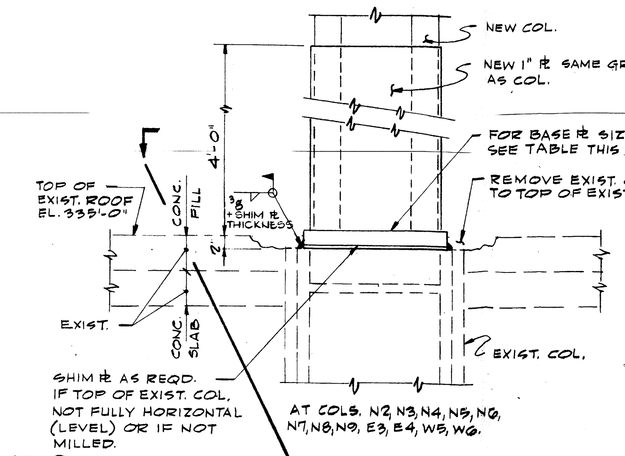
COL. NO. / FLOOR	61	61A	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	78A	79	80	81	E_3	E_4
22ND FL. 141'-9"	W14 A1048	× 500*		A1148 × 311*		A1148 × 342*		A1148 × 455*		A1148 × 176*		A1148 × 283*		A1148 × 500*		A1148 × 283*		A1148 × 370*		A1148 × 605*		A1148 × 426*		A1148 × 455*		A1148 × 730*		W14×730 + 2 SIDE & A1GS		W14 A1066	× 730*	W14 A1067	× 665*		
21ST FL. 141'-9"	W14 A1048	× 500*		A1148 × 311*		A1148 × 342*		A1148 × 455*		A1148 × 176*		A1148 × 283*		A1148 × 500*		A1148 × 283*		A1148 × 370*		A1148 × 605*		A1148 × 426*		A1148 × 455*		A1148 × 730*		W14×730 + 2 SIDE & A1GS		W14 A1066	× 730*	W14 A1067	× 665*		
20TH FL. 132'-9"	W14 A1035	× 500*		A1032 × 342*		A1032 × 370*		A1130 × 500*		A1130 × 176*		A1130 × 283*		A1133 × 500*		A1135 × 398*		A1135 × 605*		A1136 × 426*		B1130 × 500*		A1136 × 455*		W14×730 + 2 WEB & A1151	12'-2"	W14×730 + 2 SIDE & A1GS	26'-1"	W14 A1066	× 730*	W14 A1067	× 665*		
19TH FL. 122'-9"	W14 A1035	× 605*		A1032 × 370*		A1032 × 398*		A1130 × 550*		A1205 × 193*		A1130 × 455*		B1130 × 550*		W14×730 + 2 WEB & A1151	12'-2"	W14×730 + 2 WEB & A1140	12'-1"	W14 A1141	× 550*	W14 A1141	× 650*			W14×730 + 2 SIDE & A1GS	26'-1"	W14 A1066	× 730*	W14 A1067	× 665*		
18TH FL. 112'-9"	W14 A1034	× 605*		A1071 × 370*		A1031 × 398*		A1111 × 550*		B1104 × 193*		A1111 × 455*		B1111 × 550*		W14×730 + 2 WEB & A1152	12'-2"	W14×730 + 2 WEB & A1124	12'-2"	W14 A1124	× 605*	W14 A1126	× 605*			W14×730 + 2 SIDE & A1GS	26'-1"	W14 A1066	× 730*	W14 A1067	× 665*		
17TH FL. 102'-9"	W14 A1034	× 605*		A1071 × 398*		A1031 × 426*		A1111 × 550*		B1104 × 193*		A1111 × 455*		B1111 × 550*		W14×730 + 2 WEB & A1152	12'-2"	W14×730 + 2 WEB & A1124	12'-2"	W14 A1124	× 605*	W14 A1126	× 605*			W14×730 + 2 SIDE & A1GS	26'-1"	W14 A1066	× 730*	W14 A1067	× 665*		
16TH FL. 92'-9"	W14 A1033	× 605*		A1070 × 398*		A1030 × 426*		A1046 × 550*		B1074 × 193*		A1099 × 455*		B1099 × 550*		W14×730 + 2 WEB & A1121	12'-2"	W14×730 + 2 WEB & A1105	12'-2"	W14 A1105	× 605*	W14 A1125	× 605*			W14×730 + 2 SIDE & A1GS	26'-2"	W14 A1066	× 730*	W14 A1067	× 665*		
15TH FL. 82'-9"	W14 A1033	× 605*		A1070 × 398*		A1030 × 426*		A1046 × 550*		B1074 × 193*		A1099 × 455*		B1099 × 550*		W14×730 + 2 WEB & A1121	12'-2"	W14×730 + 2 WEB & A1105	12'-2"	W14 A1105	× 605*	W14 A1125	× 605*			W14×730 + 2 SIDE & A1GS	26'-2"	W14 A1066	× 730*	W14 A1067	× 665*		
14TH FL. 72'-9"	W14 A1048	× 665*		A1052 × 426*		A1024 × 426*		A1046 × 605*		A1046 × 211*		A1090 × 398*		A1090 × 605*		W14×730 + 2 WEB & A1043	12'-2"	W14×730 + 2 WEB & A1077	12'-2"	W14 A1065	× 665*	W14 A1064	× 665*			W14×730 + 2 SIDE & A1GS	26'-2"	W14 A1066	× 730*	W14 A1067	× 665*		
13TH FL. 62'-9"	W14 A1048	× 665*		A1052 × 426*		A1024 × 455*		A1089 × 605*		A1046 × 211*		A1090 × 398*		A1090 × 605*		W14×730 + 2 WEB & A1043	12'-2"	W14×730 + 2 WEB & A1077	12'-2"	W14 A1065	× 665*	W14 A1064	× 665*			W14×730 + 2 SIDE & A1GS	26'-2"	W14 A1066	× 730*	W14 A1067	× 665*		
12TH FL. 52'-9"	W14 A1021	× 665*		A1051 × 426*		A1023 × 455*		A1098 × 605*		A1055 × 211*		A1091 × 398*		A1091 × 605*		W14×730 + 2 WEB & A1042	12'-2"	W14×730 + 2 WEB & A1076	12'-2"	W14 A1065	× 665*	W14 A1063	× 665*			W14×730 + 2 SIDE & A1GS	26'-2"	W14 A1066	× 730*	W14 A1067	× 665*		
11TH FL. 42'-9"	W14 A1021	× 665*		A1051 × 455*		A1023 × 455*		A1098 × 605*		A1055 × 211*		A1091 × 398*		A1091 × 665*		W14×730 + 2 WEB & A1042	12'-2"	W14×730 + 2 WEB & A1076	12'-2"	W14 A1065	× 665*	W14 A1063	× 665*			W14×730 + 2 SIDE & A1GS	26'-2"	W14 A1066	× 730*	W14 A1067	× 665*		
10TH FL. 32'-9"	W14 A1021	× 730*		A1051 × 455*		A1023 × 455*		A1098 × 665*		A1055 × 233*		A1091 × 426*		A1091 × 730*		W14×730 + 2 WEB & A1042	12'-2"	W14×730 + 2 WEB & A1076	12'-2"	W14 A1065	× 730*	W14 A1063	× 730*			W14×730 + 2 SIDE & A1GS	26'-3"	W14 A1066	× 730*	W14 A1067	× 665*		
9TH FL. 19'-9"	W14 A1026	× 730*		A1050 × 455*		A1021 × 665*		A1044 × 730*		A1055 × 233*		A1091 × 426*		B1091 × 730*		W14×730 + 2 WEB & A1042	12'-2"	W14×730 + 2 WEB & A1078	12'-2"	W14 A1061	× 730*	W14 A1062	× 730*			W14×730 + 2 SIDE & A1GS	26'-3"	W14 A1066	× 730*	W14 A1067	× 665*		
8TH FL. 12'-9"	W14 A1026	× 730*		A1050 × 455*		A1021 × 500*		A1044 × 665*		A1055 × 233*		A1091 × 426*		B1091 × 730*		W14×730 + 2 WEB & A1042	12'-2"	W14×730 + 2 WEB & A1078	12'-2"	W14 A1061	× 730*	W14 A1062	× 730*			W14×730 + 2 SIDE & A1GS	26'-3"	W14 A1066	× 730*	W14 A1067	× 665*		
7TH FL. 12'-9"	W14 A1026	× 730*		A1050 × 455*		A1021 × 500*		A1044 × 665*		A1055 × 233*		A1091 × 426*		B1091 × 730*		W14×730 + 2 WEB & A1042	12'-2"	W14×730 + 2 WEB & A1078	12'-2"	W14 A1061	× 730*	W14 A1062	× 730*			W14×730 + 2 SIDE & A1GS	26'-3"	W14 A1066	× 730*	W14 A1067	× 665*		
6TH FL. 12'-9"	W14 A1026	× 730*		A1050 × 455*		A1021 × 500*		A1044 × 665*		A1055 × 233*		A1091 × 426*		B1091 × 730*		W14×730 + 2 WEB & A1042	12'-2"	W14×730 + 2 WEB & A1078	12'-2"	W14 A1061	× 730*	W14 A1062	× 730*			W14×730 + 2 SIDE & A1GS	26'-3"	W14 A1066	× 730*	W14 A1067	× 665*		
5TH FL. 18'-0"	W14 A1026	SEE TH U44 #3 @ 5-23 DWG.		SEE TH U44 #3 @ 5-23 DWG.		W14 A1026	500*	W14 A1026	730*	W14 A1026	665*	W14 A1026	730*	W14 A1026	730*	W14 A1026	730*	W14 A1026	730*	W14 A1026	730*	W14 A1026	730*	W14 A1026	730*	W14×730 + 2 WEB & A1078	12'-2"	W14×730 + 2 SIDE & A1GS	26'-3"	W14 A1066	× 730*	W14 A1067	× 665*		
4TH FL. 14'-3"	W14 A1026	900*	W14×730 + 2 WEB & A1078	W14 A1026	550*	W14 A1026	730*	W14 A1026	730*	W14 A1026	730*	W14 A1026	730*	W14 A1026	730*	W14 A1026	730*	W14 A1026	730*	W14 A1026	730*	W14 A1026	730*	W14 A1026	730*	W14×730 + 2 WEB & A1078	12'-2"	W14×730 + 2 SIDE & A1GS	26'-3"	W14 A1066	× 730*	W14 A1067	× 665*		
3RD FL. 14'-0"	W14 A1026	900*	W14×730 + 2 WEB & A1078	W14 A1026	550*	W14 A1026	730*	W14 A1026	730*	W14 A1026	730*	W14 A1026	730*	W14 A1026	730*	W14 A1026	730*	W14 A1026	730*	W14 A1026	730*	W14 A1026	730*	W14 A1026	730*	W14×730 + 2 WEB & A1078	12'-2"	W14×730 + 2 SIDE & A1GS	26'-3"	W14 A1066	× 730*	W14 A1067	× 665*		
2ND FL. 11'-1½"	EXIST. COL.		W14×730 + 2 WEB & A1078	EXIST. COL.		W14×730 + 2 WEB & A1078		EXIST. COL.		W14×730 + 2 WEB & A1078		W14×730 + 2 WEB & A1078		W14×730 + 2 WEB & A1078		W14×730 + 2 WEB & A1078		W14×730 + 2 WEB & A1078		W14×730 + 2 WEB & A1078		W14×730 + 2 WEB & A1078		W14×730 + 2 WEB & A1078		W14×730 + 2 WEB & A1078		EXIST. COL.		EXIST. COL.			
1ST FL. 0'-0" ⑥ DIMENSION TO BOTTOM OF BASE PLATE FROM REFERENCE EL.	EL. 3001.50	1128 (648)	1-W14×730 + 2 WEB PL. 12"×3"	1809	W14×730	1809	W14×730	4108	W14×730	9713 (429)	W14×730	1873	W14×730	3501	W14×730 + 2 WEB PL. 12"×3"	6266 (737)	W14×730	2865	W14×730 + 2 WEB PL. 12"×3"	4350 (638)	W14×730	2804	W14×730	4000	W14×730 + 2 WEB PL. 12"×3"	10865 (679)	W14×730 + 2 WEB PL. 12"×3"	5472	W14×730 + 2 WEB PL. 12"×3"	5842	W14×730 + 2 WEB PL. 12"×3"	9875 (568)	W14×730 + 2 WEB PL. 12"×3"	9875	W14×730 + 2 WEB PL. 12"×3"	6-#5	W14×730 + 2 WEB PL. 12"×3"	6-#5	W14×730 + 2 WEB PL. 12"×3"	15'-1"	W14×730 + 2 WEB PL. 12"×3"	4921 (568)	EXIST. COL.	7941 (968)	EXIST. COL.	
FIRST DIMENSION PARALLEL TO WEB BASE PLATE		1'-8"	W14×730 + 2 WEB PL. 12"×3"	1'-8"	W14×730	1'-8"	W14×730	2'-4"	W14×730	1'-8"	W14×730	1'-8"	W14×730	1'-8"	W14×730	1'-8"	W14×730	1'-8"	W14×730	1'-8"	W14×730	1'-8"	W14×730	1'-8"	W14×730	1'-8"	W14×730	1'-8"	W14×730	1'-8"	W14×730	1'-8"	W14×730	1'-8"	W14×730	1'-8"	W14×730	1'-8"				
			W14×730 + 2 WEB PL. 12"×3"		W14×730		W14×730		W14×730		W14×730		W14×730		W14×730 + 2 WEB PL. 12"×3"		W14×730		W14×730 + 2 WEB PL. 12"×3"		W14×730		W14×730		W14×730 + 2 WEB PL. 12"×3"		W14×730 + 2 WEB PL. 12"×3"		W14×730 + 2 WEB PL. 12"×3"		W14×730 + 2 WEB PL. 12"×3"		W14×730		W14×730					
			W14×730 + 2 WEB PL. 12"×3"		W14×730		W14×730		W14×730		W14×730		W14×730		W14×730 + 2 WEB PL. 12"×3"		W14×730		W14×730 + 2 WEB PL. 12"×3"		W14×730		W14×730		W14×730 + 2 WEB PL. 12"×3"		W14×730 + 2 WEB PL. 12"×3"		W14×730 + 2 WEB PL. 12"×3"		W14×730 + 2 WEB PL. 12"×3"		W14×730		W14×730					
FIRST DIMENSION PARALLEL TO WEB BASE PLATE		1'-8"	W14×730 + 2 WEB PL. 12"×3"	1'-8"	W14×730	1'-8"	W14×730	2'-4"	W14×730	1'-8"	W14×730	1'-8"	W14×730	1'-8"	W14×730 + 2 WEB PL. 12"×3"	1'-8"	W14×730	1'-8"	W14×730 + 2 WEB PL. 12"×3"	1'-8"	W14×730	1'-8"	W14×730	1'-8"	W14×730 + 2 WEB PL. 12"×3"	1'-8"	W14×730 + 2 WEB PL. 12"×3"	1'-8"	W14×730 + 2 WEB PL. 12"×3"	1'-8"	W14×730 + 2 WEB PL. 12"×3"	1'-8"	W14×730	1'-8"	W14×730	1'-8"				
COLUMN NO.	61	61A	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	78A	79	80	81	E_3	E_4

CORE COLS. SEE DET.S THIS DWG & SPLICE NOTES ON E117 (9)

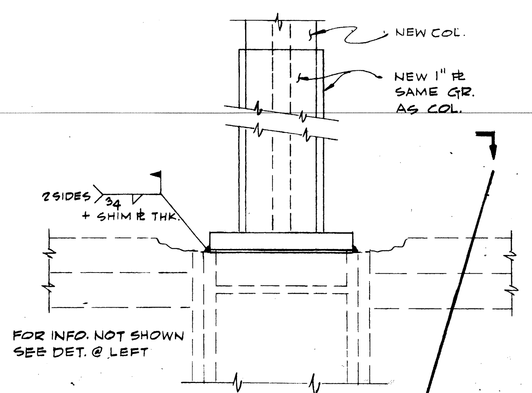
SEE DWG. FW100 FOR FIELD WORK TO COL. SPLICES AT GRID 65 (10)

CONNECTION DETS. AT EXIST. COLS.

LEGEND: F.V. = FIELD VERIFY

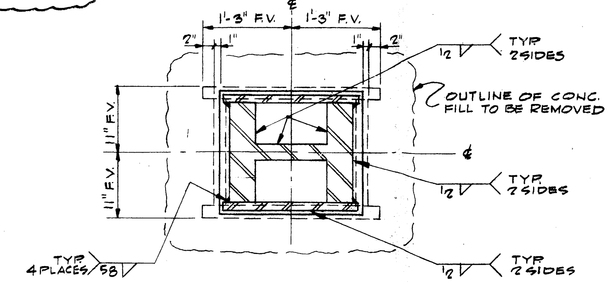


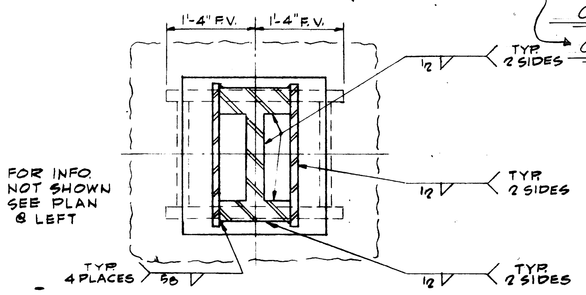
AT COLS. N2, N3, N4, N5, N6, N7, N8, N9, E3, E4, W5, W6.



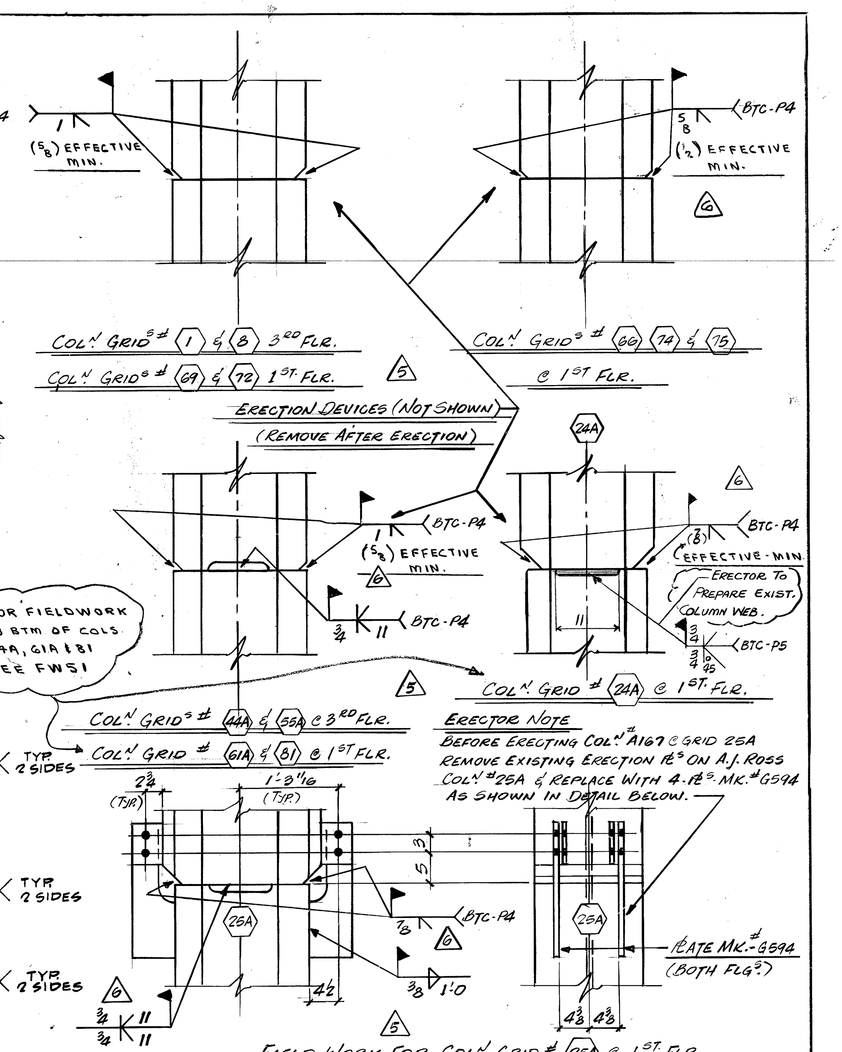
FOR INFO. NOT SHOWN SEE DET. @ LEFT

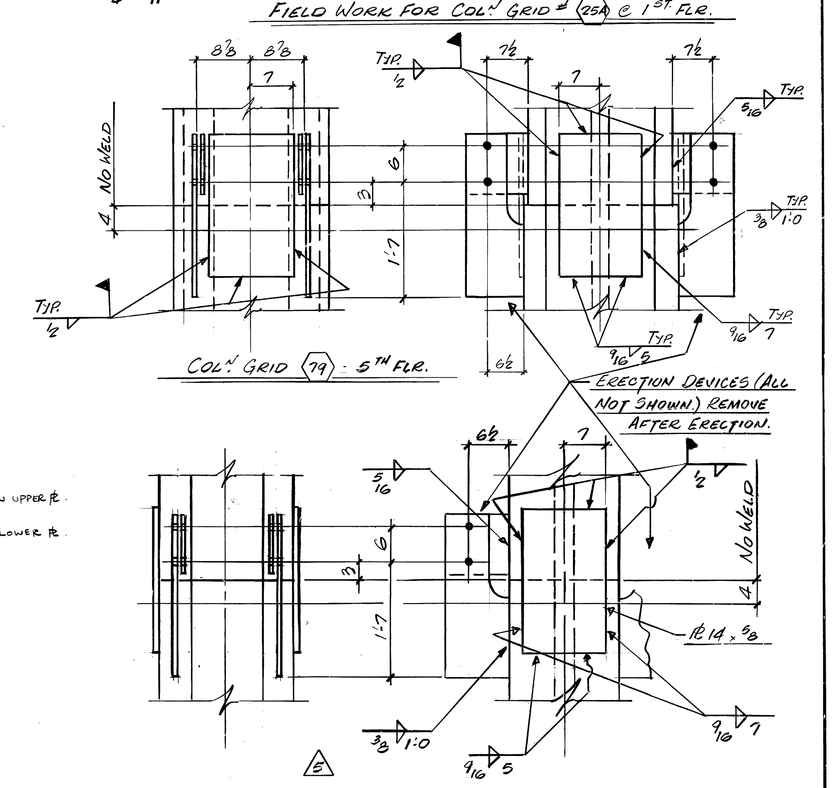
AT COLS. 501, 502, 503, 504.

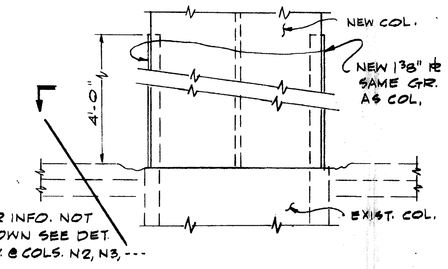




FOR FIELDWORK TO BTM OF COLS 29A, 61A & 81 SEE FW51



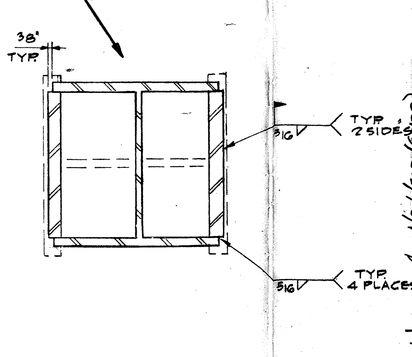




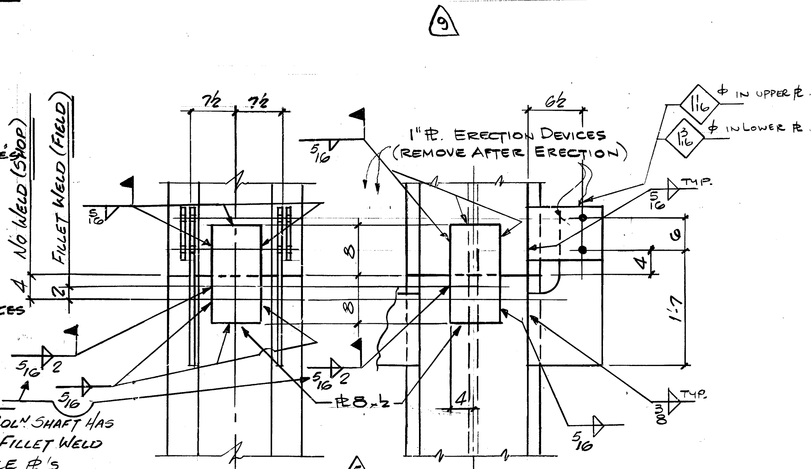
FOR INFO. NOT SHOWN SEE DET. ABV. @ COLS. N2, N3, ...

CONNECTION DET. AT EXIST. COL. 603

BASE PLATE SIZES AT CONNECTION TO EXISTING COLUMNS		
EXIST. COL. ⌀	NEW COL. ⌀	SIZE/FIRST SHIM PROCEED TO NEW COLUMN (WEB)
N9	47A	24×21×1
N8	48A	24×21×1
N7	49A	24×21×1
N6	50A	24×21×1
N5	51A	24×21×1
N4	52A	24×21×1
N3	53A	24×21×1
N2	54A	24×21×1
W5	59A	24×21×2¼
W6	59C	24×21×1
501	64	24×26×1
502	67	24×26×1
503	70	24×26×1
504	73	24×26×1
E3	E3	24×21×1
E4	E4	24×21×1¼

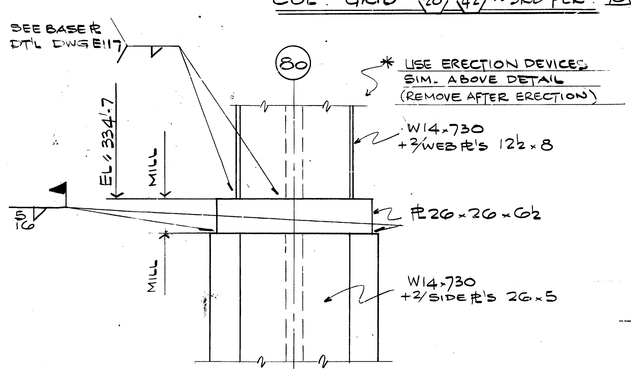


ERECTOR NOTE
AFTER UPPER COL'N SHAFT HAS BEEN ERECTED. FILLET WELD 2" ℓ'S OF SPLICE ℓ'S (INDICATED WHERE 4" NO WELD.)

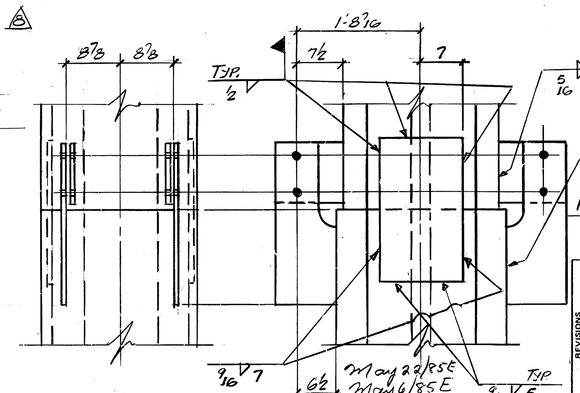


COL'N GRID ⑦⑧ ④② ~ 3RD FLR

LIFTING ℓ'S FOR COLS WITH TEMPORARY SPLICE ℓ's

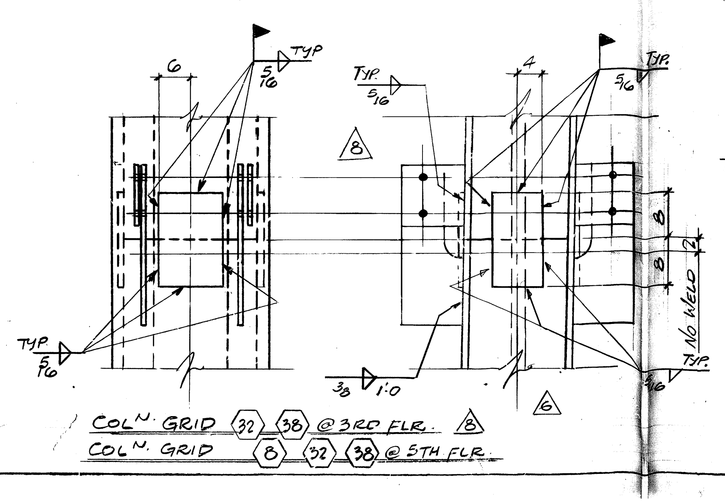


COL 80 ~ SPLICE DETAIL AT 3RD FLOOR.



COL'N GRID ⑦⑨ ㉙A ~ 3RD FLR. May 6/85E Apr 9/85E

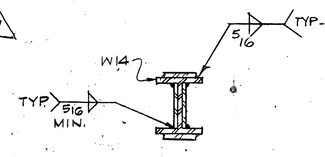
COLUMN SPLICES FOR SLOPING COL'N'S @ NORTH & SOUTH ELEVATIONS SEE DRG. NO. FW29 (8)



COL'N GRID ㉜ ㊳ @ 3RD FLR. (8)
COL'N GRID ⑧ ㉜ ㊳ @ 5TH FLR.

TYP DET. OF COL. SIDE COVER ℓ's

SEE COL. SCHED. FOR COL. & ℓ SIZES



TYP DET. OF COL. WEB & FLANGE ℓ's

SEE COL. SCHED. FOR COL. & ℓ SIZES

TENSION AT COLUMN SPLICES (K)			
FL. / COL.	3RD	5TH	
62	1000	1100	

FOR NOTES & DETAILS NOT SHOWN SEE DWG. E117 (7)

DETAILS ON THIS DWG ARE UP TO 5TH FLR SPLICES ONLY (9)

REVISION NO.	DATE	BY	DESCRIPTION OF REVISION
10	SEPT 9/85	BF	FIELDWORK NOTE ADDED FOR COL. SPLICES GRID 65
			FOR GENERAL NOTES SEE DIAG E120
			WORK THIS DIAG. WITH E117 & E117B
9	MAY 16	JM	SPLICE NOTES & LIFTING ℓ's
8	APR. 23	JS	NOTE & COL'N MARKS ADDED. DELETE DETAIL 6
7	APR. 19	BF	NOTE ADDED (DET'L ON THIS DWG TO 5TH FL ONLY)
6	APR. 15	MH	SPLICE DET'LS ADDED & FIELD WELDING KEY
5	APR. 11	MH	SPLICE DET'LS ADDED FOR FIELD WORK
4	MAR 7/85	MH	SPLICE DETAIL ADDED COL'N LINE B1
3	DEC 13/84	BS	CUSTOMERS GENERAL REVISION X2
2	NOV 30 '84	MO	DIM. FROM 6TH TO 7TH FL REVISED
1	11-28-84	AS	DIMS. FROM 1ST TO 8TH FL. REVISED

Customers Drawing S-17A — Apr 11/85E — July 5/85E — July 8/85E

COLUMN SCHEDULE NO. 2	FRANKEL STEEL LIMITED
7 WORLD TRADE CENTER	220 ATTWELL DRIVE UNIT 1 REXDALE, ONTARIO M9W 5B2
TISHMAN CONSTRUCTION — CUSTOMER	SQUAD F.R.
EMERY ROTH & SONS P.C. — ARCHITECT	MADE BY , DATE , CHKD. BY , DATE
IRWIN G. CANTOR P.C. — ENGINEER	CONT. No. 84-15 SHEET E117A