



NOTES:

1. DIMENSIONS AND EQUIPMENT PENETRATION LOCATIONS ARE FOR INFORMATION ONLY. CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY ALL INFORMATION PRIOR TO INSTALLATION.
2. REMOVE VENT COVER AND ROOF CURB AS NECESSARY TO ALLOW FRAMING INSTALLATION AND LEAVE OPENING TO ALLOW VENT INTO ATTIC SPACE.
3. ROOF DRAINS FUNCTION AS SOLID PIPE. PROPERLY EXTEND THROUGH ROOF TO FUNCTION AS SOI PIPES AND FLASH.
4. PROPERLY RAISE GAS LINE TO SET ON PIPE SUPPORTS ON METAL ROOF PANELS.
5. REPLACE LADDER WITH NEW LADDER TO PROPERLY ACCESS METAL ROOF PANELS.
6. PROVIDE HOOD RELIEF GRAVITY VENT AND ROOF CURB.
7. PROVIDE UTILITY LOCATE PRIOR TO PERFORMING ALTERNATE NO. 1 WORK.
8. PROVIDE PANEL END LAP IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. REQUIREMENTS FOR MULTIPLE PANELS ARE REQUIRED ALONG ROOF SLOPE AT 1:12 AREA.

PROJECT NAME:

BUNCOMBE COUNTY
SCHOOLS

A.C. REYNOLDS
HIGH SCHOOL
GYM METAL ROOF
RETROFIT

1 ROCKET DRIVE
ASHEVILLE, NORTH CAROLINA 28803

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THE ORIGINAL DRAWING

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REVISIONS:

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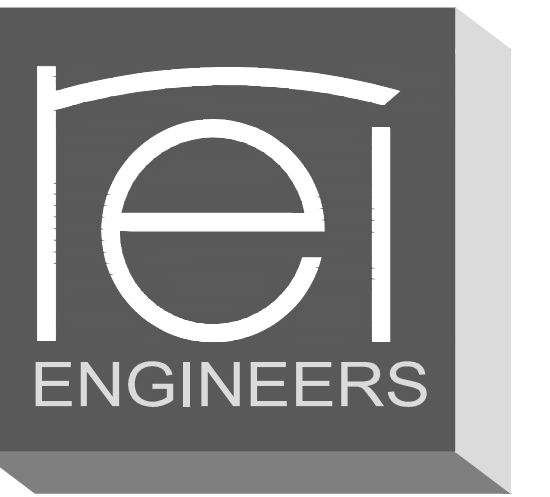
ROOF PLAN

PROJ. NO:
016CLT-047

DATE:
04/08/2016

SHEET NO:

A-



1927 J.N. PEASE PLACE, SUITE 201,
CHARLOTTE, NC 28262

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ENGINEERS AND CONSULTANTS
www.reiengineers.com
AN EMPLOYEE-OWNED COMPANY

NORTH CAROLINA ENGINEERING
FIRM LICENSE NO. C-1520

- NOTES:
1. METAL RETROFIT FRAMING SHOWN IS FOR GENERAL INFORMATION ONLY OR MAY NOT BE SHOWN FOR CLARITY. FRAMING TO BE DESIGNED BY LICENSED PROFESSIONAL ENGINEER AND INSTALLED AS SHOWN IN APPROVED SHOP DRAWINGS.
 2. CONDENSATION CONTROL BATT INSULATION AT UNDERSIDE OF METAL ROOF PANELS NOT SHOWN FOR CLARITY.

PROJECT NAME:
BUNCOMBE COUNTY SCHOOLS

A.C. REYNOLDS HIGH SCHOOL GYM METAL ROOF RETROFIT

1 ROCKET DRIVE
ASHEVILLE, NORTH CAROLINA 28803

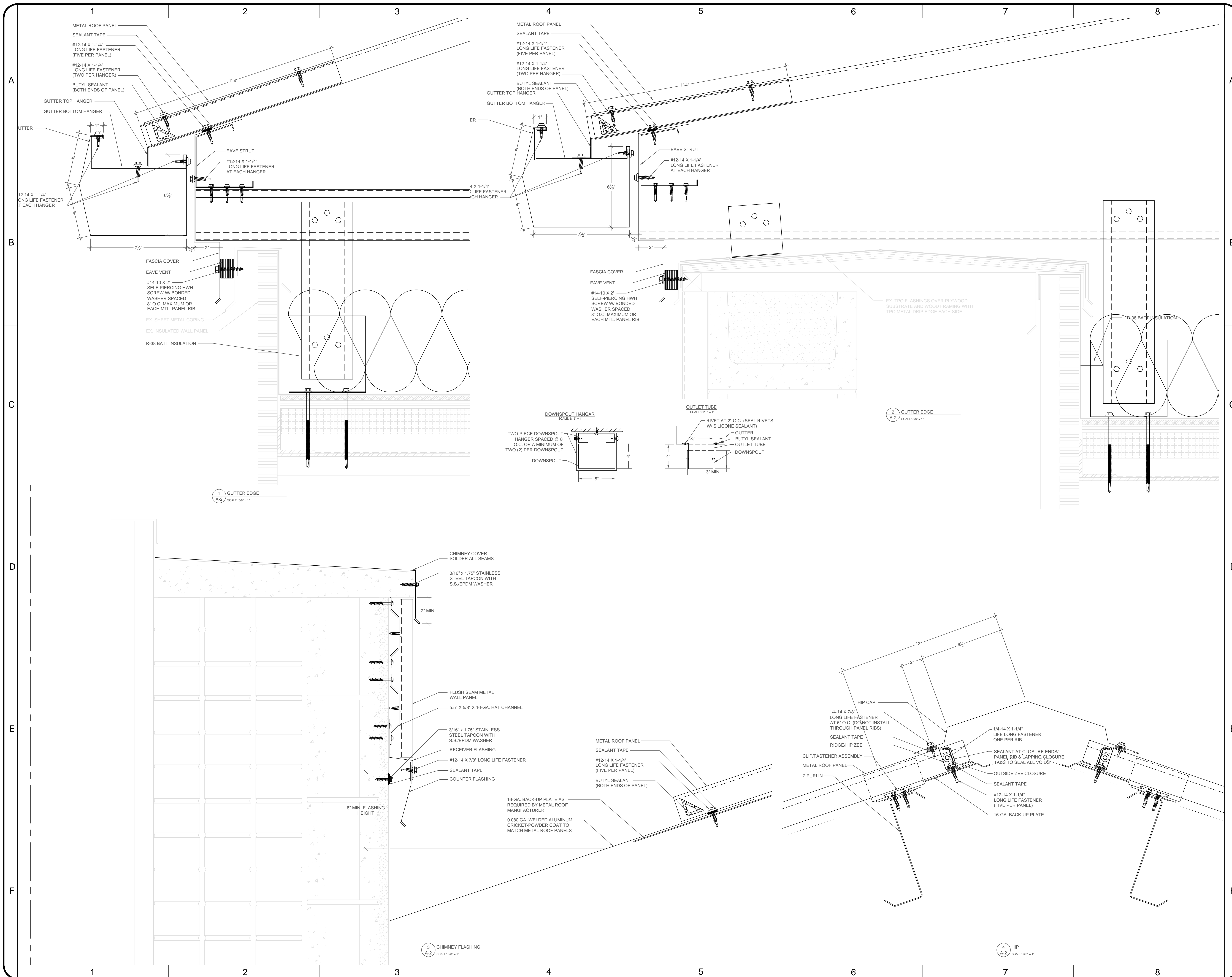
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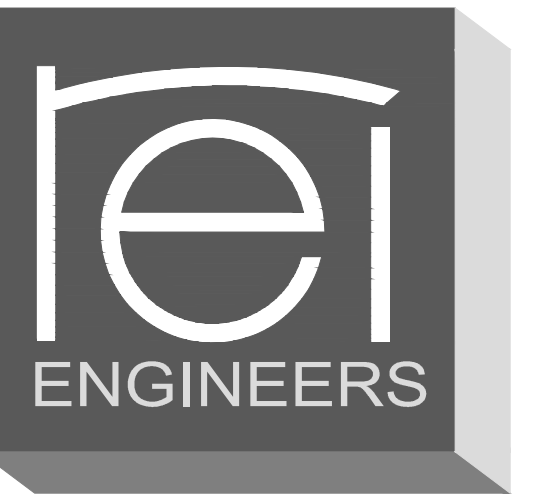
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NO.	DATE	DESCRIPTION

SHEET TITLE:

DETAILS

PROJ. NO:	SHEET NO:
016CLT-047	A-2
DATE:	04/08/2016





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2. CONDENSATION CONTROL BATT
INSULATION AT UNDERSIDE OF
METAL ROOF PANELS NOT SHOWN
FOR CLARITY.

PROJECT NAME:
**BUNCOMBE COUNTY
SCHOOLS**

**A.C. REYNOLDS
HIGH SCHOOL
GYM METAL ROOF
RETROFIT**

1 ROCKET DRIVE
ASHEVILLE, NORTH CAROLINA 28803

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REVISIONS:

NO.	DATE	DESCRIPTION

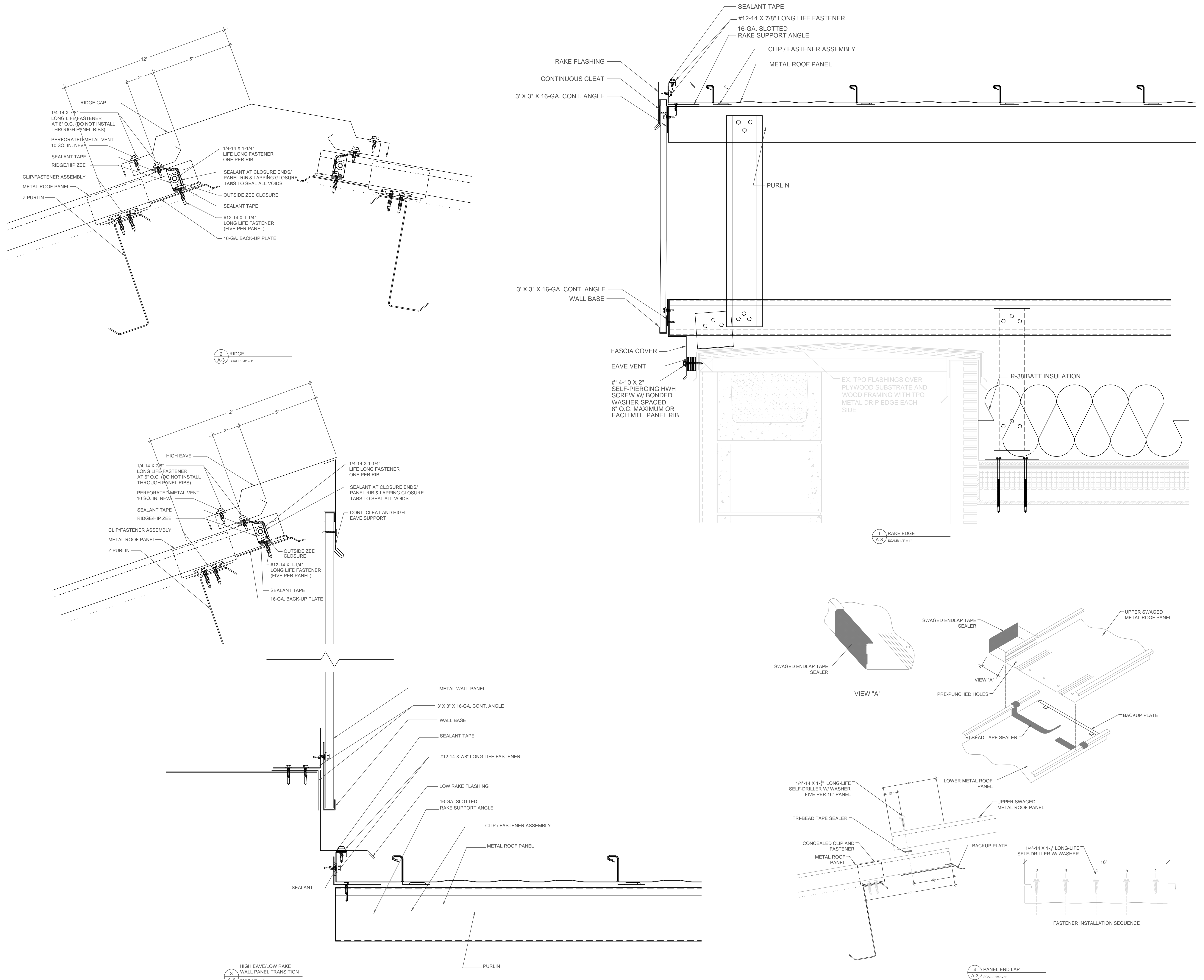
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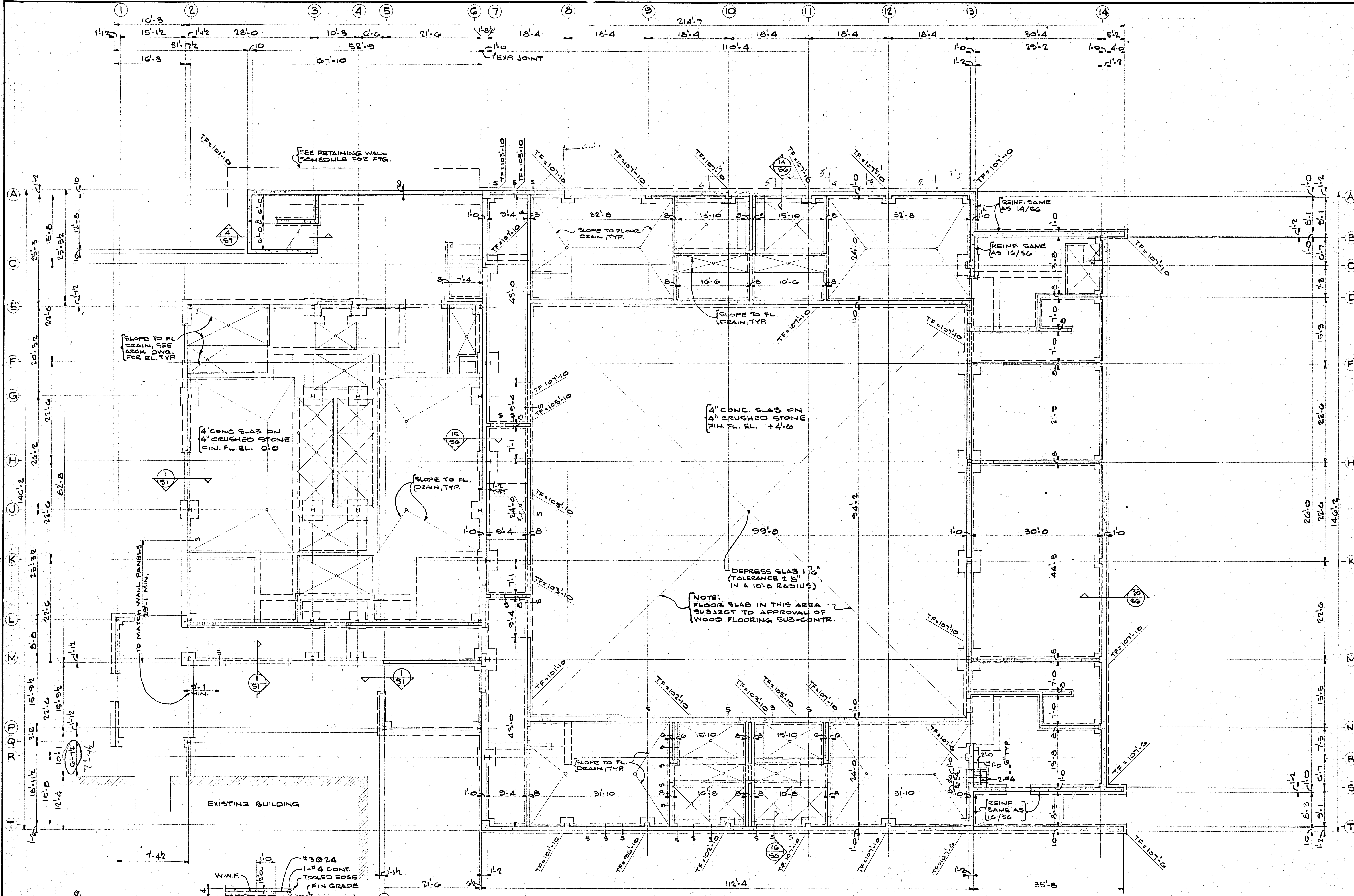
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016CLT-047

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04/08/2016

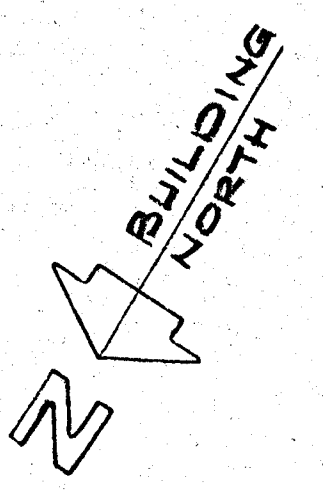
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FOUNDATION & FLOOR PLAN
3" = 1'-0" FIN. FL. EL. 0'-0" = 104'-0" (SEE SITE PLAN)

NOTES:
1. TF = TOP OF FOOTING ELEVATION, FOR ELEVATIONS NOT SHOWN SEE COLUMN SCHEDULE
2. SEE ARCH. DWGS FOR DEPRESSED SLABS
3. SEE SHEET 55 FOR GENERAL NOTES



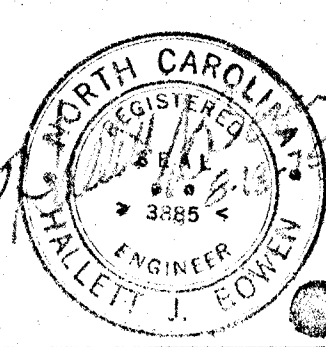
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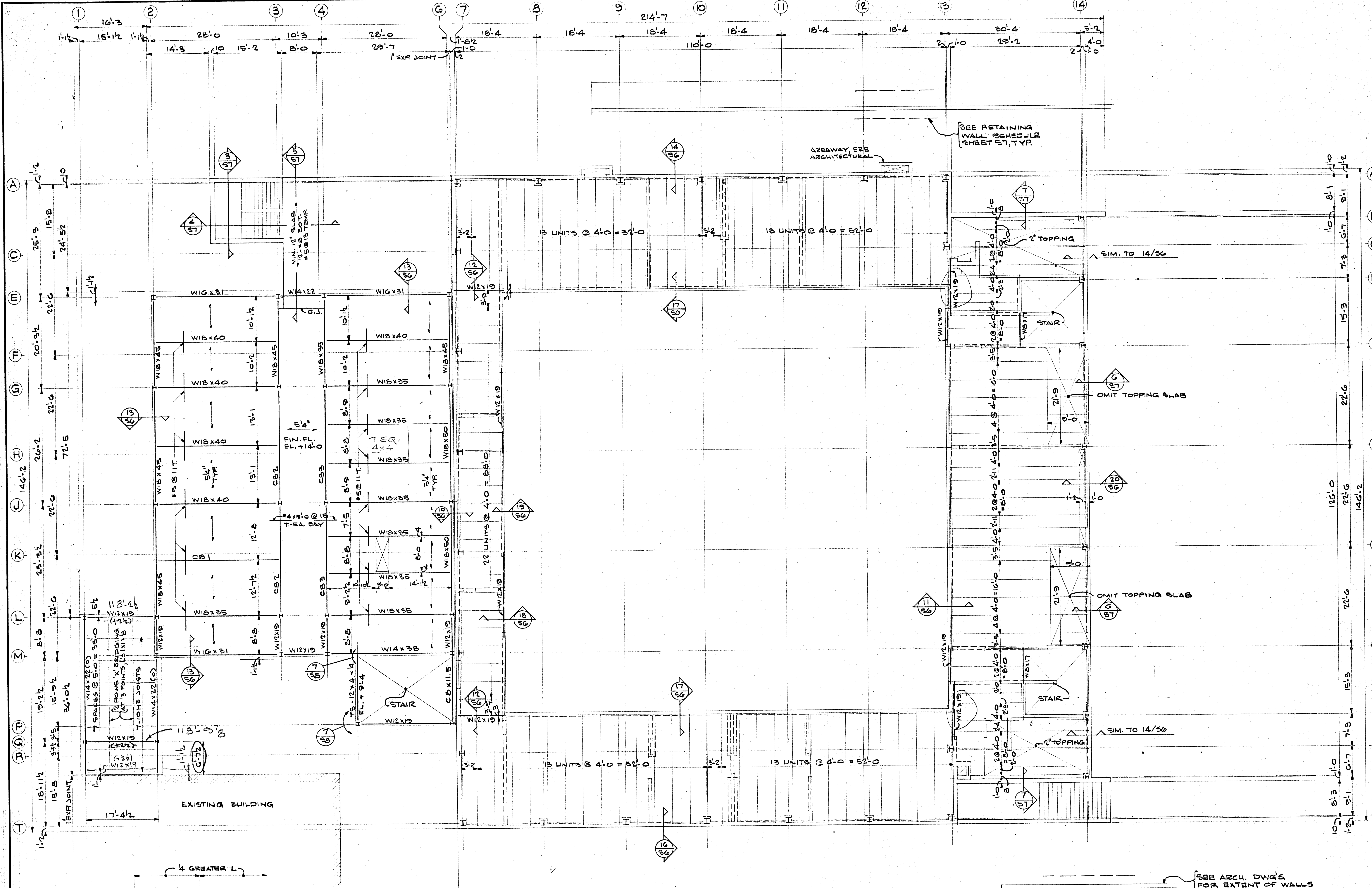
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APPROVED: [Signature]

AGYMNASIIUM FOR A.C. REYNOLDS HIGH SCHOOL
BUNCOMBE COUNTY, NORTH CAROLINA

SHEET NO. S-1
OF 8

BOWEN & FEINBERG ASSOCIATES
CONSULTING ENGINEERS
P.O. BOX 2088
ASHEVILLE, NORTH CAROLINA 28806

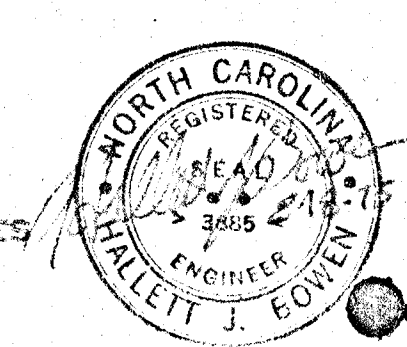


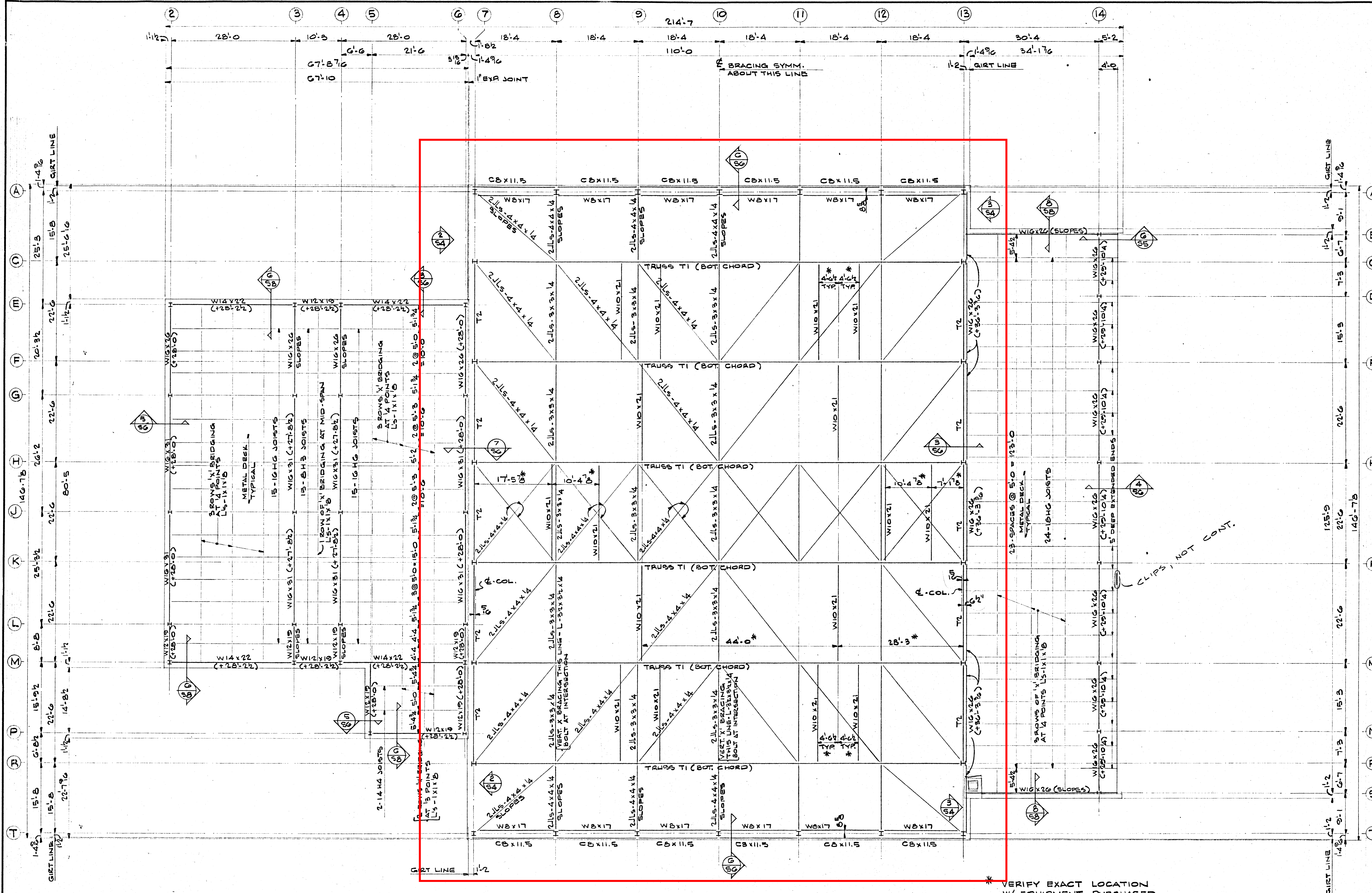


SECOND FLOOR FRAMING PLAN
FIN. FL. EL. +15'-6" U.O.N.

TYP SLAB REINF. DET.
3/4" = 1'-0"

BOWEN & FEINBERG ASSOCIATES
CONSULTING ENGINEERS
P.O. BOX 808
ASHEVILLE, NORTH CAROLINA 28904



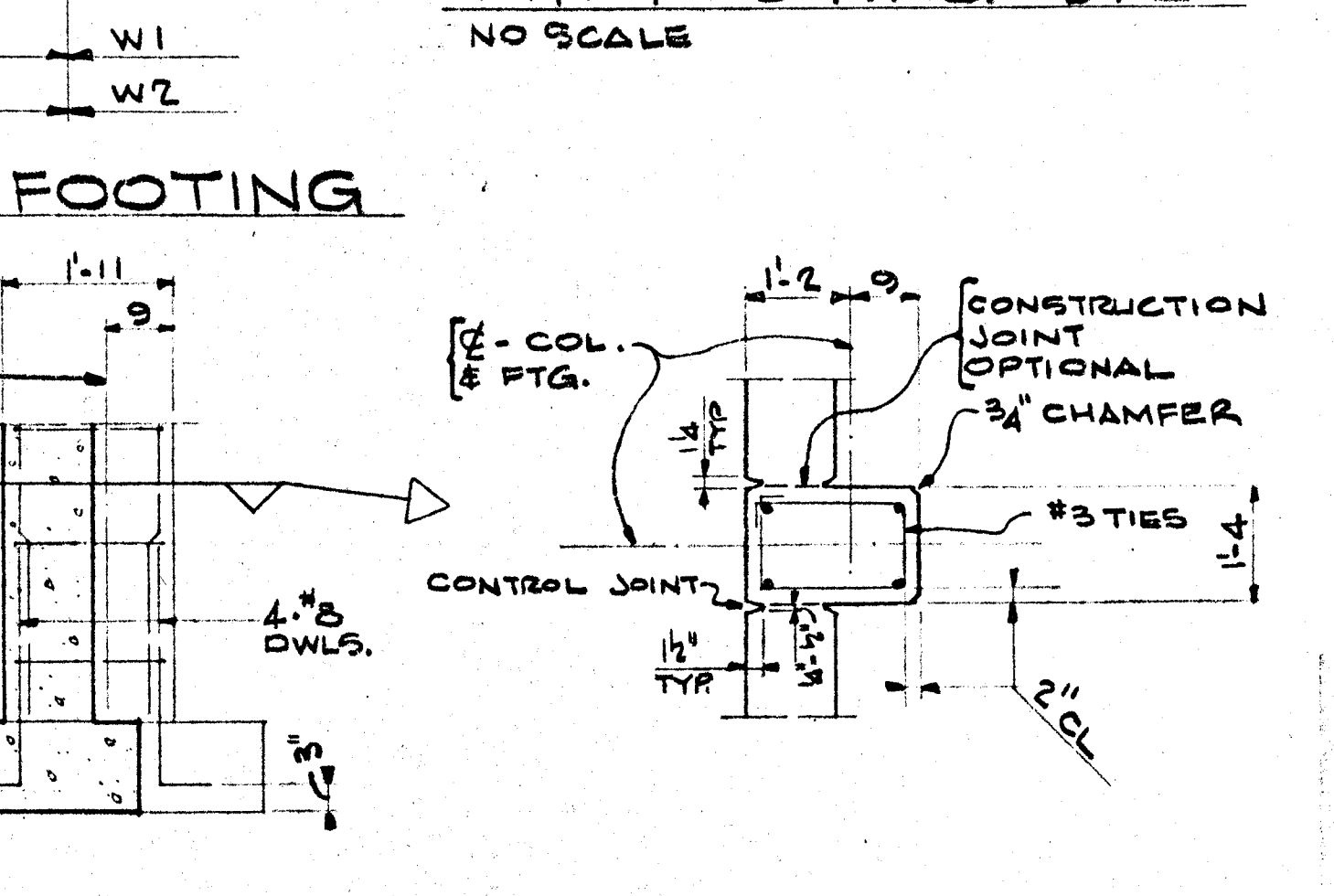
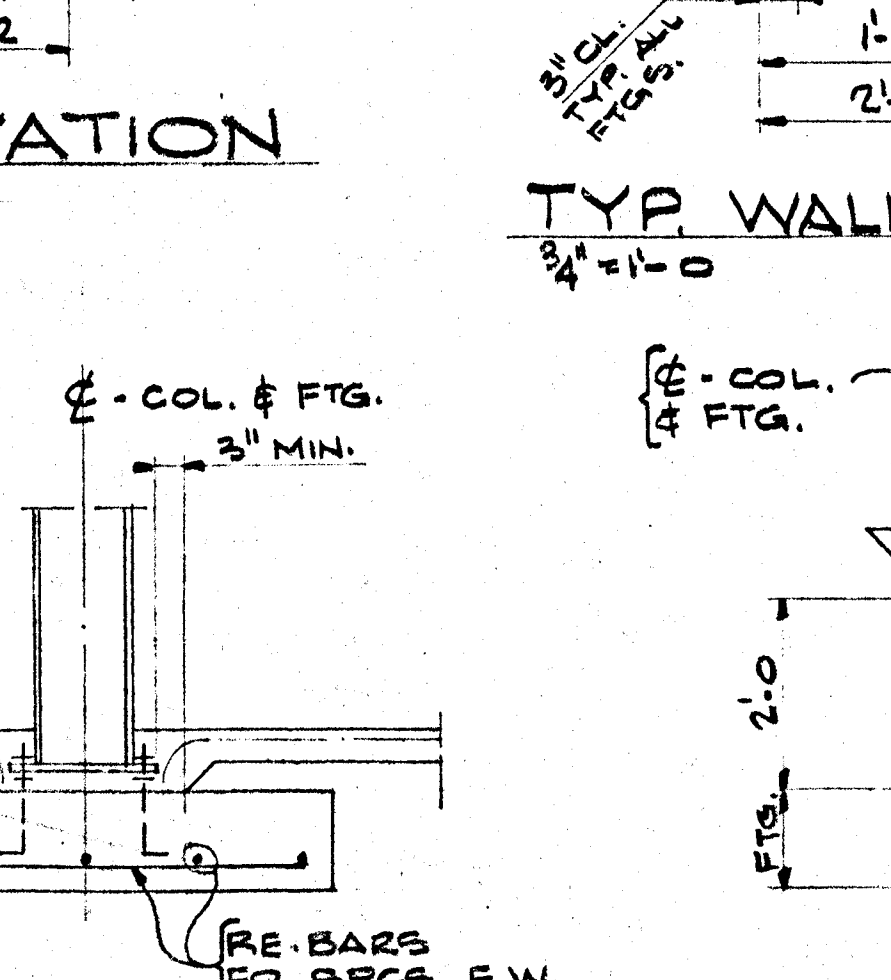
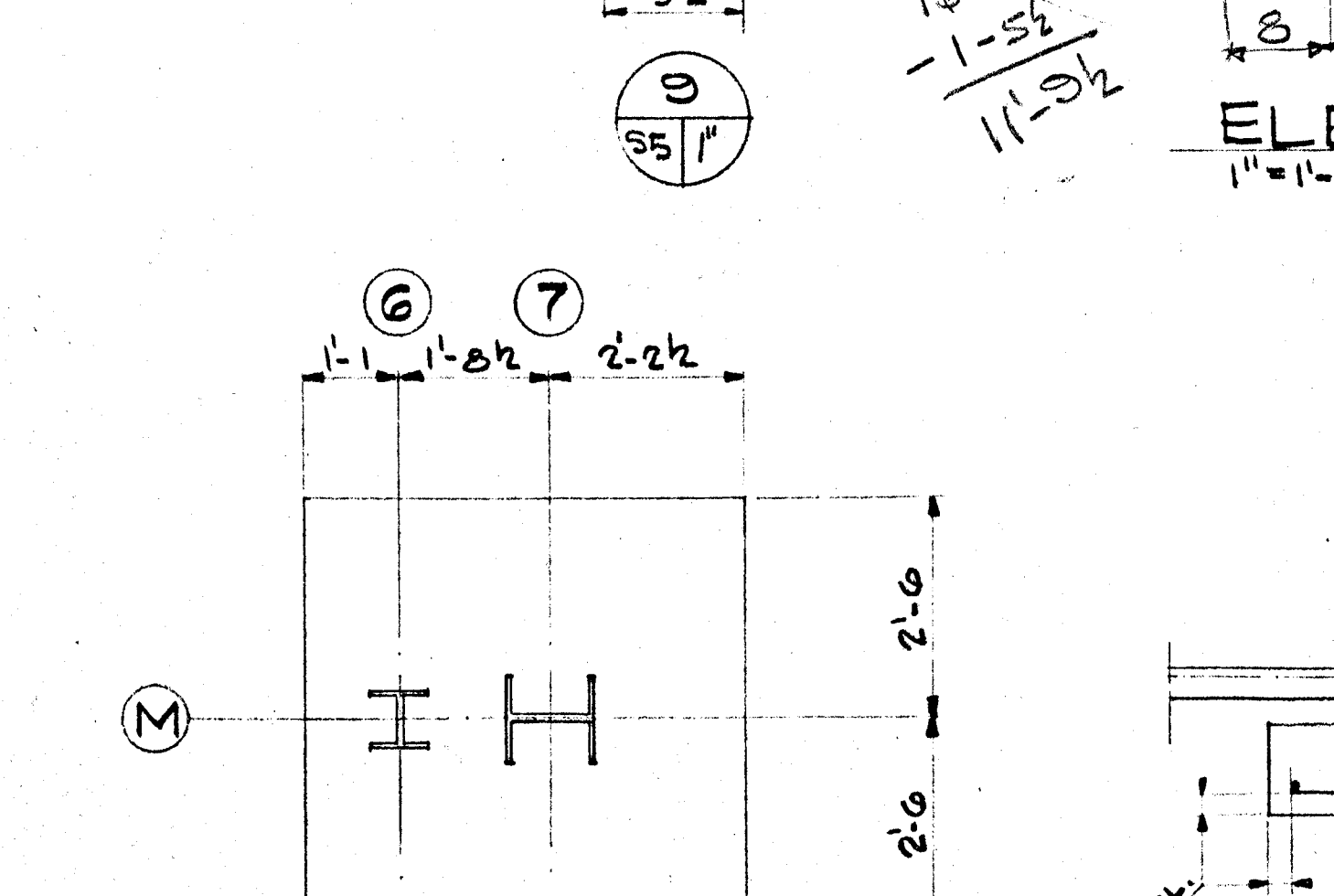
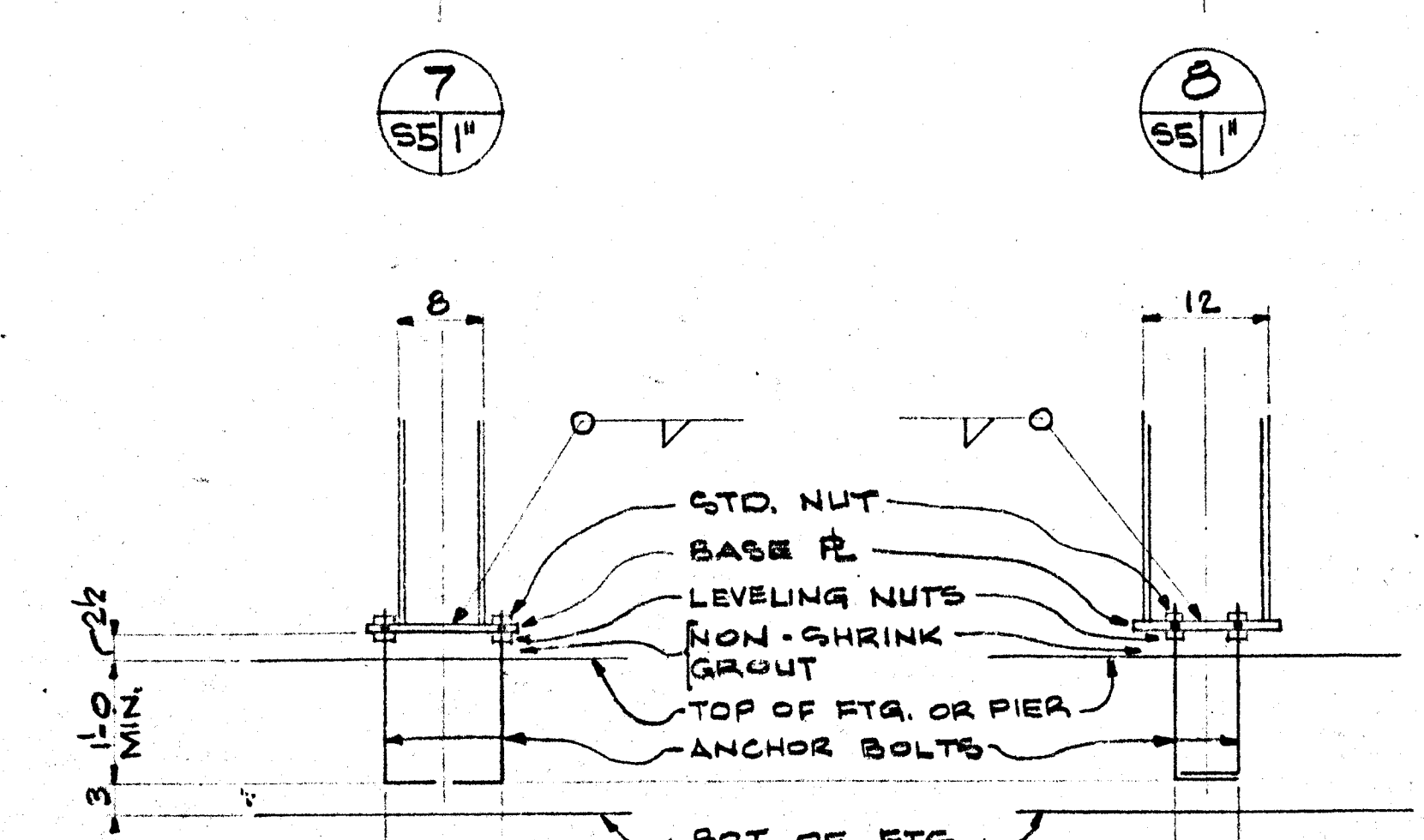
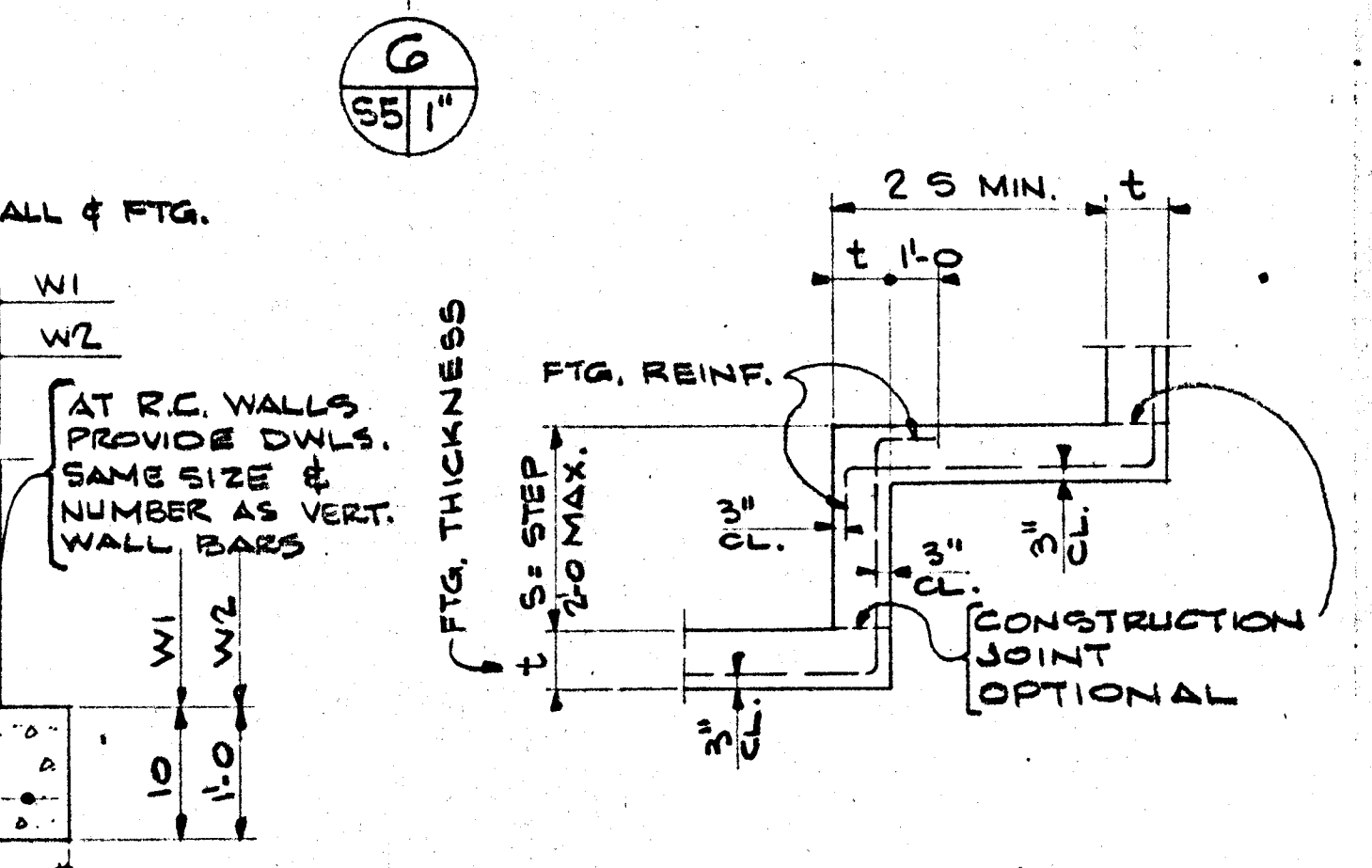
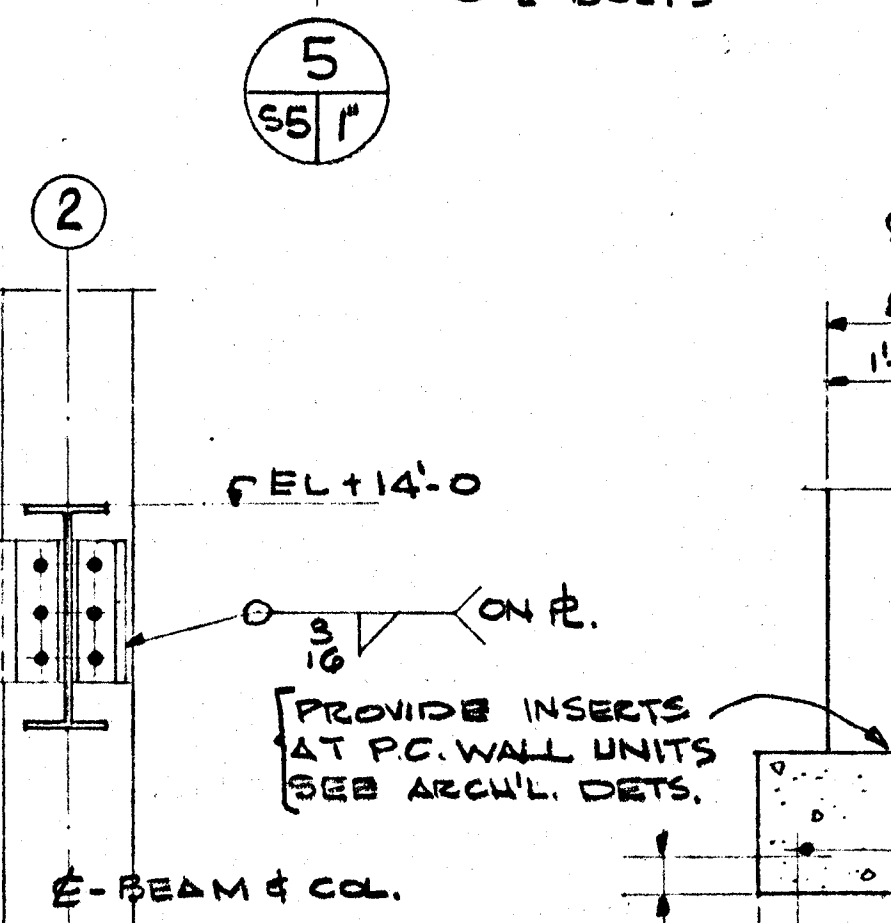
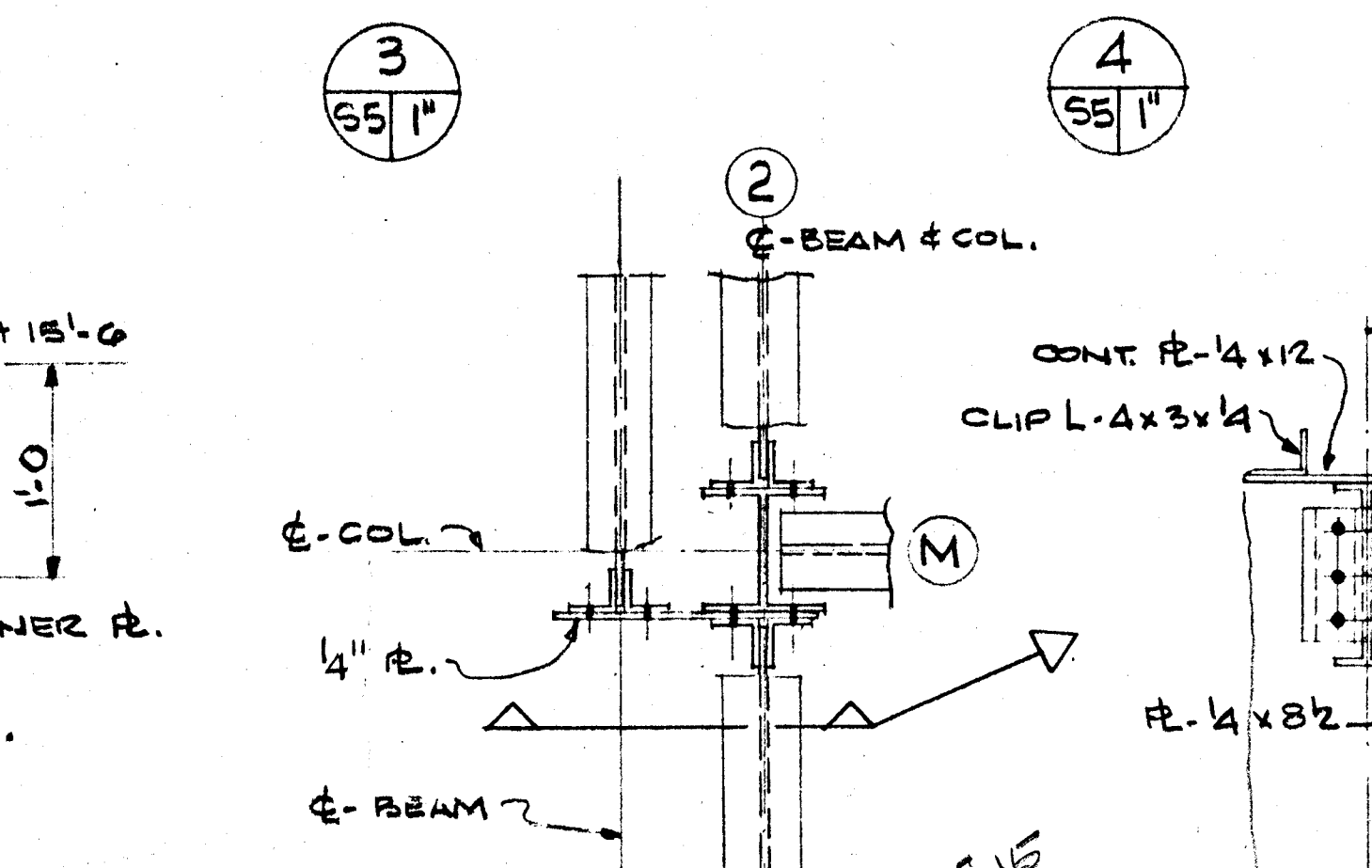
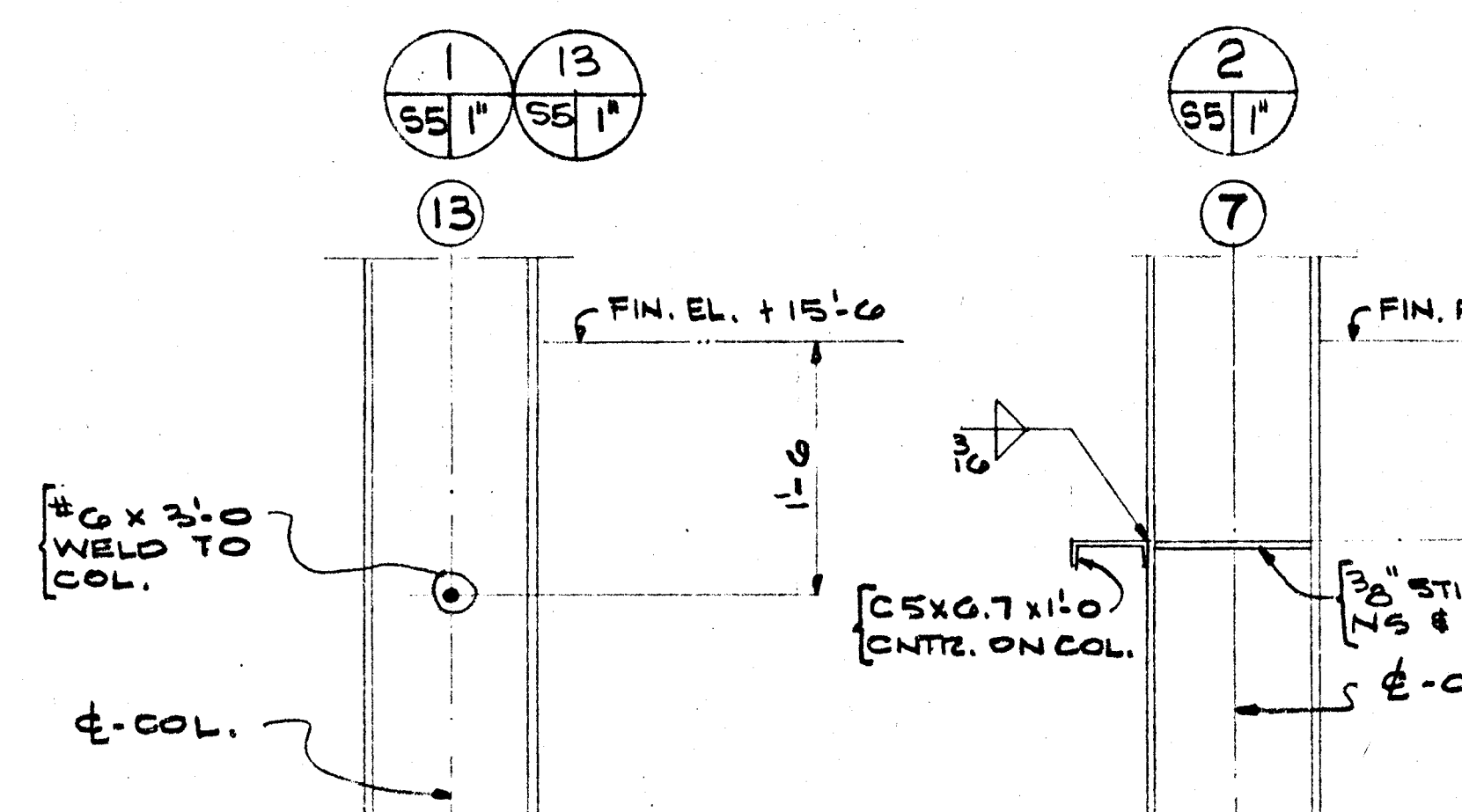
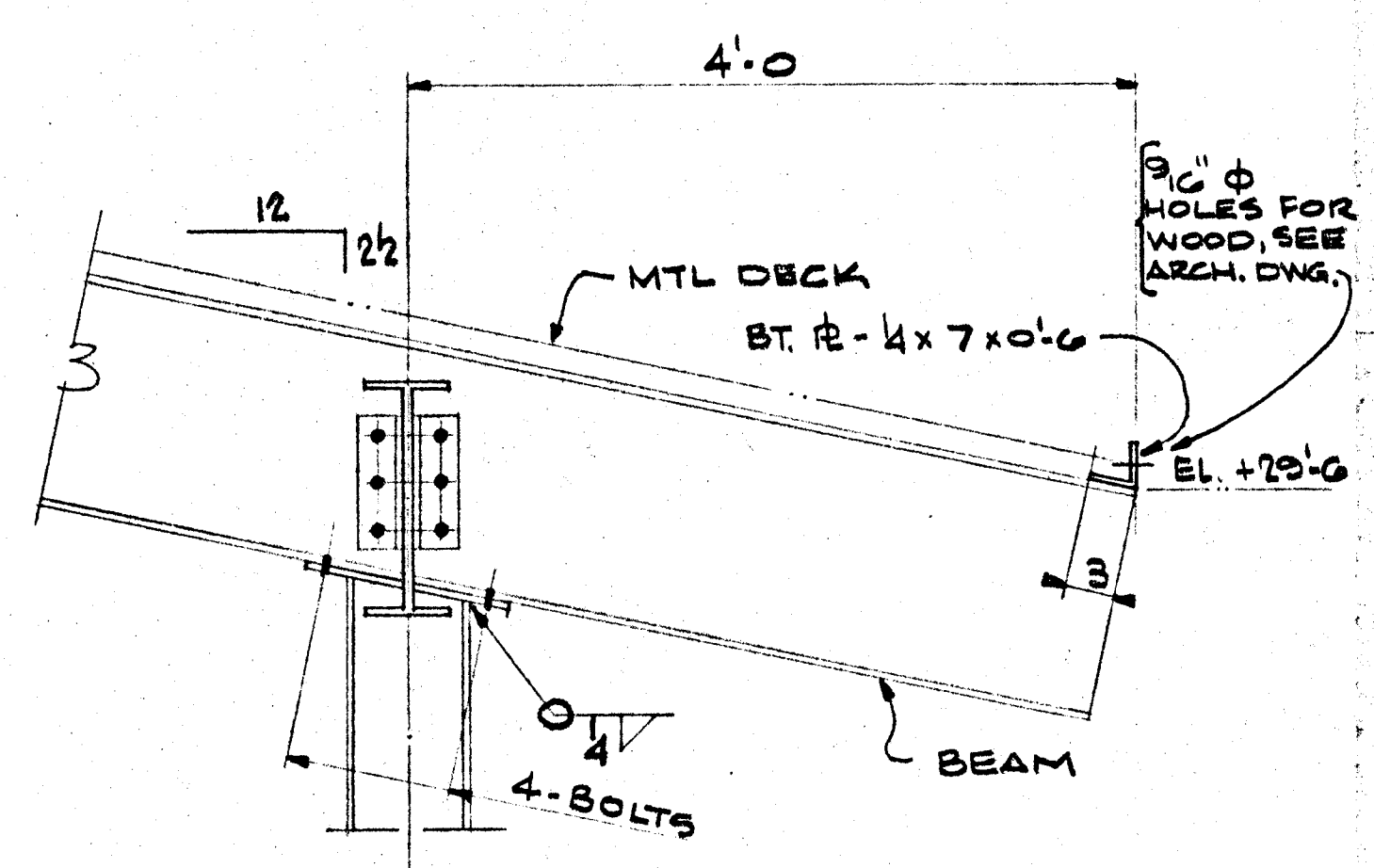
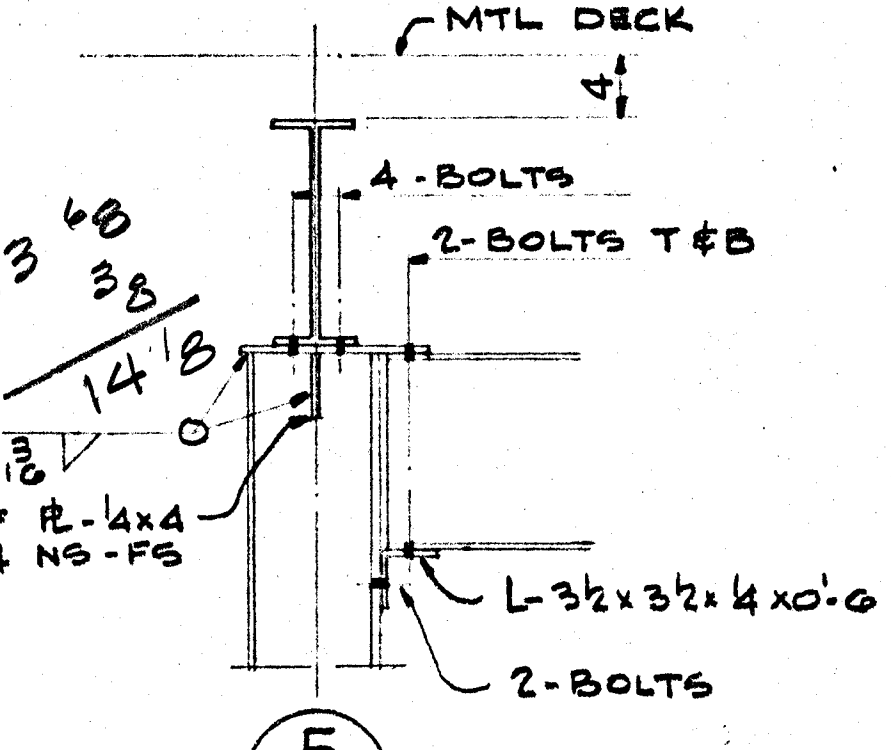
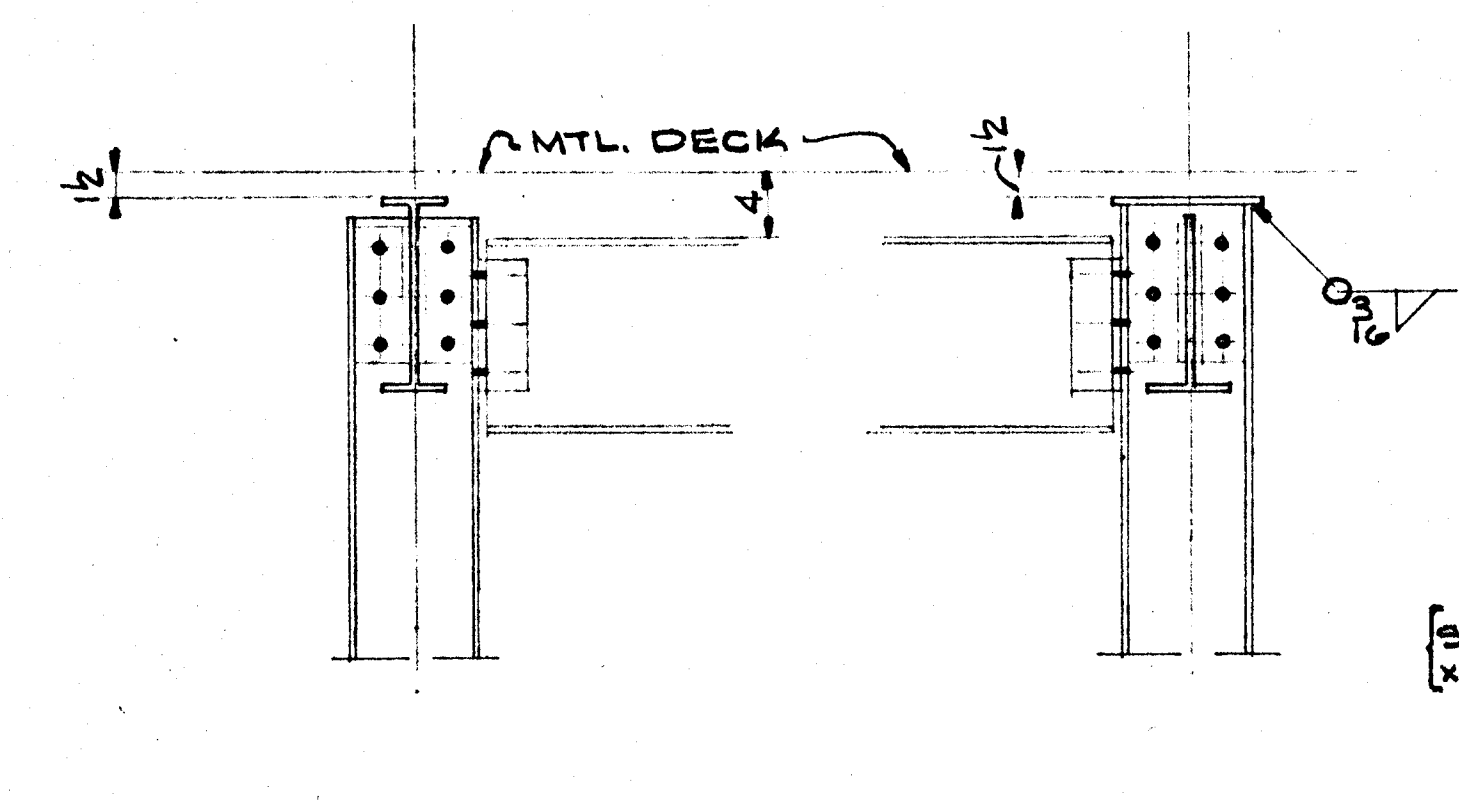
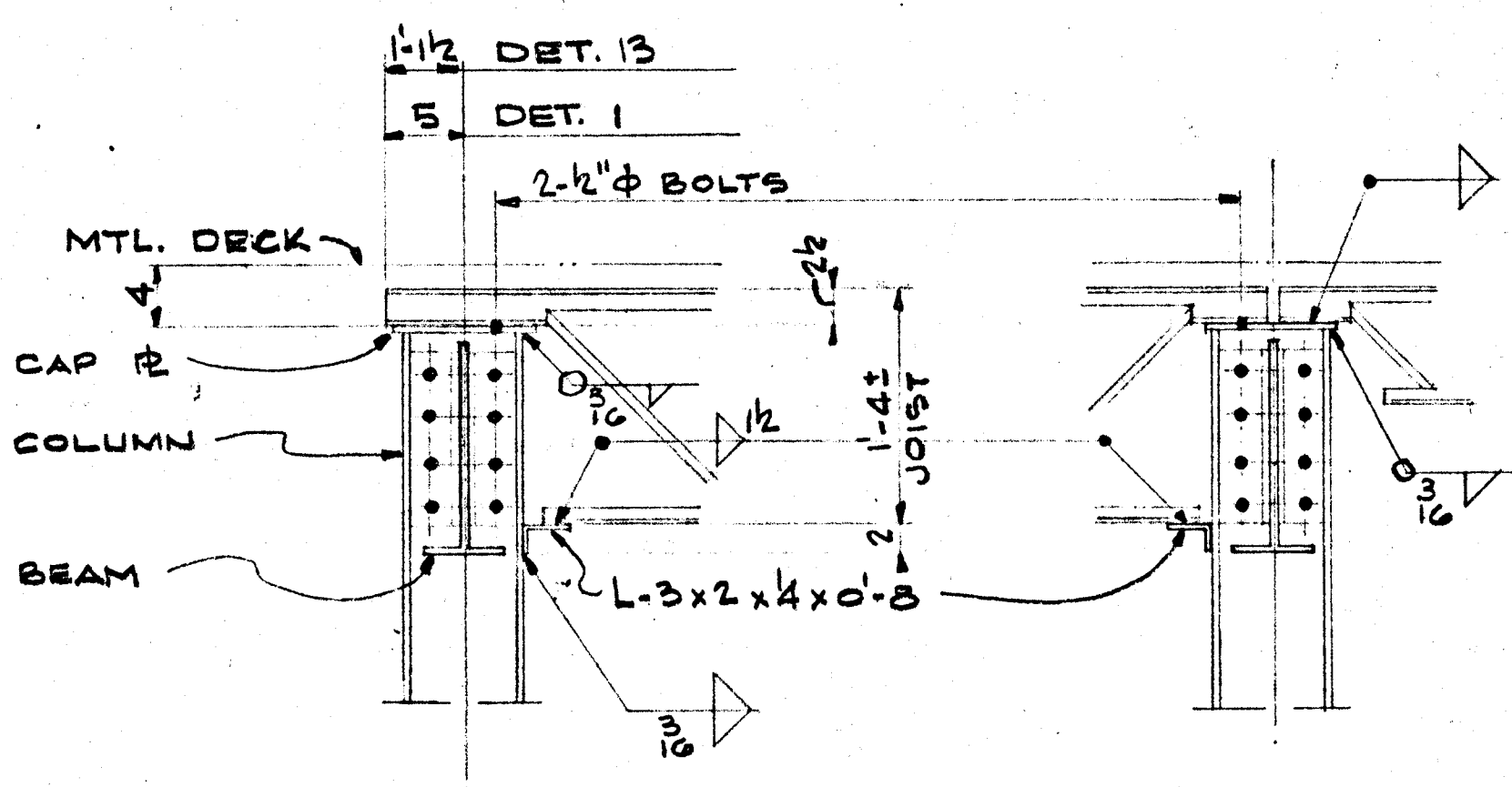


ROOF FRAMING & BOTTOM CHORD BRACING PLAN

✓ VERIFY EXACT LOCATION
W/ EQUIPMENT PURCHASED

COLUMN SCHEDULE

MARK		A7, A13 T7, T13	A8, A9, A10 A11, A12 T8, T9, T10 T11, T12	B14 S14	C17 S17	C13 R13	D14 N14	E2	E3, E4	E6	F7 K7	F13 H13 K13 M13	F14 H14 K14 M14	G2 J2	G3, G4 J3, J4	G6 J6	L1	L2	L3, L4	L6	M2	M3, M4	M6	M7	P5	P6	Q1, Q2	
STORY	CAP	PLATE DET.	3/55	3/55	6/55	1/55	1/55	3/55	4/55	3/55	4/55	1/55	1/55	3/55	1/55	2/55	1/55	4/55	1/55	2/55	1/55	4/55	3/55	3/55	1/55	4/55	4/55	5/55
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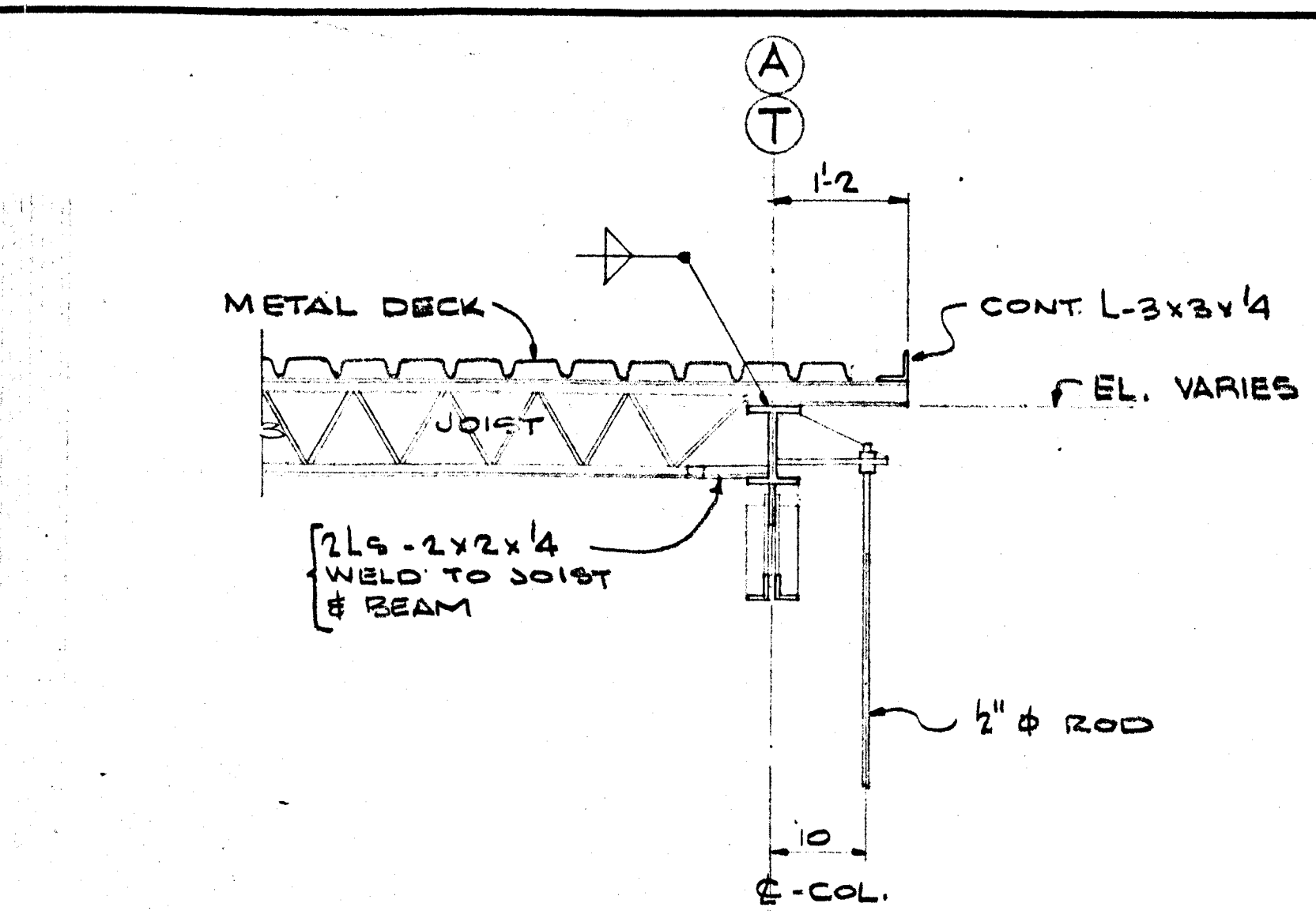
- GENERAL NOTES:
- CONCRETE SHALL HAVE THE FOLLOWING MINIMUM COMPRESSIVE STRENGTHS AT 28 DAYS:
 - A. CAST-IN-PLACE ----- 3000 P.S.I.
 - B. PRECAST HOLLOW CORE UNITS:
 - WEBS AND TOP SLABS ----- 5000 P.S.I.
 - SOPFIT SLABS MAY BE LIGHTWEIGHT CONCRETE
 - RE-BARS SHALL CONFORM TO ASTM A615 OF THE FOLLOWING GRADES:
 - A. GENERAL CONSTRUCTION ----- GRADE 40
 - B. CANTILEVERED RETAINING WALLS ----- GRADE 60
 - PRESTRESSING STRAND SHALL CONFORM TO ASTM A416
 - WELDED WIRE FABRIC (WVF) SHALL CONFORM TO ASTM A185.
 - REINFORCING STEEL SHALL HAVE THE MINIMUM LAPS AS FOLLOWS:
 - A. GRADE 40 BARS ----- 30 BAR DIAMETERS
 - B. GRADE 60 BARS ----- 40 BAR DIAMETERS
 - C. W.W.F. ----- ONE FULL MESH PLUS 2 INCHES
 - STRUCTURAL STEEL SHALL CONFORM TO ASTM A36.
 - BOLTS FOR CONNECTING STRUCTURAL STEEL SHALL BE 3/4" Ø U.O.N., AND SHALL CONFORM TO ASTM A325. ALL BOLTS USED IN THE ASSEMBLY AND ERECTION OF TRUSSES MARKED T1 SHALL BE FRICTION BOLTS.
 - WELDING ELECTRODES SHALL BE E70 SERIES.
 - ANCHOR BOLTS SHALL CONFORM TO ASTM A307 OR A36.
 - GROUT TO BE PLACED UNDER COLUMN BEARING PLATES SHALL BE NON-SHRINK, EQUAL TO "MEMBECOR" AND SHALL BE A NON-STAINING TYPE WHERE EXPOSED.
 - METAL FLOOR DECKING SHALL BE OF 24 GAGE SHEET EQUAL TO TYPE 1 MAC-COR. SHEAR WIRES SHALL HAVE A MAXIMUM SPACING OF 5 INCHES. INSTALL AND PROVIDE TEMPORARY SHORING AS DIRECTED BY THE MANUFACTURER.
 - SHEAR CONNECTORS FOR COMPOSITE BEAMS (CB) SHALL BE EQUAL TO TYPE 1 AS MANUFACTURED BY MAC-FAB PRODUCTS, INC. AND SHALL BE INSTALLED AS DIRECTED BY THE MANUFACTURER.
 - OPEN-WEB STEEL JOISTS SHALL COMPLY WITH THE REQUIREMENTS OF STANDARD SPECIFICATIONS OF THE STEEL JOIST INSTITUTE.
 - METAL ROOF DECKING SHALL BE 1-1/2 INCHES DEEP, OF 24 GAGE SHEET, AND SHALL BE EQUAL TO TYPE FN AS MANUFACTURED BY CONSOLIDATED SYSTEMS INC.
 - CONCRETE FOR FOOTINGS SHALL BE PLACED ON NATURAL, UNDISTURBED EARTH.
 - GRADE SLABS SHALL BE 4 INCHES THICK, REINFORCED WITH 6X6-10/10 WVF. PLACE WVF IN THE TOP THIRD OF SLAB BUT NOT MORE THAN 1-1/2 INCHES BELOW TOP SURFACE.
 - CONCRETE FOR GRADE SLABS SHALL BE PLACED IN ALTERNATE SECTIONS OF 1000 SQUARE FEET OR LESS. LENGTH OF SECTIONS SHALL NOT EXCEED TWICE THE WIDTH. BACKFILL SHALL NOT BE PLACED AGAINST BUILDING WALLS WHICH ARE TO RETAIN EARTH UNTIL WALLS ARE ADEQUATELY BRACED OR CONCRETE FOR WALLS AND THEIR SUPPORTING SLABS HAVE BEEN PLACED AND CURED.
 - PRECAST HOLLOW CORE FLOOR UNITS SHALL RECEIVE A CAST-IN-PLACE TOPPING SLAB NOT LESS THAN 2 INCHES THICK, U.O.N., AND REINFORCED WITH 6X6-10/10 WVF PLACED IN CENTER OF TOPPING.
 - FINAL TIGHTENING OF BOLTS CONNECTING TRUSSES T1 TO COLUMNS SHALL BE MADE AFTER ALL DEAD LOADS HAVE BEEN APPLIED. ALL TEMPORARY TRUSS COLUMN BRACING (OR GUYS) SHALL REMAIN IN PLACE UNTIL FINAL TIGHTENING OF BOLTS.

TYP. COL. BASE DETAILS

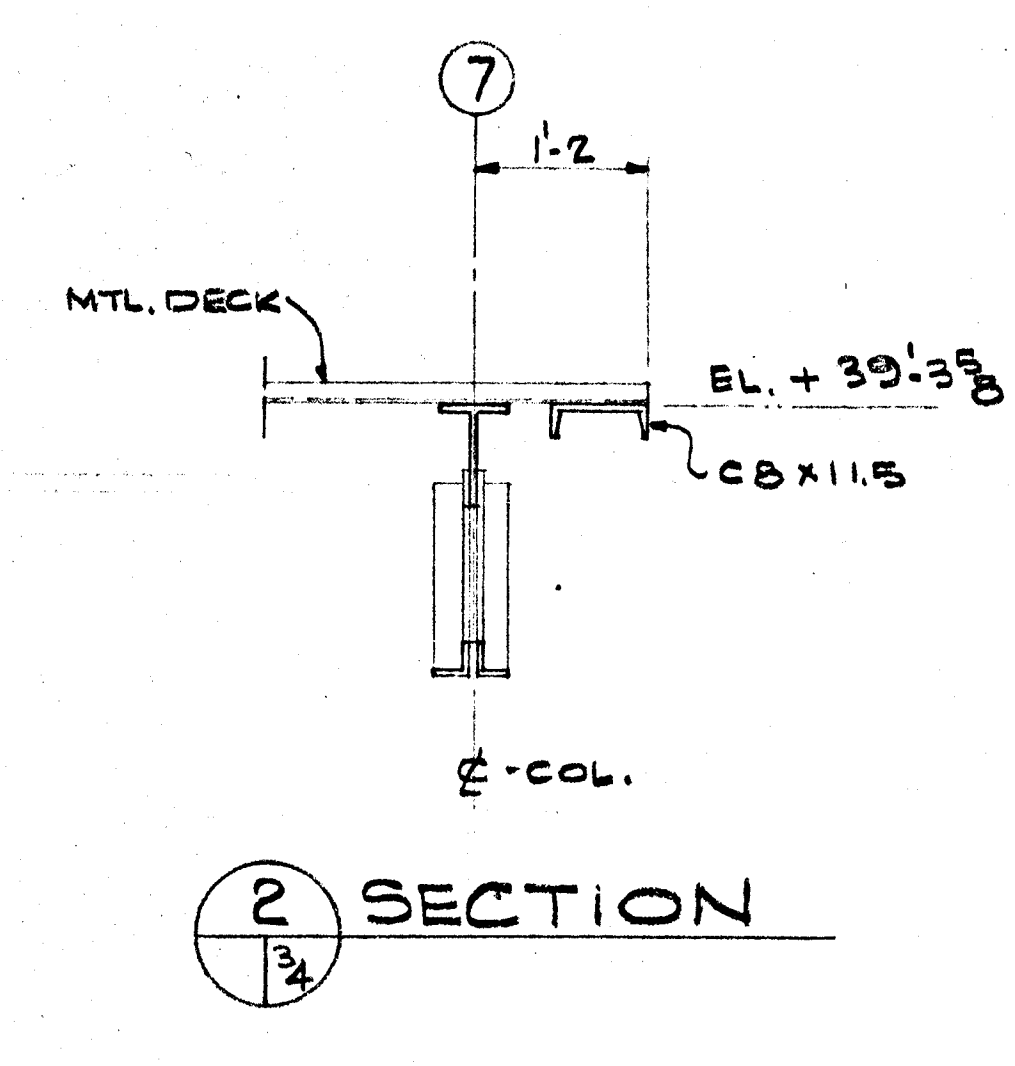
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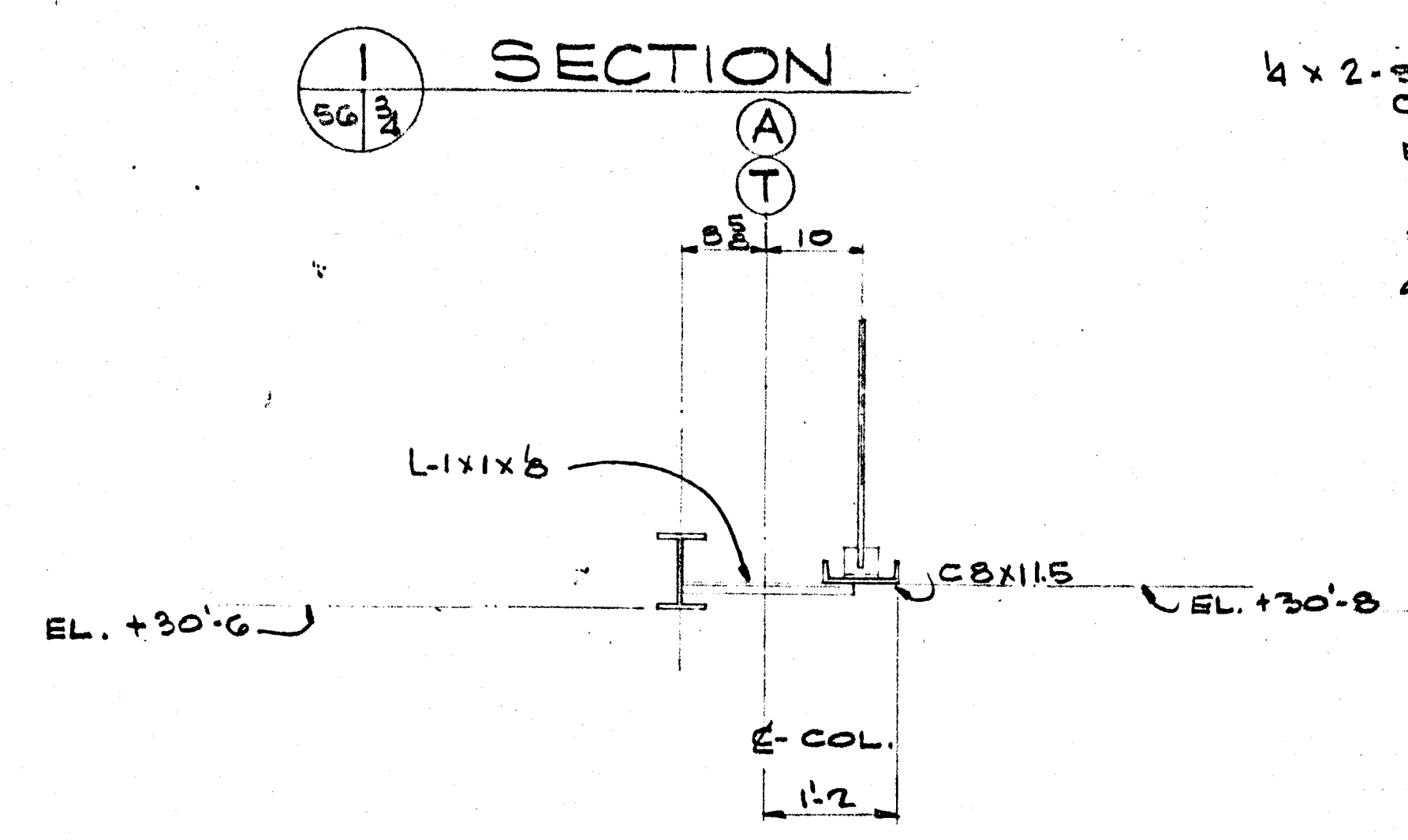
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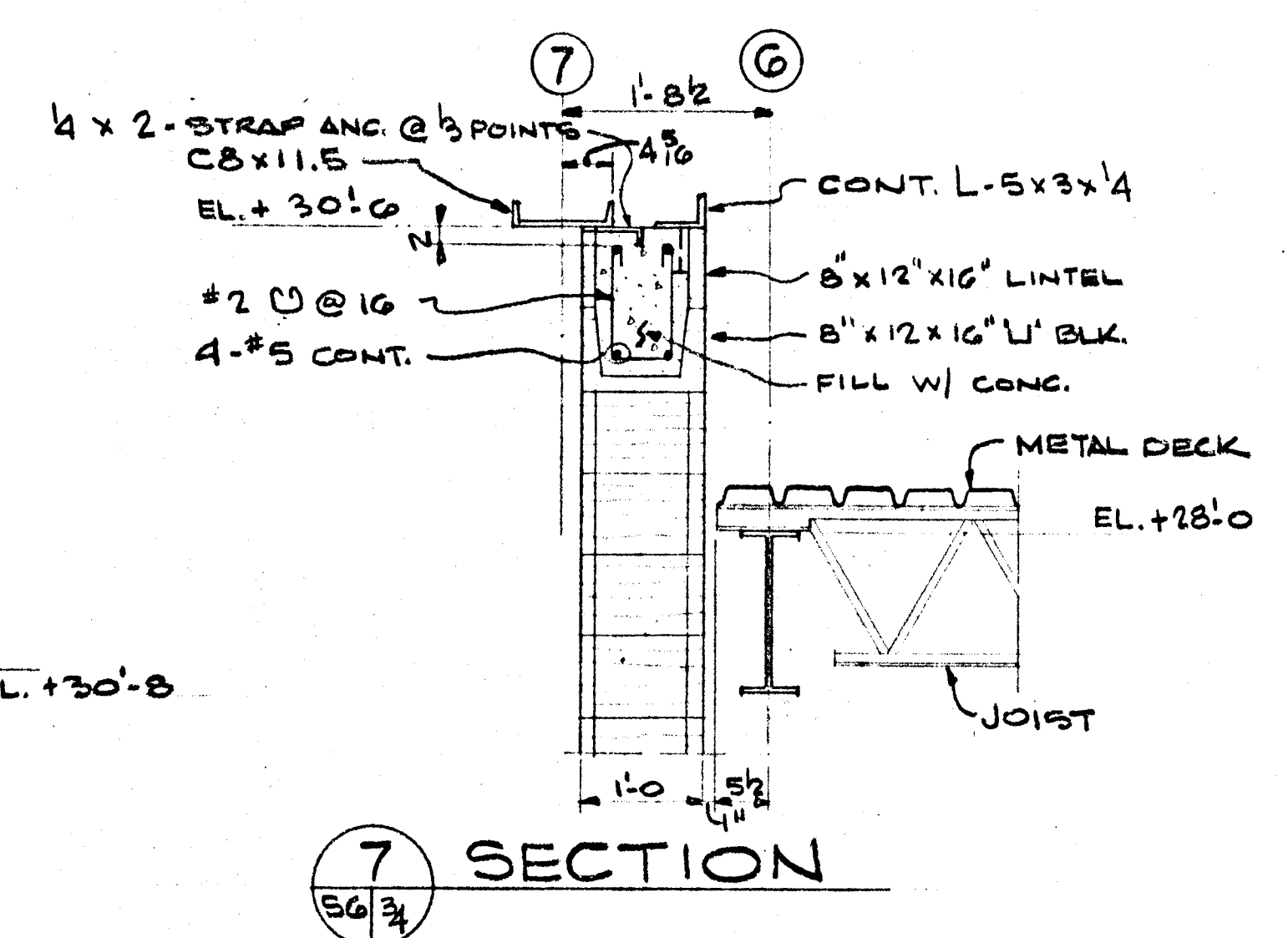
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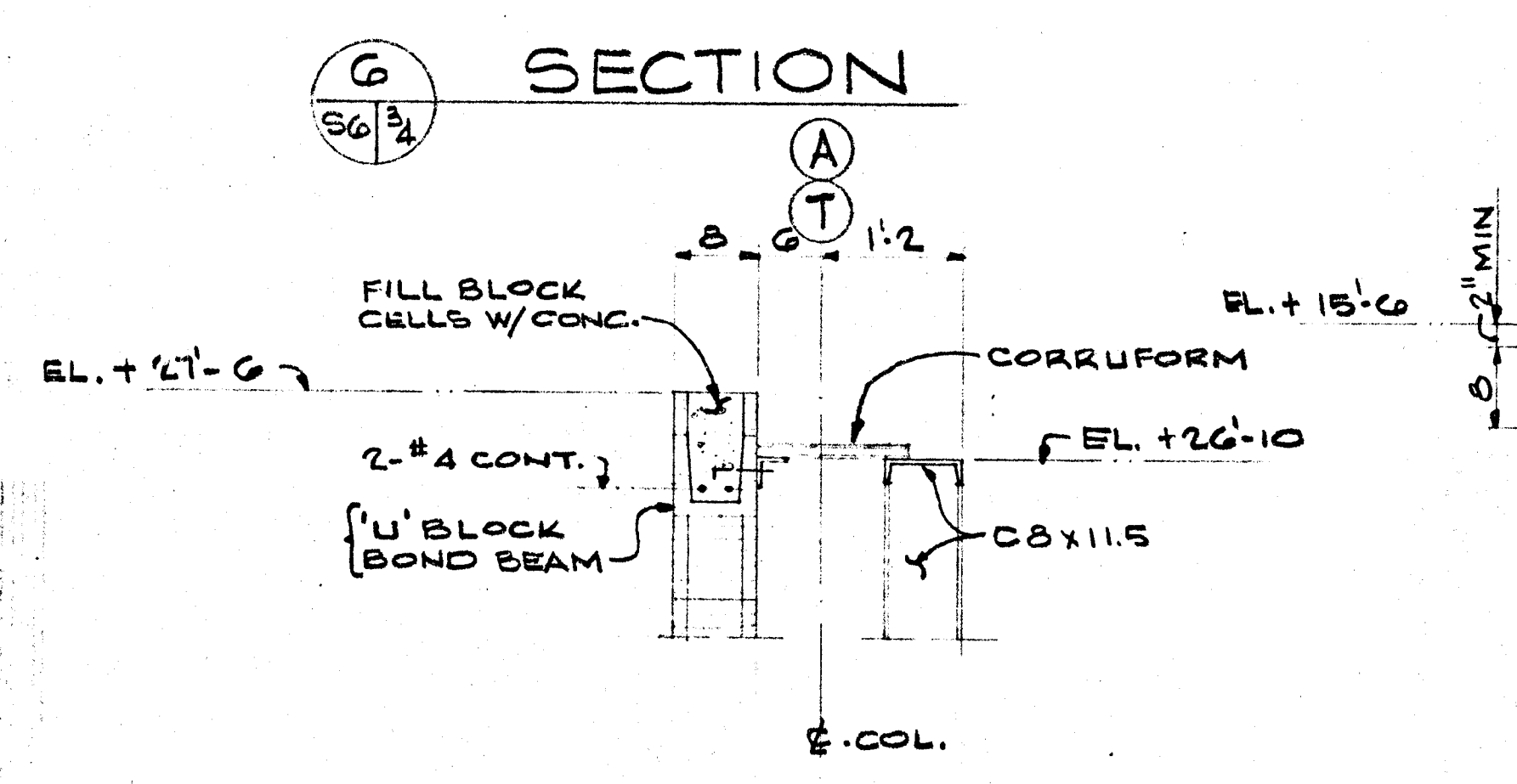
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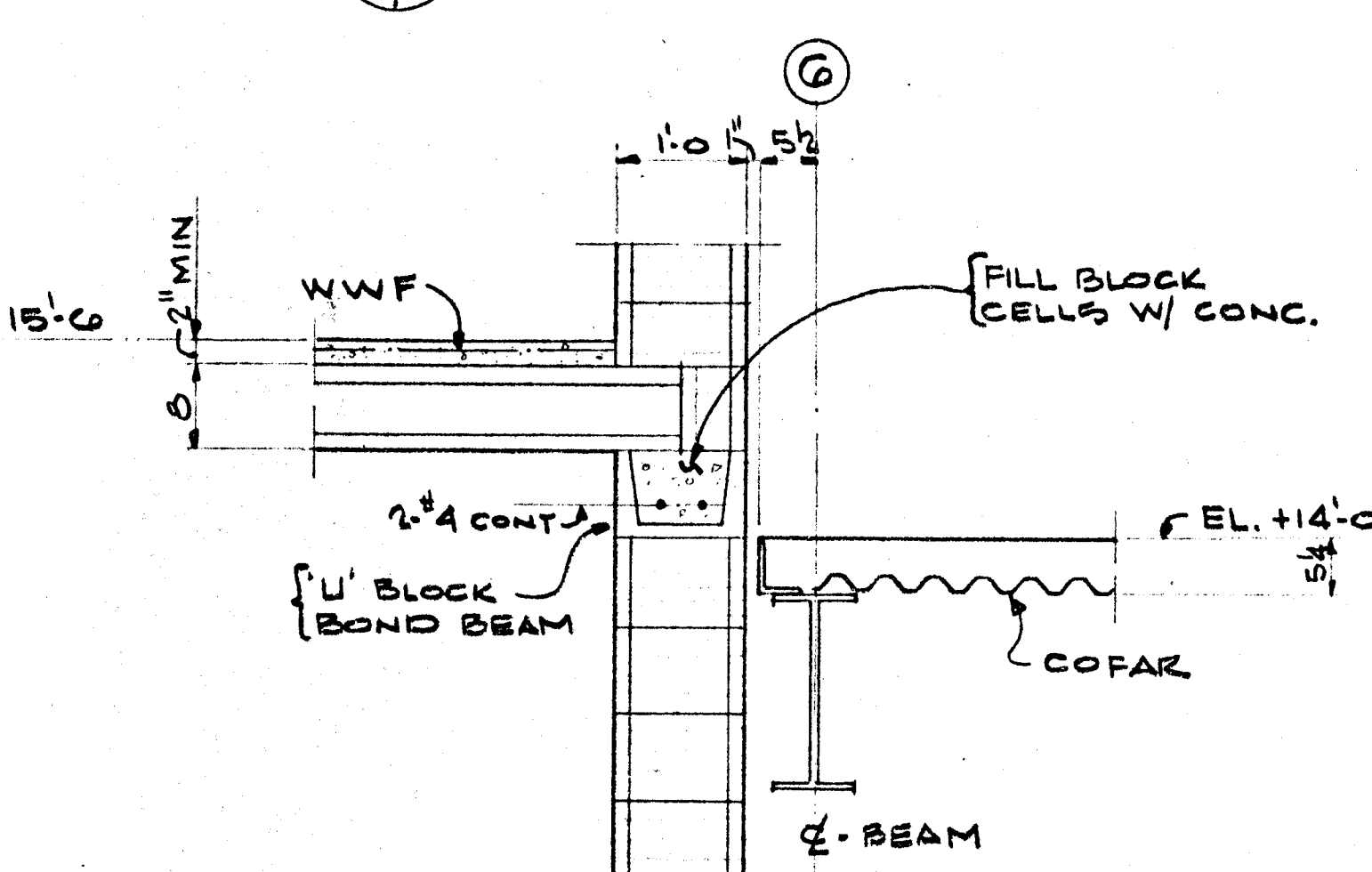
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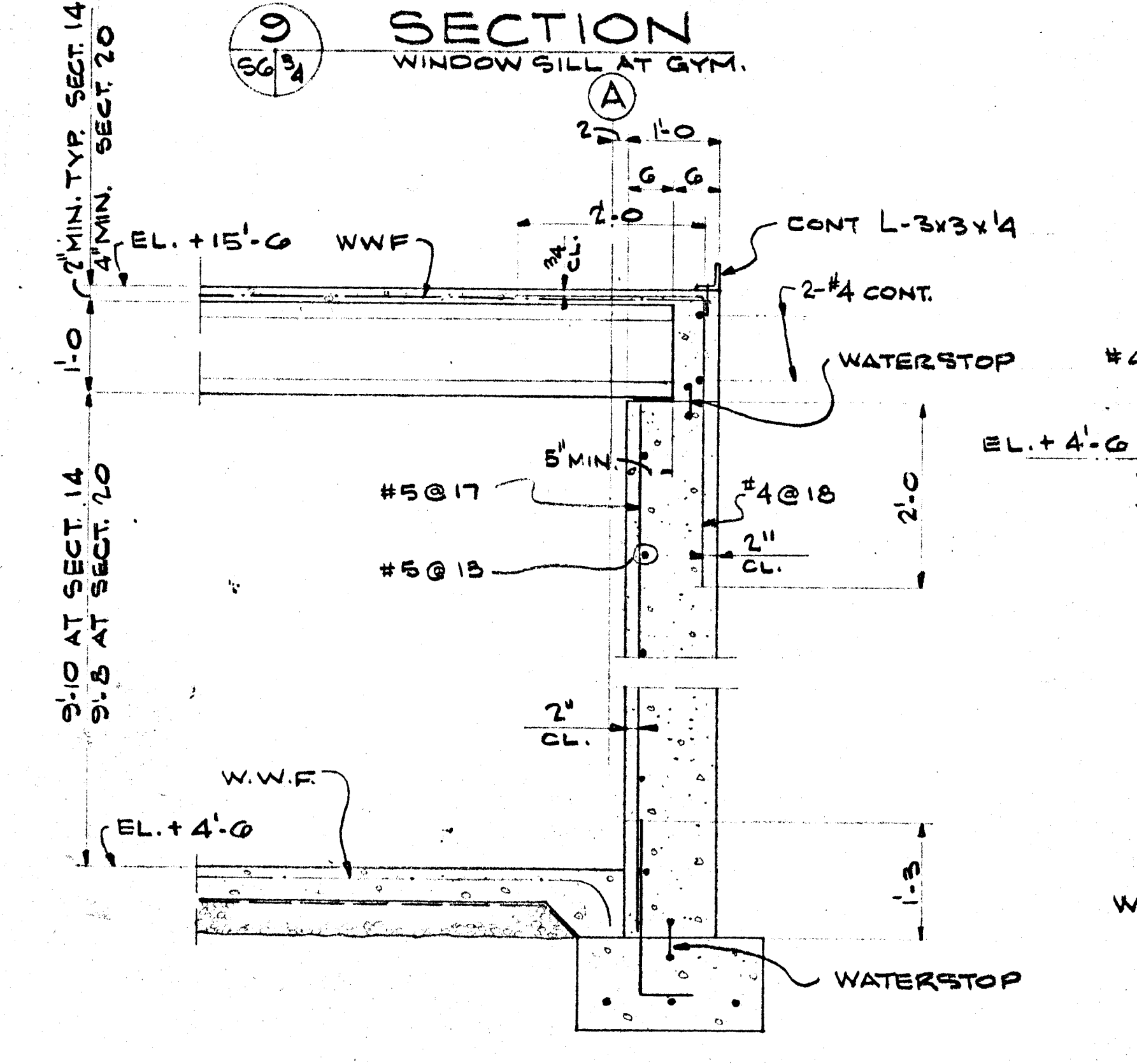
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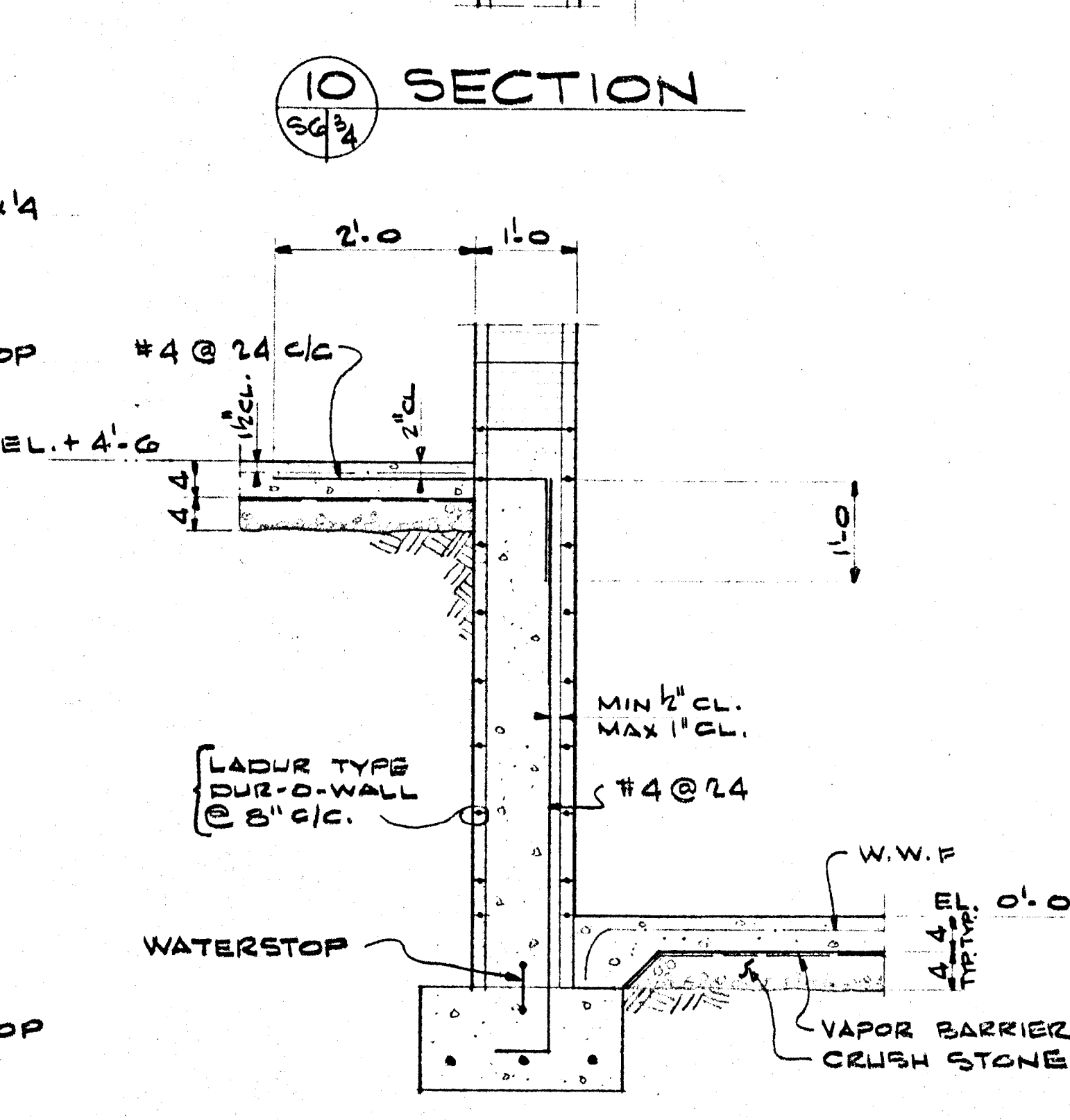
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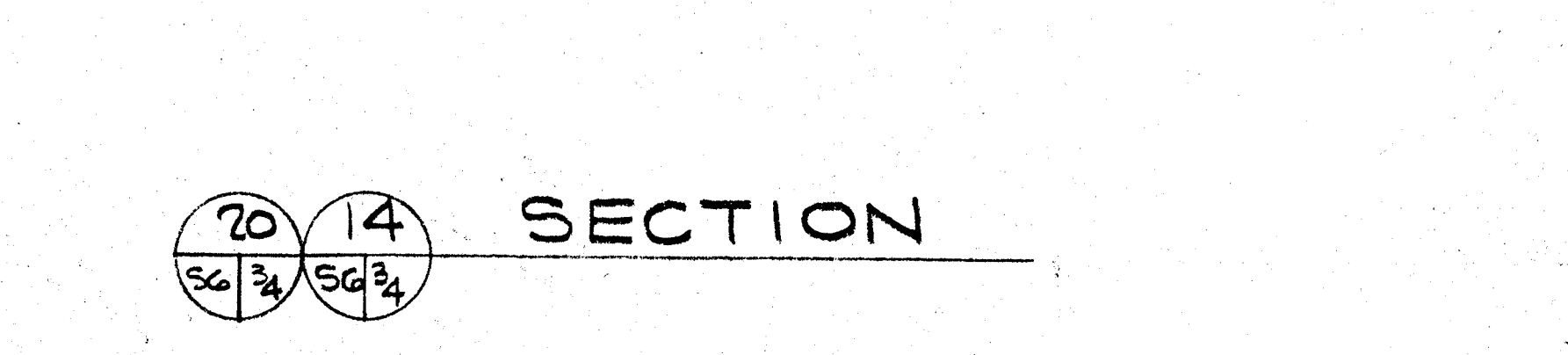
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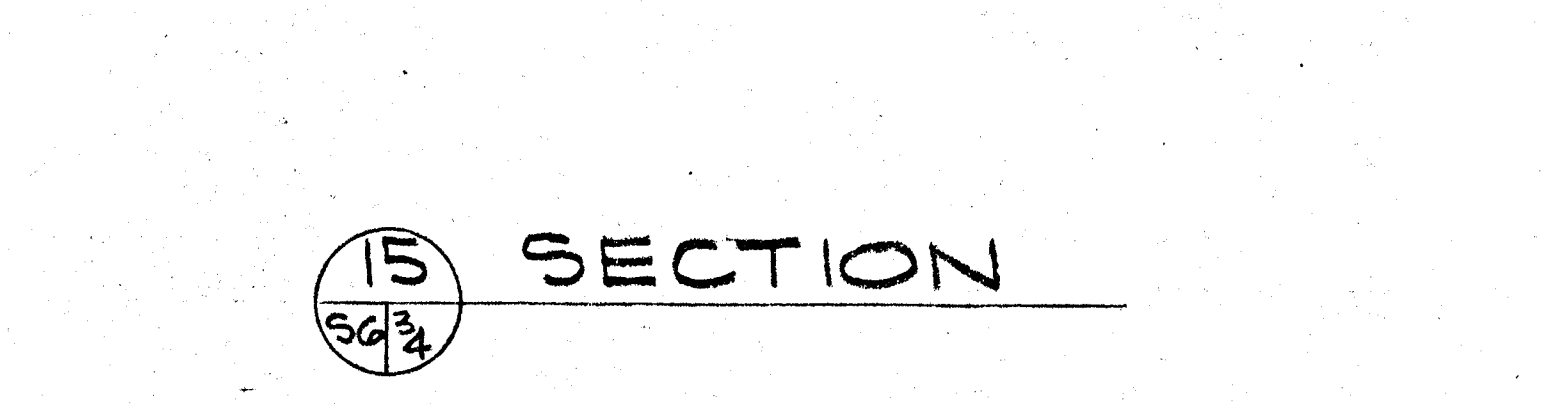
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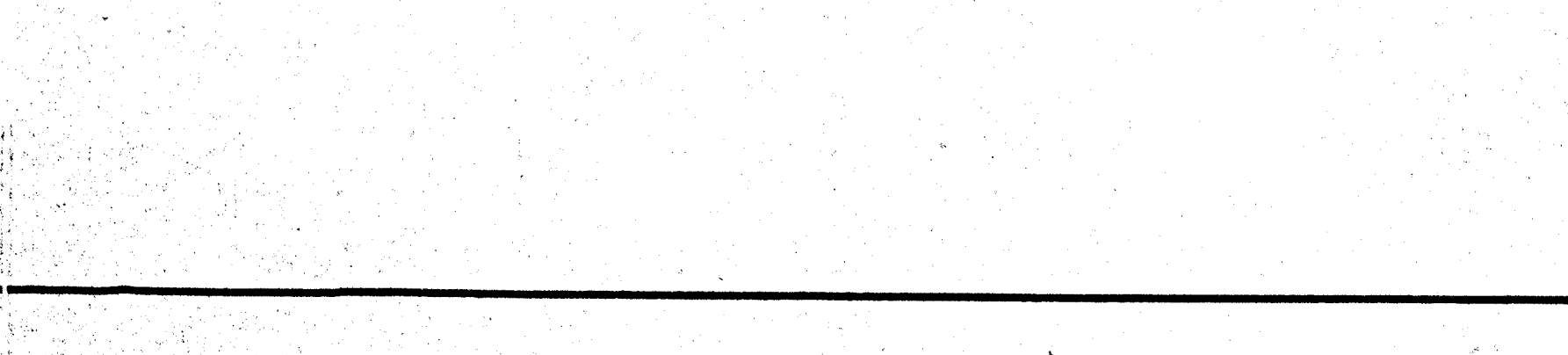
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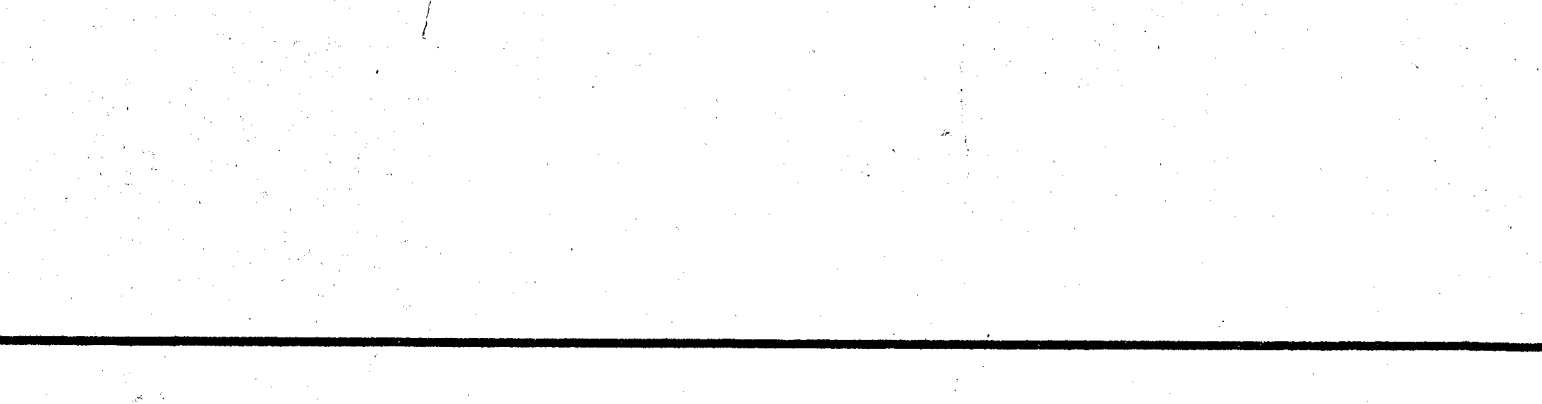
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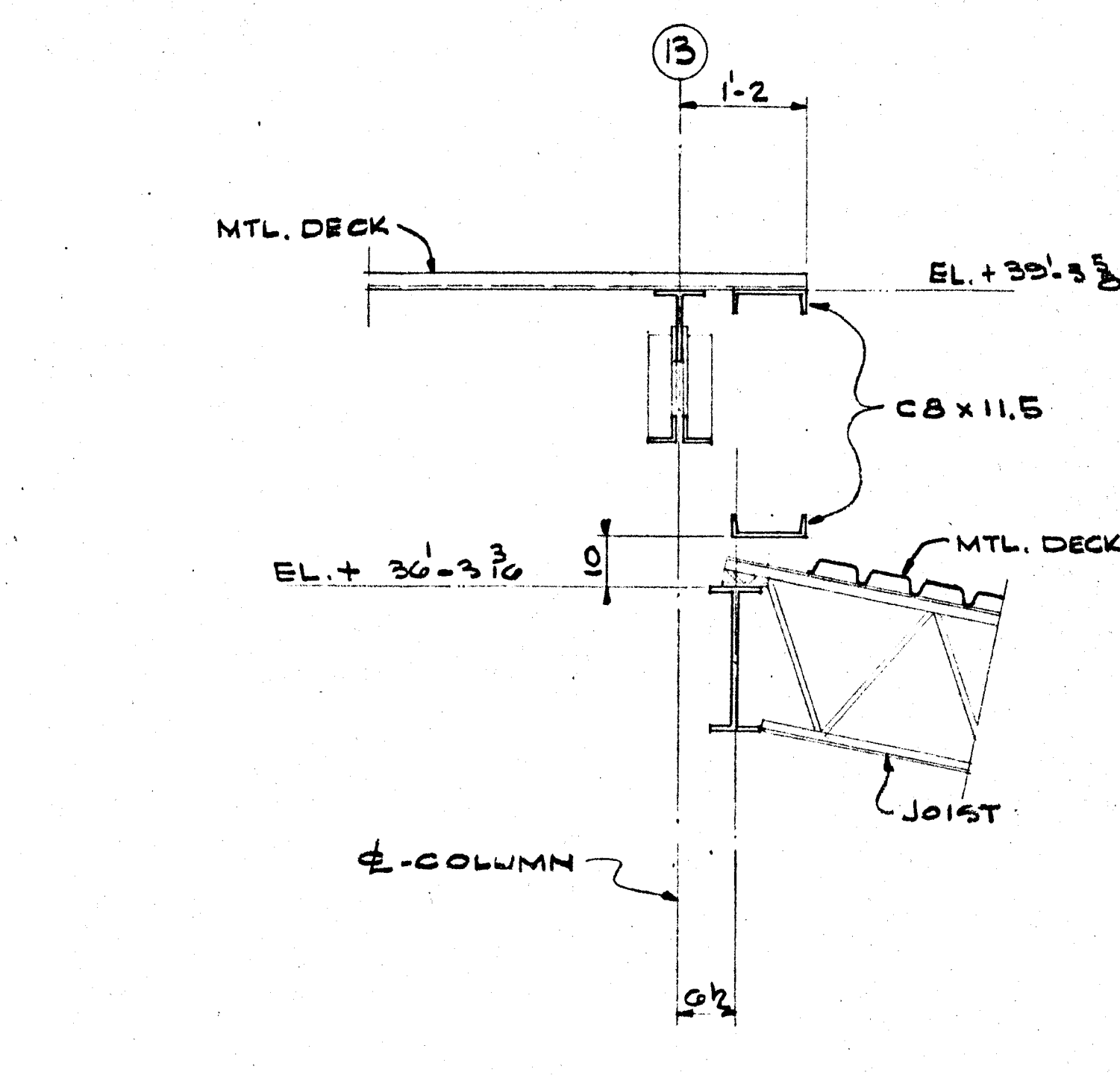
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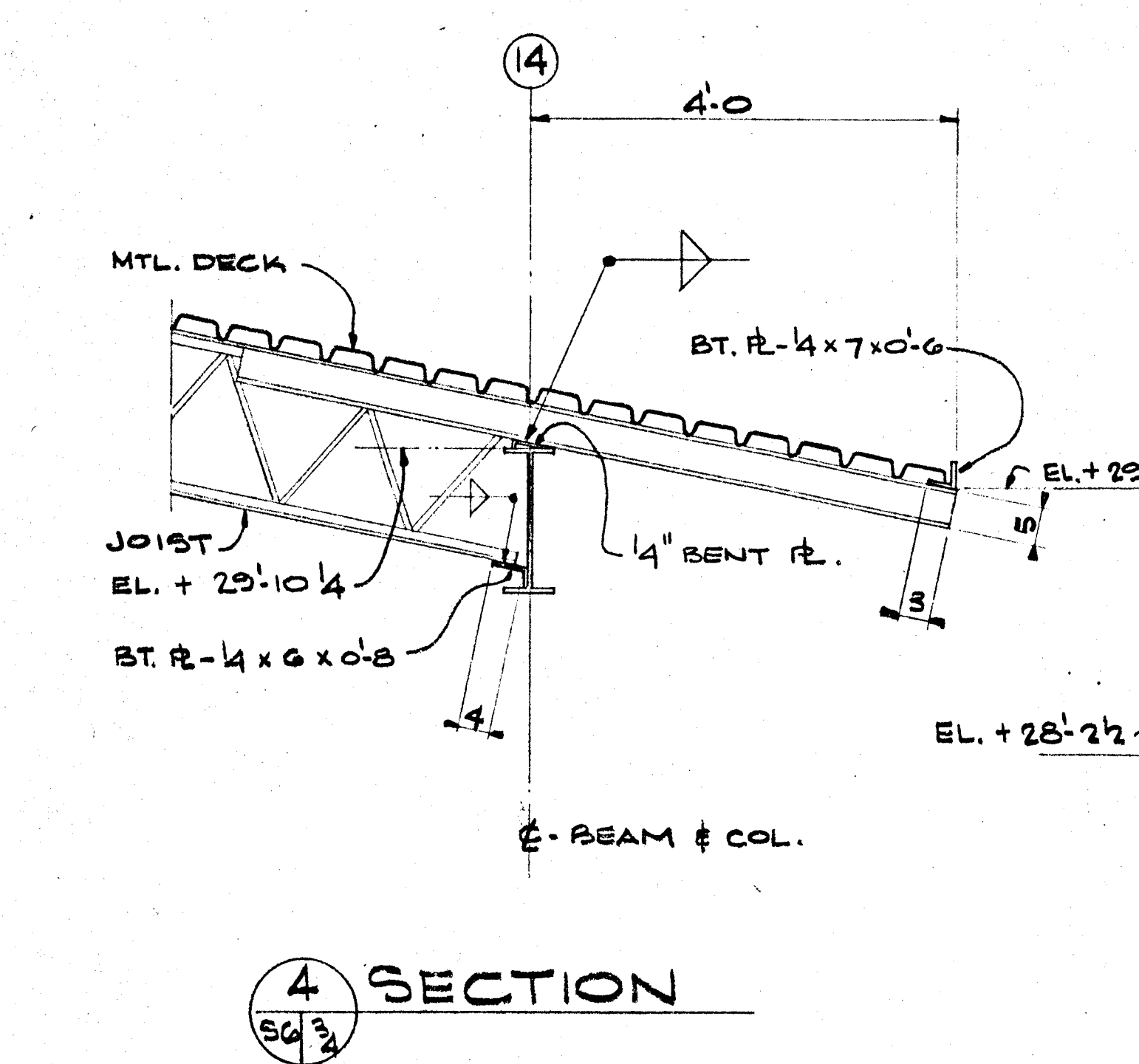
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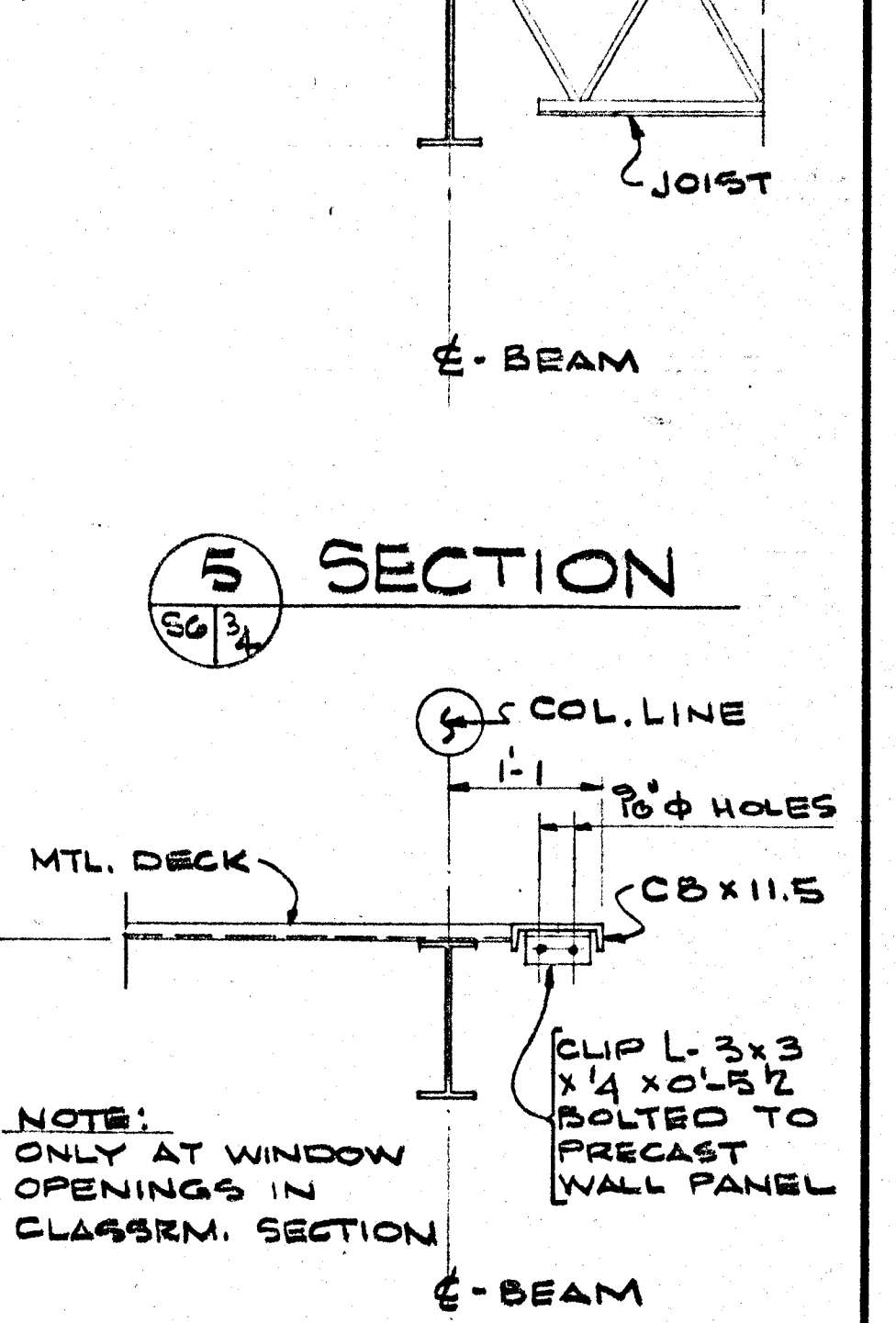
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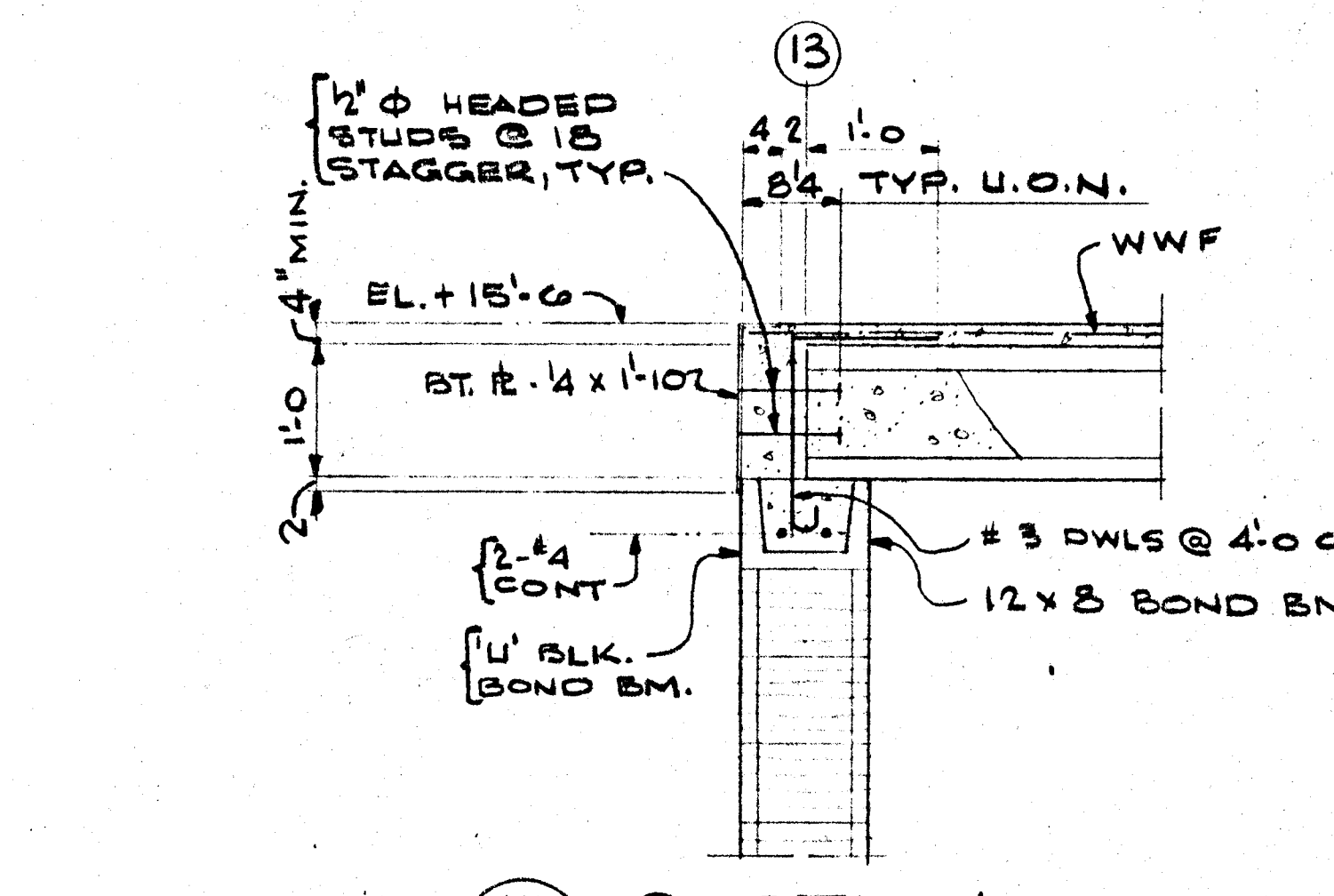
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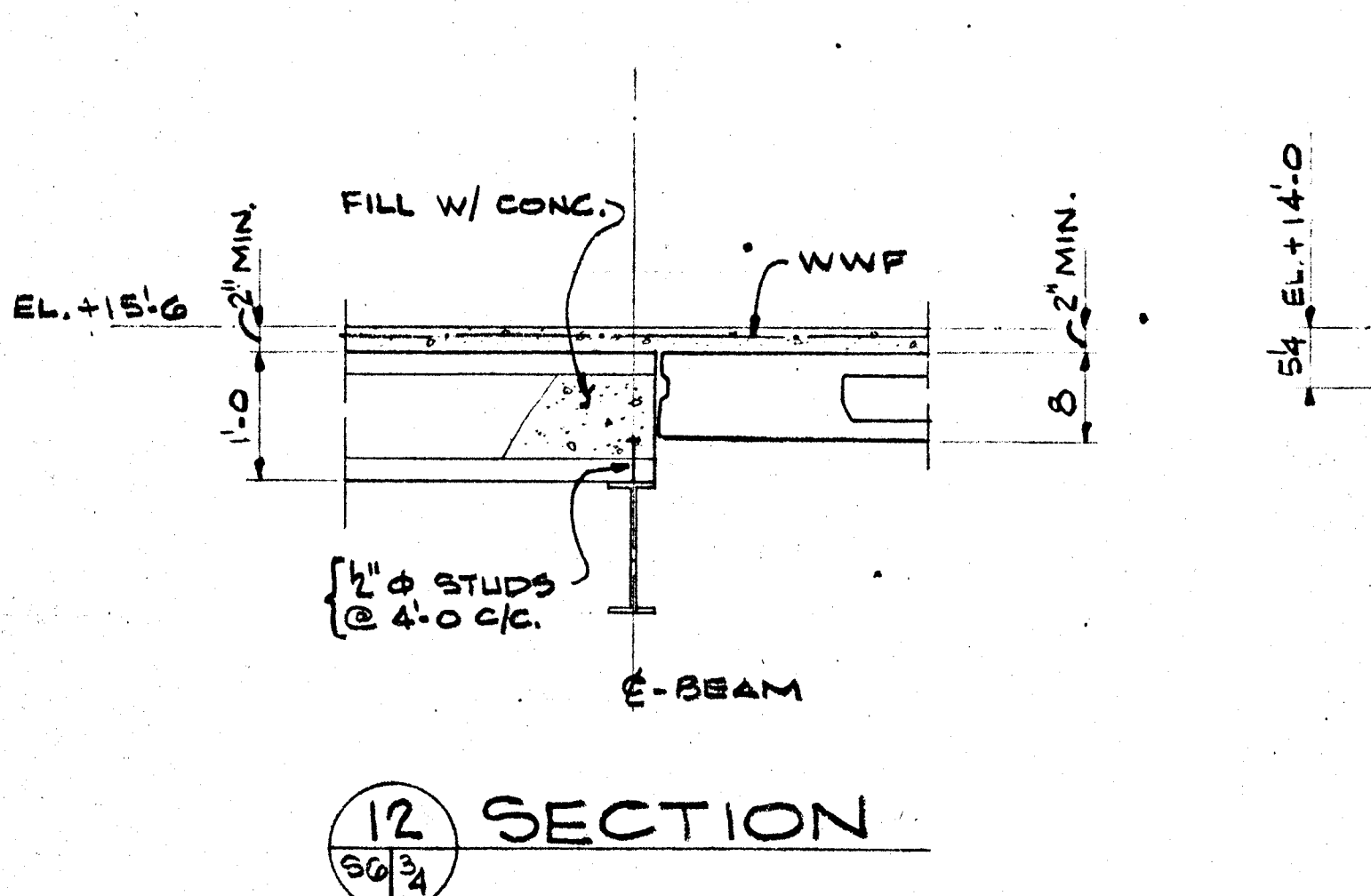
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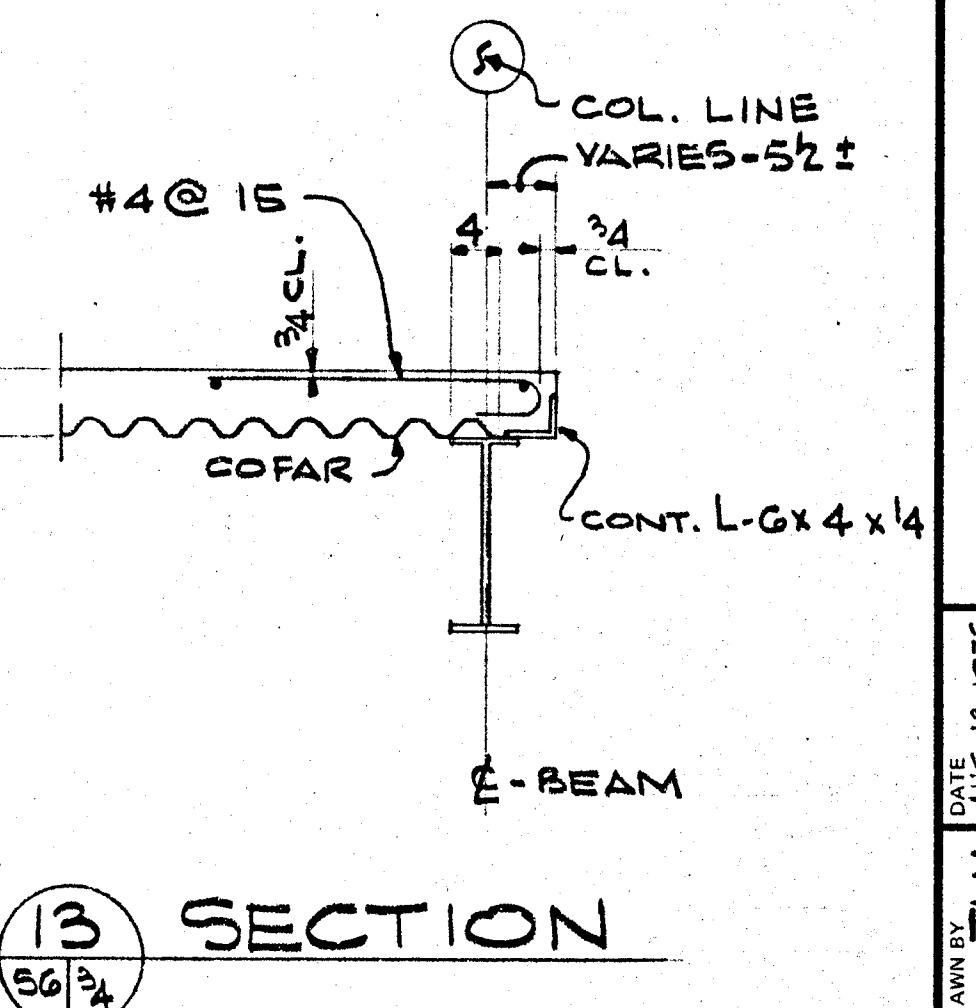
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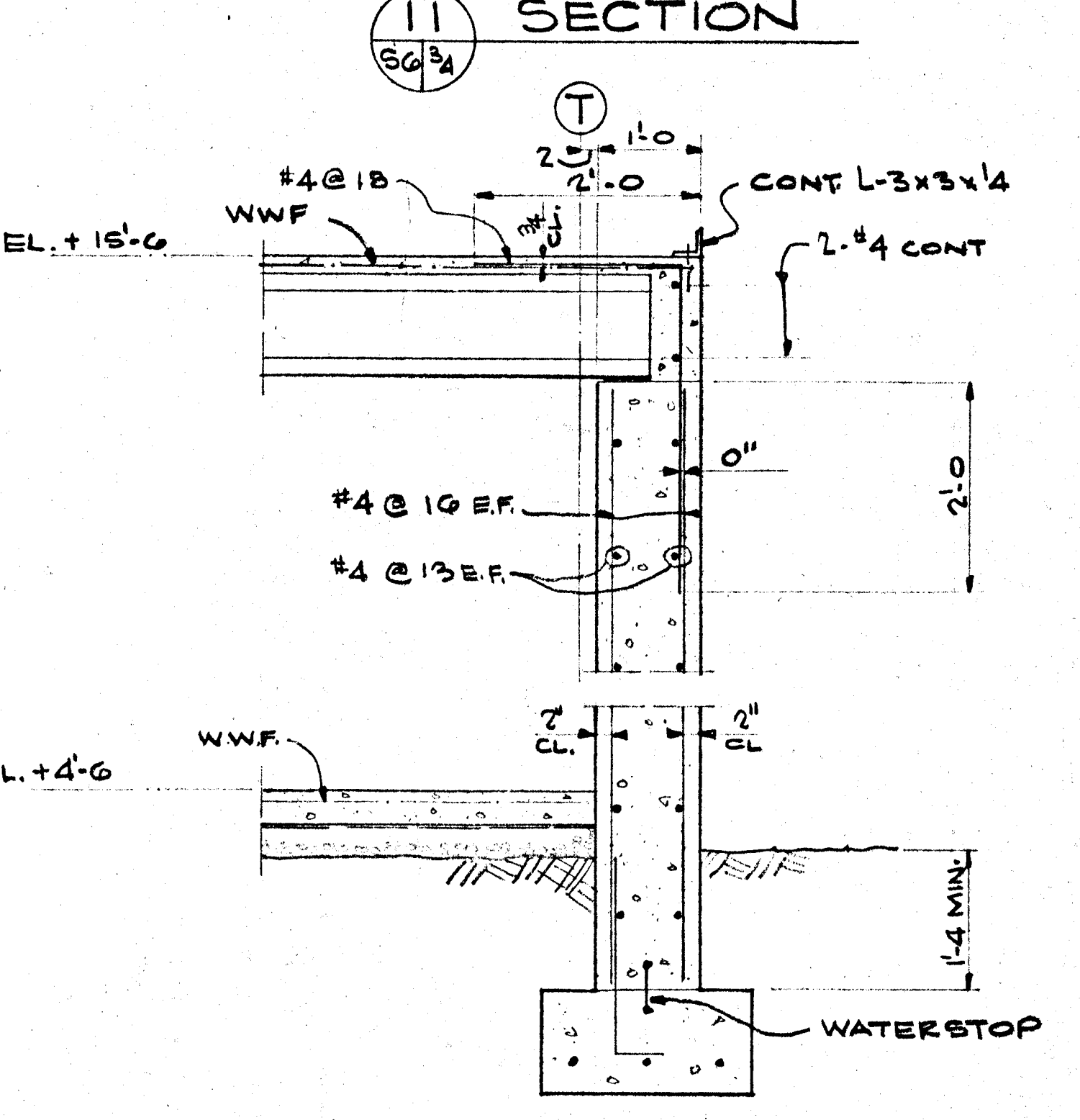
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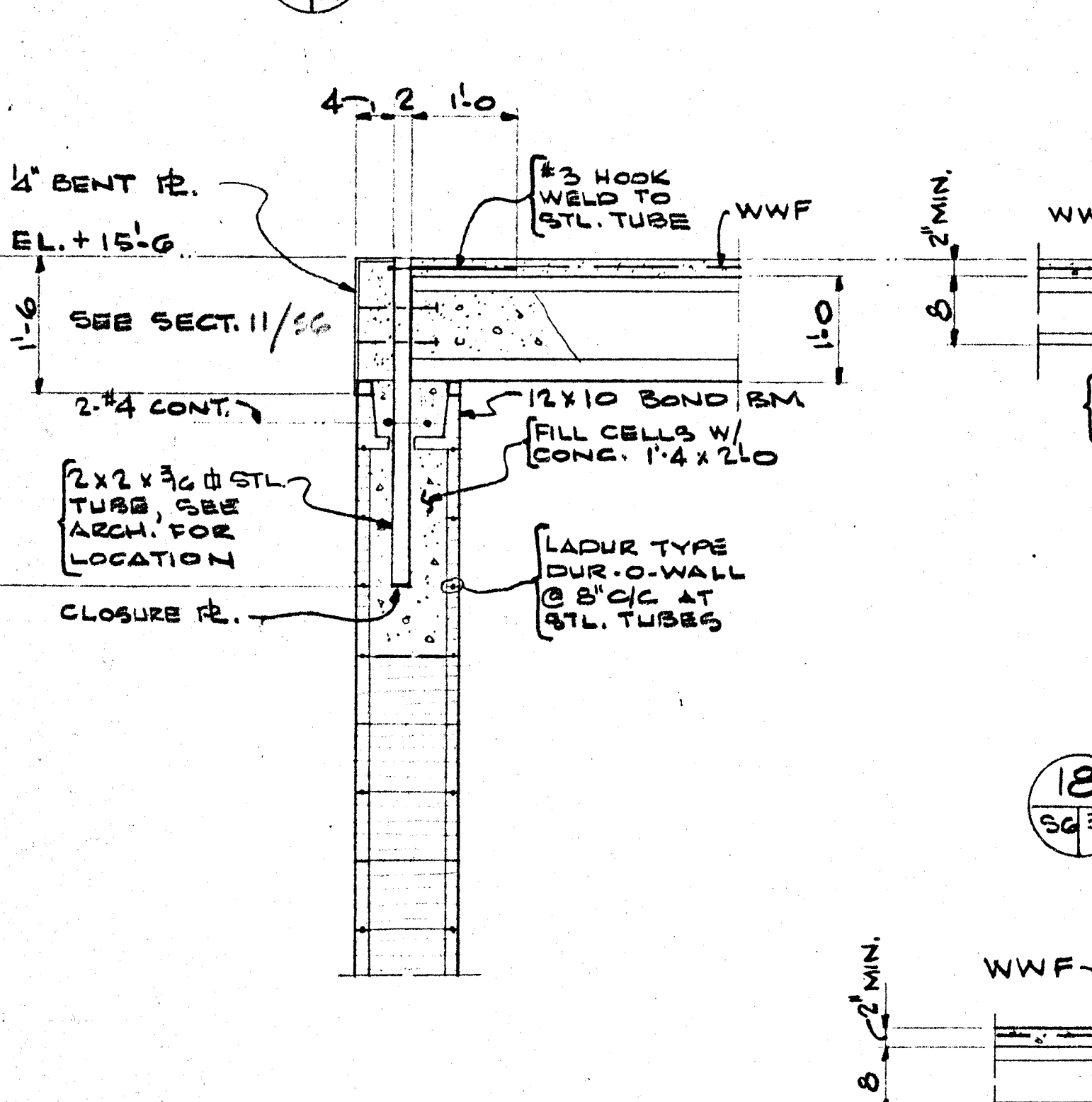
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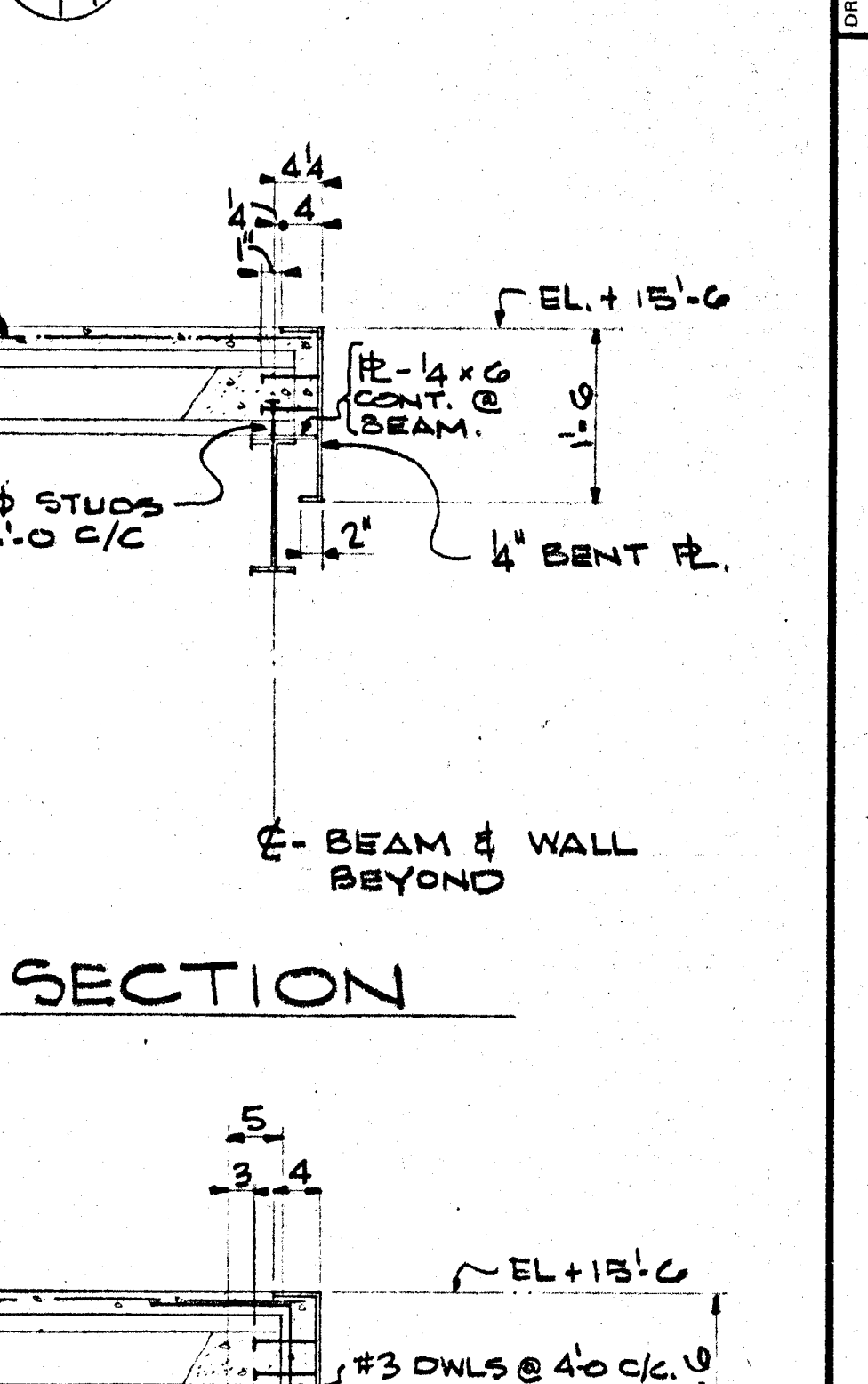
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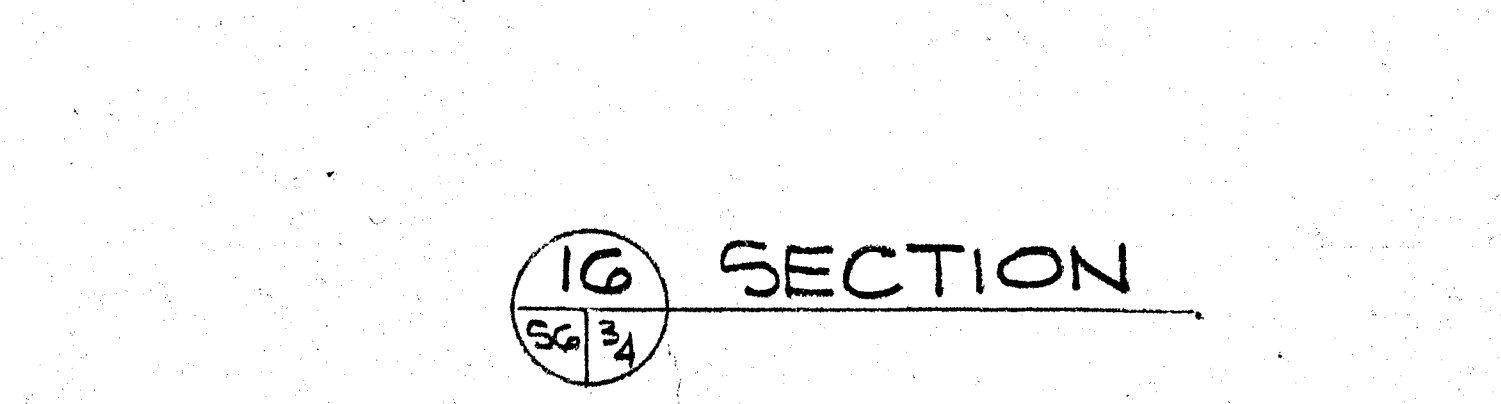
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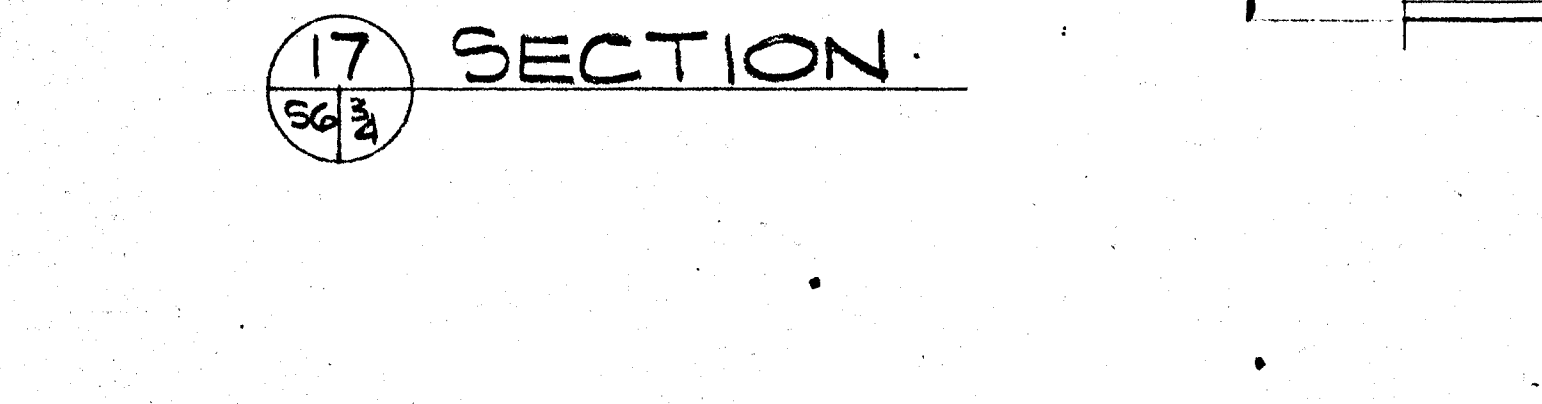
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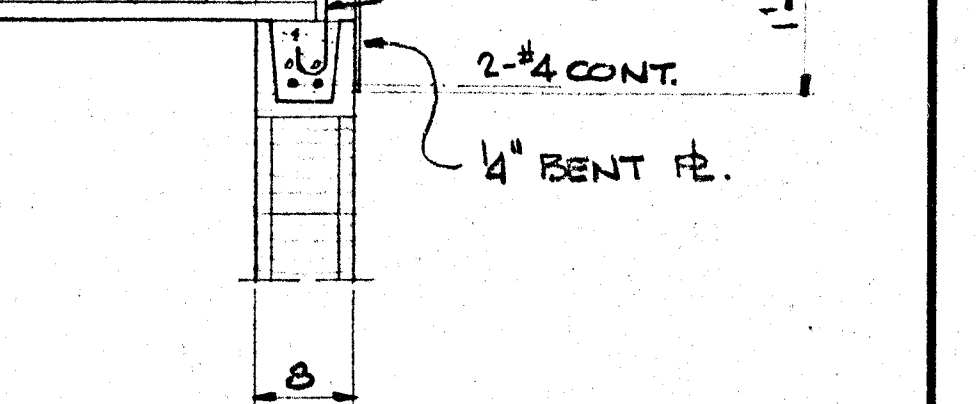
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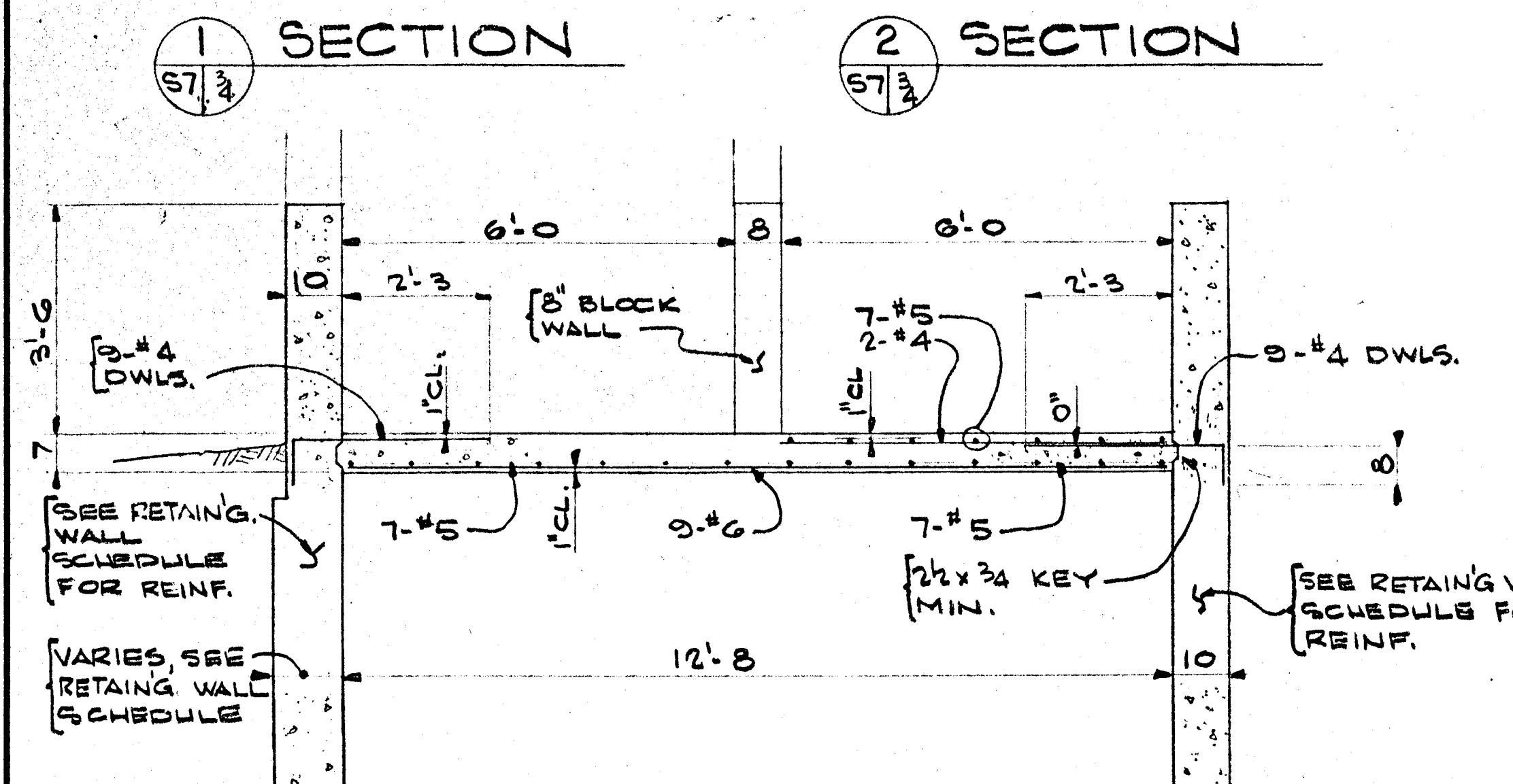
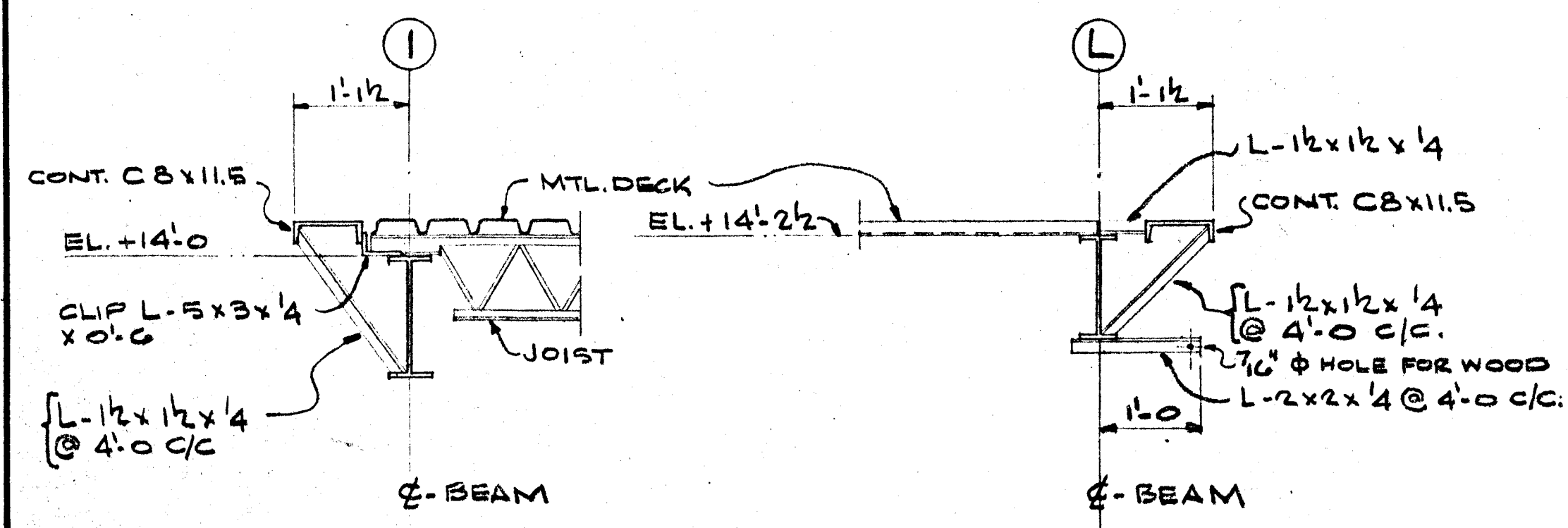
SECTION 22



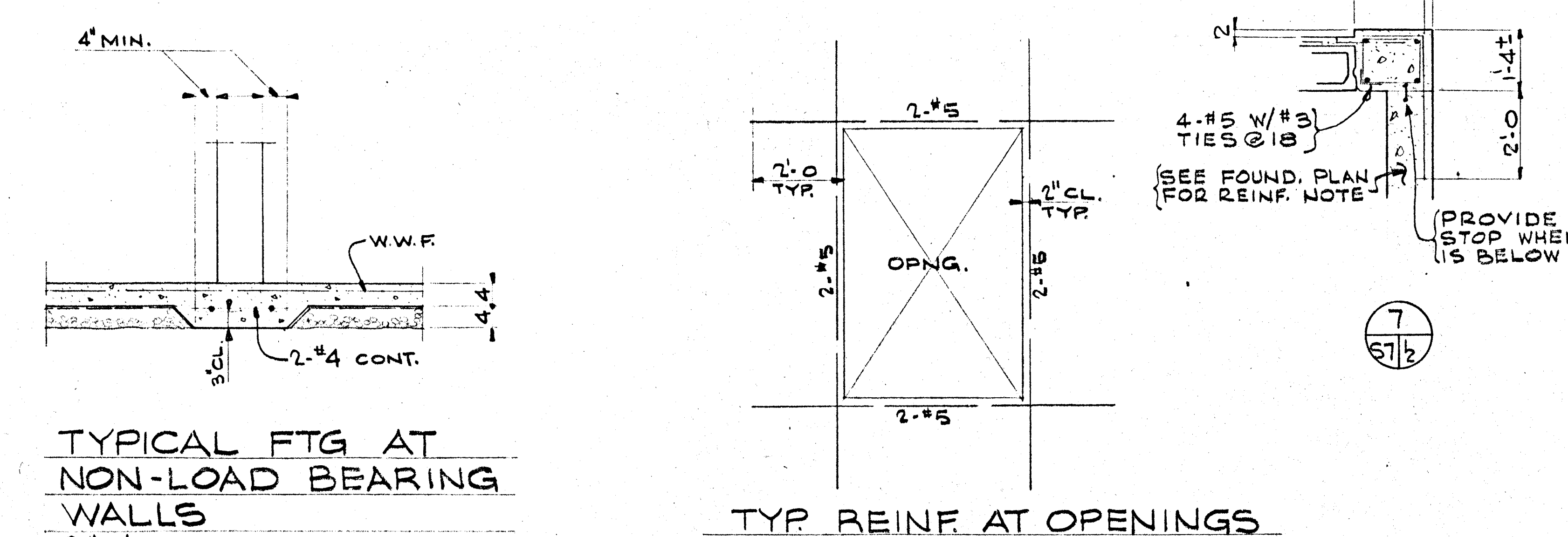
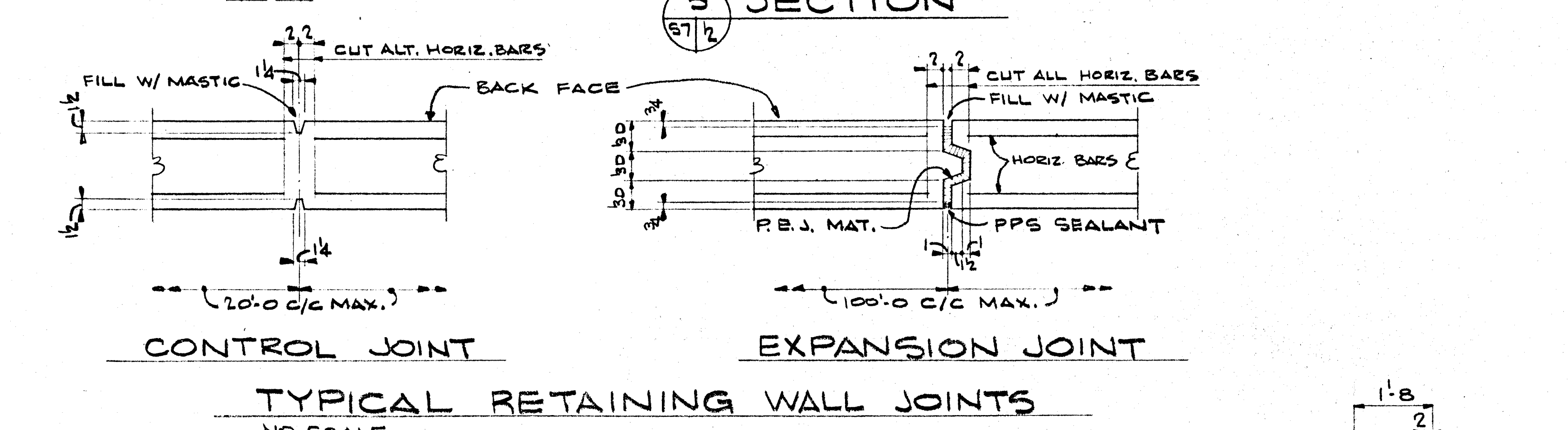
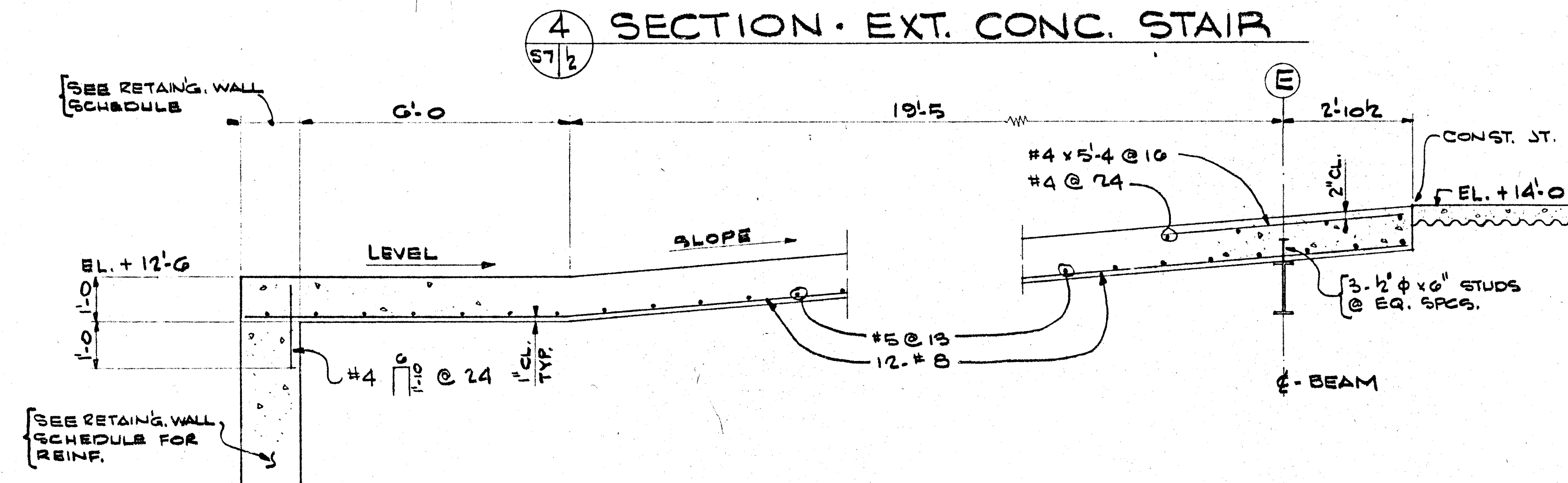
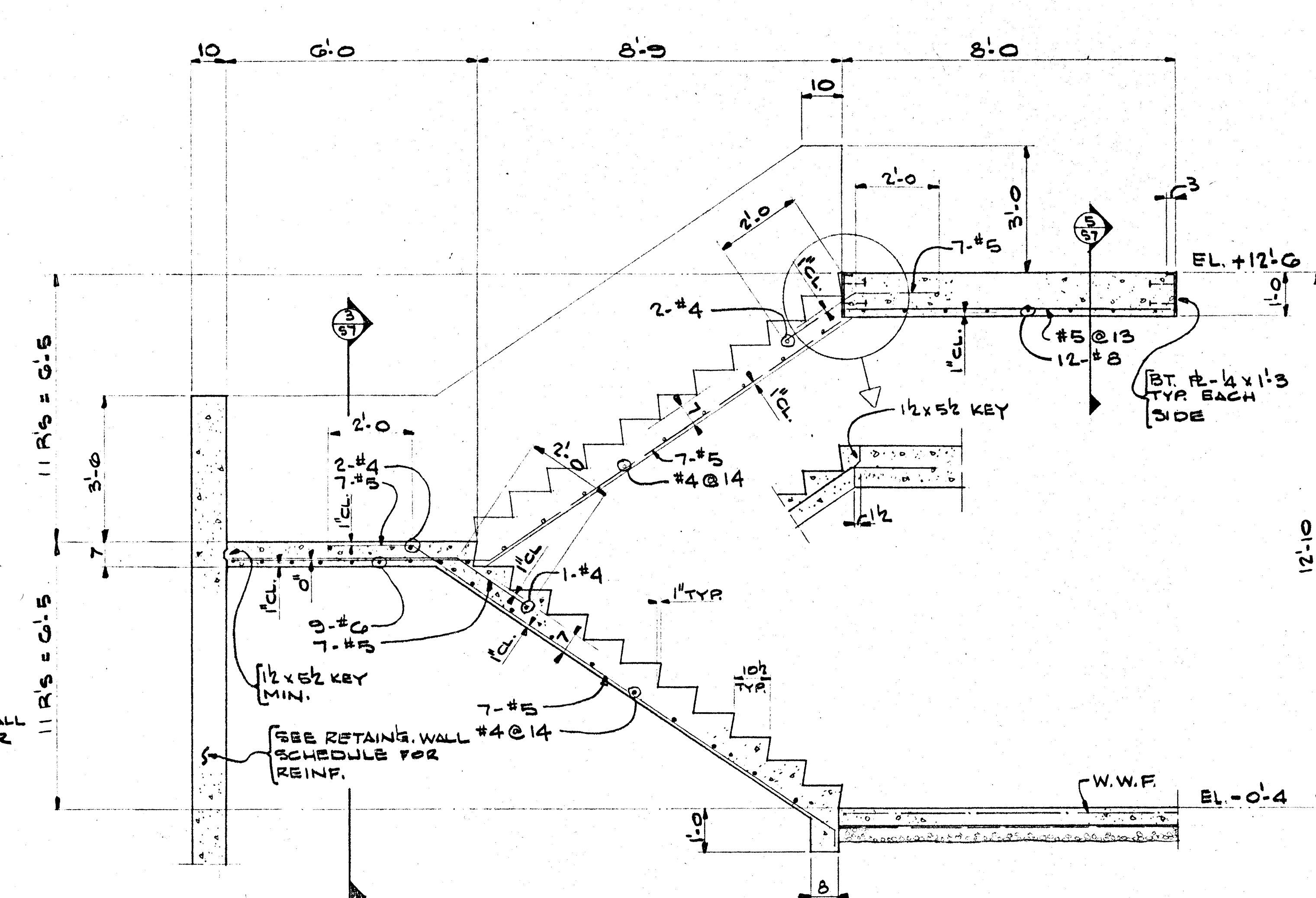
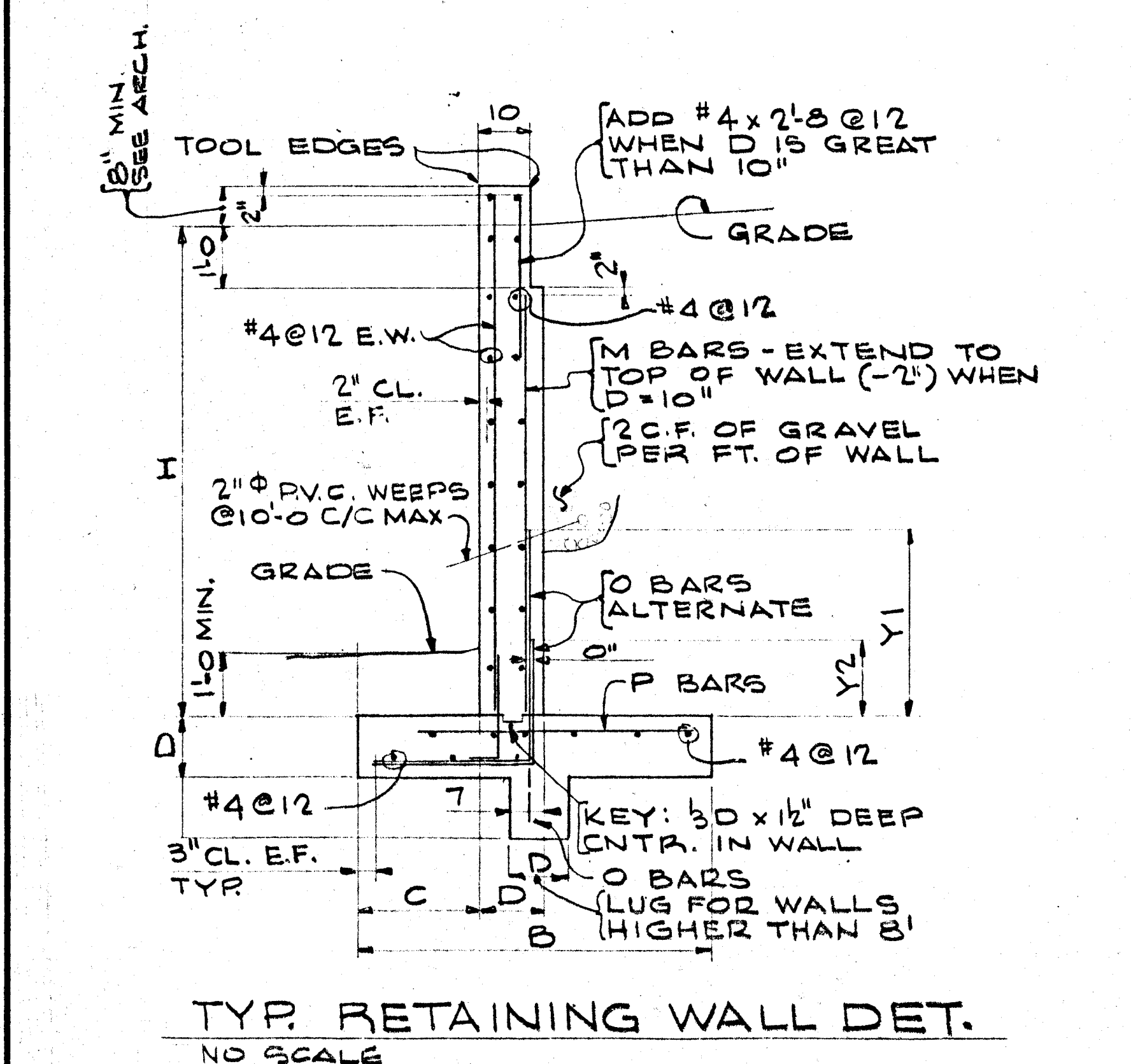
SECTION 23



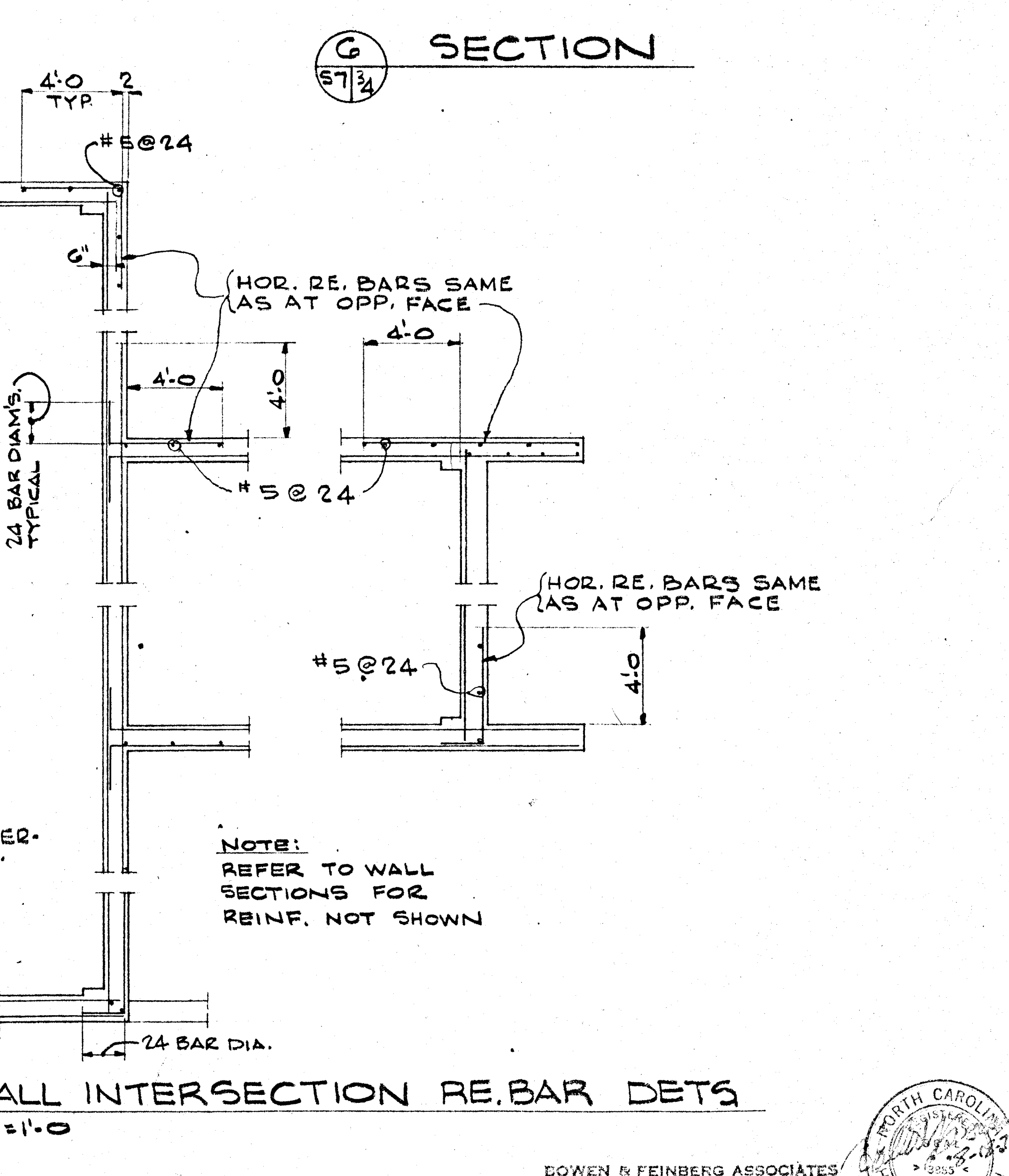
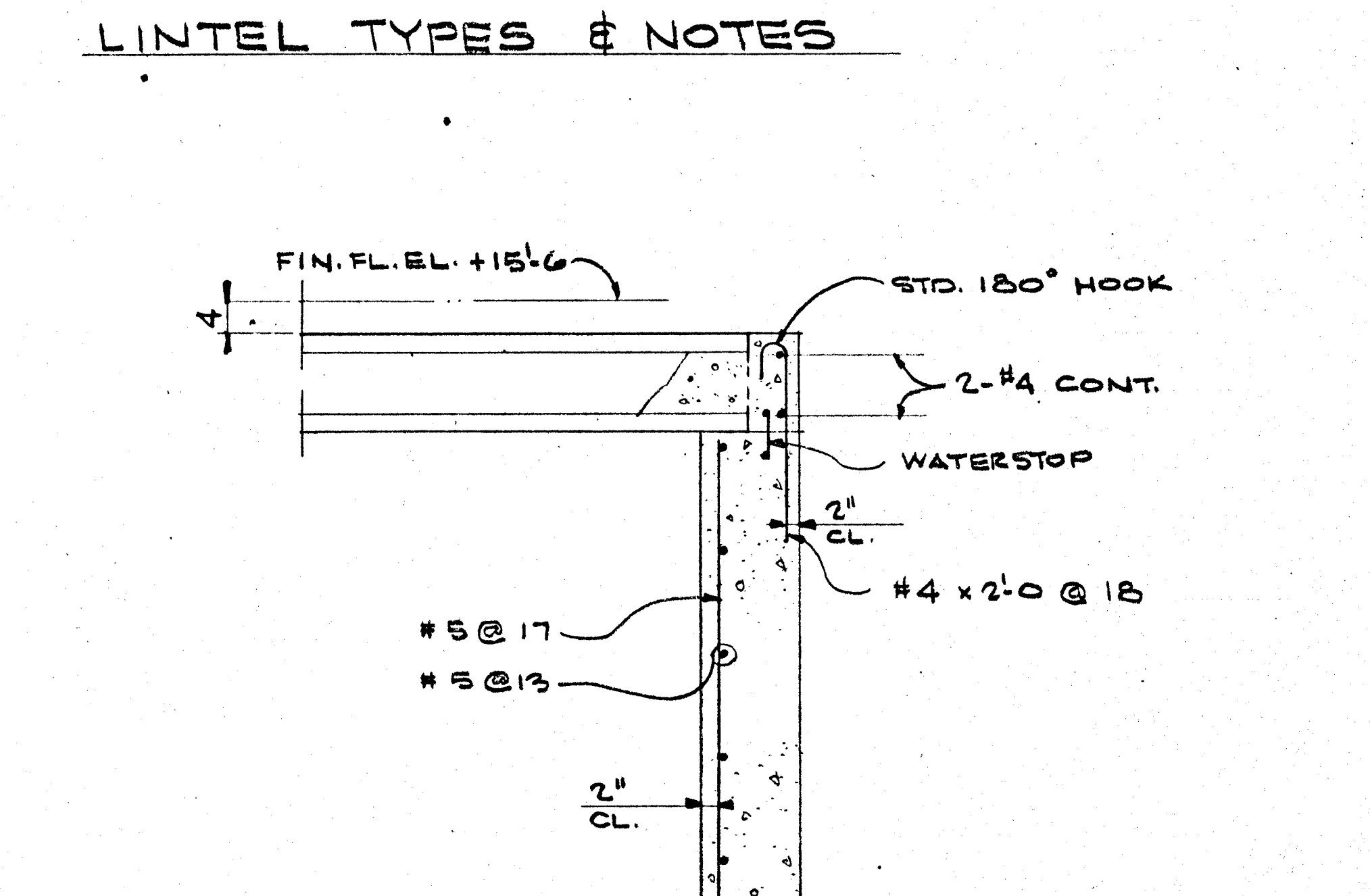
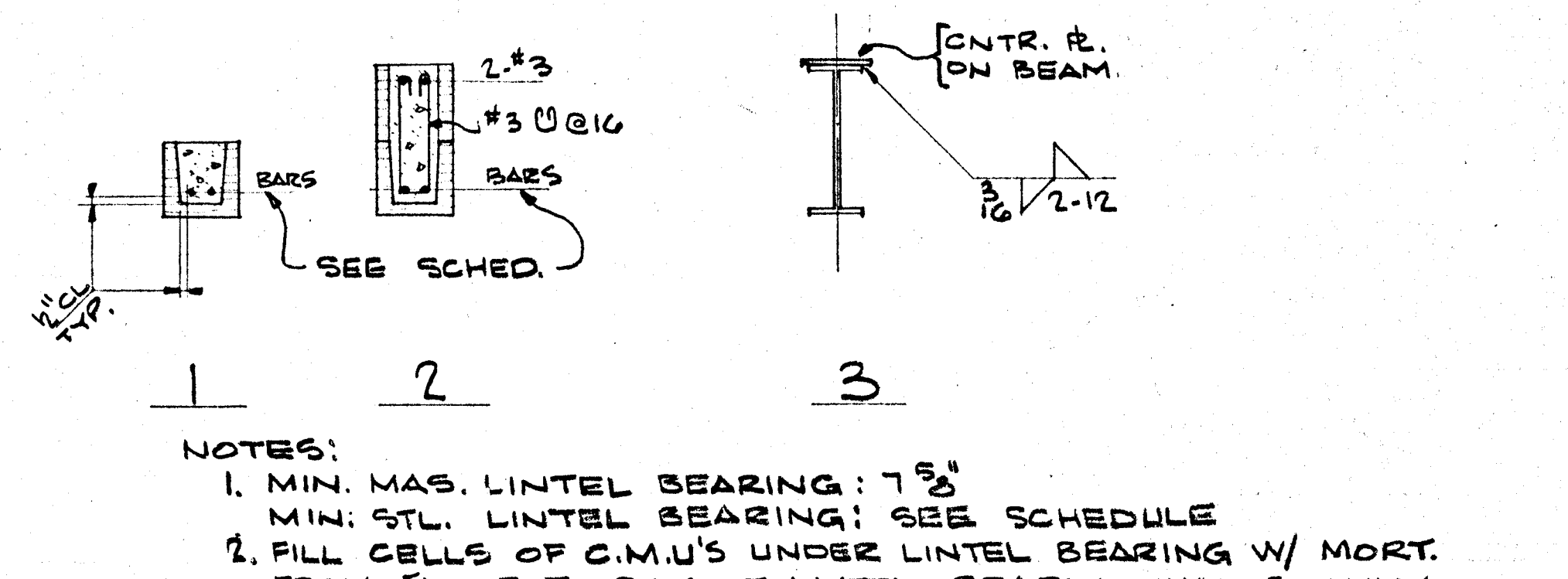
SECTION 24

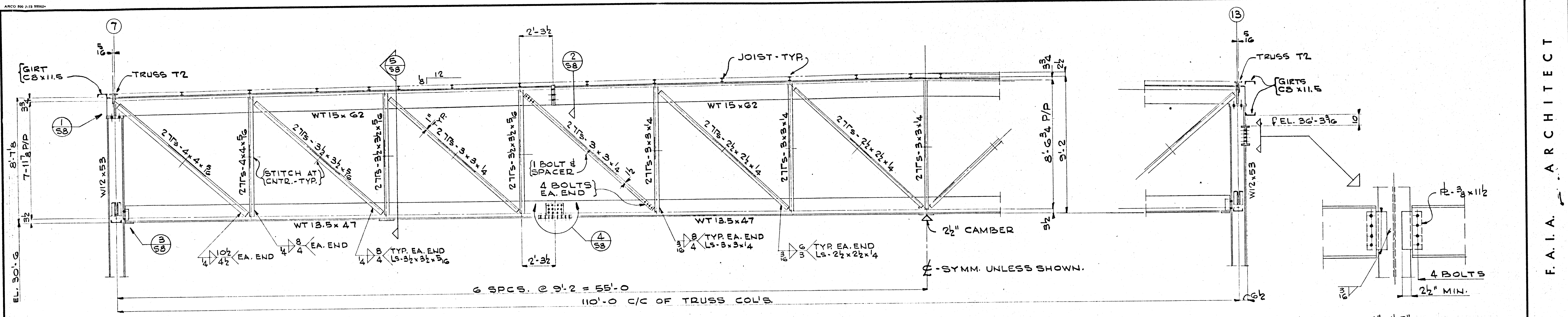


RETAINING WALL SCHEDULE					REINFORCING				
H	B	C	D	M	O	Y1	Y2	P	
3'	3'-0"	1'-1"	0'-10"		#3 @ 18"	TOP OF WALL		#3 x 2'-6" @ 18"	
4'	3'-5"	1'-3"			#3 @ 18"	MINUS		#3 x 2'-11" @ 18"	
5'	4'-1"	1'-5"			#3 @ 18"			#3 x 3'-7" @ 18"	
6'	4'-8"	1'-7"			#3 @ 12"			#3 x 4'-2" @ 18"	
7'	5'-2"	1'-9"			#3 @ 8"		2'-7"	#3 x 4'-8" @ 18"	
8'	5'-9"	2'-0"			#4 @ 11"		2'-9"	#3 x 5'-0" @ 15"	
9'	6'-3"	2'-2"			#4 @ 7 1/2"		3'-0"	#4 x 5'-0" @ 18"	
10'	6'-9"	2'-4"	0'-10"		#4 @ 6"		3'-2"	#4 x 5'-0" @ 16"	
11'	7'-3"	2'-6"	1'-2"	#4 @ 13"	#4 @ 6 1/2"	4'-1"	1'-3"	#4 x 5'-0" @ 13 1/2"	
12'	7'-9"	2'-8"	1'-2"	#5 @ 14"	#5 @ 8 1/2"	4'-6"	1'-8"	#5 x 5'-2" @ 17 1/2"	
13'	8'-4"	2'-10"	1'-3"	#5 @ 14"	#5 @ 7"	4'-11"	1'-8"	#5 x 5'-6" @ 14 1/2"	
14'	8'-9"	3'-0"	1'-3"	#5 @ 12"	#6 @ 9"	5'-0"	2'-0"	#6 x 6'-0" @ 17 1/2"	
15'	9'-4"	3'-2"	1'-4"	#6 @ 13"	#6 @ 7 1/2"	5'-9"	2'-0"	#6 x 6'-5" @ 15"	
16'	9'-9"	3'-4"	1'-4"	#6 @ 13"	#6 @ 6 1/2"	6'-1"	2'-0"	#6 x 6'-7" @ 13"	
17'	10'-4"	3'-6"	1'-5"	#7 @ 15"	#7 @ 7 1/2"	6'-9"	2'-0"	#7 x 7'-8" @ 15 1/2"	

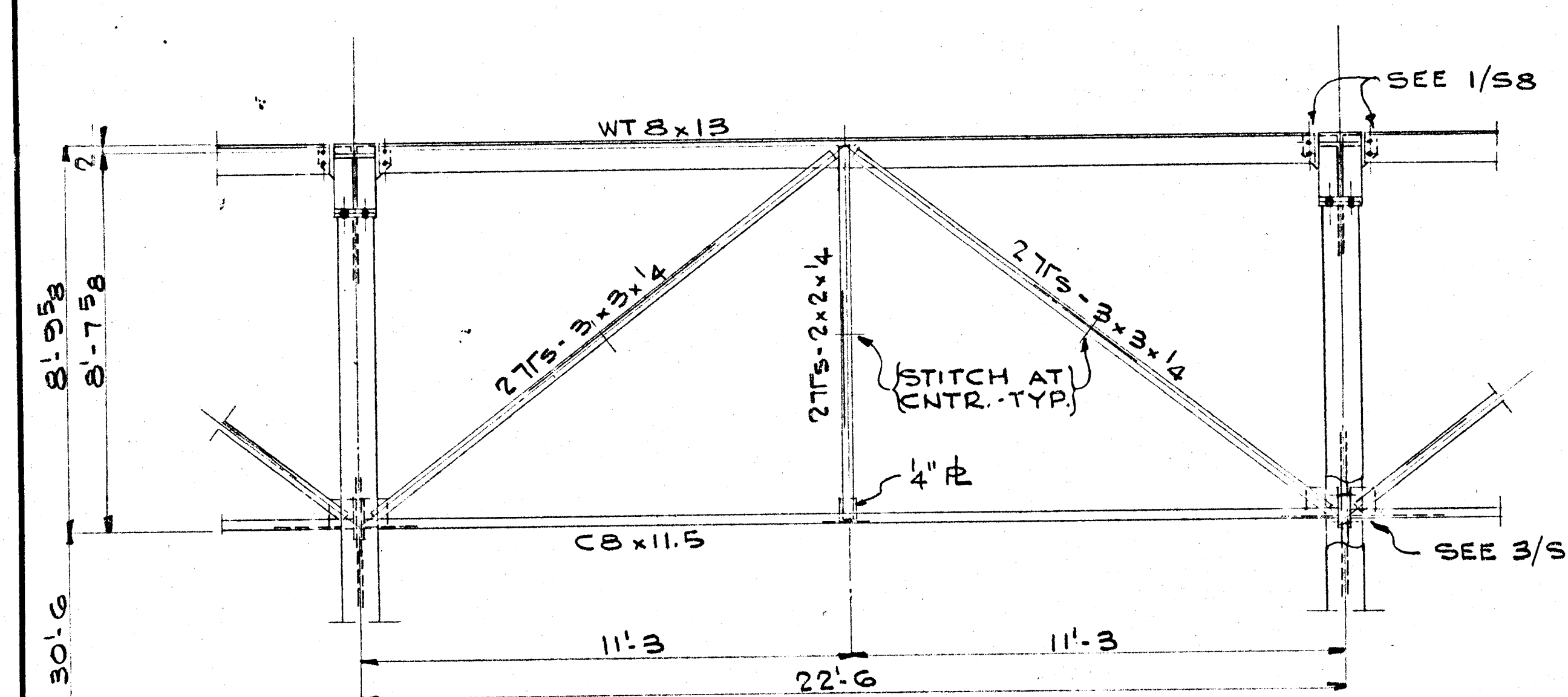


LINTEL SCHEDULE						
MARK	TYPE	M.O.	MASONRY		STEEL	REMARKS
			SIZE	BARS		
L1	1	3'-0"	7 1/2" x 7 1/2"	2-#4		
L2	2	7'-4"	7 1/2" x 15 1/2"	2-#4		
L3	2	7'-0"	11 1/2" x 15 1/2"	2-#4		
L4	1	8'-4"	7 1/2" x 7 1/2"	2-#6		
L5	3	12'-6"			W16 x 26, R-4 x 7	C" SM. BRG. EA. END
L6	2	7'-0"	7 1/2" x 15 1/2"	2-#4		
L7	1	4'-0"	7 1/2" x 7 1/2"	2-#4		
L8	1	2'-8"	7 1/2" x 7 1/2"	2-#3		
L9	1	3'-0"	11 1/2" x 7 1/2"	2-#4		

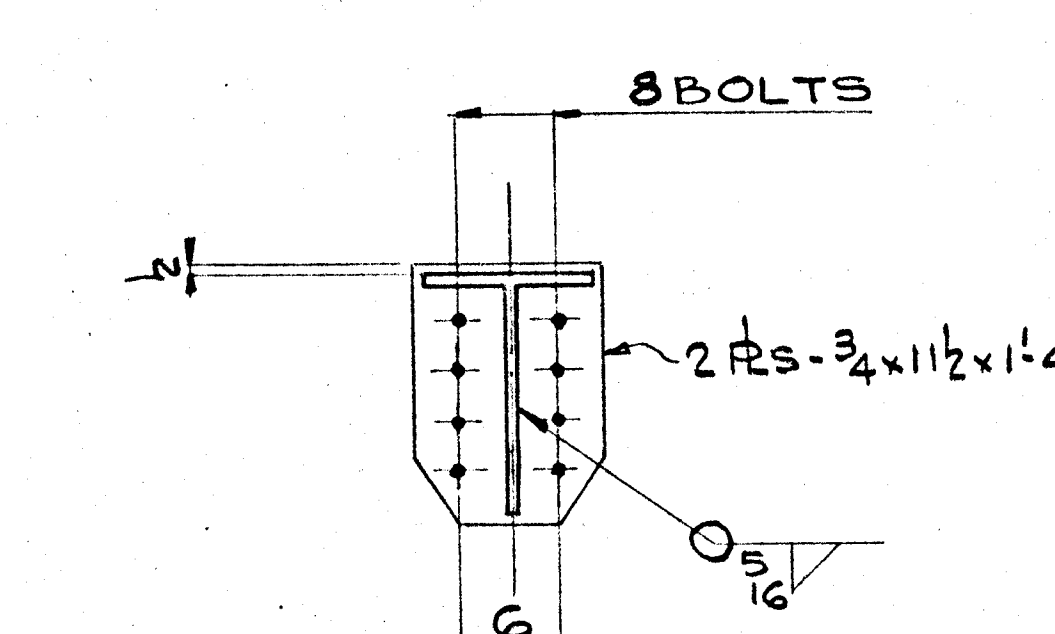
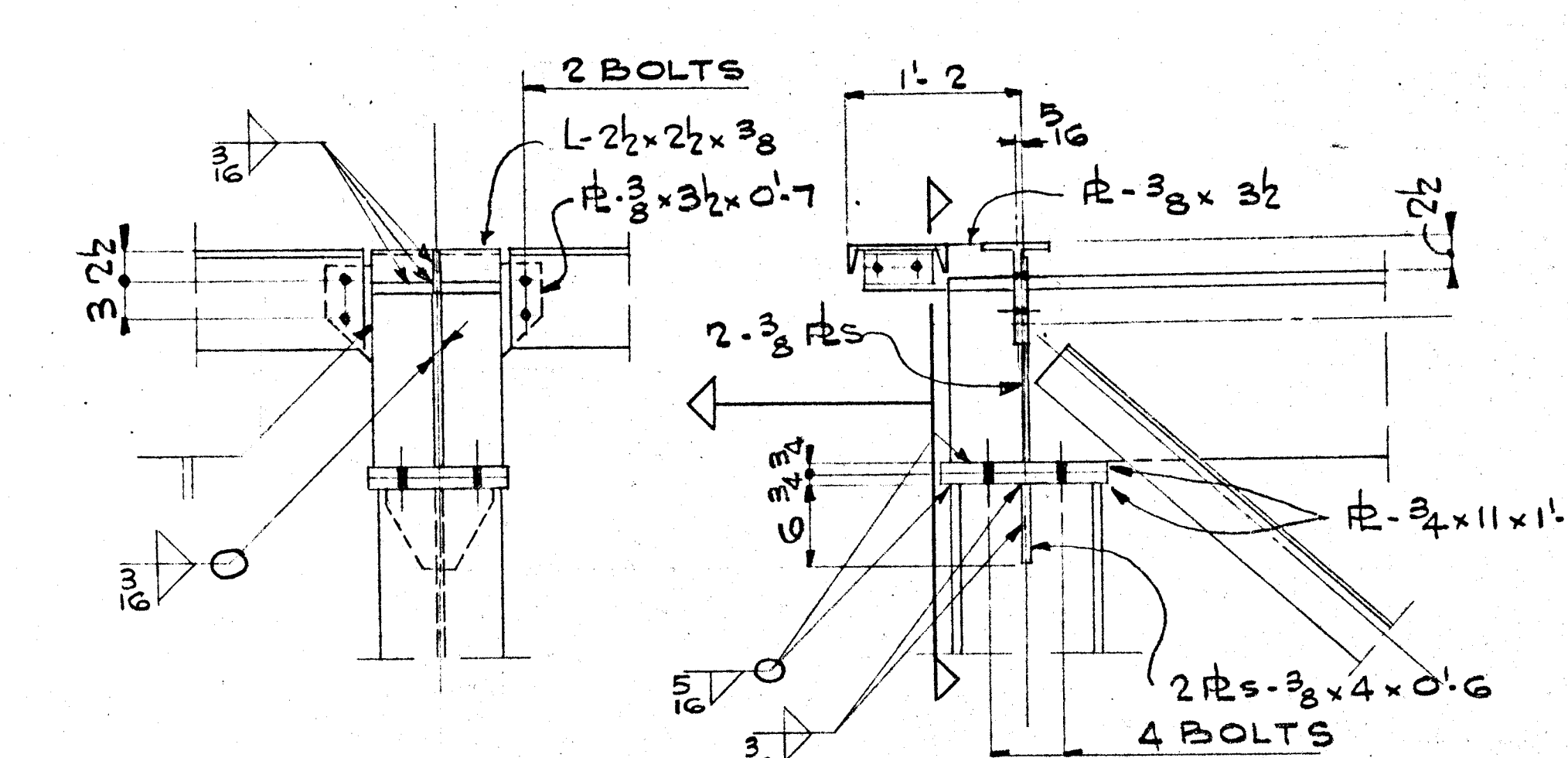
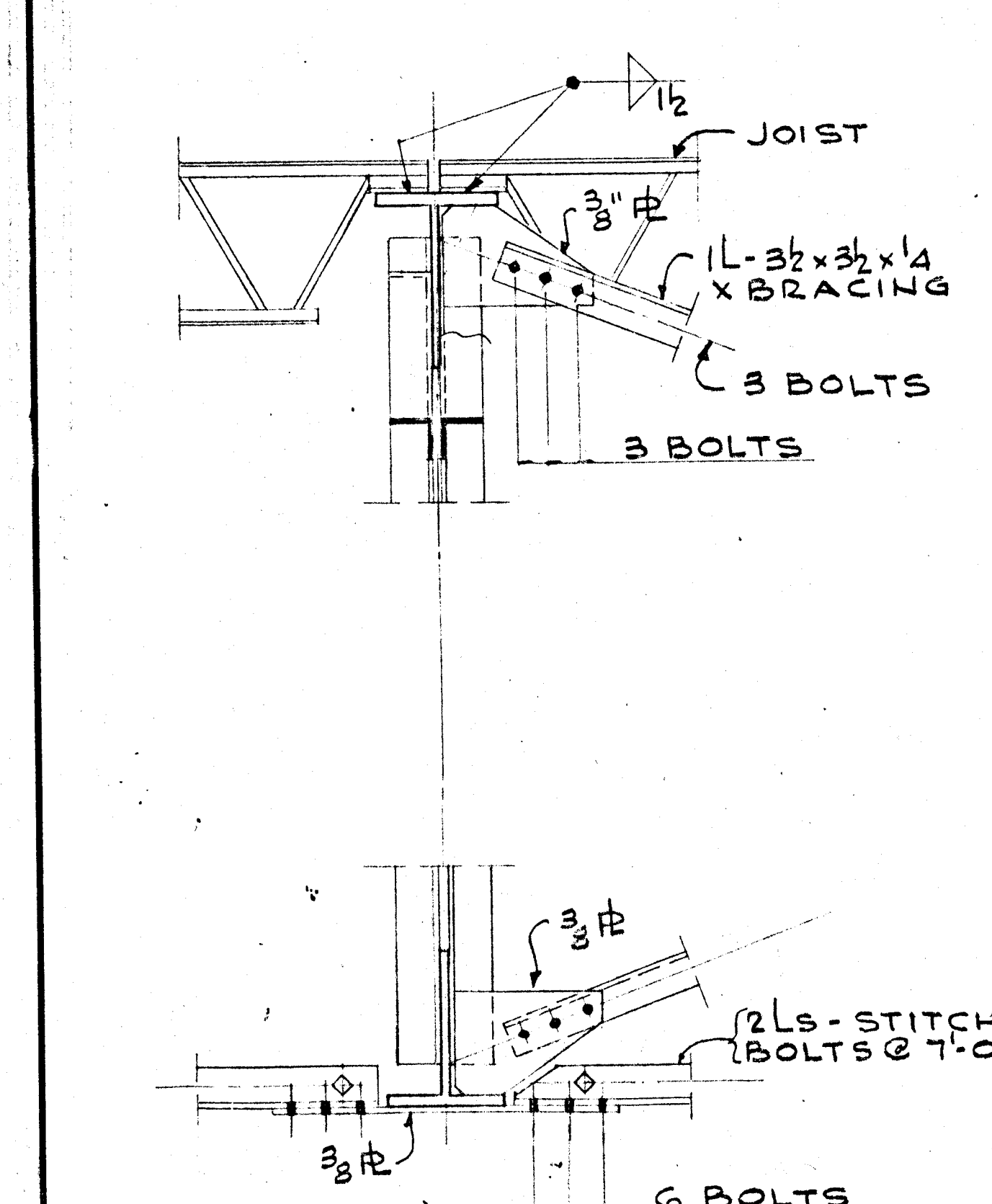




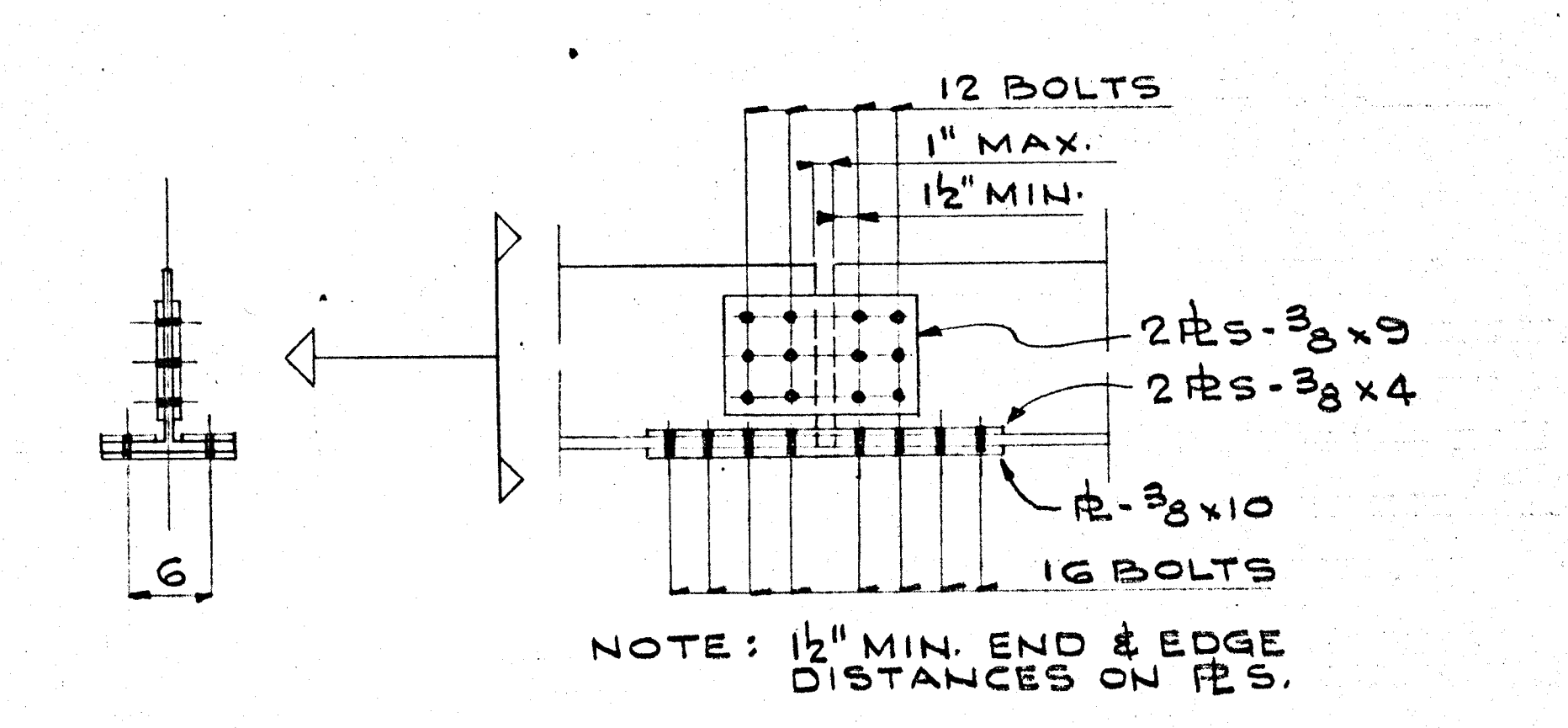
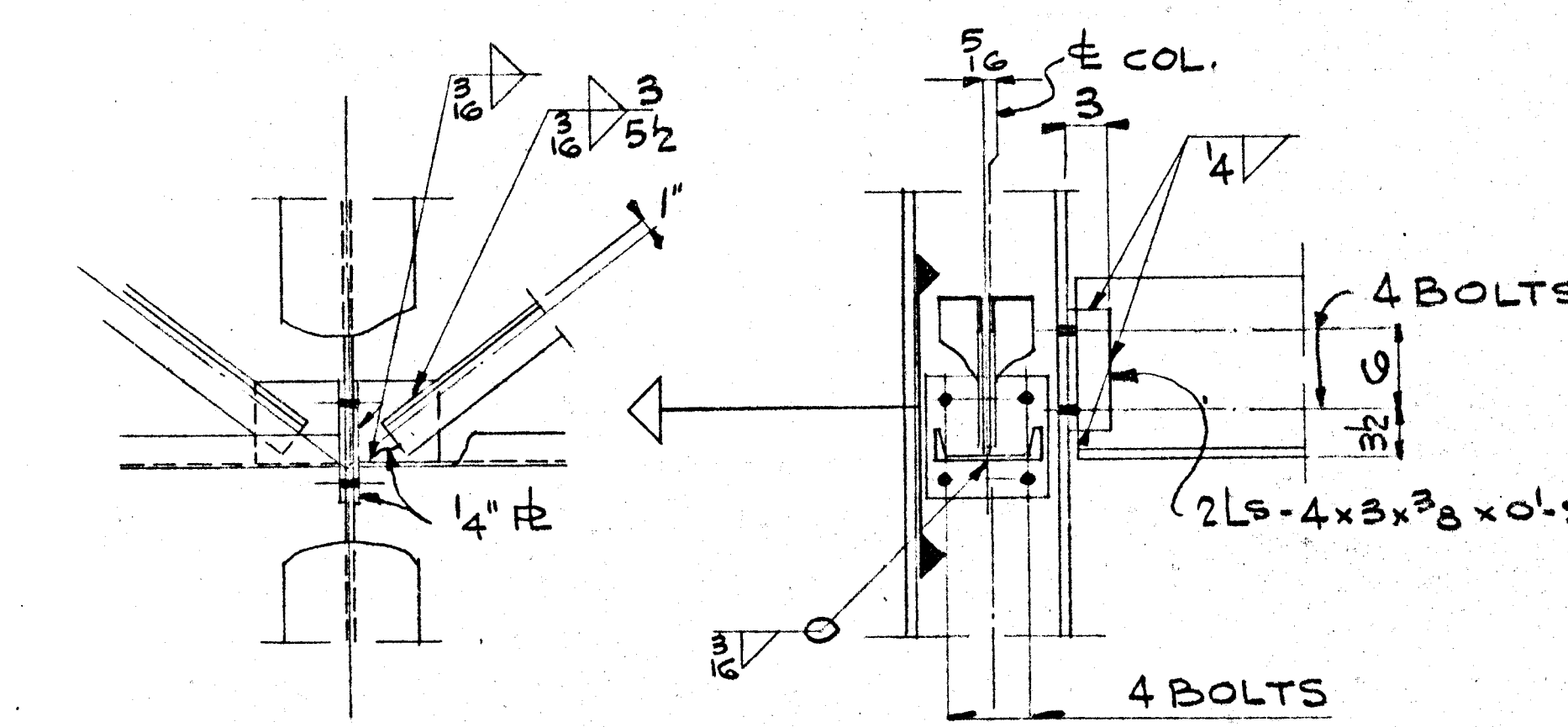
TYPICAL DETAIL - TRUSS T1
3/8" = 1'-0"



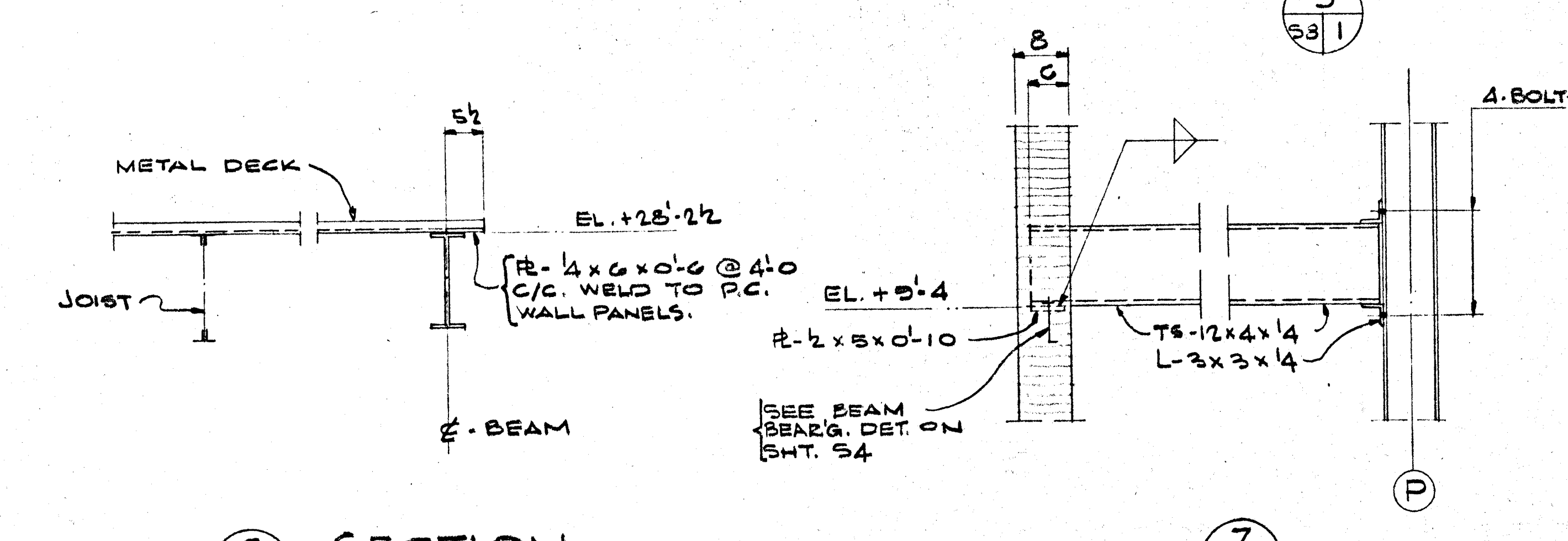
TYPICAL DETAIL - TRUSS T2
3/8" = 1'-0"



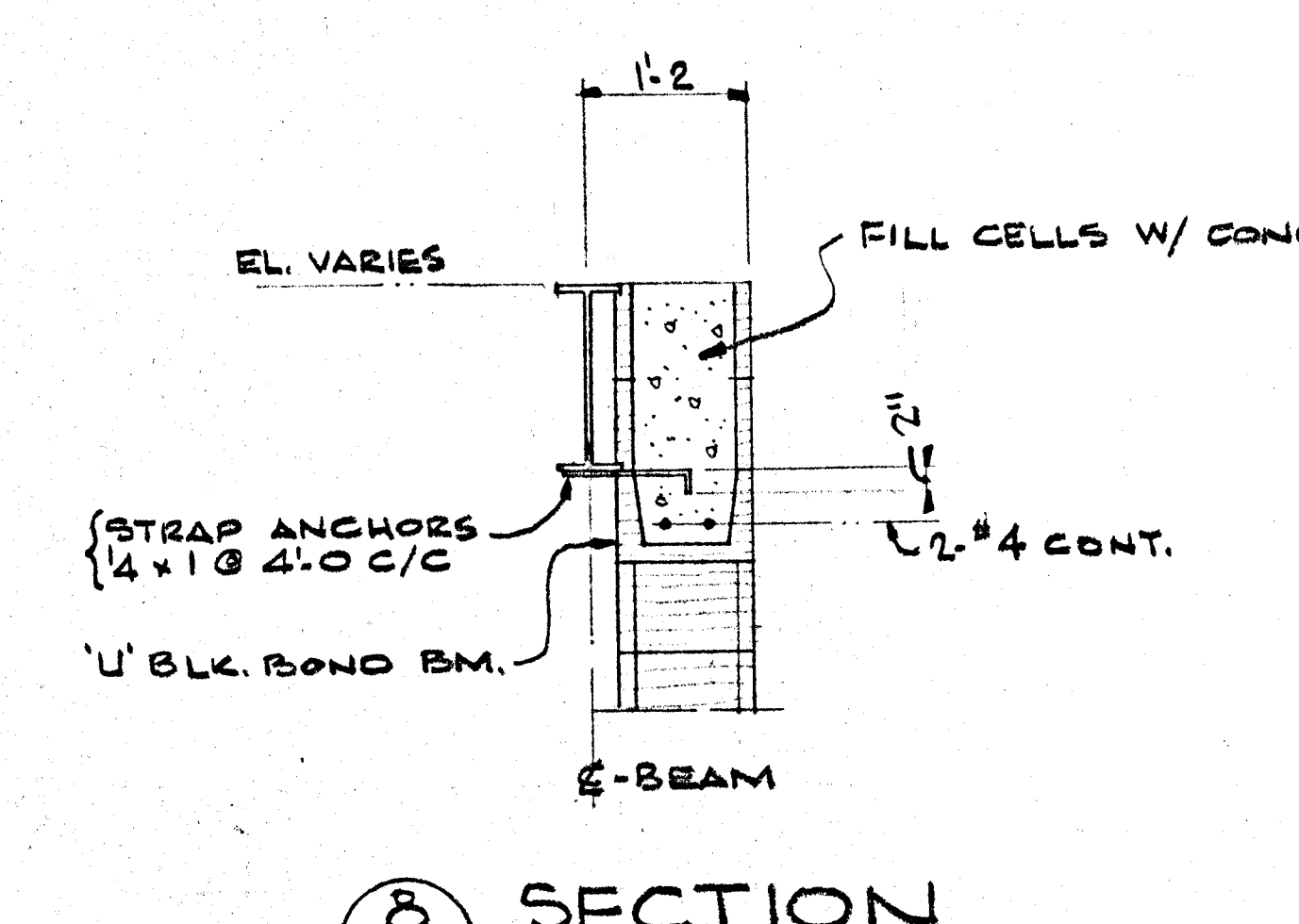
TYP. STITCH DETAIL
NO SCALE



NOTE: 1/2" MIN. END & EDGE DISTANCES ON PL'S.



SECTION 6



SECTION 7

5
58/1

7
58/2

8
58/3

4
58/4