

# AGROSCAPE

A COMBINATION OF "AGRO" AND "ESCAPE," REDEFINING ESCAPE AS ACTIVE LEARNING THROUGH HANDS-ON DURIAN CULTIVATION, TRANSFORMING THE SPACE INTO A PLATFORM FOR KNOWLEDGE, SKILLS, AND FUTURE OPPORTUNITIES IN AGRICULTURE.



## INTRODUCTION PROJECT

THIS PROJECT EXPLORES THE DEVELOPMENT OF A DURIAN AGRO-LEARNING CENTRE DESIGNED TO RECONNECT PEOPLE WITH AGRICULTURE IN AN ENGAGING AND ACCESSIBLE WAY. IN RESPONSE TO THE DECLINING INTEREST IN FARMING, PARTICULARLY AMONG YOUNGER GENERATIONS, THE PROJECT INTRODUCES A SPACE WHERE LEARNING IS COMBINED WITH EXPERIENCE AND INTERACTION.

THE DESIGN ACCOMMODATES A WIDE RANGE OF USERS, FROM STUDENTS AND FAMILIES TO VISITORS, OFFERING BOTH EDUCATIONAL WORKSHOPS AND PUBLIC EXPERIENCES. WHILE WEEKDAYS ARE PRIMARILY DEDICATED TO STRUCTURED LEARNING, THE SPACE OPENS TO VISITORS DURING WEEKENDS, ENCOURAGING COMMUNITY ENGAGEMENT.

BY INTEGRATING LEARNING, LEISURE, AND HANDS-ON AGRICULTURAL ACTIVITIES, THE PROJECT AIMS TO RESHAPE THE PERCEPTION OF AGRICULTURE AS NOT ONLY A TRADITIONAL PRACTICE, BUT ALSO A RELEVANT AND SUSTAINABLE FUTURE OPPORTUNITY.



KEY PLAN



LOCATION PLAN



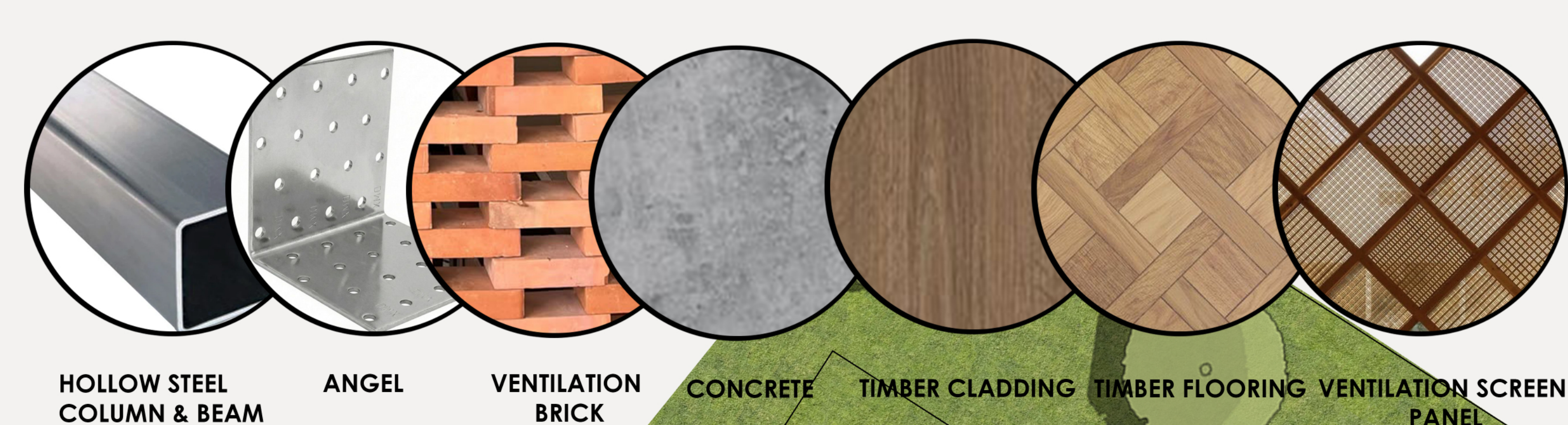
SITE PLAN SCALE 1:250

THE SITE HAS ITS ONLY SIGNIFICANT VISUAL CONNECTION TOWARDS THE REAR, WHERE A NATURAL MOUNTAIN VIEW PROVIDES A CALM AND DESIRABLE OUTLOOK. IN CONTRAST, THE FRONT OF THE SITE FACES A MAIN ROAD, WHERE TRAFFIC NOISE CAN REACH UP TO 80 DB WITHOUT VEGETATION. EXISTING SHRUBS HELP REDUCE NOISE LEVELS TO APPROXIMATELY 60-70 DB, IMPROVING ACOUSTIC COMFORT.

TO THE LEFT OF THE SITE IS THE SEEDING AREA OF TAMAN WARISAN PERTANIAN, WHICH MAY PRODUCE UNPLEASANT ODORS DURING FERTILIZATION PERIODS. THE RIGHT SIDE IS BORDERED BY RESIDENTIAL HOUSING, REQUIRING CAREFUL CONSIDERATION OF PRIVACY AND DISTURBANCE.

IN RESPONSE, LEARNING SPACES ARE ORIENTED TOWARDS THE REAR TO MAXIMIZE VIEWS AND REDUCE NOISE, WHILE THE LOBBY IS POSITIONED AT THE FRONT FOR ACCESSIBILITY. DUE TO LIMITED SITE SPACE, PARKING IS MINIMIZED AND PRIMARILY ALLOCATED FOR STAFF, WITH ADDITIONAL PARKING SUPPORTED THROUGH COLLABORATION WITH TAMAN WARISAN PERTANIAN.

- S** -SEMI-OPEN DESIGN ENHANCES NATURAL VENTILATION AND COMFORT
- DOUBLE VOLUME SPACE IMPROVES AIRFLOW AND THERMAL PERFORMANCE
- W** -LIMITED SPACE FOR TREE GROWTH AND MAINTENANCE
- RELIANCE ON NATURAL VENTILATION REDUCES ENVIRONMENTAL CONTROL
- O** -PROMOTES AWARENESS OF AGRICULTURE AND LOCAL PRODUCE
- POTENTIAL COLLABORATION WITH LOCAL COMMUNITY AND AGRO-INDUSTRY
- T** -WEATHER CONDITIONS
- RISK OF FALLING DURIAN FRUITS

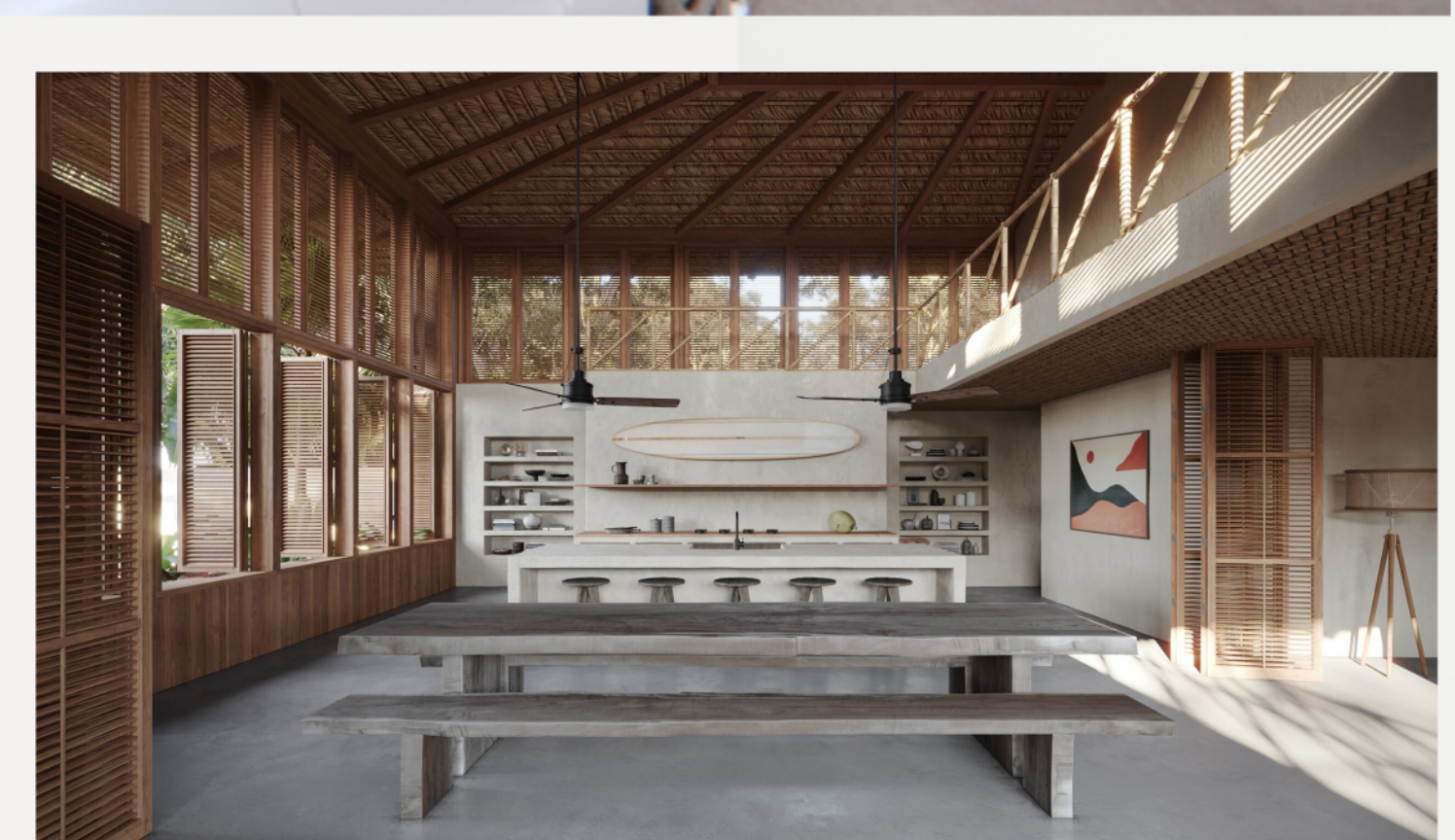


MATERIAL STUDIES



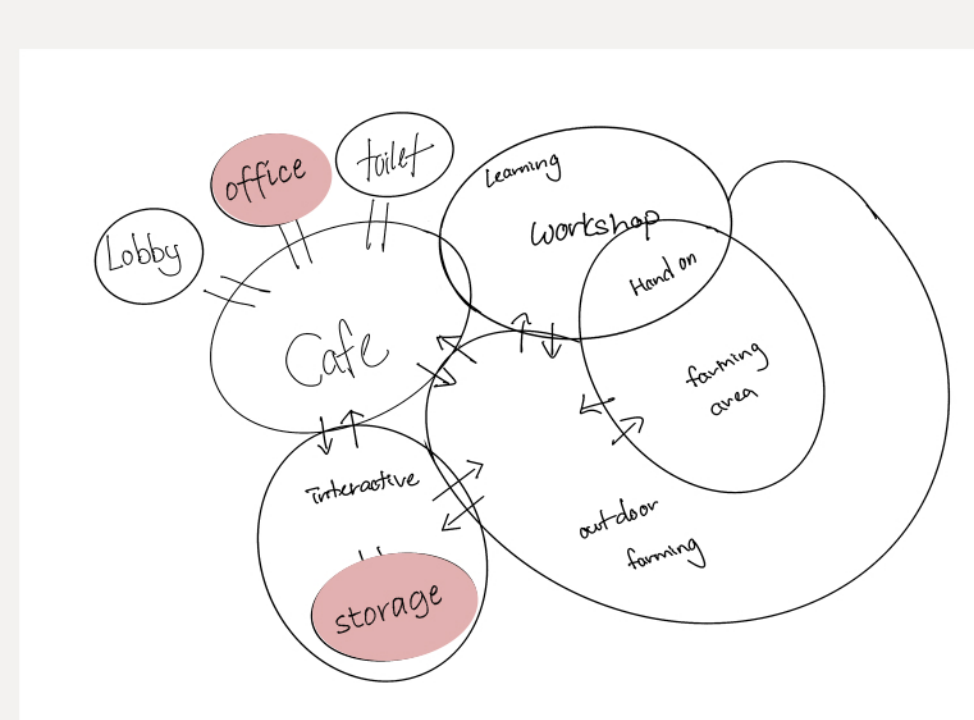
## CASE STUDY - PLAYA HERMOSA

THIS STUDY EXAMINES THE USE OF VERTICAL LOUVERS IN PLAYA HERMOSA AS A PASSIVE SHADING STRATEGY. THE LOUVERS CONTROL SUNLIGHT, REDUCE HEAT GAIN, AND ALLOW NATURAL VENTILATION, IMPROVING BOTH COMFORT AND SPATIAL EXPERIENCE.

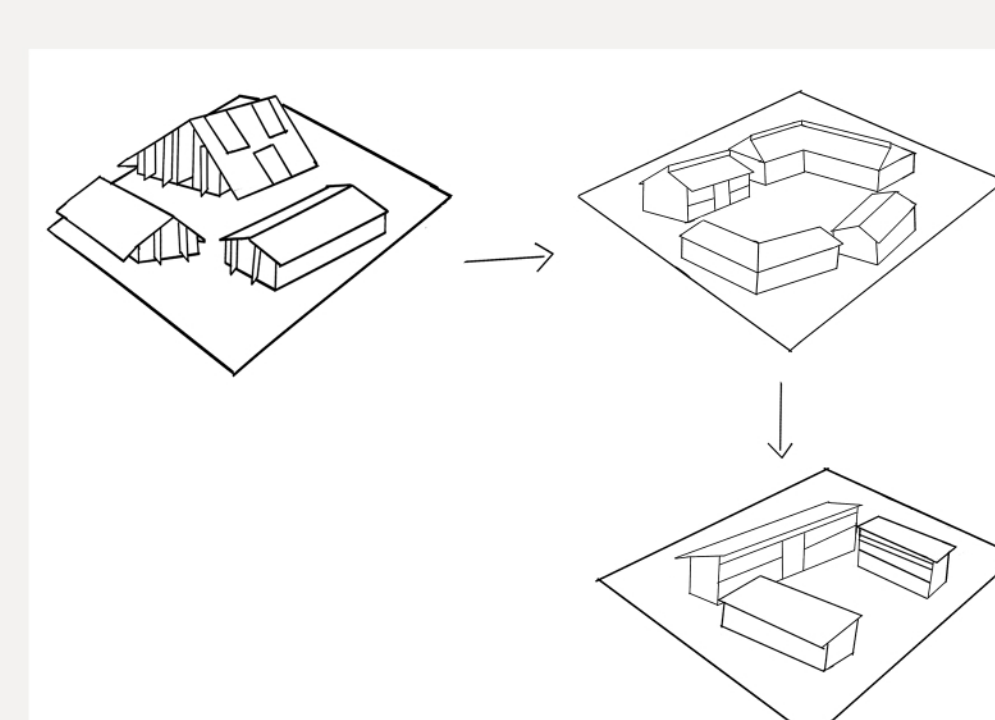


## CASE STUDY - CASA VISTA DEL LAGO

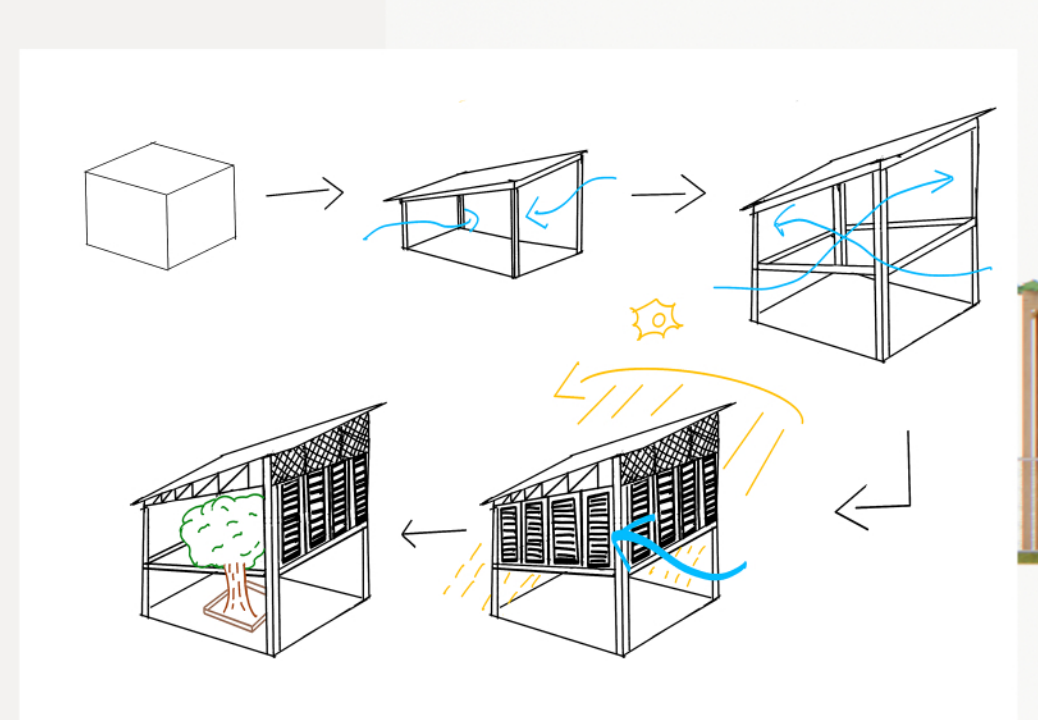
THIS STUDY FOCUSES ON THE STRUCTURAL SYSTEM OF CASA VISTA DEL LAGO, HIGHLIGHTING THE USE OF COLUMNS, BEAMS, AND ROOF TRUSSES TO CREATE A STABLE YET OPEN SPACE. THE EXPOSED STRUCTURE BECOMES PART OF THE ARCHITECTURAL EXPRESSION WHILE SUPPORTING LARGE SPANS EFFICIENTLY.



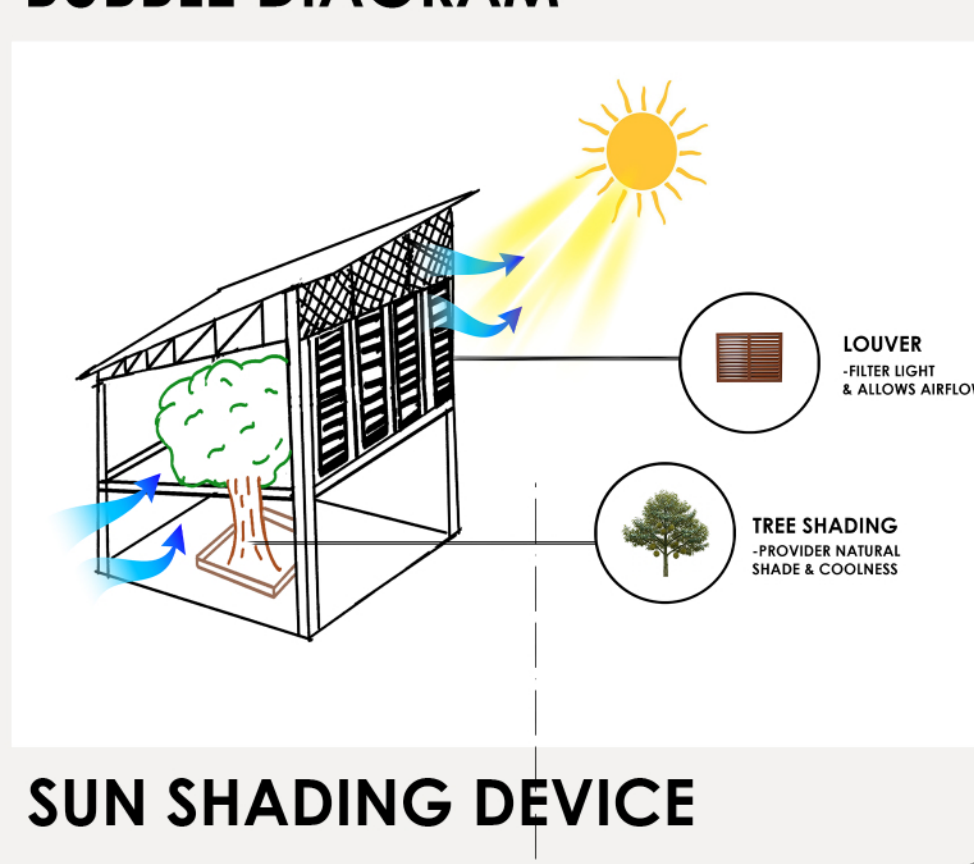
BUBBLE DIAGRAM



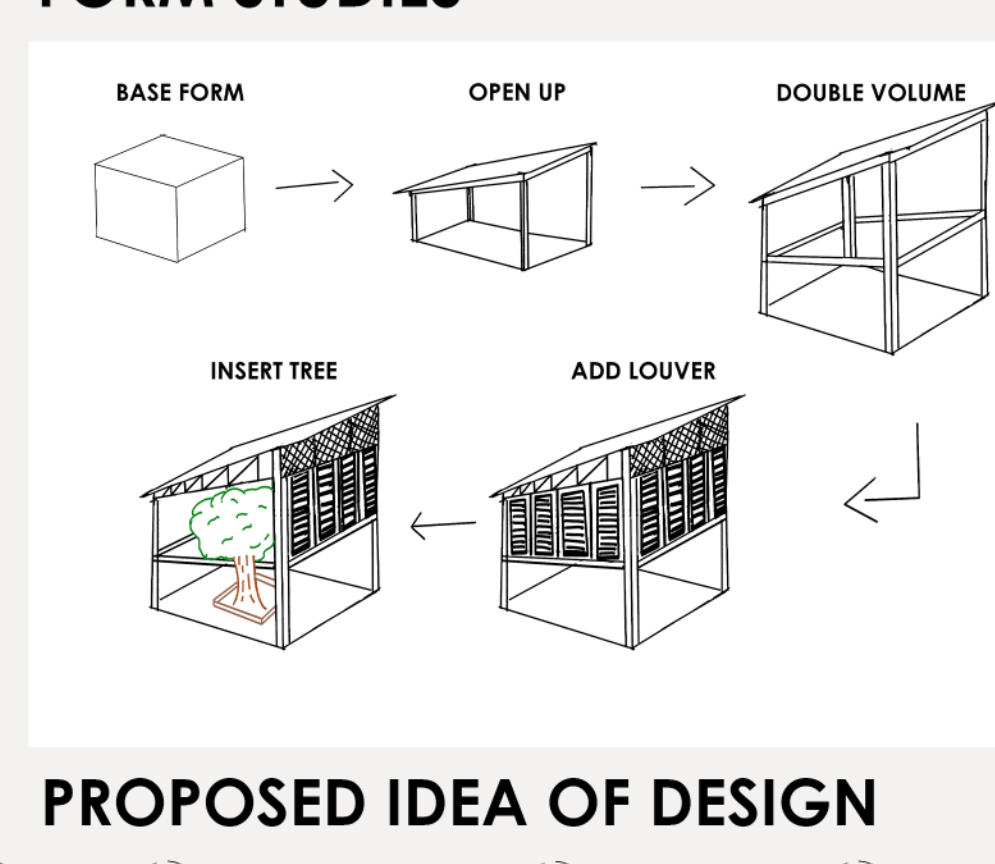
FORM STUDIES



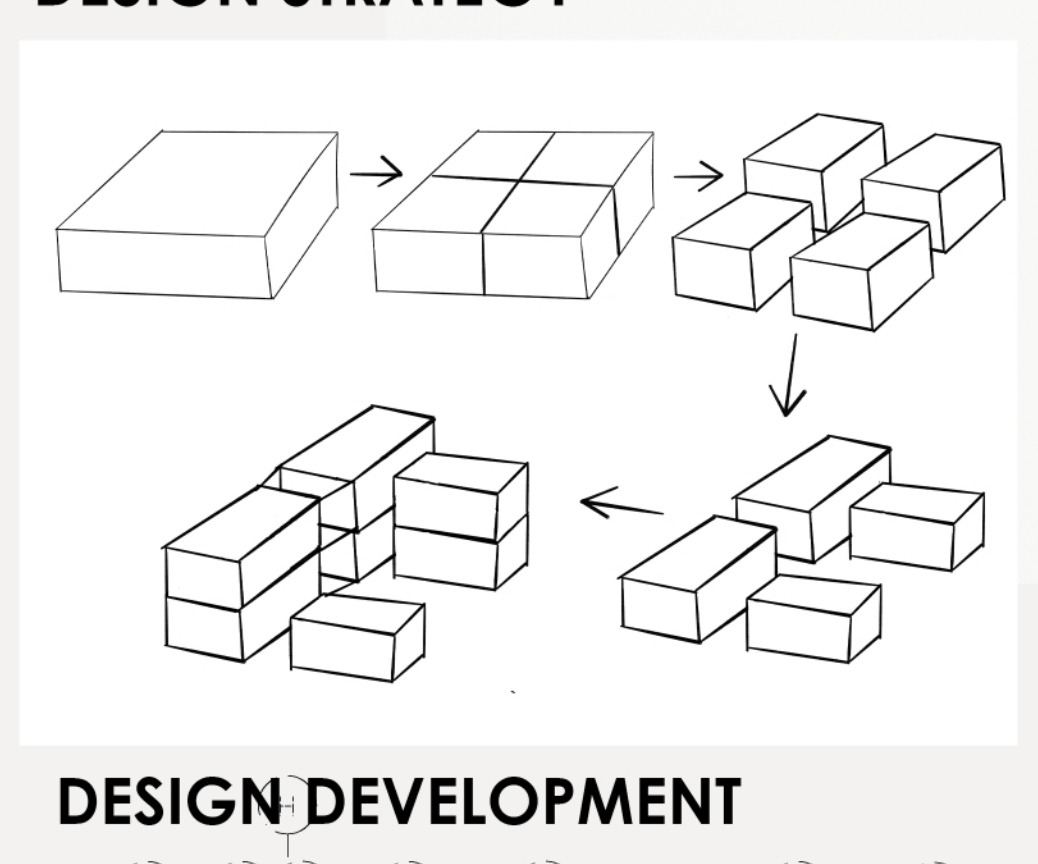
DESIGN STRATEGY



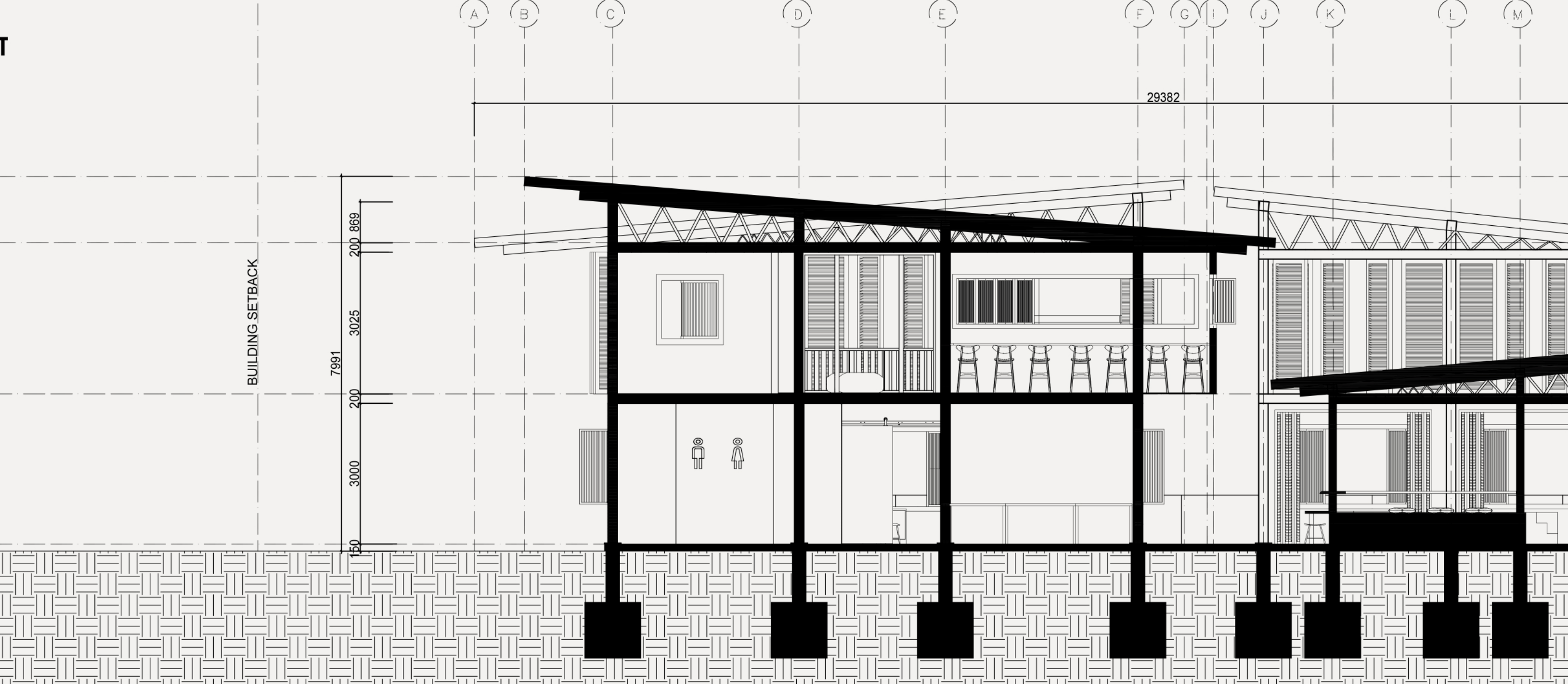
SUN SHADING DEVICE



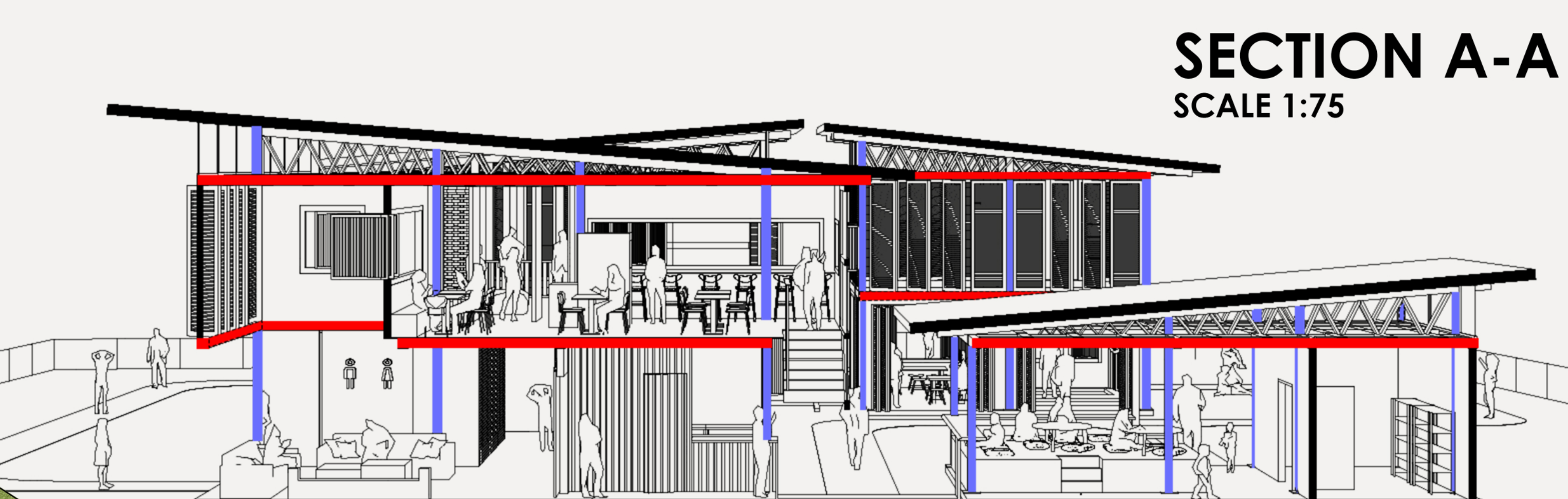
PROPOSED IDEA OF DESIGN



DESIGN DEVELOPMENT



SECTION A-A SCALE 1:75

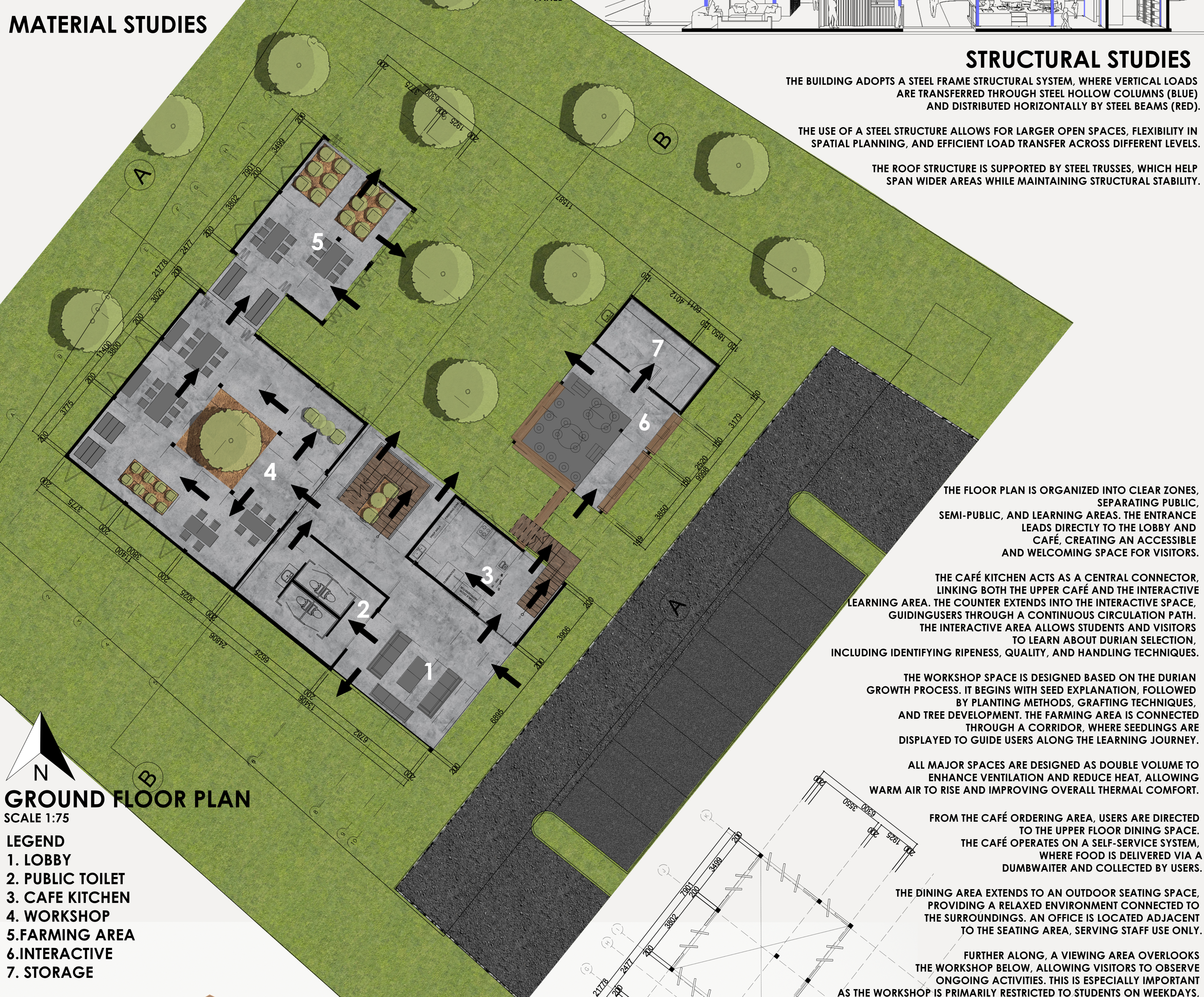


## STRUCTURAL STUDIES

THE BUILDING ADOPTS A STEEL FRAME STRUCTURAL SYSTEM, WHERE VERTICAL LOADS ARE TRANSFERRED THROUGH STEEL HOLLOW COLUMNS (BLUE) AND DISTRIBUTED HORIZONTALLY BY STEEL BEAMS (RED).

THE USE OF A STEEL STRUCTURE ALLOWS FOR LARGER OPEN SPACES, FLEXIBILITY IN SPATIAL PLANNING, AND EFFICIENT LOAD TRANSFER ACROSS DIFFERENT LEVELS.

THE ROOF STRUCTURE IS SUPPORTED BY STEEL TRUSSES, WHICH HELP SPAN WIDER AREAS WHILE MAINTAINING STRUCTURAL STABILITY.



GROUND FLOOR PLAN SCALE 1:75

- LEGEND
1. LOBBY
  2. PUBLIC TOILET
  3. CAFE KITCHEN
  4. WORKSHOP
  5. FARMING AREA
  6. INTERACTIVE
  7. STORAGE

THE FLOOR PLAN IS ORGANIZED INTO CLEAR ZONES SEPARATING PUBLIC, SEMI-PUBLIC, AND LEARNING AREAS. THE ENTRANCE LEADS DIRECTLY TO THE LOBBY AND CAFE, CREATING AN ACCESSIBLE AND WELCOMING SPACE FOR VISITORS.

THE CAFE KITCHEN ACTS AS A CENTRAL CONNECTOR, LINKING BOTH THE UPPER CAFE AND THE INTERACTIVE LEARNING AREA. THE COUNTER EXTENDS INTO THE INTERACTIVE SPACE, GUIDING USERS THROUGH A CONTINUOUS CIRCULATION PATH. THE INTERACTIVE AREA ALLOWS STUDENTS AND VISITORS TO LEARN ABOUT DURIAN SELECTION, INCLUDING IDENTIFYING RIPENESS, QUALITY, AND HANDLING TECHNIQUES.

THE WORKSHOP SPACE IS DESIGNED BASED ON THE DURIAN GROWTH PROCESS. IT BEGINS WITH SEED EXPLANATION, FOLLOWED BY PLANTING METHODS, GRAFTING TECHNIQUES, AND TREE DEVELOPMENT. THE FARMING AREA IS CONNECTED THROUGH A CORRIDOR, WHERE SEEDLINGS ARE DISPLAYED TO GUIDE USERS ALONG THE LEARNING JOURNEY.

ALL MAJOR SPACES ARE DESIGNED AS DOUBLE VOLUME TO ENHANCE VENTILATION AND REDUCE HEAT, ALLOWING WARM AIR TO RISE AND IMPROVING OVERALL THERMAL COMFORT.

FROM THE CAFE ORDERING AREA, USERS ARE DIRECTED TO THE UPPER FLOOR DINING SPACE. THE CAFE OPERATES ON A SELF-SERVICE SYSTEM, WHERE FOOD IS DELIVERED VIA A DUMBWAITER AND COLLECTED BY USERS.

THE DINING AREA EXTENDS TO AN OUTDOOR SEATING SPACE, PROVIDING A RELAXED ENVIRONMENT CONNECTED TO THE SURROUNDINGS. AN OFFICE IS LOCATED ADJACENT TO THE SEATING AREA, SERVING STAFF USE ONLY.

FURTHER ALONG, A VIEWING AREA OVERLOOKS THE WORKSHOP BELOW, ALLOWING VISITORS TO OBSERVE ONGOING ACTIVITIES. THIS IS ESPECIALLY IMPORTANT AS THE WORKSHOP IS PRIMARILY RESTRICTED TO STUDENTS ON WEEKDAYS, PROVIDING VISUAL ACCESS WHILE MAINTAINING CONTROLLED ENTRY.



EXPLODED AXONOMETRIC



FIRST FLOOR PLAN SCALE 1:75

- LEGEND
1. LOBBY
  2. OFFICE
  3. SEATING AREA
  4. VIEWING DECK