Sheet Number	Total Sheets
1	17

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PLAN AND PROFILE OF PROPOSED

LA CROSSE – TOMAH ROAD

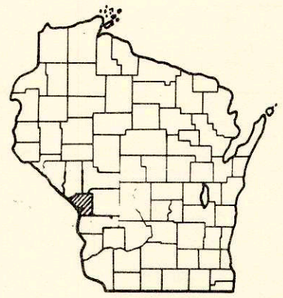
(FRENCH ISLAND PEDESTRIAN OVERPASS)

I-90 LA CROSSE COUNTY

PROJECT IDENTIFICATION NUMBER	FEDERAL PROJECT DESIGNATION
1070-7-71	I-90-1(62)2

Scales { Plan 1 in.= 50 ft.
Profile Hor. 1 in.= 50 ft. Vert. 1 in.= 5 ft.
Cross Sections Hor. 1 in.= 5' Vert. 1 in.= 5' }

Index of Sheets



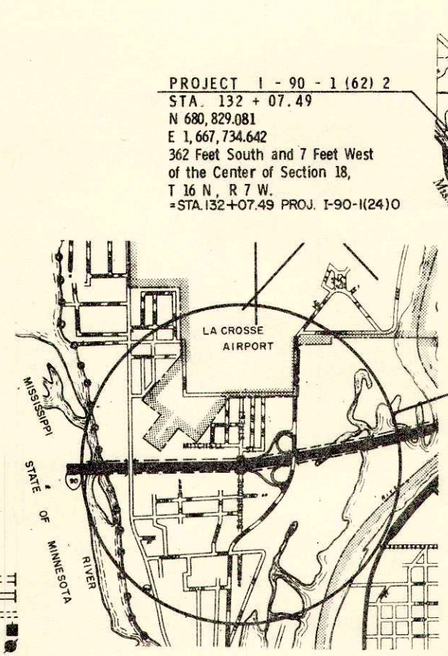
Design Designation

A.D.T.	=
A.D.T.	=
D.H.V.	=
D.	=
T.	=
V.	=

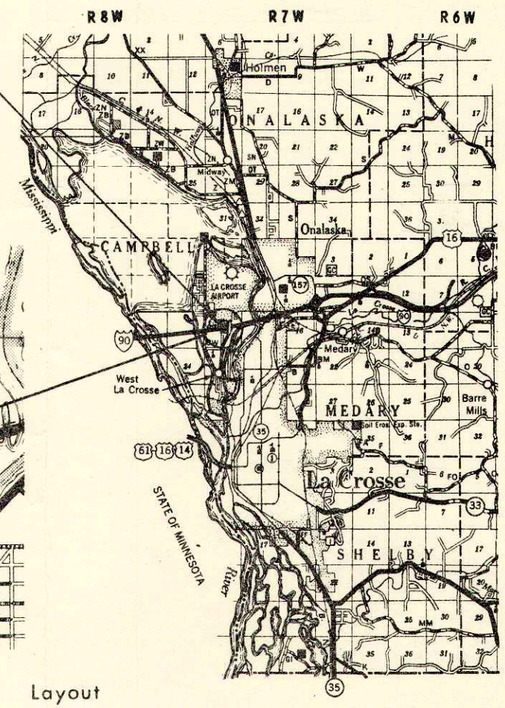
Conventional Signs

State Line		Culverts in Place	
County Line		Culverts Required	
Township or Range Line		Drop Inlet	
Section Line		Power Pole	
New Right of Way Line		Telephone or Telegraph Pole	
Present Right of Way Line		Right of Way Markers	
Wire Fence Woven		Reference Stake for Hubs Only	±61.7 259
Wire Fence Barbed	—x—x—x—	Marsh	
Lot Line		Hedge	
Corporate or City Limits		Trees	
Property Line	P.L. + 32.6		
Traveled Way or P.E.		Ground Elevation	Datum Line 73.9
Railroads			
Base or Survey Line		Grade Elevation	Datum Line 76.16

PROJECT 1 - 90 - 1 (62) 2
STA. 132 + 07.49
N 680,829.081
E 1,667,734.642
362 Feet South and 7 Feet West
of the Center of Section 18,
T 16 N., R 7 W.
=STA.132+07.49 PROJ. I-90-1(24)0



SCALE : 3" = 1 MILE



SCALE : 1" = 2 MILES

Layout

Scale

Total Net Length of Centerline = 0.000 Mi.

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	
Surveyor M.E.W.	District Checker R.V.R.
Designer R.D.E.	C.O. Checker I.L.J.

Correct:

Date 4/17/72 H.H. Schneider, District Engineer

Recommended for Approval:

Date 4/28/72 J. C. Kennedy, Chief Design Engineer

Approved:

Date 4/28/72 S.E. Hicks, State Highway Engineer

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
REGION 4 WISCONSIN DIVISION

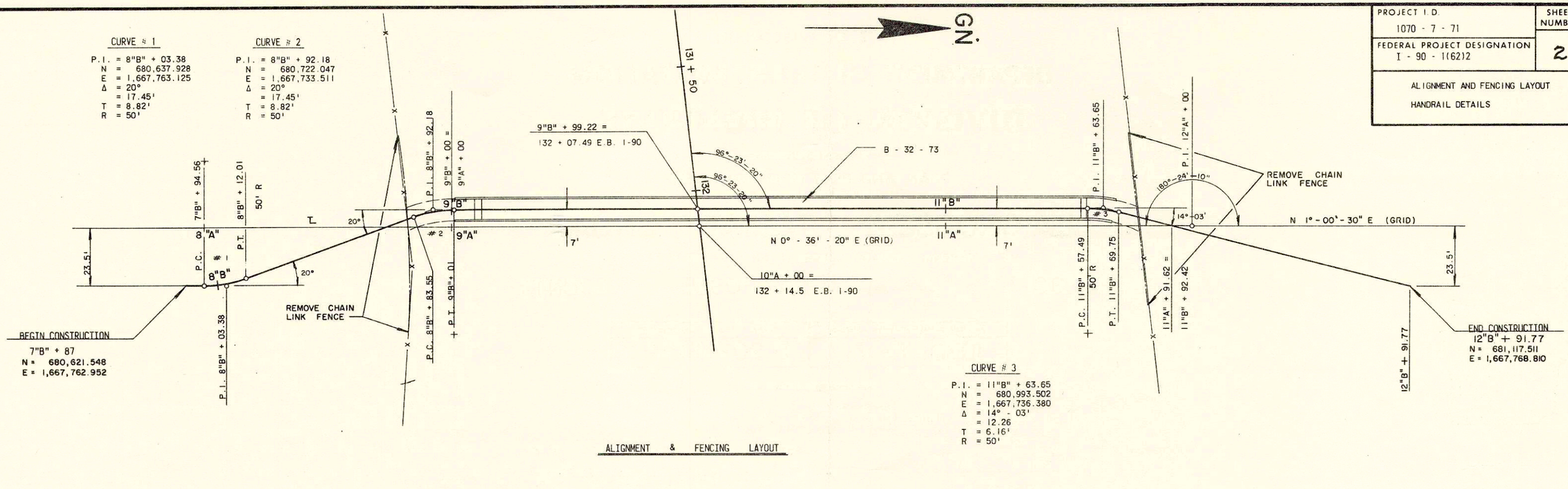
Approved:

Date _____ _____ Division Engineer

PROJECT I. D.	SHEET NUMBER	TOTAL SHEETS
1070 - 7 - 71		
FEDERAL PROJECT DESIGNATION I - 90 - 1(62)2	2	17

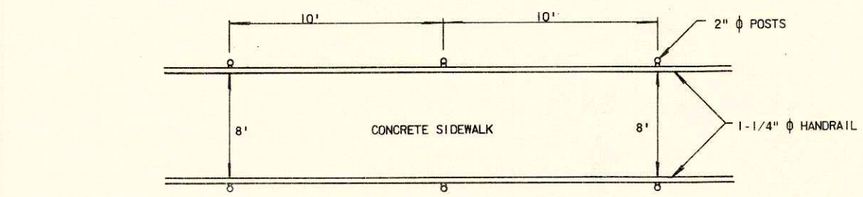
ALIGNMENT AND FENCING LAYOUT

HANDRAIL DETAILS

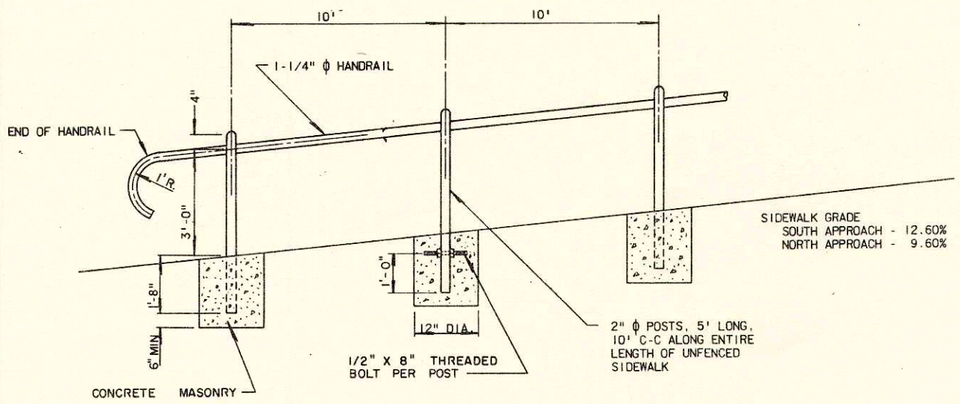


ALIGNMENT & FENCING LAYOUT

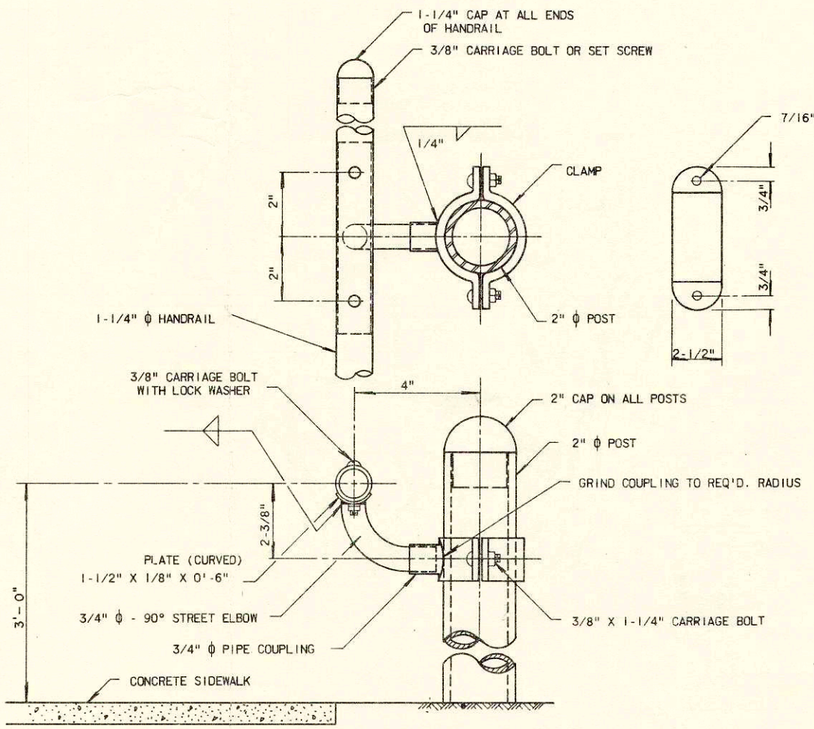
CURVE # 3
P.I. = 11"B" + 63.65
N = 680,993.502
E = 1,667,736.380
Δ = 14° - 03'
= 12.26
T = 6.16'
R = 50'



PLAN



ELEVATION



HANDRAIL DETAILS

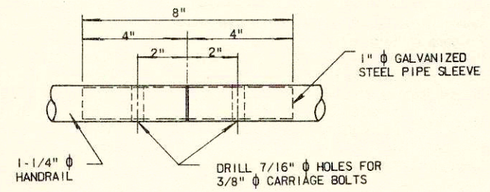
GENERAL NOTES

ALL RAILS, POSTS, HANDRAILS AND SLEEVES ARE TO BE STANDARD GALVANIZED STEEL PIPE.

ALL POSTS ARE TO BE SET VERTICAL

HANDRAIL SHALL BE PLACED ALONG ENTIRE LENGTH OF UNFENCED SIDEWALK WITH CORRECTION FOR CURVATURE.

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

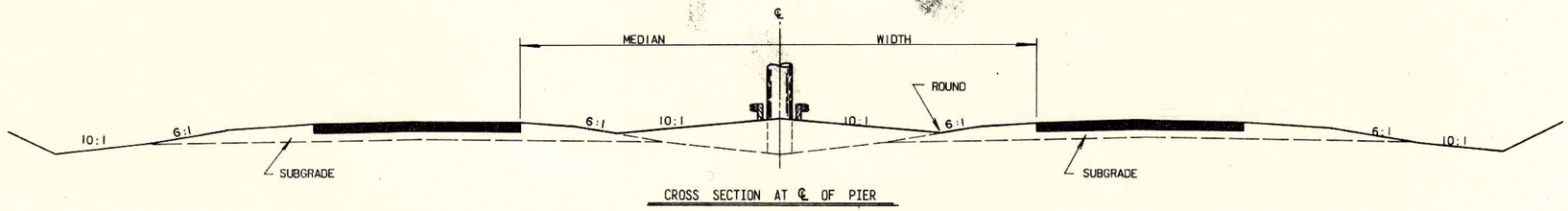


SPLICE DETAIL

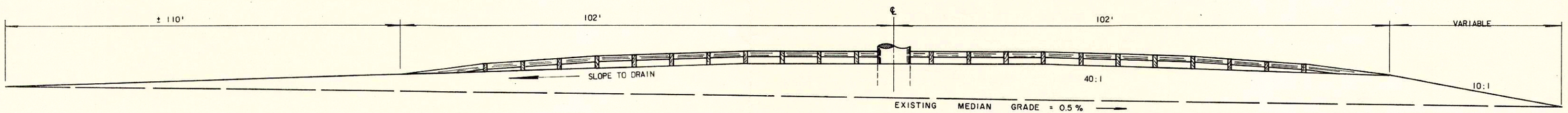
PROJECT I. D.	SHEET NUMBER	TOTAL SHEETS
1070 - 7 - 71		
FEDERAL PROJECT DESIGNATION I - 90 - 1(62)2	2.1	17

MEDIAN STEEL PLATE BEAM GUARD INSTALLATION

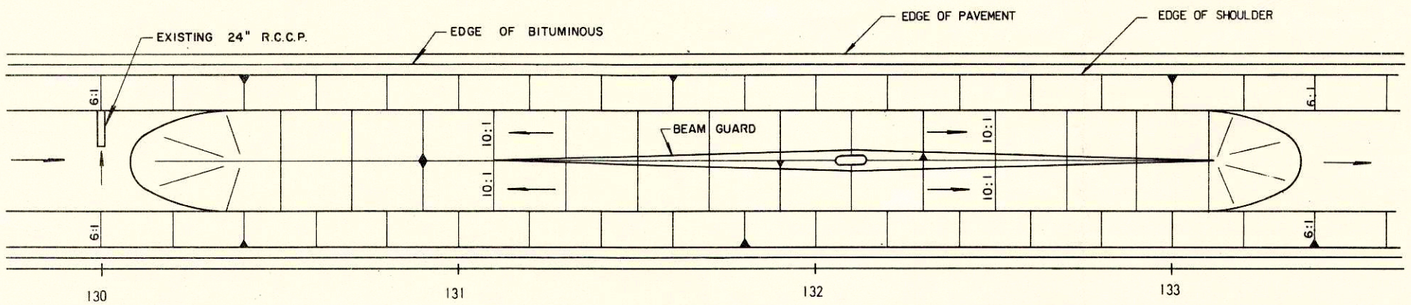
R 1 - 6/6/72



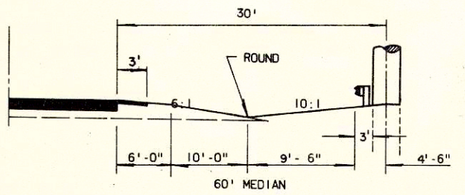
CROSS SECTION AT ℄ OF PIER



PROFILE ON ℄ OF MEDIAN



DETAIL OF MEDIAN SLOPES



DETAIL OF MEDIAN SLOPES

ESTIMATE OF QUANTITIES

CONTRACT NO. 1

STRUCTURE B-32-73
AND APPROACHES

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
1070 - 7 - 71	3	17
FEDERAL PROJECT DESIGNATION: I - 90 - 1(62) 2		

THIS PROJECT IS TO BE EXECUTED UNDER THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE WISCONSIN DIVISION OF HIGHWAYS — EDITION 1969.
APPROVED MARCH 6, 1969; FEDERAL AID REQUIRED CONTRACT PROVISIONS APPROVED NOVEMBER 15, 1968, AND SPECIAL PROVISIONS AS ATTACHED TO PROPOSALS.

SEC NO	STATION TO STATION		NET LENGTH OF CENTER LINE	REMOVING GUARDRAIL	REMOVING FENCE	EXCAVATION FOR STRUCTURES, BRIDGES	BORROW EXCAVATION	FINISHING ROADWAY	CONCRETE MASONRY BRIDGES	BAR STEEL REINFORCEMENT BRIDGES	STRUCTURAL CARBON STEEL	STRUCTURAL LOW ALLOY STEEL	LUBRICATED BRONZE PLATES	BEARING PADS	TREATED TIMBER PILING, DELIVERED	TREATED TIMBER PILING, DRIVEN	TREATED TIMBER TEST PILING, STRUCTURE B-32-73	PRE-BORING TIMBER PILING	CONCRETE SIDEWALK, 5 - INCH	RECONSTRUCTING MANHOLES	ANCHORAGES FOR STEEL PLATE BEAM GUARD	STEEL PLATE GUARD, CLASS "A"	CHAIN LINK FENCE, 6 - FT.
		ITEM NO		20411	20412	20601	20801	21301	50201	50501	50601	50605	50614	50621	50816	50820	50830	50840	60205	61128	61406	61408	61606
		UNIT	LIN FT	L.F.	L.F.	C.Y.	C.Y.	L.S.	C.Y.	LB.	LB.	LB.	LB.	S.F.	L.F.	L.F.	L.S.	L.F.	S.F.	EACH	EACH	L.F.	L.F.
1	132 + 07.49		0.0	143	140	68	3410	1	125.9	14,210	54,460	19,300	43	9	975	866	1	109	2060	2	2	408	230
	PROJECT TOTAL		0.0	143	140	68	3410	1	125.9	14,210	54,460	19,300	43	9	975	866	1	109	2060	2	2	408	230

MAINTENANCE AND REPAIR OF HAUL ROADS	TOPSOIL	FERTILIZER	SEEDING	SODDING	FIELD OFFICE TYPE "B"	CHAIN LINK FENCE 10 FT.	ELECTRICAL WORK	HANDRAIL	NEOPRENE PRE-MOLDED SEAL	ON THE JOB TRAINING
61801	62501	62901	63001	63101	64202	90001	90002	90003	90004	90005
L.S.	S.Y.	CWT	S.Y.	S.Y.	L.S.	L.F.	L.S.	L.F.	L.F.	HRS.
1	3070	2	2000	1570	1	486	1	1010	20	1000
1 *	3070	2	2000	1570	1	486	1	1010	20	1000

* NO FEDERAL PARTICIPATION

GENERAL NOTES

1. ALL COORDINATES SHOWN ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COORDINATE SYSTEM SOUTH ZONE.
2. CURVE DATA BASED ON ARC DEFINITION.
3. TOPSOIL SHALL BE PLACED AS SHOWN ON THE PLANS TO AN APPROXIMATE DEPTH OF 4" AT THE TIME OF PLACEMENT.
4. DISTURBED AREAS WITHIN THE RIGHT OF WAY ARE TO BE FERTILIZED AND SEEDED AS DIRECTED BY THE ENGINEER.

STANDARD DETAIL DRAWINGS

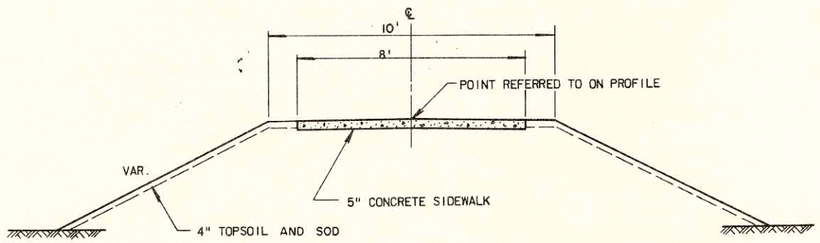
8B1-1	MANHOLES TYPE I & MANHOLE COVERS
14B2-2 a&b	CLASS "A" STEEL PLATE BEAM GUARD & STEEL PLATE BEAM MEDIAN GUARD
15B2-1	CHAIN LINK FENCE DETAILS
15C1-1	CONSTRUCTION BARRICADE

UTILITIES

TOWN OF CAMPBELL
SANITARY SEWER

LA CROSSE TELEPHONE COMPANY
UNDERGROUND TELEPHONE CABLE

NORTHERN STATES POWER COMPANY
GAS MAIN
TRANSMISSION LINE



TYPICAL SECTION
SIDEWALK APPROACH

STA. 7"B" + 87 - 9"B" + 09.77
STA. 11"B" + 56.93 - 12"B" + 91.77

DETAIL SUMMARY OF MISCELLANEOUS QUANTITIES

CONCRETE SIDEWALK

STA-STA	LOCATION	S.F.
7"B" + 87 - 9"B" + 09.77	℄	982
11"B" + 56.93 - 12"B" + 91.77	℄	1078

CHAIN LINK FENCE 6 - FOOT

STA-STA	LOCATION	L.F.
8"B + 82	LT.	30'
8"B" + 82	RT.	30'
8"B" + 82 - 9"B" + 11.85	RT.	30'
8"B" + 82 - 9"B" + 11.85	LT.	30'
11"B" + 54.85 - 11"B" + 80	RT.	25'
11"B" + 54.85 - 11"B" + 77	LT.	25'
11"B" + 79	RT.	30'
11"B" + 79	LT.	30'

STEEL PLATE BEAM GUARD

LOCATION	L.F.	ANCHORS
PIER PROTECTION (IH 90 MEDIAN)	408	2

REMOVING FENCE

STA-STA	LOCATION	L.F.
8"B" + 82	LT & RT	70'
11"B" + 79	LT & RT	70'

REMOVING GUARDRAIL

STA-STA	LOCATION	L.F.
8"B" + 54	LT & RT	78
11"B" + 80	LT & RT	65

RECONSTRUCTING MANHOLES (SEE PLATE NO. SDD 8B1-1)

STA	LOCATION	NO.	DEPTH TO BE ADDED TO EXISTING MANHOLE FT.
8"B" + 39	12' LT	1	2
11"B" + 97	1' LT	1	8

HANDRAIL

	STA-STA	LOCATION	L.F.
A.	(NOT ATTACHED TO FENCE)		
	7"B" + 87 - 8"B" + 82	LT	95
	7"B" + 87 - 8"B" + 82	RT	95
	11"B" + 80 - 12"B" + 91.77	RT	112
	11"B" + 77 - 12"B" + 91.77	LT	115
B.	(ATTACHED TO 6' CHAIN LINK FENCE)		
	8"B" + 82 - 9"B" + 11.85	LT	30
	8"B" + 82 - 9"B" + 11.85	RT	30
	11"B" + 54.85 - 11"B" + 80	RT	25
	11"B" + 54.85 - 11"B" + 77	LT	22
C.	(ATTACHED TO 10' CHAIN LINK FENCE)		
	9"B" + 11.85 - 11"B" + 54.85	LT	243
	9"B" + 11.85 - 11"B" + 54.85	RT	243

CHAIN LINK FENCE 10 - FOOT

STA-STA	LOCATION	L.F.
9"B" + 11.85 - 11"B" + 54.85	LT	243
9"B" + 11.85 - 11"B" + 54.85	RT	243

SODDING

STA-STA	LOCATION	S.Y.
7"B" + 87 - 9"B" + 39	APPROACH SLOPES	766
11"B" + 26 - 12"B" + 91.77	" "	804

SEEDING

STA-STA	LOCATION	S.Y.
130 + 00 - 133 + 50	MEDIAN IH 90	1500
UNDISTRIBUTED		500

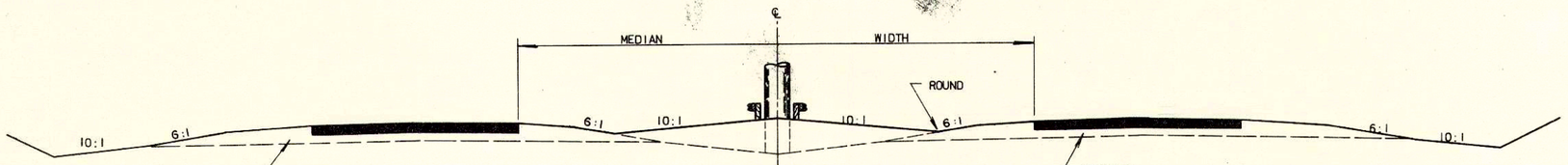
TOPSOIL

STA-STA	LOCATION	S.Y.
7"B" + 87 - 9"B" + 39	APPROACH SLOPES	766
11"B" + 26 - 12"B" + 91.77	" "	804
130 + 00 - 133 + 50	MEDIAN IH 90	1500

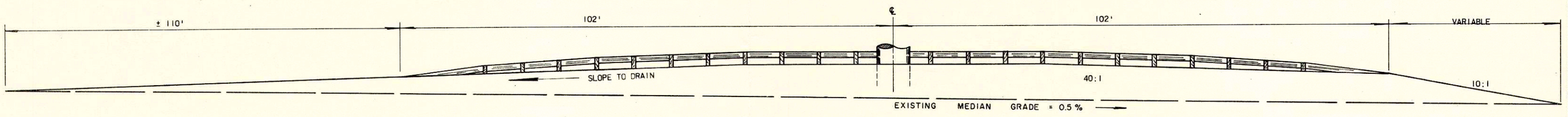
PROJECT I. D.	SHEET NUMBER	TOTAL SHEETS
1070 - 7 - 71	2.1	17
FEDERAL PROJECT DESIGNATION I - 90 - 1(62)2		

MEDIAN STEEL PLATE BEAM GUARD INSTALLATION

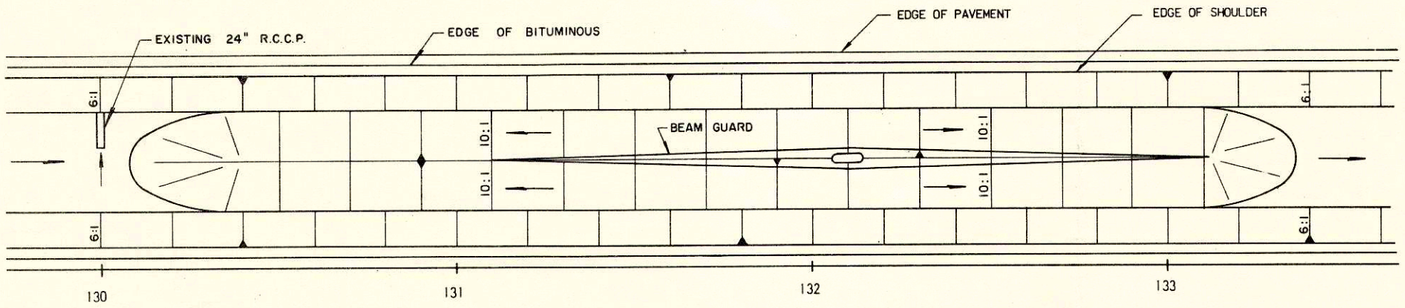
R 1 - 6/6/72



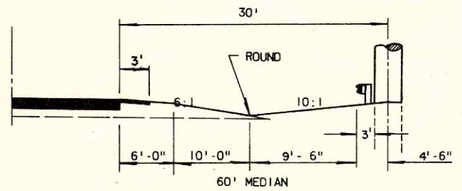
CROSS SECTION AT ℄ OF PIER



PROFILE ON ℄ OF MEDIAN

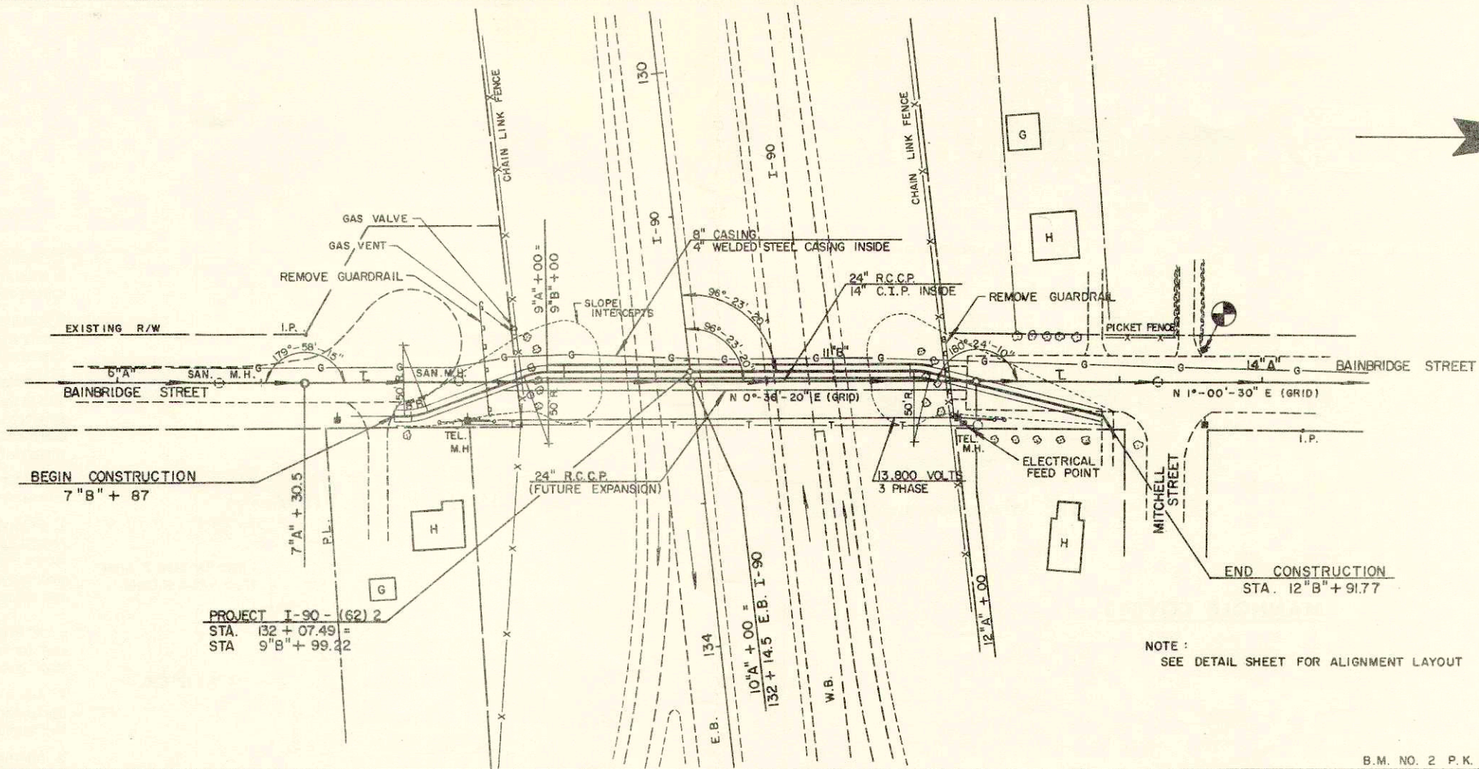


DETAIL OF MEDIAN SLOPES

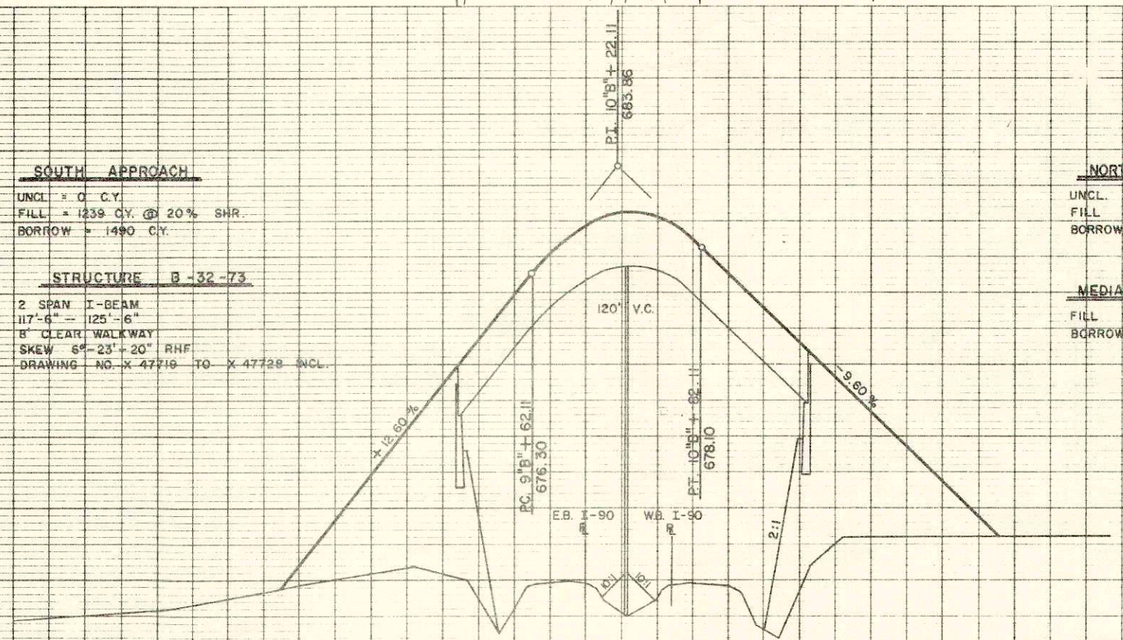


DETAIL OF MEDIAN SLOPES

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
1070 - 7 - 71	4	17
FEDERAL PROJECT DESIGNATION: I - 90 - 1(62)2		



B.M. NO. 2 P.K. IN POWER POLE STA 132 + 15 I-90 360' LT. ELEV. 657.88



SOUTH APPROACH

UNCL = 0 C.Y.
FILL = 1239 C.Y. @ 20% SHR.
BORROW = 1490 C.Y.

STRUCTURE B-32-73

2 SPAN I-BEAM
117'-6" — 125'-6"
8' CLEAR WALKWAY
SKEW 6°-23'-20" RHF
DRAWING NO. X 47718 TO X 47728 INCL.

NORTH APPROACH

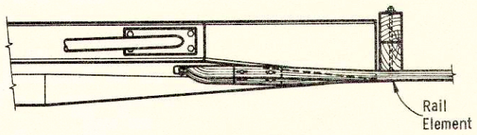
UNCL. = 0 C.Y.
FILL = 1399 C.Y. @ 20% SHR.
BORROW = 1680 C.Y.

MEDIAN - I.H. 90

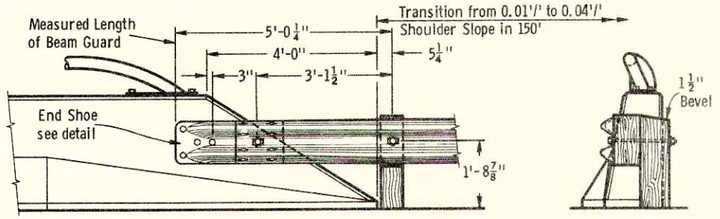
FILL = 200 C.Y. @ 20%
BORROW = 240 C.Y.

NOTE BOOK | ALIGNMENT CHECKED | R/W CHECKED | No. [illegible]

NOTE BOOK | GRADES CHECKED | R.O.S. | 10-71 | No. [illegible] | R.W.'s NOTED | STRUCTURE NOTATIONS CHECKED



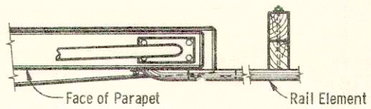
PLAN VIEW



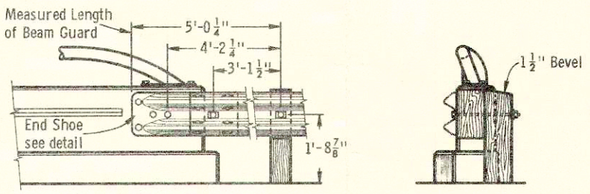
FRONT ELEVATION END ELEVATION

STRUCTURE MOUNTING DETAIL

SLOPING TYPE PARAPET WALL



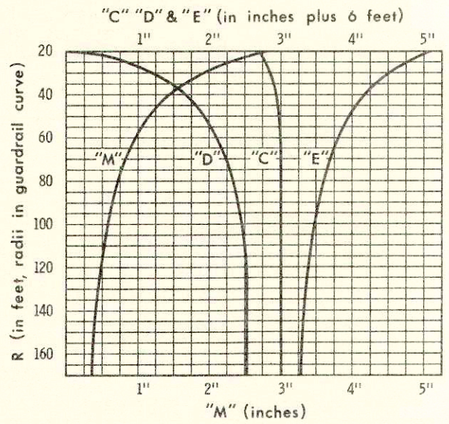
PLAN VIEW

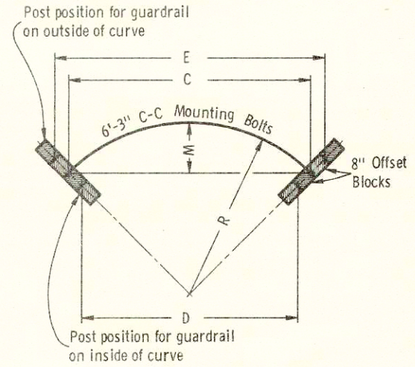


FRONT ELEVATION END ELEVATION

STRUCTURE MOUNTING DETAIL

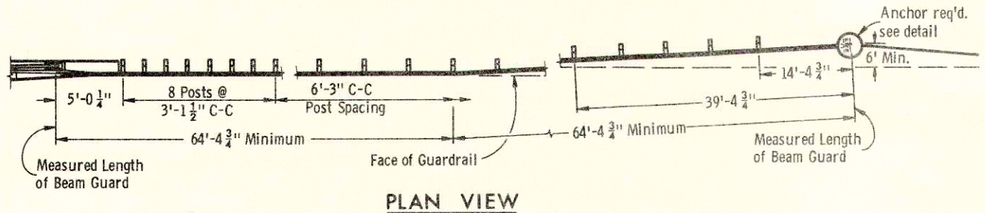
VERTICAL TYPE PARAPET WALL



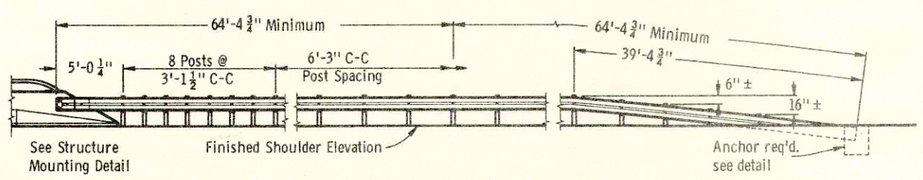


CHORD LENGTHS FOR POST SPACING AND MIDDLE ORDINATES FOR BEAM CURVING

CURVE DATA FOR POST SPACING AND BEAM CURVING

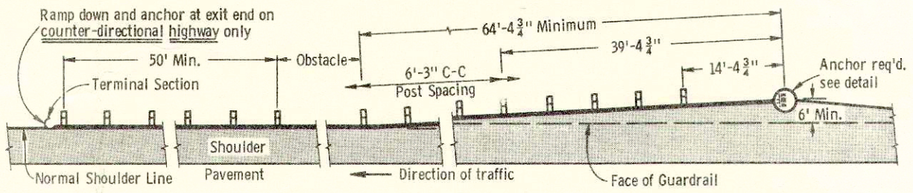


PLAN VIEW



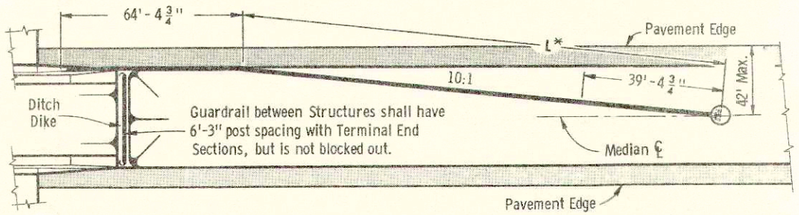
FRONT ELEVATION

TYPICAL OUTSIDE SHOULDER INSTALLATION AT STRUCTURES



PLAN VIEW

TYPICAL INSTALLATION AT LOCATIONS OTHER THAN STRUCTURES



* Variable based on Median width

PLAN VIEW

MEDIAN PROTECTION

GENERAL NOTES

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

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

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

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

Upon approval of the Engineer, the 6 foot anchor offset may be reduced to nothing for replacement installations where existing conditions will not permit the desirable offset. However, when no offset greater than or equal to 3 feet can be provided, the minimum length of guardrail in advance of an obstacle (obstacle to anchor) shall be 150 feet.

The "Post Footing Details At Piers" shall be used when guardrail posts are over structure footings and less than 3 feet-6 inches of earth is provided over the top of the footing.

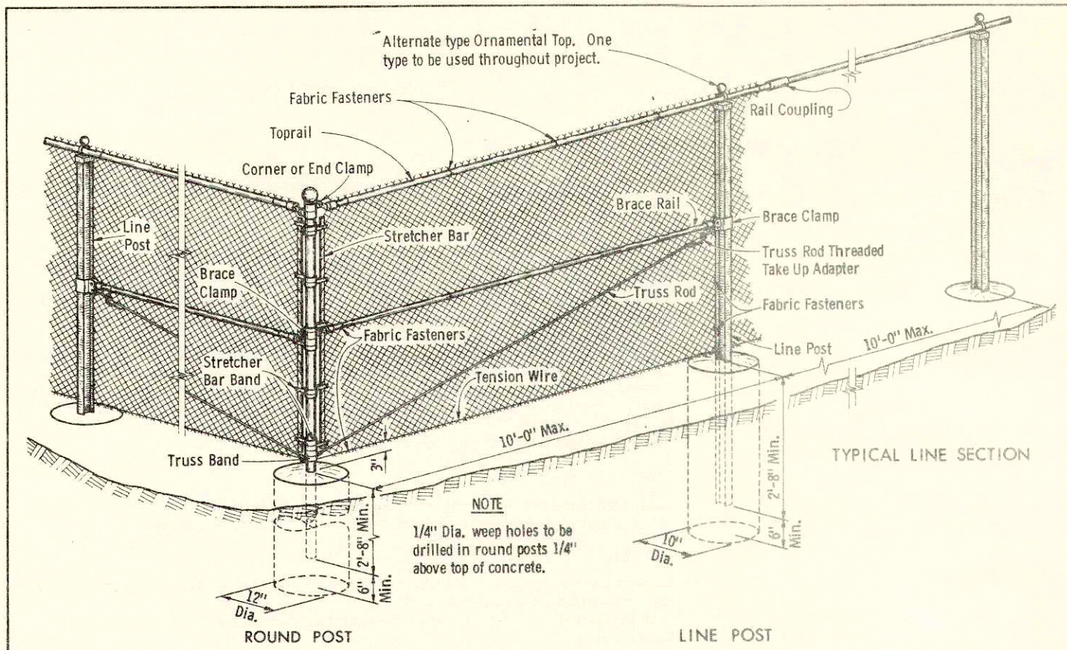
NOTE: This Standard Detail Drawing consists of two plates, and both plates are required when this Standard is called for in the plans.

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

State of Wisconsin
Department of Transportation
Division of Highways

S.D.D. 14 B 2-2a

S.D.D. 14 B 2-2a



ROUND POST

LINE POST

TYPICAL LINE SECTION

END, CORNER, ANGLE INTERSECTION, & INTERMEDIATE BRACED POSTS

NOTE

1/4" Dia. weep holes to be drilled in round posts 1/4" above top of concrete.

ELEVATION OF FENCE

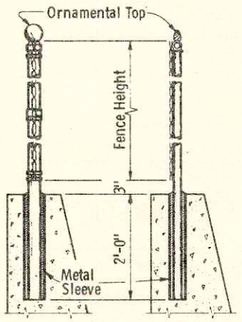
(PIPE ALTERNATE)

FENCE HEIGHT	POST *	LINE POST	LINE POST ** ON RET. WALL	BRACE RAIL & TOP RAIL
3'	3 1/2" x 3 1/2" Roll Formed @ 5.14# 2 1/2" ∅ @ 3.65#	H Col. @ 2.76#	2" ∅ @ 2.72#	1 5/8" x 1 1/4" R.F. @ 1.35# 1 5/8" ∅ @ 2.27#
4'	3 1/2" x 3 1/2" Roll Formed @ 5.14# 2 1/2" ∅ @ 3.65#	H Col. @ 2.76#	2" ∅ @ 2.72#	1 5/8" x 1 1/4" R.F. @ 1.35# 1 5/8" ∅ @ 2.27#
5'	3 1/2" x 3 1/2" Roll Formed @ 5.14# 2 1/2" ∅ @ 3.65#	H Col. @ 2.76#	2" ∅ @ 2.72#	1 5/8" x 1 1/4" R.F. @ 1.35# 1 5/8" ∅ @ 2.27#
6'	3 1/2" x 3 1/2" Roll Formed @ 5.14# 3 ∅ @ 5.79#	H Col. @ 4.1#	2 1/2" ∅ @ 3.65#	1 5/8" x 1 1/4" R.F. @ 1.35# 1 5/8" ∅ @ 2.27#
8'	3 1/2" x 3 1/2" Roll Formed @ 5.14# 3" ∅ @ 5.79#	H Col. @ 4.1#	2 1/2" ∅ @ 3.65#	1 5/8" x 1 1/4" R.F. @ 1.35# 1 5/8" ∅ @ 2.27#

* Sizes apply to End, Corner, Angle, Intersection, and Intermediate Braced Posts.

** Use tubular type post on all Retaining Walls.

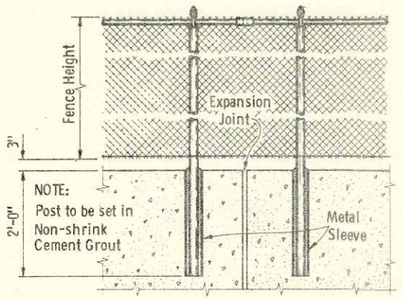
R.F. = Roll Formed



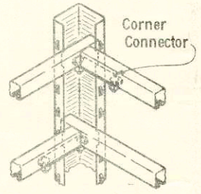
END POST & CORNER POST

LINE POST

DETAILS OF FENCE ON WALL

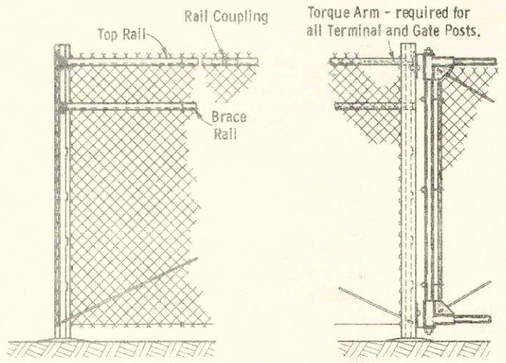


DETAILS OF FENCE AT EXPANSION JOINT IN WALL



ROLL FORMED POST

TOP & BRACE RAIL CORNER CONNECTION

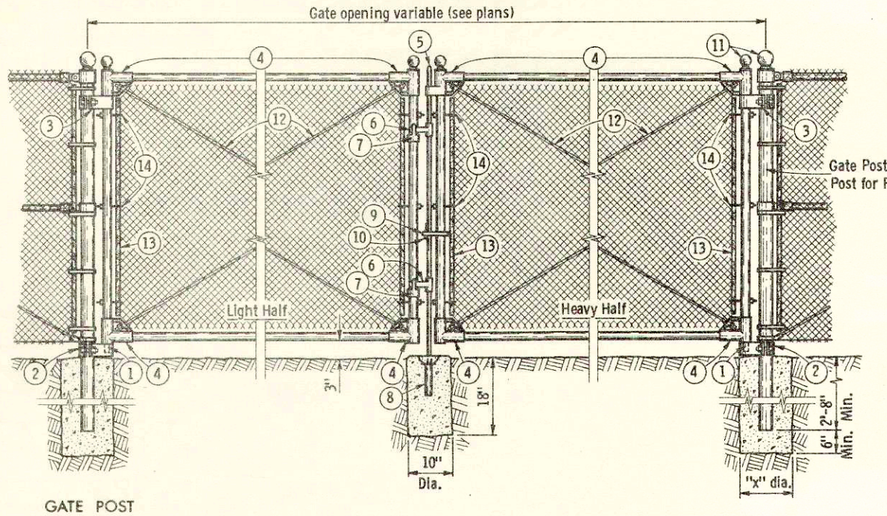


ROLL FORMED POST END, CORNER, ANGLE, INTERSECTION, & INTERMEDIATE BRACED POSTS

ROLL FORMED POST TERMINAL OR GATE POST

ELEVATION OF FENCE

(ROLL FORMED ALTERNATE)



GATE POST

LEGEND

1. Straight Plug
2. Bottom Hinge
3. Top Hinge
4. Corner Elbow
5. Plunger Rod
6. Latch Fork
7. Fork Catch
8. Plunger Rod Catch
9. Lock Keeper Guide
10. Lock Keeper
11. Ornamental Tops
12. Truss Rods
13. Stretcher Bar
14. Hook Bolts

CHAIN LINK FENCE GATE DETAILS

FENCE HEIGHT	GATE OPENING *	GATE POST	GATE FRAME	GATE POST FOOTING ("X" DIA.)
3'	Double to 12' incl.	3 1/2" x 3 1/2" R.F. 2 1/2" O.D.	1 3/8" O.D.	12"
4'	Double over 12' to 16' incl.	3 1/2" x 3 1/2" R.F. 3" O.D.	1 3/8" O.D.	12"
5'	Double over 16' to 24' incl.	3 1/2" x 3 1/2" R.F. 4" O.D.	1 3/8" O.D.	12"
6'	Double to 12' incl.	3 1/2" x 3 1/2" R.F. 3" O.D.	2" O.D.	12"
	Double over 12' to 20'	3 1/2" x 3 1/2" R.F.	2" O.D.	14"
	Double over 12' to 26'	4" O.D.	2" O.D.	14"
8'	Double over 26' to 36'	6 5/8" O.D.	2" O.D.	18"
	Double over 36'	8 5/8" O.D.	2" O.D.	24"

* Available in 2 foot increments from 12 foot to 40 foot. Double refers to two (left and right) sections per gate.

GENERAL NOTES

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

2. Detailed drawings for proposed alternate designs for "Chain Link Fence or Chain Link Fence Gates" shall be submitted to the Engineer for approval.

3. Selection of Corner, Terminal and Gate post type is optional. However, only one type shall be used throughout project. Ornamental tops are not required on the top of roll formed posts.

CHAIN LINK FENCE DETAILS

State of Wisconsin
Department of Transportation
Division of Highways

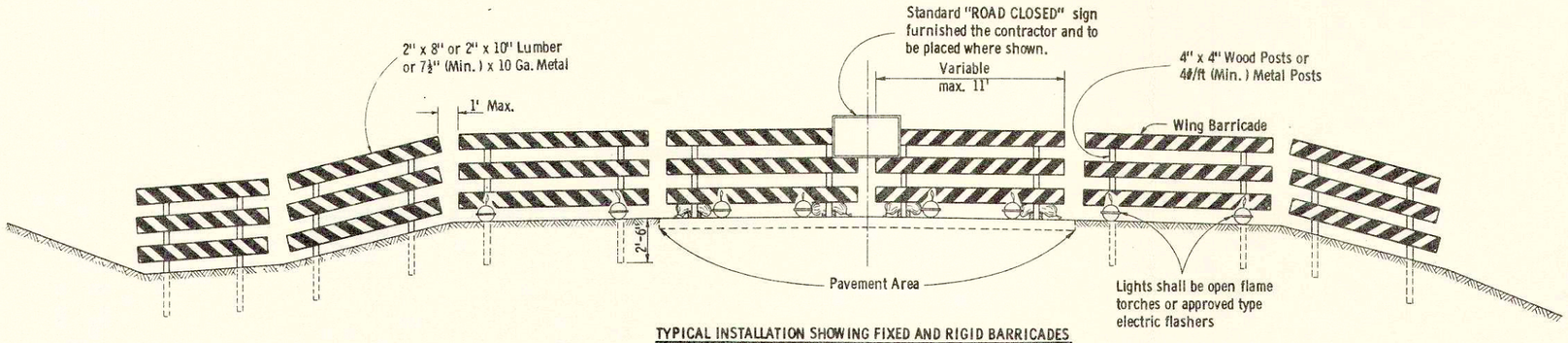
RECOMMENDED FOR APPROVAL
3/3/69 DATE — E. J. Ruckert CHIEF DESIGN ENGINEER

APPROVED
3/27/69 DATE — A. Lammerts STATE HIGHWAY ENGINEER

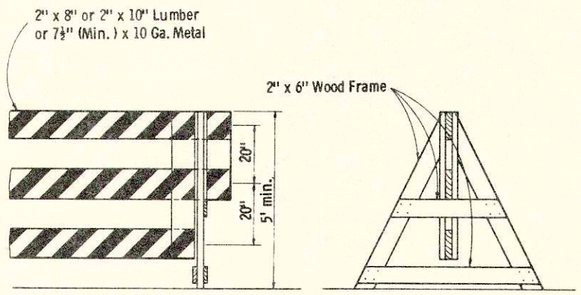
S.D.D. 15B2-1

S.D.D. 15B2-1

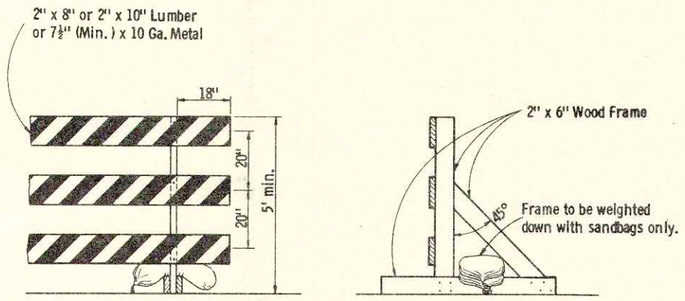
CLASS I BARRICADES



TYPICAL INSTALLATION SHOWING FIXED AND RIGID BARRICADES



ALTERNATE TYPE INSTALLATION (DEMOUNTABLE)



ALTERNATE TYPE INSTALLATION (RIGID)

GENERAL NOTES

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

CLASS 1 BARRICADE:

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

CLASS 11 BARRICADE:

Class 11 Barricades may be used only where the hazard to traffic is relatively small, and for the more or less continuous delimiting of a restricted roadway, or for temporary daytime use.

MATERIAL & FABRICATION:

Lumber shall be of a grade structurally sound and sufficiently rigid to satisfactorily support and maintain the purpose and intent of a barricade facility.
Metal shall be sufficiently rigid to satisfactorily support and maintain the purpose and intent of a barricade facility.
The fabrication of the barricade shall be in accord with good pertinent woodworking and metalworking practices.
All lumber or timber dimensions stated are nominal.

PAINTING:

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

DIRECTION OF DIAGONAL STRIPES:

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

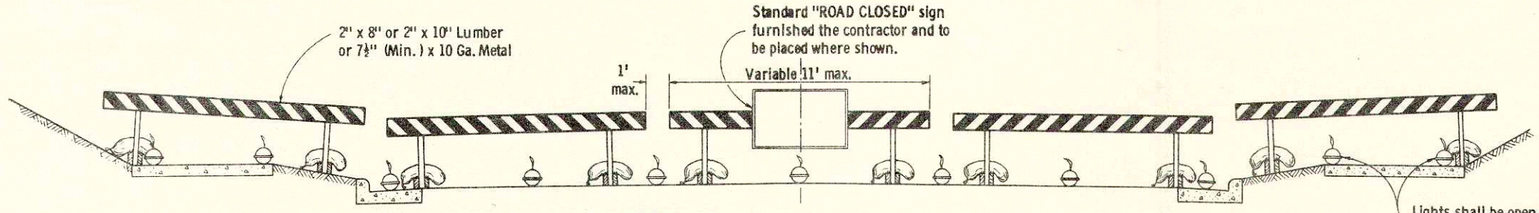
LIGHTING:

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

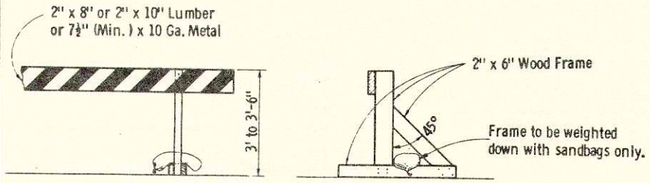
MEASUREMENT & PAYMENT:

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

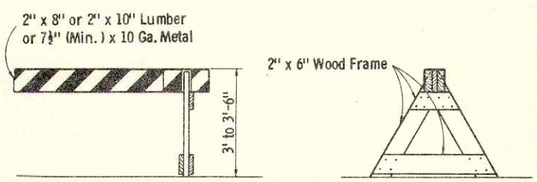
CLASS II BARRICADES



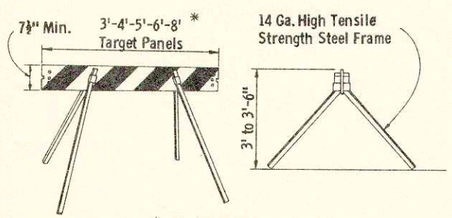
TYPICAL INSTALLATION SHOWING RIGID BARRICADES



ALTERNATE TYPE INSTALLATION (RIGID)

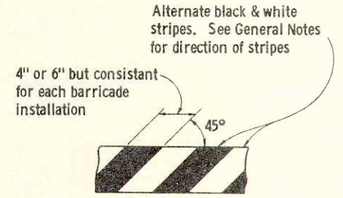


ALTERNATE TYPE INSTALLATION (DEMOUNTABLE)



* Maximum length of combination panels 16'

ALTERNATE TYPE INSTALLATION (DEMOUNTABLE)



TYPICAL DIAGONAL STRIPES

Applies to all Classes & Types of Barricades

CONSTRUCTION BARRICADE

State Highway Commission of Wisconsin

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

S.D.D. 15C1-1

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
1070-7-71	6	17
FEDERAL PROJECT DESIGNATION I-90-1(62)2		

248'-4 BACK TO BACK OF ABUTMENTS

117'-6 | 125'-6 | 2'-8

℄ BRG. S. ABUT. STA. 9 "B"+11.85

PT. OF CRIT. VERT. CL. 17'-8

STA. 9 "B"+99.22 ℄ OF WALKWAY = STA. 132+07.49 ℄ E.B. LANE I90

℄ PIER STA. 10"B"+29.35

PT. OF CRIT. VERT. CL. 17'-7½

℄ BRG. N. ABUT. STA. 11 "B"+54.85

TOE OF SLOPE

PROPOSED CONC. SDWK (NOT PART OF STRUCT. PLAN)

TOE OF SLOPE — 25'-0 — 8'-0 SHLD. — VARIES CONC. — 12'-0 PAV'T. — 12'-0 — 6'-0 SHLD. — 60'-0

96°-23'-20"

8" CASING 4" WELDING STEEL CASING INSIDE GAS PRESSURE 40 P.S.I. EL. 647.5±

6'-0 SHLD. — 12'-0 CONC. — 12'-0 PAV'T. — VARIES — 8'-0 SHLD.

PROPOSED CONC. SDWK. (NOT PART OF STRUCT. PLAN.)

19'-0 | 9"B" | 9"A" | 8'-0 | 17'-6 | 15'-0 | 10"B" | 10"A" | 11'8" | 11"A" | 16'-0 | 15'-0 | 11'-0 | 6'-0

3'-0 TYP. | 1'-0 | 10"

℄ OF WALKWAY "B" LINE

STA. 9"A"+08

END OF FLOOR STA. 9"B"+9.77

24" R.C.C.P. (FUTURE EXPANSION)

STA. 9"A"+46

STA. 10"A"+00.00 = STA. 132+14.50 ℄ E.B. LANE I90

℄ E.B. LANE EXISTING I90

STA. 10"A"+10

STA. 10"A"+49

STA. 10"B"+59.59 ℄ WALKWAY = STA. 132+14.20 ℄ W.B. LANE I90

℄ W.B. LANE EXISTING I 90

24" R.C.C.P. 14" C.I.P. INSIDE EL. 642.5±

STA. 11"A"+14

25'-0

STA. 11"A"+45

END OF FLOOR STA. 11"B"+56.93

STA. 11"A"+94

50' BAL.

PLAN

2-SPAN PLATE GIRDER

2'-6 BERM TYP. | LUMINAIRE | EL. 663.08 | EL. 664.21

690 / 680 / 670 / 660 / 650

NEOPRENE PREMOLDED SEAL (TYP. AT ABUTS)

SIDEWALK | EXP. | FIX | EXP. | SIDEWALK

2 MIN. | 1 | ORIGINAL GROUNDLINE | 17'-8 | 17'-7½

℄ E.B. LANE EXISTING I90

℄ W.B. LANE EXISTING I90

TREATED TIMBER PILING (TYP.)

NAME PLATE | EL. 660.58 | EL. 661.71

EL. 647.96

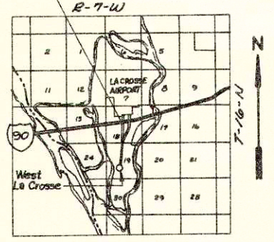
ELEVATION

(LOOKING WEST)

LIST OF DRAWINGS

STRUCTURE B-32-73

R-7-W



LAYOUT

No.	Date	Revision	By

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-32-73

PEDESTRIAN OVERPASS OVER I90

County LACROSSE | ~~City~~ ~~Village~~ TN: CAMPBELL

Design Spec. A.A.S.H.O. '69 | Load 85 P.S.F. | Const. Spec. 1969

Designed By J.R.L. | Design Checked C.R.H. | Drawn By R.GOSS | Plans Checked F.O'M

Approved W.A. Kleine, Chief Bridge Engineer — 4-24-72, Date

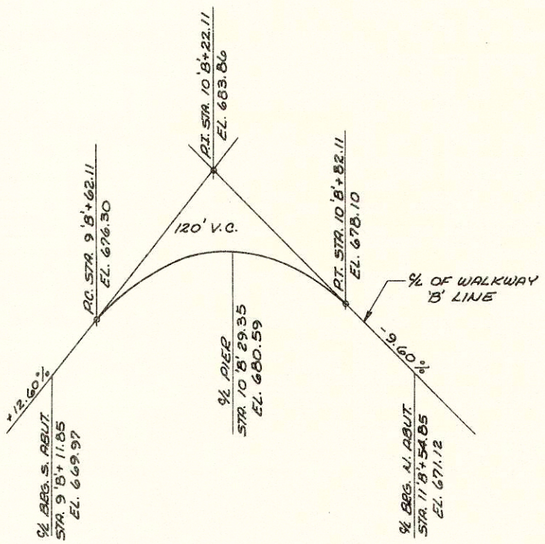
GENERAL PLAN

SHEET 1 OF 10

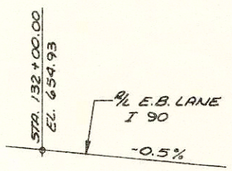
X47719

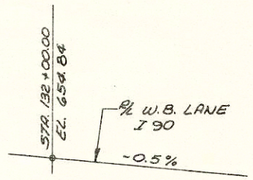
Form E-B-12-69

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
1070-7-71	7	17
FEDERAL PROJECT DESIGNATION: I-90-1(62)2		



PROFILE GRADE PEDESTRIAN OVERPASS





EXISTING GRADE I90

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

ALL FIELD CONNECTIONS SHALL BE MADE WITH ⅞"ϕ FRICTION TYPE HIGH-TENSILE STRENGTH BOLTS UNLESS SHOWN OR NOTED OTHERWISE.

THE EXISTING GROUNDLINE WAS USED AS UPPER LIMITS OF EXCAVATION FOR THE COMPUTATION OF EXCAVATION QUANTITIES AT THE PIER.

THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES FOR THE ABUTMENTS SHALL BE THE TOP OF BERM & THE QUANTITIES WERE COMPUTED FROM THIS LINE.

DESIGN CRITERIA

DESIGN CRITERIA FOR PEDESTRIAN BRIDES OVER INTERSTATE OR COMPARABLE HIGHWAYS - BUREAU OF PUBLIC ROADS APPENDIX A.

DESIGN DATA

LIVELOAD: 85 P.S.F.

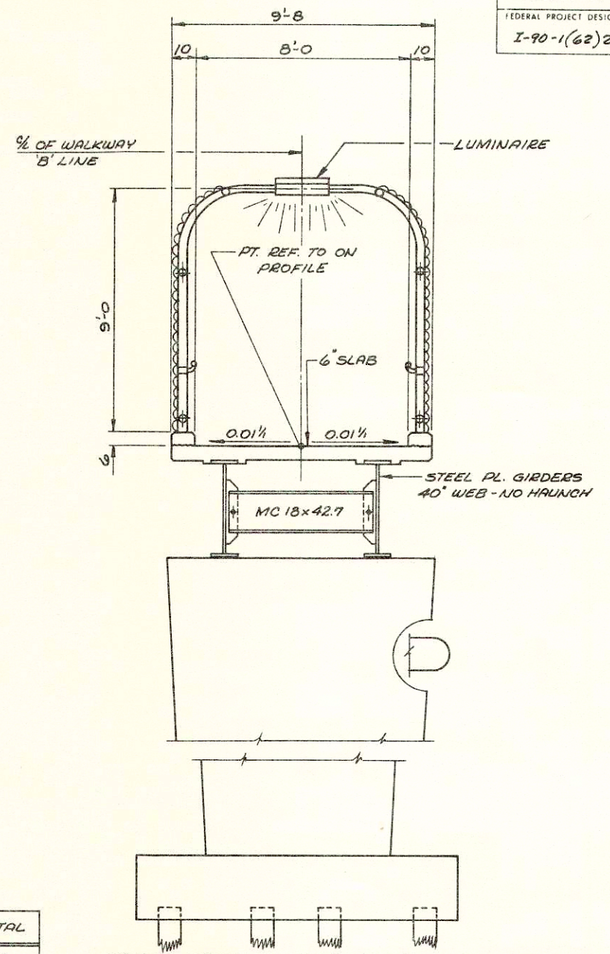
ALLOWABLE DESIGN STRESSES:

CONCRETE MASONRY, GRADE "AA"	f_c = 1,400 p.s.i.
BAR STEEL REINFORCEMENT	f_s = 20,000 p.s.i. n = 10
STRUCTURAL CARBON STEEL STRUCTURAL LOW ALLOY STEEL (A441)	f_s = 20,000 p.s.i.
OVER ¾" TO AND INCLUDING 1½" THICK	f_s = 25,000 p.s.i.

FOUNDATION DATA

PLACE ABUTMENTS ON TREATED TIMBER PILING DRIVEN TO 25 TONS/PILE MIN. BRG. EST. PILE LENGTH 40'-0.

PLACE PIER ON TREATED TIMBER PILING DRIVEN TO 30 TONS/PILE MIN. BRG. EST. PILE LENGTH 45'-0.



CROSS SECTION THRU PEDESTRIAN OVERPASS

TOTAL ESTIMATED QUANTITIES

	BID ITEMS	UNIT	SUPER	S.ABUT.	PIER	N.ABUT.	TOTAL
	EXCAVATION FOR STRUCTURES	C.Y.	———	19	30	19	68
	PREBORING, TIMBER PILING	L.F.	———	34	35	40	109
	CONCRETE MASONRY	C.Y.	54.4	22.4	26.7	22.4	125.9
	BAR STEEL REINFORCEMENT	LB	8,660	1,120	3,310	1,120	14,210
	STRUCTURAL CARBON STEEL	LB	54,460	———	———	———	54,460
	STRUCTURAL LOW ALLOY STEEL	LB	19,300	———	———	———	19,300
	LUBRICATED BRONZE PLATE	LB	43	———	———	———	43
	TREATED TIMBER PILING - DELIVERED	L.F.	———	240	495	240	975
	TREATED TIMBER PILING - DRIVEN	L.F.	———	206	460	200	866
*	TREATED TIMBER TEST PILING	L.S.	———	———	———	———	1
	CHAIN LINK FENCE - 10 FEET	L.F.	486	———	———	———	486
	CHAIN LINK FENCE - 6 FEET	L.F.	40	———	———	———	40
	ELECTRICAL WORK	L.S.	———	———	———	———	1
	BEARING PADS	S.F.	9	———	———	———	9
	NEOPRENE PREMOLDED SEAL	L.F.	———	10	———	10	20
	NON-BID ITEMS						
	⅛" ALUMINUM OR ZINC PLATE	S.F.	1	———	———	———	1
	POLYVINYL CHLORIDE WATERSTOP	L.F.	———	7	———	7	14

* DRIVE ONE TEST PILE AT PIER. EST. LENGTH 60'-0 (1 REQ'D)

No.	Date	Revision	By

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-32-73

Const. Spec.	Drawn By	Plans Checked
1969	R.J.G.	F.O'M

NOTES AND QUANTITIES

SHEET 2 OF 10

X47720

S.A.- INDICATES DIMENSIONS AND ELEVATIONS TAKEN AT THE SOUTH ABUTMENT.

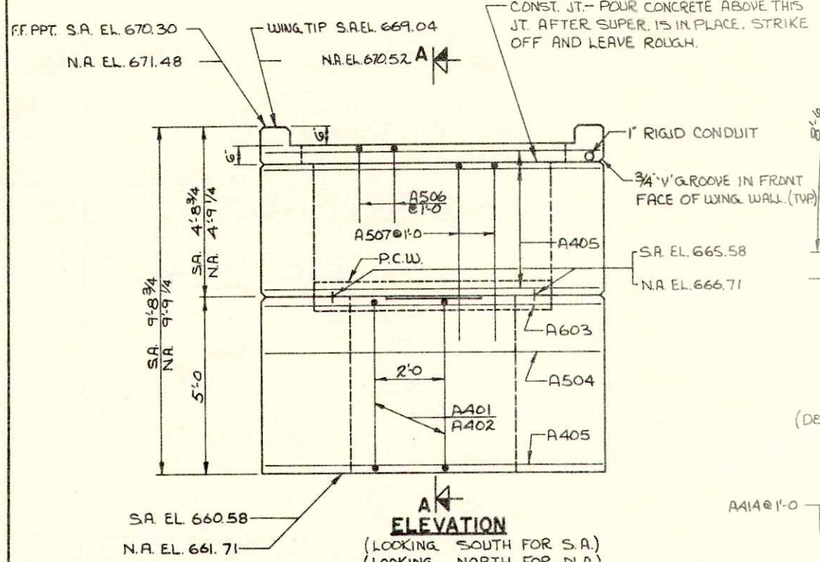
N.A.- INDICATES DIMENSIONS AND ELEVATIONS TAKEN AT THE NORTH ABUTMENT.

NOTE: THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE. ALL DIMENSIONS ARE OUT TO OUT OF BAR.

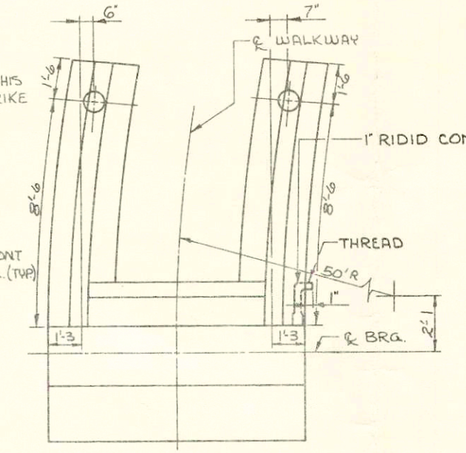
PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
1070-7-71	8	17
FEDERAL PROJECT DESIGNATION: I-90-1(62)2		

BILL OF BARS (2 ABUTS.) 2,240 LBS.

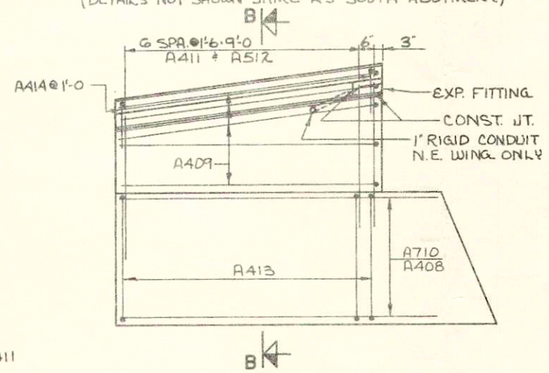
MARK	NO. REQ'D	LENGTH	BENT	LOCATION
A401	10	13-3	X	BODY
A402	10	7-3	X	"
A603	6	9-4		" HORIZ.
A504	8	9-4		" "
A405	30	9-4		" "
A506	20	3-8	X	" PAVING BLOCK
A507	20	10-9	X	" BACK WALL
A408	16	10-10		WINGS HORIZ.
A409	36	10-8	X	" "
A710	20	9-9		" "
A411	32	5-3		" VERT.
A512	32	5-0		" "
A413	64	7-5	X	" "
A414	40	3-4	X	CURB "



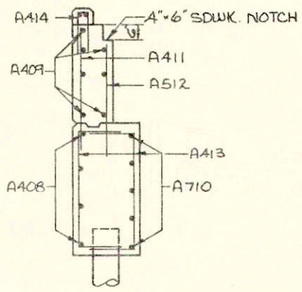
A
ELEVATION
(LOOKING SOUTH FOR S.A.)
(LOOKING NORTH FOR N.A.)



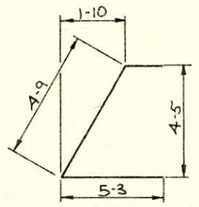
PLAN NORTH ABUT.
(DETAILS NOT SHOWN SAME AS SOUTH ABUTMENT)



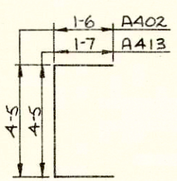
WING ELEVATION



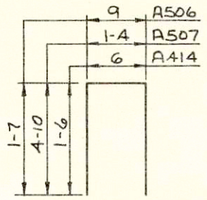
SECTION B-B



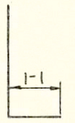
A401



A402
A413



A506
A507
A414



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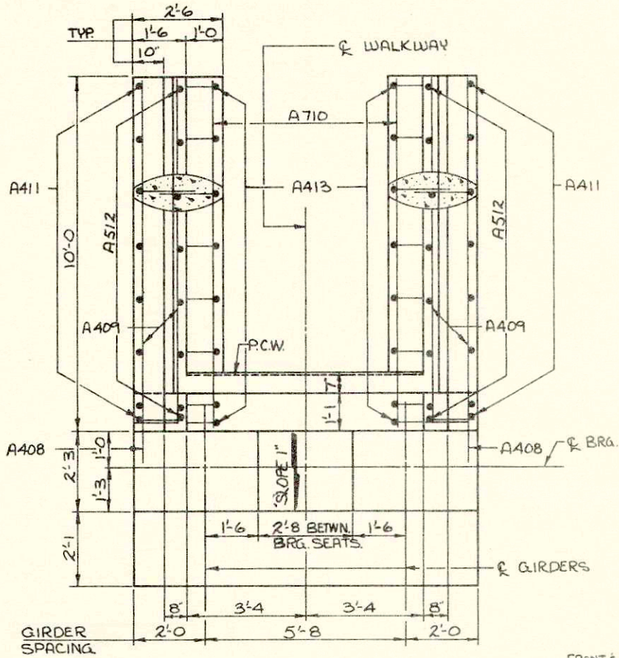
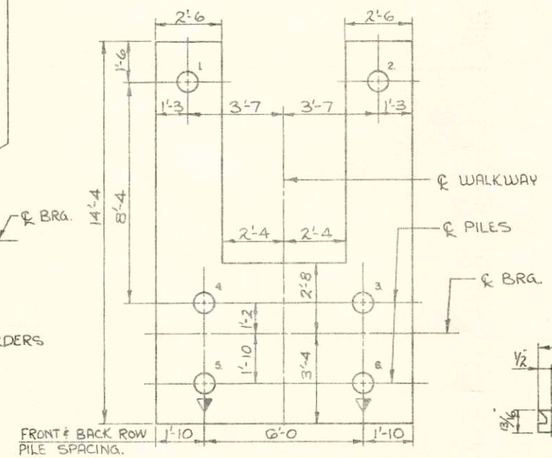
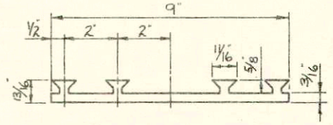


PLAN SOUTH ABUT.

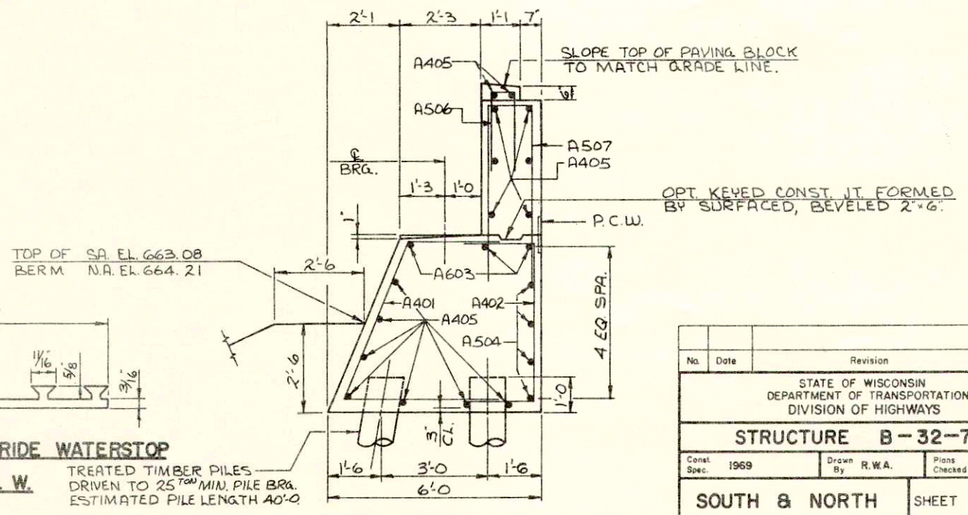


INDICATES BATTERED PILES. BATTER 3/FT.

PILE PLAN



POLYVINYL CHLORIDE WATERSTOP



SECTION A-A

No.	Date	Revision	By

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-32-73

Const. Spec. 1969	Drawn By R.W.A.	Plans Checked F.O'M.

SOUTH & NORTH ABUTMENTS

SHEET 3 OF 10

X 47721

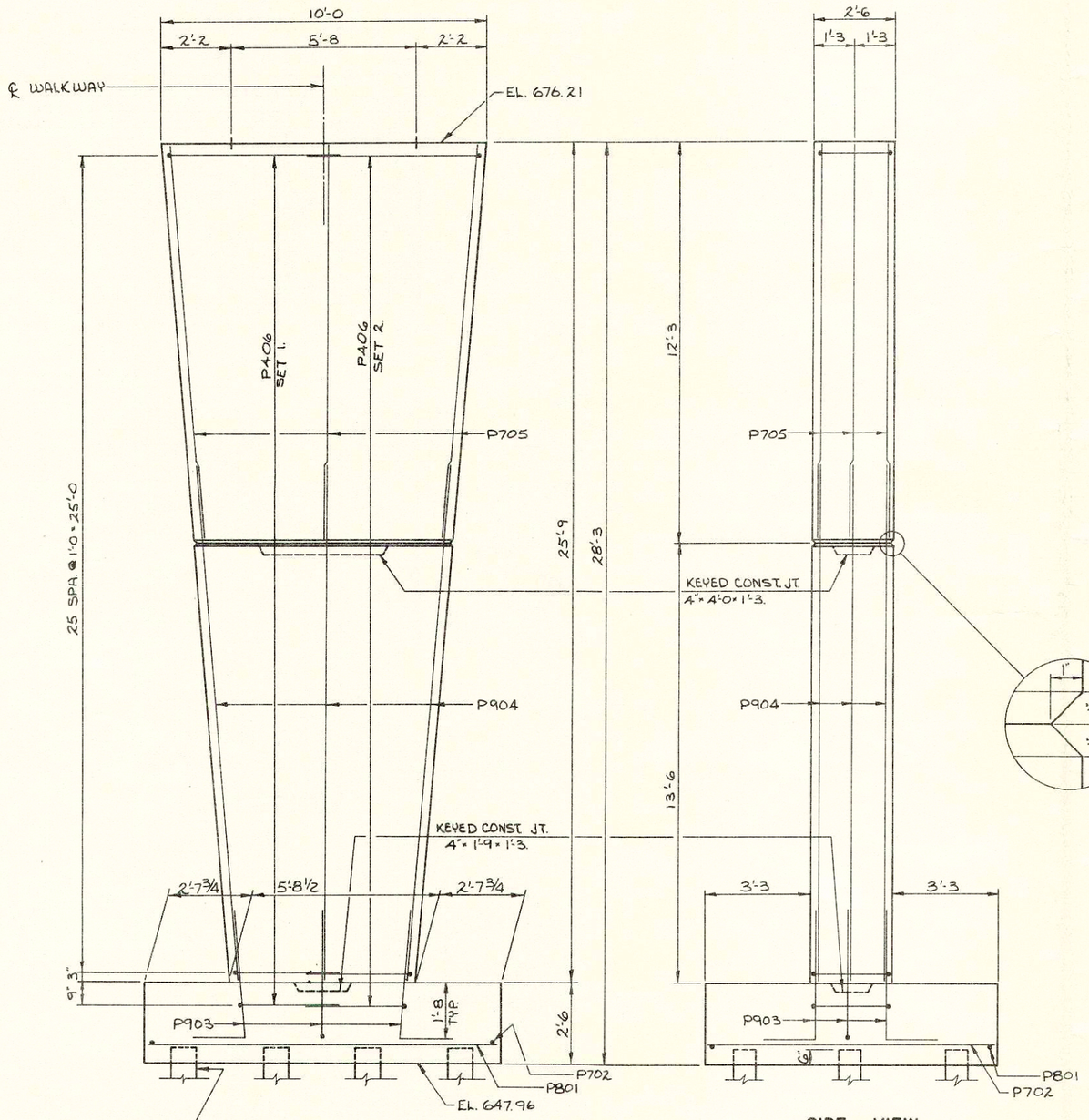
Form E-B-12-69

NOTE: THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.
ALL DIMENSIONS ARE OUT TO OUT OF BAR.

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
1070-7-71	9	17
FEDERAL PROJECT DESIGNATION: I-90-1(62)2		

BILL OF BARS 3,310 LBS

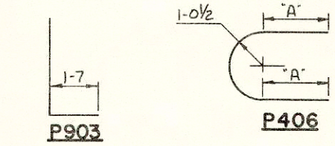
MARK	NO. REQ'D	LENGTH	BENT	CUT DIA.	LOCATION
P801	13	10-8			FOOTING
P702	16	8-8			"
P903	24	5-3	X		" & SHAFT
P904	24	15-9			SHAFT
P705	24	12-1			"
P406	27	19-3	X	X	"



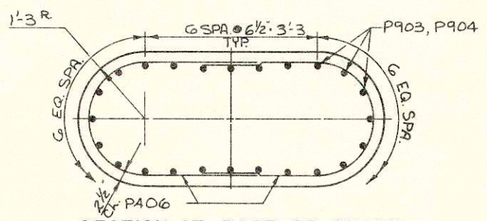
TREATED TIMBER PILES DRIVEN TO 30 TON MIN. PILE BRG. ESTIMATED PILE LENTH 45'-0.

ELEVATION
(LOOKING UP STATION)

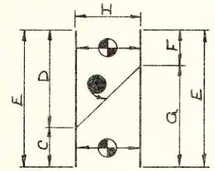
SIDE VIEW



NOTE: LAP P705 BARS TO P904 BARS ABOVE CONST. JT.



SECTION AT BASE OF SHAFT



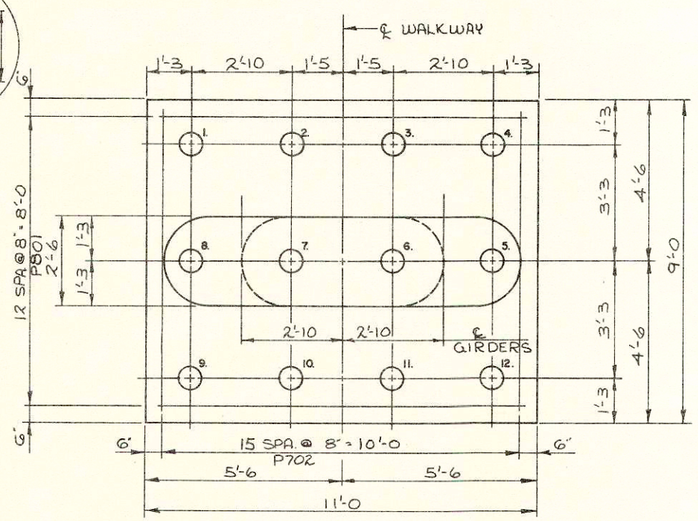
● MARK & CUT ALL BARS ALONG THIS LINE. MAKE ALL CUTS NORMAL TO BAR AXIS.

"H" IS THE NUMBER OF BARS IN A CUTTING DIAGRAM BEFORE CUTTING.

CUTTING DIAGRAM

◐ BUNDLE & MARK CUT BARS WITH BAR & SET NUMBERS.

MARK		C	D	E	F	G	H	SETS REQ'D.
P406	SET: 1.	7-6	——	19-3	——	11-9	27	1
	" 2.	——	11-9		7-6	——		1



NOTE: PREBORE PILES 1, 8, 9, 4, 5 & 12 TO CLEAR 8" GAS MAIN & 24" RCCP.

PLAN

No.	Date	Revision	By

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-32-73

Const. Spec.	Drawn By	Plans Checked
1969	R.W.A.	F.O'M

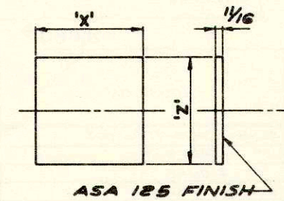
PIER

SHEET 4 OF 10

X 47722

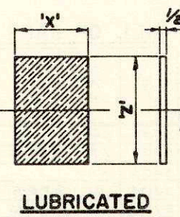
Form E-8-12-67

B. P. R. Division	Project	Sheet Number	Total Sheets
4	1070-7-71 I-90-1(62)2	10	17



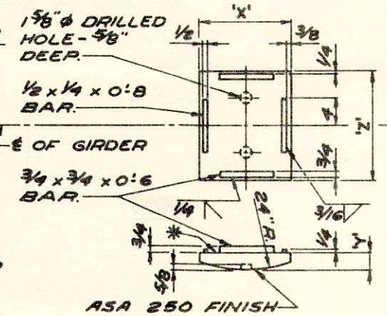
TOP PLATE "A"

FINISH BOTTOM OF TOP PLATE IN DIRECTION OF MOVEMENT.

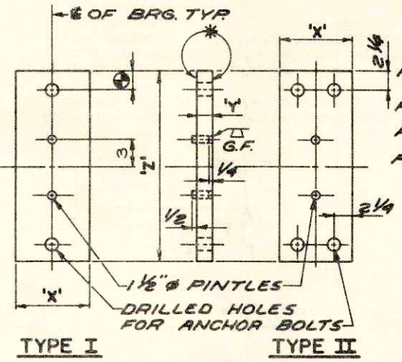


LUBRICATED BRONZE ℞ "B"

LUBRICATE TOP SURFACE ONLY.

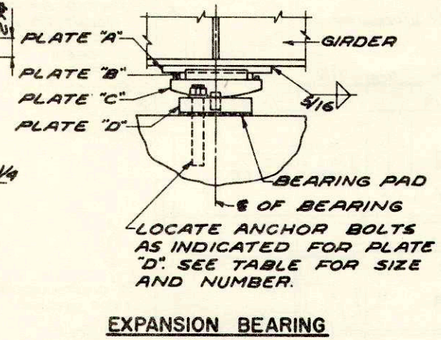


ROCKER PLATE "C"

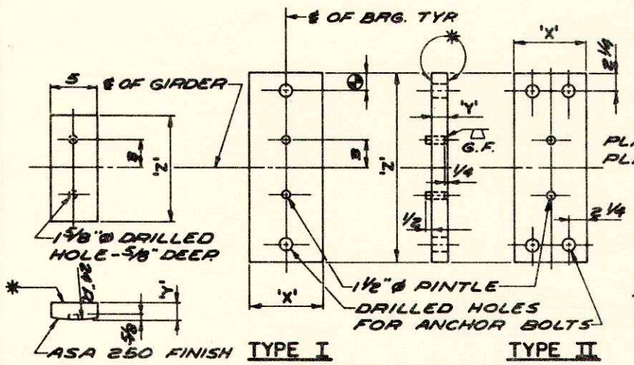


MASONRY PLATE "D"

EXPANSION BEARING



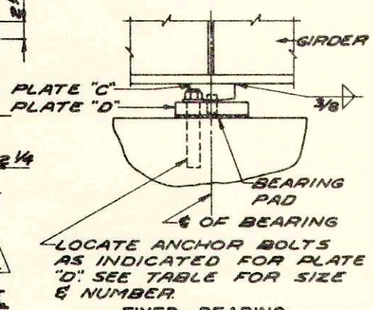
EXPANSION BEARING ASSEMBLY



ROCKER PLATE "C"

MASONRY PLATE "D"

FIXED BEARING



FIXED BEARING ASSEMBLY

	PLATE 'A'		PLATE 'B'		PLATE 'C'			PLATE 'D'			PLATE 'D' TYPE	ANCHOR BOLT SIZE	NO. OF BRG'S. REQ'D.	LOCATION
	X	Z	X	Z	X	Y	Z	X	Y	Z				
EXPANSION BEARING	9	1'-2	5	1'-2	7	1 3/16	1'-4 1/4	8	1 1/2	2'-0	I	1 1/2 ø	4	N. & S. ABUT.
FIXED BEARING					—	1 3/16	1'-2	9	1 1/2	1'-11	I	1 1/2 ø	2	PIER
					—									
					—									

② 2" WHEN 1 1/4" ø ANCHOR BOLTS ARE USED AND 2 1/4" WHEN 1 1/2" ø ANCHOR BOLTS ARE USED.

✱ FINISH ASA 250 IF DIMENSION 'Y' IS GREATER THAN 2".

BEARING NOTES

ALL BEARINGS ARE SYMMETRICAL ABOUT ℄ OF GIRDER AND ℄ OF BEARING.

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

ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

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

ALL MATERIAL INCLUDING SHIMS BUT EXCLUDING ANCHOR BOLTS, PINTLES, NUTS AND WASHERS SHALL BE MADE OF A588 STEEL. PINTLES SHALL BE MADE OF A449 STEEL.

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

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

PROVIDE 1/8" THICK BEARING PAD SAME SIZE AS MASONRY PLATE "D" FOR EACH BEARING.

ANCHOR BOLTS SHALL BE OF A SIZE AS GIVEN IN THE TABLE. LENGTH OF 1 1/4" ø ANCHOR BOLTS TO BE 1-5. LENGTH OF 1 1/2" ø ANCHOR BOLTS TO BE 1-10. PROJECT. ANCHOR BOLTS "D" PLATE THICKNESS + 2 1/4" ABOVE TOP OF CONCRETE. DRILLED HOLES FOR ANCHOR BOLTS IN PLATE "D" SHALL HAVE A DIAMETER 3/8" LARGER THAN THE ANCHOR BOLT DIAMETER.

ALL FINISHED SURFACES SHALL BE MACHINE FINISHED BY AN AUTOMATIC PROCESS.

No.	Date	Revision	By

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-32-73

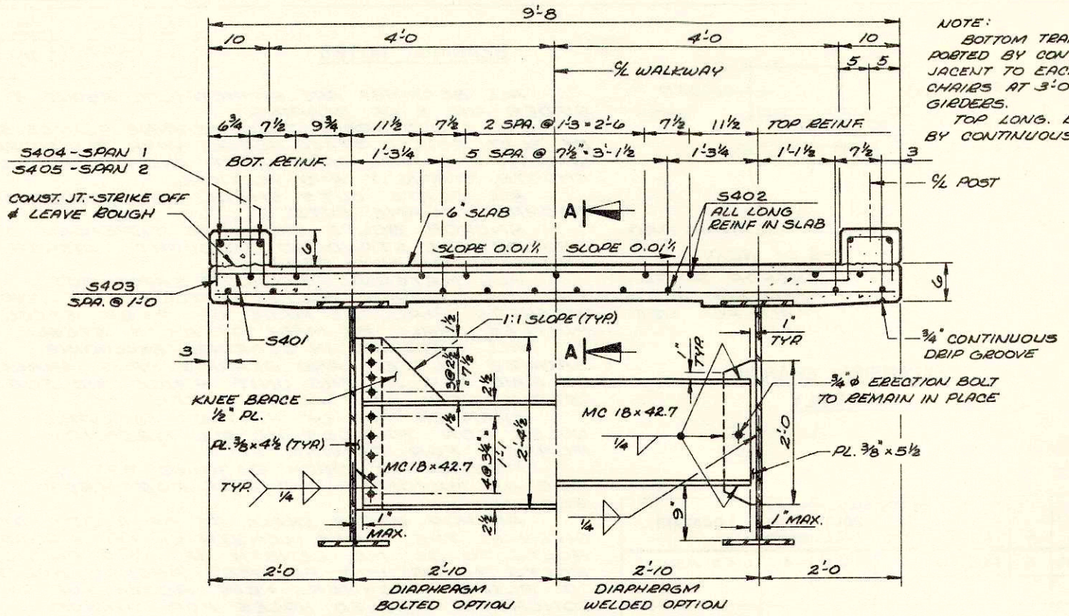
Const. Spec.	Drawn By	Plans Checked
1969	R. J. G.	F.O'M

BEARING DETAILS

SHEET 5 OF 10

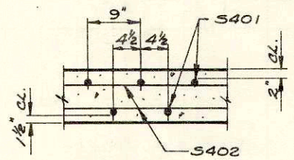
X47723

Form E-B-12-69



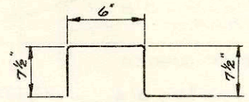
CROSS SECTION THRU PEDESTRIAN WALKWAY

NOTE:
BOTTOM TRANS. BARS IN SLAB SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS ON OR ADJACENT TO EACH GIRDER & BY INDIVIDUAL BAR CHAIRS AT 3'-0 CTRS. APPROX. MIDWAY BETWN GIRDERS.
TOP LONG. BAR STEEL SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROX. 4'-0 CTRS.



SECTION AA

NOTE
ALL DIMENSIONS ARE OUT TO OUT OF BAR.
THE FIRST DIGIT OF THE BAR MARK SIGNIFIES THE BAR SIZE.

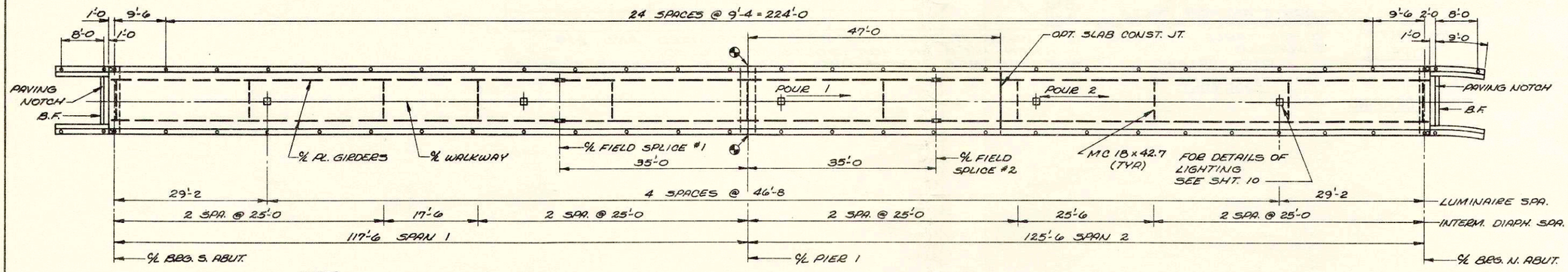


S403

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
1070-7-71	11	17
FEDERAL PROJECT DESIGNATION: I-90-1(62)2		

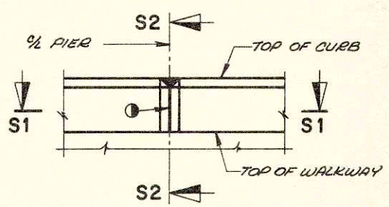
BILL OF BARS — 8,660 #

MARK	N° REQ'D	LENGTH	BENT	LOCATION
S401	649	9-4		SLAB-TRANS-TOP & BOT.
S402	171	28-1		" -LONG- "
S403	490	2-3	X	" & CURB
S404	20	24-5		CURB-SPAN 1
S405	20	25-10		" - " 2

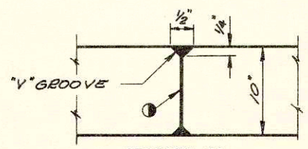


PLAN

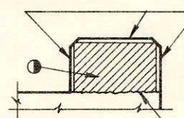
NOTE:
THE CONCRETE IN ANY SPAN SHALL BE PLACED WITHIN FOUR HOURS OF THE TIME THAT CONC. WAS PLACED OVER THE PIER.



ELEVATION



SECTION S1



SECTION S2

NOTE
CURBS SHALL BE PLACED AFTER SPANS HAVE TAKEN DEAD LOAD DEFLECTION.

◑ ⅛" ALUMINUM OR ZINC PL.

DEFLECTION JT. IN CURB

◔ DEFLECTION JOINT IN CURB

WHEN 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 "S2" BY SHADED AREA. IF CONSTRUCTION JOINTS IN CURBS ARE USED AT THE DEFLECTION JOINTS, ONE SIDE OF JOINT SHALL BE COATED WITH BITUMINOUS PAINT AND PLATE SEPARATORS MAY BE OMITTED.
ALL FENCE POST SPACINGS ARE TAKEN HORIZONTALLY ALONG ℄ OF FENCING AT BASE OF POST.

No.	Date	Revision	By

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-32-73

Const. Spec.	Drawn By	Plans Checked
1969	R.J.G.	F.O'M

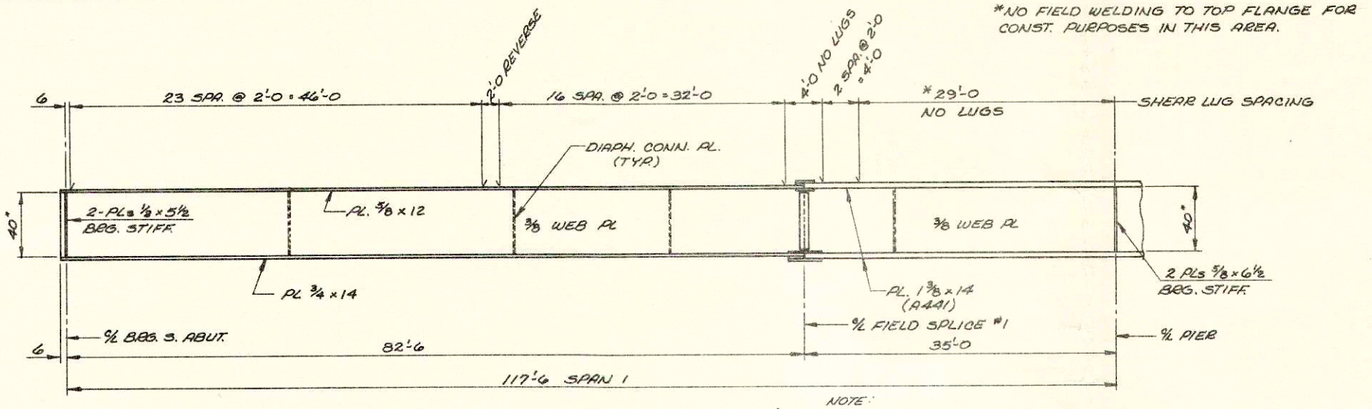
SUPERSTRUCTURE

SHEET 6 OF 10

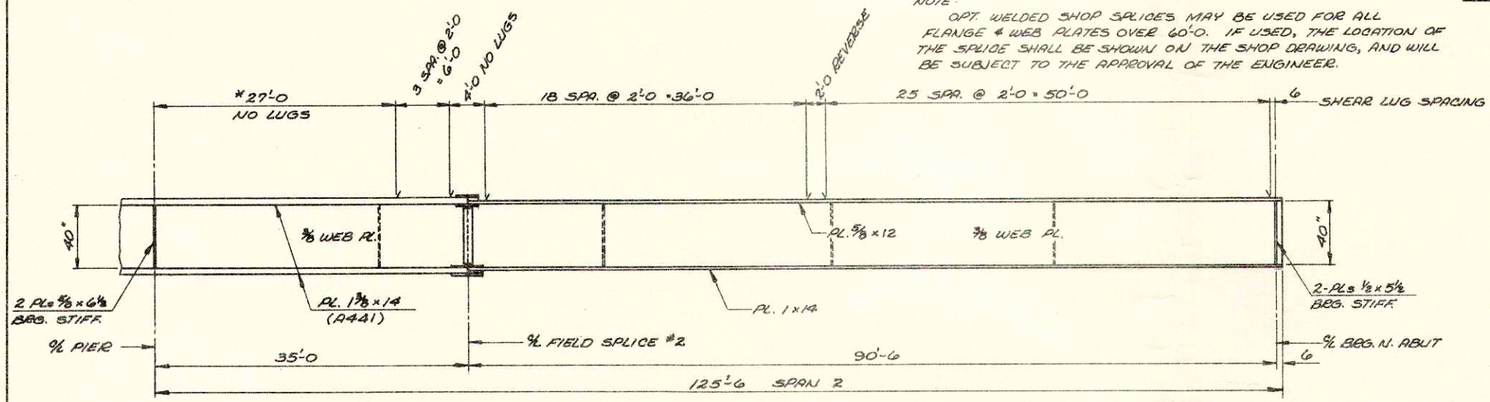
X47724

FORM E-D-12-69

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
1070-7-71	12	17
FEDERAL PROJECT DESIGNATION: I-90-1(62)2		



NOTE:
OPT. WELDED SHOP SPLICES MAY BE USED FOR ALL FLANGE & WEB PLATES OVER 60'-0. IF USED, THE LOCATION OF THE SPLICE SHALL BE SHOWN ON THE SHOP DRAWING, AND WILL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.



GIRDER ELEVATION

CONSTRUCTION GRADES (TOP OF SLAB ELEVATIONS)

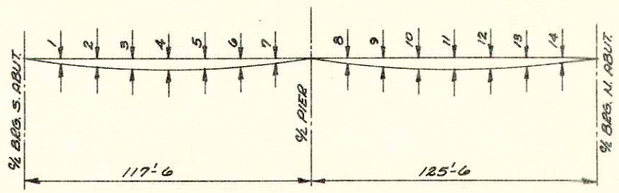
	℄ BRG S. ABUT.	1/8 SPAN	1/4 SPAN	3/8 SPAN	1/2 SPAN	5/8 SPAN	℄ FIELD SPLICE #1	3/4 SPAN	7/8 SPAN	℄ PIER	1/8 SPAN	1/4 SPAN	℄ FIELD SPLICE #2	3/8 SPAN	1/2 SPAN	5/8 SPAN	3/4 SPAN	7/8 SPAN	℄ BRG. N. ABUT
GIRDERS 1 & 2	669.94	671.79	673.64	675.49	677.27	678.70	679.37	679.72	680.34	680.56	680.36	679.70	679.48	678.59	677.11	675.61	674.10	672.59	671.09

ERECTED STEEL ELEVATIONS*

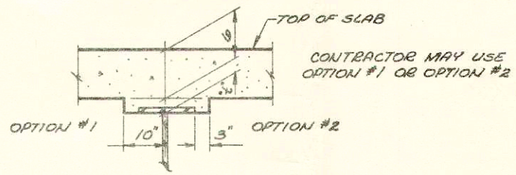
	℄ BRG S. ABUT.	℄ FIELD SPLICE #1	℄ PIER	℄ FIELD SPLICE #2	℄ BRG. N. ABUT.
GIRDERS 1 & 2	669.39	678.98	680.07	679.14	670.54

*T.S.: THESE ELEVATIONS ARE TO TOP OF STEEL (TOP OF SPLICE PLATES AT SPLICE) AND THEY ARE FOR THE MATERIAL AS ERECTED. THE ELEVATION OF THE TOP OF STEEL AT THE FIELD SPLICE POINTS SHALL BE CHECKED AND CORRECTED, IF POSSIBLE, AFTER ERECTION AND BEFORE PERMANENTLY WELDING OR BOLTING THE DIAPHRAGMS IN PLACE.

	DEAD LOAD DEFLECTION	1 1/8 PT	2 1/4 PT	3 3/8 PT	4 1/2 PT	5 5/8 PT	6 3/4 PT	7 7/8 PT	8 1/8 PT	9 1/4 PT	10 3/8 PT.	11 1/2 PT	12 5/8 PT	13 3/4 PT	14 7/8 PT
GIRDERS 1 & 2	CONC. ONLY	1 3/16	1 11/16	1 15/16	1 15/16	1 11/16	1 5/16	1/8	3/16	1 1/16	1 7/16	2 3/16	2 7/16	2 11/16	1 13/16
	TOTAL	1 1/16	2	2 3/16	2 1/8	1 13/16	1 7/16	3/16	3/16	1 13/16	2 1/16	3 3/16	3 1/2	2 15/16	1 11/16

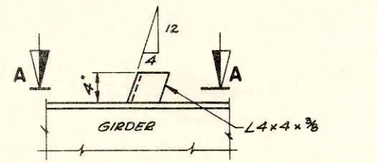


DEAD LOAD DEFLECTION DIAGRAM

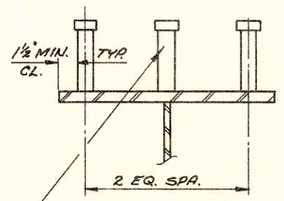


TO DETERMINE "t": AFTER ALL STRUCTURAL STEEL HAS BEEN ERECTED, ELEVATIONS OF THE TOP FLANGES OR TOP OF SPLICE PLATES WHICHEVER APPLIES, SHALL BE TAKEN AT THE ℄ OF BEARINGS, ℄ OF FIELD SPLICES, AND AT EIGHTH AND QUARTER POINTS OF EACH SPAN WHICH ARE MORE THAN SIX FEET FROM A FIELD SPLICE. THESE ELEVATIONS SUBTRACTED FROM THE GRADE ELEVATIONS, ADJUSTED FOR THE DEAD LOAD DEFLECTION OF THE CONCRETE, MINUS THE SLAB DEPTH, PLUS THE STEEL THICKNESS TO BOTTOM OF THE TOP FLANGE, EQUALS THE HAUNCH DEPTH "t".

SLAB THICKNESS DIAGRAM

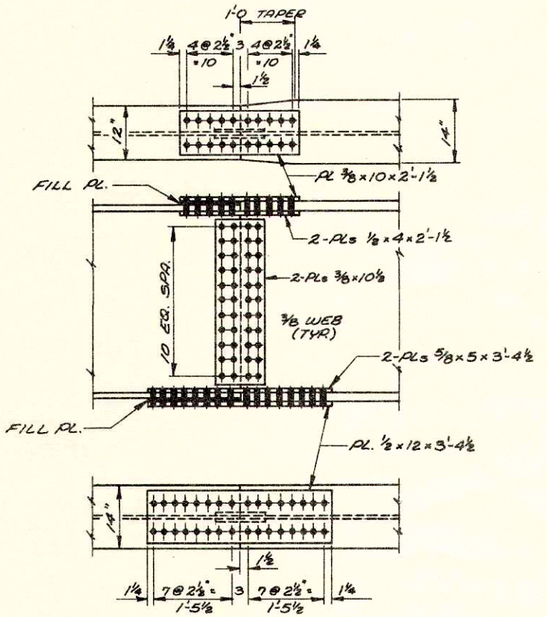


SHEAR CONNECTOR DETAIL



3-SHOP OR FIELD WELDED 7/8" DIA. x 4" LONG STUDS AT ALL PLACES WHERE AN ANGLE SHEAR CONNECTOR IS DETAILED.

ALTERNATE SHEAR CONNECTOR



FIELD SPLICE DETAIL

4 REQ'D

NOTE:
USE 3/4"ϕ HIGH STRENGTH BOLTS IN ALL SPLICES.

No.	Date	Revision	By

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-32-73

Const. Spec. 1969	Drawn By R.J.G.	Plans Checked F.O'M

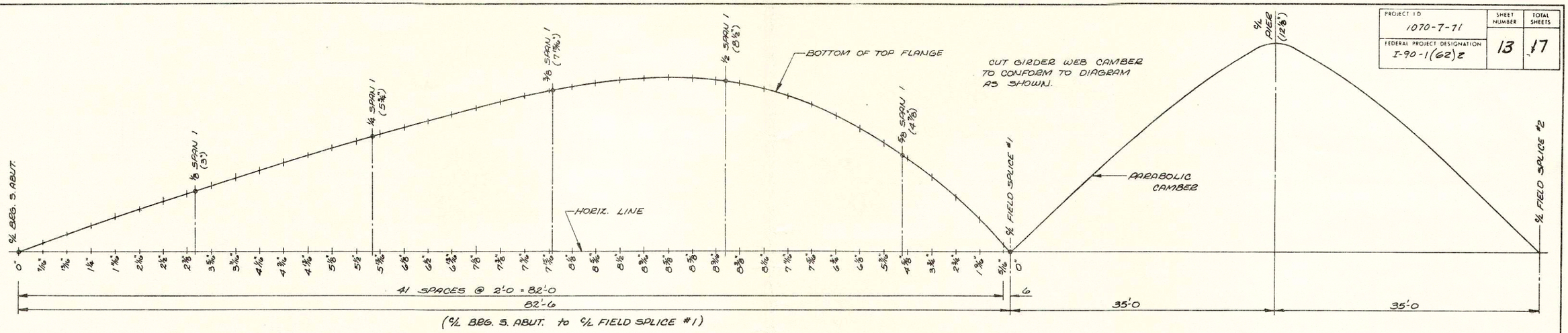
GIRDER DETAILS

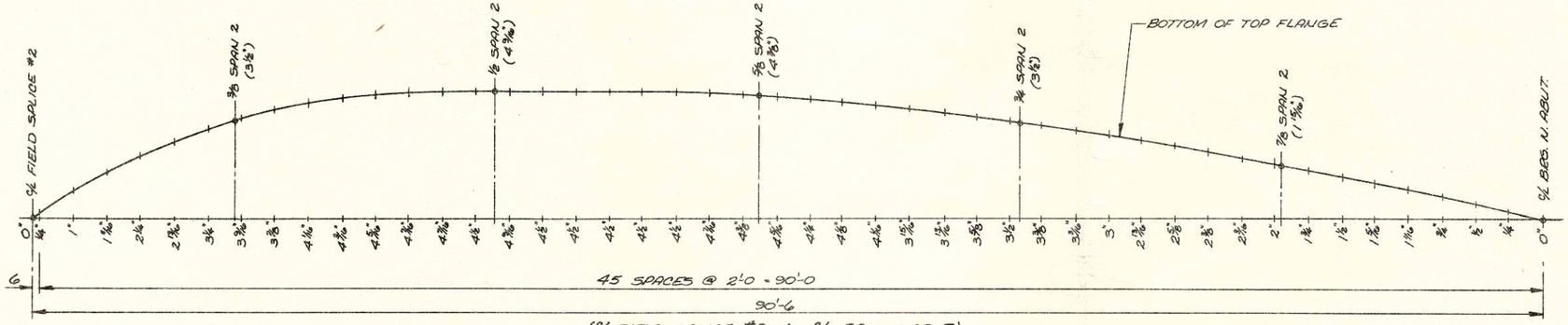
SHEET 7 OF 10

X47725

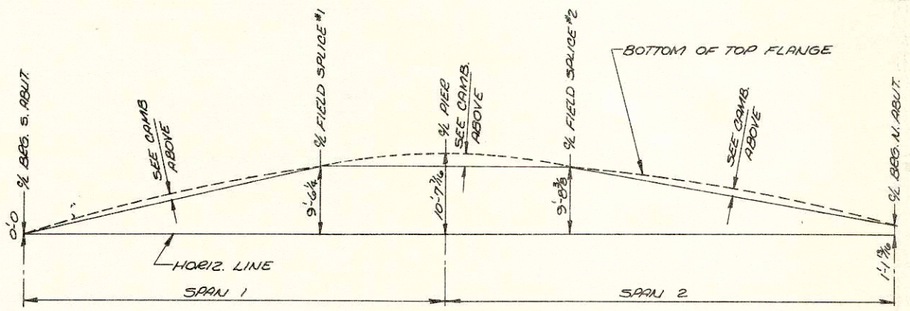
Form E-B-12-69

PROJECT I D	SHEET NUMBER	TOTAL SHEETS
1070-7-71	13	17
FEDERAL PROJECT DESIGNATION I-90-1(62)E		





CAMBER DIAGRAM



BLOCKING DIAGRAM

No.	Date	Revision	By

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-32-73

Const. Spec.	Drawn By	Plans Checked
1969	R.J.G.	F.O'M

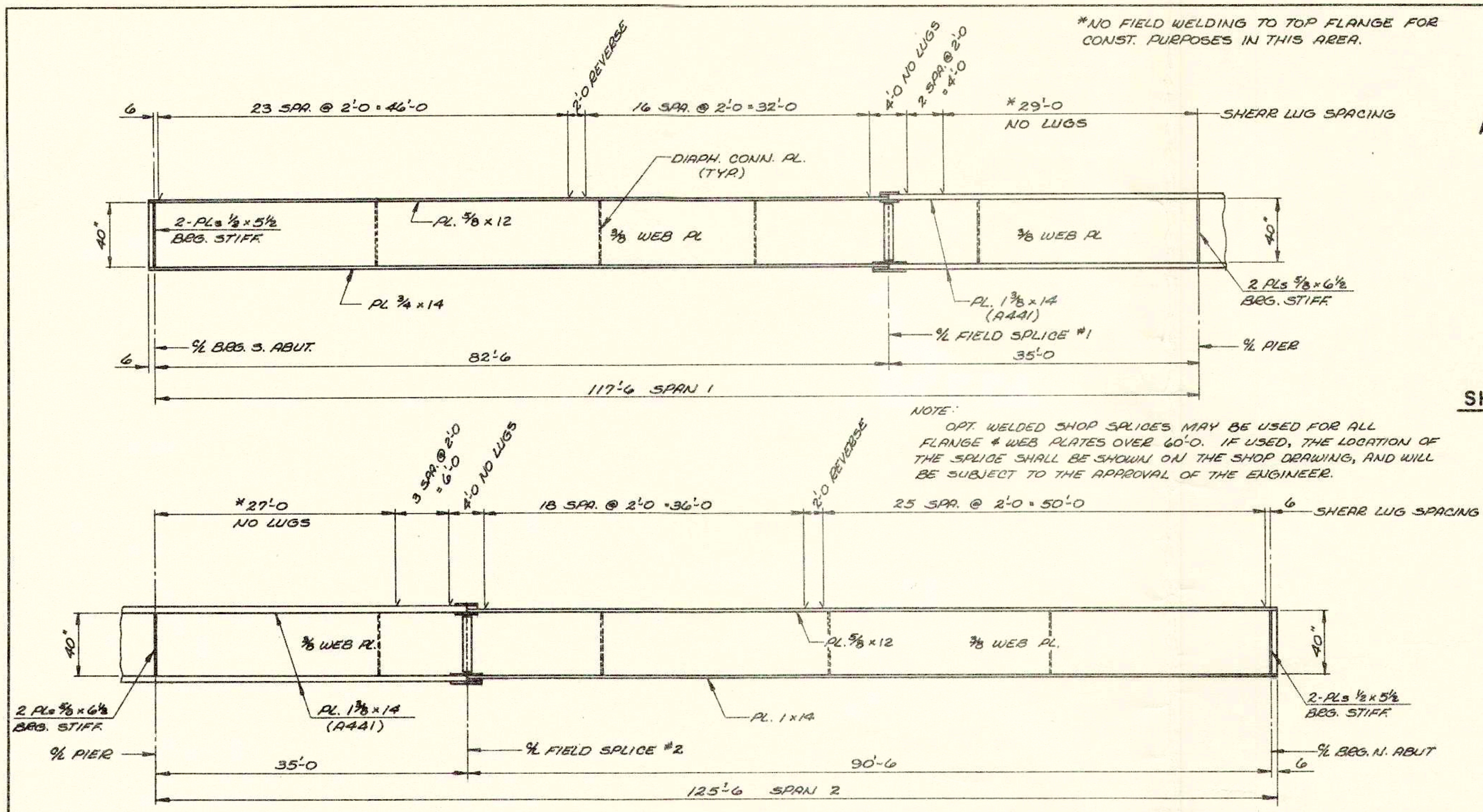
CAMBER & BLOCKING

SHEET 8 OF 10

X47726

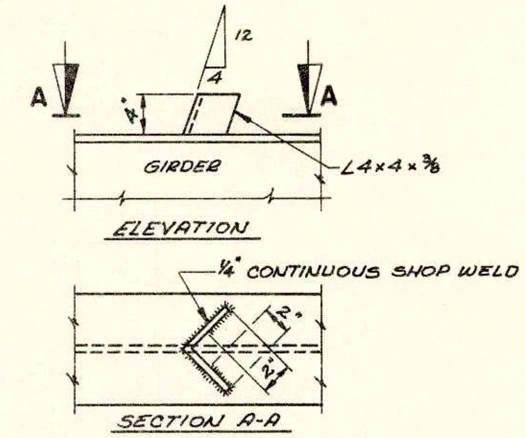
PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
1070-7-71	12	17
FEDERAL PROJECT DESIGNATION I-90-1(62)2		

*NO FIELD WELDING TO TOP FLANGE FOR CONST. PURPOSES IN THIS AREA.

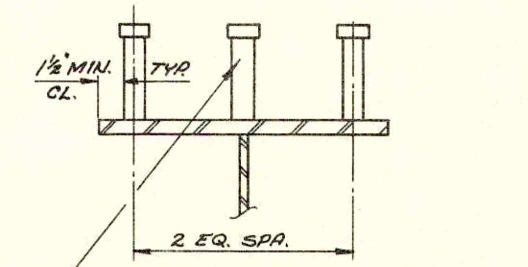


NOTE:
OPT. WELDED SHOP SPLICES MAY BE USED FOR ALL FLANGE & WEB PLATES OVER 60'-0. IF USED, THE LOCATION OF THE SPLICE SHALL BE SHOWN ON THE SHOP DRAWING, AND WILL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

GIRDER ELEVATION

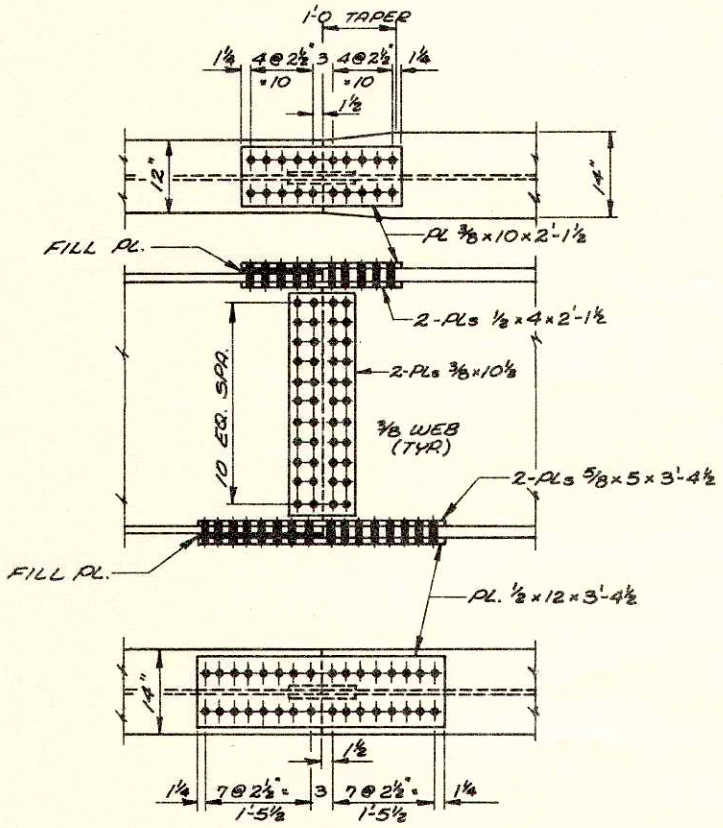


SHEAR CONNECTOR DETAIL



3-SHOP OR FIELD WELDED 7/8" DIA. x 4" LONG STUDS AT ALL PLACES WHERE AN ANGLE SHEAR CONNECTOR IS DETAILED.

ALTERNATE SHEAR CONNECTOR



FIELD SPLICE DETAIL

4 REQ'D

NOTE:
USE 3/4" ϕ HIGH STRENGTH BOLTS IN ALL SPLICES.

CONSTRUCTION GRADES (TOP OF SLAB ELEVATIONS)

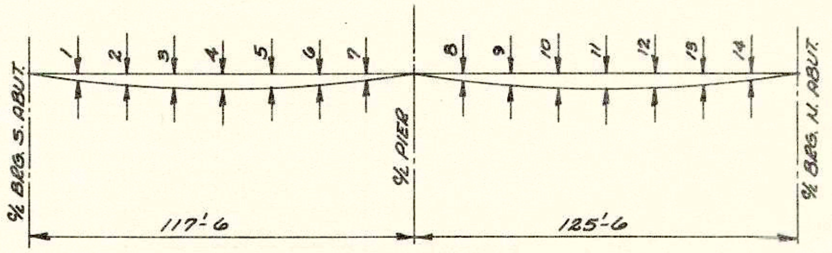
	℄ BRG S. ABUT.	1/8 SPAN	1/4 SPAN	3/8 SPAN	1/2 SPAN	5/8 SPAN	℄ FIELD SPLICE #1	3/4 SPAN	7/8 SPAN	℄ PIER	1/8 SPAN	1/4 SPAN	℄ FIELD SPLICE #2	3/8 SPAN	1/2 SPAN	5/8 SPAN	3/4 SPAN	7/8 SPAN	℄ BRG. N. ABUT
GIRDERS 1 & 2	669.94	671.79	673.64	675.49	677.27	678.70	679.37	679.72	680.34	680.56	680.36	679.70	679.48	678.59	677.11	675.61	674.10	672.59	671.09

ERECTED STEEL ELEVATIONS*

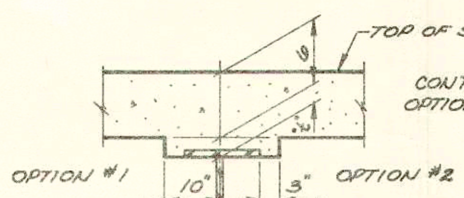
	℄ BRG S. ABUT.	℄ FIELD SPLICE #1	℄ PIER	℄ FIELD SPLICE #2	℄ BRG. N. ABUT.
GIRDERS 1 & 2	669.39	678.98	680.07	679.14	670.54

*T.S.: THESE ELEVATIONS ARE TO TOP OF STEEL (TOP OF SPLICE PLATES AT SPLICE) AND THEY ARE FOR THE MATERIAL AS ERECTED. THE ELEVATION OF THE TOP OF STEEL AT THE FIELD SPLICE POINTS SHALL BE CHECKED AND CORRECTED, IF POSSIBLE, AFTER ERECTION AND BEFORE PERMANENTLY WELDING OR BOLTING THE DIAPHRAGMS IN PLACE.

	DEAD LOAD DEFLECTION	1 1/8 PT	2 1/4 PT	3 3/8 PT	4 1/2 PT	5 5/8 PT	6 3/4 PT	7 7/8 PT	8 1/8 PT	9 1/4 PT	10 3/8 PT.	11 1/2 PT	12 5/8 PT	13 3/4 PT	14 7/8 PT
GIRDERS 1 & 2	CONC. ONLY	13/16	1 7/16	1 5/8	1 1/2	1 1/16	9/16	1/8	3/8	1 1/8	1 7/8	2 3/8	2 7/16	2 1/16	1 3/16
	TOTAL	1 1/8	2	2 3/16	2 1/8	1 9/16	13/16	3/16	9/16	1 9/16	2 11/16	3 3/8	3 1/2	2 15/16	1 11/16



DEAD LOAD DEFLECTION DIAGRAM



CONTRACTOR MAY USE OPTION #1 OR OPTION #2

TO DETERMINE "t": AFTER ALL STRUCTURAL STEEL HAS BEEN ERECTED, ELEVATIONS OF THE TOP FLANGES OR TOP OF SPLICE PLATES WHICHEVER APPLIES, SHALL BE TAKEN AT THE ℄ OF BEARINGS, ℄ OF FIELD SPLICES, AND AT EIGHTH AND QUARTER POINTS OF EACH SPAN WHICH ARE MORE THAN SIX FEET FROM A FIELD SPLICE. THESE ELEVATIONS SUBTRACTED FROM THE GRADE ELEVATIONS, ADJUSTED FOR THE DEAD LOAD DEFLECTION OF THE CONCRETE, MINUS THE SLAB DEPTH, PLUS THE STEEL THICKNESS TO BOTTOM OF THE TOP FLANGE, EQUALS THE HAUNCH DEPTH "t".

SLAB THICKNESS DIAGRAM

No.	Date	Revision	By

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-32-73

Const. Spec. 1969 | Drawn By R.J.G. | Plans Checked F.O'M

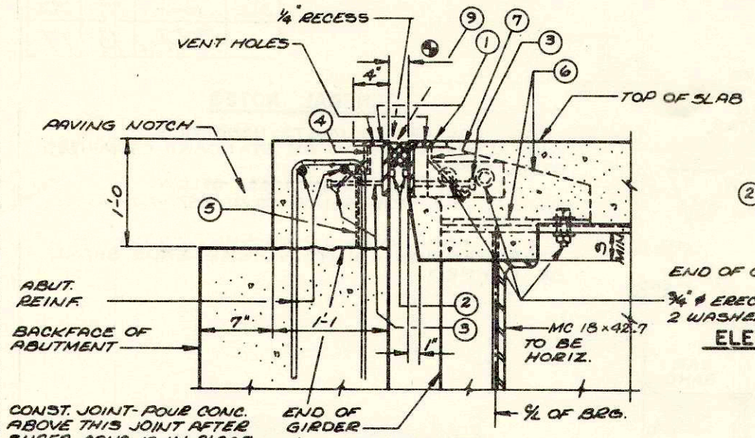
GIRDER DETAILS

SHEET 7 OF 10

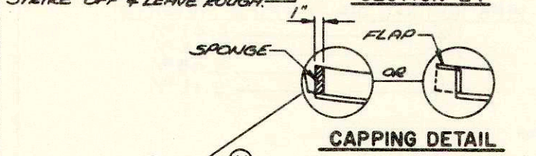
X47725

Form E-B-12-69

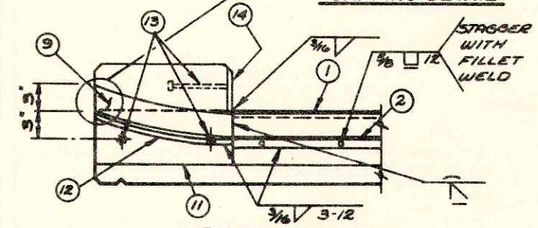
PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
1070-7-71	14	17
FEDERAL PROJECT DESIGNATION I-90-1(62)Z		



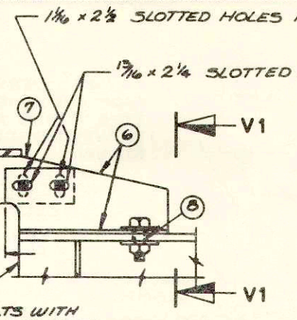
SECTION E1



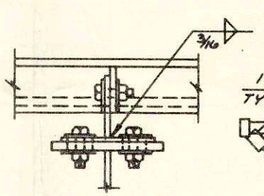
CAPPING DETAIL



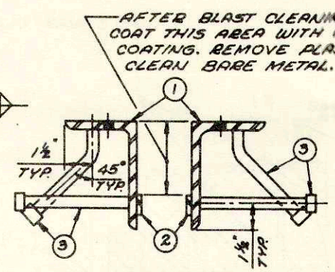
VIEW AT PARAPET



ELEVATION OF SEATING ADJUSTMENT

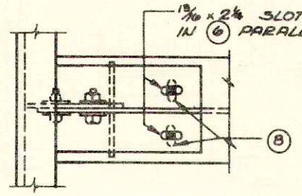


VIEW V1

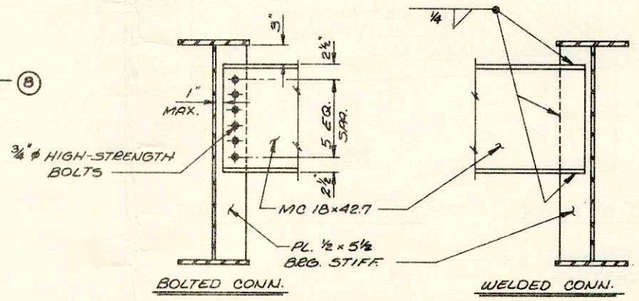


ANGLE AND STUD DETAIL

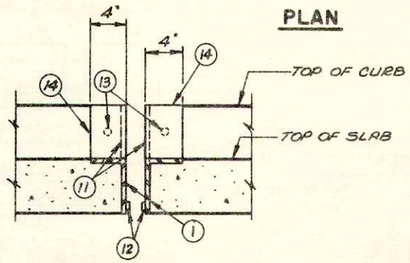
STUDS MAY BE BENT AFTER WELDING



PLAN



END DIAPHRAGM CONNECTION



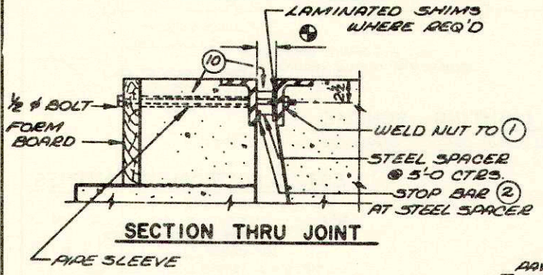
SECTION E2

SHADED UNDERSIDE DECK TEMP (F)

	JT. OPENING			
	ACME	BROWN	ACME	BROWN
90°	1⅞	1⅞	1¹⁵⁄₁₆	1¹⁵⁄₁₆
80°	2	2	1⅞	1⅞
70°	2 1/16	2 1/16	2	2
60°	2⅛	2⅛	2⅛	2⅛
50°	2¼	2¼	2 3/16	2 3/16
40°	2 5/16	2 5/16	2 5/16	2 5/16
30°	2 7/16	2 7/16	2 3/8	2 3/8
	(S. ABUT.)		(N. ABUT.)	

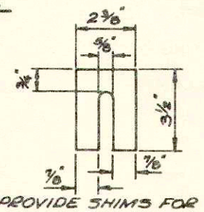
MAXIMUM PRACTIAL INSTALLATION TEMPERATURE IS 85° ACME, 90° BROWN - S. ABUT. 78° ACME, 82° BROWN - N. ABUT.

TEMPERATURE TABLE

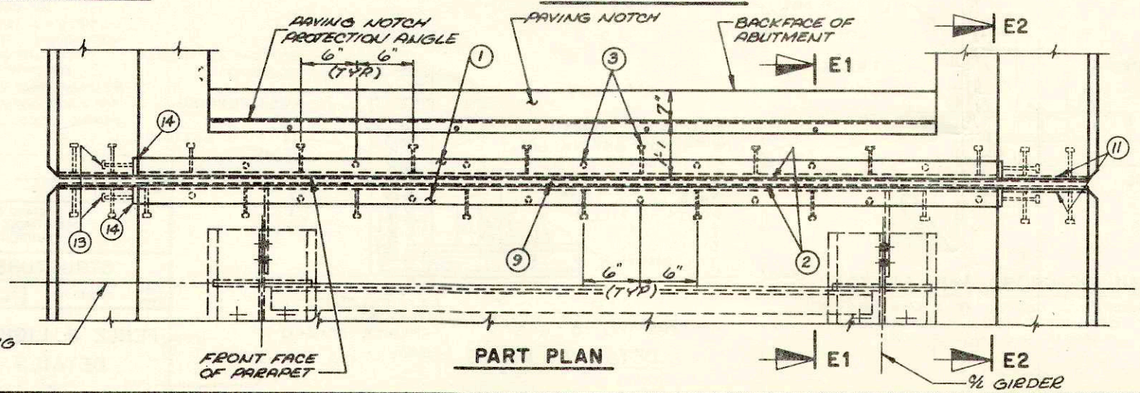


SECTION THRU JOINT

STEEL SPACER



LAMINATED SHIM



PART PLAN

LEGEND

(1) L 6 × 4 × ⅜ - ACME OR L 7×4×⅜ - BROWN WITH 1³⁄₁₆" ϕ VENT HOLES AT 2'-0 CTRS AND ⅜" ϕ HOLES FOR BOLT (10) AT 5'-0 CTRS. ANGLE FACES MUST BE PARALLEL WITHIN ± 1/16" BETWEEN STEEL SPACERS (10).

(2) RETAINER BAR 1 × ¼. WELD TO (1) AS SHOWN.

(3) ⅝ ϕ × 0'-6⅜ LONG STUDS AT 6" ALTERNATE CTRS. WELD TO (1)

(4) L 3 × 2½ × ⅜ × 0'-3 @ 3'-0 CTRS. WELD TO (1). PROVIDE 13/16" ϕ HOLE IN 2½" LEG FOR ROD (5).

(5) ¾ ϕ ROD × 0'-10 LONG WITH NUT. TACK WELD NUT TO BOTTOM OF (4). THREAD 3".

(6) FABRICATE FROM ⅜ WELDED PLATES. 2 - 1³⁄₁₆ × 2¼ SLOTTED HOLES IN BASE PLATE PARALLEL TO ℄ OF GIRDER. 2 - 1³⁄₁₆ × 2¼ SLOTTED HOLES IN STEM PLACED HORIZONTALLY.

(7) ⅜ PLATE. WELD TO LEGS OF (1) WITH ⅜" FILLET WELD NEAR SIDE AND FAR SIDE. 2 - 1⅛ × 2½ SLOTTED HOLES PLACED VERTICALLY.

(8) 2 - 1³⁄₁₆ × 1¾ SLOTTED HOLES IN GIRDER FLANGE FOR 2 - ¾ ϕ ERECTION BOLTS. SLOT TO BE PARALLEL TO ℄ OF BEARING. CLEAR BEARING STIFFENER BY 1⅛" MIN.

(9) PREFORMED B-610 ACME OR H-3500 BROWN NEOPRENE SEAL. EDGE OF SLAB TO EDGE OF SLAB.

(10) BLOCK AND BOLT FOR SHIPMENT AND ERECTION WITH PIPE SLEEVE, STEEL SPACER AND ½ ϕ BOLT AT 5'-0 CTRS.

(11) ⅜ PLATE - SHAPE TO FIT. SHOP WELD TO (1)

(12) RETAINER BAR ½ × ¼. WELD TO PLATE (11) AS SHOWN.

(13) ⅝ ϕ × 0'-6⅜ LONG STUDS. WELD TO PLATES (11) AND (14).

(14) ⅜ PLATE - PLACE FLUSH WITH FACE OF CURB AS SHOWN. SHOP WELD TO (1) AND PLATE (11).

NOTES

CAPPING DETAIL - PROVIDE EITHER:
SCE - 428 CLOSED CELL NEOPRENE SPONGE CONFORMING TO ASTM D1056-67T, 1" THICK CUT TO MATCH THE UNCOMPRESSED SEAL CROSS SECTION AND CEMENTED IN PLACE WITH THE LUBRICANT ADHESIVE, OR A FLAP FORMED BY CUTTING AWAY ALL BUT THE TOP SURFACE OF THE SEAL THEN BENT DOWN AND CEMENTED IN PLACE.

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

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

AFTER CONCRETE HAS SET, BLOCKING (10) SHALL BE REMOVED AND THE JOINT OPENING SHALL BE THOROUGHLY CLEANED.

ONE FIELD SPLICE PERMITTED. IF USED, DETAILS SHALL BE SUBMITTED FOR APPROVAL.

No.	Date	Revision	By

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-32-73

Const. Spec.	Drawn By	Plans Checked
1969	R.J.G.	F.O'M

NEOPRENE SEAL EXPANSION JOINT

SHEET 9 OF 10

X47727

FOM

FORM E-B-12-62

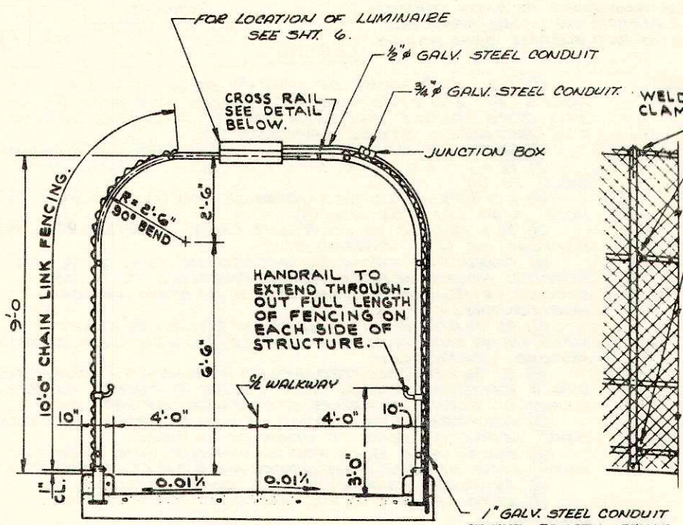
B P R DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	1070-7-71 I-90-1(62)2	15	17

GENERAL NOTES

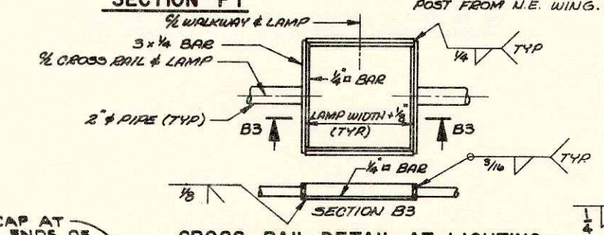
ALL RAILS, POSTS, HANDRAILS, AND SLEEVES ARE TO BE STANDARD GALVANIZED STEEL PIPE.
FOR PIPE WEIGHTS SEE BELOW.
ALL POSTS ARE TO BE SET VERTICAL.

HANDRAILS TO BE CONTINUOUS EXCEPT AT EXPANSION JOINTS WHERE ENDS SHALL BE CAPPED.

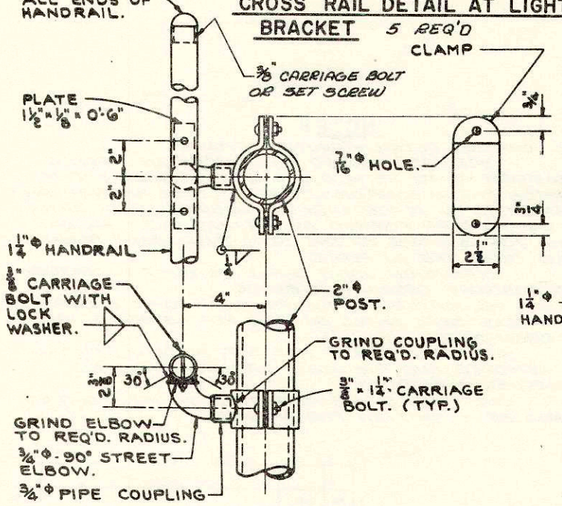
PIPE NOMINAL DIA.	PIPE WEIGHTS
1¼"	2.27 #/L
1½"	2.72 #/L
2"	3.65 #/L
3½"	9.11 #/L



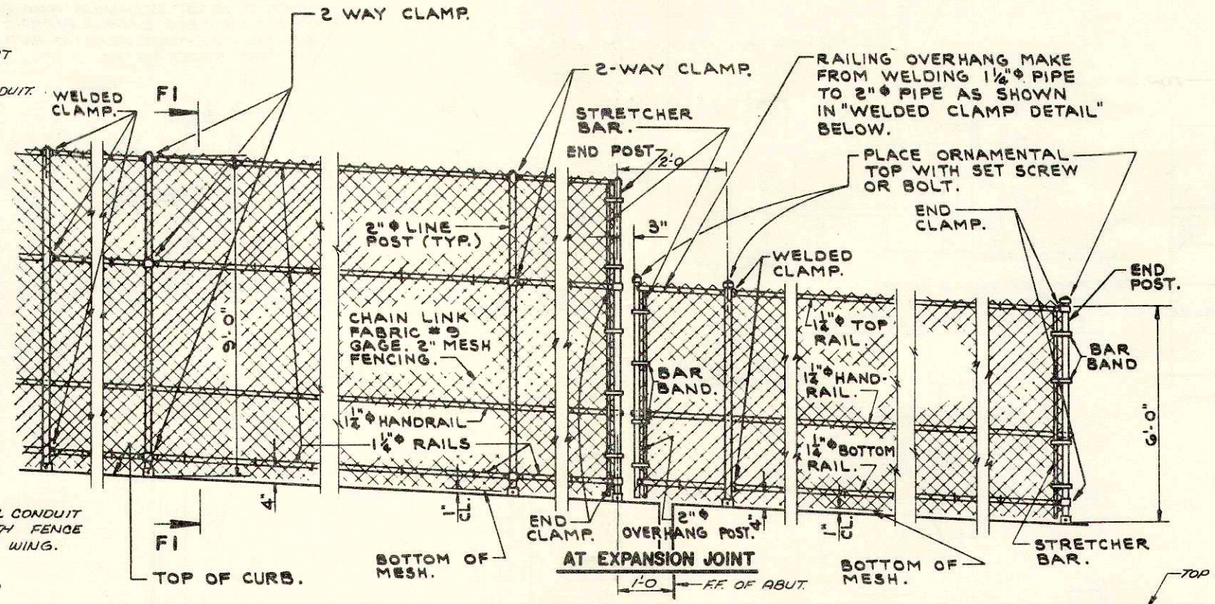
SECTION F1



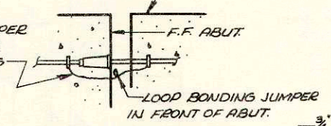
CROSS RAIL DETAIL AT LIGHTING BRACKET 5 REQ'D



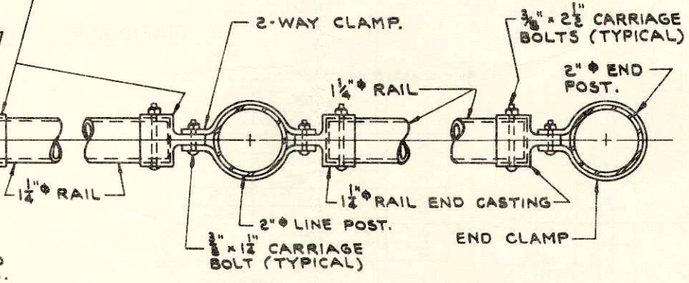
HANDRAIL DETAILS



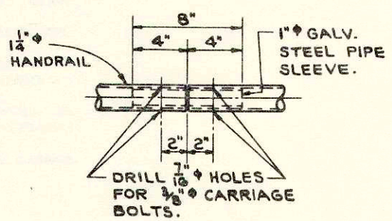
10'-0" FENCE — ELEVATION OF FENCE — 6'-0" FENCE



DETAIL OF EXPANSION FITTING



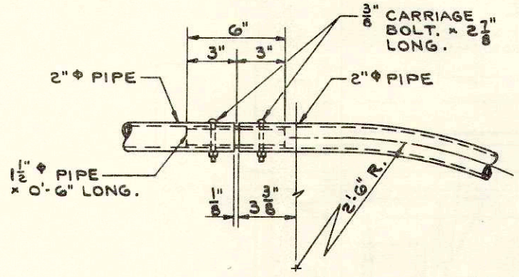
WELDED CLAMP



SPLICE DETAILS
(FOR HORIZONTAL HANDRAILS)

PLAN OF RAILING

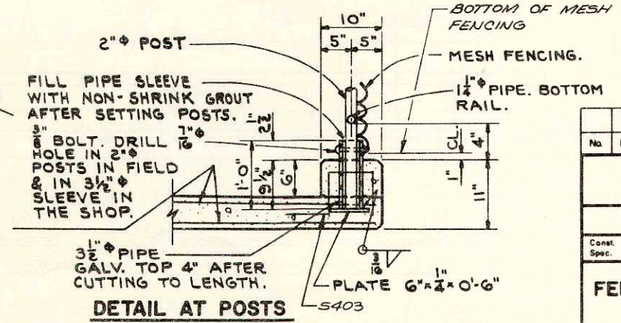
NOTE: PLACE ALL NUTS ON OUTSIDE OF FENCE.



DETAIL OF CROSS RAIL AT TOP

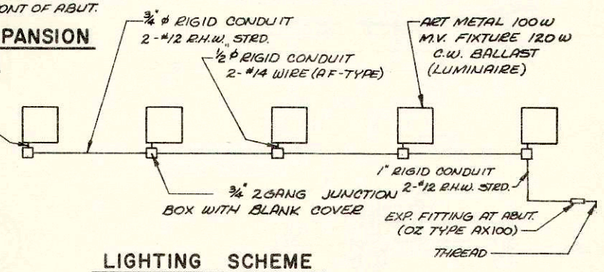
5401

FOR ADDITIONAL DETAILS AT CROSS RAIL SEE LIGHTING BRACKET DETAIL. A CROSS RAIL OCCURS AT EACH 9'-0 FENCE POST.



DETAIL AT POSTS

S403



LIGHTING SCHEME

ALL RIGID CONDUIT SHALL BE GALVANIZED.

EST. ELECTRICAL QUANTITIES

1"ϕ GALV. RIGID CONDUIT	51 L.F.
¾"ϕ " "	186 L.F.
¾" 2 GANG JUNCTION BOX W/ COVER	5 EA.
#12 R.H.W. STRD	196 L.F.
EXPANSION FITTING (OZ TYPE AX-100)	1 EA.
BONDING JUMPER (OZ TYPE BJ 1012-14)	1 EA.
½"ϕ GALV. RIGID CONDUIT	12 L.F.
#14 WIRE (AF-TYPE)	35 L.F.
LUMINAIRES	5 EA.

No.	Date	Revision	By

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-32-73

Const. Spec.	Drawn By	Plans Checked
1969	R.J.G.	F.O'M

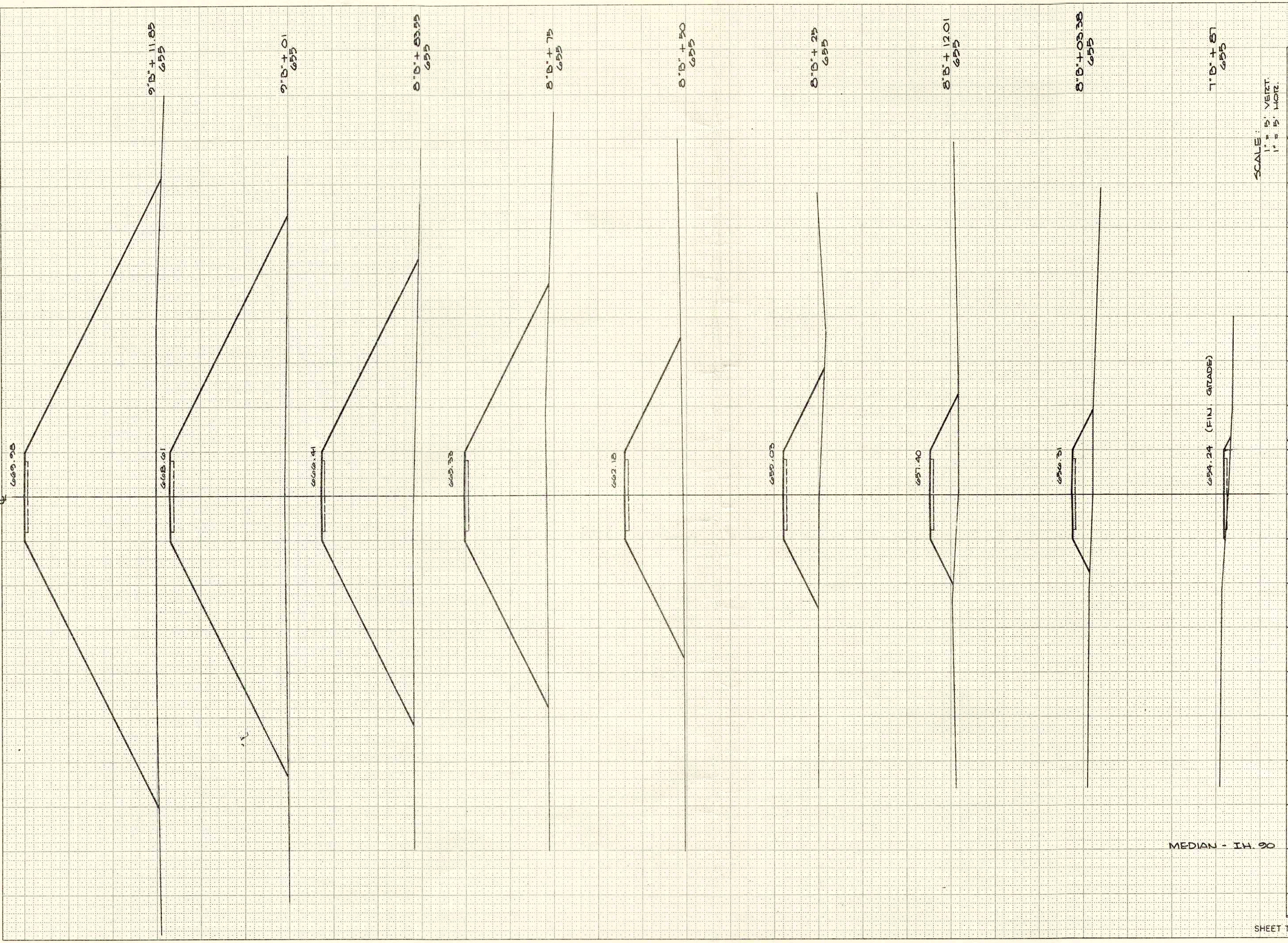
FENCE & LIGHTING DETAILS

SHEET 10 OF 10

X47728

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	I90-1(62)2 1070-7-71	16	17

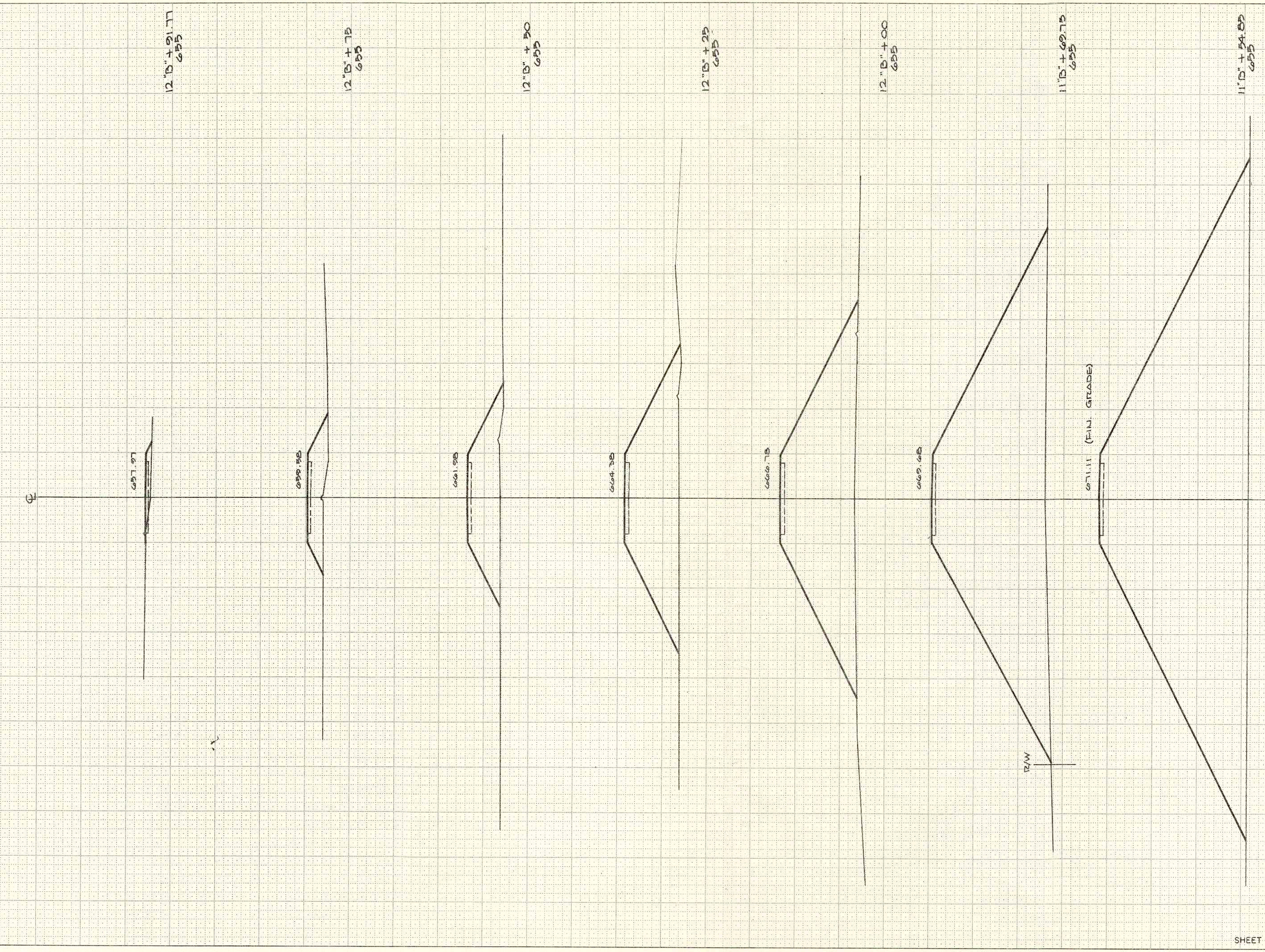
NOTE BOOK TEMPLATE AREAS AREAS CHECKED NO.



NOTE BOOK TEMPLATE AREAS AREAS CHECKED NO.

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.				FILL
7"B"+87						
	16.38	0				11
8"B"+03.38						
	8.63	0				13
8"B"+12.01						
	12.99	0				30
+25						
	25	0				106
+50						
	25	0				194
+75						
	8.55	0				94
+83.55						
	17.45	0				261
9"B"+01						
	10.85	0				217
+11.85						
	27.13	0				313
+39						
MEDIAN - I.H. 90		0				200
SHEET TOTAL		0				1439

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	I 90-1(62)2 1070-7-71	17	17



NO. AREAS AREAS CHECKED

NO. AREAS AREAS CHECKED

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.				FILL
11 "B" + 26						
	28.85	0				385
+ 54.85						
	14.90	0				322
+ 69.75						
	30.25	0				378
12 "B"						
	25	0				169
+ 25						
	25	0				93
+ 50						
	25	0				43
+ 75						
	[illegible]	0				9
+ 91.77						
SHEET TOTAL		0				1399

FUNCTIONAL CROSS SECTION - OPEN DOTTED