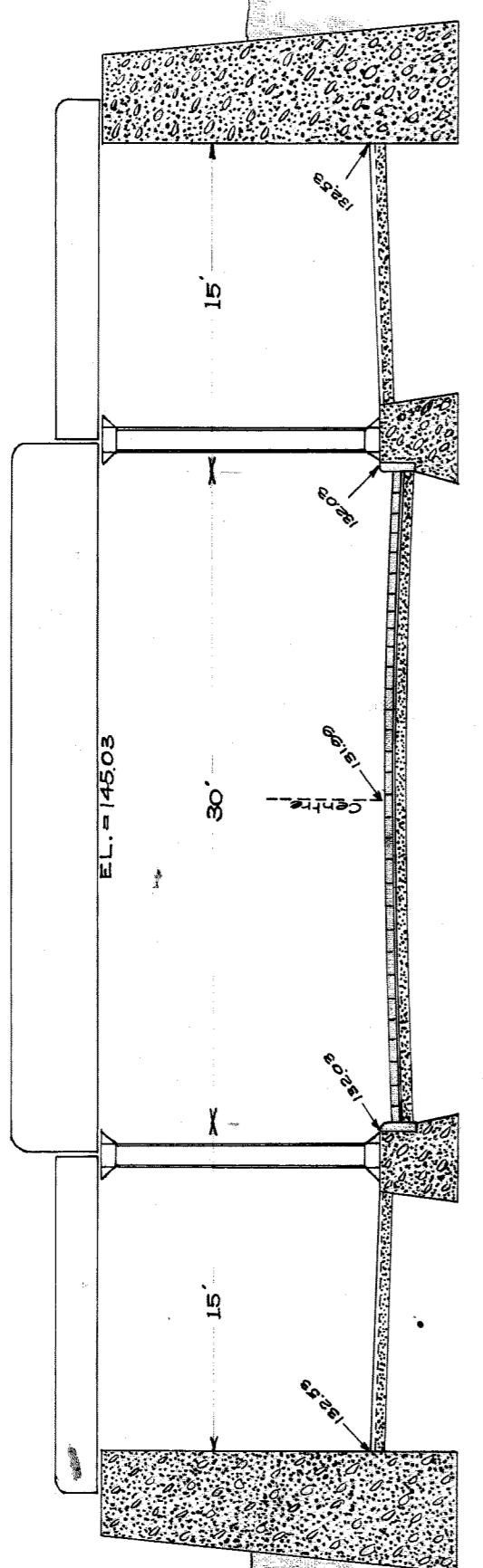
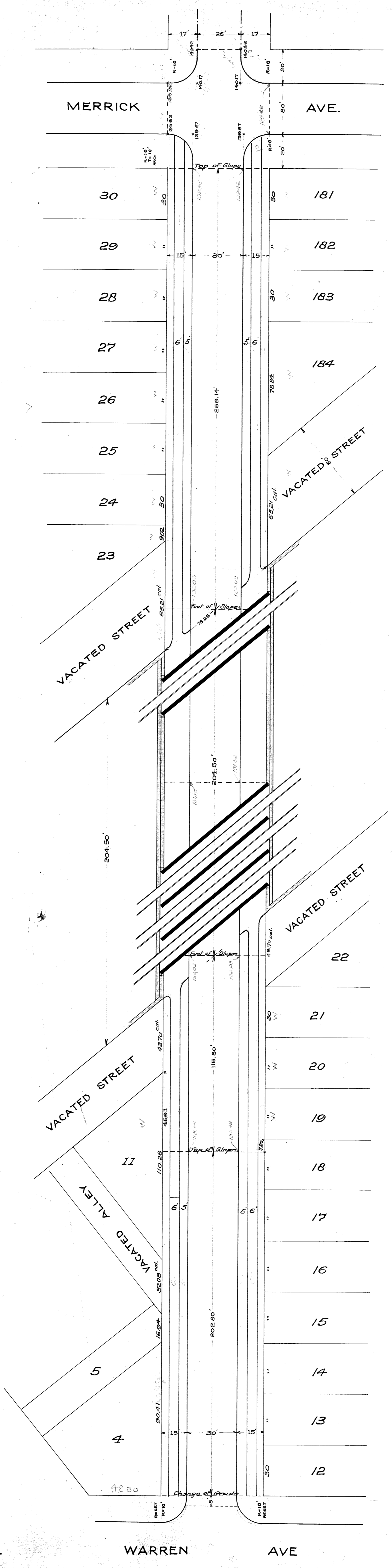


**PLAN OF PROPOSED SUBWAY
IN 16TH ST., UNDER
D. & B. C., L. S. & M. S. & G. T. RWYS.**



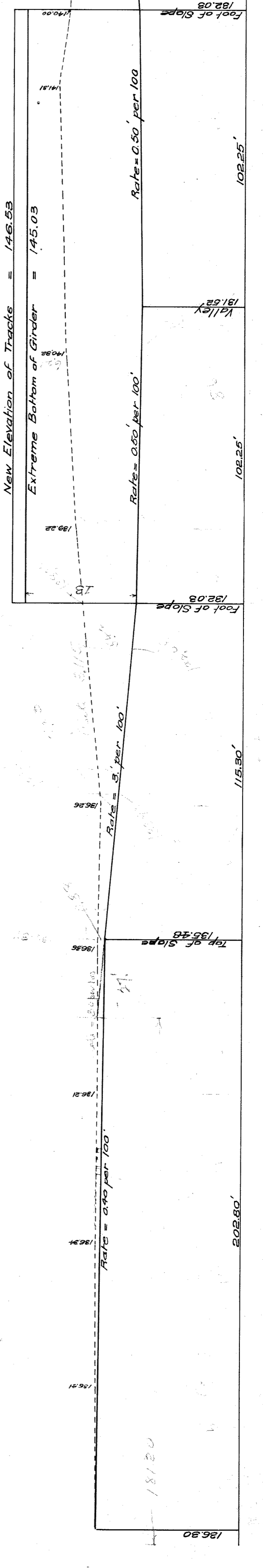
CROSS SECTION
Scale, one inch = 8 Feet.

Approved: February 22, 1907
[Signature] City Engineer,
 Chief Engineer, M.C.R.R.



*Total Straight cut = 1583.48
 to South side, R.S. = 1441.36*

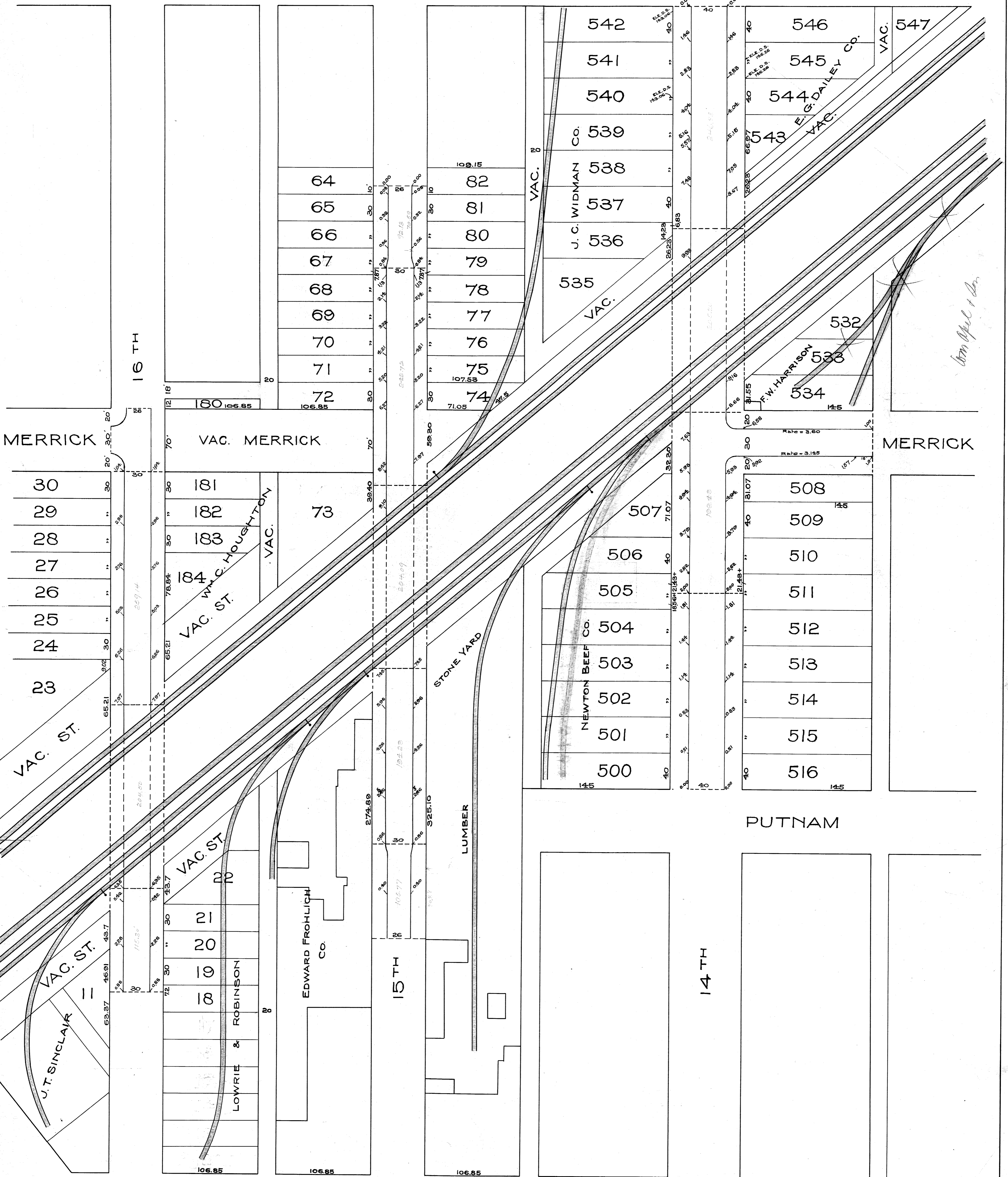
PLAN
SCALE, ONE INCH = 30 FT.



LONGITUDINAL SECTION
HOR SCALE, ONE INCH = 30 FT
VER. " " " = 10 "

7-5
 CITY ENGINEER'S OFFICE
 GRADE, SEPARATION & ELEVATION
 City Engineer's Office A I - 191
 Approved by I.N.R.

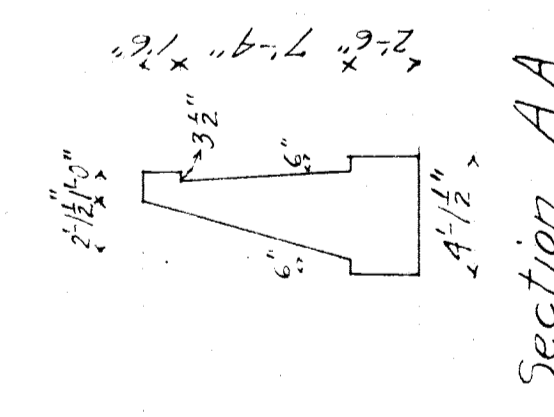
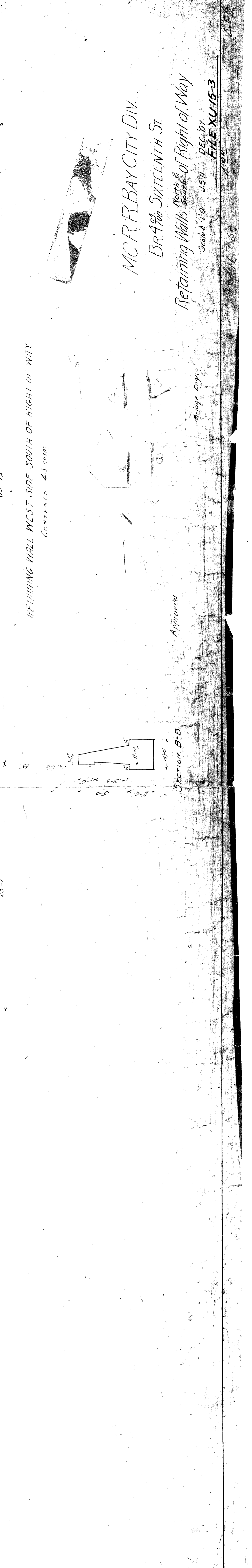
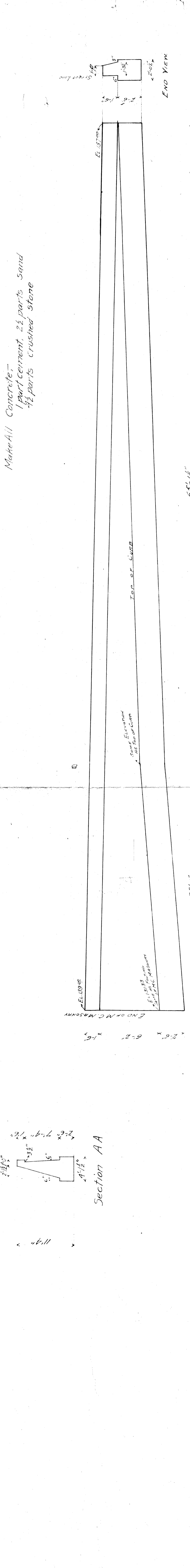
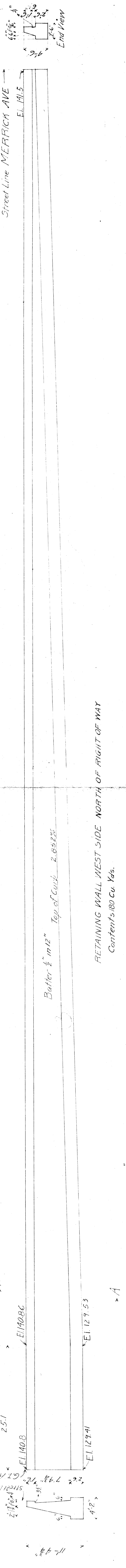
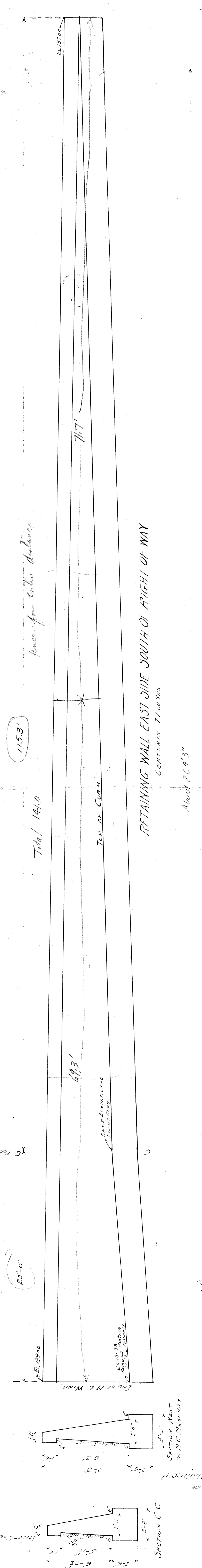
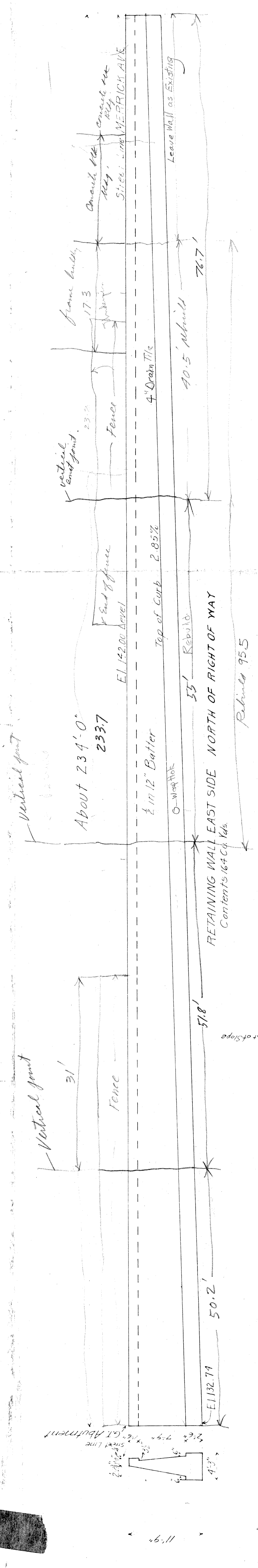
KIRBY



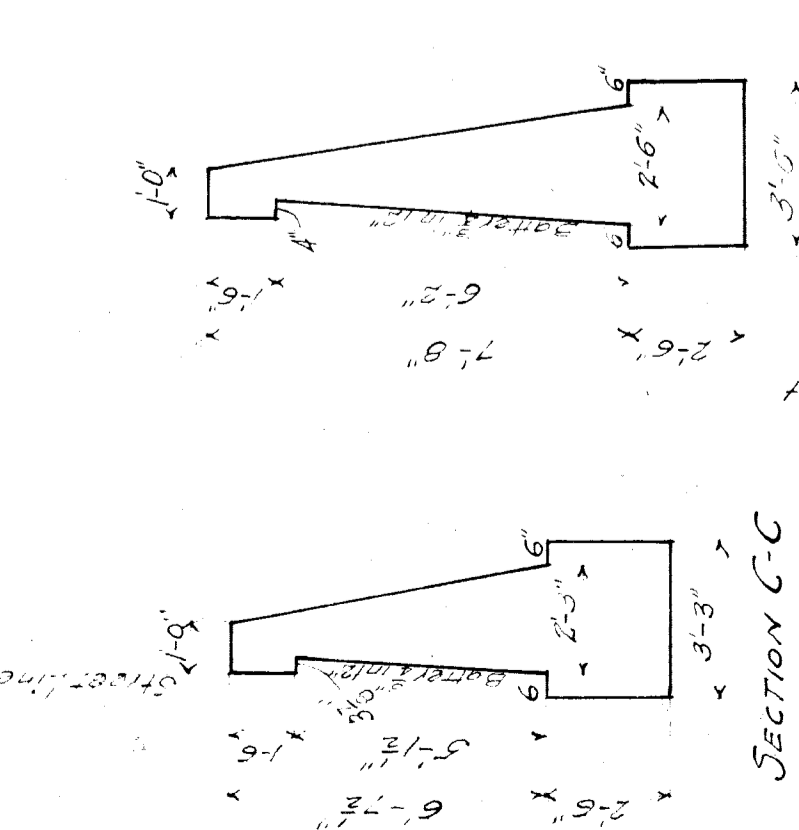
from April 1st

FILE XU15-2

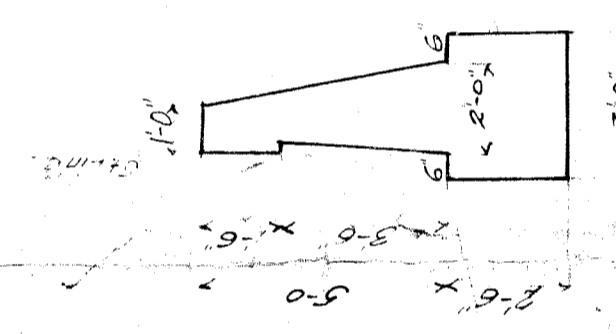
Case: A
 Drawn: 4-1-116
 CITY ENGINEERS OFFICE
 GRADE SEPARATION & BRIDGES
 City Engineers Office



Section A-A



Section C-C



Section B-B

Make All Concrete -
1 part cement, 2 1/2 parts sand
4 1/2 parts crushed stone

RETAINING WALL WEST SIDE SOUTH OF RIGHT OF WAY
CONTENTS 45 cu yds

RETAINING WALL WEST SIDE NORTH OF RIGHT OF WAY
Contents 80 Cu Yds

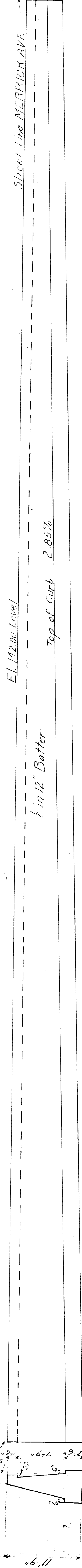
RETAINING WALL EAST SIDE SOUTH OF RIGHT OF WAY
CONTENTS 71 cu yds

About 264.5'

M.C.R. BAY CITY DIV
BR 4th SIXTEENTH ST
Retaining Walls South of Right of Way
Scale 1" = 10'
J.S.H. DEC 27
FILE XUI-5-3

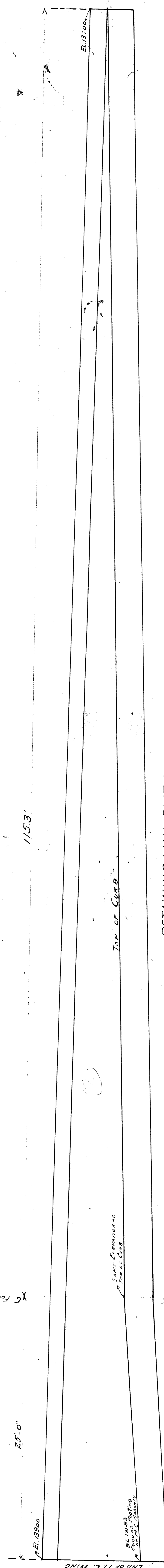
1678

About 234'0"



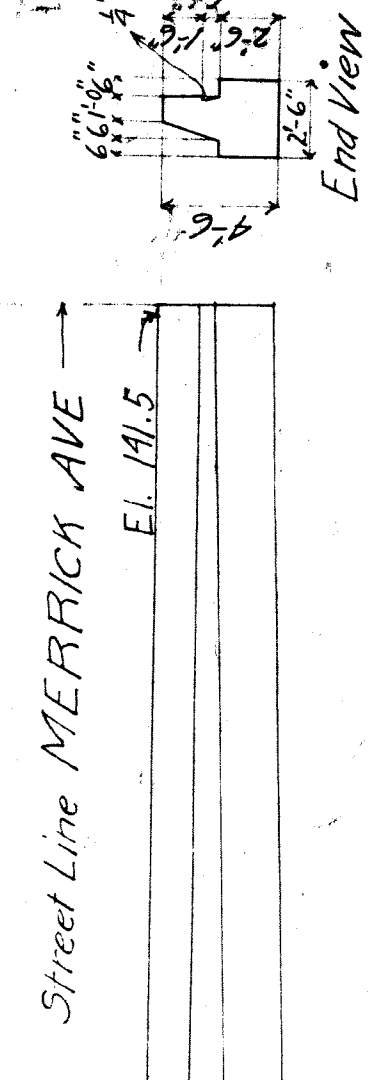
RETAINING WALL EAST SIDE NORTH OF RIGHT OF WAY
Contents 164 Cu Yds.

1/53'



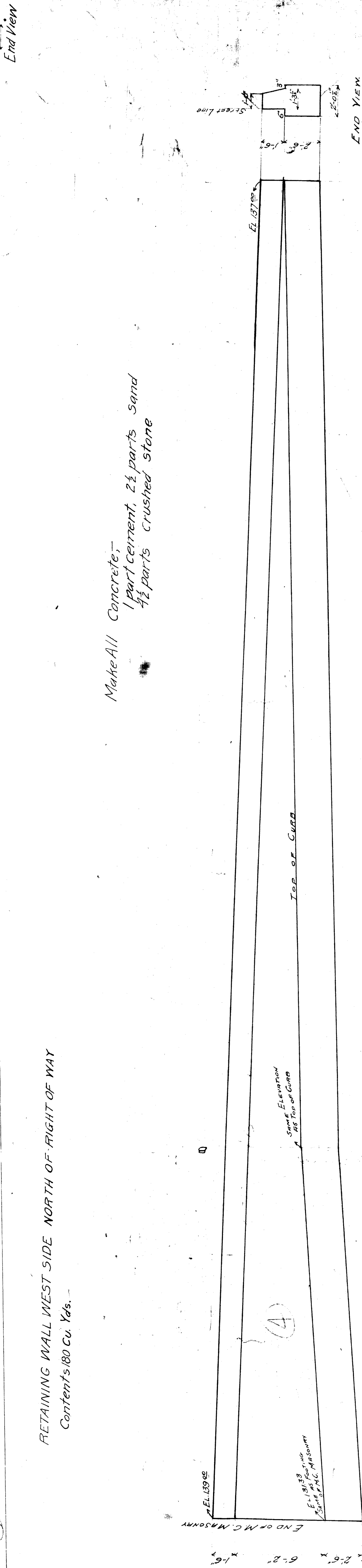
RETAINING WALL EAST SIDE SOUTH OF RIGHT OF WAY
Contents 77 Cu Yds.

About 254'3"



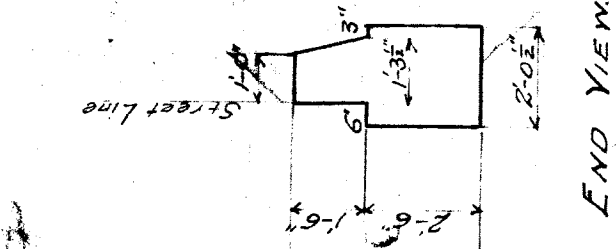
RETAINING WALL WEST SIDE NORTH OF RIGHT OF WAY
Contents 180 Cu Yds.

Batter 1/2 in 12" Top of Curb 2.85%

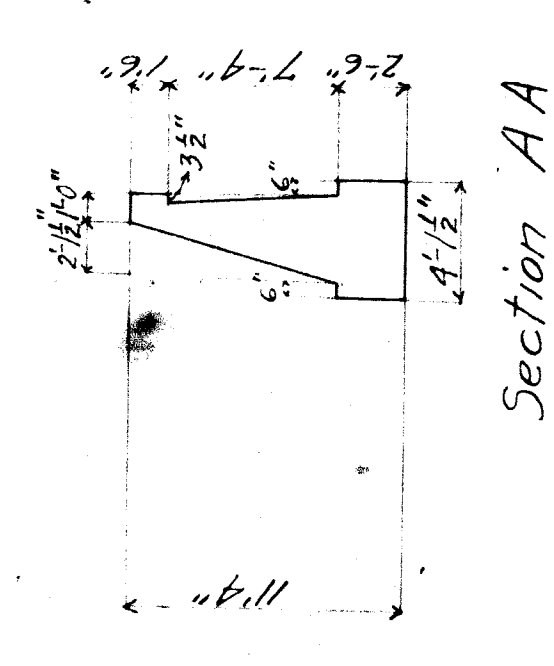


RETAINING WALL WEST SIDE SOUTH OF RIGHT OF WAY
Contents 45 Cu Yds.

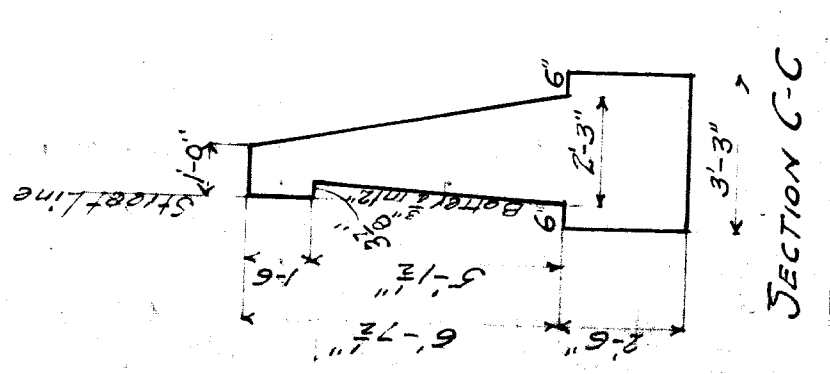
65'-1/2"



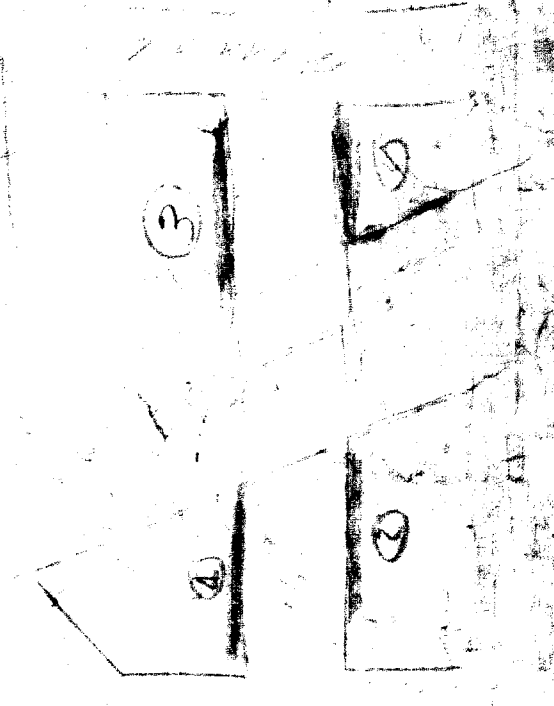
Make All Concrete -
1 part cement, 2 1/2 parts sand
1/2 parts crushed stone



Section A A



Section C C



Section B B

M.C.R. BAY CITY DIV.
BR 4th SIXTEENTH ST.
Retaining Walls North & South of Right of Way
Scale 1/4" = 1'-0" J.S.P. DEC. 07

Approved

Material Steel, 1904 Specifications.

Plates less than 36 wide to have rounded ends.

Plane shown on ends and ends of web and web splice plates.

Fit and stiffening L's and shims at bottom.

Drill holes in material more than 1/4" thick.

Rivets in flanges of I's.

Rivets in floor plates, top flanges of floor beams and horizontal leg of side L's.

Other rivets.

Each hole for rivets in lower flange L's and plates, lower for web and web splice plates.

And run to 1/8" before assembling, except in material 3/4" thick and less.

Rivets for 3/4" rivets 1/8" to 1/4" in diameter for rivets 1/2" and less.

Rivets for 5/8" rivets 1/4" to 3/8" in diameter for rivets 5/8" and less.

Rivets for 3/8" rivets 1/8" to 1/4" in diameter for rivets 3/8" and less.

Rivets for 1/2" rivets 1/4" to 3/8" in diameter for rivets 1/2" and less.

Rivets for 3/4" rivets 3/8" to 1/2" in diameter for rivets 3/4" and less.

Rivets for 5/8" rivets 1/2" to 3/4" in diameter for rivets 5/8" and less.

Rivets for 3/4" rivets 3/4" to 1" in diameter for rivets 3/4" and less.

Rivets for 1" rivets 7/8" to 1" in diameter for rivets 1" and less.

Rivets for 1" rivets 1" to 1 1/8" in diameter for rivets 1" and less.

Rivets for 1 1/8" rivets 1 1/8" to 1 1/4" in diameter for rivets 1 1/8" and less.

Rivets for 1 1/4" rivets 1 1/4" to 1 1/2" in diameter for rivets 1 1/4" and less.

Rivets for 1 1/2" rivets 1 1/2" to 1 3/4" in diameter for rivets 1 1/2" and less.

Rivets for 1 3/4" rivets 1 3/4" to 2" in diameter for rivets 1 3/4" and less.

Rivets for 2" rivets 2" to 2 1/4" in diameter for rivets 2" and less.

Rivets for 2 1/4" rivets 2 1/4" to 2 3/4" in diameter for rivets 2 1/4" and less.

Rivets for 2 3/4" rivets 2 3/4" to 3" in diameter for rivets 2 3/4" and less.

Rivets for 3" rivets 3" to 3 1/4" in diameter for rivets 3" and less.

Rivets for 3 1/4" rivets 3 1/4" to 3 3/4" in diameter for rivets 3 1/4" and less.

Rivets for 3 3/4" rivets 3 3/4" to 4" in diameter for rivets 3 3/4" and less.

Rivets for 4" rivets 4" to 4 1/4" in diameter for rivets 4" and less.

Rivets for 4 1/4" rivets 4 1/4" to 4 3/4" in diameter for rivets 4 1/4" and less.

Rivets for 4 3/4" rivets 4 3/4" to 5" in diameter for rivets 4 3/4" and less.

Rivets for 5" rivets 5" to 5 1/4" in diameter for rivets 5" and less.

Rivets for 5 1/4" rivets 5 1/4" to 5 3/4" in diameter for rivets 5 1/4" and less.

Rivets for 5 3/4" rivets 5 3/4" to 6" in diameter for rivets 5 3/4" and less.

Rivets for 6" rivets 6" to 6 1/4" in diameter for rivets 6" and less.

Rivets for 6 1/4" rivets 6 1/4" to 6 3/4" in diameter for rivets 6 1/4" and less.

Rivets for 6 3/4" rivets 6 3/4" to 7" in diameter for rivets 6 3/4" and less.

Rivets for 7" rivets 7" to 7 1/4" in diameter for rivets 7" and less.

Rivets for 7 1/4" rivets 7 1/4" to 7 3/4" in diameter for rivets 7 1/4" and less.

Rivets for 7 3/4" rivets 7 3/4" to 8" in diameter for rivets 7 3/4" and less.

Rivets for 8" rivets 8" to 8 1/4" in diameter for rivets 8" and less.

Rivets for 8 1/4" rivets 8 1/4" to 8 3/4" in diameter for rivets 8 1/4" and less.

Rivets for 8 3/4" rivets 8 3/4" to 9" in diameter for rivets 8 3/4" and less.

Rivets for 9" rivets 9" to 9 1/4" in diameter for rivets 9" and less.

Rivets for 9 1/4" rivets 9 1/4" to 9 3/4" in diameter for rivets 9 1/4" and less.

Rivets for 9 3/4" rivets 9 3/4" to 10" in diameter for rivets 9 3/4" and less.

Rivets for 10" rivets 10" to 10 1/4" in diameter for rivets 10" and less.

Rivets for 10 1/4" rivets 10 1/4" to 10 3/4" in diameter for rivets 10 1/4" and less.

Rivets for 10 3/4" rivets 10 3/4" to 11" in diameter for rivets 10 3/4" and less.

Rivets for 11" rivets 11" to 11 1/4" in diameter for rivets 11" and less.

Rivets for 11 1/4" rivets 11 1/4" to 11 3/4" in diameter for rivets 11 1/4" and less.

Rivets for 11 3/4" rivets 11 3/4" to 12" in diameter for rivets 11 3/4" and less.

Rivets for 12" rivets 12" to 12 1/4" in diameter for rivets 12" and less.

Rivets for 12 1/4" rivets 12 1/4" to 12 3/4" in diameter for rivets 12 1/4" and less.

Rivets for 12 3/4" rivets 12 3/4" to 13" in diameter for rivets 12 3/4" and less.

Rivets for 13" rivets 13" to 13 1/4" in diameter for rivets 13" and less.

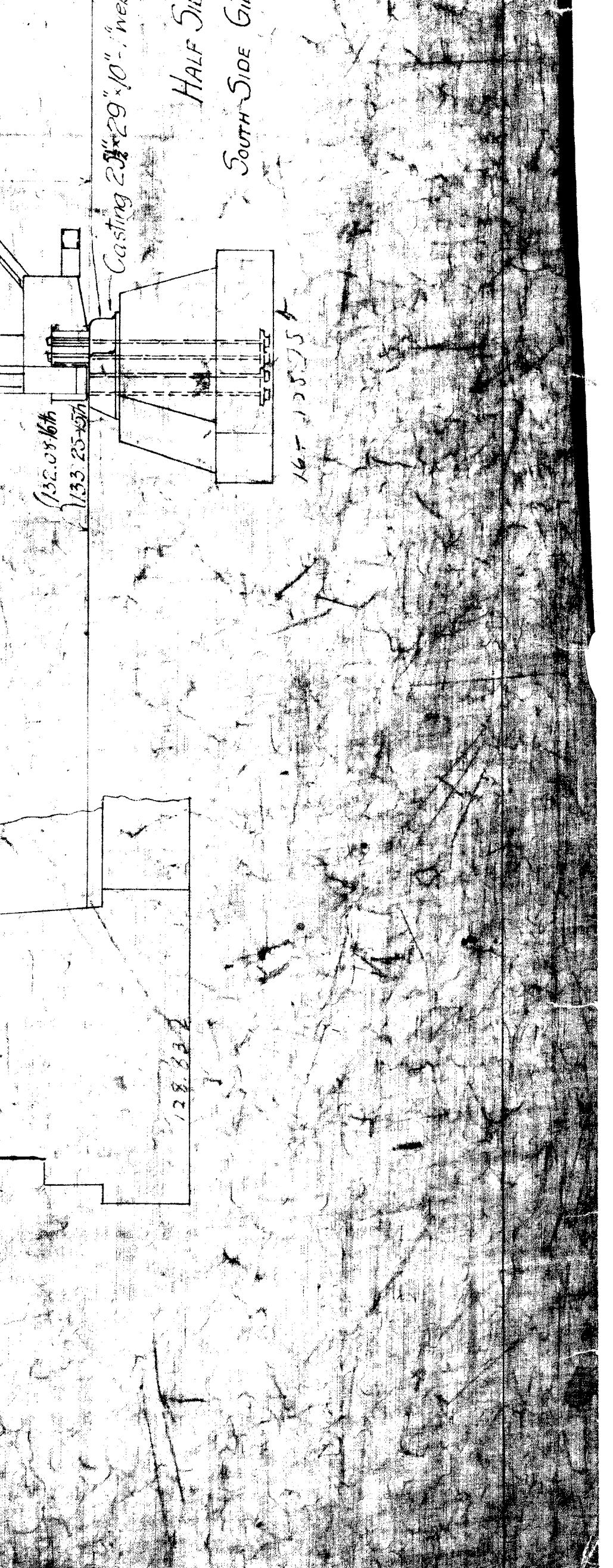
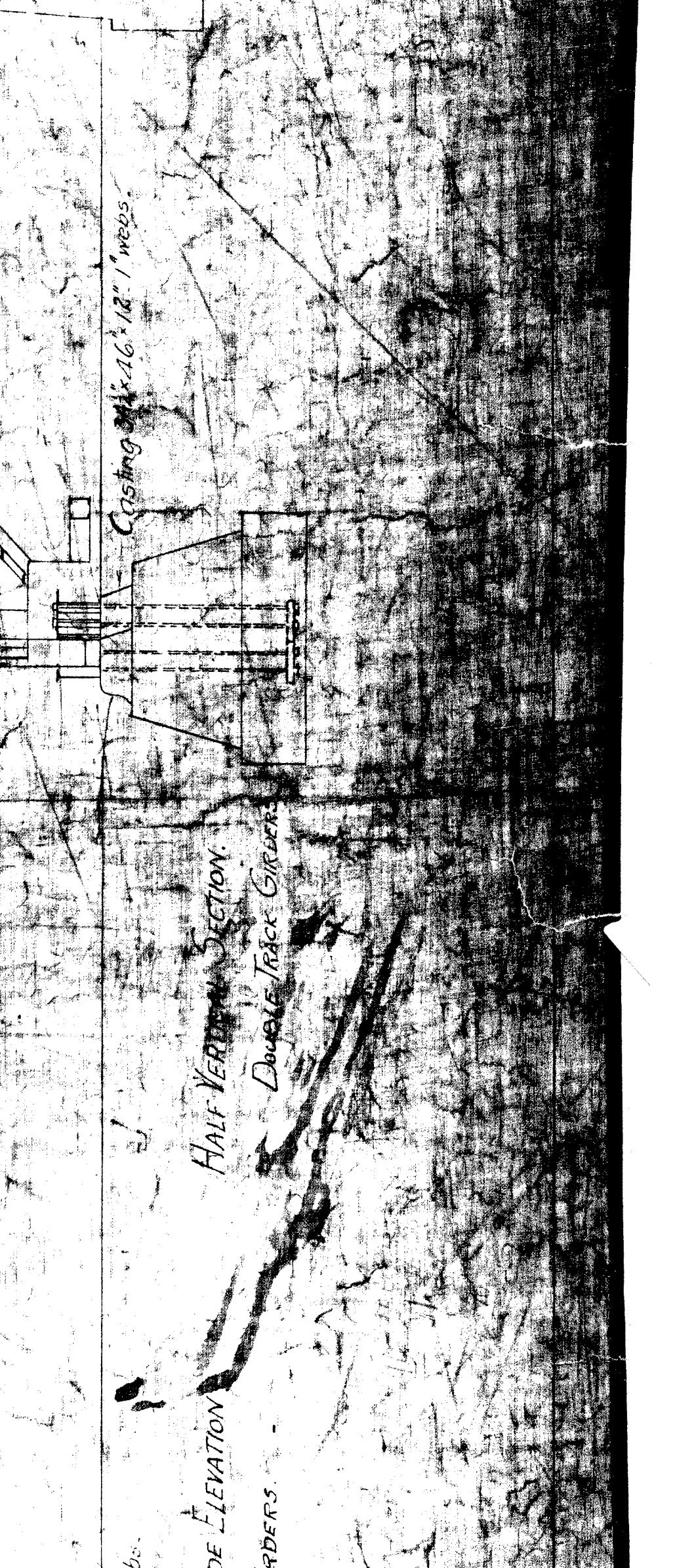
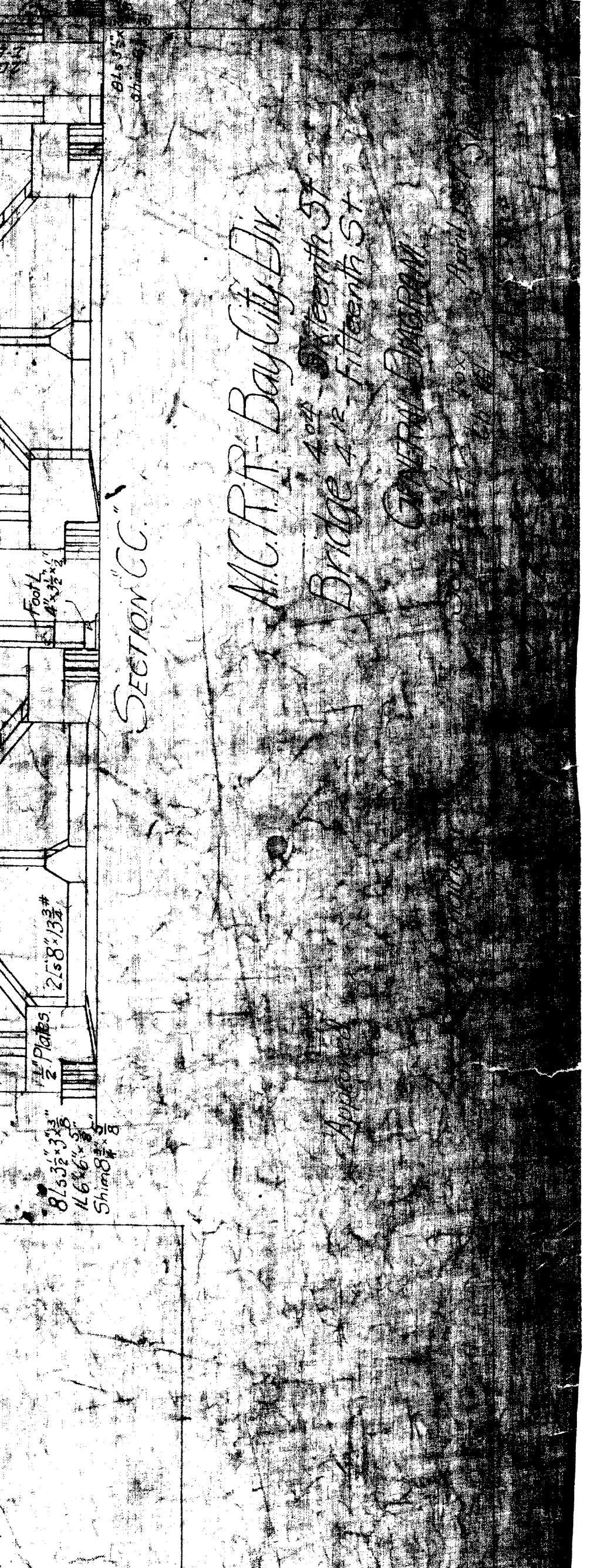
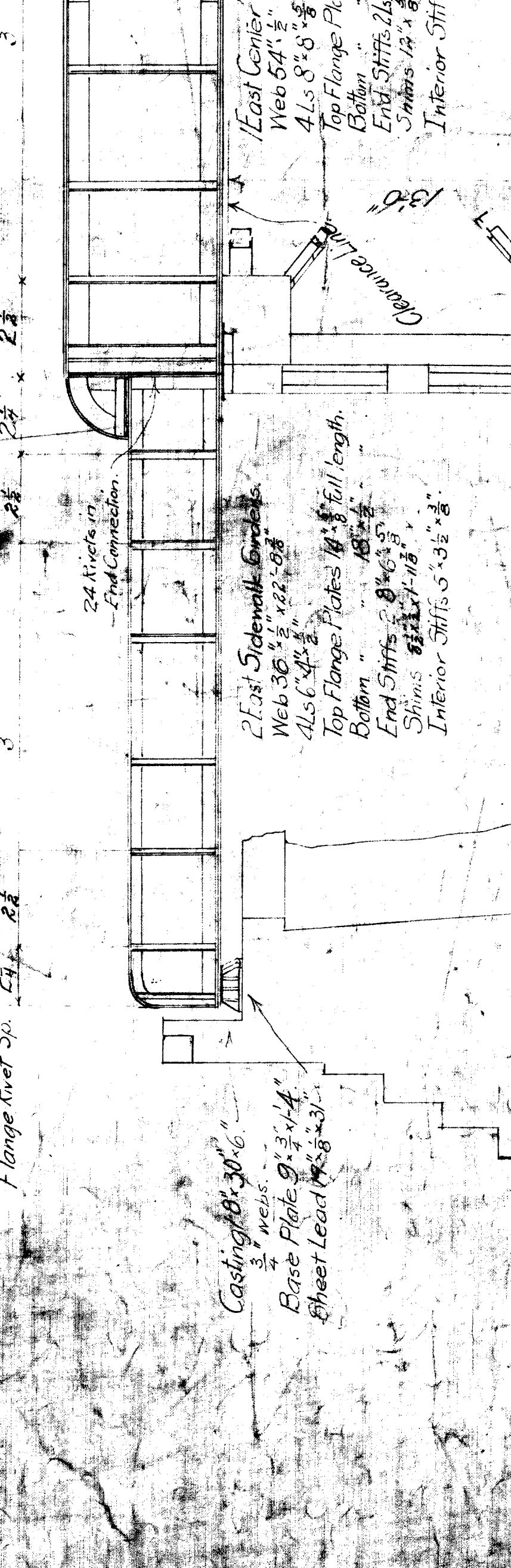
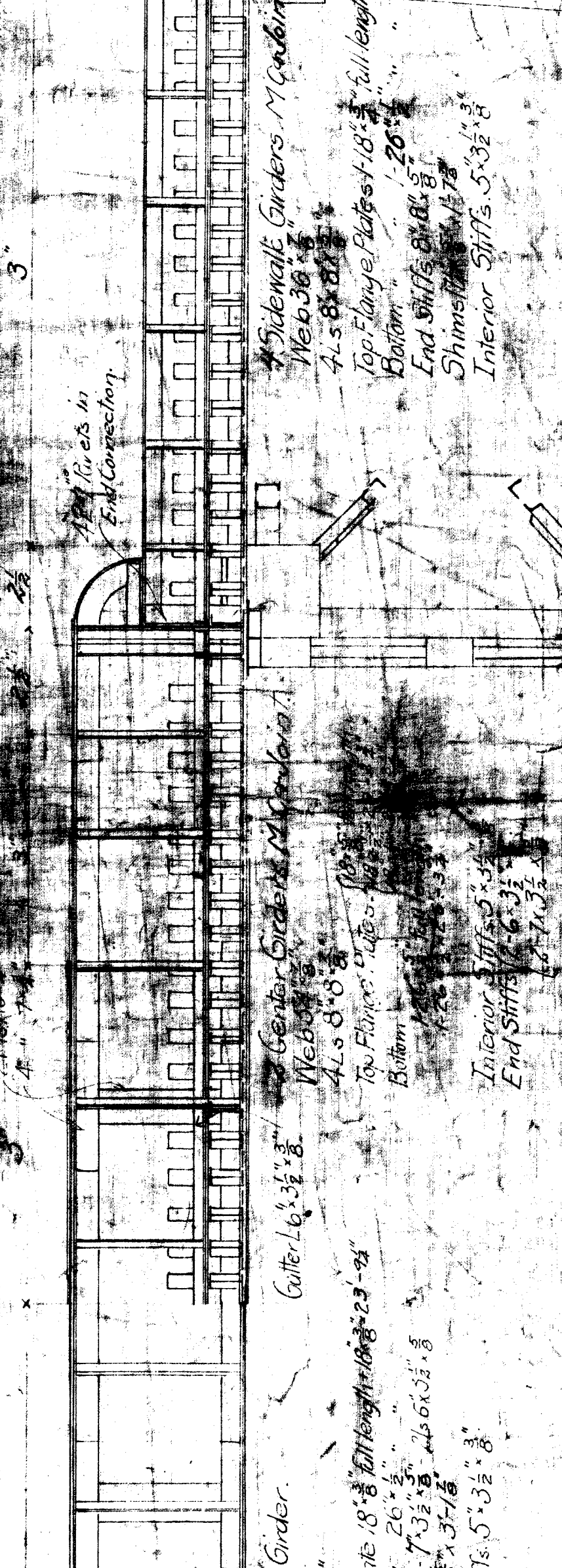
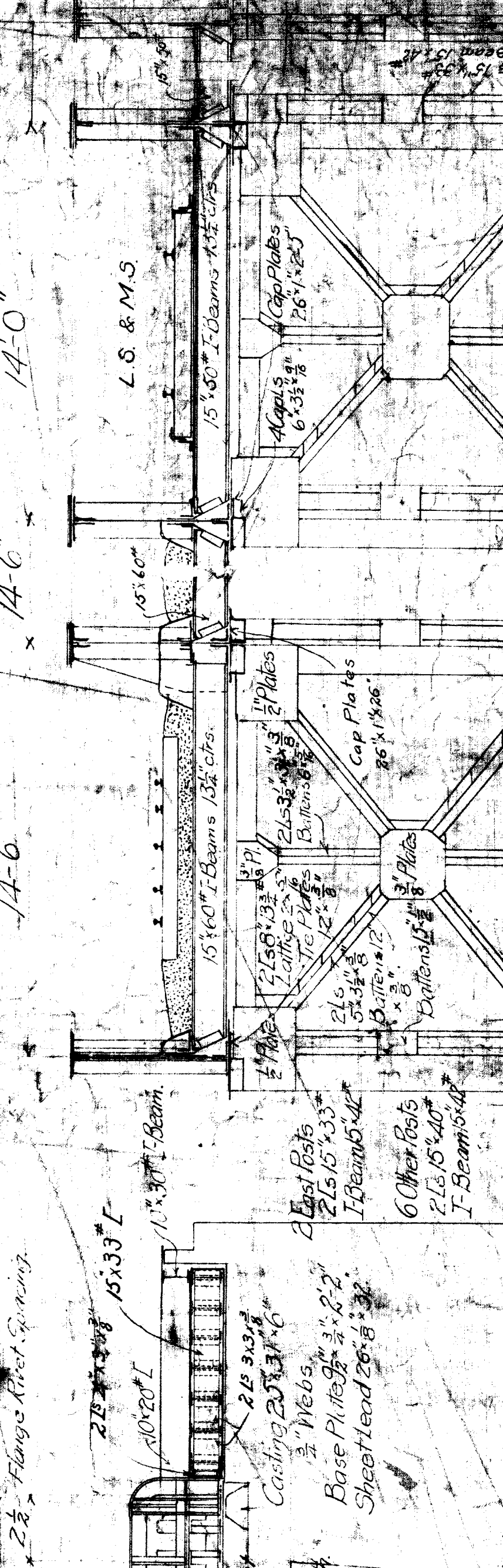
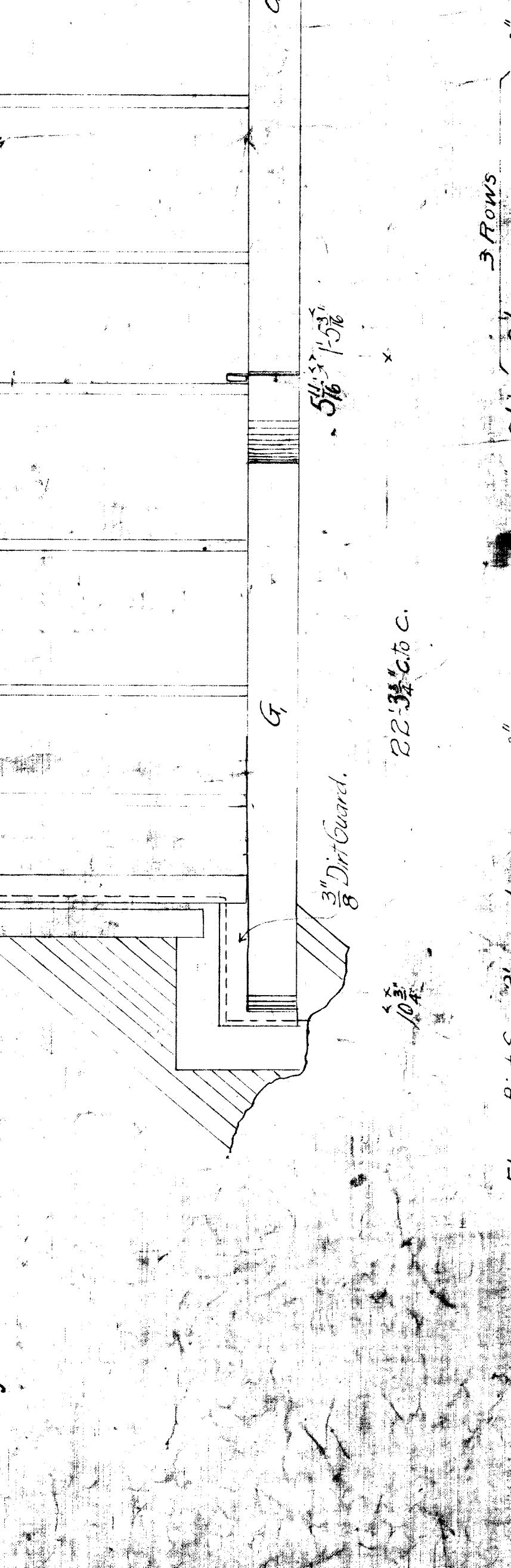
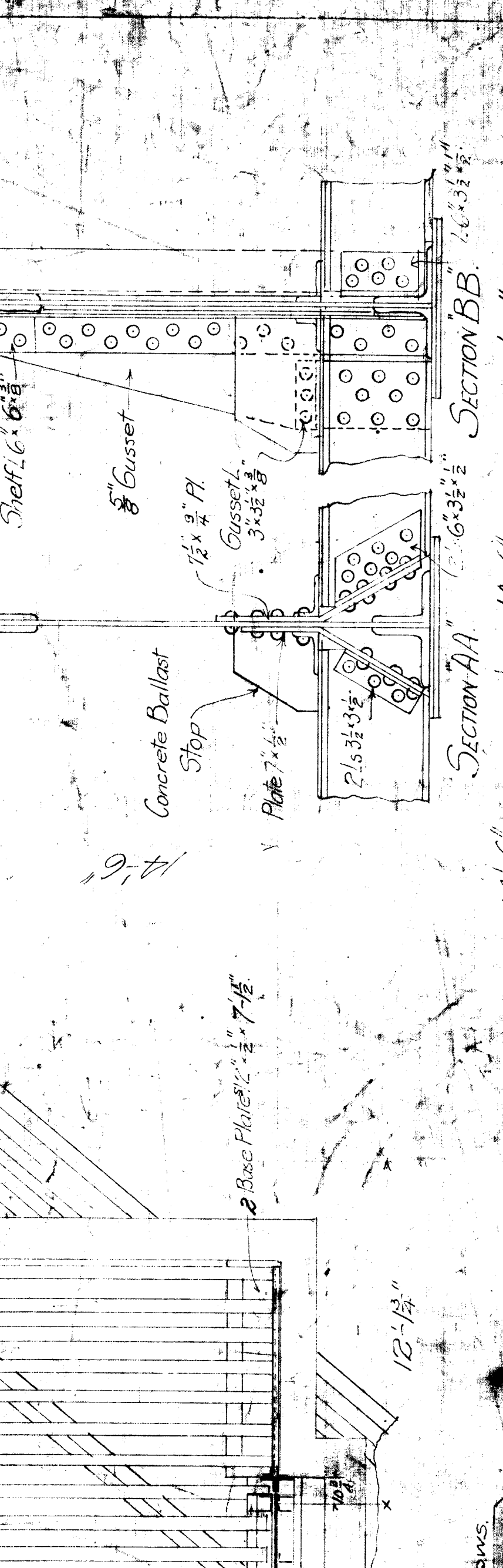
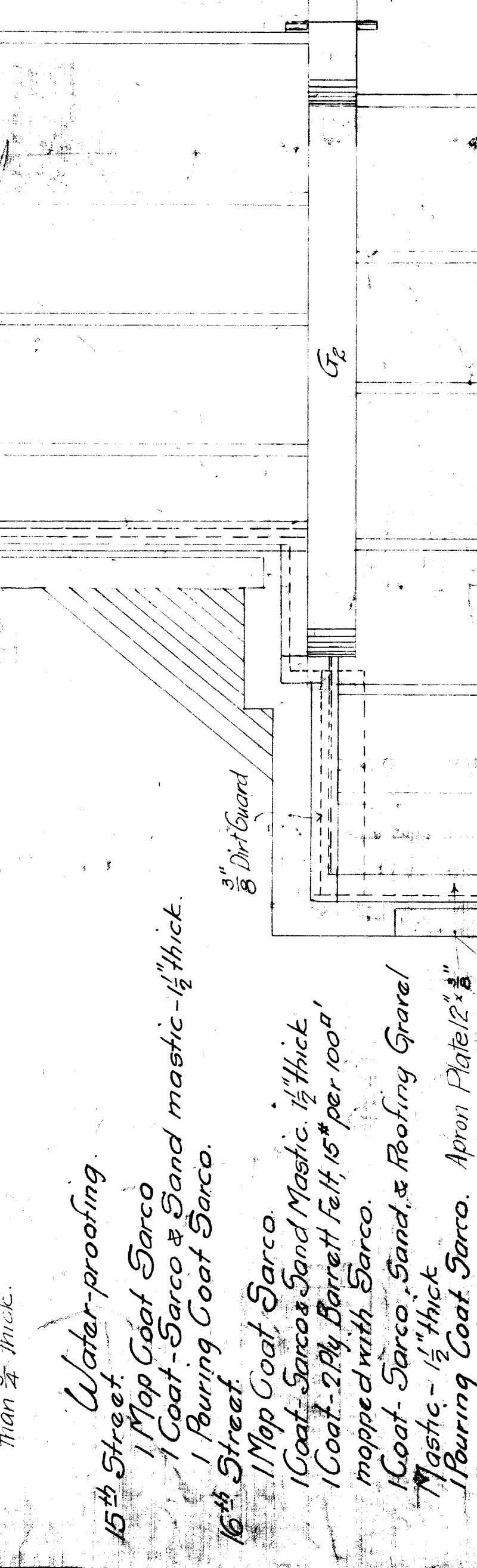
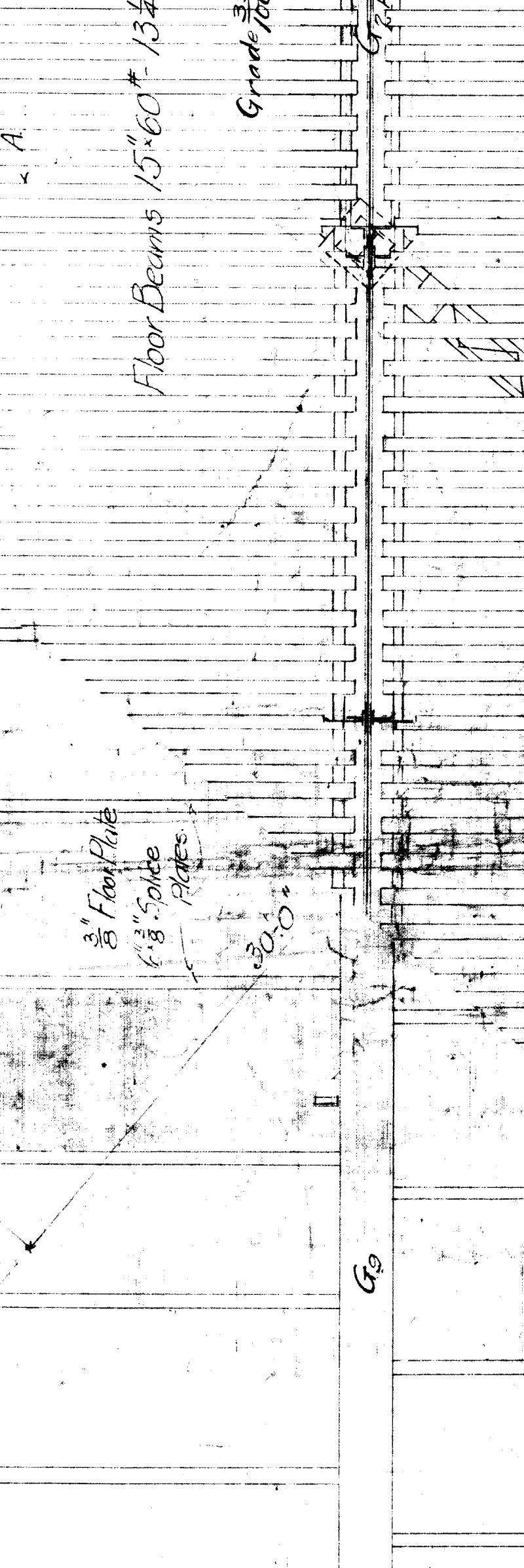
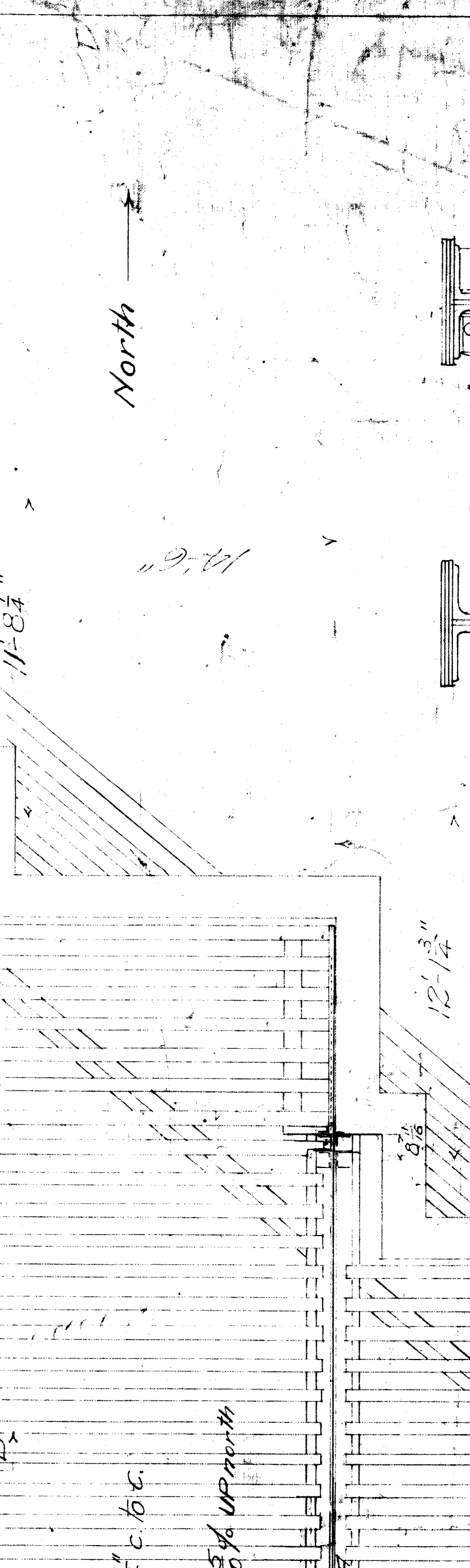
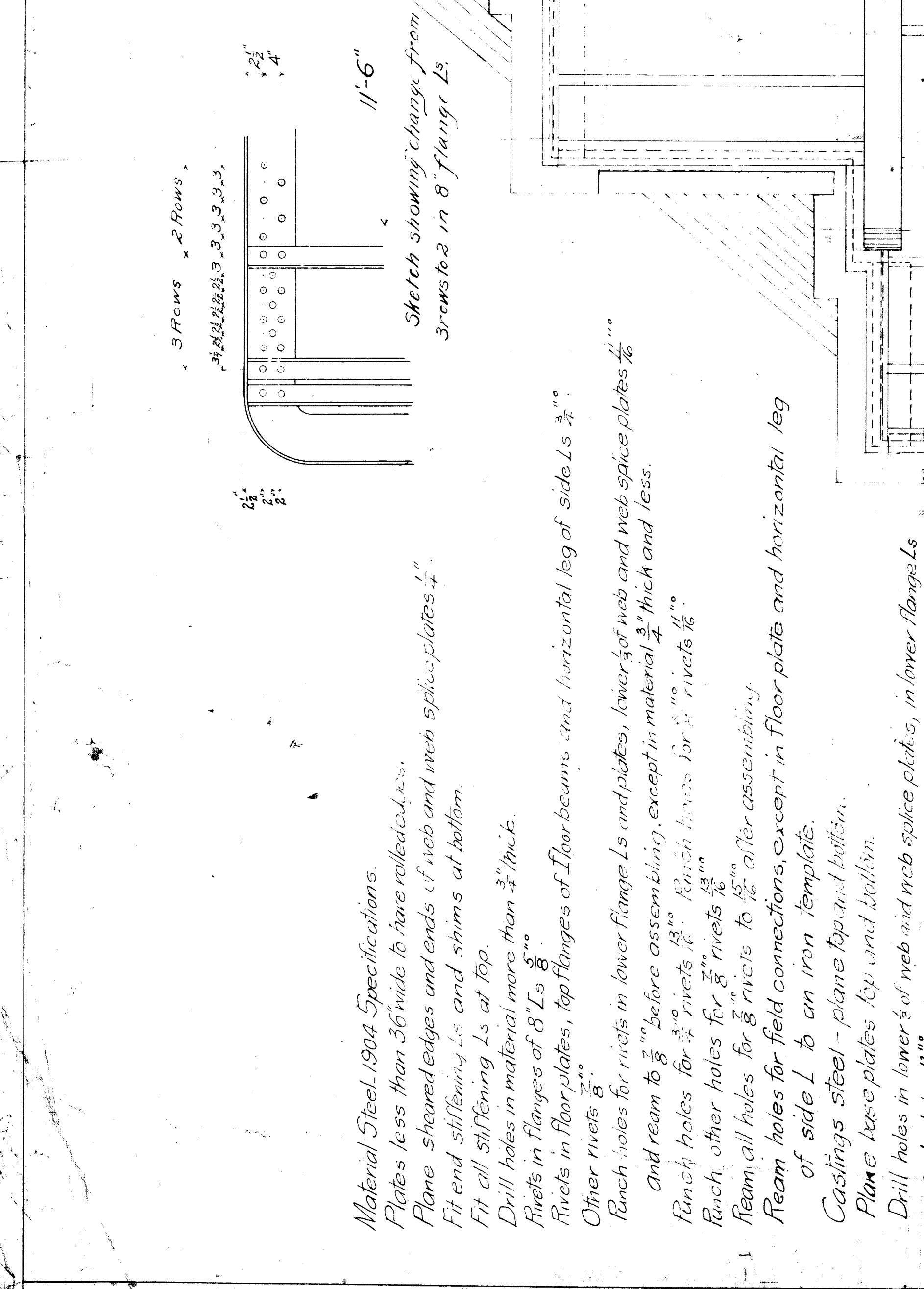
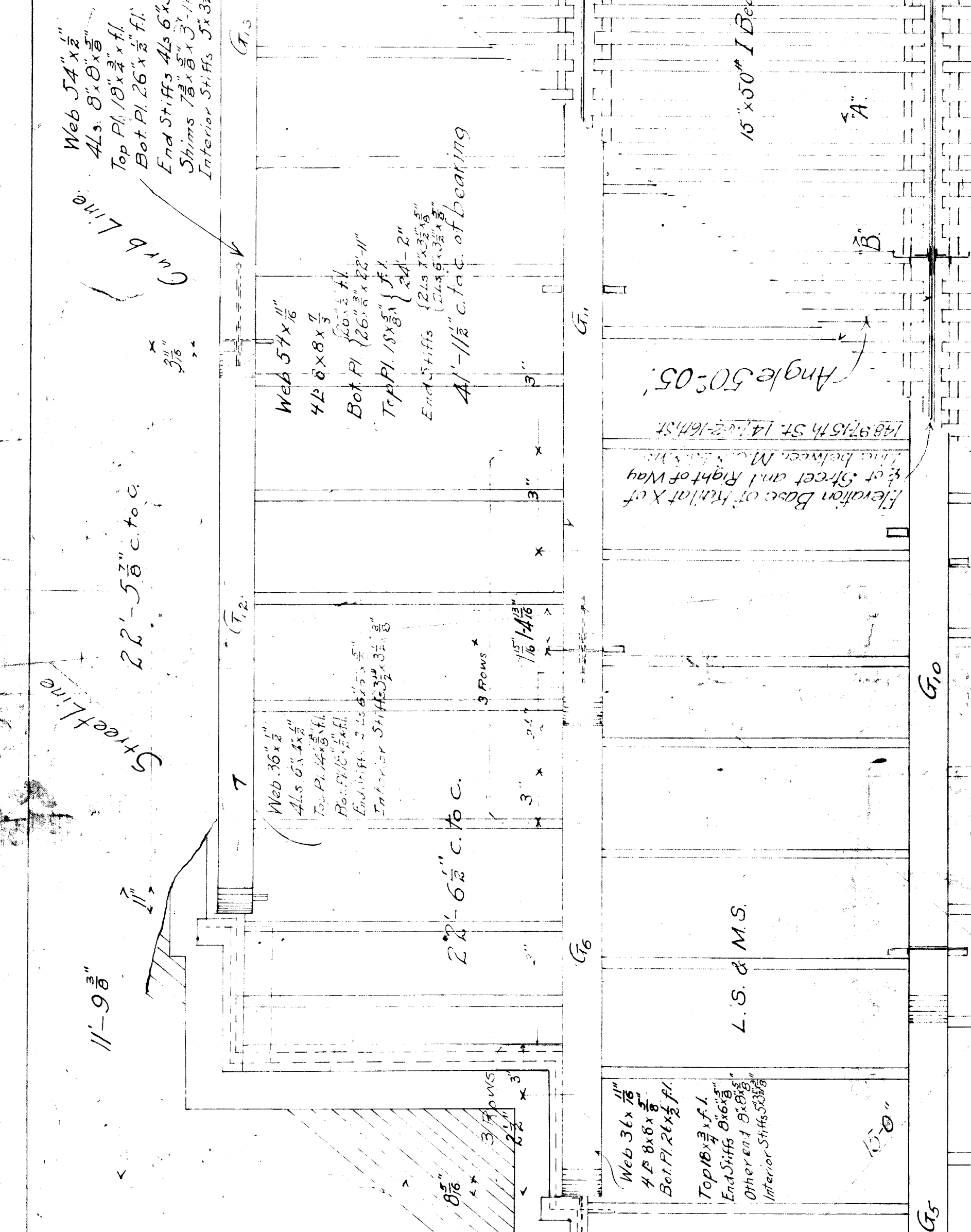
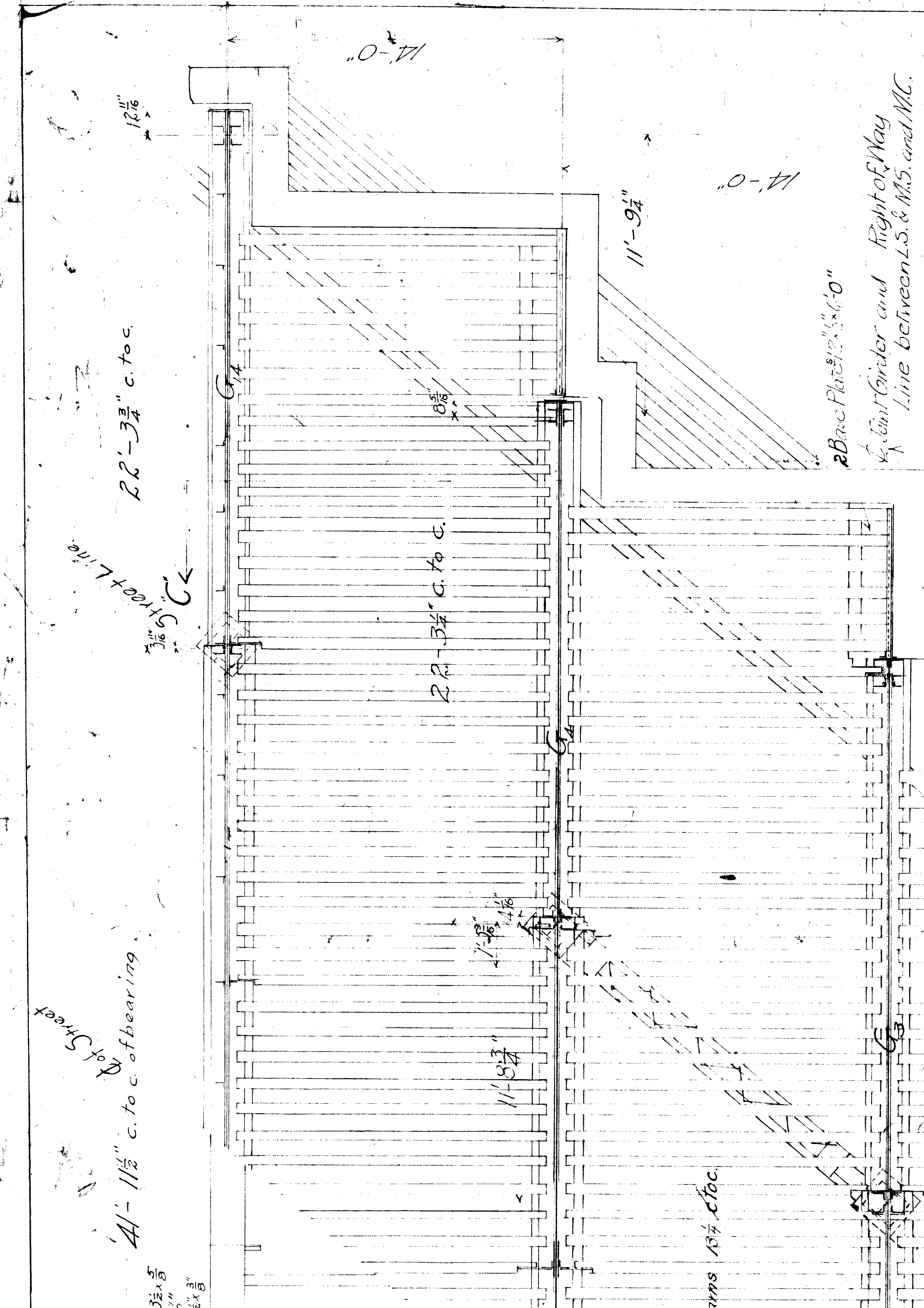
Rivets for 13 1/4" rivets 13 1/4" to 13 3/4" in diameter for rivets 13 1/4" and less.

Rivets for 13 3/4" rivets 13 3/4" to 14" in diameter for rivets 13 3/4" and less.

Rivets for 14" rivets 14" to 14 1/4" in diameter for rivets 14" and less.

Rivets for 14 1/4" rivets 14 1/4" to 14 3/4" in diameter for rivets 14 1/4" and less.

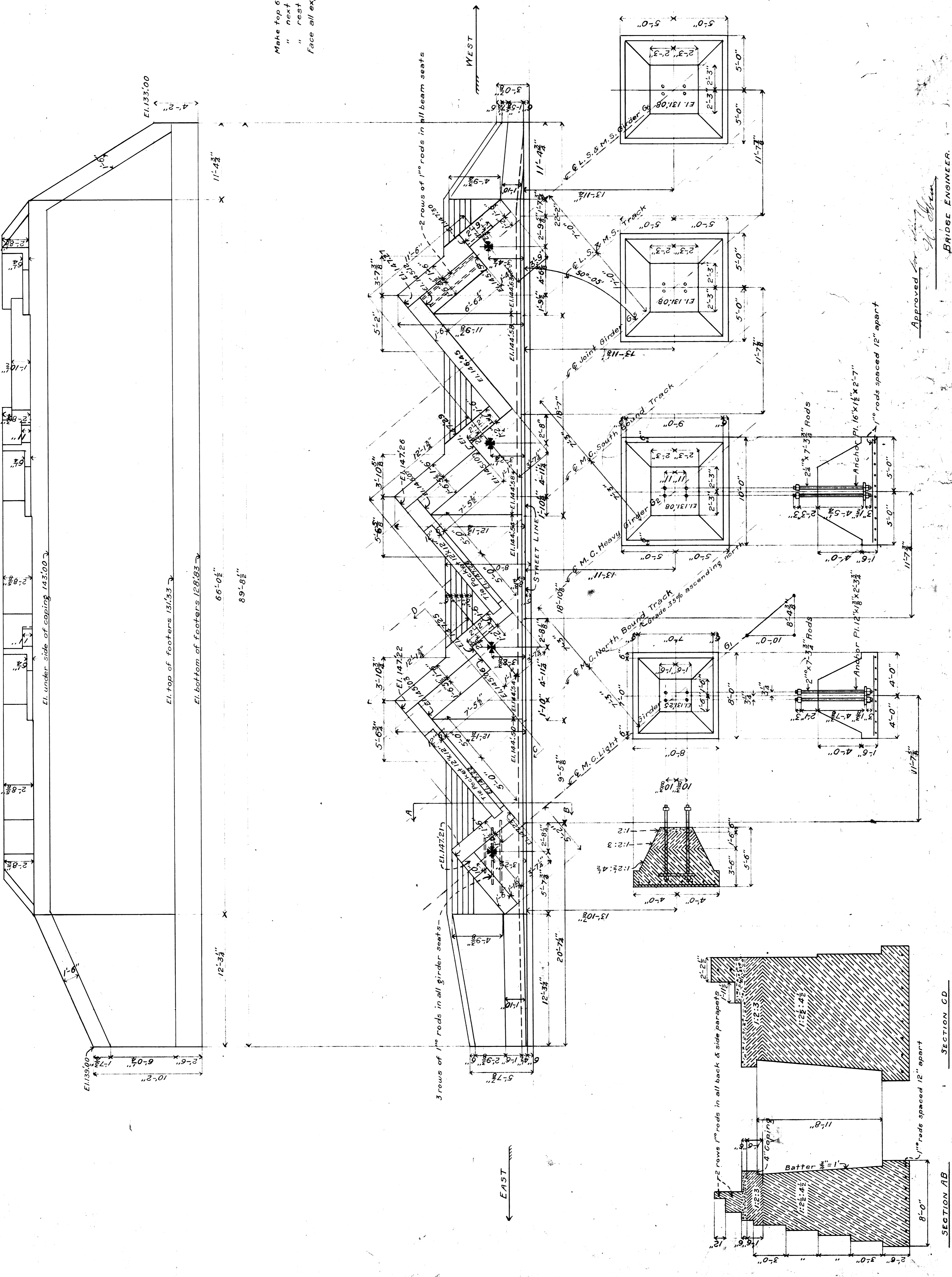
Rivets for 14 3/4" rivets 14 3/4" to 15" in diameter for rivets 14 3/4" and less.



M.C.R.A. Bay City, Mich.
 Bridge No. 110
 Fifth St.
 Detroit, Mich.

Half Year Section
 Double Track Girders
 South Side Girders

Half Year Section
 Double Track Girders
 South Side Girders



Make top 6" of bridge seat 1 cement : 2 sand.
 " next 1'-6" cement : 2 sand : 3 broken stone.
 " rest of masonry cement : 2 1/2 sand : 4 1/2 broken stone.
 Face all exposed surfaces with 1/2" of mortar.

Contents Abutment M.C. 2131 cu yds.
 L.S. 1256.6 " " total
 339.7 " " "

Piers M.C. 251 " "
 L.S. 171 " "

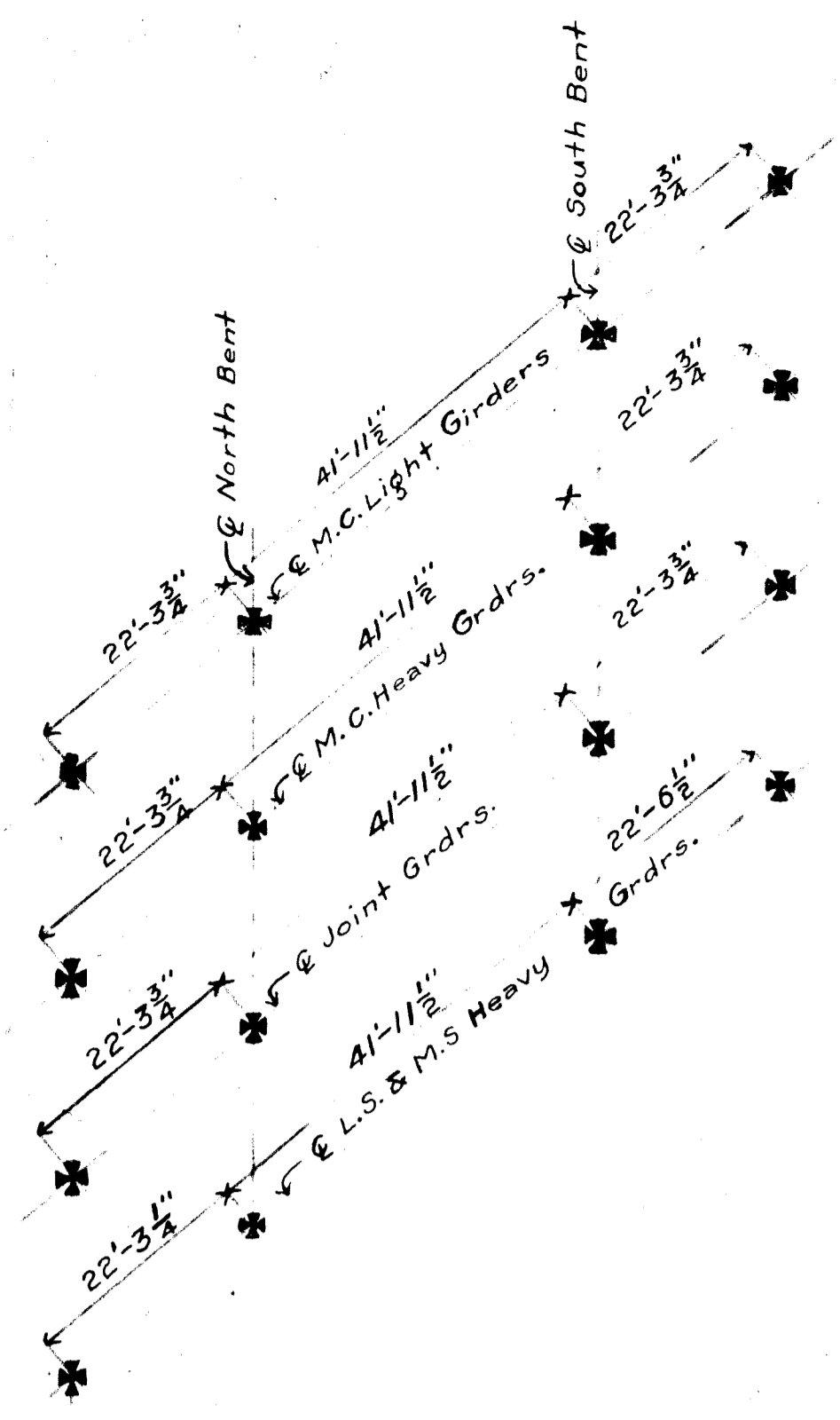
M. C. R. R. - Bay City Div.
 BRIDGE 424 16 IN. SUBWAY
 SOUTH ABUTMENT & PIERS.

Scale 1/4" = 1'
 October, 1907

Approved *[Signature]*
 BRIDGE ENGINEER.

SECTION AB
 SECTION CD

Field X 1000 16 1/2 2.02



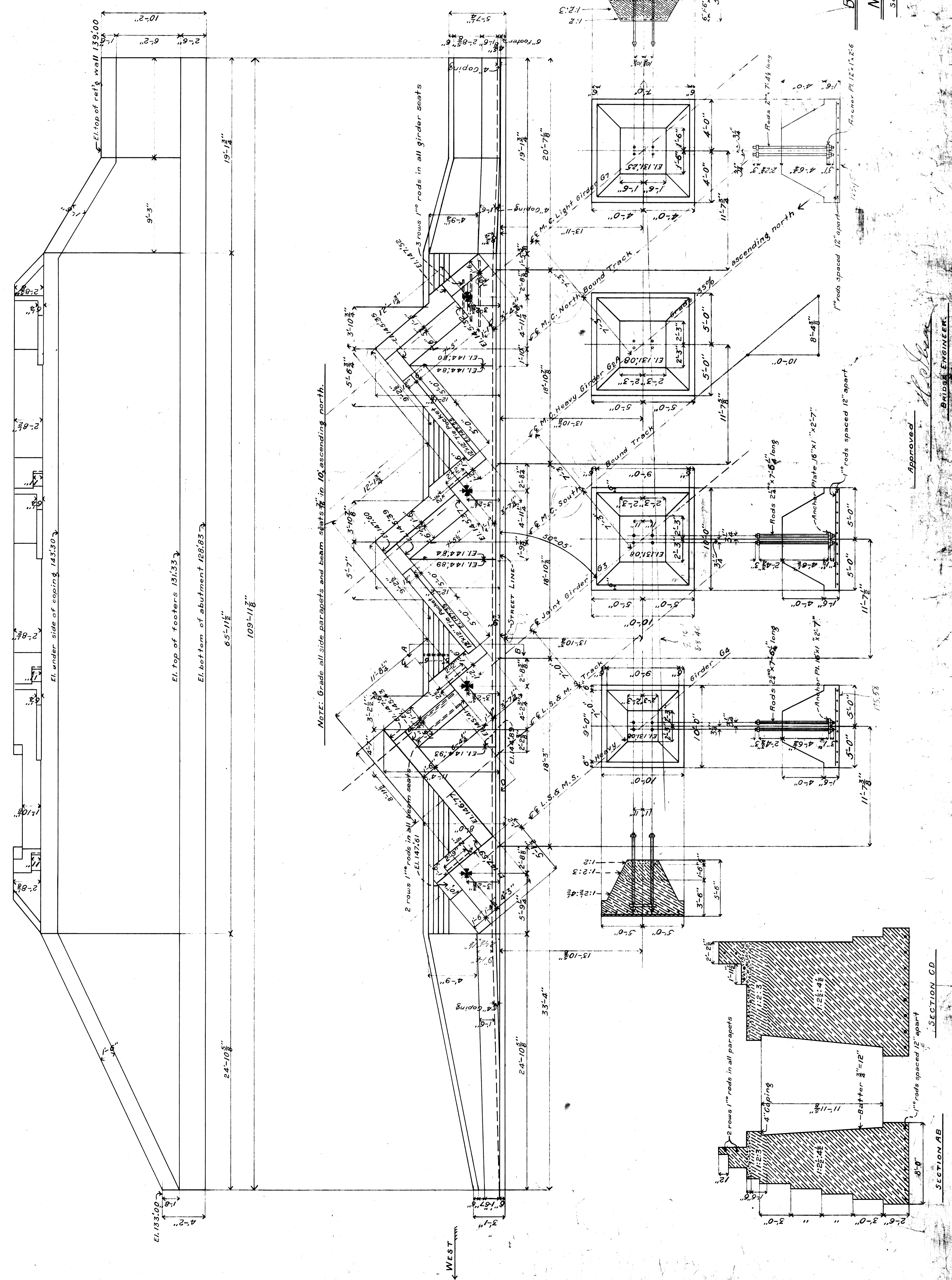
Make top 6" of bridge seat 1 part cement: 2 parts sand
 Make next 1'-6" down 1 part cement: 2 parts sand: 3 parts broken stone
 Make rest of masonry 1 " " : 2 1/2 " " : 4 1/2 " " "
 Face all exposed surfaces with 1 1/2" of mortar

Contents Abutment MC. 234.9 cu. yds.
 L.S. 136.1 " " "
 Piers MC. 251 " "
 L.S. 171.1 " "

M. C. R. R. - Bay City Div.
 BRIDGE 494 - 16TH ST. SUBWAY
 NORTH ABUTMENT & PIERS.

Scale 4"=1'
 October 1907.

Approved: *[Signature]*
 CH. FOX 10/3

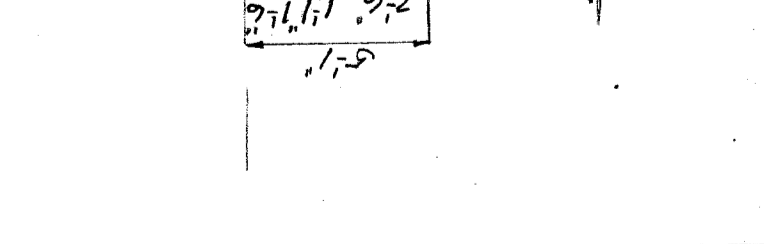
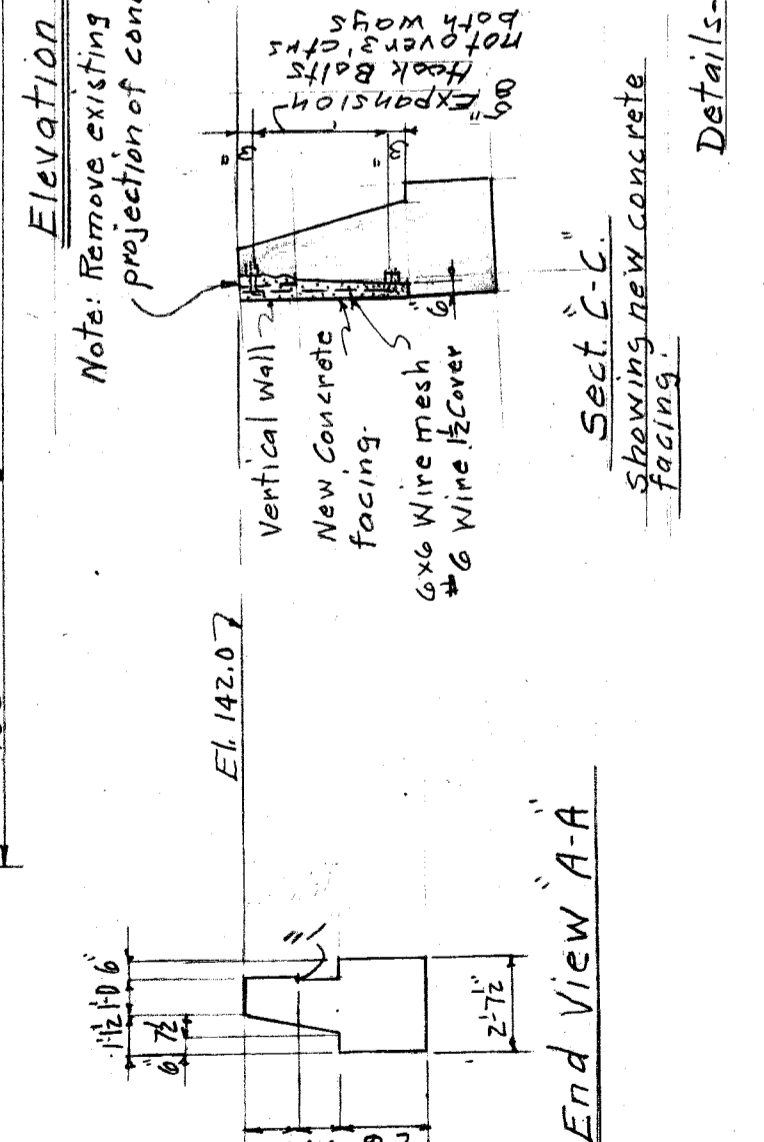
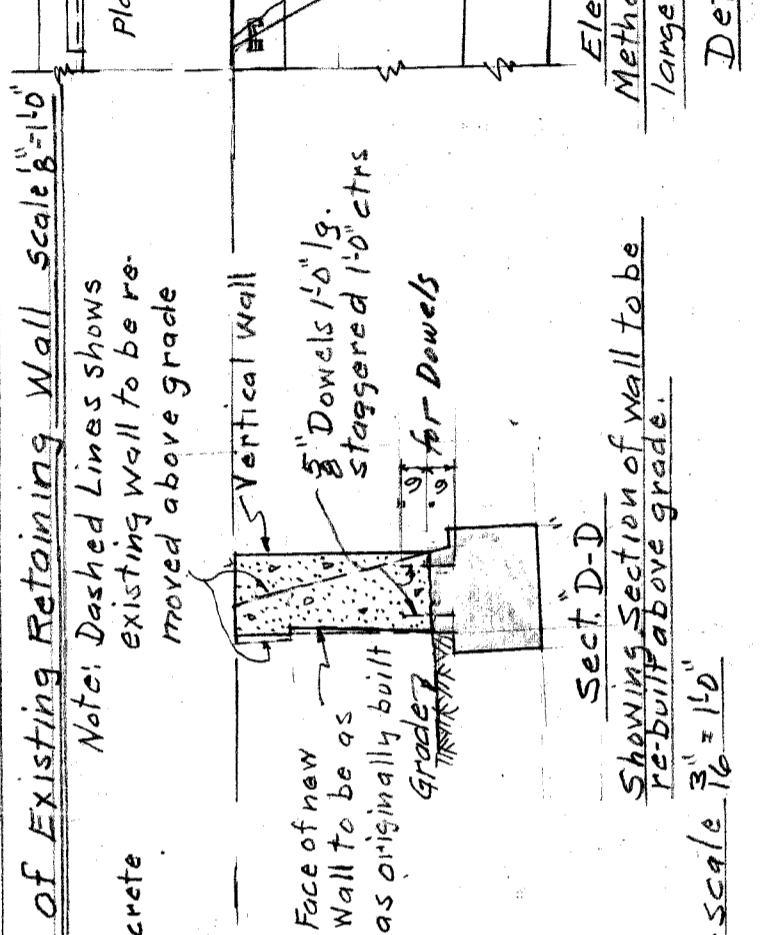
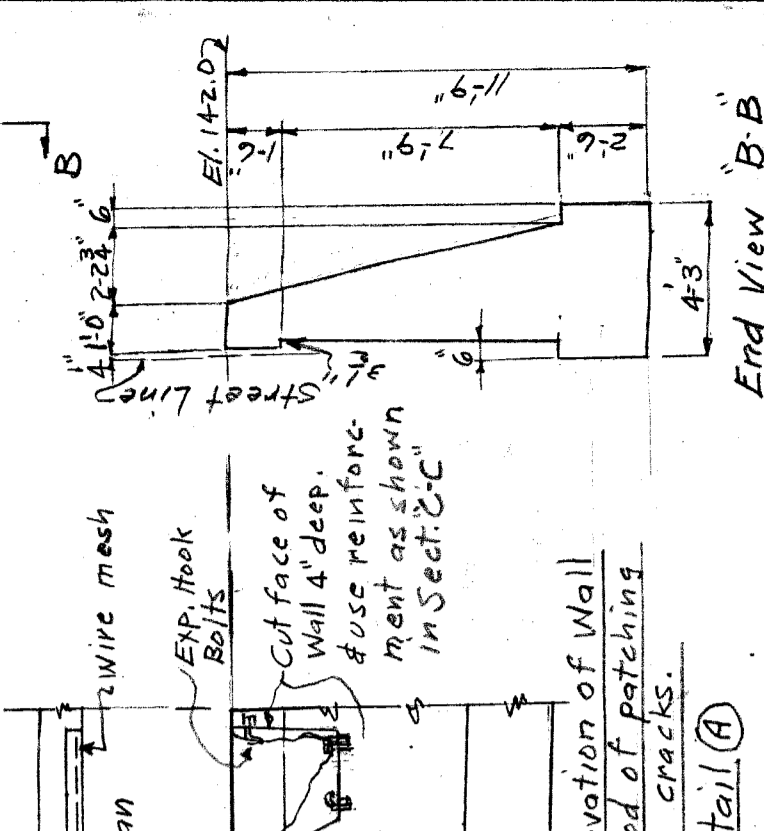
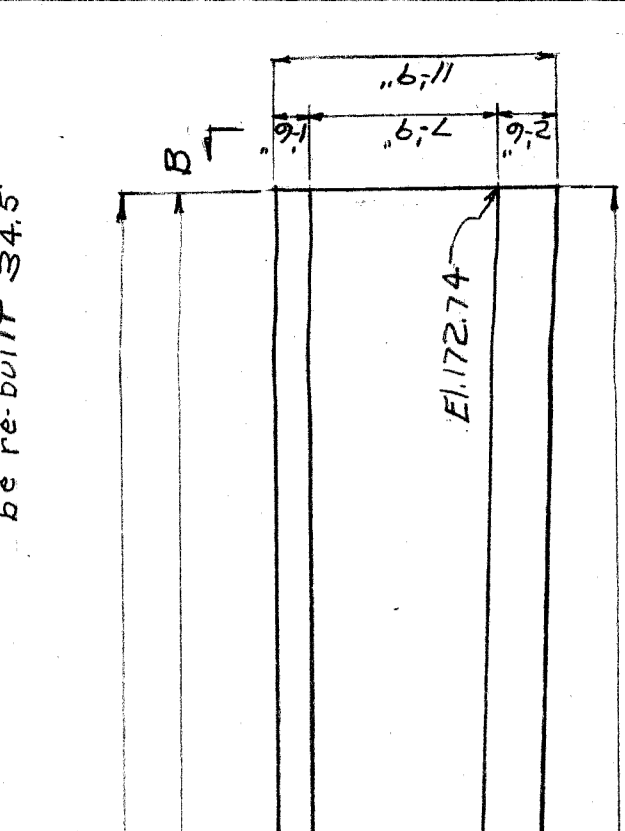
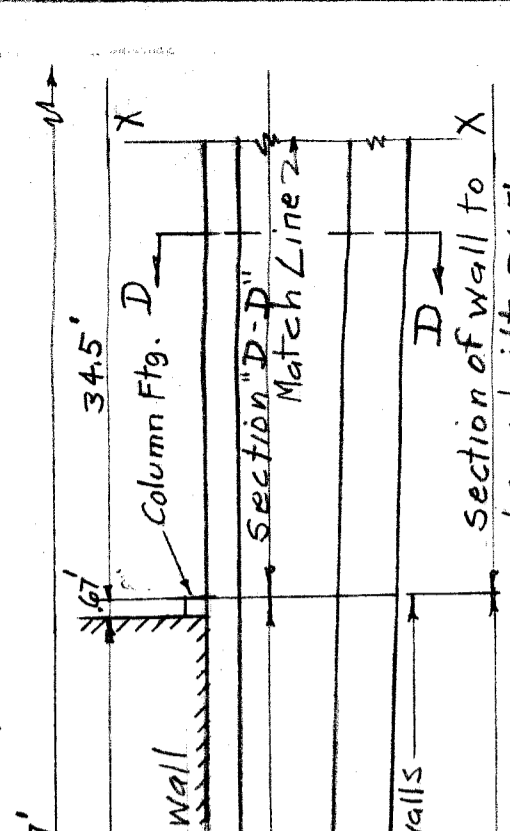
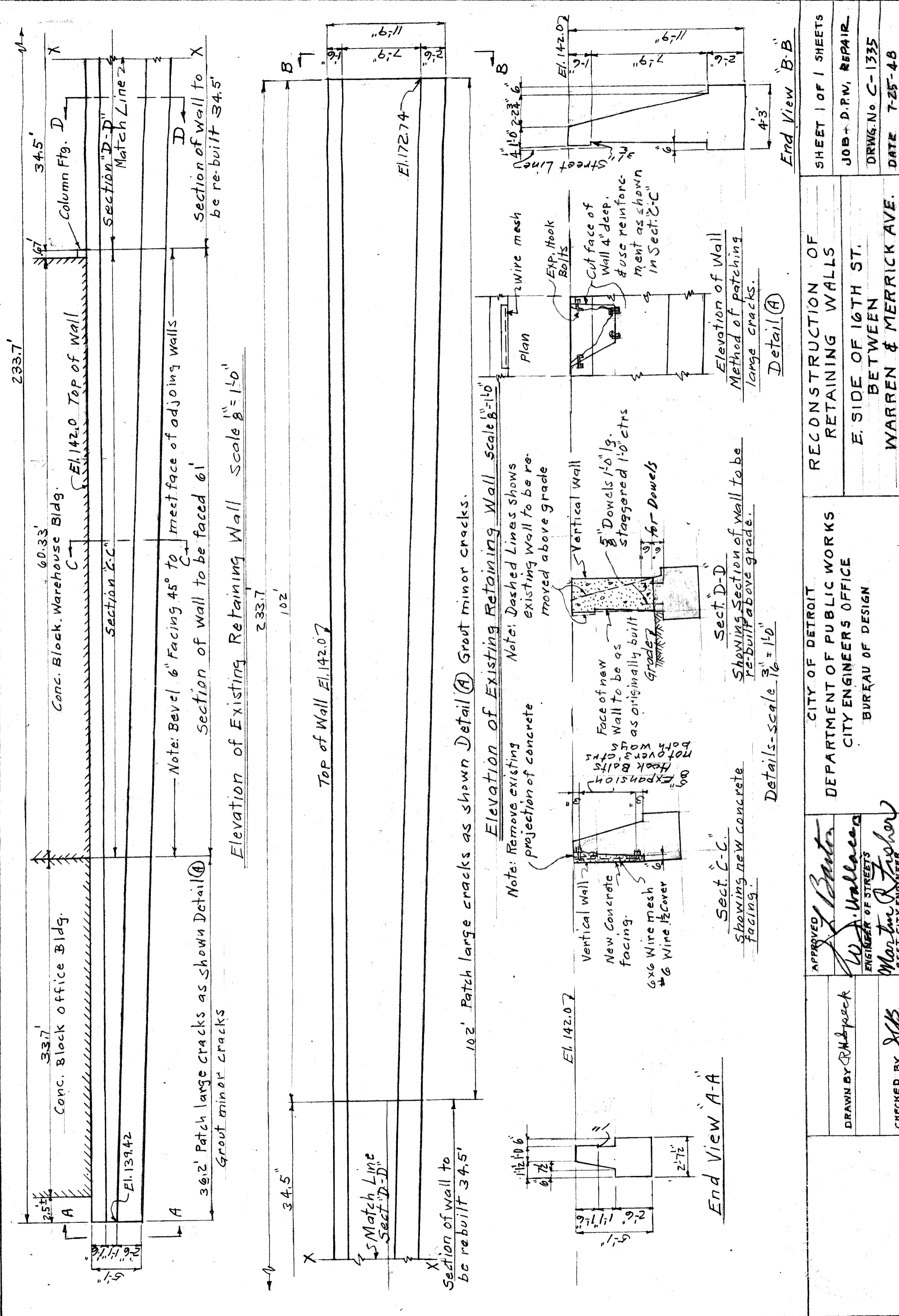


NOTE: Grade all side parapets and beam seats 1/2" in 10' ascending north.

Approved: *[Signature]*
 BRIDGE ENGINEER

SECTION CD
 SECTION AB

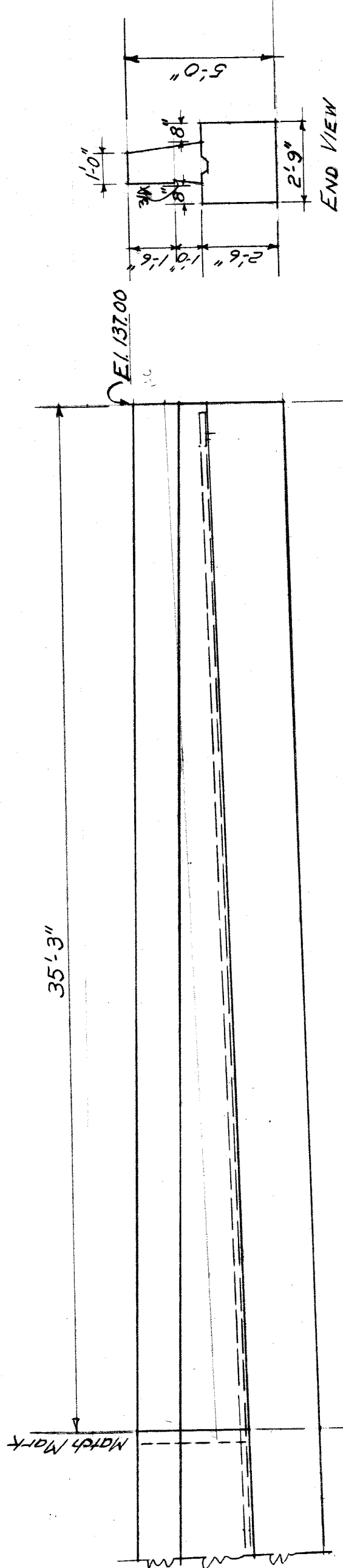
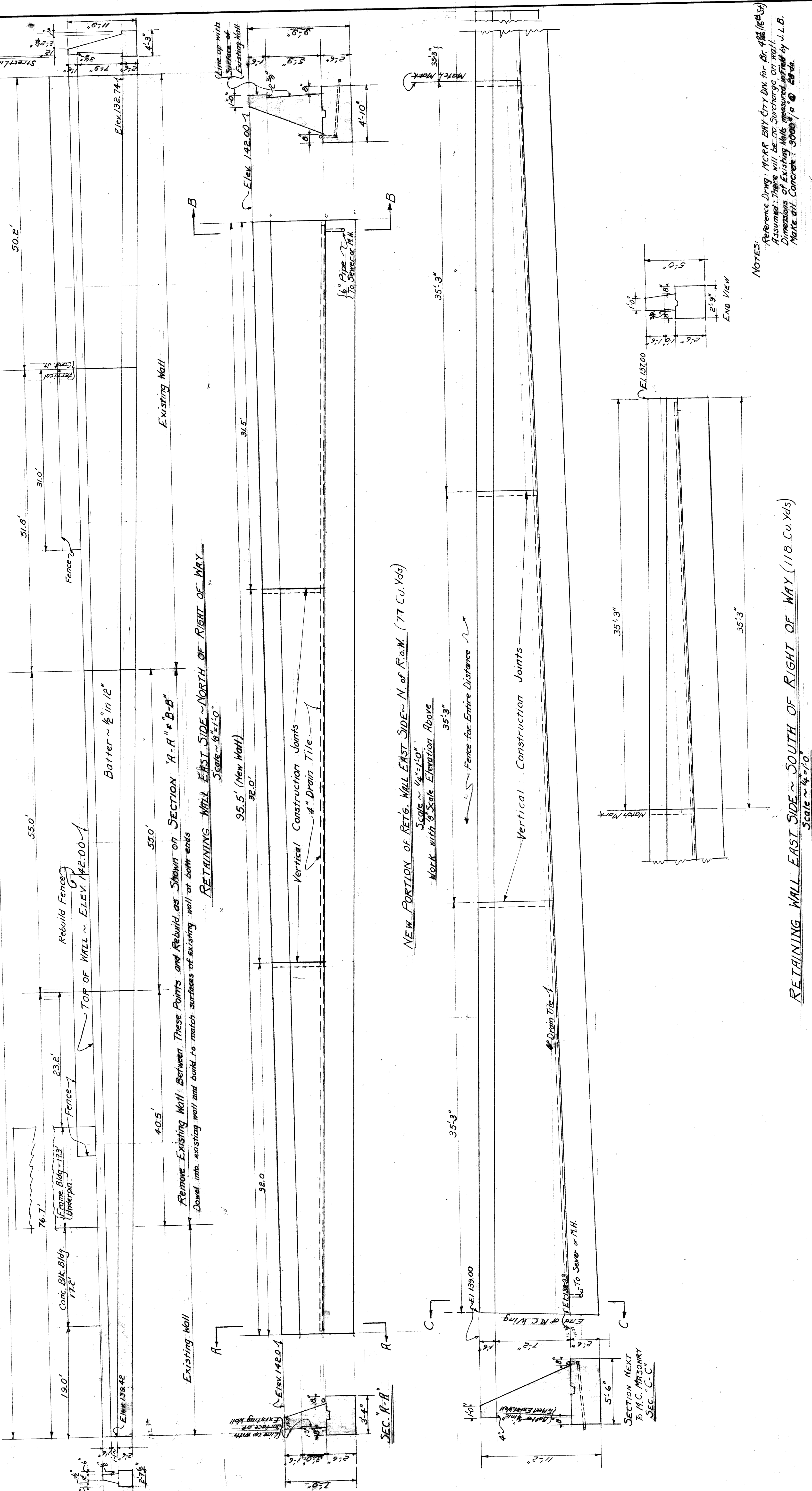
393-7/27/8



SHEET 1 OF 1 SHEETS JOB - D.P.M., REPAIR DRWG. No C-1335 DATE 7-25-48	RECONSTRUCTION OF RETAINING WALLS E. SIDE OF 16TH ST. BETWEEN WARREN & MERRICK AVE.	CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEERS OFFICE BUREAU OF DESIGN	APPROVED
			DRAWN BY
		CHECKED BY	ASST. CITY ENGINEER
		DRAWING # 4 X-15-7	ENGINEER OF STREETS

19/7/44
 2 DP 5/16/44
 2WP 7/17/44

233.7 (Field Measurements of Existing Wall)



NOTES: Reference Drawg. M.C.P.R. BRY. CITY DIV. for Br. 4-188 (1845)
 Assumed: There will be no surcharge on wall.
 Dimensions of Existing Wall measured by J.L.B.
 Make all concrete 3000 lbs @ 28 d.

CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEERS' OFFICE BUREAU OF DESIGN				RECONSTRUCTION OF RETAINING WALLS - EAST SIDE OF 16TH STREET BETWEEN MERRICK AVE. AND WARREN AVE. ASSIGNMENT NO. 7259			
DESIGNED BY	APPROVED	BOOK NO.	SCALE	AS NOTED	DATE	PAGE NO.	ASSIGNMENT NO.
DRAWN BY J. Gumbel	J. Panton		AS NOTED	AS NOTED	SEPT 29, 1944		7259
TRACED BY	ENGINEER						
CHECKED BY J. Panton	CITY ENGINEER						
DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE
DESCRIPTION	DRW.	CHKD.	APPR.	DATE	DATE	DATE	DATE
REVISIONS							

XO15-8 Drawn # 4