

- CONCRETE NOTES**
1. ALL CONC. TO BE 3750 LBS. PER SQ. IN. COMPRESSION IN 28 DAYS UNLESS OTHERWISE NOTED. $f_{c'} = 3000$ P.S.F.
 2. ALL REINF. TO BE DETAIL AND SIZED ACCORDING TO THE LATEST A.C.I. CODE AND MANUAL OF STANDARD PRACTICE.
 3. REINFORCING BARS TO MEET LATEST A.S.T.M. DESIGNATION A615 GRADE 60. STUDS & TIES GRADE 40.
 4. PROVIDE RECD. SPACERS & SUPPORTS FOR ALL REINF. INCLUDING TEMP. BARS. REINF. TO BE SECURELY TIED IN PLACE BEFORE POURING CONCRETE.
 5. PROVIDE 40 DIA. (EACH LEG) CORNER BARS AT ALL CORNERS, WALL INTERSECTIONS, CONC. CHASES, AND LINTEL BLOCKS. SAME SIZE AND SPACING AS HORIZ. REINF.
 6. PROVIDE 2-#5 EXTRA 4 SIDES OF OPENINGS IN WALLS AND SLABS, WITH 2'0\"/>

- GENERAL NOTES**
1. DESIGN LIVE LOADS - ROOF 40 P.S.F.
 2. ASSUMED SOIL BEARING CAPACITY 2000 P.S.F.
 3. ALL FOOTINGS TO BE PROTECTED AGAINST FROST.
 4. THICKEN SLABS ON GRADE TO 8\"/>

- STRUCTURAL NOTES**
1. ALL SHOP CONN. WELDED. ALL FIELD CONN. BOLTED--3/4\"/>
 - 2. BOLTS & WELDS TO BE MADE IN ACCORDANCE WITH A.I.S.C. MANUALS.
 - 3. SHOW WELD SIZES USING A.W.S. SYMBOLS.
 - 4. STRUCT. FABR. TO FURNISH ALL LOOSE LINTELS; BEAM BEARING PLATES, OPENINGS UNLESS OTHERWISE NOTED.
 - 5. FIELD WELD STD. JOISTS TO SUPPORTING STEEL WITH A MIN. OF 2\"/>

GRADE BEAM SCHEDULE

GB1-12x24 REINF. 3-#5x14-9\"/>
GB2-12x24 REINF. 3-#5x11-0\"/>
GB3-12x24 REINF. 3-#5x8-9\"/>
GB4-12x24 REINF. 3-#6x20-6\"/>

NOTE:
ELEVATIONS SHOWN ON PLAN ARE TO BOTTOM OF FOOTINGS, UNLESS NOTED OTHERWISE.

FOOTING AND FOUNDATION PLAN

ADMINISTRATION BUILDING ST. CLOUD STATE COLLEGE

TRAYNOR, HERMANSON & HAHN ARCHITECTS INC.
ST. CLOUD, MINNESOTA

STRUCTURAL ENGINEERS JOHNSTON & SAHLMAN, INC.
MPLS., MINN.
CONSULTING ENGINEERS ORR, SCHELEN, MAYERSON & ASSOC., INC. MPLS., MINN.

DRAWN J.D.D. CHECKED J.W.S. DATE 7-9-58

STATE OF MINNESOTA
DEPARTMENT OF ADMINISTRATION
ARCHITECTURAL AND ENGINEERING DIVISION
ROOM 610 ADMINISTRATION BUILDING
ST. PAUL 55455

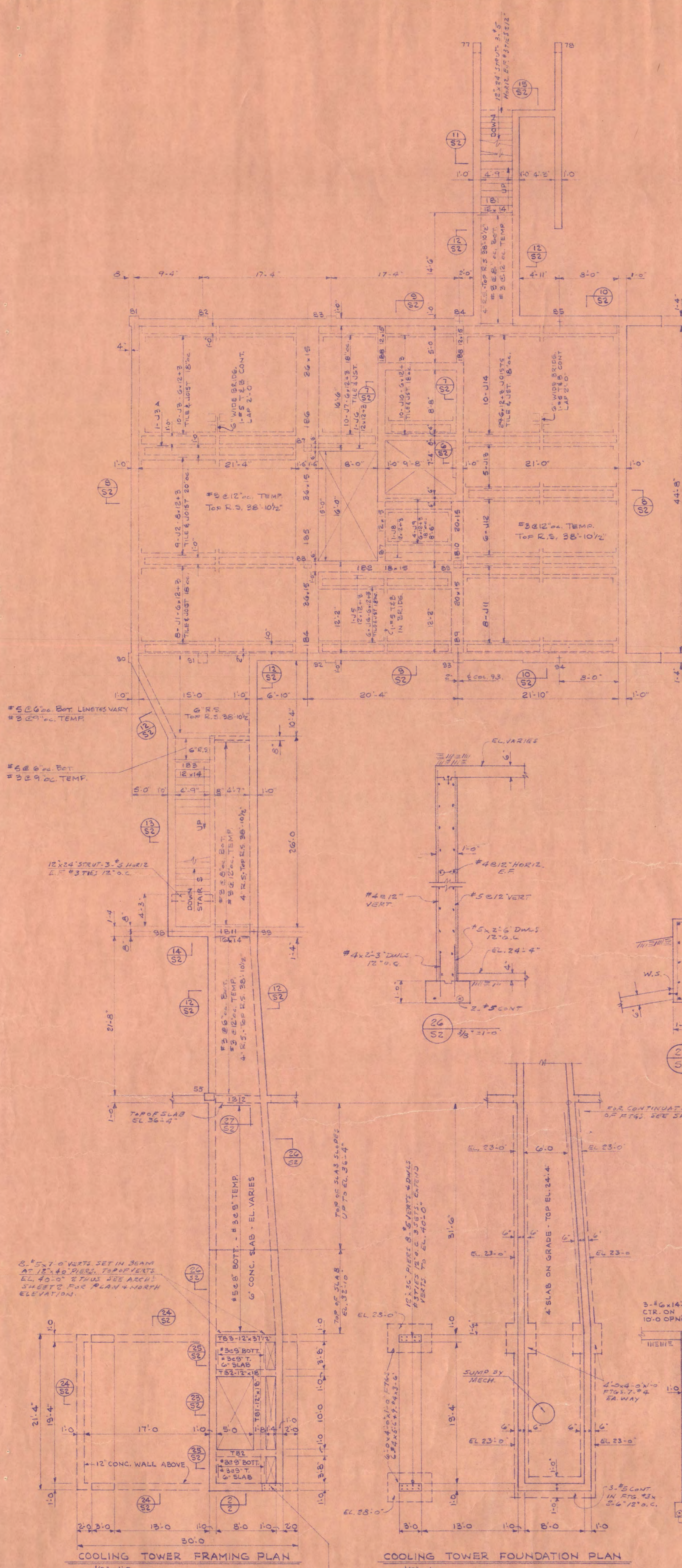
APPROVED BY: PRESIDENT ST. CLOUD STATE COLLEGE
APPROVED BY: STATE COLLEGE BOARD
APPROVED BY: COMMISSIONER OF ADMINISTRATION

STATE PROJECT NO. 6360174

SHEET NO. 31

I HEREBY CERTIFY THAT THIS DRAWING WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

John W. Sahlman
7/9/58



MARK	SIZE	NO.	REINFORCING	POSITION OF REIN.	STIRRUPS OR TIES	REMARKS
1B1	12x14	2	#5 @ 8" 3'-5"	TOP	#3 @ 6" 1'-0"	
1B2	18x16	4	#5 @ 8" 3'-0"	TOP	#3 @ 6" 1'-0"	
1B3	12x14	2	#5 @ 8" 3'-5"	TOP	#3 @ 6" 1'-0"	
1B4	30x15	6	#5 @ 8" 3'-5"	TOP	#3 @ 6" 1'-0"	
1B5	30x15	6	#5 @ 8" 3'-5"	TOP	#3 @ 6" 1'-0"	
1B6	30x15	6	#5 @ 8" 3'-5"	TOP	#3 @ 6" 1'-0"	
1B7	12x15	2	#5 @ 8" 3'-5"	TOP	#3 @ 6" 1'-0"	
1B8	12x15	2	#5 @ 8" 3'-5"	TOP	#3 @ 6" 1'-0"	
1B9	20x16	4	#5 @ 8" 3'-5"	TOP	#3 @ 6" 1'-0"	
1B10	20x16	4	#5 @ 8" 3'-5"	TOP	#3 @ 6" 1'-0"	
1B11	16x14	2	#5 @ 8" 3'-5"	TOP	#3 @ 6" 1'-0"	
1B12	12x15	2	#5 @ 8" 3'-5"	TOP	#3 @ 6" 1'-0"	

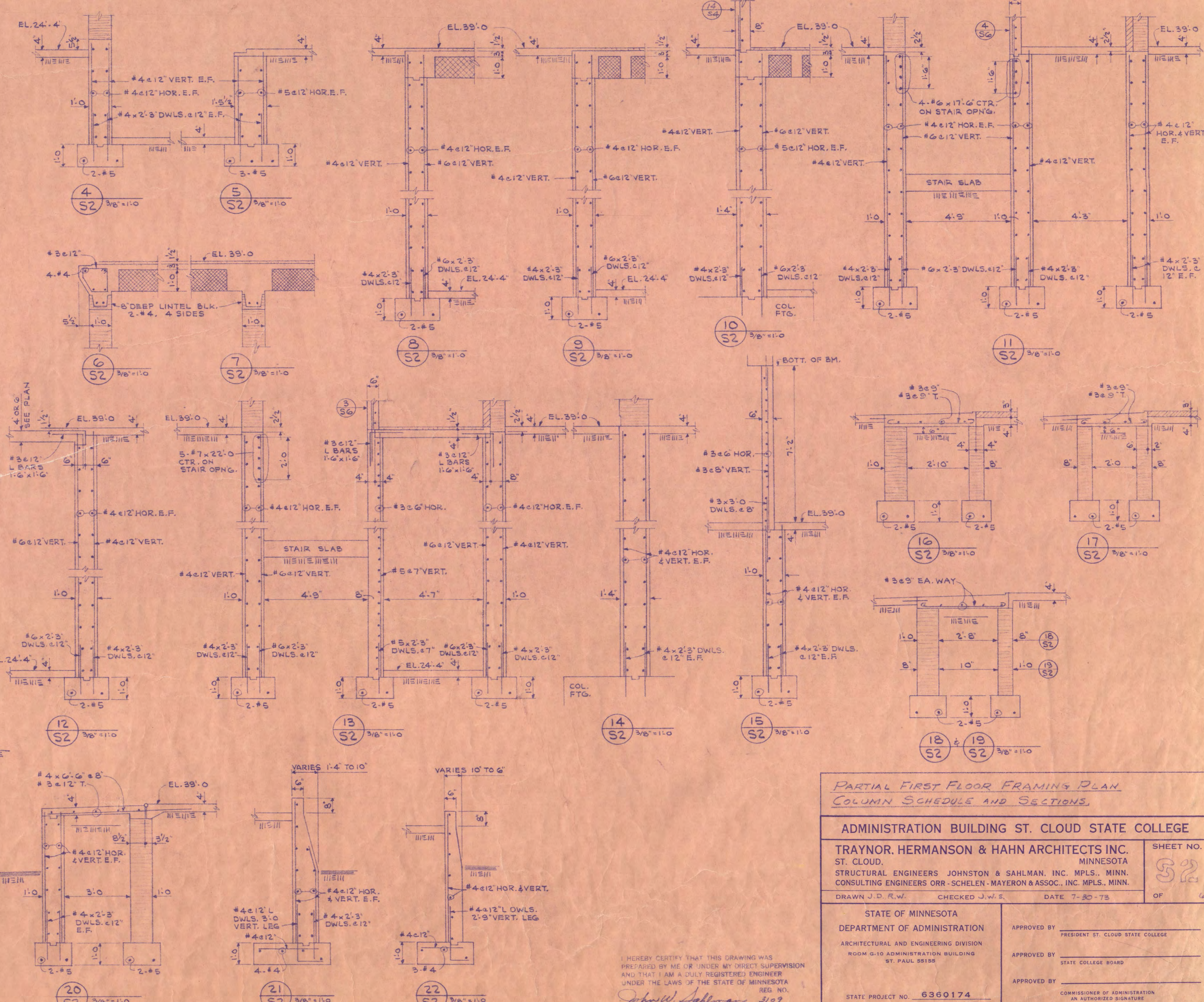
MARK	SIZE	NO.	REINFORCING	POSITION OF REIN.	REMARKS
J1	6x8	1	#5 @ 8" 3'-5"	TOP	
J2	8x10	1	#5 @ 8" 3'-5"	TOP	
J3	6x8	1	#5 @ 8" 3'-5"	TOP	
J4	6x8	1	#5 @ 8" 3'-5"	TOP	
J5	12x12	2	#5 @ 8" 3'-5"	TOP	
J6	12x12	2	#5 @ 8" 3'-5"	TOP	
J7	6x8	1	#5 @ 8" 3'-5"	TOP	
J8	12x12	2	#5 @ 8" 3'-5"	TOP	
J9	6x8	1	#5 @ 8" 3'-5"	TOP	
J10	6x8	1	#5 @ 8" 3'-5"	TOP	TOP BAR CONT. FROM J7
J11	6x8	1	#5 @ 8" 3'-5"	TOP	
J12	6x8	1	#5 @ 8" 3'-5"	TOP	
J13	6x8	1	#5 @ 8" 3'-5"	TOP	
J14	6x8	1	#5 @ 8" 3'-5"	TOP	
J15	6x8	1	#5 @ 8" 3'-5"	TOP	

COL. NO.	1, 3, 3B	2, 3, 3B, 3B, 4, 0	4, 0, 4	5	6, 8, 20, 4, 5, 5, 0	7, 21, 4, 4, 0	9, 12, 2, 5, 4, 0	10, 28, 4, 7, 8, 11	13, 10, 1, 7, 6, 10, 22, 14, 0, 2	14, 18	20, 21, 5, 5, 5, 2, 3	23, 6, 5	42	43, 0, 2	51, 54, 5, 5
LOW ROOF VERT. TIES	12x10	8x10	12x12	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10
1ST FLOOR VERT. TIES	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10
FOOTING REIN. EA. WAY	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4

COL. NO.	48	50, 61	63	66	67	68	69	70, 71	35, 36	34, 37	73, 80, 96, 103	74, 79, 97, 102	75	70, 100	71, 78, 98, 99
HIGH ROOF VERT. TIES	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10
2ND FLOOR VERT. TIES	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10
1ST FLOOR VERT. TIES	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10
FOOTING REIN. EA. WAY	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4

COL. NO.	101	81, 90	82	83	84, 95	85, 94	86, 95	91	92	87, 88, 89	89, 92	104, 105
HIGH ROOF VERT. TIES	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10
2ND FLOOR VERT. TIES	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10
1ST FLOOR VERT. TIES	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10	12x10
FOOTING REIN. EA. WAY	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4

1. SEE SHEET 33 FOR COLUMN DETAILS & REBAR PLACING NOTES.
 2. PROVIDE 4#3 TIES @ 2'-0" EXTRA IN ALL COLUMNS BELOW BOTTOM OF ALL BEAMS.



PARTIAL FIRST FLOOR FRAMING PLAN, COLUMN SCHEDULE AND SECTIONS.

ADMINISTRATION BUILDING ST. CLOUD STATE COLLEGE

TRAYNOR, HERMANSON & HAHN ARCHITECTS INC.
 ST. CLOUD, MINNESOTA
 STRUCTURAL ENGINEERS JOHNSTON & SAHLMAN INC. Mpls., MINN.
 CONSULTING ENGINEERS ORR, SCHLEIER, MAYER & ASSOC. INC. Mpls., MINN.

DRAWN J.D.R.W. CHECKED J.H.F. DATE 7-30-75

STATE OF MINNESOTA
 DEPARTMENT OF ADMINISTRATION
 ARCHITECTURAL AND ENGINEERING DIVISION
 ROOM 610 ADMINISTRATION BUILDING
 ST. PAUL, MINN.

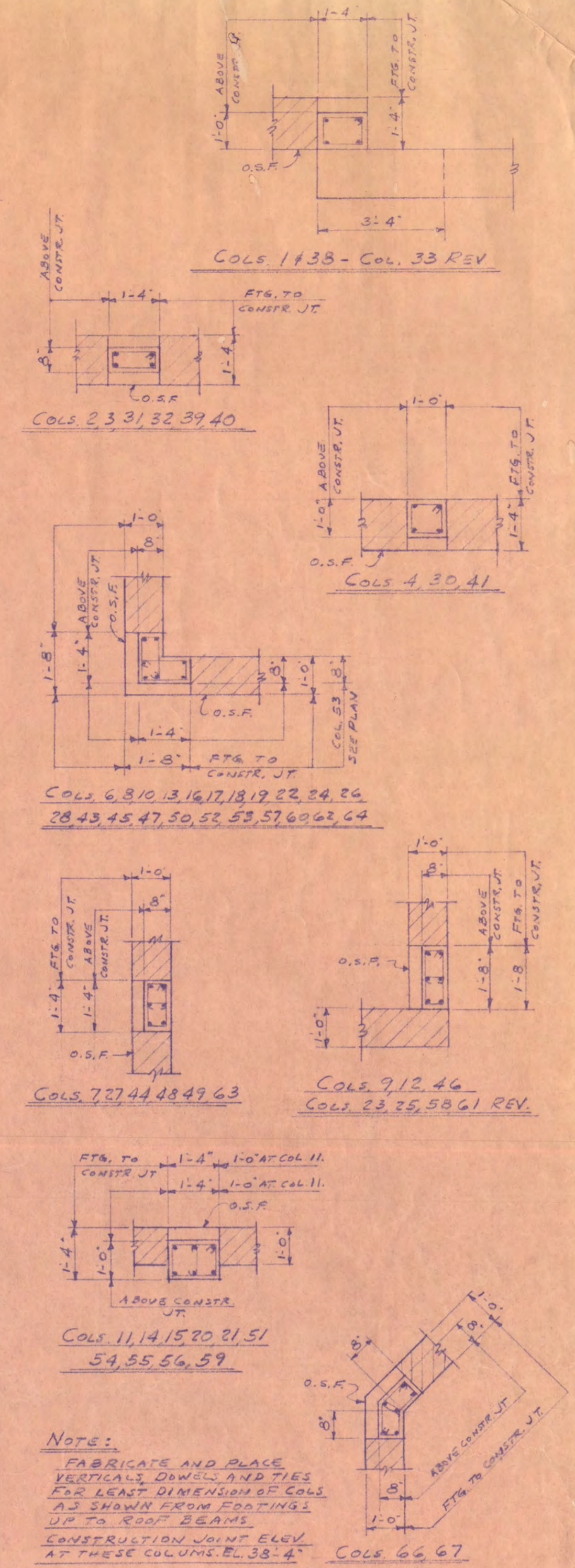
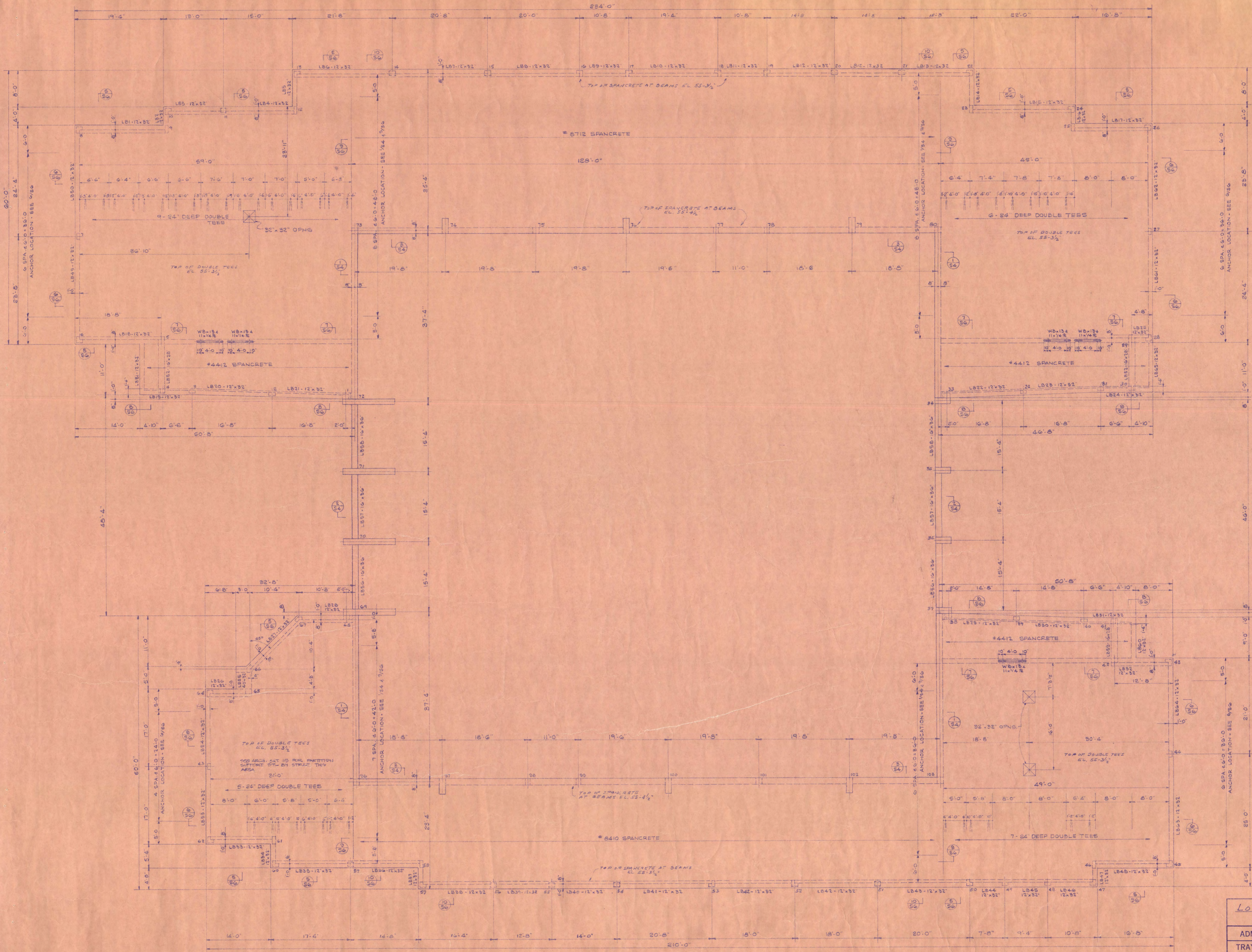
APPROVED BY: PRESIDENT ST. CLOUD STATE COLLEGE
 APPROVED BY: STATE COLLEGE BOARD
 APPROVED BY: COMMISSIONER OF ADMINISTRATION
 AN AUTHORIZED SIGNATURE

SHEET NO. 52 OF 64

STATE PROJECT NO. 6360174

COOLING TOWER BEAM SCHEDULE

TB1-12x18 REIN. 6-#4x12" TOP H.E.B. 6-#5x11" BOTT. 8-#3 TIES, 4x12" E.B.
 TB2-12x18 REIN. 3-#6x10" TOP H.E.B. 3-#7x9" BOTT. 12-#3 TIES, 30" @ 30" E.B.
 TB3-12x18 1/2 REIN. 3-#6x10" TOP H.E.B. 3-#7x9" BOTT. 8-#3 TIES, 30" @ 12" E.B.



NOTE:
 FABRICATE AND PLACE
 VERTICAL DOWNLAND TIES
 TO LEAST DIMENSION OF COLS
 AS SHOWN FROM FOOTINGS
 UP TO ROOF BEAMS.
 CONCRETE JOINT ELEV.
 AT THESE COLUMNS: 33'-4" COLS 66, 67

EXTERIOR COLUMN DETAILS
 1/8"=1'-0"

LOW ROOF AND SECOND FLOOR TEE NOTES:
 1. PROVIDE FLANGE SHEAR CONNECTIONS 6'-0" O.C.
 AT ALL TEES.
 2. ALL TEES TO BE HARDROCK.
 3. VERIFY SIZE & LOCATION OF ALL DRYS WITH
 MECHANICAL CONTRACTOR.
 4. LOW ROOF TEES TO BE DESIGNED FOR 40% U.L.
 110% D.L. = 50% SUPERIMPOSED LOAD.
 5. SECOND FLOOR TEES TO BE DESIGNED FOR
 60% U.L., 15% PARTIAL, 50% U.L. TOPPING SLAB.
 6. MECHANICAL ROOM 211 FLOOR TO BE DESIGNED
 FOR 60% U.L., 50% U.L. TOPPING 50% U.L. TOPPING
 OVER 2" ISOLATION. 20"
 7. SEE ARCH. & MECH. DWGS. FOR ANCHORS IN
 SLAB IN TEES.
 8. SEE NOTE ON MECH. ROOM SHEET 54 FOR LOADING
 AT NORTH SIDE OF ELEVATOR.

LOW ROOF FRAMING PLAN
 1/8"=1'-0"

LOW ROOF FRAMING PLAN

ADMINISTRATION BUILDING ST. CLOUD STATE COLLEGE

TRAYNOR, HERMANSON & HAHN ARCHITECTS INC.
 ST. CLOUD, MINNESOTA
 STRUCTURAL ENGINEERS JOHNSTON & SAHLMAN, INC. MPLS., MINN.
 CONSULTING ENGINEERS ORR - SCHELEN - MAYERSON & ASSOC., INC. MPLS., MINN.

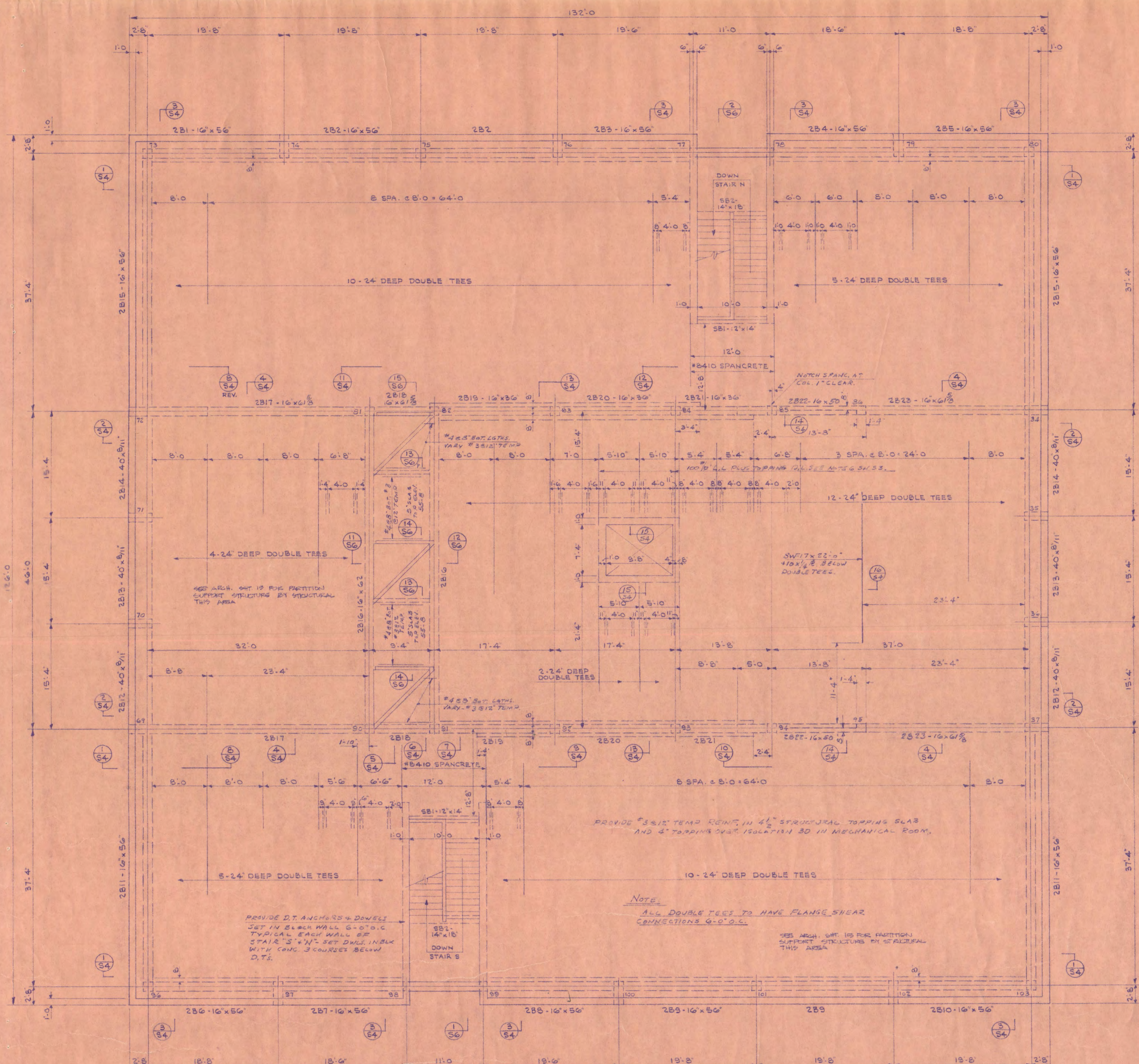
DRAWN: J.D.P.W. CHECKED: J.W.S. DATE: 7-30-58 SHEET NO. 33 OF 6

STATE OF MINNESOTA
 DEPARTMENT OF ADMINISTRATION
 ARCHITECTURAL AND ENGINEERING DIVISION
 ROOM 610 ADMINISTRATION BUILDING
 ST. PAUL 55155

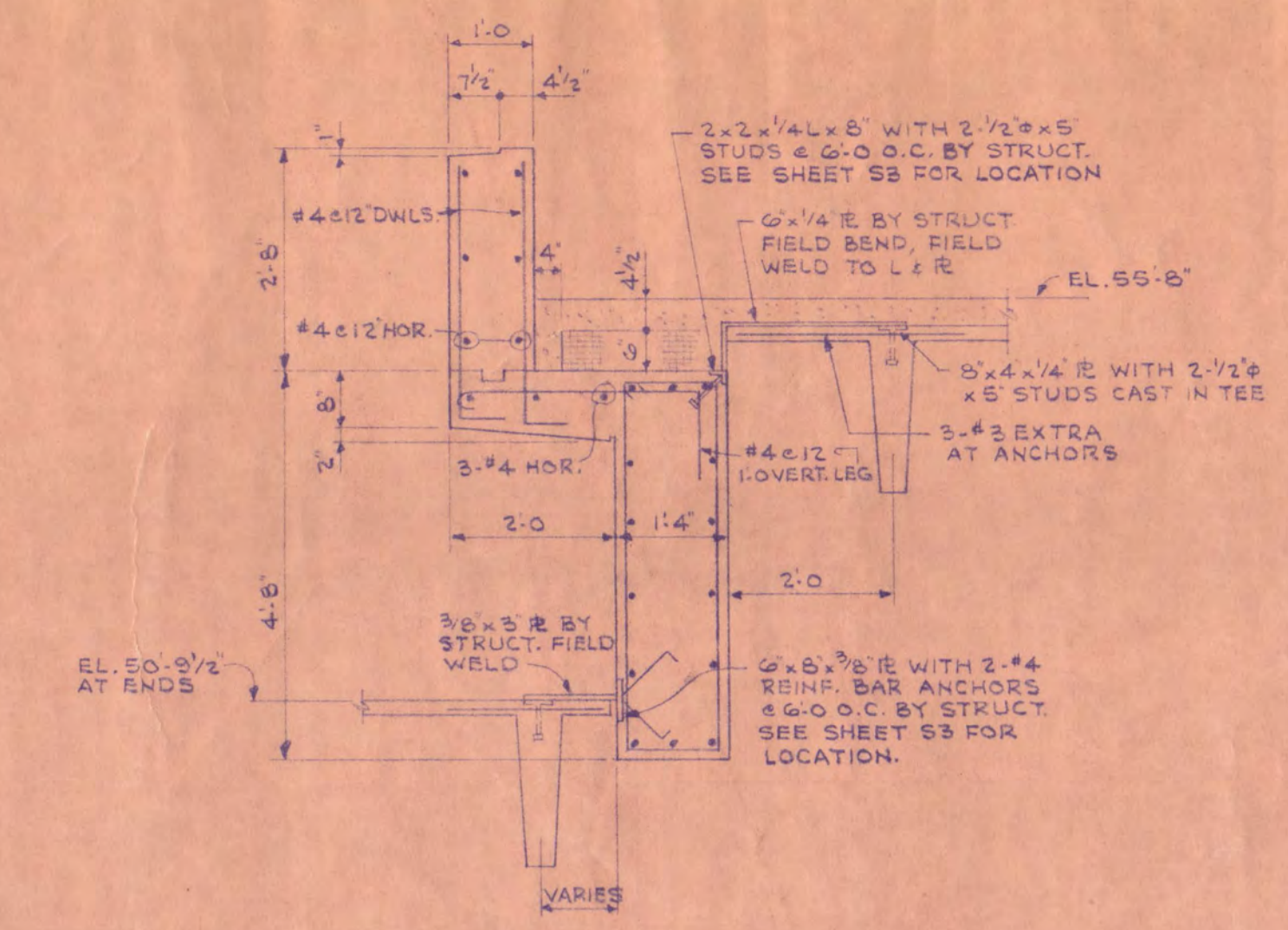
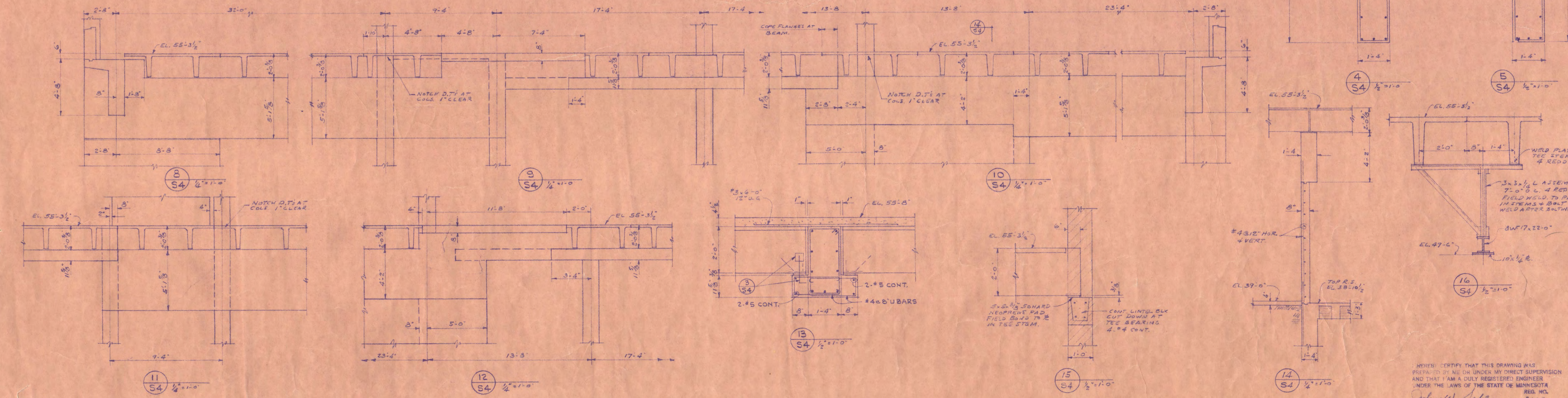
APPROVED BY: PRESIDENT ST. CLOUD STATE COLLEGE
 APPROVED BY: STATE COLLEGE BOARD
 APPROVED BY: [Signature]

STATE PROJECT NO. 6360174

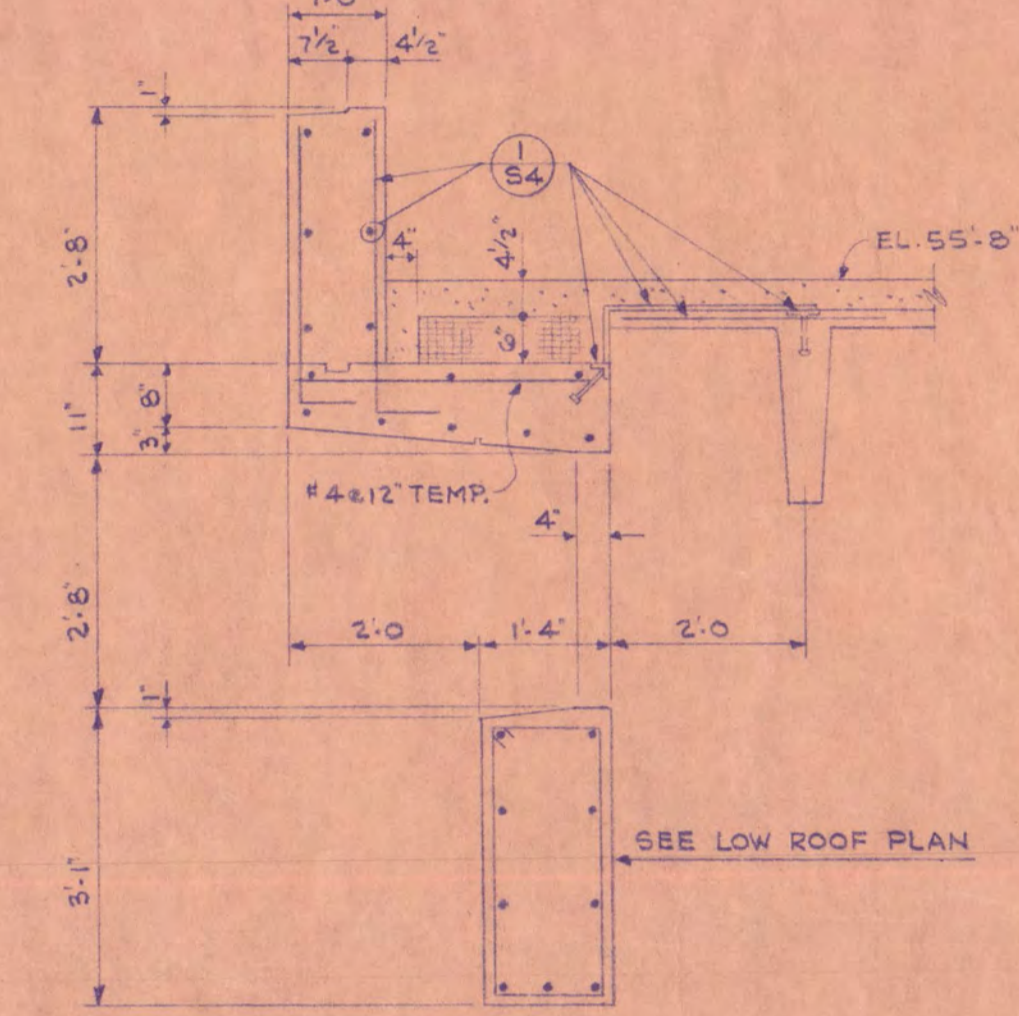
HEREBY CERTIFY THAT THIS DRAWING WAS
 PREPARED BY ME OR UNDER MY DIRECT SUPERVISION
 AND THAT I AM A DULY REGISTERED ENGINEER
 UNDER THE LAWS OF THE STATE OF MINNESOTA
 J. W. Sahlman 7/30/58



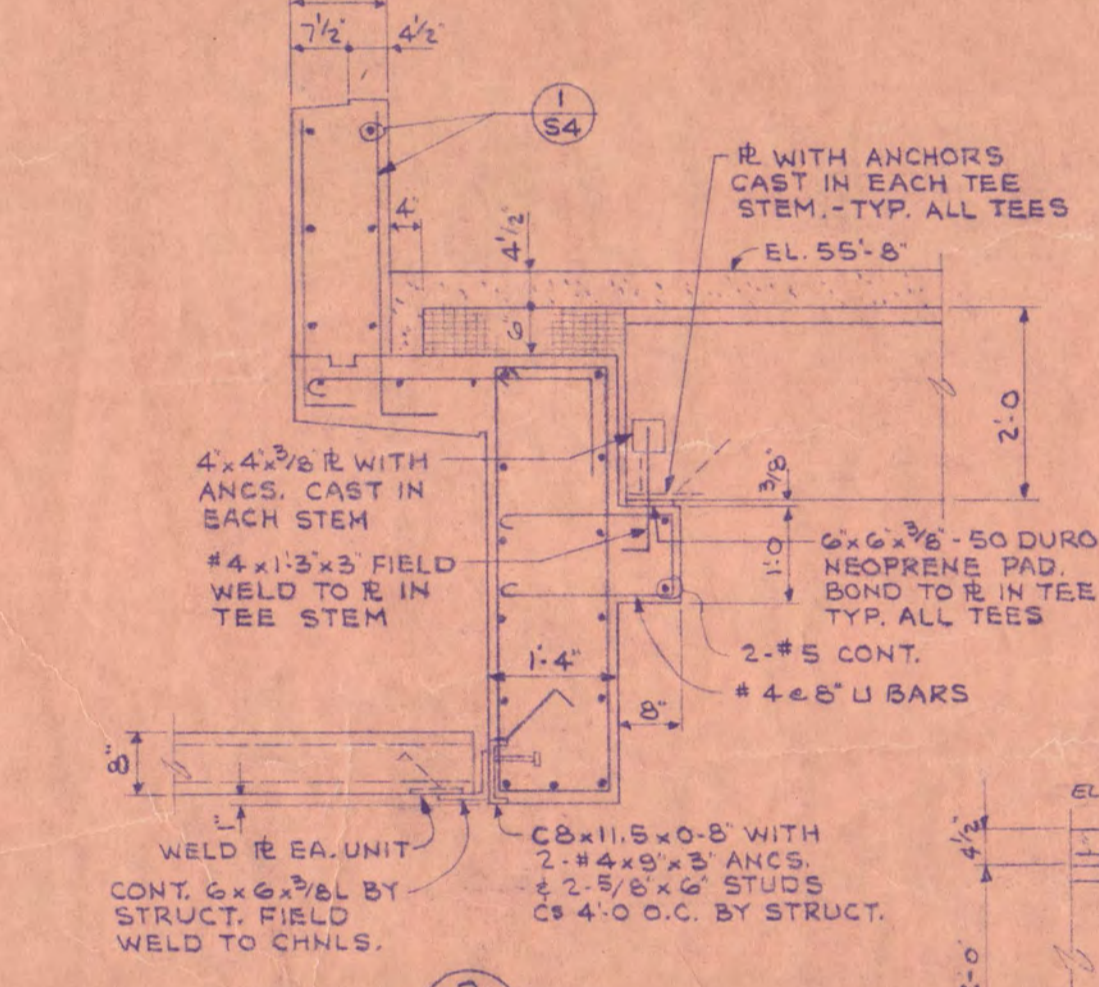
TOP OF DOUBLE TEES ELEV. 55'-3 1/2"
SECOND FLOOR FRAMING PLAN
 1/8" = 1'-0"



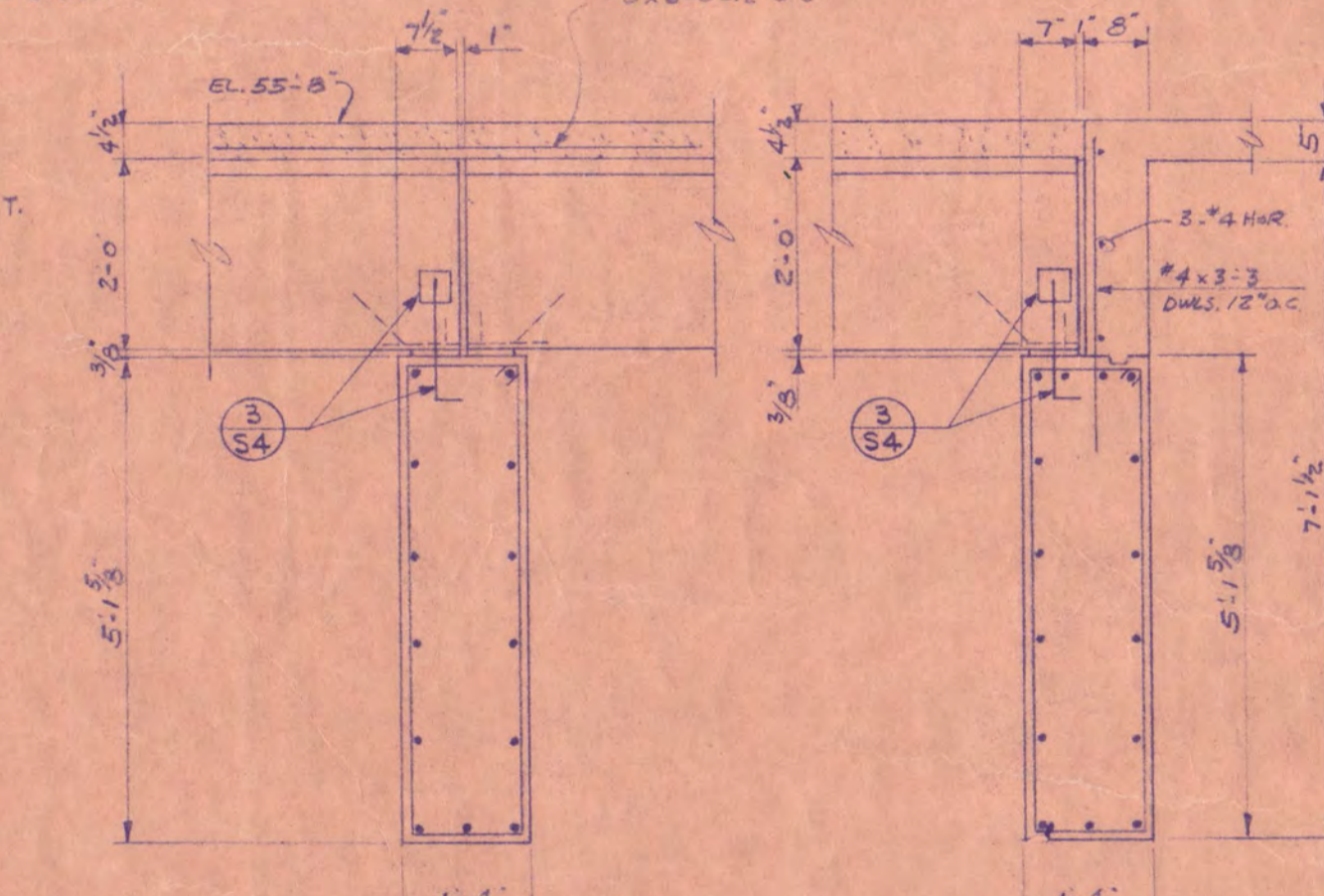
1
 S4 1/2" = 1'-0"



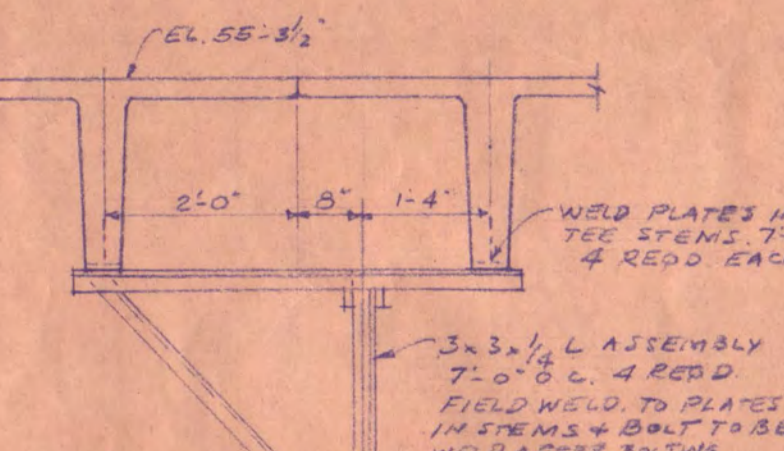
2
 S4 1/2" = 1'-0"



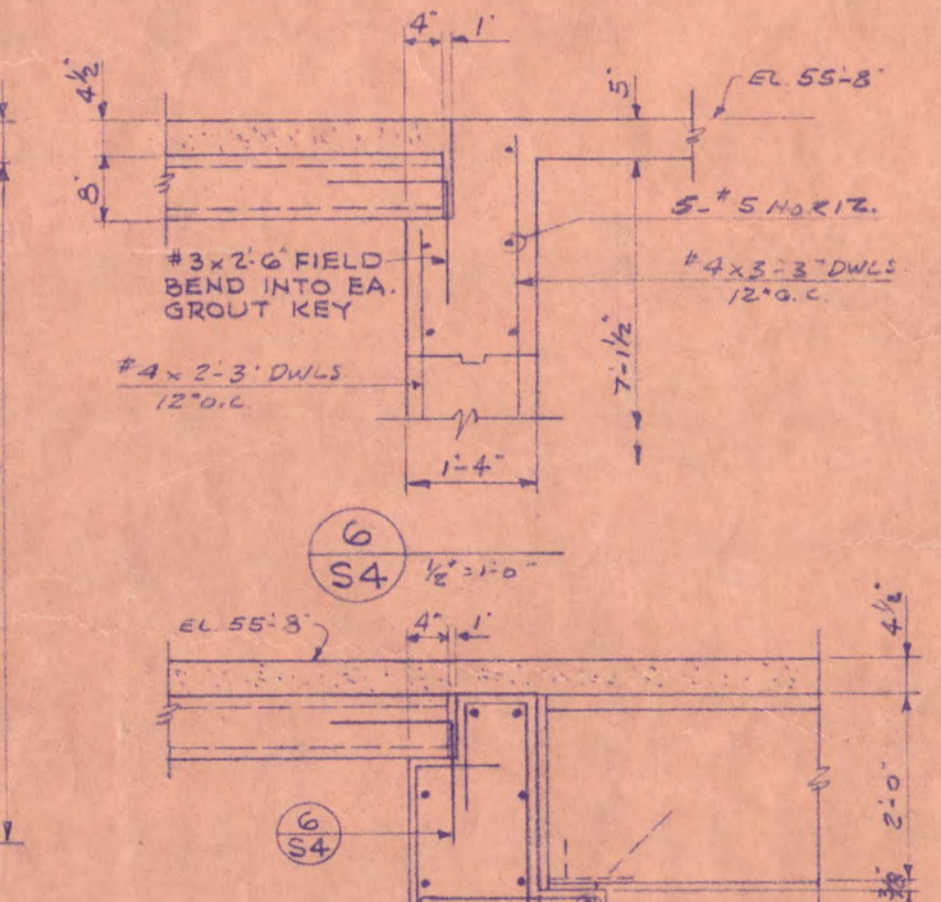
3
 S4 1/2" = 1'-0"



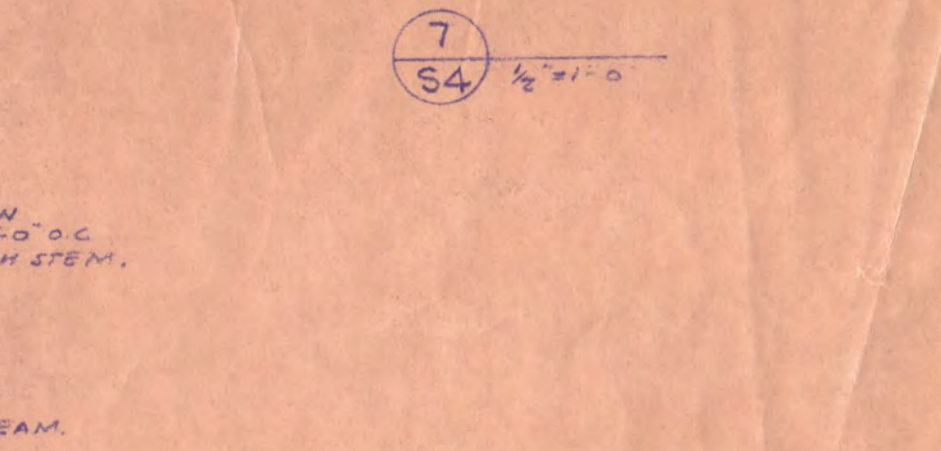
4
 S4 1/2" = 1'-0"



5
 S4 1/2" = 1'-0"



6
 S4 1/2" = 1'-0"



7
 S4 1/2" = 1'-0"

CONCRETE BEAM SCHEDULE - 2ND FLOOR										
MARK	SIZE	REINFORCING	POSITION OF REINF.	STIRRUPS OR TIES	REMARKS					
B	D	NO. SIZE	LENGTH	TOP/BOT.	NO. SIZE SPACING EA. END					
2B1	16	56	2 #6	26'-5"	12 #4 4@12 2@24@12	4 #6 INTER. EA. FACE				
2B2	16	56	2 #6	20'-0"	12 #4 4@12 2@24@12	do 2B1				
2B3	16	56	2 #6	30'-5"	12 #4 4@12 2@24@12	do 2B1				
2B4	16	56	2 #6	24'-0"	12 #4 4@12 2@24@12	do 2B1				
2B5	16	56	2 #6	18'-5"	12 #4 4@12 2@24@12	do 2B1				
2B6	16	56	2 #6	25'-0"	12 #4 4@12 2@24@12	do 2B1				
2B7	16	56	2 #6	19'-0"	12 #4 4@12 2@24@12	do 2B1				
2B8	16	56	2 #6	24'-5"	12 #4 4@12 2@24@12	do 2B1				
2B9	16	56	2 #6	18'-5"	12 #4 4@12 2@24@12	do 2B1				
2B10	16	56	2 #6	26'-5"	12 #4 4@12 2@24@12	do 2B1				
2B11	16	56	2 #6	20'-0"	12 #4 4@12 2@24@12	do 2B1				
2B12	16	56	2 #6	40'-6"	18 #4 4@12 2@24@12	do 2B1				
2B13	16	56	2 #6	38'-0"	18 #4 4@12 2@24@12	do 2B1				
2B14	16	56	2 #6	22'-5"	15 #4 4@12 2@24@12	do 2B1				
2B15	16	56	2 #6	15'-4"	15 #4 4@12 2@24@12	do 2B1				
2B16	16	56	2 #6	40'-6"	18 #4 4@12 2@24@12	do 2B1				
2B17	16	56	2 #6	38'-0"	18 #4 4@12 2@24@12	do 2B1				
2B18	16	56	2 #6	22'-5"	15 #4 4@12 2@24@12	do 2B1				
2B19	16	56	2 #6	15'-4"	15 #4 4@12 2@24@12	do 2B1				
2B20	16	56	2 #6	40'-6"	18 #4 4@12 2@24@12	do 2B1				
2B21	16	56	2 #6	38'-0"	18 #4 4@12 2@24@12	do 2B1				
2B22	16	56	2 #6	22'-5"	15 #4 4@12 2@24@12	do 2B1				
2B23	16	56	2 #6	15'-4"	15 #4 4@12 2@24@12	do 2B1				
2B24	16	56	2 #6	40'-6"	18 #4 4@12 2@24@12	do 2B1				
2B25	16	56	2 #6	38'-0"	18 #4 4@12 2@24@12	do 2B1				
2B26	16	56	2 #6	22'-5"	15 #4 4@12 2@24@12	do 2B1				
2B27	16	56	2 #6	15'-4"	15 #4 4@12 2@24@12	do 2B1				
2B28	16	56	2 #6	40'-6"	18 #4 4@12 2@24@12	do 2B1				
2B29	16	56	2 #6	38'-0"	18 #4 4@12 2@24@12	do 2B1				
2B30	16	56	2 #6	22'-5"	15 #4 4@12 2@24@12	do 2B1				
2B31	16	56	2 #6	15'-4"	15 #4 4@12 2@24@12	do 2B1				
2B32	16	56	2 #6	40'-6"	18 #4 4@12 2@24@12	do 2B1				
2B33	16	56	2 #6	38'-0"	18 #4 4@12 2@24@12	do 2B1				
2B34	16	56	2 #6	22'-5"	15 #4 4@12 2@24@12	do 2B1				
2B35	16	56	2 #6	15'-4"	15 #4 4@12 2@24@12	do 2B1				
2B36	16	56	2 #6	40'-6"	18 #4 4@12 2@24@12	do 2B1				
2B37	16	56	2 #6	38'-0"	18 #4 4@12 2@24@12	do 2B1				
2B38	16	56	2 #6	22'-5"	15 #4 4@12 2@24@12	do 2B1				
2B39	16	56	2 #6	15'-4"	15 #4 4@12 2@24@12	do 2B1				
2B40	16	56	2 #6	40'-6"	18 #4 4@12 2@24@12	do 2B1				
2B41	16	56	2 #6	38'-0"	18 #4 4@12 2@24@12	do 2B1				
2B42	16	56	2 #6	22'-5"	15 #4 4@12 2@24@12	do 2B1				
2B43	16	56	2 #6	15'-4"	15 #4 4@12 2@24@12	do 2B1				
2B44	16	56	2 #6	40'-6"	18 #4 4@12 2@24@12	do 2B1				
2B45	16	56	2 #6	38'-0"	18 #4 4@12 2@24@12	do 2B1				
2B46	16	56	2 #6	22'-5"	15 #4 4@12 2@24@12	do 2B1				
2B47	16	56	2 #6	15'-4"	15 #4 4@12 2@24@12	do 2B1				
2B48	16	56	2 #6	40'-6"	18 #4 4@12 2@24@12	do 2B1				
2B49	16	56	2 #6	38'-0"	18 #4 4@12 2@24@12	do 2B1				
2B50	16	56	2 #6	22'-5"	15 #4 4@12 2@24@12	do 2B1				
2B51	16	56	2 #6	15'-4"	15 #4 4@12 2@24@12	do 2B1				
2B52	16	56	2 #6	40'-6"	18 #4 4@12 2@24@12	do 2B1				
2B53	16	56	2 #6	38'-0"	18 #4 4@12 2@24@12	do 2B1				
2B54	16	56	2 #6	22'-5"	15 #4 4@12 2@24@12	do 2B1				
2B55	16	56	2 #6	15'-4"	15 #4 4@12 2@24@12	do 2B1				
2B56	16	56	2 #6	40'-6"	18 #4 4@12 2@24@12	do 2B1				
2B57	16	56	2 #6	38'-0"	18 #4 4@12 2@24@12	do 2B1				
2B58	16	56	2 #6	22'-5"	15 #4 4@12 2@24@12	do 2B1				
2B59	16	56	2 #6	15'-4"	15 #4 4@12 2@24@12	do 2B1				
2B60	16	56	2 #6	40'-6"	18 #4 4@12 2@24@12	do 2B1				
2B61	16	56	2 #6	38'-0"	18 #4 4@12 2@24@12	do 2B1				
2B62	16	56	2 #6	22'-5"	15 #4 4@12 2@24@12	do 2B1				
2B63	16	56	2 #6	15'-4"	15 #4 4@12 2@24@12	do 2B1				
2B64	16	56	2 #6	40'-6"	18 #4 4@12 2@24@12	do 2B1				
2B65	16	56	2 #6	38'-0"	18 #4 4@12 2@24@12	do 2B1				
2B66	16	56	2 #6	22'-5"	15 #4 4@12 2@24@12	do 2B1				
2B67	16	56	2 #6	15'-4"	15 #4 4@12 2@24@12	do 2B1				
2B68	16	56	2 #6	40'-6"	18 #4 4@12 2@24@12	do 2B1				
2B69	16	56	2 #6	38'-0"	18 #4 4@12 2@24@12	do 2B1				
2B70	16	56	2 #6	22'-5"	15 #4 4@12 2@24@12	do 2B1				
2B71	16	56	2 #6	15'-4"	15 #4 4@12 2@24@12	do 2B1				
2B72	16	56	2 #6	40'-6"	18 #4 4@12 2@24@12	do 2B1				
2B73	16	56	2 #6	38'-0"	18 #4 4@12 2@24@12	do 2B1				
2B74	16	56	2 #6	22'-5"	15 #4 4@12 2@24@12	do 2B1				
2B75	16	56	2 #6	15'-4"	15 #4 4@12 2@24@12	do 2B1				
2B76	16	56	2 #6	40'-6"	18 #4 4@12 2@24@12	do 2B1				
2B77	16	56	2 #6	38'-0"	18 #4 4@12 2@24@12	do 2B1				
2B78	16	56	2 #6	22'-5"	15 #4 4@12 2@24@12	do 2B1				
2B79	16	56	2 #6	15'-4"	15 #4 4@12 2@24@12	do 2B1				
2B80	16	56	2 #6	40'-6"	18 #4 4@12 2@24@12	do 2B1				
2B81	16	56	2 #6	38'-0"	18 #4 4@12 2@24@12	do 2B1				
2B82	16	56	2 #6	22'-5"	15 #4 4@12 2@24@12	do 2B1				
2B83	16	56	2 #6	15'-4"	15 #4 4@12 2@24@12	do 2B1				
2B84	16	56	2 #6	40'-6"	18 #4 4@12 2@24@12	do 2B1				
2B85	16	56	2 #6	38'-0"	18 #4 4@12 2@24@12	do 2B1				
2B86	16	56	2 #6	22'-5"	15 #4 4@12 2@24@12	do 2B1				
2B87	16	56	2 #6	15'-4"	15 #4 4@12 2@24@12	do 2B1				
2B88	16	56	2 #6	40'-6"	18 #4 4@12 2@24@12	do 2B1				
2B89	16	56	2 #6	38'-0"	18 #4 4@12 2@24@12	do 2B1				
2B90	16	56	2 #6	22'-5"	15 #4 4@12 2@24@12	do 2B1				
2B91	16	56	2 #6	15'-4"	15 #4 4@12 2@24@12	do 2B1				
2B92	16	56	2 #6	40'-6"	18 #4 4@12 2@24@12	do 2B1				
2B93	16	56	2 #6	38'-0"	18 #4 4@12 2@24@12	do 2B1				
2B94	16	56	2 #6	22'-5"	15 #4 4@12 2@24@12	do 2B1				
2B95	16	56	2 #6	15'-4"	15 #4 4@12 2@24@12	do 2B1				
2B96	16	56	2 #6	40'-6"	18 #4 4@12 2@24@12	do 2B1				
2B97	16	56	2 #6	38'-0"	18 #4 4@12 2@24@12	do 2B1				
2B98	16	56	2 #6	22'-5"	15 #4 4@12 2@24@12	do 2B1				
2B99	16	56	2 #6	15'-4"	15 #4 4@12 2@24@12	do 2B1				
2B100	16	56	2 #6	40'-6"	18 #4 4@12 2@24@12	do 2B1				

NOTE: PROVIDE 5 #5 x 3/4" x 8' CORNER BARS EA. FACE IN BEAMS @ COLUMNS NO. 73, 80, 76 & 105.

SECOND FLOOR FRAMING PLAN

ADMINISTRATION BUILDING ST. CLOUD STATE COLLEGE

TRAYNOR, HERMANSON & HAHN ARCHITECTS INC.
 ST. CLOUD, MINNESOTA

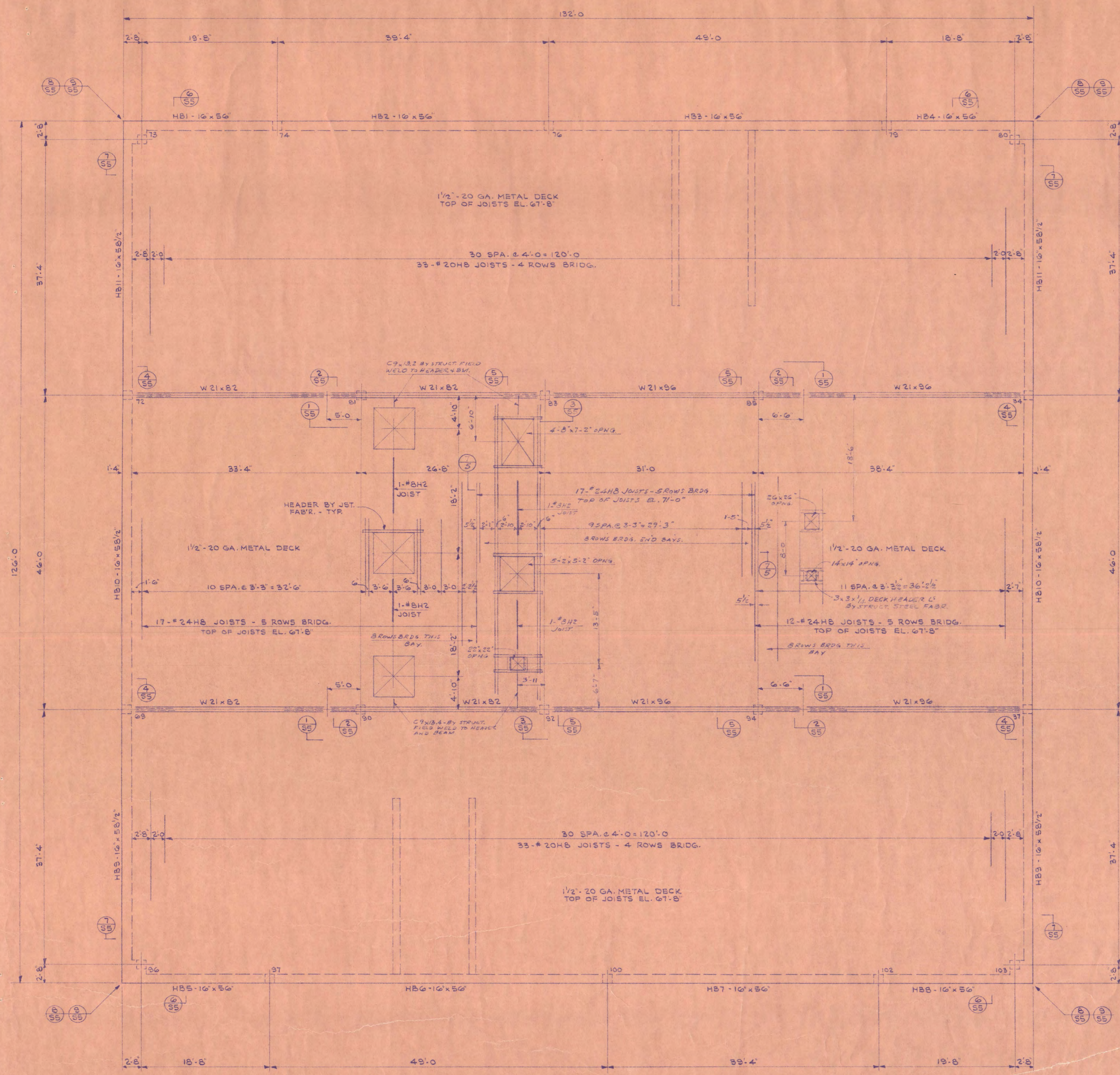
STRUCTURAL ENGINEERS JOHNSTON & SAHLMAN, INC. MPLS., MINN.
 CONSULTING ENGINEERS ORR - SCHELEN - MATYRON & ASSOC., INC. MPLS., MINN.

DRAWN J.D., J.W.S. CHECKED J.W.S. DATE 7-30-15

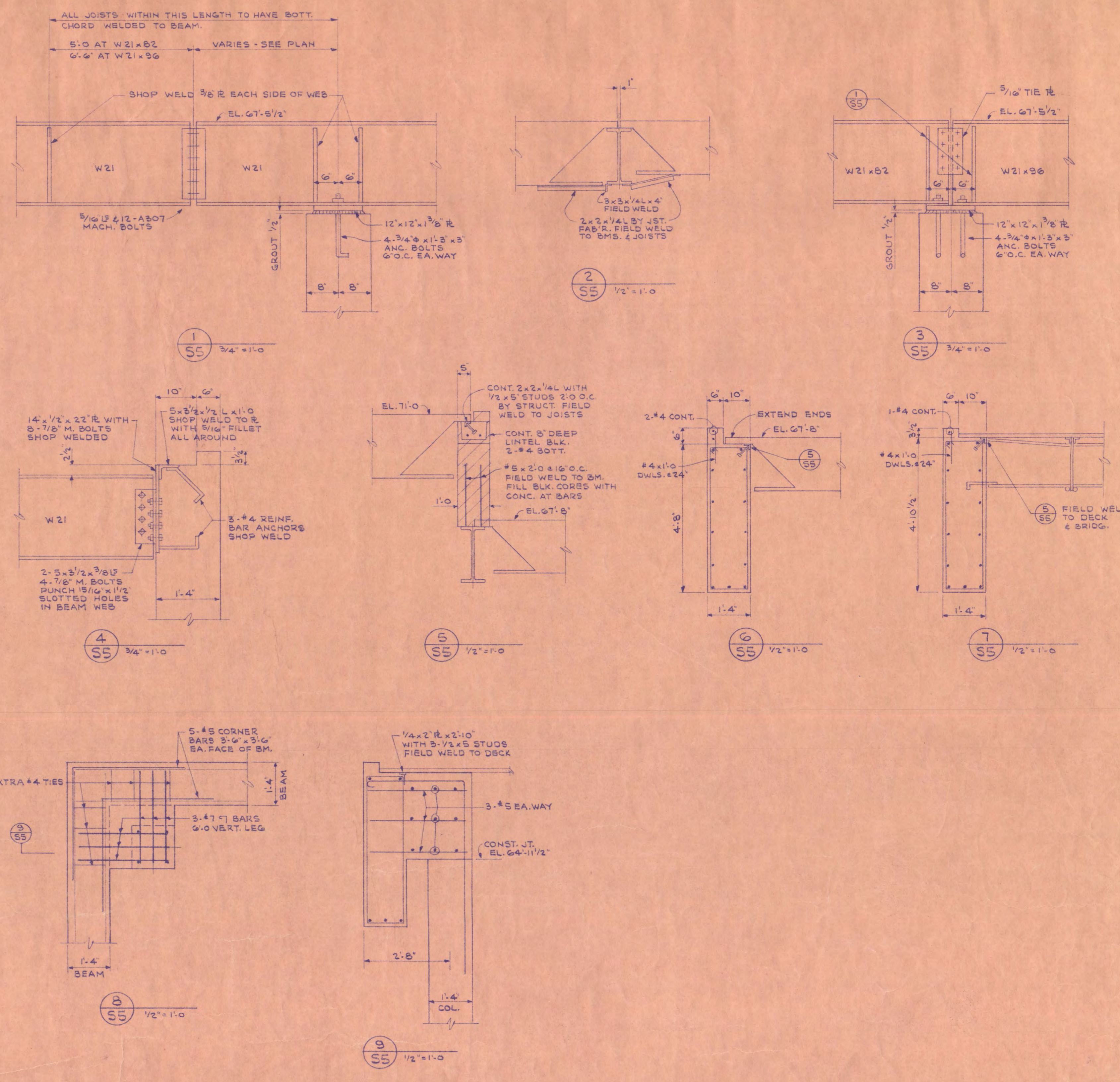
STATE OF MINNESOTA
 DEPARTMENT OF ADMINISTRATION
 ARCHITECTURAL AND ENGINEERING DIVISION
 ROOM 610 ADMINISTRATION BUILDING
 ST. PAUL 55155

APPROVED BY: PRESIDENT ST. CLOUD STATE COLLEGE
 APPROVED BY: STATE COLLEGE BOARD
 APPROVED BY: COMMISSIONER OF ADMINISTRATION AN AUTHORIZED SIGNATURE

STATE PROJECT NO. 6360174



HIGH ROOF FRAMING PLAN
1/8" = 1'-0"



CONCRETE BEAM SCHEDULE - HIGH ROOF												
MARK	SIZE	NO	SIZE	LENGTH	TOP BOT	5/8" OR 3/4" SUPPORT	OR	NO.	SIZE	SPACING	EA END	REMARKS
HB1	16" x 56"	1	#8	33'-11"	✓	2.4	15x20x15	10	#4	2@12, 3@24	TIES	4-#8 INTER. EA. FACE
HB2	16" x 56"	3	#8	20'-4"	✓	2.4	15x20x15	22	#4	4@12, 1@24	TIES	do HB1
HB3	16" x 56"	4	#8	33'-4"	✓	2.4	15x20x15	26	#4	4@12, 3@24	TIES	CTR. 3-#8 ON 1/2 OF SPAN
HB4	16" x 56"	2	#8	27'-8"	✓	2.4	15x20x15	10	#4	2@12, 3@24	TIES	do HB1
HB5	16" x 56"	2	#8	25'-4"	✓	2.4	15x20x15	10	#4	do HB4		do HB1
HB6	16" x 56"	2	#8	35'-0"	✓	2.4	15x20x15	26	#4	do HB5		CTR. 3-#8 ON 1/2 OF SPAN
HB7	16" x 56"	3	#8	28'-4"	✓	2.4	15x20x15	26	#4	do HB5		do HB1
HB8	16" x 56"	3	#8	33'-4"	✓	2.4	15x20x15	22	#4	do HB2		do HB1
HB9	16" x 56"	2	#8	33'-4"	✓	2.4	15x20x15	10	#4	do HB1		do HB1
HB10	16" x 56"	2	#8	20'-4"	✓	2.4	15x20x15	20	#4	4@12, 6@24	TIES	do HB1
HB11	16" x 56"	3	#8	33'-4"	✓	2.4	15x20x15	20	#4	do HB5		do HB1

I HEREBY CERTIFY THAT THIS DRAWING WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
John W. Seltman 5109

High Roof Framing Plan

ADMINISTRATION BUILDING ST. CLOUD STATE COLLEGE

TRAYNOR, HERMANSON & HAHN ARCHITECTS INC. SHEET NO. 55

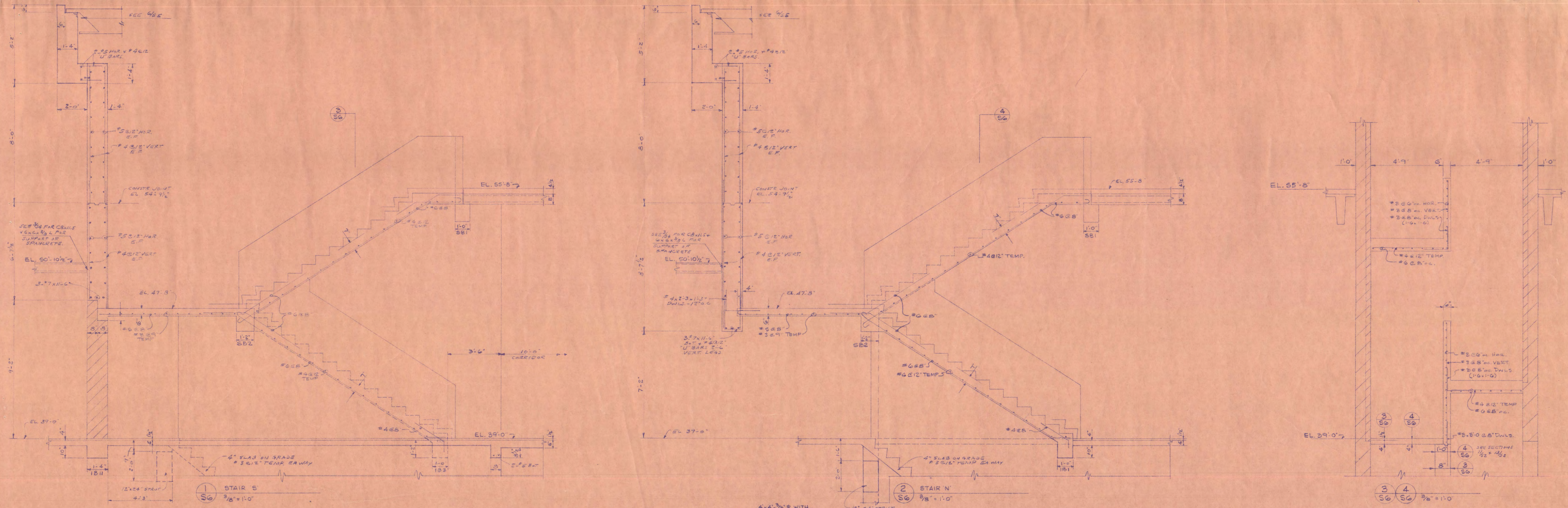
STRUCTURAL ENGINEERS JOHNSTON & SAHLMAN, INC. Mpls., MINN.
CONSULTING ENGINEERS ORR - SCHELEN - MAYERSON & ASSOC., INC. Mpls., MINN.

DRAWN J.W.S. CHECKED J.W.S. DATE 7.20.75 OF 02

STATE OF MINNESOTA
DEPARTMENT OF ADMINISTRATION
ARCHITECTURAL AND ENGINEERING DIVISION
ROOM 6-10 ADMINISTRATION BUILDING
ST. PAUL, MINN.

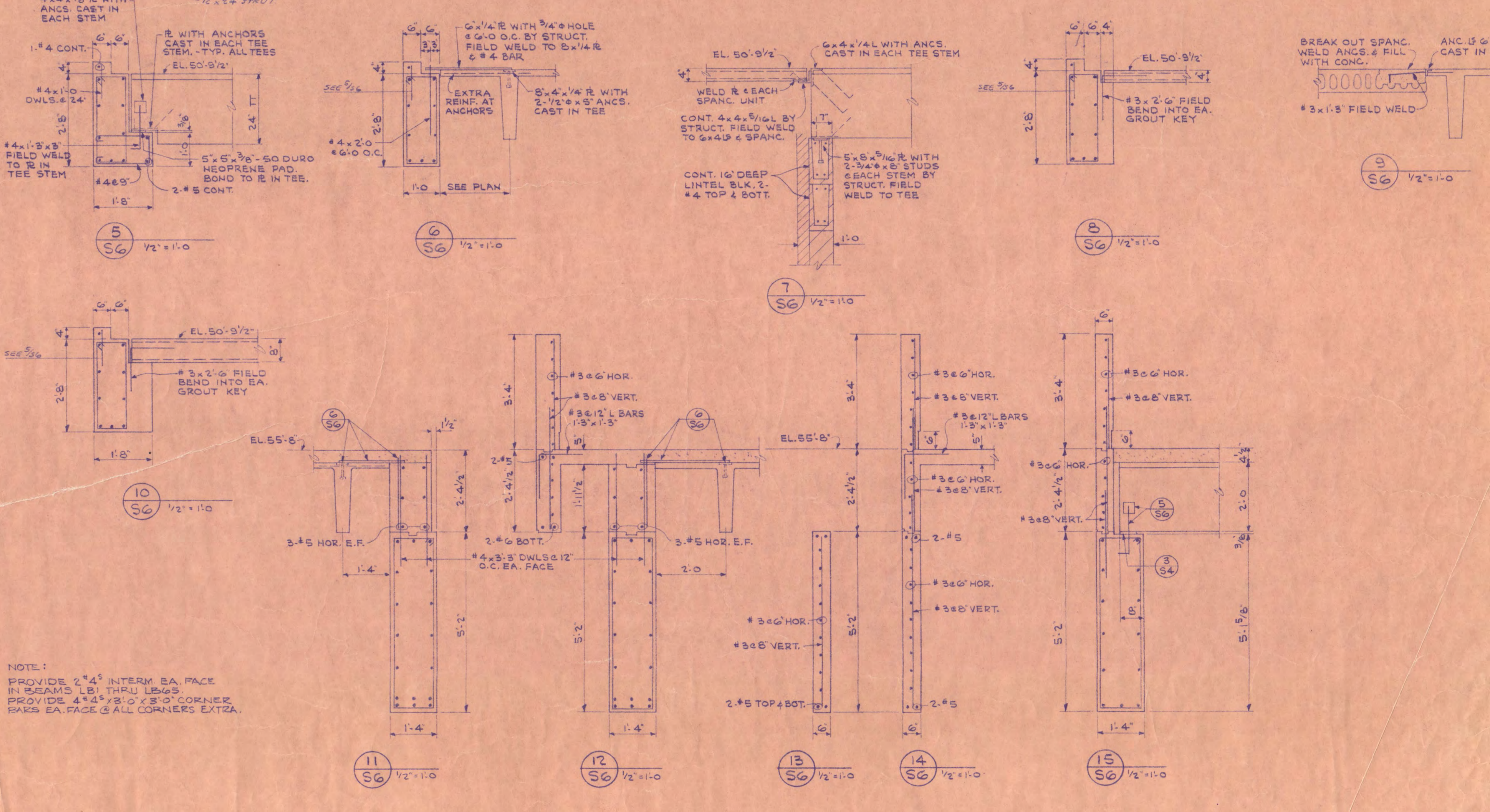
APPROVED BY PRESIDENT ST. CLOUD STATE COLLEGE
APPROVED BY STATE COLLEGE BOARD
APPROVED BY COMMISSIONER OF ADMINISTRATION
AN AUTHORIZED SIGNATURE

STATE PROJECT NO. 6360174



MARK	SIZE	REINFORCING	POSITION OF REINFR.	STIRRUPS OR TIES	REMARKS
B	D	NO. SIZE LENGTH TOP BOT	W. OR SUPPORT E. OR	NO. SIZE SPACING BA. RND	
LB1	12 32	3 #7 19'-6"	✓	20 #2 300 3/8 4#12 TIES	
LB2	12 32	3 #5 4'-0"	✓		
LB3	12 32	2 #5 17'-5"	✓	12 #4 4#5 3/8 2#12 TIES	
LB4	12 32	2 #7 20'-5"	✓	16 #4 200 3/8 3#12 TIES	
LB5	12 32	2 #5 9'-0"	✓	4 #4 2#12 TIES	
LB6	12 32	2 #5 27'-0"	✓	24 #4 400 3/8 5#12 TIES	
LB7	12 32	2 #7 31'-0"	✓	24 #4 d.	
LB8	12 32	2 #6 31'-0"	✓	24 #4 d.	
LB9	12 32	2 #6 21'-0"	✓	6 #4 3#12 TIES	
LB10	12 32	2 #6 23'-0"	✓	22 #4 300 3/8 3#12 TIES	
LB11	12 32	2 #6 16'-5"	✓	6 #4 3#12 TIES	
LB12	12 32	2 #6 22'-0"	✓	16 #4 200 3/8 3#12 TIES	
LB13	12 32	2 #7 17'-0"	✓	16 #4 d.	
LB14	12 32	2 #5 9'-0"	✓	6 #4 3#12 TIES	
LB15	12 32	3 #5 24'-0"	✓	24 #4 400 3/8 5#12 TIES	
LB16	12 32	2 #5 5'-0"	✓		
LB17	12 32	2 #7 18'-0"	✓	16 #4 200 3/8 3#12 TIES	
LB18	12 32	3 #7 20'-0"	✓	18 #4 200 3/8 4#12 TIES	
LB19	12 32	3 #5 15'-5"	✓	3 #4 2#12 TIES	HTYP BAR CAP END OR CAPT. END
LB20	12 32	2 #5 10'-0"	✓	10 #4 3#12 2#5 TIES	
LB21	12 32	2 #5 22'-0"	✓	8 #4 2#12 2#5 TIES	
LB22	12 32	2 #5 16'-0"	✓	8 #4 d.	
LB23	12 32	2 #5 25'-0"	✓	8 #4 d.	
LB24	12 32	3 #5 10'-0"	✓	4 #4 2#12 TIES	d. LB17
LB25	12 32	2 #5 8'-0"	✓	3 #4 3#12 CAPT. END	
LB26	12 32	2 #5 10'-0"	✓	6 #4 3#12 TIES	
LB27	12 32	3 #7 17'-5"	✓	18 #4 200 3/8 3#12 TIES	
LB28	12 32	2 #5 12'-0"	✓	6 #4 3#12 TIES	
LB29	12 32	2 #5 19'-0"	✓	8 #4 2#12 2#5 TIES	
LB30	12 32	2 #5 22'-0"	✓	8 #4 d.	
LB31	12 32	3 #5 15'-0"	✓	4 #4 2#12 TIES	d. LB17
LB32	12 32	2 #5 12'-0"	✓	8 #4 4#12 TIES	
LB33	12 32	2 #6 16'-0"	✓	12 #4 200 4#12 TIES	
LB34	12 32	2 #5 6'-0"	✓		

MARK	SIZE	REINFORCING	POSITION OF REINFR.	STIRRUPS OR TIES	REMARKS
B	D	NO. SIZE LENGTH TOP BOT	W. OR SUPPORT E. OR	NO. SIZE SPACING BA. RND	
LB35	12 32	2 #5 22'-0"	✓	18 #4 300 3/8 3#12 TIES	
LB36	12 32	2 #7 20'-2"	✓	18 #4 300 3/8 3#12 TIES	
LB37	12 32	2 #5 5'-0"	✓		
LB38	12 32	2 #6 15'-0"	✓	12 #4 200 5#12 TIES	
LB39	12 32	2 #6 21'-0"	✓	10 #4 5#12 TIES	
LB40	12 32	2 #6 23'-0"	✓	12 #4 6#12 TIES	
LB41	12 32	2 #6 31'-8"	✓	20 #4 200 2#5 6#12 TIES	
LB42	12 32	2 #6 29'-0"	✓	18 #4 3#12 6#12 TIES	
LB43	12 32	2 #6 33'-0"	✓	20 #4 200 2#5 6#12 TIES	
LB44	12 32	2 #5 28'-0"	✓	4 #4 2#12 TIES	
LB45	12 32	2 #5 9'-4"	✓	6 #4 3#12 TIES	
LB46	12 32	2 #5 13'-0"	✓	6 #4 3#12 TIES	
LB47	12 32	2 #5 5'-0"	✓		
LB48	12 32	2 #7 18'-0"	✓	16 #4 200 3/8 3#12 TIES	
LB49	12 32	2 #6 30'-8"	✓	12 #4 3#12 3#24 TIES	
LB50	12 32	2 #6 23'-10"	✓	14 #4 4#12 3#24 TIES	
LB51	12 32	2 #5 12'-4"	✓	4 #4 2#12 4#12 TIES	
LB52	10 28	3 #5 12'-4"	✓	4 #4 d.	
LB53	12 32	2 #6 21'-0"	✓	10 #4 3#12 2#14 TIES	
LB54	12 32	2 #6 21'-0"	✓	10 #4 d.	
LB55	40 32	4 #5 6'-4"	✓	4 #4 2#5 TIES	
LB56	10 28	2 #6 20'-0"	✓	8 #4 2#12 2#14 TIES	
LB57	10 28	2 #6 15'-4"	✓	8 #4 d.	
LB58	10 28	2 #6 20'-0"	✓	8 #4 d.	
LB59	10 28	3 #5 10'-4"	✓	4 #4 2#12 TIES	
LB60	12 32	2 #5 10'-4"	✓	4 #4 d.	
LB61	12 32	2 #6 35'-0"	✓	14 #4 4#12 3#24 TIES	
LB62	12 32	2 #6 30'-5"	✓	12 #4 3#12 3#24 TIES	
LB63	12 32	2 #6 31'-0"	✓	12 #4 4#12 3#24 TIES	
LB64	12 32	2 #6 31'-0"	✓	12 #4 3#12 3#24 TIES	
LB65	12 32	2 #6 18'-0"	✓	4 #4 2#14 TIES	



BEAM SCHEDULE AND SECTIONS

ADMINISTRATION BUILDING ST. CLOUD STATE COLLEGE

TRAYNOR, HERMANSON & HAHN ARCHITECTS INC. MINNESOTA
 STRUCTURAL ENGINEERS JOHNSON & SAHMAN INC. MPLS., MINN.
 CONSULTING ENGINEERS ORR - SCHELEN - MAYERSON & ASSOC., INC. MPLS., MINN.

DRAWN J.D. CHECKED J.W.S. DATE 7-30-33

STATE OF MINNESOTA
 DEPARTMENT OF ADMINISTRATION
 ARCHITECTURAL AND ENGINEERING DIVISION
 ROOM 610 ADMINISTRATION BUILDING
 ST. PAUL 55105

APPROVED BY: PRESIDENT ST. CLOUD STATE COLLEGE
 APPROVED BY: ST. CLOUD COLLEGE BOARD
 APPROVED BY: JOHN W. SAHMAN 3109

STATE PROJECT NO. 6360174