GENERAL NOTES

GENERAL

1) THE PROJECT SHALL CONFORM TO THE FOLLOWING INTERNATIONAL DESIGN STANDARDS

- A. EUROPEAN STANDARDS:
- EN1990: 2002,
- EN1991-1-1:2002
- EN1992-1-1:2004
- EN1993-1-1: 2006EN1998-1-1: 2004
- DIN 1045-1:2001
- B. AMERICAN INSTITUTION FOR STEEL CONSTRUCTION
- AISC360-10

2). ALL STRUCTURAL WORK SHALL CONFORM TO THE PROJECT DRAWINGS, ALL DRAWING NOTES, AND APPLICABLE REFERENCE STANDARDS. THE SCOPE OF WORK IS NOT SOLELY DEFINED BY THESE DRAWINGS.

3) TYPICAL DETAILS APPLY THROUGHOUT THE PROJECT EVEN IF NOT SPECIFICALLY REFERENCED IN PLANS OR DETAILS.

4) DO NOT USE SCALED DIMENSIONS; USE ONLY WRITTEN DIMENSIONS. WHERE NO DIMENSION IS PROVIDED, CONSULT THE ENGINEER FOR CLARIFICATIONS BEFORE PROCEEDING WITH WORK.

5) SEE ARCHITECTURAL DRAWINGS FOR SITE POSITIONING AND PROJECT DATUM REFERENCE.

6) THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONDITIONS OF THE JOB SITE INCLUDING SAFETY OF PERSONS AND PROPERTY AND THE MEANS AND METHODS OF CONSTRUCTION.

7) STRUCTURAL ELEMENTS SHALL BE CENTERED ABOUT GRID LINES OR DIMENSION LINES, UNLESS OTHERWISE NOTED.

8) ALL STRUCTURAL WORK SHALL BE COORDINATED WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, ETC. REQUIREMENTS. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN ON PLAN. DISCREPANCIES AND/OR INTERFERENCES SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY. ALL PENETRATIONS AND DUCT POSITIONS TO BE COORDINATED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

9) OPENINGS SHALL NOT BE MADE IN ANY STRUCTURAL MEMBER UNLESS SPECIFICALLY SHOWN ON THE STRUCTURAL DRAWINGS OR APPROVED BY THE STRUCTURAL ENGINEER.

10)DEFICIENT WORK AND WORK NOT IN CONFORMANCE WITH THE CONTRACT DOCUMENTS AS IDENTIFIED BY THE ENGINEER SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. CONTRACTOR SHALL COMPENSATE OWNER FOR SERVICES ARISING FROM DEFICIENT WORK.

11) THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY REQUIRED DEWATERING OF THE SITE DURING CONSTRUCTION.

12) USE THE ELEVATION DRAWING IN CONJUNCTION WITH PLAN DRAWING

FOUNDATIONS

1) FOUNDATION DESIGN CRITERIA ARE BASED ON THE RECOMMENDATIONS CONTAINED WITHIN THE BUILDING GEOTECHNICAL REPORT.

2) WHERE SOIL CONDITIONS ARE FOUND DURING CONSTRUCTION THAT DO NOT MEET CRITERIA DESCRIBED IN THE REPORT, SPECIAL INSPECTOR/CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.

3) LOCATION OF UNDERGROUND UTILITIES SHALL BE VERIFIED PRIOR TO CONSTRUCTION OF FOUNDATION TO AVOID ANY INTERFERENCE. CONTRACTOR SHALL EXPOSE EXISTING UTILITY LINES IN THE IMMEDIATE AREA TO DETERMINE THEIR EXACT INVERT ELEVATION, SIZE AND LOCATION RELATIVE TO THE FOUNDATION. NOTIFY THE ENGINEER IMMEDIATELY OF ANY INTERFERENCE WITH FOOTINGS OR THE FOUNDATION WALL.

REINFORCED CONCRETE

1) CONCRETE SHALL SHALL CONFORM TO THE FOLLOWING CYLINDER STRENGTH/CUBE STRENGTH (fck/fck,cube) VALUES

ALL BLOCKS

• FOUNDATION AND COLUMNS- C20/25

2) REINFORCING STEEL SHALL BE:

CLASS B DEFORMED BARS WITH MINIMUM YIELD STRENGTH OF fy=400kN/m2 (S-400B) FOR ALL DIAMETERS.

3) PROVIDE CONCRETE COVER OF 50MM FOR ALL REINFORCEMENT BOTH FROM BOTTOM AND SIDES BY USING 50MM THICK CONCRETE SPACERS PREPARED PRIOR TO CASTING CONCRETE.

4) ALL PIPE AND CONDUIT OPENINGS SHALL BE SLEEVED AND CAST IN PLACE UNLESS OTHERWISE NOTED. DO NOT SAW CUT, CORE OR CORE DRILL STRUCTURAL CONCRETE WITHOUT EXPLICIT DIRECTION FROM THE ENGINEER.

5) CONDUIT AND PIPES SHALL NOT BE PERMITTED IN STRUCTURAL CONCRETE ELEMENTS UNLESS SPECIFICALLY REVIEWED AND APPROVED BY THE ENGINEER. ANY CONDUITS TO BE EMBEDDED IN THE STRUCTURAL CONCRETE SHALL BE SUBMITTED FOR STRUCTURAL REVIEW.

6) CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGN AT LEAST TWO WEEKS PRIOR TO CONCRETE POUR FOR APPROVAL BY THE ENGINEER.

7) ALL ADJOINING SURFACES NOT CAST MONOLITHICALLY SHALL BE ROUGHENED FOR THE ENTIRE INTERSECTING SURFACE AND APPLY A BONDING AGENT AS REQUIRED.

8) CONTRACTOR SHALL COORDINATE LOCATION OF INSERTS, WELDED PLATES, AND OTHER ITEMS TO BE EMBEDDED IN CONCRETE WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.

STRUCTURAL STEEL

1) STRUCTURAL STEEL MEMBERS AND CONNECTION PLATES SHALL CONFORM TO THE FOLLOWING YIELD STRENGTH/ULTIMATE STRENGTH (fy/fu) VALUES

ALL BLOCKS

- •STEEL MEMBERS- S355/510 or Fe 510
- CONNECTION PLATES- \$355/510 or Fe 510

2) BOLTS

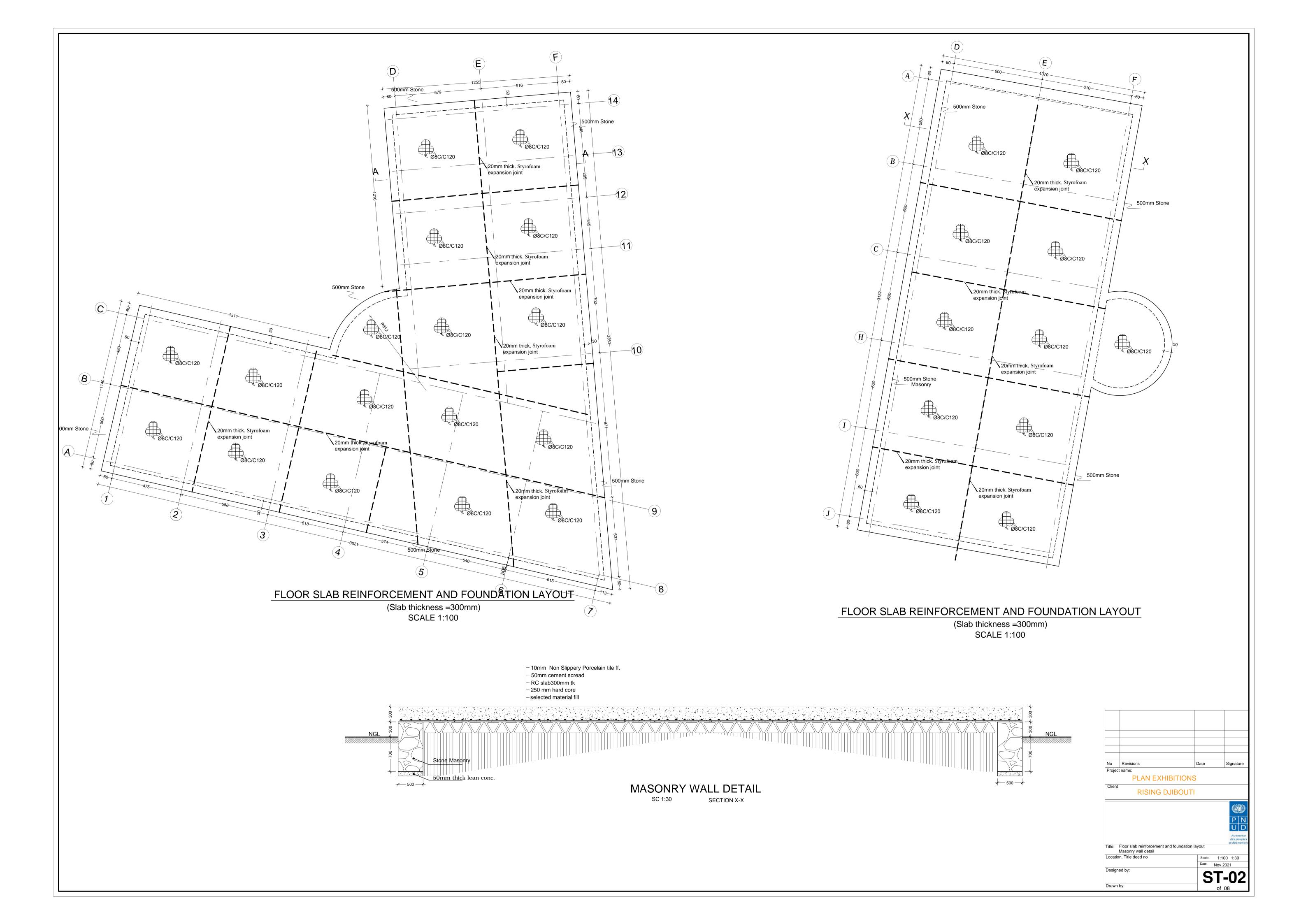
- A 325N TYPE BOLTS FOR ALL CONNECTIONS
- •BOLT GRADE =4.6
- M25 BOLTS FOR ALL CONNECTIONS OF BEAMS AND COLUMNS

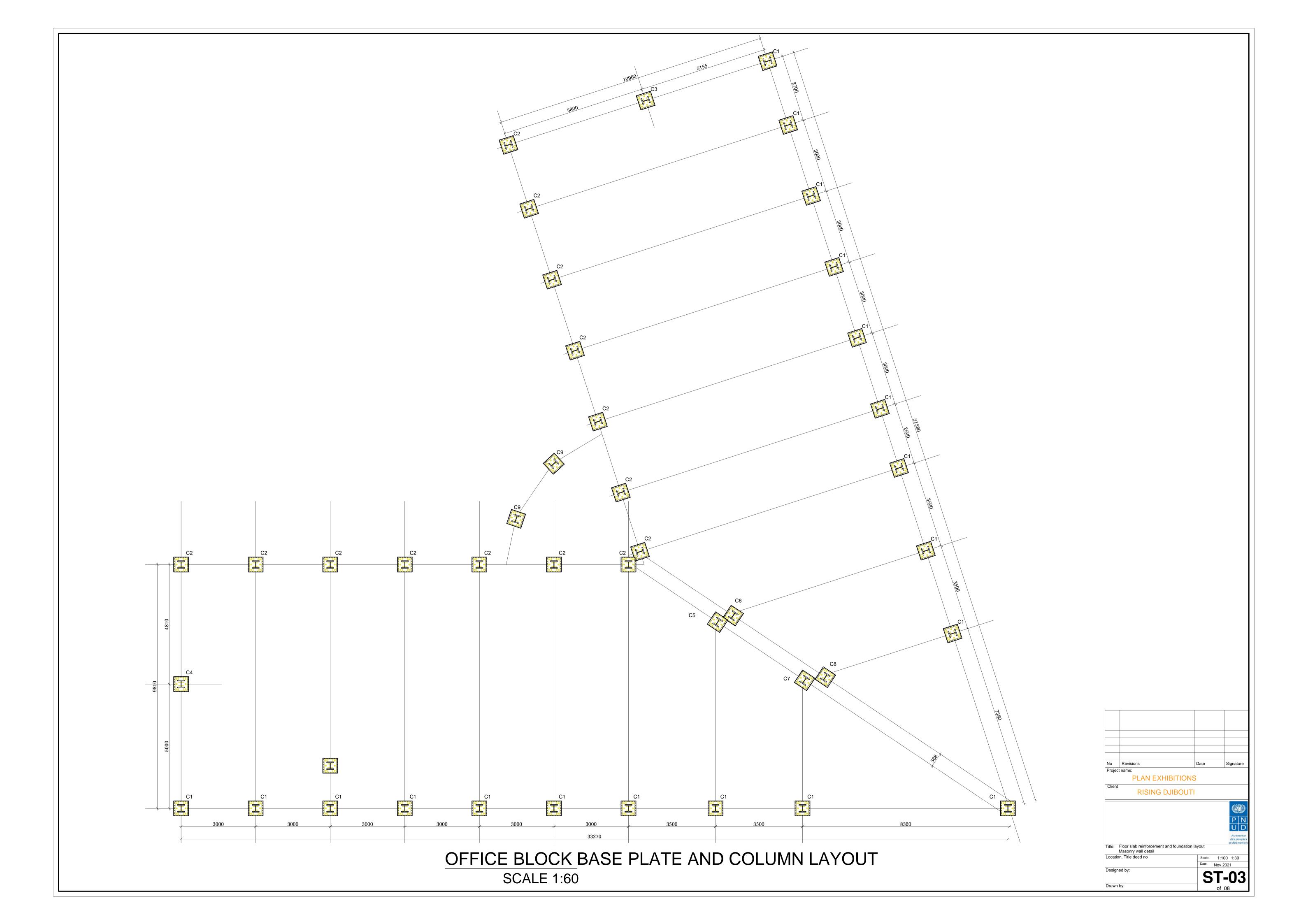
• M30 BOLTS FOR ALL BASEPLATE CONNECTIONS

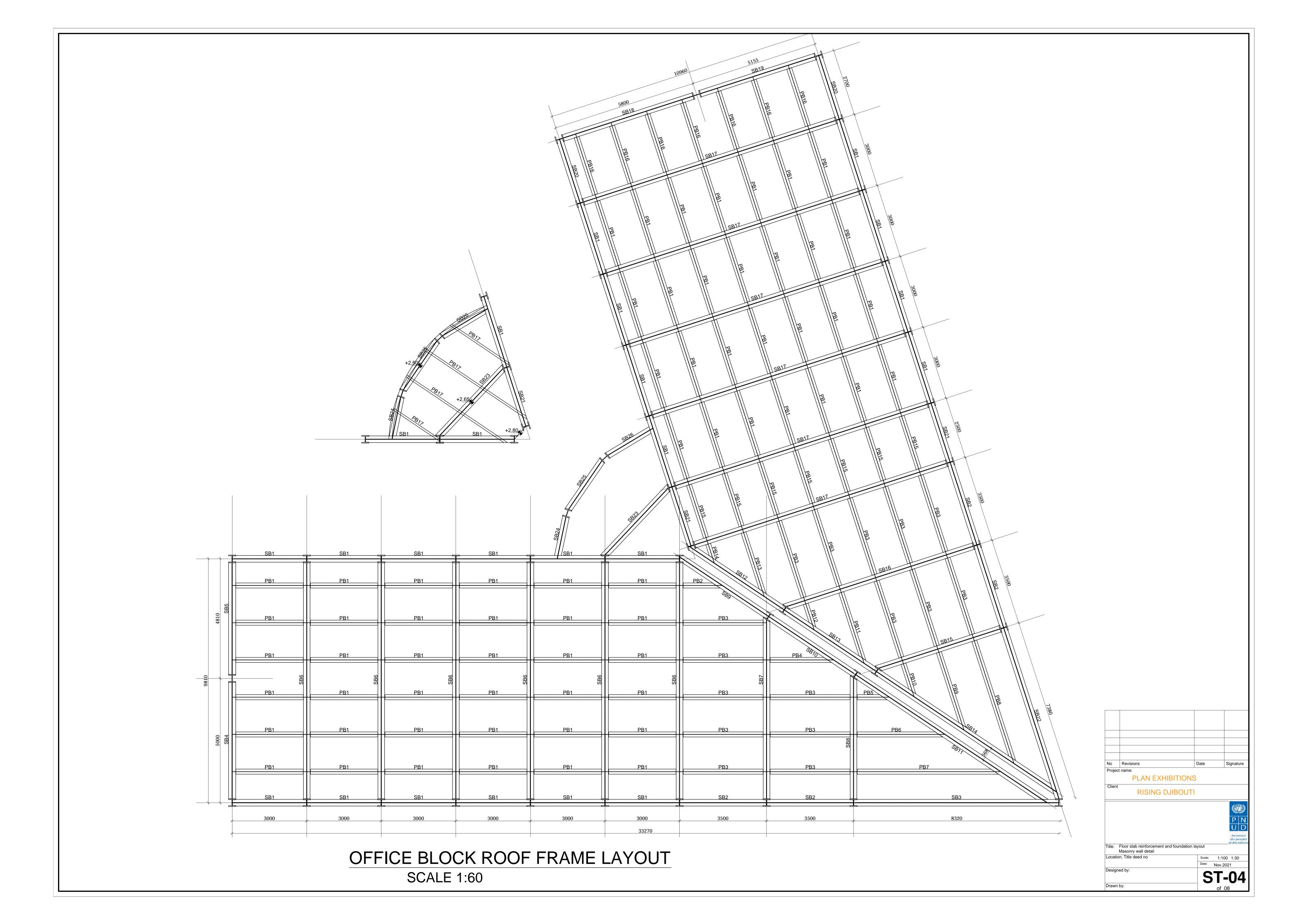
3) WELD

- 10MM WELD FOR ALL BEAM TO BEAM AND BEAM TO COLUMN CONNECTIONS.
- •12MM WELD FOR ALL COLUMN TO BASE PLATE CONNECTION.









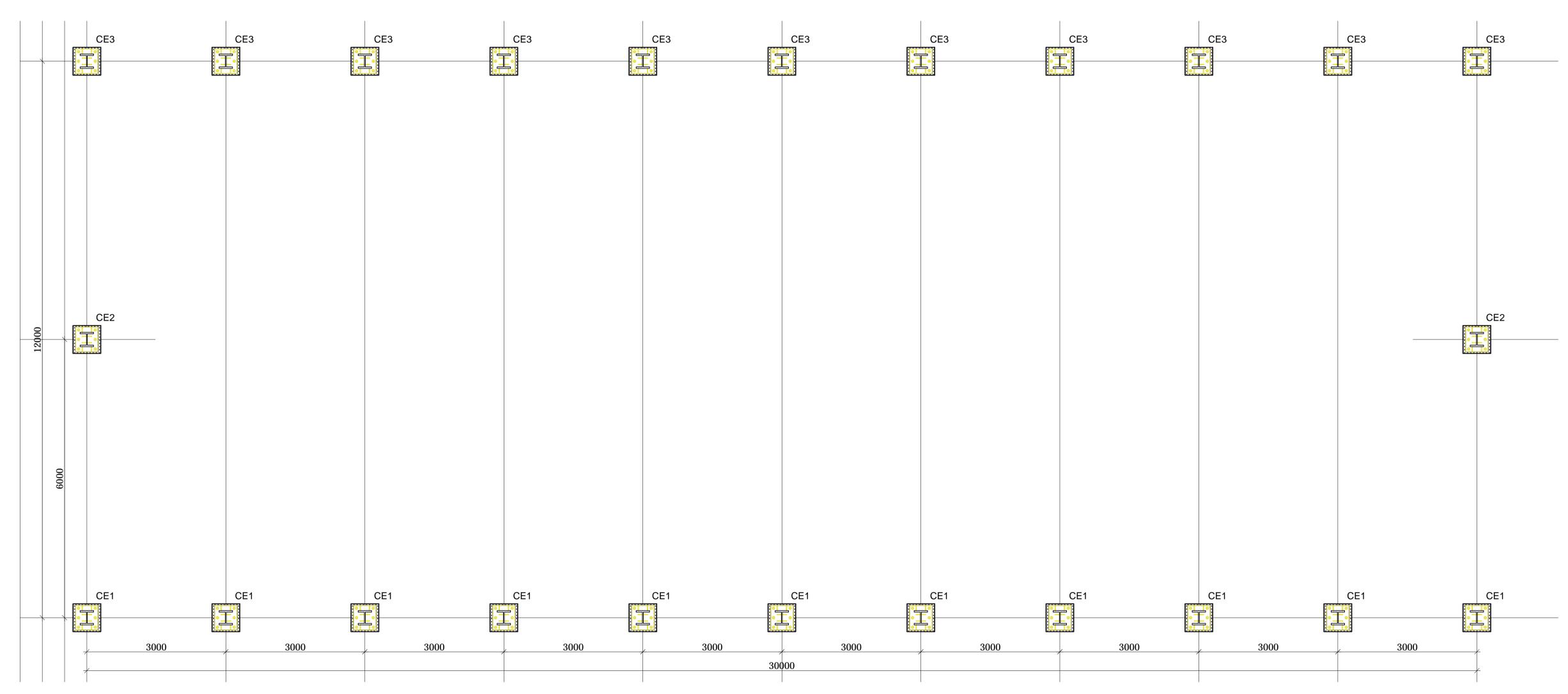
Frame material quantity OFFICE BLOCK

Member ID	Section	Depth (m)	Net Length (m)	Numbers	Total Length(m)	Total Weight(Tone)
COLUMN C1	HE 280M	310 mm	3.940	19	74.86	14.149
COLUMN C2	HE 280M	310 mm	3.340	14	46.76	8.838
COLUMN C3	HE 280M	310 mm	3.700	1	3.70	0.699
COLUMN C4	HE 280M	310 mm	3.680	1	3.68	0.696
COLUMN C5	HE 280M	310 mm	3.560	1	3.56	0.673
COLUMN C6	HE 280M	310 mm	3.560	1	3.56	0.673
COLUMN C7	HE 280M	310 mm	3.670	1	3.67	0.694
COLUMN C8	HE 280M	310 mm	3.690	1	3.69	0.697
COLUMN C9	HE 280M	310 mm	2.500	2	5.00	0.945
SB1	HE 260M	290 mm	2.970	23	68.31	12.911
SB2	HE 260M	290 mm	3.500	4	14.00	2.408
SB3	HE 260M	290 mm	8.200	1	8.20	1.410
SB4	HE 260M	290 mm	4.690	1	4.69	0.807
SB5	HE 260M	290 mm	4.490	1	4.49	0.772
SB6	HE 260M	290 mm	9.500	6	57.00	9.804
SB7	HE 260M	290 mm	7.200	1	7.20	1.238
SB8	HE 260M	290 mm	4.850	1	4.85	0.834
SB9	HE 260M	290 mm	4.270	1	4.27	0.734
SB10	HE 260M	290 mm	4.100	1	4.10	0.705
SB11	HE 260M	290 mm	9.240	1	9.24	1.589
SB12	HE 260M	290 mm	4.280	1	4.28	0.736
SB13	HE 260M	290 mm	4.100	1	4.10	0.705
SB14	HE 260M	290 mm	8.690	1	8.69	1.494
SB15	HE 260M	290 mm	5.140	1	5.14	0.884
SB16	HE 260M	290 mm	7.900	1	7.90	1.359
SB17	HE 260M	290 mm	10.640	1	10.64	1.830
SB18	HE 260M	290 mm	5.480	1	5.48	0.943
SB19	HE 260M	290 mm	4.830	1	4.83	0.831
SB20	HE 260M	290 mm	2.670	1	2.67	0.454
SB21	HE 260M	290 mm	2.470	2	4.94	0.850

Frame material quantity OFFICE BLOCK

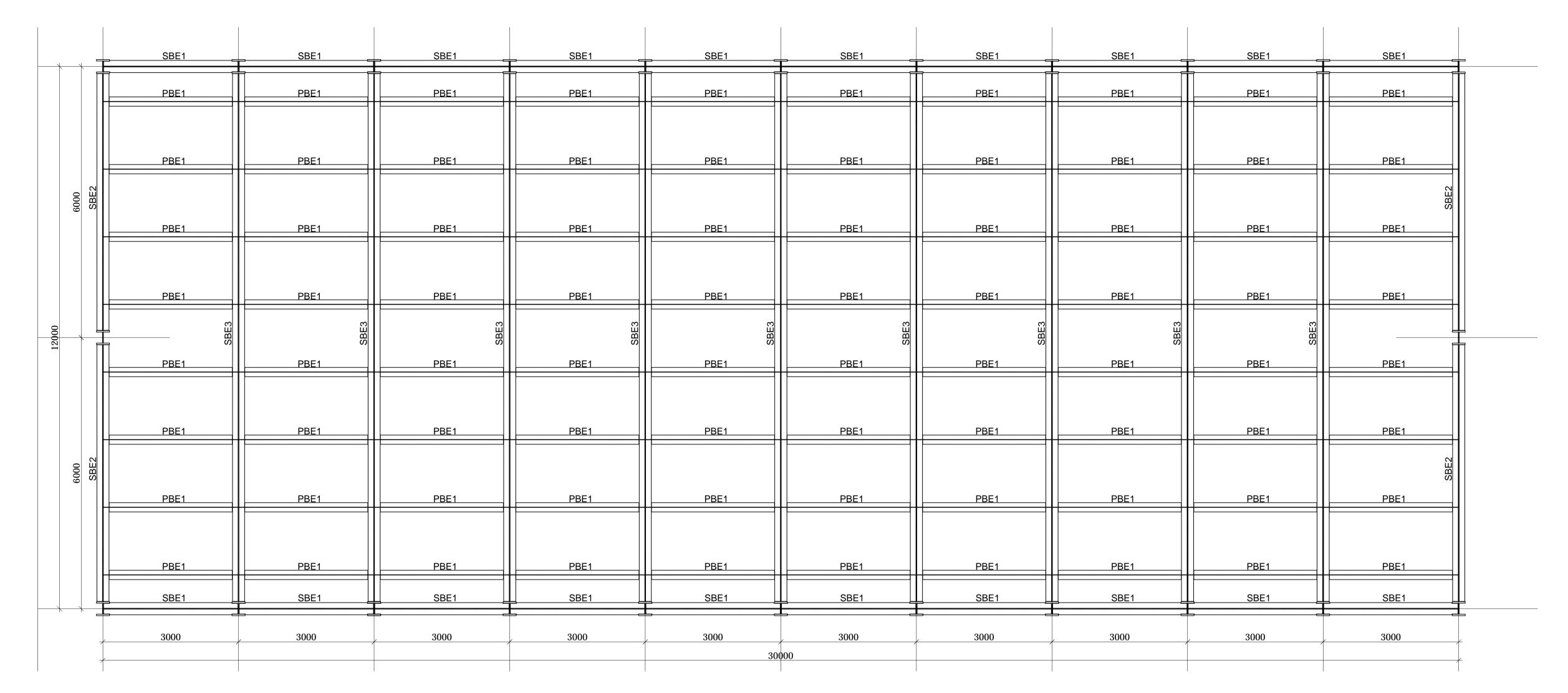
Member ID	Section	Depth (m)	Net Length (m)	Numbers	Total Length(m)	Total Weight(Tone)
SB22	HE 260M	290 mm	7.210	1	7.21	1.240
SB23	HE 260M	290 mm	3.890	1	3.890	0.669
SB24	HE 260M	290 mm	1.710	1	1.710	0.294
SB25	HE 260M	290 mm	2.440	1	2.440	0.420
SB26	HE 260M	290 mm	2.040	1	2.040	0.351
PB1	HE 200A	190 mm	2.980	64	190.72	8.067
PB2	HE 200A	190 mm	1.700	1	1.7	0.072
PB3	HE 200A	190 mm	3.480	1	3.48	0.147
PB4	HE 200A	190 mm	2.680	1	2.68	0.113
PB5	HE 200A	190 mm	1.420	1	1.42	0.060
PB6	HE 200A	190 mm	3.660	1	3.66	0.155
PB7	HE 200A	190 mm	5.900	1	5.90	0.250
PB8	HE 200A	190 mm	5.310	1	5.31	0.225
PB9	HE 200A	190 mm	3.410	1	3.41	0.144
PB10	HE 200A	190 mm	1.510	1	1.51	0.064
PB11	HE 200A	190 mm	3.120	1	3.12	0.132
PB12	HE 200A	190 mm	1.220	1	1.22	0.052
PB13	HE 200A	190 mm	2.820	1	2.82	0.119
PB14	HE 200A	190 mm	0.930	1	0.93	0.039
PB15	HE 200A	190 mm	2.480	7	2.48	0.104
PB16	HE 200A	190 mm	2.680	7	2.68	0.113
PB17	RHS 80X80X4.0	80 mm	2.25 - 4.99	4	14.98	0.141
					TOTAL	84.333





EXHIBITION BLOCK BASE PLATE AND COLUMN LAYOUT SCALE 1:50



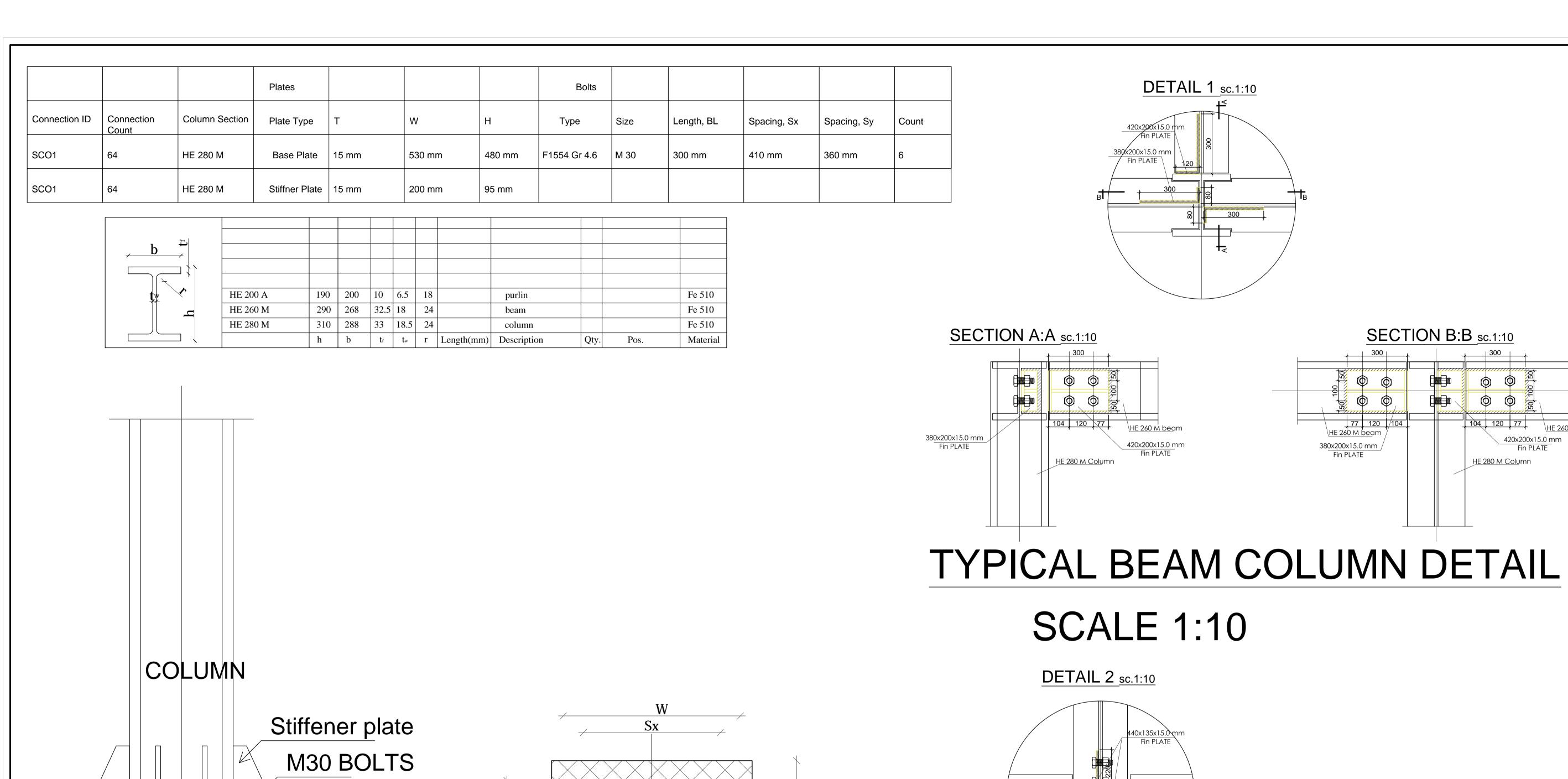


EXHIBITION BLOCK ROOF FRAME LAYOUT SCALE 1:50

Frame material quantity EXIBITION BLOCK

Member ID	Section	Depth (m)	Net Length (m)	Numbers	Total Length(m)	Total Weight(Tone)
COLUMN CE1	HE 280M	310 mm	3.940	11	43.34	8.191
COLUMN CE2	HE 280M	310 mm	3.540	1	3.54	0.669
COLUMN CE3	HE 280M	310 mm	3.140	11	34.54	6.528
SBE1	HE 260M	290 mm	2.970	20	59.40	10.217
SBE2	HE 260M	290 mm	3.500	4	14.00	2.408
SBE3	HE 260M	290 mm	8.200	9	73.80	12.694
PBE1	HE 200A	190 mm	2.980	80	238.4	10.084
					TOTAL	50.791





H

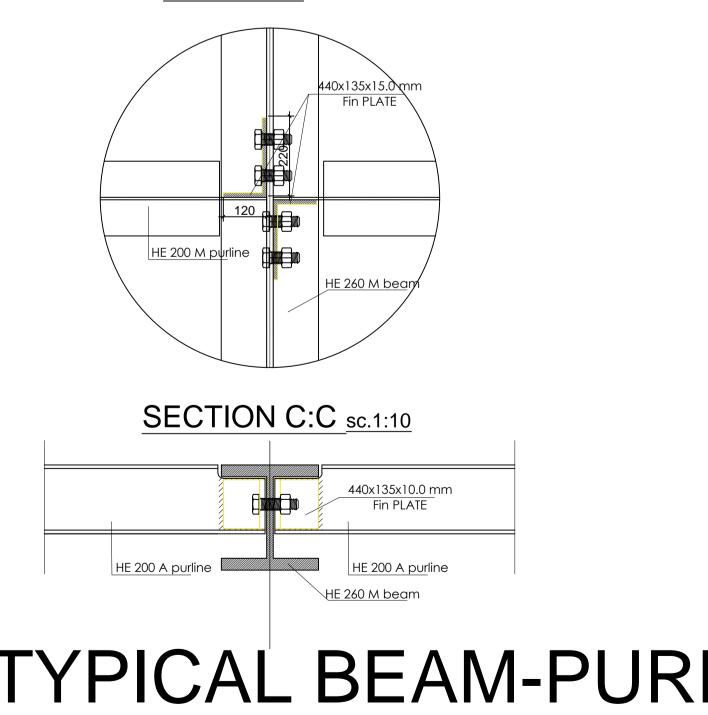
15 MM BASE PLATE



15MM STIFFENER PLATE

BASE

PLATE



TYPICAL BEAM-PURLIN DETAIL

SCALE 1:10



SECTION B:B sc.1:10

38<u>0x200x15.0 mm</u> Fin PLATE

420x200x15.0 mm

HE 280 M Column