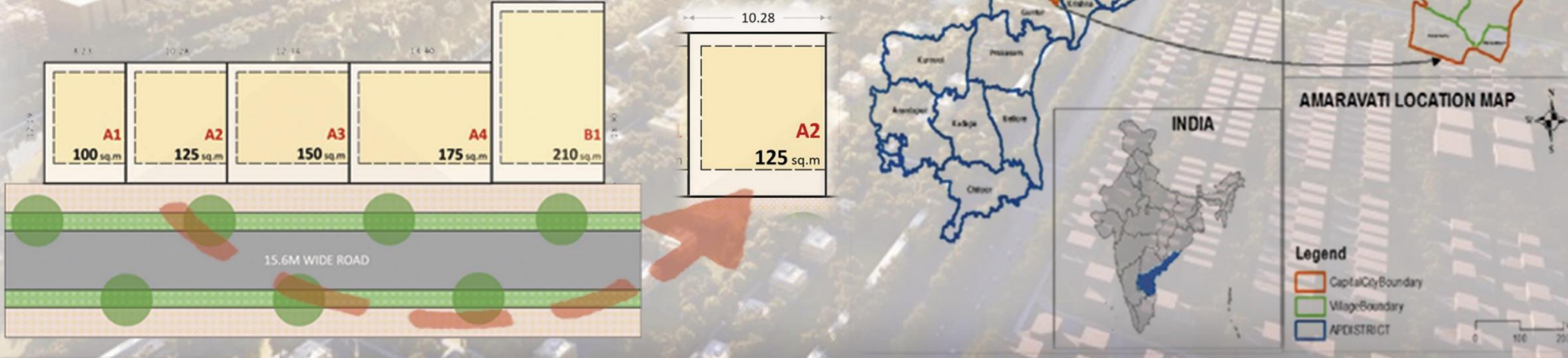


INTRODUCTION TO SITE :

Through this project the main aim for us was to create a small scale residential development on a plot size of 125 sqm (in four cardinal directions) so that we can maximize functional utility giving importance to every space for proper circulation and movement for the end user. Green spaces have also been incorporated as it serves multiple purposes like ventilation, visual aesthetics etc. Openings (its size, shape, orientation) have been considered for daylighting, ventilation and view. The site has been carefully analysed in terms of climatic conditions, topography, building codes and regulations before approaching the design.

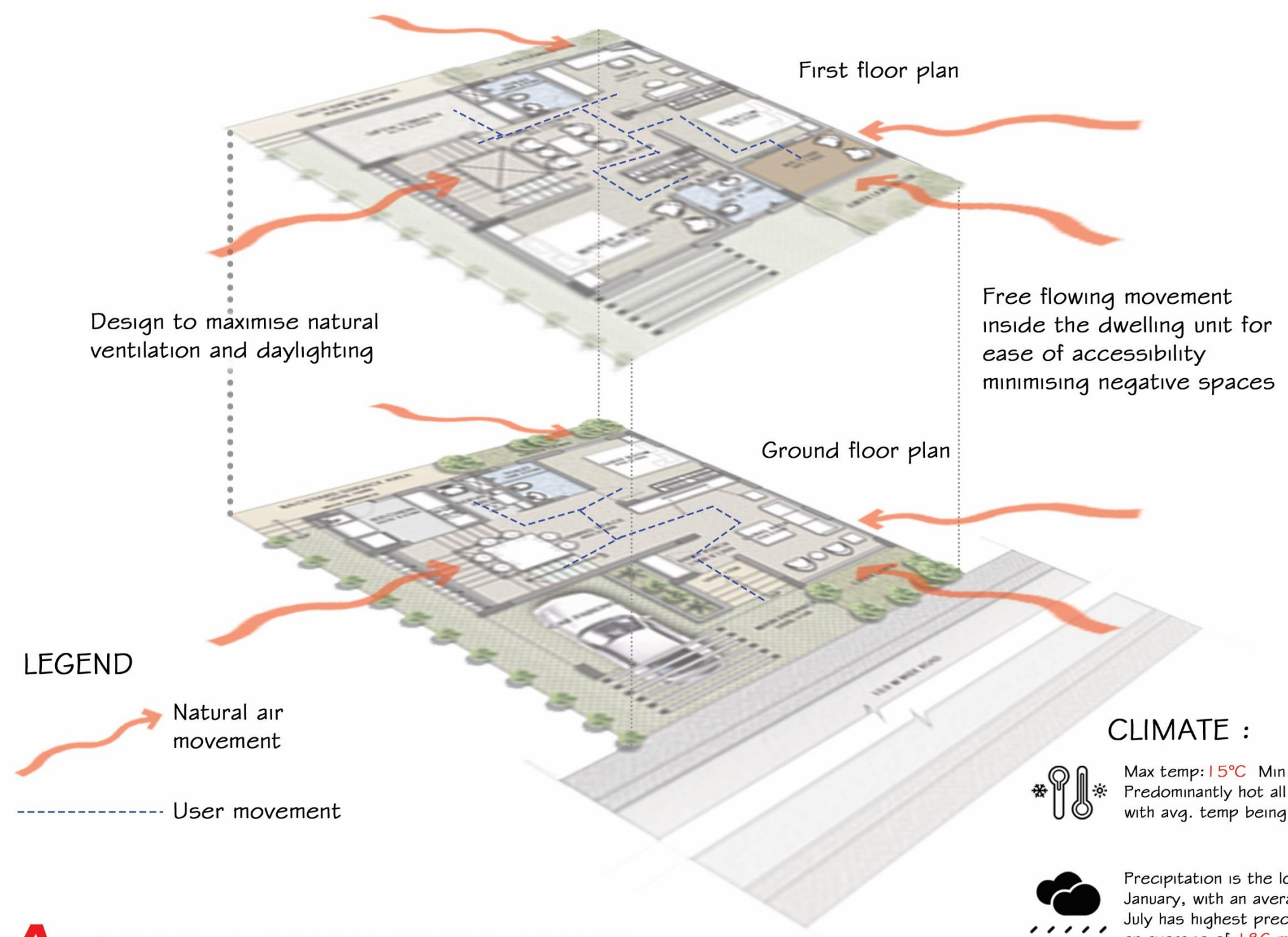


DESIGN PHILOSOPHIES :

1. Abiding by the principles of Vastu (in all aspects)
2. Minimalistic approach: Simplicity and Robustness
3. Priority to functionality and movement pattern
4. Avoiding negative spaces or converting them into usable areas
5. Adopting suitable and cost effective design - construction techniques
6. Retaining the character of the place thereby not disturbing the essence and flavour of their vernacular architecture
7. Climatic considerations and focus on methods to achieve sustainability



AIR CIRCULATION & USER MOVEMENT PATTERN :



ADOPTED DESIGN TECHNIQUES :

ROOF

Section of roof showing usage of clay pots

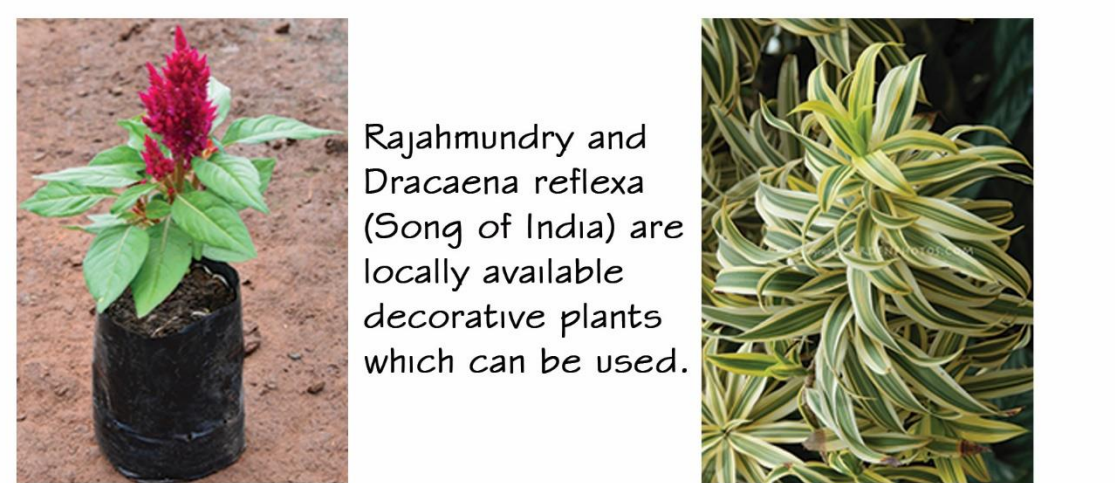
Clay pots (locally called matka) has been used in the roof treatment as a passive technique. This kind of slab called a filler slab. It aids in reducing the heat gain and works on the principle of evaporative cooling. Thus the temperature will be somewhat in check. This is an cost effective measure and is adopted in many places all over the country.



PLANTATIONS

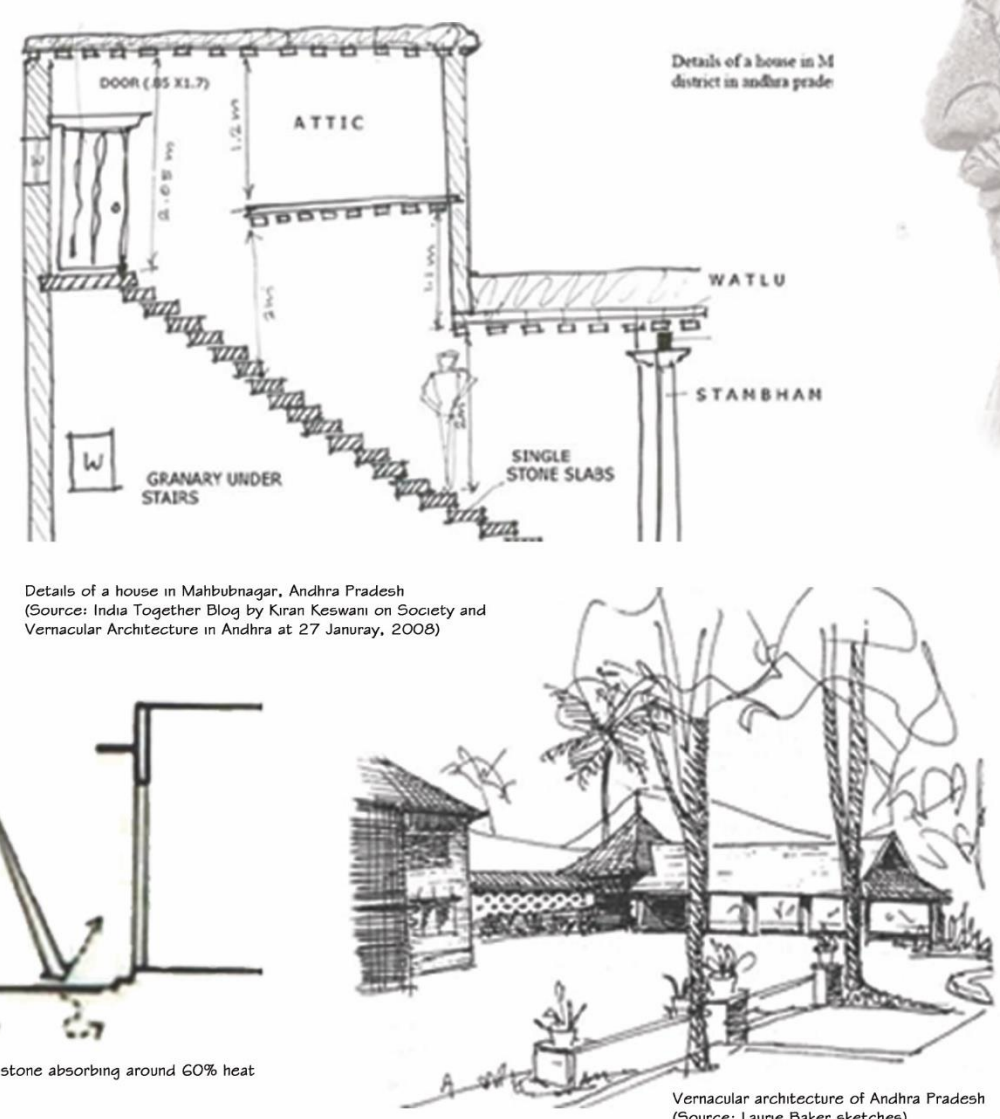
Climbers growing in the natural ground

Climbers used on the brick jali walls to add to the aesthetic value with almost little maintenance. These can grow naturally and does not require much attention.

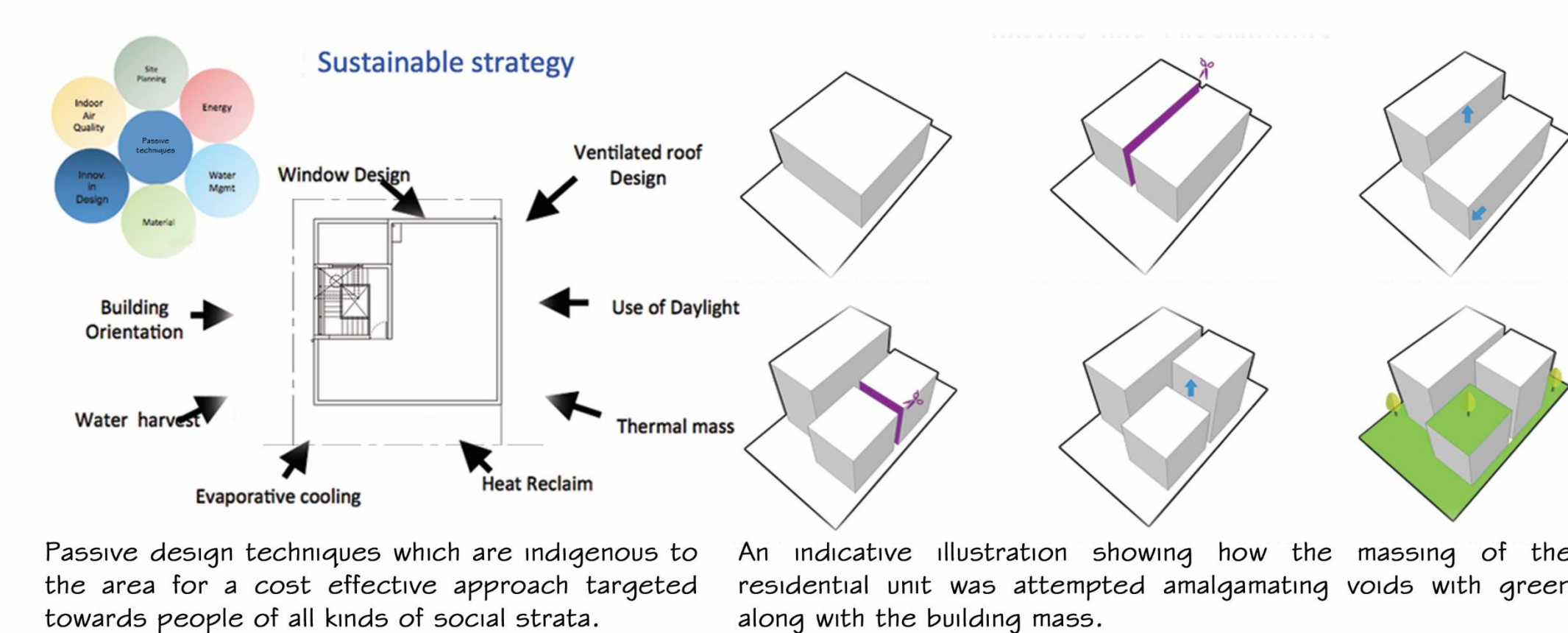


CONCEPTUAL DEVELOPMENT :

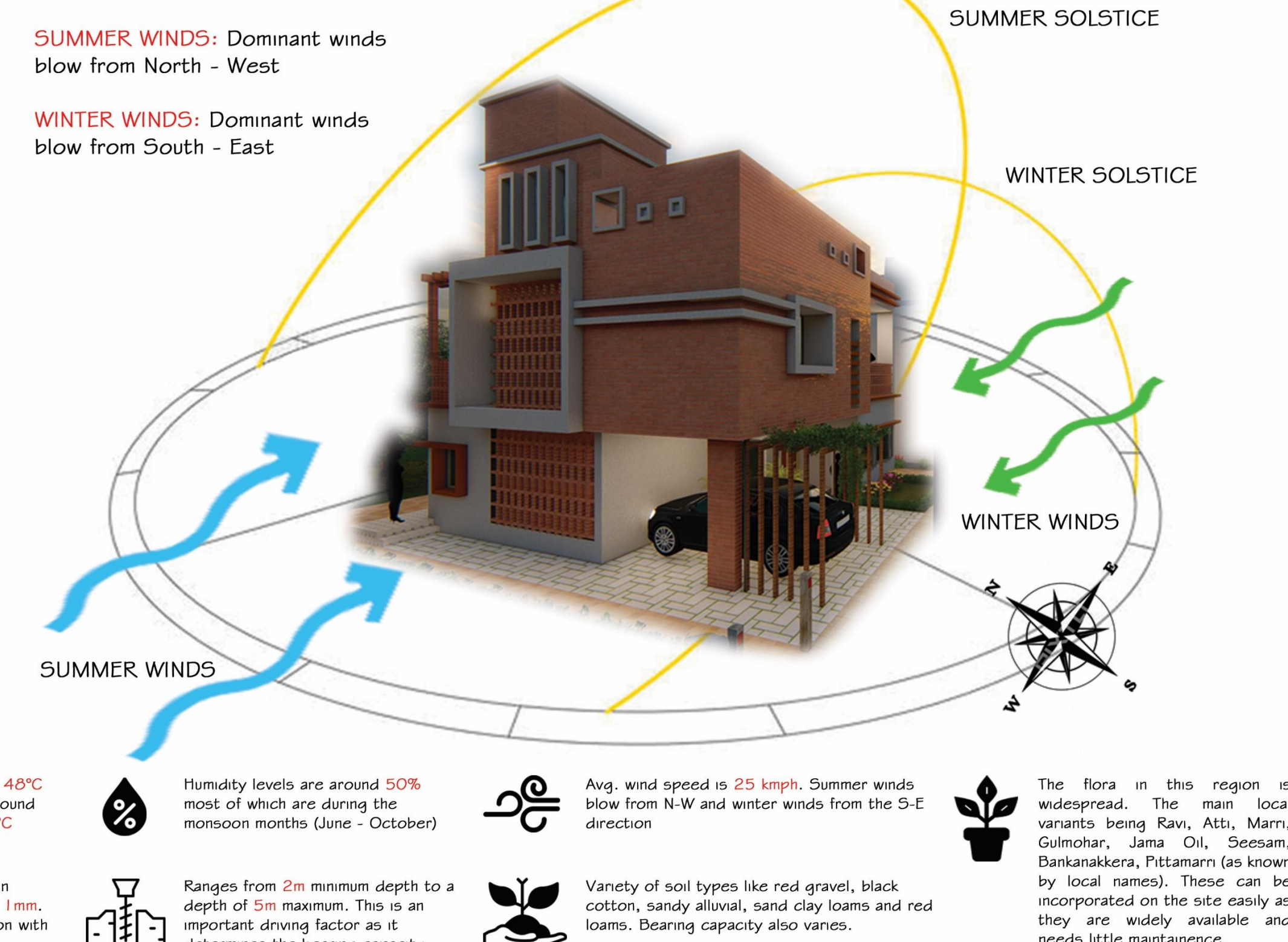
- Ecological: Earth, the planet of our own
- Economic: Being Cost-effective
- Human: Respecting Individuality
- Cultural: Incorporating Modernity
- Historical- Learning from Tradition and Vernacular Styles



FORMAL DEVELOPMENT & SUSTAINABILITY STRATEGIES :



SUN PATH & WIND DIRECTION :



GRASS PAVERS

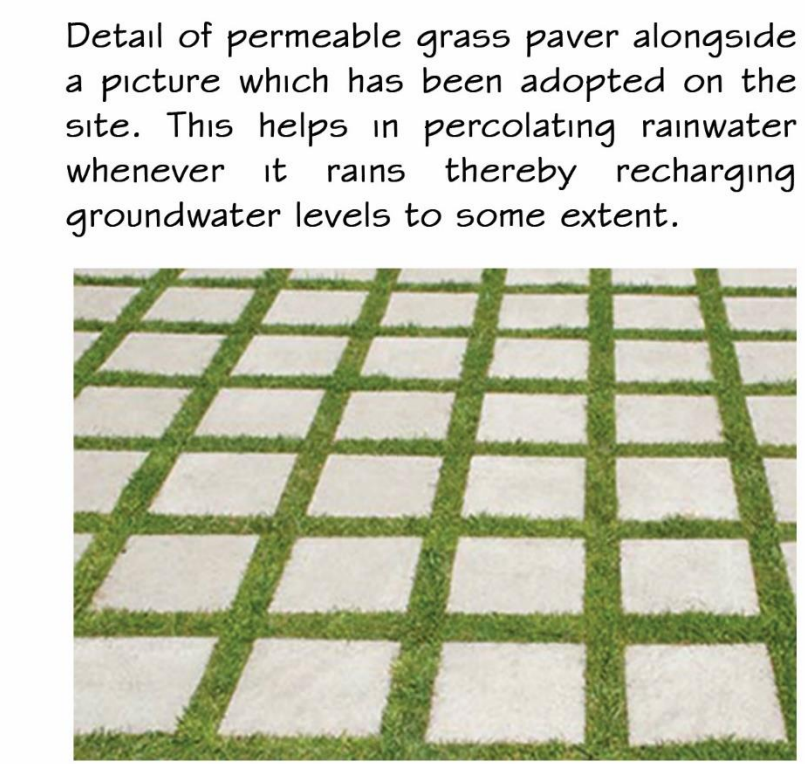
Grass grows in friable soil in 50x50mm pockets

60/80mm pavers

35-50mm grit or grit sand bedding layer

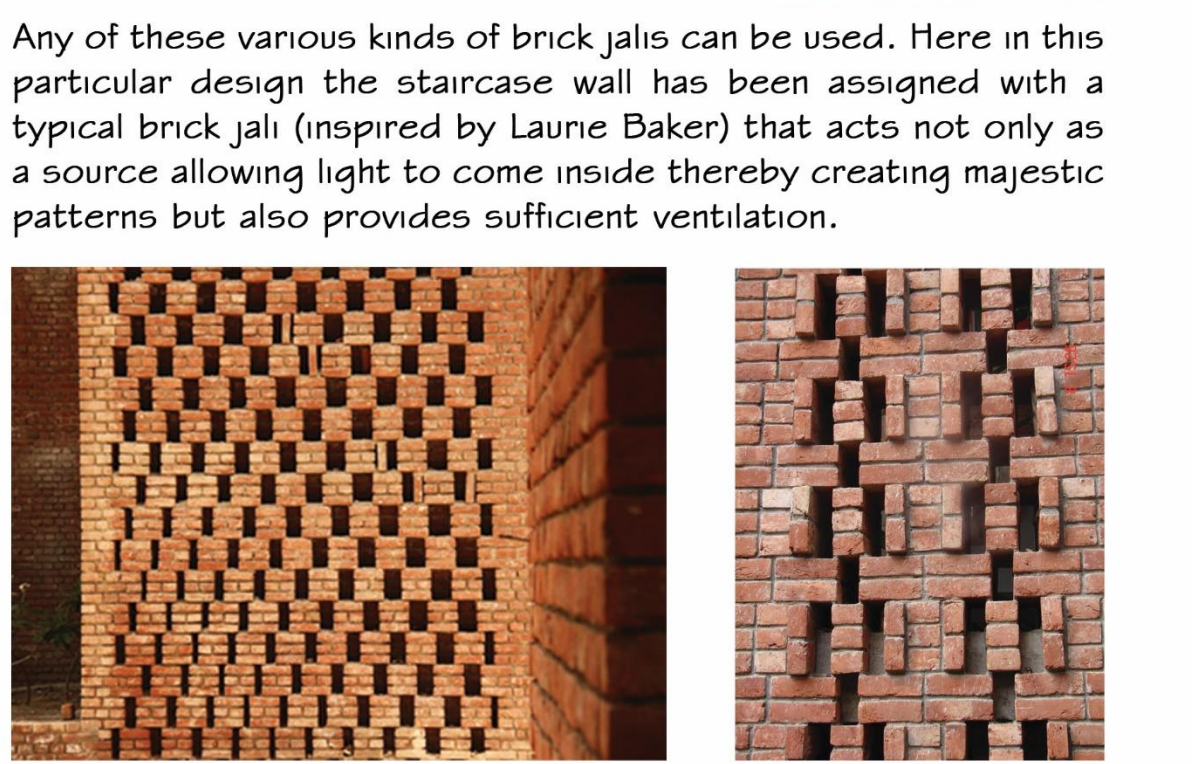
100-150mm sub-base

Detail of permeable grass paver alongside a picture which has been adopted on the site. This helps in percolating rainwater whenever it rains thereby recharging groundwater levels to some extent.



BRICK JALI

Any of these various kinds of brick jalis can be used. Here in this particular design the staircase wall has been assigned with a typical brick jali (inspired by Laurie Baker) that acts not only as a source allowing light to come inside thereby creating majestic patterns but also provides sufficient ventilation.



CAVITY WALL

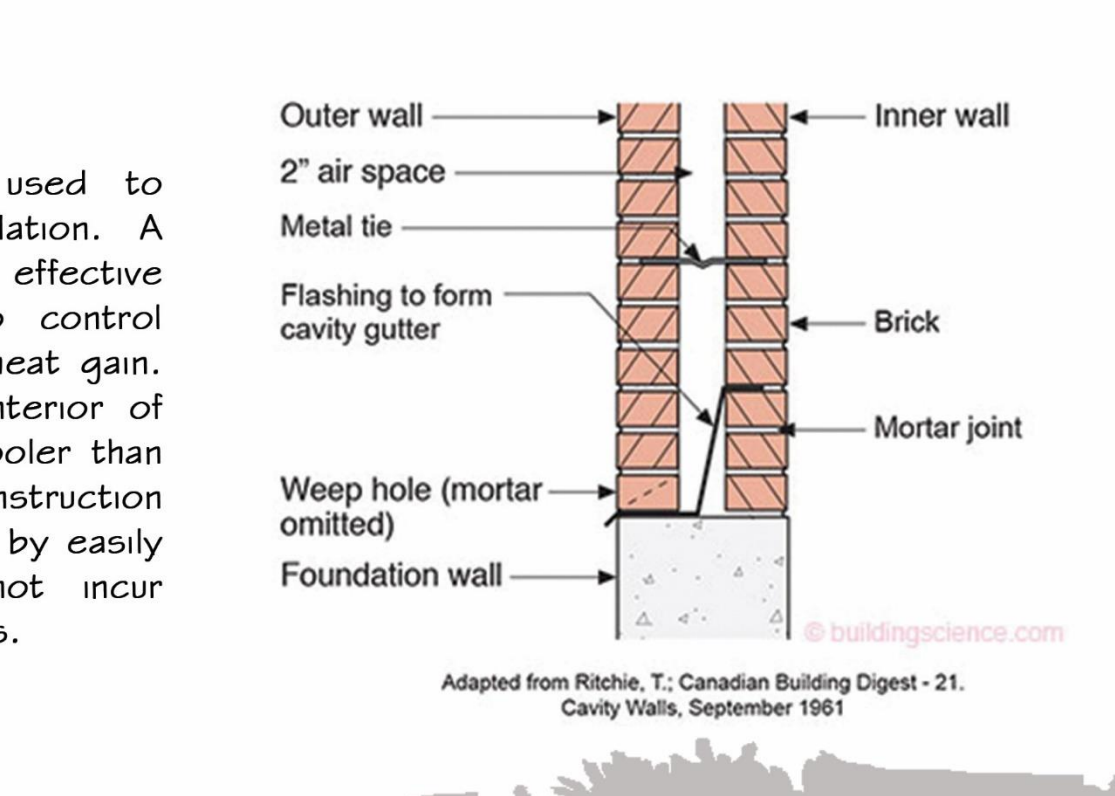
Two inch minimum cavity

Metal ties

Flashing

Weepholes

Cavity wall used to provide insulation. A simple yet effective technique to control the internal heat gain. Keeps the interior of the house cooler than usual. Construction can be done by easily and does not incur high expenses.



RECHARGE PIT

BBM 115 THICK

INT. FINISHED WITH CEMENT SLURRY

CHANNEL 0.25 WIDE SLOPE 1:100

PCC 100 THICK

BRICK LINING WITH OPEN JOINTS AND VOIDS

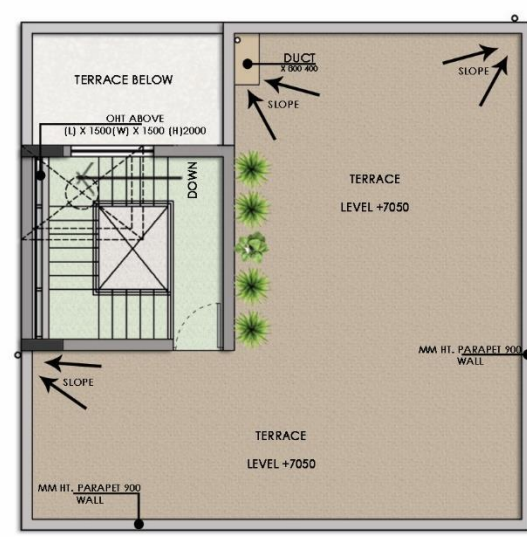
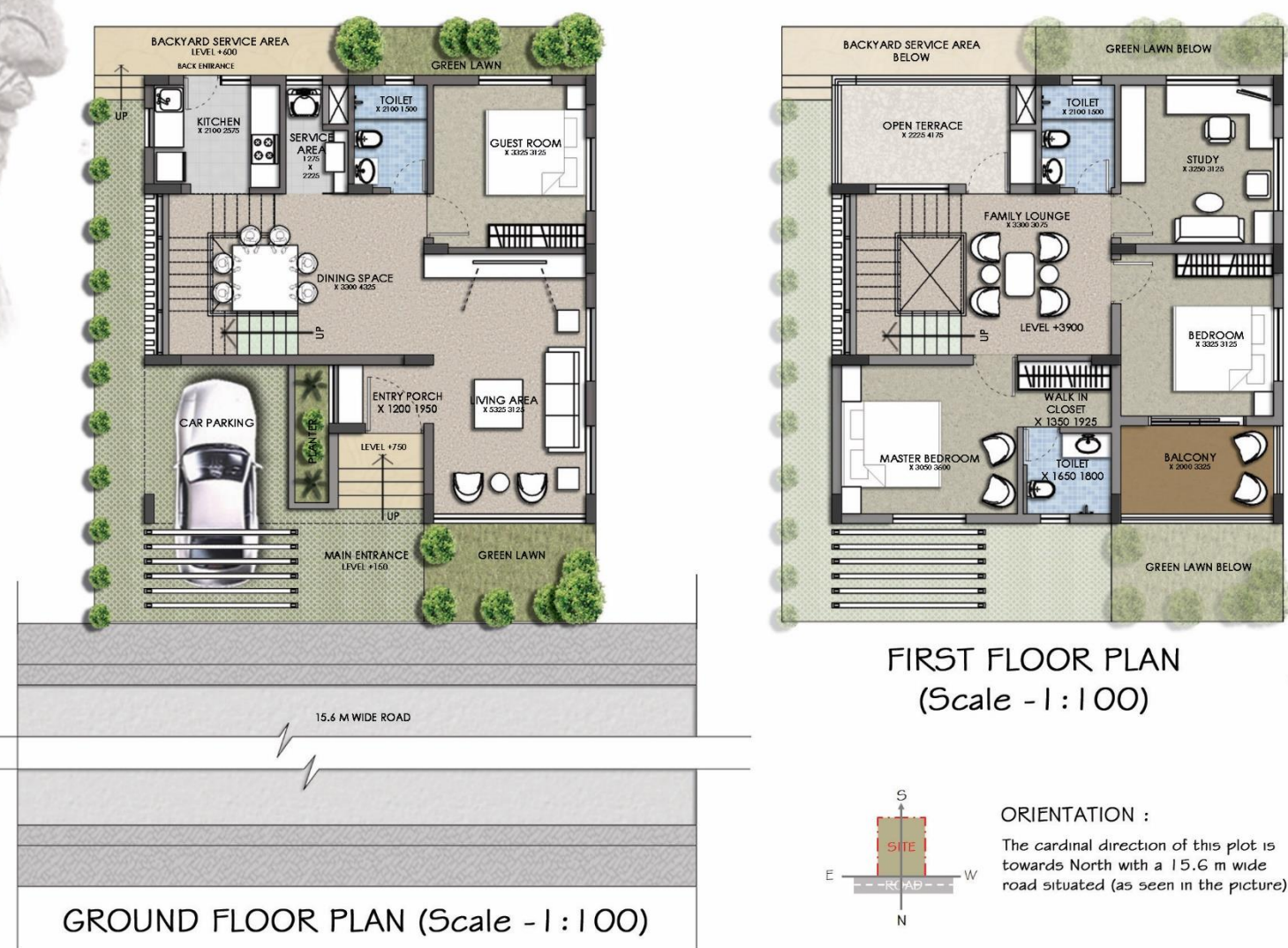
SOIL AND PLANTATION SAND CL 0.0

BRICK BATS

BOULDERS MIN 250 DIA

One of the most effective techniques in rainwater harvesting for small homes. Does not involve a large cost but greatly helps in recharging the groundwater levels.

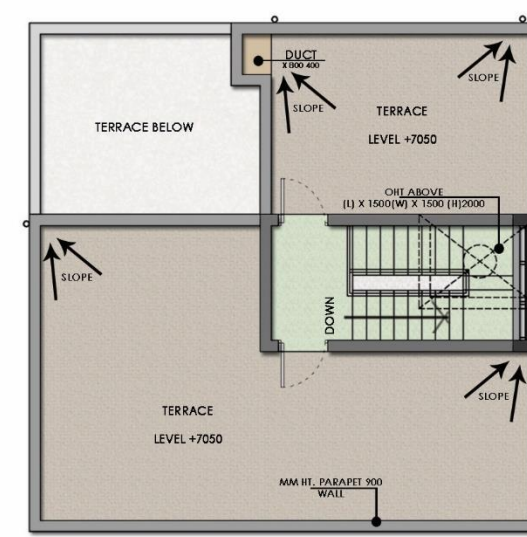
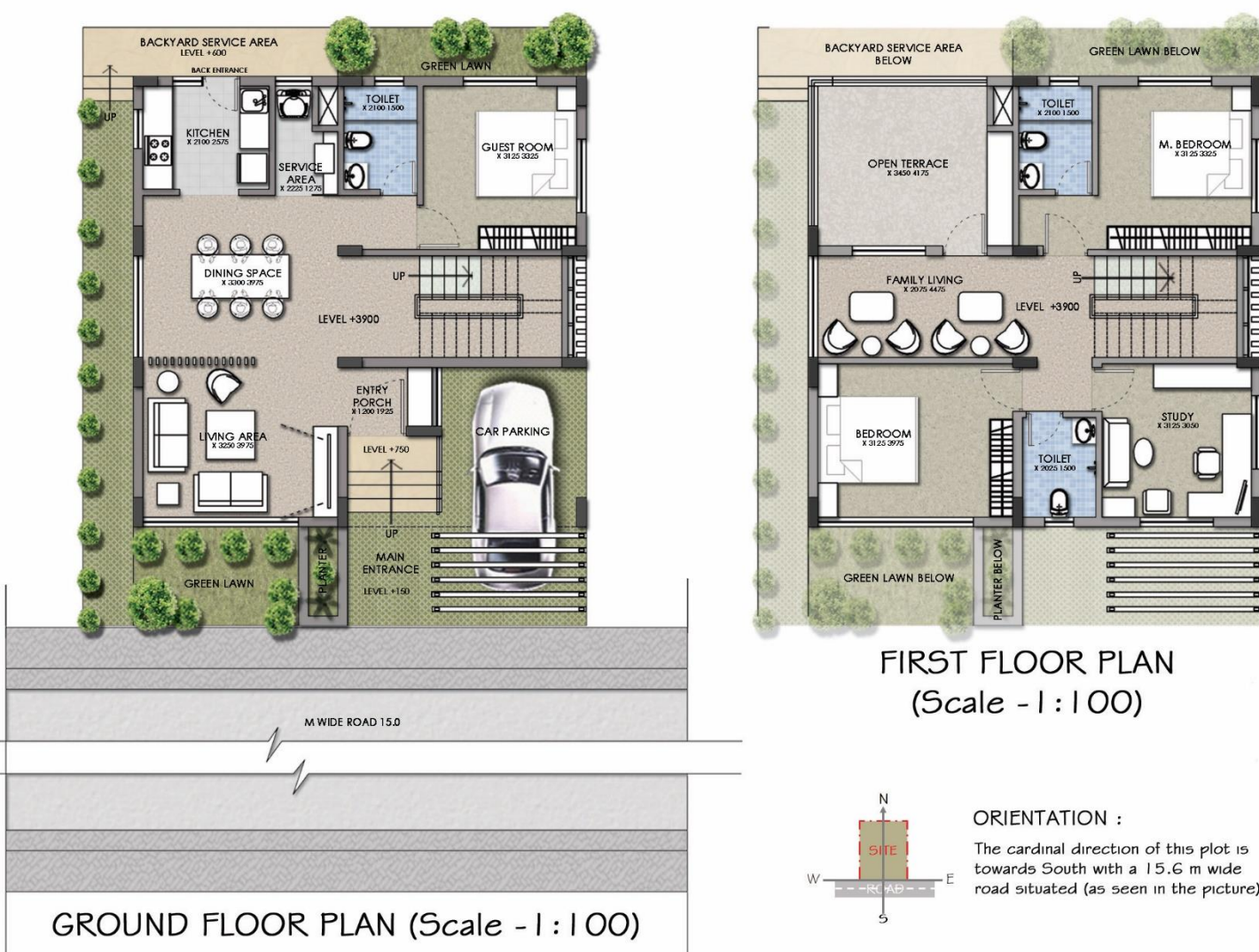
FLOOR PLANS - NORTH FACING PLOT :



AREA STATEMENT

PLOT AREA	= 125 SQ. M
GROUND COVERAGE	= 84.87 SQ. M (67.89%)
GROUND FLOOR BUILT UP AREA	= 64.04 SQ. M
FIRST FLOOR BUILT UP AREA	= 72.88 SQ. M
TOTAL BUILT UP AREA	= 136.92 SQ. M
PROPOSED FLOOR SPACE INDEX	= 1.23
OPEN AREA	= 40.13 SQ. M (32.01%)
FRONT SET BACK	= 2.015 M
REAR SET BACK	= 1.0 M
SIDE SET BACK (LEFT)	= 1.03 M
SIDE SET BACK (RIGHT)	= 0 M

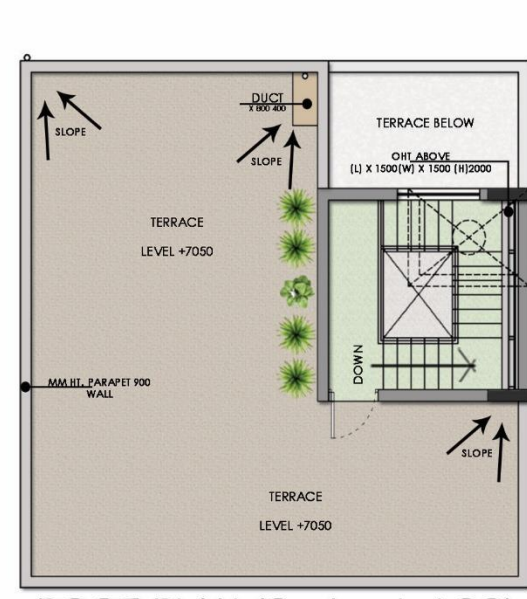
FLOOR PLANS - SOUTH FACING PLOT :



AREA STATEMENT

PLOT AREA	= 125 SQ. M
GROUND COVERAGE	= 84.87 SQ. M (67.89%)
GROUND FLOOR BUILT UP AREA	= 64.35 SQ. M
FIRST FLOOR BUILT UP AREA	= 69.48 SQ. M
TOTAL BUILT UP AREA	= 133.83 SQ. M
PROPOSED FLOOR SPACE INDEX	= 1.23
OPEN AREA	= 40.13 SQ. M (32.01%)
FRONT SET BACK	= 2.015 M
REAR SET BACK	= 1.0 M
SIDE SET BACK (LEFT)	= 1.03 M
SIDE SET BACK (RIGHT)	= 0 M

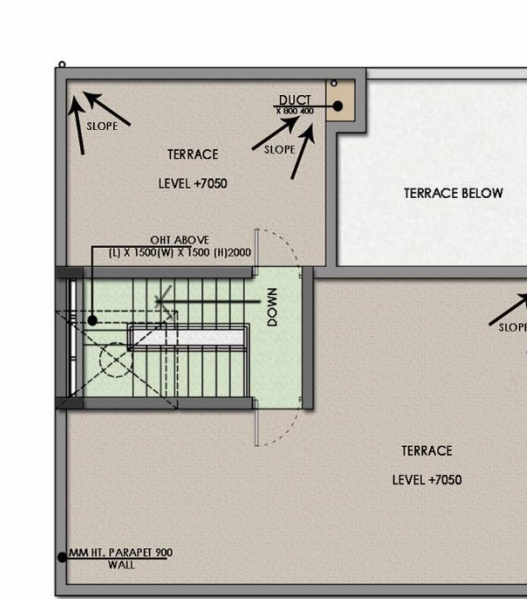
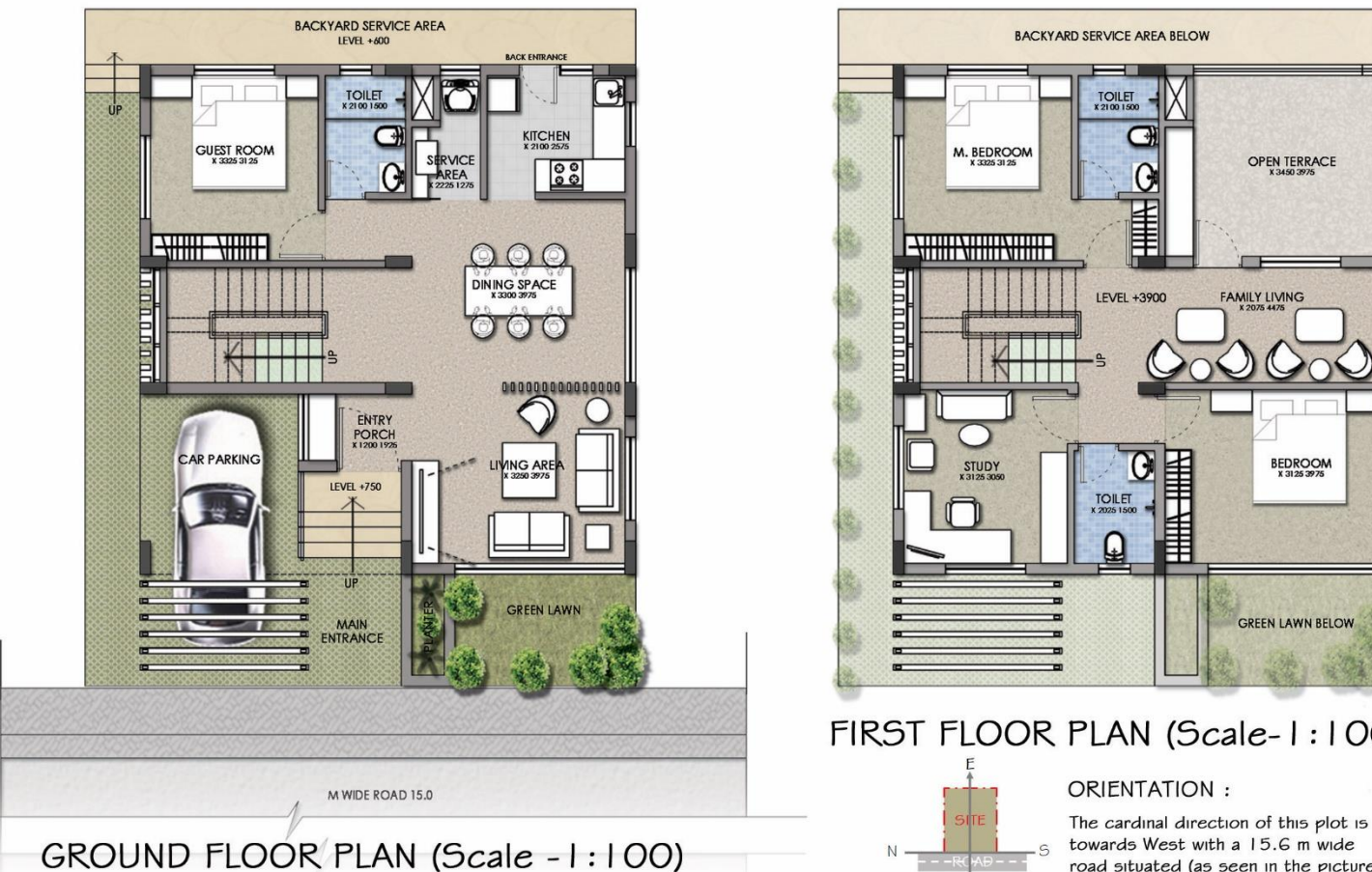
FLOOR PLANS - EAST FACING PLOT :



AREA STATEMENT

PLOT AREA	= 125 SQ. M
GROUND COVERAGE	= 84.87 SQ. M (67.89%)
GROUND FLOOR BUILT UP AREA	= 64.04 SQ. M
FIRST FLOOR BUILT UP AREA	= 72.88 SQ. M
TOTAL BUILT UP AREA	= 136.92 SQ. M
PROPOSED FLOOR SPACE INDEX	= 1.23
OPEN AREA	= 40.13 SQ. M (32.01%)
FRONT SET BACK	= 2.015 M
REAR SET BACK	= 1.0 M
SIDE SET BACK (LEFT)	= 1.03 M
SIDE SET BACK (RIGHT)	= 0 M

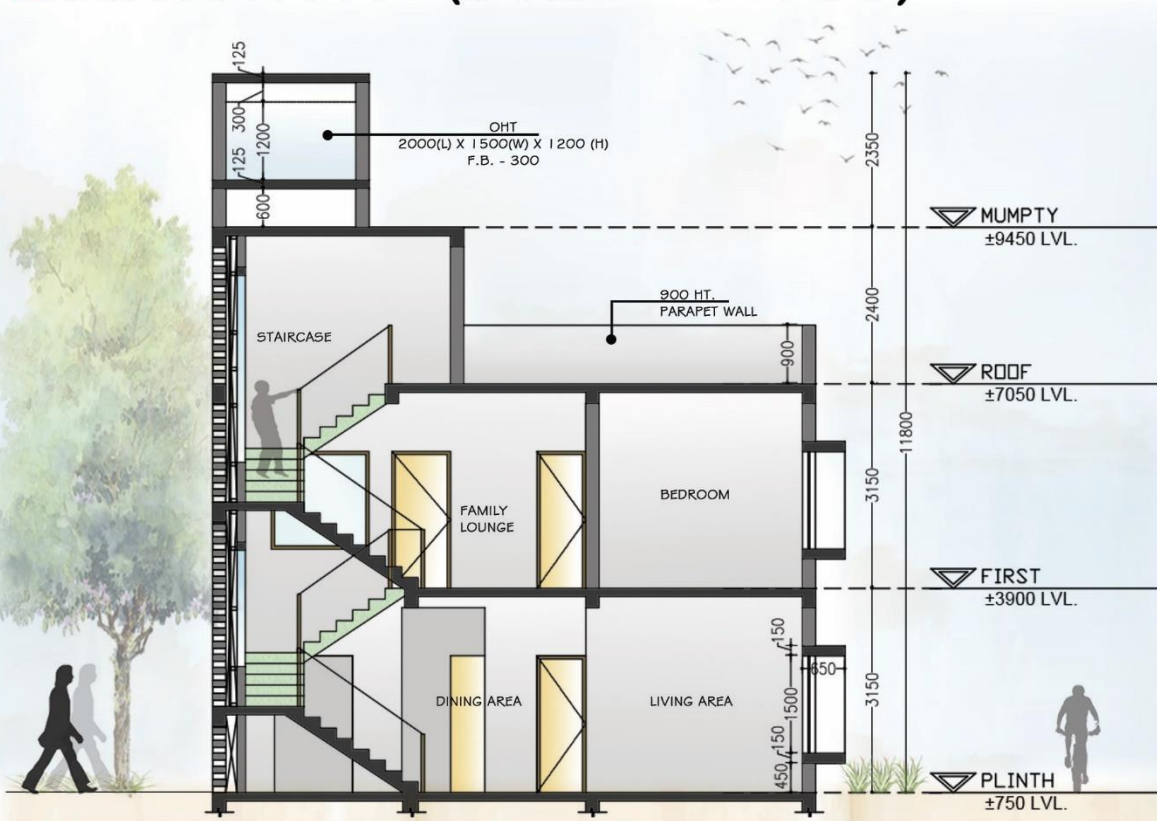
FLOOR PLANS - WEST FACING PLOT :



AREA STATEMENT

PLOT AREA	= 125 SQ. M
GROUND COVERAGE	= 84.87 SQ. M (67.89%)
GROUND FLOOR BUILT UP AREA	= 64.35 SQ. M
FIRST FLOOR BUILT UP AREA	= 69.48 SQ. M
TOTAL BUILT UP AREA	= 133.83 SQ. M
PROPOSED FLOOR SPACE INDEX	= 1.23
OPEN AREA	= 40.13 SQ. M (32.01%)
FRONT SET BACK	= 2.015 M
REAR SET BACK	= 1.0 M
SIDE SET BACK (LEFT)	= 1.03 M
SIDE SET BACK (RIGHT)	= 0 M

SECTION X-X (Scale - 1 : 100)



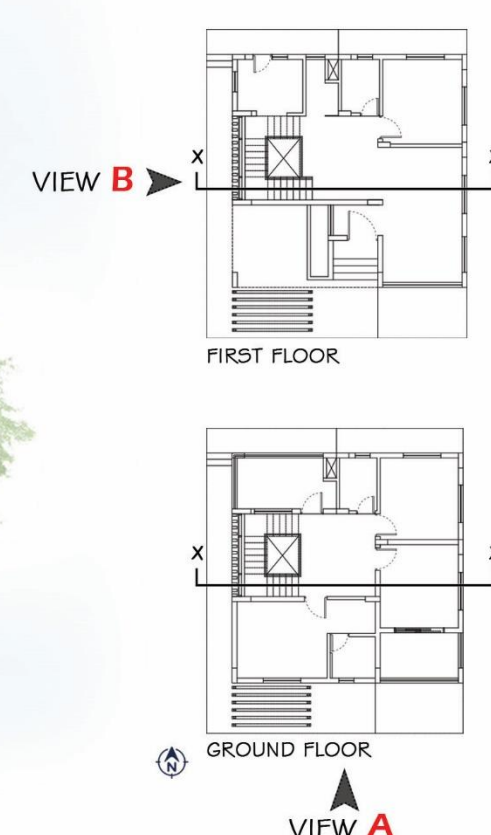
ELEVATION A (Scale - 1 : 100)



ELEVATION B (Scale - 1 : 100)



KEY PLAN



VISUALIZING VastuJa - IN THREE DIMENSION :

