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Jarateng: Making social-ends meet by embracing public living

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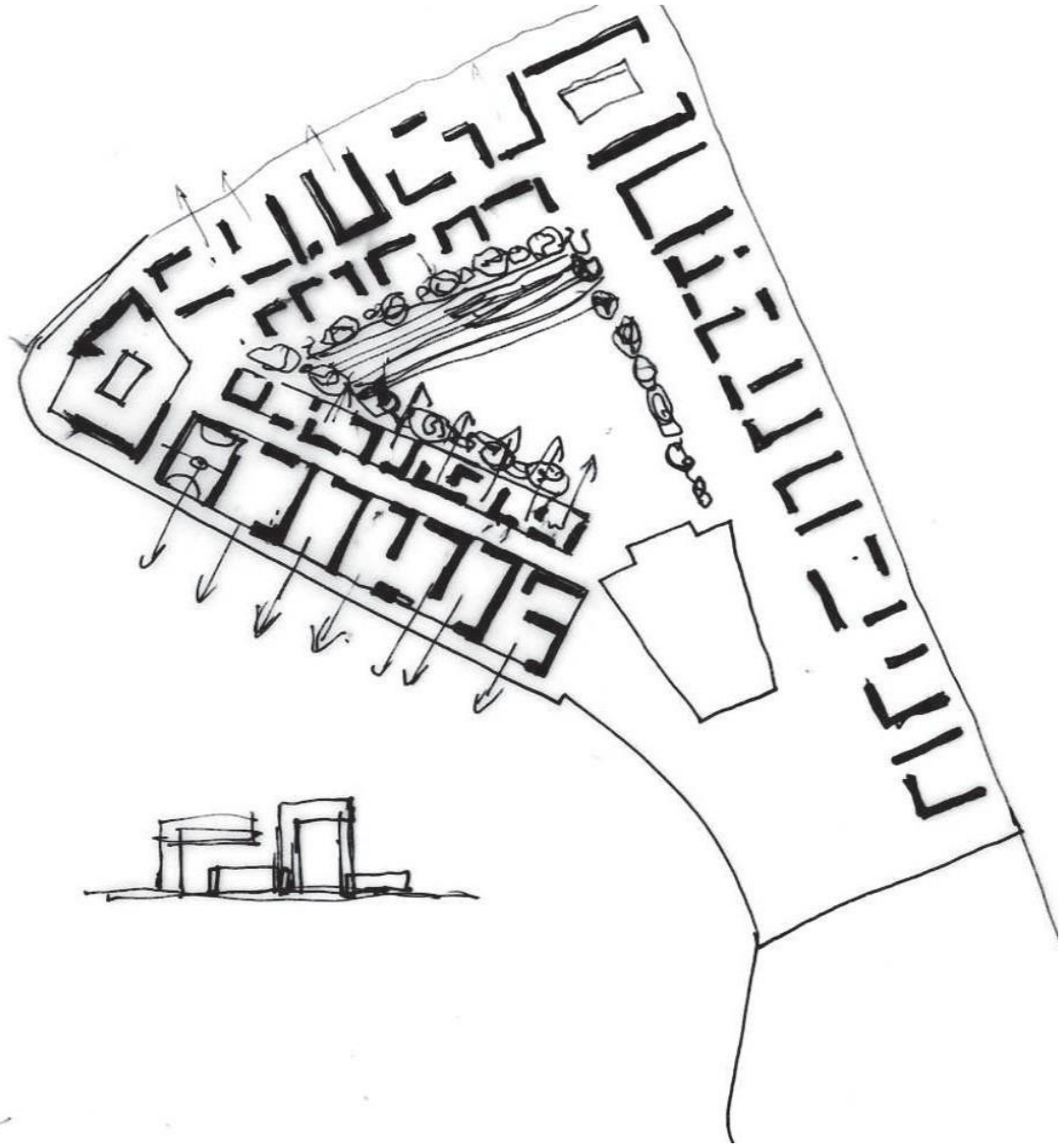


5.

Design

Design

The concept behind the design is the notion of the jarata or township yard. The program and function of my building is centred on social spaces. The building should be an enabling space which allows the residents of Mofolo central and the surrounding townships to be able to embrace public living. The spaces in the proposed design are imagined spaces. These spaces are spaces that happen in and around physical spaces and are therefore spaces of temporality. The design takes the notion of public living as a social space. The social spaces are not constant. These spaces are ever changing and vary in scale or proportion and hierarchy. The design of the proposed public space seeks to explore the phenomenon of social space as expressed in the townships of Soweto. The phenomenon is centred on social interactions between neighbours, the social events and celebrations that happen and the social invisible spaces which results from these interactions and events. The architecture of the proposed public space is also the architecture of the event where the architecture is the events that happen rather than the physical built form.

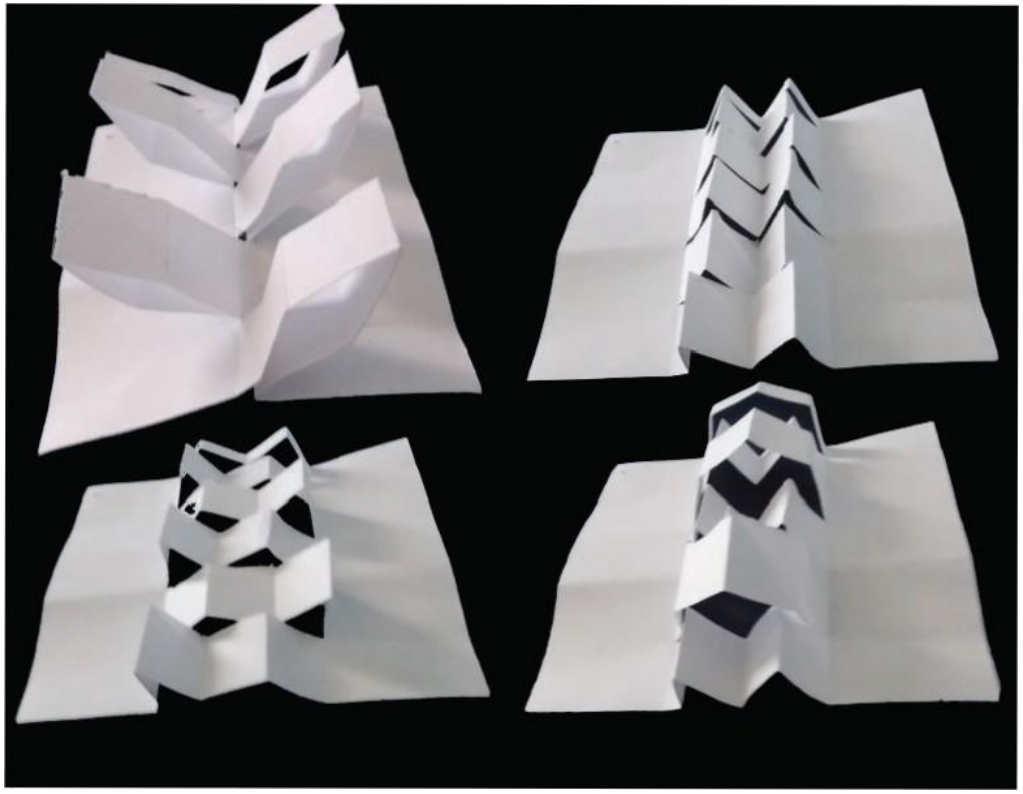
From the point when two neighbours meet a social space begins to form from a simple greeting. The social space can move to a different place of their choosing. Whether they choose to remain on their own side of the fence or one neighbour moves in to another neighbour's physical space, the social space has already been established. The social space exists in the abstract feelings when the two neighbours interact and begin to exchange on a social level. The social space can grow as another neighbour joins that social circle. There are overflows of social spaces happening in the physical space. One social space flows into another social space breaking down physical barriers. Therefore the spaces in my design should enable those overflows and connections to happen and to allow for these social spaces to organically develop.

"Architecture has always been as much about the event that takes place in a space as about the space itself" (Tschumi, 2001: 25). There is no architecture without event essentially. The architecture of the event can suggest that there is a juxtaposition of events that take place behind the facades of the physical spaces. Tschumi states that without action, without the activities and the functions, architecture was to be seen as the combination of spaces, events and movement, without any hierarchy or precedence among these concepts. The spaces of the event can result in chance combinations and casual relationships between spaces.

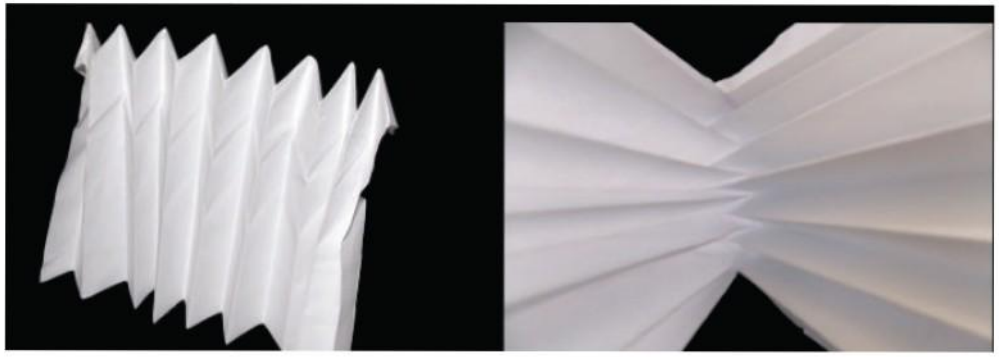
The social spaces are centred on event that people construct themselves to inhabit: heterotopia. One may be able to design conditions for these social spaces to happen. Once a designer does that then the designer will begin to understand that architecture is not about the conditions of design but rather about the design of conditions. The objective then is not to fulfil the objectives of the architecture but it is to construct our own conditions within an architectural space. There should a combination of space, place and movement so that events which take place are not fixed to one position but there is a spontaneous movement of spaces within a place. It is about experiencing the same place differently each time. Therefor design of the proposed building attempt to look for a rich mix or collision that happens between space (event) and place. Bernard Tschumi states that the event is the shock or should present a shock in a space (2001:27). This means that the interaction between form and function may result in an unexpected event.

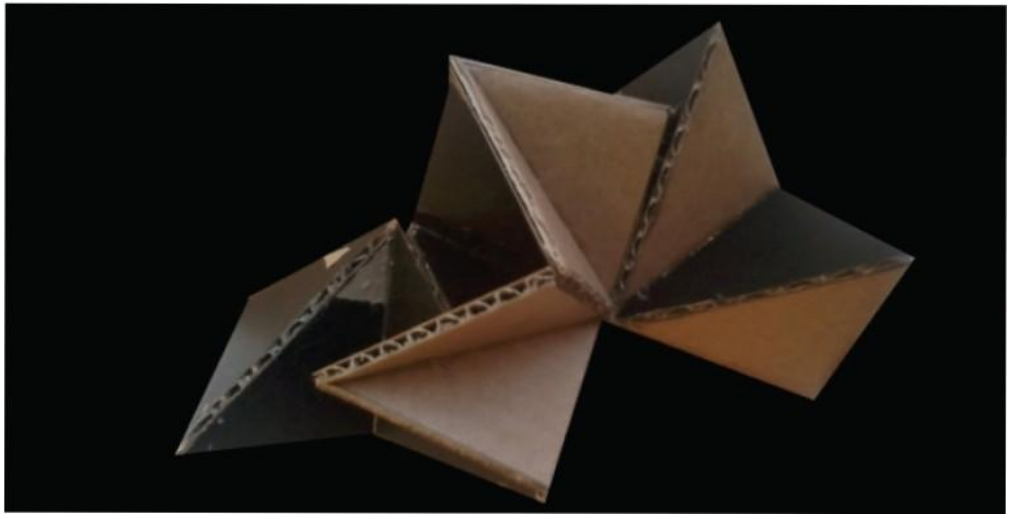
Initial Design

Modelling- experimenting with surfaces

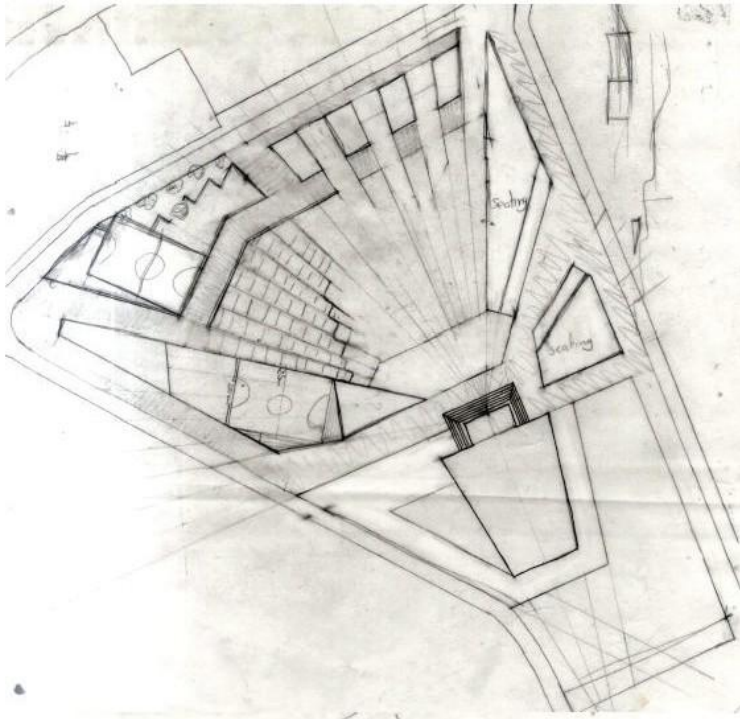


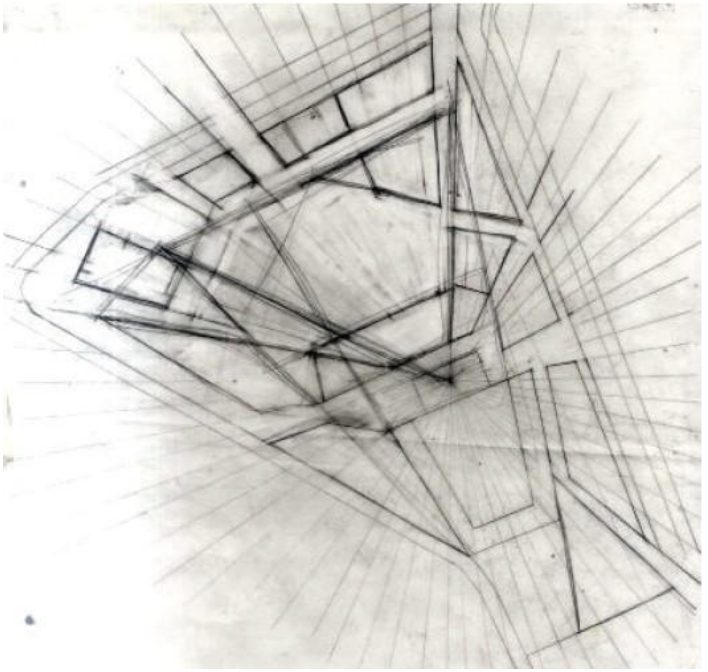


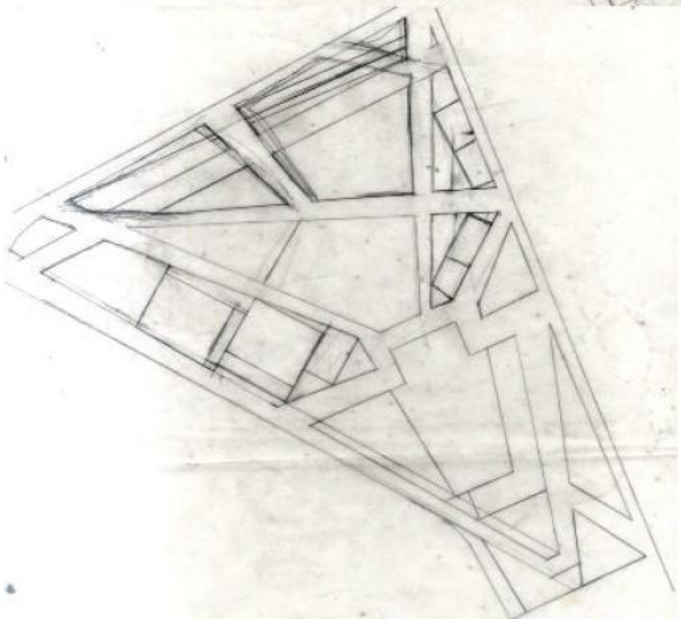


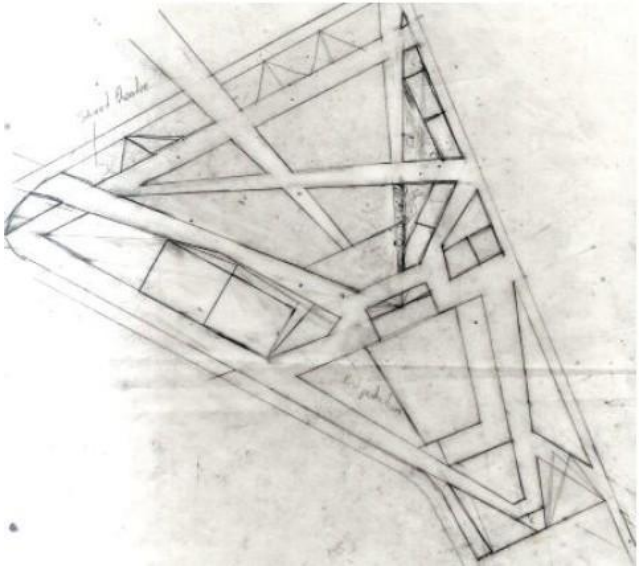


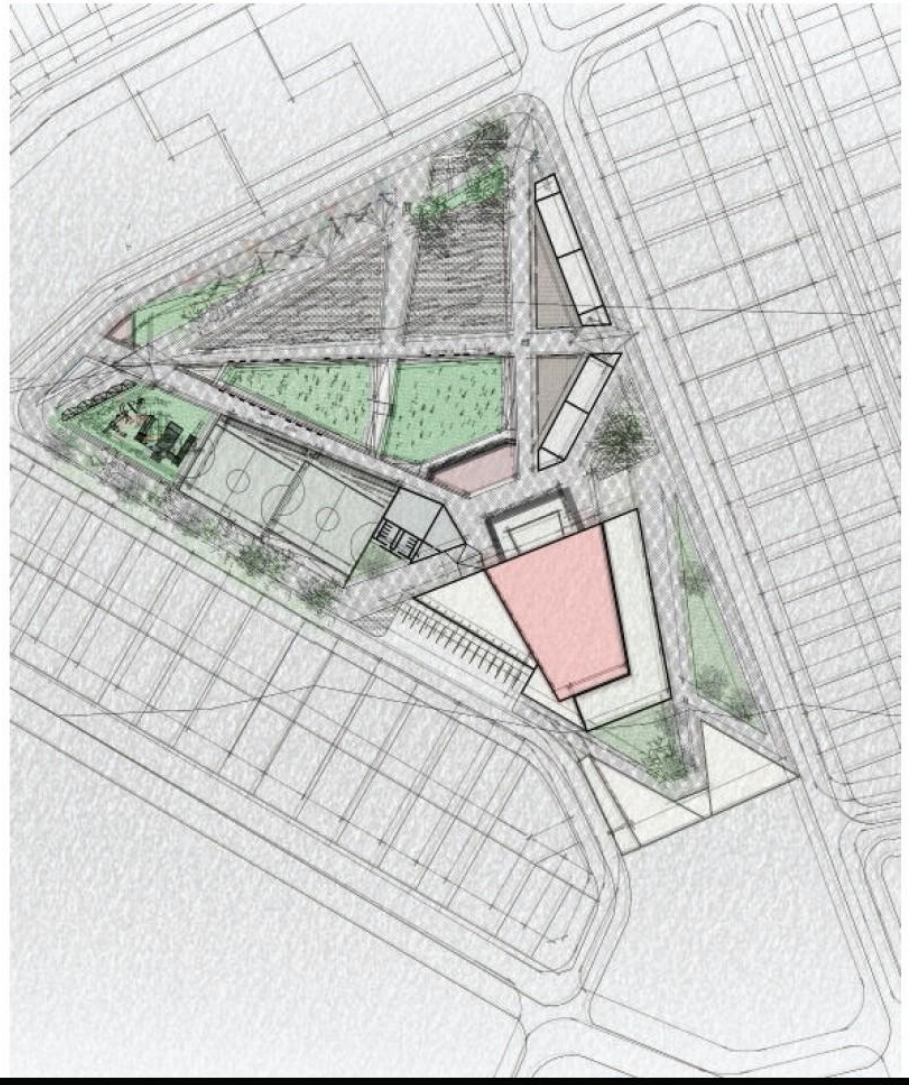
Conceptual sketches

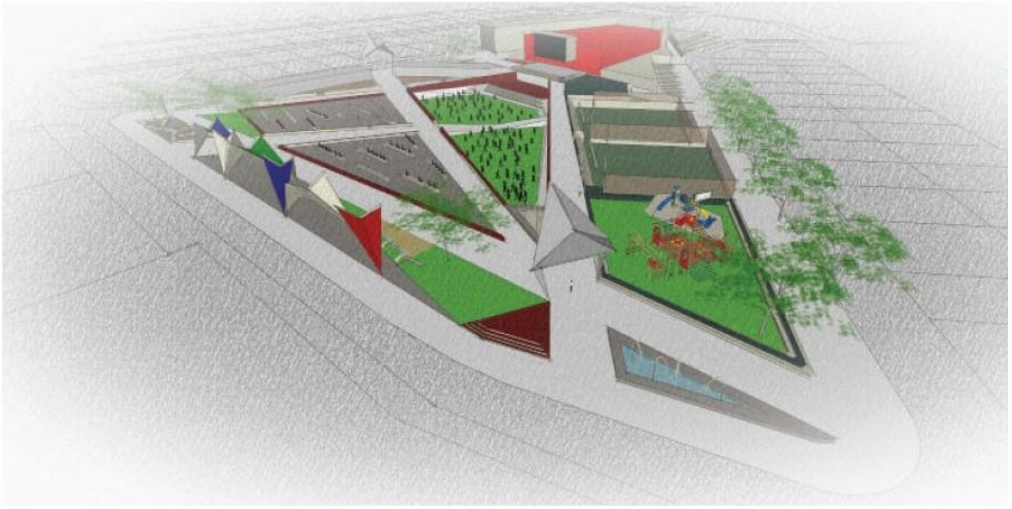


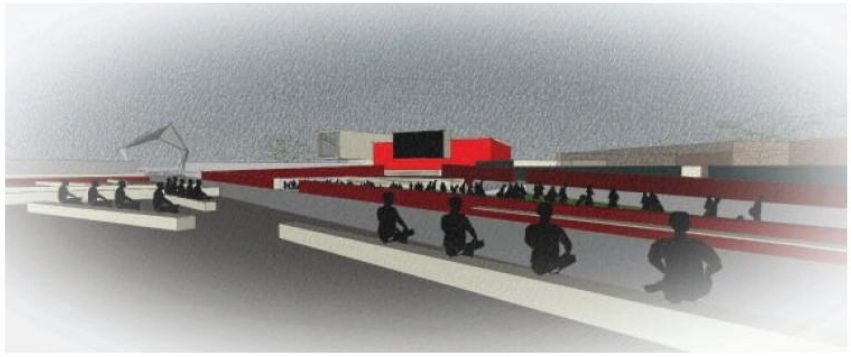


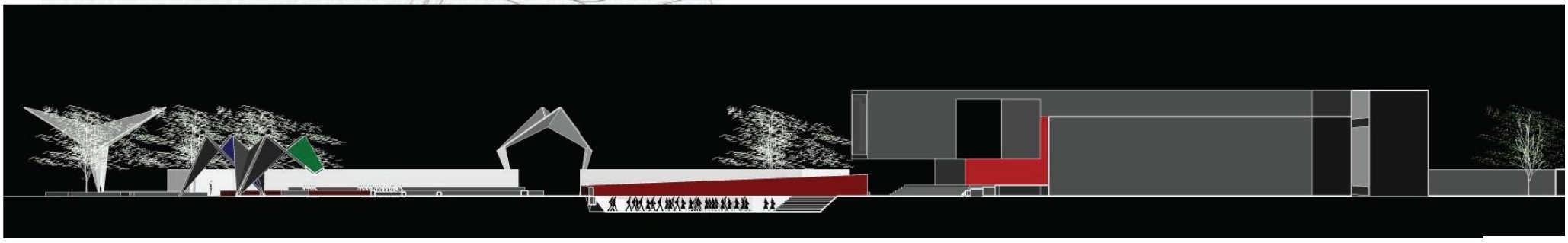






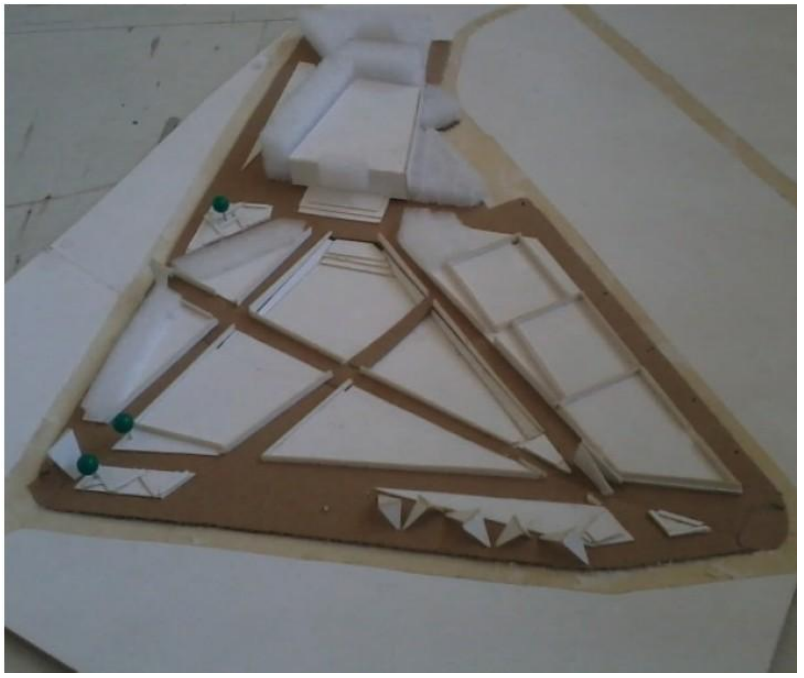






Conceptual model



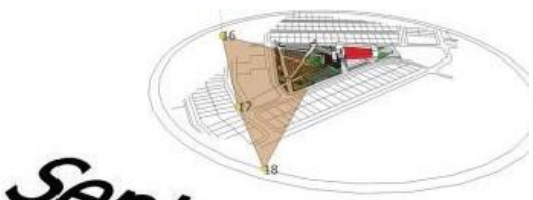


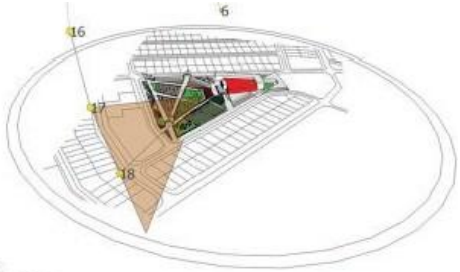


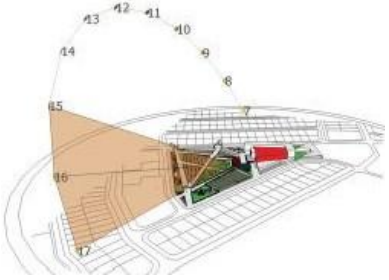


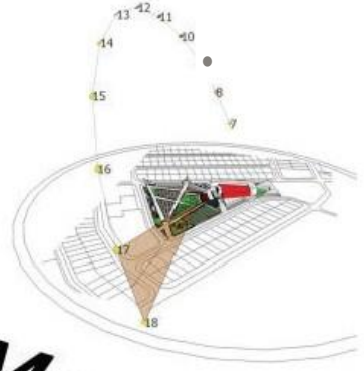
Solar study

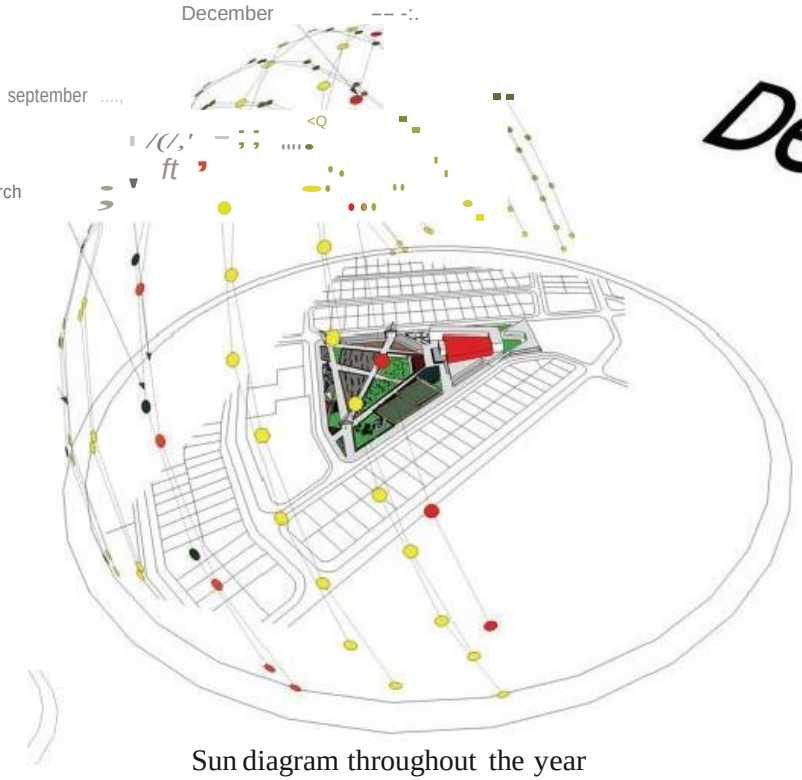
General operating starting time of the open-air cinema in the warm seasons would be between 16:00 and 18:00. The warm months are between September through to March of the following year. A solar analysis will be done for these hours.







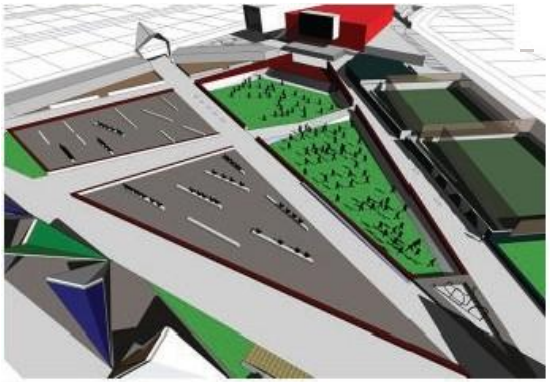




Sun diagram throughout the year

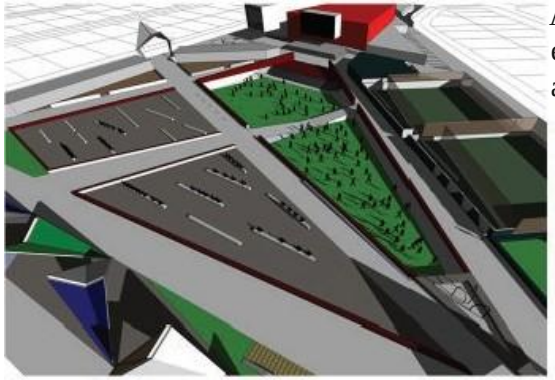
General operating starting times of the open-air cinema in the cold season would be between 15:00 and 17:00. The sun sets earlier in the cold seasons than the warm seasons. A solar study will be done for these hours.

Summer solar analysis



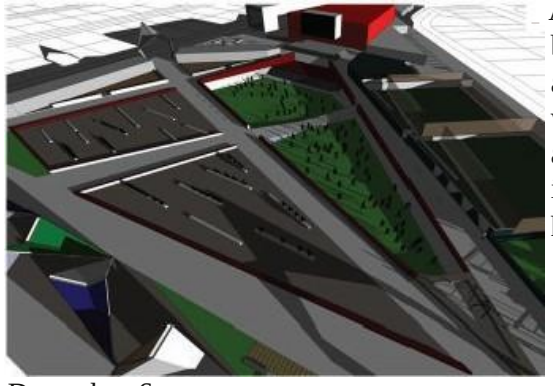
December 4pm

At 4pm there is little shade and a lager percentage of sunlight in the central area being the open-air cinema which could cause uncomfortable conditions in terms of high temperatures and direct sunlight.



December 5pm

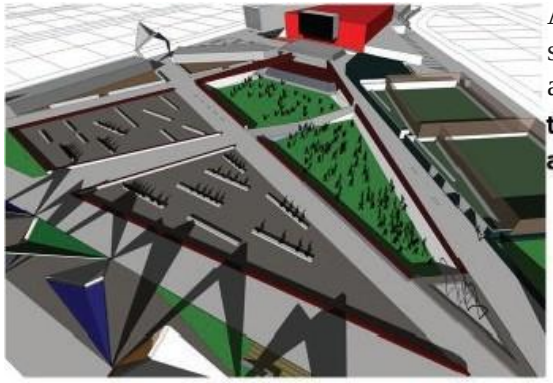
At 5pm there is no visable difference to the percentage of shade and sunlight.



December 6pm

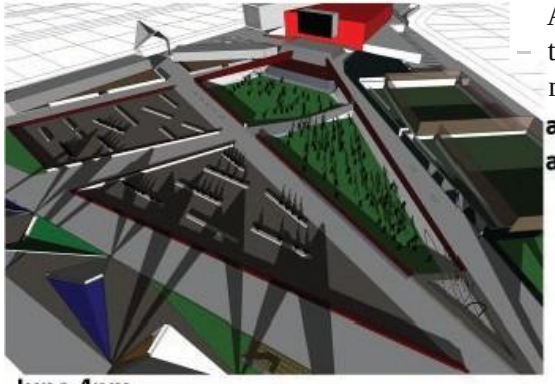
At 6pm there is a slight difference but by this time the conditions are so uncomfortable that people would have already vacated the area and would come back when it is much cooler in the later hours of the evening.

Winter solar analysis



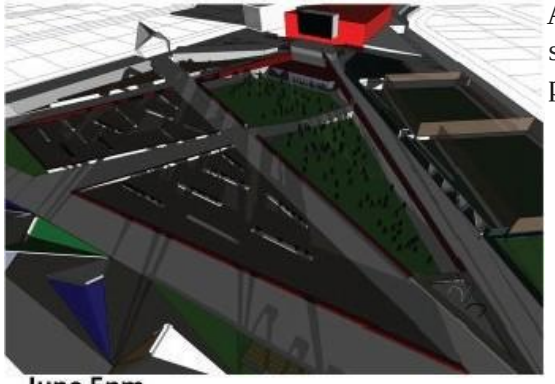
June 3pm

At 3pm there is a larger area of sunlight which may be comfortable conditions in winter because the area is warm but not unbearably hot.



June 4pm

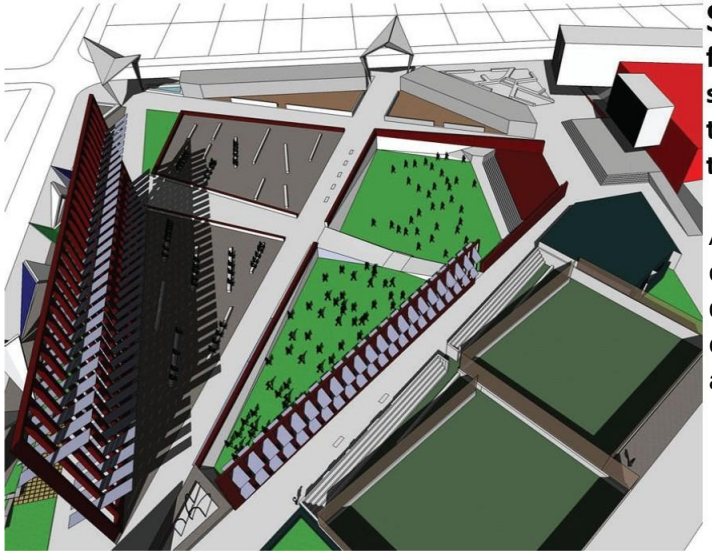
At 4pm the shaded areas begins to increase significantly which may cause temperatures to drop and may be slightly uncomfortable for the users of the space.



June 5pm

At 5pm almost the entire area Is shaded which will decrease temperatures.

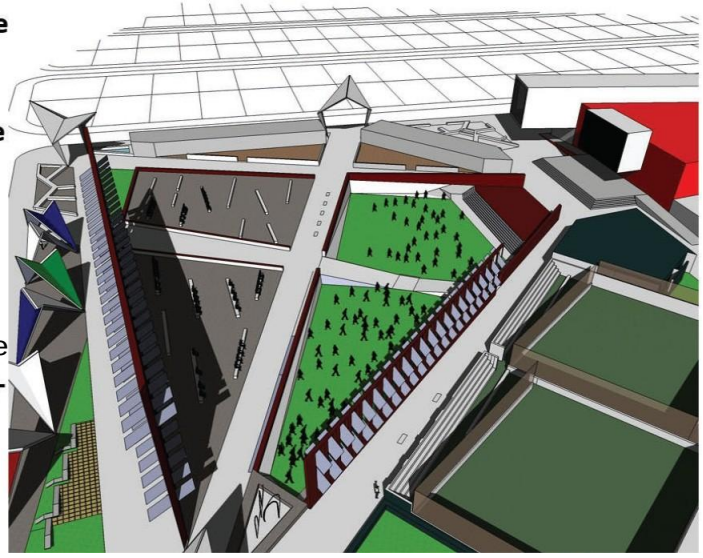
Design intervention - Shading device



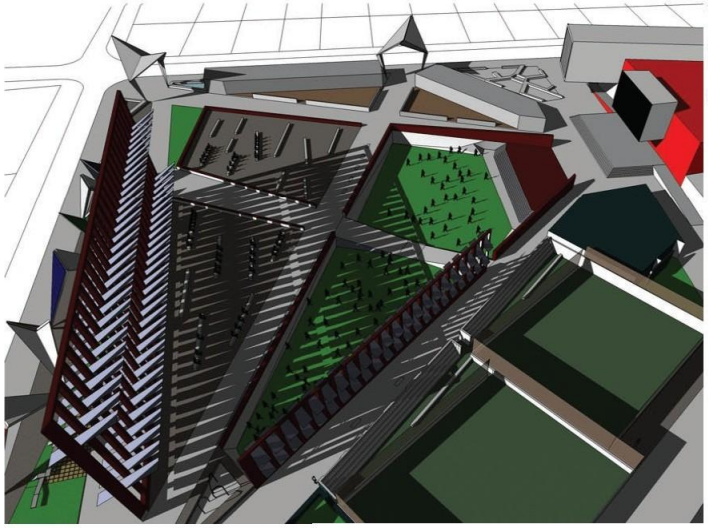
December 4pm

Summer: puting up a shading device in the form of a louvered screen which adds some shading whilst still providing visability into the space and visabiltiy from inside the space to the outside.

An unjustment is made to the louvers by decreasing the size of each louver to accomodate the winter conditions.this means that a covering will be needed in order to shade the area in summer while still providing some sunlight in winter

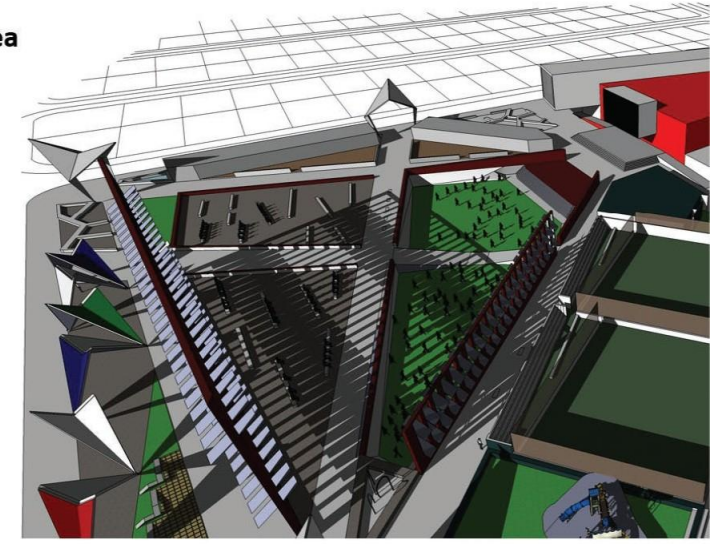


December 4pm



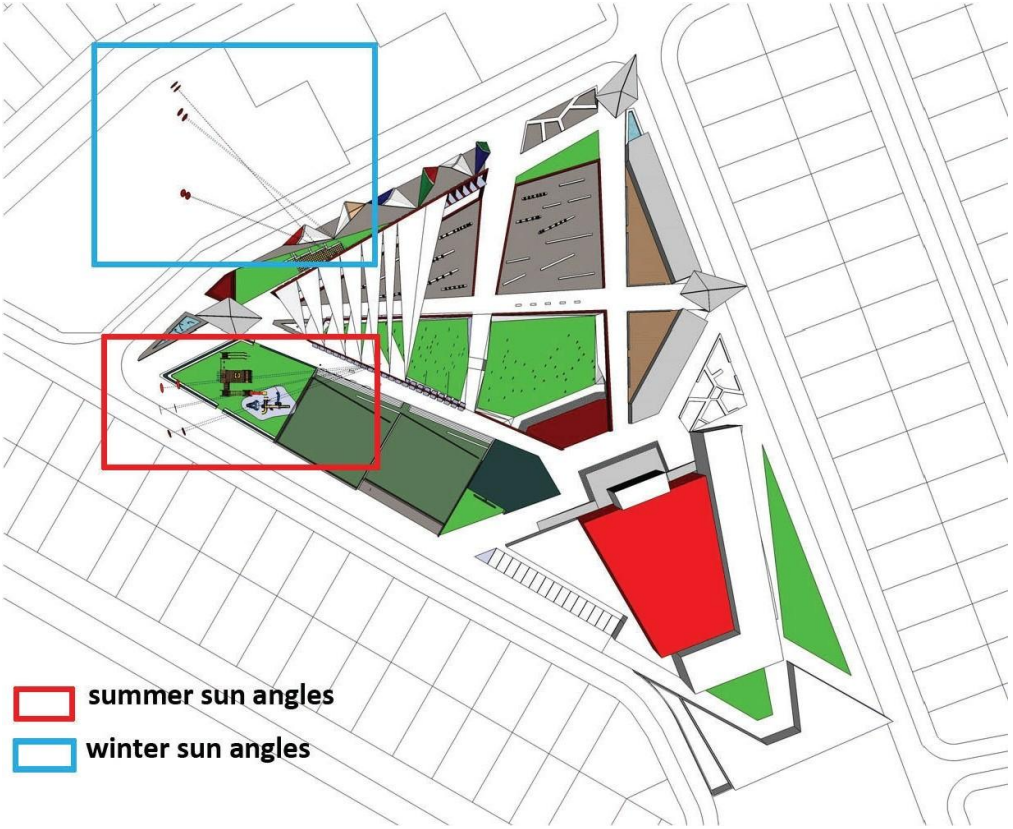
June 3pm

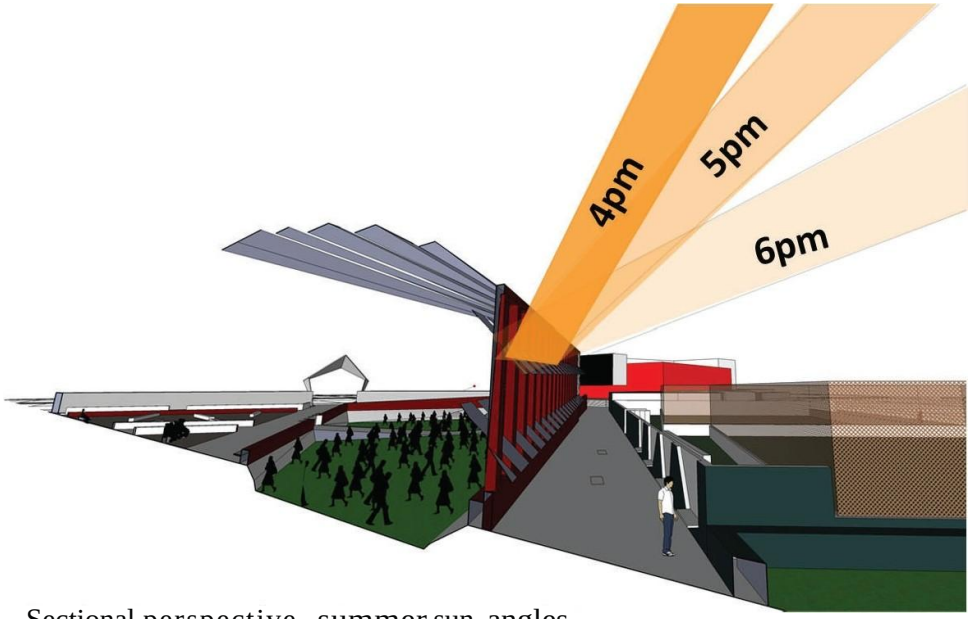
Winter: Some sunlight penetrates the area but after adjusting the louver sizes more sunlight penetrates the area.



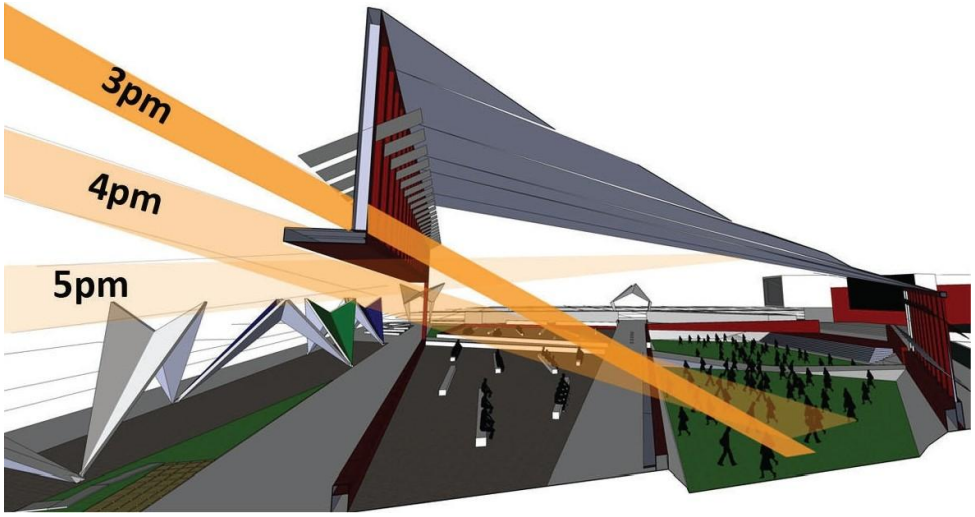
June 3pm

Sun angles





Sectional perspective- summer sun angles

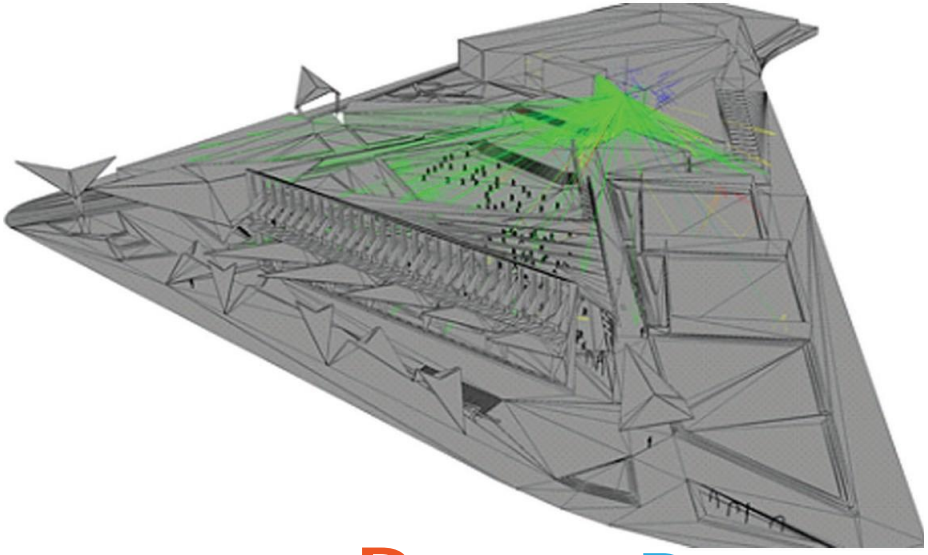


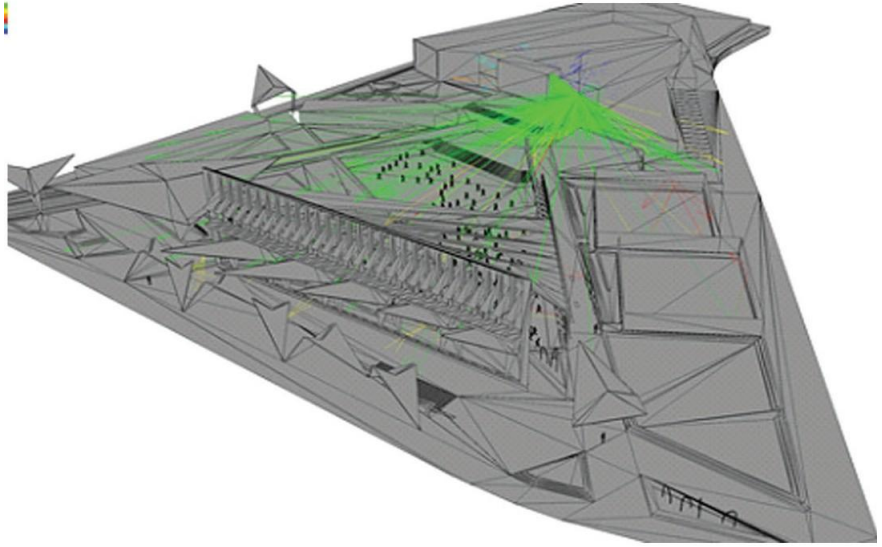
Sectional perspective - Winter sun angles

Findings

Soweto average maximum summer temperature is 25 degrees celcuis and the average maximum winter tempersture is 18 dgrees celcius. Therefore in summer the aim is to get as much shading as possible to lower the temperatures in the space and in winter the aim is to get as much sunlight as possible. It is also important that direct sunlight should be controlled so that it does not cause any obstruction to people's line of vision of the big screen. Direct sunlight should be controlled to create cool comfortable conditions in summer but at the same time be allowed to penetrate the space to create warm comfortable conditions in winter.

Acoustic analysis





KEY:

D direct

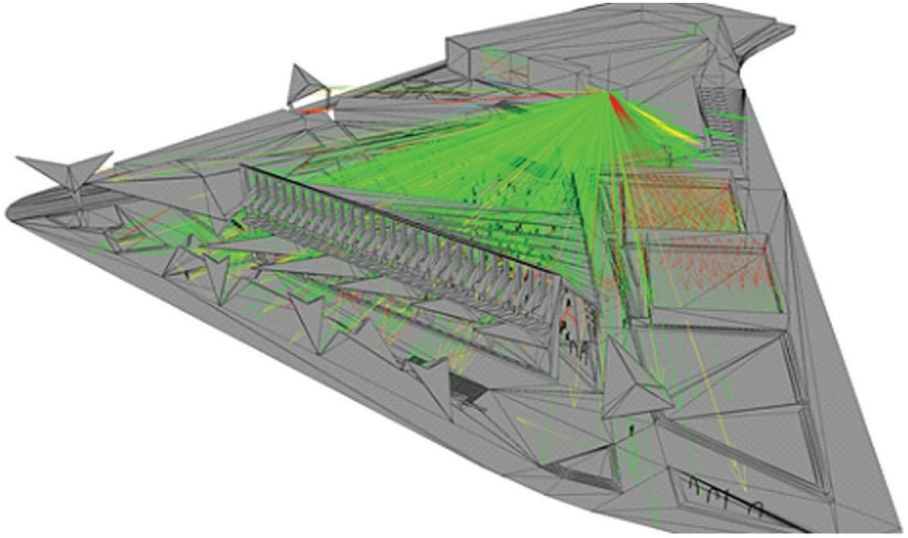
O useful

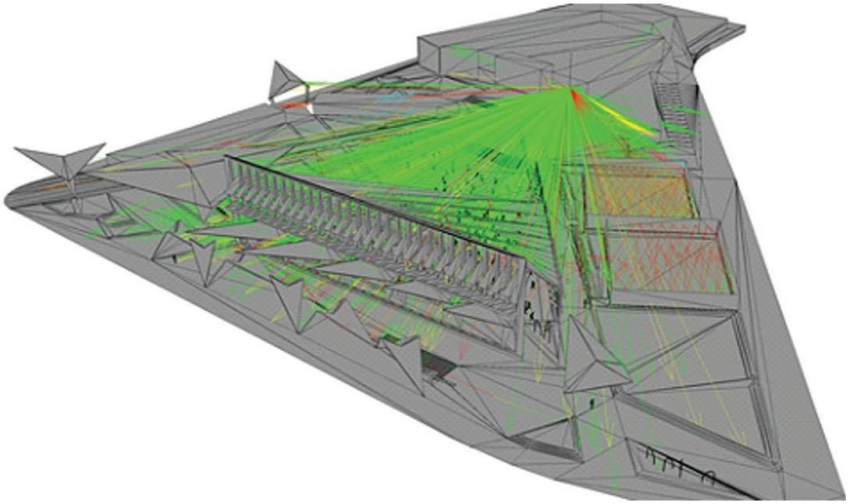
D border

O echo

D reverb

D masked

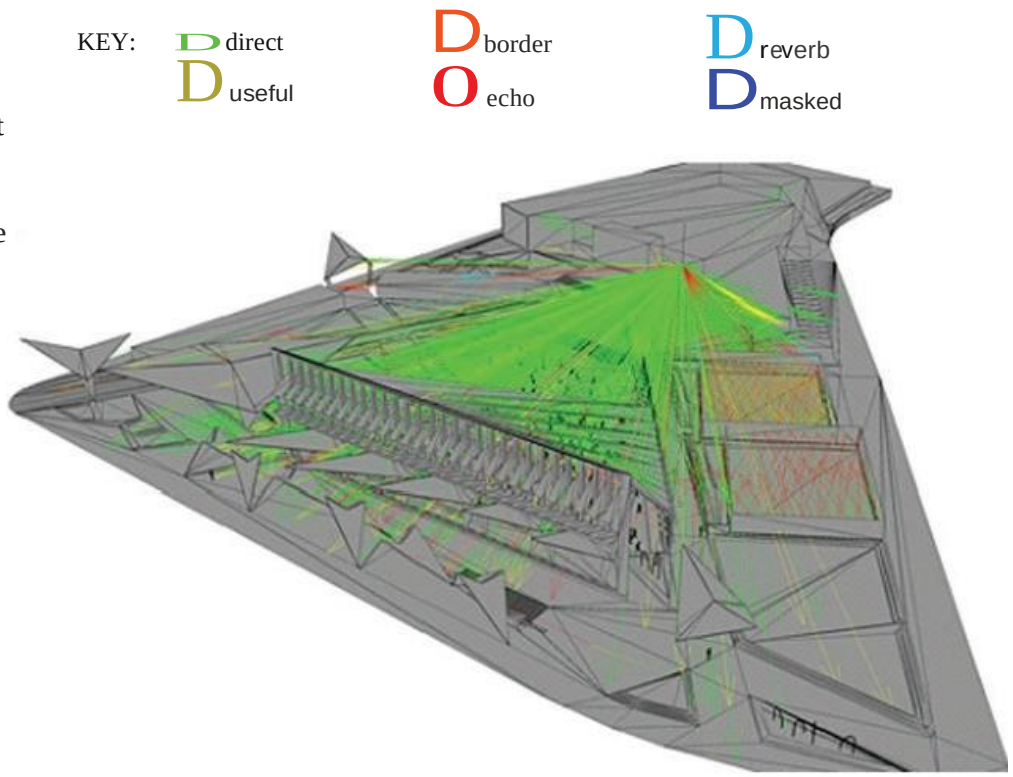




Accoustic analysis

Analysis:

In observing the path rays of sound onto the open-air cinema space there are different kinds of sounds which flow through the space. There is direct sound which dominates the space. The direct sound does not reflect on any surface before it can be heard, so it is a good thing that in the central space, direct sound dominates as there are no obstructions. There is some useful sound on the outer edges of the main open-air cinema space. The echoed sound can mostly be found where there are structures but this is well away from the open-air cinema space. There is little reverb because the space is not enclosed.



Design consideration:

One has to consider how the sound will affect the surrounding areas. The site Is very central and it is surrounded by houses. certain design considerations must be done in oder to make sure that the sound does not reach far out to the surrounding houses. The sun shading devices can aid in defusing the sound. In addition, there are concrete structures in the form of roof structures on the outer edges of the entire site which will help to contain the sound to the space.

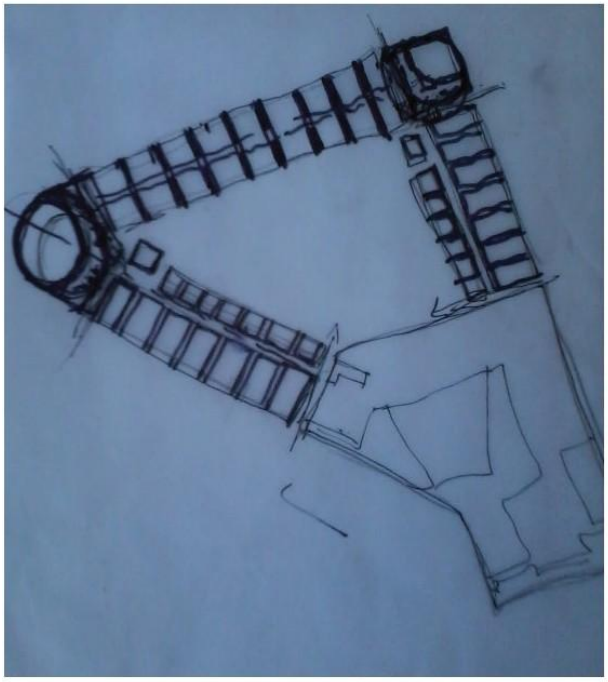
Materiality:
Concrete provides the mass required to effectively reduce the transmission of sound.
Grass can also be affective in reducing transmission of sound.

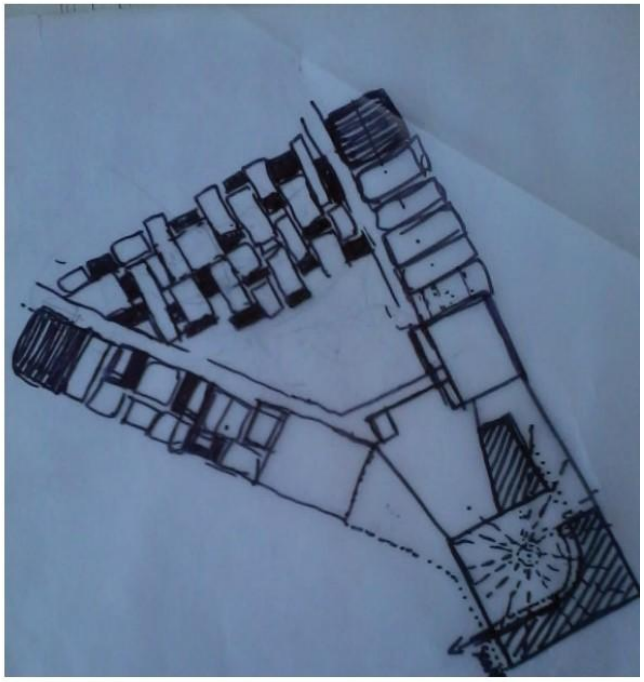
Geometry:
Choosing the appropriate geometry will result in a good, balanced quality sound effect in the space.

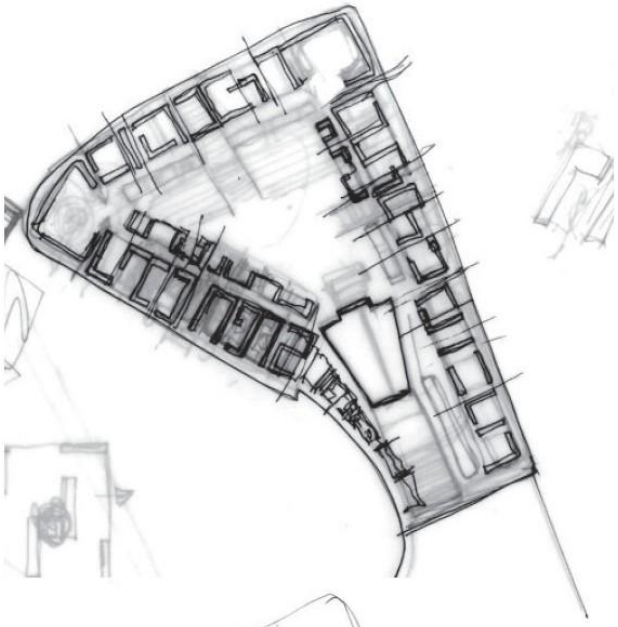
Conclusion:

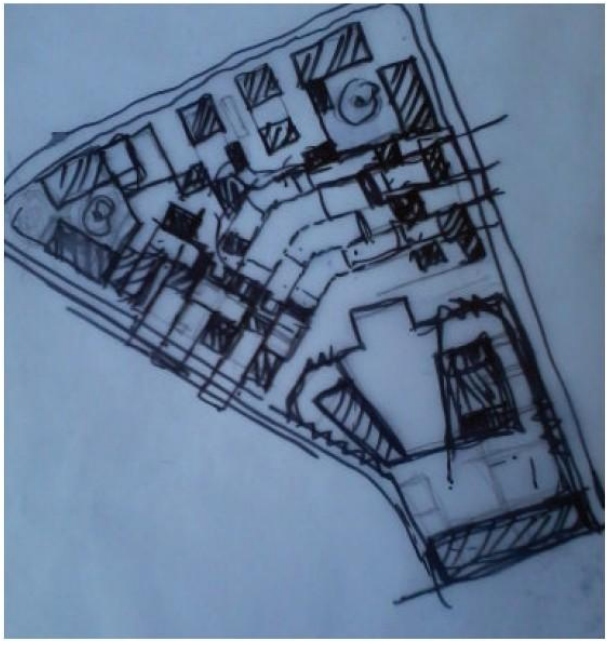
The right kind of balance must be found between geometry, materiality and sound defusing devices. The appropriate sound effect must be accomodated for such as reverb sound effects. Reverb is different from echo. A reverb effect can help in the consistant balance of sound in a space and prevents volumes from being raised to damaging levels. It is important to consider how one will contain the sound in an open-air environment.

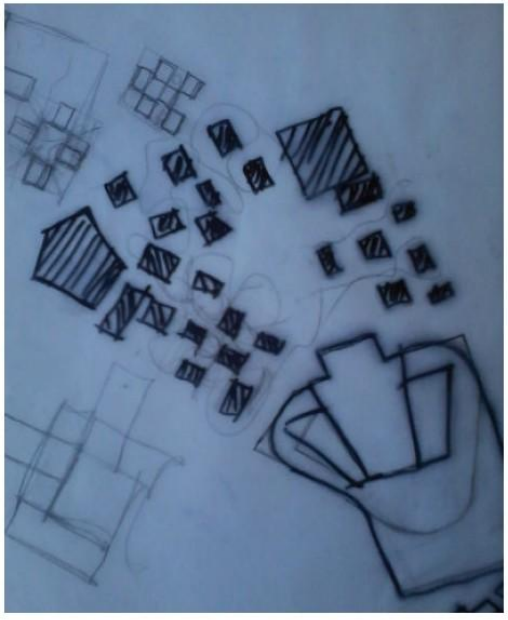
Review 2 Conceptual sketches

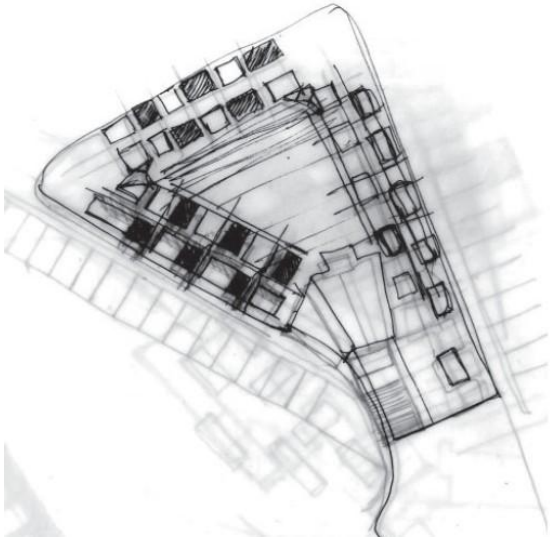


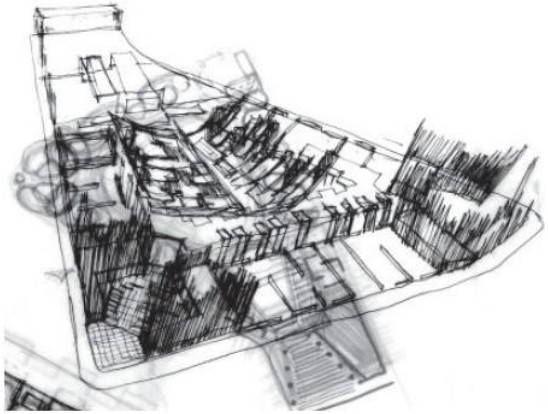


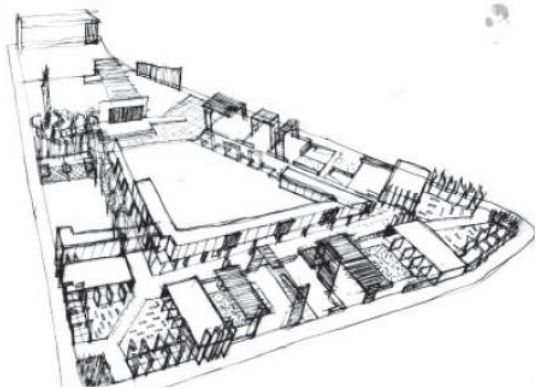


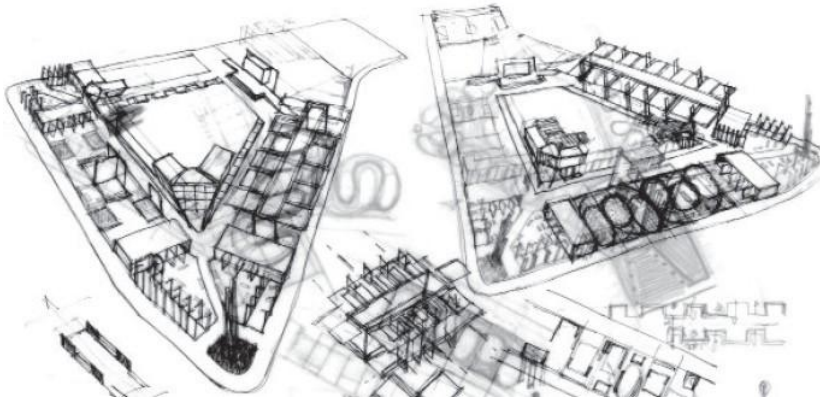


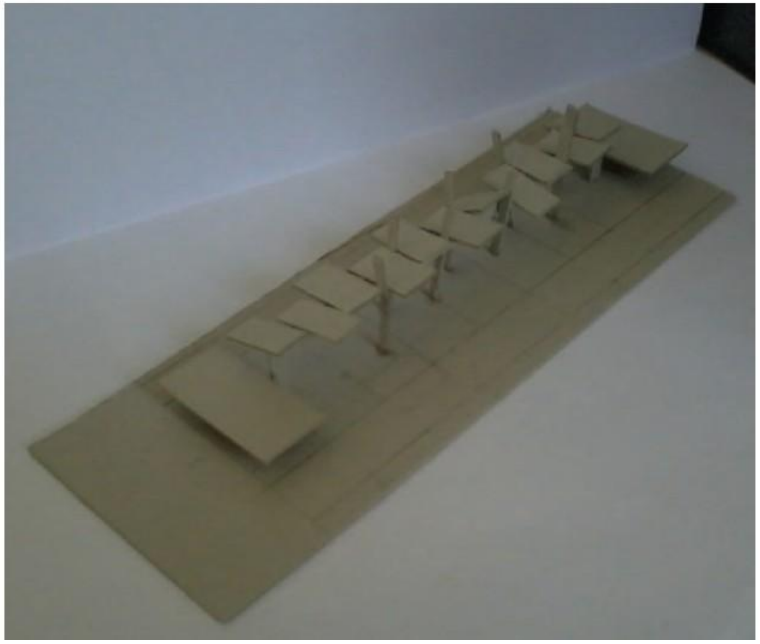




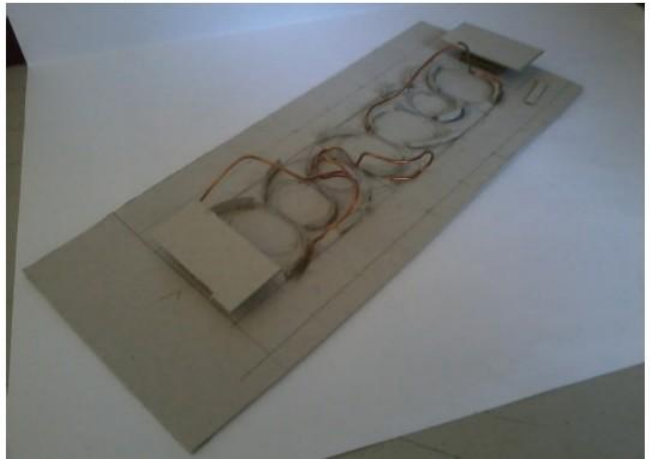


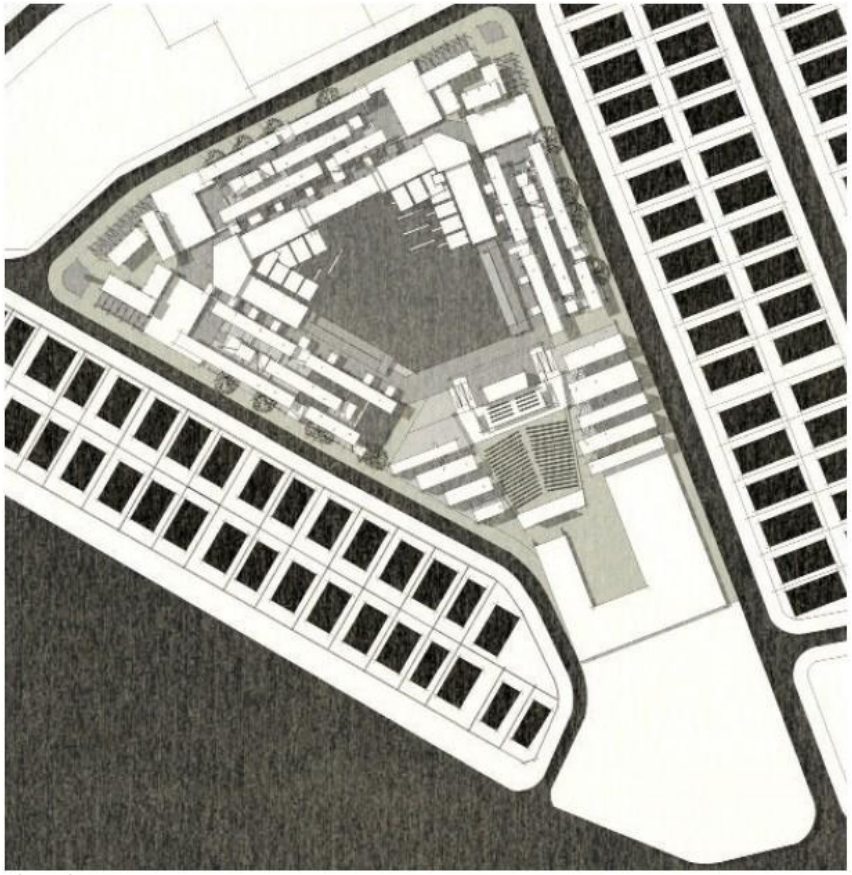




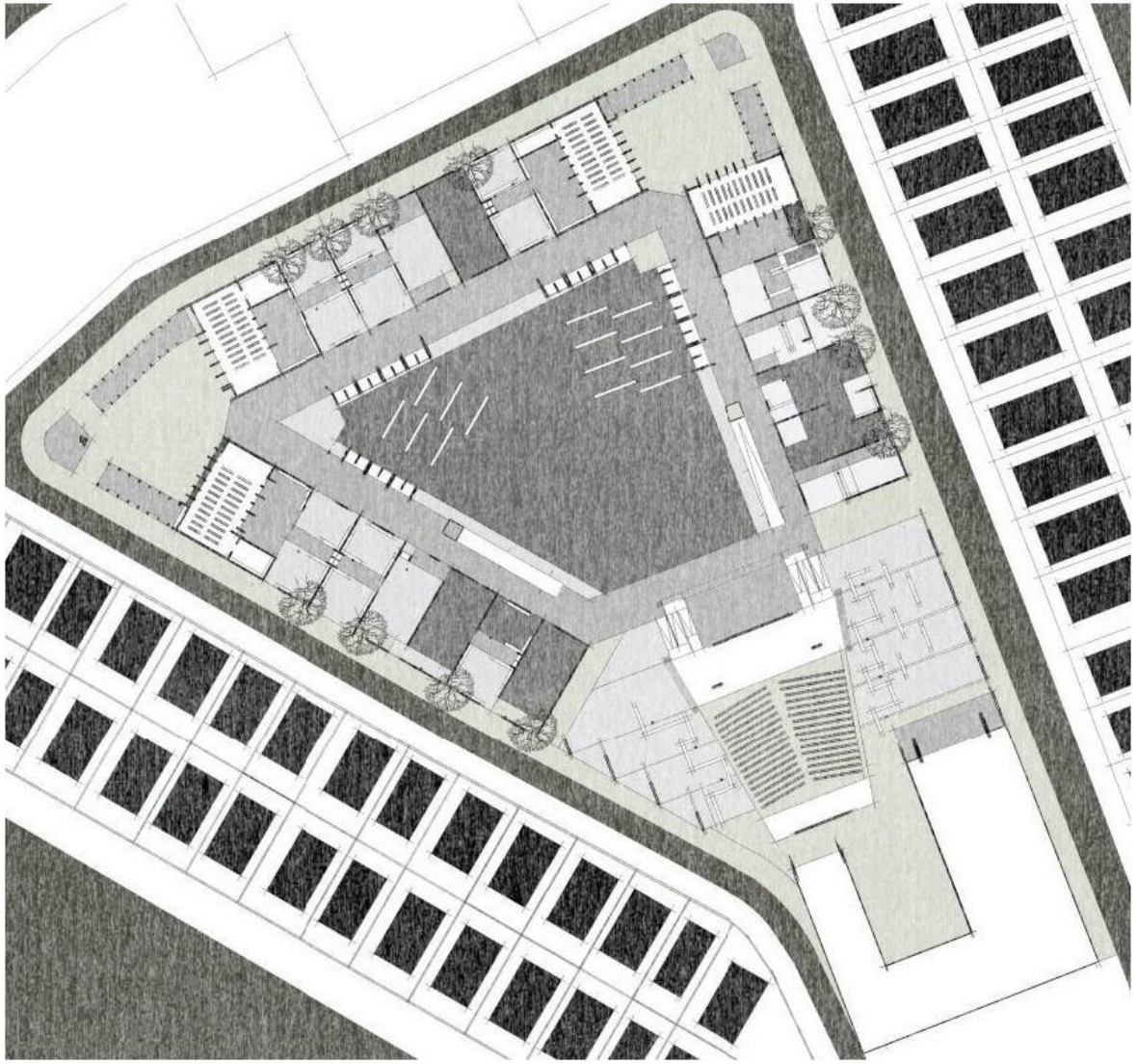




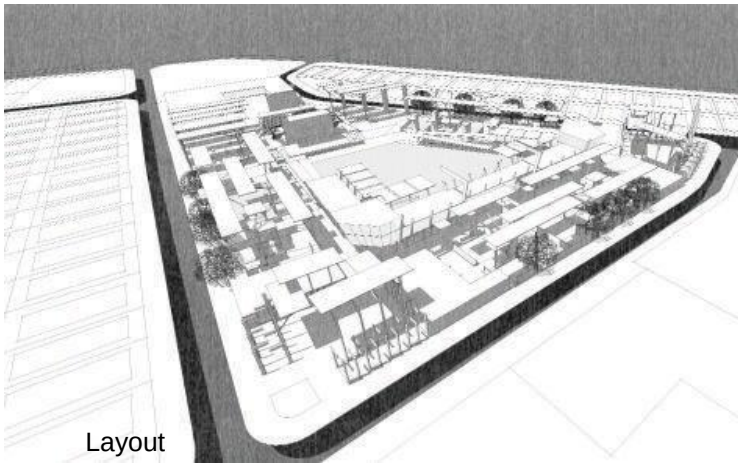




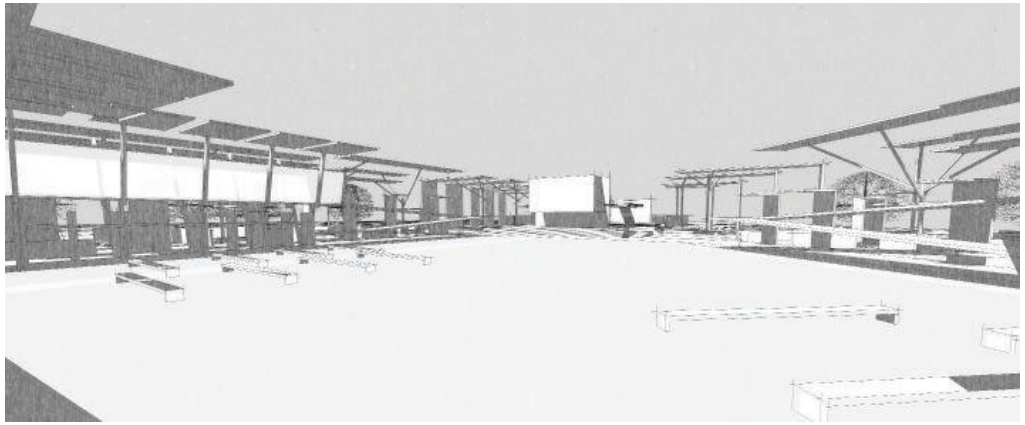
Site plan



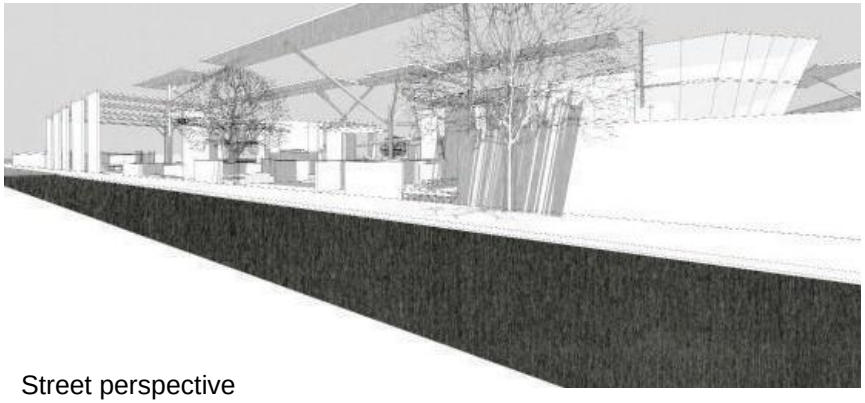
Ground floor plan



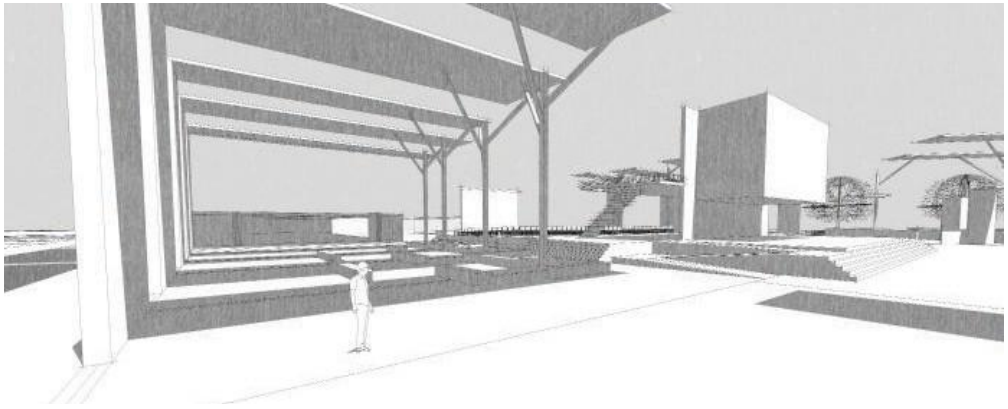
Layout

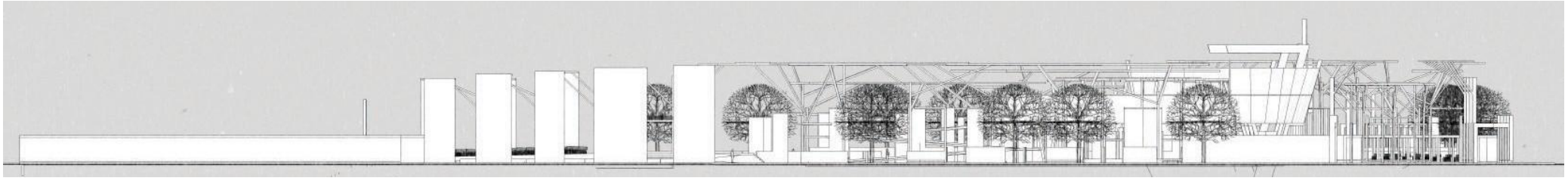


Central space

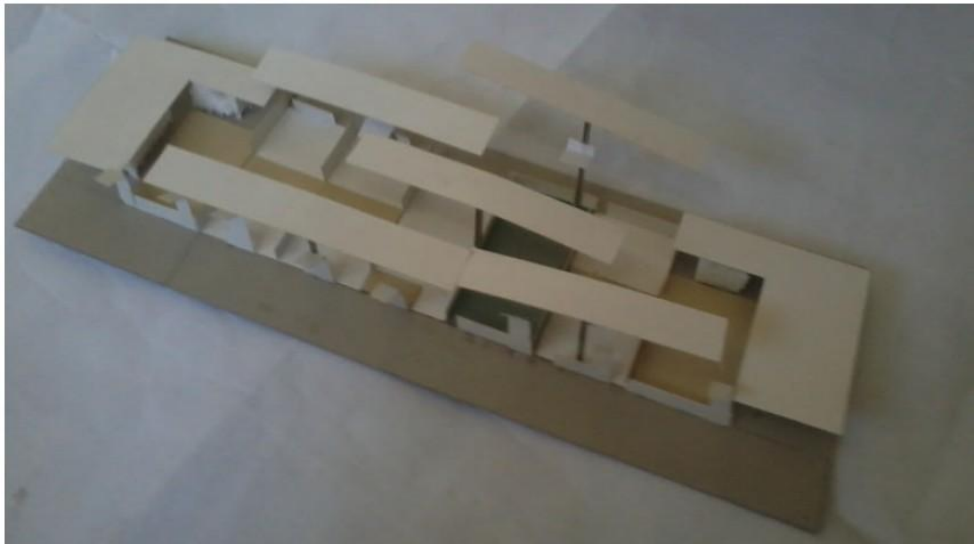


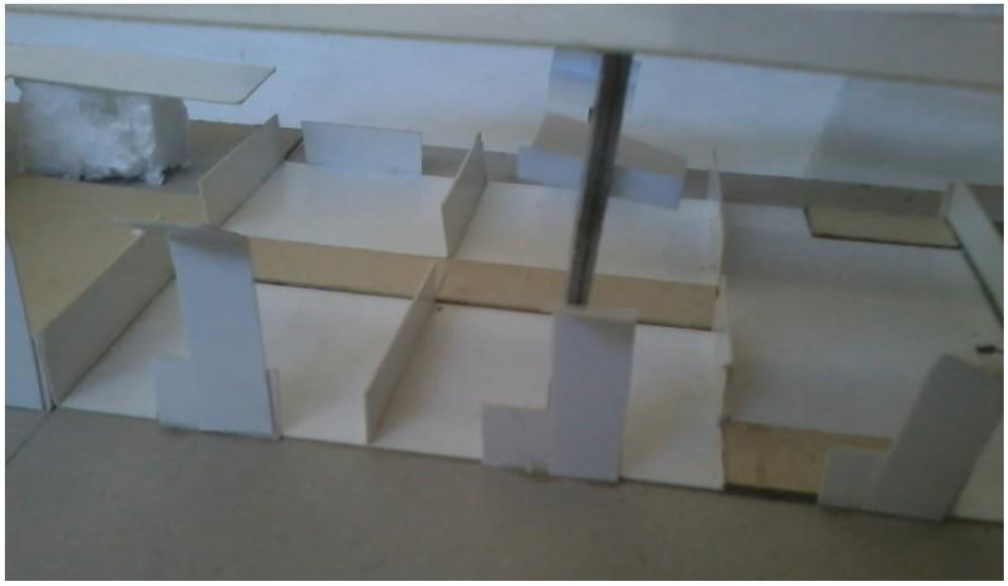
Street perspective

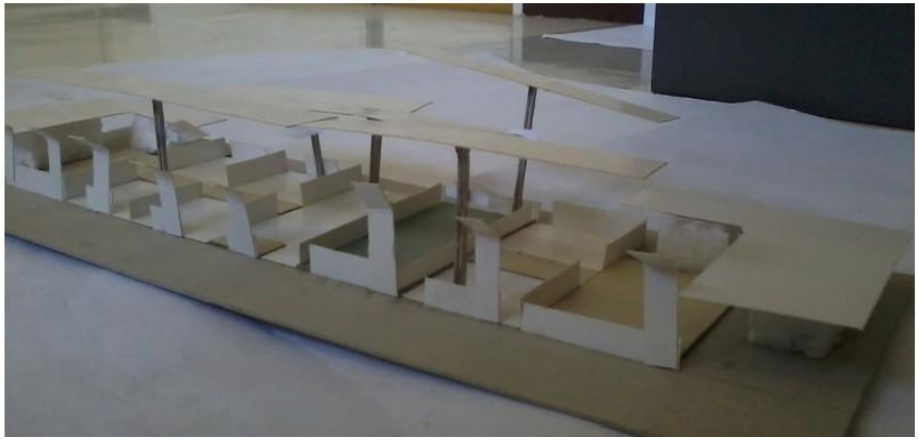




Elevation









Review three



Cinema/Theatre

diJarata (yards)

Amphitheatre

Open-air Cinema

Entrance square

Informal trading

Existing 'shisa nyama' restuarant

Ground floor

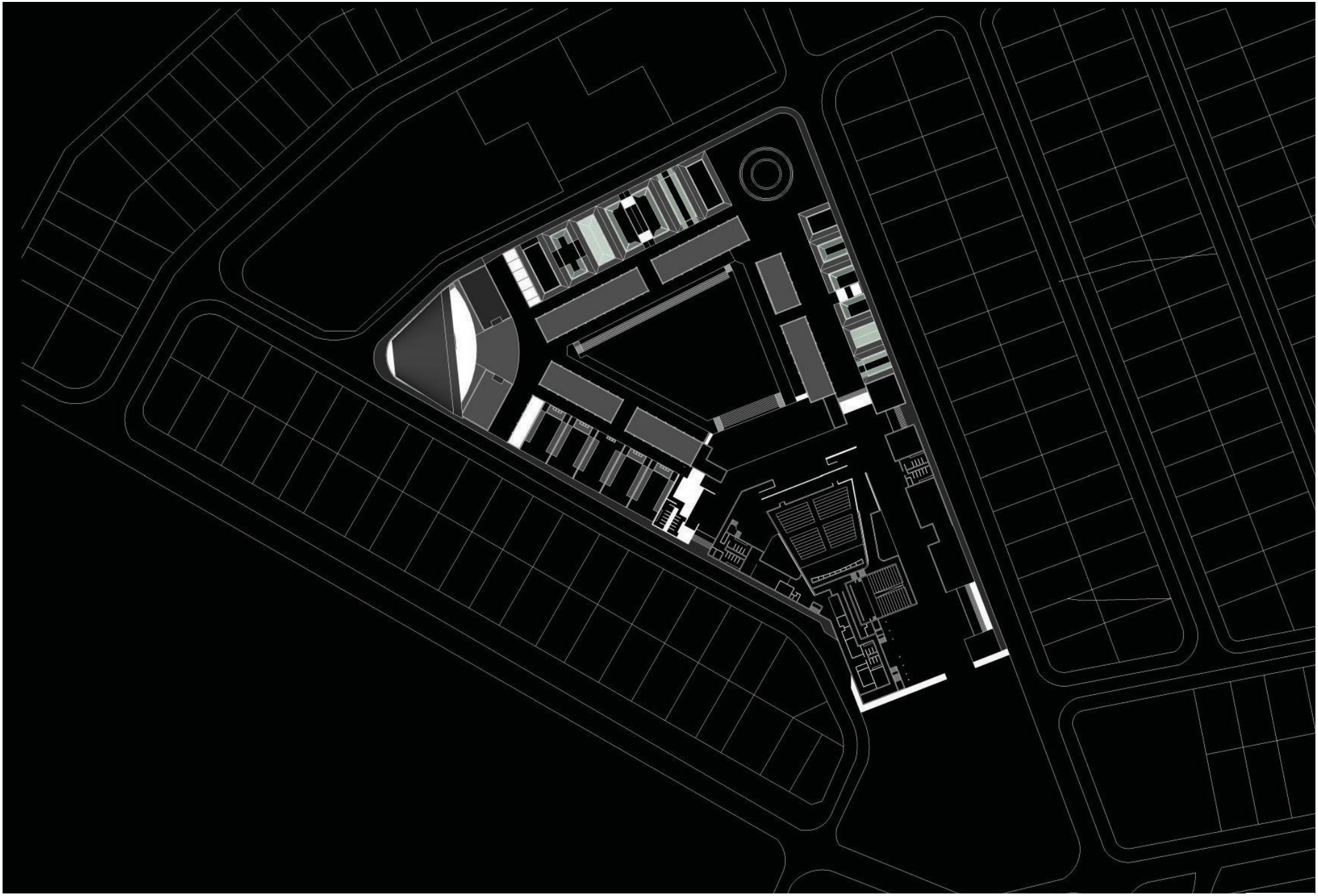
1. The main Cinema/theatre
    - Entrance foyer:
        - Ticketing area
        - Snack bar
    - Cinema foyer:
        - Ablutions
        - Courtyards
    - Backstage:
        - change rooms
        - Storage space
        - Ablutions
        - Entrance foyer
        - Lounge
        - Kitchen
        - Service area/deliveries
2. Gallery and exhibition space
3. Auditorium

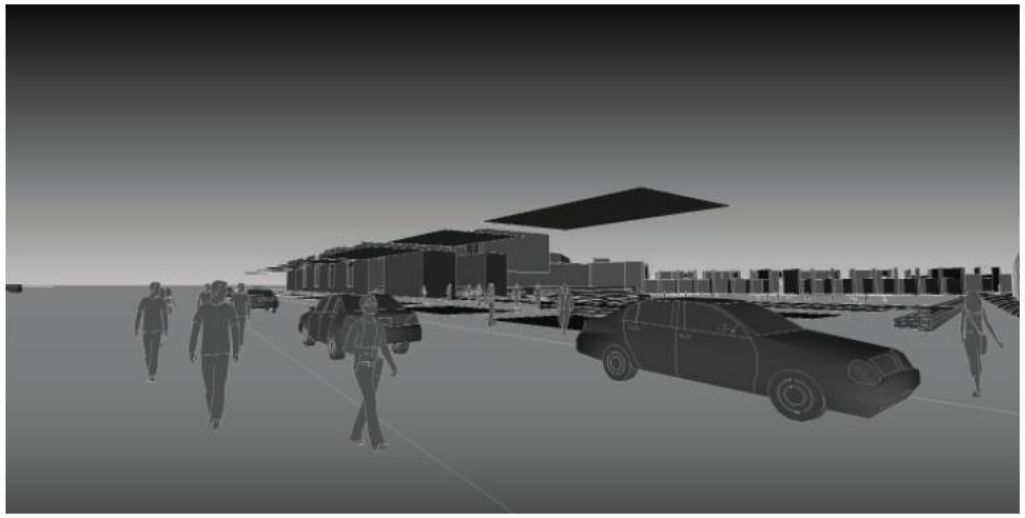
First floor

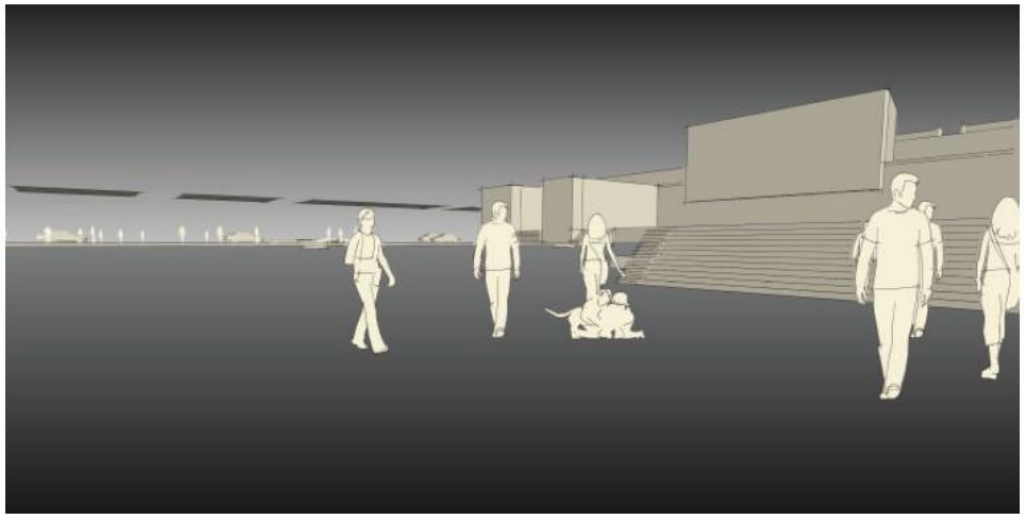
1. Restaurant
2. Auditorium
3. Film workshop area
    - Studios
    - Post production facilities
4. Management offices
5. VIP lounge with roof garden

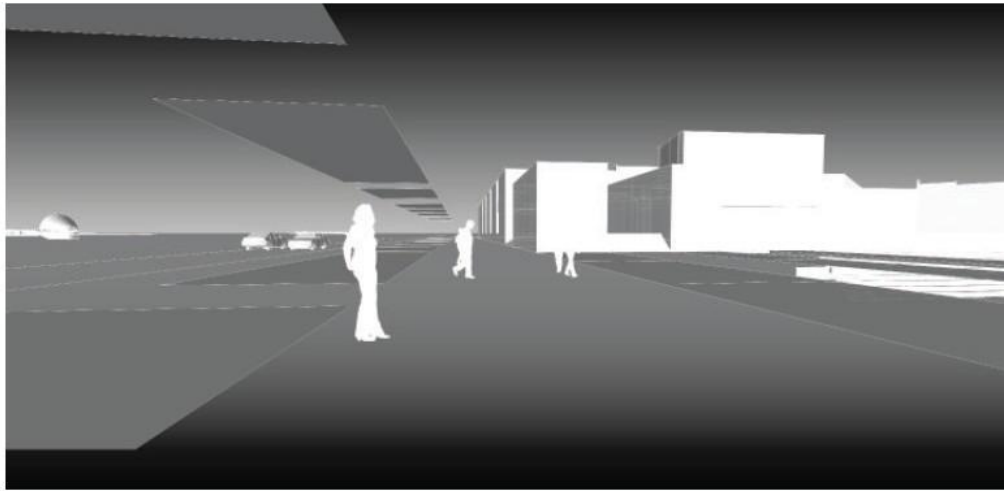
Exterior space

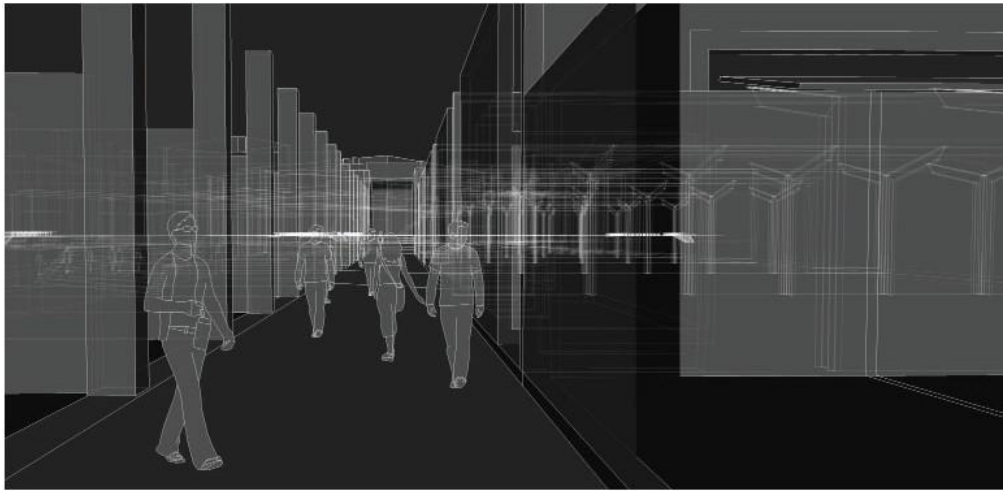
1. Jarata (open-air cinema)
2. Exterior foyer
3. Retail spaces
4. Office spaces
5. Workshop space
6. Informal trading space
7. Amphitheater
8. Entrance square
9. Drop off zone

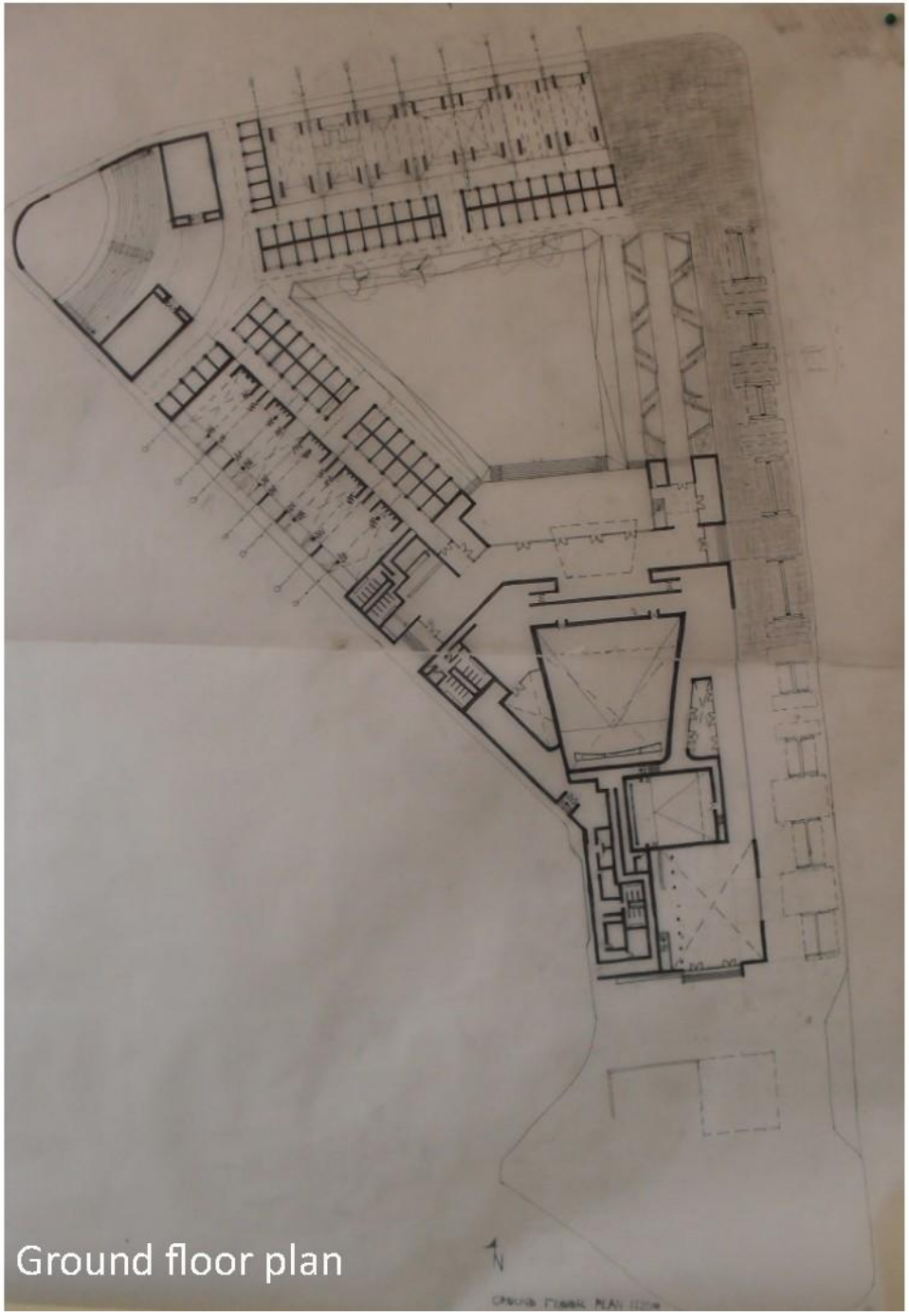




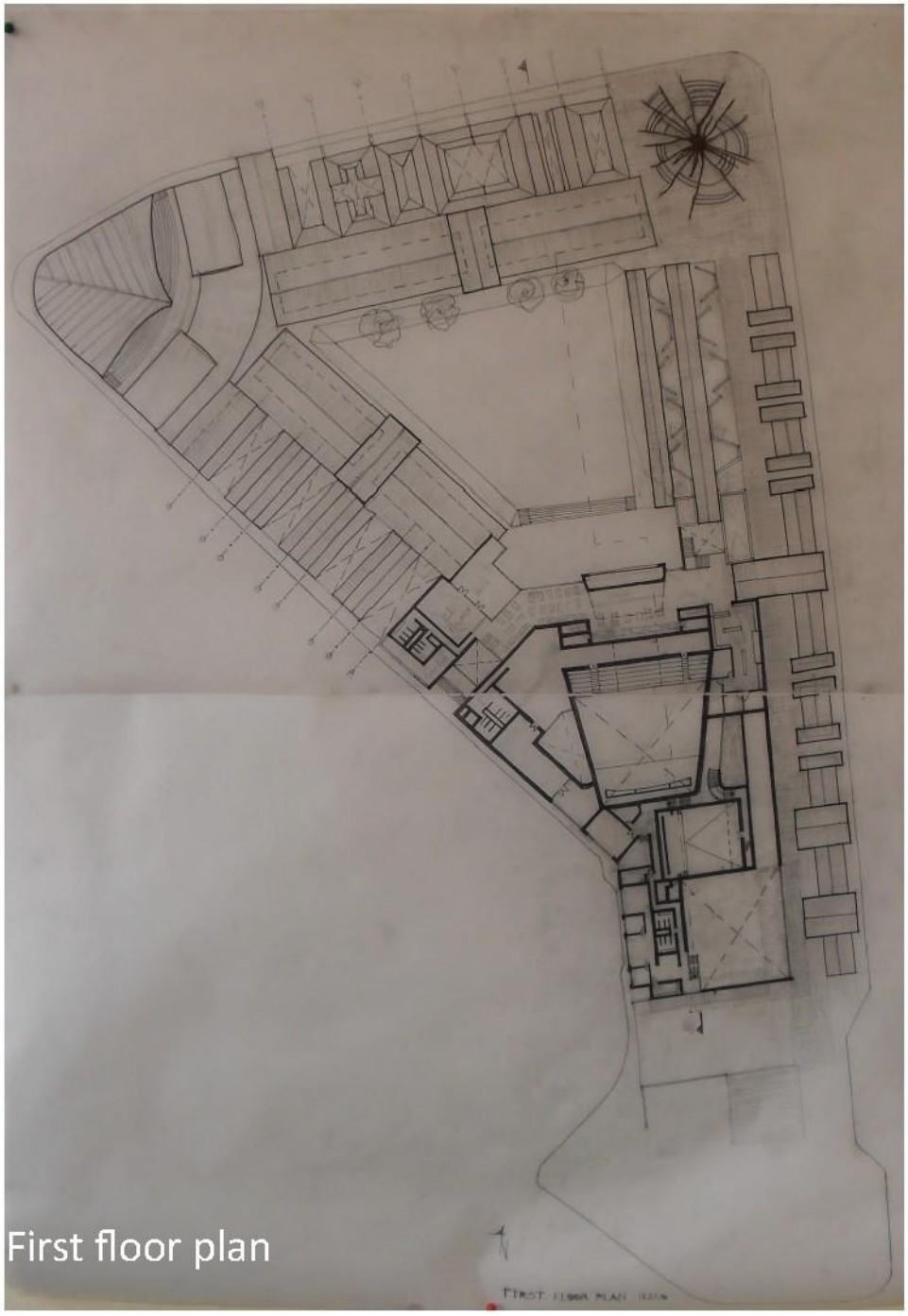




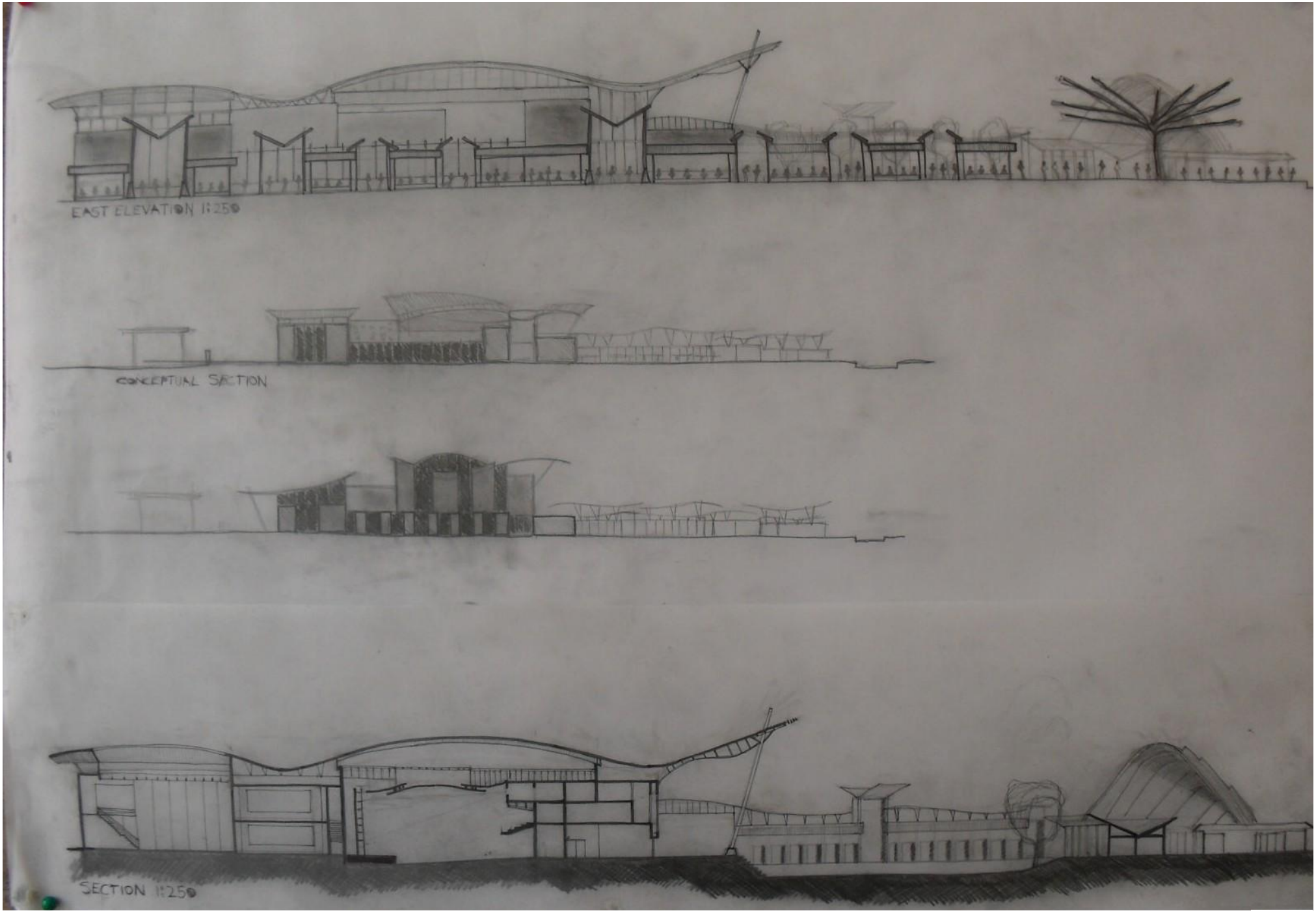




Ground floor plan



First floor plan


EAST ELEVATION 1:250
CONCEPTUAL SECTION
SECTION 1:250

Model





Re-thinking the design

The previous designs were too literally translated. I then decided to re-think the design and develop a building which followed a sort of program. This would deal with the edge better than having empty yards on the edge of the site. I decided to develop a building which could offer economic opportunities. Therefore the edge will consist of retail shops and offices. The edge also includes some recreational facilities. The design attempts to take the typology of the Jarata and draw out the essence of the yard and developing the space around a sealed urban fabric.



Conceptual sketch

Revised program

The program is split into three elements:
1. The edge
2. The central space
3. The Eyethu Cinema

The Edge:

Ground floor:
1. Retail

First floor:
1. Oficces
2. Recreational facilities
   - Library
   - Post-production facilities
   - Dance and theatre studio

The central space: (loose space/festive space)

1. Braai spaces
3. Open-air cinema/ multi- functional space

The Eyethu Cinema

Ground floor:
1. Foyer/exhibition space
2. Ticketing area
3. Restaurants
4. Toilets
5. Main Auditorium
6. Backstage

1. Gallery seating area

Third floor:

1. Control room

2. Management offices

The Exterior space

The formal and informal trading space and office spaces are located on the edges of the site thus forming a commercial edge around the site which interfaces with the street edge. The office spaces and workshop spaces sit above the trading spaces. Some of the uses of the trading spaces include a salon, fast food restaurant, shisanyama, a small supermarket store and an internet café among other uses. The office spaces are to let to anyone needing office space. The street space is also considered as part of the space of the building as the commercial use activates the street edge. The street can be used for a variety of uses as intended by the residents. It can be a space to host events such as weddings and funerals or it can be a play area for street soccer. The street space is also a live theatre space. The open-air cinema is boarded by the commercial edge. This space opens up itself to a number of possible uses of which the users construct themselves according to their social needs and patterns. At one time this space can be used as an event space, a celebration space, an open-air cinema, a playground or just a space to socialize. This space is for those spontaneous shock events that appear and disappear or move around.

The two corners of the site form the main entrances to the site. On the eastern side of the site there is an entrance square and on the western site sits a mound which covers the length of western side.

The Interior space

The main cinema auditorium is another form of a jarata. The cinema speaks to the idea of the cinema experience. It explores how cinema can be experienced in a way that is unique to its context. The cinema has three main functions. It functions as a cinema, a theatre and a concert hall. Other uses include a conference venue for an indaba. Events that will take place which are popular in the context of Soweto are choir events, which used to take place when the cinema was still in operation.

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THE ARCHITECTURE OF THE EVENT



CENTRAL SPACE AS A CELEBRATION SPACE FOR A WEDDING



CENTRAL SPACE TRANSFORMS INTO A SPACE FOR MUSIC FESTIVALS

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AT NIGHT THE SPACE BECOMES AN OPEN-AIR CINEMA

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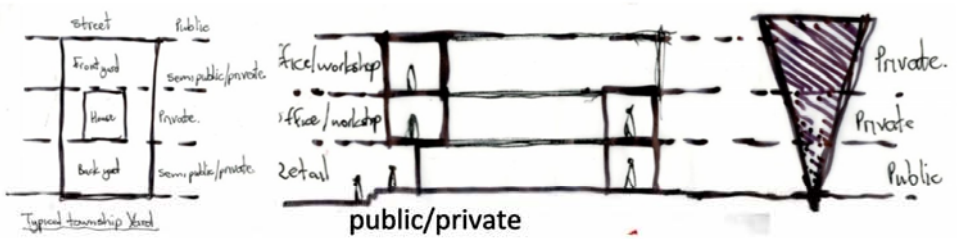
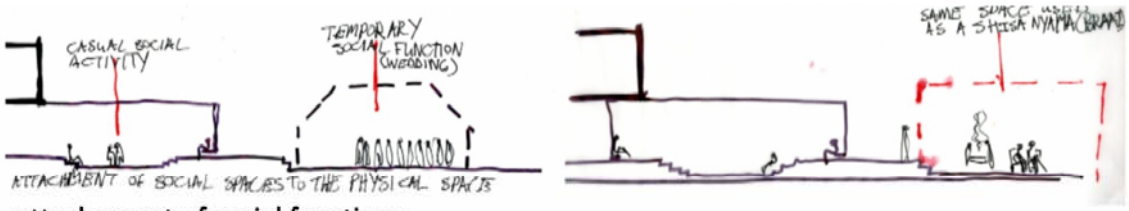
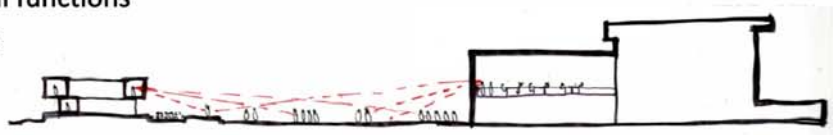
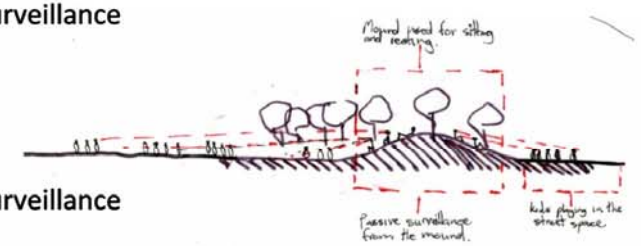


public/private

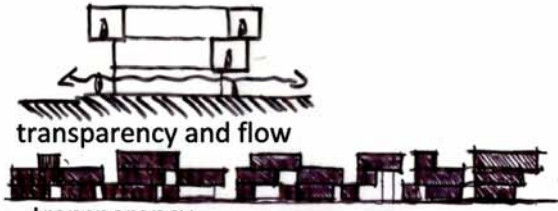


attachement of social functions
to the physical space

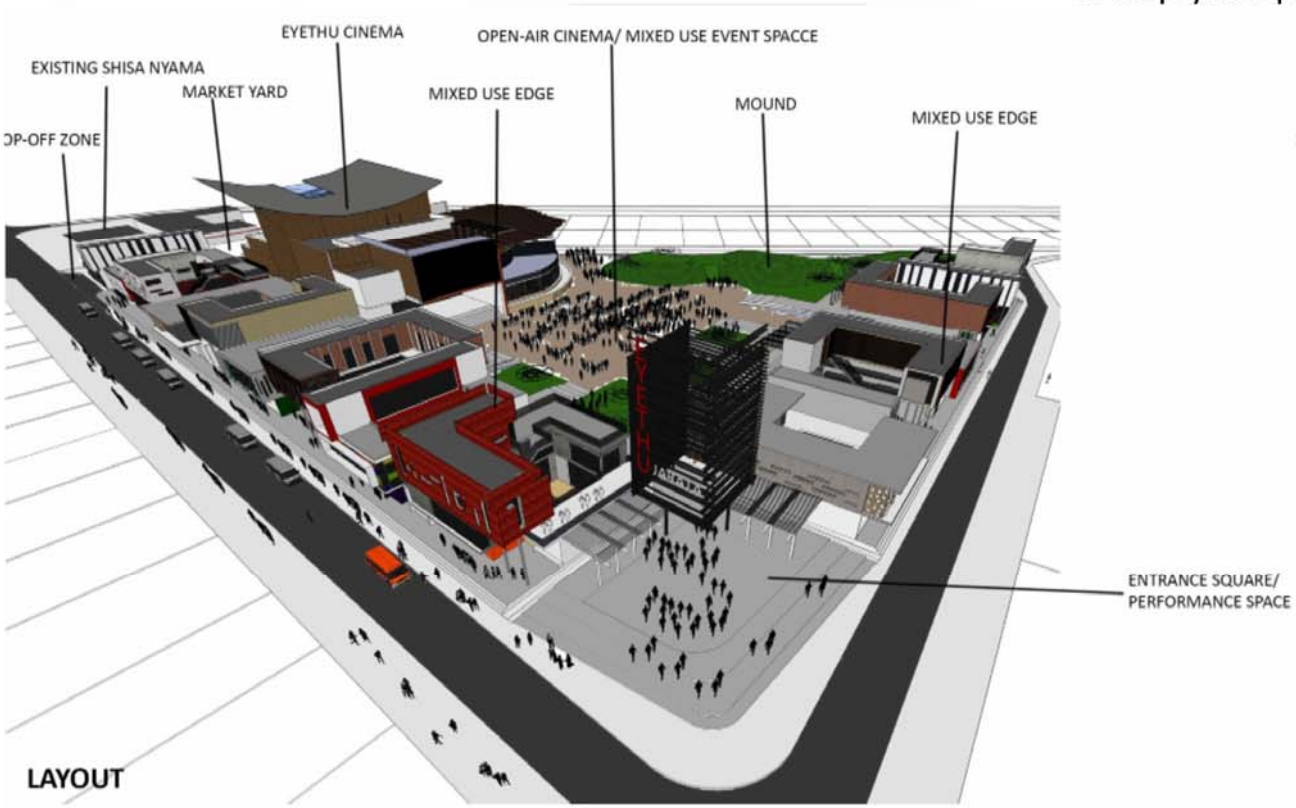

passive surveillance



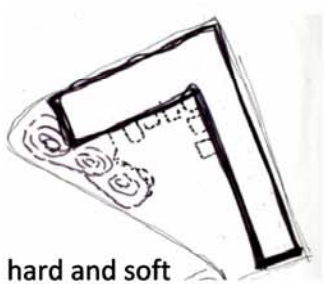
passive surveillance

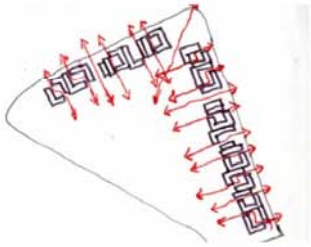

transparency and flow
transparency

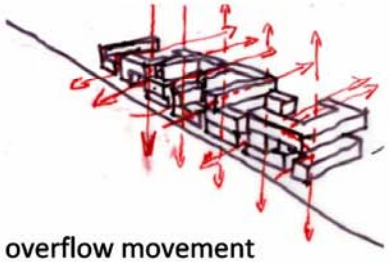

threshold

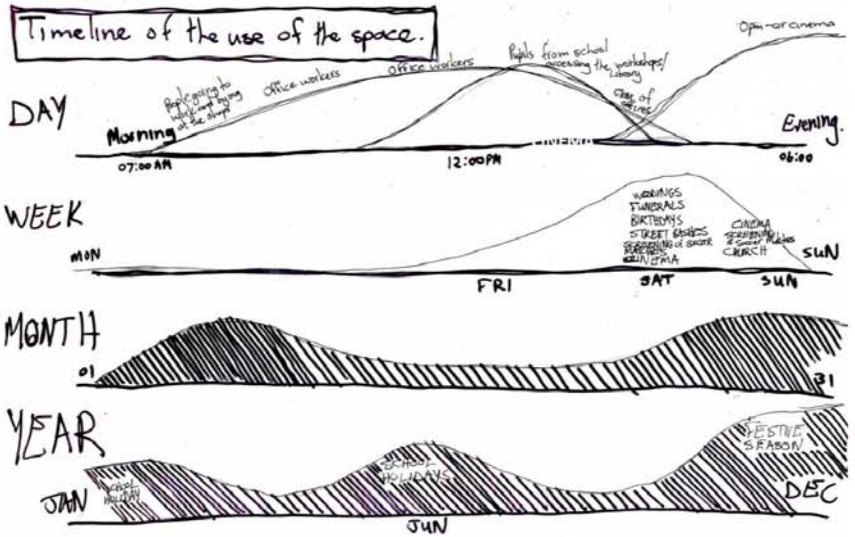


LAYOUT


hard and soft




overflow movement





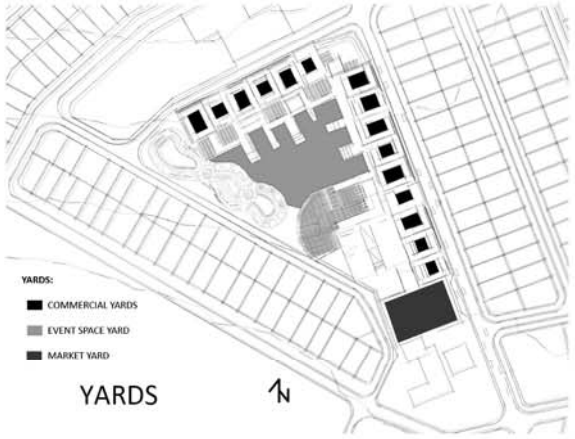
IDENTITY



TRAFFIC



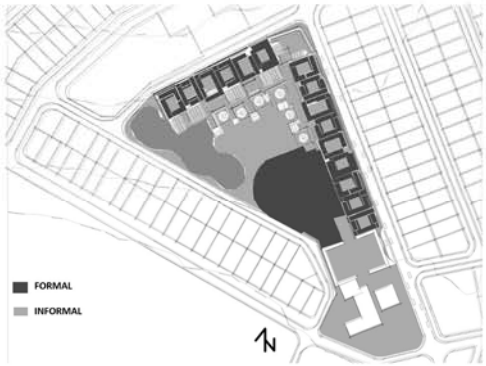
LAND USE



YARDS



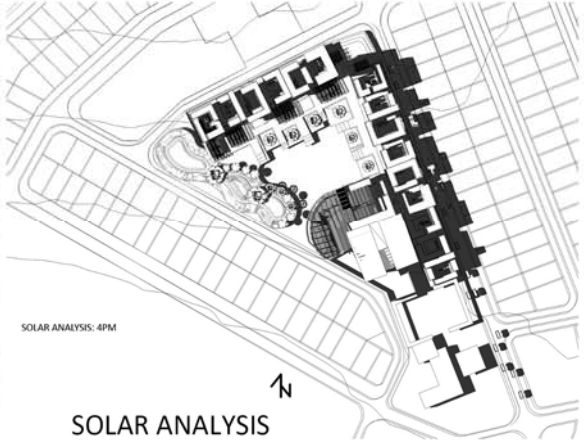
GREEN SPACES



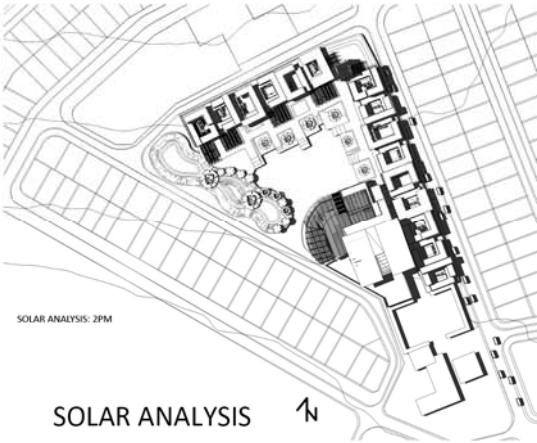
FORMAL/INFORMAL



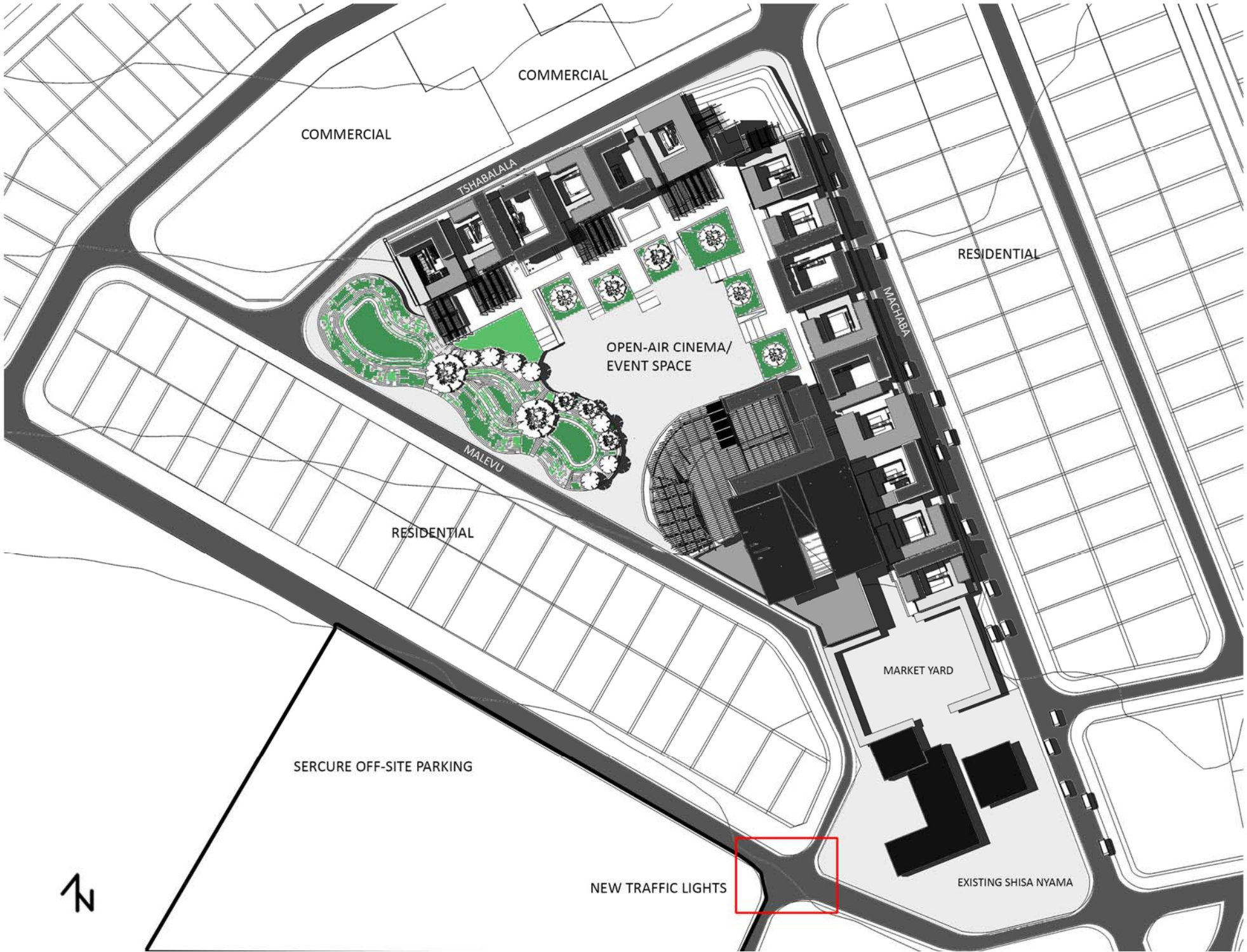
MOVEMENT



SOLAR ANALYSIS



SOLAR ANALYSIS


COMMERCIAL
COMMERCIAL
TSHABALALA
RESIDENTIAL
MACHABA
OPEN-AIR CINEMA/
EVENT SPACE
MALEVU
RESIDENTIAL
MARKET YARD
SERCURE OFF-SITE PARKING
NEW TRAFFIC LIGHTS
EXISTING SHISA NYAMA
N

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Ground floor plan



PROGRAM

COMMERCIAL USE (STREET EDGE):
- HAIR SALONS
- DRY CLEANERS
- INTERNET CAFE`S
- TAKEAWAY RESTUARANTS
- CLOTHING SHOPS ETC.

CENTRAL YARD (LOOSE SPACE):
- OPEN-AIR CINEMA
- OUTDOOR EXHIBITIONS
- CEREMONIAL SPACE
- MUSIC FESTIVAL
- OUTDOOR LIVING

EYETHU CINEMA:
1. FOYER
2. RESTUARANT
3. TICKETING AREA

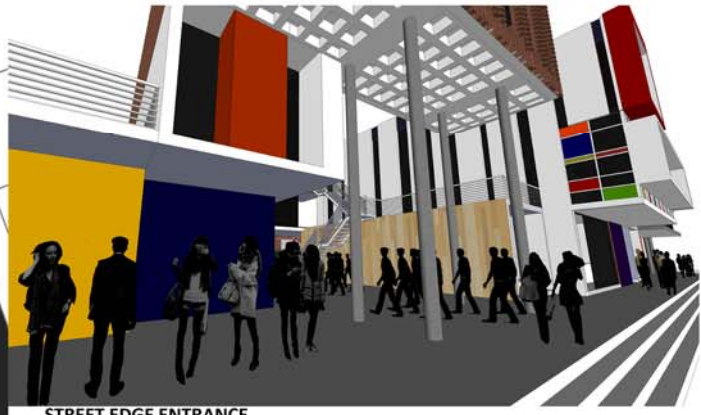
4. CINEMA AUDITORIUM
   - MOVIE SCREENINGS
   - THEATRE PERFOMANCES
   - MUSICAL PERFOMANCES
   - CONFERENCES ETC
5. BACKSTAGE
6. DELIVERY YARD

N

GROUND FLOOR PLAN



ENTRANCE SQUARE

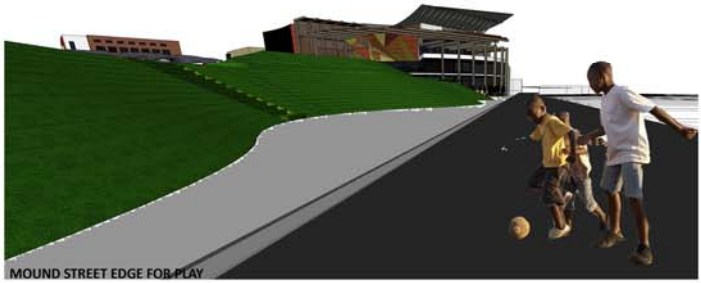


STREET EDGE ENTRANCE





CENTRAL LOOSE SPACE



MOUND STREET EDGE FOR PLAY

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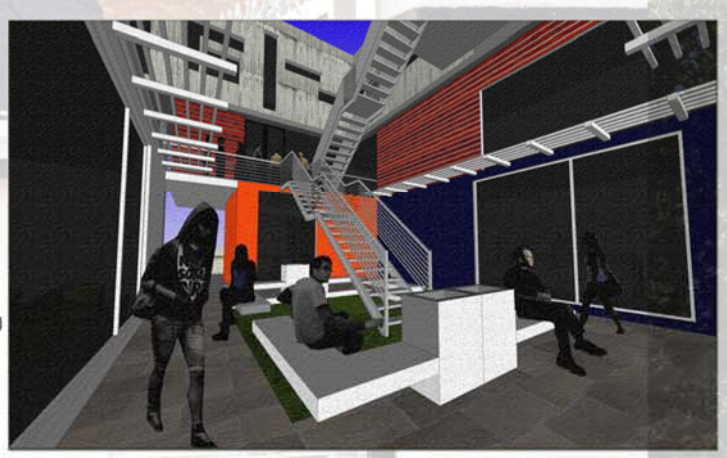
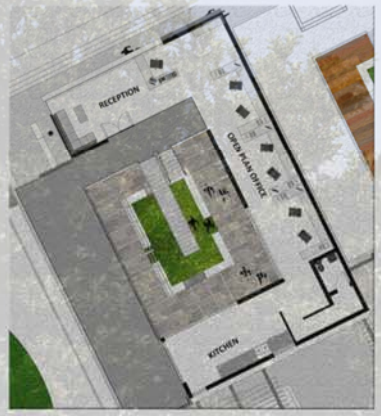
commercial/recreational edge



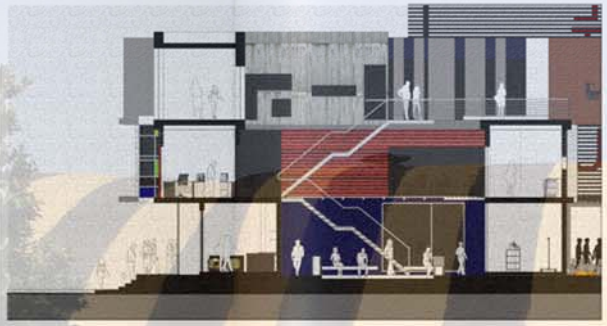
RETAIL AND OFFICE



COMMERCIAL YARD SPACE



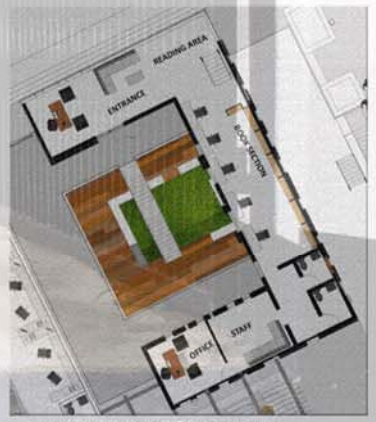
OFFICE LAYOUT, FIRST FLOOR LEVEL



SECTION



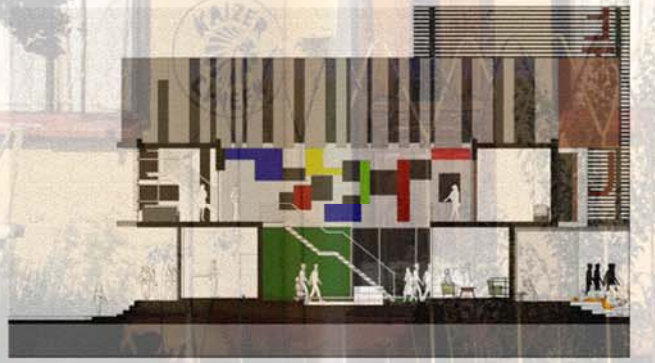
REATAIL AND LIBRARY



LIBRARY LAYOUT, FIRST FLOOR LEVEL



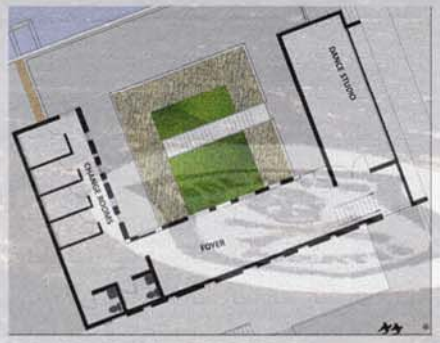
LIBRARY LAYOUT, SECOND FLOOR LEVEL



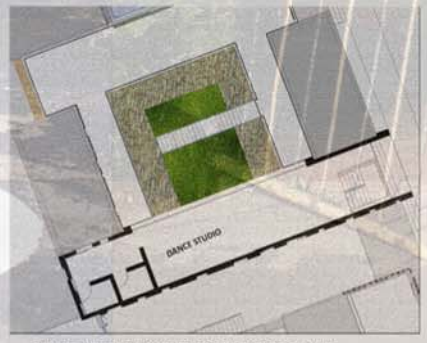
SECTION



RETAIL AND DANCE STUDIO



DANCE STUDIO LAYOUT, FIRST FLOOR LEVEL



DANCE STUDIO LAYOUT, SECOND FLOOR LEVEL



SECTION

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EAST ELEVATION



SECTION D-D

JARATENG: Making Social-Ends Meet by Embracing Public Living



SECTION A-A



SECTION B-B



SECTION C-C

ATTACHMENT OF A WEDDING CELEBRATION



SECTION C-C

ATTACHMENT OF A SHISA NYAMA (BRAAI)

Model



