



# **Urban homeless** - Dropouts - Unemployed No inclusion of vulnerable communities No access to services, medical care - No documents

Amidst the influx in refugee population there is population growth in the host community which has led to the imbalanced development in the rural, town and urban areas.

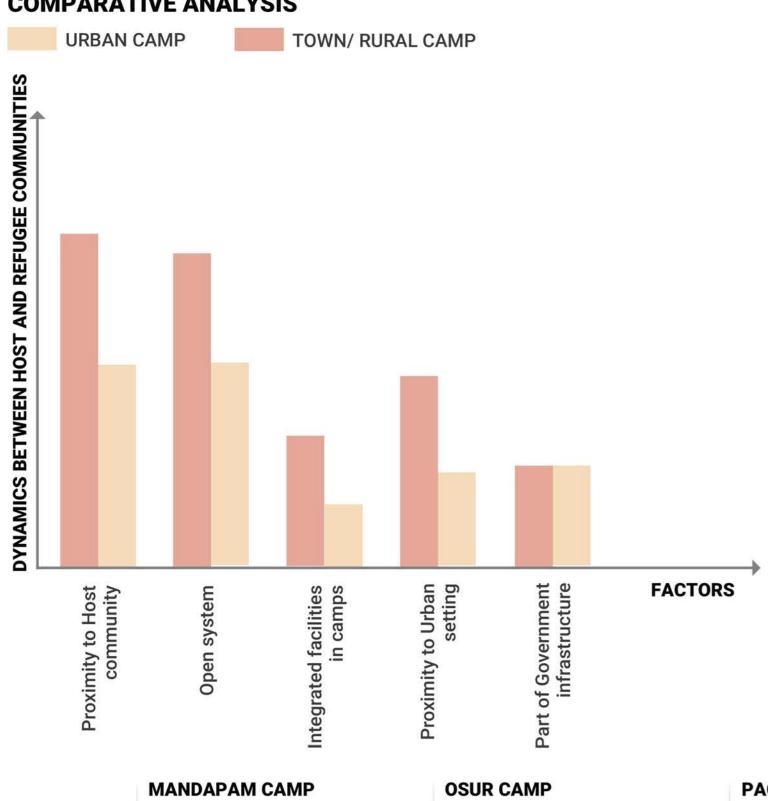
Almost all the waterbodies are encroached and polluted by dumping waste. The greens and blues are destroyed and with the limitless resources and increasing population, more problems get added to the existing problems when more people have to be accommodated.

Amidst the influx in refugee population there is population growth in the host community which has led to the imbalanced development in the rural, town and urban areas.

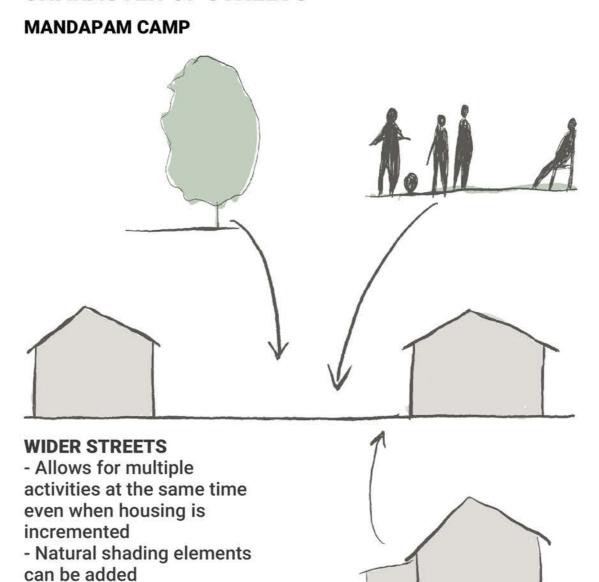


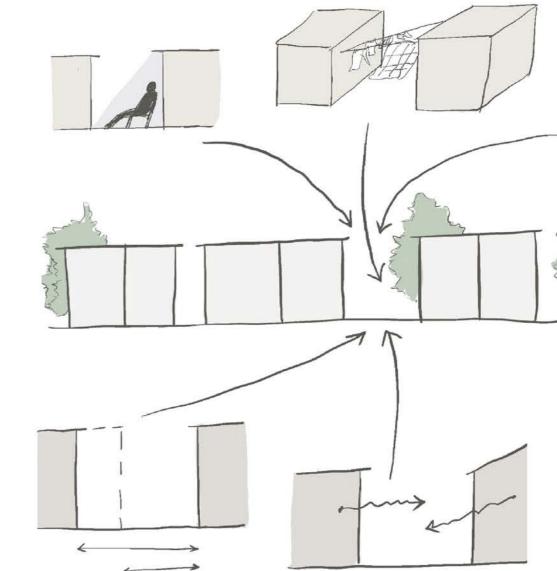
# **URBAN CAMPS AND TOWN/ RURAL CAMPS**

### **COMPARATIVE ANALYSIS**



### **CHARACTER OF STREETS**





### **NARROW STREET**

- Allows for shaded activities
- Acts as an extension of household activities
- No space for natural drainage
- Safe
- Claustrophobic as space reduces (Extension)
- No boundary between house as people have to share the limited space available
- Multiple activities can't happen

### SETTLEMENT Closed system - Located at the outskirts of a town More open spaces INTEGRATED Education **FACILITIES** Hospital - Fire department - Ration

- Open system
- Located at the village's outskirts
- Located along a street with less open spaces
- Daycare
- Dependent on host resources
- Architecture reflects the Architecture reflects the context's character
- context's character Less built up - Publicly accessible spaces are along the main road

### **PACODE CAMP**

- Open system
  - Located in a town
  - Located amidst a Govt.

space

- Visual connection - Safety

- Acts as a multifunctional

- Better natural lighting and

ventilation for housing

- Daycare
- Dependent on host resources
- Educate people according to jobs available

### **PERUMAALPURAM CAMP**

- Open system
- Located near a town

- Self help groups

- Located along a street with less open spaces
- Dependent on host resources
  - Daycare
    - Access to public transportation to access facilities

**PUZHAL CAMP** 

Closed system

Less open spaces

region

Education

- Located in the peri urban

### **KOTTAPATTU CAMP**

- Closed system
- Located in a city
- Open spaces are part of the Govt. infrastructure
- Hospital
- Ration
- Daycare
- Self help groups
- Location has access to job opportunities

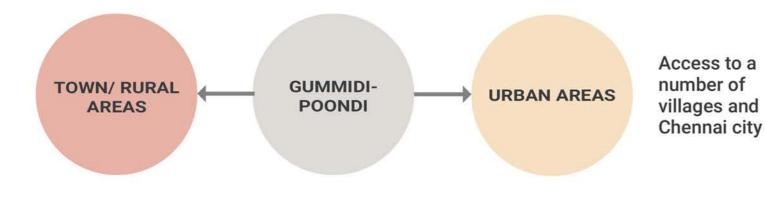
### **GUMMIDIPOONDI CAMP**

- Closed system
- Located in the city's outskirts-
- Open spaces are part of the Govt. infrastructure
- Open spaces are part of the Govt. infrastructure
- Ration
- Education
- Open play areas
- Variety of shops
- Self help group
- Location
- Open spaces

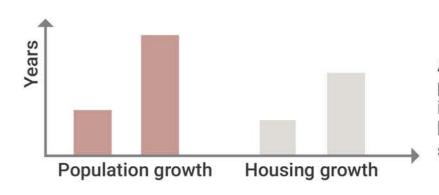
### **INFERENCES**

- Safety for women and kids
- Self help groups, especially for women
- Job according to education
- Unique food style
- Independent system

### WHAT MAKES GUMMIDIPOONDI CAMP UNIQUE?



A camp with war survivors and need of attention for physical and psychological well being



As years go by, population increases, but the housing is not sufficient

### **METHODOLOGY - ASSESSMENT**

### **CURRENT SYSTEM**







organisation

- Free clothes

- Free food till padhivu

- Psychological well being





- Continue disrupted education

- Free care for physical well being

Other requirements not provided



**IMMEDIATE INTERVENTION** 







Dependent on free resources from the Govt., NGOs, private

- Continue higher education
- Free care for physical well being
- Free 10'x10' housing with common toilet

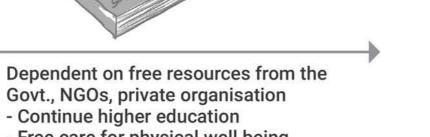
LONG-TERM INTERVENTION

- Skill training sessions

Other requirements - Better income to sustain - Dependent on host

- Job according to education







- Use of skills available









- Free 10'x10' housing with common toilet

- Recreational/ Common gathering spaces

- Activities/ Spaces that build individual resilience











- organisation - Free education
- Free care for physical well being
- Housing

Other requirements not provided

- Activities/ Spaces that build individual resilience
- Recreational/ Common gathering spaces
- Psychological well being
- Clothing, Income

Dependent on resources from the Govt., NGOs, private organisation

- Free care for physical well being
- Housing

Other requirements - Better income to sustain

- Job according to education
- Skill training sessions





NGOs, private organisation

- Psychological well being

- Free food till padhivu

- Free clothes

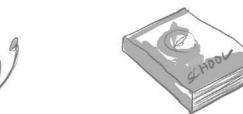
- Free care for physical well being

Other requirements not provided



**IMMEDIATE INTERVENTION** 





Dependent on free resources from the Govt., NGOs, private organisation

LONG-TERM INTERVENTION

- Continue higher education/ Learn new skills to adapt to host
- Free care for physical well being
- Free 10'x10' housing with common toilet

Other requirements - Better income to

- sustain Dependent on host - Job according to education
- Use of skills available







Dependent on free resources from the Govt.,

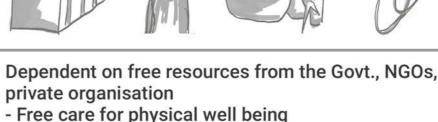
- Free 10'x10' housing with common toilet

- Recreational/ Common gathering spaces

- Activities/ Spaces that build individual resilience







- Free clothes (REFUGEE)
  - Free food till padhivu
  - Free 10'x10' housing with common toilet Other requirements not provided
  - Activities/ Spaces that build individual resilience
  - Recreational/ Common gathering spaces
  - Psychological well being

Dependent on free resources from the Govt., NGOs, private organisation

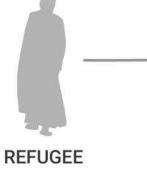
- Learn new skills to adapt to host
- Free care for physical well being
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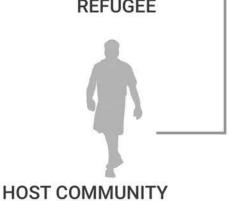
Other requirements - Better income to sustain - Dependent on host

- Job according to education
- Use of skills available

PROPOSED SYSTEM







**MEMBER** 



LONG-TERM INTERVENTION IMMEDIATE INTERVENTION



- Using shared resources from the host by reusing/ use existing facilities/ adding facilities usable by both communities
- Makes people independent Reduces strain on host country

- Using refugees skills to increase host communities economy (food production, stitching skills, farming skills, using higher degree skills for educating others, guiding others, providing aid
- Improve community interactions through communal spaces which will help in mutual benefit by even working together

Better stable, resilient system

allowing for synergetic develop-

This can be done at sites in different levels such that it connects both the communities, to encourage usage and create a better relationship.

### **NEED FOR INTEGRATION**

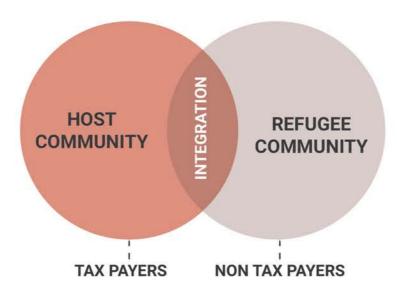
Both communities have their challenges and have similar needs. The current unbalanced system poses a threat to the existence of both communities. But if integration is not done properly, it can lead to more disastrous effects.

# **NEED FOR SYNERGETIC INTEGRATION**

The challenges faced by the host community have led to the rise of the need for an integrated solution and with the addition of growing rehabilitation camps, there is a need for an integrated sustainable solution that allows for synergetic development, for a socially cohesive and sustainable future which ensures that the communities can be and have access to resilient systems without having to deal with the issues concerned with an unbalanced system of integration. A synergetically integrated system allows for mutual growth which will lead to positive growth.

### CHALLENGES FOR INTEGRATION

### **SOCIAL CHALLENGES**



- Integrating new members (refugee) into a community (host)
- Creating an accepting community
- Breaking psychological barriers
- Provision of separate facilities and housing -- Segregation

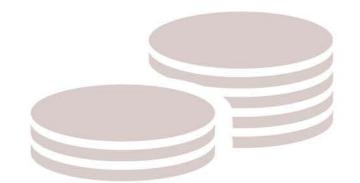
...Psychological barrier

### **CULTURAL CHALLENGES**



- Unique food style
- Similar traditions and culture
- Unique dressing style
- Have specific skills like stitching, gardening, etc.

### **ECONOMIC CHALLENGES**



**PHYSICAL BARRIERS - REMOVAL** 

No Government jobs

Architectural language

(Similarity, design

elements, familiarity,

spatial quality, visual

memory, relatibility)

Similar hierarchy of

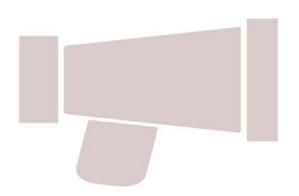
as in Sri Lanka

spaces as in Sri Lanka

Integration of activities

- Private companies ask legal documents -Hindrance
- Entirely dependent on host Creates a rift
- No job according to education

### POLITICAL CHALLENGES



- Legal and local bodies have the final power to change the rules for the refugees

### **STRATEGIES**

### **PSYCHOLOGICAL BARRIERS - REMOVAL/ REDUCTION**

COMMUNITY **ACCEPTANCE** 

Activities that benefit & include refugees & host

Promote cultural potentials

Food

Skill training (Technical & Crafts)

Therapy (Implicit & Explicit)

Medical care & Training

Maid services

**ENHANCEMENT** 

SPATIAL INCLU-

SIVITY

Activities that enhance psychological & physical well being

Identify ways to connect

& link host & refugee

communities spatially

Therapy (Implicit & Explicit)

Identify configuration of host

community

Medical care & Training

**BREAKING BOUNDARIES** 

PLACE ATTACH-

**MENT** 

Seemless segregation -Blurring boundaries between refugee & host communities

activities & generators

EGY

REMEDIAL ACTION

### **ECONOMIC BURDEN - REDUCTION**

Electricity

Water supply

Sewage

Economy

Volunteer work to mutually benefit each other & break psychological barriers

Entire site will be dependent on solar energy

Rain water harvesting and treatment at site level and urban level

Dry waste can be used for compost

Sewage treatment and reuse of treated grey water

Activities that help or equip people for income generation through skill training, selling products using existing or newly learnt skills, school, crafts, fund raising events, etc.

REMEDIAL **STRATEGY** 

INDEPEN-

DENT

SYSTEM

REMEDIAL ACTION

DESIGN DECISION

REMEDIAL STRAT-REMEDIAL ACTION DESIGN DECISION **EGY** 

Macro level (Urban level) - Circulation pattern and its

- character
- Overall layout
- Community spaces for social interactions

Micro level (Site planning)

- Heirarchy of spaces
- Open space utilisation
- Integration with nature
- Overall layout
- Form & massing
- Meso level (Building level)
- Design elements
- Spatial quality
- Facade treatment
- Form & massing
- Planning
- Interior design

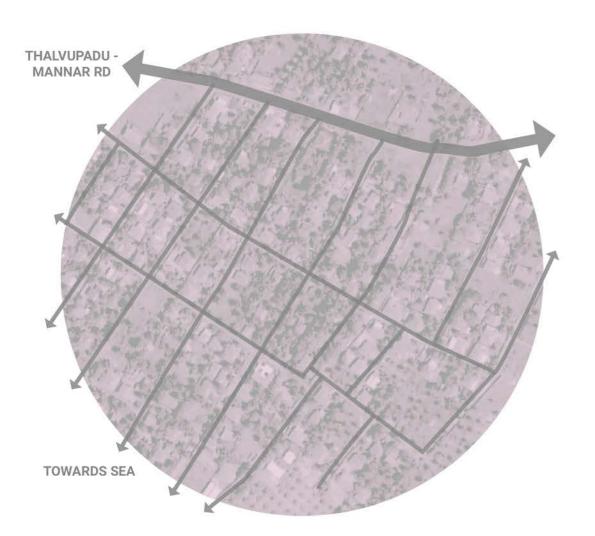
Identify the spine -Enhancement through

REMEDIAL STRAT-

DESIGN DECISION

# PLACE ATTACHMENT | SRI LANKAN ARCHITECTURE

### **LAYOUT**

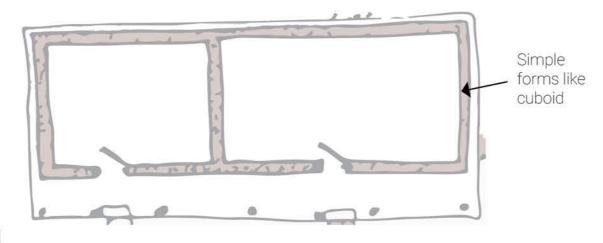


- Linear arrangement, where houses are arranged along a mud/ concrete street surrounded by nature and away from the
- Important public spaces are arranged along the main road
- Semi private fencing made out of natural elements
- Religious buildings are placed between the housing streets

### **SPATIAL DESIGN**



### **ELEVATION**

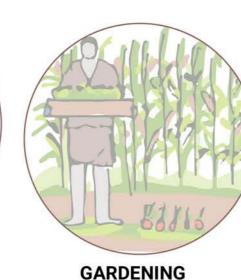


- **PLAN**
- Similar to traditional Tamil Nadu architecture
- Major design elements include courtyards, simple forms, minimal openings, pillared shaded spaces, etc.
- Each house has a garden or backyard

### **ACTIVITIES**











**POTTERY AND OTHER HANDICRAFTS** 

- Daily activities and skills developed and passed on can be utilised for economy generation and spaces can be included to promote this

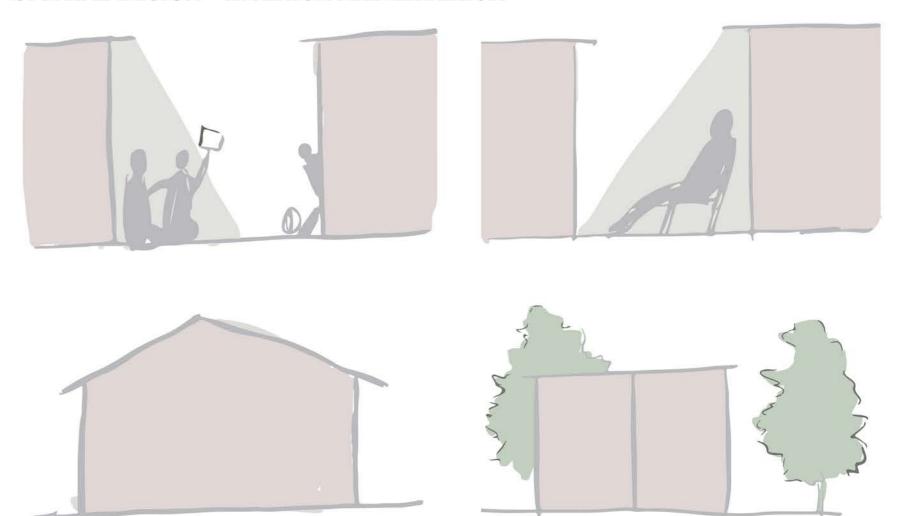
### **FOOD**

- Dependent on non veg, especially fish and related
- Higher spice, sour and other condiments

Refugees from various periods make place attachment, the visual images, identity, familiraity, etc. different for each of them. The refugees who came here relate to their home in Eelam, whereas the one who were born and brought up here, relate to the rehabilitation camps and their context.

# PLACE ATTACHMENT | LOCAL ARCHITECTURE

### **SPATIAL DESIGN - INTERIOR AND EXTERIOR**



- Construction using available materials, repurposing materials
- Major design elements include simple forms, minimal openings, bright colours, etc.
- Naturally shaded passage using trees, mud lanes, maximum use of natural elements
- Similar to local Sri Lankan architecture
- Dependent on common public toilets
- Communal activities and social interactions happen between the housing streets

### **ACTIVITIES**









**SMALL SHOP OWNER** 

**DRIVING** 

STITCHING







**DAILY WAGE WORKER** 

- Activities are more focussed on economy generation for self sufficiency
- Finding jobs based on skills learnt from people in camps or self taught
- Most of their skills are not being used to their full potential as they dont know how to benefit from them or have access to resources to use them

# **METHODOLOGY - TARGETING**

### CONTEXT ANALYSIS OF GUMMIDIPOONDI



Carpentry, painting, daily wage jobs



**Drivers** 



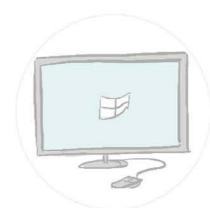
School teachers



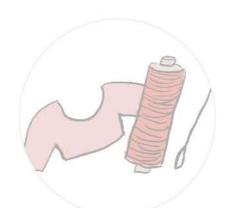
Doctors/ Nurses



Small scale factory workers



Engineers/ Computer skilled



Skilled tailors

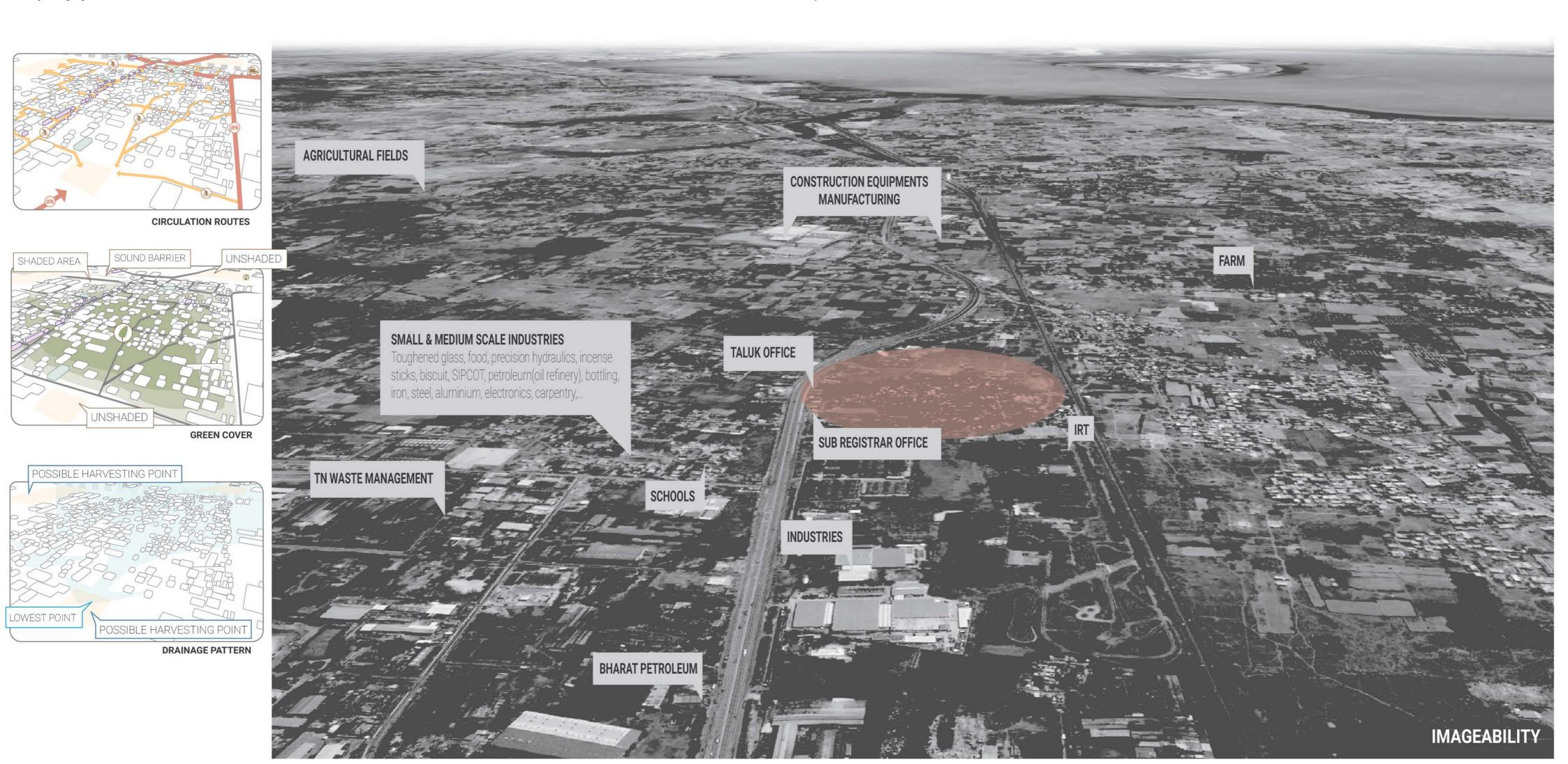


Masonry workers



Shop owners

Farmers



This shows the activities which frame the image of Gummidipoondi, the refugee camp and i'ts context. A diverse range of activities which would need a diverse range of labours skilled in specific tasks and better income generation when integrated.

# UNDERSTANDING THE BARRIERS BETWEEN REFUGEE AND HOST COMMUNITIES

# **CURRENT SYSTEM** PHYSICAL PSYCHOLOGICA INTEGRATION INTEGRATION **BARRIERS** LINK

As the refugee communities are segregated but economically dependent, this causes additional strain on the host communities

### PROPOSED SYSTEM

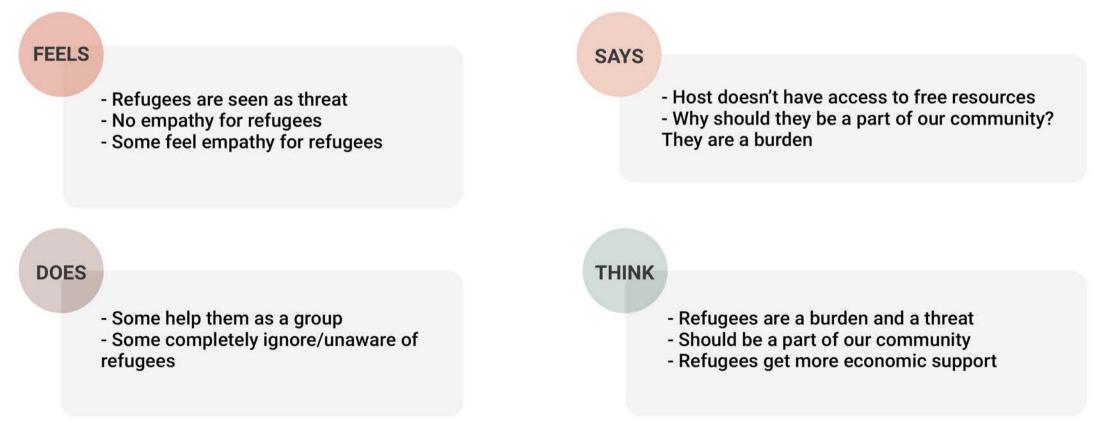


The design will focus on bridging these barriers through a framework based on various goals which will be achieved through a set of overarching principles

### **EMPATHY MAPPING OF REFUGEES**



### EMPATHY MAPPING OF HOST ACCEPTING & REJECTING



### **GOAL**



# FRAMEWORK FOR INTEGRATION

### STRATEGIC GOALS



GOAL 2 To add value to overall community develop-

### GOAL 3 **Building inter-personal** relationships between communities by breaking psychological barri-

GOAL 4 Reimagining the boundaries by breaking physical barriers



VISIBILITY to the LARGER CONTEXT

INTENT

### **IMPACT**

Positive social cohesion (Positive relationships leads to trust which inturn allows inclusivity, cooperation, sense of belonging, safety in all sense, individual and community upliftment, etc. thereby breaking barriers)

### **OVERARCHING PRINCIPLES**

**OUTCOMES** 

### **AWARENESS**

Sri Lankan refugees are a part of our history and the rural and urban systems. Yet they are never recognized.

### WHY RECOGNIZE?

- To be physically and psychologically aware of our environment and its influences
- Impact on our economy
- Cultural proximity

### INVITATION

Community interaction can happen only if the spaces are inviting, relatable (spatially, meaningful) and should be a part of their routine. This breaks physical barriers.

- Activating the edges (Interventions can be on the boundaries | based on the edge, different activities can be provided)
- Based on different types of users (physically challenged, elderly, youth, kids, women, men)
- Familiarity in architectural design and the activities

### **PARTICIPATION**

- Community engagement can happen naturally and by initiating. In this case, the interaction should be inititated.
- As a community how can they help each other for individual and community growth - Socio-economic integration (Need for affordable food, clothes, services, medical, education, lifestyle)

### WHY RECOGNIZE?

- Breaks psychological barrier
- Allows for mutual development



- Close to home Community participation, income
- Self help group (Sewing, handicrafts, aari work, gardening, business, etc.)
- Cooking Personality development (Skill training, communication skills, therapy, food spaces, clothes, household items, medical)

- Gathering spaces



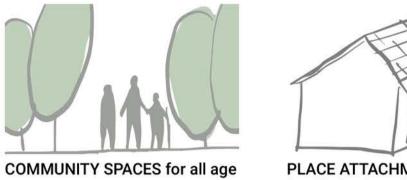


OMMUNITY (SOCIAL) DEVELOPMENT

- Community participation, income



ACCESSIBILITY to the LARGER **CULTURAL INTEGRATION** CONTEXT



PLACE ATTACHMENT.

**CULTURAL INTEGRATION & FOOD** 

familiarity for refugees and host

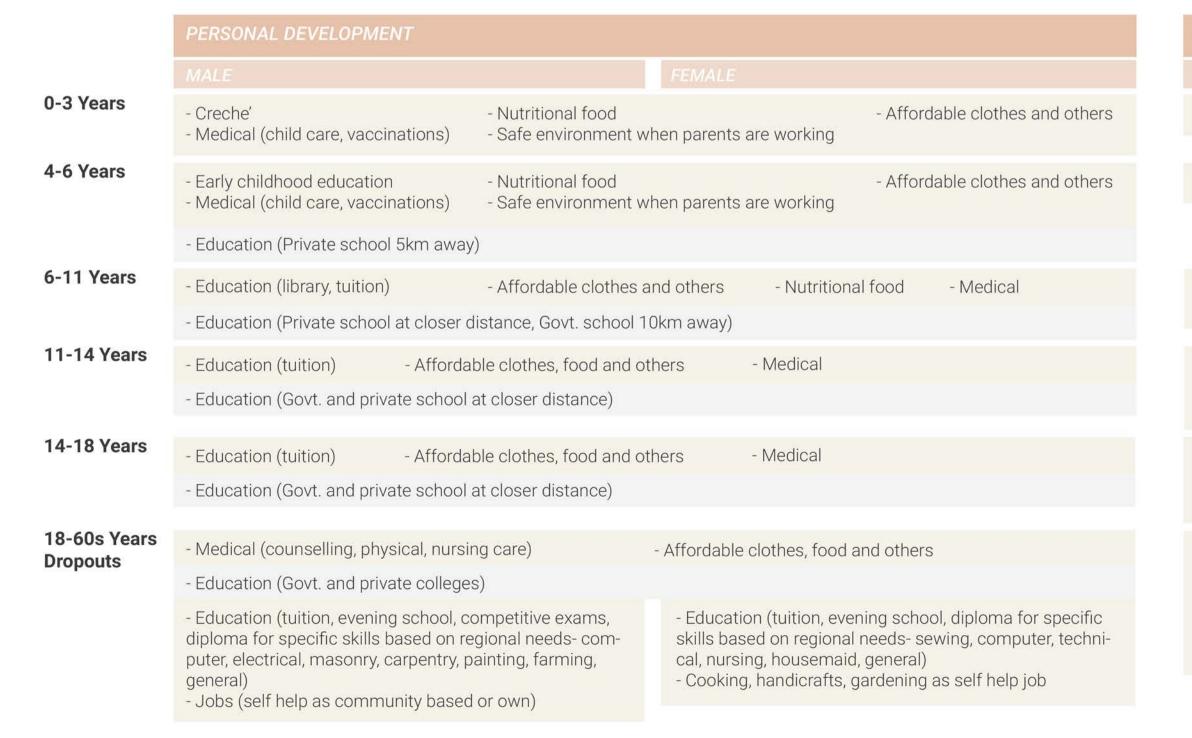
**ACTIVITIES** - Personality development (Therapy, food spaces, clothes, household item medical) Interpersonal development (Gathering spaces )

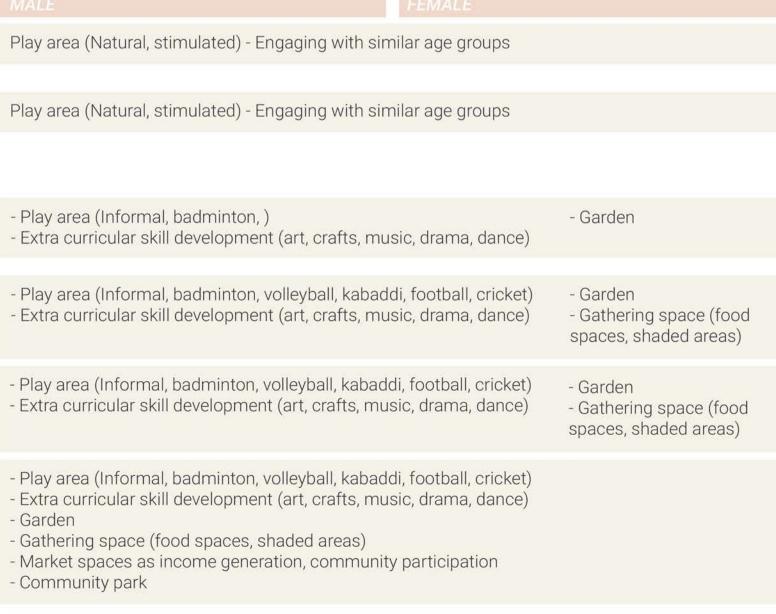




INDIVIDUAL AND COMMUNITY GROWTH based on different users

### AGE-WISE UPLIFTMENT SYSTEMS





# REGIONAL LEVEL INCREMENTAL PROPOSAL



### **GOAL 4**

Reimagining the boundaries by breaking physical barriers

### **SHORT TERM PLAN**

- Positioning of interventions along NH and rail line to pull local communities into the refugee community

- Micro level (Site planning) Heirarchy of spaces Open space utilisation Integration with nature Overall layout Form & massing

- Meso level (Building level) Design elements Spatial quality Facade treatment

Form & massing

Interior design

Planning

# LONG TERM PLAN

- Macro level (Urban level) Circulation pattern and its character Overall layout Community spaces for social interactions

- Combined housing (LIG, EWS, Refugee community) - Seamless segregation

To add value to overall community development

Large scale production using skills through website, local shops

### **SHORT TERM PLAN**

GOAL 2

**LONG TERM PLAN** 

**GOAL 1** 

**SHORT TERM PLAN** 

- Affordable clothes (Thrift)

To allow individuals to stand on their own

- Skill equipment + Production through tie up

- Natural play area for kids and youth (convertible)

- Pop up market and Retail shops

₹₹

- Gardening

- Skill production

₹₹

### **LONG TERM PLAN**

- Cultural centre

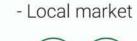
₹₹

- Community park





₹







### GOAL 3

Building inter-personal relationships between communities by breaking psychological barriers

### SHORT TERM PLAN

 Mutually beneficial economy generation activities specific to users (Sewing, carpentry, masonry, engineering trades, handicrafts, gardening, housemaiding)

- Sharing of spaces/ facilities/ resources













### **LONG TERM PLAN**

- Similar incentives for both communities

- Change in policy (Provide incentives like monthly income for a few months up till people from the refugee community can stand on their own feet)









- Health facilities (clinic, physiotherapy, pharmacy)

Large scale production of food (small scale industries, food hub)

- Community centre (convertible)

- Small scale cultural expression

 $\overline{z}$ 

- Affordable food (Local shops)

- Education for all age groups and categories (preschool, daycare, school, evening school, tuition, library)

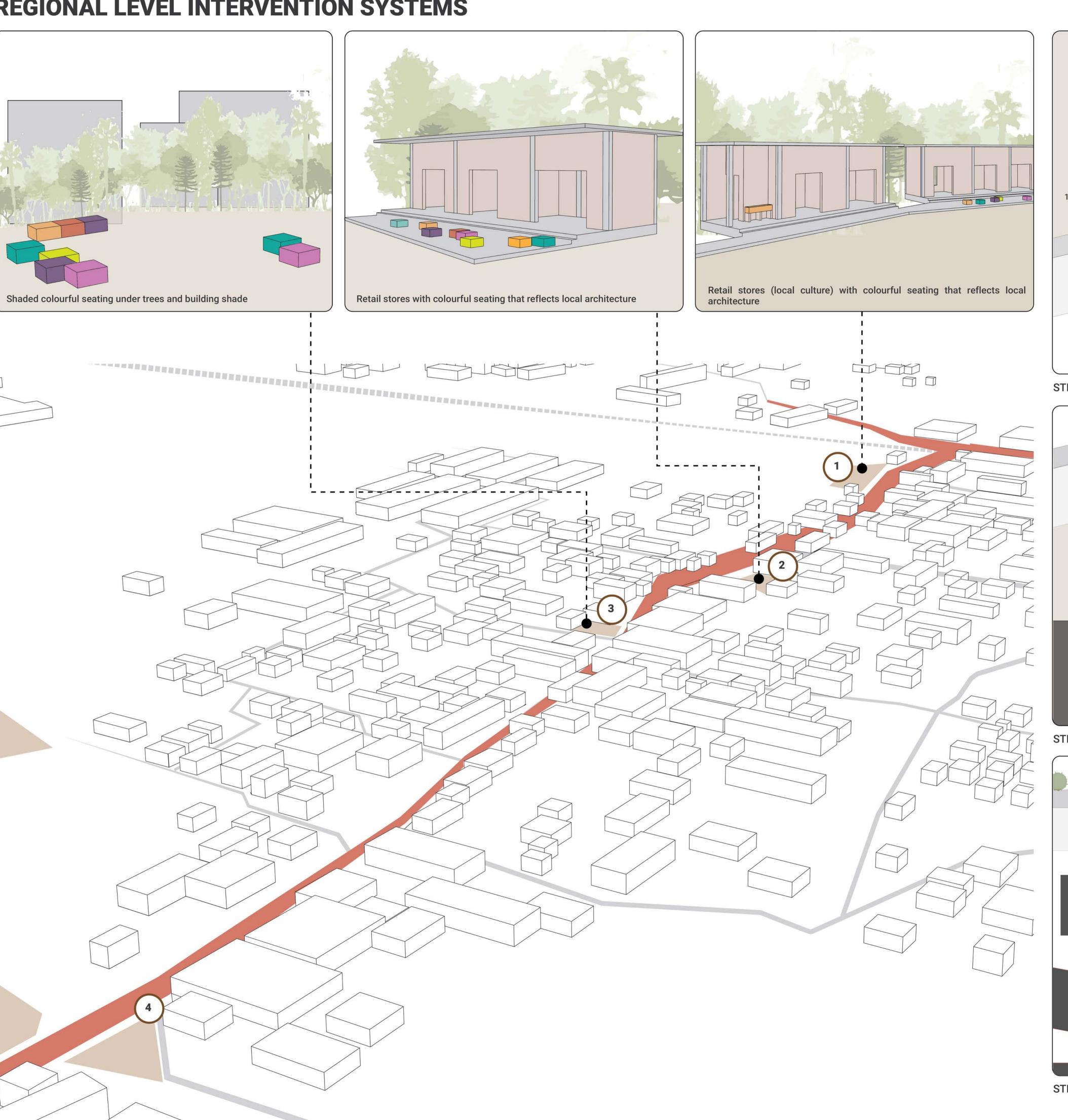
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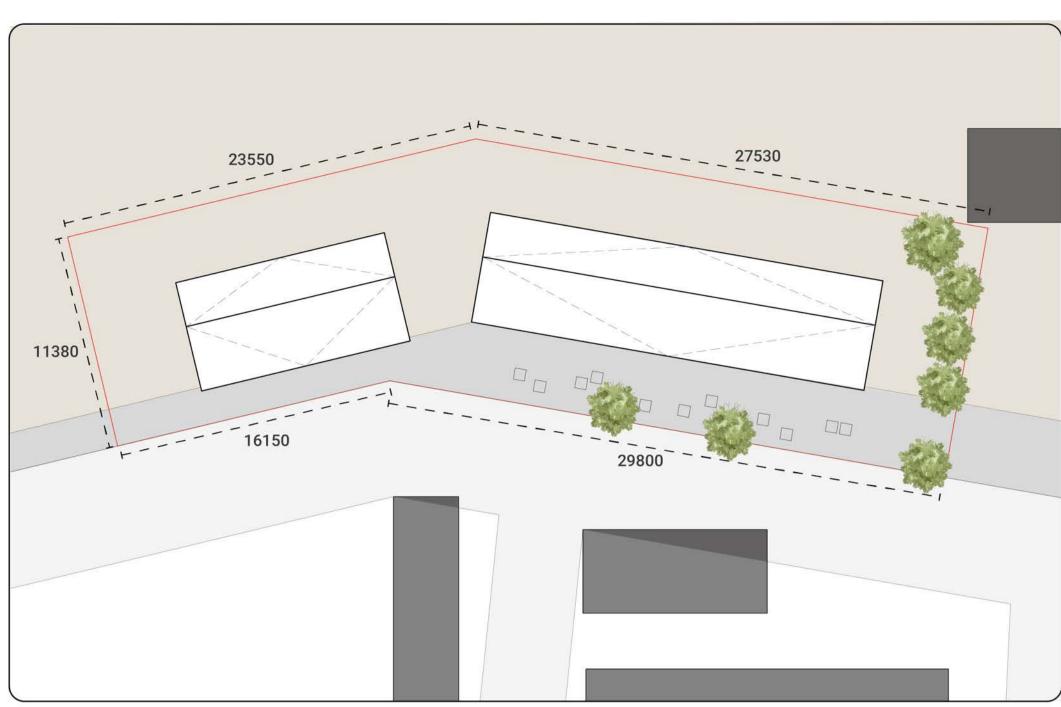




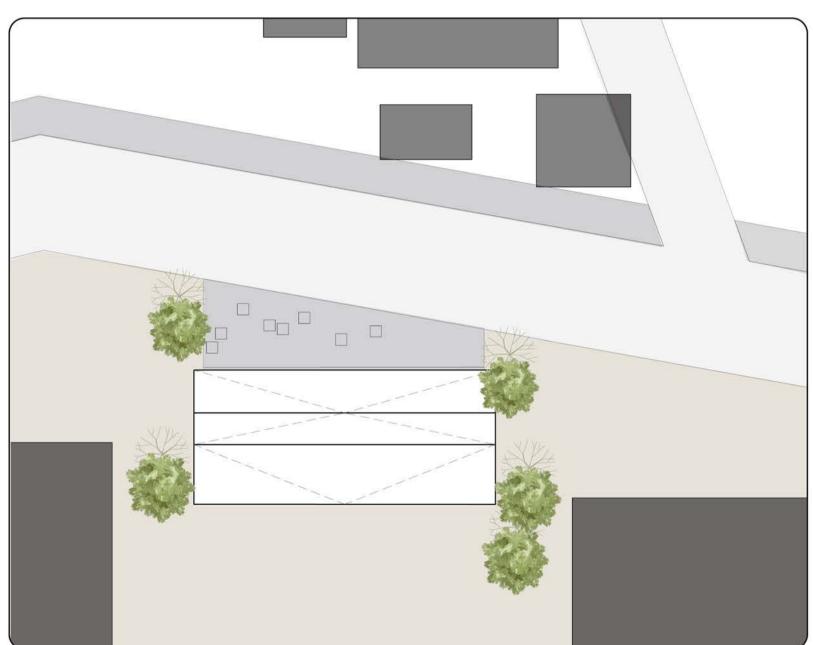
# REGIONAL LEVEL INTERVENTION SYSTEMS COMPOST RAINWATER HARVESTING GARDEN **SYSTEM** DINING SOLAR POWER SYSTEM COMPOST RAINWATER HARVESTING GARDEN SYSTEM SOLAR POWER SYSTEM Blue system **Economic system** Solar power generation system **Green system** Fund raising events and donations held by the community and a percent of the profits from the sales area will be used for maintaining the system Waste from the neighbourhood is collected and waste generated from the intervention zones are collected and utilised for the community garden. Water from the street side interventions are directed towards the main site and Street interventions are powered using the solar power systems created in the main rainwater is stored and filtered through the rainwater harvesting system in the main intervention zones. intervention zones. Intersecting node Larger community Local community tigination system interaction participation system Local community interaction

# **REGIONAL LEVEL INTERVENTION SYSTEMS**

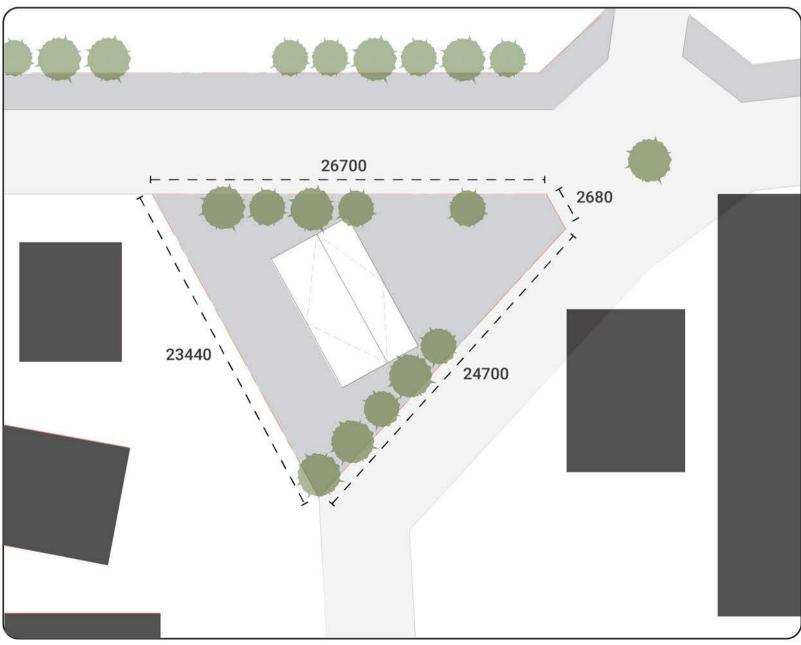




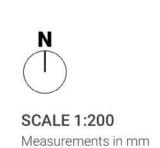
STREET INTERVENTION 1 - Plan



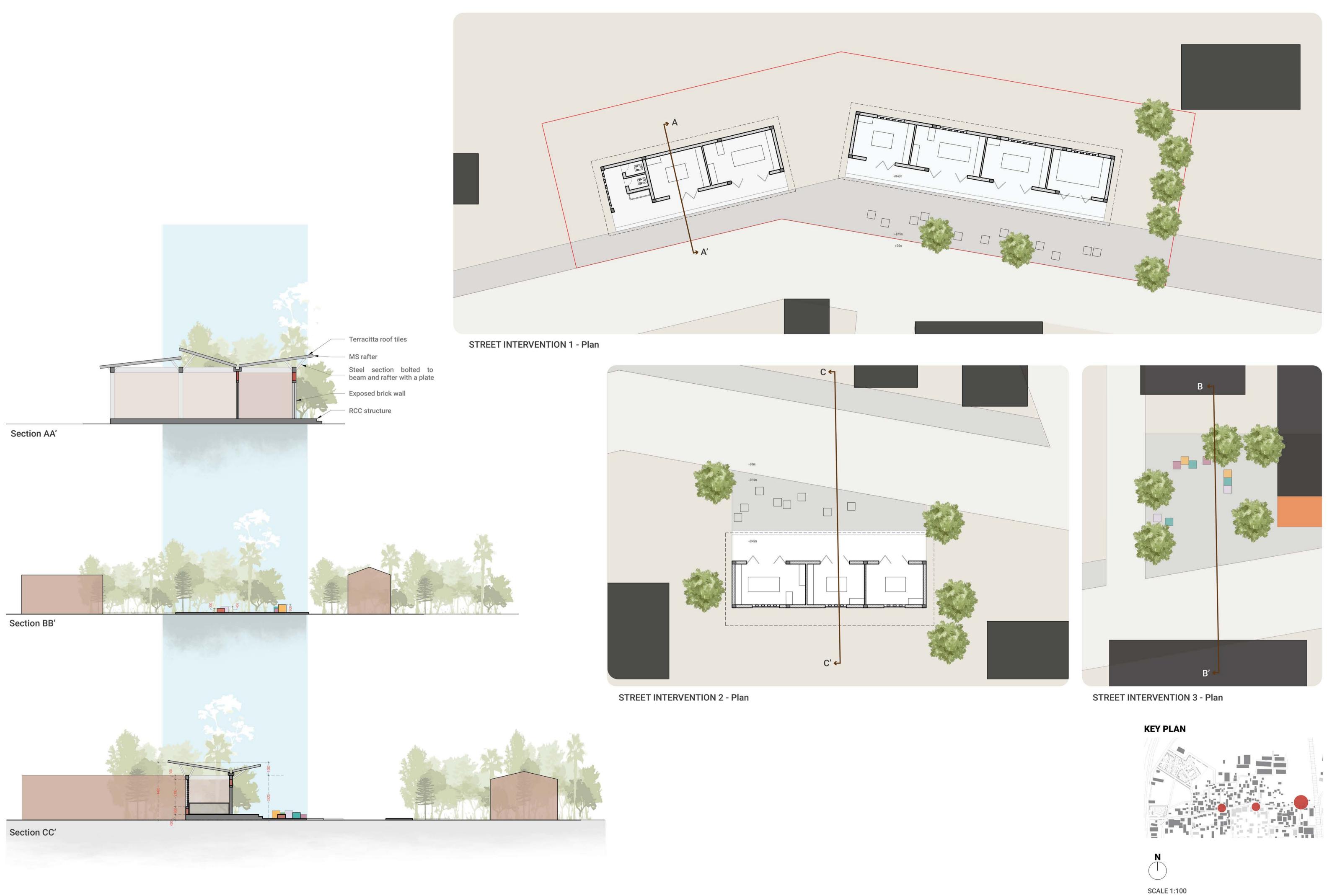
STREET INTERVENTION 2 - Plan



STREET INTERVENTION 4 - Plan



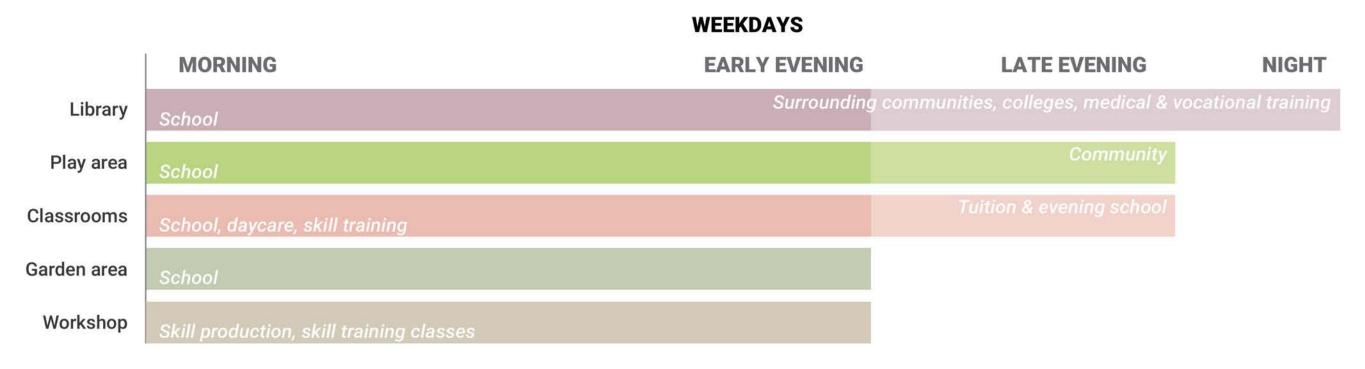
# **REGIONAL LEVEL INTERVENTION SYSTEMS**

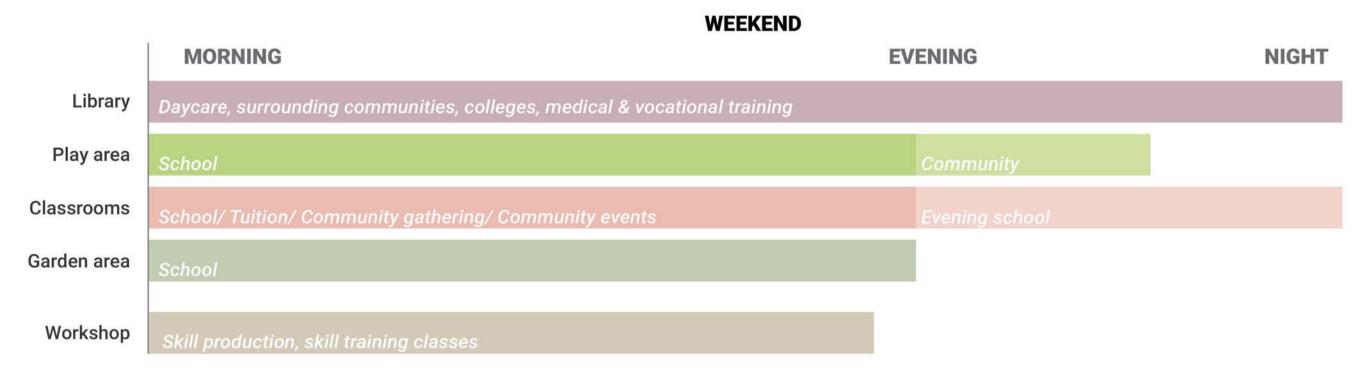


Measurements in mm

# LARGER COMMUNITY & LOCAL COMMUNITY INTERACTION INTERVENTION

### **TIMELINE**





Based on the strategic system formed, spaces were divided into larger communities interaction systems and local communities interaction system. The necessities have allowed for multi use of spaces.

### **MATERIAL PALETTE**



Materials were chosen based on accessibility and the colour and material palettes were inspired and influenced by the native architecture of both communities to allow people to be familiarised with the new built-up.



# SMALL SCALE BUSINESS | SECOND HAND SHOP

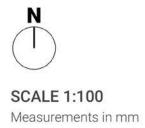




# SMALL SCALE BUSINESS | COMMUNITY DINING | PERFORMANCE AREA





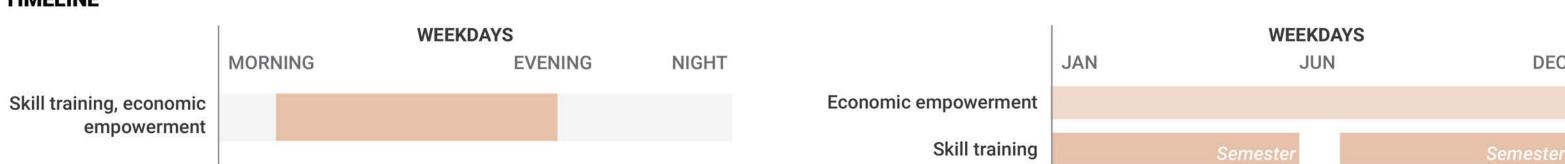


# SKILL TRAINING | PRODUCTION SYSTEM | JOB COUNSELLING | AID | MANAGEMENT



### **Ground floor plan**

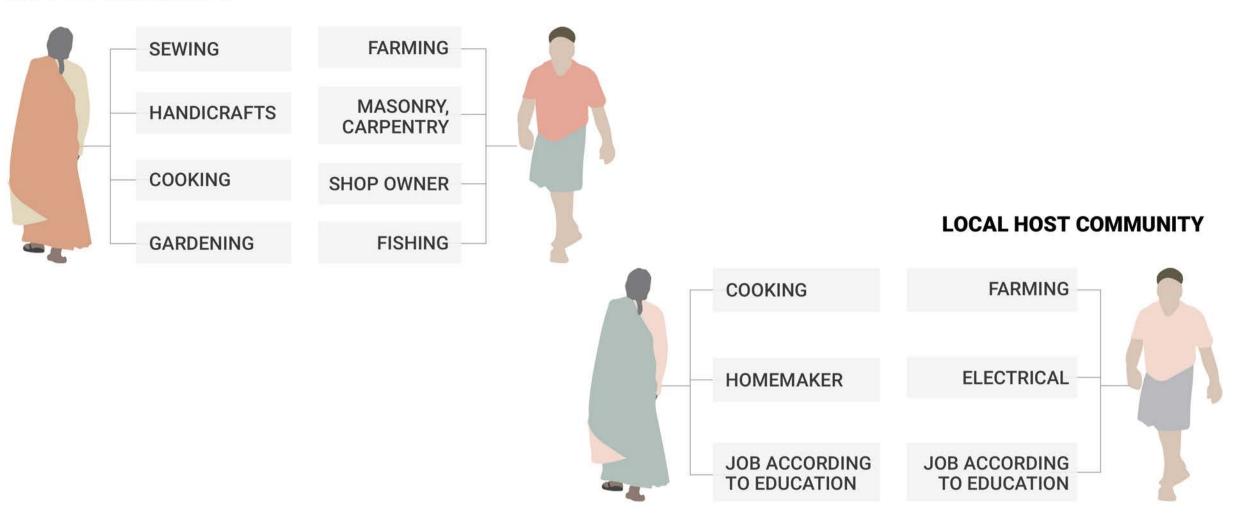
### **TIMELINE**



### LARGER COMMUNITY INTERACTION SYSTEMS

**UPLIFTMENT THROUGH SKILLS** 

### REFUGEE COMMUNITY

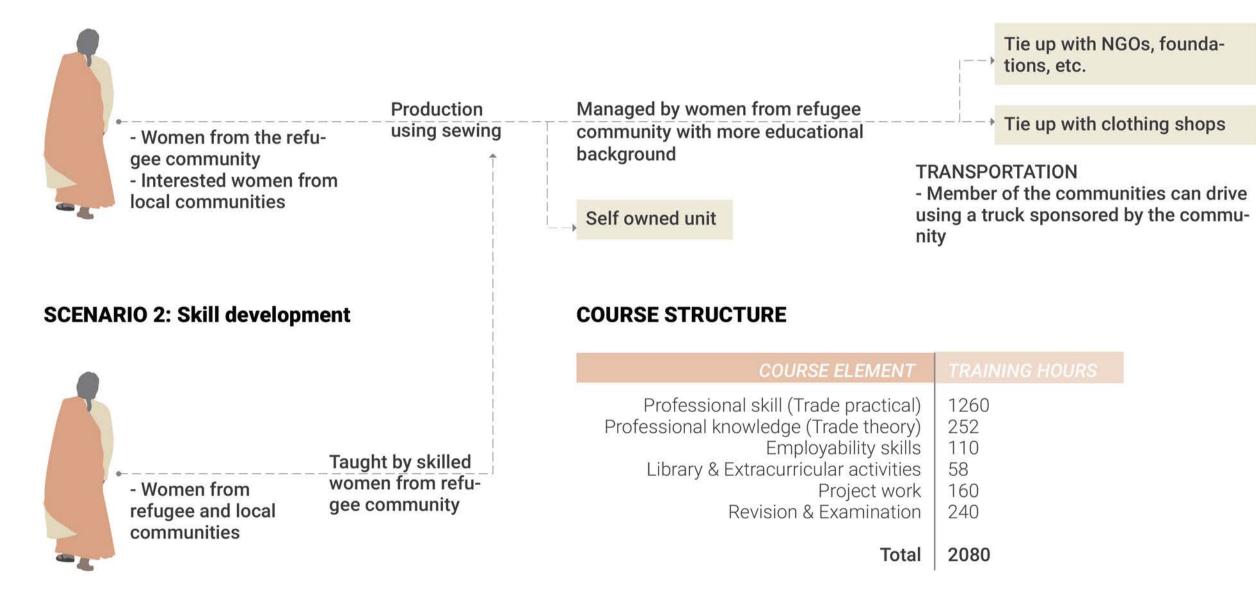


- Income generation is imperative to raise the standard of living
   Engage the community in multiple sustaining enterprises and provide opportunities for members to gain new skills as well as use them to
- Integrating these enterprises to create one consolidated brand that offers a variety of products and services

### **SEWING**

### **SCENARIO 1: Economic empowerment**

- Women from the refugee community are skilled in stitching blouses and clothes, aari work, lacemaking (dresses, garments, curtains, tablespreads, covers, ...)



- If there are no students, the space can be used for economic empowerment
- Teachers for skill training can earn by volunteering

### **ADMISSION**

- Selected based on merit and communal rotation every year through District Wise Counseling, conducted by Nodal Government ITIs located in each District. Candidates according to their rank will choose the course/ ITI as per their choice. Selection order issued to each candidate on the spot
- Training session starts during August & ends July and given as per National Council for Vocational Training (NCVT) norms

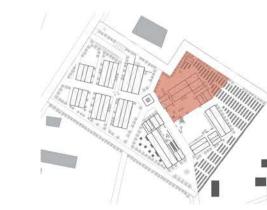
### **APRENTICE INTERNSHIP**

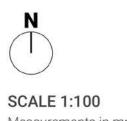
- Monthly stipend (Rs.500/-) is issued to all trainees irrespective of community and parent's annual income

### **FREEBIES**

- Bus pass between their place of residence and the institute for the entire Training period
- Uniforms (2 sets) with stitching charges per year to all the trainees
- Bi-Cycle to all the trainees
- Laptop to all eligible trainees
- Text Books for all semesters - Drawing Instruments to all Engineering trade trainees
- Shoe (1 set)
- Distribution of I.D Card







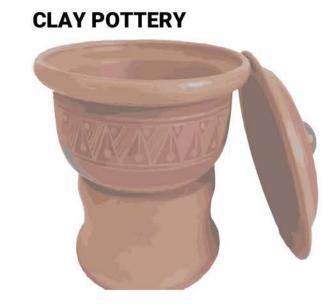
Measurements in mm

### **HANDICRAFTS**

### **LACQUER WORK**



- Colourful & bright walking
- Flag and hand fan handles
- Bowls
- Vases
- Containers Decorations



### **WOOD CARVING**



- Ornaments Figurines - Sculptures
- Lacquer products
- Boxes

### SCENARIO 1: Economic empowerment using skills

- Women from the refugee community are skilled in crafts
- Women from local communities can also join if interested
- People with similar interests from both communities can work together and benefit mutually

An answer to the depleting handicrafts industry as the local communities have better access to education and relevant job oppurtunities



Managed by women from refugee community with more educational background

Tie up with Govt. organisations (Poompuhar)

Tie up with NGOs, foun-

Self owned unit

### **TRANSPORTATION**

- Member of the communities can drive using a truck sponsored by the community

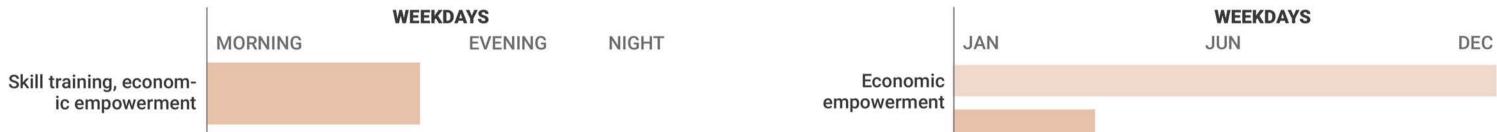
dations, etc.

### **COURSE STRUCTURE (Non-Engineering trades)**

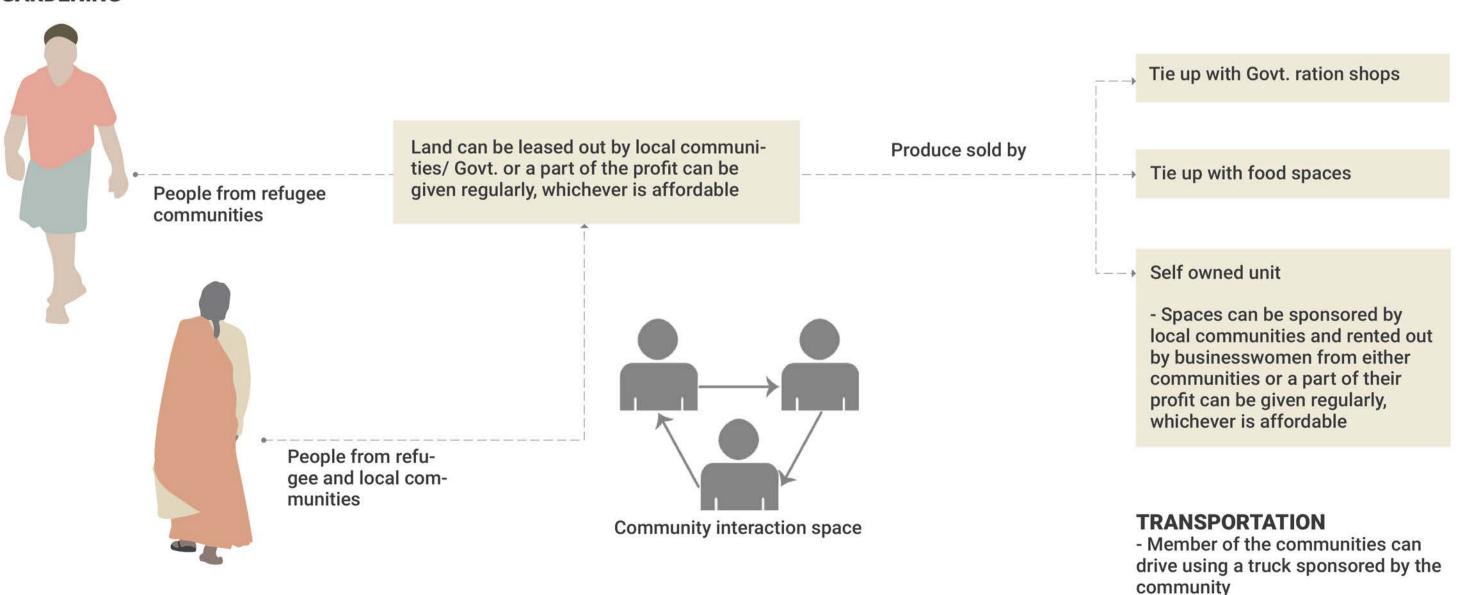
SECTOR OF TRADE	TRAINING	ENTRY	No. Of	POWER
	PERIOD	QUALIFICATION	STUDENTS	(KW)
Ornamental wood carving	2 years	8th Pass	30	2

- If there are no students, the space can be used for economic empowerment
- Teachers for skill training can earn by volunteering

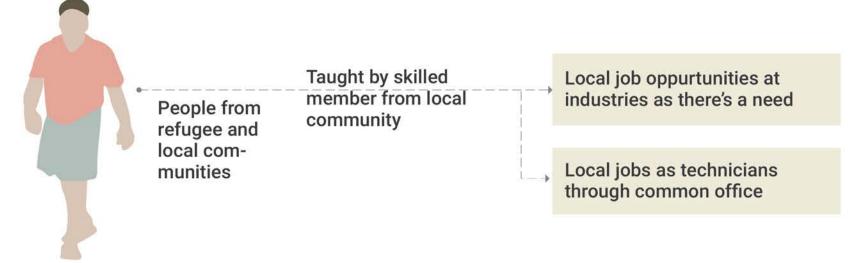
### TIMELINE



### **GARDENING**



### **ENGINEERING TRADES**



### CIVIL Mason technician 1 year 8th Pass 25 0.5 25 0.5 Plumbing technician 8th Pass 1 year **WELDER** Welding technician 8th Pass 30 1 year **ELECTRICAL** Electrical technician 30 8.0 1 year 8th Pass 30 1.5 Electrical & electronics techni-2 years 8th Pass **FITTER**

1 year

2 years

1 year

8th Pass

8th Pass

8th Pass

25

30

40

1.5

1.3

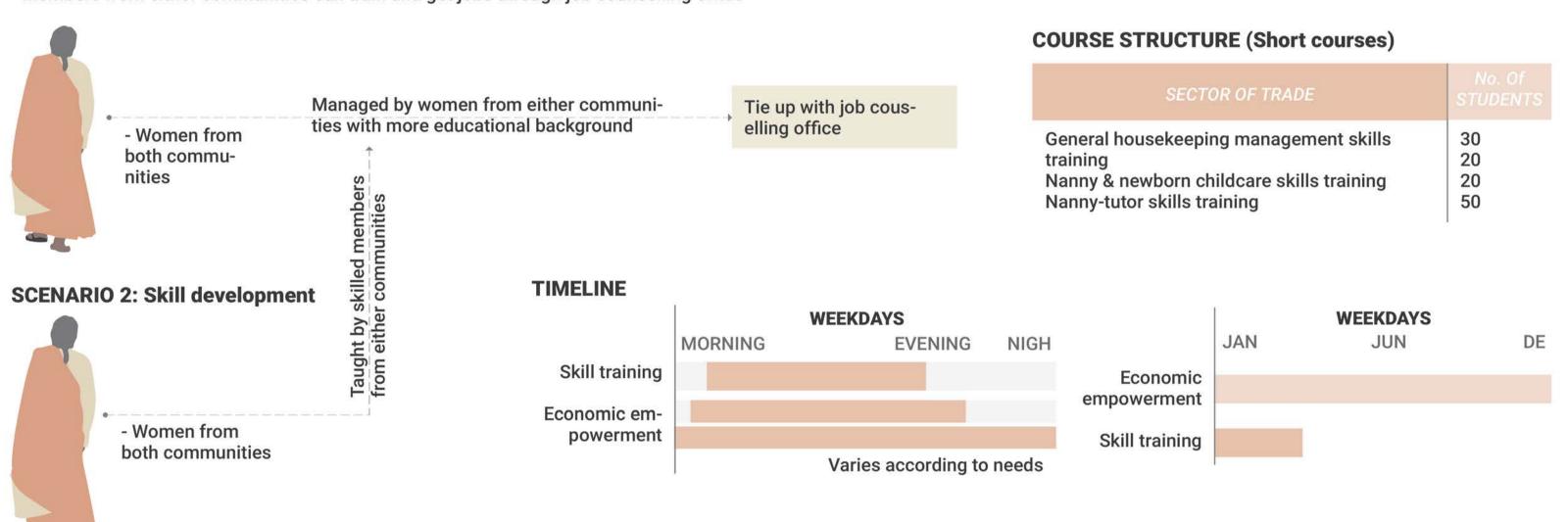
### **TIMELINE**

	WEEKDAYS				
	MORNING	EVENING	NIGHT		
Skill training, economic empowerment					

### **HOUSEMAID SERVICES**

### **SCENARIO 1: Economic empowerment**

- Increasing housing and real estate development has allowed for mixed income group development to emerge, increasing the needs for housekeeping
- Members from either communities can train and get jobs through job counselling office



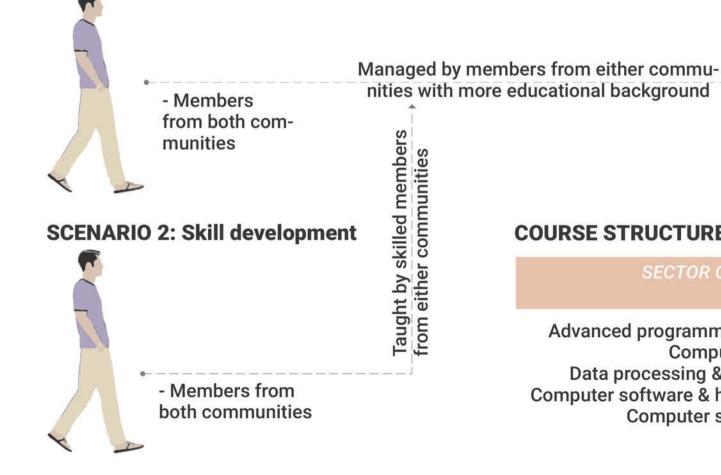
Bench fitter

Industrial fitter

Fitter cum basic machine opera-

### **COMPUTER TRAINING**

### **SCENARIO 1: Economic empowerment**



**TIMELINE** 

**WEEKDAYS** MORNING EVENING NIGH Skill training

### **COURSE STRUCTURE (Non-Engineering**

SECTOR OF TRADE	TRAINING PERIOD	ENTRY QUALIFICATION		POWER (KW)
Advanced programming & system analysis Computer software package Data processing & computer application Computer software & hardware maintenance Computer software programming	1 year	10th Pass	10	1.2
	1 year	10th Pass	10	1.5
	1 year	10th Pass	10	1.2
	1 year	10th Pass	10	1.2
	1 year	10th Pass	10	1.2

Tie up with job cous-

elling office

### **REFERENCES**



- Commissionerate of Employment and Training, Dept. of Labour Welfare and Skill Development, Govt. of Tamil Nadu (Part of Skill India)
- National Council for Vocational Training (NCVT) norms

# SKILL TRAINING | OUTDOOR WORKSHOP | DINING | COMMUNITY GATHERING | EVENING SCHOOL | TUITION | PLAY AREA

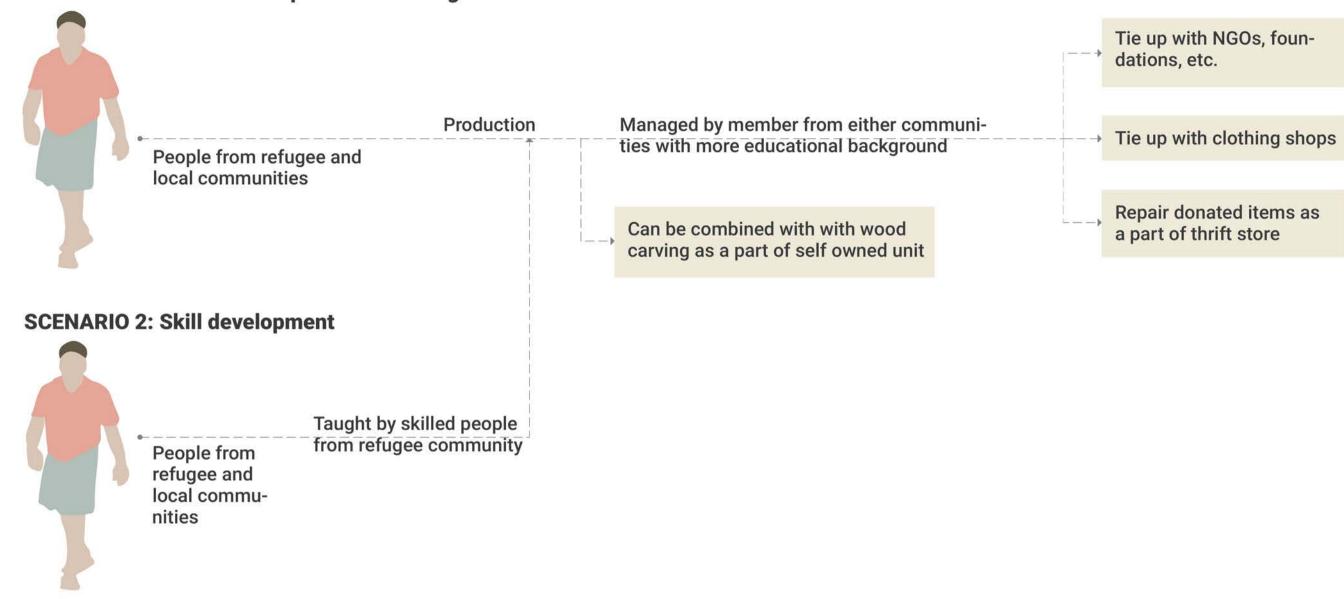


### LARGER COMMUNITY INTERACTION SYSTEMS

**UPLIFTMENT THROUGH SKILLS** 

### **CARPENTRY**

**SCENARIO 1: Economic empowerment using skills** 



### **TRANSPORTATION**

- Member of the communities can drive using a truck sponsored by the community

### **TIMELINE WEEKDAYS** MORNING EVENING NIGHT Skill training, economic empowerment **WEEKDAYS** DEC JUN **Economic empowerment** Skill training

### **COURSE STRUCTURE (Engineering trades)**

SECTOR OF TRADE	PERIOD	ENTRY QUALIFICATION	No. Of STU-	POWER (KW)
Carpentry & wood working	1 year	8th Pass	50	1.5
Carpentry & cabinet	3 years	8th Pass	50	1.5

- If there are no students, the space can be used for economic empowerment
   Teachers for skill training can earn by volunteering

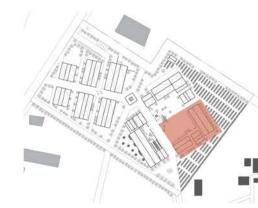
## **MASONRY**

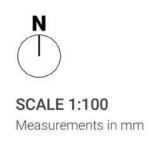


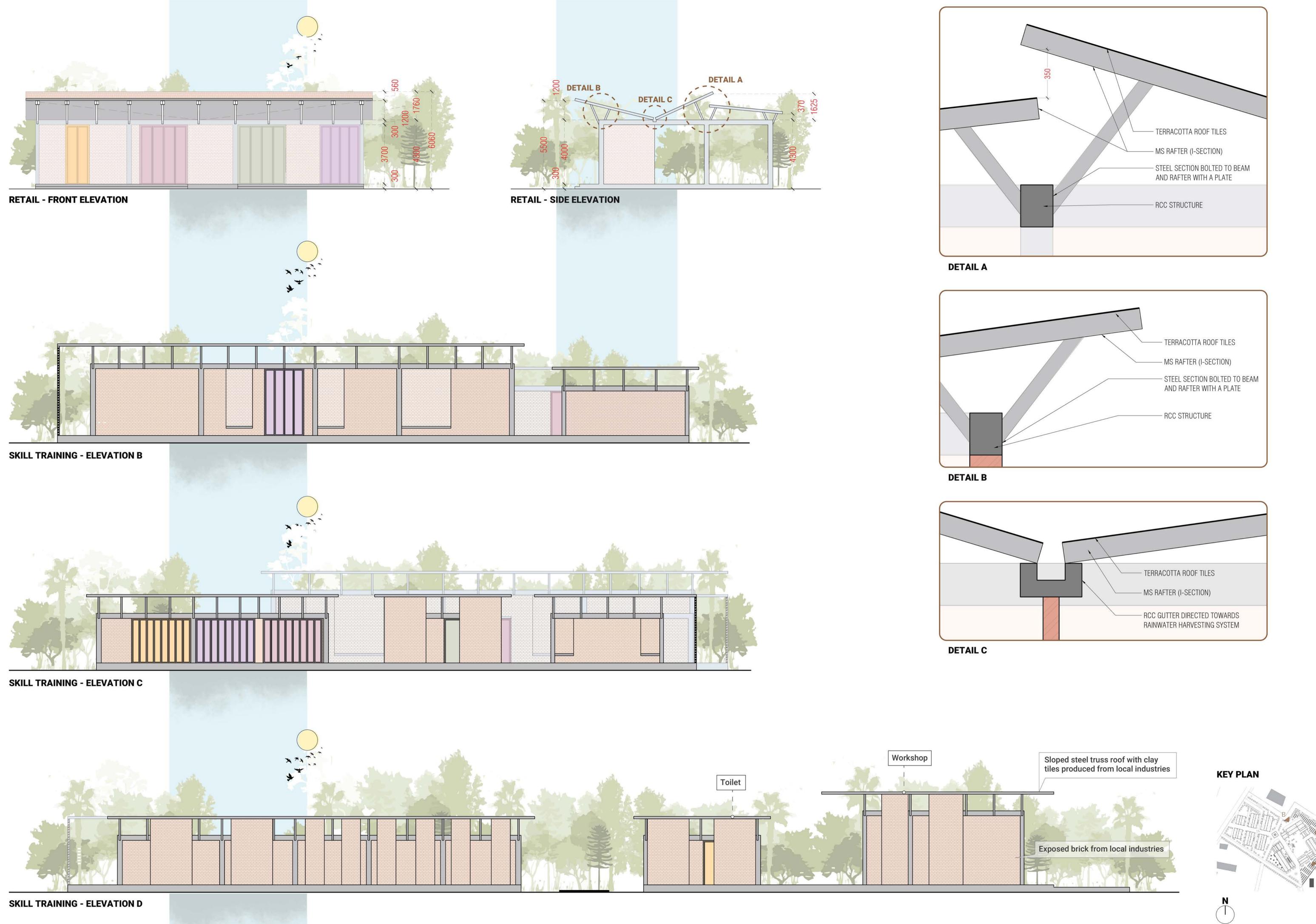
 Build the proposed structure and contribute to future expansion People from refugee and local communities

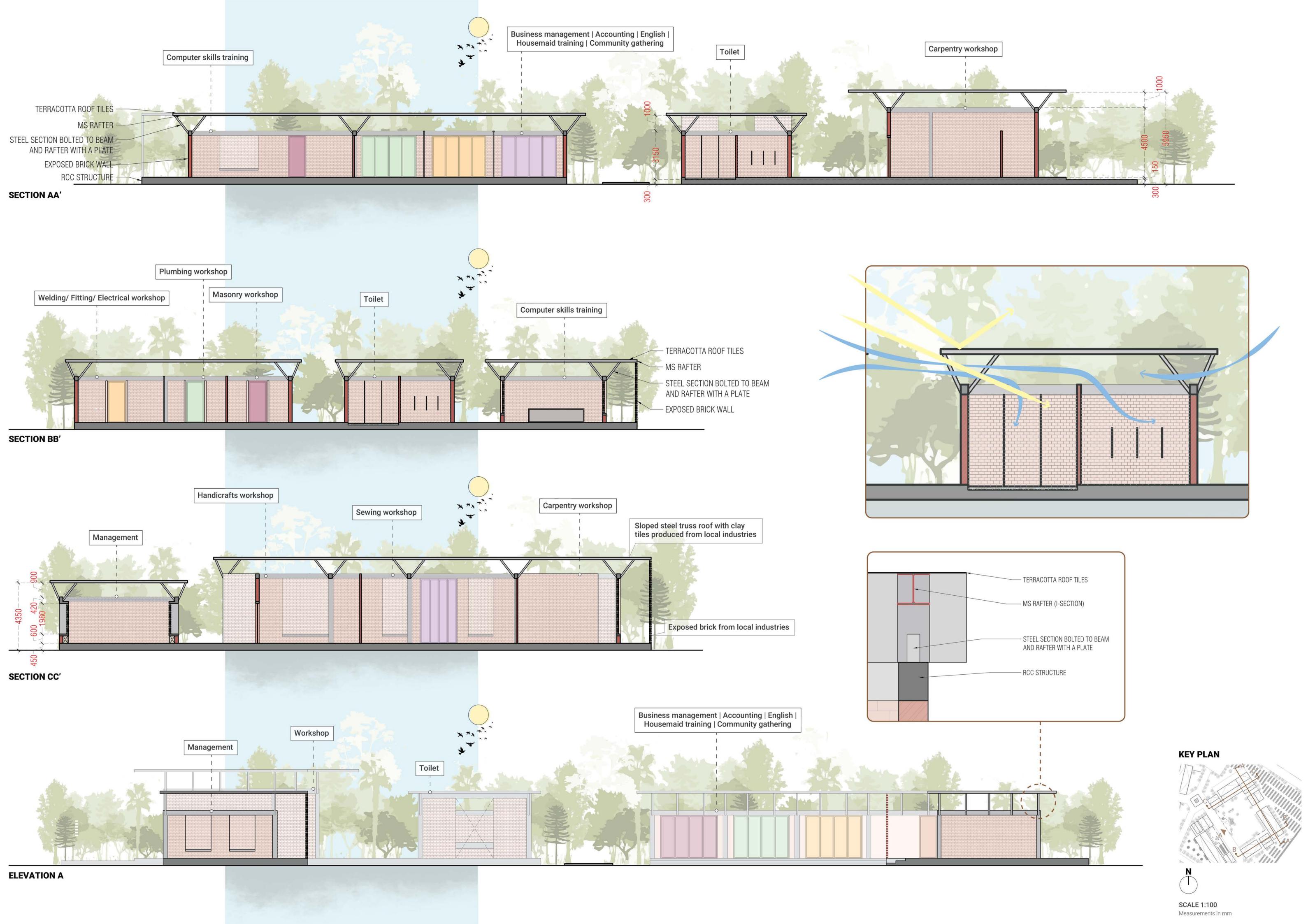
- This reduces the budget for manual labour

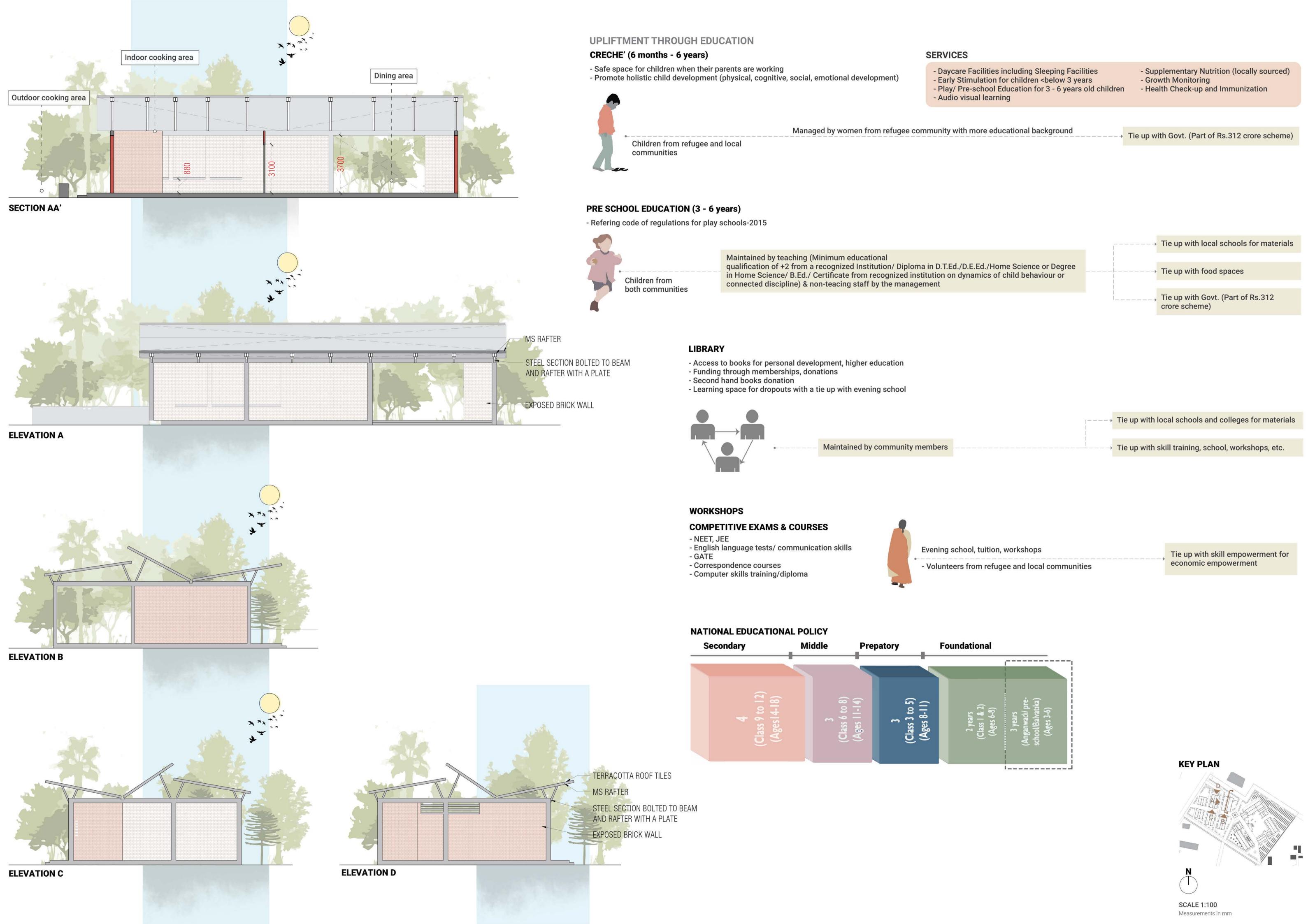
**KEY PLAN** 









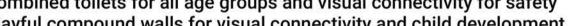


### PLAY + CULTURE = LEARNING

The kids' community (<6yrs) need a space that helps in early childhood development. Play is the most integral function as it all ows them to explore and learn and is the link that connects all the activities. The wall and plinth are the most accessible to kids. So extrusions are made to these elements which allow them to use them creatively. The play could have a positive effect on physical and psychological well being. Walls as planes of communication between inside and outside with openings that become entry, seating and window. Plinth as an adaptive play area that accommodates other community activities such as play area and cultural activities for kids during non school days



Combined toilets for all age groups and visual connectivity for safety
 Playful compound walls for visual connectivity and child development

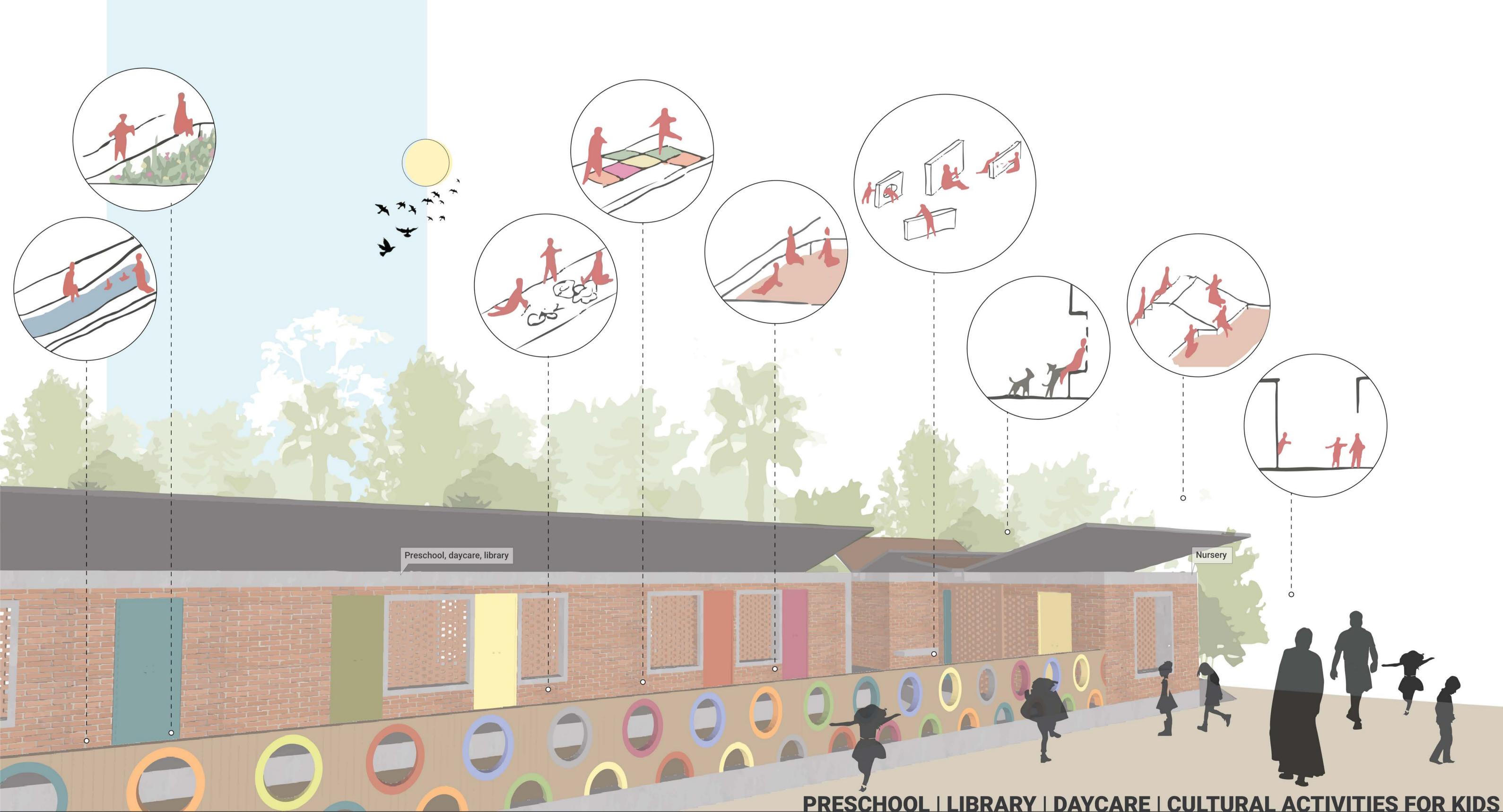


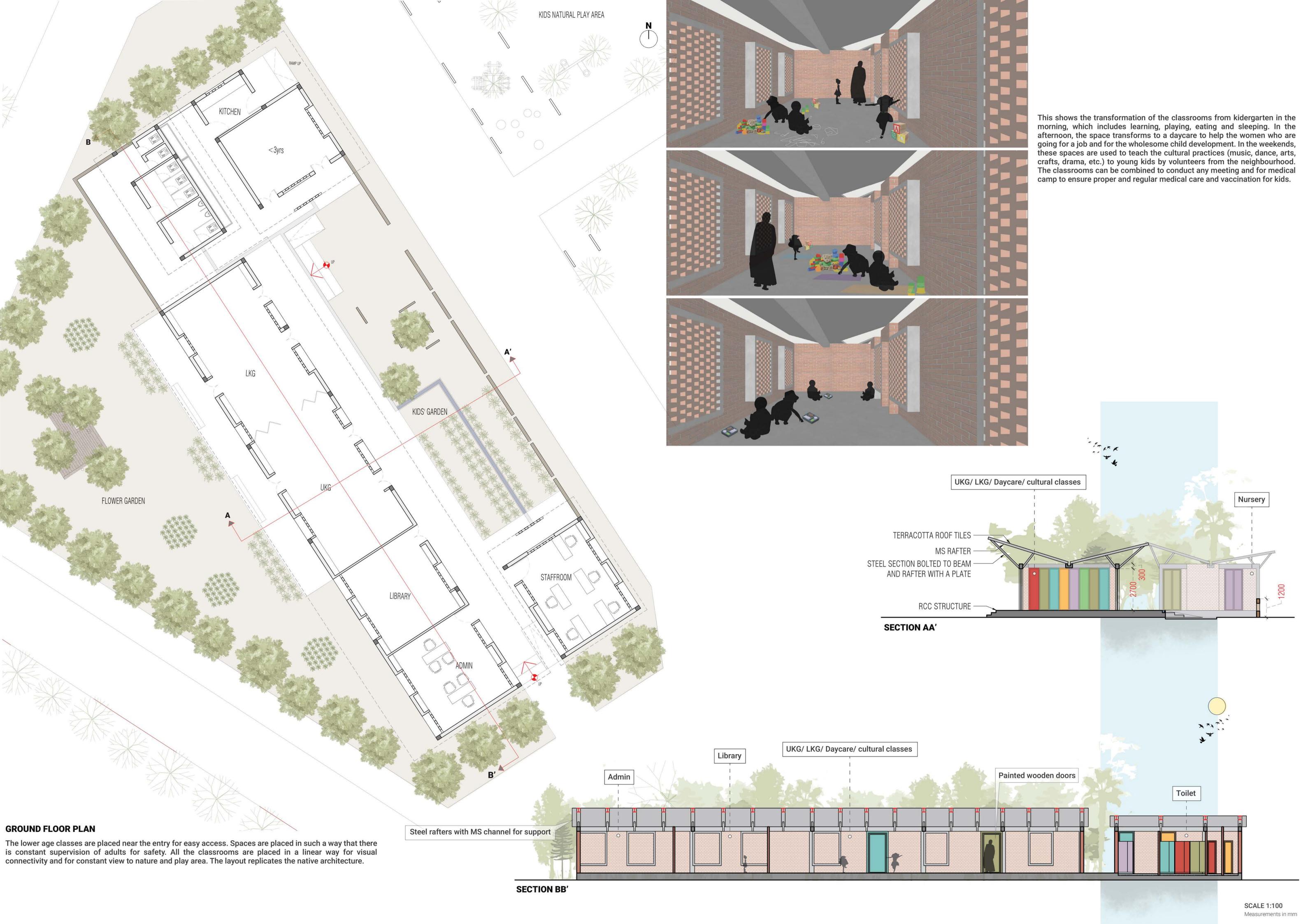


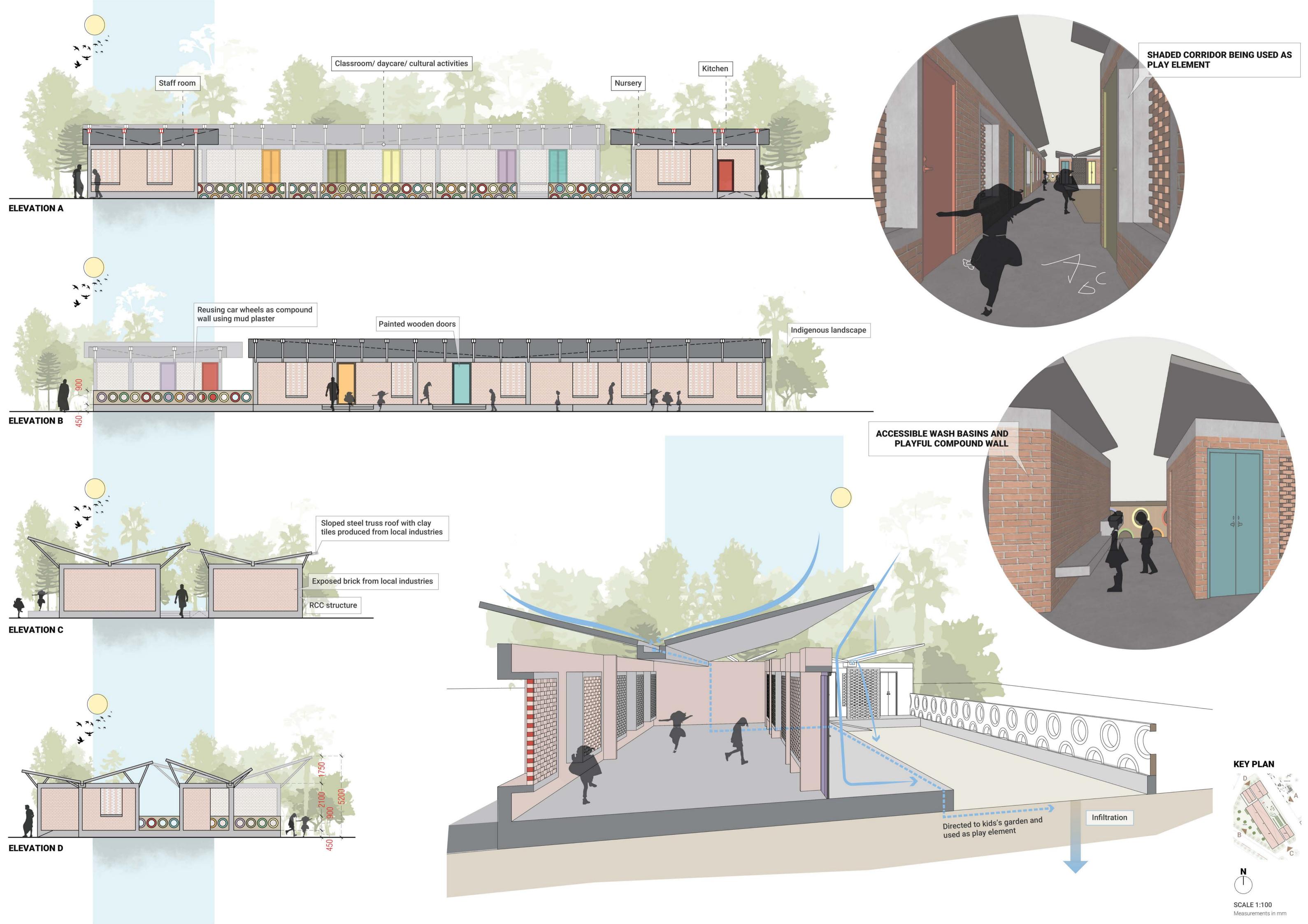
Flexible classrooms to accomodate the changing usage using doors, walls and furniture

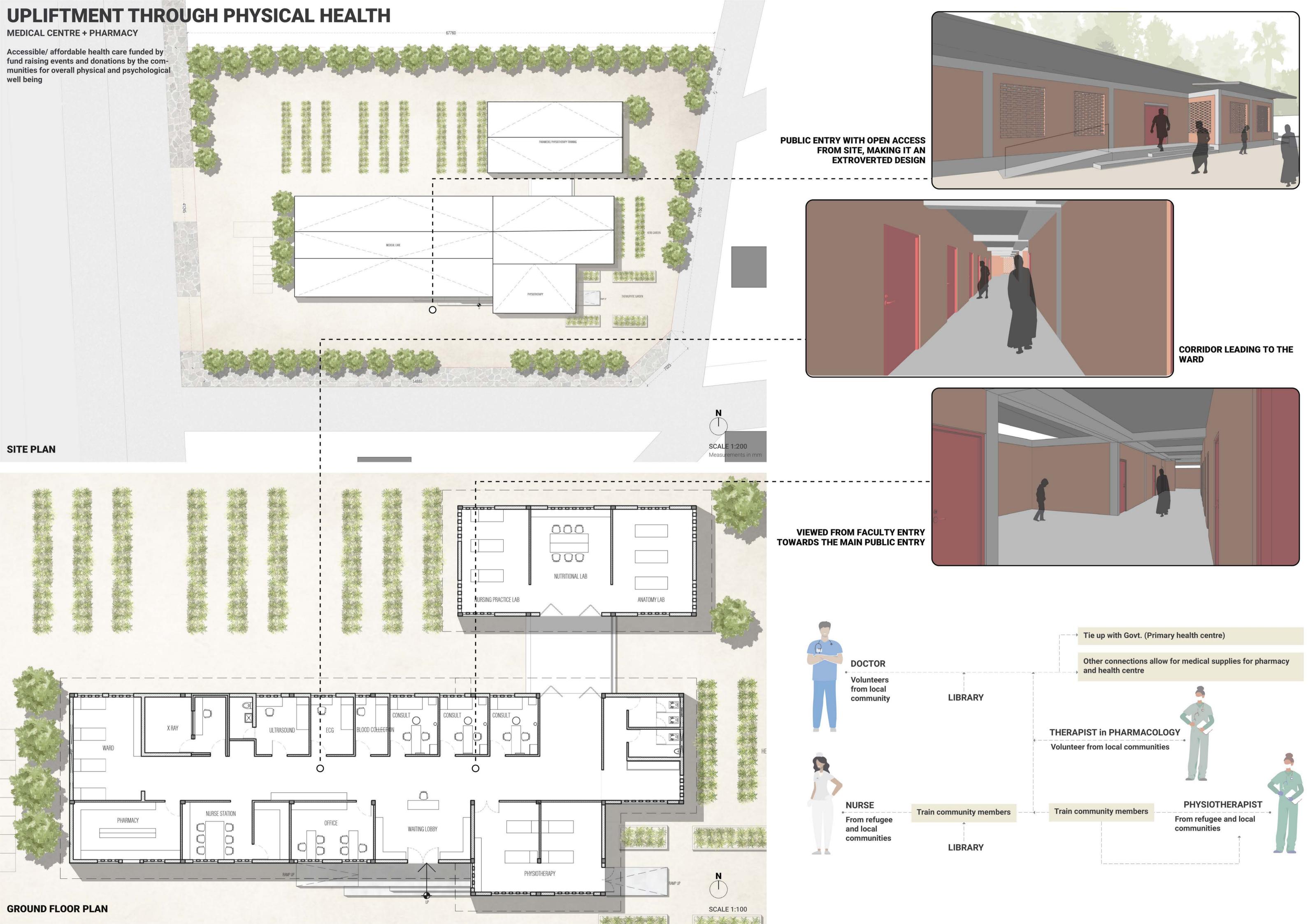


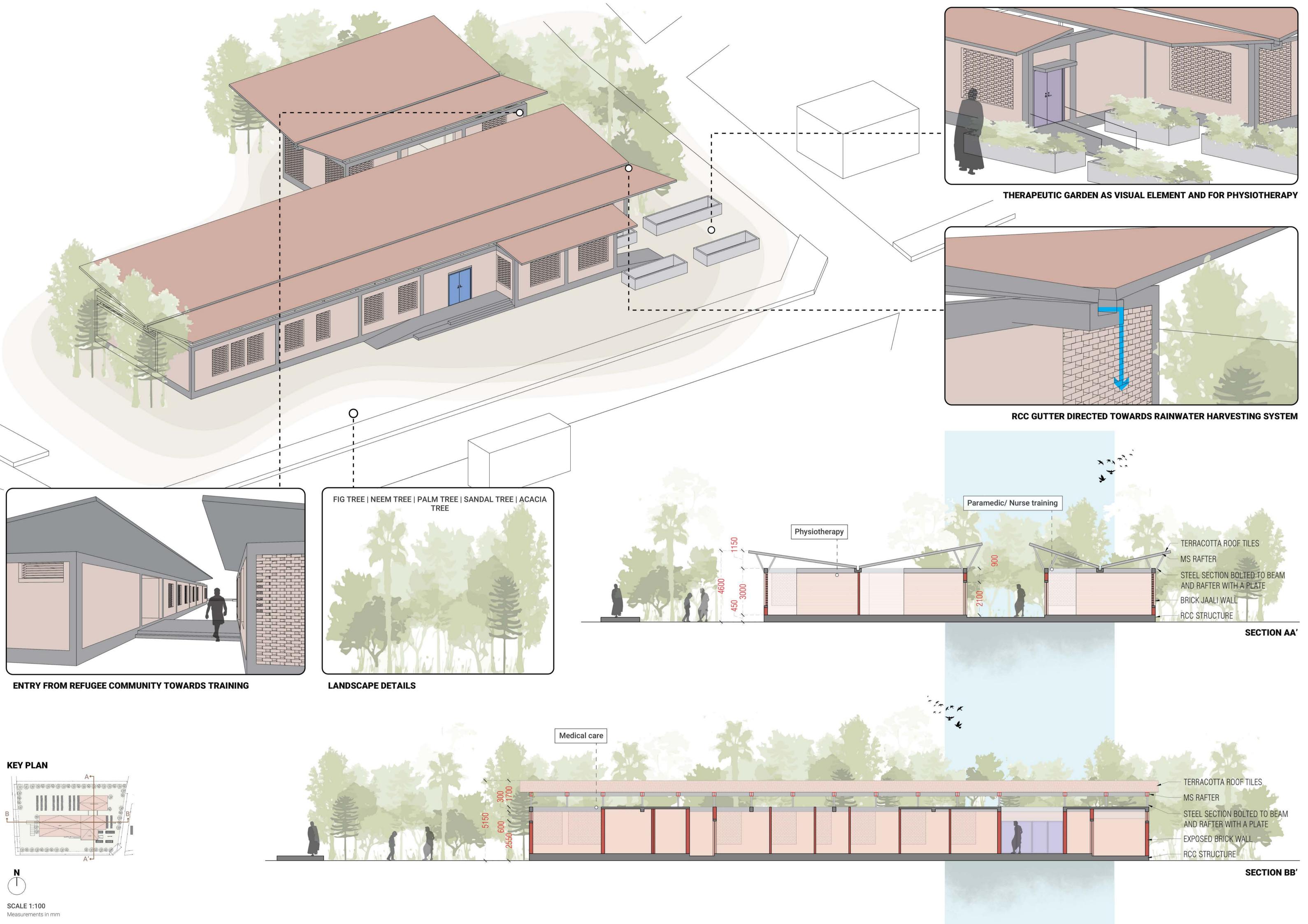
Classrooms open upto the play area and garden which encourages children to play and allows them to define the use of spaces, allowing for overall development

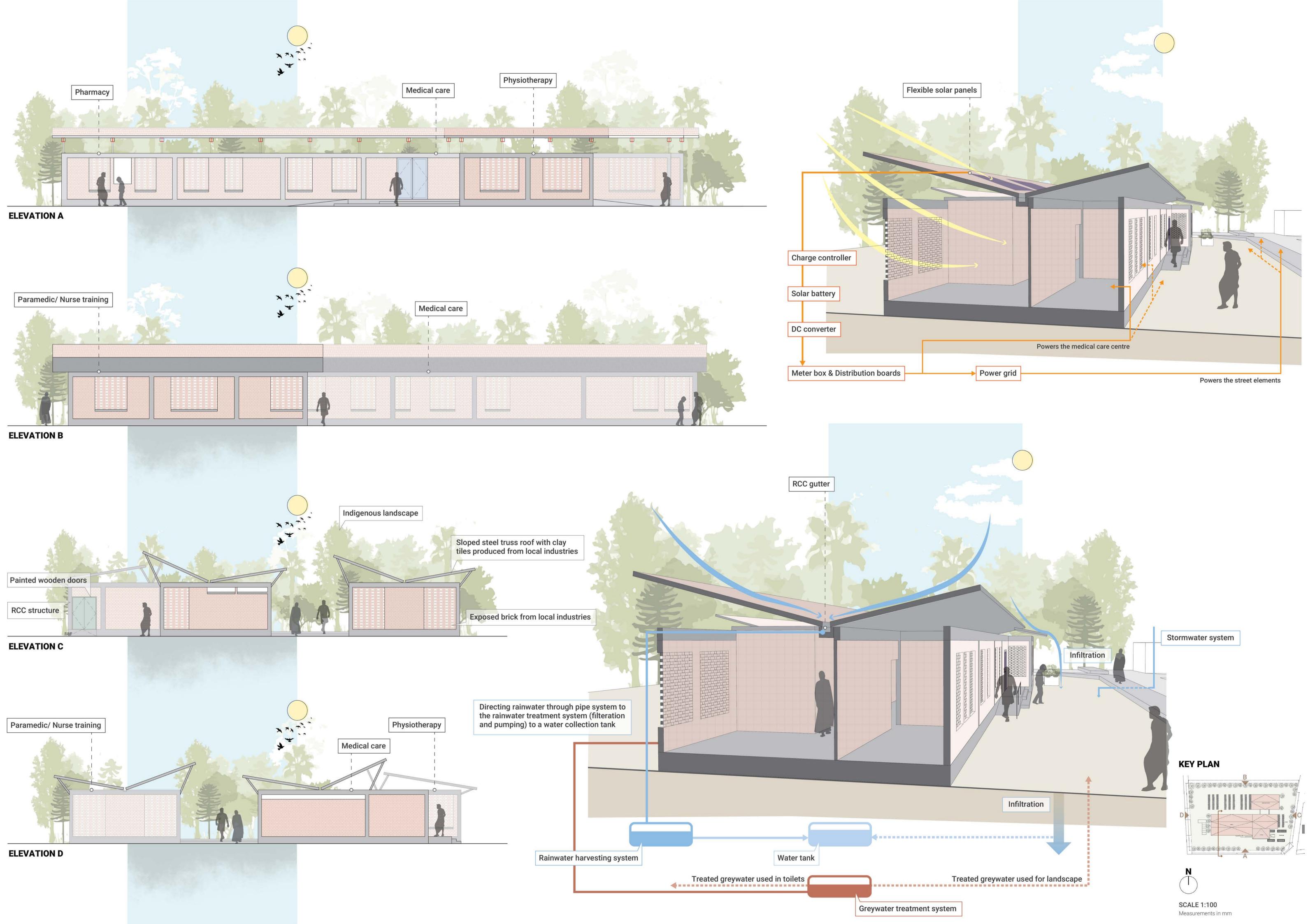




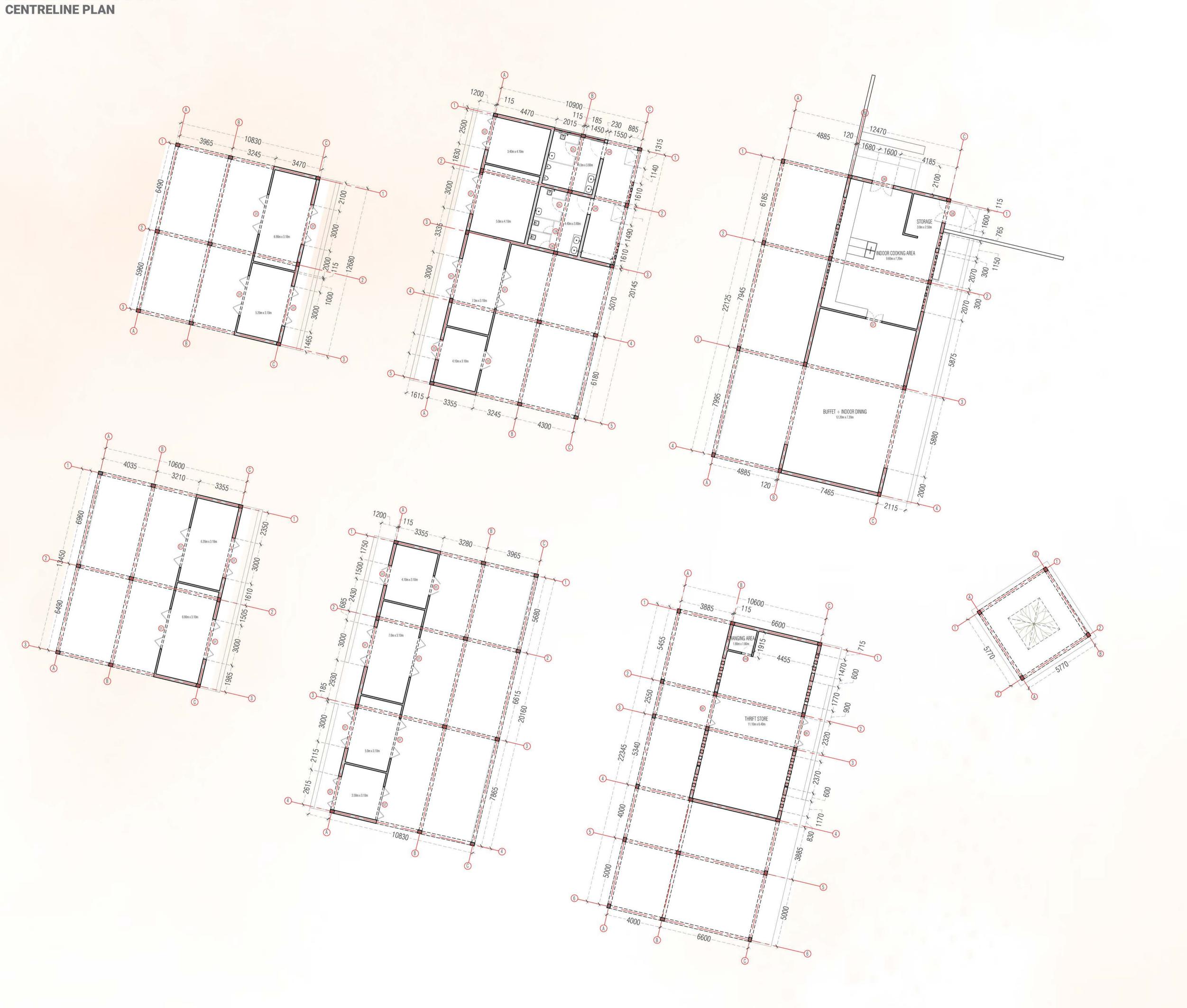








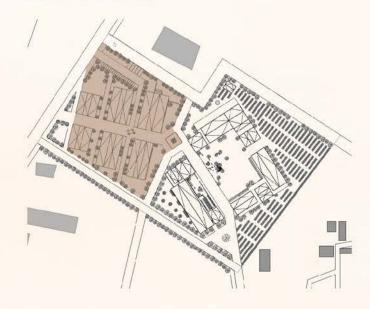
# **INTERVENTION 1**

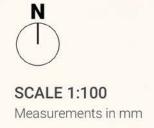


### SCHEDULE OF JOINERY - DOORS

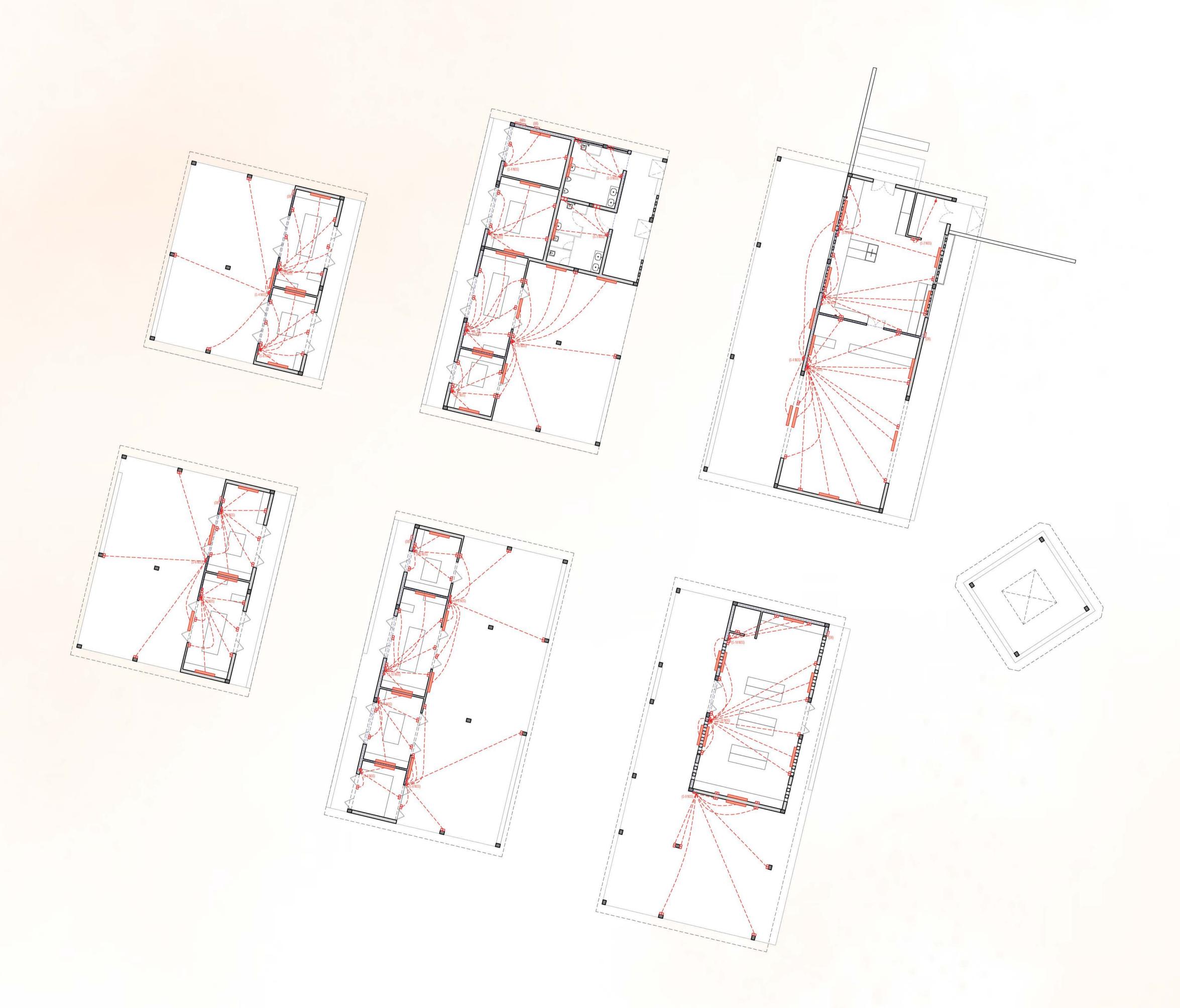
TYPE	YPE OPENING SIZE	OPENING SIZE CASEMENT S		ENT SIZE	E FINISH	DESCRIPTION	NOS.
	WIDTH	HEIGHT	WIDTH	HEIGHT			
01)	3.00m	2.10m	3=3	-	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF FOUR SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	15
D2)	2.50m	2.10m		-	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF FOUR SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	3
D3	1.50m	2.10m		-	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF DOUBLE SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	4
D4)	1.20m	2.10m	*	=	LAMINATE	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF SINGLE SHUTTER WITH LAMINATE FINISH ON BOTH SIDES	2
<b>D</b> 5	1.00m	2.10m	*	-	LAMINATE	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF SINGLE SHUTTER WITH LAMINATE FINISH ON BOTH SIDES (DIFFERENTLY ABLED)	2
D6	0.60m	2.10m	**	=1	LAMINATE	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF SINGLE SHUTTER WITH LAMINATE FINISH ON BOTH SIDES	22
<b>D7</b>	1.20m	2.10m	345		PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF DOUBLE SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	14
D8)	1.60m	2.10m	1=1		PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF DOUBLE SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	2
D9	2.30m	2.10m	2=1	w)	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF FOUR SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	2
010	0.75m	2.10m	343		PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF SINGLE SHUTTER WITH PAINTED FINISH ON BOTH SIDES	1
<b>(D11)</b>	1.20m	2.10m	3=3	-	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF SINGLE SHUTTER WITH PAINTED FINISH ON BOTH SIDES	3
<b>(D12)</b>	1.00m	2.10m	343	-	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF SINGLE SHUTTER WITH PAINTED FINISH ON BOTH SIDES	8
<b>D13</b>	4.80m	2.10m	-	-	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF EIGHT SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	1
<b>D14</b>	5.60m	2.10m	240	-	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF EIGHT SHUTTERS WITH PAINTED (CHALK PAINT) FINISH ON BOTH SIDES	2
<b>D15</b>	3.60m	2.10m	141	-	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF SIX SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	6
<b>D16</b>	3.10m	2.10m	1-		PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF FOUR SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	1
017	6.40m	2.10m	-	-	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF EIGHT SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	2
D18	2.40m	2.10m		-	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF FOUR SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	1

# **KEY PLAN**





# **INTERVENTION 1 ELECTRICAL PLAN**



# **KEY**

	PLUG - 5 AMPS (5A) with Switch
	METRE BOX (MB)
	TWO WAY SWITCH (TS)
00	WALL FAN (WF)
$\otimes$	OUTSIDE LIGHT (OL)
	DISTRIBUTION BOARD (DB)
	15 AMPS (15A)
$-\otimes$	WALL LIGHT (WL)
	EXHAUST FAN (EF)
0	SWITCH (S)
	MAIN SUPPLY LINE
	ELECTRICAL FLOW LINE

# **MOUNTING HEIGHTS**

FIXTURES	BOTTOM HT FROM FFL
WALL LIGHT	2.10m
WALL FAN	2.10m
EXHAUST FAN	2.10m
METRE BOX	1.20m
DISTRIBUTION BOARD	2.00m
EXHAUST SOCKET	2.40m
OUTSIDE LIGHT	1.00m

# NOTE

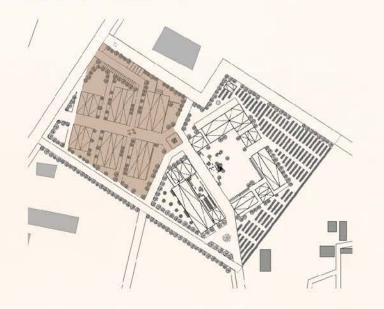
1. ALL MEASUREMENTS ARE IN METERS 4. COPPER PIPES USED FOR COVERING THE WIRES 5. FIXTURES CIRCLED IN BLUE ARE TO BE FIXED @0.80m FROM FFL 6. ALL ELECTRICAL LINES EXCEPT IN THE TOILET SHALL BE TAKEN ABOVE FALSE CEILING AND DROPPED NEAR THE FIXTURE 7. IN ONE CONDUIT MAXIMUM 3 CIRCUITS ONLY 8. DIFFERENT PHASE CIRCUITS SHOULD NOT BE DRAWN FROM SAME CONDUIT 9. NEUTRAL WIRE SHOULD NOT BE LOOPED IN JUNCTION BOXES 10. PVC CONDUITS - 2mm THICK; ISI MARK; BRANDED MAKE ONLY 11. ALL JOINTS TO BE DONE WITH PVC SOLVENT

# WIRES USED FROM DB

1. FROM PANEL TO DB - 4R x 10 sq.mm cu. COPPER
2. TO LIGHTING CIRCUIT - 2 x 2.5 & 1 x 1.5 sq.mm cu. COPPER 3. TO GEYSER &16A - 2 x 2.5 & 1 x 1.5 sq.mm cu. COPPER 4. TO AC - 2 x 4 & 1 x 2.5 sq.mm cu. COPPER

Entire electrical system is dependent on flexible solar panels (solar electricity)

### **KEY PLAN**





# INTERVENTION 1 PLUMBING PLAN



# **KEY**

中	OUTDOOR TAP (OT)	0	RAIN WATER PIPE - Ømm
	WATER CLOSET	$\cap$	SEWAGE WATER PIPE - Ømm
Ol	CSC - CONCEALED STOP COCK	Q	WASTE WATER PIPE - Ømm
<b>®</b>	TOILET TRAP	ρ	DOMESTIC WATER SUPPLY - 200mm
2	FAUCET	8	DWS - DOMESTIC WATER SUPPLY

### **MOUNTING HEIGHTS**

1. ABLUTION SPRAY UNIT @400mm AFFL
2. ANGLE VALVE FOR WASH BASIN @500mm AFFL
3. WASH BASIN TAP @800mm AFFL
4. ANGLE VALVE FOR CISTERN @300mm AFFL
5. OUTDOOR TAP @1000mm FROM GROUND LEVEL

### NOTE

1. FOR WATER CLOSETS, WATER SUPPLY LINES SHALL BE TAKEN IN THE ROOF AND DROPPED TO WALL NEAR THE FIXTURE
2. FOR POSITION OF FIXTURES AND TRAPS SHALL BE AS PER FINAL ARCHITECTURAL TOILET DETAILING LAYOUT









### SCHEDULE OF JOINERY - DOORS

TYPE	OPENIN	G SIZE	CASEME	ENT SIZE	FINISH	DESCRIPTION	NOS
	WIDTH	HEIGHT	WIDTH	HEIGHT			
(D1)	3.00m	2.10m	+	-	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF FOUR SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	15
(D2)	2.50m	2.10m	-	-	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF FOUR SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	3
D3	1.50m	2.10m	۵	9 <b>≡</b> n	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF DOUBLE SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	4
<b>D4</b>	1.20m	2.10m	2	120	LAMINATE	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF SINGLE SHUTTER WITH LAMINATE FINISH ON BOTH SIDES	2
<b>D</b> 5	1.00m	2.10m	E	-	LAMINATE	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF SINGLE SHUTTER WITH LAMINATE FINISH ON BOTH SIDES (DIFFERENTLY ABLED)	2
D6)	0.60m	2.10m	-	1.50	LAMINATE	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF SINGLE SHUTTER WITH LAMINATE FINISH ON BOTH SIDES	22
07)	1.20m	2.10m	-	-	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF DOUBLE SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	14
D8)	1.60m	2.10m	-	-	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF DOUBLE SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	2
D9	2.30m	2.10m	2	-	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF FOUR SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	2
010	0.75m	2.10m	2	- 27	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF SINGLE SHUTTER WITH PAINTED FINISH ON BOTH SIDES	9
<b>(D11)</b>	1.20m	2.10m	-	-	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF SINGLE SHUTTER WITH PAINTED FINISH ON BOTH SIDES	3
012	1.00m	2.10m	-	1	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF SINGLE SHUTTER WITH PAINTED FINISH ON BOTH SIDES	8
<b>D13</b>	4.80m	2.10m	-	1.51	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF EIGHT SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	1
014)	5.60m	2.10m	-	1965	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF EIGHT SHUTTERS WITH PAINTED (CHALK PAINT) FINISH ON BOTH SIDES	2
015	3.60m	2.10m	-	1-1	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF SIX SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	6
(D16)	3.10m	2.10m	_	-	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF FOUR SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	Ť
017	6.40m	2.10m	_	-	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF EIGHT SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	2
<b>(D18)</b>	2.40m	2.10m	_	-	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF FOUR SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	1

# **KEY PLAN**







	PLUG - 5 AMPS (5A) with Switch
	METRE BOX (MB)
	TWO WAY SWITCH (TS)
00	WALL FAN (WF)
$\boxtimes$	OUTSIDE LIGHT (OL)
	DISTRIBUTION BOARD (DB)
	15 AMPS (15A)
$-\otimes$	WALL LIGHT (WL)
	EXHAUST FAN (EF)
$\bigcirc$	SWITCH (S)
	MAIN SUPPLY LINE
	ELECTRICAL FLOW LINE

**KEY** 

### **MOUNTING HEIGHTS**

FIXTURES	BOTTOM HT FROM FFL
WALL LIGHT	2.10m
WALL FAN	2.10m
EXHAUST FAN	2.10m
METRE BOX	1.20m
DISTRIBUTION BOARD	2.00m
EXHAUST SOCKET	2.40m
OUTSIDE LIGHT	1.00m

### NOTE

ALL MEASUREMENTS ARE IN METERS
 SWITCH BOARDS TO BE FIXED @1.35m FROM FFL
 CIRCLED SWITCH BOARDS TO BE FIXED @0.75m FROM FFL
 COPPER PIPES USED FOR COVERING THE WIRES
 FIXTURES CIRCLED IN BLUE ARE TO BE FIXED @0.80m FROM FFL
 ALL ELECTRICAL LINES EXCEPT IN THE TOILET SHALL BE TAKEN
 ABOVE FALSE CEILING AND DROPPED NEAR THE FIXTURE
 IN ONE CONDUIT MAXIMUM 3 CIRCUITS ONLY
 DIFFERENT PHASE CIRCUITS SHOULD NOT BE DRAWN FROM SAME CONDUIT
 NEUTRAL WIRE SHOULD NOT BE LOOPED IN JUNCTION BOXES
 PVC CONDUITS - 2mm THICK; ISI MARK; BRANDED MAKE ONLY
 ALL JOINTS TO BE DONE WITH PVC SOLVENT

### **WIRES USED FROM DB**

1. FROM PANEL TO DB - 4R x 10 sq.mm cu. COPPER
2. TO LIGHTING CIRCUIT - 2 x 2.5 & 1 x 1.5 sq.mm cu. COPPER
3. TO GEYSER &16A - 2 x 2.5 & 1 x 1.5 sq.mm cu. COPPER
4. TO AC - 2 x 4 & 1 x 2.5 sq.mm cu. COPPER

Entire electrical system is dependent on flexible solar panels (solar electricity)

### **KEY PLAN**





# **INTERVENTION 1**

**PLUMBING PLAN** 

### **KEY**

4	OUTDOOR TAP (OT)	O	RAIN WATER PIPE - Ømm
Ø\$ <sub>α</sub>	WATER CLOSET		SEWAGE WATER PIPE - Ømm
Ol	CSC - CONCEALED STOP COCK	A	WASTE WATER PIPE - Ømm
	TOILET TRAP	A	DOMESTIC WATER SUPPLY - 200mm
8	FAUCET		DWS - DOMESTIC WATER SUPPLY

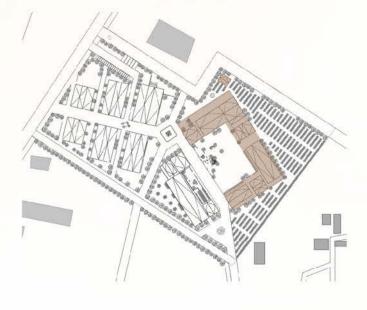
### **MOUNTING HEIGHTS**

1. ABLUTION SPRAY UNIT @400mm AFFL 2. ANGLE VALVE FOR WASH BASIN @500mm AFFL 3. WASH BASIN TAP @800mm AFFL 4. ANGLE VALVE FOR CISTERN @300mm AFFL 5. OUTDOOR TAP @1000mm FROM GROUND LEVEL

### NOTE

1. FOR WATER CLOSETS, WATER SUPPLY LINES SHALL BE TAKEN IN THE ROOF AND DROPPED TO WALL NEAR THE FIXTURE 2. FOR POSITION OF FIXTURES AND TRAPS SHALL BE AS PER FINAL ARCHITECTURAL TOILET DETAILING LAYOUT

# **KEY PLAN**





## **INTERVENTION 2** CENTRELINE PLAN 2255 / 2220 / 1200 / - 3000 - 1200 / 1610 / 2070 / 1610 - / 4 5.20m x 6.70m 4.40m x 6.70m 5.20m x 6.70m 7 - 515 - 1610 - 7 - 1610 - 7 - 1610 1920 1610 1610 1620 1610 1620 1610 1620 1610 1620 1610 1620 1610 1620 1610 1620 1610 1620 1610 1620 1610 1620 1 - - -CONSULT 3.20m x 3.70m 3.90m x 6.70m WARD 4.40m x 6.67m NURSE STATION 4.52m x 3.70m STORAGE 2.30m x 3.70m WAITING LOBBY 6.20m x 6.70m 4.20m x 5.80m

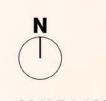
#### SCHEDULE OF JOINERY - DOORS

DOOR	DETAILS:								.,														
TYPE	OPENII	NG SIZE	CASEM	ENT SIZE	FINISH	DESCRIPTION	NOS.	TYPE	OPENII	NG SIZE	CASEM	IENT SIZE	FINISH	DESCRIPTION	NOS.	TYPE	OPENIN	IG SIZE	CASEMI	ENT SIZE	FINISH	DESCRIPTION	NOS.
	WIDTH	HEIGHT	WIDTH	HEIGHT					WIDTH	HEIGHT	WIDTH	HEIGHT					WIDTH	HEIGHT	WIDTH	HEIGHT			
<u>D1</u>	2.00m	2.10m	-	>	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF DOUBLE SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	46	D4)	0.75m	2.10m	-	95	LAMINATE	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF SINGLE SHUTTER WITH LAMINATE FINISH ON BOTH SIDES	1	<b>D7</b>	3.00m	2.10m	(=)	-	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF FOUR SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	2
D2)	1.00m	2.10m	-	-:	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF SINGLE SHUTTER WITH PAINTED FINISH ON BOTH SIDES	9	D5)	1.60m	2.10m	(2)		PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF DOUBLE SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	1	D8	0.60m	2.10m	:=	-	LAMINATE	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF SINGLE SHUTTER WITH LAMINATE FINISH ON BOTH SIDES	3
D3	0.90m	2.10m	-	120	LAMINATE	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF SINGLE SHUTTER WITH LAMINATE FINISH ON BOTH SIDES	t	<u>D6</u>	0.85m	2.10m	72	5-0	LAMINATE	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF SINGLE SHUTTER WITH LAMINATE FINISH ON BOTH SIDES	2		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						

### **INTERVENTION 1**



TYPE	OPENIN	G SIZE	CASEME	ENT SIZE	FINISH	DESCRIPTION				
	WIDTH	HEIGHT	WIDTH	HEIGHT						
<b>(D1)</b>	3.00m	2.10m	-	- 3	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF FOUR SHUTTERS WITH PAINTED FINISH ON BOTH SIDES				
D2)	2.50m	2.10m	70	N <del>T.</del> 1	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF FOUR SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	3			
D3	1.50m	2.10m	-	(80)	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF DOUBLE SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	4			
<b>D4</b>	1.20m	2.10m	-	:=:1	LAMINATE	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF SINGLE SHUTTER WITH LAMINATE FINISH ON BOTH SIDES	2			
<b>D</b> 5	1.00m	2.10m	-	-	LAMINATE	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF SINGLE SHUTTER WITH LAMINATE FINISH ON BOTH SIDES (DIFFERENTLY ABLED)	2			
<u>D6</u>	0.60m	2.10m	-	323	LAMINATE	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF SINGLE SHUTTER WITH LAMINATE FINISH ON BOTH SIDES	22			
07	1.20m	2.10m	<u>.</u>	244	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF DOUBLE SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	14			
D8)	1.60m	2.10m	4	*	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF DOUBLE SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	2			
<u>D9</u>	2.30m	2.10m	-	*	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF FOUR SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	2			
010	0.75m	2.10m	-	(8)	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF SINGLE SHUTTER WITH PAINTED FINISH ON BOTH SIDES	1			
(D1)	1.20m	2.10m	-	:=:1	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF SINGLE SHUTTER WITH PAINTED FINISH ON BOTH SIDES	3			
<b>D12</b>	1.00m	2.10m	-	:=:	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF SINGLE SHUTTER WITH PAINTED FINISH ON BOTH SIDES	8			
(D13)	4.80m	2.10m	-	20	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF EIGHT SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	7			
014	5,60m	2.10m	-	121	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF EIGHT SHUTTERS WITH PAINTED (CHALK PAINT) FINISH ON BOTH SIDES	2			
<b>D15</b>	3.60m	2.10m	14	9	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF SIX SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	6			
D16	3.10m	2.10m	-	3.	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF FOUR SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	শু			
017	6.40m	2.10m	-	(8)	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF EIGHT SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	2			
D18	2.40m	2.10m	_	-	PAINT	TREATED HARDWOOD FRAMED WOODEN FLUSH DOOR OF FOUR SHUTTERS WITH PAINTED FINISH ON BOTH SIDES	40			



SCALE 1:100
Measurements in mm

# INTERVENTION 2 ELECTRICAL PLAN



### KEY

٥	PLUG - 5 AMPS (5A) with Switch
	METRE BOX (MB)
0	TWO WAY SWITCH (TS)
	WALL FAN (WF)
$\otimes$	OUTSIDE LIGHT (OL)
	DISTRIBUTION BOARD (DB)
<b>a</b>	15 AMPS (15A)
$\otimes$	WALL LIGHT (WL)
	EXHAUST FAN (EF)
0	SWITCH (S)
	MAIN SUPPLY LINE
	ELECTRICAL FLOW LINE

#### **MOUNTING HEIGHTS**

FIXTURES	BOTTOM HT FROM FFL
WALL LIGHT	2.10m
WALL FAN	2.10m
EXHAUST FAN	2.10m
METRE BOX	1.20m
DISTRIBUTION BOARD	2.00m
EXHAUST SOCKET	2.40m
OUTSIDE LIGHT	1.00m

#### NOTE

1. ALL MEASUREMENTS ARE IN METERS
2. SWITCH BOARDS TO BE FIXED @1.35m FROM FFL
3. CIRCLED SWITCH BOARDS TO BE FIXED @0.75m FROM FFL
4. COPPER PIPES USED FOR COVERING THE WIRES
5. FIXTURES CIRCLED IN BLUE ARE TO BE FIXED @0.80m FROM FFL
6. ALL ELECTRICAL LINES EXCEPT IN THE TOILET SHALL BE TAKEN

6. ALL ELECTRICAL LINES EXCEPT IN THE TOILET SHALL BE TAKEN
ABOVE FALSE CEILING AND DROPPED NEAR THE FIXTURE

7. IN ONE CONDUIT MAXIMUM 3 CIRCUITS ONLY

8. DIFFERENT PHASE CIRCUITS SHOULD NOT BE DRAWN FROM SAME CONDUIT

9. NEUTRAL WIRE SHOULD NOT BE LOOPED IN JUNCTION BOXES

10. PVC CONDUITS - 2mm THICK; ISI MARK; BRANDED MAKE ONLY

11. ALL JOINTS TO BE DONE WITH PVC SOLVENT

#### **WIRES USED FROM DB**

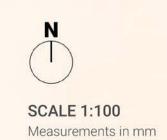
1. FROM PANEL TO DB – 4R x 10 sq.mm cu. COPPER
2. TO LIGHTING CIRCUIT – 2 x 2.5 & 1 x 1.5 sq.mm cu. COPPER
3. TO GEYSER &16A – 2 x 2.5 & 1 x 1.5 sq.mm cu. COPPER
4. TO AC – 2 x 4 & 1 x 2.5 sq.mm cu. COPPER

Entire electrical system is dependent on flexible solar panels (solar electricity)

### **INTERVENTION 1**

**ELECTRICAL PLAN** 





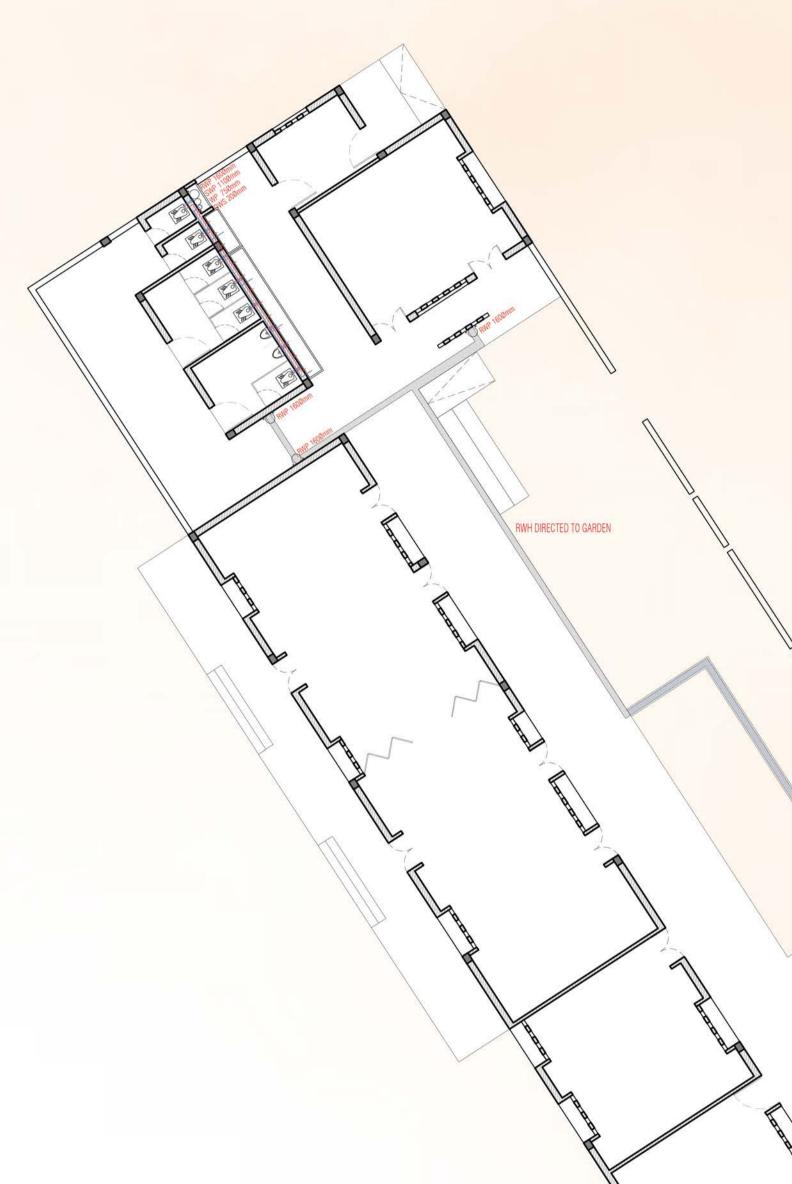
### **INTERVENTION 2**

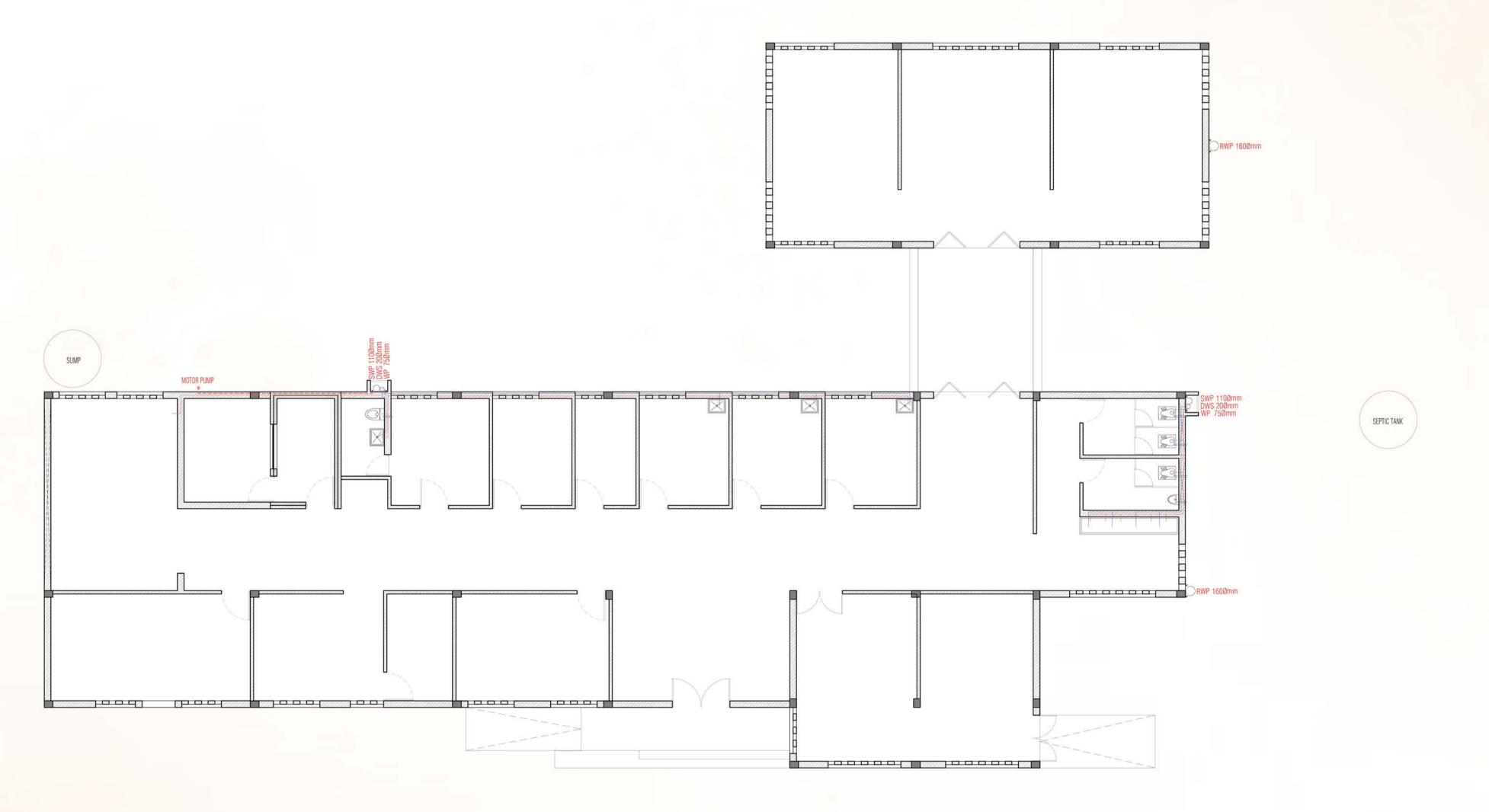
**PLUMBING PLAN** 

### **INTERVENTION 1**

**PLUMBING PLAN** 







### KEY

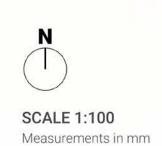
H	OUTDOOR TAP (OT)	Q	RAIN WATER PIPE - Ømm
Dt.	WATER CLOSET		SEWAGE WATER PIPE - Ømm
Ol	CSC - CONCEALED STOP COCK	A	WASTE WATER PIPE - Ømm
(1)	TOILET TRAP	P	DOMESTIC WATER SUPPLY - 200mm
2	FAUCET		DWS - DOMESTIC WATER SUPPLY

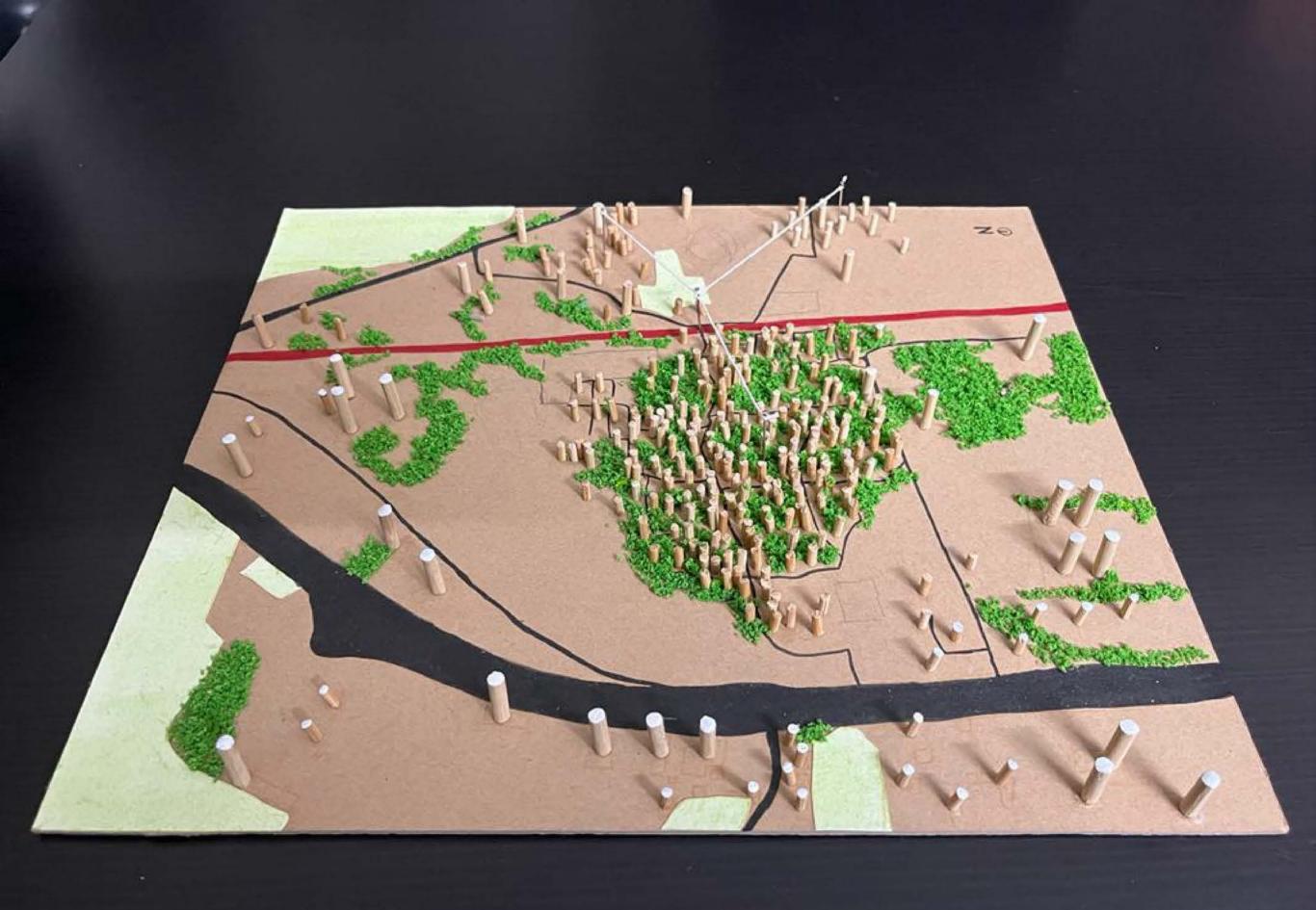
### **MOUNTING HEIGHTS**

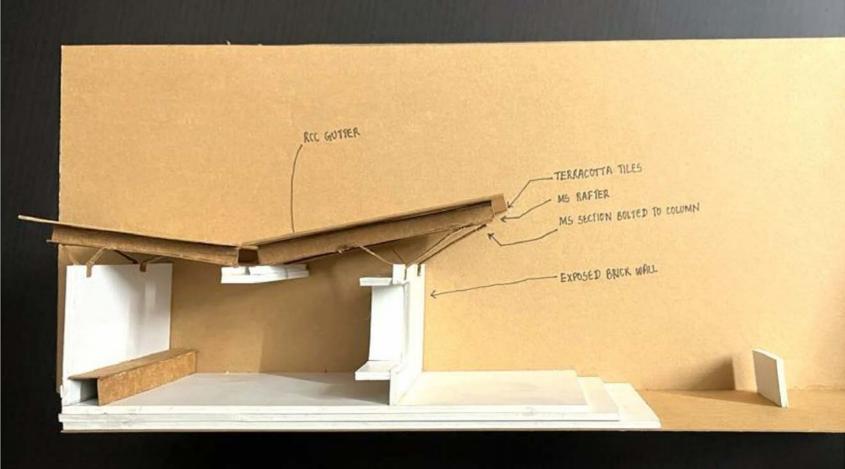
1. ABLUTION SPRAY UNIT @400mm AFFL
2. ANGLE VALVE FOR WASH BASIN @500mm AFFL
3. WASH BASIN TAP @800mm AFFL
4. ANGLE VALVE FOR CISTERN @300mm AFFL
5. OUTDOOR TAP @1000mm FROM GROUND LEVEL

### NOTE

1. FOR WATER CLOSETS, WATER SUPPLY LINES SHALL BE TAKEN IN THE ROOF AND DROPPED TO WALL NEAR THE FIXTURE
2. FOR POSITION OF FIXTURES AND TRAPS SHALL BE AS PER FINAL ARCHITECTURAL TOILET DETAILING LAYOUT







#### **SECTIONAL MODEL**







