

THIS DOCUMENT IS CONFIDENTIAL. NEITHER WHOLE OR ANY PART OF THIS DOCUMENT SHALL BE DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT. OF ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.

GENERAL NOTES:-

1. ALL DIMENSIONS ARE IN MM. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED. DIMENSIONS SHOULD NOT BE SCALED.
2. RELEVANT ARCHITECTURAL DRAWING SHALL BE DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT. OF ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.
3. THE BUILDING HAS BEEN DESIGNED FOR G+1 STOREY.
4. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED UP SOIL IS ENCOUNTERED IT SHOULD BE BROUGHT IMMEDIATELY TO THE SURFACE AND REMOVED TO THE EXISTING GROUND LEVEL.
5. FOR BRICK/BLOCK WALL LONG BRICK WITH DENSITY 1800KG/M³.
6. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000.

CONCRETE:-

1. DESIGN MIX CONCRETE SHALL BE AS FOLLOWS:
 - A. COLUMN (RETAINING WALLS) - M30
 - B. FOOTING (CAP) - M30
 - C. PILE SHAFT - M30
 - D. RETAINING WALLS - M30

COVER:-

- * THE CLEAR COVER TO REINFORCEMENT SHALL BE AS FOLLOWS
 - A. COLUMN (RETAINING WALLS) - 40 mm
 - B. FOOTING (CAP) - 75 mm
 - C. PILE BEAM - 30 mm
 - D. RETAINING WALLS - 40 mm
 - E. SLABS - 20 mm
 - F. PILE SHAFT - 50 mm
 - G. RETAINING WALLS - 30 mm

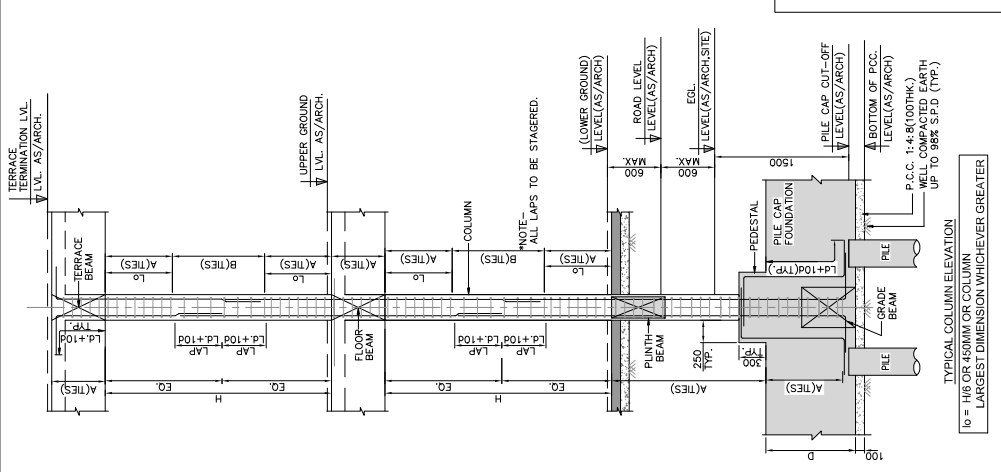
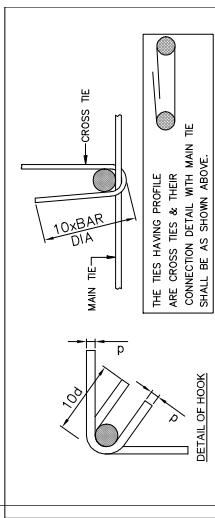
REINFORCEMENT:-

1. HIGH YIELD STRENGTH DEFORMED BARS GRADE - Fe 500D
2. LAP LENGTH TO BE AS PER IS 456:2000
3. LAP LENGTH TO BE AS PER IS 456:2000

WATER PROOFING:-

1. ALL CONCRETE FACES IN CONTACT WITH SOIL/WATER BELOW THE GROUND LEVEL OR ABOVE SHALL BE PROTECTED BY WATER PROOFING AS PER IS 8750:2000

N. M. Krishnan
Department of Civil Engineering
Indian Institute of Technology Delhi
Hauz Khas, New Delhi, India 110016



TERRACE/TERMINATION LVL (AS/ARCH)		COLUMN REIN. SCHEDULE	
UPPER GROUND LVL (AS/ARCH)	FIGURE	TIES ZONE - A	TIES ZONE - B
		OUTER RING = Y@8/750c INNER RING = Y@8/1500c INNER RING = Y@8/1500c ● 6-Y20-012-Y16	OUTER RING = Y@8/750c INNER RING = Y@8/1500c INNER RING = Y@8/1500c ● 20-Y16
		OUTER RING = Y@8/750c INNER RING = Y@8/1500c INNER RING = Y@8/1500c ● 18-Y20	OUTER RING = Y@8/750c INNER RING = Y@8/1500c INNER RING = Y@8/1500c ● 20-Y16
		OUTER RING = Y@8/750c INNER RING = Y@8/1500c INNER RING = Y@8/1500c ● 20-Y16	OUTER RING = Y@8/750c INNER RING = Y@8/1500c INNER RING = Y@8/1500c ● 20-Y16
LOWER GROUND LVL (AS/ARCH)	FIGURE	TIES ZONE - A	TIES ZONE - B
		OUTER RING = Y@8/750c INNER RING = Y@8/1500c INNER RING = Y@8/1500c ● 6-Y20-012-Y16	OUTER RING = Y@8/750c INNER RING = Y@8/1500c INNER RING = Y@8/1500c ● 20-Y16
		OUTER RING = Y@8/750c INNER RING = Y@8/1500c INNER RING = Y@8/1500c ● 18-Y20	OUTER RING = Y@8/750c INNER RING = Y@8/1500c INNER RING = Y@8/1500c ● 20-Y16
		OUTER RING = Y@8/750c INNER RING = Y@8/1500c INNER RING = Y@8/1500c ● 20-Y16	OUTER RING = Y@8/750c INNER RING = Y@8/1500c INNER RING = Y@8/1500c ● 20-Y16
FOUNDATION LVL	FIGURE	TIES ZONE - A	TIES ZONE - B
		OUTER RING = Y@8/750c INNER RING = Y@8/1500c INNER RING = Y@8/1500c ● 6-Y20-012-Y16	OUTER RING = Y@8/750c INNER RING = Y@8/1500c INNER RING = Y@8/1500c ● 20-Y16
		OUTER RING = Y@8/750c INNER RING = Y@8/1500c INNER RING = Y@8/1500c ● 18-Y20	OUTER RING = Y@8/750c INNER RING = Y@8/1500c INNER RING = Y@8/1500c ● 20-Y16
		OUTER RING = Y@8/750c INNER RING = Y@8/1500c INNER RING = Y@8/1500c ● 20-Y16	OUTER RING = Y@8/750c INNER RING = Y@8/1500c INNER RING = Y@8/1500c ● 20-Y16

ARCHITECT
AKSHAYA JAIN & ASSOCIATES
C-108, TOWER 1, LANCING INTERCOMPLEX,
C-108, TOWER 1, LANCING INTERCOMPLEX,
TELEPHONE: 491-1126136088, 26132304, 41801615
E-Mail: mail@akshayajain.com

STRUCTURAL CONSULTANT
ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.
BUILDINGS RISE WITH US
ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.
C-108, TOWER 1, LANCING INTERCOMPLEX,
C-108, TOWER 1, LANCING INTERCOMPLEX,
TELEPHONE: 491-1126136088, 26132304, 41801615
E-Mail: mail@akshayajain.com





THIS DOCUMENT IS CONFIDENTIAL. NEITHER WHOLE OR ANY PART OF THIS DOCUMENT SHALL BE DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT. OF ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.

GENERAL NOTES:-

1. ALL DIMENSIONS ARE IN MM. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED. DIMENSIONS SHOULD NOT BE SCALED.
2. REINFORCEMENT SHALL BE IN ACCORDANCE WITH IS:1786. RELEVANT ARCHITECTURAL DRAWING IN CASE OF DISCREPANCY BETWEEN ARCH. AND STRUCTURAL DRAWING IT SHOULD BE BEFORE EXECUTION CONTRACTOR TO BE ENSURE ASSUMED.
3. THE FOUNDATION HAS BEEN DESIGNED FOR G+1 STOREY.
4. THE BUILDING HAS BEEN DESIGNED FOR G+1 STOREY.
5. UP SOIL IS ENCOUNTERED IT SHOULD BE BROUGHT IMMEDIATELY TO THE SURFACE AND PROTECTED BY AN APPROPRIATE MEANS.
6. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000.

CONCRETE:-

1. DESIGN MIX CONCRETE SHALL BE AS FOLLOWS:
A. FOOTING (800mm) - M30
B. COLUMN (800mm) - M30
C. BEAM (300mm) - M30
D. RETAINING WALLS - M30

COVER:-

- * THE CLEAR COVER TO REINFORCEMENT SHALL BE AS FOLLOWS
A. FOOTING (800mm) - 75 mm
B. COLUMN (800mm) - 75 mm
C. BEAM (300mm) - 30 mm
D. RETAINING WALLS - 50 mm
E. SLAB (200mm) - 20 mm
F. FILE SHAFT - 50 mm
G. RETAINING WALLS - 50 mm

REINFORCEMENT:-

1. HIGH YIELD STRENGTH DEFORMED BARS GRADE - Fe 500D
2. ALL REINFORCEMENT SHALL BE AS PER IS 1786
3. LAP LENGTH TO BE AS PER IS 1786

WATER PROOFING:-

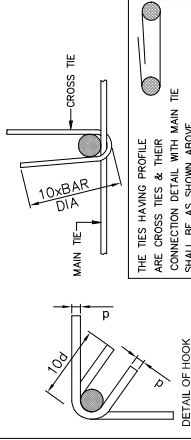
1. ALL CONCRETE FACES IN CONTACT WITH SUDWATER BELOW THE GROUND LEVEL OR ABOVE SHALL BE PROTECTED BY WATER PROOFING. AS PER IS 8743 OR AS PER IS 8743

TYP FOR ALL STRUCTURAL WORKS

1. ALL CONCRETE FACES IN CONTACT WITH SUDWATER BELOW THE GROUND LEVEL OR ABOVE SHALL BE PROTECTED BY WATER PROOFING. AS PER IS 8743 OR AS PER IS 8743

ROCC LIFT WALL REINF. SCHEDULE

LEVEL	LOWER GROUND FLOOR
MAIN BAR	VERTICAL REINF. = $\phi 12 @ 150c/c$ HORIZONTAL REINF. = $\phi 10 @ 200c/c$
WALL MARK	RW1 (230Hk.)



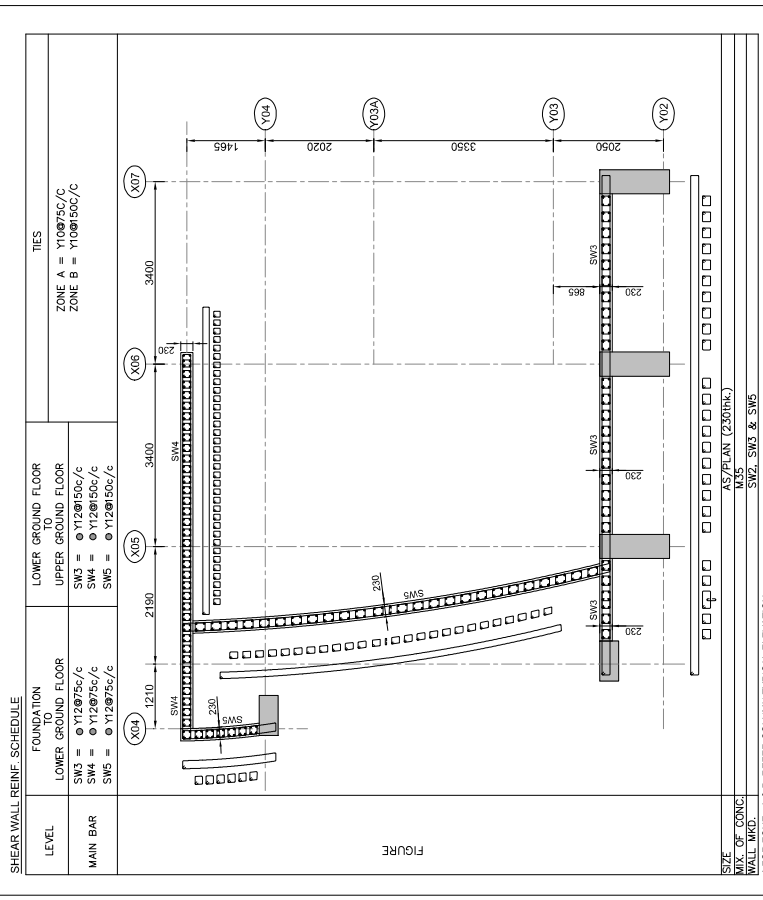
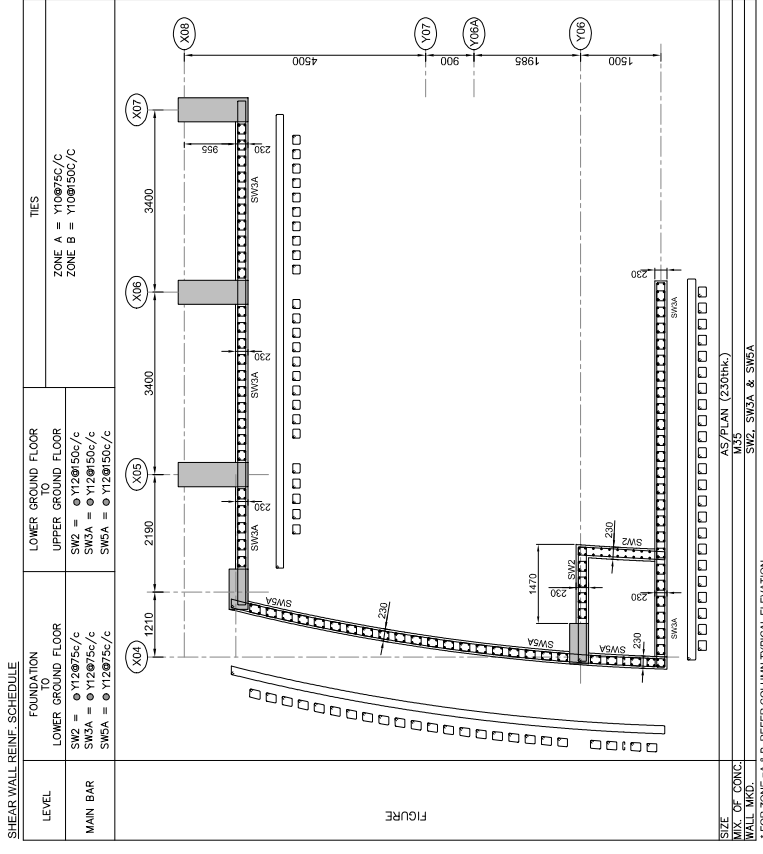
TIES	LOWER GROUND FLOOR	UPPER GROUND FLOOR TO ROOF LVL.
MAIN BAR	VERTICAL REINF. = $\phi 12 @ 150c/c$ HORIZONTAL REINF. = $\phi 10 @ 200c/c$	VERTICAL REINF. = $\phi 12 @ 150c/c$ HORIZONTAL REINF. = $\phi 10 @ 200c/c$

LEVEL	(FOUNDATION TO LOWER GROUND FLOOR)	(LOWER GROUND FLOOR TO UPPER GROUND FLOOR)	(UPPER GROUND FLOOR TO ROOF LVL.)
SIZE	AS/PLAN (230Hk.)	AS/PLAN (230Hk.)	AS/PLAN (230Hk.)
MTK. OF CONC.	M35	M35	M35
WALL MKD.	SWT	SWT	SWT

* FOR ZONE -A & B. REFER COLUMN TYPICAL ELEVATION

TIES	LOWER GROUND FLOOR	UPPER GROUND FLOOR TO ROOF LVL.
MAIN BAR	VERTICAL REINF. = $\phi 12 @ 150c/c$ HORIZONTAL REINF. = $\phi 10 @ 200c/c$	VERTICAL REINF. = $\phi 12 @ 150c/c$ HORIZONTAL REINF. = $\phi 10 @ 200c/c$

* FOR ZONE -A & B. REFER COLUMN TYPICAL ELEVATION



N. M. Krishnan
Department of Civil Engineering
Indian Institute of Technology Delhi
Hauz Khas, New Delhi, India 110016

REV.	DATE	DRAWN	CONTENTS

TENDER DRAWING

CONVENTION CENTRE (SITE - 10)
SEMINAR HALL 350 CAPACITY
SHEAR WALL REINF. SCHEDULE

DRAWN	SURAN	DRAWN	ACES-IM-SH-204
DESIGN	KARTIK	SCALE	VARIOUS
APPROVED BY	VABRAV	PAPER SIZE	A1(90x41)
DATE	26.07.2023	REVISIONS	NO

PROJECT: IIM SHILLONG, UNSAWLI CAMPUS, SHILLONG

ARCHITECT
AKSHAYA JAIN & ASSOCIATES
OFFICE: 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000, 1001, 1002, 1003, 1004, 1005, 1006, 1007, 1008, 1009, 1010, 1011, 1012, 1013, 1014, 1015, 1016, 1017, 1018, 1019, 1020, 1021, 1022, 1023, 1024, 1025, 1026, 1027, 1028, 1029, 1030, 1031, 1032, 1033, 1034, 1035, 1036, 1037, 1038, 1039, 1040, 1041, 1042, 1043, 1044, 1045, 1046, 1047, 1048, 1049, 1050, 1051, 1052, 1053, 1054, 1055, 1056, 1057, 1058, 1059, 1060, 1061, 1062, 1063, 1064, 1065, 1066, 1067, 1068, 1069, 1070, 1071, 1072, 1073, 1074, 1075, 1076, 1077, 1078, 1079, 1080, 1081, 1082, 1083, 1084, 1085, 1086, 1087, 1088, 1089, 1090, 1091, 1092, 1093, 1094, 1095, 1096, 1097, 1098, 1099, 1100, 1101, 1102, 1103, 1104, 1105, 1106, 1107, 1108, 1109, 1110, 1111, 1112, 1113, 1114, 1115, 1116, 1117, 1118, 1119, 1120, 1121, 1122, 1123, 1124, 1125, 1126, 1127, 1128, 1129, 1130, 1131, 1132, 1133, 1134, 1135, 1136, 1137, 1138, 1139, 1140, 1141, 1142, 1143, 1144, 1145, 1146, 1147, 1148, 1149, 1150, 1151, 1152, 1153, 1154, 1155, 1156, 1157, 1158, 1159, 1160, 1161, 1162, 1163, 1164, 1165, 1166, 1167, 1168, 1169, 1170, 1171, 1172, 1173, 1174, 1175, 1176, 1177, 1178, 1179, 1180, 1181, 1182, 1183, 1184, 1185, 1186, 1187, 1188, 1189, 1190, 1191, 1192, 1193, 1194, 1195, 1196, 1197, 1198, 1199, 1200, 1201, 1202, 1203, 1204, 1205, 1206, 1207, 1208, 1209, 1210, 1211, 1212, 1213, 1214, 1215, 1216, 1217, 1218, 1219, 1220, 1221, 1222, 1223, 1224, 1225, 1226, 1227, 1228, 1229, 1230, 1231, 1232, 1233, 1234, 1235, 1236, 1237, 1238, 1239, 1240, 1241, 1242, 1243, 1244, 1245, 1246, 1247, 1248, 1249, 1250, 1251, 1252, 1253, 1254, 1255, 1256, 1257, 1258, 1259, 1260, 1261, 1262, 1263, 1264, 1265, 1266, 1267, 1268, 1269, 1270, 1271, 1272, 1273, 1274, 1275, 1276, 1277, 1278, 1279, 1280, 1281, 1282, 1283, 1284, 1285, 1286, 1287, 1288, 1289, 1290, 1291, 1292, 1293, 1294, 1295, 1296, 1297, 1298, 1299, 1300, 1301, 1302, 1303, 1304, 1305, 1306, 1307, 1308, 1309, 1310, 1311, 1312, 1313, 1314, 1315, 1316, 1317, 1318, 1319, 1320, 1321, 1322, 1323, 1324, 1325, 1326, 1327, 1328, 1329, 1330, 1331, 1332, 1333, 1334, 1335, 1336, 1337, 1338, 1339, 1340, 1341, 1342, 1343, 1344, 1345, 1346, 1347, 1348, 1349, 1350, 1351, 1352, 1353, 1354, 1355, 1356, 1357, 1358, 1359, 1360, 1361, 1362, 1363, 1364, 1365, 1366, 1367, 1368, 1369, 1370, 1371, 1372, 1373, 1374, 1375, 1376, 1377, 1378, 1379, 1380, 1381, 1382, 1383, 1384, 1385, 1386, 1387, 1388, 1389, 1390, 1391, 1392, 1393, 1394, 1395, 1396, 1397, 1398, 1399, 1400, 1401, 1402, 1403, 1404, 1405, 1406, 1407, 1408, 1409, 1410, 1411, 1412, 1413, 1414, 1415, 1416, 1417, 1418, 1419, 1420, 1421, 1422, 1423, 1424, 1425, 1426, 1427, 1428, 1429, 1430, 1431, 1432, 1433, 1434, 1435, 1436, 1437, 1438, 1439, 1440, 1441, 1442, 1443, 1444, 1445, 1446, 1447, 1448, 1449, 1450, 1451, 1452, 1453, 1454, 1455, 1456, 1457, 1458, 1459, 1460, 1461, 1462, 1463, 1464, 1465, 1466, 1467, 1468, 1469, 1470, 1471, 1472, 1473, 1474, 1475, 1476, 1477, 1478, 1479, 1480, 1481, 1482, 1483, 1484, 1485, 1486, 1487, 1488, 1489, 1490, 1491, 1492, 1493, 1494, 1495, 1496, 1497, 1498, 1499, 1500, 1501, 1502, 1503, 1504, 1505, 1506, 1507, 1508, 1509, 1510, 1511, 1512, 1513, 1514, 1515, 1516, 1517, 1518, 1519, 1520, 1521, 1522, 1523, 1524, 1525, 1526, 1527, 1528, 1529, 1530, 1531, 1532, 1533, 1534, 1535, 1536, 1537, 1538, 1539, 1540, 1541, 1542, 1543, 1544, 1545, 1546, 1547, 1548, 1549, 1550, 1551, 1552, 1553, 1554, 1555, 1556, 1557, 1558, 1559, 1560, 1561, 1562, 1563, 1564, 1565, 1566, 1567, 1568, 1569, 1570, 1571, 1572, 1573, 1574, 1575, 1576, 1577, 1578, 1579, 1580, 1581, 1582, 1583, 1584, 1585, 1586, 1587, 1588, 1589, 1590, 1591, 1592, 1593, 1594, 1595, 1596, 1597, 1598, 1599, 1600, 1601, 1602, 1603, 1604, 1605, 1606, 1607, 1608, 1609, 1610, 1611, 1612, 1613, 1614, 1615, 1616, 1617, 1618, 1619, 1620, 1621, 1622, 1623, 1624, 1625, 1626, 1627, 1628, 1629, 1630, 1631, 1632, 1633, 1634, 1635, 1636, 1637, 1638, 1639, 1640, 1641, 1642, 1643, 1644, 1645, 1646, 1647, 1648, 1649, 1650, 1651, 1652, 1653, 1654, 1655, 1656, 1657, 1658, 1659, 1660, 1661, 1662, 1663, 1664, 1665, 1666, 1667, 1668, 1669, 1670, 1671, 1672, 1673, 1674, 1675, 1676, 1677, 1678, 1679, 1680, 1681, 1682, 1683, 1684, 1685, 1686, 1687, 1688, 1689, 1690, 1691, 1692, 1693, 1694, 1695, 1696, 1697, 1698, 1699, 1700, 1701, 1702, 1703, 1704, 1705, 1706, 1707, 1708, 1709, 1710, 1711, 1712, 1713, 1714, 1715, 1716, 1717, 1718, 1719, 1720, 1721, 1722, 1723, 1724, 1725, 1726, 1727, 1728, 1729, 1730, 1731, 1732, 1733, 1734, 1735, 1736, 1737, 1738, 1739, 1740, 1741, 1742, 1743, 1744, 1745, 1746, 1747, 1748, 1749, 1750, 1751, 1752, 1753, 1754, 1755, 1756, 1757, 1758, 1759, 1760, 1761, 1762, 1763, 1764, 1765, 1766, 1767, 1768, 1769, 1770, 1771, 1772, 1773, 1774, 1775, 1776, 1777, 1778, 1779, 1780, 1781, 1782, 1783, 1784, 1785, 1786, 1787, 1788, 1789, 1790, 1791, 1792, 1793, 1794, 1795, 1796, 1797, 1798, 1799, 1800, 1801, 1802, 1803, 1804, 1805, 1806, 1807, 1808, 1809, 1810, 1811, 1812, 1813, 1814, 1815, 1816, 1817, 1818, 1819, 1820, 1821, 1822, 1823, 1824, 1825, 1826, 1827, 1828, 1829, 1830, 1831, 1832, 1833, 1834, 1835, 1836, 1837, 1838, 1839, 1840, 1841, 1842, 18

THIS DOCUMENT IS CONFIDENTIAL. NEITHER WHOLE OR ANY PART OF THIS DOCUMENT SHALL BE DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.

- GENERAL NOTES:-
1. ALL DIMENSIONS ARE IN MM. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED. DIMENSIONS SHOULD NOT BE SCALED.
 2. RELEVANT ARCHITECTURAL DRAWING IN CASE OF DISCREPANCY BETWEEN ARCHITECTURAL DRAWING AND STRUCTURAL DRAWING, ARCHITECTURAL DRAWING SHALL PREVAIL.
 3. THE BUILDING HAS BEEN DESIGNED FOR G+1 STOREY.
 4. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED OR BRICKWORK WALL LOAD BEHIND WITH DENSITY 800KG.
 5. FOR BRICKWORK WALL LOAD BEHIND WITH DENSITY 800KG.
 6. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000

- CONCRETE:-
1. DESIGN MIX CONCRETE SHALL BE AS FOLLOWS:
A. COLUMN: SHEAR WALLS = 40 mm
B. FOOTING/PILE CAP: 25 mm
C. BEAMS & SLABS: M30
D. R.C.C. 1:1.5:3
E. R.C.C. 1:1.5:3
 2. ALL DIMENSIONS ARE IN MM. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED. DIMENSIONS SHOULD NOT BE SCALED.
 3. RELEVANT ARCHITECTURAL DRAWING IN CASE OF DISCREPANCY BETWEEN ARCHITECTURAL DRAWING AND STRUCTURAL DRAWING, ARCHITECTURAL DRAWING SHALL PREVAIL.
 4. THE BUILDING HAS BEEN DESIGNED FOR G+1 STOREY.
 5. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED OR BRICKWORK WALL LOAD BEHIND WITH DENSITY 800KG.
 6. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000

- REINFORCEMENT:-
1. ALL DIMENSIONS ARE IN MM. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED. DIMENSIONS SHOULD NOT BE SCALED.
 2. RELEVANT ARCHITECTURAL DRAWING IN CASE OF DISCREPANCY BETWEEN ARCHITECTURAL DRAWING AND STRUCTURAL DRAWING, ARCHITECTURAL DRAWING SHALL PREVAIL.
 3. THE BUILDING HAS BEEN DESIGNED FOR G+1 STOREY.
 4. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED OR BRICKWORK WALL LOAD BEHIND WITH DENSITY 800KG.
 5. FOR BRICKWORK WALL LOAD BEHIND WITH DENSITY 800KG.
 6. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000

- WATER PROOFING:-
1. ALL DIMENSIONS ARE IN MM. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED. DIMENSIONS SHOULD NOT BE SCALED.
 2. RELEVANT ARCHITECTURAL DRAWING IN CASE OF DISCREPANCY BETWEEN ARCHITECTURAL DRAWING AND STRUCTURAL DRAWING, ARCHITECTURAL DRAWING SHALL PREVAIL.
 3. THE BUILDING HAS BEEN DESIGNED FOR G+1 STOREY.
 4. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED OR BRICKWORK WALL LOAD BEHIND WITH DENSITY 800KG.
 5. FOR BRICKWORK WALL LOAD BEHIND WITH DENSITY 800KG.
 6. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000

- PILE NOTES:-
1. FOR MATERIAL AND WORKMANSHIP LATEST IS CODES SHALL BE THE GUIDING CRITERIA.
 2. MIX OF CONCRETE SHALL BE M30.
 3. MINIMUM COVER TO REINFORCEMENT SHALL BE AS FOLLOWS:
A. COLUMN: SHEAR WALLS = 40 mm
B. FOOTING/PILE CAP: 25 mm
C. BEAMS & SLABS: M30
D. R.C.C. 1:1.5:3
E. R.C.C. 1:1.5:3
 4. THE BUILDING HAS BEEN DESIGNED FOR G+1 STOREY.
 5. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED OR BRICKWORK WALL LOAD BEHIND WITH DENSITY 800KG.
 6. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000

- PILE NOTES:-
1. FOR MATERIAL AND WORKMANSHIP LATEST IS CODES SHALL BE THE GUIDING CRITERIA.
 2. MIX OF CONCRETE SHALL BE M30.
 3. MINIMUM COVER TO REINFORCEMENT SHALL BE AS FOLLOWS:
A. COLUMN: SHEAR WALLS = 40 mm
B. FOOTING/PILE CAP: 25 mm
C. BEAMS & SLABS: M30
D. R.C.C. 1:1.5:3
E. R.C.C. 1:1.5:3
 4. THE BUILDING HAS BEEN DESIGNED FOR G+1 STOREY.
 5. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED OR BRICKWORK WALL LOAD BEHIND WITH DENSITY 800KG.
 6. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000

- PILE NOTES:-
1. FOR MATERIAL AND WORKMANSHIP LATEST IS CODES SHALL BE THE GUIDING CRITERIA.
 2. MIX OF CONCRETE SHALL BE M30.
 3. MINIMUM COVER TO REINFORCEMENT SHALL BE AS FOLLOWS:
A. COLUMN: SHEAR WALLS = 40 mm
B. FOOTING/PILE CAP: 25 mm
C. BEAMS & SLABS: M30
D. R.C.C. 1:1.5:3
E. R.C.C. 1:1.5:3
 4. THE BUILDING HAS BEEN DESIGNED FOR G+1 STOREY.
 5. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED OR BRICKWORK WALL LOAD BEHIND WITH DENSITY 800KG.
 6. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000

- PILE NOTES:-
1. FOR MATERIAL AND WORKMANSHIP LATEST IS CODES SHALL BE THE GUIDING CRITERIA.
 2. MIX OF CONCRETE SHALL BE M30.
 3. MINIMUM COVER TO REINFORCEMENT SHALL BE AS FOLLOWS:
A. COLUMN: SHEAR WALLS = 40 mm
B. FOOTING/PILE CAP: 25 mm
C. BEAMS & SLABS: M30
D. R.C.C. 1:1.5:3
E. R.C.C. 1:1.5:3
 4. THE BUILDING HAS BEEN DESIGNED FOR G+1 STOREY.
 5. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED OR BRICKWORK WALL LOAD BEHIND WITH DENSITY 800KG.
 6. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000

- PILE NOTES:-
1. FOR MATERIAL AND WORKMANSHIP LATEST IS CODES SHALL BE THE GUIDING CRITERIA.
 2. MIX OF CONCRETE SHALL BE M30.
 3. MINIMUM COVER TO REINFORCEMENT SHALL BE AS FOLLOWS:
A. COLUMN: SHEAR WALLS = 40 mm
B. FOOTING/PILE CAP: 25 mm
C. BEAMS & SLABS: M30
D. R.C.C. 1:1.5:3
E. R.C.C. 1:1.5:3
 4. THE BUILDING HAS BEEN DESIGNED FOR G+1 STOREY.
 5. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED OR BRICKWORK WALL LOAD BEHIND WITH DENSITY 800KG.
 6. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000

- PILE NOTES:-
1. FOR MATERIAL AND WORKMANSHIP LATEST IS CODES SHALL BE THE GUIDING CRITERIA.
 2. MIX OF CONCRETE SHALL BE M30.
 3. MINIMUM COVER TO REINFORCEMENT SHALL BE AS FOLLOWS:
A. COLUMN: SHEAR WALLS = 40 mm
B. FOOTING/PILE CAP: 25 mm
C. BEAMS & SLABS: M30
D. R.C.C. 1:1.5:3
E. R.C.C. 1:1.5:3
 4. THE BUILDING HAS BEEN DESIGNED FOR G+1 STOREY.
 5. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED OR BRICKWORK WALL LOAD BEHIND WITH DENSITY 800KG.
 6. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000

- PILE NOTES:-
1. FOR MATERIAL AND WORKMANSHIP LATEST IS CODES SHALL BE THE GUIDING CRITERIA.
 2. MIX OF CONCRETE SHALL BE M30.
 3. MINIMUM COVER TO REINFORCEMENT SHALL BE AS FOLLOWS:
A. COLUMN: SHEAR WALLS = 40 mm
B. FOOTING/PILE CAP: 25 mm
C. BEAMS & SLABS: M30
D. R.C.C. 1:1.5:3
E. R.C.C. 1:1.5:3
 4. THE BUILDING HAS BEEN DESIGNED FOR G+1 STOREY.
 5. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED OR BRICKWORK WALL LOAD BEHIND WITH DENSITY 800KG.
 6. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000

- PILE NOTES:-
1. FOR MATERIAL AND WORKMANSHIP LATEST IS CODES SHALL BE THE GUIDING CRITERIA.
 2. MIX OF CONCRETE SHALL BE M30.
 3. MINIMUM COVER TO REINFORCEMENT SHALL BE AS FOLLOWS:
A. COLUMN: SHEAR WALLS = 40 mm
B. FOOTING/PILE CAP: 25 mm
C. BEAMS & SLABS: M30
D. R.C.C. 1:1.5:3
E. R.C.C. 1:1.5:3
 4. THE BUILDING HAS BEEN DESIGNED FOR G+1 STOREY.
 5. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED OR BRICKWORK WALL LOAD BEHIND WITH DENSITY 800KG.
 6. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000

- PILE NOTES:-
1. FOR MATERIAL AND WORKMANSHIP LATEST IS CODES SHALL BE THE GUIDING CRITERIA.
 2. MIX OF CONCRETE SHALL BE M30.
 3. MINIMUM COVER TO REINFORCEMENT SHALL BE AS FOLLOWS:
A. COLUMN: SHEAR WALLS = 40 mm
B. FOOTING/PILE CAP: 25 mm
C. BEAMS & SLABS: M30
D. R.C.C. 1:1.5:3
E. R.C.C. 1:1.5:3
 4. THE BUILDING HAS BEEN DESIGNED FOR G+1 STOREY.
 5. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED OR BRICKWORK WALL LOAD BEHIND WITH DENSITY 800KG.
 6. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000

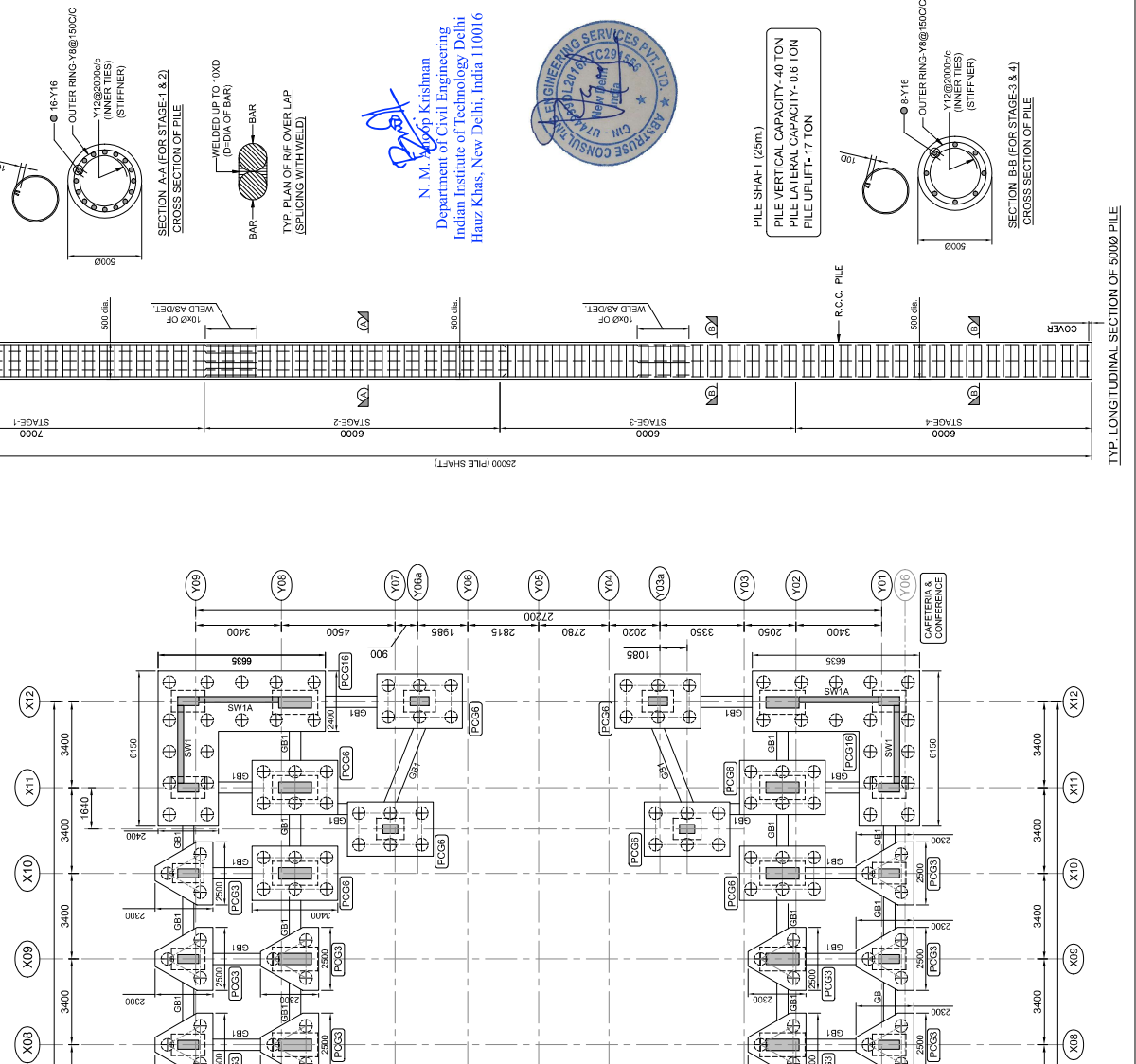
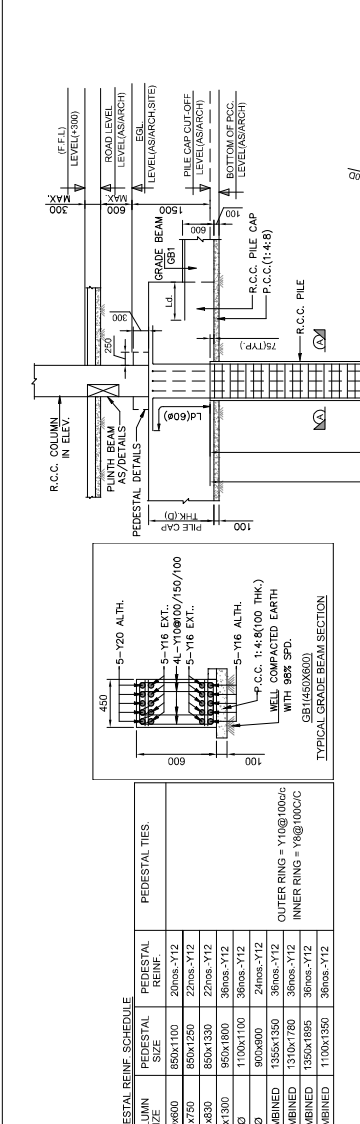
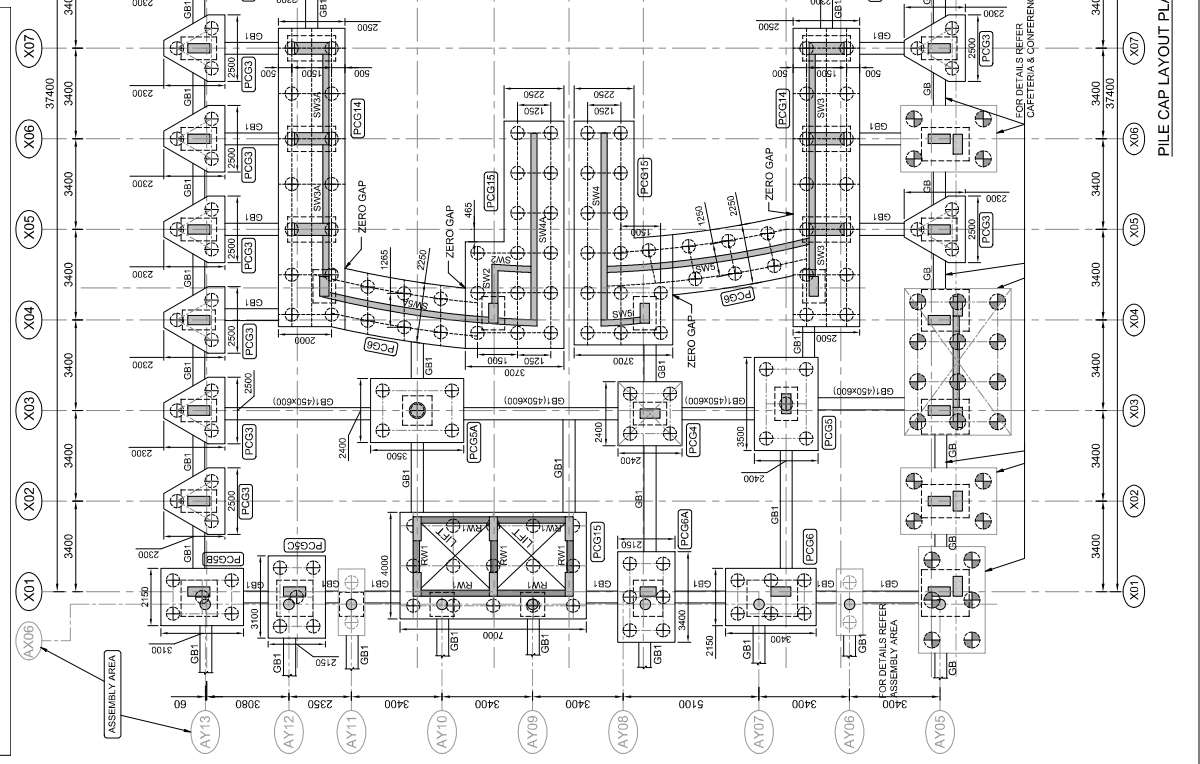
- PILE NOTES:-
1. FOR MATERIAL AND WORKMANSHIP LATEST IS CODES SHALL BE THE GUIDING CRITERIA.
 2. MIX OF CONCRETE SHALL BE M30.
 3. MINIMUM COVER TO REINFORCEMENT SHALL BE AS FOLLOWS:
A. COLUMN: SHEAR WALLS = 40 mm
B. FOOTING/PILE CAP: 25 mm
C. BEAMS & SLABS: M30
D. R.C.C. 1:1.5:3
E. R.C.C. 1:1.5:3
 4. THE BUILDING HAS BEEN DESIGNED FOR G+1 STOREY.
 5. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED OR BRICKWORK WALL LOAD BEHIND WITH DENSITY 800KG.
 6. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000

- PILE NOTES:-
1. FOR MATERIAL AND WORKMANSHIP LATEST IS CODES SHALL BE THE GUIDING CRITERIA.
 2. MIX OF CONCRETE SHALL BE M30.
 3. MINIMUM COVER TO REINFORCEMENT SHALL BE AS FOLLOWS:
A. COLUMN: SHEAR WALLS = 40 mm
B. FOOTING/PILE CAP: 25 mm
C. BEAMS & SLABS: M30
D. R.C.C. 1:1.5:3
E. R.C.C. 1:1.5:3
 4. THE BUILDING HAS BEEN DESIGNED FOR G+1 STOREY.
 5. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED OR BRICKWORK WALL LOAD BEHIND WITH DENSITY 800KG.
 6. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000

- PILE NOTES:-
1. FOR MATERIAL AND WORKMANSHIP LATEST IS CODES SHALL BE THE GUIDING CRITERIA.
 2. MIX OF CONCRETE SHALL BE M30.
 3. MINIMUM COVER TO REINFORCEMENT SHALL BE AS FOLLOWS:
A. COLUMN: SHEAR WALLS = 40 mm
B. FOOTING/PILE CAP: 25 mm
C. BEAMS & SLABS: M30
D. R.C.C. 1:1.5:3
E. R.C.C. 1:1.5:3
 4. THE BUILDING HAS BEEN DESIGNED FOR G+1 STOREY.
 5. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED OR BRICKWORK WALL LOAD BEHIND WITH DENSITY 800KG.
 6. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000

- PILE NOTES:-
1. FOR MATERIAL AND WORKMANSHIP LATEST IS CODES SHALL BE THE GUIDING CRITERIA.
 2. MIX OF CONCRETE SHALL BE M30.
 3. MINIMUM COVER TO REINFORCEMENT SHALL BE AS FOLLOWS:
A. COLUMN: SHEAR WALLS = 40 mm
B. FOOTING/PILE CAP: 25 mm
C. BEAMS & SLABS: M30
D. R.C.C. 1:1.5:3
E. R.C.C. 1:1.5:3
 4. THE BUILDING HAS BEEN DESIGNED FOR G+1 STOREY.
 5. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED OR BRICKWORK WALL LOAD BEHIND WITH DENSITY 800KG.
 6. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000

PILE CAP REINFORCEMENT SCHEDULE				
PILE CAP MARKED	NOS OF PILE	DEPTH OF PILE	REINFORCEMENT	REMARKS
PGC1	3	900	Y12@100c/c	4-Y12(SIDE FACE)
PGC2	4	750	Y12@100c/c	2-Y12(SIDE FACE)
PGC3	5	1300	Y12@75c/c	8-Y12(SIDE FACE)
PGC4	5	1300	Y12@75c/c	8-Y12(SIDE FACE)
PGC5	5	1300	Y12@75c/c	8-Y12(SIDE FACE)
PGC6	5	1300	Y12@75c/c	8-Y12(SIDE FACE)
PGC7	5	1300	Y12@75c/c	8-Y12(SIDE FACE)
PGC8	5	1300	Y12@75c/c	8-Y12(SIDE FACE)
PGC9	5	1300	Y12@75c/c	8-Y12(SIDE FACE)
PGC10	5	1300	Y12@75c/c	8-Y12(SIDE FACE)
PGC11	5	1300	Y12@75c/c	8-Y12(SIDE FACE)
PGC12	5	1300	Y12@75c/c	8-Y12(SIDE FACE)
PGC13	5	1300	Y12@75c/c	8-Y12(SIDE FACE)
PGC14	5	1300	Y12@75c/c	8-Y12(SIDE FACE)
PGC15	5	1300	Y12@75c/c	8-Y12(SIDE FACE)
PGC16	5	1300	Y12@75c/c	8-Y12(SIDE FACE)



ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.
C-100, BARBERY, SOUTH CITY - 2, SECTOR-40, GURGAON, HARYANA - 122002
PH: 0124-4131948, 9810305115
CLIENT

ARCHITECT
AKSHAYA JAIN & ASSOCIATES
ARCHITECTURE, PLANNING, INTERIOR DESIGN
C-6/1608, VASANT KUNJ, NEW DELHI - 110070
E-MAIL: akshaya.jain@akshaya-jain.com
PROJECT: 22-07-2022
REVISION: 01

STRUCTURAL CONSULTANT
AICIEIS
BUILDINGS ARE WITH US
ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.
C-100, BARBERY, SOUTH CITY - 2, SECTOR-40, GURGAON, HARYANA - 122002
PH: 0124-4131948, 9810305115
CLIENT

TENDER DRAWING
CONVENTION CENTRE (SITE - 10)
SEMI-MAR-HALL 3RD CAPACITY
PILE CAP LAYOUT PLAN & DETAILS
DRAWN: SARVATY DING NUMBER: ACES-IM-SH-2025
DESIGN BY: SARVATY DING SCALE: VARIOUS
APPROVED BY: SARVATY DING PAPER SIZE: A1 (594x841)
DATE: 22-07-2022
REVISION: 01

REFERENCE DRAWING

THIS DOCUMENT IS CONFIDENTIAL. NEITHER WHOLE OR ANY PART OF THIS DOCUMENT SHALL BE DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.

GENERAL NOTES:-

- ALL DIMENSIONS ARE IN MM. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED. DIMENSIONS SHOULD NOT BE SCALED.
- RELEVANT ARCHITECTURAL DRAWING IN CASE OF DISCREPANCY SHALL BE GIVEN PRECEDENCE OVER THIS DRAWING.
- IMMEDIATELY BROUGHT TO NOTICE TO THE CONSULTANTS BEFORE EXECUTION CONTRACTOR TO BE ENSURE ASSUMED.
- THE BUILDING HAS BEEN DESIGNED FOR G+1 STOREY.
- THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED OR UNDESIRABLE SOIL IS ENCOUNTERED, THE CONTRACTOR SHALL IMMEDIATELY BROUGHT TO NOTICE OF CONSULTANTS BEFORE EXECUTION.
- FOR BRICKWORK WALL LOAD BRICK WITH DENSITY 600KG.
- ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000.

CONCRETE :

- DESIGN MIX CONCRETE SHALL BE AS FOLLOWS:
A. FLOORING (F.F.L. + 1200) : M20
B. FOOTING (F.F.L. + 300) : M25
C. BEAMS & SLABS : M30
D. P.C.C. : 1:4:8
- COLLECTOR COVER TO REINFORCEMENT SHALL BE AS FOLLOWS:
A. COLUMN: SHEAR WALLS = 40 mm
B. FOOTING (F.F.L. + 300) : 75 mm
C. BEAMS & SLABS : 25 mm
D. FLOOR BEAM : 25 mm
E. SLABS : 20 mm
F. RETAINING WALLS : 30 mm

REINFORCEMENT :

- ALL REINFORCEMENT BARS GRAD = Fe 415
- ALL REIN. STEEL MUST BE OF TESTED QUALITY AS PER IS 1786
- LAP LENGTH TO BE 1L (50d) OF BAR MINIMUM.

WATER PROOFING:-

TYP. FOR ALL STRUCTURAL WORKS

A) ALL CONCRETE FACES IN CONTACT WITH SOIL/WATER BELOW THE FINISHED FLOOR LEVEL SHALL BE WATER PROOFED AS PER IS 8753 PART 1 & 2.

CAMBER

A) UNLESS NOTED OTHERWISE (U/L.O) UPWARD CAMBERS SHALL BE PROVIDED IN BEAM & SLABS AS FOLLOWS:
1. CAMBER IN BEAM SHALL BE 1:100
2. SPANS : 7.5M TO 12.0M : 10MM REINFORCING BARS

LEGEND:

- RCC COLUMN
- RCC COLUMN TERMINATE
- RCC RETAINING WALL
- RCC RETAINING WALL TERMINATE
- RCC SHEAR WALL
- RCC SHEAR WALL TERMINATE

REVISIONS

REV.	DATE	REVISION
1	24/07/2025	SURF/ TENDER DRAWING

TENDER DRAWING

CONVENTION CENTRE (SITE - 10)
SEMINAR HALL 350 CAPACITY

DRAWN BY: SARVY DIVE NUMBER: ACES-IM-SH-ST-208
DESIGNED BY: SARVY SCALE: VARIOUS
APPROVED BY: SARVY PAPER SIZE: A1 (594x841)
DATE: 31.05.2025 REVISED: RO

PROJECT

IM SHILONG, UMAMATI CAMPUS, SHILONG

ARCHITECT

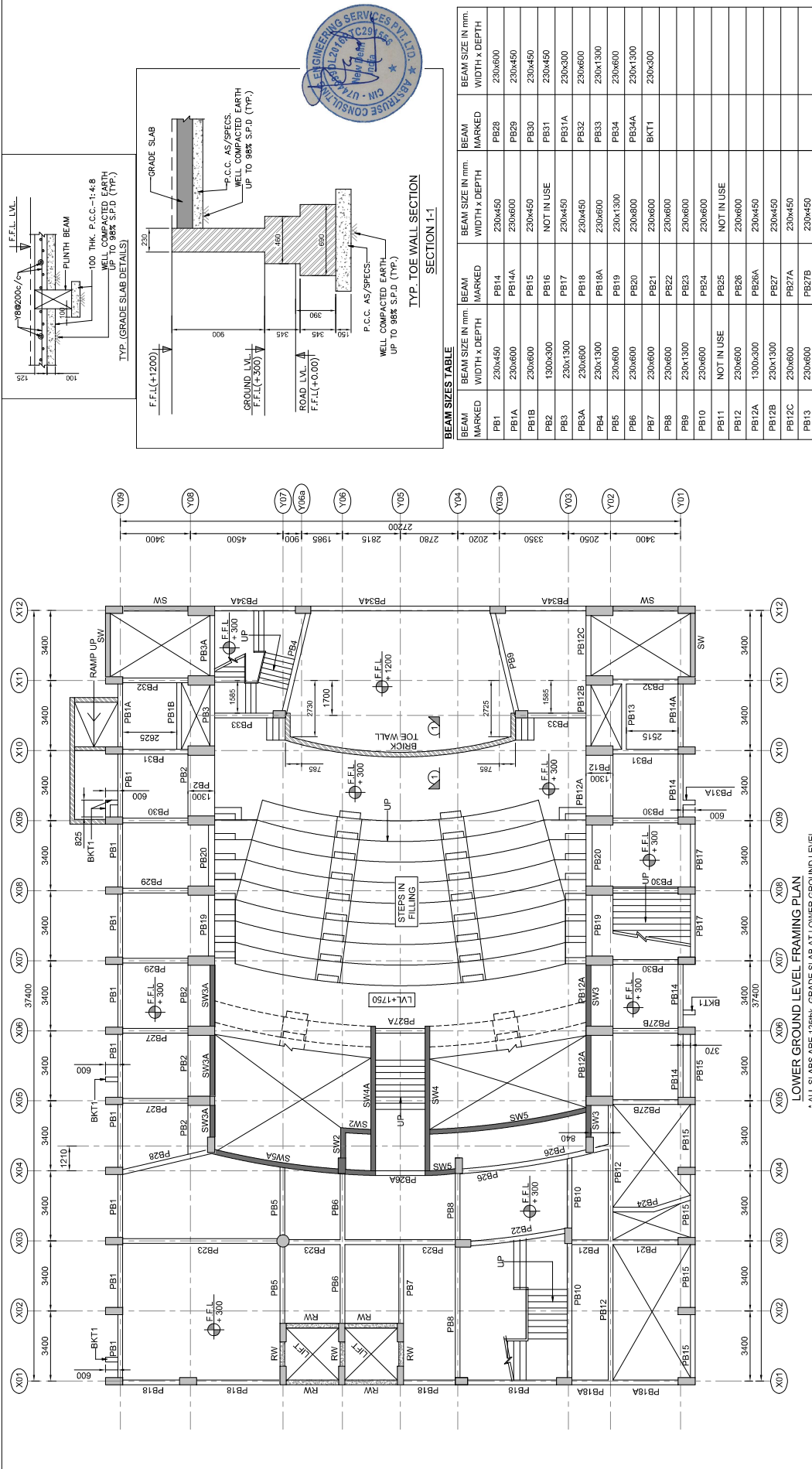
AKSHAYA JAIN & ASSOCIATES
ARCHITECTURE, PLANNING, INTERIOR DESIGN
C-6/1698, VASANT KUNJ, NEW DELHI - 110070
EMAIL: PRAJNVA@AKSHAYAJAIN.COM, AKSHAYAJAIN@AKSHAYAJAIN.COM
PHONE: 011-26155086, 2612304, 47601615

STRUCTURAL CONSULTANT

AICIEIS
BUILDINGS DESIGN WITH US
ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.
Q-100, BARBERY, SOUTH CITY - 2, SECTOR-46, Gurgaon, HARYANA - 122002
PHONE: 0124-4110648, 9643900515

CLIENT

REFERENCE DRAWING



THIS DOCUMENT IS CONFIDENTIAL. NEITHER WHOLE OR ANY PART OF THIS DOCUMENT SHALL BE DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.

- GENERAL NOTES:-
1. ALL DIMENSIONS ARE IN MM. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED. DIMENSIONS SHOULD NOT BE SCALED.
 2. RELEVANT ARCHITECTURAL DRAWING IN CASE OF DISCREPANCY BETWEEN ARCHITECTURAL DRAWING AND STRUCTURAL DRAWING, THE ARCHITECTURAL DRAWING SHALL PREVAIL.
 3. BEFORE EXECUTION CONTRACTOR TO BE ENSURE ASSUMED BEFORE EXECUTION CONTRACTOR TO BE ENSURE ASSUMED.
 4. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED OR RECLAIMED SOIL, THE FOUNDATION SHALL BE IMMEDIATELY TO NOTICE OF CONSULTANTS BEFORE EXECUTION.
 5. FOR BRICKWORK WALL LOAD BRICK WITH DENSITY 600KG.
 6. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000.

- CONCRETE :
1. DESIGN MIX CONCRETE SHALL BE AS FOLLOWS:
A. FLOORING: M20
B. FOOTING: M25
C. BEAMS & SLABS: M20
D. RETAINING WALLS: M20
 2. COVER TO REINFORCEMENT SHALL BE AS FOLLOWS:
A. COLUMN: SHEAR WALLS = 40 mm
B. FOOTING: CAP = 75 mm
C. BEAM: 25 mm
D. FLOOR SLAB: 25 mm
E. SLABS: 20 mm
F. RETAINING WALLS: 30 mm

- REINFORCEMENT:
1. ALL REINFORCEMENT SHALL BE IN GRADE: Fe 415
 2. ALL REIN. STEEL MUST BE OF TESTED QUALITY AS PER IS 1786
 3. LAP LENGTH TO BE LT (50D) OF BAR MINIMUM.

- WATER PROOFING:-
- TYP FOR ALL STRUCTURAL WORKS
- ALL CONCRETE FACES IN CONTACT WITH SOIL/WATER BELOW THE FINISHED FLOOR LEVEL SHALL BE WATERPROOFED BY WATER PROOFING ASARCH DNG OR ASPECTS

- CAMBER
- UNLESS NOTED OTHERWISE (U.N.O.) UPWARD CAMBERS SHALL BE PROVIDED IN BEAM & SLABS AS FOLLOWS:
1. SPANS: 3.00 TO 4.50 M: 1:10
 2. SPANS: 4.50 TO 12.00 M: 1:20

- REVISIONS
- | NO. | DATE | DESCRIPTION |
|-----|------------|-------------|
| 1 | 20/07/2023 | SUBMITTAL |
| 2 | 20/07/2023 | REVISIONS |

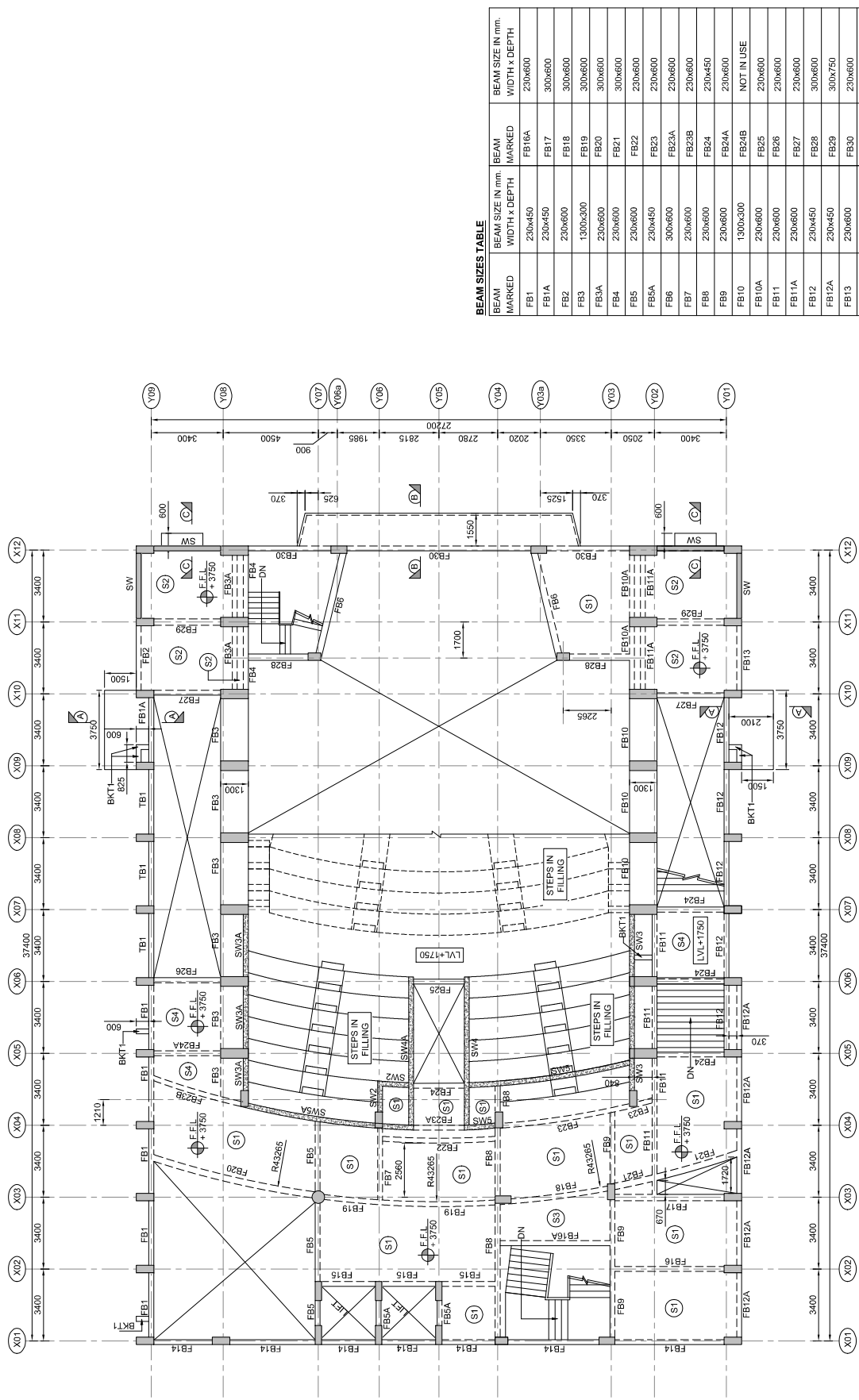
DESIGNER: N. M. Krishnan
Department of Civil Engineering
Indian Institute of Technology Delhi
Hauz Khas, New Delhi, India 110016

TENDER DRAWING
CONVENTION CENTRE (SITE - 10)
SEMINAR HALL 350 CAPACITY

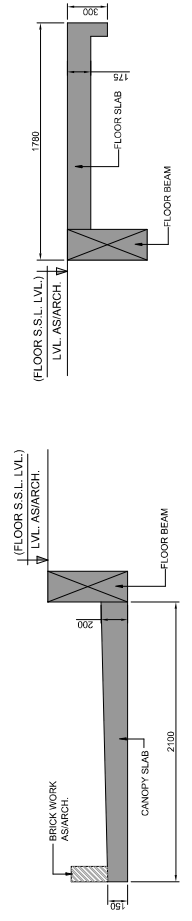
UPPER GROUND LEVEL FRAMING PLAN
DRAWN: SHAWA
DATE: 31.05.2023
SCALE: VARIOUS
APPROVED BY: VISHWAK
PAPER SIZE: A1 (594x841)
PROJECT: IIM SHILLONG, UMISAWU CAMPUS, SHILLONG

ARCHITECT
AKSHAYA JAIN & ASSOCIATES
ARCHITECTURE, PLANNING, INTERIOR DESIGN
C-6/1608, VASANT KUNJ, NEW DELHI - 110070
TELEPHONE: 011-26155886, 2612304, 47601615
EMAIL: akshaya@akjain.com, akjain@akjain.com

STRUCTURAL CONSULTANT
AIICEIS
BUILDINGS DESIGNED BY US
ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.
Q-100, BARBET, SECTOR-17, GATEWAY, HARIDWAR - 220015
PH: 0131-4131948, 9813300145
CLIENT
REFERENCE DRAWING



UPPER GROUND LEVEL FRAMING PLAN
* ALL FLOOR SLABS(S1) ARE 150THK.



SECTION A-A

SECTION B-B



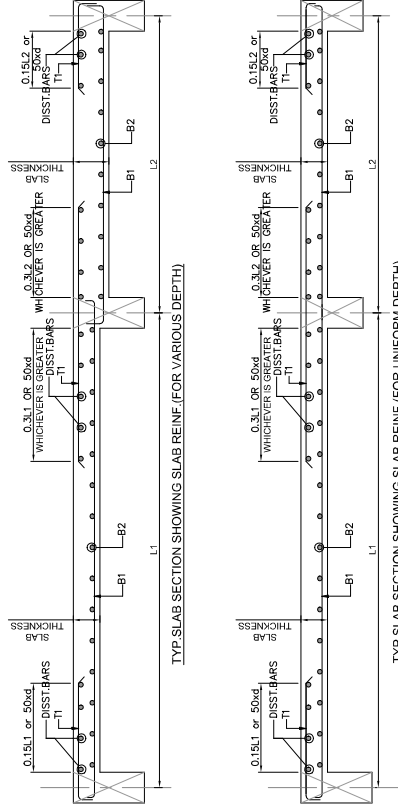
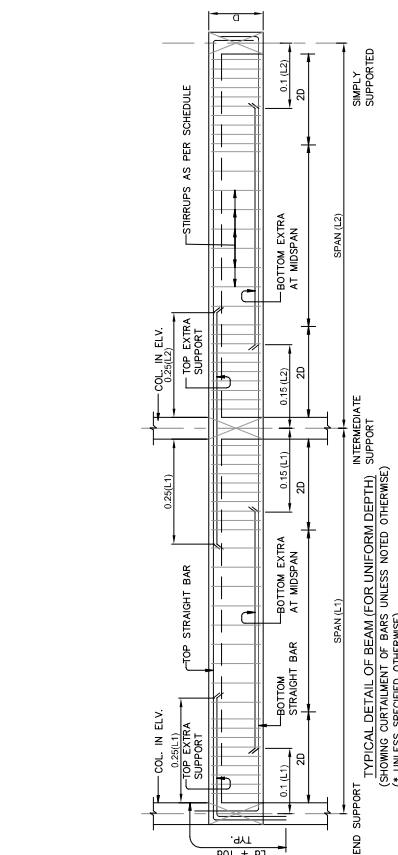
THIS DOCUMENT IS CONFIDENTIAL. NEITHER WHOLE OR ANY PART OF THIS DOCUMENT SHALL BE DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.



BEAM SIZES & REINF. TABLE

BEAM MARK		SIZE		UPPER GROUND FLOOR BEAM REINFORCEMENT SCHEDULE																REMARKS
				BOTTOM REINFORCEMENT				TOP REINFORCEMENT		STIRRUPS				EXTRA AT CONTINUOUS SUPPORT				THROUGH BAR		
				THROUGH BAR	EXTRA AT MID SPAN	THROUGH BAR	EXTRA AT MID SPAN	LEGS	DIA	SPACING	LEGS	DIA	MID SPAN	SPACING	LEGS	DIA	SPACING	LEGS	DIA	
FB1	230x450	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	100c/c
FB1A	230x450	2-Y16+1-Y12	2-Y12	2-Y16+1-Y12	2-Y12	2-Y16+1-Y12	2-Y12	2-Y16+1-Y12	2-Y12	2-Y16+1-Y12	2-Y12	2-Y16+1-Y12	2-Y12	2-Y16+1-Y12	2-Y12	2-Y16+1-Y12	2-Y12	2-Y16+1-Y12	2-Y12	100c/c
FB2	230x600	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	100c/c
FB3	1300x300	10-Y12	----	10-Y12	----	10-Y12	----	10-Y12	----	10-Y12	----	10-Y12	----	10-Y12	----	10-Y12	----	10-Y12	----	100c/c
FB3A	230x600	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	100c/c
FB4	230x600	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	100c/c
FB5	230x600	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	100c/c
FB5A	230x450	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	100c/c
FB6	300x600	4-Y20	----	4-Y20	----	4-Y20	----	4-Y20	----	4-Y20	----	4-Y20	----	4-Y20	----	4-Y20	----	4-Y20	----	100c/c
FB7	230x600	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	100c/c
FB8	230x600	3-Y20	2-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	100c/c
FB9	230x600	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	100c/c
FB10	1300x300	10-Y12	----	10-Y12	----	10-Y12	----	10-Y12	----	10-Y12	----	10-Y12	----	10-Y12	----	10-Y12	----	10-Y12	----	100c/c
FB10A	230x600	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	100c/c
FB11	230x600	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	100c/c
FB11A	230x600	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	100c/c
FB12	230x450	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	100c/c
FB12A	230x450	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	100c/c
FB13	230x600	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	100c/c
FB14	230x450	3-Y16	2-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	100c/c
FB15	230x600	3-Y20	----	3-Y20	----	3-Y20	----	3-Y20	----	3-Y20	----	3-Y20	----	3-Y20	----	3-Y20	----	3-Y20	----	100c/c
FB16	230x600	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	100c/c
FB16A	230x600	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	100c/c
FB17	300x600	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	100c/c
FB18	300x600	4-Y20	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	100c/c
FB19	300x600	4-Y20	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	100c/c
FB20	300x600	4-Y20	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	100c/c
FB21	300x600	4-Y20	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	4-Y16	100c/c
FB22	230x600	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	100c/c
FB23	230x600	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	100c/c
FB23A	230x600	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	100c/c
FB23B	230x600	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	100c/c
FB24	230x450	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	100c/c
FB24A	230x600	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	100c/c
FB24B	NOT IN USE																			
FB25	230x600	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	100c/c
FB26	230x600	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	100c/c
FB27	230x600	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	100c/c
FB28	300x600	4-Y20	----	4-Y20	----	4-Y20	----	4-Y20	----	4-Y20	----	4-Y20	----	4-Y20	----	4-Y20	----	4-Y20	----	100c/c
FB29	300x750	4-Y20	----	4-Y20	----	4-Y20	----	4-Y20	----	4-Y20	----	4-Y20	----	4-Y20	----	4-Y20	----	4-Y20	----	100c/c
FB30	230x600	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	3-Y16	100c/c
BT1	230x450	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	2-Y16+1-Y12	2-Y16	100c/c
BKT1	230x300	3-Y12	----	3-Y12	----	3-Y12	----	3-Y12	----	3-Y12	----	3-Y12	----	3-Y12	----	3-Y12	----	3-Y12	----	100c/c
EXTRA AT TOP AT ANY SIMPLY SUPPORT CONDITION(LOCATION SHALL NOT BE PROVIDED)																				
* PROVIDE 3-Y12 FACE BAR (BOTH FACE) FOR BEAM DEPTH 900mm.																				
* UPWARD CAMBERS SHALL BE PROVIDED IN BEAM & SLABS AS FOLLOW:																				
* PROVIDE 4-Y12 FACE BAR (BOTH FACE) FOR BEAM DEPTH 1200mm.																				

* EXTRA AT TOP AT ANY SIMPLY SUPPORT CONDITION/LOCATION SHALL NOT BE PROVIDED
* UPWARD CAMBERS SHALL BE PROVIDED IN BEAM & SLABS AS FOLLOW:



N. M. P. Krishnan
Department of Civil Engineering
Indian Institute of Technology Delhi
Hauz Khas, New Delhi, India 110016

SCHEDULE OF SLAB REINF.

SLAB MARK	THICKNESS (mm)	BOTTOM REINF.	TOP REINF.	REMARKS
		SHORT SPAN (B1)	LONG SPAN (B2)	
S1	150	Y8 -150c/c	Y8 -150c/c	Y8 -200c/c
S2	175	Y10 -100c/c	Y10 -150c/c	Y10 -175c/c
S3	175	Y10 -100c/c	Y10 -100c/c	Y10 -100c/c
S4	160	Y10 -100c/c	Y10 -200c/c	Y10 -175c/c

DIST. BARS - Y8 -200c/c (U.N.O.)

REVISIONS	
NO.	DESCRIPTION
1	ISSUED FOR TENDER DRAWING
2	ISSUED FOR TENDER DRAWING
3	ISSUED FOR TENDER DRAWING
4	ISSUED FOR TENDER DRAWING
5	ISSUED FOR TENDER DRAWING
6	ISSUED FOR TENDER DRAWING
7	ISSUED FOR TENDER DRAWING
8	ISSUED FOR TENDER DRAWING
9	ISSUED FOR TENDER DRAWING
10	ISSUED FOR TENDER DRAWING
11	ISSUED FOR TENDER DRAWING
12	ISSUED FOR TENDER DRAWING
13	ISSUED FOR TENDER DRAWING
14	ISSUED FOR TENDER DRAWING
15	ISSUED FOR TENDER DRAWING
16	ISSUED FOR TENDER DRAWING
17	ISSUED FOR TENDER DRAWING
18	ISSUED FOR TENDER DRAWING
19	ISSUED FOR TENDER DRAWING
20	ISSUED FOR TENDER DRAWING
21	ISSUED FOR TENDER DRAWING
22	ISSUED FOR TENDER DRAWING
23	ISSUED FOR TENDER DRAWING
24	ISSUED FOR TENDER DRAWING
25	ISSUED FOR TENDER DRAWING
26	ISSUED FOR TENDER DRAWING
27	ISSUED FOR TENDER DRAWING
28	ISSUED FOR TENDER DRAWING
29	ISSUED FOR TENDER DRAWING
30	ISSUED FOR TENDER DRAWING
31	ISSUED FOR TENDER DRAWING
32	ISSUED FOR TENDER DRAWING
33	ISSUED FOR TENDER DRAWING
34	ISSUED FOR TENDER DRAWING
35	ISSUED FOR TENDER DRAWING
36	ISSUED FOR TENDER DRAWING
37	ISSUED FOR TENDER DRAWING
38	ISSUED FOR TENDER DRAWING
39	ISSUED FOR TENDER DRAWING
40	ISSUED FOR TENDER DRAWING
41	ISSUED FOR TENDER DRAWING
42	ISSUED FOR TENDER DRAWING
43	ISSUED FOR TENDER DRAWING
44	ISSUED FOR TENDER DRAWING
45	ISSUED FOR TENDER DRAWING
46	ISSUED FOR TENDER DRAWING
47	ISSUED FOR TENDER DRAWING
48	ISSUED FOR TENDER DRAWING
49	ISSUED FOR TENDER DRAWING
50	ISSUED FOR TENDER DRAWING
51	ISSUED FOR TENDER DRAWING
52	ISSUED FOR TENDER DRAWING
53	ISSUED FOR TENDER DRAWING
54	ISSUED FOR TENDER DRAWING
55	ISSUED FOR TENDER DRAWING
56	ISSUED FOR TENDER DRAWING
57	ISSUED FOR TENDER DRAWING
58	ISSUED FOR TENDER DRAWING
59	ISSUED FOR TENDER DRAWING
60	ISSUED FOR TENDER DRAWING
61	ISSUED FOR TENDER DRAWING
62	ISSUED FOR TENDER DRAWING
63	ISSUED FOR TENDER DRAWING
64	ISSUED FOR TENDER DRAWING
65	ISSUED FOR TENDER DRAWING
66	ISSUED FOR TENDER DRAWING
67	ISSUED FOR TENDER DRAWING
68	ISSUED FOR TENDER DRAWING
69	ISSUED FOR TENDER DRAWING
70	ISSUED FOR TENDER DRAWING
71	ISSUED FOR TENDER DRAWING
72	ISSUED FOR TENDER DRAWING
73	ISSUED FOR TENDER DRAWING
74	ISSUED FOR TENDER DRAWING
75	ISSUED FOR TENDER DRAWING
76	ISSUED FOR TENDER DRAWING
77	ISSUED FOR TENDER DRAWING
78	ISSUED FOR TENDER DRAWING
79	ISSUED FOR TENDER DRAWING
80	ISSUED FOR TENDER DRAWING
81	ISSUED FOR TENDER DRAWING
82	ISSUED FOR TENDER DRAWING
83	ISSUED FOR TENDER DRAWING
84	ISSUED FOR TENDER DRAWING
85	ISSUED FOR TENDER DRAWING
86	ISSUED FOR TENDER DRAWING
87	ISSUED FOR TENDER DRAWING
88	ISSUED FOR TENDER DRAWING
89	ISSUED FOR TENDER DRAWING
90	ISSUED FOR TENDER DRAWING
91	ISSUED FOR TENDER DRAWING
92	ISSUED FOR TENDER DRAWING
93	ISSUED FOR TENDER DRAWING
94	ISSUED FOR TENDER DRAWING
95	ISSUED FOR TENDER DRAWING
96	ISSUED FOR TENDER DRAWING
97	ISSUED FOR TENDER DRAWING
98	ISSUED FOR TENDER DRAWING
99	ISSUED FOR TENDER DRAWING
100	ISSUED FOR TENDER DRAWING

TENDER DRAWING	
CONVENTION CENTRE (SITE - 10)	
SEMINAR HALL 3RD FLOOR	
UPPER GROUND LEVEL BEAM REIN. DETAILS	
DRAWN BY	SAHAY
CHECKED BY	SAHAY
DESIGNED BY	SAHAY
APPROVED BY	SAHAY
DATE	31.05.2025
PROJECT	IM SHILONG UNIVERSITY CAMPUS SHILLONG
ARCHITECT	
AKSHAYA JAIN & ASSOCIATES	
ARCHITECTURE, PLANNING, INTERIOR DESIGN	
C-6/1608, VASANT KUNJ, NEW DELHI - 110070	
E-MAIL: AKSHAYA@AKSHAYAJAIN.COM	
STRUCTURAL CONSULTANT	

THIS DOCUMENT IS CONFIDENTIAL. NEITHER WHOLE OR ANY PART OF THIS DOCUMENT SHALL BE DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.

- GENERAL NOTES:-
1. ALL DIMENSIONS ARE IN MM. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED. DIMENSIONS SHOULD NOT BE SCALED.
 2. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED OR RECLAIMED SOIL IS USED, THE FOUNDATION SHALL BE IMMEDIATELY TO BE NOTICED BY THE CONSULTANT BEFORE EXECUTION.
 3. THE BUILDING HAS BEEN DESIGNED FOR G+1 STOREY.
 4. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED OR RECLAIMED SOIL IS USED, THE FOUNDATION SHALL BE IMMEDIATELY TO BE NOTICED BY THE CONSULTANT BEFORE EXECUTION.
 5. FOR BRICK/ BLOCK WALL LOAD, BRICK/ BLOCK WITH DENSITY 600KG.
 6. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000.

- CONCRETE :
1. DESIGN MIX CONCRETE SHALL BE AS FOLLOWS:
A. CEMENT : 42.5
B. FINE AGGREGATE : 2.0 mm
C. COARSE AGGREGATE : 4.75 mm
D. BEANS & SLABS : M30
E. RCC : M40
 2. CURING SHALL BE DONE AS PER IS 456:2000.

- COVER :
1. ALL REINFORCEMENT SHALL BE AS FOLLOWS:
A. COLUMN : SHEAR WALLS = 40 mm
B. FOOTING/PILE CAP = 75 mm
C. FLOOR SLAB : 20 mm
D. FLOOR BEAM : 25 mm
E. BEANS & SLABS : 25 mm
F. RETAINING WALLS : 30 mm

- REINFORCEMENT :
1. ALL REINFORCEMENT SHALL BE AS FOLLOWS:
A. CEMENT : 42.5
B. FINE AGGREGATE : 2.0 mm
C. COARSE AGGREGATE : 4.75 mm
D. BEANS & SLABS : M30
E. RCC : M40

- WATER PROOFING:-
1. ALL CONCRETE FACES IN CONTACT WITH SOIL/WATER BELOW THE FINISHED FLOOR LEVEL SHALL BE WATER PROOFED AS PER IS 8755:2000.

- CAMBER :
1. ALL CONCRETE FACES IN CONTACT WITH SOIL/WATER BELOW THE FINISHED FLOOR LEVEL SHALL BE WATER PROOFED AS PER IS 8755:2000.

- UNLESS NOTED OTHERWISE (U.N.O.) UPWARD CAMBERS SHALL BE PROVIDED IN BEAM & SLABS AS FOLLOWS:
1. SPANS : 7.5M TO 12.0M : 10MM REINFORCEMENT
 2. SPANS : 12.0M TO 15.0M : 15MM REINFORCEMENT

N. M. Gupta Krishnan
Department of Civil Engineering
Indian Institute of Technology Delhi
Hauz Khas, New Delhi, India 110016

REVISIONS

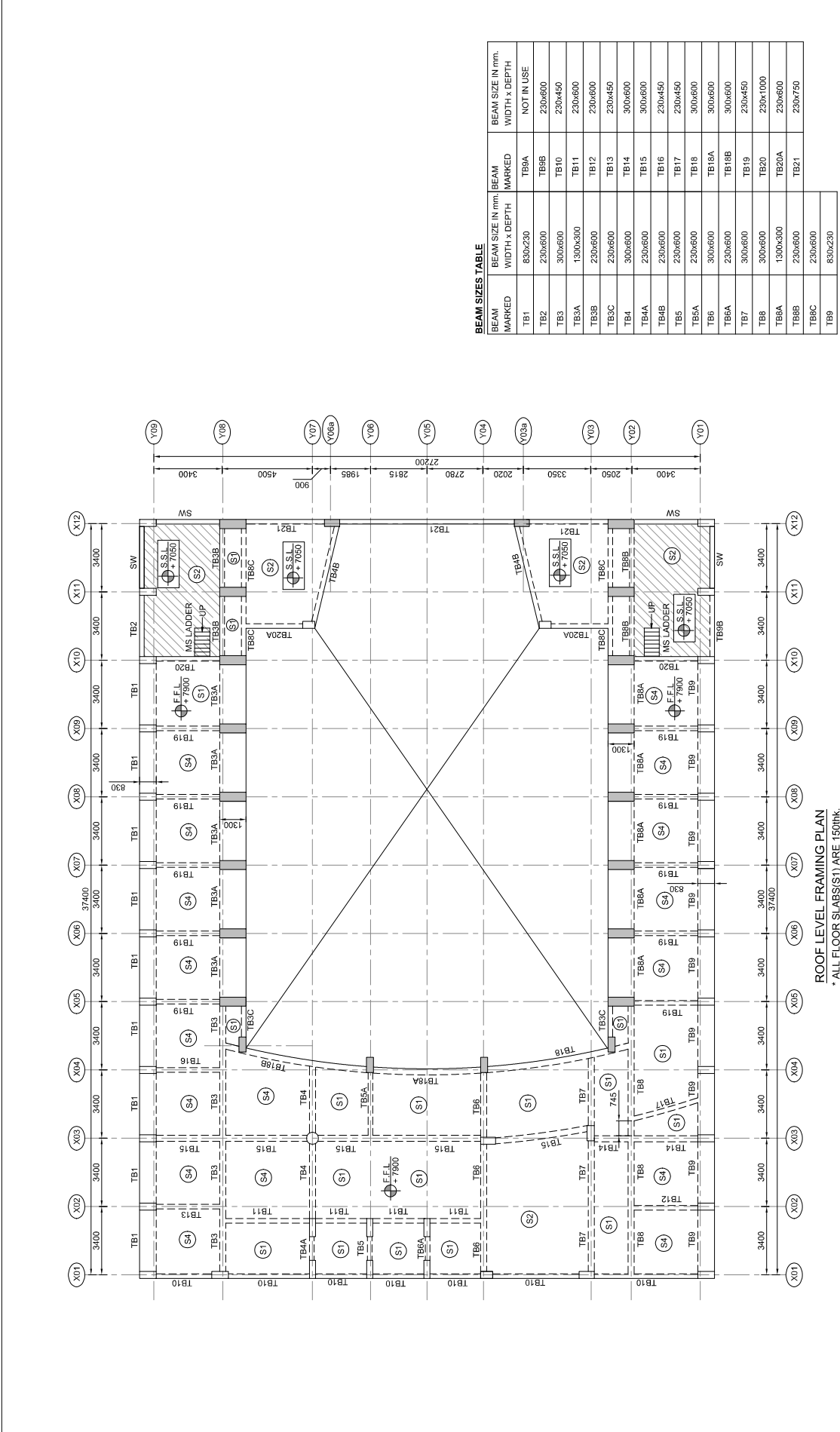
NO.	DATE	DESCRIPTION

TENDER DRAWING

NO.	DATE	DESCRIPTION

CONVENTION CENTRE (SITE - 10)

NO.	DATE	DESCRIPTION



ROOF LEVEL FRAMING PLAN
* ALL FLOOR SLABS(S1) ARE 150mm.



ARCHITECT

AKSHAYA JAIN & ASSOCIATES
ARCHITECTURE, PLANNING, INTERIOR DESIGN
C-6/1698, VASANT KUNJ, NEW DELHI - 110070
TELEPHONE: 011-26155088, 2612304, 26101615
EMAIL: akshaya@akshaya.co.in

STRUCTURAL CONSULTANT

ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.
BUILDINGS FIVE WITH US
Q-100, BARBERI, SOUTH CITY - 2, SECTOR-40, Gurgaon, HARYANA - 122002
PHONE : 0124-4131968, 963380515

CLIENT

REFERENCE DRAWING

THIS DOCUMENT IS CONFIDENTIAL. NEITHER WHOLE OR ANY PART OF THIS DOCUMENT SHALL BE DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.



GENERAL NOTES:-

1. ALL DIMENSIONS ARE IN MM. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED. DIMENSIONS SHOULD NOT BE SCALED.
2. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED OR RECLAIMED SOIL IS USED, THE FOUNDATION SHALL BE IMMEDIATELY TO BE EXCAVATED AND REPLACED WITH VIRGIN SOIL.
3. THE BUILDING HAS BEEN DESIGNED FOR G+1 STOREY.
4. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED OR RECLAIMED SOIL IS USED, THE FOUNDATION SHALL BE IMMEDIATELY TO BE EXCAVATED AND REPLACED WITH VIRGIN SOIL.
5. FOR BRICKBLOCK WALL LOAD - BRICK WITH DENSITY 600KG.
6. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000.

CONCRETE :

1. DESIGN MIX CONCRETE SHALL BE AS FOLLOWS:
A. COLUMN: SHEAR WALLS = 40 mm
B. FOOTING/PILE CAP: M30
C. FLOOR BEAM = 25 mm
D. BEAMS & SLABS = M30
E. RCC-148
F. RCC-148
G. RETAINING WALLS = 30 mm
2. ALL CONCRETE SHALL BE CURED FOR 7 DAYS.
3. ALL CONCRETE SHALL BE CURED FOR 7 DAYS.

REINFORCEMENT :

1. ALL REINFORCEMENT SHALL BE AS FOLLOWS:
A. COLUMN: SHEAR WALLS = 40 mm
B. FOOTING/PILE CAP: M30
C. FLOOR BEAM = 25 mm
D. BEAMS & SLABS = M30
E. RCC-148
F. RCC-148
G. RETAINING WALLS = 30 mm
2. ALL REINFORCEMENT SHALL BE CURED FOR 7 DAYS.
3. ALL REINFORCEMENT SHALL BE CURED FOR 7 DAYS.

WATER PROOFING:-

1. ALL CONCRETE SHALL BE CURED FOR 7 DAYS.
2. ALL CONCRETE SHALL BE CURED FOR 7 DAYS.

TYP FOR ALL STRUCTURAL WORKS

1. ALL CONCRETE SHALL BE CURED FOR 7 DAYS.
2. ALL CONCRETE SHALL BE CURED FOR 7 DAYS.

CAMBER

1. ALL CONCRETE SHALL BE CURED FOR 7 DAYS.
2. ALL CONCRETE SHALL BE CURED FOR 7 DAYS.

REVISIONS

NO.	DATE	DESCRIPTION
1	20/07/2023	ISSUED FOR TENDER DRAWING

TENDER DRAWING

CONVENTION CENTRE (SITE - 10)
SEMINAR HALL 3RD CAPACITY
ROOF LEVEL BEAM REINFORCEMENT DETAILS

DESIGN BY: ARCHITECT
SCALE: VARIOUS
DATE: 31.05.2023
PROJECT: IIM SHILONG, UMAMATI CAMPUS, SHILONG

ARCHITECT
AKSHAYA JAIN & ASSOCIATES
C-6/1608, VASANT KUNJ NEW DELHI - 110070
E-MAIL: AKSHAYA@AKSHAYAJAIN.COM
PHONE: 011-26155086, 2612304, 47601615

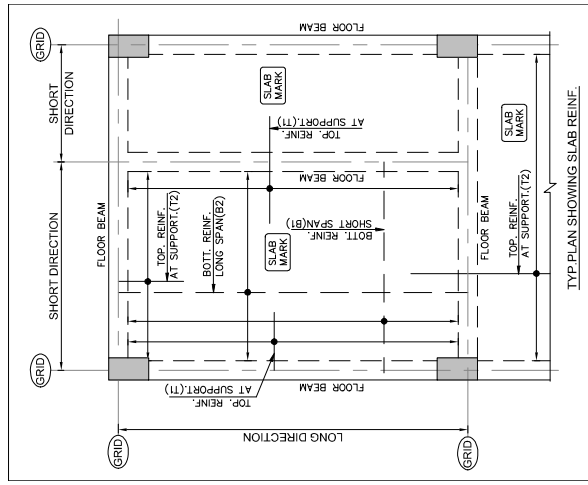
STRUCTURAL CONSULTANT
ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.
BUILDINGS BSE WITH US
Q-100, BARBERY, SECTOR-40, GURGAON, HARYANA - 122002
PHONE: 01294-131948, 964340515

CLIENT
REFERENCE DRAWING

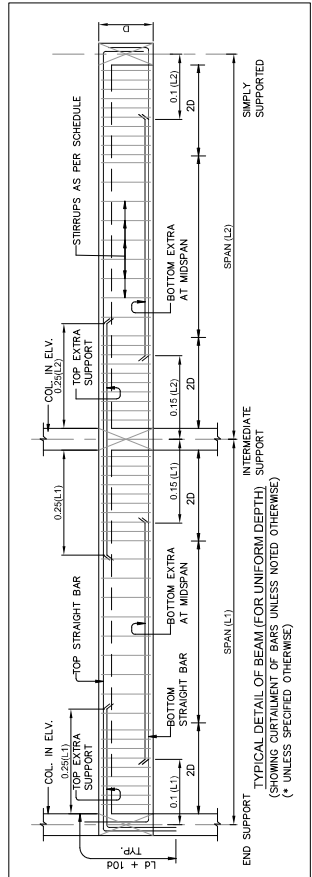
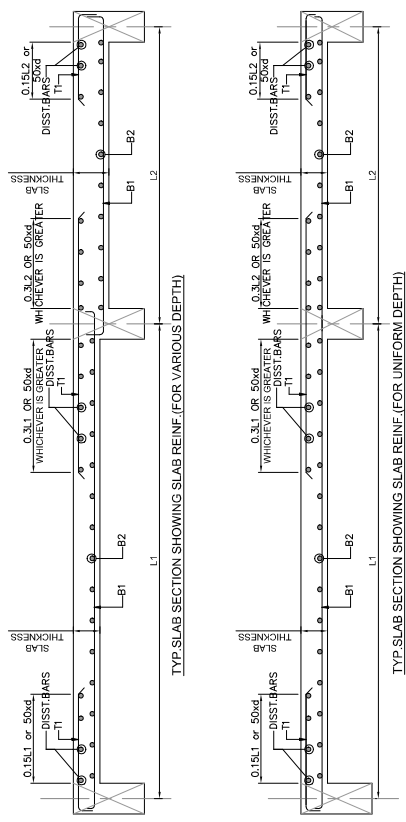
BEAM SIZES & REINFORCEMENT SCHEDULE									
BEAM MARK	SIZE WIDTH x DEPTH	BOTTOM REINFORCEMENT				STIRRUPS			
		THROUGH BAR	EXTRA AT MID SPAN	EXTRA AT CONTINUOUS SUPPORT	THROUGH BAR	LHS	LEG	SPACING	RHS
TB1	830x230	8-Y12	----	----	8-Y12	4L	Y8	100c/c	4L
TB2	230x600	2-Y16+1-Y12	----	----	2-Y16+1-Y12	2L	Y10	100c/c	2L
TB3	230x600	3-Y16	3-Y12	3-Y16	2-Y12+1-Y16	2L	Y10	100c/c	2L
TB3A	1300x300	10-Y12	----	----	10-Y12	4L	Y8	150c/c	4L
TB3B	230x600	3-Y16	3-Y12	3-Y16	2-Y12+1-Y16	2L	Y10	100c/c	2L
TB3C	230x600	3-Y16	3-Y12	3-Y16	2-Y12+1-Y16	2L	Y10	100c/c	2L
TB4	300x600	3-Y20	----	----	3-Y20	2L	Y10	100c/c	2L
TB4A	230x600	3-Y20	----	----	3-Y20	2L	Y10	100c/c	2L
TB4B	230x600	3-Y20	----	----	3-Y20	2L	Y10	100c/c	2L
TB5	230x600	3-Y20	----	----	3-Y20	2L	Y10	100c/c	2L
TB6	230x600	3-Y16	3-Y12	3-Y16	2-Y12+1-Y16	2L	Y10	100c/c	2L
TB6A	230x600	3-Y20	----	----	3-Y20	2L	Y10	100c/c	2L
TB7	230x600	3-Y20	----	----	3-Y20	2L	Y10	100c/c	2L
TB8	300x600	3-Y16	3-Y12	3-Y16	2-Y12+1-Y16	2L	Y10	100c/c	2L
TB8A	1300x300	10-Y12	----	----	10-Y12	4L	Y8	150c/c	4L
TB8B	230x600	3-Y16	3-Y12	3-Y16	2-Y12+1-Y16	2L	Y10	100c/c	2L
TB8C	230x600	3-Y16	3-Y12	3-Y16	2-Y12+1-Y16	2L	Y10	100c/c	2L
TB9	830x230	8-Y12	----	----	8-Y12	4L	Y8	100c/c	4L
TB9A	NOT IN USE	----	----	----	----	----	----	----	----
TB9B	230x600	2-Y16+1-Y12	----	----	2-Y16+1-Y12	2L	Y8	100c/c	2L
TB10	230x450	2-Y16+1-Y12	----	----	2-Y16+1-Y12	2L	Y8	100c/c	2L
TB11	230x600	2-Y16+1-Y12	----	----	2-Y16+1-Y12	2L	Y8	100c/c	2L
TB12	230x600	2-Y16+1-Y12	----	----	2-Y16+1-Y12	2L	Y10	100c/c	2L
TB13	230x450	2-Y16+1-Y12	----	----	2-Y16+1-Y12	2L	Y10	100c/c	2L
TB14	300x600	3-Y20	----	----	3-Y20	2L	Y10	100c/c	2L
TB15	300x600	4-Y16	----	----	4-Y16	4L	Y10	100c/c	4L
TB16	230x450	2-Y16+1-Y12	----	----	2-Y16+1-Y12	2L	Y8	100c/c	2L
TB17	230x450	2-Y16+1-Y12	----	----	2-Y16+1-Y12	2L	Y8	100c/c	2L
TB18	300x600	4-Y20	----	----	4-Y20	4L	Y8	100c/c	4L
TB18A	300x600	4-Y20	----	----	4-Y20	4L	Y8	100c/c	4L
TB18B	300x600	4-Y20	----	----	4-Y20	4L	Y8	100c/c	4L
TB19	230x450	2-Y16+1-Y12	----	----	2-Y16+1-Y12	2L	Y8	100c/c	2L
TB20	230x1000	3-Y20	----	----	3-Y20	2L	Y8	100c/c	2L
TB20A	230x600	3-Y20	----	----	3-Y20	2L	Y10	100c/c	2L
TB21	230x750	3-Y16	3-Y16	3-Y16	2-Y12+1-Y16	2L	Y10	100c/c	2L

* PROVIDE 3-Y12 FACE BAR (BOTH FACE) FOR BEAM DEPTH 800mm.
* PROVIDE 4-Y12 FACE BAR (BOTH FACE) FOR BEAM DEPTH 1200mm.

* EXTRA AT TOP AT ANY SIMPLY SUPPORT CONDITION/LOCATION SHALL NOT BE PROVIDED
* UPWARD CAMBERS SHALL BE PROVIDED IN BEAM & SLABS AS FOLLOWS:



SCHEDULE OF SLAB REIN.						
SLAB MARK	THICKNESS	BOTTOM REIN.		TOP REIN.		REMARKS.
		SHORT SPAN	LONG SPAN	TOP REIN.	TOP REIN.	
S1	150	Y8 -150c/c	Y8 -200c/c	Y8 -150c/c	Y8 -200c/c (T2)	---
S2	175	Y10 -100c/c	Y10 -150c/c	Y10 -150c/c	Y10 -175c/c	---
S3	NOT IN USE					---
S4	160	Y10 -100c/c	Y10 -200c/c	Y10 -100c/c	Y10 -175c/c	---
DIST.BARS-Y8-200c/c (U.N.O.)						





THIS DOCUMENT IS CONFIDENTIAL. NEITHER WHOLE OR ANY PART OF THIS DOCUMENT SHALL BE DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.

GENERAL NOTES:-

1. ALL DIMENSIONS ARE IN MM. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED. DIMENSIONS SHOULD NOT BE SCALED.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY RELEVANT ARCHITECTURAL DRAWING IN CASE OF DISCREPANCY BETWEEN ARCHITECTURAL DRAWING AND STRUCTURAL DRAWING, IMMEDIATELY BROUGHT TO NOTICE TO THE CONSULTANTS BEFORE EXECUTION CONTRACTOR TO BE ENSURE ASSUMED.
3. THE BUILDING HAS BEEN DESIGNED FOR G+1 STOREY.
4. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED OR UNDESIRABLE SOIL IS FOUND, THE CONTRACTOR SHALL IMMEDIATELY BROUGHT TO NOTICE OF CONSULTANTS BEFORE EXECUTION.
5. FOR BRICKWORK WALL LOAD BRICK WITH DENSITY 600KG.
6. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000.

CONCRETE :

1. DESIGN MIX CONCRETE SHALL BE AS FOLLOWS:
A. FLOOR SLAB: M20
B. FOOTING/PILE CAP: M30
C. BEAMS & SLABS: M30
D. RETAINING WALLS: M40

COVER :

1. COVER FOR REINFORCEMENT SHALL BE AS FOLLOWS:
A. COLUMN/ SHEAR WALLS = 40 mm
B. FOOTING/PILE CAP = 75 mm
C. BEAMS & SLABS = 25 mm
D. FLOOR BEAM = 25 mm
E. SLABS = 20 mm
F. RETAINING WALLS = 30 mm

REINFORCEMENT :

1. ALL REINFORCEMENT SHALL BE AS FOLLOWS:
A. ALL REINFORCEMENT SHALL BE IN GRADE - Fe 415
B. ALL REINFORCEMENT SHALL BE OF TESTED QUALITY AS PER IS 1786

WATER PROOFING:-

1. LAP LENGTH TO BE L_d (50D) OF BAR MINIMUM.

TYP FOR ALL STRUCTURAL WORKS

1. ALL CONCRETE FACES IN CONTACT WITH SOIL/WATER BELOW THE FINISHED FLOOR LEVEL SHALL BE PROTECTED BY WATER PROOFING AS ARCH DWG OR ASPECTS

CAMBER

1. UNLESS NOTED OTHERWISE (U.A.O.) UPWARD CAMBERS SHALL BE PROVIDED IN BEAM & SLABS AS FOLLOWS:
A. BEAMS: 1:10
B. SLABS: 1:100

SPANS

1. SPANS: 7.5M TO 12.0M - 10MM REINFORCEMENT

REVISIONS

NO.	REVISION	DATE	BY	CHKD
1	ISSUED FOR TENDER DRAWING	28/07/2025	SAURAV	DEEPTI
2	ISSUED FOR TENDER DRAWING	28/07/2025	DEEPTI	SAURAV

N. M. Pop Krishna
Department of Civil Engineering
Indian Institute of Technology Delhi
Hauz Khas, New Delhi, India 110016

TENDER DRAWING

CONVENTION CENTRE (SITE - 10)
SEMINAR HALL 350 CAPACITY

DESIGN BY:	SAURAV	DWG NUMBER:	ACES-IM-SHT-2412
APPROVED BY:	VARUN	SCALE:	VARIOUS
DATE:	31.05.2025	PAPER SIZE:	A1 (594x841)
PROJECT:	IM SHILONG, UMAMU CAMPUS, SHILONG	REVISIONS:	RO

ARCHITECT

AKSHAYA JAIN & ASSOCIATES
ARCHITECTURE - PLANNING - INTERIOR DESIGN
C-6/ 608B, VASANT KUNJ, NEW DELHI - 110070
EMAIL: akshaya@akshayaai.com, akshaya@akshayaai.com

STRUCTURAL CONSULTANT

ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.
Q-100, BARBERI, SOUTH CITY - 2, SECTOR-40, GURGAON, HARYANA - 122002
PH: 0124-4110648, 9813040145

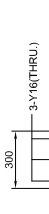
CLIENT

REFERENCE DRAWING

STEEL STRUCTURE NOTES.

1. ALL DIMENSIONS ARE IN MM.
2. ALL DIMENSIONS SHALL BE FULLY DIMENSIONED.
3. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH RELEVANT ARCH. DRAWINGS.
4. ALL STR. MEMBERS & PLATE DIMENSIONS SHALL BE VERIFIED FROM FULL SCALE SHOP LAYOUT.
5. ALL STR. STEEL SHALL BE YST 310 CONFORMING TO IS 2062.
6. ALL WELD SHALL BE IN ACCORDANCE OF IS 800-2007 AND IS 814-1983.
7. PROPER LAYOUT SHALL BE MADE FOR ALL THE JUNCTION DETAILS BEFORE STARTING FABRICATION.
8. PIPE TO PIPE JOINTS SHALL BE FULL PENETRATION GROOVE WELD.
9. ALL ELECTRODES SHALL BE AS PER IS 814-1983.
10. IT SHALL BE ASCERTAINED ON SITE BEFORE COMMENCEMENT OF WORK THAT ALL DIMENSIONS ETC. OF VARIOUS STR. MEMBERS ARE CORRECTLY DIMENSIONED AND NOTED TO THE NOTICE OF CONSULTANTS BEFORE STARTING THE WORK.
11. WHEREVER LENGTH OF WELD IS NOT INDICATED ON DRG. ALL CONTACT EDGES SHALL HAVE A FULL CONTINUOUS WELD.
12. ALL FILLET WELD SHALL BE 5mm WHERE A WELD IS PROVIDED ON SIDE OF THE THICKNESS OF THE COMPONENTS. THE MINIMUM WELD SHALL BE EQUAL TO THE THICKNESS OF THE COMPONENTS.
13. ALL ROOF AND RIGID JOINTS SHALL BE FULL PENETRATION GROOVE WELD.
14. ALL MISSING DETAIL CONNECTION TO ERCT THE STRUCTURE AS SHOWN SHALL BE CONTRACTOR RESPONSIBILITY.
15. ANY DISCREPANCY SHALL BE BROUGHT UNDER NOTICE OF CONSULTANT BEFORE EXECUTION OF WORK.

NOTES:
* CONTRACTOR TO SUBMIT FABRICATIONS DWGS. FOR CONSULTANT APPROVAL PRIOR TO EXECUTION OF WORK.
* ALL WELD SHALL BE FULL STRENGTH WELD ALL AROUND.



TB2 (300x750)
TIE BEAM REINFORCEMENT DETAILS

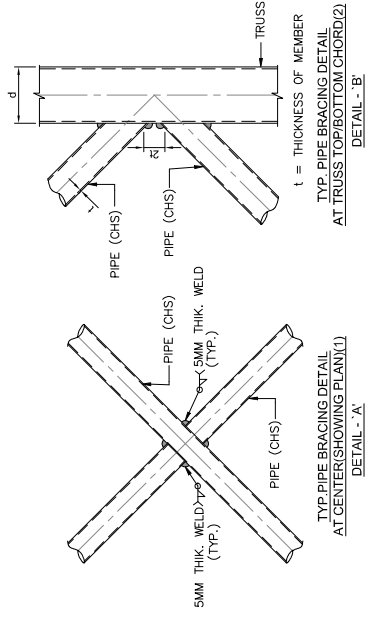


TB1 (300x600)
TIE BEAM REINFORCEMENT DETAILS

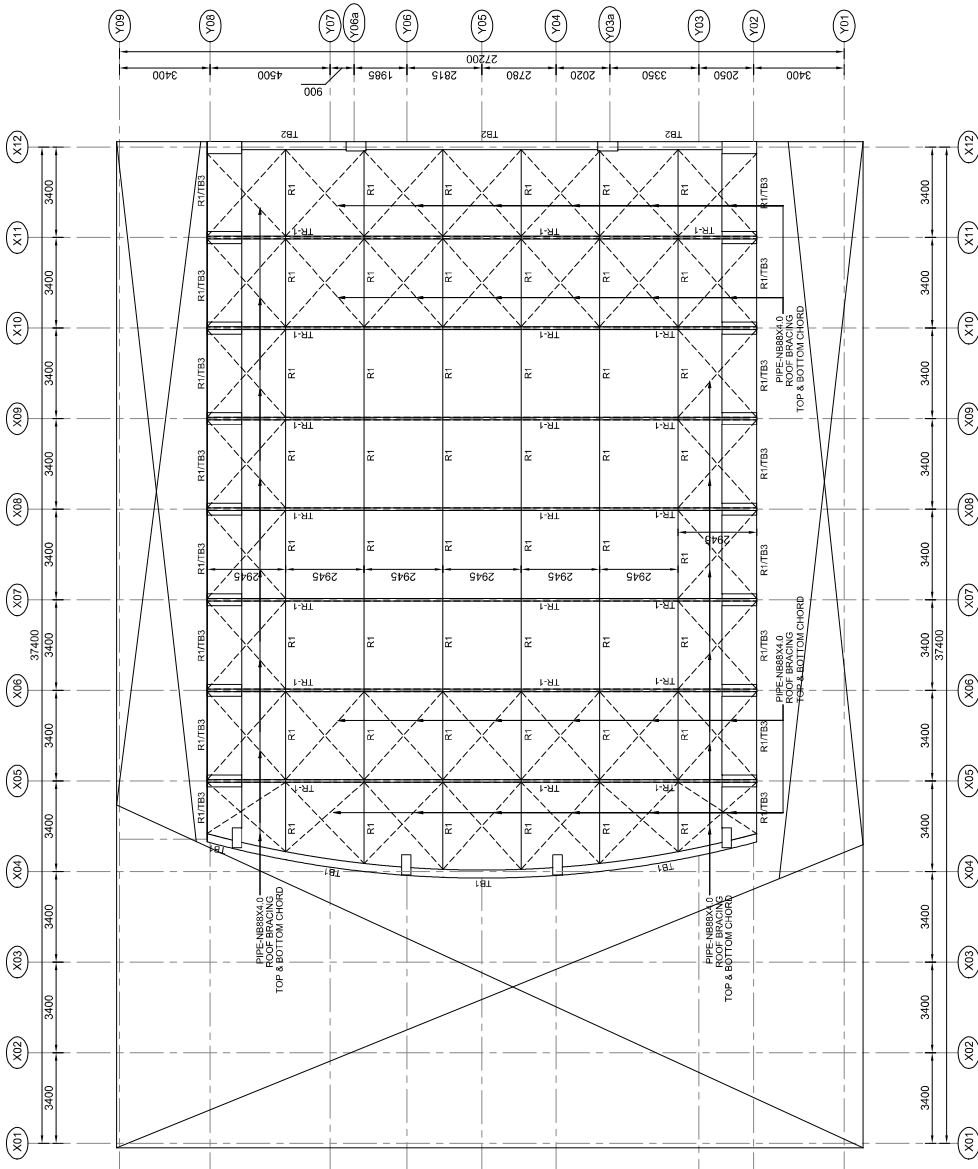


TB3 (1300x300)
TIE BEAM REINFORCEMENT DETAILS

TECHNICAL SPECIFICATION TABLE	
MEMBER NO.	PIPE / SHS MATERIAL SPECIFICATION
1	SHS (100X100X4.0 THK.)
2	SHS (100X100X6.0 THK.)
3	SHS (72X72X4.0 THK.)
4	SHS (72X72X4.0 THK.)
5	SHS (80X80X4.0 THK.)
PURLIN(P-1)	SHS (72X72X3.2 THK.)
RUNNER-1	SHS (72X72X3.2 THK.)



TRUSS TOP & BOTTOM CHORD LAYOUT PLAN
* PURLIN NOT SHOWN FOR CLARITY



THIS DOCUMENT IS CONFIDENTIAL. NEITHER WHOLE OR ANY PART OF THIS DOCUMENT SHALL BE DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT. OF ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.

GENERAL NOTES:-

1. ALL DIMENSIONS ARE IN MM. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED. DIMENSIONS SHOULD NOT BE SCALED.
2. ALL DIMENSIONS ARE TO BE GIVEN TO THE FACE UNLESS OTHERWISE SPECIFIED.
3. RELEVANT ARCHITECTURAL DRAWING IN CASE OF DISCREPANCY WITH THIS DRAWING SHALL BE THE BASIS FOR CONSTRUCTION.
4. IMMEDIATELY BROUGHT TO NOTICE TO THE CONSULTANTS BEFORE EXECUTION CONTRACTOR TO BE ENSURE ASSUMED.
5. THE BUILDING HAS BEEN DESIGNED FOR G+1 STOREY.
6. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED OR UNDESIRABLE SOIL IS ENCOUNTERED, THE CONTRACTOR SHALL IMMEDIATELY BROUGHT TO NOTICE OF CONSULTANTS BEFORE EXECUTION.
7. FOR BRICKWORK WALL LOAD BRICK WITH DENSITY 600KG.
8. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000.

CONCRETE :

1. DESIGN MIX CONCRETE SHALL BE AS FOLLOWS:
A. CEMENT : 42.5
B. FORTPORTLAND CEMENT : 42.5
C. SAND : 2.5
D. GRAVEL : 4.5
E. RCC : M20
F. BEAMS & SLABS : M30

COVER :

1. ALL REINFORCEMENT SHALL BE AS FOLLOWS:
A. COLUMN : SHEAR WALLS : 40 mm
B. FOOTING/PILE CAP : 75 mm
C. BEAMS : 25 mm
D. FLOOR BEAM : 25 mm
E. SLABS : 20 mm
F. RETAINING WALLS : 30 mm

REINFORCEMENT :

1. ALL REINFORCEMENT SHALL BE AS FOLLOWS:
A. CEMENT : 42.5
B. FORTPORTLAND CEMENT : 42.5
C. SAND : 2.5
D. GRAVEL : 4.5
E. RCC : M20
F. BEAMS & SLABS : M30

WATER PROOFING:-

1. ALL CONCRETE FACES IN CONTACT WITH SOIL/WATER BELOW THE FINISHED FLOOR LEVEL SHALL BE WATER PROOFED BY WATER PROOFING AS PER IS 800:2007.

CAMBER

1. UNLESS NOTED OTHERWISE (U.N.O.) UPWARD CAMBERS SHALL BE PROVIDED IN BEAM & SLABS AS FOLLOWS:
A. BEAMS : 1:10
B. SLABS : 1:100

SPANS : 7.5M TO 12.0M. 10MM REINFORCING

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT SHALL BE AS FOLLOWS

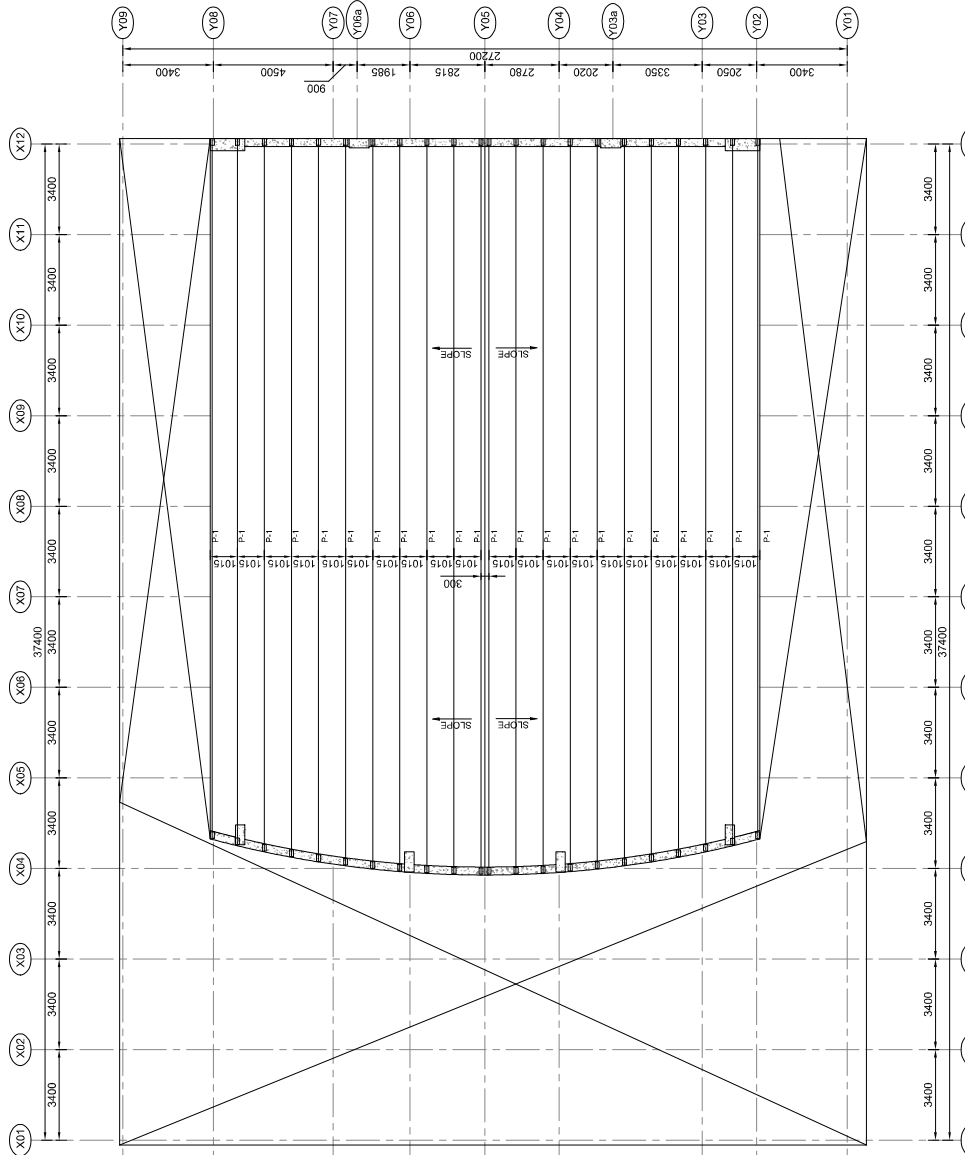


TECHNICAL SPECIFICATION TABLE	
RHS/SHS MATERIAL SPECIFICATION :	
IS : 4923, GRADE : YST 355	
MEMBER NO.	MATERIAL SPECIFICATION
①	SHS.(100X100X4.0 THK.)
②	SHS.(100X100X6.0 THK.)
③	SHS.(72X72X4.0 THK.)
④	SHS.(72X72X4.0 THK.)
⑤	SHS.(80X80X4.0 THK.)
PURLIN(P-1)	SHS.(72X72X3.2 THK.)
RUNNER-1	SHS.(72X72X3.2 THK.)

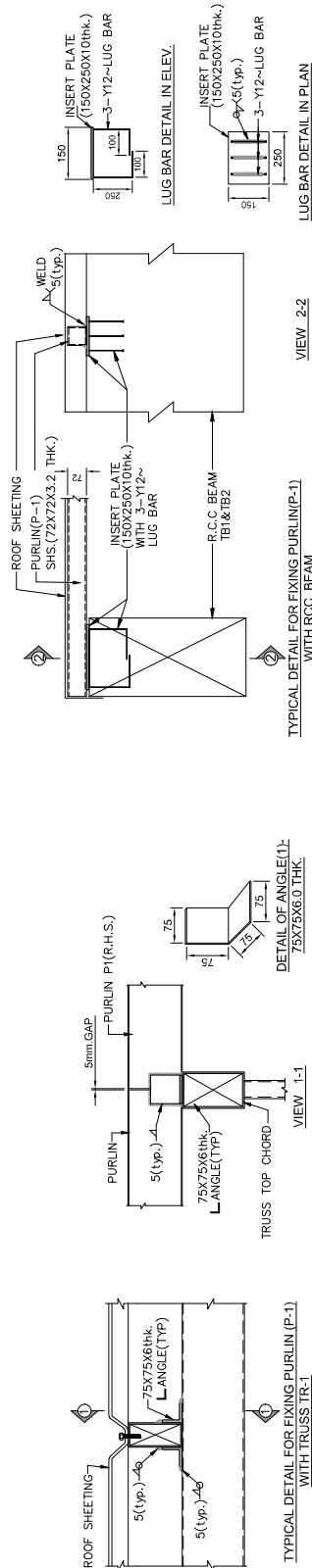
NOTES.
* CONTRACTOR TO SUBMIT FABRICATIONS DWGS. FOR CONSULTANT APPROVAL PRIOR TO EXECUTION OF WORK.
* ALL WELD SHALL BE FULL STRENGTH WELD ALL AROUND.

STEEL STRUCTURE NOTES.

1. ALL DIMENSIONS ARE IN MM.
2. DO NOT SCALE. FOLLOW WRITTEN DIMENSIONS ONLY.
3. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH RELEVANT ARCH. DRAWINGS.
4. ALL DIMENSIONS SHALL BE GIVEN TO THE FACE UNLESS OTHERWISE SPECIFIED.
5. ALL STR. STEEL SHALL BE YST 310 CONFORMING TO IS 2062.
6. ALL WELD SHALL BE IN ACCORDANCE OF IS 800:2007 AND CLAUSE 7.0.1.1 OF IS 806.
7. PROPER LAYOUT SHALL BE MADE FOR ALL THE JUNCTION DETAILS BEFORE STARTING FABRICATION.
8. ALL WELDED JOINTS SHALL BE FULL PENETRATION GROOVE WELD.
9. ALL ELECTRODES SHALL BE AS PER IS 814:1983.
10. IT SHALL BE ASCERTAINED ON SITE BEFORE COMMENCEMENT OF WORK THAT ALL DIMENSIONS ETC. OF VARIOUS STR. COMPONENTS MATCH UP ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF CONSULTANTS BEFORE STARTING THE WORK.
11. WHEREVER LENGTH OF WELD IS NOT INDICATED ON DRG. ALL WELDS SHALL BE FULL STRENGTH WELD.
12. ALL FILLET WELD SHALL BE 5mm WHERE A WELD IS PROVIDED ON SIDE OF THE THICKNESS OF THE COMPONENTS. THE MINIMUM WELD SHALL BE EQUAL TO THE THICKNESS OF THE COMPONENTS.
13. FOR DIFFERENT SLOPE ROOFS, ANY ADDITIONAL MISMISSING PLATE/BOLT REQUIRED TO ERRECT THE STABLE STRUCTURE IS IN SCOPE OF CONTRACTOR'S CONNECTION TO ERRECT THE STRUCTURE AS SHOWN SHALL BE CONTRACTOR'S RESPONSIBILITY.
15. ANY DISCREPANCY SHALL BE BROUGHT UNDER NOTICE OF CONSULTANT BEFORE EXECUTION OF WORK.



PURLIN LAYOUT PLAN



VIEW 2-2

TYPICAL DETAIL FOR FIXING PURLIN(P-1) WITH RCC BEAM

DETAIL OF ANGLE(L): 75X75X6.0 THK.

VIEW 1-1

TYPICAL DETAIL FOR FIXING PURLIN(P-1) WITH TRUSS TR-1

N. M. Krishnan
Department of Civil Engineering
Indian Institute of Technology Delhi
Hauz Khas, New Delhi, India 110016

REVISIONS	
NO.	DATE
1	20/12/2023
2	20/12/2023
3	20/12/2023
4	20/12/2023
5	20/12/2023
6	20/12/2023
7	20/12/2023
8	20/12/2023
9	20/12/2023
10	20/12/2023
11	20/12/2023
12	20/12/2023
13	20/12/2023
14	20/12/2023
15	20/12/2023
16	20/12/2023
17	20/12/2023
18	20/12/2023
19	20/12/2023
20	20/12/2023
21	20/12/2023
22	20/12/2023
23	20/12/2023
24	20/12/2023
25	20/12/2023
26	20/12/2023
27	20/12/2023
28	20/12/2023
29	20/12/2023
30	20/12/2023
31	20/12/2023
32	20/12/2023
33	20/12/2023
34	20/12/2023
35	20/12/2023
36	20/12/2023
37	20/12/2023
38	20/12/2023
39	20/12/2023
40	20/12/2023
41	20/12/2023
42	20/12/2023
43	20/12/2023
44	20/12/2023
45	20/12/2023
46	20/12/2023
47	20/12/2023
48	20/12/2023
49	20/12/2023
50	20/12/2023
51	20/12/2023
52	20/12/2023
53	20/12/2023
54	20/12/2023
55	20/12/2023
56	20/12/2023
57	20/12/2023
58	20/12/2023
59	20/12/2023
60	20/12/2023
61	20/12/2023
62	20/12/2023
63	20/12/2023
64	20/12/2023
65	20/12/2023
66	20/12/2023
67	20/12/2023
68	20/12/2023
69	20/12/2023
70	20/12/2023
71	20/12/2023
72	20/12/2023
73	20/12/2023
74	20/12/2023
75	20/12/2023
76	20/12/2023
77	20/12/2023
78	20/12/2023
79	20/12/2023
80	20/12/2023
81	20/12/2023
82	20/12/2023
83	20/12/2023
84	20/12/2023
85	20/12/2023
86	20/12/2023
87	20/12/2023
88	20/12/2023
89	20/12/2023
90	20/12/2023
91	20/12/2023
92	20/12/2023
93	20/12/2023
94	20/12/2023
95	20/12/2023
96	20/12/2023
97	20/12/2023
98	20/12/2023
99	20/12/2023
100	20/12/2023

TENDER DRAWING

CONVENTION CENTRE (SITE - 10)

SEMINAR HALL 380 CAPACITY

PURLIN LAYOUT PLAN & DETAILS

DESIGN NO. : ACES-IM-SHT-2213

DESIGN BY : AMRITK SCALE : VARIOUS

APPROVED BY : AMRITK PAPER SIZE : A1 (594X811)

DATE : 31.12.2023 REVISED: NO

PROJECT : IIM SHILONG, UMAMU CAMPUS, SHILONG

ARCHITECT : AKSHAYA JAIN & ASSOCIATES

ARCHITECTURE : PLANNING INTERIOR DESIGN

C-6 / 6088, VASANT KUNJ, NEW DELHI - 110070

TELEPHONE : 011-26156086, 26152304, 47601615

EMAIL : info@akshaya-jain.com

STRUCTURAL CONSULTANT

AIICEIS

BUILDINGS ESE WITH US

ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.

Q-300, BARBERY, SOUTH CITY - 1, SECTOR-40, GURGAON, HARYANA - 122002

PHNO : 0124-4119648, 584300515

CLIENT

REFERENCE DRAWING

GENERAL NOTES-

CONCRETE:

COVER:

* THE CLEAR COVER TO REINFORCEMENT SHALL BE AS FOLLOWS

- A. COLUMN = 40 mm
- B. FOOTING(PILE CAP) = 75 mm
- C. PLINTH BEAM = 30 mm
- D. FLOOR BEAM = 25 mm
- E. SLABS = 20 mm*
- F. PILE SHAFT = 50 mm*

1. HIGH YIELD STRENGTH DEFORMED BARS -GRADE - Fe 5500
2. ALL REINF. STEEL MUST BE OF TESTED QUALITY AS PER IS:1786
3. LAP LENGTH TO BE Ld (50xDIA) OF BAR MINIMUM.

A) ALL CONCRETE FACES IN CONTACT WITH SOIL/WATER BELOW THE GROUND SLAB LEVEL OR ABOVE SHALL BE PROTECTED BY WATER PROOFING AS/ARCH DWG. OR AS/SPECS

A) UNLESS NOTED OTHERWISE (U.N.O) UPWARD CAMBERS SHALL BE PROVIDED IN BEAM & SLABS AS FOLLOW:

1. SPANS - 6M TO 7.5M - 5MM BEAMS/SLABS
SPANS - 7.5M TO 12.0M - 10MM BEAMS/SLABS

Dr. J. K. Singh

Department of Civil Engineering
Indian Institute of Technology Delhi
Hauz Khas, New Delhi, India 110016

REVISIONS				

RD	31-07-2025	SURAV		TENDER DRAWING
REV.	DATE	DRAWN		CONTENTS

CONTENT	CONVENTION CENTRE (SITE - 10)
	SEMINAR HALL 350 CAPACITY

DESIGN BY: KARTIK	SCALE: VARIOUS
APPROVED BY: VAIBHAV	PAPER SIZE: A1(594x211)

ARCHITECT
UJALA JAIN & ASSOCIATES
111 SHILLONG, UMSAWLI CAMPUS, SHILLONG

C-6/ 6098, VASANI KUNJ, NEW DELHI - 110070
 TELEPHONES +91-11-26136098, 26132304, 41601615
 E-Mail : mail@akshayajain.com

AICIS
BUILDINGS RISE WITH US

PH.NO - 0124-4119648, 9643840145

CUSTOMER

[Signature]

N. M. Anoop Krishnan
Department of Civil Engineering
Indian Institute of Technology Delhi
Hauz Khas, New Delhi, India 110016

REV	DATE	DRAWN	CONTENTS
WORKING STAGE			TENDER DRAWING
CONTENT			CONVENTION CENTRE (SITE - 10) SEMINAR HALL 350 CAPACITY

PROJECT
IIM SHILLONG, UMSAWLI CAMPUS, SHILLONG

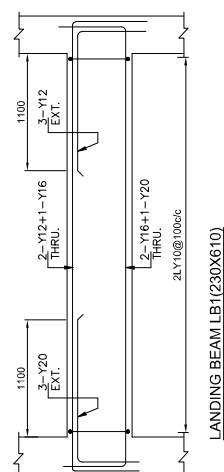
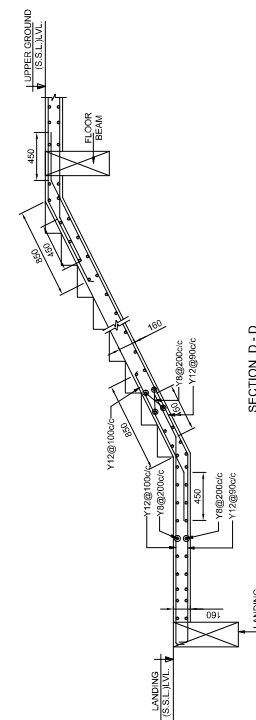
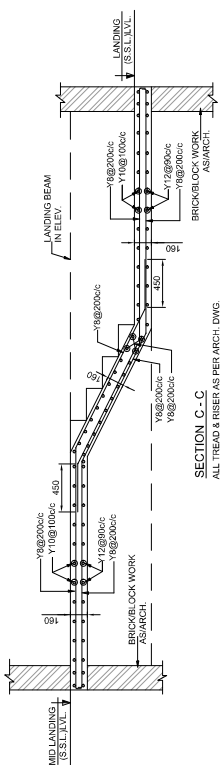
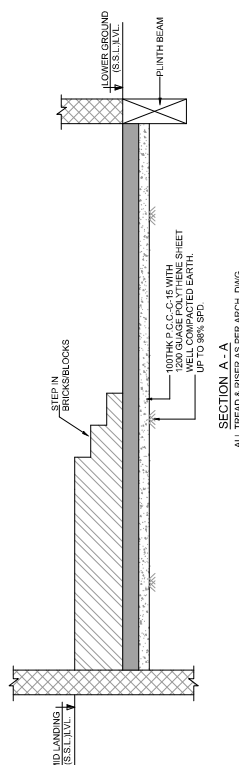
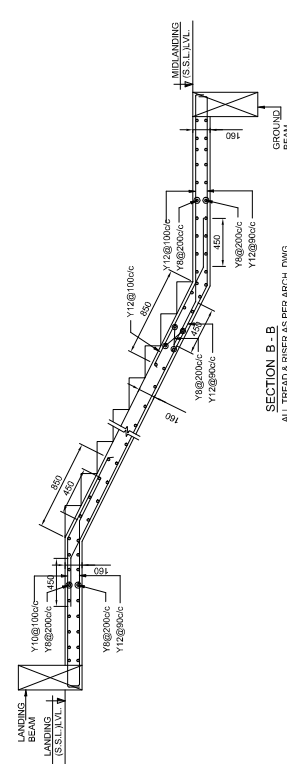
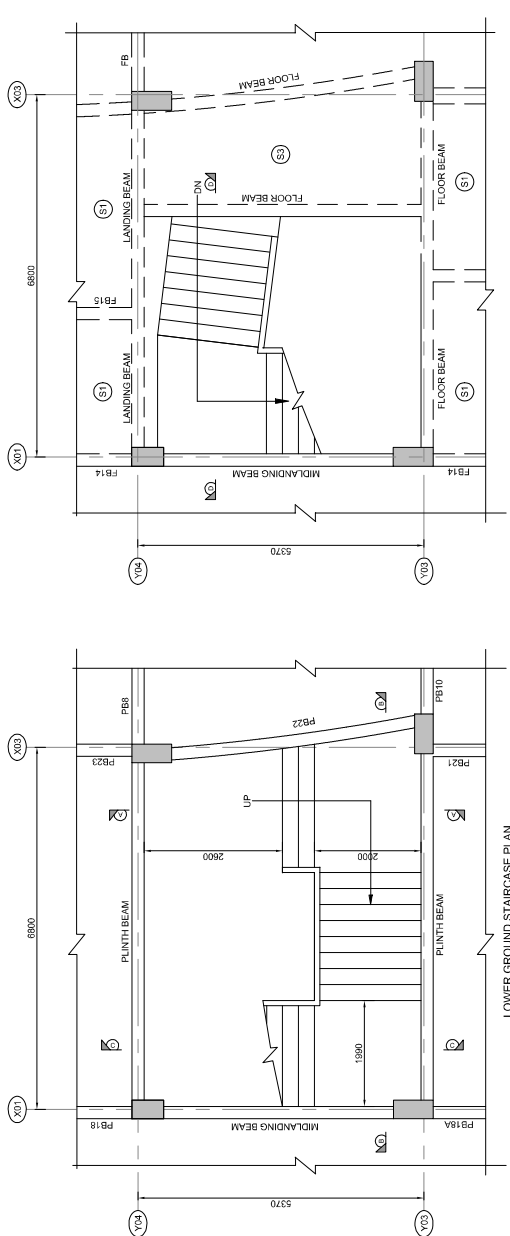
TELEPHONES +91-11-26136098, 26132304, 41601615
E-Mail : mail@akshayajain.com

BUILDINGS RISE WITH US

ABTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.

CLIENT

REFERENCE DRAWING



THIS DOCUMENT IS CONFIDENTIAL. NEITHER WHOLE OR ANY PART OF THIS DOCUMENT SHALL BE DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT. OF ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.

GENERAL NOTES:-

1. ALL DIMENSIONS ARE IN MM. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED. DIMENSIONS SHOULD NOT BE SCALED.
2. ALL DIMENSIONS ARE TO BE TAKEN FROM THE FACE UNLESS OTHERWISE SPECIFIED.
3. RELEVANT ARCHITECTURAL DRAWING IN CASE OF DISCREPANCY BETWEEN ARCHITECTURAL DRAWING AND STRUCTURAL DRAWING, THE ARCHITECTURAL DRAWING SHALL PREVAIL.
4. IMMEDIATELY BROUGHT TO NOTICE TO THE CONSULTANTS BEFORE EXECUTION CONTRACTOR TO BE ENSURE ASSUMED.
5. THE BUILDING HAS BEEN DESIGNED FOR G+1 STOREY.
6. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED OR UNDESIRABLE SOIL IS ENCOUNTERED, THE CONTRACTOR SHALL IMMEDIATELY BROUGHT TO NOTICE OF CONSULTANTS BEFORE EXECUTION.
7. FOR BRICK/ BLOCK WALL LOAD BRICK WITH DENSITY 600KG.
8. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000.

CONCRETE :

1. DESIGN MIX CONCRETE SHALL BE AS FOLLOWS:
A. COLUMN & BEAM - M30
B. FOOTING/PILE CAP/ M30
C. FLOOR SLAB - M20
D. BEAMS & SLABS - M20
E. RETAINING WALLS - M20

COVER :

1. ALL REINFORCEMENT SHALL BE AS FOLLOWS:
A. COLUMN/ SHEAR WALLS - 40 mm
B. FOOTING/PILE CAP - 75 mm
C. FLOOR SLAB - 25 mm
D. FLOOR BEAM - 25 mm
E. SLABS - 20 mm
F. RETAINING WALLS - 30 mm

REINFORCEMENT :

1. ALL REINFORCEMENT SHALL BE AS FOLLOWS:
A. COLUMN/ SHEAR WALLS - 40 mm
B. FOOTING/PILE CAP - 75 mm
C. FLOOR SLAB - 25 mm
D. FLOOR BEAM - 25 mm
E. SLABS - 20 mm
F. RETAINING WALLS - 30 mm

WATER PROOFING:-

TYP FOR ALL STRUCTURAL WORKS

1. ALL CONCRETE FACES IN CONTACT WITH SOIL/WATER BELOW THE FINISHED FLOOR LEVEL SHALL BE WATER PROOFED BY WATER PROOFING AS ARCH. DWG. OR AS SPECS

CAMBER

1. UNLESS NOTED OTHERWISE (U.N.O.) UPWARD CAMBERS SHALL BE PROVIDED IN BEAM & SLABS AS FOLLOWS:
1. SPAN - 5.00 TO 7.50 M - 10MM CAMBER
2. SPAN - 7.50 TO 12.00 M - 15MM CAMBER

REVISIONS

NO.	DATE	DESCRIPTION
1	10/01/2023	ISSUED FOR TENDER DRAWING

TENDER DRAWING

CONVENTION CENTRE (SITE - 10)
SEMINAR HALL 350 CAPACITY
STAIRCASE PLAN- 2 & SECTION

DRAWN	SAHAY	DWG NUMBER	ACES/IMSH/ST-2/16
DESIGNED BY	VARSHAW	SCALE	VARIOUS
APPROVED BY	VARSHAW	PAPER SIZE	A1 (594x841)
DATE	31.07.2023	REVISED	NO

ARCHITECT

AKSHAYA JAIN & ASSOCIATES
ARCHITECTURE . PLANNING . INTERIOR DESIGN
C-6 / 6088, VASANT KUNJ NEW DELHI - 110070
TELEPHONE : 011-26155686, 26122304, 47601615
EMAIL : akshaya@akshaya.co.in

STRUCTURAL CONSULTANT

ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.
BUILDINGS RISE WITH US
Q-100, BARBERY, SOUTH CITY - 2, SECTOR-40, GURGAON, HARYANA - 122002
PHNO : 0124-4131948, 9643400145
CLIENT

REFERENCE DRAWING

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

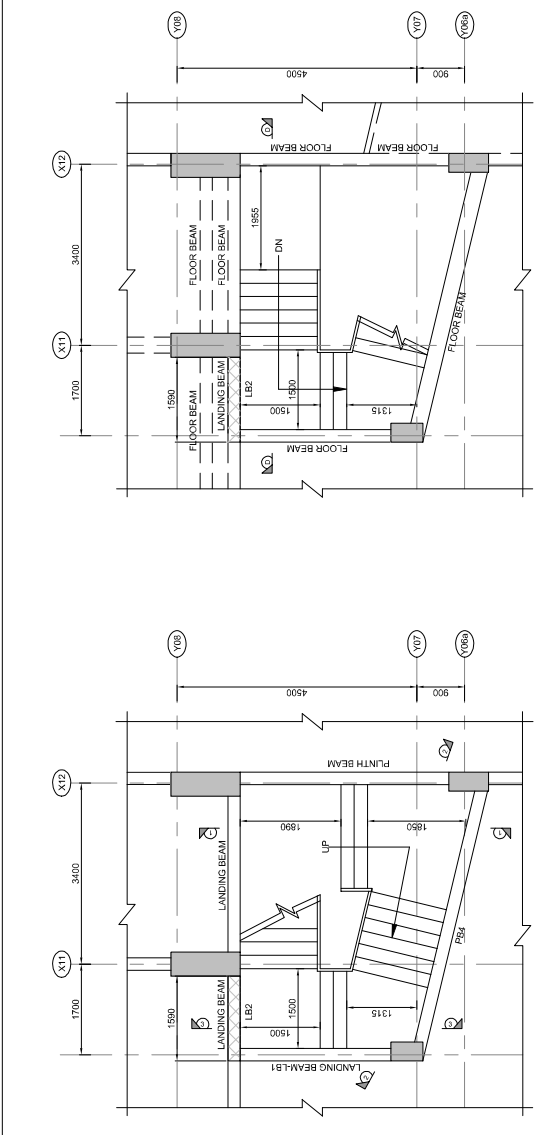
IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG

IM SHILLONG, UMAMALI CAMPUS, SHILLONG



UPPER GROUND STAIRCASE PLAN

LOWER GROUND STAIRCASE PLAN

SECTION 1 - 1

SECTION 2 - 2

SECTION 3 - 3

SECTION D - D

SECTION E - E

SECTION F - F

SECTION G - G

SECTION H - H

SECTION I - I

SECTION J - J

SECTION K - K

SECTION L - L

SECTION M - M

SECTION N - N

SECTION O - O

SECTION P - P

SECTION Q - Q

SECTION R - R

SECTION S - S

SECTION T - T

SECTION U - U

SECTION V - V

SECTION W - W

SECTION X - X

SECTION Y - Y

SECTION Z - Z

SECTION AA - AA

SECTION BB - BB

SECTION CC - CC

SECTION DD - DD

SECTION EE - EE

SECTION FF - FF

SECTION GG - GG

SECTION HH - HH

SECTION II - II

SECTION JJ - JJ

SECTION KK - KK

SECTION LL - LL

SECTION MM - MM

SECTION NN - NN

SECTION OO - OO

SECTION PP - PP

SECTION QQ - QQ

SECTION RR - RR

SECTION SS - SS

SECTION TT - TT

SECTION UU - UU

SECTION VV - VV

SECTION WW - WW

SECTION XX - XX

SECTION YY - YY

SECTION ZZ - ZZ

SECTION AA - AA

SECTION BB - BB

SECTION CC - CC

SECTION DD - DD

SECTION EE - EE

SECTION FF - FF

SECTION GG - GG

SECTION HH - HH

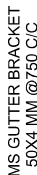
SECTION II - II

SECTION JJ - JJ

SECTION KK - KK

1. ALL DIMENSIONS ARE IN MM. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED. DIMENSIONS SHOULD NOT BE SCALED.
2. STRUCTURAL DWG SHOULD BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTURAL DRAWING. IN CASE OF DISCREPANCY BETWEEN ARCH. AND STRUCTURAL DRAWING, IT SHOULD BE IMMEDIATELY BROUGHT TO NOTICE TO THE CONSULTANTS BEFORE EXECUTION CONTRACTOR TO BE ENSURE ASSUMED S.B.C PILE CAPACITY IS ACHIEVED.

[Signature]



TYP. ROOF GUTTER LAPING DETAILS

FIXING DETAIL-

1. GUTTER SHALL BE FABRICATED FROM GALVANIZED IRON SHEETS NOT LESS THAN 1.2MM IN THICKNESS AND MAY BE STIFFENED WITH MS. FLAT 25X3 MM.THE SPACING OF MS FLAT SHOULD NOT EXCEED 400MM.
2. ALL JOINT SHALL BE LAPPED AND SOLDERED BY 2MM FOR AT LEAST 40 MM. IN THE DIRECTION FLOW.
3. ALL JOINTS/LAPS IN GUTTER ALONG WITH EDGE GUTTER COVER SHALL BE CLOSED WITH SILICON SEALANT.

NO.	CONTENT	CONVENTION CENTRE (SITE)	TENDER DRAWING	WORKING STAGE
1	1.1	1.1	1.1	1.1
2	2.1	2.1	2.1	2.1
3	3.1	3.1	3.1	3.1
4	4.1	4.1	4.1	4.1
5	5.1	5.1	5.1	5.1
6	6.1	6.1	6.1	6.1
7	7.1	7.1	7.1	7.1
8	8.1	8.1	8.1	8.1
9	9.1	9.1	9.1	9.1
10	10.1	10.1	10.1	10.1
11	11.1	11.1	11.1	11.1
12	12.1	12.1	12.1	12.1
13	13.1	13.1	13.1	13.1
14	14.1	14.1	14.1	14.1
15	15.1	15.1	15.1	15.1
16	16.1	16.1	16.1	16.1
17	17.1	17.1	17.1	17.1
18	18.1	18.1	18.1	18.1
19	19.1	19.1	19.1	19.1
20	20.1	20.1	20.1	20.1
21	21.1	21.1	21.1	21.1
22	22.1	22.1	22.1	22.1
23	23.1	23.1	23.1	23.1
24	24.1	24.1	24.1	24.1
25	25.1	25.1	25.1	25.1
26	26.1	26.1	26.1	26.1
27	27.1	27.1	27.1	27.1
28	28.1	28.1	28.1	28.1
29	29.1	29.1	29.1	29.1
30	30.1	30.1	30.1	30.1
31	31.1	31.1	31.1	31.1
32	32.1	32.1	32.1	32.1
33	33.1	33.1	33.1	33.1
34	34.1	34.1	34.1	34.1
35	35.1	35.1	35.1	35.1
36	36.1	36.1	36.1	36.1
37	37.1	37.1	37.1	37.1
38	38.1	38.1	38.1	38.1
39	39.1	39.1	39.1	39.1
40	40.1	40.1	40.1	40.1
41	41.1	41.1	41.1	41.1
42	42.1	42.1	42.1	42.1
43	43.1	43.1	43.1	43.1
44	44.1	44.1	44.1	44.1
45	45.1	45.1	45.1	45.1
46	46.1	46.1	46.1	46.1
47	47.1	47.1	47.1	47.1
48	48.1	48.1	48.1	48.1
49	49.1	49.1	49.1	49.1
50	50.1	50.1	50.1	50.1
51	51.1	51.1	51.1	51.1
52	52.1	52.1	52.1	52.1
53	53.1	53.1	53.1	53.1
54	54.1	54.1	54.1	54.1
55	55.1	55.1	55.1	55.1
56	56.1	56.1	56.1	56.1
57	57.1	57.1	57.1	57.1
58	58.1	58.1	58.1	58.1
59	59.1	59.1	59.1	59.1
60	60.1	60.1	60.1	60.1
61	61.1	61.1	61.1	61.1
62	62.1	62.1	62.1	62.1
63	63.1	63.1	63.1	63.1
64	64.1	64.1	64.1	64.1
65	65.1	65.1	65.1	65.1
66	66.1	66.1	66.1	66.1
67	67.1	67.1	67.1	67.1
68	68.1	68.1	68.1	68.1
69	69.1	69.1	69.1	69.1
70	70.1	70.1	70.1	70.1
71	71.1	71.1	71.1	71.1
72	72.1	72.1	72.1	72.1
73	73.1	73.1	73.1	73.1
74	74.1	74.1	74.1	74.1

TYP: ROOF GUTTER DETAILS		ACES-IM-SH-ST-217
DRAWN:	SURAV	DWG NUMBER
DESIGN BY:	KARTIK	SCALE
APPROVED BY:	VAIBHAV	PAPER SIZE
DATE:	31-07-2025	REVISIONS: R0

IIM SHILLONG, UMSAWLI CAMPUS, SHILLONG

ARCHITECT
AKSHAYA JAIN & ASSOCIATES
ARCHITECTURE. PLANNING. INTERIOR DESIGN
C-6 / 6098, VASANT KUNJ, NEW DELHI - 110070
TELEPHONES +91-11-26136098, 26132304, 41601615

STRUCTURAL CONSULTANT
E-mail : manoj@ansmayajain.com

A|C|E|S
BUILDINGS RISE WITH US

ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.
P-190, BASEMENT, SOUTH CITY-1, SECTOR-40, GURGAON, HARYANA - 122002
E-MAIL - ABSTRUSECONSULTANTS@GMAIL.COM
TEL NO. - 0124-4112648, 4643900/4643901

CLIENT

REFERENCE DRAWING



THIS DOCUMENT IS CONFIDENTIAL. NEITHER WHOLE OR ANY PART OF THIS DOCUMENT SHALL BE DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT. OF ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.

GENERAL NOTES:-

1. ALL DIMENSIONS ARE IN MM. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED. DIMENSIONS SHOULD NOT BE SCALED.
2. RELEVANT ARCHITECTURAL DRAWING IN CASE OF DISCREPANCY BETWEEN ARCHITECTURAL DRAWING AND STRUCTURAL DRAWING, THE ARCHITECTURAL DRAWING SHALL PREVAIL.
3. THE BUILDING HAS BEEN DESIGNED FOR LGP+G+1 STOREY.
4. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED OR UNDESIRABLE SOIL IS ENCOUNTERED, THE FOUNDATION SHALL BE IMMEDIATELY TO NOTICE OF CONSULTANTS BEFORE EXECUTION.
5. FOR BRICKBLOCK WALL LOAD BRICK WITH DENSITY 600KG.
6. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000

CONCRETE:-

1. ALL DIMENSIONS SHALL BE AS FOLLOWS:
A. COLUMN SHEAR WALLS - M35
B. FOOTING/PILE CAP - M30
C. BEAMS & SLABS - M20
D. RETAINING WALLS - M40

COVER:-

- * THE CLEAR COVER TO REINFORCEMENT SHALL BE AS FOLLOWS
A. COLUMN SHEAR WALLS - 40 mm
B. FOOTING/PILE CAP - 75 mm
C. PILE HEAD - 25 mm
D. FLOOR BEAM - 25 mm
E. RETAINING WALL - 50 mm
F. PILE SHAFT - 50 mm
G. RETAINING WALLS - 30 mm

REINFORCEMENT:-

1. HIGH YIELD STRENGTH DEFORMED BARS, GRADE - Fe 600
2. ALL REIN. STEEL MUST BE OF TESTED QUALITY AS PER IS 1786
3. LAP LENGTH TO BE AS PER IS 1786

WATER PROOFING:-

1. ALL WATER PROOFING TO BE DONE AS PER IS 1786
2. ALL WATER PROOFING TO BE DONE AS PER IS 1786

CAMBER

- A) UNLESS NOTED OTHERWISE (U.N.O.) UPWARD CAMBERS SHALL BE PROVIDED IN BEAM & SLABS AS FOLLOWS:
1. SPANS - 7.5M TO 12.0M - 10MM BEAMS/SLABS
2. SPANS - 7.5M TO 12.0M - 10MM BEAMS/SLABS

N. M. Gupta Krishnan
Department of Civil Engineering
Indian Institute of Technology Delhi
Hauz Khas, New Delhi, India 110016

REV.	DATE	DRAWN	CONTENTS

TENDER DRAWING
CONVENTION CENTRE (SITE - 10)
CAFETERIA & CONFERENCE

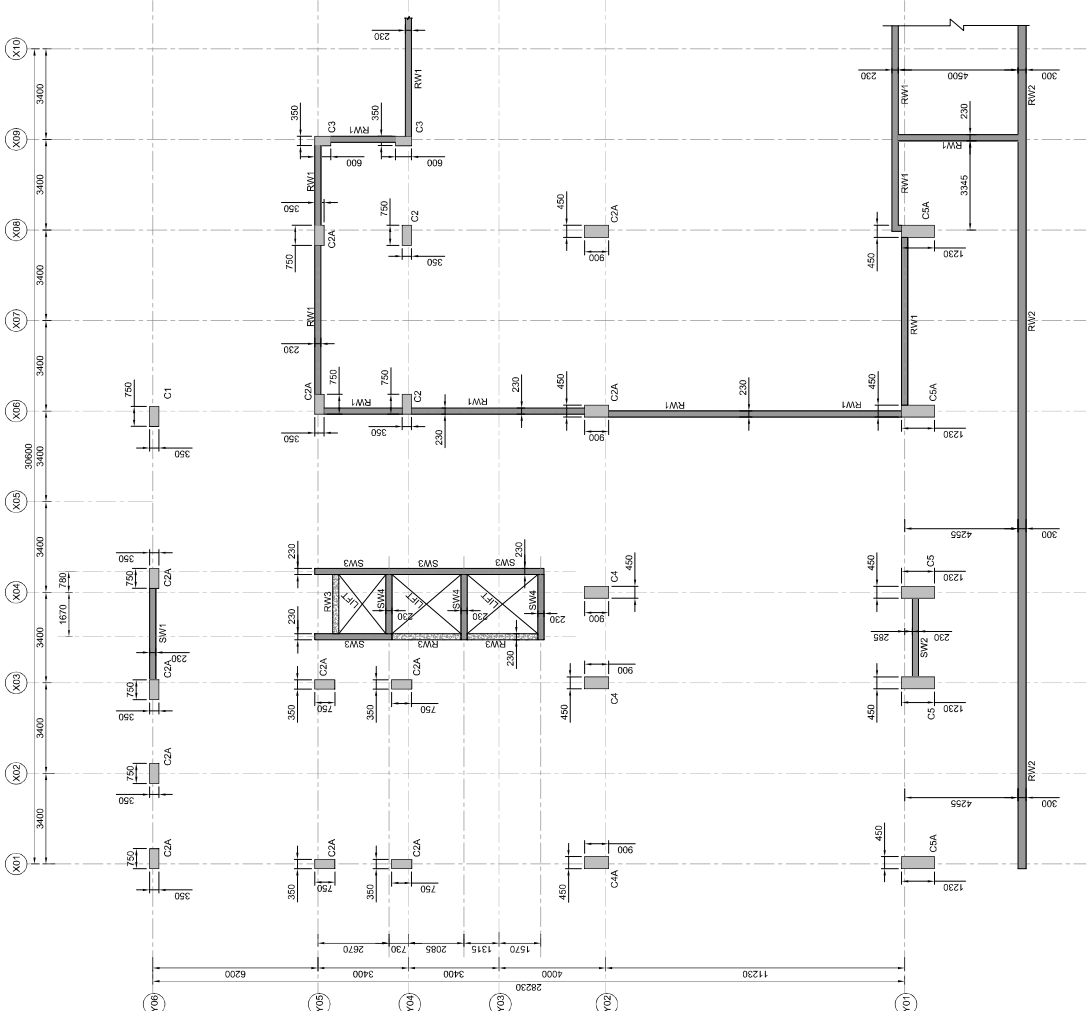
DRAWN	DATE	DWG. NUMBER	ACES/IMC/FT-201
DESIGN BY	DESIGN	SCALE	VARIOUS
APPROVED BY	APPROVED	PAPER SIZE	A1 (594x841)
DATE	20/07/2020	REVISIONS	RD
PROJECT	IIM SHILLONG, JMSAWU CAMPUS, SHILLONG		

ARCHITECT
AKSHAYA JAIN & ASSOCIATES
ARCHITECTURE, PLANNING, INTERIOR DESIGN
C-6/1608, VASANT KUNJ, NEW DELHI - 110070
TELEPHONE: 011-26156086, 26132304, 47601615
EMAIL: akshaya@akshayaai.com

STRUCTURAL CONSULTANT
AICEIS

BUILDINGS RISE WITH US
ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.
Q-100, BARBERY, SOUTH CITY - 2, SECTOR-40, GURGAON, HARYANA - 122002
PH: 0124-4131948, 9643490155
CLIENT

REFERENCE DRAWING



COLUMN LAYOUT PLAN

THIS DOCUMENT IS CONFIDENTIAL. NEITHER WHOLE OR ANY PART OF THIS DOCUMENT SHALL BE DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT. OF ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.

GENERAL NOTES-

1. ALL DIMENSIONS ARE IN MM. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED. DIMENSIONS SHOULD NOT BE SCALED.
2. RELEVANT ARCHITECTURAL DRAWING IN CASE OF DISCREPANCY BETWEEN ARCHITECTURAL DRAWING AND STRUCTURAL DRAWING, ARCHITECTURAL DRAWING SHALL PREVAIL.
3. IMMEDIATELY BROUGHT TO NOTICE TO THE CONSULTANTS BEFORE EXECUTION CONTRACTOR TO BE ENSURE ASSUMED.
4. THE BUILDING HAS BEEN DESIGNED FOR LSP+G+1 STOREY.
5. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED OR UNDESIRABLE SOIL IS ENCOUNTERED, IMMEDIATELY BROUGHT TO NOTICE OF CONSULTANTS BEFORE EXECUTION.
6. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000.

CONCRETE :

1. DESIGN MIX CONCRETE SHALL BE AS FOLLOWS:
A. DESIGN MIX CONCRETE CLASS - M35
B. FOOTING/PILE CAP - M30
C. BEAMS & SLABS - M30
D. RETAINING WALLS - M40

COVER:

- *THE CLEAR COVER TO REINFORCEMENT SHALL BE AS FOLLOWS
A. COLUMN/ SHEAR WALLS - 45 mm
B. FOOTING/PILE CAP - 75 mm
C. BEAMS & SLABS - 25 mm
D. FLOOR BEAM - 25 mm
E. SLABS - 20 mm
F. RETAINING WALLS - 30 mm

REINFORCEMENT:

1. ALL REINFORCEMENT BARS GRADE - F450
2. ALL REIN. STEEL MUST BE OF TESTED QUALITY AS PER IS 1786
3. LAP LENGTH TO BE LG (50D) OF BAR MINIMUM.

WATER PROOFING-

TYP. FOR ALL STRUCTURAL WORKS

1. ALL CONCRETE FACES IN CONTACT WITH SOIL/WATER BELOW THE FINISHED FLOOR LEVEL SHALL BE WATER PROOFED.

CAMBER

1. UNLESS NOTED OTHERWISE (U.N.O.) UPWARD CAMBERS SHALL BE PROVIDED IN BEAM & SLABS AS FOLLOWS:
A. BEAMS - 1:100
B. SLABS - 1:200
2. SPANS - 7.5M TO 12.0M - 10MM BEAMS/SLABS

N. M. Krishnan
Department of Civil Engineering
Indian Institute of Technology Delhi
Hauz Khas, New Delhi, India 110016

REVISIONS	NO.	DATE	BY	REVISION

TENDER DRAWING

REV.	DATE	BY	REVISION

CONVENTION CENTRE (SITE - 10)
CAFETERIA & CONFERENCE
SHEAR WALLS REINF. DETAILS (Sheet 1 of 2)

DRAWN: SURABY DVG NUMBER: ACES/IMC/ST-203
DESIGN BY: KISHAN SCALE: VARIOUS
APPROVED BY: VISHNAVY PAPER SIZE: A1 (594x841)
DATE: 20/07/2025 REVISED: RO
PROJECT: IIM SHILLONG, UMISAWU CAMPUS, SHILLONG

ARCHITECT

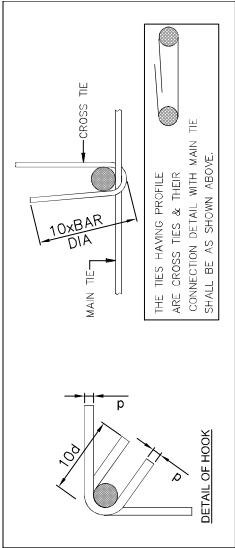
AKSHAYA JAIN & ASSOCIATES
ARCHITECTURE, PLANNING, INTERIOR DESIGN
C-6/16088, VASANT KUNJ, NEW DELHI - 110070
TELEPHONE: 011-26156686, 2612304, 47601615
EMAIL: akshaya@akshayaai.com

STRUCTURAL CONSULTANT

ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.

BUILDINGS RISE WITH US
Q-100, BARBERY, SOUTH CITY - 1, SECTOR-40, Gurgaon, HARYANA - 122002
PH: 0124-41319648, 964350515
CLIENT: IITM

REFERENCE DRAWING



SHEAR WALL REINF. SCHEDULE

TIES	ZONE A = Y10@75C/C ZONE B = Y10@150C/C	ZONE A = Y10@75C/C ZONE B = Y10@150C/C	ZONE A = Y10@75C/C ZONE B = Y10@150C/C
MAIN BAR	● Y12 @75C/C	● Y12 @150C/C	● Y12 @150C/C
FIGURE			
LEVEL	(FOUNDATION TO GROUND FLOOR)	(GROUND FLOOR TO FIRST FLOOR)	(FIRST FLOOR TO LOWER ROOF)
SIZE	AS/PLAN (230THK.)	AS/PLAN (230THK.)	AS/PLAN (230THK.)
MIX. OF CONC.	M35	M35	M35
WALL W.D.	SW1	SW1	SW1

* FOR ZONE -A & B, REFER COLUMN TYPICAL ELEVATION

SHEAR WALL REINF. SCHEDULE

TIES	ZONE A = Y10@75C/C ZONE B = Y10@150C/C	ZONE A = Y10@75C/C ZONE B = Y10@150C/C	ZONE A = Y10@75C/C ZONE B = Y10@150C/C
MAIN BAR	● Y16 @75C/C	● Y16 @150C/C	● Y16 @150C/C
FIGURE			
LEVEL	(FOUNDATION TO GROUND FLOOR)	(GROUND FLOOR TO FIRST FLOOR)	(FIRST FLOOR TO LOWER ROOF)
SIZE	AS/PLAN (230THK.)	AS/PLAN (230THK.)	AS/PLAN (230THK.)
MIX. OF CONC.	M35	M35	M35
WALL W.D.	SW2	SW2	SW2

* FOR ZONE -A & B, REFER COLUMN TYPICAL ELEVATION



THIS DOCUMENT IS CONFIDENTIAL. NEITHER WHOLE OR ANY PART OF THIS DOCUMENT SHALL BE DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT. OF ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.

GENERAL NOTES:-

1. ALL DIMENSIONS ARE IN MM. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED. DIMENSIONS SHOULD NOT BE SCALED.
2. RELEVANT ARCHITECTURAL DRAWING IN CASE OF DISCREPANCY BETWEEN ARCHITECTURAL DRAWING AND STRUCTURAL DRAWING, ARCHITECTURAL DRAWING SHALL PREVAIL.
3. THE BUILDING HAS BEEN DESIGNED FOR LGP+G+1 STOREY.
4. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED OR UNDESIRABLE SOIL IS ENCOUNTERED, IMMEDIATELY TO NOTICE OF CONSULTANTS BEFORE EXECUTION.
5. FOR BRICKWORK WALL LOAD BRICK WITH DENSITY 600KG.
6. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000.

CONCRETE :

1. DESIGN MIX CONCRETE SHALL BE AS FOLLOWS:
A. COLUMN & RETAINING WALLS - M30
B. FOOTING/SPILE CAPT - M30
C. BEAMS & SLABS - M30
D. RETAINING WALLS - M40

COVER:

- *THE CLEAR COVER TO REINFORCEMENT SHALL BE AS FOLLOWS
A. COLUMN/ SHEAR WALLS - 40 mm
B. FOOTING/SPILE CAPT - 75 mm
C. BEAMS & SLABS - 25 mm
D. FLOOR BEAM - 25 mm
E. SLABS - 20 mm
F. RETAINING WALLS - 30 mm

REINFORCEMENT:

1. HIGH YIELD MILD STEEL REINFORCED BARS, GRADE - F_y 450D
2. ALL REINFORCING STEEL MUST BE OF TESTED QUALITY AS PER TO IS 1786
3. LAP LENGTH TO BE L_d (50D) OF BAR MINIMUM.

WATER PROOFING:-

- TYP FOR ALL STRUCTURAL WORKS
A) ALL CONCRETE FACES IN CONTACT WITH SOIL/WATER BELOW THE FINISHED FLOOR LEVEL SHALL BE WATER PROOFED BY WATER PROOFING AS PER DING OR ASPECTS

CAMBER

- A) UNLESS NOTED OTHERWISE (U.N.O), UPWARD CAMBERS SHALL BE PROVIDED IN BEAM & SLABS AS FOLLOWS:
1. SPANS - 3.0M TO 7.5M - 10MM BEAMS/SLABS
2. SPANS - 7.5M TO 12.0M - 10MM BEAMS/SLABS

N. M. Rajan Krishnan
Department of Civil Engineering
Indian Institute of Technology Delhi
Hauz Khas, New Delhi, India 110016

REV.	DATE	DRAWN	CONTENTS

TENDER DRAWING

CONVENTION CENTRE (SITE - 10) CAFETERIA & CONFERENCE SHEAR WALLS REINF. DETAILS (Sheet 2 of 2)
DRAWN: SURABY DING NUMBER: ACES-IM-GFT-ST-204
DESIGN BY: KOSHAN SCALE: VARIOUS
APPROVED BY: VISHNAVY PAPER SIZE: A1 (594x841)
DATE: 20/07/2020 REV/ISSUE: 00
PROJECT: IIM SHILLONG, UMISAWLU CAMPUS, SHILLONG

ARCHITECT

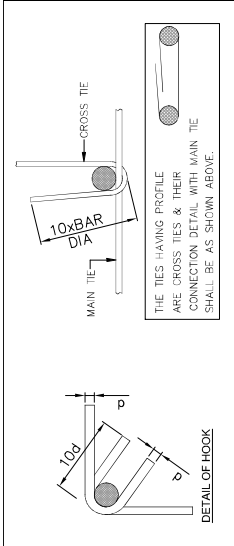
AKSHAYA JAIN & ASSOCIATES
ARCHITECTURE - PLANNING - INTERIOR DESIGN
C-6 / 6088, VASANT KUNJ, NEW DELHI - 110070
TELEPHONE: 011-26156086, 2612304, 47601615
EMAIL: info@akshaya.co.in

STRUCTURAL CONSULTANT

AICEIS

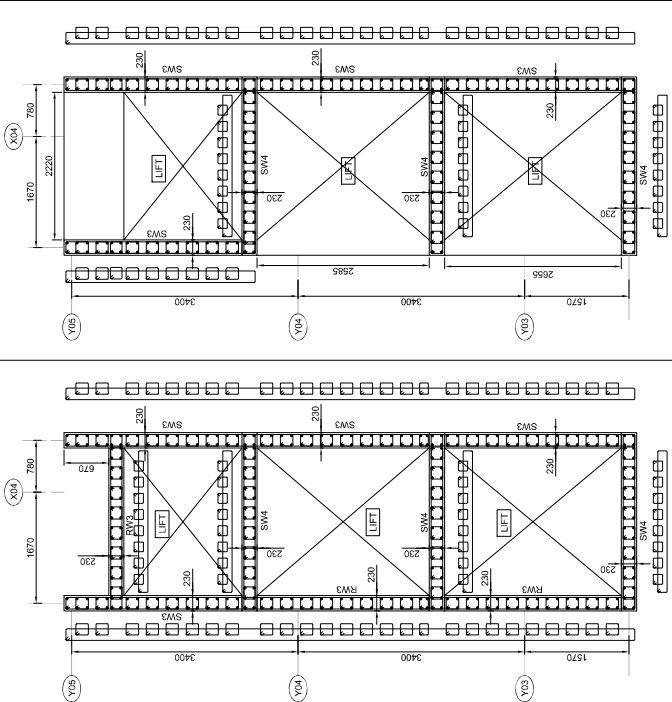
BUILDINGS RISE WITH US
ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.
Q-100, BARBERY, SOUTH CITY - 2, SECTOR-40, GURGAON, HARYANA - 122002
PH: 0124-4131945, 984350515
CLIENT

REFERENCE DRAWING



SHEAR WALL REINF. SCHEDULE

MAIN BAR	TIES	MAIN BAR	TIES
SW3 = ϕ Y12 @75c/c	ZONE A = Y10@75c/c ZONE B = Y10@150c/c	SW3 = ϕ Y12 @150c/c	ZONE A = Y10@75c/c ZONE B = Y10@150c/c
SW4 = ϕ Y12 @75c/c	ZONE B = Y10@150c/c	SW4 = ϕ Y12 @150c/c	
RW3 = ϕ Y12 @75c/c			
RW3 IS UP TO GROUND FLOOR			



FIGURE

LEVEL	(FOUNDATION TO GROUND FLOOR)	(GROUND FLOOR TO UPPER ROOF)
S/S	AS/PLAN	AS/PLAN
MIX. OF CONC.	M30	M30
WALL W.C.	SW3, SW4 & RW4	SW3 & SW4

* FOR ZONE = A & B, REFER COLUMN TYPICAL ELEVATION

THIS DOCUMENT IS CONFIDENTIAL. NEITHER WHOLE OR ANY PART OF THIS DOCUMENT SHALL BE DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT. OF ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.

GENERAL NOTES:-

1. ALL DIMENSIONS ARE IN MM. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED. DIMENSIONS SHOULD NOT BE SCALED.
2. ALL DIMENSIONS ARE TO BE GIVEN TO THE FACE UNLESS OTHERWISE SPECIFIED. RELEVANT ARCHITECTURAL DRAWING IN CASE OF DISCREPANCY BETWEEN ARCHITECTURAL DRAWING AND STRUCTURAL DRAWING, THE ARCHITECTURAL DRAWING SHALL PREVAIL.
3. THE BUILDING HAS BEEN DESIGNED FOR LG+G+1 STOREY.
4. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED OR RECLAIMED SOIL IS USED, THE FOUNDATION SHALL BE IMMEDIATELY TO NOTICE OF CONSULTANTS BEFORE EXECUTION.
5. FOR BRICKWORK WALL LOAD-BRICKWORK WITH DENSITY 600KG.
6. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000.

CONCRETE :

1. ALL CONCRETE WORKS SHALL BE AS FOLLOWS:
 - A. COLUMNS: SUGAR VALS: M25
 - B. FOOTING/PILE CAP: M30
 - C. BEAMS & SLABS: M30
 - D. RETAINING WALLS: M30

COVER:

* THE CLEAR COVER TO REINFORCEMENT SHALL BE AS FOLLOWS

- A. COLUMN: SHEAR WALLS = 40 mm
- B. RETAINING WALL: 75 mm
- C. FLOOR BEAM: 25 mm
- D. RETAINING WALLS: 30 mm
- E. RETAINING WALLS: 30 mm
- F. PILE SHAFT: 50 mm

REINFORCEMENT:

1. HIGH YIELD STRENGTH DEFORMED BARS: GRADE - Fe 500D
2. ALL REINFORCING STEEL MUST BE OF TESTED QUALITY AS PER IS 1786
3. LAP LENGTH TO BE 1.33 (L/D) OF BAR MINIMUM.

WATER PROOFING:-

TYP. FOR ALL STRUCTURAL WORKS

A) ALL REINFORCING STEEL SHALL BE PROTECTED BY WATER PROOFING AS PER IS 456:2000 OR AS PER IS 456:2000

PILE NOTES:-

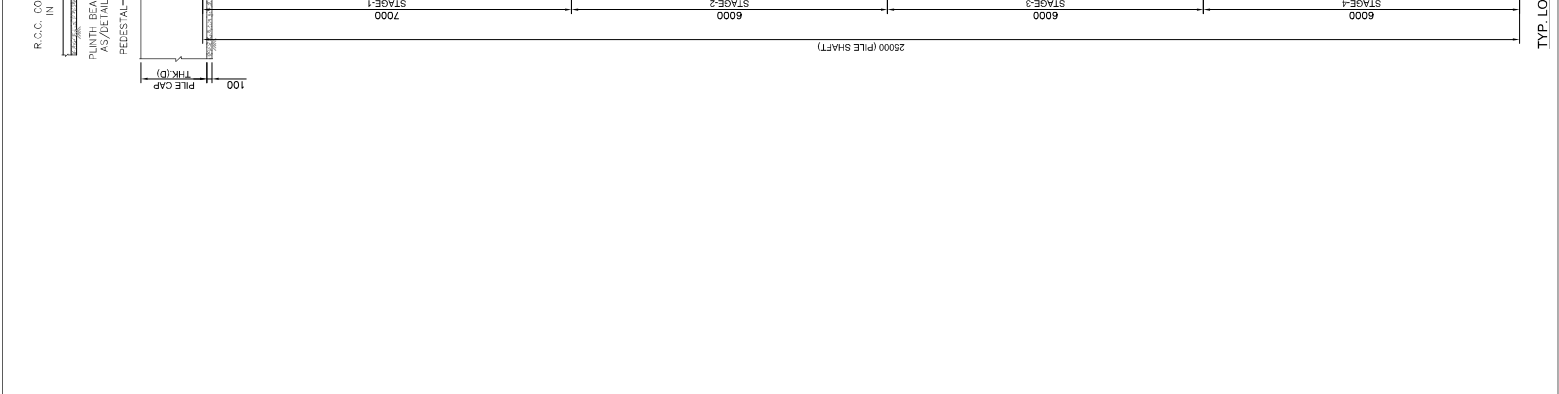
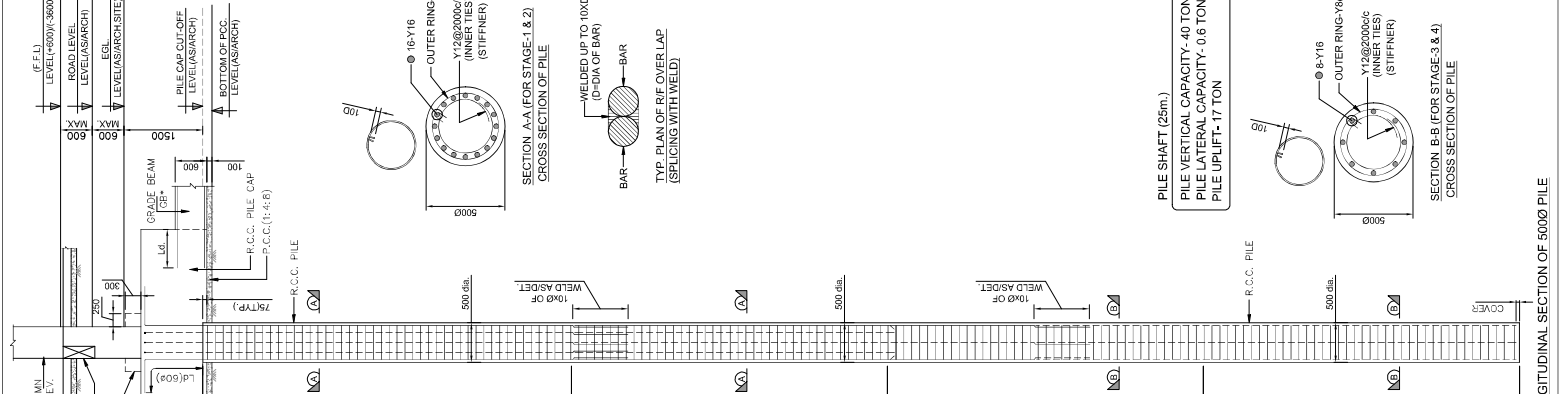
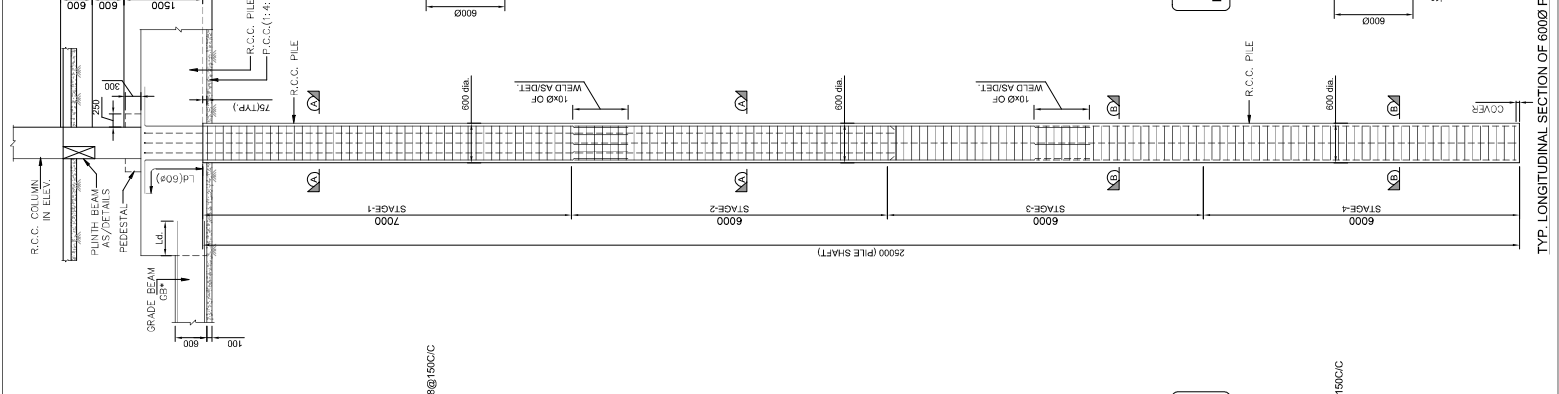
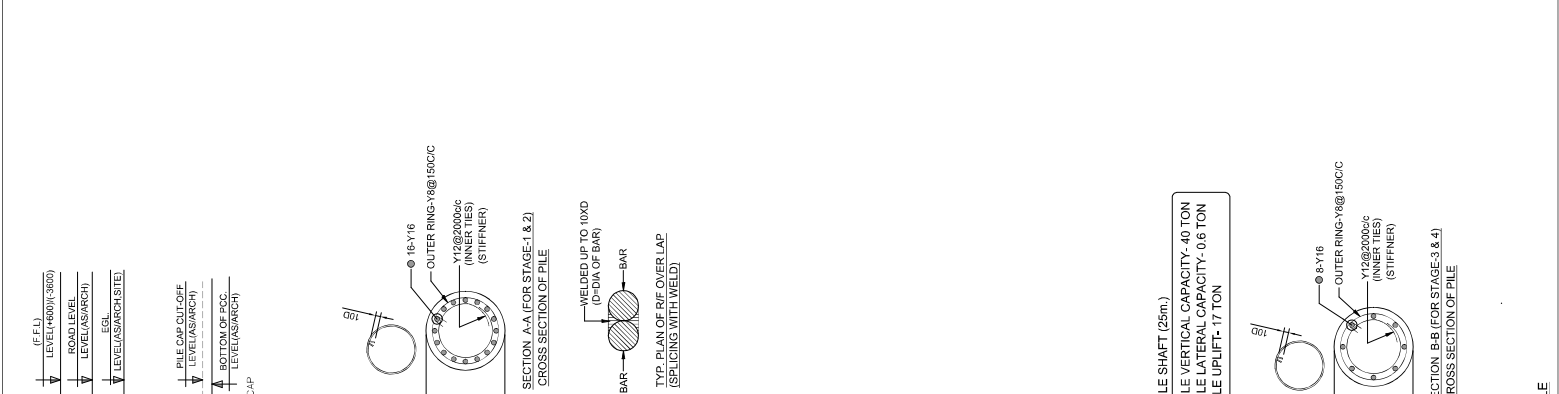
1. FOR MATERIAL AND WORKMANSHIP LATEST IS CODES SHALL BE THE GUIDING CRITERIA.
2. ALL DIMENSIONS SHALL BE AS PER IS 456:2000
3. THE MINIMUM CEMENT CONTENT SHALL BE 400 KG/CUBIC METER OF CONCRETE FOR PILING WORK.
4. ALL DIMENSIONS SHALL BE AS PER IS 456:2000
5. NO MECHANICAL VIBRATIONS SHALL BE USED.
6. ALL DIMENSIONS SHALL BE AS PER IS 456:2000
7. CONCRETING SHALL BE DONE AS SOON AS POSSIBLE
8. CONC. MIX SHALL CONFORM TO IS 456:2000
9. CLEAR COVER TO MAIN REINFORCEMENT IN PILE CAP SHALL BE 75 mm.
10. CLEAR COVER TO MAIN REINFORCEMENT IN PILE CAP SHALL BE 75 mm.
11. CONCRETE SHALL BE USED FOR PILES IN SUB CONFORM TO IS 2011(PART-1: SECTION-2) LATEST REVISION.
12. 50% EXTRA CEMENT SHALL BE USED FOR PILES IN SUB CONFORM TO IS 2011(PART-1: SECTION-2) LATEST REVISION.
13. LAP LENGTH FOR BARS SHALL BE AS UNDER:
 - (a) IN MAIN MAX = 36 WHERE IS 456:2000
 - (b) IN MAIN MAX = 36 WHERE IS 456:2000
 - (c) IN MAIN MAX = 36 WHERE IS 456:2000
 - (d) IN MAIN MAX = 36 WHERE IS 456:2000
 - (e) IN MAIN MAX = 36 WHERE IS 456:2000
 - (f) IN MAIN MAX = 36 WHERE IS 456:2000
 - (g) IN MAIN MAX = 36 WHERE IS 456:2000
 - (h) IN MAIN MAX = 36 WHERE IS 456:2000
 - (i) IN MAIN MAX = 36 WHERE IS 456:2000
 - (j) IN MAIN MAX = 36 WHERE IS 456:2000
 - (k) IN MAIN MAX = 36 WHERE IS 456:2000
 - (l) IN MAIN MAX = 36 WHERE IS 456:2000
 - (m) IN MAIN MAX = 36 WHERE IS 456:2000
 - (n) IN MAIN MAX = 36 WHERE IS 456:2000
 - (o) IN MAIN MAX = 36 WHERE IS 456:2000
 - (p) IN MAIN MAX = 36 WHERE IS 456:2000
 - (q) IN MAIN MAX = 36 WHERE IS 456:2000
 - (r) IN MAIN MAX = 36 WHERE IS 456:2000
 - (s) IN MAIN MAX = 36 WHERE IS 456:2000
 - (t) IN MAIN MAX = 36 WHERE IS 456:2000
 - (u) IN MAIN MAX = 36 WHERE IS 456:2000
 - (v) IN MAIN MAX = 36 WHERE IS 456:2000
 - (w) IN MAIN MAX = 36 WHERE IS 456:2000
 - (x) IN MAIN MAX = 36 WHERE IS 456:2000
 - (y) IN MAIN MAX = 36 WHERE IS 456:2000
 - (z) IN MAIN MAX = 36 WHERE IS 456:2000
14. NOT MORE THAN 50% REINFORCEMENT SHALL BE USED FOR PILES IN SUB CONFORM TO IS 2011(PART-1: SECTION-2) LATEST REVISION.
15. FOR MORE PRECISE DETAILS AND REINFORCEMENT PLEASE REFER STANDARD DWG.
16. 100% REINFORCEMENT SHALL BE PROVIDED AS PER IS 456:2000.

ARCHITECT
AKSHAYA JAIN & ASSOCIATES
ARCHITECTURE, PLANNING, INTERIOR DESIGN
C-6/1608, VASANT KUNJ NEW DELHI - 110070
E-MAIL: AKSHAYA@AKSHAYAJAIN.COM
PHONE: 011-26155086, 2612304, 47601615

STRUCTURAL CONSULTANT
AICIEIS
BUILDINGS BEE WITH US
ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.
Q-100, BARBERY, SOUTH CITY - 2, SECTOR-40, GURGAON, HARYANA - 122002
E-MAIL: AICIEIS@ABSTRUSECONSULTING.COM
PHONE: 0124-4131948, 9643505115

CLIENT

REFERENCE DRAWING



ARCHITECT
AKSHAYA JAIN & ASSOCIATES
ARCHITECTURE, PLANNING, INTERIOR DESIGN
C-6/1608, VASANT KUNJ NEW DELHI - 110070
E-MAIL: AKSHAYA@AKSHAYAJAIN.COM
PHONE: 011-26155086, 2612304, 47601615

STRUCTURAL CONSULTANT
AICIEIS
BUILDINGS BEE WITH US
ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.
Q-100, BARBERY, SOUTH CITY - 2, SECTOR-40, GURGAON, HARYANA - 122002
E-MAIL: AICIEIS@ABSTRUSECONSULTING.COM
PHONE: 0124-4131948, 9643505115

CLIENT

REFERENCE DRAWING

GENERAL NOTES-

CONCRETE :

COVER:

* THE CLEAR COVER TO REINFORCEMENT SHALL BE AS FOLLOWS

A. COLUMN / SHEAR WALLS =	40 mm
B. FOOTING/PILE CAP =	75 mm
C. PLINTH BEAM =	30 mm
D. FLOOR BEAM =	25 mm
E. SLABS =	20 mm*
F. PILE SHAFT =	50 mm*
G. RETAINING WALL / S. =	30 mm

**WATER PROOFING-
TYP.FOR ALL STRUCTURAL WORKS**

[Signature]

REVISIONS

DWG STAGE	TENDER DRAWING
CONTENT	CONVENTION CENTRE (SITE - 10)

CAFETERIA & CONFERENCE
LOWER GROUND LEVEL FRAMING PLAN

APPROVED BY: VAIBHAV	PAPER SIZE: A1(594x841)
DATE: 31-05-2024	REVISIONS: R0

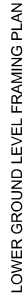
PROJECT
IIM SHILLONG, UM SAWLI CAMPUS, SHILLONG







E-Mail : mail@akshayajain.com

STRUCTURAL CONSULTANT

ABTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.
Q-190, BASEMENT, SOUTH CITY -1, SECTOR-40, GURGAON, HARYANA - 122002
EMAIL- ABTRUSECONSULTANTS@GMAIL.COM

CLIENT _____

BEAM SIZES & REINFORCEMENT TABLE

	RCC SHEAR WALL
	RCC RETAINING WALL
	RCC COLUMN
	RCC SHEAR WALL TERMINATION
	RCC RETAINING WALL TERMINATION
	RCC COLUMN TERMINATION

120	200	400	PROVIDE 3 #12 FACE BAR (BOTH FACE) FOR BEAM DEPTH 900mm
-----	-----	-----	---

THIS DOCUMENT IS CONFIDENTIAL. NEITHER WHOLE OR ANY PART OF THIS DOCUMENT SHALL BE DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT. OF ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.

GENERAL NOTES:-

1. ALL DIMENSIONS ARE IN MILLIMETER UNLESS OTHERWISE SPECIFIED.
2. BE FOLLOWED DIMENSIONS SHOULD NOT BE SCALED.
3. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE SPECIFIED.
4. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE SPECIFIED.
5. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE SPECIFIED.
6. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE SPECIFIED.
7. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE SPECIFIED.
8. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE SPECIFIED.
9. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE SPECIFIED.
10. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE SPECIFIED.

CONCRETE :

1. DESIGN MIX CONCRETE SHALL BE AS FOLLOWS
2. DESIGN MIX CONCRETE SHALL BE AS FOLLOWS
3. DESIGN MIX CONCRETE SHALL BE AS FOLLOWS
4. DESIGN MIX CONCRETE SHALL BE AS FOLLOWS
5. DESIGN MIX CONCRETE SHALL BE AS FOLLOWS
6. DESIGN MIX CONCRETE SHALL BE AS FOLLOWS
7. DESIGN MIX CONCRETE SHALL BE AS FOLLOWS
8. DESIGN MIX CONCRETE SHALL BE AS FOLLOWS
9. DESIGN MIX CONCRETE SHALL BE AS FOLLOWS
10. DESIGN MIX CONCRETE SHALL BE AS FOLLOWS

COVER :

1. COVER TO REINFORCEMENT SHALL BE AS FOLLOWS
2. COVER TO REINFORCEMENT SHALL BE AS FOLLOWS
3. COVER TO REINFORCEMENT SHALL BE AS FOLLOWS
4. COVER TO REINFORCEMENT SHALL BE AS FOLLOWS
5. COVER TO REINFORCEMENT SHALL BE AS FOLLOWS
6. COVER TO REINFORCEMENT SHALL BE AS FOLLOWS
7. COVER TO REINFORCEMENT SHALL BE AS FOLLOWS
8. COVER TO REINFORCEMENT SHALL BE AS FOLLOWS
9. COVER TO REINFORCEMENT SHALL BE AS FOLLOWS
10. COVER TO REINFORCEMENT SHALL BE AS FOLLOWS

REINFORCEMENT :

1. REINFORCEMENT SHALL BE AS FOLLOWS
2. REINFORCEMENT SHALL BE AS FOLLOWS
3. REINFORCEMENT SHALL BE AS FOLLOWS
4. REINFORCEMENT SHALL BE AS FOLLOWS
5. REINFORCEMENT SHALL BE AS FOLLOWS
6. REINFORCEMENT SHALL BE AS FOLLOWS
7. REINFORCEMENT SHALL BE AS FOLLOWS
8. REINFORCEMENT SHALL BE AS FOLLOWS
9. REINFORCEMENT SHALL BE AS FOLLOWS
10. REINFORCEMENT SHALL BE AS FOLLOWS

WATER PROOFING- TYP FOR ALL STRUCTURAL WORKS

1. ALL CONCRETE FACES IN CONTACT WITH SOLI WATER BELOW THE GRADE SHALL BE WATER PROOFED.
2. ALL CONCRETE FACES IN CONTACT WITH SOLI WATER BELOW THE GRADE SHALL BE WATER PROOFED.
3. ALL CONCRETE FACES IN CONTACT WITH SOLI WATER BELOW THE GRADE SHALL BE WATER PROOFED.
4. ALL CONCRETE FACES IN CONTACT WITH SOLI WATER BELOW THE GRADE SHALL BE WATER PROOFED.
5. ALL CONCRETE FACES IN CONTACT WITH SOLI WATER BELOW THE GRADE SHALL BE WATER PROOFED.
6. ALL CONCRETE FACES IN CONTACT WITH SOLI WATER BELOW THE GRADE SHALL BE WATER PROOFED.
7. ALL CONCRETE FACES IN CONTACT WITH SOLI WATER BELOW THE GRADE SHALL BE WATER PROOFED.
8. ALL CONCRETE FACES IN CONTACT WITH SOLI WATER BELOW THE GRADE SHALL BE WATER PROOFED.
9. ALL CONCRETE FACES IN CONTACT WITH SOLI WATER BELOW THE GRADE SHALL BE WATER PROOFED.
10. ALL CONCRETE FACES IN CONTACT WITH SOLI WATER BELOW THE GRADE SHALL BE WATER PROOFED.

CAMBER

1. UNLESS NOTED OTHERWISE (U.N.O.) UPWARD CAMBERS SHALL BE PROVIDED IN BEAM & SLABS AS FOLLOWS:
2. UNLESS NOTED OTHERWISE (U.N.O.) UPWARD CAMBERS SHALL BE PROVIDED IN BEAM & SLABS AS FOLLOWS:
3. UNLESS NOTED OTHERWISE (U.N.O.) UPWARD CAMBERS SHALL BE PROVIDED IN BEAM & SLABS AS FOLLOWS:
4. UNLESS NOTED OTHERWISE (U.N.O.) UPWARD CAMBERS SHALL BE PROVIDED IN BEAM & SLABS AS FOLLOWS:
5. UNLESS NOTED OTHERWISE (U.N.O.) UPWARD CAMBERS SHALL BE PROVIDED IN BEAM & SLABS AS FOLLOWS:
6. UNLESS NOTED OTHERWISE (U.N.O.) UPWARD CAMBERS SHALL BE PROVIDED IN BEAM & SLABS AS FOLLOWS:
7. UNLESS NOTED OTHERWISE (U.N.O.) UPWARD CAMBERS SHALL BE PROVIDED IN BEAM & SLABS AS FOLLOWS:
8. UNLESS NOTED OTHERWISE (U.N.O.) UPWARD CAMBERS SHALL BE PROVIDED IN BEAM & SLABS AS FOLLOWS:
9. UNLESS NOTED OTHERWISE (U.N.O.) UPWARD CAMBERS SHALL BE PROVIDED IN BEAM & SLABS AS FOLLOWS:
10. UNLESS NOTED OTHERWISE (U.N.O.) UPWARD CAMBERS SHALL BE PROVIDED IN BEAM & SLABS AS FOLLOWS:

REVISIONS

1. REVISIONS
2. REVISIONS
3. REVISIONS
4. REVISIONS
5. REVISIONS
6. REVISIONS
7. REVISIONS
8. REVISIONS
9. REVISIONS
10. REVISIONS

TENDER DRAWING

1. TENDER DRAWING
2. TENDER DRAWING
3. TENDER DRAWING
4. TENDER DRAWING
5. TENDER DRAWING
6. TENDER DRAWING
7. TENDER DRAWING
8. TENDER DRAWING
9. TENDER DRAWING
10. TENDER DRAWING

CONVENTION CENTRE (SITE - 10)

1. CONVENTION CENTRE (SITE - 10)
2. CONVENTION CENTRE (SITE - 10)
3. CONVENTION CENTRE (SITE - 10)
4. CONVENTION CENTRE (SITE - 10)
5. CONVENTION CENTRE (SITE - 10)
6. CONVENTION CENTRE (SITE - 10)
7. CONVENTION CENTRE (SITE - 10)
8. CONVENTION CENTRE (SITE - 10)
9. CONVENTION CENTRE (SITE - 10)
10. CONVENTION CENTRE (SITE - 10)

GROUND FLOOR LEVEL FRAMING PLAN

1. GROUND FLOOR LEVEL FRAMING PLAN
2. GROUND FLOOR LEVEL FRAMING PLAN
3. GROUND FLOOR LEVEL FRAMING PLAN
4. GROUND FLOOR LEVEL FRAMING PLAN
5. GROUND FLOOR LEVEL FRAMING PLAN
6. GROUND FLOOR LEVEL FRAMING PLAN
7. GROUND FLOOR LEVEL FRAMING PLAN
8. GROUND FLOOR LEVEL FRAMING PLAN
9. GROUND FLOOR LEVEL FRAMING PLAN
10. GROUND FLOOR LEVEL FRAMING PLAN

ARCHITECT

1. ARCHITECT
2. ARCHITECT
3. ARCHITECT
4. ARCHITECT
5. ARCHITECT
6. ARCHITECT
7. ARCHITECT
8. ARCHITECT
9. ARCHITECT
10. ARCHITECT

AKSHAYA JAIN & ASSOCIATES

1. AKSHAYA JAIN & ASSOCIATES
2. AKSHAYA JAIN & ASSOCIATES
3. AKSHAYA JAIN & ASSOCIATES
4. AKSHAYA JAIN & ASSOCIATES
5. AKSHAYA JAIN & ASSOCIATES
6. AKSHAYA JAIN & ASSOCIATES
7. AKSHAYA JAIN & ASSOCIATES
8. AKSHAYA JAIN & ASSOCIATES
9. AKSHAYA JAIN & ASSOCIATES
10. AKSHAYA JAIN & ASSOCIATES

ARCHITECTURE, PLANNING, INTERIOR DESIGN

1. ARCHITECTURE, PLANNING, INTERIOR DESIGN
2. ARCHITECTURE, PLANNING, INTERIOR DESIGN
3. ARCHITECTURE, PLANNING, INTERIOR DESIGN
4. ARCHITECTURE, PLANNING, INTERIOR DESIGN
5. ARCHITECTURE, PLANNING, INTERIOR DESIGN
6. ARCHITECTURE, PLANNING, INTERIOR DESIGN
7. ARCHITECTURE, PLANNING, INTERIOR DESIGN
8. ARCHITECTURE, PLANNING, INTERIOR DESIGN
9. ARCHITECTURE, PLANNING, INTERIOR DESIGN
10. ARCHITECTURE, PLANNING, INTERIOR DESIGN

C-6 / 6088, VASANT KUNJ, NEW DELHI - 110070

1. C-6 / 6088, VASANT KUNJ, NEW DELHI - 110070
2. C-6 / 6088, VASANT KUNJ, NEW DELHI - 110070
3. C-6 / 6088, VASANT KUNJ, NEW DELHI - 110070
4. C-6 / 6088, VASANT KUNJ, NEW DELHI - 110070
5. C-6 / 6088, VASANT KUNJ, NEW DELHI - 110070
6. C-6 / 6088, VASANT KUNJ, NEW DELHI - 110070
7. C-6 / 6088, VASANT KUNJ, NEW DELHI - 110070
8. C-6 / 6088, VASANT KUNJ, NEW DELHI - 110070
9. C-6 / 6088, VASANT KUNJ, NEW DELHI - 110070
10. C-6 / 6088, VASANT KUNJ, NEW DELHI - 110070

TELEPHONE : 011-26156086, 2612204, 47601615

1. TELEPHONE : 011-26156086, 2612204, 47601615
2. TELEPHONE : 011-26156086, 2612204, 47601615
3. TELEPHONE : 011-26156086, 2612204, 47601615
4. TELEPHONE : 011-26156086, 2612204, 47601615
5. TELEPHONE : 011-26156086, 2612204, 47601615
6. TELEPHONE : 011-26156086, 2612204, 47601615
7. TELEPHONE : 011-26156086, 2612204, 47601615
8. TELEPHONE : 011-26156086, 2612204, 47601615
9. TELEPHONE : 011-26156086, 2612204, 47601615
10. TELEPHONE : 011-26156086, 2612204, 47601615

EMAIL : info@akshaya.co.in

1. EMAIL : info@akshaya.co.in
2. EMAIL : info@akshaya.co.in
3. EMAIL : info@akshaya.co.in
4. EMAIL : info@akshaya.co.in
5. EMAIL : info@akshaya.co.in
6. EMAIL : info@akshaya.co.in
7. EMAIL : info@akshaya.co.in
8. EMAIL : info@akshaya.co.in
9. EMAIL : info@akshaya.co.in
10. EMAIL : info@akshaya.co.in

CLIENT

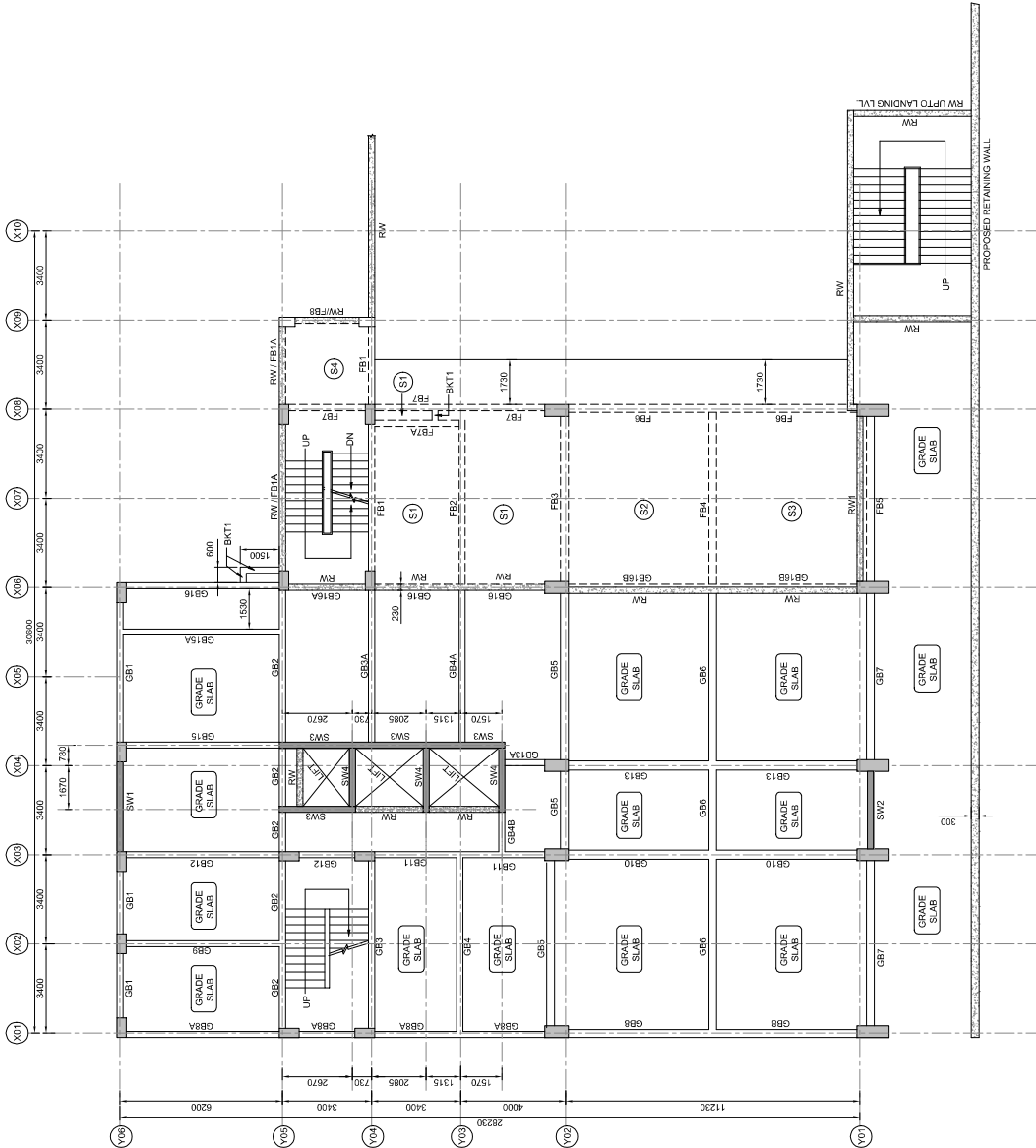
1. CLIENT
2. CLIENT
3. CLIENT
4. CLIENT
5. CLIENT
6. CLIENT
7. CLIENT
8. CLIENT
9. CLIENT
10. CLIENT

REFERENCE DRAWING

1. REFERENCE DRAWING
2. REFERENCE DRAWING
3. REFERENCE DRAWING
4. REFERENCE DRAWING
5. REFERENCE DRAWING
6. REFERENCE DRAWING
7. REFERENCE DRAWING
8. REFERENCE DRAWING
9. REFERENCE DRAWING
10. REFERENCE DRAWING

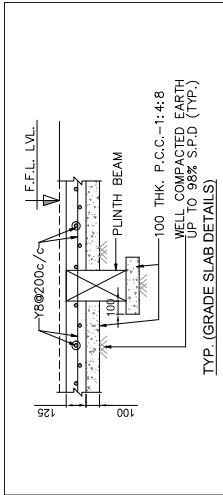
BEAM SIZES TABLE

BEAM MARK	SIZE		BEAM MARK	SIZE	
	B	D		B	D
GB1	230	750	FB1	230	750
GB2	230	750	FB1A	230	750
GB3	230	750	FB2	230	600
GB3A	230	750	FB3	300	750
GB4	230	600	FB4	300	750
GB4A	230	600	FB5	300	750
GB4B	230	600	FB6	300	750
GB5	300	750	FB7	230	750
GB6	300	750	FB8	230	750
GB7	300	750	BKT1	230	300
GB8	300	750			
GB9A	230	750			
GB9	230	600			
GB10	350	900			
GB11	230	750			
GB12	230	600			
GB13	350	900			
GB13A	230	450			
GB14	NOT IN USE				
GB15	230	600			
GB16A	230	600			
GB16	230	750			
GB16A	230	600			
GB16B	350	900			



GROUND FLOOR LEVEL FRAMING PLAN

* ALL SLABS (S1) ARE 150mm (UNO)



LEGEND:	
	RCC SHEAR WALL
	RCC RETAINING WALL
	RCC COLUMN
	RCC SHEAR WALL TERMINATION
	RCC RETAINING WALL TERMINATION
	RCC COLUMN TERMINATION



ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.

1. ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.
2. ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.
3. ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.
4. ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.
5. ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.
6. ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.
7. ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.
8. ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.
9. ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.
10. ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.

CLIENT

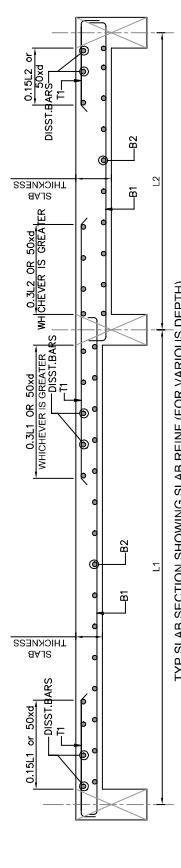
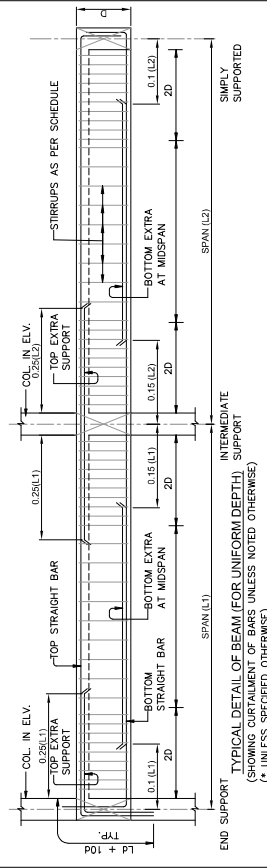
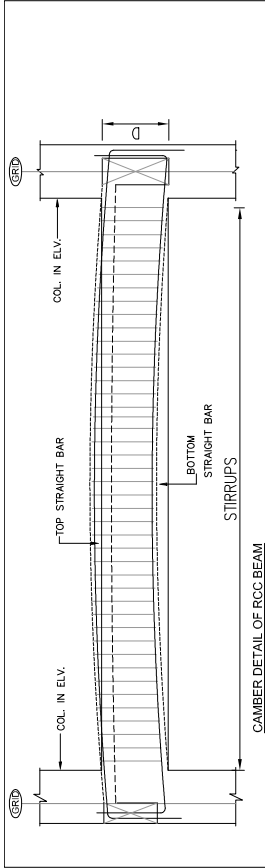
1. CLIENT
2. CLIENT
3. CLIENT
4. CLIENT
5. CLIENT
6. CLIENT
7. CLIENT
8. CLIENT
9. CLIENT
10. CLIENT

REFERENCE DRAWING

1. REFERENCE DRAWING
2. REFERENCE DRAWING
3. REFERENCE DRAWING
4. REFERENCE DRAWING
5. REFERENCE DRAWING
6. REFERENCE DRAWING
7. REFERENCE DRAWING
8. REFERENCE DRAWING
9. REFERENCE DRAWING
10. REFERENCE DRAWING

BEAM SIZES & REIN. TABLE

GROUND FLOOR BEAM REINFORCEMENT SCHEDULE														REMARKS	
BEAM MARK	SIZE		BOTTOM REINFORCEMENT		TOP REINFORCEMENT		STIRRUPS				RHS				
	B	D	THROUGH BAR	EXTRA AT MID SPAN	THROUGH BAR	EXTRA AT CONTINUOUS SUPPORT	LHS	SPACING	LEGS	MID SPAN	DIA	SPACING	LEGS		DIA
GB1	230	750	2-Y16+1-Y12	----	2-Y16+1-Y12	3-Y12	2L	Y8	100c/e	2L	Y8	150c/e	2L	Y8	100c/e
GB2	230	750	3-Y16	----	2-Y12+1-Y16	3-Y16	2L	Y10	100c/e	2L	Y10	150c/e	2L	Y10	100c/e
GB3	230	750	3-Y16	----	2-Y12+1-Y16	2-Y12	2L	Y8	100c/e	2L	Y8	150c/e	2L	Y8	100c/e
GB3A	230	750	3-Y16	3-Y12	3-Y12+1-Y16	3-Y12	2L	Y8	100c/e	2L	Y8	150c/e	2L	Y8	100c/e
GB4	230	600	3-Y20	----	2-Y12	----	2L	Y8	100c/e	2L	Y8	200c/e	2L	Y8	100c/e
GB4A	230	600	2-Y16+1-Y12	----	2-Y12+1-Y16	2-Y16	2L	Y8	100c/e	2L	Y8	200c/e	2L	Y8	100c/e
GB4B	230	600													
GB5	300	750	3-Y20	3-Y16	3-Y16	3-Y20	2L	Y10	75c/e	2L	Y10	125c/e	2L	Y10	75c/e
GB6	300	750	3-Y20	2-Y16	3-Y16	3-Y16	2L	Y8	100c/e	2L	Y8	125c/e	2L	Y8	100c/e
GB7	300	750	3-Y20	----	3-Y16	3-Y16	2L	Y8	100c/e	4L	Y8	125c/e	4L	Y8	75c/e
GB8	300	750	4-Y20	4-Y20	4-Y20	4-Y20	4L	Y8	100c/e	2L	Y8	125c/e	2L	Y8	100c/e
GB8A	230	750	3-Y20	2-Y16	3-Y20	3-Y20	2L	Y8	100c/e	2L	Y8	125c/e	2L	Y8	100c/e
GB9	230	600	3-Y20	----	3-Y16	3-Y16	2L	Y10	100c/e	2L	Y10	150c/e	2L	Y10	100c/e
GB10	350	900	5-Y20	5-Y20	5-Y20	5-Y20	4L	Y10	100c/e	4L	Y10	150c/e	4L	Y10	100c/e
GB11	230	750	3-Y20	----	3-Y20	3-Y20	2L	Y8	100c/e	2L	Y8	150c/e	2L	Y8	100c/e
GB12	230	600	3-Y16	2-Y12	3-Y20	2-Y20	2L	Y8	100c/e	2L	Y8	150c/e	2L	Y8	100c/e
GB13	350	900	4-Y20	4-Y20	4-Y20	4-Y20	4L	Y10	100c/e	4L	Y10	150c/e	4L	Y10	100c/e
GB13A	350	450													
GB14	NOT IN USE														
GB15	230	600	3-Y20	----	3-Y16	2-Y16	2L	Y8	100c/e	2L	Y8	150c/e	2L	Y8	100c/e
GB15A	230	600													
GB16	230	750	3-Y16	----	2-Y20	2-Y25	2L	Y10	100c/e	2L	Y10	150c/e	2L	Y10	100c/e
GB16A	230	600	2-Y20	2-Y16	2-Y20	2-Y25	2L	Y8	100c/e	4L	Y10	125c/e	2L	Y8	100c/e
GB16B	350	900	5-Y20	5-Y25	5-Y20	5-Y25	4L	Y10	100c/e	4L	Y10	150c/e	4L	Y10	100c/e
FB1	230	750	3-Y16	----	2-Y12+1-Y16	3-Y12	2L	Y8	100c/e	2L	Y8	150c/e	2L	Y8	100c/e
FB1A	230	750	2-Y16+1-Y12	2-Y12	2-Y12+1-Y16	2-Y12	2L	Y8	100c/e	2L	Y8	150c/e	2L	Y8	100c/e
FB2	230	600	2-Y16+1-Y12	2-Y16	2-Y12+1-Y16	2-Y16	2L	Y8	100c/e	2L	Y8	200c/e	2L	Y8	100c/e
FB3	300	750	3-Y20	3-Y16	3-Y16	3-Y20	2L	Y10	100c/e	2L	Y10	125c/e	2L	Y10	100c/e
FB4	300	750	3-Y20	2-Y16	3-Y16	3-Y16	2L	Y8	100c/e	2L	Y8	125c/e	2L	Y8	100c/e
FB5	300	750	3-Y20	----	3-Y16	3-Y16	2L	Y8	100c/e	4L	Y8	150c/e	2L	Y8	100c/e
FB6	300	750	4-Y20	4-Y20	4-Y20	4-Y20	4L	Y8	100c/e	4L	Y8	150c/e	4L	Y8	100c/e
FB7	230	750	3-Y20	----	3-Y20	2-Y20	2L	Y8	100c/e	2L	Y8	125c/e	2L	Y8	100c/e
FB7A	230	300	2-Y16	----	2-Y12	----	2L	Y8	100c/e	2L	Y8	125c/e	2L	Y8	100c/e
FB8	230	750	2-Y16+1-Y12	----	2-Y12	----	2L	Y8	100c/e	2L	Y8	150c/e	2L	Y8	100c/e
BK11	230	300	2-Y12	----	2-Y12	----	2L	Y8	100c/e	4L	Y8	150c/e	4L	Y8	100c/e



THIS DOCUMENT IS CONFIDENTIAL. NEITHER WHOLE OR ANY PART OF THIS DOCUMENT SHALL BE DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.

GENERAL NOTES-

1. ALL DIMENSIONS ARE IN MM. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED. DIMENSIONS SHOULD NOT BE SCALED.
2. REINFORCEMENT SHALL BE IN ACCORDANCE WITH IS: 1786. RELEVANT ARCHITECTURAL DRAWING IN CASE OF DISCREPANCY BETWEEN ARCH AND STRUCTURAL DRAWING IT SHOULD BE BEFORE EXECUTION CONTRACTOR TO BE ENSURE ASSUMED.
3. SILE RATE CAPACITY IS NOT TO BE USED FOR LGS-G4 STOREY.
4. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED UP SOIL IS ENCOUNTERED IT SHOULD BE BROUGHT IMMEDIATELY TO THE SURFACE AND TO BE REMOVED AND TO BE REPLACED WITH R.C.C. BLOCK WALL LOAD BRICK WITH DENSITY 800KG.
5. FOR BRICKBLOCK WALL LOAD BRICK WITH DENSITY 800KG.
6. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS: 456:2000.

CONCRETE :

1. DESIGN MIX CONCRETE SHALL BE AS FOLLOWS:
A. COLUMN: SHEAR WALLS: 40 mm
B. FOOTING(SPIRE CAP): 75 mm
C. FLOOR SLAB: 125 mm
D. FLOOR BEAM: 25 mm
E. SLABS: 20 mm
F. RETAINING WALLS: 30 mm
2. RETAINING WALLS: 30 mm

COVER:

1. DESIGN MIX CONCRETE SHALL BE AS FOLLOWS:
A. COLUMN: SHEAR WALLS: 40 mm
B. FOOTING(SPIRE CAP): 75 mm
C. FLOOR SLAB: 125 mm
D. FLOOR BEAM: 25 mm
E. SLABS: 20 mm
F. RETAINING WALLS: 30 mm
2. RETAINING WALLS: 30 mm

REINFORCEMENT:

1. ALL REINFORCEMENT SHALL BE IN ACCORDANCE WITH IS: 1786. RELEVANT ARCHITECTURAL DRAWING IN CASE OF DISCREPANCY BETWEEN ARCH AND STRUCTURAL DRAWING IT SHOULD BE BEFORE EXECUTION CONTRACTOR TO BE ENSURE ASSUMED.
2. ALL REINFORCEMENT SHALL BE IN ACCORDANCE WITH IS: 1786. RELEVANT ARCHITECTURAL DRAWING IN CASE OF DISCREPANCY BETWEEN ARCH AND STRUCTURAL DRAWING IT SHOULD BE BEFORE EXECUTION CONTRACTOR TO BE ENSURE ASSUMED.

WATER PROOFING-

1. ALL CONCRETE FACES IN CONTACT WITH SOLWATER BELOW THE FLOOR SHALL BE WATER PROOFED AS PER IS: 1786. RELEVANT ARCHITECTURAL DRAWING IN CASE OF DISCREPANCY BETWEEN ARCH AND STRUCTURAL DRAWING IT SHOULD BE BEFORE EXECUTION CONTRACTOR TO BE ENSURE ASSUMED.
2. ALL CONCRETE FACES IN CONTACT WITH SOLWATER BELOW THE FLOOR SHALL BE WATER PROOFED AS PER IS: 1786. RELEVANT ARCHITECTURAL DRAWING IN CASE OF DISCREPANCY BETWEEN ARCH AND STRUCTURAL DRAWING IT SHOULD BE BEFORE EXECUTION CONTRACTOR TO BE ENSURE ASSUMED.

CAMBER

1. UNLESS NOTED OTHERWISE (U.N.O.) UPWARD CAMBERS SHALL BE PROVIDED IN BEAM & SLABS AS FOLLOWS:
A. CAMBER: 10 mm
B. SLABS: 10 mm
2. SPANS: 750 TO 1250 MM REMAINS AS IS.

N. M. P. Krishnan
Department of Civil Engineering
Indian Institute of Technology Delhi
Hauz Khas, New Delhi, India 110016



REVISIONS	
NO.	DESCRIPTION
1	ISSUED FOR TENDER DRAWING
2	ISSUED FOR TENDER DRAWING
3	ISSUED FOR TENDER DRAWING
4	ISSUED FOR TENDER DRAWING
5	ISSUED FOR TENDER DRAWING
6	ISSUED FOR TENDER DRAWING
7	ISSUED FOR TENDER DRAWING
8	ISSUED FOR TENDER DRAWING
9	ISSUED FOR TENDER DRAWING
10	ISSUED FOR TENDER DRAWING

TENDER DRAWING

CONVENTION CENTRE (SITE - 10)	
CAFETERIA & CONFERENCE	
GROUND FLOOR BEAM REIN. DETAILS	
DESIGN BY:	ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.
DESIGNED BY:	ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.
APPROVED BY:	ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.
DATE:	31.05.2024
PROJECT:	INDIAN INSTITUTE OF TECHNOLOGY DELHI

ARCHITECT
AKSHAYA JAIN & ASSOCIATES
ARCHITECTURE, PLANNING, INTERIOR DESIGN
C-6/1608, VASANT KUNJ, NEW DELHI - 110070
TEL: 011-26156086, 2612304, 47601615
EMAIL: akshaya@akshaya.co.in, akshaya@akshaya.co.in

STRUCTURAL CONSULTANT

ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.
Q-100, BARBERI, SECTOR-17, Gurgaon, Haryana - 122002
PH: 0124-4131045, 9813005115
CLIENT

REFERENCE DRAWING

THIS DOCUMENT IS CONFIDENTIAL. NEITHER WHOLE OR ANY PART OF THIS DOCUMENT SHALL BE DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.

GENERAL NOTES:-

1. ALL DIMENSIONS ARE IN MM. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED. DIMENSIONS SHOULD NOT BE SCALED.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY APPROVALS AND PERMITS FROM THE RELEVANT AUTHORITIES PRIOR TO THE COMMENCEMENT OF WORK.
3. BETWEEN ARCHITECTURAL AND STRUCTURAL DRAWINGS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THE DIMENSIONS AND REQUIREMENTS ARE CONSISTENT AND CORRECT.
4. BEFORE EXECUTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY APPROVALS AND PERMITS FROM THE RELEVANT AUTHORITIES PRIOR TO THE COMMENCEMENT OF WORK.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY APPROVALS AND PERMITS FROM THE RELEVANT AUTHORITIES PRIOR TO THE COMMENCEMENT OF WORK.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY APPROVALS AND PERMITS FROM THE RELEVANT AUTHORITIES PRIOR TO THE COMMENCEMENT OF WORK.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY APPROVALS AND PERMITS FROM THE RELEVANT AUTHORITIES PRIOR TO THE COMMENCEMENT OF WORK.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY APPROVALS AND PERMITS FROM THE RELEVANT AUTHORITIES PRIOR TO THE COMMENCEMENT OF WORK.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY APPROVALS AND PERMITS FROM THE RELEVANT AUTHORITIES PRIOR TO THE COMMENCEMENT OF WORK.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY APPROVALS AND PERMITS FROM THE RELEVANT AUTHORITIES PRIOR TO THE COMMENCEMENT OF WORK.

CONCRETE :

1. DESIGN MIX CONCRETE SHALL BE AS FOLLOWS:
A. FLOOR SLAB: M20
B. FOOTING/PILE CAP: M30
C. BEAMS & SLABS: M30
D. RETAINING WALLS: M40

COVER :

1. ALL CONCRETE COVER TO REINFORCEMENT SHALL BE AS FOLLOWS:
A. COLUMN: SHEAR WALLS: 40 mm
B. FOOTING/PILE CAP: 75 mm
C. BEAMS & SLABS: 25 mm
D. FLOOR BEAM: 25 mm
E. SLABS: 20 mm
F. RETAINING WALLS: 30 mm

REINFORCEMENT :

1. ALL REINFORCEMENT SHALL BE AS FOLLOWS:
A. FLOOR SLAB: 8mm, 10mm, 12mm, 16mm, 20mm, 25mm, 32mm, 40mm, 50mm, 63mm, 75mm, 90mm, 110mm, 140mm, 160mm, 190mm, 220mm, 250mm, 280mm, 320mm, 360mm, 400mm, 450mm, 500mm, 560mm, 630mm, 710mm, 800mm, 900mm, 1000mm, 1100mm, 1200mm, 1300mm, 1400mm, 1500mm, 1600mm, 1700mm, 1800mm, 1900mm, 2000mm, 2200mm, 2500mm, 2800mm, 3200mm, 3600mm, 4000mm, 4500mm, 5000mm, 5600mm, 6300mm, 7100mm, 8000mm, 9000mm, 10000mm, 11000mm, 12000mm, 13000mm, 14000mm, 15000mm, 16000mm, 17000mm, 18000mm, 19000mm, 20000mm, 22000mm, 25000mm, 28000mm, 32000mm, 36000mm, 40000mm, 45000mm, 50000mm, 56000mm, 63000mm, 71000mm, 80000mm, 90000mm, 100000mm, 110000mm, 120000mm, 130000mm, 140000mm, 150000mm, 160000mm, 170000mm, 180000mm, 190000mm, 200000mm, 220000mm, 250000mm, 280000mm, 320000mm, 360000mm, 400000mm, 450000mm, 500000mm, 560000mm, 630000mm, 710000mm, 800000mm, 900000mm, 1000000mm, 1100000mm, 1200000mm, 1300000mm, 1400000mm, 1500000mm, 1600000mm, 1700000mm, 1800000mm, 1900000mm, 2000000mm, 2200000mm, 2500000mm, 2800000mm, 3200000mm, 3600000mm, 4000000mm, 4500000mm, 5000000mm, 5600000mm, 6300000mm, 7100000mm, 8000000mm, 9000000mm, 10000000mm, 11000000mm, 12000000mm, 13000000mm, 14000000mm, 15000000mm, 16000000mm, 17000000mm, 18000000mm, 19000000mm, 20000000mm, 22000000mm, 25000000mm, 28000000mm, 32000000mm, 36000000mm, 40000000mm, 45000000mm, 50000000mm, 56000000mm, 63000000mm, 71000000mm, 80000000mm, 90000000mm, 100000000mm, 110000000mm, 120000000mm, 130000000mm, 140000000mm, 150000000mm, 160000000mm, 170000000mm, 180000000mm, 190000000mm, 200000000mm, 220000000mm, 250000000mm, 280000000mm, 320000000mm, 360000000mm, 400000000mm, 450000000mm, 500000000mm, 560000000mm, 630000000mm, 710000000mm, 800000000mm, 900000000mm, 1000000000mm, 1100000000mm, 1200000000mm, 1300000000mm, 1400000000mm, 1500000000mm, 1600000000mm, 1700000000mm, 1800000000mm, 1900000000mm, 2000000000mm, 2200000000mm, 2500000000mm, 2800000000mm, 3200000000mm, 3600000000mm, 4000000000mm, 4500000000mm, 5000000000mm, 5600000000mm, 6300000000mm, 7100000000mm, 8000000000mm, 9000000000mm, 10000000000mm, 11000000000mm, 12000000000mm, 13000000000mm, 14000000000mm, 15000000000mm, 16000000000mm, 17000000000mm, 18000000000mm, 19000000000mm, 20000000000mm, 22000000000mm, 25000000000mm, 28000000000mm, 32000000000mm, 36000000000mm, 40000000000mm, 45000000000mm, 50000000000mm, 56000000000mm, 63000000000mm, 71000000000mm, 80000000000mm, 90000000000mm, 100000000000mm, 110000000000mm, 120000000000mm, 130000000000mm, 140000000000mm, 150000000000mm, 160000000000mm, 170000000000mm, 180000000000mm, 190000000000mm, 200000000000mm, 220000000000mm, 250000000000mm, 280000000000mm, 320000000000mm, 360000000000mm, 400000000000mm, 450000000000mm, 500000000000mm, 560000000000mm, 630000000000mm, 710000000000mm, 800000000000mm, 900000000000mm, 1000000000000mm, 1100000000000mm, 1200000000000mm, 1300000000000mm, 1400000000000mm, 1500000000000mm, 1600000000000mm, 1700000000000mm, 1800000000000mm, 1900000000000mm, 2000000000000mm, 2200000000000mm, 2500000000000mm, 2800000000000mm, 3200000000000mm, 3600000000000mm, 4000000000000mm, 4500000000000mm, 5000000000000mm, 5600000000000mm, 6300000000000mm, 7100000000000mm, 8000000000000mm, 9000000000000mm, 10000000000000mm, 11000000000000mm, 12000000000000mm, 13000000000000mm, 14000000000000mm, 15000000000000mm, 16000000000000mm, 17000000000000mm, 18000000000000mm, 19000000000000mm, 20000000000000mm, 22000000000000mm, 25000000000000mm, 28000000000000mm, 32000000000000mm, 36000000000000mm, 40000000000000mm, 45000000000000mm, 50000000000000mm, 56000000000000mm, 63000000000000mm, 71000000000000mm, 80000000000000mm, 90000000000000mm, 100000000000000mm, 110000000000000mm, 120000000000000mm, 130000000000000mm, 140000000000000mm, 150000000000000mm, 160000000000000mm, 170000000000000mm, 180000000000000mm, 190000000000000mm, 200000000000000mm, 220000000000000mm, 250000000000000mm, 280000000000000mm, 320000000000000mm, 360000000000000mm, 400000000000000mm, 450000000000000mm, 500000000000000mm, 560000000000000mm, 630000000000000mm, 710000000000000mm, 800000000000000mm, 900000000000000mm, 1000000000000000mm, 1100000000000000mm, 1200000000000000mm, 1300000000000000mm, 1400000000000000mm, 1500000000000000mm, 1600000000000000mm, 1700000000000000mm, 1800000000000000mm, 1900000000000000mm, 2000000000000000mm, 2200000000000000mm, 2500000000000000mm, 2800000000000000mm, 3200000000000000mm, 3600000000000000mm, 4000000000000000mm, 4500000000000000mm, 5000000000000000mm, 5600000000000000mm, 6300000000000000mm, 7100000000000000mm, 8000000000000000mm, 9000000000000000mm, 10000000000000000mm, 11000000000000000mm, 12000000000000000mm, 13000000000000000mm, 14000000000000000mm, 15000000000000000mm, 16000000000000000mm, 17000000000000000mm, 18000000000000000mm, 19000000000000000mm, 20000000000000000mm, 22000000000000000mm, 25000000000000000mm, 28000000000000000mm, 32000000000000000mm, 36000000000000000mm, 40000000000000000mm, 45000000000000000mm, 50000000000000000mm, 56000000000000000mm, 63000000000000000mm, 71000000000000000mm, 80000000000000000mm, 90000000000000000mm, 100000000000000000mm, 110000000000000000mm, 120000000000000000mm, 130000000000000000mm, 140000000000000000mm, 150000000000000000mm, 160000000000000000mm, 170000000000000000mm, 180000000000000000mm, 190000000000000000mm, 200000000000000000mm, 220000000000000000mm, 250000000000000000mm, 280000000000000000mm, 320000000000000000mm, 360000000000000000mm, 400000000000000000mm, 450000000000000000mm, 500000000000000000mm, 560000000000000000mm, 630000000000000000mm, 710000000000000000mm, 800000000000000000mm, 900000000000000000mm, 1000000000000000000mm, 1100000000000000000mm, 1200000000000000000mm, 1300000000000000000mm, 1400000000000000000mm, 1500000000000000000mm, 1600000000000000000mm, 1700000000000000000mm, 1800000000000000000mm, 1900000000000000000mm, 2000000000000000000mm, 2200000000000000000mm, 2500000000000000000mm, 2800000000000000000mm, 3200000000000000000mm, 3600000000000000000mm, 4000000000000000000mm, 4500000000000000000mm, 5000000000000000000mm, 5600000000000000000mm, 6300000000000000000mm, 7100000000000000000mm, 8000000000000000000mm, 9000000000000000000mm, 10000000000000000000mm, 11000000000000000000mm, 12000000000000000000mm, 13000000000000000000mm, 14000000000000000000mm, 15000000000000000000mm, 16000000000000000000mm, 17000000000000000000mm, 18000000000000000000mm, 19000000000000000000mm, 20000000000000000000mm, 22000000000000000000mm, 25000000000000000000mm, 28000000000000000000mm, 32000000000000000000mm, 36000000000000000000mm, 40000000000000000000mm, 45000000000000000000mm, 50000000000000000000mm, 56000000000000000000mm, 63000000000000000000mm, 71000000000000000000mm, 80000000000000000000mm, 90000000000000000000mm, 100000000000000000000mm, 110000000000000000000mm, 120000000000000000000mm, 130000000000000000000mm, 140000000000000000000mm, 150000000000000000000mm, 160000000000000000000mm, 170000000000000000000mm, 180000000000000000000mm, 190000000000000000000mm, 200000000000000000000mm, 220000000000000000000mm, 250000000000000000000mm, 280000000000000000000mm, 320000000000000000000mm, 360000000000000000000mm, 400000000000000000000mm, 450000000000000000000mm, 500000000000000000000mm, 560000000000000000000mm, 630000000000000000000mm, 710000000000000000000mm, 800000000000000000000mm, 900000000000000000000mm, 1000000000000000000000mm, 1100000000000000000000mm, 1200000000000000000000mm, 1300000000000000000000mm, 1400000000000000000000mm, 1500000000000000000000mm, 1600000000000000000000mm, 1700000000000000000000mm, 1800000000000000000000mm, 1900000000000000000000mm, 2000000000000000000000mm, 2200000000000000000000mm, 2500000000000000000000mm, 2800000000000000000000mm, 3200000000000000000000mm, 3600000000000000000000mm, 4000000000000000000000mm, 4500000000000000000000mm, 5000000000000000000000mm, 5600000000000000000000mm, 6300000000000000000000mm, 7100000000000000000000mm, 8000000000000000000000mm, 9000000000000000000000mm, 10000000000000000000000mm, 11000000000000000000000mm, 12000000000000000000000mm, 13000000000000000000000mm, 14000000000000000000000mm, 15000000000000000000000mm, 16000000000000000000000mm, 17000000000000000000000mm, 18000000000000000000000mm, 19000000000000000000000mm, 20000000000000000000000mm, 22000000000000000000000mm, 25000000000000000000000mm, 28000000000000000000000mm, 32000000000000000000000mm, 36000000000000000000000mm, 40000000000000000000000mm, 45000000000000000000000mm, 50000000000000000000000mm, 56000000000000000000000mm, 63000000000000000000000mm, 71000000000000000000000mm, 80000000000000000000000mm, 90000000000000000000000mm, 100000000000000000000000mm, 110000000000000000000000mm, 120000000000000000000000mm, 130000000000000000000000mm, 140000000000000000000000mm, 150000000000000000000000mm, 160000000000000000000000mm, 170000000000000000000000mm, 180000000000000000000000mm, 190000000000000000000000mm, 200000000000000000000000mm, 220000000000000000000000mm, 250000000000000000000000mm, 280000000000000000000000mm, 320000000000000000000000mm, 360000000000000000000000mm, 400000000000000000000000mm, 450000000000000000000000mm, 500000000000000000000000mm, 560000000000000000000000mm, 630000000000000000000000mm, 710000000000000000000000mm, 800000000000000000000000mm, 900000000000000000000000mm, 1000000000000000000000000mm, 1100000000000000000000000mm, 1200000000000000000000000mm, 1300000000000000000000000mm, 1400000000000000000000000mm, 1500000000000000000000000mm, 1600000000000000000000000mm, 1700000000000000000000000mm, 1800000000000000000000000mm, 1900000000000000000000000mm, 2000000000000000000000000mm, 2200000000000000000000000mm, 2500000000000000000000000mm, 2800000000000000000000000mm, 3200000000000000000000000mm, 3600000000000000000000000mm, 4000000000000000000000000mm, 4500000000000000000000000mm, 5000000000000000000000000mm, 5600000000000000000000000mm, 6300000000000000000000000mm, 7100000000000000000000000mm, 8000000000000000000000000mm, 9000000000000000000000000mm, 10000000000000000000000000mm, 11000000000000000000000000mm, 12000000000000000000000000mm, 13000000000000000000000000mm, 14000000000000000000000000mm, 15000000000000000000000000mm, 16000000000000000000000000mm, 17000000000000000000000000mm, 18000000000000000000000000mm, 19000000000000000000000000mm, 20000000000000000000000000mm, 22000000000000000000000000mm, 25000000000000000000000000mm, 28000000000000000000000000mm, 32000000000000000000000000mm, 36000000000000000000000000mm, 40000000000000000000000000mm, 45000000000000000000000000mm, 50000000000000000000000000mm, 56000000000000000000000000mm, 63000000000000000000000000mm, 71000000000000000000000000mm, 80000000000000000000000000mm, 90000000000000000000000000mm, 100000000000000000000000000mm, 110000000000000000000000000mm, 120000000000000000000000000mm, 130000000000000000000000000mm, 140000000000000000000000000mm, 150000000000000000000000000mm, 160000000000000000000000000mm, 170000000000000000000000000mm, 180000000000000000000000000mm, 190000000000000000000000000mm, 200000000000000000000000000mm, 220000000000000000000000000mm, 250000000000000000000000000mm, 280000000000000000000000000mm, 320000000000000000000000000mm, 360000000000000000000000000mm, 400000000000000000000000000mm, 450000000000000000000000000mm, 500000000000000000000000000mm, 560000000000000000000000000mm, 630000000000000000000000000mm, 710000000000000000000000000mm, 800000000000000000000000000mm, 900000000000000000000000000mm, 1000000000000000000000000000mm, 1100000000000000000000000000mm, 1200000000000000000000000000mm, 1300000000000000000000000000mm, 1400000000000000000000000000mm, 1500000000000000000000000000mm, 1600000000000000000000000000mm, 1700000000000000000000000000mm, 1800000000000000000000000000mm, 1900000000000000000000000000mm, 2000000000000000000000000000mm, 2200000000000000000000000000mm, 2500000000000000000000000000mm, 2800000000000000000000000000mm, 3200000000000000000000000000mm, 3600000000000000000000000000mm, 4000000000000000000000000000mm, 4500000000000000000000000000mm, 500

THIS DOCUMENT IS CONFIDENTIAL. NEITHER WHOLE OR ANY PART OF THIS DOCUMENT SHALL BE DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.

GENERAL NOTES:-

1. ALL DIMENSIONS ARE IN MM. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED. DIMENSIONS SHOULD NOT BE SCALED.
2. THE DRAWING SHALL BE PREPARED IN ACCORDANCE WITH THE RELEVANT ARCHITECTURAL DRAWING. IN CASE OF DISCREPANCY BETWEEN ARCHITECTURAL DRAWING AND STRUCTURAL DRAWING, THE STRUCTURAL DRAWING SHALL PREVAIL.
3. BEFORE EXECUTION CONTRACTOR TO BE ENSURE ASSURED SILE PILE CAPACITY IS ACHIEVED FOR LG-6+4 STOREY.
4. THE FOUNDATION IS TO BE PLACED ON THE URBIN SOIL. IF FILLED UP SOIL IS ENCOUNTERED IT SHOULD BE BROUGHT IMMEDIATELY TO THE SURFACE AND REMOVED.
5. FOR BRICKBLOCK WALL LOAD BRICK WITH DENSITY 800KG.
6. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000.

CONCRETE :

1. DESIGN MIX CONCRETE SHALL BE AS FOLLOWS:
A. COLUMN: M30
B. FOOTING/SPILE CAP: M30
C. BEAMS: M30
D. FLOOR SLABS: M30
E. RETAINING WALLS: M40

COVER :

1. COVER TO REINFORCEMENT SHALL BE AS FOLLOWS:
A. COLUMN: SHEAR WALLS: 40 mm
B. FOOTING/SPILE CAP: 75 mm
C. BEAMS: 40 mm
D. FLOOR BEAM: 25 mm
E. SLABS: 20 mm
F. RETAINING WALLS: 30 mm

REINFORCEMENT :

1. ALL REINFORCEMENT BARS SHALL BE GR-60, 16mm DIA.
2. ALL TIEING STEEL MUST BE OF TESTED QUALITY AS PER IS 1786.
3. LAP LENGTH TO BE 1.33 (50d) OF BAR MINIMUM.

WATER PROOFING- TYP FOR ALL STRUCTURAL WORKS

1. ALL CONCRETE FACES IN CONTACT WITH SOLI WATER BELOW THE GRADE SHALL BE WATER PROOFED AS PER IS 8753 BY WATER PROOFING AS PER DWG. OR AS PER SPEC.

CAMBER

1. UNLESS NOTED OTHERWISE (U.N.O.) UPWARD CAMBERS SHALL BE PROVIDED IN BEAM & SLABS AS FOLLOWS:
A. BEAMS: 1:10
B. SLABS: 1:20

REVISIONS

NO.	DATE	BY	CHKD.	REVISION
01	24/07/2023	UJAY		TENDER DRAWING

TENDER DRAWING

CONVENTION CENTRE (SITE - 10)

CAFETERIA & CONFERENCE

UPPER ROOF FRAMING PLAN & BEAM REIN DETAILS

DESIGN BY: VIKAS

SCALE: 1:100

APPROVED BY: VIKAS

PAPER SIZE: A1 (594x841)

DATE: 31.05.2024

PROJECT: IIM SHILONG, UM-SAWUL CAMPUS, SHILONG

ARCHITECT: AKSHAYA JAIN & ASSOCIATES

ARCHITECTURE, PLANNING, INTERIOR DESIGN

C-6/1608, VASANT KUNJ, NEW DELHI - 110070

PH: 011-26156086, 2612304, 47601615

EMAIL: info@akshaya-jain.com

STRUCTURAL CONSULTANT

AI CIEIS

BUILDINGS REG. NO. 15

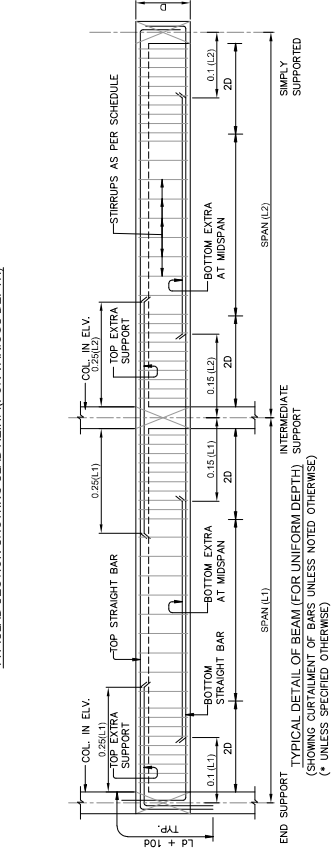
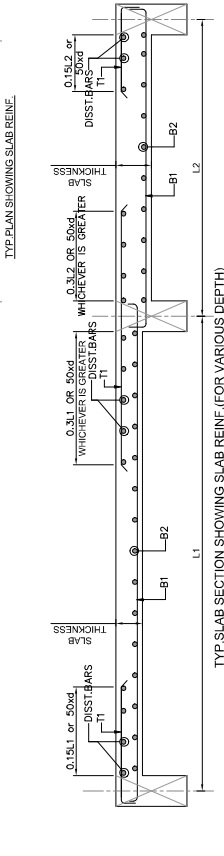
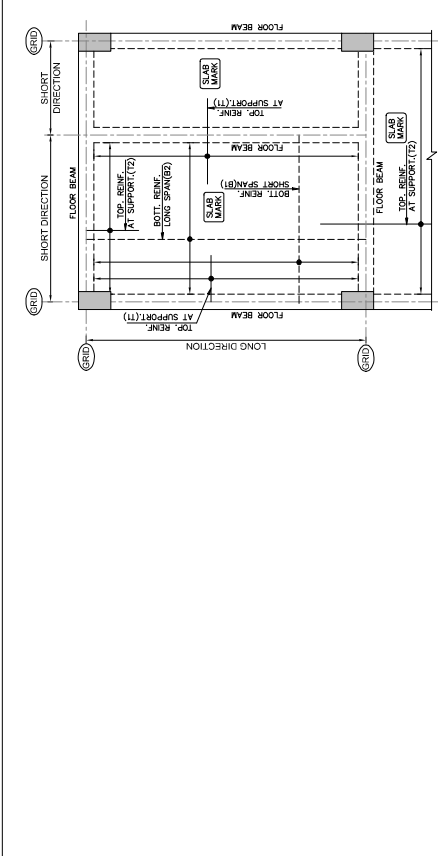
ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.

Q-200, BARBERY, SOUTH CITY - 2, SECTOR-46, Gurgaon, HARYANA - 122002

PH: 0124-4130648, 9843900145

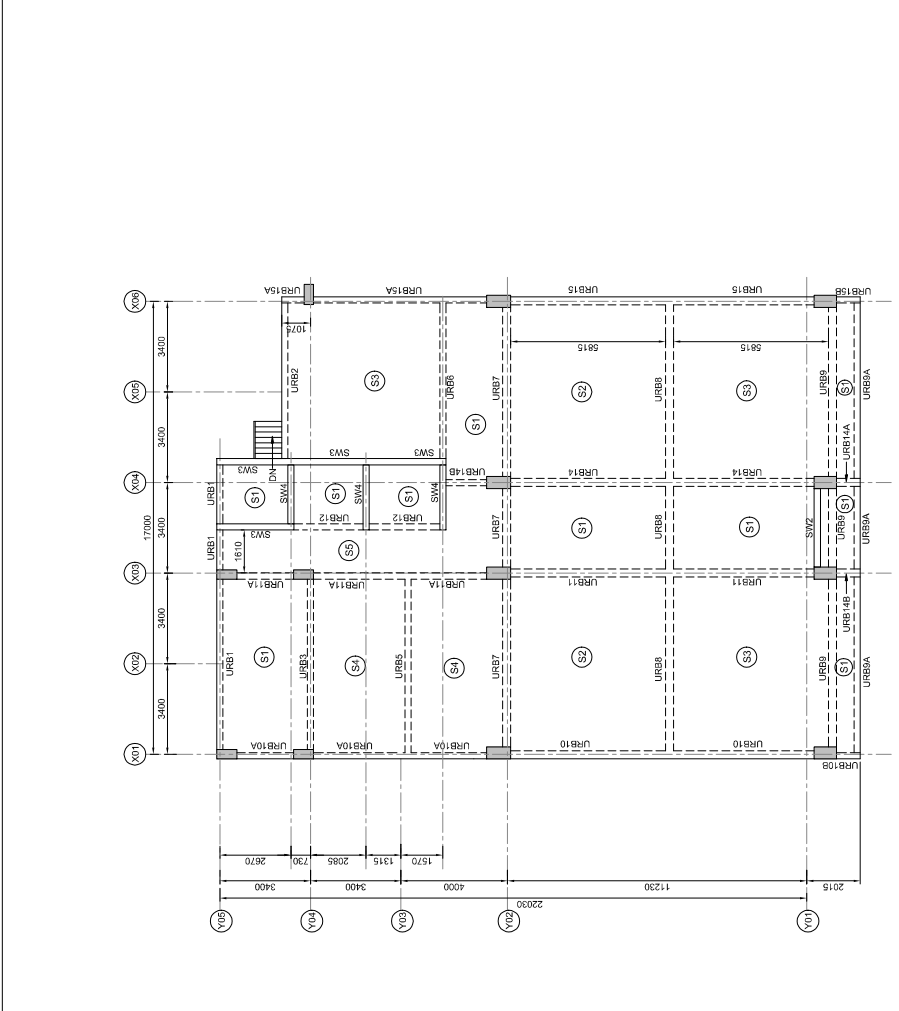
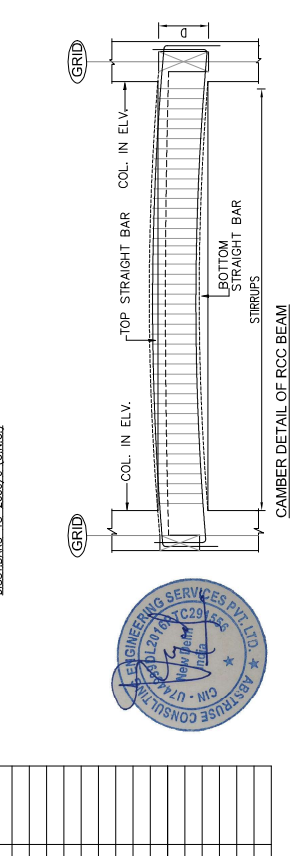
CLIENT

REFERENCE DRAWING



SCHEDULE OF SLAB REIN.

SLAB MARK	THICKNESS (mm)	BOTTOM REIN. (B1)	LONG SPAN (B2)	TOP REIN. AT SUPPORT (T1)	TOP REIN. (T2)	REMARKS
S1	150	Y8 -180c/c	Y8 -200c/c	Y8 -150c/c	Y8 -200c/c	
S2	175	Y10 -100c/c	Y10 -150c/c	Y10 -100c/c	Y10 -175c/c	
S3	175	Y10 -100c/c	Y10 -150c/c	Y10 -100c/c	Y10 -100c/c	
S4	160	Y10 -100c/c	Y10 -200c/c	Y10 -100c/c	Y10 -175c/c	
S5	160	Y12 -100c/c	Y10 -200c/c	Y12 -100c/c	Y10 -200c/c	
DIST. BARS: Y8-200c/c (U.N.O.)						



UPPER ROOF FRAMING LAYOUT PLAN
*ALL SLABS (S1) ARE 150MM (U.N.O.)

BEAM SIZES & REIN. TABLE

BEAM SIZES & REINF. TABLE																		
UPPER ROOF BEAM REINFORCEMENT SCHEDULE																		
BEAM MARK	SIZE		BOTTOM REINFORCEMENT			TOP REINFORCEMENT			STIRRUPS						RHS			
	B	D	THROUGH BAR	EXTRA AT MID SPAN	EXTRA AT CONTINUOUS SUPPORT	THROUGH BAR	EXTRA AT CONTINUOUS SUPPORT	THROUGH BAR	LHS	DIA	SPACING	LEGS	MID SPAN	DIA	SPACING	LEGS	DIA	SPACING
URB1	230	750	3-Y16	---	---	3-Y12	---	3-Y12	---	2L	Y8	100c/c	2L	Y8	150c/c	2L	Y8	100c/c
URB2	230	750	3-Y16	---	---	3-Y12	---	3-Y12	---	2L	Y8	100c/c	2L	Y8	150c/c	2L	Y8	100c/c
URB3	230	750	3-Y16	---	2-Y12	3-Y12	2-Y16	3-Y12	---	2L	Y8	100c/c	2L	Y8	150c/c	2L	Y8	100c/c
URB4	NOT IN USE	---	---	---	---	3-Y16	---	3-Y16	---	2L	Y8	100c/c	2L	Y8	150c/c	2L	Y8	100c/c
URB5	230	600	3-Y16	---	3-Y12	3-Y12	---	3-Y12	---	2L	Y8	100c/c	2L	Y8	150c/c	2L	Y8	100c/c
URB6	230	600	3-Y16	---	---	3-Y16	2-Y12	3-Y16	---	2L	Y8	100c/c	2L	Y8	150c/c	2L	Y8	100c/c
URB7	300	750	3-Y20	2-Y16	3-Y16	3-Y16	2-Y16	3-Y16	---	2L	Y8	100c/c	2L	Y8	150c/c	2L	Y8	100c/c
URB8	300	750	3-Y20	2-Y16	3-Y16	3-Y16	2-Y16	3-Y16	---	2L	Y8	100c/c	2L	Y8	150c/c	2L	Y8	100c/c
URB9	300	750	3-Y16	---	---	3-Y16	---	3-Y16	---	2L	Y8	100c/c	2L	Y8	150c/c	2L	Y8	100c/c
URB10	300	750	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y8	100c/c	4L	Y8	150c/c	4L	Y8	100c/c
URB11	230	750	3-Y20	4-Y20	2-Y16	3-Y16	2-Y20	3-Y16	---	2L	Y8	100c/c	2L	Y8	150c/c	2L	Y8	100c/c
URB12	230	750	3-Y20	4-Y20	2-Y16	3-Y16	2-Y20	3-Y16	---	2L	Y8	100c/c	2L	Y8	150c/c	2L	Y8	100c/c
URB13	300	750	4-Y20	4-Y20	4-Y20	3-Y20	4-Y20	3-Y20	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB14	300	750	4-Y20	4-Y20	4-Y20	3-Y20	4-Y20	3-Y20	---	2L	Y8	100c/c	2L	Y8	100c/c	2L	Y8	100c/c
URB15	300	750	4-Y20	4-Y20	4-Y20	3-Y16	4-Y20	3-Y16	---	2L	Y8	100c/c	2L	Y8	100c/c	2L	Y8	100c/c
URB16	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB17	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB18	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB19	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB20	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB21	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB22	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB23	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB24	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB25	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB26	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB27	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB28	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB29	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB30	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB31	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB32	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB33	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB34	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB35	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB36	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB37	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB38	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB39	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB40	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB41	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB42	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB43	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB44	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB45	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB46	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB47	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB48	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB49	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB50	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB51	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB52	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB53	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB54	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB55	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB56	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB57	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB58	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB59	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c
URB60	230	600	3-Y16	---	---	3-Y16	---	3-Y16	---	4L	Y10	100c/c	4L	Y10	150c/c	4L	Y10	100c/c

THIS DOCUMENT IS CONFIDENTIAL. NEITHER WHOLE OR ANY PART OF THIS DOCUMENT SHALL BE DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT. OF ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.

GENERAL NOTES:-

1. ALL DIMENSIONS ARE IN MM. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED. DIMENSIONS SHOULD NOT BE SCALED.
2. THE STRUCTURE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RELEVANT ARCHITECTURAL DRAWING. IN CASE OF DISCREPANCY BETWEEN ARCHITECTURAL AND STRUCTURAL DRAWING, THE STRUCTURAL DRAWING SHALL PREVAIL.
3. BEFORE EXECUTION CONTRACTOR TO BE ENSURE ASSUMED S.B.C ARE CAPACITY ACHIEVED FOR LG+G+4 STOREY.
4. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED UP SOIL IS ENCOUNTERED IT SHOULD BE BROUGHT IMMEDIATELY TO THE SURFACE AND REMOVED.
5. FOR BRICKBLOCK WALL LOAD BRICK WITH DENSITY 800KG.
6. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000.

CONCRETE :

1. DESIGN MIX CONCRETE SHALL BE AS FOLLOWS
A. FLOOR SLAB : M20
B. FOOTING/PILE CAP : M30
C. RETAINING WALL : M30
D. BEAMS & SLABS : M30
E. RCC - 148
F. RETAINING WALLS - M40

COVER :

1. COVER TO REINFORCEMENT SHALL BE AS FOLLOWS
A. COLUMN/ SHEAR WALLS : 40 mm
B. FOOTING/PILE CAP : 75 mm
C. RETAINING WALL : 50 mm
D. FLOOR BEAM : 25 mm
E. SLABS : 20 mm
F. RETAINING WALLS : 30 mm

REINFORCEMENT :

1. REINFORCEMENT SHALL BE IN ACCORDANCE WITH IS 456:2000
2. ALL TENSILE STEEL MUST BE OF TESTED QUALITY AS PER IS 1786
3. LAP LENGTH TO BE LG (50% OF BAR MINIMUM)

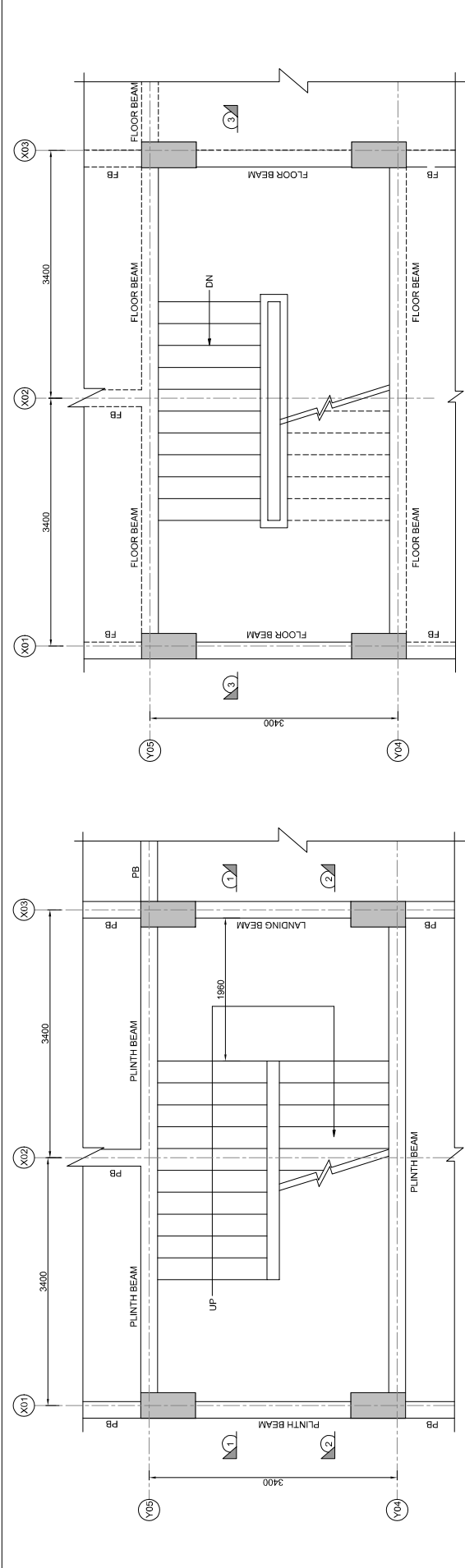
WATER PROOFING-
TYP FOR ALL STRUCTURAL WORKS

1. ALL CONCRETE FACES IN CONTACT WITH SOLI/WATER BELOW THE FINISHED FLOOR LEVEL SHALL BE WATER PROOFED BY WATER PROOFING AS ARCHT DWG OR ASPECTS

CAMBER

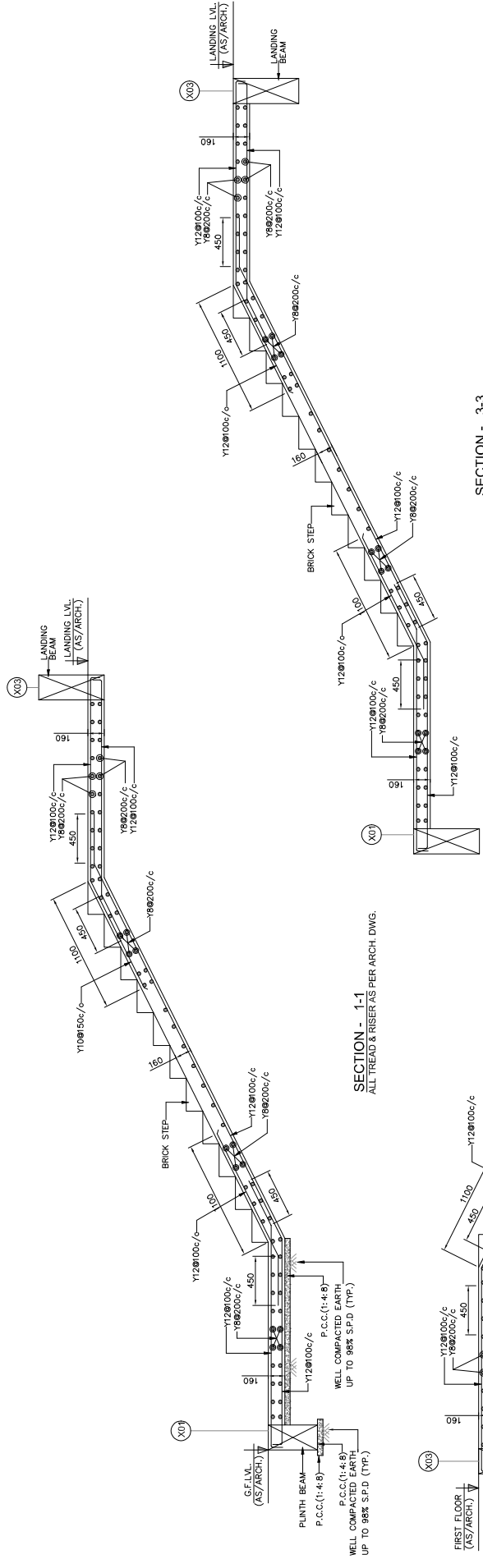
1. UNLESS NOTED OTHERWISE (U.N.O.) UPWARD CAMBERS SHALL BE PROVIDED IN BEAM & SLABS AS FOLLOWS:
A. BEAMS : 10 mm TO 15 mm
2. SPANS : 7.5M TO 12.5M : 10mm REMAINS AS IS

5. N. M. P. Krishnan
Department of Civil Engineering
Indian Institute of Technology Delhi
Hauz Khas, New Delhi, India 110016



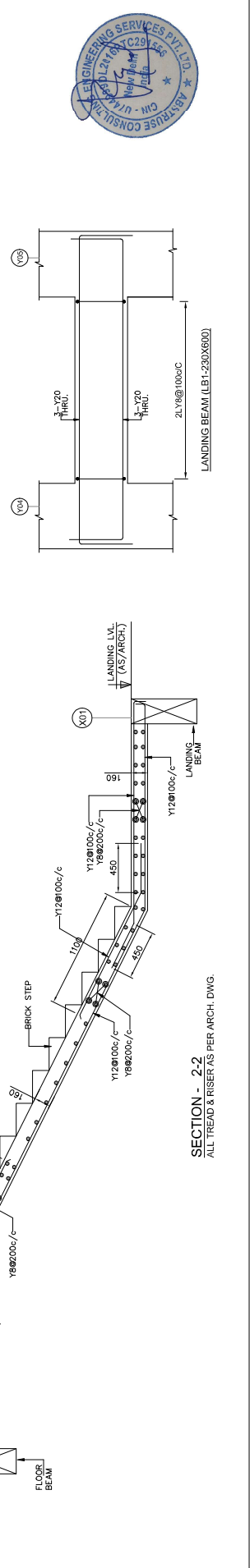
FIRST FLOOR PLAN

GROUND FLOOR PLAN



SECTION - 1-1
ALL TREAD & RISER AS PER ARCH. DWG.

SECTION - 3-3
ALL TREAD & RISER AS PER ARCH. DWG.



SECTION - 2-2
ALL TREAD & RISER AS PER ARCH. DWG.



ARCHITECT
AKSHAYA JAIN & ASSOCIATES
ARCHITECTURE, PLANNING, INTERIOR DESIGN
C-6/1608, VASANT KUNJ, NEW DELHI - 110070
TELEPHONE : 011-26155086, 26132304, 47601615
EMAIL : akshaya@akshaya.co.in
STRUCTURAL CONSULTANT
AICIEIS
BUILDINGS RISE WITH US
ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.
Q-100, BARISHATI, SOUTH CITY - 2, SECTOR-40, Gurgaon, HARYANA - 122002
PHONE : 0124-41310648, 9843500145
CLIENT
REFERENCE DRAWING

THIS DOCUMENT IS CONFIDENTIAL. NEITHER WHOLE OR ANY PART OF THIS DOCUMENT SHALL BE DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT. OF ABSTRUSE CONSULTING ENGINEERING SERVICES PVT.LTD.

GENERAL NOTES:-

1. ALL DIMENSIONS ARE IN MILL. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED. DIMENSIONS SHOULD NOT BE SCALED.
2. ALL DIMENSIONS ARE TO BE TAKEN FROM THE FINISHED FLOOR LEVEL UNLESS SPECIFICALLY NOTED OTHERWISE.
3. RELEVANT ARCHITECTURAL DRAWING IN CASE OF DISCREPANCY BETWEEN ARCH AND STRUCTURAL DRAWING IT SHOULD BE REFERRED TO ARCHITECTURAL DRAWING.
4. BEFORE EXECUTION CONTRACTOR TO BE ENSURE ASSUMED S.B.C VALUE CAPACITY IS ACHIEVED FOR LGP-G+4 STOREY.
5. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED UP SOIL IS ENCOUNTERED IT SHOULD BE BROUGHT IMMEDIATELY TO THE SURFACE AND TO BE REMOVED TO THE REQUIRED LEVEL.
6. FOR BRICKBLOCK WALL LOAD BRICK WITH DENSITY 800KG.
7. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000.

CONCRETE :

1. DESIGN MIX CONCRETE SHALL BE AS FOLLOWS
A. FLOOR SLAB - M30
B. FOOTING/SPIRE CAPT - M30
C. RETAINING WALL - M30
D. BEAMS & SLABS - M30
E. RCC - 1:1.5:3

COVER :

1. ALL CONCRETE COVER TO REINFORCEMENT SHALL BE AS FOLLOWS
A. COLUMN/ SHEAR WALLS - 40 mm
B. FOOTING/SPIRE CAPT - 75 mm
C. RETAINING WALL - 50 mm
D. FLOOR BEAM - 25 mm
E. SLABS - 20 mm
F. BEAMS - 25 mm
G. RETAINING WALLS - 30 mm

REINFORCEMENT :

1. ALL REINFORCEMENT SHALL BE IN THE FORM OF BARS. GRADES - Fe 415D
2. ALL TIEING STEEL MUST BE OF TESTED QUALITY AS PER TO IS 1786
3. LAP LENGTH TO BE L_d (AS PER IS 456) OF BAR MINIMUM.

WATER PROOFING-
TYP FOR ALL STRUCTURAL WORKS

- A) ALL CONCRETE FACES IN CONTACT WITH SOIL/WATER BELOW THE FINISHED FLOOR LEVEL SHALL BE WATER PROOFED BY WATER PROOFING AS ARCHIT. DWG. OR AS SPEC.

CAMBER

- A) UNLESS NOTED OTHERWISE (U.N.O.) UPWARD CAMBERS SHALL BE PROVIDED IN BEAM & SLABS AS FOLLOWS:
1. SPAN - 5.00 TO 7.50 M - 10 MM
2. SPAN - 7.50 TO 12.50 M - 15 MM REMAINING SLABS

REVISIONS

NO.	DATE	BY	REVISION
1	31.07.2025	SAURAV	TENDER DRAWING
2			
3			
4			
5			
6			
7			
8			
9			
10			

TENDER DRAWING

CONVENTION CENTRE (SITE - 10)
CAFETERIA & CONFERENCE

STAIRCASE PLANS - 2

DRAWN	SAURAV	DWG NUMBER	ACES/IMC/PT-151-215
DESIGNED BY	ARTIK	SCALE	VARIOUS
APPROVED BY	VIKRAJ	PAPER SIZE	A1 (594x841)
DATE	31.07.2025	REVISIONS	RO

PROJECT

IN SHILLONG, UMISAWU CAMPUS, SHILLONG

ARCHITECT

AKSHAYA JAIN & ASSOCIATES

ARCHITECTURE - PLANNING INTERIOR DESIGN

C-6 / 6088, VASANT KUNJ NEW DELHI - 110070

TELEPHONE : 011-26156086, 26132204, 47601615

EMAIL : akshaya@akshaya.co.in

WWW.AKSHAYA.CO.IN

STRUCTURAL CONSULTANT

ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.

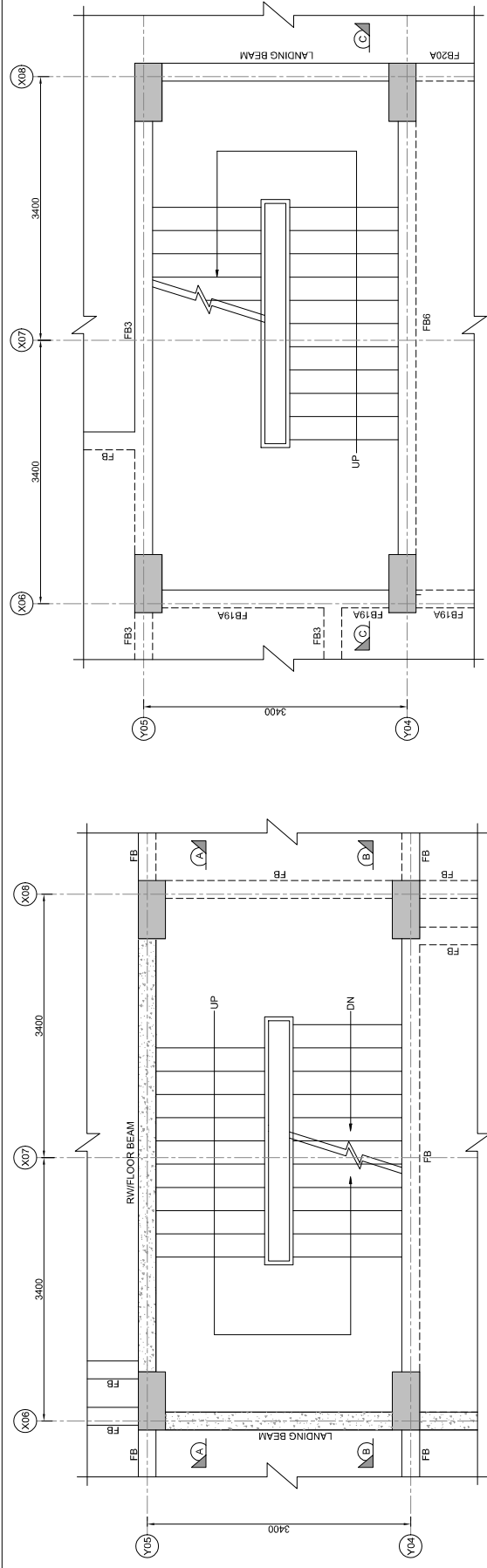
BUILDINGS RISE WITH US

Q-100, BARBERY, SOUTH CITY - 2, SECTOR-40, GURGAON, HARYANA - 122002

TELEPHONE : 0122-41319645, 9643300155

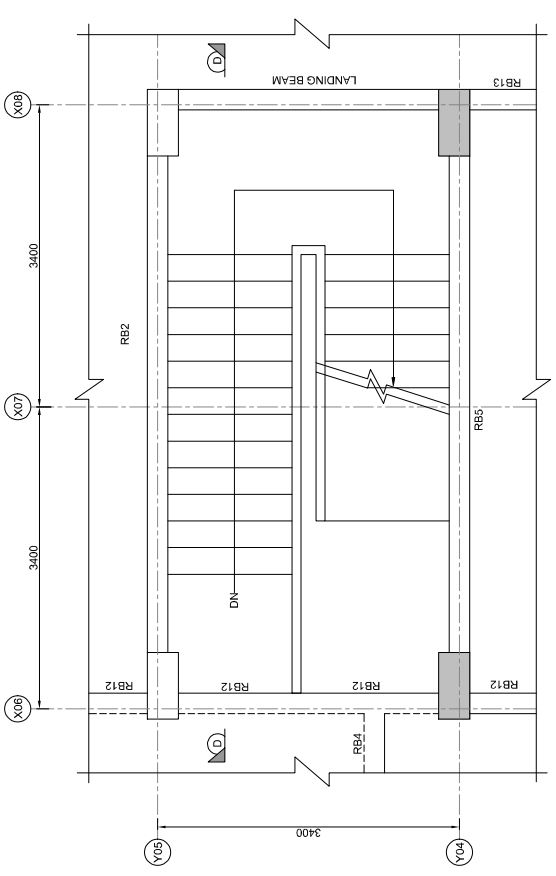
CLIENT

REFERENCE DRAWING



GROUND FLOOR PLAN

FIRST FLOOR PLAN



LOWER ROOF PLAN



N. M. Krishnan
Department of Civil Engineering
Indian Institute of Technology Delhi
Hauz Khas, New Delhi, India 110016

GENERAL NOTES-

- ALL DIMENSIONS ARE IN INCH. ONLY VERTICAL DIMENSIONS ARE TO BE FOLLOWED. DIMENSIONS SHALL NOT BE SCALED.
- STRUCTURAL DRWG SHOULD BE DRAWN IN CONJUNCTION WITH RELEVANT ARCHITECTURAL DRAWING. IN CASE OF DISCREPANCY BETWEEN ARCH. AND STRUCTURAL DRAWING IT SHOULD BE BEFORE EXECUTION. CONTRACTOR SHALL CONSULT WITH ARCHITECT BEFORE EXECUTION. CONTRACTOR TO BE ENSURE ASSUMED S.B.C PL. CAPACITY IS ACHIEVED.
- THE BUILDING HAS BEEN DESIGNED FOR LG+G+4 STOREY. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED UP SOIL IS ENCOUNTERED IT SHOULD BE BROUGHT IMMEDIATELY TO NOTICE OF CONSULTANTS BEFORE EXECUTION.
- FOR BRICKWORK WALL & COLD BRICK WITH DENSITY 1200 KG/M³.

CONCRETE:

- DESIGN MIX CONCRETE SHALL BE AS FOLLOWS:
- A. COLUMN / SHEAR WALLS - M35
 - B. FOOTING/PILE CAP) M30
 - C. PILE SHAFT - M30
 - D. BEAMS & SLABS - M30
 - E. PCC-14.8
 - F. RETAINING WALLS - M20

COVER.

- THE CLEAR COVER TO REINFORCEMENT SHALL BE AS FOLLOWS
- A. COLUMN / SHEAR WALLS = 40 mm
 - B. FOOTING/PILE CAP = 75 mm
 - C. PLINTH BEAM = 30 mm
 - D. FLOOR BEAM = 25 mm
 - E. SLABS = 20 mm*
 - F. PILE SHAFT = 50 mm*
- * RETAINING WALL: 60 mm.

CONFIDENTIAL

- REINFORCEMENT:
1. HIGH YIELD STRENGTH DEFORMED BARS -GRADE - F_y 5500
2. ALL REINF. STEEL MUST BE OF TESTED QUALITY AS PER TO IS.1786
3. LAP LENGTH TO BE 1.4 (50-DIA) OF BAR MINIMUM

WATER PROOFING-

TYPE FOR ALL STRUCTURAL WORKS

CAMBER

1. SPANS - 6M TO 7.5M - 5MM BEAMS/SLABS
2. SPANS - 7.5M TO 12.0M - 10MM BEAMS/SLABS


N. M. Anoop Krishnan
Department of Civil Engineering
Indian Institute of Technology Delhi
Hauz Khas, New Delhi, India 110016

REVISIONS			
R0	31-07-2025	SAURAV	TENDER DRAWING

W.V.	DATE	DISPERN	CONTINUED
NOG STAGE			

CONVENT	CONVENTION CENTRE (SITE - 10)
	CAFFETERIA & CONFERENCE

STAIRCASE SECTION	RAVIN:	SAURAV	DWG NUMBER:	ACES-IIM-CFT-ST-216
	DESIGN BY:	KARTIK	SCALE	VARIOUS
	APPROVED BY:	VAIBHAV	PAPER SIZE:	A1(594x841)
	DATE:	31-07-2025	REVISIONS:	R0
	PROJECT:			

IIM SHILLONG, UMSAWLI CAMPUS, SHILLONG

ARCHITECT
AKSHAYA JAIN & ASSOCIATES
ARCHITECTURE PLANNING INTERIOR DESIGN
C-6/1 6098, VASANT KUNJ, NEW DELHI - 110070
TEL: PHONES +91-11-26136098 26132304 41601615

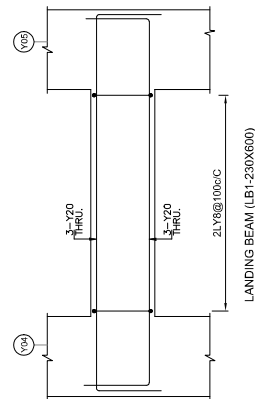
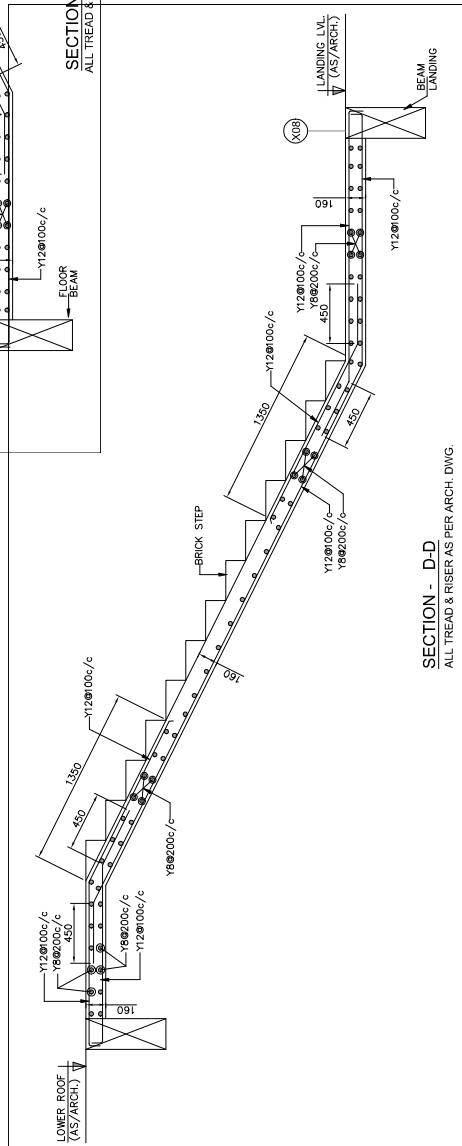
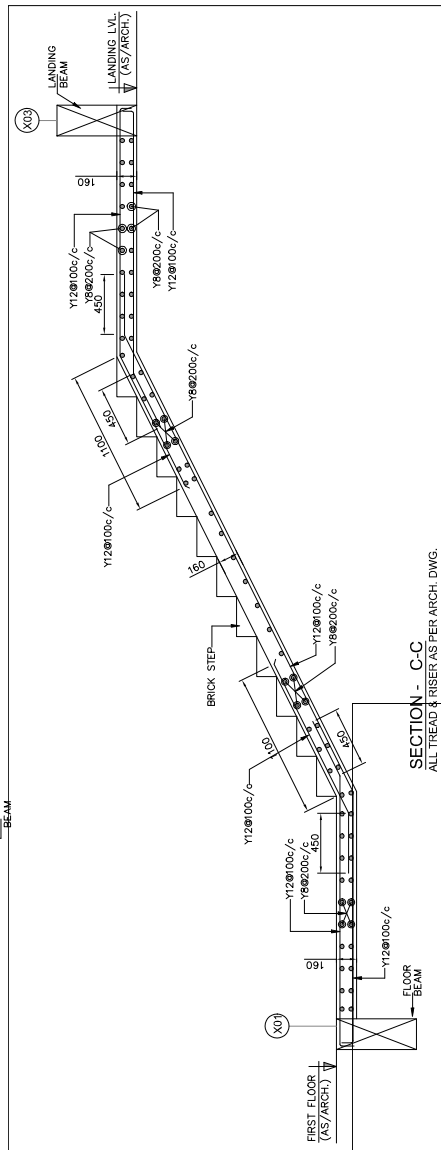
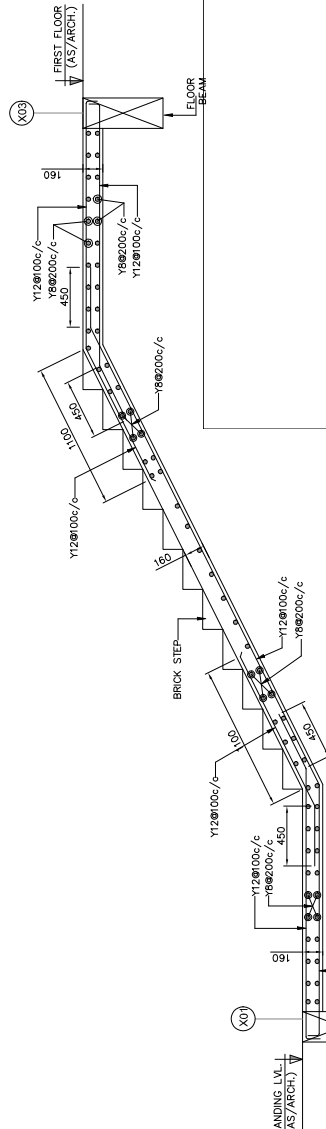
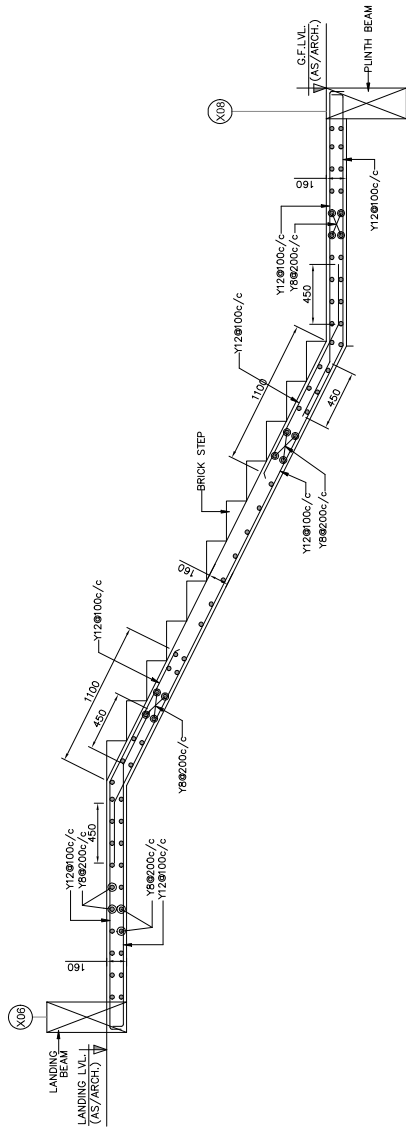
E-Mail : mail@akshayajain.com

A|C|E|S
BUILDINGS RISE WITH US
STRUCTURAL CONSULTANT

ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.,
2-190, BASEMENT, SOUTH CITY -1, SECTOR-40, GURGAON, HARYANA - 122002
E-MAIL- ABSTRUSECONSULTANTS@GMAIL.COM

CLIENT

REFERENCE DRAWING



N. M. Anoop Krishnan
Department of Civil Engineering
Indian Institute of Technology
Hauz Khas, New Delhi, India 110016

COLUMN LAYOUT PLAN

GENERAL NOTES-

4. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED UP SOIL IS ENCOUNTERED IT SHOULD BE BROUGHT IMMEDIATELY TO NOTICE OF CONSULTANTS BEFORE EXECUTION

5. FOR BRICK/BLOCK WALL LOAD -BRICK WITH DENSITY 800KG.

6. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 456:2000

1. DESIGN MIX CONCRETE SHALL BE AS FOLLOWS:

A.	COLUMNS - M35
B.	FOOTING(PILE CAP) - M30
C.	PILE SHAFT - M30
D.	BEAMS & SLAB - M30
E.	PCC - 1:4:8

COVER:

REINFORCEMENT:

1. HIGH YIELD STRENGTH DEFORMED BARS - GRADE - F_y 5500
2. ALL REINF. STEEL MUST BE OF TESTED QUALITY AS PER TO IS:1786
3. LAP LENGTH TO BE L_d (50xDIA) OF BAR MINIMUM.

A) UNLESS NOTED OTHERWISE (U.N.O) UPWARD CAMBERS SHALL BE PROVIDED IN BEAM & SLABS AS FOLLOW:

PILE NOTES-
1. EOB MATERIAL AND WORKMANSHIP LATEST IS CODES

4. THE SLUMP OF CONCRETE SHALL RANGE BETWEEN 150 TO 200mm. FOR PILE WORK.
5. NO MECHANICAL VIBRATORS SHALL BE USED.
6. COMPLETE CONCRETING IN THE SHAFT PORTION SHALL BE ENSURED.

BE 50 mm.
10. CLEAR COVER TO MAIN REINFORCEMENT IN PILE CAP
SHALL BE 75 mm.

(a) IN M30 MIX = 37d WHERE d IS DIA OF BAR WITHOUT WELD.
(b) IN M30 MIX = 10xd WHERE d IS DIA OF BAR WITH WELD.
14 NOT MORE THAN 50% REINFORCEMENT SHALL BE

REVISIONS				
REQUIREMENT.				

[illegible]

CONTENT	CONVENTION CENTRE (SITE - 10) ASSEMBLY AREA
---------	--

DESIGN BY:	KARTIK	SCALE:	VARIOUS
APPROVED BY:	VAIBHAV	PAPER SIZE:	A1(504x241)

ARCHITECT
UIM SHILLONG, UMSAWLI CAMPUS, SHILLONG

C-6/ 6098, VASANT KUNJ, NEW DELHI - 110070
TELEPHONES +91-11-26136098, 26132304, 41601615
E-Mail : mail@akshayajain.com

A/C/E/S
BUILDINGS RISE WITH US

CLIENT



PILE CAP MARKED	PILE NO.	ASPHALTE DEPTH OF PILE CAP	BOTTOM REINFORCEMENT		TOP REINFORCEMENT		REMARKS
			LONG BAR	SHORT BAR	LONG BAR	SHORT BAR	
PCG1	1	750	Y128/1000c	Y128/1000c	Y128/1500c	Y128/1500c	2-Y128(SIDE FACE)
	2	750	Y128/1000c	Y128/1000c	Y128/1500c	Y128/1500c	2-Y128(SIDE FACE)
	3	800	Y168/1000c	Y168/1000c	Y128/1000c	Y128/1000c	4-Y128(SIDE FACE)
	4	800	Y168/1000c	Y168/1000c	Y128/1000c	Y128/1000c	4-Y128(SIDE FACE)
	5	750	Y128/1000c	Y128/1000c	Y128/1000c	Y128/1000c	4-Y128(SIDE FACE)
PCG4	4	750	Y168/1000c	Y168/1000c	Y128/1000c	Y128/1000c	4-Y128(SIDE FACE)
	5	750	Y168/1000c	Y168/1000c	Y128/1000c	Y128/1000c	4-Y128(SIDE FACE)
PCG5	4	750	Y128/750c	Y128/750c	Y128/1000c	Y128/1000c	2-Y128(SIDE FACE)
	5	1300	Y128/750c	Y128/750c	Y128/1000c	Y128/1000c	2-Y128(SIDE FACE)

**TYP. LONGITUDINAL SECTION OF
500Ø PILE (FOR PCG4A & PCG5)**

GENERAL NOTES:-

1. ALL DIMENSIONS ARE IN MM. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED. DIMENSIONS SHOULD NOT BE SCALED.
2. THE FOUNDATION SHALL BE CONSTRUCTED WITH CONCRETE WITH REINFORCED ARCHITECTURAL DRAWING. IN CASE OF DISCREPANCY BETWEEN ARCH. AND STRUCTURAL DRAWING IT SHOULD BE THE ARCHITECTURAL DRAWING SHALL BE FOLLOWED.
3. BEFORE EXECUTION CONTRACTOR TO BE ENSURE ASSUMED S.B.C. PILE CAPACITY IS ACHIEVED.
4. THE BUILDING HAS BEEN DESIGNED FOR G+1 STOREY.
5. THE FOUNDATION IS TO BE PLACED ON THE VIRGIN SOIL. IF FILLED SOIL IS DISCOVERED IT SHOULD BE BROUGHT IMMEDIATELY TO THE SURFACE AND REMOVED.
6. ALL R.C.C. WORKS SHALL BE CARRIED OUT AS PER IS 446:2000

CONCRETE:

1. DESIGN MIX CONCRETE SHALL BE AS FOLLOWS:

A. COLUMNS - M35

B. FOOTING/PILE CAP¹ - M30

C. PILE SHAFT - M30

D. BEAMS & SLABS - M30

E. PCC-1:4:8

COVER:

A. COLUMN = 40 mm
B. FOOTING(PILE CAP) = 75 mm
C. PLINTH BEAM = 30 mm
D. FLOOR BEAM = 25 mm
E. SLABS = 20 mm*
D. PILE SHAFT = 50 mm*

1. HIGH YIELD STRENGTH DEFORMED BARS - GRADE - # 5000
2. ALL REIN. STEEL MUST BE OF TESTED QUALITY AS PER TO IS-1786
3. LAP LENGTH TO BE Ld (50 ϕ DA) OF BAR MINIMUM.


**WATER PROOFING-
TYP.FOR ALL STRUCTURAL WORKS**

A) ALL CONCRETE FACES IN CONTACT WITH SOIL/WATER BELOW THE

CAMBER

A) UNLESS NOTED OTHERWISE (U.N.O.) UPWARD CAMBERS SHALL BE PROVIDED IN BEAM & SLABS AS FOLLOW:

1. SPANS - 6M TO 7.5M - 5MM BEAMS/SLABS
2. SPANS - 7.5M TO 12.0M - 10MM BEAMS/SLABS


N. M. Anoop Krishnan
Department of Civil Engineering
Indian Institute of Technology Delhi
Hauz Khas, New Delhi, India 110016

[illegible]

APPROVED BY: VALBHVV	PAPER SIZE: A(594x241)
DATE: 31-05-2025	REVISIONS: R0

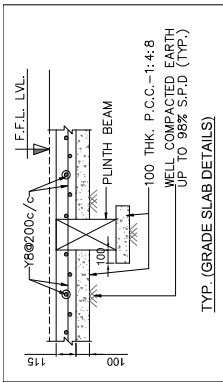
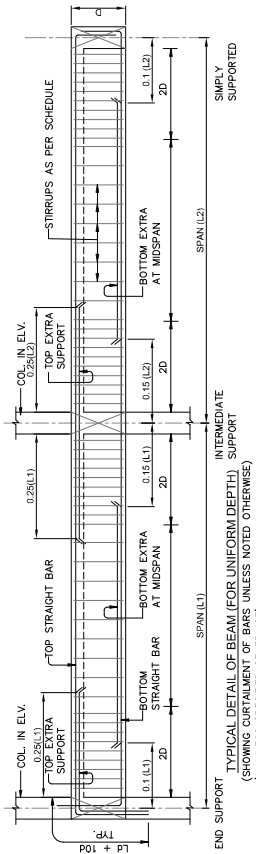
ARCHITECT
AKSHAYA JAIN & ASSOCIATES
ARCHITECTURE, PLANNING, INTERIOR DESIGN
C-6/6098, VASANT KUNJ, NEW DELHI - 110070
TELEPHONES +91-11-26136098, 26132304, 41601615

AICIEIS
BUILDING RUFF MOTES LLP

STRUCTURAL CONSULTANT

ABSTRUSE CONSULTING ENGINEERING SERVICES PVT. LTD.
Q-190, BASEMENT, SOUTH CITY -1, SECTOR-40, GURGAON, HARYANA - 122002
EMAIL- ABSTRUSECONSULTANTS@GMAIL.COM
PH.NO - 0124-4119648 , 9643840145
CLIENT

REFERENCE DRAWING

[illegible]

GROUND FLOOR LAYOUT PLAN

