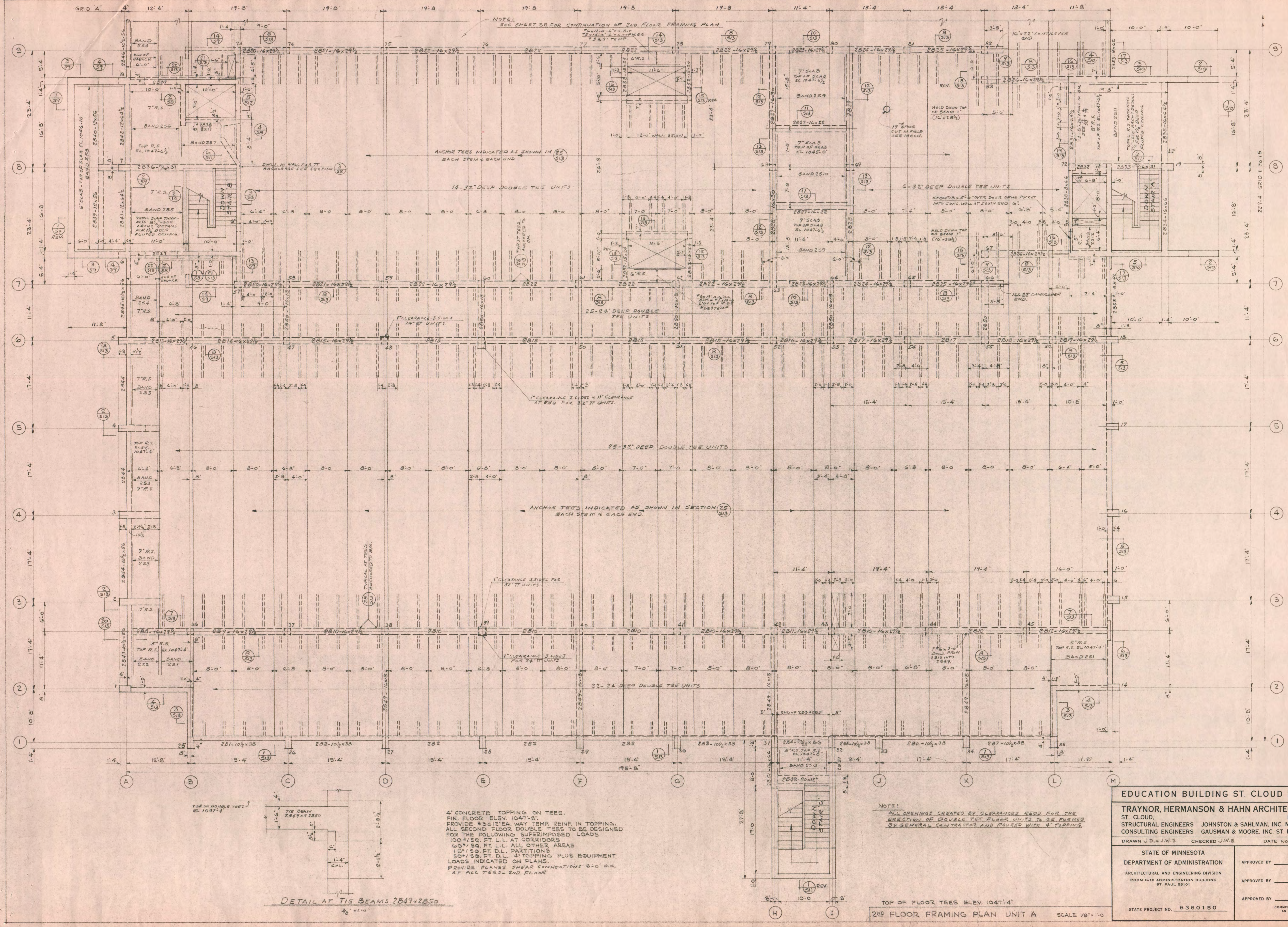
NOTE: SEE SHEET S5 FOR CONTINUATION OF 2ND FLOOR FRAMING PLAN.
ANCHOR TEES INDICATED AS SHOWN IN 25/S13 EACH STEM & EACH END
14-32" DEEP DOUBLE TEE UNITS
6-32" DEEP DOUBLE TEE UNITS
25-24" DEEP DOUBLE TEE UNITS
25-32" DEEP DOUBLE TEE UNITS
ANCHOR TEES INDICATED AS SHOWN IN SECTION 25/S13 EACH STEM & EACH END.
22-26" DEEP DOUBLE TEE UNITS
DETAIL AT TIE BEAMS 2B49 & 2B50
4" CONCRETE TOPPING ON TEES.
FIN. FLOOR ELEV. 1047'-8".
PROVIDE #3@12" EA. WAY TEMP. REINF. IN TOPPING.
ALL SECOND FLOOR DOUBLE TEES TO BE DESIGNED
FOR THE FOLLOWING SUPERIMPOSED LOADS
100#/SQ. FT. L.L. AT CORRIDORS
60#/SQ. FT. L.L. ALL OTHER AREAS
15#/SQ. FT. D.L. PARTITIONS
50#/SQ. FT. D.L. 4" TOPPING PLUS EQUIPMENT
LOADS INDICATED ON PLANS.
PROVIDE FLANGE SHEAR CONNECTIONS 6'-0" O.C.
AT ALL TEES - 2ND. FLOOR
NOTE:
ALL OPENINGS CREATED BY CLEARANCES REQD. FOR THE
ERECTION OF DOUBLE TEE FLOOR UNITS TO BE FORMED
BY GENERAL CONTRACTOR AND POURED WITH 4" TOPPING.
TOP OF FLOOR TEES ELEV. 1047'-4"
2ND FLOOR FRAMING PLAN UNIT A
SCALE 1/8" = 1'-0
N

EDUCATION BUILDING ST. CLOUD STATE COLLEGE

TRAYNOR, HERMANSON & HAHN ARCHITECTS INC.
ST. CLOUD, MINNESOTA
STRUCTURAL ENGINEERS JOHNSTON & SAHLMAN, INC. MPLS., MINN.
CONSULTING ENGINEERS GAUSMAN & MOORE, INC. ST. PAUL, MINN.

DRAWN J.D. & J.W.S. CHECKED J.W.S. DATE NOV. 10, 1969

SHEET NO. S4 OF 13

STATE OF MINNESOTA
DEPARTMENT OF ADMINISTRATION
ARCHITECTURAL AND ENGINEERING DIVISION
ROOM G-10 ADMINISTRATION BUILDING
ST. PAUL 55101

STATE PROJECT NO. 6360150

APPROVED BY ______
APPROVED BY ______
APPROVED BY ______
COMMISSIONER OF ADMINISTRATION
AN AUTHORIZED SIGNATURE

195'-8"

22-24" DEEP DOUBLE TEES

25-32" DEEP DOUBLE TEES

20-24" DEEP DOUBLE TEES

ANCHOR TEES INDICATED AS SHOWN IN SECTION 5/S13 EACH STEM & EACH END

DOWN STAIRS

5" R.S. TOP R.S. EL. 1047-4

BAND 232 · BAND 251 · BAND 253 · BAND 254

7" R.S. TOP R.S. ELEV 1047-4

2-24" DOUBLE TEE UNITS

3-24" DOUBLE TEE UNITS

67'50" AUDIO MET. BOOTH

3.5"x6"x3'-0" DWLS FROM 2810 INTO 2849

7" SLAB TOP OF SLAB ELEV. 1047-6½"

16"x22" CANTILEVER END

HOLD TOP OF BM. DOWN 1" (16"x28½")

#3x20'-0" @ 12" O.C. ALTERNATE 6" O.C. WITH TEMP. REINF.

4" CONCRETE TOPPING ON TEES.
FIN. FLOOR ELEV. 1047-8"
PROVIDE #3 @ 12" EA. WAY TEMP. REINF. IN TOPPING.

TOP OF FLOOR TEES ELEV. 1047-4"

2ND FLOOR FRAMING PLAN UNIT B SCALE 1/8"=1'-0

N

EDUCATION BUILDING ST. CLOUD STATE COLLEGE

TRAYNOR, HERMANSON & HAHN ARCHITECTS INC.
ST. CLOUD, MINNESOTA
STRUCTURAL ENGINEERS JOHNSTON & SAHLMAN, INC. MPLS., MINN.
CONSULTING ENGINEERS GAUSMAN & MOORE, INC. ST. PAUL, MINN.

SHEET NO. 35 OF 13

DRAWN J.D. CHECKED J.W.S. DATE NOV. 10, 1969

STATE OF MINNESOTA
DEPARTMENT OF ADMINISTRATION
ARCHITECTURAL AND ENGINEERING DIVISION
ROOM G-10 ADMINISTRATION BUILDING
ST. PAUL 55101

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3-24" DEEP D.T. UNITS

1-24" DEEP DOUBLE TEE UNIT

21-24" DEEP DOUBLE TEE UNITS

19 SPA. @ 8'-0" = 152'-0"

ANCHOR TEES INDICATED AS SHOWN IN (27/513) EACH STEM AND EACH END.

HALD TOP OF WALL DOWN AT EL. 1059'-0

10'-0" MECH. UNIT

25-24" DEEP DOUBLE TEE UNITS

ANCHOR TEES INDICATED AS SHOWN IN (24/513) & (27/53) EACH STEM & EACH END

23-24" DEEP DOUBLE TEE UNITS

2-24" DEEP DOUBLE TEE UNITS

DO NOT WELD TEES AT RB10

EXP. JT. IN SPANDREL BEAMS.

DET. (7/57)

REV. (6/57)

TYPICAL AT TEE ANCHORED TO BEAM. (24/513) & (27/53)

1½" EXP. JT.

TOP OF SLAB ELEV. 1061'-4"

TOP OF ROOF TEES ELEV. 1061'-4"

ALL ROOF TEES TO BE DESIGNED FOR
40#/SQ. FT. L.L.
10#/SQ. FT. D.L.
50#/SQ. FT. SUPERIMPOSED LOAD PLUS OTHER LOADS INDICATED ON PLAN.

PROVIDE FLANGE SHEAR CONNECTIONS 8'-0" O.C. AT ALL ROOF TEES.

ROOF FRAMING PLAN UNIT A

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

EDUCATION BUILDING ST. CLOUD STATE COLLEGE

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CONSULTING ENGINEERS GAUSMAN & MOORE, INC. ST. PAUL, MINN.

SHEET NO. 56 OF 18

DRAWN J.D. & J.W.S. CHECKED J.W.S. DATE NOV. 10, 1969

STATE OF MINNESOTA
DEPARTMENT OF ADMINISTRATION
ARCHITECTURAL AND ENGINEERING DIVISION
ROOM G-10 ADMINISTRATION BUILDING
ST. PAUL 55101

STATE PROJECT NO. 6360150

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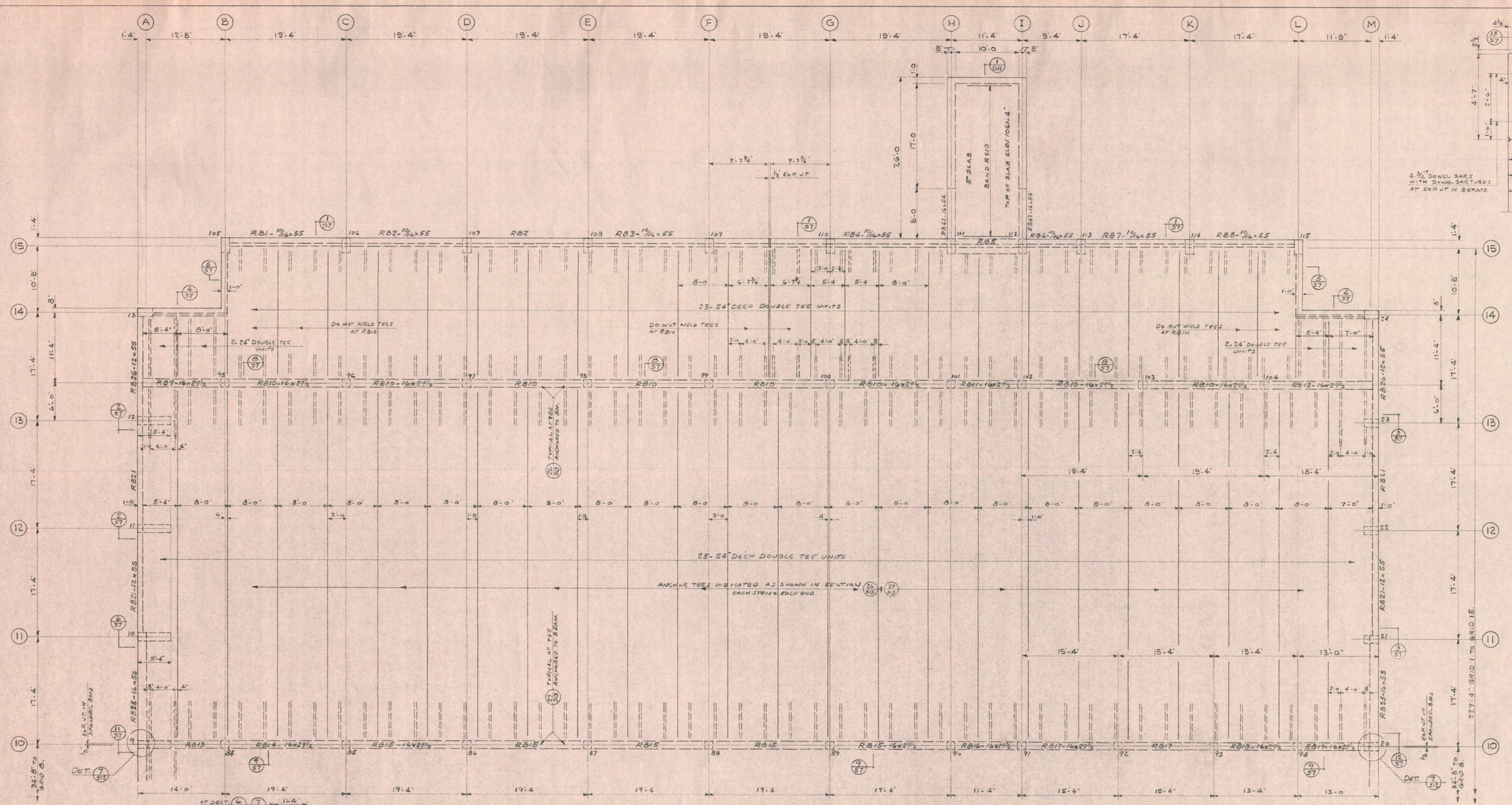
AN AUTHORIZED SIGNATURE



EDUCATION BUILDING ST. CLOUD STATE COLLEGE

TRAYNOR, HERMANSON & HAHN ARCHITECTS INC.
ST. CLOUD, MINNESOTA
STRUCTURAL ENGINEERS JOHNSTON & SAHLMAN, INC. MPLS., MINN.
CONSULTING ENGINEERS GAUSMAN & MOORE, INC. ST. PAUL, MINN.

SHEET NO. 57 OF 78

DRAWN J.D.+J.W.S. CHECKED J.W.S. DATE NOV. 10, 1969

STATE OF MINNESOTA
DEPARTMENT OF ADMINISTRATION
ARCHITECTURAL AND ENGINEERING DIVISION
ROOM G-10 ADMINISTRATION BUILDING
ST. PAUL 55101

STATE PROJECT NO. 6360150

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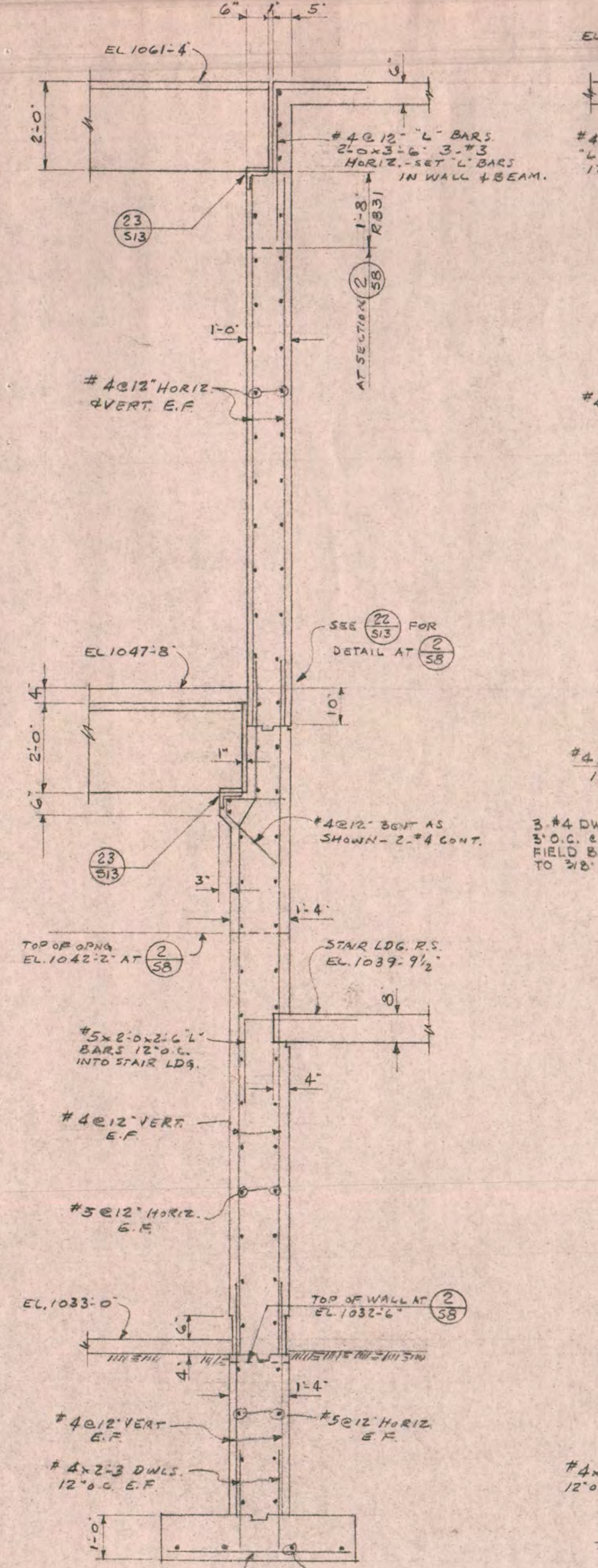
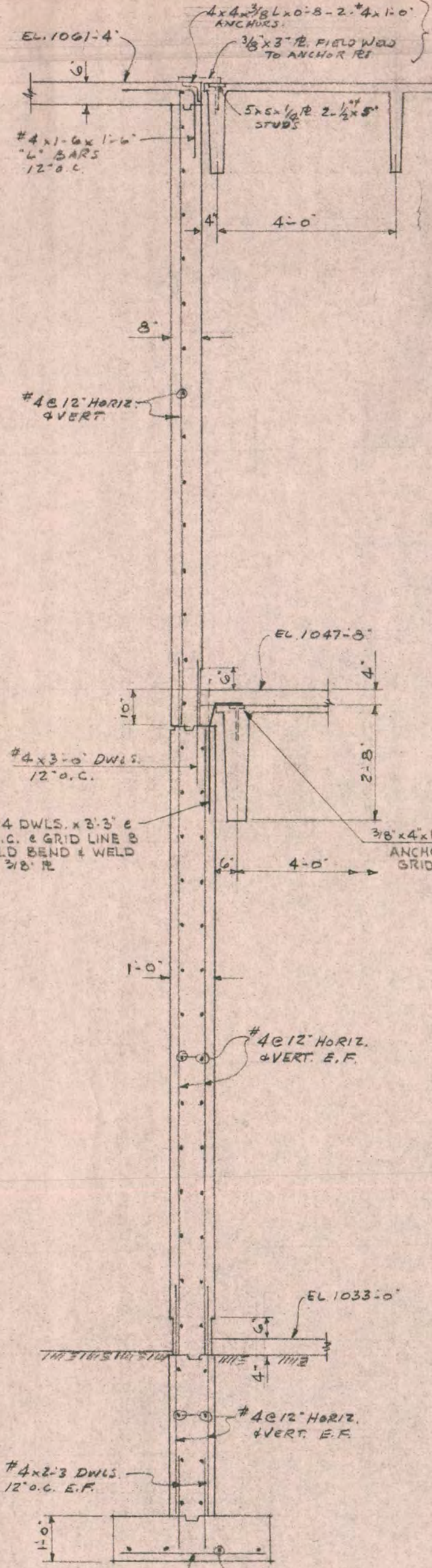
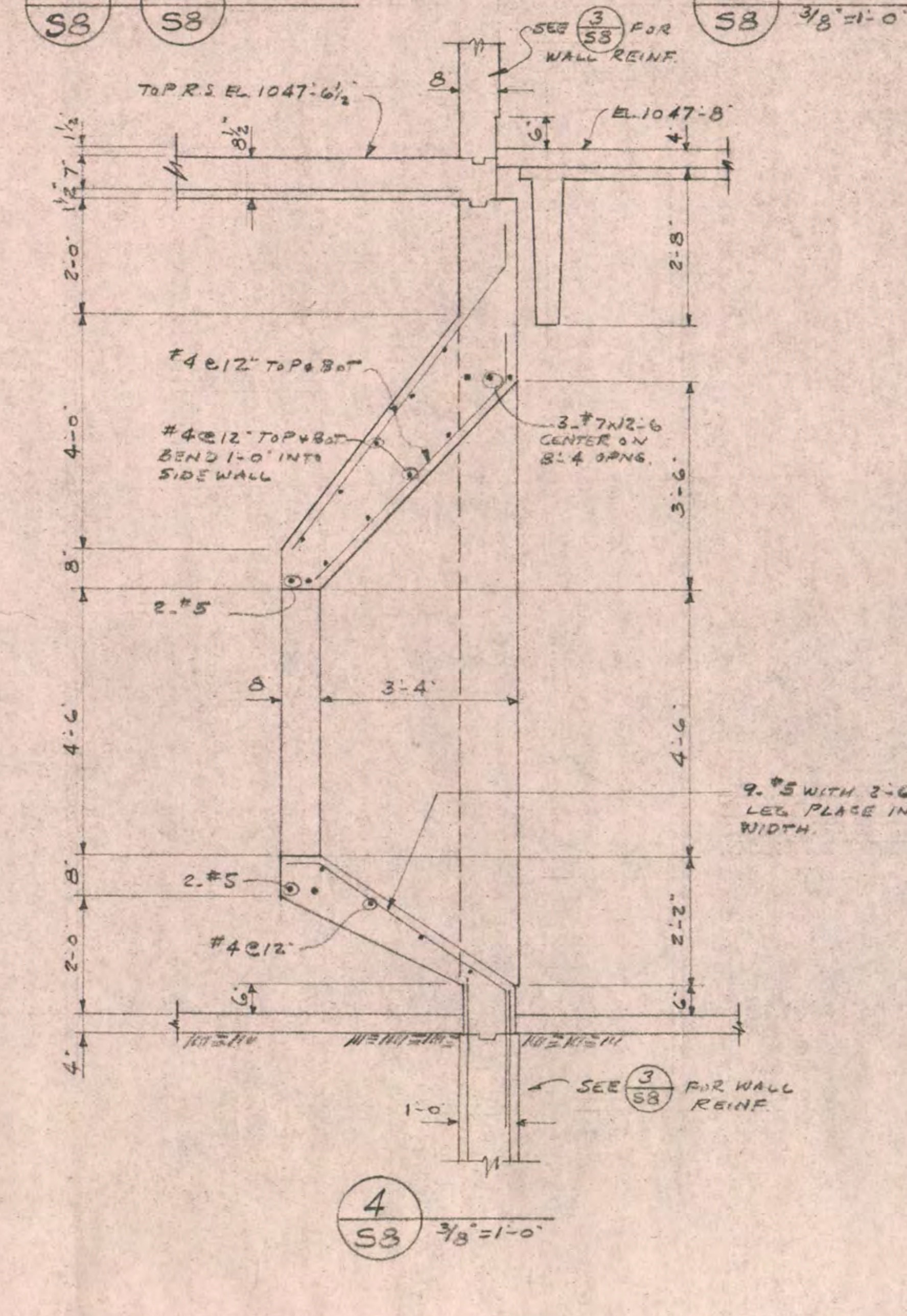


1/S8 2/S8



3/S8 3/8"=1'-0"



4/S8 3/8"=1'-0"

SLAB BAND REINFORCING SCHEDULE

Band	Top	Bottom
BAND 2S1	#5x12-0-12"o.c. TOP	#5x12-0-6"o.c. BOT.
BAND 2S2	#5x22-6-12"o.c. TOP	#5x17-9-6"o.c. BOT.
BAND 2S3	#6x26-9-12"o.c. TOP	#5x17-4-6"o.c. BOT.
BAND 2S4	#6x23-0-12"o.c. TOP	#6x17-6-6"o.c. BOTT.
BAND 2S5	#6x23-0-12"o.c. TOP	#6x17-6-6"o.c. BOT.
BAND 2S6	#6x23-0-12"o.c. TOP	#6x17-6-6"o.c. BOT.
BAND 2S7		#4x10-0-6"o.c. BOT.
BAND 2S8	#5x12-9-6"o.c. TOP	#4x11-9-6"o.c. BOT.
BAND 2S9	#4x16-0-6"o.c. TOP	#5x15-3-6"o.c. BOT.
BAND 2S10	#4x16-3-6"o.c. TOP	#5x15-3-6"o.c. BOT.
BAND 2S11	#5x20-3-6"o.c. TOP	#6x19-3-6"o.c. BOT.
BAND 2S12		#3x7-9-6"o.c. BOT.
BAND 2S13		#4x7-6-8"o.c. BOT.
BAND RS1	#5x23-3-12"o.c. TOP	#5x17-6-6"o.c. BOT.
BAND RS2	#5x23-3-12"o.c. TOP	#5x17-6-6"o.c. BOT.
BAND RS3 (4-9)	#4x16-6-12"o.c. TOP	#4x9-6-6"o.c. BOT.
BAND RS4	#3x10-9-12"o.c. TOP	#3x8-0-6"o.c. BOT.
BAND RS5	#3x11-0-12"o.c. TOP	#3x7-8-6"o.c. BOT.
BAND RS6 (2-6)	#4x16-6-12"o.c. TOP	#3x11-0-6"o.c. BOT.
BAND RS7	#4x13-6-12"o.c. TOP	#3x10-3-6"o.c. BOT.
BAND RS8	#6x24-6-12"o.c. TOP	#5x18-9-6"o.c. BOT.
BAND RS9	#4x16-0-12"o.c. TOP	#4x10-3-6"o.c. BOT.
BAND RS10		#4x12-0-7"o.c. BOT.

SECOND FLOOR CONCRETE BEAM SCHEDULE

MARK	SIZE B	SIZE D	No.	SIZE	LENGTH	TOP	BOT.	W or S	℄ OF SUPPORT	E or N	STIRRUPS No.	SIZE	SPACING EA. END	REMARKS
2B1	10½	38	2 3	#7 #7	25-9 19-6	✓	✓				14	#3	3@8, 4@12 TIES	PROVIDE 2-#4 HORIZ. E.F. EXTRA - SEE SECTION
2B2	10½	38	2 3	#7 #7	29-9 19-4	✓	✓				14	#3	do	do
2B3	10½	38	1 1 3	#7 #7 #7	29-9 25-9 19-4	✓ ✓	✓				14	#3	do	do
2B4	20/28	66	1 5	#10 #6	19-6 11-9	✓	✓			3-0	6	#3	3@12 TIES	SEE STAIR SECTION 1/S11 FOR EXTRA REINF.
2B5	10½	38	1 1 3	#7 #7 #7	17-9 14-3 9-4	✓ ✓	✓			4-9	6	#3	3@12 TIES	do 2B1
2B6	10½	38	2 3	#7 #7	26-9 17-4	✓	✓				12	#3	3@8, 3@12 TIES	do 2B1
2B7	10½	38	2 3	#7 #7	23-0 17-6	✓	✓				12	#3	do	do 2B1
2B8	16	29½	3 4	#8 #8	18-6 12-2	✓	✓				8	#4	4@12 TIES	PROVIDE 2-#5 HORIZ. E.F. EXTRA PLACE TOP BARS IN 2 LAYERS OVER COLS.
2B9	16	29½	3 4	#9 #10	31-0 19-4	✓	✓	6-6			20	#4	6@8, 4@12 TIES	do
2B10	16	29½	3 4	#9 #9	29-9 19-4	✓	✓				20	#4	do	do
2B11	16	29½	3 4	#8 #8	29-9 11-4	✓	✓				6	#4	3@12 TIES	do
2B12	16	29½	3 4	#9 #9	23-0 16-6	✓	✓				18	#4	6@8, 3@12 TIES	do
2B13	16	29½	3 3	#8 #9	16-3 10-0	✓	✓			5-3	6	#4	3@12 TIES	do
2B14	16	29½	3 3	#9 #10	31-0 19-4	✓	✓	6-6			18	#4	5@8, 4@12 TIES	do
2B15	16	29½	3 3	#8 #10	29-9 19-4	✓	✓				18	#4	5@8, 4@12 TIES	do
2B16	16	29½	3 3	#7 #9	20-9 11-4	✓	✓	4-3			6	#4	3@12 TIES	do
2B17	16	29½	3 3	#7 #8	23-9 15-4	✓	✓				16	#4	5@8, 3@12 TIES	do
2B18	16	29½	3 3	#7 #8	21-2 13-4	✓	✓	4-3			12	#4	4@8, 2@12 TIES	do
2B19	16	29½	3 3	#6 #8	16-6 12-0	✓	✓				10	#4	3@8, 2@12 TIES	do
2B20	16	29½	3 3	#7 #8	16-0 10-0	✓	✓				6	#4	3@12 TIES	do
2B21	16	29½	3 4	#8 #8	30-6 19-4	✓	✓	6-0			14	#4	3@8, 4@12 TIES	do
2B22	16	29½	3 4	#8 #8	29-9 19-4	✓	✓				14	#4	3@8, 4@12 TIES	do SEE SECTION 16/S13 FOR DWLS. INTO 2B52.
2B23	16	29½	3 4	#7 #8	20-9 11-4	✓	✓	4-3			6	#4	3@12 TIES	do
2B24	16	29½	3 4	#7 #8	23-9 15-4	✓	✓				16	#4	6@8, 2@12 TIES	do
2B25	16	29½	3 3 4	#8 #7 #8	24-0 4-6 15-6	✓	✓ ✓				14	#4	5@8, 2@12 TIES	TOP BARS HK. @ END OF 1-10 DEEP CANTILEVER. PROVIDE #3 TIES 5@8" IN CANT. do 2B8
2B26	16	29½	3 4	#8 #8	18-9 16-9	✓	✓				8	#4	4@12 TIES	TIES TO BE FOR 16x28½ BM. SEE PLAN-TOP HEAD DN. 1" AT 5-6" DIMENSION
2B27	16	22	3 3	#8 #10	18-0 16-0						12	#3	3@8, 3@12 TIES	
2B28	16	30	3 4	#8 #9	30-9 23-6						12	#3	4@12, 2@24 TIES	
2B29	16	30	3 4	#8 #9	30-9 23-6						12	#3	do	
2B30	8	66	1 2	#8 #8	23-3 17-9	✓	✓				12	#3	6@12 TIES	PROVIDE 4-#4 HORIZ. EXTRA
2B31	16	64½	1 2 4	#8 #7 #8	23-3 19-9 17-9						9	#3	2@4 NORTH END, 3@12 SOUTH END, 2 BETWEEN EACH OPNG.	PROVIDE 2-#5 HORIZ. E.F. EXTRA ABOVE OPNGS. + 3-#5 EXTRA TOP + BOT. AT OPNGS. SEE SECTION 19/S13
2B32	24	29½	3 5	#7 #6	20-0 7-6	✓	✓				4	#3	2@12	HK. TOP BAR @ COL. 72+19 SEE SECTION 1/S12
2B33	12/16	31	3	#7	11-6		✓				6	#3	3@12	TIES TO BE FABR. FOR 12" WIDE BEAM.
2B34	16	66	2 4	#8 #7	23-3 17-9	✓	✓				10	#3	3@12, 2@24 TIES	PROVIDE 3-#5 HORIZ. E.F. EXTRA
2B35	16	64½	2 4	#8 #7	23-3 17-9	✓	✓				10	#3	do	do
2B36	12/16	31	3 3	#10 #11	25-0 22-6	✓	✓				12	#3	3@8, 3@12 TIES	
2B37	12/16	64½	3	#7	11-0		✓							SEE WALL SECT. FOR ADD'N REINF. ABOVE OPNG. (6-4 WIDE OPNG)
2B38	8	17	2 2	#5 #6	9-6 8-6	✓	✓				6	#3	3@12 TIES	
2B39	12	56	2 3	#7 #8	23-3 17-9	✓	✓					#3	12"o.c. TIES	PROVIDE 3-#4 HORIZ. E.F. EXTRA
2B40	12	56	2 3	#7 #8	23-3 17-9	✓	✓					#3	12"o.c. TIES	do
2B41	12	64½	1 1 3	#9 #7 #8	26-9 23-3 17-4	✓ ✓	✓					#3	12"o.c. TIES	PROVIDE 3-#4 HORIZ. E.F. EXTRA
2B42	12	64½	1 1 3	#9 #7 #8	26-9 23-3 17-4	✓ ✓	✓					#3	do	do
2B43	10½	56	1 3	#10 #8	23-6 17-6	✓	✓					#3	12"o.c. TIES	PROVIDE 4-#4 HORIZ. EXTRA E.F.
2B44	10½	56	1 3	#9 #7	26-9 17-4	✓	✓					#3	do	do
2B45	10½	56	1 3	#9 #7	26-9 17-4	✓	✓					#3	do	do
2B46	10½	56	1 3	#9 #7	26-9 17-4	✓	✓					#3	do	do
2B47	10½	56	1 3	#10 #8	23-6 17-6	✓	✓					#3	do	do
2B48	20	12	4 7	#6 #6	13-0 11-6	✓	✓				8	#3	2@8, 2@12 TIES	
2B49	16	18	3 3	#7 #7	23-6 22-0	✓	✓					#3	12"o.c. TIES	TIE BEAM
2B50	16	18	3 3	#6 #6	13-3 11-9	✓	✓					#3	12"o.c. TIES	TIE BEAM
2B51	16	66	3 3	#6 #7	12-0 11-0	✓	✓	1-6		1-6		#3	12"o.c. TIES	PROVIDE 3-#5 HORIZ. E.F. EXTRA
2B52	15	24	3 3	#6 #7	11-3 9-9	✓	✓					#3	12"o.c. TIES	
2B53	8	62	2 2	#7 #9	19-6 18-0	✓	✓					#3	12"o.c. TIES	PROVIDE 3-#4 HORIZ. EXTRA

ROOF CONCRETE BEAM SCHEDULE

MARK	SIZE B	SIZE D	No.	SIZE	LENGTH	TOP	BOT.	W or S	℄ OF SUPPORT	E or N	STIRRUPS No.	SIZE	SPACING EA. END	REMARKS
RB1	10/16	55	2 3	#7 #8	25-9 19-6	✓	✓					#3	12"o.c. TIES	PLACE TOP BARS IN 2 LAYERS AT COLUMNS. SEE SECTION 1/S7 FOR ADD'N REINFORCING.
RB2	10/16	55	2 3	#7 #8	29-9 19-4	✓	✓					#3	do	do
RB3	10/16	55	2 2 3	#7 #7 #8	34-0 19-9 28-9	✓ ✓	✓					#3	do	do TOP BARS HOOK AT EXP. JOINT
RB4	10/16	55	2 2 3	#7 #7 #8	34-0 19-9 28-9	✓ ✓	✓					#3	do	do TOP BARS HOOK AT EXP. JOINT
RB5	10/28	54	2 4	#7 #6	19-6 11-4	✓	✓			3-0		#3	do	PLACE TOP BARS IN 2 LAYERS AT COLS. SEE SECTION 1/S11 FOR ADD'N. REINF.
RB6	10/16	55	2 3	#7 #8	17-9 9-4	✓	✓			4-9		#3	do	do RB1
RB7	10/16	55	2 3	#7 #8	26-9 17-4	✓	✓					#3	do	do
RB8	10/16	55	2 3	#7 #8	23-0 17-6	✓	✓					#3	do	do
RB9	16	29½	2 4	#8 #7	20-0 13-9	✓	✓				6	#4	2@12, 1@24 TIES	PROVIDE 2-#5 HORIZ. E.F. EXTRA
RB10	16	29½	2 4	#9 #8	29-9 19-4	✓	✓				10	#4	3@12, 2@24 TIES	do
RB11	16	29½	2 4	#8 #7	21-9 11-4	✓	✓				3	#4	2@12, 1@24 TIES	do
RB12	16	29½	2 4	#8 #8	24-3 18-0	✓					8	#4	2@12, 2@24 TIES	do
RB13	16	29½	2 4	#8 #7	18-6 12-3	✓	✓				6	#4	3@12 TIES	do
RB14	16	29½	3 4	#8 #9	29-9 19-4	✓	✓				16	#4	5@8, 3@12 TIES	do
RB15	16	29½	3 4	#8 #9	29-9 19-4	✓	✓				16	#4	do	do
RB16	16	29½	3 4	#8 #8	20-9 11-4	✓	✓	4-3			6	#4	3@12 TIES	do
RB17	16	29½	3 4	#7 #8	23-9 15-4	✓	✓				12	#4	3@8, 3@12 TIES	do
RB18	16	29½	3 4	#7 #8	21-2 13-4	✓	✓	4-3			8	#4	4@12 TIES	do
RB19	16	29½	3 4	#7 #7	15-9 11-3	✓	✓				6	#4	3@12 TIES	do
RB20	12	55	2 3	#8 #8	23-3 17-6	✓	✓					#3	12"o.c. TIES	PROVIDE 3-#4 HORIZ. E.F. EXTRA
RB21	12	55	2 3	#7 #8	26-9 17-4	✓						#3	do	do
RB22	16	55	2 2 3	#7 #6 #8	23-3 19-9 17-2	✓ ✓	✓					#3	do	TOP BARS HOOK AT EXP. JOINT PROVIDE 3-#6 HORIZ. E.F. EXTRA
RB23	16	55	2 2 3	#7 #6 #8	23-3 19-9 17-2	✓ ✓	✓					#3	do	do
RB24	16	55	2 2 3	#7 #6 #8	23-3 19-9 17-2	✓ ✓	✓					#3	do	do
RB25	16	55	2 2 3	#7 #6 #8	23-3 19-9 17-2	✓ ✓	✓					#3	do	do
RB26	12	55	2 3	#7 #8	23-3 17-6	✓	✓					#3	do	PROVIDE 3-#4 HORIZ. E.F. EXTRA
RB27	12	55	2 3	#8 #8	23-3 17-6	✓	✓					#3	do	do
RB28	16	55	2 2 3	#7 #6 #8	23-3 19-9 17-2	✓ ✓	✓					#3	do	TOP BARS HOOK AT EXP. JOINT. PROVIDE 3-#5 HORIZ. E.F. EXTRA
RB29	16	55	3 3	#8 #9	20-6 18-0	✓	✓					#3	do	1-0 BEARING ON WALL PROVIDE 3-#5 HORIZ. E.F. EXTRA
RB30	16	55	3 3	#8 #9	20-6 18-0	✓	✓					#3	do	1-0" BEARING ON WALL PROVIDE 3-#5 HORIZ. E.F. EXTRA.
RB31	12	20	3 4	#6 #6	13-0 11-6	✓	✓				6	#3	3@12 TIES	SEE SECTION 2/S8
RB32	16	24	4 5	#8 #9	25-6 23-8	✓	✓				12	#3	3@8, 3@24 TIES	8" BEARING ON WALL.
RB33	16	14½	3 3	#5 #6	12-3 11-3	✓	✓				6	#3	3@8 TIES	FULL BEARING ON WALL EA. END
RB34	8	54	1 2	#8 #8	23-3 17-9	✓	✓				12	#3	6@12 TIES	1-4" BEARING ON WALL PROVIDE 3-#4 HORIZ. EXTRA
RB35	16	54	1 2 3	#8 #7 #8	23-3 19-9 17-9	✓ ✓	✓				12	#3	6@12 TIES	1-4" BEARING ON WALL PROVIDE 3-#5 HORIZ. E.F. EXTRA
RB36	16	54	2 4	#8 #8	23-3 17-9	✓	✓				12	#3	6@12 TIES	do
RB37	16	54	2 4	#8 #8	23-3 17-9	✓	✓				12	#3	6@12 TIES	do
RB38	16	53	4 4	#8 #9	37-6 35-6	✓	✓					#3	12"o.c. TIES	do
RB39	16	54	2 3	#7 #7	11-3 7-6	✓	✓				4	#3	2@12 TIES	PROVIDE 3-#5 HORIZ. E.F. EXTRA
RB40	16	54	2 3	#7 #7	18-6 11-6	✓	✓	3-0			8	#3	4@12 TIES	do
RB41	16	53	2 3	#7 #7	14-3 10-0	✓	✓				6	#3	3@12 TIES	do
RB42	16	54	3 3	#6 #7	12-0 11-0	✓	✓	1-6		1-6		#3	12"o.c. TIES	PROVIDE 3-#5 HORIZ. E.F. EXTRA

BEAM & SLAB REINFORCING SCHEDULES

EDUCATION BUILDING ST. CLOUD STATE COLLEGE

TRAYNOR, HERMANSON & HAHN ARCHITECTS INC.
ST. CLOUD, MINNESOTA
STRUCTURAL ENGINEERS JOHNSTON & SAHLMAN, INC. MPLS., MINN.
CONSULTING ENGINEERS GAUSMAN & MOORE, INC. ST. PAUL, MINN.
DRAWN J.W.S. CHECKED J.W.S. DATE NOV. 10, 1969

SHEET NO. S8 OF 13

STATE OF MINNESOTA
DEPARTMENT OF ADMINISTRATION
ARCHITECTURAL AND ENGINEERING DIVISION
ROOM G-10 ADMINISTRATION BUILDING
ST. PAUL 55101

STATE PROJECT NO. 6360150

APPROVED BY ____________
APPROVED BY ____________
APPROVED BY ____________
COMMISSIONER OF ADMINISTRATION
AN AUTHORIZED SIGNATURE

3-#6 CONT. TOP & BOT. LAP TOP BARS 1'-6" AT & OF SPAN. #3 TIES 24" O.C.

3-#7x12'-6" EXTRA

COLUMN CONSTR. JOINT

CONST. JT. EL. 1041'-8"

EL. 1046'-10"

3-#6x12'-0" EXTRA

#5 @ 7" ALT. ST. & BNT.

#3 @ 9" TEMP.

#4 @ 12" HOR. & VERT. E.F.

#4 x 2'-3" DWLS. @ 12" E.F.

EL. 1033'-6"

EL. 1033'-0"

10'-4"

2-#5

1 / S9 3/8"=1'-0

REINF. AS COLUMN-SEE SCHEDULE SHEET S3. REMAINDER TO BE REINF. AS WALL-SEE 4/S9 FOR REINF.

2'-4" COLS. G & B

REINF. SAME AS WALL SEE SECTION 4/S9

2'-4" COL. NO 3

REINF. AS COLUMN SEE SCHEDULE SHEET S3

2 / S9

#4 x 2'-0" x 2'-0" L BARS 12" O.C.

SEE 4/S9

3 / S9 3/8"=1'-0

#5 @ 12" HOR. E.F.

#4 @ 12" VERT. E.F.

EL. VARIES

EL. 1032'-3"

#4 x 2'-3" DWLS. @ 12" E.F.

4 / S9 3/8"=1'-0

CONSTR. JT. EL. 1032'-3

5 / S9 3/8"=1'-0

11'-6" LONG AT SECT 6A/S9

3-#7x2'-0"x10'-6" BARS AT 6A/S9

#4 @ 12" VERT. O.F.

#6 @ 12" VERT. I.F.

#4 x 2'-3" DWLS. 12" O.C.

#6 @ 12"

4-#8 CONT.

6 / S9

6A / S9 3/8"=1'-0

8'x12"x 5/8" PL WITH 4-#4 x 1'-3" ANCS. 6" O.C. EA. WAY AT EA. PAIR OF TEE STEMS BY STRUCT. FIELD WELD TO TEES

#4 @ 12" HORIZ. E.F.

#4 @ 12" VERT. E.F.

#5 @ 12" BENT AS SHOWN - 2'-5" CONT.

#4 x 3'-6" DWLS. 12" O.C. E.F.

7 / S9 3/8"=1'-0

3'-4" LONG AT SECTION 8A/S9

3-#7x2'-0"x15'-3" L BARS AT SECTION 8A/S9

#4 @ 12" VERT. O.F.

#6 @ 12" VERT. I.F.

#4 @ 12" HOR. E.F.

#6 x 2'-6" DWLS. @ 12" I.F.

#4 x 2'-3" DWLS. @ 12" O.F.

8 / S9

8A / S9 3/8"=1'-0

#5 x 2'-6" DWLS. @ 12" I.F.

#4 x 2'-3" DWLS. @ 12" O.F.

9 / S9 3/8"=1'-0

#5 @ 7" ALT. ST. & BNT.

#5 @ 12" TEMP.

#4 @ 12" HOR. & VERT. E.F.

#4 x 2'-3" DWLS. @ 12" E.F.

EL. 1023'-8"

10 / S9 3/8"=1'-0

2'-4" COL.

#8 x 6'-0" G.O.C. FORM UNDERSIDE OF TEE & FILL WITH TOPPING

EL. 1045'-2"

3-#6x12'-0" EXTRA OVER OP NG

OMIT EAST LAYER OF REINF. AT WINDOW OPNG - SEE ARCH'L PLAN & DETAILS.

#4 @ 12" HORIZ. & VERT. E.F.

#4 x 2'-2 DWLS 12" O.C. E.F.

13 / S9 3/8"=1'-0

#4 @ 12" HORIZ & VERT

#4 x 2'-3 DWLS 12" O.C.

14 / S9 3/8"=1'-0

2'-6 1/2" COL.

#5 @ 12" "L" BARS 2'-9" VERT. LEG.

#4 @ 12" H. & V E.F.

#4 x 2'-3 DWLS 12" O.C. E.F.

15 / S9 3/8"=1'-0

5'-4" COL.

SEE 11/S9 FOR REINF.

12 / S9 3/8"=1'-0

#6 @ 12" VERT. E.F.

TOP OF DWLS EL. 1030'-0"

#4 @ 12" HORIZ. E.F.

#4 x 2'-3 DWLS. 12" O.C. E.F.

16 / S9 3/8"=1'-0

3'-6"x8'-6" BOT. 2'-8"x1'-3" KEY E.F. TOP 3-#3 TIES 12" O.C. 1'-0" BEARING AT NORTH & S.

EL. 1033'-0"

17 / S9 3/8"=1'-0

2'-0" TOP SIZE 1'-3" 2-#5 x 4'-3" BOT.

DUST CAP

POUR WITH COL. 4 BM. E. 17/S9

18 / S9 3/8"=1'-0

SECTIONS & DETAILS SCALE - AS NOTED

EDUCATION BUILDING ST. CLOUD STATE COLLEGE

TRAYNOR, HERMANSON & HAHN ARCHITECTS INC.
ST. CLOUD, MINNESOTA
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CONSULTING ENGINEERS GAUSMAN & MOORE, INC. ST. PAUL, MINN.

SHEET NO. S9 OF 18

DRAWN J.D. & J.W.S. CHECKED J.W.S. DATE NOV. 10, 1969

STATE OF MINNESOTA
DEPARTMENT OF ADMINISTRATION
ARCHITECTURAL AND ENGINEERING DIVISION
ROOM G-10 ADMINISTRATION BUILDING
ST. PAUL 55101

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