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**PROPOSED RESIDENTIAL BUILDING AT NO. 80, PADI VILLAGE, BLOCK- 72, AMBATTUR
TALUK, CHENNAI- 600050**

GENERAL NOTE ON STRUCTURAL DESIGN.

1.0 GENERAL.

1.1 DESIGN BASIS

The proposed residential building consists of Stilt plus Five upper floors.

The design of this building is carried out based on frame analysis using STAAD CONNECT.

1.2 CODES AND STANDARDS

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

1. I.S. 456 - 2000
2. I.S. 875 - Part I to III
3. I.S.1893 - 2016

2.0 BASIC CIVIL DESIGN LOADS

2.1 DEAD LOADS & LIVE LOADS

Typical slab dead load is calculated as follows

Self weight of slab	=	3.25kN/m ²
Floor finish	=	2.0kN/m ²
Live load	=	2.0kN/m ²
		7.25kN/m ²

For CHOLAYIL PRIVATE LIMITED

Rep. By it's PoA Mr. Gopalakrishna Shetty


C. KANNAN, B.E., M.E., (Structure)
Structural Engineer,
CMDA Reg. No: SE/GR-I/19/02/002.
Door No: 21, 4th Main Road,
Indira Nagar, Chennai-600 020.

3.0 SOIL DETAILS

Based on soil test report Pile Foundation is adopted.

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.

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

4.3 MINIMUM COVER

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

The Structure is safe and sound when used for the purpose for which it is designed.


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For CHOLAYIL PRIVATE LIMITED

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PAGE NO. 1

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*      STAAD.Pro CONNECT Edition      *
*      Version 22.12.00.142           *
*      Proprietary Program of         *
*      Bentley Systems, Inc.          *
*      Date= MAY 3, 2023              *
*      Time= 11:38:19                 *
*                                     *
*      Licensed to: C.Kannan           *
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2. START JOB INFORMATION
3. ENGINEER DATE 03-MAY-23
4. ENGINEER NAME KANNAN
5. CHECKER NAME KANNAN
6. APPROVED NAME KANNAN
7. CHECKER DATE 5/3/2023
8. APPROVED DATE 5/3/2023
9. JOB NAME PROPOSED RESIDENTIAL BUILDING AT NO. 80, PADI VILLAGE, BLOCK- 72, -
10. AMBATTUR TALUK, CHENNAI- 600050
11. END JOB INFORMATION
12. INPUT WIDTH 79
13. UNIT MMS KN
14. JOINT COORDINATES
15. 1 0 0 0; 2 7285.89 0 0; 3 -6726.05 0 0; 4 -3183.52 0 0; 5 11937.1 0 0
16. 6 14274.6 0 0; 7 17685.3 0 0; 8 0 3000 0; 9 7285.89 3000 0; 10 -6726.05 3000 0
17. 11 -3183.52 3000 0; 12 11937.1 3000 0; 13 14274.6 3000 0; 14 17685.3 3000 0
18. 15 0 6000 0; 16 7285.89 6000 0; 17 -6726.05 6000 0; 18 -3183.52 6000 0
19. 19 11937.1 6000 0; 20 14274.6 6000 0; 21 17685.3 6000 0; 22 0 9000 0
20. 23 7285.89 9000 0; 24 -6726.05 9000 0; 25 -3183.52 9000 0; 26 11937.1 9000 0
21. 27 14274.6 9000 0; 28 17685.3 9000 0; 29 0 12000 0; 30 7285.89 12000 0
22. 31 -6726.05 12000 0; 32 -3183.52 12000 0; 33 11937.1 12000 0
23. 34 14274.6 12000 0; 35 17685.3 12000 0; 36 0 15000 0; 37 7285.89 15000 0
24. 38 -6726.05 15000 0; 39 -3183.52 15000 0; 40 11937.1 15000 0
25. 41 14274.6 15000 0; 42 17685.3 15000 0; 43 0 18000 0; 44 7285.89 18000 0
26. 45 -6726.05 18000 0; 46 -3183.52 18000 0; 47 11937.1 18000 0
27. 48 14274.6 18000 0; 49 17685.3 18000 0; 50 0 -2000 0; 51 7285.89 -2000 0
28. 52 -6726.05 -2000 0; 53 -3183.52 -2000 0; 54 11937.1 -2000 0
29. 55 14274.6 -2000 0; 56 17685.3 -2000 0
30. MEMBER INCIDENCES
31. 1 1 2; 2 3 4; 3 4 1; 4 2 5; 5 5 6; 6 6 7; 7 1 8; 8 2 9; 9 3 10; 10 4 11
32. 11 5 12; 12 6 13; 13 7 14; 14 8 9; 15 10 11; 16 11 8; 17 9 12; 18 12 13
33. 19 13 14; 20 8 15; 21 9 16; 22 10 17; 23 11 18; 24 12 19; 25 13 20; 26 14 21
34. 27 15 16; 28 17 18; 29 18 15; 30 16 19; 31 19 20; 32 20 21; 33 15 22; 34 16 23
35. 35 17 24; 36 18 25; 37 19 26; 38 20 27; 39 21 28; 40 22 23; 41 24 25; 42 25 22
36. 43 23 26; 44 26 27; 45 27 28; 46 22 29; 47 23 30; 48 24 31; 49 25 32; 50 26 33
37. 51 27 34; 52 28 35; 53 29 30; 54 31 32; 55 32 29; 56 30 33; 57 33 34; 58 34 35
38. 59 29 36; 60 30 37; 61 31 38; 62 32 39; 63 33 40; 64 34 41; 65 35 42; 66 36 37

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 CMDA Reg. No: SE/GR-I/19/02/002.
 Door No: 21, 4th Main Road,
 Indira Nagar, Chennai-600 020.

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For CHOLAYIL PRIVATE LIMITED

Rep. By it's PoA Mr. Gopalakrishna Shetty

STAAD SPACE

-- PAGE NO. 2

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39. 67 38 39; 68 39 36; 69 37 40; 70 40 41; 71 41 42; 72 36 43; 73 37 44; 74 38 45
40. 75 39 46; 76 40 47; 77 41 48; 78 42 49; 79 43 44; 80 45 46; 81 46 43; 82 44 47
41. 83 47 48; 84 48 49; 85 1 50; 86 2 51; 87 3 52; 88 4 53; 89 5 54; 90 6 55
42. 91 7 56
43. DEFINE MATERIAL START
44. ISOTROPIC CONCRETE
45. E 21.7185
46. POISSON 0.17
47. DENSITY 2.35616E-08
48. ALPHA 1E-05
49. DAMP 0.05
50. G 9.28139
51. TYPE CONCRETE
52. STRENGTH FCU 0.027579
53. END DEFINE MATERIAL
54. MEMBER PROPERTY
55. 7 TO 13 20 TO 26 33 TO 39 46 TO 52 59 TO 65 72 TO 78 85 TO 90 -
56. 91 PRIS YD 600 ZD 230
57. 1 TO 6 14 TO 19 27 TO 32 40 TO 45 53 TO 58 66 TO 71 79 TO 84 PRIS YD 450 ZD 230
58. CONSTANTS
59. MATERIAL CONCRETE ALL
60. SUPPORTS
61. 50 TO 56 FIXED
62. UNIT METER KN
63. DEFINE IS1893 2016 LOAD
64. ZONE 0.16 RF 3 I 1.2 SS 1 ST 1 DM 0.05 DT 2
65. SELFWEIGHT 1
66. MEMBER WEIGHT
67. 1 TO 6 14 TO 19 27 TO 32 40 TO 45 53 TO 58 66 TO 71 79 TO 84 UNI 12 0 0
68. 1 TO 6 14 TO 19 27 TO 32 40 TO 45 53 TO 58 66 TO 71 79 TO 84 UNI 25 0 0
69. DEFINE WIND LOAD

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*** 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.

```

70. TYPE 1 WIND 1
71. <! STAAD PRO GENERATED DATA DO NOT MODIFY !!!
72. CUSTOM:PARAMS
73. !> END GENERATED DATA BLOCK
74. INT 1.5 1.65 1.7 1.723 HEIG 10 15 18 20
75. EXP 0 JOINT 3 10 17 24 31 38 45 52
76. LOAD 1 LOADTYPE SEISMIC-H TITLE EQ +X
77. 1893 LOAD X 1
78. LOAD 2 LOADTYPE SEISMIC-H TITLE EQ -X
79. 1893 LOAD X -1.
80. LOAD 3 LOADTYPE SEISMIC-H TITLE EQ +Z
81. 1893 LOAD Z 1

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For CHOLAYIL PRIVATE LIMITED

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STAAD SPACE

-- PAGE NO. 3

82. LOAD 4 LOADTYPE SEISMIC-H TITLE EQ -Z
 83. 1893 LOAD X -1.
 84. LOAD 5 LOADTYPE WIND TITLE WIND +X
 85. WIND LOAD X 1 TYPE 1
 *WARNING- NO MEMBERS LOADED FOR A WIND LOAD GENERATION.
 86. LOAD 6 LOADTYPE WIND TITLE WIND -X
 87. WIND LOAD -X 1 TYPE 1
 *WARNING- NO MEMBERS LOADED FOR A WIND LOAD GENERATION.
 88. LOAD 7 LOADTYPE WIND TITLE WIND +Z
 89. WIND LOAD Z 1 TYPE 1
 90. LOAD 8 LOADTYPE WIND TITLE WIND -Z
 91. WIND LOAD -Z 1 TYPE 1
 92. LOAD 9 LOADTYPE LIVE TITLE LIVE LOAD
 93. MEMBER LOAD
 94. 1 TO 6 14 TO 19 27 TO 32 40 TO 45 53 TO 58 66 TO 71 79 TO 84 UNI GY -12
 95. LOAD 10 LOADTYPE DEAD TITLE DEAD LOAD
 96. SELFWEIGHT Y -1
 97. MEMBER LOAD
 98. 1 TO 6 14 TO 19 27 TO 32 40 TO 45 53 TO 58 66 TO 71 79 TO 84 UNI GY -25
 99. LOAD COMB 11 1.5(DL+IL)
 100. 9 1.5 10 1.5
 101. LOAD COMB 12 1.2(DL+IL+ELX)
 102. 9 1.5 10 1.2 1 1.2
 103. LOAD COMB 13 1.2(DL+IL-ELX)
 104. 9 1.2 10 1.2 2 1.2
 105. LOAD COMB 14 1.2(DL+IL+ELZ)
 106. 9 1.2 10 1.2 3 1.2
 107. LOAD COMB 15 1.2(DL+IL-ELZ)
 108. 9 1.2 10 1.2 4 1.2
 109. LOAD COMB 16 1.2(DL+IL+WLX)
 110. 9 1.2 10 1.2 5 1.2
 111. LOAD COMB 17 1.2(DL+IL-WLX)
 112. 10 1.2 6 1.2
 113. LOAD COMB 18 1.2(DL+IL+WLZ)
 114. 9 1.2 10 1.2 7 1.2
 115. LOAD COMB 19 1.2(DL+IL-WLZ)
 116. 9 1.2 10 1.2 8 1.2
 117. LOAD COMB 20 1.5(DL+ELX)

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STAAD SPACE

-- PAGE NO. 4

118. 9 1.5 10 1.5 1 1.5
 119. LOAD COMB 21 1.5(DL-ELX)
 120. 9 1.5 10 1.5 2 1.5
 121. LOAD COMB 22 1.5(DL+ELZ)
 122. 9 1.5 10 1.5 3 1.5
 123. LOAD COMB 23 1.5(DL-ELZ)
 124. 10 1.5 4 1.5
 125. LOAD COMB 24 1.5(DL+WLX)
 126. 10 1.5 5 1.5
 127. LOAD COMB 25 1.5(DL-WLX)
 128. 10 1.5 6 1.5
 129. LOAD COMB 26 1.5(DL+WLZ)
 130. 10 1.5 7 1.5
 131. LOAD COMB 27 1.5(DL-WLZ)
 132. 10 1.5 8 1.5
 133. LOAD COMB 28 0.9 DL+ELX
 134. 10 0.9 1 1.5
 135. LOAD COMB 29 0.9 DL-ELX
 136. 10 0.9 2 1.5
 137. LOAD COMB 30 0.9 DL+ELZ
 138. 10 0.9 3 1.5
 139. LOAD COMB 31 0.9 DL-ELZ
 140. 10 0.9 4 1.5
 141. LOAD COMB 32 0.9 DL+WLX
 142. 10 0.9 5 1.5
 143. LOAD COMB 33 0.9 DL-WLX
 144. 10 0.9 6 1.5
 145. LOAD COMB 34 0.9 DL+WLZ
 146. 10 0.9 7 1.5
 147. LOAD COMB 35 0.9 DL-WLZ
 148. 10 0.9 8 1.5
 149. PERFORM ANALYSIS PRINT ALL

PROBLEM STATISTICS

NUMBER OF JOINTS	56	NUMBER OF MEMBERS	91
NUMBER OF PLATES	0	NUMBER OF SOLIDS	0
NUMBER OF SURFACES	0	NUMBER OF SUPPORTS	7

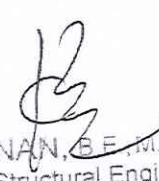
Using 64-bit analysis engine.

SOLVER USED IS THE IN-CORE ADVANCED MATH SOLVER

TOTAL PRIMARY LOAD CASES = 10, TOTAL DEGREES OF FREEDOM = 294
 TOTAL LOAD COMBINATION CASES = 25 SO FAR.

For CHOLAYIL PRIVATE LIMITED

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 Structural Engineer,
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 Door No: 21, 4th Main Road,
 Indira Nagar, Chennai-600 020.

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Taluk, Chennai- 600050

Client

Job No

Sheet No

1

Rev

Part

Ref

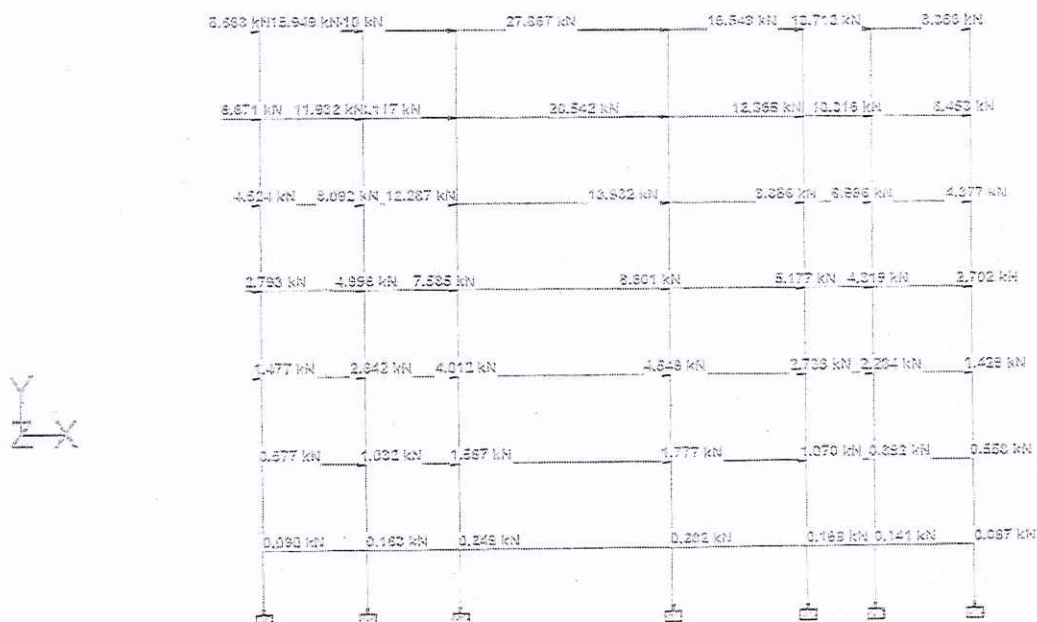
By Kannan

Date 03-May-23

Chd Kannan

File GKS - PADIPAKAM.STD

Date/Time 03-May-2023 11:33



For CHOLAYIL PRIVATE LIMITED

Rep. By it's PoA Mr. Gopalakrishna Shetty

C. KANNAN, Structural Engineer,
CMDA Reg. No: SE/GR-I/19/02/002.
Door No: 21, 4th Main Road,
Indira Nagar, Chennai-600 020.

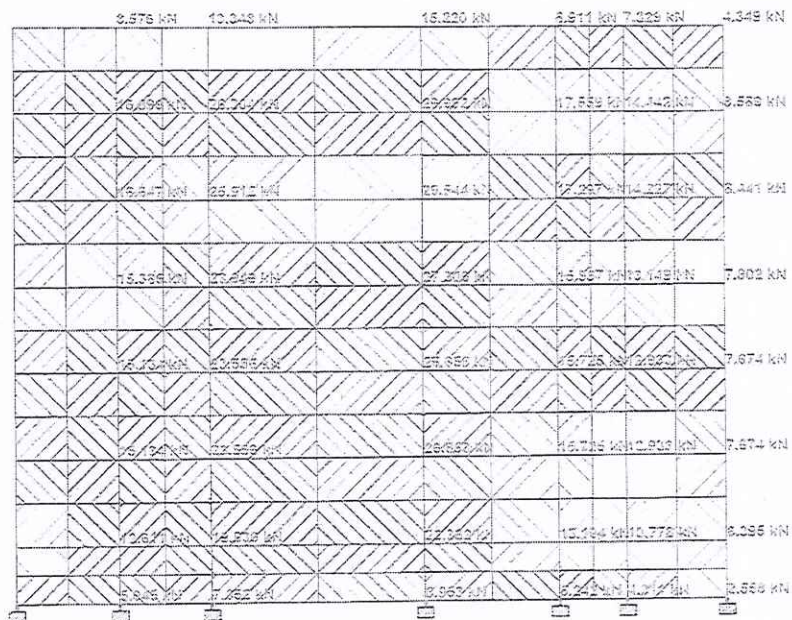
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Part		
Ref		
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Taluk, Chennai- 600050

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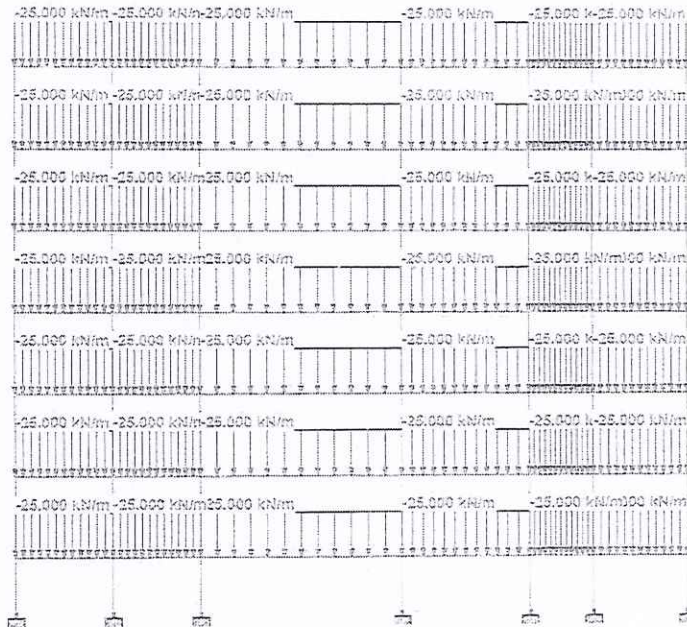
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Job Title Proposed Residential Building at No. 80, Padi Village, Block- 72, Ambattur Taluk, Chennai- 600050

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Y
Z X




C. KANNAN, B.E., M.E., (Structure)
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CMDA Reg. No: SE/GR-I/19/02/002.
Door No: 21, 4th Main Road,
Indira Nagar, Chennai-600 020.

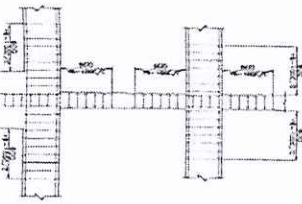
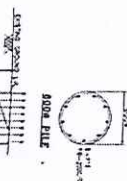
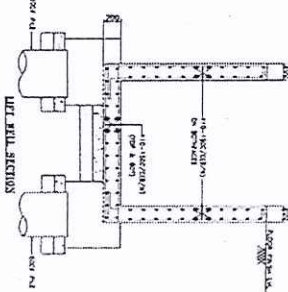
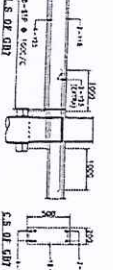
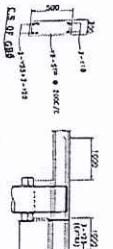
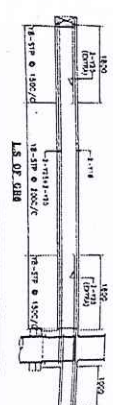
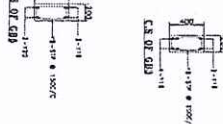
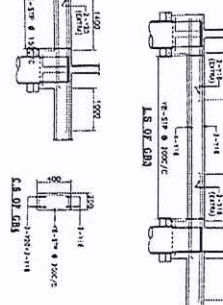
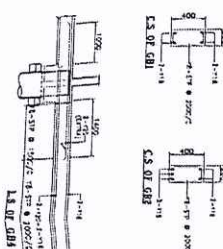
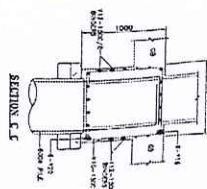
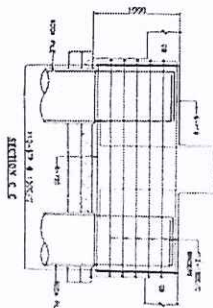
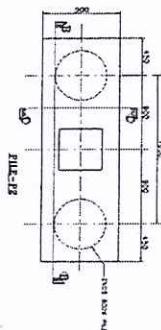
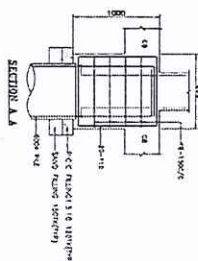
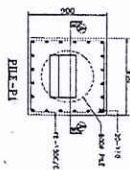
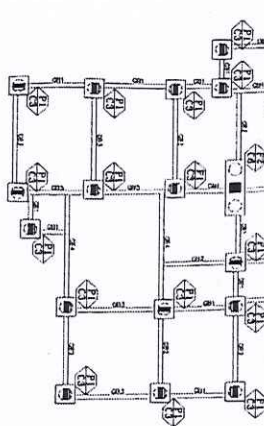
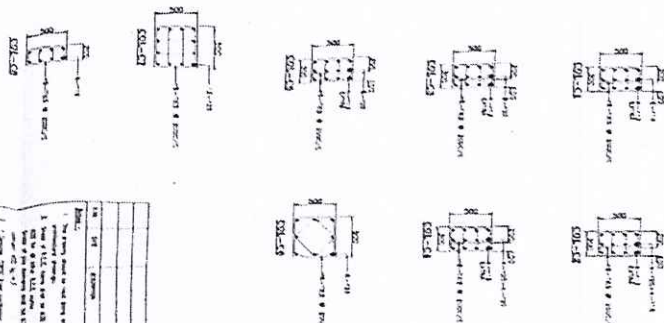
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For CHOLAYIL PRIVATE LIMITED

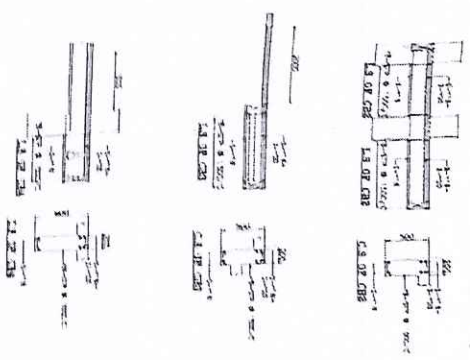
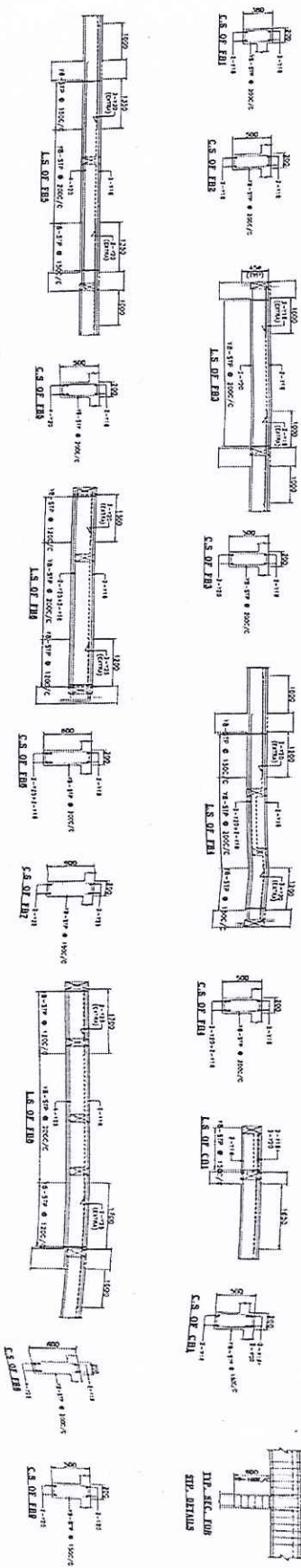
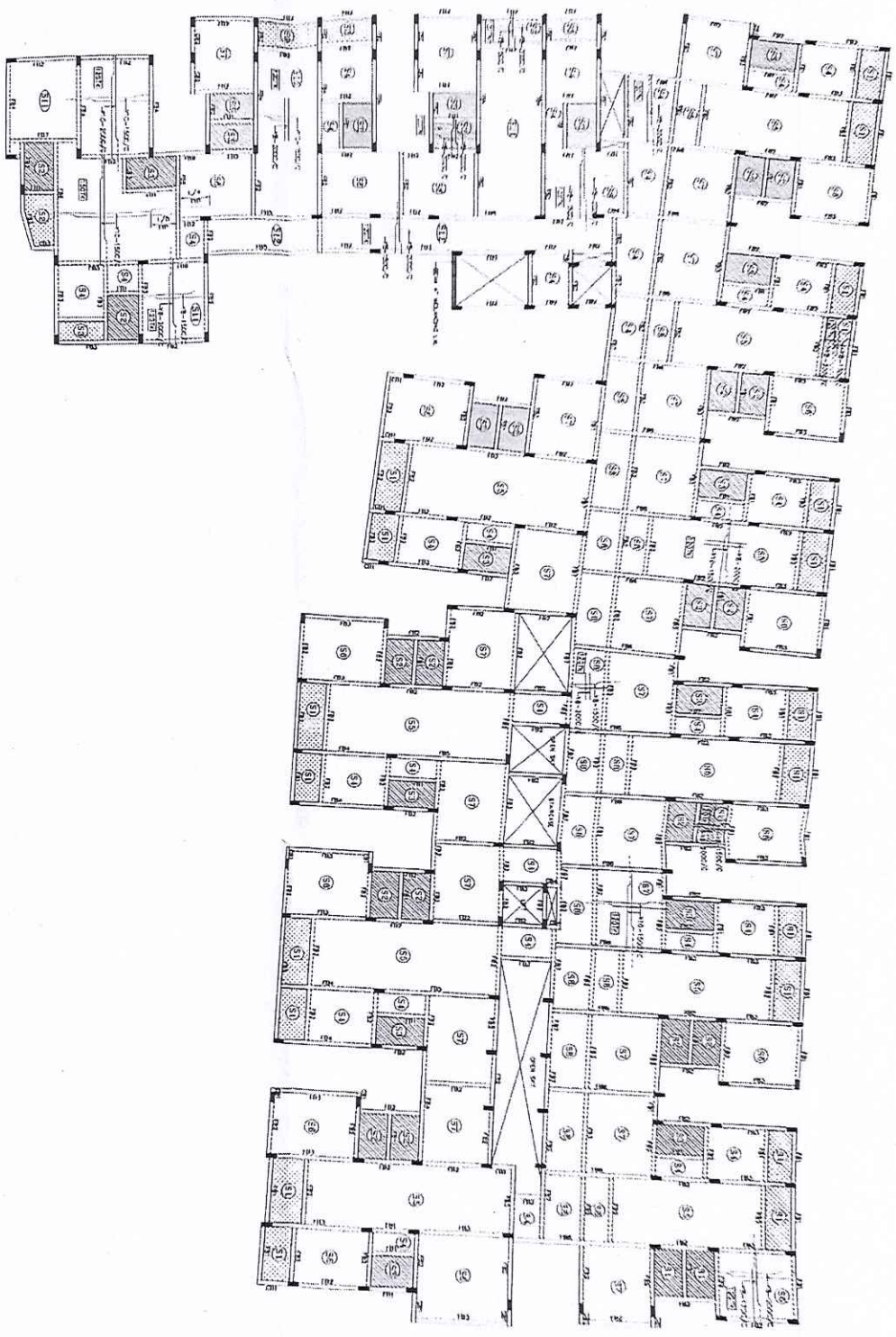
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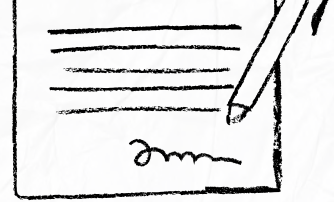


PROPOSED RESIDENTIAL BUILDING
AT NO. 10, P.D. VILLAGE,
BLOCK-72, ANANTHURU, CHENNAI-600050.

C. KANNAN
Structural Engineer
C. KANNAN ENGINEERING CONSULTANTS
NO. 10, P.D. VILLAGE,
BLOCK-72, ANANTHURU,
CHENNAI-600050.

FOR CHOLAI PRIVATE LIMITED

Rep. By it's PoA Mr. Gopalakrishna Shetty



our services doesn't just end there



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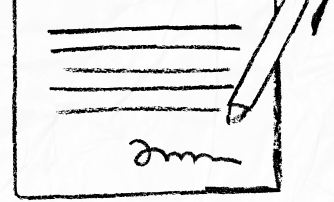
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Vastu & Property Management Tools

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