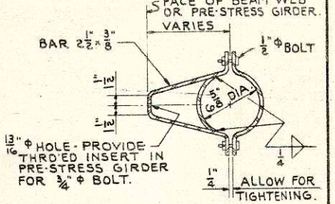


PLAN

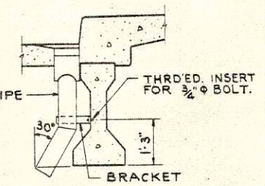


NOTE: RECTANGULAR GRATING AS SPECIFIED OR EQUIV. BOLT GRATE TO FRAME FOR SHIPMENT.

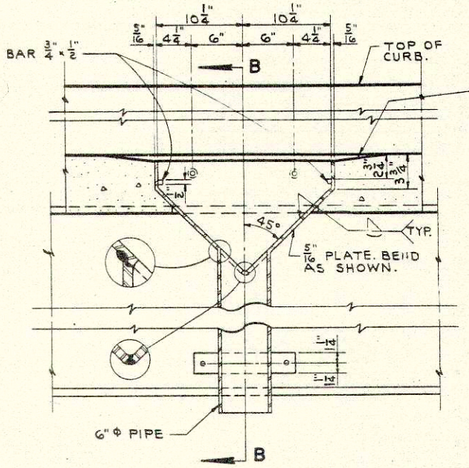
GRATE



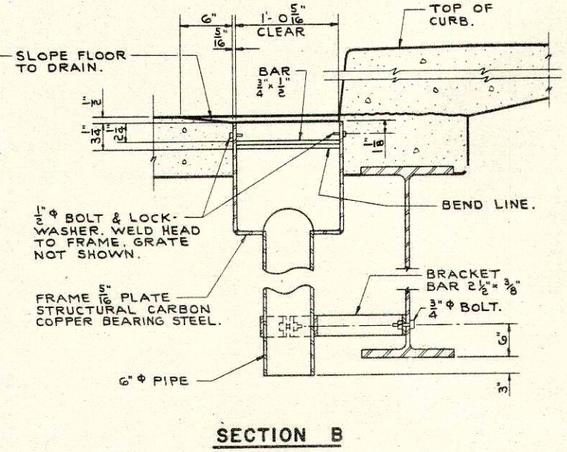
SECTION THRU BRACKET



SECTION AT PRE-STRESS GIRDER

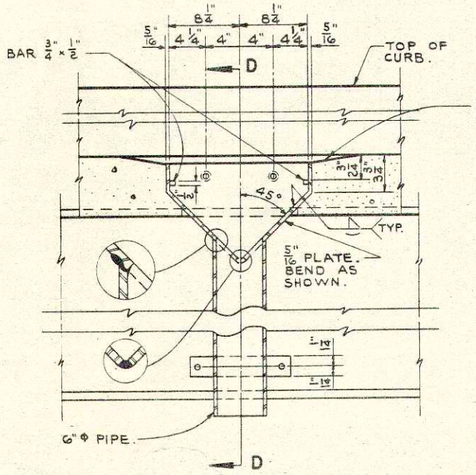


SECTION A

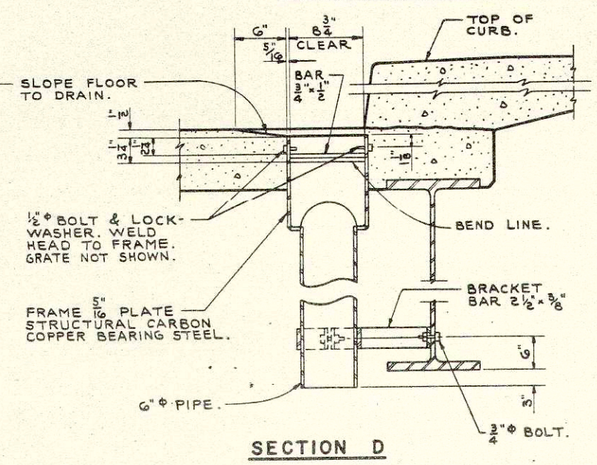


SECTION B

FLOOR DRAIN · TYPE "A"

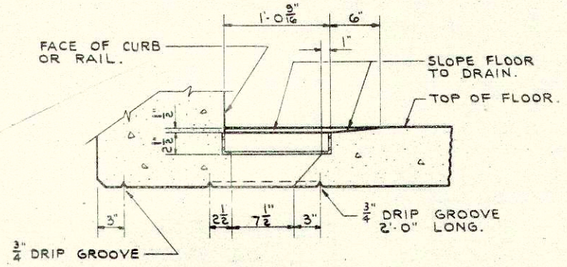


SECTION C

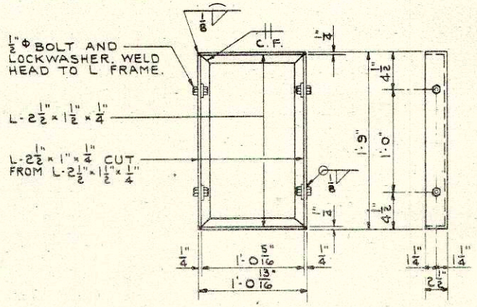


SECTION D

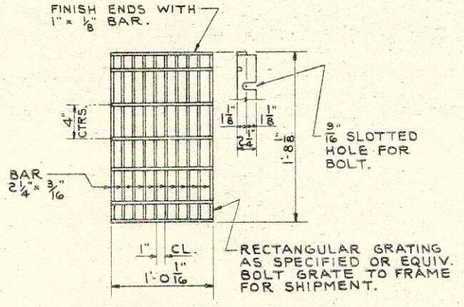
FLOOR DRAIN · TYPE "C"



SECTION THRU DRAIN



FRAME



GRATE

FLOOR DRAIN · TYPE "B"

NOTE: WELDS ON COPPER BEARING STEEL SHALL BE MADE WITH LOW HYDROGEN ELECTRODES.

FLOOR DRAIN · TYPE	A
FLOOR DRAINS REQ'D.	16

REVISED

STATE HIGHWAY COMMISSION OF WISCONSIN

FLOOR DRAIN DETAILS

DESIGN SPEC A.A.S.H.O.1961 LOADING H20-S16 MOD CONST SPEC 1963

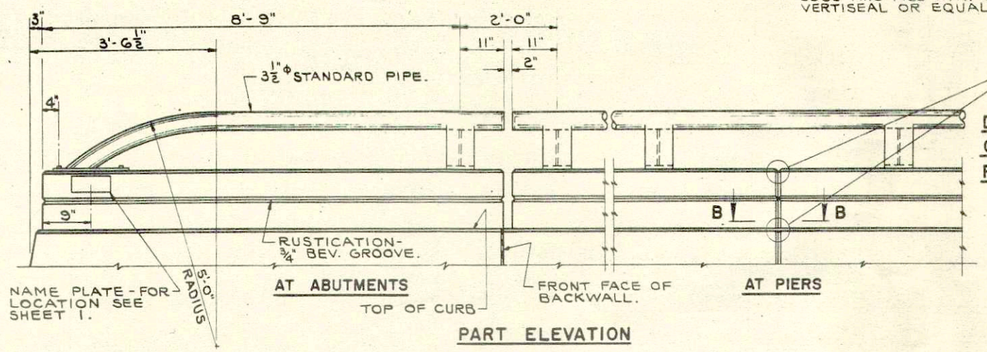
DATE 9/1963 DESIGN JE DRAWN BW LED. L.J.G.

STRUCTURE B-32-47 SHEET 9 OF 15

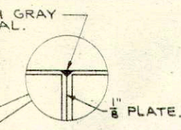
X 27780

FORM E-B-12-62

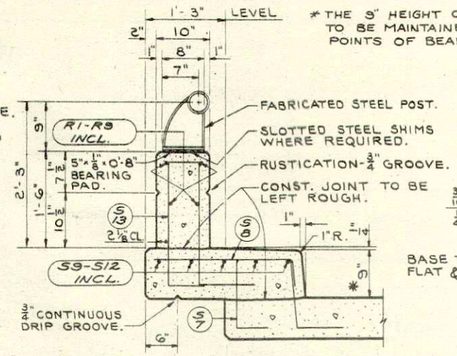
B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3) 275	32	54



PART ELEVATION

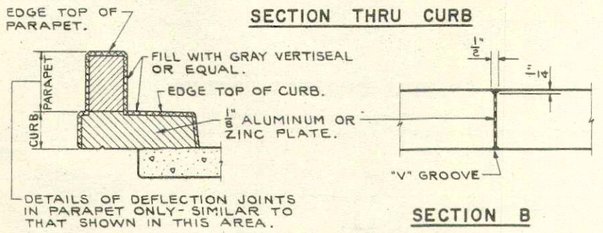


DETAIL AT TOP OF CURB AND PARAPET



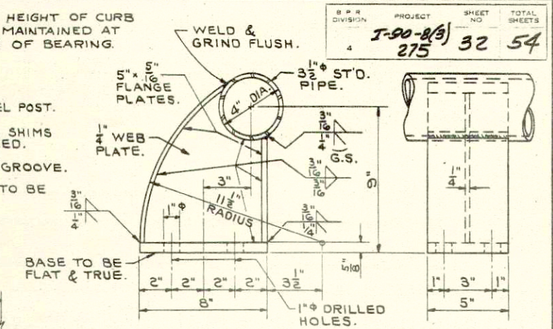
* THE 9" HEIGHT OF CURB TO BE MAINTAINED AT POINTS OF BEARING.

SECTION THRU CURB

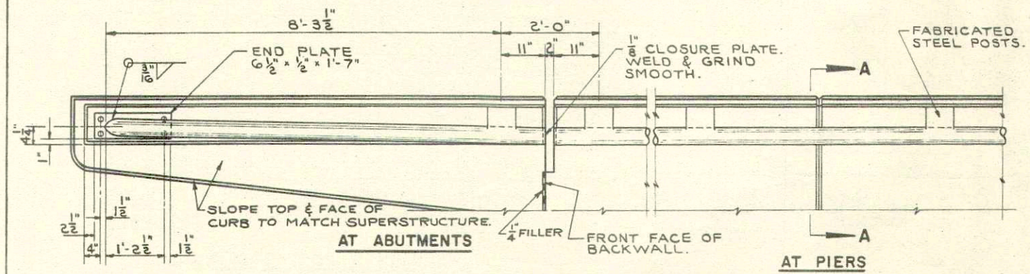


SECTION A

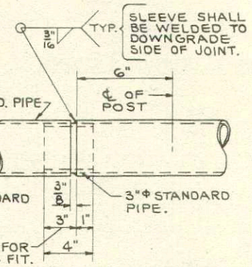
SECTION B



POST DETAILS



PART PLAN



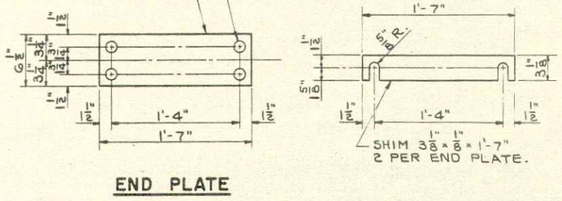
SHOP RAIL SPLICE DETAIL

FIELD ERECTION JOINT DETAIL

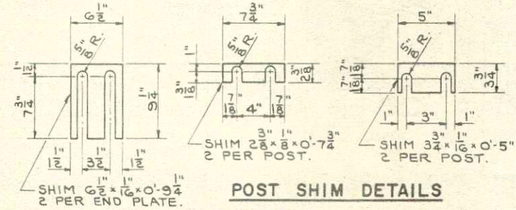
RAILING SHALL BE FABRICATED IN 2 & 3 PANEL LENGTHS.

NOTES

1. STEEL RAIL POSTS SHALL BE SET NORMAL TO GRADE.
2. RAILING SHALL BE FABRICATED IN LENGTHS AS SHOWN.
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 ⅛" 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 3½"Φ STANDARD PIPE ASTM DESIGNATION A53.
   POST SHALL BE FABRICATED FROM MATERIAL CONFORMING TO ASTM DESIGNATION A36.
   ANCHOR BOLTS TO BE MADE FROM MATERIAL CONFORMING TO ASTM DESIGNATION A307.
   SLEEVES SHALL BE 3"Φ STANDARD PIPE ASTM DESIGNATION A53.
6. CAULK EXPOSED OPENINGS BETWEEN SHIMS WITH LEAD WOOL.

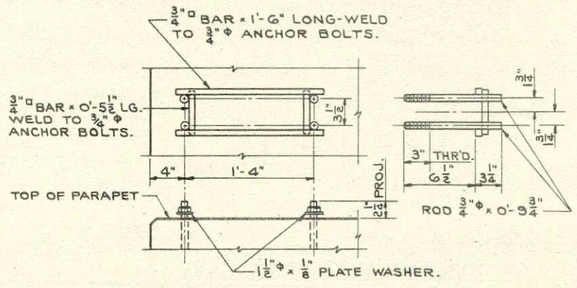


END PLATE

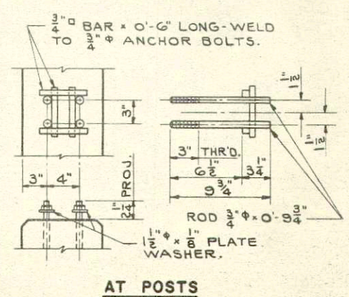


END PLATE SHIM DETAILS

POST SHIM DETAILS



AT END PLATE

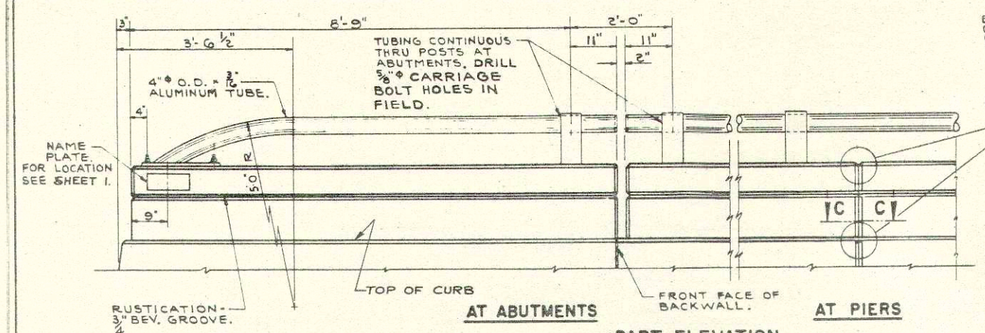


AT POSTS

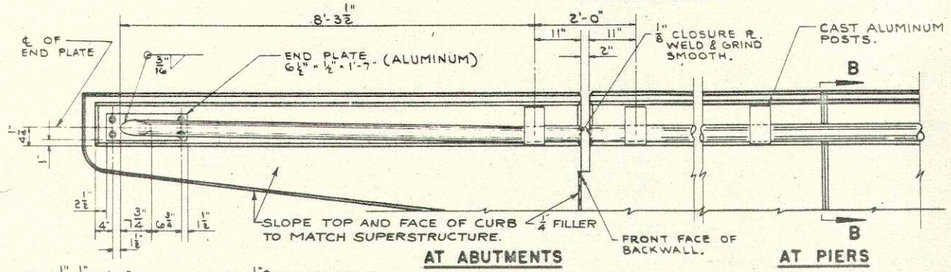
ANCHOR BOLT SETTING DETAILS

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	TUBULAR STEEL RAILING TYPE "A"
	DESIGN SPEC A.A.S.H.O.'61 LOADING H20-S16 MOD. CONST SPEC 1963
	DATE 9-1963 DESIGN STD. DRAWN B.W. CKD. L.J.G.
STRUCTURE B-32-47	SHEET 10 OF 15

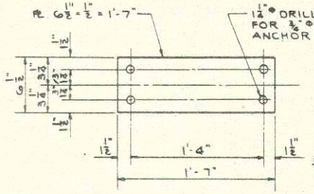
B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-30-8(3) 275	33	54



PART ELEVATION

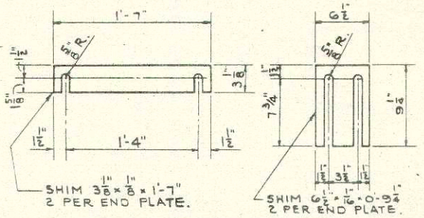


PART PLAN

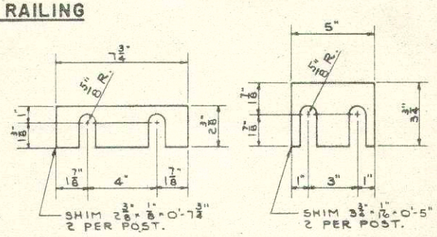


END PLATE
(ALUMINUM)

SINGLE LINE ALUMINUM RAILING

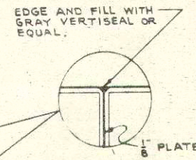


END PLATE SHIM DETAILS



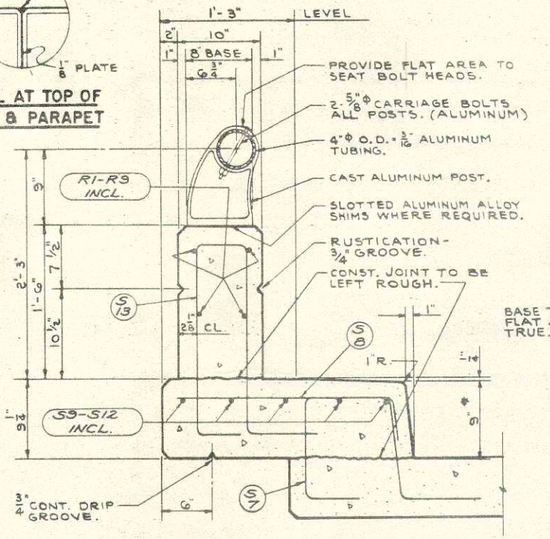
POST SHIM DETAILS

DETAILS OF DEFLECTION JOINTS IN PARAPET ONLY - SIMILAR TO THAT SHOWN IN THIS AREA.

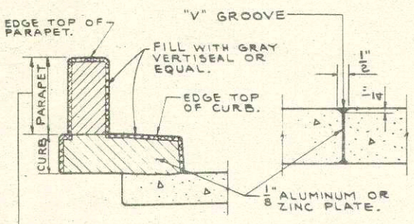


DETAIL AT TOP OF CURB & PARAPET

* THE 5" HEIGHT OF CURB TO BE MAINTAINED AT POINTS OF BEARING.



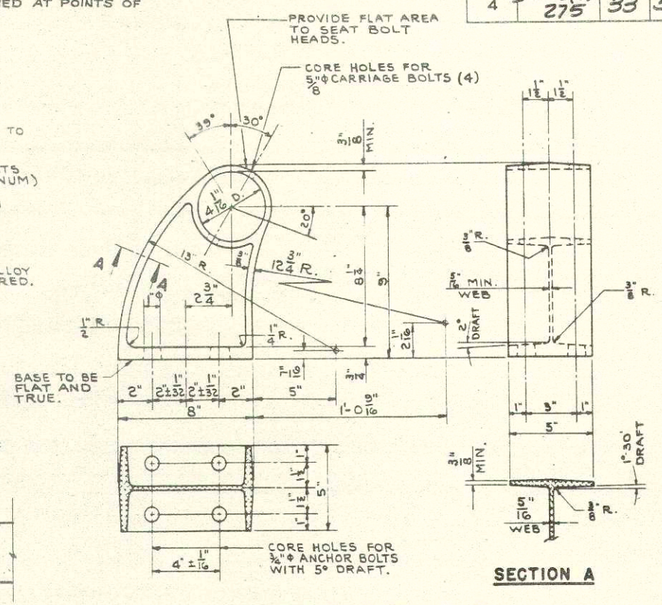
SECTION THRU CURB



SECTION B

SHOWING DEFLECTION JOINT IN CURB AND PARAPET AT PIERS.

SECTION C

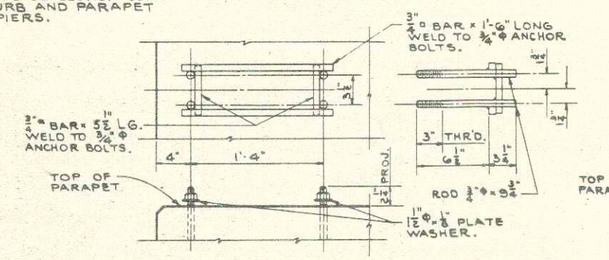


SECTION A

ALUMINUM POST CASTING

NOTES

1. ALUMINUM RAILING POSTS TO BE SET NORMAL TO GRADE.
2. THE HEX. NUTS, WASHERS AND THE UPPER 3" OF 3/4"Φ x 9 3/4" LONG ANCHOR BOLTS SHALL BE GALVANIZED OR CADMIUM PLATED. THE ANCHOR BOLT HOLES, BASE OF RAILING POSTS AND ANCHOR BOLTS, NUTS AND WASHERS SHALL BE COATED WITH AN ALUMINUM IMPREGNATED CAULKING COMPOUND. ANCHOR BOLTS, HEX. NUTS AND WASHERS TO BE STRUCTURAL CARBON STEEL.
3. ALUMINUM TUBING SHALL BE FABRICATED IN 2 OR 3 PANEL LENGTHS.
4. ALUMINUM ALLOY SHIMS SHALL BE USED UNDER POSTS AND UNDER END PLATES WHERE REQUIRED FOR ALIGNMENT.
5. 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.



AT END PLATE

AT POSTS

ANCHOR BOLT SETTING DETAILS

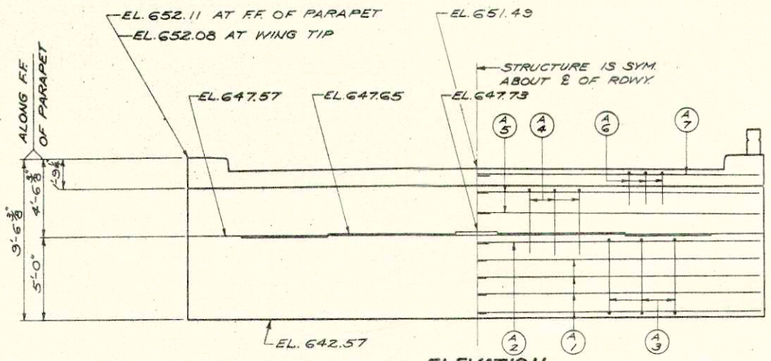
REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	TUBULAR ALUMINUM RAILING TYPE "A"
	DESIGN SPEC. AASHO 61 | LOADING H20-S16 M90 | CONST. SPEC. 1963
	DATE 9-1963 | DESIGN ST'D. | DRAWN BW | CKD L.J.G.
	STRUCTURE B-32-47 | SHEET 11 OF 15

X 27782

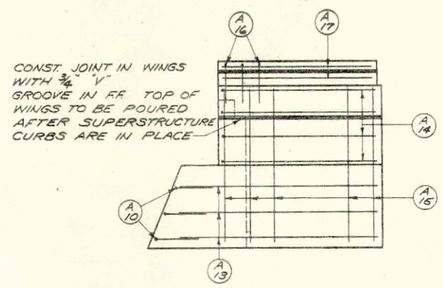
FORM E-B-12-62

B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3) 275	34	54

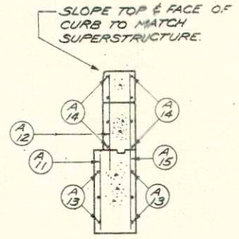
NOTE: FOR RAILING PARAPET DETAILS SEE SHEETS X27781 & X27782



ELEVATION



END VIEW



SECTION THRU WING

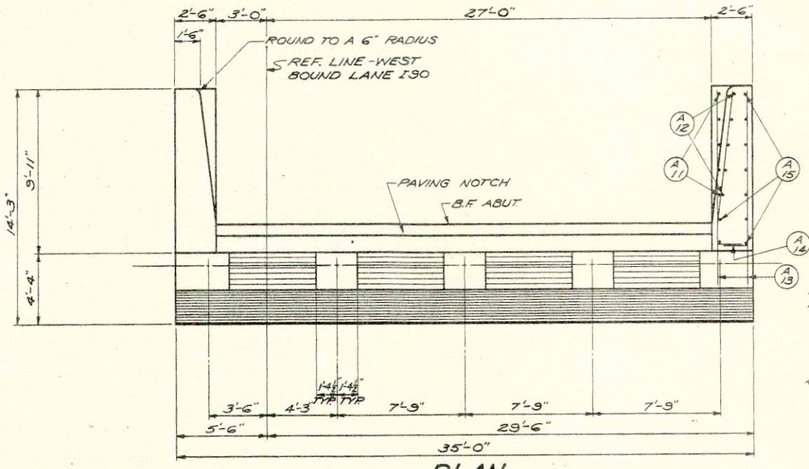
BILL OF BARS

1,590 #'s

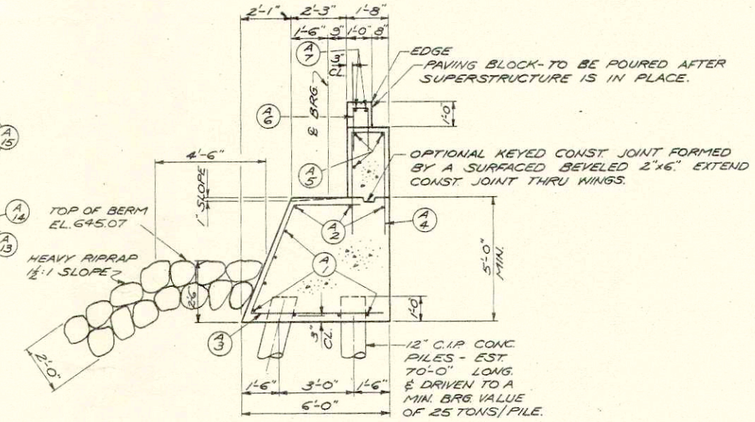
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT

MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
A1	14	4	17-3	SHOWN	BODY - HORIZ.	
A2	6	6	18-0	SHOWN	" "	
* A3	18	4	13-0	2-0	" - VERT.	A
A4	20	5	9-0	1-6	" & PARAPET	B
A5	6	4	17-6	SHOWN	PARAPET	
A6	30	5	4-6	1-0	PAVING BLOCK	B
A7	4	4	17-9	SHOWN	" "	
A8	15	4	2-6	SHOWN	GRID	
A9	20	4	3-6	SHOWN	"	C
A10	6	4	3-6	1-6	BODY CORNERS	C
A11	10	4	4-6	1-6	WINGS - VERT.	
A12	10	4	5-6	1-6	" "	
A13	12	4	11-9	1-6	" - HORIZ.	
A14	16	4	11-3	1-5	" "	C
A15	18	4	9-0	1-6	" - VERT.	
A16	20	5	5-3	1-0	RAILING PARAPET	B
A17	8	5	9-3	SHOWN	" "	

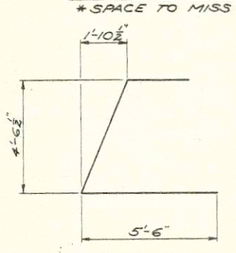
* SPACE TO MISS PILING.



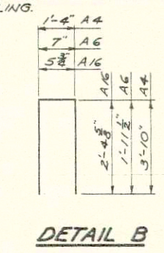
PLAN



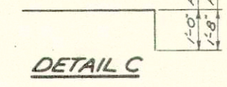
SECTION THRU BODY



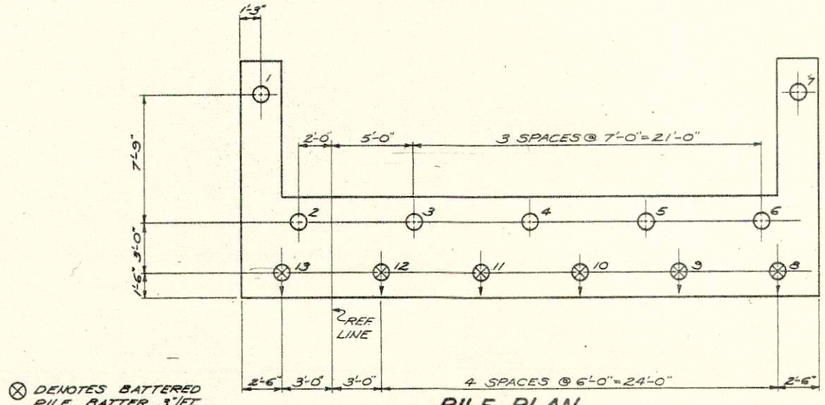
DETAIL A



DETAIL B

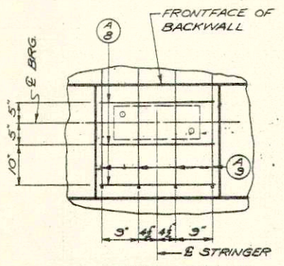


DETAIL C

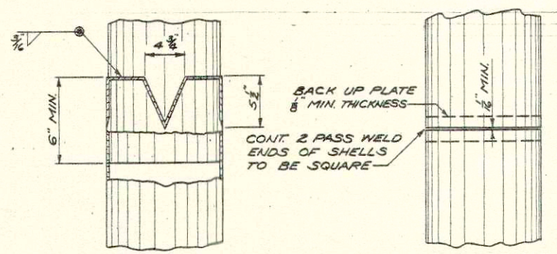


⊗ DENOTES BATTERED PILE. BATTER 3"/FT. IN DIRECTION SHOWN.

PILE PLAN



GRID DETAIL



FLUTED PILE

PIPE PILE

PILE SPLICE DETAIL

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	WEST ABUTMENT
	DESIGN SPEC. A.A.S.H.O. '61 LOADING H20-S16 MOD. CONST. SPEC. 1963
	DATE 9-1963 DESIGN BHM DRAWN BW CKD. L.J.G.
	STRUCTURE B-32-47 SHEET 12 OF 15

X 27783

FORM E-B-12-62

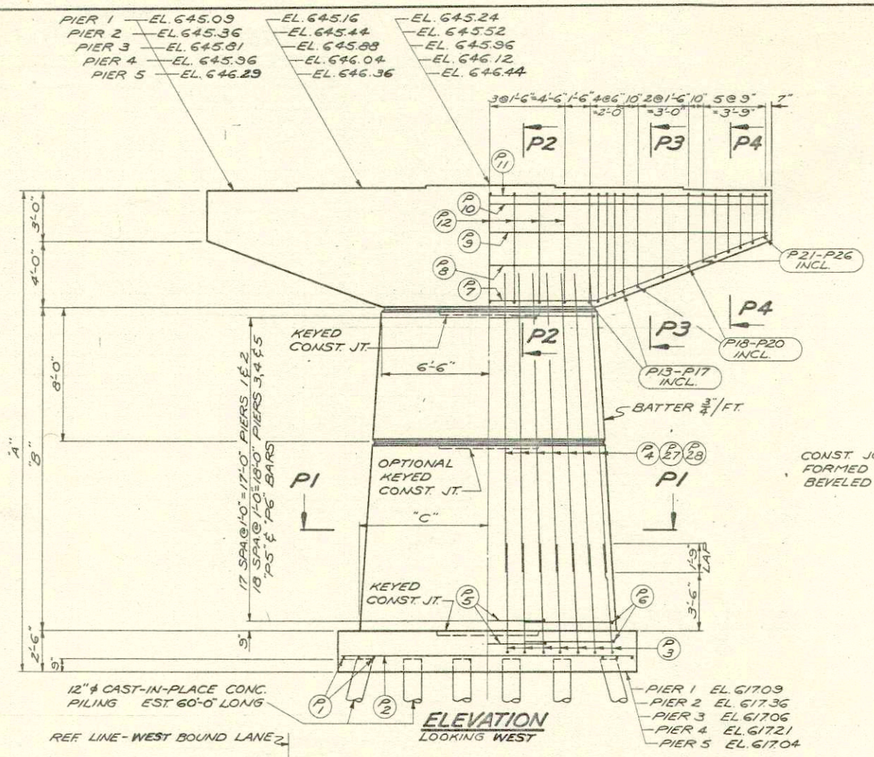
B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3) 275	35	54

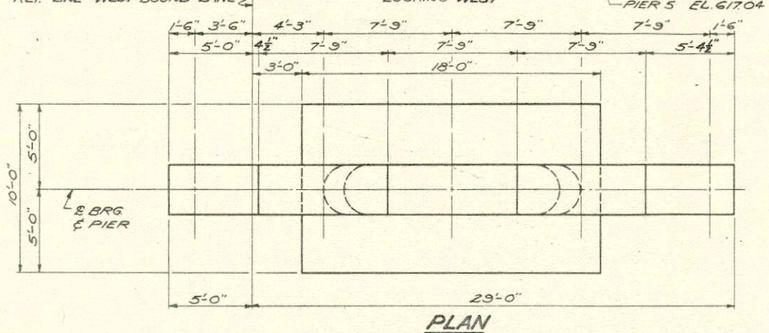
32,960 #'s

BILL OF BARS

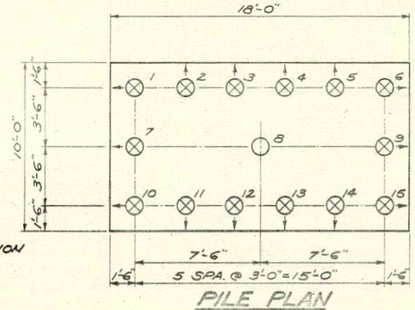
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

POUR	MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
FOOTING	P1	105	11	9-6	10½	FOOTING	
	P2	120	5	17-6	5	"	
	P3	150	9	7-6	SHOWN	" -VERT.	A
	P5	10	4	10-0	"	" -TIES	B
	P6	10	4	12-3	"	" "	C
STEM	P4	60	7	17-0	SHOWN	STEM-VERT-PIERS 1 & 2	
	P5	186	4	10-0	"	" -TIES	B
	P6	186	4	12-3	"	" "	C
	P27	60	7	17-9	"	" -VERT-PIERS 3 & 4	
	P28	30	7	18-3	"	" " -PIER 5	
CAP BEAM	P7	30	4	18-0	SHOWN	CAP BEAM	D
	P8	10	4	23-6	"	" "	
	P9	20	4	17-3	"	" "	
	P10	25	10	33-6	"	" "	
	P11	35	11	33-6	"	" "	
	P12	35	4	19-6	"	" -STIRRUP-SINGLE	E
	P13	20	4	17-0	"	" " -DOUBLE	F
	P14	20	4	17-0	"	" " "	F
	P15	20	4	16-9	"	" " "	F
	P16	20	4	16-3	"	" " "	F
	P17	20	4	16-0	"	" " "	F
	P18	10	4	17-9	"	" -SINGLE	E
	P19	10	4	16-6	"	" "	E
	P30	10	4	15-3	"	" "	E
	P21	20	4	12-3	"	" " -DOUBLE	F
	P22	20	4	11-9	"	" " "	F
	P23	20	4	11-3	"	" " "	F
	P24	20	4	10-6	"	" " "	F
	P25	20	4	10-0	"	" " "	F
	P26	20	4	9-6	"	" " "	F



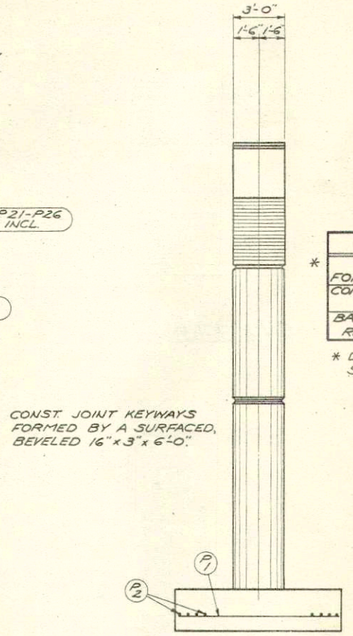


PLAN



⊗ DENOTES BATTERED PILE BATTER 1½/FT. IN DIRECTION SHOWN.

PILE PLAN



END VIEW

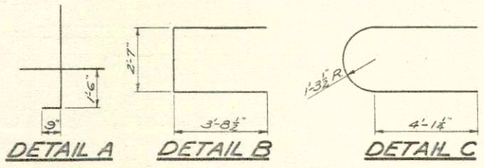
DIMENSION	PIER 1	PIER 2	PIER 3	PIER 4	PIER 5
"A"	28'-0"	28'-0"	28'-9"	28'-9"	29'-3"
"B"	18'-6"	18'-6"	19'-3"	19'-3"	19'-9"
"C"	7'-7⅞"	7'-7⅞"	7'-8⅜"	7'-8⅜"	7'-8¾"

ESTIMATE OF QUANTITIES

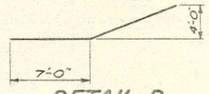
ITEM	PIER 1	PIER 2	PIER 3	PIER 4	PIER 5
* EXCAVATION FOR STRUCTURES	100 C.Y.	100 C.Y.	100 C.Y.	100 C.Y.	100 C.Y.
CONC. MASONRY GRADE 'AA'	66.1 C.Y.	66.1 C.Y.	67.4 C.Y.	67.4 C.Y.	68.2 C.Y.
BAR STEEL REINFORCEMENT	6540#	6540#	6620#	6620#	6640#

* DOES NOT INCLUDE EXCAVATION FOR SUB-FOUNDATION COURSE.

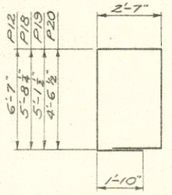
NOTE: UNLESS OTHERWISE SHOWN ALL BAR STEEL REINFORCEMENT SHALL BE IMBEDDED 2½" CLEAR.



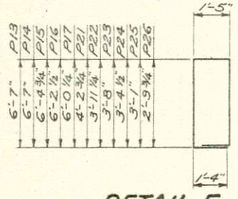
DETAIL A DETAIL B DETAIL C



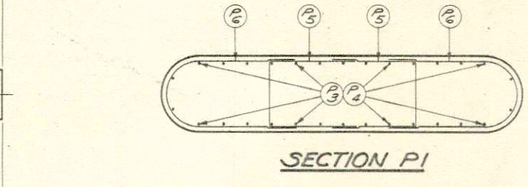
DETAIL D



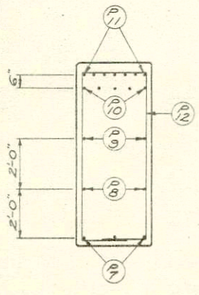
DETAIL E



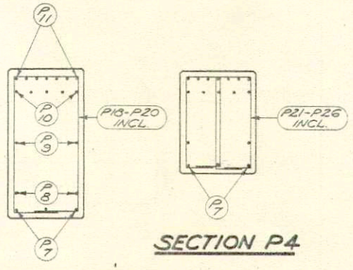
DETAIL F



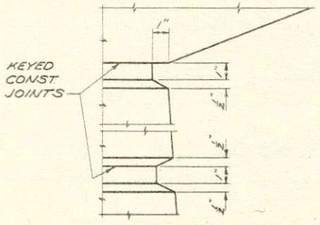
SECTION P1



SECTION P2



SECTION P3 SECTION P4



RUSTICATION DETAIL

NOTE: FOR PILE SPLICE DETAILS - SEE SHEET X27786.

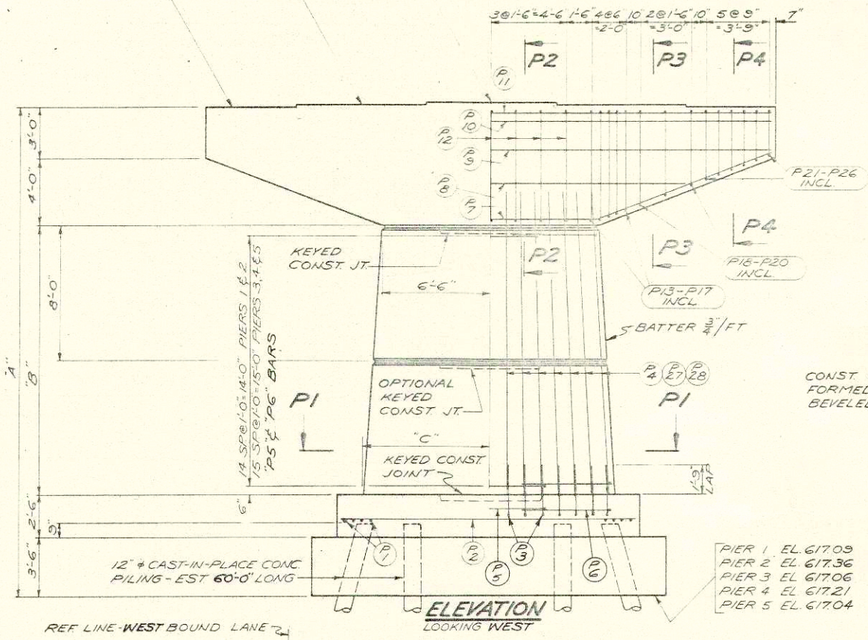
REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
12-4-63 BW JJH	PIERS WITHOUT SEAL
	DESIGN SPEC. AASHO '61 LOADING H20-S16 H00 CONST. SPEC. 1963
	DATE 9-1963 DESIGN ME DRAWN BW CKD. L.J.G
	STRUCTURE B-32-47 SHEET 13 OF 15

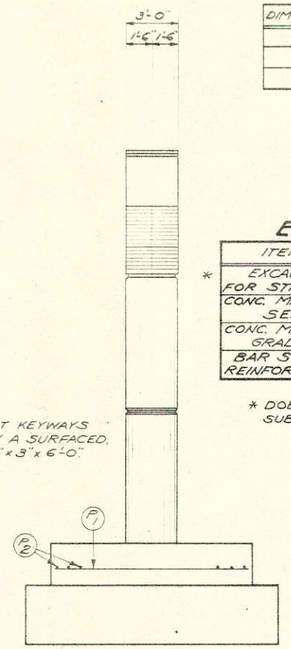
X 27784

FORM E-B-12-62

#'S	B. P. R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
34060	4	I-90-3(3) 275	36	54

PIER 1 — EL 645.09 — EL 645.16 — EL 645.24
PIER 2 — EL 645.36 — EL 645.44 — EL 645.52
PIER 3 — EL 645.81 — EL 645.88 — EL 645.96
PIER 4 — EL 645.96 — EL 646.04 — EL 646.12
PIER 5 — EL 646.29 — EL 646.36 — EL 646.44





CONST. JOINT KEYWAYS FORMED BY A SURFACED, BEVELED 16" x 3" x 6'-0"

DIMENSION	PIER 1	PIER 2	PIER 3	PIER 4	PIER 5
"A"	28'-0"	28'-0"	28'-9"	28'-9"	29'-3"
"B"	15'-0"	15'-0"	15'-9"	15'-9"	16'-3"
"C"	7'-5 1/4"	7'-5 1/4"	7'-5 3/4"	7'-5 3/4"	7'-6 5/8"

ESTIMATE OF QUANTITIES

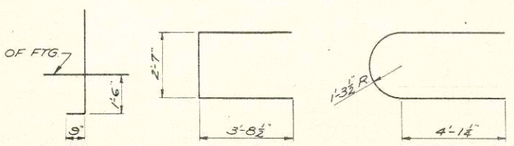
ITEM	PIER 1	PIER 2	PIER 3	PIER 4	PIER 5
EXCAVATION FOR STRUCTURES	120 C.Y.	120 C.Y.	120 C.Y.	120 C.Y.	120 C.Y.
CONC. MASONRY SEAL	39.3 C.Y.	39.3 C.Y.	39.3 C.Y.	39.3 C.Y.	39.3 C.Y.
CONC. MASONRY GRADE "AA"	63.9 C.Y.	63.9 C.Y.	65.0 C.Y.	65.0 C.Y.	65.9 C.Y.
BAR STEEL REINFORCEMENT	6,760#	6,760#	6,835#	6,835#	6,870#

* DOES NOT INCLUDE EXCAVATION FOR SUB-FOUNDATION COURSE.

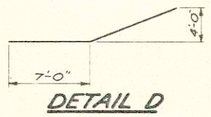
BILL OF BARS

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

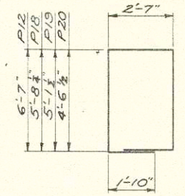
POUR	MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET
FOOTING	P1	165	11	11-6	6 1/4	FOOTING	
	P2	85	5	17-6	8 1/4	"	
	P3	150	7	4-0	SHOWN	" -VERT	A
	P5	10	4	10-0	"	" -TIES	B
	P6	10	4	12-3	"	" "	C
STEM	P4	60	7	17-0	SHOWN	STEM-VERT-PIERS 1 & 2	
	P5	156	4	10-0	"	" -TIES	B
	P6	156	4	12-3	"	" "	C
	P27	60	7	17-9	"	" -VERT-PIERS 3 & 4	
	P28	30	7	18-3	"	" " -PIER 5	
CAP BEAM	P7	30	4	18-0	SHOWN	CAP BEAM	D
	P8	10	4	23-6	"	" "	
	P9	20	4	17-3	"	" "	
	P10	25	10	33-6	"	" "	
	P11	35	11	33-6	"	" "	
	P12	35	4	19-6	"	" " -STIRRUP-SINGLE	E
	P13	20	4	17-0	"	" " " -DOUBLE	F
	P14	20	4	17-0	"	" " " "	F
	P15	20	4	16-9	"	" " " "	F
	P16	20	4	16-3	"	" " " "	F
	P17	20	4	16-0	"	" " " "	F
	P18	10	4	17-9	"	" " -SINGLE	E
	P19	10	4	16-6	"	" " "	E
	P20	10	4	15-3	"	" " "	E
	P21	20	4	12-3	"	" " " -DOUBLE	F
	P22	20	4	11-9	"	" " " "	F
	P23	20	4	11-3	"	" " " "	F
	P24	20	4	10-6	"	" " " "	F
	P25	20	4	10-0	"	" " " "	F
	P26	20	4	9-6	"	" " " "	F



DETAIL A DETAIL B DETAIL C

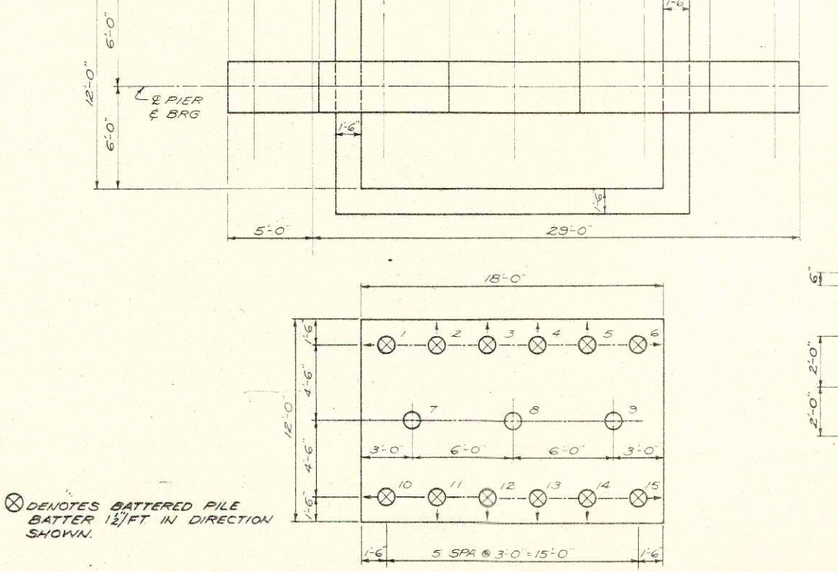


DETAIL D

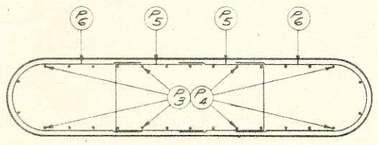


DETAIL E

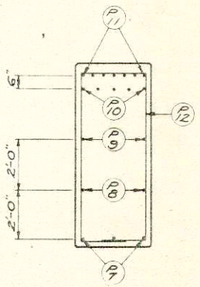
NOTE: UNLESS OTHERWISE SHOWN ALL BAR STEEL REINFORCEMENT SHALL BE IMBEDDED 2 1/2" CLEAR.



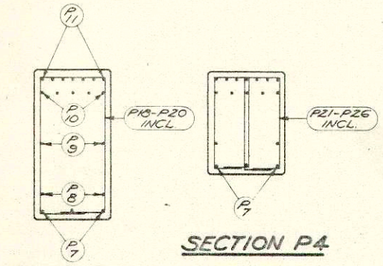
⊗ DENOTES BATTERED PILE BATTER 1 1/2"/FT IN DIRECTION SHOWN.



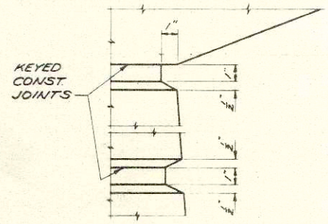
SECTION P1



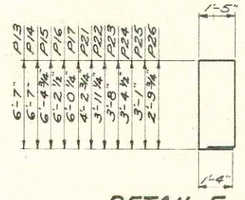
SECTION P2



SECTION P3 SECTION P4



RUSTICATION DETAIL



DETAIL F

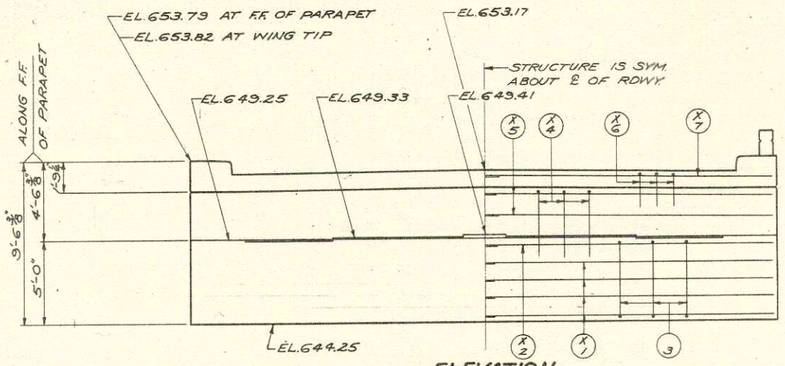
NOTE FOR PILE SPLICE DETAILS - SEE SHEET X27786.

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN			
12-64 BW JJM	PIERS WITH SEAL			
	DESIGN SPEC. AASHO '61	STANDARDS H20-S16 M00	CLIMATIC REGION 1963	
	DATE 9-13-63	DESIGNED JE	DRAWN BW	CHK'D L.J.G.
	STRUCTURE B-32-47		SHEET 14 OF 15	

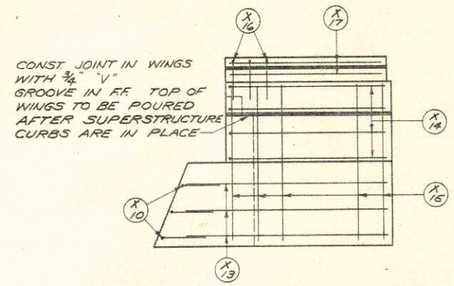
X 27785

FORM E-B-12-62

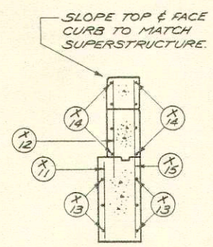
NOTE: FOR RAILING PARAPET DETAILS SEE SHEETS X27781 & X27782.



ELEVATION



END VIEW



SECTION THRU WING

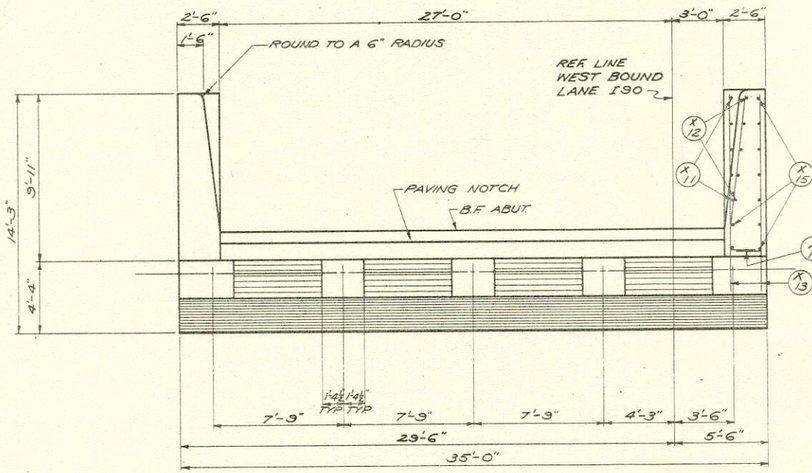
1,590 #'s BILL OF BARS

B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	2-50-8(3) 275	37	54

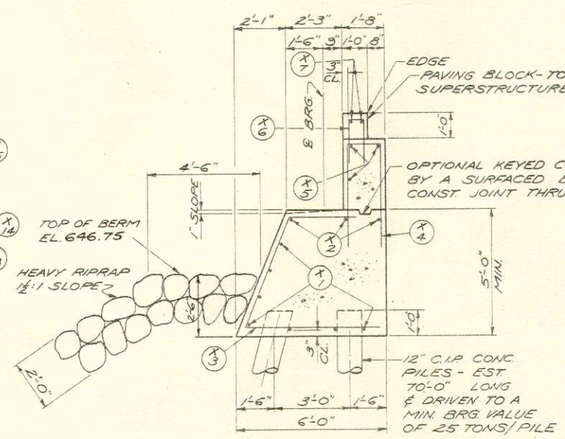
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
X1	14	4	17-3	SHOWN	BODY - HORIZ.	
X2	6	6	18-0	SHOWN	" "	
* X3	18	4	13-0	32-0	" - VERT.	A
X4	20	5	9-0	1-6	" ℄ PARAPET	B
X5	6	4	17-6	SHOWN	PARAPET	
X6	30	5	4-6	1-0	PAVING BLOCK	B
X7	4	4	17-9	SHOWN	" "	
X8	15	4	2-6	SHOWN	GRID	
X9	20	4	3-6	SHOWN	"	C
X10	6	4	3-6	1-6	BODY CORNERS	C
X11	10	4	4-6	1-6	WINGS - VERT.	
X12	10	4	5-6	1-6	" "	
X13	12	4	11-3	1-6	" - HORIZ.	
X14	16	4	11-3	1-5	" "	C
X15	18	4	9-0	1-6	" - - VERT.	
X16	20	5	5-3	1-0	RAILING PARAPET	B
X17	8	5	9-3	SHOWN	" "	

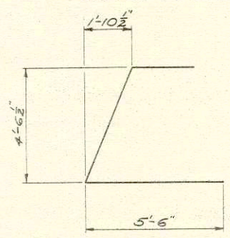
* SPACE TO MISS PILING.



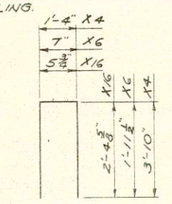
PLAN



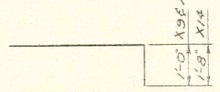
SECTION THRU BODY



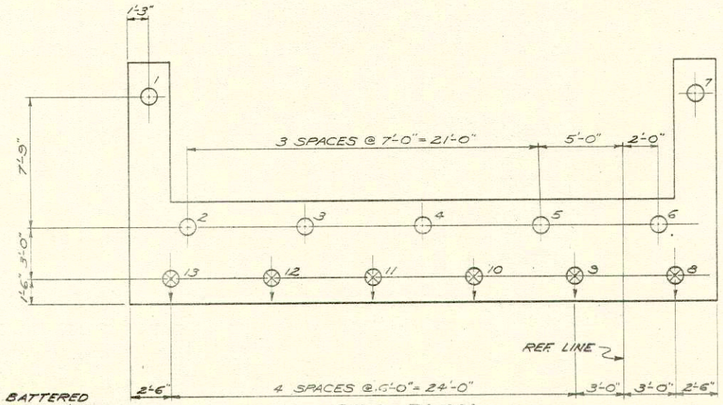
DETAIL A



DETAIL B

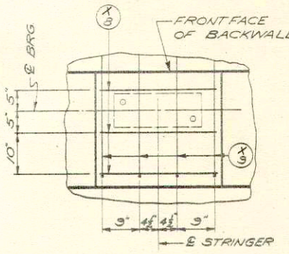


DETAIL C

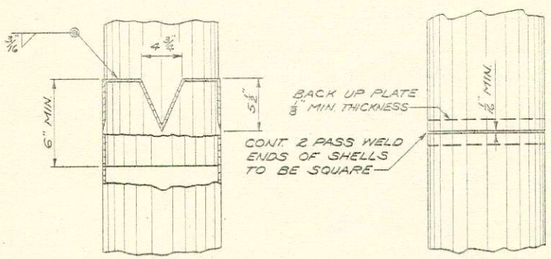


PILE PLAN

⊗ DENOTES BATTERED PILE. BATTER 3"/FT. IN DIRECTION SHOWN.



GRID DETAIL



FLUTED PILE

PIPE PILE

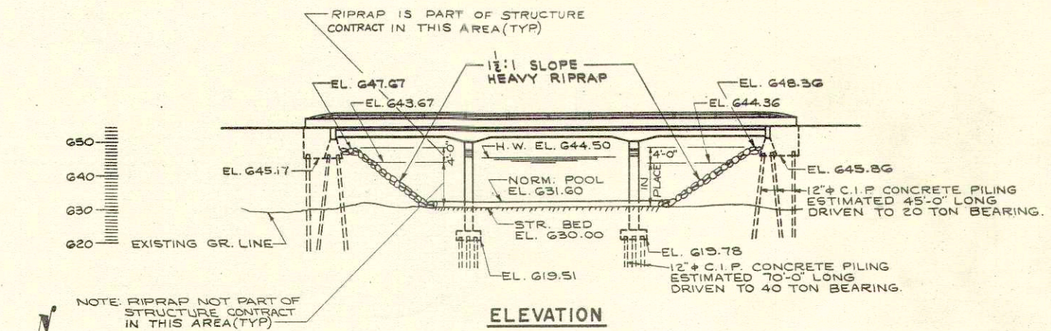
PILE SPLICE DETAIL

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	EAST ABUTMENT
	DESIGN SPEC. A.A.S.H.O. '61 / LOADING H20-S16 MOD. / CONST. SPEC. 1963
	DATE 9-1963 / DESIGN BHM / DRAWN BW / CKD. L. J. G.
	STRUCTURE B-32-47 / SHEET 15 OF 15

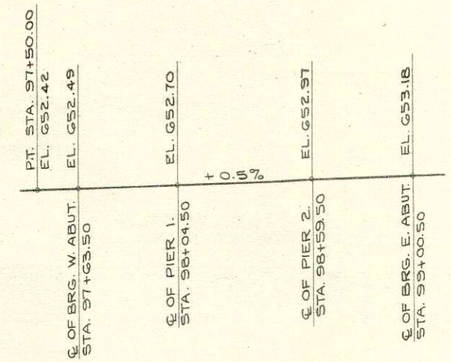
X 27786

FORM E-B-11-62

COUNTY & HIGHWAY	ROUTE & SECTION	CLASS & AGREEMENT STATE	CLASS & AGREEMENT FEDERAL	B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
32.3	90.8		12.1	4	I-90-8(3) 275	38	54

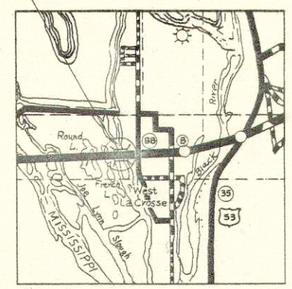


ELEVATION

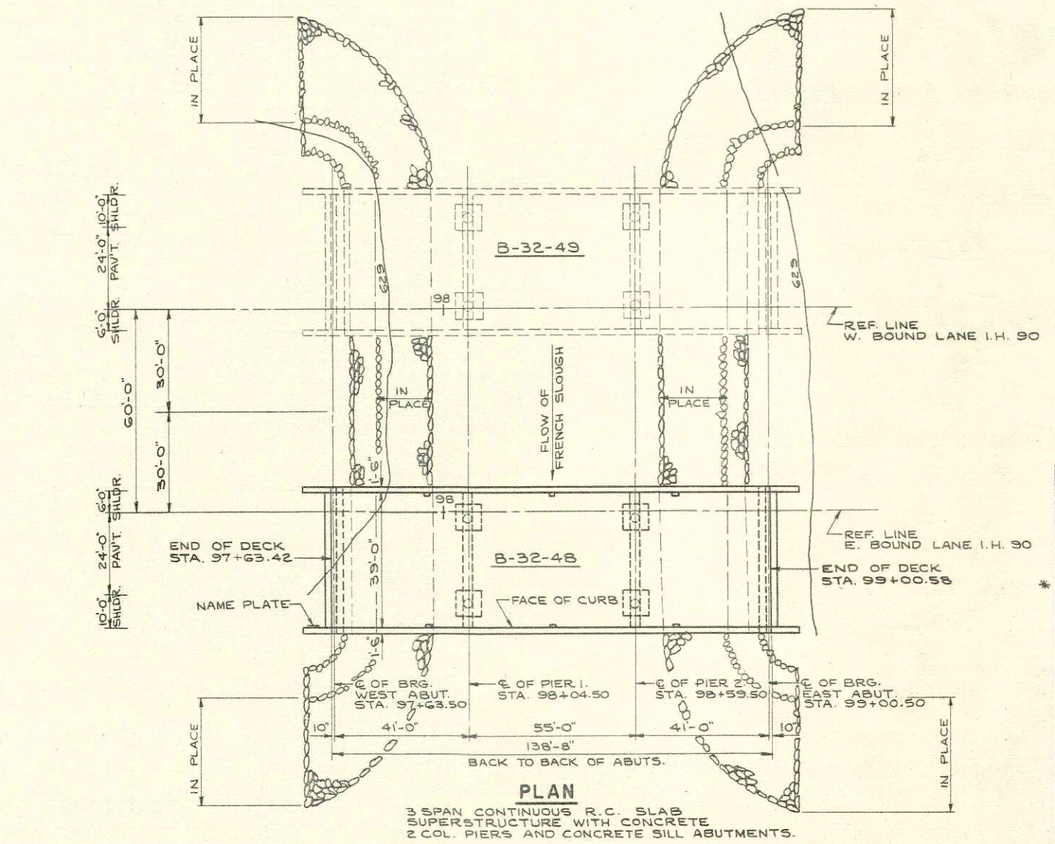


GRADE LINE I.H. 90

LOCATION OF B-32-48/49



LOCALITY MAP



PLAN

3 SPAN CONTINUOUS R.C. SLAB SUPERSTRUCTURE WITH CONCRETE 2 COL. PIERS AND CONCRETE SILL ABUTMENTS.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL CONCRETE MASONRY SHALL BE GRADE "AA" WITH f_c=1400 P.S.I.

BEVEL ALL EXPOSED EDGES OF CONCRETE 1" UNLESS OTHERWISE SPECIFIED.

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

THE PILING AT THE ABUTMENTS SHALL BE: 12"ϕ CAST-IN-PLACE CONCRETE PILING ESTIMATED 45'-0" LONG AND DRIVEN TO A MINIMUM BEARING VALUE OF 20 TONS PER PILE.

THE PILING AT THE PIERS SHALL BE 12"ϕ CAST-IN-PLACE CONCRETE PILING ESTIMATED 70'-0" LONG AND DRIVEN TO A MINIMUM BEARING VALUE OF 40 TONS PER PILE.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES" SHALL BE THE EXISTING GROUND LINE AT THE PIERS AND ABUTMENTS.

CYLINDRICAL STEEL PILE SHELLS, IF USED, SHALL HAVE A MINIMUM NOMINAL (AVERAGE) SHELL THICKNESS OF 0.188 INCH AND CONFORM TO THE REQUIREMENTS OF A.S.T.M. DESIGNATION A252, GRADE 2.

ONE INCH FILLER SHALL CONFORM TO AASHO DESIGNATION M153, TYPE II.

THE SUPERSTRUCTURE SHALL BE TREATED WITH WATER SOLUBLE SILICONE IN ACCORDANCE WITH SECTION 502.3.13 OF THE STANDARD SPECIFICATIONS.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AS SHOWN IN "SECTION A1" ON X27348 AND IN SECTION "B1" ON X27350 AND TO THE EXTENT SHOWN IN "PLAN" ON THIS SHEET.

TOTAL ESTIMATED QUANTITIES

BID ITEMS	UNIT	SUPER.	W. ABUT.	PIER 1.	PIER 2.	E. ABUT.	TOTAL
EXCAVATION FOR STRUCTURES	C.Y.	———	10	90	90	10	200
CONCRETE MASONRY	C.Y.	395.8	39.9	39.8	39.8	39.9	555.2
BAR STEEL REINFORCEMENT	LBS.	76,030	1,240	6,550	6,550	1,240	91,610
SHEET ZINC	LBS.	———	79	———	———	79	158
CAST-IN-PLACE CONCRETE TEST PILING	L.S.	———	———	———	———	———	1
CAST-IN-PLACE CONCRETE PILING-DEL.	L.F.	———	585	1050	1050	585	3,270
CAST-IN-PLACE CONCRETE PILING-DR.	L.F.	———	585	1050	1050	585	3,270
TUBULAR RAILING-TYPE "A"	L.F.	315	———	———	———	———	315
FLOOR DRAINS-TYPE "B"	EA.	6	———	———	———	———	6
HEAVY RIPRAP	C.Y.	———	72	———	———	72	144
NON-BID ITEMS							
FILLER	SIZE	———	1"	¼"	¼"	1"	¼" & 1"
⅛" ALUMINUM OR ZINC PLATES	S.F.	20	———	———	———	———	20

*2-60'-0" LONG AND 2-80'-0" LONG TEST PILES REQUIRED. DRIVE ONE 60'-0" LONG AT EACH ABUTMENT AND DRIVE ONE 80'-0" LONG AT EACH PIER.

LIST OF DRAWINGS

REVISED		
1-14-64 BW	7-8-64 J.B.	

STATE HIGHWAY COMMISSION OF WISCONSIN

GENERAL PLAN

CO. LA CROSSE | CAMPBELL | STA. 98+32.00

SECTION 13 | TOWN 16N | RANGE 8W

DESIGN SPEC. A.A.S.H.O.'61 | LOADING H20-S16 MOD. | CONST. SPEC. 1963

DATE 6-24-63 | DESIGN F.R.W. | DRAWN Auth | CKD. J.B.

RECOMMENDED H.B. Schultz, WISCONSIN ENGINEER OF BRIDGES; C.C. Le Grante, MINNESOTA BRIDGE ENGINEER

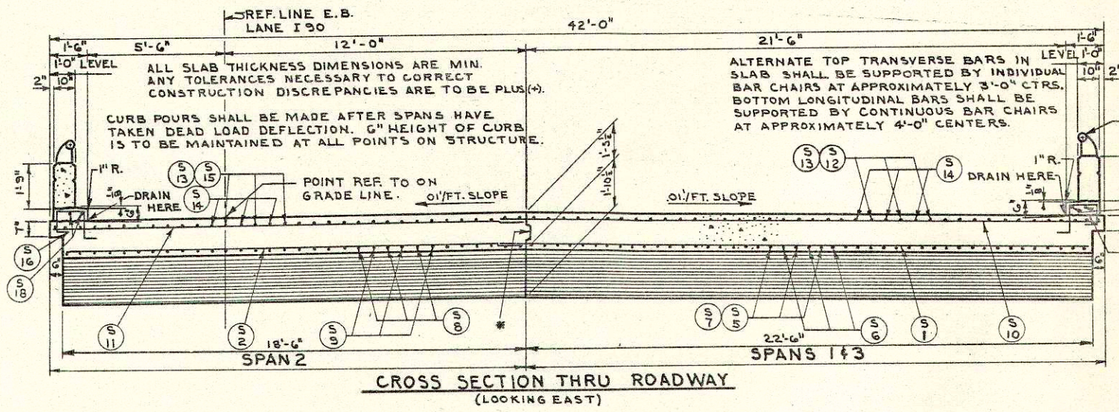
APPROVED K.T. Fredlund, WISCONSIN HIGHWAY ENGINEER; [illegible], MINNESOTA CHIEF ENGINEER

WISCONSIN STRUCTURE B-32-48 | SHEET 1 OF 9

MINNESOTA STRUCTURE 85834 | X27343

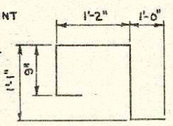
FORM E-B-12-62

B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3) 275	39	54

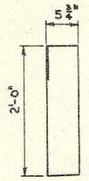


CROSS SECTION THRU ROADWAY
(LOOKING EAST)

* OPTIONAL CONST. JOINT FORMED BY SURFACED BEVELED 2"x6" MAY BE OMITTED SUBJECT TO THE APPROVAL OF THE ENGINEER.



DETAIL B

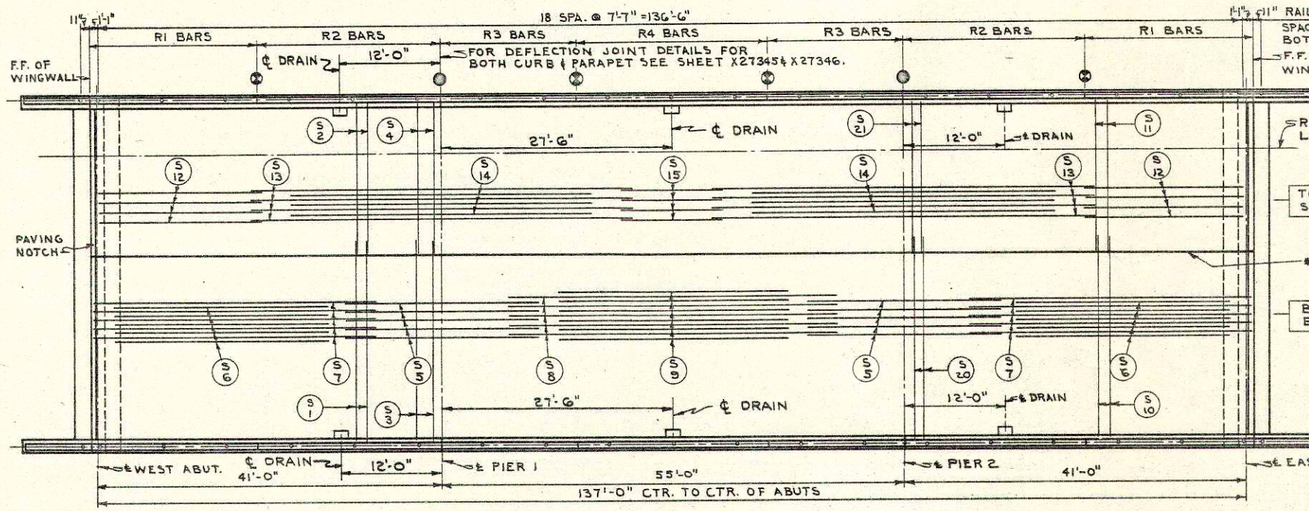


DETAIL C

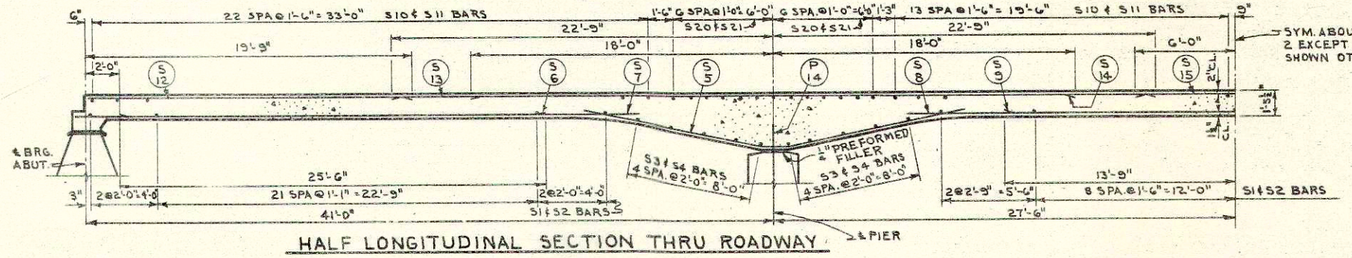
BILL OF BARS 76,030

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

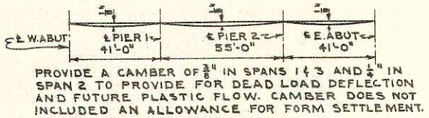
POUR	MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
SUPERSTRUCTURE	S1	73	6	24-0	SHOWN	SLAB - TRANS. - BOTTOM	
	S2	73	6	18-3	"	" " "	
	S3	20	7	24-0	"	HAUNCH " "	
	S4	20	7	18-3	"	" " "	
	S5	82	5	23-0	1-0	" LONG. "	A
	S6	80	10	25-6	1-0	SLAB " "	
	S7	82	10	33-9	1-0	" " "	
	S8	35	10	39-0	1-2	" " "	
	S9	34	10	27-6	1-2	" " "	
	S10	74	4	24-0	1-6	" TRANS. - TOP	
	S11	74	4	18-9	1-6	" " "	
	S12	72	5	19-6	1-2	" LONG. "	
	S13	72	10	45-6	1-2	" " "	
	S14	70	10	36-0	1-2	" " "	
	S15	36	5	12-0	1-2	" " "	
	S16	370	5	9-6	0-9	CURB	B
	S17	16	5	21-6	SHOWN	" LONG. SPANS 1 & 3	
	S18	8	5	28-0	"	" " SPAN 2	
	S19	370	5	6-3	0-9	RAIL PARAPET	C
	S20	26	7	24-0	1-0	SLAB - TRANS. TOP	
	S21	26	7	18-9	1-0	" " "	
	R1	16	5	19-9	SHOWN	RAIL PARAPET	
	R2	16	5	21-6	"	" "	
	R3	16	5	15-9	"	" "	
	R4	8	5	22-3	"	" "	



PLAN



HALF LONGITUDINAL SECTION THRU ROADWAY

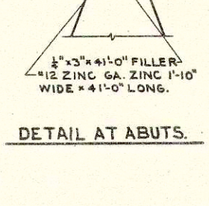


DETAIL A

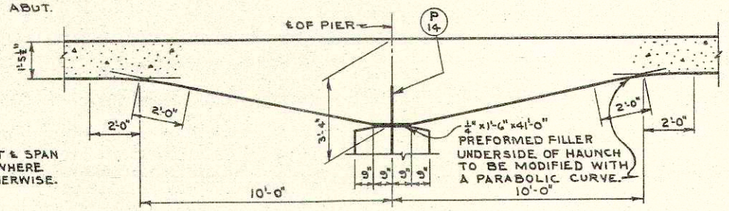
PROVIDE A CAMBER OF ¾" IN SPANS 1 & 3 AND ½" IN SPAN 2 TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE PLASTIC FLOW. CAMBER DOES NOT INCLUDED AN ALLOWANCE FOR FORM SETTLEMENT.

DEFLECTION DIAGRAM

DEFLECTIONS SHOWN ARE THOSE ANTICIPATED FROM DESIGN COMPUTATIONS



DETAIL AT ABUTS.



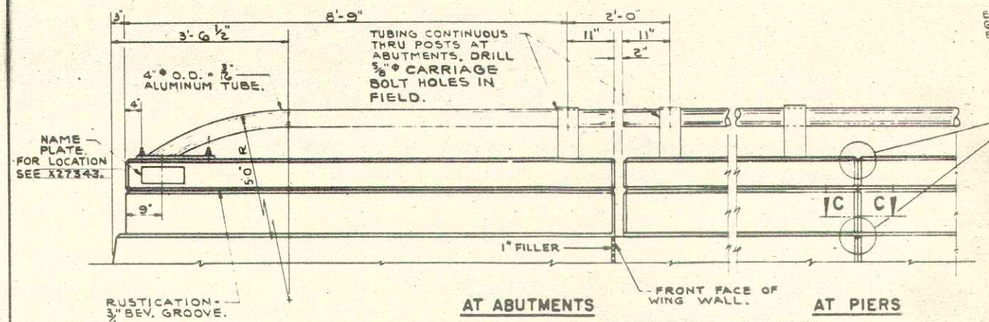
HAUNCH DETAIL

● INDICATES DEFLECTION JOINTS IN RAIL PARAPET AND CURBS AT PIERS.
⧗ INDICATES DEFLECTION JOINTS IN RAIL PARAPET ONLY, PLACED MIDWAY BETWEEN POSTS.

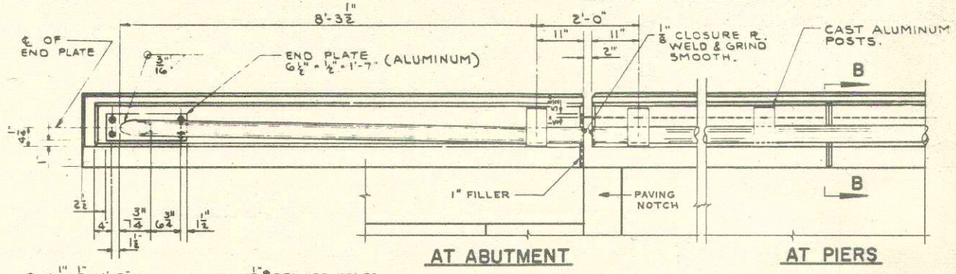
REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	SUPERSTRUCTURE
DESIGN SPEC. A.A.S.H.O. '61	LOADING H20-S16 MOD. CONST. SPEC. 1963
DATE 6-24-63 DESIGN F.R.W.	DRAWN GPS/LE CKD. J.B.
STRUCTURE B-32-48	SHEET 2 OF 9

X 27344

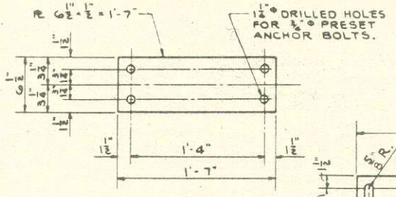
B.H.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3) 275	40	54



PART ELEVATION

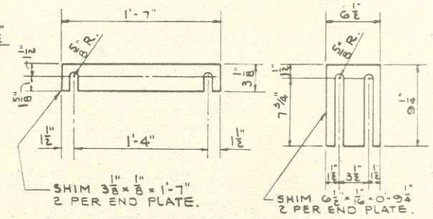


PART PLAN

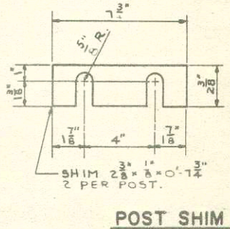


END PLATE
(ALUMINUM)

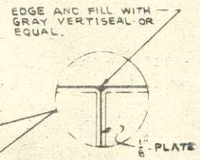
SINGLE LINE ALUMINUM RAILING



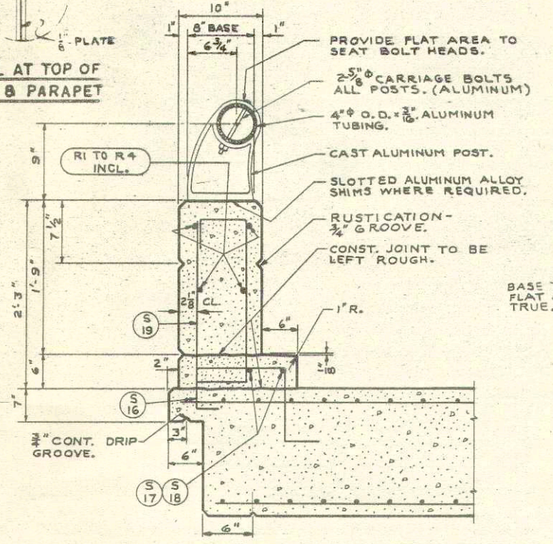
END PLATE SHIM DETAILS



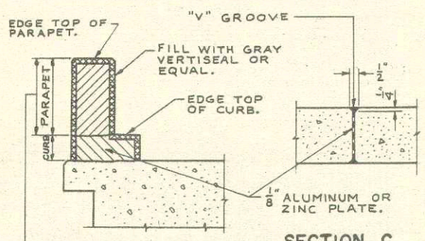
POST SHIM DETAILS



DETAIL AT TOP OF CURB & PARAPET



SECTION THRU CURB

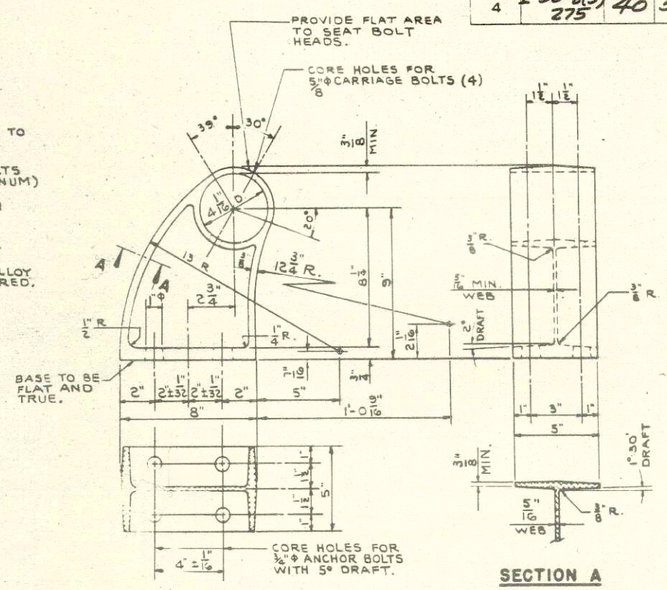


SECTION B

SECTION C

SHOWING DEFLECTION JOINT IN CURB AND PARAPET AT PIERS.

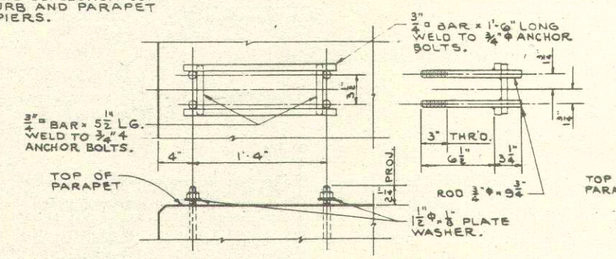
DETAILS OF DEFLECTION JOINTS IN PARAPET ONLY- SIMILAR TO THAT SHOWN IN THIS AREA.

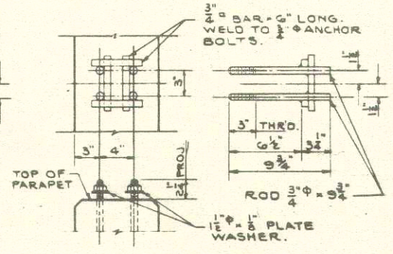


ALUMINUM POST CASTING

NOTES

1. ALUMINUM RAILING POSTS TO BE SET NORMAL TO GRADE.
2. THE HEX. NUTS, WASHERS AND THE UPPER 3" OF 3¼"Φ × 9¾" LONG ANCHOR BOLTS SHALL BE GALVANIZED OR CADMIUM PLATED. THE ANCHOR BOLT HOLES, BASE OF RAILING POSTS AND ANCHOR BOLTS, NUTS AND WASHERS SHALL BE COATED WITH AN ALUMINUM IMPREGNATED CAULKING COMPOUND. ANCHOR BOLTS, HEX. NUTS AND WASHERS TO BE STRUCTURAL CARBON STEEL.
3. ALUMINUM TUBING SHALL BE FABRICATED IN 2 OR 3 PANEL LENGTHS.
4. ALUMINUM ALLOY SHIMS SHALL BE USED UNDER POSTS AND UNDER END PLATES WHERE REQUIRED FOR ALIGNMENT.
5. WHEN PARAPETS AND CURBS ARE POURED CONTINUOUSLY FROM END TO END THEY SHALL BE SEPARATED AT THE DEFLECTION JOINTS BY A PIECE OF ⅛" ZINC OR ALUMINUM PLATE CUT AS SHOWN IN SECTION "B" BY SHADED AREA. IF CONSTRUCTION JOINTS IN PARAPETS AND CURBS ARE USED AT THE DEFLECTION JOINTS ONE SIDE OF JOINT SHALL BE COATED WITH BITUMINOUS PAINT AND PLATE SEPARATORS MAY BE OMITTED.





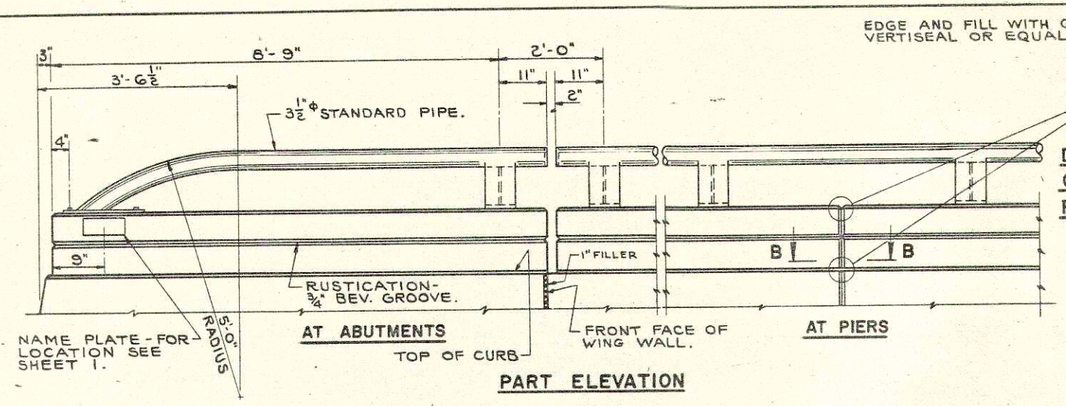
ANCHOR BOLT SETTING DETAILS

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	TUBULAR ALUMINUM RAILING TYPE "A"
	DESIGN SPEC A.A.S.H.O.'61 LOADING H20-S16 CONST SPEC 1963
	DATE 6-24-63 DESIGN S.T.D. DRAWN J.O.T. CKD J.B.
STRUCTURE B-32-48	SHEET 3 OF 9

X27345

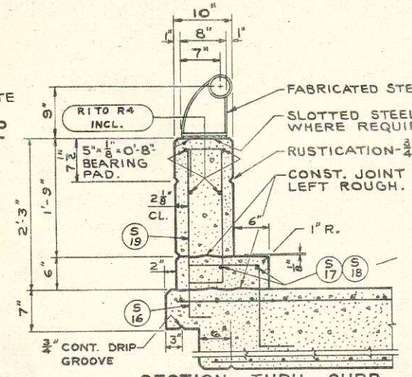
FORM E-B-12-62

B.P.R. DIVISION	PROJECT	SHEET NO	TOTAL SHEETS
4	I-90-8(3) 275	41	54

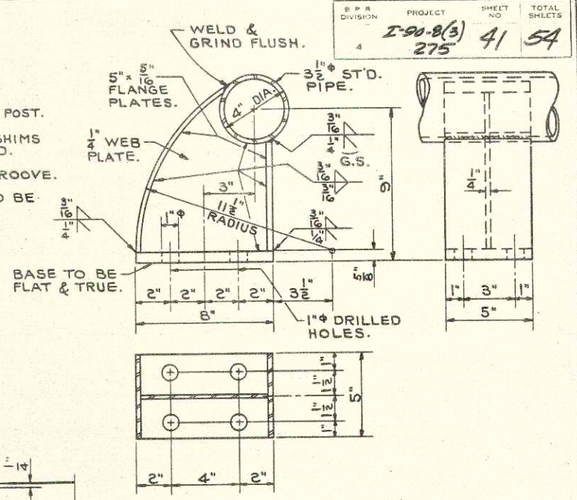


PART ELEVATION

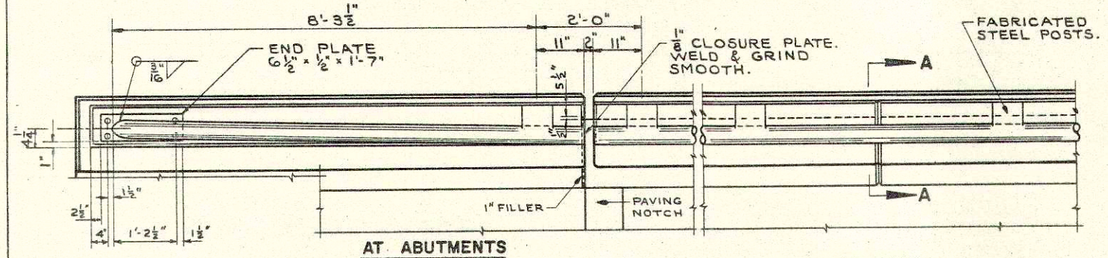
DETAIL AT TOP OF CURB AND PARAPET



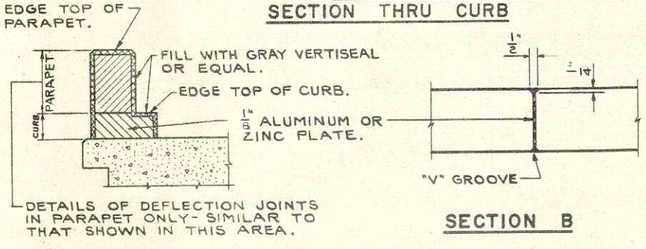
SECTION THRU CURB



POST DETAILS



PART PLAN

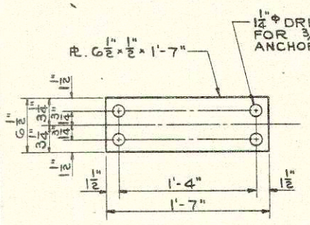


SECTION A

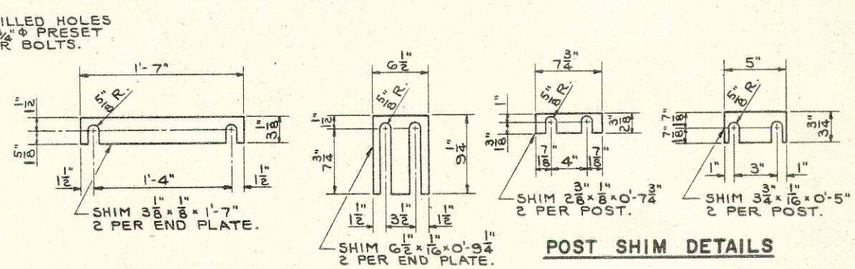
SECTION B

NOTES

1. STEEL RAIL POSTS SHALL BE SET NORMAL TO GRADE.
2. RAILING SHALL BE FABRICATED IN LENGTHS AS SHOWN.
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 ⅛" ZINC OR ALUMINUM PLATE CUT AS SHOWN IN SECTION "A-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.
5. THE FOLLOWING MATERIALS SHALL BE USED:
   RAILING SHALL BE 3½"ϕ STANDARD PIPE ASTM DESIGNATION A53.
   POST SHALL BE FABRICATED FROM MATERIAL CONFORMING TO ASTM DESIGNATION A36.
   ANCHOR BOLTS TO BE MADE FROM MATERIAL CONFORMING TO ASTM DESIGNATION A307.
   SLEEVES SHALL BE 3"ϕ STANDARD PIPE ASTM DESIGNATION A53.
6. CAULK EXPOSED OPENINGS BETWEEN SHIMS WITH LEAD WOOL.

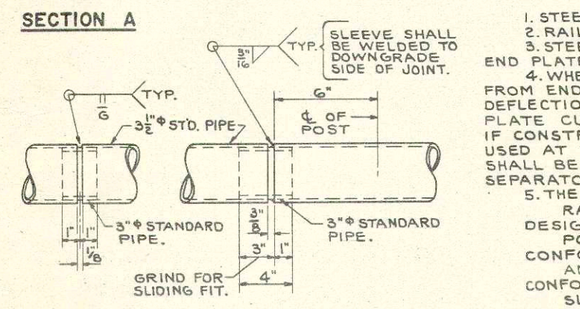


END PLATE



POST SHIM DETAILS

END PLATE SHIM DETAILS

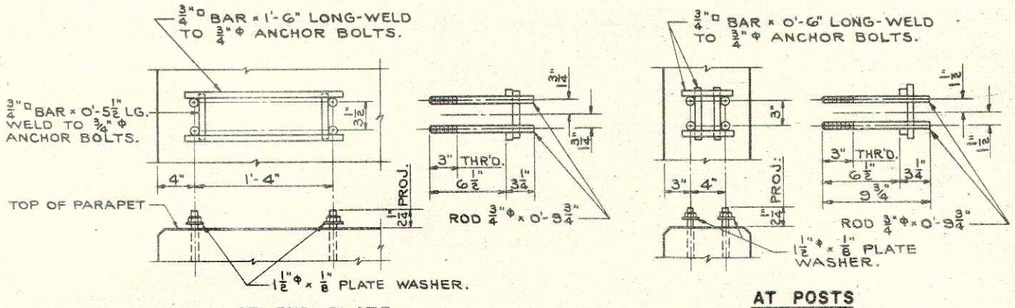


SHOP RAIL SPLICE DETAIL

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

FIELD ERECTION JOINT DETAIL

RAILING SHALL BE FABRICATED IN 2 & 3 PANEL LENGTHS.



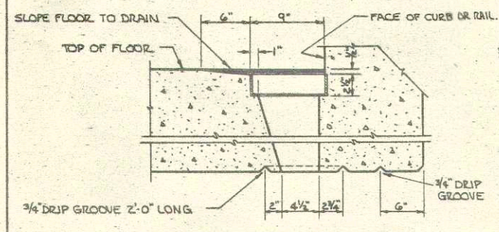
ANCHOR BOLT SETTING DETAILS

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	TUBULAR STEEL RAILING TYPE "A"
DESIGN SPEC A.A.S.H.O. '61	LOADING H20-S16 MOD. CONST. SPEC 1963
DATE 6-24-63	STRESS ST'D. DRAWN J.D.T. CKD. J.B.
STRUCTURE B-32-48	SHEET 4 OF 9

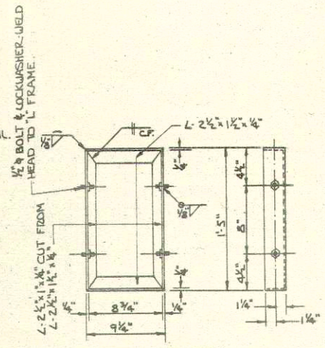
X27346

FLOOR DRAIN TYPE	NO. REQ'D
TYPE "B"	6
TYPE "C"	———

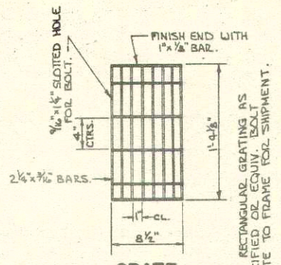
B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3) 275	42	54



SECTION THRU DRAIN.

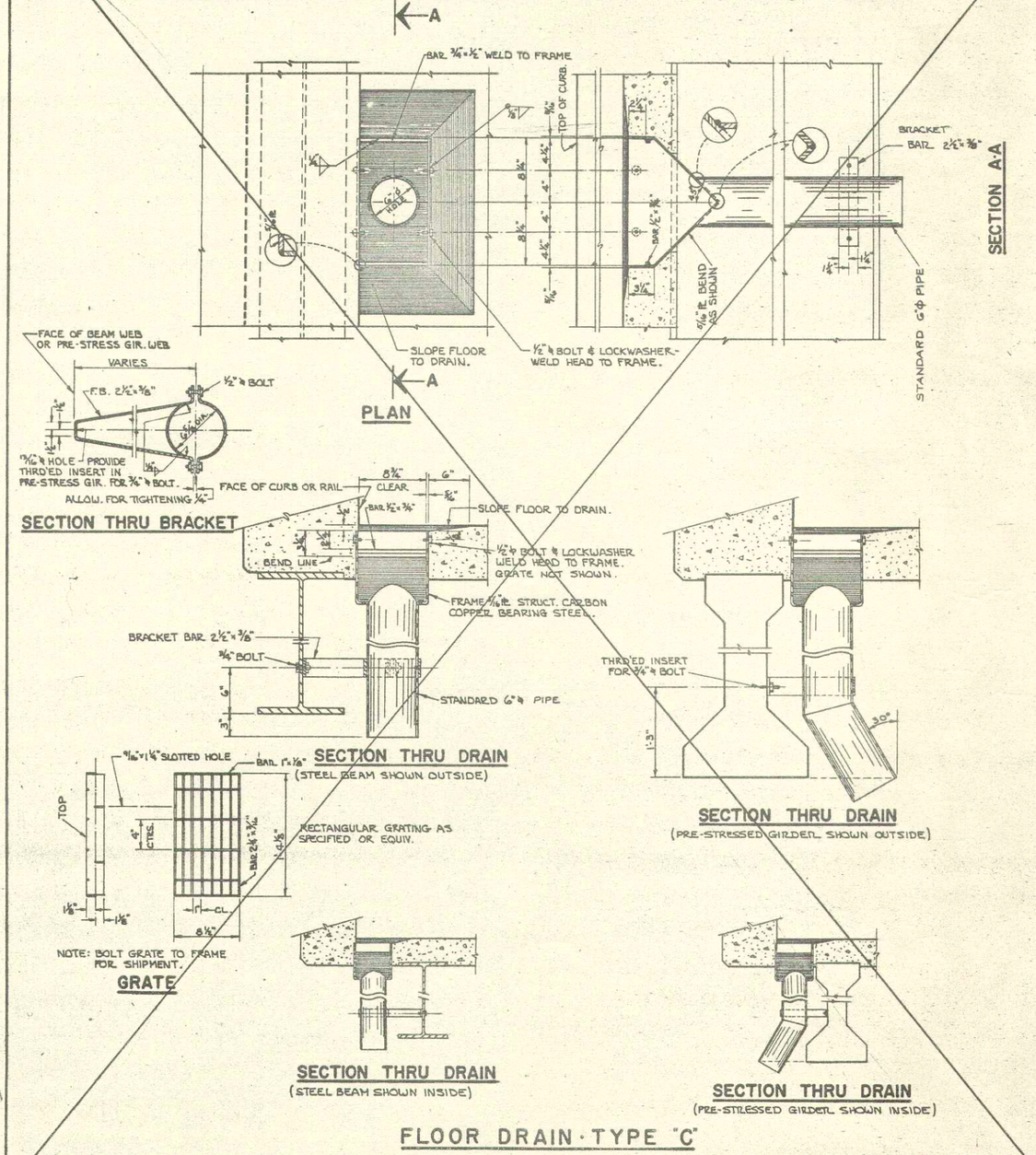


FRAME



GRATE

FLOOR DRAIN - TYPE "B"



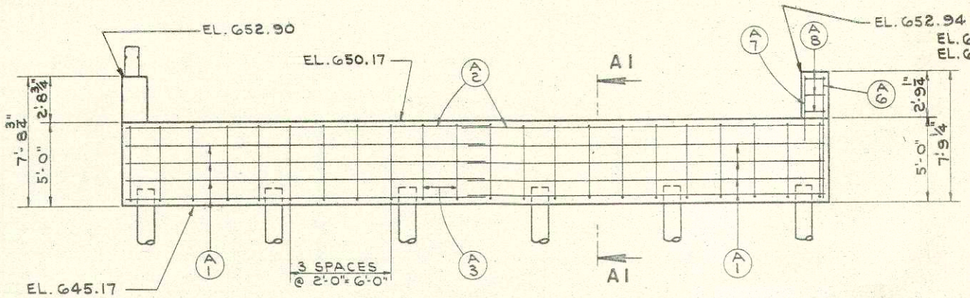
FLOOR DRAIN - TYPE "C"

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	FLOOR DRAIN DETAILS
	DESIGN SPEC. A.A.S.H.O. '61 LOADING H20-S16 M90 CONST. SPEC. 1963
	DATE 6-24-63 DESIGN STD. DRAWN J.K.G. CKD. J.B
STRUCTURE B-32-48	SHEET 5 OF 9

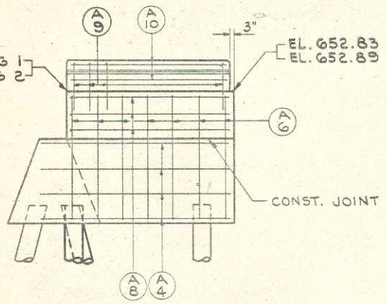
X27347

FORM E-B-12-62

B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3) 275	43	54



FRONT ELEVATION
(LOOKING WEST)

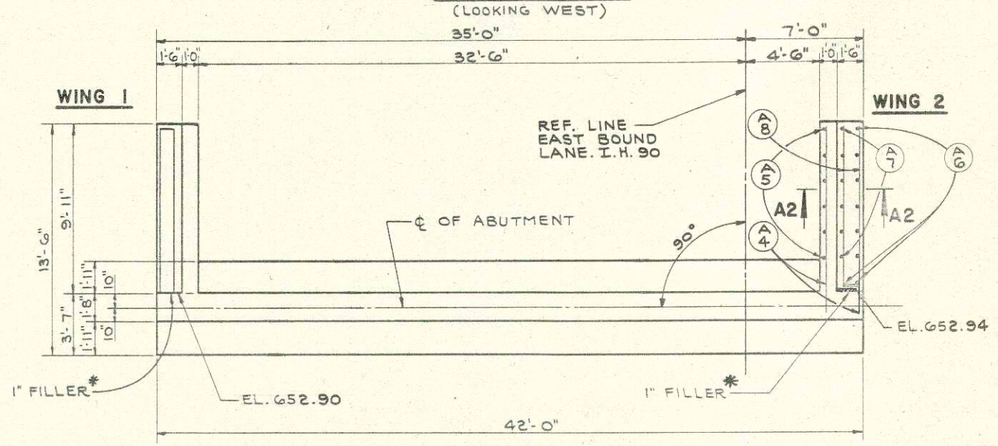


END VIEW

BILL OF BARS 1,240#

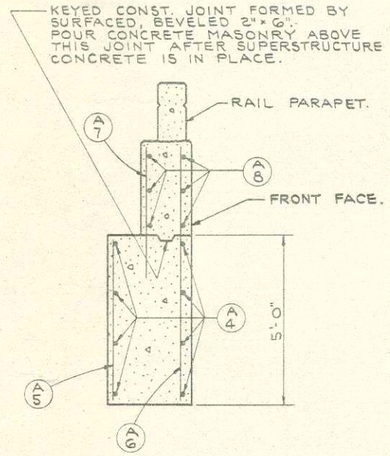
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

POUR	MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
WEST ABUTMENT	A1	20	4	21-6	SHOWN	BODY- BOTTOM & SIDES	
	A2	4	6	21-9	SHOWN	" - TOP	
	A3	44	4	9-3	SHOWN	"	A
	A4	16	4	11-3	1-6	WINGS - HORIZ.	
	A5	12	4	4-6	1-6	" - VERTICAL	
	A6	16	4	7-6	1-6	" - "	
	A7	12	4	3-9	1-6	" - "	
	A8	12	4	10-6	1-0	" - HORIZ.	B
	A9	20	5	6-0	1-0	RAIL PARAPET-VERTICAL	C
	A10	8	5	9-3	SHOWN	" " - HORIZ.	

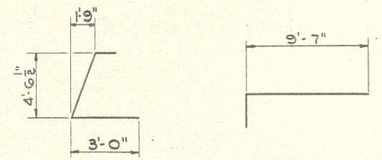


PLAN

* FOR DETAIL SEE X27345 & X27346.

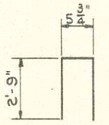


SECTION A2

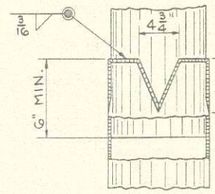


DETAIL A

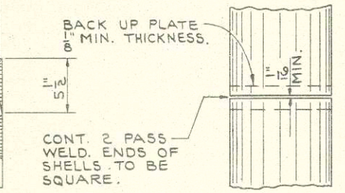
DETAIL B



DETAIL C

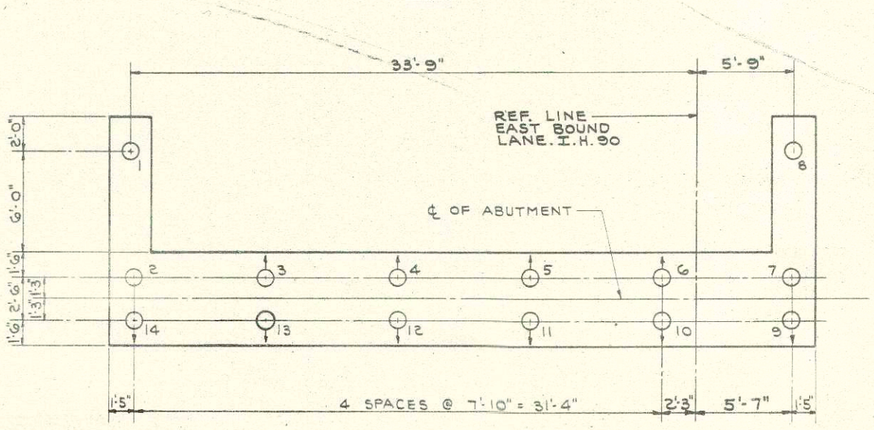


FLUTED PILE



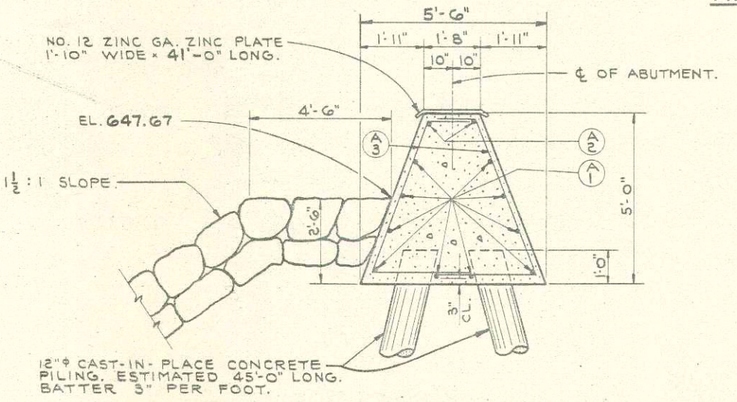
PIPE PILE

PILE SPLICE DETAIL

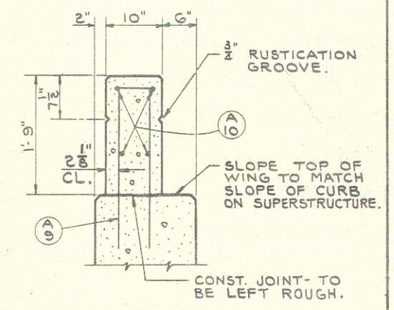


PILE PLAN

BATTER IN DIRECTION SHOWN.



SECTION A1



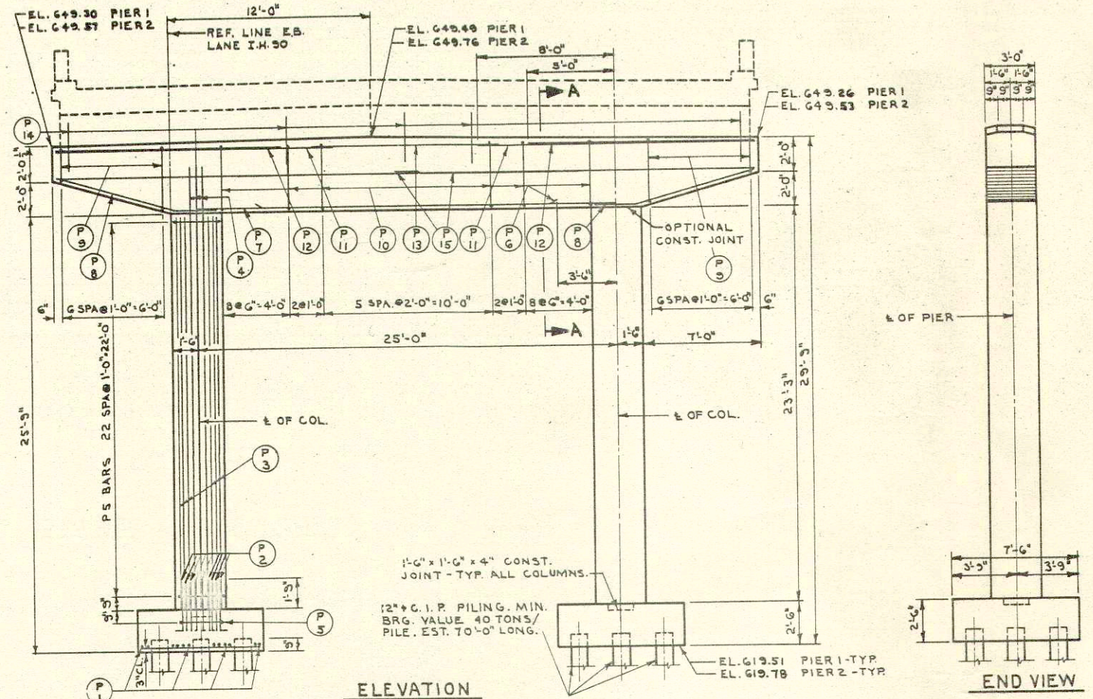
RAIL PARAPET DETAIL

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	WEST ABUTMENT
	DESIGN SPEC. A.A.S.H.O. 1961 LOADING H20-S16 MOD. CONST. SPEC. 1963
	DATE 6-24-63 DESIGN F.W. DRAWN W.K. CKD. J.B.
STRUCTURE B-32-48	SHEET 6 OF 9

X 27348

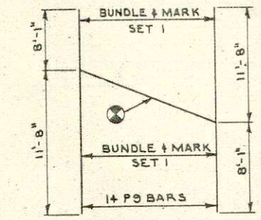
FORM E-B-12-62

B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3) 275	44	54



ELEVATION
LOOKING EAST

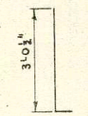
END VIEW



4 SET (1) REQ'D.

DETAIL E

MARK & CUT ALL BARS ALONG THIS LINE. ALL CUTS NORMAL TO BAR AXIS. AFTER CUTTING BEND BARS AS SHOWN IN DETAIL D.



DETAIL A

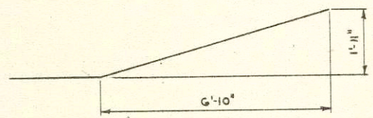
DETAIL B

BILL OF BARS 13,100

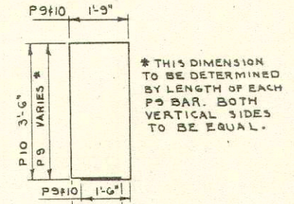
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

POUR	MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
FOOTING	P1	96	6	7-0	*SHOWN	FOOTINGS	
	P2	64	7	3-6	"	" -DOWELS	A
	P5	4	4	3-6	"	" -HOOPS	B
COLUMNS & CAPS	P3	40	7	23-0	"	COLUMNS	
	P4	24	7	26-0	"	"	
	P5	92	4	3-6	1'-0	" -HOOPS	B
	P6	12	11	18-0	SHOWN	CAP - BOTTOM CENTER	
	P7	12	11	25-0	"	" " " "	
	P8	24	5	10-0	"	" " ENDS	C
	P9	28	4	19-3	"	" - STIRRUPS "	D&E
	P10	104	4	12-0	"	" " CENTER	D
	P11	24	10	16-6	"	" -TOP ENDS	
	P12	24	10	13-6	"	" " "	
	P13	12	5	11-3	"	" " CENTER	
	P14	82	5	3-0	1'-0	" "	
	P15	8	5	21-3	SHOWN	" - SIDES	

* SPACE "P1" BARS TO MISS PILES
NOTE: BILL OF BARS INCLUDES BAR STEEL REINF. FOR BOTH PIERS.

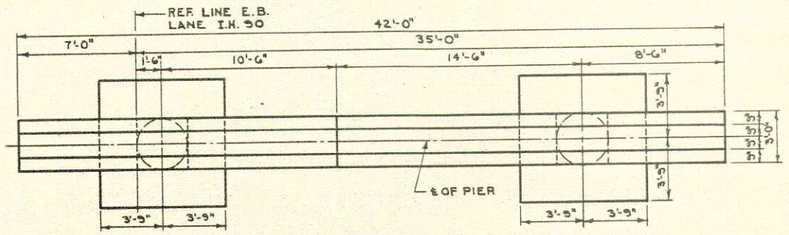


DETAIL C

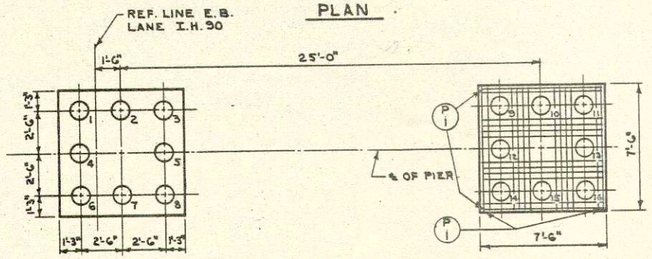


* THIS DIMENSION TO BE DETERMINED BY LENGTH OF EACH P9 BAR. BOTH VERTICAL SIDES TO BE EQUAL.

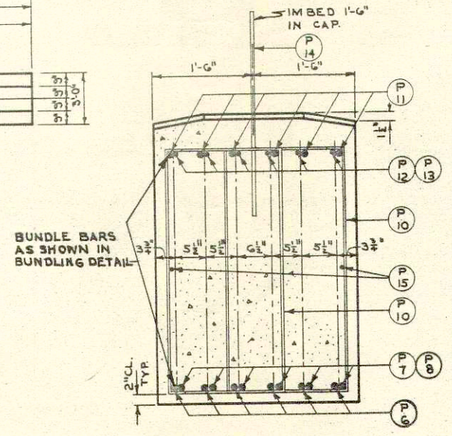
DETAIL D



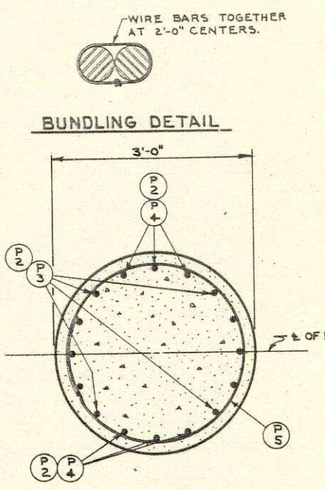
PLAN



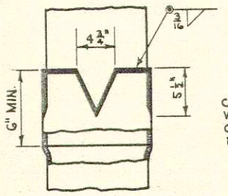
FOOTING PLAN



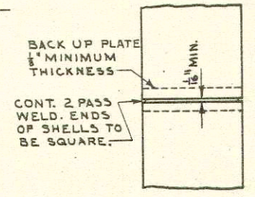
SECTION "A-A"



SECTION THRU COLUMN



FLUTED PILE



PIPE PILE

PILE SPLICE DETAIL

CONCRETE MASONRY

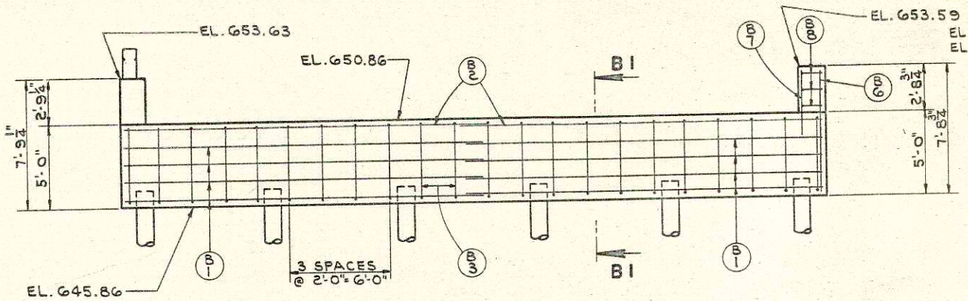
	PIER 1	PIER 2
CAP	17.6 C.Y.	17.6 C.Y.
COLUMNS	12.2 C.Y.	12.2 C.Y.
FOOTINGS	10.0 C.Y.	10.0 C.Y.
TOTALS	39.8 C.Y.	39.8 C.Y.

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN				
	PIERS 1 & 2				
	DESIGN SPEC. A.A.S.H.O. '61	LOADING	H20-S16 Mod.	CONST. SPEC.	1963
	DATE 6-24-63	DESIGN F.R.W.	DRAWN [illegible]	CKD. J.B.	
STRUCTURE B-32-48		SHEET 7 OF 9			

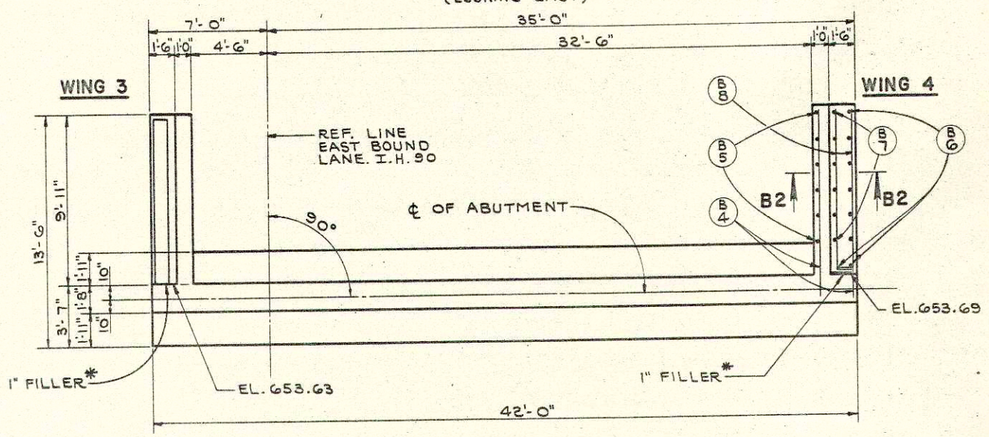
X 27349

FORM E-B-12-62

B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3) 275	45	54

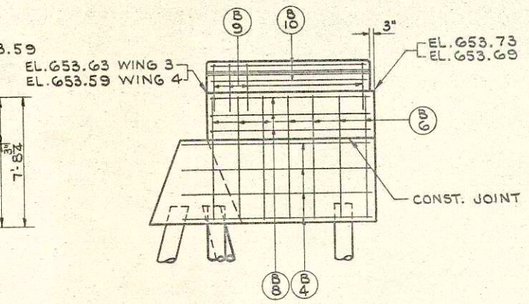


FRONT ELEVATION
(LOOKING EAST)

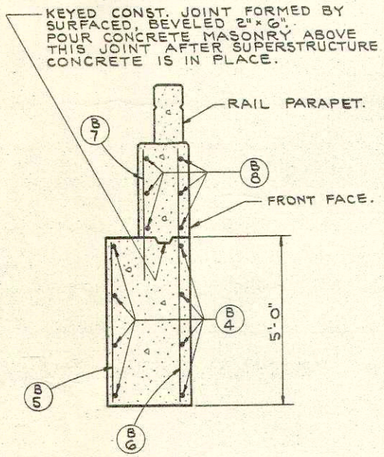


PLAN

* FOR DETAIL SEE X27345 & X27346.



END VIEW

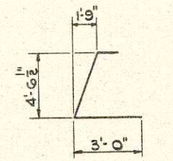


SECTION B2

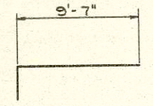
BILL OF BARS 1,240#

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

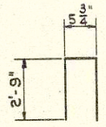
POUR	MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
EAST ABUTMENT	B1	20	4	21-6	SHOWN	BODY - BOTTOM & SIDES	
	B2	4	6	21-9	SHOWN	" - TOP	
	B3	44	4	9-3	SHOWN	"	A
	B4	16	4	11-3	1-6	WINGS - HORIZ.	
	B5	12	4	4-6	1-6	" - VERTICAL	
	B6	16	4	7-6	1-6	" - "	
	B7	12	4	3-9	1-6	" - "	
	B8	12	4	10-6	1-0	" - HORIZ.	B
	B9	20	5	6-0	1-0	RAIL PARAPET - VERTICAL	C
	B10	8	5	9-3	SHOWN	" " - HORIZ.	



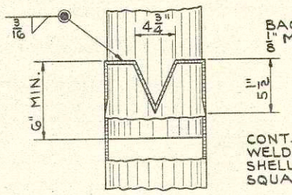
DETAIL A



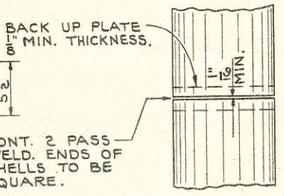
DETAIL B



DETAIL C

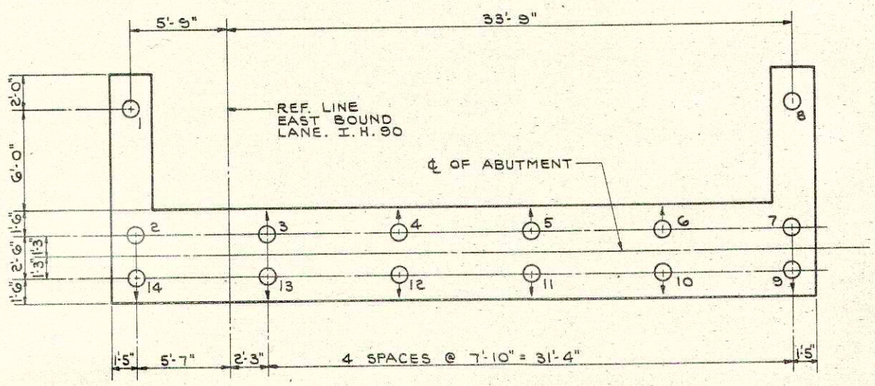


FLUTED PILE



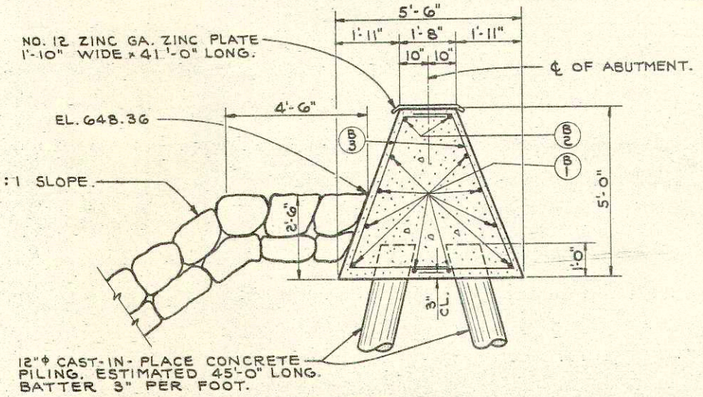
PIPE PILE

PILE SPLICE DETAIL

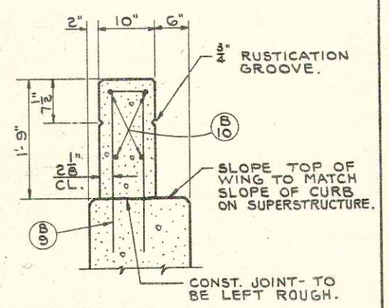


PILE PLAN

BATTER IN DIRECTION SHOWN.



SECTION B1



RAIL PARAPET DETAIL

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	EAST ABUTMENT
DESIGN SPEC. A.A.S.H.O. 1961	LOADING H20-S16 MOD. CONST. SPEC. 1963
DATE 6-24-63 DESIGN F.W.	DRAWN W.K. CKD. J.B.
STRUCTURE B-32-48	SHEET 8 OF 9

X 27350

S.F.H. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(2) 275	46	54

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 INCHES. THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

NORTH

98+00 BORING # 25 — 97+00 — BORING # 1-F — 100+00

SCALE 1" = 20'

DATE DRILLED 2/20/58 STA. 98+00 ON ℄

EL 631.0 BORING # 25

ICE & WATER
BLACK SANDY SILT
VERY LOOSE SAND SOME SILT
LOOSE SAND TR. GRAVEL
VERY LOOSE SAND SOME GRAVEL
VERY LOOSE SAND & GRAVEL
LOOSE SAND SOME GRAVEL
FIRM SAND TR GRAVEL

DATE DRILLED 2/4/63 STA 99+03 ON ℄ MEDIAN

EL. 630.8 BORING # 1-F

PUSH BY HAND
WATER
VERY LOOSE BLACK SAND TRACE ORGANIC MATERIAL
LOOSE BROWN FINE TO MED. SAND
SAND & GRAVEL
VERY LOOSE BROWN FINE TO MED. SAND
WASH SAMPLE
VERY LOOSE BROWN SAND TRACE GRAVEL
WASH SAMPLE
LOOSE BROWN FINE TO MED. SAND TR. GRAVEL
FIRM BROWN MEDIUM TO COARSE SAND
WASH SAMPLE
WASH SAMPLE
FIRM BROWN SAND TRACE GRAVEL
WASH SAMPLE
FIRM BROWN SAND
LOOSE BROWN SAND TR. GRAVEL
FIRM BROWN SAND & GRAVEL
WASH SAMPLE
FIRM BROWN SAND TRACE GRAVEL
WASH SAMPLE
WASH SAMPLE
FIRM BROWN FINE SAND
WASH SAMPLE
FIRM BROWN MED. TO COARSE SAND
SANDSTONE

630 620 610 600 590 580 570 560 550 540 530 520

LEGEND OF BORING

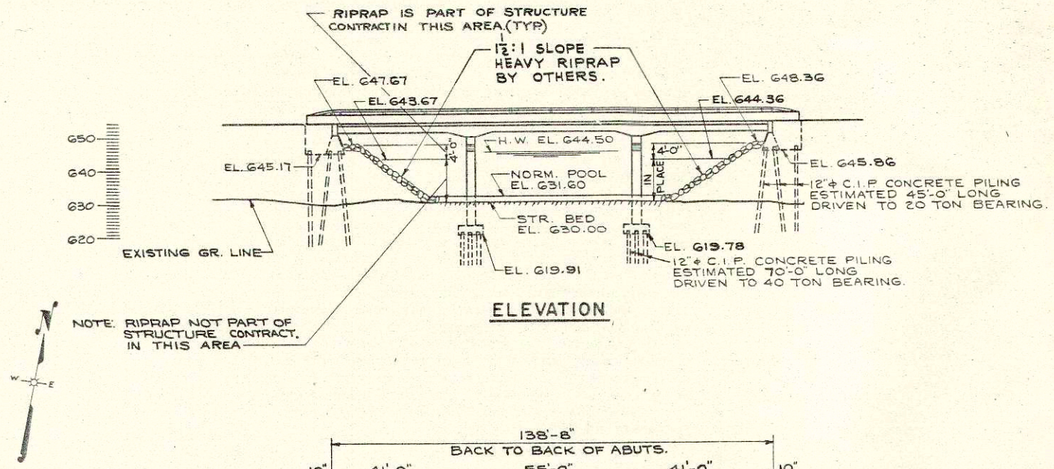
STA.
ELEV. BORING #
BLOWS PER FT. USING 140# WT. FALLING 30"
DESCRIPTION OF MATERIAL
MATERIAL CHANGE

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	SUBSURFACE EXPLORATION
	DESIGN SPEC. A.A.S.H.O. '61 LOADING H20-S16 MOD. CONST. SPEC. 1963
	DATE 6-24-63 DESIGN R.L.R. DRAWN C.D.S. CKD. T.L.M.
STRUCTURE B-32-48	SHEET 9 OF 9

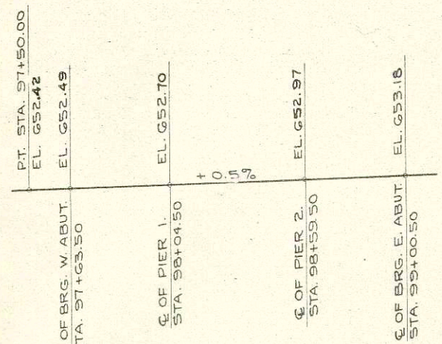
X27351

FORM E-B-11-62

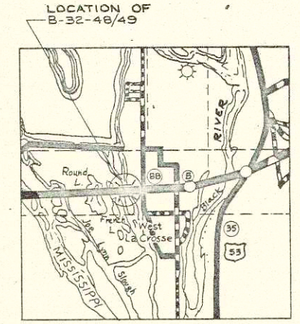
COUNTY & HIGHWAY	ROUTE & SECTION	CLASS & AGREEMENT STATE	CLASS & AGREEMENT FEDERAL	B. P. R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
32.3	90.8		12.1	4	I-90-8(3) 275	47	54



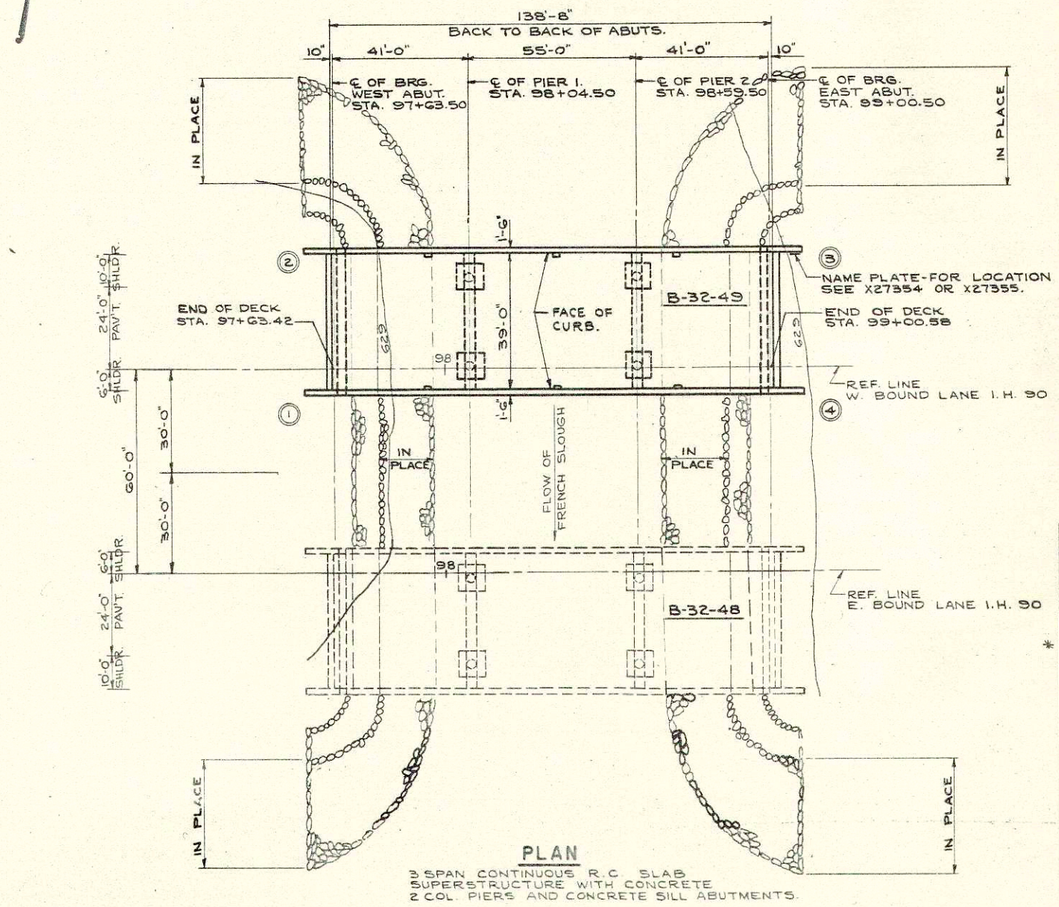
ELEVATION



GRADE LINE I. H. 90



LOCALITY MAP



PLAN

3 SPAN CONTINUOUS R.C SLAB SUPERSTRUCTURE WITH CONCRETE 2 COL. PIERS AND CONCRETE SILL ABUTMENTS.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL CONCRETE MASONRY SHALL BE GRADE "AA" WITH f_c=1400 P.S.I.

BEVEL ALL EXPOSED EDGES OF CONCRETE 1" UNLESS OTHERWISE SPECIFIED.

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

THE PILING AT THE ABUTMENTS SHALL BE 12"ϕ CAST-IN-PLACE CONCRETE PILING ESTIMATED 45'-0" LONG AND DRIVEN TO A MINIMUM BEARING VALUE OF 20 TONS PER PILE.

THE PILING AT THE PIERS SHALL BE 12"ϕ CAST-IN-PLACE CONCRETE PILING ESTIMATED 70'-0" LONG AND DRIVEN TO A MINIMUM BEARING VALUE OF 40 TONS PER PILE.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES" SHALL BE THE EXISTING GROUND LINE AT THE PIERS AND ABUTMENTS.

CYLINDRICAL TYPE STEEL PILE SHELLS, IF USED, SHALL HAVE A MINIMUM NOMINAL (AVERAGE) SHELL THICKNESS OF 0.188 INCH AND CONFORM TO THE REQUIREMENTS OF A.S.T.M. DESIGNATION A252, GRADE 2.

ONE INCH FILLER SHALL CONFORM TO AASHO DESIGNATION M153, TYPE II.

THE SUPERSTRUCTURE SHALL BE TREATED WITH WATER SOLUBLE SILICONE IN ACCORDANCE WITH SECTION 502.3.13 OF THE STANDARD SPECIFICATIONS.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AS SHOWN IN "SECTION A1" ON X27348 AND IN SECTION "B1" ON X27350 AND TO THE EXTENT SHOWN IN "PLAN" ON THIS SHEET.

TOTAL ESTIMATED QUANTITIES

BID ITEMS	UNIT	SUPER.	W. ABUT.	PIER 1.	PIER 2.	E. ABUT.	TOTAL
EXCAVATION FOR STRUCTURES	C.Y.	——	10	90	90	10	200
CONCRETE MASONRY	C.Y.	395.8	39.9	39.8	39.8	39.9	555.2
BAR STEEL REINFORCEMENT	LBS.	76,030	1,240	6,550	6,550	1,240	91,610
SHEET ZINC	LBS.	——	79	——	——	79	158
CAST-IN-PLACE CONCRETE TEST PILING	L.S.	——	——	——	——	——	1
CAST-IN-PLACE CONCRETE PILING-DEL	L.F.	——	585	1,050	1,050	585	3,270
CAST-IN-PLACE CONCRETE PILING-DR	L.F.	——	585	1,050	1,050	585	3,270
TUBULAR RAILING-TYPE "A"	L.F.	315	——	——	——	——	315
FLOOR DRAINS-TYPE "B"	EA.	6	——	——	——	——	6
HEAVY RIPRAP	C.Y.	——	72	——	——	72	144
NON-BID ITEMS							
FILLER	SIZE	——	1"	——	——	1"	1"
⅛" ALUMINUM OR ZINC PLATES	S.F.	20	——	——	——	——	20
FILLER	SIZE	——	——	¼"	¼"	——	¼"

*2-60'-0" LONG AND 2-80'-0" LONG TEST PILES REQUIRED. DRIVE ONE 60'-0" LONG AT EACH ABUTMENT AND DRIVE ONE 80'-0" LONG AT EACH PIER.

LIST OF DRAWINGS

NOTE: FOR SUBSURFACE EXPLORATION SEE B-32-48, SHEET X27351.

REVISED 1-14-64 BW; 7-19-64 J.B.

STATE HIGHWAY COMMISSION OF WISCONSIN

GENERAL PLAN

CO. LA CROSSE and CAMPBELL — STA. 98+32.00

SECTION 13 — TOWN 16N — RANGE 8W

DESIGN SPEC. A.A.S.H.O. '61 — LOADING H20-S16 MOD. — CONST. SPEC. 1963

DATE 6-24-63 — DESIGN F.R.W. — DRAWN CWB — CKD. W.K.

RECOMMENDED: W. B. Ritchie, WISCONSIN ENGINEER OF BRIDGES; T. E. La Bonte, MINNESOTA BRIDGE ENGINEER

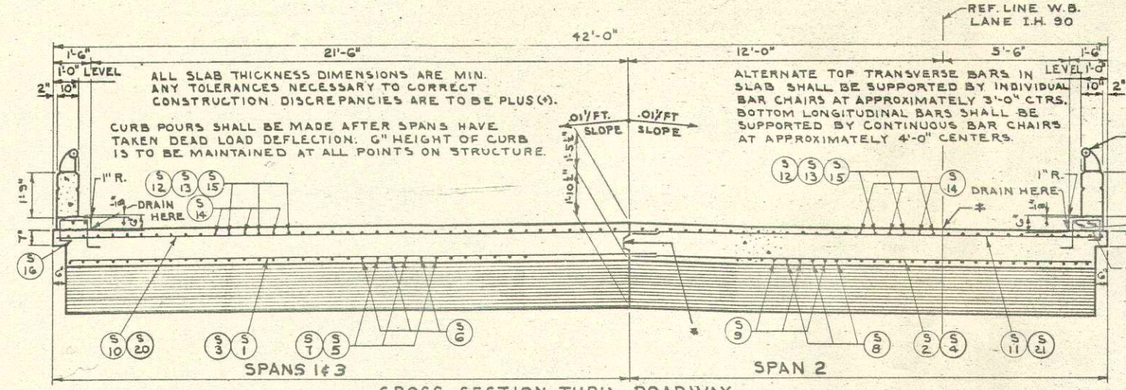
APPROVED: V. J. Fredin, WISCONSIN HIGHWAY ENG.; Stark Chandler, MINN.— CHIEF ENG.

WISCONSIN STRUCTURE B-32-49 — SHEET 1 OF 8

MINNESOTA STRUCTURE 85833 — X27352

FORM E-B-12-62

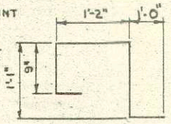
B.F.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3) 275	48	54



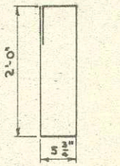
CROSS SECTION THRU ROADWAY
(LOOKING EAST)

* POINT REF. TO ON GRADE LINE.

* OPTIONAL CONST. JOINT FORMED BY SURFACED BEVELED 2"x6" MAY BE OMITTED SUBJECT TO THE APPROVAL OF THE ENGINEER.



DETAIL B

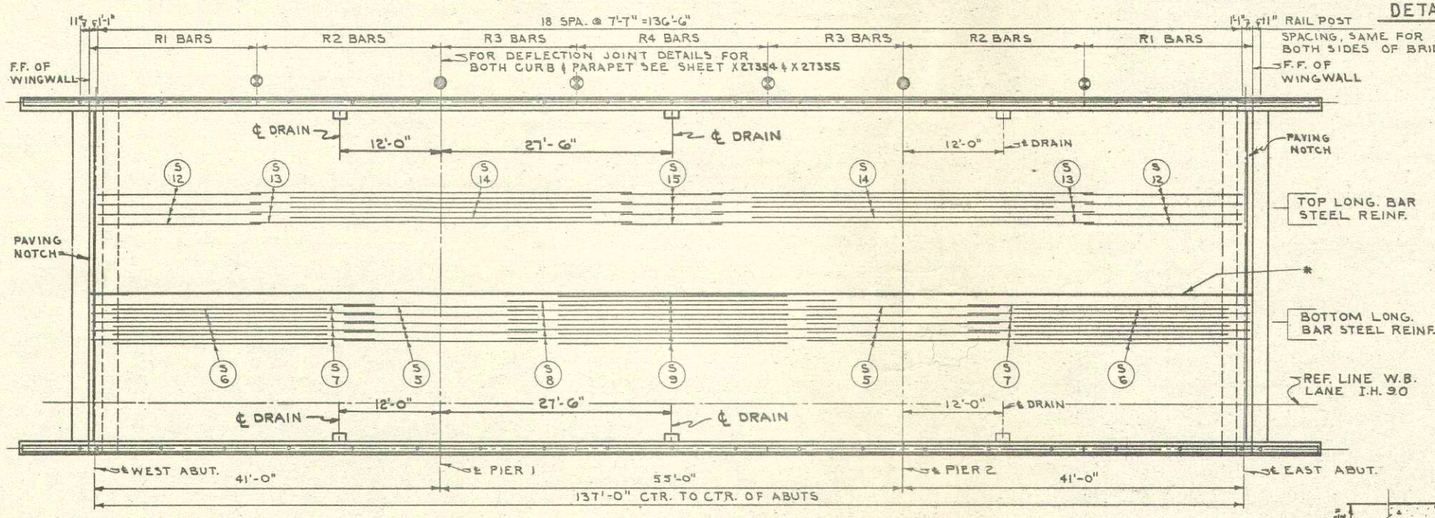


DETAIL C

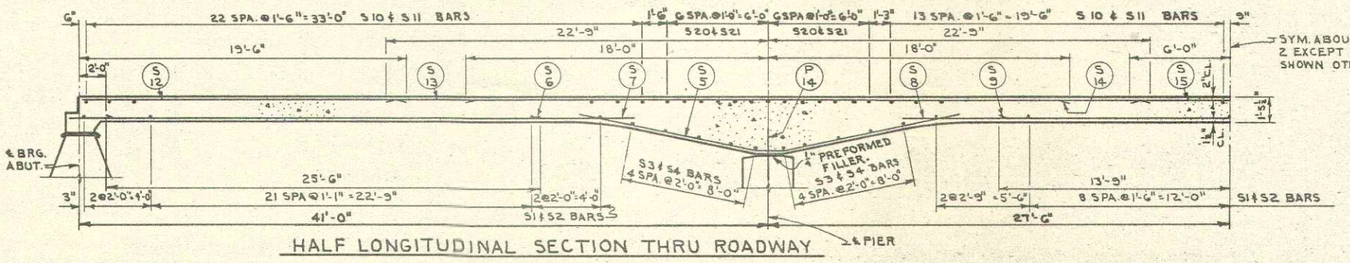
BILL OF BARS 76,030

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

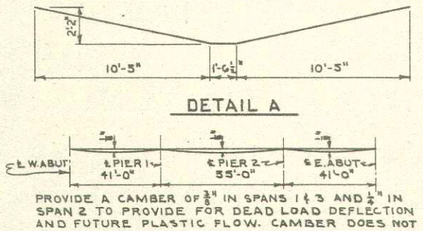
POUR	MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
SUPERSTRUCTURE	S1	73	6	24-0	SHOWN	SLAB - TRANS. - BOTTOM	
	S2	73	6	18-3	"	" " "	
	S3	20	7	24-0	"	HAUNCH " "	
	S4	20	7	18-3	"	" " "	
	S5	82	5	23-0	1-0	" LONG. "	A
	S6	80	10	25-6	1-0	SLAB " " - SPANS 1 & 3	
	S7	82	10	33-9	1-0	" " " - " 1 & 3	
	S8	35	10	39-0	1-2	" " " - SPAN 2	
	S9	34	10	27-6	1-2	" " " - " 2	
	S10	74	4	24-0	1-6	" TRANS. - TOP	
	S11	74	4	18-9	1-6	" " "	
	S12	72	5	19-6	1-2	" LONG. "	
	S13	72	10	45-6	1-2	" " "	
	S14	70	10	36-0	1-2	" " "	
	S15	36	5	12-0	1-2	" " "	
	S16	370	5	4-6	9	CURB	B
	S17	16	5	21-6	SHOWN	" LONG. - SPANS 1 & 3	
	S18	8	5	28-0	"	" " " - SPAN 2	
	S19	370	5	6-3	9	RAIL PARAPET	C
	S20	26	7	24-0	1-0	SLAB - TRANS. TOP OVER PIERS	
	S21	26	7	18-9	"	" " " " "	
RAILING	R1	16	5	19-9	SHOWN	RAIL PARAPET	
	R2	16	5	21-6	"	" "	
	R3	16	5	15-9	"	" "	
	R4	8	5	22-3	"	" "	



PLAN



HALF LONGITUDINAL SECTION THRU ROADWAY

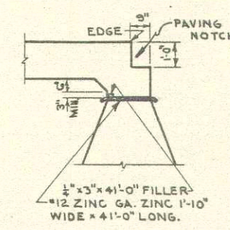


DETAIL A

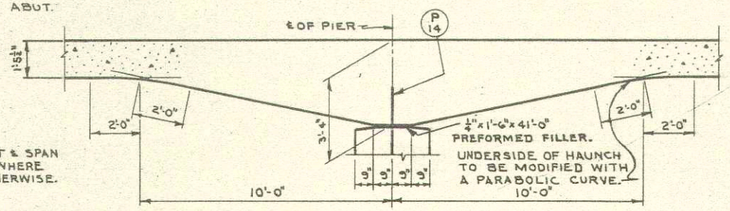
PROVIDE A CAMBER OF ⅜" IN SPANS 1 & 3 AND ½" IN SPAN 2 TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE PLASTIC FLOW. CAMBER DOES NOT INCLUDED AN ALLOWANCE FOR FORM SETTLEMENT.

DEFLECTION DIAGRAM

DEFLECTIONS SHOWN ARE THOSE ANTICIPATED FROM DESIGN COMPUTATIONS



DETAIL AT ABUTS.



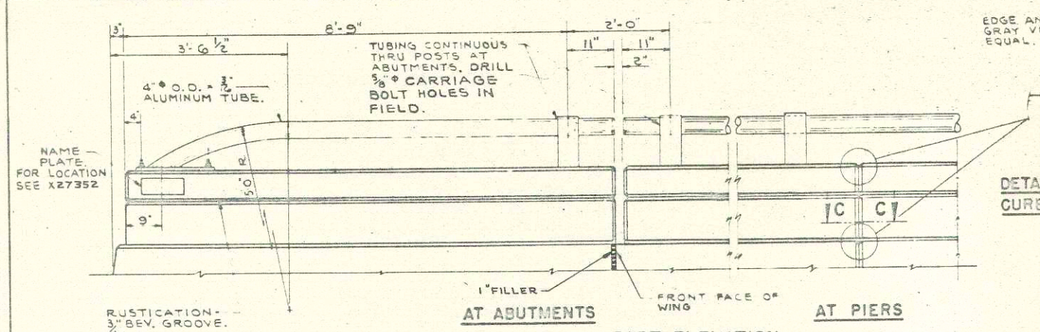
HAUNCH DETAIL

● INDICATES DEFLECTION JOINTS IN RAIL PARAPET AND CURBS AT PIERS.
⊠ INDICATES DEFLECTION JOINTS IN RAIL PARAPET ONLY, PLACED MIDWAY BETWEEN POSTS.

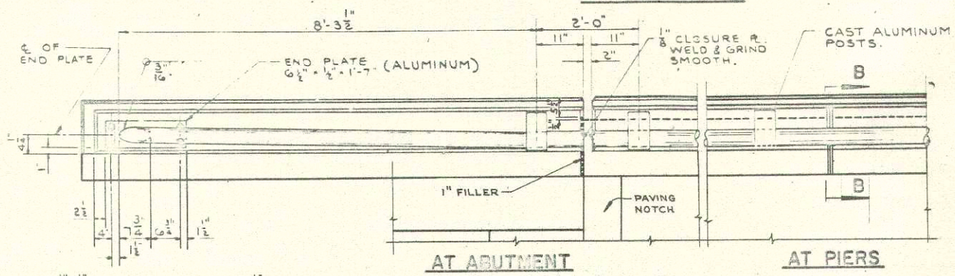
REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	SUPERSTRUCTURE
	DESIGN SPEC. A.A.S.H.O. '61 LOADING H20-S16 MOD. CONST. SPEC. 1963
	DATE 6-24-63 DESIGN F.R.W. DRAWN GFH/LC CKD. W.K.
STRUCTURE B-32-49	SHEET 2 OF 8

X 27353

S.H.C. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3) 275	49	54

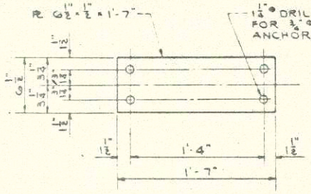


PART ELEVATION

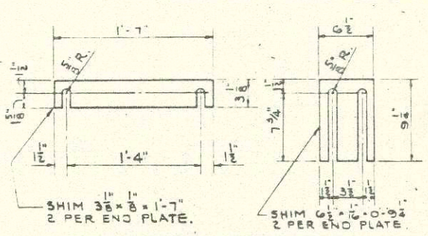


PART PLAN

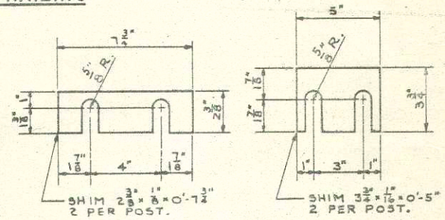
SINGLE LINE ALUMINUM RAILING



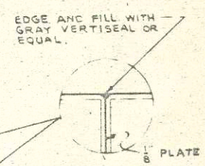
END PLATE
(ALUMINUM)



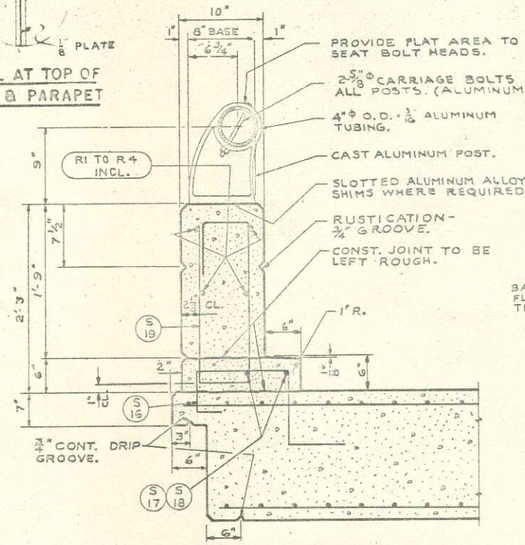
END PLATE SHIM DETAILS



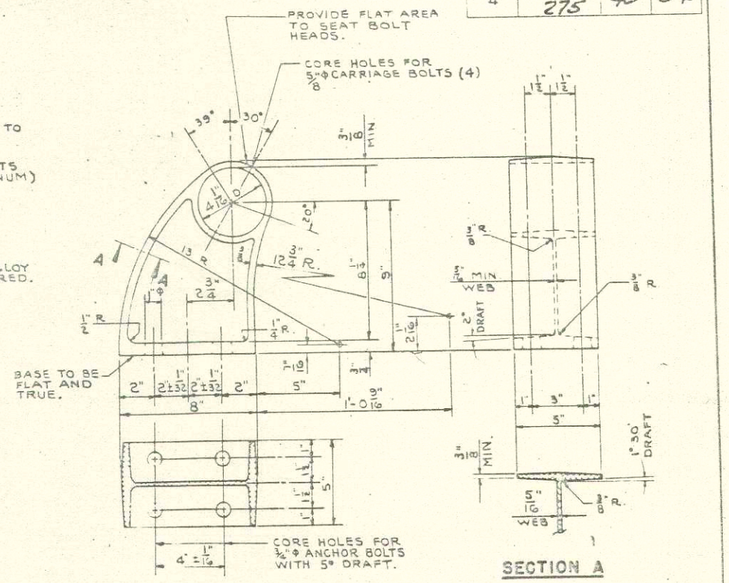
POST SHIM DETAILS



DETAIL AT TOP OF CURB & PARAPET



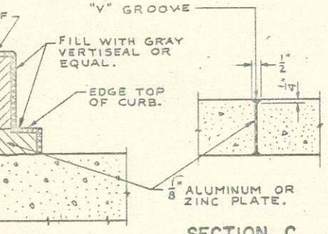
SECTION THRU CURB



ALUMINUM POST CASTING

NOTES

1. ALUMINUM RAILING POSTS TO BE SET NORMAL TO GRADE.
2. THE HEX. NUTS, WASHERS AND THE UPPER 3" OF ¾" ϕ × 9¾" LONG ANCHOR BOLTS SHALL BE GALVANIZED OR CADMIUM PLATED. THE ANCHOR BOLT HOLES, BASE OF RAILING POSTS AND ANCHOR BOLTS, NUTS AND WASHERS SHALL BE COATED WITH AN ALUMINUM IMPREGNATED CAULKING COMPOUND.
ANCHOR BOLTS, HEX. NUTS AND WASHERS TO BE STRUCTURAL CARBON STEEL.
3. ALUMINUM TUBING SHALL BE FABRICATED IN 2 OR 3 PANEL LENGTHS.
4. ALUMINUM ALLOY SHIMS SHALL BE USED UNDER POSTS AND UNDER END PLATES WHERE REQUIRED FOR ALIGNMENT.
5. WHEN PARAPETS AND CURBS ARE POURED CONTINUOUSLY FROM END TO END THEY SHALL BE SEPARATED AT THE DEFLECTION JOINTS BY A PIECE OF 1" 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.

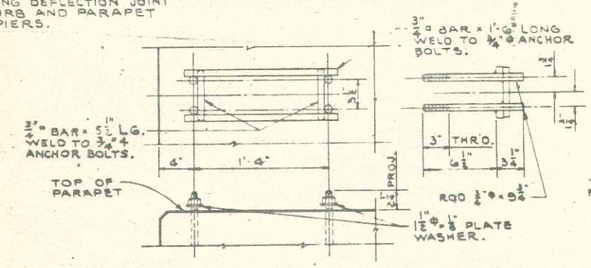


SECTION B

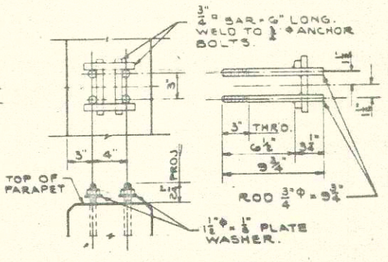
SHOWING DEFLECTION JOINT IN CURB AND PARAPET AT PIERS.

SECTION C

DETAILS OF DEFLECTION JOINTS IN PARAPET ONLY- SIMILAR TO THAT SHOWN IN THIS AREA.



AT END PLATE



AT POSTS

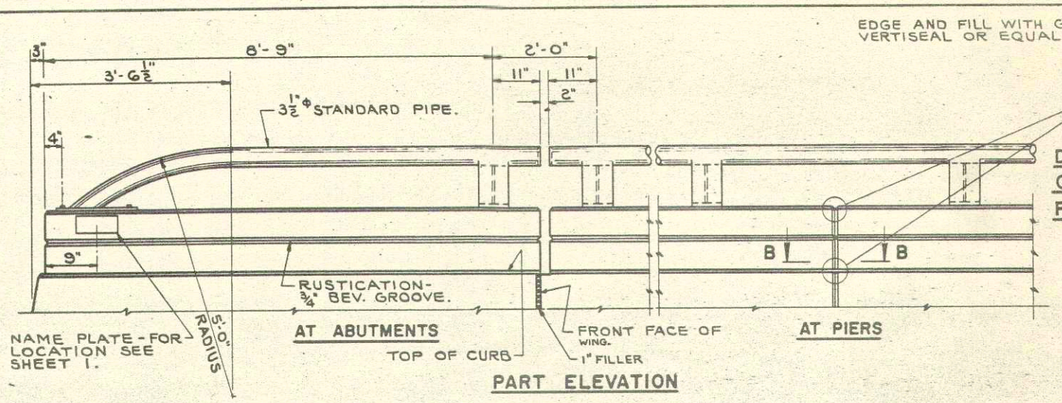
ANCHOR BOLT SETTING DETAILS

REV. SEC.	STATE HIGHWAY COMMISSION OF WISCONSIN
	TUBULAR ALUMINUM RAILING TYPE "A"
	DESIGN SPEC. A.A.S.H.O. '61 LOADING H-20-S16 MOD. CONST. SPEC. 1963
	DATE 6-24-63 DESIGN: S.T.D. DRAWN JOT CKD W.K.
STRUCTURE B-32-49	SHEET 3 OF 8

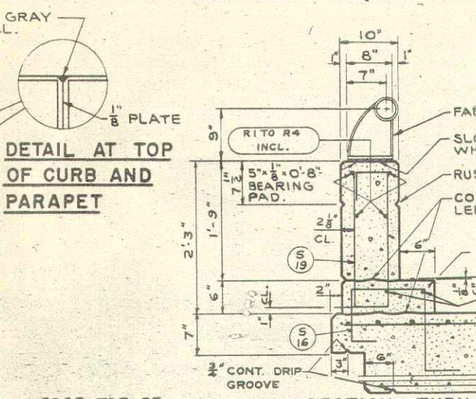
X27354

FORM E-9-12-62

STATE	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3) 275	50	54

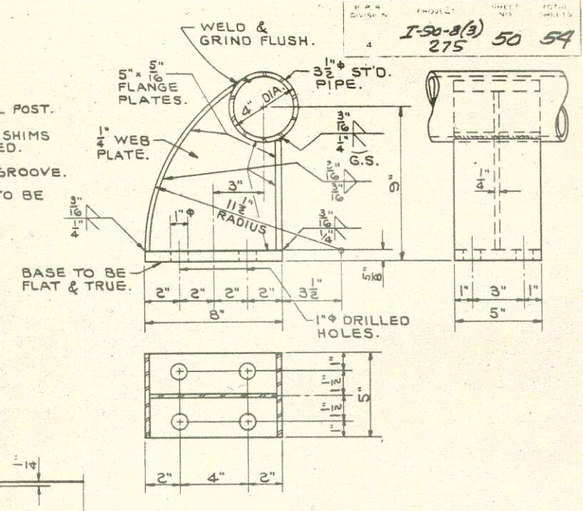


PART ELEVATION

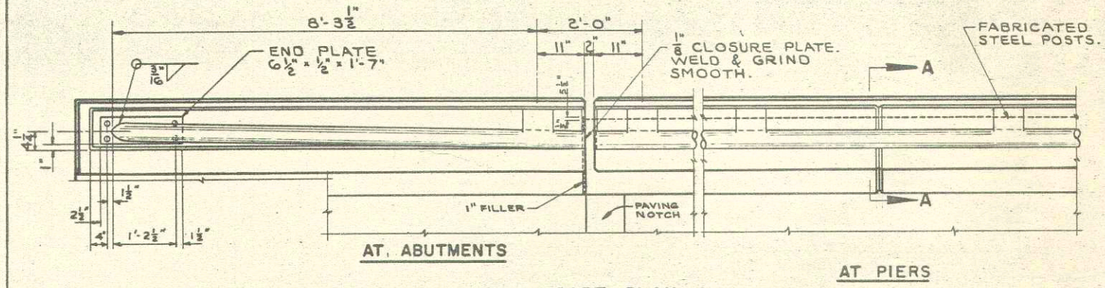


DETAIL AT TOP OF CURB AND PARAPET

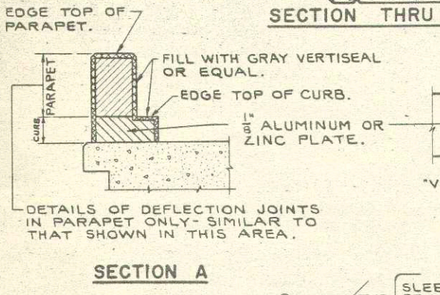
SECTION THRU CURB



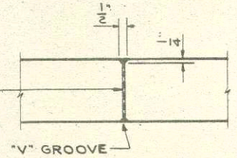
POST DETAILS



PART PLAN



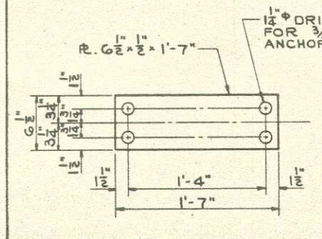
SECTION A



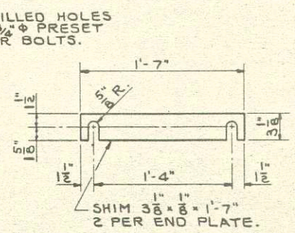
SECTION B

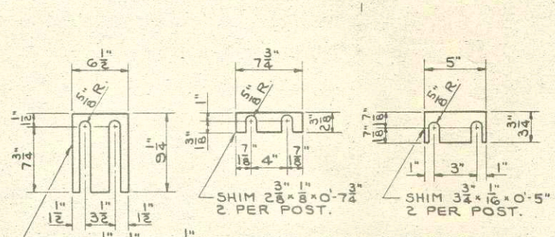
NOTES

1. STEEL RAIL POSTS SHALL BE SET NORMAL TO GRADE.
2. RAILING SHALL BE FABRICATED IN LENGTHS AS SHOWN.
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 ½" 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 3½"Φ STANDARD PIPE ASTM DESIGNATION A53.
   POST SHALL BE FABRICATED FROM MATERIAL CONFORMING TO ASTM DESIGNATION A36.
   ANCHOR BOLTS TO BE MADE FROM MATERIAL CONFORMING TO ASTM DESIGNATION A307.
   SLEEVES SHALL BE 3"Φ STANDARD PIPE ASTM DESIGNATION A53.
6. CAULK EXPOSED OPENINGS BETWEEN SHIMS WITH LEAD WOOL.



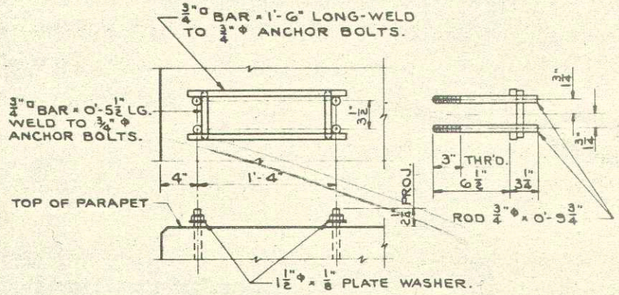
END PLATE



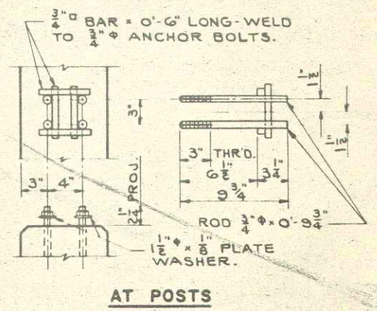


END PLATE SHIM DETAILS

POST SHIM DETAILS

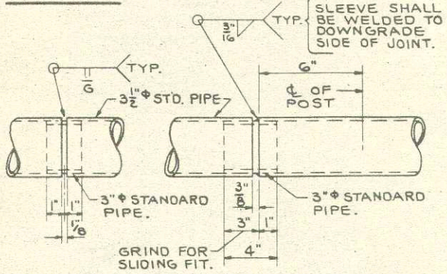


AT END PLATE



AT POSTS

ANCHOR BOLT SETTING DETAILS



SHOP RAIL SPLICE DETAIL

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

FIELD ERECTION JOINT DETAIL

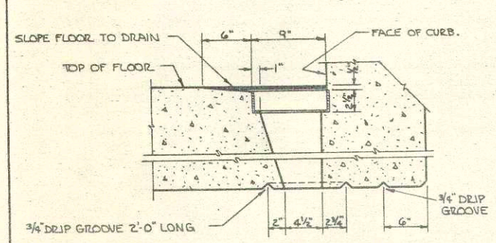
RAILING SHALL BE FABRICATED IN 2 & 3 PANEL LENGTHS.

PROJECT	STATE HIGHWAY COMMISSION OF WISCONSIN		
	TUBULAR STEEL RAILING TYPE "A"		
	A.A.S.H.O. '61	H20-S16 MOD.	1963
	6-24-63	ST'D.	JDT. W.K.
STRUCTURE B-32-49	SHEET 4 OF 8		

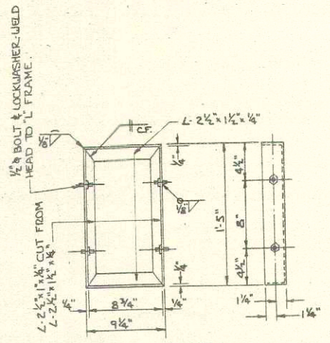
X27355

B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3) 275	51	54

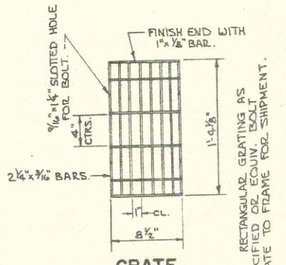
FLOOR DRAIN TYPE	NO. REQ'D
TYPE "B"	6
TYPE "C"	———



SECTION THRU DRAIN.



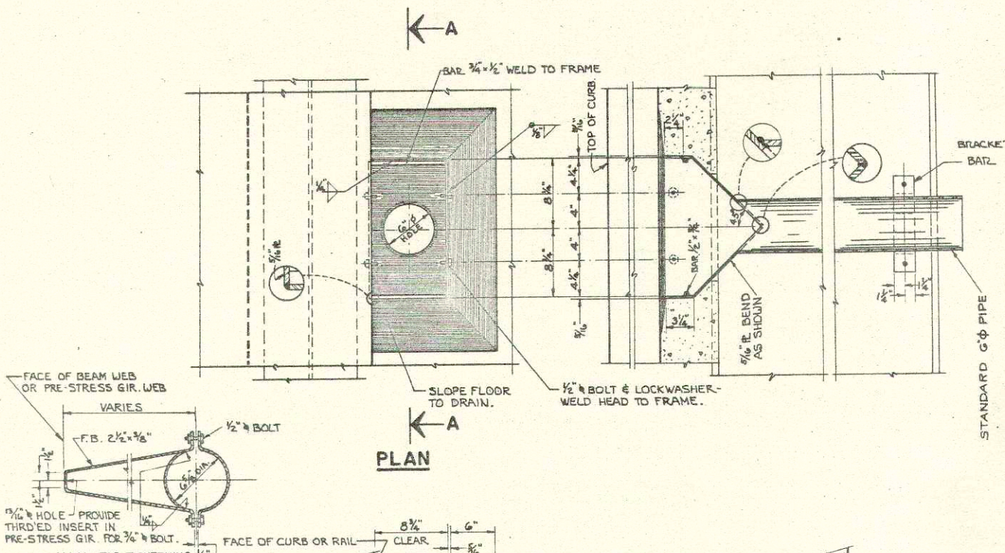
FRAME



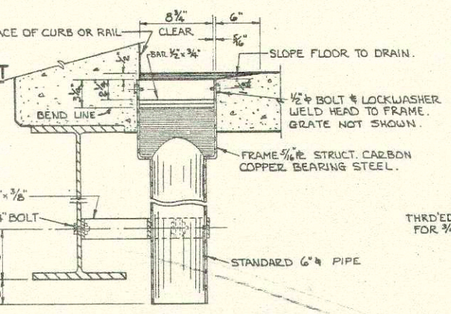
GRATE

RECTANGULAR GRATING AS SPECIFIED OR EQUIV. BOLT GRATE TO FRAME FOR SHIPMENT.

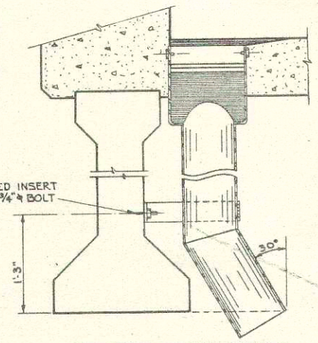
FLOOR DRAIN - TYPE "B"



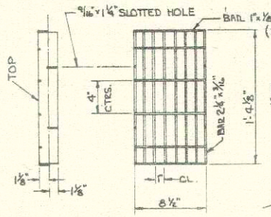
SECTION THRU BRACKET



SECTION THRU DRAIN
(STEEL BEAM SHOWN OUTSIDE)

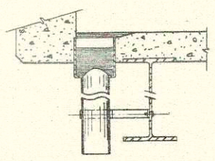


SECTION THRU DRAIN
(PRE-STRESSED GIRDER SHOWN OUTSIDE)

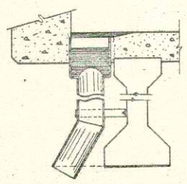


NOTE: BOLT GRATE TO FRAME FOR SHIPMENT.

GRATE



SECTION THRU DRAIN
(STEEL BEAM SHOWN INSIDE)



SECTION THRU DRAIN
(PRE-STRESSED GIRDER SHOWN INSIDE)

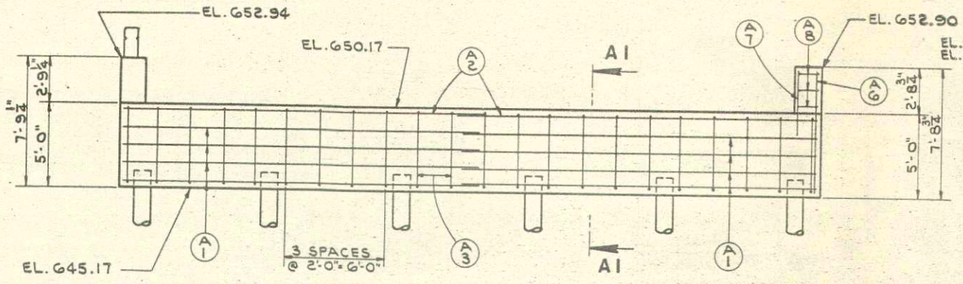
FLOOR DRAIN - TYPE "C"

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN					
	FLOOR DRAIN DETAILS					
	DESIGN SPEC. A.A.S.H.O. '61	LOADING H20-S16 MOD	CONST. SPEC. 1963			
	DATE 6-24-63	DESIGN STD.	DRAWN J.K.G.	CKD. W.K.		
STRUCTURE B-32-49	SHEET 5 OF 8					

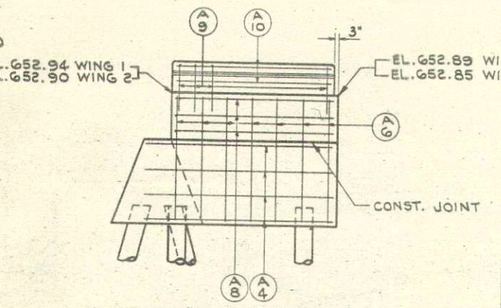
X27356

FORM E-B-12-62

B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3) 275	52	54



FRONT ELEVATION
(LOOKING WEST)



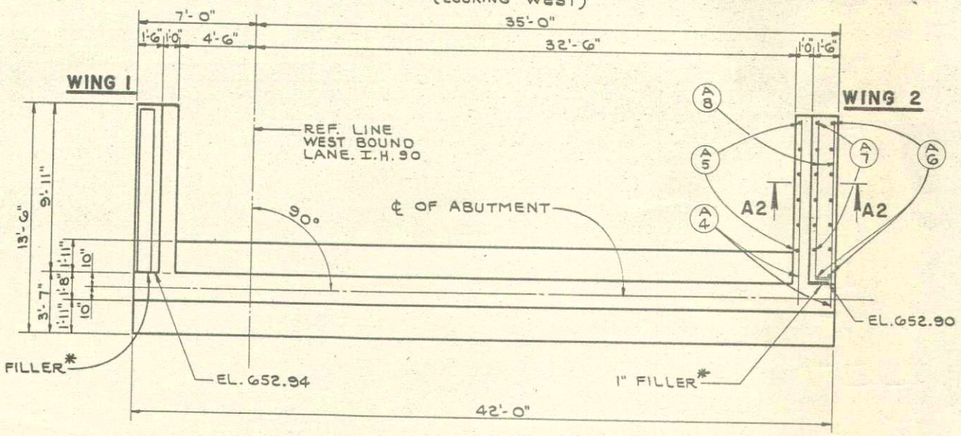
END VIEW

BILL OF BARS

1,240#

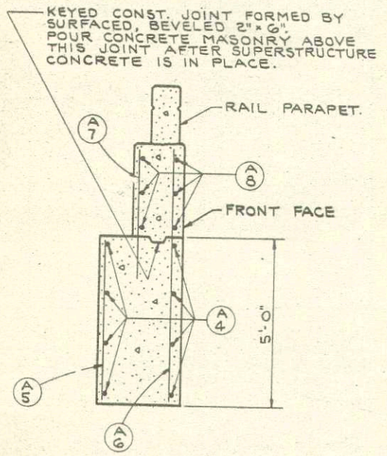
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

POUR	MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
WEST ABUTMENT	A1	20	4	21-6	SHOWN	BODY - BOTTOM & SIDES	
	A2	4	6	21-9	SHOWN	" - TOP	
	A3	44	4	9-3	SHOWN	"	A
	A4	16	4	11-3	1-6	WINGS - HORIZ.	
	A5	12	4	4-6	1-6	" - VERTICAL	
	A6	16	4	7-6	1-6	" - "	
	A7	12	4	3-9	1-6	" - "	
	A8	12	4	10-6	1-0	" - HORIZ.	B
	A9	20	5	6-0	1-0	RAIL PARAPET - VERTICAL	C
	A10	8	5	9-3	SHOWN	" " - HORIZ.	

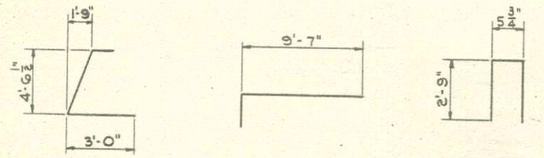


PLAN

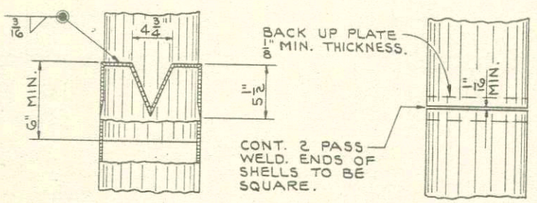
* FOR DETAILS SEE X27354 & X27355.



SECTION A2

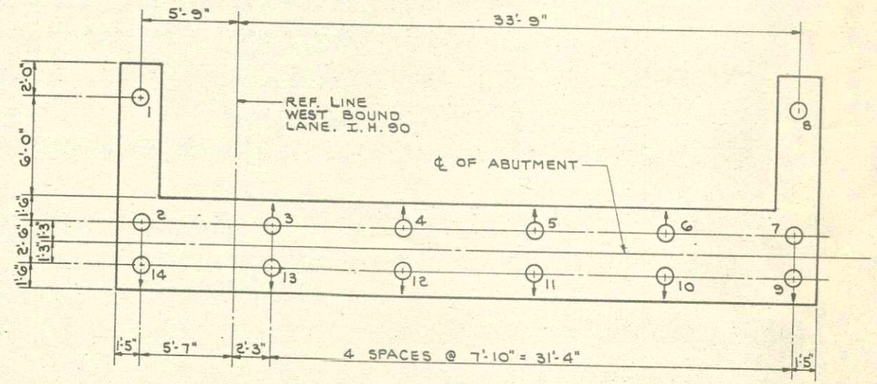


DETAIL A DETAIL B DETAIL C



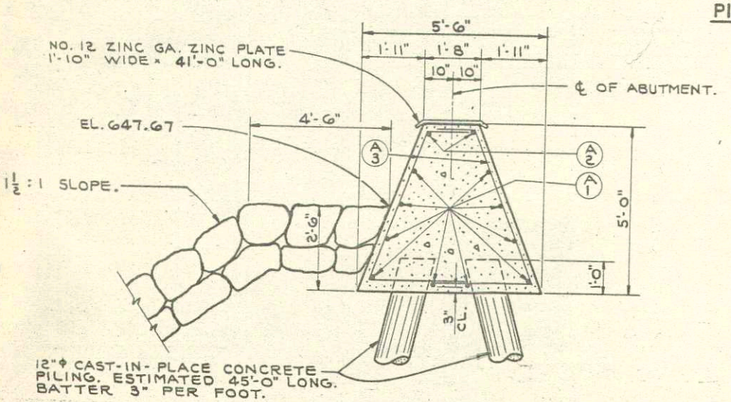
FLUTED PILE PIPE PILE

PILE SPLICE DETAIL

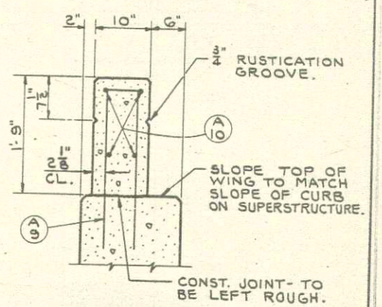


PILE PLAN

BATTER IN DIRECTION SHOWN.



SECTION A1



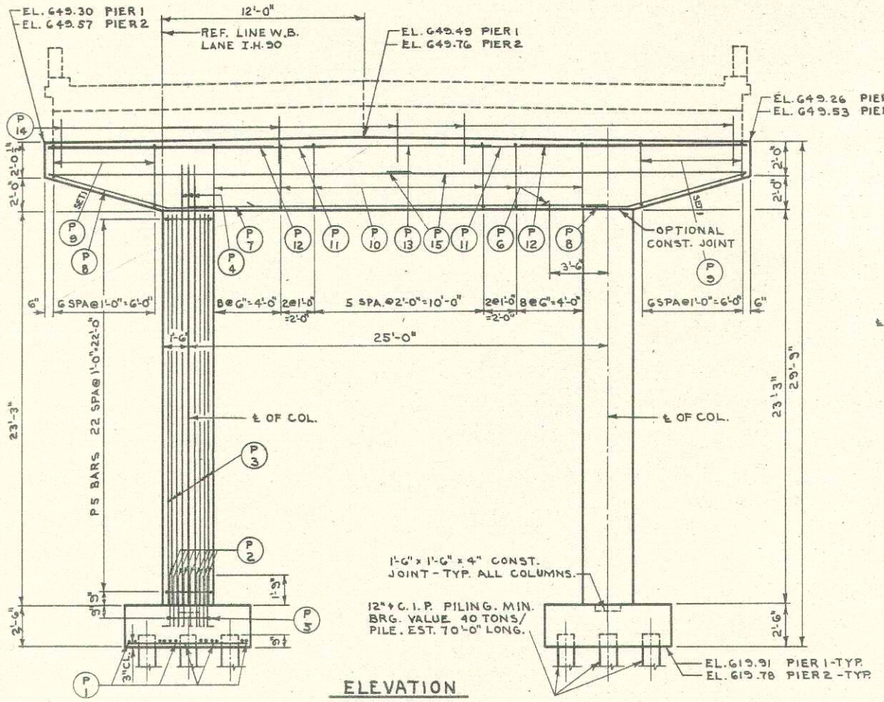
RAIL PARAPET DETAIL

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	WEST ABUTMENT
	DESIGN SPEC. A.A.S.H.O. 1961 LOADING H20-S16 MOD. CONST. SPEC. 1963
	DATE 6-24-63 DESIGN F.W. DRAWN W.K. CKD. W.G.
STRUCTURE B-32-49	SHEET 6 OF 8

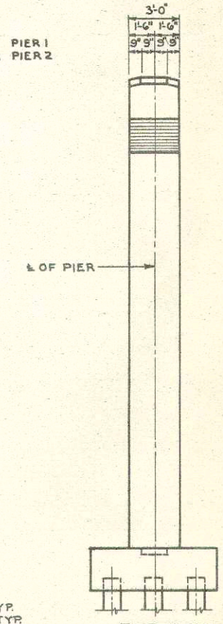
X27357

FORM E-B-12-62

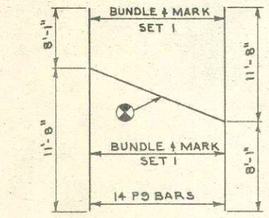
B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(3) 275	53	54



ELEVATION
LOOKING WEST



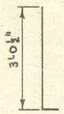
END VIEW



4 SET (1) REQ'D.

DETAIL E

MARK & CUT ALL BARS ALONG THIS LINE. ALL CUTS NORMAL TO BAR AXIS. AFTER CUTTING BEND BARS AS SHOWN IN DETAIL D.



DETAIL A

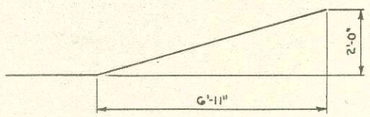
DETAIL B

BILL OF BARS 13,100#

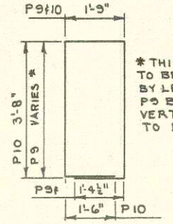
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

POUR	MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
FOOTING	P1	96	6	7-0	*SHOWN	FOOTINGS	
	P2	64	7	3-6	"	" -DOWELS	A
	P5	4	4	5-6	"	" -HOOPS	B
COLUMNS & CAP	P3	40	7	23-0	"	COLUMNS - VERT.	
	P4	24	7	26-0	"	" "	
	P5	92	4	5-6	1-0	" -HOOPS	B
	P6	12	11	18-0	SHOWN	CAP - BOTTOM CENTER	
	P7	12	11	25-0	"	" " "	
	P8	24	5	10-0	"	" " ENDS	C
	P9	28	4	19-9	1-0	" - STIRRUPS "	D&E
	P10	104	4	12-0	SHOWN	" " CENTER	D
	P11	24	10	16-6	"	" -TOP ENDS	
	P12	24	10	13-6	"	" " "	
	P13	12	5	11-3	"	" " CENTER	
	P14	82	5	3-0	1-0	" "	
	P15	8	5	21-9	SHOWN	" -SIDES	

* SPACE "P1" BARS TO MISS PILING.
NOTE: BILL OF BARS INCLUDES BAR STEEL REINF. FOR BOTH PIERS.

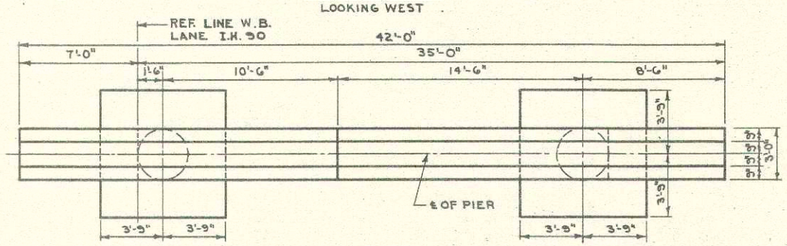


DETAIL C

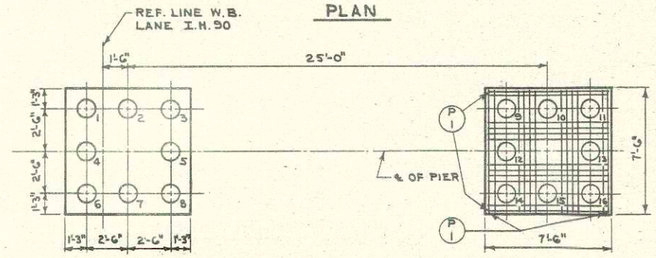


* THIS DIMENSION TO BE DETERMINED BY LENGTH OF EACH P9 BAR. BOTH VERTICAL SIDES TO BE EQUAL.

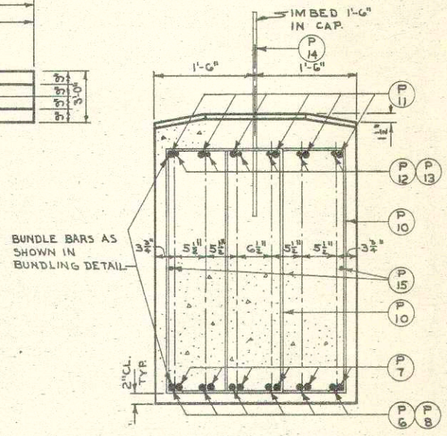
DETAIL D



PLAN

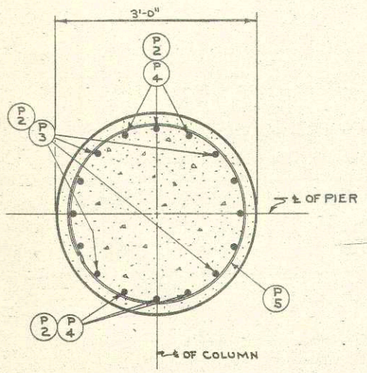


FOOTING PLAN

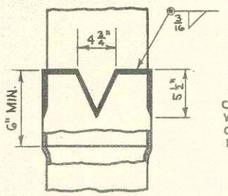


SECTION THRU CAP

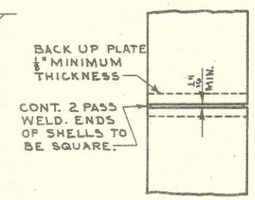
BUNDLING DETAIL



SECTION THRU COLUMNS



FLUTED PILE



PIPE PILE

PILE SPLICE DETAIL

CONCRETE MASONRY

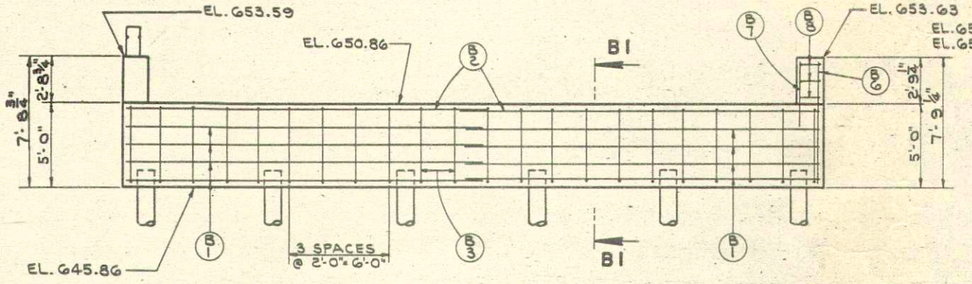
	PIER 1	PIER 2
CAP	17.6 C.Y.	17.6 C.Y.
COLUMNS	12.2 C.Y.	12.2 C.Y.
FOOTINGS	10.0 C.Y.	10.0 C.Y.
TOTALS	39.8 C.Y.	39.8 C.Y.

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	PIERS 1 & 2
	DESIGN SPEC. A.A.S.H.O. '61 · LOADING H20-S16 Mod. · CONST. SPEC. 1963
	DATE 6-24-63 · DESIGN F.R.W. · DRAWN GPT/la · CKD. W.K.
	STRUCTURE B-32-49 · SHEET 7 OF 8

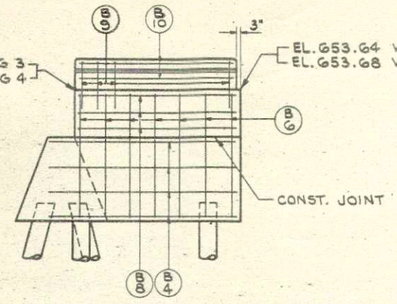
X27358

FORM E-B-12-62

B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-8(9) 275	54	54



FRONT ELEVATION
(LOOKING EAST)

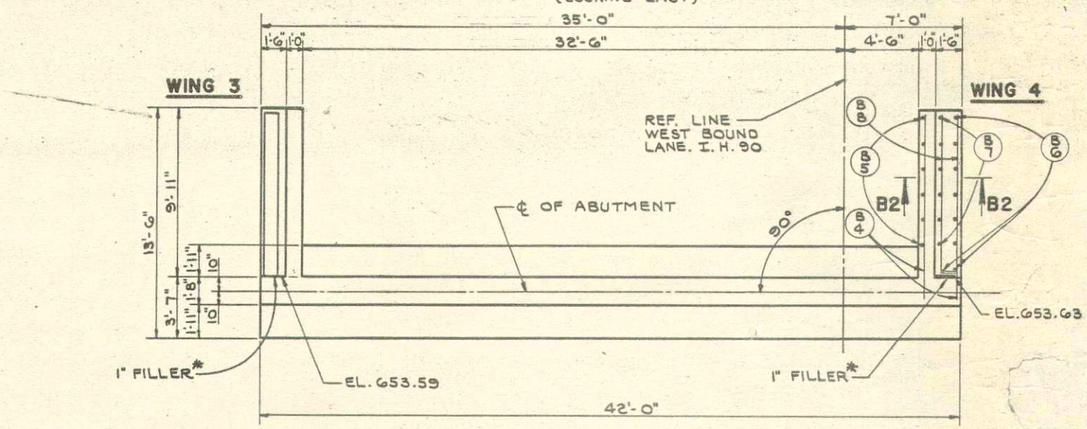


END VIEW

BILL OF BARS 1,240#

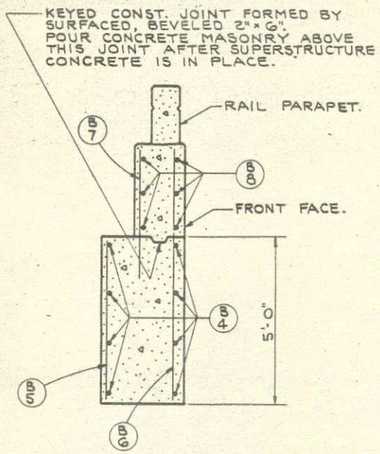
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

POUR	MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
EAST ABUTMENT	B1	20	4	21-6	SHOWN	BODY - BOTTOM & SIDES	
	B2	4	6	21-9	SHOWN	" - TOP	
	B3	44	4	9-3	SHOWN	"	A
	B4	16	4	11-3	1-6	WINGS - HORIZ.	
	B5	12	4	4-6	1-6	" - VERTICAL	
	B6	16	4	7-6	1-6	" - "	
	B7	12	4	3-9	1-6	" - "	
	B8	12	4	10-6	1-0	" - HORIZ.	B
	B9	20	5	6-0	1-0	RAIL PARAPET - VERTICAL	C
	B10	8	5	9-3	SHOWN	" " - HORIZ.	

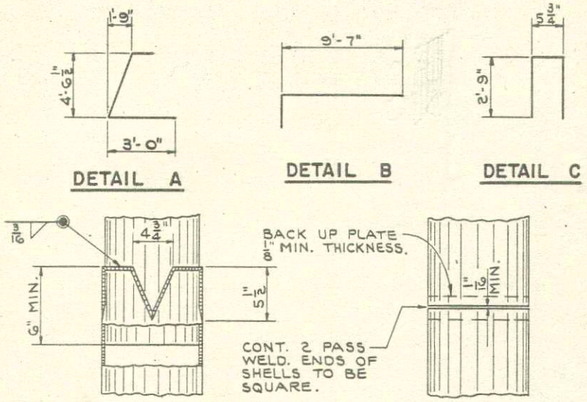


PLAN

* FOR DETAIL SEE X27354 & X27355.



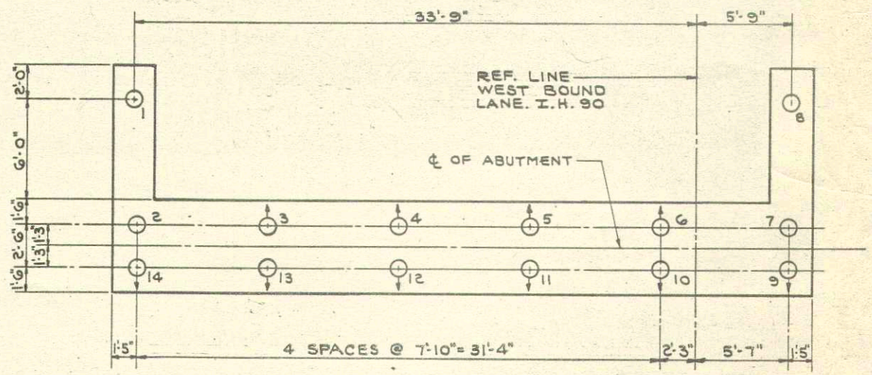
SECTION B2



DETAIL A DETAIL B DETAIL C

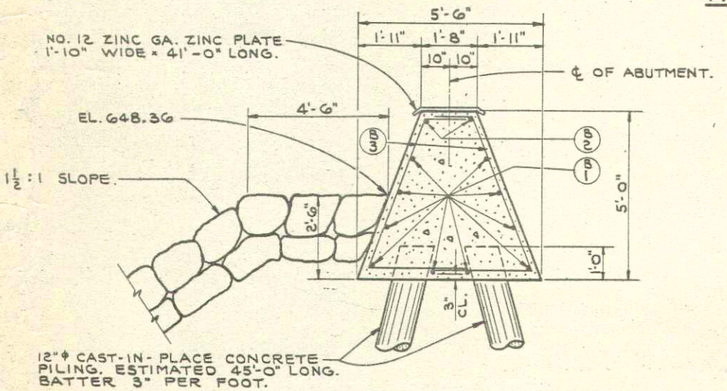
FLUTED PILE PIPE PILE

PILE SPLICE DETAIL

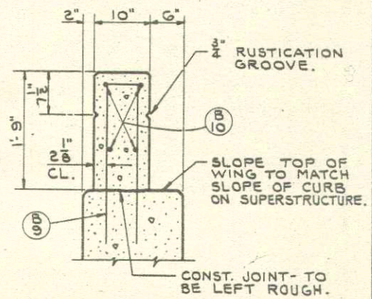


PILE PLAN

BATTER IN DIRECTION SHOWN.



SECTION B1



RAIL PARAPET DETAIL

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	EAST ABUTMENT
	DESIGN SPEC. A.A.S.H.O. 1961 LOADING H20-S16 MOD. CONST. SPEC. 1963
	DATE 6-24-63 DESIGN F.W. DRAWN W.K. CKD. W.G.
	STRUCTURE B-32-49 SHEET 8 OF 8

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