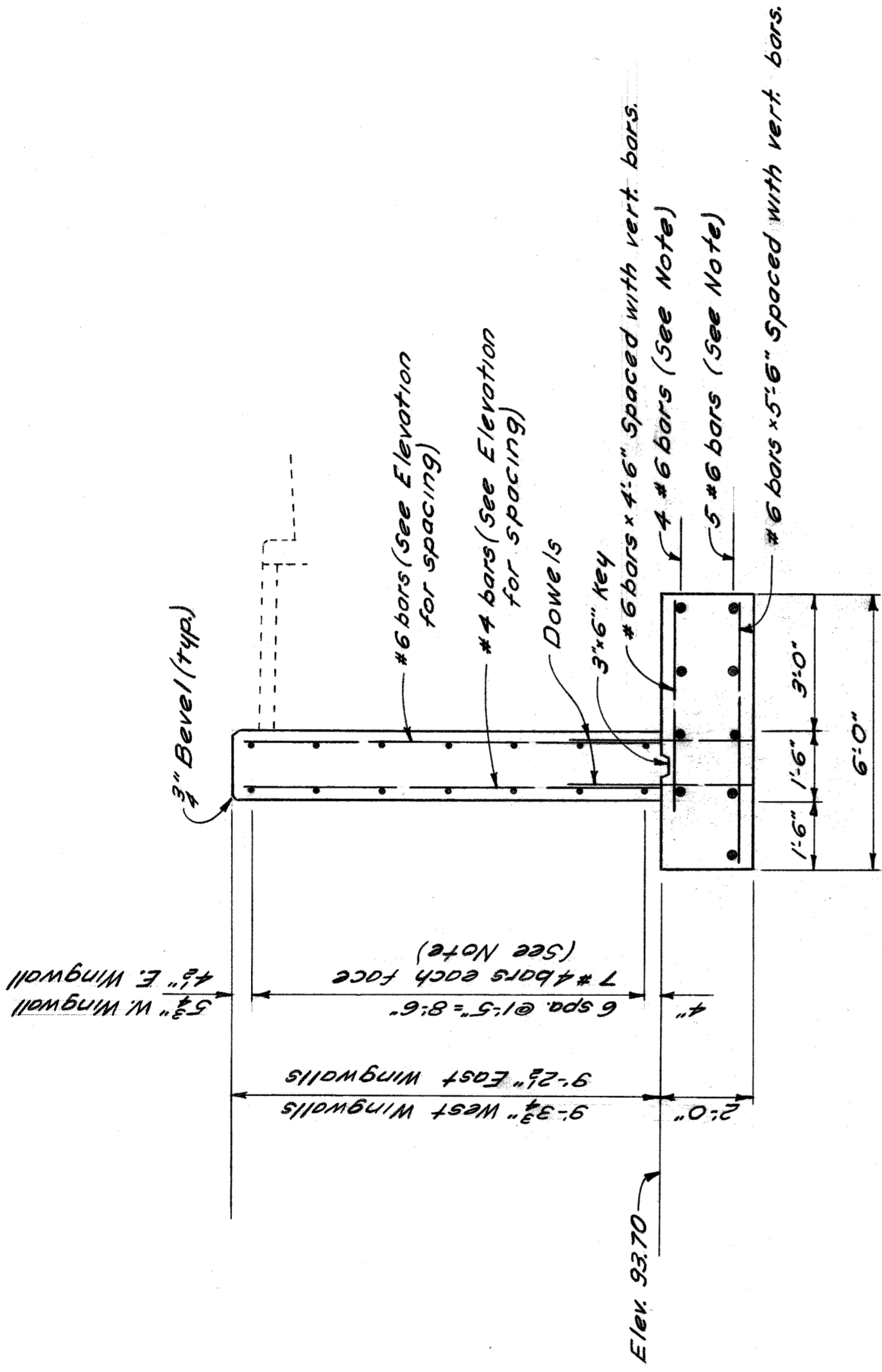


BW214 Vista Dr.  
 V.C.  
 10/3/60  
 12 1/4"

**ERECTION PLAN**

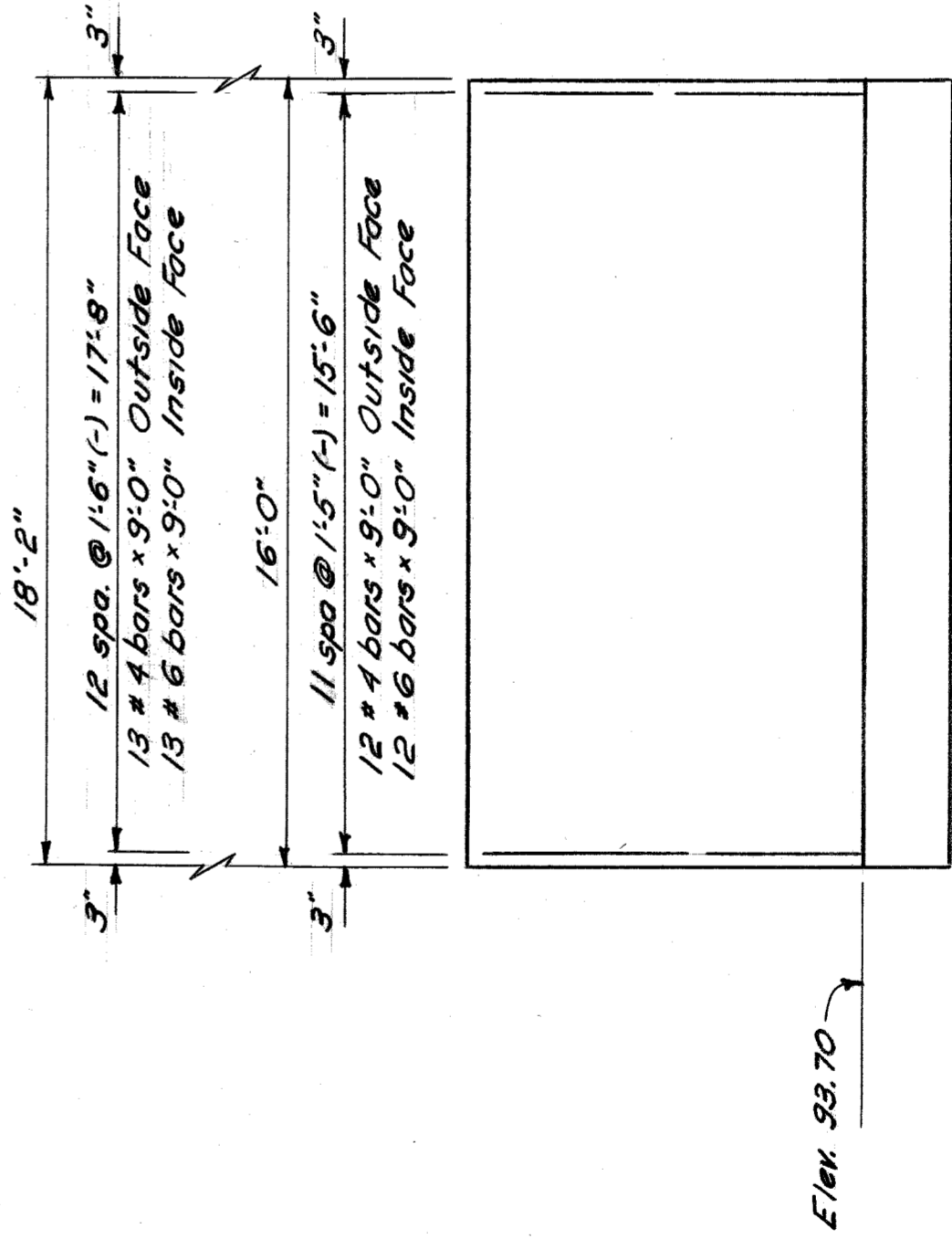
Scale: 1" = 1'-0"



TYPICAL SECTION - WINGWALL

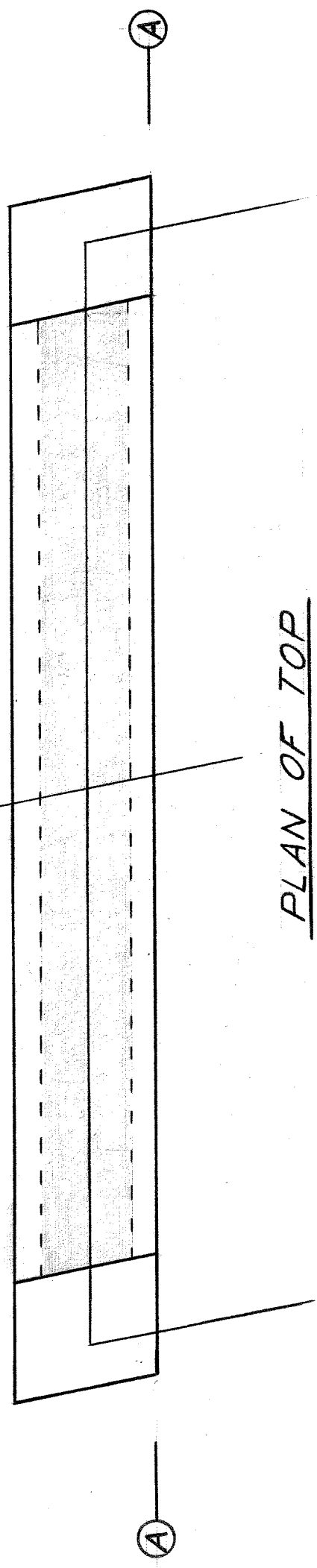
Scale: 3/8" = 1'-0"

NOTE:  
 All hori. re steel for  
 18'-2" long wingwall = 17'-8"  
 16'-0" long wingwall = 15'-6"

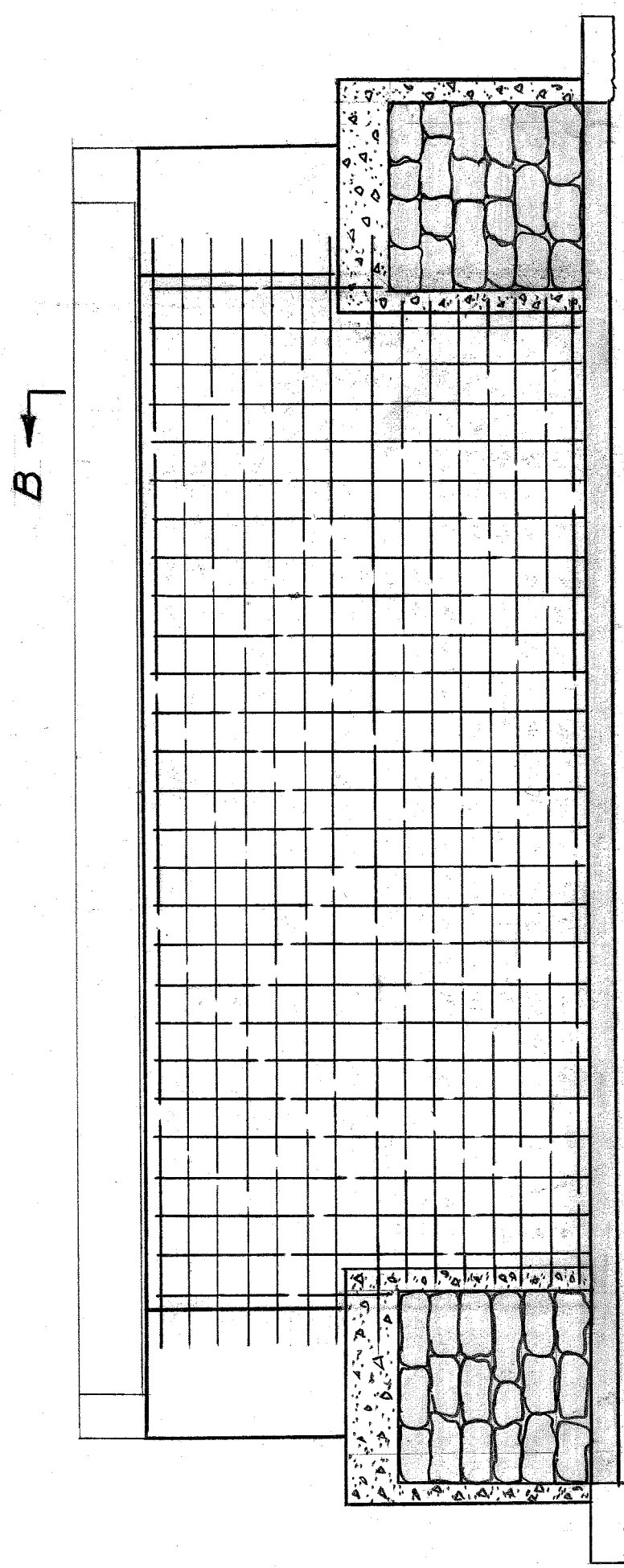


ELEVATION

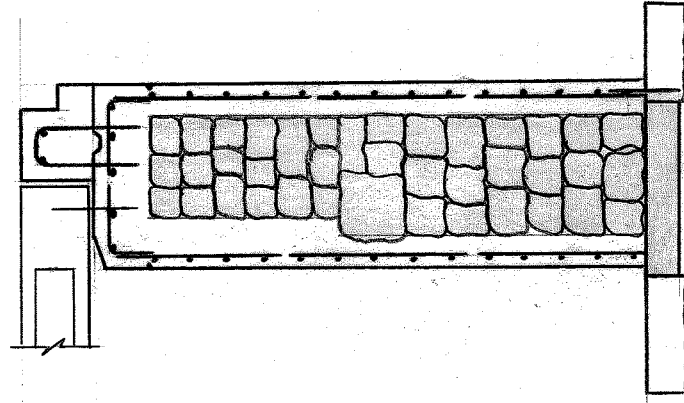
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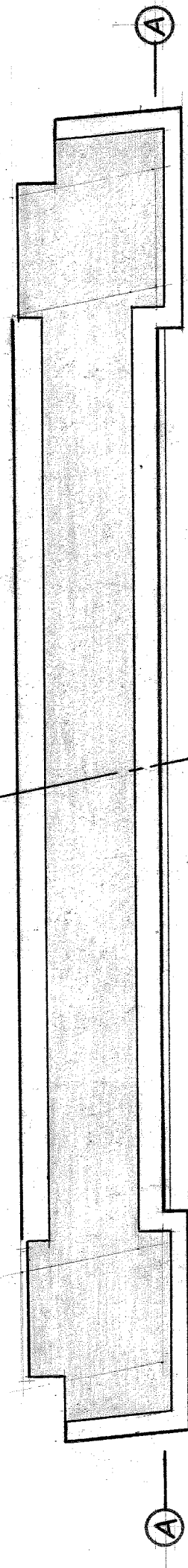
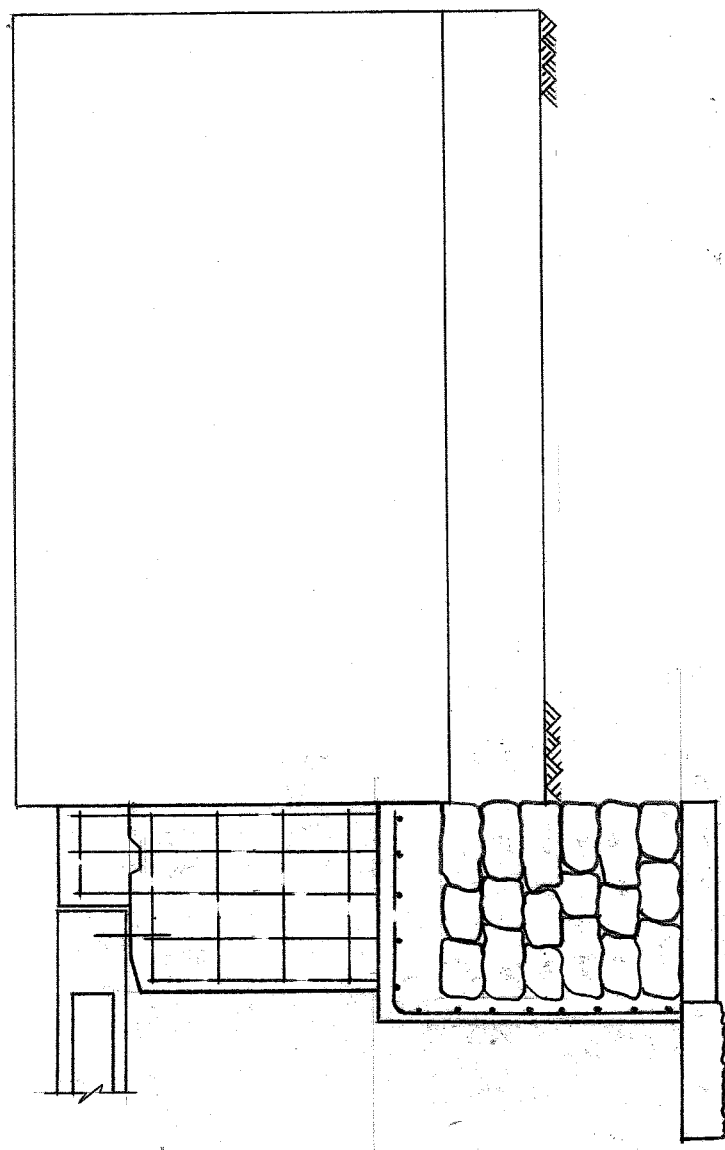
PLAN OF TOP



ELEVATION - ALONG LINE "A-A"

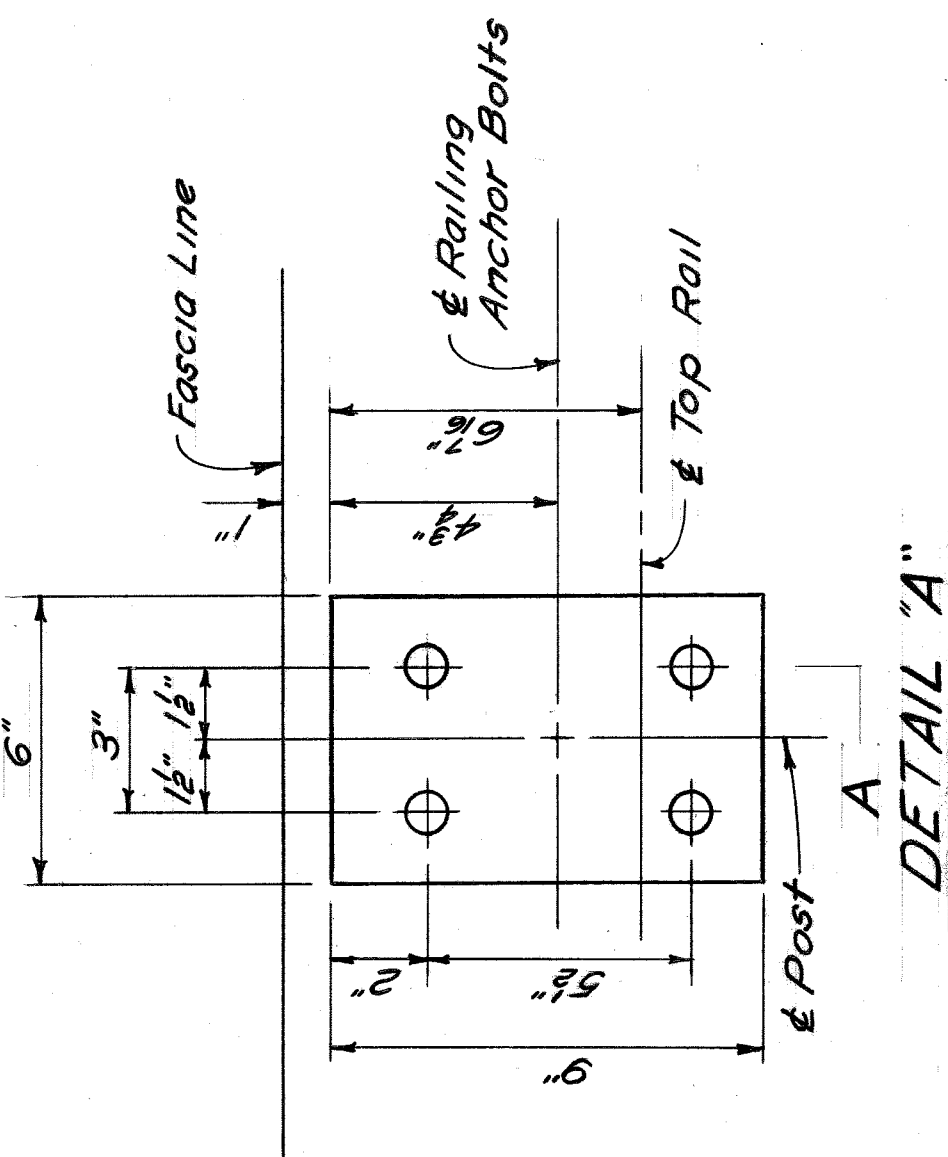
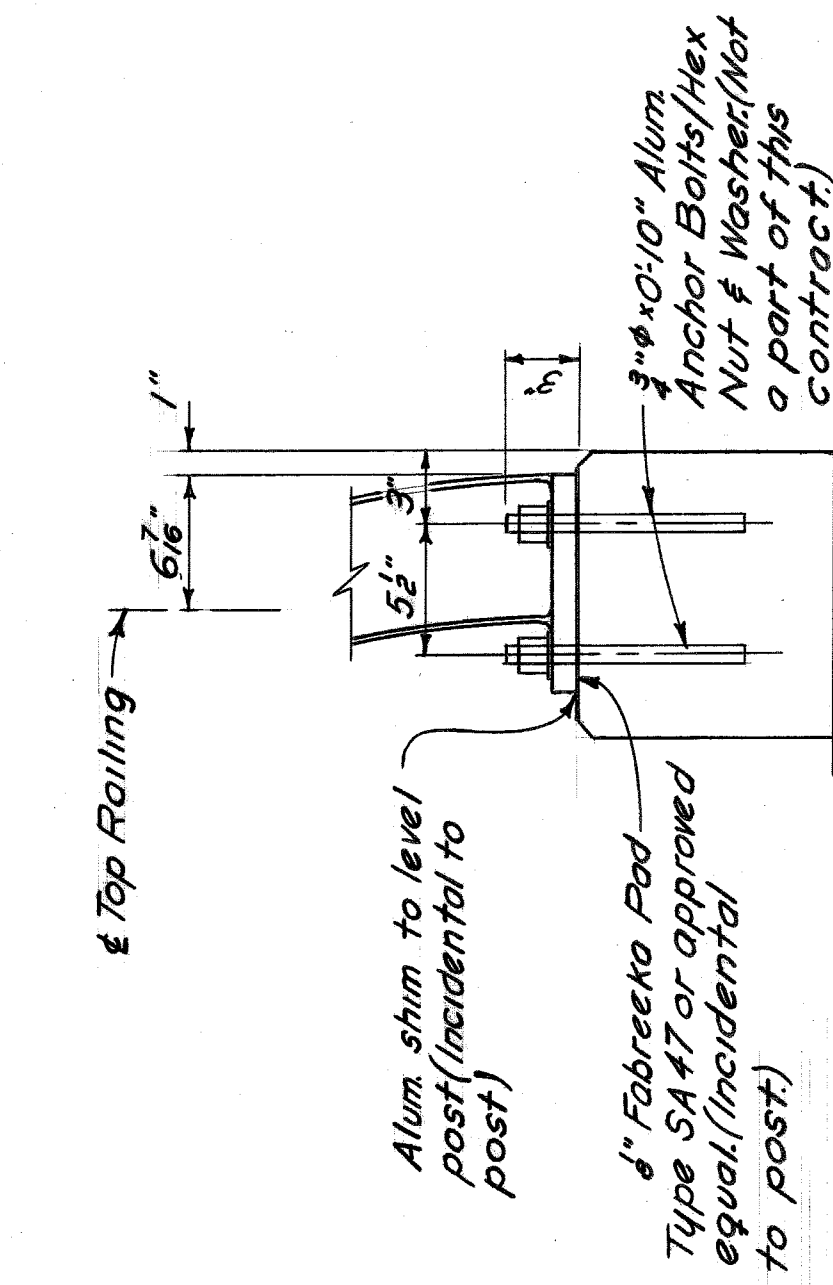
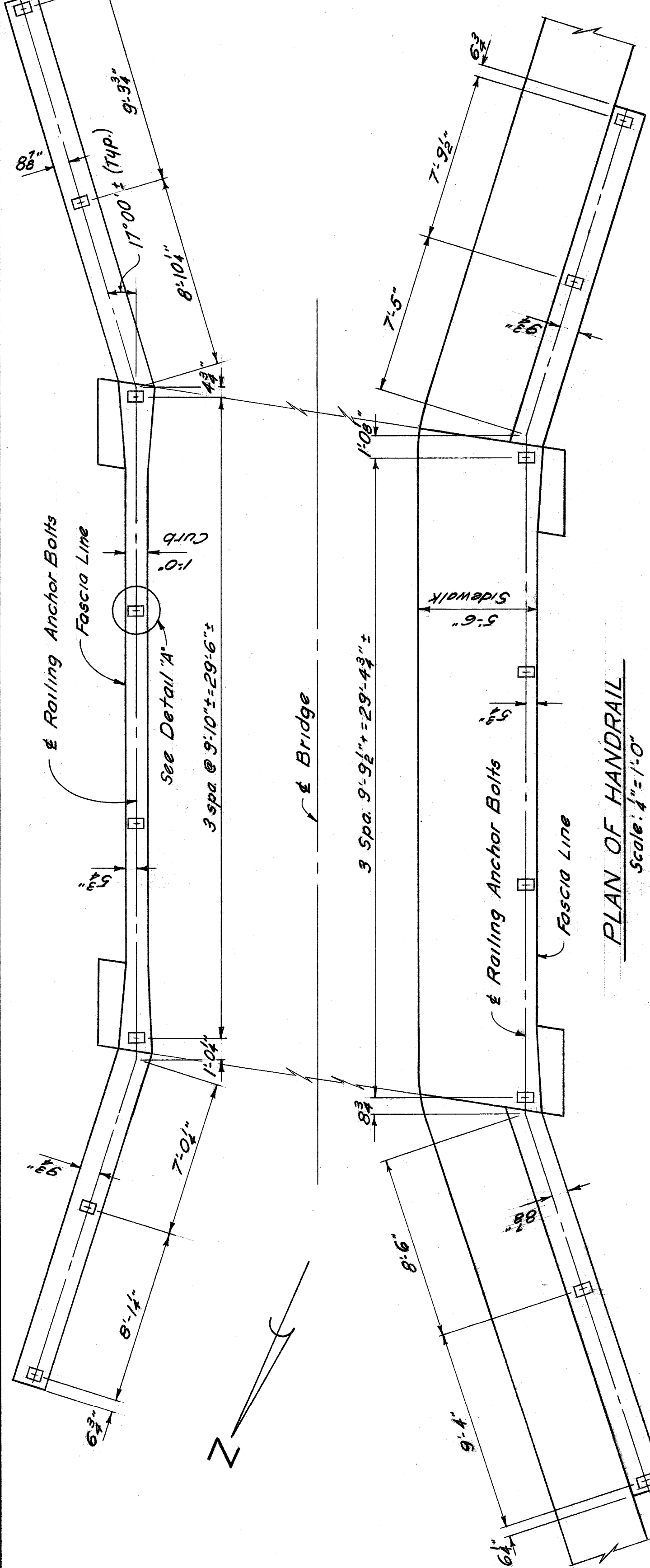


SECTION "B-B"

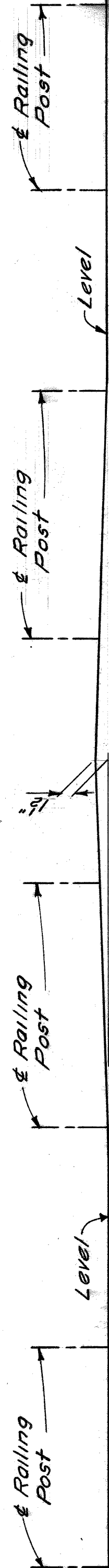


FOUNDATION PLAN

J.C.  
Vista Dr. SW 214  
19" x 30"



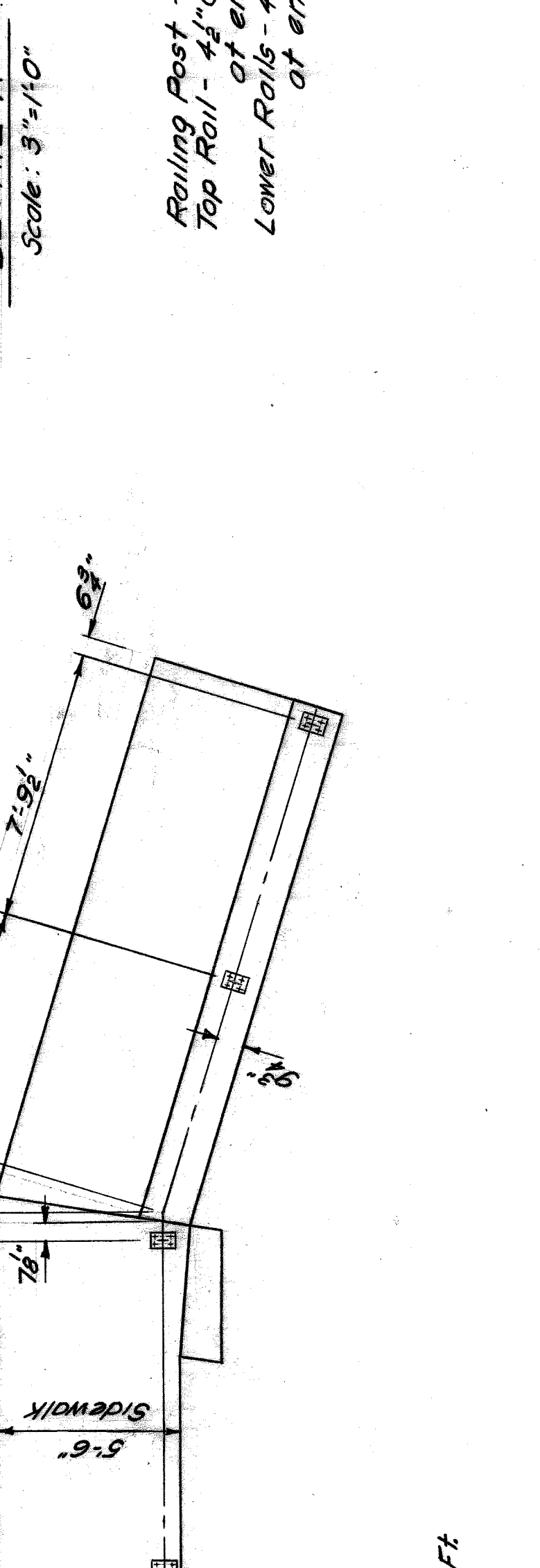
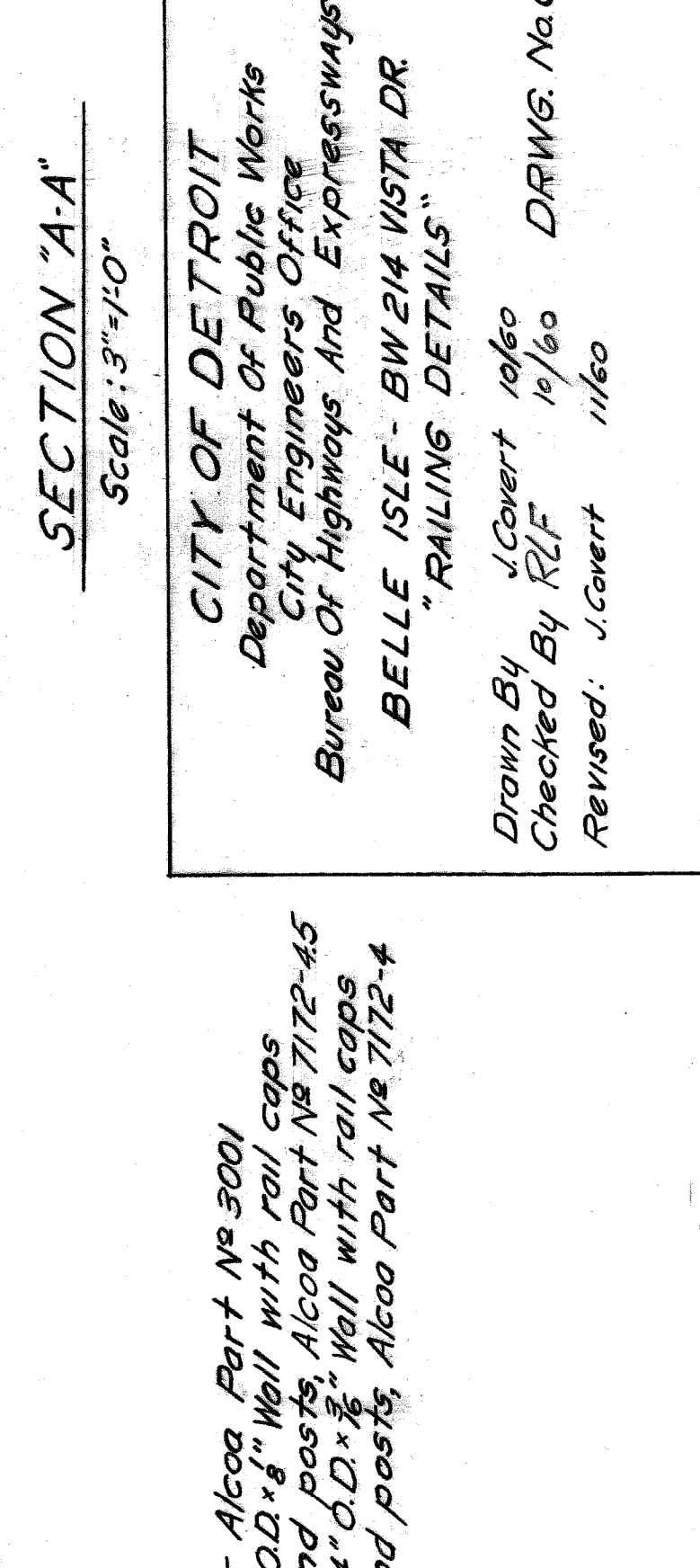
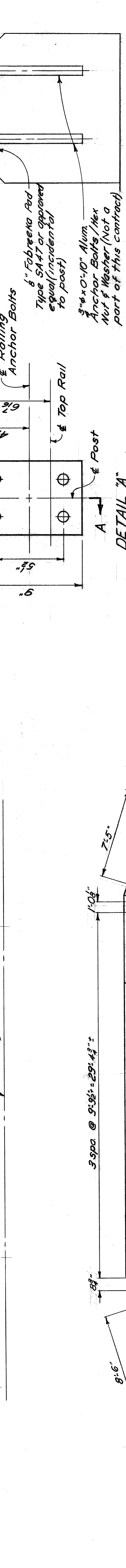
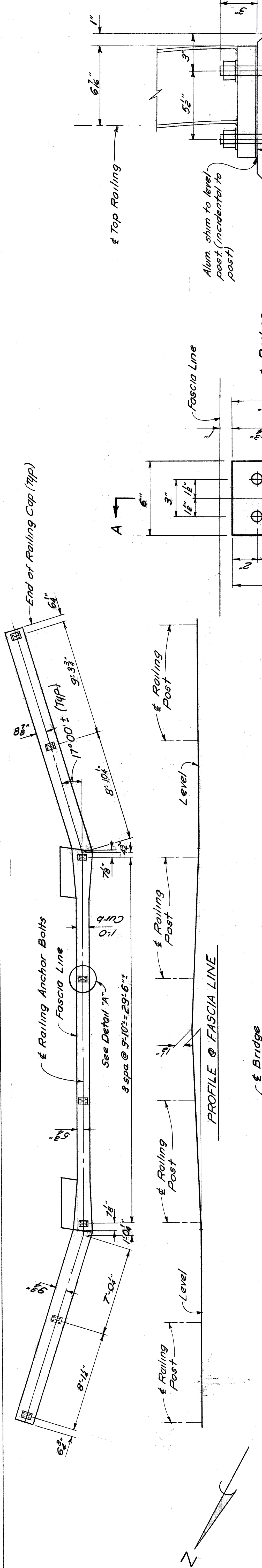
**NOTE:**  
Railing Post - Alcoa Part No 3001  
Top Rail - 4 1/2" O.D. x 8" wall with rail caps at end posts, Alcoa Part No 7172-4.5  
Lower Rails - 4" O.D. x 1/8" wall with rail caps at end posts, Alcoa Part No 7172-4



**CITY OF DETROIT**  
Department of Public Works  
City Engineers Office  
Bureau Of Highways And Expressways  
BELLE ISLE - BW 214 VISTA DR.  
"RAILING DETAILS"

Drawn By J.J.C. 10/60  
Checked By J.J.C. 11/60  
Revised

**DRWG. No C105**



**PLAN OF HANDRAIL**  
 Scale: 1/4" = 1'-0"  
 Approx. Length of Railing = 131 Lin. Ft.

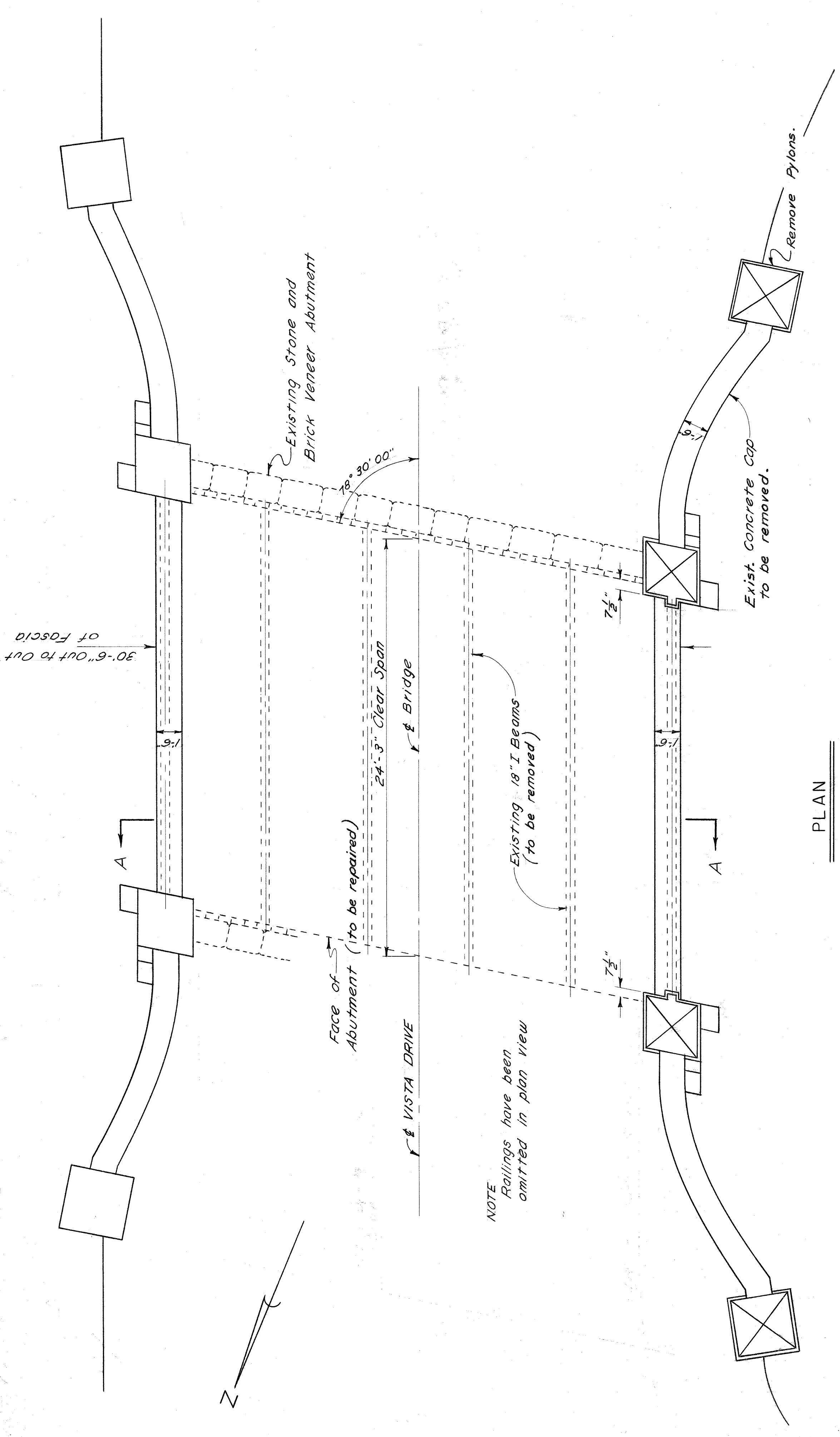
**SECTION "A-A"**  
 Scale: 3/8" = 1'-0"

**CITY OF DETROIT**  
 Department of Public Works  
 City Engineers Office  
 Bureau of Highways and Expressways

BELLE ISLE - BW 214 VISTA DR  
 "RAILING DETAILS"

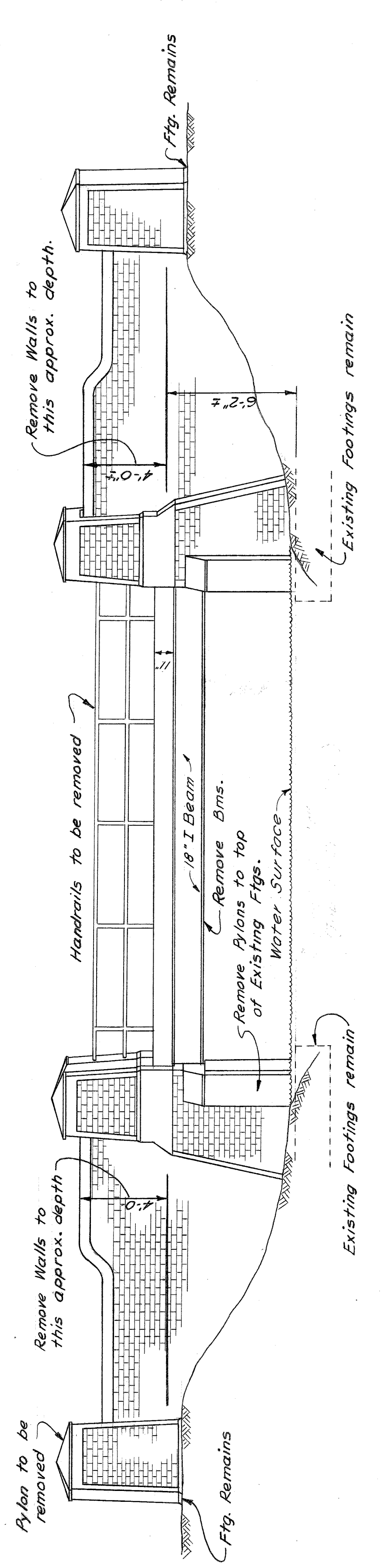
Drawn By J.Covert 10/60  
 Checked By RLF 10/60  
 Revised: J.Covert 11/60

Railing Post - Alcoa Part No 5001  
 Top Rail - 4 1/2" O.D. x 1/8" Wall with rail caps  
 at end posts, Alcoa Part No 7172-45  
 Lower Rails - 4" O.D. x 3/8" Wall with rail caps  
 at end posts, Alcoa Part No 7172-4

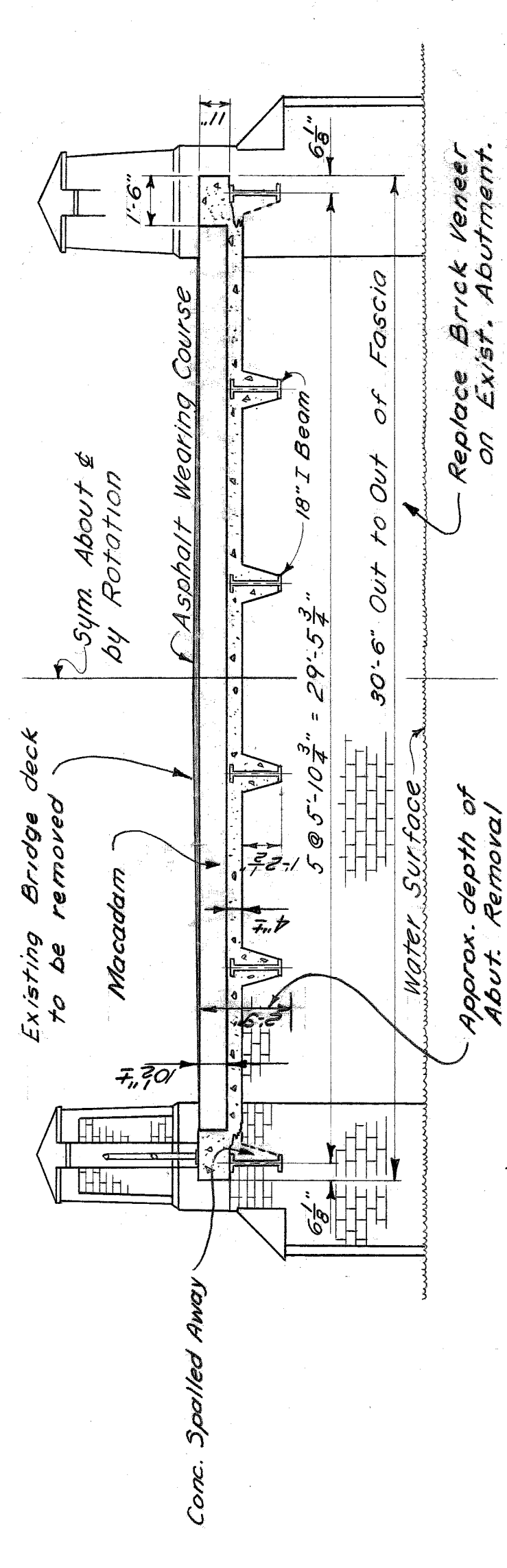


PLAN  
SCALE 1/4" = 1'-0"

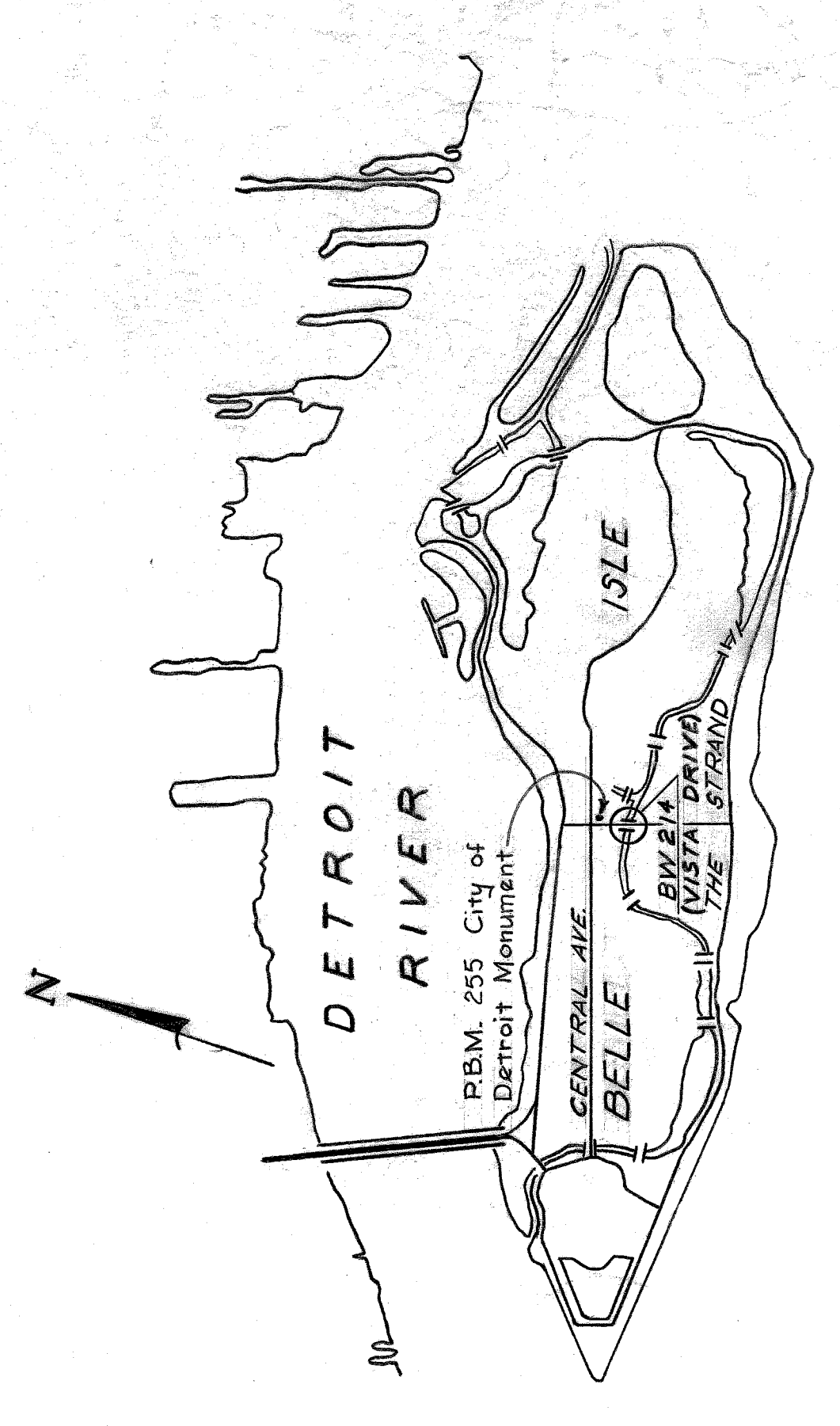
NOTE  
Railings have been omitted in plan view



ELEVATION  
SCALE 1/4" = 1'-0"



SECTION AA  
SCALE 1/4" = 1'-0"



LOCATION PLAN

GENERAL NOTES

Remove handrails, bridge deck and stringers, as indicated on the drawings. Care shall be taken, when removing stringers, to remove only that portion of Abutments to a depth immediately below existing beam seats as indicated.

Approach paving shall be resurfaced approximately as shown on Drawg. No. C102 to allow for a smooth profile of new paving across the remodeled structure.

Remove all pylons, and the tops of existing wingwalls to an approx. depth as shown, depending on an even brick course. All Pylon foundations shall remain for the support of the new structure. Brick from Walls, Abutments & Pylons shall be salvaged for repair purposes.

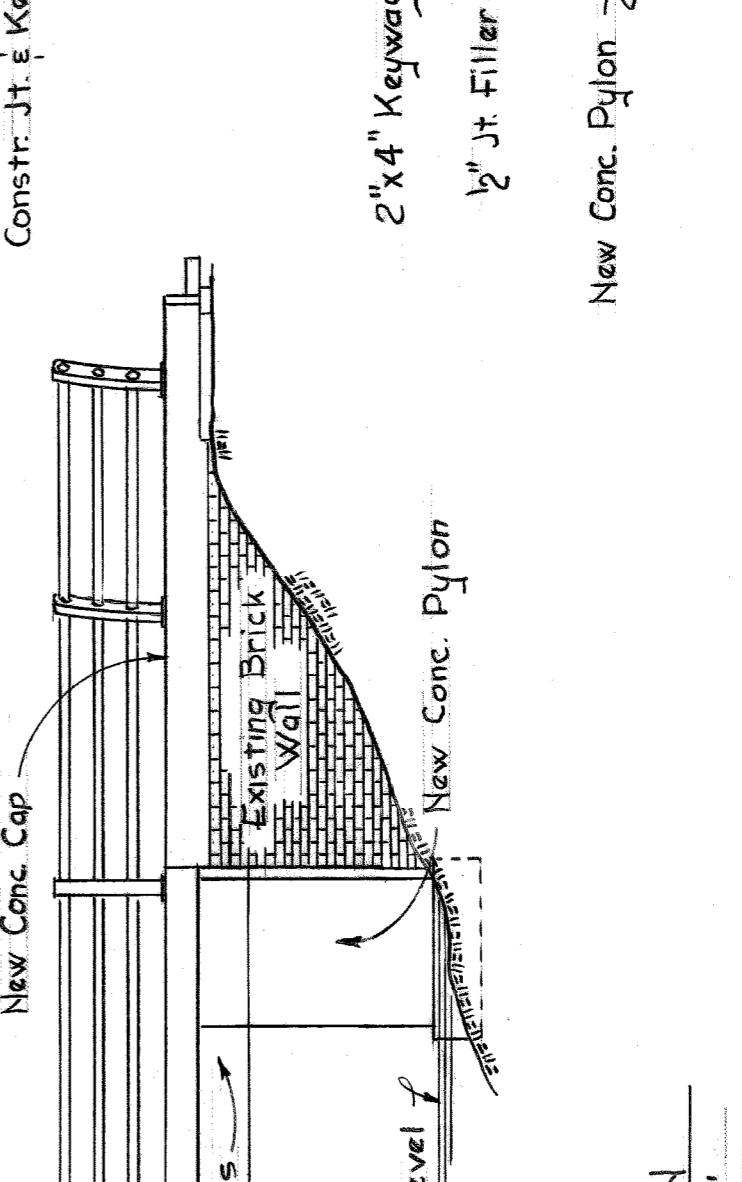
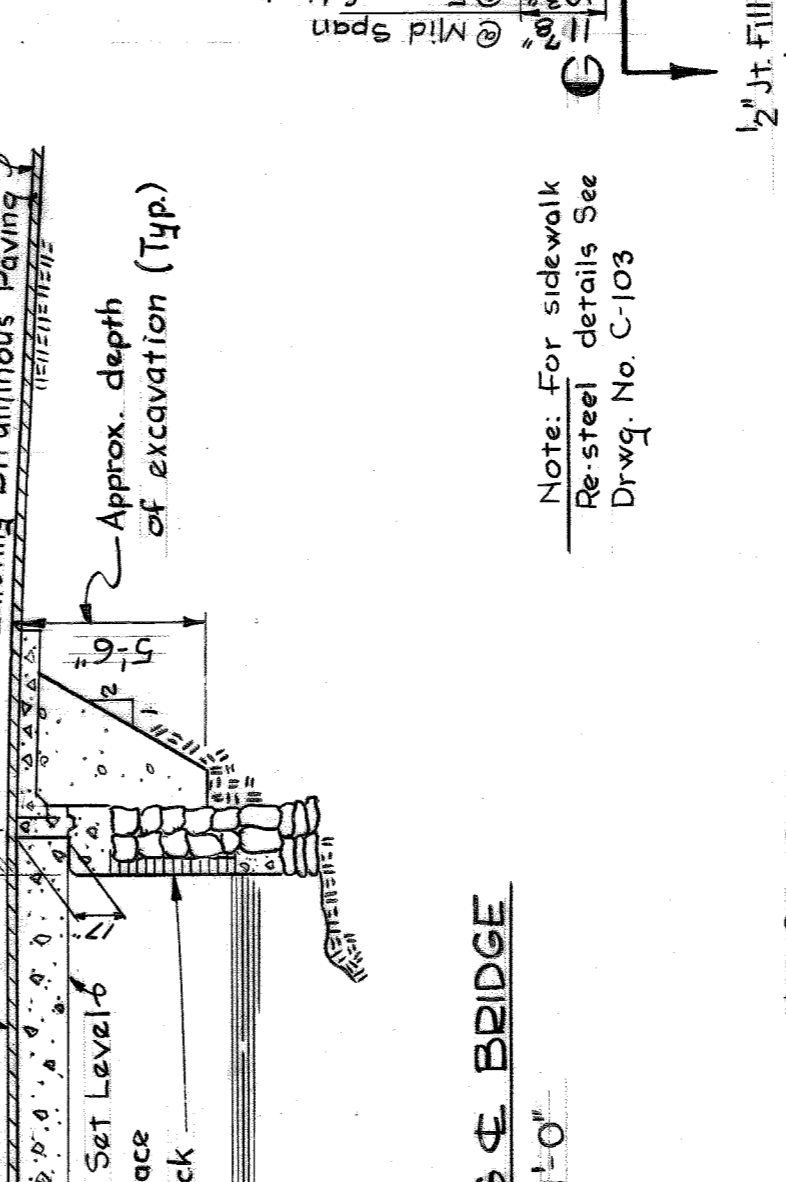
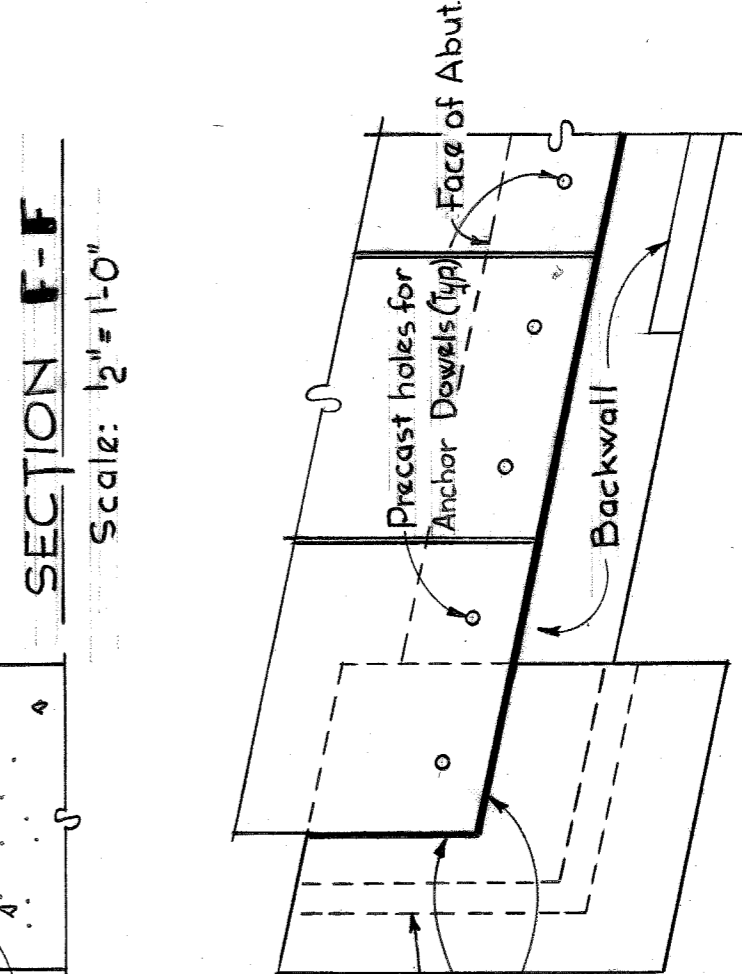
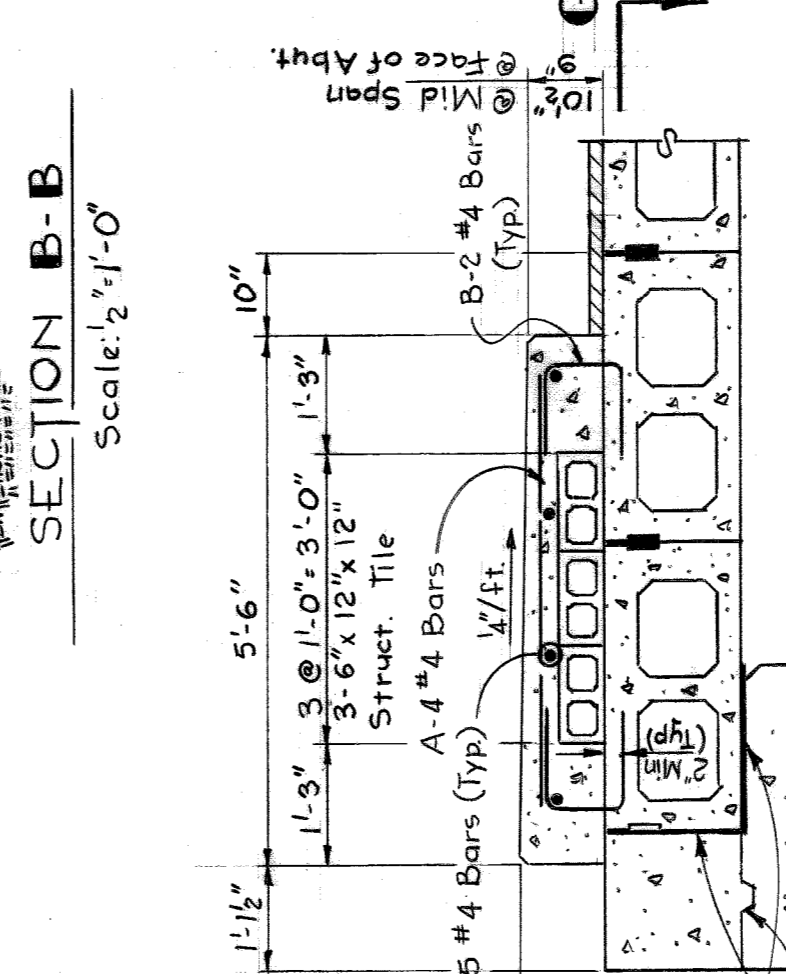
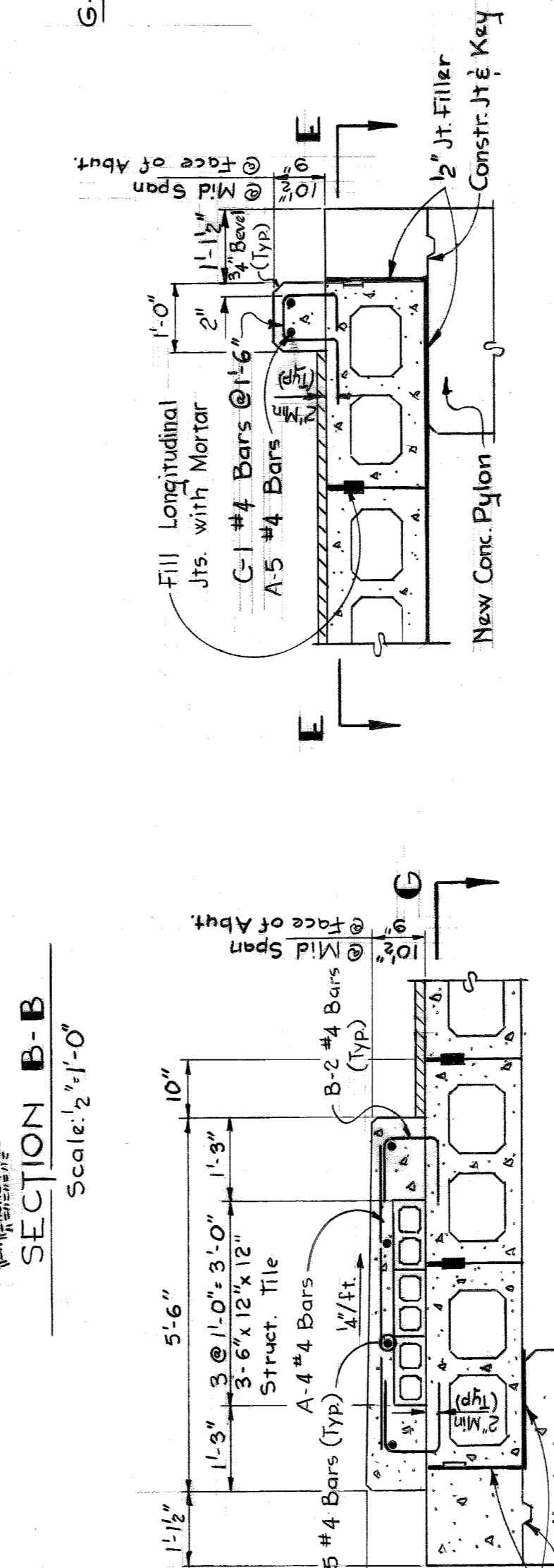
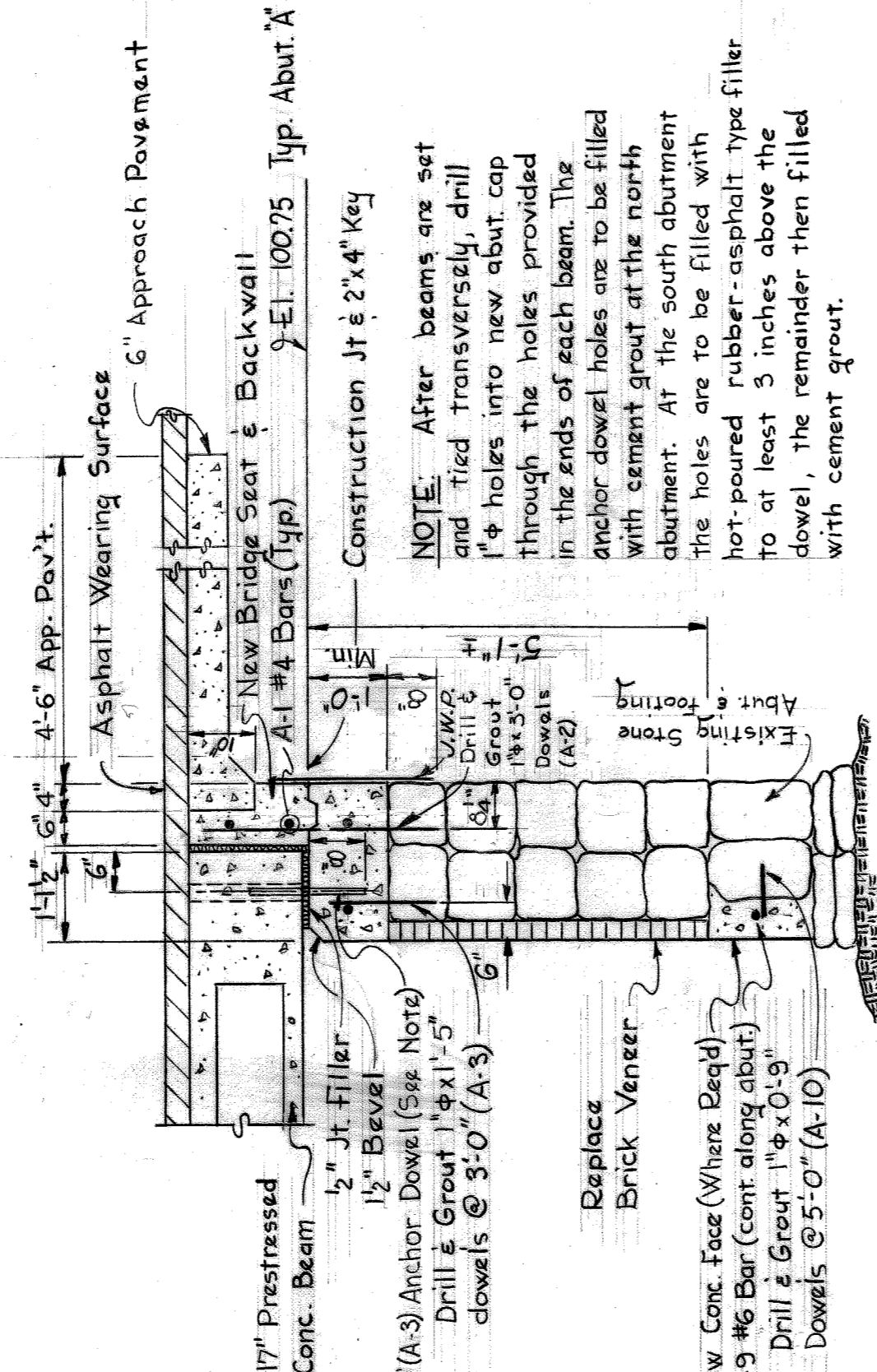
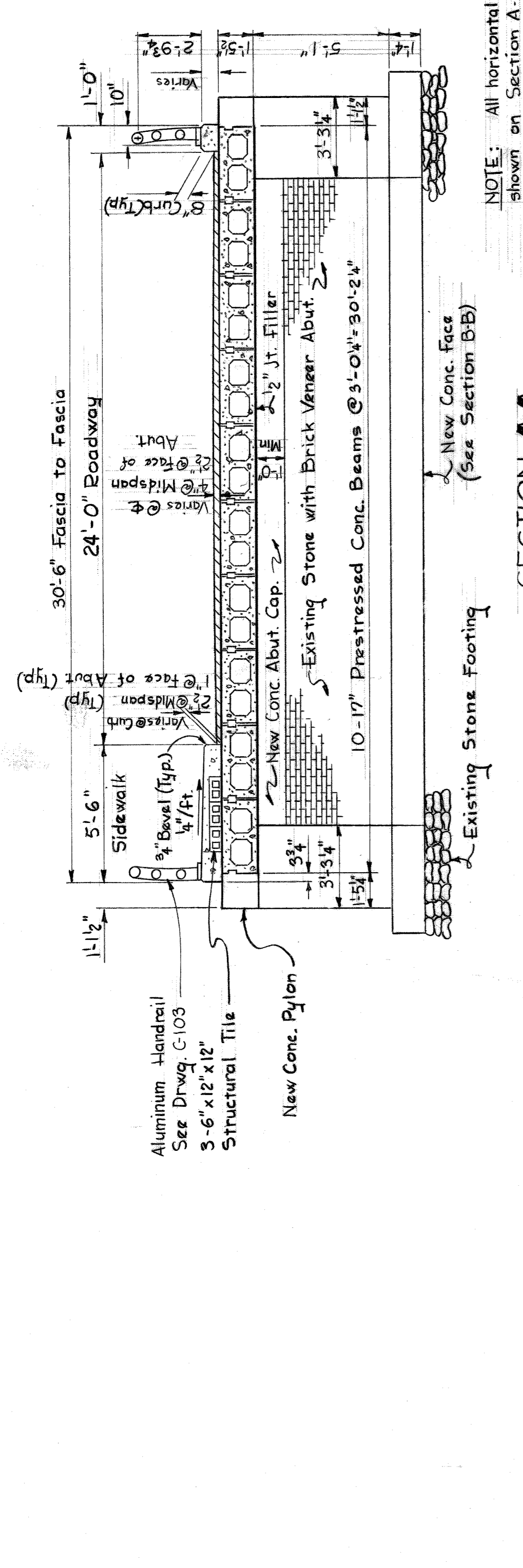
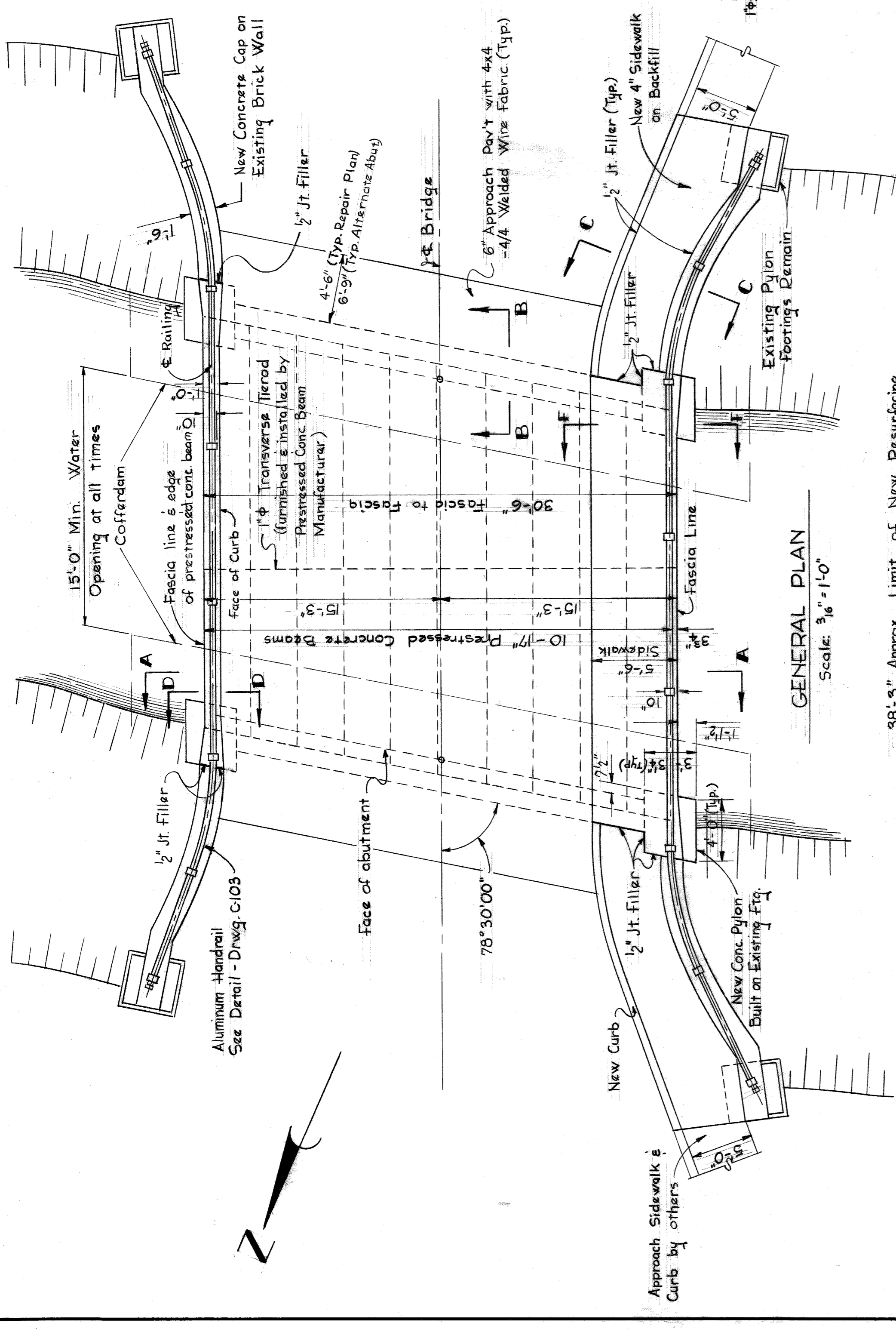
Dimensions of the existing structure were obtained by field measurement.

If the Abutments are found to be in such condition that replacement is required all of the existing Abutments and their footings shall be removed, exercising care to avoid damage to the remaining Wingwalls. New Abutments and related work shall be constructed in accordance with Drawing No. C104, Alternate Abutment Plan and Details.

City of Detroit Bench Mark located at the S.E. corner of Central Ave. and Vista Drive, Elev. 99.268 See Location Plan.

CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEERS OFFICE BUREAU OF HIGHWAYS AND EXPRESSWAYS		BELLE ISLE BW 214 · VISTA DRIVE		SHEET 1 OF 4 SHEETS
BRIDGE MAINTENANCE		GENERAL PLAN - EXISTING BRIDGE		CONTRACT No. PW-3077
DESIGNED BY	J. COVERT	APPROVED:	<i>J. Covert</i>	DRWG No. C101
DRAWN BY	J. COVERT	CITY ENGINEER	<i>M. J. [Signature]</i>	DATE APRIL '60
TRACED BY	A. HANSON	C.C.L.		
CHECKED BY				
DESCRIPTION				
REVISIONS LOCATED BY COORDINATES ON SHEET				

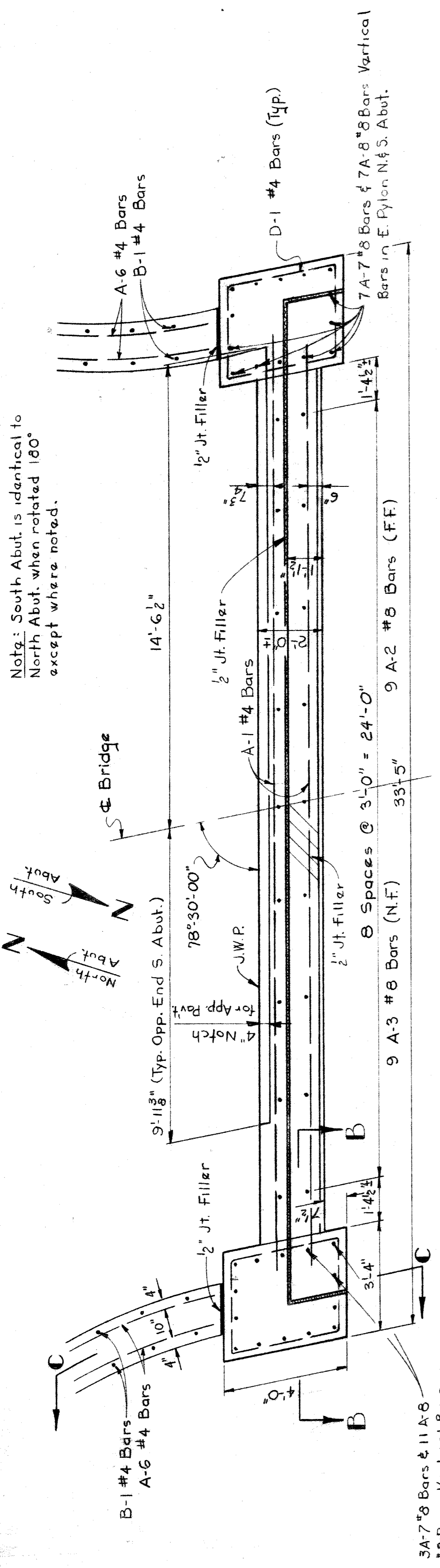
B. K. ELLIOTT CO. 7118-W 980-3781



**GENERAL NOTES:**  
Design Specifications - M.S.H.D. Standard Specifications for the Design of Highway Bridges - 1958, Edition (H20-S16-44 Loading) and the 1957 Edition of the Michigan Standard Specifications for Road and Bridge Construction and Compiled Supplemental Specifications dated May 15, 1959.  
Brick from demolition of Pylons will be salvaged for repairing Abutments & Wingwalls.  
All removal & demolition will be done in a clean & workmanlike manner to insure the aesthetic value of the bridge after remodeling.  
Rebrickwork & patching of abutments & walls shall be done after new reinforcing ties have been placed & new abutment caps, wall caps & pylons have been poured.  
All exposed concrete corners shown square on the plans shall be beveled with 1/2" triangular molding except as otherwise noted.  
The Contractor shall notify the Bureau of Highways & Expressways, City Engineers' Office, Detroit, Michigan at least one week in advance of casting concrete beams in order that testing and inspection arrangements can be made.  
The work to be done by the Prestressed Concrete Beam Contractor includes the manufacture, delivery, and erection of all beams. The Contractor shall set all beams, tie them transversely, and drill holes through the ends of the beams into the new abutment caps. All other work, including placing anchor dowels and filling holes and longitudinal joints, shall be done by City Forces.  
J.W.P. denotes Joint Waterproofing.  
Elev. shown are referenced to City of Detroit Datum P.B.M. 255 City of Detroit Monument, S.E. corner of Vista Drive and Central Ave. Elev. 93.268.

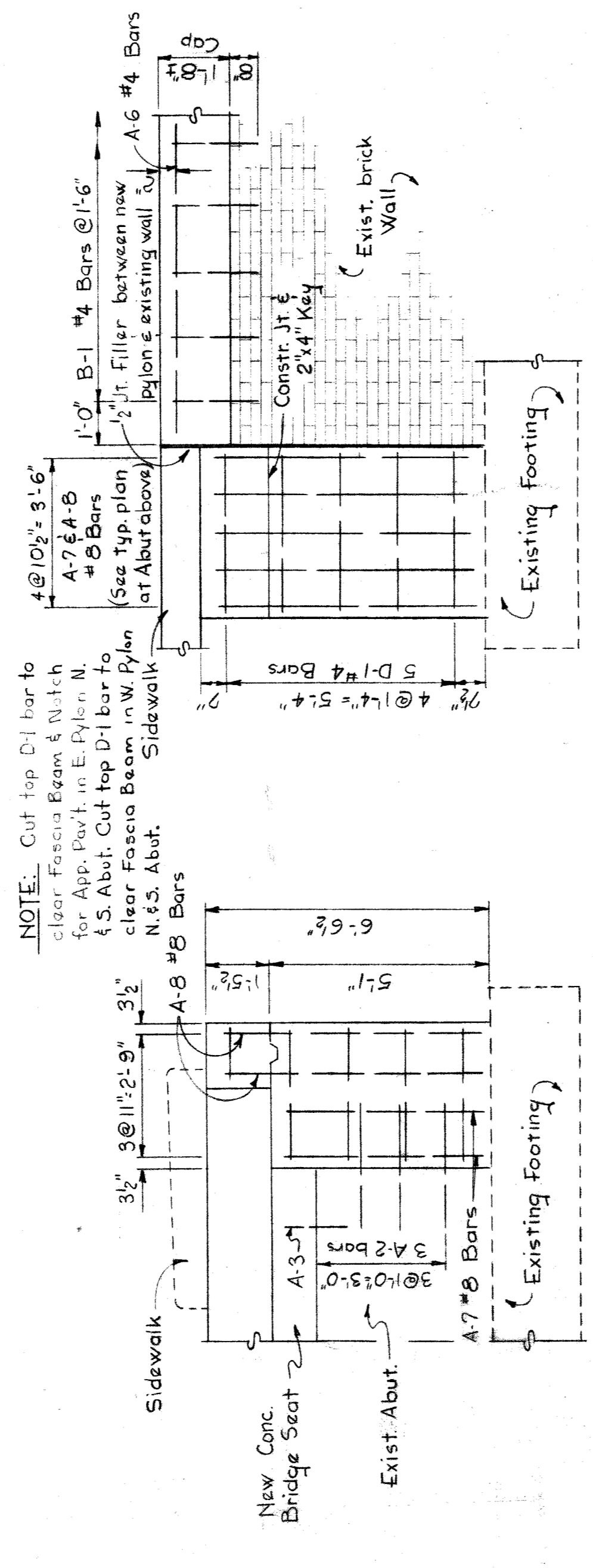
SHEET 2 OF 4 SHEETS	CITY OF DETROIT	BELLE ISLE	APPROVED:
CONTRACT PW-3077	DEPARTMENT OF PUBLIC WORKS	BW214 - VISTA DRIVE	<i>[Signature]</i>
DRWG No. C102	CITY ENGINEERS OFFICE	REPAIR PLAN	<i>[Signature]</i>
DATE APRIL '60	BUREAU OF HIGHWAYS AND EXPRESSWAYS		<i>[Signature]</i>
AO 1044	BRIDGE MAINTENANCE		<i>[Signature]</i>
DESIGNED BY J. COVERT			
DRAWN BY W. LOCHER			
TRACED BY A. GEDSH			
CHECKED BY J. COVERT C.C.L.			
REVISIONS LOCATED BY COORDINATES ON SHEET			

Note: South Abut. is identical to North Abut. when rotated 180° except where noted.

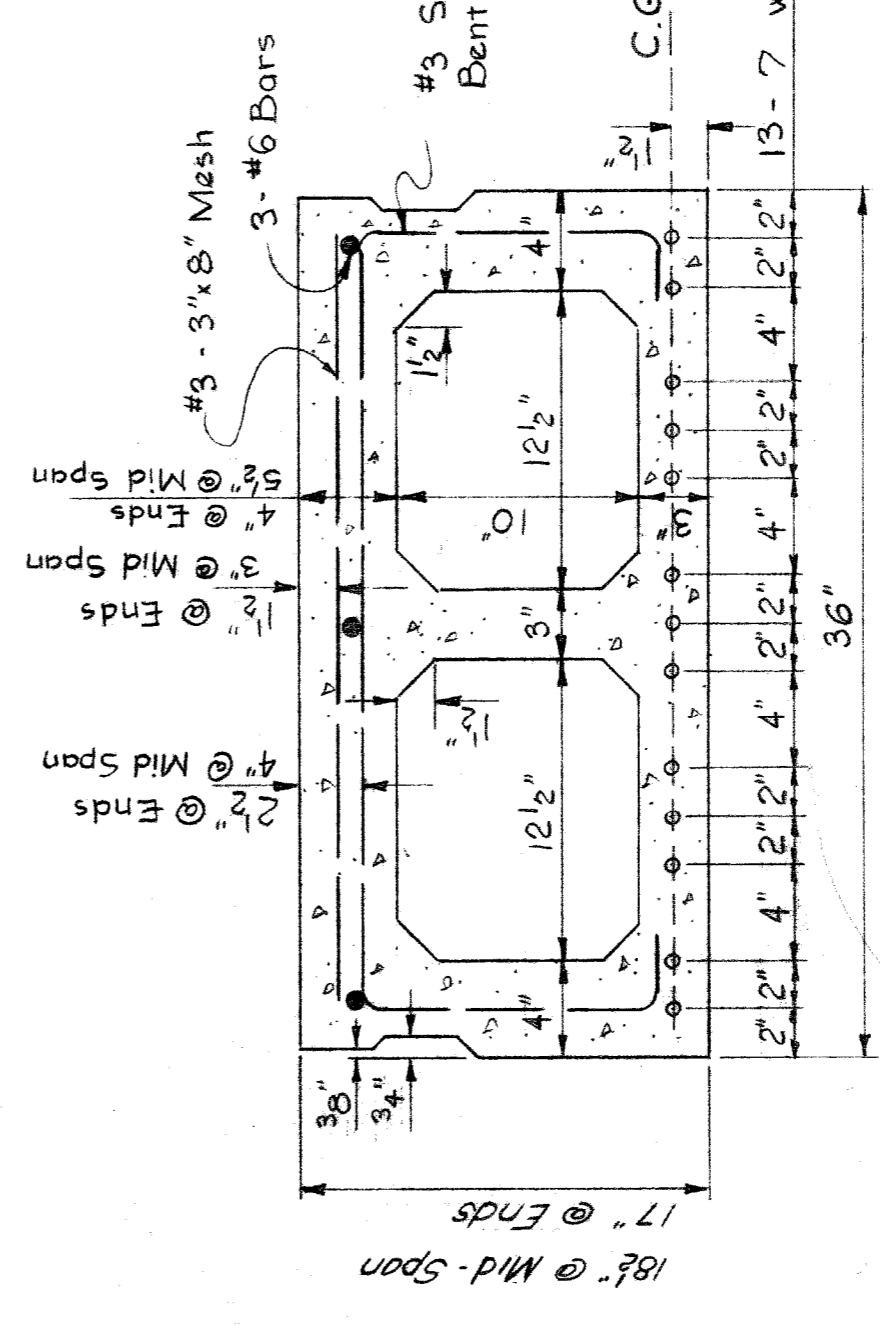


TYPICAL PLAN AT ABUTMENTS  
Scale: 3/8" = 1'-0"

NOTE: Cut top D1 bar to clear Fascia Beam & Nitch for App. Post in E. Pylon. N. S. Abut. Cut top D1 bar to clear Fascia Beam in W. Pylon N.S. Abut. Sidewalk

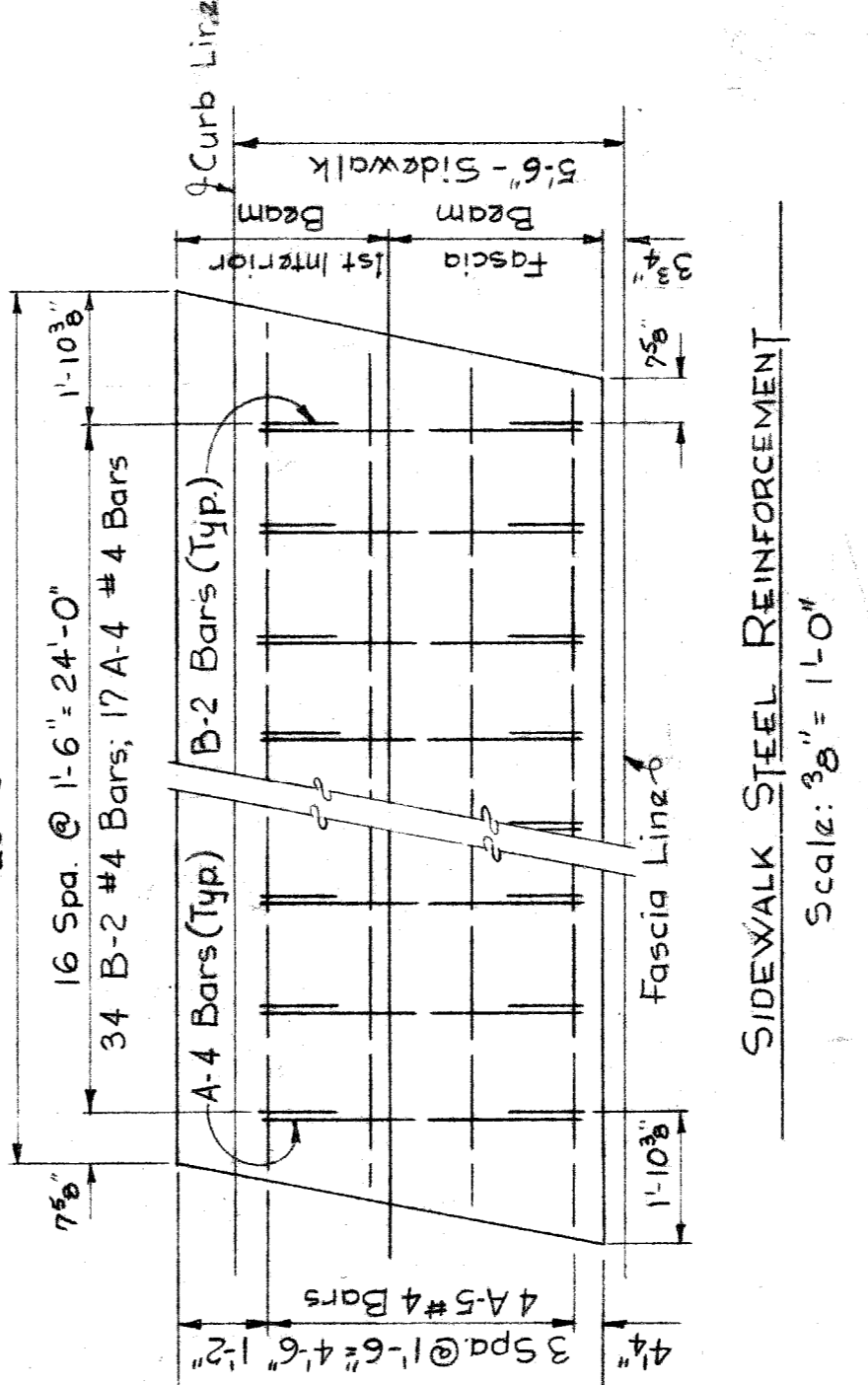


SECTION B-B  
Scale: 3/8" = 1'-0"

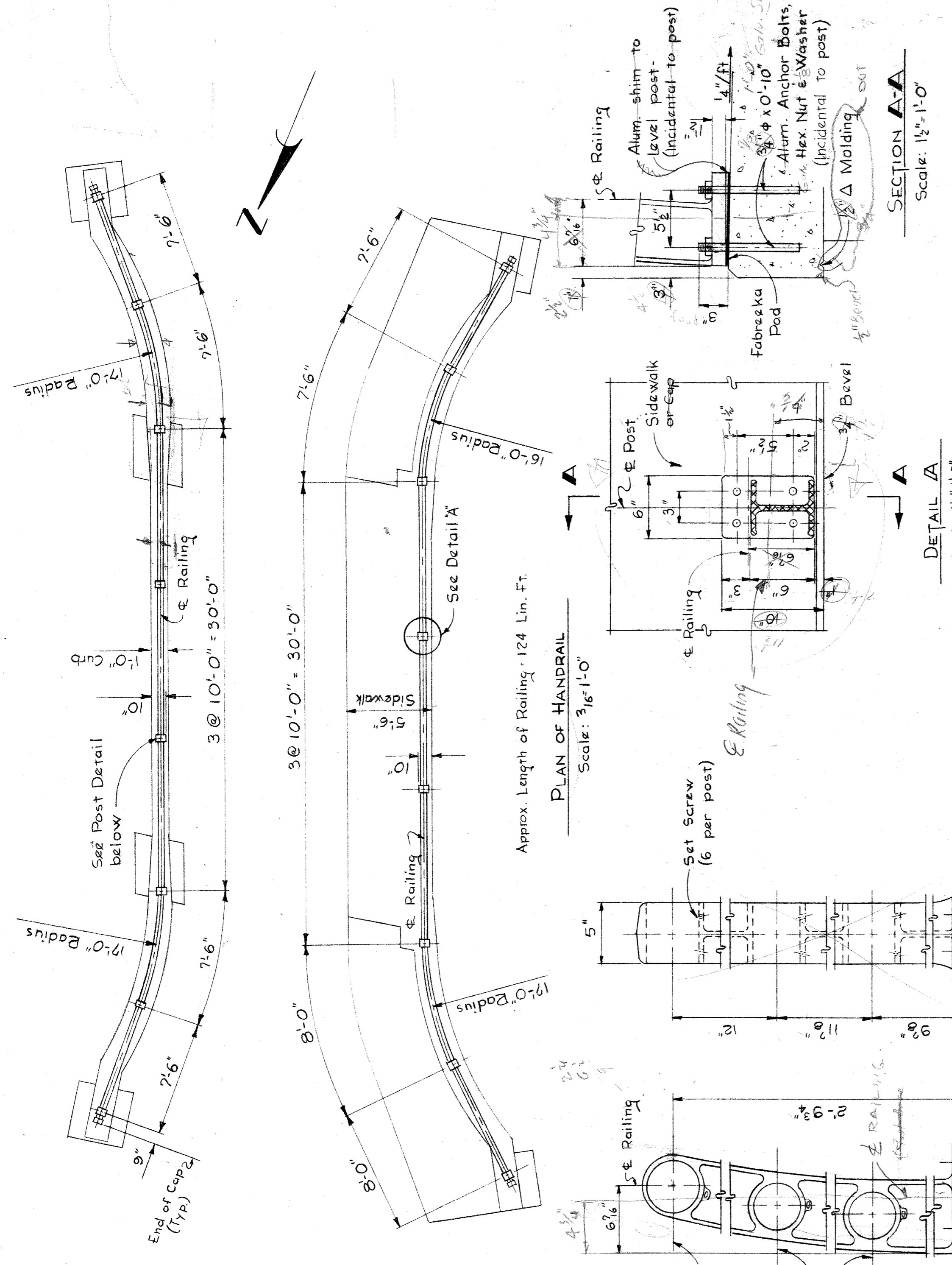


SECTION THROUGH 17' PRESTRESSED CONCRETE BEAM  
Scale: 1/2" = 1'-0"

SECTION C-C  
Scale: 3/8" = 1'-0"



SIDEWALK STEEL REINFORCEMENT  
Scale: 3/8" = 1'-0"



PLAN OF HANDRAIL  
Scale: 3/16" = 1'-0"

SECTION A-A  
Scale: 1 1/2" = 1'-0"

HANDRAIL POST DETAIL  
(ALCOA PART #3001)  
No Scale

SECTION A-A  
Scale: 1 1/2" = 1'-0"

BILL OF MATERIALS

ITEM	AMOUNT	UNIT
Demolition	Lump Sum	
Joint Waterproofing	108	Sq. Ft.
Concrete	40	Cu. Yds.
Reinforcing Steel	2377	Lbs.
17' Prestressed Conc. Beams	795	Sq. Ft.
Aluminum Railing	Lump Sum	
Structural Tile 6"x12"x12"	84	Each
Asphalt Wearing Course	13	Tons
Sand & Gravel Backfill (L.M.)	40	Cu. Yds.
Repair Brick Veneer	Lump Sum	
2" Jt. Filler	226	Sq. Ft.

STEEL REINFORCEMENT DETAILS

BAR BENDING DIAGRAM	BAR SIZE	DIMENSIONS				REINFORCING BAR SCHEDULE	No. REqd.	WEIGHT
		a	b	c	d			
(A)	A-1 #4	29'-0"	8	155				
(B)	A-2 #8	3'-0"	30	241				
(C)	A-3 #8	1'-5"	58	220				
(D)	A-4 #4	1'-9"	17	54				
(E)	A-5 #4	27'-9"	6	111				
(F)	A-6 #4	16'-0"	8	86				
(G)	A-7 #8	4'-10"	20	250				
(H)	A-8 #8	6'-4"	36	609				
(I)	A-9 #8	26'-9"	2	80				
(J)	A-10 #8	0'-9"	12	24				
(K)	B-1 #4	0'-10"	45	163				
(L)	B-2 #4	0'-10"	34	62				
(M)	C-1 #4	0'-8"	17	41				
(N)	D-1 #4	1'-10"	20	184				
(O)	4-4-4#4	Welded Wire Fabric		225.5#				

TOTAL 2480 Lb.

NOTES:  
New reinforcing ties into existing walls & abutments shall be placed or drilled & grouted before patching & re-bricking.  
The portion of new Handrail Anchor Bolts, that are to be exposed above finished concrete lines, shall be coated with grease or heavy oil before pouring concrete.  
\* Incidental to Prestressed Conc. Beams. Not included in Bill of Materials.  
South Abut. is identical to North Abut. when rotated 180° except where noted.

CITY OF DETROIT  
DEPARTMENT OF PUBLIC WORKS  
CITY ENGINEERS OFFICE  
BUREAU OF HIGHWAYS AND EXPRESSWAYS  
BRIDGE MAINTENANCE

DESIGNED BY J. Covert  
DRAWN BY W. LOCHED  
TRACED BY A. GEDSH  
CHECKED BY J. Covert C.C.L.

APPROVED: [Signature]  
[Signature]  
CITY ENGINEER

REFERENCE DRAWINGS

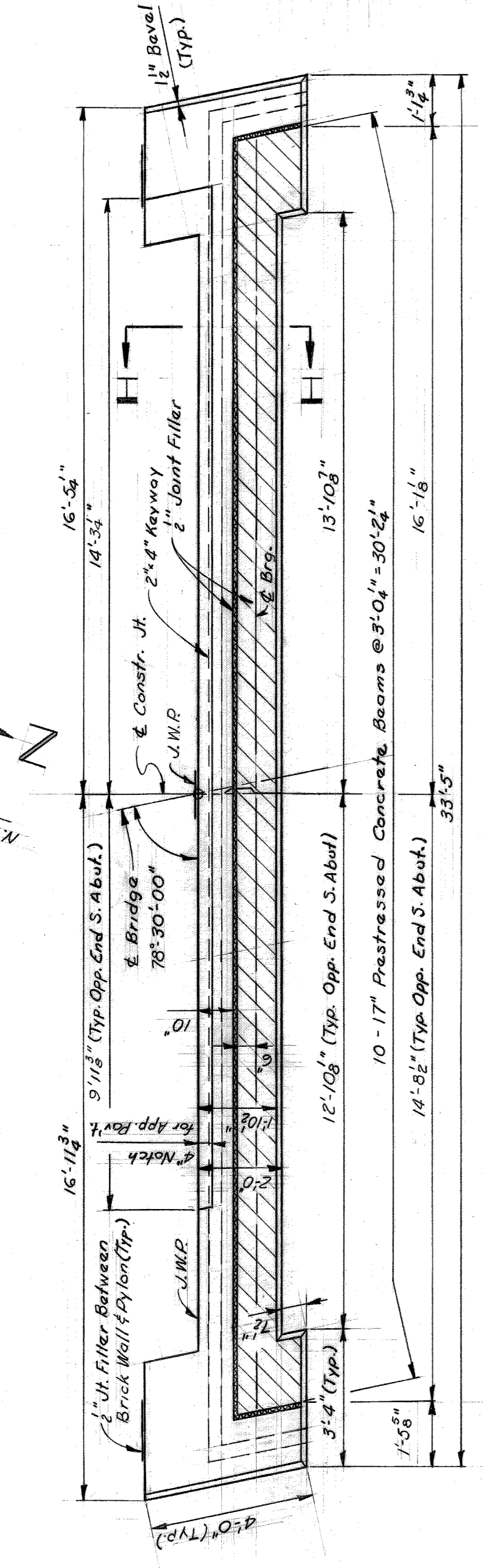
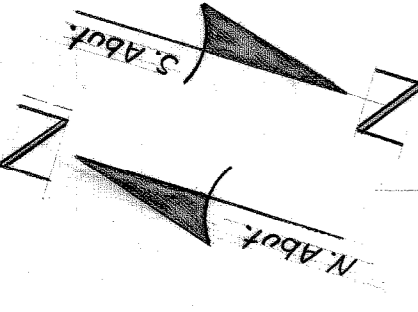
REVISIONS LOCATED BY COORDINATES ON SHEET

SHEET 3 OF 4 SHEETS  
CONTRACT PW 3077  
DRWG No. C-103  
DATE APRIL '60  
AO 1044

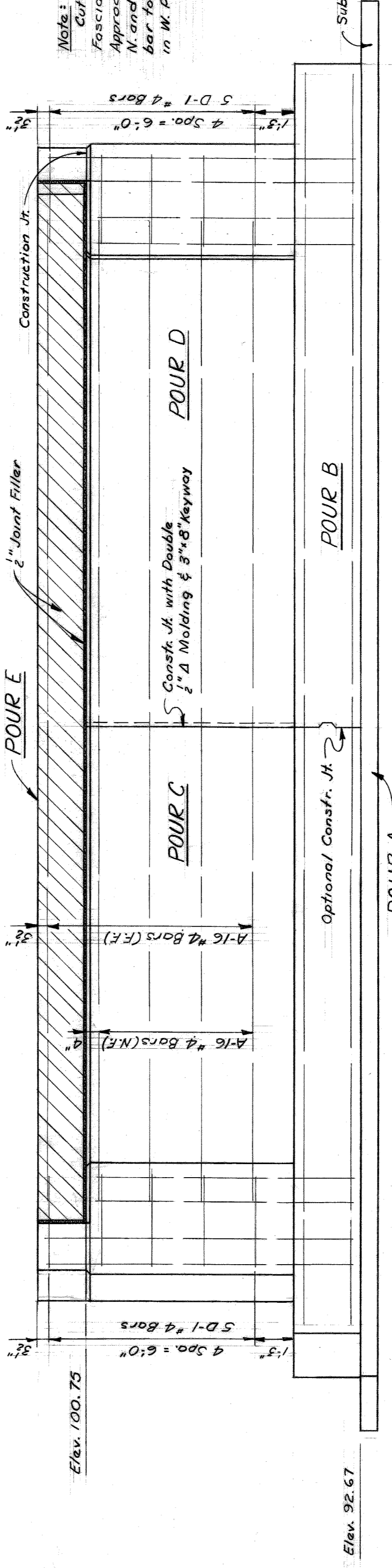
BELLE ISLE  
BW214 · VISTA DRIVE  
DETAIL SHEET



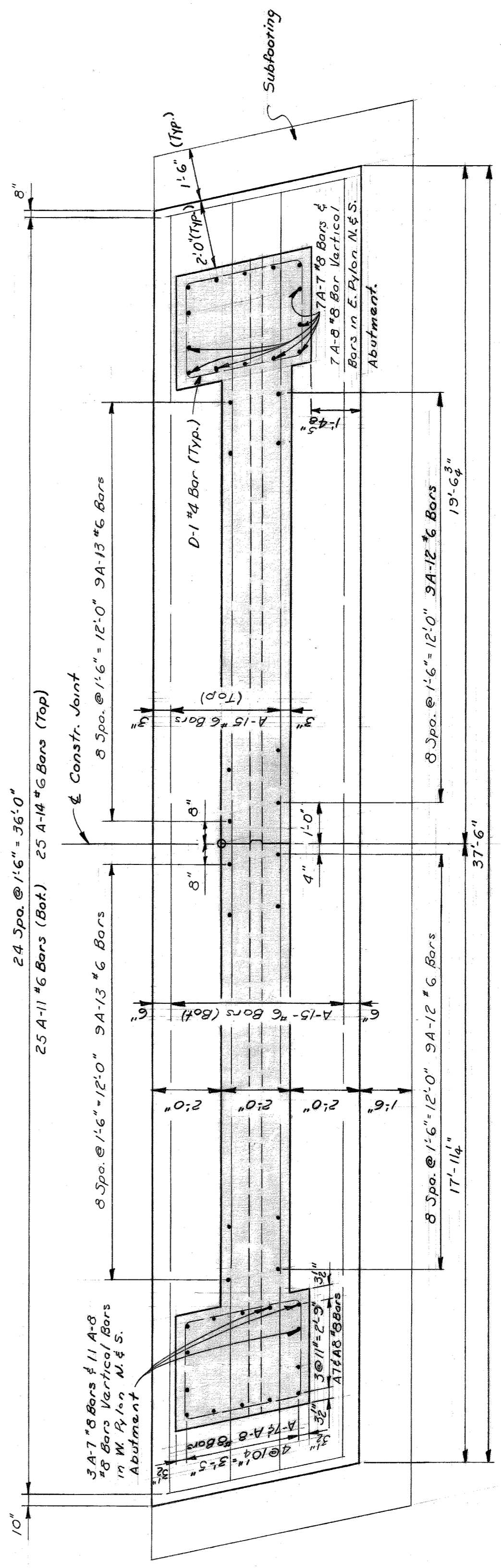
Note: South Abutment is identical to North Abutment when rotated 180° except where noted.



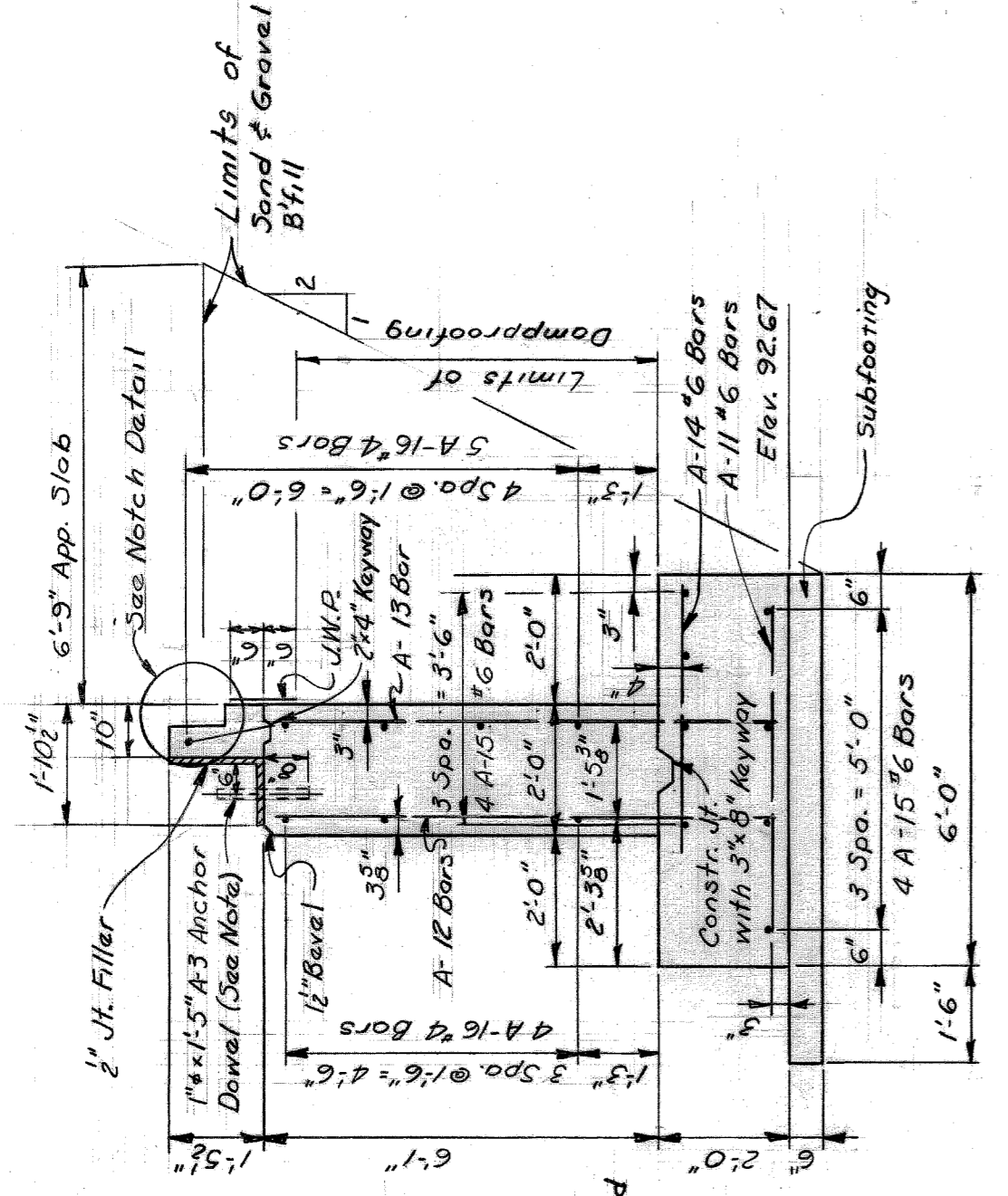
PLAN OF TOP  
SCALE: 3/8" = 1'-0"



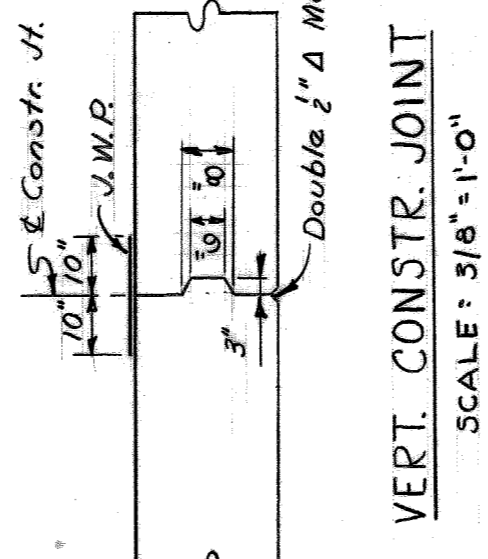
ELEVATION  
SCALE: 3/8" = 1'-0"



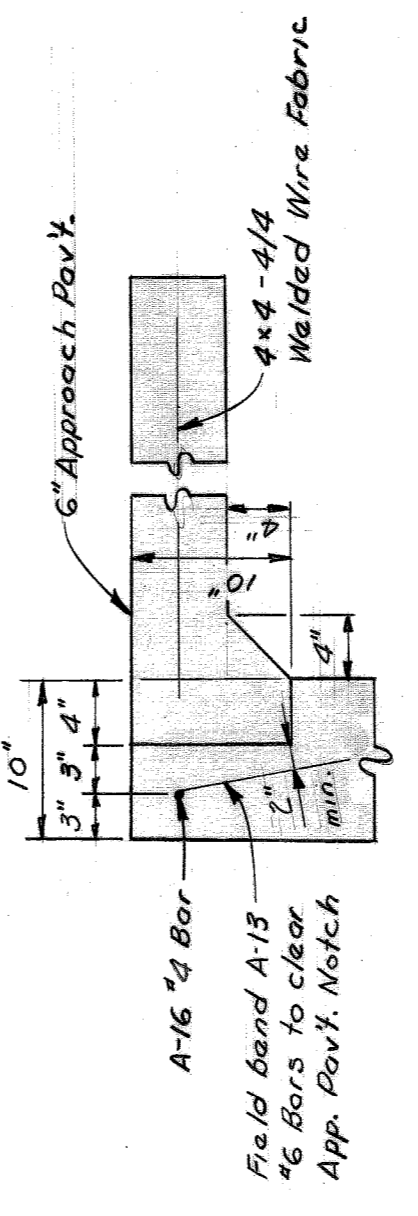
FOUNDATION PLAN  
SCALE: 3/8" = 1'-0"



SECTION H-H  
SCALE: 3/8" = 1'-0"



VERT. CONSTR. JOINT  
SCALE: 3/8" = 1'-0"



NOTCH DETAIL  
SCALE: 1" = 1'-0"


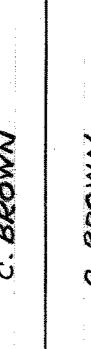
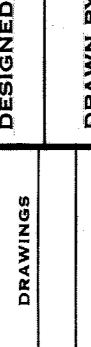
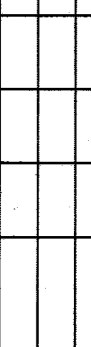
STEEL REINFORCEMENT DETAILS						
BAR	SIZE	DIMENSIONS			No. REQ'D.	WEIGHT
		a	b	c		
A-7	See Sheet 3					
A-8	See Sheet 3					
A-11	#6	5'-0"			50	377
A-12	#6	7'-6"			36	406
A-13	#6	9'-0"			36	487
A-14	#6	3'-6"			50	263
A-15	#6	37'-0"			16	889
A-16	#4	29'-0"			18	393
A-3	See Sheet 3					
D-7	See Sheet 3					
A-4, A-4A	Welded Wire Fabric			1/3 S.Ft.		96
Total						2867 Lb.

\* See Sheet 3 for Bar Bending Diagram

BILL OF MATERIALS **		
ITEM	AMOUNT	UNIT
Demolition	Lump Sum	
Joint Waterproofing	18	Sq. Ft.
Concrete	68	Cu. Yds.
Reinforcing Steel	2867	Lbs.
Sand & Gravel Backfill (L.M.)	59	Cu. Yds.
Dampproofing	558	Sq. Ft.

\*\* Items or quantities previously itemized for Repair Plan See Sh. No. 3, are not included on this Bill.

Note: South Abutment is identical to North Abutment when rotated 180° except where noted.  
Dampproof the rear surface of the abutments and the rear surface of the Pylons to the existing Brick Wall above the footings.  
The tops of the abutments shall be finished to true planes at the elevations shown and shall not vary more than 1/8" under a 10' straight edge, nor more than 1/8" under any bearing.  
N.F., F.F., and E.F. denote near face, far face, and each face respectively.  
The design of the abutment is based on a maximum foundation pressure of 1900 p.s.f. under D.L. only, and a maximum foundation pressure of 3380 p.s.f. under D.L. + L.L.  
Pier E is to be made after the beams have been set and tied transversely and the approach dowels have been set.  
M.R. denotes Joint Waterproofing.

	<b>CITY OF DETROIT</b> DEPARTMENT OF PUBLIC WORKS BUREAU OF HIGHWAYS AND EXPRESSWAYS	<b>BELLE ISLE</b> <b>BW214 - VISTA DRIVE</b> <b>ALTERNATE ABUTMENT PLAN AND DETAILS</b>	SHEET 4 OF 4 SHEETS CONTRACT PW-3077 DRWG No. C-104 DATE APRIL '60
	APPROVED:  C. BROWN DESIGNER	DRAWN BY:  C. BROWN DRAWER	TRACED BY:  C. BROWN TRACER
	CHECKED BY:  W. LOCHER CHECKER		