COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT		B.P.R. REGION DIVISION	SHEET NUMBER	TOTAL SHEETS
		STATE	FEDERAL			
35.6	1182.0		11.2	4 WIS.	1	13

STATE OF WISCONSIN

STATE HIGHWAY COMMISSION OF WISCONSIN

PLAN AND PROFILE OF PROPOSED

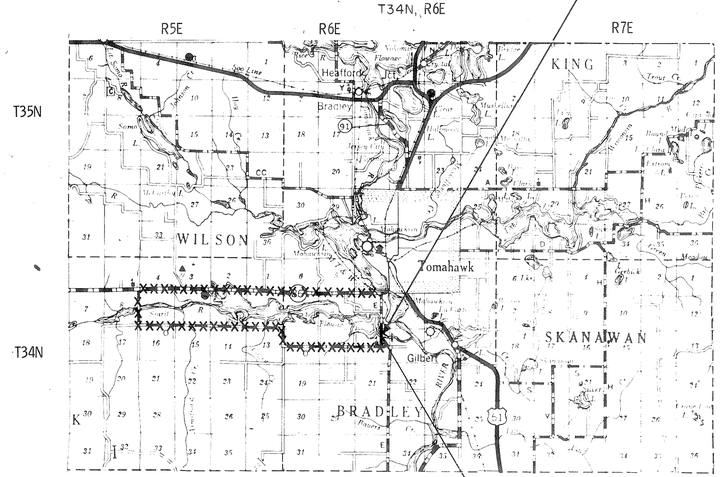
SPIRIT RIVER BRIDGE

C.T.H. "E"
LINCOLN COUNTY
PROJECT S1182(2)

INDEX OF SHEETS

SCALES
PLAN 1 IN. 100 FT.
PROFILE HOR. 1 IN. — 100 FT. VERT. 1 IN. — 10 FT.
CROSS SECTIONS HOR. 1 IN. — 5 FT. VERT. 1 IN. — 5 FT.

END PROJECT S 1182(2)
STA. 21+28.25
2017' N. of the S. 1/16 Cor. of the NE 1/4 of Sec. 16, T34N, R6E



BEGIN PROJECT S 1182(2)
STA. 20+19.75
1908.5' N. of the S. 1/16 Cor. of the NE 1/4 of Sec. 16, T34N, R6E

N

DESIGN DESIGNATION

A. D. T. 1967 = 590
A. D. T. 1968 = 1180
D. H. V. = 200
D. = 65%
T. = 12%
V. = 50 M. P. H.

CONVENTIONAL SIGNS

STATE LINE
COUNTY LINE
TOWNSHIP OR RANGE LINE
SECTION LINE
NEW RIGHT OF WAY LINE
PRESENT RIGHT OF WAY LINE
WIRE FENCE { WOVEN, BARBED
LOT LINE
CORPORATE OR CITY LIMITS
PROPERTY LINE — PL + 326
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 — +61.7 / 25.9
MARSH
HEDGE
TREES
GROUND ELEVATION — DATUM LINE — 739
GRADE ELEVATION — DATUM LINE — 751.6

LAYOUT

SCALE 2 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.021 MI.

STATE HWY. COMM. DIST. 7 RECEIVED JUN 15 1967

D. E.		
CONST.		
MAINT.		
P & D		
R/W		
ADM.		
MAT		

STATE HIGHWAY
COMMISSION OF WISCONSIN
MADISON, WIS.

SURVEYOR J. WALLIN NOTE BOOK 309
DIVISION COMPUTER W. CAIN M. O. CHECKER W.H.B.
DISTRICT CHECKER G. WINAT CORRECT

CORRECT:
DATE 4/24/67 — DISTRICT ENGINEER

RECOMMENDED FOR APPROVAL:
DATE — CHEIF DESIGN ENGINEER

APPROVED:
DATE — STATE HIGHWAY ENGINEER

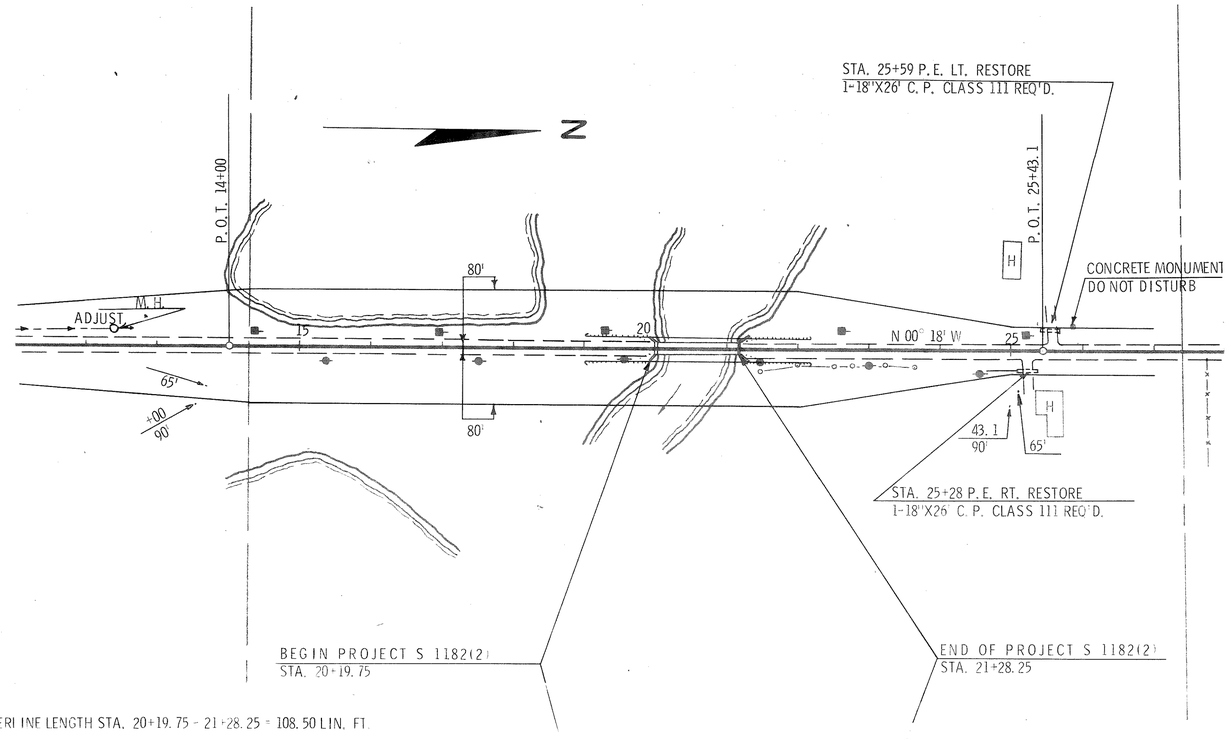
DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED:
DATE

DIVISION ENGINEER

S1182(2)

B.P.R. REGION	PROJECT	SHEET NO.	TOTAL SHEETS
	S 1182(2)	3	13

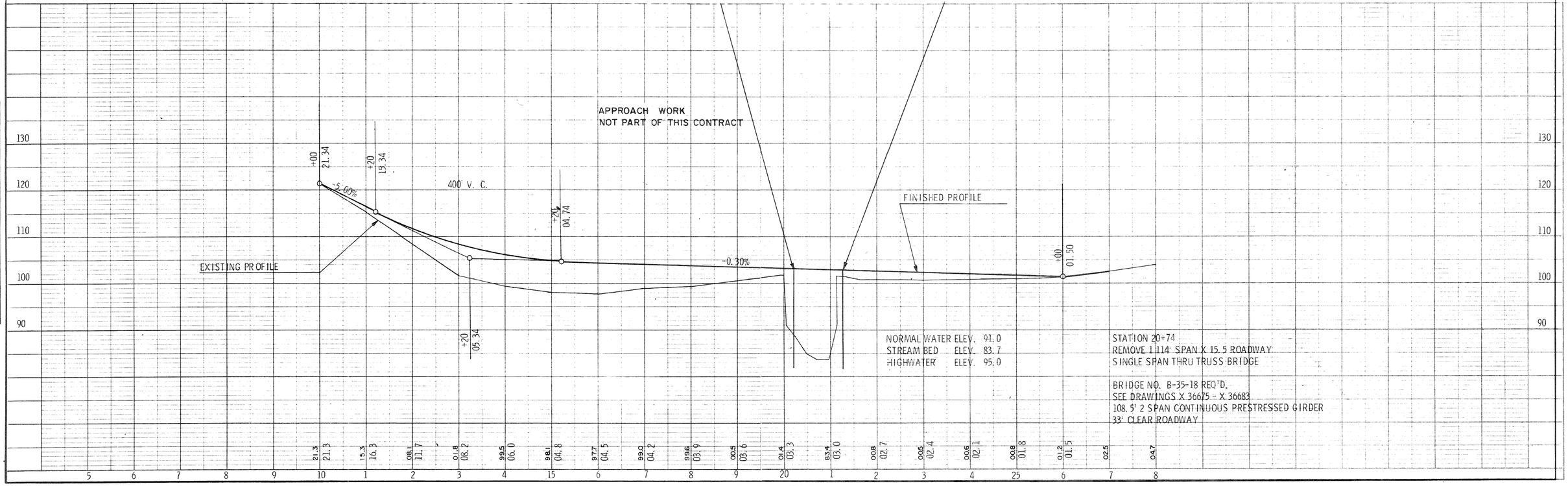


NET CENTERLINE LENGTH STA. 20+19.75 - 21+28.25 = 108.50 LIN. FT.

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
0	8+60	P.K. NAIL IN MASONRY MANHOLE 21' RT.	127.27
1	18+24	SPIKE IN 12" MAPLE 40' RT.	93.78
2	23+61	SPIKE IN 20" N. PINE 89' LT.	102.24

PROFILE
SURVEYED
PLOTTED
NOTE BOOK CHECKED
B.M.'S NOTED
NO. STRUCTURE NOTATIONS CHKD.
BY
DATE



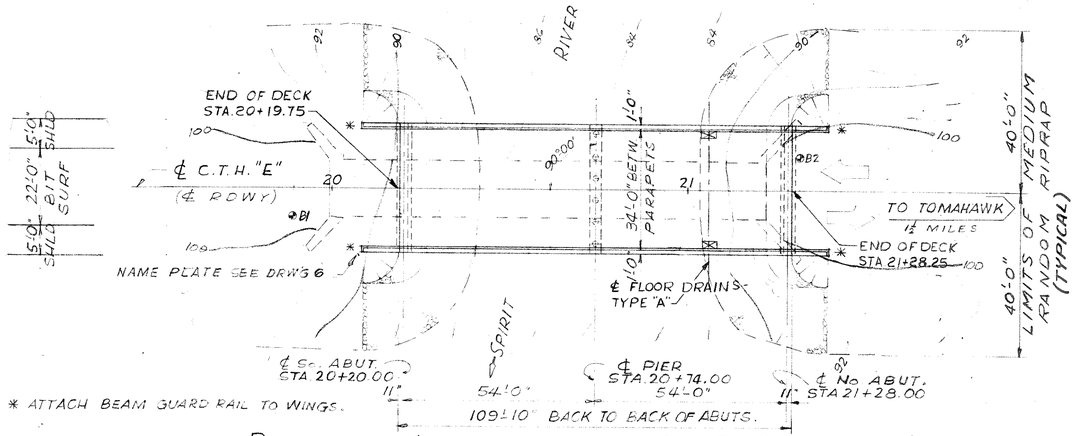
BRUNING NO 42-161

PLATE 1 — PLAN — PROFILE O F R & R E.
MADE AND PRINTED IN U.S.A.
CHARLES BRUNING COMPANY, INC.

PLAN & PROFILE STA. 10+00 - STA. 26+00

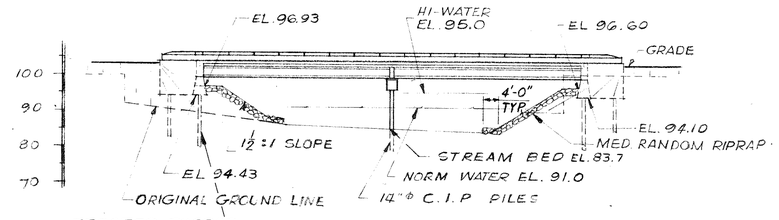
FORM E-B-11-62

COUNTY & HIGHWAY	ROUTE & SECTION	CLASS & AGREEMENT STATE	CLASS & AGREEMENT FEDERAL	B. P. R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
35.6	1182.0		11.2	4	51182(2)	5	13

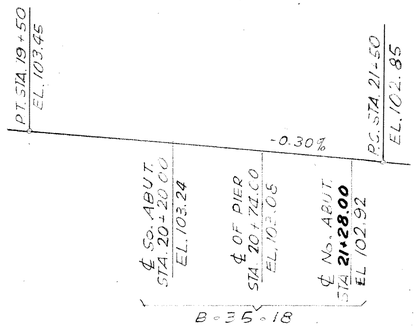


PLAN LAYOUT B-35-18

2 SPAN CONTINUOUS PRESTRESSED GIRDER SUPERSTRUCTURE.



ELEVATION



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

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

BEVEL EXPOSED EDGES 1" UNLESS SHOWN OR NOTED OTHERWISE.

JOINT FILLER SHALL CONFORM TO A.A.S.H.O. DESIGNATION M153, TYPE I.

AT PAVING NOTCH PROVIDE 3" x 12" PLANK BY WIDTH OF ROADWAY. 3/4" DIAMETER BOLTS WITH THREADED INSERTS LOCATED 5" BELOW ROADWAY SURFACE AND PLACED AT APPROXIMATELY 3'-0" CENTERS SHALL ATTACH PLANK TO CONCRETE. BOLTS AND PLANK SHALL BE REMOVED WHEN PLACING APPROACH SLAB CONCRETE. (NON-BID ITEM)

TOP AND BOTTOM TRANSVERSE BARS IN SLAB SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS ON OR ADJACENT TO EACH GIRDER, AND BY INDIVIDUAL BAR CHAIRS AT 3'-0" CENTERS AT APPROXIMATELY THE 1/3 POINTS BETWEEN GIRDERS.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

CYLINDRICAL TYPE STEEL PILE SHELLS, IF USED, SHALL HAVE A MINIMUM NOMINAL (AVERAGE) SHELL THICKNESS OF 0.219 INCH AND CONFORM TO THE REQUIREMENT OF A.S.T.M. DESIGNATION A252, GRADE 2. FLUTED PILES, IF USED, SHALL HAVE A MINIMUM SHELL THICKNESS OF NOT LESS THAN #5 GAUGE.

PILE SPLICES AT PIERS, IF USED, SHALL BE MADE BY A CERTIFIED WELDER.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH MEDIUM RANDOM RIPRAP TO THE EXTENT SHOWN ON THIS SHEET AND IN THE ABUTMENT DETAILS.

AT ABUTMENTS THE UPPER LIMIT FOR "EXCAVATION FOR STRUCTURES" SHALL BE AS SHOWN ON X36681.

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

DESIGN DATA

LIVE LOAD H20

ALLOWABLE DESIGN STRESSES

CONCRETE MASONRY, GRADE "AA"... f_c = 1,400 p. s. i.

BAR STEEL REINFORCEMENT..... f_s =20,000 p. s. i.

PRESTRESSED GIRDER
CONCRETE MASONRY..... f'_c = 6,000 p. s. i.
STRANDS-1/2" DIA. WITH ULTIMATE TENSILE STRENGTH OF..... 270,000 p. s. i.

FOUNDATION DATA

PLACE ABUTMENTS ON TREATED TIMBER PILING DRIVEN TO 24 TONS/PILE MINIMUM BEARING. ESTIMATED PILE LENGTH 30 FEET. PLACE PIER ON 14" DIA. CAST-IN-PLACE CONCRETE PILING DRIVEN TO 50 TONS/PILE MINIMUM BEARING. ESTIMATED PILE LENGTH. 40 FEET.

TOTAL ESTIMATED QUANTITIES

BID ITEM	UNIT	SUPER	S. ABUT.	PIER	N. ABUT.	TOTAL
REMOVING OLD BRIDGE STA. 20+74.00	L.S.	———	———	———	———	1
EXCAVATION FOR STRUCTURES	C.Y.	———	15	———	35	50
GRANULAR BACKFILL	C.Y.	———	10	———	20	30
CONCRETE MASONRY	C.Y.	134.9	31.4	10.1	31.4	207.8
PRESTRESSED GIRDER I TYPE, 36 INCH	L.F.	433	———	———	———	433
BAR STEEL REINFORCEMENT	L.B.	40,150	1,620	1,650	1,620	45,040
BEARING PADS, ELASTOMERIC	S.F.	20	———	———	———	20
0TREATED TIMBER TEST PILING	L.S.	———	———	———	———	1
TREATED TIMBER PILING, DELIVERED	L.F.	———	270	———	270	540
TREATED TIMBER PILING, DRIVEN	L.F.	———	270	———	270	540
00CAST-IN-PLACE CONCRETE TEST PILING	L.S.	———	———	———	———	1
CAST-IN-PLACE CONC. PILING, DELIVERED	L.F.	———	———	200	———	200
CAST-IN-PLACE CONC. PILING, DRIVEN	L.F.	———	———	135	———	135
TUBULAR RAILING, TYPE "G"	L.F.	249	———	———	———	249
FLOOR DRAINS, TYPE "A"	EA.	2	———	———	———	2
MEDIUM RANDOM RIPRAP	C.Y.	———	100	———	110	210
NON-BID ITEM						
1/8" ALUMINUM OR ZINC PLATE	S.F.	15	———	———	———	15
FILLER	SIZE	¼"x½"	———	———	———	¼"x½"
3 x 12 HARDWOOD PLANK AND HARDWARE	L.F.	66	———	———	———	66

02-45 FOOT PILES REQUIRED. DRIVE ONE AT EACH ABUTMENT.
001-60 FOOT PILE REQUIRED. DRIVE AT PIER.

LIST OF DRAWINGS

REVISED

STATE HIGHWAY COMMISSION OF WISCONSIN

GENERAL PLAN

CO. LINCOLN | TN. BRADLEY | STA. 20+74.00

SECTION 16 | TOWN 34N | RANGE 6E

DESIGN SPEC AASHO '61 | LOADING H20 | CONST SPEC. 1963

DATE 1/12/67 | DESIGN CRD | DRAWN PAGE | CKD. F.R.W.

RECOMMENDED _____ CHIEF BRIDGE ENGINEER

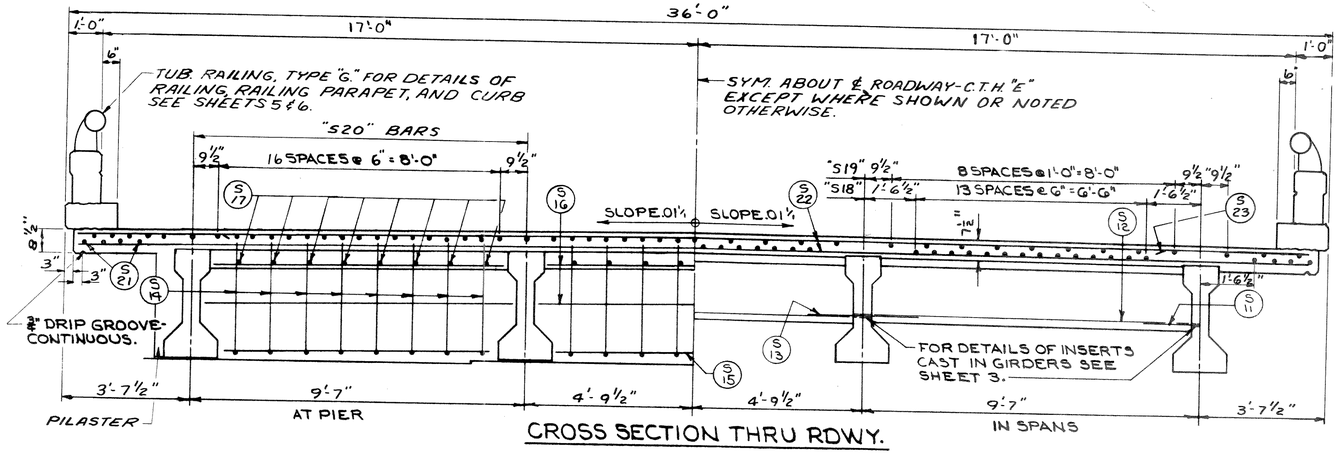
APPROVED: _____ STATE HIGHWAY ENGINEER

STRUCTURE B — 35 — 18 | SHEET 1 OF 9

X 36675

FORM E-B-12-62

B. P. R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	51182(2)	6	13

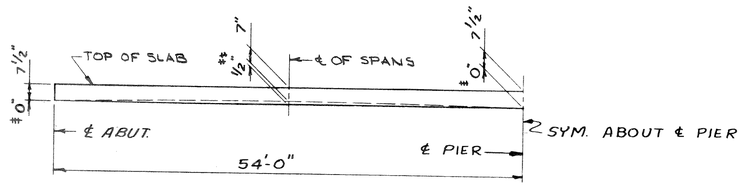


CROSS SECTION THRU RDWY.

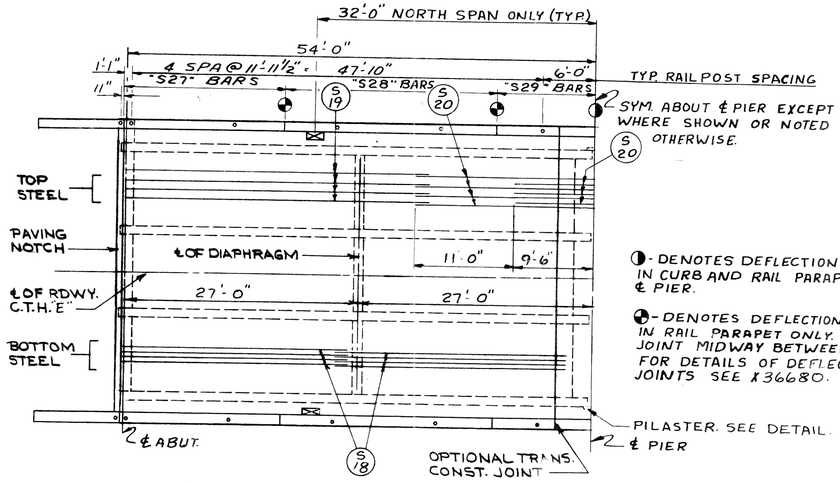
* OPTIONAL TRANSVERSE CONSTRUCTION JOINTS. CONCRETE BETWEEN JOINTS OVER PIERS TO BE PLACED AFTER CONCRETE SLAB IN BOTH SPANS IS IN PLACE. CONSTRUCTION JOINTS MAY BE OMITTED IF PLACEMENT OF EACH SPAN CAN BE MADE IN NOT LONGER THAN A FIVE HOUR PERIOD.

** TO COMPENSATE FOR VARIATIONS IN PRESTRESS CAMBER AND OTHER MINOR CONSTRUCTION DISCREPANCIES THE IMBEDMENT AT THE ℄ OF THE SPAN MAY BE VARIED WITH A MAXIMUM OF 1½" ALLOWABLE IMBEDMENT AND THE SLAB HELD TO PLAN THICKNESS.

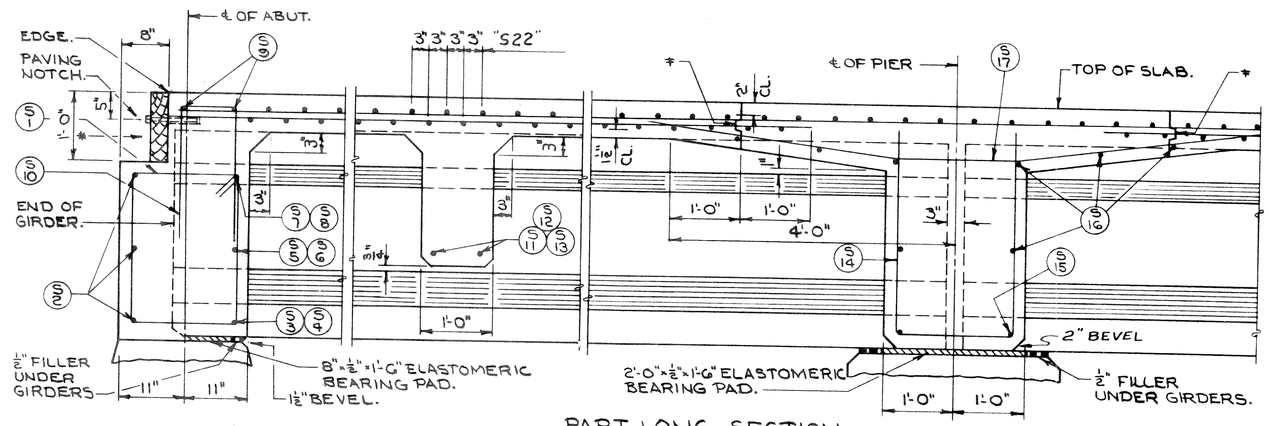
IF VARIATION IN PRESTRESS CAMBER AND OTHER CONSTRUCTION DISCREPANCIES ARE OF SUCH MAGNITUDE SO THAT THE MAXIMUM ALLOWABLE IMBEDMENT AS NOTED ABOVE WILL BE EXCEEDED THESE DIMENSIONS WILL BE REVISED. THE 1½" IMBEDMENT AND THE PLAN SLAB THICKNESS WILL BE HELD WHILE THE GRADE LINE WILL BE REVISED.



SLAB FORMING DIAGRAM

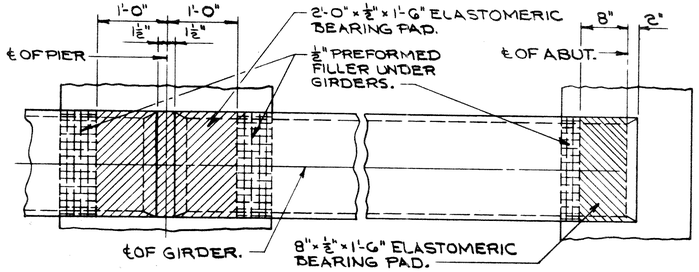


HALF PLAN

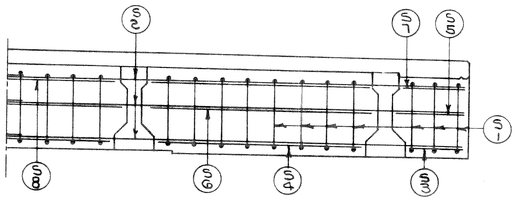


PART LONG. SECTION

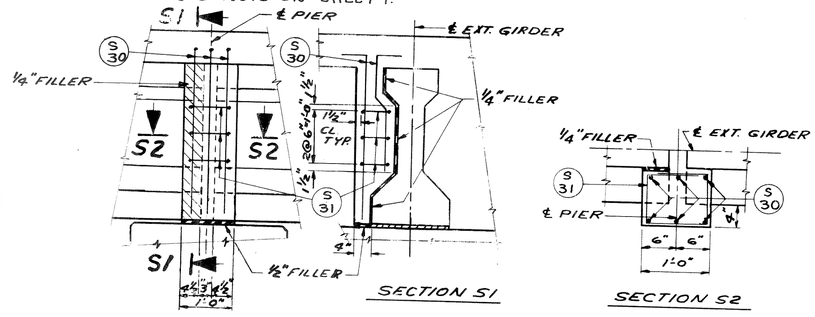
3 X 12 HARDWOOD PLANK. SEE NOTE ON SHEET 1.



BEARING PLAN



PART SECTION AT ABUTS.



ELEVATION

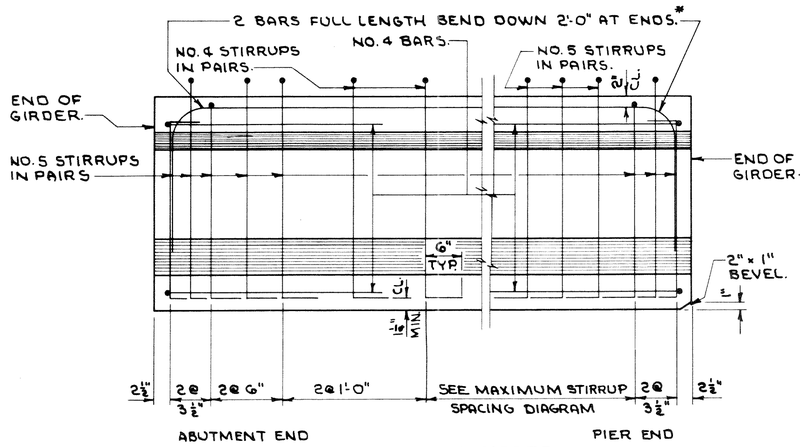
PILASTER DETAIL

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	SUPERSTRUCTURE
	DESIGN SPEC. AASHO-'61 LOADING H20 CONST. SPEC. 1963
	DATE 1-12-67 DESIGN CRD DRAWN PAGE CKD. F.R.W.
STRUCTURE B-35-18	SHEET 2 OF 9

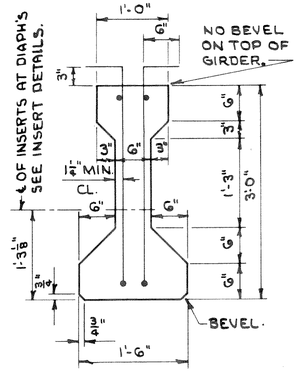
X36676

FORM E-B-12-62

E. P. R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	5118Z(2)	7	13

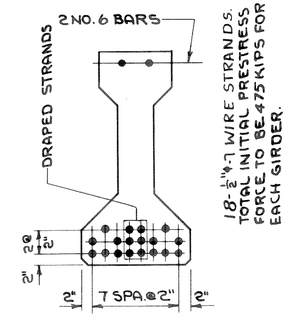


SIDE VIEW OF GIRDER



SECTION THRU GIRDER

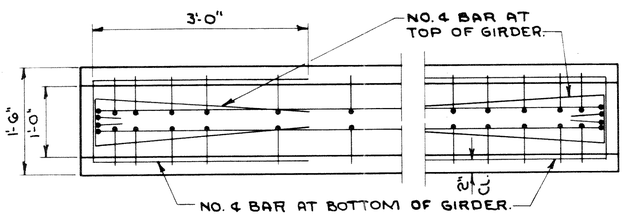
TYPICAL ALL SPANS



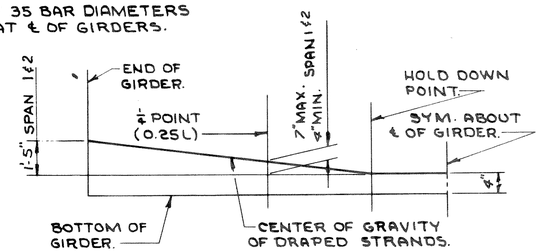
SECTION THRU GIRDER

AT ℄ OF SPAN 1 ℄ 2

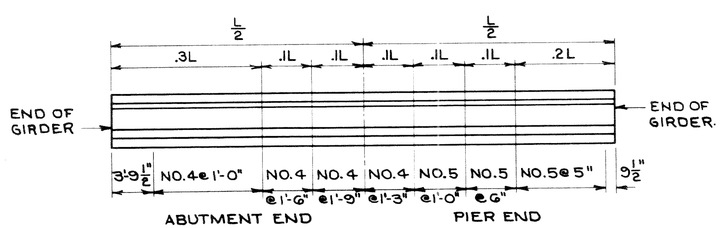
* ONE LAP OF 35 BAR DIAMETERS IS ALLOWED AT ℄ OF GIRDERS.



TOP VIEW OF GIRDER



DRAPED STRAND PROFILE



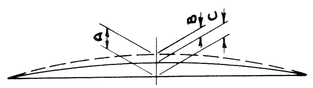
MAXIMUM STIRRUP SPACING DIAGRAM

ALL STIRRUPS TO BE IN PAIRS AS SHOWN ABOVE. THE LOCATION OF STIRRUPS SHALL BE SHOWN ON SHOP DRAWINGS.

THE OVERALL LENGTH OF GIRDERS "L" IS 54'-0½" FOR GIRDERS IN SPAN 1 ℄ 2.

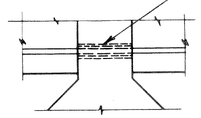
DEFLECTION DATA

	CAMBER	SPAN 1 ℄ 2
*A:	PRE-STRESS CAMBER	1⅛"
*B:	DEAD LOAD DEFLECTION	⅝"
*C:	RESIDUAL CAMBER	½"

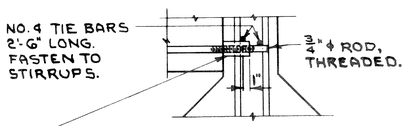


* DATA SHOWN IS THEORETICAL AND MAY VARY WITH CONCRETE STRENGTH, VARIABLE PRESTRESSING CONDITIONS AND PRESTRESS LOSSES.

2-1" I.D. SLEEVE INSERTS AT 6" CTR'S PLACED SYMMETRICAL ABOUT ℄ OF DIAPHRAGMS IN SPANS.



INTERIOR GIRDERS



¾" ø MALLEABLE HEX NUT 3" LONG OR APPROVED EQUAL INSERT WELD TO TIE BARS. 2 INSERTS AT 6" CENTERS PLACED SYMMETRICAL ABOUT ℄ OF DIAPHRAGMS IN SPANS.

EXTERIOR GIRDERS
INSERT DETAILS

MINIMUM CYLINDER STRENGTH OF CONCRETE AT TIME OF TRANSFER OF PRE-STRESS FORCE f'_{ci} (psi)

GIRDER TYPE	SPAN 1 ℄ 2
DRAPED PATTERN	4,800
SPREAD PATTERN	—

GENERAL NOTES

TOP OF GIRDERS TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY FOR BONDING TO SLAB.

THE GIRDER MANUFACTURER SHALL PROVIDE A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS. THE DETAILS OF THE LIFTING DEVICE USED SHALL BE SUBMITTED FOR APPROVAL.

ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

WIRES SHALL BE FLUSH WITH END OF GIRDERS.

PRESTRESSING WIRES SHALL HAVE AN ULTIMATE STRENGTH OF 270,000 psi.

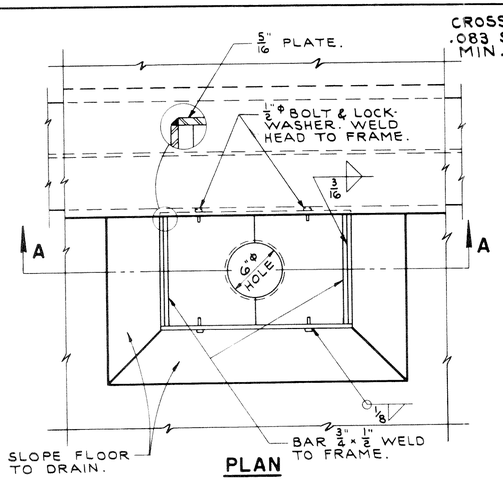
ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOULDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	36" PRESTRESSED GIRDER DETAILS
	DESIGN SPEC. AASHO-'61 LOADING H20 CONST SPEC. 1963
	DATE 12-67 DESIGN ST'D. DRAWN PAGE CKD. F.R.W.
STRUCTURE B-35-18	SHEET 3 OF 9

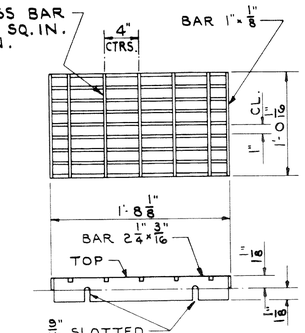
X36677

FORM E-B-12-62

B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	S1182(2)	8	13

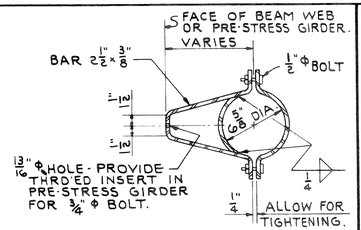


PLAN

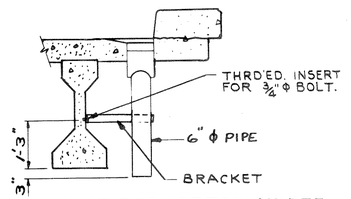


WELDED RECTANGULAR GRATING. BOLT GRATE TO FRAME FOR SHIPMENT.

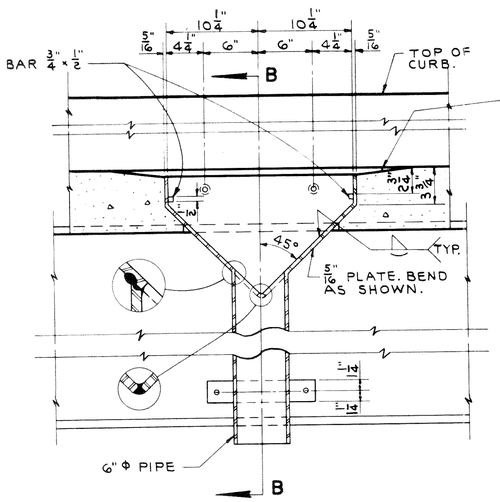
GRATE



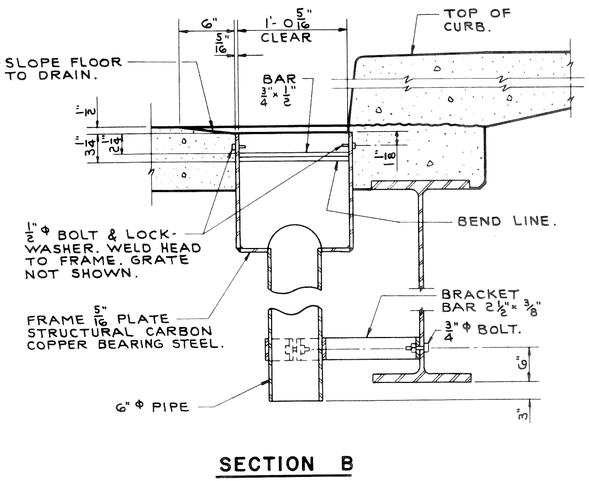
SECTION THRU BRACKET



SECTION AT PRE-STRESS GIRDER

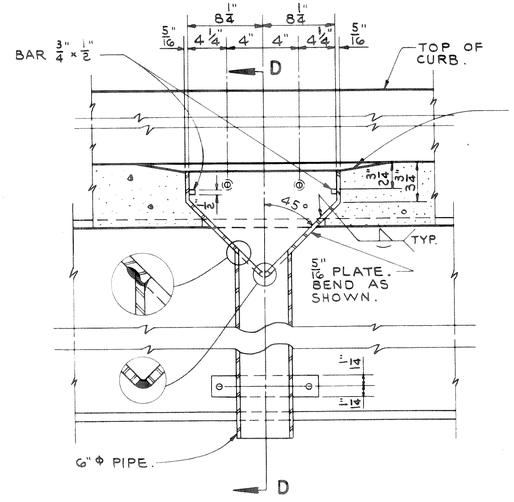


SECTION A

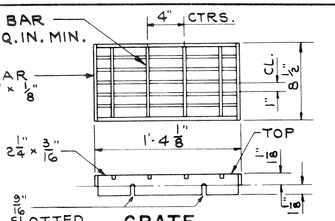


SECTION B

FLOOR DRAIN · TYPE "A"

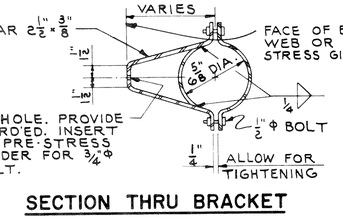


SECTION C

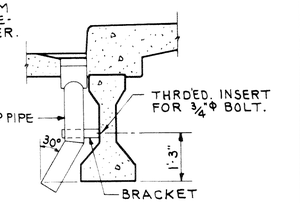


WELDED RECTANGULAR GRATING. BOLT GRATE TO FRAME FOR SHIPMENT.

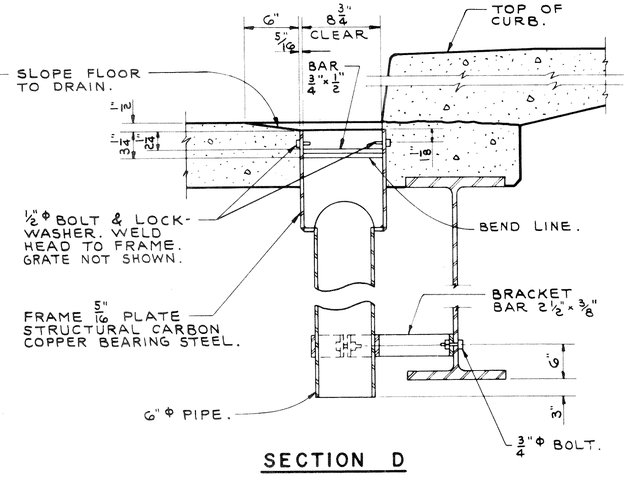
GRATE



SECTION THRU BRACKET

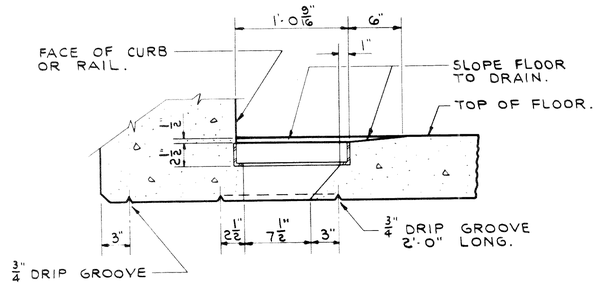


SECTION AT PRE-STRESS GIRDER

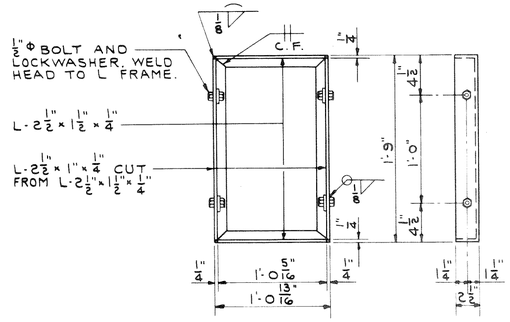


SECTION D

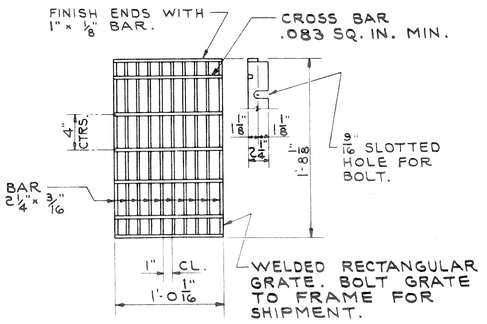
FLOOR DRAIN · TYPE "C"



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.	2

REVISED

STATE HIGHWAY COMMISSION OF WISCONSIN

FLOOR DRAIN DETAILS

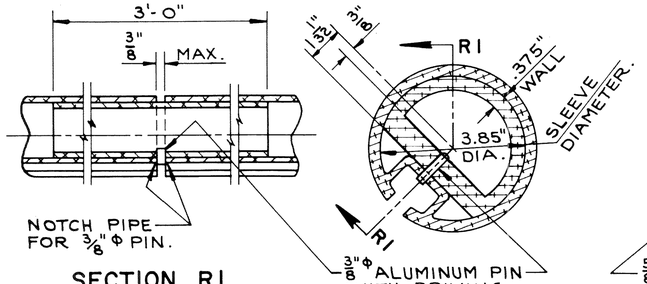
SPECS A.A.S.H.O.1961 LOADING H20 CONST. SPEC. 1963

DATE 11/12/67 CHKD. CRD DRAWN PAGE CKD. F.R.W.

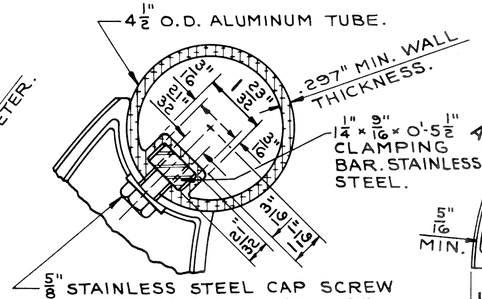
STRUCTURE B-35-18 | SHEET 4 OF 9

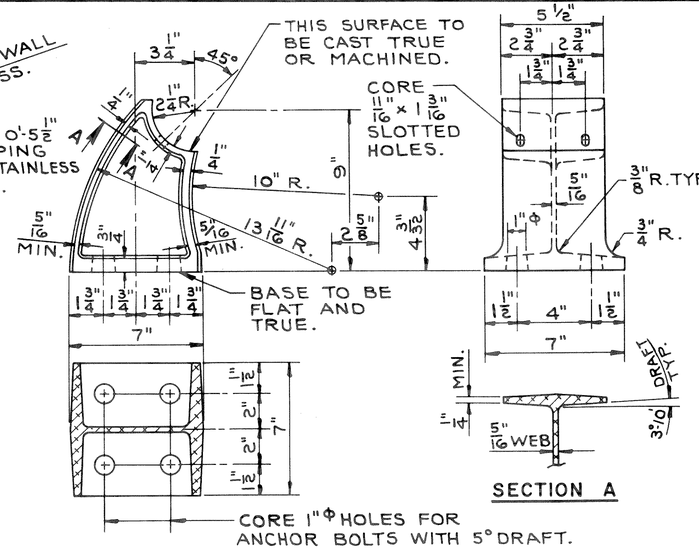
X36678

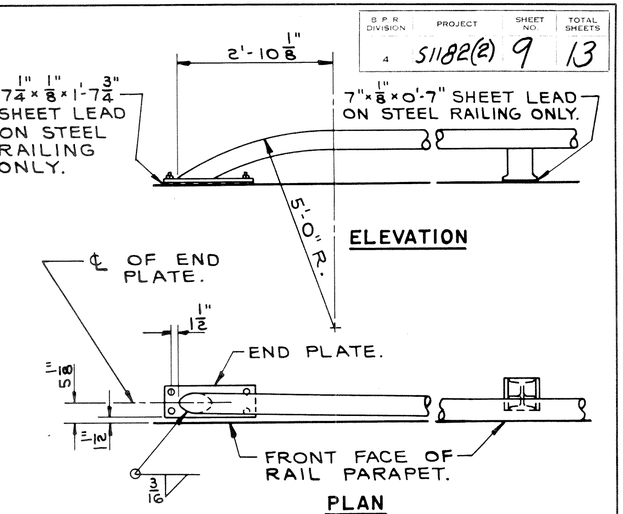
B.P.R. DIVISION 4 | PROJECT S1182(2) | SHEET NO. 9 | TOTAL SHEETS 13

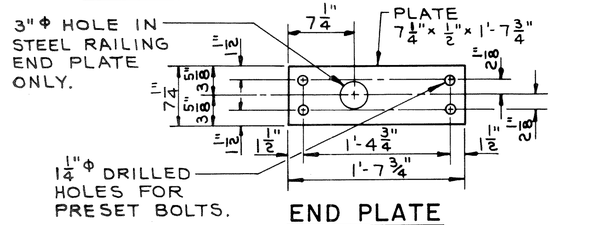


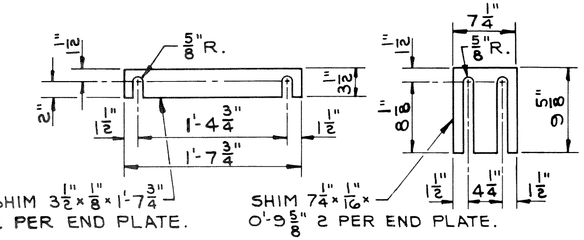
ALUMINUM RAILING DETAILS

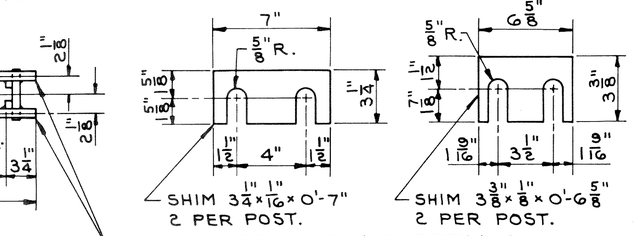


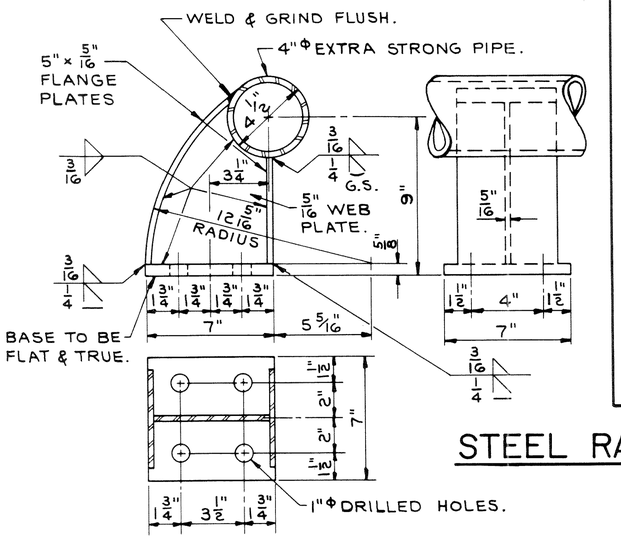


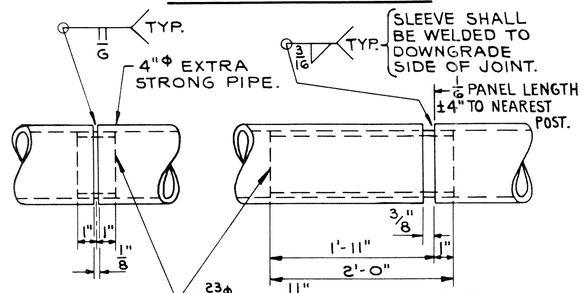












NOTES

RAILING SPLICES SHALL BE LOCATED SUCH THAT ℄ OF SPLICE IS 1/16 PANEL LENGTH ±4" OFF NEAREST POST.

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

RAILING SHALL BE FABRICATED IN TWO AND THREE PANEL LENGTHS.

ANCHOR BOLTS, NUTS & WASHERS TO BE STAINLESS STEEL.

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

STEEL RAILING DETAILS

NOTES

RAILING SHALL BE FABRICATED IN 2 & 3 PANEL LENGTHS.

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

THE FOLLOWING MATERIALS SHALL BE USED:

RAILING SHALL BE 4" Φ EXTRA STRONG PIPE CONFORMING TO ASTM DESIGNATION A53, GRADE B.

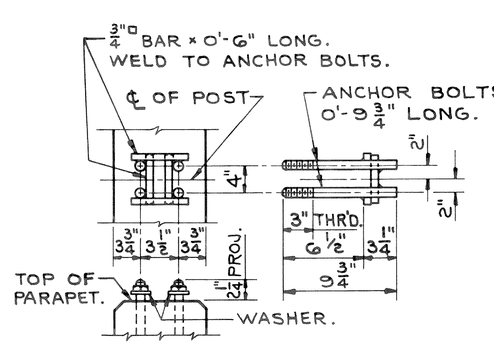
SLEEVES SHALL BE 3 23/32" Φ O.D. x 11/32" THICK SEAMLESS MECHANICAL TUBING MADE OF STEEL WITH A MINIMUM ULTIMATE TENSILE STRENGTH OF 60,000 P.S.I. AND A MINIMUM ELONGATION OF 10%.

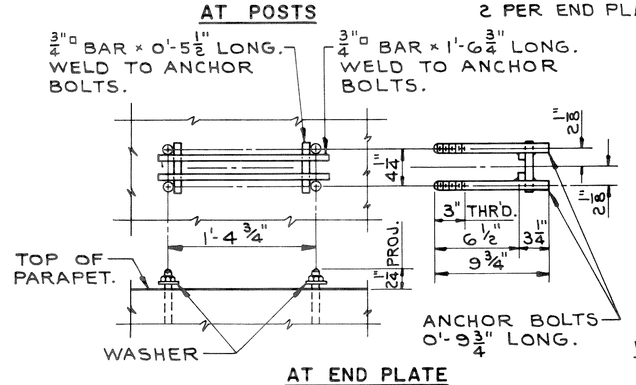
POSTS SHALL BE FABRICATED FROM MATERIAL CONFORMING TO ASTM DESIGNATION A36.

ANCHOR BOLTS TO BE MADE FROM MATERIAL CONFORMING TO ASTM A307.

CAULK EXPOSED OPENINGS BETWEEN SHIMS WITH LEAD WOOL.

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



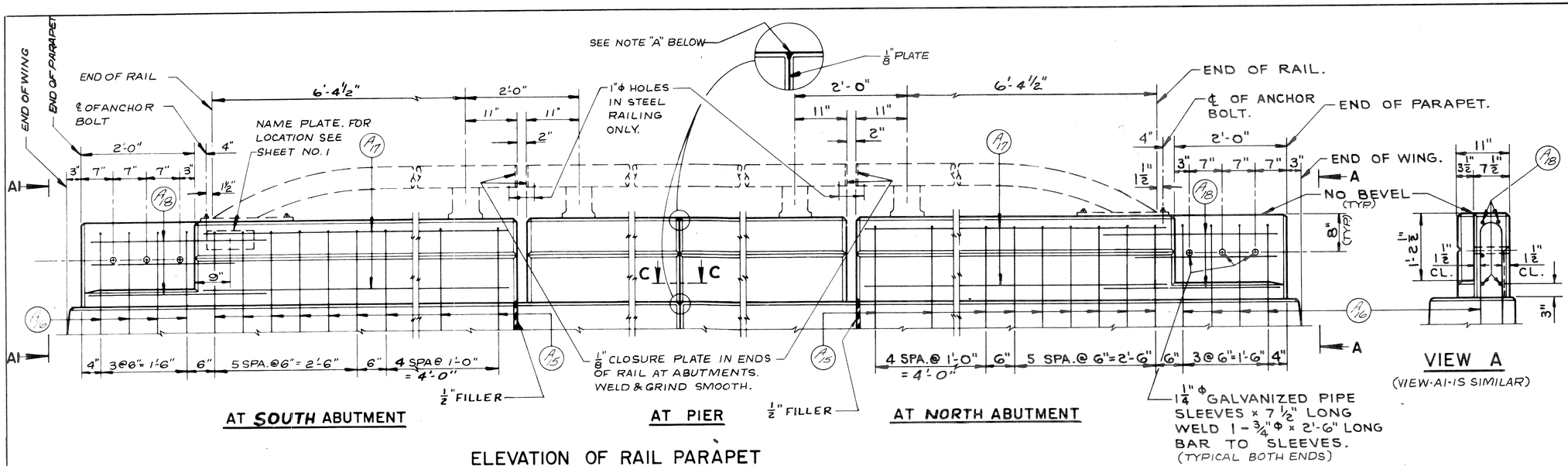


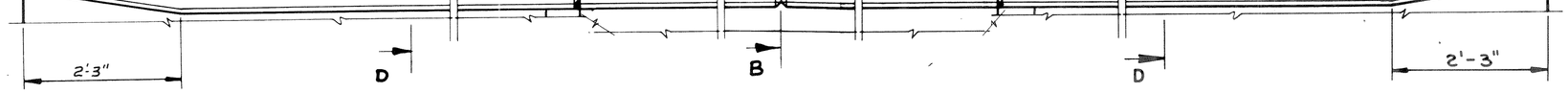
REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	DETAILS FOR TYPE "G" TUBULAR ALUMINUM & STEEL RAILING
	DESIGN SPEC. A.A.S.H.O.'61 LOADING — JOINT NO. 1963
	DATE 1-12-67 DESIGN — DRAWN PAGE CKD. F.R.W.
	STRUCTURE B-35-18 SHEET 5 OF 9

X36679

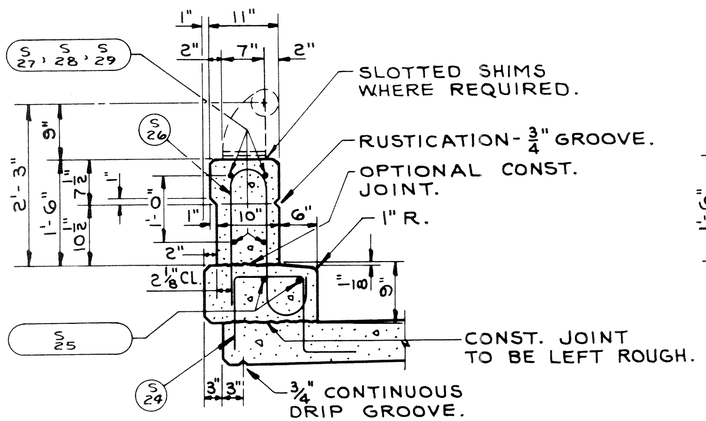
FORM E-B-12-62

B.F.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	51182(2)	10	13

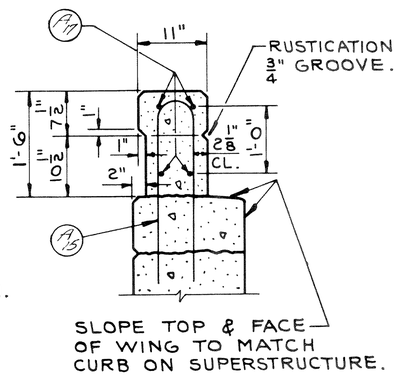




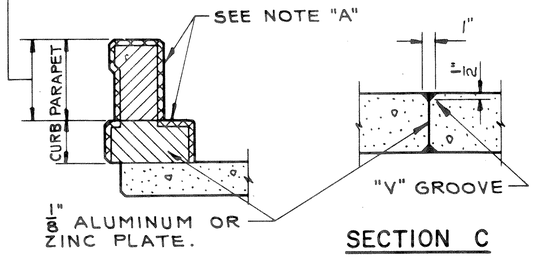
PLAN OF RAIL PARAPET



SECTION THRU PARAPET & CURB ON BRIDGE



SECTION D



SECTION B
SHOWING DEFLECTION JOINT IN CURB AND PARAPET AT PIERS.

SECTION C

NOTES

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.

COST OF 1 1/4" Φ GALVANIZED PIPE SLEEVES AND 3/4" Φ BAR TO BE INCLUDED IN UNIT PRICE BID FOR CONCRETE MASONRY.

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

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

NOTE "A": FILL WITH NON-STAINING GRAY TWO COMPONENT POLYSULFIDE LIQUID POLYMER (GUN GRADE) WITH SURFACE PRIMER, CONFORMING TO A.S.A.-A-116.1-1960.

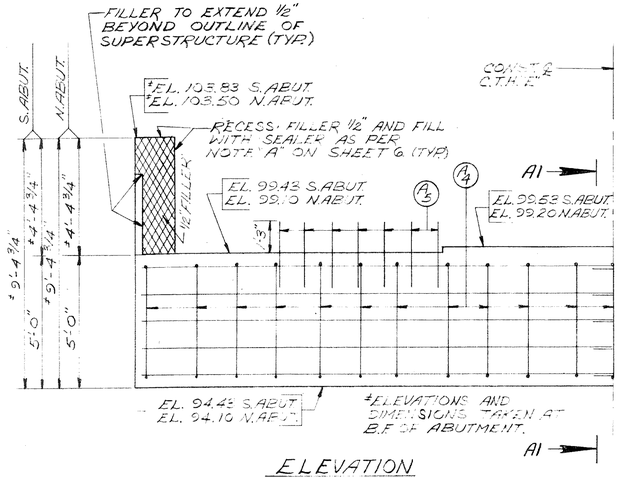
REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN	
	RAIL PARAPET DETAILS	
	DESIGN SPEC AASHO '61 LOADING —	CONST SPEC 1963
	DATE 1-12-67 DESIGN — DRAWN PAGE CKD F.R.W.	
STRUCTURE B-35-18	SHEET 6 OF 9	

X36680

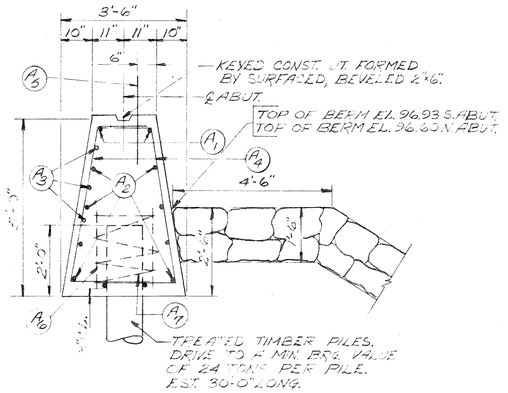
FORM E-B-12-62

B. P. R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	5118R(2)	11	13

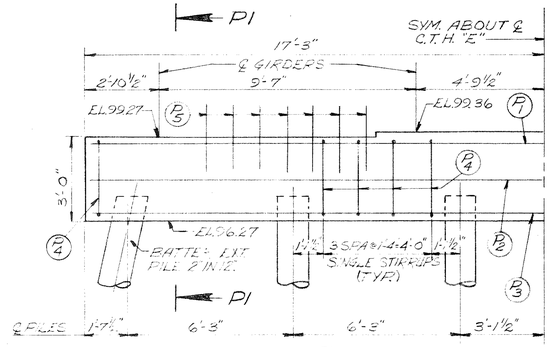
NOTE: THE UPPER LIMIT OF "EXCAVATION FOR STRUCTURES" SHALL BE THE BOTTOM OF BERM PROTECTION OR THE EXISTING GROUND LINE WHICH EVER IS HIGHER. WHERE REQUIRED FILL TO BOTTOM OF BERM PROTECTION BEFORE DRIVING PILING.



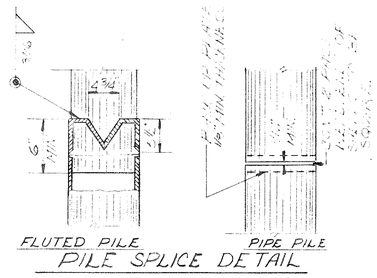
ELEVATION



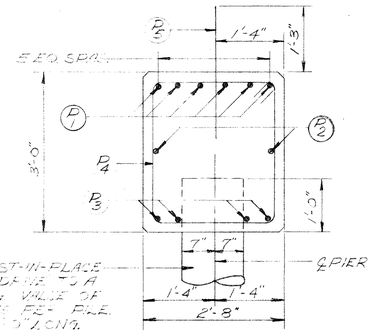
SECTION A1



ELEVATION

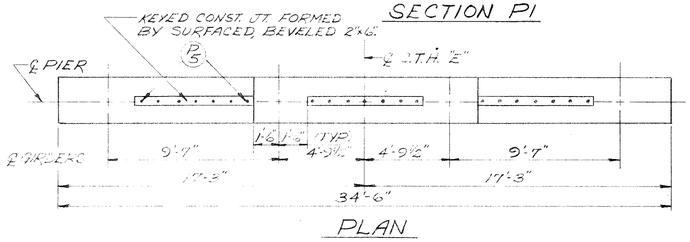


PILE SPLICE DETAIL

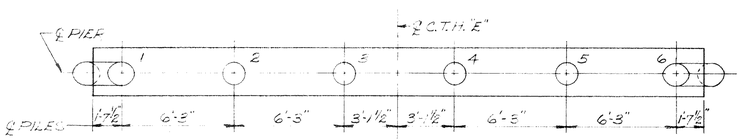


14" ϕ CAST-IN-PLACE PILES DRIVE TO A MIN. BR'G. VALUE OF 50 TONS PER PILE. EST. 20'-0" LONG.

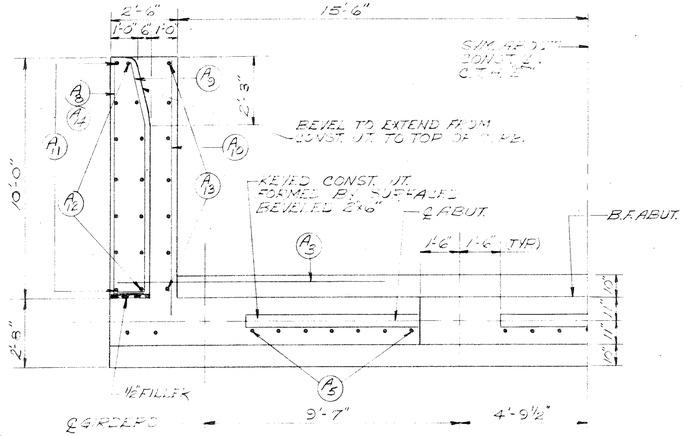
SECTION P1



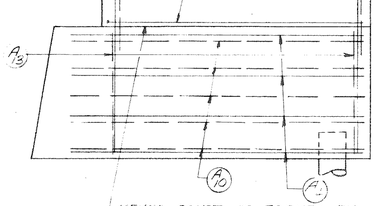
PLAN



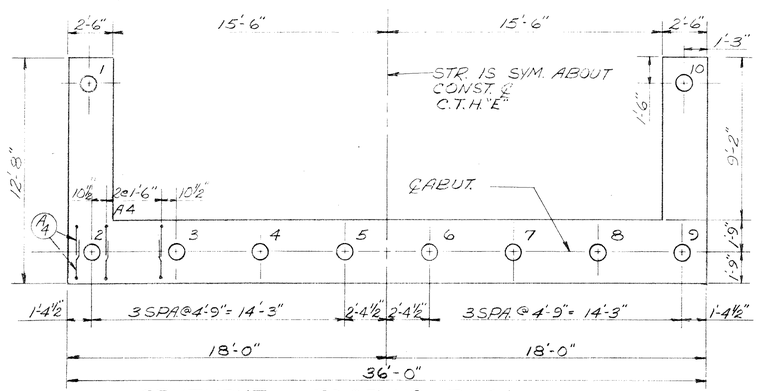
PIER — PILE PLAN
AT BOTTOM OF CAP



PLAN

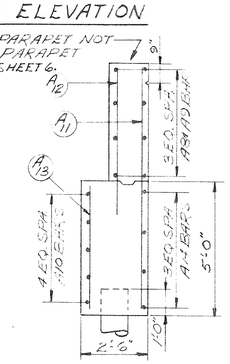


WING ELEVATION



ABUTMENT — FOOTING PLAN

NOTE: RAIL PARAPET NOT SHOWN. FOR PARAPET DETAILS SEE SHEET 6.



SECTION THRU WING

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN	
	PIER & ABUTMENTS	
	DESIGN SPEC. A.A.S.H.O.'61 LOADING H20	CONST. SPEC. 1963
	DATE 1-12-67 DESIGN C.R.D. DRAWN C.R.D. CKD. F.R.W.	
STRUCTURE B-35-18	SHEET 7 OF 9	

X36681

FORM E-B-12-62

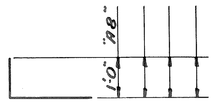
POUR	MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
SUPERSTRUCTURE 40,150#	S 1	60	5	8-6	1-0	Diaphragm at Abutments-Stirrups	L
	S 2	12	4	18-6	Shown	" " "	
	S 3	4	4	2-3	"	" " "	
	S 4	6	4	7-9	"	" " "	
	S 5	4	4	2-9	"	" " "	
	S 6	6	4	8-9	"	" " "	
	S 7	4	4	2-6	"	" " "	
	S 8	6	4	8-3	"	" " "	
	S 9	8	4	18-6	"	Slab at Abutments	
	S10	60	5	5-6	1-0	" " "	B
	S11	8	6	1-6	Shown	Diaphragm in Spans	*
	S12	12	6	8-9	"	" " "	
	S13	8	6	3-0	"	" " "	
	S14	24	5	7-9	1-0	" at Pier	B
	S15	6	4	7-9	Shown	" " "	
	S16	24	4	8-3	"	" " "	
	S17	24	5	12-0	1-0	" " "	K
	S18	200	5	26-9	Shown	Slab-Longitudinal-Bottom	
	S19	66	5	35-0	"	" " Top	
	S20	65	7	30-0	"	" " Top over Pier	
	S21	8	6	8-0	"	" " Bottom over Pier	
	S22	422	6	35-0	6	" Transverse	
	S23	72	5	5-3	3-0	" " Top	
	S24	220	5	3-9	1-0	" & Curb-Stirrup	E
	S25	16	5	27-9	Shown	Curb-Longitudinal	
	S26	220	5	5-0	1-0	" & Rail Parapet-Stirrup	D
	S27	16	5	18-6	Shown	Rail Parapet	
	S28	16	5	23-6	"	" "	
	S29	16	5	11-6	"	" "	
	S30	12	3	3-6	SHOWN	PILASTER @ PIER VERTICAL	††
	S31	6	3	3-3	SHOWN	" " " STIRRUP	††
ABUTMENTS 3,240#	A 1	8	6	18-9	Shown	Body-Horizontal-Top	
	A 2	40	4	18-6	"	" "	
	A 3	12	5	10-0	"	" " at Wings	
	A 4	92	4	8-0	"	" Vertical	F
	A 5	50	5	2-6	1-0	" " Dowels	
	A 6	32	4	2-3	Shown	" " 2 Per Pile	
	A 7	16	3	28-0	"	Body-5 Wraps 21"Φ Spiral-1 Per Pile	
	A 8	16	4	10-6	"	Wings-Horizontal	A
	A 9	16	4	10-6	"	" "	M
	A10	20	5	11-3	"	" "	
	A11	28	4	9-0	1-6	" Vertical	
	A12	28	5	5-9	1-6	" "	
	A13	28	4	4-6	1-6	" "	
	A14	16	4	11-6	Shown	" "	
	A15	44	5	6-0	"	Wings-Rail Parapet-Vertical	B
	A16	16	5	6-0	"	" " " "	B
	A17	16	5	7-3	"	" " " Horizontal	
	A18	16	5	3-3	"	" " " "	
PIER 1,650#	P 1	6	8	34-0	Shown	Pier Cap-Top	
	P 2	2	5	34-0	"	" "	
	P 3	4	11	34-0	"	" " Bottom	
	P 4	22	5	11-0	"	" " Stirrups	L
	P 5	21	5	2-6	1-0	" " Dowels	

POUR	MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.

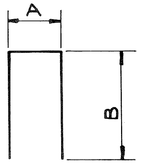
BAR BENDING DETAILS

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

B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	5182(2)	12	13

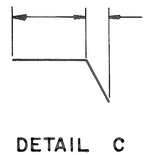


DETAIL A

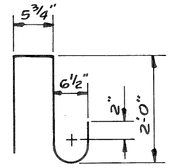


DETAIL B

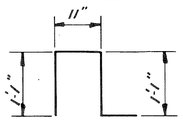
MARK	DIM. "A"	DIM. "B"
"A15"	5 3/4"	2'-9"
"A16"	4 1/2"	2'-9"
"S10"	10"	2'-4"
"S14"	1'-8"	3'-0 1/2"



DETAIL C



DETAIL D



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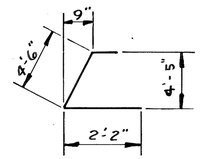
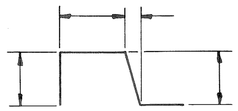
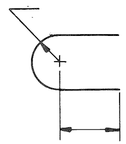


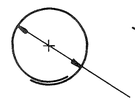
DETAIL F



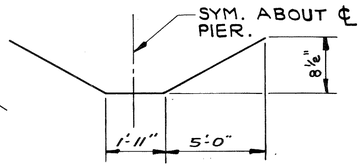
DETAIL G



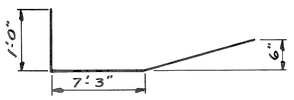
DETAIL H



DETAIL J



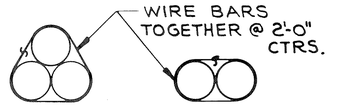
DETAIL K



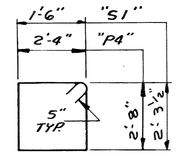
DETAIL M

†† BEND IN FIELD TO FIT.

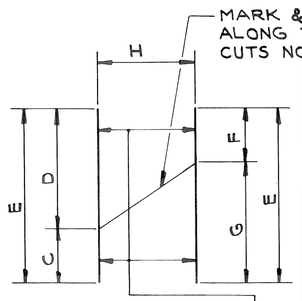
* PLAIN BAR-THREAD ONE END 3".



BUNDLING DETAIL



DETAIL L



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

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

† CUTTING DIAGRAM

"H" IS NUMBER OF BARS, BEFORE CUTTING.

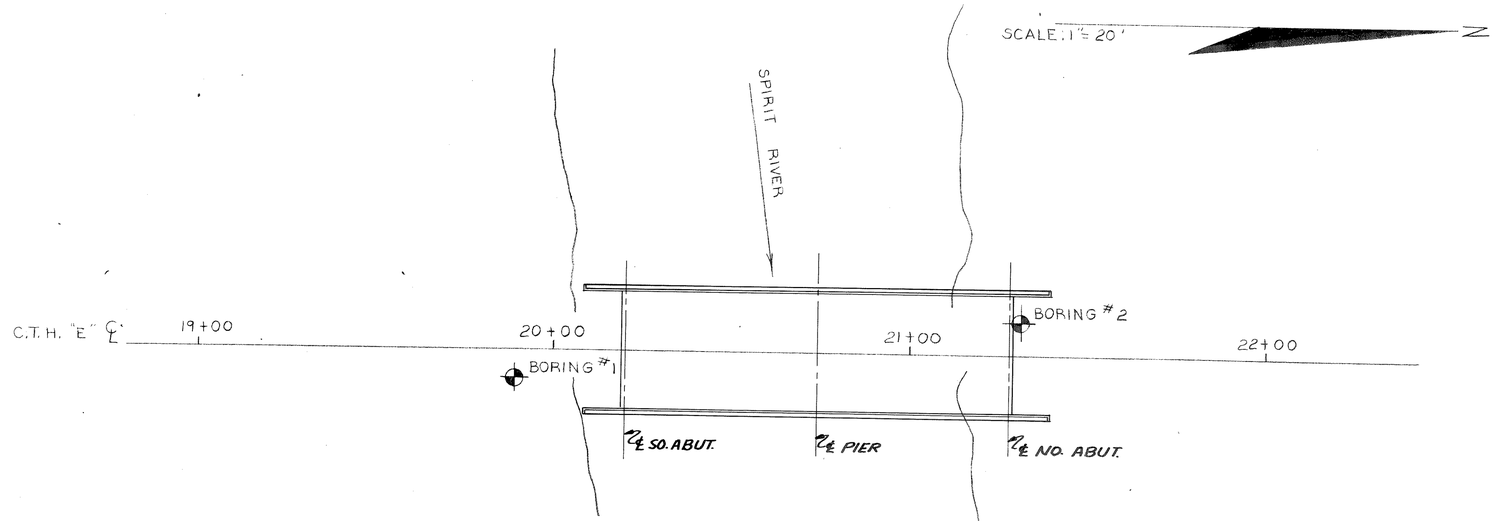
MARK	C	D	E	F	G	H	SETS REQ'D.

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	BILL OF BARS
	DESIGN SPEC. A.A.S.H.O. '61 · LOADING — · CONST. SPEC. 1963
	DATE 1-12-67 · DESIGN — · DRAWN PAGE · CKD. F.R.W.
STRUCTURE B-35-18	SHEET 8 OF 9

X 36682

FORM E-B-12-62

B. P. R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	5118 2(2)	13	13



STA. 19+89 - 8' RT. OF C.T.H. "E" ℄

EL. 101.1

BORING #1

4		VERY LOOSE BROWN FINE TO MED. SAND - SOME GRAVEL
60/2"		BROWN WOOD
8		LOOSE GRAY FINE TO MED. SAND
19		
6		LOOSE TO FIRM BROWN FINE TO MED. SAND - SOME GRAVEL - TR. SILT
14		
53		
51/3"		VERY DENSE REDDISH BROWN FINE TO COARSE SAND & GRAVEL - TR. SILT
50/2"		
49/1½		

STA. 21+31 - 9' LT. OF C.T.H. "E" ℄

EL. 100.9

BORING #2

4		VERY LOOSE BROWN FINE TO MED. SAND - TR. GRAVEL
4	*	
15		FIRM BROWN FINE TO MED. SAND - LITTLE GRAVEL
7		LOOSE DARK BROWN FINE SAND - TR. GRAVEL
6		LOOSE DARK BROWN FINE SAND - SOME SILT - SEAMS CLAY
30		FIRM TO DENSE BROWN FINE TO MED. SAND - SOME GRAVEL
35		
62		VERY DENSE REDDISH BROWN FINE TO MED. SAND & GRAVEL
60/3"		

110 100 90 80 70 60 50

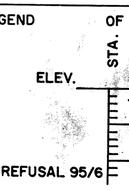
TEMPORARY B.M. = SQUARE CHISELED IN THE N.E. ABUTMENT OF PRESENT STRUCTURE ELEV. = 100.0

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN

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

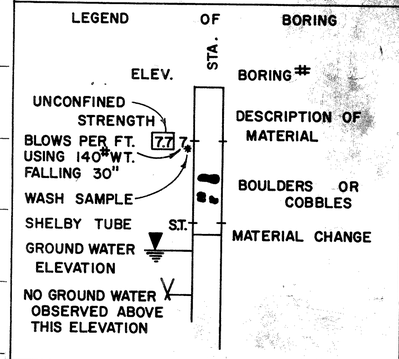
UNLESS OTHERWISE SPECIFIED THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" OD x 1.4" ID SPLIT SPOON SAMPLER WITH A 140 LB. HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE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

LEGEND OF PROBING



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

LEGEND OF BORING



REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	SUBSURFACE EXPLORATION
	DESIGN SPEC. — LOADING — CONST. SPEC.
	DATE 1-12-67 DESIGN — DRAWN JHO CKD. F.R.W.
STRUCTURE B-35-18	SHEET 9 OF 9

X36683