Model a two-storey east villa with area plans and area schedules

Software: Autodesk Revit

Task statement

Model a two-storey residential villa (project name EAST VILLA) in imperial units (feet and inches) as an architectural building model with walls, doors, windows, a staircase and a lift core. Use the supplied dimensioned diagrams diagram_01.png, diagram_01_sheet2.png and their detail images (diagram_01_detail01.png to diagram_01_detail12.png) as the layout reference.

Ground floor: bedroom, toilet, dressing, service room, service toilet, service balcony, living area, staircase, guest toilet, sink, lift, two decks, dining room, drawing hall, washing room, kitchen wet, kitchen and a front parking area. The plot has a compound wall and a road frontage with landscaping. Key sizes (length x breadth): DRAWING HALL 17'-8" x 14'-9" (254 SF), BEDROOM 1 14'-9" x 15'-3" (225 SF), DINNING ROOM 18'-0" x 14'-9" (266 SF), KITCHEN 14'-8" x 15'-2" (222 SF), KITCHEN WET 7'-0" x 7'-5", WASHING ROOM 7'-0" x 6'-3" (44 SF), PARKING 28'-3" x 25'-2" (711 SF), LIVING AREA 18'-5" x 20'-5" (364 SF), STAIR CASE 13'-6" x 7'-3" (98 SF), G.TOILET 5'-11" x 5'-11", LIFT 1 5'-5" x 5'-11", SINK 5'-11" x 4'-0", SER.ROOM 7'-7" x 9'-6", TOILET 1 6'-11" x 9'-0", SER TOILET 8'-11" x 4'-11", SER BALCANY 8'-11" x 4'-7", DECK 13'-0" x 19'-8" (255 SF), DECK 8'-8" x 14'-9" (128 SF), DRESSING 1 7'-8" x 5'-11".

First floor: MASTER BEDROOMN 19'-8" x 15'-3" (302 SF), DRESSING.M 12'-2" x 15'-3" (186 SF), TOILET.M 7'-5" x 15'-3" (114 SF), FAMILY LOUNGE (373 SF), STAIR CASE 13'-6" x 7'-3" (98 SF), BEDROOM 2 16'-5" x 14'-9" (242 SF), TOILET 2 10'-3" x 5'-11" (61 SF), LIFT 2 5'-5" x 5'-11" (32 SF), DRESSING 4 9'-4" x 6'-7" (64 SF), TOILET 3 9'-4" x 7'-1" (66 SF), BEDROOM 3 14'-11" x 14'-5" (216 SF), SIT OUT 15'-4" x 14'-5" (216 SF), and PUJA 7'-5" x 6'-11".

Create levels for the ground and first floors. On each floor create area plans (GROUND FLOOR AREA, FIRST FLOOR AREA) with area boundaries and tagged areas, plus a dimension-tagged plan view (GROUND FLOOR DIM, FIRST FLOOR DIM) labelling each space with its length x breadth. Add Area Schedule (Rentable) schedules with fields Name, Level, length, Breadth and Area. Place views at 1/8" = 1'-0" on two sheets: 01 "GF PLAN AREA" (ground floor views and schedules) and 02 "FF PLAN AREA" (first floor views and schedule), with Owner EAST VILLA and Drawn by / Checked by LOKESH in the title block.

Rubrics

- **R1:** The model shall contain building walls, doors and windows forming the ground and first floor layouts.
- **R2:** The model shall contain a staircase and a lift shaft serving both floors.
- **R3:** The model shall define separate levels for the ground floor and the first floor.
- **R4:** The model shall contain a ground floor area named PARKING of approximately 711 SF (28'-3" x 25'-2").
- **R5:** The model shall contain a ground floor area named LIVING AREA of approximately 364 SF.
- **R6:** The model shall contain a ground floor area named DRAWING HALL of approximately 254 SF and DINNING ROOM of approximately 266 SF.
- **R7:** The model shall contain two ground floor areas named DECK of approximately 255 SF and 128 SF.
- **R8:** The model shall contain a first floor area named MASTER BEDROOMN of approximately 302 SF.
- **R9:** The model shall contain first floor areas named BEDROOM 2 (approximately 242 SF) and BEDROOM 3 (approximately 216 SF).
- **R10:** The drawing shall tag areas in the area plans with name and area in SF.

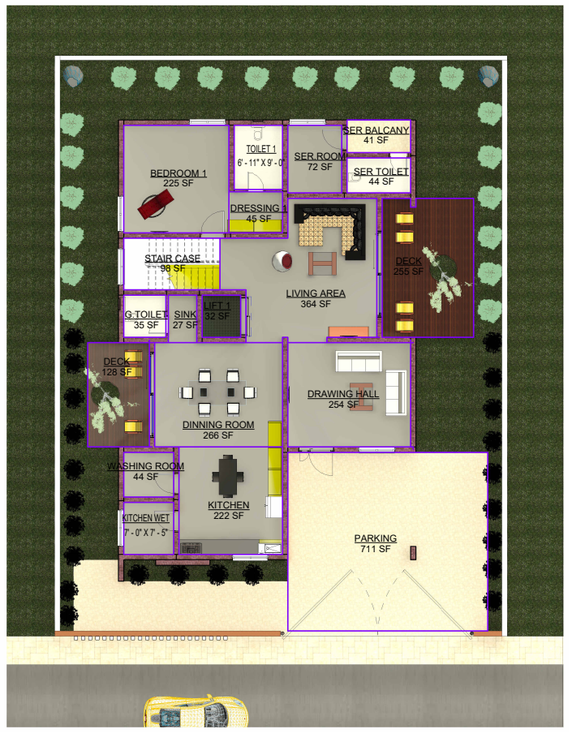
- **R11:** The drawing shall label spaces in the DIM plan views with length x breadth values such as "17' - 8" X 14' - 9"" for DRAWING HALL.
- **R12:** The model shall contain Area Schedule (Rentable) schedules listing Name, Level, length, Breadth and Area.
- **R13:** The model shall contain area plan views named GROUND FLOOR AREA and FIRST FLOOR AREA.
- **R14:** The model shall contain plan views named GROUND FLOOR DIM and FIRST FLOOR DIM at 1/8" = 1'-0".
- **R15:** The model shall contain a sheet numbered 01 named GF PLAN AREA with the ground floor views and schedules placed.
- **R16:** The model shall contain a sheet numbered 02 named FF PLAN AREA with the first floor views and schedule placed.
- **R17:** The drawing shall show Owner EAST VILLA and Drawn by / Checked by LOKESH in the sheet title blocks.

Input files

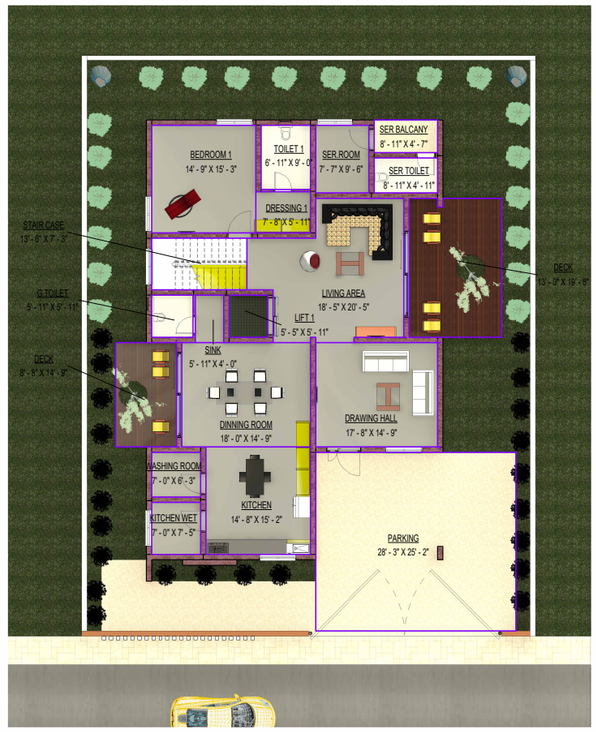
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- task_files/diagrams/diagram_01_detail10.png
- task_files/diagrams/diagram_01_detail11.png
- task_files/diagrams/diagram_01_detail12.png
- task_files/EAST_VILLA_ARCH.rvt

Deliverables

- **.rvt:** output_files/project_files/EAST_VILLA_ARCH.rvt: A Revit project EAST_VILLA_ARCH.rvt containing the two-storey villa model, ground and first floor levels, area plans, dimension-labelled plans, rentable area schedules and two sheets (01 GF PLAN AREA, 02 FF PLAN AREA).



1 GROUND FLOOR AREA
1/8" = 1'-0"



2 GROUND FLOOR DIM
1/8" = 1'-0"

Area Schedule (Rentable)				
Name	Level	length	Breadth	Area
DRAWING HALL	GROUND FLOOR AREA	17' - 8"	14' - 9"	254 SF
BEDROOM 1	GROUND FLOOR AREA	14' - 9"	15' - 3"	225 SF
DINNING ROOM	GROUND FLOOR AREA	18' - 0"	14' - 9"	266 SF
KITCHEN	GROUND FLOOR AREA	14' - 8"	15' - 2"	222 SF
KITCHEN WET	GROUND FLOOR AREA	7' - 0"	7' - 5"	52 SF
WASHING ROOM	GROUND FLOOR AREA	7' - 0"	6' - 3"	44 SF
PARKING	GROUND FLOOR AREA	28' - 3"	25' - 2"	711 SF
LIVING AREA	GROUND FLOOR AREA	18' - 5"	20' - 5"	364 SF
STAIR CASE	GROUND FLOOR AREA	13' - 6"	7' - 3"	98 SF

Area Schedule (Rentable)				
Name	Level	length	Breadth	Area
G.TOILET	GROUND FLOOR AREA	5' - 11"	5' - 11"	35 SF
LIFT 1	GROUND FLOOR AREA	5' - 5"	5' - 11"	32 SF
SINK	GROUND FLOOR AREA	5' - 11"	4' - 0"	27 SF
SER.ROOM	GROUND FLOOR AREA	7' - 7"	9' - 6"	72 SF
TOILET 1	GROUND FLOOR AREA	6' - 11"	9' - 0"	62 SF
SER TOILET	GROUND FLOOR AREA	8' - 11"	4' - 11"	44 SF
SER BALCANY	GROUND FLOOR AREA	8' - 11"	4' - 7"	41 SF
DECK	GROUND FLOOR AREA	13' - 0"	19' - 8"	255 SF
DECK	GROUND FLOOR AREA	8' - 8"	14' - 9"	128 SF

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No.	Description	Date

Owner

EAST VILLA

GF PLAN AREA

Project number	Project Number
Date	Issue Date
Drawn by	LOKESH
Checked by	LOKESH
	01
Scale	1/8" = 1'-0"

25-09-2026 00:22:43

DRAWING TITLE

TWO-STOREY EAST VILLA WITH AREA PLANS AND AREA SCHEDULES

GENERAL NOTES
1. DO NOT SCALE; USE FIGURED DIMENSIONS.

UNITS
AS SHOWN

SCALE
AS SHOWN

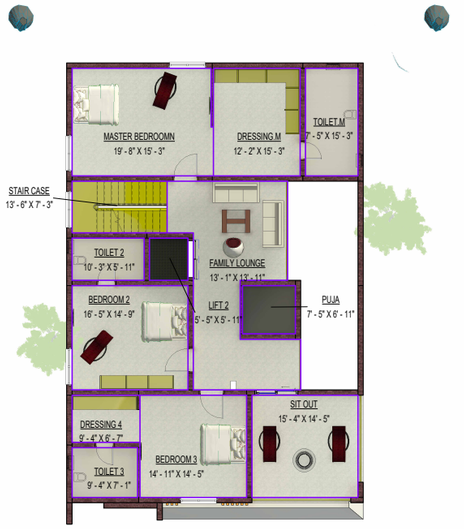
SIZE
A3

DRAWING NO.
MKV-BEB51C5D-01

SHEET
A-101



1 FIRST FLOOR AREA
1/8" = 1'-0"



2 FIRST FLOOR DIM
1/8" = 1'-0"

Area Schedule (Rentable)				
Name	Level	length	Breadth	Area
MASTER BEDROOMN	FIRST FLOOR AREA	19' - 8"	15' - 3"	302 SF
DRESSING.M	FIRST FLOOR AREA	12' - 2"	15' - 3"	186 SF
TOILET.M	FIRST FLOOR AREA	7' - 5"	15' - 3"	114 SF
FAMILY LOUNGE	FIRST FLOOR AREA	13' - 1"	13' - 11"	373 SF
STAIR CASE	FIRST FLOOR AREA	13' - 6"	7' - 3"	98 SF
BEDROOM 2	FIRST FLOOR AREA	16' - 5"	14' - 9"	242 SF
TOILET 2	FIRST FLOOR AREA	10' - 3"	5' - 11"	61 SF
LIFT 2	FIRST FLOOR AREA	5' - 5"	5' - 11"	32 SF
DRESSING 4	FIRST FLOOR AREA	9' - 4"	6' - 7"	64 SF
TOILET 3	FIRST FLOOR AREA	9' - 4"	7' - 1"	66 SF
BEDROOM 3	FIRST FLOOR AREA	14' - 11"	14' - 5"	216 SF
SIT OUT	FIRST FLOOR AREA	15' - 4"	14' - 5"	216 SF

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No.	Description	Date

Owner

EAST VILLA

FF PLAN AREA

Project number	Project Number
Date	Issue Date
Drawn by	LOKESH
Checked by	LOKESH
	02
Scale	1/8" = 1'-0"

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DRAWING TITLE

TWO-STOREY EAST VILLA WITH AREA PLANS AND AREA SCHEDULES

GENERAL NOTES
1. DO NOT SCALE; USE FIGURED DIMENSIONS.

UNITS
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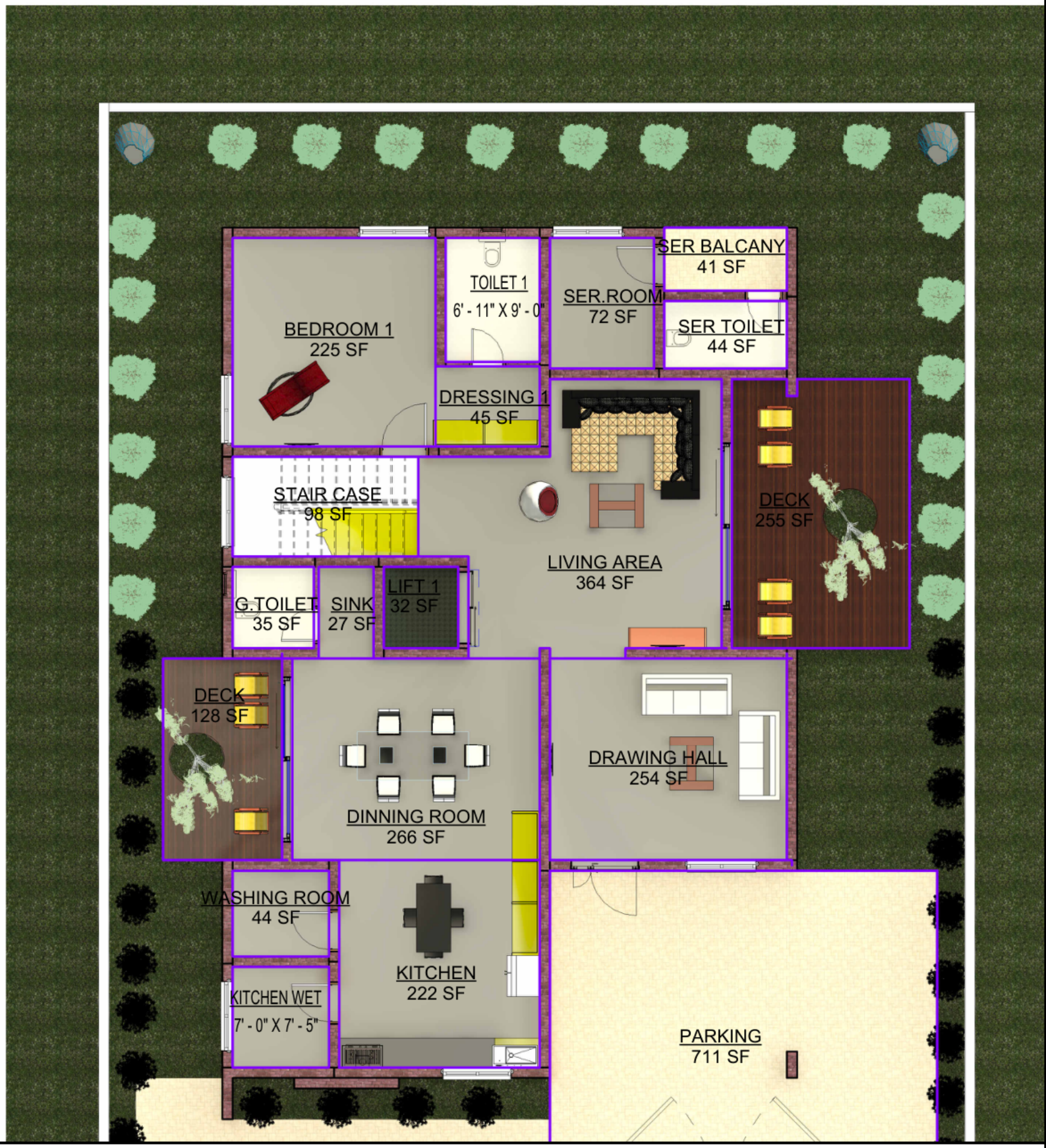
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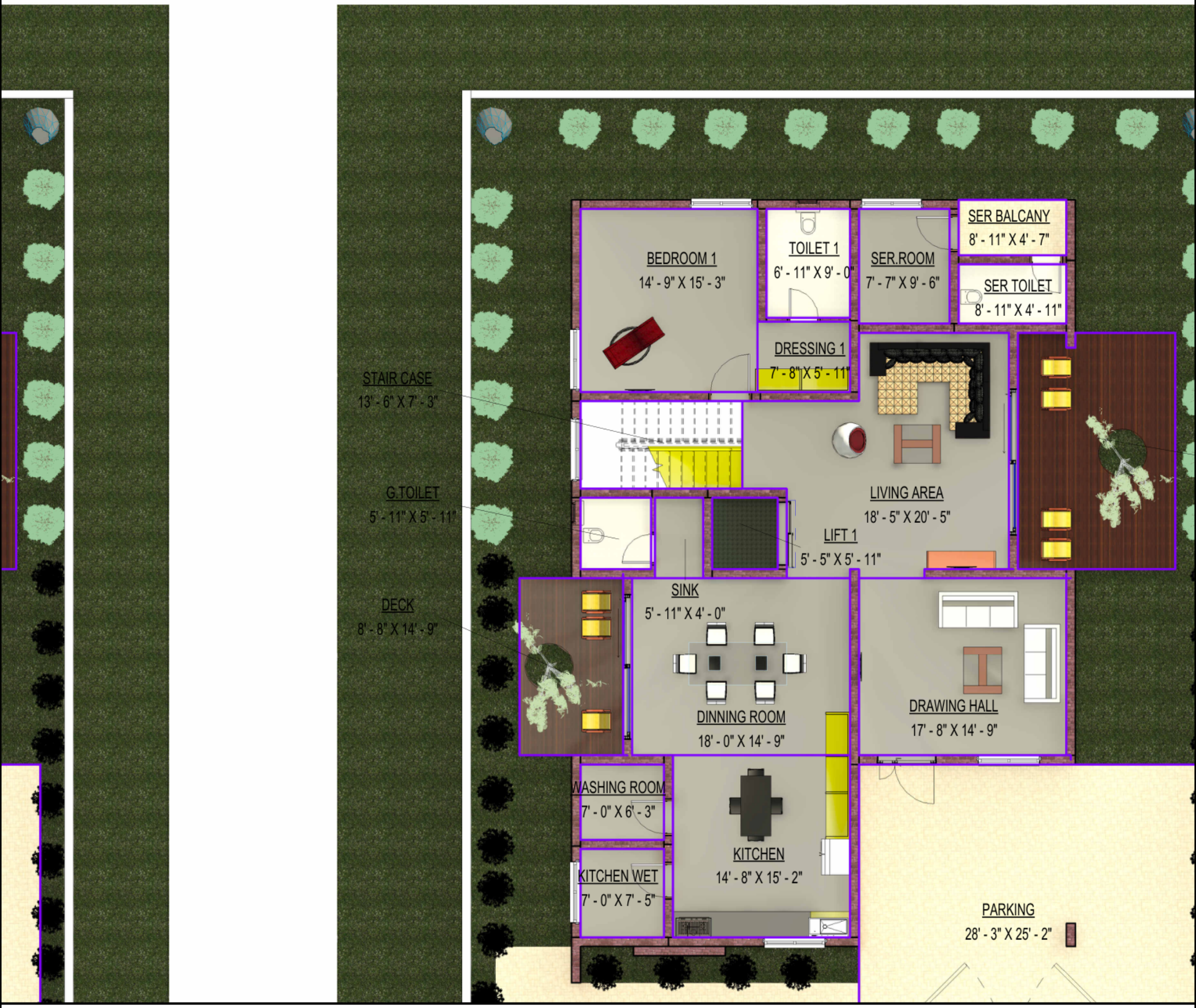
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SHEET
A-102

2 OF 2


BEDROOM 1
225 SF
TOILET 1
6' - 11" X 9' - 0"
SER.ROOM
72 SF
SER BALCANY
41 SF
SER TOILET
44 SF
DRESSING 1
45 SF
STAIR CASE
98 SF
LIVING AREA
364 SF
DECK
255 SF
G.TOILET
35 SF
SINK
27 SF
LIFT 1
32 SF
DECK
128 SF
DINNING ROOM
266 SF
DRAWING HALL
254 SF
WASHING ROOM
44 SF
KITCHEN
222 SF
KITCHEN WET
7' - 0" X 7' - 5"
PARKING
711 SF


BEDROOM 1
14' - 9" X 15' - 3"
TOILET 1
6' - 11" X 9' - 0"
SER.ROOM
7' - 7" X 9' - 6"
SER BALCANY
8' - 11" X 4' - 7"
SER TOILET
8' - 11" X 4' - 11"
DRESSING 1
7' - 8" X 5' - 11"
STAIR CASE
13' - 6" X 7' - 3"
LIVING AREA
18' - 5" X 20' - 5"
G.TOILET
5' - 11" X 5' - 11"
LIFT 1
5' - 5" X 5' - 11"
DECK
8' - 8" X 14' - 9"
SINK
5' - 11" X 4' - 0"
DINNING ROOM
18' - 0" X 14' - 9"
DRAWING HALL
17' - 8" X 14' - 9"
WASHING ROOM
7' - 0" X 6' - 3"
KITCHEN
14' - 8" X 15' - 2"
KITCHEN WET
7' - 0" X 7' - 5"
PARKING
28' - 3" X 25' - 2"



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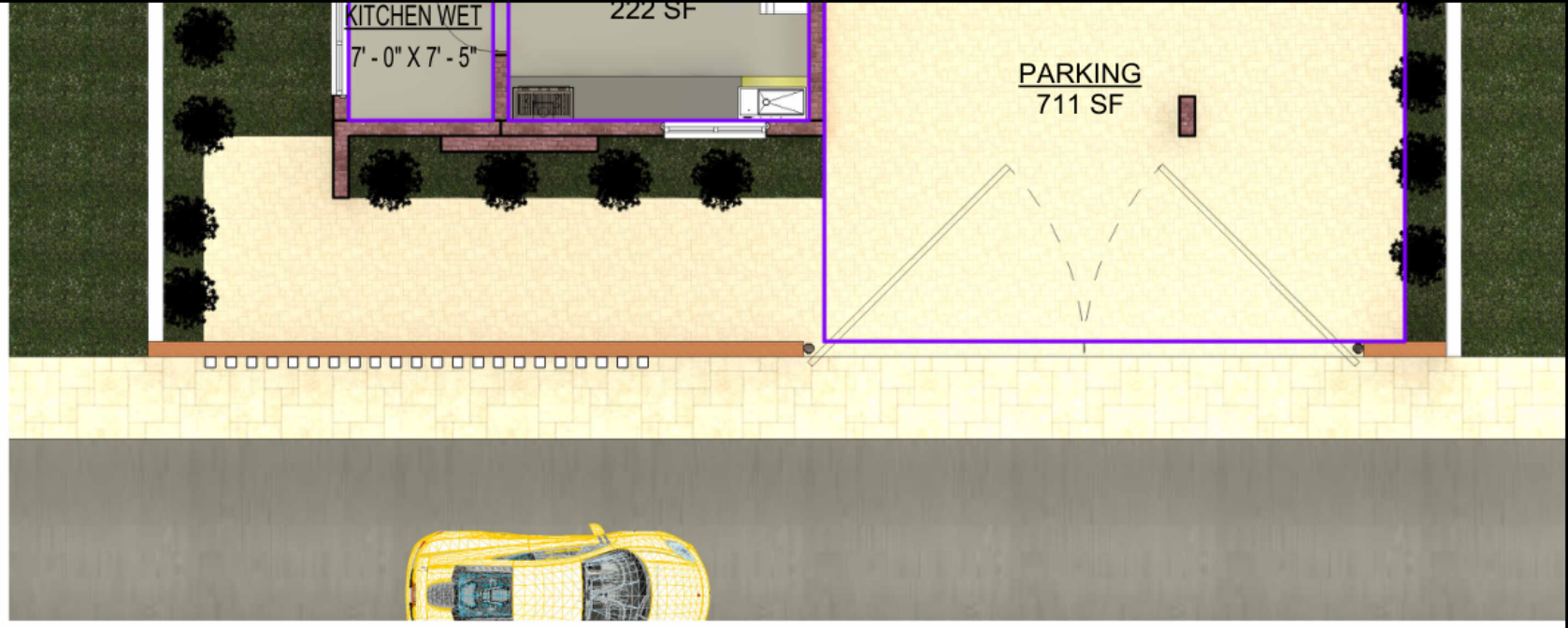
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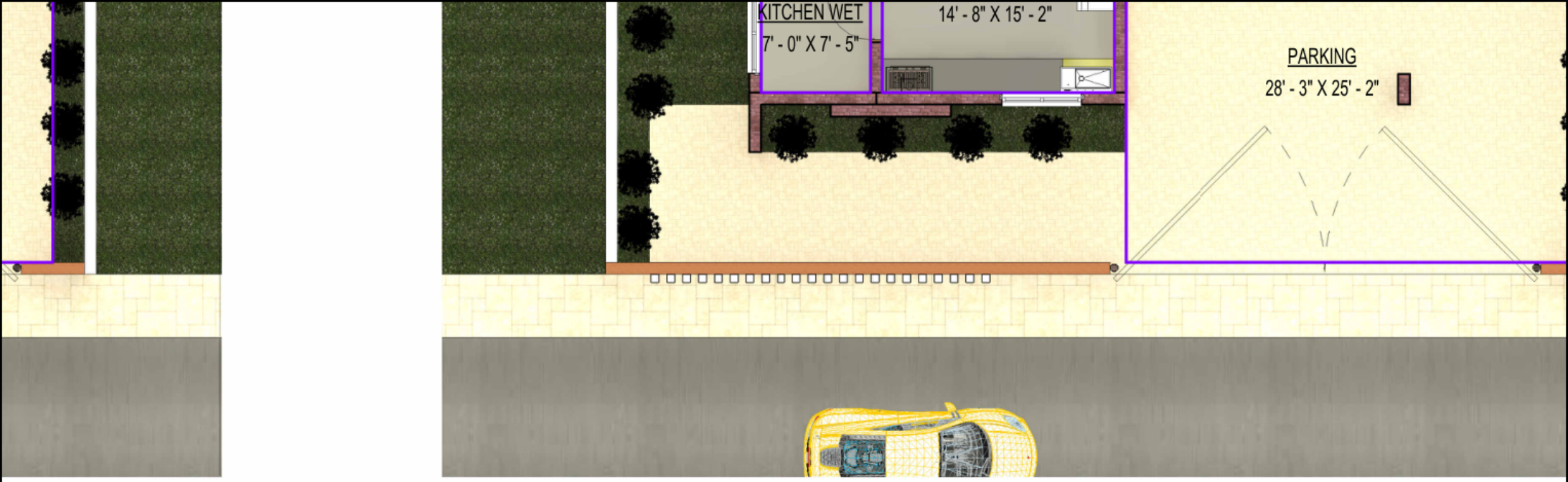
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No.	Description	Date



1 GROUND FLOOR AREA
1/8" = 1'-0"

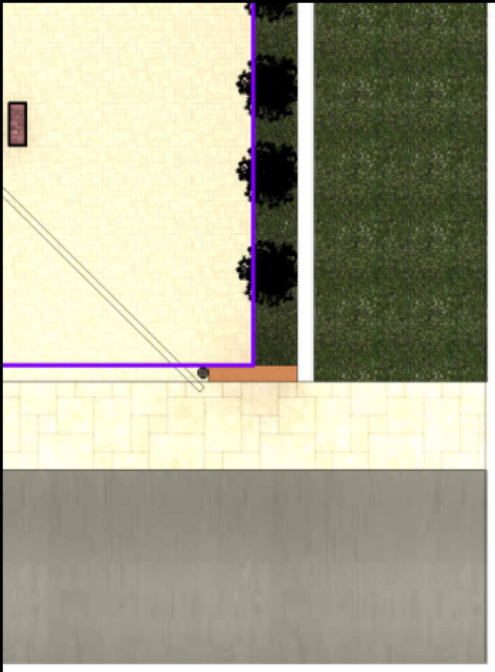
Area Schedule (Rentable)				
Name	Level	length	Breadth	
DRAWING HALL	GROUND FLOOR AREA	17' - 8"	14' - 9"	254
BEDROOM 1	GROUND FLOOR AREA	14' - 9"	15' - 3"	225
DINNING ROOM	GROUND FLOOR AREA	18' - 0"	14' - 9"	266
KITCHEN	GROUND FLOOR AREA	14' - 8"	15' - 2"	222
KITCHEN WET	GROUND FLOOR AREA	7' - 0"	7' - 5"	52 S
WASHING ROOM	GROUND FLOOR AREA	7' - 0"	6' - 3"	44 S
PARKING	GROUND FLOOR AREA	28' - 3"	25' - 2"	711
LIVING AREA	GROUND FLOOR AREA	18' - 5"	20' - 5"	364
STAIR CASE	GROUND FLOOR AREA	13' - 6"	7' - 3"	98 S



2 GROUND FLOOR DIM
1/8" = 1'-0"

e)	
Breadth	Area
14' - 9"	254 SF
15' - 3"	225 SF
14' - 9"	266 SF
15' - 2"	222 SF
7' - 5"	52 SF
6' - 3"	44 SF
25' - 2"	711 SF
20' - 5"	364 SF
7' - 3"	98 SF

Area Schedule (Rentable)				
Name	Level	length	Breadth	Area
G.TOILET	GROUND FLOOR AREA	5' - 11"	5' - 11"	35 SF
LIFT 1	GROUND FLOOR AREA	5' - 5"	5' - 11"	32 SF
SINK	GROUND FLOOR AREA	5' - 11"	4' - 0"	27 SF
SER.ROOM	GROUND FLOOR AREA	7' - 7"	9' - 6"	72 SF
TOILET 1	GROUND FLOOR AREA	6' - 11"	9' - 0"	62 SF
SER TOILET	GROUND FLOOR AREA	8' - 11"	4' - 11"	44 SF
SER BALCANY	GROUND FLOOR AREA	8' - 11"	4' - 7"	41 SF
DECK	GROUND FLOOR AREA	13' - 0"	19' - 8"	255 SF
DECK	GROUND FLOOR AREA	8' - 8"	14' - 9"	128 SF



No.	Description	Date

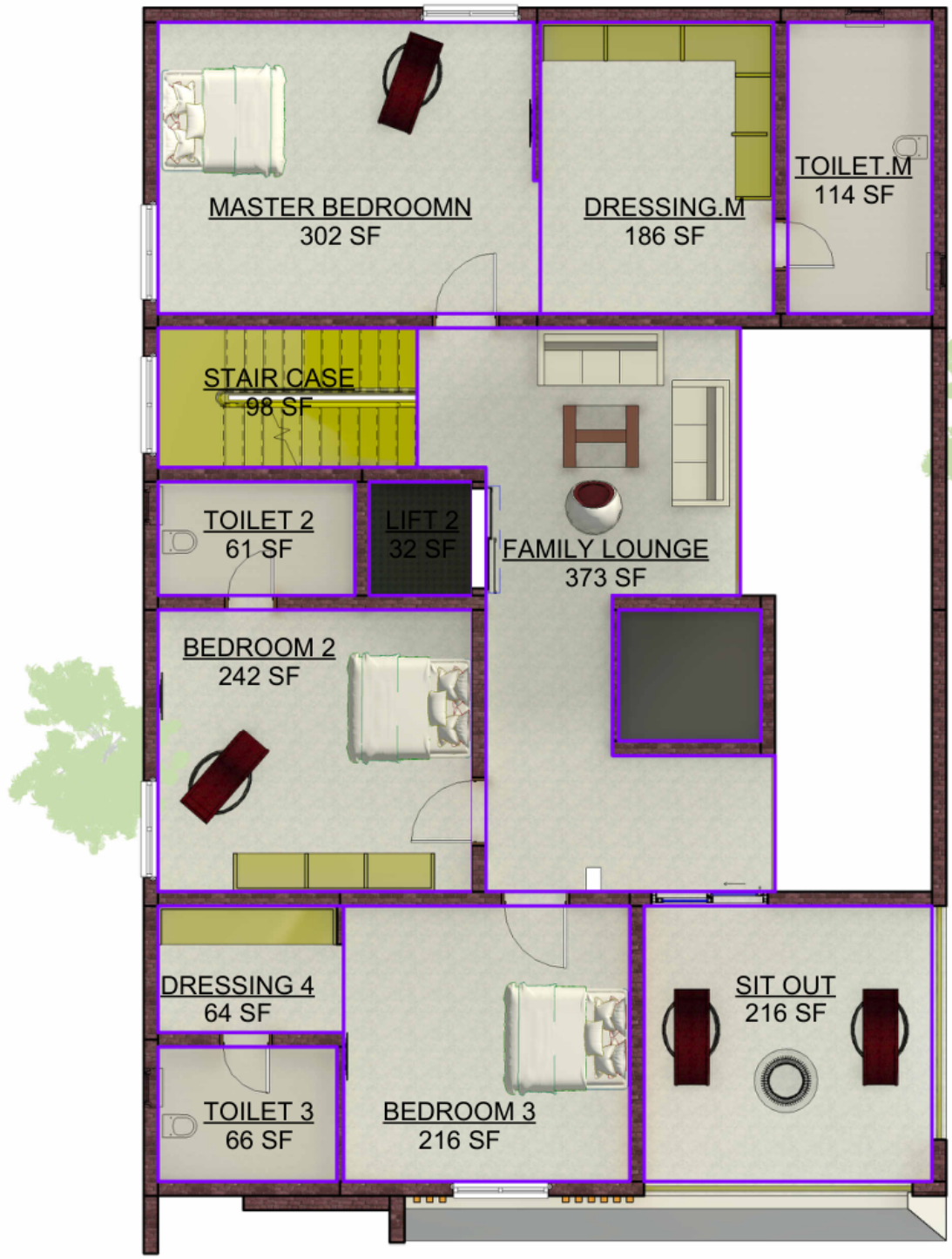
Owner

EAST VILLA

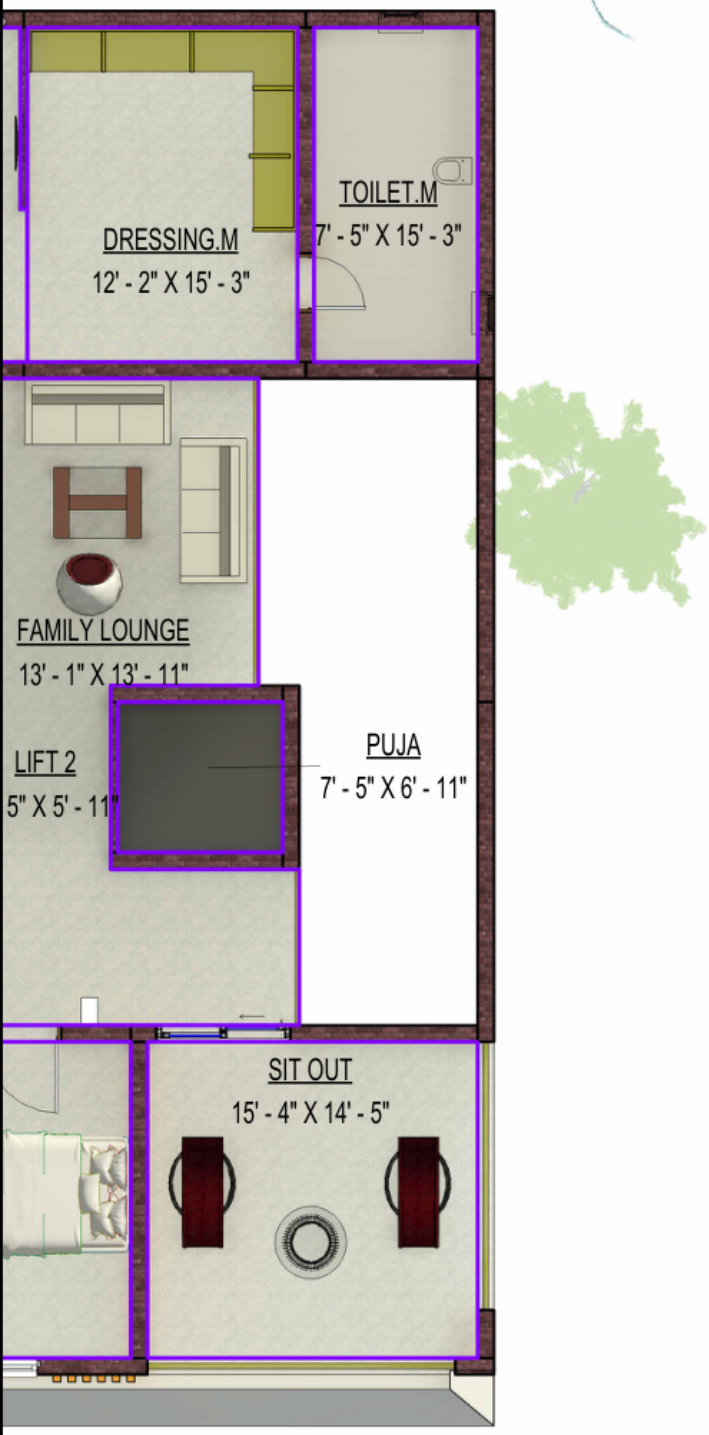
GF PLAN AREA

Project number	Project Number
Date	Issue Date
Drawn by	LOKESH
Checked by	LOKESH
	01
Scale	1/8" = 1'-0"

25-09-2026 00:22:43


MASTER BEDROOMN
302 SF
DRESSING.M
186 SF
TOILET.M
114 SF
STAIR CASE
98 SF
TOILET 2
61 SF
LIFT 2
32 SF
FAMILY LOUNGE
373 SF
BEDROOM 2
242 SF
DRESSING 4
64 SF
TOILET 3
66 SF
BEDROOM 3
216 SF
SIT OUT
216 SF


MASTER BEDROOMN
19' - 8" X 15' - 3"
DRESSING.M
12' - 2" X 15' - 3
STAIR CASE
13' - 6" X 7' - 3"
TOILET 2
10' - 3" X 5' - 11"
FAMILY LOUNGE
13' - 1" X 13' - 11"
BEDROOM 2
16' - 5" X 14' - 9"
LIFT 2
5' - 5" X 5' - 11"
DRESSING 4
9' - 4" X 6' - 7"
TOILET 3
9' - 4" X 7' - 1"
BEDROOM 3
14' - 11" X 14' - 5"

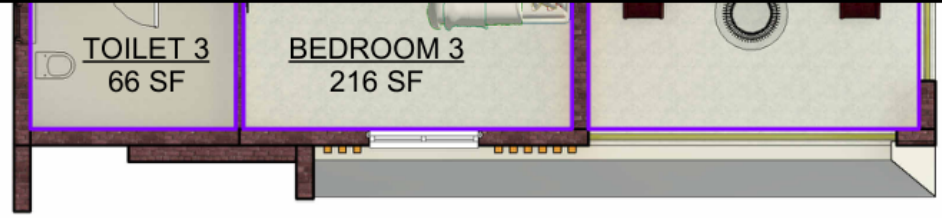


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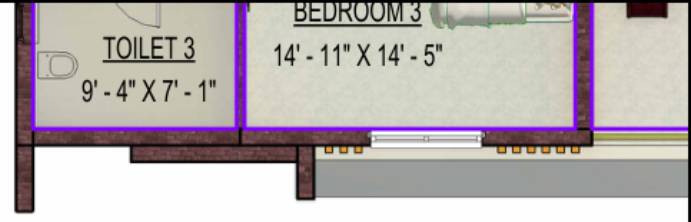
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No.	Description	Date



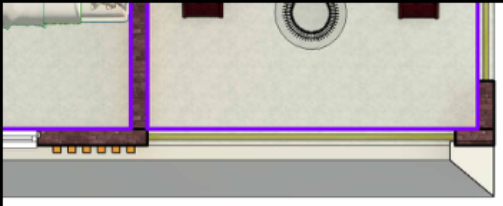
1 FIRST FLOOR AREA
1/8" = 1'-0"

Area Schedule (Rentable)			
Name	Level	length	Bre
MASTER BEDROOMN	FIRST FLOOR AREA	19' - 8"	15' - 3
DRESSING.M	FIRST FLOOR AREA	12' - 2"	15' - 3
TOILET.M	FIRST FLOOR AREA	7' - 5"	15' - 3
FAMILY LOUNGE	FIRST FLOOR AREA	13' - 1"	13' - 1
STAIR CASE	FIRST FLOOR AREA	13' - 6"	7' - 3"
BEDROOM 2	FIRST FLOOR AREA	16' - 5"	14' - 9
TOILET 2	FIRST FLOOR AREA	10' - 3"	5' - 11
LIFT 2	FIRST FLOOR AREA	5' - 5"	5' - 11
DRESSING 4	FIRST FLOOR AREA	9' - 4"	6' - 7"
TOILET 3	FIRST FLOOR AREA	9' - 4"	7' - 1"
BEDROOM 3	FIRST FLOOR AREA	14' - 11"	14' - 5
SIT OUT	FIRST FLOOR AREA	15' - 4"	14' - 5



2 FIRST FLOOR DIM
1/8" = 1'-0"

ule (Rentable)		
length	Breadth	Area
19' - 8"	15' - 3"	302 SF
12' - 2"	15' - 3"	186 SF
7' - 5"	15' - 3"	114 SF
13' - 1"	13' - 11"	373 SF
13' - 6"	7' - 3"	98 SF
16' - 5"	14' - 9"	242 SF
10' - 3"	5' - 11"	61 SF
5' - 5"	5' - 11"	32 SF
9' - 4"	6' - 7"	64 SF
9' - 4"	7' - 1"	66 SF
14' - 11"	14' - 5"	216 SF
15' - 4"	14' - 5"	216 SF



No.	Description	Date

Owner

EAST VILLA

FF PLAN AREA

Project number	Project Number
Date	Issue Date
Drawn by	LOKESH
Checked by	LOKESH
	02
Scale	1/8" = 1'-0"

25-09-2026 00:25:48