Verified RealEstate™

Your trusted partner for buying, selling, and managing property, ensuring hassle-free service with 100% transparency.

3/350/2 Mettukuppam,
OMR Thoraipakkam,
Chennai, India

hello@verified.realestate
+91 9996 12 9996

Official Property Record

Digitally Verified Record - Powered by Verified RealEstate™



V.JAGEN
B.E., M.E., (Struct.) M.I.E., A.I.V., M.B.A.
CHARTERED ENGINEER, CONSULTANT
CIVIL & STRUCTURAL, APPROVED VALUER.
CMDA REGN NOS: SE / GR - I / 19 / 03 / 24 , QA / 19 / 04 / 21.
CORPORATION OF CHENNAI , REGN NO: RSE100172019.

FLAT NO:3B, RAMANIYAM GAURAVV 2
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI –107.
MOBILE : 98412 69154

07/03/2024

CERTIFICATE

IT IS CERTIFIED THAT THE PROPOSED CONSTRUCTION OF STILT + 5 FLOORS (18.30m HEIGHT) RESIDENTIAL BUILDING WITH 15 DWELLING UNITS AVAILING PREMIUM FSI, PLOT NO. 16, NEW DOOR NO.30, OLD DOOR NO.20, CANAL ROAD, THIRUVANMIYUR , CHENNAI – 600 041 COMPRISED IN S.NOS.37/1 PART & 37/4 PART, 37/1A1A1A & 37/14 AS PER DOCUMENT AND T.S.NO.86 AS PER PATTA , BLOCK NO:11 OF THIRUVANMIYUR VILLAGE, VELACHERY TALUK, WITHIN THE LIMIT OF GREATER CHENNAI CORPORATION, ZONE – XIII, DIVISION NO – 173, HAVING STILT+5 FLOORS IS DESIGNED TO RESIST EARTHQUAKE. CHECK HAS BEEN MADE AND FOUND SAFE AND I HEREBY CERTIFY THAT,

1. The minimum grade of concrete is M25.

2. The design and analysis using the code of practice for loading Standards as per IS-875 Part I to V and seismic force as per code IS 1893, is carried out.

   The building will be sound and stable when used for the purpose for which it is designed.

V. JAGEN, B.E.,M.E., (Struct), A.M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED
3-B, RAMANIYAM GAU
BLOCK-2, MODE
SHOLINGANALL
MOBILE

V.JAGEN
B.E., M.E., (Struct.) M.I.E., A.I.V., M.B.A.
CHARTERED ENGINEER, CONSULTANT
CIVIL & STRUCTURAL, APPROVED VALUER,
CMDA REGN NOS: SE / GR - I / 19 / 03 / 24 , QA / 19 / 04 / 21.
CORPORATION OF CHENNAI , REGN NO: RSE100172019.

FLAT NO:3B, RAMANIYAM GAURAVV 2
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI –107.
MOBILE : 98412 69154

THE PROPOSED CONSTRUCTION OF STILT + 5FLOORS (18.30m HEIGHT) RESIDENTIAL BUILDING WITH 15 DWELLING UNITS AVAILING PREMIUM FSI, PLOT NO. 16, NEW DOOR NO.30, OLD DOOR NO.20, CANAL ROAD, THIRUVANMIYUR , CHENNAI – 600 041 COMPRISED IN S.NOS.37/1 PART & 37/4 PART, 37/1A1A1A & 37/14 AS PER DOCUMENT AND T.S.NO.86 AS PER PATTA , BLOCK NO:11 OF THIRUVANMIYUR VILLAGE, VELACHERY TALUK, WITHIN THE LIMIT OF GREATER CHENNAI CORPORATION, ZONE – XIII, DIVISION NO – 173.

GENERAL NOTE ON STRUCTURAL DESIGN.

1.0 GENERAL.

1.1 DESIGN BASIS

Residential Building having Stilt + 5 Floors.
The design of this building is carried out based on frame analysis using STAAD PRO CONNECT EDITION.

1.2 CODES AND STANDARDS

All structural design is carried out conforming to the provisions in National Building Code of India and other relevant Indian Codes and Standards.

1. I.S. 456 - 2000
2. I.S. 875 - Part I to V
3. I.S.1893 - Part -1: 2016.
4. I.S.13920 : 2016.

2.0 BASIC CIVIL DESIGN LOADS

2.1 DEAD LOADS & LIVE LOADS

Typical slab dead load is calculated as follows

Residential Building

Self weight of slab	=	3 0kN/m²
Floor finish	=	2.0kN/m²
Live load	=	2.0kN/m²
		7.0kN/m²

V. JAGEN, B.E.,M.E., (Struct), A.M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154

3.0 SOIL DETAILS

Based on Soil Test Report Pile foundation is adopted.

4.0 DESIGN METHODS

General design and detailing of concrete members/elements are done conforming to the provisions of I.S: 456 and other relevant I.S codes. Limit State method is followed for the design.

Seismic Zone III load is taken into account for the analysis. The predominant direction of vibration is horizontal. Relevant combination of forces has been taken into account. Ductile detailing of Reinforcement as per I.S.13920 - 2016 is considered.

4.1

Load Combination	Ultimate Limit Load	Serviceability Limit State
DL+LL+WL Or DL+LL+EL	1.2DL+1.2LL+1.2WL Or 1.2DL+1.2LL+1.2EL	DL+LL+WL Or DL+LL+EL

4.2.1 MINIMUM COVER

Slab	15 mm
Beam	25 mm
Columns	40 mm
Foundations	50 mm

Structure will be sound and stable when used for the purpose for which it is designed.

V. JAGEN, B.E.,M.E., (Struct), A.M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154

```
**************************************************
*                                                *
*          STAAD.Pro CONNECT Edition             *
*          Version  22.12.00.142                 *
*          Proprietary Program of                *
*          Bentley Systems, Inc.                 *
*          Date=    MAR  7, 2024                 *
*          Time=    12:33:51                     *
*                                                *
*  Licensed to: Ramaniyam Real Estates Pvt Ltd   *
**************************************************
```

```
    1. STAAD SPACE
INPUT FILE: F:\Ramaniyam\Ramaniyam stadd\RRE STAAD 2024\Gayathri\Gayathri seismic .STD
    2. START JOB INFORMATION
    3. ENGINEER DATE 19-JAN-24
    4. *PLAN SHOWING THE PROPOSED CONSTRUCTION OF STILT + 5 FLOORS (18.30M HEIGHT)
    5. *RESIDENTIAL BUILDING WITH 15 DWELLING UNITS AVAILING PREMIUM FSI AT PLOT NO.16
    6. *NEW DOOR NO.30,OLD DOOR NO.20,CANAL ROAD,THIRUVANMIYUR ,CHENNAI - 600041.
    7. *COMPRISED IN S.NOS:37/1 PART& 37/4 PART, 37/1A1A1A & 37/14 AS PER DOCUMENT
    8. *AND T.S.NO: 86 AS PER PATTA,BLOCK NO:11 OF THIRUVANMIYUR VILLAGE,VELACHERY,
    9. *TALUK, WITHIN THE LIMIT OF GREATER CORPORATION,ZONE: XIII,DIVISION NO-173.
   10. END JOB INFORMATION
   11. INPUT WIDTH 79
   12. UNIT METER KN
   13. JOINT COORDINATES
   14. 1 0 0 0; 2 3.83 0 0; 3 10.42 0 0; 4 13.65 0 0; 5 -0.21 0 3.52; 6 5.64 0 2.84
   15. 7 10.42 0 3.52; 8 13.65 0 3.52; 9 -0.21 0 7.07; 10 5.64 0 7.07
   16. 11 10.42 0 7.07; 12 13.65 0 7.07; 13 1.24 0 8.535; 14 3.12 0 8.535
   17. 15 1.24 0 10.61; 16 3.12 0 10.61; 17 10.345 0 10.425; 18 -0.21 0 12.06
   18. 19 5.21 0 12.06; 20 13.4 0 13.18; 21 -0.56 0 15.1; 22 10.345 0 15.93
   19. 23 13.25 0 15.93; 24 -0.56 0 17.29; 25 5.21 0 17.29; 26 9.52 0 19.445
   20. 27 13.05 0 19.445; 28 -0.56 0 20.58; 29 3.42 0 20.58; 30 0 1.2 0
   21. 31 3.83 1.2 0; 32 10.42 1.2 0; 33 13.65 1.2 0; 34 -0.21 1.2 3.52
   22. 35 5.64 1.2 2.84; 36 10.42 1.2 3.52; 37 13.65 1.2 3.52; 38 -0.21 1.2 7.07
   23. 39 5.64 1.2 7.07; 40 10.42 1.2 7.07; 41 13.65 1.2 7.07; 42 1.24 1.2 8.535
   24. 43 3.12 1.2 8.535; 44 1.24 1.2 10.61; 45 3.12 1.2 10.61; 46 10.345 1.2 10.425
   25. 47 -0.21 1.2 12.06; 48 5.21 1.2 12.06; 49 13.4 1.2 13.18; 50 -0.56 1.2 15.1
   26. 51 10.345 1.2 15.93; 52 13.25 1.2 15.93; 53 -0.56 1.2 17.29; 54 5.21 1.2 17.29
   27. 55 9.52 1.2 19.445; 56 13.05 1.2 19.445; 57 -0.56 1.2 20.58; 58 3.42 1.2 20.58
   28. 59 0 4.3 0; 60 3.83 4.3 0; 61 10.42 4.3 0; 62 13.65 4.3 0; 63 -0.21 4.3 3.52
   29. 64 5.64 4.3 2.84; 65 10.42 4.3 3.52; 66 13.65 4.3 3.52; 67 -0.21 4.3 7.07
   30. 68 5.64 4.3 7.07; 69 10.42 4.3 7.07; 70 13.65 4.3 7.07; 71 1.24 4.3 8.535
   31. 72 3.12 4.3 8.535; 73 1.24 4.3 10.61; 74 3.12 4.3 10.61; 75 10.345 4.3 10.425
   32. 76 -0.21 4.3 12.06; 77 5.21 4.3 12.06; 78 13.4 4.3 13.18; 79 -0.56 4.3 15.1
   33. 80 10.345 4.3 15.93; 81 13.25 4.3 15.93; 82 -0.56 4.3 17.29; 83 5.21 4.3 17.29
   34. 84 9.52 4.3 19.445; 85 13.05 4.3 19.445; 86 -0.56 4.3 20.58; 87 3.42 4.3 20.58
   35. 88 5.64 4.3 0; 89 5.64 4.3 3.52; 90 -1.49012E-08 4.3 3.52; 91 3.12 4.3 7.07
   36. 92 3.12 4.3 12.06; 93 5.21 4.3 7.07; 94 3.42 4.3 17.29; 95 2.01 4.3 0
   37. 96 2.01 4.3 3.52; 97 -6.47692E-09 4.3 1.53; 98 2.01 4.3 1.53; 99 5.64 4.3 1.53
   38. 100 9.355 4.3 3.52; 101 9.355 4.3 0; 102 9.355 4.3 1.53; 103 10.42 4.3 5.85
```

V. JAGEN, B.E.,M.E., (Struct), M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154

39. 104 13.65 4.3 5.85; 105 10.42 4.3 4.75; 106 8.515 4.3 4.75; 107 8.515 4.3 7.07
40. 108 9.355 4.3 4.75; 109 5.21 4.3 10.425; 111 8.545 4.3 10.425
41. 112 8.545 4.3 7.07; 113 13.4 4.3 7.07; 114 8.545 4.3 8.57; 115 13.4 4.3 8.57
42. 116 10.345 4.3 8.57; 117 10.345 4.3 13.18; 118 13.25 4.3 13.18
43. 119 5.21 4.3 15.93; 120 1.49 4.3 17.29; 121 1.49 4.3 12.06; 122 1.49 4.3 15.1
44. 123 -0.21 4.3 15.1; 124 10.345 4.3 14.33; 125 5.21 4.3 14.33
45. 126 6.86 4.3 15.93; 127 6.86 4.3 14.33; 128 8.87 4.3 15.93; 129 8.87 4.3 14.33
46. 130 13.05 4.3 15.93; 131 9.52 4.3 15.93; 132 9.52 4.3 20.58
47. 133 13.05 4.3 20.58; 134 5.96 4.3 20.58; 135 5.96 4.3 17.29
48. 136 5.96 4.3 19.445; 137 3.42 4.3 19.5; 138 5.96 4.3 19.5; 139 13.05 4.3 17.52
49. 140 9.52 4.3 17.52; 141 10.345 4.3 17.52; 142 13.4 4.3 11.57
50. 143 10.345 4.3 11.57; 144 11.44 4.3 11.57; 145 11.44 4.3 13.18
51. 146 3.535 4.3 3.52; 147 3.535 4.3 7.07; 148 -0.96 4.3 7.07
52. 149 -0.96 4.3 12.06; 150 -0.21 4.3 11.295; 151 -0.96 4.3 11.295
53. 152 -0.96 4.3 7.835; 153 -0.21 4.3 7.835; 154 5.21 1.2 15.93
54. 155 10.345 1.2 7.07; 156 13.4 1.2 7.07; 157 5.64 1.2 0; 158 5.64 1.2 3.52
55. 159 -1.63913E-07 1.2 3.52; 160 5.21 1.2 7.07; 161 13.05 1.2 15.93
56. 162 10.345 1.2 13.18; 163 13.25 1.2 13.18; 164 9.52 1.2 15.93
57. 165 3.12 1.2 7.07; 166 3.12 1.2 12.06; 167 9.52 1.2 20.58; 168 13.05 1.2 20.58
58. 169 -0.56 1.2 12.06; 170 5.21 1.2 10.425; 171 0 7.4 0; 172 3.83 7.4 0
59. 173 10.42 7.4 0; 174 13.65 7.4 0; 175 -0.21 7.4 3.52; 176 5.64 7.4 2.84
60. 177 10.42 7.4 3.52; 178 13.65 7.4 3.52; 179 -0.21 7.4 7.07; 180 5.64 7.4 7.07
61. 181 10.42 7.4 7.07; 182 13.65 7.4 7.07; 183 1.24 7.4 8.535; 184 3.12 7.4 8.535
62. 185 1.24 7.4 10.61; 186 3.12 7.4 10.61; 187 10.345 7.4 10.425
63. 188 -0.21 7.4 12.06; 189 5.21 7.4 12.06; 190 13.4 7.4 13.18
64. 191 -0.56 7.4 15.1; 192 10.345 7.4 15.93; 193 13.25 7.4 15.93
65. 194 -0.56 7.4 17.29; 195 5.21 7.4 17.29; 196 9.52 7.4 19.445
66. 197 13.05 7.4 19.445; 198 -0.56 7.4 20.58; 199 3.42 7.4 20.58; 200 5.64 7.4 0
67. 201 5.64 7.4 3.52; 202 -1.49012E-08 7.4 3.52; 203 3.12 7.4 7.07
68. 204 3.12 7.4 12.06; 205 5.21 7.4 7.07; 206 3.42 7.4 17.29; 207 2.01 7.4 0
69. 208 2.01 7.4 3.52; 209 -6.47692E-09 7.4 1.53; 210 2.01 7.4 1.53
70. 211 5.64 7.4 1.53; 212 9.355 7.4 3.52; 213 9.355 7.4 0; 214 9.355 7.4 1.53
71. 215 10.42 7.4 5.85; 216 13.65 7.4 5.85; 217 10.42 7.4 4.75; 218 8.515 7.4 4.75
72. 219 8.515 7.4 7.07; 220 9.355 7.4 4.75; 221 5.21 7.4 10.425
73. 222 8.545 7.4 10.425; 223 8.545 7.4 7.07; 224 13.4 7.4 7.07
74. 225 8.545 7.4 8.57; 226 13.4 7.4 8.57; 227 10.345 7.4 8.57
75. 228 10.345 7.4 13.18; 229 13.25 7.4 13.18; 230 5.21 7.4 15.93
76. 231 1.49 7.4 17.29; 232 1.49 7.4 12.06; 233 1.49 7.4 15.1; 234 -0.21 7.4 15.1
77. 235 10.345 7.4 14.33; 236 5.21 7.4 14.33; 237 6.86 7.4 15.93
78. 238 6.86 7.4 14.33; 239 8.87 7.4 15.93; 240 8.87 7.4 14.33
79. 241 13.05 7.4 15.93; 242 9.52 7.4 15.93; 243 9.52 7.4 20.58
80. 244 13.05 7.4 20.58; 245 5.96 7.4 20.58; 246 5.96 7.4 17.29
81. 247 5.96 7.4 19.445; 248 3.42 7.4 19.5; 249 5.96 7.4 19.5; 250 13.05 7.4 17.52
82. 251 9.52 7.4 17.52; 252 10.345 7.4 17.52; 253 13.4 7.4 11.57
83. 254 10.345 7.4 11.57; 255 11.44 7.4 11.57; 256 11.44 7.4 13.18
84. 257 3.535 7.4 3.52; 258 3.535 7.4 7.07; 259 -0.96 7.4 7.07
85. 260 -0.96 7.4 12.06; 261 -0.21 7.4 11.295; 262 -0.96 7.4 11.295
86. 263 -0.96 7.4 7.835; 264 -0.21 7.4 7.835; 265 0 10.5 0; 266 3.83 10.5 0
87. 267 10.42 10.5 0; 268 13.65 10.5 0; 269 -0.21 10.5 3.52; 270 5.64 10.5 2.84
88. 271 10.42 10.5 3.52; 272 13.65 10.5 3.52; 273 -0.21 10.5 7.07
89. 274 5.64 10.5 7.07; 275 10.42 10.5 7.07; 276 13.65 10.5 7.07
90. 277 1.24 10.5 8.535; 278 3.12 10.5 8.535; 279 1.24 10.5 10.61
91. 280 3.12 10.5 10.61; 281 10.345 10.5 10.425; 282 -0.21 10.5 12.06
92. 283 5.21 10.5 12.06; 284 13.4 10.5 13.18; 285 -0.56 10.5 15.1
93. 286 10.345 10.5 15.93; 287 13.25 10.5 15.93; 288 -0.56 10.5 17.29
94. 289 5.21 10.5 17.29; 290 9.52 10.5 19.445; 291 13.05 10.5 19.445

V. JAGEN, B.E.,M.E., (Struct), M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154

95. 292 -0.56 10.5 20.58; 293 3.42 10.5 20.58; 294 5.64 10.5 0; 295 5.64 10.5 3.52
96. 296 -1.49012E-08 10.5 3.52; 297 3.12 10.5 7.07; 298 3.12 10.5 12.06
97. 299 5.21 10.5 7.07; 300 3.42 10.5 17.29; 301 2.01 10.5 0; 302 2.01 10.5 3.52
98. 303 -6.47692E-09 10.5 1.53; 304 2.01 10.5 1.53; 305 5.64 10.5 1.53
99. 306 9.355 10.5 3.52; 307 9.355 10.5 0; 308 9.355 10.5 1.53
100. 309 10.42 10.5 5.85; 310 13.65 10.5 5.85; 311 10.42 10.5 4.75
101. 312 8.515 10.5 4.75; 313 8.515 10.5 7.07; 314 9.355 10.5 4.75
102. 315 5.21 10.5 10.425; 316 8.545 10.5 10.425; 317 8.545 10.5 7.07
103. 318 13.4 10.5 7.07; 319 8.545 10.5 8.57; 320 13.4 10.5 8.57
104. 321 10.345 10.5 8.57; 322 10.345 10.5 13.18; 323 13.25 10.5 13.18
105. 324 5.21 10.5 15.93; 325 1.49 10.5 17.29; 326 1.49 10.5 12.06
106. 327 1.49 10.5 15.1; 328 -0.21 10.5 15.1; 329 10.345 10.5 14.33
107. 330 5.21 10.5 14.33; 331 6.86 10.5 15.93; 332 6.86 10.5 14.33
108. 333 8.87 10.5 15.93; 334 8.87 10.5 14.33; 335 13.05 10.5 15.93
109. 336 9.52 10.5 15.93; 337 9.52 10.5 20.58; 338 13.05 10.5 20.58
110. 339 5.96 10.5 20.58; 340 5.96 10.5 17.29; 341 5.96 10.5 19.445
111. 342 3.42 10.5 19.5; 343 5.96 10.5 19.5; 344 13.05 10.5 17.52
112. 345 9.52 10.5 17.52; 346 10.345 10.5 17.52; 347 13.4 10.5 11.57
113. 348 10.345 10.5 11.57; 349 11.44 10.5 11.57; 350 11.44 10.5 13.18
114. 351 3.535 10.5 3.52; 352 3.535 10.5 7.07; 353 -0.96 10.5 7.07
115. 354 -0.96 10.5 12.06; 355 -0.21 10.5 11.295; 356 -0.96 10.5 11.295
116. 357 -0.96 10.5 7.835; 358 -0.21 10.5 7.835; 359 0 13.6 0; 360 3.83 13.6 0
117. 361 10.42 13.6 0; 362 13.65 13.6 0; 363 -0.21 13.6 3.52; 364 5.64 13.6 2.84
118. 365 10.42 13.6 3.52; 366 13.65 13.6 3.52; 367 -0.21 13.6 7.07
119. 368 5.64 13.6 7.07; 369 10.42 13.6 7.07; 370 13.65 13.6 7.07
120. 371 1.24 13.6 8.535; 372 3.12 13.6 8.535; 373 1.24 13.6 10.61
121. 374 3.12 13.6 10.61; 375 10.345 13.6 10.425; 376 -0.21 13.6 12.06
122. 377 5.21 13.6 12.06; 378 13.4 13.6 13.18; 379 -0.56 13.6 15.1
123. 380 10.345 13.6 15.93; 381 13.25 13.6 15.93; 382 -0.56 13.6 17.29
124. 383 5.21 13.6 17.29; 384 9.52 13.6 19.445; 385 13.05 13.6 19.445
125. 386 -0.56 13.6 20.58; 387 3.42 13.6 20.58; 388 5.64 13.6 0; 389 5.64 13.6 3.52
126. 390 -1.49012E-08 13.6 3.52; 391 3.12 13.6 7.07; 392 3.12 13.6 12.06
127. 393 5.21 13.6 7.07; 394 3.42 13.6 17.29; 395 2.01 13.6 0; 396 2.01 13.6 3.52
128. 397 -6.47692E-09 13.6 1.53; 398 2.01 13.6 1.53; 399 5.64 13.6 1.53
129. 400 9.355 13.6 3.52; 401 9.355 13.6 0; 402 9.355 13.6 1.53
130. 403 10.42 13.6 5.85; 404 13.65 13.6 5.85; 405 10.42 13.6 4.75
131. 406 8.515 13.6 4.75; 407 8.515 13.6 7.07; 408 9.355 13.6 4.75
132. 409 5.21 13.6 10.425; 410 8.545 13.6 10.425; 411 8.545 13.6 7.07
133. 412 13.4 13.6 7.07; 413 8.545 13.6 8.57; 414 13.4 13.6 8.57
134. 415 10.345 13.6 8.57; 416 10.345 13.6 13.18; 417 13.25 13.6 13.18
135. 418 5.21 13.6 15.93; 419 1.49 13.6 17.29; 420 1.49 13.6 12.06
136. 421 1.49 13.6 15.1; 422 -0.21 13.6 15.1; 423 10.345 13.6 14.33
137. 424 5.21 13.6 14.33; 425 6.86 13.6 15.93; 426 6.86 13.6 14.33
138. 427 8.87 13.6 15.93; 428 8.87 13.6 14.33; 429 13.05 13.6 15.93
139. 430 9.52 13.6 15.93; 431 9.52 13.6 20.58; 432 13.05 13.6 20.58
140. 433 5.96 13.6 20.58; 434 5.96 13.6 17.29; 435 5.96 13.6 19.445
141. 436 3.42 13.6 19.5; 437 5.96 13.6 19.5; 438 13.05 13.6 17.52
142. 439 9.52 13.6 17.52; 440 10.345 13.6 17.52; 441 13.4 13.6 11.57
143. 442 10.345 13.6 11.57; 443 11.44 13.6 11.57; 444 11.44 13.6 13.18
144. 445 3.535 13.6 3.52; 446 3.535 13.6 7.07; 447 -0.96 13.6 7.07
145. 448 -0.96 13.6 12.06; 449 -0.21 13.6 11.295; 450 -0.96 13.6 11.295
146. 451 -0.96 13.6 7.835; 452 -0.21 13.6 7.835; 453 0 16.7 0; 454 3.83 16.7 0
147. 455 10.42 16.7 0; 456 13.65 16.7 0; 457 -0.21 16.7 3.52; 458 5.64 16.7 2.84
148. 459 10.42 16.7 3.52; 460 13.65 16.7 3.52; 461 -0.21 16.7 7.07
149. 462 5.64 16.7 7.07; 463 10.42 16.7 7.07; 464 13.65 16.7 7.07
150. 465 1.24 16.7 8.535; 466 3.12 16.7 8.535; 467 1.24 16.7 10.61

V. JAGEN, B.E.,M.E., (Struct), M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154

151. 468 3.12 16.7 10.61; 469 10.345 16.7 10.425; 470 -0.21 16.7 12.06
152. 471 5.21 16.7 12.06; 472 13.4 16.7 13.18; 473 -0.56 16.7 15.1
153. 474 10.345 16.7 15.93; 475 13.25 16.7 15.93; 476 -0.56 16.7 17.29
154. 477 5.21 16.7 17.29; 478 9.52 16.7 19.445; 479 13.05 16.7 19.445
155. 480 -0.56 16.7 20.58; 481 3.42 16.7 20.58; 482 5.64 16.7 0; 483 5.64 16.7 3.52
156. 484 -1.49012E-08 16.7 3.52; 485 3.12 16.7 7.07; 486 3.12 16.7 12.06
157. 487 5.21 16.7 7.07; 488 3.42 16.7 17.29; 489 2.01 16.7 0; 490 2.01 16.7 3.52
158. 491 -6.47692E-09 16.7 1.53; 492 2.01 16.7 1.53; 493 5.64 16.7 1.53
159. 494 9.355 16.7 3.52; 495 9.355 16.7 0; 496 9.355 16.7 1.53
160. 497 10.42 16.7 5.85; 498 13.65 16.7 5.85; 499 10.42 16.7 4.75
161. 500 8.515 16.7 4.75; 501 8.515 16.7 7.07; 502 9.355 16.7 4.75
162. 503 5.21 16.7 10.425; 504 8.545 16.7 10.425; 505 8.545 16.7 7.07
163. 506 13.4 16.7 7.07; 507 8.545 16.7 8.57; 508 13.4 16.7 8.57
164. 509 10.345 16.7 8.57; 510 10.345 16.7 13.18; 511 13.25 16.7 13.18
165. 512 5.21 16.7 15.93; 513 1.49 16.7 17.29; 514 1.49 16.7 12.06
166. 515 1.49 16.7 15.1; 516 -0.21 16.7 15.1; 517 10.345 16.7 14.33
167. 518 5.21 16.7 14.33; 519 6.86 16.7 15.93; 520 6.86 16.7 14.33
168. 521 8.87 16.7 15.93; 522 8.87 16.7 14.33; 523 13.05 16.7 15.93
169. 524 9.52 16.7 15.93; 525 9.52 16.7 20.58; 526 13.05 16.7 20.58
170. 527 5.96 16.7 20.58; 528 5.96 16.7 17.29; 529 5.96 16.7 19.445
171. 530 3.42 16.7 19.5; 531 5.96 16.7 19.5; 532 13.05 16.7 17.52
172. 533 9.52 16.7 17.52; 534 10.345 16.7 17.52; 535 13.4 16.7 11.57
173. 536 10.345 16.7 11.57; 537 11.44 16.7 11.57; 538 11.44 16.7 13.18
174. 539 3.535 16.7 3.52; 540 3.535 16.7 7.07; 541 -0.96 16.7 7.07
175. 542 -0.96 16.7 12.06; 543 -0.21 16.7 11.295; 544 -0.96 16.7 11.295
176. 545 -0.96 16.7 7.835; 546 -0.21 16.7 7.835; 547 0 19.8 0; 548 3.83 19.8 0
177. 549 10.42 19.8 0; 550 13.65 19.8 0; 551 -0.21 19.8 3.52; 552 5.64 19.8 2.84
178. 553 10.42 19.8 3.52; 554 13.65 19.8 3.52; 555 -0.21 19.8 7.07
179. 556 5.64 19.8 7.07; 557 10.42 19.8 7.07; 558 13.65 19.8 7.07
180. 559 1.24 19.8 8.535; 560 3.12 19.8 8.535; 561 1.24 19.8 10.61
181. 562 3.12 19.8 10.61; 563 10.345 19.8 10.425; 564 -0.21 19.8 12.06
182. 565 5.21 19.8 12.06; 566 13.4 19.8 13.18; 567 -0.56 19.8 15.1
183. 568 10.345 19.8 15.93; 569 13.25 19.8 15.93; 570 -0.56 19.8 17.29
184. 571 5.21 19.8 17.29; 572 9.52 19.8 19.445; 573 13.05 19.8 19.445
185. 574 -0.56 19.8 20.58; 575 3.42 19.8 20.58; 576 5.64 19.8 0; 577 5.64 19.8 3.52
186. 578 -1.49012E-08 19.8 3.52; 579 3.12 19.8 7.07; 580 3.12 19.8 12.06
187. 581 5.21 19.8 7.07; 582 3.42 19.8 17.29; 583 2.01 19.8 0; 584 2.01 19.8 3.52
188. 585 -6.47692E-09 19.8 1.53; 586 2.01 19.8 1.53; 587 5.64 19.8 1.53
189. 588 9.355 19.8 3.52; 589 9.355 19.8 0; 590 9.355 19.8 1.53
190. 591 10.42 19.8 5.85; 592 13.65 19.8 5.85; 593 10.42 19.8 4.75
191. 594 8.515 19.8 4.75; 595 8.515 19.8 7.07; 596 9.355 19.8 4.75
192. 597 5.21 19.8 10.425; 598 8.545 19.8 10.425; 599 8.545 19.8 7.07
193. 600 13.4 19.8 7.07; 601 8.545 19.8 8.57; 602 13.4 19.8 8.57
194. 603 10.345 19.8 8.57; 604 10.345 19.8 13.18; 605 13.25 19.8 13.18
195. 606 5.21 19.8 15.93; 607 1.49 19.8 17.29; 608 1.49 19.8 12.06
196. 609 1.49 19.8 15.1; 610 -0.21 19.8 15.1; 611 10.345 19.8 14.33
197. 612 5.21 19.8 14.33; 613 6.86 19.8 15.93; 614 6.86 19.8 14.33
198. 615 8.87 19.8 15.93; 616 8.87 19.8 14.33; 617 13.05 19.8 15.93
199. 618 9.52 19.8 15.93; 619 9.52 19.8 20.58; 620 13.05 19.8 20.58
200. 621 5.96 19.8 20.58; 622 5.96 19.8 17.29; 623 5.96 19.8 19.445
201. 624 3.42 19.8 19.5; 625 5.96 19.8 19.5; 626 13.05 19.8 17.52
202. 627 9.52 19.8 17.52; 628 10.345 19.8 17.52; 629 13.4 19.8 11.57
203. 630 10.345 19.8 11.57; 631 11.44 19.8 11.57; 632 11.44 19.8 13.18
204. 633 3.535 19.8 3.52; 634 3.535 19.8 7.07; 635 -0.96 19.8 7.07
205. 636 -0.96 19.8 12.06; 637 -0.21 19.8 11.295; 638 -0.96 19.8 11.295
206. 639 -0.96 19.8 7.835; 640 -0.21 19.8 7.835; 641 -0.21 22.9 7.07

V. JAGEN, B.E.,M.E., (Struct), M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154

207. 642 5.64 22.9 7.07; 643 1.24 22.9 8.535; 644 3.12 22.9 8.535
208. 645 1.24 22.9 10.61; 646 3.12 22.9 10.61; 647 -0.21 22.9 12.06
209. 648 5.21 22.9 12.06; 649 3.12 22.9 7.07; 650 3.12 22.9 12.06
210. 651 5.21 22.9 7.07; 652 5.21 22.9 10.425; 653 1.49 22.9 12.06
211. 654 3.535 22.9 7.07; 655 -0.21 22.9 11.295; 656 -0.21 22.9 7.835
212. 657 -0.21 22.9 3.52; 658 5.64 22.9 2.84; 659 5.64 22.9 3.52
213. 660 -1.49012E-08 22.9 3.52; 661 2.01 22.9 3.52; 662 3.535 22.9 3.52
214. 663 6.71 22.9 12.06; 664 6.71 22.9 7.07; 665 3.42 1.2 17.29
215. MEMBER INCIDENCES
216. 1 1 30; 2 2 31; 3 3 32; 4 4 33; 5 5 34; 6 6 35; 7 7 36; 8 8 37; 9 9 38
217. 10 10 39; 11 11 40; 12 12 41; 13 13 42; 14 14 43; 15 15 44; 16 16 45; 17 17 46
218. 18 18 47; 19 19 48; 20 20 49; 21 21 50; 22 22 51; 23 23 52; 24 24 53; 25 25 54
219. 26 26 55; 27 27 56; 28 28 57; 29 29 58; 30 30 59; 31 31 60; 32 32 61; 33 33 62
220. 34 34 63; 35 35 64; 36 36 65; 37 37 66; 38 38 67; 39 39 68; 40 40 69; 41 41 70
221. 42 42 71; 43 43 72; 44 44 73; 45 45 74; 46 46 75; 47 47 76; 48 48 77; 49 49 78
222. 50 50 79; 51 51 80; 52 52 81; 53 53 82; 54 54 83; 55 55 84; 56 56 85; 57 57 86
223. 58 58 87; 59 59 95; 60 60 88; 61 61 62; 62 65 66; 63 67 91; 64 68 107
224. 65 69 113; 66 71 72; 67 73 74; 68 76 121; 69 82 120; 70 80 130; 71 86 87
225. 72 86 82; 73 82 79; 74 68 89; 75 69 103; 76 70 104; 77 66 62; 78 88 101
226. 79 64 99; 80 89 64; 81 63 90; 82 90 96; 83 90 97; 84 67 63; 85 73 71; 86 74 72
227. 87 76 150; 88 91 147; 89 72 91; 90 92 77; 91 92 74; 92 93 68; 93 77 109
228. 94 94 83; 95 87 137; 96 83 119; 97 95 60; 98 96 146; 99 96 98; 100 97 59
229. 101 98 95; 102 97 98; 103 99 88; 104 101 61; 105 100 102; 106 100 65
230. 107 102 101; 108 99 102; 109 103 105; 110 104 66; 111 103 104; 112 105 65
231. 113 106 108; 114 107 112; 115 107 106; 116 108 105; 117 108 100; 118 109 93
232. 121 111 114; 123 112 69; 124 109 75; 125 113 70; 126 78 142; 127 114 112
233. 128 115 113; 129 114 116; 130 116 115; 131 75 116; 132 80 124; 133 117 143
234. 134 117 145; 135 118 78; 136 81 118; 137 119 125; 138 119 126; 139 120 94
235. 140 121 92; 141 120 122; 142 122 121; 143 79 123; 144 123 122; 145 123 76
236. 146 124 117; 147 125 77; 148 125 127; 149 126 128; 150 127 129; 151 126 127
237. 152 128 131; 153 129 124; 154 128 129; 155 130 81; 156 85 139; 157 131 80
238. 158 84 140; 159 87 134; 160 132 133; 161 132 84; 162 133 85; 163 134 132
239. 164 134 138; 165 83 135; 166 136 135; 167 136 84; 168 137 94; 169 138 136
240. 170 137 138; 171 139 130; 172 140 131; 173 140 141; 174 141 139; 175 141 80
241. 176 142 115; 177 143 75; 178 143 144; 179 144 142; 180 145 118; 181 145 144
242. 182 146 89; 183 147 93; 184 147 146; 185 148 67; 186 149 76; 187 150 153
243. 188 151 150; 189 153 67; 190 152 153; 191 149 151; 192 152 148; 193 30 31
244. 194 31 157; 195 32 33; 196 36 37; 197 40 156; 198 38 165; 199 39 155
245. 200 42 43; 201 44 45; 202 44 42; 203 45 43; 204 47 166; 205 57 58; 206 57 53
246. 207 53 50; 208 53 665; 209 54 154; 210 154 48; 211 154 164; 212 51 161
247. 213 55 56; 214 51 162; 215 155 40; 216 46 155; 217 156 41; 218 49 156
248. 219 41 37; 220 37 33; 221 39 158; 222 157 32; 223 35 157; 224 158 35
249. 225 34 159; 226 159 158; 227 159 30; 228 38 34; 229 47 38; 230 160 39
250. 231 48 170; 232 161 52; 233 56 161; 234 162 46; 235 162 163; 236 163 49
251. 237 52 163; 238 164 51; 239 55 164; 240 40 36; 241 36 32; 242 165 160
252. 243 43 165; 244 166 48; 245 166 45; 246 167 55; 247 168 56; 248 58 167
253. 249 167 168; 250 50 169; 251 169 47; 252 170 160; 253 170 46; 254 59 171
254. 255 60 172; 256 61 173; 257 62 174; 258 63 175; 259 64 176; 260 65 177
255. 261 66 178; 262 67 179; 263 68 180; 264 69 181; 265 70 182; 266 71 183
256. 267 72 184; 268 73 185; 269 74 186; 270 75 187; 271 76 188; 272 77 189
257. 273 78 190; 274 79 191; 275 80 192; 276 81 193; 277 82 194; 278 83 195
258. 279 84 196; 280 85 197; 281 86 198; 282 87 199; 283 171 207; 284 172 200
259. 285 173 174; 286 177 178; 287 179 203; 288 180 219; 289 181 224; 290 183 184
260. 291 185 186; 292 188 232; 293 194 231; 294 192 241; 295 198 199; 296 198 194
261. 297 194 191; 298 180 201; 299 181 215; 300 182 216; 301 178 174; 302 200 213
262. 303 176 211; 304 201 176; 305 175 202; 306 202 208; 307 202 209; 308 179 175

V. JAGEN, B.E.,M.E., (Struct), M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154

263. 309 185 183; 310 186 184; 311 188 261; 312 203 258; 313 184 203; 314 204 189
264. 315 204 186; 316 205 180; 317 189 221; 318 206 195; 319 199 248; 320 195 230
265. 321 207 172; 322 208 257; 323 208 210; 324 209 171; 325 210 207; 326 209 210
266. 327 211 200; 328 213 173; 329 212 214; 330 212 177; 331 214 213; 332 211 214
267. 333 215 217; 334 216 178; 335 215 216; 336 217 177; 337 218 220; 338 219 223
268. 339 219 218; 340 220 217; 341 220 212; 342 221 205; 343 222 225; 344 223 181
269. 345 221 187; 346 224 182; 347 190 253; 348 225 223; 349 226 224; 350 225 227
270. 351 227 226; 352 187 227; 353 192 235; 354 228 254; 355 228 256; 356 229 190
271. 357 193 229; 358 230 236; 359 230 237; 360 231 206; 361 232 204; 362 231 233
272. 363 233 232; 364 191 234; 365 234 233; 366 234 188; 367 235 228; 368 236 189
273. 369 236 238; 370 237 239; 371 238 240; 372 237 238; 373 239 242; 374 240 235
274. 375 239 240; 376 241 193; 377 197 250; 378 242 192; 379 196 251; 380 199 245
275. 381 243 244; 382 243 196; 383 244 197; 384 245 243; 385 245 249; 386 195 246
276. 387 247 246; 388 247 196; 389 248 206; 390 249 247; 391 248 249; 392 250 241
277. 393 251 242; 394 251 252; 395 252 250; 396 252 192; 397 253 226; 398 254 187
278. 399 254 255; 400 255 253; 401 256 229; 402 256 255; 403 257 201; 404 258 205
279. 405 258 257; 406 259 179; 407 260 188; 408 261 264; 409 262 261; 410 264 179
280. 411 263 264; 412 260 262; 413 263 259; 414 171 265; 415 172 266; 416 173 267
281. 417 174 268; 418 175 269; 419 176 270; 420 177 271; 421 178 272; 422 179 273
282. 423 180 274; 424 181 275; 425 182 276; 426 183 277; 427 184 278; 428 185 279
283. 429 186 280; 430 187 281; 431 188 282; 432 189 283; 433 190 284; 434 191 285
284. 435 192 286; 436 193 287; 437 194 288; 438 195 289; 439 196 290; 440 197 291
285. 441 198 292; 442 199 293; 443 265 301; 444 266 294; 445 267 268; 446 271 272
286. 447 273 297; 448 274 313; 449 275 318; 450 277 278; 451 279 280; 452 282 326
287. 453 288 325; 454 286 335; 455 292 293; 456 292 288; 457 288 285; 458 274 295
288. 459 275 309; 460 276 310; 461 272 268; 462 294 307; 463 270 305; 464 295 270
289. 465 269 296; 466 296 302; 467 296 303; 468 273 269; 469 279 277; 470 280 278
290. 471 282 355; 472 297 352; 473 278 297; 474 298 283; 475 298 280; 476 299 274
291. 477 283 315; 478 300 289; 479 293 342; 480 289 324; 481 301 266; 482 302 351
292. 483 302 304; 484 303 265; 485 304 301; 486 303 304; 487 305 294; 488 307 267
293. 489 306 308; 490 306 271; 491 308 307; 492 305 308; 493 309 311; 494 310 272
294. 495 309 310; 496 311 271; 497 312 314; 498 313 317; 499 313 312; 500 314 311
295. 501 314 306; 502 315 299; 503 316 319; 504 317 275; 505 315 281; 506 318 276
296. 507 284 347; 508 319 317; 509 320 318; 510 319 321; 511 321 320; 512 281 321
297. 513 286 329; 514 322 348; 515 322 350; 516 323 284; 517 287 323; 518 324 330
298. 519 324 331; 520 325 300; 521 326 298; 522 325 327; 523 327 326; 524 285 328
299. 525 328 327; 526 328 282; 527 329 322; 528 330 283; 529 330 332; 530 331 333
300. 531 332 334; 532 331 332; 533 333 336; 534 334 329; 535 333 334; 536 335 287
301. 537 291 344; 538 336 286; 539 290 345; 540 293 339; 541 337 338; 542 337 290
302. 543 338 291; 544 339 337; 545 339 343; 546 289 340; 547 341 340; 548 341 290
303. 549 342 300; 550 343 341; 551 342 343; 552 344 335; 553 345 336; 554 345 346
304. 555 346 344; 556 346 286; 557 347 320; 558 348 281; 559 348 349; 560 349 347
305. 561 350 323; 562 350 349; 563 351 295; 564 352 299; 565 352 351; 566 353 273
306. 567 354 282; 568 355 358; 569 356 355; 570 358 273; 571 357 358; 572 354 356
307. 573 357 353; 574 265 359; 575 266 360; 576 267 361; 577 268 362; 578 269 363
308. 579 270 364; 580 271 365; 581 272 366; 582 273 367; 583 274 368; 584 275 369
309. 585 276 370; 586 277 371; 587 278 372; 588 279 373; 589 280 374; 590 281 375
310. 591 282 376; 592 283 377; 593 284 378; 594 285 379; 595 286 380; 596 287 381
311. 597 288 382; 598 289 383; 599 290 384; 600 291 385; 601 292 386; 602 293 387
312. 603 359 395; 604 360 388; 605 361 362; 606 365 366; 607 367 391; 608 368 407
313. 609 369 412; 610 371 372; 611 373 374; 612 376 420; 613 382 419; 614 380 429
314. 615 386 387; 616 386 382; 617 382 379; 618 368 389; 619 369 403; 620 370 404
315. 621 366 362; 622 388 401; 623 364 399; 624 389 364; 625 363 390; 626 390 396
316. 627 390 397; 628 367 363; 629 373 371; 630 374 372; 631 376 449; 632 391 446
317. 633 372 391; 634 392 377; 635 392 374; 636 393 368; 637 377 409; 638 394 383
318. 639 387 436; 640 383 418; 641 395 360; 642 396 445; 643 396 398; 644 397 359

V. JAGEN, B.E.,M.E., (Struct), M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154

319. 645 398 395; 646 397 398; 647 399 388; 648 401 361; 649 400 402; 650 400 365
320. 651 402 401; 652 399 402; 653 403 405; 654 404 366; 655 403 404; 656 405 365
321. 657 406 408; 658 407 411; 659 407 406; 660 408 405; 661 408 400; 662 409 393
322. 663 410 413; 664 411 369; 665 409 375; 666 412 370; 667 378 441; 668 413 411
323. 669 414 412; 670 413 415; 671 415 414; 672 375 415; 673 380 423; 674 416 442
324. 675 416 444; 676 417 378; 677 381 417; 678 418 424; 679 418 425; 680 419 394
325. 681 420 392; 682 419 421; 683 421 420; 684 379 422; 685 422 421; 686 422 376
326. 687 423 416; 688 424 377; 689 424 426; 690 425 427; 691 426 428; 692 425 426
327. 693 427 430; 694 428 423; 695 427 428; 696 429 381; 697 385 438; 698 430 380
328. 699 384 439; 700 387 433; 701 431 432; 702 431 384; 703 432 385; 704 433 431
329. 705 433 437; 706 383 434; 707 435 434; 708 435 384; 709 436 394; 710 437 435
330. 711 436 437; 712 438 429; 713 439 430; 714 439 440; 715 440 438; 716 440 380
331. 717 441 414; 718 442 375; 719 442 443; 720 443 441; 721 444 417; 722 444 443
332. 723 445 389; 724 446 393; 725 446 445; 726 447 367; 727 448 376; 728 449 452
333. 729 450 449; 730 452 367; 731 451 452; 732 448 450; 733 451 447; 734 359 453
334. 735 360 454; 736 361 455; 737 362 456; 738 363 457; 739 364 458; 740 365 459
335. 741 366 460; 742 367 461; 743 368 462; 744 369 463; 745 370 464; 746 371 465
336. 747 372 466; 748 373 467; 749 374 468; 750 375 469; 751 376 470; 752 377 471
337. 753 378 472; 754 379 473; 755 380 474; 756 381 475; 757 382 476; 758 383 477
338. 759 384 478; 760 385 479; 761 386 480; 762 387 481; 763 453 489; 764 454 482
339. 765 455 456; 766 459 460; 767 461 485; 768 462 501; 769 463 506; 770 465 466
340. 771 467 468; 772 470 514; 773 476 513; 774 474 523; 775 480 481; 776 480 476
341. 777 476 473; 778 462 483; 779 463 497; 780 464 498; 781 460 456; 782 482 495
342. 783 458 493; 784 483 458; 785 457 484; 786 484 490; 787 484 491; 788 461 457
343. 789 467 465; 790 468 466; 791 470 543; 792 485 540; 793 466 485; 794 486 471
344. 795 486 468; 796 487 462; 797 471 503; 798 488 477; 799 481 530; 800 477 512
345. 801 489 454; 802 490 539; 803 490 492; 804 491 453; 805 492 489; 806 491 492
346. 807 493 482; 808 495 455; 809 494 496; 810 494 459; 811 496 495; 812 493 496
347. 813 497 499; 814 498 460; 815 497 498; 816 499 459; 817 500 502; 818 501 505
348. 819 501 500; 820 502 499; 821 502 494; 822 503 487; 823 504 507; 824 505 463
349. 825 503 469; 826 506 464; 827 472 535; 828 507 505; 829 508 506; 830 507 509
350. 831 509 508; 832 469 509; 833 474 517; 834 510 536; 835 510 538; 836 511 472
351. 837 475 511; 838 512 518; 839 512 519; 840 513 488; 841 514 486; 842 513 515
352. 843 515 514; 844 473 516; 845 516 515; 846 516 470; 847 517 510; 848 518 471
353. 849 518 520; 850 519 521; 851 520 522; 852 519 520; 853 521 524; 854 522 517
354. 855 521 522; 856 523 475; 857 479 532; 858 524 474; 859 478 533; 860 481 527
355. 861 525 526; 862 525 478; 863 526 479; 864 527 525; 865 527 531; 866 477 528
356. 867 529 528; 868 529 478; 869 530 488; 870 531 529; 871 530 531; 872 532 523
357. 873 533 524; 874 533 534; 875 534 532; 876 534 474; 877 535 508; 878 536 469
358. 879 536 537; 880 537 535; 881 538 511; 882 538 537; 883 539 483; 884 540 487
359. 885 540 539; 886 541 461; 887 542 470; 888 543 546; 889 544 543; 890 546 461
360. 891 545 546; 892 542 544; 893 545 541; 894 453 547; 895 454 548; 896 455 549
361. 897 456 550; 898 457 551; 899 458 552; 900 459 553; 901 460 554; 902 461 555
362. 903 462 556; 904 463 557; 905 464 558; 906 465 559; 907 466 560; 908 467 561
363. 909 468 562; 910 469 563; 911 470 564; 912 471 565; 913 472 566; 914 473 567
364. 915 474 568; 916 475 569; 917 476 570; 918 477 571; 919 478 572; 920 479 573
365. 921 480 574; 922 481 575; 923 547 583; 924 548 576; 925 549 550; 926 553 554
366. 927 555 579; 928 556 595; 929 557 600; 930 559 560; 931 561 562; 932 564 608
367. 933 570 607; 934 568 617; 935 574 575; 936 574 570; 937 570 567; 938 556 577
368. 939 557 591; 940 558 592; 941 554 550; 942 576 589; 943 552 587; 944 577 552
369. 945 551 578; 946 578 584; 947 578 585; 948 555 551; 949 561 559; 950 562 560
370. 951 564 637; 952 579 634; 953 560 579; 954 580 565; 955 580 562; 956 581 556
371. 957 565 597; 958 582 571; 959 575 624; 960 571 606; 961 583 548; 962 584 633
372. 963 584 586; 964 585 547; 965 586 583; 966 585 586; 967 587 576; 968 589 549
373. 969 588 590; 970 588 553; 971 590 589; 972 587 590; 973 591 593; 974 592 554
374. 975 591 592; 976 593 553; 977 594 596; 978 595 599; 979 595 594; 980 596 593

V. JAGEN, B.E.,M.E., (Struct), M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154

```
375. 981 596 588; 982 597 581; 983 598 601; 984 599 557; 985 597 563; 986 600 558
376. 987 566 629; 988 601 599; 989 602 600; 990 601 603; 991 603 602; 992 563 603
377. 993 568 611; 994 604 630; 995 604 632; 996 605 566; 997 569 605; 998 606 612
378. 999 606 613; 1000 607 582; 1001 608 580; 1002 607 609; 1003 609 608
379. 1004 567 610; 1005 610 609; 1006 610 564; 1007 611 604; 1008 612 565
380. 1009 612 614; 1010 613 615; 1011 614 616; 1012 613 614; 1013 615 618
381. 1014 616 611; 1015 615 616; 1016 617 569; 1017 573 626; 1018 618 568
382. 1019 572 627; 1020 575 621; 1021 619 620; 1022 619 572; 1023 620 573
383. 1024 621 619; 1025 621 625; 1026 571 622; 1027 623 622; 1028 623 572
384. 1029 624 582; 1030 625 623; 1031 624 625; 1032 626 617; 1033 627 618
385. 1034 627 628; 1035 628 626; 1036 628 568; 1037 629 602; 1038 630 563
386. 1039 630 631; 1040 631 629; 1041 632 605; 1042 632 631; 1043 633 577
387. 1044 634 581; 1045 634 633; 1046 635 555; 1047 636 564; 1048 637 640
388. 1049 638 637; 1050 640 555; 1051 639 640; 1052 636 638; 1053 639 635
389. 1054 555 641; 1055 556 642; 1056 559 643; 1057 560 644; 1058 561 645
390. 1059 562 646; 1060 564 647; 1061 565 648; 1062 641 649; 1063 643 644
391. 1064 645 646; 1065 647 653; 1066 645 643; 1067 646 644; 1068 647 655
392. 1069 649 654; 1070 644 649; 1071 650 648; 1072 650 646; 1073 651 642
393. 1074 648 652; 1075 652 651; 1076 653 650; 1077 654 651; 1078 655 656
394. 1079 656 641; 1080 551 657; 1081 552 658; 1082 642 659; 1083 659 658
395. 1084 657 660; 1085 660 661; 1086 641 657; 1087 661 662; 1088 662 659
396. 1089 648 663; 1090 642 664; 1091 663 664; 1092 665 54; 1093 58 665
397. DEFINE MATERIAL START
398. ISOTROPIC CONCRETE
399. E 2.17185E+07
400. POISSON 0.17
401. DENSITY 23.5616
402. ALPHA 1E-05
403. DAMP 0.05
404. G 9.28139E+06
405. TYPE CONCRETE
406. STRENGTH FCU 27579
407. END DEFINE MATERIAL
408. MEMBER PROPERTY
409. 1 TO 4 6 TO 12 18 TO 20 22 TO 25 28 TO 33 35 TO 41 47 TO 49 51 TO 54 57 58 -
410. 254 TO 257 259 TO 265 271 TO 273 275 TO 278 281 282 414 TO 417 419 TO 425 -
411. 431 TO 433 435 TO 438 441 442 574 TO 577 579 TO 585 591 TO 593 595 TO 598 -
412. 601 602 734 TO 737 739 TO 745 751 TO 753 755 TO 758 761 762 894 TO 897 899 -
413. 900 TO 905 911 TO 913 915 TO 918 921 922 1054 1055 1060 1061 -
414. 1081 PRIS YD 0.45 ZD 0.23
415. 5 13 TO 17 21 26 27 34 42 TO 46 50 55 56 258 266 TO 270 274 279 280 418 426 -
416. 427 TO 430 434 439 440 578 586 TO 590 594 599 600 738 746 TO 750 754 759 760 -
417. 898 906 TO 910 914 919 920 1056 TO 1059 1080 PRIS YD 0.23 ZD 0.45
418. 62 64 TO 67 70 79 85 TO 87 89 91 93 95 99 101 TO 103 108 111 114 115 118 121 -
419. 123 TO 125 127 129 TO 134 138 141 TO 144 146 148 TO 154 157 158 164 -
420. 166 TO 170 172 TO 175 177 TO 181 184 TO 192 286 288 TO 291 294 303 -
421. 309 TO 311 313 315 317 319 323 325 TO 327 332 335 338 339 342 TO 346 348 -
422. 350 TO 355 359 362 TO 365 367 369 TO 375 378 379 385 387 TO 391 393 TO 396 -
423. 398 TO 402 405 TO 413 446 448 TO 451 454 463 469 TO 471 473 475 477 479 483 -
424. 485 TO 487 492 495 498 499 502 TO 506 508 510 TO 515 519 522 TO 525 527 529 -
425. 530 TO 535 538 539 545 547 TO 551 553 TO 556 558 TO 562 565 TO 573 606 608 -
426. 609 TO 611 614 623 629 TO 631 633 635 637 639 643 645 TO 647 652 655 658 659 -
427. 662 TO 666 668 670 TO 675 679 682 TO 685 687 689 TO 695 698 699 705 -
428. 707 TO 711 713 TO 716 718 TO 722 725 TO 733 766 768 TO 771 774 783 -
429. 789 TO 791 793 795 797 799 803 805 TO 807 812 815 818 819 822 TO 826 828 -
430. 830 TO 835 839 842 TO 845 847 849 TO 855 858 859 865 867 TO 871 873 TO 876 -
```

V. JAGEN, B.E.,M.E., (Struct), ..M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154

```
431. 878 TO 882 885 TO 893 926 928 TO 931 934 943 949 TO 951 953 955 957 959 963 -
432. 965 TO 967 972 975 978 979 982 PRIS YD 0.45 ZD 0.23
433. 983 TO 986 988 990 TO 995 999 1002 TO 1005 1007 1009 TO 1015 1018 1019 1025 -
434. 1027 TO 1031 1033 TO 1036 1038 TO 1042 1045 TO 1053 1063 1064 1066 TO 1068 -
435. 1070 1072 1074 1075 1078 1079 PRIS YD 0.45 ZD 0.23
436. 61 63 68 69 71 TO 77 80 TO 82 84 88 90 92 94 96 98 105 TO 107 109 110 112 -
437. 113 116 117 136 137 139 140 147 155 156 160 TO 162 165 171 182 183 -
438. 193 TO 253 285 287 292 293 295 TO 301 304 TO 306 308 312 314 316 318 320 -
439. 322 329 TO 331 333 334 336 337 340 341 357 358 360 361 368 376 377 -
440. 381 TO 383 386 392 403 404 445 447 452 453 455 TO 461 464 TO 466 468 472 -
441. 474 476 478 480 482 489 TO 491 493 494 496 497 500 501 517 518 520 521 528 -
442. 536 537 541 TO 543 546 552 563 564 605 607 612 613 615 TO 621 624 TO 626 -
443. 628 632 634 636 638 640 642 649 TO 651 653 654 656 657 660 661 677 678 680 -
444. 681 688 696 697 701 TO 703 706 712 723 724 765 767 772 773 775 TO 781 784 -
445. 785 TO 786 788 792 794 796 798 800 802 809 TO 811 813 814 816 817 820 821 -
446. 837 838 840 841 848 856 857 861 TO 863 866 872 883 884 925 927 932 933 935 -
447. 936 TO 941 944 TO 946 948 952 954 956 958 960 962 969 TO 971 973 974 976 977 -
448. 980 981 997 998 1000 1001 1008 1016 1017 1021 TO 1023 1026 1032 1043 1044 -
449. 1062 1065 1069 1071 1073 1076 1077 1082 TO 1093 PRIS YD 0.6 ZD 0.23
450. 59 60 78 83 97 100 104 126 128 135 145 159 163 176 283 284 302 307 321 324 -
451. 328 347 349 356 366 380 384 397 443 444 462 467 481 484 488 507 509 516 526 -
452. 540 544 557 603 604 622 627 641 644 648 667 669 676 686 700 704 717 763 764 -
453. 782 787 801 804 808 827 829 836 846 860 864 877 923 924 942 947 961 964 968 -
454. 987 989 996 1006 1020 1024 1037 PRIS YD 0.525 ZD 0.23
455. CONSTANTS
456. MATERIAL CONCRETE ALL
457. SUPPORTS
458. 1 TO 29 FIXED
459. CUT OFF MODE SHAPE 15
460. DEFINE REFERENCE LOADS
461. LOAD R1 LOADTYPE MASS  TITLE REF MASS MODEL
462. MEMBER LOAD
463. 62 69 75 79 80 82 94 95 98 99 105 106 109 111 TO 113 115 116 121 124 -
464. 131 TO 133 139 141 146 150 151 153 154 158 165 166 168 170 172 TO 175 177 -
465. 182 184 191 192 221 225 226 228 231 252 286 293 299 303 304 306 318 319 322 -
466. 323 329 330 333 335 TO 337 339 340 343 345 352 TO 354 360 362 367 371 372 -
467. 374 375 379 386 387 389 391 393 TO 396 398 403 405 412 413 446 453 459 463 -
468. 464 466 478 479 482 483 489 490 493 495 TO 497 499 500 503 505 512 TO 514 -
469. 520 522 527 531 532 534 535 539 546 547 549 551 553 TO 556 558 563 565 572 -
470. 573 606 613 619 623 624 626 638 639 642 643 649 650 653 655 TO 657 659 660 -
471. 663 665 672 TO 674 680 682 687 691 692 694 695 699 706 707 709 711 -
472. 713 TO 716 718 723 725 732 733 766 773 779 783 784 786 798 799 802 803 809 -
473. 810 813 815 TO 817 819 820 823 825 832 TO 834 840 842 847 851 852 854 855 -
474. 859 866 867 869 871 873 TO 876 878 883 885 892 893 UNI GX 5
475. 62 69 75 79 80 82 94 95 98 99 105 106 109 111 TO 113 115 116 121 124 -
476. 131 TO 133 139 141 146 150 151 153 154 158 165 166 168 170 172 TO 175 177 -
477. 182 184 191 192 221 225 226 228 231 252 286 293 299 303 304 306 318 319 322 -
478. 323 329 330 333 335 TO 337 339 340 343 345 352 TO 354 360 362 367 371 372 -
479. 374 375 379 386 387 389 391 393 TO 396 398 403 405 412 413 446 453 459 463 -
480. 464 466 478 479 482 483 489 490 493 495 TO 497 499 500 503 505 512 TO 514 -
481. 520 522 527 531 532 534 535 539 546 547 549 551 553 TO 556 558 563 565 572 -
482. 573 606 613 619 623 624 626 638 639 642 643 649 650 653 655 TO 657 659 660 -
483. 663 665 672 TO 674 680 682 687 691 692 694 695 699 706 707 709 711 -
484. 713 TO 716 718 723 725 732 733 766 773 779 783 784 786 798 799 802 803 809 -
485. 810 813 815 TO 817 819 820 823 825 832 TO 834 840 842 847 851 852 854 855 -
486. 859 866 867 869 871 873 TO 876 878 883 885 892 893 UNI GY 5
```

V. JAGEN, B.E.,M.E., (Struct), M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154

```
487. 62 69 75 79 80 82 94 95 98 99 105 106 109 111 TO 113 115 116 121 124 -
488. 131 TO 133 139 141 146 150 151 153 154 158 165 166 168 170 172 TO 175 177 -
489. 182 184 191 192 221 225 226 228 231 252 286 293 299 303 304 306 318 319 322 -
490. 323 329 330 333 335 TO 337 339 340 343 345 352 TO 354 360 362 367 371 372 -
491. 374 375 379 386 387 389 391 393 TO 396 398 403 405 412 413 446 453 459 463 -
492. 464 466 478 479 482 483 489 490 493 495 TO 497 499 500 503 505 512 TO 514 -
493. 520 522 527 531 532 534 535 539 546 547 549 551 553 TO 556 558 563 565 572 -
494. 573 606 613 619 623 624 626 638 639 642 643 649 650 653 655 TO 657 659 660 -
495. 663 665 672 TO 674 680 682 687 691 692 694 695 699 706 707 709 711 -
496. 713 TO 716 718 723 725 732 733 766 773 779 783 784 786 798 799 802 803 809 -
497. 810 813 815 TO 817 819 820 823 825 832 TO 834 840 842 847 851 852 854 855 -
498. 859 866 867 869 871 873 TO 876 878 883 885 892 893 UNI GZ 5
499. MEMBER LOAD
500. 60 61 65 71 TO 73 76 77 81 83 84 86 89 91 93 97 101 TO 104 107 108 110 118 -
501. 123 125 127 129 130 135 136 142 TO 144 148 155 156 159 TO 162 164 167 171 -
502. 176 179 TO 181 185 186 188 190 243 245 284 285 289 295 TO 297 300 301 305 -
503. 307 308 310 313 315 317 321 325 TO 328 331 332 334 342 344 346 348 350 351 -
504. 356 357 363 TO 365 369 376 377 380 TO 383 385 388 392 397 400 TO 402 406 -
505. 407 409 411 444 445 449 455 TO 457 460 461 465 467 468 470 473 475 477 481 -
506. 485 TO 488 491 492 494 502 504 506 508 510 511 516 517 523 TO 525 529 536 -
507. 537 540 TO 543 545 548 552 557 560 TO 562 566 567 569 571 604 605 609 615 -
508. 616 TO 617 620 621 625 627 628 630 633 635 637 641 645 TO 648 651 652 654 -
509. 662 664 666 668 670 671 676 677 683 TO 685 689 696 697 700 TO 703 705 708 -
510. 712 717 720 TO 722 726 727 729 731 764 765 769 775 TO 777 780 781 785 787 -
511. 788 790 793 795 797 801 805 TO 808 811 812 814 822 824 826 828 830 831 836 -
512. 837 843 TO 845 849 856 857 860 TO 863 865 868 872 877 880 TO 882 886 887 -
513. 889 891 953 955 UNI GX 6
514. 60 61 65 71 TO 73 76 77 81 83 84 86 89 91 93 97 101 TO 104 107 108 110 118 -
515. 123 125 127 129 130 135 136 142 TO 144 148 155 156 159 TO 162 164 167 171 -
516. 176 179 TO 181 185 186 188 190 243 245 284 285 289 295 TO 297 300 301 305 -
517. 307 308 310 313 315 317 321 325 TO 328 331 332 334 342 344 346 348 350 351 -
518. 356 357 363 TO 365 369 376 377 380 TO 383 385 388 392 397 400 TO 402 406 -
519. 407 409 411 444 445 449 455 TO 457 460 461 465 467 468 470 473 475 477 481 -
520. 485 TO 488 491 492 494 502 504 506 508 510 511 516 517 523 TO 525 529 536 -
521. 537 540 TO 543 545 548 552 557 560 TO 562 566 567 569 571 604 605 609 615 -
522. 616 TO 617 620 621 625 627 628 630 633 635 637 641 645 TO 648 651 652 654 -
523. 662 664 666 668 670 671 676 677 683 TO 685 689 696 697 700 TO 703 705 708 -
524. 712 717 720 TO 722 726 727 729 731 764 765 769 775 TO 777 780 781 785 787 -
525. 788 790 793 795 797 801 805 TO 808 811 812 814 822 824 826 828 830 831 836 -
526. 837 843 TO 845 849 856 857 860 TO 863 865 868 872 877 880 TO 882 886 887 -
527. 889 891 953 955 UNI GY 6
528. 60 61 65 71 TO 73 76 77 81 83 84 86 89 91 93 97 101 TO 104 107 108 110 118 -
529. 123 125 127 129 130 135 136 142 TO 144 148 155 156 159 TO 162 164 167 171 -
530. 176 179 TO 181 185 186 188 190 243 245 284 285 289 295 TO 297 300 301 305 -
531. 307 308 310 313 315 317 321 325 TO 328 331 332 334 342 344 346 348 350 351 -
532. 356 357 363 TO 365 369 376 377 380 TO 383 385 388 392 397 400 TO 402 406 -
533. 407 409 411 444 445 449 455 TO 457 460 461 465 467 468 470 473 475 477 481 -
534. 485 TO 488 491 492 494 502 504 506 508 510 511 516 517 523 TO 525 529 536 -
535. 537 540 TO 543 545 548 552 557 560 TO 562 566 567 569 571 604 605 609 615 -
536. 616 TO 617 620 621 625 627 628 630 633 635 637 641 645 TO 648 651 652 654 -
537. 662 664 666 668 670 671 676 677 683 TO 685 689 696 697 700 TO 703 705 708 -
538. 712 717 720 TO 722 726 727 729 731 764 765 769 775 TO 777 780 781 785 787 -
539. 788 790 793 795 797 801 805 TO 808 811 812 814 822 824 826 828 830 831 836 -
540. 837 843 TO 845 849 856 857 860 TO 863 865 868 872 877 880 TO 882 886 887 -
541. 889 891 953 955 UNI GZ 6
542. MEMBER LOAD
```

V. JAGEN, B.E.,M.E., (Struct), M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154

```
543. 63 64 68 70 87 88 90 92 137 138 140 147 149 152 157 183 187 189 198 203 204 -
544. 229 242 244 287 288 292 294 311 312 314 316 358 359 361 368 370 373 378 404 -
545. 408 410 447 448 452 454 471 472 474 476 518 519 521 528 530 533 538 564 568 -
546. 570 607 608 612 614 631 632 634 636 678 679 681 688 690 693 698 724 728 730 -
547. 767 768 772 774 791 792 794 796 838 839 841 848 850 853 858 884 888 890 927 -
548. 932 950 TO 952 954 957 982 1001 1044 1048 1050 UNI GX 7
549. 63 64 68 70 87 88 90 92 137 138 140 147 149 152 157 183 187 189 198 203 204 -
550. 229 242 244 287 288 292 294 311 312 314 316 358 359 361 368 370 373 378 404 -
551. 408 410 447 448 452 454 471 472 474 476 518 519 521 528 530 533 538 564 568 -
552. 570 607 608 612 614 631 632 634 636 678 679 681 688 690 693 698 724 728 730 -
553. 767 768 772 774 791 792 794 796 838 839 841 848 850 853 858 884 888 890 927 -
554. 932 950 TO 952 954 957 982 1001 1044 1048 1050 UNI GY 7
555. 63 64 68 70 87 88 90 92 137 138 140 147 149 152 157 183 187 189 198 203 204 -
556. 229 242 244 287 288 292 294 311 312 314 316 358 359 361 368 370 373 378 404 -
557. 408 410 447 448 452 454 471 472 474 476 518 519 521 528 530 533 538 564 568 -
558. 570 607 608 612 614 631 632 634 636 678 679 681 688 690 693 698 724 728 730 -
559. 767 768 772 774 791 792 794 796 838 839 841 848 850 853 858 884 888 890 927 -
560. 932 950 TO 952 954 957 982 1001 1044 1048 1050 UNI GZ 7
561. MEMBER LOAD
562. 59 78 100 126 128 145 163 283 302 324 347 349 366 384 443 462 484 507 509 -
563. 526 544 603 622 644 667 669 686 704 763 782 804 827 829 846 864 923 TO 925 -
564. 935 TO 937 940 TO 942 945 947 948 961 964 968 974 986 987 989 996 997 1004 -
565. 1006 1016 1017 1020 1021 1023 1024 1032 1037 UNI GX 3
566. 59 78 100 126 128 145 163 283 302 324 347 349 366 384 443 462 484 507 509 -
567. 526 544 603 622 644 667 669 686 704 763 782 804 827 829 846 864 923 TO 925 -
568. 935 TO 937 940 TO 942 945 947 948 961 964 968 974 986 987 989 996 997 1004 -
569. 1006 1016 1017 1020 1021 1023 1024 1032 1037 UNI GY 3
570. 59 78 100 126 128 145 163 283 302 324 347 349 366 384 443 462 484 507 509 -
571. 526 544 603 622 644 667 669 686 704 763 782 804 827 829 846 864 923 TO 925 -
572. 935 TO 937 940 TO 942 945 947 948 961 964 968 974 986 987 989 996 997 1004 -
573. 1006 1016 1017 1020 1021 1023 1024 1032 1037 UNI GZ 3
574. MEMBER LOAD
575. 66 67 85 200 TO 202 290 291 309 450 451 469 610 611 629 770 771 789 930 931 -
576. 949 UNI GX 13
577. 66 67 85 200 TO 202 290 291 309 450 451 469 610 611 629 770 771 789 930 931 -
578. 949 UNI GY 13
579. 66 67 85 200 TO 202 290 291 309 450 451 469 610 611 629 770 771 789 930 931 -
580. 949 UNI GZ 13
581. FLOOR LOAD
582. YRANGE 4.25 22.95 FLOAD 5.125 GX
583. YRANGE 4.25 22.95 FLOAD 5.125 GY
584. YRANGE 4.25 22.95 FLOAD 5.125 GZ
585. SELFWEIGHT X 1 LIST 1 TO 118 121 123 TO 1092
586. SELFWEIGHT Y 1 LIST 1 TO 118 121 123 TO 1092
587. SELFWEIGHT Z 1 LIST 1 TO 118 121 123 TO 1092
588. FLOOR LOAD
589. YRANGE 19.7 19.9 FLOAD 1.8 GX
590. YRANGE 19.7 19.9 FLOAD 1.8 GY
591. YRANGE 19.7 19.9 FLOAD 1.8 GZ
592. FLOOR LOAD
593. YRANGE 22.8 23 FLOAD 10 XRANGE -0.21 5.64  ZRANGE 3.52 7.07  GX
594. YRANGE 22.8 23 FLOAD 10 XRANGE -0.21 5.64  ZRANGE 3.52 7.07  GY
595. YRANGE 22.8 23 FLOAD 10 XRANGE -0.21 5.64  ZRANGE 3.52 7.07  GZ
596. FLOOR LOAD
597. YRANGE 22.8 23 FLOAD 10 XRANGE 3.12 6.71  ZRANGE 7.07 12.66  GX
598. YRANGE 22.8 23 FLOAD 10 XRANGE 3.12 6.71  ZRANGE 7.07 12.66  GY
```

V. JAGEN, B.E.,M.E., (Struct), M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154

```
599. YRANGE 22.8 23 FLOAD 10 XRANGE 3.12 6.71  ZRANGE 7.07 12.66  GZ
600. FLOOR LOAD
601. YRANGE 4.3 16.7 FLOAD 0.5 GX
602. YRANGE 4.3 16.7 FLOAD 0.5 GY
603. YRANGE 4.3 16.7 FLOAD 0.5 GZ
604. END DEFINE REFERENCE LOADS

*** NOTE: MASS MODEL FORMED WILL BE USED IN SEISMIC/RESPONSE/TIME HISTORY LOADING, IF ANY.
          IF MASS MODEL IS SEPARATELY PROVIDED IN INDIVIDUAL LOADING, THE GENERATED MASS
          WILL BE REPLACED BY THE MASS PROVIDED IN INDIVIDUAL LOADING.

605. FLOOR DIAPHRAGM
606. DIA 1 TYPE RIG HEI 4.3
607. DIA 2 TYPE RIG HEI 7.4
608. DIA 3 TYPE RIG HEI 10.5
609. DIA 4 TYPE RIG HEI 13.6
610. DIA 5 TYPE RIG HEI 16.7
611. DIA 6 TYPE RIG HEI 19.8

FLOOR DIAPHRAGM

*******************************************************************************

FLOOR DIAPHRAGM     UNIT - KN   METE
---------------     ----------
```

NO.	TYPE	FL. LEVEL	FL. WT	CENTRE OF MASS X	Z	CONTROL JOINT NO.
1	RIGID	4.300	3840.53	6.383	10.350	666
2	RIGID	7.400	3840.53	6.383	10.350	667
3	RIGID	10.500	3840.53	6.383	10.350	668
4	RIGID	13.600	3840.53	6.383	10.350	669
5	RIGID	16.700	3840.53	6.383	10.350	670
6	RIGID	19.800	3259.48	6.113	10.199	671

```
*******************************************************************************


613. DEFINE IS1893 2016 LOAD
614. ZONE 0.16 RF 5 I 1 SS 2 ST 1 DM 0.05 PX 0.44 PZ 0.37
615. DEFINE WIND LOAD
616. TYPE 1 IS875 RECT CLAD (+X)
617. <! STAAD PRO GENERATED DATA DO NOT MODIFY !!!
618. IS875-2015:PARAMS 1 0 0 22.900 0.000 5.000 0 CHENNAI 50.000 0 1.000 1 6 -
619. 1.000 1.000 1.000 1.050 1.070 1.085 1.000 2 1.000 0.020 0 14.610 20.580 -
620. 22.900 1 1 1 0.200 0 0 4 0 4 1.000 0.000 0.000 0.000 NA NA 6 0.000 0.000 -
621. 0.000 0.000 0.000 0.000 1 1 4 0.000 1.000 0.000 0.000 NA NA 6 0.000 0.000 -
622. 0.000 0.000 0.000 0.000 1 2 4 0.000 0.000 1.000 0.000 NA NA 6 0.000 0.000 -
623. 0.000 0.000 0.000 0.000 1 3 4 0.000 0.000 0.000 1.000 NA NA 6 0.000 0.000 -
624. 0.000 0.000 0.000 0.000 1 0.900 1.000 0.900 TYPES 4 1 2 3 4 LOADS 4 9 10 11 -
625. 12
```

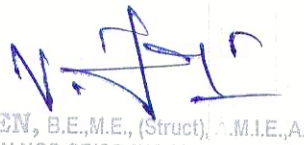
V. JAGEN, B.E.,M.E., (Struct), M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154

```
626. !> END GENERATED DATA BLOCK
627. INT 1.215 1.215 1.215 1.33954 1.39105 1.42901 HEIG  0  5  10  15  20  22.9
628. TYPE 2 IS875 RECT CLAD (-X)
629. <! STAAD PRO GENERATED DATA DO NOT MODIFY !!!
630. IS875-2015:PARAMS 1  1
631. !> END GENERATED DATA BLOCK
632. INT 1.215 1.215 1.215 1.33954 1.39105 1.42901 HEIG  0  5  10  15  20  22.9
633. TYPE 3 IS875 RECT CLAD (+Z)
634. <! STAAD PRO GENERATED DATA DO NOT MODIFY !!!
635. IS875-2015:PARAMS 1  1
636. !> END GENERATED DATA BLOCK
637. INT 1.215 1.215 1.215 1.33954 1.39105 1.42901 HEIG  0  5  10  15  20  22.9
638. TYPE 4 IS875 RECT CLAD (-Z)
639. <! STAAD PRO GENERATED DATA DO NOT MODIFY !!!
640. IS875-2015:PARAMS 1  1
641. !> END GENERATED DATA BLOCK
642. INT 1.215 1.215 1.215 1.33954 1.39105 1.42901 HEIG  0  5  10  15  20  22.9
643. LOAD 5 LOADTYPE SEISMIC-H  TITLE EQ X
644. 1893 LOAD X 1
645. LOAD 6 LOADTYPE SEISMIC-H  TITLE EQ Z
646. 1893 LOAD Z 1
647. LOAD 1 LOADTYPE DEAD  TITLE DL
648. MEMBER LOAD
649. 62 69 75 79 80 82 94 95 98 99 105 106 109 111 TO 113 115 116 121 124 -
650. 131 TO 133 139 141 146 150 151 153 154 158 165 166 168 170 172 TO 175 177 -
651. 182 184 191 192 221 225 226 228 231 252 286 293 299 303 304 306 318 319 322 -
652. 323 329 330 333 335 TO 337 339 340 343 345 352 TO 354 360 362 367 371 372 -
653. 374 375 379 386 387 389 391 393 TO 396 398 403 405 412 413 446 453 459 463 -
654. 464 466 478 479 482 483 489 490 493 495 TO 497 499 500 503 505 512 TO 514 -
655. 520 522 527 531 532 534 535 539 546 547 549 551 553 TO 556 558 563 565 572 -
656. 573 606 613 619 623 624 626 638 639 642 643 649 650 653 655 TO 657 659 660 -
657. 663 665 672 TO 674 680 682 687 691 692 694 695 699 706 707 709 711 -
658. 713 TO 716 718 723 725 732 733 766 773 779 783 784 786 798 799 802 803 809 -
659. 810 813 815 TO 817 819 820 823 825 832 TO 834 840 842 847 851 852 854 855 -
660. 859 866 867 869 871 873 TO 876 878 883 885 892 893 UNI GY -5
661. 60 61 65 71 TO 73 76 77 81 83 84 86 89 91 93 97 101 TO 104 107 108 110 118 -
662. 123 125 127 129 130 135 136 142 TO 144 148 155 156 159 TO 162 164 167 171 -
663. 176 179 TO 181 185 186 188 190 243 245 284 285 289 295 TO 297 300 301 305 -
664. 307 308 310 313 315 317 321 325 TO 328 331 332 334 342 344 346 348 350 351 -
665. 356 357 363 TO 365 369 376 377 380 TO 383 385 388 392 397 400 TO 402 406 -
666. 407 409 411 444 445 449 455 TO 457 460 461 465 467 468 470 473 475 477 481 -
667. 485 TO 488 491 492 494 502 504 506 508 510 511 516 517 523 TO 525 529 536 -
668. 537 540 TO 543 545 548 552 557 560 TO 562 566 567 569 571 604 605 609 615 -
669. 616 TO 617 620 621 625 627 628 630 633 635 637 641 645 TO 648 651 652 654 -
670. 662 664 666 668 670 671 676 677 683 TO 685 689 696 697 700 TO 703 705 708 -
671. 712 717 720 TO 722 726 727 729 731 764 765 769 775 TO 777 780 781 785 787 -
672. 788 790 793 795 797 801 805 TO 808 811 812 814 822 824 826 828 830 831 836 -
673. 837 843 TO 845 849 856 857 860 TO 863 865 868 872 877 880 TO 882 886 887 -
674. 889 891 953 955 UNI GY -6
675. 63 64 68 70 87 88 90 92 137 138 140 147 149 152 157 183 187 189 198 203 204 -
```

V. JAGEN, B.E.,M.E., (Struct), M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154

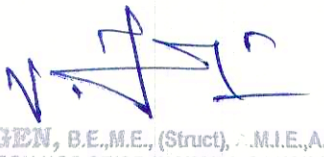
```
676. 229 242 244 287 288 292 294 311 312 314 316 358 359 361 368 370 373 378 404 -
677. 408 410 447 448 452 454 471 472 474 476 518 519 521 528 530 533 538 564 568 -
678. 570 607 608 612 614 631 632 634 636 678 679 681 688 690 693 698 724 728 730 -
679. 767 768 772 774 791 792 794 796 838 839 841 848 850 853 858 884 888 890 927 -
680. 932 950 TO 952 954 957 982 1001 1044 1048 1050 UNI GY -7
681. 59 78 100 126 128 145 163 283 302 324 347 349 366 384 443 462 484 507 509 -
682. 526 544 603 622 644 667 669 686 704 763 782 804 827 829 846 864 923 TO 925 -
683. 935 TO 937 940 TO 942 945 947 948 961 964 968 974 986 987 989 996 997 1004 -
684. 1006 1016 1017 1020 1021 1023 1024 1032 1037 UNI GY -3
685. 66 67 85 200 TO 202 290 291 309 450 451 469 610 611 629 770 771 789 930 931 -
686. 949 UNI GY -13
687. FLOOR LOAD
688. YRANGE 4.25 22.95 FLOAD -5.125 GY
**NOTE** about Floor/OneWay Loads/Weights.
  Please note that depending on the shape of the floor you may
  have to break up the FLOOR/ONEWAY LOAD into multiple commands.
  For details please refer to Technical Reference Manual
  Section 5.32.4.2 Note d and/or "5.32.4.3 Note f.

689. SELFWEIGHT Y -1
690. FLOOR LOAD
691. YRANGE 19.7 19.9 FLOAD -1.8 GY
692. YRANGE 22.8 23 FLOAD -10 XRANGE -0.21 5.64  ZRANGE 3.52 7.07  GY
693. YRANGE 22.8 23 FLOAD -10 XRANGE 3.12 6.71  ZRANGE 7.07 12.66  GY
694. LOAD 2 LOADTYPE LIVE  TITLE LL
695. FLOOR LOAD
696. YRANGE 4.3 16.7 FLOAD -2 GY
697. YRANGE 19.7 19.9 FLOAD -1.5 GY
698. LOAD 7 LOADTYPE SEISMIC-H  TITLE RS X
699. SPECTRUM CQC IS1893 2016 X 0.016 SCALE 3.1578 DAMP 0.05
700. SOIL TYPE 2
701. LOAD 8 LOADTYPE SEISMIC-H  TITLE RS Z
702. SPECTRUM CQC IS1893 2016 Z 0.016 SCALE 3.4063 DAMP 0.05
703. SOIL TYPE 2
704. LOAD 9 LOADTYPE WIND  TITLE WIND (+X) IS875 RECT CLAD
705. WIND LOAD X 1 TYPE 1 XR -0.56 1 YR 1.2 22.9 ZR 0 20.58
706. LOAD 10 LOADTYPE WIND  TITLE WIND (-X) IS875 RECT CLAD
707. WIND LOAD X -1 TYPE 2 XR 13.05 13.65 YR 1.2 22.9 ZR 0 20.58
708. LOAD 11 LOADTYPE WIND  TITLE WIND (+Z) IS875 RECT CLAD
709. WIND LOAD Z 1 TYPE 3 YR 1.2 23 ZR 0 7
```



V. JAGEN, B.E.,M.E., (Struct), M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154

```
710. LOAD 12 LOADTYPE WIND  TITLE WIND (-Z) IS875 RECT CLAD
711. WIND LOAD Z -1 TYPE 4 ZR 18 20.58
712. LOAD COMB 3 DL+LL
713. 1 1.0 2 1.0
714. LOAD COMB 4 1.5DL+1.5LL
715. 1 1.5 2 1.5
716. LOAD COMB 13 DL+RSX
717. 1 1.0 7 1.0
718. LOAD COMB 14 DL+RSZ
719. 1 1.0 8 1.0
720. LOAD COMB 15 DL+WL(+X)
721. 1 1.0 9 1.0
722. LOAD COMB 16 DL+WL(-X)
723. 1 1.0 10 1.0
724. LOAD COMB 17 DL+WL(+Z)
725. 1 1.0 11 1.0
726. LOAD COMB 18 DL+WL(-Z)
727. 1 1.0 12 1.0
728. LOAD COMB 19 0.8DL+0.8LL+0.8RSX
729. 1 0.8 2 0.8 7 0.8
730. LOAD COMB 20 0.8DL+0.8LL+0.8RSZ
731. 1 0.8 2 0.8 8 0.8
732. LOAD COMB 21 0.8DL+0.8LL+0.8WL(+X)
733. 1 0.8 2 0.8 9 0.8
734. LOAD COMB 22 0.8DL+0.8LL+0.8WL(-X)
735. 1 0.8 2 0.8 10 0.8
736. LOAD COMB 23 0.8DL+0.8LL+0.8WL(+Z)
737. 1 0.8 2 0.8 11 0.8
738. LOAD COMB 24 0.8DL+0.8LL+0.8WL(-Z)
739. 1 0.8 2 0.8 12 0.8
740. LOAD COMB 25 1.5DL+1.5RSX
741. 7 1.5 1 1.5
742. LOAD COMB 26 1.5DL+1.5RSZ
743. 1 1.5 8 1.5
744. LOAD COMB 27 1.5DL+1.5WL(+X)
745. 1 1.5 9 1.5
746. LOAD COMB 28 1.5DL+1.5WL(-X)
747. 1 1.5 10 1.5
748. LOAD COMB 29 1.5DL+1.5WL(+Z)
749. 1 1.5 11 1.5
750. LOAD COMB 30 1.5DL+1.5WL(-Z)
751. 1 1.5 12 1.5
752. LOAD COMB 31 1.2DL+1.2LL+1.2RSX
753. 1 1.2 2 1.2 7 1.2
754. LOAD COMB 32 1.2DL+1.2LL+1.2RSZ
755. 1 1.2 2 1.2 8 1.2
756. LOAD COMB 33 1.2DL+1.2LL+1.2WL(+X)
757. 1 1.2 2 1.2 9 1.2
758. LOAD COMB 34 1.2DL+1.2LL+1.2WL(-X)
759. 1 1.2 2 1.2 10 1.2
```



V. JAGEN, B.E.,M.E., (Struct), M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154

```
760. LOAD COMB 35 1.2DL+1.2LL+1.2WL(+Z)
761. 1 1.2 2 1.2 11 1.2
762. LOAD COMB 36 1.2DL+1.2LL+1.2WL(-Z)
763. 1 1.2 2 1.2 12 1.2
764. LOAD COMB 37 0.9DL+1.5RSX
765. 1 0.9 7 1.5
766. LOAD COMB 38 0.9DL+1.5RSZ
767. 1 0.9 8 1.5
768. LOAD COMB 39 0.9DL+1.5WL(+X)
769. 1 0.9 9 1.5
770. LOAD COMB 40 0.9DL+1.5WL(-X)
771. 1 0.9 10 1.5
772. LOAD COMB 41 0.9DL+1.5WL(+Z)
773. 1 0.9 11 1.5
774. LOAD COMB 42 0.9DL+1.5WL(-Z)
775. 1 0.9 12 1.5
776. PERFORM ANALYSIS


         P R O B L E M   S T A T I S T I C S
         -----------------------------------

   NUMBER OF JOINTS        670  NUMBER OF MEMBERS    1090
   NUMBER OF PLATES          0  NUMBER OF SOLIDS        0
   NUMBER OF SURFACES        0  NUMBER OF SUPPORTS     29

         Using 64-bit analysis engine.

         SOLVER USED IS THE IN-CORE ADVANCED MATH SOLVER

  TOTAL      PRIMARY LOAD CASES =    10, TOTAL DEGREES OF FREEDOM =    2154
  TOTAL LOAD COMBINATION  CASES =    32  SO FAR.


  ***NOTE: MASSES DEFINED UNDER LOAD#       7 WILL FORM
           THE FINAL MASS MATRIX FOR DYNAMIC ANALYSIS.


 **WARNING: IF THIS UBC/IBC ANALYSIS HAS TENSION/COMPRESSION
 OR REPEAT LOAD OR RE-ANALYSIS OR SELECT OPTIMIZE, THEN EACH
 UBC/IBC CASE SHOULD BE FOLLOWED BY PERFORM ANALYSIS & CHANGE.


  ***NOTE: Equivalent Static Analysis should preferably be performed for regular
structures with approximate natural time period less than 0.4s and regular
structures with height less than 15m in Seismic Zone II. Ref Cl.6.4.3 and 7.6
```



V. JAGEN, B.E.,M.E., (Struct), M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154

STAAD SPACE -- PAGE NO. 17

BASE SHEAR AND TIME PERIOD IN X

```
   *******************************************************
   * UNITS - KN    METE                                  *
   * TIME PERIOD FOR X 1893 LOADING =    0.44000 SEC     *
   * SA/G PER 1893=    2.500, LOAD FACTOR= 1.000         *
   * VB PER 1893=    0.0400 X    24421.06=     976.84 KN  *
   * VB Act Based on Clause 7.2.1 =      976.84 KN       *
   * VB Min based on Clause 7.2.2 =      268.63 KN       *
   *                                                     *
   *******************************************************
```

***NOTE: Equivalent Static Analysis should preferably be performed for regular structures with approximate natural time period less than 0.4s and regular structures with height less than 15m in Seismic Zone II. Ref Cl.6.4.3 and 7.6

BASE SHEAR AND TIME PERIOD IN Z

```
   *******************************************************
   * UNITS - KN    METE                                  *
   * TIME PERIOD FOR Z 1893 LOADING =    0.37000 SEC     *
   * SA/G PER 1893=    2.500, LOAD FACTOR= 1.000         *
   * VB PER 1893=    0.0400 X    24421.06=     976.84 KN  *
   * VB Act Based on Clause 7.2.1 =      976.84 KN       *
   * VB Min based on Clause 7.2.2 =      268.63 KN       *
   *                                                     *
   *******************************************************
```

```
 EIGEN METHOD   : SUBSPACE
 -------------------------
 NUMBER OF MODES REQUESTED              =    15
 NUMBER OF EXISTING MASSES IN THE MODEL =   795
 NUMBER OF MODES THAT WILL BE USED      =    15

   *** EIGENSOLUTION: ADVANCED METHOD ***
```

V. JAGEN, B.E.,M.E., (Struct), M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154

STAAD SPACE -- PAGE NO. 18

CALCULATED FREQUENCIES FOR LOAD CASE 7

MODE	FREQUENCY(CYCLES/SEC)	PERIOD(SEC)
1	0.630	1.58643
2	0.699	1.43046
3	0.824	1.21409
4	1.890	0.52900
5	2.123	0.47109
6	2.472	0.40459
7	2.954	0.33856
8	3.429	0.29164
9	3.645	0.27431
10	3.878	0.25786
11	4.445	0.22497
12	4.502	0.22212
13	4.736	0.21115
14	4.820	0.20745
15	5.454	0.18336

1893 RESPONSE SPECTRUM LOAD 7

RESPONSE LOAD CASE 7

MODE	MODAL WEIGHT (MODAL MASS TIMES g) IN KN X	Y	Z	GENERALIZED WEIGHT
1	6.122585E+00	3.578557E-04	1.977546E+04	1.034115E+04
2	1.910844E+04	1.074273E-06	2.226634E+01	7.878281E+03
3	6.719254E+02	2.222008E-01	1.470376E+02	5.300734E+03
4	1.829006E-01	4.109076E-03	2.294687E+03	4.565827E+03
5	2.382769E+03	4.760008E-01	5.664209E-02	5.931179E+03
6	3.756940E+01	6.536573E-01	6.864598E+00	3.084574E+03
7	2.427409E+01	1.303444E-01	4.390188E+02	6.901023E+02
8	3.878361E+02	5.478124E+00	1.993498E+02	1.171414E+03
9	2.190042E+02	3.166106E+00	2.174408E+02	1.067560E+03
10	5.901959E+01	3.507207E-02	5.738337E+00	6.860731E+02
11	6.226624E+00	2.290748E+00	8.859934E-01	4.369864E+02
12	1.530538E+02	3.907564E+01	2.121710E+01	7.754795E+02
13	5.834136E+01	9.668613E+00	2.331269E+02	7.651701E+03
14	8.184533E+01	1.190251E+01	1.806170E+01	3.443522E+02
15	4.513390E+01	5.886067E+01	2.179200E-01	7.692992E+02

V. JAGEN, B.E.,M.E., (Struct), M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154

CQC MODAL COMBINATION METHOD USED.
DYNAMIC WEIGHT X Y Z 2.437864E+04 2.437864E+04 2.437864E+04 KN
MISSING WEIGHT X Y Z -1.136892E+03 -2.424667E+04 -9.972053E+02 KN
MODAL WEIGHT X Y Z 2.324175E+04 1.319642E+02 2.338143E+04 KN

RESPONSE LOAD CASE 7

MODE	SPECTRAL ACCELERATION	DESIGN SEISMIC COEFFICIENT		
		X	Y	Z
1	0.85727	0.0433	0.0000	0.0000
2	0.95074	0.0480	0.0000	0.0000
3	1.12018	0.0566	0.0000	0.0000
4	2.50000	0.1263	0.0000	0.0000
5	2.50000	0.1263	0.0000	0.0000
6	2.50000	0.1263	0.0000	0.0000
7	2.50000	0.1263	0.0000	0.0000
8	2.50000	0.1263	0.0000	0.0000
9	2.50000	0.1263	0.0000	0.0000
10	2.50000	0.1263	0.0000	0.0000
11	2.50000	0.1263	0.0000	0.0000
12	2.50000	0.1263	0.0000	0.0000
13	2.50000	0.1263	0.0000	0.0000
14	2.50000	0.1263	0.0000	0.0000
15	2.50000	0.1263	0.0000	0.0000

PEAK STORY SHEAR

STORY	LEVEL IN METE	PEAK STORY SHEAR IN KN		
		X	Y	Z
6	19.80	337.84	0.00	0.00
5	16.70	540.15	0.00	0.00
4	13.60	676.78	0.00	0.00
3	10.50	790.02	0.00	0.00
2	7.40	898.45	0.00	0.00
1	4.30	980.13	0.00	0.00
BASE	0.00	982.38	0.00	0.00



V. JAGEN, B.E.,M.E., (Struct), A.M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154

MODE	ACCELERATION-G	DAMPING
1	2.70710	0.05000
2	3.00226	0.05000
3	3.53732	0.05000
4	7.89450	0.05000
5	7.89450	0.05000
6	7.89450	0.05000
7	7.89450	0.05000
8	7.89450	0.05000
9	7.89450	0.05000
10	7.89450	0.05000
11	7.89450	0.05000
12	7.89450	0.05000
13	7.89450	0.05000
14	7.89450	0.05000
15	7.89450	0.05000

MODAL BASE ACTIONS

MODAL BASE ACTIONS FORCES IN KN LENGTH IN METE

					MOMENTS ARE ABOUT THE ORIGIN		
MODE	PERIOD	FX	FY	FZ	MX	MY	MZ
1	1.586	0.27	-0.00	-15.07	-219.24	95.62	-3.45
2	1.430	917.90	0.01	31.33	541.16	9173.17	-13357.91
3	1.214	38.03	0.69	-17.79	-331.24	445.47	-605.51
4	0.529	0.02	-0.00	2.59	-7.39	-17.92	0.01
5	0.471	300.97	4.25	-1.47	-107.34	3296.37	659.92
6	0.405	4.75	-0.63	-2.03	26.71	104.08	15.94
7	0.339	3.07	-0.22	13.04	61.23	-50.95	-9.24
8	0.292	48.99	-5.82	-35.12	-73.55	561.82	-230.12
9	0.274	27.66	-3.33	27.56	106.42	108.19	-140.35
10	0.258	7.45	-0.18	-2.32	25.52	176.33	-23.15
11	0.225	0.79	-0.48	0.30	3.44	2.60	-8.08
12	0.222	19.33	9.77	7.20	-110.99	103.76	48.85
13	0.211	7.37	3.00	-14.73	-14.04	190.07	9.03
14	0.207	10.34	3.94	4.86	-49.50	114.59	14.21
15	0.183	5.70	6.51	0.40	-110.84	37.40	33.84

V. JAGEN, B.E.,M.E., (Struct), M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154

PARTICIPATION FACTORS

MODE	MASS PARTICIPATION FACTORS IN PERCENT						BASE SHEAR IN KN		
	X	Y	Z	SUMM-X	SUMM-Y	SUMM-Z	X	Y	Z
1	0.03	0.00	81.12	0.025	0.000	81.118	0.27	0.00	0.00
2	78.38	0.00	0.09	78.407	0.000	81.209	917.90	0.00	0.00
3	2.76	0.00	0.60	81.163	0.001	81.812	38.03	0.00	0.00
4	0.00	0.00	9.41	81.164	0.001	91.225	0.02	0.00	0.00
5	9.77	0.00	0.00	90.938	0.003	91.225	300.97	0.00	0.00
6	0.15	0.00	0.03	91.092	0.006	91.254	4.75	0.00	0.00
7	0.10	0.00	1.80	91.192	0.006	93.054	3.07	0.00	0.00
8	1.59	0.02	0.82	92.782	0.029	93.872	48.99	0.00	0.00
9	0.90	0.01	0.89	93.681	0.042	94.764	27.66	0.00	0.00
10	0.24	0.00	0.02	93.923	0.042	94.788	7.45	0.00	0.00
11	0.03	0.01	0.00	93.948	0.051	94.791	0.79	0.00	0.00
12	0.63	0.16	0.09	94.576	0.211	94.878	19.33	0.00	0.00
13	0.24	0.04	0.96	94.816	0.251	95.834	7.37	0.00	0.00
14	0.34	0.05	0.07	95.151	0.300	95.909	10.34	0.00	0.00
15	0.19	0.24	0.00	95.336	0.541	95.909	5.70	0.00	0.00
					TOTAL SRSS SHEAR		968.70	0.00	0.00
					TOTAL 10PCT SHEAR		970.77	0.00	0.00
					TOTAL ABS SHEAR		1392.63	0.00	0.00
					TOTAL CSM SHEAR		974.42	0.00	0.00
					TOTAL CQC SHEAR		982.38	0.00	0.00

```
*******************************************************
* UNITS - KN    METE                                  *
* TIME PERIOD FOR X 1893 LOADING =    0.44000 SEC     *
* SA/G PER 1893=    2.500, LOAD FACTOR= 1.000         *
*      FACTOR V  PER 1893=    0.0400 X  24421.06      *
* VB Min based on Clause 7.2.2 =      268.63          *
*******************************************************
```

1893 RESPONSE SPECTRUM LOAD 8

RESPONSE LOAD CASE 8

MODE	MODAL WEIGHT (MODAL MASS TIMES g) IN KN			GENERALIZED
	X	Y	Z	WEIGHT
1	6.122585E+00	3.578557E-04	1.977546E+04	1.034115E+04
2	1.910844E+04	1.074273E-06	2.226634E+01	7.878281E+03
3	6.719254E+02	2.222008E-01	1.470376E+02	5.300734E+03

V. JAGEN, B.E.,M.E., (Struct), M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154

4	1.829006E-01	4.109076E-03	2.294687E+03	4.565827E+03
5	2.382769E+03	4.760008E-01	5.664209E-02	5.931179E+03
6	3.756940E+01	6.536573E-01	6.864598E+00	3.084574E+03
7	2.427409E+01	1.303444E-01	4.390188E+02	6.901023E+02
8	3.878361E+02	5.478124E+00	1.993498E+02	1.171414E+03
9	2.190042E+02	3.166106E+00	2.174408E+02	1.067560E+03
10	5.901959E+01	3.507207E-02	5.738337E+00	6.860731E+02
11	6.226624E+00	2.290748E+00	8.859934E-01	4.369864E+02
12	1.530538E+02	3.907564E+01	2.121710E+01	7.754795E+02
13	5.834136E+01	9.668613E+00	2.331269E+02	7.651701E+03
14	8.184533E+01	1.190251E+01	1.806170E+01	3.443522E+02
15	4.513390E+01	5.886067E+01	2.179200E-01	7.692992E+02

CQC MODAL COMBINATION METHOD USED.

DYNAMIC WEIGHT X Y Z	2.437864E+04	2.437864E+04	2.437864E+04 KN
MISSING WEIGHT X Y Z	-1.136892E+03	-2.424667E+04	-9.972053E+02 KN
MODAL WEIGHT X Y Z	2.324175E+04	1.319642E+02	2.338143E+04 KN

RESPONSE LOAD CASE 8

MODE	SPECTRAL ACCELERATION	DESIGN SEISMIC COEFFICIENT		
		X	Y	Z
1	0.85727	0.0000	0.0000	0.0467
2	0.95074	0.0000	0.0000	0.0518
3	1.12018	0.0000	0.0000	0.0611
4	2.50000	0.0000	0.0000	0.1363
5	2.50000	0.0000	0.0000	0.1363
6	2.50000	0.0000	0.0000	0.1363
7	2.50000	0.0000	0.0000	0.1363
8	2.50000	0.0000	0.0000	0.1363
9	2.50000	0.0000	0.0000	0.1363
10	2.50000	0.0000	0.0000	0.1363
11	2.50000	0.0000	0.0000	0.1363
12	2.50000	0.0000	0.0000	0.1363
13	2.50000	0.0000	0.0000	0.1363
14	2.50000	0.0000	0.0000	0.1363
15	2.50000	0.0000	0.0000	0.1363

V. JAGEN, B.E.,M.E., (Struct), A.M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154

PEAK STORY SHEAR

STORY	LEVEL IN METE	PEAK STORY SHEAR IN KN		
		X	Y	Z
6	19.80	0.00	0.00	345.20
5	16.70	0.00	0.00	547.38
4	13.60	0.00	0.00	678.60
3	10.50	0.00	0.00	785.72
2	7.40	0.00	0.00	895.05
1	4.30	0.00	0.00	981.36
BASE	0.00	0.00	0.00	983.55

MODE	ACCELERATION-G	DAMPING
1	2.92013	0.05000
2	3.23852	0.05000
3	3.81568	0.05000
4	8.51575	0.05000
5	8.51575	0.05000
6	8.51575	0.05000
7	8.51575	0.05000
8	8.51575	0.05000
9	8.51575	0.05000
10	8.51575	0.05000
11	8.51575	0.05000
12	8.51575	0.05000
13	8.51575	0.05000
14	8.51575	0.05000
15	8.51575	0.05000

V. JAGEN, B.E.,M.E., (Struct), A.M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154

MODAL BASE ACTIONS

MODAL BASE ACTIONS FORCES IN KN LENGTH IN METE

MODE	PERIOD	FX	FY	FZ	MOMENTS ARE ABOUT THE ORIGIN MX	MY	MZ
1	1.586	-16.26	0.12	923.95	13440.59	-5862.03	211.46
2	1.430	33.80	0.00	1.15	19.93	337.78	-491.87
3	1.214	-19.19	-0.35	8.98	167.15	-224.79	305.55
4	0.529	2.79	-0.42	312.66	-893.32	-2165.23	1.41
5	0.471	-1.58	-0.02	0.01	0.56	-17.34	-3.47
6	0.405	-2.19	0.29	0.94	-12.32	-47.99	-7.35
7	0.339	14.07	-1.03	59.82	280.88	-233.74	-42.41
8	0.292	-37.89	4.50	27.16	56.88	-434.49	177.97
9	0.274	29.73	-3.58	29.63	114.38	116.29	-150.85
10	0.258	-2.51	0.06	0.78	-8.58	-59.31	7.79
11	0.225	0.32	-0.19	0.12	1.40	1.06	-3.29
12	0.222	7.76	3.92	2.89	-44.58	41.67	19.62
13	0.211	-15.89	-6.47	31.76	30.27	-409.84	-19.48
14	0.207	5.24	2.00	2.46	-25.08	58.07	7.20
15	0.183	0.43	0.49	0.03	-8.31	2.80	2.54

PARTICIPATION FACTORS

MODE	MASS PARTICIPATION FACTORS IN PERCENT X	Y	Z	SUMM-X	SUMM-Y	SUMM-Z	BASE SHEAR IN KN X	Y	Z
1	0.03	0.00	81.12	0.025	0.000	81.118	0.00	0.00	923.95
2	78.38	0.00	0.09	78.407	0.000	81.209	0.00	0.00	1.15
3	2.76	0.00	0.60	81.163	0.001	81.812	0.00	0.00	8.98
4	0.00	0.00	9.41	81.164	0.001	91.225	0.00	0.00	312.66
5	9.77	0.00	0.00	90.938	0.003	91.225	0.00	0.00	0.01
6	0.15	0.00	0.03	91.092	0.006	91.254	0.00	0.00	0.94
7	0.10	0.00	1.80	91.192	0.006	93.054	0.00	0.00	59.82
8	1.59	0.02	0.82	92.782	0.029	93.872	0.00	0.00	27.16
9	0.90	0.01	0.89	93.681	0.042	94.764	0.00	0.00	29.63
10	0.24	0.00	0.02	93.923	0.042	94.788	0.00	0.00	0.78
11	0.03	0.01	0.00	93.948	0.051	94.791	0.00	0.00	0.12
12	0.63	0.16	0.09	94.576	0.211	94.878	0.00	0.00	2.89
13	0.24	0.04	0.96	94.816	0.251	95.834	0.00	0.00	31.76
14	0.34	0.05	0.07	95.151	0.300	95.909	0.00	0.00	2.46
15	0.19	0.24	0.00	95.336	0.541	95.909	0.00	0.00	0.03
					TOTAL SRSS SHEAR		0.00	0.00	978.64
					TOTAL 10PCT SHEAR		0.00	0.00	979.67
					TOTAL ABS SHEAR		0.00	0.00	1402.33
					TOTAL CSM SHEAR		0.00	0.00	981.88
					TOTAL CQC SHEAR		0.00	0.00	983.55

V. JAGEN, B.E.,M.E., (Struct), M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154

STAAD SPACE -- PAGE NO. 25

```
*******************************************************
* UNITS - KN    METE                                  *
* TIME PERIOD FOR Z 1893 LOADING =    0.37000 SEC     *
* SA/G PER 1893=    2.500, LOAD FACTOR= 1.000         *
*      FACTOR V  PER 1893=    0.0400 X  24421.06      *
* VB Min based on Clause 7.2.2 =      268.63          *
*******************************************************


777. DEFINE ENVELOPE
778. 3 13 TO 24 ENVELOPE 1 TYPE SERVICEABILITY
779. 4 25 TO 42 ENVELOPE 2 TYPE STRENGTH
780. END DEFINE ENVELOPE
781. FINISH

          ********** END OF THE STAAD.Pro RUN **********

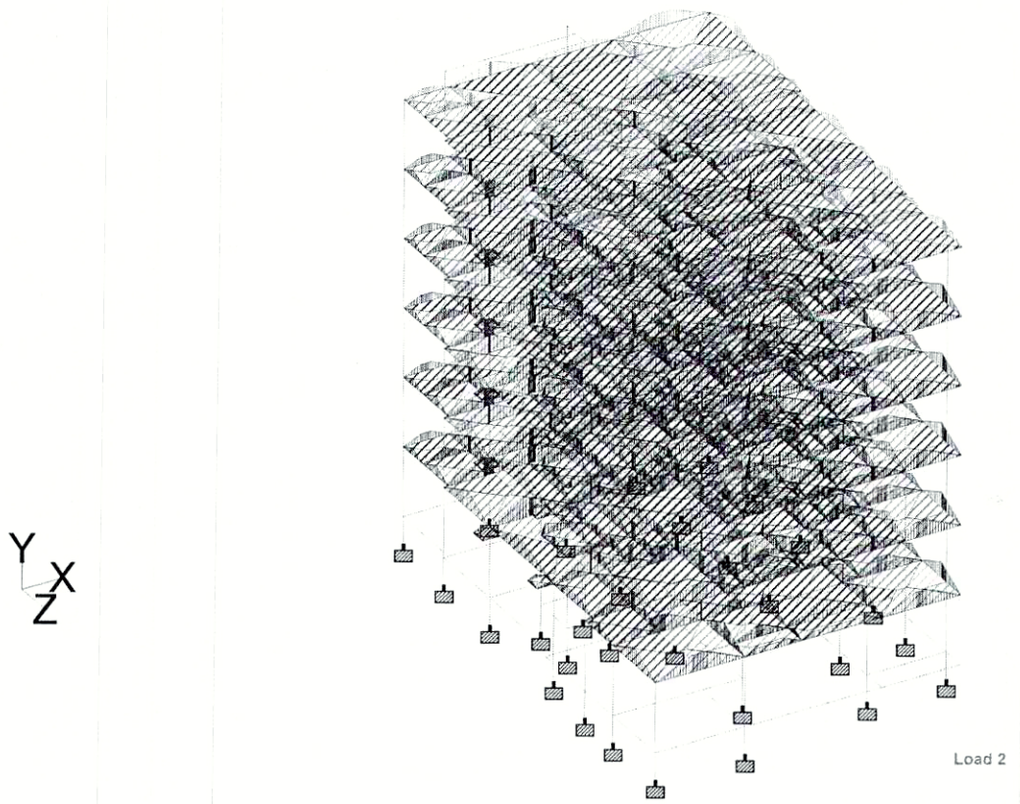
            **** DATE= MAR  7,2024    TIME= 12:34: 5 ****
```

V. JAGEN, B.E.,M.E., (Struct), M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154

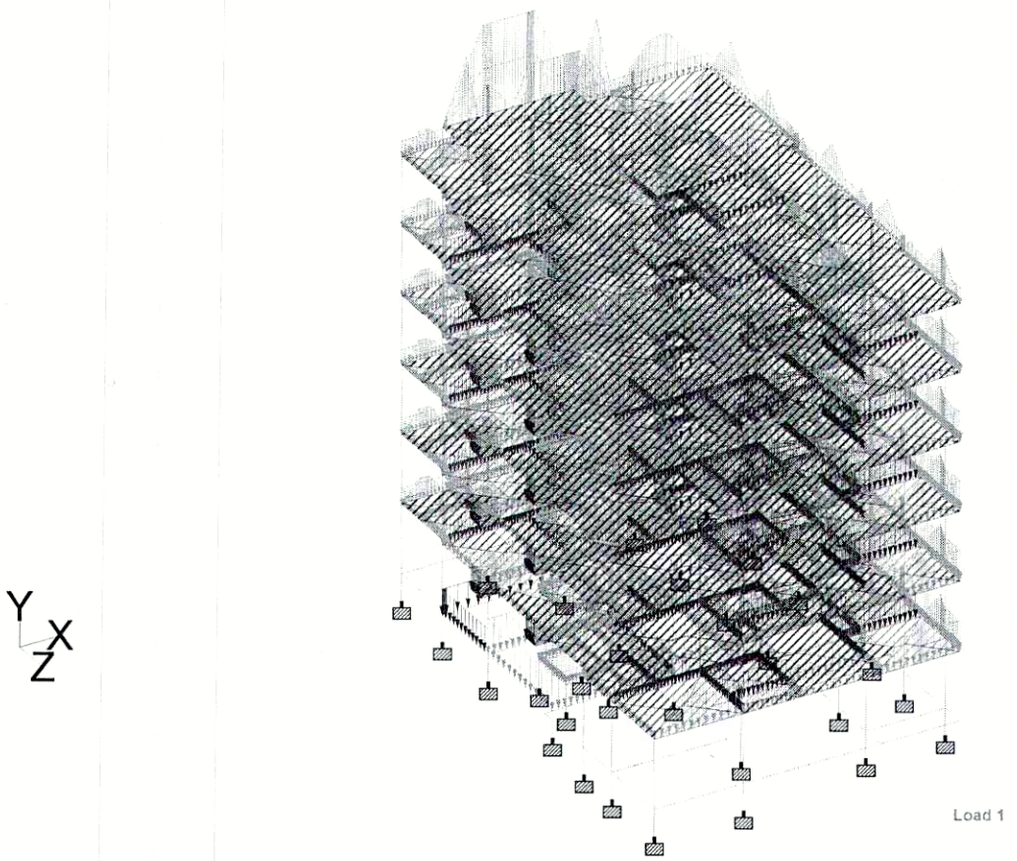
STAAD SPACE -- PAGE NO. 26

```
*************************************************************
*   For technical assistance on STAAD.Pro, please visit     *
*   http://www.bentley.com/en/support/                      *
*                                                           *
*   Details about additional assistance from                *
*   Bentley and Partners can be found at program menu       *
*   Help->Technical Support                                 *
*                                                           *
*           Copyright (c) Bentley Systems, Inc.             *
*                http://www.bentley.com                     *
*************************************************************
```

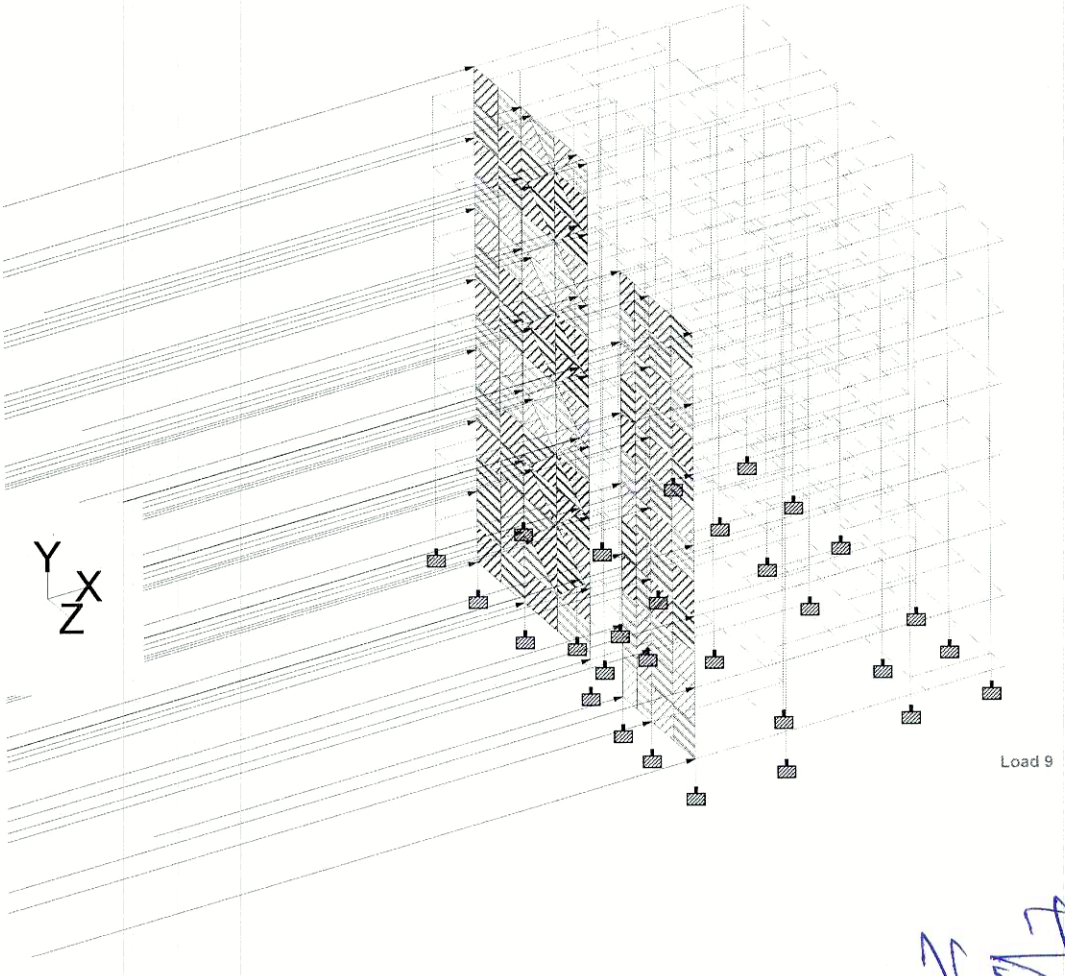
V. JAGEN, B.E.,M.E., (Struct), M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154



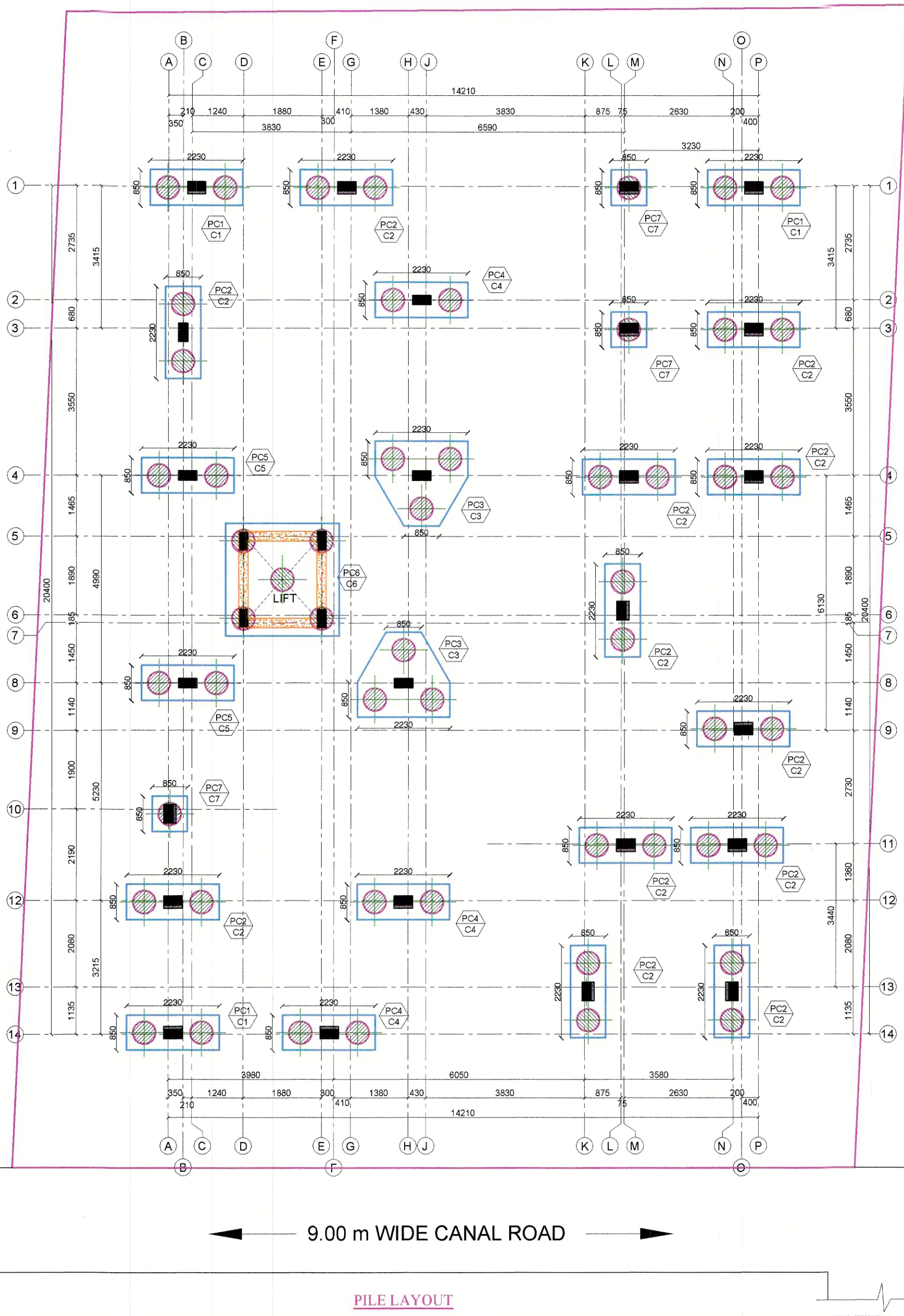
V. JAGEN, B.E.,M.E., (Struct), M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154



V. JAGEN, B.E.,M.E., (Struct), M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154

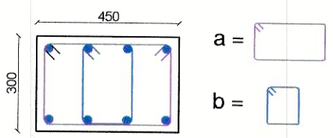


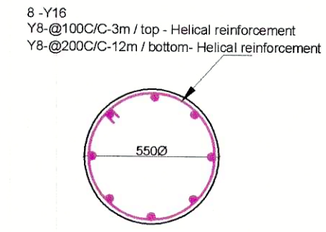
V. JAGEN, B.E.,M.E., (Struct), A.M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154



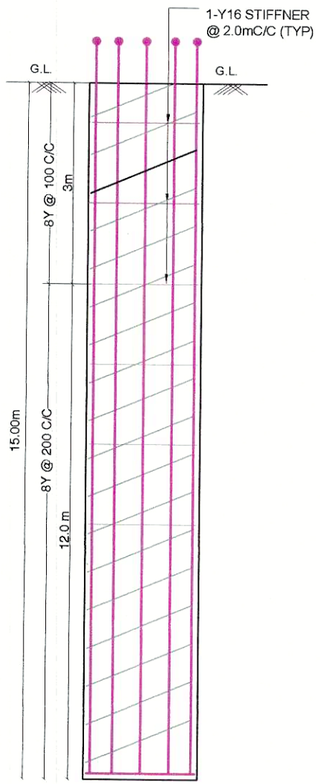
PILE LAYOUT

PROJECT TITLE : PLAN SHOWING THE PROPOSED CONSTRUCTION OF STILT + 5 FLOORS (18.30 m HEIGHT) RESIDENTIAL BUILDING WITH 15 DWELLING UNITS AVAILING PREMIUM FSI AT PLOT NO. 16, NEW DOOR NO . 30, OLD DOOR NO. 20, CANAL ROAD, THIRUVANMIYUR, CHENNAI - 600041. COMPRISED IN S.NOs : 37/1 PART& 37 / 4 PART, 37/1A1A1A & 37 /14 AS PER DOCUMENT AND T.S.NO: 86 AS PER PATTA, BLOCK NO: 11 OF THIRUVANMIYUR VILLAGE, VELACHERY TALUK, WITHIN THE LIMIT OF GREATER CHENNAI CORPORATION, ZONE : XIII, DIVISION NO - 173.	NOTES STILT+5 ● REFER ARCH. DWG. FOR CENTRE LINE DIMENSIONS. CONCRETE MIX SHALL BE M25 FOR COLUMN & ALL OTHER R.C.C WORKS, ● ALL REINFORCEMENTS ARE OF Fe500 GRADE. ● CLEAR COVER TO MAIN REINFORCEMENT SHALL BE (i) SLAB 20mm (ii) COLUMN 40mm (iii) BEAM 25mm (iv) R.C WALL 25mm ● LAP LENGTH SHALL BE 50 x DIA OF THE BAR	NORTH POINT : N	SIGNATURE : V. JAGEN, B.E.,M.E., (Struct), M.I.E.,A.I.V., CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21 CHARTERED ENGINEER & APPROVED VALUER 3-B, RAMANIYAM GAURAVV - 2, BLOCK-2, MODEL SCHOOL ROAD, SHOLINGANALLUR, CHENNAI-600 119. MOBILE: 9841269154

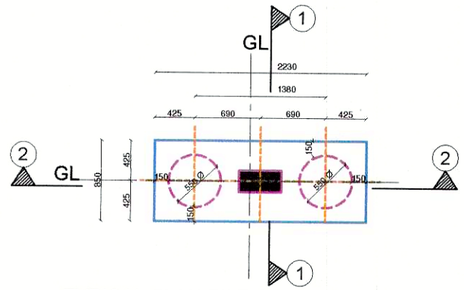
SCHEDULE OF COLUMN	
REINFORCEMENT DETAIL	
COLUMN TYPE	
C1	 8 Nos-16Y 8Y@100C/C



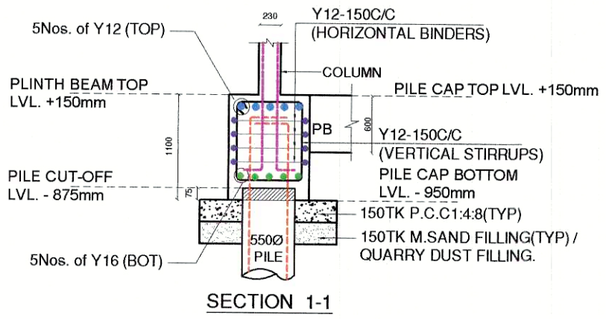
550 Ø PILE
(SAFE LOAD 90 TONNES)



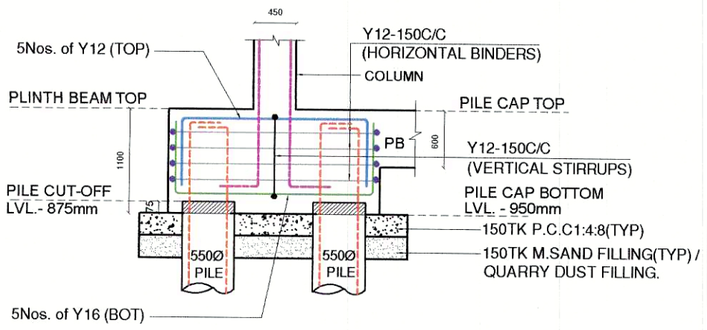
TYPICAL SECTION OF PILE
(BORED CAST IN-SITU PILE)



TYPICAL PLAN PILE CAP-PC1- 550Ø PILE



SECTION 1-1



SECTION 2-2

PILE CAP-PC1- 550Ø PILE

TYPICAL DETAIL FOR PC1

PROJECT TITLE :

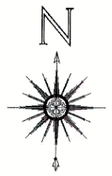
PLAN SHOWING THE PROPOSED CONSTRUCTION OF STILT + 5 FLOORS (18.30 m HEIGHT) RESIDENTIAL BUILDING WITH 15 DWELLING UNITS AVAILING PREMIUM FSI AT PLOT NO. 16, NEW DOOR NO . 30, OLD DOOR NO. 20, CANAL ROAD, THIRUVANMIYUR, CHENNAI - 600041. COMPRISED IN S.NOs : 37/1 PART& 37 / 4 PART, 37/1A1A1A & 37 /14 AS PER DOCUMENT AND T.S.NO: 86 AS PER PATTA, BLOCK NO: 11 OF THIRUVANMIYUR VILLAGE, VELACHERY TALUK, WITHIN THE LIMIT OF GREATER CHENNAI CORPORATION, ZONE : XIII, DIVISION NO - 173.

NOTES

STILT+5

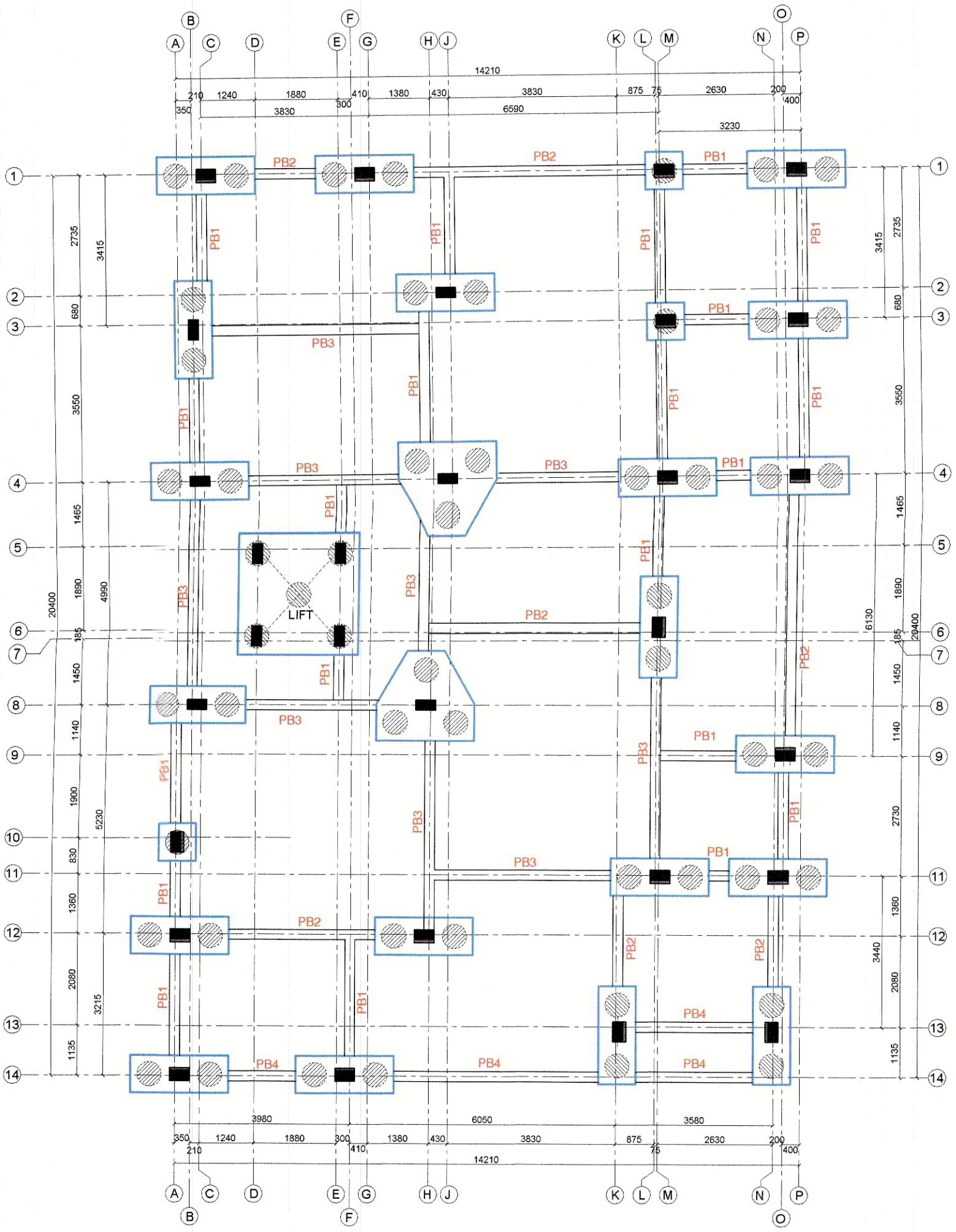
- REFER ARCH. DWG. FOR CENTRE LINE DIMENSIONS. CONCRETE MIX SHALL BE M25 FOR COLUMN & ALL OTHER R.C.C WORKS,
- ALL REINFORCEMENTS ARE OF Fe500 GRADE.
- CLEAR COVER TO MAIN REINFORCEMENT SHALL BE
  - (i) SLAB 20mm
  - (ii) COLUMN 40mm
  - (iii) BEAM 25mm
  - (iv) R.C WALL 25mm
- LAP LENGTH SHALL BE 50 x DIA OF THE BAR

NORTH POINT :

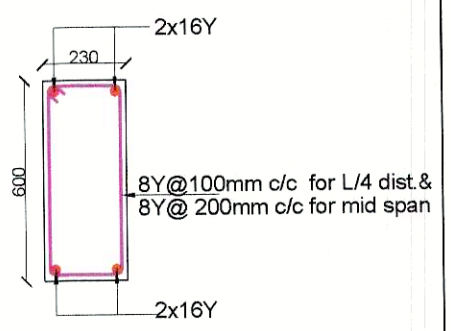


SIGNATURE :

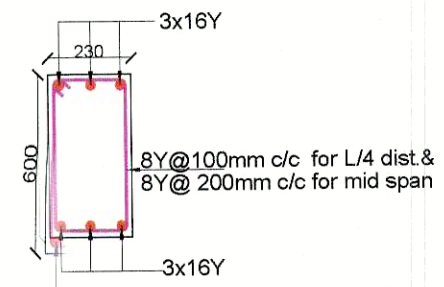
V. JAGEN, B.E.,M.E., (Struct), ,M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154



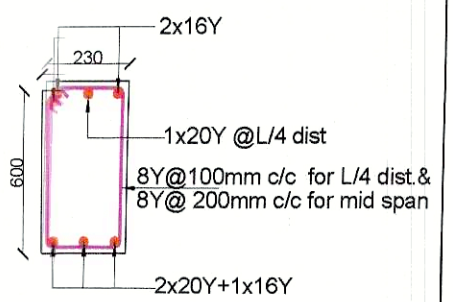
PLINTH BEAM LAYOUT



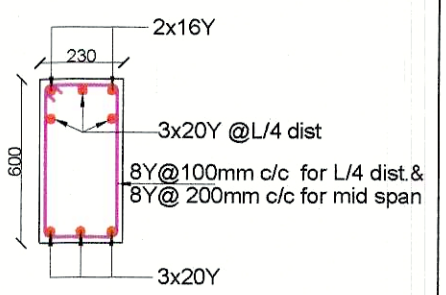
PB1 - 230 X 600



PB2 - 230 X 600



PB3 - 230 X 600



PB4 - 230 X 600

PROJECT TITLE :

PLAN SHOWING THE PROPOSED CONSTRUCTION OF STILT + 5 FLOORS (18.30 m HEIGHT) RESIDENTIAL BUILDING WITH 15 DWELLING UNITS AVAILING PREMIUM FSI AT PLOT NO. 16, NEW DOOR NO . 30, OLD DOOR NO. 20, CANAL ROAD, THIRUVANMIYUR, CHENNAI - 600041. COMPRISED IN S.NOs : 37/1 PART& 37 / 4 PART, 37/1A1A1A & 37 /14 AS PER DOCUMENT AND T.S.NO: 86 AS PER PATTA, BLOCK NO: 11 OF THIRUVANMIYUR VILLAGE, VELACHERY TALUK, WITHIN THE LIMIT OF GREATER CHENNAI CORPORATION, ZONE : XIII, DIVISION NO - 173.

NOTES

STILT+5

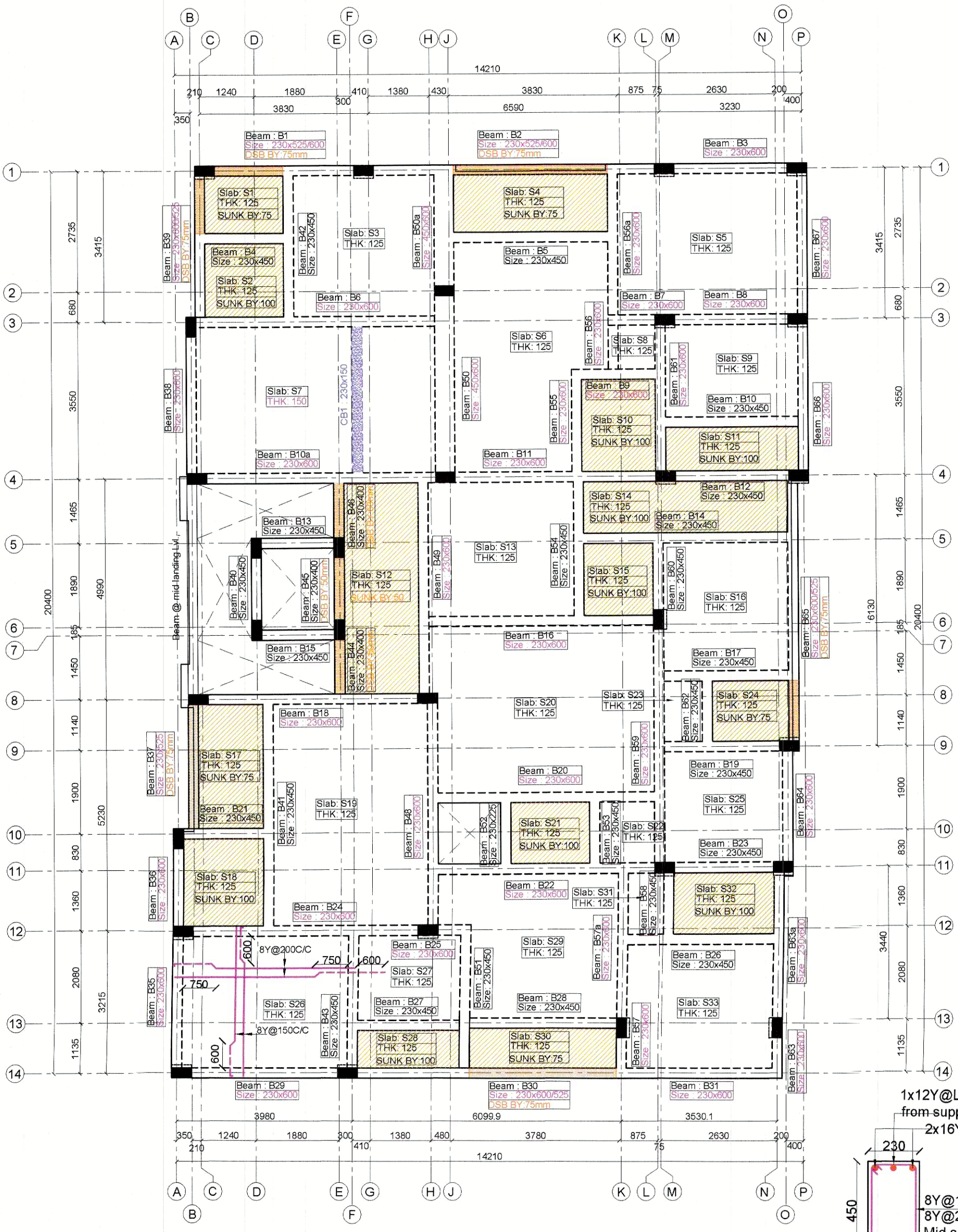
- REFER ARCH. DWG. FOR CENTRE LINE DIMENSIONS. CONCRETE MIX SHALL BE M25 FOR COLUMN & ALL OTHER R.C.C WORKS,
- ALL REINFORCEMENTS ARE OF Fe500 GRADE.
- CLEAR COVER TO MAIN REINFORCEMENT SHALL BE
  - (i) SLAB 20mm
  - (ii) COLUMN 40mm
  - (iii) BEAM 25mm
  - (iv) R.C WALL 25mm
- LAP LENGTH SHALL BE 50 x DIA OF THE BAR

NORTH POINT :



SIGNATURE :

V. JAGEN, B.E.,M.E., (Struct), M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154



STILT FLOOR ROOF BEAM LAYOUT

B12 - 230 X 450

PROJECT TITLE :

PLAN SHOWING THE PROPOSED CONSTRUCTION OF STILT + 5 FLOORS (18.30 m HEIGHT) RESIDENTIAL BUILDING WITH 15 DWELLING UNITS AVAILING PREMIUM FSI AT PLOT NO. 16, NEW DOOR NO . 30, OLD DOOR NO. 20, CANAL ROAD, THIRUVANMIYUR, CHENNAI - 600041. COMPRISED IN S.NOs : 37/1 PART& 37 / 4 PART, 37/1A1A1A & 37 /14 AS PER DOCUMENT AND T.S.NO: 86 AS PER PATTA, BLOCK NO: 11 OF THIRUVANMIYUR VILLAGE, VELACHERY TALUK, WITHIN THE LIMIT OF GREATER CHENNAI CORPORATION, ZONE : XIII, DIVISION NO - 173.

NOTES

STILT+5

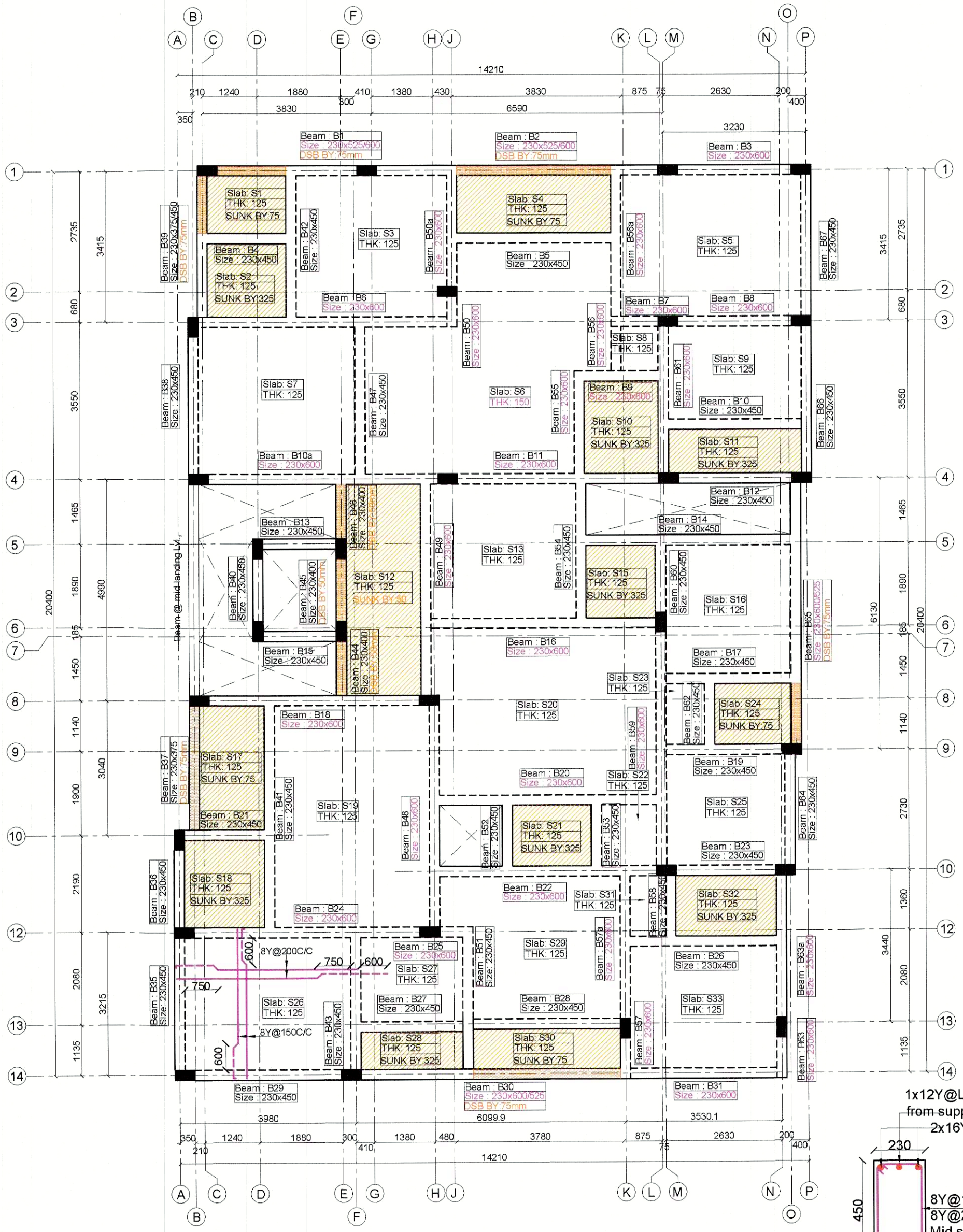
- REFER ARCH. DWG. FOR CENTRE LINE DIMENSIONS. CONCRETE MIX SHALL BE M25 FOR COLUMN & ALL OTHER R.C.C WORKS,
- ALL REINFORCEMENTS ARE OF Fe500 GRADE.
- CLEAR COVER TO MAIN REINFORCEMENT SHALL BE
  - (i) SLAB 20mm
  - (ii) COLUMN 40mm
  - (iii) BEAM 25mm
  - (iv) R.C WALL 25mm
- LAP LENGTH SHALL BE 50 x DIA OF THE BAR

NORTH POINT :

N

SIGNATURE :

V. JAGEN, B.E.,M.E., (Struct), M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, GA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154



B12 - 230 X 450

TYPICAL FLOOR ROOF BEAM LAYOUT (FIRST, SECOND, THIRD AND FOURTH)

PROJECT TITLE :

PLAN SHOWING THE PROPOSED CONSTRUCTION OF STILT + 5 FLOORS (18.30 m HEIGHT) RESIDENTIAL BUILDING WITH 15 DWELLING UNITS AVAILING PREMIUM FSI AT PLOT NO. 16, NEW DOOR NO . 30, OLD DOOR NO. 20, CANAL ROAD, THIRUVANMIYUR, CHENNAI - 600041. COMPRISED IN S.NOs : 37/1 PART& 37 / 4 PART, 37/1A1A1A & 37 /14 AS PER DOCUMENT AND T.S.NO: 86 AS PER PATTA, BLOCK NO: 11 OF THIRUVANMIYUR VILLAGE, VELACHERY TALUK, WITHIN THE LIMIT OF GREATER CHENNAI CORPORATION, ZONE : XIII, DIVISION NO - 173.

STILT+5

NOTES

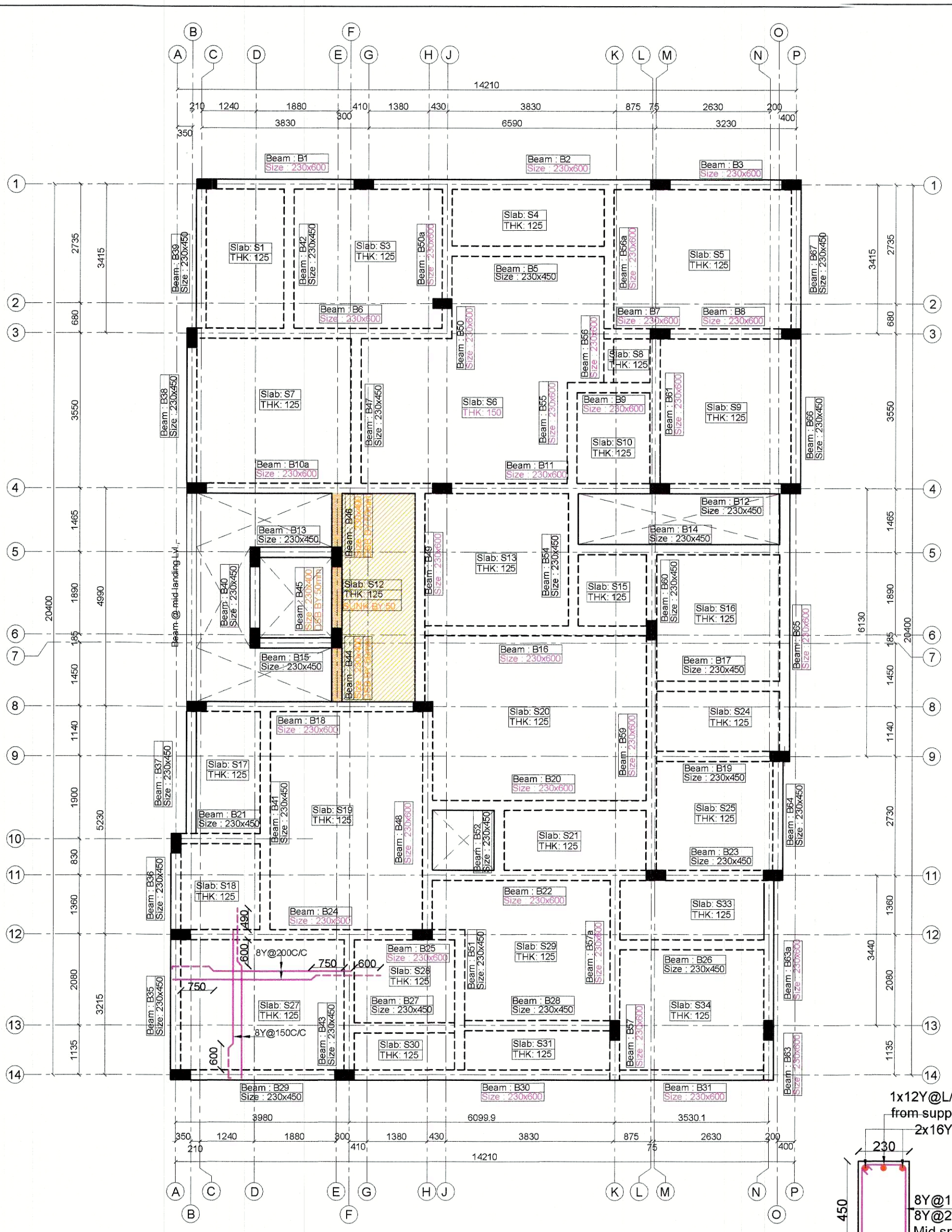
- REFER ARCH. DWG. FOR CENTRE LINE DIMENSIONS. CONCRETE MIX SHALL BE M25 FOR COLUMN & ALL OTHER R.C.C WORKS,
- ALL REINFORCEMENTS ARE OF Fe500 GRADE.
- CLEAR COVER TO MAIN REINFORCEMENT SHALL BE
  - (i) SLAB 20mm
  - (ii) COLUMN 40mm
  - (iii) BEAM 25mm
  - (iv) R.C WALL 25mm
- LAP LENGTH SHALL BE 50 x DIA OF THE BAR

NORTH POINT :

N

SIGNATURE :

V. JAGEN, B.E.,M.E., (Struct), M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, OA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154



TERRACE FLOOR BEAM LAYOUT

PROJECT TITLE :

PLAN SHOWING THE PROPOSED CONSTRUCTION OF STILT + 5 FLOORS (18.30 m HEIGHT) RESIDENTIAL BUILDING WITH 15 DWELLING UNITS AVAILING PREMIUM FSI AT PLOT NO. 16, NEW DOOR NO . 30, OLD DOOR NO. 20, CANAL ROAD, THIRUVANMIYUR, CHENNAI - 600041. COMPRISED IN S.NOs : 37/1 PART& 37 / 4 PART, 37/1A1A1A & 37 /14 AS PER DOCUMENT AND T.S.NO: 86 AS PER PATTA, BLOCK NO: 11 OF THIRUVANMIYUR VILLAGE, VELACHERY TALUK, WITHIN THE LIMIT OF GREATER CHENNAI CORPORATION, ZONE : XIII, DIVISION NO - 173.

STILT+5

NOTES

- REFER ARCH. DWG. FOR CENTRE LINE DIMENSIONS. CONCRETE MIX SHALL BE M25 FOR COLUMN & ALL OTHER R.C.C WORKS,
- ALL REINFORCEMENTS ARE OF Fe500 GRADE.
- CLEAR COVER TO MAIN REINFORCEMENT SHALL BE
  - (i) SLAB 20mm
  - (ii) COLUMN 40mm
  - (iii) BEAM 25mm
  - (iv) R.C WALL 25mm
- LAP LENGTH SHALL BE 50 x DIA OF THE BAR

NORTH POINT :

N

SIGNATURE :

V. JAGEN, B.E.,M.E., (Struct), .M.I.E.,A.I.V.,
CMDA REGN NOS-SE/GR-I/19/03/24, QA/19/04/21
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD,
SHOLINGANALLUR, CHENNAI-600 119.
MOBILE: 9841269154



our services doesn't just end there

Buying & Selling Services

Property Buying Assistance, Property Selling Support, Market Price Analysis, Owner Outreach and Negotiation.

Legal & Documentation Services

Certified EC, Patta, legal opinions, property verification, due diligence, litigation solutions, and legal heir certificates.

Property Development & Approvals

Building plan approvals, construction, layout and sub-division approvals, zone conversion, and occupancy certification.

NRI & Investment Services

Escrow Services, Rentals, Litigation Solutions, Property Valuation and Property Management

Compliance & Special Services

Demolition, Vaasthu checks, regularization of unauthorized buildings, and office space solutions.



empowering your real estate decisions with smart tools

Property Valuation & Cost Estimation

Guideline Value, Apartment Composite Value, Stamp Duty & Registration Fees Calculator, Building Value Calculator, Capital Gains Calculator, Area Unit Converter, Length Unit Converter

Ownership, Compliance & Legal Verification

Encumbrance Certificate (EC) Search, Find Your SRO, Temple Property Check, WAQF Property Check, View Patta/Chitta, View FMB, Patta Analyzer, EC Analyzer

Zoning & Land Use Analysis

Land Use Zone Finder, CRZ Zone Check, Aquifer Zone Check, CBA Check, EWS Check, Road Width Check, Proposed Road Widening Check, FSI Calculator

Property Documentation & Workflow Tools

Forms & Templates, Document Generator, Document Translation, Dictionary

Vastu & Property Management Tools

Home Vastu Shastra, Plot Vastu Shastra, Property Management

Verified RealEstate™

We're honored to be part of your real estate journey

3/350/2 Mettukuppam,
OMR Thoraipakkam,
Chennai, India

hello@verified.realestate
+91 9996 12 9996
www.verified.realestate