

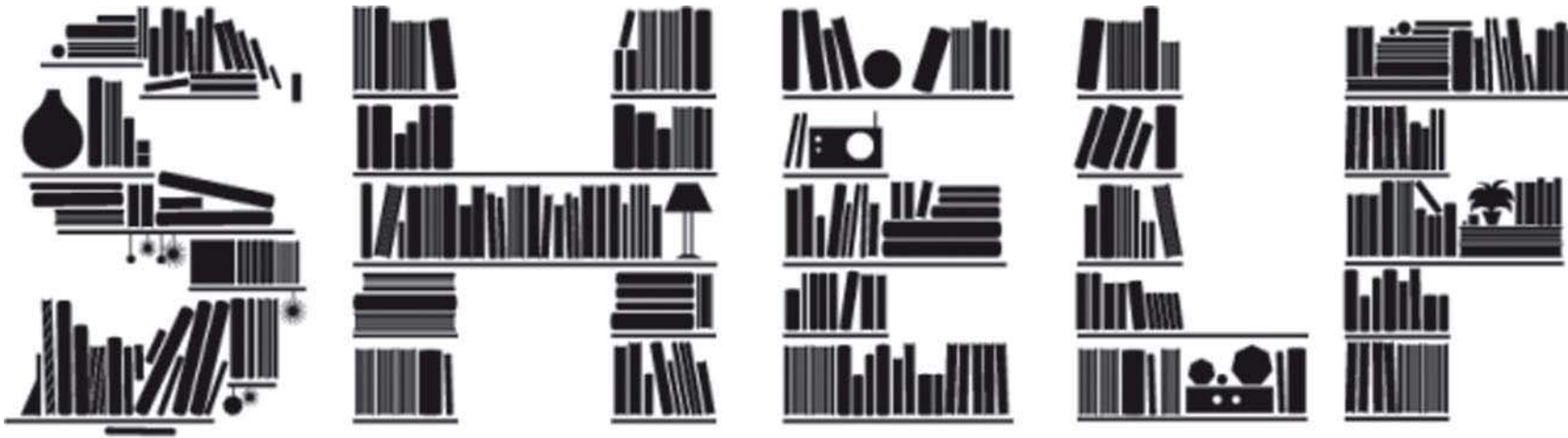


image: www.wordpress.com





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I,Leatile Gwawanda Seemule am a student for the course of Architecture(Professional) in the year 2012.I hereby declare the following:

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I am aware that the worksubmitted for the assessment for the course is my own unaided work where i have explicitly indicated otherwise.

I have followed the required conventions in referenc- ing the thoughts,ideas and visual materials of others(I have referred to the Graduate School of Engineering and the Built and Environment style guide.)

I understand that the university of the Witswatersrand may take deciplinary action against me if there is a be- lief that this is not my own unaided work or that i have failed to acknowledge the source of the ideas words in my writing.

This document is submitted in partial fulfilment for the degree:

Maters of Architecture(Professional) at the univer- sity of the Witswatersrand,Johannesburg,South Africa,year 2012.

.....

(Leatile G.seemule) December 2012

ACKNOWLEDGEMENTS



B.A.S Graduation

In my final closing years of my degree, I have realised that it would not have been possible without the help of the almighty God.

I would like to also thank my mother and my aunt for the support they gave me in my early days as an artist, and for the support they have given me throughout this degree.

Thirdly I would like to thank Gerald Chungu for all the support and encouragement throughout my project research and design.

Fourthly I would like to thank Sally Gaul for the support, patience and encouragement.

MOTIVATION



Primary school 1996



High school 2002

This thesis is a personal journey growing up in the 90's, visiting the rural and living in the urban context of Gaborone when it was largely expanding and various social developments were taking place. Through my personal experiences of schooling in the village of Mogoditshane, then finally schooling in the urban context of the city of Gaborone. This laid down a sense of curiosity about the public library as a form of education and knowledge form, and through personal experience growing-up visiting the public library.

Shelf Life:

-The length of time for which an item remains unusable, fit for consumption, or saleable.

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A/B-

STRACT



The best teachers are those that show you **where to look** but don't tell you what to see.

-Alexandra K. Trenfor

The city comprises of various public elements and civic characteristics that create the collective image of the city. Contemporary British architect David Adjaye labels public spaces as a value-added quality to an already existing social structure. Through this theory, he calls a 'third space' as an area of maximum interaction and social interaction and social cohesion between public, individual, community, experts and nonexpert (Adjaye, 2006:9). Adjaye also states that we do not make public spaces, but instead it is a silent but obvious amenities (visible by users as a symbols of public space) that should be made apparent to acquire content in public architecture.

In reference to the above theories, this study intends to discover and uncover the way in which the Gaborone public library can be adjusted and some elements adopted in relation to context and how information and knowledge is shared. The existing public library was established in the 1970s and currently clustered between the city council and town hall. Since democracy in 1966 when Gaborone was one large empty site, it is evident that when the city expanded, the architectural landscape changed as well as various city functions (Mosha, 2002:1), and this creates an opportunity to examine the current public library.

I have selected the area around the Gaborone public library as a study area, to examine the public library functions, uses and form. The public library has a traditional role of being a centre for civic and public space usage of the cities way of life. It is a space where the community gathers looking for various types of understanding and sharing of knowledge and activity. Additionally the forms and uses of the public library and its evolution in the 21st century also raise questions in terms of the functions and position in public space. The public library becomes an integral element to absorb and disperse local and external knowledge for people to use in the city, traditional through books. With the development of technology the public library lies in a space of base functions and plethora of information available through digital forms. Architecture as the art and science of space and place making and a public library as a type of architecture that is a reservoir of knowledge and freely shared information.

INTRO-



DUCTION

CULTURE

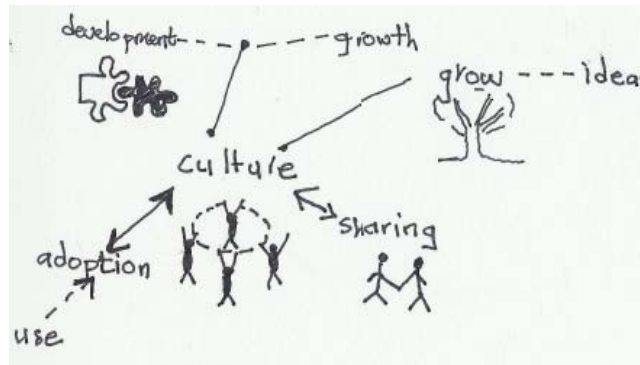
This essay deals mainly with understanding culture in general and how knowledge is shared and ideas are expressed. To clearly understand knowledge, the way of life and memory play an important role.

Culture, the way of life, is a powerful human tool for survival, but it is a frail phenomenon that is continuously changing and quickly fades as it exists only in our minds. Cultures through the history have evolved through interaction in cohabitation and resulting in dominance of a particular people or civilisation over another. This has resulted to a group of people exerting their customary beliefs, social and material values that are special to their geographical location and their past, in relation to interaction with people.

This development of cultures should be viewed positively as a reasonable accustomed progression of human evolution (Tsheki,2008:8). In reference to the past, there has been progress in society's customs, practices and values happening over a prolonged length of time, for the domineering culture to be fully integrated. Colonisation increased pace, and often had a violent manner, resulting in various cultures meeting and changes in people, in severe cases losing their knowledge and identity in the dominating and sum times suppressing culture (Tsheki, 2008:8).

With the technologically advanced world, due

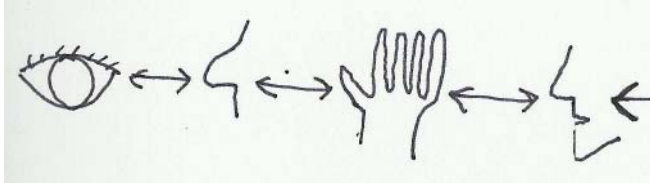
to the rapidly advancement of globalization, this promotes cultural dispersion and consumption of foreign knowledge. These ideas result in the adoption of new technology and ideas in most extreme cases of local knowledge fading (King, 2008:37-38). This has also resulted in an mixture of ideas, beliefs and ways of sharing ideas. Like most countries in the sub-Saharan Africa, Botswana has been exposed to different ways of life within the community. Botswana is a landlocked country with one of the highest economic growth rates since independence in 1966. Through socio-economic development this has resulted in rapid growth within a short period of time, and has affected the socio-cultural and educational climate (Mosha,2002:1). This growth through time creates the need to express spaces in the ever changing world.



Culture.Author:Own

MEMORY + KNOWLEDGE

"Every touching experience of architecture is multisensory; qualities of matter, space and scale are measured equally by the eye, ear, nose, skin, tongue, skeleton and muscles", (Pallasmaa,1996:28).



Senses.Author:Own

By interacting with the environment we live in, this allows for record of related events that are later recalled. By bringing different formal qualities of memory, every 'memory text' exerts a different degree of this memory. There are many dimensions and layers linked to culture, history and knowledge, but rather the art of public memory should encompass not just the memory aesthetic contours, or location in contemporary artistic discourse, it must also manifest activities, the constant between objects/events of memory viewers from the past for future expectations (Young,1993:ix). The relationship of history of remembrance and events are in line with the community's needs and interests that are adjusted progressively with time. By relating to this history, it creates an understanding of the way of life in the society. Memory in culture as performed ritually as part of a natural remembrance cycle, public cognizance is moulded in different forms and expressed through, memorials, libraries and days created to have memory of events

(Young, 1993:ix). Knowledge exerted parallel to historical realities and local practices taking into context their gradually changing lives and events even though they have potential of destruction. This means knowledge is not stagnant but continues through artefacts or products such as monuments, literatures, museums as a national 'camera-eye' methods of recollection and are informed by various contextual methods of identity (Young, 1993:xiii).

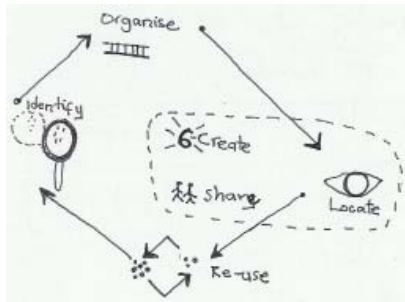
Through group sharing of constructed values and organized memory into similar patterns, and by maintaining a sense of collected form, it makes awareness of sources which is unique in relation to a lived life, and the way traditions and cultural norms assign common meaning and knowledge. Architecture as a tool to understand the environment we live in, has a potential of remembrance and knowledge according to the communities will to explore the past, to educate the next generation, through sharing documented and non-documented experiences (Young,1993:xiii). Reservoirs of knowledge and memory generated through globalization and cultural circumstances are invested with reconceptualising this meaning and intentions.

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KNOWLEDGE + INFORMATION

The knowledge in the community is carried by people of different ages, genders and experiences, professionals and no-professionals. The knowledge and skills are also based on what people are exposed to in the environment, but through the spaces created this makes ground for ideas to be passed through (Waren and Slikkerveer and Brokensha,1995:117). This involves the sharing of information from sender to receiver.

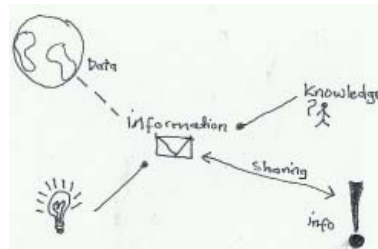


Knowledge.Author:Own

Every community has a way it disperses knowledge from one person to another. The way people communicate in society and the systems they use for distributing knowledge and information maybe be also embedded in their way of life and this is links with how people interact with each other. There is a difference between knowledge and communication, Frerie (1971) describes knowledge as the process of knowing of individual cognition. Information according to the Oxford dictionary is what is conveyed or represented by a particular arrangement. This means that knowledge is within a person, but information is what is made freely through creating a set-

ting for this to happen. The person who holds information has to analyse it according to the environment and context to relay it to people to use it. The person receiving the information then simplifies the information and analyses it through breaking it down according to relationship of what the community needs. This creates a loop of knowledge and shared memory. (Waren and Slikkerveer and Brokensha 1995:112).

The way people communicate can happen without any formal space. The actions, posture and the way a person acts can spark the beginning of two people sharing knowledge and information. (Waren and Slikkerveer and Brokensha 1995:113). I was sitting at a coffee shop the other day adjacent to a bookshop, and through the book I was holding on future housing, this resulted in a conversation with the person I was sitting next to .This resulted in sharing broad ideas because of the setting created for this to happen. Through the interaction of people and the way of communicating verbally information is exchanged, this communication of information involves the generation of ideas in a comfortable space, with the sender and receiver leaving with information.



Information.Author:Own

Indigenous communication

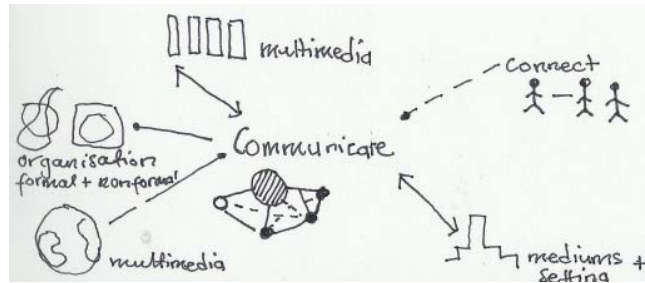
Indigenous form of communication has its own importance in society. It plays an important role in the culture of the people in the area and it is a form in which educational memory is contained ,dispensed to people in the community and then it is analysed in relation to context and changes that are happening(Waren and Slikkerveer and Brokensha 1995:113). Communication channels can be categorised through; Exogenous channels which involves mass media through television, newspapers and in some cases internet and are largely used in urban areas. This information reaches people are a wide scope and reaches the everyday person. On the other hand, indigenous channels of knowledge have reliability because they are produced amongst people within the community and the society is responsible for control and filtering information. This tries to say that the way information is interpreted and adopted in the society can lead to community development.

This is done through spreading information and sharing ideas.

Mass media in reference to radio, newspapers, television, magazines and magazines are such that they are formed in organisations and institutions such as schools, banks, museums and city agencies. They contrast with indigenous knowledge as it is developed in the community and normally the com-

munity through un-structured and non-formal organisations. The information channels may overlap, but in sum spaces they might happen hand in hand and the lines between them have blurred over time. This is due to information being interchanged through different methods, and the context also plays a big role to create relation with the area (Waren and Slikkerveer and Brokensha 1995:113-114). Indigenous communication channels are expressed through folk media, deliberate instructions, records, unorganised channels and direct observation. The form is normally used for entertainment of people in the society and many have underlying messages, to educate and provide cultural knowledge. This may be done through dance, songs, storytelling, poetry and debates. The setup which is normally informal forms a social gathering that provides a meeting environment and a social space for information to happen. In African culture proverbs and folklores are a way that the way of life of society is transmitted.

Through the use of these means, knowledge is spread through conversation similar to a conversation after a soccer game, holding a conversation at a coffee shop or any space existing or nonexistent structured for people to hold a conversation. The context and relationship of space creates the environment that allows for people to communicate through participating in different activities and meetings. (Waren and Slikkerveer and Brokensha 1995:115-116).



Communication. Author: Own

A good Library is
a place, a palace
where the lofty
spirits of all na-
tions and genera-
tions meet

-Samuel Niger

There are various buildings categories in architecture that hold memories and knowledge depending on their intentions, programme and requirements of the people in the community. The public library main function is playing a major role in how people input and output knowledge and information. This goes hand in hand with the cultural practices in the society and traditional methods used in Library design and though connecting with other means of media this has resulted in evolution. Knowledge related to context, and how information is dispersed and accessed had major impact and influence people in the society. This is through their programme, setting and architectural language.

A library is beyond just being a symbolic building that holds and produces information, but it has grown significantly to adopt and become more responsive to public space (Dijkstra & Hilgefort, 2010:11). Greek philosopher Aristotle defined a city as a collection of buildings, where men live a common life for a noble end, and no building portrays this ideal better than a library. Libraries have long been used in city planning, and although the guide for form has varied in the course of history despite changes, subtle and otherwise, libraries in public space have served as meeting space, which is normally surrounded by market place and other vital functions.

The city has always been an area where people meet and greet each other, a place to

exchange information about the city and society where information events were staged: coronations, processions, feasts and festivals, town meeting and executive to point out a few (Gemzoe and Gehl, 1998:10).

For a library to achieve its full sense and usage, a library needs to be well connected to the civic life. This involves effective connection to public transportation nodes, and facilities for library users who arrive on foot, bicycle or disabled or disabled people who arrive in clear pedestrian routes. These connect the various spaces within the city together and allow people to move and explore the city. Libraries are part of the public spaces in cities that attract users. This means the library has a key function to play as a manifestation of 'common life', socially, economically and culturally.

In relation to the context, the library becomes part of a network comprising of education, art/museum, administration, justice and sports. In traditional planning, the library created a marriage between art gallery, college and the town hall. The library is part of the civic realm, it is also critical to distinguish between the public and market functions. The central Gaborone city centre has a clear civic centre for trade (Main mall) and commerce. The public library belongs to the public realm found in most twentieth century planning, and in most cases has abandoned the idea of civic connections due to vehicle access. In

connection to public spaces, the public library forms the cultural and administrative symbols to clarify accessibility of pedestrians and is a symbol of democratic use of space (Edward & Fisher, 2002:25).

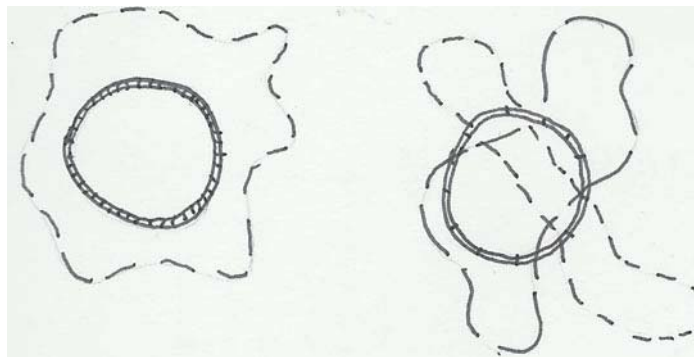
RELEVANCE OF THE INVESTIGATION

Dijkstra and Hilgefort states that a library is generally as good as the person using it. This means that libraries are defined by their programme and functions for the community. Libraries as public spaces, social and cultural buildings are designed in a way that people can use them for working, learning and sometimes playing. The issues with the current Gaborone public library is that it is wedged between the city hall and town council making it hidden from the public street level.

The library has no strong identity as a public institution of knowledge and as a space that freely provides information to the public.

The current Gaborone public library does not have adequate space and functions for its different users. By exploring an existing library this allows understanding of how different functions have evolved and ways to accommodate for the different users.

In relation to programme, the library does not have activities in relation to methods used for data and information in the 21st century.



Excluded and included. Author : own

METHOD OF INVESTIGATION

Theoretical background will provide understanding of libraries as resource centres and as cultural city space where knowledge is shared. Investigating libraries in other communities gives an understanding of form and function of libraries in the 21st century and how they have evolved. Understanding and analysing the context makes an understanding of library as a public building type in terms of the surrounding and the needs of the community. This will also involve interviews and engagement with local people to allow for generation of concepts and appropriate solutions. This thesis will finally answer the questions of;

How to create a library space looking at practices in the 21st century?

How to incorporate social and educational programmes to supplement library uses?

Why there is a need to create such a space?

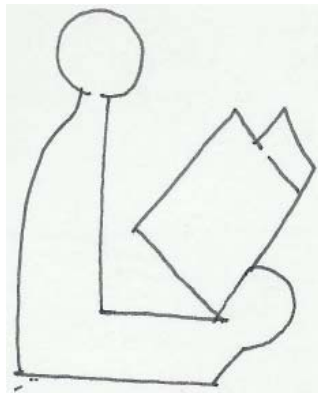
How the space functions overall according to context and community needs?

DEFINITION OF WORDS + TERMS:

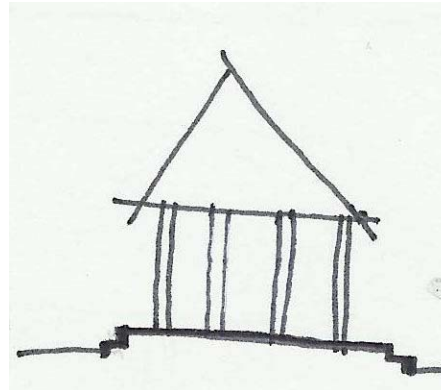
According to encyclopaedia.com, modern libraries contain the collection of books or other writing or printed material and as facilities they are housed. Modern libraries roof a wide range of manuscripts, pamphlets, posters, photographs, motion pictures, video, tapes, sound recordings and computer databases.

The definition can be broken down to the following types of libraries (Edward & Fisher, 2002:21):

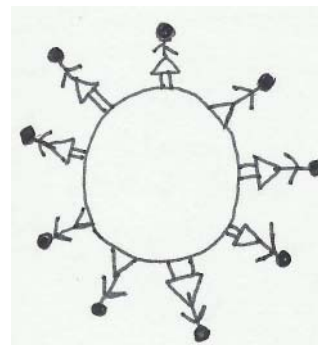
An academic library is one where books, journals and other materials, particularly electronic information systems are housed primarily to support learning or research.



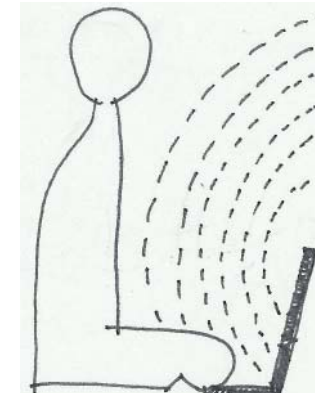
A national library is one where depositions of books and other materials of national importance are housed in such a library/ the emphasis is upon comprehensiveness of collection, plus the safe housing and conservation of scarce materials



A public library is one where depositions of books and other materials are housed for loan purposes. Such a library would normally provide study materials for use by the community groups or for local social advancement.



A virtual library is a collection of library materials housed primarily for electronic forms and accessed via networked computers such as libraries may be potentially independent or physically enclosed.



Although there are distinct descriptions of Libraries, through time the lines between definition of a library have blurred and has resulted in intermixing and use.

HISTORY OF LIBRARIES

Historically libraries have evolved from being spaces that contain and store books to buildings that are a projection of community space through their programme, function and form.

The historical form of a library was a room or set of rooms where books, other library materials were kept and is a building or institution that houses such a collection. Early notable libraries, such as the Ptolemy library and Well cathedral contained half a million scroll deposits of reading materials than spaces for scholars. The library was seen as a space where reading materials were stored.

The most famous of libraries was Alexandria in 300 B.C which was engulfed by a fire and resulted in the materials being destroyed. It was until the development of monastic sacred and secret libraries of Europe of around 1200 that humanity again managed to archive in a single place what approached

the collective wisdom and knowledge of the age (King & Edward, 2002:ix). Michelangelo's Biblioteca Laurenziana in Florence and Biblioteca Malatestiana in Caserta according to commentators notes in the 15th century were libraries rather than bookstores (Edward & Fisher, 2002:3). These were seen as an area where people visit for various learning material.

The library blossomed as a distinguished building type in the 15th century, as the printing press grew, and its own form, function and detail, the library became spacious and less confined. In Westminster when Caxton developed his printing press, this increased the demand for books and functional libraries to contain and store them. The extensive knowledge of a few transformed became the public knowledge of plenty of people. This means that the library had evolved as a space of free knowledge.

The integral adjustment resulted in the importance of books and libraries from the renaissance and the industrial revolution (Edward & Fisher, 2002:x). The 18th century is the best highlighted by the Wolfenbuttel library in Berlin (1710) with its elliptical reading room which was arranged symmetrically with a golden section plan.

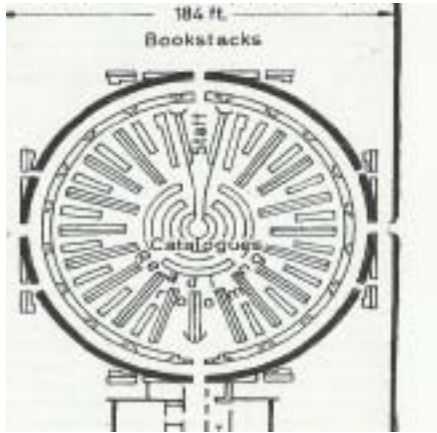
The library transformed space as it was one of the first public spaces to be free standing. It reinstated a library as a formal entity, leading to its existence in countless cities for two centuries until slight variations in the twentieth century.



Alexandria Library (www.blogspot.com)



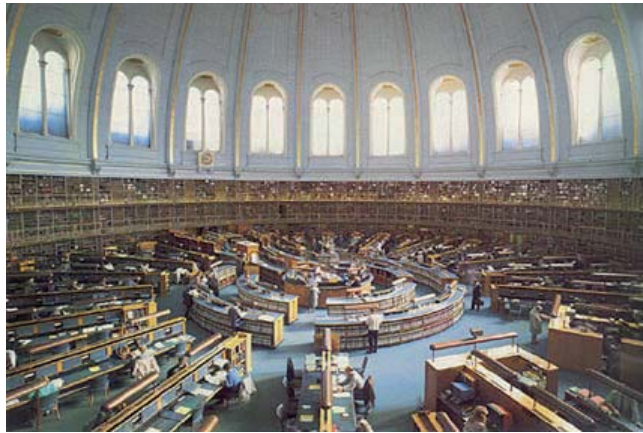
Well cathedral (www.travel.ezinemark.com)



Typical plan, Reading room at the British Museum, by Sydney Smirke

The cube and dome, as bookshelf accommodation and reading room existed as the primary trend in libraries. The dome was usually circumscribed by high level windows on the periphery of the cylinder as it passes through the cube, for the allocation of light (Edward & Fisher, 2002:3). Large spaces were created for book storage with in a sub-basement. It altered space for journals and books to be distributed simply by road level, humidity and temperatures could be managed efficiently, and this levitated the public and users to a first floor approach allowing the front doorway to be manifested architecturally (Edward & Fisher, 2002:3).

The plan advanced and improved through the 18th century stayed unaltered until the early 19th century, and the introduction of cast iron construction helped in controlling security and room conditioning. The 19th century expressed the fade away of the defined plan and section, and the modern libraries becoming more open and flowing spaces. Shelving

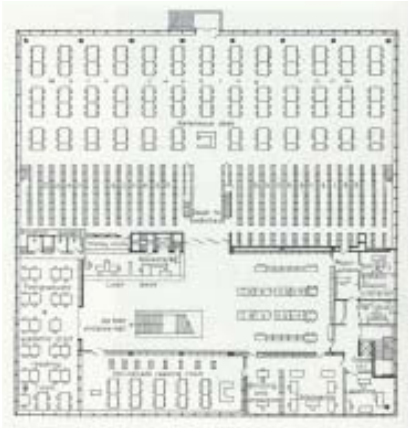


Typical plan, Reading room at the British Museum, by Sydney Smirke

areas and book storage became less dominating and became democratic in liveliness (Edward & Fisher, 2002:3). In the twentieth century the library has evolved to be concerned with the access of information and a place to meet with a living aspect in relation to environment, but falling back on historical background. (Edward & Fisher, 2002:20).

The shift of technology, production and consumption of knowledge has resulted in the reconceptualising of architecture programmes form and function for the evolving cultural functions of public libraries (Dijkstra & Hilgefort, 2010:12). Contemporary libraries don't just house books or no longer hold records and catalogues. It also provides public access to internet, recreation facilities, computer workstations, exhibition spaces and educational programmes. The public library has become the projection of community space (Dijkstra & Hilgefort 2010:16).

In the twentieth century the library has become accessible to a wider community to people of different cultures and beliefs. This means the collection and spaces can be viewed as a manifestation of one's communal knowledge and culture. Cultural theorist Aby Warburg referring to his own cultural library for cultural studies at the beginning of the 20th century, "is like the library in that it is an institution. His view of the library as a paradoxical structure in which an immense plurality of books bound by a concrete form unify and tame diversity, is the essential foundation upon which the modern-day libraries are still being realised "(Dijkstra & Hilgefort, 2010:12).



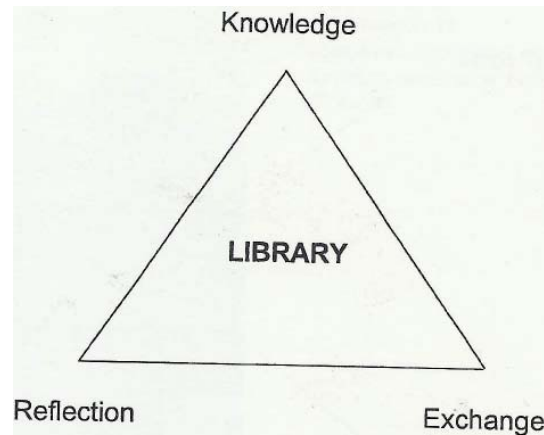
Typical plan, Sheffield Uni library, 1958, by D. Insall and Partners



Interior space of Sheffield University Library (www.xes.cx)

LIBRARIES IN THE DIGITAL AGE

Edwards and Fisher describes that technology has impacted the library in four major ways; through issue systems, records management and the media of information itself.



Edwards & Fisher. Key relationships in the Library By Brian Edwards.(2002:69)

These have impacted on how the library spaces are created and the information technology that has resulted in the way mass use of information in the library. This has resulted in libraries shifting from being shelves that store books to spaces that provide a conducive environment for free open access to online information through the use on the internet (Edwards and Fisher 200:69).

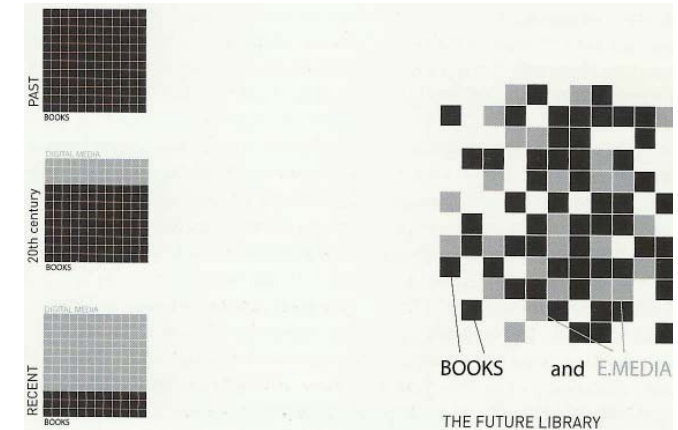
Libraries still contain physical books in connection to the needs of the community, but technology plays a major role in being linked with the library as an additional aspect to the library (Edwards and Fisher 200:69). The future of the library is not confined to the four walls of a building. Books are given new

meaning and new platforms are used for the creation of information through the internet.

Through the internet search engines such as google, yahoo, they make images and sounds available flexibly through free shared knowledge all over the world. The library has now been designed in a way that it connects to spaces such as added functions like restaurants, shops ,cinemas, internet cafes to the as a way to attract visitors to use the library.

Globalization and various network systems connect various people through internet and computers ideas and electronic learning resources are accessed. Through netbooks, which have taken a major task of providing almost every book electronically, this makes scanned pages available as a virtual library without the need to visit the library. Book resources are also provided through course materials online that provides a digital study environment, with these systems catching up with various areas around the world is a need to provide them in libraries(Dijkstra&Hilgefort,2010:30-32).

The library is no more confined to one space, but creates a personal exploration of information for professionals and non-professionals. This creates democratic knowledge that is unlimited, undifferentiated and people with similar interests to encounter.



Dijkstra&Hilgefort .The Architecture of Knowledge. (2010:68)



Library + Technology



First Free public Library

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Keywords in context index



First printing cards catalogues at Welch Library



Using Micro-film to conserve space



Earliest form in Library automation



New technology to search and storage- Rapid-prototype



Inforonics Date publication + retrieval system

TIME LINE

Printing press

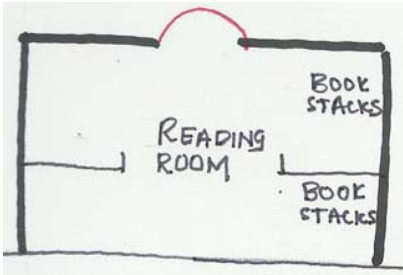
1800-1950

Scrolls



Alexendria Library-combined library +museum

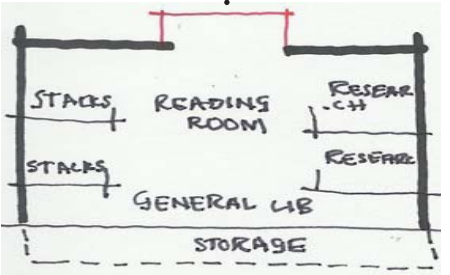
Hand-written books



Alexendria Library

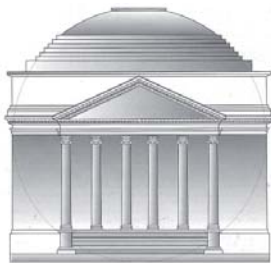
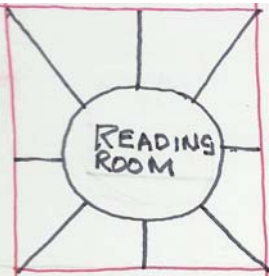
1950 -1980

Printed book, maps + journals

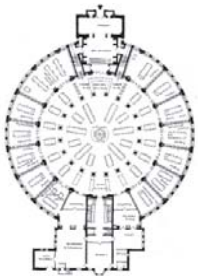


Reading room system with attached book galleries

Form Architecture +



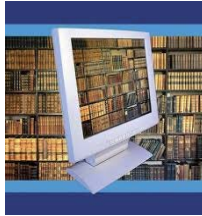
Dome and cube library



Reading rooms-wall system with perimeter bookcases



Alden Library 1st online catalogue

Michael Hart-
invention of the first
E-BooksVatican Library-First library of digital
images on the internet

Internet archives



Google Books

Amazon launches
lending of 11000
E-booksStudies on
digital
evolution

Digitization of old monasteries

Electronic digital

1980-2000

2000-2012

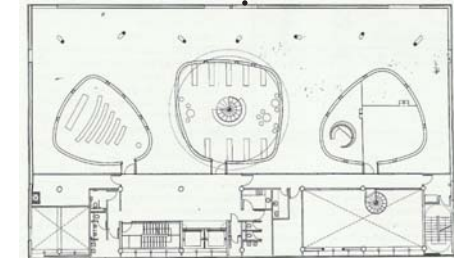
CD ROMS + digital info.



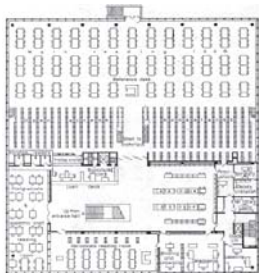
Public Library in Gaborone built



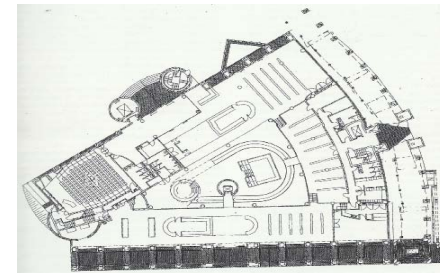
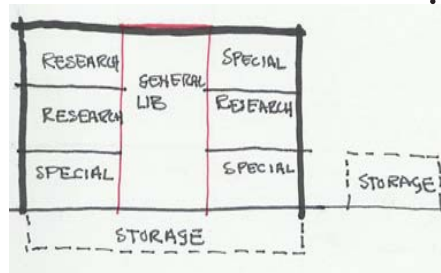
Pekman public library



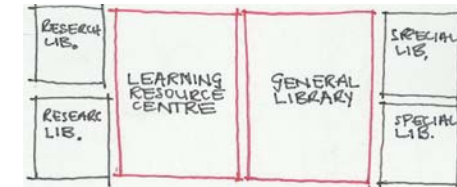
Pekman public library plan



Late 19th century Library



Sandton public library



Open plan system with integrated open shelves and PCs

Images; Google.com
www.historyofinformationage.com
 Edwards, B. Libraries and learning resource centres

CASE STUDY

Phoenix library, USA

The phoenix library is in the 'heart of Maryville' community and consists of mixed-use building programmes that consist of a 1500 square metre building complex, a 250 metre square large library as a community centre and is an example of this adaptation. It has an auditorium which has a seating capacity of 80 people, an arts and craft centre, dancing rooms, a kitchen and a music room.

The library uses context and spacial tensions as the library exercises the mind and the community centre as spaces to revitalise the body (Ajani,2007). It uses volumes, spaces and scale to play with these relationships and creates the separation between the spaces while maintaining visual relation to programme and street. The use of acoustics allows the spaces to be used for performances or public meetings, and its visual transparency allows for a fluid relationship between the two activities of sports and library.

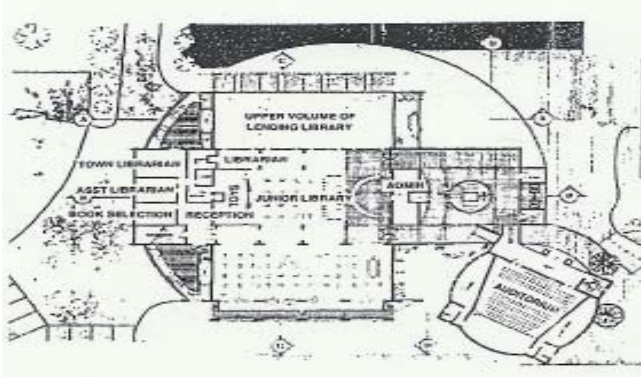


Phoenix library (www.archdaily.com)

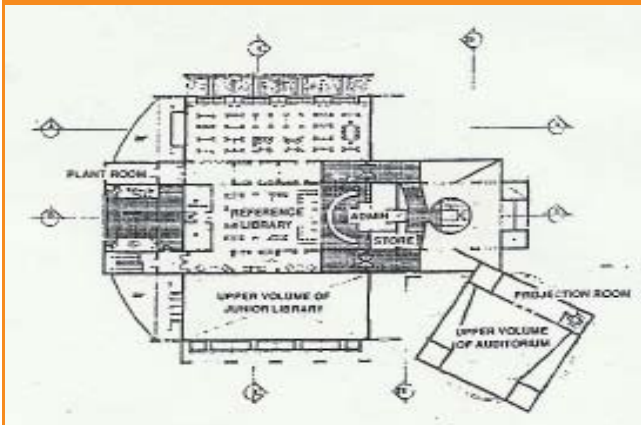


The lessons I learnt from the library is how a library serves the community and sports facilities are used as a marriage of learning and playing. This adopts the spaces on site by creating a strong link between the library, community centre and sports facility that are open for youths in the community to use. This in a way it attracts people to use the library not necessarily for reading, but people are able to gather around in an area and create a social space where they can share thoughts and ideas.

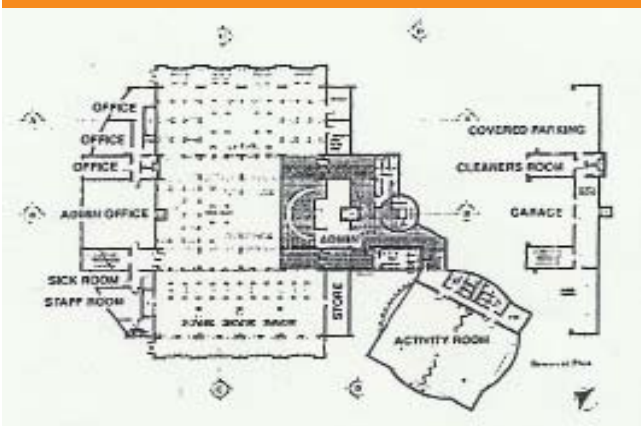
Visiting the Edenvale Library(Ricardo Mulder Library)



Upper ground floor.Architecture S.A



Lower ground floor.Architecture S.A



First floor. Architecture S.A

In an interview with the reference Librarian Dorcus Mazibuko , she described the library as a very vital community building space: the library is a space where people congregate ,information and knowledge for the people in the community is shared and it is a place where people 'chill' and get education.

Being in the library,it is showered with light and people feel comfortable in a friendly environment for working. Architecture SA describes the library as a quiet space exciting sojourn from ones daily toil ,a place to recharge the batteries of the mind, to expand ones horizons, to dream dreams, a place where the librarian is a friend, a guide on a new journey of discovery.The library is a functional space with different relationships therefore the struggle is to manage to integrate the different systems in relation to context.

The library is located in Edenvale and due to the ever changing social structures this has resulted in the library having a high membership and the members take out books twice per year more than other libraries in the country. Van Reibeeck Avenue has a centre of a string of retail and community spaces and covered by residential area. Community areas are made more functional and this consists of the community, municipal areas and civic centre which have a small mall. The library was located between the old library and the civic centre as the planning involved making the library an arm of the suburban context. The buildings are arranged as a small unit of an overall large basilica, and they are placed North-south with pedestrian circulation routes connecting to the retail area.

The programme includes an auditorium and these community spaces create connecting squares. The Library is contained in 3 volumetric spaces , with the centre creating the entrance space. The lower level has the lending Main collection, and the programme is designed is such a way that the community programme occurs in the centre and the wing spaces have double volume space. The upper level is the children's library which has reading spaces in the outer aisles. The overlapping double volume unifies and ties the spaces together.

Light is a big factor in the design of the library, through overlapping the north façade and large arches protecting books on the east-west façade to reduce direct light in the space. The double volume spaces in the library also created space that was free and it is not cluster-phobic. The programme in the adult library include: audio-visual media, Dvds, videos, Book CDs , Book stacks, newspapers and magazines. The Children's library consists of Books from toddlers to teenagers,toys and game library for mental stimulation. Multimedia that includes, DVD and videos, CD music-audio books and CD roms , music and magazines. The books consist of different ranges from fiction books to foreign language books. During holidays the library programme are

planned for children. Visiting the Edenvale Library allowed me to gain first hand knowledge and engagement in a 'functioning' library.

By visiting the library I got first hand feeling of how double volume spaces are used to tie up the different spaces and programme in a library. This allows light to enter the spaces in the library and filter down for people to read and also creates interesting internal views of people moving around and activity in the library. The library sits in civic space and feeds into the context which consists of malls, pedestrian spaces and the programme becomes an important factor for the library to function over time.





Adults library.Author:own



Community centre.Author:own



Childrens Library.Author:own



Sitting areas.Author:own



childrens library areas.Author:own

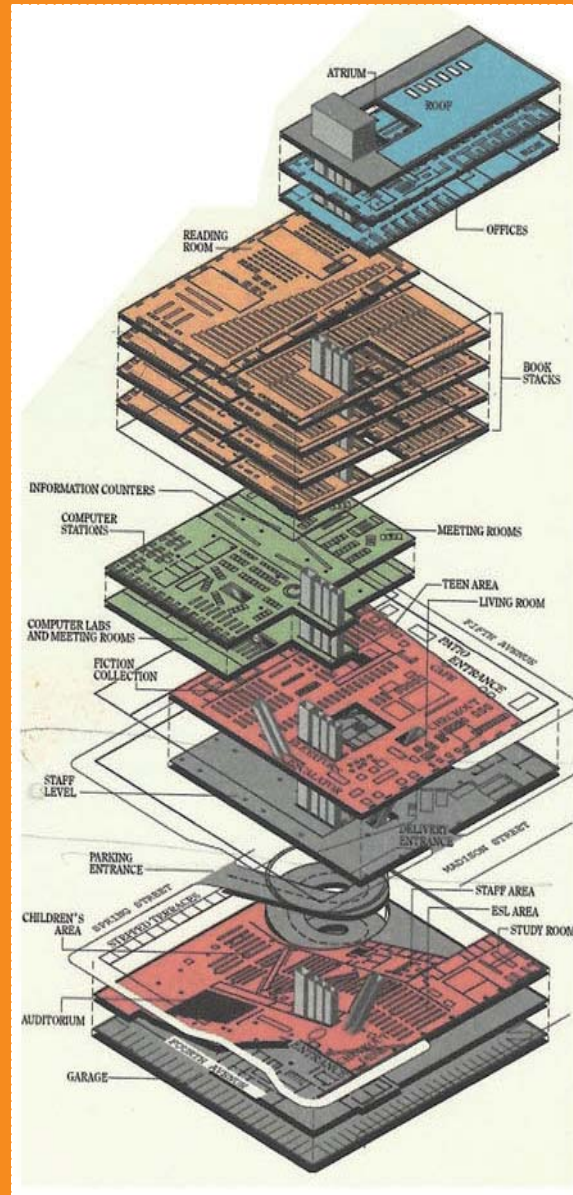


View of double volume.Author:own

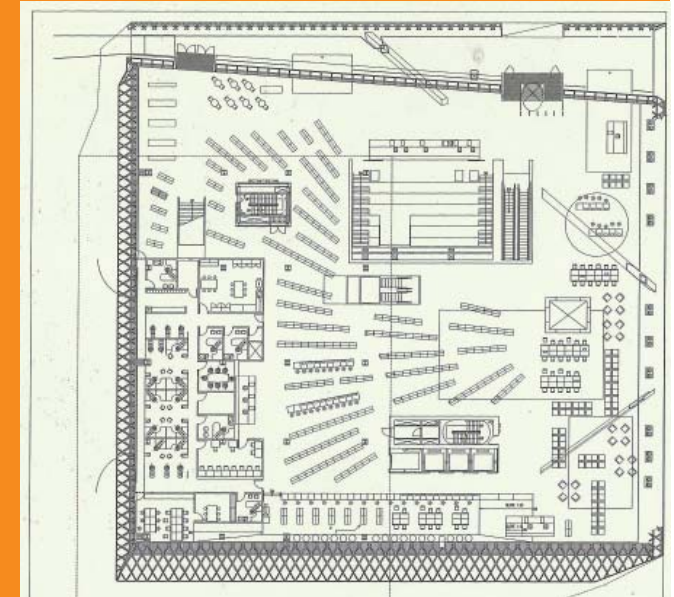
Seattle Library

The library may be criticized for its outside appearance, but it creates a spacious internal environment and transitional functions. The volumes and ramps level allow for views and looking down into the vast open spaces. The volumes and high levels free up the space and makes the area conducive for reading, playing and learning. The library is designed around its programme (Multimedia) and various library programmes which includes spaces for teenagers, Auditorium, Bookstacks, computer and meeting rooms that makes an environment for learning (Kubo and Prat 2005:66).

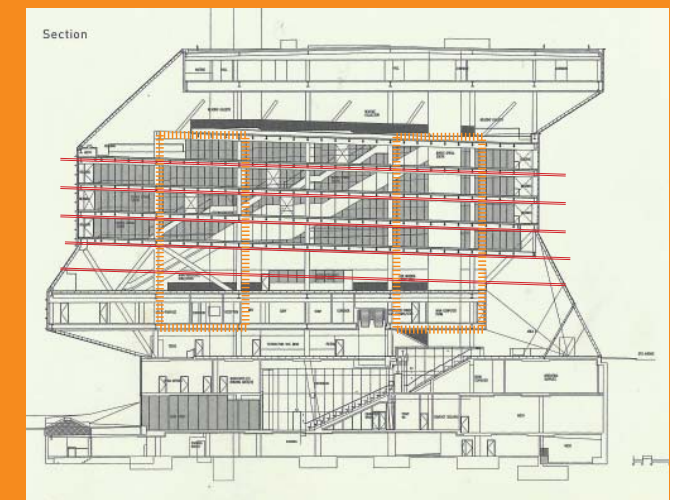
To prevent flatness, large volumes and staggered spaces are set free and ties the building from floor to floor, and allows for growth and social visual interactions. The living rooms and lounge spaces create a dynamic community space allowing for sitting, reading, resting, internet access and meeting places for coffee and chatting (Kubo and Prat 2005:66).



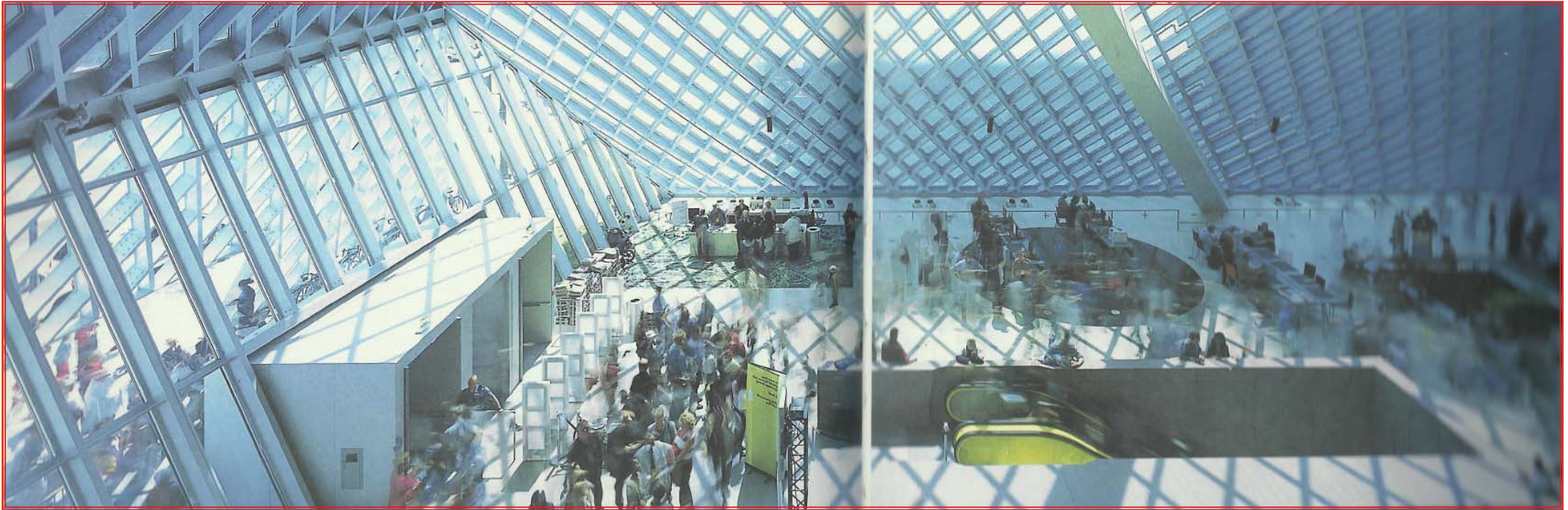
What will be inside. (Kubo and Prat 2005:66).



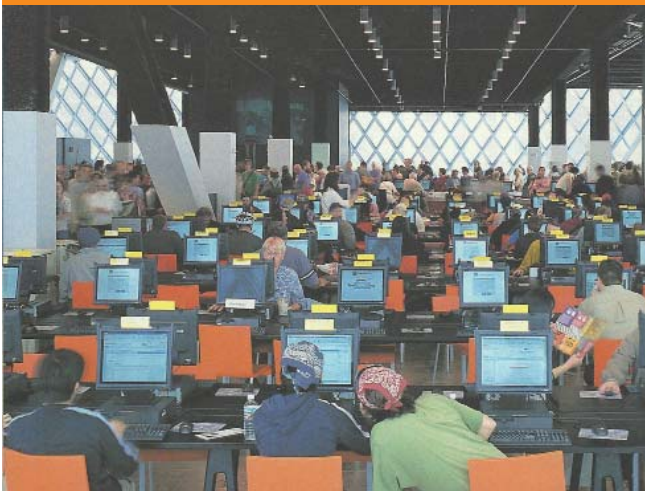
Section of space. (Kubo and Prat 2005:94).



Section of space. (Kubo and Prat 2005:94).



Section of space.(Kubo and Prat 2005:86).



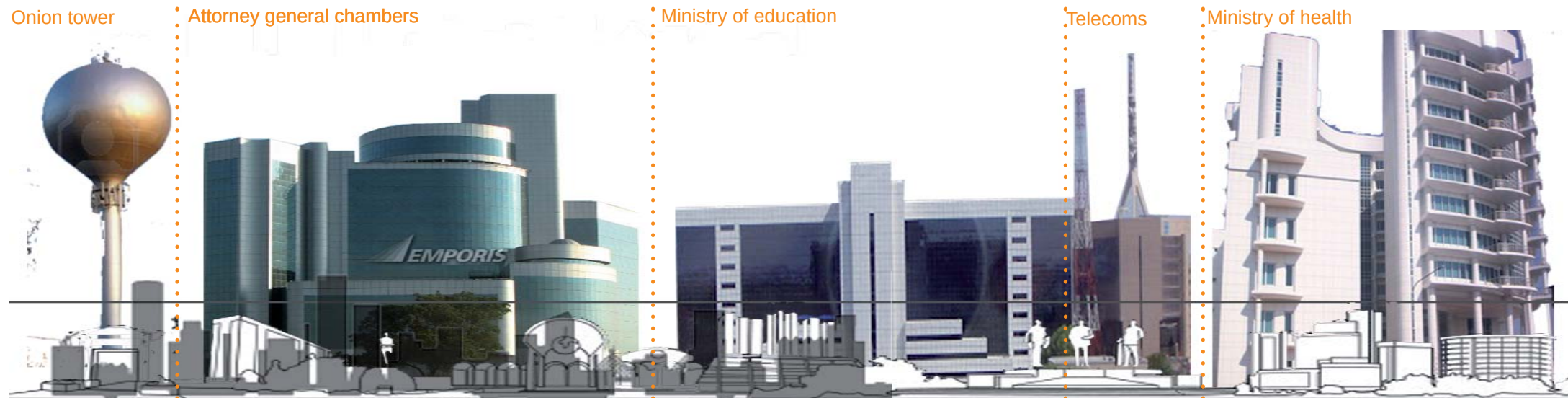
Internet facilities.(Kubo and Prat 2005:40).

From the Seattle Library, I learnt how programme and levels play an important part of creating a hierarchy of social library space and learning areas. Through using dedicated floor this creates concentration and specialization in programme and a connected social space. This also displayed how spaces are linked through walkways and ramps to create a community environment for making learning a fun experience.

CON-

TEXT

GABORONE SKYLINE



SADC Head quarters

Debswana(Diamonds)

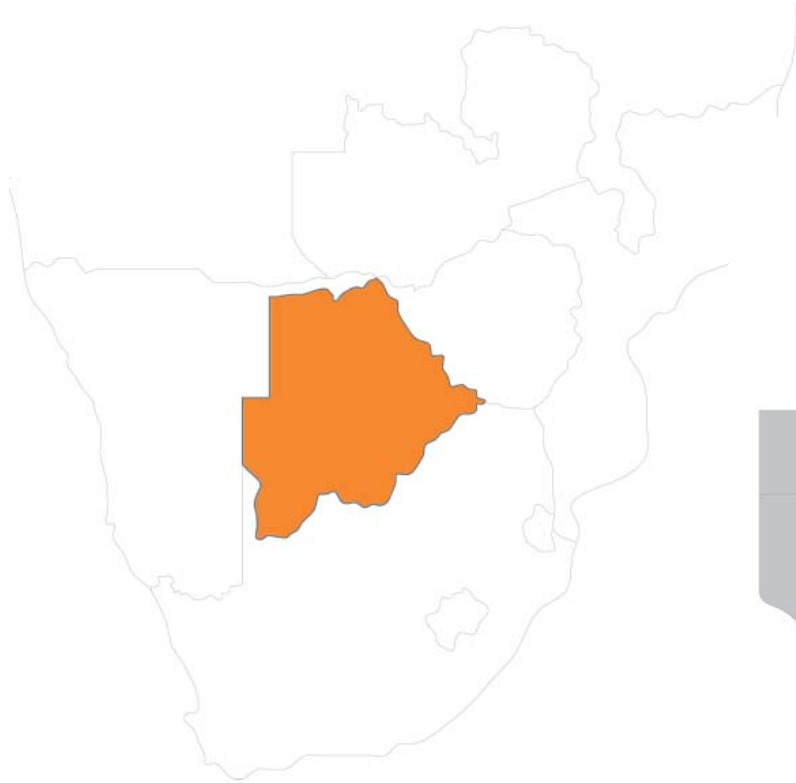
Miss Universe 1999

Basket + Crafts

Cattle moving in the
city



THE PLANNING + DEVELOPMENT OF GABORONE



Botswana in Southern Africa.Author:own

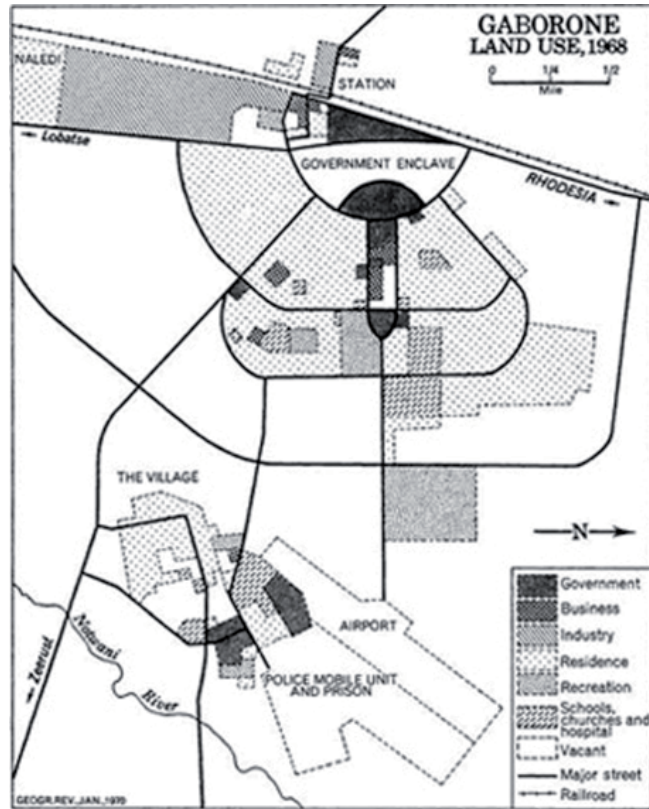


Gaborone in the South East district.Author:own

Gaborone is the capital city of Botswana and currently the fastest growing city in Africa (Mosha 199:124). Around independence in 1966, Gaborone had a population of 6000, in 1991 the urban population had expanded to 133 486 people out of the 1300 000 population. Currently the population is estimated at 231 626 based on the 2011 census.

The first Master plan of Gaborone as the capital was made to place the city between the railway station and the camp (Mosha 1996, 120). Through appropriate urban and social development and standards this enabled the setting out of the city. The garden city concept which the city of Gaborone was based on included a radial geometric circle, from which the city spread from. Having designed the new capital, the area of Gaborone had to be designed politically, administrative and economically and culturally. The Main mall was designed as the social and cultural

centre, and this made the central mall boulevard linking the ecliptic government enclave, with commercial centres happening centrally. On the east of the main mall consists of the city hall and town council, where the public library was also placed and it is there currently. The planning guidelines were based on creating a town that was self-sufficient and self-sustaining to the small population, as the city grew, vehicular movement was separated from pedestrians. In the birth of Gaborone, the town was not meant to have a population that exceeded 20 000 people and most of the infrastructure, roads and social services were only meant to support such a population (Moshale:1996,120).

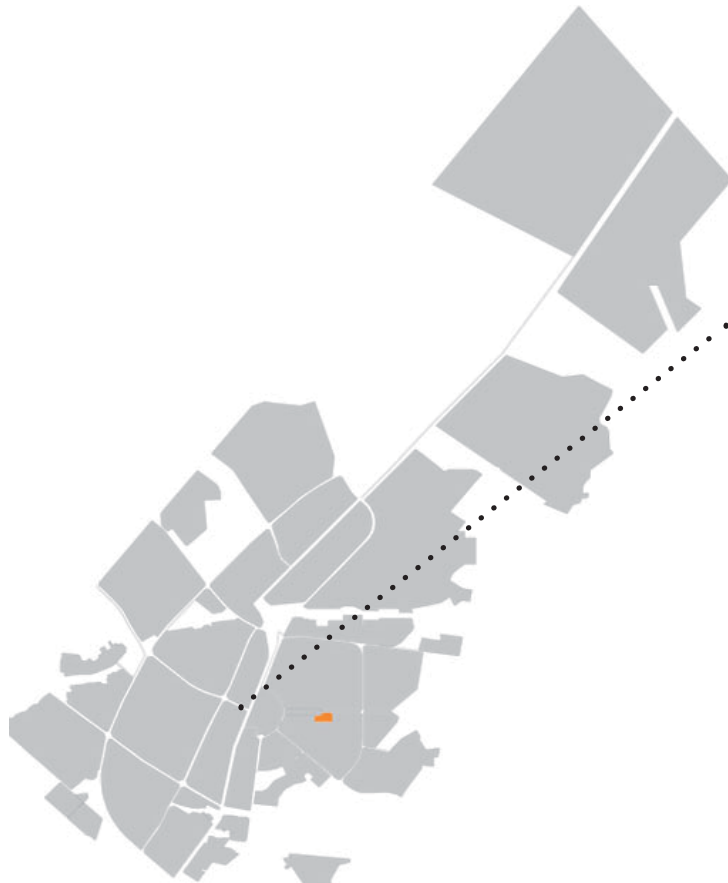


Gaborone planning.(boidus.co.bw)

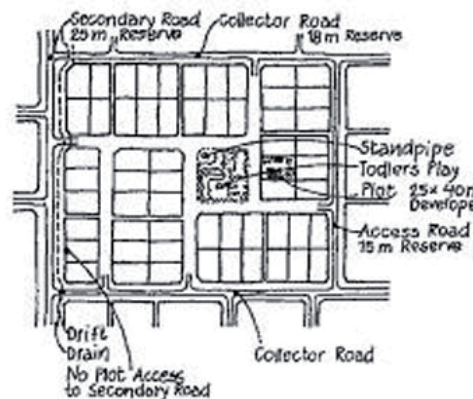
DESIGN PRINCIPLE OF THE CITY OF GABORONE

The urban form of Gaborone consists of a concentric and grid iron pattern that is visible in certain old areas of the city, that has pedestrian links and open spaces. In a conversation with my uncle who saw Gaborone grow from democracy, he explained how the city had grown so fast, from only having small kilometres of road during independence to being a web of networks and increase infrastructure. He explains that in those days in the 70s, most of the spaces in and around Gaborone was accessible by foot.

Currently due to the city expanding, this has resulted in mixed use zones in the central city. In central Gaborone, the area has been redeveloped around the main mall area due to the population increase, where some of the residential areas are being converted to mixed use spaces with internet facilities, offices, shops and small scale retail. The development of public and civic spaces in the original master plan, was not designed to hold the population increase it holds today and has resulted to strain (Mosha:1996,121).



Site in Gaborone central.
Author:own



Cluster module in Gaborone west. Moshe 1996;121.

More layers were added to create neighbouring and open spaces to the rapidly unpredicted expanding city. The zoning of the main original spaces was based on rigid, large scale square zoning with industrial, commercial and civic space being the central focus.



Aerial view of Gaborone in the 1970s
www.Google.com



Aerial view of Gaborone after 2000.
www.Google.com

HISTORY OF LIBRARIES IN BOTSWANA

Before the arrival of missionaries, there wasn't a written word or story. Things were communicated orally in Botswana, history was relayed from one generation through forms of expression, stories and poetry(Tlou,1971).

Missionaries began to write languages so that people can communicate with other people more easily, and also translated the bible in Setswana so that they can also transfer the knowledge and their teaching to the locals in the community. Isaac Schapera was amongst one of the first people to be able to write laws and customs of the country of Botswana which before were passed down verbally from one person to another. There was lack of education for other people in the community during colonisation. The chief's children and closest family were given first preference. Literacy was almost nonexistent amongst the people, and as the country grew, the few who were educated wanted to correct some of the mistakes made by missionaries. As the city was planned and grew, the literacy rate increased and people were able to communicate through reading and writing (Taylor,2003).

Christian Mission Society created the earliest form of reading rooms that were developed for the community. The literature was used by Africans as they were not allowed to occupy the same libraries space as Europeans, who were also instrumental in the education

development such as the St Josephs Secondary School founded in 1944, which had book collections. Through the 1930s book-box services were established and were endorsed by the Dutch Reform society, the Carnegie Trust and also involved the local department of education. This involved library books being taken to people in boxes but sadly by the 1950s this system failed (Baffour-Awuah,2002:1).

The need for a public library, resulted to the colonial government in 1963 to approach the British Council, for the setting up of one in the proposed new capital, Gaborone which was the centre for connectivity to other branches in surrounding towns and villages (Stiles,1973). When the first director of libraries J.S Parker came in the newly formed independent Botswana, he described the school and college libraries as;

“**Poorly equipped** and furnished, **unattractive** and haphazard collections, **shabby** second hand gifts of books, **under staffed**, if at all, by a succession of voluntary or prime-time workers with little or no library training and little or no money with which to maintain their libraries in reasonable conditions”,(Stiles 1973:4).

By this he was expressing how the library has to be given attention and a conducive environment for people to read and learn.

When Botswana gained independence there was a shortage of skilled manpower and resources were placed in providing primary education. It was in 1977 when the National commission on education became the main altering point in making knowledge and education as it was the main channel to achieve kagiso (social justice). It realized that formal education and knowledge systems had to be reconceptualised for later use of non-formal education, indigenous teaching forms and use of one –teacher schools. Although the ministry of education is in charge of development of frameworks and financing of education, the National library Services provides the guidance for all libraries and schools in the country (Baffour-Awuah2002).

The revised National policy on education was able to filter out libraries as resource facilities that should be standard in all communities and schools. This resulted in The Educational Libraries Division in September 1967, to address the library requirements and development in the country. Administrative and management resulted in the state of libraries being adjusted by providing more staff, training and motivations of people interested in the career of librarianship.

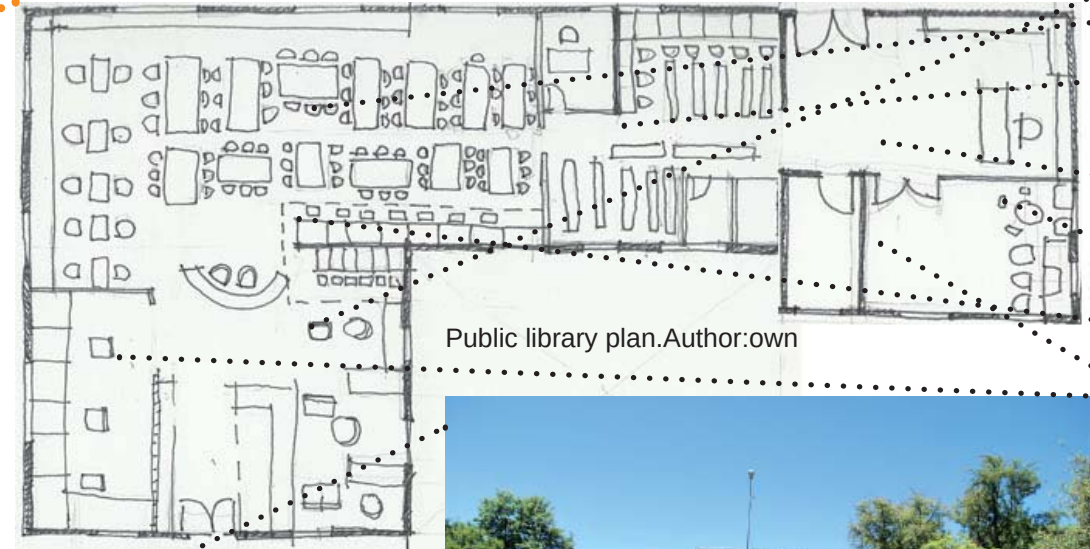
The national library network has reviewed the library as a cultural entity than being an educational institute (Baffour-Awuah 2002:5). With the development of information technology school library programmes were developed for primary, community-secondary and professional institutions. Libraries needed to be regarded as powerhouses of cultural heritage of the country by being effectively developed. The study on education systems also shows how industrialised society depends greatly on the use of written form of communication, even though Botswana has extensive knowledge in oral society (Karn & Quarmby, 1987).

The current Gaborone Public library is amongst the city hall and town council.

Current issues with the Gaborone Public Library



City council location.(www.google.com)



City council streetview.Author:own

The current public library was built in 1970 and was designed amongst the town hall and the city council; in Central Gaborone. it is located on a buzy pedestrian link and edge surrounded by trees.



Parking spaces.Author:own



Periodical section. Author: own



Main bookstacks and reading area. Author: own



Book stacks. Author: own



Public computers. Author: own



WIFI area. Author: own



Sorting area. Author: own



Library entrance. Author: own



Children's library. Author: own



Children's entertainment area. Author: own

The first president of Botswana said that “a nation without a past is a lost nation, and a people without a past is a people without a soul” ,at the University of Botswana, Lesotho and Swaziland in May 15,1970,referring to the reintroduction and teaching the urban youth culture about knowledge that is endangered of being forgotten. A library exists in the public space, and serves free public knowledge through its functions, form and programmes and as it evolves it becomes the pinnacle point that has to enhance and spread community development through recollecting memory and knowledge.

The challenges that face the current library is that it is wedged amongst the city functions, the town hall and city council. This swallows the public library by making it hidden and making it feel like an ‘extra’ to the other city functions. In the modern information world, the public library needs to be expressed as an identifiable entity that has to standout in a way that it can serve its surrounding community.



Childrens P.C entertainment centre.Author:own.

Other issues is that, the current public library cannot serve the current population of users: On April 2012,the library records show that is had 10128 memebers and on month 2200 youths and 7523 adults had visited the library. On certain days this has resulted in overcrowding and people sitting down on the floor because of lack of working space. This doesn't make a conducive sitting and reading environment and has resulted in some visitors not returning to use the library.

In an interview with the head library officer of the public library Phillip Piet, he explained that the current public library has been neglected, and is more or less the same state it was back in the 90s,and as a result it seems as if it hasn't caught up in terms of its functions and programme. The library which was open for the community lacks spaces that support community users and needs to attract users for other functions that allow education and just being a storage of books.



Entertainment centre.Author:own.

Gaborone Public Library
MONTHLY STATISTICS
APRIL 2012

Membership		Issues	
Children	2200	Children	109
Youth	403	Youth	275
Adult	7523	Adult	171
Total	10128	Total	555

Overdues		Overdue Recovered	
Children	1183	Children	27
Youth	203	Youth	91
Adult	2496	Adult	64
Total	3882	Total	182

Sex	M	F	Total
children	98	107	205
youth	1151	850	2006
adults	3814	2003	9817
total	2063	1165	3198

Periodicals		Pick-Ups	
Total - 651		Children	946
		Youth	2930
		Total	3876

Computer Usage	
Children	-
Adults	47
Total	-

Physical record copy showing Gaborone public library users



Manual catalogues.Author:own.

In an era where people are exposed to social media, electronic books and the internet, the current public library is lagging behind in making these services available for users. Visitors come to the library using laptops but the library doesn't have the required connection points for the community. There is a little as four computers working and currently the Wifi internet system is limited therefore people with computers tend to go to the nearby Mainmall to use the internet facilities, and social spaces available there.

Technology is an important incorporation to relay information and knowledge quickly, efficiently and freely. People in the community have the technology but the library does not support them.

The other issues include the current public library having low capacity and space for book stacks for intended users. This has resulted in a deficiency and limitation in available resources for learning. By walking around the site and understanding the spaces, the library does not serve the community to its full potential, and also the foundations of a public library for the people and the community. The youth and children who use the library in the community need to be served as they are the people who grow up to uplift their surroundings and area, says Phillip Piet.

Boiteko, U, 2009. Ditsala. January 2011. Gaborone, Botswana.



INTERVIEW-THE PEOPLE OF THE LIBRARY



BOEMO
Age :6
Wants to be:Footballer + Dr
Standard:1
Issues:Library is small
Multi-media Tv is never on
more computers
Wants: Sports facilities
More space
Toys

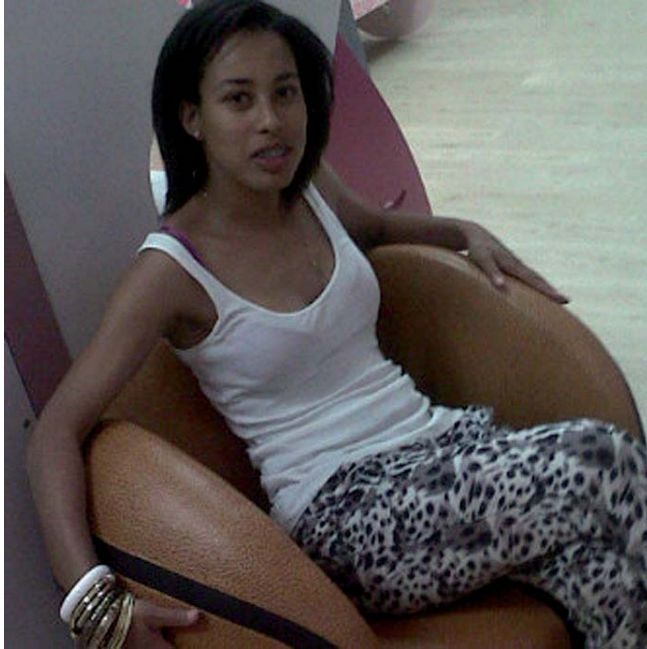


THANDILE
Age :10
Wants to be: Artist + designer
Standard:5
Issues:Library is too small
Crowded on sumdays
Too closed
More multi-media
Wants :More activities
More multimedia
More books
Internet games



WENDY
Age :12
Wants to be:Nurse
Standard:6
Issues:Crowded
More holiday activities
Relaxing + chilling space
Wants: More books
More holiday activity
to return more often
outdoor spaces

KATLO
Age :8
Wants to be:Doctor
Standard:2
Issues: Non
Wants: More books



TSHEPISO

Age :22

Wants to be:Accountant

Standard:University

Issues: Non

Wants: Non,really uses the Public Library



RITA

Age :-

Wants to be:-Travel

Standard:University

Issues: Non

Wants: More books,and
facilities,community sport spaces



Age :8

Wants to be:-

Standard:University

Issues: wifi connection points

Wants: More books,e-learning

INTERVIEW-THE PEOPLE ON THE STREET



"A library is a place to read and gain knowledge."



"I dont atudy in the library,i like studying at home all the time."



"I like going on the internet to get information and using my laptop everywhere I go."



"I go to my school library to study and discuss with my friends all the time"

Where is the Gaborone Public Library



"Libraries are everywhere you go"



"I like reading and studying, but I haven't been to the Gaborone library before."

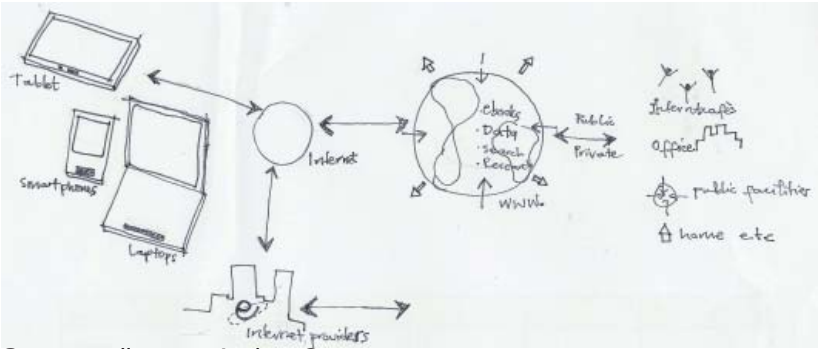
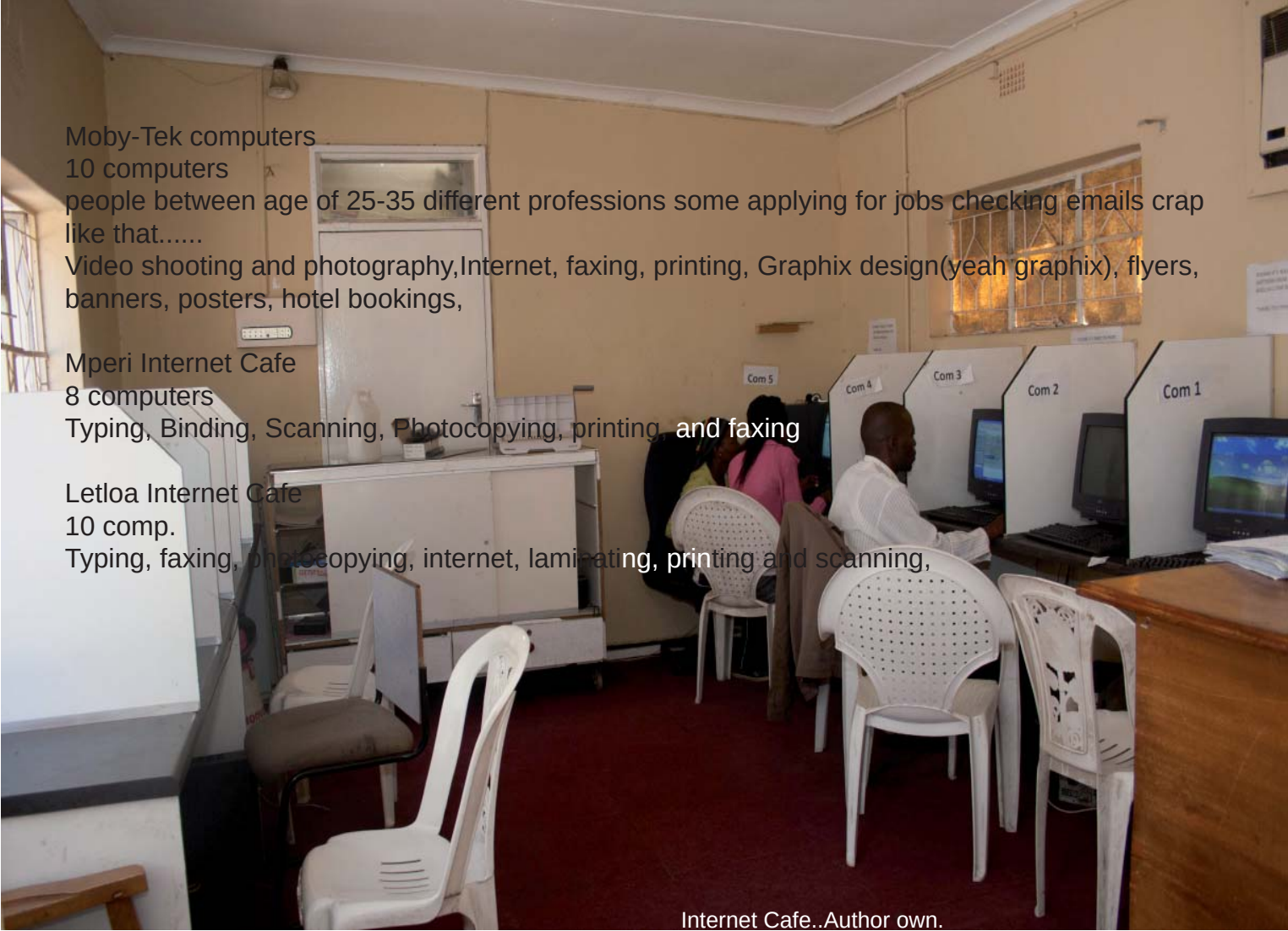


Conclusion of interviews (10 to 15 June)

Out of 20 people randomly stopped around the area close to the Gaborone Public Library 11/20 knew where the public library was. Speaking to the people, they rarely visited the library because it is not up to date with how libraries are used now. They would like more programme to be introduced in the library so that they can visit it and use it.

INTERNET CAFES

By visiting the internet Cafe in the Surrounding area,i was able to get information of the various services provides for uses and how the internet functions.
People pay for the serives and get a login card for the time they can use the internet. The internet cafes are visited mostly by students and people working in the Area and some those of the Gaborone Public Library,and most operational through peak hours which are during the afternoon from 2 PM to 5 PM.



Systems diagram.Author:Own

CONCLUSION

The way people communicate and share knowledge has evolved over time. This has resulted in new ways that people communicate and get access to vast amount of ideas and gain knowledge. Information is available in various ways through different channels and streams, and it is sent through different mediums and forms. The knowledge that is available through exposure and experience are held in these mediums. By sharing information, experts and non-experts gain information and make it available for sharing.

Using the Library as a public historical knowledge reservoir , this allows for understanding of how information is shared and how context and adaptability play an important role. Libraries are public buildings ,that have become a multifunctional role of providing information to users and also having spaces that support users. Through the advancement of technology, programme and design libraries have changed in various ways. By creating a space where the community can be supported and ideas can be shared, this enhances the way public libraries function.

The need to conceptualize the public library in Gaborone ,Botswana

Motho le motho kgomo (Each and every person donates a cow), is the campaign that saw the establishment of the highest education institution (University of Botswana) in the 1960s. This enforces the idea of working for the people by the community, to serve the community and this must be reflected in the library. Frierie (1971) explains that knowledge as knowing of an individual's cognition, resides in people but recreated by people's interpretation of their context and background. Understanding the context and the landscape allows for the creation of a 'successful' public library space.

Looking at the current public library in Gaborone, a good location and setting of a library is one that integrates the library into the civic and overall cultural context. The location and placement of the public library should enhance linkage with spaces through its exterior and interior spaces and not create suffocation psychologically and physically. The library stands in public and pedestrian space, and needs to be more visible and readable by pedestrians and users through the way it is woven into the existing infrastructure. The public library is not immobile. Therefore it is subjected to forces for change in its information and technology, and the ever abundant information in the internet and the large volume of journals and books distributed. Therefore the public library must modify as a knowledge reservoir externally and its programme internally. It is critical that the public library gets a recognized role in the public fabric and be able to adapt and grow.

-

Without Libraries,
What do we have?
We have **No Past** and **No Future**

Ray Bradbury

Site

ANALYSIS

AERIAL MAP



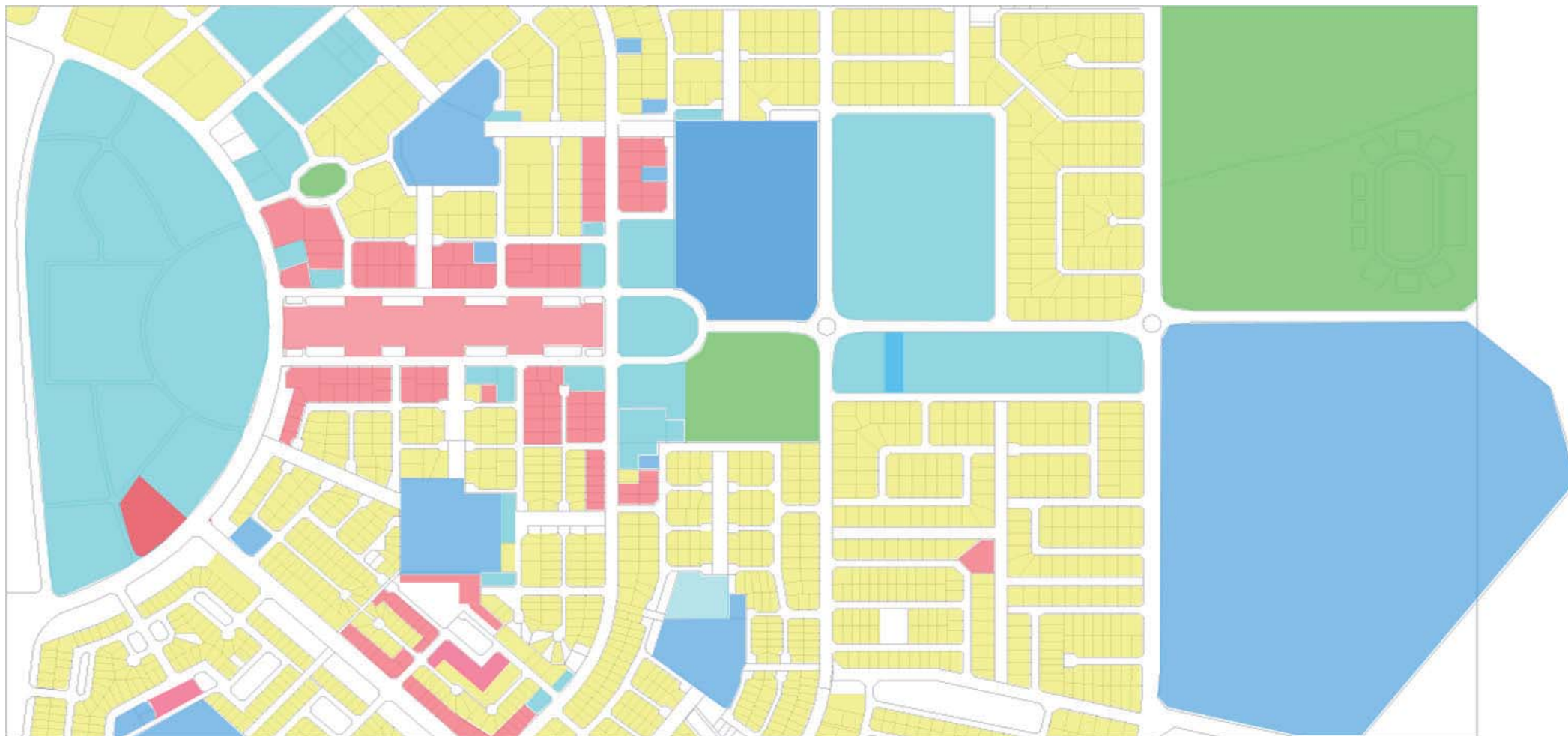
FIGURE GROUND



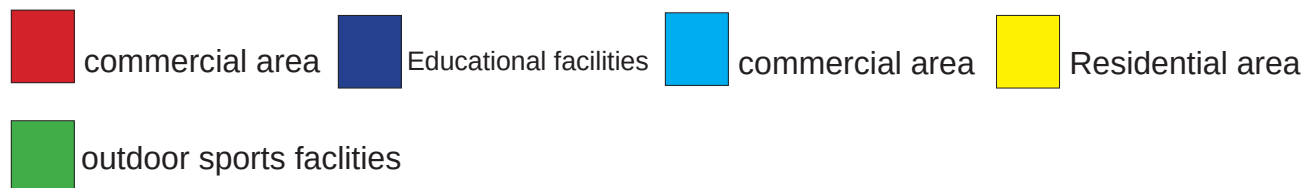
Author:own

The nolly map shows a series of fragmented building spaces happening around the site.

LAND USE



Land use.Gaborone city council



The outdoor sports fields enhances the idea physical stimulation and mental stimulation. And the area contains concentrated mixed use spaces.

BUILDING USE



Author:own



Embassy



restaurant



Small business



Civic building



Office building



Retail



Art gallery



Bank



Internet



Testing +
counselling



Hospital



Church



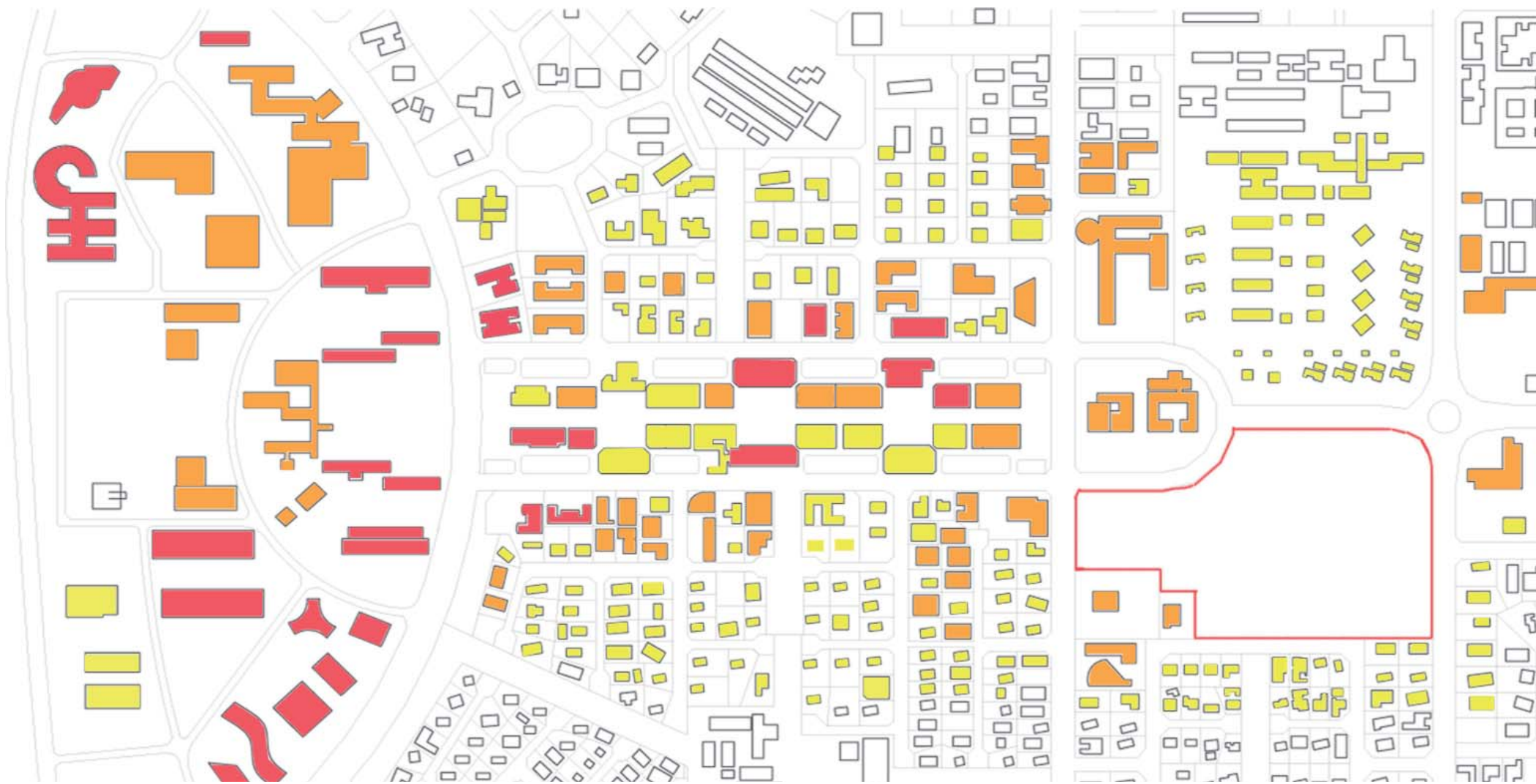
Museum



Newspaper
stand

A series of multi use spaces has resulted in the area due to the demand for growth.

BUILDING HEIGHTS



Author:own



6 + stories



4 to 6 stories



1 to 3 stories

The building heights shows medium to high building spaces close to the relative social spaces.

BUILDING EDGES

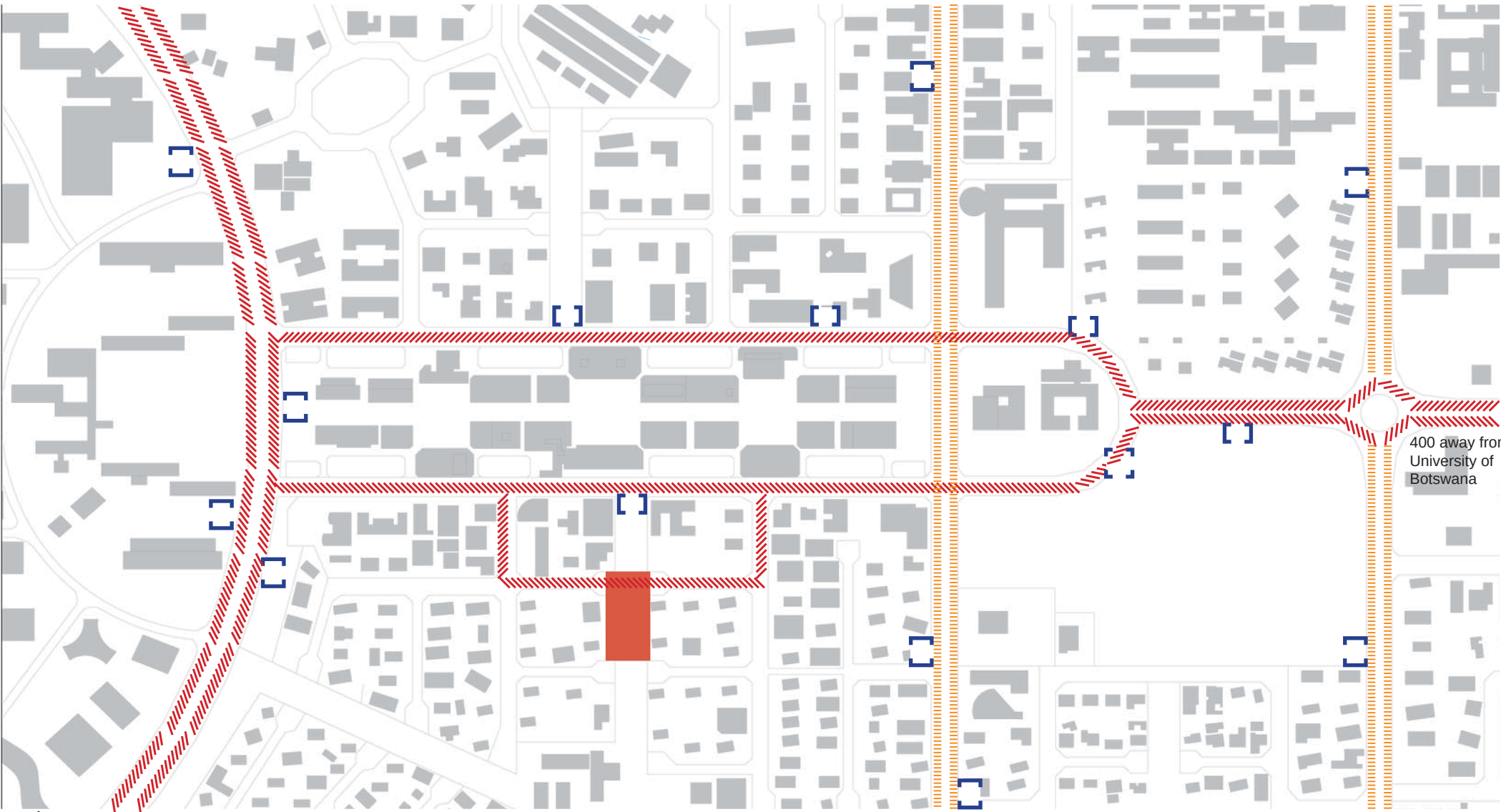


Author:own

- community spaces
 — Retail space
 — Office spaces
 — Restaurant
- Small business

The edges allow for social spaces where pedestrians can enter and explore the various spaces.

PUBLIC TRANSPORT

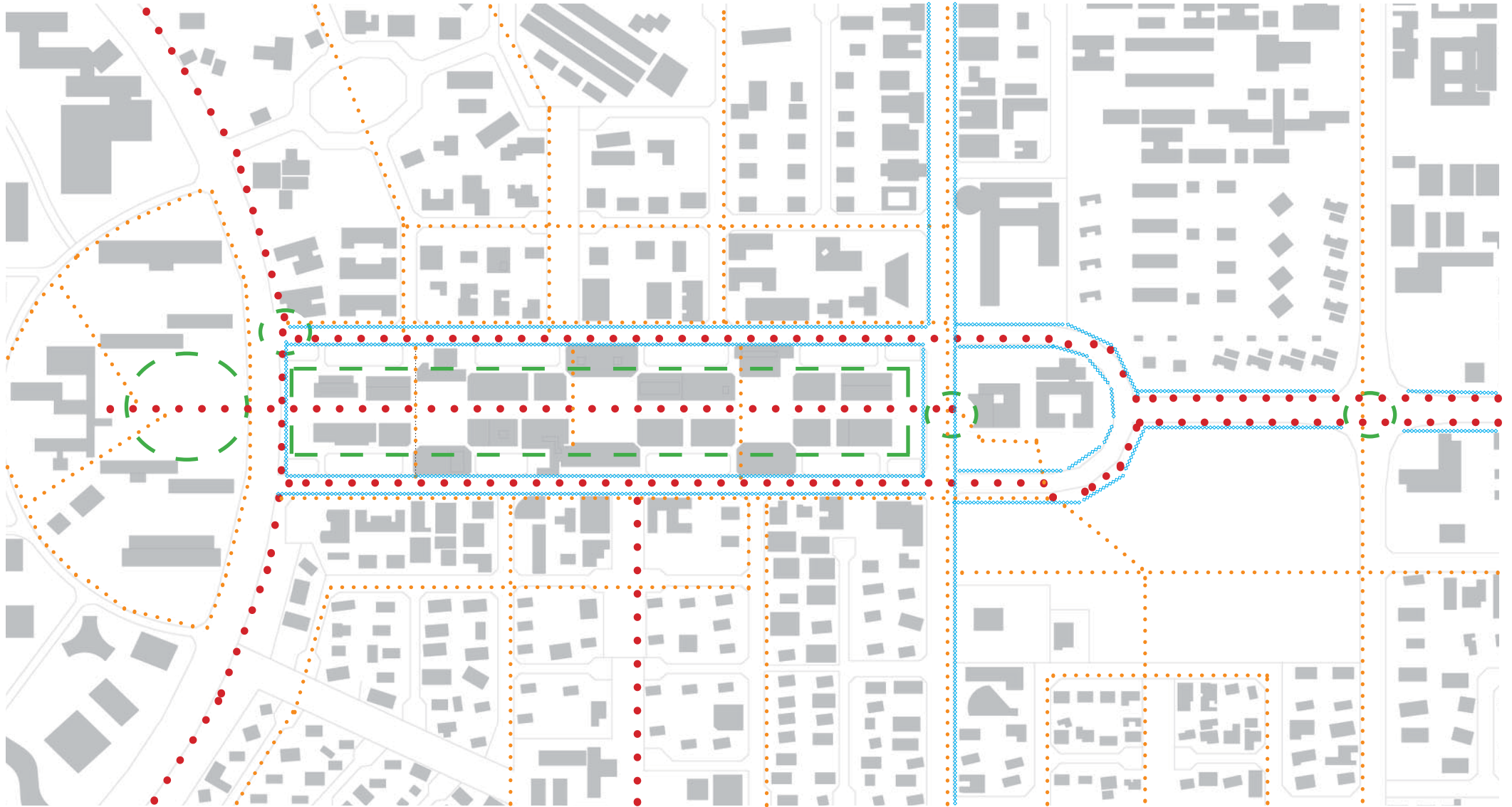


Author:own

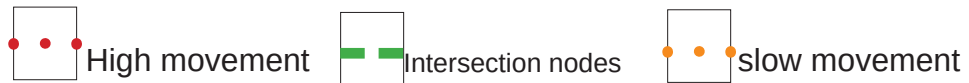
-  Frequent traffic
-  Bus stop area
-  Slow traffic
-  small taxi rank

There is a supporting public transport link for users and the site is linked to the network.

PEDESTRIAN MOVEMENT



Author:own



The space is a pedestrian catalysed space which allows access to the main social facilities.

GREEN AND OPEN SPACES



Author:own

There is a high density of trees that add richness to the areas around the site and people gathering spaces.

SCALE + RELATIONS



Spatial relations shows an explanation of the relative scale of the space used. The average street block size of 52m by 42m imposed on site to get relations



East site view. Author: own





South site view. Author: own





East site view. Author: own





South site view.Author:own





East site view. Author: own





Site conditions. Author: own

DESIGN

BRIEF

PROGRAMME

In terms of programme,i looked at the contextual language of adjacent spaces. This comprises of mixed use facilities,restaurants,coffies shops,retail,offices and internet-cafes. Some of the programme is borrowed from the surrounding site to have a relationship with the surrounding context. These spaces serve the community.



Parking spaces



Pedestian walkways



Connecting axis



City hall + town council



Book store



Market in the square.(Designgenro.co.bw)



ent.(Designgenro.



Taxi movement.(Designgenro.co.bw)

PROGRAMME PLAN

A. Collection space

1.Childrens Library

	No of units	Total area	
Ground Floor.....			
Entry vestibule	1	52	
Check in/out	1	24	
Reference	8 comp	8 comp.	
Edu-com lab	1	72	
Librarian	1	21	
Book stacks	2	177	
Game zone	1	37	
Play area	1	96	
Delivery + sorting	2	57	
Print area	4	23	
Study area	2	191	
Lounge area	2	32	
Balcony	1	33	
Mezzanine.....			
Meeting rooms	4	30	

Main collection

First Floor.....			
Entry vestibule	1	52	
Check in/out	1	23	
Catalouges	1	20	
Periodicals	1	16	
Reference stacks	1	66	
Book stacks	1	112	
Study area	1	181	
Lounge	1	33	
Librarian	1	16	
Balcony	1	10	
Printing area	1	23	
Mezzanine.....			
Meeting rooms	4	112	

3.Local collection

Third Floor.....			
Book stacks	1	98	
Reading area	1	105	
Lounge	1	57	
Help desk	1	20	

Quiet reading area

Book stacks	1	75	
Study area	1	136	
Lounge	1	91	

B. Mixed use area

4.Auditorium

	No of units	Total area	(Metres)
Ground Floor.....			
Lobby	1	53	
Entrance vestibule	1	13	
Media Library	8 comp	9.6	
Stage area	1	20	
Storage	1	2.5	
Stting	upper + lower	200 ppl.	

5.Multi-media room

Third Floor.....			
Lobby	1	10	
Meeting rooms	1		
Auditorium	1		
Audio-visual room	1		
Support	1		

P.C Training room

Second Floor.....			
Lobby	1	18	
Meeting rooms	1	21	
Audio-room	1	68	
Audio-visual room	1	68	

C.Service spaces

6.Administration

Second Floor.....			
Reception	1	5	
Waiting area	1	13	
Managers office	1	13	
Administration office	1	13	
Conferencing	1	22	
Roof lounge	1	76	
Digilization + restoration	1	86	

D. Leisure spaces

8. Courtyard

	No of units	Total area (Metres)
Ground Floor.....Entry courtyard	1	108
Gathering courtyard	1	225
Exhibition space	1	150
Community board	1	-
Coffie shop	2	120
Internet Cafe	1	205

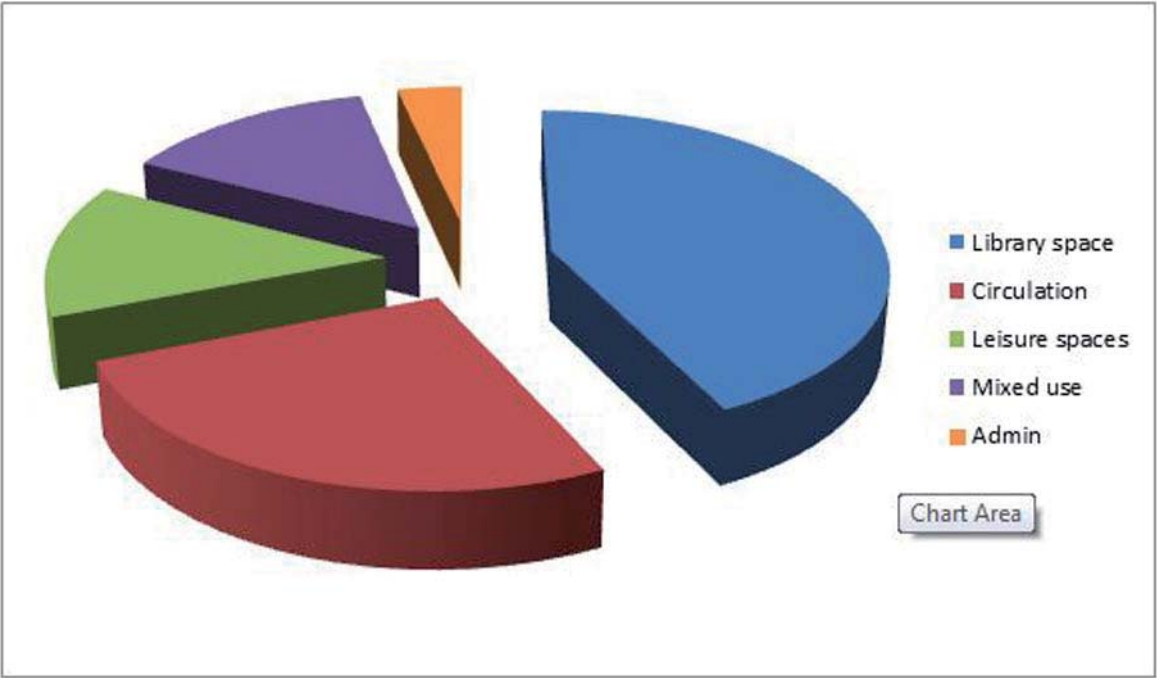
E. Outdoor space

Parking facilities	200	3 x 5
Mobile Library	1	Van
Recycling facilities	1	40
soccerfield	1	3180
Volleyball court	1	
Basketball court	1	
Exibition space	-	

F. Service

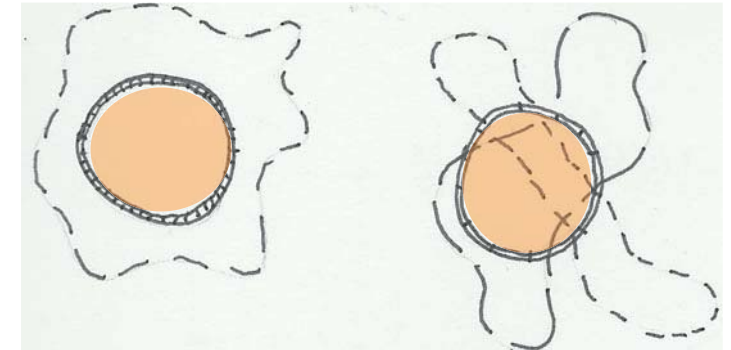
Circulationn space	-	
Delivery space/lane	2	295
Service area	1	1
Plant area	1	1
Toilets	3 floors	M 4 Uri.4 F 7

Space allocation

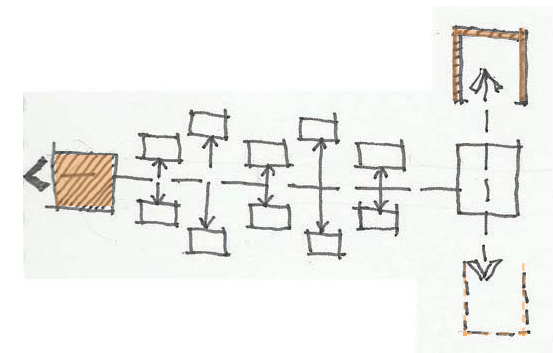


PROJECT INTENTIONS

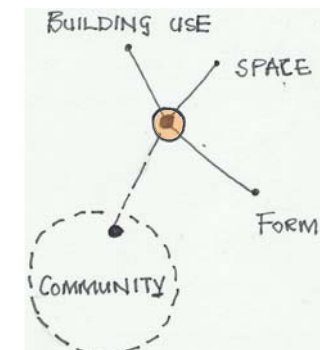
Create a public library that connects to the existing urban design and contextual landscape. The art gallery, museum and library having a linkage. And responding to the nearby social spaces.



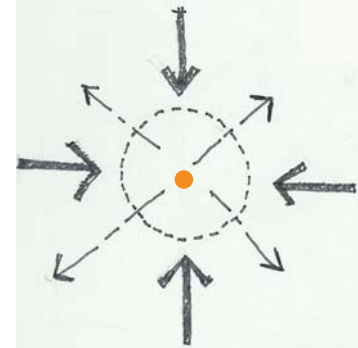
Library that responds to the public domain in a space that is pedestrian catalysed, and creating a responsive language that gets clues site and precedents.



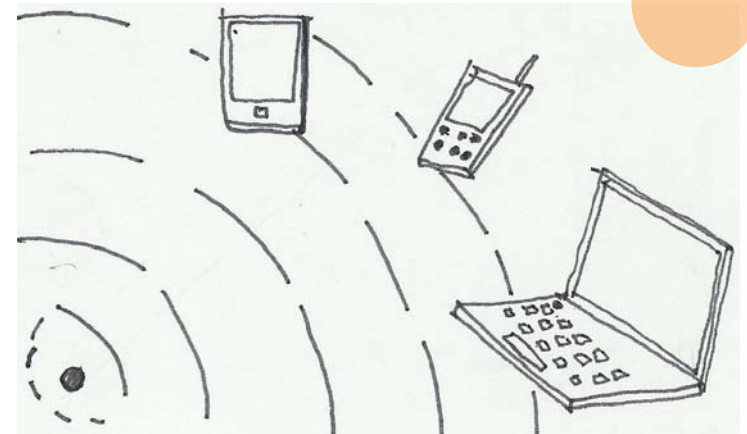
Public library as a gateway for people in the community to come together and share ideas, not necessarily a traditional form where people sit down, open books and study. But also has other community social functions connected to it.



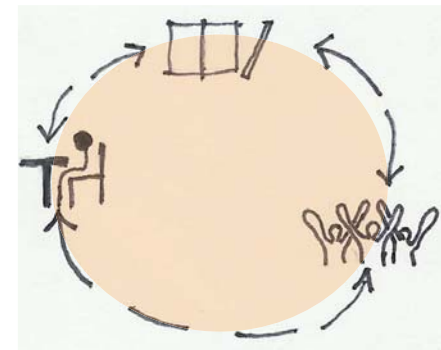
A public library as a 'street public campus' that encourage local knowledge were for community, instead of it being a place where people seem to be forced to go out of their way to visit.



A public library that uses technology and provides electronic data and community support spaces. As the library grows and becomes bigger in technology, the old public library will become the archives and storage facility for old books.



Learning is fun 'WORK, LEARN + PLAY'



EXISTING FRAMEWORK ANALYSIS





In the city of Gaborone there is lack of communal space where people can gather together for various reasons mainly to share activities. The city must try achieve grouped communities where public functions happen together in a space linked to pedestrian movement to uplift the city.

The squares in main mall achieves activity nodes for the central park of Gaborone, by creating relating high activity squares. walking through the squares, they create a poetic pedestrian relation by bring people together in the space, especially on weekends. This enhances the city life. (www.designgenro.co.bw)





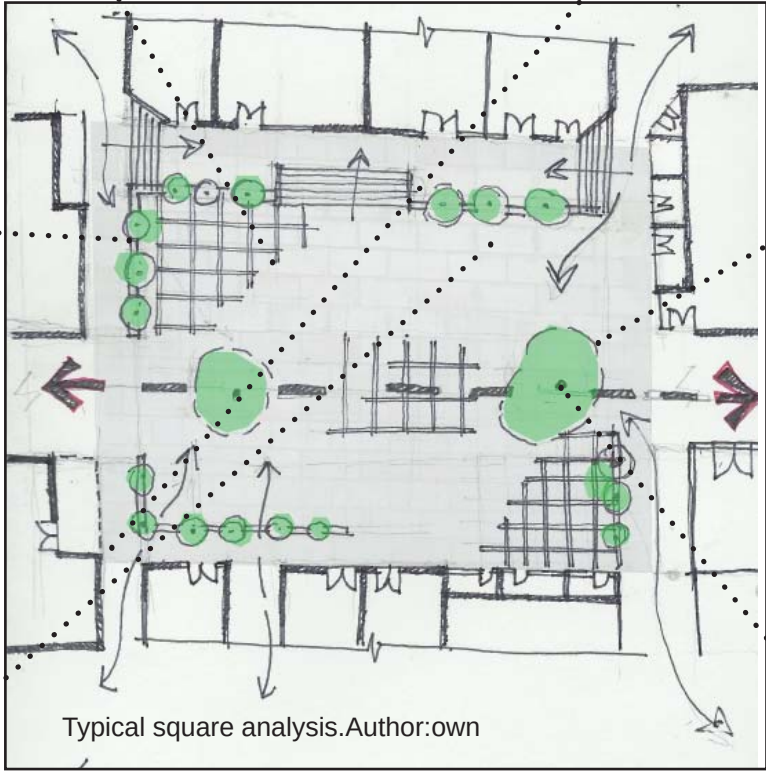
Music at the square.Author:own



Plants and flowers decoration.Author:own



Market at the square.Author:own



This is a study of how the square works, and how different spaces, surfaces and textures and edges link to the square. The square has street furniture, trees and paving and this space has high pedestrian energy and motion. By understanding how the square works in a bigger scale, this allows for using it to link the building in a smaller scale.



Paved surfaces with trees growing.Author:own



Gathering around the trees.Author:own



Pot plants at square.Author:own



SITE PLANNING



Library



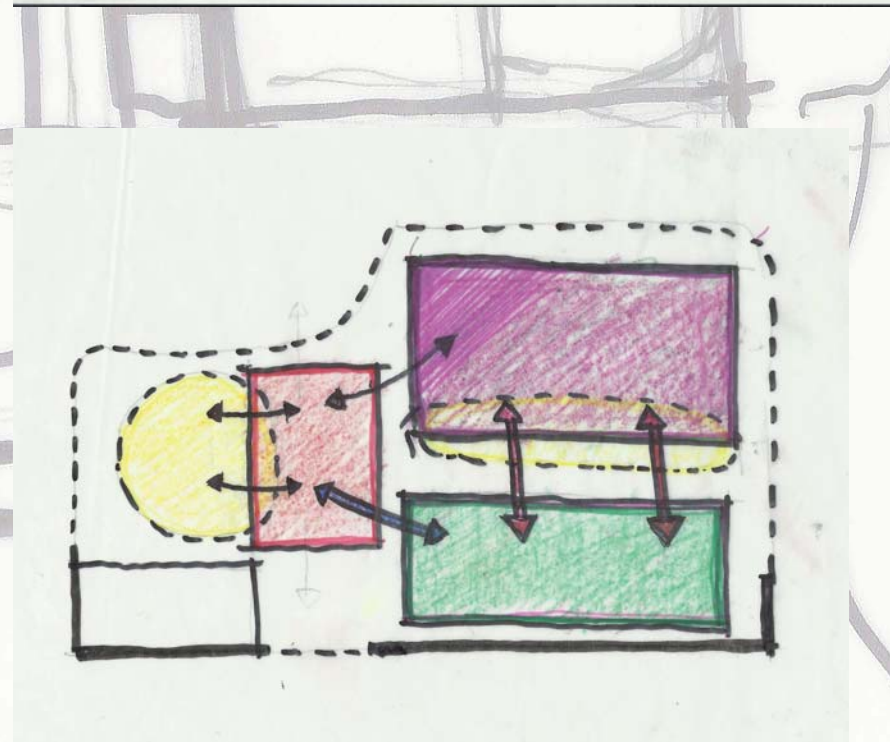
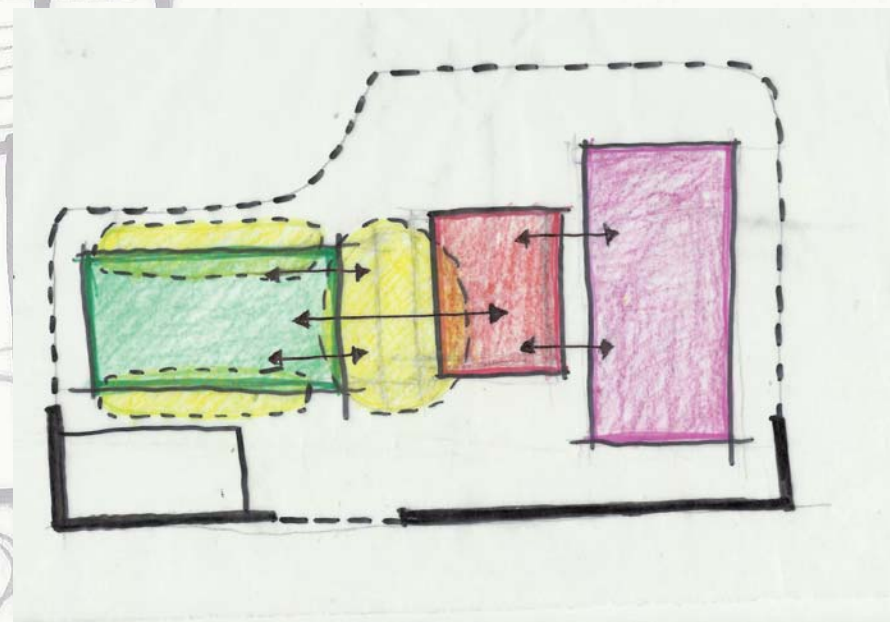
Outdoor sports

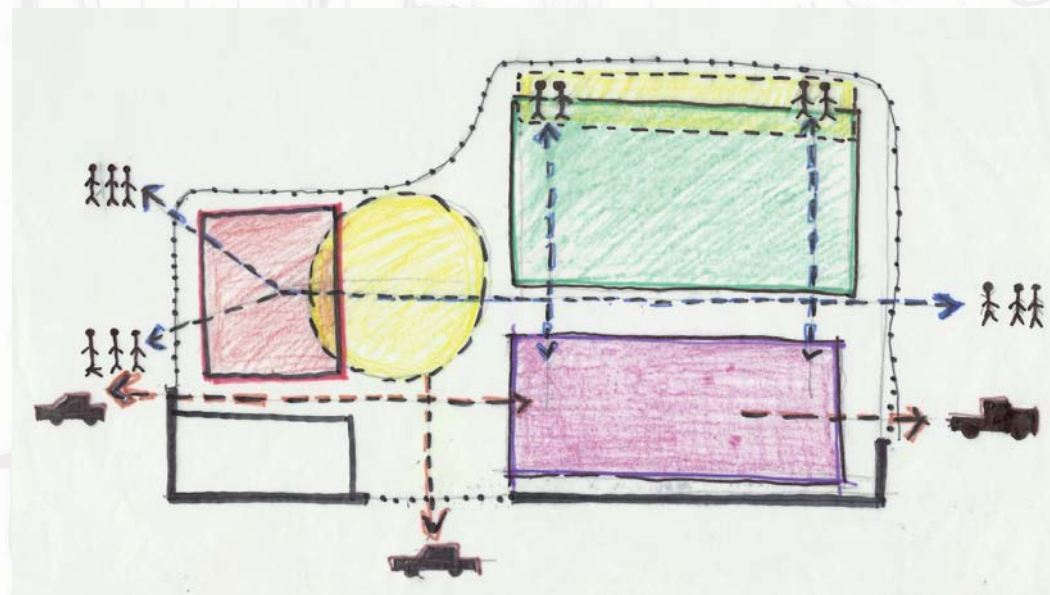
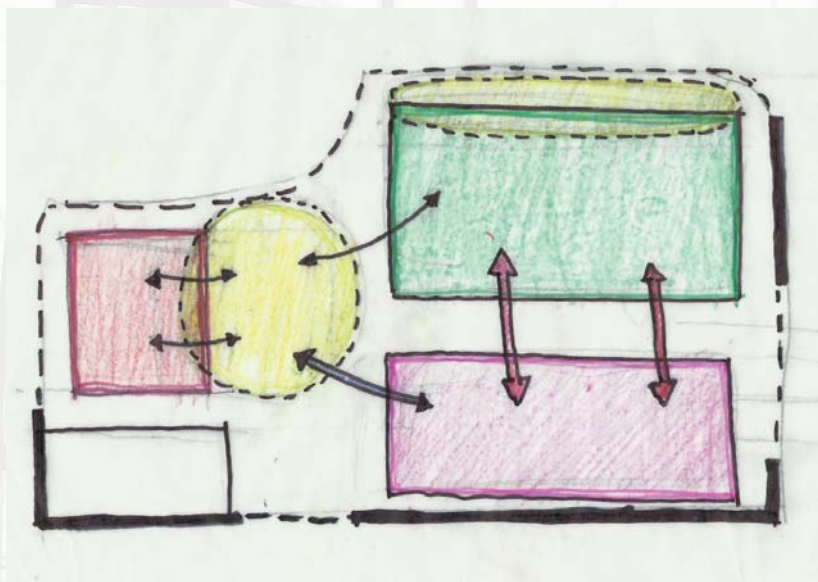
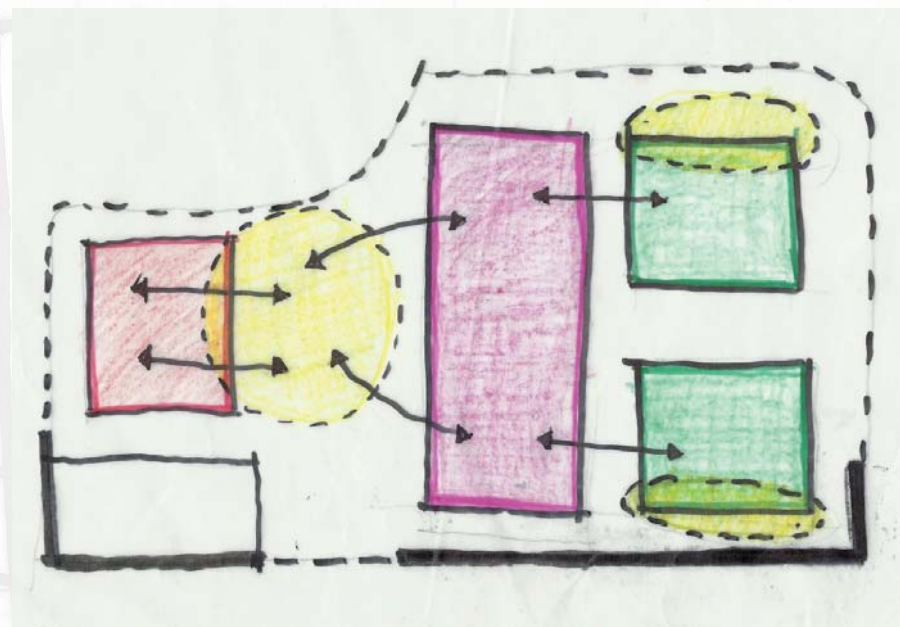
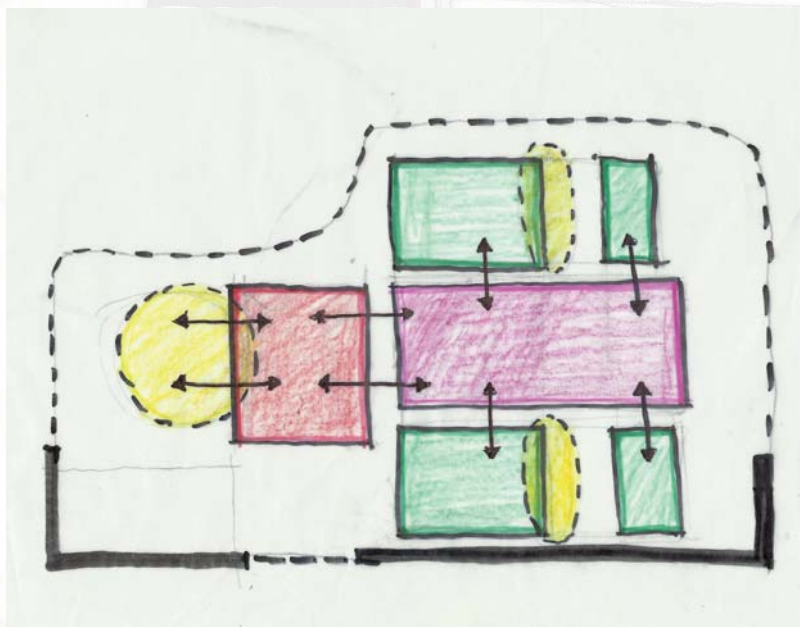


Parking

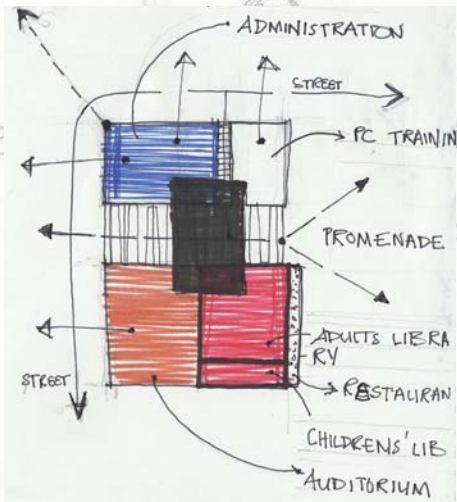
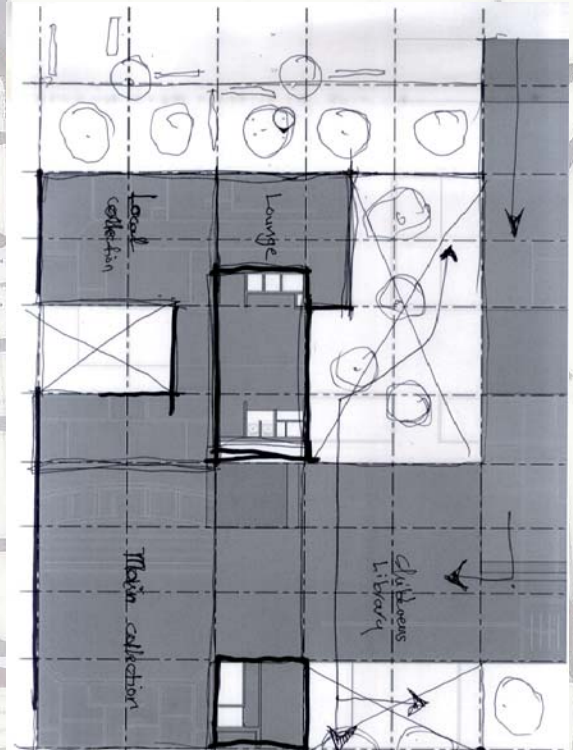
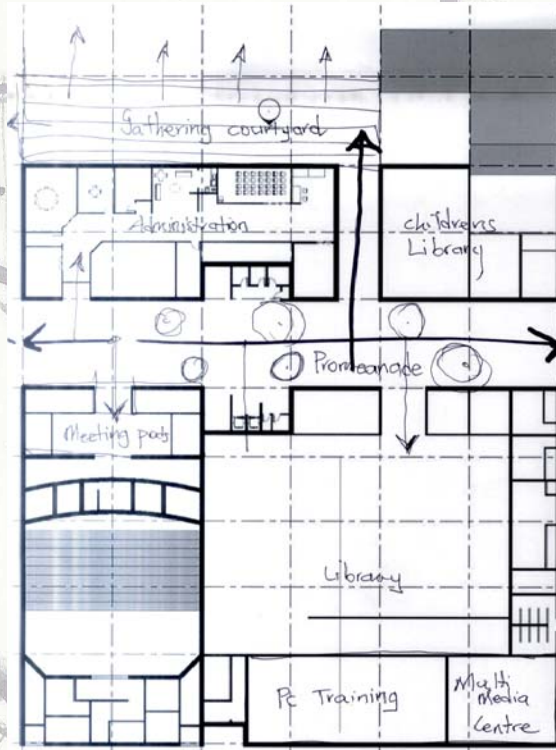
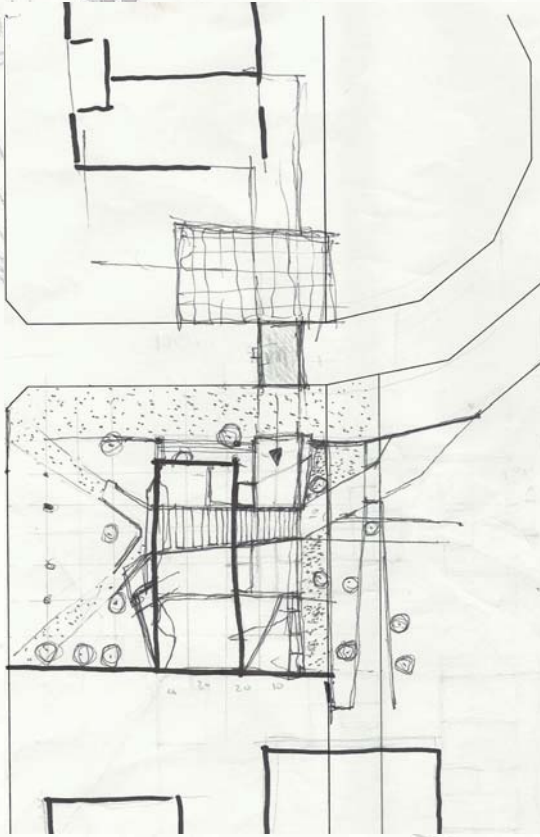


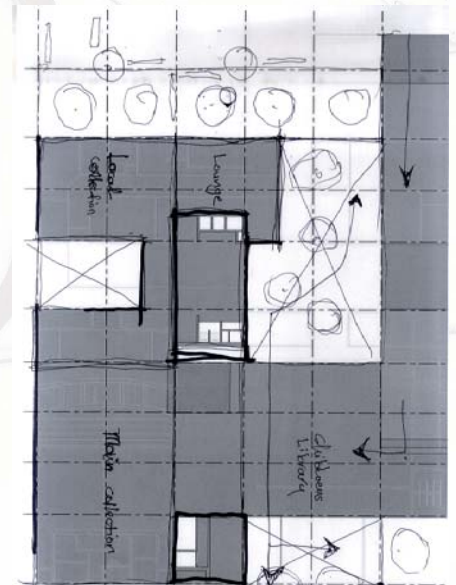
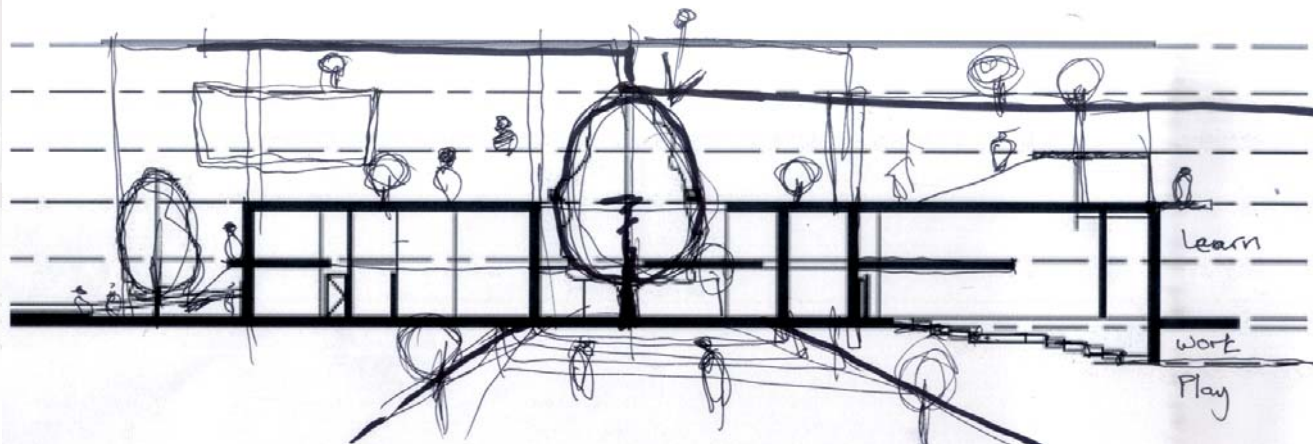
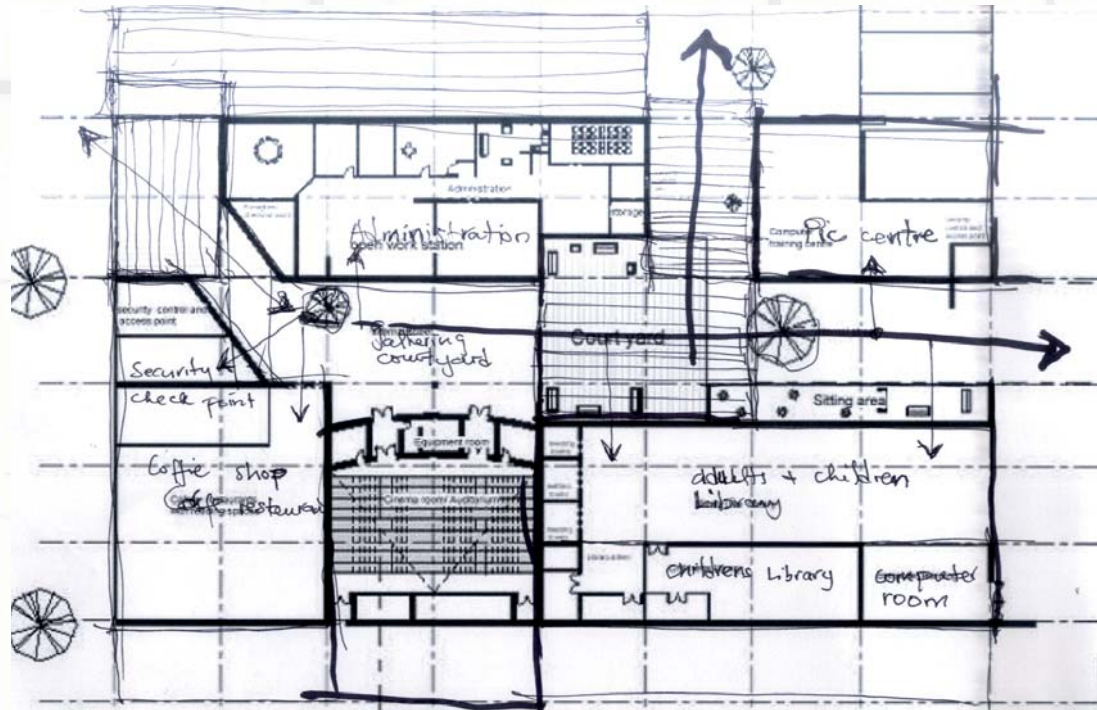
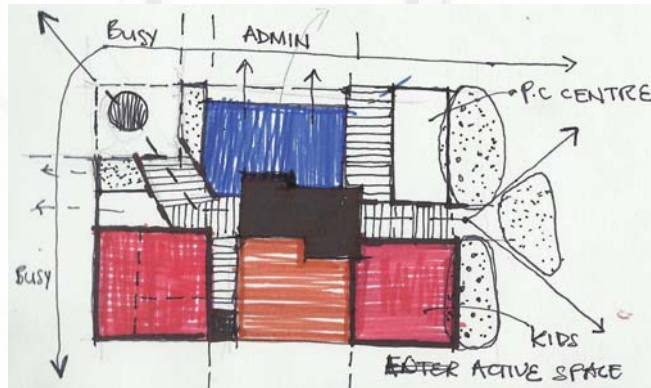
outdoor sitting area



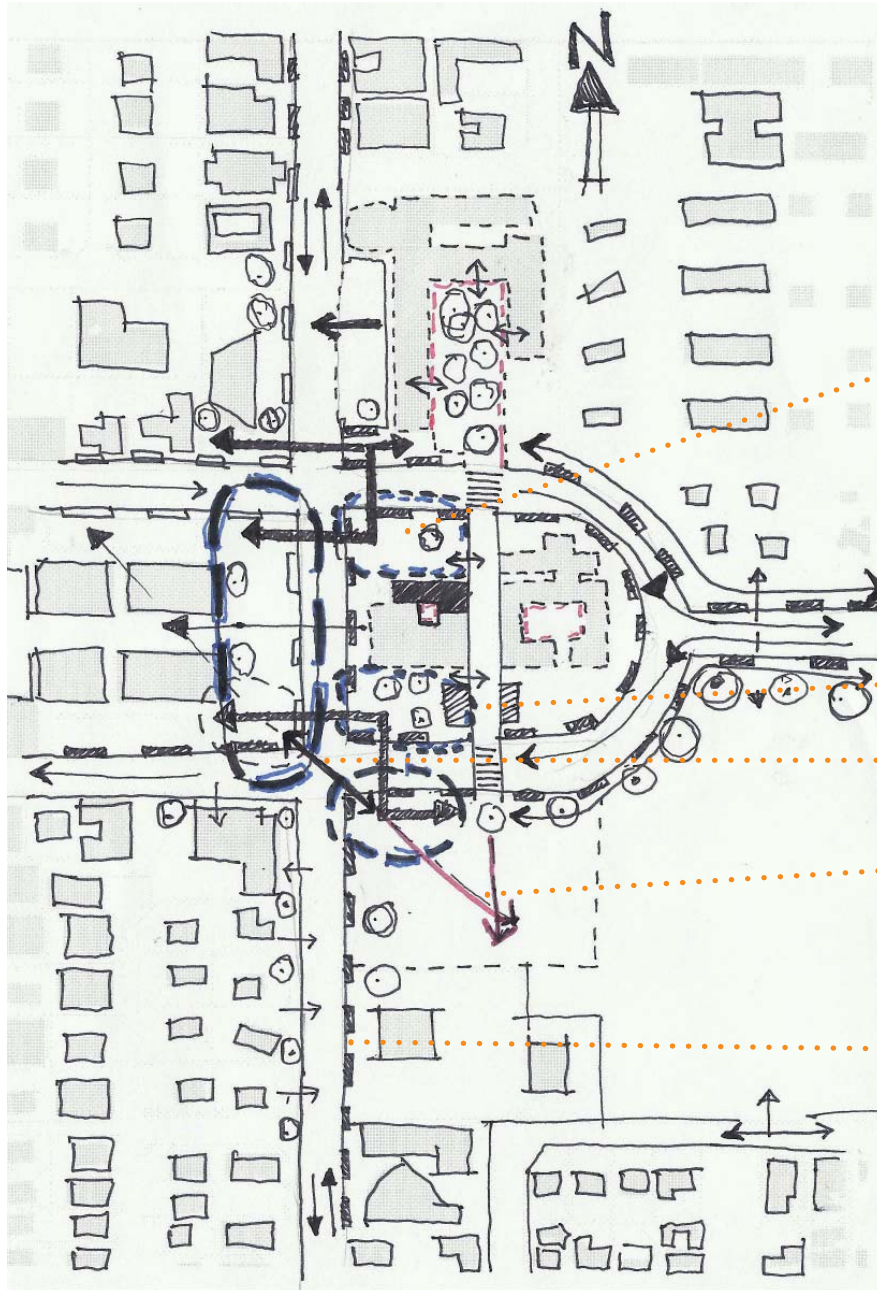


DESIGN DEVELOPMENT





CONTEXTUAL RESPONSE



Street edge analysis. Author: own

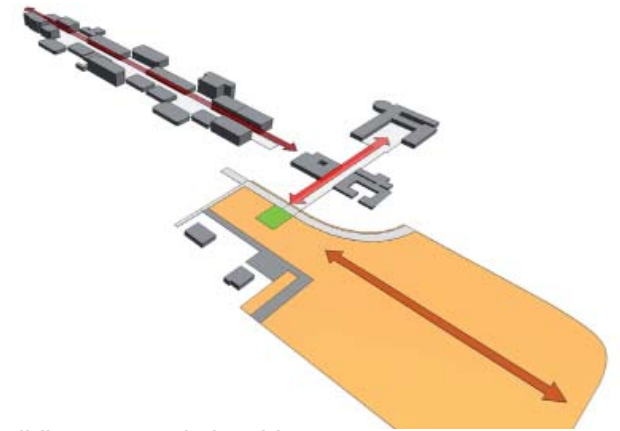
Open spaces

Suggested pedestrian link

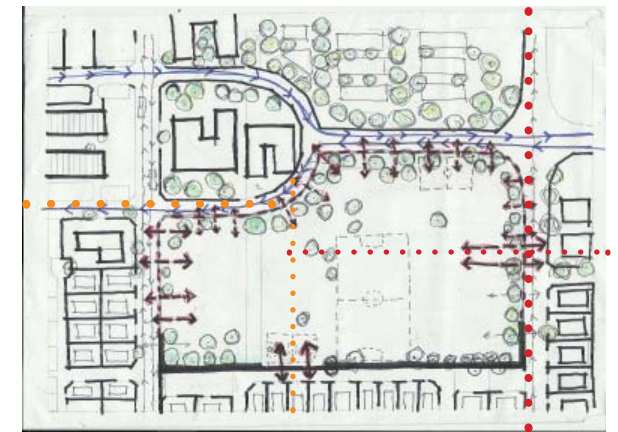
Open nodes to soften corner

Converging space linking

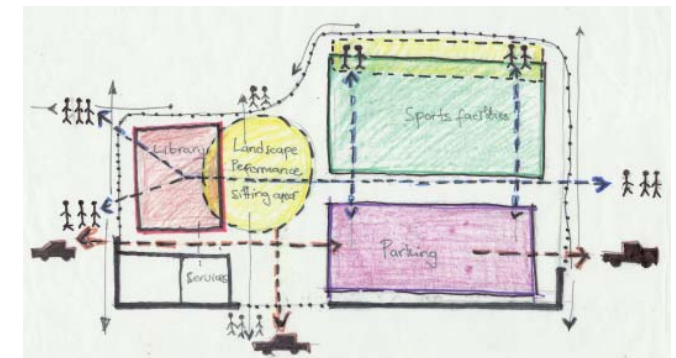
Pedestrian movement



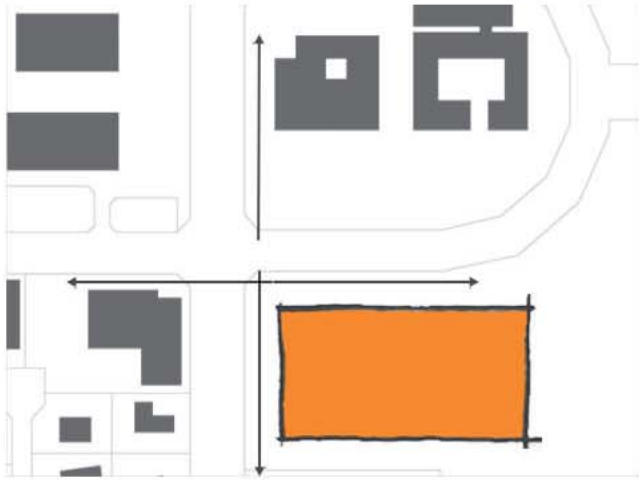
Building mass relationships



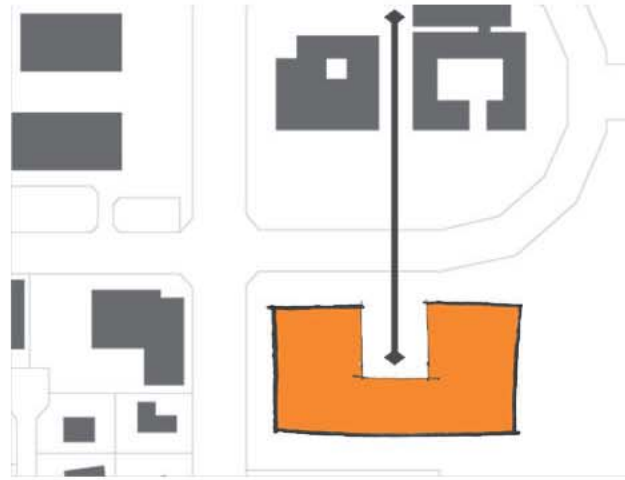
Permiability of edges that allows for transparency and free movement in and out of the site.



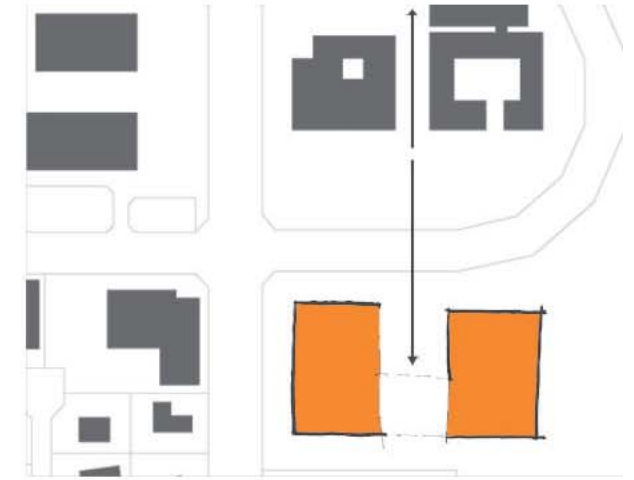
Final site layout programme. Author: own



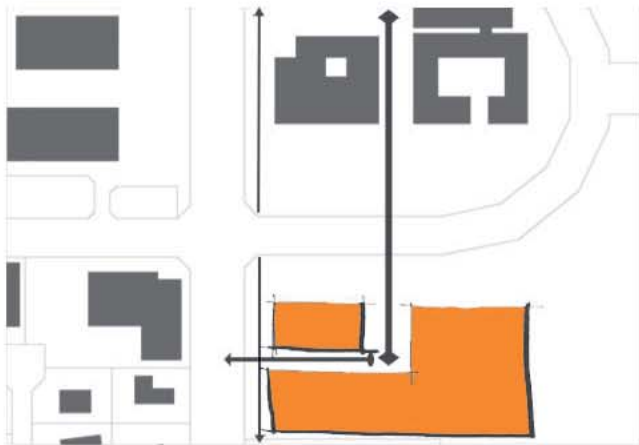
Site area, having a democratic space that is visually connected to pedestrian movement and vehicles on the road.



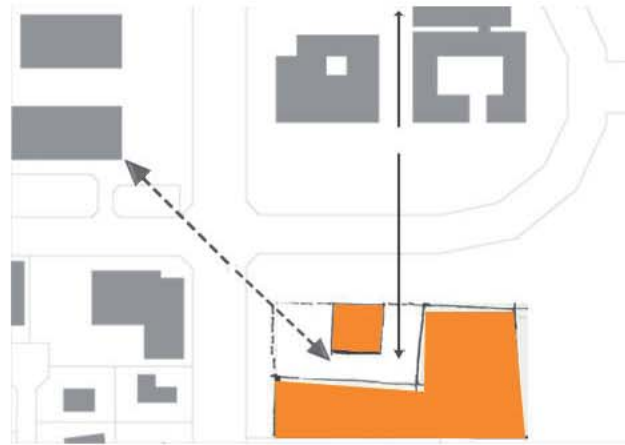
Linking courtyard spaces that relate to each other and create formal subtractive order to the shape.



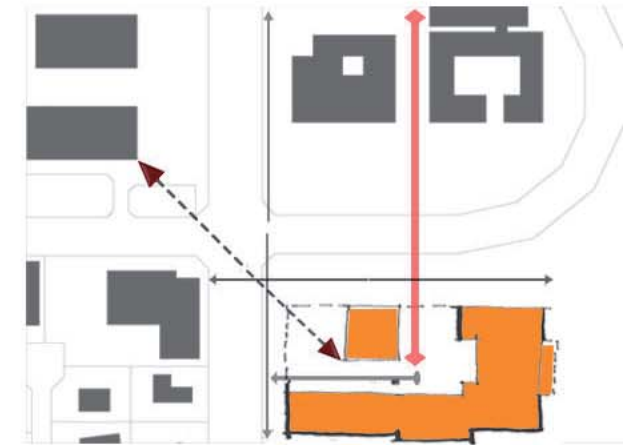
Two distinctive areas creating public and private spaces, and a semi-public element creating a connecting element.



Segmented forms to respond to permeable + creating transparent through experience for pedestrians.



Edge is softened by shifting spaces and creating a subtractive clustered form that have interlocking volumes to unify them.



Courtyard spaces relating to the Museum and art gallery, and gathering courtyard responding to the Main mall area by creating a soft edge.

CASE STUDY

Courtyards

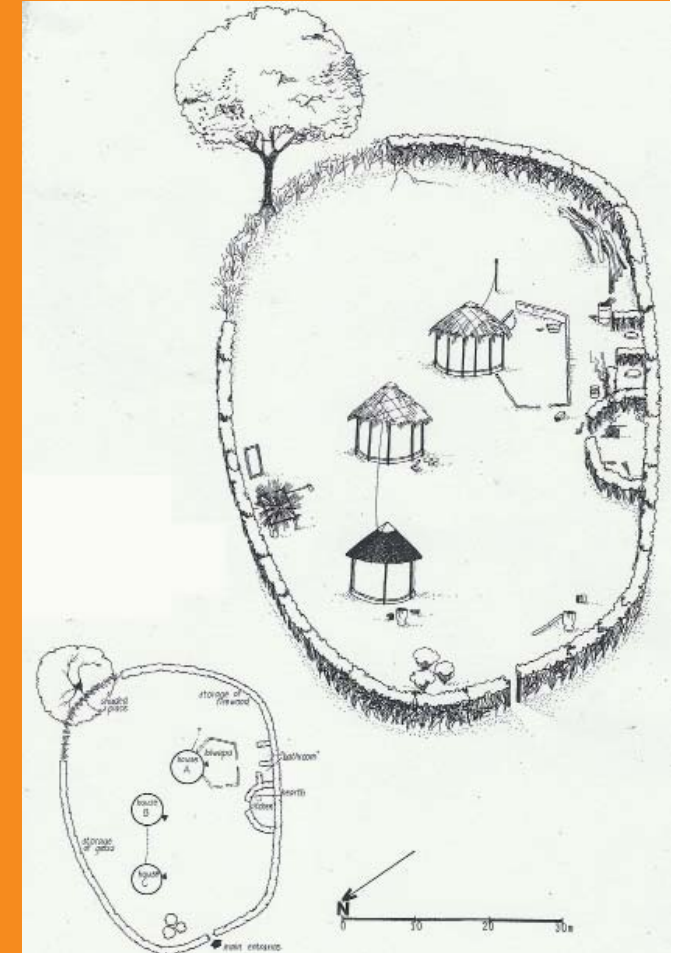
Squares are found in all types and forms in gathering spaces, and are set out in various scales and meaning in different cultures. At village level, the form of small courtyard is called 'Lelwapa' and it is represented by the kgotla and its primary is for social gatherings. (Designengro.co.bw).

The layout of the Tswana compound is a setting that artistically supports the lifestyle of a traditional tswana family. It comprises of positive-volumetric spaces (the hut), and negative-volumetric space (courtyard). The way the interior is expressed is as important as the way it is expressed externally. In understanding the compound, it exists in various scales and grounded together they create a large family group that becomes the ward and ultimately the village.

By expressing a courtyard space social spaces are created and a relationship between the closed space (the hut) and the open public space happening around the courtyard. The Tswana compound consists of the heart lelwapa (courtyard) and the important role of the overall rhythm of the layout. This results in the forecourt spaces and backcourt from the entrance courtyard to the the lelwapa and ultimately opening up to other Huts. The courtyard acts as the main orientation space for the collective spaces (Larsson A&V:1984).



Larsson A & V. Layout of a tswana dwelling. (1984:155)



Larsson A & V. Tswana compound. (1984:155)

In spaces around the city, the courtyard is a public gathering space with various aesthetic, formal and thermal delights for people in the community. This can be a space filled with social functions, sitting space, restaurant playing areas and cultural spaces. Different elements and meaning are expressed in formulating courtyards:

-Entry sequence, first transition from the heat, noise and bustle, glare of the street to create a quiet space.

-Orientation, the courtyard is an important element and normally it is connected with street motion. In some cases the courtyard responds to the sun orientation and comfort for the inhabitants.

-Placement within the building, this can be achieved by making visitors wonder through the site through the different building clusters. There are more than just central spaces, but can also be two walls that create barriers to adjacent buildings or streets.

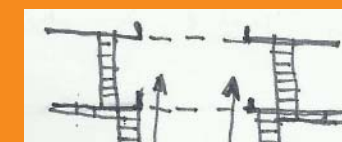
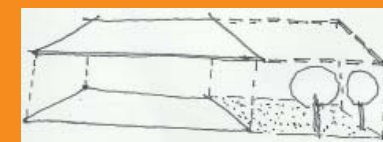
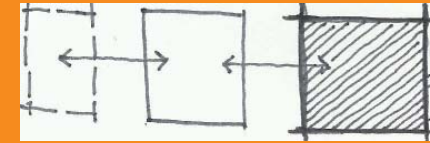
-Formality and symmetry, looking at the context to create a balance of space and can be less formal which normally is a result of change overtime.

-Exposure, this studies how courtyards are exposed to nature as a way of taking use of the natural environment.

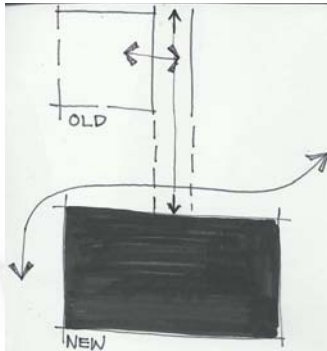
-Plants, they are an important element that adds on to the courtyard. Plants are important to the human senses of sight, smell and in some cases can be a catalyst for fresh air and evaporation.

-Open and closed Facades, open arcades in a courtyard serve as circulation space and spaces for meeting people spontaneously. This creates inviting spaces and thermal comfort.

-Vertical circulation, this can be though introducing stairs and elevators, and creates a link with outdoor activities and reinforces diagonal and vertical movement in the building.



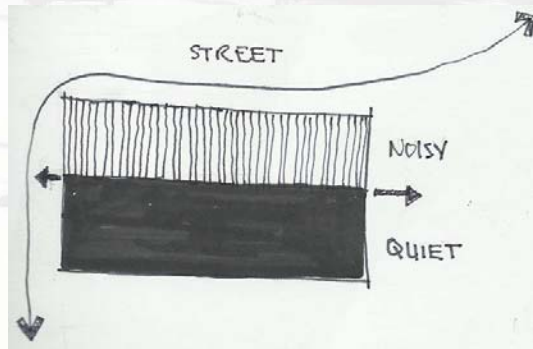
DESIGN CONCEPTS



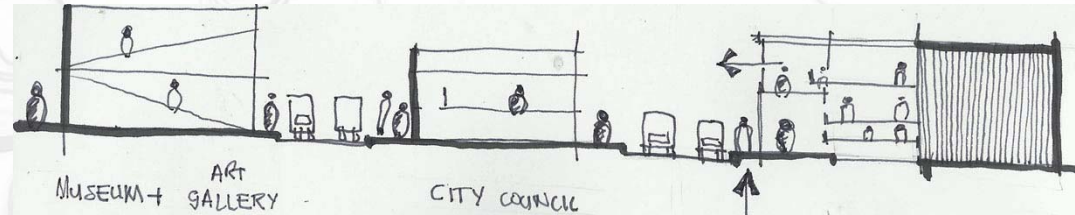
Relationship between the new and old through linking the spaces



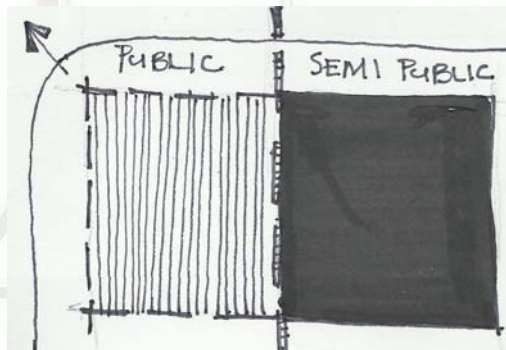
Orientation showing the different spaces feeding around the courtyard.



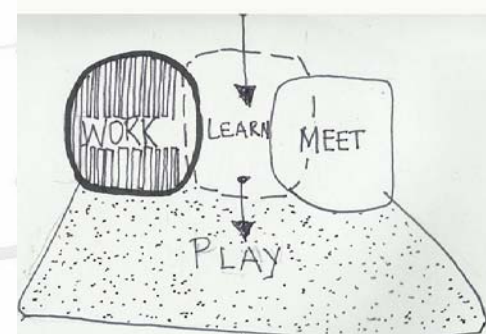
Separation of spaces and orientation

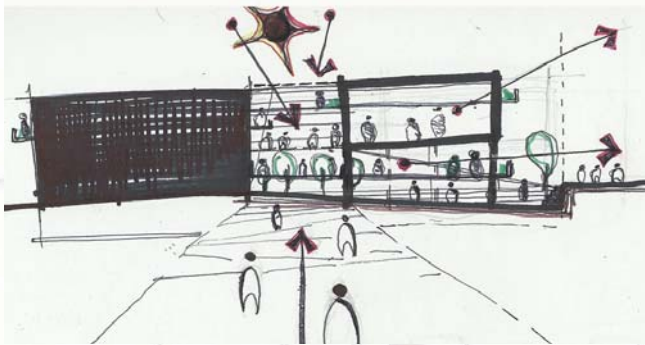


Transparency and permeability of spaces



Relationship of spaces with library spaces happening on the Eastern side

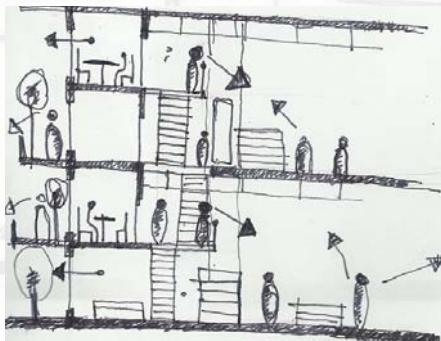




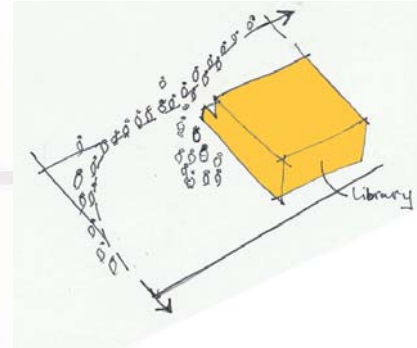
Overhead places defining volumes and to visually show movement inside the building



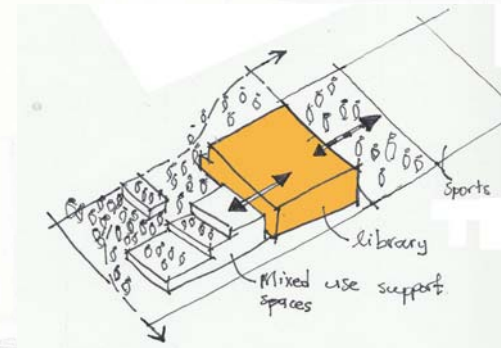
Circulations exposed to street views



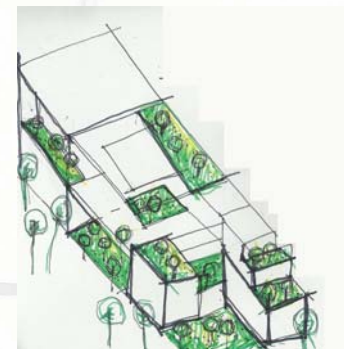
Meeting rooms on mezzanine floors with hierarchy of spaces



Library as a public space for pedestrians to use.

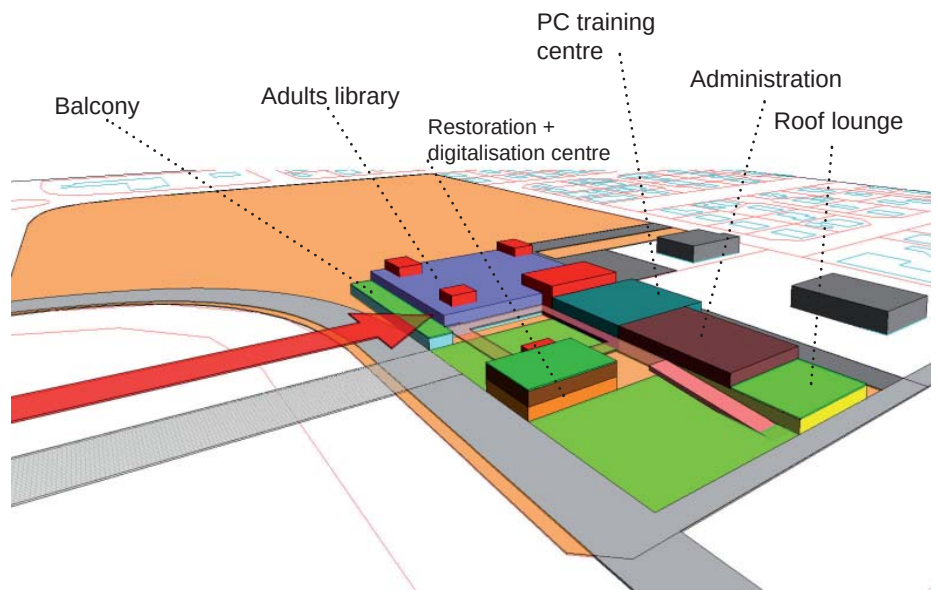
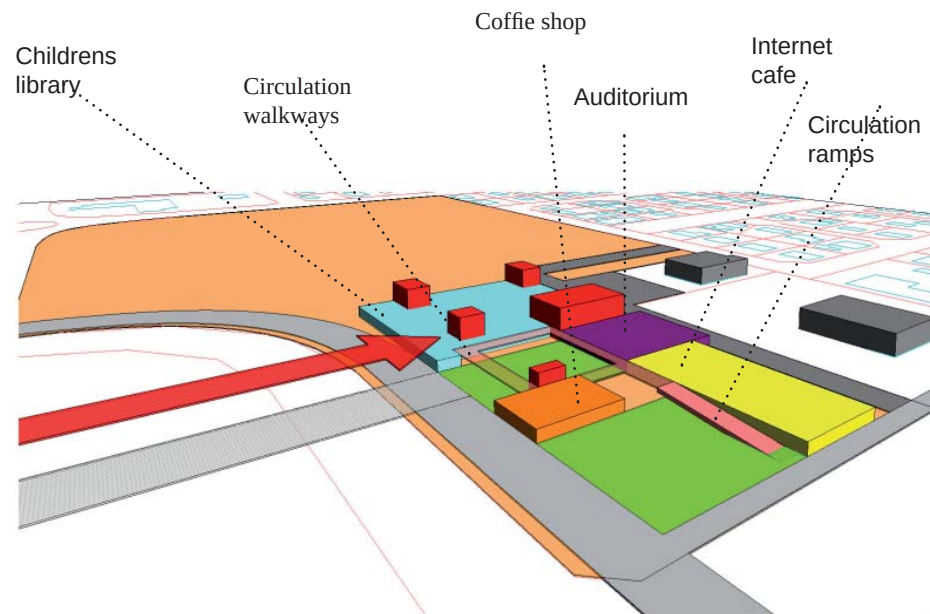
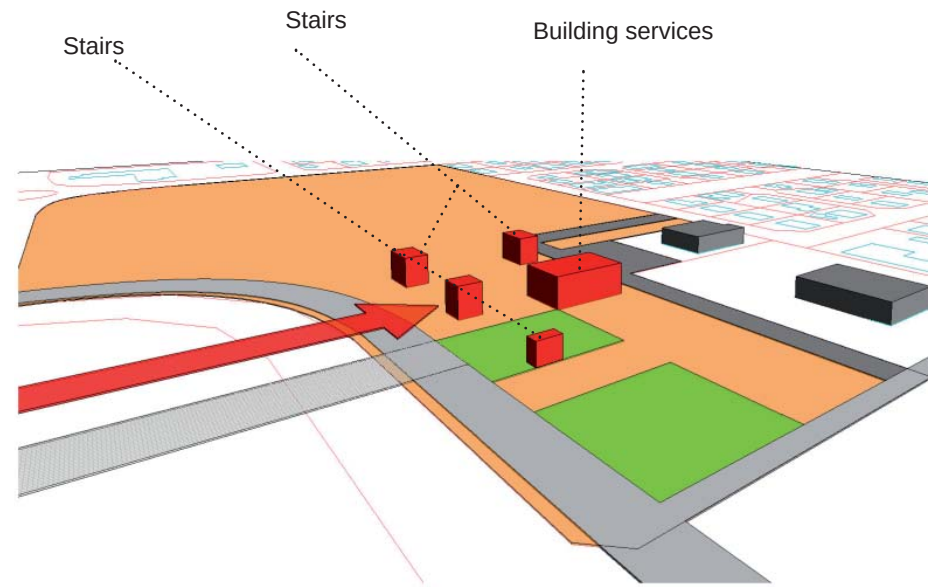
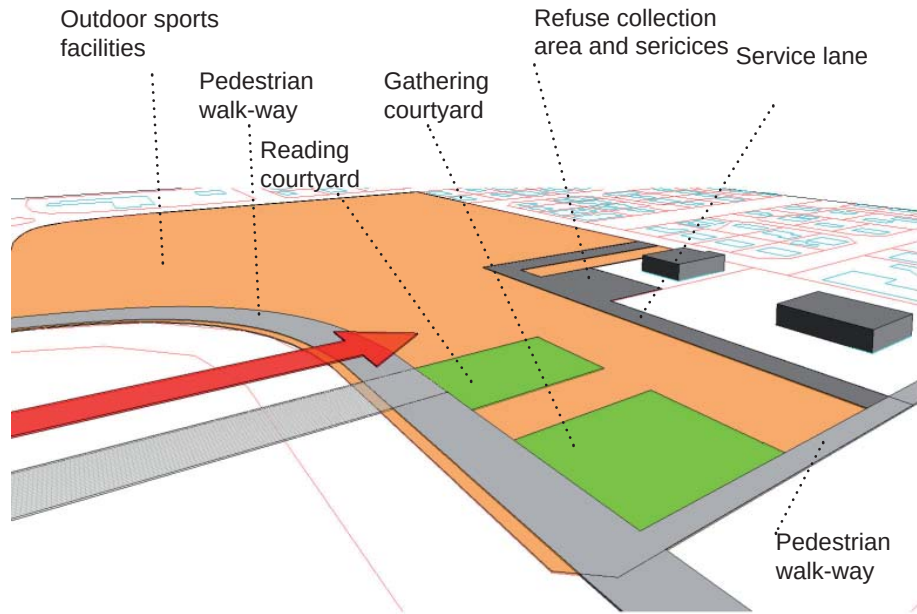


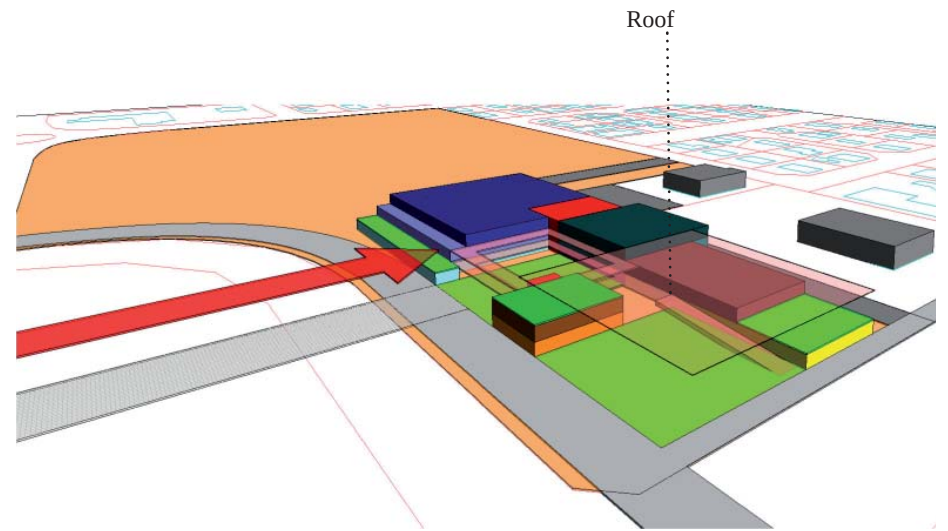
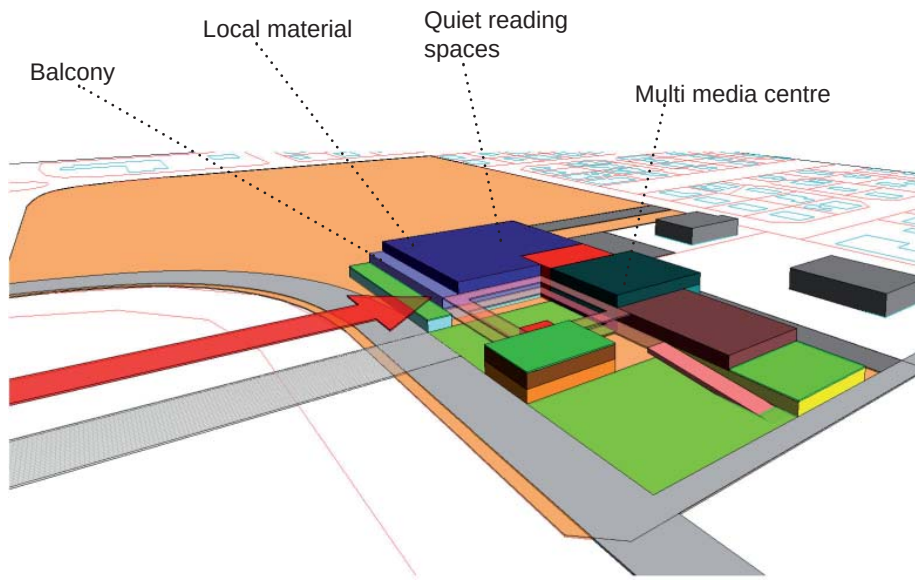
Library taking a link with Mixed use spaces and Sports facilities



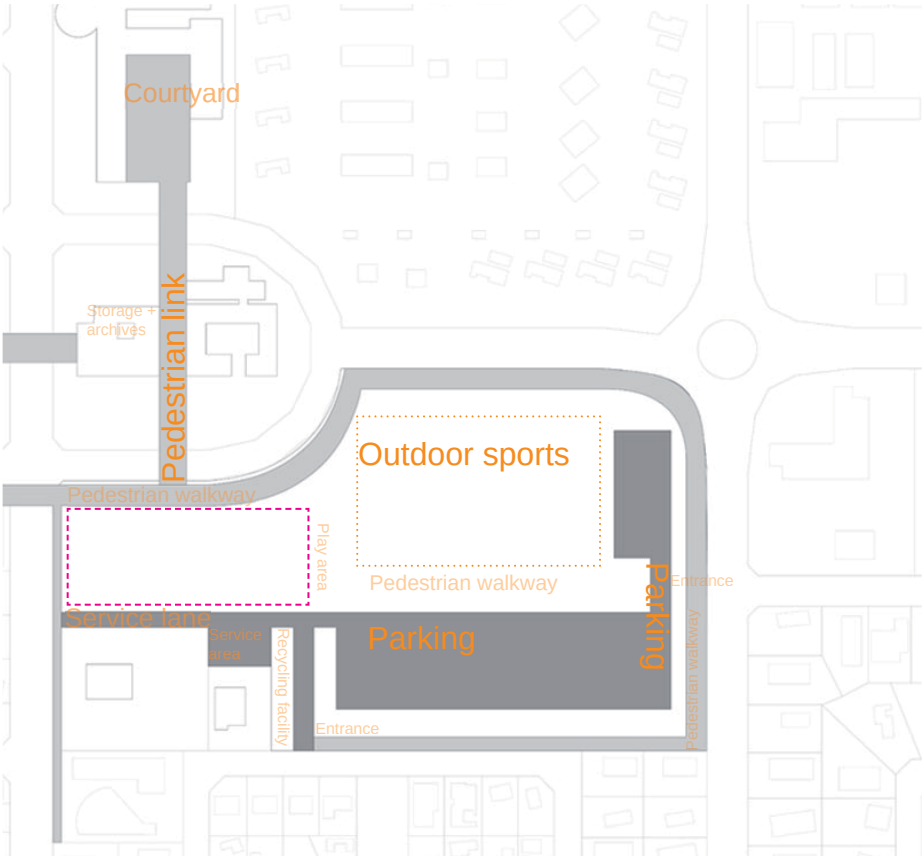
Pulling the surrounding landscape in to the building to create interlocking space

SITE MASSING

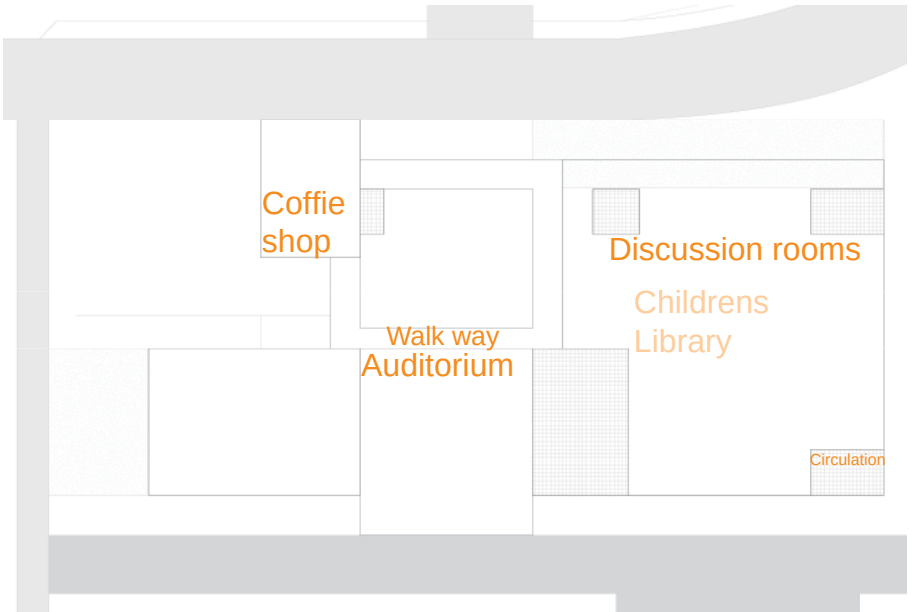
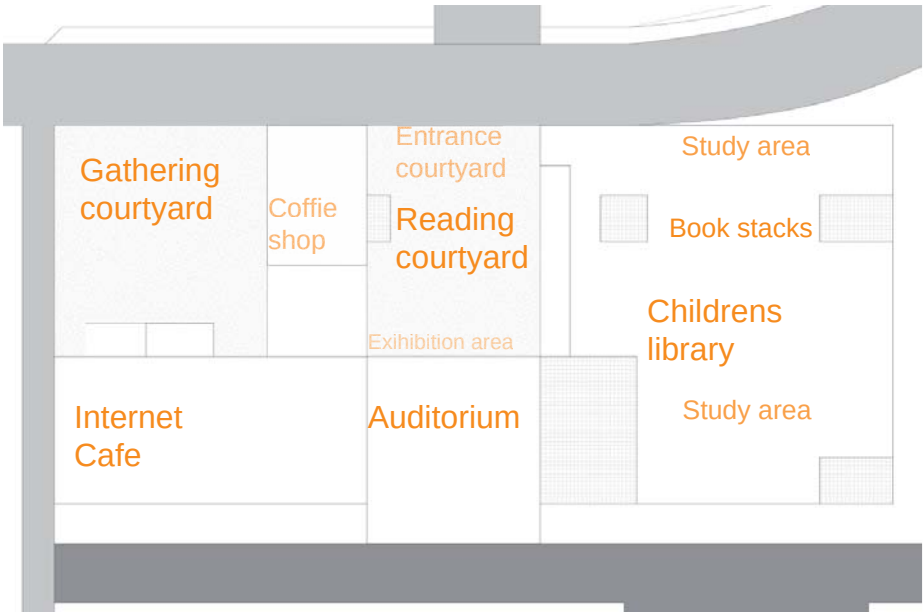


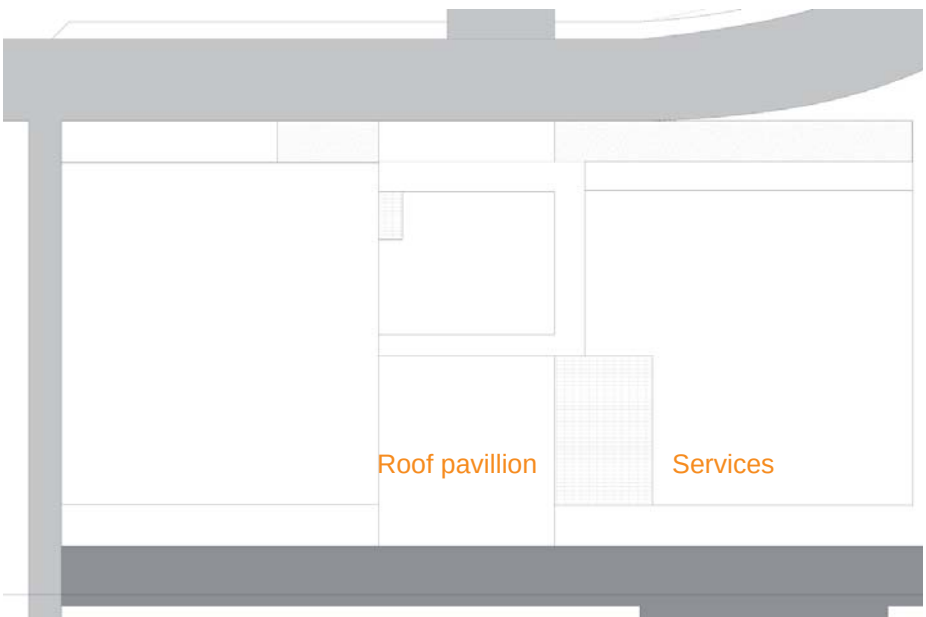
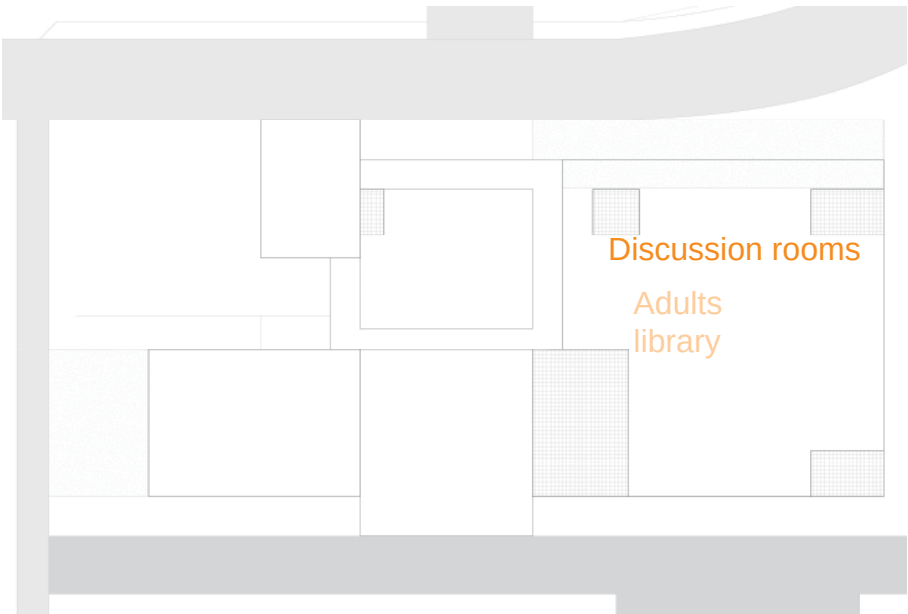
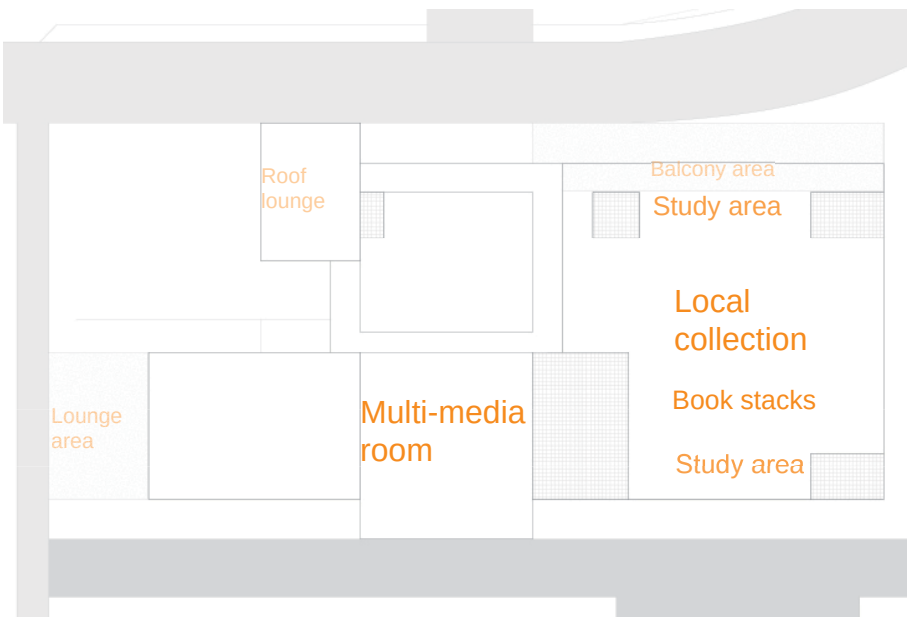
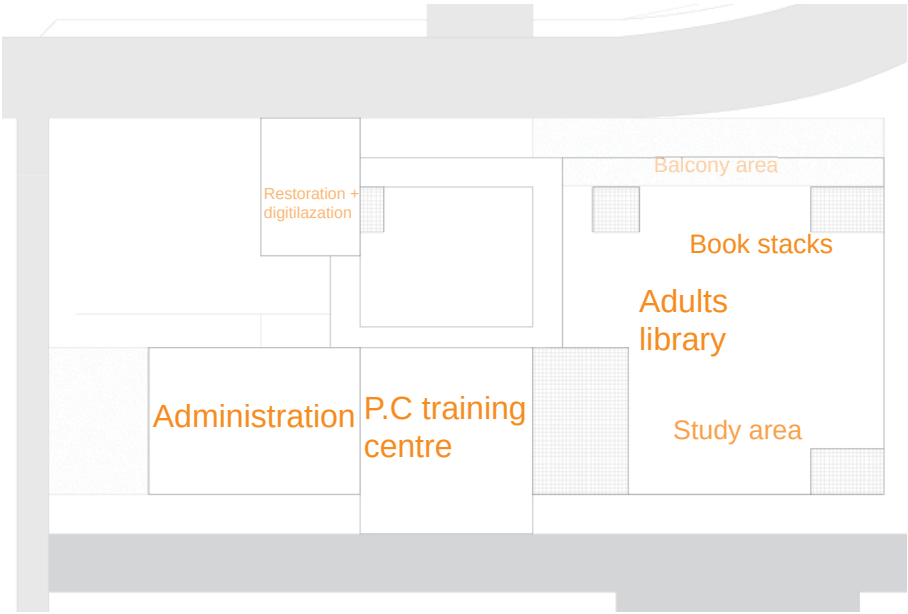


PROGRAMME BUILDING PLAN



Reading + studying		
Adults Library	Meeting spaces	
	Meeting spaces	
Childrens Library	Meeting spaces	
	Meeting spaces	





“The library is not just a fun place to go, its a place to **connect**, to **share**, to **grow** and help others expand their horizons.”

Lynne T



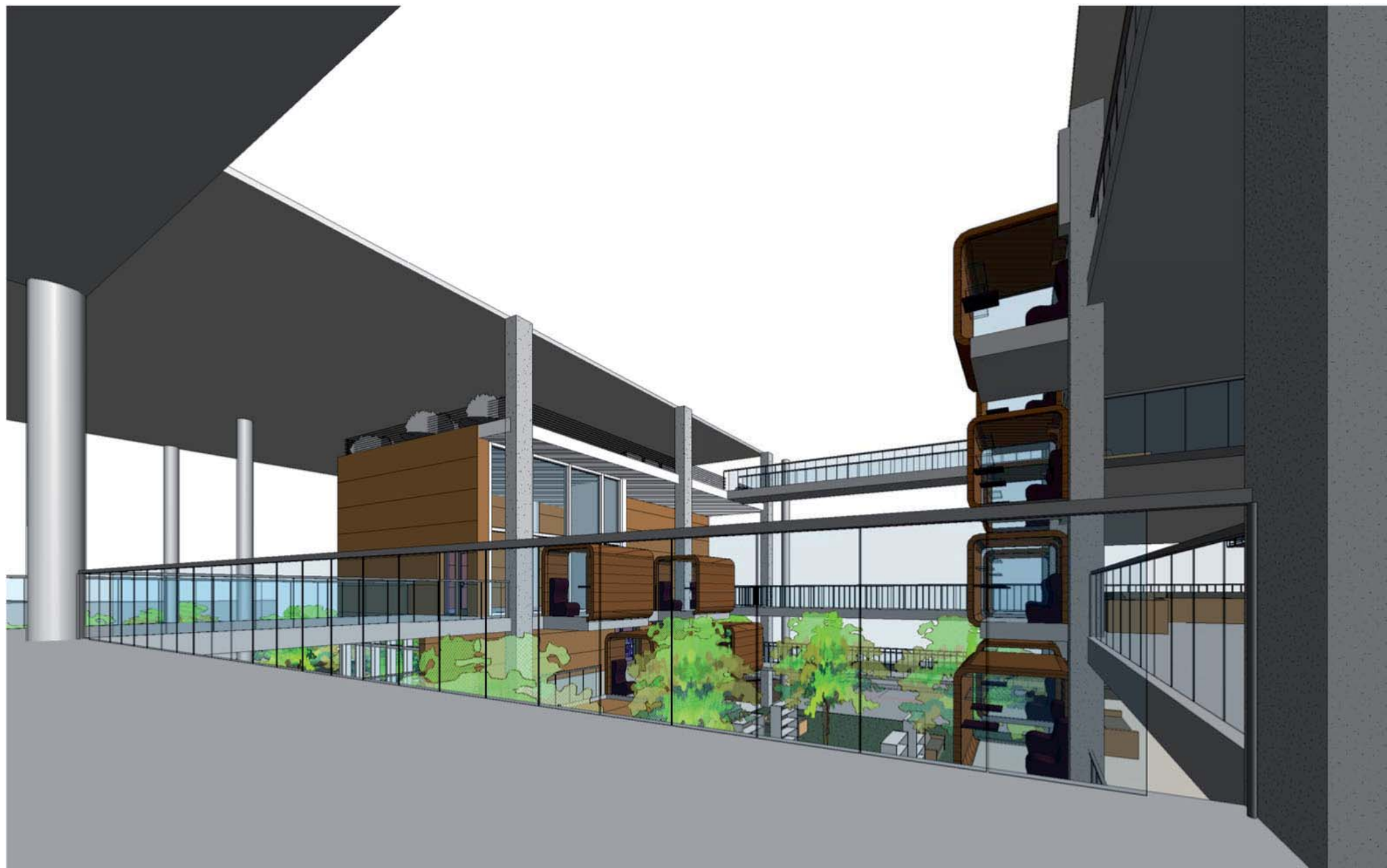


DESIGN



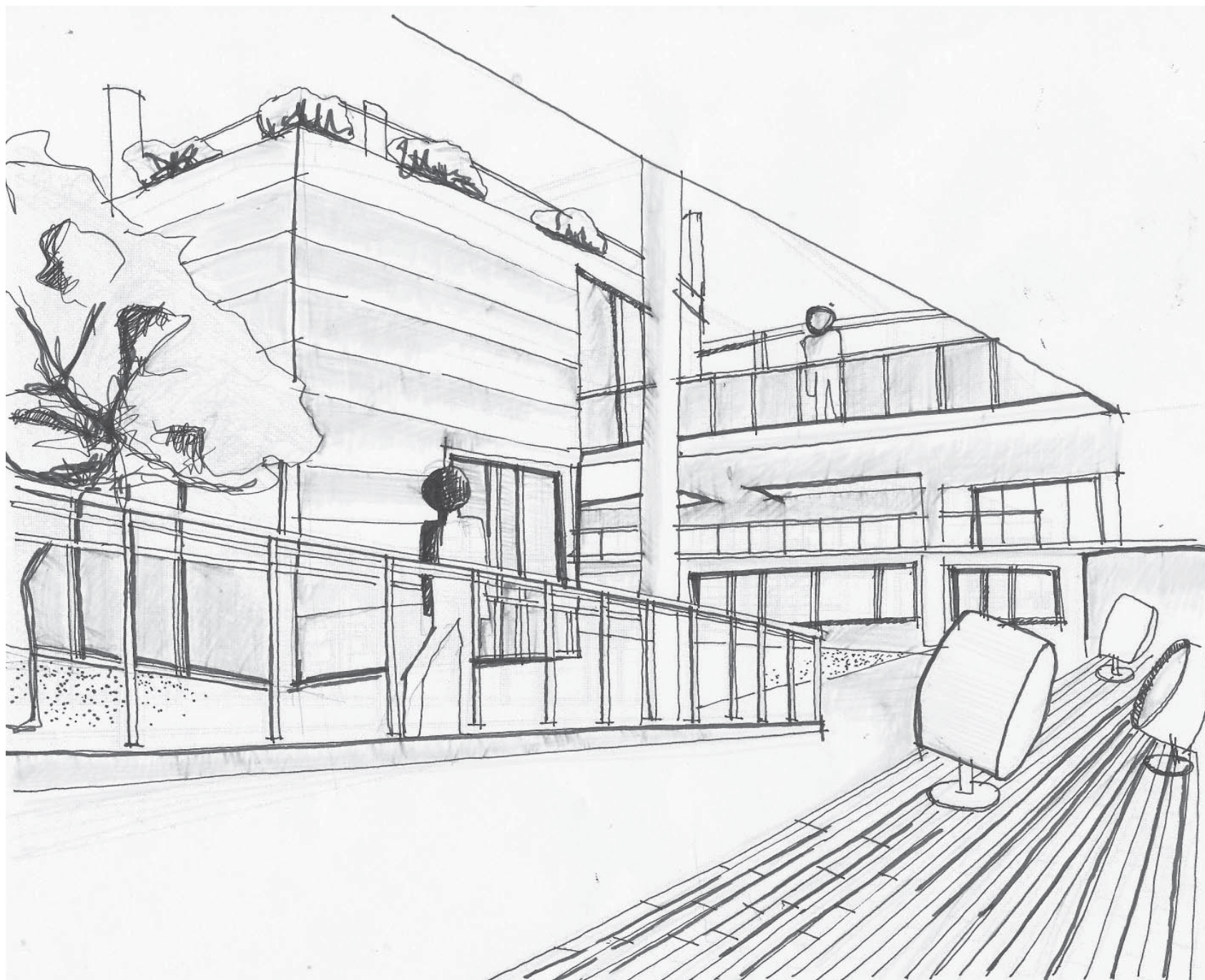
RESPONSE



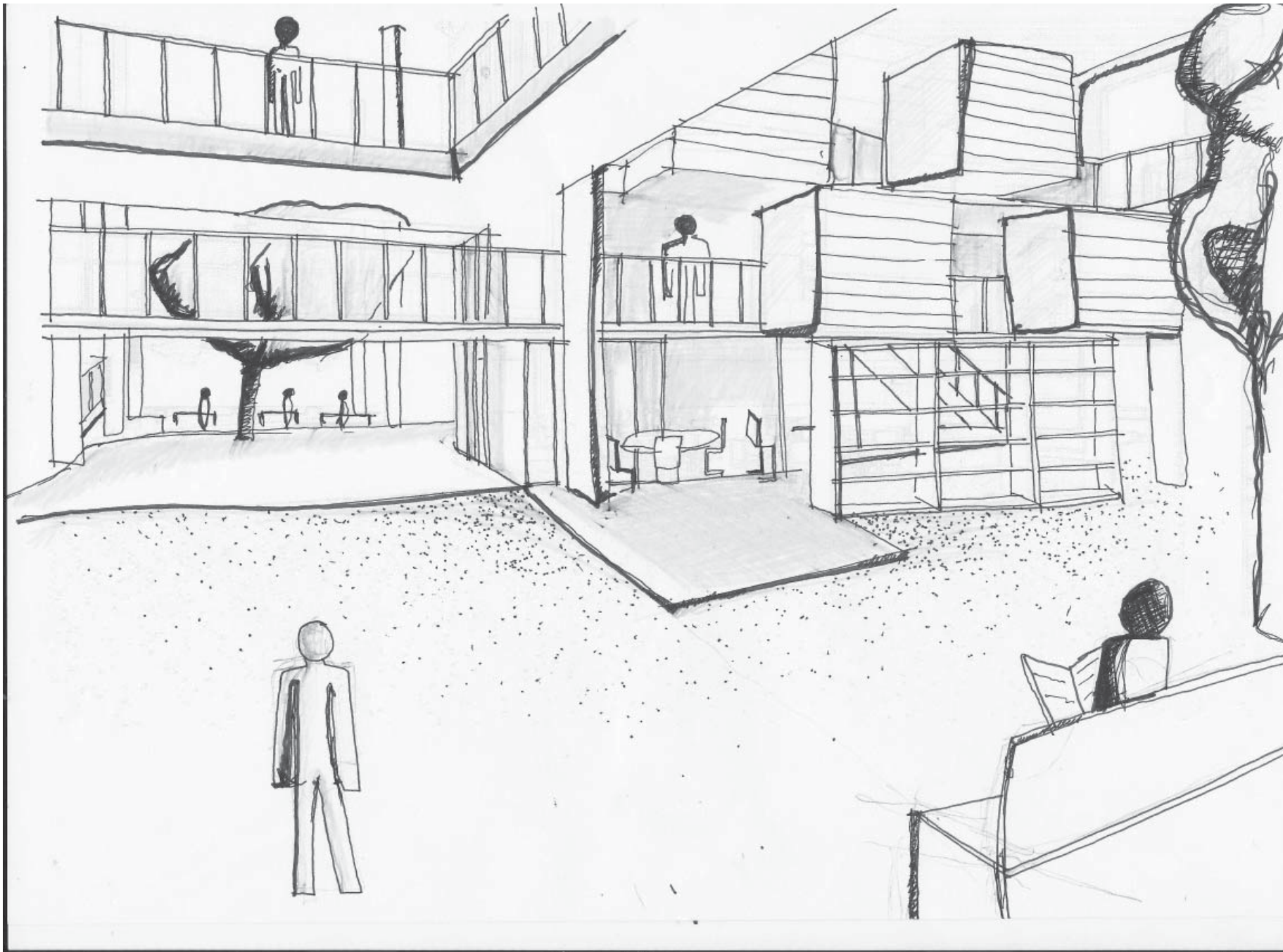




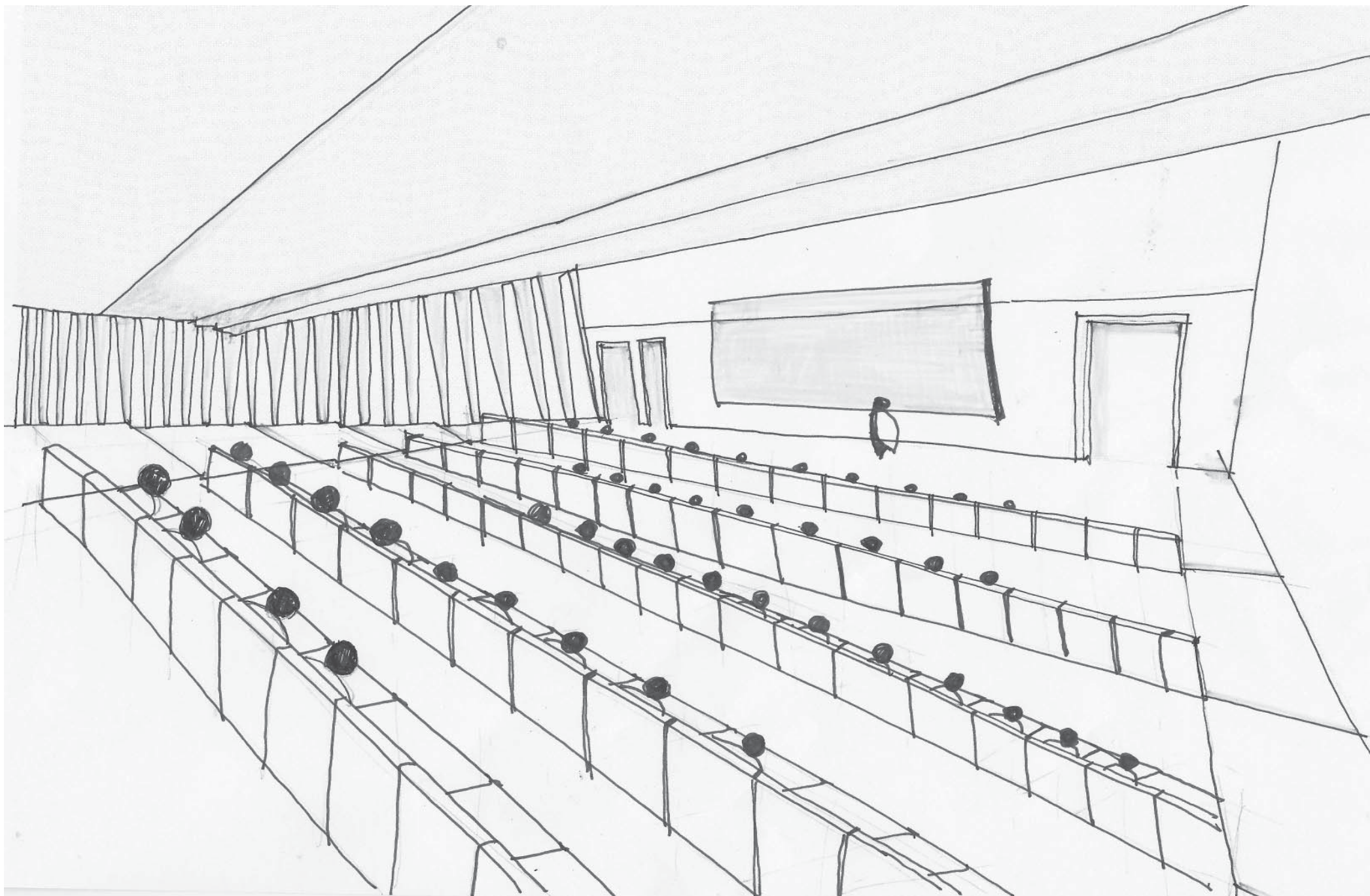




Ramps



Courtyard



Auditorium



Library interior



Gathering Courtyard



Access Ramps

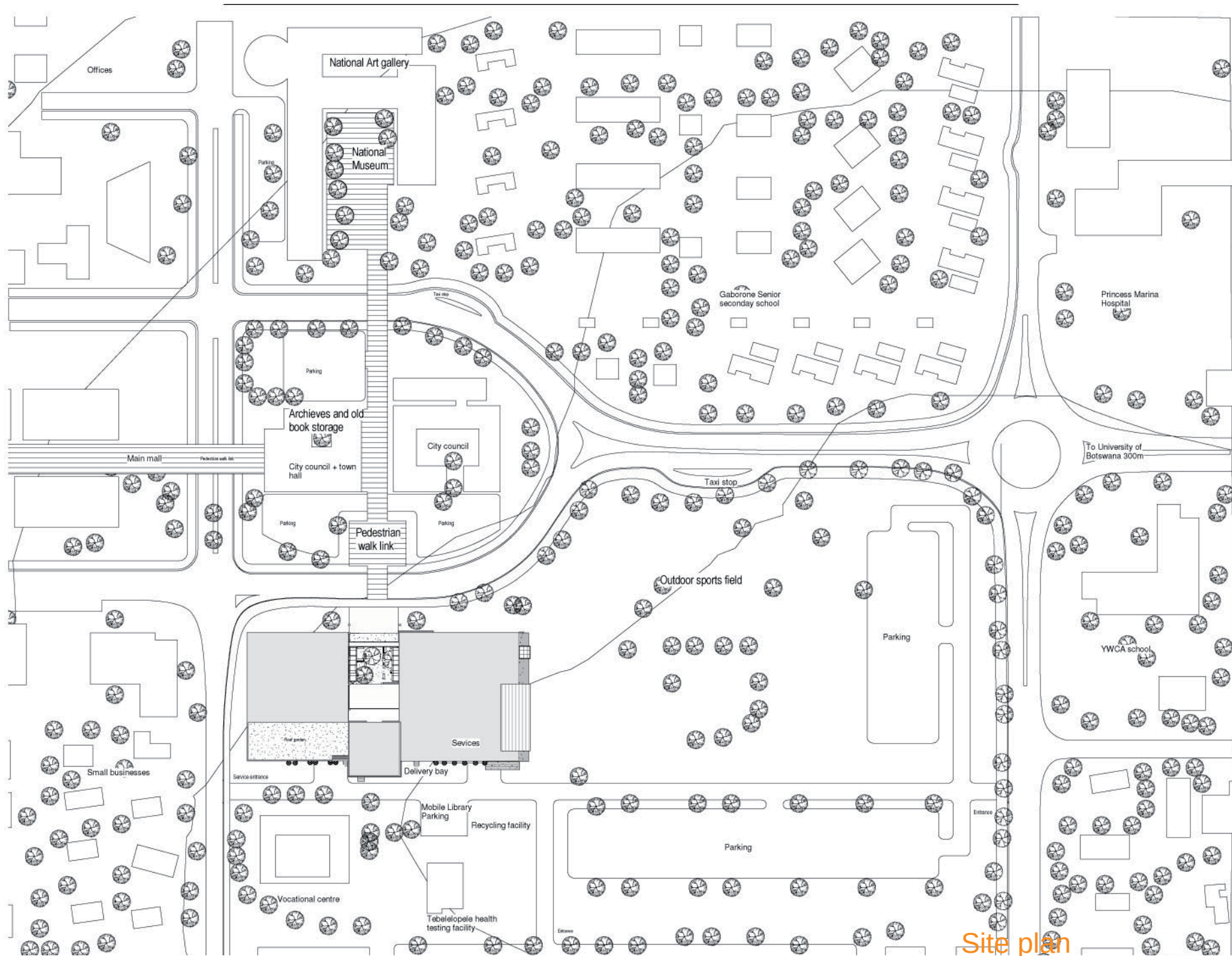


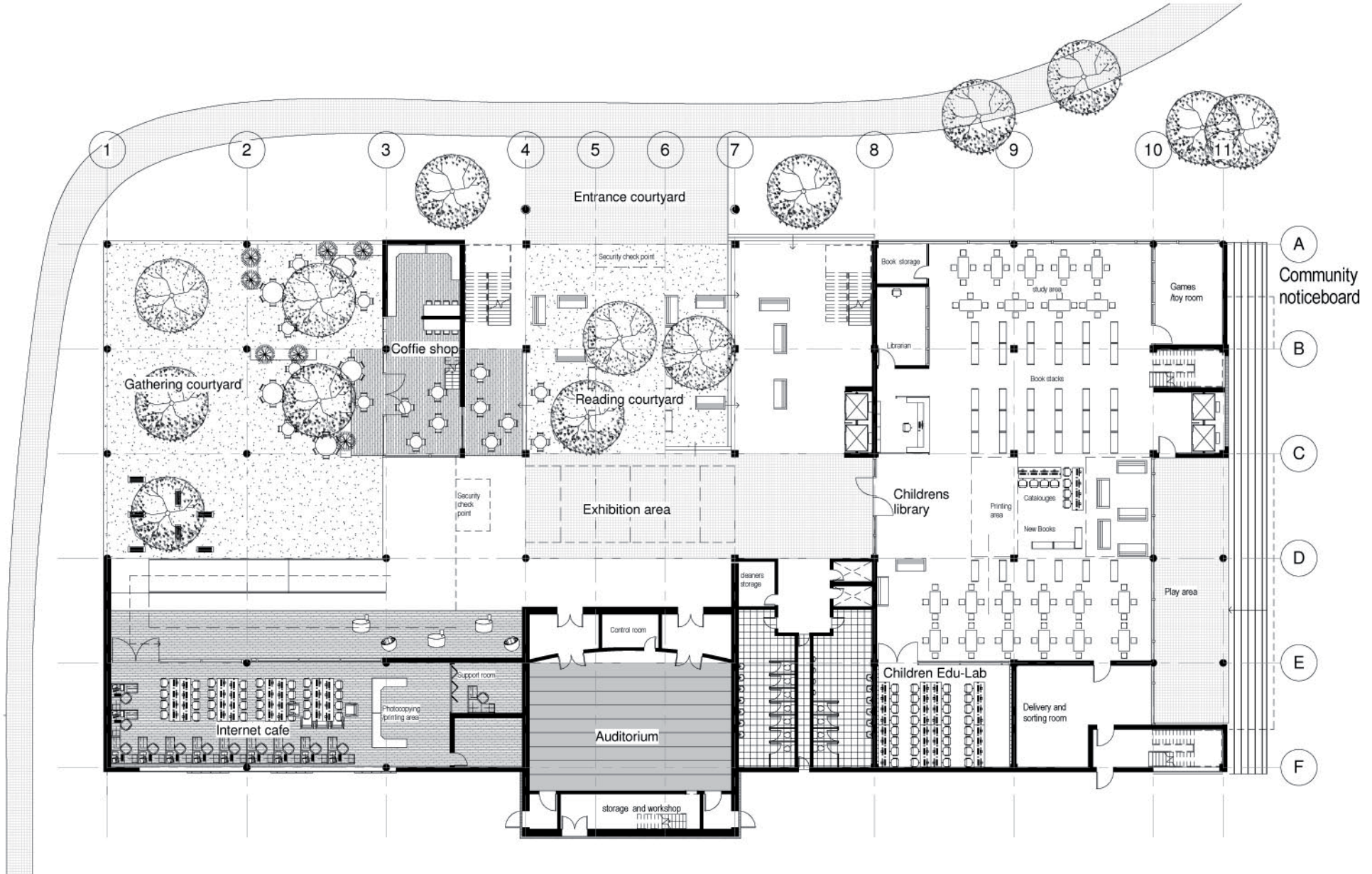
Street View

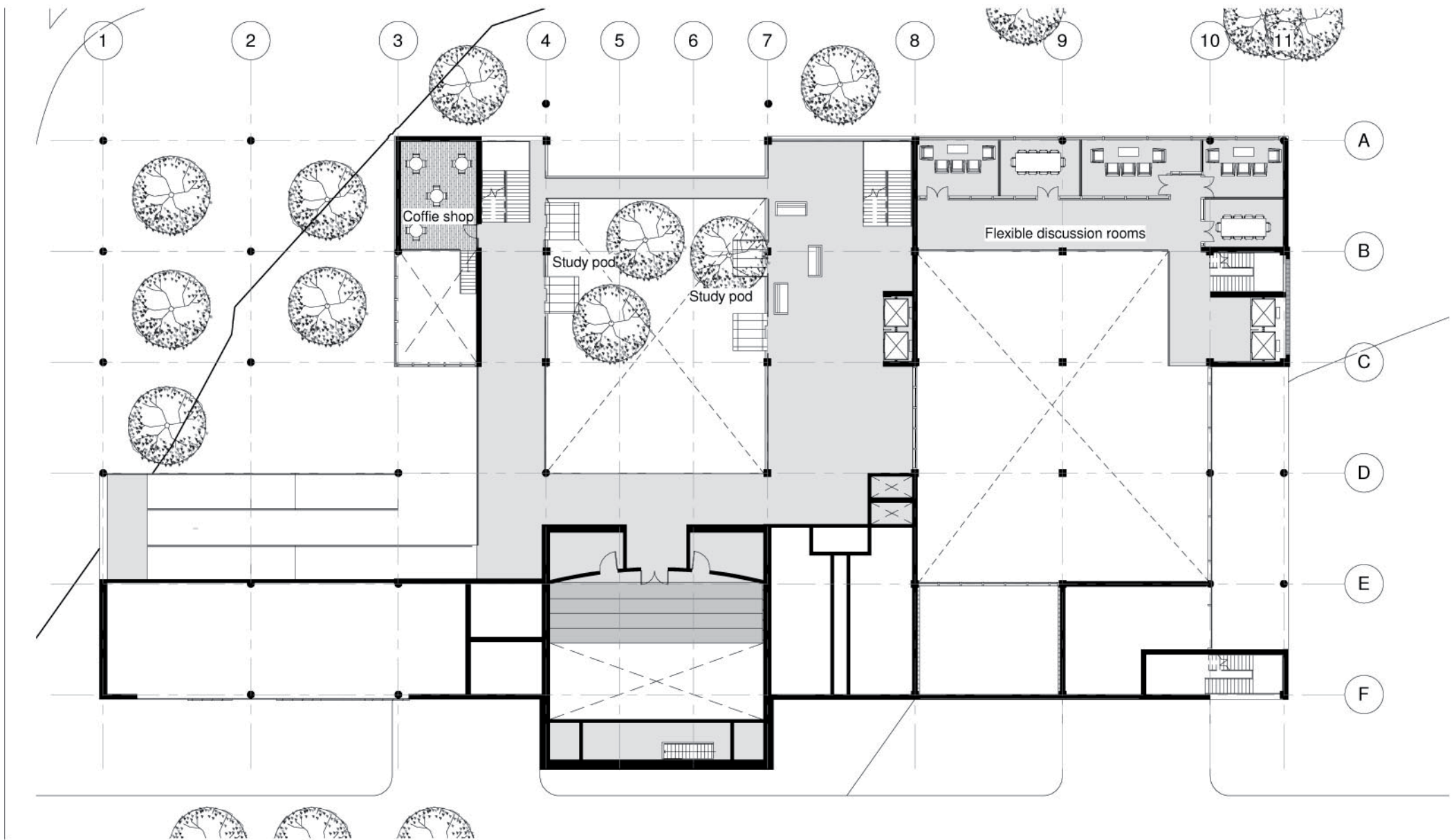


East view

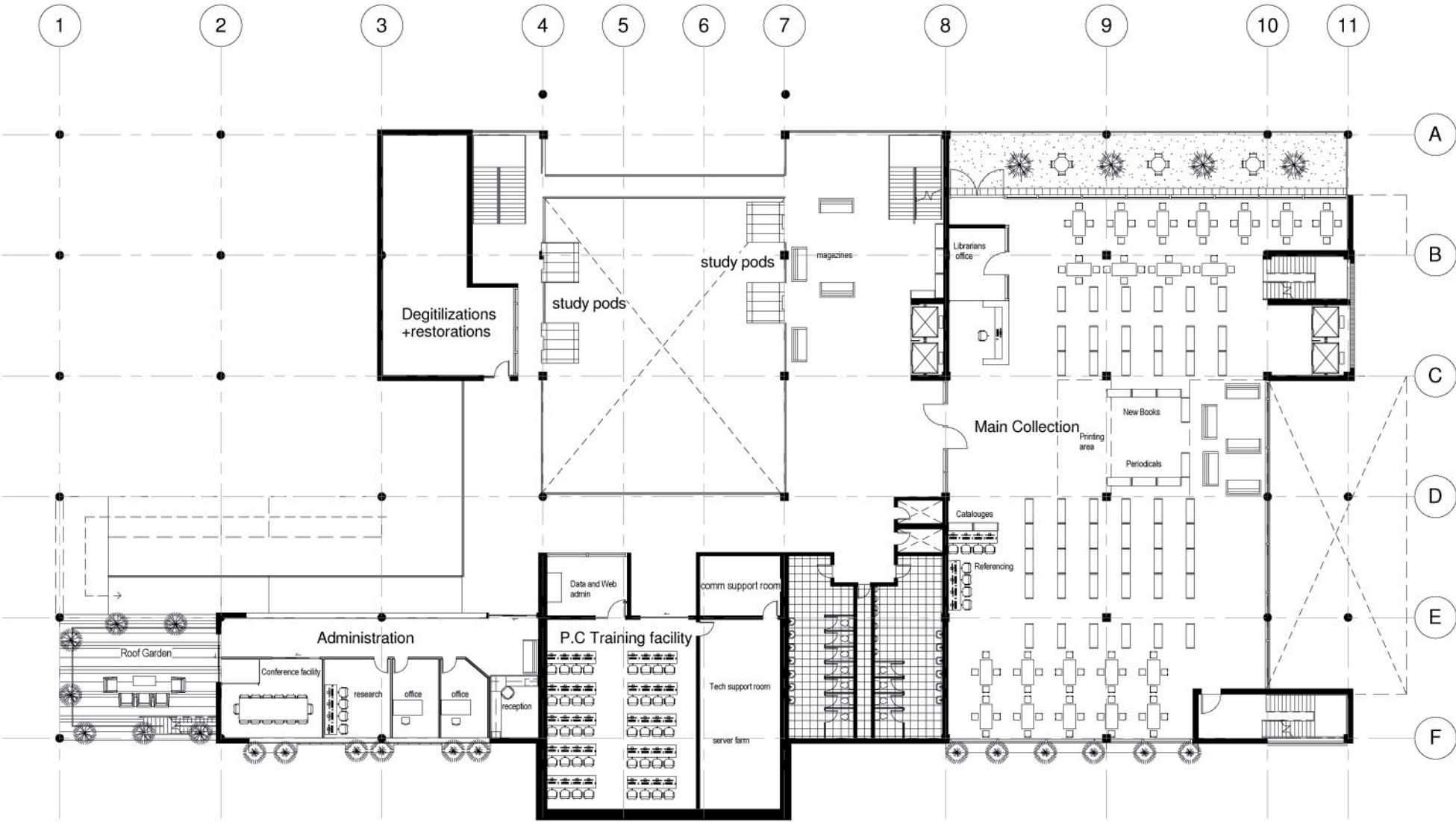




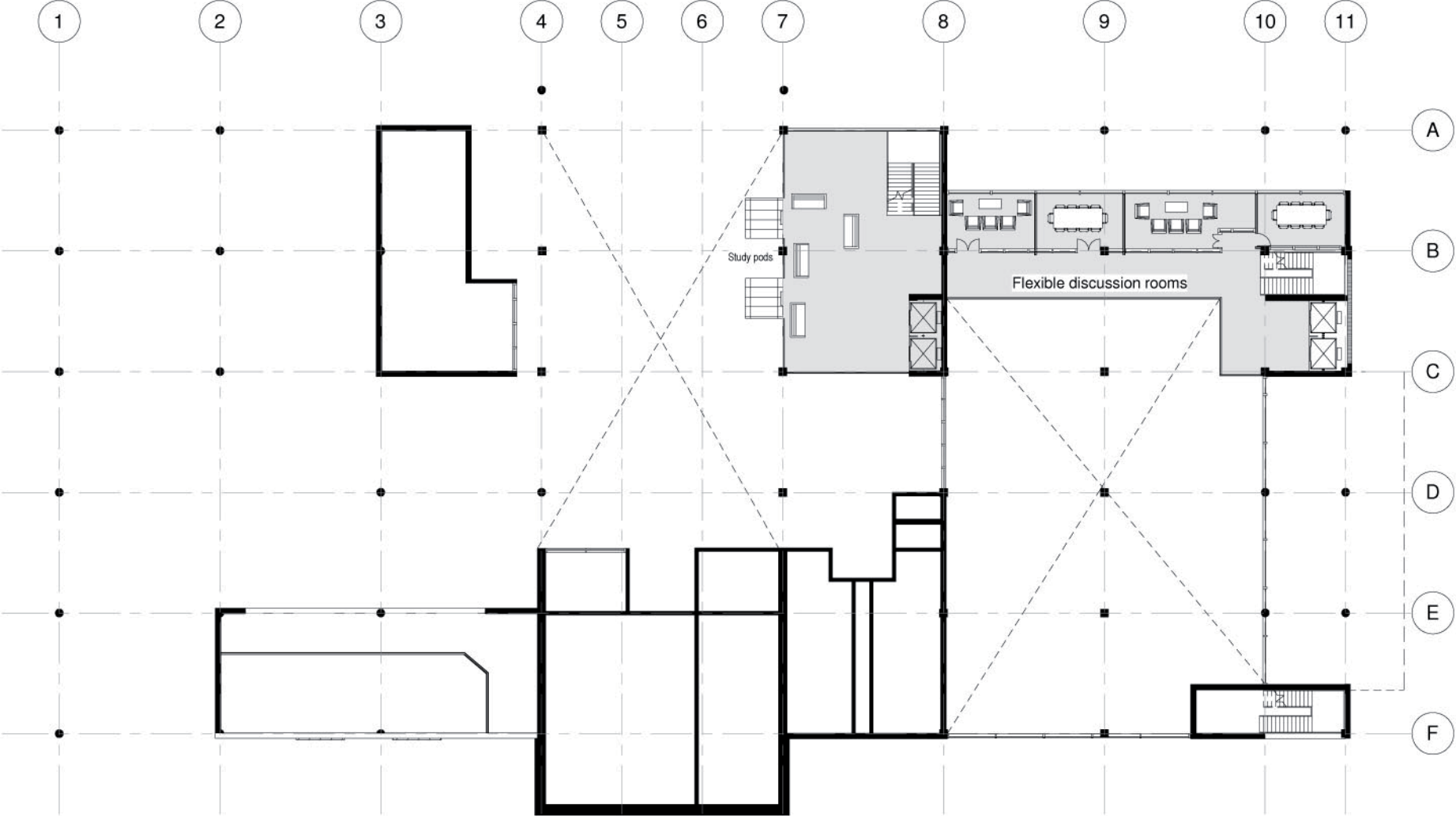




Ground Floor Mezzanine



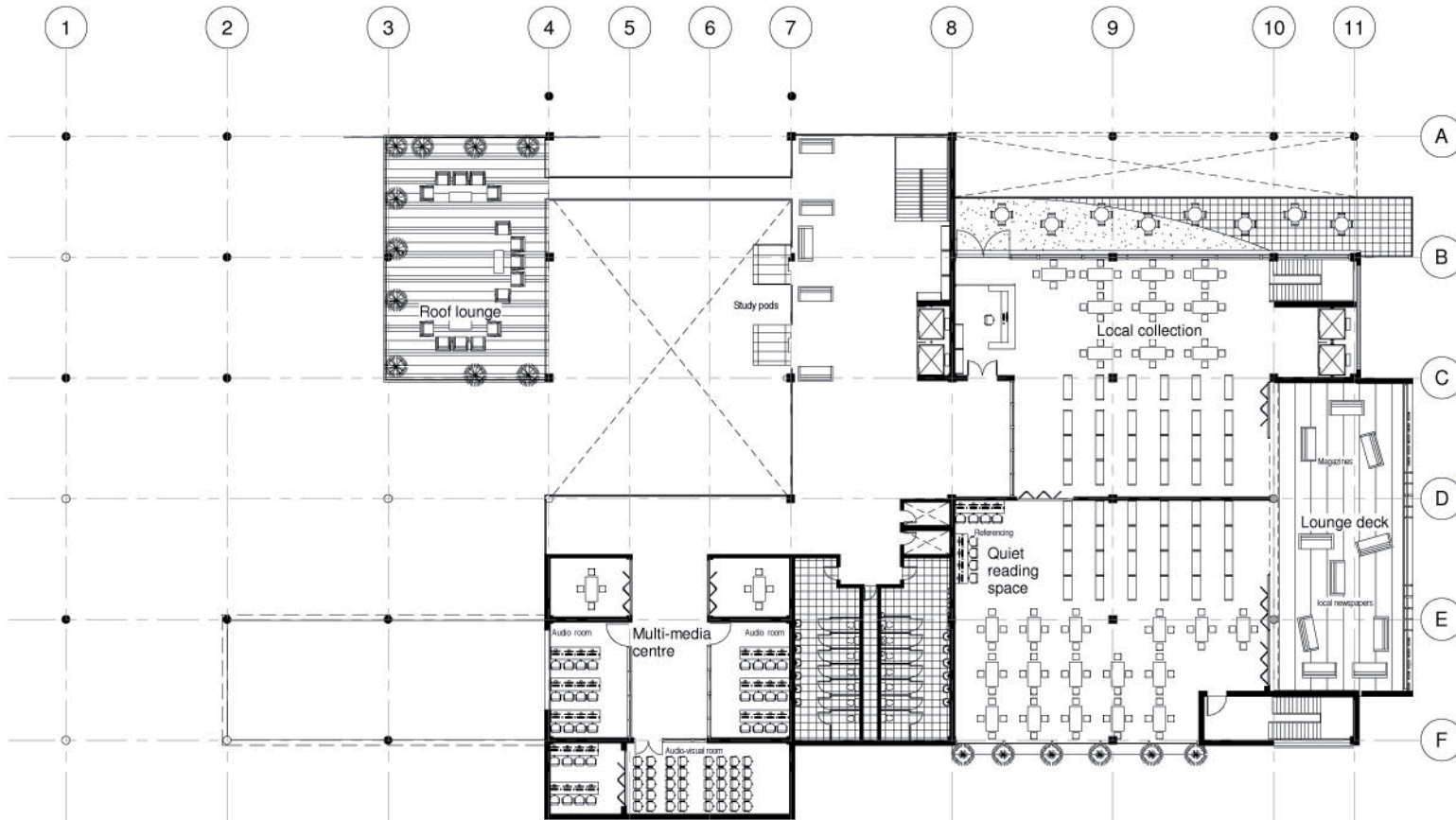
First Floor



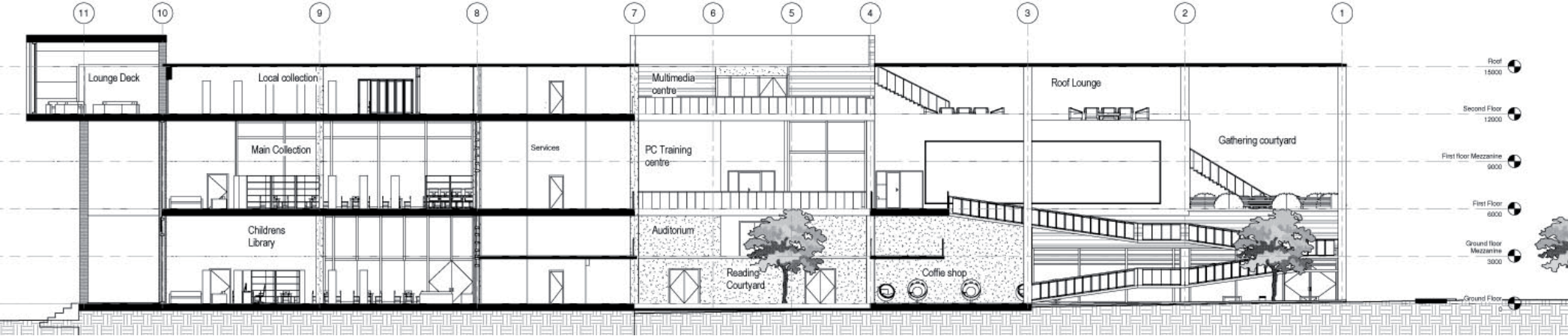
First Floor Mezzanine







First Floor



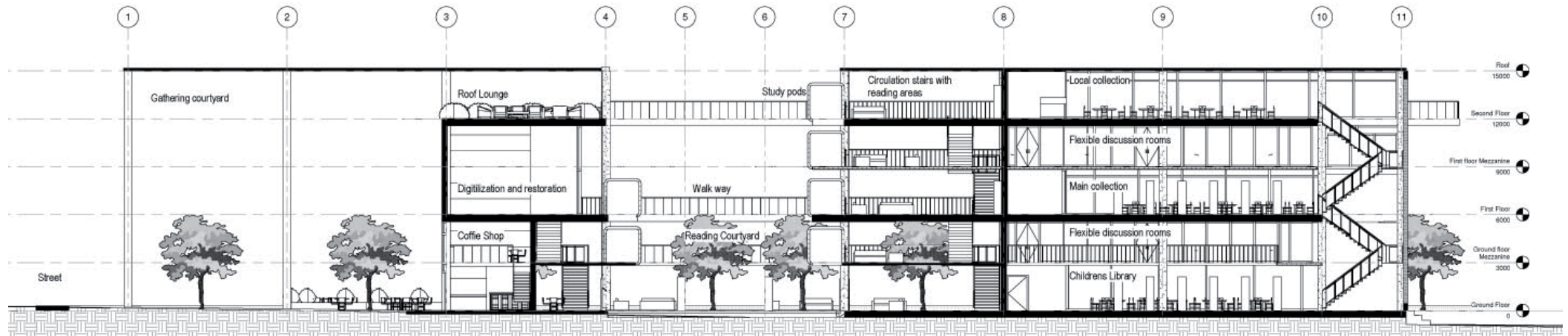
Longitudinal section



Cross section



Cross section



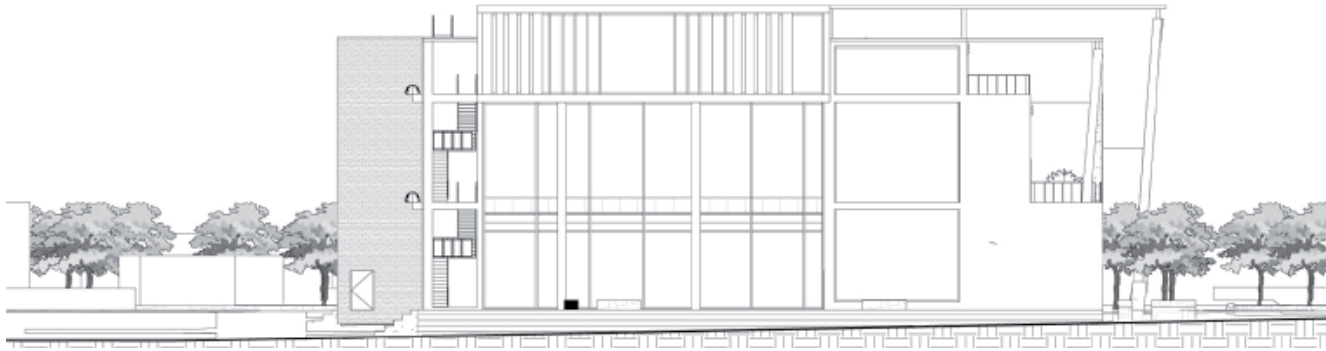
Longitudinal section



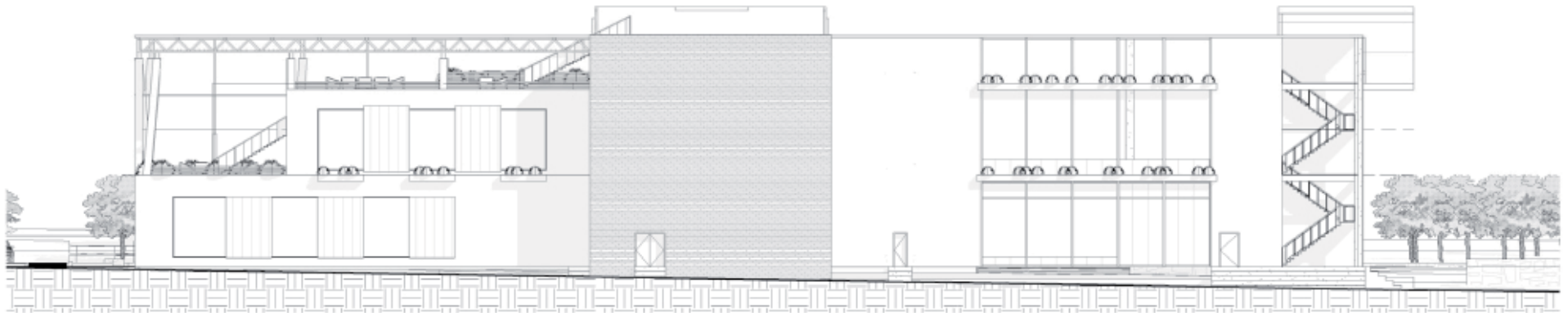
North Elevation



West Elevation



East Elevation

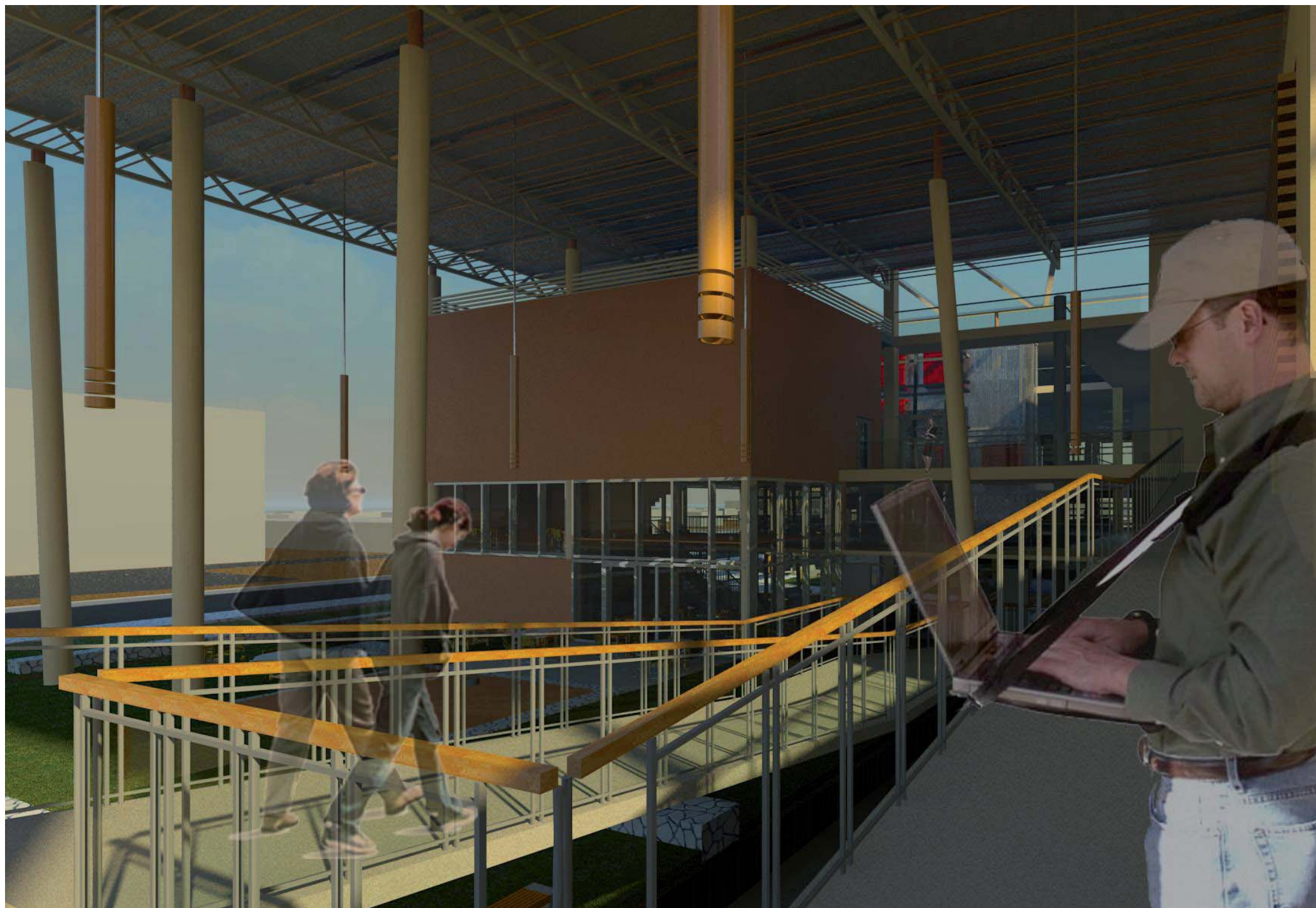


South Elevation

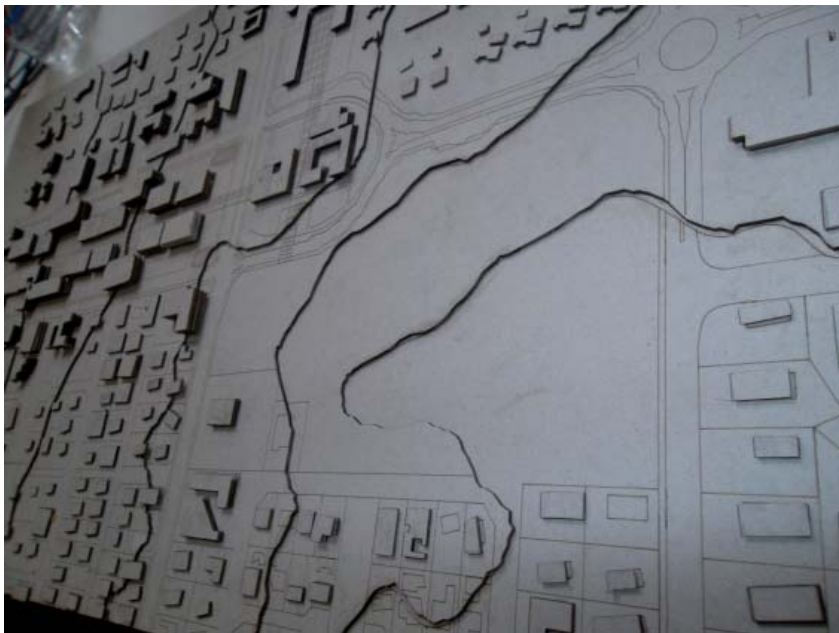
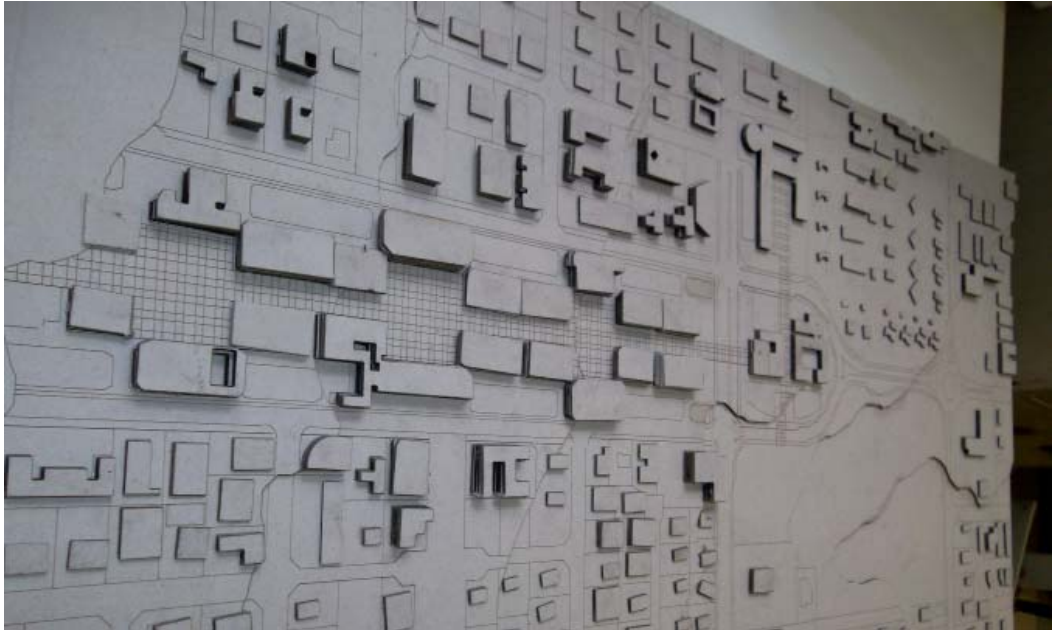














THE CITY



NOLOGY

HOME [LATEST ISSUE] HOME [12 JUN 2012] MMEGI

News | Business | Features | Analysis | Editorial | Opinion | World | Arts & Culture

Tuesday, 12 June 2012 | Issue: Vol.29 No.86

Severe water shortage looms

ISAIAH MOREWAGAE
STAFF WRITER

Like 5 Tweet 4 +1 0

Bokaa and Letsibogo dams are currently at their lowest water levels in five years. According to the Water Utilities Corporation (WUC), Letsibogo Dam's level decreased by 46 percent between June 2011 and June 2012, making it the worst recorded decrease over a five-year period.

The corporation says Letsibogo Dam is currently at 40 percent from last year's 86 percent during the same period. "Apart from supplying greater Gaborone (areas surrounding Gaborone) with 36 percent of its water, the dam is also responsible for supplying the BCL mine, Mmadinare, Palapye and Mahalapye areas," the corporation states. At its current level, WUC says, Letsibogo Dam can only supply its catchment areas for 12 months without any inflow.

Article Tools

3 Comments Share this!!!

E-mail a friend Print

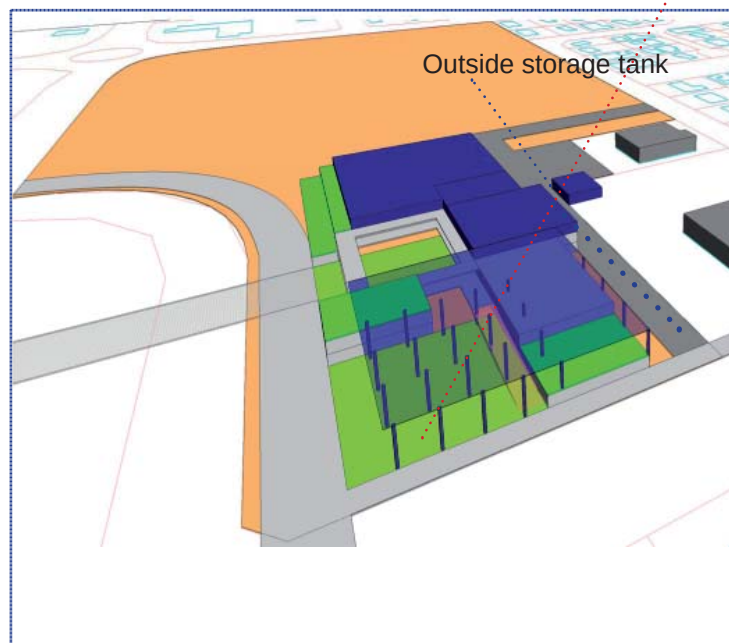
www.mmegi.bw.cited 12 August 2012.By Isaiah Morewagae

There is a need to conserve water and find ways to reuse water. This newspaper article shows a shortage of water in the Dams around Gaborone, this is due to high temperatures and lack of rain in the area



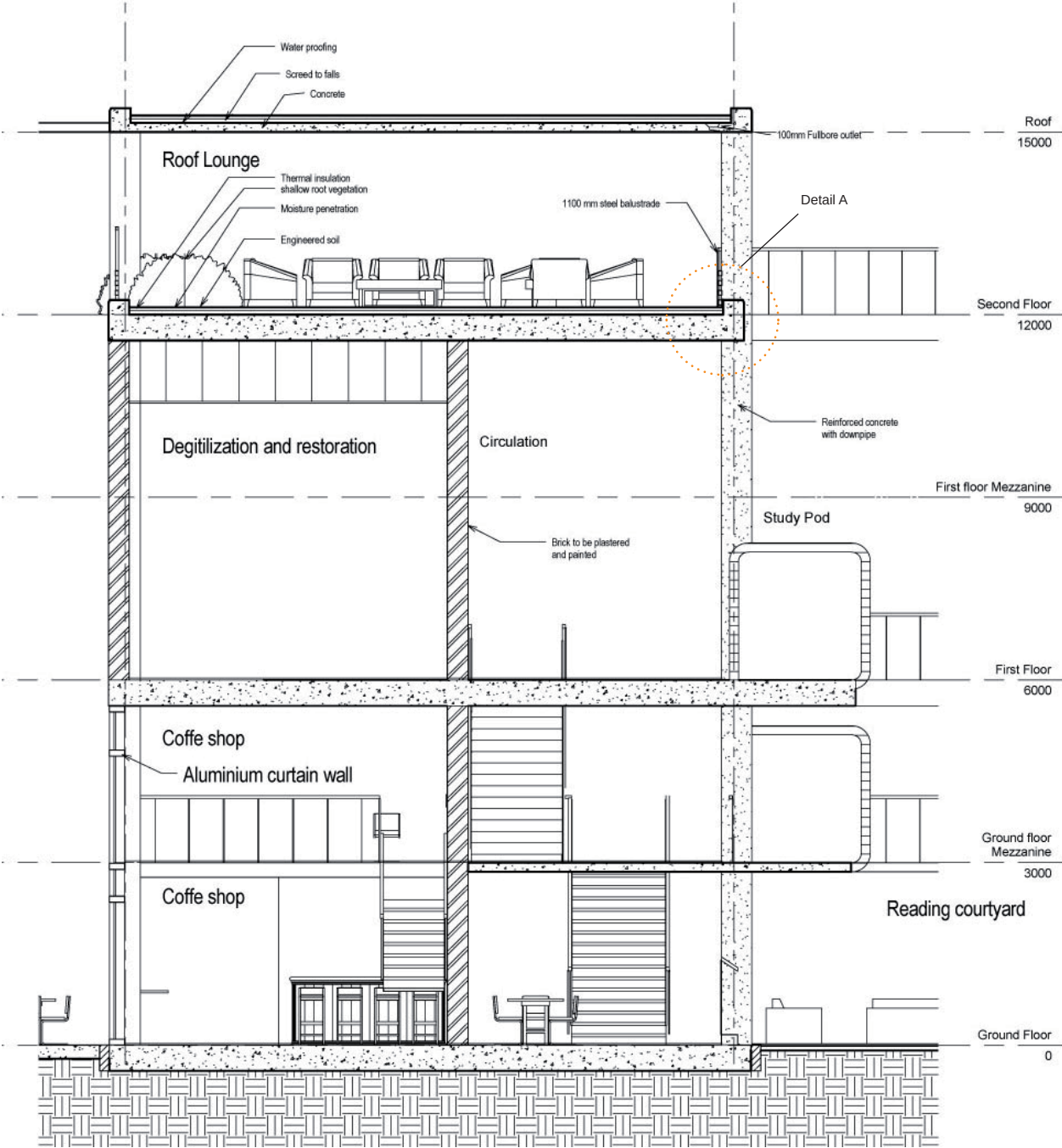
www.plantzafrica/plantab/acaciatortilis

Acacia(Mosu) is a drought resistant tree with a trademark umbrella and found in most regions in Botswana. The tree has small leaves and it makes it low maintenance, and it is an example of a tree that can be used for landscaping purposes. This restored biodiversity, costs and saves water.

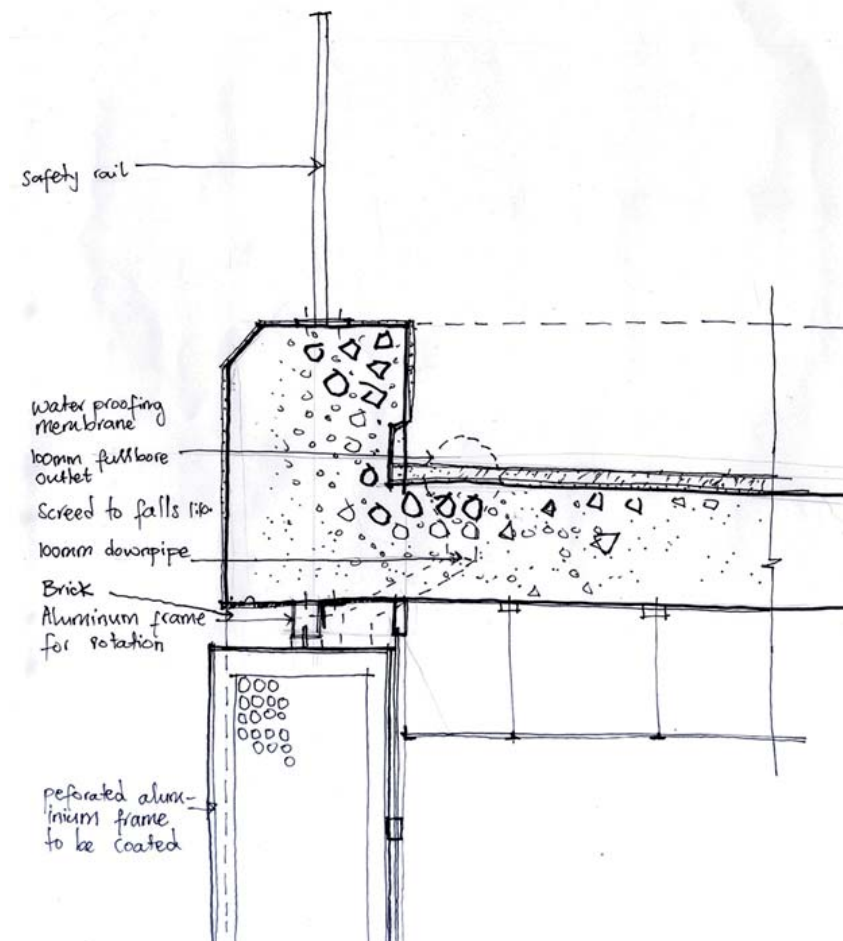
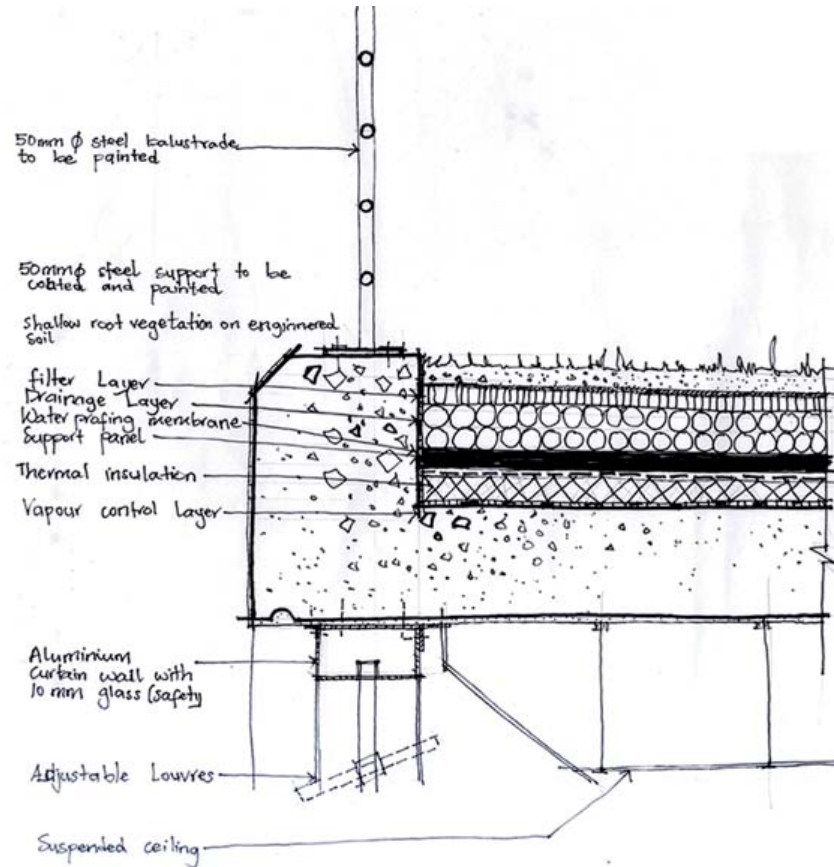


The Library has a roof area of 5000 metres square, the roof has fullbore outlets that collect water and divert it to a storage tank, where the water is taken back to be used for watering the landscape in and around the building. This reduces storm-water provision and use of portable water.

PERIMETER SECTION

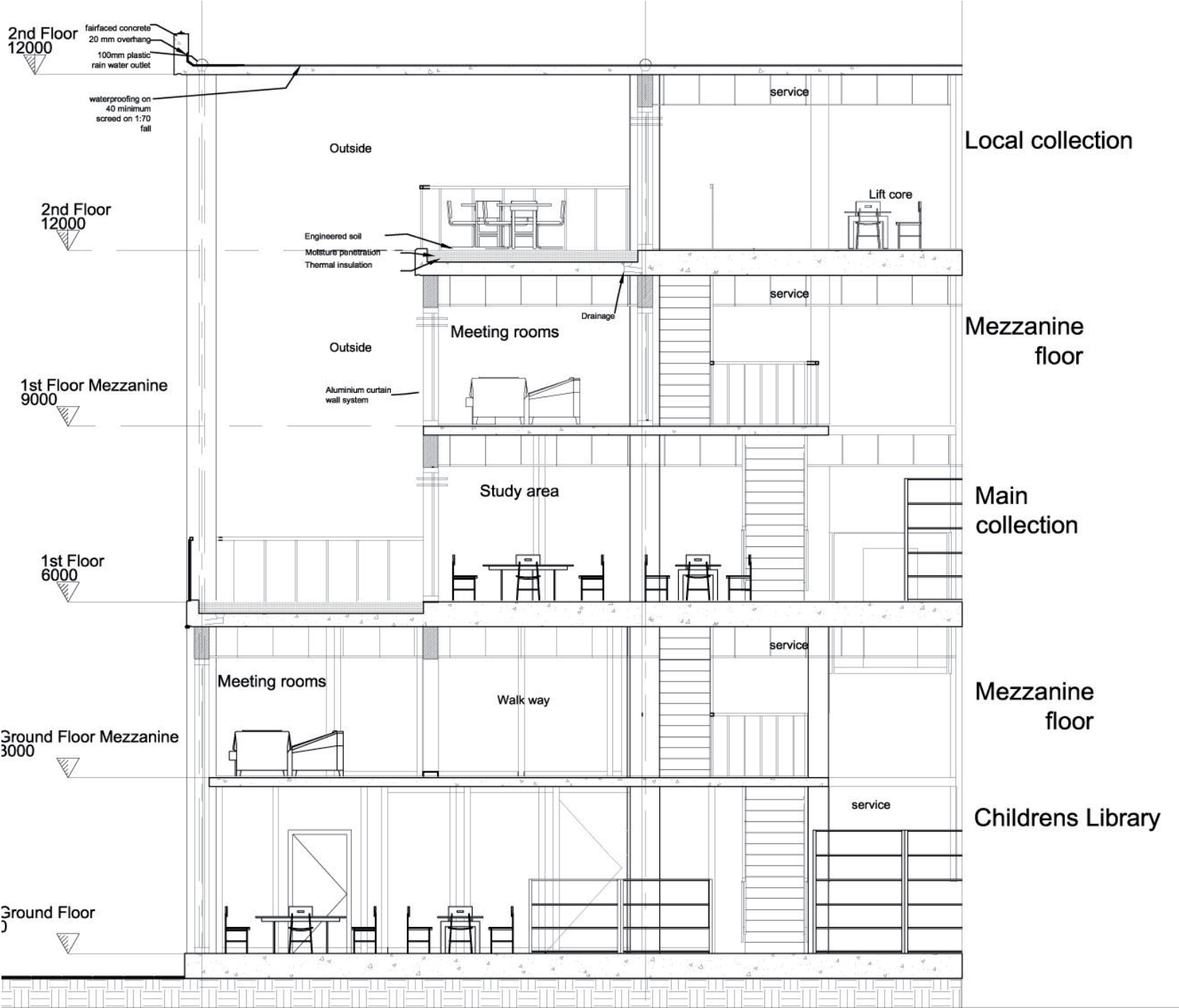


DETAIL A

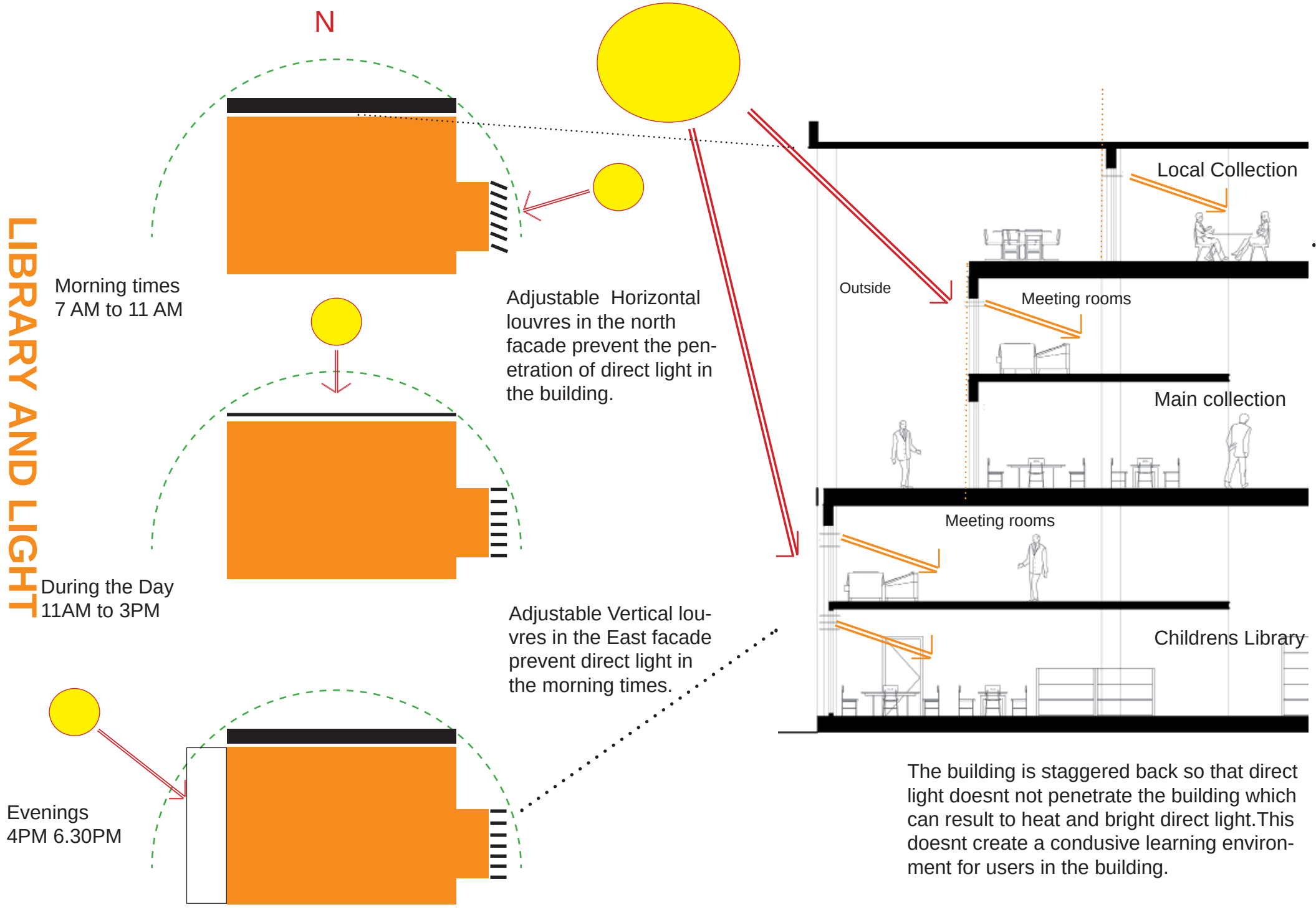


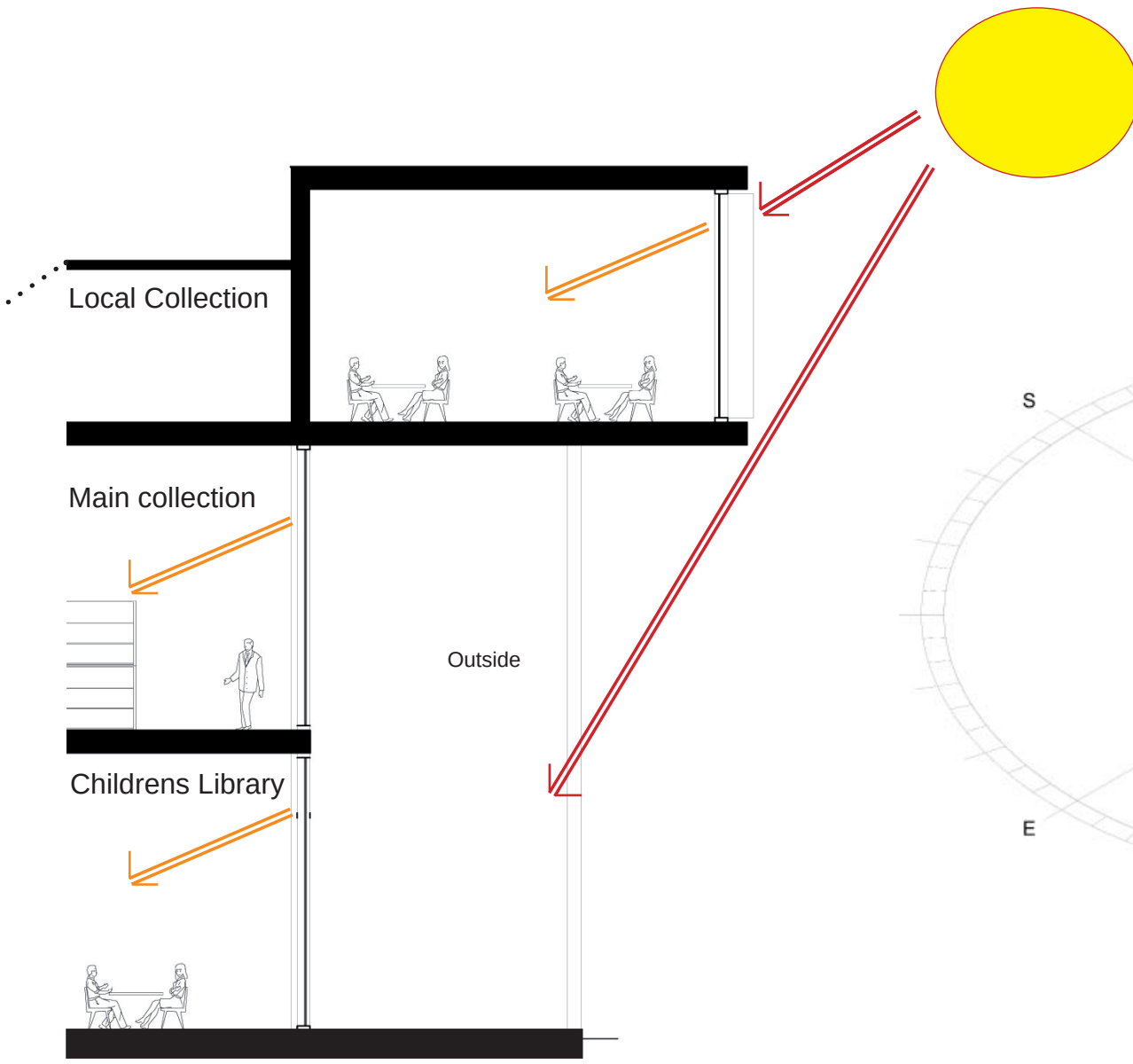
As a system, water is collected from the roof top and then it moves through pipes in the columns to storage tanks. The water is then used to water plants and trees within the building, and through using drought resistant trees water can be saved as less of it will be used. This also plays an important role by using local ecology.

PERIMETER SECTION

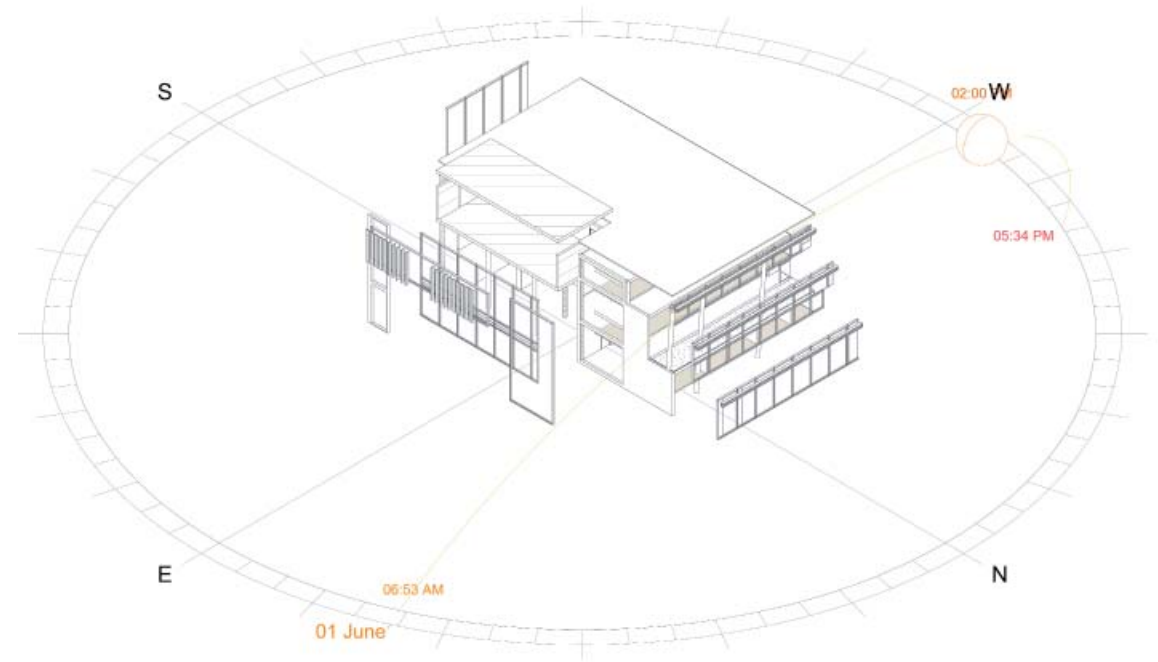


LIBRARY AND LIGHT

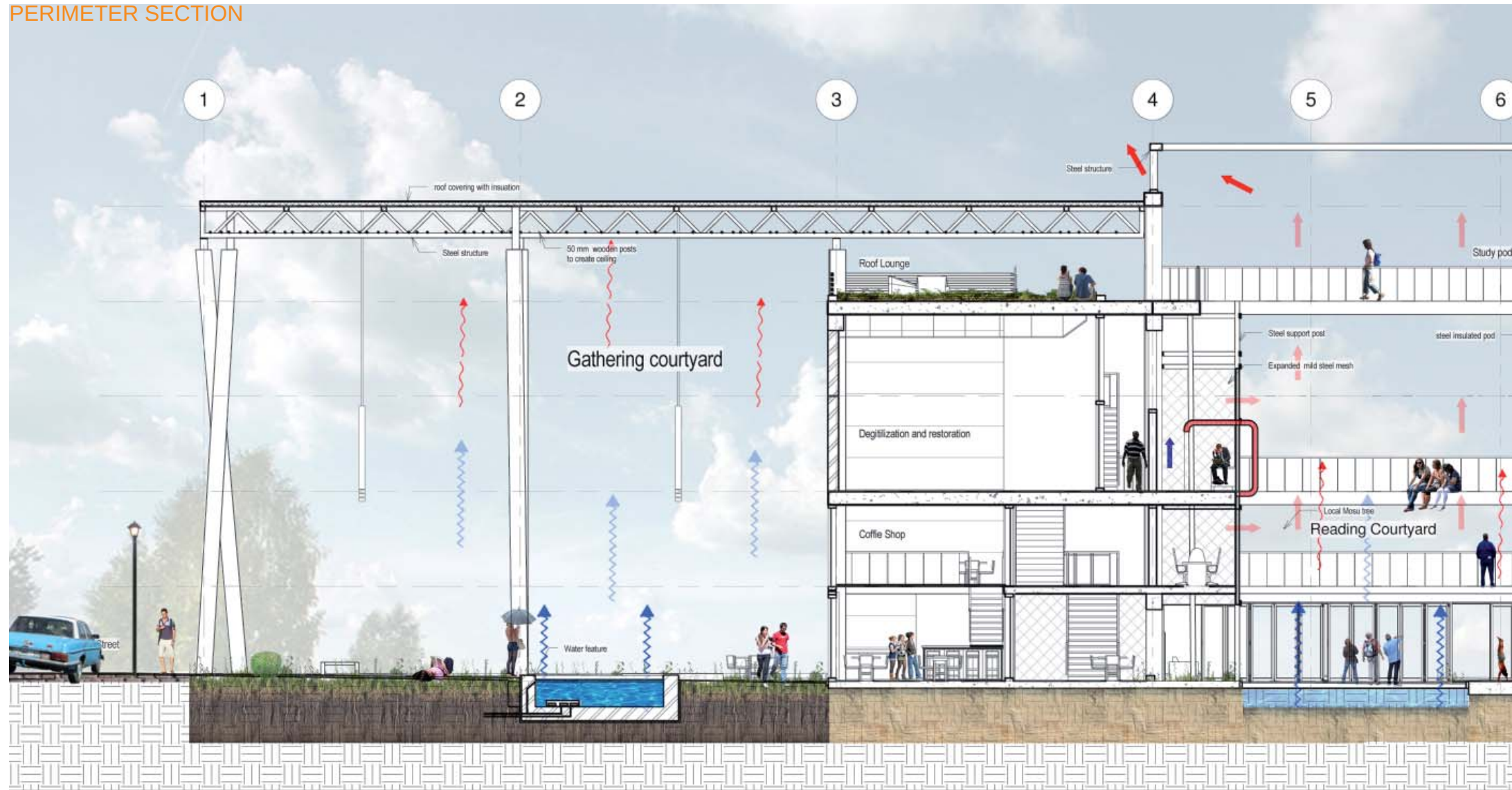


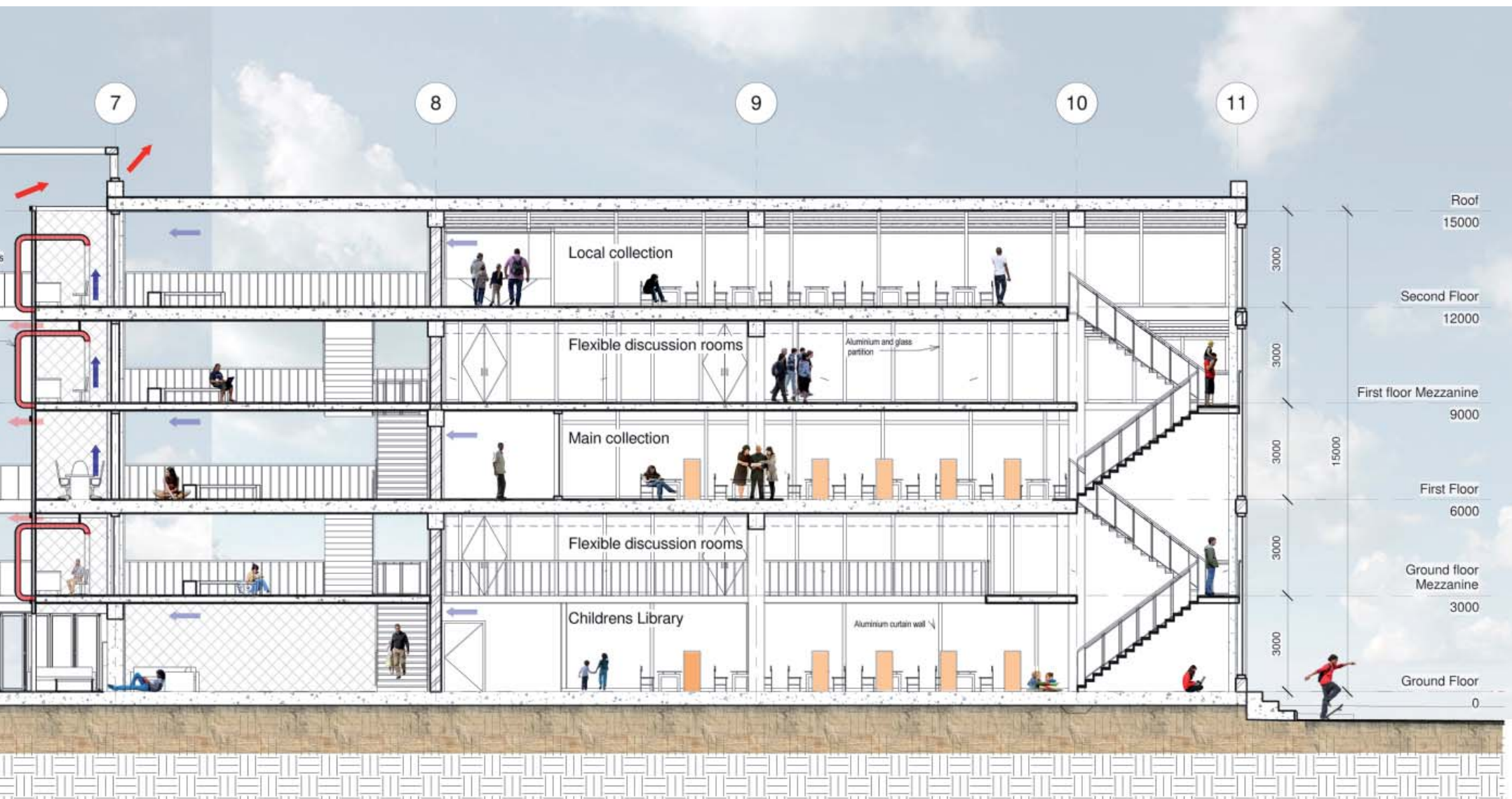


By creating an extended the top area, this blocks of direct light in the building.



PERIMETER SECTION





Thesis conclusion

Knowledge and information is available freely for people to use and public libraries are an architecture type that allows this to happen. The Gaborone Public Library does not meet the needs of the community in its programme and function. As the community and users grow, the library must grow to adopt to change and needs of the users.

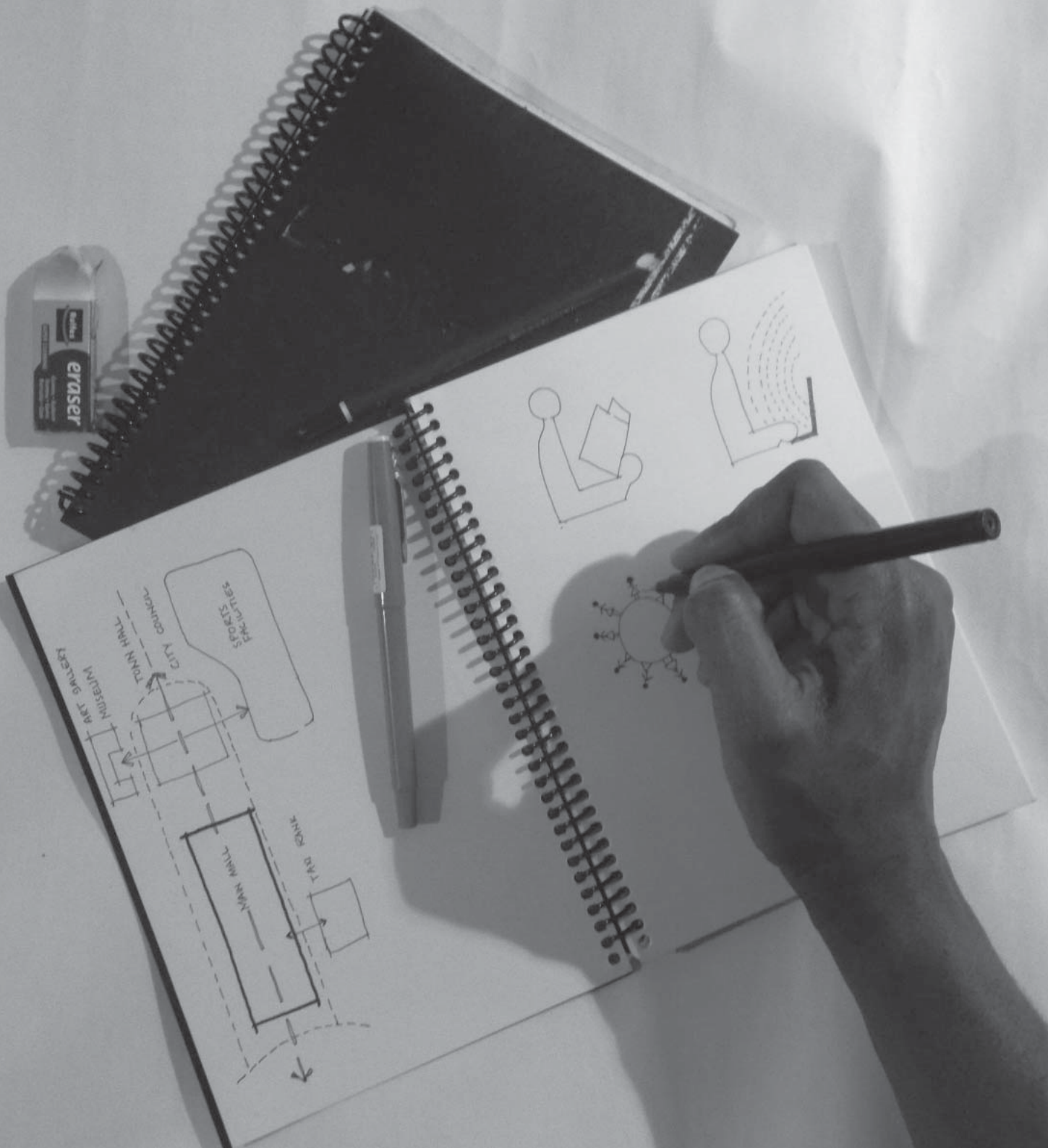
By making the library that relates to the existing context, the building creates belonging in the area and relates to the street edges and most importantly the pedestrians. The community can use the facility to work, learn and also create a 'fun' environment. The library therefore extends to be a space of national knowledge and building.

In the 21st century the existence of the library is questioned as it becomes virtual and vast information is available on the internet (ebooks) for people to access. This doesn't mean that books are totally lost, but as time goes and technology advances the library will become a space where people gather in one environment to exchange ideas. The old library within the city council will become the archive and storage facility as the life of book reduces on the shelf.

-

SHELF LIFE





You know you are an Architecture student when.....



Our SPACE is not a true representation of what it really is and how it affects us.....its a MIRAGE.

John Moffat Building



Studio chairs



Studio Trap-Door



Clips to keep eyes open



Straight jacket

Cushioned studio walls & resting area

Leatile Seemule
0706205F

SCHOOL
OF
ARCHITECTURE
&
PLANNING



Author :Own.Bringing Sanity to architecture.Honours design charrette.Anxiety in Architecture

- ...your roommate says 'good morning' and your reply 'good night'.
- ...you carry a tooth brush in your backpack.
- ...someone asks for your phone number and you give them the studio directions.
- ...you have lost your house keys and you realize weeks later.
- ...your parents are complaining that you are not having enough fun.
- ...you have considered using broccoli for your models.
- ...the only building on campus with lights on is your studio.
- ...you understand why architects wear glasses and have white hair.
- ...when you start measuring all time segments in terms of projects.
- ...when microsoft word spell-check underlines all your words in your essay

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