

PAGE NO. 1

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*      STAAD.Pro CONNECT Edition   *
*      Version  22.00.00.15        *
*      Proprietary Program of      *
*      Bentley Systems, Inc.       *
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*      Time=    12:40: 8           *
*                               *
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1. STAAD SPACE
INPUT FILE: I:\1.MISCELLANEOUS\STABILITY CERTIFICATE\UC-KATTUPAKKAM\KATTUPAKKAM.STD
2. START JOB INFORMATION
3. JOB NAME THE PROPOSED CONSTRUCTION OF HIGH RISE GROUP DEVELOPMENT RESIDENTIAL
4. *BUILDING CONSISTING OF 2 BLOCKS, WHEREIN BLOCK NO. 1: WITH EXTENDED BASEMENT
5. *FLOOR + GROUND FLOOR PART/ STILT FLOOR PART + 20 FLOORS (256 DWELLING UNITS)
6. *WITH CLUB HOUSE USE IN GROUND FLOOR PART & 1ST FLOOR PART (A.V ROOM, KIDS PLAY
7. *AREA, CHANGE ROOM, GYM, BOARD GAME, VIDEO GAMES & ETC.), BLOCK NO. 2:
8. *STILT + 4 FLOORS (23 DWELLING UNITS) AND OPEN SWIMMING POOL AT GROUND LEVEL
9. *TOTALLY 279 DWELLING UNITS) GAINING ACCESS FROM POONAMALLEE BYPASS ROAD,
10. *SENNEERKUPPAM, CHENNAI - 600 077. COMPRISED IN SURVEY NOS: 72/1A, 73/4C1B AND
11. *77/2D OF SENNEERKUPPAM VILLAGE, POONAMALLEE TALUK, THIRUVALLUR DISTRICT
12. *WITHIN THE LIMITS OF POONAMALLEE PANCHAYAT UNION.
13. ENGINEER NAME SURESH
14. CHECKER NAME SURESH
15. APPROVED NAME SURESH
16. ENGINEER DATE 3/14/2026
17. CHECKER DATE 3/14/2026
18. APPROVED DATE 3/14/2026
19. END JOB INFORMATION
20. INPUT WIDTH 79
21. UNIT METER KN
22. JOINT COORDINATES
23. 1 -5 -1 0; 25 -5 -4 0; 26 -1.5 -1 0; 27 -1.5 -4 0; 28 2.2 -1 0; 29 2.2 -4 0
24. 36 -5 2 0; 37 -1.5 2 0; 38 2.2 2 0; 42 -5 5 0; 43 -1.5 5 0; 44 2.2 5 0
25. 57 5.9 -1 0; 58 5.9 -4 0; 59 5.9 2 0; 60 5.9 5 0; 63 9.6 -1 0; 64 9.6 -4 0
26. 65 9.6 2 0; 66 9.6 5 0; 67 -5 8 0; 68 -1.5 8 0; 69 2.2 8 0; 70 5.9 8 0
27. 71 9.6 8 0; 72 -5 11 0; 73 -1.5 11 0; 74 2.2 11 0; 75 5.9 11 0; 76 9.6 11 0
28. 77 -5 14 0; 78 -1.5 14 0; 79 2.2 14 0; 80 5.9 14 0; 81 9.6 14 0; 82 -5 17 0
29. 83 -1.5 17 0; 84 2.2 17 0; 85 5.9 17 0; 86 9.6 17 0; 87 -5 20 0; 88 -1.5 20 0
30. 89 2.2 20 0; 90 5.9 20 0; 91 9.6 20 0; 92 -5 23 0; 93 -1.5 23 0; 94 2.2 23 0
31. 95 5.9 23 0; 96 9.6 23 0; 97 -5 26 0; 98 -1.5 26 0; 99 2.2 26 0; 100 5.9 26 0
32. 101 9.6 26 0; 102 -5 29 0; 103 -1.5 29 0; 104 2.2 29 0; 105 5.9 29 0
33. 106 9.6 29 0; 107 -5 32 0; 108 -1.5 32 0; 109 2.2 32 0; 110 5.9 32 0
34. 111 9.6 32 0; 112 -5 35 0; 113 -1.5 35 0; 114 2.2 35 0; 115 5.9 35 0
35. 116 9.6 35 0; 117 -5 38 0; 118 -1.5 38 0; 119 2.2 38 0; 120 5.9 38 0
36. 121 9.6 38 0; 122 -5 41 0; 123 -1.5 41 0; 124 2.2 41 0; 125 5.9 41 0
37. 126 9.6 41 0; 127 -5 44 0; 128 -1.5 44 0; 129 2.2 44 0; 130 5.9 44 0
38. 131 9.6 44 0; 132 -5 47 0; 133 -1.5 47 0; 134 2.2 47 0; 135 5.9 47 0

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Dr. J. SURESH, M.E., MIE., Ph.D.

Structural Engineer

Plot No. 555, VGP Layout, Mullai Street,
Uthandi, Chennai - 600 119.

Reg. No. SE/I/ 2024 / 2 / 0014

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39. 136 9.6 47 0; 137 -5 50 0; 138 -1.5 50 0; 139 2.2 50 0; 140 5.9 50 0
 40. 141 9.6 50 0; 142 -5 53 0; 143 -1.5 53 0; 144 2.2 53 0; 145 5.9 53 0
 41. 146 9.6 53 0; 147 -5 56 0; 148 -1.5 56 0; 149 2.2 56 0; 150 5.9 56 0
 42. 151 9.6 56 0; 152 -5 59 0; 153 -1.5 59 0; 154 2.2 59 0; 155 5.9 59 0
 43. 156 9.6 59 0; 157 -5 62 0; 158 -1.5 62 0; 159 2.2 62 0; 160 5.9 62 0
 44. 161 9.6 62 0; 162 -5 65 0; 163 -1.5 65 0; 164 2.2 65 0; 165 5.9 65 0
 45. 166 9.6 65 0; 167 -5 68 0; 168 -1.5 68 0; 169 2.2 68 0; 170 5.9 68 0
 46. 171 9.6 68 0; 172 -5 71 0; 173 -1.5 71 0; 174 2.2 71 0; 175 5.9 71 0
 47. 176 9.6 71 0; 177 -5 74 0; 178 -1.5 74 0; 179 2.2 74 0; 180 5.9 74 0
 48. 181 9.6 74 0
 49. MEMBER INCIDENCES
 50. 39 1 25; 40 1 26; 41 25 27; 42 26 27; 43 26 28; 44 27 29; 45 28 29; 55 1 36
 51. 56 26 37; 57 28 38; 61 36 37; 62 37 38; 66 36 42; 67 37 43; 68 38 44; 72 42 43
 52. 73 43 44; 96 28 57; 97 29 58; 98 57 58; 99 57 59; 100 38 59; 101 59 60
 53. 102 44 60; 107 57 63; 108 58 64; 109 63 64; 110 63 65; 111 59 65; 112 65 66
 54. 113 60 66; 114 42 67; 115 43 68; 116 44 69; 117 67 68; 118 68 69; 119 60 70
 55. 120 69 70; 121 66 71; 122 70 71; 123 67 72; 124 68 73; 125 69 74; 126 72 73
 56. 127 73 74; 128 70 75; 129 74 75; 130 71 76; 131 75 76; 132 72 77; 133 73 78
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 59. 148 81 86; 149 85 86; 150 82 87; 151 83 88; 152 84 89; 153 87 88; 154 88 89
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 64. 182 100 105; 183 104 105; 184 101 106; 185 105 106; 186 102 107; 187 103 108
 65. 188 104 109; 189 107 108; 190 108 109; 191 105 110; 192 109 110; 193 106 111
 66. 194 110 111; 195 107 112; 196 108 113; 197 109 114; 198 112 113; 199 113 114
 67. 200 110 115; 201 114 115; 202 111 116; 203 115 116; 204 112 117; 205 113 118
 68. 206 114 119; 207 117 118; 208 118 119; 209 115 120; 210 119 120; 211 116 121
 69. 212 120 121; 213 117 122; 214 118 123; 215 119 124; 216 122 123; 217 123 124
 70. 218 120 125; 219 124 125; 220 121 126; 221 125 126; 222 122 127; 223 123 128
 71. 224 124 129; 225 127 128; 226 128 129; 227 125 130; 228 129 130; 229 126 131
 72. 230 130 131; 231 127 132; 232 128 133; 233 129 134; 234 132 133; 235 133 134
 73. 236 130 135; 237 134 135; 238 131 136; 239 135 136; 240 132 137; 241 133 138
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 76. 254 140 145; 255 144 145; 256 141 146; 257 145 146; 258 142 147; 259 143 148
 77. 260 144 149; 261 147 148; 262 148 149; 263 145 150; 264 149 150; 265 146 151
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 79. 272 150 155; 273 154 155; 274 151 156; 275 155 156; 276 152 157; 277 153 158
 80. 278 154 159; 279 157 158; 280 158 159; 281 155 160; 282 159 160; 283 156 161
 81. 284 160 161; 285 157 162; 286 158 163; 287 159 164; 288 162 163; 289 163 164
 82. 290 160 165; 291 164 165; 292 161 166; 293 165 166; 294 162 167; 295 163 168
 83. 296 164 169; 297 167 168; 298 168 169; 299 165 170; 300 169 170; 301 166 171
 84. 302 170 171; 303 167 172; 304 168 173; 305 169 174; 306 172 173; 307 173 174
 85. 308 170 175; 309 174 175; 310 171 176; 311 175 176; 312 172 177; 313 173 178
 86. 314 174 179; 315 177 178; 316 178 179; 317 175 180; 318 179 180; 319 176 181
 87. 320 180 181
 88. DEFINE MATERIAL START
 89. ISOTROPIC CONCRETE
 90. E 2.17185E+07
 91. POISSON 0.17
 92. DENSITY 23.5616
 93. ALPHA 1E-05
 94. DAMP 0.05


 Dr. J. SURESH, M.E., MIE., Ph.D.
 Structural Engineer
 Plot No. 555, VGP Layout, Mullai Street,
 Uthandi, Chennai - 600 119.
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95. END DEFINE MATERIAL
 96. MEMBER PROPERTY INDIAN
 97. 39 42 45 55 TO 57 66 TO 68 98 99 101 109 110 112 114 TO 116 119 121 -
 98. 123 TO 125 128 130 132 TO 134 137 139 141 TO 143 146 148 150 TO 152 155 157 -
 99. 159 TO 161 164 166 168 TO 170 173 175 177 TO 179 182 184 186 TO 188 191 193 -
 100. 195 TO 197 200 202 204 TO 206 209 211 213 TO 215 218 220 222 TO 224 227 229 -
 101. 231 TO 233 236 238 240 TO 242 245 247 249 TO 251 254 256 258 TO 260 263 265 -
 102. 267 TO 269 272 274 276 TO 278 281 283 285 TO 287 290 292 294 TO 296 299 301 -
 103. 303 TO 305 308 310 312 TO 314 317 319 PRIS YD 0.8 ZD 0.3
 104. 40 41 43 44 61 62 72 73 96 97 100 102 107 108 111 113 117 118 120 122 126 -
 105. 127 129 131 135 136 138 140 144 145 147 149 153 154 156 158 162 163 165 167 -
 106. 171 172 174 176 180 181 183 185 189 190 192 194 198 199 201 203 207 208 210 -
 107. 212 216 217 219 221 225 226 228 230 234 235 237 239 243 244 246 248 252 253 -
 108. 255 257 261 262 264 266 270 271 273 275 279 280 282 284 288 289 291 293 297 -
 109. 298 300 302 306 307 309 311 315 316 318 320 PRIS YD 0.6 ZD 0.2
 110. CONSTANTS
 111. MATERIAL CONCRETE ALL
 112. SUPPORTS
 113. 25 27 29 58 64 FIXED
 114. DEFINE 1893 LOAD
 115. ZONE 0.16 RF 3 I 1 SS 2 ST 1 DM 0.5
 116. MEMBER WEIGHT
 117. 39 TO 45 55 TO 57 61 62 66 TO 68 72 73 96 TO 102 107 TO 320 UNI -14.5
 118. DEFINE WIND LOAD

*** NOTE: If any floor diaphragm is present in the model Wind Load definition
 should be defined after Floor Diaphragm definition. Otherwise wind
 load generation may be unsuccessful during analysis.

119. TYPE 1
 120. INT 0.673 1.03335 1.3537 1.65375 HEIG 10 30 50 100
 121. EXP 1 JOINT 1 25 TO 29 36 TO 38 42 TO 44 57 TO 60 63 TO 181
 122. LOAD 1 LOADTYPE NONE TITLE SLX1
 123. 1893 LOAD X 1
 124. LOAD 2 LOADTYPE NONE TITLE SLZ1
 125. 1893 LOAD Z 1
 126. LOAD 3 LOADTYPE DEAD TITLE DL
 127. SELFWEIGHT Y -1
 128. MEMBER LOAD
 129. 40 43 61 62 72 73 96 100 102 107 111 113 117 118 120 122 126 127 129 131 135 -
 130. 136 138 140 144 145 147 149 153 154 156 158 162 163 165 167 171 172 174 176 -
 131. 180 181 183 185 189 190 192 194 198 199 201 203 207 208 210 212 216 217 219 -
 132. 221 225 226 228 230 234 235 237 239 243 244 246 248 252 253 255 257 261 262 -
 133. 264 266 270 271 273 275 279 280 282 284 288 289 291 293 297 298 300 302 306 -
 134. 307 309 311 315 316 318 320 UNI GY -25
 135. LOAD 4 LOADTYPE LIVE TITLE LL
 136. MEMBER LOAD
 137. 40 43 61 62 72 73 96 100 102 107 111 113 117 118 120 122 126 127 129 131 135 -
 138. 136 138 140 144 145 147 149 153 154 156 158 162 163 165 167 171 172 174 176 -
 139. 180 181 183 185 189 190 192 194 198 199 201 203 207 208 210 212 216 217 219 -



Dr. J. SURESH, M.E., MIE., Ph.D.

Structural Engineer

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140. 221 225 226 228 230 234 235 237 239 243 244 246 248 252 253 255 257 261 262 -
141. 264 266 270 271 273 275 279 280 282 284 288 289 291 293 297 298 300 302 306 -
142. 307 309 311 315 316 318 320 UNI GY -15
143. LOAD 7 LOADTYPE WIND TITLE WLZ1
144. WIND LOAD Z 1 TYPE 1
145. LOAD 8 LOADTYPE WIND TITLE WLZ2
146. WIND LOAD Z -1 TYPE 1
147. LOAD COMB 9 1.5(DL+LL)
148. 3 1.5 4 1.5
149. LOAD COMB 10 1.2(DL+LL+SLX)
150. 3 1.2 4 1.2 1 1.2
151. LOAD COMB 11 1.2(DL+LL+SLZ)
152. 3 1.2 4 1.2 2 1.2
153. LOAD COMB 14 1.2(DL+LL+WLZ1)
154. 3 1.2 4 1.2 7 1.2
155. LOAD COMB 15 1.2(DL+LL+WLZ2)
156. 3 1.2 4 1.2 8 1.2
157. LOAD COMB 16 1.5(DL+SLX)
158. 3 1.5 1 1.5
159. LOAD COMB 17 1.5(DL+SLZ)
160. 3 1.5 2 1.5
161. LOAD COMB 20 1.5(DL+WLZ1)
162. 3 1.5 7 1.5
163. LOAD COMB 21 1.5(DL+WLZ2)
164. 3 1.5 8 1.5
165. LOAD COMB 22 0.9DL+1.5SLX
166. 3 0.9 1 1.5
167. LOAD COMB 23 0.9DL+1.5SLZ
168. 3 0.9 2 1.5
169. LOAD COMB 26 0.9DL+1.5WLZ1
170. 3 0.9 7 1.5
171. LOAD COMB 27 0.9DL+1.5WLZ2
172. 3 0.9 8 1.5
173. PERFORM ANALYSIS

```

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

NUMBER OF JOINTS	135	NUMBER OF MEMBERS	238
NUMBER OF PLATES	0	NUMBER OF SOLIDS	0
NUMBER OF SURFACES	0	NUMBER OF SUPPORTS	5

Using 64-bit analysis engine.



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SOLVER USED IS THE OUT-OF-CORE BASIC SOLVER

ORIGINAL/FINAL BAND-WIDTH= 11/ 5/ 36 DOF
 TOTAL PRIMARY LOAD CASES = 6, TOTAL DEGREES OF FREEDOM = 780
 TOTAL LOAD COMBINATION CASES = 13 SO FAR.
 SIZE OF STIFFNESS MATRIX = 29 DOUBLE KILO-WORDS
 REQD/AVAIL. DISK SPACE = 12.7/1634558.9 MB

**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.

 * UNITS - KN METE *
 * TIME PERIOD FOR X 1893 LOADING = 1.96849 SEC *
 * SA/G PER 1893= 0.345, LOAD FACTOR= 1.000 *
 * VB PER 1893= 0.0092 X 11370.90= 104.75 KN *
 * *****

 * UNITS - KN METE *
 * TIME PERIOD FOR Z 1893 LOADING = 1.96849 SEC *
 * SA/G PER 1893= 0.345, LOAD FACTOR= 1.000 *
 * VB PER 1893= 0.0092 X 11370.90= 104.75 KN *
 * *****

174. FINISH

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

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Dr. J. SURESH, M.E., MIE., Ph.D.
 Structural Engineer

Plot No. 555, VGP Layout, Mullai Street,
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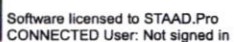
Dr. J. SURESH, M.E., MIE., Ph.D.
Structural Engineer

Plot No. 555, VGP Layout, Mullai Street,
Uthandi, Chennai - 600 119.

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Part

Job Title The proposed construction of High Rise Group Development Residential

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By Suresh

Date 3/14/2026

Chd Suresh

Client	
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Dr. J. SURESH, M.E., MIE., Ph.D.

Structural Engineer

Plot No. 555, VGP Layout, Mullai Street,
Uthandi, Chennai - 600 119.

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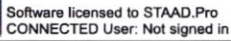
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Date/Time 14-Mar-2026 12:39

Y
Z-X

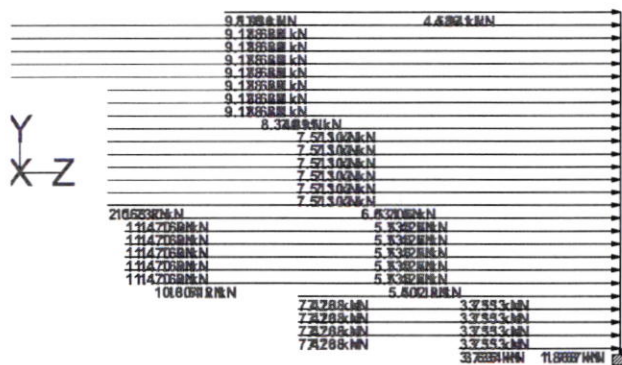


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Dr. J. SURESH, M.E., MIE., Ph.D.
Structural Engineer
Plot No. 555, VGP Layout, Mullai Street,
Uthandi, Chennai - 600 119.
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X-Z

