

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 - 1 / 2019 / 03 / 24 , QA / 2019 / 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

16/09/2024

CERTIFICATE

IT IS CERTIFIED THAT THE PROPOSED CONSTRUCTION OF HIGH RISE BUILDING CONSISTS OF STILT FLOOR + 9 FLOORS RESIDENTIAL BUILDING (30.00M HEIGHT) AT OLD DOOR NOS.268 & 269, NEW DOOR NOS.66 & 68, ROYAPETTAH HIGH ROAD, ROYAPETTAH, CHENNAI - 600 014 AND COMPRISED IN R.S.NO.423 AS PER DOCUMENT & R.S.NO.423/1 & 423/2 AS PER PATTI, BLOCK NO.08 OF MYLAPORE VILLAGE, MYLAPORE TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION, ZONE - IX, DIVISION - 119, 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.), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-1 / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

PROPOSED HIGH RISE RESIDENTIAL BUILDING

“RAMANIYAM REGAL”

**AT OLD DOOR NOS.268 & 269, NEW
DOOR NOS.66 & 68, ROYAHPETTAH HIGH
ROAD, ROYAHPETTAH, CHENNAI-600 014**

DESIGN BASIS REPORT



V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
CMDA REGN NOS
SE / GR-1 / 2019/03/024, QA / 19/04/021
CHARTERED ENGINEER & APPOINTED VALUER
3-B, RAMANIYAM GAULAH V - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

Sl.no	Contents	Page no
1.	Introduction	3
2.	Design Loads	4
3.	Materials Grade	12
4.	Deflection Criteria	12
5.	Structural System	13
6.	Nominal Cover to Reinforcement	13
7.	Analysis Method	13
8.	Design Methodology	13
9.	Codes & Standards	14


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2018/03/024, QA/2018/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 118.
 Mobile: 9841269154

1. Introduction:

The building comprises of Stilt + 9 Upper Floors + Terrace.

Floor Heights: Stilt Floor – 2.910m & Typical Floor – 3.01m.

No of Dwelling Units – 18 Flats

The objective of this report is to provide and furnish complete structural details related to this project.

This report will cover information on Codes of practice, Design loading, Material strength considered for design and analysis of the building. In addition to this report includes Structural system, Foundation system, Structural analysis adopted for design of the building.

The superstructure comprises a combination of conventional beam and slab system supported by Columns, which is supported on Isolated Footing as per soil report and recommendations.


V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

2. Design Loads:

2.1 Dead Loads:

A dead load is a load (weight) that doesn't change significantly over time. The unit weight of the various elements is computed based on the unit weight of the materials as given below:

Materials	Unit Weights (kN/m ³)
Reinforced Cement Concrete	25
Plain Cement Concrete	24
Porotherm Bricks	7.5
Steel	78.5
Soil	20
Water	10
Cement Concrete Screed	21
Clay Bricks	18.88


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841259154

2.2 Imposed Loads & Live Loads:

The imposed loads that are envisaged to act permanently (wherever applicable) are as following: -

Items	Load Intensity
Floor Finish (50mm thick screed)	1.2 kN/m ²
50mm sunken portions in toilets, Balcony & Lobby	0.8kN/m ²
375 mm sunken portions in toilets	7.1kN/m ²
150mm Weathering course in terrace	3kN/m ²
Lift Machine Room(LMR)	20 kN/m ²
Over Head Tank(OHT)	10(kN /m ³) x Water Height(m)

The superimposed load or otherwise live load assessed based on the occupancy classifications as per IS: 875 (Part 2) - 1987 is listed as follows: -

SL.No	Occupancy Classification	UDL kN/m ²
1.	Living, Kitchen& Bed Room	2.00
2.	Toilets & Bathrooms	2.00
3.	Corridors, Balconies, Staircases including Fire escapes	3.00
4.	Terrace Floor	1.50


V. JAGEN, B.E., M.E. (Struc), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

2.3 Wind Load

Wind Loads for structure and elements shall be calculated in accordance with provisions laid in IS: 875-2015(Part 3) & basic data as follows.

Description	Data	Remarks
Basic Wind Speed, V_b	50 m/s	Chennai
Probability Factor (Risk Co-efficient), k_1	1.00	General buildings & Structures (for return period of 50 years)
Terrain Category	3	Terrain with numerous closely spaced obstructions having the size of Buildings/structures up to 10 m in height with or without a few isolated tall structures.
Terrain, height and structure size factor, k_2	$K_2 = 1.00$ up to 10m height and $K_2 = 1.07$ at 31m height	As per Structure class and height of structure
Topography factor, k_3	1.00	Upwind Slope is lesser than 3°
Importance factor for cyclonic region, k_4	1.00	Clause 6.3.4, IS 875-2015 (Part 3)

$$\text{Design Wind Speed at the height } Z \quad V_z = V_b * k_1 * k_2 * k_3 * k_4$$

$$\text{Design Wind pressure at the height } Z \quad P_z = 0.6 * V_z^2$$

$$\text{Wind Directionality Factor} \quad K_d = 0.9 \text{ (Clause 7.2.1)}$$

$$\text{Area Averaging Factor} \quad K_a = 0.9 \text{ (Clause 7.2.2)}$$

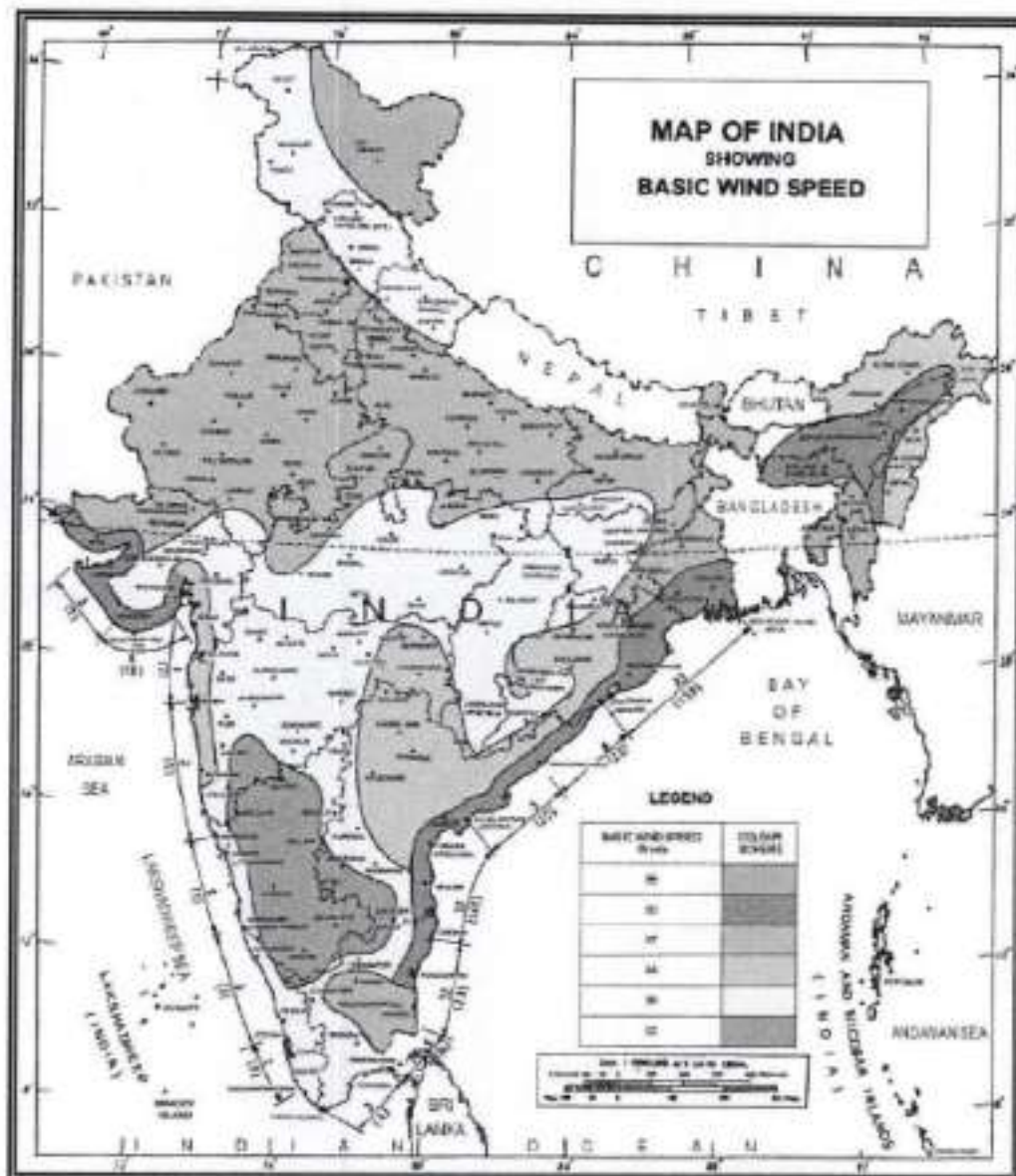
$$\text{Combination Factor} \quad K_c = 0.9 \text{ (Clause 7.3.3.13)}$$

$$\text{Design Wind Pressure} \quad P_d = \text{Max } ((K_d * K_a * K_c * P_z) \text{ or } 0.7 P_z)$$

Calculated Wind loads are applied over structure in $0^\circ, 90^\circ, 180^\circ$ and 270° Wind Directions.

Application of Wind load shall as per IS 875 2015 (Part 3)


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
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 NCS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVY - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119,
 Mobile: 9841269154

2.4 Seismic Loads

Structure and foundation shall be designed to resist the effects of earthquakes in accordance with IS: 1893 (Part – 1) – 2016. Response Spectrum method will be used to carry out seismic analysis.

Total lateral force (base shear) of the building shall be estimated at ground floor level as per clause 7.2.1 of IS1893-2016 which provides by

$$\text{Base Shear} = A_h \times W$$

A_h is horizontal seismic coefficient and W is seismic weight of building.

Seismic weight is summation of total dead load and 25% of live load where live load is equal and less than 3kN/sq.m. (As per Table 10 of IS1893 (Part-1) 2016)

$$A_h = (Z/2) \times (I/R) \times (S_a/g)$$

Seismic parameters Z , I , R and (S_a/g) are obtained as per table below.

Item	Value	Reference
Seismic Zone	Zone – III	Annex – E IS 1893 (Part 1)-2016
Zone Factor (z)	0.16	Table 3 Clause 6.4.2 IS 1893 (Part 1)-2016
Importance Factor (I)	1	Table 8 IS 1893 (Part 1)-2016
Damping	5%	Clause 7.2.4 IS 1893 (Part 1)-2016
Design acceleration Coefficient(Response Spectrum Method)	1+15T, $T < 0.10s$ 2.5, $0.10s < T < 0.55s$ 1.36/T, $0.55s < T < 4.00s$ 0.34 $T > 4.00s$	Clause 6.4.2 For Medium Stiff Soil Sites IS 1893 (Part 1)-2016
Response reduction factor (R)	4	Table 9 Clause 7.2.6 IS 1893 (Part 1)-2016

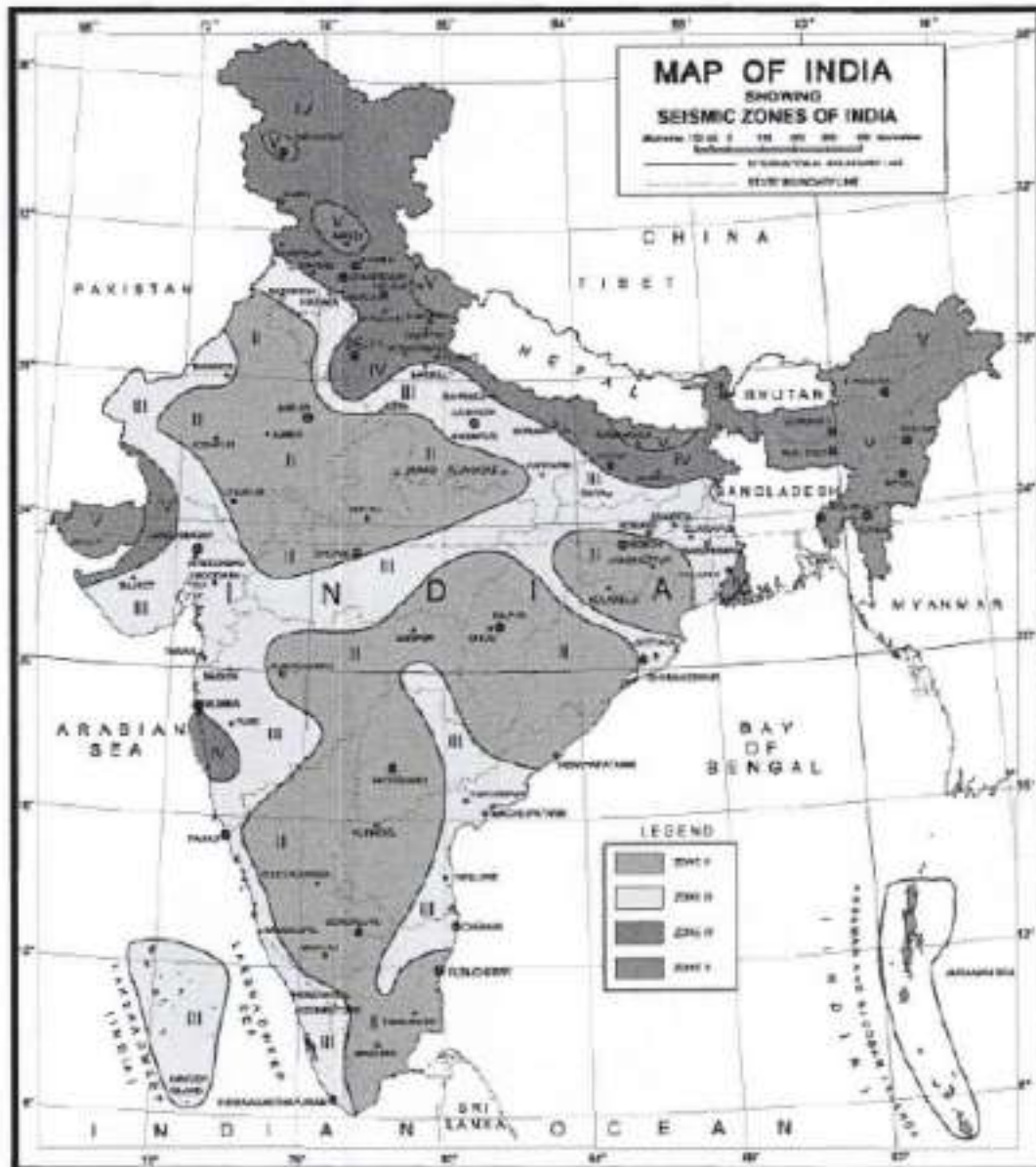
Fundamental natural time period shall be based on clause 7.6.2(b) of IS 1893 (Part 1)-2016.

$$T_n = 0.09h/v_d$$

h = Height of the building as per Clause 7.6.2(a)

d = Basic dimension of the building at the plinth level along the considered direction of earthquake.

The structure is assumed as Building with ductile RC structural walls with RC OMRFs and designed as per IS: 13920-2016 in addition to the common detailing clauses in IS 456.



V. Jagen
V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-1 / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

2.5 Load Combinations

The various load combinations used for **Design** as per IS code are as follows.

- 1.1.5(DL+LL)
- 2.1.2(DL+LL±RSX)
3. 1.2(DL+LL±RSZ)
4. 1.2(DL+LL±WLX)
5. 1.2(DL+LL±WLZ)
- 6.1.5(DL±RSX)
7. 1.5(DL±RSZ)
8. 1.5(DL±WLX)
9. 1.5(DL±WLZ)
- 10.0.9DL+1.5RSX
- 11.0.9DL+1.5RSZ
- 12.0.9DL+1.5WLX
- 13.0.9DL+1.5WLZ

On behalf of CMDA MCB Panel,
the structural design calculations
are generally in order and reviewed.
[Signature]

Superintending Engineer, P.W.D.,
Planning and Designs Circle,
Chepauk, Chennai-5.

The various load combinations used for **Serviceability** as per IS code are as follows.

- 1.1.0(DL+LL)
- 2.1.0DL+0.8LL±0.8RSX
3. 1.0DL+0.8LL±0.8RSZ
4. 1.0DL+0.8LL±0.8WLX
5. 1.0DL+0.8LL±0.8WLZ
- 6.1.0(DL±RSX)
7. 1.0(DL±RSZ)
8. 1.0(DL±WLX)
9. 1.0(DL±WLZ)

[Signature]
V. JAGEN, B.E., M.E., (Struc), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

- DL - Dead Load
- LL - Live Load
- WLX - Wind Load in X-Direction
- WLZ - Wind Load in Z-Direction
- RSX - Earthquake Load in X-Direction
- RSZ - Earthquake Load in Z-Direction



V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-1 / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

3. MATERIAL GRADES

3.1.) CONCRETE

Grade M25 ($f_{ck}=25 \text{ N/mm}^2$) for isolated, combined foundation, Roof Beam & Slabs, Overhead water Tank and UG water Tank

Grade M40 ($f_{ck}=40 \text{ N/mm}^2$) for shear wall and columns.

Grade M15 ($f_{ck}=15 \text{ N/mm}^2$) for P.C.C below footing and plinth beam.

3.2.) REINFORCEMENT

Reinforcement bars of grade Fe500D/550D conform to IS 1786-2008.

4. DEFLECTION CRITERIA

1. Lateral Deflection(Wind)
Under transient Wind Load < Height/500
Sway at top of building
(As per IS456-2000 Cl.20.5)
2. Lateral Deflection(Seismic)
Storey Drift < 0.004 times Storey Height
As per IS 1893-2016(Part-1) Cl.7.11.1
3. Vertical Deflection of Beams and Slabs due to Gravity Loads
Total Deflection (DL+LL) < Span /250
Deflection including the effects
Of Temperature, Creep and
Shrinkage occurring after
Erection of partitions and the
Application of finishes < Span/350 or 20mm whichever is less
As per IS1456-2000 CL.23.2


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

5. STRUCTURAL SYSTEM

5.1. SUB-STRUCTURE (FOUNDATION)

Proposed Foundation system is isolated & combined footing and SBC considered for the design is 250kN/m^2 the founding depth is to be 2.0m as per soil report.

5.2. SUPER-STRUCTURE

The structural system for the super structure is R.C.C Beam with R.C.C Slab. The Slab thickness is to be 125mm to 150mm.

6. NOMINAL COVER TO REINFORCEMENT

Cover to reinforcement considered for various elements

Element	Exposure Condition	Cover as per exposure condition(mm)	Cover as per 2hrs rating per fire	Actual cover
Foundation/Raft	Moderate	50		50
Column	Mild	40	40	40
Shear Wall	Mild	30	30	30
Slab	Mild	20	35	20*
Beam	Mild	20	40	30*
Water Tank/UG Sump	Moderate	40		40

*Short fall of cover for the basic requirement of the fire resistance shall be managed through plastering

7. ANALYSIS METHODS

3D analysis of the structure is carried out using STAAD PRO 2023. For seismic analysis, response spectrum analysis is considered.

8. DESIGN METHODOLOGY

Structural members shall be designed for worst load combination of forces such as Axial force, Shear force, Bending Moment, torsion etc. RCDC and in-house spreadsheets will be used for design of structural elements.

All columns shall be designed for Minimum eccentricity, equal to the unsupported length of column/500 plus lateral dimension/30, subject to a minimum of 20mm.


V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841289154

9. CODES AND STANDARDS

The relevant Standards/codes used for the design of various elements and components of the building are given below

SL.NO.	CODE	DESCRIPTION
1.	IS 875(Part 1) 1987	Code of Practice for Design Loads (other than earthquake) for buildings and structures – Unit weights of buildings materials and stored material
2.	IS 875(Part 2) 1987	Code of Practice for Design Loads (other than earthquake) for buildings and structures – Imposed Loads
3.	IS 875(Part 3) 2015	Code of Practice for Design Loads (other than earthquake) for buildings and structures – Wind Loads
4.	IS 875(Part 5) 2015	Code of Practice for Design Loads (other than earthquake) for buildings and structures – Special Loads and Load combinations
5.	IS456-2000	Code of Practice for Plain and Reinforced Concrete
6.	IS 13920-2016	Ductile detailing of reinforced concrete structures subjected to seismic forces – Code of Practice
7.	IS 1904-1995	Code of Practice for design and construction of Shallow Foundation
8.	IS1080-1997	Code of Practice for design and construction of Shallow Foundation
9.	IS2950-1998	Code of Practice for design and construction of Raft Foundation
10.	SP16 – 1980	Design Aids for Reinforced Concrete to IS 456
11.	SP34	Handbook on concrete reinforcement and detailing


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

FOOTING DESIGN CALCULATIONS

Footing No	:	F1	
Column No	:	C1,C5,C29,C31,C33(300mmX800mm)	
Analysis No	:	1,5,31,33,35	
Concrete Grade	:	M25	N/sqmm
Steel Grade	:	Fe500	N/sqmm
Clear Cover	:	50	mm
Df	:	2M	
Dw	:	5.5M	

Density of Soil	=	18	kN/cum
Soil Bearing Capacity	=	250	kN/sqm
Permissible SBC Increase for EQ	=	25	%
Permissible SBC Increase for Wind	=	25	%
Live Load Reduction	=	0	%
Permissible area of loss of contact	=	0	%

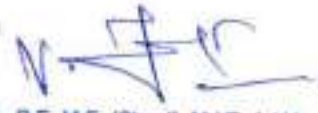
Design cross section by	:	Average pressure	
Footing Type	:	Pad	
Footing Size (LxBxD)	:	2650mmX2650mmX750mm	

Without considering Effect of Water Table

Footing Self Wt., F1	=	131.67	kN
Soil Weight, S1 Total	=	0.00	kN
Weight, W1	=	F1+S1 131.67	
	=		kN
Offset Along L(Loff)	=	925	mm
Offset Along B(Boff)	=	1175	mm

Check For Maximum Soil Pressure:

Critical Column No	=	C31	
Critical Analysis Load Combination	=	19	
Critical Load Combination	=	[5]:(LOAD1:DL) + (LOAD11:RS+Z)	
Pcomb P	=	1510.85	kN
P	=	Pcomb + W1 1642.52	
	=		kN
Mx	=	127.32	kNm
My	=	14.79	kNm
P/A	=	233.89	kN/sqm
Mx/Zx	=	41.05	kN/sqm
My/Zy	=	4.77	kN/sqm
Maximum Soil Pressure	=	279.71	kN/sqm


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-1 / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
S.B. RAMANIYAM GAURAVV - 2
BLOCK 2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

Allowable Soil Pressure	=	1.25x250	kN/sqm
	=	312.5	kN/sqm

Check For Minimum Soil Pressure:

Critical Column No	=	C29	
Critical Analysis Load Combination	=	21	
Critical Load Combination	=	[7]:(LOAD1:DL)+(LOAD13:WL(+X))	
Pcomb	=	1000.82	kN
P	=	Pcomb + W1	
P	=	1132.49	kN
Mx	=	23.78	kNm
My	=	2.78	kNm
P/A	=	161.27	kN/sqm
Mx/Zx	=	7.67	kN/sqm
My/Zy	=	0.9	kN/sqm
Minimum Soil Pressure	=	152.7	kN/sqm
	>	0	

Design For Bending:

Bottom Reinforcement Along L:

Critical Column No	=	C31	
Critical Analysis Load Combination	=	51	
Critical Load Combination	=	[79] : 1.5 (LOAD 1: DL)RS+Z)	+1.5(LOAD11:
Pu	=	2266.27	kN
Mux	=	190.97	kNm
Muy	=	22.18	kNm
P/A	=	322.72	kN/sqm
Mx/Zx	=	61.57	kN/sqm
My/Zy	=	7.15	kN/sqm
Deff	=	692	mm
Beff	=	2650	mm
SPu	=	384.29	kN/sqm
Mu	=	SPuXBXLoffXLoff/2	
	=	435.67	kNm
Pt	=	0.13	%
AstRqd(BM)	=	2385	sqmm


V. JAGEN, B.E.M.E.,(Struct), M.I.E.,A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

AstPrv(DistributedAcrossTotal Width) = 23-T12@125

= 2601 sqmm

Bottom Reinforcement Along B:

Critical Column No = C31

Critical Analysis Load Combination = 51

Critical Load Combination = [79] : 1.5 (LOAD 1: DL) +1.5 (LOAD 11:RS+Z)

Pu = 2266.27 kN

Mux = 190.97 kNm

Muy = 22.18 kNm

P/A = 322.72 kN/sqm

Mx/Zx = 61.57 kN/sqm

My/Zy = 7.15 kN/sqm

Deff = 676 mm

Leff = 2650 mm

SPu Mu = 329.87 kN/sqm

= $SPuXLXBoffXBoff/2$

= 603.44 kNm

Pt = 0.133 %

AstRqd(BM) = 2385 sqmm

AstPrv(DistributedAcrossTotal Length) = 23-T12@125

= 2601 sqmm



V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-1 / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

Design For Shear:

One Way Shear Along L:

Critical Section @d from Column Face	=	692	mm
Critical Column No	=	C31	
Critical Analysis Load Combination	=	51	
Critical Load Combination	=	[79]: 1.5 (LOAD 1: DL)RS+Z)	+1.5(LOAD11:
Pu	=	2266.27	kN
Mux	=	190.97	kNm
Muy	=	22.18	kNm
P/A	=	322.72	kN/sqm
Mx/Zx	=	61.57	kN/sqm
My/Zy	=	7.15	kN/sqm
Deff	=	692	mm
Beff	=	2650	mm
SPu	=	384.29	kN/sqm
Vu	=	SPuX(Loff-d)XB	
	=	237.28	kN
Tv	=	Vu/(BeffXDeff)	
	=	0.13	N/sqmm
Tc	=	0.27	N/sqmm
Tv	<	Tc	

One Way Shear Along B:

CriticalSection@dfromColumnFace	=	676	mm
CriticalColumnNo	=	C31	
CriticalAnalysisLoadCombination	=	51	
CriticalLoadCombination	=	[79]:1.5(LOAD1:DL)	+1.5 (LOAD 11:RS+Z)
Pu	=	2266.27	kN
Mux	=	190.97	kNm
Muy	=	22.18	kNm
P/A	=	322.72	kN/sqm
Mx/Zx	=	61.57	kN/sqm
My/Zy	=	7.15	kN/sqm
Deff	=	676	mm
Leff	=	2650	mm
SPu	=	329.87	kN/sqm


V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

V_u	=	$SP_u X (B_{eff} - d) X L$	
	=	436.20	kN
	=	$V_u / (L_{eff} X D_{eff})$	
T_v	=	0.24	N/sqmm
T_c	=	0.28	N/sqmm
T_v	<	T_c	

Design For Punching Shear:

Critical Section @ d/2 from Column Face	=	342 mm	
Critical Column No	=	C31	
Critical Analysis Load Combination	=	51	
Critical Load Combination	=	[79]: 1.5(Load1:DL)+1.5(Load11:RS+Z)	
P_u	=	2266.27	kN
M_{ux}	=	190.97	kNm
M_{uy}	=	22.18	kNm
P/A	=	322.72	kN/sqm
M_x/Z_x	=	61.57	kN/sqm
M_y/Z_y	=	7.15	kN/sqm
D_{eff}	=	684	mm
L_{eff}	=	1484	mm
B_{eff}	=	984	mm
Punching Perimeter	=	4936	mm
Punching Area	=	3376224	sqmm
SP_u	=	Average Pressure	
	=	322.72	kN/sqm

V_u	=	$SP_u X ((LXB) - (L_{eff} X B_{eff}))$	
	=	1795.02	kN
T_v	=	$V_u / \text{Punching Area}$	
	=	0.532	N/sqmm
T_c	=	1.094	N/sqmm
T_v	<	T_c	



V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

Load Transfer Check For Load Transfer From Column To Footing

Critical Column No	=	C31	
Critical Analysis Load Combination	=	51	
Critical Load Combination	=	[79]:1.5(Load1:DL) +1.5 (Load 11:RS+Z)	
Pu	=	2266.27	kN
A2	=	0.24	sqm
A1	=	12.54	sqm
BaseArea	=	7.02	sqm
A1	>	Base Area	
Thus,A1	=	7.02	
Modification Factor	=	Square Root(A1/A2) 2	<=
Square Root(A1/A2)	=	5.4083	
Thus, Modification Factor	=	2	
Concrete Bearing Capacity	=	0.45XFckXModificationFactorXColumnArea	
	=	5400	kN
Concrete Bearing Capacity	>	Pu, Hence Safe.	


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

FOOTING DESIGN CALCULATIONS

Footing No	:	F2	
Column No	:	C2,C3,C11,C28,C30,C32 (300 mm X 800 mm)	
Analysis No	:	2,3,11,30,32,34	
Concrete Grade	:	M25	N/sqmm
Steel Grade	:	Fe500	N/sqmm
Clear Cover	:	50	mm
Df	:	2 M	
Dw	:	5.5 M	

Density of Soil	=	18	kN/cum
Soil Bearing Capacity	=	250	kN/sqm
Permissible SBC Increase for EQ	=	25	%
Permissible SBC Increase for Wind	=	25	%
Live Load Reduction	=	0	%
Permissible area of loss of contact	=	0	%

Design cross section by	:	Average pressure	
Footing Type	:	Pad	
Footing Size (L x B x D)	:	2850mm X 2850mm X 800mm	
Without considering Effect of Water Table			

Footing Self Wt., F1	=	162.45	kN
Soil Weight, S1	=	0.00	kN
Total Weight, W1	=	F1 + S1	kN
	=	162.45	
Offset Along L (Loff)	=	1025	mm
Offset Along B (Boff)	=	1275	mm

Check For Maximum Soil Pressure:

Critical Column No	=	C30	
Critical Analysis Load Combination	=	19	
Critical Load Combination	=	[5] : (LOAD 1: DL) +(LOAD 11: RS+Z)	
PcombP	=	1818.33	kN
P	=	Pcomb + W11980.78	kN
	=		
Mx	=	158.32	kNm
My	=	14.59	kNm
P/A	=	243.86	kN/sqm
Mx/Zx	=	41.04	kN/sqm
My/Zy	=	3.78	kN/sqm


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
CMDA REGN NCS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

Maximum Soil Pressure	=	288.68	kN/sqm
Allowable Soil Pressure	=	1.25x250	kN/sqm
	=	312.5	kN/sqm

Check For Minimum Soil Pressure:

Critical Column No	=	C11	
Critical Analysis Load Combination	=	23	
Critical Load Combination	=	[9] : (LOAD 1: DL) + (LOAD 15: WL(+Z))	
Pcomb	=	1118.69	kN
P	=	Pcomb + W1	
P	=	1281.14	kN
Mx	=	29.19	kNm
My	=	-1.41	kNm
P/A	=	157.73	kN/sqm
Mx/Zx	=	7.57	kN/sqm
My/Zy	=	-0.37	kN/sqm
Minimum Soil Pressure	=	149.8	kN/sqm
	>	0	

Design For Bending:

Bottom Reinforcement Along L:

Critical Column No	=	C30	
Critical Analysis Load Combination	=	51	
Critical Load Combination	=	[79] : 1.5 (LOAD 1: DL) +1.5 (LOAD 11: RS+Z)	
Pu	=	2727.49	kN
Mux	=	237.48	kNm
Muy	=	21.89	kNm
P/A	=	335.79	kN/sqm
Mx/Zx	=	61.55	kN/sqm
My/Zy	=	5.67	kN/sqm
Deff	=	742	mm
Beff	=	2850	mm
SPu	=	397.35	kN/sqm
Mu	=	SPu X B X Loff X Loff / 2	



V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-1 / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.

Pt	=	594.89	kNm
Ast Rqd (BM)	=	0.129	%
Ast Prv (Distributed Across Total Width)	=	2736	sqmm
	=	27 - T12 @ 110	
	=	3054	sqmm

Bottom Reinforcement Along B:

Critical Column No	=	C3	
Critical Analysis Load Combination	=	51	
Critical Load Combination	=	[79] : 1.5 (LOAD 1: DL) + 1.5 (LOAD 11: RS+Z)	
Pu	=	2740.6	kN
Mux	=	193.82	kNm
Muy	=	34.21	kNm
P/A	=	337.41	kN/sqm
Mx/Zx	=	50.24	kN/sqm
My/Zy	=	8.87	kN/sqm
Deff	=	726	mm
Leff	=	2850	mm
SPu	=	346.28	kN/sqm
Mu	=	SPu X L X Boff X Boff / 2	kNm
	=	802.16	
Pt	=	0.132	%
Ast Rqd (BM)	=	2736	sqmm
Ast Prv (Distributed Across Total Length)	=	27 - T12 @ 110	
	=	3054	sqmm


V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

Design For Shear:

One Way Shear Along L:

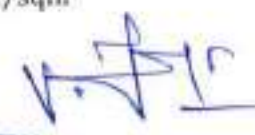
Critical Section @ d from Column Face

	=	742	mm
Critical Column No	=	C30	
Critical Analysis Load Combination	=	51	
Critical Load Combination	=	[79] : 1.5 (LOAD 1: DL) + 1.5 (LOAD 11: RS+Z)	
Pu	=	2727.49	kN
Mux	=	237.48	kNm
Muy	=	21.89	kNm
P/A	=	335.79	kN/sqm
Mx/Zx	=	61.55	kN/sqm
My/Zy	=	5.67	kN/sqm
Deff	=	742	mm
Beff	=	2850	mm
SPu	=	397.35	kN/sqm
Vu	=	SPu X (Loff - d) X B	
	=	320.48	kN
	=	Vu / (Beff X Deff)	
Tv			
	=	0.15	N/sqmm
Tc	=	0.27	N/sqmm
Tv	<	Tc	

One Way Shear Along B:

Critical Section @ d from Column Face

	=	726	mm
Critical Column No	=	C351	
Critical Analysis Load Combination	=		
Critical Load Combination	=	[79] : 1.5 (LOAD 1: DL) + 1.5 (LOAD 11: RS+Z)	
Pu	=	2740.6	kN
Mux	=	193.82	kNm
Muy	=	34.21	kNm
P/A	=	337.41	kN/sqm
Mx/Zx	=	50.24	kN/sqm
My/Zy	=	8.87	kN/sqm


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.

Deff	=	726	mm
Leff	=	2850	mm
SPu	=	346.28	kN/sqm
Vu	=	SPu X (Boff - d) X L	
	=	541.80	kN
Tv	=	Vu / (Leff X Deff)	
	=	0.26	N/sqmm
Tc	=	0.27	N/sqmm
Tv	<	Tc	

Design For Punching Shear:

Critical Section @ d/2 from Column Face

	=	367	mm
Critical Column No	=	C351	
Critical Analysis Load Combination	=		
Critical Load Combination	=	[79] : 1.5 (LOAD 1: DL) + 1.5 (LOAD 11: RS+Z)	
Pu	=	2740.6	kN
Mux	=	193.82	kNm
Muy	=	34.21	kNm
P/A	=	337.41	kN/sqm
Mx/Zx	=	50.24	kN/sqm
My/Zy	=	8.87	kN/sqm
Deff	=	734	mm
Leff	=	1534	mm
Beff	=	1034	mm
Punching Perimeter	=	5136	mm
Punching Area	=	3769824	sqmm
SPu	=	Average Pressure	
	=	337.41	kN/sqm
Vu	=	SPu X [(L X B) - (Leff X Beff)]	
	=	2205.42	kN
Tv	=	Vu / Punching Area	
	=	0.585	N/sqmm
Tc	=	1.094	N/sqmm
Tv	<	Tc	


V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

Load Transfer Check For Load Transfer From Column To Footing

Critical Column No	=	C3	
Critical Analysis Load Combination	=	51	
Critical Load Combination	=	[79] : 1.5 (LOAD 1: DL) +1.5 (LOAD 11: RS+Z)	
Pu	=	2740.6	kN
A2	=	0.24	sqm
A1	=	14	sqm
Base Area	=	8.12	sqm
A1	>	Base Area	
Thus, A1	=	8.12	
Modification Factor	=	Square Root(A1/A2) 2 <=	
Square Root(A1/A2)	=	5.8166	
Thus, Modification Factor	=	2	
Concrete Bearing Capacity	=	0.45 X Fck X Modification Factor X ColumnArea	
	=	5400	kN
Concrete Bearing Capacity	>	Pu, Hence Safe,	


V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

FOOTING DESIGN CALCULATIONS

Footing No	:	F3	
Column No	:	C4,C6,C7,C17,C22,C23,C24,C27	(300 mm X 800 mm)
Analysis No	:	4,6,7,18,24,25,26,29	
Concrete Grade	:	M25	N/sqmm
Steel Grade	:	Fe500	N/sqmm
Clear Cover	:	50	mm
Df	:	2 M	
Dw	:	5.5 M	

Density of Soil	=	18	kN/cum
Soil Bearing Capacity	=	250	kN/sqm
Permissible SBC Increase for EQ	=	25	%
Permissible SBC Increase for Wind	=	25	%
Live Load Reduction	=	0	%
Permissible area of loss of contact	=	0	%

Design cross section by	:	Average pressure	
Footing Type	:	Pad	
Footing Size (L x B x D)	:	3100mm X 3100mm X 850mm	

Without considering Effect of Water Table

Footing Self Wt., F1	=	204.21	kN
Soil Weight, S1	=	0.00	kN
Total Weight, W1	=	F1 + S1	
	=	204.21	kN
Offset Along L (Loff)	=	1150	mm
Offset Along B (Boff)	=	1400	mm

Check For Maximum Soil Pressure:

Critical Column No	=	C24	
Critical Analysis Load Combination	=	25	
Critical Load Combination	=	[11] : (LOAD 1: DL) +0.8 (LOAD 2: LL) +0.8 (LOAD 9: RS+X)	
Pcomb	=	2185.45	kN
P	=	Pcomb + W1	
P	=	2389.66	kN
Mx	=	87.41	kNm
My	=	9.14	kNm
P/A	=	248.66	kN/sqm



V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

M_x/Z_x	=	17.61	kN/sqm
M_y/Z_y	=	1.84	kN/sqm
Maximum Soil Pressure	=	268.11	kN/sqm
Allowable Soil Pressure	=	1.25x250	kN/sqm
	=	312.5	kN/sqm

Check For Minimum Soil Pressure:

Critical Column No	=	C4	
Critical Analysis Load Combination	=	23	
Critical Load Combination	=	[9] : (LOAD 1: DL) +(LOAD 15: WL(+Z))	
Pcomb	=	1305.18	kN
P	=	Pcomb + W1	
P	=	1509.39	kN
M_x	=	22.42	kNm
M_y	=	1.13	kNm
P/A	=	157.06	kN/sqm
M_x/Z_x	=	4.52	kN/sqm
M_y/Z_y	=	0.23	kN/sqm
Minimum Soil Pressure	=	152.32	kN/sqm
	>	0	

Design For Bending:

Bottom Reinforcement Along L:

Critical Column No	=	C23	
Critical Analysis Load Combination	=	49	
Critical Load Combination	=	[77] : 1.5 (LOAD 1: DL) +1.5 (LOAD 9: RS+X)	
Pu	=	3126.24	kN
Mux	=	182.89	kNm
Muy	=	18.85	kNm
P/A	=	325.31	kN/sqm
M_x/Z_x	=	36.84	kN/sqm
M_y/Z_y	=	3.8	kN/sqm
Deff	=	792	mm
Beff	=	3100	mm
SPu	=	362.15	kN/sqm
Mu	=	SPu X B X Loff X Loff / 2	
	=	742.35	kNm



V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

Pt	=	0.129	%
Ast Rqd (BM)	=	3162	sqmm
Ast Prv (Distributed Across Total Width)	=	19 - T16 @ 175	
	=	3820	sqmm

Bottom Reinforcement Along B:

Critical Column No	=	C24	
Critical Analysis Load Combination	=	4	
Critical Load Combination	=	[44] : 1.5 (LOAD 1: DL) + 1.5 (LOAD 2: LL)	

Pu	=	3257.11	kN
Mux	=	0.82	kNm
Muy	=	1.46	kNm
P/A	=	338.93	kN/sqm
Mx/Zx	=	0.17	kN/sqm
My/Zy	=	0.29	kN/sqm

Deff	=	776	mm
Leff	=	3100	mm
SPu	=	339.22	kN/sqm
Mu	=	SPu X L X Boff X Boff / 2	kNm
	=	1030.56	

Pt	=	0.131	%
Ast Rqd (BM)	=	3162	sqmm
Ast Prv (Distributed Across Total Length)	=	19 - T16 @ 175	
	=	3820	sqmm


V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

Design For Shear:

One Way Shear Along L:

Critical Section @ d from Column Face

	=	792	mm
Critical Column No	=	C23	
Critical Analysis Load Combination	=	49	
Critical Load Combination	=	[77] : 1.5 (LOAD 1: DL) +1.5 (LOAD 9: RS+X)	
Pu	=	3126.24	kN
Mux	=	182.89	kNm
Muy	=	18.85	kNm
P/A	=	325.31	kN/sqm
Mx/Zx	=	36.84	kN/sqm
My/Zy	=	3.8	kN/sqm
Deff	=	792	mm
Beff	=	3100	mm
SPu	=	362.15	kN/sqm
Vu	=	SPu X (Loff - d) X B	
	=	401.91	kN
Tv	=	Vu / (Beff X Deff)	
	=	0.16	N/sqmm
Tc	=	0.27	N/sqmm
Tv	<	Tc	

One Way Shear Along B:

Critical Section @ d from Column Face

	=	776	mm
Critical Column No	=	C24	
Critical Analysis Load Combination	=	4	
Critical Load Combination	=	[44] : 1.5 (LOAD 1: DL) +1.5 (LOAD 2: LL)	
Pu	=	3257.11	kN
Mux	=	0.82	kNm
Muy	=	1.46	kNm
P/A	=	338.93	kN/sqm
Mx/Zx	=	0.17	kN/sqm


V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841260151

M_y/Z_y	=	0.29	kN/sqm
D_{eff}	=	776	mm
L_{eff}	=	3100	mm
SP_u	=	339.22	kN/sqm
V_u	=	$SP_u \times (B_{eff} - d) \times L$	
	=	656.19	kN
T_v	=	$V_u / (L_{eff} \times D_{eff})$	
	=	0.27	N/sqmm
T_c	=	0.27	N/sqmm
T_v	<	T_c	

Design For Punching Shear:

Critical Section @ $d/2$ from Column Face

	=	392	mm
Critical Column No	=	C24	
Critical Analysis Load Combination	=	4	
Critical Load Combination	=	[44] : 1.5 (LOAD 1: DL) + 1.5 (LOAD 2: LL)	
P_u	=	3257.11	kN
M_{ux}	=	0.82	kNm
M_{uy}	=	1.46	kNm
P/A	=	338.93	kN/sqm
M_x/Z_x	=	0.17	kN/sqm
M_y/Z_y	=	0.29	kN/sqm
D_{eff}	=	784	mm
L_{eff}	=	1584	mm
B_{eff}	=	1084	mm
Punching Perimeter	=	5336	mm
Punching Area	=	4183424	sqmm
SP_u	=	Average Pressure	
	=	338.93	kN/sqm
V_u	=	$SP_u \times ((L \times B) - (L_{eff} \times B_{eff}))$	
	=	2675.15	kN
T_v	=	$V_u / \text{Punching Area}$	
	=	0.639	N/sqmm
T_c	=	1.094	N/sqmm
T_v	<	T_c	



V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.

Load Transfer Check For Load Transfer From Column To Footing

Critical Column No	=	C24	
Critical Analysis Load Combination	=	4	
Critical Load Combination	=	[44] : 1.5 (LOAD 1: DL) +1.5 (LOAD 2: LL)	
Pu	=	3257.11	kN
A2	=	0.24	sqm
A1	=	15.54	sqm
Base Area	=	9.61	sqm
A1	>	Base Area	
Thus, A1	=	9.61	
Modification Factor	=	Square Root(A1/A2) 2 < =	
Square Root(A1/A2)	=	6.3278	
Thus, Modification Factor	=	2	
Concrete Bearing Capacity	=	0.45 X Fck X Modification Factor X ColumnArea	
	=	5400	kN
Concrete Bearing Capacity	>	Pu, Hence Safe.	



V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

FOOTING DESIGN CALCULATIONS

Footing No	:	F3A	
Column No	:	C12	(300 mm X 800 mm)
Analysis No	:	12	
Concrete Grade	:	M25	N/sqmm
Steel Grade	:	Fe500	N/sqmm
Clear Cover	:	50	mm
Df	:	2 M	
Dw	:	5.5 M	

Density of Soil	=	18	kN/cum
Soil Bearing Capacity	=	250	kN/sqm
Permissible SBC Increase for EQ	=	25	%
Permissible SBC Increase for Wind	=	25	%
Live Load Reduction	=	0	%
Permissible area of loss of contact	=	0	%

Design cross section by : Average pressure

Footing Type : Pad
Footing Size (L x B x D) : 3200mm X 2750mm X 850mm
Without considering Effect of Water Table

Footing Self Wt., F1	=	187.00	kN
Soil Weight, S1	=	0.00	kN
Total Weight, W1	=	F1 + S1	
	=	187	kN
Offset Along L (Loff)	=	1200	mm
Offset Along B (Boff)	=	1225	mm

Check For Maximum Soil Pressure:

Critical Analysis Load Combination	=	25	
Critical Load Combination	=	[11] : (LOAD 1: DL) +0.8 (LOAD 2: LL) +0.8 (LOAD 9: RS+X)	
Pcomb	=	2219.73	kN
P	=	Pcomb + W1	
P	=	2406.73	kN
Mx	=	76.28	kNm
My	=	7.06	kNm
P/A	=	273.49	kN/sqm
Mx/Zx	=	16.25	kN/sqm


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

My/Zy	=	1.75	kN/sqm
Maximum Soil Pressure	=	291.49	kN/sqm
Allowable Soil Pressure	=	1.25x250	kN/sqm
	=	312.5	kN/sqm

Check For Minimum Soil Pressure:

Critical Analysis Load Combination	=	21	
Critical Load Combination	=	[7] : (LOAD 1: DL) +(LOAD 13: WL(+X))	
Pcomb	=	1697.26	kN
P	=	Pcomb + W1	
P	=	1884.26	kN
Mx	=	30.98	kNm
My	=	-1.3	kNm
P/A	=	214.12	kN/sqm
Mx/Zx	=	6.6	kN/sqm
My/Zy	=	-0.32	kN/sqm
Minimum Soil Pressure	=	207.2	kN/sqm
	>	0	

Design For Bending:

Bottom Reinforcement Along L:

Critical Analysis Load Combination	=	49	
Critical Load Combination	=	[77] : 1.5 (LOAD 1: DL) +1.5 (LOAD 9: RS+X)	
Pu	=	3189.28	kN
Mux	=	145.43	kNm
Muy	=	13.65	kNm
P/A	=	362.42	kN/sqm
Mx/Zx	=	30.99	kN/sqm
My/Zy	=	3.38	kN/sqm
Deff	=	792	mm
Beff	=	2750	mm
SPu	=	393.4	kN/sqm
Mu	=	SPu X B X Loff X Loff / 2	
	=	778.94	kNm
Pt	=	0.129	%
Ast Rqd (BM)	=	2805	sqmm

V. JAGEN, B.E.,M.E.,(Struct), M.I.E.,A.I.V.,
CMDA REGN NOS -

SE / GR-1 / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER

3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.

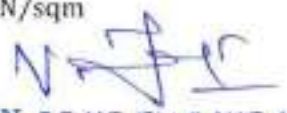
Mobile: 9941259154

Ast Prv (Distributed Across Total Width)	=	17 - T16 @ 175	
	=	3418	sqmm
<u>Bottom Reinforcement Along B:</u>			
Critical Analysis Load Combination	=	49	
Critical Load Combination	=	[77] : 1.5 (LOAD 1: DL) +1.5 (LOAD 9: RS+X)	
Pu	=	3189.28	kN
Mux	=	145.43	kNm
Muy	=	13.65	kNm
	=	362.42	kN/sqm
P/A			
Mx/Zx	=	30.99	kN/sqm
My/Zy	=	3.38	kN/sqm
Deff	=	776	mm
Leff	=	3200	mm
SPu	=	365.8	kN/sqm
Mu	=	SPu X L X Boff X Boff / 2	
	=	878.29	kNm
Pt	=	0.131	%
Ast Rqd (BM)	=	3264	sqmm
Ast Prv (Distributed Across Total Length)	=	20 - T16 @ 175	
	=	4021	sqmm

Design For Shear:

One Way Shear Along L:

Critical Section @ d from Column Face			
	=	792	mm
Critical Analysis Load Combination	=	49	
Critical Load Combination	=	[77] : 1.5 (LOAD 1: DL) +1.5 (LOAD 9: RS+X)	
Pu	=	3189.28	kN
Mux	=	145.43	kNm
Muy	=	13.65	kNm
P/A	=	362.42	kN/sqm
Mx/Zx	=	30.99	kN/sqm
My/Zy	=	3.38	kN/sqm


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

Deff	=	792	mm
Beff	=	2750	mm
SPu	=	393.4	kN/sqm
Vu	=	SPu X (Loff - d) X B	
	=	441.40	kN
Tv	=	Vu / (Beff X Deff)	
	=	0.20	N/sqmm
Tc	=	0.27	N/sqmm
Tv	<	Tc	

One Way Shear Along B:

Critical Section @ d from Column Face

	=	776	mm
Critical Analysis Load Combination	=	49	
Critical Load Combination	=	[77] : 1.5 (LOAD 1: DL) +1.5 (LOAD 9: RS+X)	
Pu	=	3189.28	kN
Mux	=	145.43	kNm
Muy	=	13.65	kNm
P/A	=	362.42	kN/sqm
Mx/Zx	=	30.99	kN/sqm
My/Zy	=	3.38	kN/sqm

Deff	=	776	mm
Leff	=	3200	mm
SPu	=	365.8	kN/sqm
Vu	=	SPu X (Boff - d) X L	
	=	525.58	kN
Tv	=	Vu / (Leff X Deff)	
	=	0.21	N/sqmm
Tc	=	0.27	N/sqmm
Tv	<	Tc	


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMOA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

Design For Punching Shear

Critical Section @ $d/2$ from Column Face

	=	392	mm
Critical Analysis Load Combination	=	49	
Critical Load Combination	=	[77] : 1.5 (LOAD 1: DL) + 1.5 (LOAD 9: RS+X)	
Pu	=	3189.28	kN
Mux	=	145.43	kNm
Muy	=	13.65	kNm
P/A	=	362.42	kN/sqm
Mx/Zx	=	30.99	kN/sqm
My/Zy	=	3.38	kN/sqm
Deff	=	784	mm
Leff	=	1584	mm
Beff	=	1084	mm
Punching Perimeter	=	5336	mm
Punching Area	=	4183424	sqmm
SPu	=	Average Pressure	
	=	362.42	kN/sqm
Vu	=	SPu X ((L X B) - (Leff X Beff))	
	=	2566.99	kN
Tv	=	Vu / Punching Area	
	=	0.614	N/sqmm
Tc	=	1.094	N/sqmm
Tv	<	Tc	

Load Transfer Check For Load Transfer From Column To Footing

Critical Analysis Load Combination	=	49	
Critical Load Combination	=	[77] : 1.5 (LOAD 1: DL) + 1.5 (LOAD 9: RS+X)	
Pu	=	3189.28	kN
A2	=	0.24	sqm
A1	=	15.54	sqm
Base Area	=	8.8	sqm
A1	>	Base Area	
Thus, A1	=	8.8	


V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-1 / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

Modification Factor = $\text{SquareRoot}(A1/A2) \geq 1$
 SquareRoot(A1/A2) = 6.0553
 Thus, Modification Factor = 2
 Concrete Bearing Capacity = $0.45 \times F_{ck} \times \text{Modification Factor} \times \text{ColumnArea}$
 = 5400 kN
 Concrete Bearing Capacity > P_u , Hence Safe.



V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841259154

FOOTING DESIGN CALCULATIONS

Footing No	:	F4	
Column No	:	C8,C9,C10,C13,C18,C25(300mmX800mm)	
Analysis No	:	8,9,10,13,19,27	
Concrete Grade	:	M25	N/sqmm
Steel Grade	:	Fe500	N/sqmm
Clear Cover	:	50	mm
Df	:	2M	
Dw	:	5.5M	
Density of Soil	=	18	kN/cum
Soil Bearing Capacity	=	250	kN/sqm
Permissible SBC Increase for EQ	=	25	%
Permissible SBC Increase for Wind	=	25	%
Live Load Reduction	=	0	%
Permissible area of loss of contact	=	0	%

Design cross section by	:	Average pressure
Footing Type	:	Pad
Footing Size (LxBxD)	:	3400mmX3400mmX925mm

Without considering Effect of Water Table

Footing Self Wt., F1	=	267.32	kN
Soil Weight, S1	=	0.00	kN
Total Weight, W1	=	F1+S1	
	=	267.32	kN
Offset Along L (Loff)	=	1300	mm
Offset Along B (Boff)	=	1550	mm

Check For Maximum Soil Pressure:

Critical Column No	=	C10	
Critical Analysis Load Combination	=	27	
Critical Load Combination	=	[13]:(LOAD1:DL)+0.8(LOAD2:LL)+0.8 (LOAD11:RS+Z)	
Pcomb	=	2581.56	kN
P	=	Pcomb +W1	
P	=	2848.88	kN
Mx	=	113.14	kNm
My	=	5.66	kNm
P/A	=	246.44	kN/sqm
Mx/Zx	=	17.27	kN/sqm


V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-1 / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

My/Zy	=	0.86	kN/sqm
Maximum Soil Pressure	=	264.58	kN/sqm
Allowable Soil Pressure	=	1.25x250	kN/sqm
	=	312.5	kN/sqm

Check For Minimum Soil Pressure:

Critical Column No	=	C18	
Critical Analysis Load Combination	=	21	
Critical Load Combination	=	[7]:(LOAD1:DL)+(LOAD13:WL(+X))	
Pcomb	=	1777.99	kN
P	=	Pcomb + W1	
P	=	2045.31	kN
Mx	=	26.09	kNm
My	=	-0.6	kNm
P/A	=	176.93	kN/sqm
Mx/Zx	=	3.98	kN/sqm
My/Zy	=	-0.09	kN/sqm
Minimum Soil Pressure	=	172.86	kN/sqm
	>	0	

Design For Bending:

Bottom Reinforcement Along L:

Critical Column No	=	C8	
Critical Analysis Load Combination	=	49	
Critical Load Combination	=	[77]: 1.5 (LOAD 1: DL) + 1.5 (LOAD 9: RS+X)	
Pu	=	3676.63	kN
Mux	=	150.1	kNm
Muy	=	16.09	kNm
P/A	=	318.05	kN/sqm
Mx/Zx	=	22.91	kN/sqm
My/Zy	=	2.46	kN/sqm
Deff	=	867	mm
Beff	=	3400	mm
SPu	=	340.96	kN/sqm
Mu	=	SPuXBXLoffXLoff/2	
	=	979.58	kNm
Pt	=	0.128	%



V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841259154

AstRqd(BM)	=	3774	sqmm
AstPrv[DistributedAcrossTotal Width]	=	24-T16@150	
	=	4825	sqmm

Bottom Reinforcement Along B:

Critical Column No	=	C10	
Critical Analysis Load Combination	=	4	
Critical Load Combination	=	[44]:1.5(Load1:DL)+1.5(Load2:LL)	
Pu	=	3737.89	kN
Mux	=	2.23	kNm
Muy	=	-9.56	kNm
P/A	=	323.35	kN/sqm
Mx/Zx	=	0.34	kN/sqm
My/Zy	=	-1.46	kN/sqm
Deff	=	851	mm
Leff	=	3400	mm
SPu Mu	=	324.81	kN/sqm
	=	SPuXLXBoffXBoff/2	
	=	1326.59	kNm
Pt	=	0.13	%
AstRqd(BM)	=	3774	sqmm
AstPrv[DistributedAcrossTotal Length]	=	24-T16@150	
	=	4825	sqmm


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

Design For Shear:

One Way Shear Along L:

Critical Section @ d from Column Face

	=	867	mm
Critical Column No	=	C8	
Critical Analysis Load Combination	=	49	
Critical Load Combination	=	[77]: 1.5 (LOAD 1: DL) + 1.5 (LOAD 9: RS+X)	
Pu	=	3676.63	kN
Mux	=	150.1	kNm
Muy	=	16.09	kNm
P/A	=	318.05	kN/sqm
Mx/Zx	=	22.91	kN/sqm
My/Zy	=	2.46	kN/sqm
Deff	=	867	mm
Beff	=	3400	mm
SPu	=	340.96	kN/sqm
Vu	=	SPuX(Loff-d)XB	
	=	501.96	kN
Tv	=	Vu/(BeffXDeff)	
	=	0.17	N/sqmm
Tc	=	0.27	N/sqmm
Tv	<	Tc	

OneWayShearAlongB:

Critical Section @ d from Column Face

	=	851	mm
Critical Column No	=	C10	
Critical Analysis Load Combination	=	4	
Critical Load Combination	=	[44]: 1.5 (LOAD 1: DL) + 1.5 (LOAD 2: LL)	
Pu	=	3737.89	kN
Mux	=	2.23	kNm
Muy	=	-9.56	kNm
P/A	=	323.35	kN/sqm


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-1 / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

Mx/Zx	=	0.34	kN/sqm
My/Zy	=	-1.46	kN/sqm
Deff	=	851	mm
Leff	=	3400	mm
SPu	=	324.81	kN/sqm
Vu	=	SPuX(Boff-d)XL	
	=	771.94	kN
Tv	=	Vu/(LeffXDeff)	
	=	0.27	N/sqmm
Tc	=	0.27	N/sqmm
Tv	<	Tc	

DesignForPunching Shear:

CriticalSection@d/2fromColumnFace

	=	430	mm
CriticalColumnNo	=	C10	
CriticalAnalysisLoadCombination	=	4	
CriticalLoadCombination	=	[44]:1.5(LOAD1:DL)+1.5(LOAD2:LL)	
Pu	=	3737.89	kN
Mux	=	2.23	kNm
Muy	=	-9.56	kNm
P/A	=	323.35	kN/sqm
Mx/Zx	=	0.34	kN/sqm
My/Zy	=	-1.46	kN/sqm
Deff	=	859	mm
Leff	=	1659	mm
Beff	=	1159	mm
PunchingPerimeter	=	5636	mm
PunchingArea	=	4841324	sqmm
SPu	=	AveragePressure	
	=	323.35	kN/sqm
Vu	=	SPuX((LXB)-(LeffXBeff))	
	=	3116.17	kN
Tv	=	Vu/PunchingArea	
	=	0.644	N/sqmm
Tc	=	1.094	N/sqmm
Tv	<	Tc	



V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 984000454

Load Transfer Check For Load Transfer From Column To Footing

Critical Column No	=	C10	
Critical Analysis Load Combination	=	4	
Critical Load Combination	=	[44]: 1.5(LOAD1:DL) +1.5(LOAD2:LL)	
Pu	=	3737.89	kN
A2	=	0.24	sqm
A1	=	18	sqm
Base Area	=	11.56	sqm
A1	>	BaseArea	
Thus,A1	=	11.56	
Modification Factor	=	SquareRoot(A1/A2) 2 <=	
Square Root(A1/A2)	=	6.9402	
Thus, Modification Factor	=	2	
Concrete Bearing Capacity	=	0.45XfckXModificationFactorXColumnArea	
	=	5400	kN
Concrete Bearing Capacity	>	Pu, Hence Safe.	


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-1 / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

FOOTING DESIGN CALCULATIONS

Footing No	:	F5	
Column No	:	C26	(300mmX800mm)
Analysis No	:	28	
Concrete Grade	:	M25	N/sqmm
Steel Grade	:	Fe500	N/sqmm
Clear Cover	:	50	mm
Df	:	2M	
Dw	:	5.5M	

Density of Soil	=	18	kN/cum
Soil Bearing Capacity	=	250	kN/sqm
Permissible SBC Increase for EQ	=	25	%
Permissible SBC Increase for Wind	=	25	%
Live Load Reduction	=	0	%
Permissible area of loss of contact	=	0	%

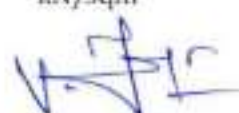
Design cross section by	:	Average pressure	
Footing Type	:	Pad	
Footing Size (L x B x D)	:	3650mmX3650mmX	1000mm

Without considering Effect of Water Table

Footing Self Wt., F1	=	333.06	kN
Soil Weight, S1	=	0.00	kN
Total Weight, W1	=	F1+S1	
	=	333.06	kN
Offset Along L (Loff)	=	1425	mm
Offset Along B (Boff)	=	1675	mm

Check For Maximum Soil Pressure:

Critical Analysis Load Combination	=	25	
Critical Load Combination	=	[11]:(LOAD1:DL)+0.8(LOAD2:LL)+0.8 (LOAD9:R5+X)	
Pcomb	=	2945.92	kN
P	=	Pcomb + W1	
P	=	3278.98	kN
Mx	=	78.61	kNm
My	=	7.19	kNm
P/A	=	246.12	kN/sqm
Mx/Zx	=	9.7	kN/sqm
My/Zy	=	0.89	kN/sqm
Maximum Soil Pressure	=	256.71	kN/sqm


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-1 / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9840004444

Allowable Soil Pressure	=	1.25x250	kN/sqm
	=	312.5	kN/sqm

Check For Minimum Soil Pressure:

Critical Analysis Load Combination	=	21	
Critical Load Combination	=	[7]:(LOAD1:DL)+(LOAD13:WL(+X))	
Pcomb	=	2288.42	kN
P	=	Pcomb + W1	
P	=	2621.48	kN
Mx	=	19.94	kNm
My	=	-0.98	kNm
P/A	=	196.77	kN/sqm
Mx/Zx	=	2.46	kN/sqm
My/Zy	=	-0.12	kN/sqm
Minimum Soil Pressure	=	194.19	kN/sqm
	>	0	

Design For Bending:

Bottom Reinforcement Along L:

Critical Analysis Load Combination	=	49	
Critical Load Combination	=	[77]: 1.5 (LOAD 1: DL) + 1.5 (LOAD 9: RS+X)	
Pu	=	4150.05	kN
Mux	=	154.49	kNm
Muy	=	13.63	kNm
P/A	=	311.51	kN/sqm
Mx/Zx	=	19.06	kN/sqm
My/Zy	=	1.68	kN/sqm
Deff	=	942	mm
Beff	=	3650	mm
SPu	=	330.57	kN/sqm
Mu	=	SPuXBXLoffXLoff/2	
	=	1225.05	kNm
Pt	=	0.127	%
AstRqd(BM)	=	4380	sqmm


V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

AstPrv(DistributedAcrossTotal Width) = 26-T16@150
= 5228 sqmm

Bottom Reinforcement Along B:

CriticalAnalysisLoadCombination = 49
CriticalLoadCombination = [77]: 1.5 (LOAD 1: DL) + 1.5 (LOAD 9: RS+X)

Pu = 4150.05 kN
Mux = 154.49 kNm
Muy = 13.63 kNm
P/A = 311.51 kN/sqm
Mx/Zx = 19.06 kN/sqm
My/Zy = 1.68 kN/sqm

Deff = 926 mm
Leff = 3650 mm
SPu = 313.19 kN/sqm
Mu = SPuXLXBoffXBoff/2
= 1603.61 kNm
Pt = 0.13 %
AstRqd(BM) = 4380 sqmm

AstPrv(DistributedAcross Total Length) = 26-T16@150
= 5228 sqmm

Design For Shear:

OneWayShearAlongL:

CriticalSection@dfromColumnFace = 942 mm

CriticalAnalysisLoadCombination = 49
CriticalLoadCombination = [77]: 1.5 (LOAD 1: DL) + 1.5 (LOAD 9: RS+X)

Pu = 4150.05 kN
Mux = 154.49 kNm
Muy = 13.63 kNm
P/A = 311.51 kN/sqm
Mx/Zx = 19.06 kN/sqm
My/Zy = 1.68 kN/sqm


V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAIURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

Deff	=	942	mm
Beff	=	3650	mm
SPu	=	330.57	kN/sqm
Vu	=	SPuX(Loff-d)XB	
	=	582.78	kN
Tv	=	Vu/(BeffXDeff)	
	=	0.17	N/sqmm
Tc	=	0.27	N/sqmm
Tv	<	Tc	

OneWayShearAlongB:

CriticalSection@dfromColumnFace

	=	926	mm
CriticalAnalysisLoadCombination	=	49	
CriticalLoadCombination	=	[77]:1.5(Load1:DL) +1.5(Load9:RS+X)	
Pu	=	4150.05	kN
Mux	=	154.49	kNm
Muy	=	13.63	kNm
P/A	=	311.51	kN/sqm
Mx/Zx	=	19.06	kN/sqm
My/Zy	=	1.68	kN/sqm

Deff	=	926	mm
Leff	=	3650	mm
SPu	=	313.19	kN/sqm
Vu	=	SPu X (Boff - d) X L	
	=	856.21	kN
Tv	=	Vu/(LeffXDeff)	
	=	0.25	N/sqmm
Tc	=	0.27	N/sqmm
Tv	<	Tc	



V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-8, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

DesignForPunching Shear:

CriticalSection@d/2fromColumnFace

	=	467	mm
CriticalAnalysisLoadCombination	=	49	
CriticalLoadCombination	=	[77] : 1.5 (LOAD 1: DL) +1.5 (LOAD 9:RS+X)	
Pu	=	4150.05	kN
Mux	=	154.49	kNm
Muy	=	13.63	kNm
P/A	=	311.51	kN/sqm
Mx/Zx	=	19.06	kN/sqm
My/Zy	=	1.68	kN/sqm
Deff	=	934	mm
Leff	=	1734	mm
Beff	=	1234	mm
PunchingPerimeter	=	5936	mm
PunchingArea	=	5544224	sqmm
SPu	=	AveragePressure	
	=	311.51	kN/sqm
Vu	=	SPuX((LXB)-(LeffXBeff))	
	=	3483.50	kN
Tv	=	Vu/PunchingArea	
	=	0.628	N/sqmm
Tc	=	1.094	N/sqmm
Tv	<	Tc	


V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
CMAA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

Load Transfer Check For Load Transfer From Column To Footing

CriticalAnalysisLoadCombination	=	49	
CriticalLoadCombination	=	$[77]: 1.5(\text{LOAD1:DL}) + 1.5(\text{LOAD9:RS+X})$	
Pu	=	4150.05	kN
A2	=	0.24	sqm
A1	=	20.64	sqm
BaseArea	=	13.32	sqm
A1	>	BaseArea	
Thus,A1	=	13.32	
ModificationFactor	=	$\text{SquareRoot}(A1/A2)^2 \leq$	
SquareRoot(A1/A2)	=	7.4498	
Thus,ModificationFactor	=	2	
ConcreteBearingCapacity	=	$0.45 \times F_{ck} \times \text{ModificationFactor} \times \text{ColumnArea}$	
	=	5400	kN
ConcreteBearingCapacity	>	Pu,HenceSafe.	



V. JAGEN, B.E.,M.E.,(Struc), M.I.E.,A.I.V.,
CMDA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-8, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

COLUMN DESIGN

Project : ROYAPETTAH HIGH ROAD(S+9)

RAMANIYAM DESIGNS

Design by: Jagen

Date : 29/08/24

Page :

Column marking: C1

Checked by:

Revision:

Job no:

Data

Column sizes	300	x	800	mm
Grade of concrete	fck		40	N/mm ²
Grade of steel	fy		500	N/mm ²
Unsupp. length of column	lo		3300	mm
Clear cover	c		40	mm
Dia of bar used	@		20	mm
Material factor	γm		1.5	
Effective cover (d')	d'		50	
			d/D =	0.0625

Design Calculation

Eccentricity : $\sqrt{500 + \text{Lateral Dimension}/30}$ emin 16.6 Refer IS-456-2000

Refer: SP16

Floor Lvl	Load(Pu)KN	Moment (Mu)KNM	Moment due to eccentricity	Pu/(fckbD)	Mu / (fck bD ²)	Pu/fck	Pt (%)	Required Ast (mm ²)	Provided Reinforcement
Stilt floor & 1st Floor	2228	210	36.9848	0.23208333	0.027	0.02	0.8	1920	4Y20+8Y16
2 nd floor level & 3rd lvl	1782	210	29.58784	0.18566667	0.027	0.02	0.8	1920	4Y20+6Y16
4th Floor & 5th Floor Lvl	1426	210	23.870272	0.14853333	0.027	0.02	0.8	1920	10Y16
6th Floor & 7th Floor Lvl	1141	210	18.9362176	0.11882667	0.027	0.02	0.8	1920	10Y16
8th Floor, 9th Floor Lvl & Terrace Floor Lvl	913	210	15.1489741	0.09508133	0.027	0.02	0.8	1920	10Y16



V. JAGEN, B.E.M.E., (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-1 / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

COLUMN DESIGN

Project : ROYAPETTAH HIGH ROAD(S+9)

RAMANIYAM DESIGNS

Design by: Jagen

Date : 29/08/24

Page :

Column marking: C2

Checked by:

Revision:

Job no:

Data

Column sizes	300	x	800	mm
Grade of concrete	fck		40	N/mm ²
Grade of steel	fy		500	N/mm ²
Unsupp. length of column	lo		3300	mm
Clear cover	c		40	mm
Dia of bar used	Ø		20	mm
Material factor	γm		1.5	
Effective cover (d')	d'		50	d'/D = 0.0625

Design Calculation

Eccentricity : $l/500 + \text{Lateral Dimension}/30$ emin 16.6 Refer: IS-456-2000

Refer: SP16

Floor Lvl	Load(Pu)KN	Moment (Mu)KNM	Moment due to eccentricity	Pu/(fckbD)	Mu / (fck bD ²)	Pt/fck	Pt (%)	Required Ast (mm ²)	Provided Reinforcement
Stilt floor & 1st Floor	2698	368	44.7868	0.28104167	0.048	0.035	1.4	3360	12Y20
2 nd floor level & 3rd lvl	2158.4	368	35.82944	0.22483333	0.048	0.02	0.8	1920	8Y20+4Y16
4th Floor & 5th Floor Lvl	1726.72	368	28.663552	0.17986667	0.048	0.02	0.8	1920	4Y20+8Y16
6th Floor & 7th Floor Lvl	1381.376	368	22.9308416	0.14389333	0.048	0.02	0.8	1920	4Y20+8Y16
8th Floor, 9th Floor Lvl & Terrace Floor Lvl	1105.1008	368	16.3446733	0.11511467	0.048	0.02	0.8	1920	12Y16


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841259154

COLUMN DESIGN

Project :	ROYAPETTAH HIGH ROAD(S+9)	RAMANIYAM DESIGNS		
		Design by: Jagen	Date : 29/08/24	Page :
		Checked by:	Revision:	Job no:

Column marking: C3

Data

Column sizes	300	x	800	mm
Grade of concrete	fck		40	N/mm ²
Grade of steel	fy		500	N/mm ²
Unsupp. length of column	lo		3300	mm
Clear cover	c		40	mm
Dia of bar used	@		20	mm
Material factor	ym		1.5	
Effective cover (d')	d'		50	
			d/D =	0.0525

Design Calculation

Eccentricity : $l/500 + \text{Lateral Dimension}/30$ emin 16.6 Refer: IS-456-2000

Refer: SP16

Floor Lvl	Load(Pu)KN	Moment (Mu)KNM	Moment due to eccentricity	Pu/(fckbD)	Mu / (fck bD ³)	Pu/fck	Pt (%)	Required Ast (mm ²)	Provided Reinforcement
Stilt floor & 1st Floor	3240	416	53.784	0.3375	0.054	0.05	2	4800	10Y25
2 nd floor level & 3rd fl	2592	416	43.0272	0.27	0.054	0.035	1.4	3360	6Y25+4Y20
4th Floor & 5th Floor Lvl	2073.6	416	34.42176	0.216	0.054	0.02	0.8	1920	4Y25+6Y20
6th Floor & 7th Floor Lvl	1658.88	416	27.537408	0.1728	0.054	0.02	0.8	1920	10Y20
8th Floor, 9th Floor Lvl & Terrace Floor Lvl	1327.104	416	22.0299264	0.13824	0.054	0.02	0.8	1920	6Y20+4Y16


V. JAGEN, B.E.M.E., (Struct), M.I.E.A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

COLUMN DESIGN

Project : ROYAPETTAH HIGH ROAD(S+9)

RAMANIYAM DESIGNS

Design by: Jagen

Date : 29/08/24

Page :

Column marking: C4

Checked by:

Revision:

Job no:

Data

Column sizes	300	x	800	mm
Grade of concrete	fck		40	N/mm ²
Grade of steel	fy		500	N/mm ²
Unsupp. length of column	lo		3300	mm
Clear cover	c		40	mm
Dia of bar used	@		20	mm
Material factor	ym		1.5	
Effective cover (d')	d'		50	
				d'/D = 0.0625

Design Calculation

Eccentricity : l/500 + Lateral Dimension/30 e_{min} 16.6 Refer: IS-456-2000

Refer: SP16

Floor Lvl	Load(Pu)KN	Moment (Mu)KNM	Moment due to eccentricity	Pu/(fckbD)	Mu / (fck bD ³)	Pu/fck	Pt (%)	Required Ast (mm ²)	Provided Reinforcement
Stilt floor & 1st Floor	3713	260	61.6358	0.38677083	0.034	0.05	2	4800	12Y25
2 nd floor level & 3rd lvl	2970.4	260	49.30864	0.30941667	0.034	0.03	1.2	2880	4Y25+8Y20
4th Floor & 5th Floor Lvl	2376.32	260	39.446912	0.24753333	0.034	0.02	0.8	1920	12Y20
6th Floor & 7th Floor Lvl	1901.055	260	31.5575296	0.19802667	0.034	0.02	0.8	1920	4Y20+8Y16
8th Floor, 9th Floor Lvl & Terrace Floor Lvl	1520.8448	260	25.2460237	0.15842133	0.034	0.02	0.8	1920	4Y20+8Y16

V. JAGEN, B.E.M.E. (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVY - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

COLUMN DESIGN

Project : ROYAPETTAH HIGH ROAD(S+9)

RAMANIYAM DESIGNS

Design by: Jagen

Date : 29/08/24

Page :

Column marking: C5

Checked by:

Revision:

Job no:

Data

Column sizes	300	x	800	mm
Grade of concrete	fck		40	N/mm ²
Grade of steel	fy		500	N/mm ²
Unsupp. length of column	lo		3300	mm
Clear cover	c		40	mm
Dia of bar used	@		20	mm
Material factor	ym		1.5	
Effective cover (d')	d'		50	
			d'/D =	0.0625

Design Calculation

Eccentricity : $l/500 + \text{Lateral Dimension}/30$ emin 15.6 Refer: IS-456-2000

Refer: SP16

Floor Lvl	Load(Pu)KN	Moment (Mu)KNM	Moment due to eccentricity	Pu/(fckbD)	Mu / (fck bD ²)	Pu/fck	Pt (%)	Required Ast (mm ²)	Provided Reinforcement
Still floor & 1st Floor	4120	180	68.392	0.42916667	0.023	0.06	2.4	5760	14Y25
2 nd floor level & 3rd fl	3296	180	54.7136	0.34333333	0.023	0.04	1.6	3840	4Y25+10Y20
4th Floor & 5th Floor Lvl	2636.8	180	43.77088	0.27466667	0.023	0.02	0.8	1920	4Y20+10Y16
6th Floor & 7th Floor Lvl	2109.44	180	35.016704	0.21973333	0.023	0.02	0.8	1920	14Y16
8th Floor, 9th Floor Lvl & Terrace Floor Lvl	1887.552	180	28.0133832	0.17578667	0.023	0.02	0.8	1920	14Y16


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119,
 Mobile: 9941269154

PROJECT NAME ROYAPETTAH HIGH ROAD
TYPICAL ROOF- BEAM DESIGN

BEAM ID B1
INPUT

Overall depth	=	500	mm	
Effective cover	=	30	mm	
Dia of bar	=	20	mm	
Effective depth (d)	=	460	mm	
Width of beam	=	230	mm	
Grade of concrete (fck)	=	25	N/mm ²	
Grade of steel (fy)	=	500	N/mm ²	
Length of the beam	=	3210	mm	
Moment (Mu _{mid}) @mid-span	=	39.00	kN.m	(FROM STADD .Pro Result)
Moment (Mu) @ left supp	=	135.00	kN.m	(FROM STADD .Pro Result)
Moment (Mu) @right supp	=	130.00	kN.m	(FROM STADD .Pro Result)
Shear Force (Vu)	=	90.00	kN	(FROM STADD .Pro Result)

REINFORCEMENT DETAILS
At Mid span

Mu/bd ²	=	0.801	
Pt	=	0.191 %	Refer SP16- Table 3
Reqd Ast	=	202.078 mm ²	
Provided =	Dia of Bar 20 mm mm	No 2	
Provided Ast	=	628 mm ²	

At left Supp

Mu/bd ²	=	2.773896606	
Pt	=	0.760 %	
Reqd Ast	=	804.08 mm ²	

Provided	Dia of Bar	No
1st Layer	20 mm	3
2nd Layer	0 mm	0

Provided Ast = 942 mm²

At right Supp

Mu/bd ²	=	2.6711597	
Pt	=	0.727 %	
Reqd Ast	=	769.166 mm ²	

Provided	Dia of Bar	No
	20 mm	3
	0 mm	0

Provided Ast = 942 mm²



V. JAGEN, B.E., M.E., (Struc), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-1 / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

CHECK FOR SHEAR

$$\tau_v = \frac{V_u}{b \cdot d} = 0.851 \text{ N/mm}^2$$

$$P_t = 0.594 \%$$

$$\tau_{dv} = 0.49 \text{ N/mm}^2$$

Refer IS456:2000 Table 19(PAGE 73)

 $\tau_v > \tau_{dv}$, hence shear reinforcement required

$$V_{us} = V_u - (\tau_{dv} \cdot b \cdot d) = 38.158 \text{ KN}$$

Assume 2legged stirrups of

$$= 8 \text{ mm dia bar}$$

Area of one bar

$$= \frac{\pi \cdot d^2}{4} = 50.24$$

$$s_v = \frac{A_{sv} \cdot 0.87 \cdot \sigma_{sv}}{V_{us}} = 526.9156664 \text{ mm}$$

Adopt spacing of stirrups at 100mm c/c @supp and 200mm c/c @mid-span

CHECK FOR DEFLECTION

$$P_t = 0.594 \%$$

$$(L/d)_{lim} = 20$$

$$f_s = 0.58 \cdot f_y \cdot (A_{st \text{ reqd}} / A_{st \text{ provided}})$$

$$f_s = 53.316274$$

Refer IS456:2000 fig 4(page 35)

Modification factor

$$k = 2$$

$$(L/d)_{req} = k \cdot (L/d)_{lim}$$

$$(L/d)_{req} = 40 \text{ mm}$$

$$(L/d)_{act} = 6.9782609 \text{ mm}$$

HENCE THE SECTION IS SAFE IN DEFLECTION



V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-1 / 2019/03/024, CA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

PROJECT NAME

ROYAPETTAH HIGH ROAD
TYPICAL ROOF- BEAM DESIGNBEAM ID
INPUT

B14

Overall depth	=	600	mm	
Effective cover	=	30	mm	
Dia of bar	=	20	mm	
Effective depth (d)	=	560	mm	
Width of beam	=	230	mm	
Grade of concrete (fck)	=	25	N/mm ²	
Grade of steel (fy)	=	500	N/mm ²	
Length of the beam	=	1780	mm	
Moment (Mu _{mid}) @mid-span	=	80.00	kN.m	(FROM STADD .Pro Result)
Moment (Mu) @ left supp	=	229.00	kN.m	(FROM STADD .Pro Result)
Moment (Mu) @right supp	=	283.00	kN.m	(FROM STADD .Pro Result)
Shear Force (Vu)	=	185.00	KN	(FROM STADD .Pro Result)

REINFORCEMENT DETAILS

At Mid span

Mu/bd ²	=	1.109	
Pt	=	0.293 %	Refer SP16- Table 3
Reqd Ast	=	377.384	mm ²
Provided =	Dia of Bar	mm	No
	20		2
Provided Ast	=	628	mm ²

At left Supp

Mu/bd ²	=	3.174911269	
Pt	=	0.898 %	
Reqd Ast	=	1156.624	mm ²
Provided	Dia of Bar	mm	No
1st Layer	20		3
2nd Layer	20		2
Provided Ast	=	1570	mm ²

At right Supp

Mu/bd ²	=	3.9235603	
Pt _{tension}	=	1.116 %	
Reqd Ast	=	1437.408	mm ²
Provided	Dia of Bar	mm	No
	25		2
	20		3
Provided Ast	=	1923.25	mm ²
Pt _{Compression}	=	0.187 %	
Reqd Ast	=	240.856	mm ²
Provided	Dia of Bar	mm	No
	20		2
Provided Ast	=	628	mm ²

V. JAGEN, B.E.,M.E.,(Struct), M.I.E.,A.I.V.,
CMDA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841259154

CHECK FOR SHEAR

$$\begin{aligned} \tau_v &= V_{ed} / b d \\ &= 1.436 \text{ N/mm}^2 \\ P_t &= 0.488 \% \\ \tau_c &= 0.45 \text{ N/mm}^2 \\ &\text{Refer IS456:2000 Table 19(PAGE 73)} \end{aligned}$$

$\tau_v > \tau_c$, hence shear reinforcement required

$$\begin{aligned} V_{sw} &= V_{ed} - (\tau_c \cdot b \cdot d) \\ &= 127.04 \text{ KN} \\ \text{Assume 2-legged stirrups of} &= 8 \text{ mm dia bar} \\ \text{Area of one bar} &= \pi \cdot d^2 / 4 \\ &= 50.24 \\ s_v &= A_{sw} \cdot 87 \cdot d^2 / V_{sw} \\ &= 192.6710327 \text{ mm} \end{aligned}$$

Adopt spacing of stirrups at 100mm c/c @supp and 200mm c/c @mid-span

CHECK FOR DEFLECTION

$$\begin{aligned} P_t &= 0.488 \% \\ (L/d)_{lim} &= 20 \\ f_s &= 0.58 \cdot f_y \cdot (A_{st \text{ reqd}} / A_{st \text{ provided}}) \\ f_s &= 174.25968 \\ &\text{Refer IS456:2000 fig 4(page 38)} \\ \text{Modification factor } k &= 1.5 \\ (L/d)_{lim} &= k \cdot (L/d)_{lim} \\ (L/d)_{lim} &= 30 \text{ mm} \\ (L/d)_{act} &= 6.75 \text{ mm} \end{aligned}$$

HENCE THE SECTION IS SAFE IN DEFLECTION



V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-1 / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

PROJECT NAME

ROYAPETTAH HIGH ROAD
TYPICAL ROOF- BEAM DESIGNBEAM ID
INPUT

B50

Overall depth	=	600	mm	
Effective cover	=	30	mm	
Dia of bar	=	20	mm	
Effective depth (d)	=	560	mm	
Width of beam	=	230	mm	
Grade of concrete (fck)	=	25	N/mm ²	
Grade of steel (fy)	=	500	N/mm ²	
Length of the beam	=	4670	mm	
Moment (Mu _{mid}) @mid-span	=	103.00	kN.m	(FROM STADD ,Pro Result)
Moment (Mu) @ left supp	=	325.00	kN.m	(FROM STADD ,Pro Result)
Moment (Mu) @right supp	=	260.00	kN.m	(FROM STADD ,Pro Result)
Shear Force (Vu)	=	197.00	kN	(FROM STADD ,Pro Result)

REINFORCEMENT DETAILS

At Mid span

Mu/bd ²	=	1.428	
Pt	=	0.373 %	Refer SP16- Table 3
Reqd Ast	=	480.424 mm ²	
Provided =	Dia of Bar 20 mm	No 3	
Provided Ast	=	942 mm ²	

At left Supp

Mu/bd ²	=	4.505878438	
Pt	=	1.244 %	
Reqd Ast	=	1602.272 mm ²	
Provided	Dia of Bar	No	
1st Layer	25 mm	3	
2nd Layer	16 mm	2	
Provided Ast	=	1873.795 mm ²	
Pt _{Compression}	=	0.326 %	
Reqd Ast	=	419.888 mm ²	
Provided	Dia of Bar	No	
	20 mm	3	
Provided Ast	=	942 mm ²	

At right Supp

Mu/bd ²	=	3.6047028	
Pt _{Tension}	=	1.014 %	
Reqd Ast	=	1306.032 mm ²	
Provided	Dia of Bar	No	
	25 mm	3	
	16 mm	2	
Provided Ast	=	1873.795 mm ²	
Pt _{Compression}	=	0.076 %	
Reqd Ast	=	97.888 mm ²	
Provided	Dia of Bar	No	
	20 mm	3	
Provided Ast	=	942 mm ²	



V. JAGEN, B.E., M.E., (Struc), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119,
Mobile: 9844320454

CHECK FOR SHEAR

$$\begin{aligned}
 T_v &= V_u/bd \\
 &= 1.530 \text{ N/mm}^2 \\
 P_t &= 0.731 \% \\
 f_c &= 0.55 \text{ N/mm}^2 \\
 &\text{Refer IS456:2000 Table 19(PAGE 73)}
 \end{aligned}$$

$T_v > f_c$, hence shear reinforcement required

$$\begin{aligned}
 V_{us} &= V_u - (f_c \cdot b \cdot d) \\
 &= 126.16 \text{ KN}
 \end{aligned}$$

$$\begin{aligned}
 &\text{Assume 2legged stirrups of } 8 \text{ mm dia bar} \\
 &\text{Area of one bar} = \pi \cdot d^2/4 = 50.24 \\
 &s_v = A_{sv} \cdot 0.87 \cdot f_y / V_{us} = 194.0149651 \text{ mm}
 \end{aligned}$$

Adopt spacing of stirrups at 100mm c/c @supp and 200mm c/c @mid-span

CHECK FOR DEFLECTION

$$\begin{aligned}
 P_t &= 0.731 \% \\
 (L/d)_{lim} &= 20 \\
 f_s &= 0.58 \cdot f_y \cdot (A_{st \text{ reqd}} / A_{st \text{ provided}}) \\
 f_s &= 147.90123 \\
 &\text{Refer IS456:2000 fig 4(page 38)} \\
 \text{Modification factor } k &= 1.6 \\
 (L/d)_{mod} &= k \cdot (L/d)_{lim} \\
 (L/d)_{mod} &= 32 \text{ mm} \\
 (L/d)_{act} &= 8.3392857 \text{ mm}
 \end{aligned}$$

HENCE THE SECTION IS SAFE IN DEFLECTION


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

PROJECT NAME

ROYAPETTAH HIGH ROAD
TYPICAL ROOF-BEAM DESIGNBEAM ID
INPUT

B52

Overall depth	=	600	mm	
Effective cover	=	30	mm	
Dia of bar	=	20	mm	
Effective depth (d)	=	560	mm	
Width of beam	=	230	mm	
Grade of concrete (fck)	=	25	N/mm ²	
Grade of steel (fy)	=	500	N/mm ²	
Length of the beam	=	5720	mm	
Moment (Mu _{max}) @mid-span	=	85.00	kN.m	(FROM STADD .Pro Result)
Moment (Mu) @ left supp	=	100.00	kN.m	(FROM STADD .Pro Result)
Moment (Mu) @right supp	=	233.00	kN.m	(FROM STADD .Pro Result)
Shear Force (Vu)	=	120.00	KN	(FROM STADD .Pro Result)

REINFORCEMENT DETAILS
At Mid span

Mu/bd ²	=	1.178	
Pt	=	0.293 %	Refer SP16- Table 3
Reqd Ast	=	377.384	mm ²
Provided =	Dia of Bar	No	
	25 mm	2	
	mm		
Provided Ast	=	981.25	mm ²

At left Supp

Mu/bd ²	=	1.386424135	
Pt	=	0.346 %	
Reqd Ast	=	445.548	mm ²

Provided	Dia of Bar	No	
1st Layer	25 mm	2	
2nd Layer	0 mm	0	

Provided As: = 981.25 mm²

At right Supp

Mu/bd ²	=	3.2303682	
Pt	=	0.916 %	
Reqd Ast	=	1179.808	mm ²

Provided	Dia of Bar	No	
	25 mm	3	
	0 mm	0	

Provided Ast = 1471.875 mm²


V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119
Mobile: 9841269154

CHECK FOR SHEAR

$$\tau_v = \frac{V_u}{b d} = 0.932 \text{ N/mm}^2$$

$$P_t = 0.762 \%$$

$$\tau_c = 0.57 \text{ N/mm}^2$$

Refer IS456:2000 Table 19(PAGE 73)

$\tau_v > \tau_c$, hence shear reinforcement required

$$V_{us} = V_u - \tau_c \cdot b \cdot d = 46.584 \text{ KN}$$

Assume 2-legged stirrups of 8 mm dia bar

$$\text{Area of one bar} = \pi \cdot d^2 / 4 = 50.24$$

$$s_v = \frac{A_{sv} \cdot 0.87 \cdot f_y}{V_{us}} = 525.436373 \text{ mm}$$

Adopt spacing of stirrups at 100mm c/c @supp and 200mm c/c @mid-span

CHECK FOR DEFLECTION

$$P_t = 0.762 \%$$

$$(L/d)_{lim} = 20$$

$$f_s = 0.58 \cdot f_y \text{ (Ast reqd/Ast provided)}$$

$$f_s = 111.5326$$

Refer IS456:2000 fig 4(page 38)

Modification factor $k = 1.6$

$$(L/d)_{min} = k \cdot (L/d)_{lim}$$

$$(L/d)_{min} = 32 \text{ mm}$$

$$(L/d)_{act} = 10.214286 \text{ mm}$$

HENCE THE SECTION IS SAFE IN DEFLECTION


V. JAGEN, B.E., M.E. (Struc), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841289154

PROJECT NAME

ROYAPETTAH HIGH ROAD
TYPICAL ROOF- BEAM DESIGNBEAM ID
INPUT

B70

Overall depth	=	600	mm	
Effective cover	=	30	mm	
Dia of bar	=	20	mm	
Effective depth (d)	=	560	mm	
Width of beam	=	230	mm	
Grade of concrete (fck)	=	25	N/mm ²	
Grade of steel (fy)	=	500	N/mm ²	
Length of the beam	=	5720	mm	
Moment (Mu _{mid}) @mid-span	=	110.00	kN.m	(FROM STADD .Pro Result)
Moment (Mu) @ left supp	=	135.00	kN.m	(FROM STADD .Pro Result)
Moment (Mu) @right supp	=	110.00	kN.m	(FROM STADD .Pro Result)
Shear Force (Vu)	=	100.00	KN	(FROM STADD .Pro Result)

REINFORCEMENT DETAILS
At Mid span

Mu/bd ²	=	1.525	
Pt	=	0.387 %	Refer SP16- Table 3
Reqd Ast	=	498.456 mm ²	
Provided =	Dia of Bar	No	
	20 mm	3	
	mm		
Provided Ast	=	942 mm ²	

At left Supp

Mu/bd ²	=	1.871672582	
Pt	=	0.484 %	
Reqd Ast	=	623.392 mm ²	

At right Supp

Mu/bd ²	=	1.5250685	
Pt	=	0.387 %	
Reqd Ast	=	498.456 mm ²	

Provided	Dia of Bar	No	
1st Layer	20 mm	2	
2nd Layer	16 mm	1	

Provided As = 828.96 mm²

Provided	Dia of Bar	No	
	20 mm	2	
	16 mm	1	

Provided Ast = 828.96 mm²


V. JAGEN, B.E., M.E., (Strud), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

CHECK FOR SHEAR

$$\begin{aligned} \tau_v &= V_u/bd \\ &= 0.776 \text{ N/mm}^2 \\ P_t &= 0.731 \% \\ \tau_{cr} &= 0.55 \text{ N/mm}^2 \\ &\text{Refer IS456:2000 Table 19(PAGE 73)} \end{aligned}$$

$\tau_v > \tau_{cr}$, hence shear reinforcement required

$$\begin{aligned} V_{us} &= V_u - (\tau_{cr} \cdot b \cdot d) \\ &= 29.16 \text{ KN} \\ \text{Assume 2legged stirrups of} &= 8 \text{ mm dia bar} \\ \text{Area of one bar} &= \pi \cdot d^2/4 \\ &= 50.24 \\ S_v &= A_{sv} \cdot 0.87 \cdot f_y / V_{us} \\ &= 839.400823 \text{ mm} \end{aligned}$$

Adopt spacing of stirrups at 100mm c/c @supp and 200mm c/c @mid-span

CHECK FOR DEFLECTION

$$\begin{aligned} P_t &= 0.731 \% \\ (L/d)_{lim} &= 20 \\ f_s &= 0.58 \cdot f_y \cdot (A_{st \text{ reqd}}/A_{st \text{ provided}}) \\ f_s &= 153.45248 \\ &\text{Refer IS456:2000 fig 4(page 38)} \\ \text{Modification factor } k &= 1.5 \\ (L/d)_{max} &= k \cdot (L/d)_{lim} \\ (L/d)_{max} &= 30 \text{ mm} \\ (L/d)_{act} &= 10.214286 \text{ mm} \end{aligned}$$

HENCE THE SECTION IS SAFE IN DEFLECTION



V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119
Mobile: 9841269154

Project name: ROYAPETTAH HIGH ROAD

ROOF SLAB DESIGN

FLOOR: Typical Floor Roof

LOAD CALCULATION

Self weight of slab $= 0.150 \times 25 = 3.750 \text{ KN/m}^2$
 Live load $= 2 \text{ KN/m}^2$
 Floor Finish $= 1.2 \text{ KN/m}^2$
 Total load $= 6.950 \text{ KN/m}^2$
 Factored W_u Load $= 10.4250 \text{ kN/m}^2$

Slab no-S1 Condition- Three Edge Discontinuous(One Short Edge)

Grade of concrete $f_{ck} = 25 \text{ N/mm}^2$ Depth $= 150 \text{ mm}$
 Grade of steel $f_y = 500 \text{ N/mm}^2$ Effective depth $= 120 \text{ mm}$
 $L_y = 4.58$ $L_y/L_x = 1.22$
 $L_x = 3.76$

$$W_u \cdot L_x^2 = 147.3845$$

$$V_u = 19.599 \text{ KN}$$

Span	Moment Coeff	M_u	M_u/bd^2	Pt	Ast required	Min Ast	Dia of bar	Spacing	Ast provided
		Knm	N/mm²		mm²	mm²	mm	mm	mm²
Shorter -ve	0.000	0.000	0.000	0.000	0	180	10	175	448.571
+ve	0.065	9.580	0.665	0.167	200.4	180	10	175	448.571
Longer -ve	0.057	8.401	0.583	0.142	170.4	180	10	200	392.5
+ve	0.043	6.338	0.440	0.106	127.2	180	10	200	392.5

Check for Depth

$$M_u = 0.138 \cdot f_{ck} \cdot b \cdot d^2$$

$$9.57999 = 0.138 \times 25 \times 1000 \times d^2$$

$$= 52.69544 < 120$$

DEPTH IS OK


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD,
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

Check for Shear

$$\begin{aligned}
 t_{vs} &= V_u/b*d \\
 &= 19.599/1000 \times 120 \\
 t_{vs} &= 0.163 \\
 P_t &= 0.374 \\
 t_v &= 0.36 \text{ N/mm}^2 \text{ Refer Table-19 IS:456 page 73}
 \end{aligned}$$

SLAB SAFE IN SHEAR

Check for deflection

$$(L/d)_{\max} = (L/d)_{\text{basic}} * K_c * K_t * K_f$$

$f_s = 0.58 * f_y * (\text{Area of cross section of steel required} / \text{Area of cross section of steel provided})$

$$\begin{aligned}
 f_s &= 129.56 \text{ N/mm}^2 \\
 P_t &= 0.374 \\
 K_t &= 2 \quad \text{Refer Fig .4, IS:456} \\
 (L/d)_{\text{basic}} &= 27.52 \quad \text{Ref. cl. 23.2.1, IS:456} \\
 (L/d)_{\max} &= 2 \times 27.52 \\
 &= 55 \\
 (L/d)_{\text{provide}} &= 31.33333 < 55
 \end{aligned}$$

SLAB SAFE IN DEFLECTION


V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

Project name: ROYAPETTAH HIGH ROAD

ROOF SLAB DESIGN

FLOOR: Typical Floor Roof

LOAD CALCULATION

Self weight of slab $= 0.150 \times 25 = 3.750 \text{ KN/m}^2$
 Live load $= 2 \text{ KN/m}^2$
 Floor Finish $= 1.2 \text{ KN/m}^2$
 Total load $= 6.950 \text{ KN/m}^2$

Factored W_u Load $= 10.4250 \text{ kN/m}^2$

Slab no-S4

Condition- Four Edge Discontinuous

Grade of concrete $f_{ck} = 25 \text{ N/mm}^2$ Depth $= 150 \text{ mm}$
 Grade of steel $f_y = 500 \text{ N/mm}^2$ Effective depth $= 120 \text{ mm}$
 $L_y = 5.3$ $L_y/L_x = 1.41$
 $L_x = 3.76$

$W_u \times L_x^2 = 147.3845$
 $V_u = 19.599 \text{ KN}$

Span	Moment Coeff	M_u Knm	M_u/bd^2 N/mm ²	Pt	Ast required mm ²	Min Ast mm ²	Dia of bar mm	Spacing mm	Ast provided mm ²
Shorter -ve	0.000	0.000	0.000	0.000	0	180	10	175	448.571
+ve	0.089	13.117	0.911	0.229	274.8	180	10	175	448.571
Longer -ve	0.000	0.000	0.000	0.000	0	180	10	200	392.5
+ve	0.056	8.254	0.573	0.142	170.4	180	10	200	392.5

Check for Depth

$M_u = 0.138 \times f_{ck} \times b \times d^2$
 $13.1172 = 0.138 \times 25 \times 1000 \times d^2$
 $= 61.66111 < 120$

DEPTH IS OK


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

Check for Shear

$$\begin{aligned}
 t_{ve} &= V_u/b*d \\
 &= 19.599/1000 \times 120 \\
 t_{ve} &= 0.163 \\
 P_t &= 0.374 \\
 t_c &= 0.36 \text{ N/mm}^2 \text{ Refer Table-19 IS:456 page 73}
 \end{aligned}$$

SLAB SAFE IN SHEAR

Check for deflection

$$(L/d)_{\max} = (L/d)_{\text{basic}} * K_c * K_t * K_f$$

$f_s = 0.58 * f_y * (\text{Area of cross section of steel required} / \text{Area of cross section of steel provided})$

$$\begin{aligned}
 f_s &= 177.66 \text{ N/mm}^2 \\
 P_t &= 0.374 \\
 K_t &= 1.7 \quad \text{Refer Fig .4, IS:456} \\
 (L/d)_{\text{basic}} &= 27.52 \quad \text{Ref: cl. 23.2.1, IS:456} \\
 (L/d)_{\max} &= 1.7 \times 27.52 \\
 &= 47 \\
 (L/d)_{\text{provide}} &= 31.33333 < 47
 \end{aligned}$$

SLAB SAFE IN DEFLECTION


 V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

Project name: ROYAPETTAH HIGH ROAD

ROOF SLAB DESIGN

FLOOR: Silt Floor Roof

LOAD CALCULATION

Self weight of slab $= 0.150 \times 25 = 3.750 \text{ KN/m}^2$
 Live load $= 2 \text{ KN/m}^2$
 Floor Finish $= 1.2 \text{ KN/m}^2$
 Total load $= 6.950 \text{ KN/m}^2$

Factored W_u Load $= 10.4250 \text{ kN/m}^2$

Slab no-S5

Condition- One Way Slab

Grade of concrete $f_{ck} = 25 \text{ N/mm}^2$ Depth $= 150 \text{ mm}$
 Grade of steel $f_y = 500 \text{ N/mm}^2$ Effective depth $= 120 \text{ mm}$
 $L_y = 7.78$ $L_y/L_x = 2.34$
 $L_x = 3.32$

$W_u \cdot L_x^2 = 114.9085$
 $V_u = 17.3055 \text{ KN}$

Span	Moment Coeff	M_u Knm	M_u/bd^2 N/mm ²	Pt	Ast required mm ²	Min Ast mm ²	Dia of bar mm	Spacing mm	Ast provided mm ²
Shorter -ve	0.122	14.019	0.974	0.242	290.4	180	10	175	448.571
+ve	0.122	14.019	0.974	0.242	290.4	180	10	175	448.571
Longer -ve	0.020	2.298	0.160	0.070	84	180	10	200	392.5
+ve	0.020	2.298	0.160	0.070	84	180	10	200	392.5

Check for Depth

$M_u = 0.138 \cdot f_{ck} \cdot b \cdot d^2$
 $14.0188 = 0.138 \times 25 \times 1000 \times d^2$
 $= 63.74505 < 120$

DEPTH IS OK


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841259154

Check for Shear

$$\begin{aligned}
 t_{ve} &= V_u/b*d \\
 &= 17.3055/1000 \times 120 \\
 t_{ve} &= 0.144 \\
 P_t &= 0.374 \\
 t_v &= 0.36 \text{ N/mm}^2 \text{ Refer Table-19 IS:456 page 73}
 \end{aligned}$$

SLAB SAFE IN SHEAR**Check for deflection**

$$(L/d)_{\max} = (L/d)_{\text{basic}} * K_c * K_t * K_f$$

$f_s = 0.58 * f_y$ (Area of cross section of steel required/Area of cross section of steel provided)

$$\begin{aligned}
 f_s &= 187.74 \text{ N/mm}^2 \\
 P_t &= 0.374 \\
 K_t &= 1.7 \quad \text{Refer Fig .4, IS:456} \\
 (L/d)_{\text{basic}} &= 27.52 \quad \text{Ref. cl. 23.2.1, IS:456} \\
 (L/d)_{\max} &= 1.7 \times 27.52 \\
 &= 47 \\
 (L/d)_{\text{provide}} &= 27.66667 < 47
 \end{aligned}$$

SLAB SAFE IN DEFLECTION


V. JAGEN, B.E., M.E., (Struc), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

Project name: ROYAPETTAH HIGH ROAD

ROOF SLAB DESIGN

FLOOR: Stilt Floor Roof

LOAD CALCULATION

Self weight of slab $= 0.150 \times 25 = 3.750 \text{ KN/m}^2$
 Live load $= 2 \text{ KN/m}^2$
 Floor Finish $= 1.2 \text{ KN/m}^2$
 Total load $= 6.950 \text{ KN/m}^2$
 Factored W_u Load $= 10.4250 \text{ kN/m}^2$

Slab no-S13

Condition- One Long Edge Discontinuous

Grade of concrete $f_{ck} = 25 \text{ N/mm}^2$ Depth $= 150 \text{ mm}$
 Grade of steel $f_y = 500 \text{ N/mm}^2$ Effective depth $= 120 \text{ mm}$
 $L_y = 6.37$ $L_y/L_x = 1.51$
 $L_x = 4.21$

$$W_u \cdot L_x^2 = 184.7737$$

$$V_u = 21.94463 \text{ KN}$$

Span	Moment Coeff	Mu	Mu/bd ²	Pt	Ast required	Min Ast	Dia of bar	Spacing	Ast provided
		Knm	N/mm ²		mm ²	mm ²	mm	mm	mm ²
Shorter -ve	0.077	14.228	0.988	0.242	290.4	180	10	150	523.333
+ve	0.059	10.902	0.757	0.191	229.2	180	10	150	523.333
Longer -ve	0.037	6.837	0.475	0.118	141.6	180	10	200	392.5
+ve	0.028	5.174	0.359	0.094	112.8	180	10	200	392.5

Check for Depth

$$M_u = 0.138 \cdot f_{ck} \cdot b \cdot d^2$$

$$14.2276 = 0.138 \times 25 \times 1000 \times d^2$$

$$= 64.21788 < 120$$

DEPTH IS OK


 V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

Check for Shear

$$\begin{aligned}
 t_{vd} &= V_u/b*d \\
 &= \\
 t_{vd} &= 21.944625/1000 \times 120 \\
 &= 0.183 \\
 P_t &= 0.436 \\
 t_v &= 0.36 \text{ N/mm}^2 \text{ Refer Table-19 IS:456 page 73}
 \end{aligned}$$

SLAB SAFE IN SHEAR**Check for deflection**

$$(L/d)_{\max} = (L/d)_{\text{basic}} * K_c * K_t * K_f$$

$f_s = 0.58 * f_y$ (Area of cross section of steel required / Area of cross section of steel provided)

$$\begin{aligned}
 f_s &= 160.92 \text{ N/mm}^2 \\
 P_t &= 0.436 \\
 K_t &= 1.8 \quad \text{Refer Fig. 4, IS:456} \\
 (L/d)_{\text{basic}} &= 27.52 \quad \text{Ref. cl. 23.2.1, IS:456} \\
 (L/d)_{\max} &= 1.8 \times 27.52 \\
 &= 50 \\
 (L/d)_{\text{provide}} &= 35.08333 < 50
 \end{aligned}$$

SLAB SAFE IN DEFLECTION


V. JAGEN, B.E., M.E. (Struct), M.J.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841259154

Project name: ROYAPETTAH HIGH ROAD

ROOF SLAB DESIGN

FLOOR: Typical Floor Roof

LOAD CALCULATION

Self weight of slab $-0.150 \times 25 = 3.750 \text{ KN/m}^2$ Live load $= 2 \text{ KN/m}^2$ Floor Finish $= 1.2 \text{ KN/m}^2$ Total load $= 6.950 \text{ KN/m}^2$ Factored W_u Load $= 10.4250 \text{ KN/m}^2$

Slab no-S19

Condition- Four Edge Discontinuous

Grade of concrete $f_{ck} = 25 \text{ N/mm}^2$ Depth $= 150 \text{ mm}$ Grade of steel $f_y = 500 \text{ N/mm}^2$ Effective depth $= 120 \text{ mm}$ $L_y = 5.19$ $L_y/L_x = 1.38$ $L_x = 3.76$ $W_u \times L_x^2 = 147.3845$ $V_u = 19.599 \text{ KN}$

Span	Moment Coeff	M_u	M_u/bd^2	Pt	Ast required	Min Ast	Dia of bar	Spacing	Ast provided
		Knm	N/mm^2		mm^2	mm^2	mm	mm	mm^2
Shorter -ve	0.000	0.000	0.000	0.000	0	180	10	175	448.571
+ve	0.089	13.117	0.911	0.229	274.8	180	10	175	448.571
Longer -ve	0.000	0.000	0.000	0.000	0	180	10	200	392.5
+ve	0.056	8.254	0.573	0.142	170.4	180	10	200	392.5

Check for Depth

 $M_u = 0.138 \times f_{ck} \times b \times d^2$
 $13.1172 = 0.138 \times 25 \times 1000 \times d^2$
 $= 61.66111 < 120$

DEPTH IS OK


V. JAGEN, B.E., M.E. (Struc), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

Check for Shear

$$\begin{aligned}
 t_{ve} &= V_u/b*d \\
 &= 19.599/1000 \times 120 \\
 t_{ve} &= 0.163 \\
 P_t &= 0.374 \\
 t_c &= 0.36 \text{ N/mm}^2 \text{ Refer Table-19 IS:456 page 73}
 \end{aligned}$$

SLAB SAFE IN SHEAR

Check for deflection

$$(L/d)_{\max} = (L/d)_{\text{basic}} * K_c * K_t * K_f$$

$f_s = 0.58 * f_y * (\text{Area of cross section of steel required} / \text{Area of cross section of steel provided})$

$$\begin{aligned}
 f_s &= 177.66 \text{ N/mm}^2 \\
 P_t &= 0.374 \\
 K_t &= 1.8 \quad \text{Refer Fig .4, IS:456} \\
 (L/d)_{\text{basic}} &= 27.52 \quad \text{Ref. cl. 23.2.1, IS:456} \\
 (L/d)_{\max} &= 1.8 \times 27.52 \\
 &= 50 \\
 (L/d)_{\text{provide}} &= 31.33333 < 50
 \end{aligned}$$

SLAB SAFE IN DEFLECTION



V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

Project name: ROYAPETTAH HIGH ROAD

ROOF SLAB DESIGN

FLOOR: Stilt Floor Roof

LOAD CALCULATION

Self weight of slab $= 0.150 \times 25 = 3.750 \text{ KN/m}^2$
 Live load $= 2 \text{ KN/m}^2$
 Floor Finish $= 1.2 \text{ KN/m}^2$
 Total load $= 6.950 \text{ KN/m}^2$
 Factored W_u Load $= 10.4250 \text{ kN/m}^2$

Slab no-S20

Condition- One Way Slab

Grade of concrete $f_{ck} = 25 \text{ N/mm}^2$ Depth $= 150 \text{ mm}$
 Grade of steel $f_y = 500 \text{ N/mm}^2$ Effective depth $= 120 \text{ mm}$
 $L_y = 6.87$ $L_y/L_x = 2.07$
 $L_x = 3.32$

$W_u \cdot L_x^2 = 114.9085$
 $V_u = 17.3055 \text{ KN}$

Span	Moment Coeff	M_u	M_u/bd^2	Pt	Ast required	Min Ast	Dia of bar	Spacing	Ast provided
		Knm	N/mm ²		mm ²	mm ²	mm	mm	mm ²
Shorter -ve	0.000	0.000	0.000	0.242	290.4	180	10	175	448.571
+ve	0.122	14.019	0.974	0.242	290.4	180	10	175	448.571
Longer -ve	0.000	0.000	0.000	0.070	84	180	10	200	392.5
+ve	0.020	2.298	0.160	0.070	84	180	10	200	392.5

Check for Depth

$M_u = 0.138 \cdot f_{ck} \cdot b \cdot d^2$
 $14.0188 = 0.138 \times 25 \times 1000 \times d^2$
 $= 63.74505 < 120$

DEPTH IS OK


V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGD NCS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 S.B. RAMANIYAN GAURAV - 2
 BLOCK-2 MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

Check for Shear

$$\begin{aligned}
 t_{vs} &= V_{us}/b^*d \\
 &= 17.3055/1000 \times 120 \\
 t_{vs} &= 0.144 \\
 P_t &= 0.374 \\
 t_c &= 0.36 \text{ N/mm}^2 \text{ Refer Table-19 IS:456 page 73}
 \end{aligned}$$

SLAB SAFE IN SHEAR**Check for deflection**

$$(L/d)_{\max} = (L/d)_{\text{basic}} * K_c * K_t * K_f$$

$f_s = 0.58 * f_y$ (Area of cross section of steel required/Area of cross section of steel provided)

$$\begin{aligned}
 f_s &= 187.74 \text{ N/mm}^2 \\
 P_t &= 0.374 \\
 K_t &= 1.7 \quad \text{Refer Fig .4, IS:456} \\
 (L/d)_{\text{basic}} &= 27.52 \quad \text{Ref. cl. 23.2.1, IS:456} \\
 (L/d)_{\max} &= 1.7 \times 27.52 \\
 &= 47 \\
 (L/d)_{\text{provide}} &= 27.66667 < 47
 \end{aligned}$$

SLAB SAFE IN DEFLECTION


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR.1 / 2019/03/024, OA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

PAGE NO. 1

```

*****
*                               *
*      STAAD.Pro 2023           *
*      Version 23.08.03.25      *
*      Proprietary Program of   *
*      Bentley Systems, Inc.    *
*      Date= SEP 10, 2024       *
*      Time= 18:12:58           *
*                               *
*      Licensed to: Ramaniyam Real Estates Pvt Ltd *
*****

```

1. STAAD SPACE

INPUT FILE: F:\Ramaniyam\Ramaniyam stadd\RRR STAAD 2024\Royapettah High Road\240909-Royapettah High Ro.. .S1D

```

2. START JOB INFORMATION
3. ENGINEER DATE 11-JUL-24
4. *PLAN SHOWING THE PROPOSED CONSTRUCTION OF HIGH RISE BUILDING CONSISTS OF
5. *STILT FLOOR + 9 FLOORS RESIDENTIAL BUILDING(30.00M HEIGHT) AT OLD DOOR
6. *NOS.268 & 269, NEW DOOR NOS.66 & 68, ROYAPETTAH HIGH ROAD, ROYAPETTAH,
7. *CHENNAI-600 014 AND COMPRISED IN R.S.NO.423 AS PER DOCUMENT & R.S.NO.423/1 &
8. *423/2 AS PER PATTI, BLOCK NO.8 OF MYLAPORE VILLAGE, MYLAPORE TALUK AND WITHIN
9. *THE LIMITS OF GREATER CHENNAI CORPORATION.ZONE - IX; DIVISION:- 119.
10. END JOB INFORMATION
11. INPUT WIDTH 79
12. UNIT METER KN
13. JOINT COORDINATES
14. 1 0 0 0; 2 4.58 0 0; 3 7.63 0 0.23; 4 10.95 0 0.23; 5 16.25 0 0.23
15. 6 7.63 0 3.76; 7 10.95 0 3.76; 8 16.25 0 5.7; 9 0 0 6; 10 4.58 0 6
16. 11 10.95 0 7.76; 12 0.23 0 9.64; 13 4.58 0 9.64; 14 9.16 0 9.64
17. 15 11.22 0 9.64; 16 9.16 0 11.52; 17 11.22 0 11.52; 18 16.02 0 11.52
18. 19 0.23 0 12.69; 20 5.19 0 12.69; 21 7.87 0 12.69; 22 5.19 0 14.96
19. 23 7.87 0 14.96; 24 11.45 0 14.96; 25 16.02 0 14.96; 26 11.45 0 17.815
20. 27 16.02 0 17.815; 28 0.23 0 18.08; 29 5.19 0 19.86; 30 8.51 0 19.86
21. 31 0.23 0 23.47; 32 5.19 0 23.47; 33 8.51 0 23.47; 34 11.45 0 23.47
22. 35 16.02 0 23.47; 36 0 1.5 0; 37 4.58 1.5 0; 38 7.63 1.5 0.23
23. 39 10.95 1.5 0.23; 40 16.25 1.5 0.23; 41 7.63 1.5 3.76; 42 10.95 1.5 3.76
24. 43 16.25 1.5 5.7; 44 0 1.5 6; 45 4.58 1.5 6; 46 10.95 1.5 7.76
25. 47 0.23 1.5 9.64; 48 4.58 1.5 9.64; 49 9.16 1.5 9.64; 50 11.22 1.5 9.64
26. 51 9.16 1.5 11.52; 52 11.22 1.5 11.52; 53 16.02 1.5 11.52; 54 0.23 1.5 12.69
27. 55 5.19 1.5 12.69; 56 7.87 1.5 12.69; 57 5.19 1.5 14.96; 58 7.87 1.5 14.96
28. 59 11.45 1.5 14.96; 60 16.02 1.5 14.96; 61 11.45 1.5 17.815
29. 62 16.02 1.5 17.815; 63 0.23 1.5 18.08; 64 5.19 1.5 19.86; 65 8.51 1.5 19.86
30. 66 0.23 1.5 23.47; 67 5.19 1.5 23.47; 68 8.51 1.5 23.47; 69 11.45 1.5 23.47
31. 70 16.02 1.5 23.47; 71 0 4.41 0; 72 4.58 4.41 0; 73 7.63 4.41 0.23
32. 74 10.95 4.41 0.23; 75 16.25 4.41 0.23; 76 7.63 4.41 3.76; 77 10.95 4.41 3.76
33. 78 16.25 4.41 5.7; 79 0 4.41 6; 80 4.58 4.41 6; 81 10.95 4.41 7.76
34. 82 0.23 4.41 9.64; 83 4.58 4.41 9.64; 84 9.16 4.41 9.64; 85 11.22 4.41 9.64
35. 86 9.16 4.41 11.52; 87 11.22 4.41 11.52; 88 16.02 4.41 11.52
36. 89 0.23 4.41 12.69; 90 5.19 4.41 12.69; 91 7.87 4.41 12.69; 92 5.19 4.41 14.96
37. 93 7.87 4.41 14.96; 94 11.45 4.41 14.96; 95 16.02 4.41 14.96
38. 96 11.45 4.41 17.815; 97 16.02 4.41 17.815; 98 0.23 4.41 18.08

```


V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841280154

39. 99 5.19 4.41 19.86; 100 8.51 4.41 19.86; 101 0.23 4.41 23.47
40. 102 5.19 4.41 23.47; 103 8.51 4.41 2.47; 104 11.45 4.41 23.47
41. 105 16.02 4.41 23.47; 106 0 7.42 0; 107 4.58 7.42 0; 108 7.63 7.42 0.23
42. 109 10.95 7.42 0.23; 110 16.25 7.42 0.23; 111 7.63 7.42 3.76
43. 112 10.95 7.42 3.76; 113 16.25 7.42 5.7; 114 0 7.42 6; 115 4.58 7.42 6
44. 116 10.95 7.42 7.76; 117 0.23 7.42 9.64; 118 4.58 7.42 9.64
45. 119 9.16 7.42 9.64; 120 11.22 7.42 9.64; 121 9.16 7.42 11.52
46. 122 11.22 7.42 11.52; 123 16.02 7.42 11.52; 124 0.23 7.42 12.69
47. 125 5.19 7.42 12.69; 126 7.87 7.42 12.69; 127 5.19 7.42 14.96
48. 128 7.87 7.42 14.96; 129 11.45 7.42 14.96; 130 16.02 7.42 14.96
49. 131 11.45 7.42 17.815; 132 16.02 7.42 17.815; 133 0.23 7.42 18.08
50. 134 5.19 7.42 19.86; 135 8.51 7.42 19.86; 136 0.23 7.42 23.47
51. 137 5.19 7.42 23.47; 138 8.51 7.42 23.47; 139 11.45 7.42 23.47
52. 140 16.02 7.42 23.47; 141 7.63 4.41 0; 142 10.95 4.41 0; 143 16.25 4.41 0
53. 144 16.25 4.41 3.76; 145 4.58 4.41 3.76; 146 7.63 4.41 1.88
54. 147 10.95 4.41 1.88; 148 0 4.41 3.76; 149 4.58 4.41 3.19; 150 7.63 4.41 3.19
55. 151 10.95 4.41 9.64; 152 0 4.41 9.64; 153 1.07 4.41 6; 154 1.07 4.41 3.76
56. 155 3.21 4.41 6; 156 3.21 4.41 3.76; 157 1.37 4.41 9.64; 158 1.37 4.41 6
57. 159 10.95 4.41 6; 160 16.25 4.41 11.52; 161 16.25 4.41 7.76
58. 162 10.95 4.41 5.7; 163 12.29 4.41 7.76; 164 12.29 4.41 5.7
59. 165 12.29 4.41 3.76; 166 15.18 4.41 7.76; 167 15.18 4.41 5.7
60. 168 15.18 4.41 3.76; 169 7.63 4.41 6; 170 8 4.41 4.93; 171 1.07 4.41 4.93
61. 172 0 4.41 12.69; 173 16.25 4.41 14.96; 174 0 4.41 18.08; 175 0 4.41 23.47
62. 176 16.25 4.41 17.815; 177 16.25 4.41 23.47; 178 5.19 4.41 17.815
63. 179 8.51 4.41 17.815; 180 11.45 4.41 19.86; 181 16.25 4.41 19.86
64. 182 0 4.41 19.86; 183 5.19 4.41 18.08; 184 1.37 4.41 19.86
65. 185 1.37 4.41 18.08; 186 3.96 4.41 19.86; 187 3.96 4.41 18.08
66. 188 0 4.41 16.45; 189 5.19 4.41 16.45; 190 1.37 4.41 16.45
67. 191 3.96 4.41 16.45; 192 5.19 4.41 23.17; 193 8.51 4.41 23.17
68. 194 5.19 4.41 21.83; 195 8.51 4.41 21.83; 196 13.045 4.41 19.86
69. 197 13.045 4.41 17.815; 198 15.18 4.41 19.86; 199 15.18 4.41 17.815
70. 200 14.88 4.41 17.815; 201 14.88 4.41 14.96; 202 15.18 4.41 18.7
71. 203 16.25 4.41 18.7; 204 11.22 4.41 14.96; 205 5.76 4.41 12.69
72. 206 5.76 4.41 9.64; 207 8.975 4.41 14.96; 208 8.975 4.41 14.17
73. 209 7.87 4.41 14.17; 210 6.95 4.41 12.69; 211 7.55 4.41 12.69
74. 214 5.76 4.41 11.785; 215 7.63 7.42 0; 216 10.95 7.42 0; 217 16.25 7.42 0
75. 218 16.25 7.42 3.76; 219 4.58 7.42 3.76; 220 7.63 7.42 1.88
76. 221 10.95 7.42 1.88; 222 0 7.42 3.76; 223 4.58 7.42 3.19; 224 7.63 7.42 3.19
77. 225 10.95 7.42 9.64; 226 0 7.42 9.64; 227 1.07 7.42 6; 228 1.07 7.42 3.76
78. 229 3.21 7.42 6; 230 3.21 7.42 3.76; 231 1.37 7.42 9.64; 232 1.37 7.42 6
79. 233 10.95 7.42 6; 234 16.25 7.42 11.52; 235 16.25 7.42 7.76
80. 236 10.95 7.42 5.7; 237 12.29 7.42 7.76; 238 12.29 7.42 5.7
81. 239 12.29 7.42 3.76; 240 15.18 7.42 7.76; 241 15.18 7.42 5.7
82. 242 15.18 7.42 3.76; 243 0 7.42 4.93; 244 1.07 7.42 4.93; 245 0 7.42 12.69
83. 247 16.25 7.42 14.96; 248 0 7.42 18.08; 249 0 7.42 23.47
84. 250 16.25 7.42 17.815; 251 16.25 7.42 23.47; 252 5.19 7.42 17.815
85. 254 11.45 7.42 19.86; 255 16.25 7.42 19.86; 256 0 7.42 19.86
86. 257 5.19 7.42 18.08; 258 1.37 7.42 19.86; 259 1.37 7.42 18.08
87. 260 3.96 7.42 19.86; 261 3.96 7.42 18.08; 262 0 7.42 16.45
88. 263 5.19 7.42 16.45; 264 1.37 7.42 16.45; 265 3.96 7.42 16.45
89. 266 5.19 7.42 13.17; 267 8.51 7.42 23.17; 268 5.19 7.42 21.83
90. 269 8.51 7.42 21.83; 270 13.045 7.42 19.86; 271 13.045 7.42 17.815
91. 272 15.18 7.42 19.86; 273 15.18 7.42 17.815; 274 14.88 7.42 17.815
92. 275 14.88 7.42 14.96; 276 15.18 7.42 18.7; 277 16.25 7.42 18.7
93. 278 11.22 7.42 14.96; 279 5.76 7.42 12.69; 280 5.76 7.42 9.64
94. 281 8.975 7.42 14.96; 282 8.975 7.42 14.17; 283 7.87 7.42 14.17

V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -

SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER

3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD

SHRINIGALLA High Road P.O. No. 119
Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 3

95. 284 6.95 7.42 12.69; 285 7.55 7.42 12.69; 288 5.76 7.42 11.785; 289 0 10.43 0
 96. 290 4.58 10.43 0; 291 7.63 10.43 0.23; 292 10.95 10.43 0.23
 97. 293 16.25 10.43 0.23; 294 7.63 10.43 3.76; 295 10.95 10.43 3.76
 98. 296 16.25 10.43 5.7; 297 0 10.43 6; 298 4.58 10.43 6; 299 10.95 10.43 7.76
 99. 300 0.23 10.43 9.64; 301 4.58 10.43 9.64; 302 9.16 10.43 9.64
 100. 303 11.22 10.43 9.64; 304 9.16 10.43 11.52; 305 11.22 10.43 11.52
 101. 306 16.02 10.43 11.52; 307 0.23 10.43 12.69; 308 5.19 10.43 12.69
 102. 309 7.87 10.43 12.69; 310 5.19 10.43 14.96; 311 7.87 10.43 14.96
 103. 312 11.45 10.43 14.96; 313 16.02 10.43 14.96; 314 11.45 10.43 17.815
 104. 315 16.02 10.43 17.815; 316 0.23 10.43 18.08; 317 5.19 10.43 19.86
 105. 318 8.51 10.43 19.86; 319 0.23 10.43 23.47; 320 5.19 10.43 23.47
 106. 321 8.51 10.43 23.47; 322 11.45 10.43 23.47; 323 16.02 10.43 23.47
 107. 324 7.63 10.43 0; 325 10.95 10.43 0; 326 16.25 10.43 0; 327 16.25 10.43 3.76
 108. 328 4.58 10.43 3.76; 329 7.63 10.43 1.88; 330 10.95 10.43 1.88
 109. 331 0 10.43 3.76; 332 4.58 10.43 3.19; 333 7.63 10.43 3.19
 110. 334 10.95 10.43 9.64; 335 0 10.43 9.64; 336 1.07 10.43 6; 337 1.07 10.43 3.76
 111. 338 3.21 10.43 6; 339 3.21 10.43 1.76; 340 1.37 10.43 9.64; 341 1.37 10.43 6
 112. 342 10.95 10.43 6; 343 16.25 10.43 11.52; 344 16.25 10.43 7.76
 113. 345 10.95 10.43 5.7; 346 12.29 10.43 7.76; 347 12.29 10.43 5.7
 114. 348 12.29 10.43 3.76; 349 15.18 10.43 7.76; 350 15.18 10.43 5.7
 115. 351 15.18 10.43 3.76; 352 0 10.43 4.93; 353 1.07 10.43 4.93; 354 0 10.43 12.69
 116. 355 16.25 10.43 14.96; 356 0 10.43 18.08; 357 0 10.43 23.47
 117. 358 16.25 10.43 17.815; 359 16.25 10.43 23.47; 360 5.19 10.43 17.815
 118. 361 11.45 10.43 19.86; 362 16.25 10.43 19.86; 363 0 10.43 19.86
 119. 364 5.19 10.43 18.08; 365 1.37 10.43 19.86; 366 1.37 10.43 18.08
 120. 367 3.96 10.43 19.86; 368 3.96 10.43 18.08; 369 0 10.43 16.45
 121. 370 5.19 10.43 16.45; 371 1.37 10.43 16.45; 372 3.96 10.43 16.45
 122. 373 5.19 10.43 23.17; 374 8.51 10.43 23.17; 375 5.19 10.43 21.83
 123. 376 8.51 10.43 21.83; 377 13.045 10.43 19.86; 378 13.045 10.43 17.815
 124. 379 15.18 10.43 19.86; 380 15.18 10.43 17.815; 381 14.88 10.43 17.815
 125. 382 14.88 10.43 14.96; 383 15.18 10.43 18.7; 384 16.25 10.43 18.7
 126. 385 11.22 10.43 14.96; 386 5.76 10.43 12.69; 387 5.76 10.43 9.64
 127. 388 8.975 10.43 14.96; 389 8.975 10.43 14.17; 390 7.87 10.43 14.17
 128. 391 6.95 10.43 12.69; 392 7.55 10.43 12.69; 393 5.76 10.43 11.785
 129. 394 0 13.44 0; 397 4.58 13.44 0; 398 7.63 13.44 0.23; 399 10.95 13.44 0.23
 130. 400 16.25 13.44 0.23; 401 7.63 13.44 3.76; 402 10.95 13.44 3.76
 131. 403 16.25 13.44 5.7; 404 0 13.44 6; 405 4.58 13.44 6; 406 10.95 13.44 7.76
 132. 407 0.23 13.44 9.64; 408 4.58 13.44 9.64; 409 9.16 13.44 9.64
 133. 410 11.22 13.44 9.64; 411 9.16 13.44 11.52; 412 11.22 13.44 11.52
 134. 413 16.02 13.44 11.52; 414 0.23 13.44 12.69; 415 5.19 13.44 12.69
 135. 416 7.87 13.44 12.69; 417 5.19 13.44 14.96; 418 7.87 13.44 14.96
 136. 419 11.45 13.44 14.96; 420 16.02 13.44 14.96; 421 11.45 13.44 17.815
 137. 422 16.02 13.44 17.815; 423 0.23 13.44 18.08; 424 5.19 13.44 19.86
 138. 425 8.51 13.44 19.86; 426 0.23 13.44 23.47; 427 5.19 13.44 23.47
 139. 428 8.51 13.44 23.47; 429 11.45 13.44 23.47; 430 16.02 13.44 23.47
 140. 431 7.63 13.44 0; 432 10.95 13.44 0; 433 16.25 13.44 0; 434 16.25 13.44 3.76
 141. 435 4.58 13.44 3.76; 436 7.63 13.44 1.88; 437 10.95 13.44 1.88
 142. 438 0 13.44 3.76; 439 4.58 13.44 3.19; 440 7.63 13.44 3.19
 143. 441 10.95 13.44 9.64; 442 0 13.44 9.64; 443 1.07 13.44 6; 444 1.07 13.44 3.76
 144. 445 3.21 13.44 6; 446 3.21 13.44 3.76; 447 1.37 13.44 9.64; 448 1.37 13.44 6
 145. 449 10.95 13.44 6; 450 16.25 13.44 11.52; 451 16.25 13.44 7.76
 146. 452 10.95 13.44 5.7; 453 12.29 13.44 7.76; 454 12.29 13.44 5.7
 147. 455 12.29 13.44 3.76; 456 15.18 13.44 7.76; 457 15.18 13.44 5.7
 148. 458 15.18 13.44 3.76; 459 0 13.44 4.93; 460 1.07 13.44 4.93; 461 0 13.44 12.69
 149. 462 16.25 13.44 14.96; 463 0 13.44 18.08; 464 0 13.44 23.47
 150. 465 16.25 13.44 17.815; 466 16.25 13.44 23.47; 467 5.19 13.44 17.815

V. JAGEN, B.E.M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QN/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841289154

STAAD SPACE

-- PAGE NO. 4

151. 468 11.45 13.44 19.86; 469 16.25 13.44 19.86; 470 0 13.44 19.86
 152. 471 5.19 13.44 18.08; 472 1.37 13.44 19.86; 473 1.37 13.44 18.08
 153. 474 3.96 13.44 19.86; 475 3.96 13.44 18.08; 476 0 13.44 16.45
 154. 477 5.19 13.44 16.45; 478 1.37 13.44 16.45; 479 3.96 13.44 16.45
 155. 480 5.19 13.44 23.17; 481 8.51 13.44 23.17; 482 5.19 13.44 21.83
 156. 483 8.51 13.44 21.83; 484 13.045 13.44 19.86; 485 13.045 13.44 17.815
 157. 486 15.18 13.44 19.86; 487 15.18 13.44 17.815; 488 14.88 13.44 17.815
 158. 489 14.88 13.44 14.96; 490 15.18 13.44 18.7; 491 16.25 13.44 18.7
 159. 492 11.22 13.44 14.96; 493 5.76 13.44 12.69; 494 5.76 13.44 9.64
 160. 495 8.975 13.44 14.96; 496 8.975 13.44 14.17; 497 7.87 13.44 14.17
 161. 498 6.95 13.44 12.69; 499 7.55 13.44 12.69; 500 5.76 13.44 11.785
 162. 503 0 16.45 0; 504 4.58 16.45 0; 505 7.63 16.45 0.23; 506 10.95 16.45 0.23
 163. 507 16.25 16.45 0.23; 508 7.63 16.45 3.76; 509 10.95 16.45 3.76
 164. 510 16.25 16.45 5.7; 511 0 16.45 6; 512 4.58 16.45 6; 513 10.95 16.45 7.76
 165. 514 0.23 16.45 9.64; 515 4.58 16.45 9.64; 516 9.16 16.45 9.64
 166. 517 11.22 16.45 9.64; 518 9.16 16.45 11.52; 519 11.22 16.45 11.52
 167. 520 16.02 16.45 11.52; 521 0.23 16.45 12.69; 522 5.19 16.45 12.69
 168. 523 7.87 16.45 12.69; 524 5.19 16.45 14.96; 525 7.87 16.45 14.96
 169. 526 11.45 16.45 14.96; 527 16.02 16.45 14.96; 528 11.45 16.45 17.815
 170. 529 16.02 16.45 17.815; 530 0.23 16.45 18.08; 531 5.19 16.45 19.86
 171. 532 8.51 16.45 19.86; 533 0.23 16.45 23.47; 534 5.19 16.45 23.47
 172. 535 8.51 16.45 23.47; 536 11.45 16.45 23.47; 537 16.02 16.45 23.47
 173. 538 7.63 16.45 0; 539 10.95 16.45 0; 540 16.25 16.45 0; 541 16.25 16.45 3.76
 174. 542 4.58 16.45 3.76; 543 7.63 16.45 1.88; 544 10.95 16.45 1.88
 175. 545 0 16.45 3.76; 546 4.58 16.45 3.19; 547 7.63 16.45 3.19
 176. 548 10.95 16.45 9.64; 549 0 16.45 9.64; 550 1.07 16.45 6; 551 1.07 16.45 3.76
 177. 552 3.21 16.45 6; 553 3.21 16.45 3.76; 554 1.37 16.45 9.64; 555 1.37 16.45 6
 178. 556 10.95 16.45 6; 557 16.25 16.45 11.52; 558 16.25 16.45 7.76
 179. 559 10.95 16.45 5.7; 560 12.29 16.45 7.76; 561 12.29 16.45 5.7
 180. 562 12.29 16.45 3.76; 563 15.18 16.45 7.76; 564 15.18 16.45 5.7
 181. 565 15.18 16.45 3.76; 566 0 16.45 4.93; 567 1.07 16.45 4.93; 568 0 16.45 12.69
 182. 569 16.25 16.45 14.96; 570 0 16.45 18.08; 571 0 16.45 23.47
 183. 572 16.25 16.45 17.815; 573 16.25 16.45 23.47; 574 5.19 16.45 17.815
 184. 575 11.45 16.45 19.86; 576 16.25 16.45 19.86; 577 0 16.45 19.86
 185. 578 5.19 16.45 18.08; 579 1.37 16.45 19.86; 580 1.37 16.45 18.08
 186. 581 3.96 16.45 19.86; 582 3.96 16.45 18.08; 583 0 16.45 16.45
 187. 584 5.19 16.45 16.45; 585 1.37 16.45 16.45; 586 3.96 16.45 16.45
 188. 587 5.19 16.45 23.17; 588 8.51 16.45 23.17; 589 5.19 16.45 21.83
 189. 590 8.51 16.45 21.83; 591 13.045 16.45 19.86; 592 13.045 16.45 17.815
 190. 593 15.18 16.45 19.86; 594 15.18 16.45 17.815; 595 14.88 16.45 17.815
 191. 596 14.88 16.45 14.96; 597 15.18 16.45 18.7; 598 16.25 16.45 18.7
 192. 599 11.22 16.45 14.96; 600 5.76 16.45 12.69; 601 5.76 16.45 9.64
 193. 602 8.975 16.45 14.96; 603 8.975 16.45 14.17; 604 7.87 16.45 14.17
 194. 605 6.95 16.45 12.69; 606 7.55 16.45 12.69; 609 5.76 16.45 11.785
 195. 610 0 19.46 0; 611 4.58 19.46 0; 612 7.63 19.46 0.23; 613 10.95 19.46 0.23
 196. 614 16.25 19.46 0.23; 615 7.63 19.46 3.76; 616 10.95 19.46 3.76
 197. 617 16.25 19.46 5.7; 618 0 19.46 6; 619 4.58 19.46 6; 620 10.95 19.46 7.76
 198. 621 0.23 19.46 9.64; 622 4.58 19.46 9.64; 623 9.16 19.46 9.64
 199. 624 11.22 19.46 9.64; 625 9.16 19.46 11.52; 626 11.22 19.46 11.52
 200. 627 16.02 19.46 11.52; 628 0.23 19.46 12.69; 629 5.19 19.46 12.69
 201. 630 7.87 19.46 12.69; 631 5.19 19.46 14.96; 632 7.87 19.46 14.96
 202. 633 11.45 19.46 14.96; 634 16.02 19.46 14.96; 635 11.45 19.46 17.815
 203. 636 16.02 19.46 17.815; 637 0.23 19.46 18.08; 638 5.19 19.46 19.86
 204. 639 8.51 19.46 19.86; 640 0.23 19.46 23.47; 641 5.19 19.46 23.47
 205. 642 8.51 19.46 23.47; 643 11.45 19.46 23.47; 644 16.02 19.46 23.47
 206. 645 7.63 19.46 0; 646 10.95 19.46 0; 647 16.25 19.46 0; 648 16.25 19.46 3.76


V. JAGEN, B.E.M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GALURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.

STAAD SPACE

-- PAGE NO. 5

207. 649 4.58 19.46 3.76; 650 7.63 19.46 1.88; 651 10.95 19.46 1.88
 208. 652 0 19.46 3.76; 653 4.58 19.46 3.19; 654 7.63 19.46 3.19
 209. 655 10.95 19.46 9.64; 656 0 19.46 9.64; 657 1.07 19.46 6; 658 1.07 19.46 3.76
 210. 659 3.21 19.46 6; 660 3.21 19.46 3.76; 661 1.37 19.46 9.64; 662 1.37 19.46 6
 211. 663 10.95 19.46 6; 664 16.25 19.46 11.52; 665 16.25 19.46 7.76
 212. 666 10.95 19.46 5.7; 667 12.29 19.46 7.76; 668 12.29 19.46 5.7
 213. 669 12.29 19.46 3.76; 670 15.18 19.46 7.76; 671 15.18 19.46 5.7
 214. 672 15.18 19.46 3.76; 673 0 19.46 4.93; 674 1.07 19.46 4.93; 675 0 19.46 12.69
 215. 676 16.25 19.46 14.96; 677 0 19.46 18.08; 678 0 19.46 23.47
 216. 679 16.25 19.46 17.815; 680 16.25 19.46 23.47; 681 5.19 19.46 17.815
 217. 682 11.45 19.46 19.86; 683 16.25 19.46 19.86; 684 0 19.46 19.86
 218. 685 5.19 19.46 18.08; 686 1.37 19.46 19.86; 687 1.37 19.46 18.08
 219. 688 3.96 19.46 19.86; 689 3.96 19.46 18.08; 690 0 19.46 16.45
 220. 691 5.19 19.46 16.45; 692 1.37 19.46 16.45; 693 3.96 19.46 16.45
 221. 694 5.19 19.46 23.17; 695 8.51 19.46 23.17; 696 5.19 19.46 21.83
 222. 697 8.51 19.46 21.83; 698 13.045 19.46 19.86; 699 13.045 19.46 17.815
 223. 700 15.18 19.46 19.86; 701 15.18 19.46 17.815; 702 14.88 19.46 17.815
 224. 703 14.88 19.46 14.96; 704 15.18 19.46 18.7; 705 16.25 19.46 18.7
 225. 706 11.22 19.46 14.96; 707 5.76 19.46 12.69; 708 5.76 19.46 9.64
 226. 709 8.975 19.46 14.96; 710 8.975 19.46 14.17; 711 7.87 19.46 14.17
 227. 712 6.95 19.46 12.69; 713 7.55 19.46 12.69; 714 5.76 19.46 11.785
 228. 717 0 22.47 0; 718 4.58 22.47 0; 719 7.63 22.47 0.23; 720 10.95 22.47 0.23
 229. 721 16.25 22.47 0.23; 722 7.63 22.47 3.76; 723 10.95 22.47 3.76
 230. 724 16.25 22.47 5.7; 725 0 22.47 6; 726 4.58 22.47 6; 727 10.95 22.47 7.76
 231. 728 0.23 22.47 9.64; 729 4.58 22.47 9.64; 730 9.16 22.47 9.64
 232. 731 11.22 22.47 9.64; 732 9.16 22.47 11.52; 733 11.22 22.47 11.52
 233. 734 16.02 22.47 11.52; 735 0.23 22.47 12.69; 736 5.19 22.47 12.69
 234. 737 7.87 22.47 12.69; 738 5.19 22.47 14.96; 739 7.87 22.47 14.96
 235. 740 11.45 22.47 14.96; 741 16.02 22.47 14.96; 742 11.45 22.47 17.815
 236. 743 16.02 22.47 17.815; 744 0.23 22.47 18.08; 745 5.19 22.47 19.86
 237. 746 8.51 22.47 19.86; 747 0.23 22.47 23.47; 748 5.19 22.47 23.47
 238. 749 8.51 22.47 23.47; 750 11.45 22.47 23.47; 751 16.02 22.47 23.47
 239. 752 7.63 22.47 0; 753 10.95 22.47 0; 754 16.25 22.47 0; 755 16.25 22.47 3.76
 240. 756 4.58 22.47 3.76; 757 7.63 22.47 1.88; 758 10.95 22.47 1.88
 241. 759 0 22.47 3.76; 760 4.58 22.47 3.19; 761 7.63 22.47 3.19
 242. 762 10.95 22.47 9.64; 763 0 22.47 9.64; 764 1.07 22.47 6; 765 1.07 22.47 3.76
 243. 766 3.21 22.47 6; 767 3.21 22.47 3.76; 768 1.37 22.47 9.64; 769 1.37 22.47 6
 244. 770 10.95 22.47 6; 771 16.25 22.47 11.52; 772 16.25 22.47 7.76
 245. 773 10.95 22.47 5.7; 774 12.29 22.47 7.76; 775 12.29 22.47 5.7
 246. 776 12.29 22.47 3.76; 777 15.18 22.47 7.76; 778 15.18 22.47 5.7
 247. 779 15.18 22.47 3.76; 780 0 22.47 4.93; 781 1.07 22.47 4.93; 782 0 22.47 12.69
 248. 783 16.25 22.47 14.96; 784 0 22.47 18.08; 785 0 22.47 23.47
 249. 786 16.25 22.47 17.815; 787 16.25 22.47 23.47; 788 5.19 22.47 17.815
 250. 789 11.45 22.47 19.86; 790 16.25 22.47 19.86; 791 0 22.47 19.86
 251. 792 5.19 22.47 18.08; 793 1.37 22.47 19.86; 794 1.37 22.47 18.08
 252. 795 3.96 22.47 19.86; 796 3.96 22.47 18.08; 797 0 22.47 16.45
 253. 798 5.19 22.47 16.45; 799 1.37 22.47 16.45; 800 3.96 22.47 16.45
 254. 801 5.19 22.47 23.17; 802 8.51 22.47 23.17; 803 5.19 22.47 21.83
 255. 804 8.51 22.47 21.83; 805 13.045 22.47 19.86; 806 13.045 22.47 17.815
 256. 807 15.18 22.47 19.86; 808 15.18 22.47 17.815; 809 14.88 22.47 17.815
 257. 810 14.88 22.47 14.96; 811 15.18 22.47 18.7; 812 16.25 22.47 18.7
 258. 813 11.22 22.47 14.96; 814 5.76 22.47 12.69; 815 5.76 22.47 9.64
 259. 816 8.975 22.47 14.96; 817 8.975 22.47 14.17; 818 7.87 22.47 14.17
 260. 819 6.95 22.47 12.69; 820 7.55 22.47 12.69; 821 5.76 22.47 11.785
 261. 824 0 25.48 0; 825 4.58 25.48 0; 826 7.63 25.48 0.23; 827 10.95 25.48 0.23
 262. 828 16.25 25.48 0.23; 829 7.63 25.48 3.76; 830 10.95 25.48 3.76

V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
CMDA REGN NOS.

SE / GR-1 / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER

3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD

SHOLINGANALLUR, CHENNAI - 600 119

263. 831 16.25 25.48 5.7; 832 0 25.48 6; 833 4.58 25.48 6; 834 10.95 25.48 7.76
264. 835 0.23 25.48 9.64; 836 4.58 25.48 9.64; 837 9.16 25.48 9.64
265. 838 11.22 25.48 9.64; 839 9.16 25.48 11.52; 840 11.22 25.48 11.52
266. 841 16.02 25.48 11.52; 842 0.23 25.48 12.69; 843 5.19 25.48 12.69
267. 844 7.87 25.48 12.69; 845 5.19 25.48 14.96; 846 7.87 25.48 14.96
268. 847 11.45 25.48 14.96; 848 16.02 25.48 14.96; 849 11.45 25.48 17.815
269. 850 16.02 25.48 17.815; 851 0.23 25.48 18.08; 852 5.19 25.48 19.86
270. 853 8.51 25.48 19.86; 854 0.23 25.48 23.47; 855 5.19 25.48 23.47
271. 856 8.51 25.48 23.47; 857 11.45 25.48 23.47; 858 16.02 25.48 23.47
272. 859 7.63 25.48 0; 860 10.95 25.48 0; 861 16.25 25.48 0; 862 16.25 25.48 3.76
273. 863 4.58 25.48 3.76; 864 7.63 25.48 1.88; 865 10.95 25.48 1.88
274. 866 0 25.48 3.76; 867 4.58 25.48 3.19; 868 7.63 25.48 3.19
275. 869 10.95 25.48 9.64; 870 0 25.48 9.64; 871 1.07 25.48 6; 872 1.07 25.48 3.76
276. 873 3.21 25.48 6; 874 3.21 25.48 3.76; 875 1.37 25.48 9.64; 876 1.37 25.48 6
277. 877 10.95 25.48 6; 878 16.25 25.48 11.52; 879 16.25 25.48 7.76
278. 880 10.95 25.48 5.7; 881 12.29 25.48 7.76; 882 12.29 25.48 5.7
279. 883 12.29 25.48 3.76; 884 15.18 25.48 7.76; 885 15.18 25.48 5.7
280. 886 15.18 25.48 3.76; 887 0 25.48 4.93; 888 1.07 25.48 4.93; 889 0 25.48 12.69
281. 890 16.25 25.48 14.96; 891 0 25.48 18.08; 892 0 25.48 23.47
282. 893 16.25 25.48 17.815; 894 16.25 25.48 23.47; 895 5.19 25.48 17.815
283. 896 11.45 25.48 19.86; 897 16.25 25.48 19.86; 898 0 25.48 19.86
284. 899 5.19 25.48 18.08; 900 1.37 25.48 19.86; 901 1.37 25.48 18.08
285. 902 3.96 25.48 19.86; 903 3.96 25.48 18.08; 904 0 25.48 16.45
286. 905 5.19 25.48 16.45; 906 1.37 25.48 16.45; 907 3.96 25.48 16.45
287. 908 5.19 25.48 23.17; 909 8.51 25.48 23.17; 910 5.19 25.48 21.83
288. 911 8.51 25.48 21.83; 912 13.045 25.48 19.86; 913 13.045 25.48 17.815
289. 914 15.18 25.48 19.86; 915 15.18 25.48 17.815; 916 14.88 25.48 17.815
290. 917 14.88 25.48 14.96; 918 15.18 25.48 18.7; 919 16.25 25.48 18.7
291. 920 11.22 25.48 14.96; 921 5.76 25.48 12.69; 922 5.76 25.48 9.64
292. 923 8.975 25.48 14.96; 924 8.975 25.48 14.17; 925 7.87 25.48 14.17
293. 926 6.95 25.48 12.69; 927 7.55 25.48 12.69; 928 5.76 25.48 11.785
294. 931 0 28.49 0; 932 4.58 28.49 0; 933 7.63 28.49 0.23; 934 10.95 28.49 0.23
295. 935 16.25 28.49 0.23; 936 7.63 28.49 3.76; 937 10.95 28.49 3.76
296. 938 16.25 28.49 5.7; 939 0 28.49 6; 940 4.58 28.49 6; 941 10.95 28.49 7.76
297. 942 0.23 28.49 9.64; 943 4.58 28.49 9.64; 944 9.16 28.49 9.64
298. 945 11.22 28.49 9.64; 946 9.16 28.49 11.52; 947 11.22 28.49 11.52
299. 948 16.02 28.49 11.52; 949 0.23 28.49 12.69; 950 5.19 28.49 12.69
300. 951 7.87 28.49 12.69; 952 5.19 28.49 14.96; 953 7.87 28.49 14.96
301. 954 11.45 28.49 14.96; 955 16.02 28.49 14.96; 956 11.45 28.49 17.815
302. 957 16.02 28.49 17.815; 958 0.23 28.49 18.08; 959 5.19 28.49 19.86
303. 960 8.51 28.49 19.86; 961 0.23 28.49 23.47; 962 5.19 28.49 23.47
304. 963 8.51 28.49 23.47; 964 11.45 28.49 23.47; 965 16.02 28.49 23.47
305. 966 7.63 28.49 0; 967 10.95 28.49 0; 968 16.25 28.49 0; 969 16.25 28.49 3.76
306. 970 4.58 28.49 3.76; 971 7.63 28.49 1.88; 972 10.95 28.49 1.88
307. 973 0 28.49 3.76; 974 4.58 28.49 3.19; 975 7.63 28.49 3.19
308. 976 10.95 28.49 9.64; 977 0 28.49 9.64; 978 1.07 28.49 6; 979 1.07 28.49 3.76
309. 980 3.21 28.49 6; 981 3.21 28.49 3.76; 982 1.37 28.49 9.64; 983 1.37 28.49 6
310. 984 10.95 28.49 6; 985 16.25 28.49 11.52; 986 16.25 28.49 7.76
311. 987 10.95 28.49 5.7; 988 12.29 28.49 7.76; 989 12.29 28.49 5.7
312. 990 12.29 28.49 3.76; 991 15.18 28.49 7.76; 992 15.18 28.49 5.7
313. 993 15.18 28.49 3.76; 994 0 28.49 4.93; 995 1.07 28.49 4.93; 996 0 28.49 12.69
314. 997 16.25 28.49 14.96; 998 0 28.49 18.08; 999 0 28.49 23.47
315. 1000 16.25 28.49 17.815; 1001 16.25 28.49 23.47; 1002 5.19 28.49 17.815
316. 1003 11.45 28.49 19.86; 1004 16.25 28.49 19.86; 1005 0 28.49 19.86
317. 1006 5.19 28.49 18.08; 1007 1.37 28.49 19.86; 1008 1.37 28.49 18.08
318. 1009 3.96 28.49 19.86; 1010 3.96 28.49 18.08; 101

V. JAGEN, B.E.M.E., (Struct), MIE, A.I.V.
CMDA REGN NOS -
SE / GR-1 / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.

STAAD SPACE

-- PAGE NO. 7

319. 1012 5.19 28.49 16.45; 1013 1.37 28.49 16.45; 1014 3.96 28.49 16.45
 320. 1015 5.19 28.49 23.17; 1016 8.51 28.49 23.17; 1017 5.19 28.49 21.83
 321. 1018 8.51 28.49 21.83; 1019 13.045 28.49 19.86; 1020 13.045 28.49 17.815
 322. 1021 15.18 28.49 19.86; 1022 15.18 28.49 17.815; 1023 14.88 28.49 17.815
 323. 1024 14.88 28.49 14.96; 1025 15.18 28.49 18.7; 1026 16.25 28.49 18.7
 324. 1027 11.22 28.49 14.96; 1028 5.76 28.49 12.69; 1029 5.76 28.49 9.64
 325. 1030 8.975 28.49 14.96; 1031 8.975 28.49 14.17; 1032 7.87 28.49 14.17
 326. 1033 6.95 28.49 12.69; 1034 7.55 28.49 12.69; 1037 5.76 28.49 11.785
 327. 1038 0 31.5 0; 1039 4.58 31.5 0; 1040 7.63 31.5 0.23; 1041 10.95 31.5 0.23
 328. 1042 16.25 31.5 0.23; 1043 7.63 31.5 3.76; 1044 10.95 31.5 3.76
 329. 1045 16.25 31.5 5.7; 1046 0 31.5 6; 1047 4.58 31.5 6; 1048 10.95 31.5 7.76
 330. 1049 0.23 31.5 9.64; 1050 4.58 31.5 9.64; 1051 9.16 31.5 9.64
 331. 1052 11.22 31.5 9.64; 1053 9.16 31.5 11.52; 1054 11.22 31.5 11.52
 332. 1055 16.02 31.5 11.52; 1056 0.23 31.5 12.69; 1057 5.19 31.5 12.69
 333. 1058 7.87 31.5 12.69; 1059 5.19 31.5 14.96; 1060 7.87 31.5 14.96
 334. 1061 11.45 31.5 14.96; 1062 16.02 31.5 14.96; 1063 11.45 31.5 17.815
 335. 1064 16.02 31.5 17.815; 1065 0.23 31.5 18.08; 1066 5.19 31.5 19.86
 336. 1067 8.51 31.5 19.86; 1068 0.23 31.5 23.47; 1069 5.19 31.5 23.47
 337. 1070 8.51 31.5 23.47; 1071 11.45 31.5 23.47; 1072 16.02 31.5 23.47
 338. 1073 7.63 31.5 0; 1074 10.95 31.5 0; 1075 16.25 31.5 0; 1076 16.25 31.5 3.76
 339. 1077 4.58 31.5 3.76; 1078 7.63 31.5 1.88; 1079 10.95 31.5 1.88
 340. 1080 0 31.5 3.76; 1081 4.58 31.5 3.19; 1082 7.63 31.5 3.19
 341. 1083 10.95 31.5 9.64; 1084 0 31.5 9.64; 1085 1.07 31.5 6; 1086 1.07 31.5 3.76
 342. 1087 3.21 31.5 6; 1088 3.21 31.5 3.76; 1089 1.37 31.5 9.64; 1090 1.37 31.5 6
 343. 1091 10.95 31.5 6; 1092 16.25 31.5 11.52; 1093 16.25 31.5 7.76
 344. 1094 10.95 31.5 5.7; 1095 12.29 31.5 7.76; 1096 12.29 31.5 5.7
 345. 1097 12.29 31.5 3.76; 1098 15.18 31.5 7.76; 1099 15.18 31.5 5.7
 346. 1100 15.18 31.5 3.76; 1101 0 31.5 4.93; 1102 1.07 31.5 4.93; 1103 0 31.5 12.69
 347. 1104 16.25 31.5 14.96; 1105 0 31.5 18.08; 1106 0 31.5 23.47
 348. 1107 16.25 31.5 17.815; 1108 16.25 31.5 23.47; 1109 5.19 31.5 17.815
 349. 1110 11.45 31.5 19.86; 1111 16.25 31.5 19.86; 1112 0 31.5 19.86
 350. 1113 5.19 31.5 18.08; 1114 1.37 31.5 19.86; 1115 1.37 31.5 18.08
 351. 1116 3.96 31.5 19.86; 1117 3.96 31.5 18.08; 1118 0 31.5 16.45
 352. 1119 5.19 31.5 16.45; 1120 1.37 31.5 16.45; 1121 3.96 31.5 16.45
 353. 1122 5.19 31.5 23.17; 1123 8.51 31.5 23.17; 1124 5.19 31.5 21.83
 354. 1125 8.51 31.5 21.83; 1126 13.045 31.5 19.86; 1127 13.045 31.5 17.815
 355. 1128 15.18 31.5 19.86; 1129 15.18 31.5 17.815; 1130 14.88 31.5 17.815
 356. 1131 14.88 31.5 14.96; 1132 15.18 31.5 18.7; 1133 16.25 31.5 18.7
 357. 1134 11.22 31.5 14.96; 1135 5.76 31.5 12.69; 1136 5.76 31.5 9.64
 358. 1137 8.975 31.5 14.96; 1138 8.975 31.5 14.17; 1139 7.87 31.5 14.17
 359. 1140 6.95 31.5 12.69; 1141 7.55 31.5 12.69; 1144 5.76 31.5 11.785
 360. 1145 0.23 34.51 9.64; 1146 4.58 34.51 9.64; 1147 9.16 34.51 9.64
 361. 1148 11.22 34.51 9.64; 1149 9.16 34.51 11.52; 1150 11.22 34.51 11.52
 362. 1151 16.02 34.51 11.52; 1152 0.23 34.51 12.69; 1153 5.19 34.51 12.69
 363. 1154 7.87 34.51 12.69; 1155 5.19 34.51 14.96; 1156 7.87 34.51 14.96
 364. 1157 11.45 34.51 14.96; 1158 16.02 34.51 14.96; 1159 10.95 34.51 9.64
 365. 1160 1.37 34.51 9.64; 1162 14.88 34.51 14.96; 1163 11.22 34.51 14.96
 366. 1164 5.76 34.51 12.69; 1165 5.76 34.51 9.64; 1166 8.975 34.51 14.96
 367. 1168 7.87 34.51 14.17; 1169 6.95 34.51 12.69; 1170 7.55 34.51 12.69
 368. 1172 7.55 34.51 11.785; 1173 5.76 34.51 11.785; 1174 7.55 34.51 11.52
 369. 1175 16.02 34.51 15.775; 1176 11.22 34.51 15.775; 1177 7.63 34.51 0.23
 370. 1178 10.95 34.51 0.23; 1179 7.63 34.51 3.76; 1180 10.95 34.51 3.76
 371. 1181 7.63 34.51 1.88; 1182 10.95 34.51 1.88; 1183 7.63 34.51 3.19
 372. 1184 7.63 34.51 0.965; 1185 10.95 34.51 0.965; 1186 4.58 1.5 3.76
 373. 1190 16.25 1.5 3.76; 1191 10.95 1.5 6; 1192 7.63 1.5 6; 1193 7.73 1.5 9.64
 374. 1194 7.73 1.5 6; 1195 10.95 1.5 5.7; 1200 11.45 1.5 19.86; 1206 7.7 1.5 19.86


V. JAGEN, B.E.M.E., (Struct), M.I.E.A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841289154

STAAD SPACE

-- PAGE NO. 8

375. 1207 7.7 1.5 14.96; 1208 5.19 1.5 18.08; 1210 5.19 1.5 17.53
 376. 1211 7.7 1.5 17.53; 1212 11.45 1.5 11.52; 1213 5.76 1.5 12.69
 377. 1214 5.76 1.5 9.64; 1215 10.95 1.5 9.64; 1216 7.87 1.5 14.17
 378. 1217 8.975 1.5 14.17; 1218 8.975 1.5 14.96; 1219 5.76 1.5 11.785
 379. 1220 6.95 1.5 11.785; 1221 7.55 1.5 11.785; 1222 7.55 1.5 12.69
 380. 1223 6.95 1.5 12.69; 1224 9.16 36.01 9.64; 1225 11.22 36.01 9.64
 381. 1226 9.16 36.01 11.52; 1227 11.22 36.01 11.52; 1228 5.19 36.01 12.69
 382. 1229 7.87 36.01 12.69; 1230 5.19 36.01 14.96; 1231 7.87 36.01 14.96
 383. 1232 10.95 36.01 9.64; 1233 5.76 36.01 12.69; 1234 7.87 36.01 14.17
 384. 1235 6.95 36.01 12.69; 1236 7.55 36.01 12.69; 1237 5.19 0.375 12.69
 385. 1238 5.19 0.75 12.69; 1239 5.19 1.125 12.69; 1240 5.19 1.985 12.69
 386. 1241 5.19 2.47 12.69; 1242 5.19 2.955 12.69; 1243 5.19 3.44 12.69
 387. 1244 5.19 3.925 12.69; 1245 5.19 4.78625 12.69; 1246 5.19 5.1625 12.69
 388. 1247 5.19 5.53875 12.69; 1248 5.19 5.915 12.69; 1249 5.19 6.29125 12.69
 389. 1250 5.19 6.6675 12.69; 1251 5.19 7.04375 12.69; 1252 5.19 7.79625 12.69
 390. 1253 5.19 8.1725 12.69; 1254 5.19 8.54875 12.69; 1255 5.19 8.925 12.69
 391. 1256 5.19 9.30125 12.69; 1257 5.19 9.6775 12.69; 1258 5.19 10.0538 12.69
 392. 1259 5.19 10.4263 12.69; 1260 5.19 11.1825 12.69; 1261 5.19 11.5588 12.69
 393. 1262 5.19 11.935 12.69; 1263 5.19 12.3112 12.69; 1264 5.19 12.6875 12.69
 394. 1265 5.19 13.0637 12.69; 1266 5.19 13.8162 12.69; 1267 5.19 14.1925 12.69
 395. 1268 5.19 14.5688 12.69; 1269 5.19 14.945 12.69; 1270 5.19 15.3212 12.69
 396. 1271 5.19 15.6975 12.69; 1272 5.19 16.0738 12.69; 1273 5.19 16.4501 12.69
 397. 1274 5.19 17.2025 12.69; 1275 5.19 17.5788 12.69; 1276 5.19 17.955 12.69
 398. 1277 5.19 18.3312 12.69; 1278 5.19 18.7075 12.69; 1279 5.19 19.0837 12.69
 399. 1280 5.19 19.4588 12.69; 1281 5.19 20.2125 12.69; 1282 5.19 20.5887 12.69
 400. 1283 5.19 20.965 12.69; 1284 5.19 21.3412 12.69; 1285 5.19 21.7175 12.69
 401. 1286 5.19 22.0938 12.69; 1287 5.19 22.4662 12.69; 1288 5.19 23.2225 12.69
 402. 1289 5.19 23.5987 12.69; 1290 5.19 23.975 12.69; 1291 5.19 24.3512 12.69
 403. 1292 5.19 24.7275 12.69; 1293 5.19 25.1038 12.69; 1294 5.19 25.4801 12.69
 404. 1295 5.19 25.8562 12.69; 1296 5.19 26.2325 12.69; 1297 5.19 26.6087 12.69
 405. 1298 5.19 27.3612 12.69; 1299 5.19 27.7375 12.69; 1300 5.19 28.1138 12.69
 406. 1301 5.19 28.4901 12.69; 1302 5.19 29.2425 12.69; 1303 5.19 29.6187 12.69
 407. 1304 5.19 29.995 12.69; 1305 5.19 30.3713 12.69; 1306 5.19 30.7475 12.69
 408. 1307 5.19 31.1238 12.69; 1308 5.19 31.5001 12.69; 1309 5.19 31.8762 12.69
 409. 1310 5.19 32.2525 12.69; 1311 5.19 32.6287 12.69; 1312 5.19 33.005 12.69
 410. 1313 5.19 33.3812 12.69; 1314 5.19 33.7575 12.69; 1315 5.19 34.1337 12.69
 411. 1316 5.19 34.5101 12.69; 1317 5.19 34.8862 12.69; 1318 5.19 35.2625 12.69
 412. 1319 5.19 35.6387 12.69; 1320 5.19 36.015 12.69; 1321 5.19 36.3912 12.69
 413. 1322 5.19 36.7675 12.69; 1323 5.19 37.1438 12.69; 1324 5.19 37.5201 12.69
 414. 1325 5.19 37.8962 12.69; 1326 5.19 38.2725 12.69; 1327 5.19 38.6487 12.69
 415. 1328 5.19 39.025 12.69; 1329 5.19 39.4012 12.69; 1330 5.19 39.7775 12.69
 416. 1331 5.19 40.1538 12.69; 1332 5.19 40.5301 12.69; 1333 5.19 40.9062 12.69
 417. 1334 5.19 41.2825 12.69; 1335 5.19 41.6587 12.69; 1336 5.19 42.035 12.69
 418. 1337 5.19 42.4112 12.69; 1338 5.19 42.7875 12.69; 1339 5.19 43.1638 12.69
 419. 1340 5.19 43.5401 12.69; 1341 5.19 43.9162 12.69; 1342 5.19 44.2925 12.69
 420. 1343 5.19 44.6687 12.69; 1344 5.19 45.045 12.69; 1345 5.19 45.4212 12.69
 421. 1346 5.19 45.7975 12.69; 1347 5.19 46.1738 12.69; 1348 5.19 46.5501 12.69
 422. 1349 5.19 46.9262 12.69; 1350 5.19 47.3025 12.69; 1351 5.19 47.6787 12.69
 423. 1352 5.19 48.055 12.69; 1353 5.19 48.4312 12.69; 1354 5.19 48.8075 12.69
 424. 1355 5.19 49.1838 12.69; 1356 5.19 49.5601 12.69; 1357 5.19 49.9362 12.69
 425. 1358 5.19 50.3125 12.69; 1359 5.19 50.6887 12.69; 1360 5.19 51.065 12.69
 426. 1361 5.19 51.4412 12.69; 1362 5.19 51.8175 12.69; 1363 5.19 52.1938 12.69
 427. 1364 5.19 52.5701 12.69; 1365 5.19 52.9462 12.69; 1366 5.19 53.3225 12.69
 428. 1367 5.19 53.7087 12.69; 1368 5.19 54.085 12.69; 1369 5.19 54.4612 12.69
 429. 1370 5.19 54.8375 12.69; 1371 5.19 55.2138 12.69; 1372 5.19 55.5901 12.69
 430. 1373 5.19 55.9662 12.69; 1374 5.19 56.3425 12.69; 1375 5.19 56.7187 12.69



V. JAGEN, B.E., M.E., (Struct), M.I.E.A.I.V.,
CMDA REGN NOS -

SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 9

431. 1376 7.87 13.0637 12.69; 1377 7.87 12.6875 12.69; 1378 7.87 12.3112 12.69
 432. 1379 7.87 11.935 12.69; 1380 7.87 11.5588 12.69; 1381 7.87 11.1825 12.69
 433. 1382 7.87 10.8063 12.69; 1383 7.87 10.0538 12.69; 1384 7.87 9.6775 12.69
 434. 1385 7.87 9.30125 12.69; 1386 7.87 8.925 12.69; 1387 7.87 8.54875 12.69
 435. 1388 7.87 8.1725 12.69; 1389 7.87 7.79625 12.69; 1390 7.87 7.04375 12.69
 436. 1391 7.87 6.6675 12.69; 1392 7.87 6.29125 12.69; 1393 7.87 5.915 12.69
 437. 1394 7.87 5.53875 12.69; 1395 7.87 5.1625 12.69; 1396 7.87 4.78625 12.69
 438. 1397 7.87 3.925 12.69; 1398 7.87 3.44 12.69; 1399 7.87 2.955 12.69
 439. 1400 7.87 2.47 12.69; 1401 7.87 1.985 12.69; 1402 7.87 1.125 12.69
 440. 1403 7.87 0.75 12.69; 1404 7.87 0.375 12.69; 1405 7.42333 0 12.69
 441. 1406 6.97067 0 12.69; 1407 6.53 0 12.69; 1408 6.08333 0 12.69
 442. 1409 5.63667 0 12.69; 1410 5.475 4.41 12.69; 1411 6.0575 4.41 12.69
 443. 1412 6.355 4.41 12.69; 1413 6.6525 4.41 12.69; 1414 7.25 4.41 12.69
 444. 1415 7.71 4.41 12.69; 1416 5.475 7.42 12.69; 1417 6.0575 7.42 12.69
 445. 1418 6.355 7.42 12.69; 1419 6.6525 7.42 12.69; 1420 7.25 7.42 12.69
 446. 1421 7.71 7.42 12.69; 1422 5.475 10.43 12.69; 1423 6.0575 10.43 12.69
 447. 1424 6.355 10.43 12.69; 1425 6.6525 10.43 12.69; 1426 7.25 10.43 12.69
 448. 1427 7.71 10.43 12.69; 1428 5.475 13.44 12.69; 1429 6.0575 13.44 12.69
 449. 1430 6.355 13.44 12.69; 1431 6.6525 13.44 12.69; 1432 7.25 13.44 12.69
 450. 1433 7.71 13.44 12.69; 1434 5.475 16.45 12.69; 1435 6.0575 16.45 12.69
 451. 1436 6.355 16.45 12.69; 1437 6.6525 16.45 12.69; 1438 7.25 16.45 12.69
 452. 1439 7.71 16.45 12.69; 1440 5.475 19.46 12.69; 1441 6.0575 19.46 12.69
 453. 1442 6.355 19.46 12.69; 1443 6.6525 19.46 12.69; 1444 7.25 19.46 12.69
 454. 1445 7.71 19.46 12.69; 1446 5.475 22.47 12.69; 1447 6.0575 22.47 12.69
 455. 1448 6.355 22.47 12.69; 1449 6.6525 22.47 12.69; 1450 7.25 22.47 12.69
 456. 1451 7.71 22.47 12.69; 1452 5.475 25.48 12.69; 1453 6.0575 25.48 12.69
 457. 1454 6.355 25.48 12.69; 1455 6.6525 25.48 12.69; 1456 7.25 25.48 12.69
 458. 1457 7.71 25.48 12.69; 1458 5.475 28.49 12.69; 1459 6.0575 28.49 12.69
 459. 1460 6.355 28.49 12.69; 1461 6.6525 28.49 12.69; 1462 7.25 28.49 12.69
 460. 1463 7.71 28.49 12.69; 1464 5.475 31.5 12.69; 1465 6.0575 31.5 12.69
 461. 1466 6.355 31.5 12.69; 1467 6.6525 31.5 12.69; 1468 7.25 31.5 12.69
 462. 1469 7.71 31.5 12.69; 1470 5.475 34.51 12.69; 1471 6.0575 34.51 12.69
 463. 1472 6.355 34.51 12.69; 1473 6.6525 34.51 12.69; 1474 7.25 34.51 12.69
 464. 1475 7.71 34.51 12.69; 1476 5.475 1.5 12.69; 1477 6.0575 1.5 12.69
 465. 1478 6.355 1.5 12.69; 1479 6.6525 1.5 12.69; 1480 7.71 1.5 12.69
 466. 1481 7.25 1.5 12.69; 1482 6.90769 35.3022 12.69; 1483 6.36519 35.3209 12.69
 467. 1484 5.77909 35.2939 12.69; 1485 7.23924 33.8851 12.69
 468. 1486 7.20877 33.085 12.69; 1487 7.23936 32.125 12.69
 469. 1488 5.8696 33.7442 12.69; 1489 5.9425 33.085 12.69
 470. 1490 7.24095 30.8754 12.69; 1491 5.86979 32.2661 12.69
 471. 1492 7.2321 29.995 12.69; 1493 7.24095 29.1146 12.69
 472. 1494 5.86995 30.7328 12.69; 1495 5.9425 29.995 12.69
 473. 1496 7.24095 27.8654 12.69; 1497 5.86989 29.2572 12.69
 474. 1498 7.2321 26.985 12.69; 1499 7.24095 26.1046 12.69
 475. 1500 5.86995 27.7228 12.69; 1501 5.9425 26.985 12.69
 476. 1502 7.24095 24.8554 12.69; 1503 5.86989 26.2472 12.69
 477. 1504 7.2321 23.975 12.69; 1505 7.24095 23.0946 12.69
 478. 1506 5.86995 24.7128 12.69; 1507 5.9425 23.975 12.69
 479. 1508 7.23931 21.845 12.69; 1509 5.86989 23.2372 12.69
 480. 1510 7.19971 20.965 12.69; 1511 7.23931 20.085 12.69
 481. 1512 5.86985 21.704 12.69; 1513 5.9425 20.965 12.69
 482. 1514 7.24095 18.8354 12.69; 1515 5.86979 20.226 12.69
 483. 1516 7.2321 17.955 12.69; 1517 7.24095 17.0746 12.69
 484. 1518 5.86995 18.6928 12.69; 1519 5.9425 17.955 12.69
 485. 1520 7.24095 15.8254 12.69; 1521 5.86989 17.2172 12.69
 486. 1522 7.2321 14.945 12.69; 1523 7.24095 14.0646 12.69


V. JAGEN, B.E.M.E.,(Struct), M.I.E.A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 10

487. 1524 5.86995 15.6828 12.69; 1525 5.9425 14.945 12.69
 488. 1526 7.23931 12.815 12.69; 1527 5.86989 14.2072 12.69
 489. 1528 7.19971 11.935 12.69; 1529 7.23931 11.055 12.69
 490. 1530 5.86985 12.674 12.69; 1531 5.9425 11.935 12.69
 491. 1532 7.24095 9.80541 12.69; 1533 5.86979 11.196 12.69; 1534 7.2321 8.925 12.69
 492. 1535 7.24095 8.04459 12.69; 1536 5.86995 9.66278 12.69
 493. 1537 5.9425 8.925 12.69; 1538 7.24129 6.7949 12.69; 1539 5.86989 8.18723 12.69
 494. 1540 7.23151 5.91574 12.69; 1541 7.23561 5.039 12.69
 495. 1542 5.8722 6.65093 12.69; 1543 5.9425 5.915 12.69; 1544 6.91251 3.46005 12.69
 496. 1545 5.87128 5.17583 12.69; 1546 6.90854 2.45283 12.69
 497. 1547 5.80039 3.44836 12.69; 1548 7.15401 0.855134 12.69
 498. 1549 5.82482 2.46794 12.69; 1550 6.09332 0.87396 12.69
 499. 1551 6.53074 33.0053 12.69; 1552 6.56159 29.995 12.69
 500. 1553 6.56159 26.985 12.69; 1554 6.56159 23.975 12.69
 501. 1555 6.52588 20.965 12.69; 1556 6.56159 17.955 12.69
 502. 1557 6.56159 14.945 12.69; 1558 6.52588 11.935 12.69; 1559 6.56159 8.925 12.69
 503. 1560 6.56114 5.91306 12.69; 1561 6.5061 33.7719 12.69
 504. 1562 6.50794 32.238 12.69; 1563 6.50984 18.7203 12.69
 505. 1564 6.5075 11.168 12.69; 1565 6.51104 29.2286 12.69
 506. 1566 6.50984 30.7603 12.69; 1567 6.50984 24.7403 12.69
 507. 1568 6.51104 8.15859 12.69; 1569 6.50984 9.60028 12.69
 508. 1570 6.50641 21.7308 12.69; 1571 6.5075 20.198 12.69
 509. 1572 6.51104 23.2086 12.69; 1573 6.51104 14.1786 12.69
 510. 1574 6.50641 12.7008 12.69; 1575 6.51104 17.1886 12.69
 511. 1576 6.50984 15.7103 12.69; 1577 6.50984 27.7503 12.69
 512. 1578 6.51104 26.2106 12.69; 1579 6.51474 5.14800 12.69
 513. 1580 6.51228 6.67656 12.69; 1581 7.43103 35.2895 12.69
 514. 1582 7.41844 3.4636 12.69; 1583 7.41394 2.4518 12.69
 515. 1584 6.37285 2.43335 12.69; 1585 6.37494 3.47677 12.69
 516. 1586 6.09114 0.4172 12.69; 1587 5.62855 0.767527 12.69
 517. 1588 6.91530 34.9081 12.69; 1589 6.62167 35.311 12.69
 518. 1590 6.36009 34.915 12.69; 1591 5.49519 3.44418 12.69
 519. 1592 5.78835 3.92552 12.69; 1593 6.88315 32.2083 12.69
 520. 1594 6.4316 31.8000 12.69; 1595 7.01819 31.833 12.69
 521. 1596 7.39884 25.1262 12.69; 1597 7.00867 25.1428 12.69
 522. 1598 7.39885 7.06608 12.69; 1599 7.55693 6.71057 12.69
 523. 1600 5.81653 13.8349 12.69; 1601 5.53225 14.2012 12.69
 524. 1602 6.09075 33.3082 12.69; 1603 5.77017 34.9274 12.69
 525. 1604 5.81653 7.81488 12.69; 1605 5.53225 8.18117 12.69
 526. 1606 5.53414 27.7298 12.69; 1607 5.81795 28.0958 12.69
 527. 1608 7.23112 29.5684 12.69; 1609 7.55697 29.1994 12.69
 528. 1610 7.55105 29.995 12.69; 1611 5.81748 4.80446 12.69
 529. 1612 5.55517 5.16924 12.69; 1613 6.80684 5.11812 12.69
 530. 1614 6.43457 4.79233 12.69; 1615 7.02267 4.74831 12.69
 531. 1616 7.39868 13.0863 12.69; 1617 7.0081 13.1025 12.69
 532. 1618 6.4315 19.8408 12.69; 1619 6.20018 20.2175 12.69
 533. 1620 5.81646 19.8544 12.69; 1621 7.00054 7.08207 12.69
 534. 1622 7.23112 8.49844 12.69; 1623 7.55697 8.12939 12.69
 535. 1624 7.55105 8.925 12.69; 1625 5.53414 15.6898 12.69
 536. 1626 5.81795 16.0559 12.69; 1627 6.3752 2.95551 12.69
 537. 1628 6.64857 2.45175 12.69; 1629 6.91021 2.95697 12.69
 538. 1630 6.64784 3.46531 12.69; 1631 6.29602 1.17498 12.69
 539. 1632 5.85168 1.15616 12.69; 1633 7.22509 32.5826 12.69
 540. 1634 7.55697 32.2094 12.69; 1635 7.53538 33.005 12.69
 541. 1636 6.88245 33.0028 12.69; 1637 6.52659 33.3909 12.69
 542. 1638 6.86575 33.0051 12.69; 1639 7.2251 55.4274 12.69


 V. JAGEN, B.E./M.E. (Struct), M.I.E. A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 11

543. 1640 5.53225 26.2412 12.69; 1641 5.90667 26.6127 12.69
 544. 1642 5.56625 26.985 12.69; 1643 5.56625 23.975 12.69
 545. 1644 5.90667 24.3473 12.69; 1645 5.53414 24.7198 12.69
 546. 1646 6.08907 3.45949 12.69; 1647 6.36471 3.96299 12.69
 547. 1648 7.40311 1.15342 12.69; 1649 7.53024 0.770896 12.69
 548. 1650 7.55697 27.7806 12.69; 1651 7.23112 27.4116 12.69
 549. 1652 7.55105 26.985 12.69; 1653 6.20023 29.2482 12.69
 550. 1654 6.54247 29.6103 12.69; 1655 6.25205 29.995 12.69
 551. 1656 5.90667 29.6227 12.69; 1657 6.08315 27.7817 12.69
 552. 1658 6.54247 27.3697 12.69; 1659 6.89684 26.985 12.69
 553. 1660 5.81653 25.8749 12.69; 1661 5.90667 27.3573 12.69
 554. 1662 5.76888 35.677 12.69; 1663 6.36809 35.6658 12.69
 555. 1664 7.40883 2.9574 12.69; 1665 7.64222 2.44925 12.69
 556. 1666 7.64597 3.46288 12.69; 1667 7.45005 3.95865 12.69
 557. 1668 6.88315 24.7717 12.69; 1669 6.54247 24.3597 12.69
 558. 1670 6.89684 23.975 12.69; 1671 7.23112 24.4016 12.69
 559. 1672 5.53225 29.2512 12.69; 1673 5.56625 29.995 12.69
 560. 1674 7.55698 33.8006 12.69; 1675 7.01878 25.8129 12.69
 561. 1676 7.42596 25.8283 12.69; 1677 7.39868 34.1561 12.69
 562. 1678 7.55697 26.1894 12.69; 1679 5.56625 33.085 12.69
 563. 1680 5.9065 33.378 12.69; 1681 5.53395 33.7506 12.69
 564. 1682 5.81767 34.1166 12.69; 1683 6.20023 26.2382 12.69
 565. 1684 6.54247 26.6003 12.69; 1685 6.25205 26.985 12.69
 566. 1686 6.88315 14.1483 12.69; 1687 6.43251 13.8211 12.69
 567. 1688 7.01878 13.7729 12.69; 1689 5.53447 6.65913 12.69
 568. 1690 5.81861 7.02473 12.69; 1691 6.43251 22.8511 12.69
 569. 1692 6.20023 23.2282 12.69; 1693 5.81653 22.8649 12.69
 570. 1694 5.53225 23.2312 12.69; 1695 7.55697 21.7606 12.69
 571. 1696 7.22456 21.3874 12.69; 1697 7.53485 20.965 12.69
 572. 1698 7.42596 22.8183 12.69; 1699 7.55697 23.1794 12.69
 573. 1700 6.43047 34.1252 12.69; 1701 7.00815 34.1728 12.69
 574. 1702 7.42596 16.7983 12.69; 1703 7.01878 16.7829 12.69
 575. 1704 5.81653 16.8449 12.69; 1705 5.53225 17.2112 12.69
 576. 1706 7.42553 4.7562 12.69; 1707 6.88315 30.7917 12.69
 577. 1708 6.54247 30.3797 12.69; 1709 6.89684 29.995 12.69
 578. 1710 7.23112 30.4216 12.69; 1711 7.42596 28.8383 12.69
 579. 1712 7.39884 31.1462 12.69; 1713 7.00867 31.1628 12.69
 580. 1714 6.52492 11.5503 12.69; 1715 6.88315 11.1383 12.69
 581. 1716 7.22456 11.5126 12.69; 1717 6.86279 11.935 12.69
 582. 1718 7.55697 12.7306 12.69; 1719 7.22456 12.3574 12.69
 583. 1720 7.53485 11.935 12.69; 1721 7.42596 13.7883 12.69
 584. 1722 7.55697 11.1394 12.69; 1723 6.36459 1.95431 12.69
 585. 1724 6.919 1.96393 12.69; 1725 7.39868 22.1161 12.69
 586. 1726 7.0081 22.1325 12.69; 1727 6.54247 15.3297 12.69
 587. 1728 6.20023 15.6918 12.69; 1729 5.90667 15.3173 12.69
 588. 1730 6.25205 14.945 12.69; 1731 6.43158 16.0643 12.69
 589. 1732 6.88315 15.7417 12.69; 1733 7.00867 16.1128 12.69
 590. 1734 7.55671 5.1198 12.69; 1735 7.55875 5.91537 12.69
 591. 1736 7.22979 5.49053 12.69; 1737 5.50741 2.46897 12.69
 592. 1738 5.8126 2.95815 12.69; 1739 5.79266 1.98766 12.69
 593. 1740 7.44777 1.95454 12.69; 1741 7.17001 2.45324 12.69
 594. 1742 7.01878 28.8229 12.69; 1743 5.81646 31.8945 12.69
 595. 1744 5.5322 32.2606 12.69; 1745 5.90667 9.2973 12.69
 596. 1746 5.53414 9.66984 12.69; 1747 5.56625 8.925 12.69
 597. 1748 7.39884 19.1061 12.69; 1749 7.55697 18.7506 12.69
 598. 1750 6.88315 23.1783 12.69; 1751 7.01878 22.8029 12.69


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841289154

STAAD SPACE

-- PAGE NO. 12

599. 1752 7.65288 35.277 12.69; 1753 7.45442 34.9082 12.69
 600. 1754 7.55697 14.1494 12.69; 1755 7.55185 14.945 12.69
 601. 1756 7.23112 14.5184 12.69; 1757 6.88315 17.1583 12.69
 602. 1758 6.43251 16.8311 12.69; 1759 5.48252 35.2768 12.69
 603. 1760 7.01878 7.75386 12.69; 1761 7.42596 7.76831 12.69
 604. 1762 7.55697 15.7406 12.69; 1763 7.23112 15.3716 12.69
 605. 1764 6.20823 17.2082 12.69; 1765 7.55697 17.1594 12.69
 606. 1766 6.20823 27.7318 12.69; 1767 7.23112 28.5584 12.69
 607. 1768 5.56625 11.935 12.69; 1769 5.90662 12.308 12.69
 608. 1770 5.53408 12.6885 12.69; 1771 6.88315 21.7617 12.69
 609. 1772 6.52492 21.3497 12.69; 1773 6.86279 20.965 12.69
 610. 1774 7.55185 17.955 12.69; 1775 7.23112 17.5284 12.69
 611. 1776 7.23112 23.5484 12.69; 1777 7.55185 23.975 12.69
 612. 1778 7.55697 24.7706 12.69; 1779 5.81795 25.0858 12.69
 613. 1780 5.56625 5.915 12.69; 1781 5.90781 6.2866 12.69
 614. 1782 6.88315 9.72171 12.69; 1783 6.54247 9.30965 12.69
 615. 1784 6.89684 8.925 12.69; 1785 7.23112 9.35156 12.69
 616. 1786 6.20823 8.1782 12.69; 1787 6.54247 8.54035 12.69
 617. 1788 6.25205 8.925 12.69; 1789 5.90667 8.5527 12.69; 1790 6.4315 10.8108 12.69
 618. 1791 7.01818 10.763 12.69; 1792 6.52492 12.3197 12.69
 619. 1793 6.20818 12.6825 12.69; 1794 6.23419 11.935 12.69
 620. 1795 6.43069 13.0546 12.69; 1796 5.81789 13.0463 12.69
 621. 1797 6.52731 32.6205 12.69; 1798 7.42571 31.8485 12.69
 622. 1799 6.61293 0.776507 12.69; 1800 6.95141 1.15952 12.69
 623. 1801 5.56625 20.965 12.69; 1802 5.90662 21.338 12.69
 624. 1803 5.53409 21.7105 12.69; 1804 5.81653 28.8849 12.69
 625. 1805 5.5322 20.2205 12.69; 1806 7.4257 19.8085 12.69
 626. 1807 7.55697 20.1694 12.69; 1808 5.53414 18.6998 12.69
 627. 1809 5.81795 19.0658 12.69; 1810 6.52492 20.5803 12.69
 628. 1811 6.23419 20.965 12.69; 1812 5.90662 20.592 12.69
 629. 1813 5.81795 10.0359 12.69; 1814 6.88315 29.1983 12.69
 630. 1815 7.55697 30.7906 12.69; 1816 5.90667 30.3673 12.69
 631. 1817 5.53414 30.7398 12.69; 1818 5.5322 11.1985 12.69
 632. 1819 5.90662 11.562 12.69; 1820 6.88315 8.12829 12.69
 633. 1821 6.43251 7.80186 12.69; 1822 5.56625 17.955 12.69
 634. 1823 5.90667 18.3273 12.69; 1824 6.20486 5.16582 12.69
 635. 1825 6.54847 5.53021 12.69; 1826 6.25333 5.91448 12.69
 636. 1827 5.90753 5.5416 12.69; 1828 6.43158 19.0743 12.69
 637. 1829 6.88315 18.7517 12.69; 1830 7.08867 19.1228 12.69
 638. 1831 5.56625 14.945 12.69; 1832 6.54583 6.29546 12.69
 639. 1833 6.20264 6.65748 12.69; 1834 7.17861 3.46515 12.69
 640. 1835 6.92817 3.94773 12.69; 1836 7.39884 18.0762 12.69
 641. 1837 7.55697 9.72061 12.69; 1838 7.08867 18.0928 12.69
 642. 1839 6.54247 18.3397 12.69; 1840 6.89684 17.955 12.69
 643. 1841 7.23112 18.3816 12.69; 1842 7.4257 18.7785 12.69
 644. 1843 5.81789 22.0763 12.69; 1844 7.01818 19.793 12.69
 645. 1845 6.88315 20.1683 12.69; 1846 7.22456 20.5426 12.69
 646. 1847 5.81795 31.1059 12.69; 1848 6.43158 31.1143 12.69
 647. 1849 7.17424 35.2963 12.69; 1850 7.46655 35.6753 12.69
 648. 1851 6.93838 35.6748 12.69; 1852 5.81646 18.8244 12.69
 649. 1853 7.39884 16.0962 12.69; 1854 6.20818 21.7125 12.69
 650. 1855 6.43069 22.0846 12.69; 1856 7.39884 28.1362 12.69
 651. 1857 7.08867 28.1528 12.69; 1858 6.20823 9.6718 12.69
 652. 1859 6.43158 10.8443 12.69; 1860 6.43251 25.8611 12.69
 653. 1861 6.88315 26.1883 12.69; 1862 7.05371 0.39835 12.69
 654. 1863 6.20823 24.7218 12.69; 1864 6.25205 23.975 12.69



V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119,
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 13

655. 1865 6.54247 23.5903 12.69; 1866 6.89684 14.945 12.69
 656. 1867 6.43251 7.0323 12.69; 1868 6.88521 6.70802 12.69
 657. 1869 6.54247 14.5603 12.69; 1870 6.43158 28.1043 12.69
 658. 1871 7.23459 6.34014 12.69; 1872 6.20023 18.7018 12.69
 659. 1873 6.89781 5.91485 12.69; 1874 6.19936 33.7537 12.69
 660. 1875 6.20018 32.2576 12.69; 1876 6.23662 33.0051 12.69
 661. 1877 5.90662 32.6321 12.69; 1878 6.25205 17.955 12.69
 662. 1879 6.43158 25.0943 12.69; 1880 6.54247 17.5703 12.69
 663. 1881 6.20023 14.1982 12.69; 1882 5.90667 14.5727 12.69
 664. 1883 6.20018 11.1875 12.69; 1884 6.20023 30.7418 12.69
 665. 1885 5.90667 17.5827 12.69; 1886 6.88315 12.7317 12.69
 666. 1887 5.90667 23.6827 12.69; 1888 6.43251 28.8711 12.69
 667. 1889 6.0952 2.45527 12.69; 1890 5.63111 0.389104 12.69
 668. 1891 6.64049 34.9174 12.69; 1892 5.48514 3.92617 12.69
 669. 1893 6.74375 31.869 12.69; 1894 7.21819 25.2471 12.69
 670. 1895 7.64184 7.05625 12.69; 1896 5.50066 13.8301 12.69
 671. 1897 6.06963 34.9151 12.69; 1898 5.50066 7.81013 12.69
 672. 1899 5.58485 28.1022 12.69; 1900 7.54774 20.503 12.69
 673. 1901 5.50111 4.79984 12.69; 1902 6.74605 4.78263 12.69
 674. 1903 7.21808 13.2071 12.69; 1904 6.12848 19.8427 12.69
 675. 1905 7.21827 7.18596 12.69; 1906 7.54774 8.52299 12.69
 676. 1907 5.58485 16.0622 12.69; 1908 6.65261 2.95670 12.69
 677. 1909 6.06913 1.28699 12.69; 1910 7.54508 32.6059 12.69
 678. 1911 6.87627 33.4082 12.69; 1912 5.54927 26.6117 12.69
 679. 1913 5.54927 24.3483 12.69; 1914 6.07583 3.94654 12.69
 680. 1915 7.64533 1.12182 12.69; 1916 7.55466 27.3836 12.69
 681. 1917 6.22535 29.6191 12.69; 1918 6.80136 27.3879 12.69
 682. 1919 5.50066 25.8701 12.69; 1920 5.54927 27.3583 12.69
 683. 1921 6.0693 35.6653 12.69; 1922 7.64075 2.9579 12.69
 684. 1923 7.67145 3.96463 12.69; 1924 6.89136 24.3779 12.69
 685. 1925 5.54927 29.6217 12.69; 1926 7.54509 33.4041 12.69
 686. 1927 7.23254 25.7052 12.69; 1928 7.64182 34.1461 12.69
 687. 1929 7.65359 25.8476 12.69; 1930 5.54918 33.3787 12.69
 688. 1931 5.58476 34.1226 12.69; 1932 6.22535 26.6091 12.69
 689. 1933 6.744 13.8091 12.69; 1934 5.50503 7.03182 12.69
 690. 1935 6.12851 22.853 12.69; 1936 5.50066 22.8601 12.69
 691. 1937 7.54482 21.364 12.69; 1938 7.65359 22.8376 12.69
 692. 1939 6.73964 34.1337 12.69; 1940 7.23254 16.6752 12.69
 693. 1941 5.50066 16.8401 12.69; 1942 7.23299 4.63711 12.69
 694. 1943 6.89136 30.3979 12.69; 1944 7.65359 28.8576 12.69
 695. 1945 7.21819 31.2671 12.69; 1946 6.87518 11.5325 12.69
 696. 1947 7.54482 12.334 12.69; 1948 7.23254 13.6652 12.69
 697. 1949 7.54482 11.536 12.69; 1950 6.64753 1.94679 12.69
 698. 1951 7.21808 22.2371 12.69; 1952 6.22535 15.3209 12.69
 699. 1953 6.73999 16.073 12.69; 1954 7.65394 4.77787 12.69
 700. 1955 7.5497 5.51495 12.69; 1956 5.5013 2.95658 12.69
 701. 1957 5.49127 1.98541 12.69; 1958 7.19965 1.95438 12.69
 702. 1959 7.23254 28.7152 12.69; 1960 5.50059 31.8898 12.69
 703. 1961 5.54927 9.29835 12.69; 1962 7.64186 19.0962 12.69
 704. 1963 6.744 22.8391 12.69; 1964 7.68027 34.9002 12.69
 705. 1965 7.65359 13.8076 12.69; 1966 7.54774 14.543 12.69
 706. 1967 6.744 16.8191 12.69; 1968 5.47942 34.8998 12.69
 707. 1969 7.23254 7.6452 12.69; 1970 7.23254 22.6952 12.69
 708. 1971 7.55466 15.3436 12.69; 1972 6.12851 16.833 12.69
 709. 1973 6.12971 16.0665 12.69; 1974 7.65359 16.8176 12.69
 710. 1975 6.22535 27.3609 12.69; 1976 7.54774 26.583 12.69



V. JAGEN, B.E., M.E. (Struc), M.I.E., A.I.V.,
 CMDA REGN NCS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 14

711. 1977 5.54924 12.3887 12.69; 1978 6.8752 21.3675 12.69
 712. 1979 7.64182 22.1061 12.69; 1980 7.54774 17.553 12.69
 713. 1981 7.54774 23.573 12.69; 1982 7.64186 25.1162 12.69
 714. 1983 5.50485 25.0922 12.69; 1984 5.54943 6.288 12.69
 715. 1985 6.89136 0.32786 12.69; 1986 6.22535 8.54906 12.69
 716. 1987 6.74374 10.799 12.69; 1988 6.21648 12.3113 12.69
 717. 1989 6.12954 13.0572 12.69; 1990 6.87661 32.6025 12.69
 718. 1991 7.23232 31.7253 12.69; 1992 6.62125 1.12704 12.69
 719. 1993 5.54924 21.3387 12.69; 1994 5.50066 28.8801 12.69
 720. 1995 5.50055 19.8498 12.69; 1996 7.6535 19.8278 12.69
 721. 1997 5.50485 19.0722 12.69; 1998 6.21648 20.5887 12.69
 722. 1999 5.50485 10.0422 12.69; 2000 6.89135 29.5921 12.69
 723. 2001 7.64186 31.1362 12.69; 2002 7.55466 30.3936 12.69
 724. 2003 5.54927 30.3683 12.69; 2004 7.21129 1.2782 12.69
 725. 2005 5.54924 11.5613 12.69; 2006 5.53157 1.10629 12.69
 726. 2007 7.65359 7.78762 12.69; 2008 6.744 7.78913 12.69
 727. 2009 5.54926 18.1283 12.69; 2010 5.50483 13.0525 12.69
 728. 2011 6.22855 5.53828 12.69; 2012 6.73999 19.083 12.69
 729. 2013 5.54927 15.3183 12.69; 2014 6.2272 6.2885 12.69
 730. 2015 6.13155 4.79213 12.69; 2016 7.28212 3.95826 12.69
 731. 2017 7.64186 10.0662 12.69; 2018 7.21819 10.1971 12.69
 732. 2019 6.89136 18.3579 12.69; 2020 7.23232 10.6553 12.69
 733. 2021 5.50483 21.0825 12.69; 2022 7.21819 19.2271 12.69
 734. 2023 7.23232 19.6853 12.69; 2024 6.87518 20.5625 12.69
 735. 2025 5.50485 31.1122 12.69; 2026 6.73999 31.123 12.69
 736. 2027 7.20551 35.6742 12.69; 2028 7.21808 34.2772 12.69
 737. 2029 5.50059 10.8198 12.69; 2030 7.21819 16.2171 12.69
 738. 2031 7.64186 16.0862 12.69; 2032 6.12954 22.0872 12.69
 739. 2033 7.21819 28.2571 12.69; 2034 7.64186 28.1262 12.69
 740. 2035 7.19861 34.9814 12.69; 2036 6.64116 35.6654 12.69
 741. 2037 6.12971 10.0465 12.69; 2038 7.55466 9.32357 12.69
 742. 2039 6.73999 10.053 12.69; 2040 7.55466 18.3536 12.69
 743. 2041 6.12851 25.863 12.69; 2042 6.744 25.8491 12.69
 744. 2043 7.46695 0.377702 12.69; 2044 6.22535 24.3509 12.69
 745. 2045 7.55466 24.3736 12.69; 2046 6.89135 23.5721 12.69
 746. 2047 7.66885 1.94292 12.69; 2048 5.4791 35.6497 12.69
 747. 2049 6.89136 15.3479 12.69; 2050 6.74016 7.04101 12.69
 748. 2051 7.6535 10.7978 12.69; 2052 6.89135 14.5422 12.69
 749. 2053 7.6535 31.8678 12.69; 2054 6.12971 28.1065 12.69
 750. 2055 6.89135 26.5822 12.69; 2056 7.55449 6.31374 12.69
 751. 2057 6.12971 19.0765 12.69; 2058 7.64182 13.0761 12.69
 752. 2059 6.89311 5.51435 12.69; 2060 6.21648 21.3413 12.69
 753. 2061 6.22535 9.30894 12.69; 2062 7.54482 20.566 12.69
 754. 2063 6.12911 34.1277 12.69; 2064 6.21768 32.6288 12.69
 755. 2065 6.89135 8.52216 12.69; 2066 6.22535 18.3309 12.69
 756. 2067 5.54927 8.55165 12.69; 2068 6.74374 19.829 12.69
 757. 2069 6.12971 25.0965 12.69; 2070 6.89134 17.5522 12.69
 758. 2071 6.22535 14.5691 12.69; 2072 7.07308 35.6629 12.69
 759. 2073 6.13102 7.03458 12.69; 2074 6.21648 11.5587 12.69
 760. 2075 5.54924 32.6313 12.69; 2076 6.12971 31.1165 12.69
 761. 2077 6.22535 30.3709 12.69; 2078 6.6471 3.95035 12.69
 762. 2079 5.54926 17.5817 12.69; 2080 6.8752 12.3375 12.69
 763. 2081 6.21727 33.3819 12.69; 2082 5.54924 20.5913 12.69
 764. 2083 6.22535 23.5991 12.69; 2084 5.54927 23.6017 12.69
 765. 2085 5.54974 5.54115 12.69; 2086 6.56777 0.398929 12.69
 766. 2087 6.12848 10.8127 12.69; 2088 6.744 28.8591 12.69

V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 15

767. 2089 6.08144 1.96557 12.69; 2090 5.54927 14.5717 12.69
 768. 2091 6.12851 13.823 12.69; 2092 6.73972 22.0931 12.69
 769. 2093 6.12851 7.803 12.69; 2094 6.12851 28.873 12.69
 770. 2095 6.73972 13.0631 12.69; 2096 6.73999 28.113 12.69
 771. 2097 6.22535 17.5701 12.69; 2098 6.89333 6.31582 12.69
 772. 2099 6.12848 31.8827 12.69; 2100 6.73999 25.103 12.69
 773. 2101 7.16875 2.95802 12.69; 2102 6.09875 2.95765 12.69
 774. 2103 5.19 36.01 13.0683; 2104 5.19 36.01 13.4467; 2105 5.19 36.01 13.825
 775. 2106 5.19 36.01 14.2033; 2107 5.19 36.01 14.5817; 2108 5.19 35.635 14.96
 776. 2109 5.19 35.26 14.96; 2110 5.19 34.885 14.96; 2111 5.19 34.1337 14.96
 777. 2112 5.19 33.7575 14.96; 2113 5.19 33.3812 14.96; 2114 5.19 33.005 14.96
 778. 2115 5.19 32.6287 14.96; 2116 5.19 32.2525 14.96; 2117 5.19 31.8762 14.96
 779. 2118 5.19 31.1238 14.96; 2119 5.19 30.7475 14.96; 2120 5.19 30.3713 14.96
 780. 2121 5.19 29.995 14.96; 2122 5.19 29.6187 14.96; 2123 5.19 29.2425 14.96
 781. 2124 5.19 28.8662 14.96; 2125 5.19 28.5138 14.96; 2126 5.19 27.7375 14.96
 782. 2127 5.19 27.3612 14.96; 2128 5.19 26.985 14.96; 2129 5.19 26.6087 14.96
 783. 2130 5.19 26.2325 14.96; 2131 5.19 25.8562 14.96; 2132 5.19 25.1038 14.96
 784. 2133 5.19 24.7275 14.96; 2134 5.19 24.3512 14.96; 2135 5.19 23.975 14.96
 785. 2136 5.19 23.5987 14.96; 2137 5.19 23.2225 14.96; 2138 5.19 22.8462 14.96
 786. 2139 5.19 22.0938 14.96; 2140 5.19 21.7175 14.96; 2141 5.19 21.3412 14.96
 787. 2142 5.19 20.965 14.96; 2143 5.19 20.5887 14.96; 2144 5.19 20.2125 14.96
 788. 2145 5.19 19.8362 14.96; 2146 5.19 19.0837 14.96; 2147 5.19 18.7075 14.96
 789. 2148 5.19 18.3312 14.96; 2149 5.19 17.955 14.96; 2150 5.19 17.5788 14.96
 790. 2151 5.19 17.2025 14.96; 2152 5.19 16.8263 14.96; 2153 5.19 16.4501 14.96
 791. 2154 5.19 15.6975 14.96; 2155 5.19 15.3212 14.96; 2156 5.19 14.945 14.96
 792. 2157 5.19 14.5688 14.96; 2158 5.19 14.1925 14.96; 2159 5.19 13.8162 14.96
 793. 2160 5.19 13.8637 14.96; 2161 5.19 12.6875 14.96; 2162 5.19 12.3112 14.96
 794. 2163 5.19 11.935 14.96; 2164 5.19 11.5588 14.96; 2165 5.19 11.1825 14.96
 795. 2166 5.19 10.8063 14.96; 2167 5.19 10.4301 14.96; 2168 5.19 9.6775 14.96
 796. 2169 5.19 9.30125 14.96; 2170 5.19 8.925 14.96; 2171 5.19 8.54875 14.96
 797. 2172 5.19 8.1725 14.96; 2173 5.19 7.79625 14.96; 2174 5.19 7.420125 14.96
 798. 2175 5.19 6.6675 14.96; 2176 5.19 6.29125 14.96; 2177 5.19 5.915 14.96
 799. 2178 5.19 5.53875 14.96; 2179 5.19 5.1625 14.96; 2180 5.19 4.78625 14.96
 800. 2181 5.19 3.925 14.96; 2182 5.19 3.44 14.96; 2183 5.19 2.955 14.96
 801. 2184 5.19 2.47 14.96; 2185 5.19 1.985 14.96; 2186 5.19 1.495 14.96
 802. 2187 5.19 0.75 14.96; 2188 5.19 0.375 14.96; 2189 5.19 0 14.96
 803. 2190 5.19 0 14.2033; 2191 5.19 0 13.825; 2192 5.19 0 13.4467
 804. 2193 5.19 0 13.0683; 2194 5.19 4.41 14.5817; 2195 5.19 4.41 14.2033
 805. 2196 5.19 4.41 13.825; 2197 5.19 4.41 13.4467; 2198 5.19 4.41 13.0683
 806. 2199 5.19 7.42 14.5817; 2200 5.19 7.42 14.2033; 2201 5.19 7.42 13.825
 807. 2202 5.19 7.42 13.4467; 2203 5.19 7.42 13.0683; 2204 5.19 10.43 14.5817
 808. 2205 5.19 10.43 14.2033; 2206 5.19 10.43 13.825; 2207 5.19 10.43 13.4467
 809. 2208 5.19 10.43 13.0683; 2209 5.19 13.44 14.5817; 2210 5.19 13.44 14.2033
 810. 2211 5.19 13.44 13.825; 2212 5.19 13.44 13.4467; 2213 5.19 13.44 13.0683
 811. 2214 5.19 16.45 14.5817; 2215 5.19 16.45 14.2033; 2216 5.19 16.45 13.825
 812. 2217 5.19 16.45 13.4467; 2218 5.19 16.45 13.0683; 2219 5.19 19.46 14.5817
 813. 2220 5.19 19.46 14.2033; 2221 5.19 19.46 13.825; 2222 5.19 19.46 13.4467
 814. 2223 5.19 19.46 13.0683; 2224 5.19 22.47 14.5817; 2225 5.19 22.47 14.2033
 815. 2226 5.19 22.47 13.825; 2227 5.19 22.47 13.4467; 2228 5.19 22.47 13.0683
 816. 2229 5.19 25.48 14.5817; 2230 5.19 25.48 14.2033; 2231 5.19 25.48 13.825
 817. 2232 5.19 25.48 13.4467; 2233 5.19 25.48 13.0683; 2234 5.19 28.49 14.5817
 818. 2235 5.19 28.49 14.2033; 2236 5.19 28.49 13.825; 2237 5.19 28.49 13.4467
 819. 2238 5.19 28.49 13.0683; 2239 5.19 31.5 14.5817; 2240 5.19 31.5 14.2033
 820. 2241 5.19 31.5 13.825; 2242 5.19 31.5 13.4467; 2243 5.19 31.5 13.0683
 821. 2244 5.19 34.51 14.5817; 2245 5.19 34.51 14.2033; 2246 5.19 34.51 13.825
 822. 2247 5.19 34.51 13.4467; 2248 5.19 34.51 13.0683; 2249 5.19 35.2598 14.2033

V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, Q/A/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9541269154

STAAD SPACE

-- PAGE NO. 16

823.	2258	5.19	35.2598	13.4463;	2251	5.19	33.757	14.2039;	2252	5.19	33.005	14.2032
824.	2253	5.19	32.2529	14.2032;	2254	5.19	33.7571	13.4467;	2255	5.19	33.005	13.4464
825.	2256	5.19	30.747	14.2039;	2257	5.19	32.2528	13.4464;	2258	5.19	29.9947	14.2041
826.	2259	5.19	29.2428	14.2039;	2260	5.19	30.747	13.4403;	2261	5.19	29.9948	13.4466
827.	2262	5.19	27.737	14.2037;	2263	5.19	29.2428	13.4471;	2264	5.19	26.9848	14.2034
828.	2265	5.19	26.2327	14.2036;	2266	5.19	27.737	13.4461;	2267	5.19	26.9847	13.4459
829.	2268	5.19	24.727	14.2037;	2269	5.19	26.2327	13.4467;	2270	5.19	23.9749	14.2032
830.	2271	5.19	23.2228	14.2033;	2272	5.19	24.7271	13.4466;	2273	5.19	23.975	13.4462
831.	2274	5.19	21.7171	14.2039;	2275	5.19	23.2229	13.4464;	2276	5.19	20.965	14.2039
832.	2277	5.19	20.2129	14.2036;	2278	5.19	21.717	13.4465;	2279	5.19	20.9649	13.447
833.	2280	5.19	18.7072	14.2032;	2281	5.19	20.2128	13.4468;	2282	5.19	17.955	14.203
834.	2283	5.19	17.203	14.2035;	2284	5.19	18.7071	13.4464;	2285	5.19	17.955	13.4461
835.	2286	5.19	15.697	14.2038;	2287	5.19	17.2029	13.4461;	2288	5.19	14.945	14.2041
836.	2289	5.19	14.193	14.2038;	2290	5.19	15.697	13.4462;	2291	5.19	14.9449	13.4457
837.	2292	5.19	12.6872	14.2036;	2293	5.19	14.193	13.4464;	2294	5.19	11.9351	14.2038
838.	2295	5.19	11.1829	14.2035;	2296	5.19	12.6871	13.4468				
839.	2297	5.19	11.9349	13.4472;	2298	5.19	9.67697	14.2039				
840.	2300	5.19	11.1828	13.4468;	2300	5.19	8.92473	14.2034				
841.	2301	5.19	8.17275	14.2041;	2302	5.19	9.67698	13.4464				
842.	2303	5.19	8.92476	13.4462;	2304	5.19	6.66721	14.2027				
843.	2305	5.19	8.17271	13.4468;	2306	5.19	5.91511	14.2025				
844.	2307	5.19	5.16294	14.2026;	2308	5.19	6.66729	13.4458				
845.	2309	5.19	5.91526	13.4455;	2310	5.19	3.46184	14.1952				
846.	2311	5.19	5.16295	13.4459;	2312	5.19	2.48537	14.1921;	2313	5.19	1.5587	14.1846
847.	2314	5.19	0.759036	14.1946;	2315	5.19	0.751929	13.4377				
848.	2316	5.19	1.55528	13.4296;	2317	5.19	3.464	13.4417;	2318	5.19	2.48462	13.4358
849.	2319	5.19	35.6348	14.2034;	2320	5.19	35.2598	14.582;	2321	5.19	34.8849	14.2034
850.	2322	5.19	20.2127	14.582;	2323	5.19	20.965	14.582;	2324	5.19	20.5891	14.2038
851.	2325	5.19	11.1826	13.0683;	2326	5.19	11.5589	13.4469				
852.	2327	5.19	11.9349	13.0685;	2328	5.19	13.8167	13.4466				
853.	2329	5.19	14.1927	13.0679;	2330	5.19	5.16302	13.8243				
854.	2331	5.19	5.53913	14.2026;	2332	5.19	5.91525	13.8239				
855.	2333	5.19	5.53928									

V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.
CMDA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119

STAAD SPACE

-- PAGE NO. 17

879. 2390 5.19 10.8067 13.4467; 2391 5.19 8.17262 14.5823; 2392 5.19 7.7965 14.2037
 880. 2393 5.19 19.8367 13.4467; 2394 5.19 22.8467 14.2033
 881. 2395 5.19 22.8466 13.4466; 2396 5.19 23.2227 13.0681
 882. 2397 5.19 11.1827 14.5819; 2398 5.19 10.8067 14.2034
 883. 2399 5.19 11.1828 13.8252; 2400 5.19 33.7572 14.5821
 884. 2401 5.19 33.3009 14.2035; 2402 5.19 33.005 14.5816; 2403 5.19 13.0633 14.2035
 885. 2404 5.19 12.6874 14.5819; 2405 5.19 19.0833 14.2033
 886. 2406 5.19 19.0833 13.4466; 2407 5.19 18.7072 13.8249
 887. 2408 5.19 16.0266 13.4464; 2409 5.19 17.2027 13.0678
 888. 2410 5.19 8.92486 14.5817; 2411 5.19 8.54888 14.2038
 889. 2412 5.19 2.48762 13.8126; 2413 5.19 1.56577 13.8067
 890. 2414 5.19 2.01866 14.1885; 2415 5.19 16.0734 13.4464
 891. 2416 5.19 15.6969 13.8249; 2417 5.19 7.04343 13.4462
 892. 2418 5.19 6.66726 13.8241; 2419 5.19 5.1628 14.5814; 2420 5.19 5.91511 14.5813
 893. 2421 5.19 0.372098 13.4418; 2422 5.19 0.750128 13.062
 894. 2423 5.19 19.0367 14.2034; 2424 5.19 30.7472 13.0679
 895. 2425 5.19 31.1232 13.4465; 2426 5.19 32.2528 13.8247
 896. 2427 5.19 31.0767 13.4465; 2428 5.19 31.1234 14.2036
 897. 2429 5.19 30.7473 14.5821; 2430 5.19 28.8665 13.4469
 898. 2431 5.19 29.2427 13.0684; 2432 5.19 12.6873 13.0682; 2433 5.19 12.3109 13.447
 899. 2434 5.19 17.2028 14.5818; 2435 5.19 16.8268 14.2035; 2436 5.19 33.005 13.0681
 900. 2437 5.19 33.301 13.4465; 2438 5.19 10.0533 13.4466
 901. 2439 5.19 0.755389 14.5767; 2440 5.19 0.377405 14.2; 2441 5.19 3.94625 14.1987
 902. 2442 5.19 3.45281 14.5764; 2443 5.19 27.3608 13.4461
 903. 2444 5.19 26.9848 13.8247; 2445 5.19 11.935 14.5819; 2446 5.19 11.5591 14.2037
 904. 2447 5.19 30.3707 14.2042; 2448 5.19 29.9949 14.5821
 905. 2449 5.19 29.9949 13.0683; 2450 5.19 30.3707 13.4463; 2451 5.19 1.14504 13.434
 906. 2452 5.19 0.75839 13.8169; 2453 5.19 1.15002 14.189; 2454 5.19 18.7073 14.5817
 907. 2455 5.19 18.3311 14.2031; 2456 5.19 17.955 14.5815; 2457 5.19 27.7372 13.0678
 908. 2458 5.19 14.945 14.5822; 2459 5.19 14.5691 14.2039; 2460 5.19 14.1928 14.5822
 909. 2461 5.19 24.7271 13.8253; 2462 5.19 23.975 13.8247; 2463 5.19 5.16268 13.0677
 910. 2464 5.19 4.78669 13.4463; 2465 5.19 10.0533 14.2036
 911. 2466 5.19 9.67723 14.5823; 2467 5.19 21.7171 13.8251; 2468 5.19 11.935 13.8255
 912. 2469 5.19 12.311 14.2037; 2470 5.19 1.52914 14.5698; 2471 5.19 8.17258 13.0684
 913. 2472 5.19 8.54874 13.4465; 2473 5.19 7.79658 13.4468
 914. 2474 5.19 29.2427 13.8256; 2475 5.19 29.6188 14.204; 2476 5.19 32.2526 13.0681
 915. 2477 5.19 32.629 13.4463; 2478 5.19 26.9848 13.0679; 2479 5.19 15.3209 14.2039
 916. 2480 5.19 17.5792 14.2032; 2481 5.19 25.1033 13.4467
 917. 2482 5.19 25.8566 13.4468; 2483 5.19 26.2326 13.0683
 918. 2484 5.19 21.3408 13.4468; 2485 5.19 14.569 13.446; 2486 5.19 2.4784 14.5745
 919. 2487 5.19 8.17275 13.8254; 2488 5.19 3.45396 13.0658; 2489 5.19 3.9503 13.4444
 920. 2490 5.19 4.78665 14.2029; 2491 5.19 21.3411 14.2039
 921. 2492 5.19 13.8166 14.2036; 2493 5.19 14.1931 13.8251
 922. 2494 5.19 26.6087 13.4464; 2495 5.19 20.2128 13.8251
 923. 2496 5.19 29.6188 13.4469; 2497 5.19 32.6291 14.2031
 924. 2498 5.19 6.29113 14.2025; 2499 5.19 23.5991 13.4463
 925. 2500 5.19 17.2029 13.8249; 2501 5.19 14.945 13.8249; 2502 5.19 9.67596 13.8251
 926. 2503 5.19 17.955 13.8246; 2504 5.19 13.0634 13.4467; 2505 5.19 26.2328 13.8251
 927. 2506 5.19 17.5789 13.4461; 2507 5.19 20.965 13.8254; 2508 5.19 12.6872 13.8254
 928. 2509 5.19 9.30081 14.2035; 2510 5.19 30.747 13.825; 2511 5.19 23.2228 13.825
 929. 2512 5.19 2.97171 13.439; 2513 5.19 2.97105 14.1928; 2514 5.19 3.46518 13.8179
 930. 2515 5.19 8.92476 13.8248; 2516 5.19 33.005 13.8247; 2517 5.19 29.9948 13.8355
 931. 2518 5.19 35.6348 14.5818; 2519 5.19 34.8849 14.5819; 2520 5.19 20.5889 14.582
 932. 2521 5.19 11.5508 13.0684; 2522 5.19 13.8165 13.0682
 933. 2523 5.19 5.53925 13.8239; 2524 5.19 1.99524 13.0575; 2525 5.19 34.885 13.068
 934. 2526 5.19 35.6348 13.8248; 2527 5.19 18.3311 13.068; 2528 5.19 9.30105 13.0681


V. JAGEN, B.E.M.E. (Struct), M.I.E.A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 110.

STAAD SPACE

-- PAGE NO. 18

935. 2529 5.19 20.5889 13.0685; 2530 5.19 22.0936 14.582; 2531 5.19 24.3511 13.0682
 936. 2532 5.19 16.0735 14.5818; 2533 5.19 15.3211 13.0676
 937. 2534 5.19 25.1035 14.5819; 2535 5.19 34.1333 13.8252
 938. 2536 5.19 31.8765 14.5818; 2537 5.19 22.0935 13.0682; 2538 5.19 24.351 14.5818
 939. 2539 5.19 26.6088 14.5819; 2540 5.19 6.29128 13.0677
 940. 2541 5.19 7.04351 14.5815; 2542 5.19 28.8664 14.5818
 941. 2543 5.19 34.1336 13.0683; 2544 5.19 27.361 14.582; 2545 5.19 25.8564 14.5818
 942. 2546 5.19 28.1132 13.825; 2547 5.19 35.635 13.068; 2548 5.19 23.5989 14.5816
 943. 2549 5.19 10.8065 13.0683; 2550 5.19 7.79637 14.582; 2551 5.19 19.8365 13.0683
 944. 2552 5.19 22.8465 14.5817; 2553 5.19 22.8464 13.0682
 945. 2554 5.19 10.8064 14.5818; 2555 5.19 10.8066 13.825; 2556 5.19 34.1335 14.5819
 946. 2557 5.19 33.3811 14.5818; 2558 5.19 13.0636 14.5818; 2559 5.19 19.0834 13.825
 947. 2560 5.19 16.8264 13.068; 2561 5.19 28.1135 14.5819; 2562 5.19 8.54884 14.5821
 948. 2563 5.19 2.0145 13.8092; 2564 5.19 16.0732 13.8249; 2565 5.19 10.0836 13.0682
 949. 2566 5.19 7.04347 13.8245; 2567 5.19 5.53896 14.5813; 2568 5.19 0.3733 13.0648
 950. 2569 5.19 19.8364 14.5818; 2570 5.19 31.1235 13.0682
 951. 2571 5.19 31.8766 13.8249; 2572 5.19 31.1236 14.5819
 952. 2573 5.19 28.8665 13.0684; 2574 5.19 12.3111 13.0684
 953. 2575 5.19 16.8265 14.5818; 2576 5.19 33.3811 13.0682
 954. 2577 5.19 10.0535 13.0683; 2578 5.19 0.376949 14.5798
 955. 2579 5.19 3.93713 14.5783; 2580 5.19 27.3608 13.8249
 956. 2581 5.19 11.5589 14.5819; 2582 5.19 30.371 14.5823; 2583 5.19 30.371 13.0681
 957. 2584 5.19 1.15299 13.8116; 2585 5.19 18.3311 14.5815
 958. 2586 5.19 19.0835 14.5817; 2587 5.19 28.1135 13.0681; 2588 5.19 16.0736 13.068
 959. 2589 5.19 14.5689 14.5823; 2590 5.19 24.3509 13.8249; 2591 5.19 7.04361 13.068
 960. 2592 5.19 4.78645 13.068; 2593 5.19 10.0535 14.5819; 2594 5.19 22.0933 13.8251
 961. 2595 5.19 11.559 13.8254; 2596 5.19 12.3112 14.5819; 2597 5.19 1.13779 14.5726
 962. 2598 5.19 8.5487 13.0682; 2599 5.19 7.79649 13.0683; 2600 5.19 28.8665 13.8254
 963. 2601 5.19 29.6187 14.5821; 2602 5.19 32.6288 13.0681
 964. 2603 5.19 31.8764 13.0682; 2604 5.19 27.3609 13.0677
 965. 2605 5.19 15.3211 14.5823; 2606 5.19 17.579 14.5817; 2607 5.19 25.1035 13.0683
 966. 2608 5.19 25.8565 13.0683; 2609 5.19 21.341 13.0683; 2610 5.19 14.5689 13.0676
 967. 2611 5.19 1.99991 14.572; 2612 5.19 7.79656 13.8253; 2613 5.19 3.94025 13.0684
 968. 2614 5.19 4.78655 14.5815; 2615 5.19 21.3411 14.5821
 969. 2616 5.19 13.8168 13.8251; 2617 5.19 26.6087 13.0681; 2618 5.19 19.8366 13.825
 970. 2619 5.19 29.6188 13.0683; 2620 5.19 32.6289 14.5817; 2621 5.19 1.13311 13.06
 971. 2622 5.19 13.8165 14.582; 2623 5.19 6.29117 14.5813; 2624 5.19 23.5989 13.0681
 972. 2625 5.19 5.539 13.0676; 2626 5.19 16.8267 13.8249; 2627 5.19 15.3209 13.8249
 973. 2628 5.19 10.0532 13.8251; 2629 5.19 18.331 13.8246; 2630 5.19 34.8849 13.8249
 974. 2631 5.19 13.0635 13.0683; 2632 5.19 25.1033 13.8251
 975. 2633 5.19 26.6089 13.8249; 2634 5.19 17.5789 13.0679
 976. 2635 5.19 0.375251 13.8211; 2636 5.19 20.589 13.8254
 977. 2637 5.19 4.78666 13.8246; 2638 5.19 21.341 13.8254; 2639 5.19 17.579 13.8246
 978. 2640 5.19 13.0634 13.8252; 2641 5.19 9.30097 14.582; 2642 5.19 14.5691 13.8249
 979. 2643 5.19 31.1232 13.825; 2644 5.19 22.8466 13.825; 2645 5.19 2.97382 13.8155
 980. 2646 5.19 8.54882 13.8251; 2647 5.19 23.599 13.8247; 2648 5.19 9.30079 13.8248
 981. 2649 5.19 32.629 13.8246; 2650 5.19 6.29123 13.8238; 2651 5.19 29.6189 13.8256
 982. 2652 5.19 30.3708 13.8253; 2653 5.19 33.3809 13.825; 2654 5.19 25.8566 13.8251
 983. 2655 5.19 2.96445 14.575; 2656 5.19 12.311 13.8254; 2657 5.19 3.9507 13.8208
 984. 2658 5.19 2.96496 13.0645; 2659 5.19 5.63667 36.01 14.96; 2660 6.08333 36.01 14.96
 985. 2661 6.53 36.01 14.96; 2662 6.97667 36.01 14.96; 2663 7.42333 36.01 14.96
 986. 2664 7.87 35.635 14.96; 2665 7.87 35.26 14.96; 2666 7.87 34.835 14.96
 987. 2667 7.87 34.1337 14.96; 2668 7.87 33.7575 14.96; 2669 7.87 33.3812 14.96
 988. 2670 7.87 33.005 14.96; 2671 7.87 32.6287 14.96; 2672 7.87 32.2525 14.96
 989. 2673 7.87 31.8762 14.96; 2674 7.87 31.1238 14.96; 2675 7.87 30.7475 14.96
 990. 2676 7.87 30.3713 14.96; 2677 7.87 29.995 14.96; 2678 7.87 29.6187 14.96


 V. JAGEN, B.E.M.E., (Struct), M.E.ALV.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.

STAAD SPACE

-- PAGE NO. 19

991. 2679 7.87 29.2425 14.96; 2680 7.87 28.8662 14.96; 2681 7.87 28.1138 14.96
 992. 2682 7.87 27.7375 14.96; 2683 7.87 27.3612 14.96; 2684 7.87 26.985 14.96
 993. 2685 7.87 26.6087 14.96; 2686 7.87 26.2325 14.96; 2687 7.87 25.8562 14.96
 994. 2688 7.87 25.4808 14.96; 2689 7.87 24.7275 14.96; 2690 7.87 24.3512 14.96
 995. 2691 7.87 23.975 14.96; 2692 7.87 23.5987 14.96; 2693 7.87 23.2225 14.96
 996. 2694 7.87 22.8462 14.96; 2695 7.87 22.0938 14.96; 2696 7.87 21.7175 14.96
 997. 2697 7.87 21.3412 14.96; 2698 7.87 20.965 14.96; 2699 7.87 20.5887 14.96
 998. 2700 7.87 20.2125 14.96; 2701 7.87 19.8362 14.96; 2702 7.87 19.0837 14.96
 999. 2703 7.87 18.7075 14.96; 2704 7.87 18.3312 14.96; 2705 7.87 17.955 14.96
 1000. 2706 7.87 17.5788 14.96; 2707 7.87 17.2025 14.96; 2708 7.87 16.8263 14.96
 1001. 2709 7.87 16.0738 14.96; 2710 7.87 15.6975 14.96; 2711 7.87 15.3212 14.96
 1002. 2712 7.87 14.945 14.96; 2713 7.87 14.5688 14.96; 2714 7.87 14.1925 14.96
 1003. 2715 7.87 13.8162 14.96; 2716 7.87 13.0637 14.96; 2717 7.87 12.6875 14.96
 1004. 2718 7.87 12.3112 14.96; 2719 7.87 11.935 14.96; 2720 7.87 11.5588 14.96
 1005. 2721 7.87 11.1825 14.96; 2722 7.87 10.8063 14.96; 2723 7.87 10.0538 14.96
 1006. 2724 7.87 9.6775 14.96; 2725 7.87 9.30125 14.96; 2726 7.87 8.925 14.96
 1007. 2727 7.87 8.54875 14.96; 2728 7.87 8.1725 14.96; 2729 7.87 7.79625 14.96
 1008. 2730 7.87 7.04375 14.96; 2731 7.87 6.6675 14.96; 2732 7.87 6.29125 14.96
 1009. 2733 7.87 5.915 14.96; 2734 7.87 5.53875 14.96; 2735 7.87 5.1625 14.96
 1010. 2736 7.87 4.78625 14.96; 2737 7.87 3.925 14.96; 2738 7.87 3.44 14.96
 1011. 2739 7.87 2.955 14.96; 2740 7.87 2.47 14.96; 2741 7.87 1.985 14.96
 1012. 2742 7.87 1.125 14.96; 2743 7.87 0.75 14.96; 2744 7.87 0.375 14.96
 1013. 2745 7.42333 0 14.96; 2746 6.97667 0 14.96; 2747 6.53 0 14.96
 1014. 2748 6.08333 0 14.96; 2749 5.63667 0 14.96; 2750 5.63667 4.41 14.96
 1015. 2751 6.08333 4.41 14.96; 2752 6.53 4.41 14.96; 2753 6.97667 4.41 14.96
 1016. 2754 7.42333 4.41 14.96; 2755 5.63667 7.42 14.96; 2756 6.08333 7.42 14.96
 1017. 2757 6.53 7.42 14.96; 2758 6.97667 7.42 14.96; 2759 7.42333 7.42 14.96
 1018. 2760 5.63667 10.43 14.96; 2761 6.08333 10.43 14.96; 2762 6.53 10.43 14.96
 1019. 2763 6.97667 10.43 14.96; 2764 7.42333 10.43 14.96; 2765 5.63667 13.44 14.96
 1020. 2766 6.08333 13.44 14.96; 2767 6.53 13.44 14.96; 2768 6.97667 13.44 14.96
 1021. 2769 7.42333 13.44 14.96; 2770 5.63667 16.45 14.96; 2771 6.08333 16.45 14.96
 1022. 2772 6.53 16.45 14.96; 2773 6.97667 16.45 14.96; 2774 7.42333 16.45 14.96
 1023. 2775 5.63667 19.46 14.96; 2776 6.08333 19.46 14.96; 2777 6.53 19.46 14.96
 1024. 2778 6.97667 19.46 14.96; 2779 7.42333 19.46 14.96; 2780 5.63667 22.47 14.96
 1025. 2781 6.08333 22.47 14.96; 2782 6.53 22.47 14.96; 2783 6.97667 22.47 14.96
 1026. 2784 7.42333 22.47 14.96; 2785 5.63667 25.48 14.96; 2786 6.08333 25.48 14.96
 1027. 2787 6.53 25.48 14.96; 2788 6.97667 25.48 14.96; 2789 7.42333 25.48 14.96
 1028. 2790 5.63667 28.49 14.96; 2791 6.08333 28.49 14.96; 2792 6.53 28.49 14.96
 1029. 2793 6.97667 28.49 14.96; 2794 7.42333 28.49 14.96; 2795 5.63667 31.5 14.96
 1030. 2796 6.08333 31.5 14.96; 2797 6.53 31.5 14.96; 2798 6.97667 31.5 14.96
 1031. 2799 7.42333 31.5 14.96; 2800 5.63667 34.51 14.96; 2801 6.08333 34.51 14.96
 1032. 2802 6.53 34.51 14.96; 2803 6.97667 34.51 14.96; 2804 7.42333 34.51 14.96
 1033. 2805 5.63667 37.52 14.96; 2806 6.02667 37.52 14.96; 2807 6.445 37.52 14.96
 1034. 2808 6.06333 37.52 14.96; 2809 7.28167 37.52 14.96; 2810 7.785 37.52 14.96
 1035. 2811 6.98538 35.2588 14.96; 2812 6.08169 35.255 14.96
 1036. 2813 6.97609 33.7473 14.96; 2814 6.96886 33.0862 14.96
 1037. 2815 6.97031 32.2634 14.96; 2816 6.07847 33.7467 14.96
 1038. 2817 6.07708 33.083 14.96; 2818 6.98987 30.7352 14.96
 1039. 2819 6.0719 32.2622 14.96; 2820 6.98711 29.9939 14.96
 1040. 2821 6.98845 29.2534 14.96; 2822 6.08788 30.7362 14.96
 1041. 2823 6.08029 29.9966 14.96; 2824 6.97424 27.7288 14.96
 1042. 2825 6.0901 29.254 14.96; 2826 6.96385 26.9876 14.96
 1043. 2827 6.96978 26.2488 14.96; 2828 6.07917 27.727 14.96
 1044. 2829 6.06357 26.9842 14.96; 2830 6.97083 24.7182 14.96
 1045. 2831 6.05639 26.2461 14.96; 2832 6.96955 23.9783 14.96
 1046. 2833 6.98242 23.2393 14.96; 2834 6.06341 24.7215 14.96

V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAND SPACE

-- PAGE NO. 28

1047. 2835 6.06823 23.9807 14.96; 2836 6.96882 21.707 14.96
 1048. 2837 6.072 23.2365 14.96; 2838 6.96281 20.9691 14.96
 1049. 2839 6.97269 20.2287 14.96; 2840 6.06375 21.7097 14.96
 1050. 2841 6.05645 20.9722 14.96; 2842 7.00326 18.0922 14.96
 1051. 2843 6.05863 20.2286 14.96; 2844 6.09846 17.954 14.96
 1052. 2845 6.98622 17.2147 14.96; 2846 6.09259 18.6937 14.96
 1053. 2847 6.09339 17.9542 14.96; 2848 6.99036 15.6839 14.96
 1054. 2849 6.08851 17.214 14.96; 2850 6.96794 14.9442 14.96
 1055. 2851 6.96849 14.2038 14.96; 2852 6.08119 15.6868 14.96
 1056. 2853 6.07238 14.9455 14.96; 2854 6.97788 12.6769 14.96
 1057. 2855 6.07322 14.2029 14.96; 2856 6.96624 11.9359 14.96
 1058. 2857 6.96894 11.1942 14.96; 2858 6.08 12.6773 14.96
 1059. 2859 6.07089 11.9346 14.96; 2860 6.97512 9.6644 14.96
 1060. 2861 6.06959 11.1043 14.96; 2862 6.98134 8.92368 14.96
 1061. 2863 6.98458 8.18132 14.96; 2864 6.06545 9.66335 14.96
 1062. 2865 6.07843 8.91717 14.96; 2866 6.98524 6.653 14.96
 1063. 2867 6.07512 8.18155 14.96; 2868 6.9668 5.90974 14.96
 1064. 2869 6.9654 5.17202 14.96; 2870 6.06603 6.65124 14.96
 1065. 2871 6.06097 5.9108 14.96; 2872 7.03768 3.39044 14.96
 1066. 2873 6.05932 5.17047 14.96; 2874 7.1948 2.2599 14.96
 1067. 2875 6.09934 3.39587 14.96; 2876 7.21337 0.855159 14.96
 1068. 2877 6.17889 2.41958 14.96; 2878 6.18409 0.751559 14.96
 1069. 2879 6.08103 35.6335 14.96; 2880 7.43566 35.2596 14.96
 1070. 2881 6.98156 34.8852 14.96; 2882 7.12785 2.84825 14.96
 1071. 2883 7.54678 2.37456 14.96; 2884 7.45604 3.41319 14.96
 1072. 2885 6.06786 15.8566 14.96; 2886 5.62028 20.2205 14.96
 1073. 2887 6.0826 13.0542 14.96; 2888 6.53233 12.6772 14.96
 1074. 2889 6.97785 13.0505 14.96; 2890 6.08457 16.0623 14.96
 1075. 2891 6.53843 15.6851 14.96; 2892 6.98564 16.0619 14.96
 1076. 2893 6.08807 34.8844 14.96; 2894 5.62734 35.2571 14.96
 1077. 2895 6.08105 35.6311 14.96; 2896 6.53442 35.2562 14.96
 1078. 2897 6.10348 1.97061 14.96; 2898 5.68444 2.44479 14.96
 1079. 2899 6.99649 18.3129 14.96; 2900 7.43486 17.954 14.96
 1080. 2901 7.44126 18.6998 14.96; 2902 6.14094 0.389909 14.96
 1081. 2903 5.67105 0.745387 14.96; 2904 7.43436 8.17737 14.96
 1082. 2905 7.42841 8.92462 14.96; 2906 6.98299 8.5538 14.96
 1083. 2907 7.42478 21.7115 14.96; 2908 6.96513 21.3347 14.96
 1084. 2909 7.41604 20.9671 14.96; 2910 5.62179 24.7247 14.96
 1085. 2911 6.07336 25.0948 14.96; 2912 6.9721 13.8321 14.96
 1086. 2913 6.52379 14.2027 14.96; 2914 6.07063 13.8282 14.96
 1087. 2915 5.63109 15.6925 14.96; 2916 5.6292 14.9454 14.96
 1088. 2917 6.07627 15.3149 14.96; 2918 6.97205 25.093 14.96
 1089. 2919 7.42452 24.7229 14.96; 2920 6.08125 34.1216 14.96
 1090. 2921 6.53219 33.7492 14.96; 2922 6.97633 34.1211 14.96
 1091. 2923 7.42482 32.2586 14.96; 2924 6.97097 31.8889 14.96
 1092. 2925 6.05794 20.602 14.96; 2926 5.62323 20.9686 14.96
 1093. 2927 5.62175 21.7139 14.96; 2928 6.07323 22.084 14.96
 1094. 2929 7.43113 23.2309 14.96; 2930 7.41949 25.9769 14.96
 1095. 2931 6.97583 23.6112 14.96; 2932 7.42847 26.241 14.96
 1096. 2933 6.97328 25.8717 14.96; 2934 6.07977 7.81088 14.96
 1097. 2935 5.63078 8.17662 14.96; 2936 6.98632 7.02979 14.96
 1098. 2937 7.43766 6.65951 14.96; 2938 7.00105 3.98774 14.96
 1099. 2939 7.43341 29.2464 14.96; 2940 6.98266 28.8789 14.96
 1100. 2941 5.62063 33.752 14.96; 2942 7.42642 27.7336 14.96
 1101. 2943 6.9685 27.3562 14.96; 2944 7.41993 26.9869 14.96
 1102. 2945 6.08911 28.8796 14.96; 2946 6.54376 29.2534 14.96

V. JAGEN, B.E., M.E. (Struct), M.E. A.I.V.
 CMDAREGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 21

1103. 2947 6.96442 26.6207 14.96; 2948 6.97528 28.0972 14.96
 1104. 2949 6.06884 23.6099 14.96; 2950 5.62725 23.9778 14.96
 1105. 2951 5.62207 23.2303 14.96; 2952 6.06544 24.3471 14.96
 1106. 2953 6.06843 11.5654 14.96; 2954 5.62882 11.9346 14.96
 1107. 2955 5.62604 11.1871 14.96; 2956 5.6234 9.6705 14.96
 1108. 2957 6.07516 10.0407 14.96; 2958 6.51565 9.6634 14.96
 1109. 2959 6.97529 10.0395 14.96; 2960 7.49111 1.85763 14.96
 1110. 2961 6.95977 1.89579 14.96; 2962 6.9798 22.8655 14.96
 1111. 2963 6.52521 23.2393 14.96; 2964 6.07565 22.8591 14.96
 1112. 2965 5.62785 12.6832 14.96; 2966 6.07658 10.8203 14.96
 1113. 2967 7.42642 33.7536 14.96; 2968 6.97344 33.3754 14.96
 1114. 2969 7.42082 33.0062 14.96; 2970 7.42817 12.6829 14.96
 1115. 2971 5.63353 17.2084 14.96; 2972 6.0899 17.5865 14.96
 1116. 2973 5.63979 17.9552 14.96; 2974 6.08579 16.8381 14.96
 1117. 2975 6.08212 28.1042 14.96; 2976 6.52706 27.7264 14.96
 1118. 2977 6.98163 7.80834 14.96; 2978 7.4226 14.1975 14.96
 1119. 2979 5.63603 18.7002 14.96; 2980 6.08979 19.0701 14.96
 1120. 2981 5.62415 6.65989 14.96; 2982 5.62373 5.01217 14.96
 1121. 2983 6.06475 6.2811 14.96; 2984 6.07447 7.02937 14.96
 1122. 2985 6.52176 6.65156 14.96; 2986 6.11223 1.10888 14.96
 1123. 2987 7.49727 1.17 14.96; 2988 7.57826 0.772191 14.96
 1124. 2989 7.42761 20.2214 14.96; 2990 6.97549 19.8518 14.96
 1125. 2991 5.63741 30.7404 14.96; 2992 6.08606 31.1093 14.96
 1126. 2993 6.07706 31.8892 14.96; 2994 5.62833 32.1571 14.96
 1127. 2995 6.09117 3.91337 14.96; 2996 5.64467 3.41794 14.96
 1128. 2997 5.61972 5.16634 14.96; 2998 6.06223 5.54202 14.96
 1129. 2999 6.52152 33.0046 14.96; 3000 6.07357 32.6343 14.96
 1130. 3001 6.51665 32.2634 14.96; 3002 6.96992 32.6366 14.96
 1131. 3003 6.98411 31.11 14.96; 3004 7.43202 30.7411 14.96
 1132. 3005 5.63535 29.2491 14.96; 3006 6.0907 29.6276 14.96
 1133. 3007 5.64013 29.9962 14.96; 3008 7.41976 14.9420 14.96
 1134. 3009 6.96774 14.5751 14.96; 3010 6.07601 12.303 14.96
 1135. 3011 7.43044 17.2079 14.96; 3012 6.98053 16.84 14.96
 1136. 3013 5.63206 33.0038 14.96; 3014 6.07787 33.3709 14.96
 1137. 3015 7.42824 9.66997 14.96; 3016 6.9682 1.16035 14.96
 1138. 3017 6.07242 27.3529 14.96; 3018 6.51288 26.9856 14.96
 1139. 3019 6.97294 12.305 14.96; 3020 7.41841 11.9357 14.96
 1140. 3021 6.9881 30.3625 14.96; 3022 7.4304 29.9934 14.96
 1141. 3023 7.11424 0.427634 14.96; 3024 6.99051 17.586 14.96
 1142. 3025 5.62785 27.7332 14.96; 3026 7.43464 15.6893 14.96
 1143. 3027 5.62702 14.1975 14.96; 3028 6.06972 14.5769 14.96
 1144. 3029 6.06908 9.28828 14.96; 3030 6.52544 8.9201 14.96
 1145. 3031 6.97719 9.29122 14.96; 3032 6.99214 19.0634 14.96
 1146. 3033 7.42374 11.1896 14.96; 3034 6.96983 10.8199 14.96
 1147. 3035 6.9707 22.0818 14.96; 3036 6.51028 28.229 14.96
 1148. 3037 6.71043 0.785743 14.96; 3038 6.07094 4.79672 14.96
 1149. 3039 6.98867 29.6252 14.96; 3040 5.62558 26.9849 14.96
 1150. 3041 6.06618 25.8753 14.96; 3042 5.61899 26.2393 14.96
 1151. 3043 6.05926 21.3376 14.96; 3044 6.54724 17.9544 14.96
 1152. 3045 6.5407 17.2132 14.96; 3046 6.70156 2.37106 14.96
 1153. 3047 6.08937 30.3653 14.96; 3048 6.07341 8.55136 14.96
 1154. 3049 5.63022 8.92108 14.96; 3050 6.5629 3.39012 14.96
 1155. 3051 7.42245 5.16007 14.96; 3052 6.96751 4.79797 14.96
 1156. 3053 6.96516 5.54293 14.96; 3054 6.51211 5.91087 14.96
 1157. 3055 6.50635 5.17141 14.96; 3056 6.97525 6.28023 14.96
 1158. 3057 7.41873 5.9116 14.96; 3058 6.15029 2.89751 14.96


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 22

1159. 3059 6.97863 15.3122 14.96; 3060 6.96806 24.3443 14.96
 1160. 3061 6.06094 26.6157 14.96; 3062 6.51735 11.9344 14.96
 1161. 3063 6.51442 11.1945 14.96; 3064 6.96808 11.5668 14.96
 1162. 3065 6.96808 20.6012 14.96; 3066 6.53705 30.7365 14.96
 1163. 3067 6.51075 21.7079 14.96; 3068 6.51051 14.0440 14.96
 1164. 3069 6.09578 18.3187 14.96; 3070 6.51094 24.7211 14.96
 1165. 3071 6.50793 26.2479 14.96; 3072 6.55317 18.6932 14.96
 1166. 3073 6.51879 23.9791 14.96; 3074 6.53992 29.9953 14.96
 1167. 3075 6.52574 8.17963 14.96; 3076 6.5096 20.9703 14.96
 1168. 3077 7.43093 35.633 14.96; 3078 7.43079 34.8851 14.96
 1169. 3079 7.50381 2.89798 14.96; 3080 5.6266 19.8453 14.96
 1170. 3081 6.53168 13.0525 14.96; 3082 6.53831 15.0619 14.96
 1171. 3083 5.63046 34.8859 14.96; 3084 6.53355 35.6314 14.96
 1172. 3085 5.64592 1.07332 14.96; 3086 7.43734 18.3264 14.96
 1173. 3087 5.66089 0.386723 14.96; 3088 7.43212 8.55346 14.96
 1174. 3089 7.42026 21.3366 14.96; 3090 5.63022 25.0992 14.96
 1175. 3091 6.52642 13.826 14.96; 3092 5.62975 15.3182 14.96
 1176. 3093 7.42437 25.0968 14.96; 3094 6.53039 34.1231 14.96
 1177. 3095 7.42443 31.8841 14.96; 3096 5.62144 20.5956 14.96
 1178. 3097 5.6302 22.0088 14.96; 3098 7.42506 23.6054 14.96
 1179. 3099 7.42512 25.8646 14.96; 3100 5.63341 7.8014 14.96
 1180. 3101 7.43131 7.03561 14.96; 3102 7.43424 3.91099 14.96
 1181. 3103 7.42733 28.8713 14.96; 3104 5.63315 34.1297 14.96
 1182. 3105 7.4214 27.3584 14.96; 3106 6.53688 28.8779 14.96
 1183. 3107 7.42172 26.6159 14.96; 3108 7.42506 28.1054 14.96
 1184. 3109 5.6334 35.632 14.96; 3110 5.62387 23.6052 14.96
 1185. 3111 5.62663 24.3501 14.96; 3112 5.6269 11.5617 14.96
 1186. 3113 5.63104 10.0471 14.96; 3114 5.62308 10.0407 14.96
 1187. 3115 7.23985 1.74376 14.96; 3116 6.52665 22.8532 14.96
 1188. 3117 5.6341 13.0592 14.96; 3118 5.63239 10.8117 14.96
 1189. 3119 7.42466 34.1275 14.96; 3120 7.42329 33.3782 14.96
 1190. 3121 7.42552 13.0573 14.96; 3122 5.63747 17.5841 14.96
 1191. 3123 5.63472 16.8338 14.96; 3124 6.52986 28.1017 14.96
 1192. 3125 7.42826 7.80032 14.96; 3126 7.42343 13.8252 14.96
 1193. 3127 5.63624 19.0752 14.96; 3128 5.62349 6.28604 14.96
 1194. 3129 6.52761 7.02909 14.96; 3130 5.64577 1.10022 14.96
 1195. 3131 7.69403 1.1545 14.96; 3132 7.42575 19.8445 14.96
 1196. 3133 5.636 31.1149 14.96; 3134 5.63254 31.8813 14.96
 1197. 3135 5.64063 3.91658 14.96; 3136 5.62281 5.54019 14.96
 1198. 3137 6.5195 32.6357 14.96; 3138 7.42947 31.1189 14.96
 1199. 3139 5.63808 29.6741 14.96; 3140 7.42101 14.5716 14.96
 1200. 3141 5.62919 12.3066 14.96; 3142 7.42594 16.8321 14.96
 1201. 3143 5.63041 33.3764 14.96; 3144 7.42698 10.8459 14.96
 1202. 3145 7.24809 1.29121 14.96; 3146 6.5204 27.3535 14.96
 1203. 3147 7.42309 13.3077 14.96; 3148 7.43147 30.3648 14.96
 1204. 3149 7.50967 0.405704 14.96; 3150 7.43227 17.5813 14.96
 1205. 3151 5.63197 28.1078 14.96; 3152 7.43201 16.0668 14.96
 1206. 3153 5.63384 16.0677 14.96; 3154 5.62664 14.5727 14.96
 1207. 3155 7.42647 22.8542 14.96; 3156 5.62063 22.8536 14.96
 1208. 3157 6.52087 9.28887 14.96; 3158 7.43338 19.0747 14.96
 1209. 3159 7.42389 10.8145 14.96; 3160 7.42427 22.086 14.96
 1210. 3161 6.5202 19.8532 14.96; 3162 6.57052 1.12809 14.96
 1211. 3163 5.62772 4.79216 14.96; 3164 5.62842 7.03083 14.96
 1212. 3165 7.43042 29.6211 14.96; 3166 5.63042 32.6319 14.96
 1213. 3167 5.62795 27.3577 14.96; 3168 5.62574 25.8646 14.96
 1214. 3169 5.62356 21.3403 14.96; 3170 6.54299 17.5865 14.96


V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 118.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 23

1215. 3171 6.56165 1.85118 14.96; 3172 5.63874 30.3679 14.96
 1216. 3173 5.63829 8.54946 14.96; 3174 6.54628 3.90531 14.96
 1217. 3175 7.42306 4.79369 14.96; 3176 6.58889 5.54324 14.96
 1218. 3177 7.42845 6.28413 14.96; 3178 5.63187 13.8202 14.96
 1219. 3179 5.66705 2.92445 14.96; 3180 7.42869 9.29493 14.96
 1220. 3181 7.42686 15.3143 14.96; 3182 5.63588 28.8743 14.96
 1221. 3183 7.4217 24.3474 14.96; 3184 5.62733 9.29419 14.96
 1222. 3185 5.62181 26.6125 14.96; 3186 6.64854 2.87514 14.96
 1223. 3187 7.42134 32.6342 14.96; 3188 6.51342 11.5669 14.96
 1224. 3189 7.42226 20.5965 14.96; 3190 6.53424 31.1113 14.96
 1225. 3191 7.69251 1.88787 14.96; 3192 6.52006 22.0834 14.96
 1226. 3193 6.51633 14.5766 14.96; 3194 5.63924 18.3256 14.96
 1227. 3195 6.53355 34.8823 14.96; 3196 6.63734 0.406511 14.96
 1228. 3197 6.52069 25.0947 14.96; 3198 7.42105 11.5644 14.96
 1229. 3199 6.52816 15.3132 14.96; 3200 6.5183 25.8723 14.96
 1230. 3201 6.54206 19.0685 14.96; 3202 6.51556 24.3473 14.96
 1231. 3203 6.5226 23.6103 14.96; 3204 7.42094 5.54081 14.96
 1232. 3205 6.5414 29.6264 14.96; 3206 6.5173 4.79783 14.96
 1233. 3207 6.52122 10.8187 14.96; 3208 6.52867 7.80792 14.96
 1234. 3209 6.52193 31.8882 14.96; 3210 6.52753 8.55252 14.96
 1235. 3211 6.51606 6.27921 14.96; 3212 6.52524 12.3036 14.96
 1236. 3213 6.50907 26.6103 14.96; 3214 6.52518 33.374 14.96
 1237. 3215 6.51833 28.6027 14.96; 3216 6.55038 18.3213 14.96
 1238. 3217 6.5383 30.3639 14.96; 3218 6.53519 16.8377 14.96
 1239. 3219 6.50973 21.3368 14.96; 3220 9.16 0.375 9.64; 3221 9.16 0.75 9.64
 1240. 3222 9.16 1.125 9.64; 3223 9.16 1.985 9.64; 3224 9.16 2.47 9.64
 1241. 3225 9.16 3.955 9.64; 3226 9.16 3.44 9.64; 3227 9.16 3.925 9.64
 1242. 3228 9.16 4.78625 9.64; 3229 9.16 5.1625 9.64; 3230 9.16 5.53875 9.64
 1243. 3231 9.16 5.915 9.64; 3232 9.16 6.29125 9.64; 3233 9.16 6.6675 9.64
 1244. 3234 9.16 7.04375 9.64; 3235 9.16 7.79625 9.64; 3236 9.16 8.1725 9.64
 1245. 3237 9.16 8.54075 9.64; 3238 9.16 8.925 9.64; 3239 9.16 9.30125 9.64
 1246. 3240 9.16 9.6775 9.64; 3241 9.16 10.0538 9.64; 3242 9.16 10.8063 9.64
 1247. 3243 9.16 11.1825 9.64; 3244 9.16 11.5588 9.64; 3245 9.16 11.935 9.64
 1248. 3246 9.16 12.3112 9.64; 3247 9.16 12.6875 9.64; 3248 9.16 13.0637 9.64
 1249. 3249 9.16 13.8162 9.64; 3250 9.16 14.1925 9.64; 3251 9.16 14.5688 9.64
 1250. 3252 9.16 14.945 9.64; 3253 9.16 15.3212 9.64; 3254 9.16 15.6975 9.64
 1251. 3255 9.16 16.0738 9.64; 3256 9.16 16.8263 9.64; 3257 9.16 17.2025 9.64
 1252. 3258 9.16 17.5788 9.64; 3259 9.16 17.955 9.64; 3260 9.16 18.3312 9.64
 1253. 3261 9.16 18.7075 9.64; 3262 9.16 19.0837 9.64; 3263 9.16 19.8362 9.64
 1254. 3264 9.16 20.2125 9.64; 3265 9.16 20.5887 9.64; 3266 9.16 20.965 9.64
 1255. 3267 9.16 21.3412 9.64; 3268 9.16 21.7175 9.64; 3269 9.16 22.0938 9.64
 1256. 3270 9.16 22.8462 9.64; 3271 9.16 23.2225 9.64; 3272 9.16 23.5987 9.64
 1257. 3273 9.16 23.975 9.64; 3274 9.16 24.3512 9.64; 3275 9.16 24.7275 9.64
 1258. 3276 9.16 25.1038 9.64; 3277 9.16 25.8562 9.64; 3278 9.16 26.2325 9.64
 1259. 3279 9.16 26.6087 9.64; 3280 9.16 26.985 9.64; 3281 9.16 27.3612 9.64
 1260. 3282 9.16 27.7375 9.64; 3283 9.16 28.1138 9.64; 3284 9.16 28.8662 9.64
 1261. 3285 9.16 29.2425 9.64; 3286 9.16 29.6187 9.64; 3287 9.16 29.995 9.64
 1262. 3288 9.16 30.3713 9.64; 3289 9.16 30.7475 9.64; 3290 9.16 31.1238 9.64
 1263. 3291 9.16 31.8762 9.64; 3292 9.16 32.2525 9.64; 3293 9.16 32.6287 9.64
 1264. 3294 9.16 33.005 9.64; 3295 9.16 33.3812 9.64; 3296 9.16 33.7575 9.64
 1265. 3297 9.16 34.1337 9.64; 3298 9.16 34.885 9.64; 3299 9.16 35.26 9.64
 1266. 3300 9.16 35.635 9.64; 3301 9.6075 36.01 9.64; 3302 10.055 36.01 9.64
 1267. 3303 10.5025 36.01 9.64; 3304 11.085 36.01 9.64; 3305 11.22 35.635 9.64
 1268. 3306 11.22 35.26 9.64; 3307 11.22 34.885 9.64; 3308 11.22 34.1337 9.64
 1269. 3309 11.22 33.7575 9.64; 3310 11.22 33.3812 9.64; 3311 11.22 33.005 9.64
 1270. 3312 11.22 32.6287 9.64; 3313 11.22 32.2525 9.64; 3314 11.22 31.8762 9.64

V. JAGEN, B.E.M.E.(Struct), M.I.E.,A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOC ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 24

1271. 3315 11.22 31.1238 9.64; 3316 11.22 30.7475 9.64; 3317 11.22 30.3713 9.64
 1272. 3318 11.22 29.995 9.64; 3319 11.22 29.6187 9.64; 3320 11.22 29.2425 9.64
 1273. 3321 11.22 28.8662 9.64; 3322 11.22 28.1138 9.64; 3323 11.22 27.7375 9.64
 1274. 3324 11.22 27.3612 9.64; 3325 11.22 26.985 9.64; 3326 11.22 26.6087 9.64
 1275. 3327 11.22 26.2325 9.64; 3328 11.22 25.8562 9.64; 3329 11.22 25.1038 9.64
 1276. 3330 11.22 24.7275 9.64; 3331 11.22 24.3512 9.64; 3332 11.22 23.975 9.64
 1277. 3333 11.22 23.5987 9.64; 3334 11.22 23.2225 9.64; 3335 11.22 22.8462 9.64
 1278. 3336 11.22 22.8938 9.64; 3337 11.22 21.7175 9.64; 3338 11.22 21.3412 9.64
 1279. 3339 11.22 20.965 9.64; 3340 11.22 20.5887 9.64; 3341 11.22 20.2125 9.64
 1280. 3342 11.22 19.8362 9.64; 3343 11.22 19.0837 9.64; 3344 11.22 18.7075 9.64
 1281. 3345 11.22 18.3312 9.64; 3346 11.22 17.955 9.64; 3347 11.22 17.5788 9.64
 1282. 3348 11.22 17.2025 9.64; 3349 11.22 16.8263 9.64; 3350 11.22 16.0738 9.64
 1283. 3351 11.22 15.6975 9.64; 3352 11.22 15.3212 9.64; 3353 11.22 14.945 9.64
 1284. 3354 11.22 14.5688 9.64; 3355 11.22 14.1925 9.64; 3356 11.22 13.8162 9.64
 1285. 3357 11.22 13.0637 9.64; 3358 11.22 12.6875 9.64; 3359 11.22 12.3112 9.64
 1286. 3360 11.22 11.935 9.64; 3361 11.22 11.5588 9.64; 3362 11.22 11.1825 9.64
 1287. 3363 11.22 10.8063 9.64; 3364 11.22 10.0538 9.64; 3365 11.22 9.6775 9.64
 1288. 3366 11.22 9.30125 9.64; 3367 11.22 8.925 9.64; 3368 11.22 8.54875 9.64
 1289. 3369 11.22 8.1725 9.64; 3370 11.22 7.79625 9.64; 3371 11.22 7.04375 9.64
 1290. 3372 11.22 6.6675 9.64; 3373 11.22 6.29125 9.64; 3374 11.22 5.915 9.64
 1291. 3375 11.22 5.53875 9.64; 3376 11.22 5.1625 9.64; 3377 11.22 4.78625 9.64
 1292. 3378 11.22 3.925 9.64; 3379 11.22 3.44 9.64; 3380 11.22 2.955 9.64
 1293. 3381 11.22 2.47 9.64; 3382 11.22 1.985 9.64; 3383 11.22 1.125 9.64
 1294. 3384 11.22 0.75 9.64; 3385 11.22 0.375 9.64; 3386 10.8767 0 9.64
 1295. 3387 10.5333 0 9.64; 3388 10.19 0 9.64; 3389 9.84667 0 9.64
 1296. 3390 9.58333 0 9.64; 3391 9.6075 4.41 9.64; 3392 10.055 4.41 9.64
 1297. 3393 10.5025 4.41 9.64; 3394 11.005 4.41 9.64; 3395 9.6075 7.42 9.64
 1298. 3396 10.055 7.42 9.64; 3397 10.5025 7.42 9.64; 3398 11.005 7.42 9.64
 1299. 3399 9.6075 10.43 9.64; 3400 10.055 10.43 9.64; 3401 10.5025 10.43 9.64
 1300. 3402 11.005 10.43 9.64; 3403 9.6075 13.44 9.64; 3404 10.055 13.44 9.64
 1301. 3405 10.5025 13.44 9.64; 3406 11.005 13.44 9.64; 3407 9.6075 16.45 9.64
 1302. 3408 10.055 16.45 9.64; 3409 10.5025 16.45 9.64; 3410 11.005 16.45 9.64
 1303. 3411 9.6075 19.46 9.64; 3412 10.055 19.46 9.64; 3413 10.5025 19.46 9.64
 1304. 3414 11.005 19.46 9.64; 3415 9.6075 22.47 9.64; 3416 10.055 22.47 9.64
 1305. 3417 10.5025 22.47 9.64; 3418 11.005 22.47 9.64; 3419 9.6075 25.48 9.64
 1306. 3420 10.055 25.48 9.64; 3421 10.5025 25.48 9.64; 3422 11.005 25.48 9.64
 1307. 3423 9.6075 28.49 9.64; 3424 10.055 28.49 9.64; 3425 10.5025 28.49 9.64
 1308. 3426 11.005 28.49 9.64; 3427 9.6075 31.5 9.64; 3428 10.055 31.5 9.64
 1309. 3429 10.5025 31.5 9.64; 3430 11.005 31.5 9.64; 3431 9.6075 34.51 9.64
 1310. 3432 10.055 34.51 9.64; 3433 10.5025 34.51 9.64; 3434 11.005 34.51 9.64
 1311. 3435 9.6075 1.5 9.64; 3436 10.055 1.5 9.64; 3437 10.5025 1.5 9.64
 1312. 3438 11.005 1.5 9.64; 3439 9.98637 35.265 9.64; 3440 10.6663 33.7641 9.64
 1313. 3441 10.5766 33.005 9.64; 3442 10.6629 32.2433 9.64; 3443 9.94241 33.7716 9.64
 1314. 3444 9.90607 33.005 9.64; 3445 10.6663 30.7541 9.64; 3446 9.9425 32.2384 9.64
 1315. 3447 10.5766 29.995 9.64; 3448 10.6629 29.2333 9.64; 3449 9.9425 30.7616 9.64
 1316. 3450 9.90609 29.995 9.64; 3451 10.6694 27.7447 9.64; 3452 9.9425 29.2284 9.64
 1317. 3453 10.6814 26.985 9.64; 3454 10.6649 26.2233 9.64; 3455 9.9425 27.7516 9.64
 1318. 3456 9.87191 26.985 9.64; 3457 10.6525 24.7354 9.64; 3458 9.94192 25.2198 9.64
 1319. 3459 10.5231 23.975 9.64; 3460 10.0495 23.2134 9.64; 3461 9.9425 24.7416 9.64
 1320. 3462 9.9125 23.975 9.64; 3463 10.6663 21.7241 9.64; 3464 9.9425 23.2084 9.64
 1321. 3465 10.5766 20.965 9.64; 3466 10.6629 20.2033 9.64; 3467 9.9425 21.7316 9.64
 1322. 3468 9.90609 20.965 9.64; 3469 10.6663 18.7141 9.64; 3470 9.9425 20.1984 9.64
 1323. 3471 10.5766 17.955 9.64; 3472 10.6629 17.1933 9.64; 3473 9.9425 18.7216 9.64
 1324. 3474 9.90609 17.955 9.64; 3475 10.6667 15.7043 9.64; 3476 9.9425 17.1884 9.64
 1325. 3477 10.5766 14.945 9.64; 3478 10.6621 14.1832 9.64; 3479 9.9425 15.7116 9.64
 1326. 3480 9.90609 14.945 9.64; 3481 10.6694 12.6943 9.64; 3482 9.9425 14.1784 9.64

V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDAREGN NOS -
 SE / GR-I / 2019/03/024, QN/2019/04/021
 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

1383. 3622 10.7803 28.1133 9.64; 3623 9.99574 28.8582 9.64
 1384. 3624 10.3026 29.2282 9.64; 3625 10.9449 3.4814 9.64; 3626 10.7701 31.8686 9.64
 1385. 3627 10.8983 29.995 9.64; 3628 10.6207 29.6128 9.64; 3629 10.6332 12.3172 9.64
 1386. 3630 9.51595 11.935 9.64; 3631 9.9072 12.3183 9.64; 3632 10.7701 16.8186 9.64
 1387. 3633 9.55125 32.2455 9.64; 3634 9.92428 32.6217 9.64; 3635 9.53303 33.805 9.64
 1388. 3636 9.55125 9.68454 9.64; 3637 9.9072 11.5517 9.64; 3638 10.7701 10.7986 9.64
 1389. 3639 9.99574 31.8682 9.64; 3640 10.3026 32.2382 9.64
 1390. 3641 9.99574 31.1244 9.64; 3642 9.99572 25.8485 9.64
 1391. 3643 9.55125 26.2255 9.64; 3644 9.92429 15.3283 9.64
 1392. 3645 10.6207 14.5628 9.64; 3646 10.9436 14.1852 9.64; 3647 10.8983 14.945 9.64
 1393. 3648 10.5797 23.5919 9.64; 3649 10.5806 6.29537 9.64
 1394. 3650 10.8744 5.91496 9.64; 3651 9.53625 5.915 9.64; 3652 9.91265 6.30289 9.64
 1395. 3653 9.53305 17.955 9.64; 3654 9.92429 18.3383 9.64; 3655 10.6207 20.5828 9.64
 1396. 3656 9.9836 4.78085 9.64; 3657 9.53205 5.16706 9.64; 3658 9.55856 3.46089 9.64
 1397. 3659 10.6332 27.3672 9.64; 3660 9.55125 27.7445 9.64
 1398. 3661 9.99574 28.1144 9.64; 3662 10.3026 17.1882 9.64
 1399. 3663 9.99574 25.1044 9.64; 3664 9.92429 20.5817 9.64; 3665 9.53305 20.965 9.64
 1400. 3666 9.92429 21.3483 9.64; 3667 10.2413 20.965 9.64; 3668 10.9475 15.7036 9.64
 1401. 3669 10.608 15.3253 9.64; 3670 10.7803 16.8733 9.64; 3671 9.55125 29.2355 9.64
 1402. 3672 9.92424 33.3883 9.64; 3673 10.2413 33.805 9.64; 3674 10.6079 33.3852 9.64
 1403. 3675 10.3026 33.7718 9.64; 3676 9.92429 9.30829 9.64
 1404. 3677 10.5757 5.53493 9.64; 3678 10.942 5.15621 9.64; 3679 10.7671 4.78028 9.64
 1405. 3680 10.7701 13.8086 9.64; 3681 10.2413 14.045 9.64; 3682 10.3026 14.1782 9.64
 1406. 3683 9.91267 23.587 9.64; 3684 10.3026 24.7418 9.64; 3685 10.212 23.9748 9.64
 1407. 3686 9.99574 7.78821 9.64; 3687 9.55125 8.16546 9.64
 1408. 3688 10.3026 15.7118 9.64; 3689 9.92429 29.6117 9.64
 1409. 3690 10.3078 11.1692 9.64; 3691 10.2366 11.935 9.64; 3692 10.2227 5.91653 9.64
 1410. 3693 9.89991 5.53726 9.64; 3694 10.2914 5.16078 9.64; 3695 9.51595 26.985 9.64
 1411. 3696 9.9072 27.3683 9.64; 3697 10.3026 20.1982 9.64; 3698 10.3026 27.7518 9.64
 1412. 3699 9.53305 8.925 9.64; 3700 10.2413 17.955 9.64; 3701 9.92429 17.5717 9.64
 1413. 3702 10.3026 10.7118 9.64; 3703 9.51077 0.307519 9.64
 1414. 3704 11.0258 35.6594 9.64; 3705 11.0168 25.8503 9.64; 3706 10.4243 35.656 9.64
 1415. 3707 10.3148 2.95885 9.64; 3708 11.018 34.8906 9.64; 3709 11.016 25.103 9.64
 1416. 3710 9.57876 22.0933 9.64; 3711 10.9206 21.3446 9.64; 3712 11.016 13.063 9.64
 1417. 3713 9.57762 13.8093 9.64; 3714 11.0174 1.12257 9.64
 1418. 3715 10.9206 8.54544 9.64; 3716 11.0138 1.92308 9.64
 1419. 3717 9.57876 19.0833 9.64; 3718 10.8933 24.3546 9.64
 1420. 3719 9.54215 14.5652 9.64; 3720 9.57876 16.0733 9.64; 3721 11.016 34.133 9.64
 1421. 3722 11.0168 22.8403 9.64; 3723 10.3998 22.0939 9.64
 1422. 3724 9.57765 22.0391 9.64; 3725 9.50675 35.6354 9.64
 1423. 3726 9.58675 34.8858 9.64; 3727 10.2699 26.6019 9.64; 3728 9.5777 10.7992 9.64
 1424. 3729 11.016 7.04301 9.64; 3730 11.0168 28.8603 9.64; 3731 9.57874 34.1333 9.64
 1425. 3732 11.016 31.123 9.64; 3733 9.54215 30.3748 9.64; 3734 10.2722 30.3781 9.64
 1426. 3735 9.54375 24.3548 9.64; 3736 10.3985 22.8344 9.64
 1427. 3737 11.0168 7.79029 9.64; 3738 10.3998 10.0539 9.64
 1428. 3739 10.9206 9.30456 9.64; 3740 9.5825 1.96603 9.64; 3741 9.57764 19.8292 9.64
 1429. 3742 10.9269 11.5554 9.64; 3743 10.9206 32.6254 9.64
 1430. 3744 9.57876 13.0633 9.64; 3745 10.3999 13.0638 9.64
 1431. 3746 10.9206 17.5754 9.64; 3747 9.57764 16.8192 9.64
 1432. 3748 10.9269 26.6054 9.64; 3749 10.2722 8.54191 9.64
 1433. 3750 9.57876 7.04327 9.64; 3751 10.9206 18.3346 9.64
 1434. 3752 10.3972 3.98094 9.64; 3753 10.3997 7.04423 9.64
 1435. 3754 10.2317 0.365763 9.64; 3755 10.3832 1.12733 9.64
 1436. 3756 11.0168 19.8303 9.64; 3757 11.016 19.083 9.64; 3758 11.016 28.113 9.64
 1437. 3759 10.3991 28.8558 9.64; 3760 10.9359 2.95256 9.64
 1438. 3761 11.0168 31.8703 9.64; 3762 10.9206 29.6154 9.64

V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 27

1439. 3763 10.9206 30.3746 9.64; 3764 10.9269 12.3146 9.64; 3765 9.5336 12.3148 9.64
 1440. 3766 11.0168 16.8203 9.64; 3767 9.54214 32.6252 9.64
 1441. 3768 9.57876 18.0533 9.64; 3769 9.5336 11.5552 9.64; 3770 11.0168 18.8803 9.64
 1442. 3771 10.3991 31.8658 9.64; 3772 9.57876 31.1233 9.64
 1443. 3773 10.9115 0.364366 9.64; 3774 9.57760 25.8492 9.64
 1444. 3775 9.54215 15.3248 9.64; 3776 10.9206 14.5654 9.64
 1445. 3777 10.8962 23.6808 9.64; 3778 10.8969 6.28882 9.64
 1446. 3779 9.54375 6.29477 9.64; 3780 9.54215 18.3348 9.64; 3781 11.016 10.053 9.64
 1447. 3782 11.016 22.093 9.64; 3783 10.9206 20.5854 9.64; 3784 9.57091 4.78093 9.64
 1448. 3785 9.57829 3.94858 9.64; 3786 10.9269 27.3646 9.64
 1449. 3787 9.57764 31.8692 9.64; 3788 9.57876 28.1133 9.64
 1450. 3789 10.3991 16.8158 9.64; 3790 9.57876 25.1833 9.64
 1451. 3791 9.54215 20.5852 9.64; 3792 10.2722 21.3481 9.64
 1452. 3793 10.9206 15.3246 9.64; 3794 11.016 16.073 9.64; 3795 10.4011 1.93161 9.64
 1453. 3796 9.57764 28.8592 9.64; 3797 10.2722 33.3881 9.64
 1454. 3798 9.54212 33.3848 9.64; 3799 10.2722 9.30809 9.64
 1455. 3800 9.56423 2.96099 9.64; 3801 10.8954 5.54185 9.64; 3802 11.016 4.78093 9.64
 1456. 3803 11.0168 13.8103 9.64; 3804 10.2722 14.5619 9.64
 1457. 3805 10.9206 33.3846 9.64; 3806 9.54375 23.5952 9.64
 1458. 3807 10.2535 24.3623 9.64; 3808 9.57764 7.7892 9.64; 3809 10.2722 15.3281 9.64
 1459. 3810 10.2722 29.6119 9.64; 3811 10.2699 11.5519 9.64
 1460. 3812 10.3998 34.1339 9.64; 3813 10.3998 31.1239 9.64
 1461. 3814 9.56388 1.12674 9.64; 3815 10.2534 6.3019 9.64; 3816 10.2384 5.53041 9.64
 1462. 3817 10.3992 10.796 9.64; 3818 10.2535 23.5875 9.64; 3819 10.2699 12.3181 9.64
 1463. 3820 9.5336 26.6052 9.64; 3821 9.5336 27.3648 9.64; 3822 9.54215 21.3448 9.64
 1464. 3823 10.3991 19.8258 9.64; 3824 11.0137 3.98506 9.64
 1465. 3825 10.3998 28.1139 9.64; 3826 9.54215 29.6152 9.64
 1466. 3827 9.54215 9.30477 9.64; 3828 10.2722 17.5719 9.64
 1467. 3829 9.54215 17.5752 9.64; 3830 10.3998 19.0839 9.64
 1468. 3831 10.2722 20.5819 9.64; 3832 10.2699 27.3681 9.64
 1469. 3833 10.3998 25.1039 9.64; 3834 10.3992 25.8468 9.64
 1470. 3835 10.3992 13.0068 9.64; 3836 9.54215 8.54523 9.64
 1471. 3837 10.2722 18.3381 9.64; 3838 10.2722 32.6219 9.64
 1472. 3839 10.3902 4.77961 9.64; 3840 10.3991 7.78576 9.64; 3841 10.4187 34.881 9.64
 1473. 3842 10.3998 16.0739 9.64; 3843 9.53491 5.54224 9.64; 3844 9.16 36.01 10.11
 1474. 3845 9.16 36.01 10.58; 3846 9.16 36.01 11.05; 3847 9.16 35.635 11.52
 1475. 3848 9.16 35.26 11.52; 3849 9.16 34.885 11.52; 3850 9.16 34.1337 11.52
 1476. 3851 9.16 33.7575 11.52; 3852 9.16 33.3812 11.52; 3853 9.16 33.005 11.52
 1477. 3854 9.16 32.6287 11.52; 3855 9.16 32.2525 11.52; 3856 9.16 31.8762 11.52
 1478. 3857 9.16 31.1238 11.52; 3858 9.16 30.7475 11.52; 3859 9.16 30.3713 11.52
 1479. 3860 9.16 29.995 11.52; 3861 9.16 29.6187 11.52; 3862 9.16 29.2425 11.52
 1480. 3863 9.16 28.8662 11.52; 3864 9.16 28.1138 11.52; 3865 9.16 27.7375 11.52
 1481. 3866 9.16 27.3612 11.52; 3867 9.16 26.985 11.52; 3868 9.16 26.6087 11.52
 1482. 3869 9.16 26.2325 11.52; 3870 9.16 25.8562 11.52; 3871 9.16 25.1038 11.52
 1483. 3872 9.16 24.7275 11.52; 3873 9.16 24.3512 11.52; 3874 9.16 23.975 11.52
 1484. 3875 9.16 23.5987 11.52; 3876 9.16 23.2225 11.52; 3877 9.16 22.8462 11.52
 1485. 3878 9.16 22.0938 11.52; 3879 9.16 21.7175 11.52; 3880 9.16 21.3412 11.52
 1486. 3881 9.16 20.965 11.52; 3882 9.16 20.5887 11.52; 3883 9.16 20.2125 11.52
 1487. 3884 9.16 19.8362 11.52; 3885 9.16 19.0837 11.52; 3886 9.16 18.7075 11.52
 1488. 3887 9.16 18.3312 11.52; 3888 9.16 17.955 11.52; 3889 9.16 17.5788 11.52
 1489. 3890 9.16 17.2025 11.52; 3891 9.16 16.8263 11.52; 3892 9.16 16.0738 11.52
 1490. 3893 9.16 15.6975 11.52; 3894 9.16 15.3212 11.52; 3895 9.16 14.945 11.52
 1491. 3896 9.16 14.5688 11.52; 3897 9.16 14.1925 11.52; 3898 9.16 13.8162 11.52
 1492. 3899 9.16 13.0637 11.52; 3900 9.16 12.6875 11.52; 3901 9.16 12.3112 11.52
 1493. 3902 9.16 11.935 11.52; 3903 9.16 11.5588 11.52; 3904 9.16 11.1825 11.52
 1494. 3905 9.16 10.8063 11.52; 3906 9.16 10.0538 11.52; 3907 9.16 9.6775 11.52

V. JAGEN, B.E./M.E. (Struct), M.I.E./A.I.V.,
CMDA REGN NOS.

SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER

3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.

Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 28

1495. 3908 9.16 9.30125 11.52; 3909 9.16 8.925 11.52; 3910 9.16 8.54875 11.52
 1496. 3911 9.16 8.1725 11.52; 3912 9.16 7.79625 11.52; 3913 9.16 7.04375 11.52
 1497. 3914 9.16 6.6675 11.52; 3915 9.16 6.29125 11.52; 3916 9.16 5.915 11.52
 1498. 3917 9.16 5.53875 11.52; 3918 9.16 5.1625 11.52; 3919 9.16 4.78625 11.52
 1499. 3920 9.16 3.925 11.52; 3921 9.16 3.44 11.52; 3922 9.16 2.955 11.52
 1500. 3923 9.16 2.47 11.52; 3924 9.16 1.985 11.52; 3925 9.16 1.125 11.52
 1501. 3926 9.16 0.75 11.52; 3927 9.16 0.375 11.52; 3928 9.16 0 11.05
 1502. 3929 9.16 0 10.58; 3930 9.16 0 10.11; 3931 9.16 4.41 11.05
 1503. 3932 9.16 4.41 10.58; 3933 9.16 4.41 10.11; 3934 9.16 7.42 11.05
 1504. 3935 9.16 7.42 10.58; 3936 9.16 7.42 10.11; 3937 9.16 10.43 11.05
 1505. 3938 9.16 10.43 10.58; 3939 9.16 10.43 10.11; 3940 9.16 13.44 11.05
 1506. 3941 9.16 13.44 10.58; 3942 9.16 13.44 10.11; 3943 9.16 16.45 11.05
 1507. 3944 9.16 16.45 10.58; 3945 9.16 16.45 10.11; 3946 9.16 19.46 11.05
 1508. 3947 9.16 19.46 10.58; 3948 9.16 19.46 10.11; 3949 9.16 22.47 11.05
 1509. 3950 9.16 22.47 10.58; 3951 9.16 22.47 10.11; 3952 9.16 25.48 11.05
 1510. 3953 9.16 25.48 10.58; 3954 9.16 25.48 10.11; 3955 9.16 28.49 11.05
 1511. 3956 9.16 28.49 10.58; 3957 9.16 28.49 10.11; 3958 9.16 31.5 11.05
 1512. 3959 9.16 31.5 10.58; 3960 9.16 31.5 10.11; 3961 9.16 34.51 11.05
 1513. 3962 9.16 34.51 10.58; 3963 9.16 34.51 10.11; 3964 9.16 35.2599 10.5817
 1514. 3965 9.16 33.7488 10.58; 3966 9.16 33.085 10.58; 3967 9.16 32.2612 10.58
 1515. 3968 9.16 30.7388 10.58; 3969 9.16 29.995 10.58; 3970 9.16 29.2512 10.58
 1516. 3971 9.16 27.7288 10.58; 3972 9.16 26.985 10.58; 3973 9.16 26.2412 10.58
 1517. 3974 9.16 24.7188 10.58; 3975 9.16 23.975 10.58; 3976 9.16 23.2312 10.58
 1518. 3977 9.16 21.7088 10.58; 3978 9.16 20.965 10.58; 3979 9.16 20.2212 10.58
 1519. 3980 9.16 18.6996 10.58; 3981 9.16 17.955 10.58; 3982 9.16 17.2112 10.58
 1520. 3983 9.16 15.6888 10.58; 3984 9.16 14.945 10.58; 3985 9.16 14.2012 10.58
 1521. 3986 9.16 12.6788 10.58; 3987 9.16 11.935 10.58; 3988 9.16 11.1912 10.58
 1522. 3989 9.16 9.66883 10.58; 3990 9.16 8.925 10.58; 3991 9.16 8.18117 10.58
 1523. 3992 9.16 6.65883 10.58; 3993 9.16 5.915 10.58; 3994 9.16 5.17117 10.58
 1524. 3995 9.16 3.44 10.58; 3996 9.16 2.47517 10.58; 3997 9.16 1.54398 10.58
 1525. 3998 9.16 0.777255 10.58; 3999 9.16 26.1367 11.0503; 4000 9.16 25.8701 10.58
 1526. 4001 9.16 19.0718 10.58; 4002 9.16 18.7033 11.0504; 4003 9.16 32.2584 11.051
 1527. 4004 9.16 31.808 10.5803; 4005 9.16 8.17646 10.1097; 4006 9.16 8.55122 10.5799
 1528. 4007 9.16 8.925 10.11; 4008 9.16 31.112 10.5797; 4009 9.16 30.7435 11.0503
 1529. 4010 9.16 34.8069 10.5805; 4011 9.16 35.26 10.1023; 4012 9.16 35.6322 10.5806
 1530. 4013 9.16 35.2601 11.0508; 4014 9.16 17.955 11.05; 4015 9.16 17.5813 10.5801
 1531. 4016 9.16 17.2067 11.0503; 4017 9.16 16.8401 10.58; 4018 9.16 17.2057 10.1096
 1532. 4019 9.16 0.765212 10.109; 4020 9.16 0.399277 10.5799
 1533. 4021 9.16 15.6916 10.109; 4022 9.16 10.062 10.5797; 4023 9.16 5.915 11.05
 1534. 4024 9.16 5.54129 10.5801; 4025 9.16 5.16671 11.0503; 4026 9.16 4.03012 10.58
 1535. 4027 9.16 5.16658 10.1096; 4028 9.16 14.945 10.11; 4029 9.16 15.3188 10.5801
 1536. 4030 9.16 33.7535 11.0503; 4031 9.16 33.3788 10.5801; 4032 9.16 33.005 11.05
 1537. 4033 9.16 22.082 10.5797; 4034 9.16 21.7135 11.0503; 4035 9.16 25.0899 10.58
 1538. 4036 9.16 24.7233 11.0504; 4037 9.16 18.3289 10.5799
 1539. 4038 9.16 18.7041 10.1098; 4039 9.16 17.955 10.11; 4040 9.16 20.5913 10.5801
 1540. 4041 9.16 20.2167 11.0503; 4042 9.16 20.965 11.05; 4043 9.16 21.7116 10.109
 1541. 4044 9.16 14.1984 11.051; 4045 9.16 13.828 10.5803; 4046 9.16 14.1965 10.1097
 1542. 4047 9.16 26.985 11.05; 4048 9.16 26.0113 10.5801; 4049 9.16 29.995 11.05
 1543. 4050 9.16 29.6213 10.5801; 4051 9.16 29.2467 11.0503
 1544. 4052 9.16 30.3688 10.5801; 4053 9.16 23.975 10.11; 4054 9.16 24.3487 10.5799
 1545. 4055 9.16 24.7233 10.1097; 4056 9.16 33.7516 10.109; 4057 9.16 34.122 10.5797
 1546. 4058 9.16 5.915 10.11; 4059 9.16 6.28878 10.5801; 4060 9.16 6.66161 10.109
 1547. 4061 9.16 7.03199 10.5797; 4062 9.16 3.44 11.05; 4063 9.16 2.95759 10.58
 1548. 4064 9.16 2.47259 11.05; 4065 9.16 8.17839 11.051; 4066 9.16 7.88801 10.5803
 1549. 4067 9.16 6.66354 11.0503; 4068 9.16 28.8801 10.58; 4069 9.16 29.2467 10.1096
 1550. 4070 9.16 10.0399 10.58; 4071 9.16 9.67332 11.0504; 4072 9.16 28.102 10.5797

V. JAGEN, B.E., M.E. (Struct), M.I.E. A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOK ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 29

1551. 4073 9.16 27.7335 11.0503; 4074 9.16 26.985 10.11; 4075 9.16 27.3588 10.5801
 1552. 4076 9.16 27.7316 10.109; 4077 9.16 33.805 10.11; 4078 9.16 32.2565 10.1097
 1553. 4079 9.16 32.6312 10.5799; 4080 9.16 3.92881 10.58; 4081 9.16 11.1884 11.051
 1554. 4082 9.16 10.828 10.5803; 4083 9.16 1.99096 10.58; 4084 9.16 1.52199 11.05
 1555. 4085 9.16 23.975 11.05; 4086 9.16 23.6013 10.5801; 4087 9.16 23.2267 11.0503
 1556. 4088 9.16 22.8601 10.58; 4089 9.16 23.2267 10.1096; 4090 9.16 14.945 11.05
 1557. 4091 9.16 14.5712 10.5799; 4092 9.16 26.2367 10.1096
 1558. 4093 9.16 0.764573 11.0506; 4094 9.16 11.1865 10.1097
 1559. 4095 9.16 12.6816 10.109; 4096 9.16 13.052 10.5797; 4097 9.16 11.5612 10.5799
 1560. 4098 9.16 11.935 10.11; 4099 9.16 11.935 11.05; 4100 9.16 12.3088 10.5801
 1561. 4101 9.16 12.6835 11.0503; 4102 9.16 9.29871 10.5799; 4103 9.16 8.925 11.05
 1562. 4104 9.16 30.7416 10.109; 4105 9.16 9.67329 10.1097; 4106 9.16 21.3388 10.5801
 1563. 4107 9.16 20.965 10.11; 4108 9.16 1.1506 10.58; 4109 9.16 1.52199 10.11
 1564. 4110 9.16 19.8501 10.58; 4111 9.16 20.2167 10.1096; 4112 9.16 2.47259 10.11
 1565. 4113 9.16 3.44 10.11; 4114 9.16 15.6935 11.0503; 4115 9.16 29.995 10.11
 1566. 4116 9.16 25.8634 11.0508; 4117 9.16 19.077 11.0508; 4118 9.16 31.8845 11.0522
 1567. 4119 9.16 8.54875 10.11; 4120 9.16 31.117 11.0508; 4121 9.16 34.8883 10.1035
 1568. 4122 9.16 35.6322 11.057; 4123 9.16 17.5788 11.05; 4124 9.16 16.833 10.1092
 1569. 4125 9.16 0.390137 10.1083; 4126 9.16 16.0655 10.1078; 4127 9.16 5.53875 11.05
 1570. 4128 9.16 4.79296 10.1092; 4129 9.16 15.3202 10.1098; 4130 9.16 33.3812 11.05
 1571. 4131 9.16 22.087 11.0508; 4132 9.16 25.097 11.0508; 4133 9.16 18.3312 10.11
 1572. 4134 9.16 20.5887 11.05; 4135 9.16 22.0855 10.1078; 4136 9.16 35.6315 10.1035
 1573. 4137 9.16 13.8245 11.0522; 4138 9.16 13.823 10.1092; 4139 9.16 26.6087 11.05
 1574. 4140 9.16 29.6187 11.05; 4141 9.16 30.3713 11.05; 4142 9.16 24.3512 10.11
 1575. 4143 9.16 34.1255 10.1078; 4144 9.16 25.0966 10.1092
 1576. 4145 9.16 6.29024 10.1098; 4146 9.16 7.03553 10.1078; 4147 9.16 2.95629 11.05
 1577. 4148 9.16 7.80447 11.0522; 4149 9.16 7.03702 11.0508; 4150 9.16 28.873 10.1092
 1578. 4151 9.16 10.047 11.0508; 4152 9.16 28.107 11.0508; 4153 9.16 27.3682 10.1098
 1579. 4154 9.16 34.127 11.0508; 4155 9.16 32.6287 10.11; 4156 9.16 3.92595 11.05
 1580. 4157 9.16 10.8145 11.0522; 4158 9.16 16.8334 11.0508
 1581. 4159 9.16 1.99106 11.0505; 4160 9.16 23.5987 11.05; 4161 9.16 22.853 10.1091
 1582. 4162 9.16 14.5688 11.0502; 4163 9.16 25.863 10.1092
 1583. 4164 9.16 0.388161 11.0503; 4165 9.16 26.6087 10.11; 4166 9.16 10.813 10.1092
 1584. 4167 9.16 13.0555 10.1078; 4168 9.16 11.5588 10.11; 4169 9.16 11.5598 11.0502
 1585. 4170 9.16 12.3112 11.05; 4171 9.16 9.30125 11.05; 4172 9.16 31.1155 10.1078
 1586. 4173 9.16 10.8466 10.1092; 4174 9.16 21.3402 10.1098
 1587. 4175 9.16 1.14013 11.0504; 4176 9.16 1.14013 10.1096; 4177 9.16 9.30125 10.11
 1588. 4178 9.16 19.843 10.1092; 4179 9.16 2.95629 10.11; 4180 9.16 16.067 11.0508
 1589. 4181 9.16 28.8734 11.0508; 4182 9.16 28.1055 10.1078; 4183 9.16 27.3612 11.05
 1590. 4184 9.16 22.8534 11.0508; 4185 9.16 31.883 10.1092; 4186 9.16 4.79341 11.0508
 1591. 4187 9.16 32.6298 11.0502; 4188 9.16 6.29125 11.05; 4189 9.16 7.80298 10.1092
 1592. 4190 9.16 3.92595 10.11; 4191 9.16 19.0766 10.1092; 4192 9.16 13.057 11.0508
 1593. 4193 9.16 17.5788 10.11; 4194 9.16 19.8434 11.0508; 4195 9.16 15.3212 11.05
 1594. 4196 9.16 23.5987 10.11; 4197 9.16 12.3102 10.1098; 4198 9.16 33.3802 10.1098
 1595. 4199 9.16 21.3412 11.05; 4200 9.16 24.3512 11.05; 4201 9.16 30.3702 10.1098
 1596. 4202 9.16 29.6187 10.11; 4203 9.16 5.53875 10.11; 4204 9.16 18.3303 11.0502
 1597. 4205 9.16 14.5688 10.11; 4206 9.16 1.99106 10.1095; 4207 9.16 34.8881 11.0573
 1598. 4208 9.16 20.5887 10.11; 4209 9.16 8.54976 11.0502; 4210 11.22 36.01 10.11
 1599. 4211 11.22 36.01 10.58; 4212 11.22 36.01 11.05; 4213 11.22 35.635 11.52
 1600. 4214 11.22 35.26 11.52; 4215 11.22 34.885 11.52; 4216 11.22 34.1337 11.52
 1601. 4217 11.22 33.7575 11.52; 4218 11.22 33.3812 11.52; 4219 11.22 33.005 11.52
 1602. 4220 11.22 32.6287 11.52; 4221 11.22 32.2525 11.52; 4222 11.22 31.8762 11.52
 1603. 4223 11.22 31.1238 11.52; 4224 11.22 30.7475 11.52; 4225 11.22 30.3713 11.52
 1604. 4226 11.22 29.995 11.52; 4227 11.22 29.6187 11.52; 4228 11.22 29.2425 11.52
 1605. 4229 11.22 28.8662 11.52; 4230 11.22 28.1138 11.52; 4231 11.22 27.7375 11.52
 1606. 4232 11.22 27.3612 11.52; 4233 11.22 26.985 11.52; 4234 11.22 26.6087 11.52

V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS.
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.

STAAD SPACE

-- PAGE NO. 30

1607. 4235 11.22 26.2325 11.52; 4236 11.22 25.8562 11.52; 4237 11.22 25.1038 11.52
 1608. 4238 11.22 24.7275 11.52; 4239 11.22 24.3512 11.52; 4240 11.22 23.975 11.52
 1609. 4241 11.22 23.5987 11.52; 4242 11.22 23.2225 11.52; 4243 11.22 22.8462 11.52
 1610. 4244 11.22 22.0938 11.52; 4245 11.22 21.7175 11.52; 4246 11.22 21.3412 11.52
 1611. 4247 11.22 20.965 11.52; 4248 11.22 20.5887 11.52; 4249 11.22 20.2125 11.52
 1612. 4250 11.22 19.8362 11.52; 4251 11.22 19.0837 11.52; 4252 11.22 18.7075 11.52
 1613. 4253 11.22 18.3312 11.52; 4254 11.22 17.955 11.52; 4255 11.22 17.5788 11.52
 1614. 4256 11.22 17.2025 11.52; 4257 11.22 16.8263 11.52; 4258 11.22 16.0738 11.52
 1615. 4259 11.22 15.6975 11.52; 4260 11.22 15.3212 11.52; 4261 11.22 14.945 11.52
 1616. 4262 11.22 14.5688 11.52; 4263 11.22 14.1925 11.52; 4264 11.22 13.8162 11.52
 1617. 4265 11.22 13.0637 11.52; 4266 11.22 12.6875 11.52; 4267 11.22 12.3112 11.52
 1618. 4268 11.22 11.935 11.52; 4269 11.22 11.5588 11.52; 4270 11.22 11.1825 11.52
 1619. 4271 11.22 10.8063 11.52; 4272 11.22 10.0538 11.52; 4273 11.22 9.6775 11.52
 1620. 4274 11.22 9.30125 11.52; 4275 11.22 8.925 11.52; 4276 11.22 8.54875 11.52
 1621. 4277 11.22 8.1725 11.52; 4278 11.22 7.79625 11.52; 4279 11.22 7.04375 11.52
 1622. 4280 11.22 6.6675 11.52; 4281 11.22 6.29125 11.52; 4282 11.22 5.915 11.52
 1623. 4283 11.22 5.53875 11.52; 4284 11.22 5.1625 11.52; 4285 11.22 4.78625 11.52
 1624. 4286 11.22 3.925 11.52; 4287 11.22 3.44 11.52; 4288 11.22 2.955 11.52
 1625. 4289 11.22 2.47 11.52; 4290 11.22 1.985 11.52; 4291 11.22 1.125 11.52
 1626. 4292 11.22 0.75 11.52; 4293 11.22 0.375 11.52; 4294 11.22 0 11.05
 1627. 4295 11.22 0 10.58; 4296 11.22 0 10.11; 4297 11.22 4.41 11.05
 1628. 4298 11.22 4.41 10.58; 4299 11.22 4.41 10.11; 4300 11.22 7.42 11.05
 1629. 4301 11.22 7.42 10.58; 4302 11.22 7.42 10.11; 4303 11.22 10.43 11.05
 1630. 4304 11.22 10.43 10.58; 4305 11.22 10.43 10.11; 4306 11.22 13.44 11.05
 1631. 4307 11.22 13.44 10.58; 4308 11.22 13.44 10.11; 4309 11.22 16.45 11.05
 1632. 4310 11.22 16.45 10.58; 4311 11.22 16.45 10.11; 4312 11.22 19.46 11.05
 1633. 4313 11.22 19.46 10.58; 4314 11.22 19.46 10.11; 4315 11.22 22.47 11.05
 1634. 4316 11.22 22.47 10.58; 4317 11.22 22.47 10.11; 4318 11.22 25.48 11.05
 1635. 4319 11.22 25.48 10.58; 4320 11.22 25.48 10.11; 4321 11.22 28.49 11.05
 1636. 4322 11.22 28.49 10.58; 4323 11.22 28.49 10.11; 4324 11.22 31.5 11.05
 1637. 4325 11.22 31.5 10.58; 4326 11.22 31.5 10.11; 4327 11.22 34.51 11.05
 1638. 4328 11.22 34.51 10.58; 4329 11.22 34.51 10.11; 4330 11.22 35.2599 10.5817
 1639. 4331 11.22 33.7488 10.58; 4332 11.22 33.005 10.58; 4333 11.22 32.2612 10.58
 1640. 4334 11.22 30.7388 10.58; 4335 11.22 29.995 10.58; 4336 11.22 29.2512 10.58
 1641. 4337 11.22 27.7288 10.58; 4338 11.22 26.985 10.58; 4339 11.22 26.2412 10.58
 1642. 4340 11.22 24.7188 10.58; 4341 11.22 23.975 10.58; 4342 11.22 23.2312 10.58
 1643. 4343 11.22 21.7088 10.58; 4344 11.22 20.965 10.58; 4345 11.22 20.2212 10.58
 1644. 4346 11.22 18.6996 10.58; 4347 11.22 17.955 10.58; 4348 11.22 17.2112 10.58
 1645. 4349 11.22 15.6888 10.58; 4350 11.22 14.945 10.58; 4351 11.22 14.2012 10.58
 1646. 4352 11.22 12.6788 10.58; 4353 11.22 11.935 10.58; 4354 11.22 11.1912 10.58
 1647. 4355 11.22 9.66883 10.58; 4356 11.22 8.925 10.58; 4357 11.22 8.18117 10.58
 1648. 4358 11.22 6.65883 10.58; 4359 11.22 5.915 10.58; 4360 11.22 5.17117 10.58
 1649. 4361 11.22 3.44 10.58; 4362 11.22 2.47517 10.58; 4363 11.22 1.54398 10.58
 1650. 4364 11.22 0.777255 10.58; 4365 11.22 28.2367 11.0503
 1651. 4366 11.22 25.8701 10.58; 4367 11.22 19.0718 10.58; 4368 11.22 18.7033 11.0504
 1652. 4369 11.22 32.2584 11.051; 4370 11.22 31.888 10.5803
 1653. 4371 11.22 8.17646 10.1097; 4372 11.22 8.55122 10.5799; 4373 11.22 8.925 10.11
 1654. 4374 11.22 31.112 10.5797; 4375 11.22 30.7435 11.0503
 1655. 4376 11.22 34.8869 10.5805; 4377 11.22 35.26 10.1023
 1656. 4378 11.22 35.6322 10.5806; 4379 11.22 35.2601 11.0588
 1657. 4380 11.22 17.955 11.05; 4381 11.22 17.5813 10.5801
 1658. 4382 11.22 17.2067 11.0503; 4383 11.22 16.8401 10.58
 1659. 4384 11.22 17.2067 10.1096; 4385 11.22 0.765212 10.109
 1660. 4386 11.22 0.399277 10.5799; 4387 11.22 15.6916 10.109
 1661. 4388 11.22 16.062 10.5797; 4389 11.22 5.915 11.05; 4390 11.22 5.54129 10.5801
 1662. 4391 11.22 5.16671 11.0503; 4392 11.22 4.80012 10.58


V. JAGEN, B.E.M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.

STAAD SPACE

1663. 4393 11.22 5.16668 10.1096; 4394 11.22 14.945 10.11
 1664. 4395 11.22 15.3188 10.5801; 4396 11.22 33.7535 11.0503
 1665. 4397 11.22 33.3788 10.5801; 4398 11.22 33.005 11.05; 4399 11.22 22.082 10.5797
 1666. 4400 11.22 21.7135 11.0503; 4401 11.22 25.0899 10.58
 1667. 4402 11.22 24.7233 11.0504; 4403 11.22 18.3289 10.5799
 1668. 4404 11.22 18.7041 10.1098; 4405 11.22 17.955 10.11
 1669. 4406 11.22 20.5913 10.5801; 4407 11.22 20.2167 11.0503
 1670. 4408 11.22 20.955 11.05; 4409 11.22 21.7116 10.109; 4410 11.22 14.1984 11.051
 1671. 4411 11.22 13.828 10.5803; 4412 11.22 14.1965 10.1097; 4413 11.22 26.985 11.05
 1672. 4414 11.22 26.6113 10.5801; 4415 11.22 29.995 11.05
 1673. 4416 11.22 29.6213 10.5801; 4417 11.22 29.2467 11.0503
 1674. 4418 11.22 30.3688 10.5801; 4419 11.22 23.975 10.11
 1675. 4420 11.22 24.3487 10.5799; 4421 11.22 24.7233 10.1097
 1676. 4422 11.22 33.7516 10.109; 4423 11.22 34.122 10.5797; 4424 11.22 5.015 10.11
 1677. 4425 11.22 6.28878 10.5801; 4426 11.22 6.66161 10.109
 1678. 4427 11.22 7.03199 10.5797; 4428 11.22 3.44 11.05; 4429 11.22 2.95759 10.58
 1679. 4430 11.22 2.47259 11.05; 4431 11.22 8.17839 11.051
 1680. 4432 11.22 7.80801 10.5803; 4433 11.22 6.66354 11.0503
 1681. 4434 11.22 28.8801 10.58; 4435 11.22 29.2467 10.1096; 4436 11.22 10.0399 10.58
 1682. 4437 11.22 9.67332 11.0504; 4438 11.22 28.102 10.5797
 1683. 4439 11.22 27.7335 11.0503; 4440 11.22 26.985 10.11
 1684. 4441 11.22 27.3588 10.5801; 4442 11.22 27.7316 10.109; 4443 11.22 33.005 10.11
 1685. 4444 11.22 32.3565 10.1097; 4445 11.22 32.6312 10.5799
 1686. 4446 11.22 3.92881 10.58; 4447 11.22 11.1884 11.051; 4448 11.22 10.818 10.5803
 1687. 4449 11.22 1.99696 10.58; 4450 11.22 1.52199 11.05; 4451 11.22 23.975 11.05
 1688. 4452 11.22 23.6813 10.5801; 4453 11.22 23.2267 11.0503
 1689. 4454 11.22 22.8601 10.58; 4455 11.22 23.2267 10.1096; 4456 11.22 14.945 11.05
 1690. 4457 11.22 14.5712 10.5799; 4458 11.22 26.2367 10.1096
 1691. 4459 11.22 0.764573 11.0506; 4460 11.22 11.1865 10.1097
 1692. 4461 11.22 12.6816 10.109; 4462 11.22 13.052 10.5797
 1693. 4463 11.22 11.5612 10.5799; 4464 11.22 11.935 10.11; 4465 11.22 11.935 11.05
 1694. 4466 11.22 12.3088 10.5801; 4467 11.22 12.6835 11.0503
 1695. 4468 11.22 9.29871 10.5799; 4469 11.22 8.925 11.05; 4470 11.22 30.7416 10.109
 1696. 4471 11.22 9.67329 10.1097; 4472 11.22 21.3388 10.5801
 1697. 4473 11.22 20.965 10.11; 4474 11.22 1.1506 10.58; 4475 11.22 1.52199 10.11
 1698. 4476 11.22 19.8501 10.58; 4477 11.22 20.2167 10.1096; 4478 11.22 2.47259 10.11
 1699. 4479 11.22 3.44 10.11; 4480 11.22 15.6935 11.0503; 4481 11.22 29.995 10.11
 1700. 4482 11.22 25.8634 11.0508; 4483 11.22 19.077 11.0508
 1701. 4484 11.22 31.8845 11.0522; 4485 11.22 8.54875 10.11
 1702. 4486 11.22 31.117 11.0508; 4487 11.22 34.8883 10.1035
 1703. 4488 11.22 35.6322 11.057; 4489 11.22 17.5788 11.05; 4490 11.22 16.833 10.1092
 1704. 4491 11.22 0.390137 10.1083; 4492 11.22 16.8655 10.1078
 1705. 4493 11.22 5.53875 11.05; 4494 11.22 4.79296 10.1092
 1706. 4495 11.22 15.3202 10.1098; 4496 11.22 33.3812 11.05
 1707. 4497 11.22 22.087 11.0508; 4498 11.22 25.097 11.0508; 4499 11.22 18.3312 10.11
 1708. 4500 11.22 20.5887 11.05; 4501 11.22 22.0855 10.1078
 1709. 4502 11.22 35.6315 10.1035; 4503 11.22 13.8245 11.0522
 1710. 4504 11.22 13.823 10.1092; 4505 11.22 26.6087 11.05; 4506 11.22 29.6187 11.05
 1711. 4507 11.22 30.3713 11.05; 4508 11.22 24.3512 10.11; 4509 11.22 34.1255 10.1078
 1712. 4510 11.22 25.0966 10.1092; 4511 11.22 6.29024 10.1098
 1713. 4512 11.22 7.03553 10.1078; 4513 11.22 2.95629 11.05
 1714. 4514 11.22 7.80447 11.0522; 4515 11.22 7.83702 11.0508
 1715. 4516 11.22 28.873 10.1092; 4517 11.22 10.847 11.0508
 1716. 4518 11.22 20.107 11.0508; 4519 11.22 27.3682 10.1098
 1717. 4520 11.22 34.127 11.0508; 4521 11.22 32.6287 10.11; 4522 11.22 3.92595 11.05
 1718. 4523 11.22 10.8145 11.0522; 4524 11.22 16.8334 11.0508

V. JAGEN, B.E.M.E., (Struct), M.I.E.A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841266154

STAND SPACE

1719. 4525 11.22 1.99106 11.0505; 4526 11.22 23.5987 11.05
 1720. 4527 11.22 22.853 10.1092; 4528 11.22 14.5698 11.0502
 1721. 4529 11.22 25.063 10.1092; 4530 11.22 0.388161 11.0503
 1722. 4531 11.22 26.6087 10.11; 4532 11.22 10.813 10.1091
 1723. 4533 11.22 13.0555 10.1078; 4534 11.22 11.5588 10.11
 1724. 4535 11.22 11.5598 11.0502; 4536 11.22 12.3112 11.05; 4537 11.22 9.30125 11.05
 1725. 4538 11.22 31.1155 10.1078; 4539 11.22 10.0466 10.1092
 1726. 4540 11.22 21.3402 10.1098; 4541 11.22 1.14013 11.0504
 1727. 4542 11.22 1.14013 10.1096; 4543 11.22 9.30125 10.11
 1728. 4544 11.22 19.843 10.1092; 4545 11.22 2.95629 10.11; 4546 11.22 16.067 11.051
 1729. 4547 11.22 28.8734 11.0508; 4548 11.22 28.1055 10.1078
 1730. 4549 11.22 27.3612 11.05; 4550 11.22 22.8534 11.0508
 1731. 4551 11.22 31.083 10.1092; 4552 11.22 4.79341 11.0508
 1732. 4553 11.22 32.6298 11.0502; 4554 11.22 6.29125 11.05
 1733. 4555 11.22 7.80298 10.1092; 4556 11.22 3.92595 10.11
 1734. 4557 11.22 19.0766 10.1092; 4558 11.22 13.057 11.0508
 1735. 4559 11.22 17.5788 10.11; 4560 11.22 19.8434 11.0508; 4561 11.22 15.3212 11.05
 1736. 4562 11.22 23.5987 10.11; 4563 11.22 12.3102 10.1098
 1737. 4564 11.22 33.3802 10.1098; 4565 11.22 21.3412 11.05; 4566 11.22 24.3512 11.05
 1738. 4567 11.22 30.3702 10.1098; 4568 11.22 29.6187 10.11; 4569 11.22 5.53875 10.11
 1739. 4570 11.22 18.3303 11.0502; 4571 11.22 14.5688 10.11
 1740. 4572 11.22 1.99106 10.1095; 4573 11.22 34.8881 11.0573
 1741. 4574 11.22 20.5887 10.11; 4575 11.22 8.54976 11.0502; 4576 11.22 4.41 7.78
 1742. 4577 7.63 7.42 9.64; 4578 8.51 7.42 14.96; 4579 5.76 7.42 11.52
 1743. 4580 7.87 7.42 11.52; 4581 7.63 10.43 9.64; 4582 8.51 10.43 14.96
 1744. 4583 7.87 7.42 11.52; 4584 5.76 10.43 11.52; 4585 7.87 10.43 11.52; 4586 7.63 13.44 9.64
 1745. 4587 8.51 13.44 14.96; 4588 5.76 13.44 11.52; 4589 5.76 13.44 11.52; 4590 7.87 13.44 11.52
 1746. 4591 7.63 16.45 9.64; 4592 8.51 16.45 14.96; 4593 5.76 16.45 11.52; 4594 5.76 16.45 11.52
 1747. 4595 7.87 16.45 11.52; 4596 7.63 19.46 9.64; 4597 7.63 19.46 11.52; 4598 8.51 19.46 14.96
 1748. 4599 5.76 19.46 11.52; 4600 7.87 19.46 11.52; 4601 7.87 22.47 9.64
 1749. 4602 8.51 22.47 14.96; 4603 5.76 22.47 11.52; 4604 5.76 22.47 11.52; 4605 7.87 22.47 11.52
 1750. 4606 7.63 25.48 9.64; 4607 8.51 25.48 14.96; 4608 5.76 25.48 11.52; 4609 5.76 25.48 11.52
 1751. 4610 7.87 25.48 11.52; 4611 7.63 28.49 9.64; 4612 7.63 28.49 11.52; 4613 8.51 28.49 14.96
 1752. 4614 5.76 28.49 11.52; 4615 7.87 28.49 11.52; 4616 7.63 31.5 9.64
 1753. 4617 8.51 31.5 14.96; 4618 5.76 31.5 11.52; 4619 5.76 31.5 11.52; 4620 7.87 31.5 11.52
 1754. 4621 5.76 4.41 11.52; 4622 7.87 4.41 11.52; 4623 7.87 4.41 11.52; 4624 4.58 7.42 7.87
 1755. 4625 7.63 7.42 7.87; 4626 11.45 7.42 16.69; 4627 8.51 7.42 16.69
 1756. 4628 4.58 10.43 7.87; 4629 7.63 10.43 7.87; 4630 7.63 10.43 7.87; 4631 11.45 10.43 16.69
 1757. 4632 8.51 10.43 16.69; 4633 4.58 13.44 7.87; 4634 7.63 13.44 7.87
 1758. 4635 11.45 13.44 16.69; 4636 8.51 13.44 16.69; 4637 4.58 16.45 7.87
 1759. 4638 7.63 16.45 7.87; 4639 11.45 16.45 16.69; 4640 8.51 16.45 16.69
 1760. 4641 4.58 19.46 7.87; 4642 7.63 19.46 7.87; 4643 11.45 19.46 16.69
 1761. 4644 8.51 19.46 16.69; 4645 4.58 22.47 7.87; 4646 7.63 22.47 7.87
 1762. 4647 11.45 22.47 16.69; 4648 8.51 22.47 16.69; 4649 4.58 25.48 7.87
 1763. 4650 7.63 25.48 7.87; 4651 11.45 25.48 16.69; 4652 8.51 25.48 16.69
 1764. 4653 4.58 28.49 7.87; 4654 7.63 28.49 7.87; 4655 11.45 28.49 16.69
 1765. 4656 8.51 28.49 16.69; 4657 4.58 31.5 7.87; 4658 7.63 31.5 7.87
 1766. 4659 11.45 31.5 16.69; 4660 8.51 31.5 16.69; 4661 0.23 1.5 19.86
 1767. 4662 16.02 1.5 19.86; 4663 16.02 1.5 5.7; 4664 4.58 1.5 0.23; 4665 0.23 1.5 6
 1768. 4666 7.87 4.41 11.825; 4667 5.76 4.41 11.825; 4668 6.95 4.41 11.825
 1769. 4669 5.76 7.42 11.825; 4670 7.87 7.42 11.825; 4671 6.95 7.42 11.825
 1770. 4672 5.76 10.43 11.825; 4673 6.95 25.48 11.825; 4674 7.87 22.47 11.825
 1771. 4675 7.87 19.46 11.825; 4676 7.87 16.45 11.825; 4677 5.76 19.46 11.825
 1772. 4678 5.76 16.45 11.825; 4679 7.87 31.5 11.825; 4680 6.95 16.45 11.825
 1773. 4681 5.76 22.47 11.825; 4682 6.95 10.43 11.825; 4683 7.87 28.49 11.825
 1774. 4684 6.95 22.47 11.825; 4685 5.76 13.44 11.825; 4686 5.76 25.48 11.825

V. JAGEN, BE.ME. (Struct), MIE AIV.
 CMA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 33

1775. 4687 7.87 13.44 11.825; 4688 6.95 13.44 11.825; 4689 6.95 19.46 11.825
 1776. 4690 7.87 25.48 11.825; 4691 5.76 28.49 11.825; 4692 6.95 28.49 11.825
 1777. 4693 7.87 10.43 11.825; 4694 5.76 31.5 11.825; 4695 6.95 31.5 11.825
 1778. 4696 8.51 4.41 14.96; 4697 11.45 4.41 16.69; 4698 8.51 4.41 16.69
 1779. MEMBER INCIDENCES
 1780. 1 1 36; 2 2 37; 3 3 38; 4 4 39; 5 5 40; 6 6 41; 7 7 42; 8 8 43; 9 9 44
 1781. 10 10 45; 11 11 46; 12 12 47; 13 13 48; 14 14 49; 15 15 50; 16 16 51; 17 17 52; 18 18 53; 19 19 54; 20 20 55; 21 21 56; 22 22 57; 23 23 58; 24 24 59; 25 25 60
 1782. 26 26 61; 27 27 62; 28 28 63; 29 29 64; 30 30 65; 31 31 66; 32 32 67; 33 33 68
 1783. 34 34 69; 35 35 70; 36 36 71; 37 37 72; 38 38 73; 39 39 74; 40 40 75; 41 41 76
 1784. 42 42 77; 43 43 78; 44 44 79; 45 45 80; 46 46 81; 47 47 82; 48 48 83; 49 49 84; 50 50 85; 51 51 86; 52 52 87; 53 53 88
 1785. 54 54 89; 55 55 90; 56 56 91; 57 57 92; 58 58 93; 59 59 94; 60 60 95; 61 61 96; 62 62 97; 63 63 98; 64 64 99
 1786. 65 65 100; 66 66 101; 67 67 102; 68 68 103; 69 69 104; 70 70 105; 71 71 106
 1787. 72 72 107; 73 73 108; 74 74 109; 75 75 110; 76 76 111; 77 77 112; 78 78 113
 1788. 79 79 114; 80 80 115; 81 81 116; 82 82 117; 83 83 118; 84 84 119; 85 85 120; 86 86 121; 87 87 122; 88 88 123; 89 89 124
 1789. 90 90 125; 91 91 126; 92 92 127; 93 93 128; 94 94 129; 95 95 130; 96 96 131; 97 97 132; 98 98 133; 99 99 134; 100 100 135
 1790. 101 101 136; 102 102 137; 103 103 138; 104 104 139; 105 105 140; 106 106 141; 107 107 142; 108 108 143; 109 109 144; 110 110 145; 111 111 146; 112 112 147; 113 113 148; 114 114 149; 115 115 150; 116 116 151; 117 117 152; 118 118 153; 119 119 154; 120 120 155; 121 121 156; 122 122 157; 123 123 158; 124 124 159; 125 125 160; 126 126 161; 127 127 162; 128 128 163; 129 129 164; 130 130 165; 131 131 166; 132 132 167; 133 133 168; 134 134 169; 135 135 170; 136 136 171; 137 137 172; 138 138 173; 139 139 174; 140 140 175; 141 141 176; 142 142 177; 143 143 178; 144 144 179; 145 145 180; 146 146 181; 147 147 182; 148 148 183; 149 149 184; 150 150 185; 151 151 186; 152 152 187; 153 153 188; 154 154 189; 155 155 190; 156 156 191; 157 157 192; 158 158 193; 159 159 194; 160 160 195; 161 161 196; 162 162 197; 163 163 198; 164 164 199; 165 165 200; 166 166 201; 167 167 202; 168 168 203; 169 169 204; 170 170 205; 171 171 206; 172 172 207; 173 173 208; 174 174 209; 175 175 210; 176 176 211; 177 177 212; 178 178 213; 179 179 214; 180 180 215; 181 181 216; 182 182 217; 183 183 218; 184 184 219; 185 185 220; 186 186 221; 187 187 222; 188 188 223; 189 189 224; 190 190 225; 191 191 226; 192 192 227; 193 193 228; 194 194 229; 195 195 230; 196 196 231; 197 197 232; 198 198 233; 199 199 234; 200 200 235; 201 201 236; 202 202 237; 203 203 238; 204 204 239; 205 205 240; 206 206 241; 207 207 242; 208 208 243; 209 209 244; 210 210 245; 211 211 246; 212 212 247; 213 213 248; 214 214 249; 215 215 250; 216 216 251; 217 217 252; 218 218 253; 219 219 254; 220 220 255; 221 221 256; 222 222 257; 223 223 258; 224 224 259; 225 225 260; 226 226 261; 227 227 262; 228 228 263; 229 229 264; 230 230 265; 231 231 266; 232 232 267; 233 233 268; 234 234 269; 235 235 270; 236 236 271; 237 237 272; 238 238 273; 239 239 274; 240 240 275; 241 241 276; 242 242 277; 243 243 278; 244 244 279; 245 245 280; 246 246 281; 247 247 282; 248 248 283; 249 249 284; 250 250 285; 251 251 286; 252 252 287; 253 253 288; 254 254 289; 255 255 290; 256 256 291; 257 257 292; 258 258 293; 259 259 294; 260 260 295; 261 261 296; 262 262 297; 263 263 298; 264 264 299; 265 265 300; 266 266 301; 267 267 302; 268 268 303; 269 269 304; 270 270 305; 271 271 306; 272 272 307; 273 273 308; 274 274 309; 275 275 310; 276 276 311; 277 277 312; 278 278 313; 279 279 314; 280 280 315; 281 281 316; 282 282 317; 283 283 318; 284 284 319; 285 285 320; 286 286 321; 287 287 322; 288 288 323; 289 289 324; 290 290 325; 291 291 326; 292 292 327; 293 293 328; 294 294 329; 295 295 330; 296 296 331; 297 297 332; 298 298 333; 299 299 334; 300 300 335; 301 301 336; 302 302 337; 303 303 338; 304 304 339; 305 305 340; 306 306 341; 307 307 342; 308 308 343; 309 309 344; 310 310 345; 311 311 346; 312 312 347; 313 313 348; 314 314 349; 315 315 350; 316 316 351; 317 317 352; 318 318 353; 319 319 354; 320 320 355; 321 321 356; 322 322 357; 323 323 358; 324 324 359; 325 325 360; 326 326 361; 327 327 362; 328 328 363; 329 329 364; 330 330 365; 331 331 366; 332 332 367; 333 333 368; 334 334 369; 335 335 370; 336 336 371; 337 337 372; 338 338 373; 339 339 374; 340 340 375; 341 341 376; 342 342 377; 343 343 378; 344 344 379; 345 345 380; 346 346 381; 347 347 382; 348 348 383; 349 349 384; 350 350 385; 351 351 386; 352 352 387; 353 353 388; 354 354 389; 355 355 390; 356 356 391; 357 357 392; 358 358 393; 359 359 394; 360 360 395; 361 361 396; 362 362 397; 363 363 398; 364 364 399; 365 365 400; 366 366 401; 367 367 402; 368 368 403; 369 369 404; 370 370 405; 371 371 406; 372 372 407; 373 373 408; 374 374 409; 375 375 410; 376 376 411; 377 377 412; 378 378 413; 379 379 414; 380 380 415; 381 381 416; 382 382 417; 383 383 418; 384 384 419; 385 385 420; 386 386 421; 387 387 422; 388 388 423; 389 389 424; 390 390 425; 391 391 426; 392 392 427; 393 393 428; 394 394 429; 395 395 430; 396 396 431; 397 397 432; 398 398 433; 399 399 434; 400 400 435; 401 401 436; 402 402 437; 403 403 438; 404 404 439; 405 405 440; 406 406 441; 407 407 442; 408 408 443; 409 409 444; 410 410 445; 411 411 446; 412 412 447; 413 413 448; 414 414 449; 415 415 450; 416 416 451; 417 417 452; 418 418 453; 419 419 454; 420 420 455; 421 421 456; 422 422 457; 423 423 458; 424 424 459; 425 425 460; 426 426 461; 427 427 462; 428 428 463; 429 429 464; 430 430 465; 431 431 466; 432 432 467; 433 433 468; 434 434 469; 435 435 470; 436 436 471; 437 437 472; 438 438 473; 439 439 474; 440 440 475; 441 441 476; 442 442 477; 443 443 478; 444 444 479; 445 445 480; 446 446 481; 447 447 482; 448 448 483; 449 449 484; 450 450 485; 451 451 486; 452 452 487; 453 453 488; 454 454 489; 455 455 490; 456 456 491; 457 457 492; 458 458 493; 459 459 494; 460 460 495; 461 461 496; 462 462 497; 463 463 498; 464 464 499; 465 465 500; 466 466 501; 467 467 502; 468 468 503; 469 469 504; 470 470 505; 471 471 506; 472 472 507; 473 473 508; 474 474 509; 475 475 510; 476 476 511; 477 477 512; 478 478 513; 479 479 514; 480 480 515; 481 481 516; 482 482 517; 483 483 518; 484 484 519; 485 485 520; 486 486 521; 487 487 522; 488 488 523; 489 489 524; 490 490 525; 491 491 526; 492 492 527; 493 493 528; 494 494 529; 495 495 530; 496 496 531; 497 497 532; 498 498 533; 499 499 534; 500 500 535; 501 501 536; 502 502 537; 503 503 538; 504 504 539; 505 505 540; 506 506 541; 507 507 542; 508 508 543; 509 509 544; 510 510 545; 511 511 546; 512 512 547; 513 513 548; 514 514 549; 515 515 550; 516 516 551; 517 517 552; 518 518 553; 519 519 554; 520 520 555; 521 521 556; 522 522 557; 523 523 558; 524 524 559; 525 525 560; 526 526 561; 527 527 562; 528 528 563; 529 529 564; 530 530 565; 531 531 566; 532 532 567; 533 533 568; 534 534 569; 535 535 570; 536 536 571; 537 537 572; 538 538 573; 539 539 574; 540 540 575; 541 541 576; 542 542 577; 543 543 578; 544 544 579; 545 545 580; 546 546 581; 547 547 582; 548 548 583; 549 549 584; 550 550 585; 551 551 586; 552 552 587; 553 553 588; 554 554 589; 555 555 590; 556 556 591; 557 557 592; 558 558 593; 559 559 594; 560 560 595; 561 561 596; 562 562 597; 563 563 598; 564 564 599; 565 565 600; 566 566 601; 567 567 602; 568 568 603; 569 569 604; 570 570 605; 571 571 606; 572 572 607; 573 573 608; 574 574 609; 575 575 610; 576 576 611; 577 577 612; 578 578 613; 579 579 614; 580 580 615; 581 581 616; 582 582 617; 583 583 618; 584 584 619; 585 585 620; 586 586 621; 587 587 622; 588 588 623; 589 589 624; 590 590 625; 591 591 626; 592 592 627; 593 593 628; 594 594 629; 595 595 630; 596 596 631; 597 597 632; 598 598 633; 599 599 634; 600 600 635; 601 601 636; 602 602 637; 603 603 638; 604 604 639; 605 605 640; 606 606 641; 607 607 642; 608 608 643; 609 609 644; 610 610 645; 611 611 646; 612 612 647; 613 613 648; 614 614 649; 615 615 650; 616 616 651; 617 617 652; 618 618 653; 619 619 654; 620 620 655; 621 621 656; 622 622 657; 623 623 658; 624 624 659; 625 625 660; 626 626 661; 627 627 662; 628 628 663; 629 629 664; 630 630 665; 631 631 666; 632 632 667; 633 633 668; 634 634 669; 635 635 670; 636 636 671; 637 637 672; 638 638 673; 639 639 674; 640 640 675; 641 641 676; 642 642 677; 643 643 678; 644 644 679; 645 645 680; 646 646 681; 647 647 682; 648 648 683; 649 649 684; 650 650 685; 651 651 686; 652 652 687; 653 653 688; 654 654 689; 655 655 690; 656 656 691; 657 657 692; 658 658 693; 659 659 694; 660 660 695; 661 661 696; 662 662 697; 663 663 698; 664 664 699; 665 665 700; 666 666 701; 667 667 702; 668 668 703; 669 669 704; 670 670 705; 671 671 706; 672 672 707; 673 673 708; 674 674 709; 675 675 710; 676 676 711; 677 677 712; 678 678 713; 679 679 714; 680 680 715; 681 681 716; 682 682 717; 683 683 718; 684 684 719; 685 685 720; 686 686 721; 687 687 722; 688 688 723; 689 689 724; 690 690 725; 691 691 726; 692 692 727; 693 693 728; 694 694 729; 695 695 730; 696 696 731; 697 697 732; 698 698 733; 699 699 734; 700 700 735; 701 701 736; 702 702 737; 703 703 738; 704 704 739; 705 705 740; 706 706 741; 707 707 742; 708 708 743; 709 709 744; 710 710 745; 711 711 746; 712 712 747; 713 713 748; 714 714 749; 715 715 750; 716 716 751; 717 717 752; 718 718 753; 719 719 754; 720 720 755; 721 721 756; 722 722 757; 723 723 758; 724 724 759; 725 725 760; 726 726 761; 727 727 762; 728 728 763; 729 729 764; 730 730 765; 731 731 766; 732 732 767; 733 733 768; 734 734 769; 735 735 770; 736 736 771; 737 737 772; 738 738 773; 739 739 774; 740 740 775; 741 741 776; 742 742 777; 743 743 778; 744 744 779; 745 745 780; 746 746 781; 747 747 782; 748 748 783; 749 749 784; 750 750 785; 751 751 786; 752 752 787; 753 753 788; 754 754 789; 755 755 790; 756 756 791; 757 757 792; 758 758 793; 759 759 794; 760 760 795; 761 761 796; 762 762 797; 763 763 798; 764 764 799; 765 765 800; 766 766 801; 767 767 802; 768 768 803; 769 769 804; 770 770 805; 771 771 806; 772 772 807; 773 773 808; 774 774 809; 775 775 810; 776 776 811; 777 777 812; 778 778 813; 779 779 814; 780 780 815; 781 781 816; 782 782 817; 783 783 818; 784 784 819; 785 785 820; 786 786 821; 787 787 822; 788 788 823; 789 789 824; 790 790 825; 791 791 826; 792 792 827; 793 793 828; 794 794 829; 795 795 830; 796 796 831; 797 797 832; 798 798 833; 799 799 834; 800 800 835; 801 801 836; 802 802 837; 803 803 838; 804 804 839; 805 805 840; 806 806 841; 807 807 842; 808 808 843; 809 809 844; 810 810 845; 811 811 846; 812 812 847; 813 813 848; 814 814 849; 815 815 850; 816 816 851; 817 817 852; 818 818 853; 819 819 854; 820 820 855; 821 821 856; 822 822 857; 823 823 858; 824 824 859; 825 825 860; 826 826 861; 827 827 862; 828 828 863; 829 829 864; 830 830 865; 831 831 866; 832 832 867; 833 833 868; 834 834 869; 835 835 870; 836 836 871; 837 837 872; 838 838 873; 839 839 874; 840 840 875; 841 841 876; 842 842 877; 843 843 878; 844 844 879; 845 845 880; 846 846 881; 847 847 882; 848 848 883; 849 849 884; 850 850 885; 851 851 886; 852 852 887; 853 853 888; 854 854 889; 855 855 890; 856 856 891; 857 857 892; 858 858 893; 859 859 894; 860 860 895; 861 861 896; 862 862 897; 863 863 898; 864 864 899; 865 865 900; 866 866 901; 867 867 902; 868 868 903; 869 869 904; 870 870 905; 871 871 906; 872 872 907; 873 873 908; 874 874 909; 875 875 910; 876 876 911; 877 877 912; 878 878 913; 879 879 914; 880 880 915; 881 881 916; 882 882 917; 883 883 918; 884 884 919; 885 885 920; 886 886 921; 887 887 922; 888 888 923; 889 889 924; 890 890 925; 891 891 926; 892 892 927; 893 893 928; 894 894 929; 895 895 930; 896 896 931; 897 897 932; 898 898 933; 899 899 934; 900 900 935; 901 901 936; 902 902 937; 903 903 938; 904 904 939; 905 905 940; 906 906 941; 907 907 942; 908 908 943; 909 909 944; 910 910 945; 911 911 946; 912 912 947; 913 913 948; 914 914 949; 915 915 950; 916 916 951; 917 917 952; 918 918 953; 919 919 954; 920 920 955; 921 921 956; 922 922 957; 923 923 958; 924 924 959; 925 925 960; 926 926 961; 927 927 962; 928 928 963; 929 929 964; 930 930 965; 931 931

STAAD SPACE

1831. 377 260 261; 378 262 246; 379 263 127; 380 262 264; 381 264 265; 382 259 264
 1832. 383 265 263; 384 261 265; 385 266 268; 386 267 269; 387 266 267; 388 268 134
 1833. 389 269 135; 390 268 269; 391 270 272; 392 271 274; 393 270 271; 394 272 255
 1834. 395 273 132; 396 272 276; 397 274 273; 398 275 130; 399 274 275; 400 276 273
 1835. 401 277 250; 402 276 277; 403 278 129; 404 278 122; 406 280 4577; 407 279 4669
 1836. 408 281 278; 409 283 126; 410 283 282; 411 281 282; 414 288 4579; 419 106 289
 1837. 420 107 290; 421 108 291; 422 109 292; 423 110 293; 424 111 294; 425 112 295
 1838. 426 113 296; 427 114 297; 428 115 298; 429 116 299; 430 117 300; 431 118 301
 1839. 436 123 306; 437 124 307; 442 129 312; 443 130 313; 444 131 314; 445 132 315
 1840. 446 133 316; 447 134 317; 448 135 318; 449 136 319; 450 137 320; 451 138 321
 1841. 452 139 322; 453 140 323; 454 289 290; 455 290 324; 456 324 325; 457 325 326
 1842. 458 297 352; 459 297 336; 460 294 333; 461 291 324; 462 295 330; 463 292 325
 1843. 464 296 327; 465 293 326; 466 327 293; 467 295 348; 468 298 328; 469 328 332
 1844. 470 329 291; 471 330 292; 472 329 330; 473 331 289; 474 331 337; 475 332 290
 1845. 476 333 329; 477 332 333; 478 300 340; 479 301 387; 481 299 342; 483 334 299
 1846. 484 335 300; 485 335 297; 486 301 4629; 487 336 341; 488 337 339; 489 336 353
 1847. 498 338 298; 491 339 328; 492 338 339; 493 340 301; 494 341 338; 495 340 341
 1848. 496 342 345; 497 305 306; 498 304 305; 500 306 343; 501 343 344; 503 344 296
 1849. 504 299 346; 505 345 295; 506 345 347; 507 346 349; 508 347 350; 509 346 347
 1850. 510 348 351; 511 347 348; 512 349 344; 513 350 296; 514 349 350; 515 351 327
 1851. 516 350 351; 517 352 331; 518 353 337; 519 352 353; 520 307 308; 523 311 390
 1852. 525 354 307; 526 307 300; 527 311 4583; 528 312 382; 529 313 386; 530 313 355
 1853. 531 356 316; 532 357 319; 533 357 363; 534 356 369; 535 319 320; 536 320 373
 1854. 537 317 364; 538 321 322; 539 322 323; 540 315 358; 541 323 359; 542 359 362
 1855. 543 358 358; 544 314 378; 545 322 361; 546 314 4631; 547 321 374; 548 360 370
 1856. 549 361 314; 550 318 361; 551 362 384; 552 361 377; 553 363 356; 554 363 365
 1857. 555 364 360; 556 316 366; 557 365 367; 558 366 368; 559 365 366; 560 367 317
 1858. 561 368 364; 562 367 368; 563 369 354; 564 370 310; 565 369 371; 566 371 372
 1859. 567 366 371; 568 372 370; 569 368 372; 570 373 375; 571 374 376; 572 373 374
 1860. 573 375 317; 574 376 318; 575 375 376; 576 377 379; 577 378 381; 578 377 378
 1861. 579 379 362; 580 380 315; 581 379 383; 582 381 380; 583 382 313; 584 381 382
 1862. 585 383 380; 586 384 358; 587 383 384; 588 385 312; 589 385 305; 591 387 4582
 1863. 592 386 4672; 593 388 385; 594 390 309; 595 390 389; 596 388 389; 599 395 4584
 1864. 604 289 396; 605 290 397; 606 291 398; 607 292 399; 608 293 400; 609 294 401
 1865. 610 295 402; 611 296 403; 612 297 404; 613 298 405; 614 299 406; 615 300 407
 1866. 616 301 408; 621 306 413; 622 307 414; 627 312 419; 628 313 420; 629 314 421
 1867. 630 315 422; 631 316 423; 632 317 424; 633 318 425; 634 319 426; 635 320 427
 1868. 636 321 428; 637 322 429; 638 323 430; 639 396 397; 640 397 431; 641 431 432
 1869. 642 432 433; 643 404 459; 644 404 443; 645 401 440; 646 398 431; 647 402 437
 1870. 648 399 432; 649 403 434; 650 400 433; 651 434 400; 652 402 455; 653 405 435
 1871. 654 435 439; 655 436 398; 656 437 399; 657 436 437; 658 438 396; 659 438 444
 1872. 660 439 397; 661 440 436; 662 439 440; 663 407 447; 664 408 494; 666 406 449
 1873. 668 441 406; 669 442 407; 670 442 404; 671 408 4633; 672 443 448; 673 444 446
 1874. 674 443 440; 675 445 405; 676 446 435; 677 445 446; 678 447 408; 679 448 445
 1875. 680 447 448; 681 449 452; 682 412 413; 683 411 412; 685 413 450; 686 450 451
 1876. 688 451 403; 689 406 453; 690 452 402; 691 452 454; 692 453 456; 693 454 457
 1877. 694 453 454; 695 455 458; 696 454 455; 697 456 451; 698 457 403; 699 456 457
 1878. 700 458 434; 701 457 458; 702 459 438; 703 460 444; 704 459 460; 705 414 415
 1879. 708 418 407; 710 461 414; 711 414 407; 712 418 4588; 713 419 489; 714 420 413
 1880. 715 420 462; 716 463 423; 717 464 426; 718 464 470; 719 403 476; 720 426 427
 1881. 721 427 480; 722 424 471; 723 428 429; 724 429 430; 725 422 465; 726 430 466
 1882. 727 466 469; 728 465 462; 729 421 485; 730 429 468; 731 421 4635; 732 428 481
 1883. 733 467 477; 734 468 421; 735 425 468; 736 469 491; 737 468 484; 738 470 463
 1884. 739 470 472; 740 471 467; 741 423 473; 742 472 474; 743 473 475; 744 472 473
 1885. 745 474 424; 746 475 471; 747 474 475; 748 476 461; 749 477 417; 750 476 478
 1886. 751 478 479; 752 473 478; 753 479 477; 754 475 479; 755 480 482; 756 483 483

V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

1887. 757 488 481; 758 482 424; 759 483 425; 760 482 483; 761 484 486; 762 485 488
1888. 763 484 485; 764 486 469; 765 487 422; 766 486 496; 767 488 487; 768 489 420
1889. 769 488 489; 770 490 487; 771 491 465; 772 490 491; 773 492 419; 774 492 412
1890. 776 494 4587; 777 493 4685; 778 495 492; 779 497 416; 780 497 496; 781 495 496
1891. 784 502 4589; 789 396 503; 790 397 504; 791 398 505; 792 399 506; 793 400 507
1892. 794 401 508; 795 402 509; 796 403 510; 797 404 511; 798 405 512; 799 406 513
1893. 800 407 514; 801 408 515; 806 413 520; 807 414 521; 812 419 526; 813 420 527
1894. 814 421 528; 815 422 529; 816 423 530; 817 424 531; 818 425 532; 819 426 533
1895. 820 427 534; 821 428 535; 822 429 536; 823 430 537; 824 503 504; 825 504 538
1896. 826 538 539; 827 539 540; 828 511 566; 829 511 558; 830 508 547; 831 505 538
1897. 832 509 544; 833 506 539; 834 510 541; 835 507 548; 836 541 507; 837 509 562
1898. 838 512 542; 839 542 546; 840 543 505; 841 544 506; 842 543 544; 843 545 503
1899. 844 545 551; 845 546 504; 846 547 543; 847 548 547; 848 514 554; 849 515 001
1900. 851 513 556; 853 548 513; 854 549 514; 855 549 511; 856 515 4637; 857 550 555
1901. 858 551 553; 859 550 567; 860 552 512; 861 553 542; 862 552 553; 863 554 515
1902. 864 555 552; 865 554 555; 866 556 559; 867 519 520; 868 518 519; 870 520 557
1903. 871 557 558; 873 558 510; 874 513 560; 875 559 509; 876 559 561; 877 560 563
1904. 878 561 564; 879 560 561; 880 562 565; 881 561 562; 882 563 558; 883 564 510
1905. 884 563 564; 885 565 541; 886 564 565; 887 566 545; 888 567 551; 889 566 567
1906. 890 521 522; 893 525 604; 895 568 521; 896 521 514; 897 525 4593; 898 526 596
1907. 899 527 528; 900 527 569; 901 570 530; 902 571 533; 903 571 577; 904 570 583
1908. 905 533 534; 906 534 587; 907 531 578; 908 535 536; 909 536 537; 910 529 572
1909. 911 537 573; 912 573 576; 913 572 569; 914 528 592; 915 536 575; 916 528 4639
1910. 917 535 588; 918 574 584; 919 575 528; 920 532 575; 921 576 598; 922 575 591
1911. 923 577 570; 924 577 579; 925 578 574; 926 530 580; 927 579 581; 928 580 582
1912. 929 579 580; 930 581 531; 931 582 578; 932 581 582; 933 583 568; 934 584 524
1913. 935 583 585; 936 585 586; 937 580 585; 938 586 584; 939 582 586; 940 587 589
1914. 941 588 590; 942 587 588; 943 589 531; 944 590 532; 945 589 590; 946 591 593
1915. 947 592 595; 948 591 592; 949 593 576; 950 594 529; 951 593 597; 952 595 594
1916. 953 596 527; 954 595 596; 955 597 594; 956 598 572; 957 597 598; 958 599 526
1917. 959 599 519; 961 601 4592; 962 608 4678; 963 602 599; 964 604 523; 965 604 603
1918. 966 602 603; 969 609 4594; 974 503 610; 975 504 611; 976 505 612; 977 506 613
1919. 978 507 614; 979 508 615; 980 509 616; 981 510 617; 982 511 618; 983 512 619
1920. 984 513 620; 985 514 621; 986 515 622; 991 520 627; 992 521 628; 997 526 633
1921. 998 527 634; 999 528 635; 1000 529 636; 1001 530 637; 1002 531 638
1922. 1003 532 639; 1004 533 640; 1005 534 641; 1006 535 642; 1007 536 643
1923. 1008 537 644; 1009 618 611; 1010 611 645; 1011 645 646; 1012 646 647
1924. 1013 618 673; 1014 618 657; 1015 615 654; 1016 612 645; 1017 616 651
1925. 1018 613 646; 1019 617 648; 1020 614 647; 1021 648 614; 1022 616 669
1926. 1023 619 649; 1024 649 653; 1025 650 612; 1026 651 613; 1027 650 651
1927. 1028 652 610; 1029 652 658; 1030 653 611; 1031 654 650; 1032 653 654
1928. 1033 621 661; 1034 622 708; 1036 620 663; 1038 655 620; 1039 656 621
1929. 1040 656 618; 1041 622 4641; 1042 657 662; 1043 658 660; 1044 657 674
1930. 1045 659 619; 1046 660 649; 1047 659 660; 1048 661 622; 1049 662 659
1931. 1050 661 662; 1051 663 666; 1052 626 637; 1053 625 626; 1055 627 664
1932. 1056 664 665; 1058 665 617; 1059 620 667; 1060 666 616; 1061 666 668
1933. 1062 667 670; 1063 668 671; 1064 667 668; 1065 669 672; 1066 668 669
1934. 1067 670 665; 1068 671 617; 1069 670 671; 1070 672 648; 1071 671 672
1935. 1072 673 652; 1073 674 658; 1074 673 674; 1075 628 629; 1078 632 711
1936. 1080 675 628; 1081 628 621; 1082 632 4598; 1083 633 703; 1084 634 627
1937. 1085 63

V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.
CMDAREGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.

STAAD SPACE

-- PAGE NO. 36

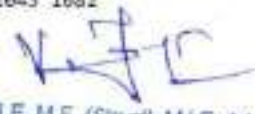
1943. 1115 688 638; 1116 689 685; 1117 688 689; 1118 690 675; 1119 691 631
 1944. 1120 690 692; 1121 692 693; 1122 687 692; 1123 693 691; 1124 689 693
 1945. 1125 694 696; 1126 695 697; 1127 694 695; 1128 696 638; 1129 697 639
 1946. 1130 696 697; 1131 698 700; 1132 699 702; 1133 698 699; 1134 700 683
 1947. 1135 701 636; 1136 700 704; 1137 702 701; 1138 703 634; 1139 702 703
 1948. 1140 704 701; 1141 705 679; 1142 704 705; 1143 706 633; 1144 706 626
 1949. 1146 708 4597; 1147 707 4677; 1148 709 706; 1149 711 630; 1150 711 710
 1950. 1151 709 710; 1154 716 4599; 1159 610 717; 1160 611 718; 1161 612 719
 1951. 1162 613 720; 1163 614 721; 1164 615 722; 1165 616 723; 1166 617 724
 1952. 1167 618 725; 1168 619 726; 1169 620 727; 1170 621 728; 1171 622 729
 1953. 1176 627 734; 1177 628 735; 1182 633 740; 1183 634 741; 1184 635 742
 1954. 1185 636 743; 1186 637 744; 1187 638 745; 1188 639 746; 1189 640 747
 1955. 1190 641 748; 1191 642 749; 1192 643 750; 1193 644 751; 1194 717 718
 1956. 1195 718 752; 1196 752 753; 1197 753 754; 1198 725 788; 1199 725 764
 1957. 1200 722 761; 1201 719 752; 1202 723 758; 1203 720 753; 1204 724 755
 1958. 1205 721 754; 1206 755 721; 1207 723 776; 1208 726 756; 1209 756 760
 1959. 1210 757 719; 1211 758 720; 1212 757 758; 1213 759 717; 1214 759 765
 1960. 1215 760 718; 1216 761 757; 1217 760 761; 1218 728 768; 1219 729 815
 1961. 1221 727 770; 1223 762 727; 1224 763 728; 1225 763 725; 1226 729 4645
 1962. 1227 764 769; 1228 765 767; 1229 764 781; 1230 766 726; 1231 767 756
 1963. 1232 766 767; 1233 768 729; 1234 769 766; 1235 768 769; 1236 770 773
 1964. 1237 733 734; 1238 732 733; 1240 734 771; 1241 771 772; 1243 772 724
 1965. 1244 727 774; 1245 773 723; 1246 773 775; 1247 774 777; 1248 775 778
 1966. 1249 774 775; 1250 776 779; 1251 775 776; 1252 777 772; 1253 778 724
 1967. 1254 777 778; 1255 779 755; 1256 778 779; 1257 780 759; 1258 781 765
 1968. 1259 780 781; 1260 735 736; 1263 739 818; 1265 782 735; 1266 735 728
 1969. 1267 739 4603; 1268 740 810; 1269 741 734; 1270 741 783; 1271 784 744
 1970. 1272 785 747; 1273 785 791; 1274 784 797; 1275 747 748; 1276 748 881
 1971. 1277 745 792; 1278 749 750; 1279 750 751; 1280 743 786; 1281 751 787
 1972. 1282 787 790; 1283 786 783; 1284 742 806; 1285 750 789; 1286 742 4647
 1973. 1287 749 802; 1288 788 798; 1289 789 742; 1290 746 789; 1291 790 812
 1974. 1292 789 805; 1293 791 784; 1294 791 793; 1295 792 788; 1296 744 794
 1975. 1297 793 795; 1298 794 796; 1299 793 794; 1300 795 745; 1301 796 792
 1976. 1302 795 796; 1303 797 782; 1304 798 738; 1305 797 799; 1306 799 800
 1977. 1307 794 799; 1308 800 799; 1309 796 800; 1310 801 803; 1311 802 804
 1978. 1312 801 802; 1313 803 745; 1314 804 746; 1315 803 804; 1316 805 807
 1979. 1317 806 809; 1318 805 806; 1319 807 790; 1320 808 743; 1321 807 811
 1980. 1322 809 808; 1323 810 741; 1324 809 810; 1325 811 808; 1326 812 786
 1981. 1327 811 812; 1328 813 740; 1329 813 733; 1331 815 4602; 1332 814 4681
 1982. 1333 816 813; 1334 818 737; 1335 818 817; 1336 816 817; 1339 823 4604
 1983. 1344 717 824; 1345 718 825; 1346 719 826; 1347 720 827; 1348 721 828
 1984. 1349 722 829; 1350 723 830; 1351 724 831; 1352 725 832; 1353 726 833
 1985. 1354 727 834; 1355 728 835; 1356 729 836; 1361 734 841; 1362 735 842
 1986. 1367 740 847; 1368 741 848; 1369 742 849; 1370 743 850; 1371 744 851
 1987. 1372 745 852; 1373 746 853; 1374 747 854; 1375 748 855; 1376 749 856
 1988. 1377 750 857; 1378 751 858; 1379 824 825; 1380 825 859; 1381 859 860
 1989. 1382 860 861; 1383 832 887; 1384 832 871; 1385 829 868; 1386 826 859
 1990. 1387 830 865; 1388 827 860; 1389 831 862; 1390 828 861; 1391 862 828
 1991. 1392 830 883; 1393 833 863; 1394 863 867; 1395 864 826; 1396 865 827
 1992. 1397 864 865; 1398 866 824; 1399 866 872; 1400 867 825; 1401 868 864
 1993. 1402 867 868; 1403 835 875; 1404 836 922; 1406 834 877; 1408 869 834
 1994. 1409 870 835; 1410 870 832; 1411 836 4649; 1412 871 876; 1413 872 874
 1995. 1414 871 888; 1415 873 833; 1416 874 863; 1417 873 874; 1418 875 836
 1996. 1419 876 873; 1420 875 876; 1421 877 880; 1422 840 841; 1423 839 840
 1997. 1425 841 878; 1426 878 879; 1428 879 831; 1429 834 881; 1430 880 830
 1998. 1431 880 882; 1432 881 884; 1433 882 885; 1434 881 882; 1435 883 886

V. JAGEN, B.E.M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GALURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.

STAAD SPACE

-- PAGE NO. 37

1999. 1436 882 883; 1437 884 879; 1438 885 831; 1439 884 885; 1440 886 862
 2000. 1441 885 886; 1442 887 866; 1443 888 872; 1444 887 888; 1445 842 843
 2001. 1448 846 925; 1450 889 842; 1451 842 835; 1452 846 4608; 1453 847 917
 2002. 1454 848 841; 1455 848 890; 1456 891 851; 1457 892 854; 1458 892 898
 2003. 1459 891 904; 1460 854 855; 1461 855 908; 1462 852 899; 1463 856 857
 2004. 1464 857 858; 1465 850 893; 1466 858 894; 1467 894 897; 1468 893 890
 2005. 1469 849 913; 1470 857 896; 1471 849 4651; 1472 856 909; 1473 895 905
 2006. 1474 896 849; 1475 853 896; 1476 897 919; 1477 896 912; 1478 898 891
 2007. 1479 898 900; 1480 899 895; 1481 851 901; 1482 900 902; 1483 901 903
 2008. 1484 900 901; 1485 902 852; 1486 903 899; 1487 902 903; 1488 904 889
 2009. 1489 905 845; 1490 904 905; 1491 906 907; 1492 901 906; 1493 907 905
 2010. 1494 903 907; 1495 908 910; 1496 909 911; 1497 908 909; 1498 910 852
 2011. 1499 911 853; 1500 910 911; 1501 912 914; 1502 913 916; 1503 912 913
 2012. 1504 914 897; 1505 915 850; 1506 914 918; 1507 916 915; 1508 917 848
 2013. 1509 916 917; 1510 918 915; 1511 919 893; 1512 918 919; 1513 920 847
 2014. 1514 920 840; 1516 922 4607; 1517 921 4686; 1518 923 920; 1519 925 844
 2015. 1520 925 924; 1521 923 924; 1524 930 4609; 1529 824 931; 1530 825 932
 2016. 1531 826 933; 1532 827 934; 1533 828 935; 1534 829 936; 1535 830 937
 2017. 1536 831 938; 1537 832 939; 1538 833 940; 1539 834 941; 1540 835 942
 2018. 1541 836 943; 1546 841 948; 1547 842 949; 1552 847 954; 1553 848 955
 2019. 1554 849 956; 1555 850 957; 1556 851 958; 1557 852 959; 1558 853 960
 2020. 1559 854 961; 1560 855 962; 1561 856 963; 1562 857 964; 1563 858 965
 2021. 1564 931 932; 1565 932 966; 1566 966 967; 1567 967 968; 1568 939 994
 2022. 1569 939 978; 1570 936 975; 1571 933 966; 1572 937 972; 1573 934 967
 2023. 1574 938 969; 1575 935 968; 1576 969 935; 1577 937 990; 1578 940 970
 2024. 1579 970 974; 1580 971 933; 1581 972 934; 1582 971 972; 1583 973 931
 2025. 1584 973 979; 1585 974 932; 1586 975 971; 1587 974 975; 1588 942 982
 2026. 1589 943 1029; 1591 941 984; 1593 976 941; 1594 977 942; 1595 977 939
 2027. 1596 943 4653; 1597 978 983; 1598 979 981; 1599 978 995; 1600 980 940
 2028. 1601 981 970; 1602 980 981; 1603 982 943; 1604 983 980; 1605 982 983
 2029. 1606 984 987; 1607 947 948; 1608 946 947; 1610 948 985; 1611 985 986
 2030. 1613 986 938; 1614 941 988; 1615 987 937; 1616 987 989; 1617 988 991
 2031. 1618 989 992; 1619 988 989; 1620 990 993; 1621 989 990; 1622 991 985
 2032. 1623 992 938; 1624 991 992; 1625 993 969; 1626 992 993; 1627 994 973
 2033. 1628 995 979; 1629 994 995; 1630 949 950; 1633 953 1032; 1635 996 949
 2034. 1636 949 942; 1637 953 4613; 1638 954 1024; 1639 955 948; 1640 955 997
 2035. 1641 998 958; 1642 999 961; 1643 999 1005; 1644 998 1011; 1645 961 962
 2036. 1646 962 1015; 1647 959 1006; 1648 963 964; 1649 964 965; 1650 957 1000
 2037. 1651 965 1001; 1652 1001 1004; 1653 1000 997; 1654 956 1020; 1655 964 1003
 2038. 1656 956 4655; 1657 963 1016; 1658 1002 1012; 1659 1003 956; 1660 960 1003
 2039. 1661 1004 1026; 1662 1003 1019; 1663 1005 998; 1664 1005 1007; 1665 1006 1002
 2040. 1666 958 1008; 1667 1007 1009; 1668 1008 1010; 1669 1007 1008; 1670 1009 959
 2041. 1671 1010 1006; 1672 1009 1010; 1673 1011 996; 1674 1012 952; 1675 1011 1013
 2042. 1676 1013 1014; 1677 1008 1013; 1678 1014 1012; 1679 1010 1014; 1680 1015 1017
 2043. 1681 1016 1018; 1682 1015 1016; 1683 1017 959; 1684 1018 960; 1685 1017 1018
 2044. 1686 1019 1021; 1687 1020 1023; 1688 1019 1020; 1689 1021 1004; 1690 1022 957
 2045. 1691 1021 1025; 1692 1023 1022; 1693 1024 955; 1694 1023 1024; 1695 1025 1022
 2046. 1696 1026 1000; 1697 1025 1026; 1698 1027 954; 1699 1027 947; 1701 1029 4612
 2047. 1702 1028 4691; 1703 1030 1027; 1704 1032 951; 1705 1032 1031; 1706 1030 1031
 2048. 1709 1037 4614; 1714 931 1038; 1715 932 1039; 1716 933 1040; 1717 934 1041
 2049. 1718 935 1042; 1719 936 1043; 1720 937 1044; 1721 938 1045; 1722 939 1046
 2050. 1723 940 1047; 1724 941 1048; 1725 942 1049; 1726 943 1050; 1731 948 1055
 2051. 1732 949 1056; 1737 954 1061; 1738 955 1062; 1739 956 1063; 1740 957 1064
 2052. 1741 958 1065; 1742 959 1066; 1743 960 1067; 1744 961 1068; 1745 962 1069
 2053. 1746 963 1070; 1747 964 1071; 1748 965 1072; 1749 1038 1039; 1750 1039 1073
 2054. 1751 1073 1074; 1752 1074 1075; 1753 1046 1101; 1754 1046 1085; 1755 1043 1082


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOG -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600139.
 MOBILE: 9841269154

STAND SPACE

-- PAGE NO. 38

2055. 1756 1040 1073; 1757 1044 1079; 1758 1041 1074; 1759 1045 1076; 1760 1042 1075
2056. 1761 1076 1042; 1762 1044 1097; 1763 1047 1077; 1764 1077 1081; 1765 1078 1040
2057. 1766 1079 1041; 1767 1078 1079; 1768 1080 1038; 1769 1080 1086; 1770 1081 1039
2058. 1771 1082 1078; 1772 1081 1082; 1773 1049 1009; 1774 1050 1136; 1776 1048 1091
2059. 1778 1083 1048; 1779 1084 1049; 1780 1084 1046; 1781 1058 4557; 1782 1085 1000
2060. 1783 1086 1088; 1784 1085 1102; 1785 1087 1047; 1786 1088 1077; 1787 1087 1088
2061. 1788 1089 1050; 1789 1090 1087; 1790 1089 1090; 1791 1091 1094; 1792 1054 1055
2062. 1793 1053 1054; 1795 1055 1092; 1796 1092 1093; 1798 1093 1045; 1799 1048 1095
2063. 1800 1094 1044; 1801 1094 1056; 1802 1095 1098; 1803 1096 1090; 1804 1095 1090
2064. 1805 1097 1100; 1806 1096 1097; 1807 1098 1093; 1808 1099 1045; 1809 1098 1095
2065. 1810 1100 1076; 1811 1099 1100; 1812 1101 1080; 1813 1102 1086; 1814 1101 1102
2066. 1815 1056 1057; 1818 1060 1139; 1820 1103 1056; 1821 1056 1049; 1822 1060 4610
2067. 1823 1061 1131; 1824 1062 1055; 1825 1062 1104; 1826 1105 1065; 1827 1106 1068
2068. 1828 1106 1112; 1829 1105 1118; 1830 1068 1069; 1831 1069 1122; 1832 1066 1113
2069. 1833 1070 1071; 1834 1071 1072; 1835 1064 1107; 1836 1072 1108; 1837 1108 1111
2070. 1838 1107 1104; 1839 1063 1127; 1840 1071 1110; 1841 1063 4639; 1842 1070 1123
2071. 1843 1109 1119; 1844 1130 1063; 1845 1067 1110; 1846 1111 1133; 1847 1110 1126
2072. 1848 1112 1105; 1849 1112 1114; 1850 1113 1109; 1851 1065 1115; 1852 1114 1116
2073. 1853 1115 1117; 1854 1114 1115; 1855 1116 1066; 1856 1117 1113; 1857 1116 1117
2074. 1858 1118 1103; 1859 1119 1059; 1860 1118 1120; 1861 1120 1121; 1862 1115 1120
2075. 1863 1121 1119; 1864 1117 1121; 1865 1122 1124; 1866 1123 1125; 1867 1122 1123
2076. 1868 1124 1066; 1869 1125 1067; 1870 1124 1125; 1871 1126 1128; 1872 1127 1129
2077. 1873 1126 1127; 1874 1128 1111; 1875 1129 1064; 1876 1128 1132; 1877 1130 1130
2078. 1878 1131 1062; 1879 1130 1131; 1880 1132 1129; 1881 1133 1107; 1882 1132 1133
2079. 1883 1134 1061; 1884 1134 1054; 1886 1136 4617; 1887 1135 4694; 1888 1137 1134
2080. 1889 1139 1058; 1890 1139 1138; 1891 1137 1138; 1894 1144 4619; 1899 1049 1145
2081. 1900 1050 1146; 1905 1055 1151; 1906 1056 1152; 1911 1061 1157; 1912 1062 1150
2082. 1913 1145 1160; 1914 1146 1165; 1917 1160 1146; 1918 1150 1151; 1919 1149 1150
2083. 1922 1152 1153; 1925 1156 1168; 1927 1152 1145; 1928 1156 1166; 1929 1157 1162
2084. 1930 1158 1151; 1932 1162 1158; 1933 1163 1157; 1934 1163 1150; 1937 1164 1173
2085. 1938 1166 1163; 1939 1168 1154; 1944 1173 1165; 1947 1170 1172; 1949 1172 1174
2086. 1950 1174 1149; 1951 1176 1163; 1952 1176 1175; 1953 1175 1158; 1954 1040 1177
2087. 1955 1041 1178; 1956 1043 1179; 1957 1044 1180; 1958 1179 1183; 1959 1180 1182
2088. 1960 1181 1184; 1961 1182 1185; 1963 1183 1181; 1964 1179 1180; 1965 1184 1177
2089. 1966 1185 1178; 1967 1184 1185; 1968 36 37; 1969 44 36; 1970 45 1186
2090. 1971 44 4665; 1972 41 42; 1973 41 38; 1974 42 39; 1975 1185 4664; 1976 1186 41
2091. 1983 43 1190; 1984 1190 40; 1985 42 1190; 1986 46 1191; 1987 1191 1195
2092. 1988 45 1192; 1989 1192 1194; 1991 48 45; 1992 48 1214; 1993 1193 49
2093. 1994 1194 1191; 1995 1193 1194; 1996 1195 42; 1997 1195 4663; 1998 47 48
2094. 1999 54 55; 2000 58 1218; 2001 59 60; 2002 51 1212; 2004 60 53; 2011 69 70
2095. 2012 68 69; 2013 67 68; 2014 66 67; 2015 67 64; 2016 68 65; 2017 69 1200
2096. 2018 64 1206; 2019 1200 61; 2020 65 1200; 2023 61 62; 2024 61 59; 2025 64 1208
2097. 2032 54 47; 2034 1206 65; 2037 1206 1211; 2038 1208 1210; 2039 63 1208
2098. 2042 1210 57; 2043 1211 1207; 2044 1210 1211; 2045 1212 53; 2046 59 1211
2099. 2049 1214 1193; 2050 1213 1219; 2053 1215 46; 2054 1216 1217; 2055 1218 50
2100. 2056 1218 1217; 2057 1219 1214; 2058 1219 1220; 2059 1220 1221; 2061 1222 1221
2101. 2063 1223 1220; 2071 1226 1227; 2076 1231 1234; 2079 1234 1229; 6348 84 3391
2102. 6349 92 2750; 6350 119 3395; 6351 127 2755; 6352 302 3399; 6353 310 2760
2103. 6354 409 3403; 6355 417 2765;

V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
CINDA REGN NOS -
SE / GR-1 / 2019/03024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.

STAAD SPACE

-- PAGE NO. 39

2111. 6305 524 2214; 6306 522 1434; 6307 680 1435; 6308 518 3043; 6309 548 3410
 2112. 6408 519 4309; 6401 631 2219; 6402 629 1440; 6403 707 1441; 6404 625 3946
 2113. 6405 655 3414; 6406 626 4312; 6407 738 2224; 6408 736 1446; 6409 814 1447
 2114. 6410 732 3949; 6411 762 3418; 6412 733 4315; 6413 845 2229; 6414 843 1452
 2115. 6415 921 1453; 6416 839 3952; 6417 860 3422; 6418 840 4318; 6419 952 2234
 2116. 6420 950 1458; 6421 1028 1459; 6422 946 3955; 6423 976 3426; 6424 947 4321
 2117. 6425 1059 2239; 6426 1057 1464; 6427 1135 1465; 6428 1053 3958; 6429 1083 1430
 2118. 6430 1054 4324; 6441 51 52; 6442 58 1216; 6443 1216 56; 6470 4577 119
 2119. 6471 4577 4626; 6472 4578 281; 6473 135 4628; 6474 4579 280; 6475 4609 4671
 2120. 6476 4580 121; 6477 126 4670; 6478 4671 4670; 6479 284 4671; 6480 4582 302
 2121. 6481 4583 388; 6482 4584 387; 6483 4582 4630; 6484 318 4632; 6485 4672 4682
 2122. 6486 309 4693; 6487 4682 4693; 6488 391 4682; 6489 4587 469; 6490 4588 495
 2123. 6491 4589 494; 6492 4587 4634; 6493 425 4636; 6494 4685 4688; 6495 416 4687
 2124. 6496 4688 4687; 6497 498 4688; 6498 4502 516; 6499 4593 602; 6500 4594 601
 2125. 6501 4681 4638; 6502 532 4640; 6503 4678 4680; 6504 523 4676; 6505 4680 4676
 2126. 6506 605 4680; 6507 4597 623; 6508 4598 709; 6509 4599 708; 6510 4597 4642
 2127. 6511 639 4644; 6512 4677 4689; 6513 630 4675; 6514 4689 4675; 6515 712 4689
 2128. 6516 4602 730; 6517 4603 816; 6518 4604 815; 6519 4602 4646; 6520 746 4648
 2129. 6521 4681 4684; 6522 737 4674; 6523 4684 4674; 6524 819 4684; 6525 4607 837
 2130. 6526 4608 923; 6527 4609 922; 6528 4607 4650; 6529 853 4652; 6530 4686 4673
 2131. 6531 844 4690; 6532 4673 4690; 6533 926 4673; 6534 4612 944; 6535 4613 1030
 2132. 6536 4614 1029; 6537 4612 4654; 6538 960 4656; 6539 4691 4692; 6540 951 4683
 2133. 6541 4692 4683; 6542 1033 4692; 6543 4617 1051; 6544 4618 1137; 6545 4619 1136
 2134. 6546 4617 4658; 6547 1067 4660; 6548 4694 4695; 6549 1058 4679; 6550 4695 4679
 2135. 6551 1140 4695; 6552 4585 304; 6553 4590 411; 6554 4595 518; 6555 4600 625
 2136. 6556 4605 732; 6557 4610 839; 6558 4615 946; 6559 4620 1053; 6560 4622 206
 2137. 6561 4667 4668; 6562 4623 86; 6563 91 4666; 6564 4668 4666; 6565 210 4668
 2138. 6566 1230 2659; 6567 1230 2107; 6568 1228 1318; 6569 1226 3846; 6570 1227 4212
 2139. 6571 1224 3301; 6572 4625 115; 6573 4626 111; 6574 4625 4626; 6575 4627 129
 2140. 6576 4628 4578; 6577 4628 4627; 6578 4629 298; 6579 4630 294; 6580 4631 312
 2141. 6581 4632 4583; 6582 4629 4630; 6583 4632 4631; 6584 4633 405; 6585 4634 401
 2142. 6586 4635 419; 6587 4636 4588; 6588 4633 4634; 6589 4636 4635; 6590 4637 512
 2143. 6591 4638 508; 6592 4639 526; 6593 4640 4593; 6594 4637 4638; 6595 4640 4639
 2144. 6596 4641 619; 6597 4642 515; 6598 4643 633; 6599 4644 4598; 6600 4641 4642
 2145. 6601 4644 4643; 6602 4645 726; 6603 4646 722; 6604 4647 740; 6605 4648 4603
 2146. 6606 4645 4646; 6607 4648 4647; 6608 4649 833; 6609 4650 829; 6610 4651 847
 2147. 6611 4652 4608; 6612 4649 4650; 6613 4652 4651; 6614 4653 948; 6615 4654 936
 2148. 6616 4655 954; 6617 4656 4613; 6618 4653 4654; 6619 4656 4655; 6620 4657 1047
 2149. 6621 4658 1043; 6622 4659 1061; 6623 4660 4618; 6624 4657 4658; 6625 4660 4659
 2150. 6626 66 4661; 6627 63 54; 6628 4661 63; 6629 4661 64; 6630 70 4662
 2151. 6631 4662 62; 6632 1200 4662; 6633 62 60; 6634 4663 43; 6635 53 4663
 2152. 6636 38 39; 6637 39 40; 6638 4664 37; 6639 4664 38; 6640 4665 45; 6641 47 4665
 2153. 6642 4666 4623; 6643 4667 214; 6645 210 1414; 6646 211 1415; 6647 284 1420
 2154. 6648 285 1421; 6649 391 1426; 6650 392 1427; 6651 498 1432; 6652 499 1433
 2155. 6653 605 1438; 6654 606 1439; 6655 712 1444; 6656 713 1445; 6657 819 1450
 2156. 6658 820 1451; 6659 926 1456; 6660 927 1457; 6661 1033 1452; 6662 1034 1463
 2157. 6663 1140 1468; 6664 1141 1469; 6665 1232 3304; 6666 1233 1319; 6667 1235 1321
 2158. 6668 1236 1323; 6669 1318 1233; 6670 1319 1320; 6671 1320 1321; 6672 1321 1235
 2159. 6673 1322 1236; 6674 1323 1229; 6675 1410 205; 6676 1411 1412; 6677 1412 1413
 2160. 6678 1413 210; 6679 1414 211; 6680 1415 91; 6681 1416 279; 6682 1417 1438
 2161. 6683 1418 1419; 6684 1419 284; 6685 1420 285; 6686 1421 126; 6687 1422 386
 2162. 6688 1423 1424; 6689 1424 1425; 6690 1425 391; 6691 1426 392; 6692 1427 309
 2163. 6693 1428 493; 6694 1429 1430; 6695 1430 1431; 6696 1431 498; 6697 1432 499
 2164. 6698 1433 416; 6699 1434 600; 6700 1435 1436; 6701 1436 1437; 6702 1437 605
 2165. 6703 1438 606; 6704 1439 523; 6705 1440 707; 6706 1441 1442; 6707 1442 1443
 2166. 6708 1443 712; 6709 1444 713; 6710 1445 630; 6711 1446 814; 6712 1447 1448

V. JAGEN, B.E.M.E. (Struct), M.I.E.A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, GA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9641269154

STAAD SPACE

-- PAGE NO. 48

2167. 6713 1448 1449; 6714 1449 819; 6715 1450 820; 6716 1451 737; 6717 1452 921
 2168. 6718 1453 1454; 6719 1454 1455; 6720 1455 926; 6721 1456 927; 6722 1457 844
 2169. 6723 1458 1028; 6724 1459 1460; 6725 1460 1461; 6726 1461 1033; 6727 1462 1034
 2170. 6728 1463 951; 6729 1464 1135; 6730 1465 1466; 6731 1466 1467; 6732 1467 1140
 2171. 6733 1468 1141; 6734 1469 1058; 6735 1470 1164; 6736 2103 1228; 6737 2104 2103
 2172. 6738 2105 2104; 6739 2106 2105; 6740 2107 2106; 6741 2194 2195; 6742 2195 2196
 2173. 6743 2196 2197; 6744 2197 2198; 6745 2198 90; 6746 2199 2200; 6747 2200 2201
 2174. 6748 2201 2202; 6749 2202 2203; 6750 2203 125; 6751 2204 2205; 6752 2205 2206
 2175. 6753 2206 2207; 6754 2207 2208; 6755 2208 308; 6756 2209 2210; 6757 2210 2211
 2176. 6758 2211 2212; 6759 2212 2213; 6760 2213 415; 6761 2214 2215; 6762 2215 2216
 2177. 6763 2216 2217; 6764 2217 2218; 6765 2218 522; 6766 2219 2220; 6767 2220 2221
 2178. 6768 2221 2222; 6769 2222 2223; 6770 2223 629; 6771 2224 2225; 6772 2225 2226
 2179. 6773 2226 2227; 6774 2227 2228; 6775 2228 736; 6776 2229 2230; 6777 2230 2231
 2180. 6778 2231 2232; 6779 2232 2233; 6780 2233 843; 6781 2234 2235; 6782 2235 2236
 2181. 6783 2236 2237; 6784 2237 2238; 6785 2238 950; 6786 2239 2240; 6787 2240 2241
 2182. 6788 2241 2242; 6789 2242 2243; 6790 2243 1057; 6791 2659 2660; 6792 2660 2661
 2183. 6793 2661 2662; 6794 2662 2663; 6795 2663 1231; 6796 2750 2751; 6797 2751 2752
 2184. 6798 2752 2753; 6799 2753 2754; 6800 2754 93; 6801 2755 2756; 6802 2756 2757
 2185. 6803 2757 2758; 6804 2758 2759; 6805 2759 128; 6806 2760 2761; 6807 2761 2762
 2186. 6808 2762 2763; 6809 2763 2764; 6810 2764 311; 6811 2765 2766; 6812 2766 2767
 2187. 6813 2767 2768; 6814 2768 2769; 6815 2769 418; 6816 2770 2771; 6817 2771 2772
 2188. 6818 2772 2773; 6819 2773 2774; 6820 2774 525; 6821 2775 2776; 6822 2776 2777
 2189. 6823 2777 2778; 6824 2778 2779; 6825 2779 632; 6826 2780 2781; 6827 2781 2782
 2190. 6828 2782 2783; 6829 2783 2784; 6830 2784 739; 6831 2785 2786; 6832 2786 2787
 2191. 6833 2787 2788; 6834 2788 2789; 6835 2789 846; 6836 2790 2791; 6837 2791 2792
 2192. 6838 2792 2793; 6839 2793 2794; 6840 2794 953; 6841 2795 2796; 6842 2796 2797
 2193. 6843 2797 2798; 6844 2798 2799; 6845 2799 1060; 6846 3301 3302; 6847 3302 3303
 2194. 6848 3303 1232; 6849 3304 1225; 6850 3391 3392; 6851 3392 3393; 6852 3393 151
 2195. 6853 3394 85; 6854 3395 3396; 6855 3396 3397; 6856 3397 225; 6857 3398 120
 2196. 6858 3399 3400; 6859 3400 3401; 6860 3401 334; 6861 3402 303; 6862 3403 3404
 2197. 6863 3404 3405; 6864 3405 441; 6865 3406 410; 6866 3407 3408; 6867 3408 3409
 2198. 6868 3409 548; 6869 3410 517; 6870 3411 3412; 6871 3412 3413; 6872 3413 655
 2199. 6873 3414 624; 6874 3415 3416; 6875 3416 3417; 6876 3417 762; 6877 3418 731
 2200. 6878 3419 3420; 6879 3420 3421; 6880 3421 869; 6881 3422 838; 6882 3423 3424
 2201. 6883 3424 3425; 6884 3425 976; 6885 3426 945; 6886 3427 3428; 6887 3428 3429
 2202. 6888 3429 1003; 6889 3430 1052; 6890 3044 1224; 6891 3845 3844; 6892 3846 3845
 2203. 6893 3931 3932; 6894 3932 3933; 6895 3933 84; 6896 3934 3935; 6897 3935 3936
 2204. 6898 3936 119; 6899 3937 3938; 6900 3938 3939; 6901 3939 302; 6902 3940 3941
 2205. 6903 3941 3942; 6904 3942 409; 6905 3943 3944; 6906 3944 3945; 6907 3945 516
 2206. 6908 3946 3947; 6909 3947 3948; 6910 3948 623; 6911 3949 3950; 6912 3950 3951
 2207. 6913 3951 730; 6914 3952 3953; 6915 3953 3954; 6916 3954 837; 6917 3955 3956
 2208. 6918 3956 3957; 6919 3957 944; 6920 3958 3959; 6921 3959 3960; 6922 3960 1851
 2209. 6923 4210 1225; 6924 4211 4210; 6925 4212 4211; 6926 4297 4298; 6927 4298 4299
 2210. 6928 4299 85; 6929 4300 4301; 6930 4301 4302; 6931 4302 120; 6932 4303 4304
 2211. 6933 4304 4305; 6934 4305 303; 6935 4306 4307; 6936 4307 4308; 6937 4308 410
 2212. 6938 4309 4310; 6939 4310 4311; 6940 4311 517; 6941 4312 4313; 6942 4313 4314
 2213. 6943 4314 624; 6944 4315 4316; 6945 4316 4317; 6946 4317 731; 6947 4318 4319
 2214. 6948 4319 4320; 6949 4320 838; 6950 4321 4322; 6951 4322 4323; 6952 4323 945
 2215. 6953 4324 4325; 6954 4325 4326; 6955 4326 1052; 6956 4669 288; 6957 4670 4580
 2216. 6959 4672 395; 6961 4674 4605; 6962 4675 4600; 6963 4676 4595; 6964 4677 716
 2217. 6965 4678 609; 6966 4679 4620; 6968 4681 823; 6970 4683 4615; 6972 4685 502
 2218. 6973 4686 930; 6974 4687 4590; 6977 4690 4610; 6978 4691 1037; 6980 4693 4585
 2219. 6981 4694 1144; 6982 4696 207; 6983 179 4698; 6984 4697 94; 6985 4698 4696
 2220. 6986 4698 4697; 6987 176 250; 6988 250 358; 6989 358 465; 6990 465 572
 2221. 6991 572 679; 6992 679 786; 6993 786 893; 6994 893 1000; 6995 1000 1107
 2222. 6996 177 251; 6997 251 359; 6998 359 466; 6999 466 573; 7000 573 680

V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 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 / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.

STAAD SPACE

-- PAGE NO. 42

2279. 2444 1880 1223 1481 2004; 2445 1260 1261 2005 1818; 2446 1587 2006 1632 1550
 2280. 2447 1761 1535 1623 2007; 2448 2008 1820 1535 1760; 2449 1277 1278 1808 2009
 2281. 2450 1265 415 1428 2010; 2451 1545 1827 2011 1824; 2452 1828 1442 1443 2012
 2282. 2453 1270 1271 1625 2013; 2454 1826 2014 1832 1560; 2455 1411 2015 1614 1412
 2283. 2456 1544 1835 2016 1834; 2457 1836 392 1427 2017; 2458 1838 391 1426 2018
 2284. 2459 2019 1829 1514 1841; 2460 391 1791 2020 1426; 2461 1286 736 1446 2021
 2285. 2462 1838 712 1444 2022; 2463 712 1844 2023 1444; 2464 1810 1555 1773 2024
 2286. 2465 1307 1857 1464 2025; 2466 1848 1466 1467 2026; 2467 1482 1851 2027 1849
 2287. 2468 1701 1169 1474 2028; 2469 308 1259 2029 1422; 2470 1733 605 1438 2030
 2288. 2471 1853 686 1439 2031; 2472 1512 1843 2032 1854; 2473 1857 1033 1462 2033
 2289. 2474 1856 1034 1463 2034; 2475 1474 2035 1753 1170; 2476 1589 2036 1851 1482
 2290. 2477 1536 1813 2037 1858; 2478 2038 1837 1384 1385; 2479 1859 1424 1425 2039
 2291. 2480 2040 1749 1363 1364; 2481 1453 2041 1860 1454; 2482 2041 1361 1499 1675
 2292. 2483 2043 1849 1403 1404; 2484 1864 2044 1669 1554; 2485 2045 1778 1349 1350
 2293. 2486 1865 1554 1670 2046; 2487 2047 1665 1400 1401; 2488 1316 1317 2048 1759
 2294. 2489 2049 1732 1520 1763; 2490 1867 1418 1419 2050; 2491 1842 1529 1722 2051
 2295. 2492 1869 1557 1866 2052; 2493 1798 1487 1634 2053; 2494 1500 1607 2054 1766
 2296. 2495 1684 1553 1659 2055; 2496 2056 1599 1391 1392; 2497 1518 1809 2057 1872
 2297. 2498 1616 499 1433 2058; 2499 1825 1568 1873 2059; 2500 1811 2060 1772 1555
 2298. 2501 1788 2061 1783 1559; 2502 1887 2062 1359 1360; 2503 1488 1682 2063 1874
 2299. 2504 1491 1877 2064 1875; 2505 1787 1559 1784 2065; 2506 1878 2066 1839 1556
 2300. 2507 1253 1254 2067 1605; 2508 2068 1845 1511 1844; 2509 1506 1779 2069 1863
 2301. 2510 1880 1556 1840 2070; 2511 1527 1882 2071 1881; 2512 1850 1236 1323 2072
 2302. 2513 1542 1690 2073 1833; 2514 1533 1819 2074 1883; 2515 1309 1310 2075 1744
 2303. 2516 1494 1847 2076 1884; 2517 1655 2077 1708 1552; 2518 1647 1412 1413 2078
 2304. 2519 1274 1275 2079 1705; 2520 2080 1806 1526 1719; 2521 1876 2081 1637 1551
 2305. 2522 1281 1282 2082 1805; 2523 1589 1887 2083 1692; 2524 1288 1289 2084 1694
 2306. 2525 1246 1247 2085 1612; 2526 1488 1586 2086 1407; 2527 1423 2087 1790 1424
 2307. 2528 2088 1814 1493 1742; 2529 1477 2089 1723 1478; 2530 1267 1268 2090 1601
 2308. 2531 1429 2091 1687 1430; 2532 1855 1448 1449 2092; 2533 1417 2093 1821 1418
 2309. 2534 1459 2094 1888 1460; 2535 1795 1430 1431 2095; 2536 1870 1460 1461 2096
 2310. 2537 1521 1885 2097 1764; 2538 2098 1868 1538 1871; 2539 1465 2099 1594 1466
 2311. 2540 1879 1454 1455 2100; 2541 1741 2101 1664 1583; 2542 1889 2102 1627 1584
 2312. 2543 20 1237 1890 1409; 2544 1237 1238 1587 1890; 2545 1890 1587 1550 1586
 2313. 2546 1590 1483 1589 1891; 2547 1891 1589 1482 1588; 2548 1473 1891 1588 1169
 2314. 2549 1892 1410 205 1592; 2550 1501 1892 1592 1547; 2551 1243 1244 1892 1591
 2315. 2552 1467 1893 1595 1140; 2553 1466 1594 1893 1467; 2554 1594 1562 1593 1893
 2316. 2555 1894 1456 927 1596; 2556 1502 1597 1894 1596; 2557 1895 1421 126 1390
 2317. 2558 1599 1895 1390 1391; 2559 1538 1598 1895 1599; 2560 1266 1267 1601 1896
 2318. 2561 1896 1501 1527 1600; 2562 1428 1896 1600 493; 2563 1471 1897 1590 1472
 2319. 2564 1164 1503 1897 1471; 2565 1603 1484 1602 1897; 2566 1252 1253 1605 1898
 2320. 2567 1898 1505 1539 1604; 2568 1416 1898 1604 279; 2569 1899 1458 1828 1607
 2321. 2570 1606 1899 1607 1500; 2571 1299 1300 1899 1606; 2572 1900 1610 1337 1338
 2322. 2573 1609 1900 1338 1339; 2574 1493 1608 1900 1609; 2575 1245 1246 1612 1901
 2323. 2576 1901 1612 1545 1611; 2577 1410 1901 1611 205; 2578 1413 1902 1615 210
 2324. 2579 1412 1614 1902 1413; 2580 1614 1579 1613 1902; 2581 1903 1432 499 1616
 2325. 2582 1526 1617 1903 1616; 2583 707 1620 1904 1441; 2584 1620 1515 1619 1904
 2326. 2585 1904 1619 1571 1618; 2586 1905 1420 285 1598; 2587 1538 1621 1905 1598
 2327. 2588 1906 1624 1306 1307; 2589 1623 1906 1307 1308; 2590 1535 1622 1906 1623
 2328. 2591 1907 1434 600 1626; 2592 1625 1907 1626 1524; 2593 1271 1272 1907 1625
 2329. 2594 1908 1630 1544 1629; 2595 1628 1908 1629 1546; 2596 1584 1627 1908 1628
 2330. 2597 1632 1213 1477 1909; 2598 1909 1477 1478 1631; 2599 1910 1635 1330 1331
 2331. 2600 1634 1910 1331 1332; 2601 1487 1633 1910 1634; 2602 1638 1911 1639 1486
 2332. 2603 1551 1637 1911 1638; 2604 1637 1561 1636 1911; 2605 1296 1297 1642 1912
 2333. 2606 1912 1642 1501 1641; 2607 1640 1912 1641 1503; 2608 1913 1645 1506 1644
 2334. 2609 1643 1913 1644 1507; 2610 1290 1291 1913 1643; 2611 1592 205 1411 1914

V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119

STAAD SPACE

-- PAGE NO. 43

2335. 2612 1914 1411 1412 1647; 2613 1646 1914 1647 1585; 2614 1915 1480 56 1402
 2336. 2615 1649 1915 1402 1403; 2616 1548 1648 1915 1649; 2617 1652 1916 1343 1344
 2337. 2618 1498 1651 1916 1652; 2619 1651 1496 1650 1916; 2620 1656 1495 1655 1917
 2338. 2621 1917 1655 1552 1654; 2622 1653 1917 1654 1565; 2623 1659 1918 1651 1498
 2339. 2624 1553 1658 1918 1659; 2625 1658 1577 1657 1918; 2626 1452 1919 1660 921
 2340. 2627 843 1294 1919 1452; 2628 1294 1295 1640 1919; 2629 1920 1606 1500 1661
 2341. 2630 1642 1920 1661 1581; 2631 1297 1298 1920 1642; 2632 1602 1921 1663 1483
 2342. 2633 1484 1662 1921 1682; 2634 1662 1233 1319 1921; 2635 1922 1666 1398 1399
 2343. 2636 1665 1922 1399 1400; 2637 1583 1664 1922 1665; 2638 1923 1415 91 1397
 2344. 2639 1666 1923 1397 1398; 2640 1582 1667 1923 1666; 2641 1670 1924 1671 1504
 2345. 2642 1554 1669 1924 1670; 2643 1669 1567 1668 1924; 2644 1303 1304 1673 1925
 2346. 2645 1925 1673 1495 1656; 2646 1672 1925 1656 1497; 2647 1639 1485 1674 1926
 2347. 2648 1926 1674 1328 1329; 2649 1635 1926 1329 1330; 2650 1675 1499 1676 1927
 2348. 2651 1456 1927 1676 927; 2652 1928 1475 1154 1327; 2653 1674 1928 1327 1328
 2349. 2654 1485 1677 1928 1674; 2655 1929 1678 1346 1347; 2656 1457 1929 1347 844
 2350. 2657 927 1676 1929 1457; 2658 1930 1681 1488 1680; 2659 1679 1930 1680 1489
 2351. 2660 1311 1312 1930 1679; 2661 1313 1314 1931 1681; 2662 1314 1153 1470 1931
 2352. 2663 1931 1470 1164 1682; 2664 1641 1501 1685 1932; 2665 1932 1685 1553 1684
 2353. 2666 1683 1932 1684 1578; 2667 1431 1933 1688 498; 2668 1430 1687 1933 1431
 2354. 2669 1687 1573 1686 1933; 2670 1934 1416 279 1690; 2671 1689 1934 1690 1542
 2355. 2672 1250 1251 1934 1689; 2673 814 1693 1935 1447; 2674 1693 1509 1692 1935
 2356. 2675 1935 1692 1572 1691; 2676 1287 1288 1694 1936; 2677 1936 1694 1509 1693
 2357. 2678 1446 1936 1693 814; 2679 1697 1937 1357 1358; 2680 1510 1696 1937 1697
 2358. 2681 1696 1508 1695 1937; 2682 1938 1699 1353 1354; 2683 1451 1938 1354 737
 2359. 2684 820 1698 1938 1451; 2685 1939 1473 1369 1701; 2686 1636 1939 1701 1485
 2360. 2687 1561 1700 1939 1636; 2688 1703 1517 1702 1940; 2689 1438 1940 1702 606
 2361. 2690 1273 1274 1705 1941; 2691 1941 1705 1521 1704; 2692 1434 1941 1704 608
 2362. 2693 1615 1541 1706 1942; 2694 1414 1942 1706 211; 2695 1709 1943 1710 1492
 2363. 2696 1552 1708 1943 1709; 2697 1708 1566 1707 1943; 2698 1944 1609 1339 1340
 2364. 2699 1463 1944 1340 951; 2700 1034 1711 1944 1463; 2701 1945 1468 1141 1712
 2365. 2702 1490 1713 1945 1712; 2703 1946 1717 1528 1716; 2704 1715 1946 1716 1529
 2366. 2705 1564 1714 1946 1715; 2706 1720 1947 1378 1379; 2707 1528 1719 1947 1720
 2367. 2708 1719 1526 1718 1947; 2709 1688 1523 1721 1948; 2710 1432 1948 1721 499
 2368. 2711 1949 1720 1379 1380; 2712 1722 1949 1380 1381; 2713 1529 1716 1949 1722
 2369. 2714 1479 1950 1724 1223; 2715 1478 1723 1950 1479; 2716 1723 1584 1628 1950
 2370. 2717 1951 1450 820 1725; 2718 1508 1726 1951 1725; 2719 1525 1729 1952 1730
 2371. 2720 1729 1524 1728 1952; 2721 1952 1728 1576 1727; 2722 1953 1437 605 1733
 2372. 2723 1732 1953 1733 1520; 2724 1576 1731 1953 1732; 2725 1954 1734 1395 1396
 2373. 2726 1415 1954 1396 91; 2727 211 1706 1954 1415; 2728 1541 1736 1955 1734
 2374. 2729 1736 1540 1735 1955; 2730 1955 1735 1393 1394; 2731 1737 1956 1738 1540
 2375. 2732 1241 1242 1956 1737; 2733 1242 1243 1591 1956; 2734 1476 1957 1739 1213
 2376. 2735 55 1240 1457 1476; 2736 1240 1241 1737 1957; 2737 1223 1724 1958 1481
 2377. 2738 1724 1546 1741 1958; 2739 1958 1741 1583 1740; 2740 1742 1493 1711 1959
 2378. 2741 1462 1959 1711 1034; 2742 1308 1309 1744 1960; 2743 1960 1744 1491 1743
 2379. 2744 1464 1960 1743 1135; 2745 1255 1256 1961 1747; 2746 1256 1257 1746 1961
 2380. 2747 1961 1746 1536 1745; 2748 1962 1445 630 1362; 2749 1749 1962 1362 1363
 2381. 2750 1514 1748 1962 1749; 2751 1449 1963 1751 819; 2752 1448 1691 1963 1449
 2382. 2753 1691 1572 1750 1963; 2754 1475 1964 1326 1154; 2755 1170 1753 1964 1475
 2383. 2756 1753 1581 1752 1964; 2757 1965 1754 1374 1375; 2758 1433 1965 1375 416
 2384. 2759 499 1721 1965 1433; 2760 1523 1756 1966 1754; 2761 1756 1522 1755 1966
 2385. 2762 1966 1755 1372 1373; 2763 1437 1967 1703 605; 2764 1436 1758 1967 1437
 2386. 2765 1758 1575 1757 1967; 2766 1470 1968 1603 1164; 2767 1153 1315 1968 1470
 2387. 2768 1315 1316 1759 1968; 2769 1760 1535 1761 1969; 2770 1420 1969 1761 285
 2388. 2771 1751 1505 1698 1970; 2772 1450 1970 1698 820; 2773 1755 1971 1371 1372
 2389. 2774 1522 1763 1971 1755; 2775 1763 1520 1762 1971; 2776 600 1704 1972 1435
 2390. 2777 1704 1521 1764 1972; 2778 1972 1764 1575 1758; 2779 1626 600 1435 1973

V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS.
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 110.

2391. 2780 1073 1435 1436 1731; 2781 1728 1973 1731 1576; 2782 1974 1765 1367 1368
2392. 2783 1439 1974 1368 523; 1784 606 1702 1974 1439; 2785 1581 1661 1975 1685
2393. 2786 1661 1500 1766 1975; 2787 1975 1766 1577 1658; 2788 1976 1652 1344 1345
2394. 2789 1678 1976 1345 1346; 2790 1499 1767 1976 1678; 2791 1977 1770 1530 1769
2395. 2792 1768 1977 1769 1531; 2793 1262 1263 1977 1768; 2794 1773 1978 1696 1510
2396. 2795 1555 1772 1978 1773; 2796 1772 1578 1771 1978; 2797 1979 1451 737 1355
2397. 2798 1695 1979 1355 1356; 2799 1508 1725 1979 1695; 2800 1517 1775 1980 1765
2398. 2801 1775 1516 1774 1980; 2802 1980 1774 1365 1366; 2803 1981 1777 1351 1352
2399. 2804 1699 1981 1352 1353; 2805 1505 1776 1981 1699; 2806 1982 1457 844 1348
2400. 2807 1778 1982 1348 1349; 2808 1502 1596 1982 1778; 2809 1202 1203 1083 164
2401. 2810 1293 843 1452 1983; 2811 1983 1452 921 1779; 2812 1984 1689 1542 1781
2402. 2813 1780 1984 1781 1543; 2814 1248 1249 1984 1780; 2815 1784 1985 1785 1534
2403. 2816 1559 1783 1985 1784; 2817 1783 1569 1782 1985; 2818 1789 1537 1788 1986
2404. 2819 1986 1788 1559 1787; 2820 1786 1986 1787 1568; 2821 1425 1987 1791 391
2405. 2822 1424 1790 1987 1425; 2823 1790 1564 1715 1987; 2824 1531 1769 1988 1794
2406. 2825 1769 1530 1793 1988; 2826 1988 1793 1574 1792; 2827 1796 493 1429 1989
2407. 2828 1989 1429 1430 1795; 2829 1793 1989 1795 1574; 2830 1990 1638 1486 1633
2408. 2831 1993 1990 1633 1487; 2832 1562 1797 1990 1593; 2833 1595 1487 1798 1991
2409. 2834 1468 1991 1798 1141; 2835 1799 1992 1800 1548; 2836 1550 1633 1992 1799
2410. 2837 1631 1478 1479 1992; 2838 1993 1803 1512 1802; 2839 1801 1993 1802 1513
2411. 2840 1283 1284 1993 1801; 2841 1301 1302 1672 1994; 2842 1994 1672 1497 1804
2412. 2843 1458 1994 1804 1028; 2844 1288 1281 1805 1995; 2845 1995 1805 1515 1620
2413. 2846 1440 1995 1620 707; 2847 1996 1807 1360 1361; 2848 1445 1996 1361 630
2414. 2849 713 1806 1996 1445; 2850 1997 1448 707 1809; 2851 1808 1997 1809 1518
2415. 2852 1278 1279 1997 1808; 2853 1812 1513 1811 1998; 2854 1998 1811 1555 1810
2416. 2855 1619 1998 1810 1571; 2856 1999 1422 386 1813; 2857 1746 1999 1813 1536
2417. 2858 1257 1258 1999 1746; 2859 2000 1709 1492 1608; 2860 1814 2000 1608 1493
2418. 2861 1565 1654 2000 1814; 2862 2001 1469 1058 1334; 2863 1815 2001 1334 1335
2419. 2864 1490 1712 2001 1815; 2865 1710 1490 1815 2002; 2866 2002 1815 1335 1336
2420. 2867 1610 2002 1336 1337; 2868 2003 1817 1494 1816; 2869 1673 2003 1816 1495
2421. 2870 1304 1305 2003 1673; 2871 2004 1481 1222 1648; 2872 1548 1800 2004 1648
2422. 2873 1261 1262 1768 2005; 2874 2005 1768 1531 1819; 2875 1818 2005 1819 1533
2423. 2876 1238 1239 2006 1587; 2877 1239 55 1476 2006; 2878 2006 1476 1213 1632
2424. 2879 2007 1623 1388 1389; 2880 1421 2007 1389 126; 2881 285 1761 2007 1421
2425. 2882 1419 2008 1760 284; 2883 1418 1821 2008 1419; 2884 1821 1568 1820 2008
2426. 2885 2009 1808 1510 1823; 2886 1822 2009 1823 1519; 2887 1276 1277 2009 1822
2427. 2888 2010 1428 493 1796; 2889 1770 2010 1796 1530; 2890 1264 1265 2010 1770
2428. 2891 1827 1543 1826 2011; 2892 2011 1826 1568 1825; 2893 1824 2011 1825 157
2429. 2894 2012 1443 712 1830; 2895 1829 2012 1830 1514; 2896 1563 1828 2012 1829
2430. 2897 2013 1625 1524 1729; 2898 1831 2013 1729 1525; 2899 1269 1270 2013 1831
2431. 2900 1543 1781 2014 1826; 2901 1781 1542 1833 2014; 2902 2014 1833 1580 1832
2432. 2903 285 1611 2015 1411; 2904 1611 1545 1824 2015; 2905 2015 1824 1579 1614
2433. 2906 1835 210 1414 2016; 2907 2016 1414 211 1667; 2908 1834 2016 1667 1582
2434. 2909 2017 1427 309 1383; 2910 1837 2017 1383 1384; 2911 1532 1836 2017 1837
2435. 2912 2018 1426 392 1836; 2913 1532 1838 2018 1836; 2914 1840 2019 1841 1516
2436. 2915 1556 1839 2019 1840; 2916 1839 1553 1829 2019; 2917 1701 1529 1842 2020
2437. 2918 1426 2020 1842 392; 2919 2021 1446 814 1843; 2920 1803 2021 1843 1512
2438. 2921 1285 1286 2021 1803; 2922 2022 1444 713 1748; 2923 1514 1830 2022 1748
2439. 2924 1844 1511 1806 2023; 2925 1444 2023 1806 713; 2926 2024 1773 1510 1846
2440. 292

V. JAGEN, B.E.M.E., (Struct), M.I.E.A.I.V.
CMDA REGN NOS -
SE / GR-1 / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.

2447.	2948	1843	814	1447	2032;	2949	2032	447	1448	1855;	2950	1854	2032	1855	1570
2448.	2951	2033	1462	1834	1856;	2952	1496	1857	2033	1856;	2953	2034	1463	951	1341
2449.	2954	1650	2034	1341	1342;	2955	1496	1856	2034	1650;	2956	1169	1588	2035	1474
2450.	2957	1580	1482	1849	2035;	2958	2035	1849	1581	1753;	2959	1483	1683	2036	1589
2451.	2960	1663	1320	1321	2036;	2961	2036	1321	1235	1851;	2962	1813	386	1423	2037
2452.	2963	2037	1423	1424	1859;	2964	1858	2037	1859	1569;	2965	1624	2038	1385	1386
2453.	2966	1534	1785	2038	1624;	2967	1785	1532	1837	2038;	2968	2039	1425	391	1838
2454.	2969	1782	2039	1838	1532;	2970	1569	1859	2039	1782;	2971	1774	2040	1364	1365
2455.	2972	1516	1841	2040	1774;	2973	1841	1514	1749	2040;	2974	921	1660	2041	1453
2456.	2975	1660	1503	1683	2041;	2976	2041	1683	1578	1860;	2977	1455	2042	1675	928
2457.	2978	1454	1860	2042	1455;	2979	1860	1578	1861	2042;	2980	1405	2043	1484	21
2458.	2981	1406	1862	2043	1405;	2982	1862	1548	1649	2043;	2983	1507	1644	2044	1864
2459.	2984	1644	1506	1863	2044;	2985	2044	1863	1567	1669;	2986	1777	2045	1350	1351
2460.	2987	1504	1671	2045	1777;	2988	1671	1502	1778	2045;	2989	2046	1670	1504	1776
2461.	2990	1750	2046	1776	1505;	2991	1572	1865	2046	1750;	2992	1480	2047	1401	56
2462.	2993	1222	1740	2047	1480;	2994	1740	1583	1665	2047;	2995	1317	1228	1318	2048
2463.	2996	2048	1318	1233	1662;	2997	1739	2048	1662	1484;	2998	1866	2049	1763	1522
2464.	2999	1557	1727	2049	1866;	3000	1727	1576	1732	2049;	3001	2050	1419	284	1621
2465.	3002	1868	2050	1621	1538;	3003	1500	1867	2050	1868;	3004	2051	1722	1381	1382
2466.	3005	1427	2051	1382	309;	3006	392	1842	2051	1427;	3007	2052	1866	1522	1756
2467.	3008	1686	2052	1756	1523;	3009	1573	1869	2052	1686;	3010	2053	1634	1332	1333
2468.	3011	1469	2053	1333	1058;	3012	1141	1798	2053	1469;	3013	1607	1028	1459	2054
2469.	3014	2054	1459	1460	1878;	3015	1766	2054	1870	1577;	3016	2055	1659	1498	1767
2470.	3017	1861	2055	1767	1499;	3018	1578	1684	2055	1861;	3019	1735	2056	1392	1393
2471.	3020	1540	1871	2056	1735;	3021	1071	1538	1599	2056;	3022	1809	707	1441	2057
2472.	3023	2057	1441	1442	1828;	3024	1872	2057	1828	1563;	3025	2058	1433	416	1376
2473.	3026	1718	2058	1376	1377;	3027	1526	1616	2058	1718;	3028	2059	1873	1540	1736
2474.	3029	1613	2059	1736	1541;	3030	1579	1825	2059	1613;	3031	15			

V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-1 / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.

STAAD SPACE

-- PAGE NO. 46

2503. 3116 1460 1888 2088 1461; 3117 1888 1565 1814 2088; 3118 1213 1739 2089 1477
 2504. 3119 1739 1549 1889 2089; 3120 2089 1889 1584 1723; 3121 1268 1269 1831 2090
 2505. 3122 2090 1831 1525 1882; 3123 1681 2090 1882 1527; 3124 493 1600 2091 1429
 2506. 3125 1600 1527 1881 2091; 3126 2091 1881 1573 1607; 3127 2092 1449 819 1726
 2507. 3128 1771 2092 1726 1508; 3129 1570 1855 2092 1771; 3130 270 1604 2093 1417
 2508. 3131 1604 1539 1786 2093; 3132 2093 1786 1568 1821; 3133 1028 1804 2094 1459
 2509. 3134 1804 1497 1653 2094; 3135 2094 1653 1565 1888; 3136 2095 1431 498 1617
 2510. 3137 1886 2095 1617 1526; 3138 1574 1795 2095 1886; 3139 2096 1461 1833 1857
 2511. 3140 1657 2096 1857 1496; 3141 1577 1870 2096 1657; 3142 1885 1519 1878 2097
 2512. 3143 2097 1878 1556 1880; 3144 1764 2097 1880 1575; 3145 1873 2098 1871 1540
 2513. 3146 1560 1832 2098 1873; 3147 1832 1580 1868 2098; 3148 1135 1743 2099 1465
 2514. 3149 1743 1491 1875 2099; 3150 2099 1875 1562 1594; 3151 2100 1455 926 1597
 2515. 3152 1668 2100 1597 1502; 3153 1567 1879 2100 1668; 3154 1546 1629 2101 1741
 2516. 3155 1629 1544 1834 2101; 3156 2101 1834 1582 1664; 3157 1540 1738 2102 1889
 2517. 3158 1738 1547 1646 2102; 3159 2102 1646 1585 1627; 3301 2518 2107 1230 2108
 2518. 3302 2519 2320 2109 2110; 3303 2277 2324 2520 2322; 3304 1261 1262 2327 2521
 2519. 3305 2213 2522 2328 2212; 3306 2311 2333 2523 2330; 3307 2336 2524 2334 2316
 2520. 3308 2248 2525 2337 2247; 3309 2339 2104 2105 2526; 3310 2527 2341 2284 2343
 2521. 3311 1255 1256 2528 2344; 3312 2349 2529 2347 2281; 3313 2351 2530 2139 2140
 2522. 3314 2531 2352 2272 2354; 3315 2356 2532 2153 2154; 3316 2533 2357 2290 2359
 2523. 3317 2360 2230 2229 2534; 3318 2362 2247 2246 2535; 3319 2536 2365 2116 2117
 2524. 3320 2537 2228 2227 2368; 3321 2369 2268 2361 2538; 3322 2539 2371 2128 2129
 2525. 3323 1248 1249 2540 2374; 3324 2377 2200 2199 2541; 3325 2542 2379 2123 2124
 2526. 3326 1313 1314 2543 2381; 3327 2371 2544 2127 2128; 3328 2230 2384 2545 2229
 2527. 3329 2385 2237 2236 2546; 3330 1317 2228 2103 2547; 3331 2548 2370 2135 2136
 2528. 3332 2208 2549 2390 2207; 3333 2200 2391 2350 2199; 3334 1280 1281 2349 2551
 2529. 3335 2552 2389 2137 2138; 3336 1287 1288 2396 2553; 3337 2205 2398 2554 2204
 2530. 3338 2107 2390 2555 2205; 3339 2400 2556 2111 2112; 3340 2401 2251 2400 2557
 2531. 3341 2404 2558 2160 2161; 3342 2407 2559 2405 2280; 3343 2218 2560 2408 2217
 2532. 3344 2387 2235 2234 2561; 3345 2381 2411 2562 2391; 3346 2563 2412 2312 2414
 2533. 3347 2416 2564 2355 2286; 3348 2565 2223 2222 2406; 3349 2417 2202 2201 2566
 2534. 3350 2307 2331 2567 2419; 3351 20 1237 2568 2193; 3352 2220 2423 2569 2219
 2535. 3353 1306 1307 2570 2424; 3354 2242 2427 2571 2241; 3355 2429 2572 2118 2119
 2536. 3356 1301 1302 2431 2573; 3357 2574 2432 2296 2433; 3358 2575 2434 2151 2152
 2537. 3359 2576 2381 2254 2437; 3360 2577 2208 2207 2438; 3361 2189 2578 2188 22
 2538. 3362 2579 2194 92 2181; 3363 2443 2266 2386 2580; 3364 2295 2446 2581 2397
 2539. 3365 2448 2582 2120 2121; 3366 2583 2424 2260 2450; 3367 2451 2316 2413 2584
 2540. 3368 2456 2585 2148 2149; 3369 2405 2220 2219 2586; 3370 1299 1300 2587 2457
 2541. 3371 2588 2218 2217 2415; 3372 2589 2458 2156 2157; 3373 2590 2461 2260 2369
 2542. 3374 1250 1251 2591 2376; 3375 2592 2463 2311 2464; 3376 2466 2593 2167 2168
 2543. 3377 2368 2227 2226 2594; 3378 2326 2297 2468 2595; 3379 2469 2292 2404 2596
 2544. 3380 2439 2597 2186 2187; 3381 1254 1255 2344 2598; 3382 2203 2599 2473 2202
 2545. 3383 2136 2600 2380 2235; 3384 2259 2475 2601 2379; 3385 1318 1311 2436 2602
 2546. 3386 1308 1309 2476 2603; 3387 2604 2457 2266 2443; 3388 2479 2286 2356 2605
 2547. 3389 2606 2456 2149 2150; 3390 1292 1293 2607 2352; 3391 2233 2608 2482 2232
 2548. 3392 1283 1284 2609 2348; 3393 2329 2610 2485 2293; 3394 2470 2611 2185 57
 2549. 3395 2201 2612 2392 2200; 3396 1243 1244 2613 2488; 3397 2194 2614 2180 92
 2550. 3398 2491 2274 2351 2615; 3399 2212 2328 2616 2211; 3400 2483 2617 2494 2269
 2551. 3401 2393 2281 2495 2618; 3402 2431 2619 2496 2263; 3403 2620 2482 2114 2115
 2552. 3404 1239 55 2336 2621; 3405 2612 2460 2158 2159; 3406 2498 2304 2378 2623
 2553. 3407 2396 2624 2499 2275; 3408 2463 2625 2333 2311; 3409 2217 2488 2626 2216
 2554. 3410 2581 2627 2479 2288; 3411 2438 2207 2206 2628; 3412 2503 2629 2455 2282
 2555. 3413 2247 2337 2630 2246; 3414 1264 1265 2631 2432; 3415 2481 2232 2231 2632
 2556. 3416 2494 2267 2444 2633; 3417 2480 2634 2506 2287; 3418 2191 2635 2440 2190
 2557. 3419 2636 2587 2276 2324; 3420 2197 2464 2637 2196; 3421 2279 2484 2638 2587
 2558. 3422 2639 2583 2282 2480; 3423 2640 2211 2210 2403; 3424 2509 2298 2466 2641

V. JAGEN, B.E.M.E., (Struct), M.I.E.A.I.V.,
CMDA REGN NOS.

SE / GR-1 / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER

3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD

SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841265154

STAAD SPACE

-- PAGE NO. 47

2559. 3425 2293 2485 2642 2493; 3426 2425 2242 2241 2643; 3427 2227 2395 2644 2226
 2560. 3428 2512 2317 2514 2645; 3429 2487 2646 2411 2381; 3430 2511 2647 2388 2271
 2561. 3431 2648 2582 2298 2589; 3432 2426 2649 2497 2253; 3433 2650 2418 2384 2498
 2562. 3434 2283 2496 2651 2474; 3435 2261 2450 2652 2517; 3436 2653 2363 2251 2401
 2563. 3437 2232 2482 2654 2231; 3438 2486 2655 2183 2184; 3439 2297 2433 2656 2468
 2564. 3440 2489 2197 2196 2657; 3441 2335 2658 2512 2318; 3442 2320 2518 2188 2189
 2565. 3443 2249 2319 2518 2320; 3444 2319 2186 2187 2518; 3445 2244 2519 2110 1155
 2566. 3446 2245 2321 2519 2244; 3447 2321 2249 2320 2519; 3448 2324 2276 2323 2520
 2567. 3449 2520 2323 2142 2143; 3450 2322 2520 2143 2144; 3451 2521 2327 2297 2326
 2568. 3452 2325 2521 2326 2299; 3453 1260 1261 2521 2325; 3454 415 1266 2522 2213
 2569. 3455 1266 1267 2329 2522; 3456 2522 2329 2293 2328; 3457 2333 2309 2332 2523
 2570. 3458 2523 2332 2306 2331; 3459 2330 2523 2331 2307; 3460 55 1248 2524 2336
 2571. 3461 1240 1241 2335 2524; 3462 2524 2335 2318 2334; 3463 1153 1315 2525 2248
 2572. 3464 1315 1316 2338 2525; 3465 2525 2338 2250 2337; 3466 2526 2185 2186 2319
 2573. 3467 2340 2526 2319 2249; 3468 2250 2339 2526 2340; 3469 2342 2527 2343 2285
 2574. 3470 1276 1277 2527 2342; 3471 1277 1278 2341 2527; 3472 1256 1257 2346 2528
 2575. 3473 2528 2346 2302 2345; 3474 2344 2528 2345 2303; 3475 1281 1282 2529 2349
 2576. 3476 1282 1283 2348 2529; 3477 2529 2348 2279 2347; 3478 2274 2350 2530 2351
 2577. 3479 2350 2225 2224 2530; 3480 2530 2224 738 2139; 3481 2353 2531 2354 2273
 2578. 3482 1290 1291 2531 2353; 3483 1291 1292 2352 2531; 3484 2286 2355 2532 2356
 2579. 3485 2355 2215 2214 2532; 3486 2532 2214 524 2153; 3487 2358 2533 2359 2291
 2580. 3488 1269 1270 2533 2358; 3489 1270 1271 2357 2533; 3490 2534 2229 845 2132
 2581. 3491 2361 2534 2132 2133; 3492 2268 2360 2534 2361; 3493 2535 2246 2245 2364
 2582. 3494 2363 2535 2364 2251; 3495 2254 2362 2535 2363; 3496 2239 2536 2117 1059
 2583. 3497 2240 2366 2536 2239; 3498 2366 2253 2365 2536; 3499 2367 2537 2368 2278
 2584. 3500 1285 1286 2537 2367; 3501 1286 736 2228 2537; 3502 2538 2361 2133 2134
 2585. 3503 2178 2538 2134 2135; 3504 2270 1369 2538 2170; 3505 2373 2539 2139 2130
 2586. 3506 2265 2372 2539 2373; 3507 2372 2264 2371 2539; 3508 1249 1250 2376 2540
 2587. 3509 2540 2376 2380 2375; 3510 2374 2540 2375 2389; 3511 2541 2199 127 2174
 2588. 3512 2178 2541 2174 2175; 3513 2384 2377 2541 2378; 3514 2234 2542 2124 952
 2589. 3515 2335 2380 2542 2234; 3516 2380 2259 2379 2542; 3517 1314 1153 2248 2543
 2590. 3518 2543 2248 2247 2362; 3519 2381 2543 2362 2254; 3520 2264 2383 2544 2371
 2591. 3521 2383 2262 2382 2544; 3522 2544 2382 2126 2127; 3523 2384 2265 2373 2545
 2592. 3524 2545 2373 2130 2131; 3525 2229 2545 2131 845; 3526 2546 2236 2235 2387
 2593. 3527 2386 2546 2387 2262; 3528 2266 2385 2546 2386; 3529 2547 2183 2184 2339
 2594. 3530 2338 2547 2339 2250; 3531 1316 1317 2547 2338; 3532 2389 2548 2136 2137
 2595. 3533 2271 2388 2548 2389; 3534 2388 2270 2370 2548; 3535 308 1259 2549 2280
 2596. 3536 1259 1260 2325 2549; 3537 2549 2325 2299 2390; 3538 2392 2381 2391 2550
 2597. 3539 2550 2391 2172 2173; 3540 2199 2550 2173 127; 3541 2551 2349 2281 2393
 2598. 3542 2223 2551 2393 2222; 3543 629 1280 2551 2223; 3544 2224 2552 2138 738
 2599. 3545 2225 2394 2552 2224; 3546 2394 2271 2389 2552; 3547 2553 2396 2275 2395
 2600. 3548 2228 2553 2395 2227; 3549 736 1287 2553 2228; 3550 2398 1295 2397 2554
 2601. 3551 2554 2397 2165 2166; 3552 2204 2554 2166 310; 3553 2398 2299 2399 2555
 2602. 3554 2555 2399 2295 2398; 3555 2206 2555 2398 2205; 3556 2251 2364 2556 2400
 2603. 3557 2364 2245 2244 2556; 3558 2556 2244 1155 2111; 3559 2557 2400 2112 2113
 2604. 3560 2402 2557 2113 2114; 3561 2252 2401 2557 2402; 3562 2292 2403 2558 2404
 2605. 3563 2403 2210 2209 2558; 3564 2558 2209 417 2160; 3565 2284 2406 2559 2407
 2606. 3566 2406 2222 2221 2559; 3567 2559 2221 2220 2405; 3568 522 1273 2560 2218
 2607. 3569 1273 1274 2409 2560; 3570 2560 2409 2287 2408; 3571 2561 2234 952 2125
 2608. 3572 2382 2561 2125 2126; 3573 2262 2387 2561 2382; 3574 2411 2380 2410 2562
 2609. 3575 2562 2410 2170 2171; 3576 2391 2562 2171 2172; 3577 2413 2563 2414 2313
 2610. 3578 2316 2334 2563 2413; 3579 2334 2318 2412 2563; 3580 2290 2415 2564 2416
 2611. 3581 2415 2217 2216 2564; 3582 2564 2216 2215 2355; 3583 2341 2565 2406 2284
 2612. 3584 1278 1279 2565 2341; 3585 1279 629 2223 2565; 3586 2566 2201 2200 2377
 2613. 3587 2418 2566 2377 2304; 3588 2308 2417 2566 2418; 3589 2331 2386 2420 2567
 2614. 3590 2567 2420 2177 2178; 3591 2419 2567 2178 2179; 3592 1237 1238 2422 2568

V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841289184

STAAD SPACE

-- PAGE NO. 48

2615. 3593 2568 2422 2315 2421; 3594 2193 2568 2421 2192; 3595 2423 2277 2322 2569
 2616. 3596 2569 2322 2144 2145; 3597 2219 2569 2145 631; 3598 1307 1057 2243 2570
 2617. 3599 2570 2243 2242 2425; 3600 2424 2570 2425 2260; 3601 2427 2257 2426 2571
 2618. 3602 2571 2426 2253 2366; 3603 2241 2571 2366 2240; 3604 2256 2428 2572 2429
 2619. 3605 2428 2240 2239 2572; 3606 2572 2239 1059 2118; 3607 2573 2431 2263 2430
 2620. 3608 2238 2573 2430 2237; 3609 950 1301 2573 2238; 3610 2327 2574 2433 2297
 2621. 3611 1262 1263 2574 2327; 3612 1263 1264 2432 2574; 3613 2214 2575 2152 524
 2622. 3614 2215 2435 2575 2214; 3615 2435 2283 2434 2575; 3616 2436 2576 2437 2255
 2623. 3617 1311 1312 2576 2436; 3618 1312 1313 2381 2576; 3619 2346 2577 2438 2382
 2624. 3620 1257 1258 2577 2346; 3621 1258 308 2288 2577; 3622 2190 2440 2578 2189
 2625. 3623 2440 2314 2439 2578; 3624 2578 2439 2187 2188; 3625 2442 2579 2181 2182
 2626. 3626 2310 2441 2579 2442; 3627 2441 2195 2194 2579; 3628 2580 2386 2262 2383
 2627. 3629 2444 2580 2383 2264; 3630 2267 2443 2580 2444; 3631 2446 2294 2445 2581
 2628. 3632 2581 2445 2163 2164; 3633 2397 2581 2164 2165; 3634 2258 2447 2582 2448
 2629. 3635 2447 2256 2429 2582; 3636 2582 2429 2119 2120; 3637 2449 2583 2450 2261
 2630. 3638 1304 1305 2583 2449; 3639 1305 1306 2424 2583; 3640 2584 2413 2313 2453
 2631. 3641 2452 2584 2453 2314; 3642 2315 2451 2584 2452; 3643 2282 2455 2585 2456
 2632. 3644 2455 2280 2454 2585; 3645 2585 2454 2147 2148; 3646 2586 2219 631 2146
 2633. 3647 2454 2586 2146 2147; 3648 2280 2405 2586 2454; 3649 1300 950 2238 2587
 2634. 3650 2587 2238 2237 2385; 3651 2457 2587 2385 2266; 3652 2357 2588 2415 2290
 2635. 3653 1271 1272 2588 2357; 3654 1272 522 2218 2588; 3655 2460 2589 2157 2158
 2636. 3656 2289 2459 2589 2460; 3657 2459 2288 2458 2589; 3658 2462 2590 2369 2270
 2637. 3659 2273 2354 2590 2462; 3660 2354 2272 2461 2590; 3661 1251 125 2283 2591
 2638. 3662 2191 2283 2282 2417; 3663 2376 2591 2417 2308; 3664 2198 2592 2464 2197
 2639. 3665 90 1245 2592 2198; 3666 1245 1246 2463 2592; 3667 2298 2465 2593 2466
 2640. 3668 2465 2285 2284 2593; 3669 2593 2284 310 2167; 3670 2594 2226 2225 2350
 2641. 3671 2467 2594 2350 2274; 3672 2278 1368 2594 2467; 3673 2595 2468 2294 2446
 2642. 3674 2399 2595 2446 2295; 3675 2299 2326 2595 2399; 3676 2596 2404 2161 2162
 2643. 3677 2445 2596 2162 2163; 3678 2294 2469 2596 2445; 3679 2314 2453 2597 2439
 2644. 3680 2453 2313 2470 2597; 3681 2597 2470 57 2186; 3682 2598 2344 2303 2472
 2645. 3683 2471 2598 2472 2305; 3684 1253 1254 2598 2471; 3685 125 1252 2599 2203
 2646. 3686 1252 1253 2471 2599; 3687 2599 2471 2305 2473; 3688 2237 2430 2600 2236
 2647. 3689 2430 2263 2474 2600; 3690 2600 2474 2259 2380; 3691 2475 2258 2448 2601
 2648. 3692 2601 2448 2121 2122; 3693 2379 2601 2122 2123; 3694 2602 2436 2255 2477
 2649. 3695 2476 2602 2477 2257; 3696 1309 1310 2602 2476; 3697 2603 2476 2257 2427
 2650. 3698 2243 2603 2427 2242; 3699 1057 1308 2603 2243; 3700 2478 2604 2443 2267
 2651. 3701 1297 1298 2604 2478; 3702 1298 1299 2457 2604; 3703 2605 2356 2154 2155
 2652. 3704 2458 2605 2155 2156; 3705 2208 2479 2605 2458; 3706 2434 2606 2150 2151
 2653. 3707 2283 2480 2606 2434; 3708 2480 2282 2456 2606; 3709 1293 843 2233 2607
 2654. 3710 2607 2233 2232 2481; 3711 2352 2607 2481 2272; 3712 843 1294 2608 2233
 2655. 3713 1294 1295 2483 2608; 3714 2608 2483 2269 2482; 3715 1284 1285 2367 2609
 2656. 3716 2609 2367 2278 2484; 3717 2348 2609 2484 2279; 3718 1267 1268 2610 2329
 2657. 3719 1268 1269 2358 2610; 3720 2610 2358 2291 2485; 3721 2313 2414 2611 2470
 2658. 3722 2414 2312 2486 2611; 3723 2611 2486 2184 2185; 3724 2202 2473 2612 2201
 2659. 3725 2473 2305 2487 2612; 3726 2612 2487 1301 2392; 3727 1244 90 2198 2613
 2660. 3728 2613 2198 2197 2489; 3729 2488 2613 2489 2317; 3730 2195 2490 2614 2194
 2661. 3731 2490 2307 2419 2614; 3732 2614 2419 2179 2180; 3733 2615 2351 2140 2141
 2662. 3734 2323 2615 2141 2142; 3735 2276 2491 2615 2323; 3736 2328 2293 2493 2616
 2663. 3737 2616 2493 2280 2492; 3738 2211 2616 2492 2210; 3739 1295 1296 2617 2483
 2664. 3740 1296 1297 2478 2617; 3741 2617 2478 2267 2494; 3742 2618 2495 2277 2423
 2665. 3743 2121 2618 2423 2220; 3744 2222 2393 2618 2221; 3745 1302 1303 2619 2431
 2666. 3746 1303 1304 2449 2619; 3747 2619 2449 2261 2496; 3748 2365 2620 2115 2116
 2667. 3749 2253 2497 2620 2365; 3750 2497 2252 2402 2620; 3751 2621 2336 2316 2451
 2668. 3752 2422 2621 2451 2315; 3753 1238 1239 2621 2422; 3754 2280 2622 2150 417
 2669. 3755 2210 2492 2622 2209; 3756 2492 2289 2460 2622; 3757 2623 2378 2175 2176
 2670. 3758 2420 2623 2176 2177; 3759 2306 2498 2623 2420; 3760 1288 1289 2624 2396


V. JAGEN, B.E.M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, OA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 49

2671. 3761 1289 1290 2353 2624; 3762 2624 2353 2273 2499; 3763 1246 1247 2625 2463
 2672. 3764 1247 1248 2374 2625; 3765 2625 2374 2389 2333; 3766 2408 2287 2508 2626
 2673. 3767 2626 2508 2283 2435; 3768 2216 2626 2435 2215; 3769 2291 2359 2627 2501
 2674. 3770 2359 2290 2416 2627; 3771 2627 2416 2286 2479; 3772 2628 2206 2205 2465
 2675. 3773 2502 2628 2465 2298; 3774 2382 2438 2628 2502; 3775 2285 2343 2629 2583
 2676. 3776 2343 2284 2407 2629; 3777 2629 2407 2288 2455; 3778 2337 2258 2340 2638
 2677. 3779 2630 2340 2249 2321; 3780 2246 2630 2321 2245; 3781 1265 415 2213 2631
 2678. 3782 2631 2213 2212 2504; 3783 2432 2631 2504 2296; 3784 2632 2231 2230 2360
 2679. 3785 2461 2632 2360 2268; 3786 2272 2481 2632 2461; 3787 2633 2444 2264 2372
 2680. 3788 2505 2633 2372 2265; 3789 2269 2494 2633 2505; 3790 1274 1275 2634 2409
 2681. 3791 1275 1276 2342 2634; 3792 2634 2342 2285 2506; 3793 2192 2421 2635 2191
 2682. 3794 2421 2315 2452 2635; 3795 2635 2452 2314 2440; 3796 2495 2636 2324 2277
 2683. 3797 2181 2347 2636 2495; 3798 2347 2279 2507 2636; 3799 2464 2311 2330 2637
 2684. 3800 2637 2330 2307 2498; 3801 2196 2637 2490 2195; 3802 2484 2278 2467 2638
 2685. 3803 2638 2467 2274 2491; 3804 2507 2638 2491 2276; 3805 2508 2639 2480 2283
 2686. 3806 2187 2506 2639 2508; 3807 2506 1285 2503 2639; 3808 2508 2640 2403 2292
 2687. 3809 2296 2504 2640 2508; 3810 2504 2212 2211 2640; 3811 2641 2466 2168 2169
 2688. 3812 2410 2641 2160 2179; 3813 2300 2509 2641 2410; 3814 2485 2291 2501 2642
 2689. 3815 2642 2501 2288 2459; 3816 2493 2642 2459 2289; 3817 2643 2241 2240 2428
 2690. 3818 2510 2643 2428 2256; 3819 2260 2425 2643 2510; 3820 2395 2275 2511 2644
 2691. 3821 2644 2511 2271 2394; 3822 2226 2644 2394 2225; 3823 2645 2514 2310 2513
 2692. 3824 2412 2645 2513 2312; 3825 2318 2511 2645 2412; 3826 2305 2472 2646 2487
 2693. 3827 2472 2383 2515 2646; 3828 2646 2515 2308 2411; 3829 2375 2499 2647 2511
 2694. 3830 2499 2273 2462 2647; 3831 2647 2462 2270 2388; 3832 2515 2648 2509 2380
 2695. 3833 2383 2345 2648 2515; 3834 2345 2382 2502 2648; 3835 2257 2477 2649 2426
 2696. 3836 2477 2255 2516 2649; 3837 2649 2516 2252 2497; 3838 2332 2650 2498 2386
 2697. 3839 2389 2375 2650 2332; 3840 2375 2388 2418 2650; 3841 2496 2261 2517 2651
 2698. 3842 2651 2517 2258 2475; 3843 2474 2651 2475 2259; 3844 2450 2260 2510 2652
 2699. 3845 2652 2510 2256 2447; 3846 2517 2652 2447 2258; 3847 2516 2653 2401 2252
 2700. 3848 2255 2437 2653 2516; 3849 2437 2254 2363 2653; 3850 2482 2269 2505 2654
 2701. 3851 2654 2505 2265 2384; 3852 2231 2654 2384 2230; 3853 2312 2513 2655 2486
 2702. 3854 2513 2310 2442 2655; 3855 2655 2442 2182 2183; 3856 2433 2296 2508 2656
 2703. 3857 2656 2508 2292 2469; 3858 2468 2656 2469 2294; 3859 2657 2196 2195 2441
 2704. 3860 2514 2657 2441 2310; 3861 2317 2489 2657 2514; 3862 1241 1242 2658 2335
 2705. 3863 1242 1243 2488 2658; 3864 2658 2488 2317 2512; 4012 3077 2663 1231 2684
 2706. 4013 3078 2880 2665 2666; 4014 2882 2872 2884 3079; 4015 2145 2144 2886 3080
 2707. 4016 2887 2766 2767 3081; 4017 2890 2771 2772 3082; 4018 2880 3083 2893 2801
 2708. 4019 2895 2660 2661 3084; 4020 57 2185 3085 2885; 4021 2899 2842 2901 3086
 2709. 4022 22 2188 3087 2749; 4023 2863 2906 3088 2984; 4024 2989 3089 2697 2698
 2710. 4025 2133 2132 3090 2910; 4026 2767 3091 2912 2768; 4027 3092 2915 2852 2917
 2711. 4028 2919 3093 2688 2689; 4029 2920 2801 2802 3094; 4030 3095 2923 2672 2673
 2712. 4031 2143 2142 2926 3096; 4032 3097 2780 2781 2928; 4033 2833 2931 3098 2929
 2713. 4034 2788 2933 3099 2789; 4035 2755 3100 2934 2756; 4036 2936 2758 2759 3101
 2714. 4037 3102 2754 93 2737; 4038 3103 2939 2679 2680; 4039 2112 2111 3104 2941
 2715. 4040 2944 3105 2683 2684; 4041 2945 2825 2946 3106; 4042 3107 2944 2684 2685
 2716. 4043 2948 2793 2794 3108; 4044 2108 1230 2659 3109; 4045 2951 3110 2949 2837
 2717. 4046 3111 2910 2834 2952; 4047 2955 3112 2953 2861; 4048 2168 2167 3113 2956
 2718. 4049 2957 2761 2762 3114; 4050 2808 2961 3115 2809; 4051 2782 3116 2962 2783
 2719. 4052 2161 2160 3117 2965; 4053 2760 3118 2966 2761; 4054 2967 3119 2667 2668
 2720. 4055 2968 2813 2967 3120; 4056 2889 2768 2769 3121; 4057 2150 2149 2973 3122
 2721. 4058 2152 2151 2971 3123; 4059 2975 2791 2792 3124; 4060 2758 2977 3125 2759
 2722. 4061 2768 2912 3126 2769; 4062 2147 2146 3127 2979; 4063 3128 2981 2870 2983
 2723. 4064 3129 2757 2758 2936; 4065 3130 2885 2886 2986; 4066 2987 1207 2810 3131
 2724. 4067 2770 2990 3132 2779; 4068 1119 1118 3133 2991; 4069 2117 2116 2994 3134
 2725. 4070 2996 3135 2995 2875; 4071 2178 2177 2982 3136; 4072 3137 2999 2814 3082
 2726. 4073 3004 3138 2674 2675; 4074 2122 2121 3007 3139; 4075 2851 3009 3140 2978

V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GALURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.

STAND SPACE

-- PAGE NO. 58

2727.	4076	2163	2162	3141	2954;	4077	2773	3012	3142	2774;	4078	2114	2113	3143	3013
2728.	4079	3015	3144	2723	2724;	4080	3016	2808	2809	3145;	4081	3018	3146	2943	2826
2729.	4082	3020	3147	2718	2719;	4083	3021	2818	3004	3148;	4084	2746	3023	3149	2745
2730.	4085	2845	3024	3150	3011;	4086	2126	2125	3153	3048;	4087	2892	2773	2774	3152
2731.	4088	2154	2153	3153	2915;	4089	2157	2156	2916	3154;	4090	2783	2962	3155	2784
2732.	4091	2130	2137	2951	3156;	4092	3029	2864	2958	3157;	4093	3032	2778	2779	3158
2733.	4094	3159	3033	2721	2722;	4095	3035	2783	2784	3160;	4096	2885	2843	3036	3161
2734.	4097	3037	3162	3016	2876;	4098	2180	2179	2997	3163;	4099	3164	2755	2756	2984
2735.	4100	3165	3022	2677	2678;	4101	2115	2114	3013	3166;	4102	3167	3025	2828	3017
2736.	4103	2785	3168	3041	2786;	4104	2142	2141	3169	2926;	4105	3045	3170	3024	284
2737.	4106	2806	2897	3171	2807;	4107	2121	2120	3172	3007;	4108	2935	3173	3048	286
2738.	4109	2875	2995	3174	3050;	4110	3175	3051	2735	2736;	4111	3055	3176	3053	2869
2739.	4112	3057	3177	2732	2733;	4113	2159	2158	3027	3178;	4114	2184	2183	3179	2898
2740.	4115	3031	2860	3015	3180;	4116	3059	2848	3026	3181;	4117	2790	3182	2945	2791
2741.	4118	3060	2830	2919	3183;	4119	3184	2956	2864	3029;	4120	3042	3185	3061	2831
2742.	4121	3046	3186	2832	2874;	4122	3187	2969	2670	2671;	4123	3188	3062	2856	3064
2743.	4124	2839	3065	3189	2989;	4125	3066	3190	3003	2818;	4126	2960	2874	2894	3191
2744.	4127	3067	3192	3035	2836;	4128	2913	3193	3009	2851;	4129	2149	2148	3194	2973
2745.	4130	2801	2893	3195	2882;	4131	2748	2902	3196	2747;	4132	3197	2787	2788	2918
2746.	4133	3198	3020	2719	2720;	4134	3199	2891	2848	3059;	4135	2787	3200	2933	2788
2747.	4136	2980	2776	2777	3201;	4137	2952	2834	3070	3202;	4138	2837	2949	3203	2963
2748.	4139	2869	3053	3204	3051;	4140	2825	3006	3205	2946;	4141	2751	3038	3206	2752
2749.	4142	2762	3207	3034	2763;	4143	2757	3208	2977	2758;	4144	2797	3209	2924	2798
2750.	4145	3210	3030	2862	2906;	4146	2983	2870	2985	3211;	4147	3062	3212	3019	2856
2751.	4148	3213	3018	2826	2947;	4149	3214	2921	2813	2968;	4150	2843	2925	3215	3036
2752.	4151	2847	3069	3216	3044;	4152	2823	3047	3217	3074;	4153	2771	2974	3218	2772
2753.	4154	2841	3043	3219	3076;	4155	2880	3077	2664	2665;	4156	2811	2879	3077	2880
2754.	4157	2879	2662	2663	3077;	4158	2884	3078	2666	1156;					

V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-I / 2018/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 118

STAAD SPACE

-- PAGE NO. 51

2783. 4244 2791 2945 3105 2792; 4245 2932 3107 2685 2686; 4246 3027 2947 3107 2932
 2784. 4247 2947 2826 2944 3107; 4248 3108 2794 953 2681; 4249 2942 3108 2681 2682
 2785. 4250 2824 2948 3108 2942; 4251 3109 2659 2660 2895; 4252 2894 3109 2895 2812
 2786. 4253 2109 2108 3109 2894; 4254 2137 2136 3110 2951; 4255 2136 2135 2950 3110
 2787. 4256 3118 2950 2835 2949; 4257 2950 3111 2952 2835; 4258 2135 2134 3111 2950
 2788. 4259 2134 2133 2910 3111; 4260 2165 2164 3112 2955; 4261 2164 2163 2954 3112
 2789. 4262 3112 2954 2859 2953; 4263 2167 310 2760 3113; 4264 3113 2760 2761 2957
 2790. 4265 2956 3113 2957 2864; 4266 3114 2762 2763 2959; 4267 2958 3114 2959 2860
 2791. 4268 2864 2957 3114 2958; 4269 2961 2874 2960 3115; 4270 2889 3115 2960 1267
 2792. 4271 2781 2964 3116 2782; 4272 2964 2837 2963 3116; 4273 3116 2963 2833 2962
 2793. 4274 2160 417 2765 3117; 4275 3117 2765 2766 2887; 4276 2965 3117 2887 2858
 2794. 4277 310 2166 3118 2768; 4278 2166 2165 2955 3118; 4279 3118 2955 2861 2966
 2795. 4280 2813 2922 3119 2967; 4281 2922 2803 2804 3119; 4282 3119 2804 1156 2667
 2796. 4283 3120 2967 2668 2669; 4284 2969 3120 2669 2670; 4285 2814 2968 3120 2969
 2797. 4286 3121 2769 418 2716; 4287 2970 3121 2716 2717; 4288 2854 2889 3121 2970
 2798. 4289 3122 2973 2847 2972; 4290 2971 3122 2972 2849; 4291 2151 2150 3122 2971
 2799. 4292 3123 2971 2849 2974; 4293 2770 3123 2974 2771; 4294 524 2152 3123 2770
 2800. 4295 3124 2792 2793 2948; 4296 2976 3124 2948 2824; 4297 2828 2975 3124 2976
 2801. 4298 2977 2863 2984 3125; 4299 3125 2984 2728 2729; 4300 2759 3125 2729 128
 2802. 4301 2912 2851 2978 3126; 4302 3126 2978 2714 2715; 4303 2769 3126 2715 418
 2803. 4304 2146 631 2775 3127; 4305 3127 2775 2776 2980; 4306 2979 3127 2980 2846
 2804. 4307 2982 3128 2983 2871; 4308 2177 2176 3128 2982; 4309 2176 2175 2981 3128
 2805. 4310 2985 3129 2936 2866; 4311 2870 2984 3129 2985; 4312 2984 2756 2757 3129
 2806. 4313 2903 3130 2986 2878; 4314 2187 2186 3130 2903; 4315 2186 57 2805 3130
 2807. 4316 3131 2810 58 2742; 4317 2988 3131 2742 2743; 4318 2876 2987 3131 2988
 2808. 4319 2990 2839 2989 3132; 4320 3132 2989 2700 2701; 4321 2779 3132 2701 632
 2809. 4322 2110 1059 2795 3133; 4323 3133 2795 2796 2992; 4324 2991 3133 2992 2822
 2810. 4325 3134 2994 2819 2993; 4326 2795 3134 2993 2796; 4327 1850 2117 3134 2795
 2811. 4328 2182 2181 3135 2996; 4329 2181 92 2750 3135; 4330 3135 2750 2751 2995
 2812. 4331 3136 2982 2871 2998; 4332 2997 3136 2998 2873; 4333 2179 2178 3136 2997
 2813. 4334 3001 3137 3002 2815; 4335 2819 3000 3137 3001; 4336 3000 2817 2999 3137
 2814. 4337 2818 3003 3138 3004; 4338 3003 2798 2799 3138; 4339 3138 2799 1060 2674
 2815. 4340 3139 3007 2823 3005; 4341 3005 3139 3006 2825; 4342 2123 2122 3139 3005
 2816. 4343 3009 2850 3008 3140; 4344 3140 3008 2712 2713; 4345 2978 3140 2713 2714
 2817. 4346 2162 2161 2965 3141; 4347 3141 2965 2858 3010; 4348 2954 3141 3010 2859
 2818. 4349 3012 2845 3011 3142; 4350 3142 3011 2707 2708; 4351 2774 3142 2708 525
 2819. 4352 2113 2112 2941 3143; 4353 3143 2941 2816 3014; 4354 3013 3143 3014 2817
 2820. 4355 2860 2959 3144 3015; 4356 2959 2763 2764 3144; 4357 3144 2764 311 2723
 2821. 4358 3145 2809 1207 2987; 4359 2876 3016 3145 2987; 4360 2829 3017 3146 3018
 2822. 4361 3017 2828 2976 3146; 4362 3146 2976 2824 2943; 4363 2856 3019 3147 3020
 2823. 4364 3019 2854 2970 3147; 4365 3147 2970 2717 2718; 4366 3148 3004 2675 2676
 2824. 4367 3022 3148 2676 2677; 4368 2820 3021 3148 3022; 4369 3023 2876 2988 3149
 2825. 4370 3149 2988 2743 2744; 4371 2745 3149 2744 23; 4372 3024 2844 2900 3150
 2826. 4373 3150 2900 2705 2706; 4374 3011 3150 2706 2707; 4375 2125 952 2790 3151
 2827. 4376 3151 2790 2791 2975; 4377 3025 3151 2975 2828; 4378 3152 2774 525 2709
 2828. 4379 3026 3152 2709 2710; 4380 2848 2892 3152 3026; 4381 2153 524 2770 3153
 2829. 4382 3153 2770 2771 2890; 4383 2915 3153 2890 2852; 4384 3154 2916 2853 3028
 2830. 4385 3027 3154 3028 2855; 4386 2158 2157 3154 3027; 4387 2962 2833 2929 3155
 2831. 4388 3155 2929 2693 2694; 4389 2784 3155 2694 739; 4390 3156 2951 2837 2964
 2832. 4391 2780 3156 2964 2781; 4392 738 2138 3156 2780; 4393 3157 2958 2860 3031
 2833. 4394 3030 3157 3031 2862; 4395 2865 3029 3157 3030; 4396 3158 2779 632 2702
 2834. 4397 2901 3158 2702 2703; 4398 2842 3032 3158 2901; 4399 2764 3159 2722 311
 2835. 4400 2763 3034 3159 2764; 4401 3034 2857 3033 3159; 4402 3160 2784 739 2695
 2836. 4403 2907 3160 2695 2696; 4404 2836 3035 3160 2907; 4405 3161 3036 2839 2990
 2837. 4406 2777 3161 2990 2778; 4407 2776 2885 3161 2777; 4408 2878 2986 3162 3037
 2838. 4409 2986 2806 2807 3162; 4410 3162 2807 2808 3016; 4411 3163 2997 2873 3038

V. JAGEN, B.E./M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS.
 SE / GR-I / 2010/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 52

2839. 4412 2750 3163 3038 2751; 4413 92 2180 3163 2750; 4414 2981 3164 2984 2870
 2840. 4415 2175 2174 3164 2981; 4416 2174 127 2755 3164; 4417 2939 3165 2678 2679
 2841. 4418 2821 3039 3165 2939; 4419 3039 2820 3022 3165; 4420 3166 3013 2817 3000
 2842. 4421 2994 3166 3000 2819; 4422 2116 2115 3166 2994; 4423 3040 3167 3017 2829
 2843. 4424 2128 2127 3167 3040; 4425 2127 2126 3025 3167; 4426 845 2131 3168 2785
 2844. 4427 2131 2130 3042 3168; 4428 3168 3042 2831 3041; 4429 2141 2140 2927 3169
 2845. 4430 3169 2927 2840 3043; 4431 2926 3169 3043 2841; 4432 2849 2972 3170 3045
 2846. 4433 2972 2847 3044 3170; 4434 3170 3044 2844 3024; 4435 2897 2877 3046 3171
 2847. 4436 3171 3046 2874 2961; 4437 2807 3171 2961 2808; 4438 2120 2119 2991 3172
 2848. 4439 3172 2991 2822 3047; 4440 3007 3172 3047 2823; 4441 2172 2171 3173 2925
 2849. 4442 2171 2170 3049 3173; 4443 3173 3049 2865 3048; 4444 2995 2751 2752 3174
 2850. 4445 3174 2752 2753 2938; 4446 3050 3174 2938 2872; 4447 2754 3175 2736 93
 2851. 4448 2753 3052 3175 2754; 4449 3052 2869 3051 3175; 4450 2873 2998 3176 3055
 2852. 4451 2998 2871 3054 3176; 4452 3176 3054 2868 3053; 4453 2868 3056 3177 3057
 2853. 4454 3056 2866 2937 3177; 4455 3177 2937 2731 2732; 4456 3178 3027 2855 2914
 2854. 4457 2765 3178 2914 2766; 4458 417 2159 3178 2765; 4459 2183 2182 2996 3179
 2855. 4460 3179 2996 2875 3058; 4461 2898 3179 3058 2877; 4462 3180 3015 2724 2725
 2856. 4463 2905 3180 2725 2726; 4464 2862 3031 3180 2905; 4465 3181 3026 2710 2711
 2857. 4466 3008 3181 2711 2712; 4467 2850 3059 3181 3008; 4468 952 2124 3182 2790
 2858. 4469 2124 2123 3005 3182; 4470 3182 3005 2825 2945; 4471 3183 2919 2689 2690
 2859. 4472 2930 3183 2690 2691; 4473 2832 3060 3183 2930; 4474 3049 3184 3029 2865
 2860. 4475 2170 2169 3184 3049; 4476 2169 2168 2956 3184; 4477 2130 2129 3185 3042
 2861. 4478 2129 2128 3040 3185; 4479 3185 3040 2829 3061; 4480 2877 3058 3186 3046
 2862. 4481 3058 2875 3050 3186; 4482 3186 3050 2872 2882; 4483 2923 3187 2671 2672
 2863. 4484 2815 3082 3187 2923; 4485 3082 2814 2969 3187; 4486 3063 3188 3064 2857
 2864. 4487 2861 2953 3188 3063; 4488 2953 2859 3062 3188; 4489 3065 2838 2909 3189
 2865. 4490 3180 2909 2698 2699; 4491 2989 3189 2699 2700; 4492 2822 2992 3190 3066
 2866. 4493 2992 2796 2797 3190; 4494 3190 2797 2798 3003; 4495 3191 2803 2740 2741
 2867. 4496 2810 3191 2741 58; 4497 1207 2960 3191 2810; 4498 2840 2928 3192 3067
 2868. 4499 2928 2781 2782 3192; 4500 3192 2782 2783 3035; 4501 2855 3028 3193 2913
 2869. 4502 3028 2853 3068 3193; 4503 3193 3068 2850 3009; 4504 2148 2147 2979 3194
 2870. 4505 3194 2979 2846 3069; 4506 2973 3194 3069 2847; 4507 2893 2812 2896 3195
 2871. 4508 3195 2896 2811 2881; 4509 2882 3195 2881 2803; 4510 2902 2878 3037 3196
 2872. 4511 3196 3037 2876 3023; 4512 2747 3196 3023 2746; 4513 3070 3197 2918 2830
 2873. 4514 2834 2911 3197 3070; 4515 2911 2786 2787 3197; 4516 3033 3198 2720 2721
 2874. 4517 2857 3064 3198 3033; 4518 3064 2856 3020 3198; 4519 3068 3199 3059 2850
 2875. 4520 2853 2917 3199 3068; 4521 2917 2852 2891 3199; 4522 2786 3041 3200 2787
 2876. 4523 3041 2831 3071 3200; 4524 3200 3071 2827 2933; 4525 3201 2777 2778 3032
 2877. 4526 3072 3201 3032 2842; 4527 2846 2980 3201 3072; 4528 3202 3070 2830 3060
 2878. 4529 3073 3202 3060 2832; 4530 2835 2952 3202 3073; 4531 2949 2835 3073 5203
 2879. 4532 3203 3073 2832 2931; 4533 2963 3203 2931 2833; 4534 3053 2868 3057 3204
 2880. 4535 3204 3057 2733 2734; 4536 3051 3204 2734 2735; 4537 3006 2823 3074 3205
 2881. 4538 3205 3074 2820 3039; 4539 2946 3205 3039 2821; 4540 3038 2873 3055 3206
 2882. 4541 3206 3055 2869 3052; 4542 2752 3206 3052 2753; 4543 2761 2966 3207 2762
 2883. 4544 2966 2861 3063 3207; 4545 3207 3063 2857 3034; 4546 2756 2934 3208 2757
 2884. 4547 2934 2867 3075 3208; 4548 3208 3075 2863 2977; 4549 2796 2993 3209 2797
 2885. 4550 2993 2819 3001 3209; 4551 3209 3001 2815 2924; 4552 3075 3210 2906 2863
 2886. 4553 2867 3048 3210 3075; 4554 3048 2865 3030 3210; 4555 3211 2985 2866 3056
 2887. 4556 3054 3211 3056 2868; 4557 2871 2983 3211 3054; 4558 2859 3010 3212 3062
 2888. 4559 3010 2858 2888 3212; 4560 3212 2888 2854 3019; 4561 3071 3213 2947 2827
 2889. 4562 2831 3061 3213 3071; 4563 3061 2829 3018 3213; 4564 2999 3214 2968 2814
 2890. 4565 2817 3014 3214 2999; 4566 3014 2816 2921 3214; 4567 2925 2841 3076 3215
 2891. 4568 3215 3076 2838 3065; 4569 3036 3215 3065 2839; 4570 3069 2846 3072 3216
 2892. 4571 3216 3072 2842 2899; 4572 3044 3216 2809 2844; 4573 3047 2822 3066 3217
 2893. 4574 3217 3066 2818 3021; 4575 3074 3217 3021 2820; 4576 2974 2849 3045 3218
 2894. 4577 3218 3045 2845 3012; 4578 2772 3218 3012 2773; 4579 3043 2840 3067 3219

V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -

SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.

Mobile: 9841288154

STAAD SPACE

-- PAGE NO. 53

2895. 4580 3219 3067 2836 2908; 4581 3076 3219 2908 2838; 4796 14 3220 3703 3390
 2896. 4797 3509 1232 3304 3704; 4798 3422 3705 3328 838; 4799 3439 3514 3706 3513
 2897. 4800 3518 3707 3515 3504; 4801 3708 3510 3306 3307; 4802 3709 3422 838 3329
 2898. 4803 3710 3415 3416 3523; 4804 3465 3526 3711 3524; 4805 3712 3406 410 3357
 2899. 4806 3249 3250 3530 3713; 4807 3714 3438 50 3383; 4808 3535 3715 3368 3369
 2900. 4809 3716 3536 3381 3382; 4810 3261 3262 3717 3538; 4811 3718 3521 3330 3331
 2901. 4812 3151 3252 3543 3719; 4813 3254 3255 3720 3544; 4814 3721 3434 1148 3308
 2902. 4815 3548 3460 3549 3722; 4816 3467 3523 3723 3550; 4817 3415 3724 3552 3416
 2903. 4818 3725 3301 3302 3514; 4819 3298 3299 3554 3726; 4820 3458 3559 3727 3556
 2904. 4821 3399 3728 3560 3400; 4822 3729 3398 120 3371; 4823 3426 3730 3321 945
 2905. 4824 3731 3431 3432 3567; 4825 3445 3569 3732 3568; 4826 3733 3570 3440 3572
 2906. 4827 3575 3734 3573 3447; 4828 3273 3274 3735 3576; 4829 3552 3464 3579 3736
 2907. 4830 3398 3737 3370 120; 4831 3491 3583 3738 3581; 4832 3739 3584 3365 3366
 2908. 4833 49 3223 3740 3435; 4834 3263 3264 3589 3741; 4835 3590 3403 3592 3742
 2909. 4836 3595 3743 3312 3313; 4837 3247 3248 3744 3596; 4838 3485 3597 3745 3598
 2910. 4839 3601 3746 3347 3348; 4840 3407 3747 3602 3408; 4841 3557 3453 3604 3748
 2911. 4842 3494 3607 3749 3605; 4843 3750 3395 3396 3609; 4844 3471 3611 3751 3599
 2912. 4845 3499 3613 3752 3516; 4846 3497 3609 3753 3614; 4847 3754 3615 3501 3616
 2913. 4848 3755 3437 1215 3531; 4849 3618 3466 3619 3756; 4850 3757 3414 624 3343
 2914. 4851 3451 3622 3758 3621; 4852 3623 3452 3624 3759; 4853 3515 3506 3625 3760
 2915. 4854 3430 3761 3314 1052; 4855 3564 3762 3319 3320; 4856 3763 3568 3316 3317
 2916. 4857 3764 3528 3358 3359; 4858 3245 3246 3765 3630; 4859 3410 3766 3340 517
 2917. 4860 3293 3294 3635 3767; 4861 3768 3399 3400 3583; 4862 3561 3769 3637 3488
 2918. 4863 3638 3484 3591 3770; 4864 3639 3446 3640 3771; 4865 3772 3427 3428 3641
 2919. 4866 3387 3616 3773 3386; 4867 3277 3278 3643 3774; 4868 3775 3544 3479 3644
 2920. 4869 3645 3477 3647 3776; 4870 3648 3459 3541 3777; 4871 3778 3563 3372 3373
 2921. 4872 3779 3600 3497 3651; 4873 3259 3260 3780 3653; 4874 3781 3402 303 3364
 2922. 4875 3782 3418 731 3336; 4876 3610 3783 3340 3341; 4877 84 3228 3784 3391
 2923. 4878 3227 84 3391 3785; 4879 3453 3659 3786 3684; 4880 3427 3787 3639 3428
 2924. 4881 3788 3423 3424 3661; 4882 3682 3476 3662 3789; 4883 3275 3276 3790 3578
 2925. 4884 3265 3266 3665 3791; 4885 3666 3467 3550 3792; 4886 3477 3669 3793 3647
 2926. 4887 3794 3410 517 3350; 4888 3437 3795 3537 1215; 4889 3423 3796 3623 3424
 2927. 4890 3672 3443 3675 3797; 4891 3798 3566 3443 3672; 4892 3676 3491 3581 3799
 2928. 4893 3224 3225 3800 3587; 4894 3678 3801 3375 3376; 4895 3679 3496 3678 3802
 2929. 4896 3406 3803 3356 410; 4897 3804 3681 3477 3645; 4898 3805 3547 3309 3310
 2930. 4899 3553 3806 3683 3464; 4900 3685 3807 3540 3459; 4901 3395 3808 3686 3396
 2931. 4902 3681 3809 3669 3477; 4903 3810 3575 3447 3628; 4904 3488 3637 3811 3690
 2932. 4905 3812 3433 1159 3546; 4906 3813 3429 1883 3569; 4907 3221 3222 3814 3508
 2933. 4908 3652 3497 3614 3815; 4909 3816 3692 3495 3677; 4910 3401 3817 3638 334
 2934. 4911 3818 3685 3459 3648; 4912 3691 3819 3629 3483; 4913 3643 3820 3559 3458
 2935. 4914 3280 3281 3821 3695; 4915 3822 3522 3467 3666; 4916 3413 3823 3618 655
 2936. 4917 3612 151 3394 3824; 4918 3825 3425 976 3622; 4919 3286 3287 3571 3826
 2937. 4920 3827 3636 3491 3676; 4921 3828 3700 3471 3600; 4922 3603 3829 3701 3476
 2938. 4923 3830 3413 655 3620; 4924 3831 3667 3465 3655; 4925 3696 3455 3698 3832
 2939. 4926 3833 3421 869 3520; 4927 3421 3834 3512 869; 4928 3405 3835 3680 441
 2940. 4929 3237 3238 3699 3836; 4930 3654 3473 3702 3837; 4931 3446 3634 3838 3640
 2941. 4932 3393 3839 3679 151; 4933 3297 3840 3580 125; 4934 3433 3841 3519 1159
 2942. 4935 3842 3409 548 3670; 4936 3229 3230 3843 3657; 4937 3220 3221 3508 3703
 2943. 4938 3703 3508 3502 3507; 4939 3390 3703 3507 3389; 4940 3704 3304 1225 3305
 2944. 4941 3510 3704 3305 3306; 4942 3505 3509 3704 3510; 4943 869 3512 3705 3422
 2945. 4944 3512 3454 3511 3705; 4945 3705 3511 3327 3328; 4946 3514 3302 3303 3706
 2946. 4947 3706 3303 1232 3509; 4948 3513 3706 3509 3505; 4949 3500 3517 3707 3518
 2947. 4950 3517 3499 3516 3707; 4951 3707 3516 3506 3515; 4952 3434 3708 3307 1148
 2948. 4953 1159 3519 3708 3434; 4954 3519 3505 3510 3708; 4955 3521 3709 3329 3330
 2949. 4956 3457 3520 3709 3521; 4957 3520 869 3422 3709; 4958 3521 3710 3523 3467
 2950. 4959 3268 3269 3710 3522; 4960 3269 730 3415 3710; 4961 3526 3463 3525 3711

V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mob: 9841269154

STAAD SPACE

-- PAGE NO. 54

2951. 4961 3711 3525 3337 3338; 4963 3524 3711 3338 3339; 4964 3528 3712 3357 3358
 2952. 4965 3481 3527 3712 3528; 4966 3527 441 3406 3712; 4967 3713 3530 3482 3529
 2953. 4968 3403 3713 3529 3404; 4969 409 3249 3713 3403; 4970 3532 3714 3383 3384
 2954. 4971 3501 3531 3714 3532; 4972 3531 1215 3438 3714; 4973 3490 3534 3715 3535
 2955. 4974 3534 3489 3533 3715; 4975 3715 3533 3367 3368; 4976 3438 3716 3382 50
 2956. 4977 1215 3537 3716 3438; 4978 3537 3504 3536 3716; 4979 3262 623 3411 3717
 2957. 4980 3717 3411 3412 3539; 4981 3538 3717 3539 3473; 4982 3541 3718 3331 3332
 2958. 4983 3459 3540 3718 3541; 4984 3540 3457 3521 3718; 4985 3719 3543 3480 3542
 2959. 4986 3530 3719 3542 3482; 4987 3250 3251 3719 3530; 4988 3255 516 3407 3720
 2960. 4989 3720 3407 3408 3545; 4990 3544 3720 3545 3479; 4991 3547 3721 3388 3389
 2961. 4992 3440 3546 3721 3547; 4993 3546 1159 3434 3721; 4994 3722 3549 3334 3335
 2962. 4995 3418 3722 3335 731; 4996 762 3548 3722 3418; 4997 3523 3416 3417 3723
 2963. 4998 3723 3417 762 3551; 4999 3550 3723 3551 3463; 5000 730 3270 3724 3415
 2964. 5001 3270 3271 3553 3724; 5002 3724 3553 3464 3552; 5003 3554 3725 3514 3439
 2965. 5004 3299 3300 3725 3554; 5005 3300 1224 3301 3725; 5006 3726 3554 3439 3555
 2966. 5007 3431 3726 3555 3432; 5008 1147 3298 3726 3431; 5009 3559 3456 3558 3727
 2967. 5010 3727 3558 3453 3557; 5011 3556 3727 3557 3454; 5012 302 3242 3728 3399
 2968. 5013 3242 3243 3561 3728; 5014 3728 3561 3480 3560; 5015 3563 3729 3371 3372
 2969. 5016 3493 3562 3729 3563; 5017 3562 225 3398 3729; 5018 976 3565 3730 3426
 2970. 5019 3565 3448 3564 3730; 5020 3730 3564 3320 3321; 5021 3566 3731 3567 3443
 2971. 5022 3296 3297 3731 3566; 5023 3297 1147 3431 3731; 5024 3569 1083 3430 3732
 2972. 5025 3732 3430 1052 3315; 5026 3568 3732 3315 3316; 5027 3571 3733 3572 3450
 2973. 5028 3287 3288 3733 3571; 5029 3288 3289 3570 3733; 5030 3450 3572 3734 3575
 2974. 5031 3572 3449 3574 3734; 5032 3734 3574 3445 3573; 5033 3274 3275 3578 3735
 2975. 5034 3735 3578 3461 3577; 5035 3576 3735 3577 3462; 5036 3736 3579 3460 3548
 2976. 5037 3417 3736 3548 762; 5038 3416 3552 3736 3417; 5039 225 3580 3737 3398
 2977. 5040 3580 3490 3535 3737; 5041 3737 3535 3369 3370; 5042 3583 3480 3401 3738
 2978. 5043 3738 3401 334 3582; 5044 3581 3738 3582 3487; 5045 3533 3739 3366 3367
 2979. 5046 3489 3585 3739 3533; 5047 3585 3487 3584 3739; 5048 3223 3224 3587 3740
 2980. 5049 3740 3587 3588 3586; 5050 3435 3740 3586 3436; 5051 3741 3589 3470 3588
 2981. 5052 3411 3741 3588 3412; 5053 623 3263 3741 3411; 5054 3742 3592 3360 3361
 2982. 5055 3591 3742 3361 3362; 5056 3484 3590 3742 3591; 5057 3442 3594 3743 3595
 2983. 5058 3594 3441 3593 3743; 5059 3743 3593 3311 3312; 5060 3248 409 3403 3744
 2984. 5061 3744 3403 3404 3597; 5062 3596 3744 3597 3485; 5063 3597 3404 3405 3745
 2985. 5064 3745 3405 441 3527; 5065 3598 3745 3527 3481; 5066 3472 3600 3746 3601
 2986. 5067 3600 3471 3599 3746; 5068 3746 3599 3346 3347; 5069 516 3256 3747 3407
 2987. 5070 3256 3257 3603 3747; 5071 3747 3603 3476 3602; 5072 3748 3604 3325 3326
 2988. 5073 3511 3748 3326 3327; 5074 3454 3557 3748 3511; 5075 3607 3492 3606 3749
 2989. 5076 3749 3606 3489 3534; 5077 3605 3749 3534 3490; 5078 3608 3750 3609 3497
 2990. 5079 3233 3234 3750 3608; 5080 1234 119 3395 3750; 5081 3611 3469 3610 3751
 2991. 5082 3751 3610 3344 3345; 5083 3599 3751 3345 3346; 5084 3613 3392 3393 3752
 2992. 5085 3752 3393 151 3612; 5086 3516 3752 3612 3506; 5087 3609 3396 3397 3753
 2993. 5088 3753 3397 225 3562; 5089 3614 3753 3562 3493; 5090 3388 3754 3616 3387
 2994. 5091 3389 3507 3754 3388; 5092 3507 3502 3615 3754; 5093 3615 3755 3531 3501
 2995. 5094 3502 3617 3755 3615; 5095 3617 3436 3437 3755; 5096 3756 3619 3341 3342
 2996. 5097 3414 3756 3342 624; 5098 655 3618 3756 3414; 5099 3610 3757 3343 3344
 2997. 5100 3469 3620 3757 3610; 5101 3620 655 3414 3757; 5102 3622 976 3426 3758
 2998. 5103 3758 3426 945 3322; 5104 3621 3758 3322 3323; 5105 3759 3624 3448 3565
 2999. 5106 3425 3759 3565 976; 5107 3424 3623 3759 3425; 5108 3760 3625 3379 3380
 3000. 5109 3536 3760 3380 3381; 5110 3504 3515 3760 3536; 5111 1083 3626 3761 3430
 3001. 5112 3626 3442 3595 3761; 5113 3761 3595 3313 3314; 5114 3448 3628 3762 3564
 3002. 5115 3628 3447 3627 3762; 5116 3762 3627 3318 3319; 5117 3627 3763 3317 3318
 3003. 5118 3447 3573 3763 3627; 5119 3573 3445 3568 3763; 5120 3592 3764 3359 3360
 3004. 5121 3483 3629 3764 3592; 5122 3629 3481 3528 3764; 5123 3246 3247 3596 3765
 3005. 5124 3765 3596 3485 3631; 5125 3630 3765 3631 3486; 5126 548 3632 3766 3410
 3006. 5127 3632 3472 3601 3766; 5128 3766 3601 3348 3349; 5129 3767 3635 3444 3634

V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
CMDA REGN NOS.

SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAV - 2
BLOCK-2, MODEL SCHOOL ROAD

SHOLINGANALLUR, CHENNAI - 600 110

STAAD SPACE

-- PAGE NO. 55

3007. 5130 3633 3767 3634 3446; 5131 3292 3293 3767 3633; 5132 3636 3768 3583 3491
 3008. 5133 3240 3241 3768 3636; 5134 3241 302 3399 3768; 5135 3243 3244 3769 3561
 3009. 5136 3244 3245 3630 3769; 5137 3769 3630 3486 3637; 5138 3770 3591 3362 3363
 3010. 5139 3402 3770 3363 303; 5140 334 3638 3770 3402; 5141 3771 3640 3442 3626
 3011. 5142 3429 3771 3626 1083; 5143 3428 3639 3771 3429; 5144 3570 3772 3641 3449
 3012. 5145 3189 3290 3772 3570; 5146 3290 1051 3427 3772; 5147 3616 3501 3532 3773
 3013. 5148 3773 3532 3384 3385; 5149 3386 3773 3385 15; 5150 3774 3643 3458 3642
 3014. 5151 3419 3774 3642 3420; 5152 037 3277 3774 3419; 5153 3543 3775 3644 3480
 3015. 5154 3252 3253 3775 3543; 5155 3253 3254 3544 3775; 5156 3776 3647 3353 3354
 3016. 5157 3646 3776 3354 3355; 5158 3470 3645 3776 3646; 5159 3777 3541 3332 3333
 3017. 5160 3549 3777 3333 3334; 5161 3460 3648 3777 3549; 5162 3650 3778 3373 3374
 3018. 5163 3495 3649 3778 3650; 5164 3649 3493 3563 3778; 5165 3651 3779 3652 3498
 3019. 5166 3231 3232 3779 3651; 5167 3232 3233 3608 3779; 5168 3260 3261 3538 3780
 3020. 5169 3780 3538 3473 3654; 5170 3653 3780 3654 3474; 5171 3584 3781 3364 3365
 3021. 5172 3487 3582 3781 3584; 5173 3582 334 3402 3781; 5174 3525 3782 3336 3337
 3022. 5175 3463 3551 3782 3525; 5176 3551 762 3418 3782; 5177 3466 3655 3783 3619
 3023. 5178 3655 3465 3524 3783; 5179 3783 3524 3339 3340; 5180 3228 3229 3657 3784
 3024. 5181 3784 3657 3503 3656; 5182 3391 3784 3656 3392; 5183 3785 3391 3392 3613
 3025. 5184 3658 3785 3613 3499; 5185 3226 3227 3785 3658; 5186 3659 3451 3621 3785
 3026. 5187 3786 3621 3323 3324; 5188 3604 3786 3324 3325; 5189 1051 3291 3787 3427
 3027. 5190 3291 3292 3633 3787; 5191 3787 3633 3446 3639; 5192 3660 3788 3661 3455
 3028. 5193 3282 3283 3788 3660; 5194 3283 044 3423 3788; 5195 3789 3662 3472 3632
 3029. 5196 3409 3789 3632 348; 5197 3408 3602 3789 3409; 5198 3276 837 3419 3790
 3030. 5199 3790 3419 3420 3663; 5200 3578 3790 3663 3461; 5201 3791 3665 3468 3664
 3031. 5202 3589 3791 3664 3470; 5203 3264 3265 3791 3589; 5204 3792 3550 3463 3526
 3032. 5205 3667 3792 3526 3465; 5206 3408 3666 3792 3667; 5207 3669 3475 3668 3793
 3033. 5208 3793 3668 3351 3352; 5209 3647 3793 3352 3353; 5210 3668 3794 3350 3351
 3034. 5211 3475 3670 3794 3668; 5212 3670 548 3410 3794; 5213 3436 3586 3795 3437
 3035. 5214 3586 3500 3518 3795; 5215 3795 3518 3504 3537; 5216 944 3284 3796 3423
 3036. 5217 3284 3285 3671 3796; 5218 3796 3671 3452 3623; 5219 3797 3675 3440 3674
 3037. 5220 3673 3797 3674 3441; 5221 3444 3672 3797 3673; 5222 3635 3798 3672 3444
 3038. 5223 3294 3295 3798 3635; 5224 3295 3296 3566 3798; 5225 3799 3581 3487 3585
 3039. 5226 3606 3799 3585 3489; 5227 3492 3676 3799 3606; 5228 3225 3226 3658 3800
 3040. 5229 3800 3658 3499 3517; 5230 3587 3800 3517 3500; 5231 3496 3677 3801 3678
 3041. 5232 3677 3495 3650 3801; 5233 3801 3650 3374 3375; 5234 3802 3678 3376 3377
 3042. 5235 3394 3802 3377 85; 5236 151 3679 3802 3394; 5237 441 3680 3803 3406
 3043. 5238 3680 3478 3646 3803; 5239 3803 3646 3355 3356; 5240 3682 3804 3645 3478
 3044. 5241 3482 3542 3804 3682; 5242 3542 3480 3681 3804; 5243 3593 3805 3310 3311
 3045. 5244 3441 3674 3805 3593; 5245 3674 3440 3547 3805; 5246 3271 3272 3806 3553
 3046. 5247 3272 3273 3576 3806; 5248 3806 3576 3462 3683; 5249 3462 3577 3807 3685
 3047. 5250 3577 3461 3684 3807; 5251 3807 3684 3457 3540; 5252 119 3235 3808 3395
 3048. 5253 3235 3236 3687 3808; 5254 3808 3687 3494 3686; 5255 3480 3644 3809 3681
 3049. 5256 3644 3479 3688 3809; 5257 3809 3688 3475 3669; 5258 3624 3810 3620 3448
 3050. 5259 3452 3689 3810 3624; 5260 3689 3450 3575 3810; 5261 3637 3486 3691 3811
 3051. 5262 3811 3691 3483 3590; 5263 3690 3811 3590 3484; 5264 3675 3812 3546 3440
 3052. 5265 3443 3567 3812 3675; 5266 3567 3432 3433 3812; 5267 3574 3813 3569 3445
 3053. 5268 3449 3641 3813 3574; 5269 3641 3428 3429 3813; 5270 3222 49 3435 3814
 3054. 5271 3814 3435 3426 3617; 5272 3508 3814 3617 3502; 5273 3815 3614 3493 3649
 3055. 5274 3692 3815 3649 3495; 5275 3498 3652 3815 3692; 5276 3694 3816 3677 3496
 3056. 5277 3503 3693 3816 3694; 5278 3693 3498 3692 3816; 5279 3400 3560 3817 3401
 3057. 5280 3560 3488 3690 3817; 5281 3817 3690 3484 3638; 5282 3579 3818 3648 3460
 3058. 5283 3464 3683 3818 3579; 5284 3683 3462 3685 3818; 5285 3486 3631 3819 3691
 3059. 5286 3631 3485 3598 3819; 5287 3819 3598 3481 3629; 5288 3278 3279 3820 3643
 3060. 5289 3279 3280 3695 3820; 5290 3820 3695 3456 3559; 5291 3281 3282 3660 3821
 3061. 5292 3821 3660 3455 3696; 5293 3695 3821 3696 3456; 5294 3665 3822 3666 3468
 3062. 5295 3266 3267 3822 3665; 5296 3267 3268 3522 3822; 5297 3412 3588 3823 3413

V. JAGEN, B.E.M.E.,(Struct), M.I.E.,A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAND SPACE

-- PAGE NO. 56

3063.	5298	3588	3478	3697	3823;	5299	3823	3697	3466	3618;	5300	3824	3794	85	3378
3064.	5301	3625	3824	3378	3379;	5302	3506	3612	3824	3625;	5303	3698	3825	3622	3451
3065.	5304	3455	3661	3825	3698;	5305	3661	3424	3425	3825;	5306	3826	3571	3450	3689
3066.	5307	3671	3826	3689	3452;	5308	3285	3286	3826	3671;	5309	3699	3827	3676	3492
3067.	5310	3238	3239	3827	3699;	5311	3239	3240	3636	3827;	5312	3662	3828	3680	3472
3068.	5313	3476	3781	3828	3667;	5314	3781	3474	3780	3828;	5315	3257	3258	3829	3683
3069.	5316	3258	3259	3653	3829;	5317	3829	3653	3474	3781;	5318	3782	3830	3620	3469
3070.	5319	3473	3539	3830	3782;	5320	3539	3412	3413	3830;	5321	3697	3831	3655	3466
3071.	5322	3478	3664	3831	3697;	5323	3664	3468	3667	3831;	5324	3832	3698	3451	3659
3072.	5325	3558	3832	3659	3453;	5326	3456	3696	3832	3558;	5327	3684	3833	3520	3475
3073.	5328	3461	3663	3833	3684;	5329	3663	3420	3421	3833;	5330	3420	3642	3834	3421
3074.	5331	3642	3458	3556	3834;	5332	3834	3556	3454	3512;	5333	3404	3529	3835	3485
3075.	5334	3529	3482	3682	3835;	5335	3835	3682	3478	3688;	5336	3836	3699	3442	3687
3076.	5337	3687	3836	3687	3494;	5338	3236	3237	3836	3687;	5339	3837	3702	3469	3611
3077.	5340	3780	3837	3611	3471;	5341	3474	3654	3837	3780;	5342	3634	3444	3673	3838
3078.	5343	3838	3673	3441	3594;	5344	3640	3838	3594	3442;	5345	3392	3656	3839	3393
3079.	5346	3656	3583	3694	3839;	5347	3839	3694	3496	3679;	5348	3396	3686	3840	3397
3080.	5349	3686	3494	3605	3840;	5350	3840	3605	3490	3580;	5351	3432	3555	3841	3433
3081.	5352	3555	3439	3513	3841;	5353	3841	3513	3505	3519;	5354	3688	3842	3670	3475
3082.	5355	3479	3545	3842	3688;	5356	3545	3488	3489	3842;	5357	3238	3231	3651	3843
3083.	5358	3843	3651	3498	3693;	5359	3657	3843	3693	3503;	5477	3953	4000	4116	3952
3084.	5478	4002	4117	3885	3886;	5479	4118	4003	3855	3856;	5480	3236	3237	4119	4005
3085.	5481	4008	3959	3958	4120;	5482	3298	3299	4011	4121;	5483	4122	3846	4126	3847
3086.	5484	4016	4123	3889	3890;	5485	3945	4124	4017	3944;	5486	4125	4019	3958	4020
3087.	5487	3254	3255	4126	4021;	5488	4025	4127	3917	3918;	5489	3228	3229	4027	4128
3088.	5490	3252	3253	4129	4028;	5491	4138	4030	3851	3852;	5492	4033	3950	3949	4131
3089.	5493	4035	3953	3952	4132;	5494	4039	4133	4037	3981;	5495	4040	3978	4042	4133
3090.	5496	3268	3269	4135	4043;	5497	4011	4136	4012	3964;					

V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.
CMDA REGN NOS -
SE / GR-1 / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.

STAAD SPACE

-- PAGE NO. 57

3110. 5583 4120 3958 1053 3857; 5584 4009 4120 3857 3858; 5585 3968 4008 4120 4009
 3120. 5586 4121 4011 3964 4010; 5587 3963 4121 4010 3962; 5588 1147 3298 4121 3963
 3121. 5589 4013 4122 3847 3848; 5590 3964 4012 4122 4013; 5591 4012 3845 3846 4122
 3122. 5592 3982 4015 4123 4016; 5593 4015 3981 4014 4123; 5594 4123 4014 3888 3889
 3123. 5595 516 3256 4124 3945; 5596 3256 3257 4018 4124; 5597 4124 4018 3982 4017
 3124. 5598 3938 4125 4020 3929; 5599 14 3220 4125 3930; 5600 3220 3221 4019 4125
 3125. 5601 3255 516 3945 4126; 5602 4126 3945 3944 4022; 5603 4021 4125 4022 3983
 3126. 5604 3994 4024 4127 4025; 5605 4024 3993 4023 4127; 5606 4127 4023 3916 3917
 3127. 5607 4128 4027 3994 4026; 5608 3933 4128 4026 3932; 5609 84 3228 4128 3933
 3128. 5610 3253 3254 4021 4129; 5611 4129 4021 3983 4029; 5612 4028 4129 4029 3984
 3129. 5613 4032 4130 3852 3853; 5614 3966 4031 4130 4032; 5615 4031 3965 4030 4130
 3130. 5616 4131 3949 732 3878; 5617 4034 4131 3878 3879; 5618 3977 4033 4131 4034
 3131. 5619 4132 3952 839 3871; 5620 4036 4132 3871 3872; 5621 3974 4035 4132 4036
 3132. 5622 3259 3260 4133 4039; 5623 3260 3261 4038 4133; 5624 4133 4038 3980 4037
 3133. 5625 4134 4042 3881 3882; 5626 4041 4134 3882 3883; 5627 3979 4040 4134 4041
 3134. 5628 3269 730 3951 4135; 5629 4135 3951 3950 4033; 5630 4043 4135 4033 3977
 3135. 5631 3299 3300 4136 4011; 5632 3300 1224 3844 4136; 5633 4136 3844 3845 4012
 3136. 5634 4045 3985 4044 4137; 5635 4137 4044 3897 3898; 5636 3940 4137 3898 411
 3137. 5637 409 3249 4138 3942; 5638 3249 3250 4046 4138; 5639 4138 4046 3905 4045
 3138. 5640 4048 3972 4047 4139; 5641 4139 4047 3867 3868; 5642 3999 4139 3868 3869
 3139. 5643 3970 4050 4140 4051; 5644 4050 3969 4049 4140; 5645 4140 4049 3860 3861
 3140. 5646 4049 4141 3859 3860; 5647 3969 4052 4141 4049; 5648 4052 3968 4009 4141
 3141. 5649 4142 4055 3974 4054; 5650 4053 4142 4054 3975; 5651 3273 3274 4142 4053
 3142. 5652 3297 1147 3963 4143; 5653 4143 3963 3962 4057; 5654 4056 4143 4057 3965
 3143. 5655 4055 4144 4035 3974; 5656 3275 3276 4144 4055; 5657 3276 837 3954 4144
 3144. 5658 4145 4060 3992 4059; 5659 4058 4145 4059 3993; 5660 3231 3232 4145 4058
 3145. 5661 4060 4146 4061 3992; 5662 3233 3234 4146 4060; 5663 3234 119 3936 4146
 3146. 5664 3996 4063 4147 4064; 5665 4063 3995 4062 4147; 5666 4147 4062 3921 3922
 3147. 5667 3934 4148 3912 121; 5668 3935 4066 4148 3934; 5669 4066 3991 4065 4148
 3148. 5670 4149 3934 121 3913; 5671 4067 4149 3913 3914; 5672 3992 4061 4149 4067
 3149. 5673 944 3284 4150 3957; 5674 3284 3285 4069 4150; 5675 4150 4069 3970 4068
 3150. 5676 4151 3937 304 3906; 5677 4071 4151 3906 3907; 5678 3989 4070 4151 4071
 3151. 5679 3971 4072 4152 4073; 5680 4072 3956 3955 4152; 5681 4152 3955 946 3864
 3152. 5682 4153 4076 3971 4075; 5683 4074 4153 4075 3972; 5684 3280 3281 4153 4074
 3153. 5685 4154 3961 1149 3850; 5686 4030 4154 3850 3851; 5687 3965 4057 4154 4030
 3154. 5688 4078 4155 4079 3967; 5689 3292 3293 4155 4078; 5690 3293 3294 4077 4155
 3155. 5691 3995 4080 4156 4062; 5692 4080 3932 3931 4156; 5693 4156 3931 86 3920
 3156. 5694 3937 4157 3905 304; 5695 3938 4082 4157 3937; 5696 4082 3988 4081 4157
 3157. 5697 4017 3982 4016 4158; 5698 4158 4016 3890 3891; 5699 3943 4158 3891 518
 3158. 5700 4159 4064 3923 3924; 5701 4084 4159 3924 51; 5702 3997 4083 4159 4084
 3159. 5703 3976 4086 4160 4087; 5704 4086 3975 4085 4160; 5705 4160 4085 3874 3875
 3160. 5706 4161 4089 3976 4088; 5707 3951 4161 4088 3950; 5708 730 1270 4161 3951
 3161. 5709 4091 3984 4090 4162; 5710 4162 4090 3895 3896; 5711 4044 4162 3896 3897
 3162. 5712 4163 4092 3973 4090; 5713 3954 4163 4090 3953; 5714 837 3277 4163 3954
 3163. 5715 3929 4020 4164 3928; 5716 4020 3990 4093 4164; 5717 4164 4093 3926 3927
 3164. 5718 3278 3279 4165 4092; 5719 3279 3280 4074 4165; 5720 4165 4074 3972 4048
 3165. 5721 382 3242 4166 3939; 5722 3242 3243 4094 4166; 5723 4166 4094 3988 4082
 3166. 5724 4095 4167 4096 3986; 5725 3247 3248 4167 4095; 5726 3248 409 3942 4167
 3167. 5727 3243 3244 4168 4094; 5728 3244 3245 4098 4168; 5729 4168 4098 3987 4097
 3168. 5730 4097 3987 4099 4169; 5731 4169 4099 3902 3903; 5732 4081 4169 3903 3904
 3169. 5733 4170 4181 3900 3901; 5734 4099 4170 3901 3902; 5735 3987 4180 4170 4099
 3170. 5736 4171 4071 3907 3908; 5737 4103 4171 3908 3909; 5738 3990 4102 4171 4103
 3171. 5739 3290 1051 3960 4172; 5740 4172 3960 3959 4008; 5741 4104 4172 4008 3968
 3172. 5742 3241 302 3939 4173; 5743 4173 3939 3938 4070; 5744 4105 4173 4070 3989
 3173. 5745 3266 3267 4174 4107; 5746 3267 3268 4043 4174; 5747 4174 4043 3977 4106
 3174. 5748 3998 4108 4175 4093; 5749 4108 3997 4084 4175; 5750 4175 4084 51 3925

V. JAGEN, B.E.M.E.,(Struct), M.I.E.A.I.V.,
CMDA REGN NOS -

SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER

3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.

Mobile: 9841260164

STAAD SPACE

-- PAGE NO. 58

3175. 5751 3222 40 4100 4176; 5752 4176 4109 3957 4108; 5753 4019 4176 4100 3998
 3176. 5754 4007 4177 4182 3990; 5755 3238 3239 4177 4007; 5756 3239 3240 4185 4177
 3177. 5757 4178 4111 3979 4110; 5758 3948 4178 4110 3947; 5759 623 3263 4178 3948
 3178. 5760 3225 3226 4113 4179; 5761 4179 4113 3995 4063; 5762 4112 4179 4063 3996
 3179. 5763 4180 3943 518 3892; 5764 4114 4180 3892 3893; 5765 3983 4022 4180 4114
 3180. 5766 4068 3970 4051 4181; 5767 4181 4051 3862 3863; 5768 3955 4181 3863 946
 3181. 5769 4076 4182 4072 3971; 5770 3282 3283 4182 4076; 5771 3283 944 3957 4182
 3182. 5772 4047 4183 3866 3867; 5773 3972 4075 4183 4047; 5774 4075 3971 4073 4183
 3183. 5775 4088 3976 4087 4184; 5776 4184 4087 3876 3877; 5777 3949 4184 3877 732
 3184. 5778 1851 3291 4185 3960; 5779 3291 3292 4078 4185; 5780 4185 4078 3967 4004
 3185. 5781 4026 3994 4025 4186; 5782 4186 4025 3918 3919; 5783 3931 4186 3919 86
 3186. 5784 3967 4079 4187 4003; 5785 4079 3966 4032 4187; 5786 4187 4032 3853 3854
 3187. 5787 4023 4188 3915 3916; 5788 3993 4059 4188 4023; 5789 4059 3992 4067 4188
 3188. 5790 110 3235 4189 3936; 5791 3235 3236 4005 4189; 5792 4189 4005 3991 4066
 3189. 5793 4113 4190 4088 3995; 5794 3226 3227 4190 4113; 5795 3227 84 3933 4190
 3190. 5796 4038 4191 4001 3980; 5797 3261 3262 4191 4038; 5798 3262 623 3948 4191
 3191. 5799 4192 3940 411 3899; 5800 4101 4192 3899 3900; 5801 3986 4096 4192 4101
 3192. 5802 3250 3259 4039 4193; 5803 4193 4039 3981 4015; 5804 4018 4193 4015 3982
 3193. 5805 4110 3979 4041 4194; 5806 4194 4041 3883 3884; 5807 3946 4194 3884 625
 3194. 5808 3984 4029 4195 4090; 5809 4029 3983 4114 4195; 5810 4195 4114 3893 3894
 3195. 5811 3272 3273 4053 4196; 5812 4196 4053 3975 4086; 5813 4089 4196 4086 3976
 3196. 5814 3246 3247 4095 4197; 5815 4197 4095 3986 4100; 5816 4098 4197 4100 3987
 3197. 5817 4198 4056 3965 4031; 5818 4077 4198 4031 3966; 5819 3294 3295 4198 4077
 3198. 5820 4042 4199 3880 3881; 5821 3978 4106 4199 4042; 5822 4106 3977 4034 4199
 3199. 5823 4085 4200 3873 3874; 5824 3975 4054 4200 4085; 5825 4054 3974 4036 4200
 3200. 5826 4201 4104 3968 4052; 5827 4115 4201 4052 3969; 5828 3287 3288 4201 4115
 3201. 5829 3286 3287 4115 4202; 5830 4202 4115 3969 4050; 5831 4069 4202 4050 3970
 3202. 5832 3230 3231 4058 4203; 5833 4203 4058 3993 4024; 5834 4027 4203 4024 3994
 3203. 5835 4014 4204 3887 3888; 5836 3981 4037 4204 4014; 5837 4037 3980 4002 4204
 3204. 5838 4205 4028 3984 4091; 5839 4046 4205 4091 3985; 5840 3250 3251 4205 4046
 3205. 5841 3223 3224 4112 4206; 5842 4206 4112 3996 4083; 5843 4109 4206 4083 3997
 3206. 5844 3961 4207 3849 4149; 5845 3962 4010 4207 3961; 5846 4010 3964 4013 4207
 3207. 5847 3265 3266 4107 4208; 5848 4208 4107 3978 4040; 5849 4111 4208 4040 3979
 3208. 5850 3991 4006 4209 4065; 5851 4006 3990 4103 4209; 5852 4209 4103 3909 3910
 3209. 5853 4319 4366 4482 4318; 5854 4368 4483 4251 4252; 5855 4484 4369 4221 4222
 3210. 5856 3369 3368 4485 4371; 5857 4374 4325 4324 4486; 5858 3307 3306 4377 4487
 3211. 5859 4488 4212 4227 4213; 5860 4382 4489 4255 4256; 5861 4311 4490 4383 4310
 3212. 5862 4491 4385 4364 4386; 5863 3351 3350 4492 4387; 5864 4391 4493 4283 4284
 3213. 5865 3377 3376 4393 4494; 5866 3353 3352 4495 4394; 5867 4496 4396 4217 4218
 3214. 5868 4399 4316 4315 4497; 5869 4401 4319 4318 4498; 5870 4405 4499 4403 4347
 3215. 5871 4406 4344 4408 4500; 5872 3337 3336 4501 4409; 5873 4377 4502 4378 4330
 3216. 5874 4307 4411 4503 4306; 5875 4308 4504 4411 4307; 5876 4339 4414 4505 4365
 3217. 5877 4417 4506 4227 4228; 5878 4507 4375 4224 4225; 5879 3331 3330 4421 4508
 3218. 5880 3309 3308 4509 4422; 5881 4510 4320 4319 4401; 5882 3373 3372 4426 4511
 3219. 6000 4512 4302 4301 4427; 6001 4430 4513 4288 4289; 6002 4514 4431 4277 4278
 3220. 6003 4427 4301 4300 4515; 6004 4323 4516 4434 4322; 6005 4436 4304 4303 4517
 3221. 6006 4439 4518 4230 4231; 6007 3324 3323 4442 4519; 6008 4423 4328 4327 4520
 3222. 6009 4521 4443 4332 4445; 6010 4428 4522 4286 4287; 6011 4523 4447 4270 4271
 3223. 6012 4310 4383 4524 4309; 6013 4449 4362 4430 4525; 6014 4453 4526 4241 4242
 3224. 6015 3335 3334 4455 4527; 6016 4351 4457 4528 4410; 6017 3328 3327 4458 4529
 3225. 6018 4294 4530 4293 17; 6019 4458 4531 4414 4339; 6020 4305 4532 4448 4304
 3226. 6021 4533 4308 4307 4462; 6022 4460 4534 4463 4354; 6023 4354 4463 4535 4447
 3227. 6024 4466 4352 4467 4536; 6025 4468 4355 4437 4537; 6026 3316 3315 4538 4470
 3228. 6027 3365 3364 4539 4471; 6028 4473 4540 4472 4344; 6029 4459 4541 4291 4292
 3229. 6030 3384 3383 4542 4385; 6031 4543 4471 4355 4468; 6032 3342 3341 4477 4544
 3230. 6033 3381 3380 4545 4478; 6034 4388 4310 4309 4546; 6035 4322 4434 4547 4321

V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2010/03/024, QA/2010/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 59

3231. 6036 4548 4323 4322 4438; 6037 4549 4439 4231 4232; 6038 4316 4454 4550 4315
 3232. 6039 4326 4551 4370 4325; 6040 4298 4392 4552 4297; 6041 4369 4553 4220 4221
 3233. 6042 4554 4433 4280 4281; 6043 4382 4555 4432 4301; 6044 4556 4299 4298 4446
 3234. 6045 4557 4314 4313 4367; 6046 4462 4307 4306 4558; 6047 3348 3347 4559 4384
 3235. 6048 4313 4476 4560 4312; 6049 4456 4561 4260 4261; 6050 3334 3333 4562 4455
 3236. 6051 3360 3359 4563 4464; 6052 3310 3309 4422 4564; 6053 4565 4400 4245 4246
 3237. 6054 4566 4402 4238 4239; 6055 3317 3316 4470 4567; 6056 3320 3319 4568 4435
 3238. 6057 3376 3375 4569 4393; 6058 4570 4368 4252 4253; 6059 3354 3353 4394 4571
 3239. 6060 50 3382 4572 4475; 6061 4573 4379 4214 4215; 6062 3341 3340 4574 4477
 3240. 6063 4431 4575 4276 4277; 6064 4366 4330 4365 4482; 6065 4482 4365 4235 4236
 3241. 6066 4318 4482 4236 840; 6067 4346 4367 4483 4368; 6068 4367 4313 4312 4483
 3242. 6069 4483 4312 626 4251; 6070 4324 4484 4222 1054; 6071 4325 4370 4484 4324
 3243. 6072 4370 4333 4369 4484; 6073 3368 3367 4373 4485; 6074 4485 4373 4356 4372
 3244. 6075 4371 4485 4372 4357; 6076 4486 4324 1054 4223; 6077 4375 4486 4223 4224
 3245. 6078 4334 4374 4486 4375; 6079 4487 4377 4338 4376; 6080 4329 4487 4376 4328
 3246. 6081 1148 3307 4487 4329; 6082 4379 4488 4213 4214; 6083 4330 4378 4488 4379
 3247. 6084 4378 4211 4212 4488; 6085 4348 4301 4489 4382; 6086 4381 4347 4380 4489
 3248. 6087 4489 4380 4254 4255; 6088 517 3349 4490 4311; 6089 3349 3348 4384 4490
 3249. 6090 4490 4384 4348 4383; 6091 4296 4491 4386 4295; 6092 15 3385 4491 4296
 3250. 6093 3385 3384 4385 4491; 6094 3350 517 4311 4492; 6095 4492 4311 4310 4388
 3251. 6096 4387 4492 4388 4349; 6097 4360 4390 4493 4391; 6098 4390 4359 4389 4493
 3252. 6099 4493 4389 4282 4283; 6100 4494 4393 4360 4392; 6101 4299 4494 4392 4298
 3253. 6102 85 3377 4494 4299; 6103 3352 3351 4387 4495; 6104 4495 4387 4349 4395
 3254. 6105 4394 4495 4395 4350; 6106 4398 4496 4218 4219; 6107 4332 4397 4496 4398
 3255. 6108 4397 4331 4396 4496; 6109 4497 4315 733 4244; 6110 4400 4497 4244 4245
 3256. 6111 4343 4399 4497 4400; 6112 4498 4318 840 4237; 6113 4402 4498 4237 4238
 3257. 6114 4340 4401 4498 4402; 6115 3346 3345 4499 4405; 6116 3345 3344 4404 4499
 3258. 6117 4499 4404 4346 4403; 6118 4500 4408 4247 4248; 6119 4407 4500 4248 4249
 3259. 6120 4345 4406 4500 4407; 6121 3336 731 4317 4501; 6122 4501 4317 4316 4399
 3260. 6123 4409 4501 4399 4343; 6124 3306 3305 4502 4377; 6125 3305 1225 4210 4502
 3261. 6126 4502 4210 4211 4378; 6127 4411 4351 4410 4503; 6128 4503 4410 4263 4264
 3262. 6129 4306 4503 4264 412; 6130 410 3356 4504 4308; 6131 3356 3355 4412 4504
 3263. 6132 4504 4412 4351 4411; 6133 4414 4338 4413 4505; 6134 4505 4413 4233 4234
 3264. 6135 4365 4505 4234 4235; 6136 4336 4416 4506 4417; 6137 4416 4335 4415 4506
 3265. 6138 4506 4415 4226 4227; 6139 4415 4507 4225 4226; 6140 4335 4418 4507 4415
 3266. 6141 4418 4334 4375 4507; 6142 4508 4421 4348 4420; 6143 4419 4508 4420 4341
 3267. 6144 3332 3331 4508 4419; 6145 3308 1148 4320 4509; 6146 4509 4329 4328 4423
 3268. 6147 4422 4509 4423 4331; 6148 4421 4510 4401 4340; 6149 3330 3329 4510 4421
 3269. 6150 3329 838 4320 4510; 6151 4511 4426 4358 4425; 6152 4424 4511 4425 4359
 3270. 6153 3374 3373 4511 4424; 6154 4426 4512 4427 4358; 6155 3372 3371 4512 4426
 3271. 6156 3371 120 4302 4512; 6157 4362 4429 4513 4430; 6158 4429 4361 4428 4513
 3272. 6159 4513 4428 4287 4288; 6160 4300 4514 4278 122; 6161 4301 4432 4514 4300
 3273. 6162 4432 4357 4431 4514; 6163 4515 4300 122 4279; 6164 4433 4515 4279 4280
 3274. 6165 4358 4427 4515 4433; 6166 945 3321 4516 4323; 6167 3321 3320 4435 4516
 3275. 6168 4516 4435 4336 4434; 6169 4517 4303 305 4272; 6170 4437 4517 4272 4273
 3276. 6171 4355 4436 4517 4437; 6172 4337 4438 4518 4439; 6173 4438 4322 4321 4518
 3277. 6174 4518 4321 947 4230; 6175 4519 4442 4337 4441; 6176 4440 4519 4441 4338
 3278. 6177 3325 3324 4519 4440; 6178 4520 4327 1150 4216; 6179 4396 4520 4216 4217
 3279. 6180 4331 4423 4520 4396; 6181 4444 4521 4445 4333; 6182 3313 3312 4521 4444
 3280. 6183 3312 3311 4443 4521; 6184 4361 4446 4522 4428; 6185 4446 4298 4297 4522
 3281. 6186 4522 4297 87 4286; 6187 4303 4523 4271 305; 6188 4304 4448 4523 4303
 3282. 6189 4448 4354 4447 4523; 6190 4383 4348 4382 4524; 6191 4524 4382 4256 4257
 3283. 6192 4309 4524 4257 519; 6193 4525 4430 4289 4290; 6194 4450 4525 4290 52
 3284. 6195 4363 4449 4525 4450; 6196 4342 4452 4526 4453; 6197 4452 4341 4451 4526
 3285. 6198 4526 4451 4240 4241; 6199 4527 4455 4342 4454; 6200 4317 4527 4454 4316
 3286. 6201 731 3335 4527 4317; 6202 4457 4350 4456 4528; 6203 4528 4456 4261 4262

V. JAGEN, B.E.M.E.(Struct), M.I.E.A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, CA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 60

```

3287. 6204 4410 4528 4262 4263; 6205 4529 4458 4339 4366; 6206 4328 4529 4366 4319
3288. 6207 838 3328 4529 4320; 6208 4295 4386 4538 4294; 6209 4386 4364 4459 4530
3289. 6210 4530 4459 4292 4293; 6211 3327 3326 4531 4458; 6212 3326 3325 4440 4531
3290. 6213 4531 4440 4338 4414; 6214 303 3363 4532 4305; 6215 3363 3362 4460 4532
3291. 6216 4532 4460 4354 4448; 6217 4461 4533 4462 4352; 6218 3358 3357 4533 4461
3292. 6219 3357 410 4308 4533; 6220 3362 3361 4534 4460; 6221 3361 3360 4464 4534
3293. 6222 4534 4464 4353 4463; 6223 4463 4353 4465 4535; 6224 4535 4465 4268 4269
3294. 6225 4447 4535 4269 4270; 6226 4536 4467 4266 4267; 6227 4465 4536 4267 4268
3295. 6228 4353 4466 4536 4465; 6229 4537 4437 4273 4274; 6230 4469 4537 4274 4275
3296. 6231 4356 4468 4537 4469; 6232 3315 1052 4326 4538; 6233 4538 4326 4325 4374
3297. 6234 4470 4538 4374 4334; 6235 3364 303 4305 4539; 6236 4539 4305 4304 4436
3298. 6237 4471 4539 4436 4355; 6238 3339 3338 4540 4473; 6239 3338 3337 4409 4540
3299. 6240 4540 4409 4343 4472; 6241 4364 4474 4541 4459; 6242 4474 4363 4450 4541
3300. 6243 4541 4450 52 4291; 6244 3383 50 4475 4542; 6245 4542 4475 4363 4474
3301. 6246 4385 4542 4474 4364; 6247 4373 4543 4468 4356; 6248 3367 3366 4543 4373
3302. 6249 3366 3365 4471 4543; 6250 4544 4477 4345 4476; 6251 4314 4544 4476 4313
3303. 6252 624 3342 4544 4314; 6253 3380 3379 4479 4545; 6254 4545 4479 4361 4429
3304. 6255 4478 4545 4429 4362; 6256 4546 4309 519 4258; 6257 4480 4546 4258 4259
3305. 6258 4349 4388 4546 4480; 6259 4434 4336 4417 4547; 6260 4547 4417 4228 4229
3306. 6261 4321 4547 4229 947; 6262 4442 4548 4438 4337; 6263 3323 3322 4548 4442
3307. 6264 3322 945 4323 4548; 6265 4413 4549 4232 4233; 6266 4338 4441 4549 4413
3308. 6267 4441 4337 4439 4549; 6268 4454 4342 4453 4550; 6269 4550 4453 4242 4243
3309. 6270 4315 4550 4243 733; 6271 1052 3314 4551 4326; 6272 3314 3313 4444 4551
3310. 6273 4551 4444 4333 4370; 6274 4392 4360 4391 4552; 6275 4552 4391 4284 4285
3311. 6276 4297 4552 4285 87; 6277 4333 4445 4553 4369; 6278 4445 4332 4398 4553
3312. 6279 4553 4398 4219 4220; 6280 4389 4554 4281 4282; 6281 4359 4425 4554 4389
3313. 6282 4425 4358 4433 4554; 6283 120 3370 4555 4302; 6284 3370 3369 4371 4555
3314. 6285 4555 4371 4357 4432; 6286 4479 4556 4446 4361; 6287 3370 3378 4556 4479
3315. 6288 3378 85 4299 4556; 6289 4404 4557 4367 4346; 6290 3344 3343 4557 4484
3316. 6291 3343 624 4314 4557; 6292 4558 4306 412 4265; 6293 4467 4558 4265 4266
3317. 6294 4352 4462 4558 4467; 6295 3347 3346 4405 4559; 6296 4559 4405 4347 4381
3318. 6297 4384 4559 4381 4348; 6298 4476 4345 4407 4560; 6299 4560 4407 4249 4250
3319. 6300 4312 4560 4250 626; 6301 4350 4395 4561 4456; 6302 4395 4349 4480 4561
3320. 6303 4561 4480 4259 4260; 6304 3333 3332 4419 4562; 6305 4562 4419 4341 4452
3321. 6306 4455 4562 4452 4342; 6307 3359 3358 4461 4563; 6308 4563 4461 4352 4466
3322. 6309 4464 4563 4466 4353; 6310 4564 4422 4331 4397; 6311 4443 4564 4397 4332
3323. 6312 3311 3310 4564 4443; 6313 4488 4565 4246 4247; 6314 4344 4472 4565 4408
3324. 6315 4472 4343 4480 4565; 6316 4451 4566 4239 4240; 6317 4341 4420 4566 4451
3325. 6318 4420 4340 4402 4566; 6319 4567 4470 4334 4418; 6320 4481 4567 4418 4335
3326. 6321 3318 3317 4567 4481; 6322 3319 3318 4481 4568; 6323 4568 4481 4335 4416
3327. 6324 4435 4568 4416 4336; 6325 3375 3374 4424 4569; 6326 4569 4424 4359 4390
3328. 6327 4393 4569 4398 4368; 6328 4380 4570 4253 4254; 6329 4347 4403 4570 4380
3329. 6330 4403 4346 4368 4570; 6331 4571 4394 4350 4457; 6332 4412 4571 4457 4351
3330. 6333 3355 3354 4571 4412; 6334 3382 3381 4478 4572; 6335 4572 4478 4362 4449
3331. 6336 4475 4572 4449 4363; 6337 4327 4573 4215 1150; 6338 4328 4376 4573 4327
3332. 6339 4376 4380 4379 4573; 6340 3340 3339 4473 4574; 6341 4574 4473 4344 4406
3333. 6342 4477 4574 4406 4345; 6343 4357 4372 4575 4431; 6344 4372 4356 4469 4575
3334. 6345 4575 4469 4275 4276
3335. <! STAAD PRO GENERATED DATA DO NOT MODIFY !!!
3336. PARAMETRIC MODEL SW1-C
3337. TYPE WALL
3338. MESH PARAM 1 4 1
3339. MESH ORG 0 1 14
3340. BOUNDARY 28
3341. 15 0 0 50 0 0 85 0 0 120 0 0 303 0 0 410 0 0 517 0 0 624 0 0 731 0 0 838 0 0
3342. 945 0 0 1052 0 0 1148 0 0 1225 0 0 1227 0 0 1150 0 0 1054 0 0 947 0 0 -

```

V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVY - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841209154

STAAD SPACE

-- PAGE NO. 61

```

3343. 840 0 0 733 0 0 626 0 0 519 0 0 412 0 0 305 0 0 122 0 0 87 0 0 52 0 0 17 0 0
3344. DENSITY LINE 11.22 4.41 11.52 1 11.22 4.41 9.64 1 0
3345. DENSITY LINE 11.22 7.42 11.52 1 11.22 7.42 9.64 1 0
3346. DENSITY LINE 11.22 10.43 11.52 1 11.22 10.43 9.64 1 0
3347. DENSITY LINE 11.22 13.44 11.52 1 11.22 13.44 9.64 1 0
3348. DENSITY LINE 11.22 16.45 11.52 1 11.22 16.45 9.64 1 0
3349. DENSITY LINE 11.22 19.46 11.52 1 11.22 19.46 9.64 1 0
3350. DENSITY LINE 11.22 22.47 11.52 1 11.22 22.47 9.64 1 0
3351. DENSITY LINE 11.22 25.48 11.52 1 11.22 25.48 9.64 1 0
3352. DENSITY LINE 11.22 28.49 11.52 1 11.22 28.49 9.64 1 0
3353. DENSITY LINE 11.22 31.5 11.52 1 11.22 31.5 9.64 1 0
3354. DENSITY LINE 11.22 34.51 11.52 1 11.22 34.51 9.64 1 0
3355. GENERATED NODES 4210 TO 4575
3356. GENERATED PLATES PLATE 5970 TO 6345
3357. END
3358. !> END GENERATED DATA BLOCK
3359. <! STAAD PRO GENERATED DATA DO NOT MODIFY !!!
3360. PARAMETRIC MODEL SW1-B
3361. TYPE WALL
3362. MESH PARAM 1 4 1
3363. MESH ORG 0 1 14
3364. BOUNDARY 28
3365. 14 0 0 49 0 0 84 0 0 119 0 0 302 0 0 409 0 0 516 0 0 623 0 0 730 0 0 837 0 0 -
3366. 944 0 0 1051 0 0 1147 0 0 1224 0 0 1226 0 0 1149 0 0 1053 0 0 946 0 0 -
3367. 839 0 0 732 0 0 625 0 0 518 0 0 411 0 0 304 0 0 121 0 0 86 0 0 51 0 0 16 0 0
3368. DENSITY LINE 9.16 4.41 11.52 1 9.16 4.41 9.64 1 0
3369. DENSITY LINE 9.16 7.42 11.52 1 9.16 7.42 9.64 1 0
3370. DENSITY LINE 9.16 10.43 11.52 1 9.16 10.43 9.64 1 0
3371. DENSITY LINE 9.16 13.44 11.52 1 9.16 13.44 9.64 1 0
3372. DENSITY LINE 9.16 16.45 11.52 1 9.16 16.45 9.64 1 0
3373. DENSITY LINE 9.16 19.46 11.52 1 9.16 19.46 9.64 1 0
3374. DENSITY LINE 9.16 22.47 11.52 1 9.16 22.47 9.64 1 0
3375. DENSITY LINE 9.16 25.48 11.52 1 9.16 25.48 9.64 1 0
3376. DENSITY LINE 9.16 28.49 11.52 1 9.16 28.49 9.64 1 0
3377. DENSITY LINE 9.16 31.5 11.52 1 9.16 31.5 9.64 1 0
3378. DENSITY LINE 9.16 34.51 11.52 1 9.16 34.51 9.64 1 0
3379. GENERATED NODES 3844 TO 4209
3380. GENERATED PLATES PLATE 5477 TO 5852
3381. END
3382. !> END GENERATED DATA BLOCK
3383. <! STAAD PRO GENERATED DATA DO NOT MODIFY !!!
3384. PARAMETRIC MODEL SW1-A
3385. TYPE WALL
3386. MESH PARAM 1 4 1
3387. MESH ORG 0 1 15
3388. BOUNDARY 29
3389. 14 0 0 49 0 0 84 0 0 119 0 0 302 0 0 409 0 0 516 0 0 623 0 0 730 0 0 837 0 0 -
3390. 944 0 0 1051 0 0 1147 0 0 1224 0 0 1232 0 0 1225 0 0 1148 0 0 1052 0 0 -
3391. 945 0 0 838 0 0 731 0 0 624 0 0 517 0 0 410 0 0 303 0 0 120 0 0 85 0 0 -
3392. 50 0 0 15 0 0
3393. DENSITY POINTS 12
3394. 10.95 4.41 9.64 1 10.95 7.42 9.64 1 10.95 10.43 9.64 1 10.95 13.44 9.64 1 -
3395. 10.95 16.45 9.64 1 10.95 19.46 9.64 1 10.95 22.47 9.64 1 10.95 25.48 9.64 1 -
3396. 10.95 28.49 9.64 1 10.95 31.5 9.64 1 10.95 34.51 9.64 1 10.95 1.5 9.64 1
3397. DENSITY LINE 9.16 4.41 9.64 1 10.95 4.41 9.64 1 0
3398. DENSITY LINE 10.95 4.41 9.64 1 11.22 4.41 9.64 1 0

```



V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.

Mobile: 9841250154

STAAD SPACE

-- PAGE NO. 62

```

3399. DENSITY LINE 9.16 7.42 9.64 1 10.95 7.42 9.64 1 0
3400. DENSITY LINE 10.95 7.42 9.64 1 11.22 7.42 9.64 1 0
3401. DENSITY LINE 9.16 10.43 9.64 1 10.95 10.43 9.64 1 0
3402. DENSITY LINE 10.95 10.43 9.64 1 11.22 10.43 9.64 1 0
3403. DENSITY LINE 9.16 13.44 9.64 1 10.95 13.44 9.64 1 0
3404. DENSITY LINE 10.95 13.44 9.64 1 11.22 13.44 9.64 1 0
3405. DENSITY LINE 9.16 16.45 9.64 1 10.95 16.45 9.64 1 0
3406. DENSITY LINE 10.95 16.45 9.64 1 11.22 16.45 9.64 1 0
3407. DENSITY LINE 9.16 19.46 9.64 1 10.95 19.46 9.64 1 0
3408. DENSITY LINE 10.95 19.46 9.64 1 11.22 19.46 9.64 1 0
3409. DENSITY LINE 9.16 22.47 9.64 1 10.95 22.47 9.64 1 0
3410. DENSITY LINE 10.95 22.47 9.64 1 11.22 22.47 9.64 1 0
3411. DENSITY LINE 9.16 25.48 9.64 1 10.95 25.48 9.64 1 0
3412. DENSITY LINE 10.95 25.48 9.64 1 11.22 25.48 9.64 1 0
3413. DENSITY LINE 9.16 28.49 9.64 1 10.95 28.49 9.64 1 0
3414. DENSITY LINE 10.95 28.49 9.64 1 11.22 28.49 9.64 1 0
3415. DENSITY LINE 9.16 31.5 9.64 1 10.95 31.5 9.64 1 0
3416. DENSITY LINE 10.95 31.5 9.64 1 11.22 31.5 9.64 1 0
3417. DENSITY LINE 9.16 34.51 9.64 1 10.95 34.51 9.64 1 0
3418. DENSITY LINE 10.95 34.51 9.64 1 11.22 34.51 9.64 1 0
3419. DENSITY LINE 9.16 1.5 9.64 1 10.95 1.5 9.64 1 0
3420. DENSITY LINE 10.95 1.5 9.64 1 11.22 1.5 9.64 1 0
3421. GENERATED NODES 3220 TO 3843
3422. GENERATED PLATES PLATE 4796 TO 5359
3423. END
3424. !> END GENERATED DATA BLOCK
3425. <! STAAD PRO GENERATED DATA DO NOT MODIFY !!!
3426. PARAMETRIC MODEL SW2-C
3427. TYPE WALL
3428. MESH PARAM 1 4 1
3429. MESH ORG 0 1 14
3430. BOUNDARY 28
3431. 22 0 0 57 0 0 92 0 0 127 0 0 310 0 0 417 0 0 524 0 0 631 0 0 738 0 0 845 0 0 -
3432. 952 0 0 1059 0 0 1155 0 0 1230 0 0 1231 0 0 1156 0 0 1060 0 0 953 0 0 -
3433. 846 0 0 739 0 0 632 0 0 525 0 0 418 0 0 311 0 0 128 0 0 93 0 0 58 0 0 23 0 0
3434. DENSITY POINTS 1
3435. 7.7 1.5 14.96 1
3436. DENSITY LINE 5.19 4.41 14.96 1 7.87 4.41 14.96 1 0
3437. DENSITY LINE 5.19 7.42 14.96 1 7.87 7.42 14.96 1 0
3438. DENSITY LINE 5.19 10.43 14.96 1 7.87 10.43 14.96 1 0
3439. DENSITY LINE 5.19 13.44 14.96 1 7.87 13.44 14.96 1 0
3440. DENSITY LINE 5.19 16.45 14.96 1 7.87 16.45 14.96 1 0
3441. DENSITY LINE 5.19 19.46 14.96 1 7.87 19.46 14.96 1 0
3442. DENSITY LINE 5.19 22.47 14.96 1 7.87 22.47 14.96 1 0
3443. DENSITY LINE 5.19 25.48 14.96 1 7.87 25.48 14.96 1 0
3444. DENSITY LINE 5.19 28.49 14.96 1 7.87 28.49 14.96 1 0
3445. DENSITY LINE 5.19 31.5 14.96 1 7.87 31.5 14.96 1 0
3446. DENSITY LINE 5.19 34.51 14.96 1 7.87 34.51 14.96 1 0
3447. DENSITY LINE 5.19 1.5 14.96 1 7.7 1.5 14.96 1 0
3448. DENSITY LINE 7.7 1.5 14.96 1 7.87 1.5 14.96 1 0
3449. GENERATED NODES 2659 TO 3219
3450. GENERATED PLATES PLATE 4012 TO 4581
3451. END
3452. !> END GENERATED DATA BLOCK
3453. <! STAAD PRO GENERATED DATA DO NOT MODIFY !!!
3454. PARAMETRIC MODEL SW2-B

```


V. JAGEN, B.E.M.E.(Struct), M.I.E.A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 63

```

3455. TYPE WALL
3456. MESH PARAM 1 4 1
3457. MESH ORG 0 1 14
3458. BOUNDARY 28
3459. 20 0 0 55 0 0 90 0 0 125 0 0 300 0 0 415 0 0 522 0 0 629 0 0 736 0 0 843 0 0 -
3460. 950 0 0 1057 0 0 1153 0 0 1228 0 0 1230 0 0 1155 0 0 1059 0 0 952 0 0 -
3461. 845 0 0 738 0 0 631 0 0 524 0 0 417 0 0 310 0 0 127 0 0 92 0 0 57 0 0 21 0 0
3462. DENSITY LINE 5.19 4.41 14.96 1 5.19 4.41 12.69 1 0
3463. DENSITY LINE 5.19 7.42 14.96 1 5.19 7.42 12.69 1 0
3464. DENSITY LINE 5.19 10.43 14.96 1 5.19 10.43 12.69 1 0
3465. DENSITY LINE 5.19 13.44 14.96 1 5.19 13.44 12.69 1 0
3466. DENSITY LINE 5.19 16.45 14.96 1 5.19 16.45 12.69 1 0
3467. DENSITY LINE 5.19 19.46 14.96 1 5.19 19.46 12.69 1 0
3468. DENSITY LINE 5.19 22.47 14.96 1 5.19 22.47 12.69 1 0
3469. DENSITY LINE 5.19 25.48 14.96 1 5.19 25.48 12.69 1 0
3470. DENSITY LINE 5.19 28.49 14.96 1 5.19 28.49 12.69 1 0
3471. DENSITY LINE 5.19 31.5 14.96 1 5.19 31.5 12.69 1 0
3472. DENSITY LINE 5.19 34.51 14.96 1 5.19 34.51 12.69 1 0
3473. GENERATED NODES 2103 TO 2658
3474. GENERATED PLATES PLATE 3301 TO 3864
3475. END
3476. 1> END GENERATED DATA BLOCK
3477. <1 STAAD PRO GENERATED DATA DO NOT MODIFY !!!
3478. PARAMETRIC MODEL SW2-A
3479. TYPE WALL
3480. MESH PARAM 1 4 1
3481. MESH ORG 0 1 17
3482. BOUNDARY 31
3483. 20 0 0 55 0 0 90 0 0 125 0 0 300 0 0 415 0 0 522 0 0 629 0 0 736 0 0 843 0 0 -
3484. 950 0 0 1057 0 0 1153 0 0 1228 0 0 1233 0 0 1235 0 0 1236 0 0 1229 0 0 -
3485. 1154 0 0 1058 0 0 951 0 0 844 0 0 737 0 0 630 0 0 523 0 0 416 0 0 309 0 0 -
3486. 126 0 0 91 0 0 56 0 0 21 0 0
3487. DENSITY POINTS 36
3488. 5.76 4.41 12.69 1 6.95 4.41 12.69 1 7.55 4.41 12.69 1 5.76 7.42 12.69 1 -
3489. 6.95 7.42 12.69 1 7.55 7.42 12.69 1 5.76 10.43 12.69 1 6.95 10.43 12.69 1 -
3490. 7.55 10.43 12.69 1 5.76 13.44 12.69 1 6.95 13.44 12.69 1 7.55 13.44 12.69 1 -
3491. 5.76 16.45 12.69 1 6.95 16.45 12.69 1 7.55 16.45 12.69 1 5.76 19.46 12.69 1 -
3492. 6.95 19.46 12.69 1 7.55 19.46 12.69 1 5.76 22.47 12.69 1 6.95 22.47 12.69 1 -
3493. 7.55 22.47 12.69 1 5.76 25.48 12.69 1 6.95 25.48 12.69 1 7.55 25.48 12.69 1 -
3494. 5.76 28.49 12.69 1 6.95 28.49 12.69 1 7.55 28.49 12.69 1 5.76 31.5 12.69 1 -
3495. 6.95 31.5 12.69 1 7.55 31.5 12.69 1 5.76 34.51 12.69 1 6.95 34.51 12.69 1 -
3496. 7.55 34.51 12.69 1 5.76 1.5 12.69 1 7.55 1.5 12.69 1 6.95 1.5 12.69 1
3497. DENSITY LINE 5.19 4.41 12.69 1 5.76 4.41 12.69 1 0
3498. DENSITY LINE 5.76 4.41 12.69 1 6.95 4.41 12.69 1 0
3499. DENSITY LINE 6.95 4.41 12.69 1 7.55 4.41 12.69 1 0
3500. DENSITY LINE 7.55 4.41 12.69 1 7.87 4.41 12.69 1 0
3501. DENSITY LINE 5.19 7.42 12.69 1 5.76 7.42 12.69 1 0
3502. DENSITY LINE 5.76 7.42 12.69 1 6.95 7.42 12.69 1 0
3503. DENSITY LINE 6.95 7.42 12.69 1 7.55 7.42 12.69 1 0
3504. DENSITY LINE 7.55 7.42 12.69 1 7.87 7.42 12.69 1 0
3505. DENSITY LINE 5.19 10.43 12.69 1 5.76 10.43 12.69 1 0
3506. DENSITY LINE 5.76 10.43 12.69 1 6.95 10.43 12.69 1 0
3507. DENSITY LINE 6.95 10.43 12.69 1 7.55 10.43 12.69 1 0
3508. DENSITY LINE 7.55 10.43 12.69 1 7.87 10.43 12.69 1 0
3509. DENSITY LINE 5.19 13.44 12.69 1 5.76 13.44 12.69 1 0
3510. DENSITY LINE 5.76 13.44 12.69 1 6.95 13.44 12.69 1 0

```


V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 64

```

3511. DENSITY LINE 6.95 13.44 12.69 1 7.55 13.44 12.69 1 0
3512. DENSITY LINE 7.55 13.44 12.69 1 7.87 13.44 12.69 1 0
3513. DENSITY LINE 5.19 16.45 12.69 1 5.76 16.45 12.69 1 0
3514. DENSITY LINE 5.76 16.45 12.69 1 6.95 16.45 12.69 1 0
3515. DENSITY LINE 6.95 16.45 12.69 1 7.55 16.45 12.69 1 0
3516. DENSITY LINE 7.55 16.45 12.69 1 7.87 16.45 12.69 1 0
3517. DENSITY LINE 5.19 19.46 12.69 1 5.76 19.46 12.69 1 0
3518. DENSITY LINE 5.76 19.46 12.69 1 6.95 19.46 12.69 1 0
3519. DENSITY LINE 6.95 19.46 12.69 1 7.55 19.46 12.69 1 0
3520. DENSITY LINE 7.55 19.46 12.69 1 7.87 19.46 12.69 1 0
3521. DENSITY LINE 5.19 22.47 12.69 1 5.76 22.47 12.69 1 0
3522. DENSITY LINE 5.76 22.47 12.69 1 6.95 22.47 12.69 1 0
3523. DENSITY LINE 6.95 22.47 12.69 1 7.55 22.47 12.69 1 0
3524. DENSITY LINE 7.55 22.47 12.69 1 7.87 22.47 12.69 1 0
3525. DENSITY LINE 5.19 25.48 12.69 1 5.76 25.48 12.69 1 0
3526. DENSITY LINE 5.76 25.48 12.69 1 6.95 25.48 12.69 1 0
3527. DENSITY LINE 6.95 25.48 12.69 1 7.55 25.48 12.69 1 0
3528. DENSITY LINE 7.55 25.48 12.69 1 7.87 25.48 12.69 1 0
3529. DENSITY LINE 5.19 28.49 12.69 1 5.76 28.49 12.69 1 0
3530. DENSITY LINE 5.76 28.49 12.69 1 6.95 28.49 12.69 1 0
3531. DENSITY LINE 6.95 28.49 12.69 1 7.55 28.49 12.69 1 0
3532. DENSITY LINE 7.55 28.49 12.69 1 7.87 28.49 12.69 1 0
3533. DENSITY LINE 5.19 31.5 12.69 1 5.76 31.5 12.69 1 0
3534. DENSITY LINE 5.76 31.5 12.69 1 6.95 31.5 12.69 1 0
3535. DENSITY LINE 6.95 31.5 12.69 1 7.55 31.5 12.69 1 0
3536. DENSITY LINE 7.55 31.5 12.69 1 7.87 31.5 12.69 1 0
3537. DENSITY LINE 5.19 34.51 12.69 1 5.76 34.51 12.69 1 0
3538. DENSITY LINE 5.76 34.51 12.69 1 6.95 34.51 12.69 1 0
3539. DENSITY LINE 6.95 34.51 12.69 1 7.55 34.51 12.69 1 0
3540. DENSITY LINE 7.55 34.51 12.69 1 7.87 34.51 12.69 1 0
3541. DENSITY LINE 5.19 1.5 12.69 1 5.76 1.5 12.69 1 0
3542. DENSITY LINE 5.76 1.5 12.69 1 6.95 1.5 12.69 1 0
3543. DENSITY LINE 7.55 1.5 12.69 1 7.87 1.5 12.69 1 0
3544. DENSITY LINE 6.95 1.5 12.69 1 7.55 1.5 12.69 1 0
3545. GENERATED NODES 1237 TO 2102
3546. GENERATED PLATES PLATE 2330 TO 3159
3547. END
3548. !> END GENERATED DATA BLOCK
3549. START GROUP DEFINITION
3550. FLOOR
3551. _WT 1913 1914 1917 1922 1927 1937 1944 6368 6735
3552. _FWT 1918 1929 1930 1932 TO 1934 1951 TO 1953
3553. _WT3 1958 TO 1961 1963 1964 1967
3554. _SRTOILET 111 131 137 138 140 TO 142 145 147 148 161 TO 165 168 170 174 186 -
3555. 196 199 216 TO 218 221 225 226 228 235 TO 237 239 TO 244
3556. _TYPICALTOILET 268 287 293 294 296 TO 298 301 303 304 317 TO 321 324 326 330 -
3557. 342 352 355 372 TO 374 377 381 382 384 391 TO 393 395 TO 400 459 478 484 -
3558. 485 487 TO 489 492 494 495 507 TO 511 514 516 518 530 540 543 557 TO 559 -
3559. 562 566 567 569 576 TO 578 580 TO 585 644 663 669 670 672 TO 674 677 679 -
3560. 680 692 TO 696 699 701 703 715 725 728 742 TO 744 747 751 752 754 -
3561. 761 TO 763 765 TO 770 829 848 854 855 857 TO 859 862 864 865 877 TO 881 884 -
3562. 886 888 900 910 913 927 TO 929 932 936 937 939 946 TO 948 950 TO 955 1014 -
3563. 1033 1039 1040 1042 TO 1044 1047 1049 1050 1062 TO 1066 1069 1071 1073 1085 -
3564. 1095 1098 1112 TO 1114 1117 1121 1122 1124 1131 TO 1133 1135 TO 1140 1195 -
3565. 1218 1224 1225 1227 TO 1229 1232 1234 1235 1247 TO 1251 1254 1256 1258 1270 -
3566. 1280 1283 1297 TO 1299 1302 1306 1307 1309 1316 TO 1318 1320 TO 1325 1384 -

```


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841289154

STAAD SPACE

-- PAGE NO. 65

3567. 1403 1409 1410 1412 TO 1414 1417 1419 1420 1432 TO 1436 1439 1441 1443 1455 -
 3568. 1465 1468 1482 TO 1484 1487 1491 1492 1494 1501 TO 1503 1505 TO 1510 1569 -
 3569. 1588 1594 1595 1597 TO 1599 1602 1604 1605 1617 TO 1621 1624 1626 1628 1640 -
 3570. 1650 1652 1667 TO 1669 1672 1676 1677 1679 1686 TO 1688 1690 TO 1695
 3571. 185 188 113 115 123 TO 125 131 132 146 151 152 176 182 184 185 229 TO 231 -
 3572. 234 242 247 250 TO 255 258 265 270 272 279 TO 281 287 288 302 307 308 332 -
 3573. 338 340 341 385 TO 387 390 398 403 406 TO 411 414 456 461 463 470 TO 472 -
 3574. 478 479 493 497 498 520 526 528 529 570 TO 572 575 583 588 591 TO 596 599 -
 3575. 641 646 648 655 TO 657 663 664 678 682 683 705 711 713 714 755 TO 757 760 -
 3576. 768 773 776 TO 781 784 826 831 833 840 TO 842 848 849 863 867 868 890 896 -
 3577. 898 899 940 TO 942 945 953 958 961 TO 966 969 1011 1016 1018 1025 TO 1027 -
 3578. 1033 1034 1048 1052 1053 1075 1081 1083 1084 1125 TO 1127 1130 1138 1143 -
 3579. 1146 TO 1151 1154 1196 1201 1203 1210 TO 1212 1210 1219 1233 1237 1238 1260 -
 3580. 1266 1268 1269 1310 TO 1312 1315 1323 1328 1331 TO 1336 1339 1381 1386 1388 -
 3581. 1395 TO 1397 1403 1404 1418 1422 1423 1445 1451 1453 1454 1495 TO 1497 1500 -
 3582. 1508 1513 1516 TO 1521 1524 1566 1571 1573 1580 TO 1582 1588 1589 1603 1607 -
 3583. 1608 1630 1636 1638 1639 1680 TO 1682 1685 1693 1698 1701 TO 1706 1709 1751 -
 3584. 1756 1758 1765 TO 1767 1773 1774 1788 1792 1793 1815 1821 1823 1824 1865 -
 3585. 1866 TO 1867 1870 1878 1883 1886 TO 1891 1894 6370 TO 6372 6378 TO 6380 6384 -
 3586. 6385 TO 6386 6390 TO 6392 6396 TO 6398 6402 TO 6404 6408 TO 6410 -
 3587. 6414 TO 6416 6420 TO 6422 6426 TO 6428
 3588. 185 6470 6474 6480 6482 6489 6491 6498 6500 6507 6509 6516 6518 6525 6527 -
 3589. 6534 6536 6543 6545 6560 6643 6645 TO 6664 6675 TO 6734 6893 TO 6922 6956 -
 3590. 6959 6964 6965 6968 6972 6973 6978 6981
 3591. 1 296 TO 298 301 303 317 TO 321 324 326 330 342 352 355 372 TO 374 377 381 -
 3592. 382 384 391 TO 393 395 TO 400
 3593. 2 487 TO 489 492 494 507 TO 511 514 516 518 530 540 543 557 TO 559 562 566 -
 3594. 567 569 576 TO 578 580 TO 585
 3595. 250MMTHK 269 271 277 278 281 285 286 288 290 292 295 305 315 406 460 462 -
 3596. 468 469 472 476 477 479 481 483 486 496 505 591 645 647 653 654 657 661 662 -
 3597. 664 666 668 671 681 690 776 830 832 838 839 842 846 847 849 851 853 856 866 -
 3598. 875 961 1015 1017 1023 1024 1027 1031 1032 1034 1036 1038 1041 1051 1060 -
 3599. 1146 1200 1202 1208 1209 1212 1216 1217 1219 1221 1223 1226 1236 1245 1331 -
 3600. 1385 1387 1393 1394 1397 1401 1402 1404 1406 1408 1411 1421 1430 1516 1570 -
 3601. 1572 1578 1579 1582 1586 1587 1589 1591 1593 1596 1606 1615 1701 1755 1757 -
 3602. 1763 1764 1767 1771 1772 1774 1776 1778 1781 1791 1800 1886 6350 6352 6354 -
 3603. 6356 6358 6360 6362 6364 6366 6470 6480 6489 6498 6507 6516 6525 6534 6543 -
 3604. 6572 6578 6584 6590 6596 6602 6608 6614 6620 6854 TO 6856 6858 TO 6860 6862 -
 3605. 6863 TO 6864 6866 TO 6868 6870 TO 6872 6874 TO 6876 6878 TO 6880 -
 3606. 6882 TO 6884 6886 TO 6888
 3607. 225MMTHK 339 349 358 360 364 365 370 379 388 TO 390 403 408 527 537 546 548 -
 3608. 549 TO 550 555 564 573 TO 575 588 593 712 722 731 733 TO 735 740 749 -
 3609. 758 TO 760 773 778 897 907 916 918 TO 920 925 934 943 TO 945 958 963 1082 -
 3610. 1092 1101 1103 TO 1105 1110 1119 1128 TO 1130 1143 1148 1267 1277 1286 1288 -
 3611. 1289 TO 1290 1295 1304 1313 TO 1315 1328 1333 1452 1462 1471 1473 TO 1475 -
 3612. 1480 1489 1498 TO 1500 1513 1518 1637 1647 1656 1658 TO 1660 1665 1674 1683 -
 3613. 1684 TO 1685 1698 1703 1822 1832 1841 1843 TO 1845 1850 1859 1868 TO 1870 -
 3614. 1883 1888 6351 6353 6355 6357 6359 6361 6363 6365 6367 6472 6481 6490 6499 -
 3615. 6508 6517 6526 6535 6544 6575 6580 6586 6592 6598 6604 6610 6616 6622 6801 -
 3616. 6802 TO 6845
 3617. END GROUP DEFINITION
 3618. ELEMENT PROPERTY
 3619. 2330 TO 3159 3301 TO 3864 4012 TO 4581 4796 TO 5359 5477 TO 5852 -
 3620. 5970 TO 6345 THICKNESS 0.23
 3621. DEFINE MATERIAL START
 3622. ISOTROPIC CONCRETE


V. JAGEN, B.E.M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NCS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9641269154

STAND SPACE

-- PAGE NO. 66

```

3623. E 2.17185E+07
3624. POISSON 0.17
3625. DENSITY 23.5616
3626. ALPHA 1E-05
3627. DAMP 0.05
3628. G 9.28139E+06
3629. TYPE CONCRETE
3630. STRENGTH FCU 27579
3631. ISOTROPIC DUMMY
3632. E 100
3633. POISSON 0.3
3634. ALPHA 1.2E-05
3635. DAMP 0.03
3636. G 7.9E+07
3637. END DEFINE MATERIAL
3638. MEMBER PROPERTY
3639. 106 107 109 111 119 125 127 130 131 137 TO 148 151 158 161 163 TO 166 168 -
3640. 169 TO 170 172 174 176 182 TO 186 191 194 195 199 200 202 203 207 209 211 -
3641. 213 216 219 224 225 227 230 233 TO 244 247 252 263 264 266 268 276 281 283 -
3642. 286 287 293 294 296 TO 304 307 314 317 319 TO 322 324 TO 326 330 332 338 -
3643. 339 TO 342 347 350 TO 352 355 356 358 359 365 367 369 372 374 375 377 380 -
3644. 381 TO 384 386 389 TO 400 403 408 454 455 457 459 467 472 474 477 478 484 -
3645. 485 487 TO 495 497 504 507 509 TO 512 514 TO 516 518 520 526 TO 530 535 538 -
3646. 539 TO 540 543 544 546 550 552 554 557 559 560 562 565 TO 569 575 TO 585 588 -
3647. 593 639 640 642 644 652 657 659 662 663 669 670 672 TO 680 682 689 692 694 -
3648. 695 TO 697 699 TO 701 703 705 711 TO 715 720 723 TO 725 728 729 731 735 737 -
3649. 739 742 744 745 747 750 TO 754 760 TO 770 773 778 824 825 827 829 837 842 -
3650. 844 847 848 854 855 857 TO 865 867 874 877 879 TO 882 884 TO 886 888 890 -
3651. 896 TO 900 905 908 TO 910 913 914 916 920 922 924 927 929 930 932 -
3652. 935 TO 939 945 TO 955 958 963 1009 1010 1012 1014 1022 1027 1029 1032 1033 -
3653. 1039 1040 1042 TO 1050 1052 1059 1062 1064 TO 1067 1069 TO 1071 1073 1075 -
3654. 1081 TO 1085 1090 PRIS YD 0.5 ZD 0.23
3655. 1093 TO 1095 1098 6982 TO 6985 PRIS YD 0.5 ZD 0.23
3656. 1099 1101 1105 1107 1109 1112 1114 1115 1117 1120 TO 1124 1130 TO 1140 1143 -
3657. 1148 1194 1195 1197 1199 1207 1212 1214 1217 1218 1224 1225 1227 TO 1235 -
3658. 1237 1244 1247 1249 TO 1252 1254 TO 1256 1258 1260 1266 TO 1270 1275 1278 -
3659. 1279 TO 1280 1283 1284 1286 1290 1292 1294 1297 1299 1300 1302 1305 TO 1309 -
3660. 1315 TO 1325 1328 1333 1379 1380 1382 1384 1392 1397 1399 1402 1403 1409 -
3661. 1410 1412 TO 1420 1422 1429 1432 1434 TO 1437 1439 TO 1441 1443 1445 1451 -
3662. 1452 TO 1455 1460 1463 TO 1465 1468 1469 1471 1475 1477 1479 1482 1484 1485 -
3663. 1487 1490 1491 1493 1500 TO 1502 1504 1505 1507 1564 1567 1577 1582 1584 -
3664. 1598 1601 1614 1617 1620 1622 1625 1645 1648 TO 1650 1654 1660 1662 1664 -
3665. 1667 1670 1675 1676 1678 1685 TO 1687 1689 1690 1692 1749 1751 1752 1762 -
3666. 1767 1769 1783 1786 1793 1799 1802 1805 1807 1810 1818 1830 1833 TO 1835 -
3667. 1839 1845 1847 1849 1852 1855 1860 1861 1863 1867 1870 TO 1872 1874 1875 -
3668. 1877 1887 1889 TO 1891 1894 6373 6472 6473 6481 6490 6499 6508 6517 6526 -
3669. 6545 6548 TO 6551 6559 6574 TO 6577 6966 6981 6986 PRIS YD 0.5 ZD 0.23
3670. 0580 0582 0583 0586 0588 0529 0592 0594 0595 0598 0600 0601 0604 0606 0607 -
3671. 0610 0612 0613 0618 0619 0624 0625 PRIS YD 0.5 ZD 0.23
3672. 132 218 221 226 228 250 1492 1494 1503 1506 1508 TO 1510 1513 1518 1565 1569 -
3673. 1587 1588 1594 1595 1597 1599 1600 1602 TO 1605 1607 1619 1621 1624 1626 -
3674. 1628 1630 1636 TO 1640 1653 1656 1669 1672 1677 1679 1688 1691 1693 TO 1695 -
3675. 1698 1703 1750 1754 1772 1773 1779 1780 1782 1784 1785 1787 TO 1790 1792 -
3676. 1804 1806 1809 1811 1813 1815 1821 TO 1825 1838 1841 1854 1857 1862 1864 -
3677. 1873 1876 1878 TO 1880 1883 1888 1919 1925 1928 1938 1939 1947 1949 1950 -
3678. 1958 TO 1961 1963 TO 1967 2071 2076 2079 6484 6493 6502 6511 6520 6529 6535 -

```

V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-1 / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-8, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.

STAAD SPACE

-- PAGE NO. 67

3679. 6538 6544 6547 6581 6587 6593 6599 6605 6611 6616 6617 6622 -
 3680. 6623 PRIS YD 0.5 ZD 0.23
 3681. 110 112 TO 118 120 121 123 124 126 128 129 134 136 149 158 154 155 157 159 -
 3682. 160 162 167 171 173 181 187 TO 190 192 193 196 TO 198 201 204 208 210 212 -
 3683. 214 215 217 220 222 223 229 231 245 267 269 TO 275 277 TO 280 282 284 285 -
 3684. 288 290 292 295 305 310 311 313 315 316 318 323 329 337 343 TO 346 348 349 -
 3685. 353 354 357 360 364 366 368 370 371 373 376 378 379 385 388 401 406 458 460 -
 3686. 461 TO 466 468 TO 471 473 475 476 479 481 483 486 496 500 501 503 505 506 -
 3687. 508 513 517 525 531 TO 534 536 537 541 542 545 547 TO 549 551 553 555 556 -
 3688. 558 561 563 564 570 571 573 574 586 591 643 645 TO 651 653 TO 656 658 660 -
 3689. 661 664 666 668 671 681 685 686 688 690 691 693 698 702 710 716 TO 719 721 -
 3690. 722 726 727 730 732 TO 734 736 738 740 741 743 746 748 749 755 756 758 759 -
 3691. 771 776 828 830 TO 836 838 TO 841 843 845 846 849 851 853 856 866 870 871 -
 3692. 873 875 876 878 883 887 895 901 TO 904 906 907 911 913 915 917 TO 919 921 -
 3693. 923 925 926 928 931 933 934 940 941 943 944 956 961 1013 1015 TO 1021 1023 -
 3694. 1024 TO 1026 1028 1030 1031 1034 1036 1038 1041 1051 1055 1056 1058 1060 -
 3695. 1061 1063 1068 1072 1080 1086 TO 1089 1091 1092 1096 1097 1100 1102 TO 1104 -
 3696. 1106 1108 PRIS YD 0.6 ZD 0.23
 3697. 1110 1111 1113 1116 1118 1119 1125 1126 1128 1129 1226 1411 1596 1781 6572 -
 3698. 6578 6584 6590 6596 6602 6608 6614 6620 PRIS YD 0.6 ZD 0.23
 3699. 1141 1146 1198 1200 TO 1206 1208 TO 1211 1213 1215 1216 1219 1221 1223 1236 -
 3700. 1240 1331 1404 1516 1589 1701 1774 1806 6470 6471 6480 6483 6489 6492 6498 -
 3701. 6501 6507 6510 6516 6519 6525 6528 6534 6537 6543 6546 6573 6579 6585 6591 -
 3702. 6597 6603 6609 6615 6621 PRIS YD 0.6 ZD 0.23
 3703. 1911 1914 1917 1918 1922 1927 1929 1930 1932 TO 1934 1937 1944 1951 TO 1952 -
 3704. 1953 PRIS YD 0.6 ZD 0.23
 3705. 1241 1243 1245 1246 1248 1253 1257 1265 1271 TO 1274 1276 1277 1281 1282 -
 3706. 1285 1287 TO 1289 1291 1293 1295 1296 1298 1301 1303 1304 1310 1311 1313 -
 3707. 1314 1326 1383 1385 TO 1391 1393 TO 1396 1398 1400 1401 1406 1408 1421 1425 -
 3708. 1426 1428 1430 1431 1433 1438 1442 1450 1456 TO 1459 1461 1462 1466 1467 -
 3709. 1470 1472 TO 1474 1476 1478 1480 1481 1483 1486 1488 1489 1495 1496 1498 -
 3710. 1499 1511 1568 1570 TO 1576 1578 TO 1581 1583 1585 1586 1591 1593 1606 1610 -
 3711. 1611 1613 1615 1616 1618 1623 1627 1635 1641 TO 1644 1646 1647 1651 1652 -
 3712. 1655 1657 TO 1659 1661 1663 1665 1666 1668 1671 1673 1674 1680 1681 1683 -
 3713. 1684 1696 1753 1755 TO 1761 1763 TO 1766 1768 1770 1771 1776 1778 1791 1795 -
 3714. 1796 1798 1800 1801 1803 1808 1812 1820 1826 TO 1829 1831 1832 1836 1837 -
 3715. 1840 1842 TO 1844 1846 1848 1850 1851 1853 1856 1858 1859 1865 1866 1868 -
 3716. 1869 1881 PRIS YD 0.6 ZD 0.23
 3717. 152 179 248 251 253 258 308 335 404 407 409 414 408 523 589 592 594 599 683 -
 3718. 708 774 777 779 784 868 893 959 962 964 969 1053 1078 1144 1147 1149 1154 -
 3719. 1238 1263 1329 1332 1334 1339 1423 1448 1514 1517 1519 1524 1608 1633 1699 -
 3720. 1702 1704 1709 1804 6474 TO 6479 6482 6485 TO 6488 6491 6494 TO 6497 6500 -
 3721. 6503 TO 6506 6509 6512 TO 6515 6518 6521 TO 6524 6527 6530 TO 6533 6536 -
 3722. 6539 TO 6542 6552 TO 6558 6560 TO 6565 6642 6643 6956 6957 6959 -
 3723. 6961 TO 6965 6968 6970 6972 TO 6974 6977 6978 6980 PRIS YD 0.45 ZD 0.23
 3724. 108 231 265 387 456 572 641 757 826 942 1011 1127 1196 1312 1381 1497 1566 -
 3725. 1682 PRIS YD 0.4 ZD 0.23
 3726. 254 255 410 411 595 596 780 781 965 966 1150 1151 1335 1336 1520 1521 1705 -
 3727. 1706 PRIS YD 0.45 ZD 0.23
 3728. 175 246 331 402 519 587 704 772 839 957 1074 1142 1259 1327 1444 1512 1629 -
 3729. 1697 1814 1882 PRIS YD 0.5 ZD 0.23
 3730. 3 TO 7 10 11 29 30 32 33 38 TO 42 45 46 64 65 67 68 73 TO 77 80 81 99 100 -
 3731. 102 103 421 TO 425 428 429 447 448 450 451 606 TO 610 613 614 632 633 635 -
 3732. 636 791 TO 795 798 799 817 818 820 821 976 TO 980 983 984 1002 1003 1005 -
 3733. 1006 1161 TO 1165 1168 1169 1187 1188 1190 1191 1346 TO 1350 1353 1354 1372 -
 3734. 1373 1375 1376 1531 TO 1535 1538 1539 1557 1558 1560 1561 1716 TO 1720 1723 -


V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS.
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOLE ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 MOBILE: 9841203154

STAAD SPACE

-- PAGE NO. 68

3735. 1724 1742 1743 1745 1746 1954 TO 1957 PRIS YD 0.3 ZD 0.8
 3736. 1 2 8 9 12 13 18 19 24 TO 28 31 34 TO 37 43 44 47 48 53 54 59 TO 63 66 69 -
 3737. 70 TO 72 78 79 82 83 88 89 94 TO 98 101 104 105 419 420 425 427 430 431 436 -
 3738. 437 442 TO 446 449 452 453 604 605 611 612 615 616 621 622 627 TO 631 634 -
 3739. 637 638 789 798 796 797 800 801 806 807 812 TO 816 819 822 823 974 975 981 -
 3740. 982 985 986 991 992 997 TO 1001 1004 1007 1088 1159 1168 1166 1167 1170 -
 3741. 1171 1176 1177 1182 TO 1186 1189 1192 1193 1344 1345 1351 1352 1355 1356 -
 3742. 1361 1362 1367 TO 1371 1374 1377 1378 1529 1530 1536 1537 1540 1541 1546 -
 3743. 1547 1552 TO 1556 1559 1562 1563 1714 1715 1721 1722 1725 1726 1731 1732 -
 3744. 1737 TO 1741 1744 1747 1748 1899 1900 1905 1906 1911 -
 3745. 1912 PRIS YD 0.8 ZD 0.3
 3746. 6348 TO 6372 6375 TO 6430 6566 TO 6571 6645 TO 6955 6987 TO 7084 -
 3747. 7085 PRIS YD 0.23 ZD 0.23
 3748. 1968 TO 1976 1983 TO 1989 1991 TO 2002 2006 2011 TO 2020 2023 TO 2025 2032 -
 3749. 2034 2037 TO 2039 2042 TO 2046 2049 2050 2053 TO 2059 2061 2063 -
 3750. 6441 TO 6443 6626 TO 6641 PRIS YD 0.6 ZD 0.3
 3751. CONSTANTS
 3752. MATERIAL CONCRETE MEMB 1 TO 13 18 19 24 TO 48 53 54 59 TO 83 88 89 94 TO 121 -
 3753. 123 TO 132 134 136 TO 152 154 155 157 TO 176 179 181 TO 204 207 TO 248 250 -
 3754. 251 TO 255 258 263 TO 288 290 292 TO 305 307 308 310 311 313 TO 326 -
 3755. 329 TO 332 335 337 TO 360 364 TO 404 406 TO 411 414 419 TO 431 436 437 442 -
 3756. 443 TO 479 481 483 TO 498 500 501 503 TO 520 523 525 TO 589 591 TO 596 599 -
 3757. 604 TO 616 621 622 627 TO 664 666 668 TO 683 685 686 688 TO 705 708 -
 3758. 710 TO 774 776 TO 781 784 789 TO 801 806 807 812 TO 849 851 853 TO 868 870 -
 3759. 871 873 TO 890 893 895 TO 959 961 TO 966 969 974 TO 986 991 992 997 TO 1034 -
 3760. 1036 1038 TO 1053 1055 1056 1058 TO 1075 1078 1080 TO 1144 1146 TO 1151 -
 3761. 1154 1159 TO 1171 1176 1177 1182 TO 1219 1221 1223 TO 1238 1240 1241 1243 -
 3762. 1244 TO 1260 1263 1265 TO 1329 1331 TO 1336 1339 1344 TO 1356 1361 1362 1367 -
 3763. 1368 TO 1404 1406 1408 TO 1423 1425 1426 1428 TO 1445 1448 1450 TO 1514 1516 -
 3764. 1517 TO 1521 1524 1529 TO 1541 1546 1547 1552 TO 1589 1591 1593 TO 1608 1610 -
 3765. 1611 1613 TO 1630 1633 1635 TO 1699 1701 TO 1706 1709 1714 TO 1726 1731 -
 3766. 1732 1737 TO 1774 1776 1778 TO 1793 1795 1796 1798 TO 1815 1818 -
 3767. 1820 TO 1884 1886 TO 1891 1894 1899 1900 1905 1906 1911 TO 1914 -
 3768. 1917 TO 1919 1922
 3769. MATERIAL CONCRETE MEMB 1925 1927 TO 1930 1932 TO 1934 1937 TO 1939 1944 1947 -
 3770. 1949 TO 1961 1963 TO 1976 1983 TO 1989 1991 TO 2002 2006 2011 TO 2020 2023 -
 3771. 2024 TO 2025 2032 2034 2037 TO 2039 2042 TO 2046 2049 2050 2053 TO 2059 2061 -
 3772. 2063 2071 2076 2079 2330 TO 3159 3301 TO 3864 4012 TO 4581 4796 TO 5359 -
 3773. 5477 TO 5852 5970 TO 6345 6373 6441 TO 6443 6470 TO 6565 6572 TO 6643 6956 -
 3774. 6957 6959 6961 TO 6966 6968 6970 6972 TO 6974 6977 6978 6980 TO 6986
 3775. MATERIAL DUMMY MEMB 6348 TO 6372 6375 TO 6430 6566 TO 6571 6645 TO 6955 6987 -
 3776. 6988 TO 7085
 3777. SUPPORTS
 3778. 1 TO 35 1405 TO 1409 2189 TO 2193 2745 TO 2749 3386 TO 3390 3928 TO 3930 -
 3779. 4294 TO 4296 FIXED
 3780. CUT OFF MODE SHAPE 50
 3781. DEFINE REFERENCE LOADS

** WARNING ** A SOFT MATERIAL WITH (1.0 / 2.172E+05) TIMES THE STIFFNESS OF
 CONCRETE ENTERED. PLEASE CHECK.

3782. LOAD R1 LOADTYPE MASS TITLE REF MASS MODEL
 3783. MEMBER LOAD

3784. 112 114 119 TO 121 128 TO 130 134 136 139 TO 141 143 TO 145 147 TO 149 158 -
 3785. 161 TO 165 200 TO 202 204 209 211 214 216 217 219 221 223 225 227 228 232 -


V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, CA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841209154

STAAD SPACE

-- PAGE NO. 69

3786. 233 235 TO 237 241 243 271 276 TO 278 284 TO 286 290 292 295 TO 297 -
 3787. 299 TO 301 303 TO 305 314 317 TO 321 356 TO 358 360 365 367 370 372 373 375 -
 3788. 377 379 381 383 384 388 389 391 TO 393 397 399 402 407 TO 409 475 TO 477 -
 3789. 481 483 486 TO 488 490 TO 492 494 TO 496 504 507 TO 511 544 TO 546 548 550 -
 3790. 552 555 557 558 560 562 564 566 568 569 573 574 576 TO 578 582 584 647 652 -
 3791. 653 TO 654 660 TO 662 666 668 671 TO 673 675 TO 677 679 TO 681 689 -
 3792. 692 TO 696 729 TO 731 733 735 737 740 742 743 745 747 749 751 753 754 758 -
 3793. 759 761 TO 763 767 769 832 837 TO 839 845 TO 847 851 853 856 TO 858 -
 3794. 860 TO 862 864 TO 866 874 877 TO 881 914 TO 916 918 920 922 925 927 928 930 -
 3795. 932 934 936 938 939 943 944 946 TO 948 952 954 1017 1022 TO 1024 -
 3796. 1030 TO 1032 1036 1038 1041 TO 1043 1045 TO 1047 1049 TO 1051 1059 -
 3797. 1062 TO 1066 1099 TO 1101 1103 1105 1107 1110 1112 1113 1115 1117 1119 1121 -
 3798. 1123 1124 1128 1129 1131 TO 1133 1137 1139 1202 1207 TO 1209 1215 TO 1217 -
 3799. 1221 1223 1226 TO 1228 1230 6572 6574 UNI GX 5
 3800. 6984 UNI GX 5
 3801. 112 114 119 TO 121 128 TO 130 134 136 139 TO 141 143 TO 145 147 TO 149 158 -
 3802. 161 TO 165 200 TO 202 204 209 211 214 216 217 219 221 223 225 227 228 232 -
 3803. 233 235 TO 237 241 243 271 276 TO 278 284 TO 286 290 292 295 TO 297 -
 3804. 299 TO 301 303 TO 305 314 317 TO 321 356 TO 358 360 365 367 370 372 373 375 -
 3805. 377 379 381 383 384 388 389 391 TO 393 397 399 402 407 TO 409 475 TO 477 -
 3806. 481 483 486 TO 488 490 TO 492 494 TO 496 504 507 TO 511 544 TO 546 548 550 -
 3807. 552 555 557 558 560 562 564 566 568 569 573 574 576 TO 578 582 584 647 652 -
 3808. 653 TO 654 660 TO 662 666 668 671 TO 673 675 TO 677 679 TO 681 689 -
 3809. 692 TO 696 729 TO 731 733 735 737 740 742 743 745 747 749 751 753 754 758 -
 3810. 759 761 TO 763 767 769 832 837 TO 839 845 TO 847 851 853 856 TO 858 -
 3811. 860 TO 862 864 TO 866 874 877 TO 881 914 TO 916 918 920 922 925 927 928 930 -
 3812. 932 934 936 938 939 943 944 946 TO 948 952 954 1017 1022 TO 1024 -
 3813. 1030 TO 1032 1036 1038 1041 TO 1043 1045 TO 1047 1049 TO 1051 1059 -
 3814. 1062 TO 1066 1099 TO 1101 1103 1105 1107 1110 1112 1113 1115 1117 1119 1121 -
 3815. 1123 1124 1128 1129 1131 TO 1133 1137 1139 1202 1207 TO 1209 1215 TO 1217 -
 3816. 1221 1223 1226 TO 1228 1230 6572 6574 UNI GY 5
 3817. 6984 UNI GY 5
 3818. 112 114 119 TO 121 128 TO 130 134 136 139 TO 141 143 TO 145 147 TO 149 158 -
 3819. 161 TO 165 200 TO 202 204 209 211 214 216 217 219 221 223 225 227 228 232 -
 3820. 233 235 TO 237 241 243 271 276 TO 278 284 TO 286 290 292 295 TO 297 -
 3821. 299 TO 301 303 TO 305 314 317 TO 321 356 TO 358 360 365 367 370 372 373 375 -
 3822. 377 379 381 383 384 388 389 391 TO 393 397 399 402 407 TO 409 475 TO 477 -
 3823. 481 483 486 TO 488 490 TO 492 494 TO 496 504 507 TO 511 544 TO 546 548 550 -
 3824. 552 555 557 558 560 562 564 566 568 569 573 574 576 TO 578 582 584 647 652 -
 3825. 653 TO 654 660 TO 662 666 668 671 TO 673 675 TO 677 679 TO 681 689 -
 3826. 692 TO 696 729 TO 731 733 735 737 740 742 743 745 747 749 751 753 754 758 -
 3827. 759 761 TO 763 767 769 832 837 TO 839 845 TO 847 851 853 856 TO 858 -
 3828. 860 TO 862 864 TO 866 874 877 TO 881 914 TO 916 918 920 922 925 927 928 930 -
 3829. 932 934 936 938 939 943 944 946 TO 948 952 954 1017 1022 TO 1024 -
 3830. 1030 TO 1032 1036 1038 1041 TO 1043 1045 TO 1047 1049 TO 1051 1059 -
 3831. 1062 TO 1066 1099 TO 1101 1103 1105 1107 1110 1112 1113 1115 1117 1119 1121 -
 3832. 1123 1124 1128 1129 1131 TO 1133 1137 1139 1202 1207 TO 1209 1215 TO 1217 -
 3833. 1221 1223 1226 TO 1228 1230 6572 6574 UNI GZ 5
 3834. 6984 UNI GZ 5
 3835. MEMBER LOAD
 3836. 6575 6577 6578 6580 6582 TO 6584 6586 6588 TO 6590 6592 6594 TO 6596 6598 -
 3837. 6600 TO 6602 6606 6607 6612 6613 6618 6619 6986 UNI GX 5
 3838. 6575 6577 6578 6580 6582 TO 6584 6586 6588 TO 6590 6592 6594 TO 6596 6598 -
 3839. 6600 TO 6602 6606 6607 6612 6613 6618 6619 6986 UNI GY 5
 3840. 6575 6577 6578 6580 6582 TO 6584 6586 6588 TO 6590 6592 6594 TO 6596 6598 -
 3841. 6600 TO 6602 6606 6607 6612 6613 6618 6619 6986 UNI GZ 5

V. JAGEN, B.E.M.E., (Struct), M.I.E.A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.

STAAD SPACE

-- PAGE NO. 78

3842. MEMBER LOAD
 3843. 6373 UNI GX 5
 3844. 6373 UNI GY 5
 3845. 6373 UNI GZ 5
 3846. MEMBER LOAD
 3847. 2058 2059 UNI GX 5
 3848. 2058 2059 UNI GY 5
 3849. 2058 2059 UNI GZ 5
 3850. MEMBER LOAD
 3851. 1231 1232 1234 TO 1236 1244 1247 TO 1251 1284 TO 1286 1288 1290 1292 1295 -
 3852. 1297 1298 1300 1302 1304 1306 1308 1309 1313 1314 1316 TO 1318 1322 1324 -
 3853. 1387 1392 TO 1394 1400 TO 1402 1406 1408 1411 TO 1413 1415 TO 1417 -
 3854. 1419 TO 1421 1429 1432 TO 1436 1469 TO 1471 1473 1475 1477 1480 1482 1483 -
 3855. 1485 1487 1489 1491 1493 1494 1498 1499 1501 TO 1503 1507 1509 1572 1577 -
 3856. 1578 TO 1579 1585 TO 1587 1591 1593 1596 TO 1598 1600 TO 1602 1604 TO 1606 -
 3857. 1614 1617 TO 1621 1654 TO 1656 1658 1660 1662 1665 1667 1668 1670 1672 1674 -
 3858. 1676 1678 1679 1683 1684 1686 TO 1688 1692 1694 6604 6608 6610 6614 -
 3859. 6616 UNI GX 5
 3860. 1231 1232 1234 TO 1236 1244 1247 TO 1251 1284 TO 1286 1288 1290 1292 1295 -
 3861. 1297 1298 1300 1302 1304 1306 1308 1309 1313 1314 1316 TO 1318 1322 1324 -
 3862. 1387 1392 TO 1394 1400 TO 1402 1406 1408 1411 TO 1413 1415 TO 1417 -
 3863. 1419 TO 1421 1429 1432 TO 1436 1469 TO 1471 1473 1475 1477 1480 1482 1483 -
 3864. 1485 1487 1489 1491 1493 1494 1498 1499 1501 TO 1503 1507 1509 1572 1577 -
 3865. 1578 TO 1579 1585 TO 1587 1591 1593 1596 TO 1598 1600 TO 1602 1604 TO 1606 -
 3866. 1614 1617 TO 1621 1654 TO 1656 1658 1660 1662 1665 1667 1668 1670 1672 1674 -
 3867. 1676 1678 1679 1683 1684 1686 TO 1688 1692 1694 6604 6608 6610 6614 -
 3868. 6616 UNI GY 5
 3869. 1231 1232 1234 TO 1236 1244 1247 TO 1251 1284 TO 1286 1288 1290 1292 1295 -
 3870. 1297 1298 1300 1302 1304 1306 1308 1309 1313 1314 1316 TO 1318 1322 1324 -
 3871. 1387 1392 TO 1394 1400 TO 1402 1406 1408 1411 TO 1413 1415 TO 1417 -
 3872. 1419 TO 1421 1429 1432 TO 1436 1469 TO 1471 1473 1475 1477 1480 1482 1483 -
 3873. 1485 1487 1489 1491 1493 1494 1498 1499 1501 TO 1503 1507 1509 1572 1577 -
 3874. 1578 TO 1579 1585 TO 1587 1591 1593 1596 TO 1598 1600 TO 1602 1604 TO 1606 -
 3875. 1614 1617 TO 1621 1654 TO 1656 1658 1660 1662 1665 1667 1668 1670 1672 1674 -
 3876. 1676 1678 1679 1683 1684 1686 TO 1688 1692 1694 6604 6608 6610 6614 -
 3877. 6616 UNI GZ 5
 3878. MEMBER LOAD
 3879. 106 107 109 111 113 115 118 123 TO 127 138 142 155 166 TO 170 174 175 187 -
 3880. 188 TO 189 191 192 194 TO 196 198 199 203 213 215 218 222 224 226 229 230 -
 3881. 234 238 TO 240 244 246 254 255 263 264 266 268 270 272 274 275 279 TO 283 -
 3882. 294 298 311 322 TO 326 330 331 343 TO 345 347 348 350 TO 352 354 355 359 -
 3883. 369 371 374 378 380 382 385 386 390 394 TO 396 400 402 410 411 454 455 457 -
 3884. 459 461 463 465 466 470 TO 474 485 489 501 512 TO 516 518 519 531 TO 533 -
 3885. 535 536 538 TO 540 542 543 547 554 556 559 563 565 567 570 571 575 -
 3886. 579 TO 581 585 587 595 596 630 640 642 644 646 648 650 651 655 TO 659 670 -
 3887. 674 685 697 TO 701 703 704 716 TO 718 720 721 723 TO 725 727 728 732 739 -
 3888. 741 744 748 750 752 755 756 760 764 TO 766 770 772 780 781 824 825 827 829 -
 3889. 831 833 835 836 840 TO 844 855 859 871 882 TO 886 888 889 901 TO 903 905 -
 3890. 906 908 TO 910 912 913 917 924 926 929 933 935 937 940 941 945 949 TO 951 -
 3891. 955 957 965 966 1009 1010 1012 1014 1016 1018 1020 1021 1025 TO 1029 1040 -
 3892. 1044 1056 1067 TO 1071 1073 1074 1086 TO 1088 1090 1091 1093 TO 1095 1097 -
 3893. 1098 1102 1109 1111 1114 1118 1120 1122 1125 1126 1130 1134 TO 1135 -
 3894. 1136 UNI GX 6
 3895. 106 107 109 111 113 115 118 123 TO 127 138 142 155 166 TO 170 174 175 187 -
 3896. 188 TO 189 191 192 194 TO 196 198 199 203 213 215 218 222 224 226 229 230 -
 3897. 234 238 TO 240 244 246 254 255 263 264 266 268 270 272 274 275 279 TO 283 -

V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2016/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841289154

STAND SPACE

-- PAGE NO. 71

3898. 294 298 311 322 TO 326 330 331 343 TO 345 347 348 350 TO 352 354 355 359 -
 3899. 369 371 374 378 380 382 385 386 390 394 TO 396 400 402 410 411 454 455 457 -
 3900. 459 461 463 465 466 470 TO 474 485 489 501 512 TO 516 518 519 531 TO 533 -
 3901. 535 536 538 TO 540 542 543 547 554 556 559 563 565 567 570 571 575 -
 3902. 579 TO 581 585 587 595 596 639 640 642 644 646 648 650 651 655 TO 659 670 -
 3903. 674 686 697 TO 701 703 704 716 TO 718 720 721 723 TO 725 727 728 732 739 -
 3904. 741 744 748 750 752 755 756 760 764 TO 766 770 772 780 781 824 825 827 829 -
 3905. 831 833 835 836 840 TO 844 855 859 871 882 TO 886 888 889 901 TO 903 905 -
 3906. 906 908 TO 910 912 913 917 924 926 929 933 935 937 940 941 945 949 TO 951 -
 3907. 955 957 965 966 1009 1010 1012 1014 1016 1018 1020 1021 1025 TO 1029 1040 -
 3908. 1044 1056 1067 TO 1071 1073 1074 1086 TO 1088 1090 1091 1093 TO 1095 1097 -
 3909. 1098 1102 1109 1111 1114 1118 1120 1122 1125 1126 1130 1134 TO 1135 -
 3910. 1136 UNI GY 6
 3911. 106 107 109 111 113 115 118 123 TO 127 138 142 155 166 TO 170 174 175 187 -
 3912. 188 TO 189 191 192 194 TO 196 198 199 203 213 215 218 222 224 226 229 230 -
 3913. 234 238 TO 240 244 246 254 255 263 264 266 268 270 272 274 275 279 TO 283 -
 3914. 294 298 311 322 TO 326 330 331 343 TO 345 347 348 350 TO 352 354 355 359 -
 3915. 369 371 374 378 380 382 385 386 390 394 TO 396 400 402 410 411 454 455 457 -
 3916. 459 461 463 465 466 470 TO 474 485 489 501 512 TO 516 518 519 531 TO 533 -
 3917. 535 536 538 TO 540 542 543 547 554 556 559 563 565 567 570 571 575 -
 3918. 579 TO 581 585 587 595 596 639 640 642 644 646 648 650 651 655 TO 659 670 -
 3919. 674 686 697 TO 701 703 704 716 TO 718 720 721 723 TO 725 727 728 732 739 -
 3920. 741 744 748 750 752 755 756 760 764 TO 766 770 772 780 781 824 825 827 829 -
 3921. 831 833 835 836 840 TO 844 855 859 871 882 TO 886 888 889 901 TO 903 905 -
 3922. 906 908 TO 910 912 913 917 924 926 929 933 935 937 940 941 945 949 TO 951 -
 3923. 955 957 965 966 1009 1010 1012 1014 1016 1018 1020 1021 1025 TO 1029 1040 -
 3924. 1044 1056 1067 TO 1071 1073 1074 1086 TO 1088 1090 1091 1093 TO 1095 1097 -
 3925. 1098 1102 1109 1111 1114 1118 1120 1122 1125 1126 1130 1134 TO 1135 -
 3926. 1136 UNI GZ 6
 3927. MEMBER LOAD
 3928. 2054 2056 2061 2063 UNI GX 6
 3929. 2054 2056 2061 2063 UNI GY 6
 3930. 2054 2056 2061 2063 UNI GZ 6
 3931. MEMBER LOAD
 3932. 1140 1142 1150 1151 1194 1195 1197 1199 1201 1203 1205 1206 1210 TO 1214 -
 3933. 1225 1229 1241 1252 TO 1256 1258 1259 1271 TO 1273 1275 1276 1278 TO 1280 -
 3934. 1282 1283 1287 1294 1296 1299 1303 1305 1307 1310 1311 1315 1319 TO 1321 -
 3935. 1325 1327 1335 1336 1379 1380 1382 1384 1386 1388 1390 1391 1395 TO 1399 -
 3936. 1410 1414 1426 1437 TO 1441 1443 1444 1456 TO 1458 1460 1461 1463 TO 1465 -
 3937. 1467 1468 1472 1479 1481 1484 1488 1490 1492 1495 1496 1500 1504 TO 1506 -
 3938. 1510 1512 1520 1521 1564 1565 1567 1569 1571 1573 1575 1576 1580 TO 1584 -
 3939. 1595 1599 1611 1622 TO 1626 1628 1629 1641 TO 1643 1645 1646 1648 TO 1650 -
 3940. 1652 1653 1657 1664 1666 1669 1673 1675 1677 1680 1681 1685 1689 TO 1691 -
 3941. 1695 1697 1705 1706 1719 1755 1757 1765 1766 1771 1890 1891 1986 TO 1988 -
 3942. 1994 1995 1997 2042 TO 2044 2053 6634 UNI GX 6
 3943. 1140 1142 1150 1151 1194 1195 1197 1199 1201 1203 1205 1206 1210 TO 1214 -
 3944. 1225 1229 1241 1252 TO 1256 1258 1259 1271 TO 1273 1275 1276 1278 TO 1280 -
 3945. 1282 1283 1287 1294 1296 1299 1303 1305 1307 1310 1311 1315 1319 TO 1321 -
 3946. 1325 1327 1335 1336 1379 1380 1382 1384 1386 1388 1390 1391 1395 TO 1399 -
 3947. 1410 1414 1426 1437 TO 1441 1443 1444 1456 TO 1458 1460 1461 1463 TO 1465 -
 3948. 1467 1468 1472 1479 1481 1484 1488 1490 1492 1495 1496 1500 1504 TO 1506 -
 3949. 1510 1512 1520 1521 1564 1565 1567 1569 1571 1573 1575 1576 1580 TO 1584 -
 3950. 1595 1599 1611 1622 TO 1626 1628 1629 1641 TO 1643 1645 1646 1648 TO 1650 -
 3951. 1652 1653 1657 1664 1666 1669 1673 1675 1677 1680 1681 1685 1689 TO 1691 -
 3952. 1695 1697 1705 1706 1719 1755 1757 1765 1766 1771 1890 1891 1986 TO 1988 -
 3953. 1994 1995 1997 2042 TO 2044 2053 6634 UNI GY 6

V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 72

3954. 1140 1142 1150 1151 1194 1195 1197 1199 1201 1203 1205 1206 1210 TO 1214 -
 3955. 1225 1229 1241 1252 TO 1256 1258 1259 1271 TO 1273 1275 1276 1278 TO 1280 -
 3956. 1282 1283 1287 1294 1296 1299 1303 1305 1307 1310 1311 1315 1319 TO 1321 -
 3957. 1325 1327 1335 1336 1379 1380 1382 1384 1386 1388 1390 1391 1395 TO 1399 -
 3958. 1410 1414 1426 1437 TO 1441 1443 1444 1456 TO 1458 1460 1461 1463 TO 1465 -
 3959. 1467 1468 1472 1479 1481 1484 1488 1490 1492 1495 1496 1500 1504 TO 1506 -
 3960. 1510 1512 1520 1521 1564 1565 1567 1569 1571 1573 1575 1576 1580 TO 1584 -
 3961. 1595 1599 1611 1622 TO 1626 1628 1629 1641 TO 1643 1645 1646 1648 TO 1650 -
 3962. 1652 1653 1657 1664 1666 1669 1673 1675 1677 1680 1681 1685 1689 TO 1691 -
 3963. 1695 1697 1705 1706 1719 1755 1757 1765 1766 1771 1890 1891 1986 TO 1988 -
 3964. 1994 1995 1997 2042 TO 2044 2053 6634 UNI GZ 6
 3965. MEMBER LOAD
 3966. 108 110 116 157 173 190 210 212 231 245 265 267 273 313 329 346 366 368 387 -
 3967. 401 456 458 464 503 517 534 551 553 572 586 641 643 649 688 702 719 736 738 -
 3968. 757 771 826 828 834 873 887 904 921 923 942 956 1011 1013 1019 1058 1072 -
 3969. 1089 1106 1108 1127 1141 1196 1198 1204 1243 1257 1274 1291 1293 1312 1326 -
 3970. 1381 1383 1389 1428 1442 1459 1476 1478 1497 1511 1566 1568 1574 1613 1627 -
 3971. 1644 1661 1663 1682 1696 1749 TO 1752 1754 1761 1768 1769 1780 1784 1796 -
 3972. 1807 1809 TO 1811 1813 1827 1828 1830 1831 1833 TO 1838 1842 1849 1854 1858 -
 3973. 1860 1862 1867 1874 TO 1876 1880 UNI GX 3
 3974. 108 110 116 157 173 190 210 212 231 245 265 267 273 313 329 346 366 368 387 -
 3975. 401 456 458 464 503 517 534 551 553 572 586 641 643 649 688 702 719 736 738 -
 3976. 757 771 826 828 834 873 887 904 921 923 942 956 1011 1013 1019 1058 1072 -
 3977. 1089 1106 1108 1127 1141 1196 1198 1204 1243 1257 1274 1291 1293 1312 1326 -
 3978. 1381 1383 1389 1428 1442 1459 1476 1478 1497 1511 1566 1568 1574 1613 1627 -
 3979. 1644 1661 1663 1682 1696 1749 TO 1752 1754 1761 1768 1769 1780 1784 1796 -
 3980. 1807 1809 TO 1811 1813 1827 1828 1830 1831 1833 TO 1838 1842 1849 1854 1858 -
 3981. 1860 1862 1867 1874 TO 1876 1880 UNI GY 3
 3982. 108 110 116 157 173 190 210 212 231 245 265 267 273 313 329 346 366 368 387 -
 3983. 401 456 458 464 503 517 534 551 553 572 586 641 643 649 688 702 719 736 738 -
 3984. 757 771 826 828 834 873 887 904 921 923 942 956 1011 1013 1019 1058 1072 -
 3985. 1089 1106 1108 1127 1141 1196 1198 1204 1243 1257 1274 1291 1293 1312 1326 -
 3986. 1381 1383 1389 1428 1442 1459 1476 1478 1497 1511 1566 1568 1574 1613 1627 -
 3987. 1644 1661 1663 1682 1696 1749 TO 1752 1754 1761 1768 1769 1780 1784 1796 -
 3988. 1807 1809 TO 1811 1813 1827 1828 1830 1831 1833 TO 1838 1842 1849 1854 1858 -
 3989. 1860 1862 1867 1874 TO 1876 1880 UNI GZ 3
 3990. FLOOR LOAD
 3991. YRANGE 4.35 36.2 FLOAD 3.125 GX
 3992. YRANGE 4.35 36.2 FLOAD 3.125 GY
 3993. YRANGE 4.35 36.2 FLOAD 3.125 GZ
 3994. FLOOR LOAD
 3995. YRANGE 4.35 28.7 FLOAD 1.2 GX
 3996. YRANGE 4.35 28.7 FLOAD 1.2 GY
 3997. YRANGE 4.35 28.7 FLOAD 1.2 GZ
 3998. FLOOR LOAD
 3999. _WT FLOAD 15 GX
 4000. _WT FLOAD 15 GY
 4001. _WT FLOAD 15 GZ
 4002. FLOOR LOAD
 4003. _FMT FLOAD 15 GX
 4004. _FMT FLOAD 15 GY
 4005. _FMT FLOAD 15 GZ
 4006. MEMBER LOAD
 4007. 1913 1914 1917 1922 1927 1937 1944 UNI GX 15.5
 4008. 1913 1914 1917 1922 1927 1937 1944 UNI GY 15.5
 4009. 1913 1914 1917 1922 1927 1937 1944 UNI GZ 15.5


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841259154

STAAD SPACE

-- PAGE NO. 73

4010. MEMBER LOAD
 4011. 1918 1929 1930 1932 TO 1934 UNI GX 17.825
 4012. 1918 1929 1930 1932 TO 1934 UNI GY 17.825
 4013. 1918 1929 1930 1932 TO 1934 UNI GZ 17.825
 4014. MEMBER LOAD
 4015. 1958 TO 1961 1963 1964 1967 UNI GX 11.625
 4016. 1958 TO 1961 1963 1964 1967 UNI GY 11.625
 4017. 1958 TO 1961 1963 1964 1967 UNI GZ 11.625
 4018. MEMBER LOAD
 4019. 1958 TO 1961 1963 UNI GX 6.84
 4020. 1958 TO 1961 1963 UNI GY 6.84
 4021. 1958 TO 1961 1963 UNI GZ 6.84
 4022. MEMBER LOAD
 4023. 1964 1967 UNI GX 8.7
 4024. 1964 1967 UNI GY 8.7
 4025. 1964 1967 UNI GZ 8.7
 4026. MEMBER LOAD
 4027. 1913 1914 1917 1922 UNI GX 19.08
 4028. 1913 1914 1917 1922 UNI GY 19.08
 4029. 1913 1914 1917 1922 UNI GZ 19.08
 4030. MEMBER LOAD
 4031. 1918 UNI GX 20.45
 4032. 1918 UNI GY 20.45
 4033. 1918 UNI GZ 20.45
 4034. MEMBER LOAD
 4035. 1929 1932 1933 UNI GX 30.85
 4036. 1929 1932 1933 UNI GY 30.85
 4037. 1929 1932 1933 UNI GZ 30.85
 4038. FLOOR LOAD
 4039. _WT3 FLOAD 15 GX
 4040. _WT3 FLOAD 15 GY
 4041. _WT3 FLOAD 15 GZ
 4042. MEMBER LOAD
 4043. 131 132 137 146 151 152 154 176 179 181 TO 186 242 247 250 TO 253 258 287 -
 4044. 288 293 302 307 308 310 332 335 337 TO 342 398 403 406 TO 409 414 478 479 -
 4045. 484 493 497 498 500 520 523 525 TO 530 583 588 591 TO 594 599 663 664 669 -
 4046. 678 682 683 685 705 708 710 TO 715 768 773 776 TO 779 784 848 849 854 863 -
 4047. 867 868 870 890 893 895 TO 900 953 958 961 TO 964 969 1033 1034 1039 1048 -
 4048. 1052 1053 1055 1075 1078 1080 TO 1085 1138 1143 1146 TO 1149 1154 1218 1219 -
 4049. 1224 1233 1237 1238 1240 1260 1263 1265 TO 1270 1323 1328 1331 TO 1334 1339 -
 4050. 1403 1404 1409 1418 1422 1423 1425 1445 1448 1450 TO 1455 1508 1513 1516 -
 4051. 1517 TO 1519 1524 1588 1589 1594 1603 1607 1608 1610 1630 1633 1635 TO 1640 -
 4052. 1693 1698 1781 TO 1704 1709 1773 1774 1779 1788 1792 1793 1795 1815 1818 -
 4053. 1820 TO 1825 1878 1883 1886 TO 1889 1894 1992 1993 1998 TO 2002 2006 2032 -
 4054. 2045 2049 2050 2055 2057 6441 TO 6443 6470 6472 6474 6480 TO 6482 -
 4055. 6489 TO 6491 6498 TO 6500 6507 TO 6509 6516 TO 6518 6525 TO 6527 -
 4056. 6534 TO 6536 6543 TO 6545 6560 6643 6956 6959 6964 6965 6968 6972 6973 6978 -
 4057. 6981 6982 UNI GX 13
 4058. 131 132 137 146 151 152 154 176 179 181 TO 186 242 247 250 TO 253 258 287 -
 4059. 288 293 302 307 308 310 332 335 337 TO 342 398 403 406 TO 409 414 478 479 -
 4060. 484 493 497 498 500 520 523 525 TO 530 583 588 591 TO 594 599 663 664 669 -
 4061. 678 682 683 685 705 708 710 TO 715 768 773 776 TO 779 784 848 849 854 863 -
 4062. 867 868 870 890 893 895 TO 900 953 958 961 TO 964 969 1033 1034 1039 1048 -
 4063. 1052 1053 1055 1075 1078 1080 TO 1085 1138 1143 1146 TO 1149 1154 1218 1219 -
 4064. 1224 1233 1237 1238 1240 1260 1263 1265 TO 1270 1323 1328 1331 TO 1334 1339 -
 4065. 1403 1404 1409 1418 1422 1423 1425 1445 1448 1450 TO 1455 1508 1513 1516 -



V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -

SE / GR-1 / 2019/03/024, QA/2019/04/021

CHARTERED ENGINEER & APPROVED VALUER

3-B, RAMANIYAM GAURAVV - 2

BLOCK-2, MODEL SCHOOL ROAD

SHOLINGANALLUR, CHENNAI - 600 119.

Mobile: 9641259154

STAAD SPACE

-- PAGE NO. 74

4066. 1517 TO 1519 1524 1588 1589 1594 1603 1607 1608 1610 1630 1633 1635 TO 1640 -
 4067. 1693 1698 1781 TO 1784 1789 1773 1774 1779 1788 1792 1793 1795 1815 1818 -
 4068. 1820 TO 1825 1878 1883 1886 TO 1889 1894 1992 1993 1998 TO 2002 2006 2032 -
 4069. 2045 2049 2050 2055 2057 6441 TO 6443 6470 6472 6474 6480 TO 6482 -
 4070. 6489 TO 6491 6498 TO 6500 6507 TO 6509 6516 TO 6518 6525 TO 6527 -
 4071. 6534 TO 6536 6543 TO 6545 6560 6643 6956 6959 6964 6965 6968 6972 6973 6978 -
 4072. 6981 6982 UNI GY 13
 4073. 131 132 137 146 151 152 154 176 179 181 TO 186 242 247 250 TO 253 258 287 -
 4074. 288 293 302 307 308 310 332 335 337 TO 342 398 403 406 TO 409 414 478 479 -
 4075. 484 493 497 498 500 520 523 525 TO 530 583 588 591 TO 594 599 663 664 669 -
 4076. 678 682 683 685 705 708 710 TO 715 768 773 776 TO 779 784 848 849 854 863 -
 4077. 867 868 870 890 893 895 TO 900 953 958 961 TO 964 969 1033 1034 1039 1048 -
 4078. 1052 1053 1055 1075 1078 1080 TO 1085 1138 1143 1146 TO 1149 1154 1218 1219 -
 4079. 1224 1233 1237 1238 1240 1260 1263 1265 TO 1270 1323 1328 1331 TO 1334 1339 -
 4080. 1403 1404 1409 1418 1422 1423 1425 1445 1448 1450 TO 1455 1508 1513 1516 -
 4081. 1517 TO 1519 1524 1588 1589 1594 1603 1607 1608 1610 1630 1633 1635 TO 1640 -
 4082. 1693 1698 1781 TO 1784 1789 1773 1774 1779 1788 1792 1793 1795 1815 1818 -
 4083. 1820 TO 1825 1878 1883 1886 TO 1889 1894 1992 1993 1998 TO 2002 2006 2032 -
 4084. 2045 2049 2050 2055 2057 6441 TO 6443 6470 6472 6474 6480 TO 6482 -
 4085. 6489 TO 6491 6498 TO 6500 6507 TO 6509 6516 TO 6518 6525 TO 6527 -
 4086. 6534 TO 6536 6543 TO 6545 6560 6643 6956 6959 6964 6965 6968 6972 6973 6978 -
 4087. 6981 6982 UNI GZ 13
 4088. FLOOR LOAD
 4089. YRANGE 31.25 31.75 FLOAD 3 GX
 4090. YRANGE 31.25 31.75 FLOAD 3 GY
 4091. YRANGE 31.25 31.75 FLOAD 3 GZ
 4092. FLOOR LOAD
 4093. _TYPICALTOILET FLOAD 7.1 GX
 4094. _TYPICALTOILET FLOAD 7.1 GY
 4095. _TYPICALTOILET FLOAD 7.1 GZ
 4096. FLOOR LOAD
 4097. _SRTOILET FLOAD 0.8 GX
 4098. _SRTOILET FLOAD 0.8 GY
 4099. _SRTOILET FLOAD 0.8 GZ
 4100. FLOOR LOAD
 4101. _LBS FLOAD 1 GX
 4102. _LBS FLOAD 1 GY
 4103. _LBS FLOAD 1 GZ
 4104. FLOOR LOAD
 4105. YRANGE 36 36.02 FLOAD 20 GX
 4106. YRANGE 36 36.02 FLOAD 20 GY
 4107. YRANGE 36 36.02 FLOAD 20 GZ
 4108. SELFWEIGHT X 1
 4109. SELFWEIGHT Y 1
 4110. SELFWEIGHT Z 1
 4111. FLOOR LOAD
 4112. YRANGE 4.25 28.6 FLOAD 0.5 GX
 4113. YRANGE 4.25 28.6 FLOAD 0.5 GY
 4114. YRANGE 4.25 28.6 FLOAD 0.5 GZ
 4115. FLOOR LOAD
 4116. _LBS FLOAD 0.25 GX
 4117. _LBS FLOAD 0.25 GY
 4118. _LBS FLOAD 0.25 GZ
 4119. END DEFINE REFERENCE LOADS


V. JAGEN, B.E., M.E., (Struct), M.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 75

*** 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.

4120. FLOOR DIAPHRAGM
4121. DIA 1 TYPE RIG HEI 4.41
4122. DIA 2 TYPE RIG HEI 7.42
4123. DIA 3 TYPE RIG HEI 10.43
4124. DIA 4 TYPE RIG HEI 13.44
4125. DIA 5 TYPE RIG HEI 16.45
4126. DIA 6 TYPE RIG HEI 19.46
4127. DIA 7 TYPE RIG HEI 22.47
4128. DIA 8 TYPE RIG HEI 25.48
4129. DIA 9 TYPE RIG HEI 28.49
4130. DIA 10 TYPE RIG HEI 31.5
4131. DIA 11 TYPE RIG HEI 34.51
4132. CHECK SOFT STORY 1893 2016

FLOOR DIAPHRAGM

FLOOR DIAPHRAGM

UNIT - KN METE

NO.	TYPE	FL. LEVEL	FL. WT	CENTRE OF X	MASS Z	CONTROL JOINT NO.
1	RIGID	4.410	4717.47	7.986	11.805	4699
2	RIGID	7.420	4940.24	7.943	11.818	4700
3	RIGID	10.430	4942.20	7.944	11.822	4701
4	RIGID	13.440	4942.18	7.944	11.822	4702
5	RIGID	16.450	4942.19	7.944	11.822	4703
6	RIGID	19.460	4942.23	7.944	11.822	4704
7	RIGID	22.470	4942.20	7.944	11.822	4705
8	RIGID	25.480	4942.20	7.944	11.822	4706
9	RIGID	28.490	4993.49	7.992	11.764	4707
10	RIGID	31.500	4290.90	7.987	11.671	4708
11	RIGID	34.510	2386.12	8.856	10.418	4709

4134. DEFINE IS1893 2016 LOAD

4135. ZONE 0.16 RF 4 I 1 S5 2 ST 1 DM 0.05 PX 0.67 PZ 0.55

4136. DEFINE WIND LOAD

4137. TYPE 1 WIND 1

4138. <! STAAD PRO GENERATED DATA DO NOT MODIFY !!!

4139. IS875-2015:PARAMS 0 0 0 0.000 0.000 5.000 0 50.000 0 1.000 0 0 1.000 2 1.000 -

4140. 1.000 0 0.000 0.000 0.000 0 0 0 1.000 0 0 0.200 1.000 0 1.000 1.000 1.000

4141. !> END GENERATED DATA BLOCK


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119
Mobile: 9841269154

SYAAD SPACE

-- PAGE NO. 76

4142. INT 0.906 0.906 0.906 1.029 1.115 1.171 1.229 1.264 1.271 HEIG 0 5 10 15 20 -
 4143. 25 30 35 36.01
 4144. LOAD 5 LOADTYPE NONE TITLE EQ+X
 4145. 1893 LOAD X 1
 4146. LOAD 6 LOADTYPE NONE TITLE EQ-X
 4147. 1893 LOAD X -1.
 4148. LOAD 7 LOADTYPE NONE TITLE EQ+Z
 4149. 1893 LOAD Z 1
 4150. LOAD 8 LOADTYPE NONE TITLE EQ-Z
 4151. 1893 LOAD Z -1.
 4152. LOAD 1 LOADTYPE DEAD TITLE DL
 4153. MEMBER LOAD
 4154. 112 114 119 TO 121 128 TO 130 134 136 139 TO 141 143 TO 145 147 TO 149 158 -
 4155. 161 TO 165 200 TO 202 204 209 211 214 216 217 219 221 223 225 227 228 232 -
 4156. 233 235 TO 237 241 243 271 276 TO 278 284 TO 286 290 292 295 TO 297 -
 4157. 299 TO 301 303 TO 305 314 317 TO 321 356 TO 358 360 365 367 370 372 373 375 -
 4158. 377 379 381 383 384 388 389 391 TO 393 397 399 462 467 TO 469 475 TO 477 -
 4159. 481 483 486 TO 488 490 TO 492 494 TO 496 504 507 TO 511 544 TO 546 548 550 -
 4160. 552 555 557 558 560 562 564 566 568 569 573 574 576 TO 578 582 584 647 652 -
 4161. 653 TO 654 660 TO 662 666 668 671 TO 673 675 TO 677 679 TO 681 689 -
 4162. 692 TO 696 729 TO 731 733 735 737 740 742 743 745 747 749 751 753 754 758 -
 4163. 759 761 TO 763 767 769 832 837 TO 839 845 TO 847 851 853 856 TO 858 -
 4164. 860 TO 862 864 TO 866 874 877 TO 881 914 TO 916 918 920 922 925 927 928 930 -
 4165. 932 934 936 938 939 943 944 946 TO 948 952 954 1017 1022 TO 1024 -
 4166. 1030 TO 1032 1036 1038 1041 TO 1043 1045 TO 1047 1049 TO 1051 1059 -
 4167. 1062 TO 1066 1099 TO 1101 1103 1105 1107 1110 1112 1113 1115 1117 1119 1121 -
 4168. 1123 1124 1128 1129 1131 TO 1133 1137 1139 1202 1207 TO 1209 1215 TO 1217 -
 4169. 1221 1223 1226 TO 1228 1230 6572 6574 UNI GY -5
 4170. 6984 UNI GY -5
 4171. 6575 6577 6578 6580 6582 TO 6584 6586 6588 TO 6590 6592 6594 TO 6596 6598 -
 4172. 6600 TO 6602 6606 6607 6612 6613 6618 6619 6986 UNI GY -5
 4173. 6373 UNI GY -5
 4174. 2058 2059 UNI GY -5
 4175. 1231 1232 1234 TO 1236 1244 1247 TO 1251 1284 TO 1286 1288 1290 1292 1295 -
 4176. 1297 1298 1300 1302 1304 1306 1308 1309 1313 1314 1316 TO 1318 1322 1324 -
 4177. 1387 1392 TO 1394 1400 TO 1402 1406 1408 1411 TO 1413 1415 TO 1417 -
 4178. 1419 TO 1421 1429 1432 TO 1436 1469 TO 1471 1473 1475 1477 1480 1482 1483 -
 4179. 1485 1487 1489 1491 1493 1494 1498 1499 1501 TO 1503 1507 1509 1572 1577 -
 4180. 1578 TO 1579 1585 TO 1587 1591 1593 1596 TO 1598 1600 TO 1602 1604 TO 1606 -
 4181. 1614 1617 TO 1621 1654 TO 1656 1658 1660 1662 1665 1667 1668 1670 1672 1674 -
 4182. 1676 1678 1679 1683 1684 1686 TO 1688 1692 1694 6604 6608 6610 6614 -
 4183. 6616 UNI GY -5
 4184. 106 107 109 111 113 115 118 123 TO 127 138 142 155 166 TO 170 174 175 187 -
 4185. 188 TO 189 191 192 194 TO 196 198 199 203 213 215 218 222 224 226 229 230 -


V. JAGEN, B.E.M.E., (Struct), M.I.E.A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9641269154

STAAD SPACE

-- PAGE NO. 77

4186. 234 238 TO 240 244 246 254 255 263 264 266 268 270 272 274 275 279 TO 283 -
 4187. 294 298 311 322 TO 326 330 331 343 TO 345 347 348 350 TO 352 354 355 359 -
 4188. 369 371 374 378 380 382 385 386 390 394 TO 396 400 402 410 411 454 455 457 -
 4189. 459 461 463 465 466 470 TO 474 485 489 501 512 TO 516 518 519 531 TO 533 -
 4190. 535 536 538 TO 540 542 543 547 554 556 559 563 565 567 570 571 575 -
 4191. 579 TO 581 585 587 595 596 639 640 642 644 646 648 650 651 655 TO 659 670 -
 4192. 674 686 697 TO 701 703 704 716 TO 718 720 721 723 TO 725 727 728 732 739 -
 4193. 741 744 748 750 752 755 756 760 764 TO 766 770 772 780 781 824 825 827 829 -
 4194. 831 833 835 836 840 TO 844 855 859 871 882 TO 886 888 889 901 TO 903 905 -
 4195. 906 908 TO 910 912 913 917 924 926 929 933 935 937 940 941 945 949 TO 951 -
 4196. 955 957 965 966 1009 1010 1012 1014 1016 1018 1020 1021 1025 TO 1029 1040 -
 4197. 1044 1056 1067 TO 1071 1073 1074 1086 TO 1088 1090 1091 1093 TO 1095 1097 -
 4198. 1098 1102 1109 1111 1114 1118 1120 1122 1125 1126 1130 1134 TO 1135 -
 4199. 1136 UNI GY -6
 4200. 2054 2056 2061 2063 UNI GY -6
 4201. 1140 1142 1150 1151 1194 1195 1197 1199 1201 1203 1205 1206 1210 TO 1214 -
 4202. 1225 1229 1241 1252 TO 1256 1258 1259 1271 TO 1273 1275 1276 1278 TO 1280 -
 4203. 1282 1283 1287 1294 1296 1299 1303 1305 1307 1310 1311 1315 1319 TO 1321 -
 4204. 1325 1327 1335 1336 1379 1380 1382 1384 1386 1388 1390 1391 1395 TO 1399 -
 4205. 1410 1414 1426 1437 TO 1441 1443 1444 1456 TO 1458 1460 1461 1463 TO 1465 -
 4206. 1467 1468 1472 1479 1481 1484 1488 1490 1492 1495 1496 1500 1504 TO 1506 -
 4207. 1510 1512 1520 1521 1564 1565 1567 1569 1571 1573 1575 1576 1580 TO 1584 -
 4208. 1595 1599 1611 1622 TO 1626 1628 1629 1641 TO 1643 1645 1646 1648 TO 1650 -
 4209. 1652 1653 1657 1664 1666 1669 1673 1675 1677 1680 1681 1685 1689 TO 1691 -
 4210. 1695 1697 1705 1706 1719 1755 1757 1765 1766 1771 1890 1891 1986 TO 1988 -
 4211. 1994 1995 1997 2042 TO 2044 2053 6634 6635 UNI GY -6
 4212. 108 110 116 157 173 190 210 212 231 245 265 267 273 313 329 346 366 368 387 -
 4213. 401 456 458 464 503 517 534 551 553 572 586 641 643 649 688 702 719 736 738 -
 4214. 757 771 826 828 834 873 887 904 921 923 942 956 1011 1013 1019 1058 1072 -
 4215. 1089 1106 1108 1127 1141 1196 1198 1204 1243 1257 1274 1291 1293 1312 1326 -
 4216. 1381 1383 1389 1428 1442 1459 1476 1478 1497 1511 1566 1568 1574 1613 1627 -
 4217. 1644 1661 1663 1682 1696 1749 TO 1752 1754 1761 1768 1769 1780 1784 1796 -
 4218. 1807 1809 TO 1811 1813 1827 1828 1830 1831 1833 TO 1838 1842 1849 1854 1858 -
 4219. 1860 1862 1867 1874 TO 1876 1880 UNI GY -3
 4220. FLOOR LOAD
 4221. YRANGE 4.35 36.2 FLOAD -3.125 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.
 4222. YRANGE 4.35 28.7 FLOAD -1.2 GY
 4223. **WATER TANK LOAD**
 4224. _WT FLOAD -15 GY
 NOTE about FLOOR GROUP command
 All floor panels in a floor group should lie in a single plane.
 If not lying in a single plane break single FLOOR GROUP
 command into multiple FLOOR GROUP commands where each
 floor group lie in a single plane / height.
 4225. _FWT FLOAD -15 GY
 4226. **WATER TANK RC WALL LOAD**



V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841289154

STAAD SPACE

-- PAGE NO. 78

4227. MEMBER LOAD
 4228. 1913 1914 1917 1922 1927 1937 1944 UNI GY -15.5
 4229. 1918 1929 1930 1932 TO 1934 UNI GY -17.825
 4230. 1958 TO 1961 1963 1964 1967 UNI GY -11.625
 4231. 1958 TO 1961 1963 UNI GY -6.84
 4232. 1964 1967 UNI GY -8.7
 4233. 1913 1914 1917 1922 UNI GY -19.88
 4234. 1918 UNI GY -20.45
 4235. 1929 1932 1933 UNI GY -30.85
 4236. **WATER TANK LOAD**
 4237. FLOOR LOAD
 4238. _WT3 FLOAD -15 GY
 4239. MEMBER LOAD
 4240. 131 132 137 146 151 152 154 176 179 181 TO 186 242 247 250 TO 253 258 287 -
 4241. 288 293 302 307 308 310 332 335 337 TO 342 398 403 406 TO 409 414 478 479 -
 4242. 484 493 497 498 500 520 523 525 TO 530 583 588 591 TO 594 599 663 664 669 -
 4243. 678 682 683 685 705 708 718 TO 715 768 773 776 TO 779 784 848 849 854 863 -
 4244. 867 868 870 890 893 895 TO 900 953 958 961 TO 964 969 1033 1034 1039 1048 -
 4245. 1052 1053 1055 1075 1078 1080 TO 1085 1138 1143 1146 TO 1149 1154 1210 1219 -
 4246. 1224 1233 1237 1238 1240 1260 1263 1265 TO 1270 1323 1328 1331 TO 1334 1339 -
 4247. 1403 1404 1409 1418 1422 1423 1425 1445 1448 1450 TO 1455 1508 1513 1516 -
 4248. 1517 TO 1519 1524 1588 1589 1594 1603 1607 1608 1610 1630 1633 1635 TO 1640 -
 4249. 1693 1698 1701 TO 1704 1709 1773 1774 1779 1788 1792 1793 1795 1815 1818 -
 4250. 1820 TO 1825 1878 1883 1886 TO 1889 1894 1992 1993 1998 TO 2002 2006 2032 -
 4251. 2045 2049 2050 2055 2057 6441 TO 6443 6470 6472 6474 6480 TO 6482 -
 4252. 6489 TO 6491 6498 TO 6500 6507 TO 6509 6516 TO 6518 6525 TO 6527 -
 4253. 6534 TO 6536 6543 TO 6545 6560 6643 6956 6959 6964 6965 6968 6972 6973 6978 -
 4254. 6981 6982 UNI GY -13
 4255. FLOOR LOAD
 4256. YRANGE 31.25 31.75 FLOAD -3 GY
 4257. **FILLING LOAD**
 4258. FLOOR LOAD
 4259. _TYPICALTOILET FLOAD -7.1 GY
 4260. _SRTOILET FLOAD -0.8 GY
 4261. _LBS FLOAD -1 GY
 4262. **LIFT MACHINE ROOM LOAD**
 4263. YRANGE 36 36.02 FLOAD -20 GY
 4264. SELFWEIGHT Y -1
 4265. LOAD 2 LOADTYPE LIVE TITLE LL
 4266. FLOOR LOAD
 4267. YRANGE 4.25 28.6 FLOAD -2 GY
 4268. YRANGE 31.25 31.75 FLOAD -1.5 GY
 4269. _LBS FLOAD -1 GY
 4270. LOAD 9 LOADTYPE SEISMIC-H TITLE RS+X
 4271. SPECTRUM CQC IS1893 2016 X 0.016 SCALE 3.617 DAMP 0.05 MIS 0
 4272. SOIL TYPE 2
 4273. LOAD 10 LOADTYPE SEISMIC-H TITLE RS-X



V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 110.
 Mobile: 9841269154

STAND SPACE

-- PAGE NO. 79

4274. SPECTRUM CQC IS1893 2016 X -0.016 SCALE 3.617 DAMP 0.05 MIS 0
 4275. SOIL TYPE 2
 4276. LOAD 11 LOADTYPE SEISMIC-H TITLE RS+Z
 4277. SPECTRUM CQC IS1893 2016 Z 0.016 SCALE 4.173 DAMP 0.05 MIS 0
 4278. SOIL TYPE 2
 4279. LOAD 12 LOADTYPE SEISMIC-H TITLE RS-Z
 4280. SPECTRUM CQC IS1893 2016 Z -0.016 SCALE 4.173 DAMP 0.05 MIS 0
 4281. SOIL TYPE 2
 4282. CHECK STORY DRIFT
 4283. LOAD 13 LOADTYPE WIND TITLE WL(+X)
 4284. WIND LOAD X 1 TYPE 1 XR 0 1 YR 4.4 37
 4285. LOAD 14 LOADTYPE WIND TITLE WL(-X)
 4286. WIND LOAD -X -1 TYPE 1 XR 15 17 YR 4.4 37
 4287. LOAD 15 LOADTYPE WIND TITLE WL(+Z)
 4288. WIND LOAD Z 1 TYPE 1 YR 4.4 37 ZR 0 1
 4289. LOAD 16 LOADTYPE WIND TITLE WL(-Z)
 4290. WIND LOAD -Z -1 TYPE 1 YR 4.4 37 ZR 22 23.5
 4291. **LIMIT STATE OF SERVICEABILITY**
 4292. LOAD COMB 3 DL+LL
 4293. 1 1.0 2 1.0
 4294. LOAD COMB 17 DL+RS(+X)
 4295. 1 1.0 9 1.0
 4296. LOAD COMB 18 DL+RS(-X)
 4297. 1 1.0 10 1.0
 4298. LOAD COMB 19 DL+RS(+Z)
 4299. 1 1.0 11 1.0
 4300. LOAD COMB 20 DL+RS(-Z)
 4301. 1 1.0 12 1.0
 4302. LOAD COMB 21 DL+WL(+X)
 4303. 1 1.0 13 1.0
 4304. LOAD COMB 22 DL+WL(-X)
 4305. 1 1.0 14 1.0
 4306. LOAD COMB 23 DL+WL(+Z)
 4307. 1 1.0 15 1.0
 4308. LOAD COMB 24 DL+WL(-Z)
 4309. 1 1.0 16 1.0
 4310. LOAD COMB 25 1.0DL+0.8LL+0.8RS(+X)
 4311. 1 1.0 9 0.8 2 0.8
 4312. LOAD COMB 26 1.0DL+0.8LL+0.8RS(-X)
 4313. 1 1.0 10 0.8 2 0.8
 4314. LOAD COMB 27 1.0DL+0.8LL+0.8RS(+Z)
 4315. 1 1.0 11 0.8 2 0.8
 4316. LOAD COMB 28 1.0DL+0.8LL+0.8RS(-Z)
 4317. 1 1.0 12 0.8 2 0.8


V. JAGEN, B.E.M.E.(Struct), M.I.E.,A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 80

4318. LOAD COMB 29 1.0DL+0.8LL+0.8WL(+X)
 4319. 1 1.0 13 0.8 2 0.8
 4320. LOAD COMB 30 1.0DL+0.8LL+0.8WL(-X)
 4321. 1 1.0 14 0.8 2 0.8
 4322. LOAD COMB 31 1.0DL+0.8LL+0.8WL(+Z)
 4323. 1 1.0 15 0.8 2 0.8
 4324. LOAD COMB 32 1.0DL+0.8LL+0.8WL(-Z)
 4325. 1 1.0 16 0.8 2 0.8
 4326. **LIMIT STATE OF COLLAPSE**
 4327. LOAD COMB 4 1.5DL+1.5LL
 4328. 1 1.5 2 1.5
 4329. LOAD COMB 33 1.2DL+1.2LL+1.2RS(+X)
 4330. 1 1.2 2 1.2 9 1.2
 4331. LOAD COMB 34 1.2DL+1.2LL+1.2RS(-X)
 4332. 1 1.2 2 1.2 10 1.2
 4333. LOAD COMB 35 1.2DL+1.2LL+1.2RS(+Z)
 4334. 1 1.2 2 1.2 11 1.2
 4335. LOAD COMB 36 1.2DL+1.2LL+1.2RS(-Z)
 4336. 1 1.2 2 1.2 12 1.2
 4337. LOAD COMB 37 1.2DL+1.2LL+1.2WL(+X)
 4338. 1 1.2 2 1.2 13 1.2
 4339. LOAD COMB 38 1.2DL+1.2LL+1.2WL(-X)
 4340. 1 1.2 2 1.2 14 1.2
 4341. LOAD COMB 39 1.2DL+1.2LL+1.2WL(+Z)
 4342. 1 1.2 2 1.2 15 1.2
 4343. LOAD COMB 40 1.2DL+1.2LL+1.2WL(-Z)
 4344. 1 1.2 2 1.2 16 1.2
 4345. LOAD COMB 41 0.9DL+1.5RS(+X)
 4346. 1 0.9 9 1.5
 4347. LOAD COMB 42 0.9DL+1.5RS(-X)
 4348. 1 0.9 10 1.5
 4349. LOAD COMB 43 0.9DL+1.5RS(+Z)
 4350. 1 0.9 11 1.5
 4351. LOAD COMB 44 0.9DL+1.5RS(-Z)
 4352. 1 0.9 12 1.5
 4353. LOAD COMB 45 0.9DL+1.5WL(+X)
 4354. 1 0.9 13 1.5
 4355. LOAD COMB 46 0.9DL+1.5WL(-X)
 4356. 1 0.9 14 1.5
 4357. LOAD COMB 47 0.9DL+1.5WL(+Z)
 4358. 1 0.9 15 1.5
 4359. LOAD COMB 48 0.9DL+1.5WL(-Z)
 4360. 1 0.9 16 1.5
 4361. LOAD COMB 49 1.5DL+1.5RS(+X)
 4362. 1 1.5 9 1.5
 4363. LOAD COMB 50 1.5DL+1.5RS(-X)
 4364. 1 1.5 10 1.5
 4365. LOAD COMB 51 1.5DL+1.5RS(+Z)
 4366. 1 1.5 11 1.5
 4367. LOAD COMB 52 1.5DL+1.5RS(-Z)
 4368. 1 1.5 12 1.5
 4369. LOAD COMB 53 1.5DL+1.5WL(+X)
 4370. 1 1.5 13 1.5
 4371. LOAD COMB 54 1.5DL+1.5WL(-X)
 4372. 1 1.5 14 1.5
 4373. LOAD COMB 55 1.5DL+1.5WL(+Z)


 V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 81

4374. 1 1.5 15 1.5
 4375. LOAD COMB 56 1,SDL+1,SWL(-Z)
 4376. 1 1.5 16 1.5
 4377. PERFORM ANALYSIS

PROBLEM STATISTICS

NUMBER OF JOINTS	4661	NUMBER OF MEMBERS	2462
NUMBER OF PLATES	3288	NUMBER OF SOLIDS	0
NUMBER OF SURFACES	0	NUMBER OF SUPPORTS	61

Using 64-bit analysis engine.

SOLVER USED IS THE IN-CORE ADVANCED MATH SOLVER

TOTAL PRIMARY LOAD CASES = 14, TOTAL DEGREES OF FREEDOM = 23148
 TOTAL LOAD COMBINATION CASES = 42 SO FAR.

***NOTE: MASSES DEFINED UNDER LOAD# 9 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.

SOFT STORY CHECK

VERTICAL STRUCTURAL IRREGULARITIES : SOFT STORY CHECK - IS 1893:2016

STORY	FL. LEVEL IN METER	S T A T U S
-----	-----	-----
		X Z


V. JAGEN, B.E., M.E. (Structl), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 82

1	4.41	OK	OK
2	7.42	OK	OK
3	10.43	OK	OK
4	13.44	OK	OK
5	16.45	OK	OK
6	19.46	OK	OK
7	22.47	OK	OK
8	25.48	OK	OK
9	28.49	OK	OK
10	31.50	OK	OK
11	34.51	OK	OK

NOTE : NO SOFT STOREY IS DETECTED.

***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 X

```
*****
* UNITS - KN    METE
* TIME PERIOD FOR X 1893 LOADING = 0.67000 SEC
* SA/G PER 1893= 2.030, LOAD FACTOR= 1.000
* VB PER 1893= 0.0406 X 55688.01= 2260.77 KN
* VB Act Based on Clause 7.2.1 = 2260.77 KN
* VB Min based on Clause 7.2.2 = 612.57 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 X

```
*****
* UNITS - KN    METE
* TIME PERIOD FOR X 1893 LOADING = 0.67000 SEC
* SA/G PER 1893= 2.030, LOAD FACTOR= 1.000
* VB PER 1893= 0.0406 X 55688.01= 2260.77 KN
* VB Act Based on Clause 7.2.1 = 2260.77 KN
* VB Min based on Clause 7.2.2 = 612.57 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 = 0.55000 SEC
* SA/G PER 1893= 2.500, LOAD FACTOR= 1.000
* VB PER 1893= 0.0500 X 55688.01= 2784.40 KN
* VB Act Based on Clause 7.2.1 = 2784.40 KN
* VB Min based on Clause 7.2.2 = 612.57 KN
*****
```


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.
CMDA REGN NOS -
SE / GR-1 / 2019/03/024, CA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 83

BASE SHEAR AND TIME PERIOD IN Z

```

*****
* UNITS - KN METE *
* TIME PERIOD FOR Z 1893 LOADING = 0.55000 SEC *
* SA/G PER 1893= 2.500, LOAD FACTOR=-1.000 *
* VB PER 1893= 0.0500 X 55688.01= -2784.40 KN *
* VB Act Based on Clause 7.2.1 = -2784.40 KN *
* VB Min based on Clause 7.2.2 = -612.57 KN *
*****

```

EIGEN METHOD : SUBSPACE

```

-----
NUMBER OF MODES REQUESTED = 50
NUMBER OF EXISTING MASSES IN THE MODEL = 10832
NUMBER OF MODES THAT WILL BE USED = 50

```

*** EIGENSOLUTION: ADVANCED METHOD ***



V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 84

CALCULATED FREQUENCIES FOR LOAD CASE 9

MODE	FREQUENCY(CYCLES/SEC)	PERIOD(SEC)
1	0.596	1.67846
2	0.656	1.52440
3	0.713	1.40163
4	1.988	0.50402
5	2.321	0.43082
6	2.410	0.41490
7	3.489	0.28665
8	4.722	0.21176
9	4.896	0.20423
10	5.326	0.18775
11	6.475	0.15445
12	6.606	0.15139
13	6.694	0.14938
14	7.056	0.14172
15	7.167	0.13953
16	7.601	0.13156
17	7.682	0.13018
18	7.709	0.12971
19	8.168	0.12243
20	8.335	0.11997
21	8.770	0.11403
22	8.869	0.11275
23	9.192	0.10880
24	9.369	0.10673
25	9.494	0.10533
26	9.687	0.10323
27	9.737	0.10270
28	9.813	0.10191
29	9.838	0.10165
30	9.942	0.10059
31	10.035	0.09966
32	10.071	0.09930
33	10.084	0.09916
34	10.144	0.09858
35	10.150	0.09852
36	10.152	0.09850
37	10.196	0.09808
38	10.216	0.09788
39	10.316	0.09694
40	10.393	0.09612
41	10.413	0.09604
42	10.473	0.09548
43	10.483	0.09540
44	10.598	0.09436
45	10.689	0.09355
46	10.728	0.09312
47	10.741	0.09310
48	10.786	0.09271
49	10.814	0.09247
50	10.847	0.09219


 V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 85

COMPOSITE DAMPING SUMMARY

MODE	STRAIN ENERGY	DAMP*ENERGY	COMPOSITE DAMPING
1	3.947440E+01	1.968961E+00	0.0499
2	5.742142E+01	2.861152E+00	0.0498
3	9.634562E+01	4.793983E+00	0.0498
4	3.276024E+02	1.634589E+01	0.0499
5	6.984847E+02	3.484763E+01	0.0499
6	8.663151E+02	4.314996E+01	0.0498
7	8.058260E+02	4.022551E+01	0.0499
8	2.323255E+03	1.159417E+02	0.0499
9	2.372236E+03	1.183996E+02	0.0499
10	1.590331E+03	7.942743E+01	0.0499
11	1.623865E+03	8.106034E+01	0.0499
12	1.434109E+03	7.159544E+01	0.0499
13	1.129556E+03	5.647881E+01	0.0500
14	1.216281E+03	6.078150E+01	0.0500
15	4.732261E+03	2.363923E+02	0.0500
16	1.829320E+03	9.135222E+01	0.0499
17	5.213465E+03	2.603810E+02	0.0499
18	1.734228E+03	8.666818E+01	0.0500
19	5.357373E+03	2.675787E+02	0.0499
20	2.572192E+03	1.284143E+02	0.0499
21	2.692490E+03	1.343389E+02	0.0499
22	2.182063E+03	1.090521E+02	0.0500
23	4.497738E+03	2.248147E+02	0.0500
24	5.460150E+03	2.731246E+02	0.0499
25	7.027459E+03	3.511489E+02	0.0500
26	7.554519E+03	3.773782E+02	0.0500
27	6.866916E+02	3.433453E+01	0.0500
28	4.358771E+02	2.179383E+01	0.0500
29	4.107640E+02	2.053816E+01	0.0500
30	4.825312E+02	2.412652E+01	0.0500
31	5.237419E+02	2.618704E+01	0.0500
32	5.689860E+03	2.042873E+02	0.0500
33	4.594536E+02	2.297267E+01	0.0500
34	5.715795E+02	2.857867E+01	0.0500
35	4.277831E+02	2.138861E+01	0.0500
36	4.942185E+02	2.471089E+01	0.0500
37	5.521814E+03	2.759266E+02	0.0500
38	5.289426E+02	2.644687E+01	0.0500
39	5.912741E+02	2.956367E+01	0.0500
40	4.334925E+02	2.167457E+01	0.0500
41	4.274628E+03	2.135690E+02	0.0500
42	3.087461E+02	1.543727E+01	0.0500
43	4.909106E+02	2.454551E+01	0.0500
44	1.555000E+02	7.774852E+00	0.0500
45	8.873329E+02	4.425533E+01	0.0499
46	7.515525E+03	3.753010E+02	0.0499
47	7.470137E+02	3.729952E+01	0.0499
48	5.438170E+02	2.710948E+01	0.0499


 V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841259154

STAAD SPACE

-- PAGE NO. 86

MODE STRAIN ENERGY DAMP*ENERGY COMPOSITE DAMPING

49 1.124646E+03 5.613053E+01 0.0499
 50 5.940187E+02 2.962088E+01 0.0499

1893 RESPONSE SPECTRUM LOAD 9

RESPONSE LOAD CASE 9

MODE	MODAL WEIGHT (MODAL MASS TIMES g) IN KN			GENERALIZED WEIGHT
	X	Y	Z	
1	3.878751E+03	4.981096E-02	3.308653E+03	9.675647E+03
2	3.296139E+04	4.846837E-02	1.726551E+03	1.160952E+04
3	3.543773E+03	9.442540E-02	3.627455E+04	1.646803E+04
4	1.918168E+02	2.343864E-01	4.537594E+02	7.826890E+03
5	6.105164E+03	7.640031E-02	9.510667E+02	1.127969E+04
6	1.193206E+03	2.021957E-01	5.649944E+03	1.297471E+04
7	3.935611E+01	1.918886E+00	2.428918E+02	5.760704E+03
8	4.328966E+01	7.856227E-01	2.179257E+03	9.063934E+03
9	2.896792E+03	2.946702E-01	5.901533E+01	8.608658E+03
10	3.235781E+01	1.424374E+01	3.765651E+02	4.877177E+03
11	2.700236E+00	2.135406E+04	5.307295E-01	3.368597E+03
12	5.753414E-01	7.626241E+02	3.820702E+00	2.859520E+03
13	4.503201E+00	8.714364E+03	3.624659E+00	2.193109E+03
14	4.479771E+00	4.967124E+03	2.462337E-01	2.125392E+03
15	1.454953E+00	2.747243E+02	1.762012E+02	8.016359E+03
16	1.120678E+01	1.036908E+02	2.780101E+00	2.754635E+03
17	2.230651E-02	4.079688E+00	9.597315E+02	7.686852E+03
18	1.651248E+01	7.499507E+00	1.468231E+02	2.538687E+03
19	1.449938E+03	1.089602E+00	2.604404E+00	6.986839E+03
20	5.416223E+00	2.168757E+03	2.719863E-01	3.221205E+03
21	9.000429E+00	6.415500E+01	5.437604E+00	3.046069E+03
22	1.444253E+00	4.502040E+02	9.054394E-02	2.413581E+03
23	1.233364E+00	2.644971E+02	2.484056E-02	4.631804E+03
24	6.994562E-02	1.328873E+03	1.824439E+00	5.419947E+03
25	1.179372E-01	5.876724E+02	7.566739E+00	6.783303E+03
26	3.112927E+00	1.353028E+00	4.412297E+00	7.004126E+03
27	1.068536E-03	5.805623E+00	3.326147E-02	6.301999E+02
28	4.882356E-05	2.323649E+01	3.442170E-02	3.930317E+02
29	1.409179E-02	1.609392E+02	3.222120E-02	3.692593E+02
30	3.216815E-02	2.201225E+01	5.382616E-01	4.247618E+02
31	6.818298E-06	6.354953E+00	1.224607E-01	4.525434E+02
32	4.691541E-01	1.001219E+02	3.607352E-01	4.881186E+03
33	7.604820E-04	1.653337E+02	1.045337E-03	3.930855E+02
34	3.546843E-02	2.929198E-01	4.540545E+00	4.833272E+02
35	2.457735E-02	2.232302E+01	9.609302E+00	3.612925E+02
36	1.869194E-03	4.976428E+00	1.095363E-01	4.172007E+02
37	5.606349E-02	2.608395E+01	1.033129E+00	4.621541E+03
38	3.226586E-03	4.492762E-01	4.525448E-03	4.409336E+02
39	1.485270E-02	1.091805E+00	2.975679E-02	4.833877E+02

V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 9E / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 87

40	5.061132E-04	4.301379E+00	2.040389E-02	3.491572E+02
41	3.583911E-02	3.395539E+02	3.127571E-05	3.430193E+03
42	5.822367E-02	1.091540E+01	8.426068E-01	2.449019E+02
43	2.828742E-01	1.757652E+00	2.067680E-01	3.886896E+02
44	4.171362E-02	1.185748E+02	2.830805E+00	1.204567E+02
45	6.550792E-03	1.838490E+00	2.742219E-04	6.756848E+02
46	1.859797E-03	2.162139E+01	5.934414E+02	5.681959E+03
47	1.026856E-02	2.438970E+00	2.983483E-01	5.640255E+02
48	6.613280E-02	2.050433E+01	2.047814E+01	4.067123E+02
49	1.563199E-01	7.679431E+01	2.605287E+01	8.367260E+02
50	2.686750E-01	1.370692E+02	3.048334E+00	4.392593E+02

CQC MODAL COMBINATION METHOD USED.
MISSING MASS METHOD USED.

DYNAMIC WEIGHT X Y Z 5.555949E+04 5.555949E+04 5.555949E+04 KN
MISSING WEIGHT X Y Z -3.159222E+03 -1.321239E+04 -2.357573E+03 KN
MODAL WEIGHT X Y Z 5.240827E+04 4.234710E+04 5.320192E+04 KN

RESPONSE LOAD CASE 9

MODE	SPECTRAL ACCELERATION	DESIGN	SEISMIC	COEFFICIENT
----	-----	-----	-----	-----
		X	Y	Z
1	0.81827	0.0469	0.0000	0.0000
2	0.89216	0.0516	0.0000	0.0000
3	0.97030	0.0562	0.0000	0.0000
4	2.50000	0.1447	0.0000	0.0000
5	2.50000	0.1447	0.0000	0.0000
6	2.50000	0.1447	0.0000	0.0000
7	2.50000	0.1447	0.0000	0.0000
8	2.50000	0.1447	0.0000	0.0000
9	2.50000	0.1447	0.0000	0.0000
10	2.50000	0.1447	0.0000	0.0000
11	2.50000	0.1447	0.0000	0.0000
12	2.50000	0.1447	0.0000	0.0000
13	2.50000	0.1447	0.0000	0.0000
14	2.50000	0.1447	0.0000	0.0000
15	2.50000	0.1447	0.0000	0.0000
16	2.50000	0.1447	0.0000	0.0000
17	2.50000	0.1447	0.0000	0.0000
18	2.50000	0.1447	0.0000	0.0000
19	2.50000	0.1447	0.0000	0.0000
20	2.50000	0.1447	0.0000	0.0000
21	2.50000	0.1447	0.0000	0.0000
22	2.50000	0.1447	0.0000	0.0000
23	2.50000	0.1447	0.0000	0.0000
24	2.50000	0.1447	0.0000	0.0000
25	2.50000	0.1447	0.0000	0.0000

V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 88

26	2.50000	0.1447	0.0000	0.0000
27	2.50000	0.1447	0.0000	0.0000
28	2.50000	0.1447	0.0000	0.0000
29	2.50000	0.1447	0.0000	0.0000
30	2.50000	0.1447	0.0000	0.0000
31	2.49483	0.1444	0.0000	0.0000
32	2.48947	0.1441	0.0000	0.0000
33	2.48745	0.1440	0.0000	0.0000
34	2.47877	0.1435	0.0000	0.0000
35	2.47787	0.1434	0.0000	0.0000
36	2.47753	0.1434	0.0000	0.0000
37	2.47120	0.1430	0.0000	0.0000
38	2.46826	0.1428	0.0000	0.0000
39	2.45403	0.1420	0.0000	0.0000
40	2.44324	0.1414	0.0000	0.0000
41	2.44055	0.1412	0.0000	0.0000
42	2.43224	0.1408	0.0000	0.0000
43	2.43093	0.1407	0.0000	0.0000
44	2.41537	0.1398	0.0000	0.0000
45	2.40329	0.1391	0.0000	0.0000
46	2.39826	0.1388	0.0000	0.0000
47	2.39651	0.1387	0.0000	0.0000
48	2.39071	0.1384	0.0000	0.0000
49	2.38708	0.1381	0.0000	0.0000
50	2.38287	0.1379	0.0000	0.0000

PEAK STORY SHEAR

STORY	LEVEL IN METE	PEAK STORY SHEAR IN KN		
		X	Y	Z
11	34.51	374.78	0.00	0.00
10	31.50	775.89	0.00	0.00
9	28.49	1067.70	0.00	0.00
8	25.48	1264.68	0.00	0.00
7	22.47	1410.85	0.00	0.00
6	19.46	1538.59	0.00	0.00
5	16.45	1679.90	0.00	0.00
4	13.44	1837.05	0.00	0.00
3	10.43	1998.17	0.00	0.00
2	7.42	2146.81	0.00	0.00
1	4.41	2237.13	0.00	0.00
BASE	0.00	2245.91	0.00	0.00

MODE	ACCELERATION-G	DAMPING
1	2.93074	0.05000
2	3.22693	0.05000
3	3.50957	0.05000
4	9.04250	0.05000


V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841259154

STAAD SPACE

-- PAGE NO. 89

MODE	ACCELERATION-G	DAMPING
----	-----	-----
5	9.04250	0.05000
6	9.04250	0.05000
7	9.04250	0.05000
8	9.04250	0.05000
9	9.04250	0.05000
10	9.04250	0.05000
11	9.04250	0.05000
12	9.04250	0.05000
13	9.04250	0.05000
14	9.04250	0.05000
15	9.04250	0.05000
16	9.04250	0.05000
17	9.04250	0.05000
18	9.04250	0.05000
19	9.04250	0.05000
20	9.04250	0.05000
21	9.04250	0.05000
22	9.04250	0.05000
23	9.04250	0.05000
24	9.04250	0.05000
25	9.04250	0.05000
26	9.04250	0.05000
27	9.04250	0.05000
28	9.04250	0.05000
29	9.04250	0.05000
30	9.04250	0.05000
31	9.02379	0.05000
32	9.00441	0.05000
33	8.99710	0.05000
34	8.96573	0.05000
35	8.96247	0.05000
36	8.96123	0.05000
37	8.93833	0.05000
38	8.92768	0.05000
39	8.87622	0.05000
40	8.83721	0.05000
41	8.82748	0.05000
42	8.79740	0.05000
43	8.79269	0.05000
44	8.73639	0.05000
45	8.69271	0.05000
46	8.67452	0.05000
47	8.66817	0.05000
48	8.64720	0.05000
49	8.63409	0.05000
50	8.61882	0.05000


 V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2016/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVY - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 98

PEAK STORY SHEAR MIS

STORY	LEVEL IN METE	PEAK STORY SHEAR IN KN INCLUDING MISSING MASS CORRECTION		
		X	Y	Z
11	34.51	375.62	0.00	0.00
10	31.50	776.06	0.00	0.00
9	28.49	1067.94	0.00	0.00
8	25.48	1265.43	0.00	0.00
7	22.47	1410.96	0.00	0.00
6	19.46	1538.97	0.00	0.00
5	16.45	1680.85	0.00	0.00
4	13.44	1837.08	0.00	0.00
3	10.43	1999.36	0.00	0.00
2	7.42	2148.21	0.00	0.00
1	4.41	2239.08	0.00	0.00
BASE	0.00	2261.60	0.00	0.00
ZPA		5.26109		
ZPAFREQ		33.00000		


V. JAGEN, B.E., M.E. (Struct), M.L.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 110.
 Mobile: 9841289154

STAAD SPACE

-- PAGE NO. 91

NODAL 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	1.678	181.88	-0.65	167.98	3987.23	736.14	-4438.59
2	1.524	1701.82	-2.06	389.49	9396.63	16835.40	-40795.13
3	1.482	198.99	-1.03	-636.66	-15094.78	7430.43	-4761.21
4	0.524	27.75	0.97	42.68	-83.72	9.92	-61.56
5	0.431	883.30	3.12	348.63	489.74	8052.39	-1373.16
6	0.415	172.63	2.25	-375.65	-163.41	4999.37	-131.07
7	0.287	5.69	-1.25	14.15	82.08	-67.68	-38.92
8	0.212	0.26	-0.84	44.44	238.83	-293.07	-53.39
9	0.204	419.11	-4.23	-59.82	-287.23	5275.82	-2331.18
10	0.188	4.68	3.11	15.97	26.76	-72.83	20.12
11	0.154	0.39	-34.74	0.17	364.79	3.02	-139.74
12	0.151	0.08	-3.03	-0.21	124.45	2.71	-17.94
13	0.149	0.65	28.66	0.58	-459.33	3.63	420.19
14	0.142	0.65	21.58	-0.15	-58.01	10.05	297.11
15	0.140	0.21	2.89	-2.32	-31.93	15.24	43.48
16	0.132	1.62	-4.93	0.81	47.39	13.29	9.68
17	0.130	0.00	0.04	0.67	2.05	-5.36	0.90
18	0.130	2.39	-1.61	-7.12	-21.84	85.76	17.13
19	0.122	209.78	5.75	8.89	-125.71	2504.75	-664.75
20	0.120	0.78	-15.68	-0.18	103.43	11.31	-133.71
21	0.114	1.30	-3.48	-1.01	215.25	24.36	-58.88
22	0.113	0.35	4.00	-0.07	-111.43	4.10	16.81
23	0.109	0.18	2.61	-0.03	-43.31	3.23	19.83
24	0.107	0.01	-1.39	-0.05	25.05	0.34	-8.10
25	0.105	0.02	1.20	-0.14	-20.37	0.91	8.86
26	0.103	0.45	-0.30	-0.54	3.17	9.12	-14.06
27	0.103	0.00	0.01	-0.00	-0.05	0.01	0.03
28	0.102	0.00	-0.00	0.00	0.02	-0.00	-0.01
29	0.102	0.00	-0.22	-0.00	0.98	0.04	-0.61
30	0.101	0.00	-0.12	-0.02	0.62	0.20	-0.40
31	0.100	0.00	0.00	0.00	-0.01	-0.00	0.00
32	0.099	0.07	-0.99	0.06	27.70	0.21	-18.05
33	0.099	0.00	0.05	-0.00	-0.99	0.00	0.68
34	0.099	0.01	0.01	-0.06	-0.53	0.55	0.27
35	0.099	0.00	0.11	-0.07	-0.37	0.64	0.28
36	0.099	0.00	-0.01	-0.00	0.28	0.02	-0.21
37	0.098	0.01	0.17	-0.03	4.23	0.39	0.33
38	0.098	0.00	-0.01	-0.00	0.35	0.01	-0.14
39	0.097	0.00	-0.02	0.00	0.50	0.00	-0.28
40	0.096	0.00	0.01	-0.00	-0.16	0.01	0.10
41	0.096	0.01	0.49	0.00	-4.67	0.05	5.48
42	0.095	0.01	0.11	0.03	-2.08	-0.18	1.53
43	0.095	0.04	0.10	0.03	-1.89	0.16	1.25
44	0.094	0.01	0.31	0.05	-0.85	-0.37	0.71
45	0.094	0.00	0.02	-0.00	-0.24	0.01	0.05
46	0.093	0.00	-0.03	0.15	1.05	-1.21	-0.09
47	0.093	0.00	0.02	0.01	-0.37	-0.05	0.08

V. JAGEN, B.E.M.E.(Strud), M.I.E.A.I.V.
 CMDA REGN NOS -
 SE / GR-1 / 2018/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.

STAAD SPACE

-- PAGE NO. 92

MODAL BASE ACTIONS		FORCES IN KN			LENGTH IN METE		

MODE	PERIOD	FX	FY	FZ	MOMENTS ARE ABOUT THE ORIGIN		
					MX	MY	MZ
48	0.093	0.01	0.16	-0.16	-2.02	1.46	0.48
49	0.092	0.02	-0.48	-0.28	11.86	2.64	-0.78
50	0.092	0.04	-0.84	-0.12	17.49	1.58	-1.51



V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, CA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 93

PARTICIPATION FACTORS

MASS PARTICIPATION FACTORS IN PERCENT							BASE SHEAR IN KN		
MODE	X	Y	Z	SUMM-X	SUMM-Y	SUMM-Z	X	Y	Z
1	6.98	0.00	5.96	6.981	0.000	5.955	181.88	0.00	0.00
2	59.33	0.00	3.11	66.388	0.000	9.063	1701.82	0.00	0.00
3	6.38	0.00	65.29	72.686	0.000	74.352	198.99	0.00	0.00
4	0.35	0.00	0.82	73.031	0.001	75.169	27.75	0.00	0.00
5	10.99	0.00	1.71	84.020	0.001	76.881	883.30	0.00	0.00
6	2.15	0.00	10.17	86.167	0.001	87.050	172.63	0.00	0.00
7	0.07	0.00	0.44	86.238	0.005	87.487	5.69	0.00	0.00
8	0.08	0.00	3.92	86.316	0.006	91.409	6.26	0.00	0.00
9	5.21	0.00	0.11	91.530	0.007	91.516	419.11	0.00	0.00
10	0.06	0.03	0.68	91.588	0.032	92.193	4.68	0.00	0.00
11	0.00	38.43	0.00	91.593	38.467	92.194	0.39	0.00	0.00
12	0.00	1.37	0.01	91.594	39.839	92.201	0.08	0.00	0.00
13	0.01	15.68	0.01	91.602	55.524	92.208	0.65	0.00	0.00
14	0.01	8.94	0.00	91.610	64.464	92.208	0.65	0.00	0.00
15	0.00	0.49	0.32	91.613	64.959	92.525	0.21	0.00	0.00
16	0.02	0.19	0.01	91.633	65.146	92.530	1.62	0.00	0.00
17	0.00	0.01	1.73	91.635	65.153	94.258	0.00	0.00	0.00
18	0.03	0.01	0.26	91.663	65.166	94.522	2.39	0.00	0.00
19	2.61	0.00	0.00	94.272	65.168	94.527	209.78	0.00	0.00
20	0.01	3.90	0.00	94.282	69.072	94.527	0.78	0.00	0.00
21	0.02	0.12	0.01	94.298	69.187	94.537	1.30	0.00	0.00
22	0.00	0.81	0.00	94.303	69.998	94.537	0.35	0.00	0.00
23	0.00	0.48	0.00	94.305	70.474	94.537	0.18	0.00	0.00
24	0.00	2.39	0.00	94.305	72.865	94.541	0.01	0.00	0.00
25	0.00	1.06	0.01	94.305	73.923	94.554	0.02	0.00	0.00
26	0.01	0.00	0.01	94.311	73.926	94.561	0.45	0.00	0.00
27	0.00	0.01	0.00	94.311	73.936	94.561	0.00	0.00	0.00
28	0.00	0.04	0.00	94.311	73.978	94.561	0.00	0.00	0.00
29	0.00	0.29	0.00	94.311	74.268	94.561	0.00	0.00	0.00
30	0.00	0.04	0.00	94.311	74.307	94.563	0.00	0.00	0.00
31	0.00	0.01	0.00	94.311	74.319	94.563	0.00	0.00	0.00
32	0.00	0.18	0.00	94.312	74.409	94.564	0.07	0.00	0.00
33	0.00	0.30	0.00	94.312	74.796	94.564	0.00	0.00	0.00
34	0.00	0.00	0.01	94.312	74.797	94.571	0.01	0.00	0.00
35	0.00	0.04	0.02	94.312	74.837	94.590	0.00	0.00	0.00
36	0.00	0.01	0.00	94.312	74.846	94.590	0.00	0.00	0.00
37	0.00	0.05	0.00	94.312	74.893	94.592	0.01	0.00	0.00
38	0.00	0.00	0.00	94.312	74.894	94.592	0.00	0.00	0.00
39	0.00	0.00	0.00	94.312	74.896	94.592	0.00	0.00	0.00
40	0.00	0.01	0.00	94.312	74.904	94.592	0.00	0.00	0.00
41	0.00	0.61	0.00	94.312	75.515	94.592	0.01	0.00	0.00
42	0.00	0.02	0.00	94.312	75.534	94.593	0.01	0.00	0.00
43	0.00	0.00	0.00	94.313	75.537	94.594	0.04	0.00	0.00
44	0.00	0.21	0.01	94.313	75.751	94.599	0.01	0.00	0.00
45	0.00	0.00	0.00	94.313	75.754	94.599	0.00	0.00	0.00
46	0.00	0.04	1.07	94.313	75.793	95.667	0.00	0.00	0.00
47	0.00	0.00	0.00	94.313	75.798	95.667	0.00	0.00	0.00

V. JAGEN, B.E., M.E., (Strud), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, OA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 94

MASS PARTICIPATION FACTORS IN PERCENT							BASE SHEAR IN KN		
MODE	X	Y	Z	SUMM-X	SUMM-Y	SUMM-Z	X	Y	Z
48	0.00	0.04	0.04	94.313	75.834	95.704	0.01	0.00	0.00
49	0.00	0.14	0.05	94.313	75.973	95.751	0.02	0.00	0.00
50	0.00	0.25	0.01	94.314	76.219	95.757	0.04	0.00	0.00
ZPA	5.69	0.00	0.00	100.000	0.000	0.000	265.94	0.00	0.00
TOTAL SRSS SHEAR							2017.46	0.00	0.00
TOTAL 10PCT SHEAR							2250.41	0.00	0.00
TOTAL ABS SHEAR							4087.16	0.00	0.00
TOTAL CSM SHEAR							3620.37	0.00	0.00
TOTAL CQC SHEAR							2261.60	0.00	0.00

 * UNITS - KN METE *
 * TIME PERIOD FOR X 1893 LOADING = 0.67000 SEC *
 * SA/G PER 1893= 2.030, LOAD FACTOR= 1.000 *
 * FACTOR V PER 1893= 0.0406 X 55608.01 *
 * VB Min based on Clause 7.2.2 = 612.57 *


 V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841209154

STAAD SPACE

-- PAGE NO. 95

STORY DRIFT CHECK

STORY	HEIGHT (METER)	INTERSTORY DRIFT(CM)		RATIO		STATUS	
		X	Z	X	Z	X	Z
BASE	0.00						
1	4.41	0.2489	0.1377	L / 1772	L / 3204	PASS	PASS
2	7.42	0.3369	0.1735	L / 894	L / 1735	PASS	PASS
3	10.43	0.4031	0.1977	L / 747	L / 1523	PASS	PASS
4	13.44	0.4351	0.2071	L / 692	L / 1454	PASS	PASS
5	16.45	0.4438	0.2088	L / 679	L / 1442	PASS	PASS
6	19.46	0.4377	0.2074	L / 688	L / 1452	PASS	PASS
7	22.47	0.4216	0.2041	L / 714	L / 1475	PASS	PASS
8	25.48	0.3983	0.1981	L / 756	L / 1520	PASS	PASS
9	28.49	0.3674	0.1849	L / 820	L / 1629	PASS	PASS
10	31.50	0.3346	0.1731	L / 900	L / 1739	PASS	PASS
11	34.51	0.3025	0.2308	L / 995	L / 1305	PASS	PASS

1893 RESPONSE SPECTRUM LOAD 10

RESPONSE LOAD CASE 10

MODE	MODAL WEIGHT (MODAL MASS TIMES g) IN KN			GENERALIZED WEIGHT
	X	Y	Z	
1	3.878751E+03	4.981096E-02	3.308653E+03	9.675647E+03
2	3.296139E+04	4.846837E-02	1.726551E+03	1.160952E+04
3	3.543773E+03	9.442540E-02	3.627455E+04	1.646803E+04
4	1.918168E+02	2.343864E-01	4.537594E+02	7.826890E+03
5	6.105164E+03	7.648031E-02	9.510667E+02	1.127969E+04
6	1.193206E+03	2.021957E-01	5.049944E+03	1.297471E+04
7	3.935611E+01	1.910886E+00	2.428918E+02	5.760704E+03
8	4.328966E+01	7.856227E-01	2.179257E+03	9.063934E+03
9	2.896792E+03	2.946702E-01	5.901533E+01	8.608658E+03
10	3.235781E+01	1.424374E+01	3.765651E+02	4.877177E+03
11	2.700236E+00	1.135406E+04	5.307205E-01	3.360597E+03
12	5.753414E-01	7.626241E+02	3.820702E+00	2.859520E+03



V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-1 / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119,
Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 96

13	4.503201E+00	8.714364E+03	3.624659E+00	2.193109E+03
14	4.479771E+00	4.967124E+03	2.462337E-01	2.125392E+03
15	1.454953E+00	2.747243E+02	1.762012E+02	8.016359E+03
16	1.120678E+01	1.036908E+02	2.780101E+00	2.754635E+03
17	2.230651E-02	4.079688E+00	9.597315E+02	7.686852E+03
18	1.651248E+01	7.499507E+00	1.468231E+02	2.538687E+03
19	1.449938E+03	1.089602E+00	2.604404E+00	6.986839E+03
20	5.416223E+00	2.368757E+03	2.719863E-01	3.221205E+03
21	9.000429E+00	6.415500E+01	5.437604E+00	3.046069E+03
22	2.444253E+00	4.502040E+02	9.054394E-02	2.413581E+03
23	1.233364E+00	2.644971E+02	2.484056E-02	4.631884E+03
24	6.994562E-02	1.328873E+03	1.824439E+00	5.419947E+03
25	1.179372E-01	5.076724E+02	7.566739E+00	6.783303E+03
26	3.112927E+00	1.353828E+00	4.412297E+00	7.004126E+03
27	1.068536E-03	5.805623E+00	3.326147E-02	6.301999E+02
28	4.882356E-05	2.323649E+01	3.442170E-02	3.938317E+02
29	1.409179E-02	1.009392E+02	3.222120E-02	3.692593E+02
30	3.216815E-02	2.201225E+01	5.382616E-01	4.247618E+02
31	6.818298E-06	6.354953E+00	1.224607E-01	4.525434E+02
32	4.691541E-01	1.001219E+02	3.607352E-01	4.881186E+03
33	7.694828E-04	1.653337E+02	1.845337E-03	3.930855E+02
34	3.546843E-02	2.029190E-01	4.540545E+00	4.833272E+02
35	2.457735E-02	2.232302E+01	9.609302E+00	3.612925E+02
36	1.869194E-03	4.976428E+00	1.095363E-01	4.172087E+02
37	5.686349E-02	2.608395E+01	1.033129E+00	4.621541E+03
38	3.226506E-03	4.492762E-01	4.525448E-03	4.409336E+02
39	1.485270E-02	1.091805E+00	2.975679E-02	4.833877E+02
40	5.061132E-04	4.301379E+00	2.040309E-02	3.491572E+02
41	3.583911E-02	3.395539E+02	3.127571E-05	3.430193E+03
42	5.822367E-02	1.091540E+01	8.426068E-01	2.449019E+02
43	2.828742E-01	1.757652E+00	2.067600E-01	3.886896E+02
44	4.171362E-02	1.185748E+02	2.830805E+00	1.204567E+02
45	6.550792E-03	1.838490E+00	2.742219E-04	6.756848E+02
46	1.859797E-03	2.162139E+01	5.934414E+02	5.681959E+03
47	1.026856E-02	2.430970E+00	2.983483E-01	5.640255E+02
48	6.613280E-02	2.050433E+01	2.847814E+01	4.067123E+02
49	1.563199E-01	7.679431E+01	2.605287E+01	8.367260E+02
50	2.686750E-01	1.370692E+02	3.048334E+00	4.392593E+02

CQC MODAL COMBINATION METHOD USED.
MISSING MASS METHOD USED.

DYNAMIC WEIGHT X Y Z 5.555949E+04 5.555949E+04 5.555949E+04 KN
MISSING WEIGHT X Y Z -3.159222E+03 -1.321239E+04 -2.357573E+03 KN
MODAL WEIGHT X Y Z 5.240027E+04 4.234710E+04 5.320192E+04 KN

RESPONSE LOAD CASE 10


V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841209154

STAAD SPACE

-- PAGE NO. 97

MODE	SPECTRAL ACCELERATION	DESIGN SEISMIC COEFFICIENT		
		X	Y	Z
1	0.81027	-0.0469	0.0000	0.0000
2	0.89216	-0.0510	0.0000	0.0000
3	0.97030	-0.0562	0.0000	0.0000
4	2.50000	-0.1447	0.0000	0.0000
5	2.50000	-0.1447	0.0000	0.0000
6	2.50000	-0.1447	0.0000	0.0000
7	2.50000	-0.1447	0.0000	0.0000
8	2.50000	-0.1447	0.0000	0.0000
9	2.50000	-0.1447	0.0000	0.0000
10	2.50000	-0.1447	0.0000	0.0000
11	2.50000	-0.1447	0.0000	0.0000
12	2.50000	-0.1447	0.0000	0.0000
13	2.50000	-0.1447	0.0000	0.0000
14	2.50000	-0.1447	0.0000	0.0000
15	2.50000	-0.1447	0.0000	0.0000
16	2.50000	-0.1447	0.0000	0.0000
17	2.50000	-0.1447	0.0000	0.0000
18	2.50000	-0.1447	0.0000	0.0000
19	2.50000	-0.1447	0.0000	0.0000
20	2.50000	-0.1447	0.0000	0.0000
21	2.50000	-0.1447	0.0000	0.0000
22	2.50000	-0.1447	0.0000	0.0000
23	2.50000	-0.1447	0.0000	0.0000
24	2.50000	-0.1447	0.0000	0.0000
25	2.50000	-0.1447	0.0000	0.0000
26	2.50000	-0.1447	0.0000	0.0000
27	2.50000	-0.1447	0.0000	0.0000
28	2.50000	-0.1447	0.0000	0.0000
29	2.50000	-0.1447	0.0000	0.0000
30	2.50000	-0.1447	0.0000	0.0000
31	2.49483	-0.1444	0.0000	0.0000
32	2.48947	-0.1441	0.0000	0.0000
33	2.48745	-0.1440	0.0000	0.0000
34	2.47877	-0.1435	0.0000	0.0000
35	2.47787	-0.1434	0.0000	0.0000
36	2.47753	-0.1434	0.0000	0.0000
37	2.47128	-0.1430	0.0000	0.0000
38	2.46826	-0.1428	0.0000	0.0000
39	2.45403	-0.1420	0.0000	0.0000
40	2.44324	-0.1414	0.0000	0.0000
41	2.44055	-0.1412	0.0000	0.0000
42	2.43224	-0.1408	0.0000	0.0000
43	2.43093	-0.1407	0.0000	0.0000
44	2.41537	-0.1398	0.0000	0.0000
45	2.40329	-0.1391	0.0000	0.0000
46	2.39826	-0.1388	0.0000	0.0000
47	2.39651	-0.1387	0.0000	0.0000
48	2.39071	-0.1384	0.0000	0.0000
49	2.38708	-0.1381	0.0000	0.0000
50	2.38287	-0.1379	0.0000	0.0000


 V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2015/03/024, QAI/2016/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 98

PEAK STORY SHEAR

STORY -----	LEVEL IN METE -----	PEAK STORY SHEAR IN KN -----		
		X	Y	Z
11	34.51	374.78	0.00	0.00
10	31.50	775.89	0.00	0.00
9	28.49	1067.70	0.00	0.00
8	25.48	1264.68	0.00	0.00
7	22.47	1410.85	0.00	0.00
6	19.46	1538.59	0.00	0.00
5	16.45	1679.90	0.00	0.00
4	13.44	1837.05	0.00	0.00
3	10.43	1998.17	0.00	0.00
2	7.42	2146.81	0.00	0.00
1	4.41	2237.13	0.00	0.00
BASE	0.00	2245.91	0.00	0.00

MODE -----	ACCELERATION-G -----	DAMPING -----
1	2.93074	0.05000
2	3.22693	0.05000
3	3.50957	0.05000
4	9.04250	0.05000
5	9.04250	0.05000
6	9.04250	0.05000
7	9.04250	0.05000
8	9.04250	0.05000
9	9.04250	0.05000
10	9.04250	0.05000
11	9.04250	0.05000
12	9.04250	0.05000
13	9.04250	0.05000
14	9.04250	0.05000
15	9.04250	0.05000
16	9.04250	0.05000
17	9.04250	0.05000
18	9.04250	0.05000
19	9.04250	0.05000
20	9.04250	0.05000
21	9.04250	0.05000
22	9.04250	0.05000
23	9.04250	0.05000
24	9.04250	0.05000
25	9.04250	0.05000
26	9.04250	0.05000
27	9.04250	0.05000
28	9.04250	0.05000
29	9.04250	0.05000


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 99

MODE	ACCELERATION-G	DAMPING
----	-----	-----
30	9.04250	0.05000
31	9.02379	0.05000
32	9.00441	0.05000
33	8.99710	0.05000
34	8.96573	0.05000
35	8.96247	0.05000
36	8.96123	0.05000
37	8.93833	0.05000
38	8.92768	0.05000
39	8.87622	0.05000
40	8.83721	0.05000
41	8.82748	0.05000
42	8.79740	0.05000
43	8.79269	0.05000
44	8.73639	0.05000
45	8.69271	0.05000
46	8.67452	0.05000
47	8.66817	0.05000
48	8.64720	0.05000
49	8.63489	0.05000
50	8.61882	0.05000

PEAK STORY SHEAR KIS

STORY	LEVEL IN METER	PEAK STORY SHEAR IN KN	INCLUDING MISSING MASS CORRECTION		
-----	-----	-----	X	Y	Z
11	34.51	375.62		0.00	0.00
10	31.50	776.06		0.00	0.00
9	28.49	1067.94		0.00	0.00
8	25.48	1265.43		0.00	0.00
7	22.47	1410.90		0.00	0.00
6	19.46	1538.97		0.00	0.00
5	16.45	1680.85		0.00	0.00
4	13.44	1837.08		0.00	0.00
3	10.43	1999.36		0.00	0.00
2	7.42	2148.21		0.00	0.00
1	4.41	2239.08		0.00	0.00
BASE	0.00	2261.60		0.00	0.00
ZPA		5.26109			
ZPAFREQ		33.00000			


V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 100

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	1.678	-181.88	0.65	-167.98	-3987.23	-736.14	4438.59
2	1.524	-1701.82	2.06	-389.49	-9396.63	-16835.48	48795.13
3	1.402	-198.99	1.03	636.66	15094.78	-7438.43	4761.21
4	0.524	-27.75	-0.97	-42.68	83.72	-0.92	61.56
5	0.431	-883.30	-3.12	-348.63	-489.74	-8852.39	1373.16
6	0.415	-172.63	-2.25	375.65	163.41	-4999.37	131.07
7	0.287	-5.69	1.25	-14.15	-82.08	67.68	38.92
8	0.212	-6.26	0.84	-44.44	-238.83	293.07	53.39
9	0.204	-410.11	4.23	59.82	287.23	-5275.82	2331.18
10	0.188	-4.68	-3.11	-15.97	-26.76	72.83	-20.12
11	0.154	-0.39	34.74	-0.17	-364.79	-3.02	139.74
12	0.151	-0.08	3.03	0.21	-124.45	-2.71	17.94
13	0.149	-0.65	-28.66	-0.58	459.33	-3.63	-420.19
14	0.142	-0.65	-21.58	0.15	58.01	-10.05	-297.11
15	0.140	-0.21	-2.89	2.32	31.93	-15.24	-43.48
16	0.132	-1.62	4.93	-0.81	-47.39	-13.29	-9.68
17	0.130	-0.00	-0.04	-0.67	-2.05	5.36	-0.90
18	0.130	-2.39	1.61	7.12	21.84	-85.76	-17.13
19	0.122	-209.78	-5.75	-8.89	125.71	-2504.75	664.75
20	0.120	-0.78	15.68	0.18	-103.43	-11.31	133.71
21	0.114	-1.30	3.48	1.01	-215.25	-24.36	58.88
22	0.113	-0.35	-4.00	0.07	111.43	-4.10	-16.81
23	0.109	-0.18	-2.61	0.03	43.31	-3.23	-19.03
24	0.107	-0.01	1.39	0.05	-25.05	-0.34	8.10
25	0.105	-0.02	-1.20	0.14	20.37	-0.91	-8.86
26	0.103	-0.45	0.30	0.54	-3.17	-9.12	14.06
27	0.103	-0.00	-0.01	0.00	0.00	-0.01	-0.03
28	0.102	-0.00	0.00	-0.00	-0.02	0.00	0.01
29	0.102	-0.00	0.22	0.00	-0.98	-0.04	0.61
30	0.101	-0.00	0.12	0.02	-0.62	-0.20	0.40
31	0.100	-0.00	-0.00	-0.00	0.01	0.00	-0.00
32	0.099	-0.07	0.99	-0.06	-27.70	-0.21	18.05
33	0.099	-0.00	-0.05	0.00	0.99	-0.00	-0.68
34	0.099	-0.01	-0.01	0.06	0.53	-0.55	-0.27
35	0.099	-0.00	-0.11	0.07	0.37	-0.64	-0.28
36	0.099	-0.00	0.01	0.00	-0.28	-0.02	0.21
37	0.098	-0.01	-0.17	0.03	-4.23	-0.39	-0.33
38	0.098	-0.00	0.01	0.00	-0.35	-0.01	0.14
39	0.097	-0.00	0.02	-0.00	-0.50	-0.00	0.28
40	0.096	-0.00	-0.01	0.00	0.16	-0.01	-0.10
41	0.096	-0.01	-0.49	-0.00	4.67	-0.05	-5.48
42	0.095	-0.01	-0.11	-0.03	2.08	0.18	-1.53
43	0.095	-0.04	-0.10	-0.03	1.89	-0.16	-1.25
44	0.094	-0.01	-0.31	-0.05	0.85	0.37	-0.71
45	0.094	-0.00	-0.02	0.00	0.24	-0.01	-0.05
46	0.093	-0.00	0.03	-0.15	-1.05	1.21	0.09
47	0.093	-0.00	-0.02	-0.01	0.37	0.05	-0.08

V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QV/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 101

MODAL BASE ACTIONS		FORCES IN KN			LENGTH IN METE		
MODE	PERIOD	FX	FY	FZ	MOMENTS ARE ABOUT THE ORIGIN		
					MX	MY	MZ
48	0.093	-0.01	-0.16	0.16	2.02	-1.46	-0.48
49	0.092	-0.02	0.48	0.28	-11.86	-2.64	0.78
50	0.092	-0.04	0.84	0.12	-17.49	-1.58	1.51


V. JAGEN, B.E.M.E.(Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 102

PARTICIPATION FACTORS

MASS PARTICIPATION FACTORS IN PERCENT							BASE SHEAR IN KN		
MODE	X	Y	Z	SUMM-X	SUMM-Y	SUMM-Z	X	Y	Z
1	6.98	0.00	5.96	6.981	0.000	5.955	-181.88	0.00	0.00
2	59.33	0.00	3.11	66.308	0.000	9.063	-1701.82	0.00	0.00
3	6.38	0.00	65.29	72.686	0.000	74.352	-198.99	0.00	0.00
4	0.35	0.00	0.82	73.031	0.001	75.169	-27.75	0.00	0.00
5	10.99	0.00	1.71	84.020	0.001	76.881	-883.30	0.00	0.00
6	2.15	0.00	10.17	86.167	0.001	87.050	-172.63	0.00	0.00
7	0.07	0.00	0.44	86.238	0.005	87.487	-5.69	0.00	0.00
8	0.08	0.00	3.92	86.316	0.006	91.409	-6.26	0.00	0.00
9	5.21	0.00	0.11	91.530	0.007	91.516	-419.11	0.00	0.00
10	0.06	0.01	0.68	91.588	0.032	92.193	-4.68	0.00	0.00
11	0.00	38.43	0.00	91.593	38.467	92.194	-0.39	0.00	0.00
12	0.00	1.37	0.01	91.594	39.839	92.201	-0.08	0.00	0.00
13	0.01	15.68	0.01	91.602	55.524	92.208	-0.65	0.00	0.00
14	0.01	8.94	0.00	91.610	64.464	92.208	-0.65	0.00	0.00
15	0.00	0.49	0.32	91.613	64.959	92.525	-0.21	0.00	0.00
16	0.02	0.19	0.01	91.633	65.146	92.530	-1.62	0.00	0.00
17	0.00	0.01	1.73	91.633	65.153	94.258	-0.00	0.00	0.00
18	0.01	0.01	0.25	91.663	65.166	94.522	-2.39	0.00	0.00
19	2.61	0.00	0.00	94.272	65.168	94.527	-209.78	0.00	0.00
20	0.01	3.90	0.00	94.282	69.072	94.527	-0.78	0.00	0.00
21	0.02	0.12	0.01	94.298	69.187	94.537	-1.30	0.00	0.00
22	0.00	0.81	0.00	94.303	69.998	94.537	-0.35	0.00	0.00
23	0.00	0.48	0.00	94.305	70.474	94.537	-0.18	0.00	0.00
24	0.00	2.39	0.00	94.305	72.865	94.541	-0.01	0.00	0.00
25	0.00	1.06	0.01	94.305	73.923	94.554	-0.02	0.00	0.00
26	0.01	0.00	0.01	94.311	73.926	94.562	-0.45	0.00	0.00
27	0.00	0.01	0.00	94.311	73.936	94.562	-0.00	0.00	0.00
28	0.00	0.04	0.00	94.311	73.978	94.562	-0.00	0.00	0.00
29	0.00	0.29	0.00	94.311	74.268	94.562	-0.00	0.00	0.00
30	0.00	0.04	0.00	94.311	74.307	94.563	-0.00	0.00	0.00
31	0.00	0.01	0.00	94.311	74.319	94.563	-0.00	0.00	0.00
32	0.00	0.18	0.00	94.312	74.499	94.564	-0.07	0.00	0.00
33	0.00	0.30	0.00	94.312	74.796	94.564	-0.00	0.00	0.00
34	0.00	0.00	0.01	94.312	74.797	94.572	-0.01	0.00	0.00
35	0.00	0.04	0.02	94.312	74.837	94.590	-0.00	0.00	0.00
36	0.00	0.01	0.00	94.312	74.846	94.590	-0.00	0.00	0.00
37	0.00	0.05	0.00	94.312	74.893	94.592	-0.01	0.00	0.00
38	0.00	0.00	0.00	94.312	74.894	94.592	-0.00	0.00	0.00
39	0.00	0.00	0.00	94.312	74.896	94.592	-0.00	0.00	0.00
40	0.00	0.01	0.00	94.312	74.984	94.592	-0.00	0.00	0.00
41	0.00	0.61	0.00	94.312	75.515	94.592	-0.01	0.00	0.00
42	0.00	0.02	0.00	94.312	75.534	94.593	-0.01	0.00	0.00
43	0.00	0.00	0.00	94.313	75.537	94.594	-0.04	0.00	0.00
44	0.00	0.21	0.01	94.313	75.751	94.599	-0.01	0.00	0.00
45	0.00	0.00	0.00	94.313	75.754	94.599	-0.00	0.00	0.00
46	0.00	0.04	1.07	94.313	75.793	95.667	-0.00	0.00	0.00
47	0.00	0.00	0.00	94.313	75.798	95.667	-0.00	0.00	0.00


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, 04/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 103

MASS PARTICIPATION FACTORS IN PERCENT							BASE SHEAR IN KN		
MODE	X	Y	Z	SUMM-X	SUMM-Y	SUMM-Z	X	Y	Z
48	0.00	0.04	0.04	94.313	75.834	95.704	-0.01	0.00	0.00
49	0.00	0.14	0.05	94.313	75.973	95.751	-0.02	0.00	0.00
50	0.00	0.25	0.01	94.314	76.219	95.757	-0.04	0.00	0.00
ZPA	5.69	0.00	0.00	100.000	0.000	0.000	-265.94	0.00	0.00
TOTAL SRSS SHEAR							-2017.46	0.00	0.00
TOTAL 10PCT SHEAR							-2250.41	0.00	0.00
TOTAL ABS SHEAR							-4087.16	0.00	0.00
TOTAL CSM SHEAR							-3620.37	0.00	0.00
TOTAL CQC SHEAR							-2261.60	0.00	0.00


V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, GA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 104

STORY DRIFT CHECK

STORY	HEIGHT (METER)	INTERSTORY DRIFT(CM)		RATIO		STATUS	
		X	Z	X	Z	X	Z
BASE	0.00						
1	4.41	0.2489	0.1377	L / 1772	L / 3204	PASS	PASS
2	7.42	0.3369	0.1735	L / 894	L / 1735	PASS	PASS
3	10.43	0.4031	0.1977	L / 747	L / 1523	PASS	PASS
4	13.44	0.4351	0.2071	L / 692	L / 1454	PASS	PASS
5	16.45	0.4438	0.2088	L / 679	L / 1442	PASS	PASS
6	19.46	0.4377	0.2074	L / 688	L / 1452	PASS	PASS
7	22.47	0.4216	0.2041	L / 714	L / 1475	PASS	PASS
8	25.48	0.3983	0.1981	L / 756	L / 1520	PASS	PASS
9	28.49	0.3674	0.1849	L / 820	L / 1629	PASS	PASS
10	31.50	0.3346	0.1731	L / 900	L / 1739	PASS	PASS
11	34.51	0.3025	0.2388	L / 995	L / 1305	PASS	PASS

1893 RESPONSE SPECTRUM LOAD 11

RESPONSE LOAD CASE 11

MODE	MODAL WEIGHT (MODAL MASS TIMES g)		IN KN	GENERALIZED WEIGHT
	X	Y	Z	
1	3.878751E+03	4.981096E-02	3.308653E+03	9.675647E+03
2	3.296139E+04	4.846837E-02	1.726551E+03	1.100952E+04
3	3.543773E+03	9.442540E-02	3.627455E+04	1.646803E+04
4	1.918168E+02	2.343864E-01	4.537594E+02	7.826890E+03
5	6.185164E+03	7.640031E-02	9.510667E+02	1.127969E+04
6	1.193206E+03	2.021957E-01	5.649944E+03	1.297471E+04
7	3.935611E+01	1.910886E+00	2.428918E+02	5.760704E+03
8	4.328966E+01	7.856227E-01	2.179257E+03	9.063934E+03
9	2.896792E+03	2.946702E-01	5.901533E+01	8.688658E+03
10	3.235781E+01	1.424374E+01	3.765651E+02	4.877177E+03
11	2.700236E+00	2.135406E+04	5.307295E-01	3.368597E+03
12	5.753414E-01	7.626241E+02	3.820702E+00	2.859520E+03



V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-1 / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2,
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 105

13	4.583201E+00	8.714364E+03	3.624659E+00	2.193189E+03
14	4.479771E+00	4.967124E+03	2.462337E-01	2.125392E+03
15	1.454953E+00	2.747243E+02	1.762012E+02	8.016359E+03
16	1.120678E+01	1.036908E+02	2.780101E+00	2.754635E+03
17	2.230651E-02	4.079680E+00	9.597315E+02	7.686852E+03
18	1.651248E+01	7.499507E+00	1.468231E+02	2.538687E+03
19	1.449938E+03	1.009602E+00	2.604404E+00	6.986839E+03
20	5.416223E+00	2.168757E+03	2.719863E-01	3.221205E+03
21	9.000429E+00	6.415500E+01	5.437604E+00	3.046069E+03
22	2.444253E+00	4.502040E+02	9.054394E-02	2.413581E+03
23	1.233364E+00	2.644971E+02	2.484056E-02	4.631884E+03
24	6.994562E-02	1.328873E+03	1.824439E+00	5.419947E+03
25	1.179372E-01	5.876724E+02	7.566739E+00	6.783303E+03
26	3.112027E+00	1.353028E+00	4.412297E+00	7.004126E+03
27	1.068536E-03	5.805623E+00	3.326147E-02	6.381999E+02
28	4.882356E-05	2.323649E+01	3.442170E-02	3.938317E+02
29	1.409179E-02	1.609392E+02	3.222120E-02	3.692593E+02
30	3.216815E-02	2.201225E+01	5.382610E-01	4.247618E+02
31	6.818298E-06	6.354953E+00	1.224607E-01	4.525434E+02
32	4.691541E-01	1.001219E+02	3.607352E-01	4.881106E+03
33	7.694820E-04	1.653337E+02	1.845337E-03	3.930855E+02
34	3.546843E-02	2.929198E-01	4.540545E+00	4.833272E+02
35	2.457735E-02	2.232302E+01	9.600302E+00	3.612025E+02
36	1.869194E-03	4.976428E+00	1.095363E-01	4.172087E+02
37	5.686349E-02	2.608395E+01	1.033129E+00	4.621541E+03
38	3.226586E-03	4.492762E-01	4.525448E-03	4.409336E+02
39	1.485270E-02	1.091805E+00	2.975679E-02	4.833877E+02
40	5.061132E-04	4.301379E+00	2.840389E-02	3.491572E+02
41	3.583911E-02	3.395539E+02	3.127571E-05	3.430193E+03
42	5.822367E-02	1.091540E+01	8.426068E-01	2.449019E+02
43	2.828742E-01	1.757652E+00	2.067680E-01	3.886890E+02
44	4.171362E-02	1.185748E+02	2.830805E+00	1.204567E+02
45	6.550792E-03	1.838490E+00	2.742219E-04	6.756848E+02
46	1.859797E-03	2.162139E+01	5.934414E+02	5.681959E+03
47	1.026856E-02	2.438970E+00	2.983483E-01	5.640255E+02
48	6.613280E-02	2.050433E+01	2.047014E+01	4.067123E+02
49	1.563199E-01	7.679431E+01	2.605287E+01	8.367260E+02
50	2.686750E-01	1.370692E+02	3.048334E+00	4.392593E+02

CQC MODAL COMBINATION METHOD USED.
MISSING MASS METHOD USED.

DYNAMIC WEIGHT X Y Z 5.555949E+04 5.555949E+04 5.555949E+04 KN
MISSING WEIGHT X Y Z -3.159222E+03 -1.321239E+04 -2.357573E+03 KN
MODAL WEIGHT X Y Z 5.240027E+04 4.234710E+04 5.320192E+04 KN

RESPONSE LOAD CASE 11



V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-I / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 185

MODE	SPECTRAL ACCELERATION	DESIGN SEISMIC COEFFICIENT		
		X	Y	Z
1	0.81827	0.0000	0.0000	0.0541
2	0.89215	0.0000	0.0000	0.0596
3	0.97830	0.0000	0.0000	0.0648
4	2.50000	0.0000	0.0000	0.1669
5	2.50000	0.0000	0.0000	0.1669
6	2.50000	0.0000	0.0000	0.1669
7	2.50000	0.0000	0.0000	0.1669
8	2.50000	0.0000	0.0000	0.1669
9	2.50000	0.0000	0.0000	0.1669
10	2.50000	0.0000	0.0000	0.1669
11	2.50000	0.0000	0.0000	0.1669
12	2.50000	0.0000	0.0000	0.1669
13	2.50000	0.0000	0.0000	0.1669
14	2.50000	0.0000	0.0000	0.1669
15	2.50000	0.0000	0.0000	0.1669
16	2.50000	0.0000	0.0000	0.1669
17	2.50000	0.0000	0.0000	0.1669
18	2.50000	0.0000	0.0000	0.1669
19	2.50000	0.0000	0.0000	0.1669
20	2.50000	0.0000	0.0000	0.1669
21	2.50000	0.0000	0.0000	0.1669
22	2.50000	0.0000	0.0000	0.1669
23	2.50000	0.0000	0.0000	0.1669
24	2.50000	0.0000	0.0000	0.1669
25	2.50000	0.0000	0.0000	0.1669
26	2.50000	0.0000	0.0000	0.1669
27	2.50000	0.0000	0.0000	0.1669
28	2.50000	0.0000	0.0000	0.1669
29	2.50000	0.0000	0.0000	0.1669
30	2.50000	0.0000	0.0000	0.1669
31	2.49483	0.0000	0.0000	0.1666
32	2.48947	0.0000	0.0000	0.1662
33	2.48745	0.0000	0.0000	0.1661
34	2.47877	0.0000	0.0000	0.1655
35	2.47787	0.0000	0.0000	0.1654
36	2.47753	0.0000	0.0000	0.1654
37	2.47120	0.0000	0.0000	0.1650
38	2.46826	0.0000	0.0000	0.1648
39	2.45403	0.0000	0.0000	0.1639
40	2.44324	0.0000	0.0000	0.1631
41	2.44055	0.0000	0.0000	0.1630
42	2.43224	0.0000	0.0000	0.1624
43	2.43093	0.0000	0.0000	0.1623
44	2.41537	0.0000	0.0000	0.1613
45	2.40329	0.0000	0.0000	0.1605
46	2.39826	0.0000	0.0000	0.1601
47	2.39651	0.0000	0.0000	0.1600
48	2.39071	0.0000	0.0000	0.1596
49	2.38708	0.0000	0.0000	0.1594
50	2.38287	0.0000	0.0000	0.1591


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.
 CMOA REGD NOS -
 SE / GR-I / 2019/03/024, CA/2018/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 107

PEAK STORY SHEAR

STORY -----	LEVEL IN METE -----	PEAK STORY SHEAR IN KN -----		
		X	Y	Z
11	34.51	0.00	0.00	415.87
10	31.50	0.00	0.00	879.39
9	28.49	0.00	0.00	1256.79
8	25.48	0.00	0.00	1530.29
7	22.47	0.00	0.00	1741.70
6	19.46	0.00	0.00	1926.60
5	16.45	0.00	0.00	2108.04
4	13.44	0.00	0.00	2297.01
3	10.43	0.00	0.00	2480.02
2	7.42	0.00	0.00	2637.13
1	4.41	0.00	0.00	2734.83
BASE	0.00	0.00	0.00	2744.67

MODE -----	ACCELERATION-G -----	DAMPING -----
1	3.38125	0.05000
2	3.72297	0.05000
3	4.04906	0.05000
4	10.43250	0.05000
5	10.43250	0.05000
6	10.43250	0.05000
7	10.43250	0.05000
8	10.43250	0.05000
9	10.43250	0.05000
10	10.43250	0.05000
11	10.43250	0.05000
12	10.43250	0.05000
13	10.43250	0.05000
14	10.43250	0.05000
15	10.43250	0.05000
16	10.43250	0.05000
17	10.43250	0.05000
18	10.43250	0.05000
19	10.43250	0.05000
20	10.43250	0.05000
21	10.43250	0.05000
22	10.43250	0.05000
23	10.43250	0.05000
24	10.43250	0.05000
25	10.43250	0.05000
26	10.43250	0.05000
27	10.43250	0.05000
28	10.43250	0.05000
29	10.43250	0.05000


V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 108

MODE	ACCELERATION-G	DAMPING
----	-----	-----
30	10.43250	0.05000
31	10.41091	0.05000
32	10.38855	0.05000
33	10.38012	0.05000
34	10.34302	0.05000
35	10.34016	0.05000
36	10.33874	0.05000
37	10.31232	0.05000
38	10.30003	0.05000
39	10.24066	0.05000
40	10.19565	0.05000
41	10.18443	0.05000
42	10.14972	0.05000
43	10.14429	0.05000
44	10.07933	0.05000
45	10.02894	0.05000
46	10.00795	0.05000
47	10.00062	0.05000
48	9.97643	0.05000
49	9.96131	0.05000
50	9.94370	0.05000

PEAK STORY SHEAR KIS

STORY	LEVEL IN METE	PEAK STORY SHEAR IN KN	INCLUDING MISSING MASS CORRECTION		
-----	-----	-----	X	Y	Z
11	34.51	0.00	0.00	0.00	416.09
10	31.50	0.00	0.00	0.00	879.41
9	28.49	0.00	0.00	0.00	1257.05
8	25.48	0.00	0.00	0.00	1530.31
7	22.47	0.00	0.00	0.00	1741.89
6	19.46	0.00	0.00	0.00	1926.72
5	16.45	0.00	0.00	0.00	2108.19
4	13.44	0.00	0.00	0.00	2297.47
3	10.43	0.00	0.00	0.00	2480.07
2	7.42	0.00	0.00	0.00	2638.41
1	4.41	0.00	0.00	0.00	2735.12
BASE	0.00	0.00	0.00	0.00	2754.21
ZPA		0.00982			
ZPAFREQ		33.00000			


V. JAGEN, B.E.M.E. (Struct), M.I.E.A.I.V.
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVY - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 109

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	1.678	193.81	-0.69	179.09	4248.65	784.41	-4729.60
2	1.524	449.37	-0.54	102.85	2481.18	4445.39	-10771.97
3	1.402	-734.53	3.79	2358.05	55717.91	-27427.24	17574.59
4	0.524	49.25	1.72	75.74	-148.56	17.60	-109.24
5	0.431	402.22	1.42	158.75	223.01	3666.75	-625.28
6	0.415	-433.40	-5.64	941.09	410.25	-12551.02	329.06
7	0.287	16.32	-3.60	40.54	235.24	-193.98	-111.56
8	0.212	51.27	-6.91	363.76	1955.03	-2399.03	-437.01
9	0.204	-69.02	0.70	9.83	47.30	-868.79	383.88
10	0.188	18.43	12.22	62.86	105.33	-286.62	79.17
11	0.154	0.20	-17.77	0.09	186.58	1.54	-71.48
12	0.151	-0.25	9.01	0.64	-370.01	-8.06	53.34
13	0.149	0.67	29.67	0.61	-475.45	3.76	434.93
14	0.142	-0.18	-5.84	0.04	15.69	-2.72	-80.36
15	0.140	-2.67	-36.72	29.41	485.35	-193.50	-552.08
16	0.132	0.93	-2.83	0.46	27.23	7.64	5.56
17	0.130	0.77	10.44	160.20	489.65	-1283.47	215.43
18	0.130	-8.22	5.54	24.51	75.12	-295.03	-58.93
19	0.122	10.26	0.28	0.43	-6.15	122.47	-32.50
20	0.120	-0.20	4.05	0.05	-26.74	-2.93	34.57
21	0.114	-1.17	3.12	0.91	-193.03	-21.84	52.80
22	0.113	-0.08	-1.07	0.02	24.74	-0.91	-3.73
23	0.109	-0.03	-0.43	0.00	7.09	-0.53	-3.12
24	0.107	-0.06	8.22	0.30	-147.58	-1.99	47.71
25	0.105	-0.16	-11.13	1.26	188.28	-8.42	-81.88
26	0.103	-0.62	0.41	0.74	-4.36	-12.53	19.31
27	0.103	-0.00	-0.07	0.01	0.32	-0.05	-0.18
28	0.102	0.00	-0.15	0.01	0.67	-0.05	-0.40
29	0.102	-0.00	0.38	0.01	-1.71	-0.08	1.06
30	0.101	-0.02	0.57	0.09	-2.94	-0.94	1.87
31	0.100	0.00	0.15	0.02	-0.97	-0.20	0.50
32	0.099	0.07	-1.00	0.06	28.03	0.21	-18.26
33	0.099	-0.00	-0.09	0.00	1.76	-0.00	-1.21
34	0.099	-0.07	-0.19	0.75	6.94	-7.14	-3.48
35	0.099	-0.08	-2.42	1.59	8.41	-14.64	-6.46
36	0.099	-0.00	0.12	0.02	-2.51	-0.18	1.88
37	0.098	-0.04	-0.86	0.17	-20.80	-1.94	-1.63
38	0.098	-0.00	0.01	0.00	-0.47	-0.01	0.19
39	0.097	0.00	-0.03	0.00	0.82	0.00	-0.46
40	0.096	-0.00	-0.05	0.00	1.20	-0.04	-0.73
41	0.096	0.00	0.02	0.00	-0.16	0.00	0.19
42	0.095	0.04	0.49	0.14	-9.15	-0.80	6.70
43	0.095	0.04	0.10	0.03	-1.86	0.16	1.24
44	0.094	0.06	2.95	0.46	-8.09	-3.55	5.75
45	0.094	-0.00	-0.00	0.00	0.06	-0.00	-0.01
46	0.093	0.17	-18.14	95.03	681.91	-789.67	-61.07
47	0.093	0.01	0.14	0.05	-2.33	-0.33	0.51

V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.

STAAD SPACE

-- PAGE NO. 110

MODAL BASE ACTIONS		FORCES IN KN			LENGTH IN METE		
MODE	PERIOD	FX	FY	FZ	MOMENTS ARE ABOUT THE ORIGIN		
					MX	MY	MZ
48	0.093	-0.19	-3.27	3.27	40.98	-29.67	-9.85
49	0.092	-0.32	7.13	4.15	-176.71	-39.26	11.58
50	0.092	-0.14	3.25	0.48	-67.96	-6.15	5.88



V. JAGEN, B.E., M.E. (Struc), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 111

PARTICIPATION FACTORS

MASS PARTICIPATION FACTORS IN PERCENT							BASE SHEAR IN KN		
MODE	X	Y	Z	SUMM-X	SUMM-Y	SUMM-Z	X	Y	Z
1	6.98	0.00	5.95	6.981	0.000	5.955	0.00	0.00	179.00
2	59.33	0.00	3.11	66.308	0.000	9.063	0.00	0.00	102.85
3	6.38	0.00	65.29	72.686	0.000	74.352	0.00	0.00	2350.05
4	0.35	0.00	0.82	73.031	0.001	75.169	0.00	0.00	75.74
5	10.99	0.00	1.71	84.020	0.001	76.881	0.00	0.00	158.75
6	2.15	0.00	10.17	86.167	0.001	87.058	0.00	0.00	943.09
7	0.07	0.00	0.44	86.238	0.005	87.487	0.00	0.00	40.54
8	0.08	0.00	3.92	86.316	0.006	91.409	0.00	0.00	363.76
9	5.21	0.00	0.11	91.530	0.007	91.516	0.00	0.00	9.85
10	0.06	0.03	0.68	91.588	0.032	92.193	0.00	0.00	62.86
11	0.00	38.43	0.00	91.593	38.467	92.194	0.00	0.00	0.00
12	0.00	1.37	0.01	91.594	39.839	92.201	0.00	0.00	0.64
13	0.01	15.68	0.01	91.602	55.524	92.208	0.00	0.00	0.61
14	0.01	8.94	0.00	91.610	64.464	92.208	0.00	0.00	0.04
15	0.00	0.49	0.32	91.613	64.959	92.525	0.00	0.00	20.41
16	0.02	0.19	0.01	91.633	65.146	92.530	0.00	0.00	0.46
17	0.00	0.01	1.73	91.633	65.153	94.258	0.00	0.00	160.20
18	0.03	0.01	0.26	91.663	65.166	94.522	0.00	0.00	24.51
19	2.61	0.00	0.00	94.272	65.168	94.527	0.00	0.00	0.43
20	0.01	3.90	0.00	94.282	69.072	94.527	0.00	0.00	0.05
21	0.02	0.12	0.01	94.298	69.187	94.537	0.00	0.00	0.91
22	0.00	0.01	0.00	94.303	69.998	94.537	0.00	0.00	0.02
23	0.00	0.48	0.00	94.305	70.474	94.537	0.00	0.00	0.00
24	0.00	2.39	0.00	94.305	72.865	94.541	0.00	0.00	0.30
25	0.00	1.06	0.01	94.305	73.923	94.554	0.00	0.00	1.26
26	0.01	0.00	0.01	94.311	73.926	94.562	0.00	0.00	0.74
27	0.00	0.01	0.00	94.311	73.936	94.562	0.00	0.00	0.01
28	0.00	0.04	0.00	94.311	73.978	94.562	0.00	0.00	0.01
29	0.00	0.29	0.00	94.311	74.268	94.562	0.00	0.00	0.01
30	0.00	0.04	0.00	94.311	74.307	94.563	0.00	0.00	0.09
31	0.00	0.01	0.00	94.311	74.319	94.563	0.00	0.00	0.02
32	0.00	0.18	0.00	94.312	74.400	94.564	0.00	0.00	0.06
33	0.00	0.30	0.00	94.312	74.796	94.564	0.00	0.00	0.00
34	0.00	0.00	0.01	94.312	74.797	94.572	0.00	0.00	0.75
35	0.00	0.04	0.02	94.312	74.837	94.590	0.00	0.00	1.59
36	0.00	0.01	0.00	94.312	74.846	94.590	0.00	0.00	0.02
37	0.00	0.05	0.00	94.312	74.893	94.592	0.00	0.00	0.17
38	0.00	0.00	0.00	94.312	74.894	94.592	0.00	0.00	0.00
39	0.00	0.00	0.00	94.312	74.896	94.592	0.00	0.00	0.00
40	0.00	0.01	0.00	94.312	74.904	94.592	0.00	0.00	0.00
41	0.00	0.61	0.00	94.312	75.515	94.592	0.00	0.00	0.00
42	0.00	0.02	0.00	94.312	75.534	94.593	0.00	0.00	0.14
43	0.00	0.00	0.00	94.313	75.537	94.594	0.00	0.00	0.03
44	0.00	0.21	0.01	94.313	75.751	94.599	0.00	0.00	0.46
45	0.00	0.00	0.00	94.313	75.754	94.599	0.00	0.00	0.00
46	0.00	0.04	1.07	94.313	75.793	95.667	0.00	0.00	95.03
47	0.00	0.00	0.00	94.313	75.798	95.667	0.00	0.00	0.05


V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841259154

STAAD SPACE

-- PAGE NO. 112

MASS PARTICIPATION FACTORS IN PERCENT							BASE SHEAR IN KN		
MODE	X	Y	Z	SUMM-X	SUMM-Y	SUMM-Z	X	Y	Z
48	0.00	0.04	0.04	94.313	75.834	95.704	0.00	0.00	3.17
49	0.00	0.14	0.05	94.313	75.973	95.751	0.00	0.00	4.15
50	0.00	0.25	0.01	94.314	76.210	95.757	0.00	0.00	0.48
ZPA	0.00	0.00	4.24	0.000	0.000	100.000	0.00	0.00	218.96
TOTAL SRSS SHEAR							0.00	0.00	2590.81
TOTAL 10PCT SHEAR							0.00	0.00	2743.17
TOTAL ABS SHEAR							0.00	0.00	4841.44
TOTAL CSM SHEAR							0.00	0.00	4327.82
TOTAL CQC SHEAR							0.00	0.00	2754.21

 * UNITS - KN METE *
 * TIME PERIOD FOR Z 1893 LOADING = 0.55000 SEC *
 * SA/G PER 1893= 2.473, LOAD FACTOR= 1.000 *
 * FACTOR V PER 1893= 0.0495 X 55688.01 *
 * VB Min based on Clause 7.2.2 = 612.57 *


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 110.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 113

STORY DRIFT CHECK

STORY	HEIGHT (METER)	INTERSTORY DRIFT(CM)		RATIO		STATUS	
		X	Z	X	Z	X	Z
BASE	0.00						
1	4.41	0.1518	0.3112	L / 2906	L / 1418	PASS	PASS
2	7.42	0.1958	0.3911	L / 1537	L / 770	PASS	PASS
3	10.43	0.1276	0.4478	L / 1323	L / 672	PASS	PASS
4	13.44	0.2401	0.4695	L / 1254	L / 641	PASS	PASS
5	16.45	0.2416	0.4695	L / 1246	L / 641	PASS	PASS
6	19.46	0.2386	0.4558	L / 1262	L / 661	PASS	PASS
7	22.47	0.2334	0.4327	L / 1290	L / 696	PASS	PASS
8	25.48	0.2250	0.4022	L / 1338	L / 749	PASS	PASS
9	28.49	0.2181	0.3648	L / 1380	L / 825	PASS	PASS
10	31.50	0.2052	0.3302	L / 1467	L / 912	PASS	PASS
11	34.51	0.2059	0.3191	L / 823	L / 544	PASS	PASS

1893 RESPONSE SPECTRUM LOAD 12

RESPONSE LOAD CASE 12

MODE	MODAL WEIGHT (MODAL MASS TIMES g) IN KN			GENERALIZED WEIGHT
	X	Y	Z	
1	3.878751E+03	4.981096E-02	3.308653E+03	9.675647E+03
2	3.296139E+04	4.846837E-02	1.726551E+03	1.160952E+04
3	3.543773E+03	9.442540E-02	3.627455E+04	1.646803E+04
4	1.918168E+02	2.343864E-01	4.537594E+02	7.826890E+03
5	6.105164E+03	7.640031E-02	9.510667E+02	1.127969E+04
6	1.193286E+03	2.021957E-01	5.649944E+03	1.297471E+04
7	3.935611E+01	1.910886E+00	2.428918E+02	5.760704E+03
8	4.328966E+01	7.856227E-01	2.179257E+03	9.063934E+03
9	2.896792E+03	2.946702E-01	5.901533E+01	8.608658E+03
10	3.235781E+01	1.424374E+01	3.765651E+02	4.877177E+03
11	2.700236E+00	2.135406E+04	5.307295E-01	3.368597E+03
12	5.753414E-01	7.626241E+02	3.820702E+00	2.859520E+03


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 114

13	4.503201E+00	8.714364E+03	3.624650E+00	2.193109E+03
14	4.479771E+00	4.967124E+03	2.462137E-01	2.125392E+03
15	1.454953E+00	2.747243E+02	1.762012E+02	8.016359E+03
16	1.120678E+01	1.036908E+02	2.780101E+00	2.754635E+03
17	2.230651E-02	4.070688E+00	9.597315E+02	7.686852E+03
18	1.651248E+01	7.499507E+00	1.468231E+02	2.538687E+03
19	1.449938E+03	1.089602E+00	2.604404E+00	6.986839E+03
20	5.416223E+00	2.168757E+03	2.719863E-01	3.221205E+03
21	9.000429E+00	6.415500E+01	5.437604E+00	3.046069E+03
22	2.444253E+00	4.502040E+02	9.854394E-02	2.413581E+03
23	1.233364E+00	2.644971E+02	2.484056E-02	4.631884E+03
24	6.994562E-02	1.328873E+03	1.824439E+00	5.419947E+03
25	1.179372E-01	5.876724E+02	7.566739E+00	6.783303E+03
26	3.112927E+00	1.353028E+00	4.412297E+00	7.004126E+03
27	1.068536E-03	5.805623E+00	3.326147E-02	6.301599E+02
28	4.882356E-05	2.323649E+01	3.442170E-02	3.938317E+02
29	1.409179E-02	1.609392E+02	3.222120E-02	3.692593E+02
30	3.216815E-02	2.201225E+01	5.302616E-01	4.247618E+02
31	6.818290E-06	6.354953E+00	1.224607E-01	4.525434E+02
32	4.691541E-01	1.001219E+02	3.607352E-01	4.881186E+03
33	7.694828E-04	1.653337E+02	1.845337E-03	3.930855E+02
34	3.546043E-02	2.929198E-01	4.540545E+00	4.833272E+02
35	1.457735E-02	2.232302E+01	9.609302E+00	3.612925E+02
36	1.869194E-03	4.976428E+00	1.095363E-01	4.172087E+02
37	5.686349E-02	2.608395E+01	1.033129E+00	4.621541E+03
38	3.226586E-03	4.492762E-01	4.525448E-03	4.409336E+02
39	1.485270E-02	1.091805E+00	2.975679E-02	4.833877E+02
40	5.061132E-04	4.301379E+00	2.040389E-02	3.491572E+02
41	3.583911E-02	3.395539E+02	3.127571E-05	3.430193E+03
42	5.822367E-02	1.091540E+01	8.426068E-01	2.449019E+02
43	2.828742E-01	1.757652E+00	2.067680E-01	3.886896E+02
44	4.171362E-02	1.185748E+02	2.830805E+00	1.204567E+02
45	6.550792E-03	1.838490E+00	2.742219E-04	6.756848E+02
46	1.859797E-03	2.162139E+01	5.934414E+02	5.681959E+03
47	1.026856E-02	2.430970E+00	2.983483E-01	5.640255E+02
48	6.613280E-02	2.050433E+01	2.047814E+01	4.067123E+02
49	1.563199E-01	7.679431E+01	2.605287E+01	8.367260E+02
50	2.686750E-01	1.370692E+02	3.048334E+00	4.392593E+02

CQC MODAL COMBINATION METHOD USED.
MISSING MASS METHOD USED.

DYNAMIC WEIGHT X Y Z 5.555949E+04 5.555949E+04 5.555949E+04 KN
MISSING WEIGHT X Y Z -3.159222E+03 -1.321239E+04 -2.357573E+03 KN
MODAL WEIGHT X Y Z 5.240027E+04 4.234710E+04 5.320392E+04 KN

RESPONSE LOAD CASE 12


V. JAGEN, B.E., M.E. (Struct), M.T.E., A.T.V.,
CMDA REGN NOS -
SE / GR-I / 2018/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 115

MODE	SPECTRAL ACCELERATION	DESIGN SEISMIC COEFFICIENT		
		X	Y	Z
1	0.81027	0.0000	0.0000	-0.0541
2	0.89216	0.0000	0.0000	-0.0596
3	0.97830	0.0000	0.0000	-0.0648
4	2.50000	0.0000	0.0000	-0.1669
5	2.50000	0.0000	0.0000	-0.1669
6	2.50000	0.0000	0.0000	-0.1669
7	2.50000	0.0000	0.0000	-0.1669
8	2.50000	0.0000	0.0000	-0.1669
9	2.50000	0.0000	0.0000	-0.1669
10	2.50000	0.0000	0.0000	-0.1669
11	2.50000	0.0000	0.0000	-0.1669
12	2.50000	0.0000	0.0000	-0.1669
13	2.50000	0.0000	0.0000	-0.1669
14	2.50000	0.0000	0.0000	-0.1669
15	2.50000	0.0000	0.0000	-0.1669
16	2.50000	0.0000	0.0000	-0.1669
17	2.50000	0.0000	0.0000	-0.1669
18	2.50000	0.0000	0.0000	-0.1669
19	2.50000	0.0000	0.0000	-0.1669
20	2.50000	0.0000	0.0000	-0.1669
21	2.50000	0.0000	0.0000	-0.1669
22	2.50000	0.0000	0.0000	-0.1669
23	2.50000	0.0000	0.0000	-0.1669
24	2.50000	0.0000	0.0000	-0.1669
25	2.50000	0.0000	0.0000	-0.1669
26	2.50000	0.0000	0.0000	-0.1669
27	2.50000	0.0000	0.0000	-0.1669
28	2.50000	0.0000	0.0000	-0.1669
29	2.50000	0.0000	0.0000	-0.1669
30	2.50000	0.0000	0.0000	-0.1669
31	2.49493	0.0000	0.0000	-0.1666
32	2.48947	0.0000	0.0000	-0.1662
33	2.48745	0.0000	0.0000	-0.1661
34	2.47877	0.0000	0.0000	-0.1655
35	2.47787	0.0000	0.0000	-0.1654
36	2.47753	0.0000	0.0000	-0.1654
37	2.47120	0.0000	0.0000	-0.1650
38	2.46826	0.0000	0.0000	-0.1648
39	2.45403	0.0000	0.0000	-0.1639
40	2.44324	0.0000	0.0000	-0.1631
41	2.44055	0.0000	0.0000	-0.1630
42	2.43224	0.0000	0.0000	-0.1624
43	2.43093	0.0000	0.0000	-0.1623
44	2.41537	0.0000	0.0000	-0.1613
45	2.40329	0.0000	0.0000	-0.1605
46	2.39826	0.0000	0.0000	-0.1601
47	2.39651	0.0000	0.0000	-0.1600
48	2.39071	0.0000	0.0000	-0.1596
49	2.38708	0.0000	0.0000	-0.1594
50	2.38287	0.0000	0.0000	-0.1591


 V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841289154

STAAD SPACE

-- PAGE NO. 116

PEAK STORY SHEAR

STORY -----	LEVEL IN METE -----	PEAK STORY SHEAR IN KN -----		
		X	Y	Z
11	34.51	0.00	0.00	415.87
10	31.50	0.00	0.00	879.39
9	28.49	0.00	0.00	1256.79
8	25.48	0.00	0.00	1530.29
7	22.47	0.00	0.00	1741.70
6	19.46	0.00	0.00	1926.60
5	16.45	0.00	0.00	2108.04
4	13.44	0.00	0.00	2297.01
3	10.43	0.00	0.00	2480.02
2	7.42	0.00	0.00	2637.13
1	4.41	0.00	0.00	2734.83
BASE	0.00	0.00	0.00	2744.67

MODE -----	ACCELERATION-G -----	DAMPING -----
1	3.38125	0.05000
2	3.72297	0.05000
3	4.04906	0.05000
4	10.43250	0.05000
5	10.43250	0.05000
6	10.43250	0.05000
7	10.43250	0.05000
8	10.43250	0.05000
9	10.43250	0.05000
10	10.43250	0.05000
11	10.43250	0.05000
12	10.43250	0.05000
13	10.43250	0.05000
14	10.43250	0.05000
15	10.43250	0.05000
16	10.43250	0.05000
17	10.43250	0.05000
18	10.43250	0.05000
19	10.43250	0.05000
20	10.43250	0.05000
21	10.43250	0.05000
22	10.43250	0.05000
23	10.43250	0.05000
24	10.43250	0.05000
25	10.43250	0.05000
26	10.43250	0.05000
27	10.43250	0.05000
28	10.43250	0.05000
29	10.43250	0.05000



V. JAGEN, B.E.M.E.,(Struct), M.I.E.A.I.V.,
CMDA REGN NOS -
SE / GR-1 / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

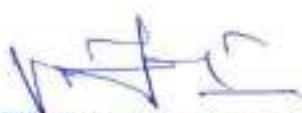
STAAD SPACE

-- PAGE NO. 117

MODE	ACCELERATION-G	DAMPING
----	-----	-----
30	10.43250	0.05000
31	10.41091	0.05000
32	10.38855	0.05000
33	10.36012	0.05000
34	10.34392	0.05000
35	10.34016	0.05000
36	10.33874	0.05000
37	10.31232	0.05000
38	10.30003	0.05000
39	10.24066	0.05000
40	10.19565	0.05000
41	10.18443	0.05000
42	10.14972	0.05000
43	10.14429	0.05000
44	10.07933	0.05000
45	10.02894	0.05000
46	10.00795	0.05000
47	10.00062	0.05000
48	9.97643	0.05000
49	9.96131	0.05000
50	9.94370	0.05000

PEAK STORY SHEAR KIS

STORY	LEVEL IN METE	PEAK STORY SHEAR IN KN	INCLUDING MISSING MASS CORRECTION		
-----	-----	-----	-----	-----	-----
		X	Y	Z	
11	34.51	0.00	0.00	416.09	
10	31.50	0.00	0.00	879.41	
9	28.49	0.00	0.00	1257.05	
8	25.48	0.00	0.00	1530.31	
7	22.47	0.00	0.00	1741.89	
6	19.46	0.00	0.00	1926.72	
5	16.45	0.00	0.00	2108.19	
4	13.44	0.00	0.00	2297.47	
3	10.43	0.00	0.00	2480.07	
2	7.42	0.00	0.00	2638.41	
1	4.41	0.00	0.00	2735.12	
BASE	0.00	0.00	0.00	2754.21	
ZPA		6.06982			
ZPAFREQ		33.00000			


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 118

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	1.678	-193.81	0.69	-179.09	-4248.65	-784.41	4729.60
2	1.524	-449.37	0.54	-102.85	-2481.18	-4445.39	10771.97
3	1.402	734.53	-3.79	-2350.05	-55717.91	27427.24	-17574.59
4	0.524	-49.25	-1.72	-75.74	148.56	-17.60	109.24
5	0.431	-402.22	-1.42	-158.75	-223.01	-3666.75	625.28
6	0.415	433.40	5.64	-943.09	-410.25	12551.02	-329.06
7	0.287	-16.32	3.60	-40.54	-235.24	193.98	111.56
8	0.212	-51.27	6.91	-363.76	-1955.03	2399.03	437.01
9	0.204	69.02	-0.70	-9.85	-47.30	868.79	-583.88
10	0.188	-18.43	-12.22	-61.86	-105.33	286.62	-79.17
11	0.154	-0.20	17.77	-0.09	-186.58	-1.54	71.48
12	0.151	0.25	-9.01	-0.64	370.01	8.06	-53.34
13	0.149	-0.67	-29.67	-0.61	475.45	-3.76	-434.93
14	0.141	0.18	5.84	-0.04	-15.69	2.72	80.36
15	0.140	2.67	36.72	-29.41	-405.35	193.50	552.08
16	0.131	-0.93	2.83	-0.46	-27.23	-7.64	-5.56
17	0.130	-0.77	-10.44	-160.20	-489.65	1283.47	-215.43
18	0.110	8.22	-5.54	-24.51	-75.12	295.03	58.93
19	0.121	-10.26	-0.28	-0.43	6.15	-122.47	32.50
20	0.120	0.20	-4.05	-0.05	26.74	2.93	-34.57
21	0.114	1.17	-3.12	-0.91	193.03	21.84	-52.80
22	0.111	0.08	1.07	-0.02	-24.74	0.91	3.73
23	0.109	0.03	0.43	-0.00	-7.09	0.53	3.12
24	0.107	0.06	-8.22	-0.30	147.58	1.99	-47.71
25	0.105	0.16	11.13	-1.26	-188.28	8.42	81.88
26	0.103	0.62	-0.41	-0.74	4.36	12.53	-19.31
27	0.103	0.00	0.07	-0.01	-0.32	0.05	0.18
28	0.102	-0.00	0.15	-0.01	-0.67	0.05	0.40
29	0.102	0.00	-0.30	-0.01	1.71	0.08	-1.06
30	0.101	0.02	-0.57	-0.09	2.94	0.94	-1.87
31	0.100	-0.00	-0.15	-0.02	0.97	0.20	-0.56
32	0.099	-0.07	1.00	-0.06	-28.03	-0.21	18.26
33	0.099	0.00	0.09	-0.00	-1.76	0.00	1.21
34	0.099	0.07	0.19	-0.75	-6.94	7.14	3.48
35	0.099	0.08	2.42	-1.59	-0.41	14.64	6.46
36	0.099	0.00	-0.12	-0.02	2.51	0.18	-1.88
37	0.098	0.04	0.86	-0.17	20.80	1.94	1.63
38	0.098	0.00	-0.01	-0.00	0.47	0.01	-0.19
39	0.097	-0.00	0.03	-0.00	-0.82	-0.00	0.46
40	0.096	0.00	0.05	-0.00	-1.20	0.04	0.73
41	0.096	-0.00	-0.02	-0.00	0.16	-0.00	-0.19
42	0.095	-0.04	-0.49	-0.14	9.15	0.80	-6.70
43	0.095	-0.04	-0.10	-0.03	1.86	-0.16	-1.24
44	0.094	-0.06	-2.95	-0.46	8.09	3.55	-6.75
45	0.094	0.00	0.00	-0.00	-0.06	0.00	0.01
46	0.093	-0.17	18.14	-95.03	-681.91	789.67	61.07
47	0.093	-0.01	-0.14	-0.05	2.33	0.33	-0.51

V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS.
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SMC, INGANALLUR, CHENNAI - 600 119.
 Mobile: 9841209159

STAAD SPACE

-- PAGE NO. 119

MODAL BASE ACTIONS		FORCES IN KN			LENGTH IN METE		
MODE	PERIOD	FX	FY	FZ	MOMENTS ARE ABOUT THE ORIGIN		
					MX	MY	MZ
48	0.893	0.19	3.27	-3.27	-40.98	29.67	9.85
49	0.892	0.32	-7.13	-4.15	176.71	39.26	-11.58
50	0.892	0.14	-3.25	-0.48	67.96	6.15	-5.88


V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 120

PARTICIPATION FACTORS

MASS PARTICIPATION FACTORS IN PERCENT							BASE SHEAR IN KN		
MODE	X	Y	Z	SUM-X	SUM-Y	SUM-Z	X	Y	Z
1	6.88	0.00	5.96	6.981	0.000	5.955	0.00	0.00	-179.00
2	59.33	0.00	3.11	66.388	0.000	9.063	0.00	0.00	-182.85
3	6.38	0.00	65.29	72.686	0.000	74.352	0.00	0.00	-2359.05
4	0.35	0.00	0.82	73.031	0.001	75.169	0.00	0.00	-75.74
5	10.00	0.00	1.71	84.020	0.001	76.881	0.00	0.00	-158.75
6	2.15	0.00	18.17	86.167	0.001	87.050	0.00	0.00	-943.09
7	0.07	0.00	0.44	86.238	0.005	87.487	0.00	0.00	-48.54
8	0.08	0.00	3.92	86.316	0.006	91.489	0.00	0.00	-363.76
9	5.21	0.00	0.11	91.530	0.007	91.516	0.00	0.00	-9.85
10	0.06	0.03	0.68	91.588	0.032	92.193	0.00	0.00	-62.86
11	0.00	38.43	0.00	91.593	38.467	92.194	0.00	0.00	-0.09
12	0.00	1.37	0.01	91.594	39.839	92.201	0.00	0.00	-0.64
13	0.01	15.68	0.01	91.602	55.524	92.208	0.00	0.00	-0.61
14	0.01	0.94	0.00	91.610	64.464	92.208	0.00	0.00	-0.04
15	0.00	0.49	0.32	91.613	64.959	92.525	0.00	0.00	-29.41
16	0.02	0.19	0.01	91.633	65.146	92.530	0.00	0.00	-0.46
17	0.00	0.01	1.73	91.633	65.153	94.258	0.00	0.00	-160.20
18	0.03	0.01	0.25	91.663	65.166	94.522	0.00	0.00	-24.51
19	2.61	0.00	0.00	94.272	65.168	94.527	0.00	0.00	-0.43
20	0.01	3.90	0.00	94.282	69.072	94.527	0.00	0.00	-0.05
21	0.02	0.12	0.01	94.298	69.187	94.537	0.00	0.00	-0.91
22	0.00	0.81	0.00	94.303	69.998	94.537	0.00	0.00	-0.02
23	0.00	0.48	0.00	94.305	70.474	94.537	0.00	0.00	-0.00
24	0.00	2.39	0.00	94.305	72.865	94.541	0.00	0.00	-0.30
25	0.00	1.06	0.01	94.305	73.923	94.554	0.00	0.00	-1.26
26	0.01	0.00	0.01	94.311	73.926	94.562	0.00	0.00	-0.74
27	0.00	0.01	0.00	94.311	73.936	94.562	0.00	0.00	-0.01
28	0.00	0.04	0.00	94.311	73.978	94.562	0.00	0.00	-0.01
29	0.00	0.29	0.00	94.311	74.268	94.562	0.00	0.00	-0.01
30	0.00	0.04	0.00	94.311	74.307	94.563	0.00	0.00	-0.09
31	0.00	0.01	0.00	94.311	74.319	94.563	0.00	0.00	-0.02
32	0.00	0.18	0.00	94.312	74.499	94.564	0.00	0.00	-0.06
33	0.00	0.30	0.00	94.312	74.796	94.564	0.00	0.00	-0.00
34	0.00	0.00	0.01	94.312	74.797	94.572	0.00	0.00	-0.75
35	0.00	0.04	0.02	94.312	74.837	94.590	0.00	0.00	-1.59
36	0.00	0.01	0.00	94.312	74.846	94.590	0.00	0.00	-0.02
37	0.00	0.05	0.00	94.312	74.893	94.592	0.00	0.00	-0.17
38	0.00	0.00	0.00	94.312	74.894	94.592	0.00	0.00	-0.00
39	0.00	0.00	0.00	94.312	74.896	94.592	0.00	0.00	-0.00
40	0.00	0.01	0.00	94.312	74.904	94.592	0.00	0.00	-0.00
41	0.00	0.61	0.00	94.312	75.315	94.592	0.00	0.00	-0.00
42	0.00	0.02	0.00	94.312	75.534	94.593	0.00	0.00	-0.14
43	0.00	0.00	0.00	94.313	75.537	94.594	0.00	0.00	-0.03
44	0.00	0.21	0.01	94.313	75.751	94.599	0.00	0.00	-0.46
45	0.00	0.00	0.00	94.313	75.754	94.599	0.00	0.00	-0.00
46	0.00	0.04	1.07	94.313	75.793	95.667	0.00	0.00	-95.03
47	0.00	0.00	0.00	94.313	75.798	95.667	0.00	0.00	-0.05

V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 110.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 121

MASS PARTICIPATION FACTORS IN PERCENT							BASE SHEAR IN KN		
MODE	X	Y	Z	SUMM-X	SUMM-Y	SUMM-Z	X	Y	Z
48	0.00	0.04	0.04	94.313	75.834	95.704	0.00	0.00	-3.27
49	0.00	0.14	0.05	94.313	75.973	95.751	0.00	0.00	-4.15
50	0.00	0.25	0.01	94.314	76.219	95.757	0.00	0.00	-0.48
ZPA	0.00	0.00	4.24	0.000	0.000	100.000	0.00	0.00	-228.96
TOTAL SRSS SHEAR							0.00	0.00	-2590.81
TOTAL 10PCT SHEAR							0.00	0.00	-2743.17
TOTAL ABS SHEAR							0.00	0.00	-4841.44
TOTAL CSM SHEAR							0.00	0.00	-4327.82
TOTAL CQC SHEAR							0.00	0.00	-2754.21


V. JAGEN, B.E. M.E. (Struct), M.I.E. A.I.V.,
 CMDA REGN NOS -
 SE / GR-I / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 122

STORY DRIFT CHECK

STORY	HEIGHT (METER)	INTERSTORY DRIFT(CM)		RATIO		STATUS	
		X	Z	X	Z	X	Z
BASE	0.00						
1	4.41	0.1518	0.3112	L / 2906	L / 1418	PASS	PASS
2	7.42	0.1958	0.3911	L / 1537	L / 770	PASS	PASS
3	10.43	0.2276	0.4478	L / 1323	L / 672	PASS	PASS
4	13.44	0.2481	0.4695	L / 1254	L / 641	PASS	PASS
5	16.45	0.2416	0.4695	L / 1246	L / 641	PASS	PASS
6	19.46	0.2386	0.4558	L / 1262	L / 661	PASS	PASS
7	22.47	0.2334	0.4327	L / 1290	L / 696	PASS	PASS
8	25.48	0.2258	0.4022	L / 1338	L / 749	PASS	PASS
9	28.49	0.2181	0.3648	L / 1380	L / 825	PASS	PASS
10	31.50	0.2052	0.3302	L / 1467	L / 912	PASS	PASS
11	34.51	0.2059	0.3191	L / 823	L / 944	PASS	PASS

4378. DEFINE ENVELOPE
 4379. 3 17 TO 32 ENVELOPE 1 TYPE SERVICEABILITY
 4380. 4 33 TO 56 ENVELOPE 1 TYPE STRENGTH
 4381. END DEFINE ENVELOPE
 4382. PRINT DIA CR
 DIA CR



V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841259154

STAAD SPACE

-- PAGE NO. 123

CENTRE OF RIGIDITY UNIT - METE

DIAPHRAM	FL. LEVEL	X-COORDINATE	Z-COORDINATE
1	4.410	7.456	12.309
2	7.420	7.198	12.175
3	10.430	7.138	12.107
4	13.440	7.169	12.077
5	16.450	7.230	12.062
6	19.460	7.300	12.055
7	22.470	7.371	12.050
8	25.480	7.445	12.044
9	28.490	7.526	12.033
10	31.500	7.603	12.012
11	34.510	7.644	11.985

4383. PRINT STORY STIFFNESS
STORY STIFFNESS

STORY STIFFNESS UNIT - METE KN

DIAPHRAM	FL. LEVEL	LATERAL-X	LATERAL-Z	ROTATIONAL-Y
1	4.410	1.849E+06	1.535E+06	4.705E+07
2	7.420	1.243E+06	1.146E+06	4.691E+07
3	10.430	8.860E+05	8.894E+05	3.925E+07
4	13.440	7.110E+05	7.597E+05	3.577E+07
5	16.450	6.106E+05	6.798E+05	3.388E+07
6	19.460	5.445E+05	6.235E+05	3.267E+07
7	22.470	4.941E+05	5.775E+05	3.171E+07
8	25.480	4.485E+05	5.329E+05	3.071E+07
9	28.490	3.983E+05	4.787E+05	2.919E+07
10	31.500	3.386E+05	4.122E+05	2.573E+07
11	34.510	2.067E+05	2.427E+05	1.292E+07

4384. FINISH


V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 124


V. JAGEN, B.E., M.E. (Struc), M.I.E., A.I.V.,
CMDA REGN NOS -
SE / GR-1 / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANTYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

STAAD SPACE

-- PAGE NO. 125

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

**** DATE= SEP 10, 2024 TIME= 18:16: 7 ****

```
*****
* 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 / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

GEO MARINE CONSULTANTS (P) LTD.,

11, 2nd Main Road, Kannappa Nagar Ext,
Kottivakkam, Chennai – 600 041.

Ph. No. 044 - 24481485 & 24480305.

geotech@geomarineindia.com / drcvp@geomarineindia.com

NAME OF PROJECT

GEOTECHNICAL INVESTIGATION FOR THE PROPOSED CONSTRUCTION OF
RESIDENTIAL BUILDING (STILT + 9 UPPER FLOORS) AT NEW NO. 66 & 68, OLD NO. 268,
ROYAPETTAH HIGH ROAD, CHENNAI 600014.

CLIENT

M/s RAMANIYAM REALTORS LLP,
RAMANIYAM CORPORATE OFFICE,
14/67, 3RD MAIN ROAD, GANDHI NAGAR, ADYAR,
TAMIL NADU- 600 020.

TITLE

GEOTECHNICAL INVESTIGATION REPORT

REPORT NO.: GT- 2808


Dr. C. VENKATA PRASAD
Registered Geotechnical Engineer (RGTE)
Registration No. GTE/19/03/003
Chennai Metropolitan Development Authority (CMDA)
No. 11, 2nd Main Road, Kannappa Nagar, Thiruvananthapuram,
Chennai-41. Mob No. +91 9444026169
Email: drcvp@geomarineindia.com

DATE	REVISION	DESCRIPTION		AUTHORISED SIGNATORY
24/06/2024	0.0	SUBMISSION OF INTERIM REPROT	SIGNATURE	
08/07/2024	1.0	SUBMISSION OF FINAL GEOTECHNICAL REPORT	REPORT NO.	GT-2808
			DESIGNATION	MANAGING DIRECTOR
			NAME	DR. C.V.PRASAD

CONTENTS

CONTENTS

	SEC. NO.	CONTENTS	PAGE NO.
			i-ii
CHAPTER-1		INTRODUCTION	
	1.0	Project Information Matrix	1
	1.1	Scope of Work	1
	1.1.1	Field Work	1
	1.1.2	Laboratory Work	1
	1.2	Structure of the Report	1
CHAPTER-2		INVESTIGATION METHODOLOGY & TEST RESULTS	
	2.0	Preamble	2
	2.1	Methodology of Field Work	2
	2.1.1	Equipment Used and Method of Drilling	2
	2.1.2	Standard Penetration Test	2
	2.1.3	Collection of Soil Samples	3
	2.1.4	Collection of Ground Water Samples	3
	2.2	Laboratory Testing	3
	2.2.1	On Coarse Grained Soil	3
	2.2.2	On Fine Grained Soil	3
	2.2.3	Chemical Analysis Tests	3
	2.3	Summary	4
FIGURES	2.0	Site Plan showing the Location of Field Investigation Points	5
	2.1	Soil Profile	6-8
	2.2	Graphical Representation of Grain Size Distribution Curve	9
TABLES	2.1	Laboratory test Results	10
	2.2	Rock test results	11
	2.3 to 2.5	Results of Chemical analysis	12-14
CHAPTER-3		GEOLOGY & SUB-SURFACE STRATIFICATION	
	3.0	Preamble	15
	3.1	Climate & Rainfall	15
	3.2	Geomorphology	15
	3.3 & 3.4	Geology	15-16
	3.5	Design Sub Soil Profile	16
CHAPTER-4		FOUNDATION SYSTEM	
	4.0	Preamble	17

4.1	Proposed Structures	17
4.2	Sub soil profile	17
4.3	Foundation System	17-18
CHAPTER-5	RECOMMENDATIONS	19
ANNEXURE-I	Typical bearing capacity computations for shallow foundations	
A1	Relationship between Angle of Internal Friction & N-Value	
A2	Relationship between UCC & SPT -Value (N) of Saturated Clay	
ANNEXURE-II	MANUSCRIPT OF FIELD BORE CHART	
	FIELD SPT PHOTOS	
	FIELD INVESTIGATION PHOTOS	

REPORT TEXT

INTRODUCTION**1.0 PROJECT INFORMATION MATRIX:**

NATURE OF PROJECT	: PROPOSED RESIDENTIAL BUILDING
STRUCTURE	: STILT + 9 UPPER FLOORS
PROJECT OWNER	: M/s RAMANIYAM REALTORS LLP,
PROJECT LOCATION	: ROYAPET, CHENNAI
JOB CODE	: GT-2808

1.1 SCOPE OF WORK:**1.1.1 FIELD WORK:**

- ❖ Conducting one soil investigation bore holes of 150 mm diameter in Soil & Overburden,
- ❖ In case of rock formation NX Diameter with Core barrel shall be adopted to progress the drilling up the termination depth.
- ❖ Conducting Standard Penetration Test (SPT) within the borehole at:
 - Every 1.0m depth interval up to 6.0m.
 - From 6.0m to 12.0m, SPT is conducted at every 1.5m depth interval
 - Beyond 12.0m SPT is carried out at every 2.0m depth interval
 - Core drilling in rocks is carried out at an interval of 1.5m up to the termination depth.
- ❖ The depth of investigation is 21.0m below the existing ground level.
- ❖ Collection of disturbed soil samples at SPT location and undisturbed samples from the clayey strata with SPT-value greater than 2 to less than 15 if met within the investigation depth.
- ❖ Collection of water samples if groundwater table met within the investigation depth.

1.1.2 LABORATORY WORK:

- ❖ Natural Moisture Content
- ❖ Atterberg's limits
- ❖ Grain Size Analysis
- ❖ Consolidation test on undisturbed samples if applicable
- ❖ Chemical Analysis test on soil and water samples to give pH, Chlorides and Sulphates

1.2 STRUCTURE OF THE REPORT:

- ❖ Contents
- ❖ Introduction
- ❖ Investigation Methodology & Test Results
- ❖ Sub-Surface Stratification
- ❖ Foundation System
- ❖ Recommendation
- ❖ Annexure

INVESTIGATION METHODOLOGY & TEST RESULTS

2.0 PREAMBLE:

One soil investigation borehole was put as per the planning of the engineer in-charge and these locations are shown in Fig.2.0. The equipment used and the methodology adopted to carry out the fieldwork is described below.

The proposed investigation is planned to identify the sub surface stratification of the project site. In order to determine the engineering properties including shear strength and classification as per IS 1498, it is proposed to collect disturbed and undisturbed soil sample and in case of rock formation cores are obtained using appropriate method as per the specification.

2.1 METHODOLOGY OF FIELD WORK:

2.1.1 EQUIPMENT USED AND METHOD OF DRILLING:

All the boreholes were sunk by conventional rotary drilling rigs. For borehole Methodology followed for boring conformed to IS: 1892 -2000. Boring was progressed by the cutting action of rotating bit with water circulation and stabilizing the side of the boreholes by using casing pipes/bentonite slurry up to required depth to prevent collapse of sidewall. Boring was continued by normal boring process using MS soil cutter in soil.

However, Tungsten Carbide (TC) bit drilling was resorted to drill in highly weathered rock stratum where the normal boring process became slow. Diamond Core (DC) bit drilling was adopted in moderately weathered rock formations where penetration using TC bit was became slow.

2.1.2 STANDARD PENETRATION TESTS:

This is a field test to determine "Penetration Resistance of Stratum at the Test Depth". This has been conducted in the boreholes generally up to refusal depth using procedures described in IS: 2131- 2002. In this test, split spoon sampler (50.8 mm OD and 35 mm ID) has replaced driving bit. Sampler is then driven by dropping 63.5 kg hammer on top of driving collar with free fall of 75 cm.

Using "A" rod, at specific depth SPT is driven up to the length of 45 Cm. The number of hammer blows for each 15.0Cm penetration is recorded and the total number of blows required for the last 30 Cm is calculated as SPT "N" value at the tested depth within the borehole. The first 15Cm is ignored and considered as seating blows. In case of refusal stratum, the number of blows and the penetration length is recorded in the respective depth and SPT N is mentioned as >100.

SPT "N" values are correlated with relative density for non-cohesive soils and with consistency for cohesive soils.

Sand		Clay	
N SPT value	Relative Density	N SPT value	Consistency
0 - 4	Very Loose	<2	Very Soft
4 - 10	Loose	2 - 4	Soft
10 - 30	Medium	4 - 8	Medium
30 - 50	Dense	8 - 15	Stiff
>50	Very Dense	15 - 30	Very Stiff
		>30	Hard

2.1.3 COLLECTION OF SOIL SAMPLES:

2.1.3.1 DISTURBED SAMPLES:

The SPT-samples collected were used as disturbed soil samples. These samples were used for visual and physical identification and for conducting laboratory classification tests as per I.S.1498-1970.

2.1.3.2 UNDISTURBED SAMPLES:

From the soft to stiff clay layer, representative undisturbed samples were collected. These samples were used primarily to establish the compressibility parameters to estimate the settlements of shallow foundation system wherever applicable.

Undisturbed samples were collected using MS tubes of suitable diameter and length with Area ratio as per clause 4.1.1 (c) of IS: 1892 (latest) fitted to an adopter with ball and socket arrangement. Before taking any sample, sampling tube was properly greased. Immediately after taking on undisturbed sample in a tube, the adopter head was removed along with the disturbed material. The visible ends of the sample were trimmed off any wet disturbed soil. The ends were coated alternately with four layers of just molten wax. More molten wax was added to give a total thickness of min. 25 mm. The samples were carefully labeled and transported to the laboratory for testing. Undisturbed samples wherever slipped during lifting were duly marked in the field logs as well as in the soil profile.

2.1.4 COLLECTION OF GROUND WATER SAMPLES:

One representative water sample from each borehole was collected after 24 hours of completing the borehole if water table met within the investigated depth. All the samples were properly sealed, levelled and carefully transported to the laboratory for chemical analysis.

- ❖ The groundwater level indicated in the bore logs is specific to the duration of investigation and intensity of the monsoon rains during the time of investigation. Hence, the level shall be taken as guidelines only to plan the investigation for the dewatering system

2.2 LABORATORY TESTING:

2.2.1 ON COARSE GRAINED SOIL:

On the representative samples, sieve analysis tests were conducted to arrive at grain size distribution. These tests were conducted as per I.S.2720 (part 4)-1985 and the results are presented in Tables-2.1. The graphical representation of grain size distribution curve for the representative samples in each bore is presented in Fig. 2.2.

2.2.2 ON FINE GRAINED SOIL:

On the SPT sample index property tests were conducted to estimate consistency. These test results are presented in Tables-2.1.

2.2.3 CHEMICAL ANALYSIS TESTS:

On representative soil samples chemical analysis tests were conducted to estimate pH, Chloride and Sulphates and these results are presented in Table - 2.3 to 2.5.

2.3 SUMMARY:

- The locations of the field investigation boreholes are shown in site plan given in Fig.2.0.
- The average sub soil profiles encountered at each location along with their classification and engineering properties are presented in Figs.2.1,
- Laboratory test results is presented in Table 2.1
- Rock test results is presented in Table 2.2
- Chemical test results is presented in Table 2.3 to 2.5


Dr. C. VENKATA PRASAD
Registered Geotechnical Engineer (RGTE)
Registration No. GTE/10/03/003
Chennai Metropolitan Development Authority (CMDA)
No. 11, 2nd Main Road, Kannappa Nagar, Thiruvananthapuram,
Chennai-41, Mob No. +91 9444026199
Email: drcvp@geomarineindia.com

SITE PLAN



AREA STATEMENT:

SURVEYED AREA OF PART 1 = 3096 SQ. FT. (OR) 3.374 GROUND.
SURVEYED AREA OF PART 2 = 3006 SQ. FT. (OR) 2.210 GROUND.

TOTAL SURVEYED AREA OF PART 1 & 2 = 13403 SQ. FT. (OR) 5.584 GROUND.)

NOTE:

ALL DIMENSIONS ARE IN METRES, FEET & INCHES.
28m x 40.2m ON THE BUILDING FLOOR LEVEL.

SURVEYED BY:



abide Landmark
SURVEYORS

W-1, 133/3 CHENNAI CONTAINERYARD,
K. J. SOMASUNDRAM ROAD,
K. J. SOMASUNDRAM CHOWK, 401 081,
PO BOX 19401 MADRAS
Email: abide@abidegroup.com

CLIENT

SITE

NEW No. 66 & 82, OLD No. 266, ROYAPETTAH HIGH ROAD,
ROYAPETTAH, CHENNAI-600014.

TITLE

PLAN SHOWING THE DETAILED BOUNDARY MAP
WITH EXISTING FEATURES AND LEVELS.

SCALE
1:400

SHEET
A-2

DATE

NAME

DATE

DATE

DATE

DATE

DATE

DATE

DATE

LEGEND:

1. LAMP POST
2. ELECTRIC POST
3. TELEPHONE BOX
4. MAN-HOLE

5. PLANTAL TREES
6. MANGROVE TREES
7. OTHER TREES

SPOT LEVEL

Dr. C. V. V. PRASAD
Registered Professional Engineer (R.G.T.E.)

Registration No: GTE/19/03/003
Chennai Metropolitan Development Authority (CMDA)
No. 11, 2nd Main Road, Kannappa Nagar, Thiruvanniyur,
Chennai-41. Mob No: +919444026188
Email: drovp@geomannendia.com

SOIL PROFILES

GEO MARINE THE SPIRIT OF ENGINEERING															SITE INVESTIGATION RECORD										BORE HOLE No.		BH-01																																																														
															SHEET		1		OF		3																																																																				
PROPOSED CONSTRUCTION OF A RESIDENTIAL BUILDING															DIA OF BORE HOLE		150mm		✓																																																																						
PRG. NAME															LOCATION		Royapet, Chennai		MACHINE No.		CR03		Free Fall Energy (%)		60		BORE START DATE		13/06/2024																																																												
STRUCTURE															Split + 9 Upper Floors		DRILLING METHOD		Rotary		CO-ORDINATES		N		-		BORE END DATE		15/06/2024																																																												
JOB CODE															GT-2808		FLUSHING MEDIUM		Bentonite		E		-		TOTAL DRILL DAYS		3																																																														
Depth below G.L.L. (m)															Drilling progress per metre			Core Details			SPT Details					Sample Details			Layer Data																																																												
															Time		Type of Drill Bit (SC / TCB / DB)		Total Core Recovery %		R.O.D. %		Blows/cm			SPT Value		Depth		Type		RL (m)		Legend		No		Depth		Geotechnical Description																																																	
13/06/2024															15 To 20		SC		-		-		3			4		6		-		10		0.50		SS		-0.5		L1		1.3		Brown, Moist, Fine & Medium Grains Sands, Loose, Clayey Silty SAND (SC) Observed to Be Filled Up																																													
															15 To 54		SC		-		-		5			5		10		-		15		1.25		SS		-1.25																																																			
1															15 To 54		SC		-		-		5			5		10		-		15		1.25		SS		-1.25		L2		2.0		Brown, Moist, Stiff, Silty CLAY (CL) With Pieces of Brick Observed Observed to be Filled Up																																													
															16 To 10		SC		-		-		9			12		20		-		32		2.00		SS		-2.0																																																			
2															16 To 45		SC		-		-		16			18		19		-		37		3.00		SS		-3.0																																																			
															16 To 45		SC		-		-		16			18		19		-		37		3.00		SS		-3.0																																																			
3															10 To 10		SC		-		-		16			21		23		-		44		4.00		SS		-4.0																																																			
															10 To 10		SC		-		-		16			21		23		-		44		4.00		SS		-4.0																																																			
4															10 To 50		SC		-		-		8			12		16		-		28		5.00		SS		-5.0																																																			
															10 To 50		SC		-		-		8			12		16		-		28		5.00		SS		-5.0																																																			
5															11 To 15		SC		-		-		8			17		13		-		30		6.00		SS		-6.0																																																			
															11 To 15		SC		-		-		8			17		13		-		30		6.00		SS		-6.0																																																			
6															11 To 34		SC		-		-		15			17		11		-		28		7.50		SS		-7.5																																																			
															11 To 34		SC		-		-		15			17		11		-		28		7.50		SS		-7.5																																																			
7															11 To 56		SC		-		-		14			25		22		-		47		9.00		SS		-9.0																																																			
															11 To 56		SC		-		-		14			25		22		-		47		9.00		SS		-9.0																																																			
8															11 To 57		SC		-		-																																																																				
															11 To 57		SC		-		-																																																																				
9															12 To 30		SC		-		-																																																																				
															12 To 30		SC		-		-																																																																				
10															12 To 31		SC		-		-																																																																				
															12 To 31		SC		-		-																																																																				
CS - Core Sample															OS - Disturbed Sample															LOGGED															Sriram Prasath															PROJECT SITE DETAILS															REMARKS														
SS - Split Spoon Sample															SC - Soil Cutter															DATE															14/06/2024															GROUND LEVEL (m)															0.00														
UDS - Undisturbed Sample															TCB - Tungsten Carbide Bit															CHECKED															A. Vineth															WATER TABLE (m)															5.50														
WS - Wash Sample															DB - Diamond Bit															DATE															21/06/2024															CASING DEPTH (m)															0.00														

GEO MARINE THE SPIRIT OF ENGINEERING															SITE INVESTIGATION RECORD										BORE HOLE No.		BH-01	
															SHEET		2		OF		3							
PROJ. NAME		PROPOSED CONSTRUCTION OF A RESIDENTIAL BUILDING															DIA OF BORE HOLE		150mm		✓							
LOCATION		Roysepet, Chennal		MACHINE No.		CR03		Free Fall Energy (%)		60		BORE START DATE		13/06/2024														
STRUCTURE		Shift + 9 Upper Floors		DRILLING METHOD		Rotary		CO-ORDINATES		N		BORE END DATE		15/06/2024														
JOB CODE		GT-2908		FLUSHING MEDIUM		Bentonite		E		TOTAL DRILL DAYS		3																
Depth below E.G.L. (m)		Drilling progress per metre			Core Details			SPT Details				Sample Details			Layer Data													
		Time		Type of Drill Bit (SC / TCB / DB)	Total Core Recovery %	R.O.D %	Blows/cm			SPT Value		Depth	Type	RL (m)	Legend	No	Depth	Geotechnical Description										
		hr.	Min.				0-15	15-30	30-45	N ₆₀	N ₁₀																	
11	13	15	To	SC	-	-	13	18	20	-	36	10.50	SS	-10.5					Grey Brown Brown, Moist, Poorly Graded, Fine & Medium Grains Sand, Dense, Poorly Graded SAND - Silty SAND (SP-SM)									
	13	18										10.95																
12							16	20	22	-	42	12.00	SS	-12.0														
												12.45																
13	14	58	To	SC	-	-												L3 14.0										
	14	57																										
14							8	6	11	-	17	14.00	SS	-14.0														
												14.45																
15	15	20	To	SC	-	-												Grey to Black, Moist, Poorly Graded, Fine & Medium Grains Sand, Medium Dense, Clayey Silty SAND (SC)										
	15	21																										
16	16	23	To	SC	-	-	5	8	14	-	22	16.00	SS	-16.0														
	16	25										16.45																
17																		L4 18.0										
18	09	45	To	DB	20	09	SPT Hammer Rebounded			-	>100	18.00	WS	-18.0				Brown, Grey Brown, Yellow Shades, Medium & Coarse Grain Structure, Highly Fractured & Weathered, Highly Weathered Rock - Grade W4 Formation Fractured Hyperssthene Granitic Rock Formation										
	11	30										19.00	CS	-19.0														
19	11	54	To	DB	18	0																						
	12	57										20.00	CS	-20.0														
20																		L5 20.0										

CS - Core Sample	DS - Disturbed Sample	LOGGED	Sriram Prasath	PROJECT SITE DETAILS		REMARKS
SS - Split Spoon Sample	SC - Soil Cutter	DATE	15/06/2024	GROUND LEVEL (m)	0.00	(F)-Sample Failed
UDS - Undisturbed Sample	TCB - Tungsten Carbide Bit	CHECKED	A. Venuth	WATER TABLE (m)	5.50	
WS - Wash Sample	DB - Diamond Bit	DATE	21/06/2024	CASING DEPTH (m)	0.00	

PROPOSED CONSTRUCTION OF A RESIDENTIAL BUILDING							DIA OF BORE HOLE		150mm
							NX		✓
LOCATION	Royapet, Chennai	MACHINE No.	CR03	Free Fall Energy (J)	60		BORE START DATE	13/06/2024	
STRUCTURE	Stilt + 8 Upper Floors	DRILLING METHOD	Rotary	CO-ORDINATES	N	-	BORE END DATE	15/06/2024	
USE CODE	GT-3088	FLUSHING MEDIUM	Bentonite		E	-	TOTAL DRILL DAYS	3	

[illegible][illegible]

Borehole terminated at 21 m depth below E.G.L.

FIG.2.1 Sub Soil Profile at BH-01 Location

D.T.C. VENKATA PRASAD
Registered Geotechnical Engineer (RGTE)
Registration No. GTE/1902/003
Chennai Metropolitan Development Authority (C.M.D.A.)
No 11, 2nd Main Road, Kannappa Nagar, Thiruvannamiyur,
Chennai-41, Mob No: +919444026199
Email: dtcvcpe@gmail.com

GRAIN SIZE DISTRIBUTION CURVE

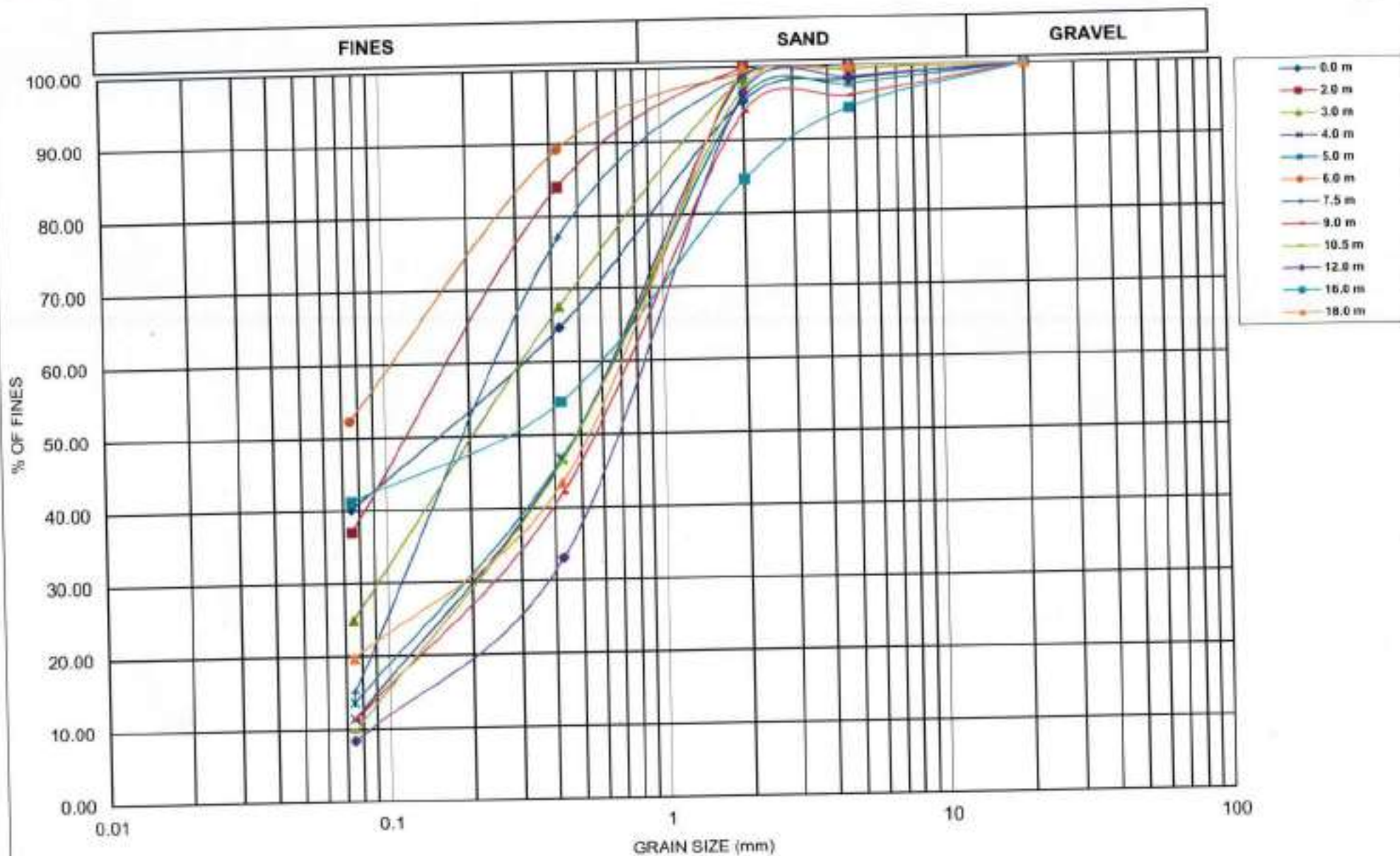


Fig. 2.2 GRAIN SIZE DISTRIBUTION CURVE - BH-01

LABORATORY TEST RESULTS

DISCIPLINE/GROUP: MECHANICAL / SOIL AND ROCK
 SAMPLE DESCRIPTION: CLAY AND SOIL
 SAMPLE CONDITION: SATISFACTORY
 TEST METHOD: BUREAU OF INDIAN STANDARDS
 ULR NUMBER: TC:114102400000593F
 NAME AND ADDRESS OF THE CUSTOMER: M/s RAMANIYAM REALTORS LLP,
 14/ 67, 3RD MAIN ROAD, GANDHI NAGAR, CHENNAI

SAMPLE IDENTIFICATION NUMBER: GMTL/SS/8900624/BH-01(01-16)
 TEST REPORT NUMBER: GMC 887
 SAMPLE RECEIPT DATE: 21/06/2024
 PERIOD OF TESTING: 28/06/2024 to 04/07/2024
 SAMPLE SOURCE: CUSTOMER SUPPLIED
 REPORT DATE: 08/07/2024
 NO. OF PAGES: 1

TABLE 2.1 TEST RESULTS FOR SOIL SAMPLES FROM BH-01

SAMPLE NUMBER	DEPTH (m)	WATER CONTENT (%) AS PER IS 2720 (P-II) - 1973, RA-2020	LIQUID LIMIT (%) AS PER IS 2720 (P-IV) - 1985, RA-2020	PLASTIC LIMIT (%) AS PER IS 2720 (P-V) - 1985, RA-2020	PLASTICITY INDEX (I _p = LL-PL)	SHRINKAGE LIMIT (%) AS PER IS 2720 (P-VI) - 1972, RA-2021	FREE SWELL INDEX (%) AS PER IS 2720 (P-XL) - 1977, RA-2021	SPECIFIC GRAVITY AS PER IS 2720 (P-III) SEC-1) - 1980, RA-2021	GRAIN SIZE ANALYSIS AS PER IS 2720 (P-IV) - 1985 (RA:2020)					DIRECT SHEAR TEST IS 2720 PART 13:1986 (RA 2021)		Uniformity Co-Efficient $C_u=D_{60}/D_{10}$	Co-Efficient of Curvature $C_c=D_{30}^3/(D_{60} \times D_{10})$	
									Gravel (%) (4.75mm)	Sand (%)			Silt (%)	Clay (%)	Cohesion (kg/cm ²)			ϕ (Degree)
										Coarse (2.0 mm)	Medium (0.425 mm)	Fine (0.075mm)						
1.0	6.5	14	28	15	13	-	-7	-	1.7	2.8	30.7	24.6	40.2		-	-		
2.0	1.3	16	29	14	15	-	0	-	Fine Sand Mixture					-	-			
3.0	2.0	20	39	18	20	18.9	-	-	0.0	0.0	16.9	47.0	37.1		-	-		
4.0	3.0	18	-	-	-	-	-	-	0.0	1.5	31.0	42.6	26.0		-	-		
5.0	4.0	16	-	-	-	-	-	-	0.0	0.0	52.8	35.1	11.5		-	-		
6.0	5.0	18	-	-	-	-	-	-	2.4	1.8	48.9	33.2	13.7		-	-		
7.0	6.0	20	Non-Plastic					-15	-	0.4	0.3	10.1	36.8	52.4		-	-	
8.0	7.5	20	-	-	-	-	-	-	0.0	1.0	21.8	62.1	15.1		-	-		
9.0	9.0	16	-	-	-	-	-	-	4.0	2.0	51.9	30.7	11.3		-	-		
10.0	10.5	26	-	-	-	-	-	-	0.5	2.2	51.0	35.5	9.8		-	-		
11.0	12.0	17	-	-	-	-	-	-	1.5	1.9	63.4	24.7	8.4		-	-		
12.0	14.0	33	41	20	21	-	-7	-	Low Quantity Sample For Wet Sieve					-	-			
13.0	16.0	23	62	23	39	14.5	20	-	5.7	9.6	30.1	13.3	41.3		-	-		
14.0	18.0	11	-	-	-	-	-	-	0.0	0.0	56.5	23.7	19.8		-	-		

** END OF REPORT **

Terms and Conditions

- (1) The test results furnished corresponds to the sample received.
 (2) The tested sample will not be retained for more than 15 days from the date of issue of test report except in the case as required by the applicable regulations.
 (3) Any correction in this report invalidates the report.
 (4) LHM = Blow Hole

REVIEWED BY

(TECHNICAL MANAGER)

AUTHORISED BY

(QUALITY MANAGER)

ROCK TEST RESULTS

Table 2.2 Result of Rock Test

ULR NO.	TC114102400000594F	TEST REPORT NUMBER	GMC 890
DISCIPLINE/GROUP	MECHANICAL/SOIL AND ROCK	SAMPLE RECEIPT DATE	21/06/2024
SAMPLE DESCRIPTION	ROCK	PERIOD OF TESTING	08/07/2024
SAMPLE CONDITION	SATISFACTORY	NO. OF PAGES	ONE
TEST METHOD	BUREAU OF INDIAN STANDARDS	DATE OF ISSUE OF REPORT	08/07/2024
NAME AND ADDRESS OF THE CUSTOMER	M/s RAMANIYAM REALTORS LLP, 14/ 67, 3RD MAIN ROAD, GANDHI NAGAR, CHENNAI	SAMPLE SOURCE	CUSTOMER SUPPLIED

S.No	SAMPLE IDENTIFICATION NUMBER	DEPTH (m)	UNCONFINED COMPRESSIVE STRENGTH, mPa AS PER IS 9143 - 1970, RA-2021	POINT LOAD STRENGTH INDEX, mPa AS PER IS 8764 - 1958, RA-2019	WATER CONTENT, % AS PER IS 13030 - 1991, RA-2021	SLAKE DURABILITY, % AS PER IS 10050 - 1981, RA-2021	TENSILE STRENGTH, mPa AS PER IS 10002 - 1981, RA-2021
1	GMTL/CS/890/0624/BH-01/01	18.00 to 19.00	-	6.2	0.02	-	12.7
2	GMTL/CS/890/0624/BH-01/02	19.00 to 20.00	-	5.3	0.04	-	14.1
3	GMTL/CS/890/0624/BH-01/03	20.00 to 21.00	54.0	5.5	0.03	-	12.2

“END OF REPORT”

REVIEWED BY

AUTHORISED BY

(TECHNICAL MANAGER)

(QUALITY MANAGER)

Terms and Conditions

- (1) The test results furnished corresponds to the sample received
- (2) The tested sample will not be retained for more than 45 days from the date of issue of test report except in the case as required by the applicable regulations
- (3) Any correction in this report, invalidates the reports

CHEMICAL LABORATORY TEST RESULTS

TABLE -2.3 RESULT OF CHEMICAL TEST ON WATER

URL NO	: TC114102400000595F		
DISCIPLINE/GROUP	: CHEMICAL - WATER	TEST REPORT NUMBER	: GMC / 890
SAMPLE DESCRIPTION	: GROUND WATER	SAMPLE RECEIPT DATE	: 21/06/2024
SAMPLE CONDITION	: SATISFACTORY	PERIOD OF TESTING	: 28/06/2024
TEST METHOD	: AS PER BIS	NO. OF PAGES	: 1 (1 Of 1)
SAMPLE SOURCE	: CUSTOMER SUPPLIED	DATE OF ISSUE OF REPORT	: 08/07/2024
NAME AND ADDRESS OF THE CUSTOMER	: M/s RAMANIYAM REALTORS LLP, 14/ 67, 3RD MAIN ROAD, GANDHI NAGAR, CHENNAI		

S.NO	SAMPLE IDENTIFICATION NUMBER	WATER			
		DEPTH OF SAMPLER (m)	pH AS PER IS 3025 (P-XI) - 2022	SULPHATES (mg/l) AS PER APHA 24 th Edn. 2023-4500	CHLORIDES (mg/l) AS PER IS 3025 (P-XXXII) -1988, RA-2019
1.0	GMTL/WS/890/0624/BH-01/01	5.5	7.35	113.0	203.7

**** END OF REPORT****

REVIEWED BY

AUTHORISED BY

(TECHNICAL MANAGER)

(QUALITY MANAGER)

Note:

- (1) The test results furnished corresponds to the sample received
- (2) The tested sample will not be retained for more than 30 days from the date of issue of test report except in the case as required by the applicable regulations.
- (3) Any correction in this reports invalidates the reports.

TABLE - 2.4 RESULT OF CHEMICAL TEST ON SOIL

URL NO	: TC114102400000596F		
DISCIPLINE/GROUP	: CHEMICAL-SOIL AND ROCK	TEST REPORT NUMBER	: GMC / 890
SAMPLE DESCRIPTION	: SOIL	SAMPLE RECEIPT DATE	: 21/06/2024
SAMPLE CONDITION	: SATISFACTORY	PERIOD OF TESTING	: 28/06/2024
TEST METHOD	: AS PER BIS	NO. OF PAGES	: 1 (1 Of 1)
SAMPLE SOURCE	: CUSTOMER SUPPLIED	DATE OF ISSUE OF REPORT	: 08/07/2024
NAME AND ADDRESS OF THE CUSTOMER	: M/s RAMANIYAM REALTORS LLP, 14/ 67, 3RD MAIN ROAD, GANDHI NAGAR, CHENNAI		

S.NO	SAMPLE IDENTIFICATION NUMBER	SOIL (2:1)	
		DEPTH OF SAMLPLE (m)	pH AS PER IS 2720 (P-XXVI) - 1987
1.0	GMTL/SS/890/0624/BH-01/04	3.0	7.5

**** END OF REPORT****

REVIEWED BY

AUTHORISED BY

(TECHNICAL MANAGER)

(QUALITY MANAGER)

Note:

- (1) The test results furnished corresponds to the sample received.
- (2) The tested sample will not be retained for more than 30 days from the date of issue of test report except in the case as required by the applicable regulations.
- (3) Any correction in this reports invalidates the reports.

TABLE -2.5 RESULT OF CHEMICAL TEST ON SOIL

DISCIPLINE/GROUP	:CHEMICAL-SOIL AND ROCK	TEST REPORT NUMBER	: GMC / 890	
SAMPLE DESCRIPTION	:SOIL	SAMPLE RECEIPT DATE	: 21/06/2024	
SAMPLE CONDITION	:SATISFACTORY	PERIOD OF TESTING	: 28/06/2024	
TEST METHOD	:AS PER BIS	NO. OF PAGES	: 1 (1 OF 1)	
SAMPLE SOURCE	:CUSTOMER SUPPLIED	DATE OF ISSUE OF REPORT	: 08/07/2024	
NAME AND ADDRESS OF THE CUSTOMER	:M/s RAMANIYAM REALTORS LLP, 14/ 67, 3RD MAIN ROAD, GANDHI NAGAR, CHENNAI			
S.NO	SAMPLE IDENTIFICATION NUMBER	SOIL (2:1)		
		DEPTH OF SAMPLE (m)	SULPHATES (mg/l) AS PER APHA 24 th Edn. 2023-4500	CHLORIDES (mg/l) AS PER IS 3025 (P-XXXII) -1988, RA-2019
1.0	GMTL/SS/890/0624/BH-01/04	3	30.9	13.0

**** END OF REPORT****

REVIEWED BY

AUTHORISED BY

(TECHNICAL MANAGER)

(QUALITY MANAGER)

Note:

- (1) The test results furnished corresponds to the sample received
- (2) The tested sample will not be retained for more than 30 days from the date of issue of test report except in the case as required by the applicable regulations.
- (3) Any correction in this reports invalidates the reports.

GEOLOGY & SUB-SURFACE STRATIFICATION

3.0 PREAMBLE:

Geotechnical investigation carried out at a specific site provides location specific sub surface engineering characteristics. However, in major project sites where the construction activities spread over a very large area location specific sub surface strata characteristics are studied together with the geological mapping data.

This is required to incorporate the impact of any documented macro-level geological characteristics of the region on the foundation design, irrespective of the location specific sub surface strata characteristics.

In view on the above, though it is beyond the scope of the present study to carry out macro-level geological investigation the regional geology based on the published data is presented and discussed.

3.1 CLIMATE AND RAINFALL:

The study area receives the rain under the influence of both southeast and northeast monsoons. Predominantly northeast monsoon contributes rainfall and most of the precipitation occurs in the form of cyclonic storm caused due to the depressions in Bay of Bengal. The north east monsoon occurs between October & December. The southwest monsoon rainfall is highly erratic and summer rains are negligible.

The normal annual rainfall over the study area varies from 1100 mm to 1200mm.

3.2 GEOMORPHOLOGY:

Chennai district forms part of coastal plains of northern Tamil Nadu. Major part of the district is having flat topography with very gentle slope towards east. The altitudes of land surface vary from 10 m above MSL in the west to sea level in the east.

Fluvial, marine and erosional landforms are noticed in the district. Marine transgression and regressions and neo-tectonic activity during the recent past have influenced the morphology and resulted in various present landforms.

Meandering streams with small sand bars are present along the course of Adyar River. The pediment and buried pediment in Guindy area in and around the reserved forest, is the only area where the ecological system is less disturbed, while the other areas are completely disturbed by built up area with large-scale human interference and pollution.

3.3 GEOLOGY OF CHENNAI DISTRICT:

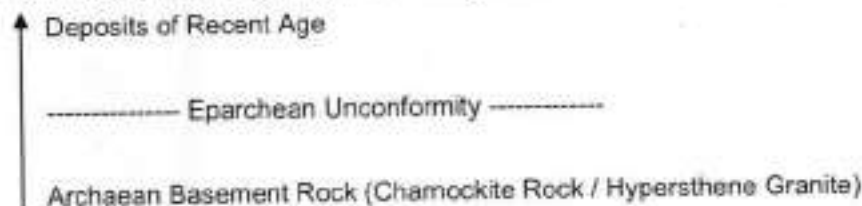
Chennai district is underlain by various geological formations from ancient Archaean to the Recent Alluvium. The geological formations of the district can be grouped into three units, namely

- i) Archaean crystalline rocks
- ii) Gondwana (Consolidated Clay/Clayey Silt) and Tertiary sediments and
- iii) Recent Alluvium.

The Archaean crystalline rocks of the district comprise chiefly of Charnockite, gneisses and the associated basic and ultra-basic intrusive dykes.

3.4 GEOLOGICAL ORDER OF THE STUDY AREA:

The stratigraphy of the study area can be classified as recent formation which is underlain by basement rock of meta-igneous origin (hypersthene granite/ Charnockite rock)



3.5 DESIGN SUB SOIL PROFILE: (WRT Foundation Engineering Application)

The sub soil characteristics obtained at the test location are further processed to arrive at the design soil parameters required for the design of sub structure using the following shear strength correlations with respect to the Standard Penetration Test Values of different layers.

- ❖ For Coarse Grained Material, Ref. IS: 6403 to estimate Angle of Shearing Resistance (Reproduced and shown in Fig.A1)
- ❖ For Fine Grained Material, Ref. Terzaghi & Peck, 1948, to estimate Unconfined Compressive Strength (Reproduced and shown in Fig.A2)

Based on the above, the average design soil characteristics are given below:

REFERENCE BORE HOLE				BH-01	Ref R.L. of G.L. (m):			0.00			
Layer No.	Layer Thk. (m)			Type of Strata	Colour	Ave. Design SPT	Relative Density	Consistency	(γ) kN/m ³	Shear Parameters	
	Top BGL	Bottom BGL	Thickness							(C _u) kPa	(φ) Deg.
1.0	0.00	1.30	1.30	Clayey Silty Sand	Brown	10	Loose	-	15	-	30
2.0	1.30	2.00	0.70	Silty Clay	Brown	15	Medium Dense	-	17.5	-	32
3.0	2.00	14.00	12.00	Silty Sand	Grey Brown	38	Dense	-	19.5	-	38
4.0	14.00	18.00	4.00	Clayey Silty Sand	Grey to Black	20	Medium Dense	-	18	-	33
5.0	18.00	20.00	2.00	Highly Weathered Rock	Brown	CRR - 18 to 20%; RQD - 0 to 9%					
6.0	20.00	21.00	1.00	Slightly Weathered Rock	Grey	CRR - 86% ; RQD - 57%					

FOUNDATION SYSTEM

FOUNDATION SYSTEM

4.0 PREAMBLE:

In the design of foundation system, the stress-strain compatibility of the super structure, sub structure and the bearing strata should be satisfied both individually and as a combined system. In view of this, the following data are needed for the design of foundation system, defined in terms of the type of sub structure and the bearing strata characteristics.

- The super structure characteristics along with the loading pattern on the sub structure
- The sub soil characteristics that define the required substructure configuration for a safe transfer of super-structural loads to the bearing strata

Considering the above aspects of the foundation design, the suitable type of foundation system is presented below.

4.1 PROPOSED STRUCTURES:

An understanding of the proposed construction and the order of loads on the foundations is needed for choosing the appropriate foundation system. In the present case, the proposed structure is configured with Stilt + 9 Upper Floors and is meant for residential occupancy. For this kind of structure, the column loads could vary between 3,000 kN to 4,500 kN.

The above-mentioned loads have no bearing on the design of either sub or super structures and are mentioned just to provide an insight to choose an appropriate foundation system with respect to subsoil conditions.

4.2 SUB SOIL STRATIFICATION:

The sub surface stratification for the present investigation area is as follows:

0.0m to 2.0m	Clayey Sand & Sandy Clay (Filled Up)
2.0m to 14.0m	Medium Dense to Dense, Silty Sand With lenses of Clayey Sand & Sandy Silt
14.0m to 18.0m	Medium Dense, Clayey Silty Sand
18.0m to 20.0m	Highly Weathered Rock – Grade W4 Formation
20.0m to 21.0m	Slightly Weathered Rock – Grade W2 Formation

4.3 FOUNDATION SYSTEM:

4.3.1 BEARING STRATUM:

For the kind of proposed construction, Dense, Sand formation exists beyond 1.8m satisfies the requirement of bearing strata from both shear and compressibility response to super structural load.

4.3.2 FOUNDATION SYSTEM:

For the kind of proposed construction and sub soil formation, it is possible to adopt RCC Raft foundation system. Place the raft at a depth of 2.0m below the existing ground level over a well compacted 100mm thick M10 grade levelling course bed or PCC. In case of isolated column footing, locate the footing at a depth of 1.55m below the existing ground level over a well compacted layer of sand gravel (1:1) mix or granular sub base of 450mm thickness. Thus, the total depth of excavation shall be 2.0m below the existing ground level.

Table 5.1 presents the allowable net safe bearing pressure for the design of raft and isolated footing. In the project site, the sub soil being coarse grain formation the settlement will be of immediate elastic in nature and no consolidation or creep settlement is applicable.

Typical computation is presented in Annexure-1.

NOTE: In case the filled up/existing foundation extends beyond 2.0m the same shall be replaced with sand-gravel (1:1) mix or granular sub base.

TABLE 5.1 RECOMMENDED ALLOWABLE NET SAFE BEARING PRESSURE							
REFERENCE BOREHOLE	SHAPE OF FOUNDATION	DEPTH OF FOUNDATION EXCAVATION BELOW EGL (m)	THICKNESS OF SOIL REPLACEMENT (m)	DEPTH OF FOUNDATION BELOW EGL (m)	WIDTH OF FOUNDATION (m)	RECOMMENDED NET SAFE BEARING CAPACITY (kPa)	SETTLEMENT (mm)
BH-01	SQUARE	2.0	0.45	1.55	1.0	250	2.19
					2.0	300	5.26
					3.0	300	7.89
					4.0	300	10.52
					5.0	300	13.15
	Raft	2.00	0.00	2.00	>10	250	21.92


Dr. C. VENKATA PRASAD
 Registered Geotechnical Engineer (RGTE)
 Registration No: GTE/10/03/003
 Chennai Metropolitan Development Authority (CMDA)
 No.11, 2nd Main Road, Kanneppa Nagar, Thiruvannamipur,
 Chennai-41. Mob No: +919444036169
 Email: drcvp@gesmarineindia.com

RECOMMENDATIONS

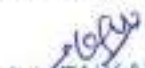
RECOMMENDATIONS**5.1 RECOMMENDATION FOR SHALLOW FOUNDATION:**

- ❖ For the proposed configuration of the structure and the sub soil condition shallow foundation can be adopted.
- ❖ Adopt raft or isolated column footing at a depth of 2.0m below the existing ground level.
- ❖ In case of, isolated column footing, locate the footing over a well compacted layer of granular sub base or sand gravel (1:1) mix of 450mm thickness.
- ❖ The layer shall be compacted in a non-compacted layer thickness of 225mm using plate compactor or hand rammer.
- ❖ All columns shall be connected with grade beams in either direction at plinth level.
- ❖ In case of raft, locate the raft over a compacted 100mm thick M10 grade levelling course bed or PCC.
- ❖ Table 5.1 presents the allowable net safe bearing pressure for the design of footing and raft.
- ❖ There is a possibility of slush formation due to removal of overburden below the raft. In such case, replace the same with sand gravel (1:1) mix or granular sub base before laying the PCC.

5.2 GENERAL RECOMMENDATION:

- ❖ The present project location falls in seismic zone-III as per IS 1893-P-1.
- ❖ The chemical analysis results of soil and water is presented in Table 2.3 to 2.5. The structural consultant shall consider the results as guidelines for arriving cement and steel for the proposed project.

AUTHORISED SIGNATORY**DR. C. V. PRASAD****GEOMARINE CONSULTANTS PRIVATE LIMITED**


Dr. C. VENKATA PRASAD
Registered Geotechnical Engineer (RGTE)
Registration No: GTE/1903/003
No. Chennai Metropolitan Development Authority (CMDA)
No.11, 2nd Main Road, Kannappa Nagar, Thiruvanniyur,
Chennai-41. Mob No +919444026189
Email: drcvp@geomarineindia.com

*on behalf of COMED NB Board,
the geotechnical investigation
report is hereby reviewed.*


**Superintending Engineer, P.W.D.,
Planning and Designs Circle,
Chepauk, Chennai-6.**

ANNEXURE-I

TYPICAL BEARING CAPACITY COMPUTATIONS FOR SHALLOW FOUNDATION

1.0 COMPUTATION OF BEARING CAPACITY AS PER IS:6403

1.1 Geometrical Data :

Shape of the Foundation: Raft
 Depth of foundation below Existing Ground Level "D_f"(m): 2.00
 Thickness of Soil Replacement below Footing (m): 0.0
 Breadth of Footing "B" (m): 10.0
 Length of Footing "L" (m): 10.0
 L/B 1.00
 Inclination of Vertical Load with the Vertical (α) 0.00

1.2 Soil Data :

Type of Effective Bearing Strata : Sand
 Type of Shear Failure: General
 Average SPT "N" of the Bearing Strata: 32
 Angle of Internal Resistance Restricted to 36°: 30
 Angle of Shearing Resistance 36

1.3 Design Parameters:

Bulk Density of Soil above the foundation depth (γ_{bulk}) 18 kN/m³
 Water Table Correction Factor (w') 0.5
 Effective overburden pressure at foundation level (q) 16 kN/m²
 Bearing Capacity Factors:
 N_c = N/A
 N_q = 39.48
 N_γ = 60.31

Shape Factors:

S_c = -
 S_q = 1.20
 S_γ = 0.60

Depth Factors :

D_c = -
 D_q = 1.00
 D_γ = 1.00

Inclination Factor:

I_c = 1.00
 I_q = 1.00
 I_γ = 1.00

1.4 Ultimate Bearing Capacity (Q_u) :

$Q_u = q(N_q - 1) * S_q * D_q * I_q + 0.5 * B * \gamma * N_\gamma * S_\gamma * D_\gamma * I_\gamma * w'$ 2374.58 kPa
 (γ should be read as gamma)

1.5 Safe Bearing Capacity (Q_{safe}) :

Factor of Safety (F.S.) : 2.50
 Q_{safe} : 949.83 kPa
Say Q_{safe} 250 kPa

2.0 Computation of Settlement for Maximum Pressure and Size of Footing : (as per IS:8009-Part-I-Ref. Eq.11) (Elastic Analysis)

The immediate elastic settlement (S_i) = $qB(1-\mu^2)/E_s$
 q = bearing pressure 250.00 kPa
 Poisson's Ratio (μ) 0.20

Modulus of Elasticity (E_s) (Ref. Joseph E Bowels, 1996, page 316, Table 5.6, Japanese design standards)

Modulus of Elasticity (E_s) 83200
 Width of the Raft 10.00
 Influence factor 0.95
 Rigidity Factor 0.80
 Depth Factor: 1.00

Elastic Settlement (DH_i) 21.92 mm
<75 mm

TYPICAL BEARING CAPACITY COMPUTATIONS FOR SHALLOW FOUNDATION

1.0 COMPUTATION OF BEARING CAPACITY AS PER IS:6403

1.1 Geometrical Data :

Shape of the Foundation: Square
 Depth of foundation below Existing Ground Level "D_f" (m): 1.55
 Thickness of Soil Replacement below Footing (m): 0.45
 Depth of Excavation below Existing Ground Level (m): 2.0
 Breadth of Footing "B" (m): 1.0
 Length of Footing "L" (m): 1.0
 L/B: 1.00
 Inclination of Vertical Load with the Vertical (α): 0.00

1.2 Soil Data :

Type of Effective Bearing Strata : Sand
 Type of Shear Failure: General
 Average SPT "N" of the Bearing Strata: 32
 Angle of Internal Resistance Restricted to 36°: 30
 Angle of Shearing Resistance 36

1.3 Design Parameters:

Bulk Density of Soil above the foundation depth (γ_{bulk}): 18 kN/m³
 Water Table Correction Factor (W'): 0.5
 Effective overburden pressure at foundation level (q): 12 kN/m²
 Bearing Capacity Factors:
 N_c = N/A
 N_q = 39.48
 N_γ = 60.31

Shape Factors:

S_c = -
 S_q = 1.20
 S_γ = 0.80

Depth Factors :

D_c = -
 D_q = 1.02
 D_γ = 1.02

Inclination Factor:

i_c = 1.00
 i_q = 1.00
 i_γ = 1.00

1.4 Ultimate Bearing Capacity (Q_u) :

$Q_u = q \cdot (N_q - 1) \cdot S_q \cdot D_q \cdot I_q + 0.5 \cdot B \cdot \gamma \cdot N_{\gamma} \cdot S_{\gamma} \cdot D_{\gamma} \cdot I_{\gamma} \cdot W'$ 809.07 kPa
 (γ should be read as gamma)

1.5 Safe Bearing Capacity (Q_{safe}) :

Factor of Safety (F.S.) : 2.50
 Q_{safe} : 323.63 kPa
Say Q_{safe} 250 kPa

2.0 Computation of Settlement for Maximum Pressure and Size of Footing : (as per IS:8009-Part-I-Ref. Eq.11) (Elastic Analysis)

The immediate elastic settlement (S_i) = $qB(1-\mu^2)/E_s$ kPa
 q = bearing pressure 250.00
 Poisson's Ratio (μ) 0.20

Modulus of Elasticity (E_s) (Ref. Joseph E Bowels, 1996, page 316, Table 5.6, Japanese design standards)

Modulus of Elasticity (E_s) 83200
 Maximum Width of Footing: 1.00
 Influence factor: 0.95
 Rigidity Factor: 0.80
 Depth Factor: 1.00
 Elastic Settlement (DH) : 2.19 mm
<50 mm

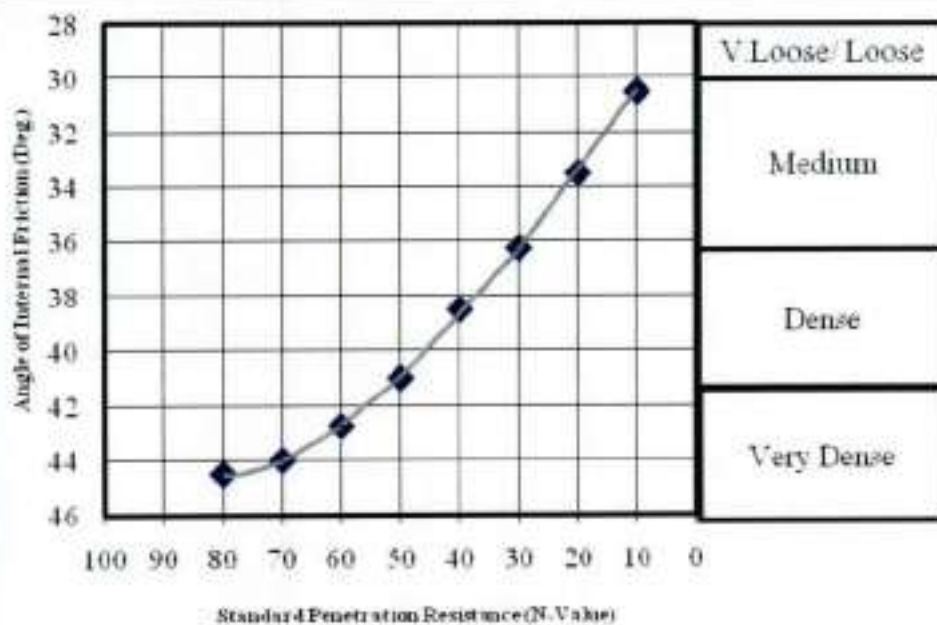


FIG. A1 Relation Ship between Angle of Internal Friction & N-value (Reproduced from IS:6403-1981)

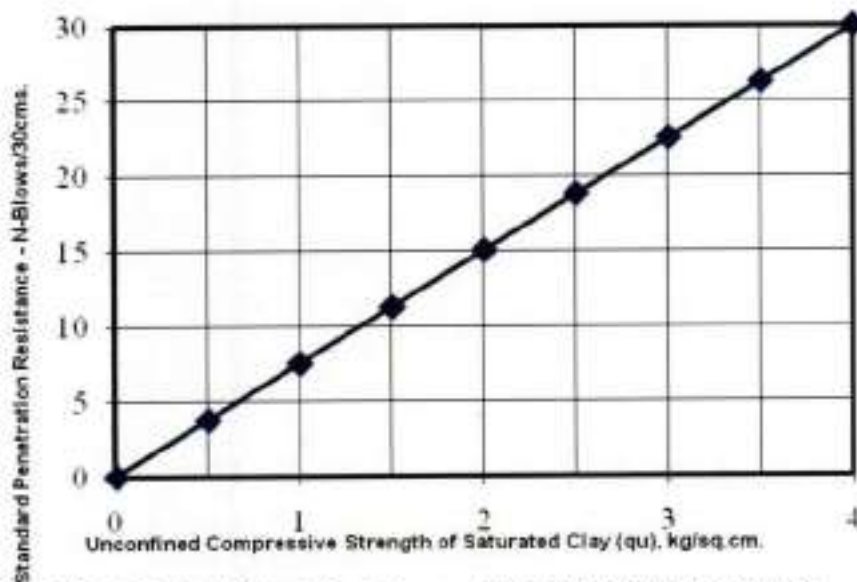


FIG. A2 : Relationship between UCC & SPT-Value (N) of Saturated Clay (After Terzaghi & Peck, 1948)

ANNEXURE-II

GEOMARINE THE SPIRIT OF ENGINEERING		SITE INVESTIGATION RECORD				BORE HOLE No. 01							
PROJECT NAME		Ramanivam				PAGE No. 01							
LOCATION		MACHINE No.		CHARGE (M)		DIA OF BORE HOLE							
STRUCTURE		DRILLING METHOD		CO-ORDINATES		BORE START DATE							
JOB CODE		FLUSHING MEDIUM		Borehole		BORE END DATE							
						TOTAL DRILLING DAYS							
Depth (m)	Drilling progress per metre		Type of core bit (TCB/DB)	Core Details		SPT Details		Sample Details		Layer Data			
	Date	Time		Total Core Recovery %	H.D.B. %	Blow/ft			Depth	No.	Type	Geotechnical Description	
						10-15	15-30	30-45					SPT 'M' Value
0.5	13/06/2024	03:20	SC			3	4	6	10	0.5	1	SS	Loose, brownish, Sand, Silt.
1.0		03:26	SC			5	5	10	15	1.25	2	SS	Medium dense, brownish slightly bluish, Sand, Silt.
1.5		03:54	SC			4	12	20	32	2	3	SS	Dense, brownish sand with silt.
2.0		04:10	SC			16	18	19	37	3	4	SS	Dense, greyish brownish silty sand.
2.5		04:45	SC			16	21	23	44	4	5	SS	Dense, greyish, brownish silty sand.
3.0		04:45	SC			8	12	16	28	5	6	SS	Medium dense, greyish brownish, Sand with silt.
3.5		10:10	SC			8	17	13	30	6	7	SS	Medium dense, dark greyish, brownish, Sand with silt.
4.0		10:10	SC			15	17	11	28	7.5	8	SS	Medium dense, pale brownish, Sand with silt.
4.5		11:34	SC			14	25	22	47	9	9	SS	Dense, brownish, Sand with silt.
5.0		11:35	SC										
5.5		11:56	SC										
6.0		11:57	SC										

CS - Core Sample	DS - Disturbed Sample	SUPERVISOR NAME	S. Ramakrishna	PROJECT SITE DETAILS	
SS - Split Spoon Sample	SC - Soil Cutter	SIGNATURE	S. Ramakrishna	GROUND LEVEL (m)	
UDS - Undisturbed Sample	TCB - Tungsten Carbide Bit	DATE	14/06/2024	WATER TABLE (m)	
WS - Wash Sample	DB - Diamond Bit	CLIENT IN-CHARGE		CASING DEPTH (m)	

GEO MARINE SPECIALTY OF ENGINEERING		SITE INVESTIGATION RECORD				BORE HOLE No. 01								
PROJECT NAME		Ramaniyam				PAGE No. 02								
LOCATION	MACHINE No.	CP - CB	CHARGE (m)	DIA OF BORE HOLE		BORE START DATE								
REYADATTAH				150mm	✓	13/06/2024								
STRUCTURE	DILLING METHOD	Rotary	CO-ORDINATES	N	BORE END DATE		15/06/2024							
JOB CODE	FLUSHING MEDIUM	Bentonite	E	TOTAL DRILLING DAYS		03								
Depth below G.L. (m)	Drilling progress per metre		Type of Dist. Bit (SC / TCB / DB)	Core Details		SPT Details		Sample Details		Layer Data				
	Date	Time		Serial Core No.	R.C.T. No.	Blows/cm.			SPT 'N' Value	Depth	No.	Type	Geotechnical Description	
						0-15	15-30	30-45						
1	14/06/2024	12 30	SC			13	16	20	36	10	10	10	SS	Dense, dark greyish, brownish, Sand with silt.
2		01 15 01 16	SC			15	20	22	42	12	11	SS	Dense, brownish, dark greyish, Sand, Silty, Shells.	
4		02 56 02 57	SC			6	6	11	17	14	12	SS	Medium dense, blackish clayey sand with Shells & silt.	
6		03 20 03 21	SC			5	8	14	22	16	13	SS	Medium dense, blackish, Pale greyish, Clayey sand with silt.	
8		04 35 06 15	SC			HAMMER REB. 200			200	12	14	SS	Sample - nil -	
9	15/06/2024	9 45 11 30	DB	209	09%					17	15	CS	Very hard, Pale yellowish, slightly brownish, greyish, Hard rock (Patched rock)	

PROJECT SITE DETAILS	
GROUND LEVEL (m)	
WATER TABLE (m)	
CASING DEPTH (m)	

SUPERVISOR NAME		SIGNATURE		DATE		CLIENT IN CHARGE	
S. Ramadas		S. Ramadas		15/06/2024			

CS - Core Sample		DS - Disturbed Sample	
SS - Split Spoon Sample		SC - Soil Cutter	
UDS - Undisturbed Sample		TCB - Tungsten Carbide Bit	
WS - Wash Sample		DB - Diamond Bit	

SITE INVESTIGATION RECORD

BORE HOLE No. **01**
PAGE No. **03**
DIA OF BORE HOLE
150mm ☒
100mm ☐
BORE START DATE **13/06/2024**
BORE END DATE **15/06/2024**
TOTAL DRILLING DAYS **03**

PROJECT NAME **RAMANIVAM**

LOCATION **POUNDRIAH** MACHINE No. **CR 02** DRIVEWAY (m)

STRUCTURE **DRILLING METHOD** **Rotary** CO-ORDINATES N

JOB CODE **FLUSHING MEDIUM** **Bentonite** E

Depth below G.S. (m)	Drilling progress per metre		Type of Drill Bit (SI / TCB / DB)	Core Details		SPT Details			Sample Details			Layer Data	
	Date	Time		Total Core Recovery %	R-Q-D %	Blows/ton			Depth	No.	Type	Depth (m)	Geotechnical Description
						0-15	15-30	30-45					

15/06/2024

11 54
12 57
02 15
04 09

DB 181 DT
DB 381 SH

20 16 CS
21 17 CS

very hard, pale yellow brownish mix pale greyish. Hard rock (fractured rock piece)
Very hard, pale whitish brownish mix pale greyish hard rock slightly fractured

Probably terminated at 21.00m

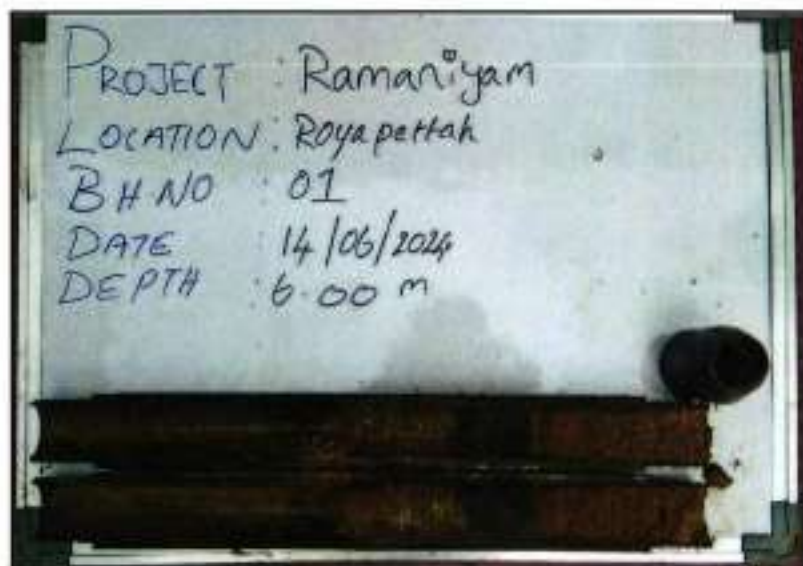
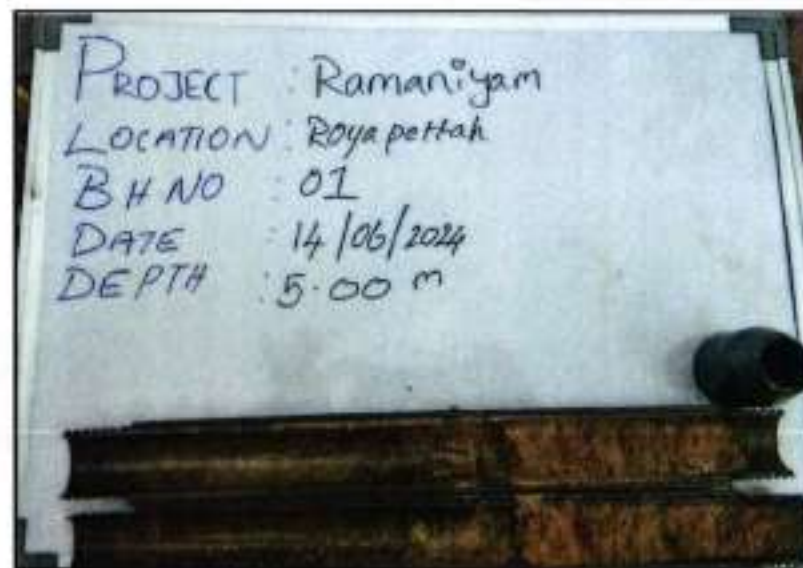
CS - Core Sample	DS - Disturbed Sample	SUPERVISOR NAME	PROJECT SITE DETAILS
SS - Split Spoon Sample	SC - Soil Cutter	SIGNATURE	GROUND LEVEL (m)
UDS - Undisturbed Sample	TCB - Tungsten Carbide Bit	DATE	WATER TABLE (m)
WS - Wash Sample	DB - Diamond Bit	CLIENT IN-CHARGE	CASING DEPTH (m)

PROJECT : Ramaniyam
LOCATION : Royapettah
BH NO : 01
DATE : 13/06/2024
DEPTH : 0.50 m

PROJECT : Ramaniyam
LOCATION : Royapettah
BH NO : 01
DATE : 13/06/2024
DEPTH : 1.25 m

PROJECT : Ramaniyam
LOCATION : Royapettah
BH NO : 01
DATE : 13/06/2024
DEPTH : 2.00 m

PROJECT : Ramaniyam
LOCATION : Royapettah
BH NO : 01
DATE : 13/06/2024
DEPTH : 3.00 m



PROJECT : Ramaniyam
LOCATION : Royapettah
BH NO : 01
DATE : 14/06/2024
DEPTH : 9.00 m

PROJECT : Ramaniyam
LOCATION : Royapettah
BH NO : 01
DATE : 14/06/2024
DEPTH : 10.50 m

PROJECT : Ramaniyam
LOCATION : Royapettah
BH NO : 01
DATE : 14/06/2024
DEPTH : 12.00 m

PROJECT : Ramaniyam
LOCATION : Royapettah
BH NO : 01
DATE : 14/06/2024
DEPTH : 14.00 m



PROJECT : Ramaniyam

LOCATION : Royapettah

BH NO : 01

DATE : 15/06/2024

DEPTH : 19.00 m

CER-20-1.

REQ-9-1.



PROJECT : Ramaniyam

LOCATION : Royapettah

BH NO : 01

DATE : 15/06/2024

DEPTH : 20.00 m

CER-18-1.

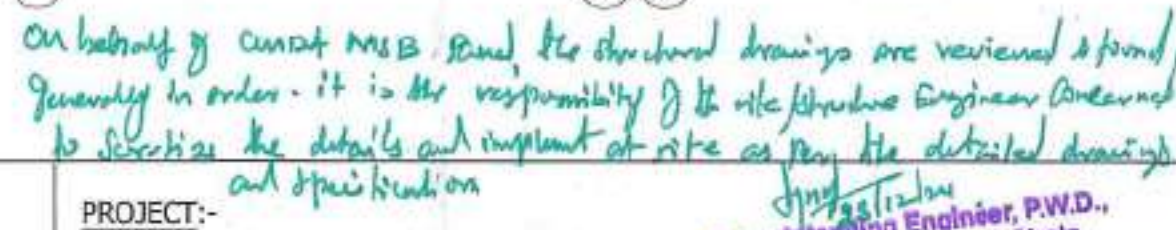
RAD-0-1.

PROJECT : Ramaniyam
LOCATION : Royapettah
BH NO : 01
DATE : 15/06/2024
DEPTH : 21.00 m

CSE-36 V
RAD-51.1



Dr. C. Venkata Prasad
Dr. C. VENKATA PRASAD
Registered Geotechnical Engineer (RGTE)
Registration No: GTE/19/03/003
Chennai Metropolitan Development Authority (CMDA)
No. 11, 2nd Main Road, Kannappa Nagar, Thiruvanniyur,
Chennai-41. Mob No +919444026189
Email: drcvp@geomarindia.com



S + 9

1. REFER ARCH. DWG. FOR CENTRE LINE DIMENSIONS.
ALL DIMENSIONS ARE IN mm.
2. CONCRETE MIX SHALL BE M40 FOR COLUMN
& M25 FOR ALL OTHER R.C.C WORKS.
3. ALL REINFORCEMENTS ARE OF Fe500D/Fe550D GRADE
4. CLEAR COVER TO MAIN REINFORCEMENT SHALL BE

(i) COLUMN = 40mm	(iii) BEAM = 30mm
(ii) SLAB = 20mm	(iv) R.C.C WALL = 30mm
5. LAP LENGTH SHALL BE 50 x DIA OF THE BAR.
6. DESIGN HAS BEEN EVOLVED BY CONSIDERING
PERMITTED HIGH WEIGHT BLOCKS AS PANEL WALL.
THIS HAS TO BE ENFORCED AT SITE DURING CP

COLUMN NUMBER	COLUMN SIZE
COL-C1	300x800
COL-C2	300x800
COL-C3	300x800
COL-C4	300x800
COL-C5	300x800

SBc = 250 K4/m²

$$SBC = 250 \text{ KN/m}^2$$

SIGNATURE:

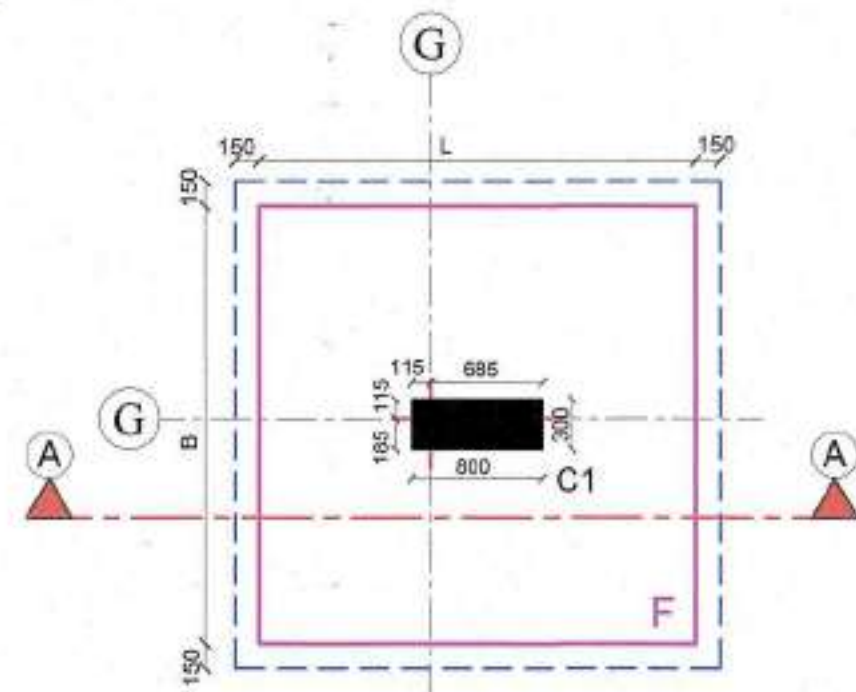
V. JAGEN, B.E., M.E. (Struct), M.I.E., A.I.C.E.
CMA REGN NOS -
SE / GR-1 / 2019/03/04, 0A/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-8, RAMANJAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 118.
Mobile: 9841269154

DRAWING TITLE:
FOOTING LAYOUT

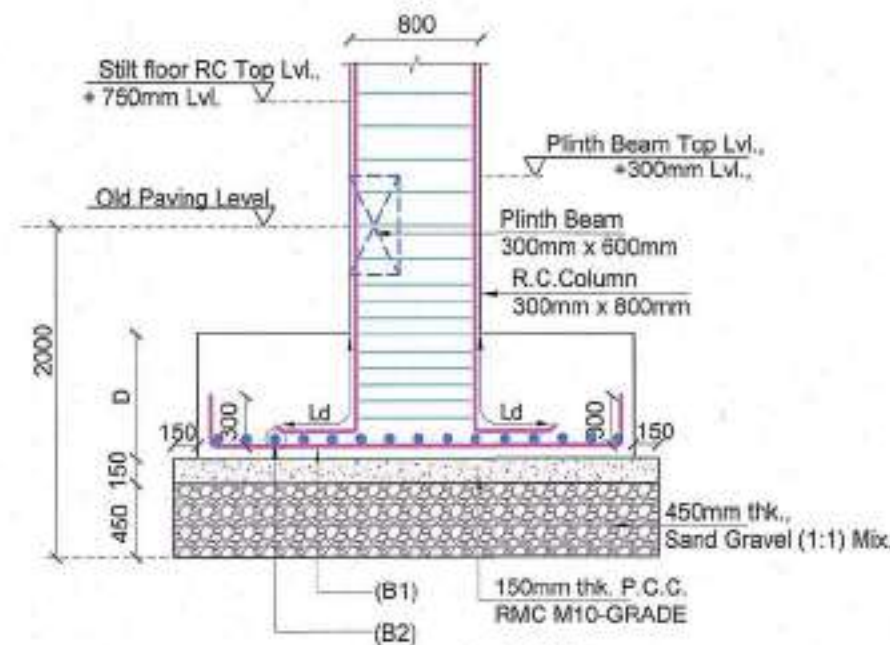
PROJECT:-

PLAN SHOWING THE PROPOSED CONSTRUCTION OF A HIGH-RISE BUILDING CONSISTS OF STILT FLOOR + 9 FLOORS RESIDENTIAL BUILDING (30.00m HEIGHT) AT OLD DOOR NOS. 268 & 269, NEW DOOR NOS. 66 & 68, ROYAPETTAH HIGH ROAD, ROYAPETTAH, CHENNAI-600 014 AND COMPRISED IN R.S. NO. 423 AS PER DOCUMENT & R.S. NO.423/1 & 423/2 AS PER PATTU, BLOCK NO. 08 OF MYLAPORE VILLAGE, MYLAPORE TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

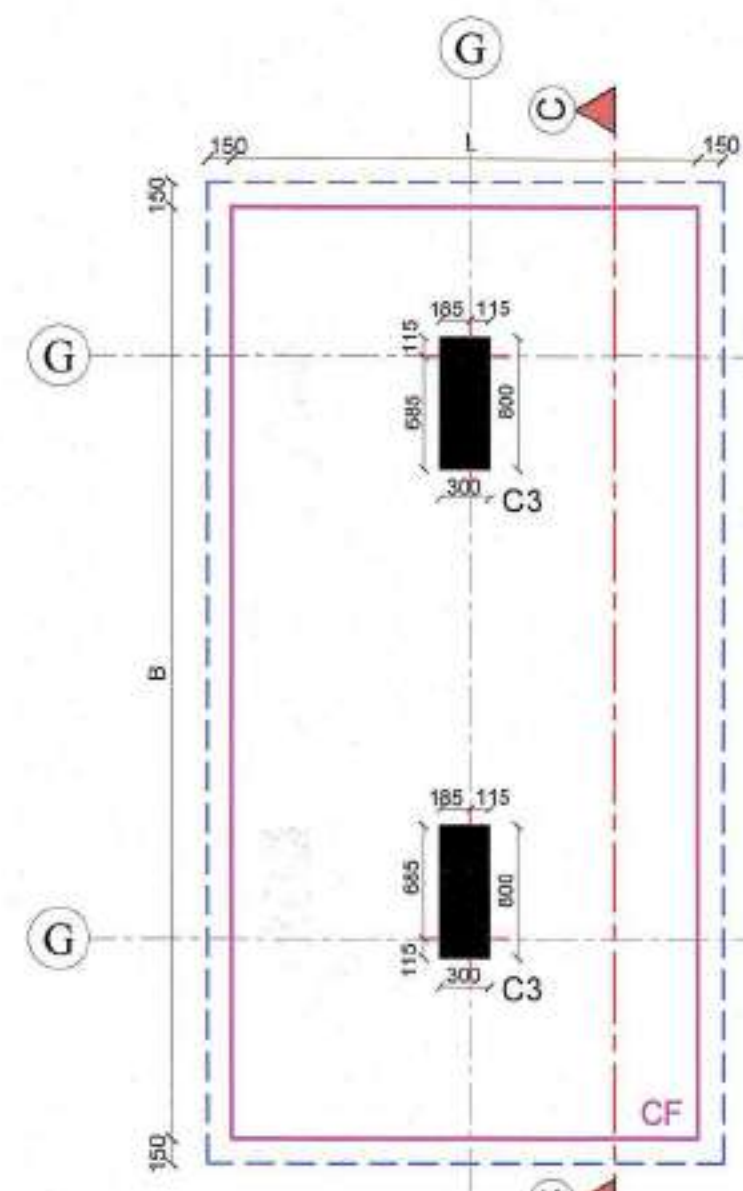
ZONE: IX; DIVISION:- 119



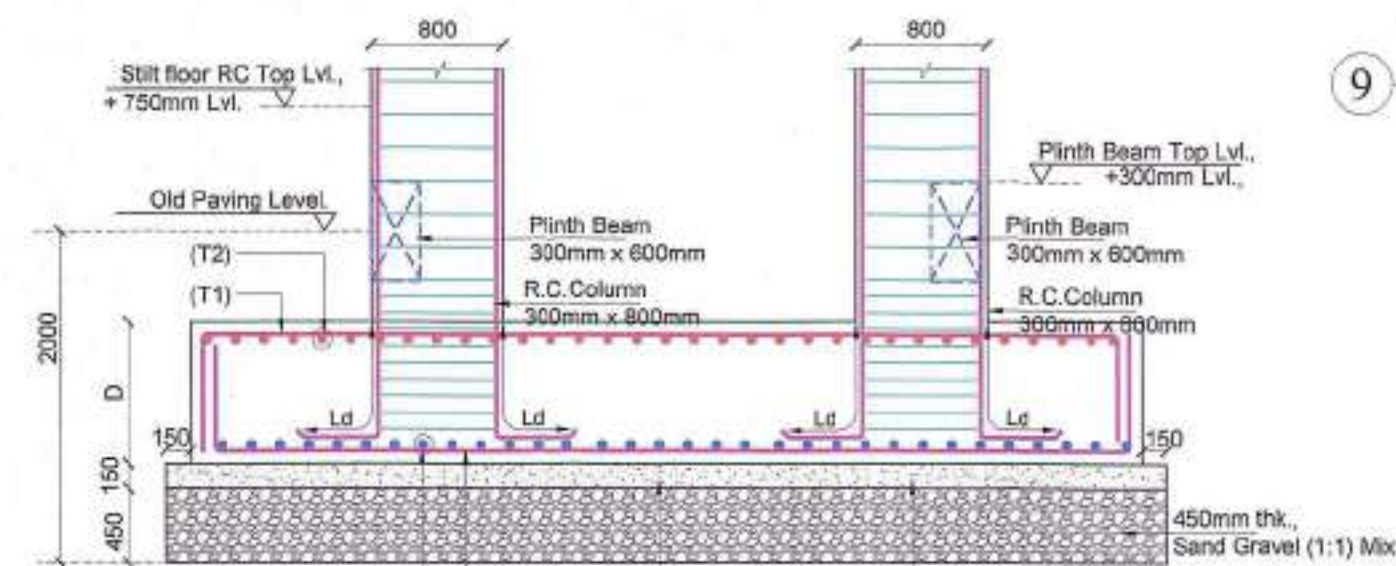
TYPICAL SQUARE ISOLATED FOOTING



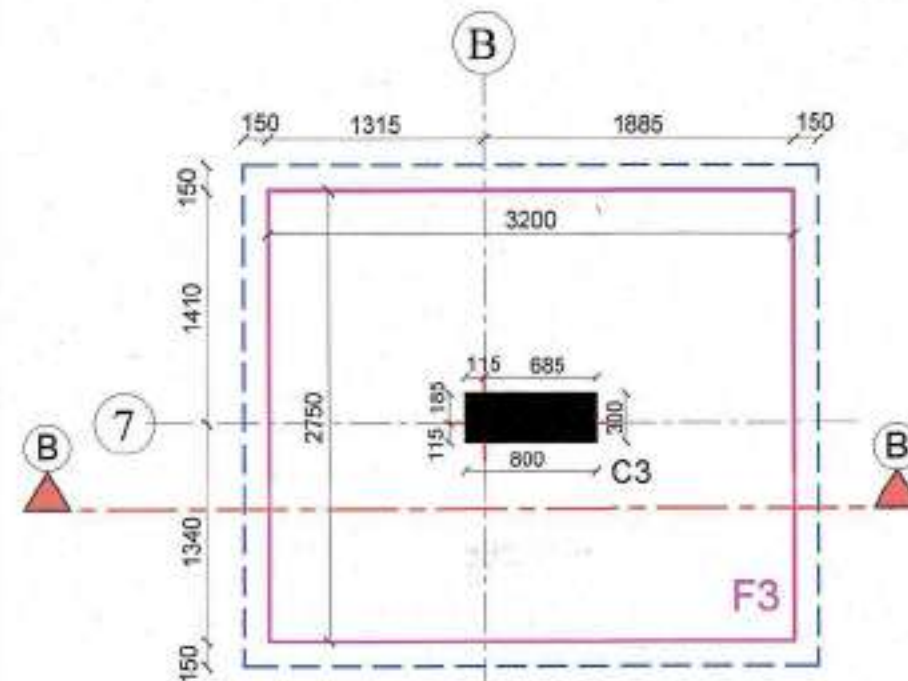
SECTION A - A



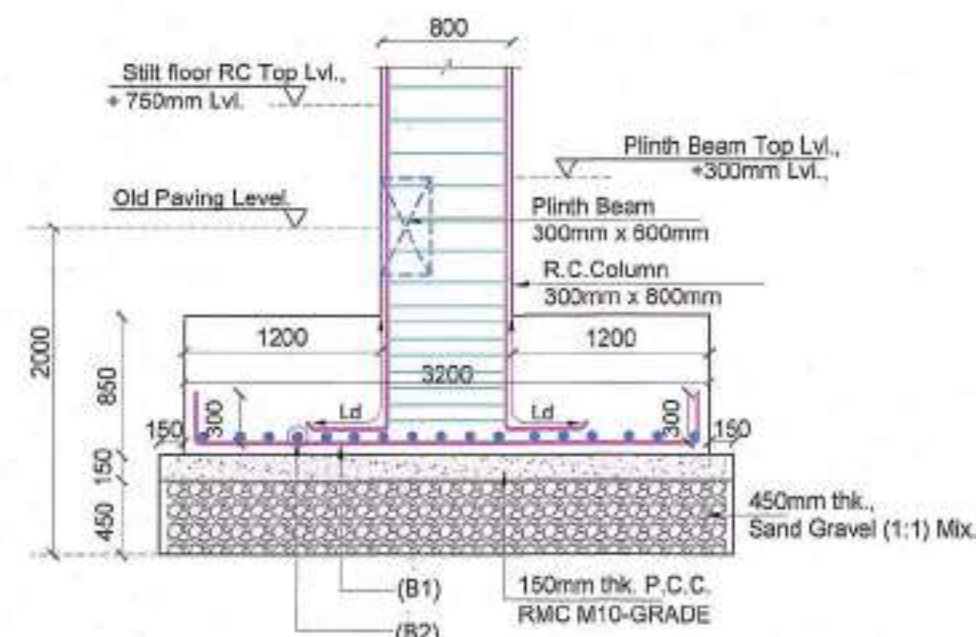
TYPICAL COMBINED FOOTING



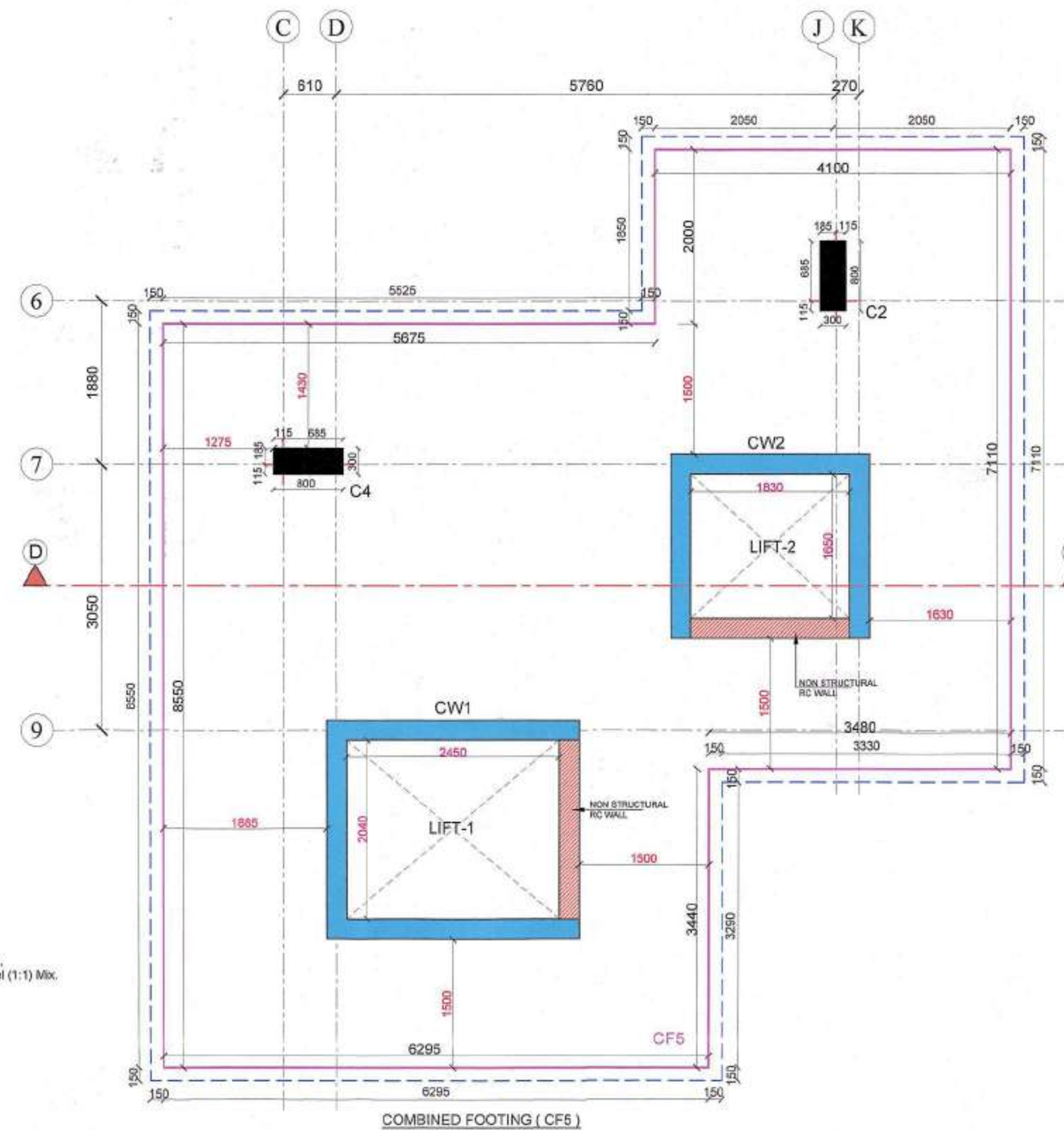
SECTION C - C



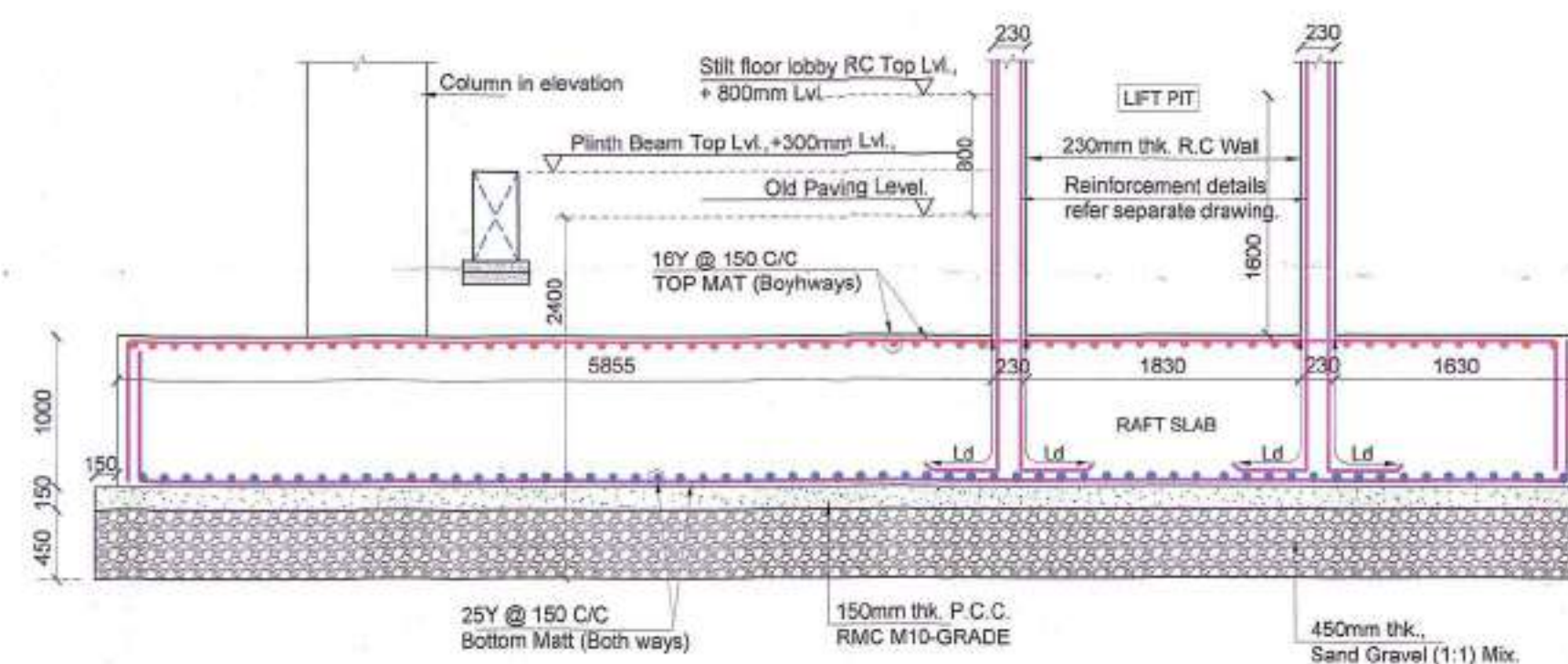
ISOLATED FOOTING (F3)
SIZE : 3.10m x 2.75m



SECTION B - B



COMBINED FOOTING (CF5)



SECTION - D - D

FOOTING NO.	NO OF FOOTING	L (mm)	B (mm)	D (mm)	REINFORCEMENT			
					B1	B2	T1	T2
F1	5 NOS.	2650	2650	750	12Y@125 C/C	12Y@125 C/C	-	-
F2	4 NOS.	2850	2850	800	12Y@110 C/C	12Y@110 C/C	-	-
F3	2 NOS.	3100	3100	850	16Y@175 C/C	16Y@175 C/C	-	-
F3A	1 NO.	3200	2750	850	16Y@175 C/C	16Y@175 C/C	-	-
F4	4 NOS.	3400	3400	925	16Y@150 C/C	16Y@150 C/C	-	-
F5	1 NO.	3650	3650	1000	16Y@150 C/C	16Y@150 C/C	-	-
CF1	1 NO.	5550	2750	850	16Y@175 C/C	16Y@175 C/C	12Y@110 C/C	12Y@110 C/C
CF2	1 NO.	5700	2850	850	16Y@150 C/C	16Y@150 C/C	12Y@110 C/C	12Y@110 C/C
CF3	1 NO.	6350	3000	900	16Y@110 C/C	16Y@110 C/C	16Y@175 C/C	16Y@175 C/C
CF4	1 NO.	6200	3000	950	16Y@110 C/C	16Y@110 C/C	16Y@175 C/C	16Y@175 C/C
CF5	1 NO.	REFER PLAN	1000	25Y@150 C/C	25Y@150 C/C	16Y@150 C/C	16Y@150 C/C	16Y@150 C/C

NOTES:

1. REFER ARCH. DWG. FOR CENTRE LINE DIMENSIONS. ALL DIMENSIONS ARE IN mm.
2. CONCRETE MIX SHALL BE M40 FOR COLUMN & M25 FOR ALL OTHER R.C WORKS.
3. ALL REINFORCEMENTS ARE OF Fe500D/Fe550D GRADE.
4. CLEAR COVER TO MAIN REINFORCEMENT SHALL BE
(i) COLUMN = 40mm (ii) BEAM = 30mm
(iii) SLAB = 20mm (iv) R.C.C WALL = 30mm
5. LAP LENGTH SHALL BE 50 x DIA OF THE BAR.

SIGNATURE:

V. JAGEN, B.E.M.E.(Struct), M.E.A.I.V.
CMAA REGD NOS -
SE / GR-1 / 2018/03/024, QA/2018/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVY - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841269154

DRAWING TITLE:

FOOTING SCHEDULE & SECTION DETAIL

PROJECT:-

PLAN SHOWING THE PROPOSED CONSTRUCTION OF HIGH RISE BUILDING CONSISTS OF STILT FLOOR + 9 FLOORS RESIDENTIAL BUILDING (30.00m HEIGHT) AT OLD DOOR NOS. 268 & 269, NEW DOOR NOS. 66 & 68, ROYAPETTAH HIGH ROAD, ROYAPETTAH, CHENNAI-600 014 AND COMPRISED IN R.S. NO. 423 AS PER DOCUMENT & R.S. NO.423/1 & 423/2 AS PER PATTI, BLOCK NO. 08 OF MYLAPORE VILLAGE, MYLAPORE TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.
ZONE: IX; DIVISION:- 119

COLUMN LD	FLOORS	NO. OF COLUMNS	COLUMN SIZE	REINFORCEMENT DETAILS	SHAPE OF TIES	COLUMN LD	FLOORS	NO. OF COLUMNS	COLUMN SIZE	REINFORCEMENT DETAILS	SHAPE OF TIES
C1	300X800 STILT FLOOR	5 Nos.		$\nearrow$ 6 Nos -20Y (b) + 8 Nos-16Y (c) TIES 10Y @ 100C/C @ SUP.FOR H		C4	300X800 STILT FLOOR	6 Nos.		$\nearrow$ 14 Nos -25Y (a) TIES 10Y @ 100C/C @ SUP.FOR H	
	300X800 FIRST FLOOR			$\nearrow$ 6 Nos -20Y (b) + 8 Nos-16Y (c) TIES 8Y @ 100C/C @ SUP.FOR H/4 8Y @ 200C/C @ MID.FOR H/2			300X800 FIRST FLOOR			$\nearrow$ 14 Nos -25Y (a) TIES 8Y @ 100C/C @ SUP.FOR H/4 8Y @ 200C/C @ MID.FOR H/2	
	300X800 SECOND & THIRD FLOOR			$\nearrow$ 6 Nos -20Y (b) + 8 Nos-16Y (c) TIES 8Y @ 100C/C @ SUP.FOR H/4 8Y @ 200C/C @ MID.FOR H/2			300X800 SECOND & THIRD FLOOR			$\nearrow$ 14 Nos -25Y (a) + 8 Nos-20Y (b) TIES 8Y @ 100C/C @ SUP.FOR H/4 8Y @ 200C/C @ MID.FOR H/2	
	300X800 FOURTH & FIFTH FLOOR			$\nearrow$ 12 Nos-16Y (c) TIES 8Y @ 100C/C @ SUP.FOR H/4 8Y @ 200C/C @ MID.FOR H/2			300X800 FOURTH & FIFTH FLOOR			$\nearrow$ 14 Nos -20Y (b) TIES 8Y @ 100C/C @ SUP.FOR H/4 8Y @ 200C/C @ MID.FOR H/2	
	300X800 SIXTH & SEVENTH FLOOR			$\nearrow$ 12 Nos-16Y (c) TIES 8Y @ 100C/C @ SUP.FOR H/4 8Y @ 200C/C @ MID.FOR H/2			300X800 SIXTH & SEVENTH FLOOR			$\nearrow$ 6 Nos -20Y (b) + 8 Nos-16Y (c) TIES 8Y @ 100C/C @ SUP.FOR H/4 8Y @ 200C/C @ MID.FOR H/2	
	300X800 EIGHTH, NINTH & TERRACE FLOOR			$\nearrow$ 12 Nos-16Y (c) TIES 8Y @ 100C/C @ SUP.FOR H/4 8Y @ 200C/C @ MID.FOR H/2			300X800 EIGHTH, NINTH & TERRACE FLOOR			$\nearrow$ 6 Nos -20Y (b) + 8 Nos-16Y (c) TIES 8Y @ 100C/C @ SUP.FOR H/4 8Y @ 200C/C @ MID.FOR H/2	
C2	300X800 STILT FLOOR	6 Nos.		$\nearrow$ 14 Nos -20Y (b) TIES 10Y @ 100C/C @ SUP.FOR H		C5	300X800 STILT FLOOR	1 No.		$\nearrow$ 16 Nos -25Y (a) TIES 10Y @ 100C/C @ SUP.FOR H	
	300X800 FIRST FLOOR			$\nearrow$ 14 Nos -20Y (b) TIES 8Y @ 100C/C @ SUP.FOR H/4 8Y @ 200C/C @ MID.FOR H/2			300X800 FIRST FLOOR			$\nearrow$ 16 Nos -25Y (a) TIES 8Y @ 100C/C @ SUP.FOR H/4 8Y @ 200C/C @ MID.FOR H/2	
	300X800 SECOND & THIRD FLOOR			$\nearrow$ 10 Nos -20Y (b) + 4 Nos-16Y (c) TIES 8Y @ 100C/C @ SUP.FOR H/4 8Y @ 200C/C @ MID.FOR H/2			300X800 SECOND & THIRD FLOOR			$\nearrow$ 6 Nos -25Y (a) + 10 Nos-20Y (b) TIES 8Y @ 100C/C @ SUP.FOR H/4 8Y @ 200C/C @ MID.FOR H/2	
	300X800 FOURTH & FIFTH FLOOR			$\nearrow$ 6 Nos -20Y (b) + 8 Nos-16Y (c) TIES 8Y @ 100C/C @ SUP.FOR H/4 8Y @ 200C/C @ MID.FOR H/2			300X800 FOURTH & FIFTH FLOOR			$\nearrow$ 6 Nos -20Y (b) + 10 Nos-16Y (c) TIES 8Y @ 100C/C @ SUP.FOR H/4 8Y @ 200C/C @ MID.FOR H/2	
	300X800 SIXTH & SEVENTH FLOOR			$\nearrow$ 6 Nos -20Y (b) + 8 Nos-16Y (c) TIES 8Y @ 100C/C @ SUP.FOR H/4 8Y @ 200C/C @ MID.FOR H/2			300X800 SIXTH & SEVENTH FLOOR			$\nearrow$ 14 Nos-16Y (c) TIES 8Y @ 100C/C @ SUP.FOR H/4 8Y @ 200C/C @ MID.FOR H/2	
	300X800 EIGHTH, NINTH & TERRACE FLOOR			$\nearrow$ 14 Nos-16Y (c) TIES 8Y @ 100C/C @ SUP.FOR H/4 8Y @ 200C/C @ MID.FOR H/2			300X800 EIGHTH, NINTH & TERRACE FLOOR			$\nearrow$ 16 Nos-16Y (c) TIES 8Y @ 100C/C @ SUP.FOR H/4 8Y @ 200C/C @ MID.FOR H/2	
C3	300X800 STILT FLOOR	9 Nos.		$\nearrow$ 10 Nos -25Y (a) TIES 10Y @ 100C/C @ SUP.FOR H			300X800 STILT FLOOR			$\nearrow$ 10 Nos -25Y (a) TIES 10Y @ 100C/C @ SUP.FOR H	
	300X800 FIRST FLOOR			$\nearrow$ 10 Nos -25Y (a) TIES 8Y @ 100C/C @ SUP.FOR H/4 8Y @ 200C/C @ MID.FOR H/2			300X800 FIRST FLOOR			$\nearrow$ 10 Nos -25Y (a) TIES 8Y @ 100C/C @ SUP.FOR H/4 8Y @ 200C/C @ MID.FOR H/2	
	300X800 SECOND & THIRD FLOOR			$\nearrow$ 8 Nos -25Y (a) + 4 Nos-20Y (b) TIES 8Y @ 100C/C @ SUP.FOR H/4 8Y @ 200C/C @ MID.FOR H/2			300X800 SECOND & THIRD FLOOR			$\nearrow$ 8 Nos -25Y (a) + 4 Nos-20Y (b) TIES 8Y @ 100C/C @ SUP.FOR H/4 8Y @ 200C/C @ MID.FOR H/2	
	300X800 FOURTH & FIFTH FLOOR			$\nearrow$ 8 Nos -25Y (a) + 8 Nos-20Y (b) TIES 8Y @ 100C/C @ SUP.FOR H/4 8Y @ 200C/C @ MID.FOR H/2			300X800 FOURTH & FIFTH FLOOR			$\nearrow$ 12 Nos-20Y (b) TIES 8Y @ 100C/C @ SUP.FOR H/4 8Y @ 200C/C @ MID.FOR H/2	
	300X800 SIXTH & SEVENTH FLOOR			$\nearrow$ 12 Nos-20Y (b) TIES 8Y @ 100C/C @ SUP.FOR H/4 8Y @ 200C/C @ MID.FOR H/2			300X800 SIXTH & SEVENTH FLOOR			$\nearrow$ 8 Nos -20Y (b) + 4 Nos-16Y (c) TIES 8Y @ 100C/C @ SUP.FOR H/4 8Y @ 200C/C @ MID.FOR H/2	
	300X800 EIGHTH, NINTH & TERRACE FLOOR			$\nearrow$ 8 Nos -20Y (b) + 4 Nos-16Y (c) TIES 8Y @ 100C/C @ SUP.FOR H/4 8Y @ 200C/C @ MID.FOR H/2			300X800 EIGHTH, NINTH & TERRACE FLOOR			$\nearrow$ 8 Nos -20Y (b) + 4 Nos-16Y (c) TIES 8Y @ 100C/C @ SUP.FOR H/4 8Y @ 200C/C @ MID.FOR H/2	

NOTES:

1. REFER ARCH. DWG. FOR CENTRE LINE DIMENSIONS. ALL DIMENSIONS ARE IN mm.

2. CONCRETE MIX SHALL BE M40 FOR COLUMN & M25 FOR ALL OTHER R.C.C WORKS.

3. ALL REINFORCEMENTS ARE OF Fe500D/Fe550D GRADE.

4. CLEAR COVER TO MAIN REINFORCEMENT SHALL BE
(i) COLUMN = 40mm (ii) BEAM = 30mm
(ii) SLAB = 20mm (iv) R.C.C WALL = 30mm

5. LAP LENGTH SHALL BE 50 x DIA OF THE BAR.

SIGNATURE:

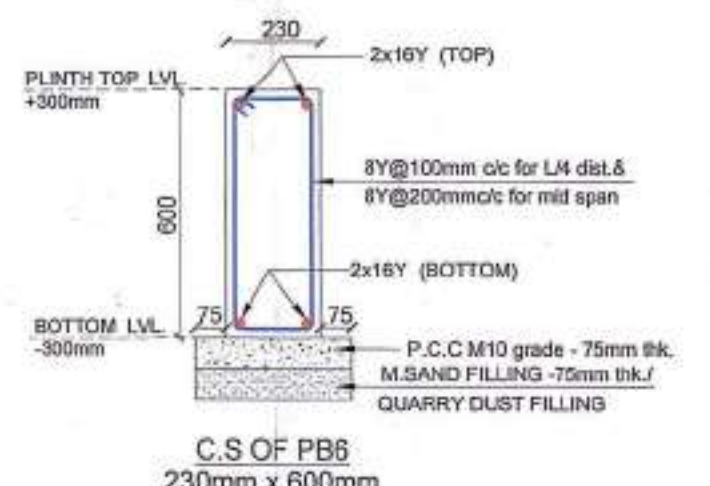
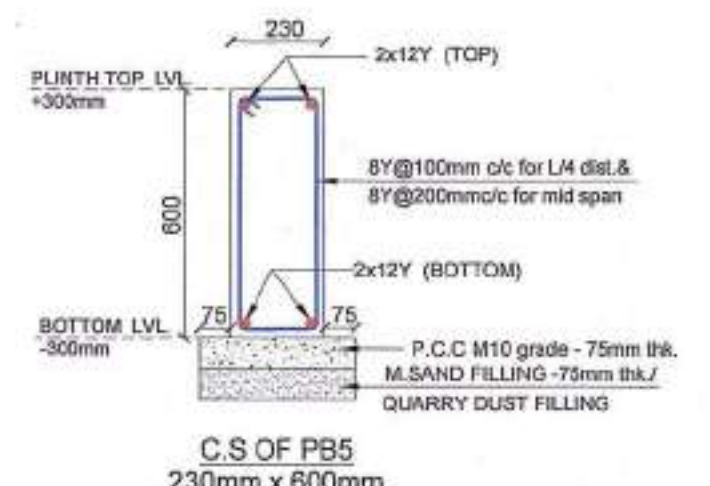
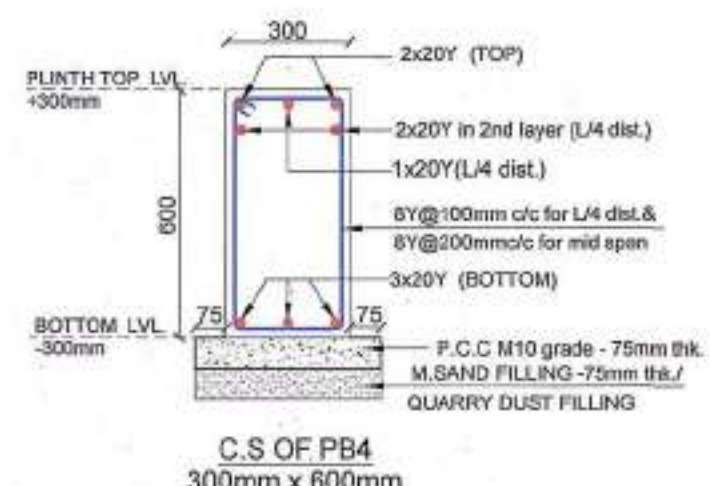
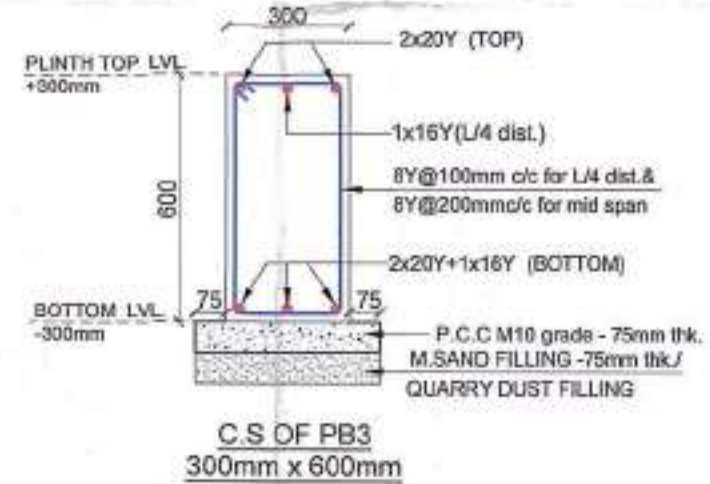
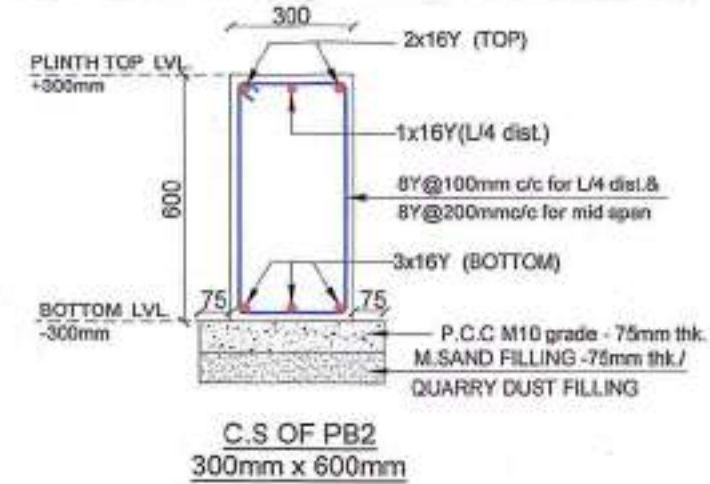
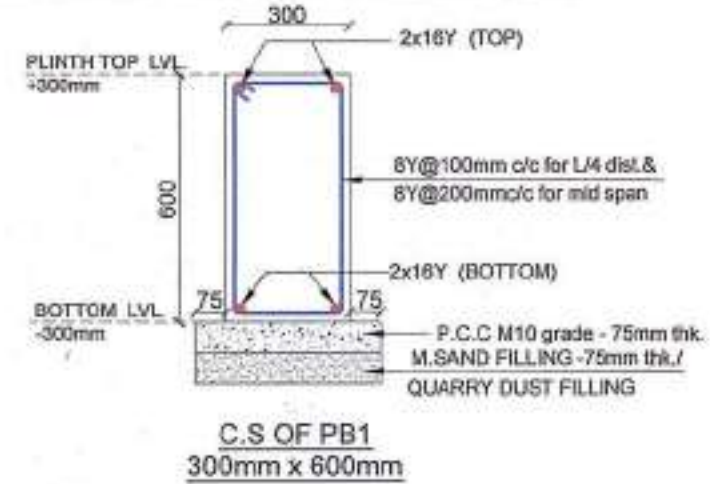
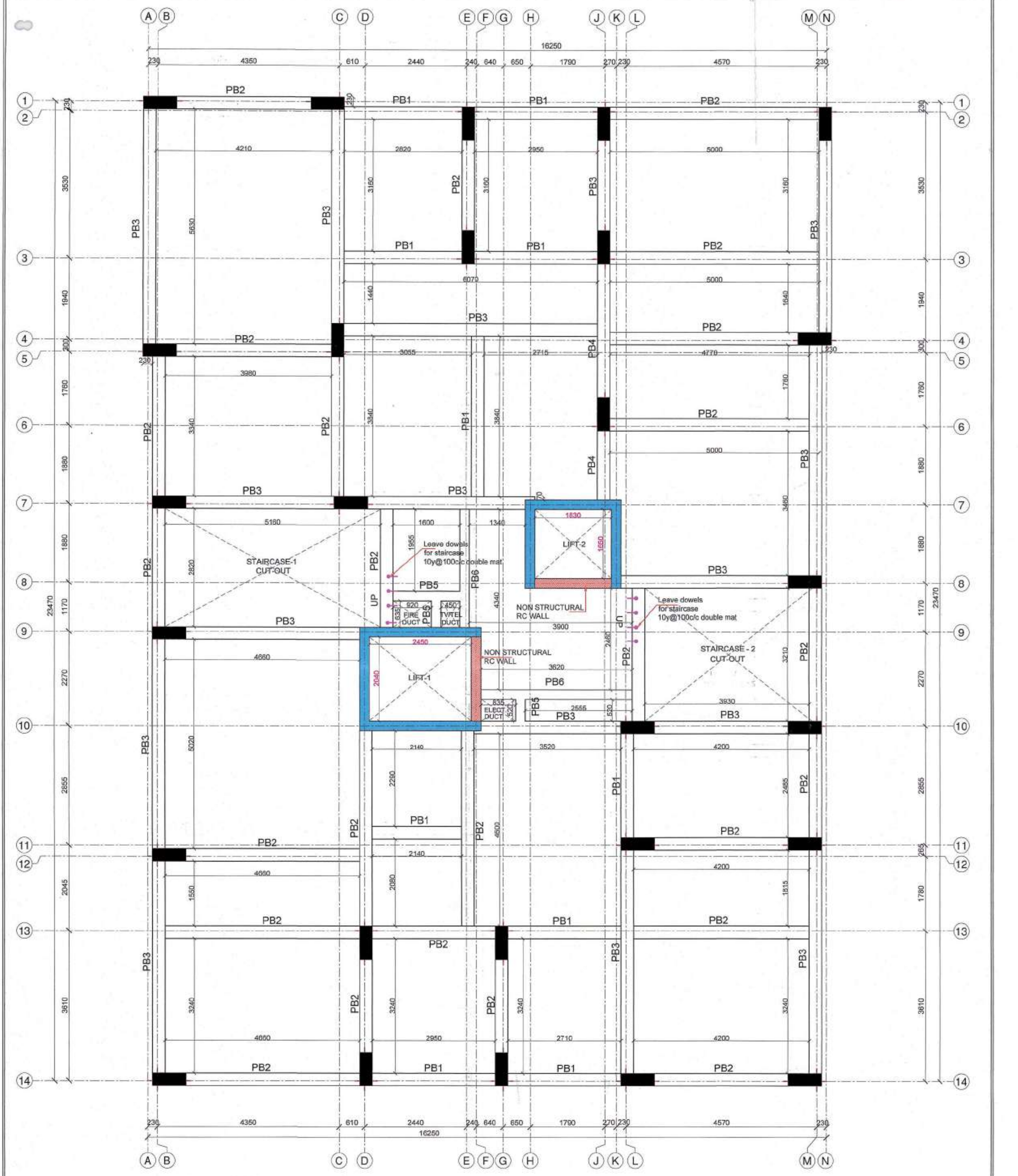
V. JAGEN, S.E., M.E. (Struct), M.L.E., A.I.V.,
SE / GR-1 / 201903024, 0A/201904/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9841209154

DRAWING TITLE:

COLUMN SCHEDULE

PROJECT:-

PLAN SHOWING THE PROPOSED CONSTRUCTION OF HIGH RISE BUILDING CONSISTS OF STILT FLOOR + 9 FLOORS RESIDENTIAL BUILDING (30.00m HEIGHT) AT OLD DOOR NOS. 268 & 269, NEW DOOR NOS. 65 & 68, ROYAPETTAH HIGH ROAD, ROYAPETTAH, CHENNAI-600 014 AND COMPRISED IN R.S. NO. 423 AS PER DOCUMENT & R.S. NO.423/1 & 423/2 AS PER PATTI, BLOCK NO. 08 OF MYLAPORE VILLAGE, MYLAPORE TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.
ZONE: IX; DIVISION:- 119



- NOTES:**
- REFER ARCH. DWG. FOR CENTRE LINE DIMENSIONS. ALL DIMENSIONS ARE IN mm.
 - CONCRETE MIX SHALL BE M40 FOR COLUMN & M25 FOR ALL OTHER R.C.C WORKS.
 - ALL REINFORCEMENTS ARE OF Fe500D/Fe550D GRADE.
 - CLEAR COVER TO MAIN REINFORCEMENT SHALL BE
(i) COLUMN = 40mm (iii) BEAM = 30mm
(ii) SLAB = 20mm (iv) R.C.C WALL = 30mm
 - LAP LENGTH SHALL BE 50 x DIA OF THE BAR.

S + 9

SIGNATURE:

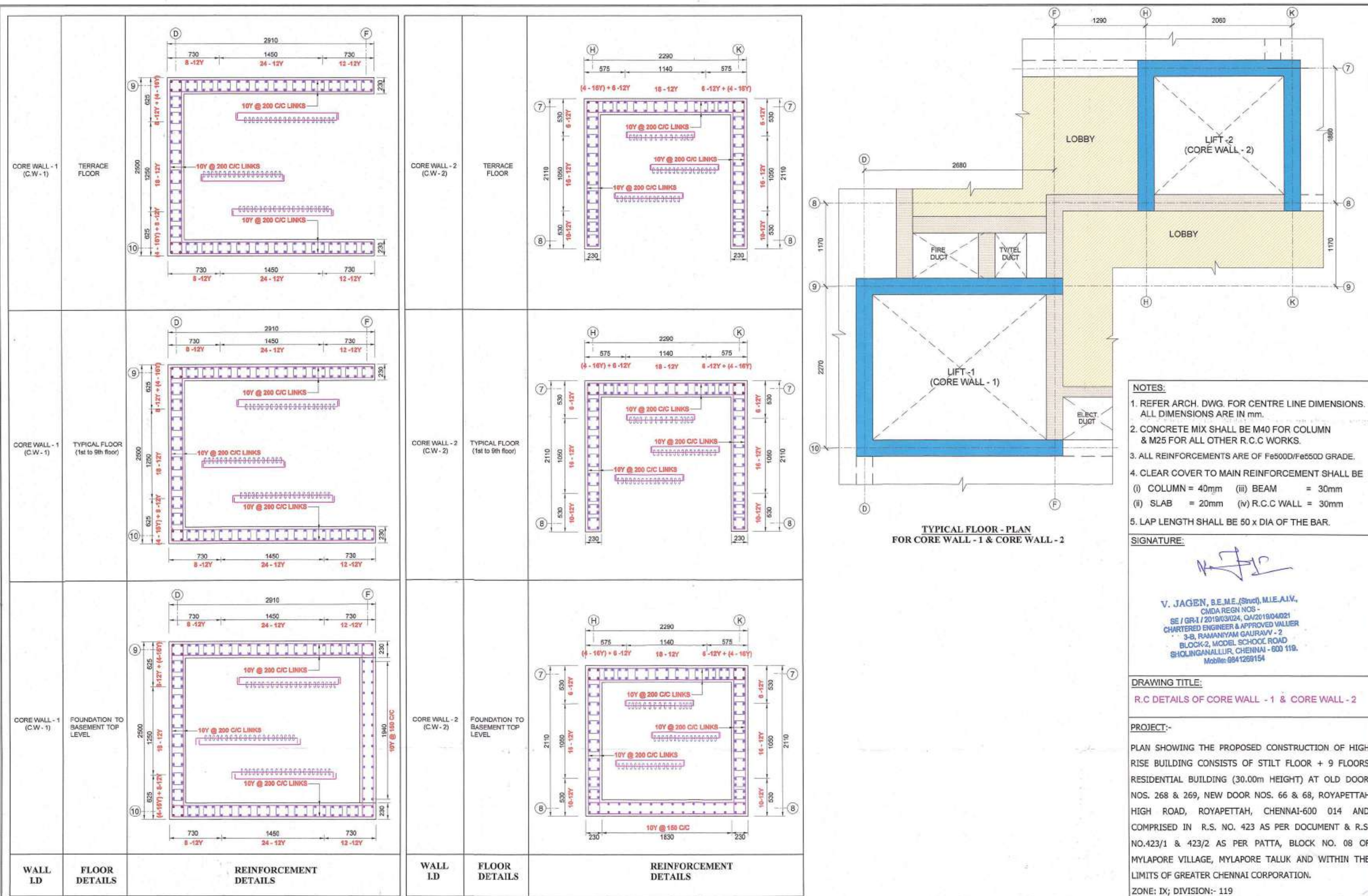
V. JAGEN

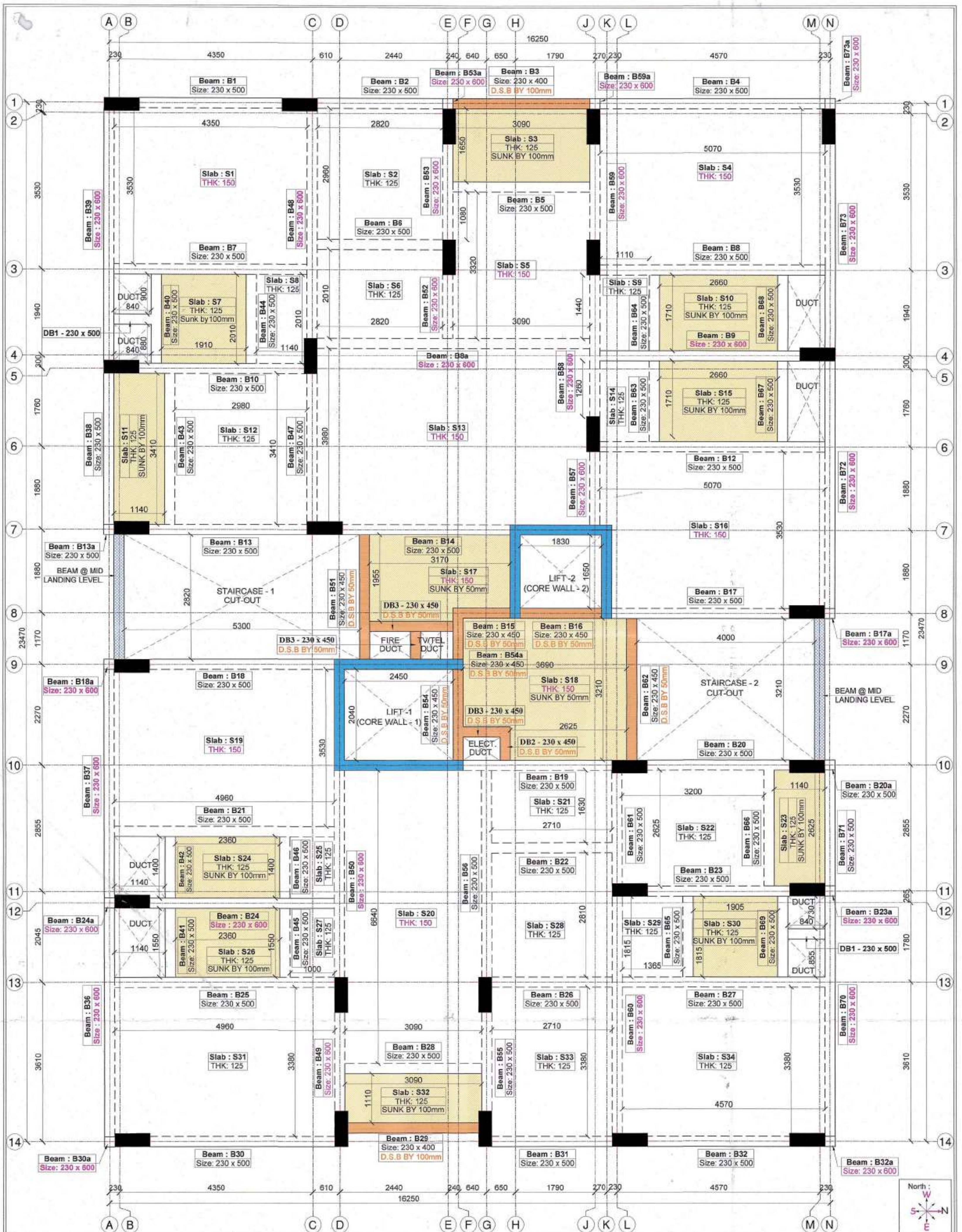
V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
CMA REGN NOS.
SE / GR-I / 201903024, QA201904021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANYAM GAURAV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9941269154

DRAWING TITLE:
PLINTH BEAM LAYOUT

PROJECT:-

PLAN SHOWING THE PROPOSED CONSTRUCTION OF HIGH RISE BUILDING CONSISTS OF STILT FLOOR + 9 FLOORS RESIDENTIAL BUILDING (30.00m HEIGHT) AT OLD DOOR NOS. 268 & 269, NEW DOOR NOS. 66 & 68, ROYAPETTAH HIGH ROAD, ROYAPETTAH, CHENNAI-600 014 AND COMPRISED IN R.S. NO. 423 AS PER DOCUMENT & R.S. NO.423/1 & 423/2 AS PER PATTI, BLOCK NO. 08 OF MYLAPORE VILLAGE, MYLAPORE TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.
ZONE: IX; DIVISION:- 119





NOTES:

1. REFER ARCH. DWG. FOR CENTRE LINE DIMENSIONS. ALL DIMENSIONS ARE IN mm.
2. CONCRETE MIX SHALL BE M40 FOR COLUMN & M25 FOR ALL OTHER R.C.C WORKS.
3. ALL REINFORCEMENTS ARE OF Fe500D/Fe550D GRADE.
4. CLEAR COVER TO MAIN REINFORCEMENT SHALL BE
 - (i) COLUMN = 40mm (ii) BEAM = 30mm
 - (iii) SLAB = 20mm (iv) R.C.C WALL = 30mm
5. LAP LENGTH SHALL BE 50 x DIA OF THE BAR.

SIGNATURE :-

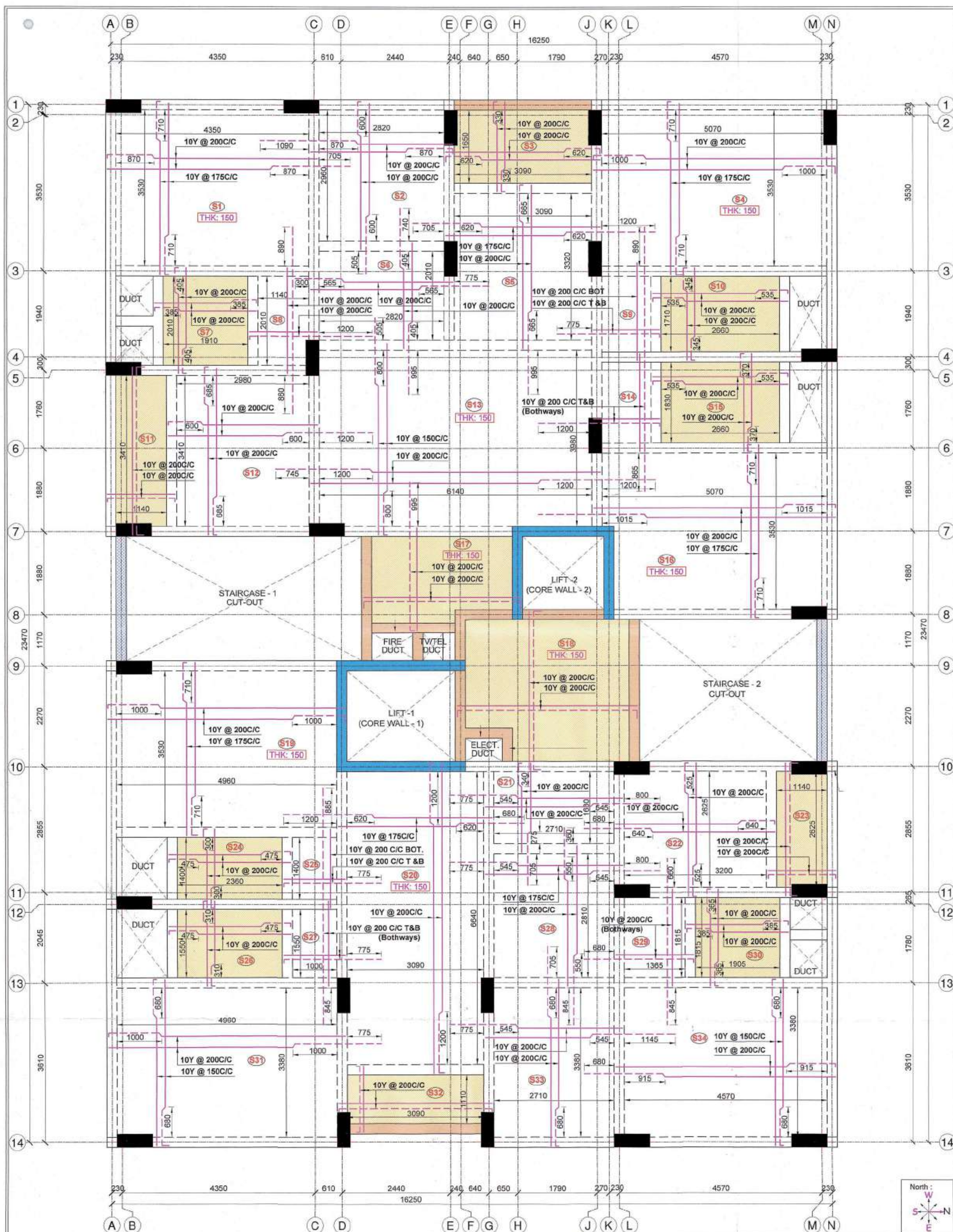
V. JAGEN, S.E., M.E., (Struct), M.I.E., A.I.V.,
CMDA REGD NOS -
SE / GR-1 / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIYAM GAURAVV - 2
BLDG 2, MOOL SCHOOL ROAD
SHOLINGAN, KUDUR, CHENNAI - 600 119.
Mobile: 9841269154

DRAWING TITLE:-

STILT FLOOR ROOF BEAM FRAMING LAYOUT

PROJECT:-

PLAN SHOWING THE PROPOSED CONSTRUCTION OF HIGH RISE BUILDING CONSISTS OF STILT FLOOR + 9 FLOORS RESIDENTIAL BUILDING (30.00m HEIGHT) AT OLD DOOR NOS. 268 & 269, NEW DOOR NOS. 66 & 68, ROYAPETTAH HIGH ROAD, ROYAPETTAH, CHENNAI-600 014 AND COMPRISED IN R.S. NO. 423 AS PER DOCUMENT & R.S. NO.423/1 & 423/2 AS PER PATTI, BLOCK NO. 08 OF MYLAPORE VILLAGE, MYLAPORE TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.
ZONE: IX; DIVISION:- 119



NOTES:

1. REFER ARCH. DWG. FOR CENTRE LINE DIMENSIONS. ALL DIMENSIONS ARE IN mm.
2. CONCRETE MIX SHALL BE M40 FOR COLUMN & M25 FOR ALL OTHER R.C.C WORKS.
3. ALL REINFORCEMENTS ARE OF Fe500D/Fe550D GRADE.
4. CLEAR COVER TO MAIN REINFORCEMENT SHALL BE
 - (i) COLUMN = 40mm
 - (ii) SLAB = 20mm
 - (iii) BEAM = 30mm
 - (iv) R.C.C WALL = 30mm
5. LAP LENGTH SHALL BE 50 x DIA OF THE BAR.

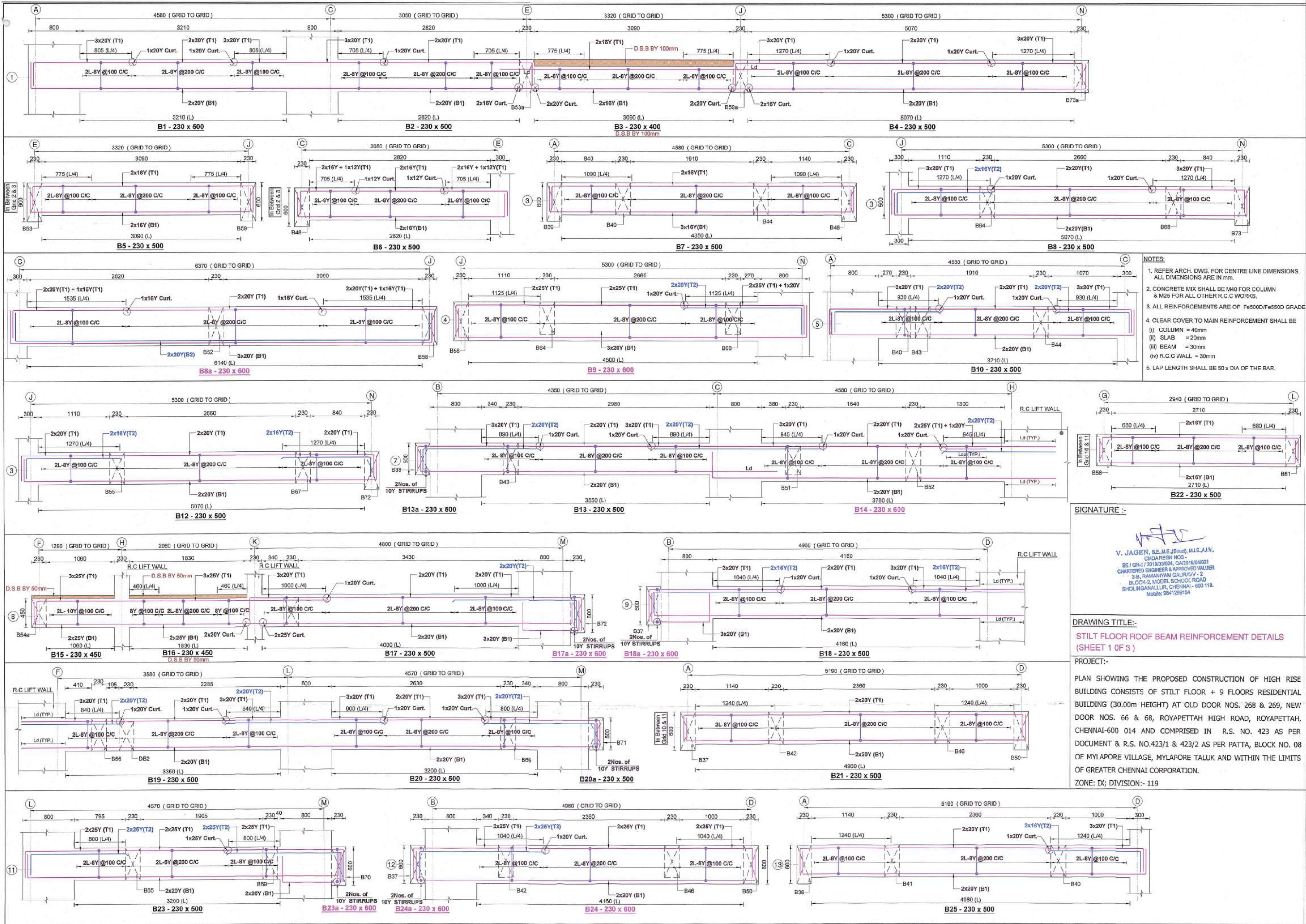
SIGNATURE:-

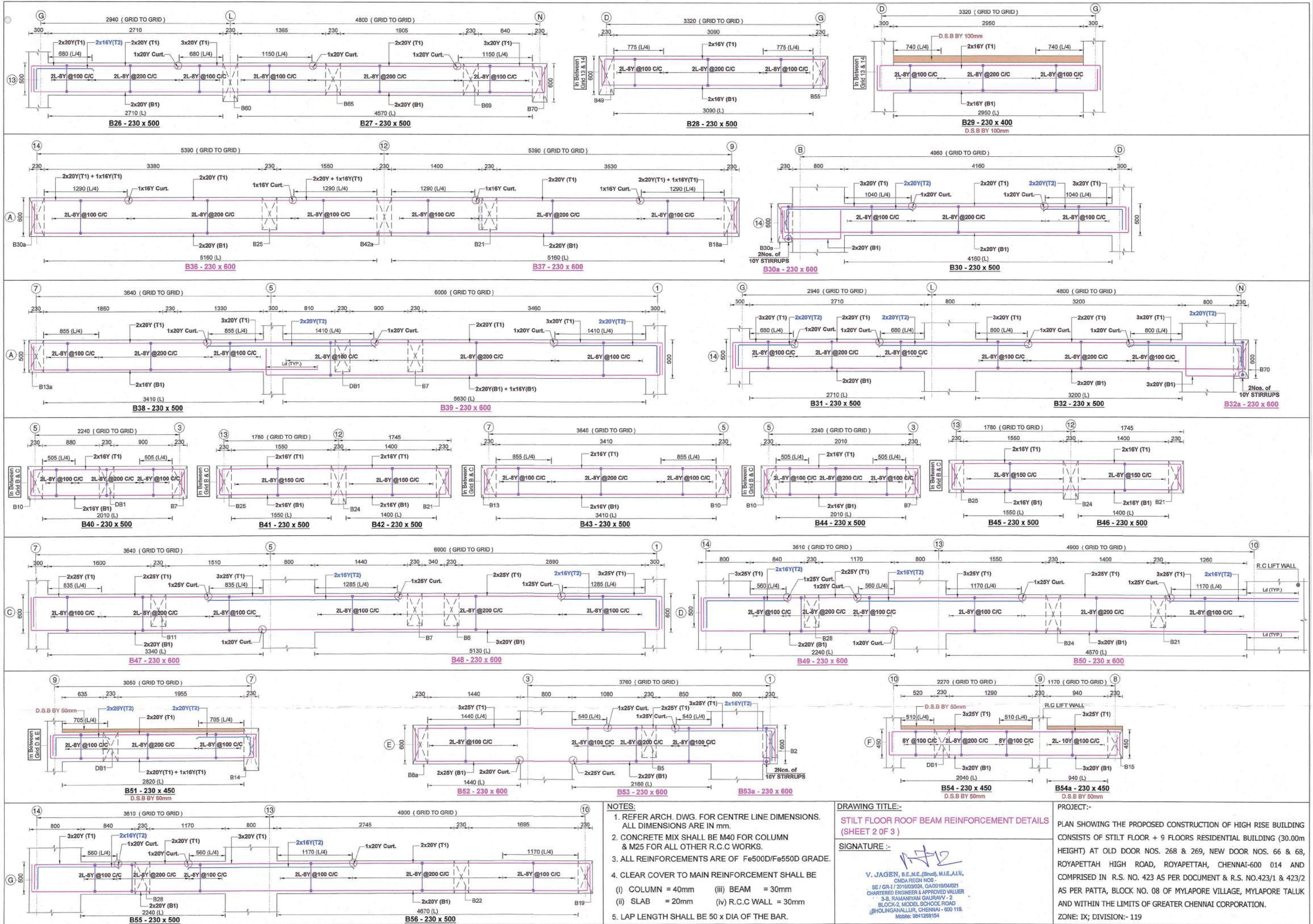
V. JAGEN, B.E., M.E., (Struct), M.I.E., A.I.V.,
 CMDA REGN NOS.
 SE / GR-1 / 20 / 000024, QA/2018/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9941269154

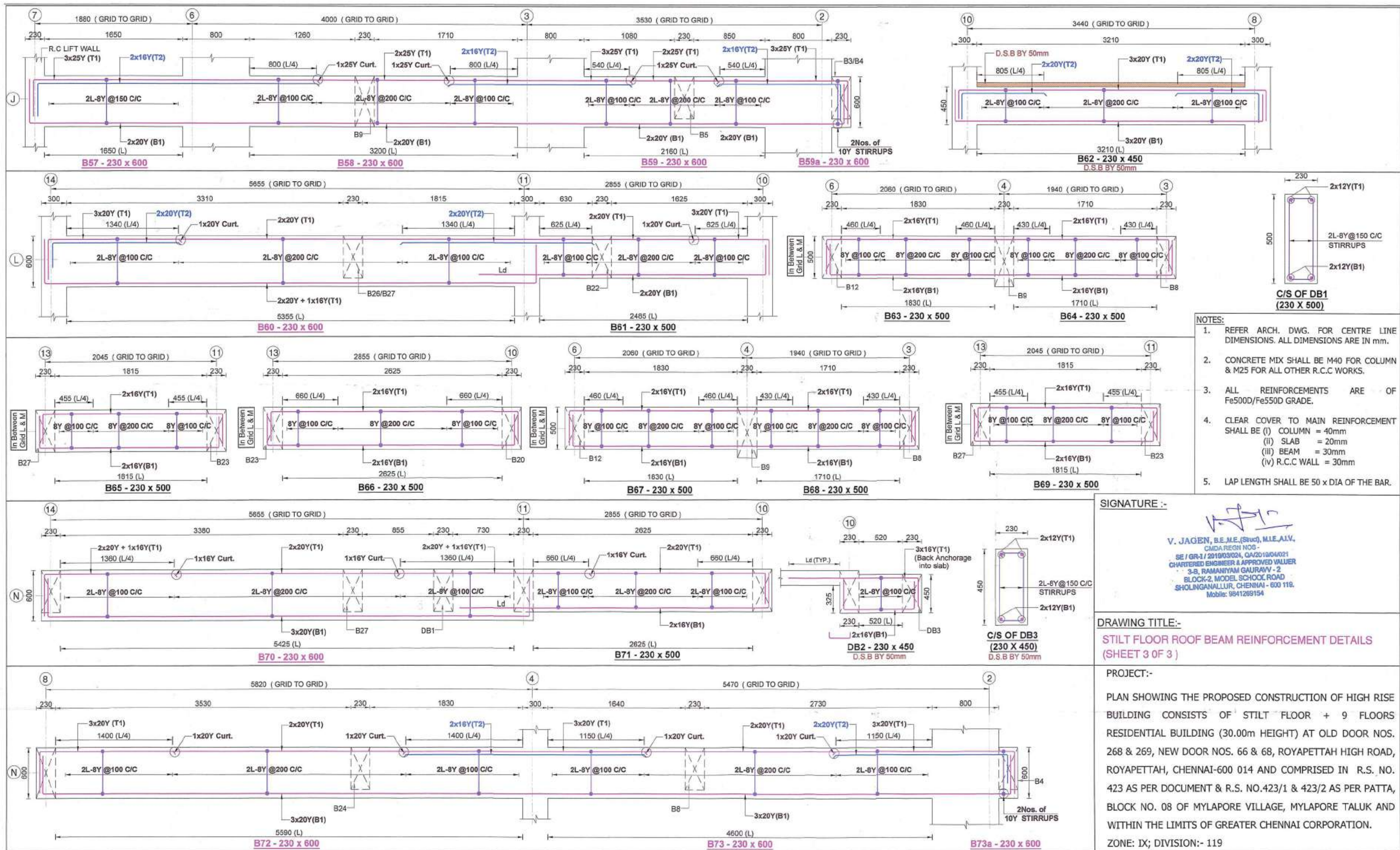
DRAWING TITLE:-

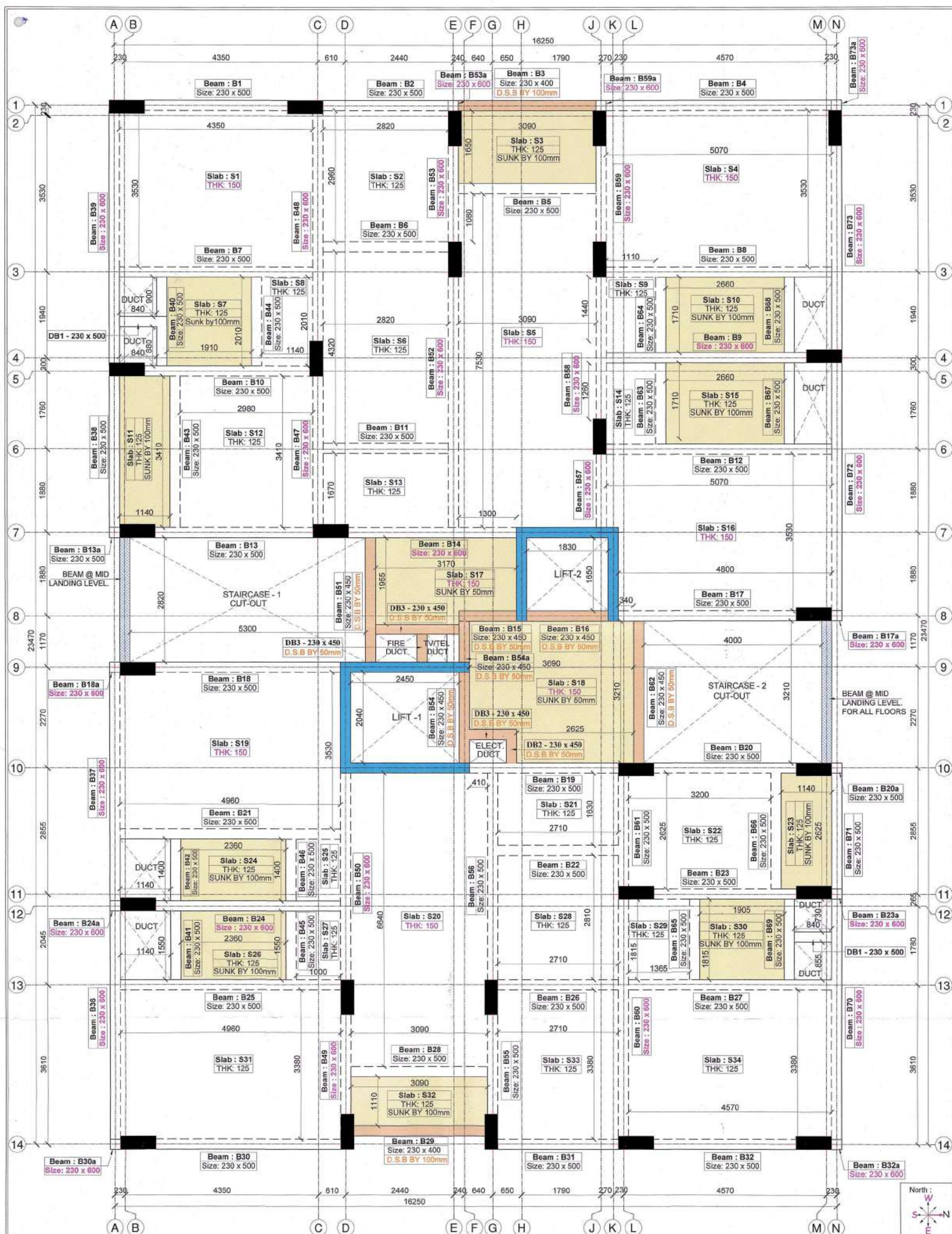
STILT FLOOR ROOF SLAB LAYOUT

PROJECT:-
 PLAN SHOWING THE PROPOSED CONSTRUCTION OF HIGH RISE BUILDING CONSISTS OF STILT FLOOR + 9 FLOORS RESIDENTIAL BUILDING (30.00m HEIGHT) AT OLD DOOR NOS. 268 & 269, NEW DOOR NOS. 66 & 68, ROYAPETTAH HIGH ROAD, ROYAPETTAH, CHENNAI-600 014 AND COMPRISED IN R.S. NO. 423 AS PER DOCUMENT & R.S. NO.423/1 & 423/2 AS PER PATTI, BLOCK NO. 08 OF MYLAPORE VILLAGE, MYLAPORE TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.
 ZONE: IX; DIVISION:- 119









- NOTES:**
1. REFER ARCH. DWG. FOR CENTRE LINE DIMENSIONS. ALL DIMENSIONS ARE IN mm.
 2. CONCRETE MIX SHALL BE M40 FOR COLUMN & M25 FOR ALL OTHER R.C.C WORKS.
 3. ALL REINFORCEMENTS ARE OF Fe500D/Fe550D GRADE.
 4. CLEAR COVER TO MAIN REINFORCEMENT SHALL BE

(i) COLUMN = 40mm	(iii) BEAM = 30mm
(ii) SLAB = 20mm	(iv) R.C.C WALL = 30mm
 5. LAP LENGTH SHALL BE 50 x DIA OF THE BAR.

SIGNATURE :-

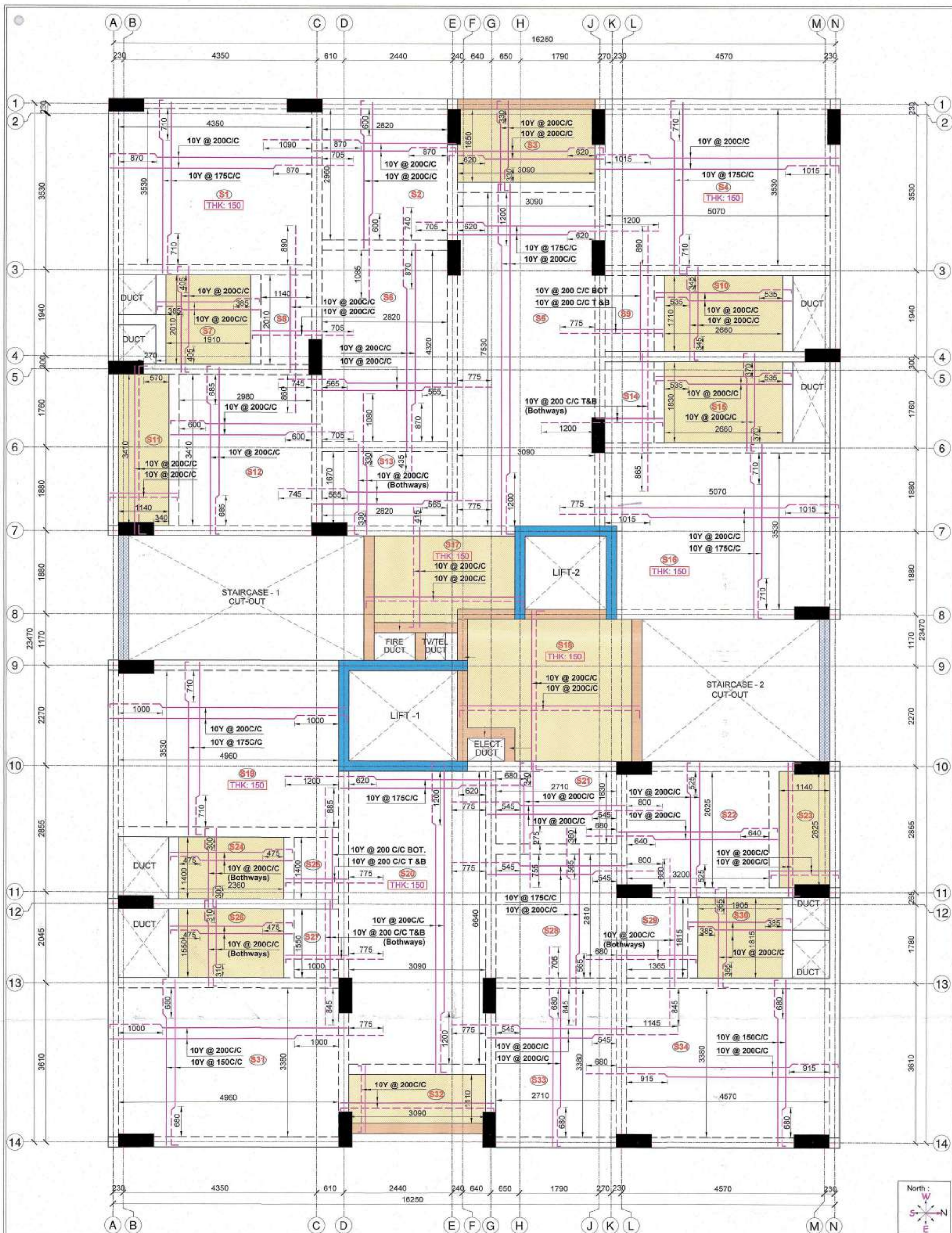
V. JAGEN

V. JAGEN, S.E., M.E., M.I.E., A.I.V.,
 CMDAREGN NOS -
 SE / GR-1 / 2019/03/024, QA/2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841289154

DRAWING TITLE:-

TYPICAL FLOOR ROOF BEAM FRAMING LAYOUT
(1st TO 8th FLOOR ROOF)

PROJECT:-
 PLAN SHOWING THE PROPOSED CONSTRUCTION OF HIGH RISE BUILDING CONSISTS OF STILT FLOOR + 9 FLOORS RESIDENTIAL BUILDING (30.00m HEIGHT) AT OLD DOOR NOS. 268 & 269, NEW DOOR NOS. 66 & 68, ROYAPETTAH HIGH ROAD, ROYAPETTAH, CHENNAI-600 014 AND COMPRISED IN R.S. NO. 423 AS PER DOCUMENT & R.S. NO.423/1 & 423/2 AS PER PATTA, BLOCK NO. 08 OF MYLAPORE VILLAGE, MYLAPORE TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.
 ZONE: D; DIVISION:- 119



NOTES:

1. REFER ARCH. DWG. FOR CENTRE LINE DIMENSIONS. ALL DIMENSIONS ARE IN mm.
2. CONCRETE MIX SHALL BE M40 FOR COLUMN & M25 FOR ALL OTHER R.C.C WORKS.
3. ALL REINFORCEMENTS ARE OF Fe500D/Fe550D GRADE.
4. CLEAR COVER TO MAIN REINFORCEMENT SHALL BE

(i) COLUMN = 40mm	(iii) BEAM = 30mm
(ii) SLAB = 20mm	(iv) R.C.C WALL = 30mm
5. LAP LENGTH SHALL BE 50 x DIA OF THE BAR.

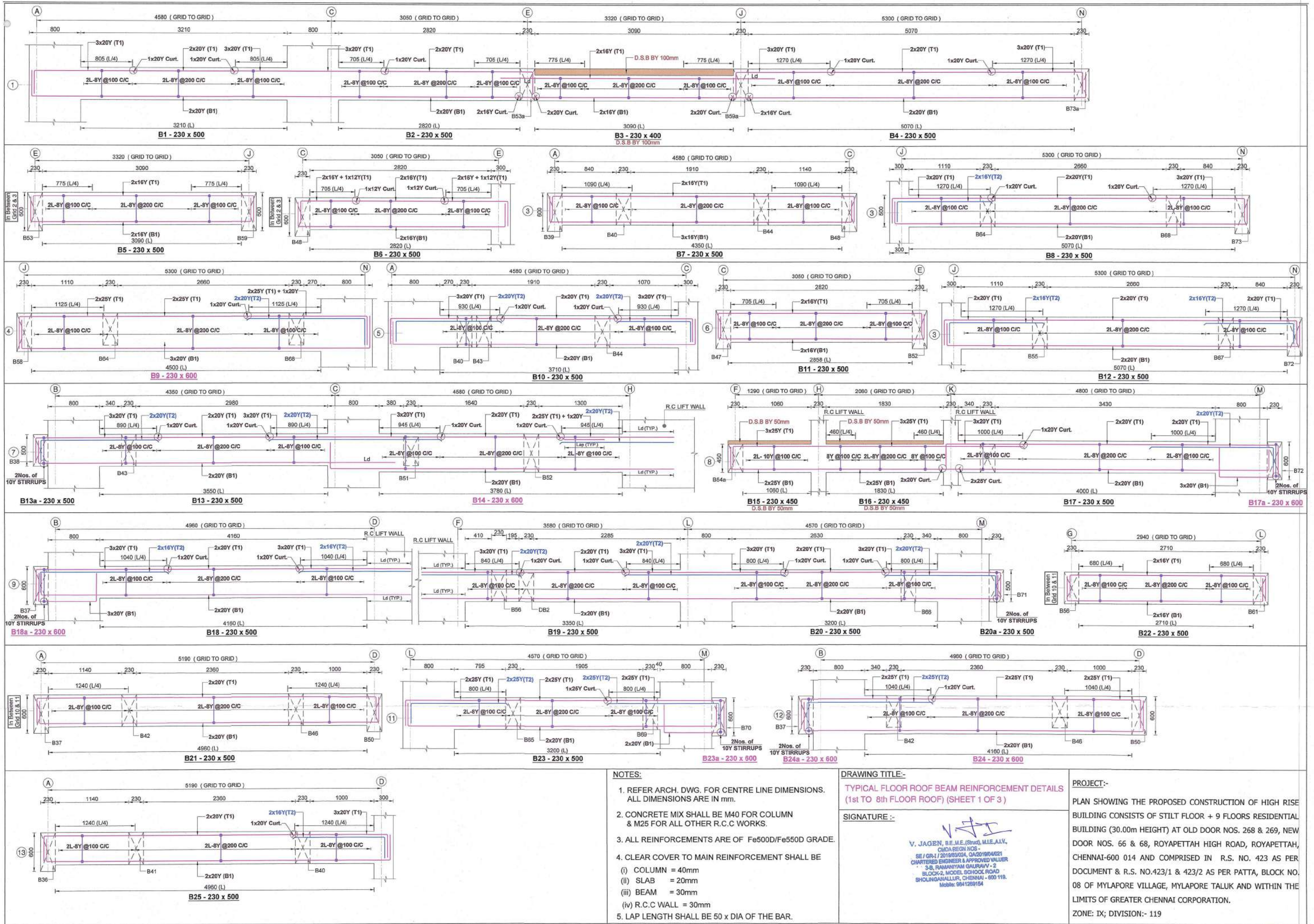
SIGNATURE:-

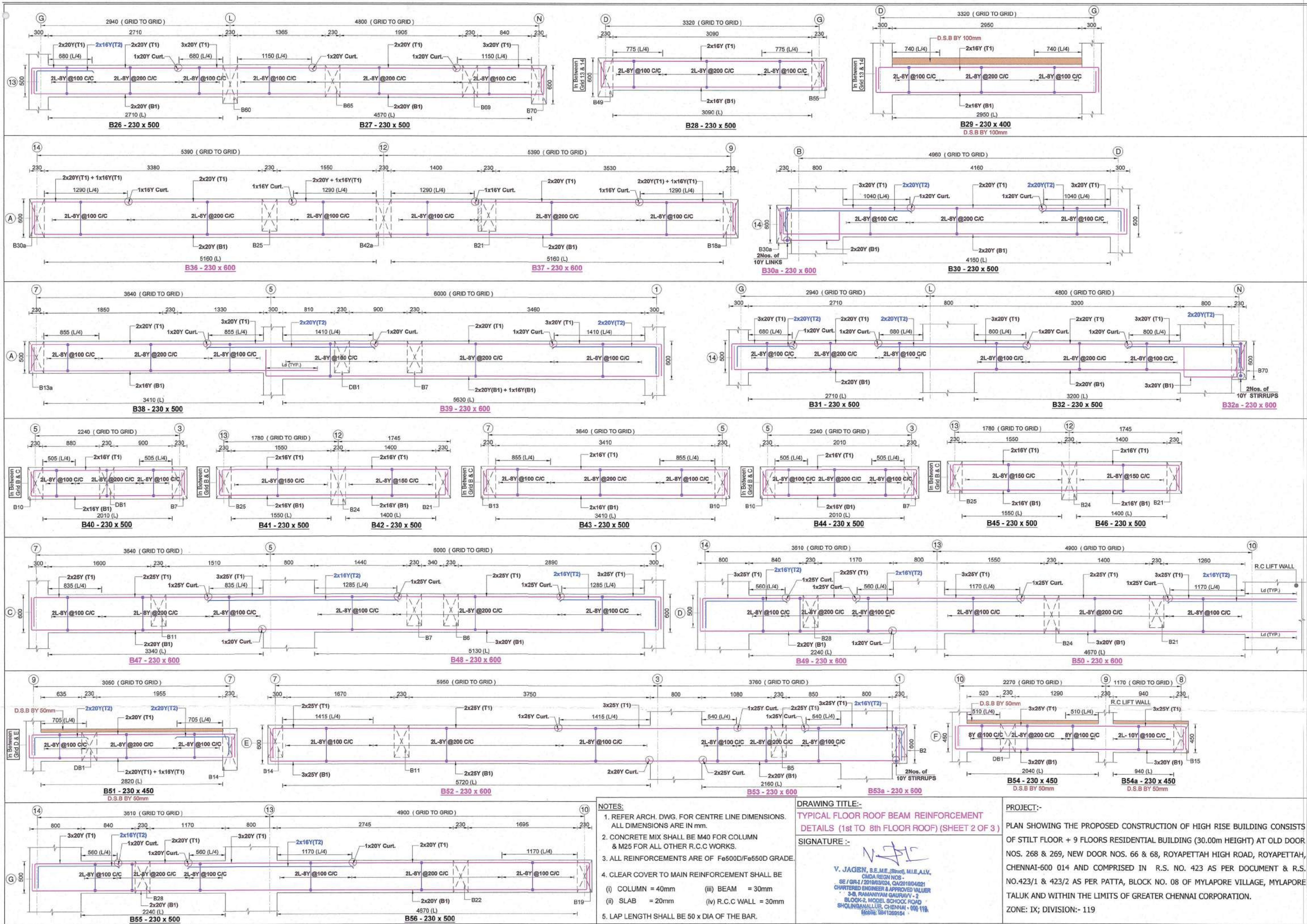
V. JAGEN
V. JAGEN, B.E.M.E. (Struct), M.E.A.I.V.,
 CMDA REGD NCS -
 SE / GR-1 / 2019/03/024, QAZ2019/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVY - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841299154

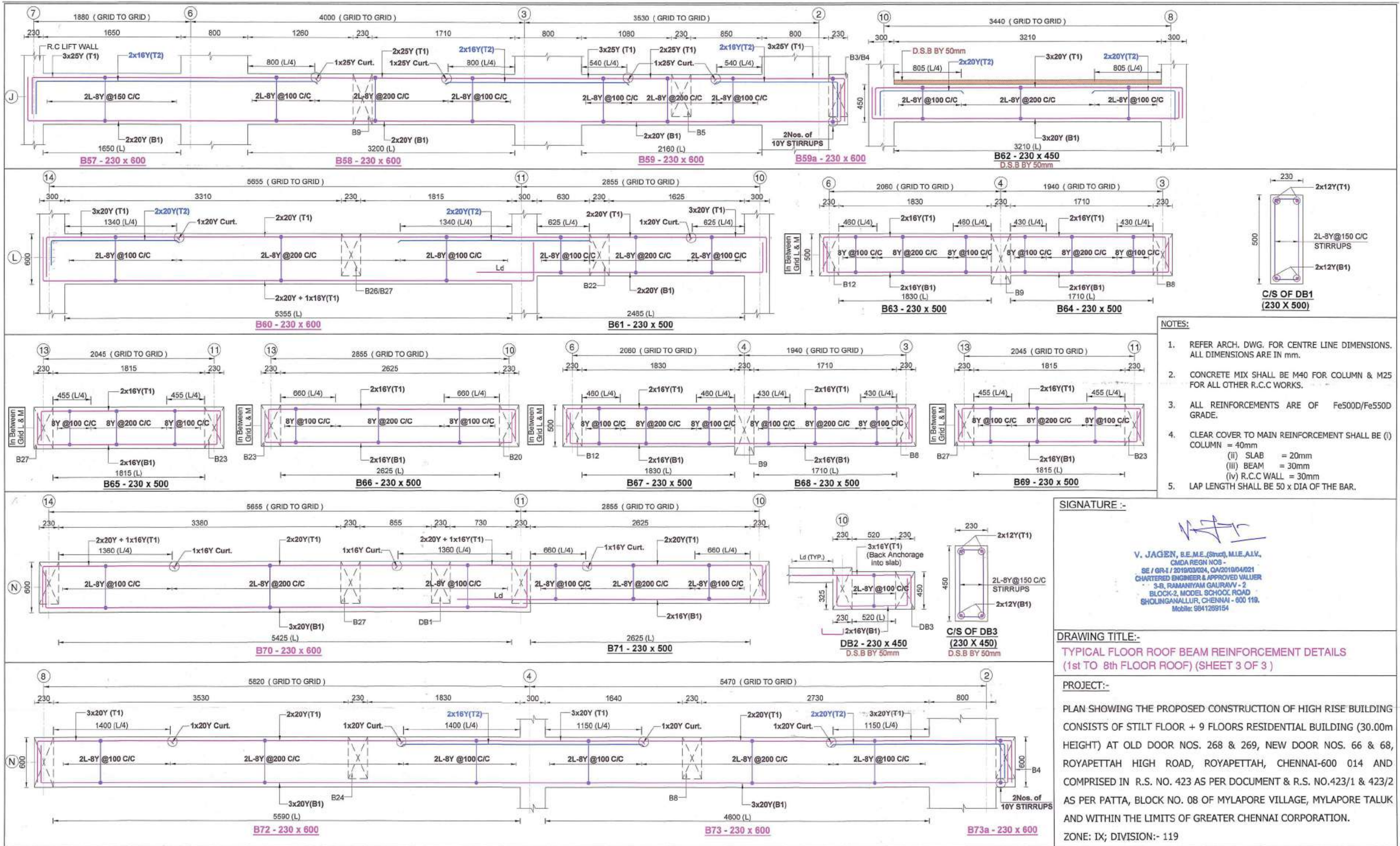
DRAWING TITLE:-

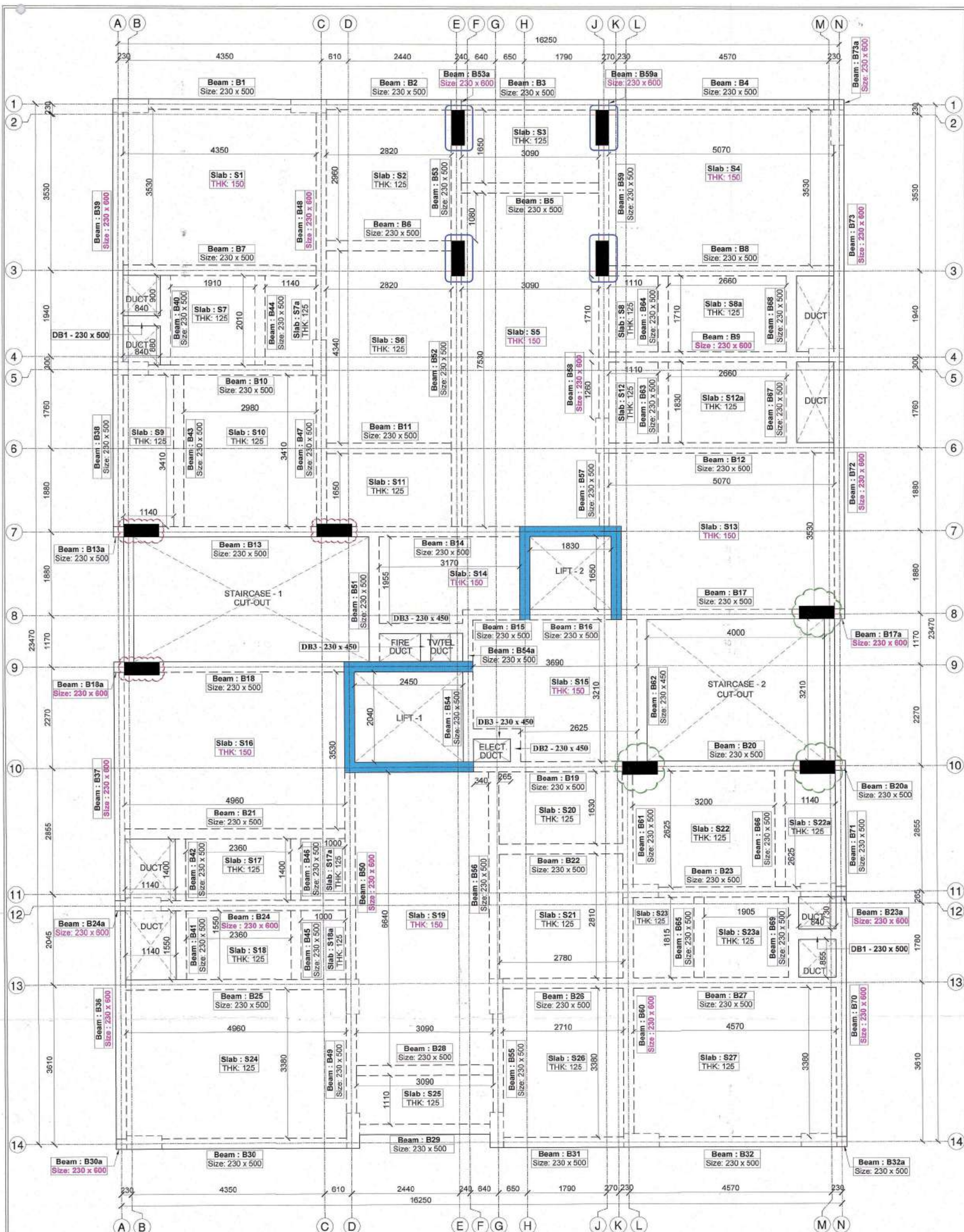
**TYPICAL FLOOR ROOF SLAB LAYOUT
 (1st TO 8th FLOOR ROOF)**

PROJECT:-
 PLAN SHOWING THE PROPOSED CONSTRUCTION OF HIGH RISE BUILDING CONSISTS OF STILT FLOOR + 9 FLOORS RESIDENTIAL BUILDING (30.00m HEIGHT) AT OLD DOOR NOS. 268 & 269, NEW DOOR NOS. 66 & 68, ROYAPETTAH HIGH ROAD, ROYAPETTAH, CHENNAI-600 014 AND COMPRISED IN R.S. NO. 423 AS PER DOCUMENT & R.S. NO.423/1 & 423/2 AS PER PATTI, BLOCK NO. 08 OF MYLAPORE VILLAGE, MYLAPORE TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.
 ZONE: IX; DIVISION:- 119

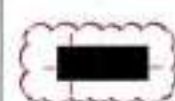








MARKED COLUMNS ARE TERMINATED AT WATER TANK BASE SLAB LVL.,



MARKED COLUMNS ARE TERMINATED AT WATER TANK BASE SLAB LVL.,



MARKED COLUMNS ARE TERMINATED AT HEAD ROOM ROOF TOP LVL.,

NOTES:

1. REFER ARCH. DWG. FOR CENTRE LINE DIMENSIONS. ALL DIMENSIONS ARE IN mm.
2. CONCRETE MIX SHALL BE M40 FOR COLUMN & M25 FOR ALL OTHER R.C.C WORKS.
3. ALL REINFORCEMENTS ARE OF Fe500D/Fe550D GRADE.
4. CLEAR COVER TO MAIN REINFORCEMENT SHALL BE
 - (i) COLUMN = 40mm (iii) BEAM = 30mm
 - (ii) SLAB = 20mm (iv) R.C.C WALL = 30mm
5. LAP LENGTH SHALL BE 50 x DIA OF THE BAR.

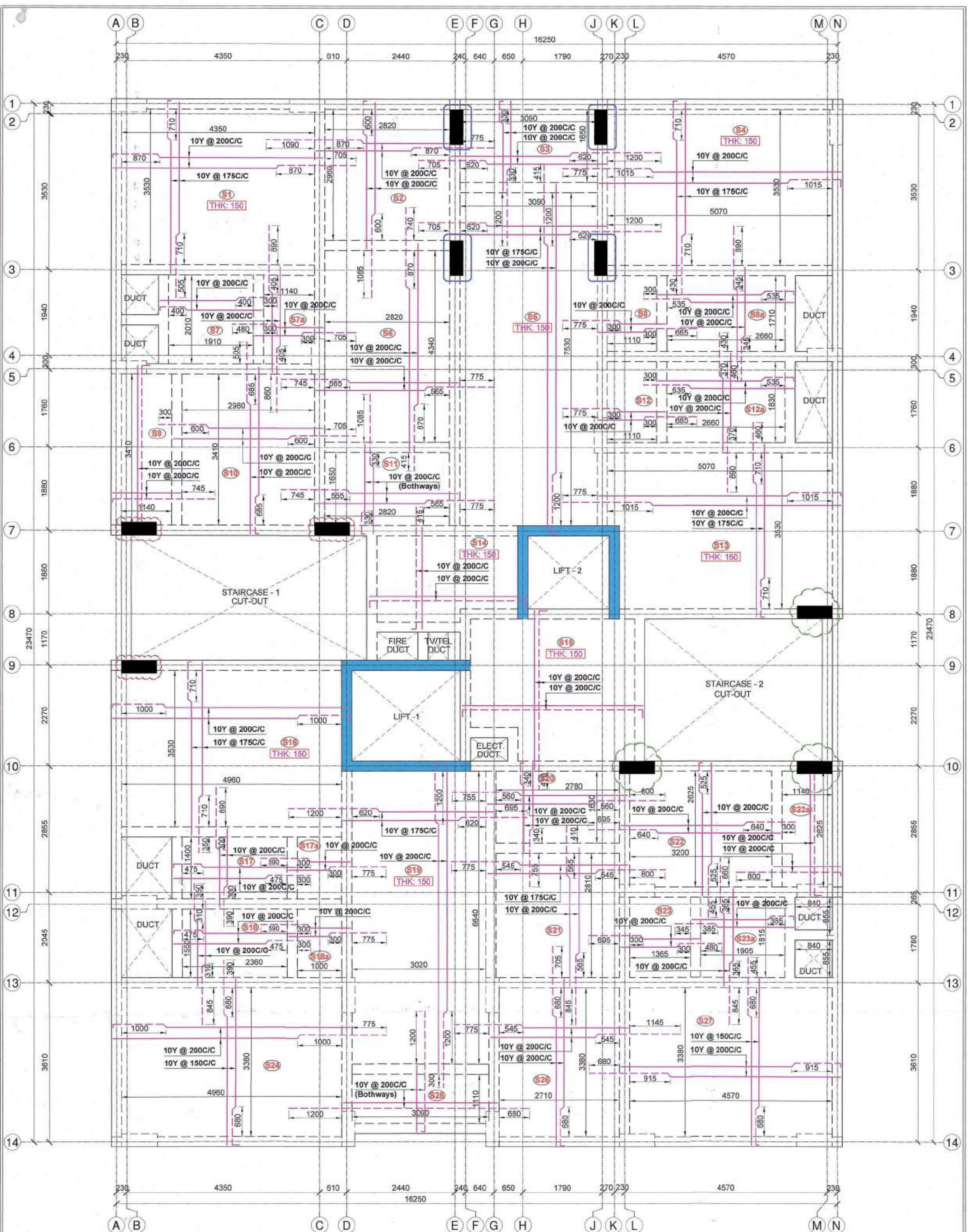
SIGNATURE :-

V. JAGEN, S.E.M.E., (Struct), M.E.A.I.V.,
CMDAREGN NOS -
SE / GR-1 / 2019/03/024, QA/2019/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-B, RAMANIAM GAURAV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGANALLUR, CHENNAI - 600 119.
Mobile: 9941269154

DRAWING TITLE:-

NINTH FLOOR ROOF BEAM FRAMING LAYOUT

PROJECT:-
PLAN SHOWING THE PROPOSED CONSTRUCTION OF HIGH RISE BUILDING
CONSISTS OF STILT FLOOR + 9 FLOORS RESIDENTIAL BUILDING (30.00m
HEIGHT) AT OLD DOOR NOS. 268 & 269, NEW DOOR NOS. 66 & 68,
ROYAPETTAH HIGH ROAD, ROYAPETTAH, CHENNAI-600 014 AND COMPRISED
IN R.S. NO. 423 AS PER DOCUMENT & R.S. NO.423/1 & 423/2 AS PER PATTI,
BLOCK NO. 08 OF MYLAPORE VILLAGE, MYLAPORE TALUK AND WITHIN THE
LIMITS OF GREATER CHENNAI CORPORATION.
ZONE: IX; DIVISION:- 119



- MARKED COLUMNS ARE TERMINATED AT WATER TANK BASE SLAB LVL.,**
- MARKED COLUMNS ARE TERMINATED AT WATER TANK BASE SLAB LVL.,**
- MARKED COLUMNS ARE TERMINATED AT HEAD ROOM ROOF TOP LVL.,**

- NOTES:**
1. REFER ARCH. DWG. FOR CENTRE LINE DIMENSIONS. ALL DIMENSIONS ARE IN mm.
 2. CONCRETE MIX SHALL BE M40 FOR COLUMN & M25 FOR ALL OTHER R.C.C WORKS.
 3. ALL REINFORCEMENTS ARE OF Fe500D/Fe550D GRADE.
 4. CLEAR COVER TO MAIN REINFORCEMENT SHALL BE
 - (i) COLUMN = 40mm (iii) BEAM = 30mm
 - (ii) SLAB = 20mm (iv) R.C.C WALL = 30mm
 5. LAP LENGTH SHALL BE 50 x DIA OF THE BAR.

SIGNATURE :-

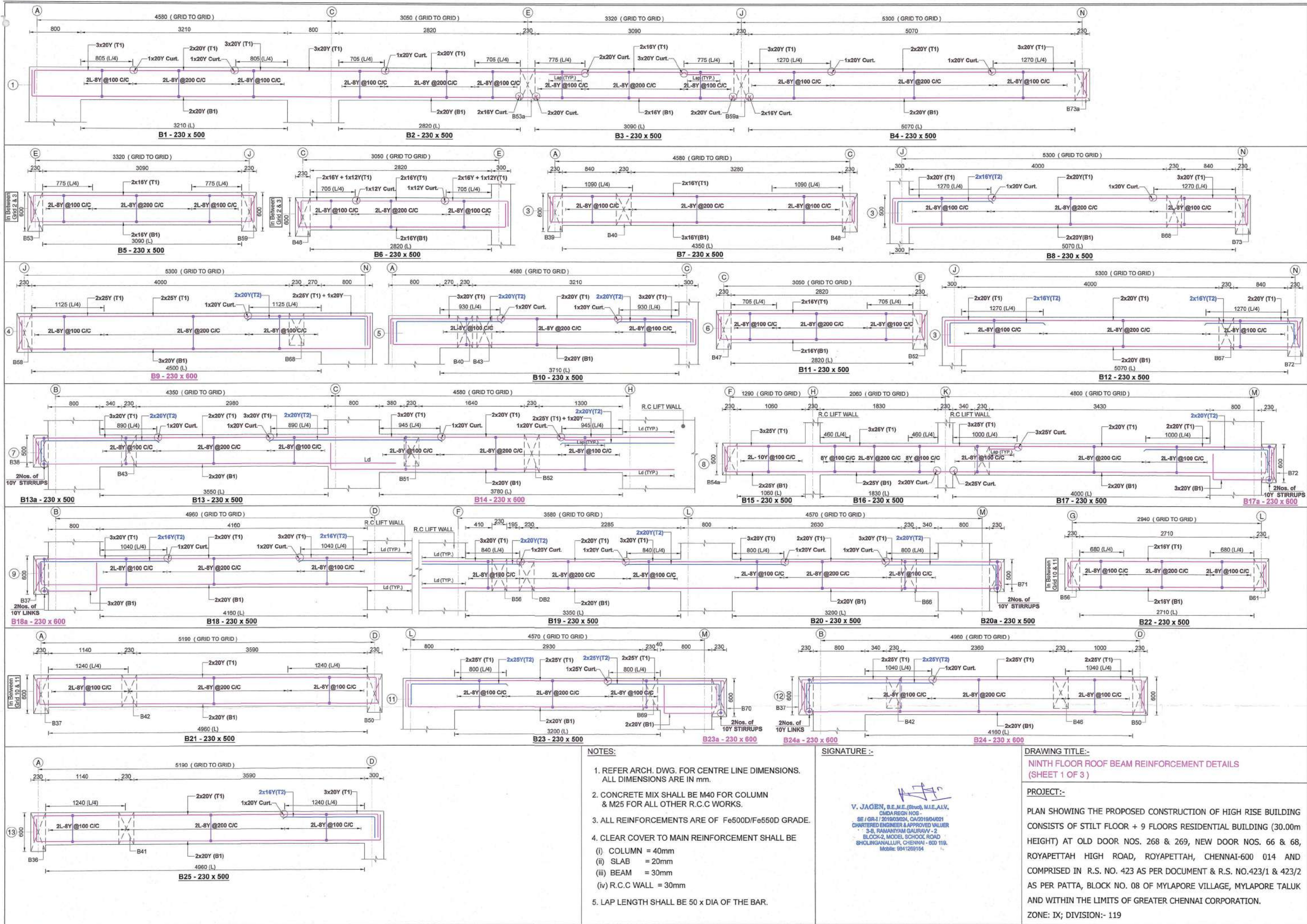
V. JAGEN

V. JAGEN, B.E., M.E. (Struct), M.I.E. A.I.V.,
 CMDA REGN NOS.
 SE/GR-1/2018/03/024, CA/2018/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANNAM GAURAVV - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 118.
 Mobile: 9841269164

DRAWING TITLE:-

NINTH FLOOR ROOF SLAB LAYOUT

PROJECT:-
 PLAN SHOWING THE PROPOSED CONSTRUCTION OF HIGH RISE BUILDING CONSISTS OF STILT FLOOR + 9 FLOORS RESIDENTIAL BUILDING (30.00m HEIGHT) AT OLD DOOR NOS. 268 & 269, NEW DOOR NOS. 66 & 68, ROYAPETTAH HIGH ROAD, ROYAPETTAH, CHENNAI-600 014 AND COMPRISED IN R.S. NO. 423 AS PER DOCUMENT & R.S. NO.423/1 & 423/2 AS PER PATTI, BLOCK NO. 08 OF MYLAPORE VILLAGE, MYLAPORE TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.
 ZONE: IX; DIVISION:- 119



NOTES:

1. REFER ARCH. DWG. FOR CENTRE LINE DIMENSIONS. ALL DIMENSIONS ARE IN mm.
2. CONCRETE MIX SHALL BE M40 FOR COLUMN & M25 FOR ALL OTHER R.C.C WORKS.
3. ALL REINFORCEMENTS ARE OF Fe500D/Fe550D GRADE.
4. CLEAR COVER TO MAIN REINFORCEMENT SHALL BE
 - (i) COLUMN = 40mm
 - (ii) SLAB = 20mm
 - (iii) BEAM = 30mm
 - (iv) R.C.C WALL = 30mm
5. LAP LENGTH SHALL BE 50 x DIA OF THE BAR.

SIGNATURE :-

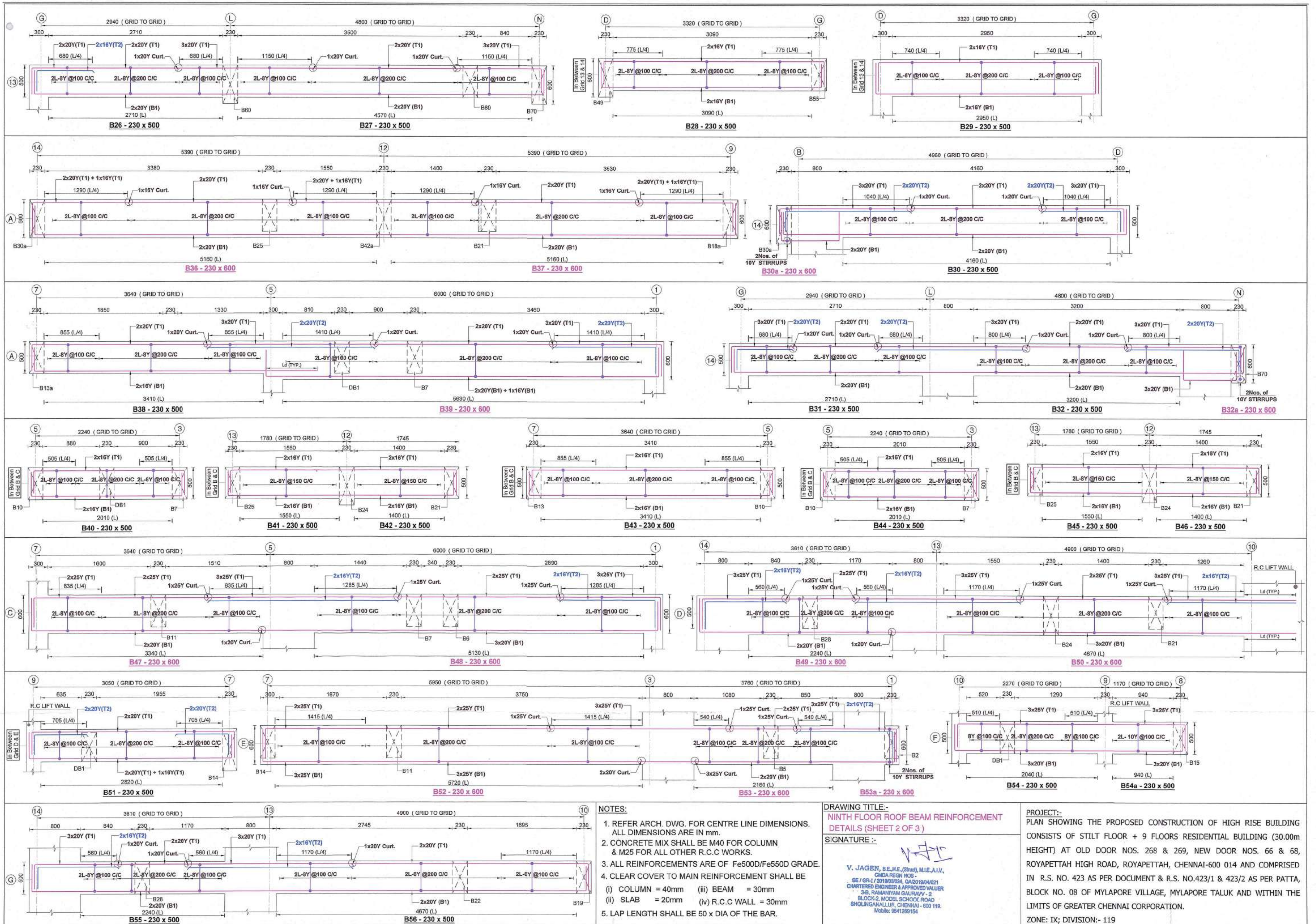
V. JAGEN, B.E., M.E. (Struct), M.E., A.I.V.,
CADA REGD. NOS -
SE / GR-1 / 201903024, CA/2018/04/021
CHARTERED ENGINEER & APPROVED VALUER
3-8, RAMANIAM GAURAVV - 2
BLOCK-2, MODEL SCHOOL ROAD
SHOLINGNALLUR, CHENNAI - 600 119.
Mobile: 9941269154

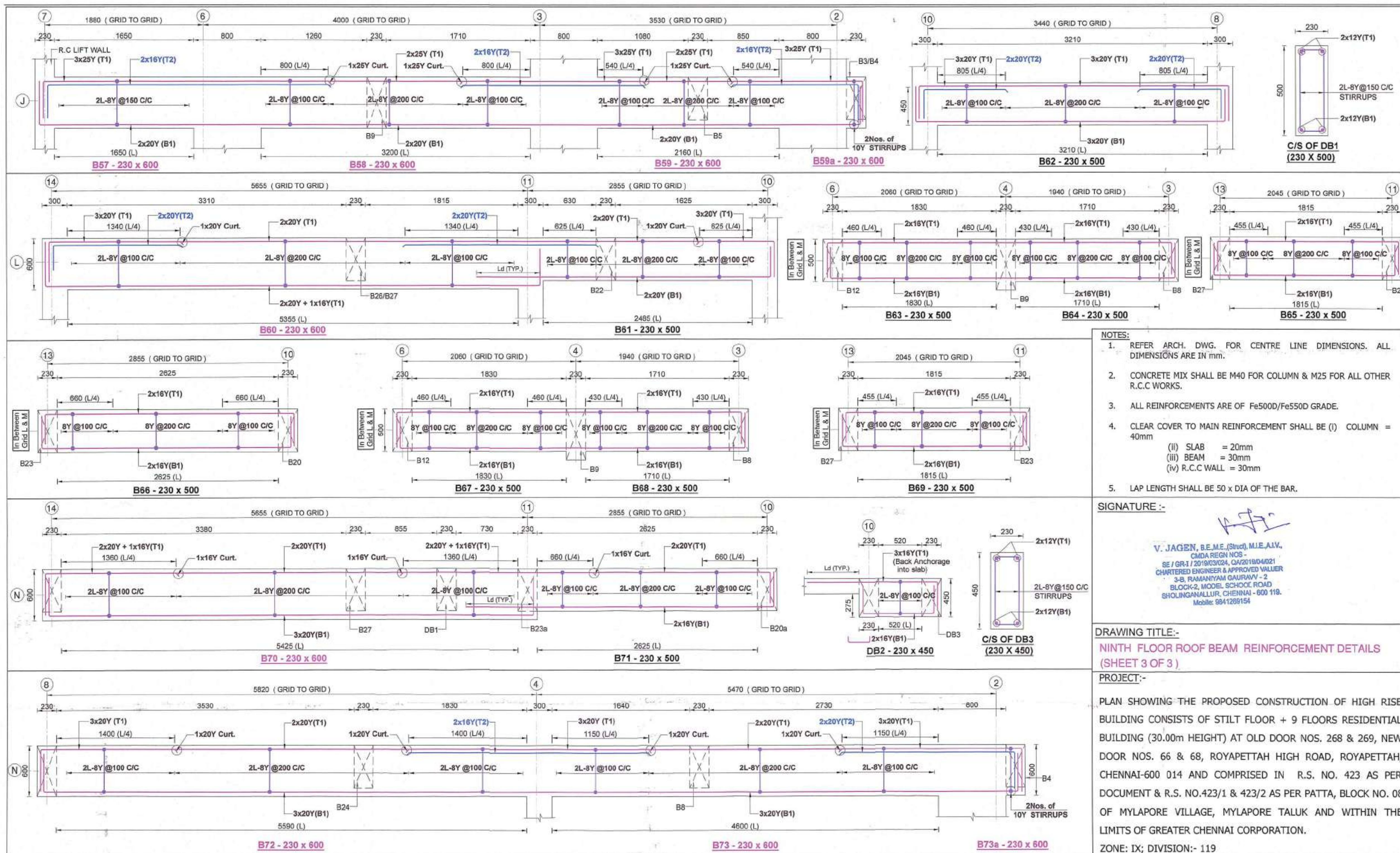
DRAWING TITLE:-

NINTH FLOOR ROOF BEAM REINFORCEMENT DETAILS
(SHEET 1 OF 3)

PROJECT:-

PLAN SHOWING THE PROPOSED CONSTRUCTION OF HIGH RISE BUILDING
CONSISTS OF STILT FLOOR + 9 FLOORS RESIDENTIAL BUILDING (30.00m
HEIGHT) AT OLD DOOR NOS. 268 & 269, NEW DOOR NOS. 66 & 68,
ROYAPETTAH HIGH ROAD, ROYAPETTAH, CHENNAI-600 014 AND
COMPRISED IN R.S. NO. 423 AS PER DOCUMENT & R.S. NO.423/1 & 423/2
AS PER PATTI, BLOCK NO. 08 OF MYLAPORE VILLAGE, MYLAPORE TALUK
AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.
ZONE: IX; DIVISION:- 119





- NOTES:**
1. REFER ARCH. DWG. FOR CENTRE LINE DIMENSIONS. ALL DIMENSIONS ARE IN mm.
 2. CONCRETE MIX SHALL BE M40 FOR COLUMN & M25 FOR ALL OTHER R.C.C WORKS.
 3. ALL REINFORCEMENTS ARE OF Fe500D/Fe550D GRADE.
 4. CLEAR COVER TO MAIN REINFORCEMENT SHALL BE (i) COLUMN = 40mm
(ii) SLAB = 20mm
(iii) BEAM = 30mm
(iv) R.C.C WALL = 30mm
 5. LAP LENGTH SHALL BE 50 x DIA OF THE BAR.

SIGNATURE :-

V. JAGEN

V. JAGEN, B.E., M.E., (Struct), M.J.E., A.I.V.,
 CMDA REGN NOS -
 SE / GR-1 / 2019/03/024, QAZ2018/04/021
 CHARTERED ENGINEER & APPROVED VALUER
 3-B, RAMANIYAM GAURAVY - 2
 BLOCK-2, MODEL SCHOOL ROAD
 SHOLINGANALLUR, CHENNAI - 600 119.
 Mobile: 9841269154

DRAWING TITLE:-
NINTH FLOOR ROOF BEAM REINFORCEMENT DETAILS
(SHEET 3 OF 3)

PROJECT:-

PLAN SHOWING THE PROPOSED CONSTRUCTION OF HIGH RISE BUILDING CONSISTS OF STILT FLOOR + 9 FLOORS RESIDENTIAL BUILDING (30.00m HEIGHT) AT OLD DOOR NOS. 268 & 269, NEW DOOR NOS. 66 & 68, ROYAPETTAH HIGH ROAD, ROYAPETTAH, CHENNAI-600 014 AND COMPRISED IN R.S. NO. 423 AS PER DOCUMENT & R.S. NO.423/1 & 423/2 AS PER PATTA, BLOCK NO. 08 OF MYLAPORE VILLAGE, MYLAPORE TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

ZONE: IX; DIVISION:- 119