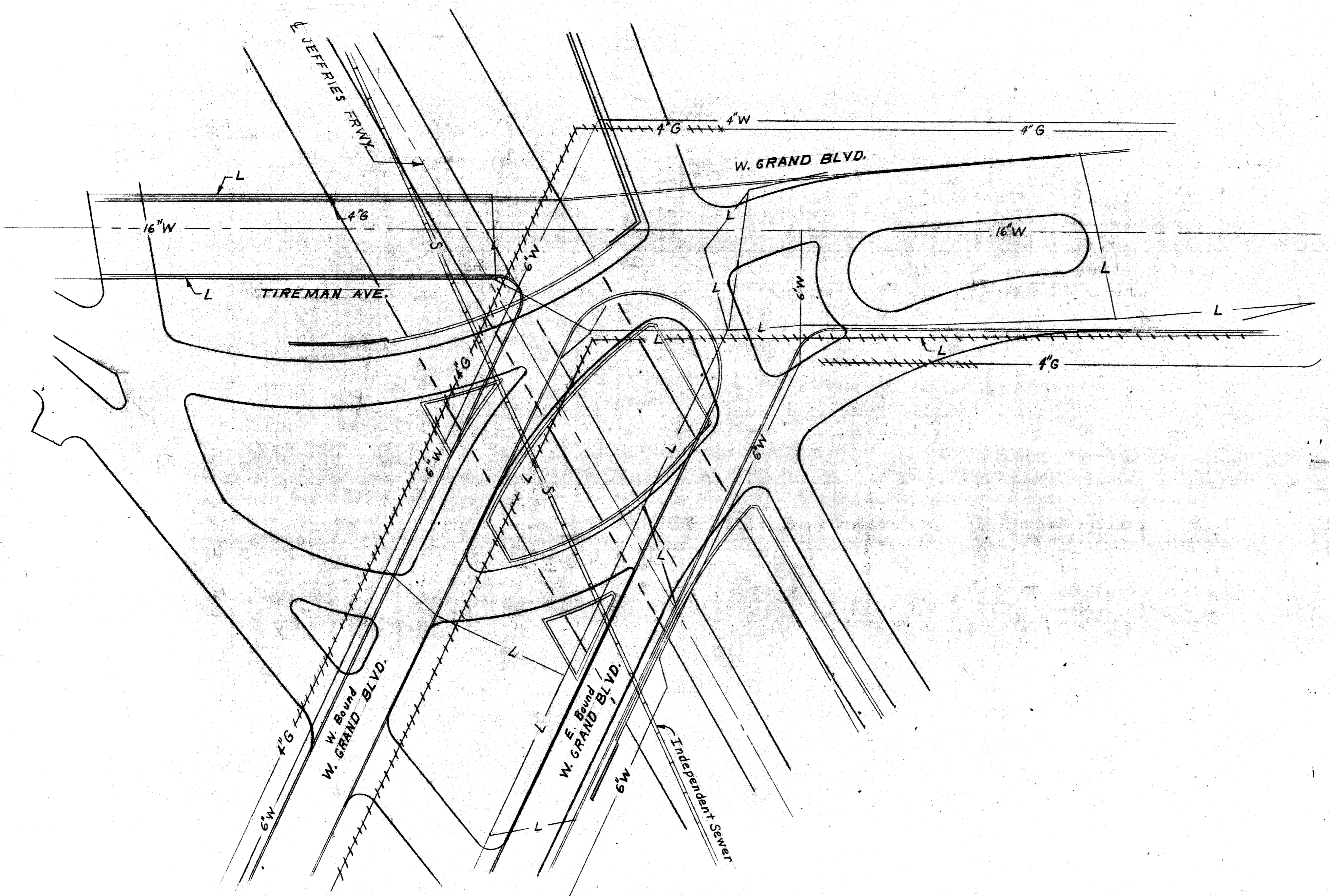


LEGEND

UTILITY	Deleted or Abandoned		New Work by Others	New Work by Contractor
	Existing	Deleted or Abandoned		
Michigan Consolidated Gas Co.	— G —	----- G -----		
Detroit Water Dept.	— W —	----- W -----		
Expway and City of Detroit Sewers	— S —	----- S -----		
Public Lighting Commission	— L —	----- L -----		

NOTE:

Bridge construction and utility alterations are included in package contract for control section 82123J.
 The contractor shall locate all active underground utilities prior to starting work and shall conduct his operations in such a manner as to insure that those utilities not requiring relocation will not be disturbed.



SITUATION PLAN
 Scale: 1" = 40'

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

APPROVED _____
 STRUCTURAL ENGINEER

JOB NO.
 PW 990(3)

MICHIGAN DEPARTMENT OF STATE HIGHWAYS

WEST GRAND BLVD. CROSSING
 THE JEFFRIES FREEWAY IN DETROIT

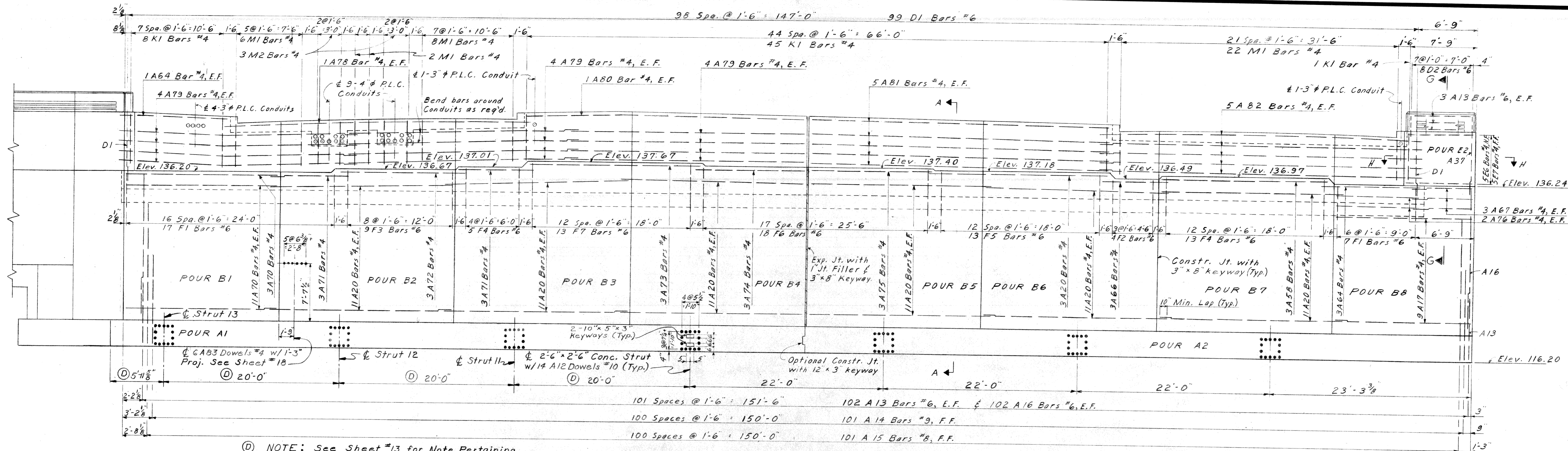
**EXISTING UTILITIES AND
 PROPOSED ALTERATIONS**

CITY OF DETROIT

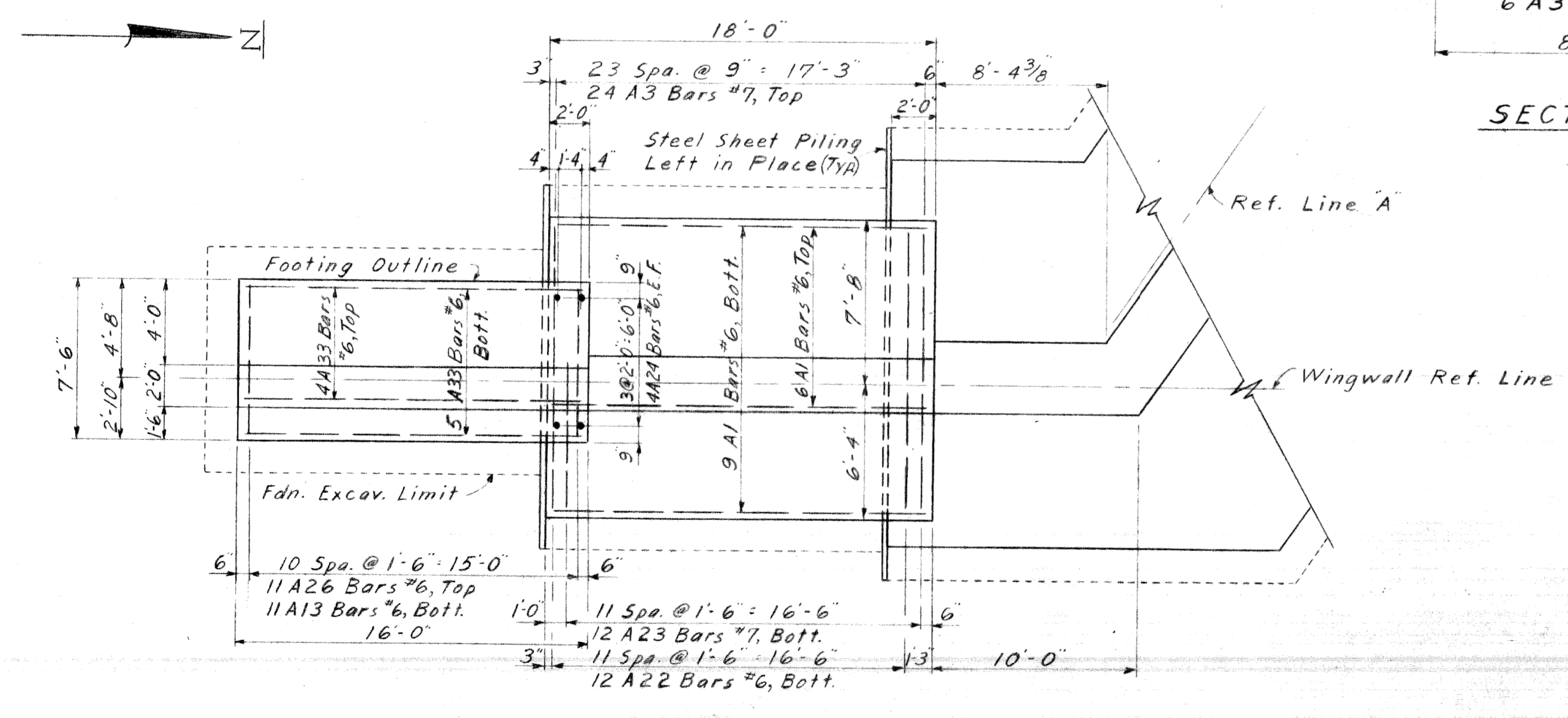
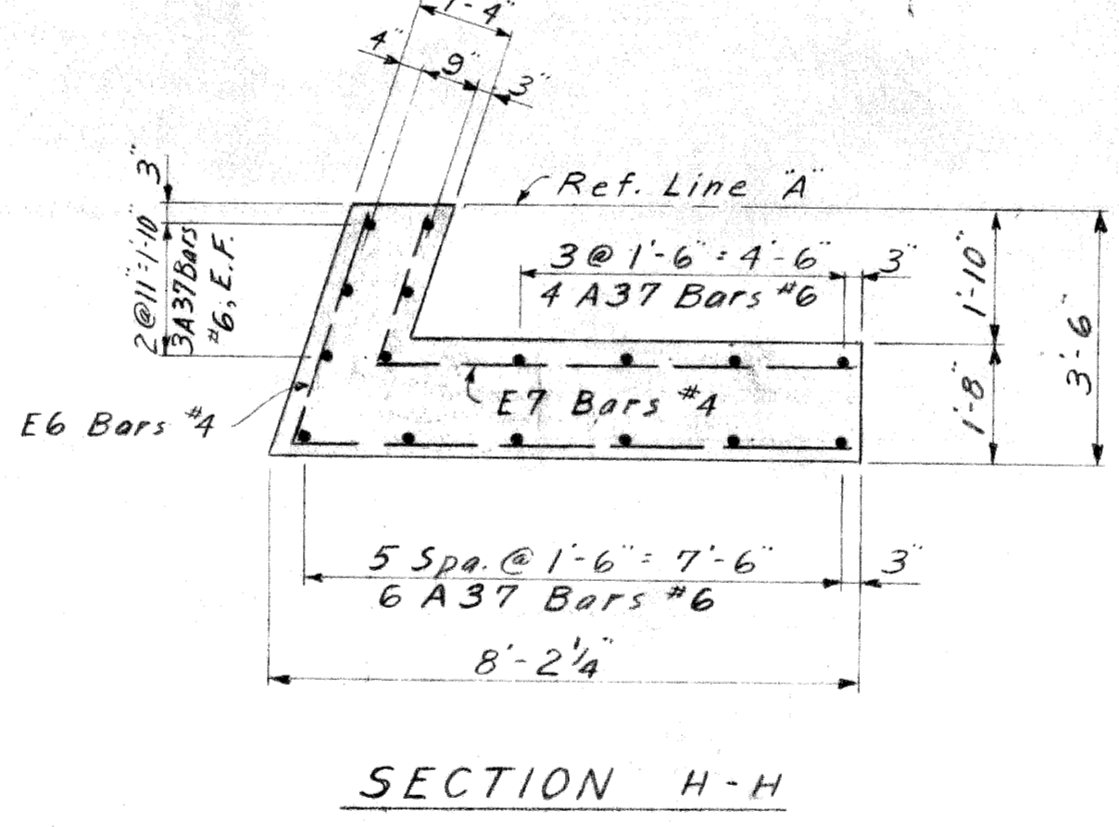
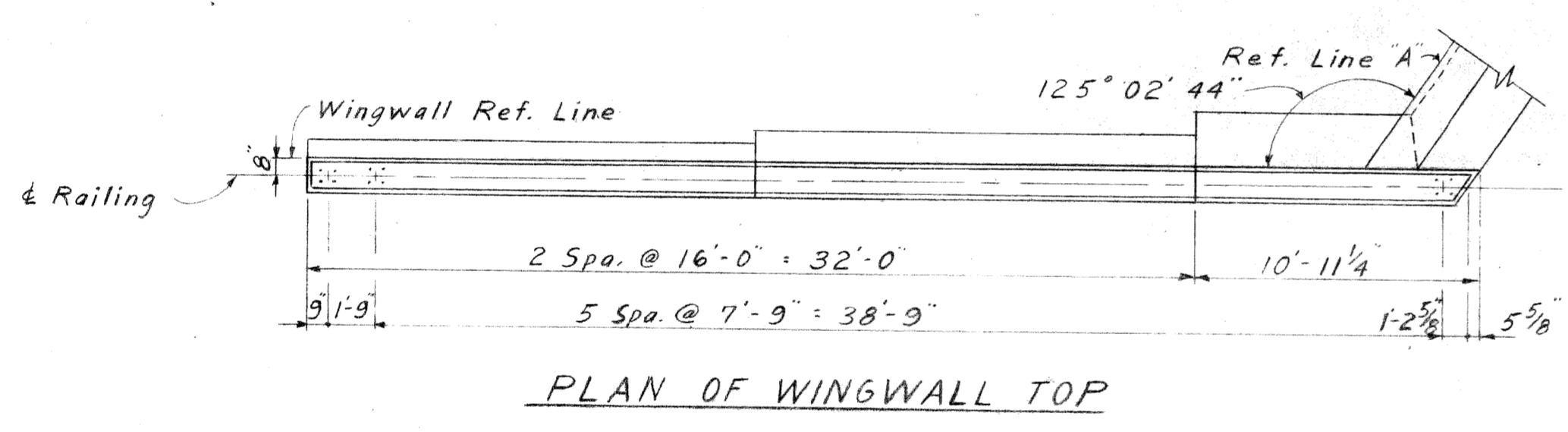
NO.	DESCRIPTION	DATE	BY

SQUAD BOSS _____
 DRAWN BY _____
 CHECKED BY _____
 SHEET 10 OF _____

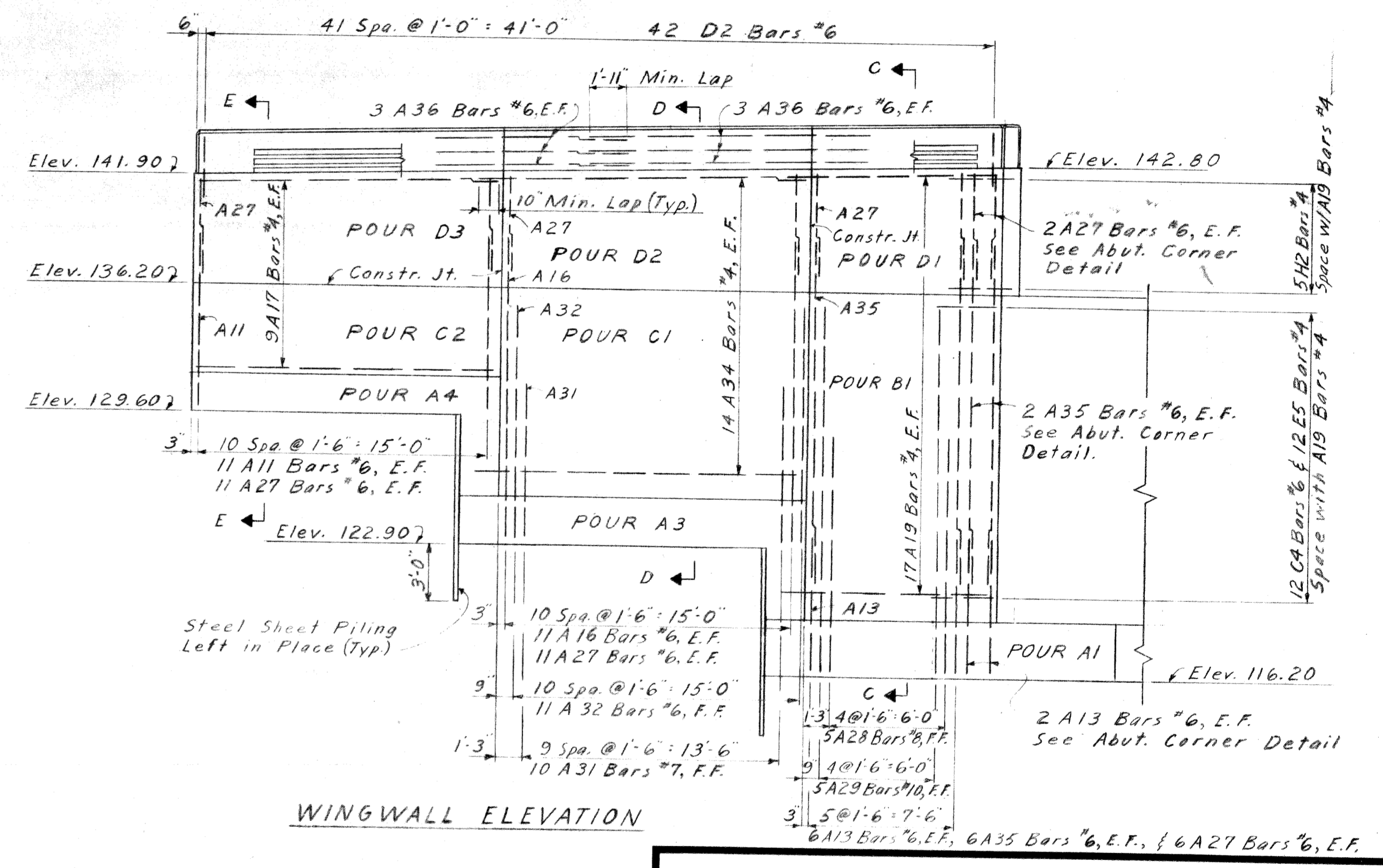
S36,S37 of 82123J



ELEVATION (S37)



WINGWALL FOUNDATION PLAN



WINGWALL ELEVATION

For Sect GG See S4.17

PLANS PREPARED BY
 CITY OF DETROIT
 DEPARTMENT OF PUBLIC WORKS
 CIVIL ENGINEERING OFFICE
 BUREAU OF HIGHWAYS AND EXPRESSWAYS

APPROVED: *H. Cant*
 STRUCTURAL ENGINEER

JOB NO.
 PW 990(3)

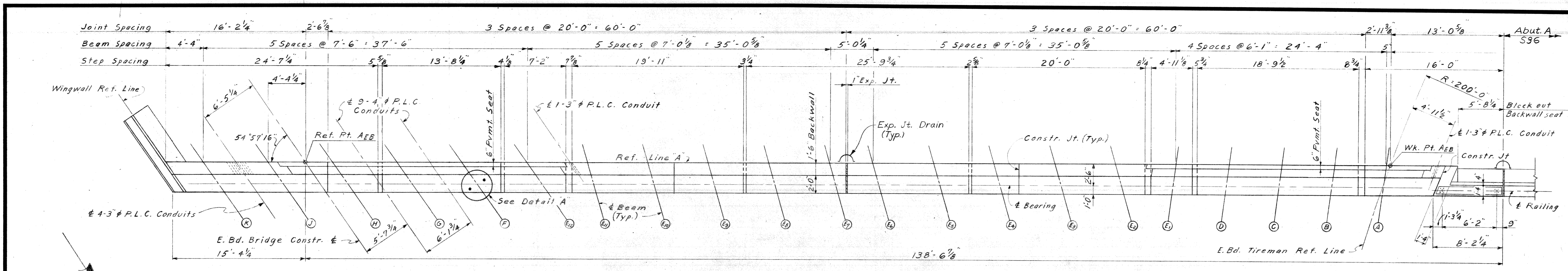
MICHIGAN DEPARTMENT OF STATE HIGHWAYS

ABUTMENT A DETAILS

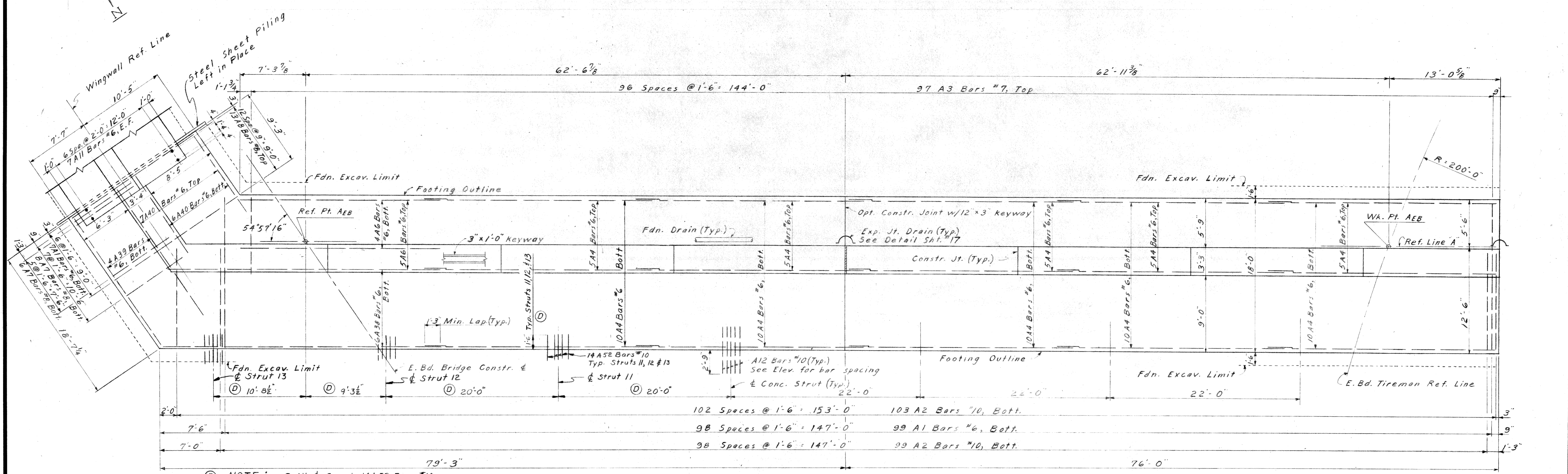
REVISIONS			
NO.	DESCRIPTION	DATE	BY
D	Add 3 Struts	3/6/71	R.R.R.

CITY OF GERRIT
 SQUAD BOSS: *W.H.H.*
 DRAWN BY: *J.B.W.*
 CHECKED BY: *J.B.W.*
 SHEET 14 OF 56

S36,S37 of 82123J



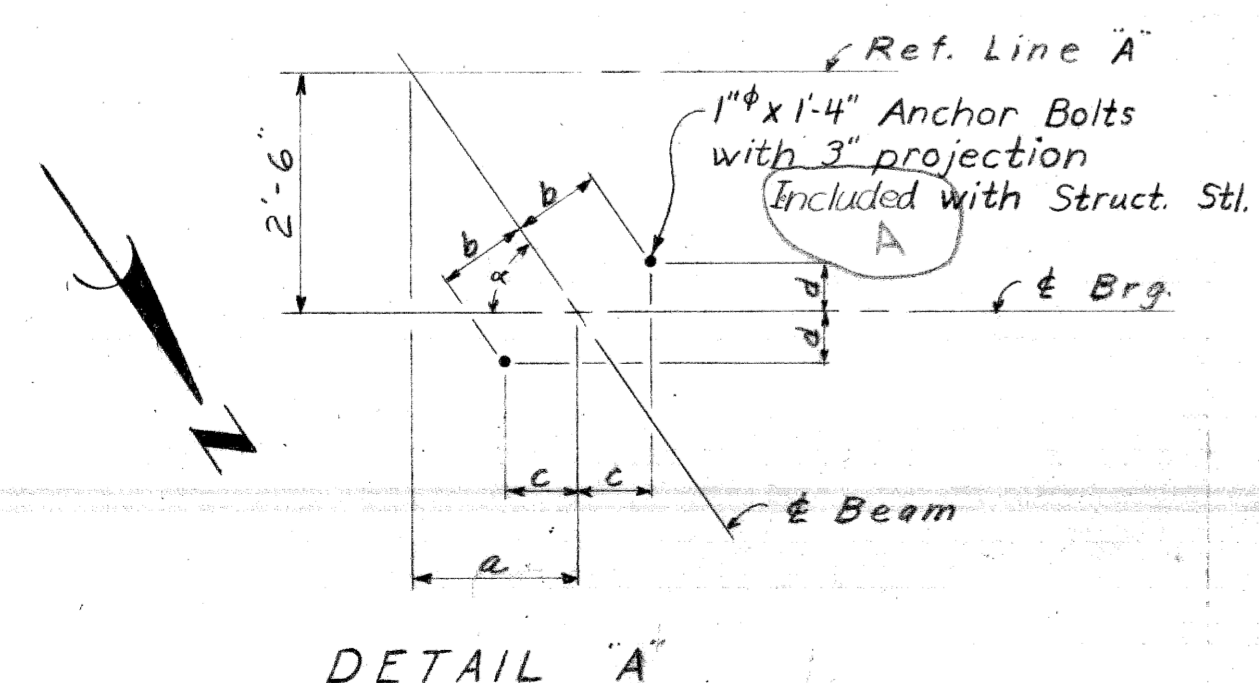
PLAN OF TOP (S37)



FOUNDATION PLAN (S37)

① NOTE: Drill & Grout 14A52 Bars #10 for Struts 11, 12 & 13.

Max. average foundation pressure D.L. only = 2400 PSF.
Max. foundation pressure D.L. and L.L. = 3000 PSF.



DETAIL 'A'

ANCHOR BOLT OFFSETS					
BEAMS	a	a	b	c	d
A-E	83° 03' 56"	3 3/8"	11"	10 15/16"	15 1/16"
E2-E11	73° 50' 03"	8 1/2"	11"	10 9/16"	3 1/16"
E12-K	54° 57' 16"	1-3 1/8"	11"	9"	6 5/16"

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

APPROVED: *J. J. Conant*
STRUCTURAL ENGINEER

JOB No.
FW 990(3)

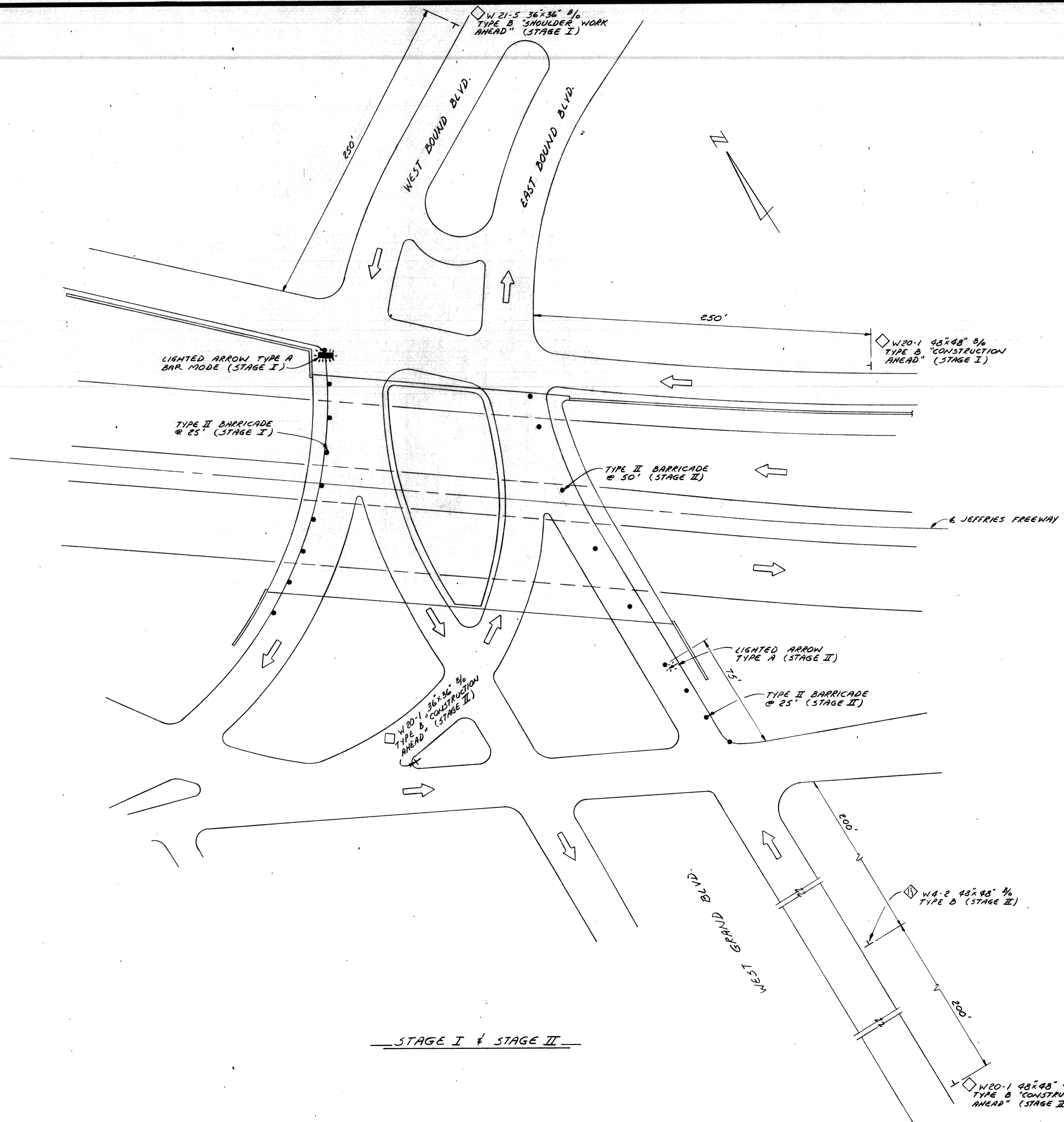
MICHIGAN DEPARTMENT OF STATE HIGHWAYS

ABUTMENT A DETAILS

REVISIONS			
NO.	DESCRIPTION	DATE	BY
A	Miscellaneous Corr.	7/17/49	A.V.R.
D	Add Struts	2/10/51	R.R.R.

CITY OF DETROIT
SQUAD BOSS: *Watts* 269
DRAWN BY: *J.B.W.*
TRACED BY: *J.B.W.*
CHECKED BY: *L.B.V.*
SHEET 13 OF 56

836, S37 of 82123J



STAGE I & STAGE II

SCALE: 1" = 40'

MICHIGAN DEPARTMENT OF TRANSPORTATION
 WEST GRAND BLVD OVER I-96
 SCREENING
 STAGING AND CONSTRUCTION SIGNING

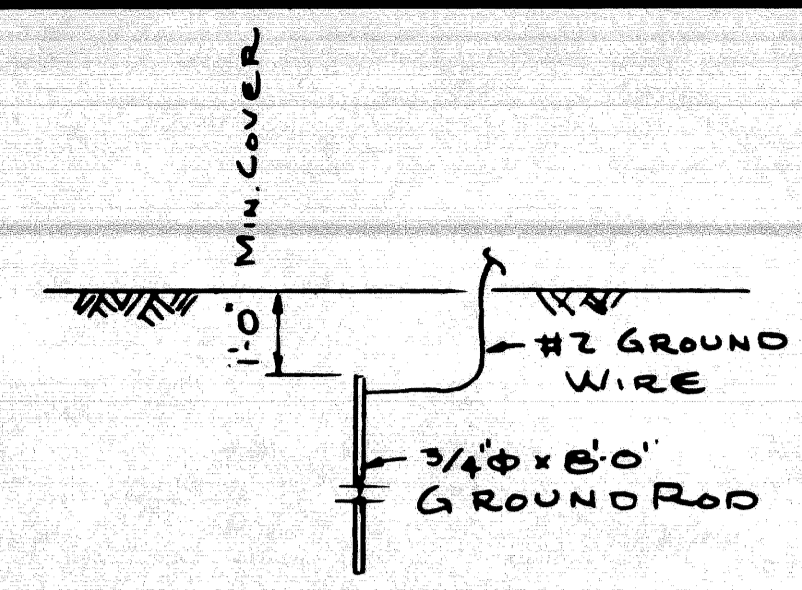
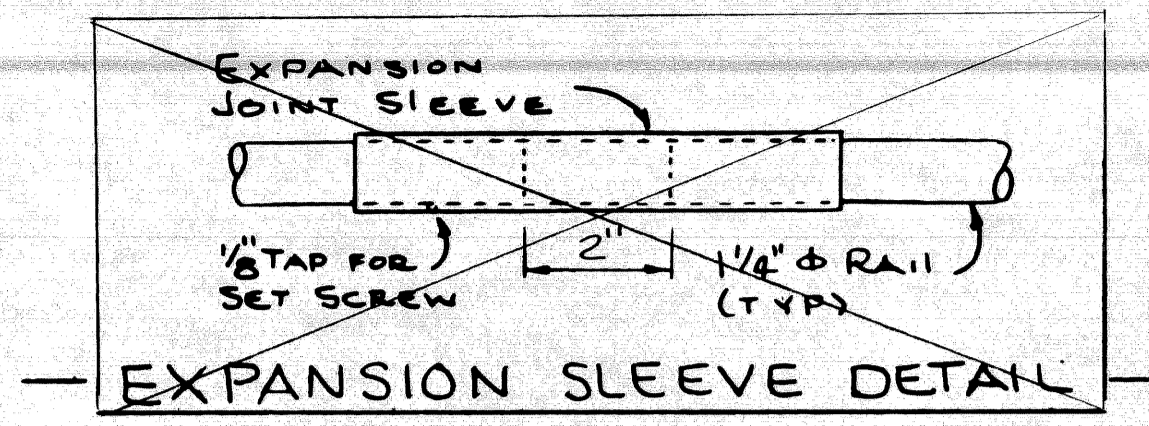
PLANS PREPARED BY
CITY OF DETROIT
 DEPARTMENT OF PUBLIC WORKS
 CITY ENGINEERS OFFICE
 BUREAU OF HIGHWAYS AND EXPRESSWAYS
 APPROVED: *T. E. McGowan*
 STRUCTURAL ENGINEER

JOB No.
 79-22-26 E1F

REVISIONS			
NO.	DESCRIPTION	DATE	BY

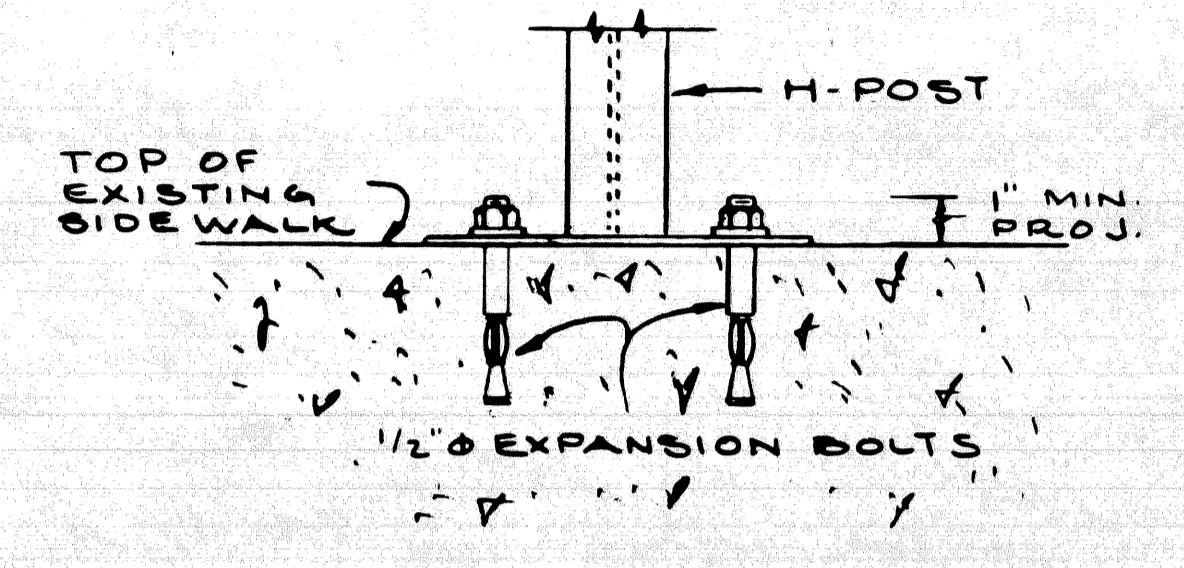
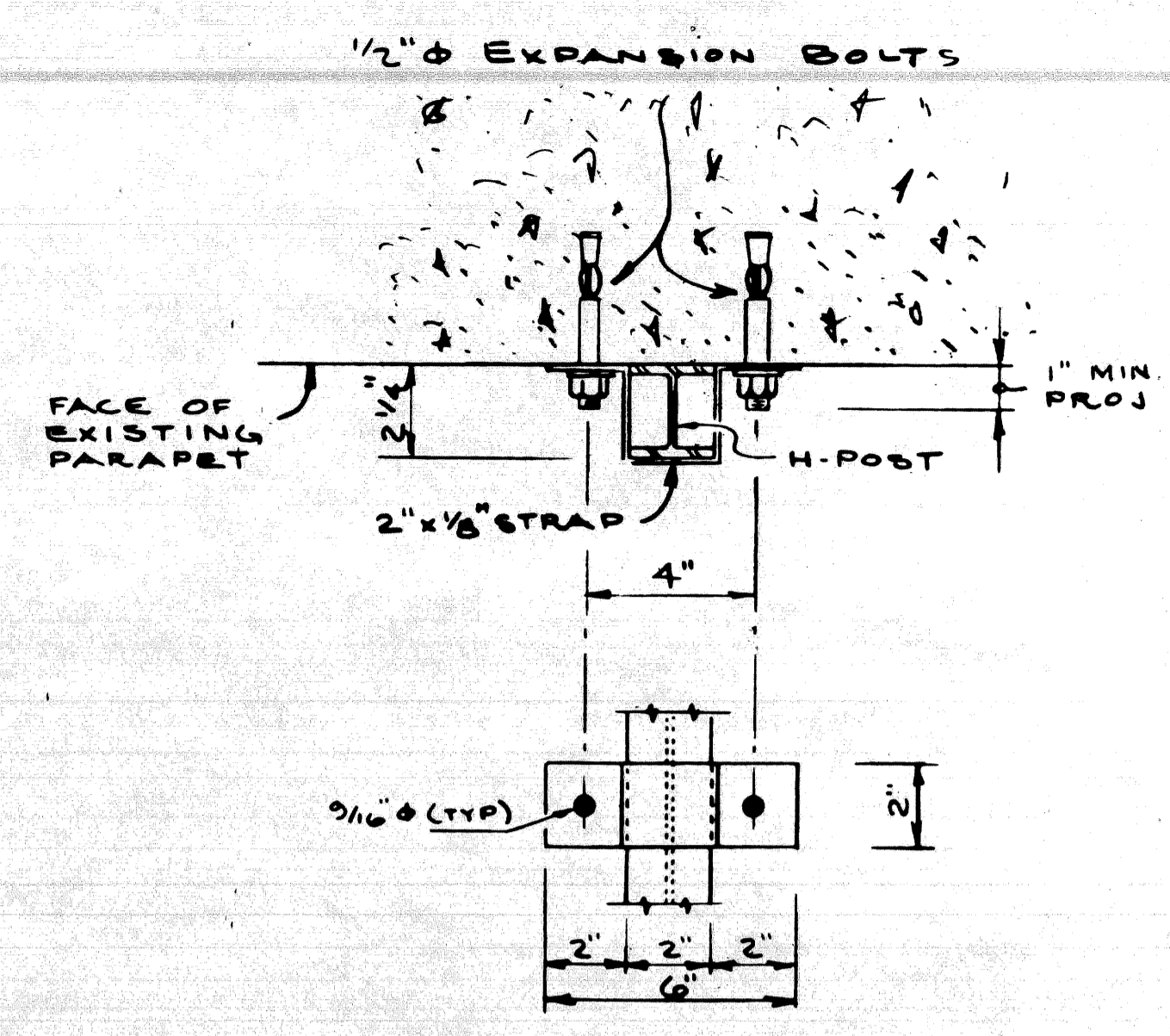
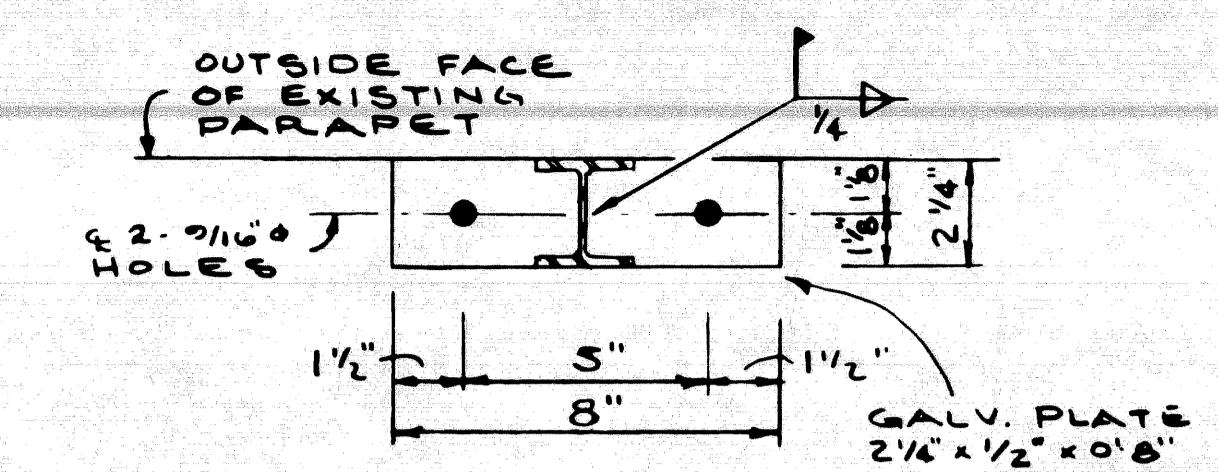
SQUAD BOSS	<i>[Signature]</i>	1-29-81
DRAWN BY	<i>[Signature]</i>	1-29-81
CHECKED BY	<i>[Signature]</i>	1-29-81
SHEET	OF	

S36.S37 OF 82123 J



1. ALL UNDERGROUND CONNECTIONS SHALL BE CALDWELL THERMITE WELD, GAS OR ARC WELD.
2. EXPOSED CONNECTIONS MAY BE SPLIT BOLT OR CLAMP TYPE.
3. GROUND WIRE SHALL BE #2 AWG STRANDED SOFT DRAWN COPPER WIRE.
4. RESISTANCE TO GROUND FOR ANY CONTINUOUS SECTION OF FENCE SHALL NOT EXCEED 25 OHMS PER GROUND ROD.

— GROUNDING DETAIL —



— BASE PLATE DETAILS —

— BRACKET DETAILS —

QUANTITIES		
ITEM	UNIT	AMOUNT
PEDESTRIAN FENCING, STRUCTURES	S.F.	2853
ELECTRICAL GROUNDING SYSTEM	EA	2

FENCING NOTES

All work shall conform to MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION, 1979 EDITION

All fence fabric shall be galvanized, #9 gage with a 2" mesh and with knuckling at the bottom selvage.

The posts shall be 2 1/4" x 2" galvanized H-Posts weighing 4.1 p.l.f. Round posts having a 2 7/8" o.d. weighing 5.19 p.l.f. galvanized may be used with similar connection details.

The nominal 1/4" φ braces shall be 1 5/8" φ o.d. steel pipe or tubing weighing 2.27 p.l.f. galvanized.

All posts and tubing shall be furnished with the manufacturers standard connections and its minimum weight shall be within 5% of that specified.

Posts and tubing shall be bent in the shop as shown on the plans.

All components are to be galvanized. Bolts, nuts and washers are to be galvanized in accordance with ASTM A 153.

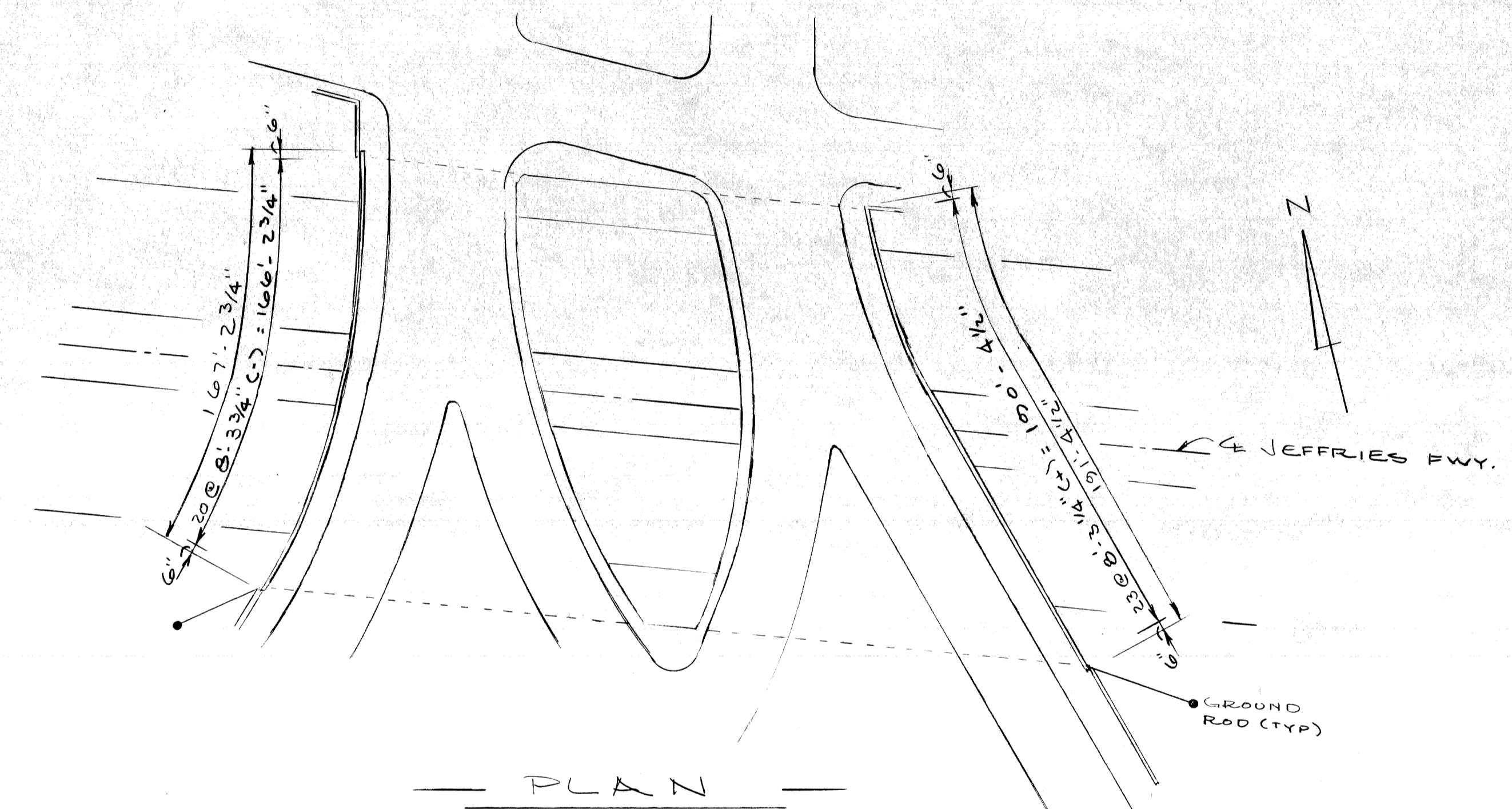
Tension bars shall be 3/4" x 1/4" galvanized steel.

Contractor shall verify field conditions before fabrication.

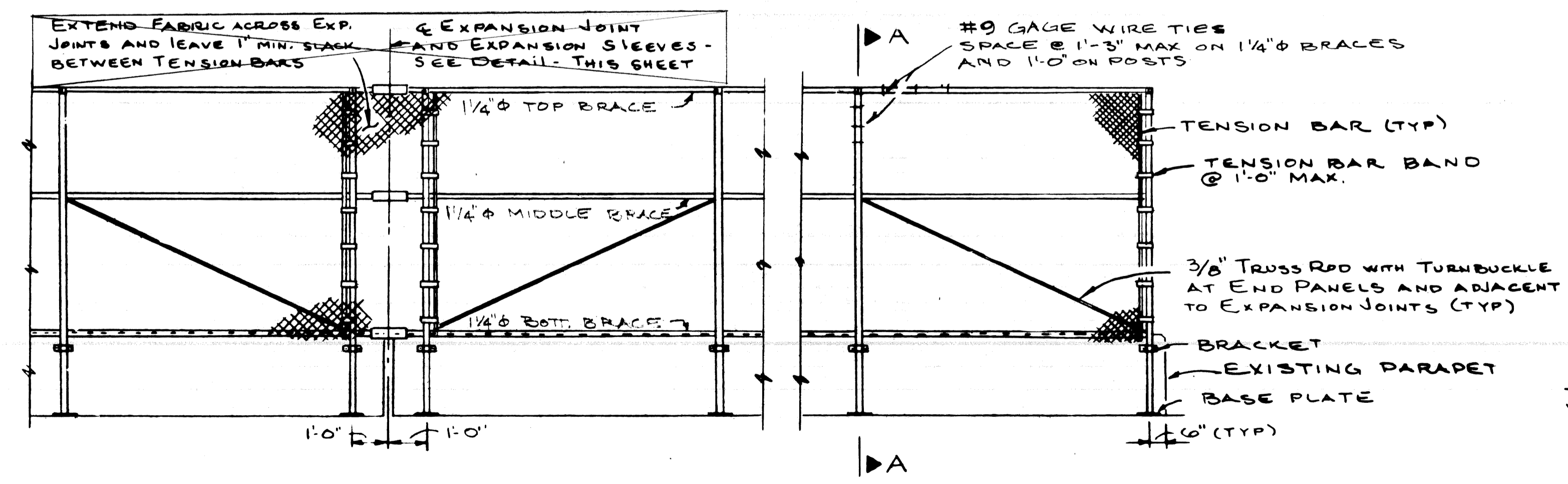
Care is to be taken in placing expansion bolts and brackets so as to insure that the brackets hold the posts firmly against concrete, shim if necessary.

PEDESTRIAN FENCING STRUCTURES shall include the fabric, posts, braces, expansion bolts, brackets and all suitable connections and fittings.

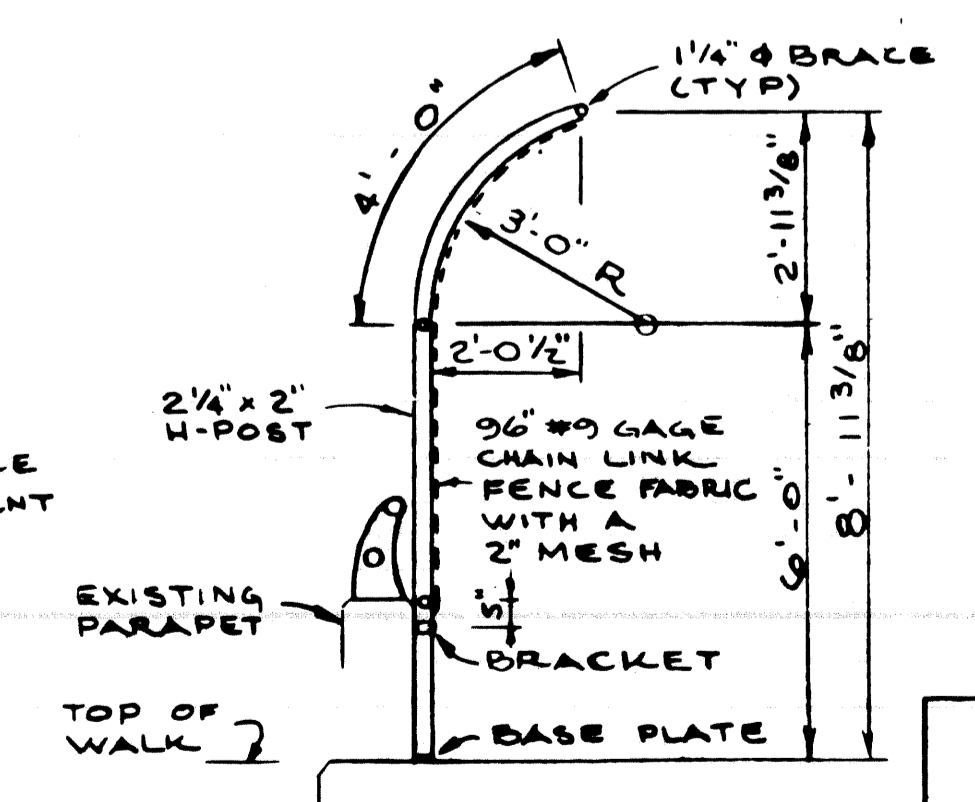
1/2" φ expansion bolts shall be Phillips red head galvanized wedge anchors WS 1242 G or approved equal.



— PLAN —



TYPICAL ELEVATION



SECTION A-A

PLANS PREPARED BY
CITY OF DETROIT
DEPARTMENT OF PUBLIC WORKS
CITY ENGINEER'S OFFICE

APPROVED *T.E. McLean*
STRUCTURAL ENGINEER

JOB No. 79-22-26E.F

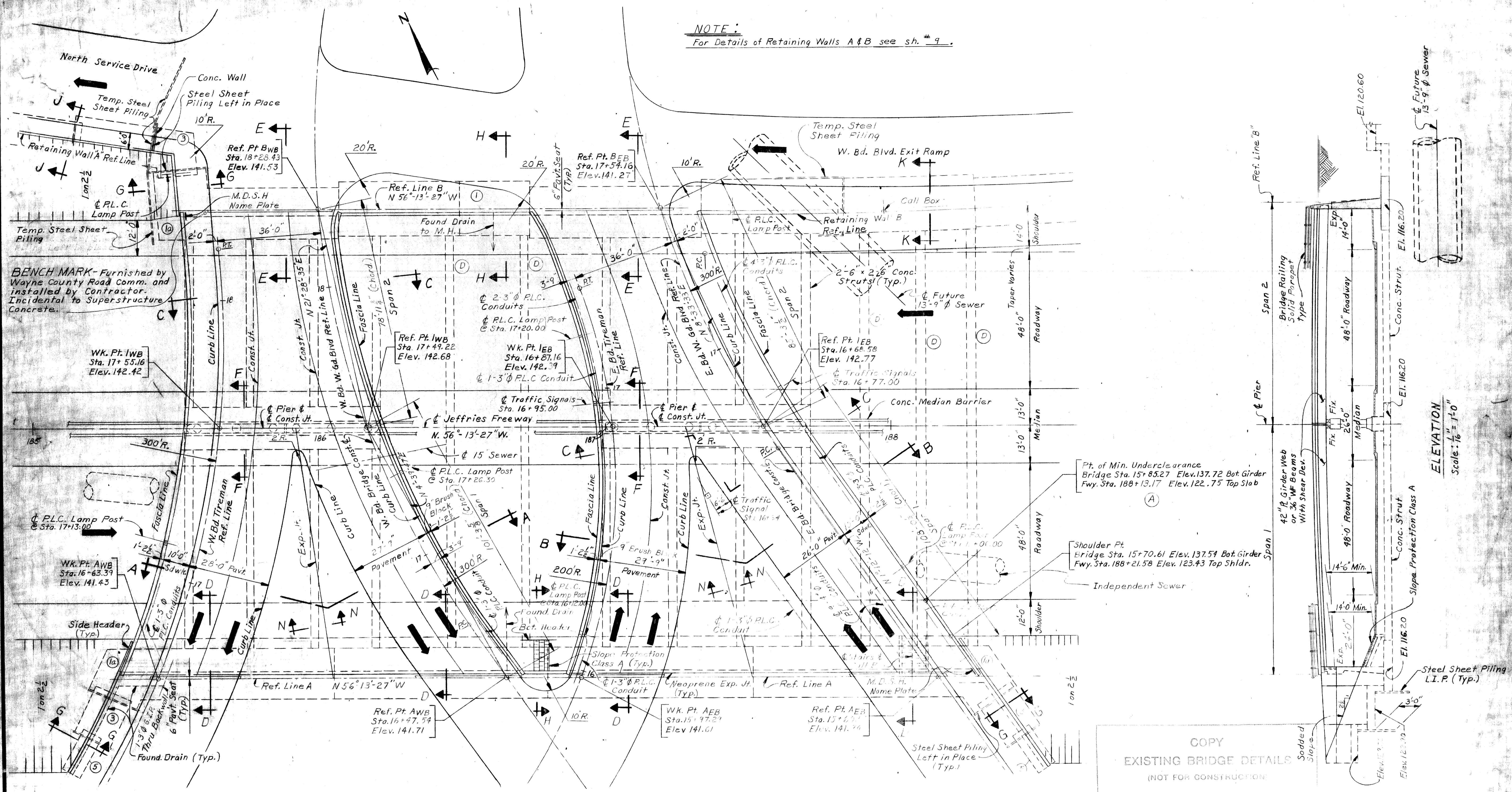
MICHIGAN DEPARTMENT OF TRANSPORTATION
WEST GRAND BLVD. OVER I-96
PROTECTIVE SCREENING DETAILS

REVISIONS			
NO.	DESCRIPTION	DATE	BY

SQUAD BOSS	<i>OK</i>	1-28-81
DRAWN BY	<i>RAK</i>	1-29-81
CHECKED BY	<i>OK</i>	1-29-81
SHEET OF 82123		

S3637 OF 82123

NOTE:
For Details of Retaining Walls A & B see sh. # 9.



COPY
EXISTING BRIDGE DETAILS
(NOT FOR CONSTRUCTION)

MISCELLANEOUS QUANTITIES

ITEM	AMT.	UNIT
Temporary Steel Sheet Piling	1312 434	Sq. Ft.
Foundation Drain	24 14	Lin. Ft.
Slope Protection Class A	185 188	Sq. Yds.
Slope Protection Header	158 161	Lin. Ft.

PLAN
Scale: 1/16" = 1'-0"

GENERAL NOTES

The design of this structure is based on the M.D.S.H. Specifications for the Design of Highway Bridges, 1958 edition and current AASHTO Standard Specifications for Highway Bridges - HS20-44 Loading.

Live-Load plus impact deflection equals 1/800th of span length.

The tops of slabs and tops of curbs are parallel to the vertical curve and tangents except as modified by super-elevation transition.

(2) Indicates wall type. See Wall Dimensions Sheet # 9.

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

APPROVED: [Signature] **STRUCTURAL ENGINEER**

JOB No.
PW 990 (3)

NO.	DESCRIPTION	DATE	BY
A	Station Change @ Min. Undercl.	7/17/69	A.V.K.
D	Add 4 Struts	8/1/69	P.R.R.

MICHIGAN DEPARTMENT OF STATE HIGHWAYS

WEST GRAND BLVD. CROSSING THE JEFFRIES FREEWAY IN DETROIT

GENERAL PLAN OF STRUCTURE

DESIGN SUPERVISING ENGINEER: [Signature]

DESIGN ENGINEER: [Signature]

APPROVED: [Signature]

DESIGN SUPERVISING ENGINEER: [Signature]

DESIGN ENGINEER: [Signature]

CITY OF DETROIT

SQUAD BOSS: [Signature] 2/69

DRAWN BY: R. ROSIK 3/68

TRACED BY: [Signature] 1/69

CHECKED BY: M.C. 1/69

SHEET 7 OF 23

S36,S37 of 82126J