

INTERFACE

Altering architecture

Transforming existing mono-functional buildings in the Pretoria CBD to adapt to changing social spatial conditions. The notion of 'altering architecture' aims to manipulate existing boundaries into INTERFACES to affect interior spaces and building skins as well extend into the urban context

NADIA REYNDERS

Study leader: Elana van der Wath
Studio Master: Arthur Barker

Submitted in partial fulfilment of the requirements for the degree Masters in Interior Architecture (Professional) in the faculty of Engineering, Built Environment and Information Technology, Department of Architecture, University of Pretoria.

2010



...VIR MY OUERS

Pa, Moedertjie, Rieks, Stef & Donads: *dankie vir eindelose geduld, liefde, geduld, geloof in my, geduld en belangstelling*

Oupa Fanie en Ouma Beau: *dankie vir jul belangstelling en ondersteuning wat soveel meer is as waarvoor ek kon vra*

Elana van der Wath and Arthur Barker: most appreciation for UNDERSTANDING and translating into words!!!

Simone: thanks buddy for all the *teetjies*, laughter and for keeping me in touch with the outside world.

Paul, Anthony and Richard: thank you for shedding light on the situation... (pun intended)



PREFACE

When I was searching for a theme/topic for my dissertation, I thought about what interior architecture had to offer society. With this exploration, I concluded that it is not the element of decoration, but rather the experience of our immediate physical fabric surrounding us. It is the element of space that stimulates emotions. Spaces amalgamated by lines and shapes. Lines and shapes that link the eye to the mind. Inviting the observer to go deeper. To become the actor, making observations and speculating; SPATIAL EXPLORATION. Exploration that links architecture to man, the interface between human and element.



in•ter•face

associative:

a surface regarded as the common boundary of two bodies –
facts, problems, considerations, theories, practices, etc., shared by two or more disciplines, or fields of study –
to bring together; connect or mesh –

in the field of science:

an interface is a thin layer that has properties differing from those of the bulk material on either side of the interface.

(HARPER, D. Online Etymology Dictionary)

ABSTRACT

In a globalised world, influenced by social flux brought about by various **factors**¹, cities' perimeters are subject to continuous change. More often than not, a city's perimeter expands in the form of urban sprawl. Energy drains from the centre, leaving in its wake numerous vacant, degraded and underutilised structures.

Radical interventions on an urban scale are often proposed to counter this degradation and transformation of such urban areas. These **interventions**² entail densification of the urban fabric, the insertion of additional structures and the creation of new precincts; a process which occurs over many years. By comparison, well-considered alterations to existing built fabric can be implemented quickly with smaller financial and ecological implications. Such alterations also include the adaptation of interior space to support a change in programme, and the possible improvement of a buildings interface with the street. The aim is to improve local social environments within the urban fabric and stimulate social influx.

INTERFACE is about interventions to existing structures within the CBD of Pretoria. These interventions are limited to low-rise buildings (between two and five stories) designed specifically for mono-function. Over time, the programme and user profile of those buildings has changed, while the built fabric stagnated, with no active response to its context. Currently, such buildings do not participate in the creation of a living city – a city where interior spaces are supplemented by well designed outdoor spaces, thereby creating places that support and encourage social interaction. Buildings which have simply been taken over and used ad hoc, have not truly been adapted to their new programmes and as such, full exploitation of the space is not possible. Interior spaces can therefore play a determining role in the **social motion**³ of the city, but only if they address the transition between interior and exterior space, and the extension of such transition into the subsequent urban fabric. These interior and exterior spaces should be adaptable to current social needs of city dwellers and users in order to be deemed successful.

Living cities require buildings to adapt and change in response to ever shifting social conditions in order to satisfy basic human desires and needs. It can thus be deduced that a building programme will more than likely change regularly. INTERFACE therefore focus on the creation of responsive interior space and works from the premise that structure and interior are implicitly linked. This thesis explores 'permanent' changes to existing structures; changes that will assist in creating responsive interior environments. Such environments should also accommodate both semi-permanent and temporary alterations, with minimal **impact**⁴ resulting from the implementation of each new programme.

1 Factors: Include change in political, social and economical circumstances.

2 Interventions: In Pretoria CBD, large interventions are proposed over long periods of time. They include strategies such as the Tshwane City Strategy (twenty year), Tshwane Inner City Development and Regeneration Strategy 2005 (ten year program) and City of Tshwane Integrated Development Plan 2009/2010 (five year).

3 Social motion: Interaction and attraction of civilians in a space

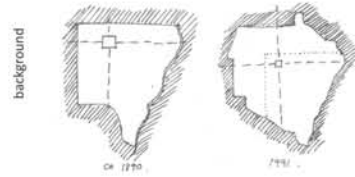
4 Impact: Refer to alterations to the permanent responsive structure as well as financial and ecological implications.



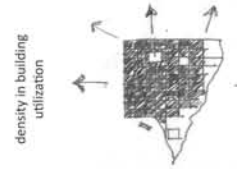
CBD

PRETORIA, GAUTENG

ISSUE OF CONCERN:



CHANGING PERIMETERS OF
PRETORIA CBD



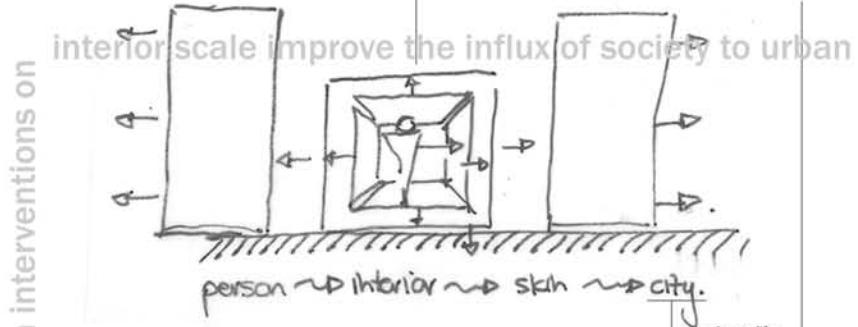
because of change in human needs caused
by political and economical circumstances

SOCIAL CHANGE

INTERIOR ARCHITECTURE = design for
human interaction is of great concern human needs



Changed conditions in urban societies are
expressed by the change in street life patterns.



can interventions on

caused by social change?

experience: life
happens on foot

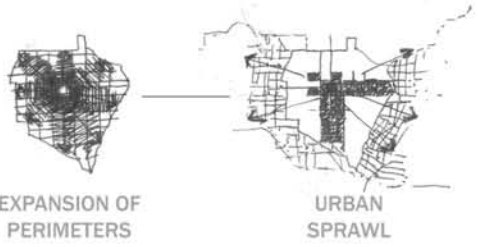
STREETS

must be able to change with
social circumstances

CHANGE IN PROGRAMME



Figure 1: Diagrammatic representation of abstract



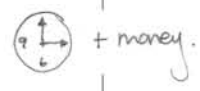
EXPANSION OF PERIMETERS

URBAN SPRAWL

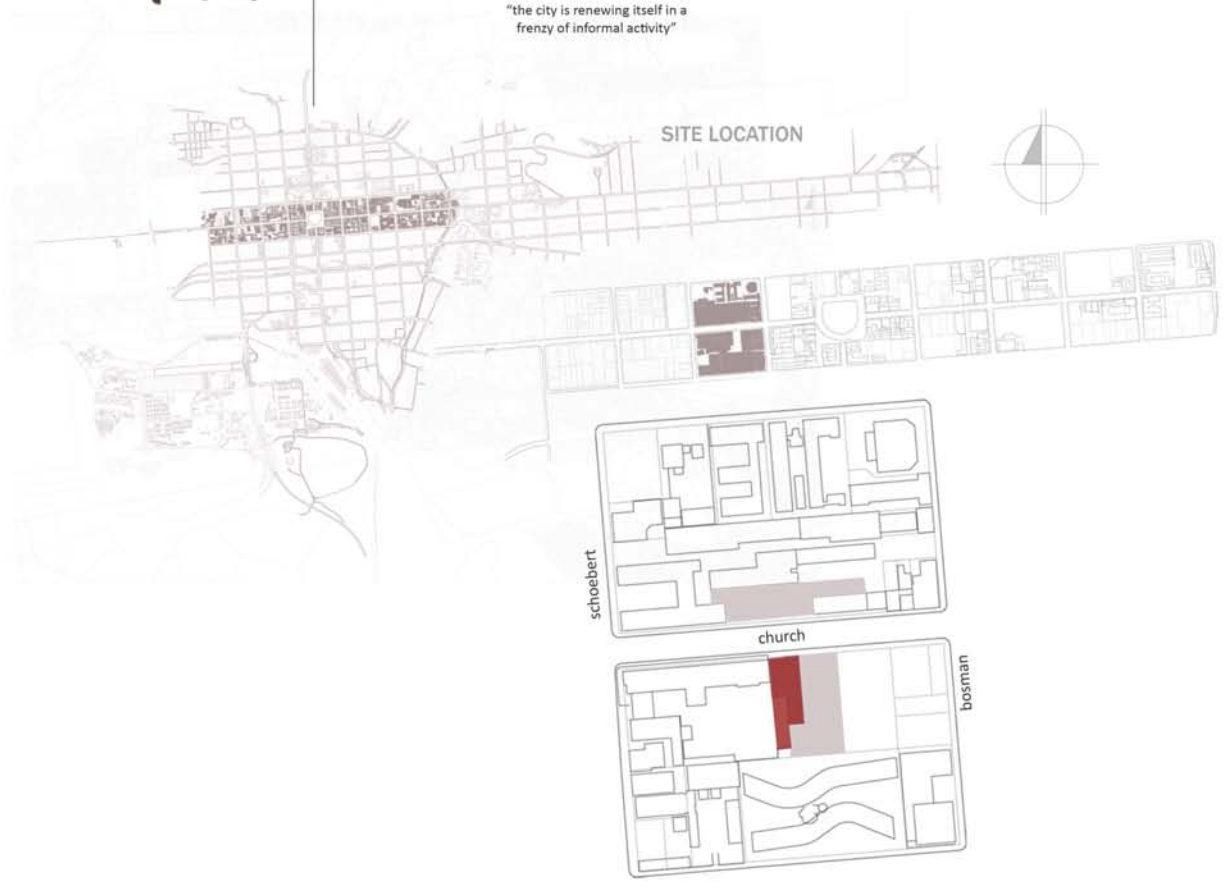
VACANT OR PARTIAL USE OF BUILDINGS IN CBD AS RESULT



PRIVATE SECTOR



"the city is renewing itself in a frenzy of informal activity"



SITE LOCATION



schoebert

church

bosman

TABLE OF CONTENTS

PREFACE 3

ABSTRACT 5

LIST OF FIGURES 10

INTRODUCTION 13

BACKGROUND 14

OUTLINE BRIEF 15

DELIMITATIONS..... 15

RESEARCH STRATEGY 16

 3 scales [of research] 16

RESEARCH METHODS 18

INTERIOR SPACES AS CORE OF THE CITY CENTER 21

INTRODUCTION 22

DISPOSITION OF LIVING CITIES 22

 1. SOCIAL AND ECONOMICAL MOTION OF THE CBD 24

PLUG IN CITY FRAMEWORK 26

 1. THEORETICAL BACKGROUND 27

 2. THEORY APPLIED 27

 3. RESPONDING TO THE URBAN FRAMEWORK 28

 4. PROPOSED SITE WITHIN A CONNECTION PATH 28

CONNECTION OF ACTIVITIES 30

 1. PRECEDENT - CONNECTION OF ACTIVITIES 30

INTERFACE BETWEEN INTERIOR AND EXTERIOR SPACE 32

SCALE WITHIN THE CITY: MOVING FROM PUBLIC TO PRIVATE SPACE CONNECTION OF ACTIVITIES 32

CONCLUSION 33

STREETS AS CONNECTIONS BETWEEN INTERIOR SPACES 35

INTRODUCTION 36

STREET CHARACTERISTICS 36

LAYERING OF EVENTS 40

CRITERIA FOR SELECTION OF SITE AND EXISTING STREET ANALYSIS 41

 1. CHARACTERISTIC ESSENTIAL FOR THE PROPOSED SITE..... 41

 2. SITE LOCALITY 43

 3. EXISTING PROGRAMMES 45

 4. SITE INFLUENCE 47

 5. MOVEMENT 49

 6. THRESHOLDS (INTERFACES) 51

 7. STREET ELEVATION 52

 8. POTENTIAL/CONCLUSION 55

CONCLUSION 56

INTERIOR ARCHITECTURE AS MEDIATOR 59

THE ROLE OF INTERIOR ARCHITECTURE IN THE URBAN ENVIRONMENT 60

 Context model 63

DESIGN DEVELOPMENT 65

 1. CONCEPT INTENTION 66

 1.1 Liminal Space 66

 1.2 What is an architectural interface? 67

 1.3 Conclusion 67

 2. EXISTING BUILDING AS MONTAGE 69

 3. EXISTING INTERNAL MATERIALITY 75

 4. EXISTING INTERFACES 77

 5. EXISTING INTERFACE EXPLORATION 79

 5.1 Precedent studies 81

 6. INITIAL REACTION AND CONCEPT 82

 6.1 Initial Reaction 82

 6.2 Concept(ual) Approach 82



7. CONCLUSION	83
CONNECTING INTERFACES	85
INTRODUCTION	86
EXISTING as boundary	88
CONCEPT SKETCHES	90
1. PRIMARY SKETCH	90
2. SUCCESSION SKETCH 1	90
3. SUCCESSION SKETCH 2	91
4. SUCCESSION SKETCH 3	92
5. INITIAL DESIGN	92
6. DEMOLITION OF EXISTING - final proposal	94
7. DEMOLITION PLANS	95
INTERNAL STRUCTURE as interface	96
1. INTERNAL INTERFACES	99
MOVEMENT as connection	100
SERVICES occur directly along the lines of movement	110
1. NATURAL VENTILATION	114
2. NATURAL LIGHT	115
3. SERVICE SPINE	120
4. POSSIBLE PROGRAMMES	122
SKIN AND IDENTITY	124
CONCLUSION	128
APPENDIX AND REFERENCES	131
APPENDIX A	132
LIST OF REFERENCES	133

LIST OF FIGURES

Figure i: Diagrammatic representation of abstract.....6

Figure 1a: Growing perimeter of Pretoria CBD form 1890 to 1993.....14

Figure 1b: Urban sprawl is contributing to vacant buildings in the CBD of Pretoria.....14

Figure 1c: Diagrammatic representation of the different scales or research and how it influence each other.....17

Figure 2a: Buildings in Pretoria with only the ground floor functioning.....22

Figure 2b: Street in the city of Curitiba, Brazil.....23

Figure 2c: Sectional vibrant social and economical motion in the CBD.....25

Figure 2d: Existing and proposed activity nodes in the CBD as proposed by PLUG-IN CITY Framework.....26

Figure 2e: Phasing of Plug-In-City Framework.....27

Figure 2f: Activities are stretched out in time and space and connected with pedestrian movement.....28

Figure 2g: Location of the proposed site.....29

Figure 2h: Mellow Yellow, temporary architecture.....31

Figure 2i: Mellow Yellow, Chicago’s Museum of Modern Art.....31

Figure 2j: Local precedent study of pedestrian movement used as connection path.....30

Figure 2k: Residential building layout - layers of defence.....32

Figure 2l: Hierarchy of scale from city to individual dwelling.....32

Figure 2m: Example of a building with no transition from public to private territory.....33

Figure 2n: The interior space influence the quality of the city.....33

Figure 3a: Map of remote locations around Pretoria.....37

Figure 3b: Map of CBD analysis - data overlay.....38

Figure 3c: Low-rise buildings in the CBD.....39

Figure 3d: Streets as ‘places’.....39

Figure 3e: Interface of public and private space.....40

Figure 3f: Layers of events.....41

Figure 3g: Criteria for proposed site.....42

Figure 3h: Context of proposed site.....43

Figure 3i: Existing activities.....45

Figure 3j: Factors influencing the proposed site.....47

Figure 3k: Existing and proposed movement.....49

Figure 3l: Existing interfaces.....51

Figure 3m: Existing street elevation.....52

Figure 3n: Potential of site.....55

Figure 3o: Diversity of programme.....56

Figure 4a: Interior Architecture as catalyst to improve the urban environment.....60

Figure 4b: Movement from private to public space occurs in a sequence of spatial order and change in scale.....61

Figure 4c: Hierarchy of scale.....61

Figure 4d: Context model.....63

Figure 4e: Model of hierarchy of space.....64

Figure 4f: Model of layers of events.....65

Figure 4g: Liminal space.....66

Figure 4h: Exploration of the existing building components.....69

Figure 4i: Existing building plans and elevation.....71

Figure 4j: Exploration of the existing building with sections.....73

Figure 4k: Existing interior materiality.....75

Figure 4l: Existing interfaces.....77

Figure 4m: Existing interface exploration.....79

Figure 4n: Precedent studies.....81

Figure 4o: Initial concept sketches.....82

Figure 4p: Concept sketch.....82

Figure 5a: Diagram of layering system.....86

Figure 5b: Icons of building layering system.....87

Figure 5c: Existing building as boundary icon.....88

Figure 5d: Current internal and external boundaries.....89

Figure 5e: Primary concept sketch.....90

Figure 5f: Succession 1 concept sketch.....90

Figure 5g: Succession 2 concept sketch.....91



Figure 5h: Succession 2 concept sketch.....	92
Figure 5i: Initial design sketches.....	93
Figure 5j: Internal boundaries to be demolished.....	94
Figure 5k: Demolition plans, not to scale.....	95
Figure 5l: Structure as interface icon.....	96
Figure 5m: New structure as interface.....	97
Figure 5n: Table of new structural interfaces.....	99
Figure 5o: Movement as connection icon.....	100
Figure 5p: Movement connecting the individual interfaces.....	101
Figure 5q: Site plan.....	102
Figure 5r: Ground floor plan.....	103
Figure 5s: First floor plan.....	104
Figure 5t: Section D-D with external details.....	105
Figure 5u: Suspended veranda and stage detail	106
Figure 5v: Acoustic separation detail.....	107
Figure 5w: Section A-A.....	107
Figure 5x: New ablutions.....	108
Figure 5y: Service icon.....	110
Figure 5z: New services along the lines of movement.....	111
Figure 5aa: Ground floor ceiling plan and lighting layout.....	112
Figure 5bb: First floor ceiling plan and lighting layout.....	113
Figure 5cc: Existing and new natural ventilation in the internal spaces.....	114
Figure 5dd: Existing and new natural light penetrating the internal spaces.....	115
Figure 5ee: Internal natural lighting.....	117
Figure 5ff: Natural and artificial lighting in the internal spaces.....	118
Figure 5gg: Typical assembly of service spine.....	120
Figure 5ii: Wood service spine.....	120
Figure 5hh: Placement of the service spine.....	121
Figure 5jj: Section of service spine footing.....	121
Figure 5kk: Possibilities of programmes.....	122
Figure 5ll: Skin and identity icon.....	124
Figure 5mm: Alterations to the skin and identity.....	125
Figure 5nn: Renderings.....	126
Figure 5oo: Layered building system.....	129



INTRODUCTION
chapter 1

BACKGROUND

In an increasingly globalised world, the formation of cities is drastically influenced by economic (Sassen 2006), social and political conditions (Hildebrandt 2006). Within this dynamic, cities' perimeters are subject to continuous change (figure 1a), either expanding or withdrawing resulting in vacant or degraded structures (figure 1b). Fewer people are commuting to the city and urban sprawl further contaminates it, the urban body is 'being eaten from inside', resulting in dead empty pockets (Mitchell 2001) (figure 1b).

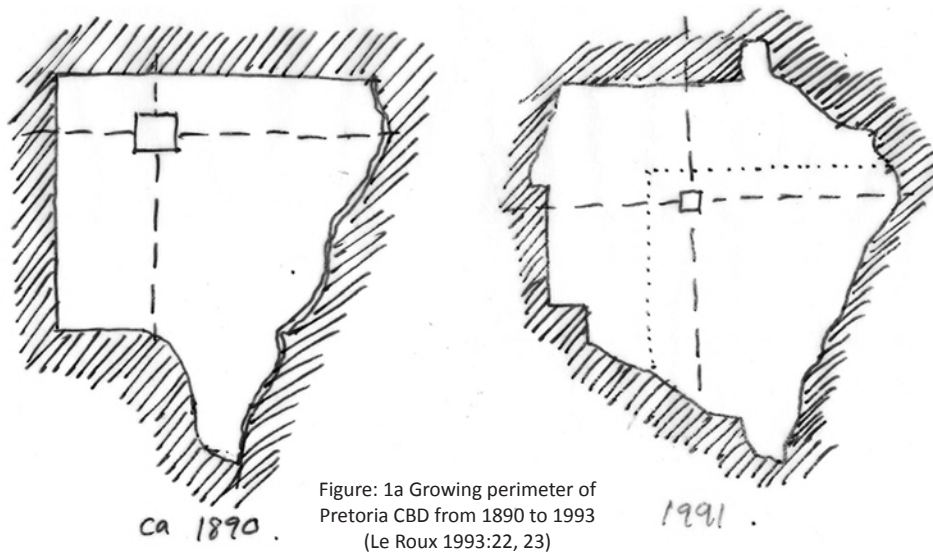


Figure: 1a Growing perimeter of Pretoria CBD from 1890 to 1993 (Le Roux 1993:22, 23)

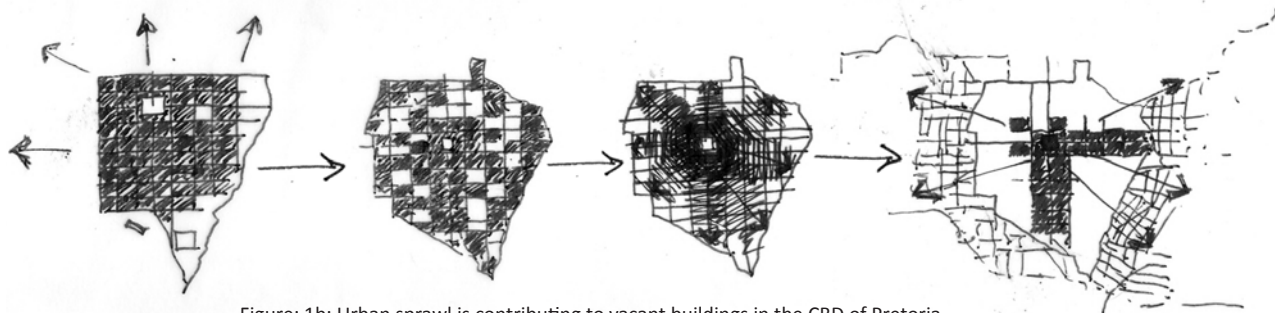


Figure: 1b: Urban sprawl is contributing to vacant buildings in the CBD of Pretoria

These complex globalised cities have a rich diversity in life styles (social interaction), cultures and economic challenges which can be experienced through habits of everyday life - with the latter being the most acute form (Schoonraad 2000).

Inequalities in cities caused by these economic challenges are visible in social and spatial differences (Sassen 2006). Developing countries such as South Africa are not spending finances to develop and rectify these social environments. All new urban schemes such as Re Kgabisa Tshwane 2006 (City of Tshwane 2006) and The City of Tshwane Spatial Development Strategy 2010 and beyond (City of Tshwane 2007) propose radical interventions to stop urban degradation. This involves enormous financial impute and densification of the city fabric towards a new **Utopia**¹. However, what is not taken into consideration is the alterations to existing built fabric (Scott 2008:1) in order to improve degraded social environments and hence social influx. Aspects such as the implementation of responsive interior spaces that include the adaptation of space to assist change in programme and the improvement of the interface between private and public space can enhance social and as result economic development (Lipman 2006; Jacobs 1962:44;65-84).

1 New Utopia: The world map does not provide for a space that includes Utopia, nor does it take notice of it. Humanity is always seeking for something greater. When the previous decade's Utopia is reached, yet again they set sail in search for a better country (Coleman 2005:iix). It would be a less intrusive search to find or create an adaptable country, changing its colours with the change of each social regime.

Shifting social conditions put a time limit on the social exploitation of such urban environments. Time has very particular temporal qualities which long for space to be able to fluctuate (Hauptmann 2006:214). This encourages diversity and movement which is the determining factor of the boundaries between life and death of a space. Living space is fluctuating space, keeping up with social variables and not a monolingual building designed for a specific programme, not able to adapt to the 'language' of the next occupant (Lambert 1993:53).

It is of great concern to create **living cities**, cities where interior spaces of buildings become an extension of the surrounding social outdoor areas (Gehl 2006:31). In such cities public spaces have a much better chance of working well. Here spaces are penetrable and functional for the ordinary citizens and buildings grow naturally, logically and harmoniously out of its surrounding conditions (Lambert 1993:7).

The implementation of a **temporal intervention**², which is interior architecture - further discussed in chapter 4, implies

that the identity of a building can change with society. Giving the building the ability to change its function as needed – form doesn't always follow function, but form rather follows future. This leaves us with the underlying question: **How can interventions at an interior scale improve the influx of society to urban environments and address vacant buildings caused by changes in economic and social environments?**

- **What basic interior architectural principles can be applied to alter the interface of interior and exterior spaces of existing buildings to create living cities?**
- **How can one create interior space that respond to changing conditions and in doing remain valid and improve the social notion of the city?**

2 Temporal intervention: An intervention with minimum impact to the existing environment in which it is placed, and can be removed or altered accordingly.

OUTLINE BRIEF

The aim is to design or transform an existing, mono-functional space into a responsive space that is able to adjust to changing social conditions and the user's specific needs. In other words the thesis will attempt to alter an existing building in the CBD - vacant or partially used - without prescribing a specific programme that implies definite conditions. Specifying a definite programme to the building may lead to the exclusion of other varied programmes in the future. Scott (2008:3) believes that specifying in this way, may lead to future vacancies. In contrast, the idea is rather to keep the "existing occupied and significant" (ibid 2008:xv) by allowing change to occur naturally in a given space.

"...everything physical changes" (Scott 2008:8). Change is inevitable, thus spaces should be designed with transformation in mind. The spatial intervention must be able to change with the progressive social environment. "...function is uncoupled from social progress" and "buildings over time will alter their status with regard to society" (ibid: 14-17). There is a necessity to create a relationship between the 'living' and the built form.

The objective is to address the following areas of concern:

- o interface between built form and human interaction
- o influence of interior architecture on urban conditions which include the interface between private and public spaces
- o interplay between building and everyday use (social environment)

To test the adaptable nature of the building and its spaces, a selection of programmes - ranging from public, semi-public and private - will be placed in the proposed design to illustrate the utilisation and adaptability of the building.

DELIMITATIONS

The following delimitations apply to this study in order to have a product based result:

- o The focus of the study lies within the CBD of Pretoria, with changing boundary lines and scattered vacant or dilapidated buildings.
- o After a field study conducted on 23 February 2010 (see Chapter 3), the assumption was made that the main reason for building vacancies can be traced back to two main factors:
 1. Poor street interface (facade as a boundary and therefore difficult to breach by the pedestrians) and;
 2. The inability to adapt to the needs of new and future occupants.
- o Although references will be made to the profession of architecture, the primary focus is on interior architecture and its contribution to the creation of living cities.
- o In-depth understanding of cultural diversity in South Africa is not of importance to this study, thus there will only be reference to the greater whole of cultural affiliation since it is a factor in determining the nature of the social condition of the city.
- o The design of external social environments will not be fully exploited in the proposal since it does not fall in the realm of Interior Architecture. In order to formulate the interface between interior (typically private) and exterior (typically public) space, the exploration of these public social environments are crucial to propose the necessary adaptation of building facades and sidewalks, and will therefore be included as framework and not detailed design.

RESEARCH STRATEGY

"Always design a thing by considering it in its next larger context – a chair in a room, a room in a house, a house in an environment, an environment in a city plan."

ELIEL SAARINEN (Frederic 2007)

Like any other living creature, a city is a large organism consisting of matter, varying in size. To every leap travelled in scale, there is a corresponding shrink to a dimension travelled within. From urban scale, right down to the interior (molecules and DNA coiling) spaces, it is implicitly linked to each other. For one to be successful, the former should be equally successful. For a thorough understanding of this idea, refer to figure 1c.

THREE SCALES [of research]

The first portion of the dissertation will outline the current problems and possible solutions to **urban** decay.

Street scale represents life between buildings which makes a positive collaboration between the two opposite scales, urban and interior, possible.

Interior scale will be the area of focus, indicating how **moderate scale**² interventions, even on individual level, can counter social situations on an urban scale. Take care of the small things and the big things will take care of themselves.

The diagram represents the relationship that has emerged among the different scales.

2. Moderate scale: based on interior dimensions. Interventions of the Interior Architecture profession as defined in chapter on Interior Architecture as mediator

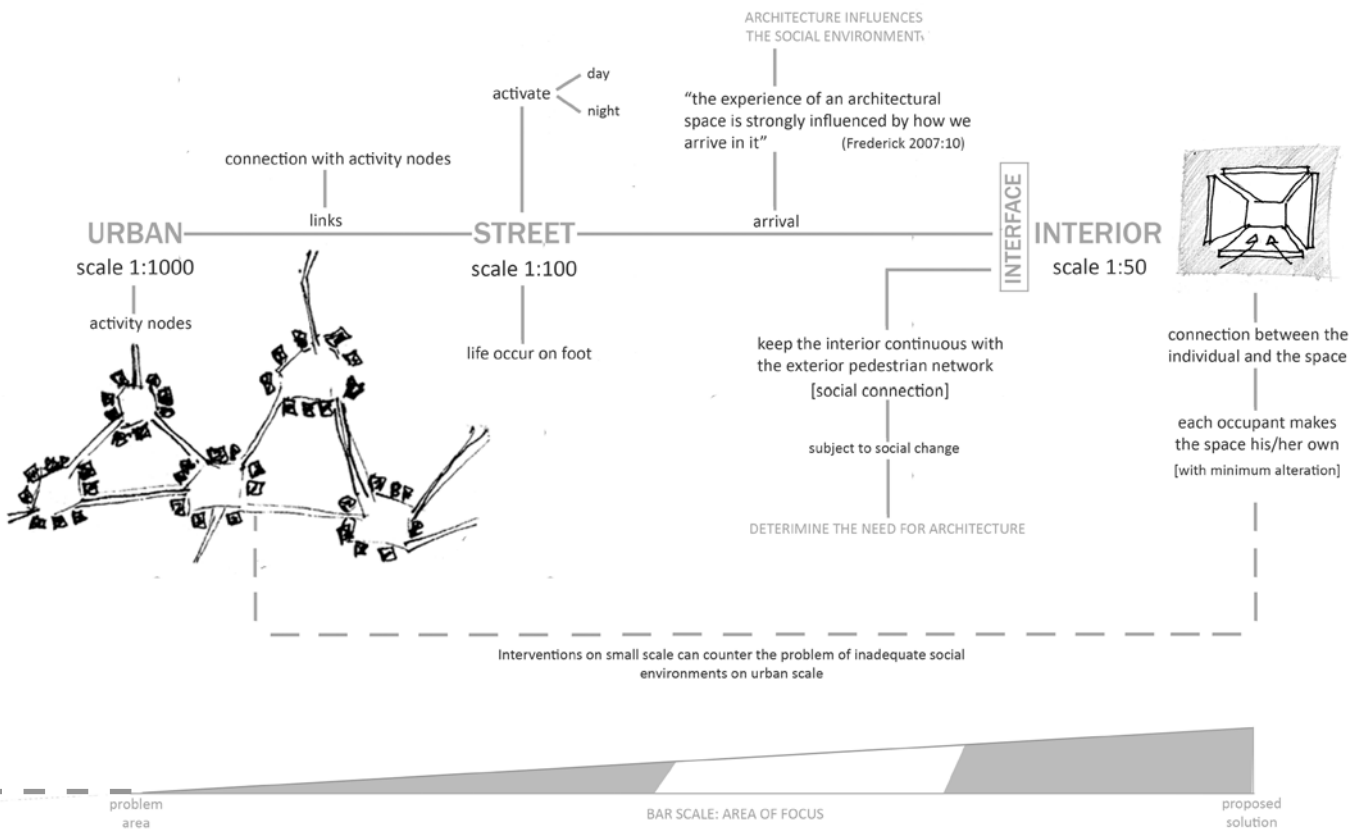


Figure 1c: Diagrammatic representation of the different scales of research and how it influence each other

RESEARCH METHODS

This study follows a liberal approach to research methods, considering multiple approaches and applying the strengths of each respectively.

“Designers often use mixed-method research approaches without explicitly calling these approaches ‘mixed-method’” (Groat & Wang 2002:341). The use of a more integrative approach is a method whereby strengths of multiple methods are used to complement each other and formulate a single objective.

This study challenges the functional design approach of the Modern movement and the Post-modern tool of communication with society to achieve common ground through spatial interpretation and experiences to accommodate the fluctuating function. It calls for logical debate (pragmatic thinking) combined with intuitive creativity.

In exploring the question of how *interventions on an interior scale can improve the influx of society to urban environments and address vacant buildings caused by change in social environments*, the method for collecting data includes: using precedents of successful cities which introduced social public spaces; formal analysis of existing buildings and the study of current social behaviours in the environment of the proposed site; personal experience – using subjective feelings and experiences.

According to Moustaka (1990:10) the “Heuristic process [which] is a way of being informed, a way of knowing”. Combining the Heuristic process with Qualitative research methods would be of great advantage to gather the appropriate information. The Heuristic Research method incorporates creative self-process and self-discoveries, essential in investigations of human experience – the “emphasis is on the investigator’s internal frame of reference, self-searching, intuition, and dwelling lies in the heart of heuristic inquiry” (ibid:12). This study incorporates this method along with the Case study approach that implies the study of precedents on paper and in real life context.

This study thus follows multiple research approaches to gather the information necessary to address the problem statements.





INTRODUCTION

Worldwide cities are undergoing both growth and decline in urban density (Rasmuss 2000). The contents of cities change because of social and economical conditions, forcing the face of the city to also change with it (Rasmuss 2000). This constant change in social environments urges designers to react on such changes through alteration and adaptation of the existing structures (Scott 2008:6), rather than attempt to control it. A controlling design only proposes a solution to the current social position and does not provide for the next generation of change, contributing to yet another cycle of vacant buildings.

Pretoria is a growing city (illustrated in figure 1b), yet has a number of vacant and/or dilapidated buildings as illustrated in figure 2a. A number of buildings are also becoming ‘mothballed’ with only street level activity keeping them alive. To address the current situation and to prevent another cycle of vacancies, the city needs designers to react to its existing structures without attempting to ‘control’ it.

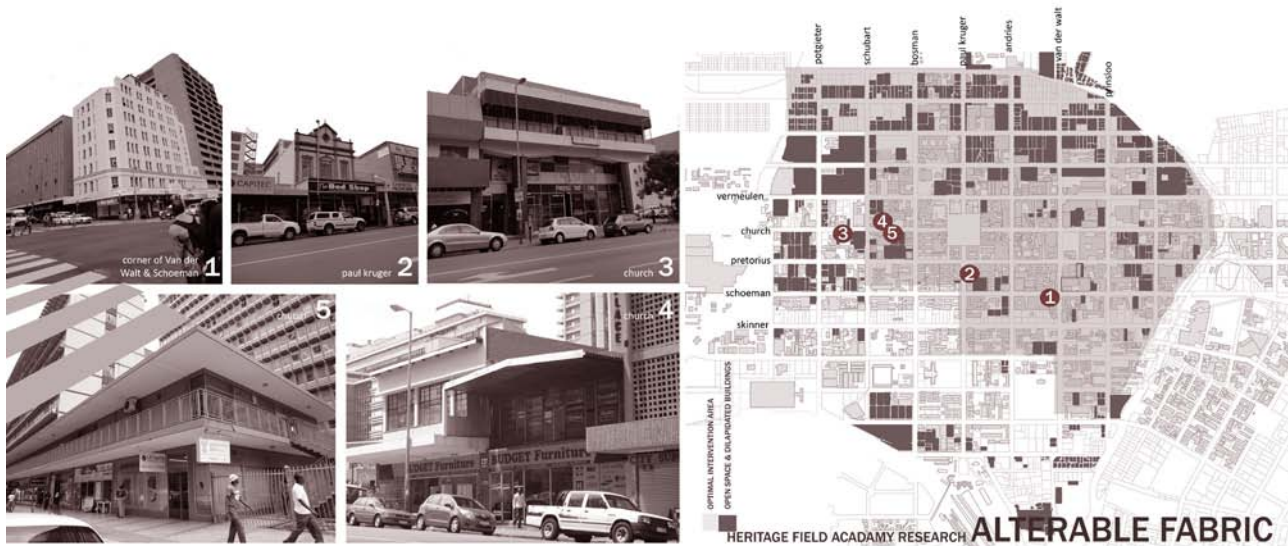


Figure 2a: A few examples of buildings in Pretoria with only the ground floor functioning

DISPOSITION OF LIVING CITIES

Changed conditions in urban societies are expressed by the change in street life patterns (Gehl 2006:50).

It is an all too common approach to view urban space as one big entity consisting of a collection of city blocks with surface areas covered in buildings. It is too seldom thought of as spaces used by individuals. The connections, shapes and scale of these spaces are often not taken into consideration (Trancik 1986:1). These spaces are seen by Trancik (ibid) as “anti-space”. Anti-space is crucial in the role of improving social influx to the city since cities are experienced on a human scale.

According to Ian Bentley (1985:9), the design of a space affects the choices people make dramatically. It affects: where people go and where they cannot; the range of uses available; how easily people can understand what opportunities it offers; the degree to which people can use a given place for different purposes; whether the detailed appearance of the place makes people aware of the available choices; people’s choice of sensory experiences; and the extent to which people can put their own stamp on a place. To summarize: it is of immense significance to make cities penetrable and functional for the ordinary citizens and provide them with a **living city**.

“It is important that all meaningful social activities, intense experiences, conversations, and caresses take place when people are standing, sitting, laying down, or walking. One can catch a brief glimpse of others from a car or from a train window, but life takes place on foot. Only ‘on foot’ does a situation function as a meaningful opportunity for contact and information in which the individual is at ease and able to take time to experience pause, or become involved.”
(Gehl 2006:72)



A successful example of a recently transformed living city is Curitiba, Brazil. The successful innovations of the city's fabric renewal process was initiated and implemented by the city leadership which lead to actually making a difference (Campbell 2006:5). One of the secrets to success in the planning was the continuous interplay of public participation (ibid:5). Curitiba, further illustrates how focussing on a human scale down town (figure 2b) can make an immense improvement not just on a social level, but also economics and safety (Lipman 2006). Central Curitiba was remade for its citizens rather than solely for automobiles. Cheap public transport – South Africa is in the process of implementing affordable and reliable public transport, BRT and Gautrain – is responsible for a decrease in fuel used per capita and citizens are attracted to the city (Campbell 2006:5-6), achieving a further decrease in sprawl. **Buildings previously marked for demolition were rescheduled and adapted for social use.** Simple treatment of streets, for instance the sidewalks fronting a building is cobbled, closed off to cars and streets are strung with lights which make the buildings inviting. And the slums are kept neat by slum dwellers, for each sack of garbage they collect; they get a sack of food in return. Overall, there is a general promotion of small scale businesses and social interaction (Lipman 2006).

There is a vibrant social and economical motion within the CBD of Pretoria, but it is limited to certain sections of the city leaving barren pockets in other areas lacking in activity (figure 2c). Such 'dead' spaces do not contribute in creating a living city. Spatial design can promote the development of social activities by using built form to encourage or discourage social interaction. The physical framework undoubtedly plays a crucial role and can be used to reverse the current lack of activity. If a high concentration of people is not present in a city, it can cripple the regeneration of the area (Jacobs 1962:255).

Figure 2b: Street in the city of Curitiba, Brazil. Top: (Fox 2009), middle and above: (Lipman 2006)



1. SOCIAL AND ECONOMICAL MOTION IN THE CBD:

Pedestrian behaviour in the urban environment. The eastern link of church street is flooded with social and economical activity (nr.1-3), in comparison to the quiet western link (nr.4 & 6) and nr. 5 which is just a street block north of 1 and 2.

Pretoria's CBD is in need of a framework that addresses the current lack of activity in certain sections and attempts to reverse this negative trend.

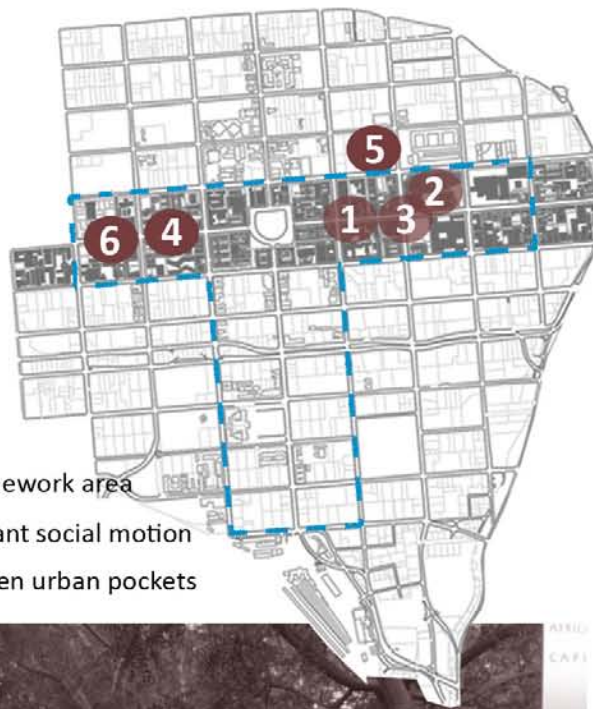




Figure 2c: Sectional vibrant social and economical motion in the CBD

PLUG IN CITY URBAN FRAMEWORK

(by author, Olga-Marie de Villiers, Radhia Khan, Janri Myburgh, Grant Prestedge, Suné-Marie Steyn)

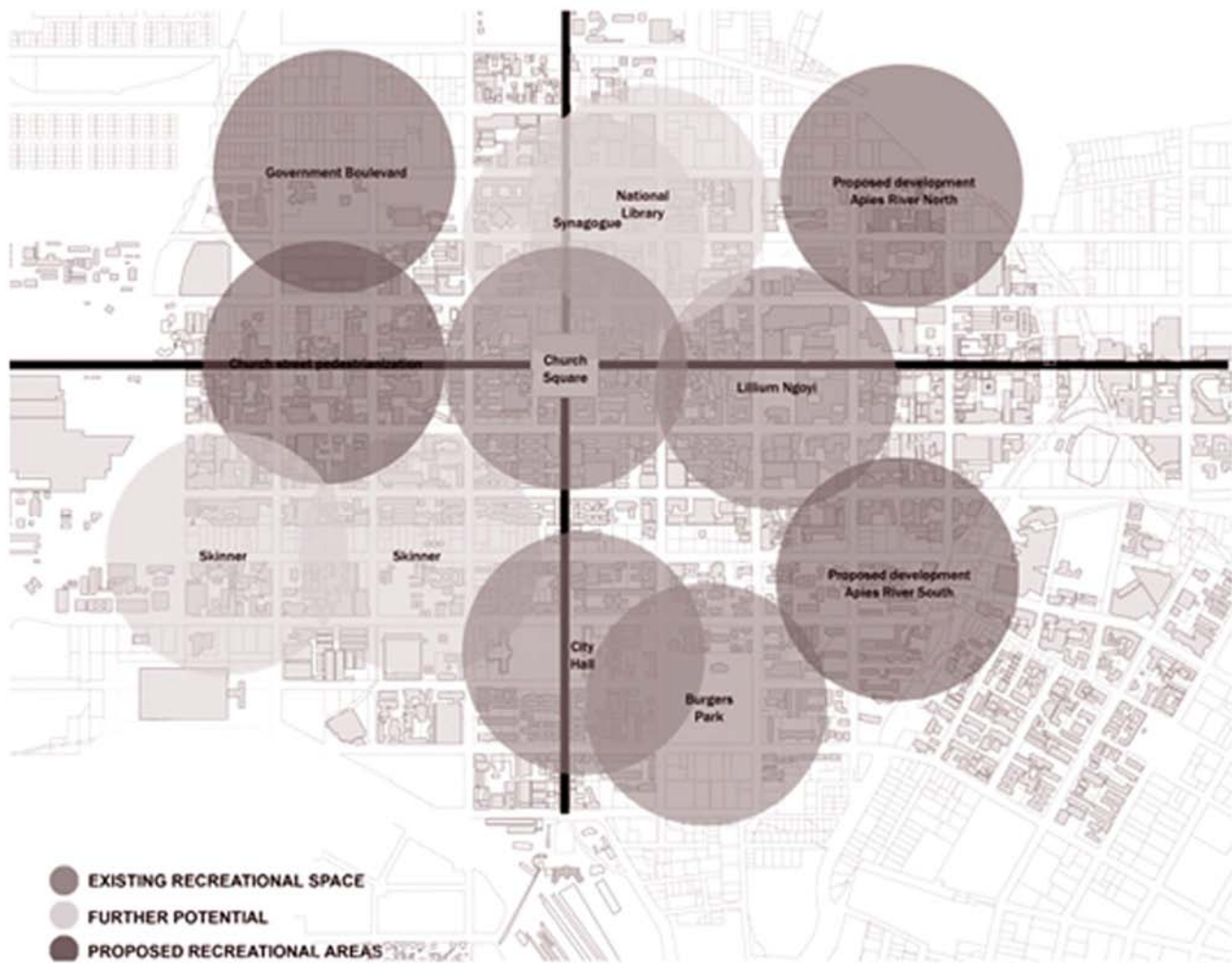


Figure 2d: Existing and proposed activity nodes in the CBD as proposed by PLUG-IN CITY Framework

According to the Tshwane Inner City Development and Regeneration Strategy (2006), the inner city is identified as a strategic focus area because it acts as the functional and symbolical heart of the greater Tshwane. Therefore the *Plug-In-City* Framework's location is of strategic significance, placed within the heart of the CBD of Pretoria.

The scope of the framework involves the whole extent of the CBD in order to connect the existing and proposed activity nodes. With specific focus area on the core which includes Church Street as the eastern and western gateway and Paul Kruger as the southern gateway to the city. The individual projects are driven by a holistic approach to integrate the city's identity and in providing the public with better access and awareness of the respective activity nodes.

As a response to this, the framework proposes Church Street as a vibrant spine of public space with Vermeulen, Pretorius and Paul Kruger Streets supplementing the public activity.

Existing focal points (activity nodes) include Lillian Ngoyi Square, Church Square, the State Theatre, Sammy Marks Square, City Hall, Kruger House and various arcade systems. Pedestrian activity is ample to the east of Church Street, conflicting with the other routes predominantly due to the fact that vehicular movement is generally restricted which allows for more informal interaction space along this spine.

as per group work.

1. THEORETICAL BACKGROUND:

The theory of Collage City (Rowe 1978) emerged as a response to problems brought about by modern urbanism. The study involved looking at figure ground drawings which emphasize the role of public and private space in determining the character of the city.

Collage is both a fragmentary technique and a state of mind that aims to address the difficulties of both Utopia and tradition in an urban context. The idea of collage is used to identify the problem of composite presence in the city. Collage City promotes an anti-totalitarian approach: one should rather think of a sum total of small and opposing set pieces than to continue the search for total and perfect solutions.

2. THEORY APPLIED:

The implementation is focused on site specific interventions (fragments) that are initiated with a common vision. Each intervention functions as a catalyst on its own, thus creating points of rejuvenation throughout the city. When viewed on a larger scale, a collage is created, revealing the diverse and pluralistic character of Pretoria's inner city.

The proposed concept is intend to be implemented in four phases (figure 2e) and aims to increase the legibility and accessibility of the city to all users, harnessing the grassroots' daily impact of pedestrian experience whilst emphasizing and exploring the individual components of the city. The phases connect these elements through collage and event and consider the experience from a variety of scales.

Phases:

- The first phase is the identification of potential within the city and their development as a node.
- Phase two links these nodes by corridor developments, aiming to strengthen the existing commercial and residential sectors.
- Phase three of the framework uses thresholds as points to indicate the currently concealed aspects in the city, harnessing identity, street essence and branding.
- The aim of phase four of the framework is to celebrate the city by implementing a festival: *PlugIn Festival*.

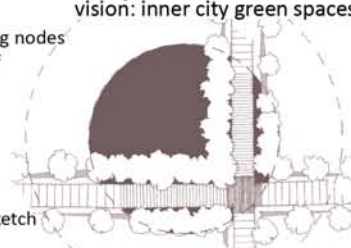
1

public nodes

by means of:

- identification of existing nodes
- new proposed areas of recreation (figure 2d)
- must be accessible to residents and workers

vision: inner city green spaces



node sketch

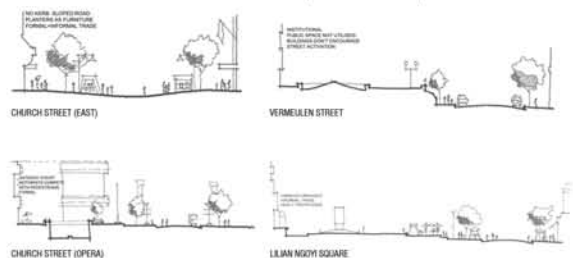
2

corridors

vision: interactive public routes with focus on street edge

by means of

- strip development between public nodes
- connect and encompass existing commercial and recreational activities
- use existing transport routes and events to enhance pedestrian experience and public interaction



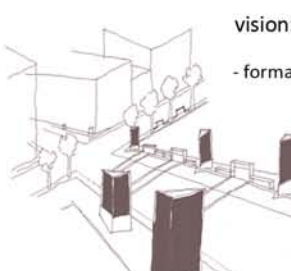
3

thresholds

vision: orientation and information

by means of

- formalizing thresholds into and within the city
- increase legibility of existing significant spaces by branding certain zones
- promote underutilised resources



Pretoria **PLUGIN festival**

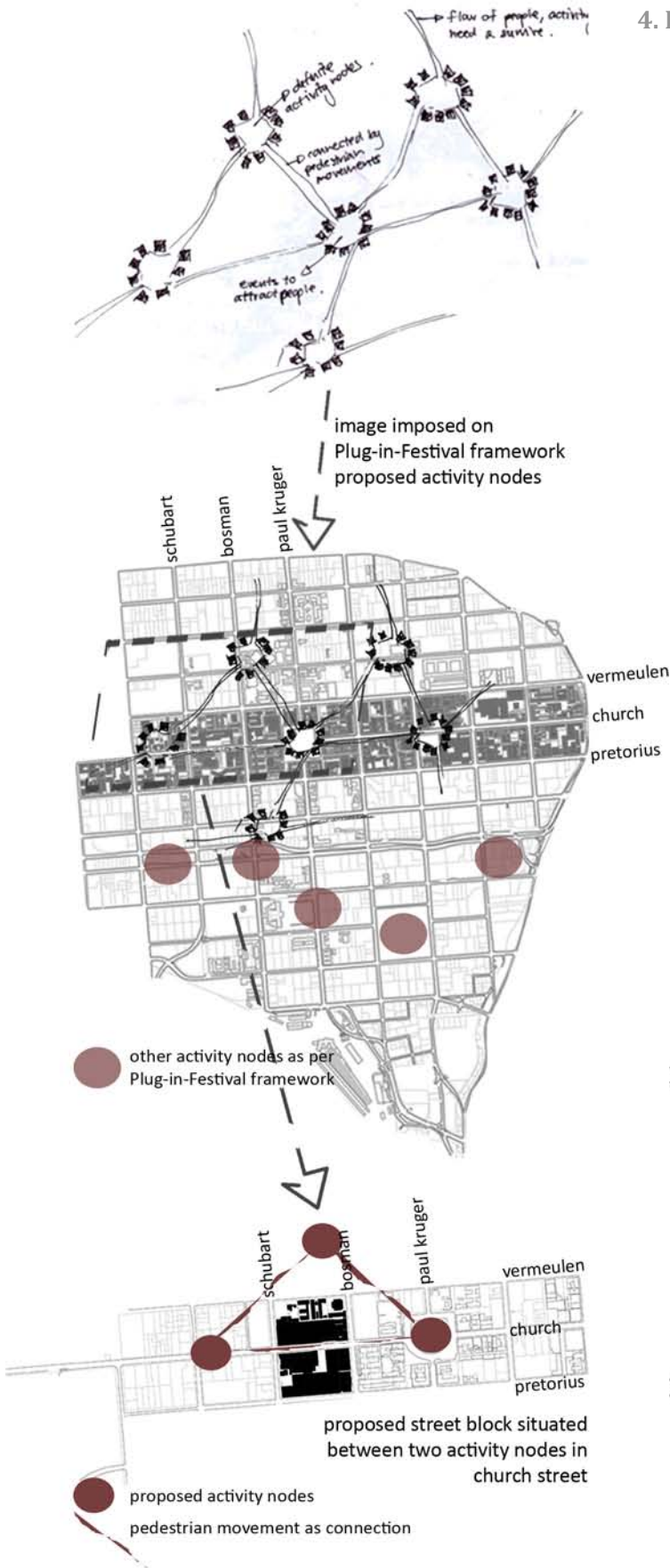
- vision:
- to create a local/regional identity
 - create recreational attraction, drawing people to the city
 - generate income
 - sets up framework for collaboration and skills transfer sparking future incentives
 - an opportunity for community involvement



Figure 2e: Phasing of Plug-In-City Framework

3. RESPONDING TO THE URBAN FRAMEWORK

The framework proposes to link the existing and new activity nodes. INTERFACE is located in one of the connecting pedestrian movement paths (formulating part of the cultural and historical walk within the Plug-in Festival) linking two public activity nodes as proposed by Plug in City Framework.



4. PROPOSED SITE WITHIN A CONNECTION PATH

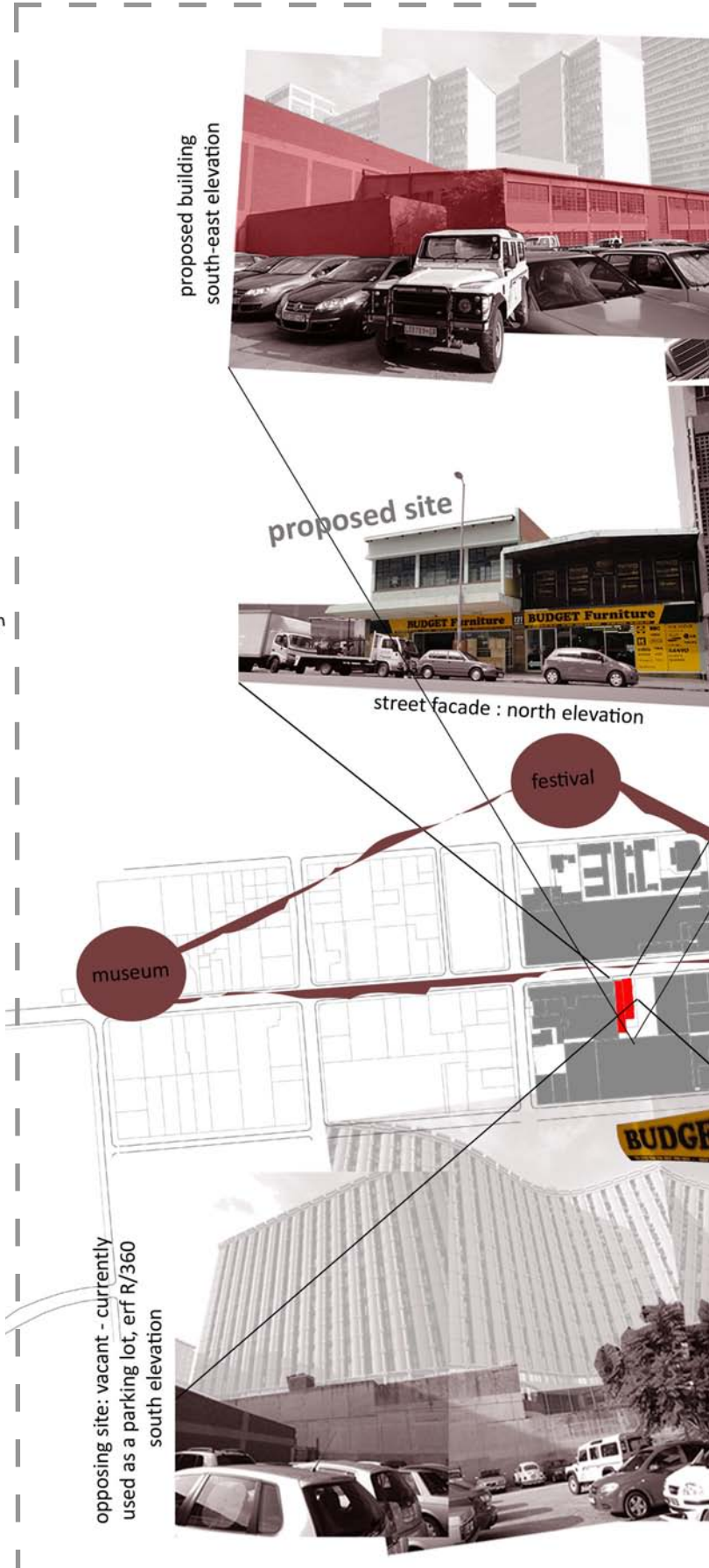


Figure 2f: Activities are stretched out in time and space and connected with pedestrian movement

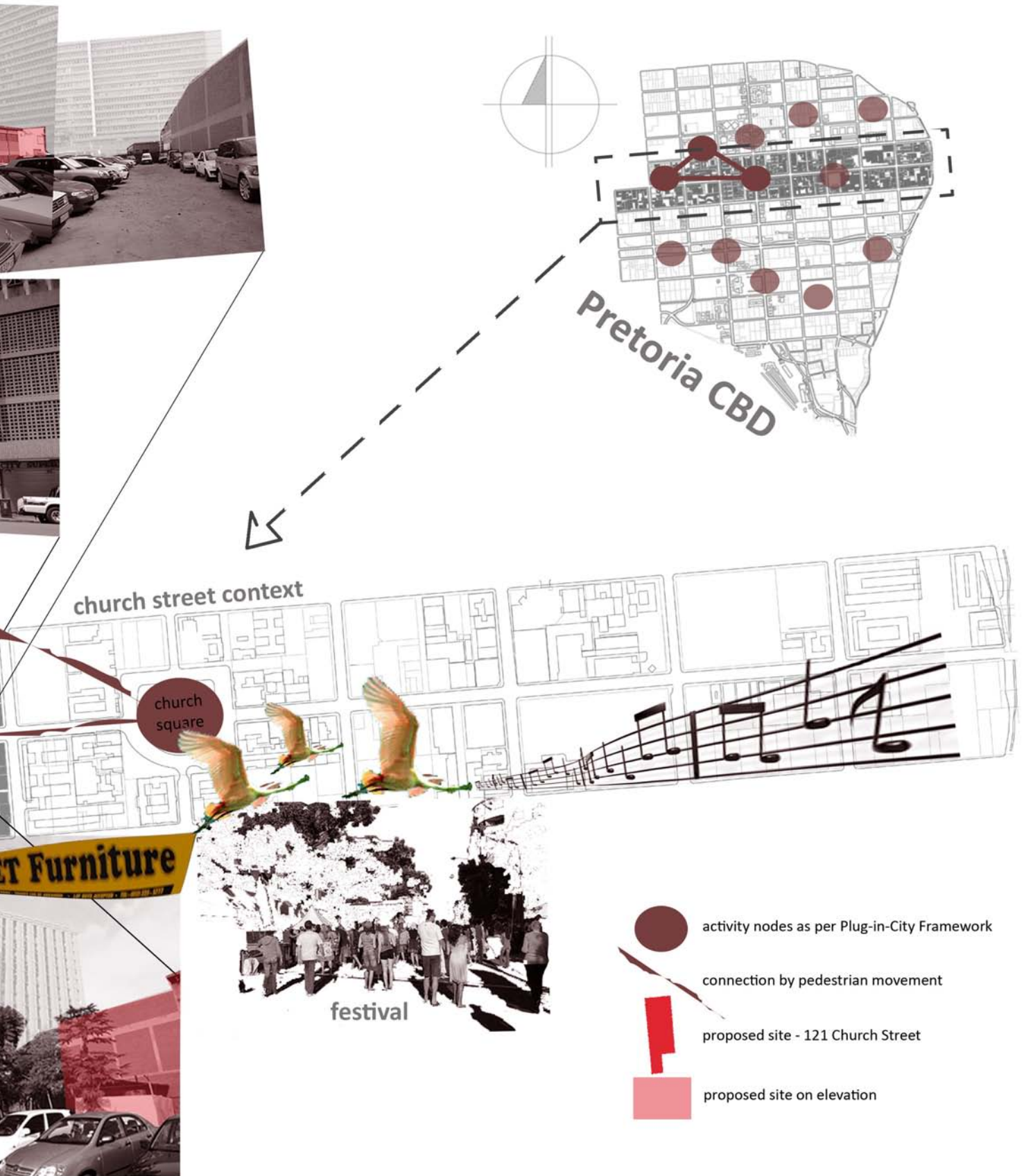


Figure 2g: Location and views of the proposed site surrounded by activity nodes

CONNECTION OF ACTIVITIES

“Where there are people – in buildings, in neighbourhoods, in city centres, in recreational areas, and so on – it is generally true that people and human activities attract other people. People are attracted to other people. They gather with and move about with others and seek to place themselves near others. New activities begin in the vicinity of events that are already in progress” (Gehl 2006:23)

To experience a space, the user must be able to easily and comfortably move about (access) (Gehl 2006:51); to be able to linger and explore the street life that connects the interior spaces of buildings. The approach to improve this experience must be done on a moderate scale (Sassen 2006; Lipman 2006). Moderate changes, interior interventions as defined in chapter 4, allow for objectives to be accomplished faster.

“The character of the life between buildings changes with changes in the society situation” (Gehl 2006:7). In a public space the individual is contributing in a modest way towards the atmosphere of the space (ibid:17). The participation of people is needed to activate the streets and great attention should be given to the design thereof.

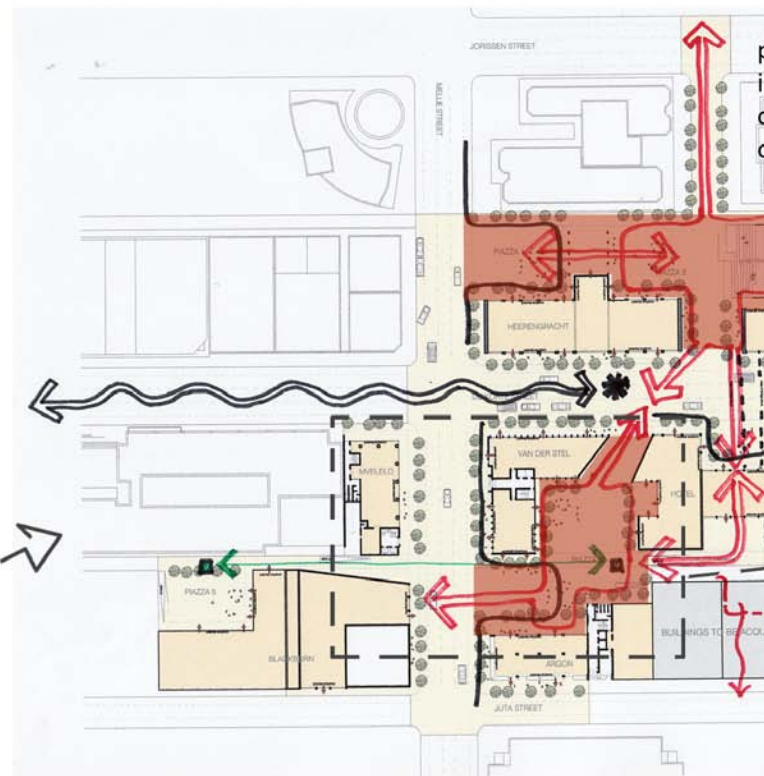
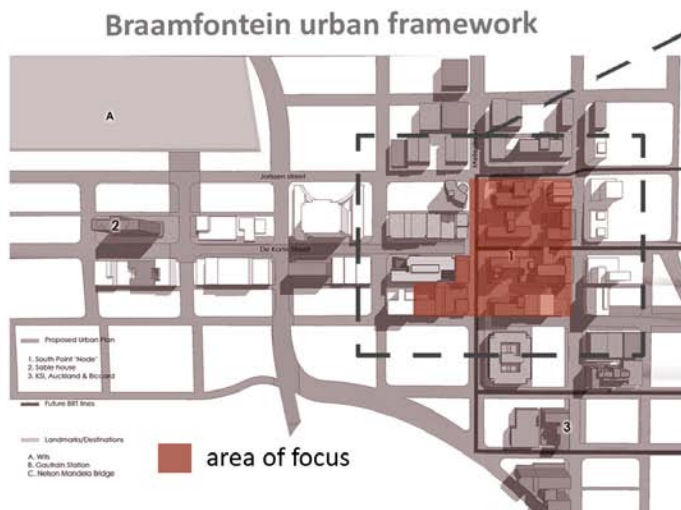
The focus of this thesis is not to create a meeting space nor redesign the streets of the CBD, but rather to provide direction of how to invite activities through designing responsive street interfaces affected by spatial qualities of the interior environment. As exhibited by the temporary architecture of Dough Garofalo: Mellow Yellow (Demby 2003), social events can evolve spontaneously. In an attempt to activate the public space in front of Chicago’s Museum of Modern Art, Garofalo constructed a pavilion that promotes social interaction by the incorporation of seating and shading devices. The pavilion is a connection between the museum and the city; it becomes the connection point of activity where situations are allowed to develop. This is evidence of how the addition of simple architectural elements to existing built fabric can become the connection with daily social activities and therefore increase the opportunity for development and activation of space.

1. PRECEDENT - CONNECTION OF ACTIVITIES:

Situated just outside the Johannesburg CBD, Braamfontein is currently undergoing a process of regeneration (Braamfontein Precinct Regeneration Programme). In collaboration with South Point Property Holdings, Silvio Rech and Lesely Carstens proposed an urban framework that entails the connection of activity nodes by pedestrian movement.

urban settings can be filtered down to human activity nodes and their interconnections

Figure 2j: Local precedent study of pedestrian movement used as connection between individual buildings



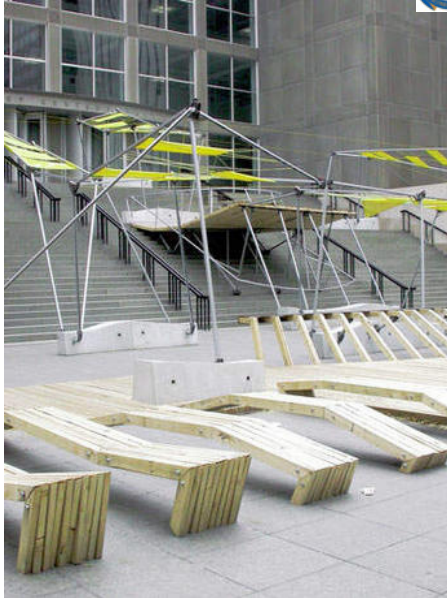


Figure 2h: Mellow Yellow,
Temporary architecture
designed by Dough
Garofalo (Demby 2003)

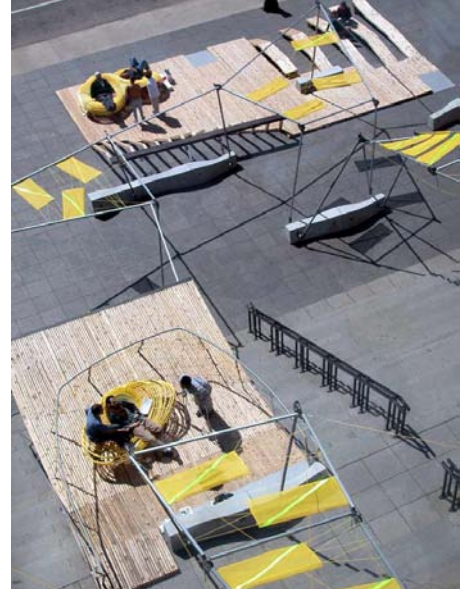


Figure 2i: Mellow Yellow,
Chicago's Museum of
Modern Art (Garofalo
2003)

des and

It is important to dedicate time to pedestrian movement along observed ways; this includes the arrangement of activities on ground floors of buildings as it divines the streets

pedestrian movement is influenced by the building configuration and location of attractions



plan rendering (by SRLC)

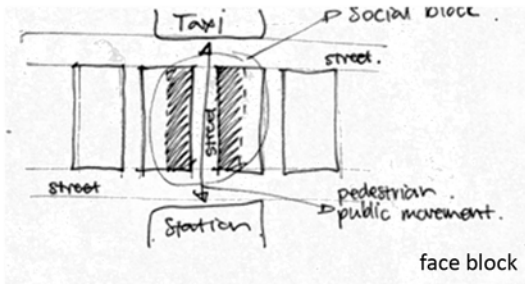
intervention (current)
photos taken by author



pedestrian axes

LAYERS OF DEFENCE INTERFACE BETWEEN INTERIOR AND EXTERIOR SPACES

The term for a public street surveillance by dense social housing is a *face block*, which means exactly that - a row of houses with the street facades as the border between public and private space (European model). In South Africa, we arrange a sequence of lesser spaces (transitional space) before you reach the private space, giving the private space a more significant feeling. This transition space acts as the interface between public and private space. This is the principle of layered spaces where "the outer rings of subsidiary zones protect the core ones" (Frederick 2007:10).



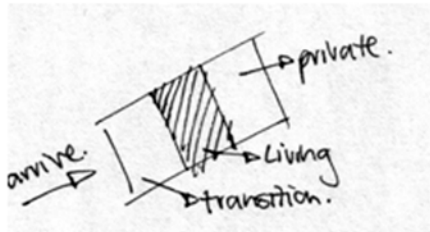
"Change of use causes a massive change in the rituals of occupation. Buildings change as the city changes" (Scott 2008:17)

There are social activities which connect city environments; "these activities include day-to-day interaction between city inhabitants, but also interaction between inhabitant and environment. On a human scale this feedback from user to building and vice versa can be seen in the adaptation in order to fulfil a certain need" (Brits 2007:12) and create favourable conditions for harmonious living.

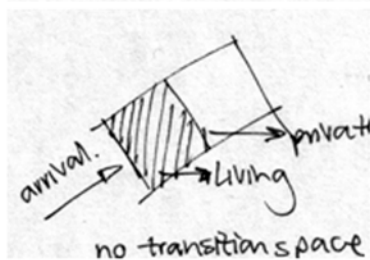
Favourable conditions does not entail the design of "interesting" buildings by using dramatic architectural effects, it rather requires simple principles to create an interface between the exterior and interior spaces. The exterior can invite, or in some cases prohibit, the user to enter and experience the internal space (figure 2b). The facade of a building must 'interact' with city dwellers to encourage them to experience buildings. This experience creates an ease of mind and creates opportunity for simulation of various activities.

The interface between interior and exterior space (in the physical realm) is the subject of this dissertation. Because of the integral part the exterior social activities play in the interplay of such physical realms, a further discussion on outdoor space will follow.

residential building layout from public to private space:



South African model



European model

layers has the sole intention of protecting the core, thus limiting access whether it is from human contact or preventing the natural elements to penetrate

Figure 2k: Residential building layout - layers of defence

SCALES WITHIN THE CITY: MOVING FROM PUBLIC TO PRIVATE SPACE

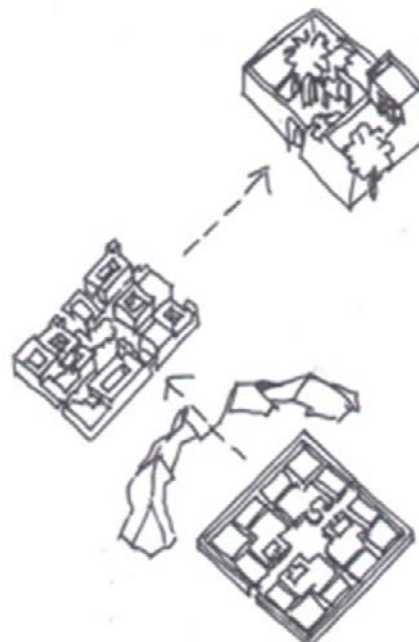


Figure 2l: Hierarchy of scale from city to individual dwelling (Kriken 1987)

A city is built up of a series of spaces positioned in hierarchical order from large public spaces, with a gradual decrease in scale to a single private room (Figure 2l, Kriken 1987).

Public spaces in the CBD - especially economically driven areas - have little or no transition from exterior to interior or public to very private territory (figure 2m). Compared to residential buildings (figure 2k) where there is a gradual

transition from the public street (arrival) to the approach and transition over the front yard to the dwelling entrance, entering the living room (semi-private) through to the bedrooms (private).

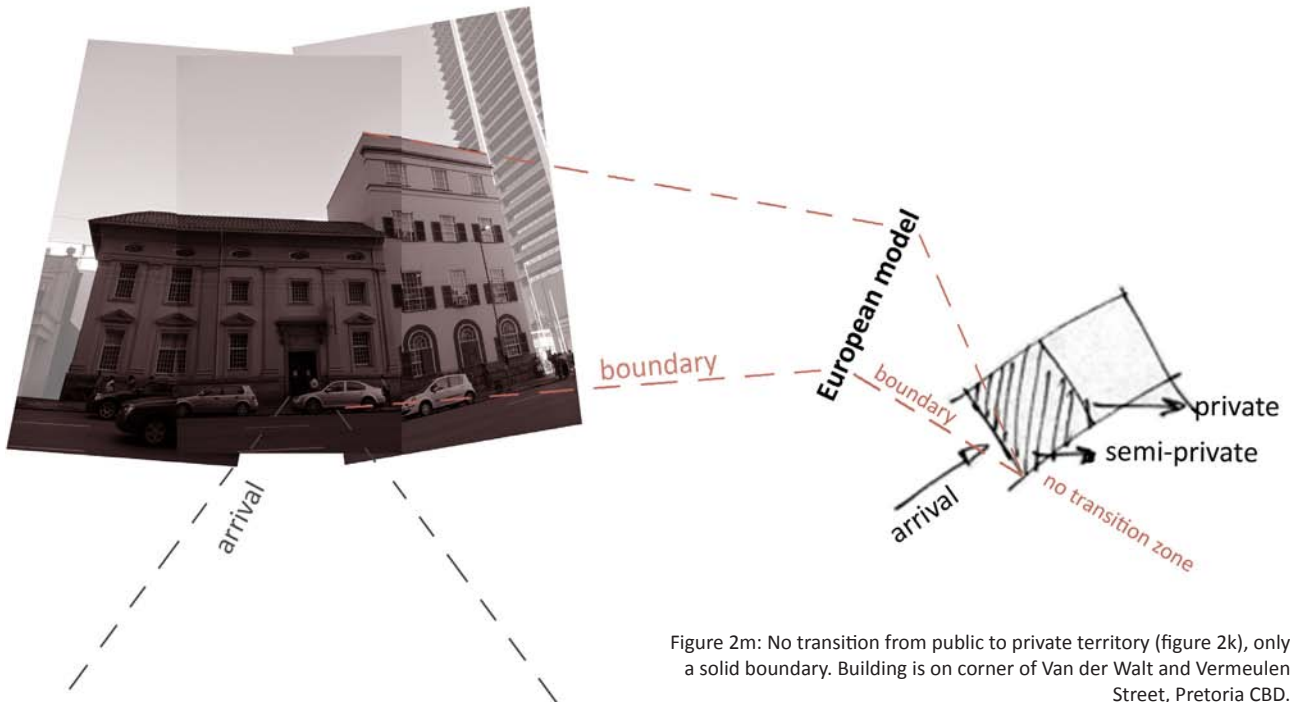


Figure 2m: No transition from public to private territory (figure 2k), only a solid boundary. Building is on corner of Van der Walt and Vermeulen Street, Pretoria CBD.

In the CBD of Pretoria, the hierarchical order of these spaces is not as gradual. It may leap directly from public to very-private, demarcated with a definite boundary – generally the building’s facade. Demarcation of the private space is necessary, but visual connection to the public space is important for security, access and social purposes. The boundary between public and private space may also be as a result of the programme of a specific building.

Boundaries limit access to buildings, whereas gradual transitions invite access. The successful transition between these spaces must have a well thought through social and physical structure with clearly defined yet accessible transitional zones.

CONCLUSION

The success of each city is ultimately identified in how it adapts to the changing rhythms of life, in how it connects or reconnects and inspires the man on the street. Through implementation of responsive designs, cities can transform to become a ‘location’ (destination).

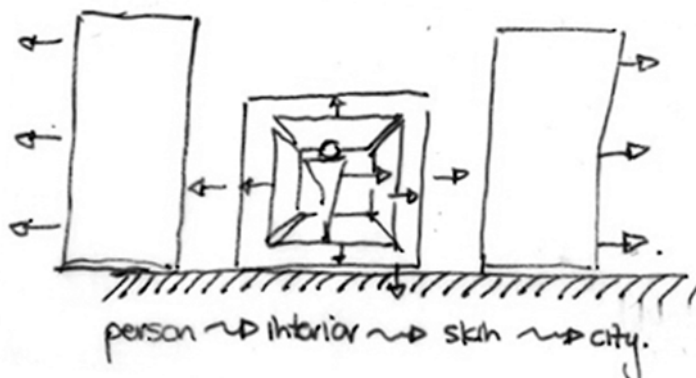


Figure 2n: The interior space influence the quality of the city.

The city of Pretoria is designed from the outside in (figure 2l), an approach that seems to give rise to the formation of boundaries instead of transition zones (interface) that encourage access and thus social interaction - INTERFACE proposes to move in the opposite direction (figure 2n), indicating that a city can and should be designed from the inside out. Such an approach will produce a more humanitarian city with comfortable internal spaces spilling out into the streets, connecting the social urban activities - to create a social unity within the city. This in turn will aid in transforming Pretoria into a living city.



STREETS AS CONNECTIONS BETWEEN INTERIOR SPACES

chapter 3

INTRODUCTION








Life (feet) on the street, in essence diversity, tends to decrease with economic instability and leads to social inadequacy in the city. Urban sprawl caused the segregation of residential and commercial/functional environments resulting in a decrease in people entering the CBD. Communities are separated to the north, west and more apparent the east of the inner city of Pretoria and need to commute from far to enter the CBD but do not always have the financial means to do so (figure 3a). This results in less people within the cities and a decrease in security levels (fewer eyes to notice an illegal act).

Pretoria is a growing city (illustrated in figure 1b), yet has a number of vacant and/or dilapidated buildings as illustrated in figure 2a. A number of buildings are also becoming 'mothballed' with only street level activity keeping them alive. To address the current situation and to prevent another cycle of vacancies, the city needs designers to react to its existing structures without attempting to 'control' it.

STREET CHARACTERISTICS

According to the description of a 'Modernised' city given by Jan Gehl (2006:31), the CBD of Pretoria fits into this category. Characteristics include: multi-storey buildings, extensive automobile traffic and long distances between buildings and functions. In cities like this, vehicular movement is predominantly framed by non-interactive buildings, and public outdoor conditions are poor and impersonal. A site analysis conducted on 23 February 2010 along the northern quadrant of the Pretoria CBD (figure 3b), indicates large distances between street and building facades providing adequate space for public interventions along the sidewalks. These spaces provide adequate opportunity for public interventions along the sidewalks. However, currently such interventions do not occur in these spaces. This is due to a lack of activity brought about by non-responsive street interfaces (refer to figure 2g;h for an example of responsive street interface). At present, the outdoor environment has not much to offer and the few activity areas (recreation and informal markets) that do take place; are spread out in time and place. These activities are concentrated around Church Square, Lillium Ngoyi, City Hall and Berea Park as illustrated in figure 2d. Under these conditions, most people tend to use personal vehicular transport to get to their destination or rather just not commute at all. Compared to '*living cities*' (ibid 2006:31) where people would rather walk from destination to destination and be part of the experience of a social urban environment. A fundamental shift from streets as transport units to streets as 'places' (figure 3d) is required to change the face of Pretoria CBD.

TSHWANE SPATIAL DEVELOPMENT FRAMEWORK 2010

-  gautrain lines
-  railway lines
-  national roads
-  nodes
-  major corridors
-  2009 urban edge
-  provincial boundary



0 3.75 7.5 15 22.5 30 kilometer

Figure 3a: in times of economic instability, less people commute to the city due to remote location and high travel costs, drawn by author

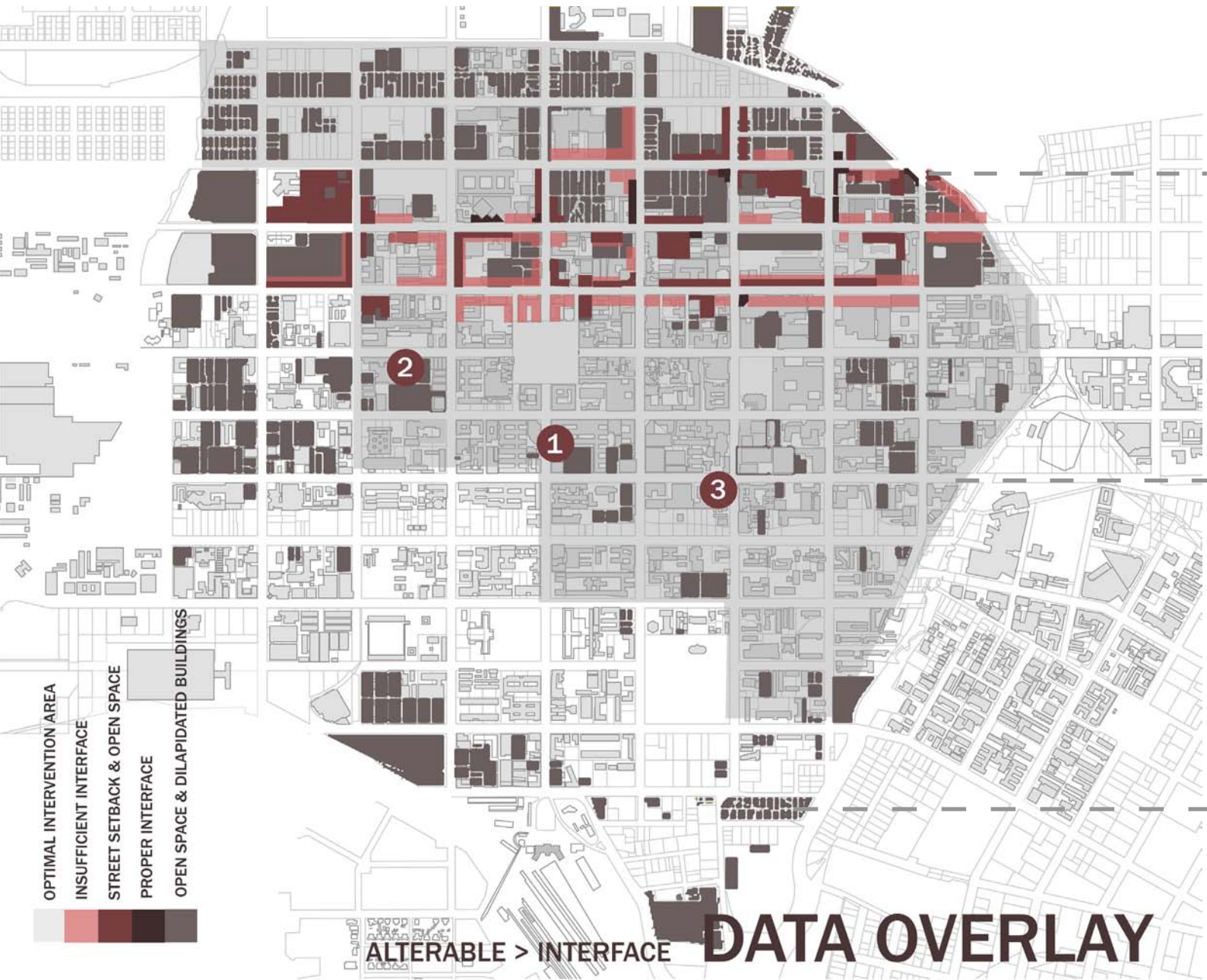


Figure 3b: Data overlay of CBD analysis including potential sites (figure 3d)

STREETS AS PLACES

According to PPS' (Project for Public Spaces) website, the single minded approach of streets being planned as car-centric, has encouraged urban sprawl and a larger ecological impact. It also has a crippling effect on social, communal and economical aspects .

Regarding streets as places has the advantage to improve human life and the environment rather than simply being a unit for vehicular transport (PPS [S.a.]a). Thus being a multifunctional space, streets can create diversity in the city in terms of people, visuals and utilization which ultimately regenerate the social influx.

an exaple done by PPS of an existing street in New York: (PPS [S.a]a)



Paul Kruger Street



current status of the street...



Church Street

proposed site



...if redesigned with community goals in mind



Van der Walt Street

a paradigm shift in street design: (PPS [S.a]b)

Old Paradigm	New Paradigm
<ul style="list-style-type: none"> • Large area planning • Arterials • Access to malls • Retail market area - large • Single family bedroom communities • Big roads, wide intersections, and parking lots • Big solutions (interstates/bypasses) • Standards-based (Green Book) • Performance is about mobility 	<ul style="list-style-type: none"> • Small area planning • Boulevards • Access to corner markets • Retail Market area - small • Mixed residential/office/services with local businesses • Bike paths, sidewalks, narrow streets, and transit • Small solutions (road connectivity, context sensitivity) • Place-based • Performance is about access and sense of place

Figure 3c: Low-rise buildings (potential & proposed sites) in the CBD that are not fully occupied. See figure 3b for location.

“The street is the river of life of the city, the place where we come together, the pathway to the center.” - William H. Whyte

(ibid)

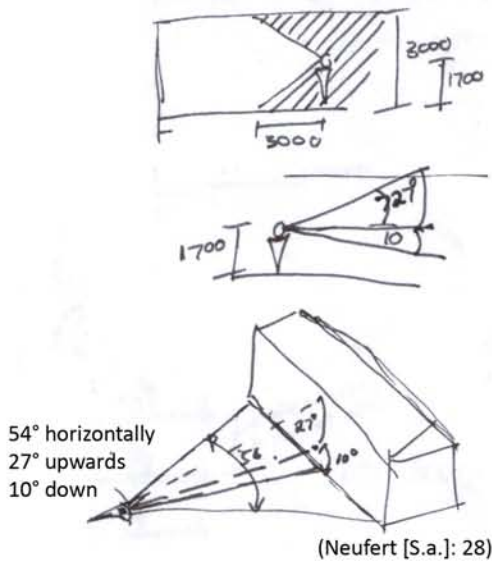
Figure 3d: streets as ‘places’ can contribute to creating social urban environments



THE EYE: PERCEPTION

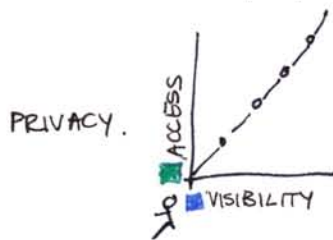
Parameters for the appropriate use of public and private space promote spatial usage. The parameters can be time based, aligned with social patterns, mobility and own personal choice, but most specifically: what the eye can perceive.

"A person walking on street sees practically nothing but the ground floor of buildings, the pavement, and what is going on in the street space itself" (Gehl 2006:63).

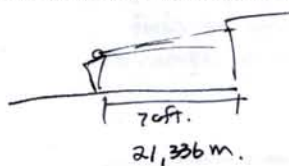


the negotiation between public and private realms occur by views and desire lines

important factors to consider:
movement flows -
sight lines -
oblique open spaces -



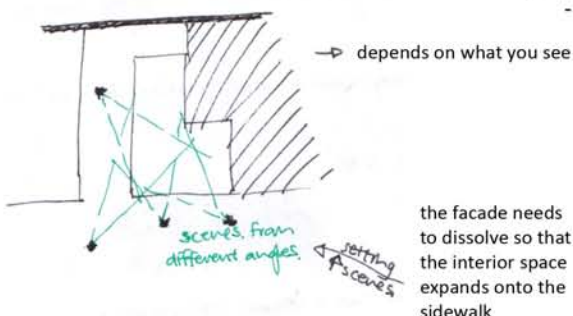
human interface: people can see as far as 21m



(Alexander 1977:312)

"spaces that are not seen, are not used" (Gehl 2006:97).

bringing the outside in:
from Modernism - we construct sense out of the accretion of everyday activities that continually change our reality, rather than fixing a particular order onto things. the focus should be on small details, showing scenes several times from different angles



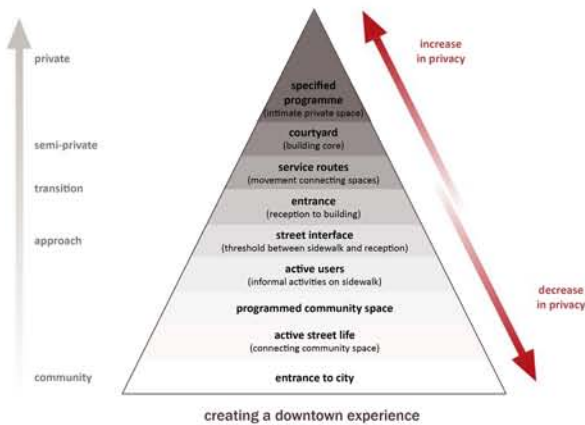
For Pretoria CBD to once again become a living city, pedestrian interest should be awakened on street level to encourage the public to move about on foot. To transform the city's streets into places, events are required that can activate the streets as social spaces. There is a need for layering of events (figure 4c) or social outdoor activities on urban scale. People are drawn to places where 'something' is happening. Events cannot take place in isolation, but should be linked with one another. Currently, events are only connected along the eastern section (figure 2c). The rest of the city's events take place in isolation and vacant buildings emphasize the 'anti-social' nature of the movement routes that do link events. Because life happens on foot, places are experienced on foot. The streets assume the character of its environments and should be treated with the greatest of concern.

Layers of events encourage slow and gradual progress towards each individual destination. These events increase the amount of usable public space (figure 3e). This process increases the lingering time, leading to the perception that more people are present along a space. Gehl (2006:77) believes that "slow traffic means lively cities". Events slow down the movement, and will increase the activity level.

To proceed with this transformation, a process of mediation between social changes through time and existing structures to secure occupation (re-use) should be established. Interrelationship between place and activity emerge on moderate scale, but the assembling of people and activities must be examined in context with their urban environment (refer to figure 1c).

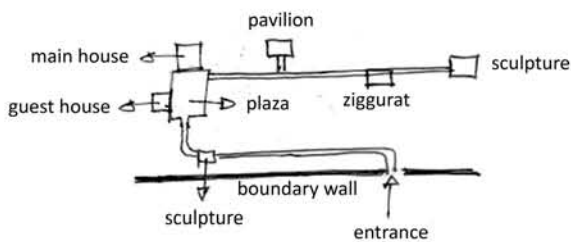
Figure 3e: interface of public and private space

Events are placed in a landscape or building in an order of importance to delay the movement from the entrance to the privacy of intimate spaces.



each event act as a filter.
it filters people out as to limit access to more private areas

In Gobbai House, Galwad, there is a specific purpose of each event, leading from public to private order:



Gobbai House, Galwad 1995-99 (Correa 1999:72)

Figure 3f: The study indicates how the implementation of a series of events filter the movements to private space

CRITERIA FOR SELECTION OF SITE AND EXISTING STREET ANALYSIS

It is also important to investigate a site which holds the potential for moderate transformation. This document will specifically focus on **low-rise**¹ buildings in the CBD that are either vacant or underutilised. Currently, such buildings do not attract investors and therefore remain underutilised and directly contribute to a lack of social activity in the urban environment. These buildings do not contribute to the creation of a living city and require immediate design attention.

¹ **Low-rise buildings:** limited between two to five storey buildings for the purpose of this study

1. CHARACTERISTICS ESSENTIAL FOR THE PROPOSED SITE

The site also needs to exhibit the social and physical characteristics that currently inhibit urban regeneration. The following five characteristics have been identified (figure 3g): (1) monofunctionality of programme and use; (2) public to private interface; (3) scale and (4) lifecycle of the building; and (5) whether the building in itself has the necessary potential to survive the flux in urban conditions.

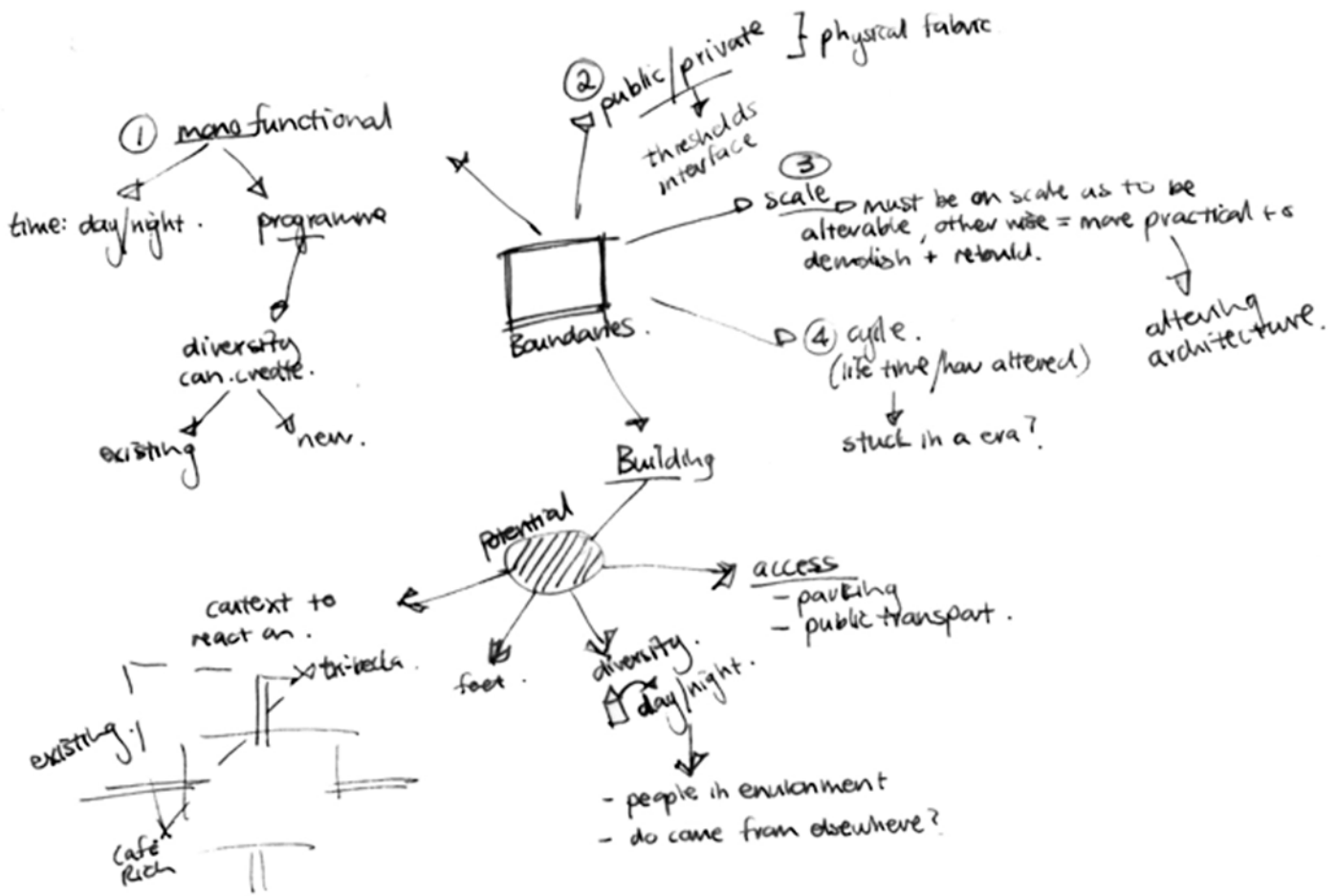


Figure 3g: Criteria for proposed site based on potential of street characteristics

1. **Use** during day and/or night
Programme: existing diversity within the context in terms of users and activity, does the site offer the potential for creating new diversity? (figure 3i; j)
2. Does the physical fabric act as a **threshold** to separate public (urban) from private (interior) space.(figure 3k)
3. The building must be of moderate **scale** to be feasible to alter, otherwise its more practical to demolish and rebuild. (figure 3m)
4. Has the building been altered over time or is it stuck in a previous era that does not promote contemporary use?
5. **Building** potential
 - Access - Existing or proposed parking;
 - Existing or proposed public transport in the approximate area. (figure 3j)
 - Diversity – hourly use
 - a. Are there currently users in the environment?
 - b. Do users commute from elsewhere? (figure 3j)
 - Feet – existing pedestrian movement (figure 3k)
 - Context – existing context to react on. (figure 3i; j)

According to these characteristics, the selection of the proposed site followed:
 121 Church Street, erf no. 336. Currently housing Budget Furniture.

2. SITE LOCALITY



Figure 3h: Context of proposed site



3. EXISTING PROGRAMMES:

Cities must have places that attract people into and not just have a 'nice promenade' to connect urban activity nodes. The nature of the existing programmes within the area allows the proposed site to plug into the surrounding activity and promote social influx.

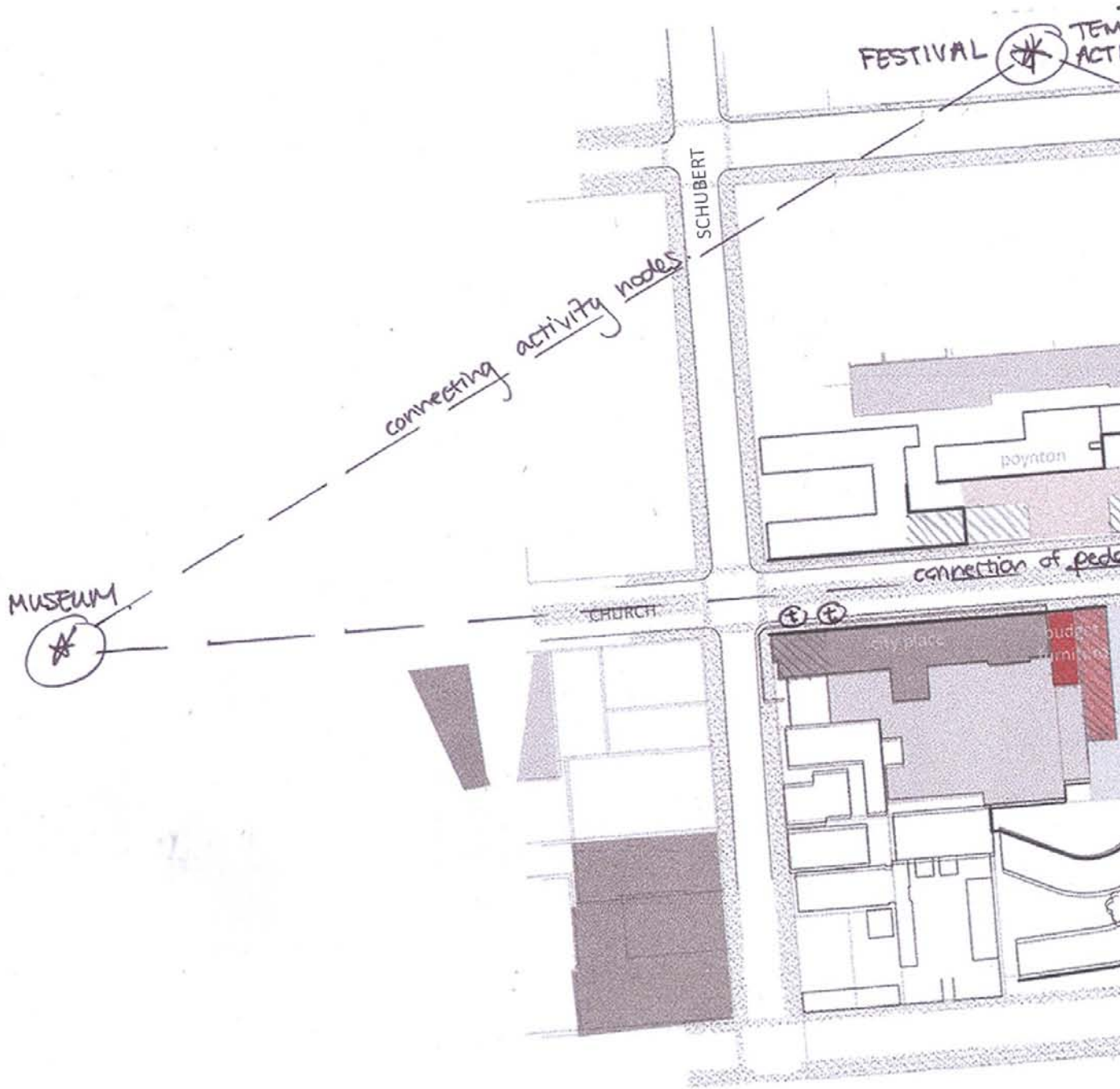
Existing programmes include a variety of cultural foods and social venues.





4. SITE INFLUENCE:

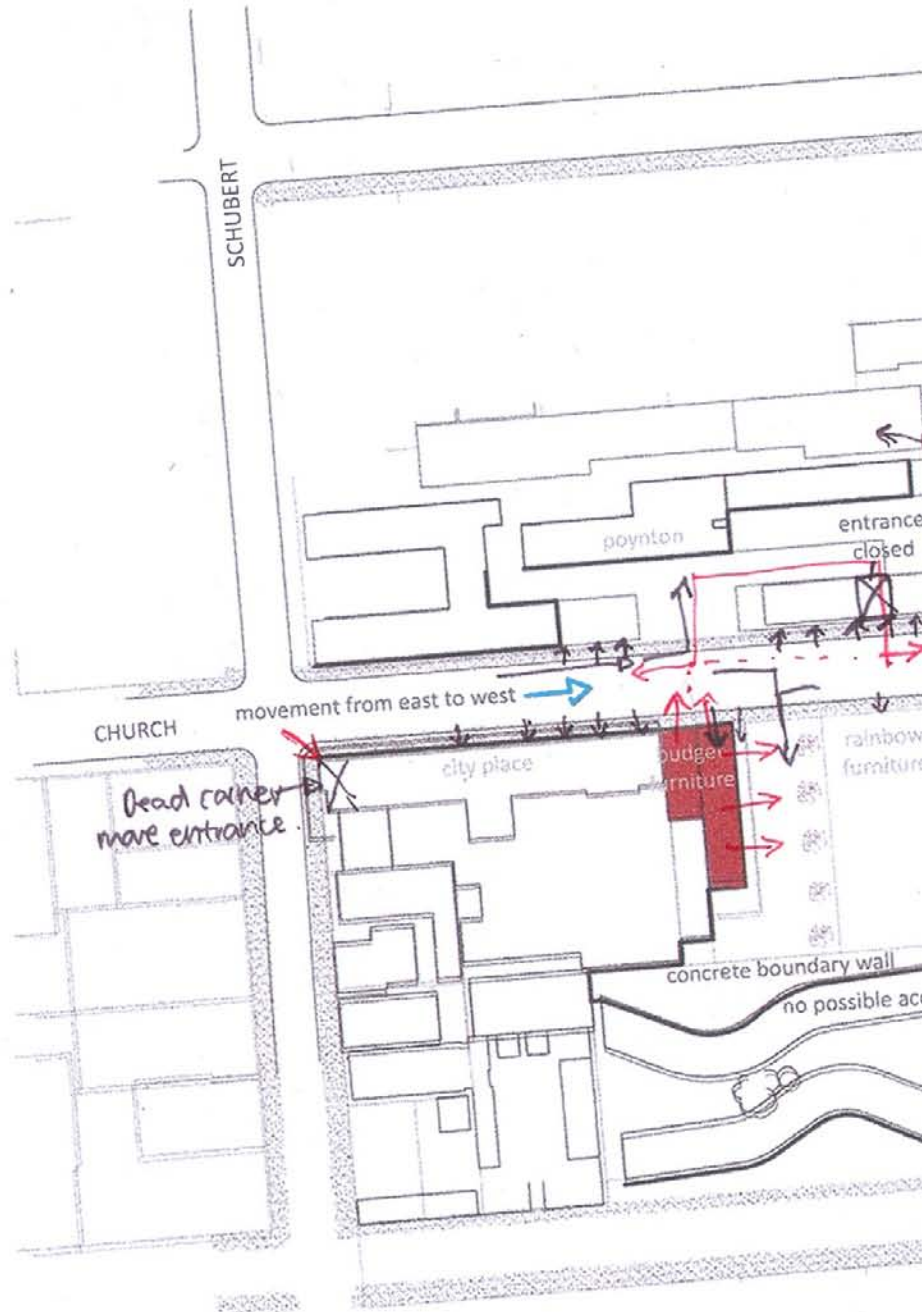
The site is centrally located within the CBD of Pretoria between two activity nodes of Church Square and Museum node, as proposed by Plug-In City Framework. Orientation of entrances in relation to the pedestrian routes and areas for interaction, are determining factors for the connection of space. Individual buildings can stimulate each other if attention is paid to access to opposite sites and buildings.





5. MOVEMENT:

Vehicular movement is predominantly from North to South in Bosman Street. even during peak hours (site analysis from 7-8:30 am and 4-5:30pm), the four lane street of Church street is not fully utilised - this is unnecessary misuse of urban space that can be dedicated to redesigning 'streets as spaces' (figure 3c). There is an existing diversity of people moving on foot towards and from Church Square. This suggests further pedestrianisation of the city. There is adequate existing parking in the surrounding area for users who commute from elsewhere and a BRT stop on Church Square.



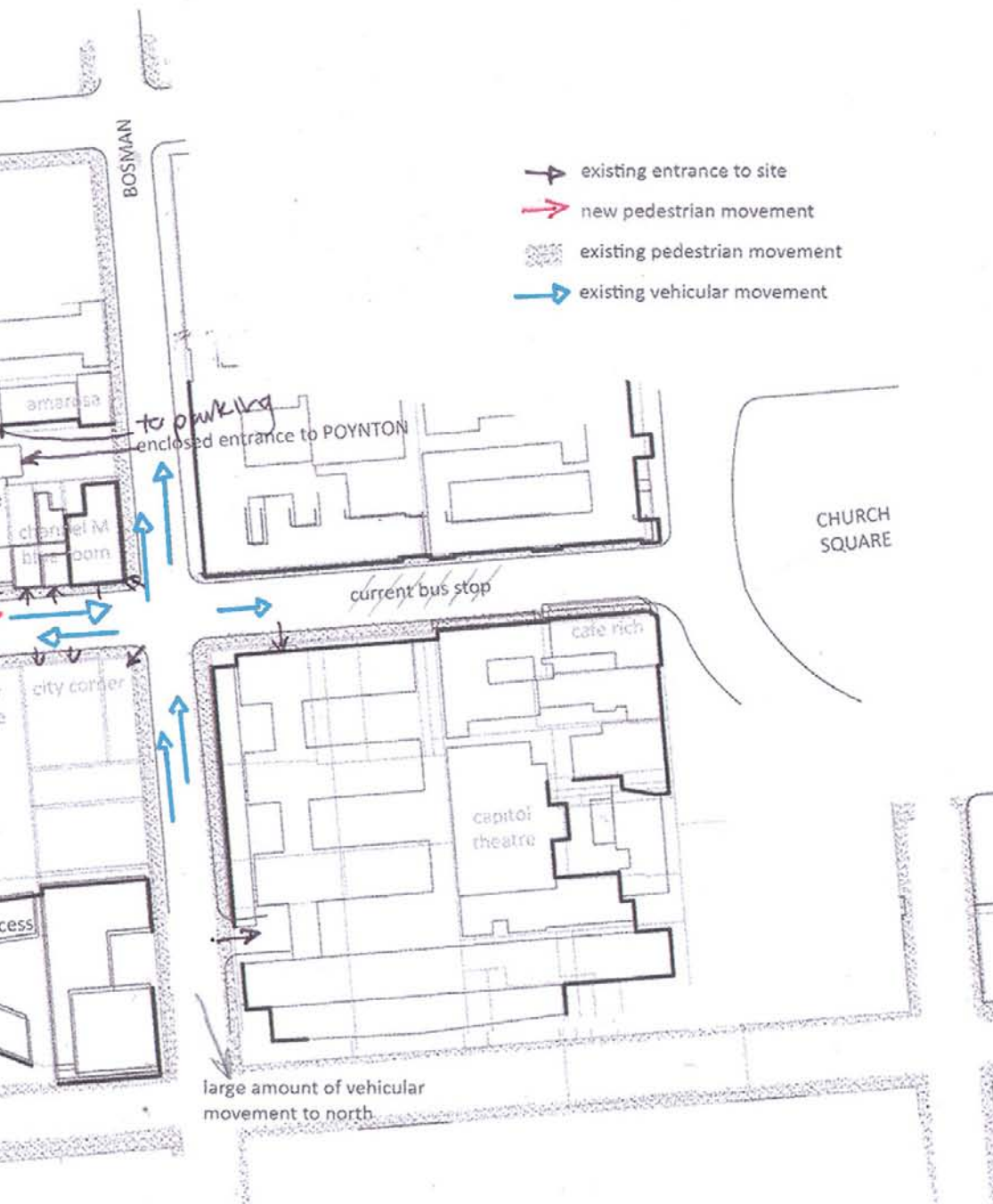


Figure 3k: Existing and proposed movement along the site



6. THRESHOLDS (INTERFACES):

Existing thresholds present in Church Street. Boundaries cause isolation of spaces and prevent access (physical and visual) which can lead to a decrease in social activity. Built fabric should not prevent social interaction but rather promote it and is therefore in need of alteration to rouse pedestrian interest.





Figure 31: Existing interfaces present in Church Street

7. STREET ELEVATION:

The building must be of appropriate scale to be feasible to alter, otherwise demolition and a new building is more promising

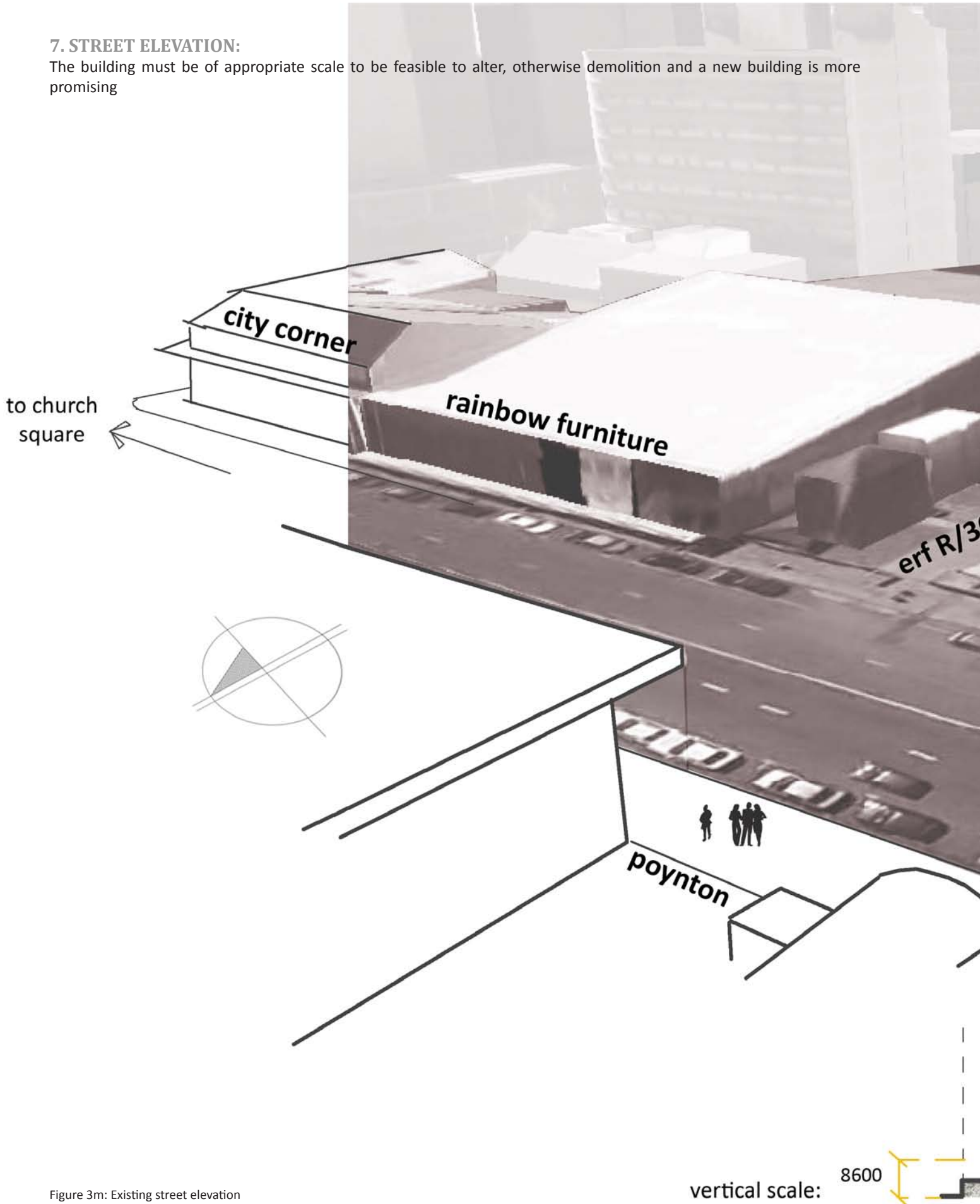


Figure 3m: Existing street elevation

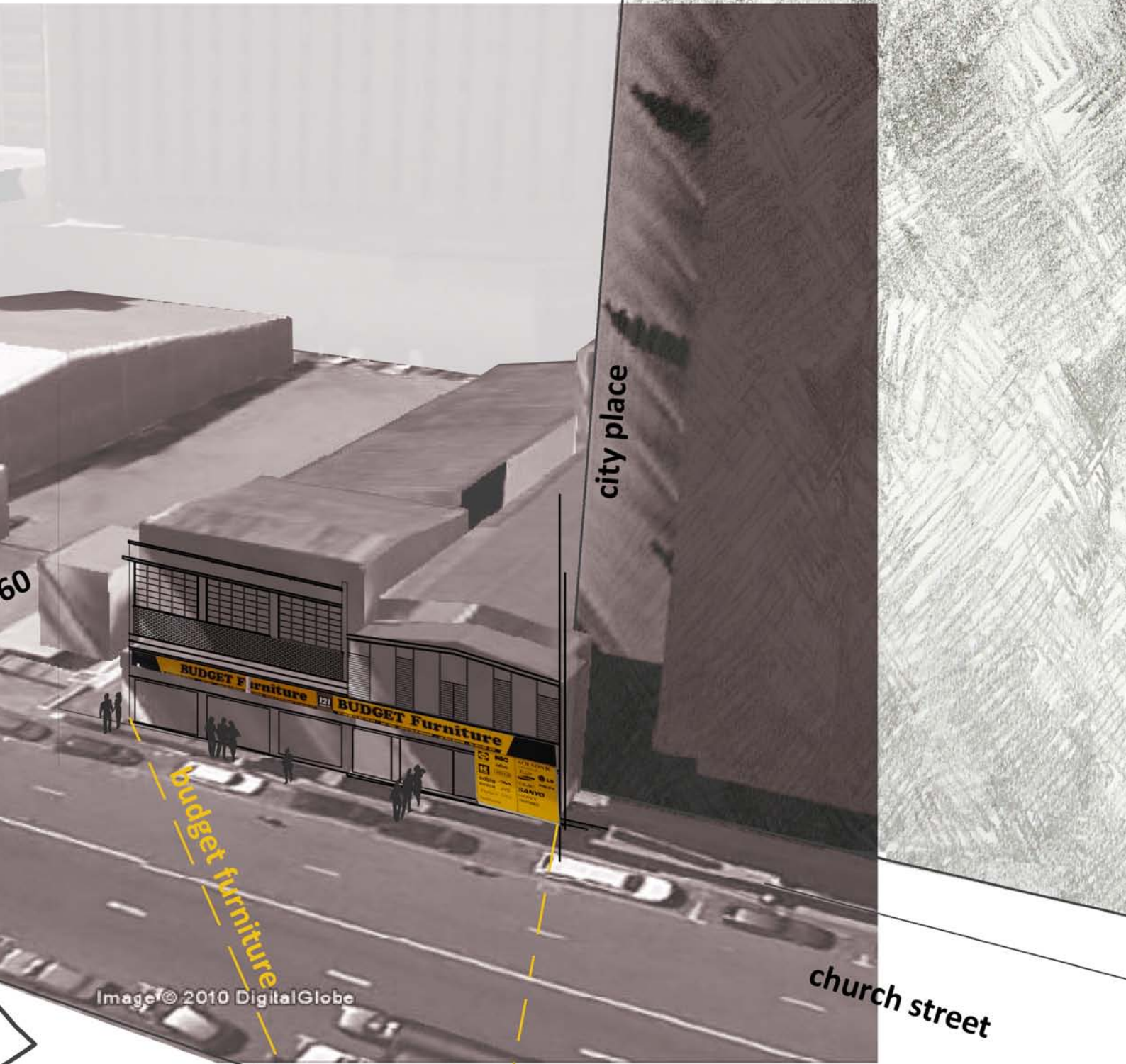
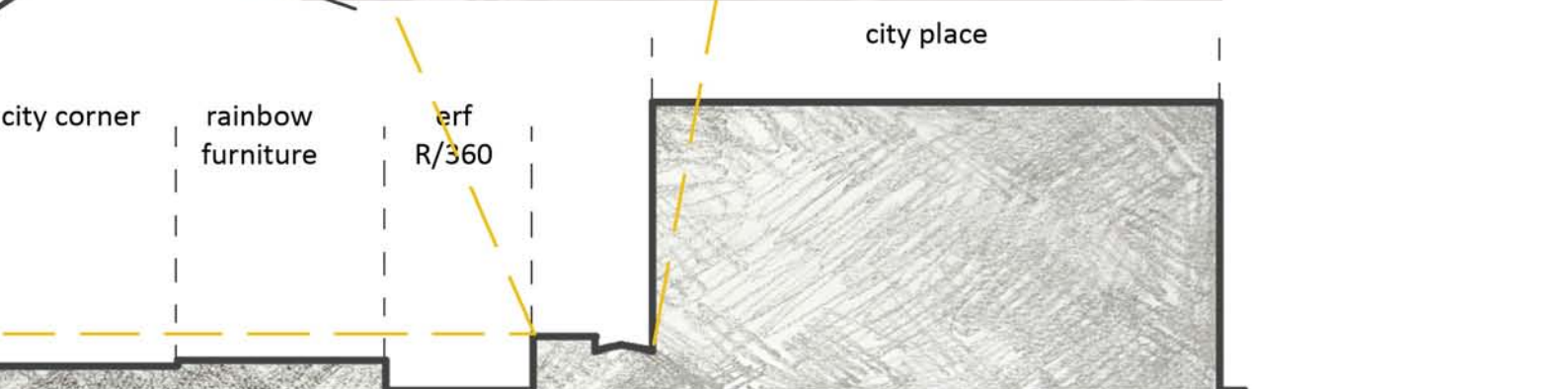


Image © 2010 DigitalGlobe



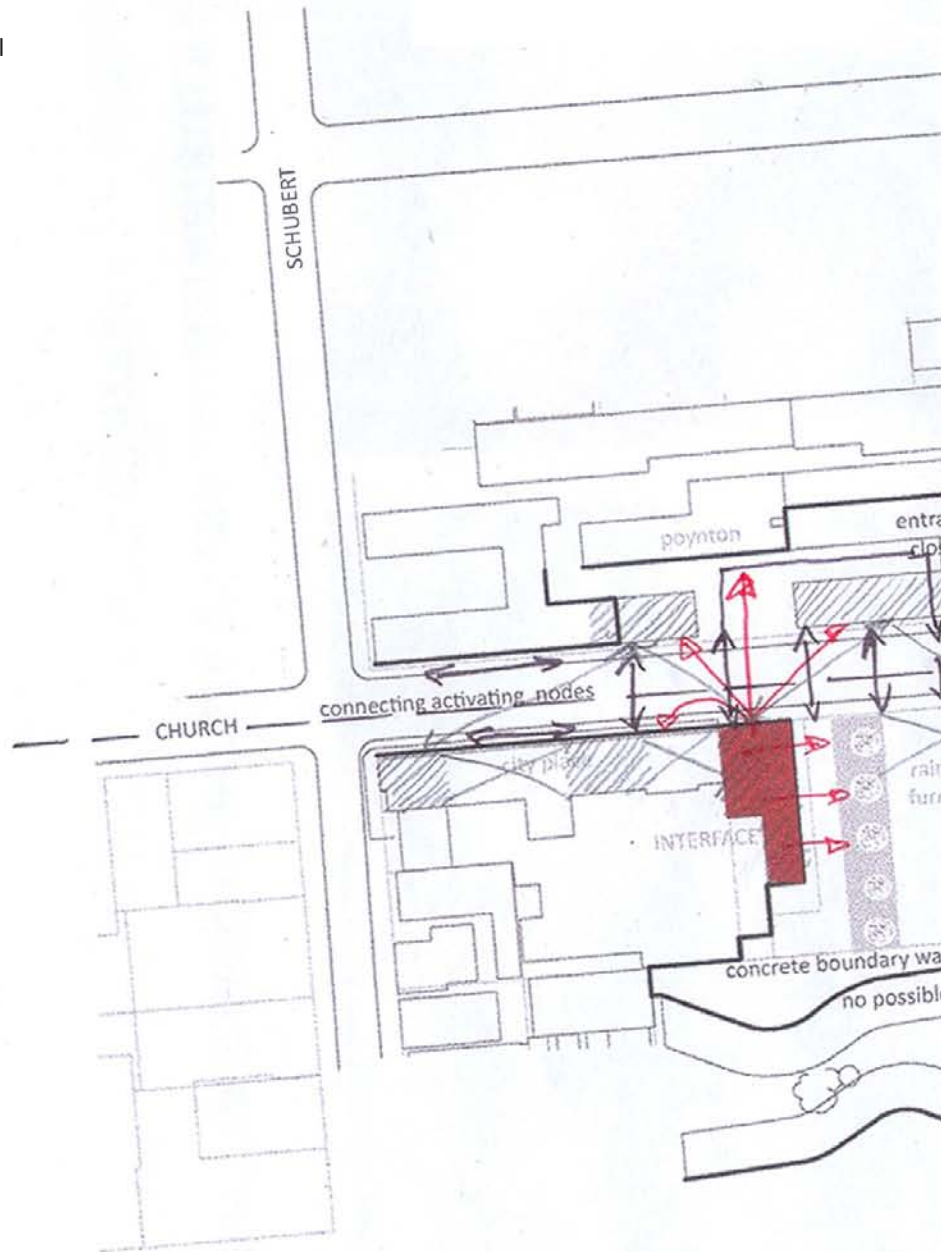


8. POTENTIAL/CONCLUSION:

There is a need for only day time programmes on a street to allow for dead facades in the evening to accommodate resting places for pedestrians (figure 3n), this prevents unwanted clustering in front of night programmes. The affective dispersal of events allow for movement between spaces.

List of possible programmes (public, semi-public or private nature) based on the potential of the site, taking into consideration day-night activities and the festival as proposed by the Plug-In Festival Framework:

- o restaurant – cultural food
- o artists’ studios and housing
- o music centre, -school, -instruments retail
- o nightclub
- o recording studio
- o radio broadcasting
- o dance studio



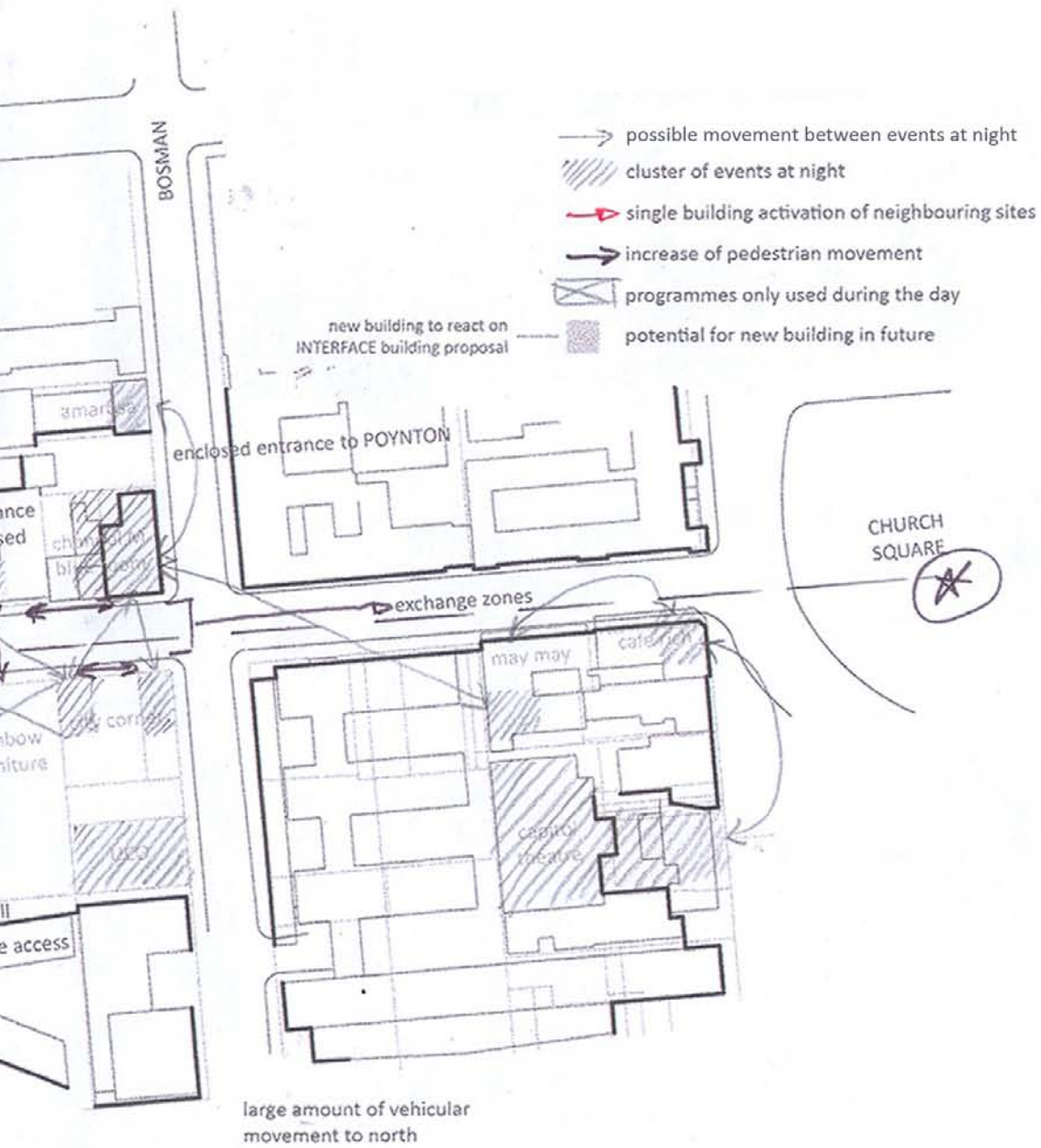
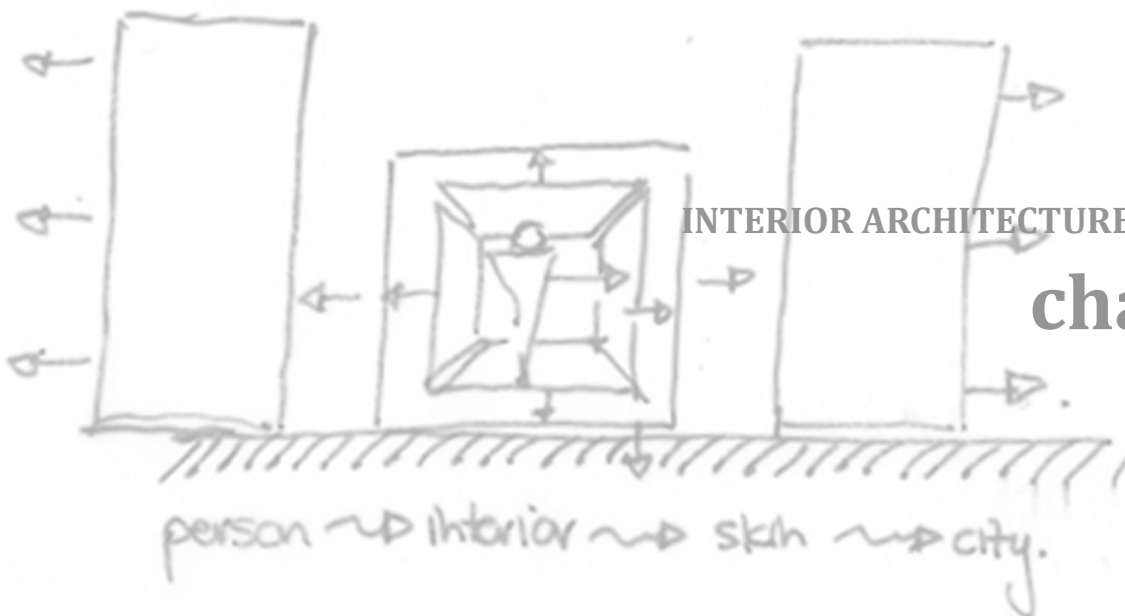


Figure 3n: Proposed site acting as catalyst in activating its surrounding environment





INTERIOR ARCHITECTURE AS MEDIATOR

chapter 4

THE ROLE OF INTERIOR ARCHITECTURE IN AN URBAN CONTEXT

This thesis is rooted in the search for what Interior Architecture means to the public. Not just offering simple decorative or temporary solutions, but its worth to support and strengthen the surrounding environment.

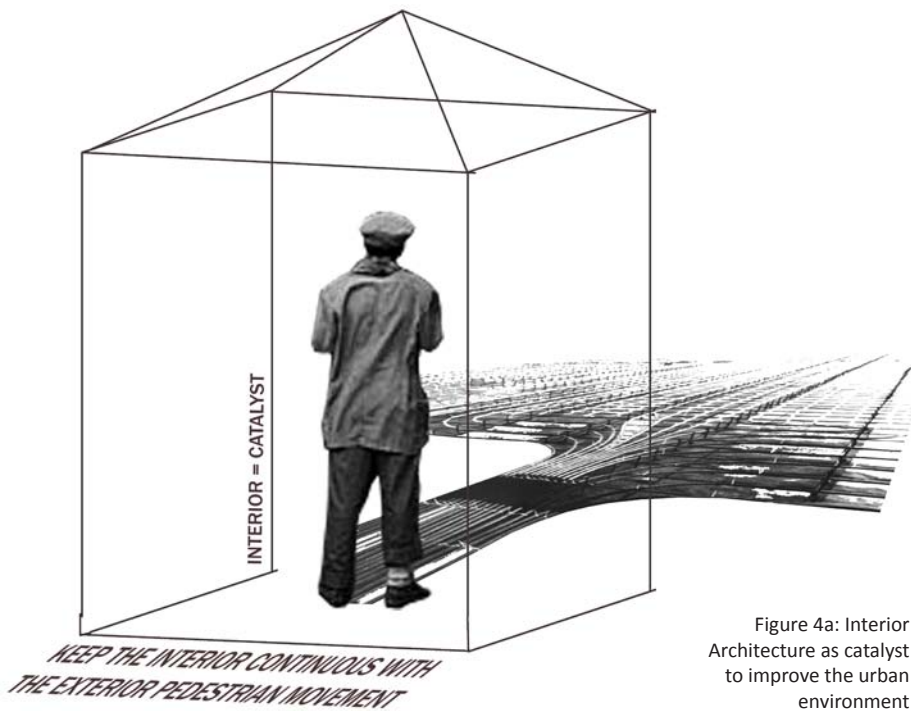


Figure 4a: Interior Architecture as catalyst to improve the urban environment

As described by Hildebrandt (2006:30-31), the professional service of architecture is simplistically apparent to the public as the design of mostly the exterior of buildings. He proceeds with an explanation of how new sets of problems are brought about by new circumstances in contemporary society, and demands a philosophical shift for creative solutions (connected to human and environmental needs). This shift calls to the role of Interior Architecture, as it is especially focused on the interaction between the user and its environmental needs.

The adapting and re-using of buildings is a typical characteristic of Interior Architecture; one on which

architecture is dependent on. Interior Architecture “offers a theory and vocabulary for the design work that responds to and alters architecture” (Scott 2008:12). It manifests itself as the meaning imbedded within the building’s interior as well as exterior and as such must be housed within an architectural structure. Interior Architecture “involves the contractual agreement of design services encompassing interior elements equally with shell and site conditions associated in building design” (Hildebrandt 2006:32).

The design of interior environments entails a complexity of space and the body within this space. Thus human experiences and comfort is of deep concern to the profession (Königk 2009:12). The design is based on the contemporary social value system (Hildebrandt 2006:30), based on human use. Therefore its role is continually evolving within a shifting social, economical and political culture.

In contrast to what Hildebrandt (2006:32) writes, Interior Architecture should not be an extension of the exterior to the inside of the structure, but quite the opposite. The exterior shell should become a direct translation of the interior space it contains (Kurtich 1993:5), thereby extending human experience into the city. Such a view of Interior Architecture implies that a space, therefore a building, can remain relevant in an ever changing social context.

Human interaction is of great concern to the discipline of interior design (Königk 2009:12). The **connection of people** is significant to architecture because this interaction has a direct influence on the physical form of the space and also the function and utilization of the built fabric. It creates an allegiance which architecture in the sense that it supports and strengthens the environment.

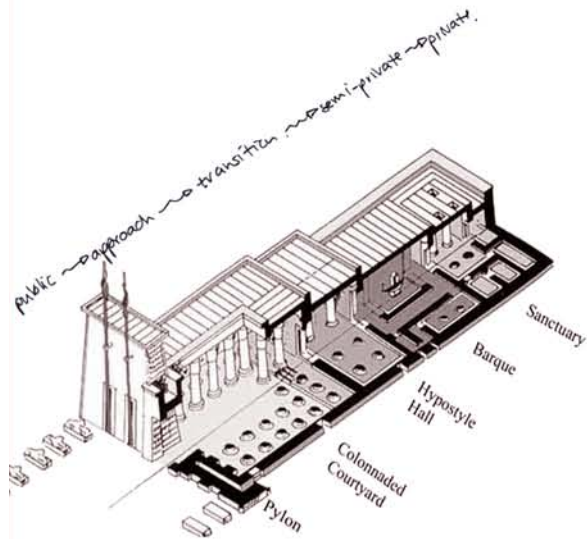
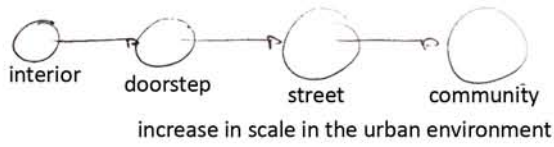
A number of buildings in the inner city of Pretoria do not have maximum linear occupation. This is due to, amongst others, inefficient humanistic design (incl. the public interface) and the high costs of alteration with each occupant (Hildebrandt 2006:31). It is necessary to mediate between ever-changing interior use and activity and static exterior form.

Interior architecture is a completion of space for human use determined by function (Eakin & Kurtich 1993:3). With social conditions changing and function coupled to it, a sensitive approach to alter existing buildings should be used to relate to the building and its immediate surroundings as a whole. The exterior of a building formulates the interior of a city. The shell of a building is derived from its interior and therefore the internal space influences the urban space in which it is situated. But the interior as driving force for the skin of a building does not always apply to existing buildings in the CBD of Pretoria, INTERFACE proposes that **interior architecture is used as mediator or transition between interior and exterior space** (private and public)(figure 4c)

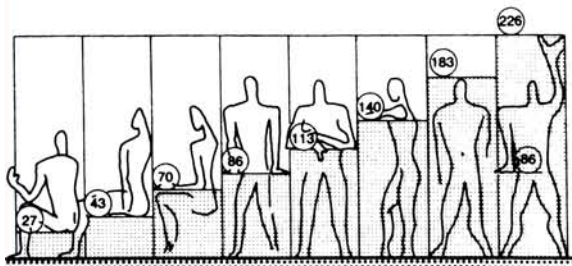


HIERARCHY OF SPACE

Hierarchy and use of space is directly influenced by scale. A decrease in scale is equal to an increase in privacy - the smaller the space or volume the more intimate it becomes



Temple of Khonsu within the Precinct of Amun
“note the increasing sanctity emphasised by: decreased lighting further into the temple’s sacred areas - rising floor level and diminishing roof level - (Ziegler 2001:474)



(Neufert S.a.: 30)

SPATIAL EXPLORATION (SCALE) - exploration that links architecture to man, the interface between human and element

To every leap in scale travelled, there is a corresponding shrink to a dimension travelled within. From urban scale, right down to interior, spaces seem to proportion itself so that with every threshold (or interface) being breached, there is only an awareness of one continuous space, not of the separate particles it consist of.

Figure 4b: Movement from private to public space occurs in a sequence of spatial order and change in scale

The proposed intervention will show that Interior architecture is not constrained by the boundaries (walls) of architecture. In Raymund König’s (2009:114) dissertation, he raises the argument that **interior design**¹ is often perceived as being inferior to architecture. The argument here is that this is quite the opposite - the scale of the work defined within the profession is of such a nature that it can act quickly and efficiently. Interior interventions can act as the vaccine for the ‘vacant city’ disease. Jan Gehl (2006:83) states that **intervention on small scale can counter the problem of inadequate sociable environments on urban scale**. Stimulation of the individual benefits an entire social environment.

1 interior design: Interior Design and Interior Architecture is of similar origin but ultimately of different professional status. Please refer to appendix A.

“...great interior architecture is created by the fusion of related disciplines” (Eakin & Kurtich 1993:viii).

This architectural thought should be conducted in a manner in which the single individual becomes absorbed into a space by using basic fundamentals of Interior Architecture as mediator between decayed urban environments, functional space and social exploration.



Figure 4c: Exploration and implementation of hierarchy of scale (figure 4b) and how it influences spatial experience n within its urban context



Context model:

The interface between human experience and built form occur on small scale. This small scale permeates into the larger (street scale) surrounding environment and ultimately into urban scale. For this to be successful the interior spaces should extend outwards and become continuous with the exterior pedestrian movement



Pretoria's CBD is a framework that has a current lack of attention to pedestrian sections and attention to a negative trend.

exi

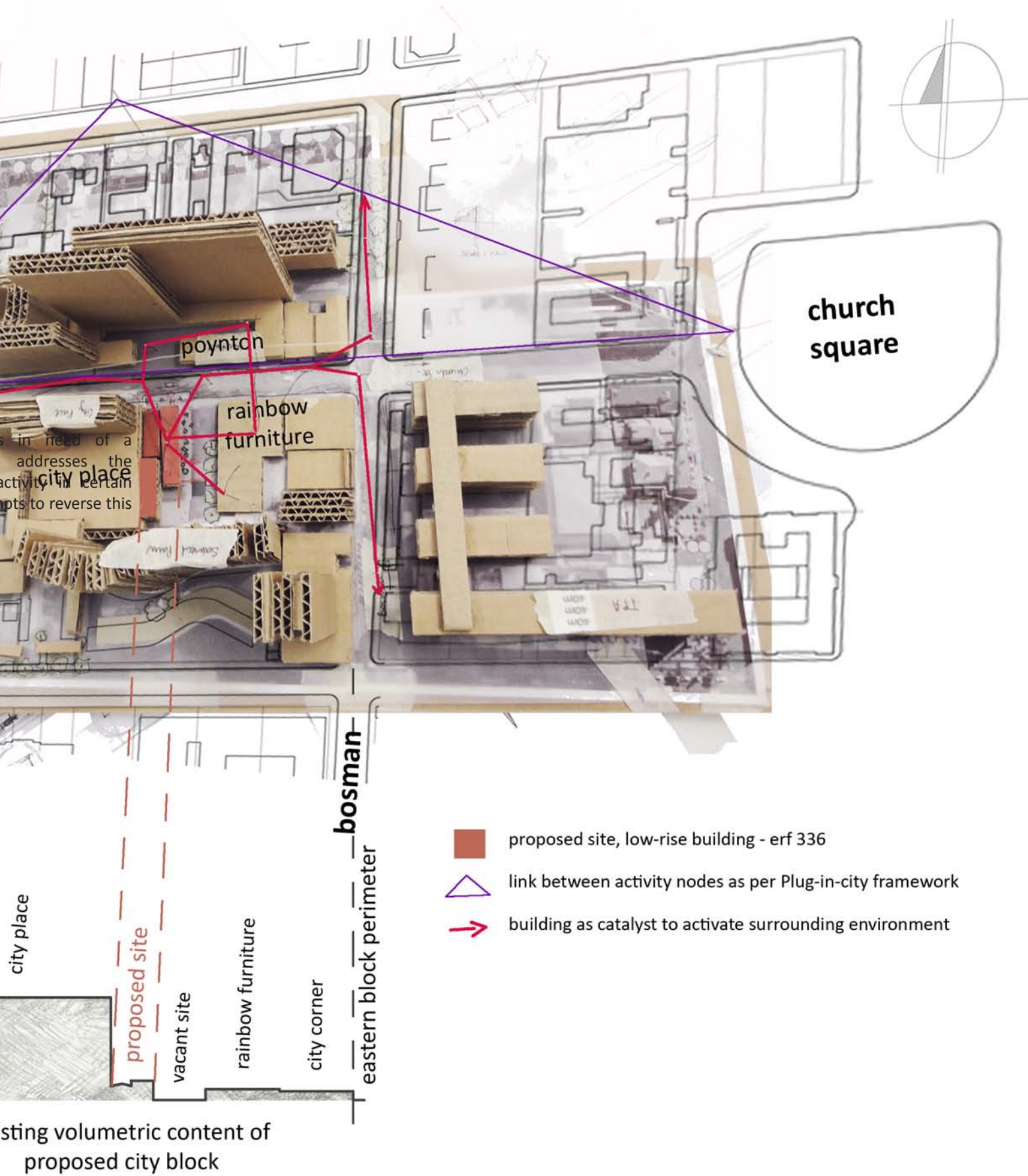


Figure 4d: Model of the proposed interior intervention within its urban context

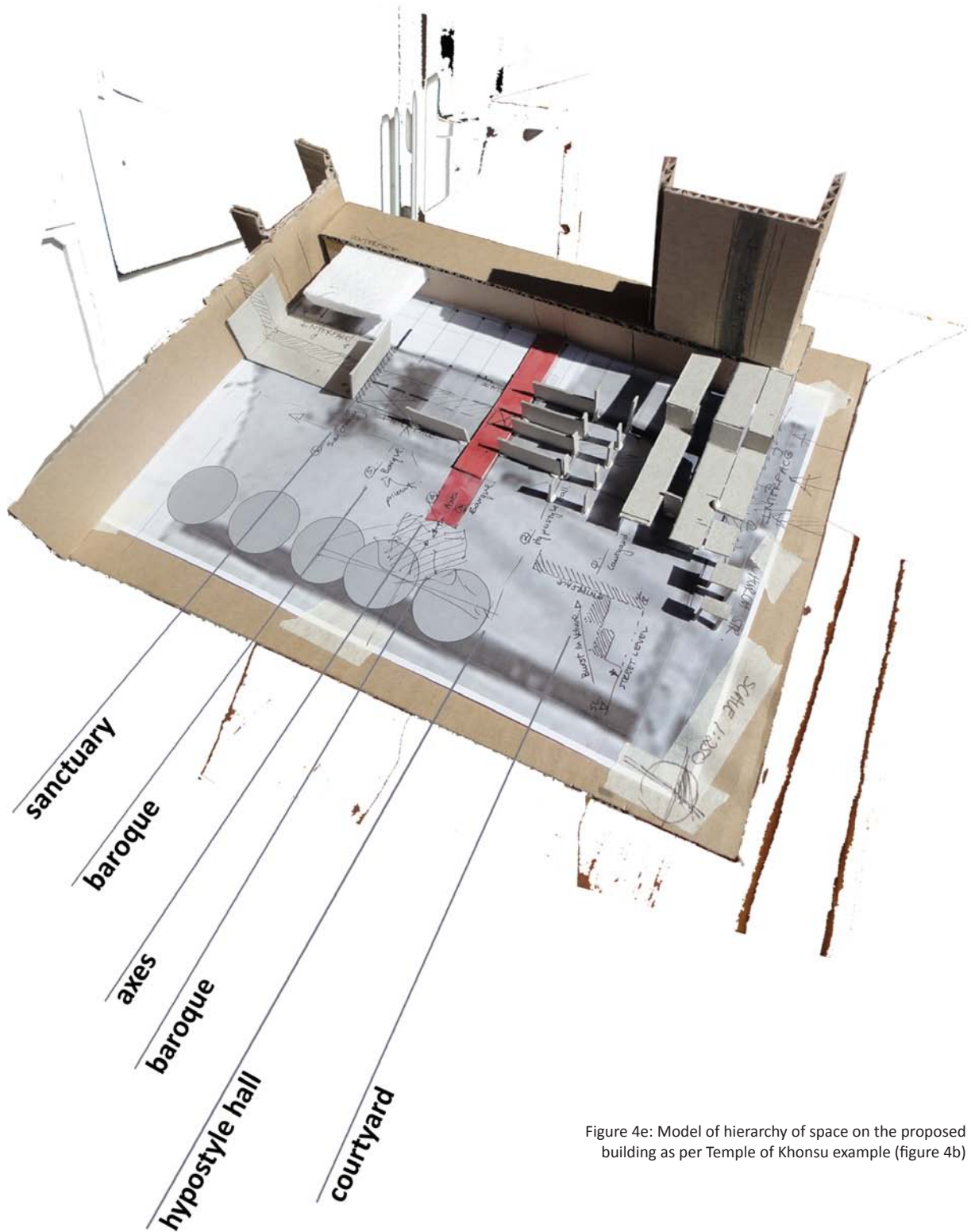


Figure 4e: Model of hierarchy of space on the proposed building as per Temple of Khonsu example (figure 4b)

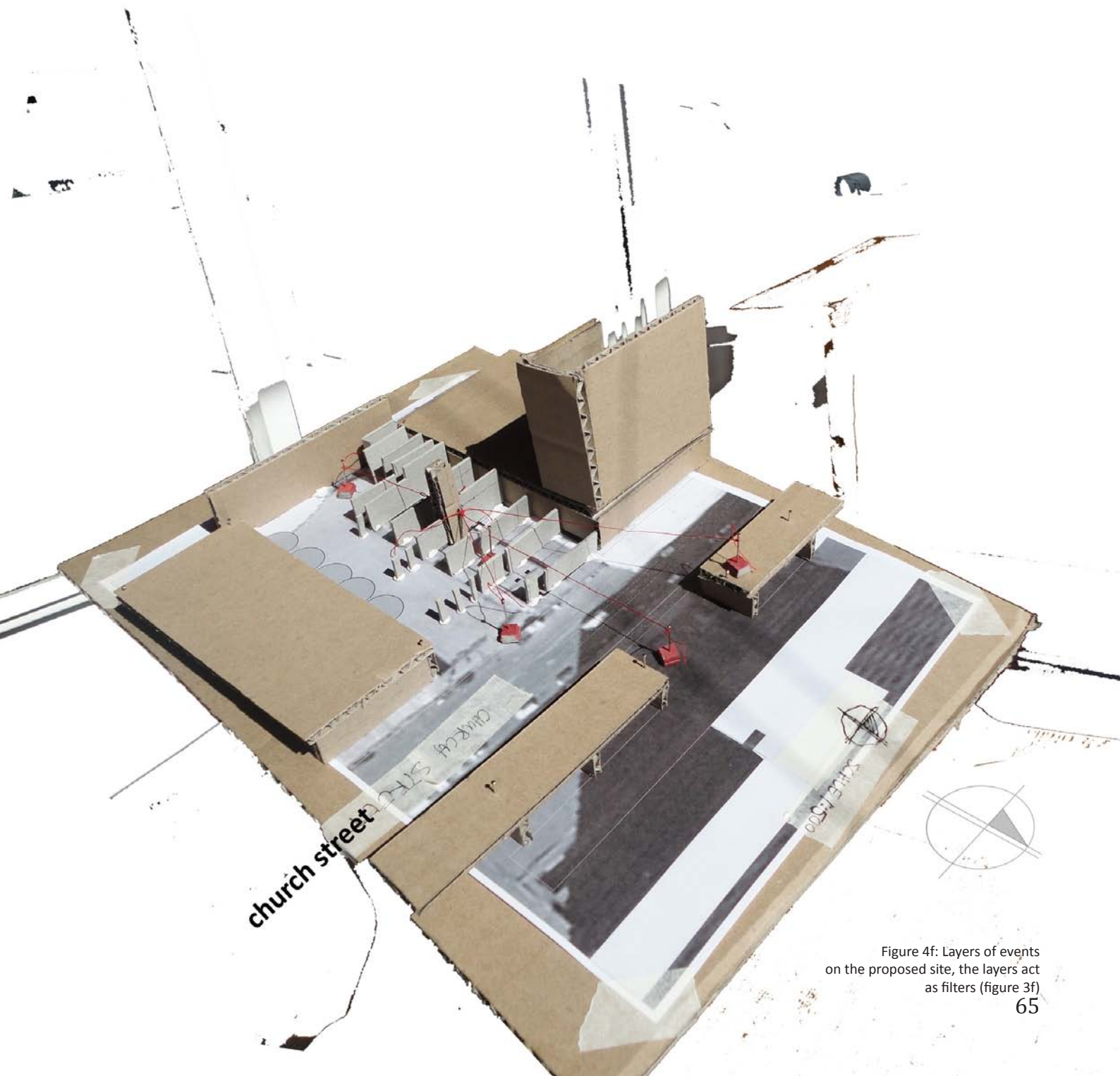
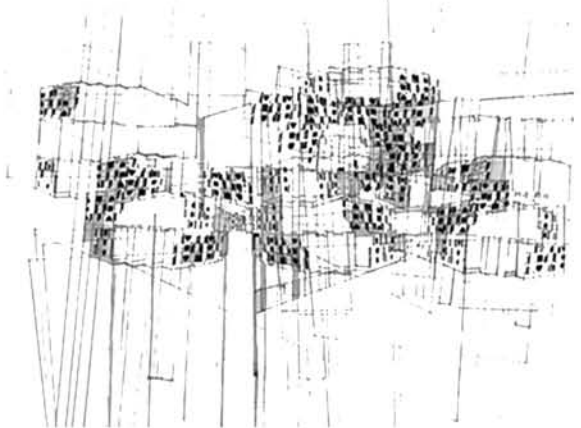


Figure 4f: Layers of events
on the proposed site, the layers act
as filters (figure 3f)

in-between state to be able to adapt to the environment.



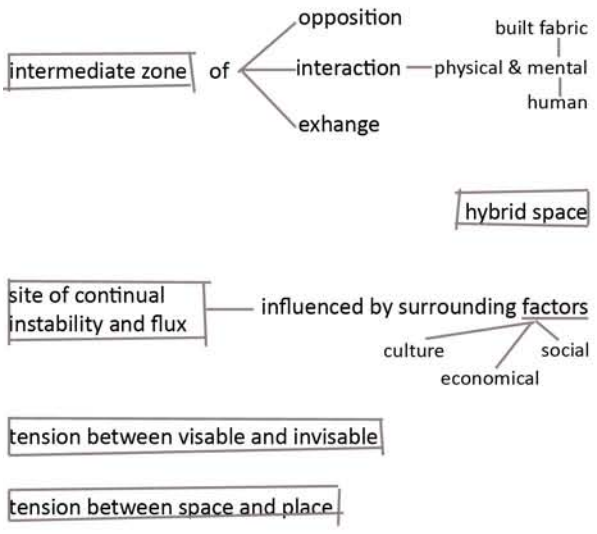
1.1 LIMINAL SPACE

Psychologists refer to liminal space as a quality of ‘in-between’ space. Victor Turner (La Shure 2005) explains the concept of liminality as a place where boundaries dissolve as we stand “on the threshold, getting ready to move across the limit”. It becomes the transitional space that divides human experience - a stage where a person is hearing a space and being inducted. It complicates the effort to construct identity. It becomes the temporary phase rather than a permanent state. This temporary status signifies mobility, it allows for the **freedom of movement**.

- In contemporary cities, it is the slip “between public use and private value” (Parole 2010).
- It’s a transitional zone of oppositions, interactions and exchange.” A state on continual instability and flux” (ibid 2010)

Ching (1996:98-133) describes space as: the arrangement of architectural elements (planes). Space can therefore be seen as a volume contained by a physical form. This physical form or surface of separation (definition of interface according to Harper [Sa]) is creating a type of barrier or boundary.

The definitions that will follow are the investigation into the meaning of the word INTERFACE. The meaning of the word INTERFACE will be investigated in an effort to free the word of its weightiness and portray it as a simple line or mental crossing, rather than a physical barrier, notifying a human being of their transition into the next space - from exterior to interior space.



(La Shure 2005)

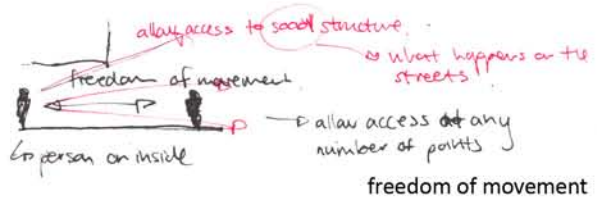


Figure 4g: Liminal space based on the social rite of passage

(noun) - An interface is a surface dividing two spaces (Porter 2005:101).

(verb) – “A building envelope functions as the interface between inside and outside” (ibid).

Kiss: connection of interior and exterior space by means of a plane, without touching each other. Just before the point of contact: it “holds both parties in perfect tension for a moment in time and space” (ibid:108)

(object) - interfaces = interconnectors, a device assuming the role of organisational and narrative character. It is a device intended to “relate us with reality and to multiply its qualities (that is, enhancing its very nature)” (Cros 2003:356).

Interfaces are **catalysts** and channellers transferring bits of information (ibid:356).

Transition “occurs directionally along lines of movement” (Porter 2005:197).

“Exposed to the ravages of time and the elements, architecture itself is in a perpetual state of transition. Moreover, the expression of architecture finds itself in a constant state of flux, shifting from one ideological standpoint or theoretical approach to another. **Transition** is simply another term for **change**” (ibid).

Threshold = transition zone (Porter 2005:193-194)

...where spaces transform the shape, colour and texture of its borders, where objects **react** to external pulses and are transformed. Architecture has always been the interface of human activity.

in INTERFACE architecture react to fluctuating social conditions

A threshold is literally “a strip of wood, stone, or metal fixed to the floor under a door, used to cover the joint between two types of floor finish” (Curl 1992:317). A threshold is a point at which a physiological or psychological effect begins to be produced.

An element of stone that marks precisely a limit between private and public space, combines all the non-physical conditions that the word transmits.

1.3 CONCLUSION

Susanna Cros (2003:623) states that: “**The threshold is a very potential space. It is the place of suggestion, where things happen only in a half way. The place where the moral and the amoral, the legal and the illegal, the truth and the lie can not be sorted out. The place where everything is possible, just for a moment, before you pass through it**”. A threshold (or rather the interface) is a mythical place, only existing for a few split seconds while being crossed. A place of magic, a place of imagination, a place of idealism and now: A PLACE OF REALITY!

“THE NATURE OF ANY INTERFACE WILL BE DRIVEN BY THE NATURE OF THE ACTIVITY AND CONTEXT”
(ibid:357).

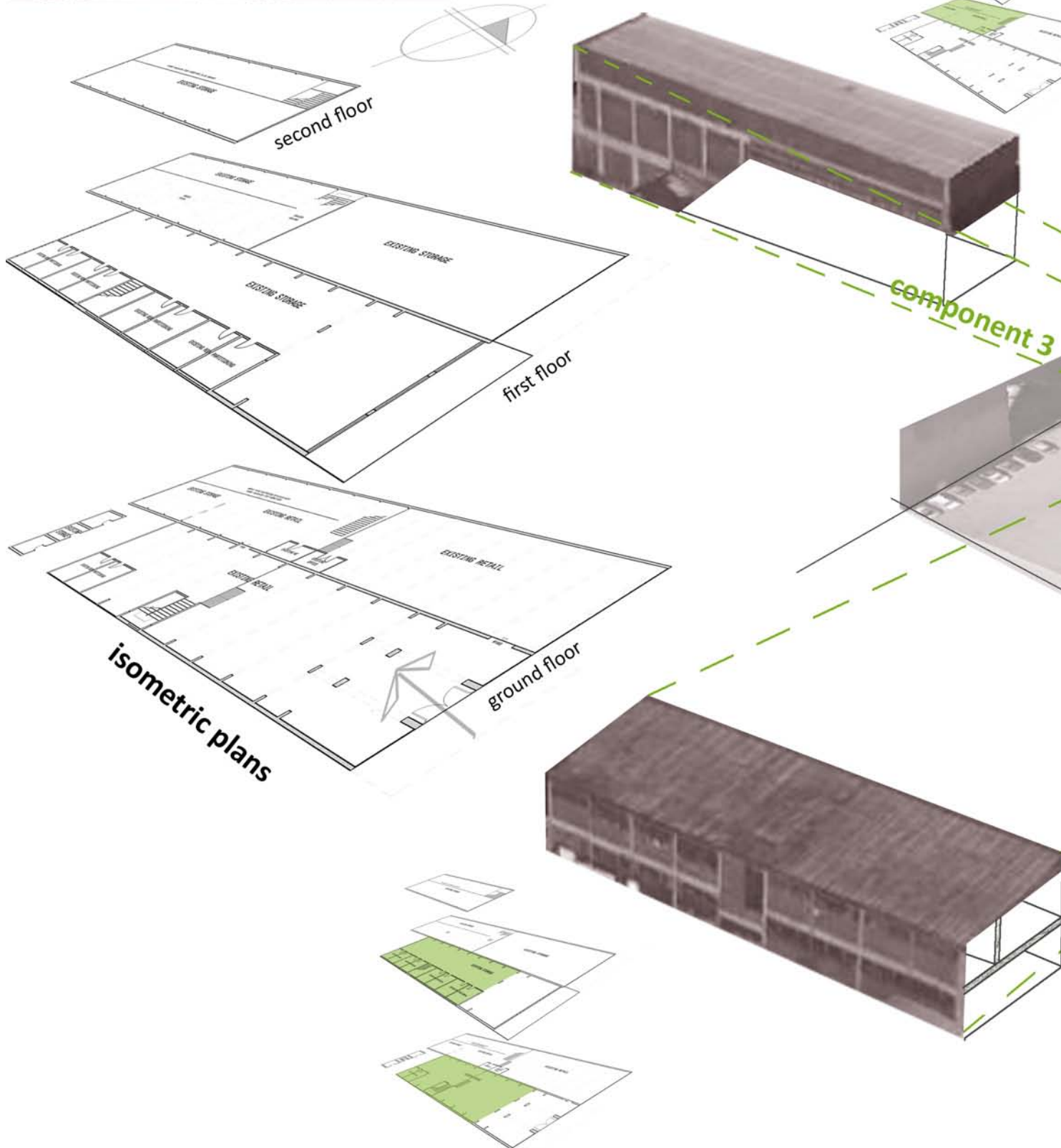
With emphasis on an interface driven by the nature of the activity and not the programme of the spaces.

According to Tappan, Teichmann and van Weert (Cros 2003:357): Interface is the point where **different uses accumulate**; a place of dislocation and re-location, a **place of line and flow**



2. EXISTING BUILDING AS MONTAGE:

Although no information on construction dates are available, Budget Furniture consists of four components constructed at different time periods visible when looking at the materiality and roof construction. With exception to the main entrance (see ground floor plan), the building as a whole 'functions' in isolation with no connection to its surrounding environment.



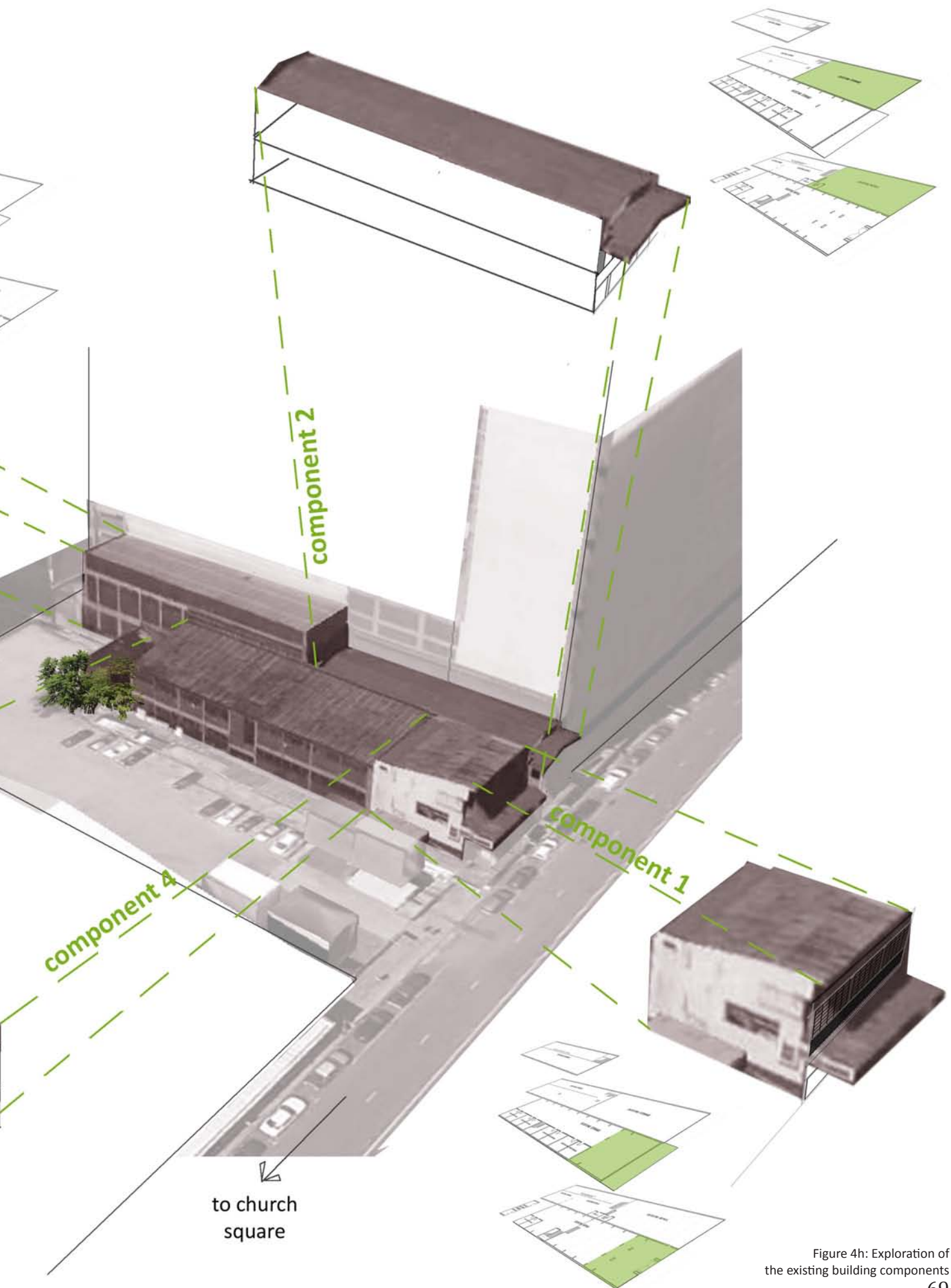
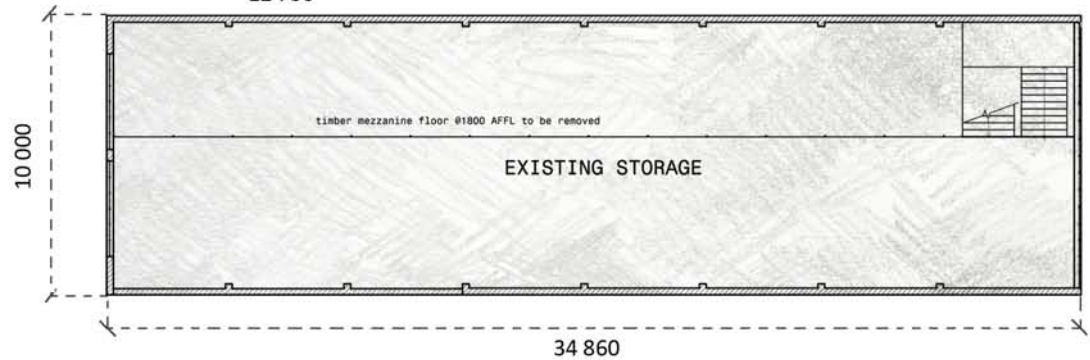
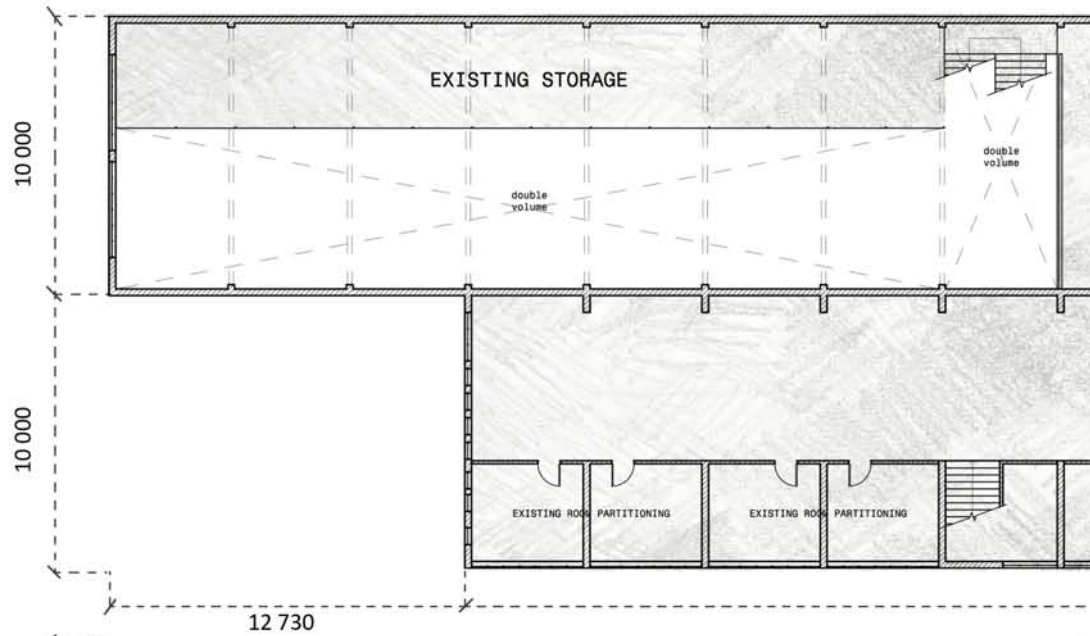
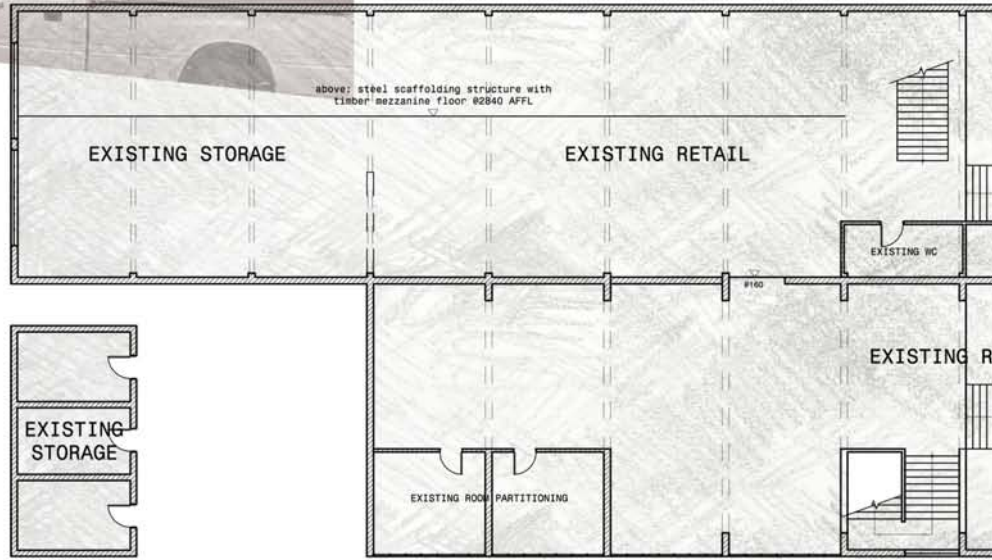


Figure 4h: Exploration of the existing building components
69



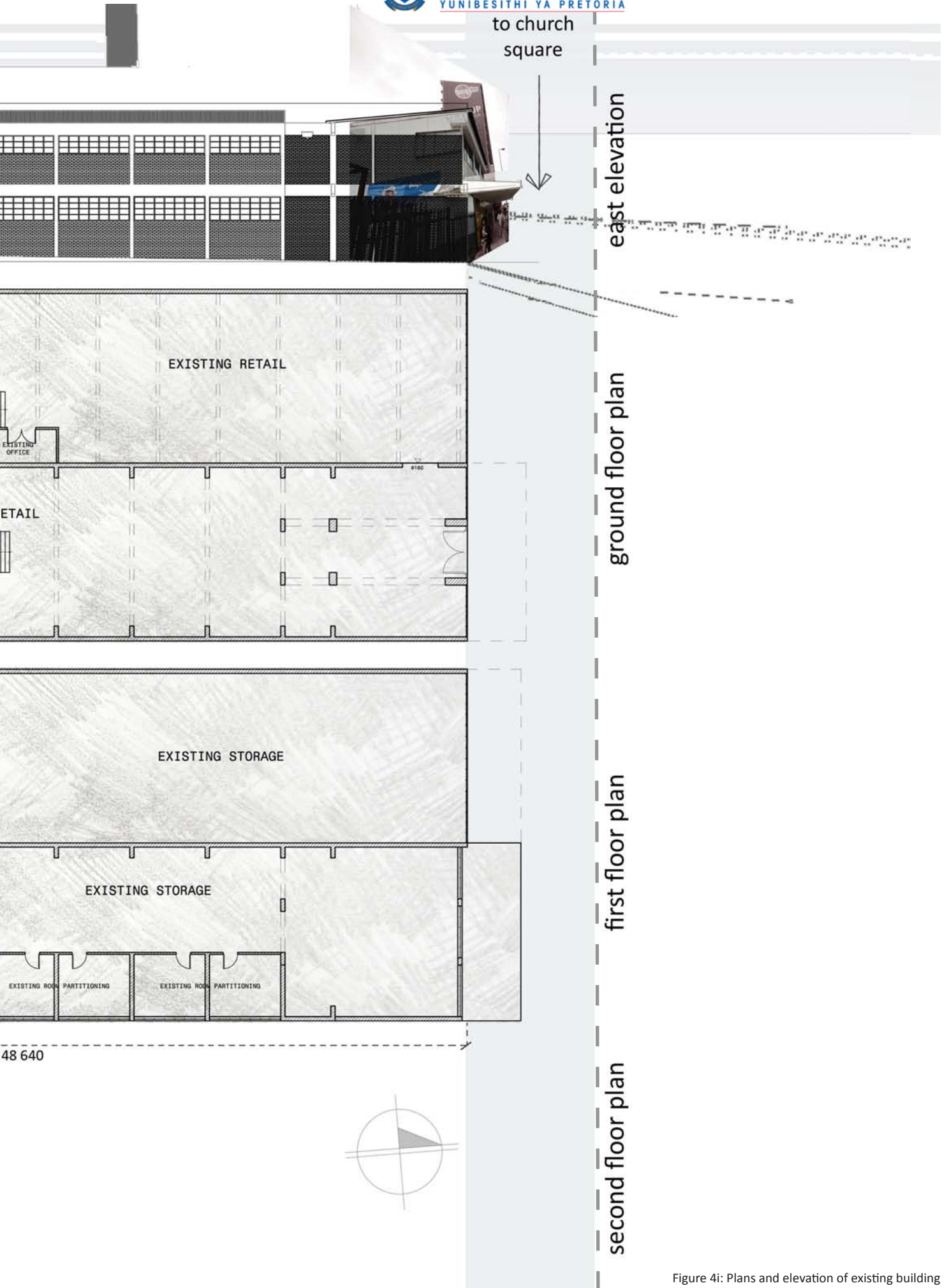
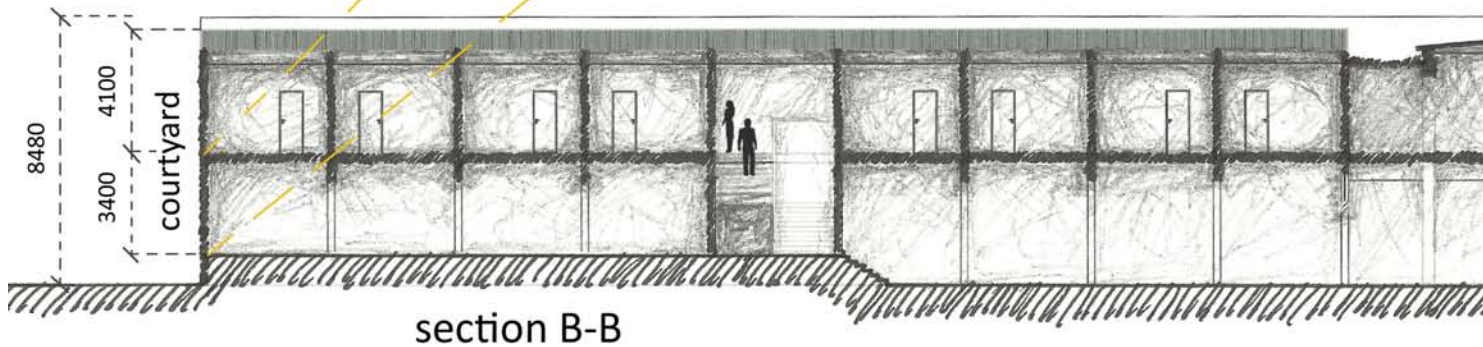
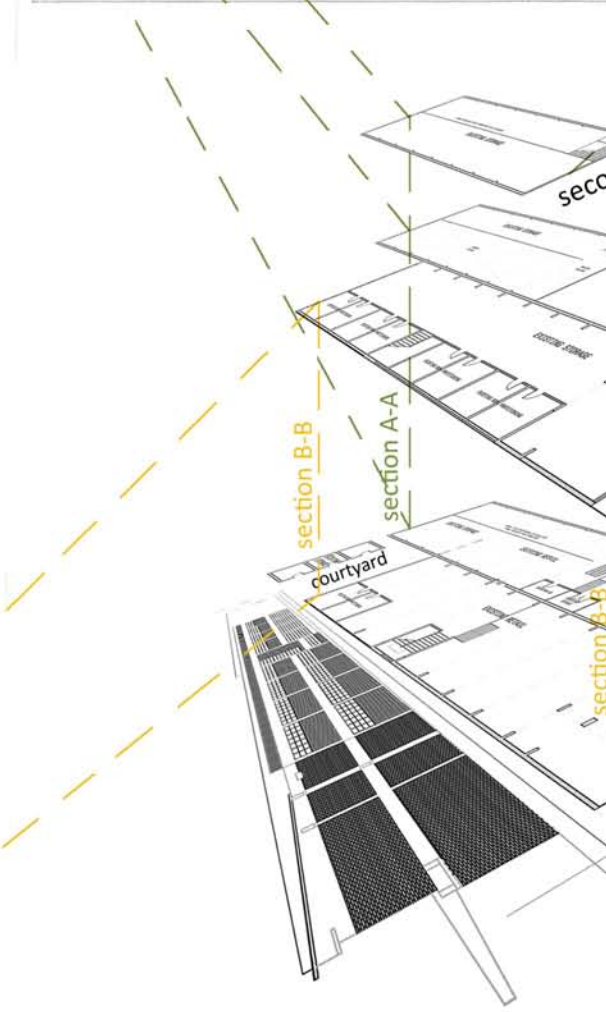
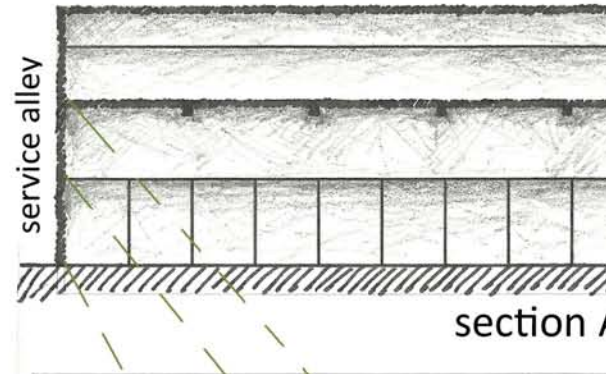
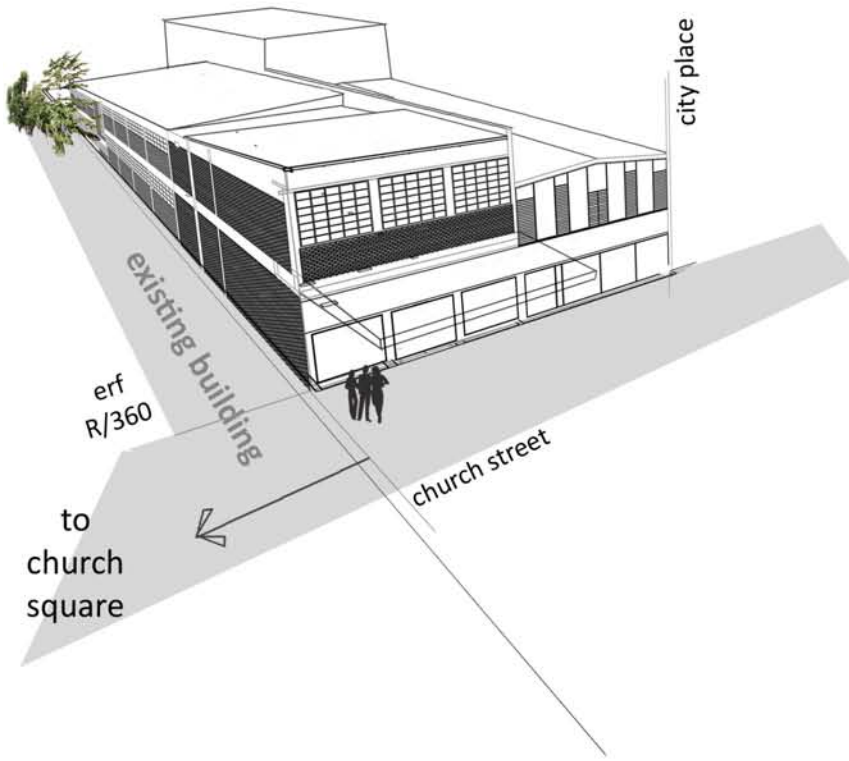
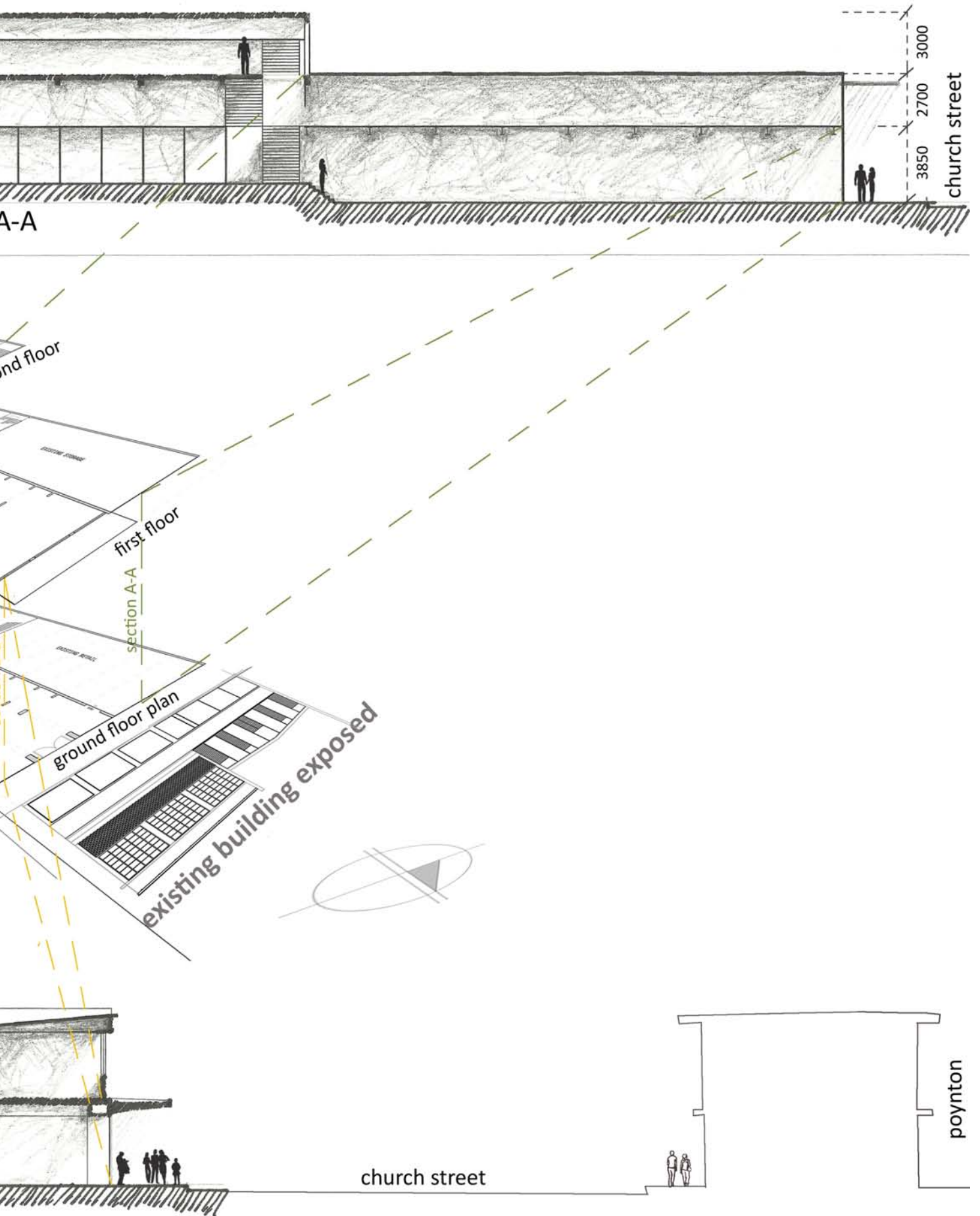


Figure 4i: Plans and elevation of existing building





4j: Further exploration of the existing building with sections – to give an indication of volumetric properties of the interior spaces



3. EXISTING INTERIOR MATERIALITY:

From the entrance straight through to the service alley, the building acts as a puzzle: there is no consistent use of materials; restricted movement because of arrangement of products in the showroom; and no separation between private or public space. The addition of mezzanine floors in component 3 (figure 4i) cannot be used for anything other than storage because there is not enough head room. Artificial lighting is switched on during the day to illuminate the dark interior spaces.

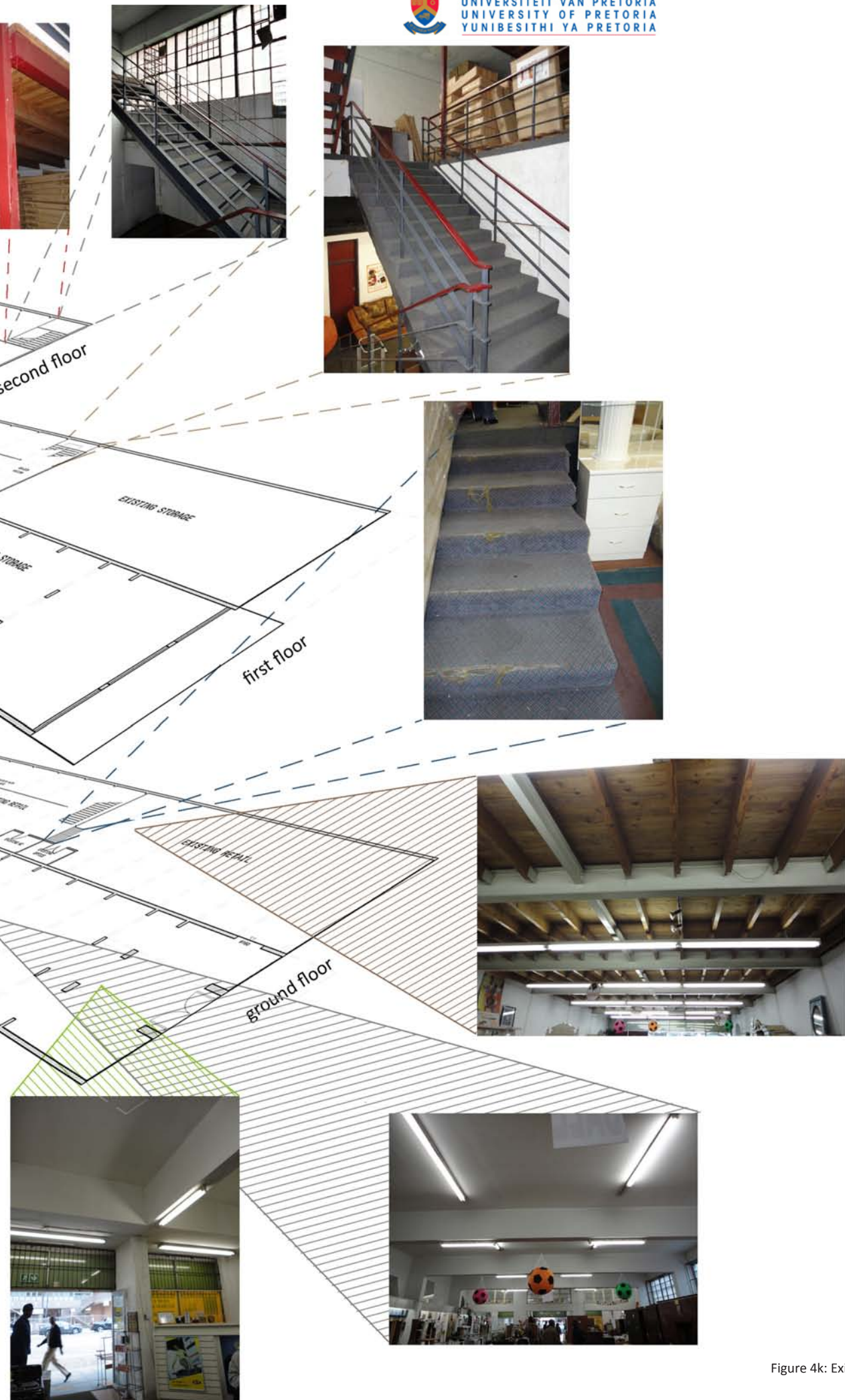
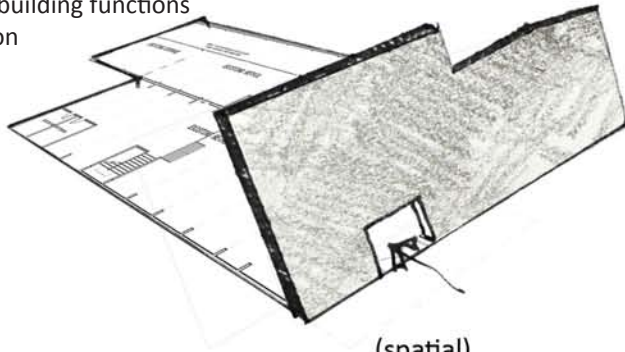


Figure 4k: Existing interior materiality



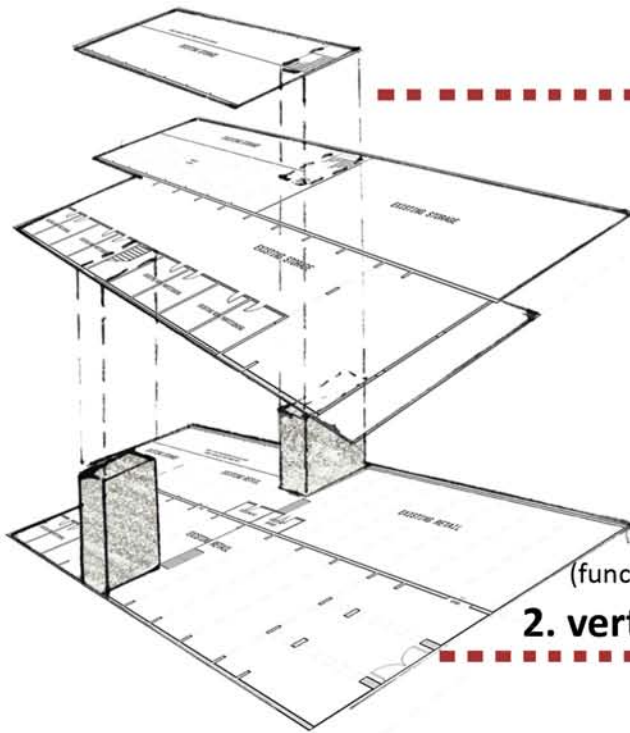
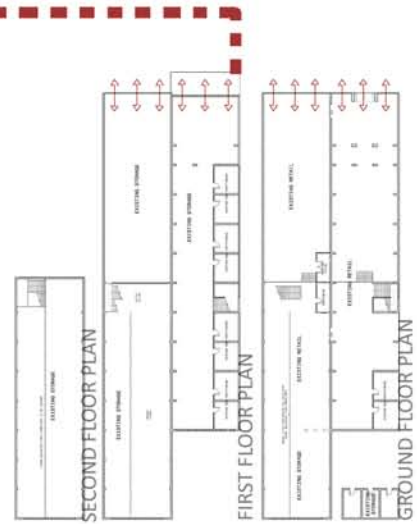
4. EXISTING INTERFACES:

Interfaces present in the proposed building. These interfaces appear problematic as it actually create solid boundaries within the space - the main reason why this building functions in isolation



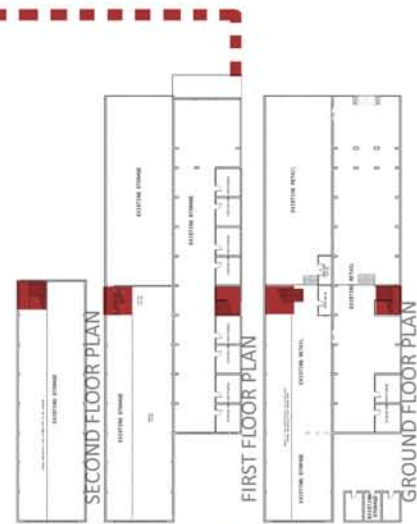
(spatial)

1. street interface



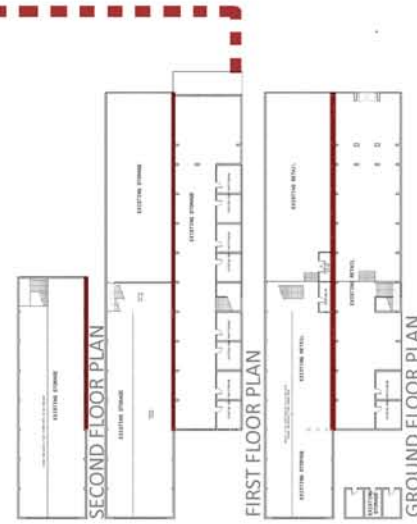
(functionall)

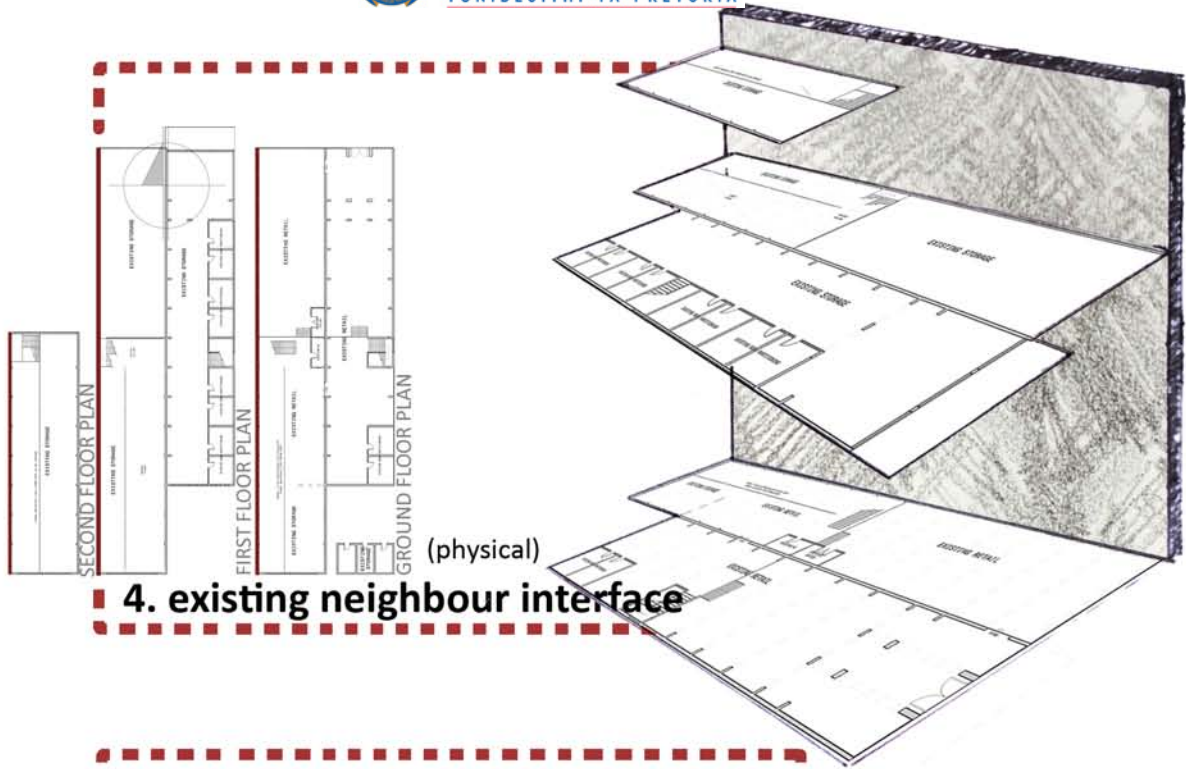
2. vertical interface



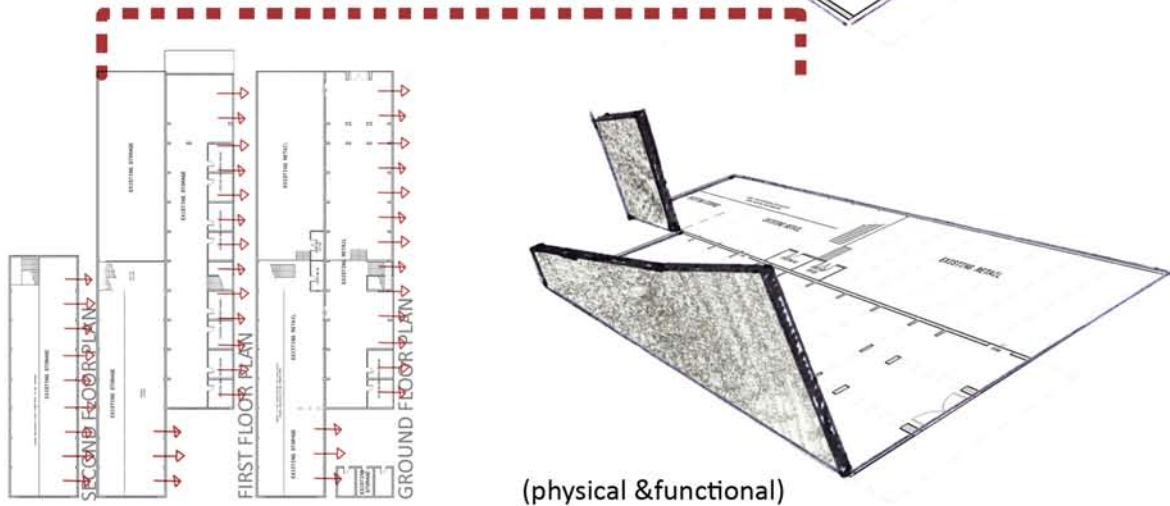
(volumetric)

3. link interface

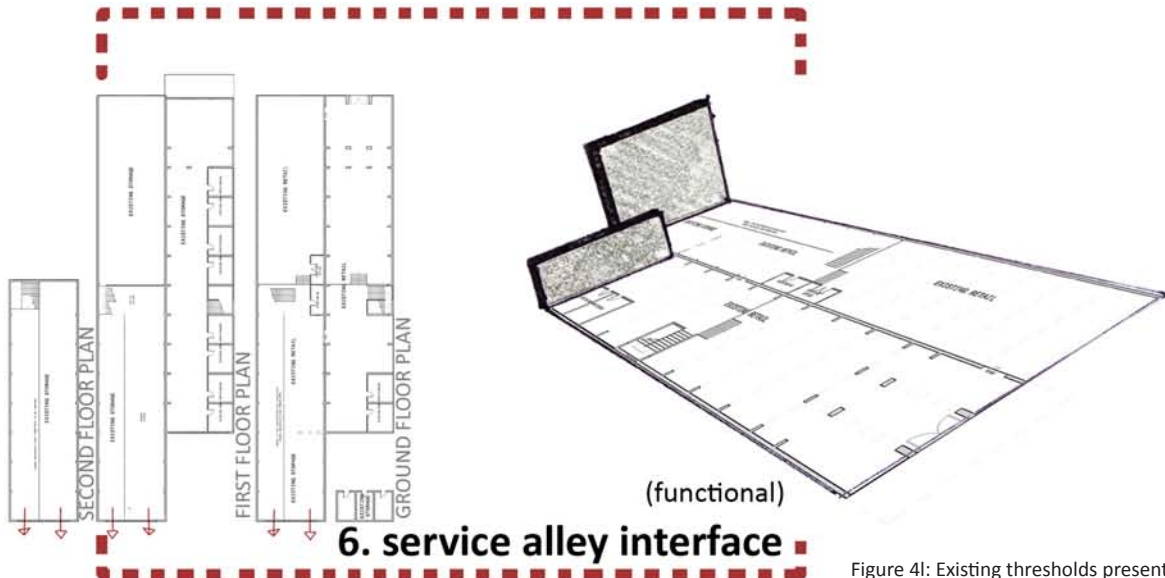




4. existing neighbour interface



5. adjacent vacant site interface


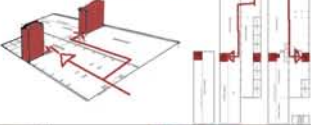
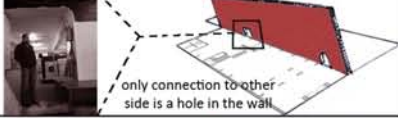



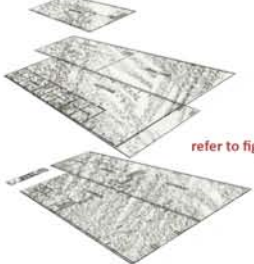


6. service alley interface

Figure 41: Existing thresholds present on site

5. EXISTING INTERFACES EXPLORATION:

Interfaces (thresholds) on site which currently act as boundaries, along with alterations (proposed options) to be made to existing structure in order to achieve a responsive building

Interface	Problem	
1 Street	<ul style="list-style-type: none"> - Limited access - Very limited visibility - No visual interest 	<ul style="list-style-type: none"> - Improv - Improv - Increa
2 Vertical	<ul style="list-style-type: none"> - Isolated/hidden - No contextual connection - Building regulations not followed - Two staircases (no direct movement) 	<ul style="list-style-type: none"> - Improv - Improv - Direct
3 Link	<ul style="list-style-type: none"> - Boundary - Physically secluded - Minimum natural light - Structural wall  <p>only connection to other side is a hole in the wall</p>	<ul style="list-style-type: none"> - Increa - Improv - Increa - Improv
4 Existing Neighbour	<ul style="list-style-type: none"> - No relationship - Only physical connection - Scale 	<ul style="list-style-type: none"> - Incorp - Improv
5 Adjacent Vacant Site	<ul style="list-style-type: none"> - Isolated - No access (only from street façade) - No visual interest - Block off eastern sun - Vacant (dead) external space 	<ul style="list-style-type: none"> - Buildin - Improv - Open t - Improv - Increa
6 Service Alley	<ul style="list-style-type: none"> - Boundary - Nothing to react on - Services - Access - Scale 	<ul style="list-style-type: none"> - Direct - Decre - Direct
7 Interior	<ul style="list-style-type: none"> - Public to private - Functional (programmatic) interface - New and old  <p>refer to figure 4l</p>	<ul style="list-style-type: none"> - Improv - Improv - Perma - Decre - Improv - Improv - Add to - Inclusi - Human

Simple architectural elements that can be implemented to act as interface layers:

- change of surface material 1
- hierarchy of space 2
- horizontal and vertical separators 3
- boundaries 4
- layers of events 5
- change in levels and spatial qualities 6


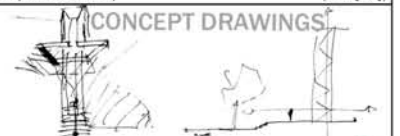


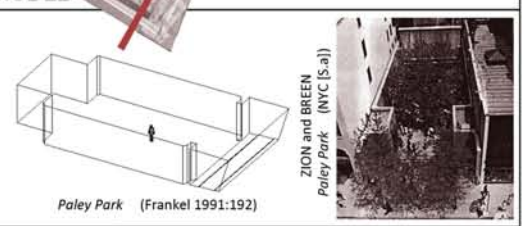
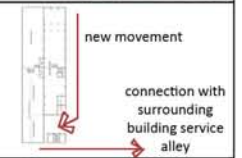
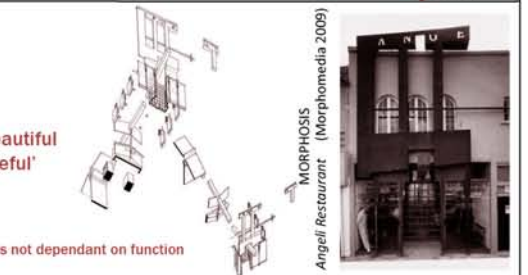

Aim	Proposed options
<ul style="list-style-type: none"> improve visual access improve physical access improve use 	<ul style="list-style-type: none"> - Movable planes - Materiality (e.g. extension of floor materials) - Lighting - Seating - Shade/shelter - Transitional space <p style="text-align: right;">refer to figure 4o for discussion and relevance of precedents</p> 
<ul style="list-style-type: none"> improve visual connection with context improve visibility from entrance define main access route 	<ul style="list-style-type: none"> - Increase height - Materiality (minimalist with physical strength) - Change axes - Remove 1 staircase 
<ul style="list-style-type: none"> improve natural lighting improve internal movement improve user comfort improve visual access 	<ul style="list-style-type: none"> - Remove floor slabs where necessary - Remove boundary walls, columns in tact - Volume (spatial qualities) - Lighting <p style="text-align: right;">also refer to figure 4c</p> 
<ul style="list-style-type: none"> elaborate visual link improve connection with context (include scale) 	<ul style="list-style-type: none"> - Skylight - Roof garden - Exterior access routes 
<ul style="list-style-type: none"> linking must react to empty external space improve accessibility link for natural light improve awareness from street improve use (attraction) 	<ul style="list-style-type: none"> - Courtyard - New additional entrance - Windows - Activity (programmed space) - Seating - Shade/shelter - Advertising/branding 
<ul style="list-style-type: none"> improve access improve visibility link new services 	<ul style="list-style-type: none"> - Link access to linking sites - Wall treatment - Vertical visual connection (movement axes) 
<ul style="list-style-type: none"> improve user comfort improve internal movement permanent vs temporary change in scale improve security improve visual interest elevators improve design change in scale 	<ul style="list-style-type: none"> - Movable planes - Materiality - Permanent planes/services - Temporary fittings - Texture - Lighting - Layers of events - Ramps and lift <p style="text-align: center;">'that which is beautiful must also be useful'</p> <p style="text-align: center;">design space which is not dependant on function</p> 

Figure 4m: Table of the proposed options to possible alteration of existing interfaces

5.1 PRECEDENT STUDIES:

The following precedent studies acts as examples of how to go about responding to the different interfaces (figure 4m) individually.

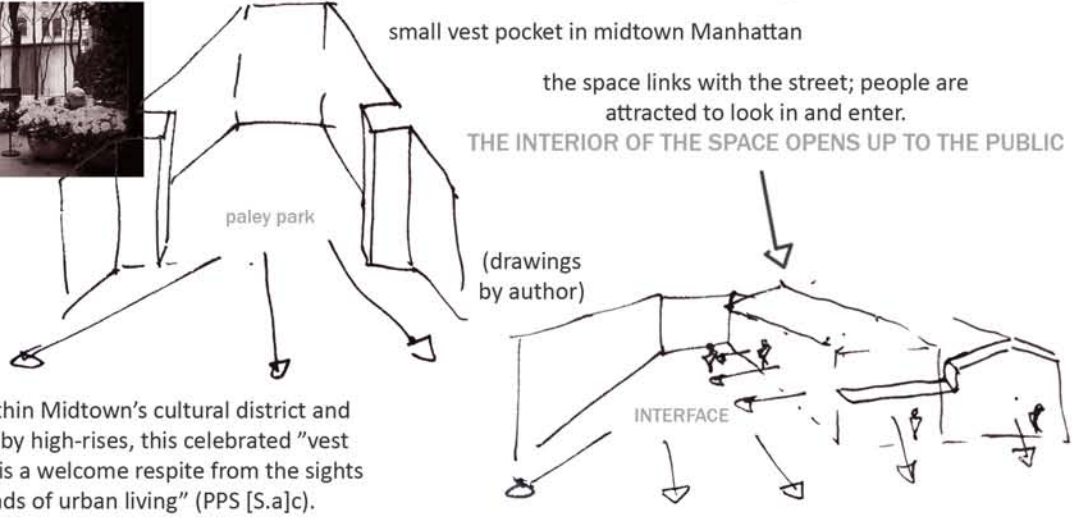
PALEY PARK
ZION & BREEN ASSOCIATES
5 east 53rd street, new york



small vest pocket in midtown Manhattan

the space links with the street; people are attracted to look in and enter.

THE INTERIOR OF THE SPACE OPENS UP TO THE PUBLIC

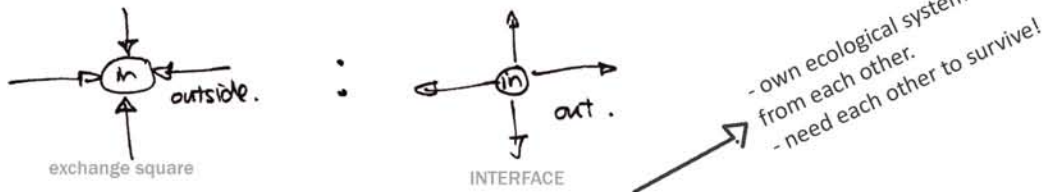


“Located within Midtown’s cultural district and surrounded by high-rises, this celebrated “vest pocket” park is a welcome respite from the sights and sounds of urban living” (PPS [S.a]c).

According to Project for Public Spaces (ibid), the success of this park boils down to the location, food and adaptability. This park has “an intimate relation with the street” (Frankel 1991:191-197) which attract people to look in and enter. The mobility of the chairs and tables allow the public to ‘construct’ their own space and therefore be in control and comfortable. Along with the waterfall, the shades of the trees during the summer and light entering the space, it allows one to ‘escape’ from the urban surroundings and sounds and create a sense of tranquility.

EXCHANGE SQUARE
MARTHA SCHWARTZ PARTNERS
manchester, england 2000

the square fabric extends out to the building edges surrounding it.
social activity is borrowed of the surrounding buildings and streets.



“Vital to the design of the square is that the plaza extends out to the building edges as its success, in part, depends on carefully ‘borrowing’ the activity of the surrounding buildings and streets” (Schwartz 2000).

The design of the square allows for free access for all and a variety of activities to take place, in addition it also “provides a setting for the surrounding buildings” (ibid). The ramps are of great functional value, driving the movement through the space and also providing seating and display space.

STOREFRONT FOR ART
AND ARCHITECTURE
STEVEN HOLL ARCHITECTS
new york 1992-1993



photo above
(Holl [S.a]a)



photos (Holl [S.a]b)



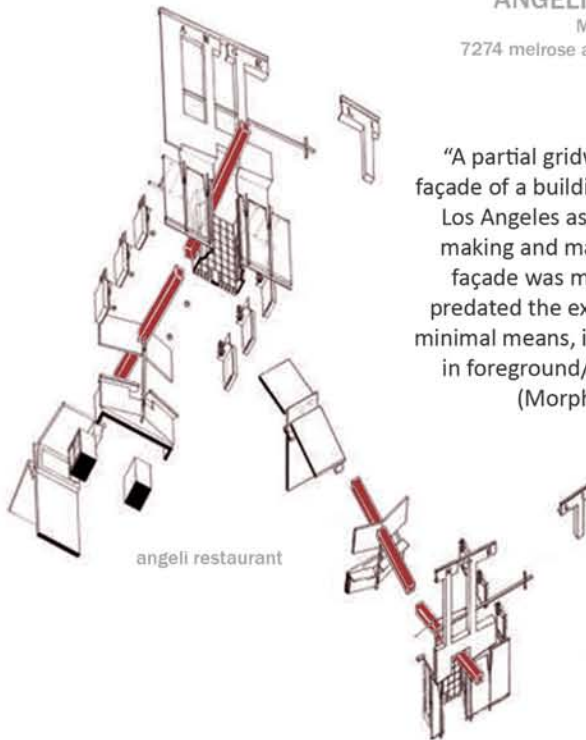
“The design forges a powerful link between public space, the sidewalk and street, and the private space...”
(Holl [S.a]b).

The adaptive nature of the street facade becomes the link/interface between two very different spaces. It creates the awareness of a threshold being breached, and allows the continuation of space by visual and physical access.



ANGELI RESTAURANT
MORPHOSIS

7274 melrose avenue, los angeles 1984

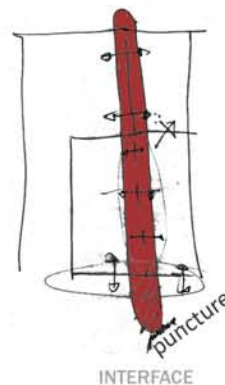


angeli restaurant

“A partial gridwork was added to the façade of a building on Melrose Avenue in Los Angeles as an inexpensive way of making and marking an addition. The façade was meant to appear as if it predated the existing building. By using minimal means, it creates a series of shifts in foreground/background meaning”
(Morphomedia 2009).



An example of having one physical element running through an entire building, breaching all interfaces and connecting the respective spaces.



INTERFACE

6. INITIAL REACTION AND CONCEPT:

After the analysis and study of the existing interfaces, the initial reactions were driven by instinctive and swift decisions.

INITIAL REACTION

Due to the chosen location, the primary concern within the initial design is to connect it with the surrounding context. Finding the one intervention to respond to all the various interfaces of the building itself. To insure that the interior space is continuous with the exterior pedestrian movement

CONCEPT(UAL) APPROACH

Liminality (figure 4h) refers to a space that links the various interfaces by means of the movement back and forth through thresholds. This space can either be a boundary or an intermediate zone. An umbral is a sign of a change in condition or state that man uses to delimit space.

first each interface was given individual attention:

- 1. street interface
- 2. vertical interface
- 3. link interface
- 4. existing neighbour interface
- 5. adjacent vacant site interface
- 6. service alley interface

Umbral (threshold): an edge of light, a strip where light changes or fades. (Cros 2003:623)

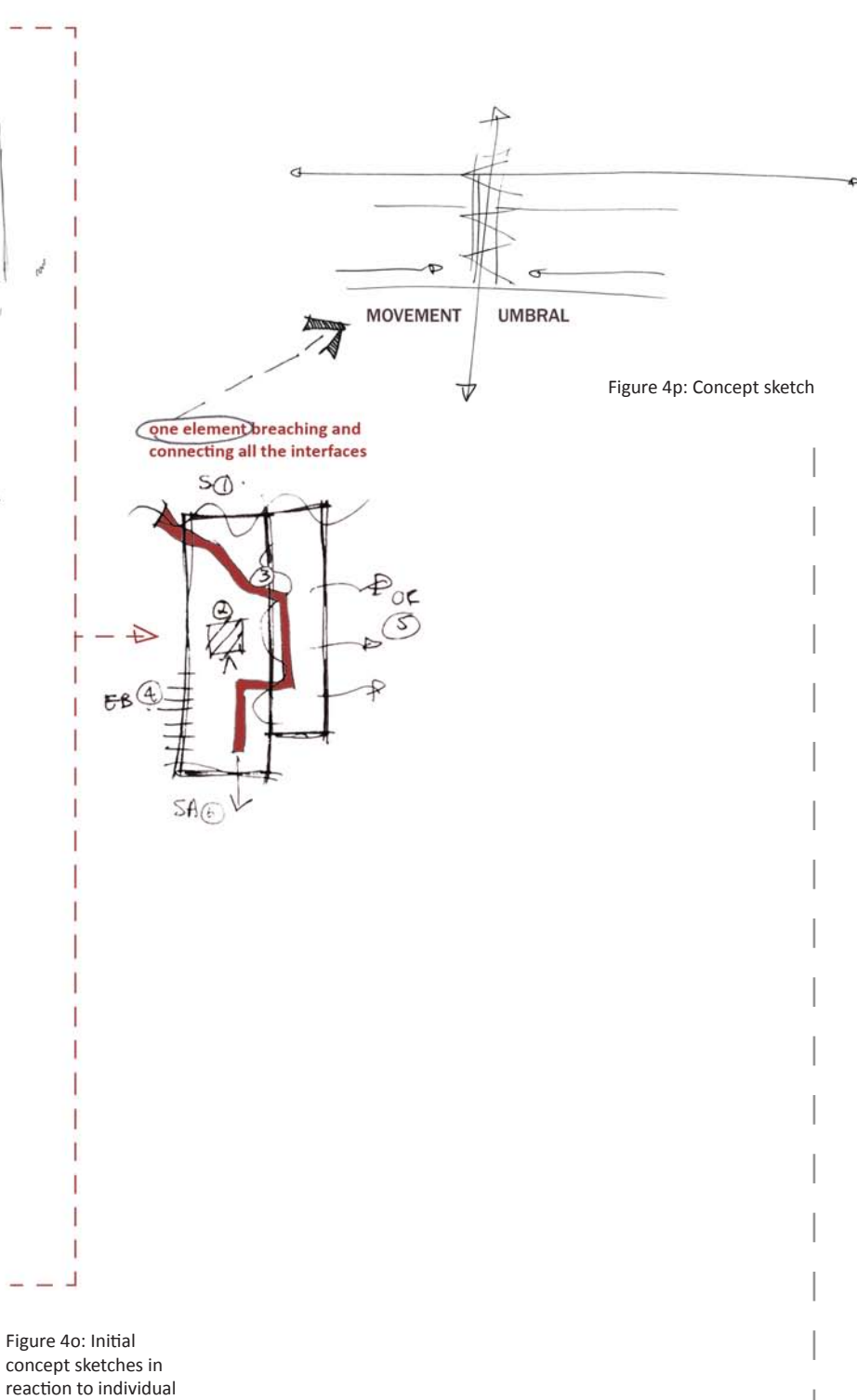


Figure 4p: Concept sketch

Figure 4o: Initial concept sketches in reaction to individual interface analysis



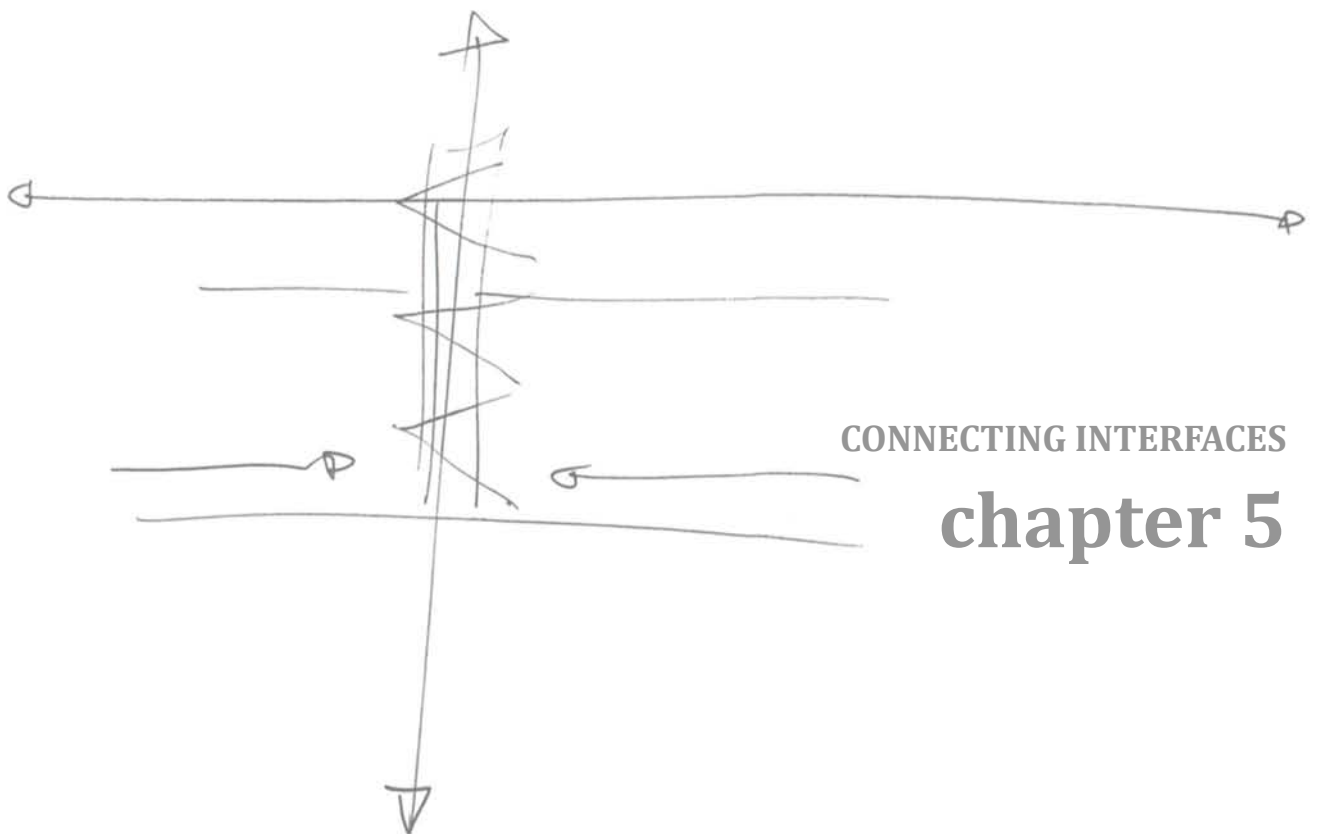
7. CONCLUSION

This chapter started with the role of interior architecture in the broader urban context, narrowed down to a proposed building and further decreased in scale to the exploration of specific individual boundaries found within.

This process of investigation should be done with each vacant or degraded building in the CBD since the materiality; spatial qualities and surrounding context vary.

In spite of the incomplete nature of the design, it was necessary to illustrate that the only constant element connecting the respective interfaces is movement. With the removal of boundaries, the potential energy possessed by each space was set into motion and transferred to the next. Movement activates planes, edges and ultimately spaces.

However it is necessary to proceed with further investigation into the guidelines applicable to all building types.



CONNECTING INTERFACES

chapter 5

INTRODUCTION:

Following the investigation of the various building specific interfaces, it is clear that these interfaces should be connected with one another. INTERFACE now proposes a single element (movement) to join them together. This process of connecting interfaces can be applied to other, similar buildings. The following illustrates this process as a layered system.

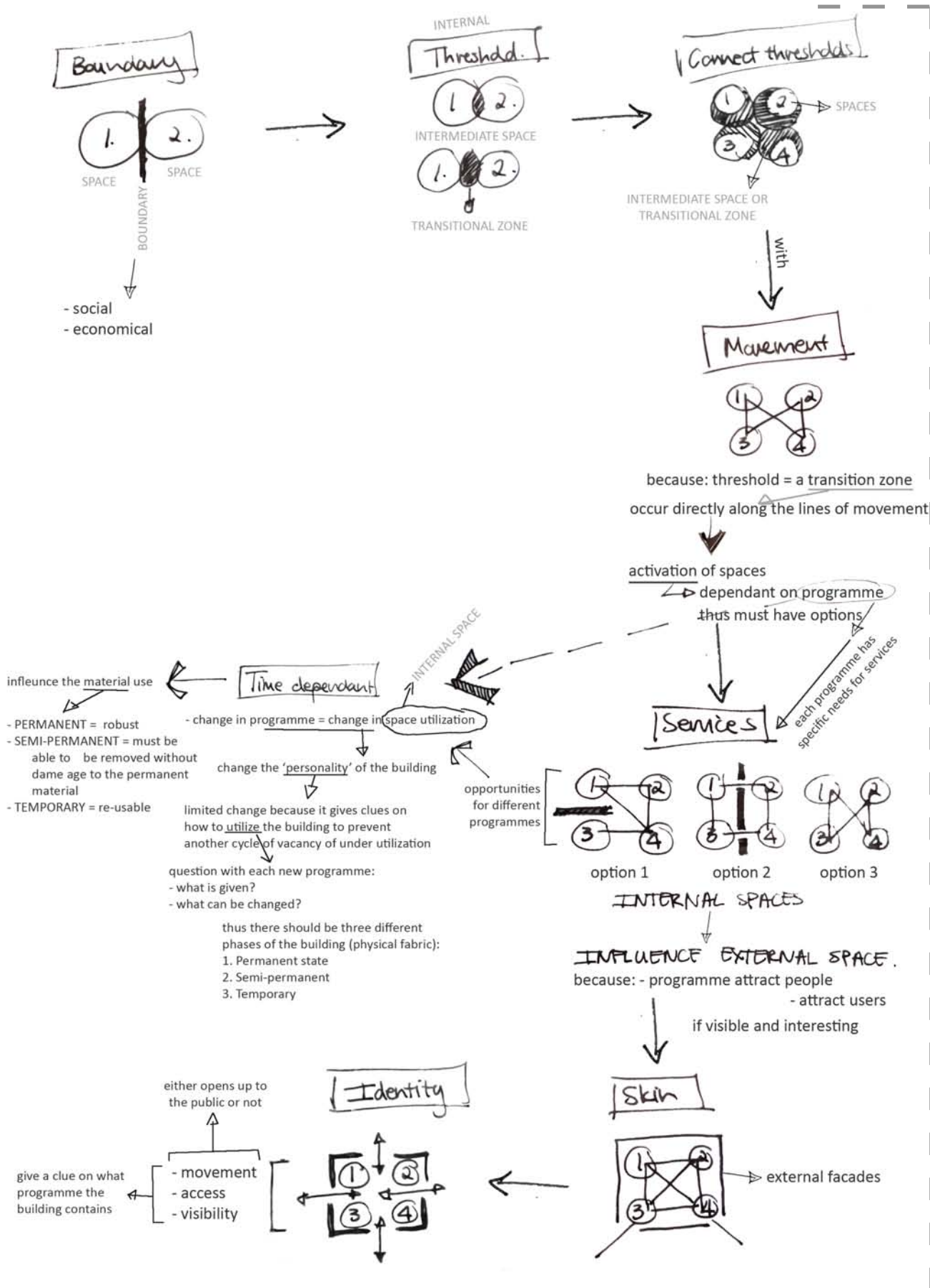
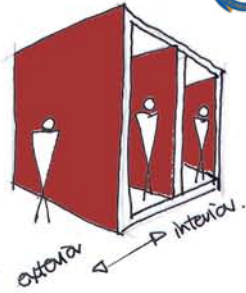
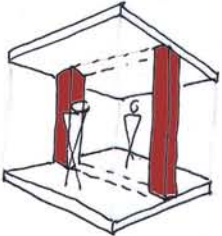


Figure 5a: Diagrammatic representation of layering system



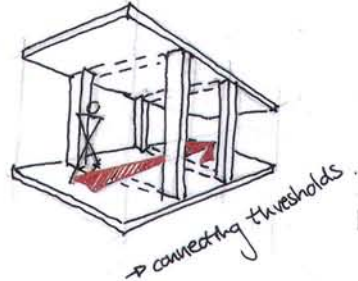
2 elements → inside
→ outside.

EXISTING as boundary



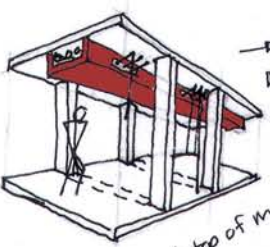
→ structure as threshold to create.
--- INTERMEDIATE ZONE.

INTERNAL STRUCTURE as interface



→ connecting thresholds.

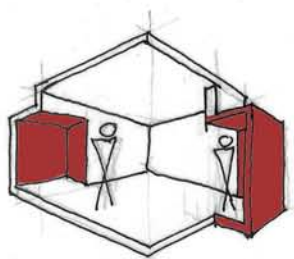
MOVEMENT as connection



→ option based :: Δ
service duct

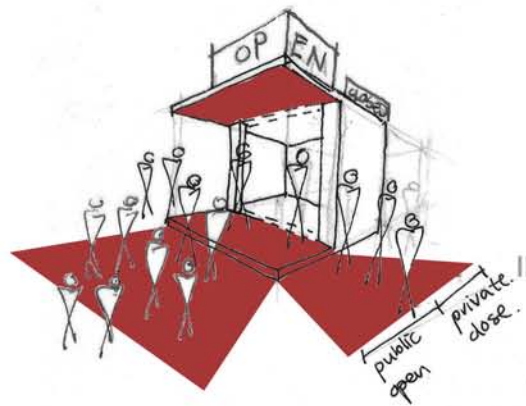
(on top of movement)

SERVICES occur directly along the lines of movement



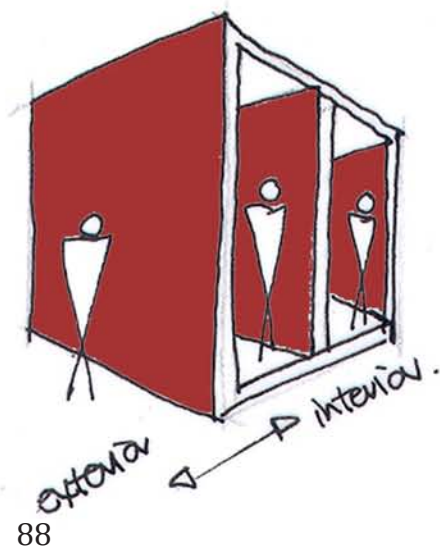
→ interior spaces determine the shape/mat. of skin of the building.

SKIN influenced by internal spaces



IDENTITY as gesture/clue on how to utilize spaces

Figure 5b: icons of building layering system



2 elements → inside
→ outside.

EXISTING as boundary:

A building is representative of a city (Bell 2004:137). It giving an idea of the boundaries within. If a building is a boundary, a city becomes a maze consisting of only layers of streets or paths. Movement occur in-through-out. Resulting with a city to become a gateway and not a destination.

Figure 5c: Existing building as boundary icon

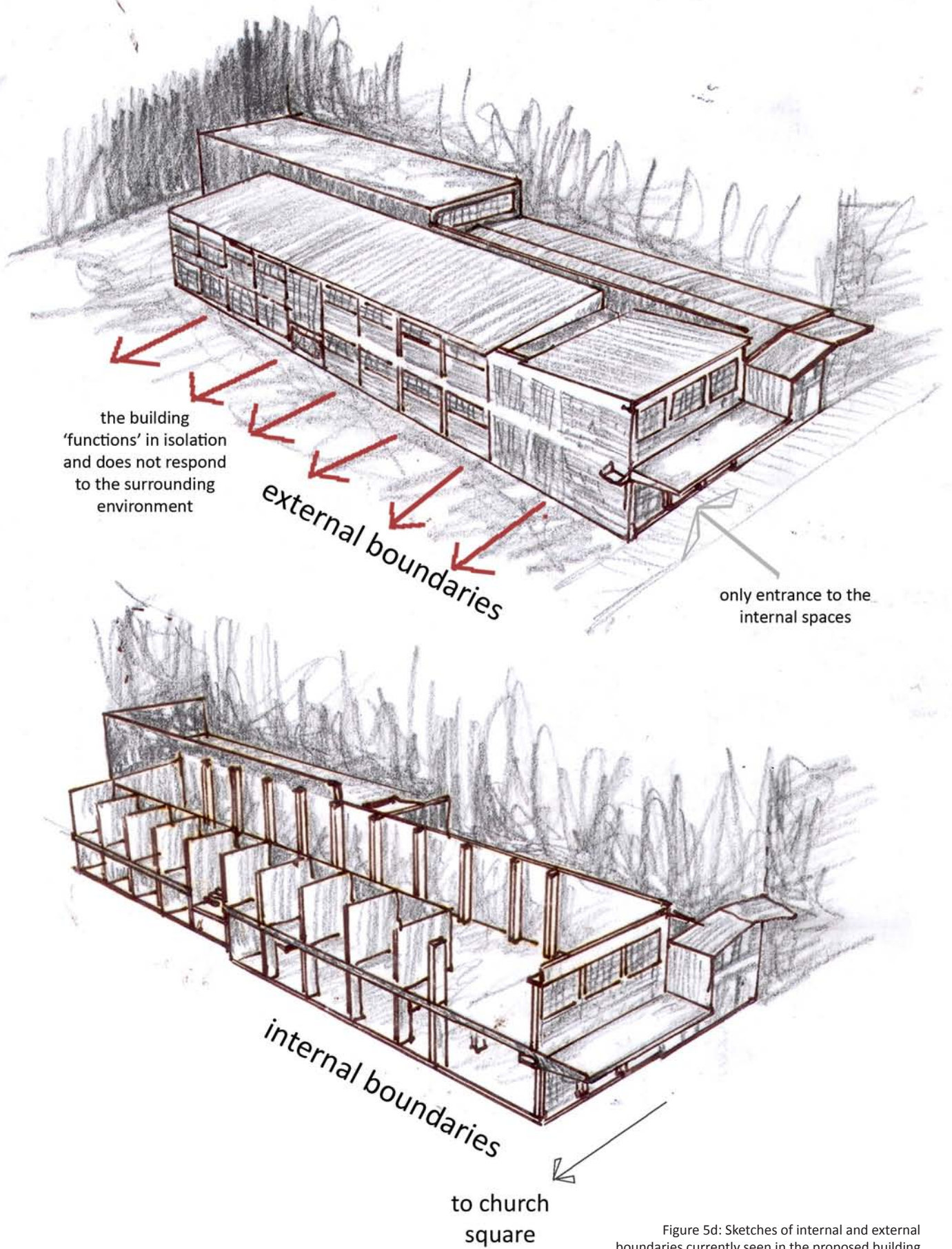


Figure 5d: Sketches of internal and external boundaries currently seen in the proposed building

CONCEPT SKETCHES:

1. PRIMARY SKETCH

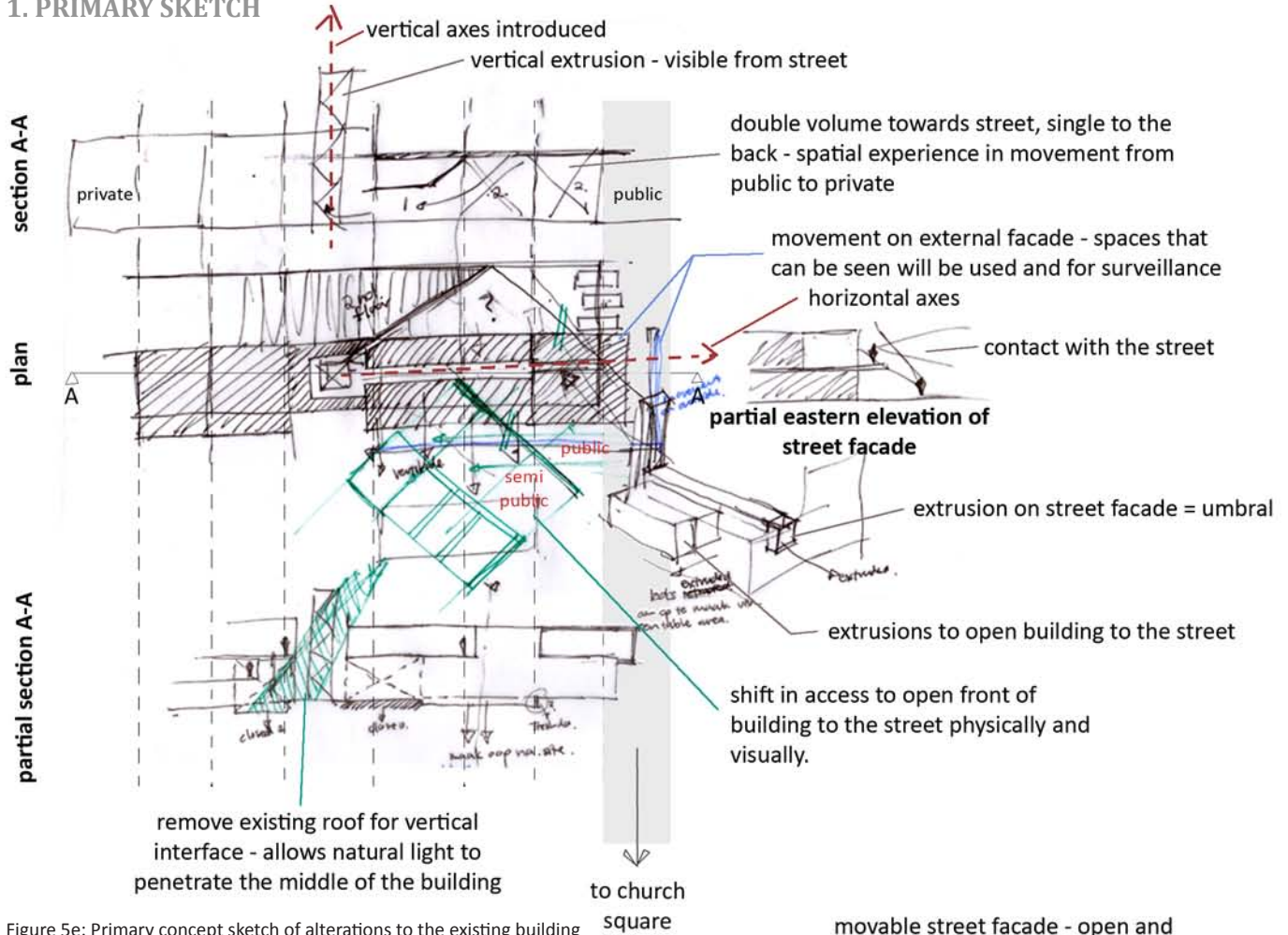
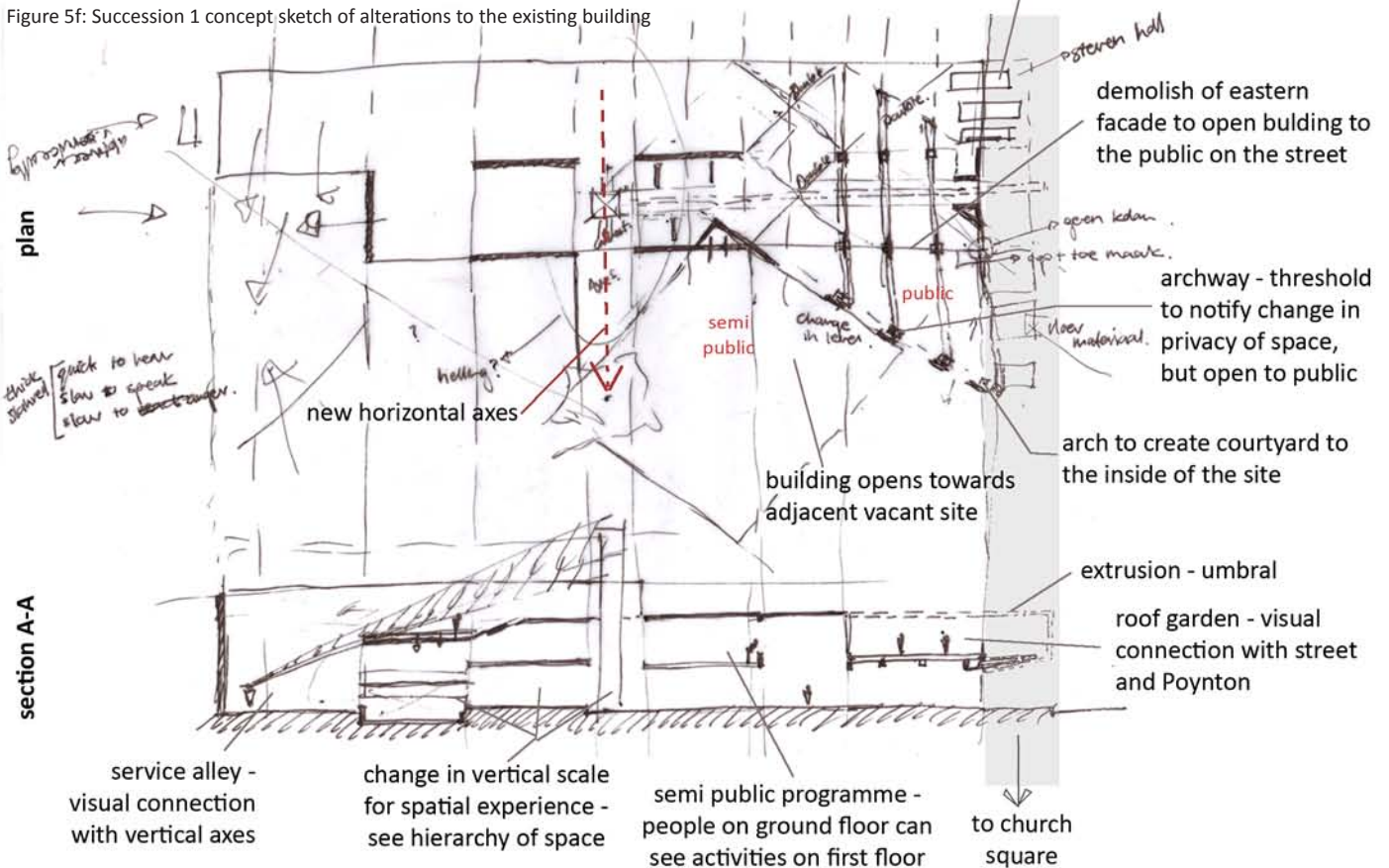


Figure 5e: Primary concept sketch of alterations to the existing building

2. SUCCESSION SKETCH 1

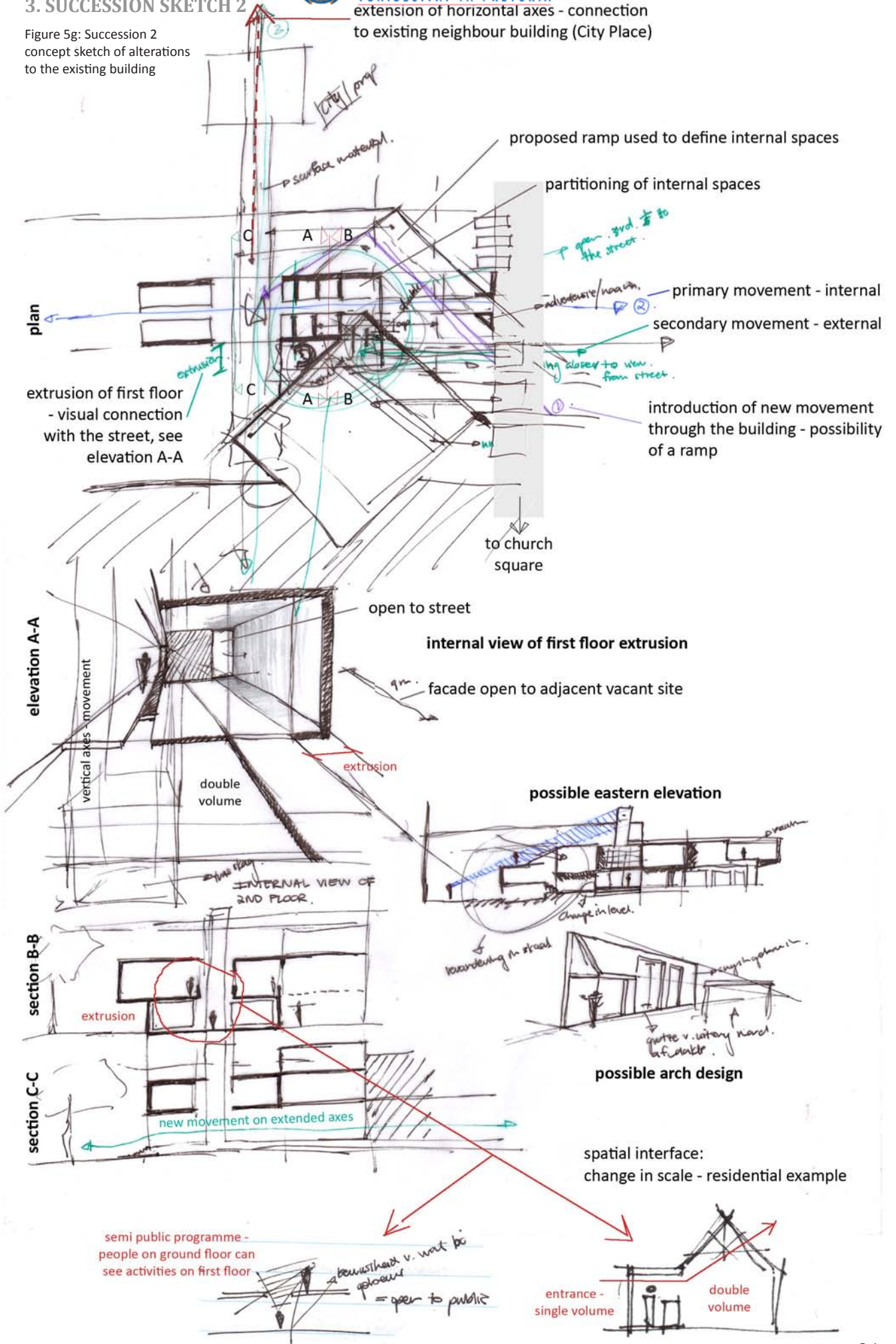
Figure 5f: Succession 1 concept sketch of alterations to the existing building



3. SUCCESSION SKETCH 2

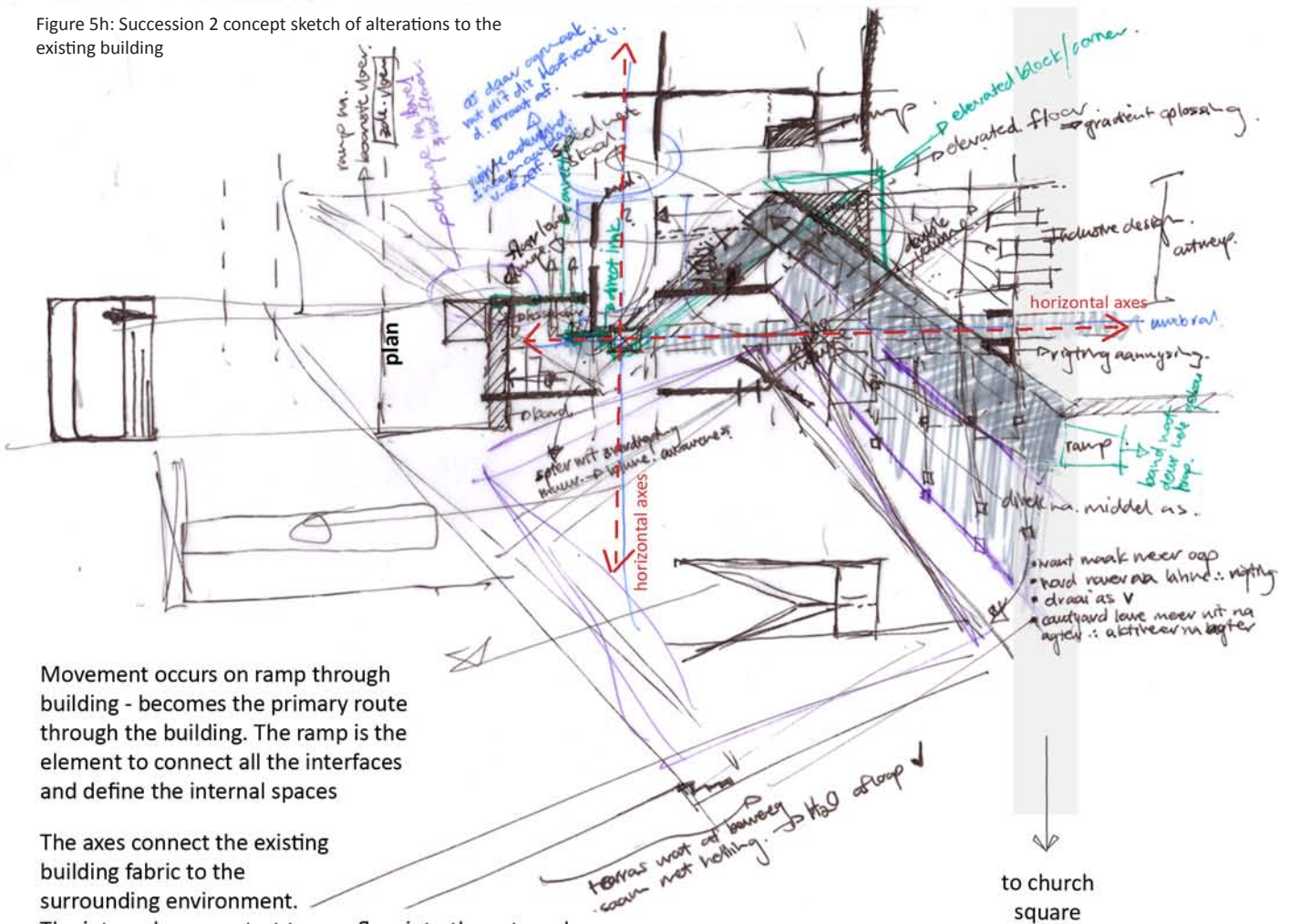
Figure 5g: Succession 2
concept sketch of alterations
to the existing building

extension of horizontal axes - connection
to existing neighbour building (City Place)



4. SUCCESSION SKETCH 3:

Figure 5h: Succession 2 concept sketch of alterations to the existing building



Movement occurs on ramp through building - becomes the primary route through the building. The ramp is the element to connect all the interfaces and define the internal spaces

The axes connect the existing building fabric to the surrounding environment.

The internal spaces start to overflow into the external spaces and serves as catalyst to regenerate the immediate urban fabric

5. INITIAL DESIGN

The design is focused on movement through the building and using this to define internal spaces. Although this proposal is adequate in terms of spatial, physical and functional qualities, the aim of this study is to make moderate alterations to existing structures. Therefore the physical alterations to the existing structure is to drastic and the design is only used as footwork for the final proposal.

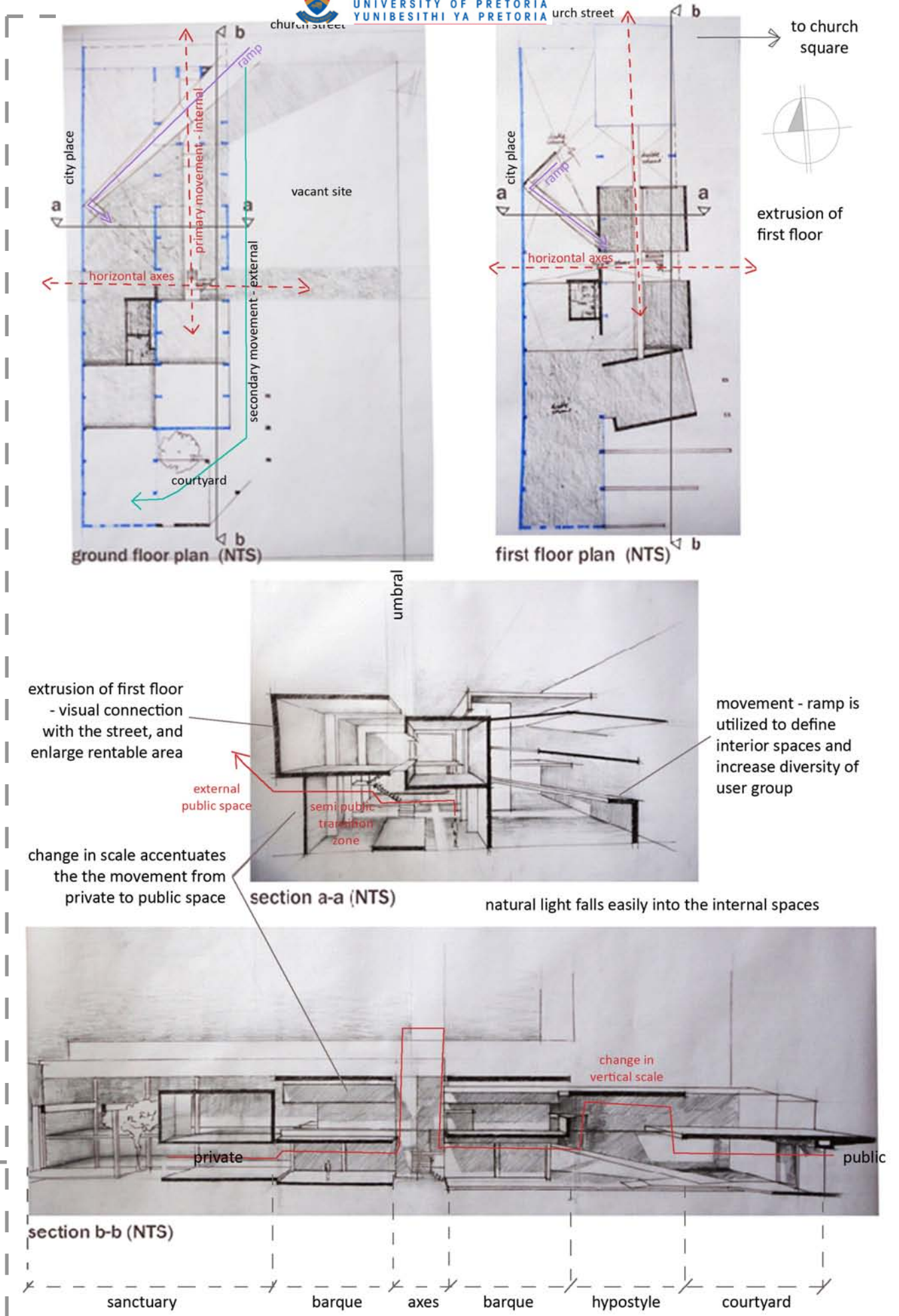


Figure 5i: Initial design sketches

spatial order according to Egyptian Temple terminology and hierarchical order in space (see figure 4b and 4e)



6. DEMOLITION OF EXISTING - final proposal.

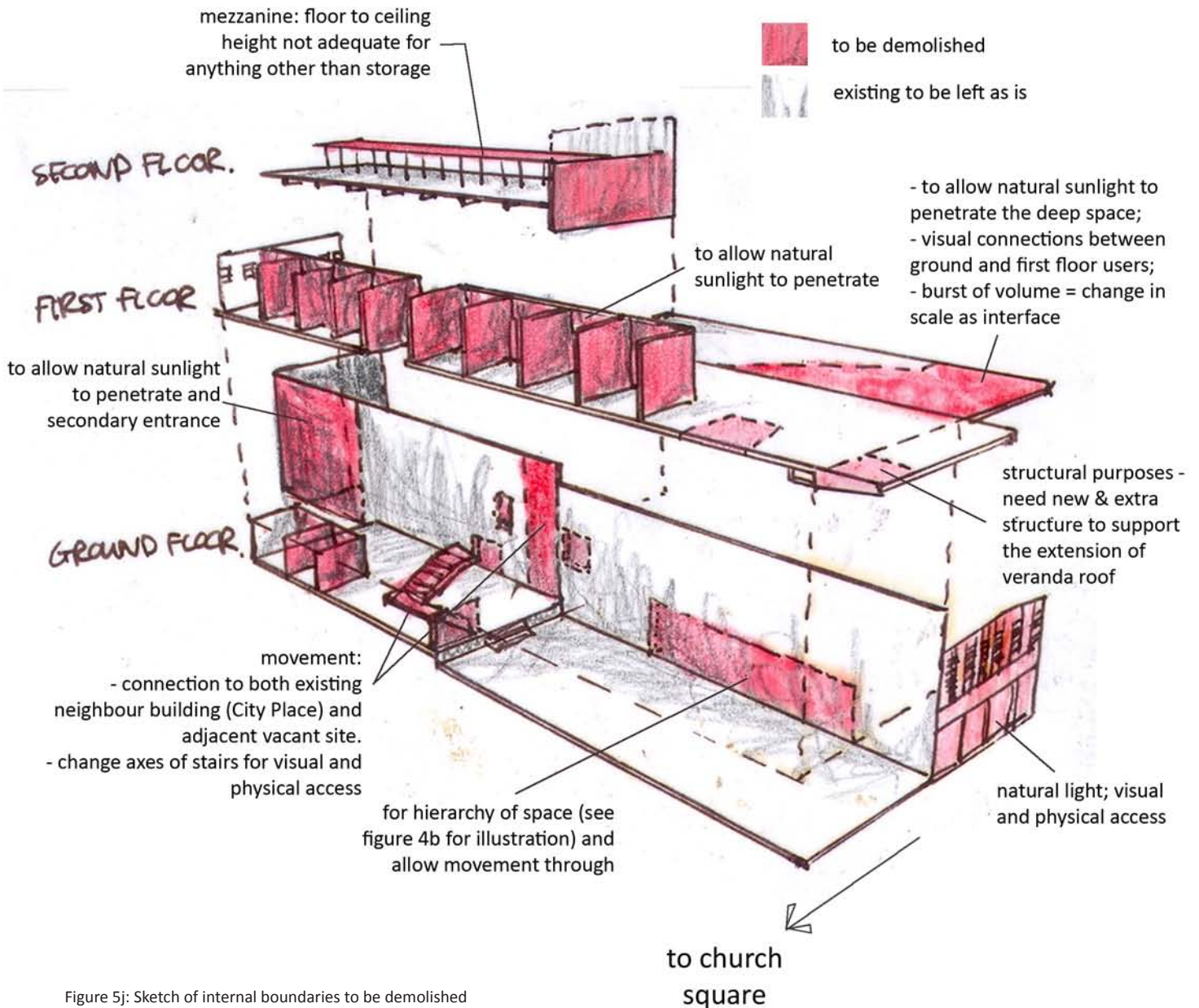
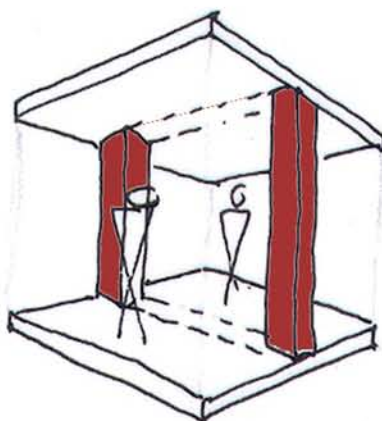


Figure 5j: Sketch of internal boundaries to be demolished



→ structure as
threshold & create.
--- INTERMEDIATE
ZONE.

INTERNAL STRUCTURE as interface:

It is the embracing of permanent changes to the structure towards the creation of responsive interior spaces. The structure represents the transition zone between interior and exterior, adjacent spaces and between human and object. This transition zone becomes the point of interaction between physical mass and mental state (figure 5n).

Figure 5l: Structure as interface icon

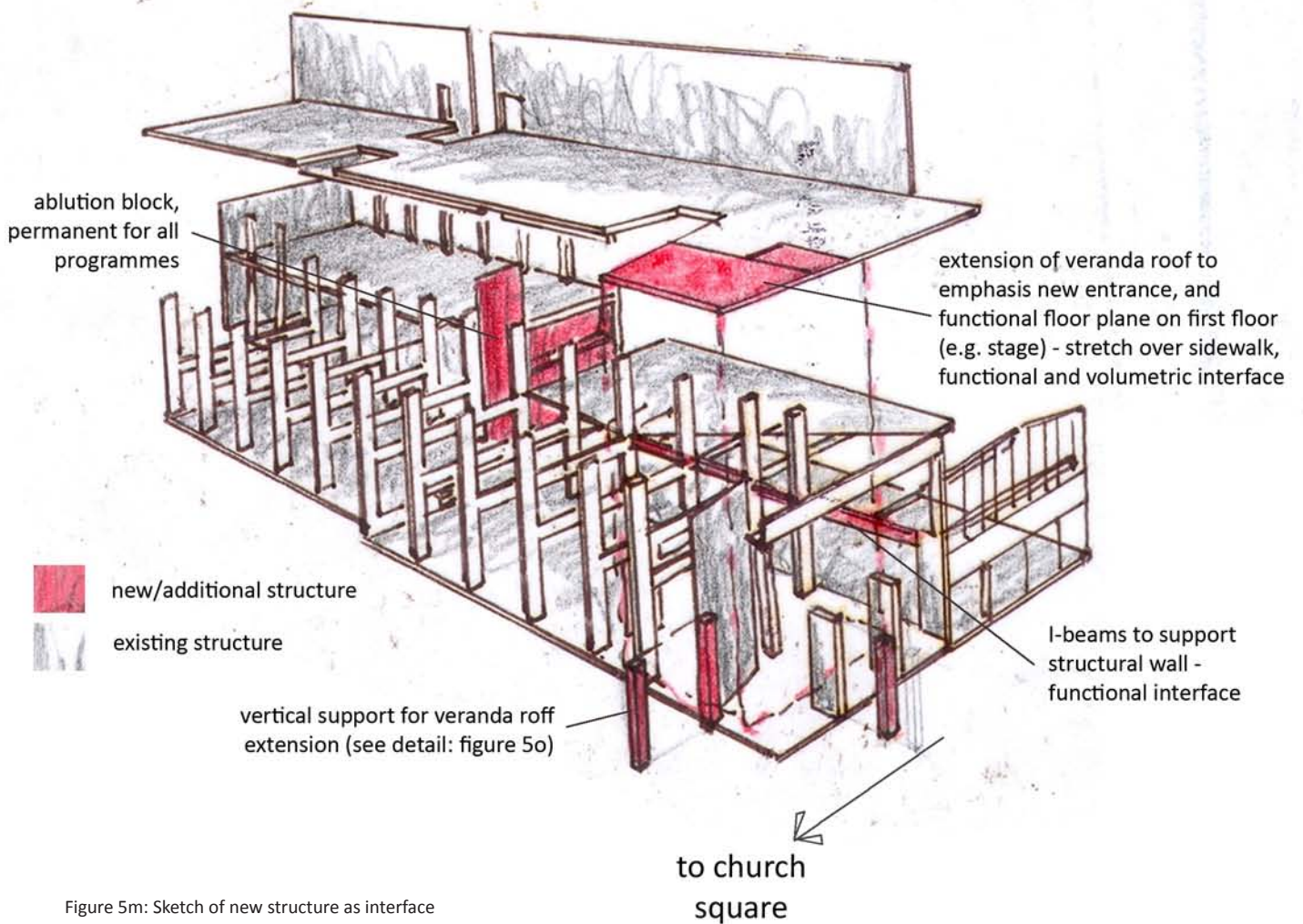

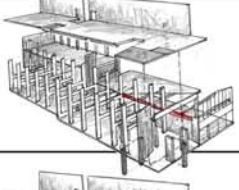

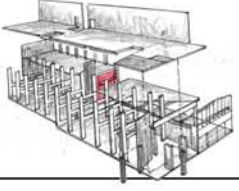


Figure 5m: Sketch of new structure as interface

1. STRUCTURAL INTERFACE:

This involves the luminal space created by the physical fabric of the building, the construction necessary for alterations and the influence thereof. The alterations have an impact on the surrounding environment and spatial experience.

Interface	Physical	Construction
<p>1 Corner</p> 	<ul style="list-style-type: none"> - Change in scale - Shadow line 	<ul style="list-style-type: none"> - Removal of existing ex veranda - Addition of extra column - Enlarge existing column services
<p>2 Internal</p> 	<ul style="list-style-type: none"> - Removal of structural wall - Change in scale - Change in light value 	<ul style="list-style-type: none"> - Demolish wall - Additional structural s
<p>3 Vertical</p> 	<ul style="list-style-type: none"> - Sudden change in scale - Natural light - Slows down movement - Signage wall (inclusive design) - Vertical connection 	<ul style="list-style-type: none"> - Removal of staircases - Additional wall - Open connection to ex neighbour building (Ci - Partial demolition of r floor slab - New staircase
<p>4 Services</p> 	<ul style="list-style-type: none"> - Additional central service 'unit' - Focus movement on main movement axes - Security to more private space at the back - Centralise services 	<ul style="list-style-type: none"> - Wet masonry of wall - Plant Room on roof, a structure for mainten - Additional ablutions

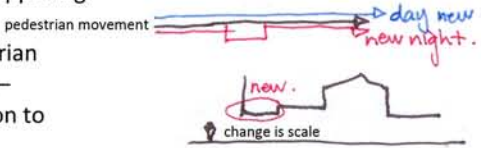
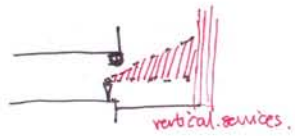
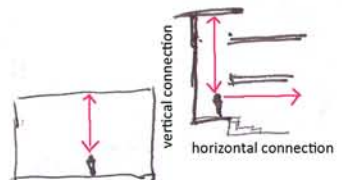
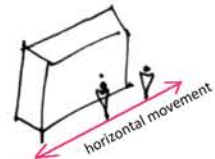
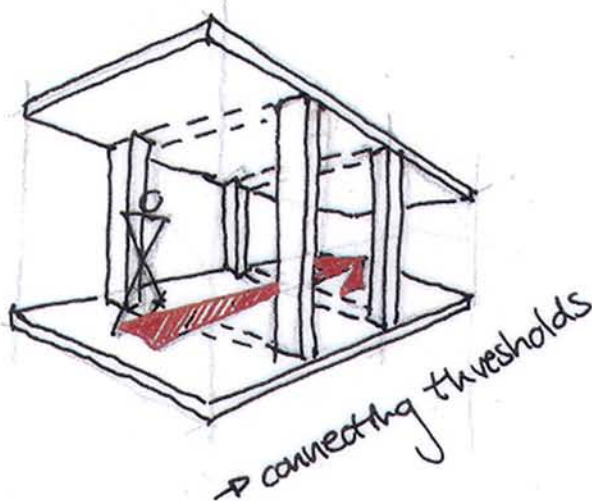
	Mental	Surrounding Environment
extended mns n to house	<ul style="list-style-type: none"> - Awareness of soffit above head - Boundary on the sidewalk (evening) - Change in spatial experience 	<ul style="list-style-type: none"> - Visual connection with opposing site (Poynton) - Connection with pedestrian movement on sidewalk – ultimately the connection to urban environment 
upport	<ul style="list-style-type: none"> - Awareness of sudden burst in volume - Change in floor levels - Light and shadow lines on floor - Improve movement 	<ul style="list-style-type: none"> - Gives the opportunity for vertical dispersal of services 
x2 existing ty Place) roof and first	<ul style="list-style-type: none"> - Improve movement - Change is scale - Inclusive design – natural ventilation and light 	<ul style="list-style-type: none"> - Vertical connection - Horizontal connection - Divides building in 2, improve movement to back of building 
Additional ance	<ul style="list-style-type: none"> - Physical boundary 	<ul style="list-style-type: none"> - Focus on horizontal movement - Centralised ablutions 

Figure 5n: Table of new structural interfaces



MOVEMENT as connection:

As designers we need to be aware of the relationships of design to the changing nature of our society. The attention to introduce inclusive design and access to space is fundamental. By allowing access to spaces (physical and visual), the building opens up to the public, allowing the spaces to be entered and utilized by a diverse range of people.

The concept of liminality, means mobility or freedom of movement (figure 4p), and connects the internal structures (interfaces) with each other. The internal movement disperse and become continuous with the external pedestrian movement – ultimately connecting interior spaces dispersed in the urban environment with each other.

Figure 5o: Movement as connection icon

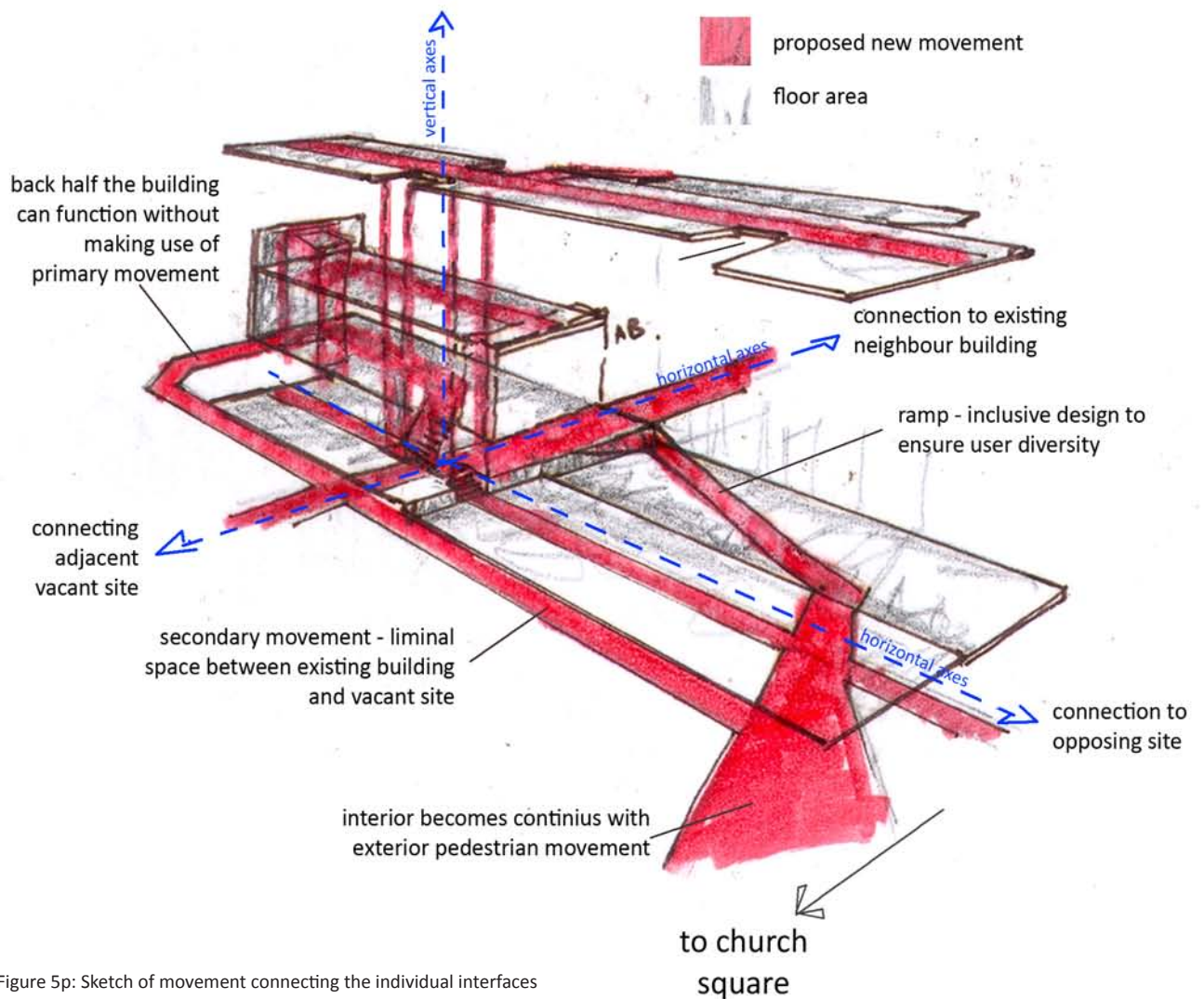
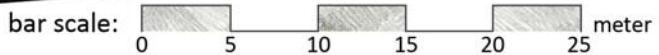
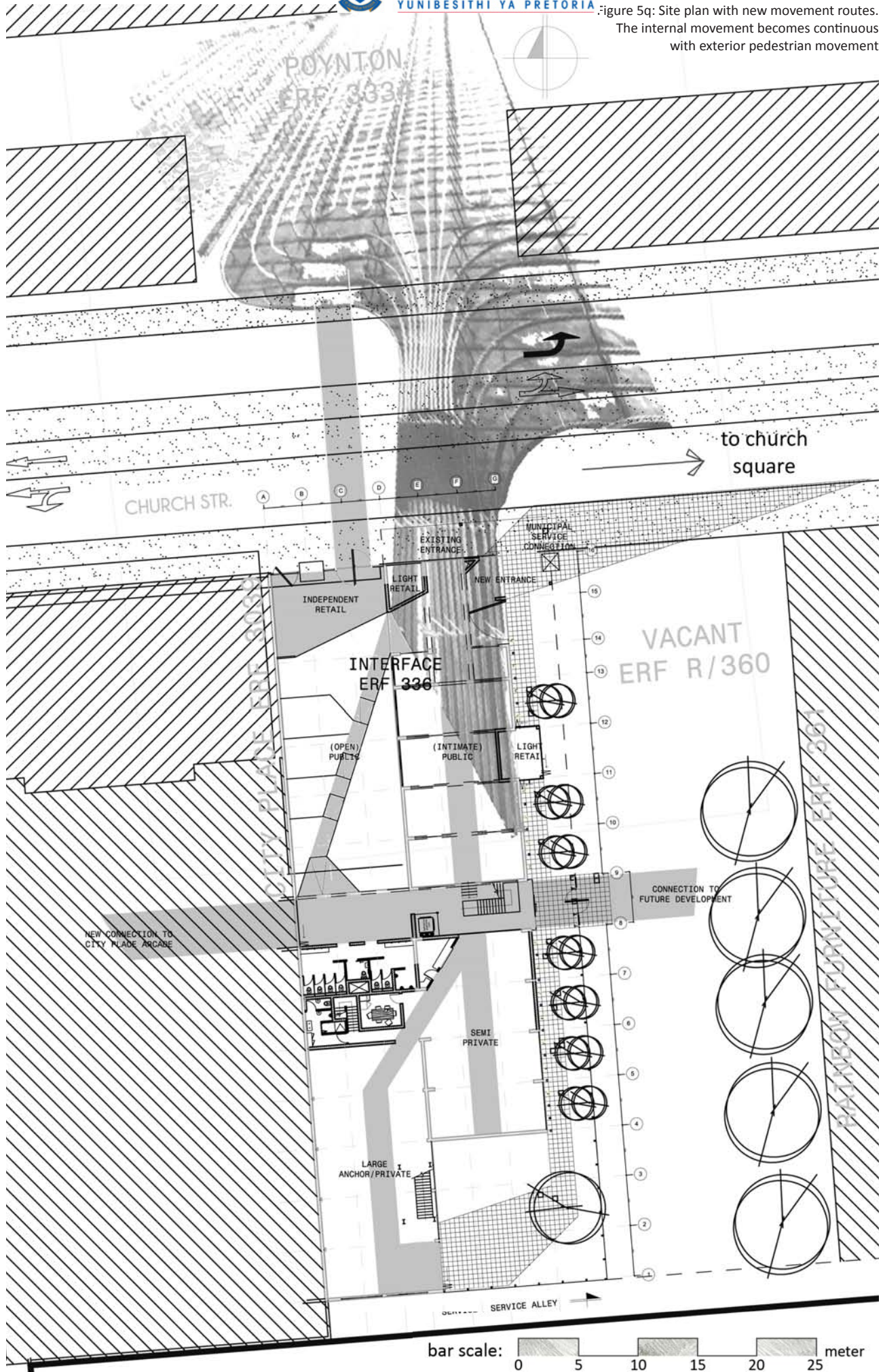


Figure 5p: Sketch of movement connecting the individual interfaces

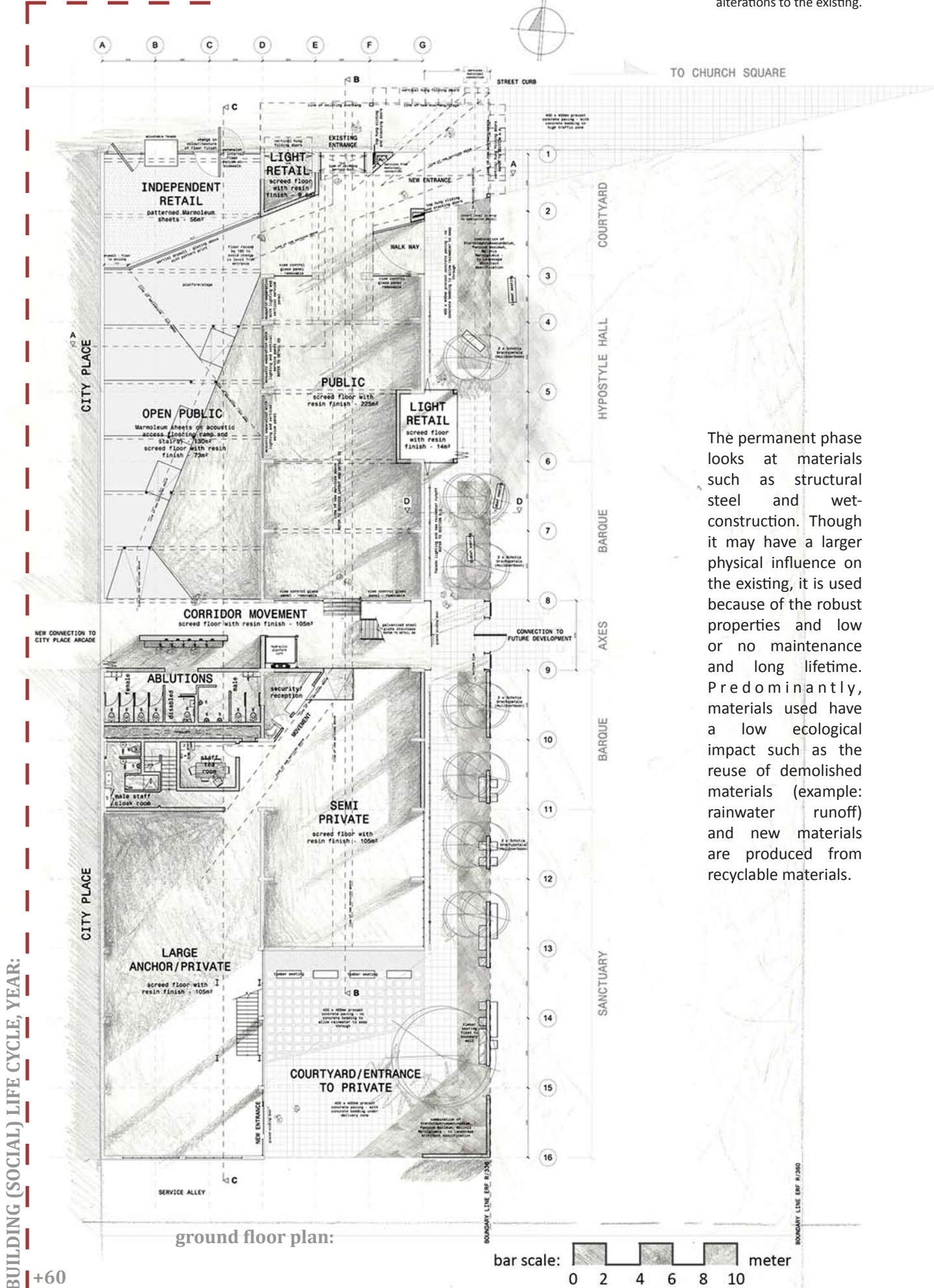


Figure 5q: Site plan with new movement routes.
The internal movement becomes continuous with exterior pedestrian movement



permanent changes:

Figure 5r: Ground floor plan with permanent alterations to the existing.



The permanent phase looks at materials such as structural steel and wet-construction. Though it may have a larger physical influence on the existing, it is used because of the robust properties and low or no maintenance and long lifetime. Predominantly, materials used have a low ecological impact such as the reuse of demolished materials (example: rainwater runoff) and new materials are produced from recyclable materials.

Figure 5s: First & second floor plan with permanent alterations to the existing

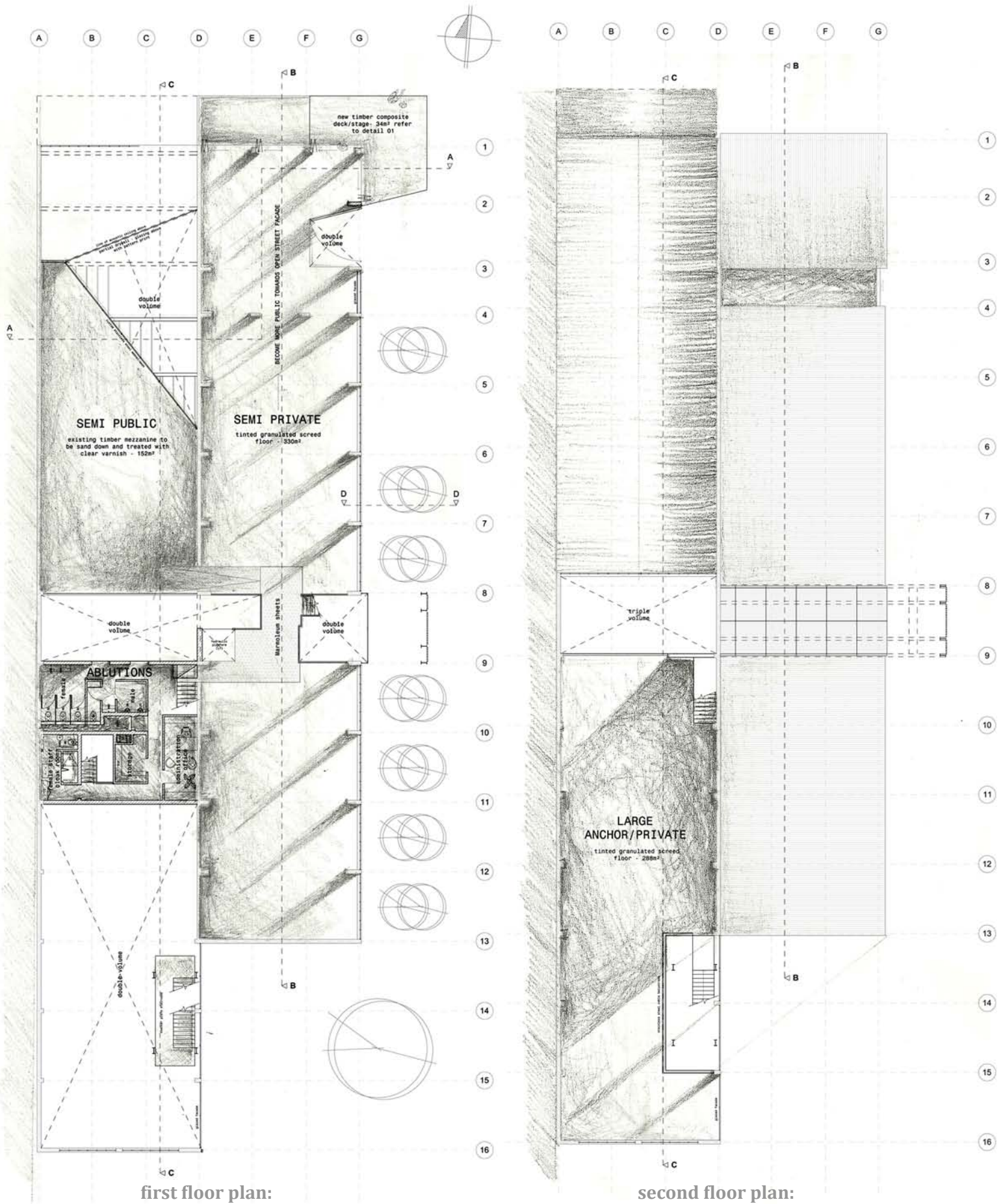
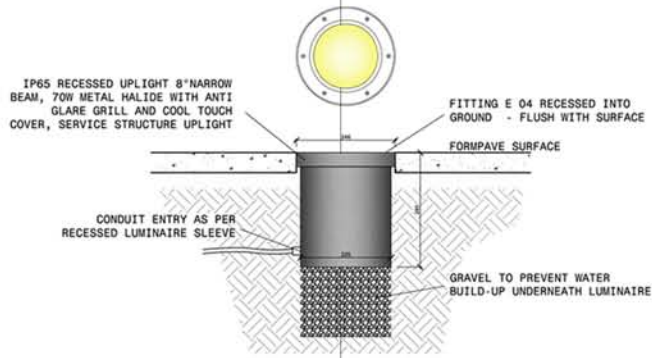


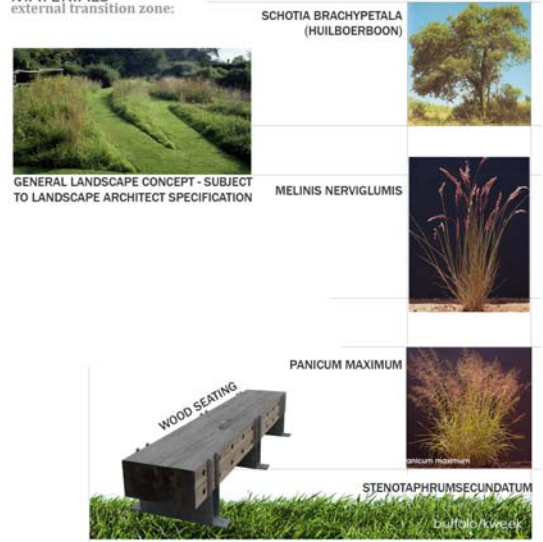


Figure 5t: Section D-D and external transitional zone detailing

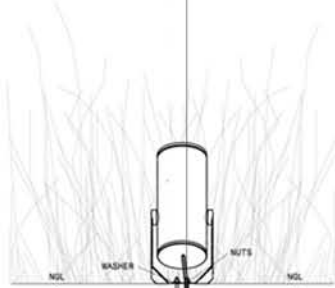


fitting EA 4:

ERIALS
external transition zone:



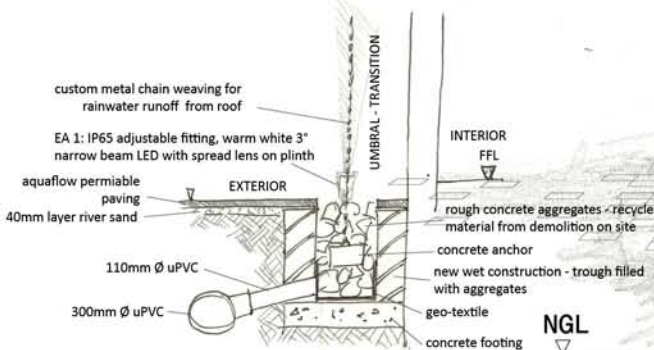
G



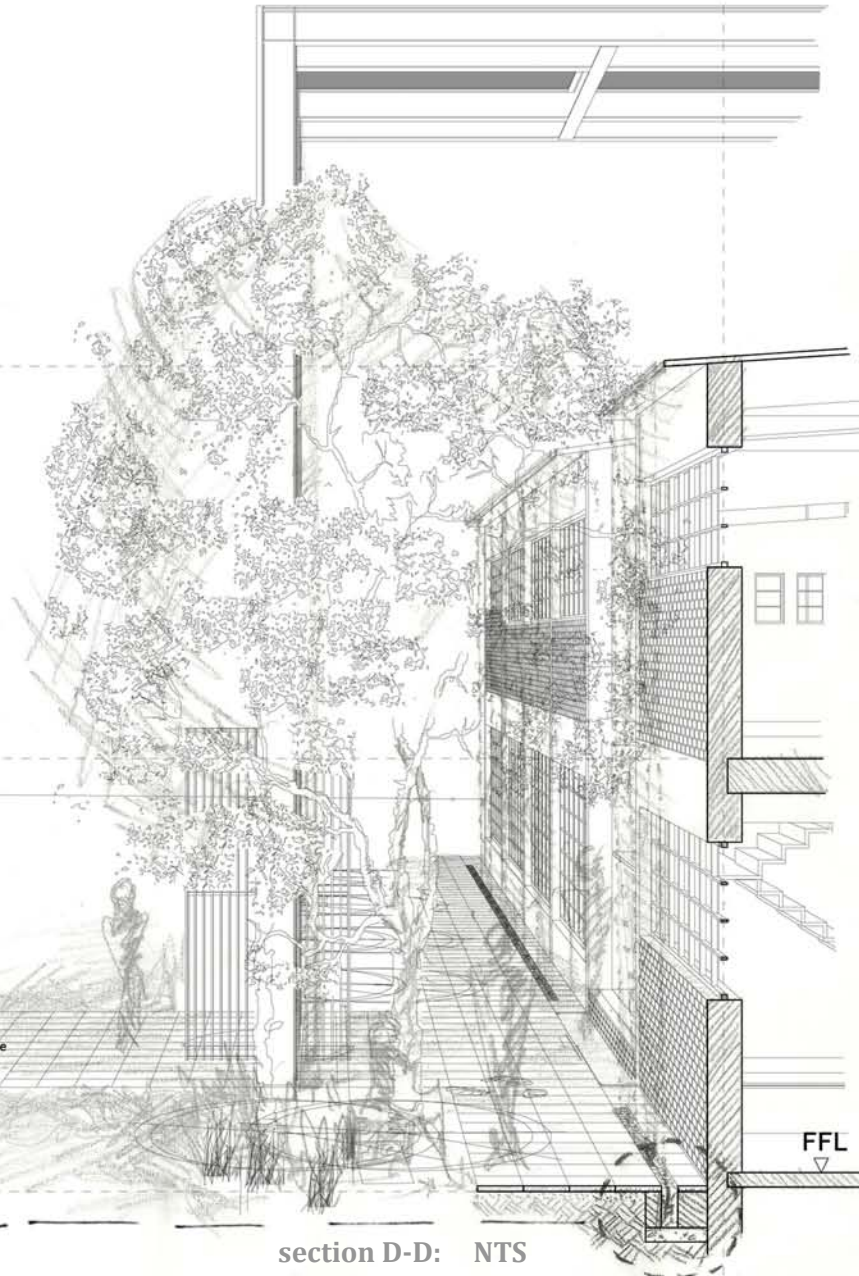
fitting EA 2:

8400mm

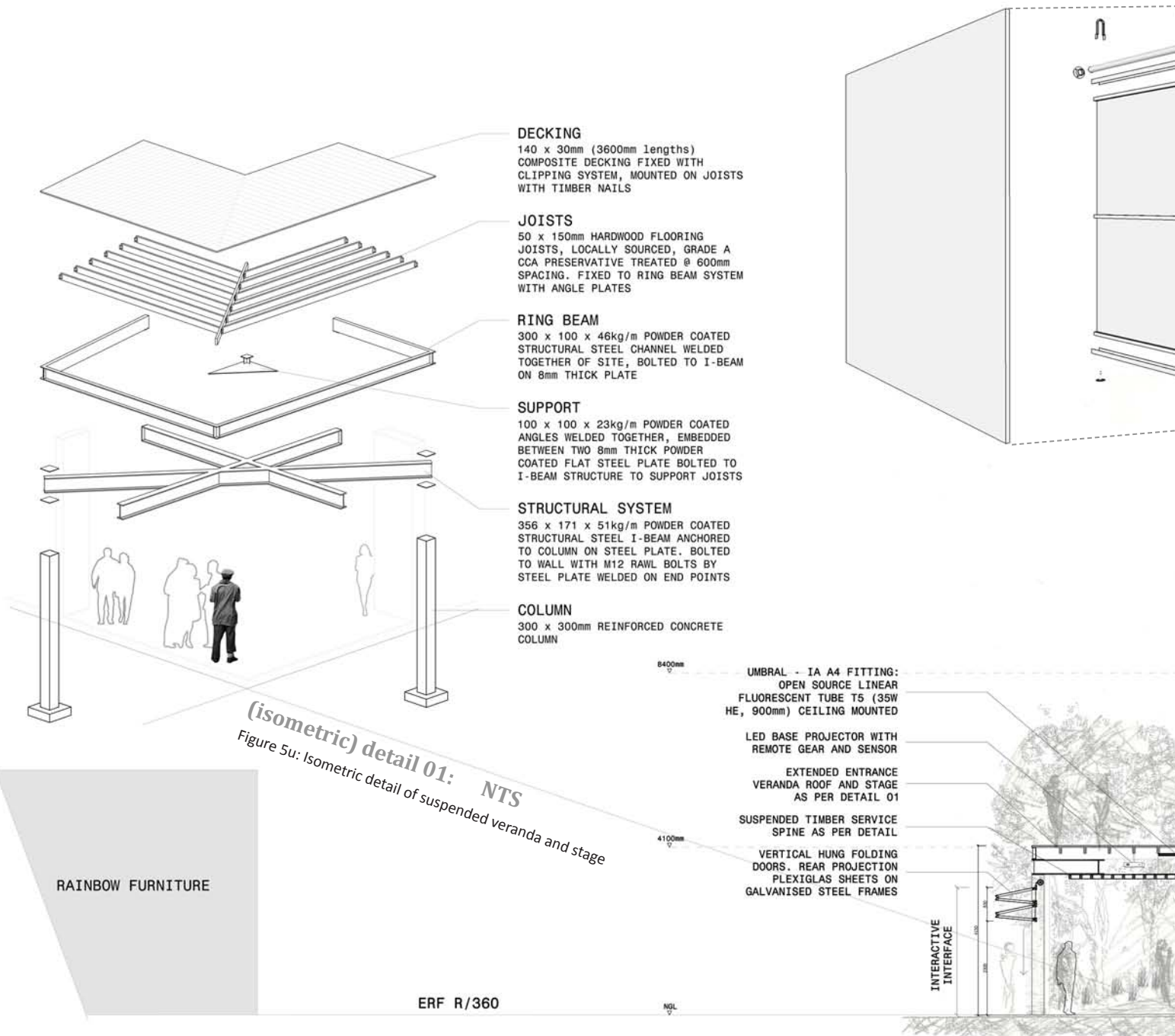
4100mm



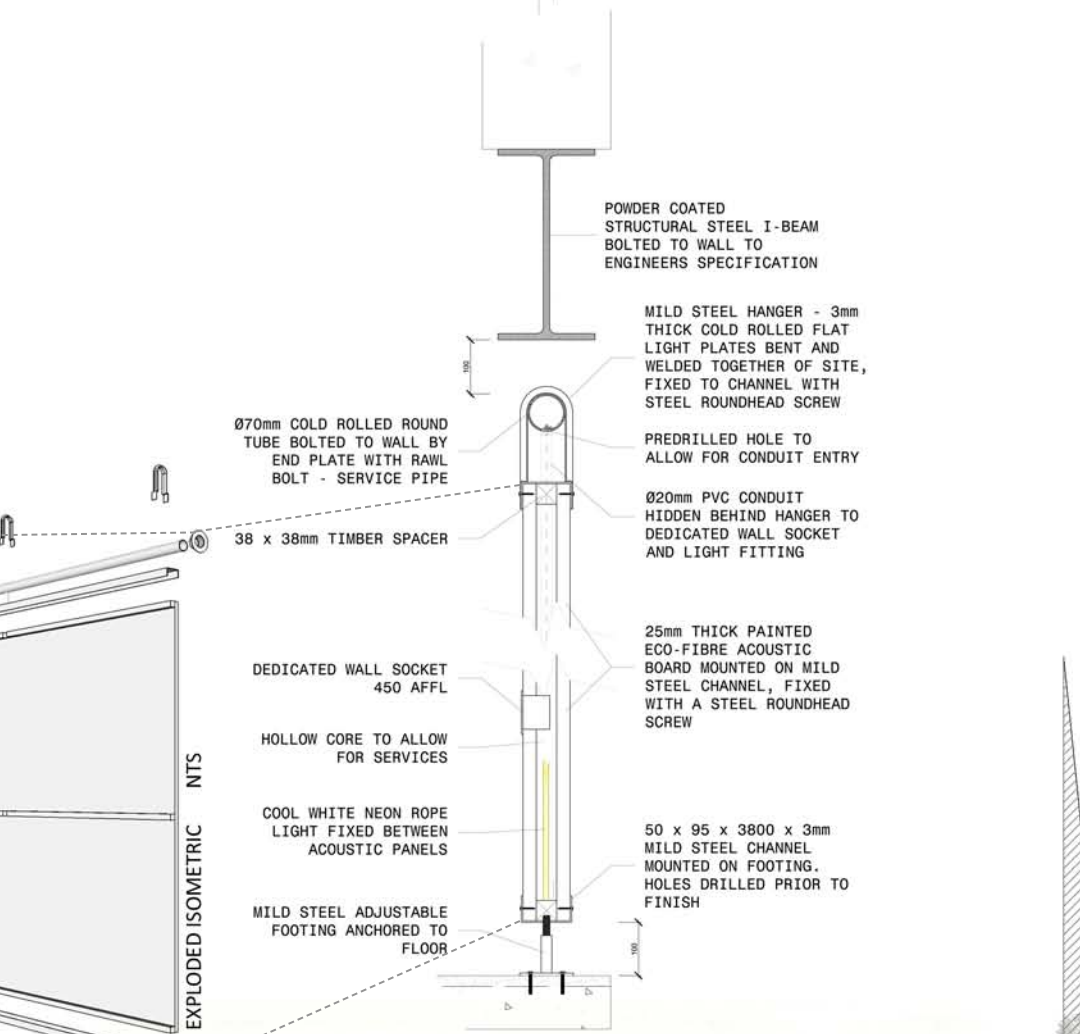
detail - new rainwater runoff: NTS



section D-D: NTS

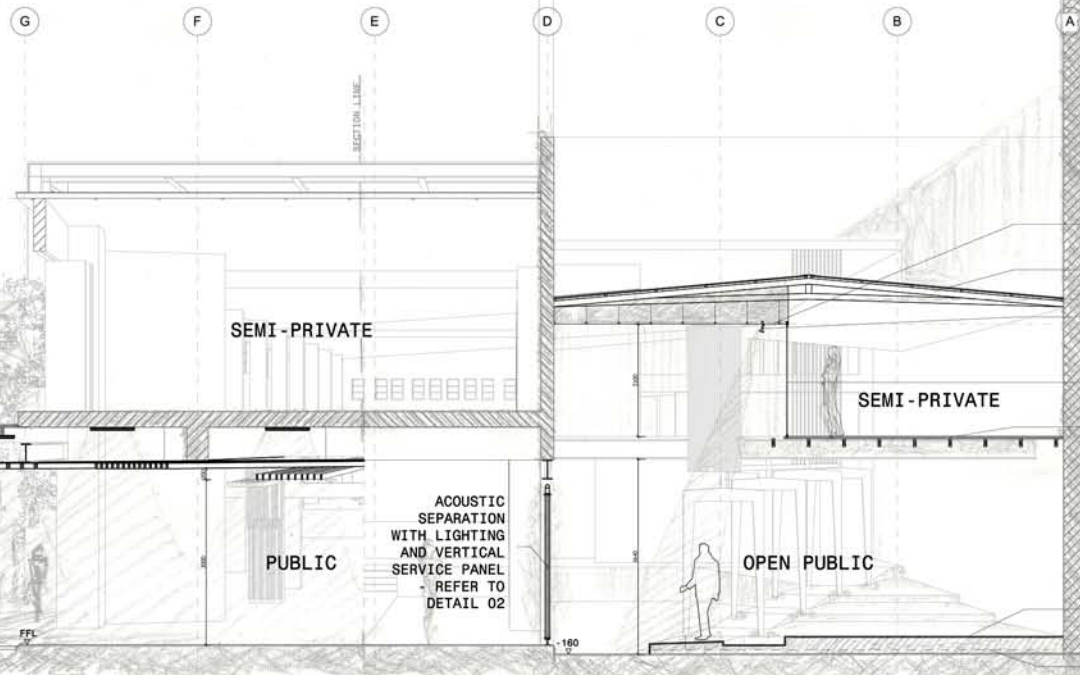
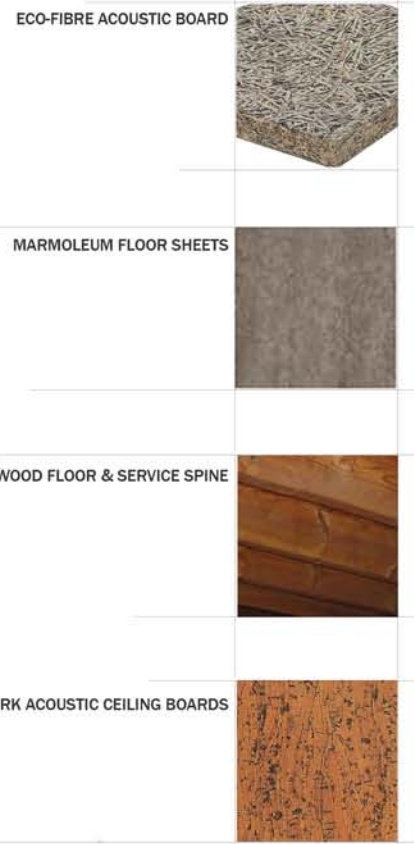


(isometric) detail 01: NTS
Figure 5u: Isometric detail of suspended veranda and stage



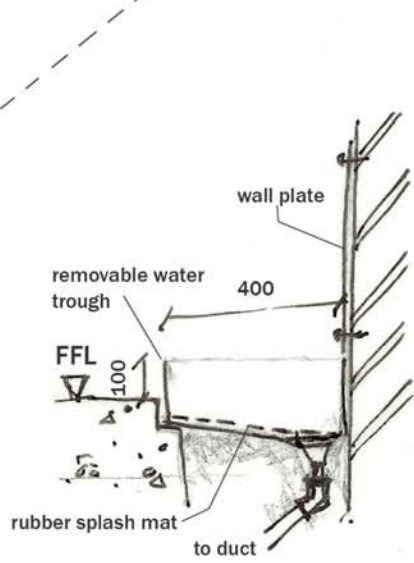
detail 02: NTS
Figure 5v: Sectional & Isometric detail of acoustic separation

MATERIALS



section A-A: NTS

Figure 5w: Section A-A with permanent and semi-permanent changes, including materials



private

trans

MATERIALS

transition:

WALL TILES:
500 x 500 light grey glass mosaique tiles



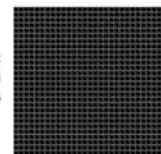
STAINLESS STEEL

- brushed Stainless Steel recess cover plate
- brushed Stainless Steel removable dustbin
- soap dispenser with brushed Stainless Steel wall plate
- removable brushed Stainless Steel water trough with 100mm splashback



SPLASH MAT:

black interlocking rubber mats with holes

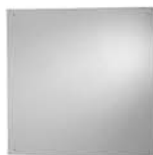


private:

IA 1 LIGHT FITTING:
suspended open source (8W Philips Ambiance Standard shape compact fluorescent lamp, E27 base).



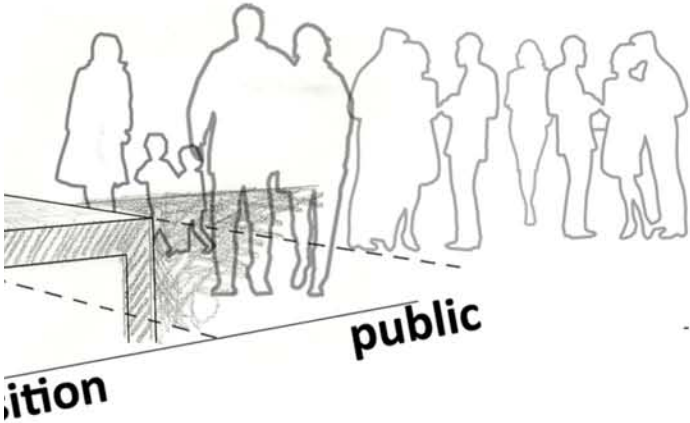
STAINLESS STEEL:
0.5mm polished Stainless Steel
- 3 x 450mm width flat panels on wall, floor to ceiling
- 1 x custom handwash crib



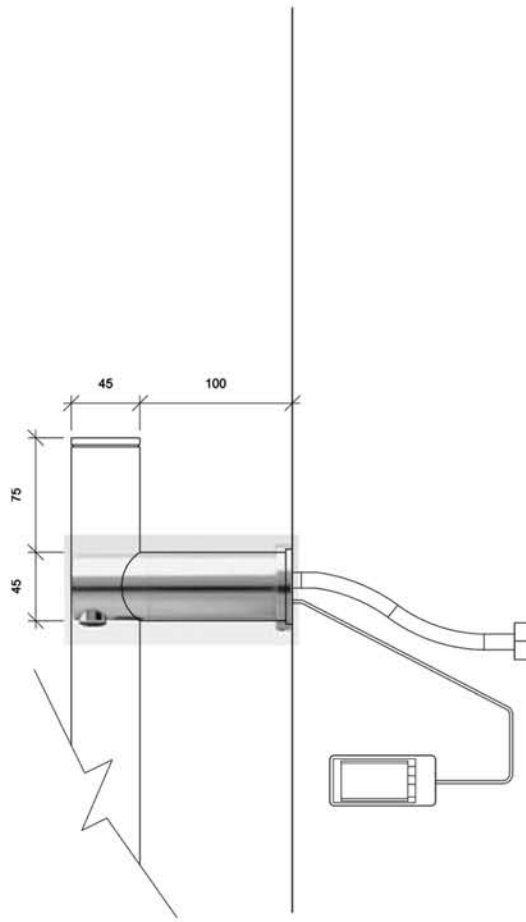
VALCHROMAT WALL STRIP:
12mm grey large strata
Valchromat sheets with varnish - floor to ceiling



Figure 5x: Detailed exploration of new ablutions – permanent changes

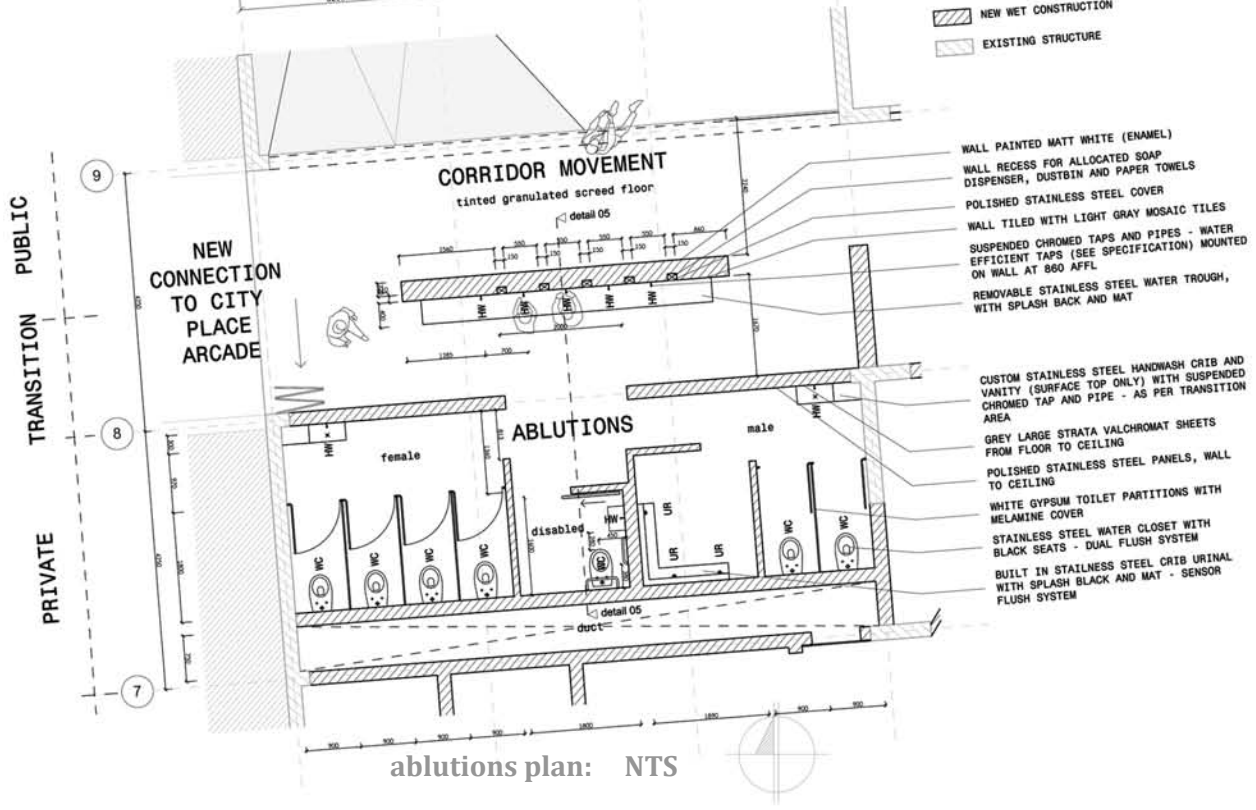


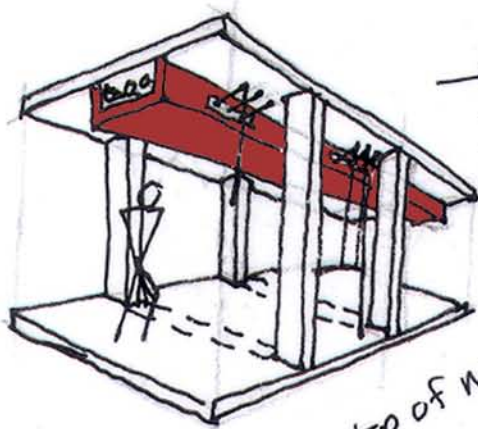
- TAPS:**
 CHROME PLATED WALL SPOUT
 - single temperature, touch free electronic control spout
 - flow time 4 seconds
 - operating pressure 0.3bar
- METERING STOPTAP:**
 - concealed electronic metering stoptap (in wall recess)
 - default flow time setting 4 seconds
 - sensor operation



LEGEND

- WC STAINLESS STEEL WATER CLOSET WITH BLACK SEATS
- HW HAND WASH AREA - STAINLESS STEEL SURFACE WITH WALL MOUNTED CHROME PLATED PIPE TAPS
- UR BUILT IN STAINLESS STEEL CRIB URINAL
- BIF BUILT IN FURNITURE





→ option based ∴ Δ
service duct

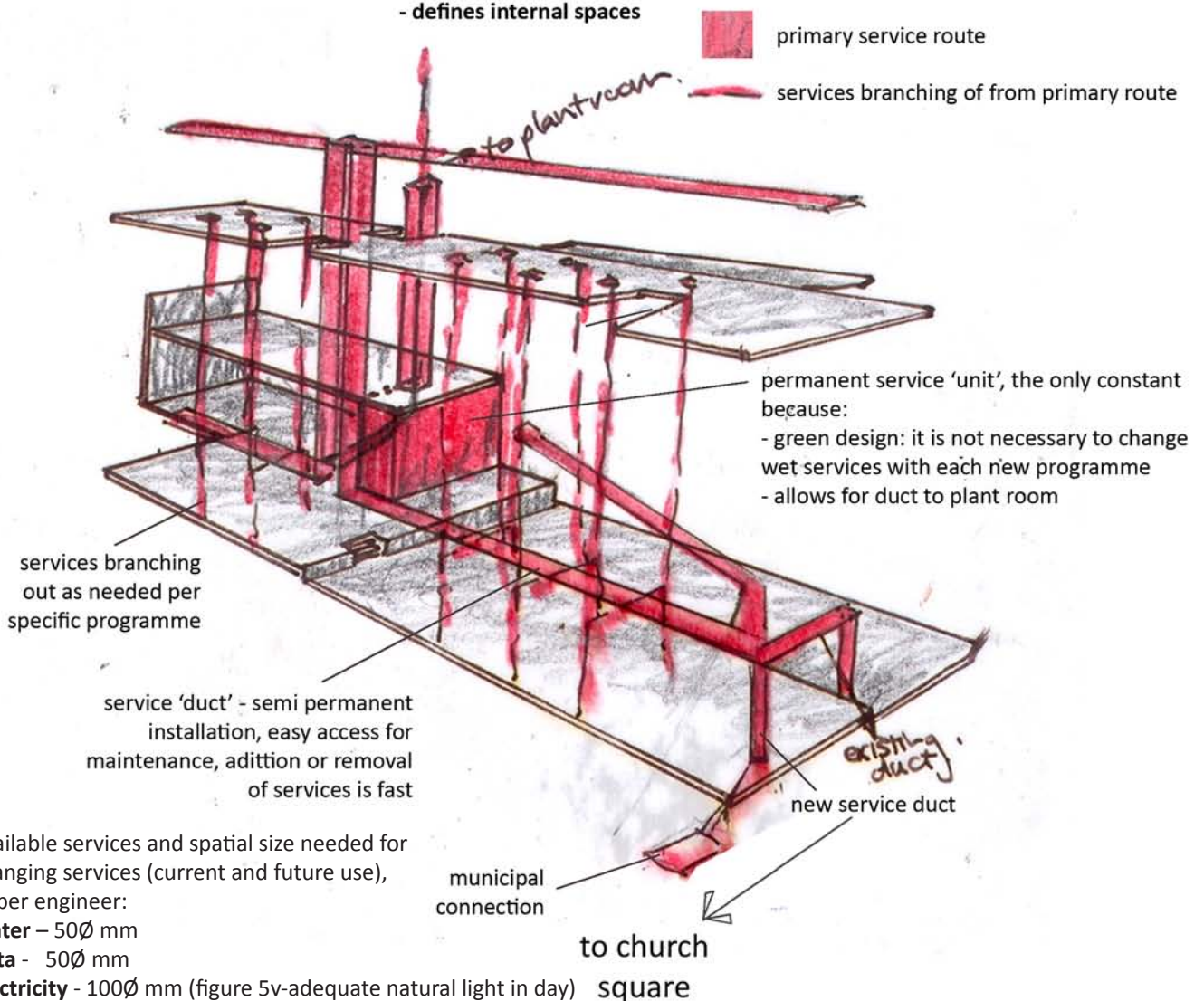
(on top of movement)

SERVICES occur directly along the lines of movement:

“changeability itself is frequently the object of admiration. For it means movement, progress and eternal youthfulness...”
Daisetz Suzuki (Plummer 2009:20)

Figure 5y: Services icon

- occur along the lines of movement
- services are like an infection spreading through the building
- defines internal spaces



Available services and spatial size needed for changing services (current and future use), as per engineer:

Water – 50Ø mm

Data - 50Ø mm

Electricity - 100Ø mm (figure 5v-adequate natural light in day) square

Air-conditioning - 500Ø mm, split units is used if needed, otherwise the natural ventilation is more than adequate (figure 5u)

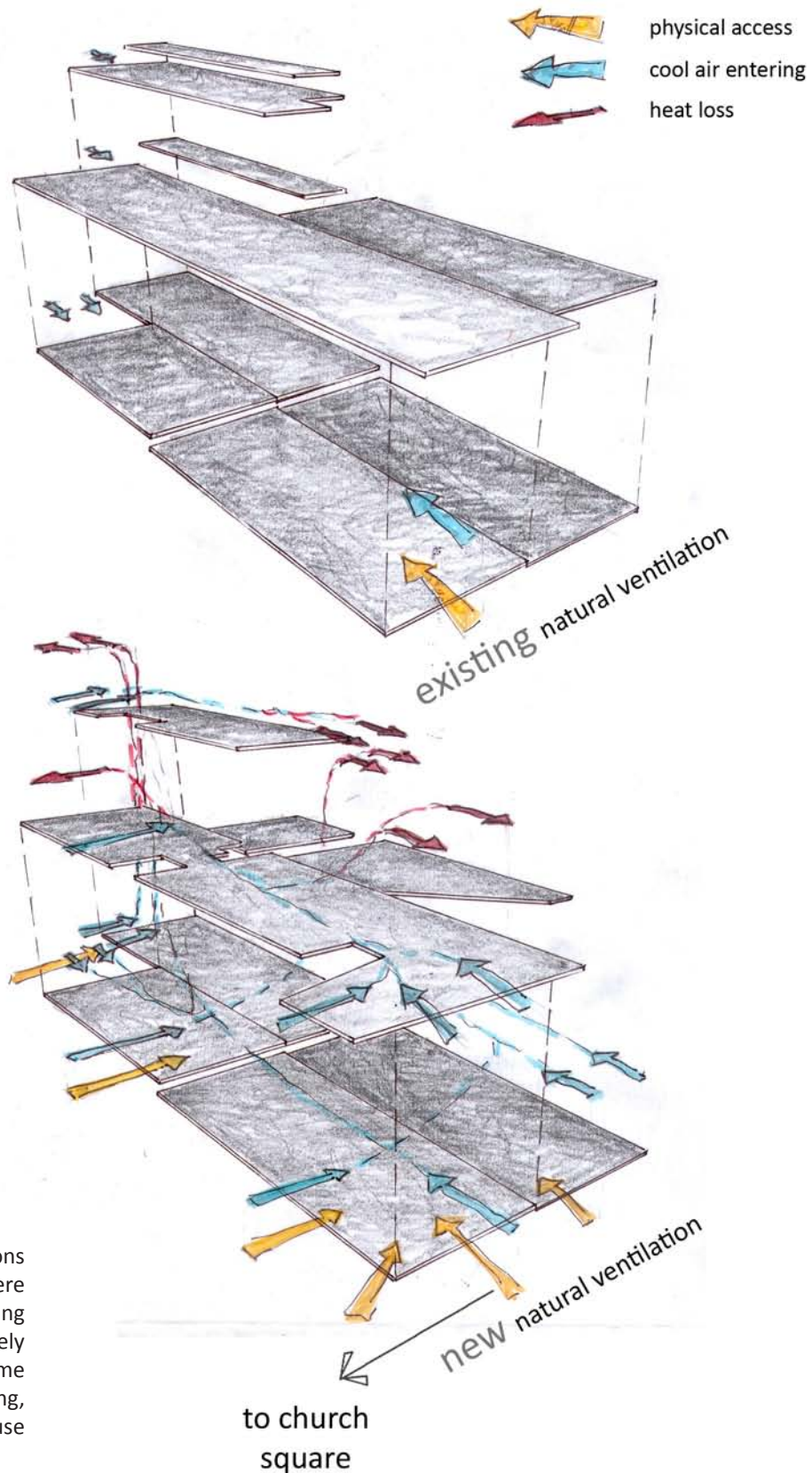
Figure 5z: Sketch of new services along the lines of movement

Figure 5.6b: First floor ceiling plan with lighting layout, part of the semi-permanent changes to the proposed building



1. NATURAL VENTILATION:

Due to the long and narrow windowless nature of the existing building, one gets the sense of feeling blocked in. Studies done in Japan on offices spaces indicated that “psychological tension associated with windowless rooms arises not because the outside is not visible, but rather because there is not enough room to allow the eye to roam freely” (Abe 2003:25) Thus by creating higher floor to ceiling ratios (4,5m) it creates the illusion of a ‘window’, liberating a person of the feeling of being boxed in, and by doing this also allow natural ventilation to take place.



By making these alterations to the existing building, there is no need for air-conditioning in the building. In the unlikely event that a programme may need air-conditioning, provision is made to house the services.

Figure 5x illustrates possible programmes in the building

Figure 5cc: Sketch indicating the existing and new natural ventilation in the internal

2. NATURAL LIGHT:

Light gives a static building the ability to change. The building “register change and movement of natural light” (Plummer 2009:18). Therefore the building is altered to introduce these changes to mimic the changing rhythms of life.

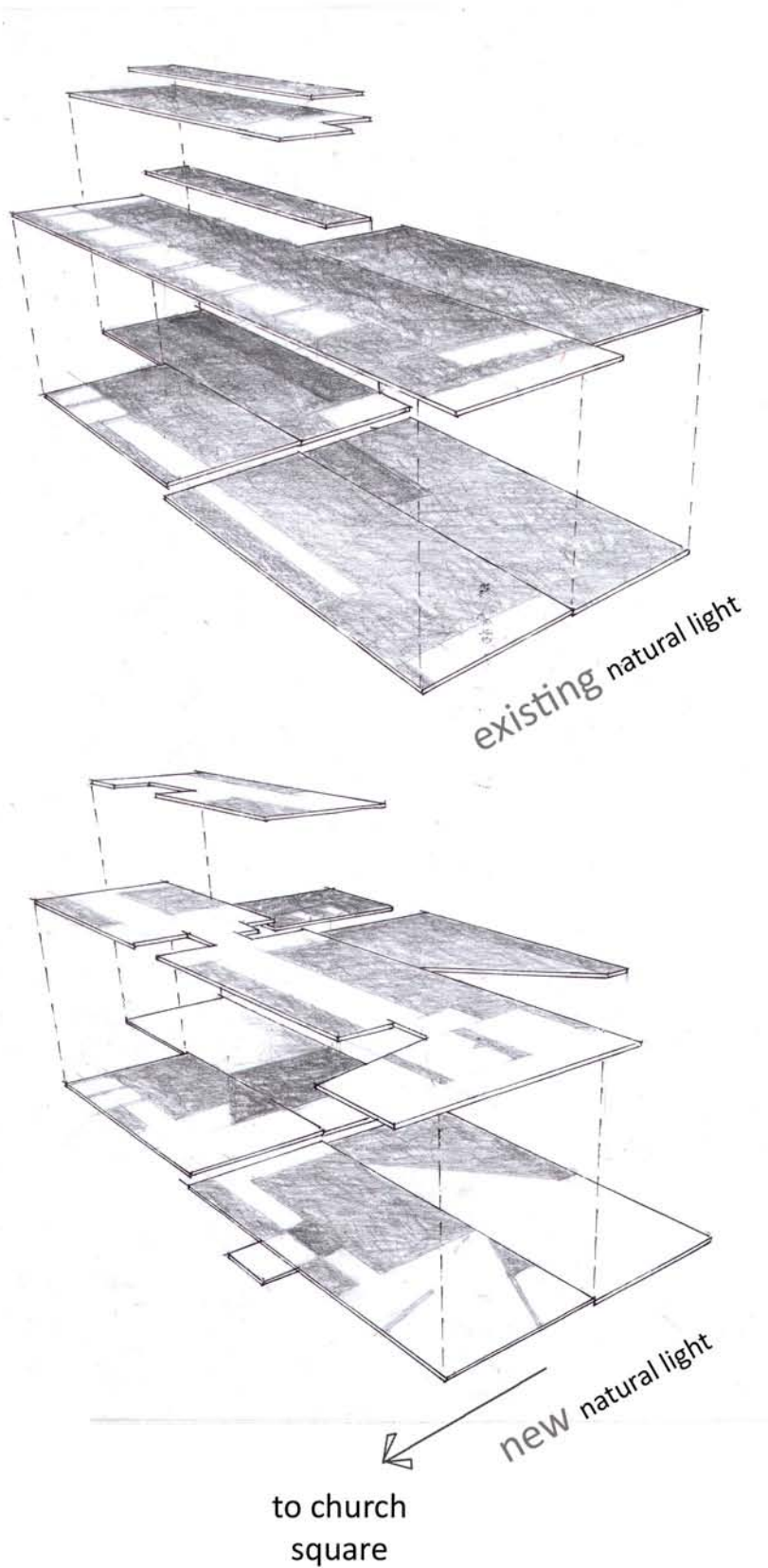
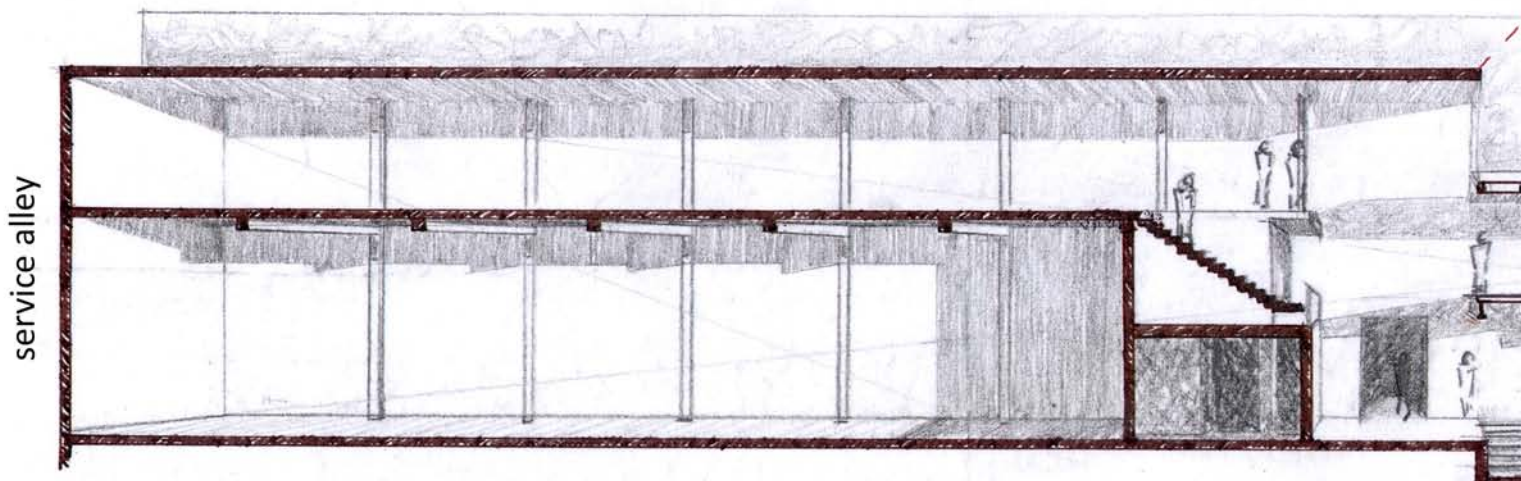
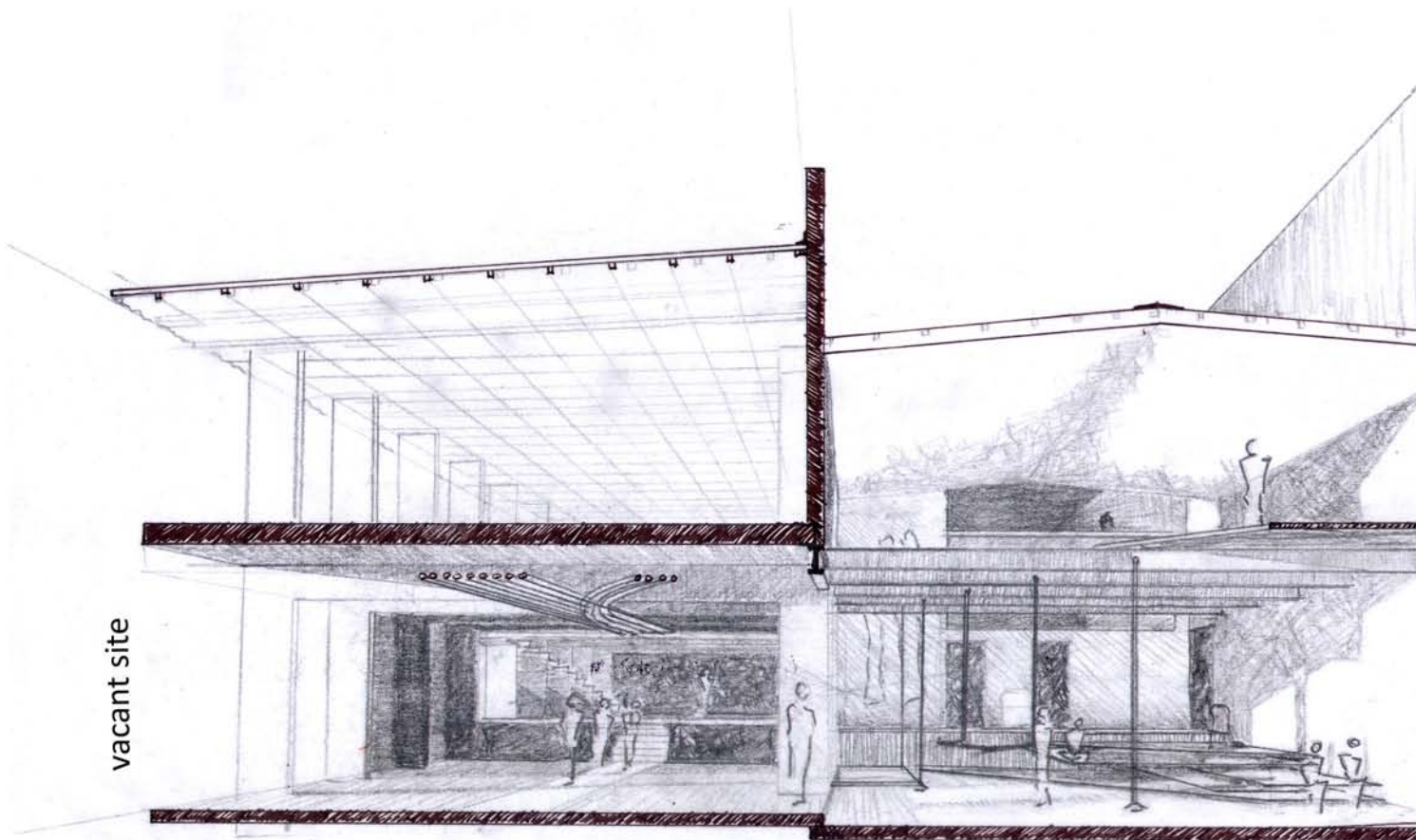


Figure 5dd: Sketch of existing and new natural light penetrating the internal spaces



These sections are merely an indication of how natural light falls into the internal spaces after permanent alterations to the building. It does not reflect the spaces as illustrated by figure 5x, brought about by semi-permanent and temporary alterations.



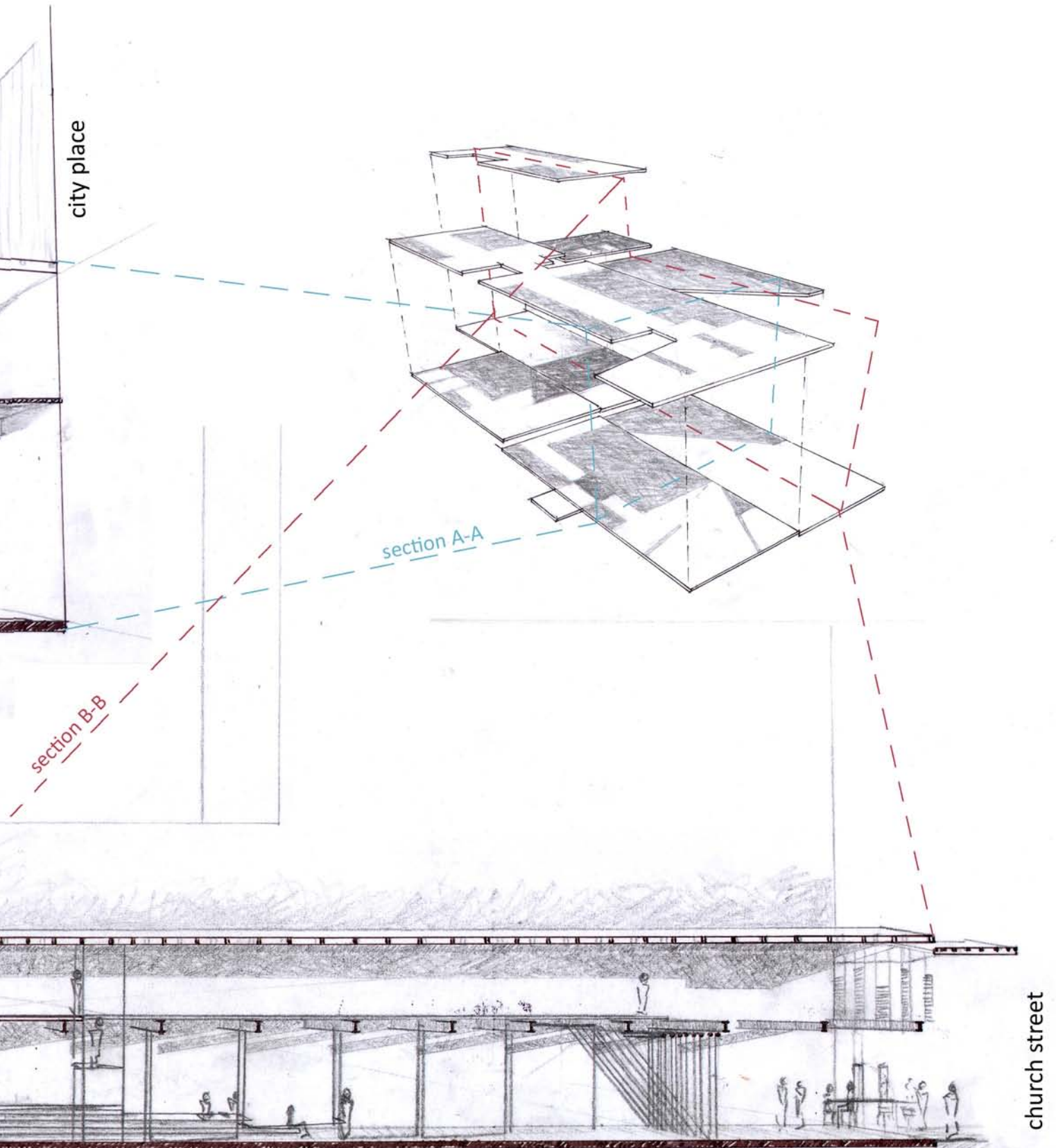
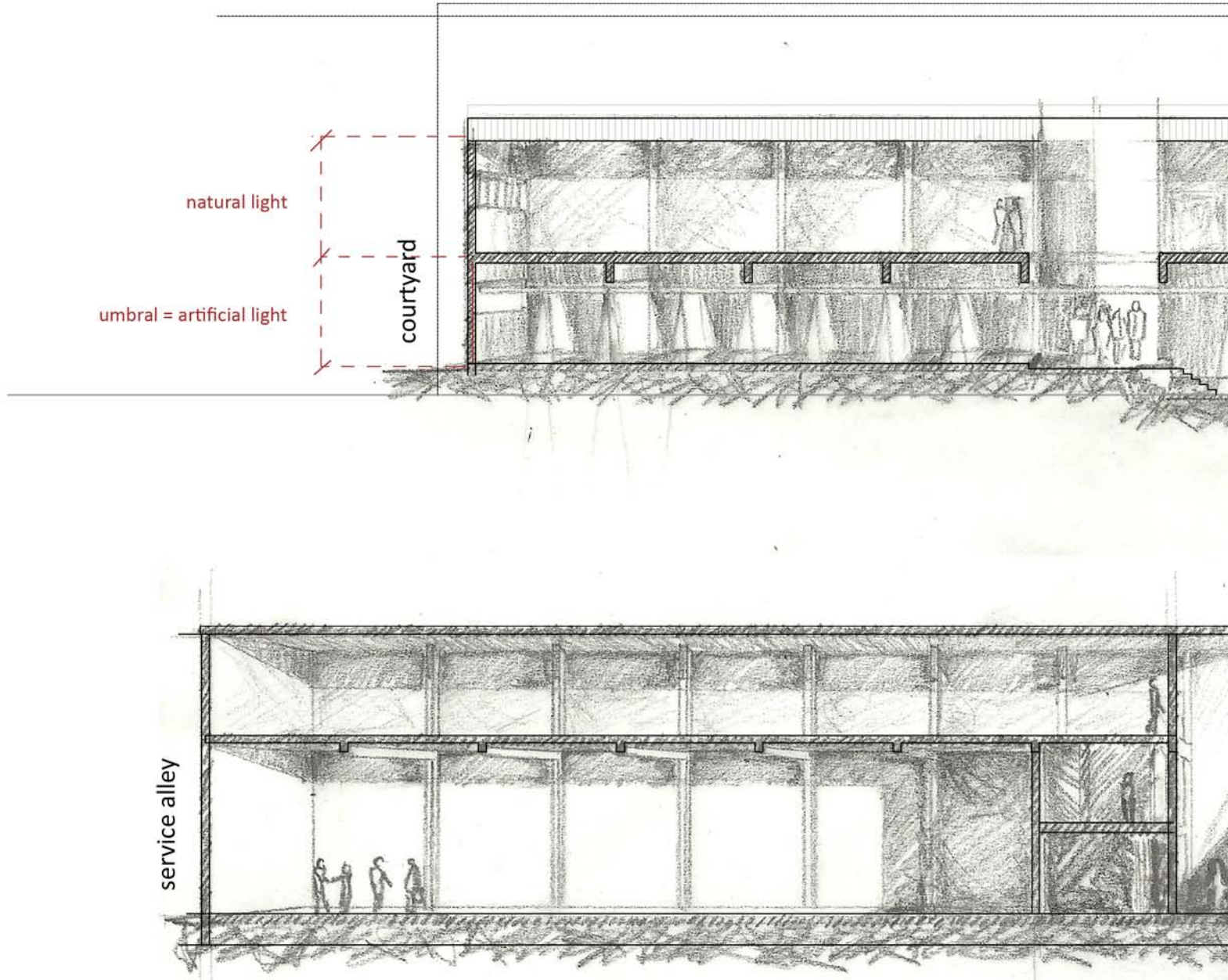
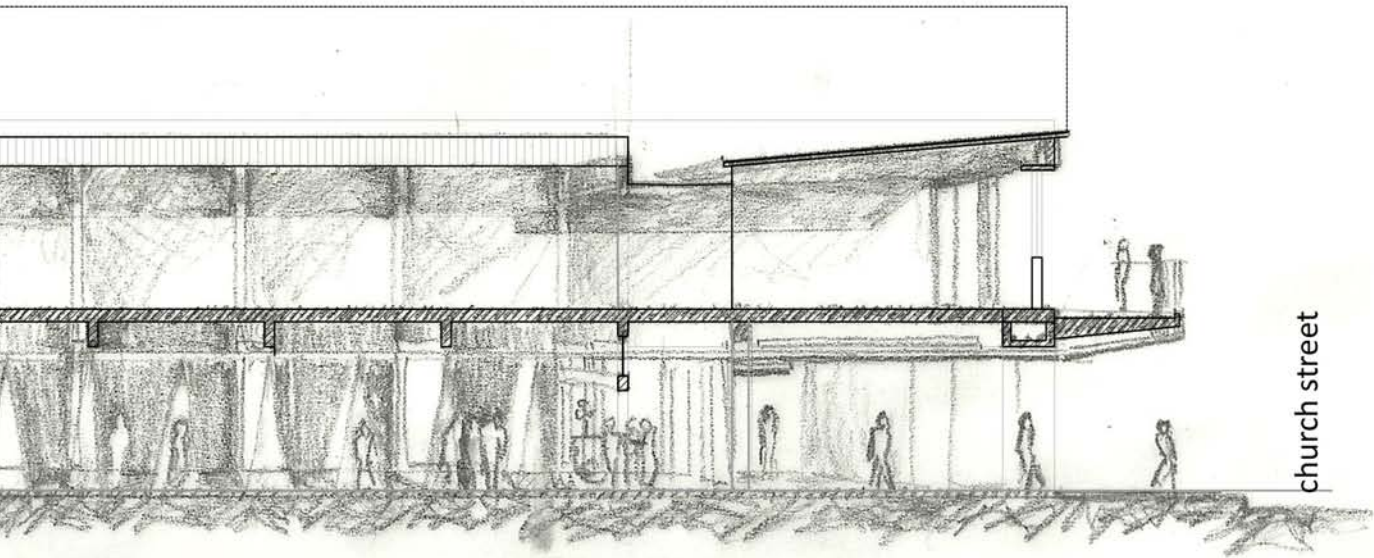


Figure 5ee: Internal natural lighting sketches

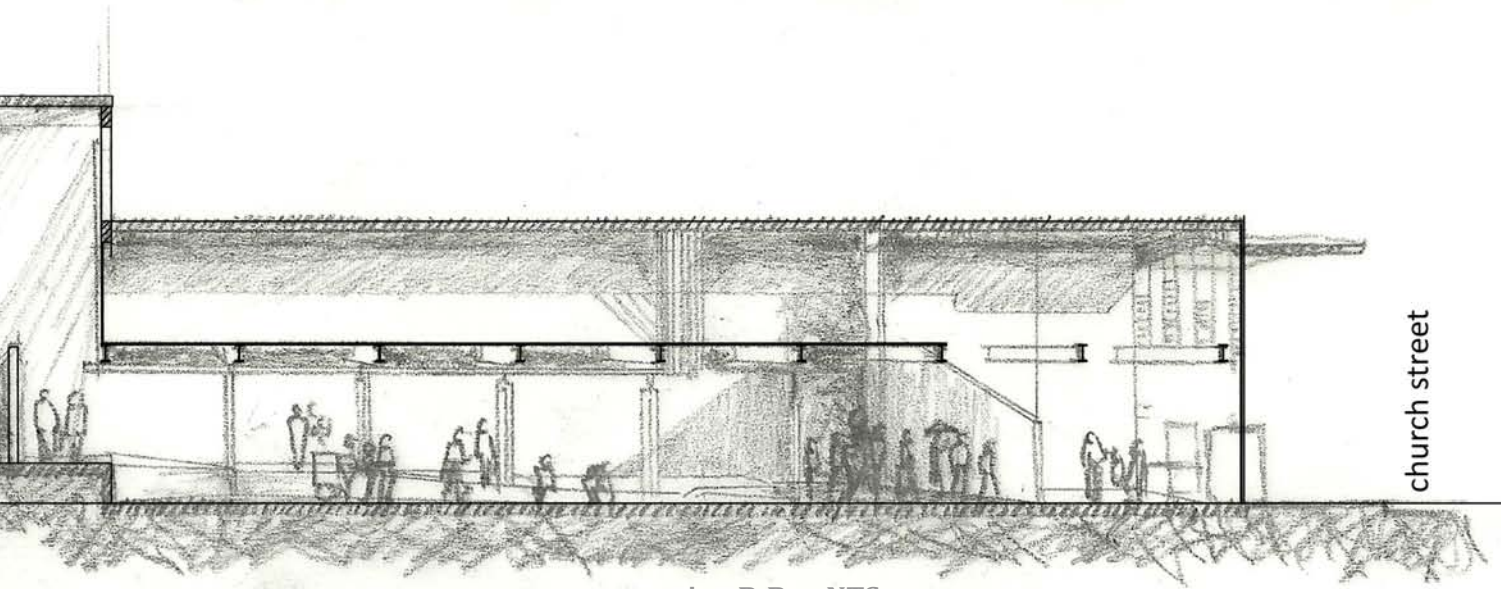
These sections are an accurate indication of the internal spatial qualities after permanent and semi-permanent changes are made to the proposed building. It illustrates how natural light and where specified artificial light falls into the spaces.

Figure 5ff: Sketch of natural and artificial lighting penetrating the internal spaces, after permanent and semi-permanent changes





section C-C: NTS



section B-B: NTS



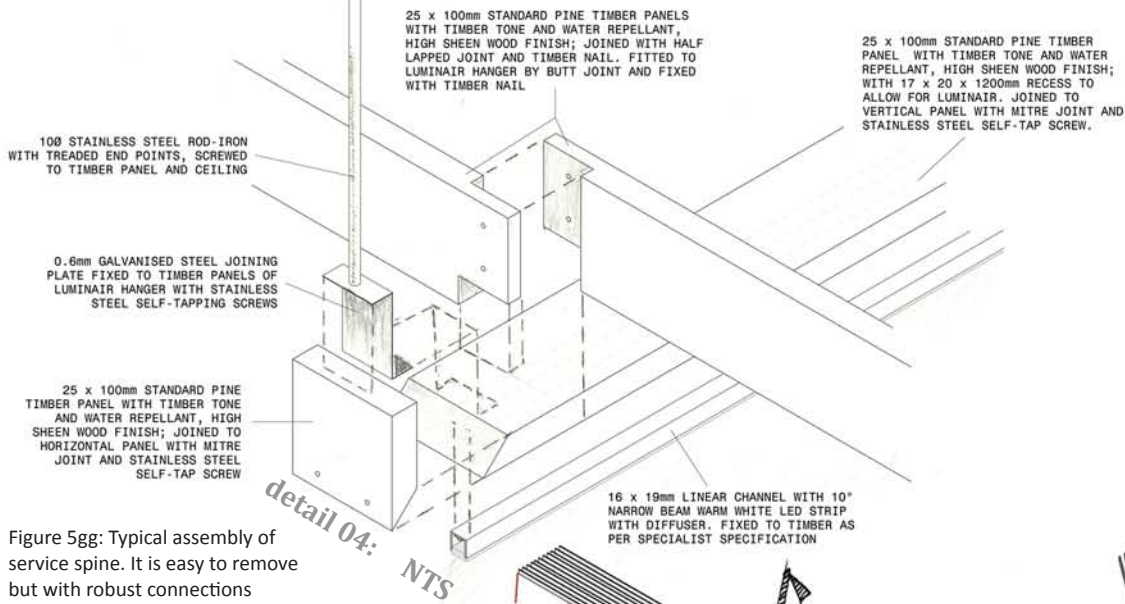


Figure 5gg: Typical assembly of service spine. It is easy to remove but with robust connections

3. SERVICE SPINE:

A semi-permanent layer of material is introduced which is robust yet is able to be removed (as change is social conditions) without damage to the permanent materials. Wood is chosen because of lower financial implications and connections as interlocking systems are easy to install as well as remove, and can be structurally secured to last longer.

It becomes the service tray spreading the necessary services through the building. The design allows for easy access to all services thus maintenance and changes can be done without difficulty.

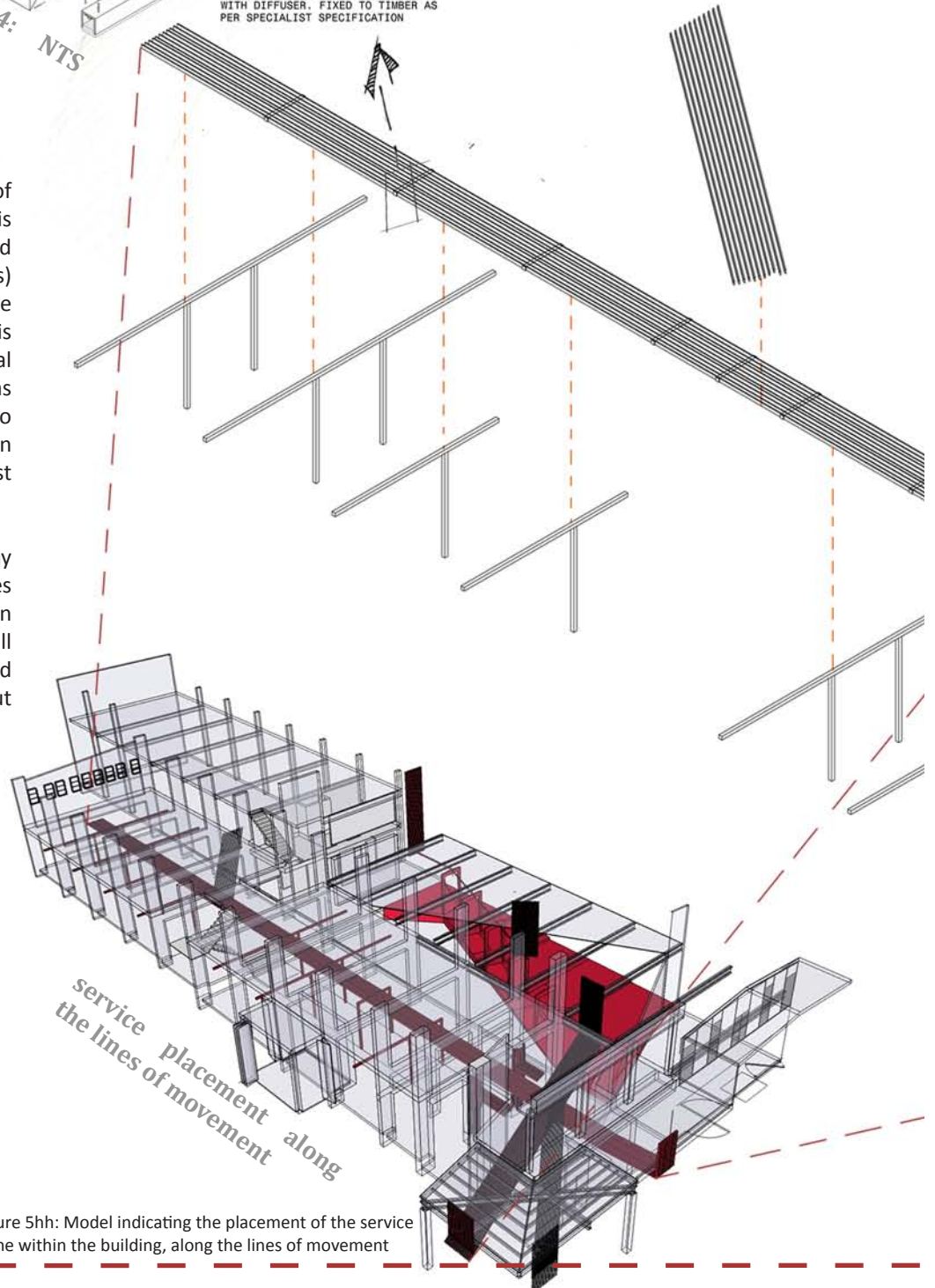


Figure 5hh: Model indicating the placement of the service spine within the building, along the lines of movement

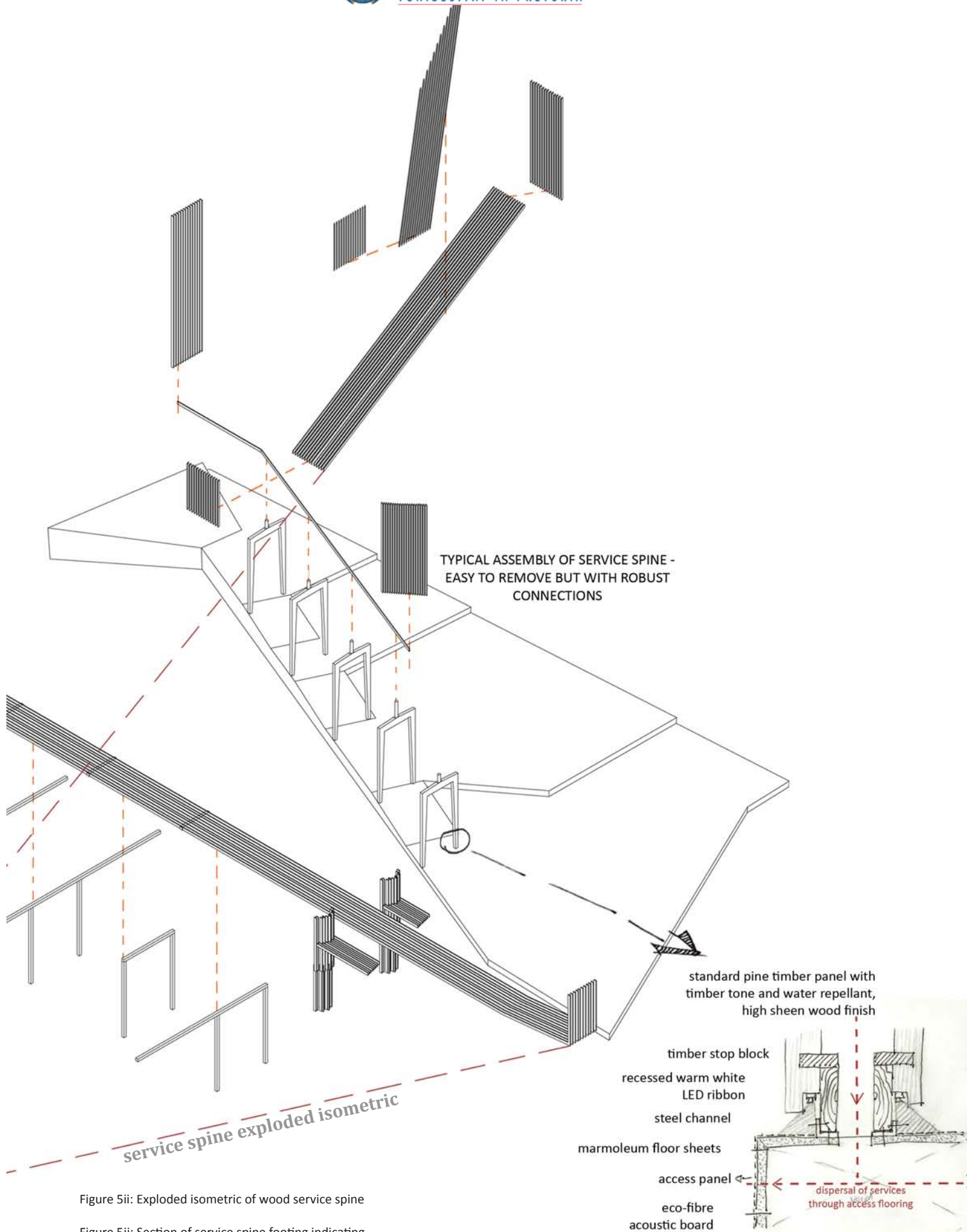


Figure 5ii: Exploded isometric of wood service spine

Figure 5jj: Section of service spine footing indicating how the services run down the mullion into the access flooring

detail 05 - spine footing:

4. POSSIBLE PROGRAMMES:

These possibilities were used as framework towards the proposed design.

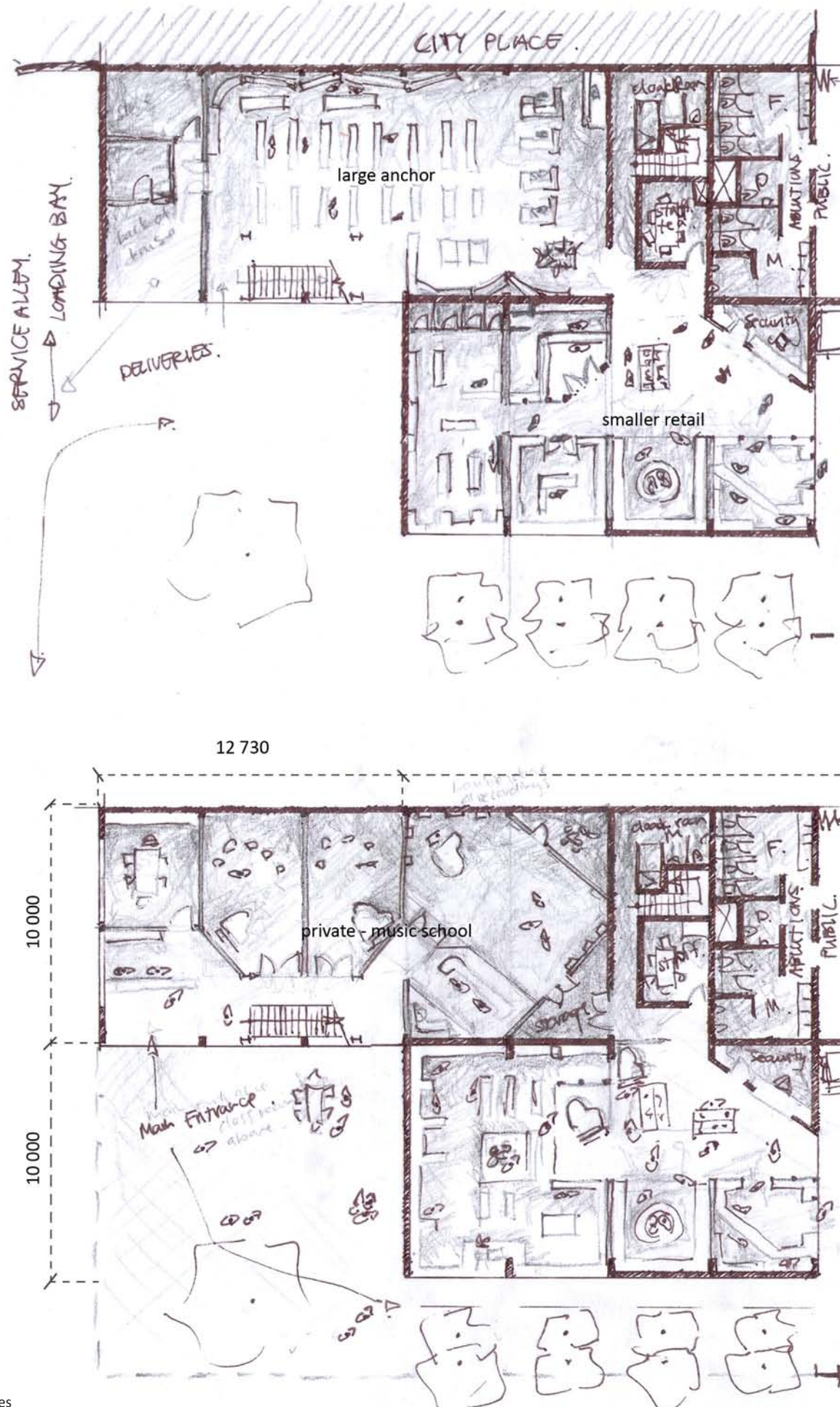


Figure 5kk: Possibilities of programmes



ARCADIAE SYSTEM

CITY PLACE

'arcade' and open public

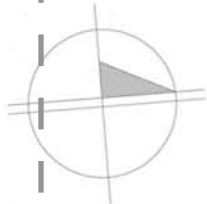
independant retail

light retail

smaller retail

48 640

to church square



PUBLIC PROGRAMME

ground floor plan - retail centre

auditorium and open public

independant retail

light retail

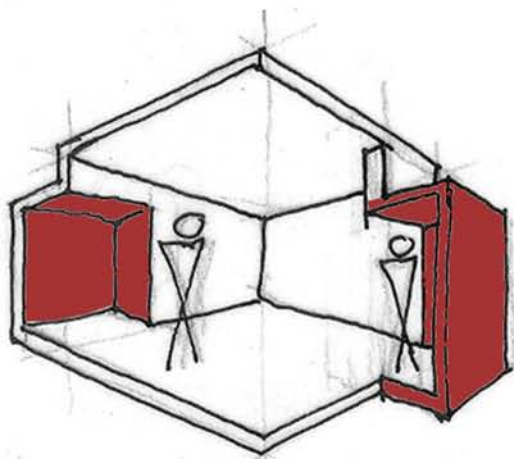
smaller retail

ADDITIONAL AVES = ENTRANCE TO PRIVATE/SEMI-PRIVATE

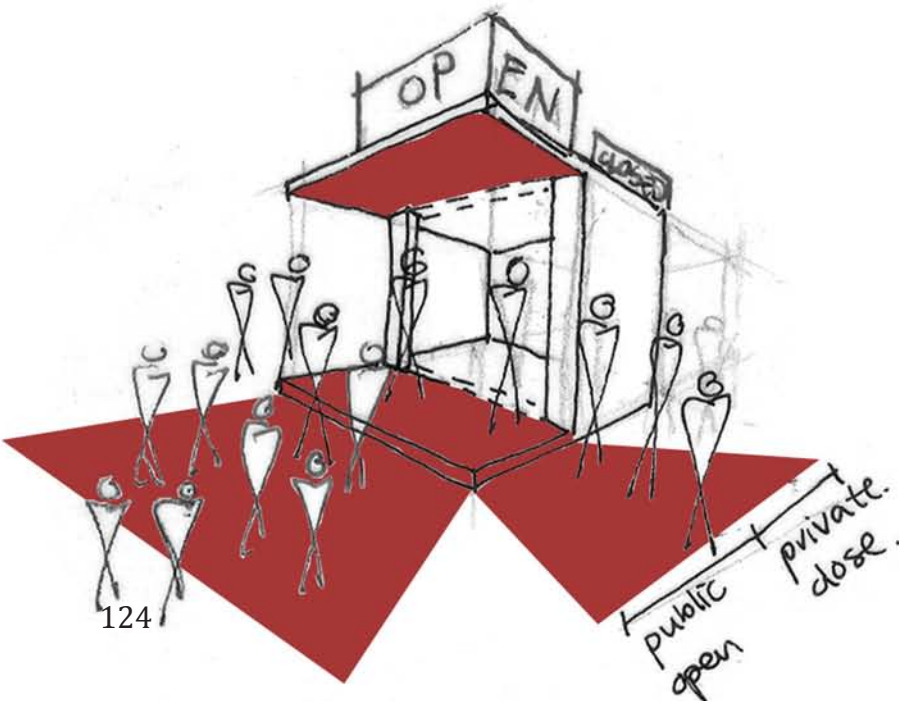
SEMI-PUBLIC PROGRAMME

ground floor plan - music school,
recording studio and retail

Possible to open/close



→ interior spaces.
determine the shape/mat.
of skin of the building.



SKIN AND IDENTITY:

The interior spaces affect the shape of the skin which in return influences the identity. There is a gradual transition from private to public space towards the street. This is indicated not only through a change in vertical scale, but in the physical fabric as well. The building starts to reveal itself to you (construction materials and services) towards the more public areas.

Figure 5II: Skin and identity icon

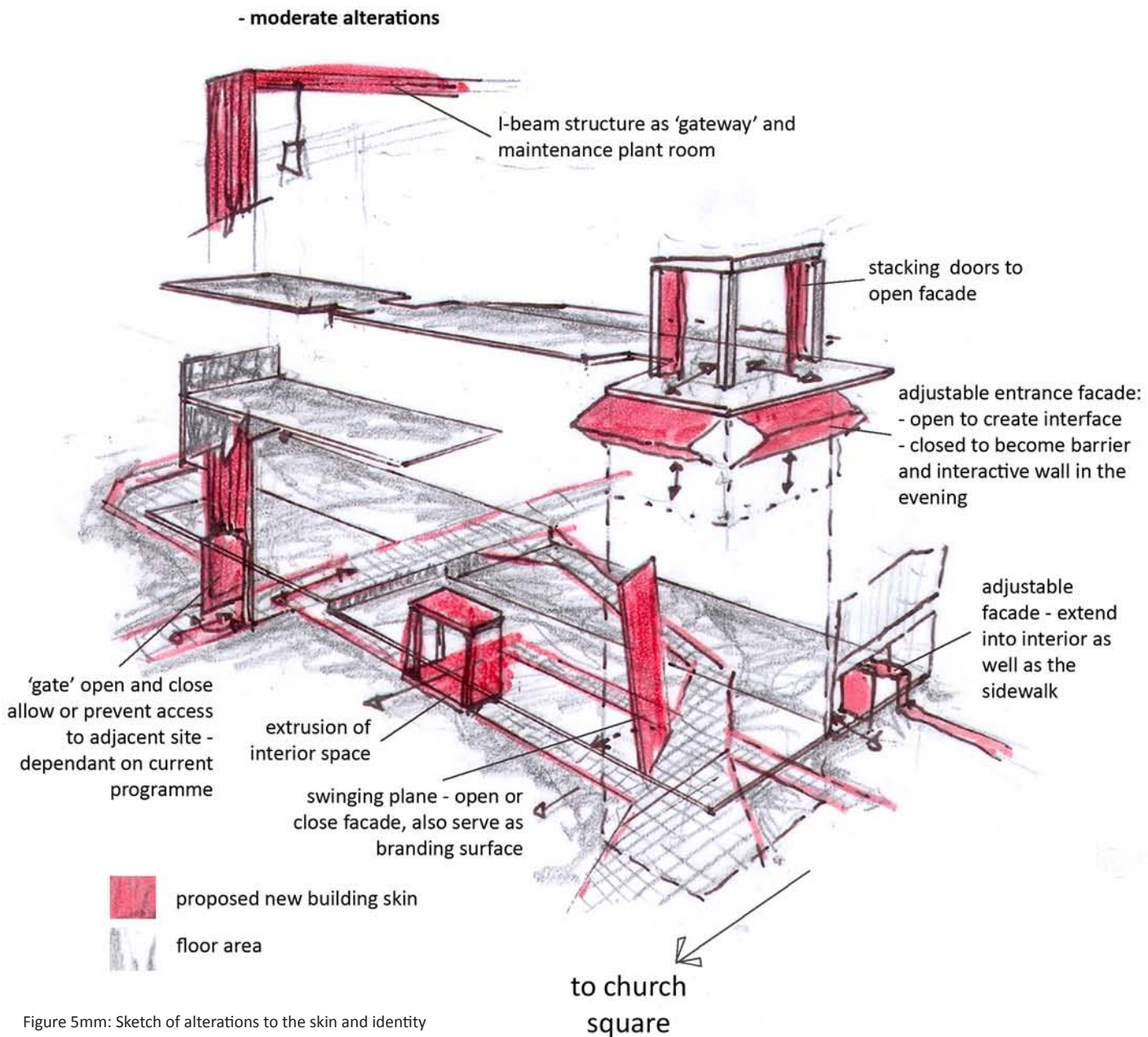
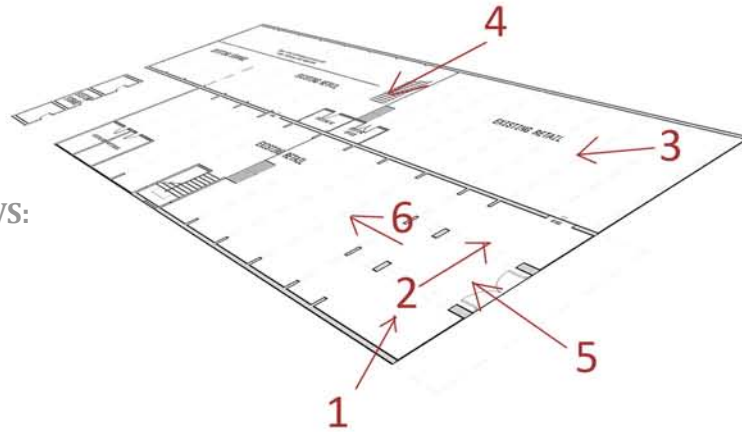


Figure 5mm: Sketch of alterations to the skin and identity

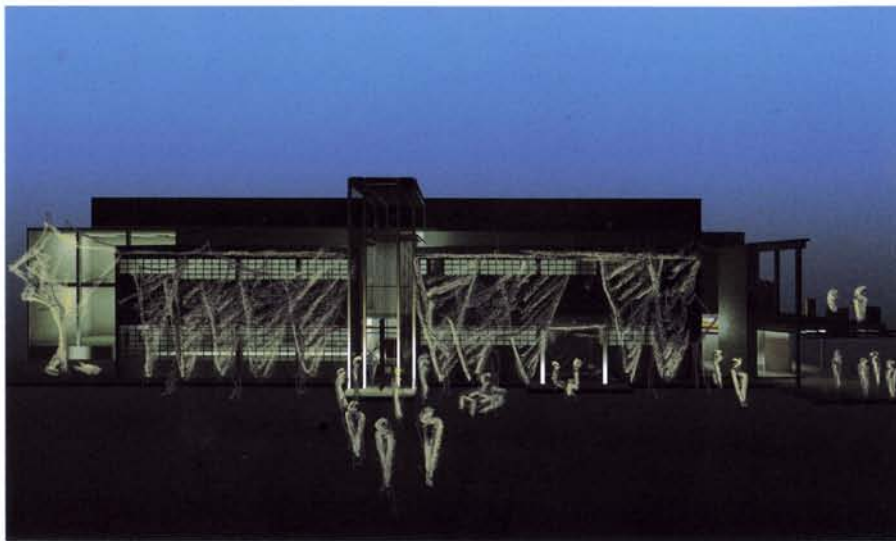
temporary changes:

The temporary phase is subject to tenant requirements. With permanent and semi-permanent changes, any additions to the structure as needed with each new tenant can be removed and reused.

VIEWS:



NORTH FACADE - UMBRAL



EAST FACADE - UMBRAL

GIVEN SPACES (PERMANENT AND SEMI-PERMANENT CHANGES).....



1



2



3



4

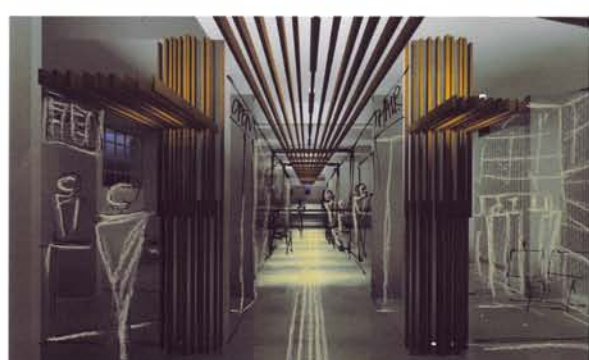
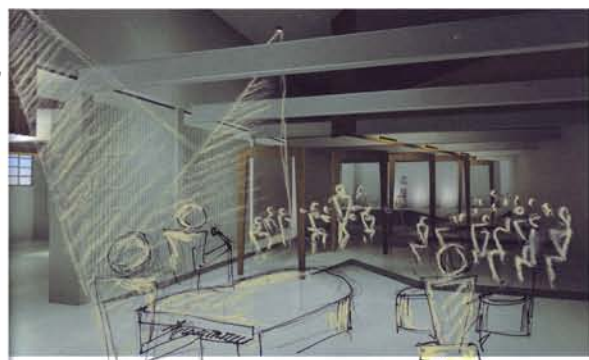
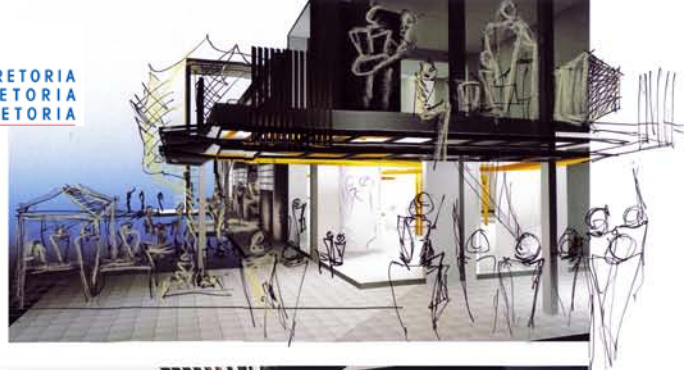


5



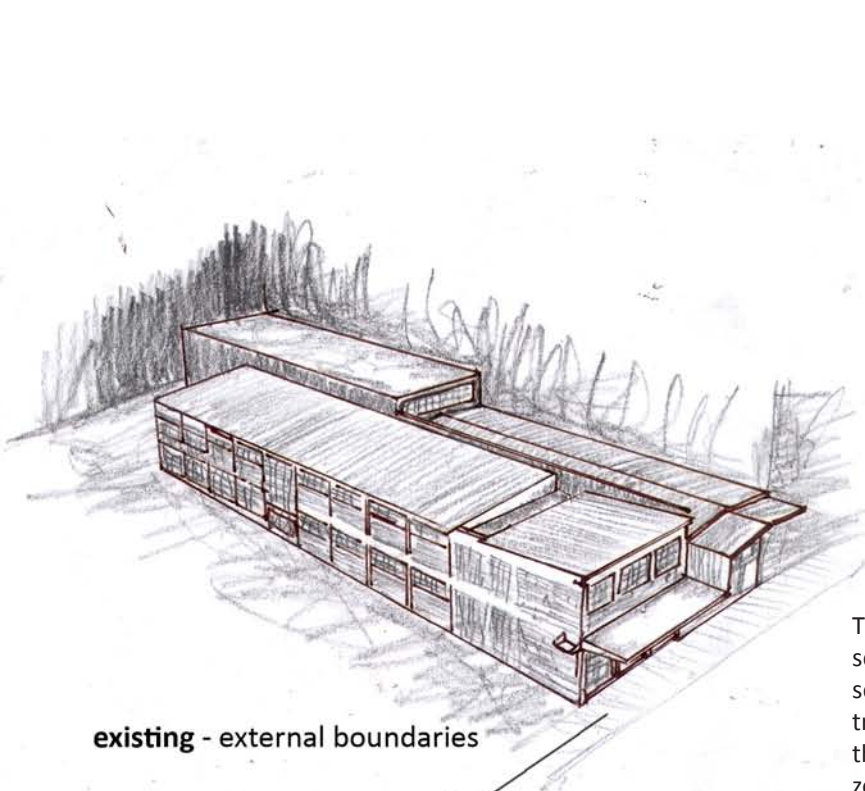
6

.....POSSIBLE SPATIAL USE AS PER TENANT (TEMPORARY CHANGES)



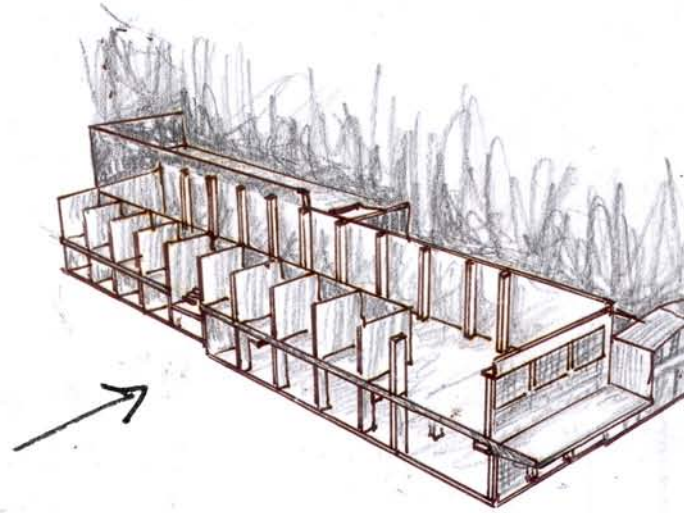


CONCLUSION:



existing - external boundaries

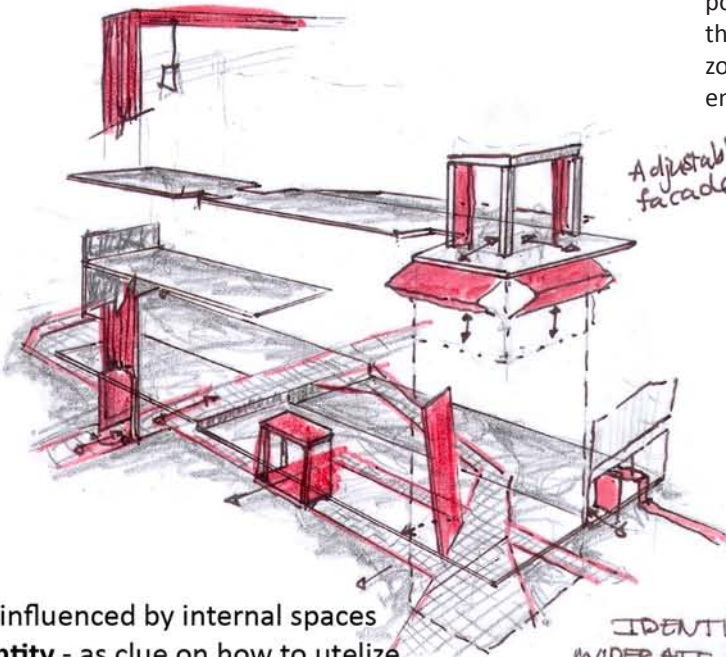
to church square



existing - internal boundaries

The thesis examined the existence of multiple scales within the city and how these various scales relate to interior spaces. There are transition zones between these 'scales' that need to be breached. These transition zones can act as physical boundaries thereby preventing infiltration or alternatively only posses the behavioural qualities of a boundary thereby territorializing space without being a physical or visual 'wall'.

INTERFACE embodies this transition zone - the body of research that looks between, in and around the structures and envelopes that comprise this space. It seeks to acknowledge the importance and transition between two phases (or spaces), and to recognize the potential it holds. INTERFACE seeks to harness this potential by connecting these transition zones with the surrounding qualitative environment of different scales.

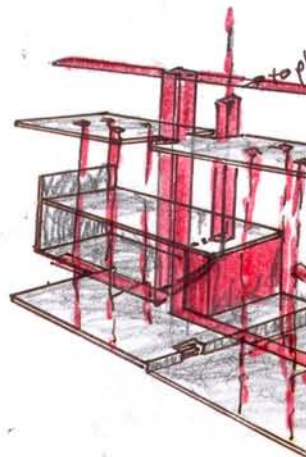


Adjustable facade.

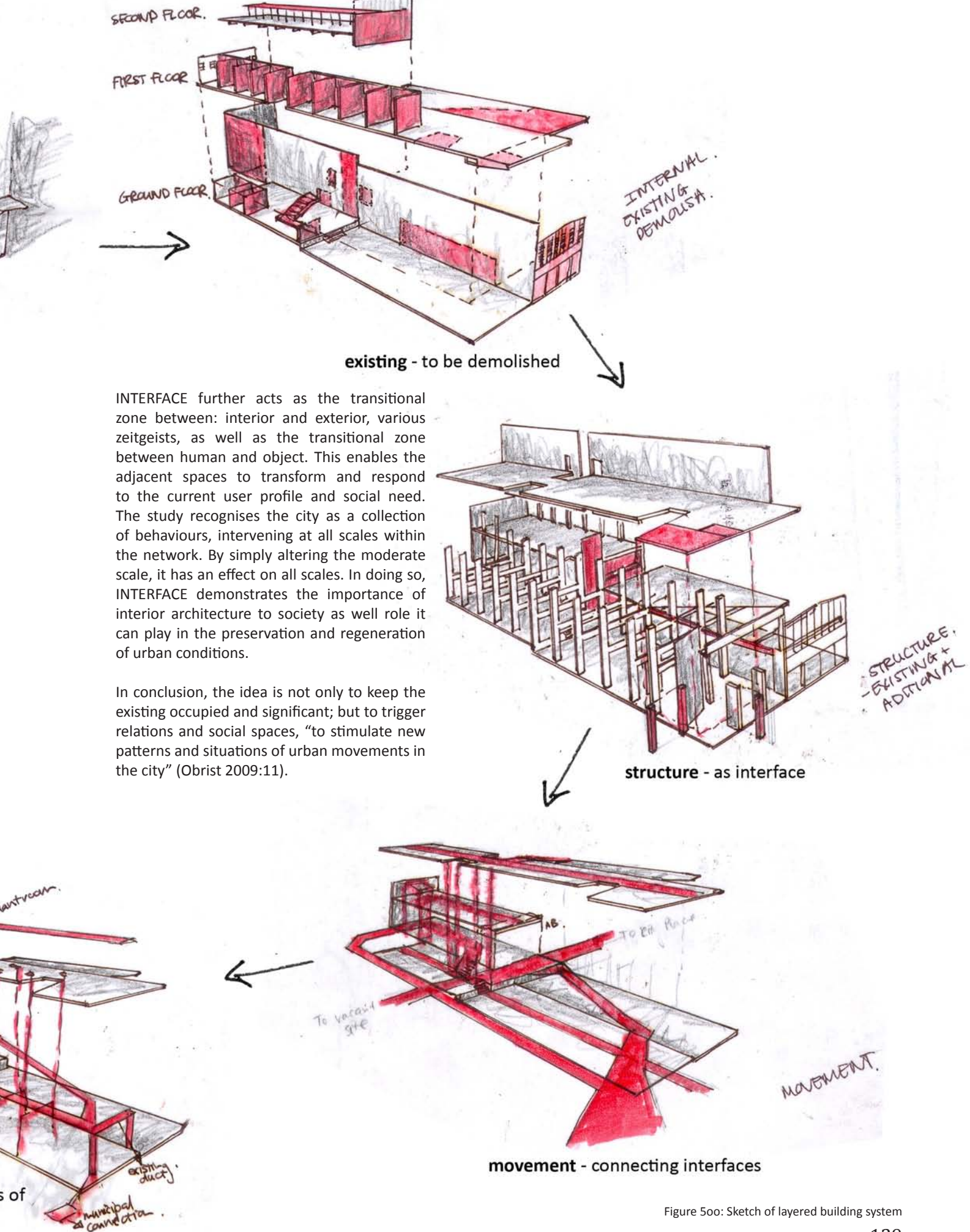
skin - influenced by internal spaces
& identity - as clue on how to utilize the space

IDENTITY.
MODERATE ALTERATION

- permanent
- semi semiza



services - directly along lines of movement. DEFINE SPACES



INTERFACE further acts as the transitional zone between: interior and exterior, various zeitgeists, as well as the transitional zone between human and object. This enables the adjacent spaces to transform and respond to the current user profile and social need. The study recognises the city as a collection of behaviours, intervening at all scales within the network. By simply altering the moderate scale, it has an effect on all scales. In doing so, INTERFACE demonstrates the importance of interior architecture to society as well role it can play in the preservation and regeneration of urban conditions.

In conclusion, the idea is not only to keep the existing occupied and significant; but to trigger relations and social spaces, "to stimulate new patterns and situations of urban movements in the city" (Obrist 2009:11).

Figure 5oo: Sketch of layered building system



...TO ELANA - a toast to firsts!
thank you for your enthusiasm,
encouragement and for being a mentor



APPENDIX & REFERENCES

chapter 6

PROPOSED INTERIOR DESIGN PROFESSIONAL REGISTRATION CATEGORIES

NQF Level	Qualification	Band	Years of Study [Credits]	Years of Practical Experience	Registration Category	Equivalent Architecture Registration Category	Identification of Work [†]		
							Complexity	Low Sensitivity	Medium Sensitivity
4	(Certificate) (optional)	GET FET	0 – 2 (optional)		Interior Decorator*	No Equivalent			No Reservation
6-7	(Diploma and Bachelor Degree) BSc(Int)	HET (graduate)	3 (3 years) [360 cumulative minimum]	3**	Professional Interior Designer [PrID]	Prof. Architectural Technologist [PAT]	Low Complexity Building	"Commercial", "Exhibition", "Institutional", "Places of assembly", "Shopping precincts", "Residential", "Facilities for handling mortal remains" and "Alterations". Professional Interior Designers can do all the work identified for Professional Draughtspersons but some specialist interior spaces will be reserved for interior designers.	In some instances Professional Interior Designers may undertake adaptive re-use of buildings in medium-sensitivity sites (some evidence of significance without requiring EIA's, HIA's or SIA's).
7-8	(Honours and BTech Degree) BInt(Hons)	HET+ (post-graduate)	1 (+3) (4 years) [480 cumulative minimum]	2	Professional Senior Interior Designer [PrSID]	Prof. Senior Architectural Technologist [PSAT]	Medium Complexity Building	"Commercial", "Exhibition", "Institutional", "Places of assembly", "Shopping precincts", "Residential", "Facilities for handling mortal remains" and "Alterations". Professional Senior Interior Designers can do all the work identified for Professional Interior Designers but some specialist interior spaces will be reserved for senior interior designers (e.g. "Private art galleries", "Medical consulting rooms", "A la carte restaurants", "Night clubs", "Funeral parlours" etc.)	In some instances Professional Senior Interior Designers may undertake adaptive re-use of buildings in high-sensitivity sites (requiring EIA's, HIA's or SIA's).
9	(Masters [by coursework] and MTech Degrees) MInt(Prof)	HET+ (post-graduate)	1 (+3+1) (5 years) [600 cumulative minimum]	2	Professional Interior Architect [PrIntArch]	Prof. Architect [PrArch]	High Complexity Building	Commercial", "Exhibition", "Institutional", "Places of assembly", "Shopping precincts", "Residential", "Facilities for handling mortal remains" and "Alterations". Professional Interior Architects can do all the work identified for Professional Senior Interior Designers but some specialist interior spaces will be reserved for interior architects (e.g. "Higher education libraries", "Planetariums/specialised exhibition spaces", "Theatres", "Auditoria", "Mortuaries" etc.) These are interior specific installations of a highly technical nature or with a public health or safety concern, which may currently only be designed by Professional Architects.	

[†] The Identification of Work is preliminary, and for illustrative purposes, will be aligned to the Architectural Work Matrix once it is legislated.

* Interior Decorator is not a professional registration category, it cannot use the title 'Professional', has no minimum qualifications and no work reservation.

** The three (3) years practical experience requirement is based on the IFI's requirement of six (6) combined years of study and work experience for Interior Designers.

+ Post-graduate education is necessary to enable the practitioner to gain the relevant research skill to work in sites with heritage, social or environmental significance.



LIST OF REFERENCES:

- ALEXANDER, C. 1977. *A Pattern Language: Town, Building, Construction*. Oxford University Press, New York.
- ABE, H. 2003. *Mega Structures*. Japan Architecture, 50:25-75.
- BENTLEY, I. 1985. *Responsive environments: A manual for designers*. The Architectural Press, London.
- BRITZ, E, F. 2007. *Emergence in the self-organizing city: a multi-functional intervention*. March dissertation, University of Pretoria, Pretoria.
- CAMPHELL, T. 2006. *The Untold Secret of Curitiba: In-House Technical Capacity for Sustainable Environmental Planning*. IPPUC, Urban Age Institute, California.
- CHING, F.D.K. 1943, 1996. *Architecture: Form, Space, and Order*. Van Nostrand Reinhold, New York.
- COLEMAN, N. 2005. *Utopias and Architecture*. Routledge, New York
- CITY OF TSHWANE, 2004. *Tshwane City Strategy: final report*. Organisation Development Africa, Vlaeberg.
- CITY OF TSHWANE, 2007. *City of Tshwane Spatial Development Strategy:2010 and beyond..*
- CITY OF TSHWANE, 2006. *Re Kgabisa Tshwane: Tshwane Inner City Programme*. The Department of Public works, Pretoria.
- Institute for Advanced Architecture. 2003. *The Metapolis Dictionary of Advanced Architecture: city, technology and society in the information age*, edited by S. Cros..[et al.] ACTAR, Barcelona.
- CURL, J, S. 1992. *Encyclopaedia of Architectural Terms*. Donhead Publishing Ltd, United Kingdom.
- DEMBY, D. 2003. *Mellow Yellow: Taking a cue from P.S.1, Chicago's Museum of Contemporary Art lightens up with chill-out pavilion for summer*. **Internet:**
http://www.google.co.za/imgres?imgurl=http://www.metropolismag.com/webimages/304/DSCN9476_t346.jpg&imgrefurl=http://www.metropolismag.com/story/20030801/mellow-yellow&usg=__U9LkfkuqepFM1Wo4-Jk6BSN1zU=&h=461&w=346&sz=40&hl=en&start=20&tbid=DSncLrQDZQsPjM:&tbnh=128&tbnw=96&prev=/images%3Fq%3Dtemporary%2Barchitecture%26hl%3Den%26sa%3DG%26gbv%3D2%26tbs%3Disch:1&itbs=1. Access: 7 July 2010
- EAKIN, G & KURTICH, J. 1993. *Interior Architecture*. Van Nostrand Reinolds, New York.
- FRANKEL, F. & JOHNSTON, J. 1991. *Modern Landscape Architecture: Redefining the garden*. Abbeville Publishers, New York.
- FREDERICK, M. 2007. *One hundred and one Things I Learned in Architectural School*. The MIT Press, Cambridge.
- FOX, J. 2009. "A Convenient Truth" *Chronicles Curitiba's Urban Innovations*. **Internet:**
http://www.google.co.za/imgres?imgurl=http://www.treehugger.com/curitiba-colonial-street-photo.jpg&imgrefurl=http://www.treehugger.com/files/2009/05/a-convenient-truth-chronicles-curitibas-urban-innovations.php&usg=__w5PwuJXA. Access: 26 July 2010
- GAROFALO. [S.a.]. *Chicago Museum of Contemporary Art: Between the museum and the city*. **Internet:** <http://www.garofaloarchitects.com/> Access: 26 July 2010
- GEHL, J. 2006. *Life between buildings: using public space*, 6th edition. Translated by J. Koch. The Danish Architectural Press, [S.I.].
- GROAT, L. & WANG, D. 2002. *Architectural research methods*. John Wiley & sons INC, New York.
- HARPER, D. [S.a.]. *Online Etymology Dictionary*. **Internet:** <http://dictionary.reference.com/browse/interface>. Access: 24 March 2010
- HAUPTMANN, D. 2006. *The Body in Architecture*. 010 Publishers, Rotterdam.
- HILDEBRANDT, H. 2006. *The gaps between interior design and architecture*. Leading Architecture and Design, July/August:30-34.
- HOLL, S. [S.a.]a *Storefront for art and architecture* **Internet:** <http://www.mimoo.eu/projects/United%20States/New%20York/Storefront%20for%20Art%20and%20Architecture> Access: 18 April 2010
- HOLL, S. [S.a.]b *Storefront for art and architecture* **Internet:** <http://www.stevenholl.com/project-detail.php?id=24> Access: 14 August 2010
- JACOBS, J. 1962. *The death and life of great American cities: the failure of Town Planning*. Random House, New York.
- KÖNIGK, R. 2010. *Interior design as architecture's Other*. MInt, University of Pretoria, Pretoria
- KRIKEN, J.L. 1987. *Design for Arid Regions*. [S.n.], New York
- LAMBERT, S. 1993. *Form Follows Function: Design in the 20th Century*. Victoria and Albert Museum, England.

- LA SURE, C. 2005. *What is Liminality?* **Internet:** <http://www.liminality.org/about/whatisliminality/> Access: 3 May 2010
- LE ROUX, S. 1991. *Plekke en geboue van Pretoria: 'n oorsig van hulle argitektoniese en stedelike belang*. Volume 1. Stadsraad van Pretoria, Pretoria.
- LIPMAN, A. 2006. *Curitiba, Brazil: a Model for development?*. Architecture South Africa, June/July:59-60.
- MOUSTAKA, C, E. 1990. *Heuristic Research: design, methodology and applications*. Sage Publications, California.
- MORPHOMEDIA. 2009. *Angeli Restaurant*. **Internet:** <http://morphopedia.com/projects/angeli-restaurant> Access: 25 May 2010
- NEUFERT, E., Neufert, P. [S.a.]. *Architect's Data*. 3rd edition. Blackwell Science, Oxford.
- NEW YORK ARCHITECTURE IMAGES (NYC). [S.a]. *Paley Park*. **Internet:** <http://www.nyc-architecture.com/MID/MID141.htm> Access: 8 April 2010
- OBRIST, H.U. 2009. *Cedric Price: the conversation Series*. Verlag der Buchhandlung Walter König, Köln, Germany.
- PAROLE APOREE ORGANISATION. 2010. *Liminal: some thoughts and definitions*. **Internet:** http://www.liminalartsnetwork.co.uk/Resources/Liminal_definition.pdf Access: 3 May 2010
- PLUMMER, H. 2009. *The Architecture of Natural Light*. Monacelli Press, New York.
- PORTER, T. 2005. *Archispeak: an illustrated guide to architectural terms*. Span Press, London.
- PROJECT FOR PUBLIC SPACES. [S.a]a. *Streets as Places*. **Internet:** <http://www.pps.org/streets-as-places-initiative/> Access: 9 April 2010
- PROJECT FOR PUBLIC SPACES. [S.a]b. *Reinventing Streets as Places*. **Internet:** http://www.pps.org/graphics/upo-pages/paradigm_great_streets_nl.jpg Access: 22 September 2010
- PROJECT FOR PUBLIC SPACES. [S.a]c. *Great Public Spaces: Paley Park*. **Internet:** http://www.pps.org/great_public_spaces/one?public_place_id=69 Access: 9 April 2010
- RASMUS, H. 2000. *Johannesburg: a different Urban Renewal – A Contribution to TAGESZEITUNG*. (Berlin: URBAN21 Uterbatuibaak Cibferebce). **Internet:** http://www.sharpcity.co.za/mediaroom/urban_renewal_johannesburg.pdf Access: 4 March 2010.
- RIDING, A. 2004. *Barcelona Tries Cultural Forum to Encourage Urban Renewal*. **Internet:** <http://www.nytimes.com/2004/07/26/arts/barcelona-tries-cultural-forum-to-encourage-urban-renewal.html>. Access: 6 April 2010.
- SASSEN, S. 2006. *Cities at the Intersection of New Histories*. Urban Age (November, 2006). **Internet:** http://www.urban-age.net/0_downloads/Berlin_Saskia_Sassen_2006-Cities_at_the_Intersection.pdf. Access: 4 March 2010
- SCHOONRAAD, M,D. 2000. *Some reasons why we build unsustainable cities in South Africa*. **Internet:** <http://www.sustainablesettlement.co.za/event/SSBE/Proceedings/Schoonraad.pdf> Access: 22 July 2010
- SCOTT, F. 2008. *On Altering Architecture*. Routledge, New York
- SCHWARTZ, M. 2000. *Martha Schwartz Partners: Exchange Square*. Manchester, England. **Internet:** <http://www.marthaschwartz.com/projects/exchange.pdf> Accessed 8 April 2010 priority
- TRANCIK, R. 1986. *Finding Lost Space: Theories of urban design*. Van Nostrand Reinhold Company, New York.
- WHITEMAN, J. KIPNIS, J. BURDETT, R. 1992. *Strategies in Architectural thinking*. The MIT Press, London.
- ZIEGLER. 2001. *Manuels de l'Ecole du Louvre, Art et archaeologies: l'Egypte Ancienne*. Ecole de Louvre, Paris