

FENCING NOTES

EXPANSION ANCHORED BOLTS OF THE SIZE INDICATED SHALL BE BETHLEHEM MINE ROOF EXPANSION TYPE WITH K-1 SHELL, PHILLIPS RED HEAD SELF DRILLING CONCRETE ANCHORS, CHICAGO EXPANSION BOLT CO. SPECIAL SELF DRILLING ANCHOR OR APPROVED EQUAL.

ALL WORK SHALL CONFORM TO THE M.D.O.T SPECIFICATIONS FOR HIGHWAY CONSTRUCTION - 1984 EDITION EXCEPT AS SHOWN OR NOTED ON THE PLAN.

THE POSTS SHALL BE ROUND POST HAVING AN OUTSIDE DIAMETER OF 2.875" AND WEIGHT OF 5.79 LBS. PER FT. GALVANIZED. NOMINAL 1 1/4" Ø PIPE SHALL BE 1 5/8" OUTSIDE DIAMETER STEEL PIPE OR TUBING WEIGHING 22.7 LBS. PER FT. GALVANIZED.

ALL POSTS AND TUBING SHALL BE FURNISHED WITH MANUFACTURERS STANDARD CONNECTIONS AND ITS MINIMUM WEIGHT SHALL BE WITHIN 5% OF THAT SPECIFIED. POSTS SHALL BE BENT IN THE SHOP AS SHOWN ON THE PLANS.

ALL COMPONENTS ARE TO BE GALVANIZED IN ACCORDANCE WITH A.S.T.M A-153 AFTER FABRICATION.

FABRIC FASTENERS SHALL BE DOUBLE TWISTED #9 GAUGE GALVANIZED STEEL.

ALL FABRIC OR CHAIN LINK FENCE SHALL BE FURNISHED WITH KNUCKLING AT BOTH SELVAGES.

TENSION BARS SHALL BE 3/4" X 1/4" GALVANIZED STEEL.

FENCE FABRIC SHALL BE GALVANIZED, #9 GAGE WITH A 1" MESH.

THE BID ITEM "PEDESTRIAN FENCING - STRUCTURES" SHALL INCLUDE THE FABRIC, POSTS, BRACES, ANCHORED BOLTS, PIPE, BRACKETS, BASE PLATES AND ALL SUITABLE CONNECTIONS AND FITTINGS.

THE CONTRACTOR WILL BE FURNISHED WITH PLANS OF THE EXISTING STRUCTURE IF REQUESTED, HE SHALL ALSO VERIFY FIELD CONDITIONS BEFORE FABRICATION.

THE PAY LIMITS FOR "PEDESTRIAN FENCING - STRUCTURES" IS MEASURED FROM THE TOP OF SIDEWALK TO TOP RAIL OF FENCE.

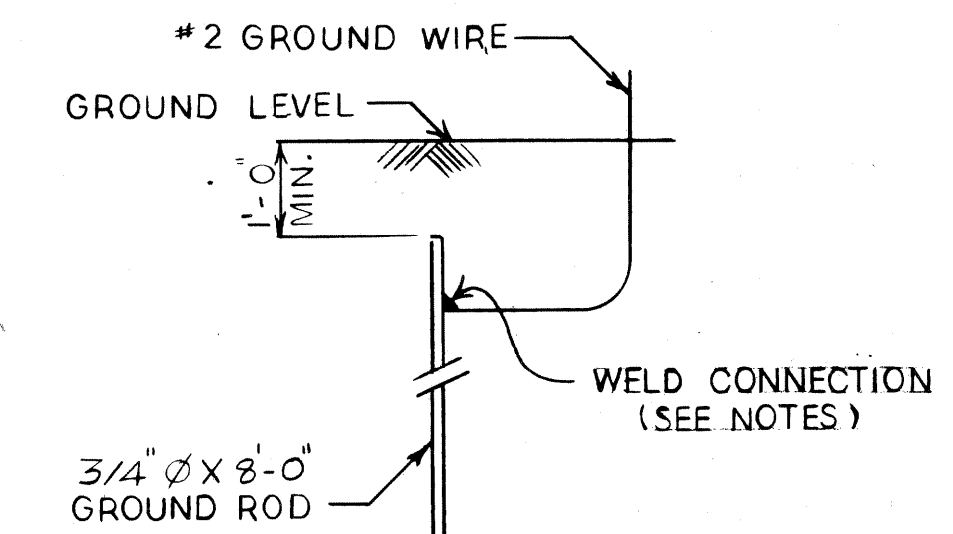
CARE SHALL BE TAKEN SO THAT DEBRIS DOES NOT FALL FROM STRUCTURE.

WHERE SIGNS MOUNTED ON BRIDGE FASCIAS INTERFERE WITH CONSTRUCTION, THEY SHALL BE REMOVED AND RESET AT THE CONTRACTORS EXPENSE.

CARE IS TO BE TAKEN IN PLACING ANCHORED BOLTS AND BRACKETS SO AS TO INSURE THAT THE BRACKETS HOLD THE POSTS FIRMLY AGAINST CONCRETE; SHIM IF NECESSARY.

2" X 2 1/4" H POST WEIGHING 4.1 LBS PER FT. GALVANIZED MAY BE USED AS AN OPTION FOR THE ROUND POST.

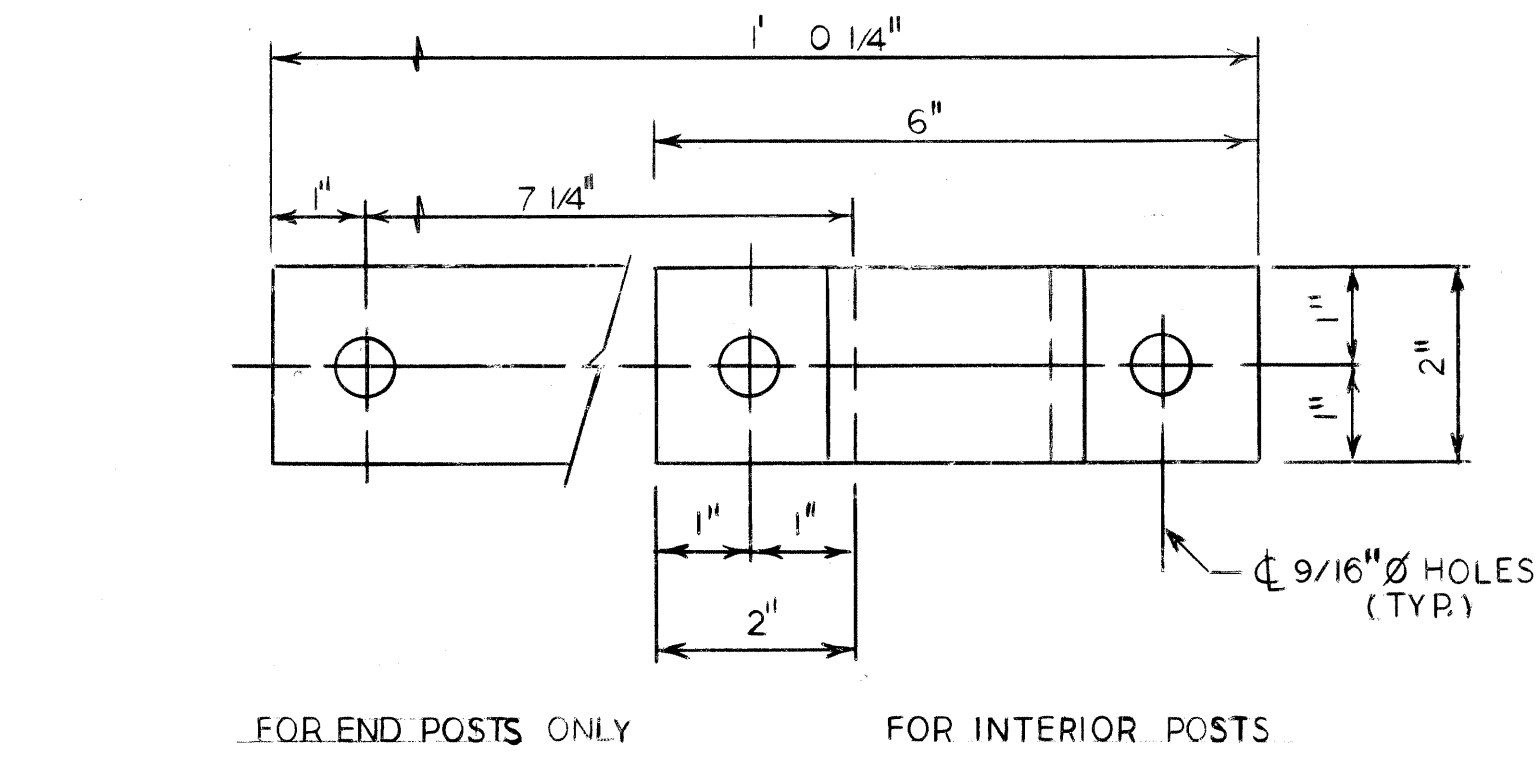
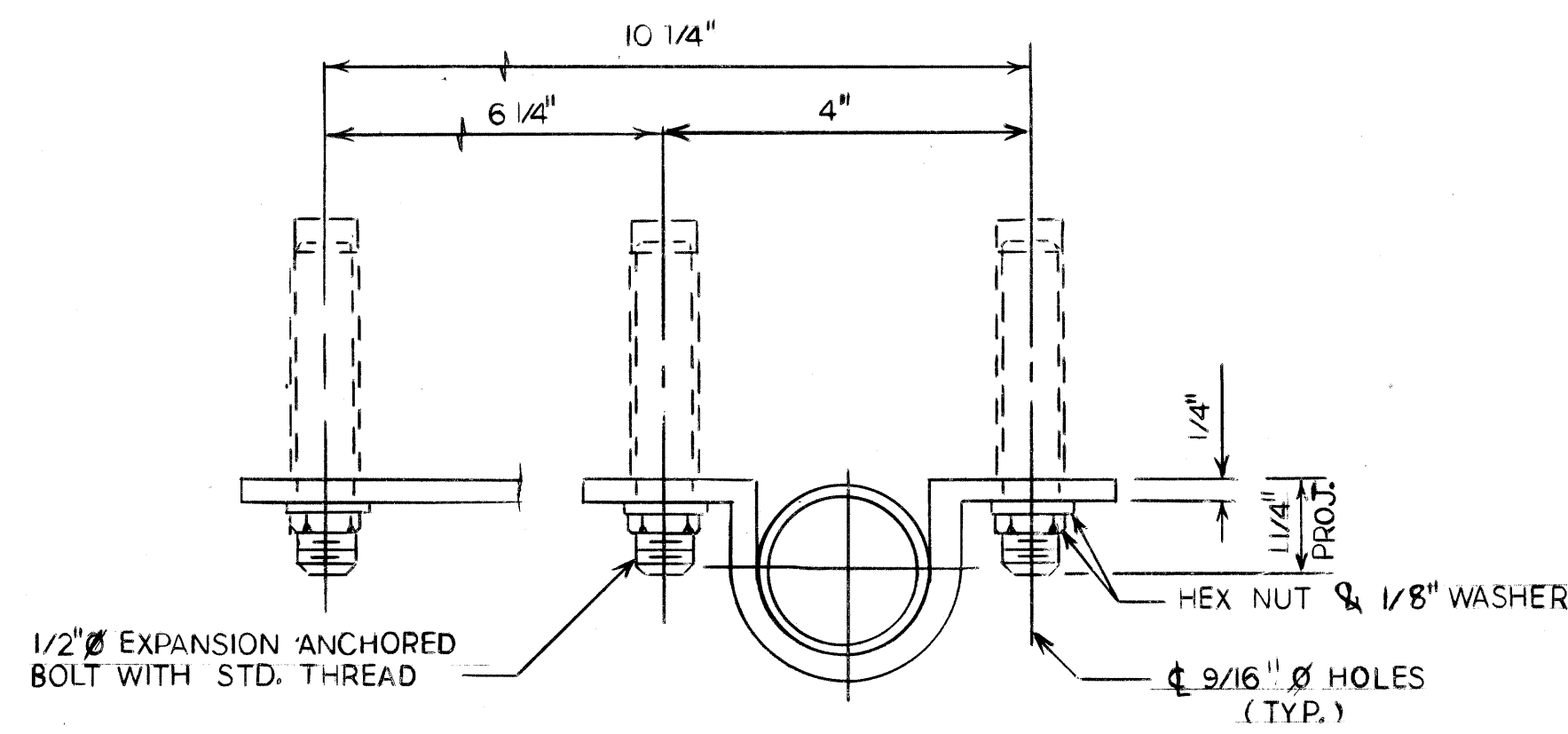
GROUNDING NOTES AND DETAIL



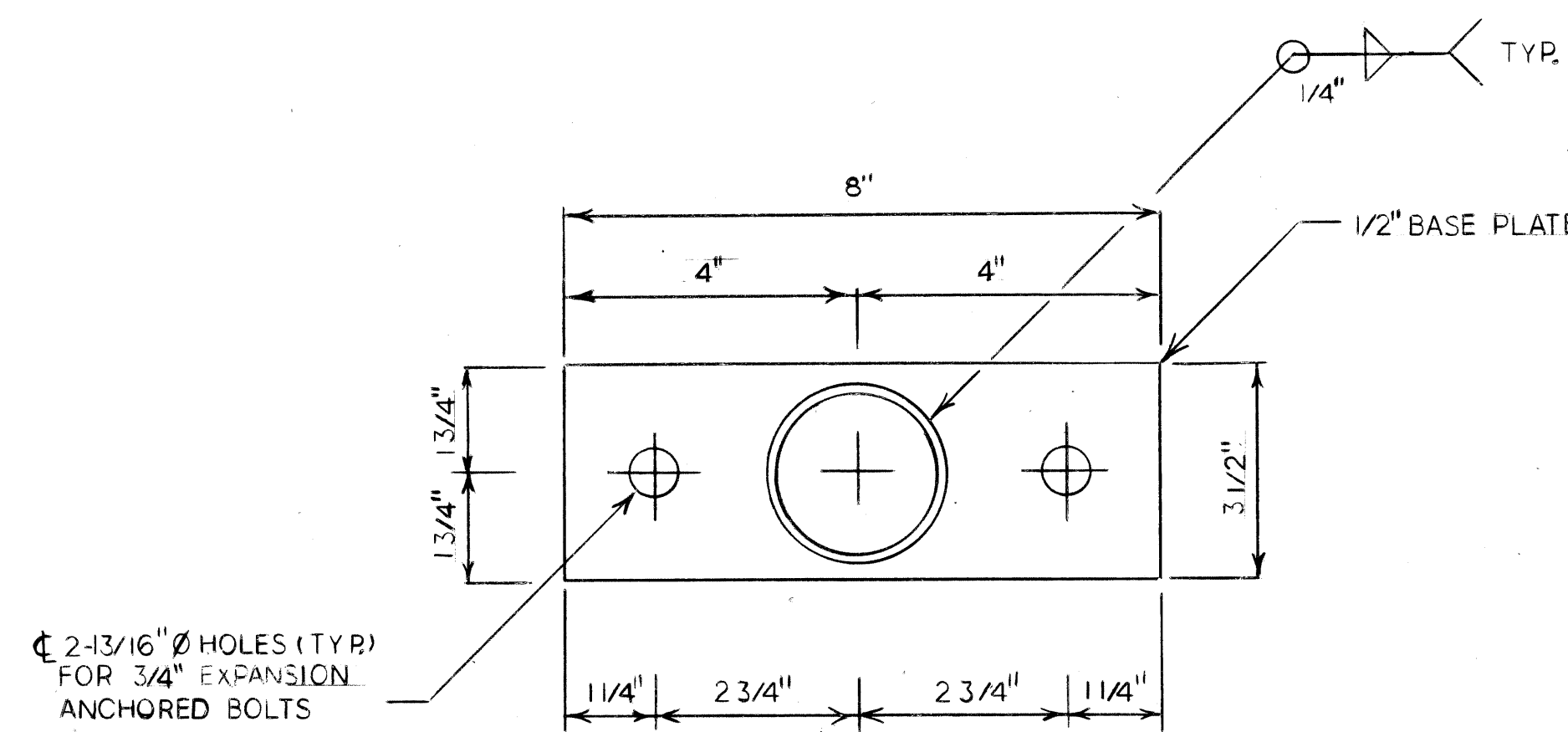
MAINTAIN ONE FOOT MINIMUM COVER OVER GROUND WIRE AND GROUND ROD.  
 ALL UNDERGROUND CONNECTIONS SHALL BE MADE BY CADWELD, THERMITE, GAS OR ARC WELD.  
 EXPOSED CONNECTIONS MAY BE SPLIT BOLT OR CLAMP TYPE.  
 GROUND WIRE SHALL BE BARE #2 AWG AND SHALL CONFORM TO THE LATEST REVISION OF THE APPLICABLE CURRENT ASTM SPECIFICATION ASTM B 33 FOR TINNED SOFT OR ANNEALED COPPER WIRE FOR ELECTRICAL PURPOSES.  
 GROUND ROD SHALL BE STEEL, COPPER CLAD ROD 3/4 MIN. DIA. AND 8'-0" LONG.

MISCELLANEOUS QUANTITIES

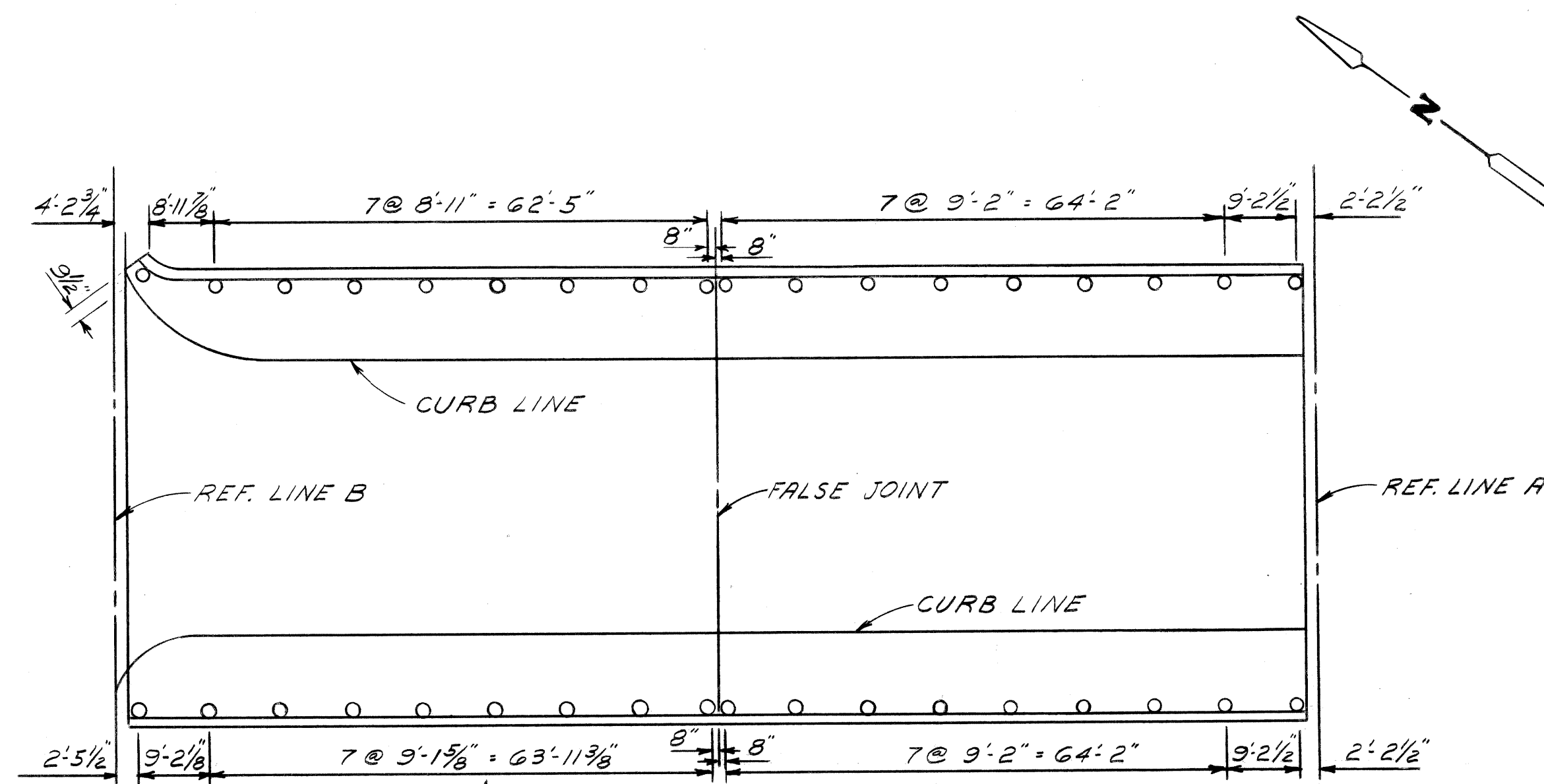
ITEM	UNIT	AMOUNT
PEDESTRIAN FENCING - STRUCTURES	S.F.T.	2940
ELECTRICAL GROUNDING SYSTEM	EACH	1



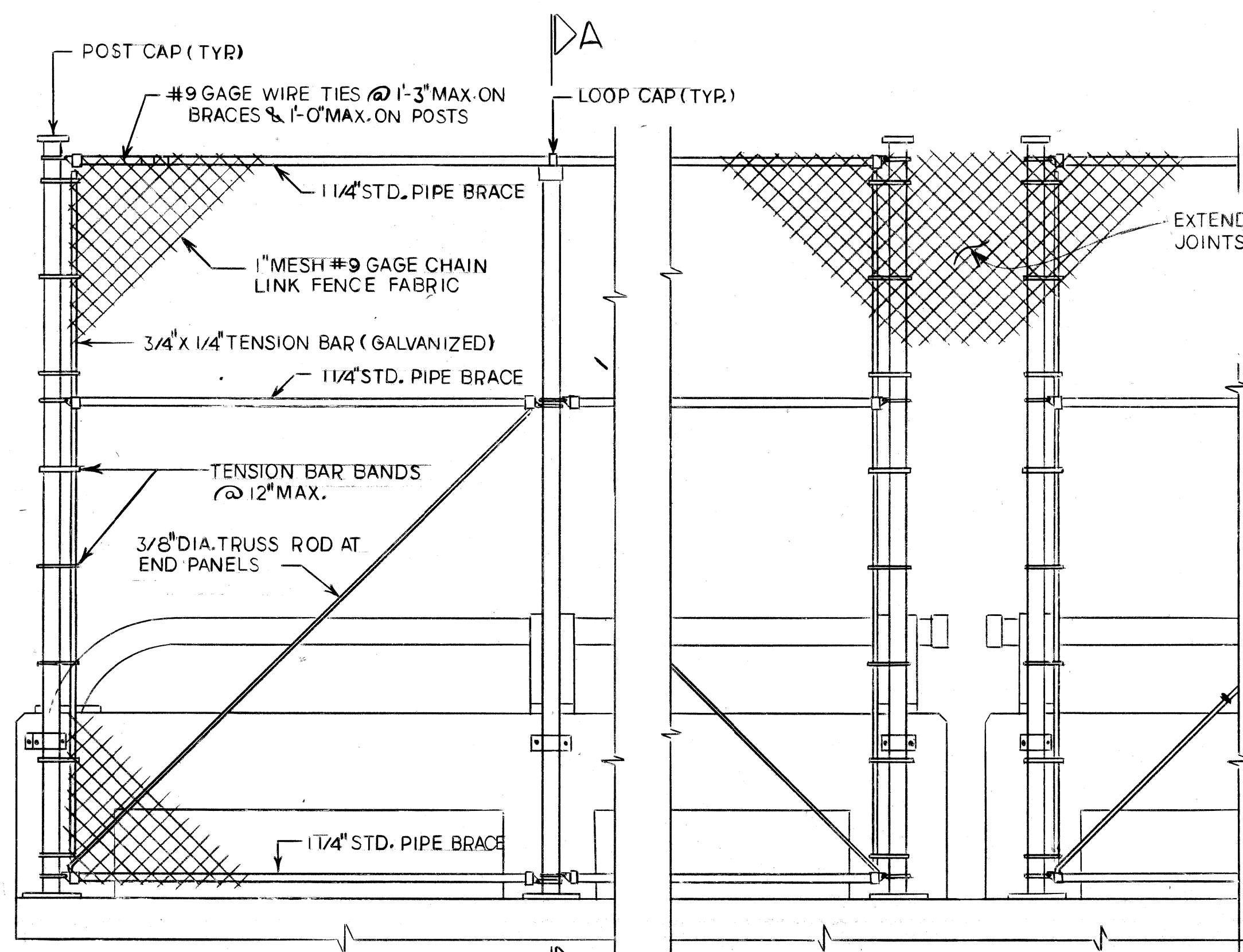
BRACKET DETAIL



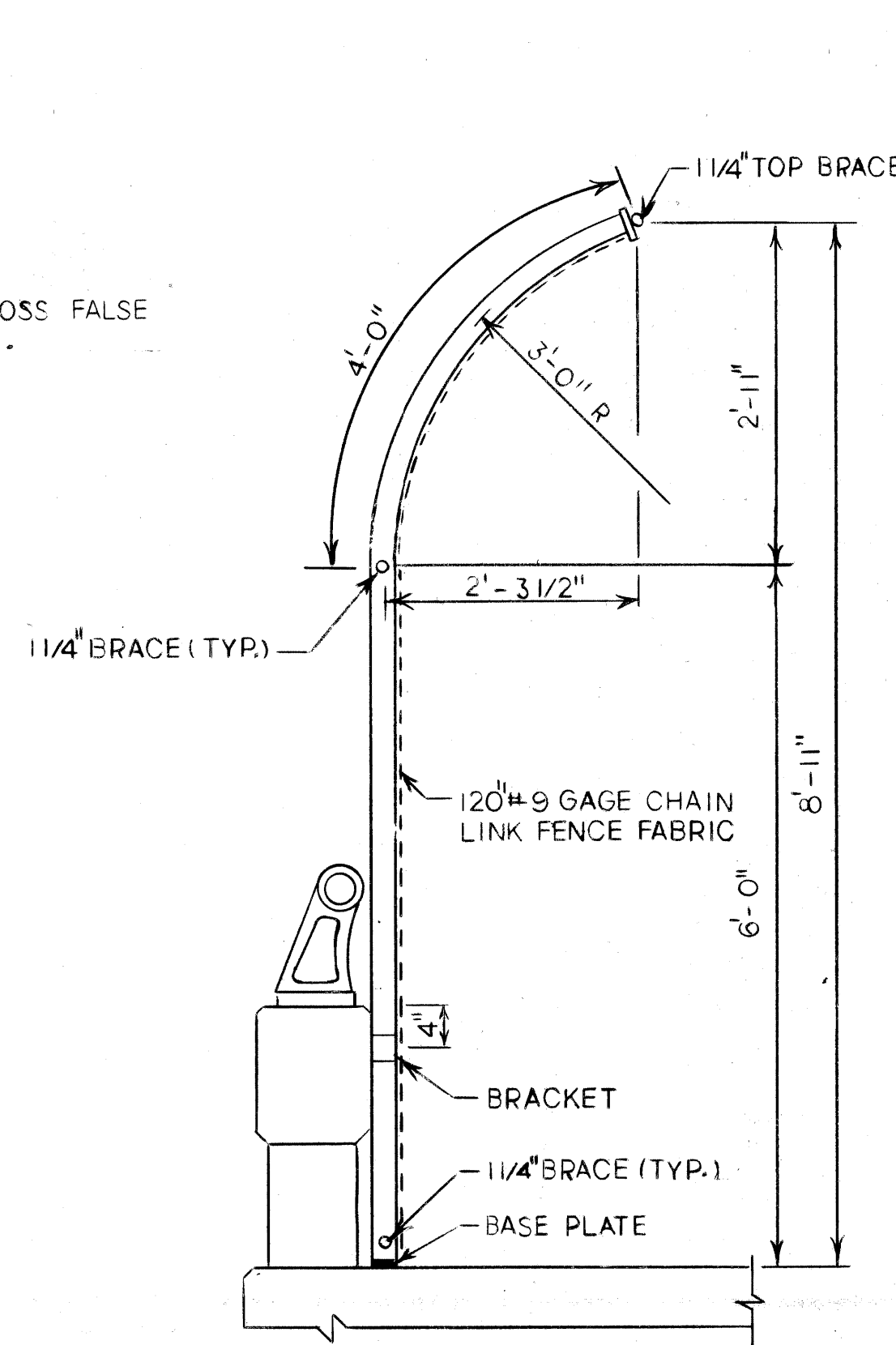
FENCE POST BASE DETAIL



PLAN



TYPICAL ELEVATION



SECTION A-A

dr	n	ck'd	ap	vd	date

designed by H. DICKOW  
 drawn by H. DICKOW  
 checked by  
 approved:  
 STRUCTURAL ENGINEER

CITY OF DETROIT  
 city engineering department  
 for MICHIGAN DEPARTMENT OF TRANSPORTATION

BRIDGE PROTECTIVE SCREENING DETAILS

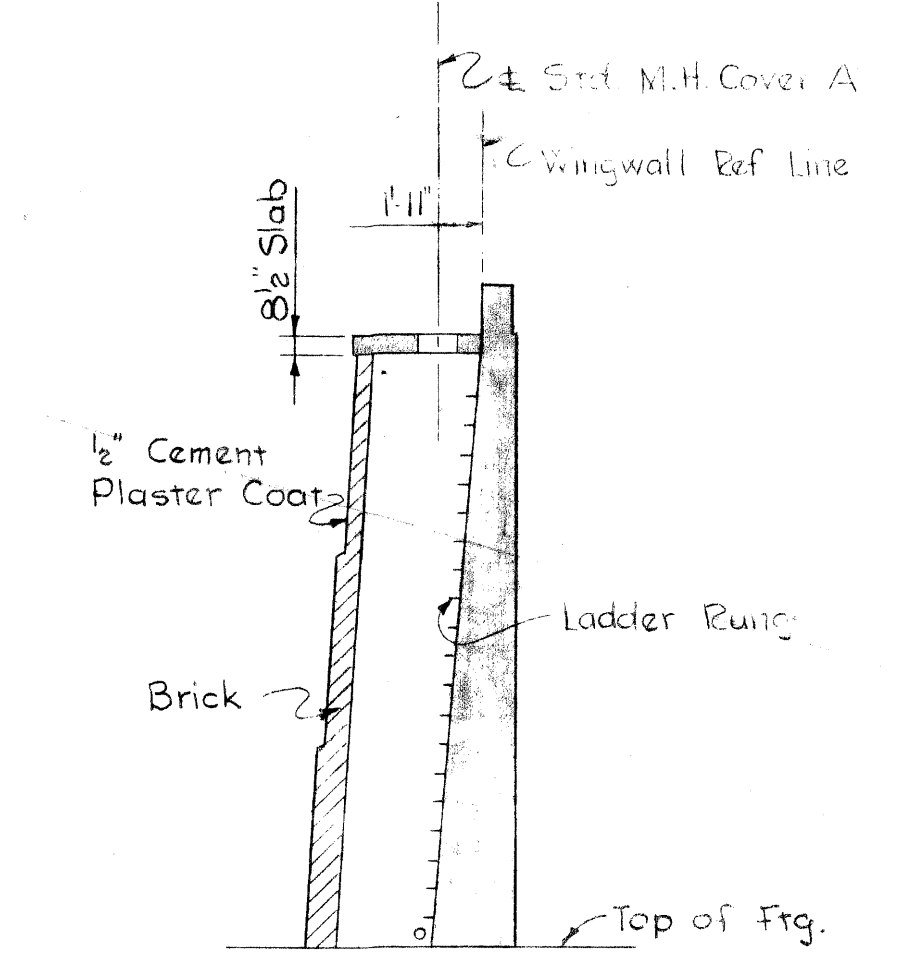
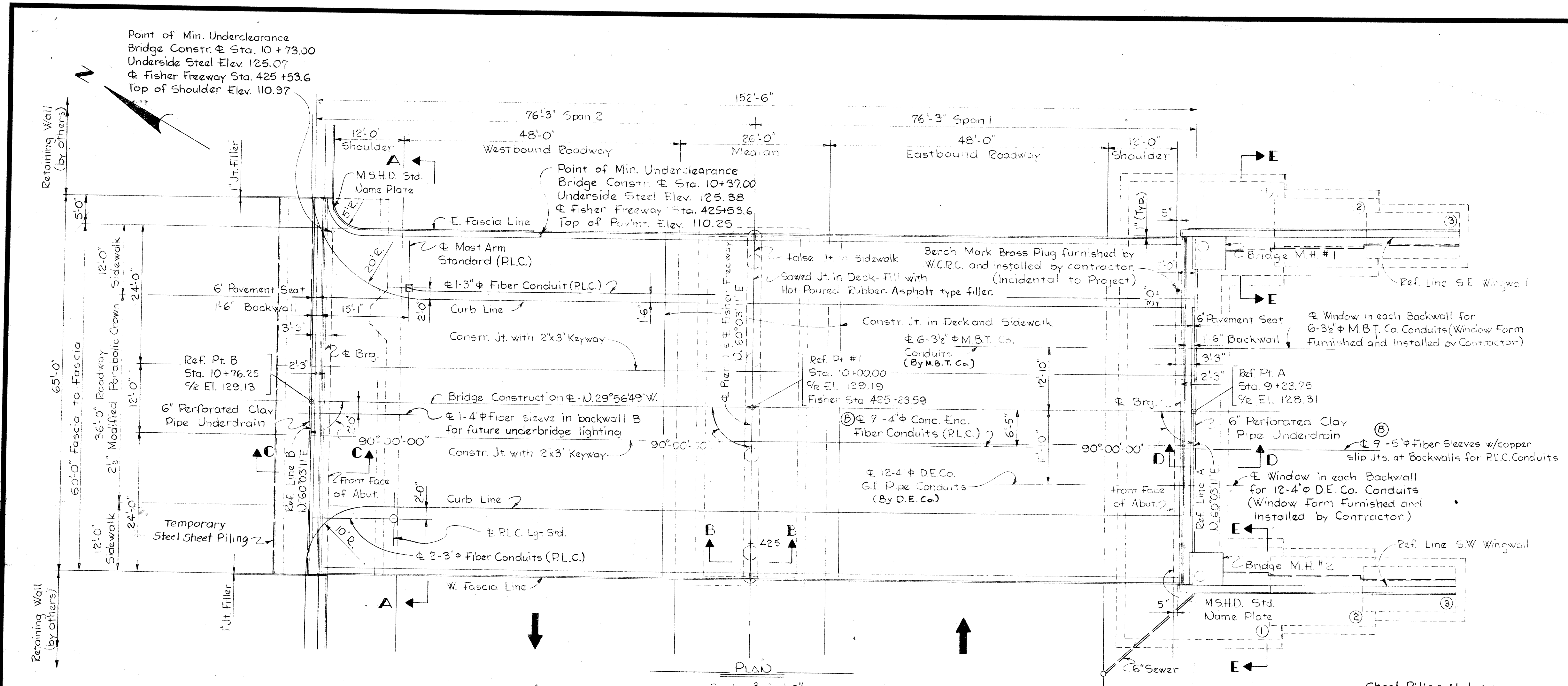
PARK AVE. CROSSING FISHER FWY (1-75) IN DETROIT

S 31 OF 82195

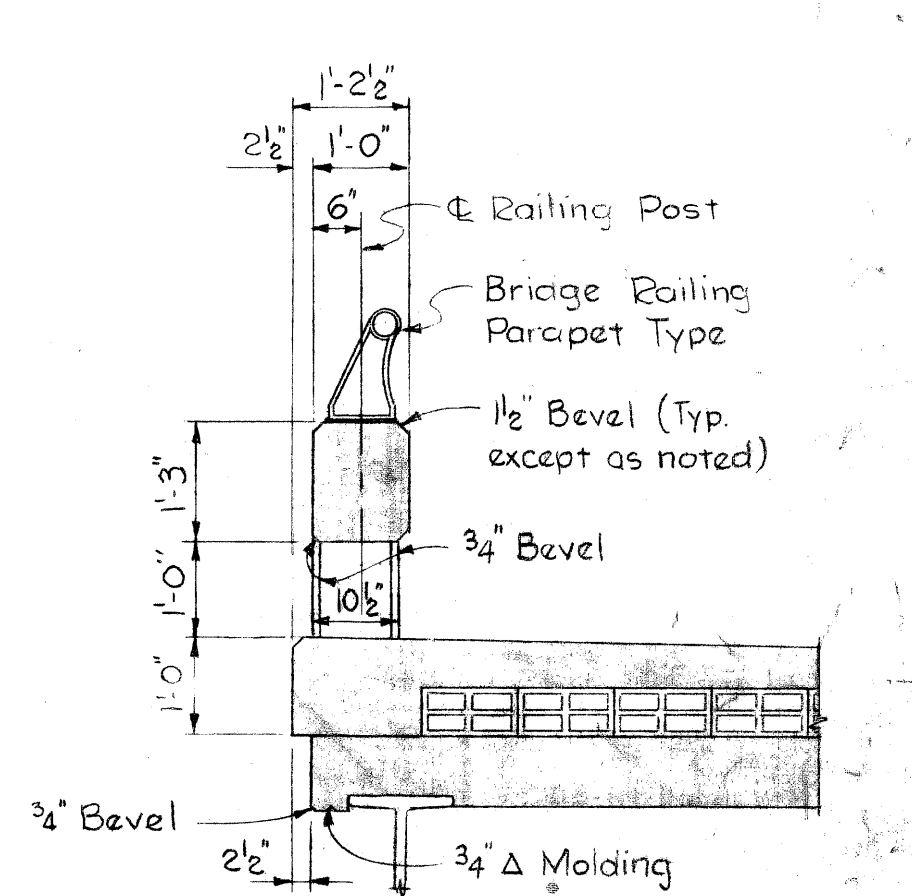
a.o. 87-22-21 contract no.  
 sheet 2 of 3

date 10-1-87





TYPICAL SECTION THRU M.H. AT WINGWALL

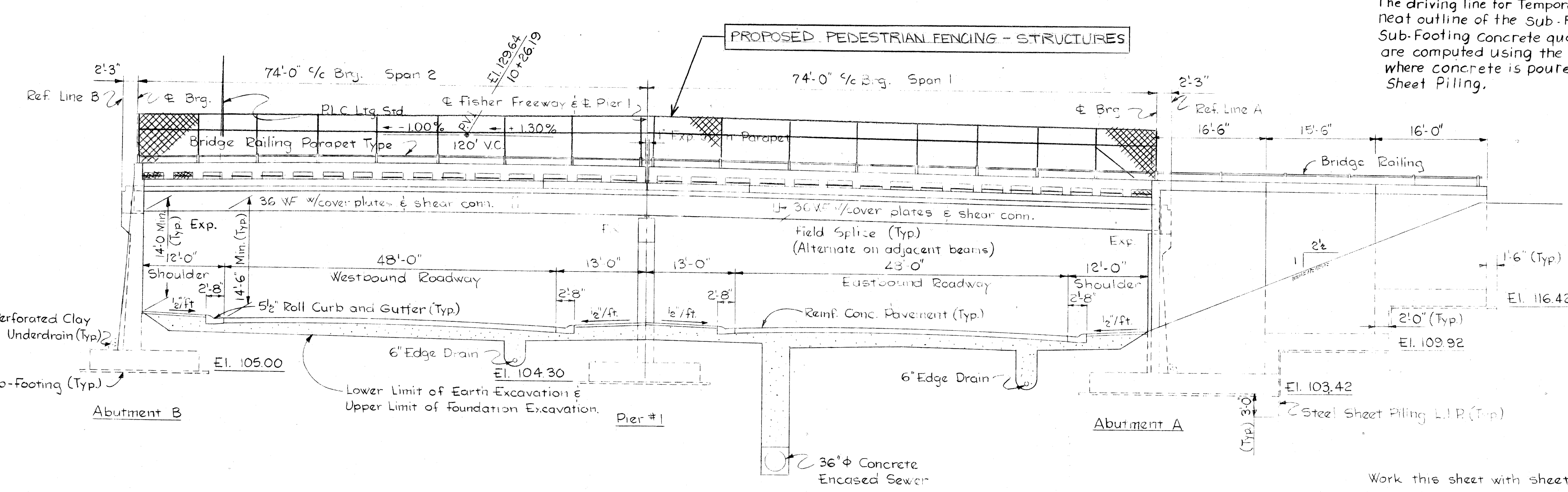


DETAIL OF BRIDGE RAILING PARAPET TYPE Scale: 1/2\"/>

**Sheet Piling Notes:**  
 The driving line for Temporary Steel Sheet Piling is the neat outline of the Sub-Footing.  
 Sub-Footing concrete quantities and Foundation Excavation are computed using the neat outline of the sub-Footing where concrete is poured against Temporary Steel Sheet Piling.

**NOTES:**  
 Back fill around pier footing and toe of each abutment footing with selected excavated material to provide 5' Min. Cover. (Incidental)  
 Top of roadway slab and tops of curbs are parallel to the vertical curve and tangents.  
 1/2 denotes crown of roadway.  
 D.E. Co. denotes Detroit Edison Company.  
 P.L.C. denotes Public Lighting Commission.  
 M.B.T. denotes Michigan Bell Telephone Co.

**MISCELLANEOUS QUANTITIES:**  
 6" Sewer 6'0" deep or less 25 Lin. Ft.  
 Temporary Steel Sheet Piling 1,500 Sq. Ft.



ELEVATION Scale: 3/32\"/>

**COPY EXISTING BRIDGE DETAILS (NOT FOR CONSTRUCTION)**

Work this sheet with sheet 305.

CONTROL SECTION 82195 D

PLANS PREPARED BY  
**CITY OF DETROIT**  
 DEPARTMENT OF PUBLIC WORKS  
 CITY ENGINEERS OFFICE  
 BUREAU OF HIGHWAYS AND EXPRESSWAYS

CORRECT *[Signature]* JOB No. PW 1002 (2)  
 RECOMMENDED FOR APPROVAL *[Signature]* Engineer of Design

NO.	DESCRIPTION	DATE	BY
B	Changed No. of 4" P.L.C. Conduits	4-23-65	C.M.

**MICHIGAN STATE HIGHWAY DEPARTMENT**

PARK AVE. CROSSING THE FISHER FREEWAY IN DETROIT

**GENERAL PLAN OF STRUCTURE**

CITY OF DETROIT

DESIGNED BY	<i>[Signature]</i>
DRAWN BY	<i>[Signature]</i>
CHECKED BY	<i>[Signature]</i>
APPROVED	DESIGN SUPERVISING ENGINEER
APPROVED	ENGINEER OF DESIGN - CONSULTANTS

SHEET 3 OF 3  
**S31 of 82195 D**