

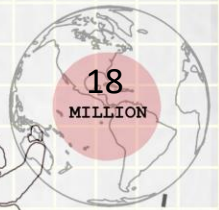
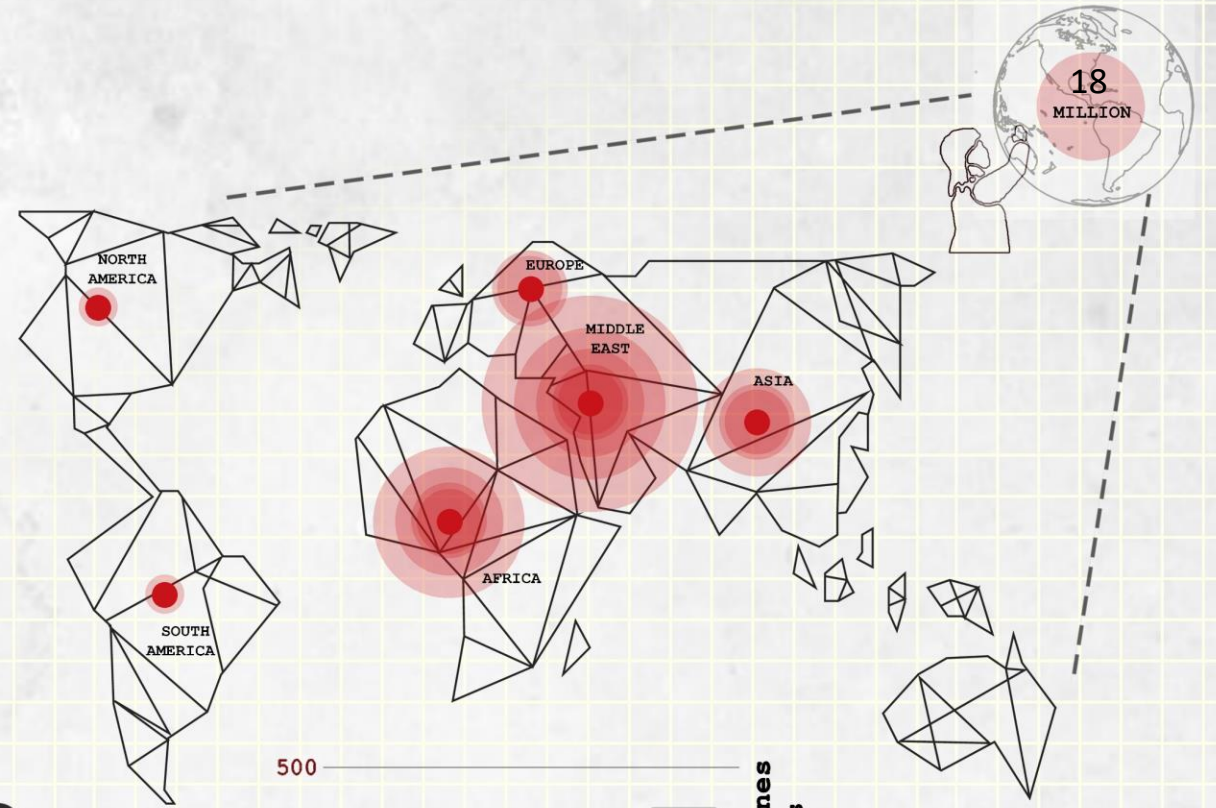
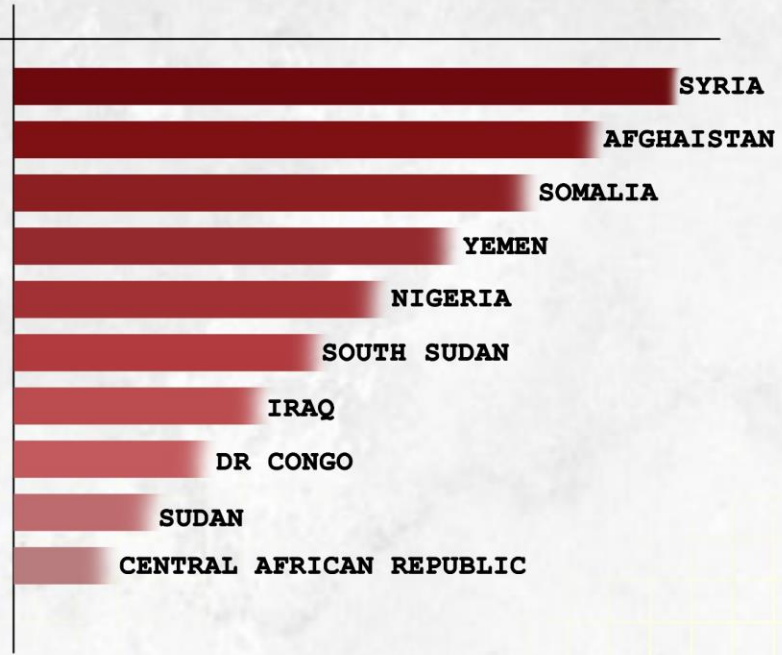
HEALING THROUGH ARCHITECTURE

PSYCHOLOGICAL EFFECTS OF
ARMED CONFLICT ON CHILDREN



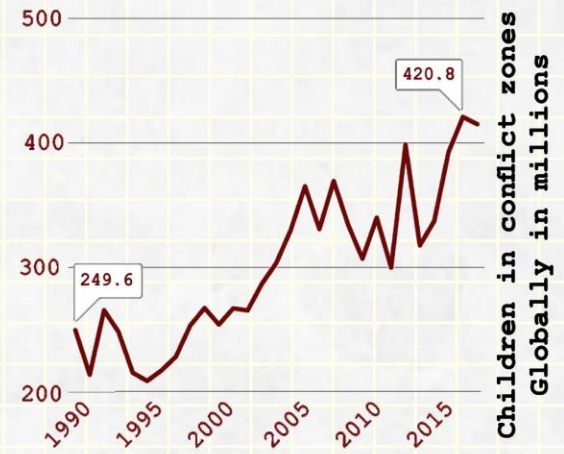
CHILDREN IMPACTED BY CONFLICT

TOP 10 MOST DANGEROUS COUNTRIES FOR CHILDREN IN CONFLICT



CHILD SOLDIERS

- Volunteered to **fight**
- Suffers from **PTSD**
- Has **no social bonds** or moral compass
- Is prone to insomnia, nightmares
- Suicidal thoughts
- Can handle **weapons**
- Works as cook, suicide bomber, human shield or domestic worker
- Is **sexually abused**



SOURCE: Save the children: Worst place to be a child

SIX GRAVE VIOLATIONS

As the **number** of children **living** in **conflict zones** is **increasing** day by day, it has now become more necessary to **shed light** on this issue and take care of the children as they will be leading the **future generations**.



Abduction



Killing and maiming



Recruitment and use by arm forces or groups



Attacks on schools



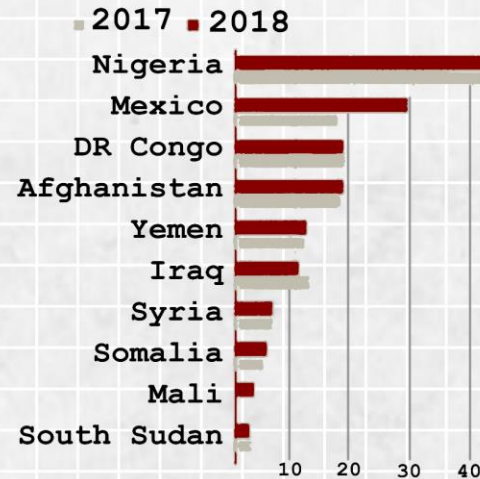
Denial of humanitarian access limited psychological aid



Rape and other form of sexual violence

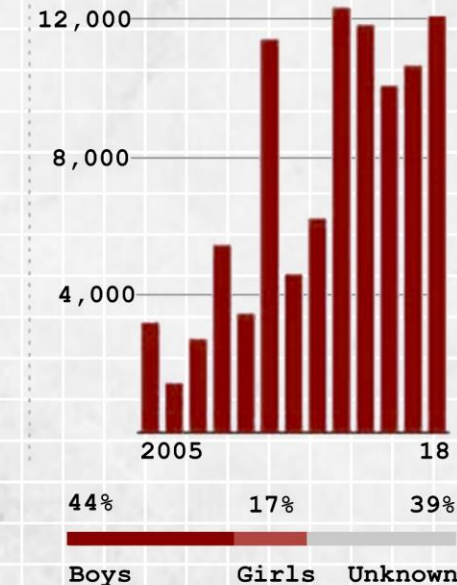
Living in high-intensity conflict zones

Millions, by Country



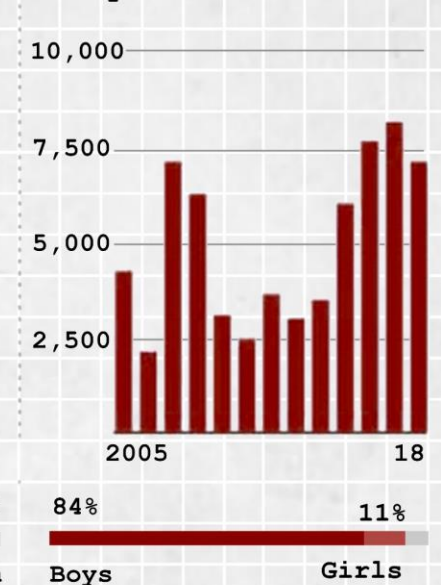
Deaths and Casualties

Killed Or Maimed, Yearly

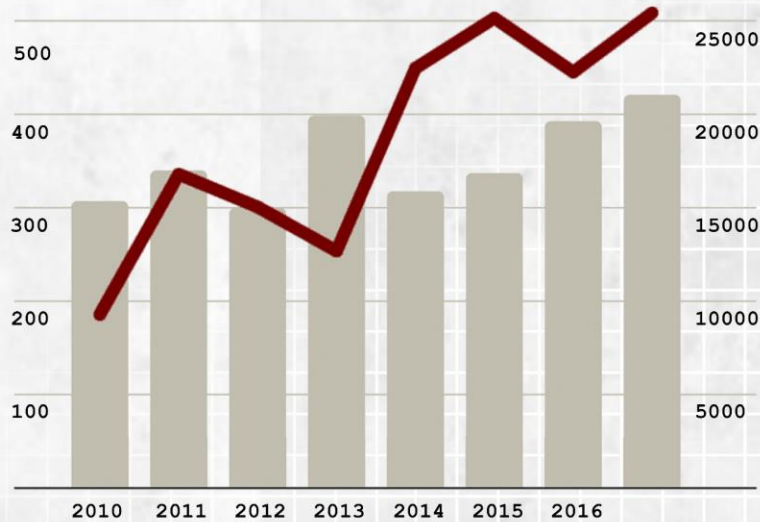


Recruitment

By armed forces and groups, Yearly



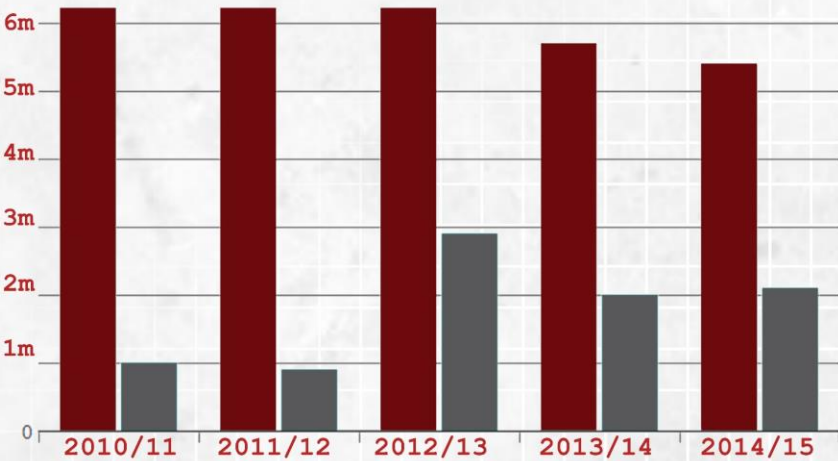
Grave violations
Children in conflict (millions)



CHILDREN CRISIS IN SYRIA



■ Total of school aged children
 ■ School age children out of school



SOURCE: Save the children: Stop the war on children
 UNICEF
 UNHCR : Al- Jazeera



1 in 3 SYRIAN CHILDREN have been born in the last 5 years of WAR including 300,000



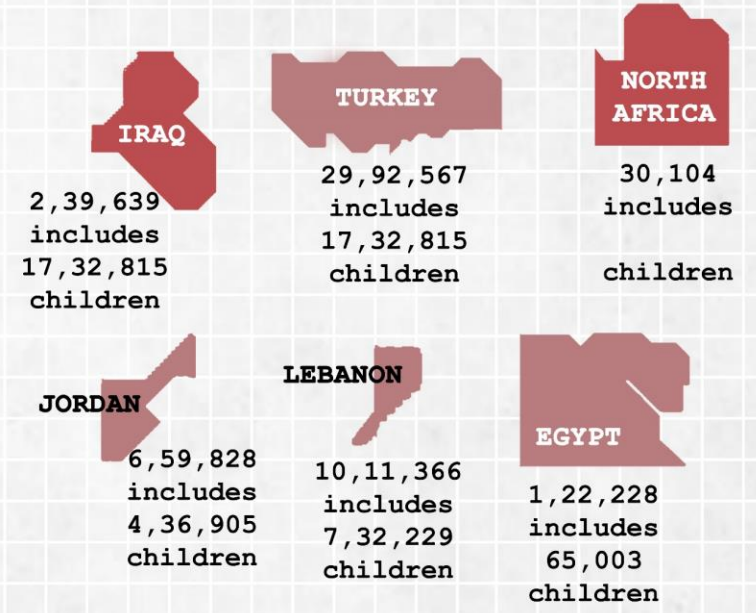
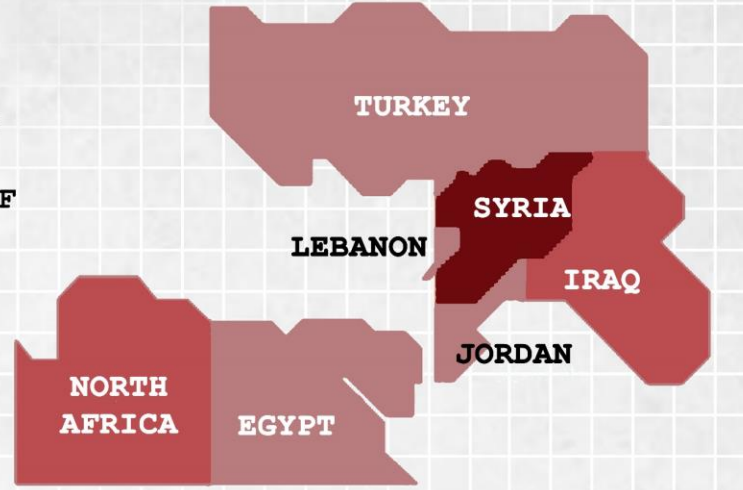
Over 13 MILLION PEOPLE need humanitarian assistance, almost HALF of them are children



Number of child refugee of Syria is equal to population of Estonia

Thousands of children have been killed since 2011, but even for those that have survived, the outlook remains bleak. Syria's education system has been shattered by the war, more than 40% children are not going to school.

SYRIAN REFUGEES



SABAHAT MUKHTAR

SYRIAN WAR CRISIS - ALEPPO



THE #1 REASON children aren't attending school



2 MILLION HUNGRY CHILDREN are at risk for malnutrition



85% CHILDREN have lost a loved one



LOSS OF HOMES arising situation of internal displacement and refugee crisis



2,000 SCHOOLS have been bombed or daaged as a result of the conflict



LOSS OF FRIENDS sense of loneliness



70% HEALTH WORKERS can't get to the children who need them because of danger and roadblocks



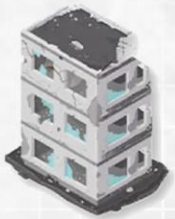
THE WAR HAS DOUBLED the price of food for hungry children

How many houses are destroyed in Syria?

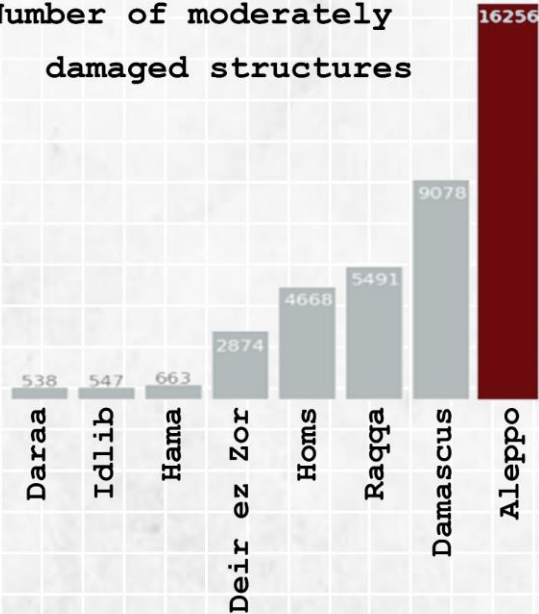
The building is **partially destroyed** Rate of destruction is between **5% to 30 %**

The building is **heavily damaged** Rate of destruction is **30% to 75%**

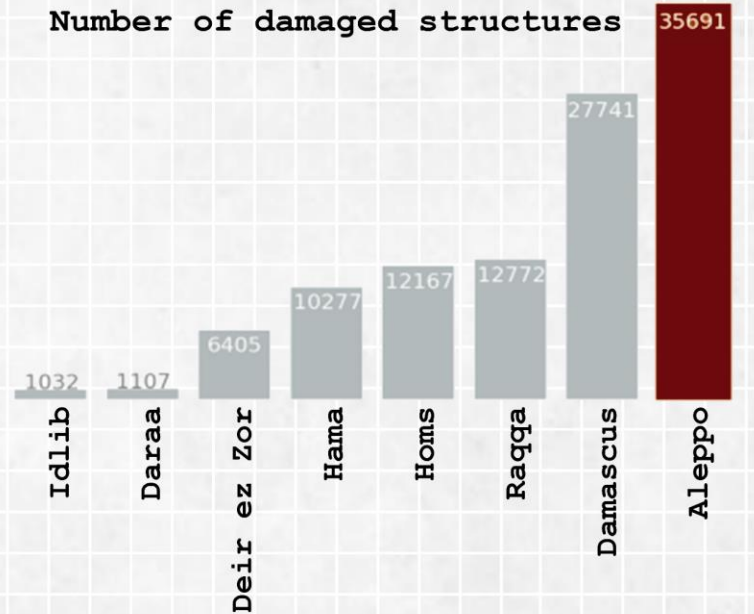
The building is **completely destroyed** Rate of destruction is between **75% to 100%**



Number of moderately damaged structures



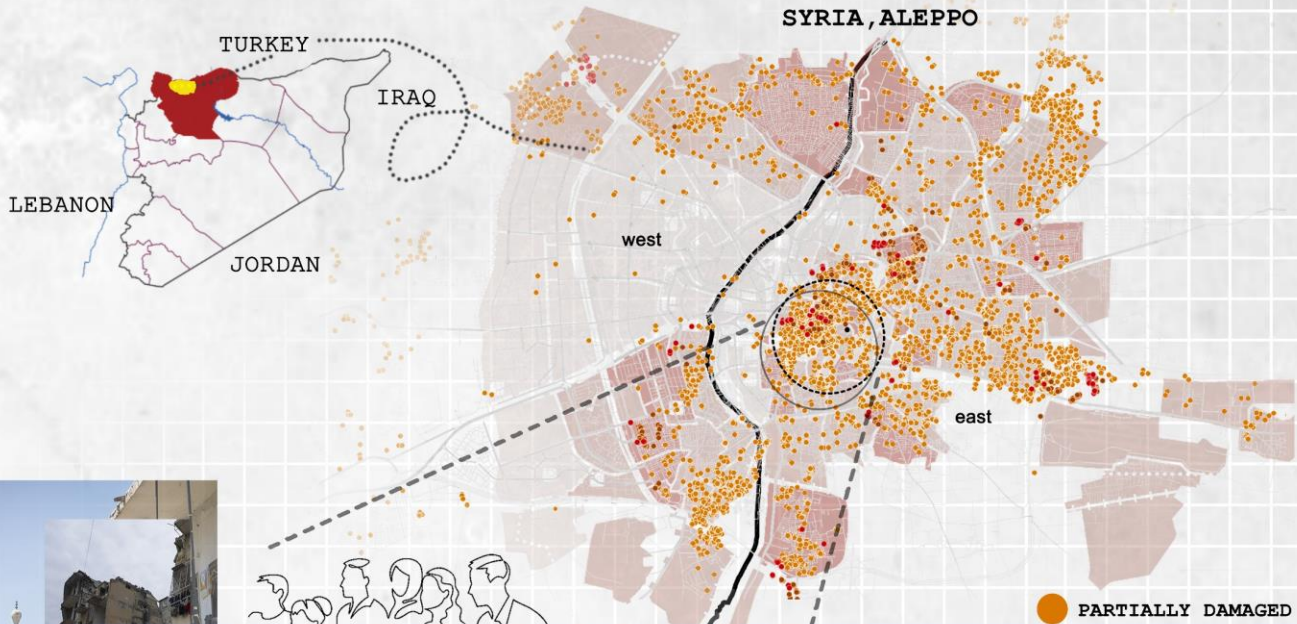
Number of damaged structures



SYRIAN WAR CRISIS

Aleppo: from a land of smiles to a land of ruins
The journey from the past to present illustrates
what war did to the people of Aleppo

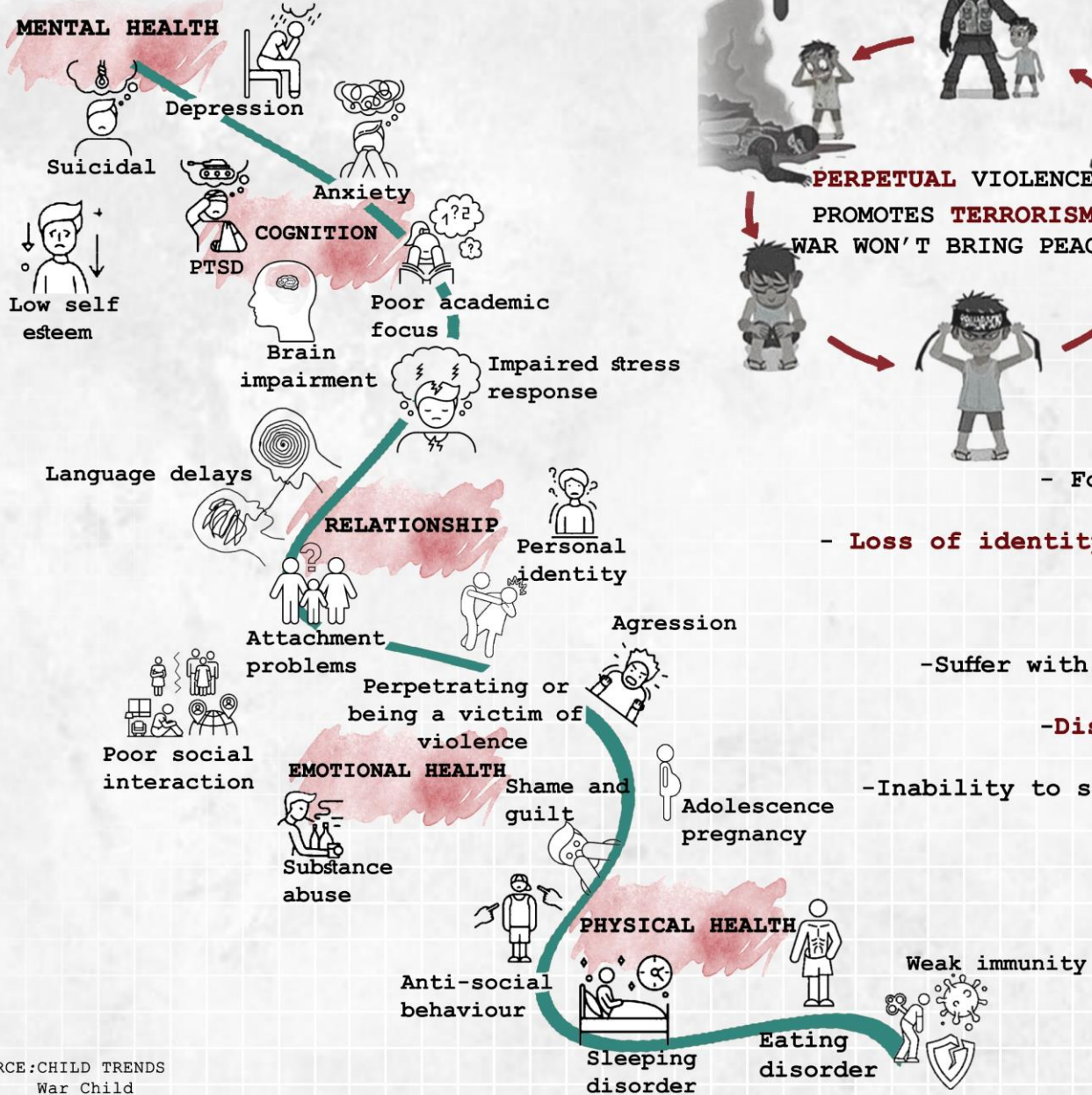
journey from heaven
to debris



PARTIALLY DAMAGED



IMPACT OF CHILDHOOD TRAUMA



- Forcibly **displaced**
- **Loss of identity** and social life
- Marginalized
- Suffer with **PTSD** and anxiety
- Disrupted** education
- Inability to see a stable future
- Hopelessness
- Community **stigma**



WHAT ARE CHILD FRIENDLY SPACES

Emotional Support



Creative Playtime



Informal Learning and Life lessons



Proper Nutritions

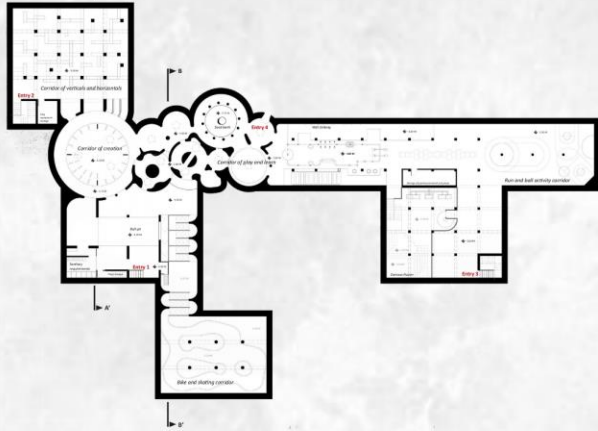


Protection For Disabled Children



CHILDREN UPROOTED BY TANAY BOTHARA

A BRIGHT FUTURE FOR WAR TORN SYRIA

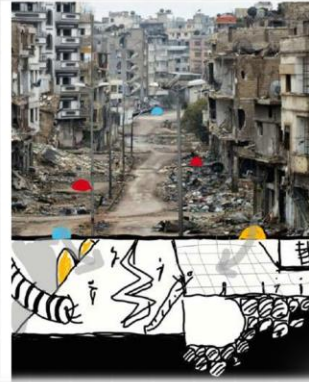
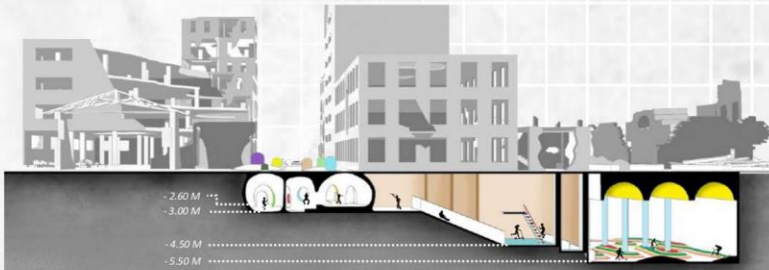


It was an attempt to bring, smile for the kids of syria to re imagine a space to remember and evoke emotions while simultaneously inspiring a pro active approach.

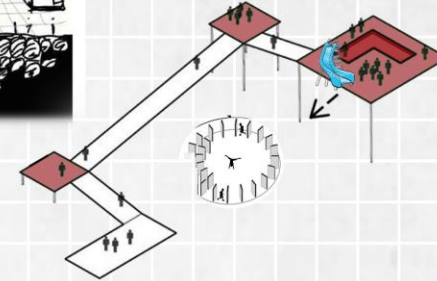
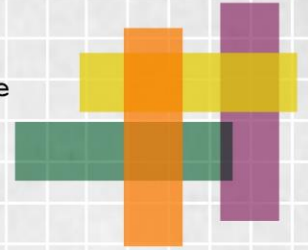
Sectional elevation showing playful activities underground



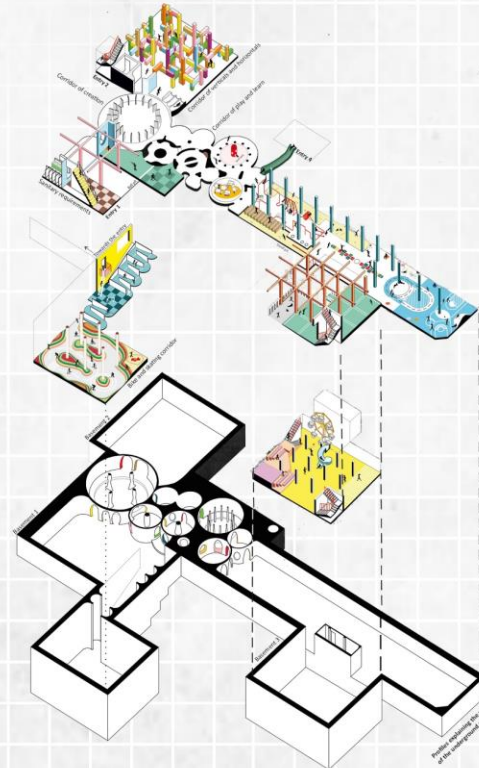
Sectional elevation showing height variances



Use of different **COLORS** for the **VIBRANCY** of space



MULTILEVEL SPACES for different **PLAYFUL ACTIVITIES** connected with each other to evoke **SENSE OF BELONGING**



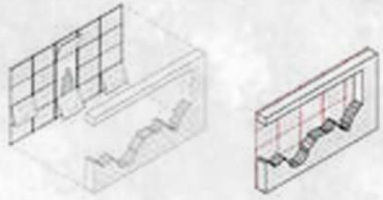
Used different **SHAPES AND MATERIALS** to create a space closer to a **CHILD'S IMAGINATION**



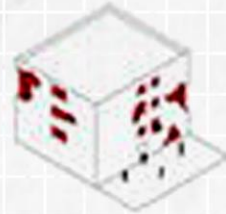
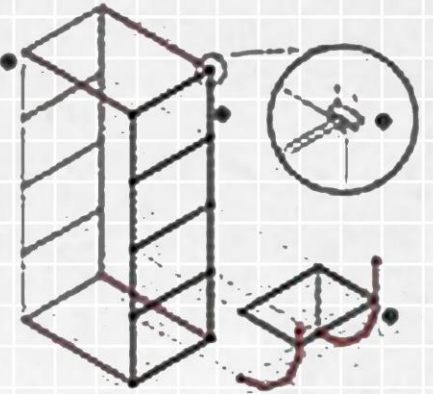
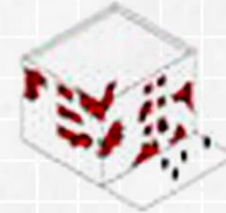
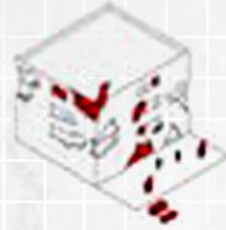
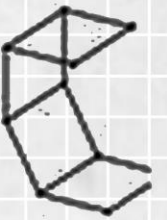
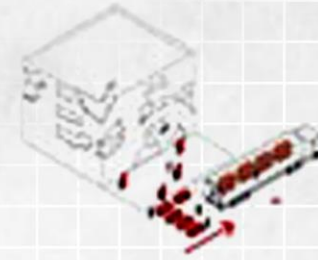
Utilized **BASEMENTS** of damaged buildings to **AVOID ADDITIONAL CONSTRUCTION** and to provide **SAFE PLAY ZONE** amidst the ongoing war

OCCUPYING WAR

FUTURE OF SHADES COMPETITION, WINNING ENTRY BY DANIEL ZULUAGA



Due to the **fabric** around, kids are **feeling secured**. They are with the known person which gives them the **sense of comfort** and then arousing the **sense of happiness**



Fabric was the only material the designers could use. Creating a module with a frame with attached fabric was a simple and effective idea for this scheme. This layer filled up the voids within the walls giving the sense a security to the civilians residing



TULUM PLASTIC SCHOOL

SECOND WINNING ENTRY BY DAVID NEE ZHI KANG
SIBU, MALAYSIA

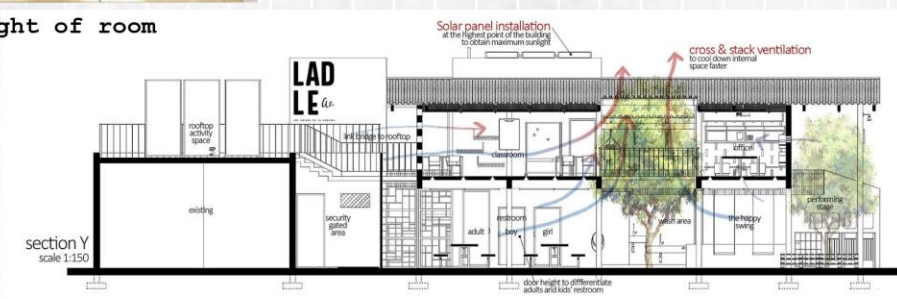
It focuses on **CHILDREN CENTRED DESIGN**, the idea is to redefine the architecture of learning environment through the ergonomic volume of space providing an intimate space for children.



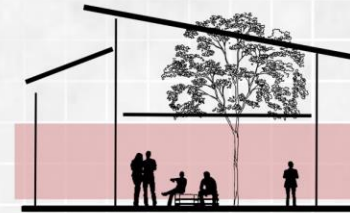
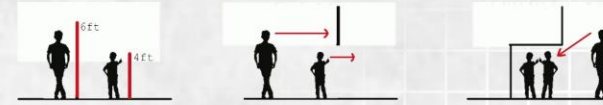
User specified height of room



Ground floor as public space

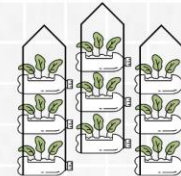


CHILDREN CENTRIC DESIGN



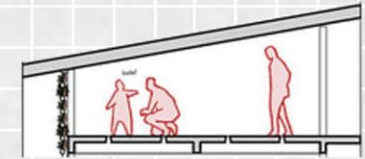
GATHERING SPACE

- Sense of **connectedness**
- Social interaction
- Ground floor as **multi purpose space**



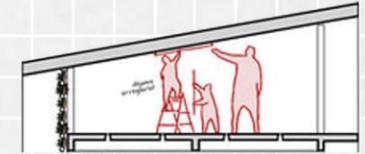
ZERO WASTE

- Reuse of **plastic bottles**
- Vertical farming** contributes to environment



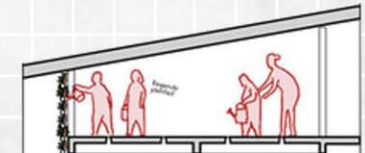
GESTURE

- Low ceiling** make adults bend down to **interact** with child



INDEPENDENCE

- Fixing things** themselves contributes to **personal growth**
- Sense of **achievement**



ENVIRONMENT

- Sense of **awareness**
- Sense of **responsibility**

DESIGN CONCEPT

CHILDREN CENTRIC DESIGN

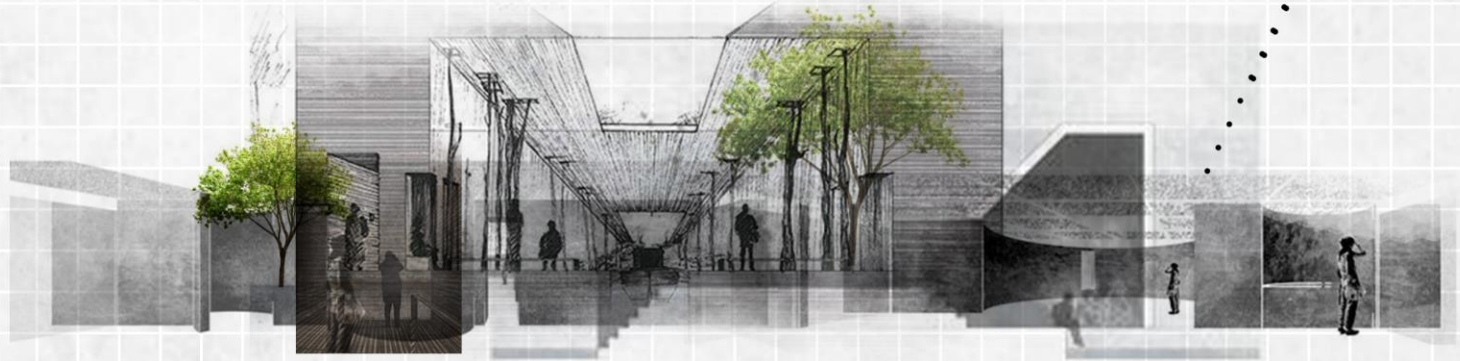


- scale and **proportions** of the space responding to the characteristics of **primary user**
- **Play** environments are **educational spaces** for children, also serves as an act of resilience
- space serves as an **element of delight**

THE IDEA IS TO ASSESS THE POTENTIAL OF ARCHITECTURE IN CREATING SPACES WHICH HELPS TO MITIGATE THE WAR TRAUMA FACED BY CHILDREN LIVING IN A POST WAR ZONE

DESIGN FOR SENSES

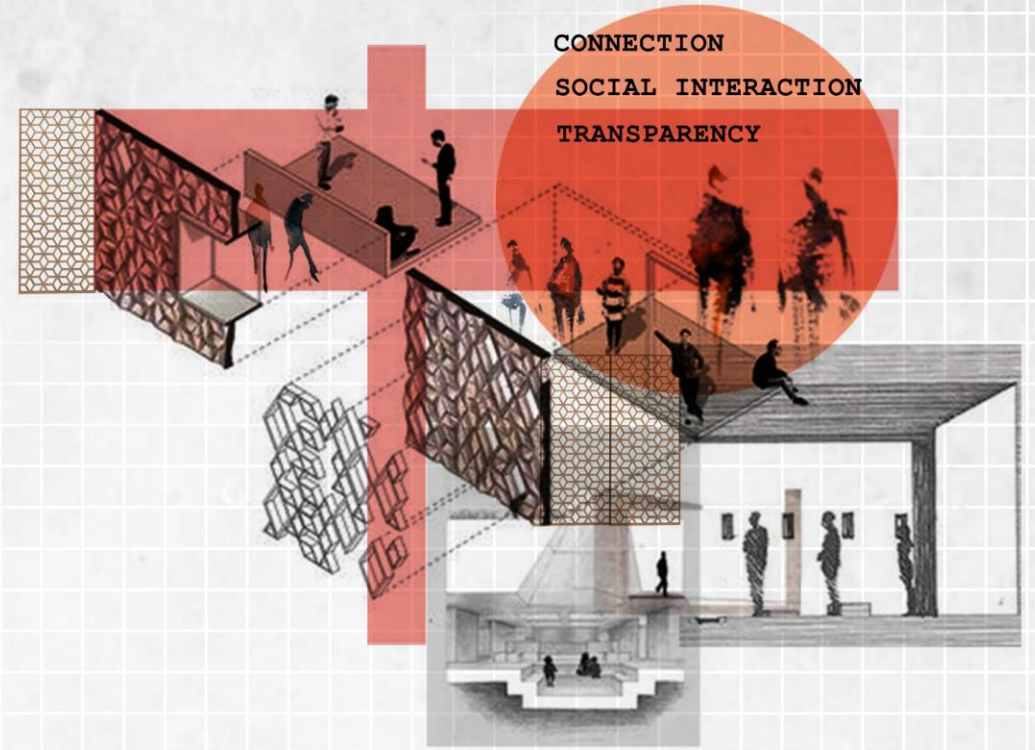
- designing for senses which evokes **emotion**
- brings a sense of happiness and **contentment** for the **fabric of soul** through varying textures, scent and atmosphere



DESIGN CONCEPT

HEALING SPACES

- Healing is a multidimensional process including **physical, mental, spiritual and social aspects**
- **Nature** enhances people's ability to deal with **stress**
- It creates **rejuvenating spaces** which brings **sense of hope** and paves way for optimism







SENSE OF SAFETY

Bring a sense of safety in space which is a primary necessity for the war trauma affected children








- Sense of **comfort**
- Sense of **Happiness**
- to create **visual connection** for enhancing social interaction
- Sense of **connectivity**

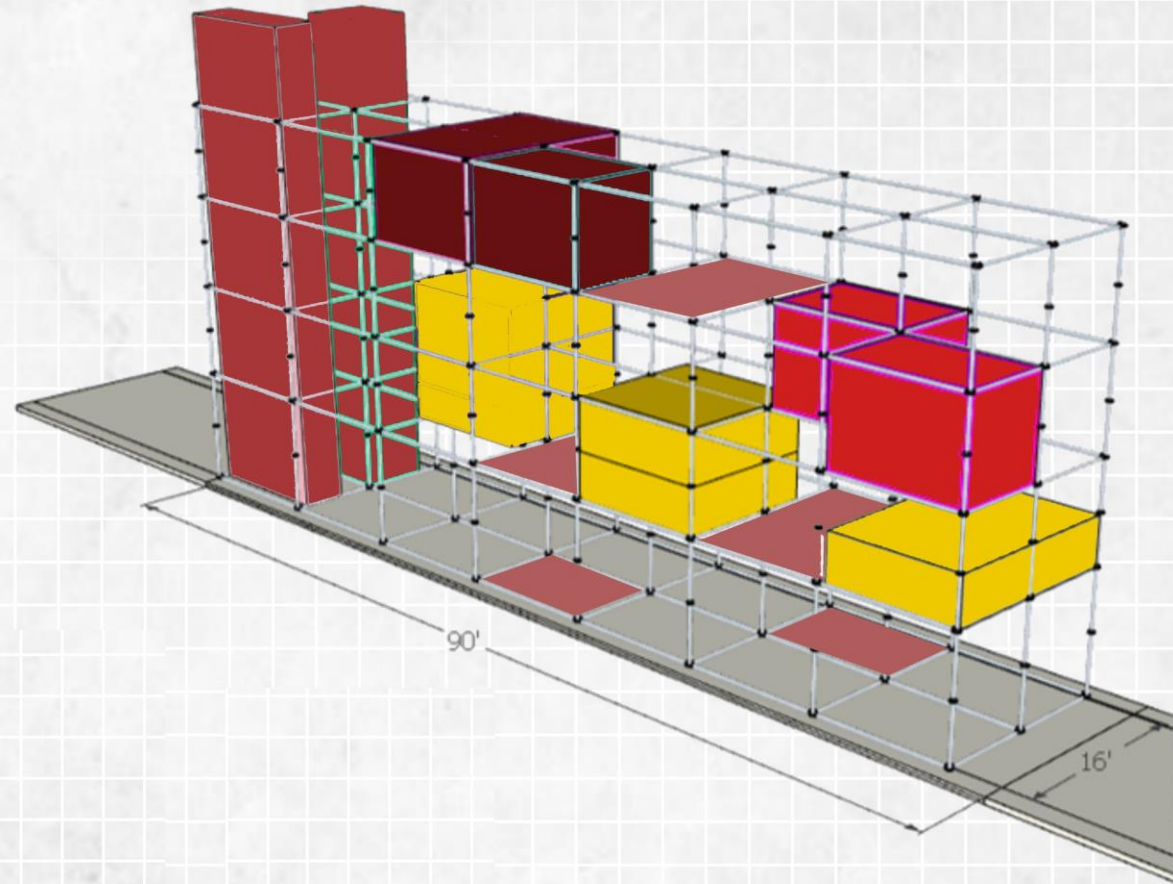
PROGRAM (CHILDREN HEALING SPACE)

QUIET SPACES

-  COUNSELLING ROOM 96 SQFT
-  SENSORY ROOM 120 SQFT
-  INDIVIDUAL THERAPY ROOM 96 SQFT
-  DARK ROOM 96 SQFT

ACTIVE SPACES

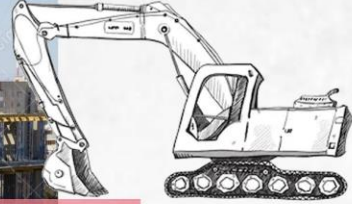
-  ART THERAPY 150 SQFT
-  DANCE THERAPY 150 SQFT
-  ACTIVE PLAYScape
-  SENSORY PLAYScape
-  OPEN CLASSROOM 120 SQFT
-  THERAPEUTIC VERTICAL GARDEN
-  VERTICAL CIRCULATION



DESIGN STRATEGY: TEMPORARY OVER PERMANENT STRUCTURE

Non reusable waste

Heavy waste



Slow Construction



Structure, can't be reconfigured anywhere

Immobile

Months

Construction time



Days

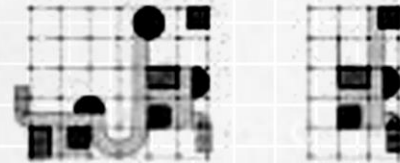


Permanent structure

Temporary structure

Requires proper Labour

Modular structure, can be reconfigured anywhere



Less waste



Easily Transportable

Quick Construction



Mantling and dismantling can be done by community themselves

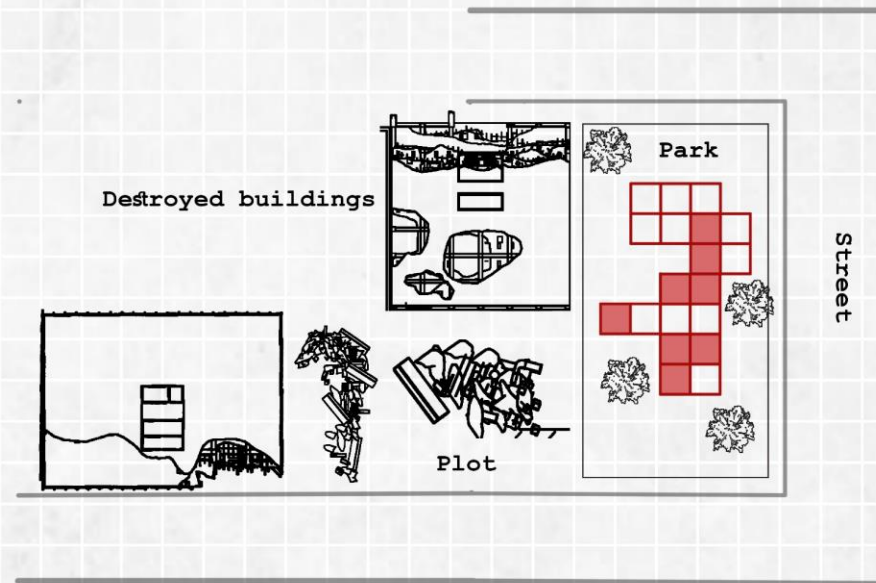
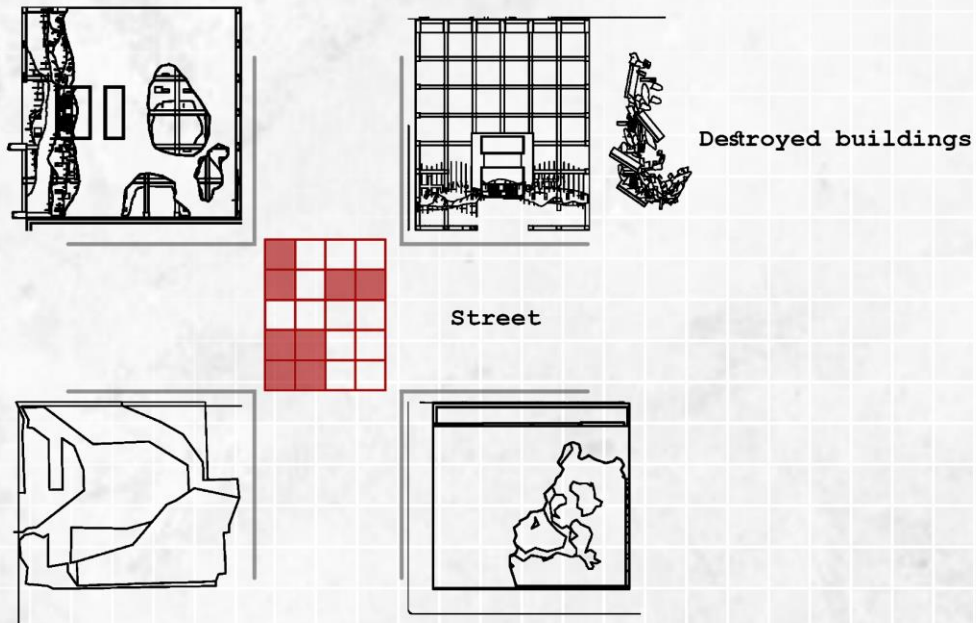
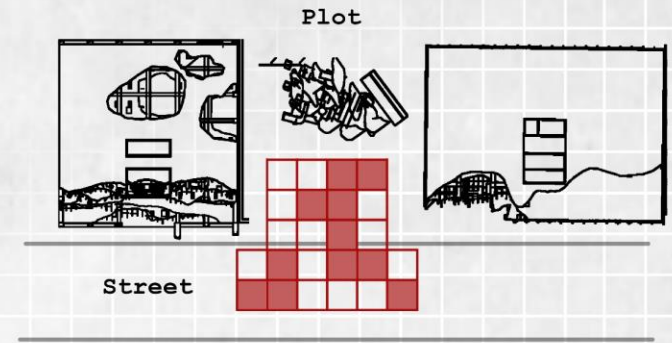
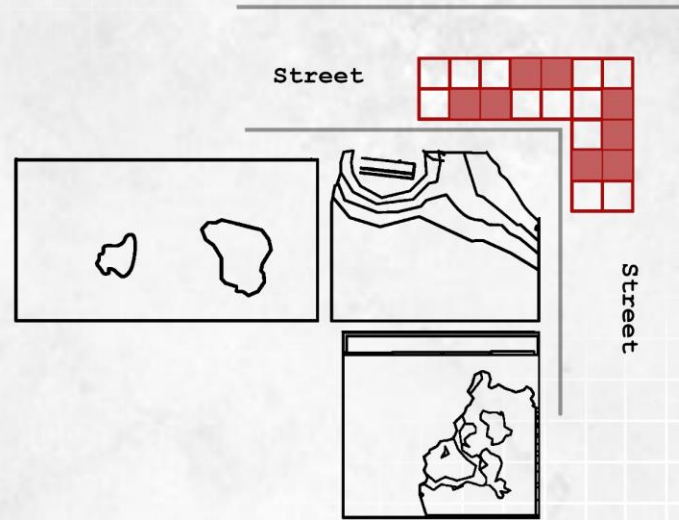
Reusable later in reconstruction waste



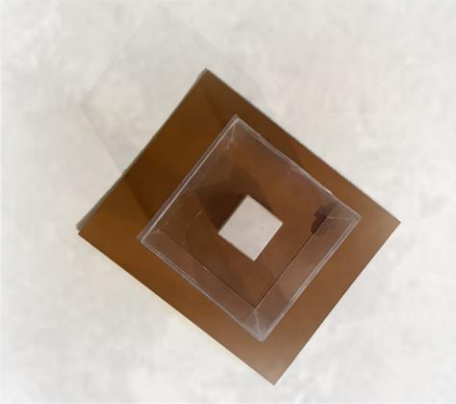
DESIGN STRATEGY

TEMPORARY MODULAR STRUCTURE

- Scaffolding offers easy, temporary and quick solution for emergency situations
- Not Site Restricted; intervention can be reconfigured as per the need onto any site
- offers spatial impermanence
- reclaiming of existing space

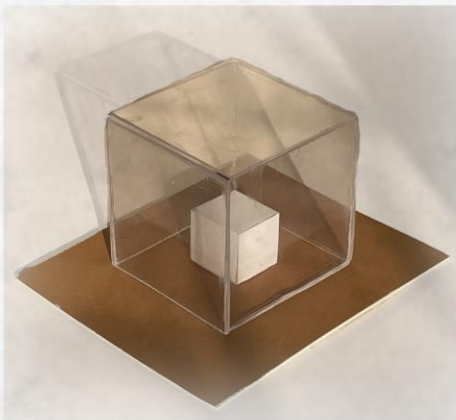


DESIGN STRATEGY



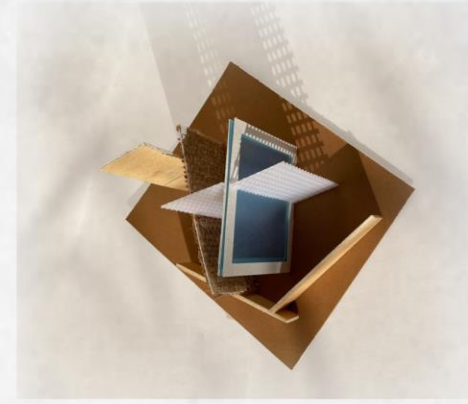
Permeability

- connection of spaces
- creates a sense of safety due to visual interaction
- sense of transparency



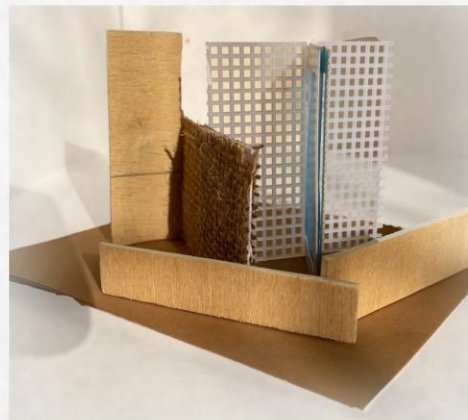
Modular Structure

- offers flexibility
- can be reconfigured pragmatically as per the need
- easily assembled



Layering of texture and materials

- sense of touch evokes emotion
- helps in creating interesting spaces for children



MATERIAL BOARD

RING LOCK SCAFFOLDING

- EASY TO ASSEMBLE AND DISEMBLE

LIGHT WEIGHT WALL PANELS

- Poly Carbonate sheet
- PVC + Calcium board

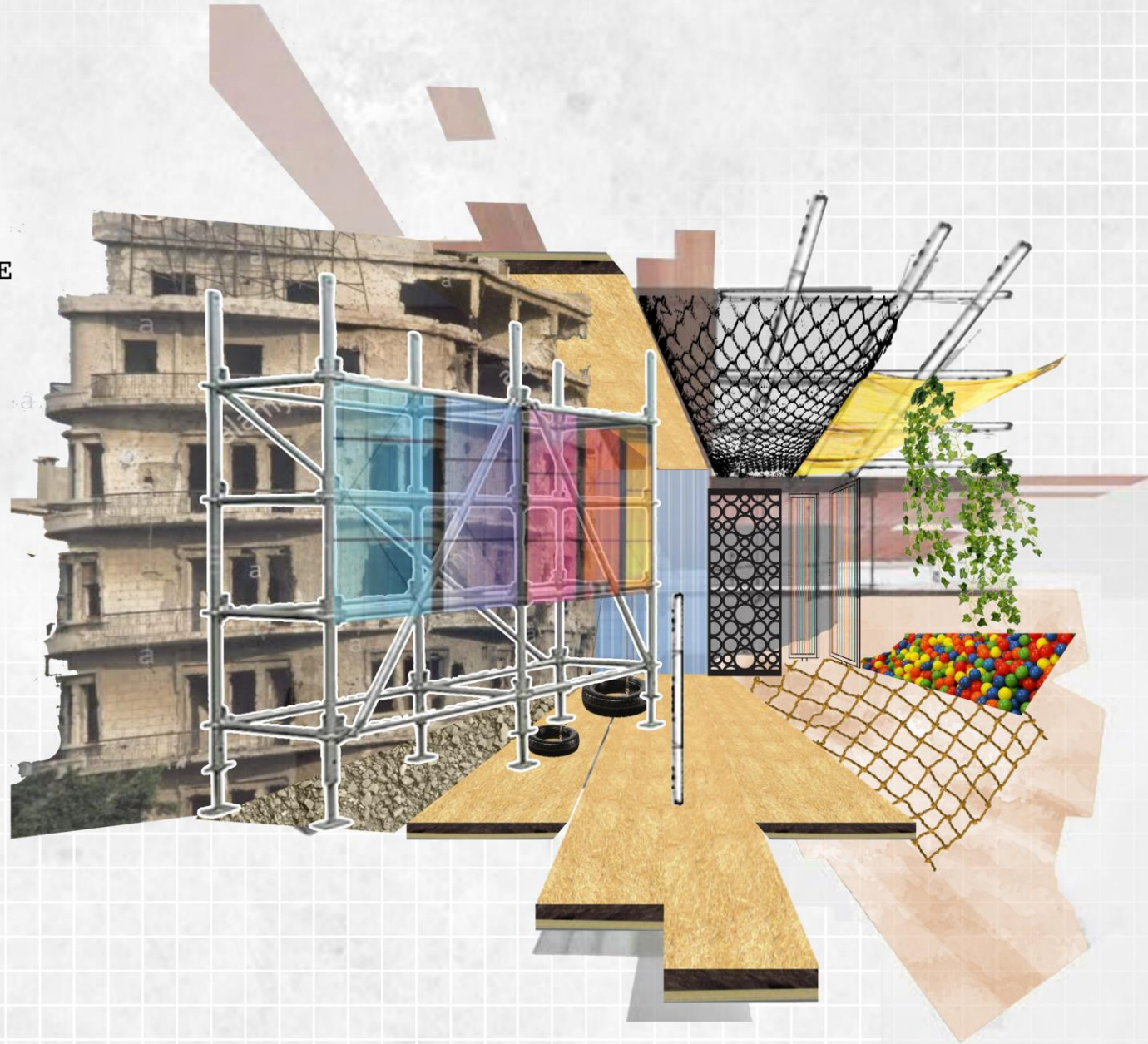
CHILD-FRIENDLY MATERIALS

- Rope net
- Ball pit
- Screens for transparency
- Soft Flooring

FLOORING and ROOF

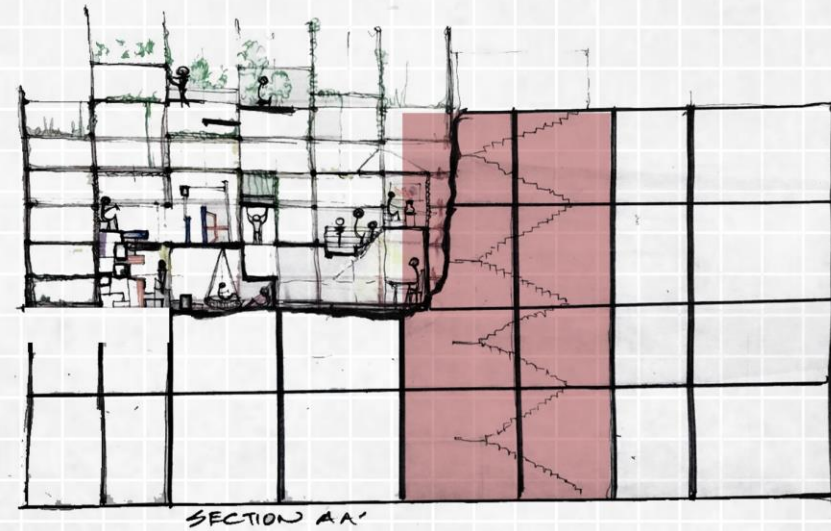
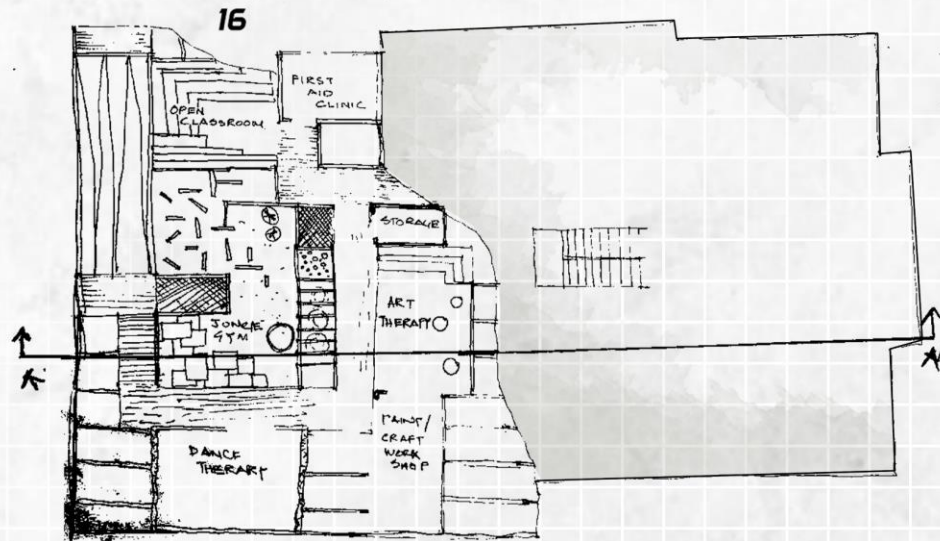
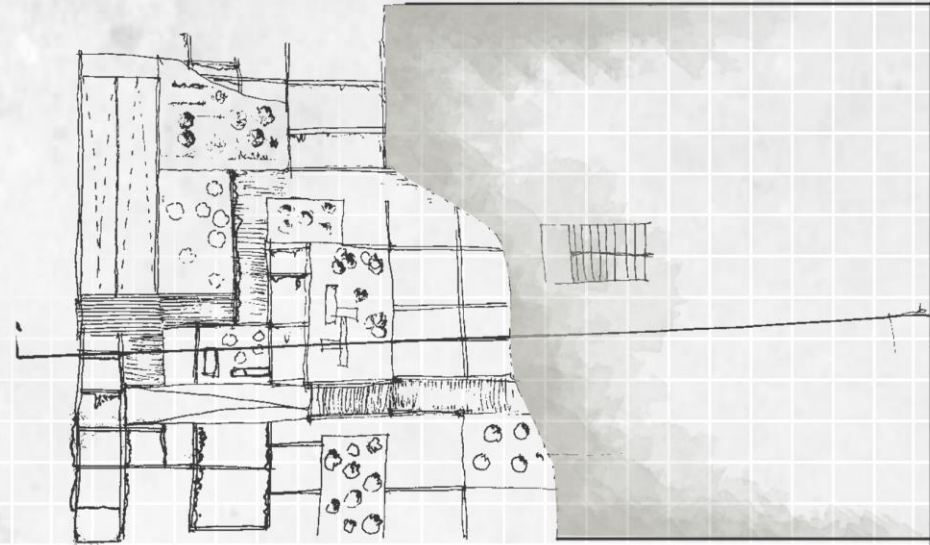
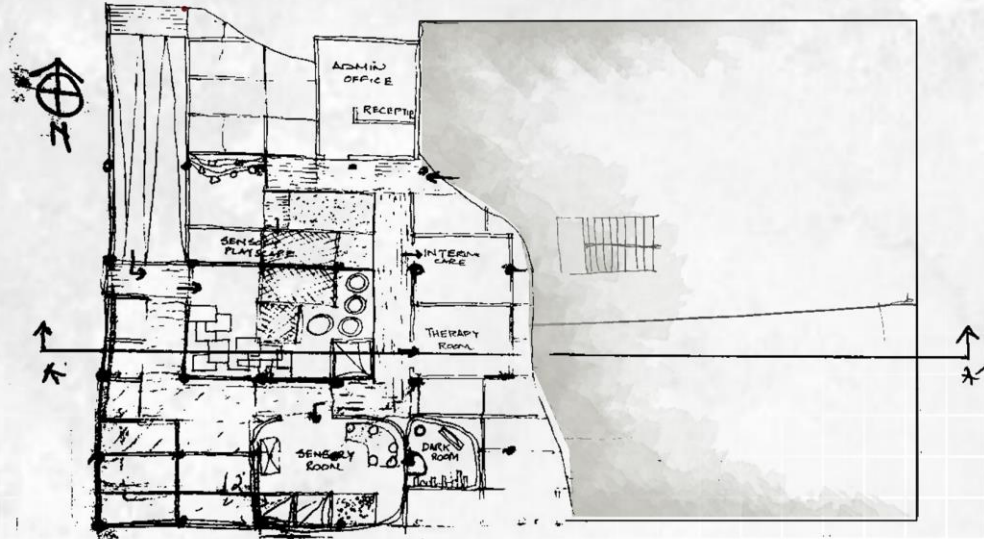
- Fabric net mesh as shade
- Wooden platform with aluminium frame

IN-SITU RUBBLE USED TO MAKE BENCHES AND PLANTERS



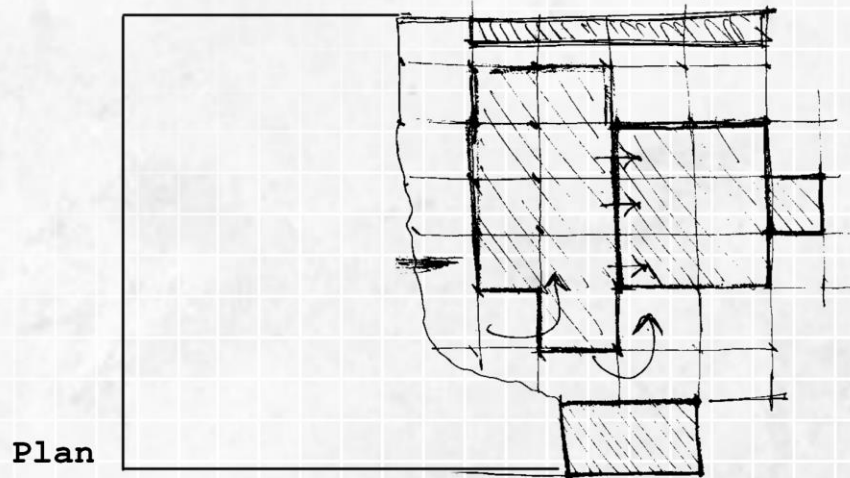
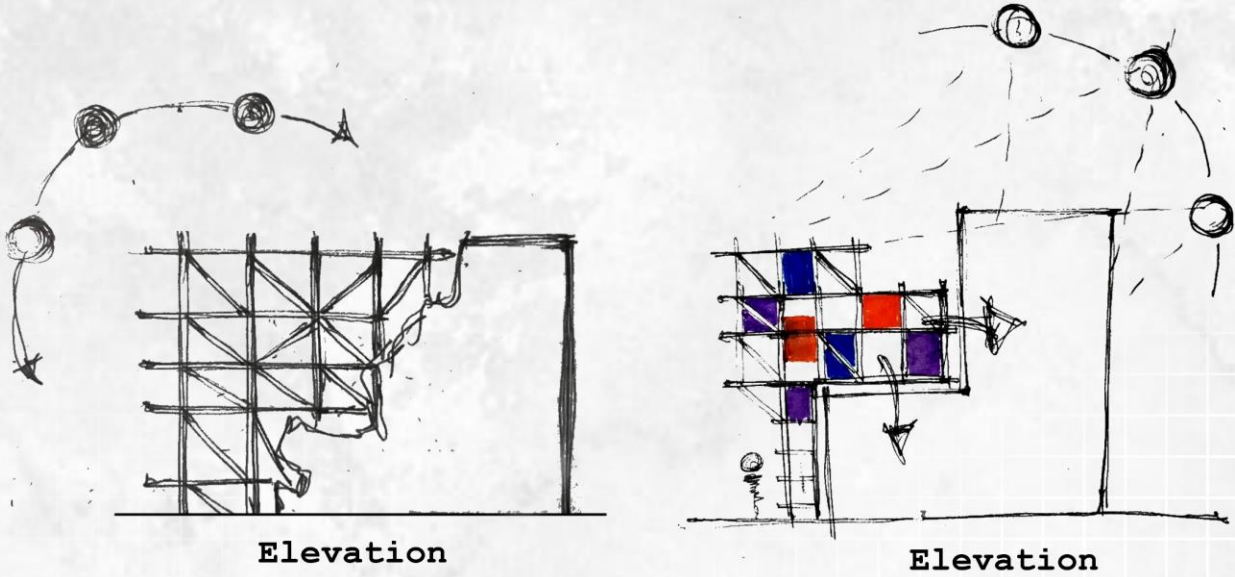
DEVELOPMENT

Development 1: attached onto a semi damaged building

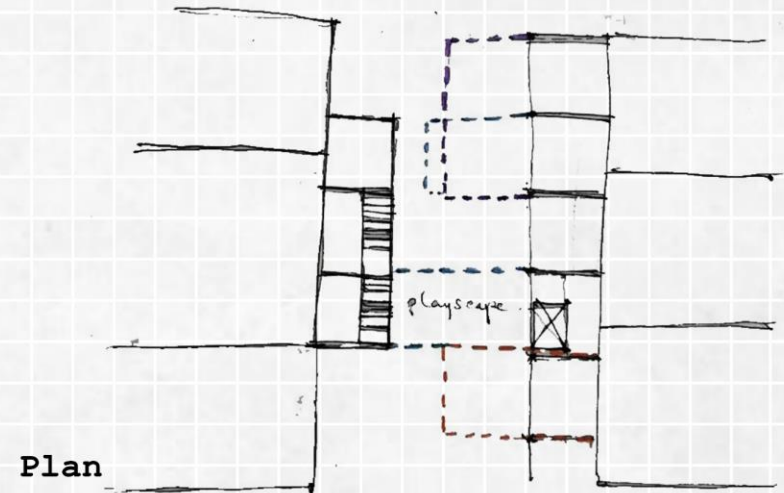
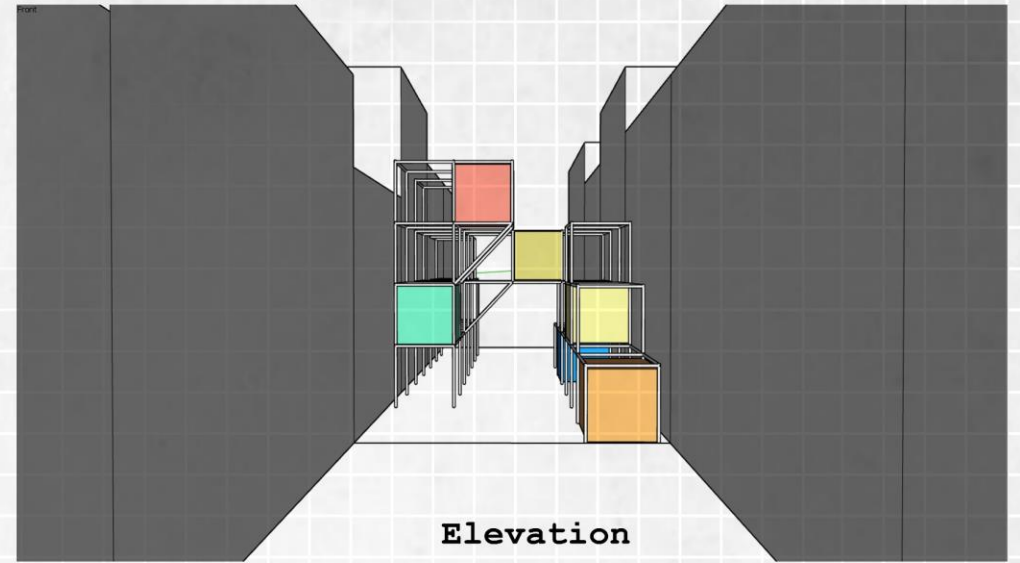


DEVELOPMENT

Development 2: detached while complimenting the building



Development 3: within a residential street, supporting the adjacent buildings on either side



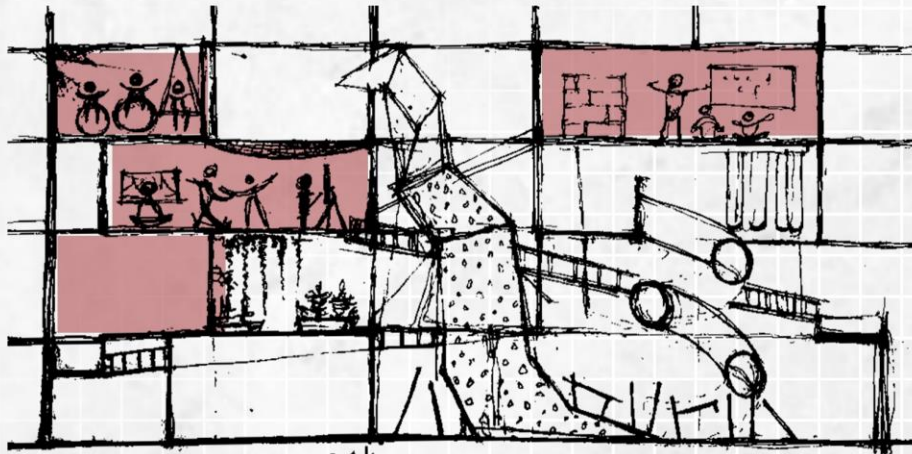
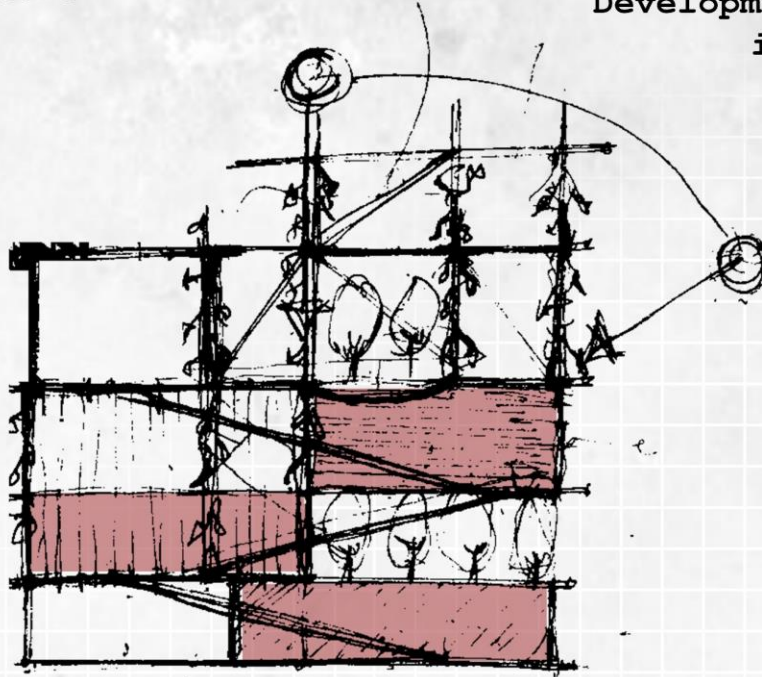
DEVELOPMENT

Development 4: free standing temporary structure

massing



Development 5: trying out different shaped inserts within scaffolding



Budd

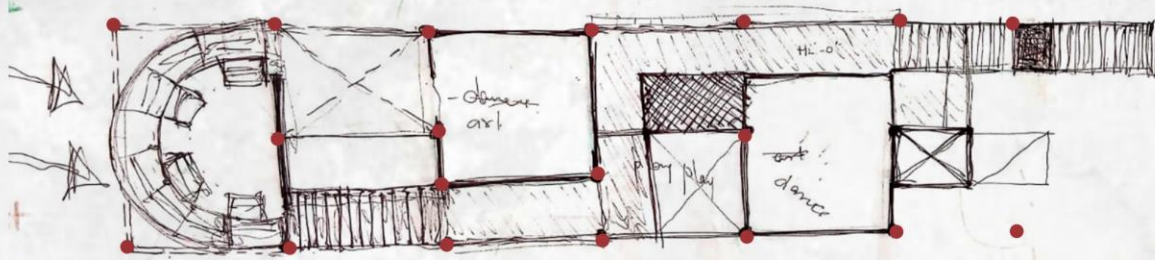
section



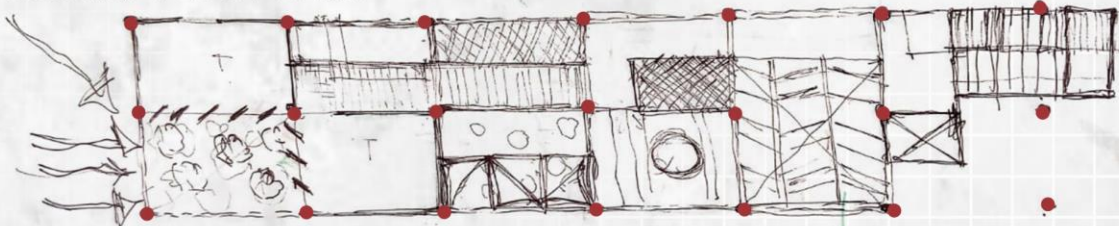
DEVELOPMENT

Development 6: Intervention On a Street

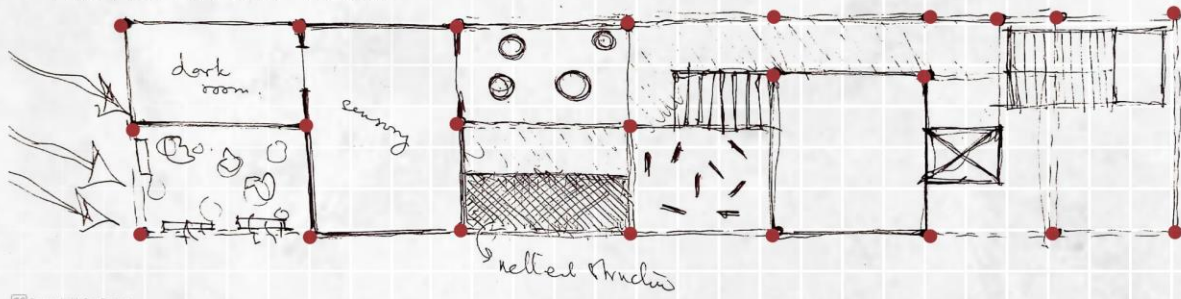
First Floor Plan



Second Floor Plan



Third Floor Plan



Elevation



DEVELOPMENT

Development 6: Intervention On a Street

Longitudinal Section

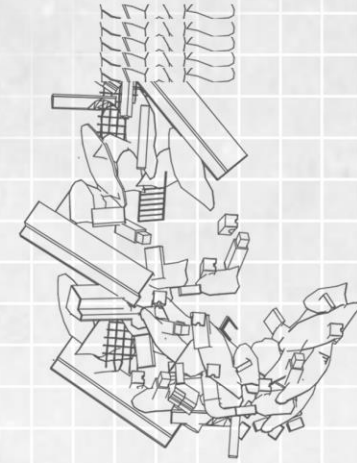
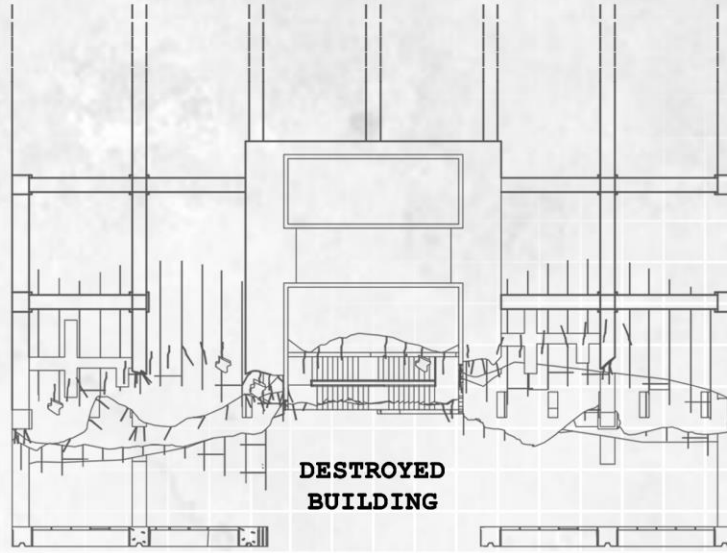
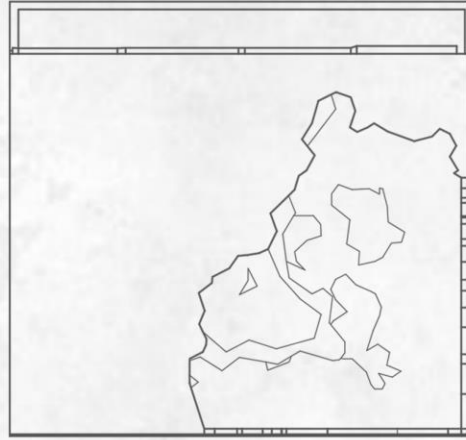


Cross Section

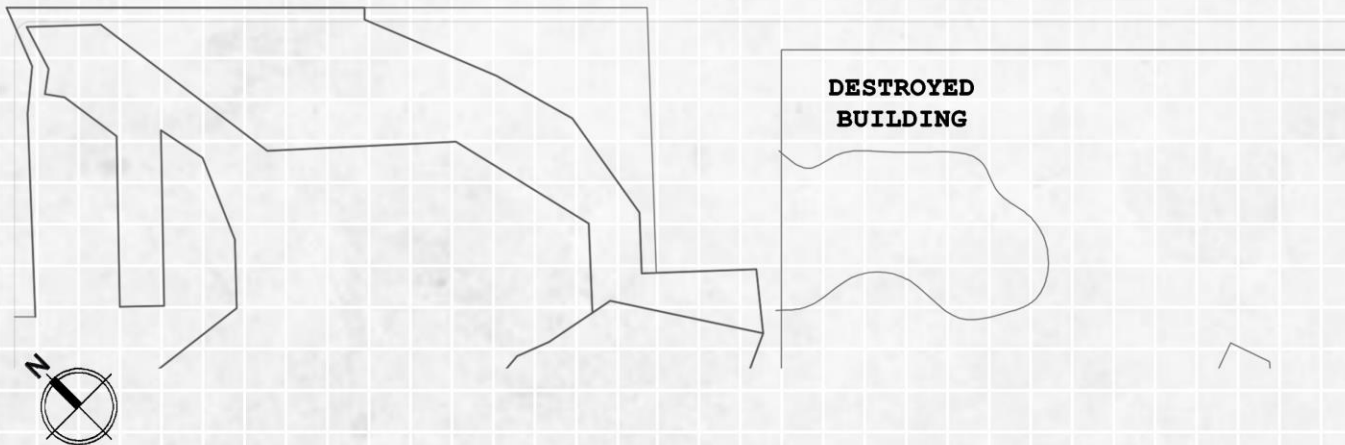
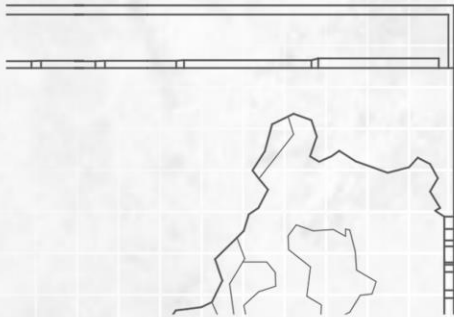
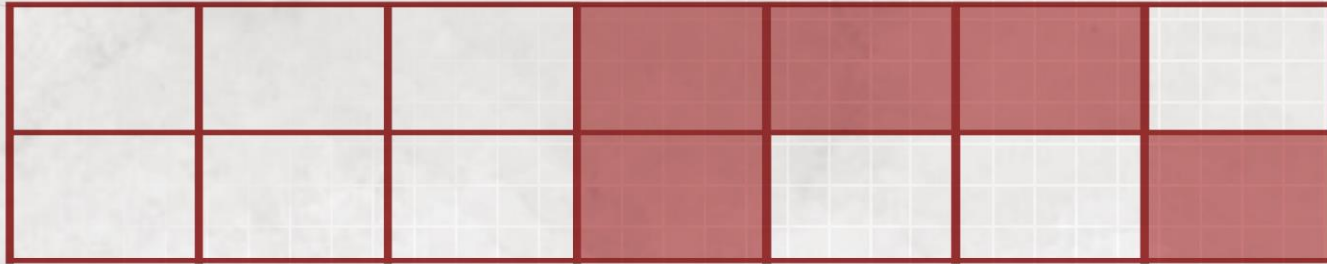


SITE PLAN

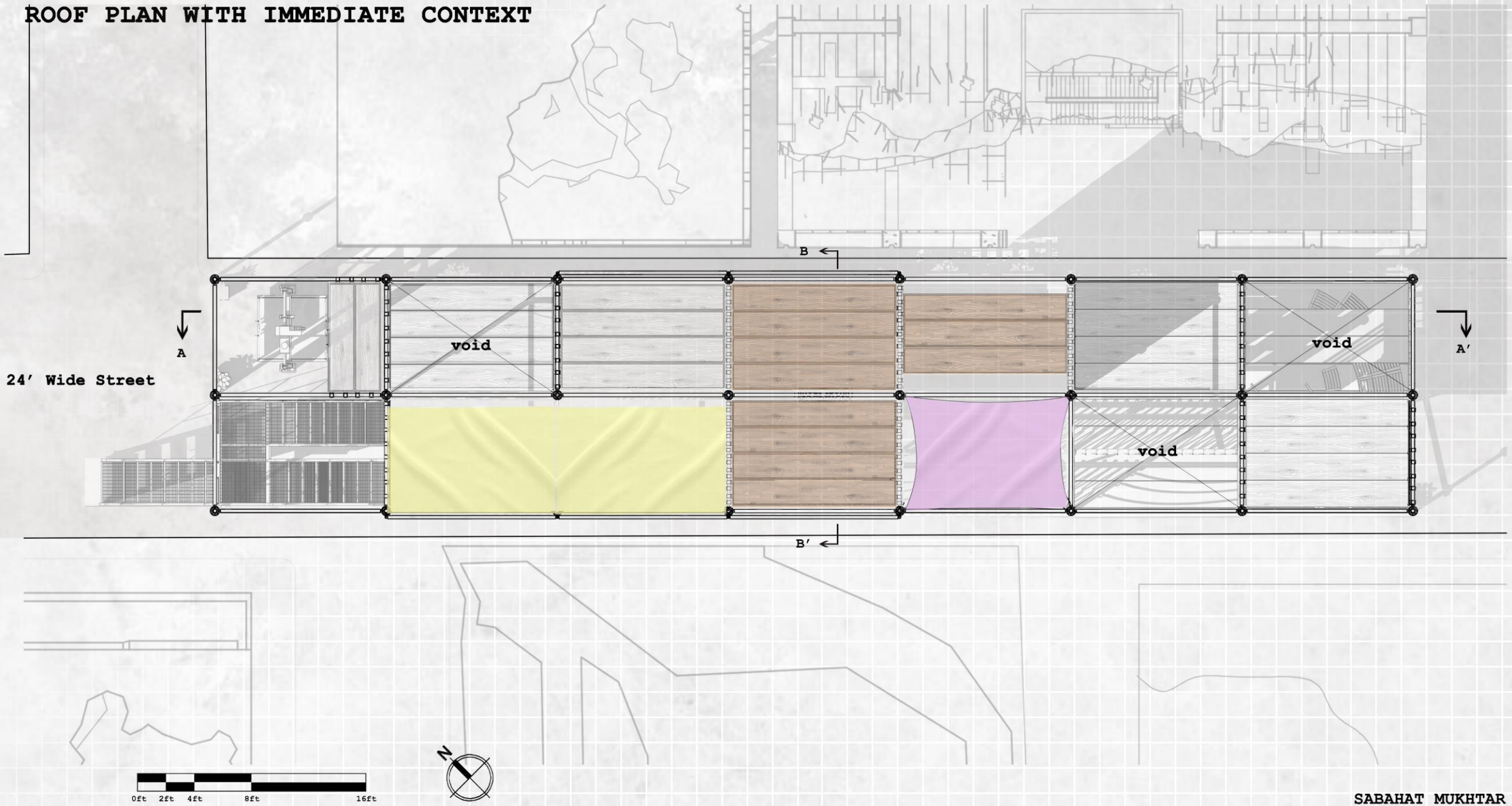
20'
WIDE
STREET



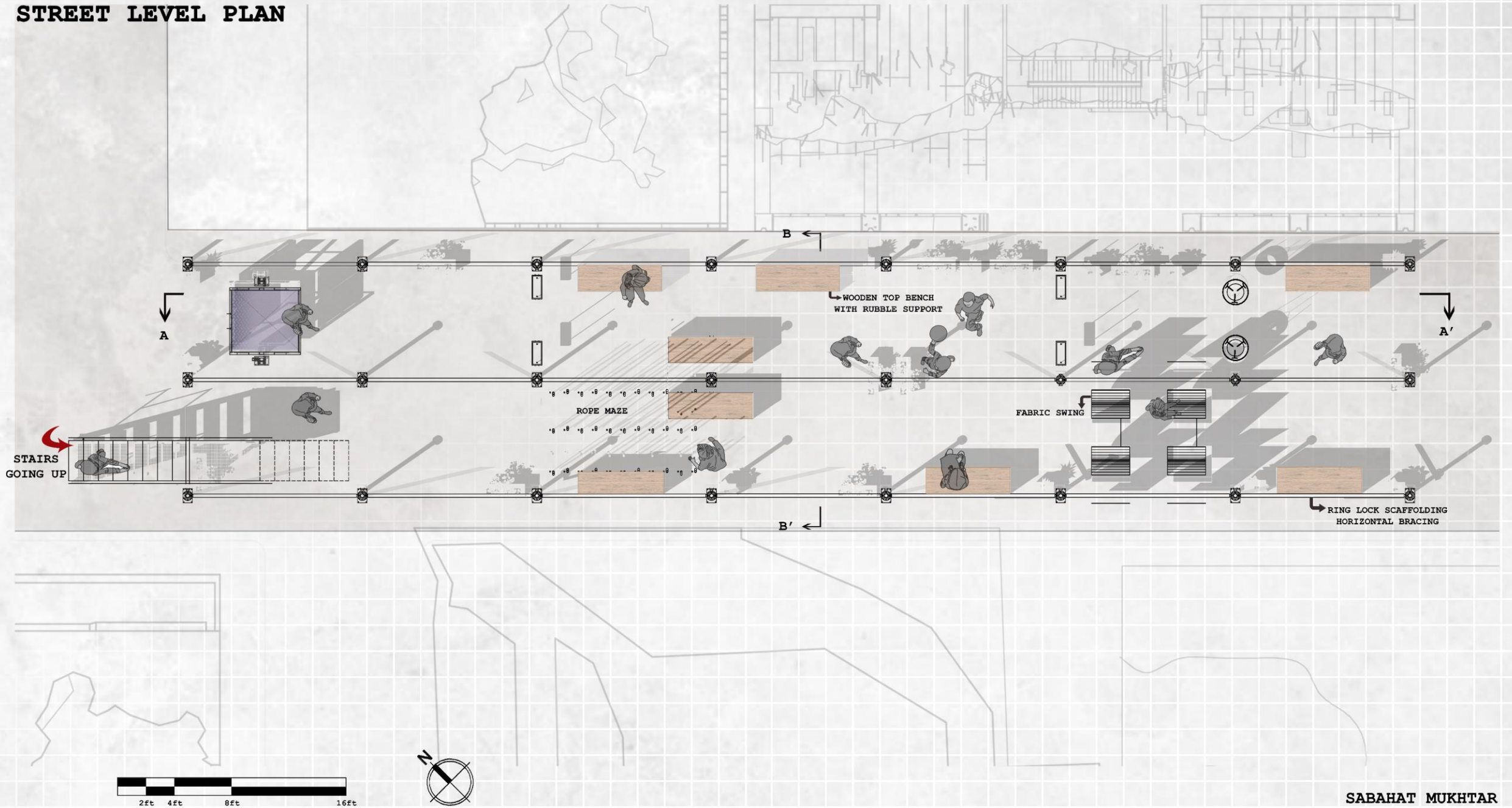
24' WIDE
STREET



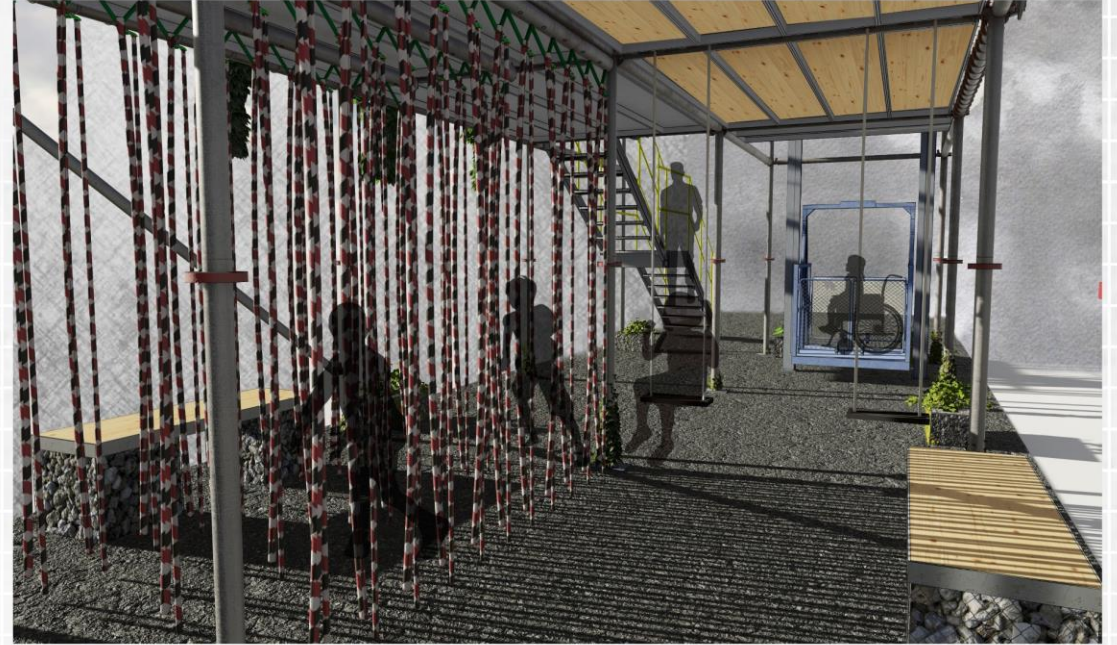
ROOF PLAN WITH IMMEDIATE CONTEXT



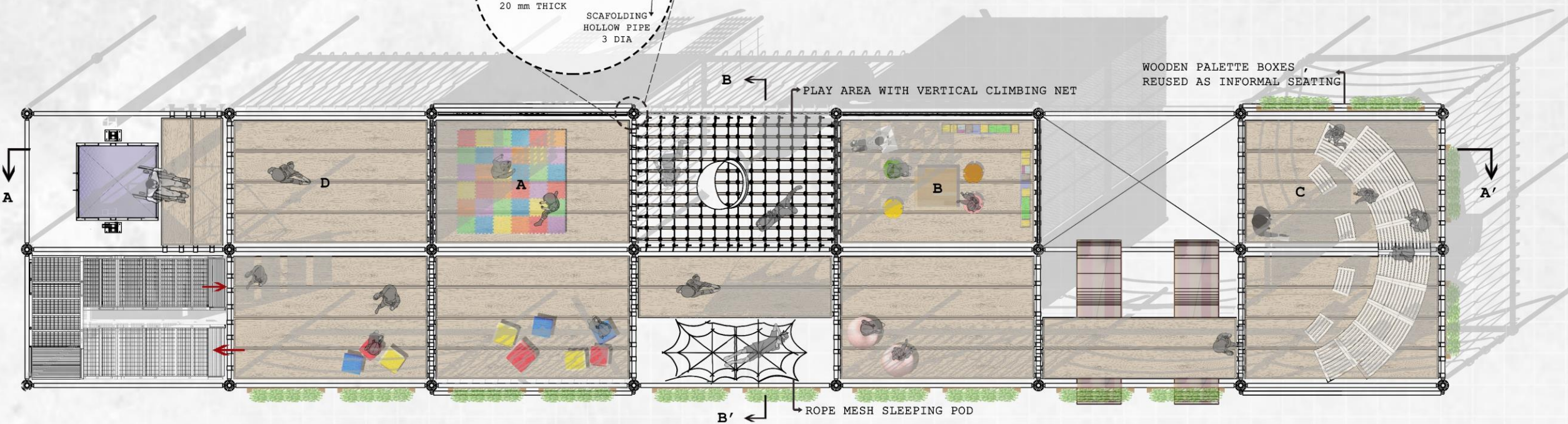
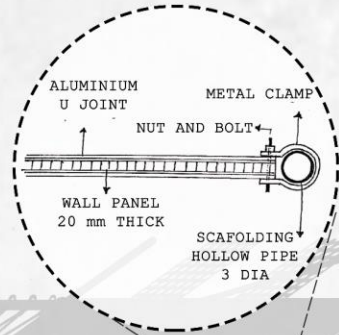
STREET LEVEL PLAN



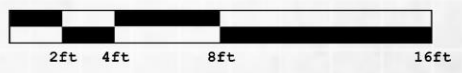
Ground floor views showing playscape



FIRST FLOOR PLAN



- A Dance Therapy
- B Art Therapy
- C Open classroom
- D Lobby



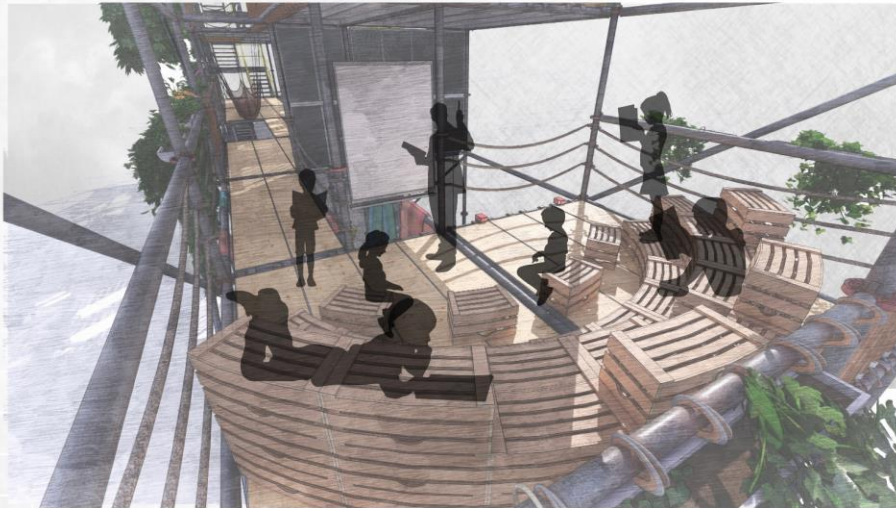
PlayScape



Dance Therapy Room



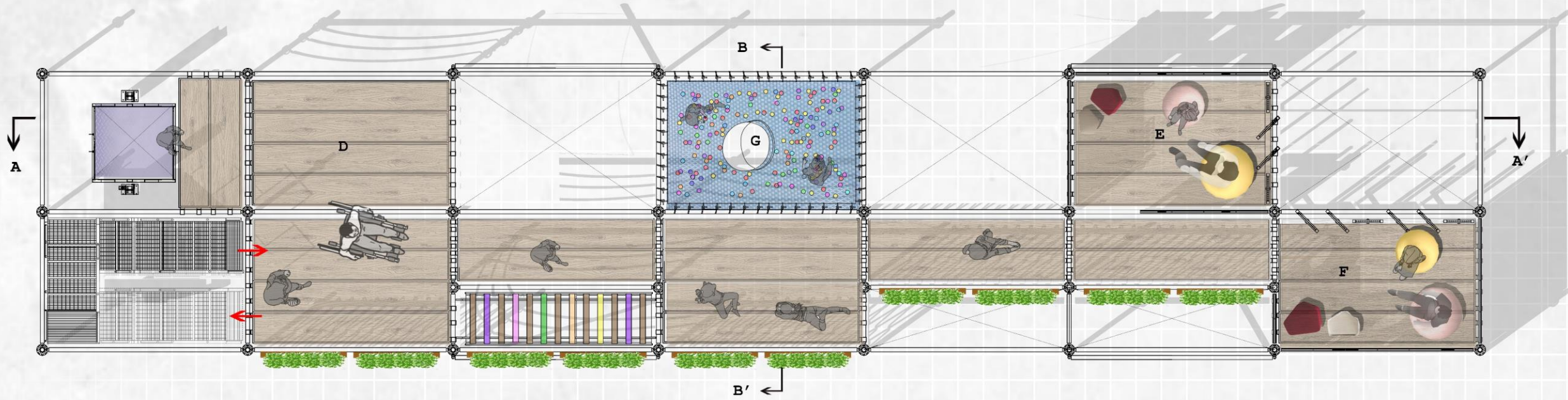
Open Classroom



Art therapy room



SECOND FLOOR PLAN

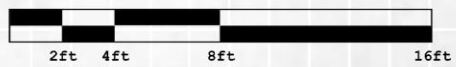


E Individual Therapy Room

F Consulting Room

G Play area

D Lobby



Therapy room



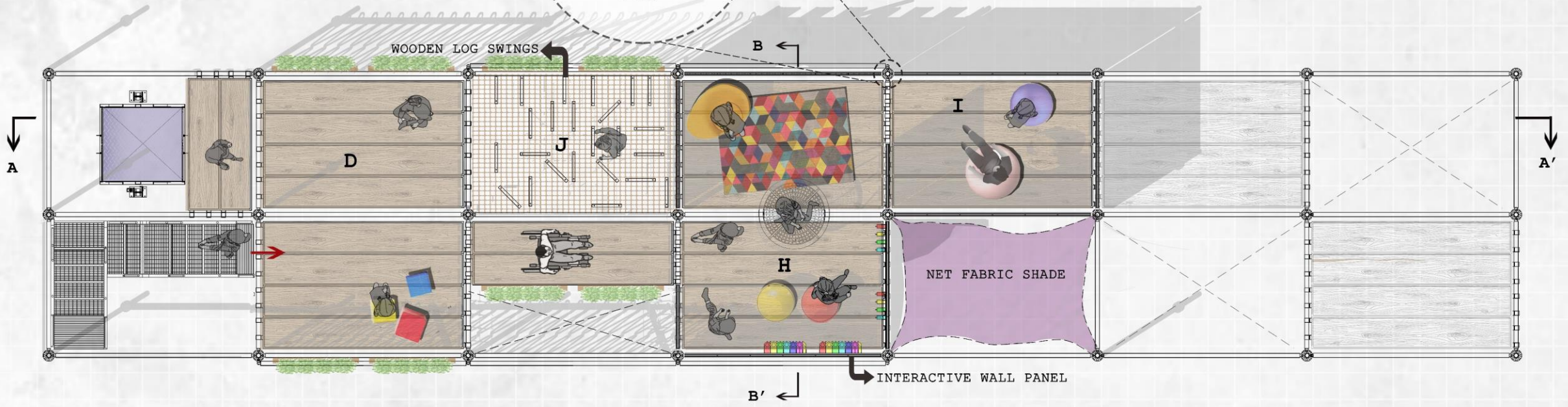
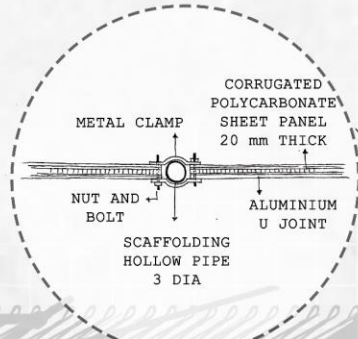
Counselling Room



Aisle View on Second Floor



THIRD FLOOR PLAN

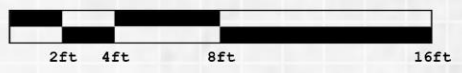


H Sensory Room

I Dark Room

J Play area

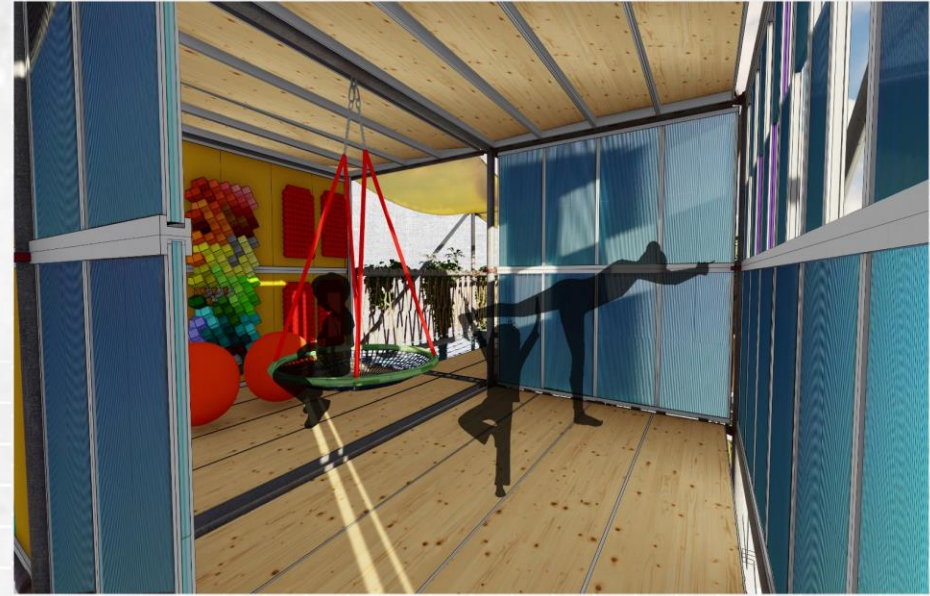
D Lobby



Dark room



Sensory room

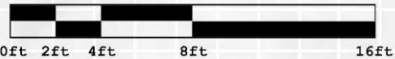


Playscape and corridor view



PROPOSED ELEVATION B

VISUALLY CONNECTED WITH ADJACENT BUILDINGS



SABAHAT MUKHTAR

PROPOSED ELEVATION B'
VISUALLY CONNECTED WITH THE ADJACENT BUILDINGS

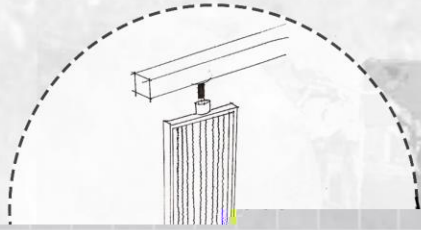


0ft 2ft 4ft 8ft 16ft

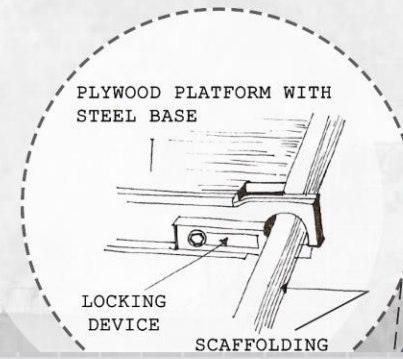
SABAHAAT MUKHTAR

LONGITUDNAL SECTION AA'

SHOWING PERMEABILITY AND RELATIONSHIP OF SPACES

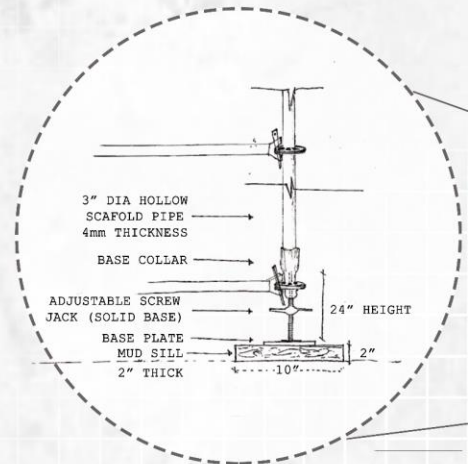
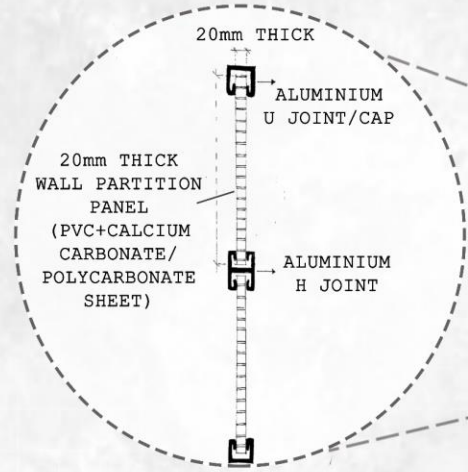


SABAHAT MUKHTAR



CROSS SECTION BB'

SHOWING PRAGMATIC RELATIONSHIP OF SPACES WITH ADJACENT BUILDINGS ON A RESIDENTIAL STREET



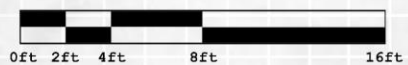
+36'-0"

+28'-0"

+20'-0"

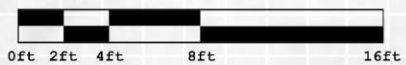
+12'-0"

+0'-0"



PROPOSED ELEVATION A

SHOWING INTERVENTION SITTING ON A RESIDENTIAL STREET



PROPOSED ELEVATION A'

SHOWING PERMEABILITY WITHIN THE INTERVENTION ON A RESIDENTIAL STREET

