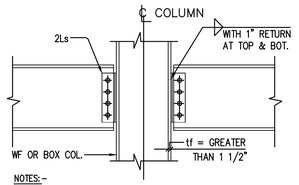
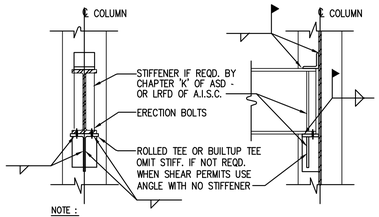


NOTES:-

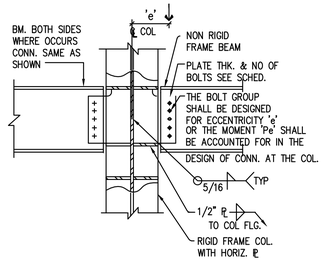
1. CONN. TO BE ADEQUATE FOR AXIAL BRACING FORCE = 1% OF WORKING COLUMN LOAD IN ADDITION TO END REACTION DETERMINED PER STEEL GENERAL NOTES SHEET S0-1 (U.N.O. ON DWG.) ALLOWABLE STRESS CAN BE INCREASED 1/3 FOR THIS CONDITION. COLUMN LOAD CAN BE DETERMINED FROM AISC DETERMINED FROM AISC MANUAL FOR FLOOR TO FLOOR HEIGHT.
2. SINGLE PLATE CONNECTION IS ALLOWED ONLY WHEN AXIAL FORCE BRACING THE COLUMN IS LESS THAN 20 kips. THE DESIGN OF SINGLE PLATE CONNECTION WITH AXIAL FORCE LESS THAN 20 kips. SHOULD BE SUBJECT TO ENGINEER'S APPROVAL.

1 DETAIL: TYP. BEAM TO COL. SHEAR CONN. AT FLANGE

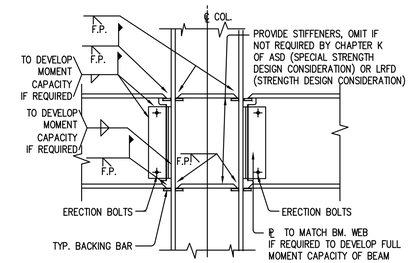


NOTE :
CONN. TO BE ADEQUATE FOR AXIAL BRACING FORCE = 1% OF WORKING COLUMN LOAD IN ADDITION TO END REACTION DETERMINED PER STEEL GENERAL NOTES SHEET S0-1 (U.N.O. ON DWG.) ALLOWABLE STRESS CAN BE INCREASED 1/3 FOR THIS CONDITION. COLUMN LOAD CAN BE DETERMINED FROM AISC MANUAL FOR FLOOR TO FLOOR HEIGHT.

2 DETAIL: TYP. BEAM TO COL. SHEAR CONN. AT WEB

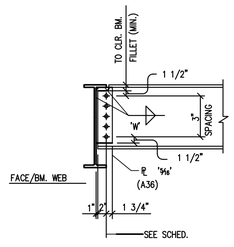


3 DETAIL: MOMENT CONNECTED TO COLUMN FLANGE



NOTE :- ALL BOLTED SHEAR CONNECTION IS ACCEPTABLE, IF IT'S EQUIVALENT TO WELDED CONNCETION

4 DETAIL: BEAM TO COL. MOMENT CONN. @ FLANGE (WELDED)



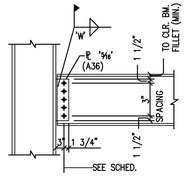
BEAM TO BEAM (TYP.)

BEAM SIZE	NO. OF BOLTS A325-X (STD)	WELD SIZE 'W'	PLATE THK. 't'	MAXIMUM ASD REACTION (K)	AXIAL FORCE [P] IN KIPS
W12 & W14	3 -3/4"ø	1/4"	3/8"	25	10
W16	4 -3/4"ø	1/4"	3/8"	48	15
W18	5 -3/4"ø	1/4"	1/2"	69	20
W21	6 -3/4"ø	1/4"	1/2"	90	25
W24	7 -3/4"ø	1/4"	1/2"	109	30
W27, W30	8 -1"ø	5/16"	5/8"	128	35
W33	9 -1"ø	5/16"	5/8"	147	40
W36	10 -1"ø	5/16"	5/8"	166	50

NOTE:

1. ALL WELDS TO BE LARGER OF SCHEDULED WELD OR AISC MIN.

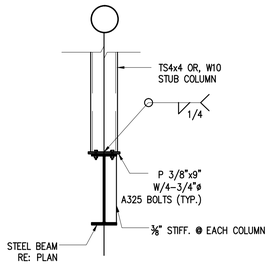
5 DETAIL: BEAM TO BEAM SHEAR CONN. WITH BRACE ATACHMENT



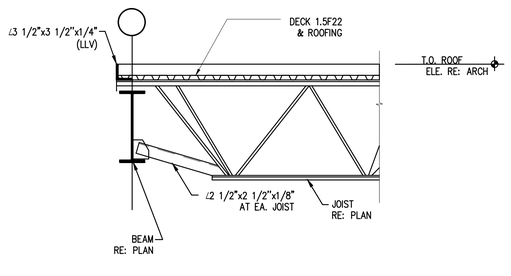
BEAM SIZE	NO. OF BOLTS A325-X (STD)	℞ 't' THICKNESS	WELD 'W'	MAXIMUM ASD REACTION (K)
W8	2-3/4"ø	3/8"	1/4"	12
W10	2-3/4"ø	3/8"	1/4"	12
W12	3	3/8"	1/4"	25
W14	3	3/8"	1/4"	25
W16	4	3/8"	1/4"	48
W18	5	1/2"	1/4"	69
W21	6	1/2"	1/4"	90
W24	7	1/2"	1/4"	109
W27	8 -1"ø	1/2"	5/16"	128
W30	9 -1"ø	5/8"	5/16"	128
W33	9 -1"ø	5/8"	5/16"	147
W36	10 -1"ø	5/8"	5/16"	166

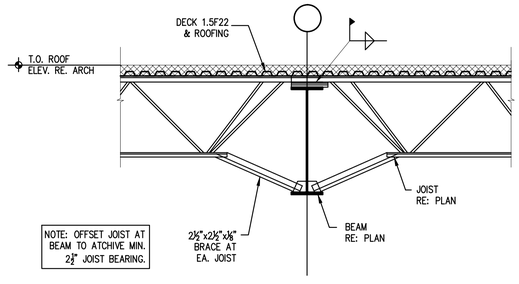
NOTES: 1. COLUMN IN NON-MOMENT RESISTING FRAME (GRAVITY COLUMN)

6 DETAIL: TYP. BEAM TO COL. SHEAR CONNECTION AT FLANGE, U.N.O.

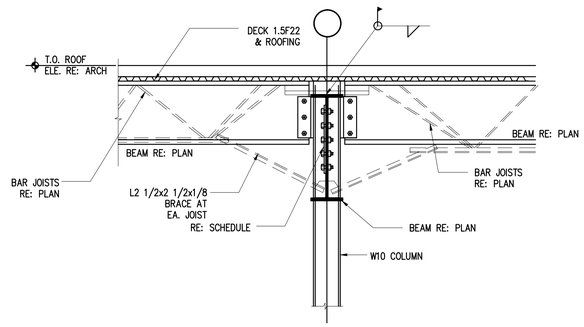


7 DETAIL: TYP. BEAM TO STUB COL. CONN.





8 DETAIL: TYP. JOIST TO BEAM CONNECTION AT ROOF



9 DETAIL: TYP. BEAM TO COL. CONN.

THE MONTESSORIOM AT BELLA TERRA

23421 FM 1093 RD.
RICHMOND, TX 77406

NO.	DESCRIPTION	DATE
1	FINAL SCHEME	02.01.19
2	REV.FINAL SCHEME	02.07.19
3	CD REVIEW	04.15.19

06/11/19

STATE OF TEXAS
M. W. MIRZA
84151
LICENSED
PROFESSIONAL ENGINEER

BUILDING SECTION

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TBPE REGISTRATION # F-3394

DRAWN BY: AS | CHECKED BY: MM

PROJ. NO.: PE19-105

Project No. 1801.74
Date
Drawn by
Checked by

Sheet No.

S8