Architectural Hybridity In Democracy

Reactivating Pretoria City Hall as a political civic centre

T.Mc Donald 2017

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Figure 0.1 Cover Page; Pretoria City Hall watercolor (Barnard 2017)

In accordance with Regulation 4[e] of the General Regulations [G.57] for dissertations and these, I declare that this dissertation, which is hereby submitted for the degree Master of Architecture [Professional] at the University of Pretoria, is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution.

I further state that no part of my thesis has already been, or is currently being, submitted for any such degree, diploma or any other qualification.

I further declare that this thesis is substantially my own work. Where reference is made to works of others, the extent to which that work has been used is indicated and fully acknowledged in the text and list of references.

Tristan Mc Donald

Abstract

In this paper commentary is offered on the role of architecture in a democratic society, as manifested in its use as a tool in the creation of spaces through which the public has equal opportunities for expression and interaction, at both the micro and macro scales. How the public connects to the city is questioned, and the value of politicized South African architectural symbols to the current political environment, in which a higher level of transparency is being sought, is considered. The value of a localised platform acting as a mediator between architecture, the public and the political powers is argued for. Consideration is given to the greater continuum of architectural thinking by discussing modern examples of political 'democratic' architecture and comparing them to those seen in the South African context. Furthermore, an understanding of democracy in both the social and spatial realms becomes an important informant in establishing value to society.

The intention with the paper is to contribute to a way of thinking when designing within the confines of buildings that have past or present political value, such as the Pretoria City Hall, by addressing the question of how politics shapes architecture and how architecture, through politics, shapes the political environment. The focus is on how architecture is able to change meaning by inverting past symbols, so that the existing is enabled to become more representative of and responsive to the current socio-political environment.

Ekserp

In hierdie referaat word kommentaar gelewer op die rol van argitektuur in 'n demokratiese samelewing, waar dit gebruik kan word as 'n instrument vir die skep van ruimtes wat aan die publiek gelyke geleenthede vir uitdrukking en interaksie verskaf, op beide die mikro- en makroskale. Hoe die publiek met die stad konnekteer word bevraagteken, en die waarde van verpolitiseerde Suid-Afrikaanse argitektoniese simbole vir die huidige politiese omgewing, waarin 'n hoër vlak van deursigtigheid nagestreef word, word oorweeg. Daar word ten gunste van die waarde van 'n gelokaliseerde platform wat as bemiddelaar tussen argitektuur, die publiek en die politieke magte kan optree, geargumenteer. Die groter kontinuum van argitektoniese denke word oorweeg deur moderne voorbeelde van politiese 'demokratiese' argitektuur te bespreek en met dié binne Suid-Afrikaanse konteks te vergelyk. Verder word 'n begrip van demokrasie op beide die sosiale en ruimtelike terreine 'n belangrike informant in die vaslegging van waarde vir die samelewing.

Met die referaat word daar beoog om by te dra tot 'n manier van dink wanneer daar ontwerp word binne die grense van geboue met teenswoordige of geskiedkundige politieke waarde, soos die Pretoria Stadsaal, deur die vraag aan te spreek oor hoe politiek die argitektuur vorm en hoe argitektuur, deur politiek, die politiese omgewing vorm. Die fokus word geplaas op hoe betekenis deur middel van argitektuur verander kan word deur simbole van die verlede om te keer, sodat die bestaande meer verteenwoordigend van en responsief tot die huidige sosio-politiese omgewing kan word.

Architectural Hybridity
In Democracy

Reactivating Pretoria city hall as
a political civic centre

Tristan Mc Donald
10688057

Programme:
Oppositional Parties Headquarters and Debate Arena &
Museum of Democracy

Location:
Pretoia City Hall, Pretoria
25.7532° S, 28.1869° E

Client:
City of Tshwane Metropolitan Municipality
Opposition Parties

Research Field:
Heritage and Cultural Landscapes

Keywords:
Democracy, Opposition Party, Political, Debate, Pretoria
City Hall, Protest, Hegemony, Hybridisation

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For your support and willingness to always help

Karlien van Niekerk
For proof reading and editing the document

WE, THE PEOPLE OF SOUTH AFRICA

declare for all our country and the world to know;

Figure 0.2 We. The People of South Africa (Author 2017)

We, the People of South Africa declare for all our country and the world to know:

That South Africa belongs to all who live in it, black and white, and that no government can justly claim authority unless it is based on the will of all the people;

That our people have been robbed of their birth right to land, liberty and peace by a form of government founded on injustices and inequality;

That our country will never be prosperous or free until all our people live in brotherhood, enjoying equal rights and opportunities;

That only a democratic state, based on all the will of all the people can secure to all their birth right without the distinction of colour, race, sex or belief;

And therefore, we the people of South Africa, black and white together equals, countrymen and brothers adopt this Freedom Charter. And we pledge ourselves to strive together, sparing nothing of our strength and courage, until democratic changes here set out have been won.

(Congress of the People and the Freedom Charter 1955)

Acknowledgements

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Freedom Charter

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Chapter 7 - Technification

Chapter 8 - Final Exam

Chapter 9 - Conclusion

Architecture is a thing of art, a phenomenon of the emotions, lying outside questions of construction and beyond them. The purpose of construction is to make things hold together; of architecture to move us. Architectural emotion exists when the work rings within us in tune with a universe whose laws we obey, recognize and respect. When certain harmonies have been attained, the work captures us. Architecture is a matter of harmonies; it is a pure creation of the spirit.

(Le Corbusier 1986)

Figure 1.1 View from City Hall Porte Cochere to Pretorius Square with Chief Tshwane (Hoffman 2017)

01

Introduction

Figure 1.2 Right; Paul Kruger Statue
after protest (Author 2016)

1.1 - Preface

The South African context is one of great personal interest and intrigue for this author. Its past has led to the formation of a country which has seen scattered growth and a skewed distribution of wealth, which acts as an important indicator of the long-term welfare of its people (Orthofer 2016). From the townships that grow larger each day to the poor distribution of school textbooks, this imbalance is a daily occurrence which we are all learning to live with.

What is it that, twenty-two years into democracy, we can say defines South Africa as a democratic state? Is the implementation of the constitution enough to right the wrongs of the past and allow us to move forward as a nation in order to develop and grow?

It is argued that our present national reality has been developed around what we have been fighting against rather than for what we desire (Zibi 2012). It could be suggested that some of the progress South Africa has witnessed as a democratic state was more of a temporary band aid solution, rather than a direct attempt at dealing with the issues at hand. Though there have been changes in government, it did not automatically bring a solution to the many years of injustice prior to apartheid.

In this dissertation it is argued that more must be done with architecture in order to identify what it is that makes architecture democratic. It is argued that it is through the study of the past and how our values have changed over time - due to political progress and activity, international events and public interaction - that we are able to start to develop an understanding of today's context, and therefore design for our current political climate.

Figure 1.3 Right; Reflected Pretoria City Hall with Andries Pretorius Statue (Author 2016)

1.2 - Proposed Context

Architecture, like other art forms, allows for the expression of the creator as well as that of the viewer. The innate ability to develop an opinion or understanding is key to the further development of architecture in society. In order to achieve this, architecture can look at bodies in motion (Imirzian 2010) as a means of creating platforms for expression to improve the connection of the inhabitant with the city, thus allowing for the development of a dialogue between building and public space which may help connect people, spaces and events. Everything we do occurs within space and, therefore, it is important to understand this choreography to be able to create spaces which are more appropriate to both the intention of the design and the user.

Lefebvre (Simonsen 2005) argues that, due to the strong focus on visual stimuli in architecture, our occupation and use of space become secondary to architectural understanding. It could be suggested that this is a result of the inherent need to assert our presence in our cities. On walking through the Pretoria city centre, the chosen context for the dissertation, the way people express themselves through the occupation of space becomes evident in the way shops and street vendors manipulate the sidewalk.

The position taken when dealing with the dissertation is that similar to Nobel's (2008) suggestion of hybridity's in architecture, arguing for the merging of Western and African ideals so to better facilitate the development of African identity and narratives. Therefore, the stance taken is that of using the existing in the creation of the new. It is the intention that the existing act as the foundation onto which the new can be developed, allowing architecture to focus on that which is desired rather than that which is rejected through its ability to facilitating the merging of different ideals.

Figure 1.4 Above; Occupation along
    Pretoria city streets (Author 2016)

1.3 - Normative Position

The focus of the dissertation will be Pretoria City Hall and Pretorius Square.

As a way to celebrate Pretoria officially becoming a capital city (Herring 1935) a competition was held in 1926 for the design of a new city hall. It was designed to be a civic building intended to instil a sense of pride and honour for those living in the capital city as well as act as seat for the mayor and local government (Herring 1935). Its positioning as a civic centre and the seat of the mayor emphasised the importance of the structure in the new capital city.

The building was to be representative of the political structure of the time, in which the existing Government was mandated to establish an institutional identity, separating it from the rest of the population. The establishment of an institutional identity was used to distract the rest of the world from the injustices and racial separations experienced in South Africa at the time (Mabin 2012).

Presently it can be suggested that Pretoria City Hall no longer fulfils its role as an important civic centre to the urban inhabitant, as it no longer represents the will and views of our democracy and its people. While still prominent in its presence, it appears to have become more of a folly of heritage value within the city rather than an active civic centre. It could be suggested that part of the reason for this, other than issues of management, funding, lack of public interest and poor upkeep, could be that Pretoria City Hall is viewed to be representative of South Africa's darker past.

1.4 - General Issue

The current identity of South Africa is based on a fixation with the negativity that arose out of our apartheid and colonial past (Zibi 2012). If this is true, it can be suggested that much of the architecture of the new democracy was done in an attempt to either recreate, repurpose or remove the old as a way of representing the new political control and its rejection of the past (Wolff 2011). This can be seen as an architectural hybridisation which attempts to create new dialogues across previous divides (Noble 2008:71).

In South Africa and more specifically, in the City of Pretoria, public space appears to be changing from that of the square to the occupation of the city's sidewalks (Goheen 1998), as revealed during investigativewalks through Pretoria's city centre. Along the historic Paul Kruger Street, it was observed that, while the edges of squares such as Pretorius Square and Church square were being used, very few people ventured onto the square itself. The few that do use the square would mainly occupy the periphery, which could be suggested as defensible space along boundary walls as suggested by William Whyte in his film, The Social Life of Small Urban Spaces (Whyte 1980).

The occupation of the sidewalk becomes the crudest form of confrontation (Goheen 1998; Kotze 2017). It leads to the formation of new public space and therefore can be suggested as an unintentional hybridisation of space (Noble 2008: 81) in which we see two opposite typologies, structured vs. appropriated, coming together to create a new identity. The sidewalk becomes an active space for both personal development and daily interactions (Kotze 2017).

In this dissertation hybridisation of space with regard to its different forms, conscious or unconscious, is therefore considered as a way of developing an identity through a spatial contestation with the past.
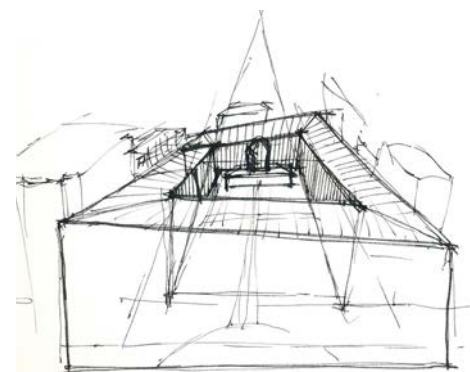
Figure 1.5 Above; General Issue (Author 2016)
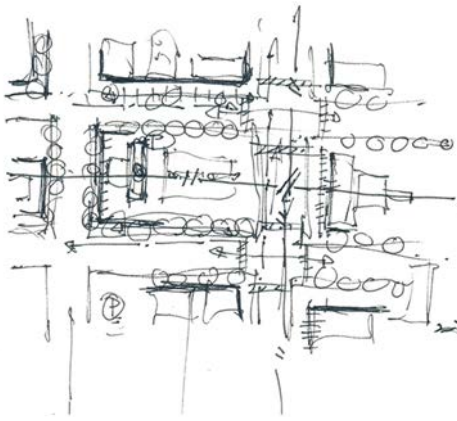
Figure 1.6 Above; Urban Issue
     (Author 2016)

Figure 1.7 Above; Architectural Issue
     (Author 2016)

1.5 - Urban Issue

The urban issue revolves around making Pretoria the new Capital City of South Africa, based on a call by President Jacob Zuma in his State of the Nation address for there to be a single Capital (Zuma 2016).

In order to create the hypothetical Capital City, it was identified that certain governmental functions would have to be relocated to Pretoria, namely Parliament from Cape Town and the Supreme Court of Appeal from Bloemfontein.

With the creation of Pretoria as the Capital City, the focus of the urban vision (UP MArch(Prof) 2016) was delimited to the historic protest route or Cardo of Paul Kruger Street.
Historically the Cardo referred to the main north-south axis in Roman Cities (Norris 2015). Paul Kruger Street, as identified through investigative walks and a study of past events relating to protest marches in the city that started at the Pretoria Station, changed direction at Church Square and proceeded towards the Union Buildings in the east.

1.6 - Architectural Issue

As suggested, the development of our present national identity has occurred as a rejection of the past resulting in the creation of new monuments and places of memory (Bakker & Müller 2010: 48) in an attempt to create a new layer of heritage. It can therefore be suggested that this push to create a new layer of heritage has led to the deterioration of the existing infrastructure, which could ultimately have led to the loss of that heritage.

How does political heritage architecture respond to the existing context of the past, which is contested against, as well as develop present identity? The question not only responds to the heritage of the existing, but also to the appropriate response of the new architecture and the ability of the existing to strengthen the new identity of society, and then to combine both ideals so as to enable them in the facilitation of the political. Responding to both political climate and site, the architecture proposes to enable the public and government in its facilitation of the democratic processes of protest, debate and management. This is done as

an exploration of the ability of architecture to facilitate political process and encourage transparency

1.7 - Research Question

1.   In the South African context, what is the role of architecture in addressing the issues of relevance with regard to the social and political ideals and beliefs of the changing nation as a whole?

2.   How have political spaces changed from the inception of Pretoria City Hall to the present day, and what can be done to enable architecture to reactivate the past?

3.   How can architecture be used to reactivate political heritage architecture so as to create a new link to the changed society?

4.   How can one spatially define the characteristics of democratic space and use it as a tool to manipulate architecture so as to create a spatially democratic space?

1.8 - Architectural Intent

The aim with the dissertation is to investigate whether Pretoria city hall, a pre-apartheid structure, is still relevant in the new Capital City as both a civic centre and political platform. An attempt will be made to develop an understanding of how the notion of space and its value has changed from the inception of the City Hall through to today's issue where past structures, while still visually significant, no longer appear to respond or contribute to the general population.
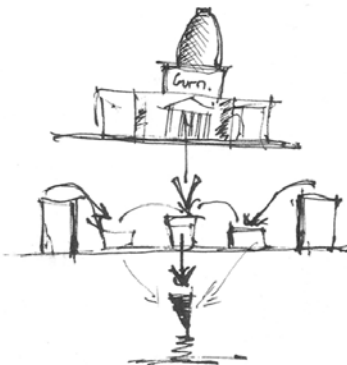
Figure 1.8 Above; Architectural Intent (Author 2016)

1.9 - Methodology

A combination of the following research methods will be used to help inform the design.

Field Research.
-        Site visits
-        Mapping
-        Investigative walks through the surrounding context

Literature Review:

Literature research is intended to uncover gaps in thought relating to political architecture and its role in facilitating the reactivation of architecture in a changed political climate.

Precedent Studies:

A study will be made of buildings which have a political heritage relevant to the context and have been used as a commentary on the past in the expression and appropriation of the new architecture, and the by doing so, have created an architecture which responds to changing notions of society that use the past as its foundation for growth.

1.10 - Delimitations

All drawings and representations of plans, sections and interiors of Pretoria City Hall are derived from a single viewing of the interior during which photos were not permitted, and on an interpretation of incomplete drawings found in the archive of the State Theatre.

The dissertation will not look at the democratic experience in its entirety, but will rather focus on the ability of architecture to facilitate certain processes of democracy.

In the dissertation only Pretorius Square, and its ability to contribute to the technical aspect of water collection, will be considered in the master plan.

1.11 - Assumptions

The dissertation is grounded in the speculative condition of Pretoria becoming the Capital City of South Africa, which will therefore see the incorporation of the Judicial and Legislative governmental functions with Pretoria.

The Pretorius Square and City Hall precinct including all adjacent block edges in the context of an assumed urban vision (UP MArch(Prof) 2016), would become known as the Local Government Square. All surrounding buildings would therefore be occupied by administrative governmental functions. These departments may include:

- The Department of Home Affairs
- The Department of Public Service and Administration.
- The Public Service Commission (PSC)
- The Centre for Public Service Innovation (CPSI)
- The Department of Cooperative Governance and Traditional Affairs
- The Department of Justice and Constitutional Development
- The Department of Finance
- The Presidency: Performance Monitoring, Evaluation and Administration.

It is further established in the urban vision for Pretoria (UP MArch(Prof) 2016) the private vehicular access along Paul Kruger Street will be restricted between Pretoria Station and Church Square. Only public vehicles will be allowed along Paul Kruger Street and parking at Pretoria city hall will be limited to the southern edge of Pretorius Square.

02

Urban Vision

Figure 2.1 Pretorius Square (Hoffman 2017)

Pretoria.
The New Capital City

PRETORIA. THE CAPITAL CITY.
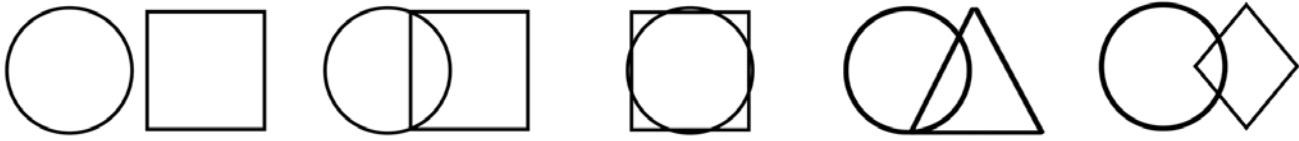
A democratic identity of South Africa's capital city.
The re-imagined Cardo of Pretria.

Figure 2.2 Above, Pretoria. The Capital
City (UP Arch Mprof 2016)

2.1 - The {New} Capital City

Literature suggests that the success of a city is judged by the way it is able to restructure, reinterpret and make past symbols of power - in both the landscape and built environment – its own. In Capital Cities in Africa (Bekker & Therborn 2012: 1) it is stated that a capital city is the barometer of new ideological approaches, and that to study its urban code is key to understanding its political and historical development. The urban code is able to unpack a city's structure so as to expose its core principles and influences, and from this one is able to work forward in developing a responsive city. A capital city therefore has the responsibility to be representative of the people through the expression of the ideologies of the time. The Tshwane Vision 2055: Remaking South Africa's Capital City (Myeza & Associates 2013: 1) emphasises and identifies the need for South Africa to have a single capital city. The selection of Pretoria is specific as, according to the Tshwane 2055 Vision publication, it is the seat of government, the diplomatic capital, and the country's intellectual capital with multiple research, development and higher education facilities located here (Myeza et al 2013: 22).

In a statement given about the Tshwane Vision 2055 by the then Executive Mayor of Tshwane Kgosientso Ramokgopa, it was declared that:
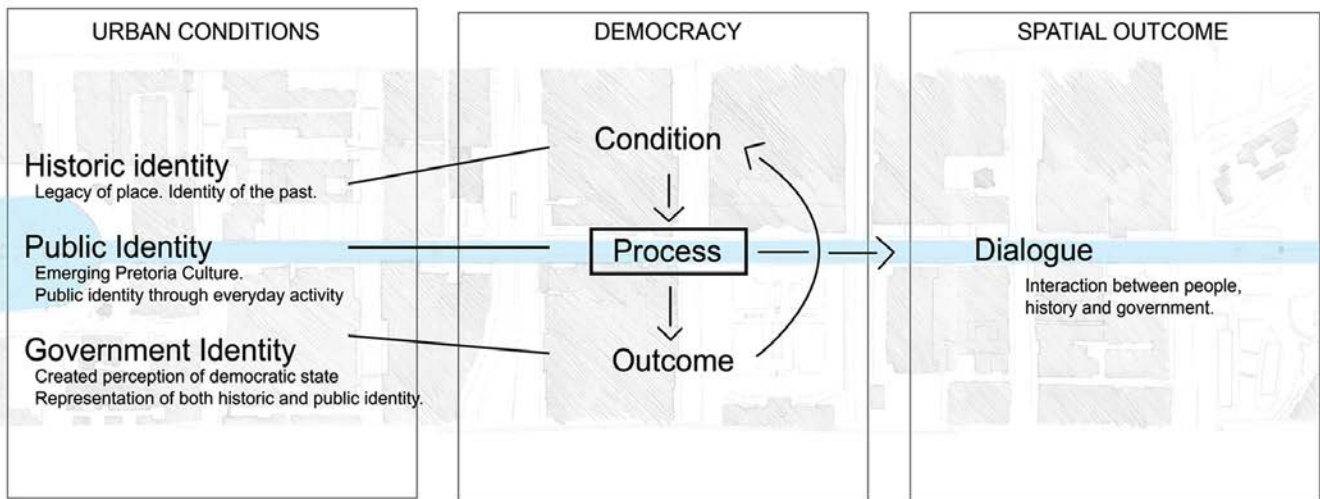
Figure 2.3 Above; Spatial Representation of a South African Democratic state (UP Arch Mprof 2016)

Our vision is a City of Tshwane that in 2055 is liveable, resilient and inclusive whose citizens enjoy a high quality of life, have access to social, economic and enhanced political freedoms and where citizens are partners in the development of the African Capital City of Excellence. Tshwane Vision 2055 is about our future Capital City; it is about your future Capital City.
(Myeza et al 2013: 6)

A capital city is constructed for the people. It is representative of the ideologies of the time, whether public or governmental, and which the public has a right to. Mark Purcell argues that Lefebvre's Right to the City has the potential to contribute to a renewed urban democracy (Purcell 2002: 100). He asserts that there is a decline in democracy and enfranchisement in our cities in which the governance is being restructured in three ways: it is being rescaled, policy is moving away from redistribution towards competition, and state functions are being outsourced to external bodies. Lefebvre argues that, in order to strengthen democracy and the Right to the City, there needs to be a restructuring of social, political and economic relations as a means of shifting control to the urban inhabitant, which would then focus on the creation of urban space (Purcell 2002). The Right to the City argues for, and gives urban inhabitants a voice in those decisions which contribute to the development and growth of the urban environment which they have a right to (Purcell 2002).

The Right to the City involves a shift of power from a single government to the public, which is what democracy represents. But as seen in South Africa, this sudden shift of power could lend itself to possible conflict and short falls, therefore, the current governance structure is questioned in the dissertation and it is argued that a greater level of power or control should be transferred to the public and not be left in one set of hands. For this to be successful, the shift needs to focus on the integration of state and urban inhabitant. It is argued that it is through direct interaction between government and the public, whereby all have an equal opportunity to contribute to the discussion, that democracy starts to flourish.

2.2 - Strengthening the Capital

Carrying the notion of the importance and value of a Capital city to the identity of both the country and the public, a proposal was developed in which Pretoria becomes the 'New' Capital City of South Africa.

In order to enhance the 'New' Capital City and further strengthen the notion of a Democratic South Africa certain political markers were engaged with in order to inform the appropriate relocation of governmental organisation. The markers used were the origins and heritage of the city as well as the public's interaction with the city through protest.

2.2.1 - Origin and History

The layout of Pretoria was arranged along the Cardo, the north-south axis known today as Paul Kruger Street, and the Decamanus, the east-west axis known today as WF Nkomo Street, Church Street, Helen Joseph Street and Stanza Bopape Street. In Roman cities, the Cardo and Decamanus acted as the two main arteries along which the rest of the city grew. The Cardo acted as a hub for economic life while the Decamanus connected the city with its military camp (Norris 2015). In Pretoria, the Cardo could be suggested to have been designed so as to connect the openings in the two ridges forming the northern and southern boundaries of the city, while the Decamanus, which runs parallel to the ridges, facilitates the east-west urban sprawl experienced in the city today. The intention with the New

Capital City is to refocus the growth and attention of the city on the existing Cardo and Decamanus along which specific civic functions of a capital city would be positioned at strategic anchor points.

The positioning of main civic functions would respond to the heritage and origins of the city, with new functions adding a new layer of value to the identity of the Capital. Through the application of this new layer, and the reorganisation of governmental functions, the city is intended to better facilitate the transparency and interaction of a capital city with its government and its public.

As Pretoria is already the Administrative Capital, some of the functions would be relocated and focused south of Church Square. What will become the new administrative district will be positioned in and around Pretoria City Hall, Pretorius Square and the surrounding buildings.

Judicial functions such as the Supreme Court of Appeal and the International Electoral Court will be positioned in the existing judicial district of Church Square, with legislative functions being relocated to the Union Buildings precinct with the intention of strengthening the country's legislative foundation.

Figure 2.4 Right; Mapping Iterations (UP Arch Mprof 2016)

THE PEOPLE'S SQUARE

PUBLIC TAKE BACK

FORMAL COMMERCIAL

PUBLIC GOVERNMENT INTERFACE

ADMINISTRATIVE DISTRICT

TRANSPORTATION DISTRICT
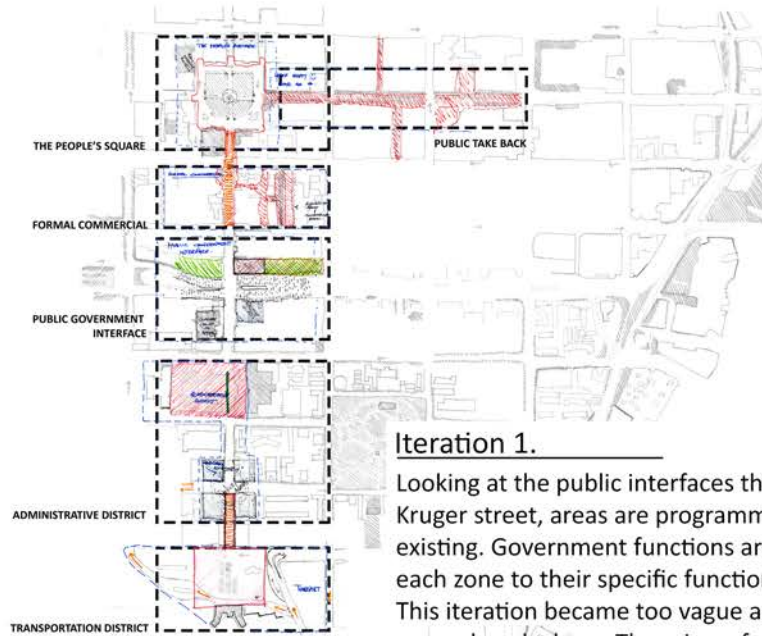
Iteration 1.

Looking at the public interfaces that exist along Paul Kruger street, areas are programmed as a result of the existing. Government functions are moved to develop each zone to their specific function.

This iteration became too vague as to what buildings were placed where. There is no further clarity to the public space by introducing the new buildings.

Building edge

Square

Park
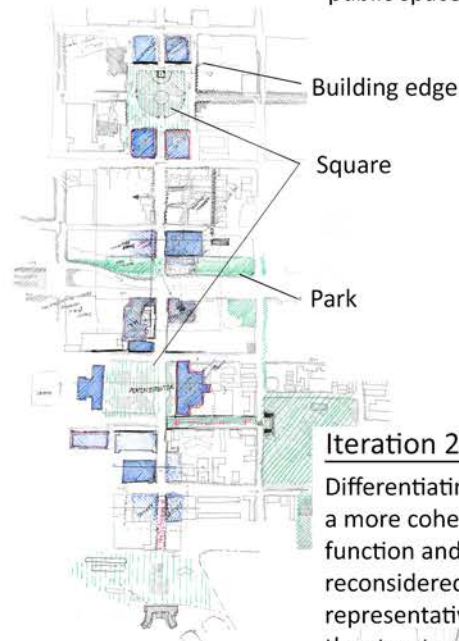
Iteration 2.

Differentiating public spaces and building edges allowed a more coherent understanding of public spaces as a function and a network in the city. Building edges are reconsidered to better define each space and their representative function. However, this iteration neglects the street as public space as well as considered building as an edge in an over simplified manner.

JUDICIAL

ADMINISTRATIVE

TRANSPORTATION
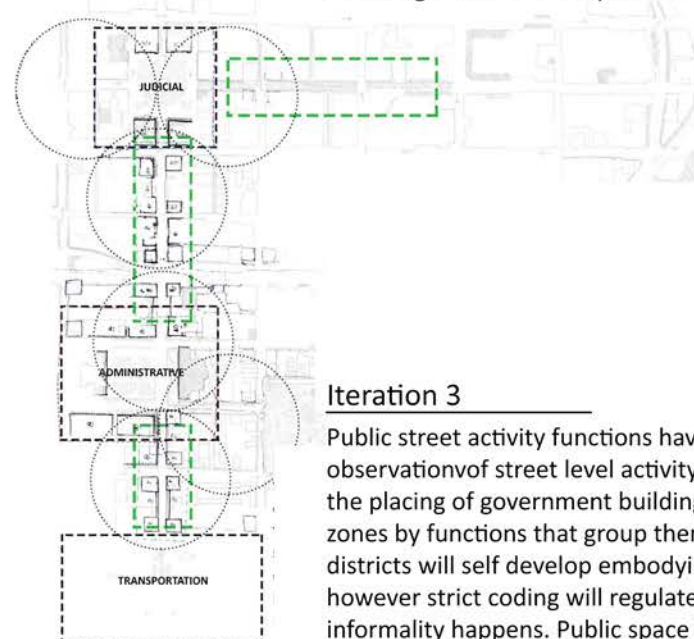
Iteration 3

Public street activity functions have been defined by observationvof street level activity (as in iteration one), but the placing of government buildings has been coordinated into zones by functions that group them. The spaces in between districts will self develop embodying everyday urbanism, however strict coding will regulate the edge in which this informality happens. Public space therefor becomes readable and more defined to the city user.

Seat of Government

Supreme Court of Appeal

Parliament
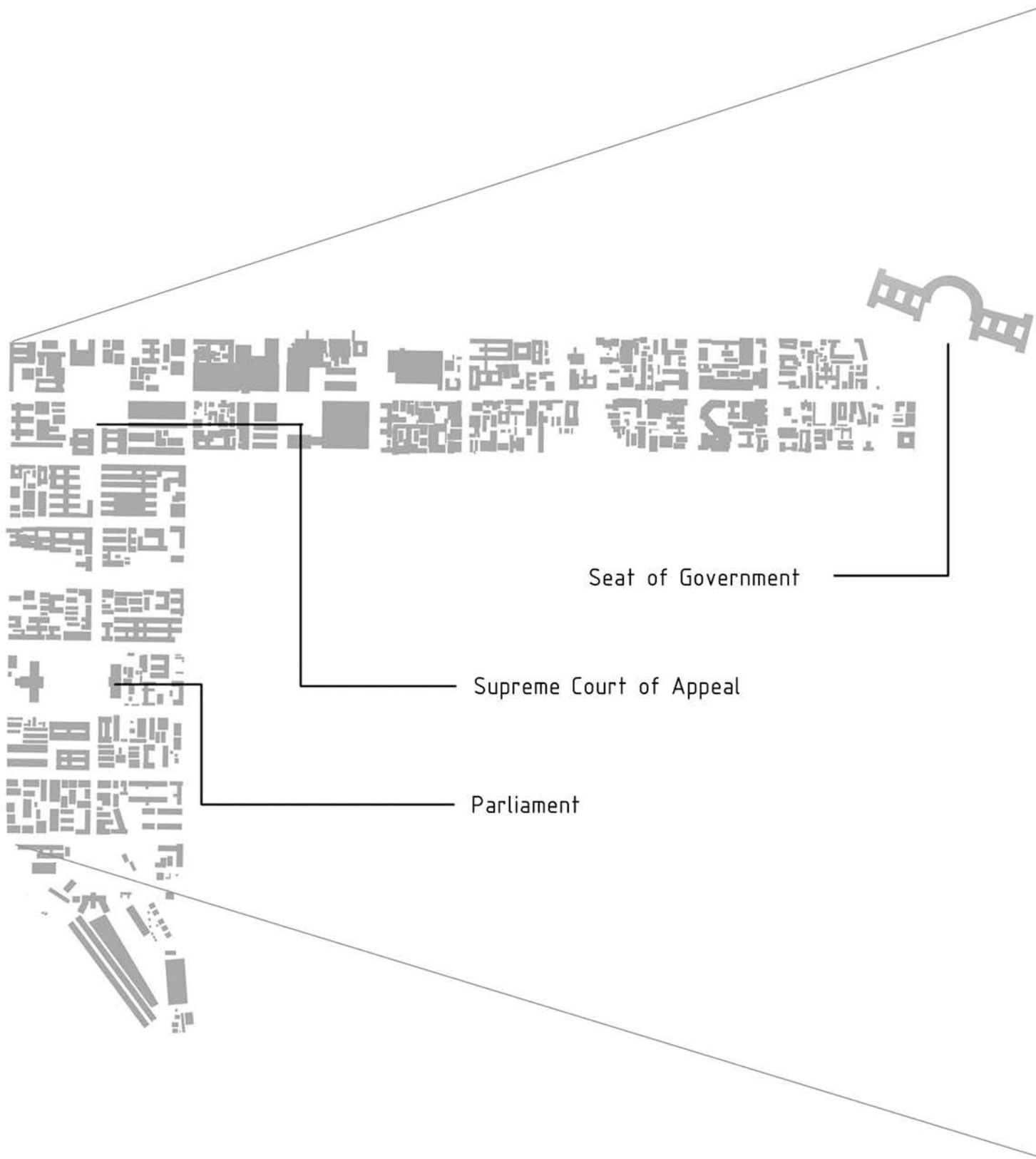
Figure 2.5 Zoning and Phasing of Paul
Kruger Street (UP Arch Mprof 2016)

Judicial

Administration

Transport

Phase 1
Civic Nodes

Anchored by moved government
department buildings.
Administrative. Judicial. Legislative

Phase 2
Private Investors

Anchored by Commercial use.
Commerce. Residential. Hotel
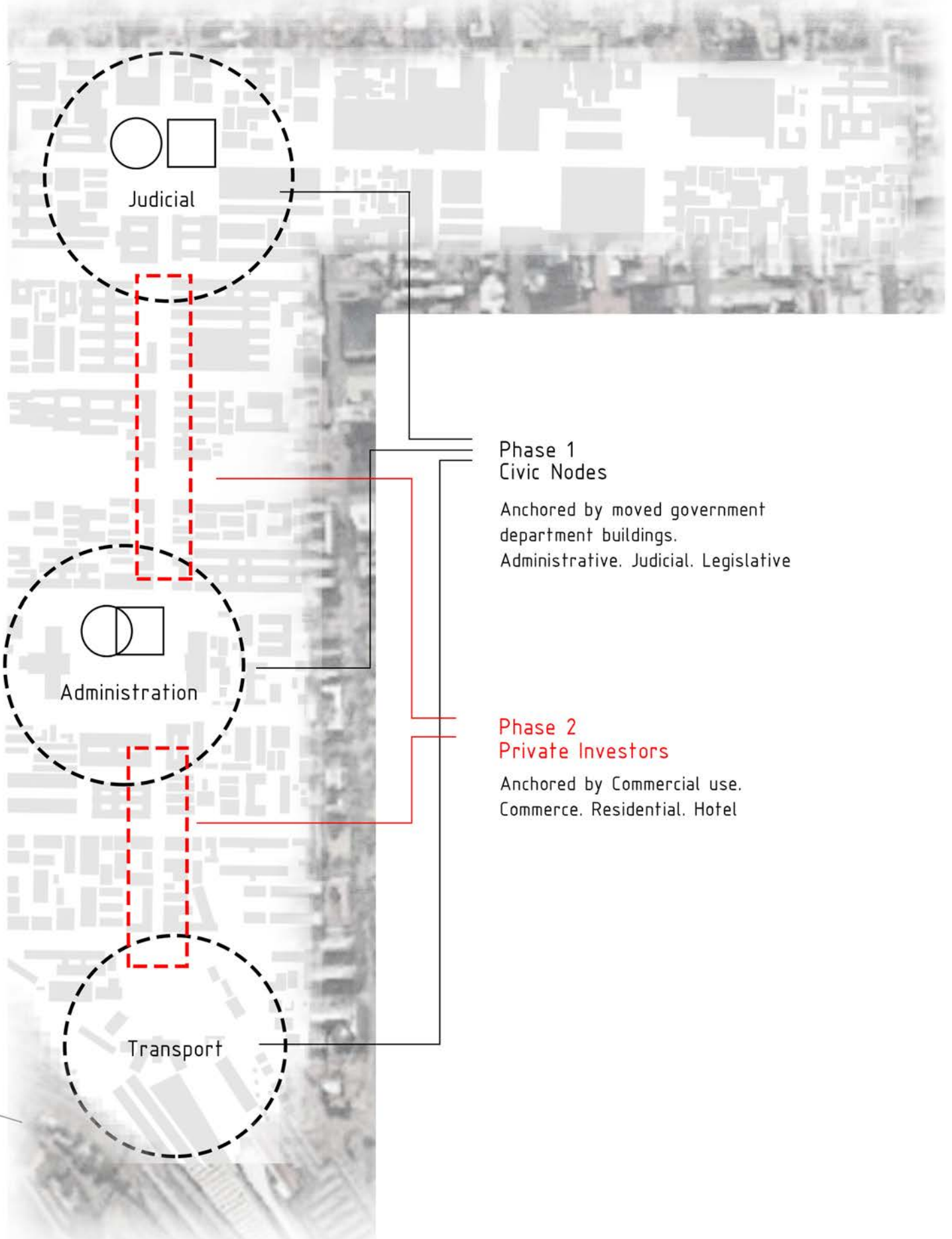
2.2.1 - Protest as Identity

Protest has been identified as a strong marker of democracy as it can be seen as an indicator of the collective identity of the public (Van Stekelenburg & Klandermans, 2010). Protest occurs or is born when a collective identity is politicised through a shared grievance, which an external party is blamed for, and then acted upon (Van Stekelenburg & Klandermans 2010: 5). A recent example of the politicisation of a collective identity would be that of the Fees Must Fall movement of 2015 (Henderson 2017). It is through effective protest that concerns are brought to the attention of those not involved, allowing for a greater level of interaction with the country.

Through the identification of protest as an important political informant, the issue of space can be developed. Protest falls into the spectrum of Lefebvre's Right to the City. It sees a shift of control of urban space into the hands of the urban inhabitant. Protest provides the inhabitant with a voice and identity which, through action, sees a new appropriation of urban space. It can therefore be argued that Pretoria, as the New Capital City, has to better facilitate protest as a means of strengthening identity.

The notion of the Spatial Choreography of Protest proposed by Tali Hatuka (2008) looks at how urban space is used, manipulated and appropriated in protest. As a way of strengthening protest, the route along which it moves is specifically chosen so as to more strongly instil a shared grievance. Protesters choose to occupy a public space for its identity associated with a specific function, the symbolism relating to the heritage of the site, and physical characteristics such as scale, form and boundaries which, in turn, contribute to an understanding of the spatial order of protest (Hatuka 2008). In general, protesters focus most of their energy on spaces which are more specifically related to the identity of those in power.

The Spatial Choreography of Protest is broken down into three core elements: Voice, Appropriation and Boundaries.

The Voice of the protest revolves around audio and visual elements of expression, and acts as the tangible representation of the oppositional consciousness (Hatuka 2008), so promoting interaction with those outside the protest.

The Appropriation of protest looks at how in protest, through the occupation of a spatially symbolic identity, space is utilised to better facilitate its needs. Appropriation challenges the social codes set out through its temporary occupation of urban space (Hatuka 2008).

The Boundaries of protest address the spatial, social and conceptual boundaries of protest, all of which influence the stage on which the protest takes place. It ultimately influences the effectiveness of the Voice and Appropriation of the space (Hatuka 2008).

Figure 2.6 Protest Mapping through Pretoria (Author 2017; Adapted from SF van Rooyen 2016)

Route taken by the 1913 march against military conscription.

3 April 2014 Protest at the State Capital Address at Pretoria City Hall.

1920 Railway protest against racial exclusion from first class coaches.

23 October 2015 Fees Must Fall protest
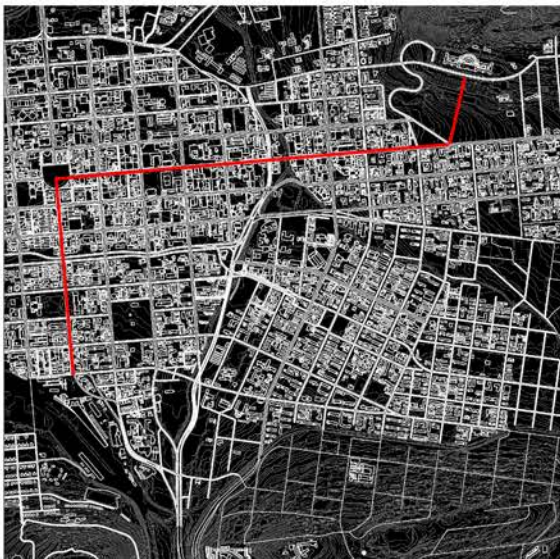
1956 Womans march against laws.
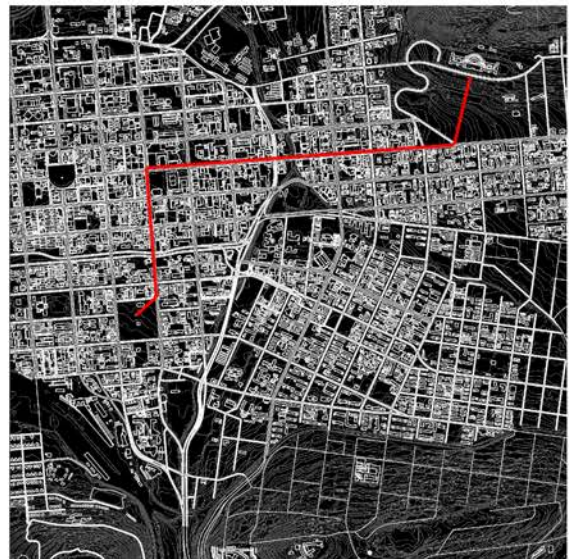
16 December 2015 Zuma Must Fall Protest

GOVERNMENT   PEOPLE

JUDICIAL
(process)

GOVERNMENT   PEOPLE

ADMINISTRATIVE
(condition)

LEGISLATIVE
(outcome)

Figure 2.7 Above; Diagrammatic representation of the three entities of Democracy (Author 2016)
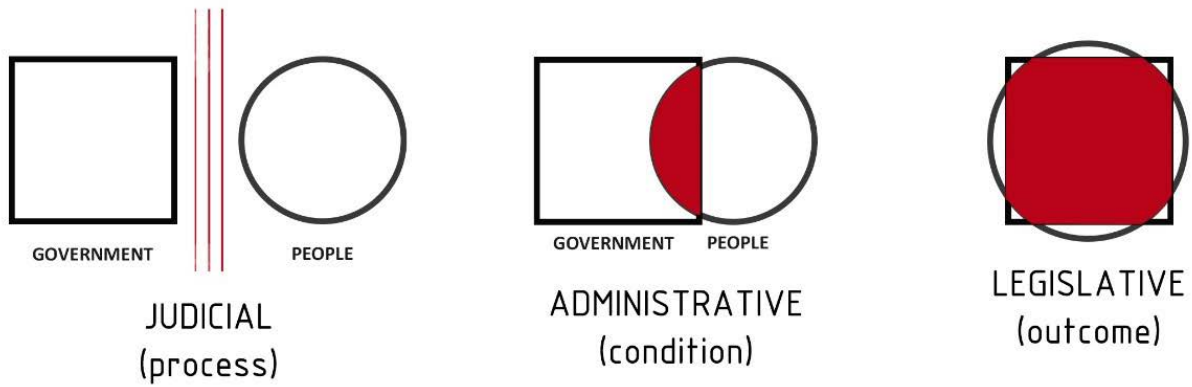
2.3 - Language of the City Scape

Through the process of developing a New Capital City it is important to understand the context in which one is working. In order to do this, the existing city was observed through an urban design lens. This was done through mapping explorations ranging from research regarding its history and growth and explorative walks through the city, to physical mapping exercises in which the information acquired on the walks was overlaid onto aerial photographs of the city. Through this, it was possible to develop a vision for the new capital.

The urban coding applied to the development of the capital was derived from an adaptation of Duany Plater-Zyberk & Company's concept of 'smart soding' (Plater-Zyberk & Company 2001). It is suggested that the rural-to-urban continuum must be segmented into identifiable zones due to our cities being dictated by land regulation-zoning (Duany & Talen 2001: 1454). These zones are therefore termed 'transect zones'. The human experience is intrinsic to the notion of transect zones, and so these zones become pedestrian-orientated, diverse and public (Duany & Talen 2001). In this way an understanding of and language for the type of zone that a certain function would be located in, can be developed.

It is through this coding that a vision for Pretoria is proposed. Five transect zones were developed for the New Capital City. These were placed along Paul Kruger Street and were all developed with the main focus on public interaction. These were then broken down into three main zones, i.e. the Judicial District, Administrative District, Legislative District, with secondary zones being commercial and residential, as determined by the functions identified along the street edge.
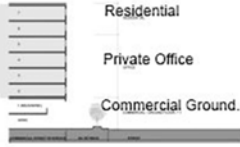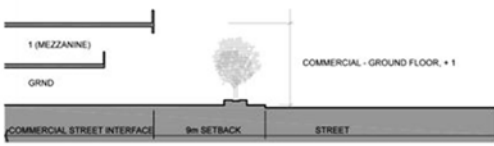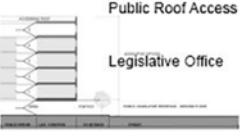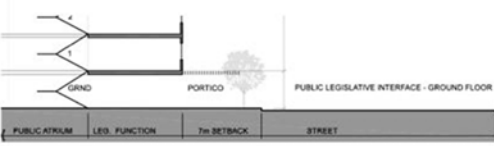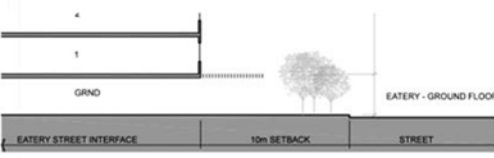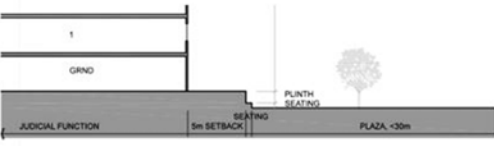
STREET CONDITION	RULE	SECTION	PLAN	STREET LEVEL
Commercial	CNR- 10 stories. Commercial Anchor store, INT- 7 stories.	Residential Private Office Commercial Ground.		1 (MEZZANINE) GRND COMMERCIAL STREET INTERFACE / 9m SETBACK / STREET COMMERCIAL - GROUND FLOOR. + 1
Administration	CNR- 10 stories. INT- 7 stories. Frontage onto plaza 10 stories	Administrative office		2 1 GRND / PORTICO PUBLIC ADMINISTRATION INTERFACE / 5m SETBACK / STREET COMMERCIAL - GROUND FLOOR
Legislative	CNR- None. INT- 5 stories. Roof Access. Public Atrium.	Public Roof Access Legislative Office		1 GRND / PORTICO PUBLIC ATRIUM / LEG. FUNCTION / 7m SETBACK / STREET PUBLIC LEGISLATIVE INTERFACE - GROUND FLOOR
Residential	CNR- None. INT- 5 stories. Programmed grd. level.	Residential. Ground Program.		4 1 GRND EATERY STREET INTERFACE / 10m SETBACK / STREET EATERY - GROUND FLOOR
Judicial	CNR- None. INT- 8 stories. No ground level public access.	Judicial.		1 GRND JUDICIAL FUNCTION / 5m SETBACK / SEATING / PLAZA, <30m PLINTH SEATING

Figure 2.8 Above; Street edge conditioned adapted from Smart Coding applied to Paul Kruger Street (Up Arch MProf 2016)

2.4 - Coding Applied
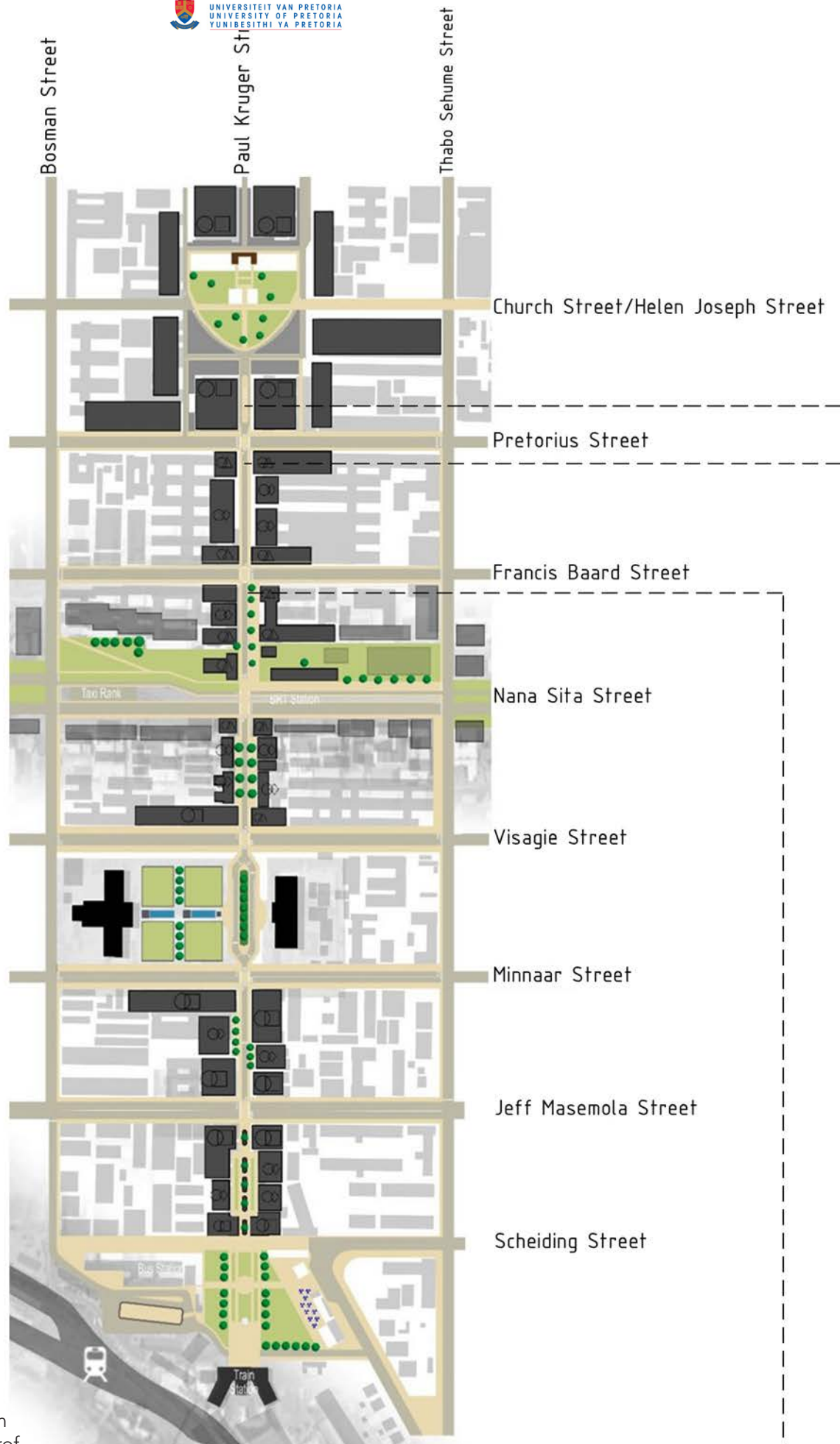
Figure 2.9 Above; Proposed design of Paul Kruger Street (Up Arch MProf 2016)
Figure 2.10 Right; Sections through Paul Kruger Street with applied coding (Author 2017)

Judicial Street Section

Commercial Street Section

Residential Street Section
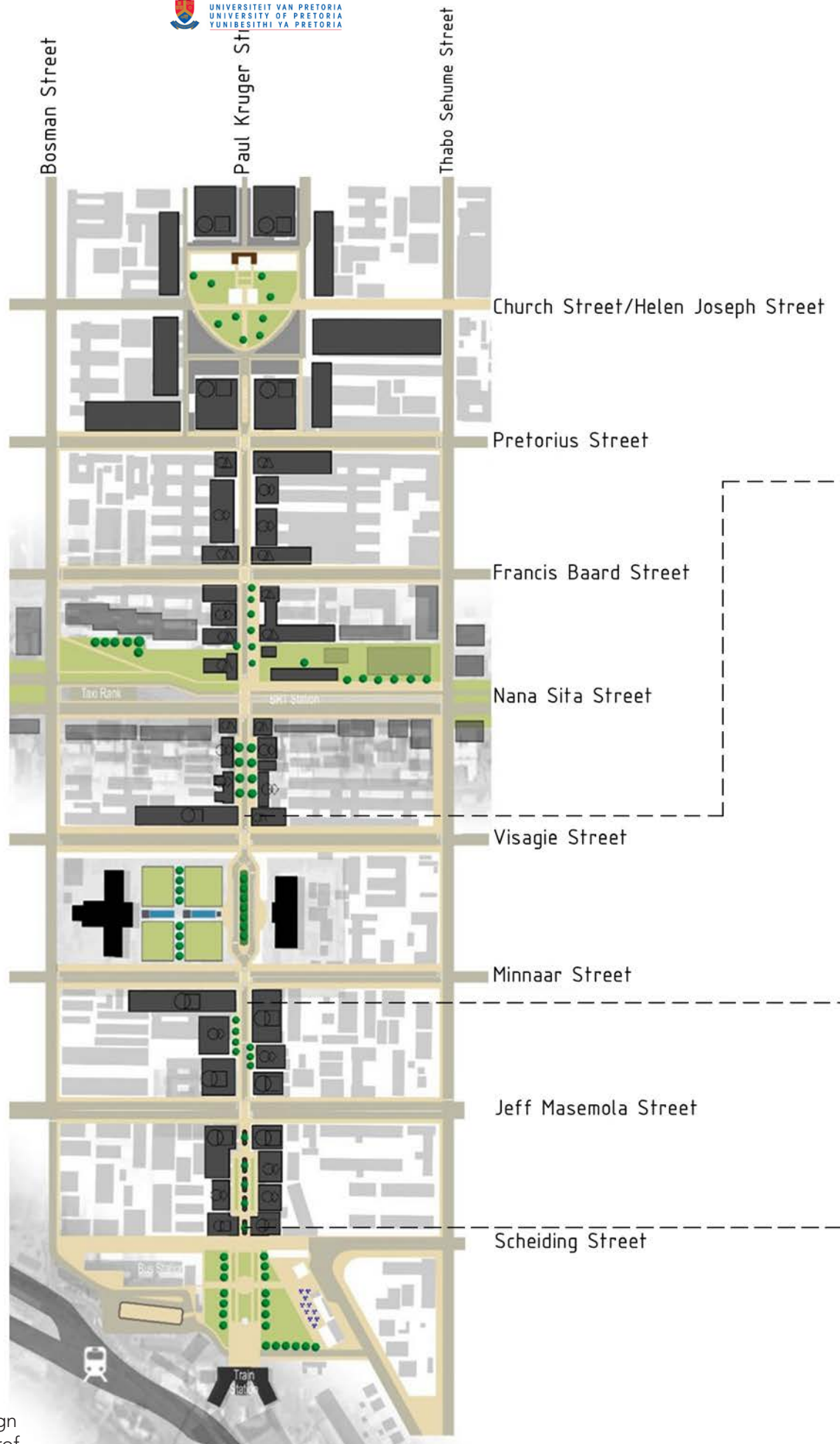
Figure 2.11 Above; Proposed design
of Paul Kruger Street (Up Arch MProf
2016)
Figure 2.12 Right; Sections through
Paul Kruger Street with applied coding
(Author 2017)

Administration Street Section

Administration Street Section

Commercial Street Section

Chair

Dept. ...

Deputy Chair

Dept. ...

CLUSTER

Dept. ...

Dept. ...

Dept. ...

Dept. ...
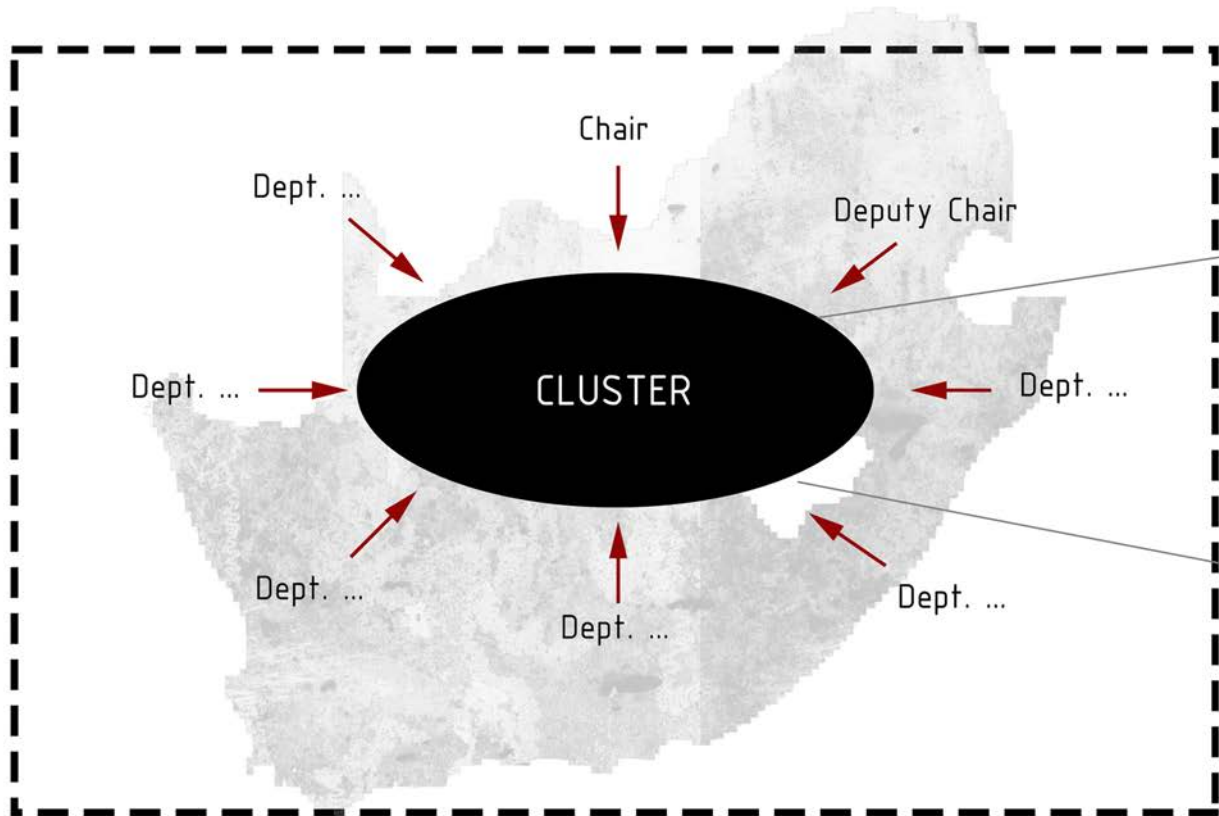
2.5 - Administrative District
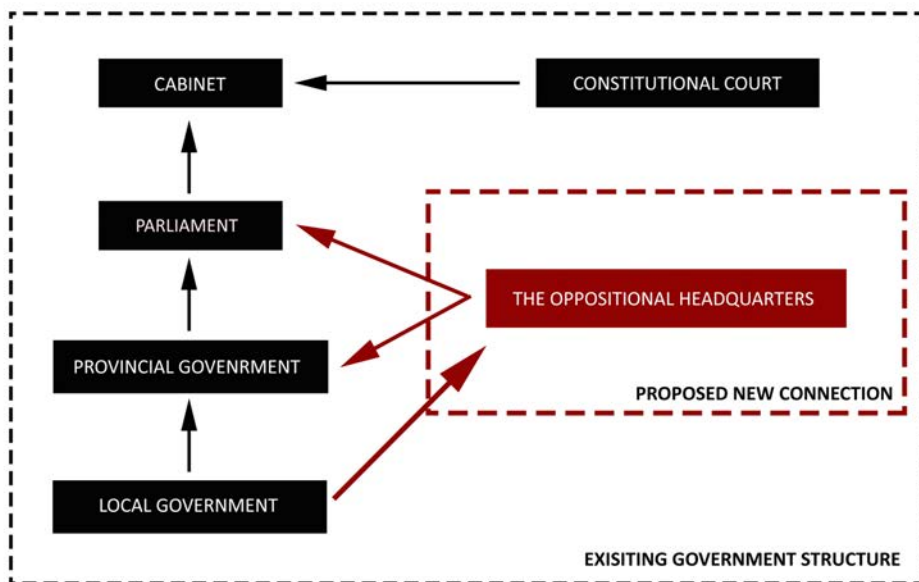
The district in which the dissertation design will be situated is the newly established Local Government Square (LGS) or Administrative District. As the name suggests, the district is orientated around administrative functions of both the new capital city and the country as a whole. The intention with the district is to localise all administrative functions in government, in order to improve accessibility for the public as well as develop a greater sense of transparency through enabling an increased level of awareness.

CABINET

CONSTITUTIONAL COURT

PARLIAMENT

THE OPPOSITIONAL HEADQUARTERS

PROVINCIAL GOVENRMENT

PROPOSED NEW CONNECTION

LOCAL GOVERNMENT

EXISITING GOVERNMENT STRUCTURE

Figure 2.13 Top; Existing governmental structure organised into clusters (Author 2016)
Figure 2.14 Above; Positioning of Proposal into existing of Governmental structure (Author 2016)
Figure 2.15 Right; Proposed arrangement of Administrative district building from existing clusters (Author 2016)
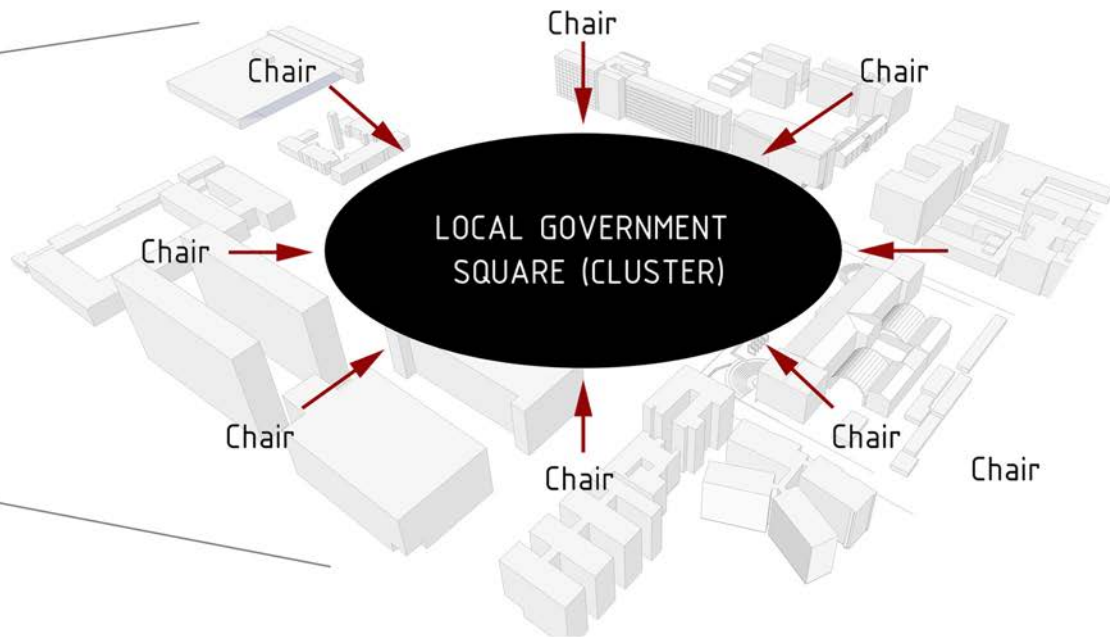
2.5.1 - Government Clusters (Existing)

In order to achieve a sense of accountability between departments it becomes important to develop a system that facilitates interaction between programmes of varying natures. The development of accountability would allow for a higher level of transparency in government, as there would be interaction between several government bodies.

A government cluster is intended to develop an integrated approach to management that is aimed at improving government planning, decision making and service delivery with the main function being to ensure coordination of all government programmes (Tibane & Honwane 2015).

In the South Africa Yearbook 2014/15 it is stipulated that 12 outcomes for these clusters have been identified by the government. These include (Tibane et al 2015: 203):

- Improved quality of basic education
- A long and healthy life for all South Africans
- All people in South Africa are and feel safe
- Decent employment through inclusive economic growth
- A skilled and capable workforce to support an inclusive growth path
- An efficient, competitive and responsive economic infrastructure network
- Vibrant, equitable and sustainable rural communities with food security for all
- Sustainable human settlements and improved quality of household life
- A responsive, accountable, effective and efficient local government system
- Environmental assets and natural resources that are well protected and continually enhanced
- A better South Africa contributing to a better and safer Africa and world
- An efficient, effective and development orientated public service and an empowered, fair and inclusive citizenship

The attempt to respond to the structuring of governmental clusters and the notion of democracy in the new Capital City saw the formation of a new, larger cluster titled Local Government Square.

2.6 - Local Government Square

As the new Local Government Square is positioned within the area zoned to be the administrative district of the new Capital it was deemed necessary to appropriate the buildings surrounding Pretorius Square to be better suited to the functions required within an administrative district.

The new Local Government Square (LGS) is comprised of all the chairs found in the existing clusters as well as all seats of the Governance and Administrative clusters (Tibane et al 2015).
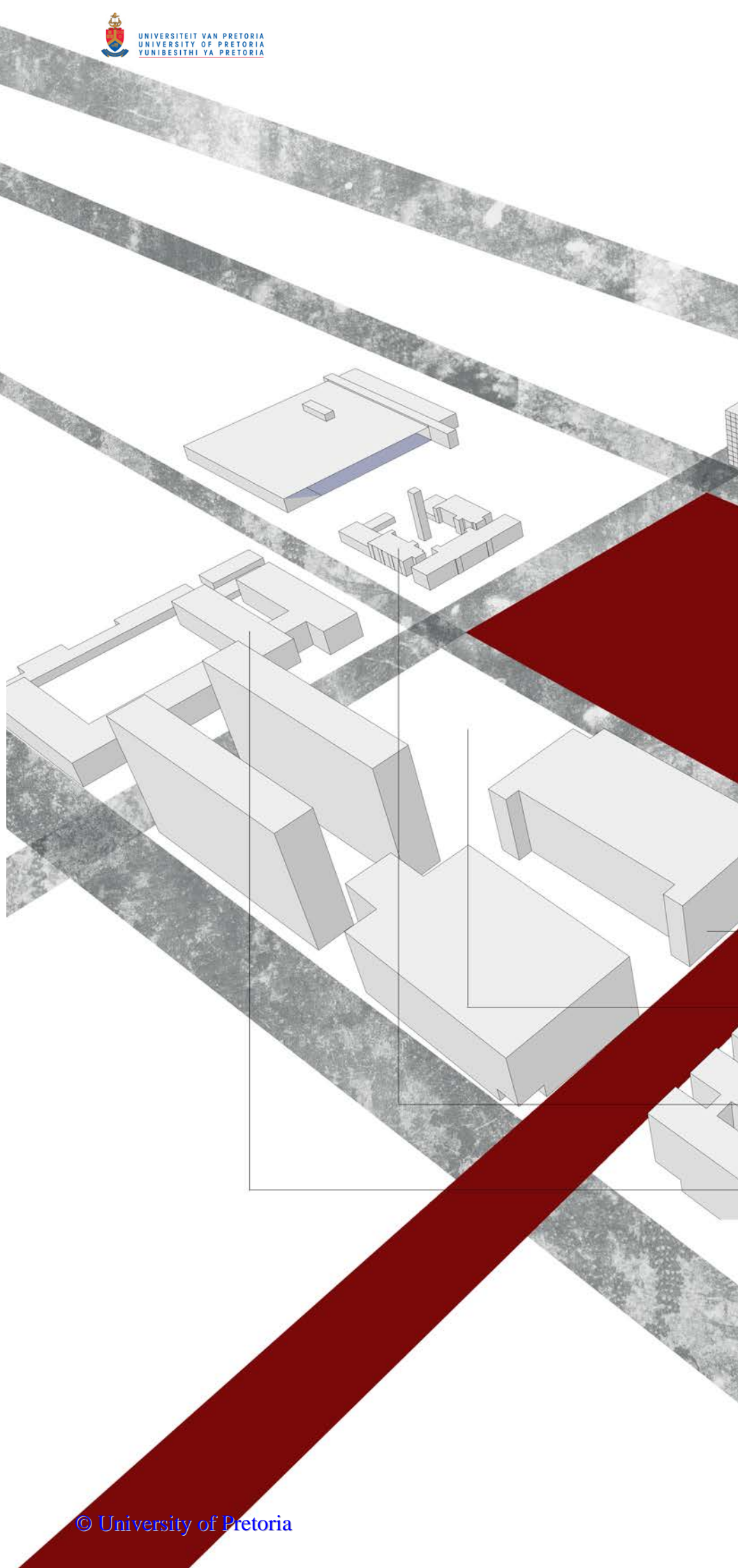
Figure 2.16 Right; Proposed Local Government Square (Author 2016)
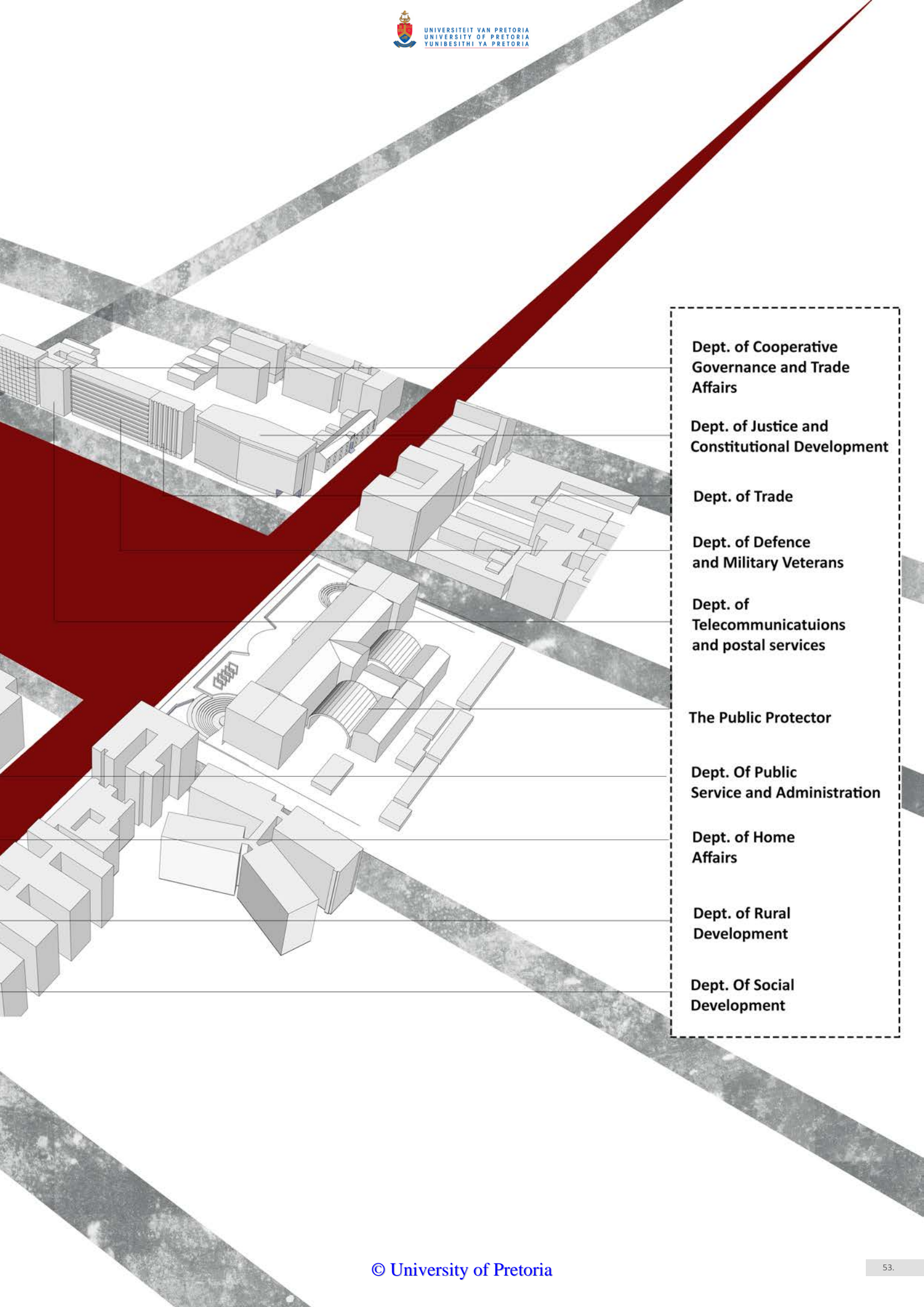
Dept. of Cooperative
Governance and Trade
Affairs

Dept. of Justice and
Constitutional Development

Dept. of Trade

Dept. of Defence
and Military Veterans

Dept. of
Telecommunicatuions
and postal services

The Public Protector

Dept. Of Public
Service and Administration

Dept. of Home
Affairs

Dept. of Rural
Development

Dept. Of Social
Development

Through the proposal of a single administrative district it is intended that a spatial development facilitating co-dependency between governmental organisations, political parties and the public would be created. In the new political climate, it is hoped that this would achieve a greater level of transparency in both government and the administration of the country.

2.7 - Intention

The city of Togo was founded in 1874 by African, British and German traders (Gervais-Lambony 2012: 46), and it was during this time that Lomé saw the development of its iconic double city core - these being the administrative core, and the commercial core which was centred around an existing market.

In the 1920s the French took control of Lomé and it was during this time that a change in urban policy could be seen through extensive building developments, such as the iconic Boulevard Circulaire, extensions to hospitals, and the construction of a town hall (Gervais-Lambony 2012: 48). It is during this change in power that Lomé experienced a major change in ideology to something that was more representative of a typical colonial city (Baskerville n.d).

Independence Square, which is situated in the administrative district of Lomé, has multiple layers of symbolism and ideologies. These layers include: the first place where the German powers sought to place their mark - occupation by political regimes as a display of power through the construction of political statues - a place for student demonstrations, and today, the home of the only skyscraper in Lomé (Gervais-Lambony 2012).

The period between 1920 and 2006 was characterised by a struggle for control over public space through demonstrations and protests aimed at being as visible as possible (Gascoigne 2001; Gervais-Lambony 2012). A feature of Lomé, which can be seen as similar to that of Paul Kruger Street in Pretoria, is its historic protest route. Protests would move along this iconic route as it held significance for the history of Lomé. Demonstrations and protestors would gather at the Dove of Peace statue and move along main roads with the final destination being Independence Square (Gervais-Lambony 2012).

What is it that made a single square - Independence Square - and a route to the square such iconic spaces in the city? As was suggested, a capital city is successful in the way that it restructures and reinterprets the past so as to better represent ideologies of the present, therefore, though the square and the protest route were built during different times, their significance has remained current due to the fact that each generation of power was able to utilise these spaces as a means of expressing their control over the city.

Figure 2.17 Top (1); Lome Map (Operationworld.org 2016).
Figure 2.18 MIddle (2); Suburbs of Lome (Bekker & Therborn 2012).
Figure 2.19 Top Right (3); Independence Square (Bekker & Therborn 2012).
Figure 2.20 Right Middle (4); Dove of peace (Bekker & Therborn 2012).
Figure 2.21 Right Middle (5); Main political areas and routes (Bekker & Therborn 2012).
Figure 2.22 Right Bottom; Capital City (Clarky 2016)

1.

2.

1. AGOENYIVE
2. ADIDOGOMÉ
3. AGBÉLÉPÉDOGAN
4. DJIDJOLÉ
5. HEDZRANAWOÉ
6. TOKOIN WUITI
7. TOKOIN SECONDARY SCHOOL
8. GBADAGO
9. TOKOIN HOSPITAL
10. OCTAVIANO NÉTIMÉ
11. NYÉKONAKPOÉ
12. KIDJOVIAKPOÉ
13. ADMINISTRATIVE QUARTER

Public land
Lomé commune boundary
Suburb boundary

3.

4.

5.

RPT area
Usual routes for the RPT demonstrations
Opposition area
Usual routes for the opposition's demonstrations
Places of confrontation
Meeting points
Lomé commune boundary

03

Heritage

Figure 3.1 Pretoria City Hall Tower (Author 2017)

Figure 3.2 Pretoria, the new town hall
(Eskia Mphahlele Library 2017)

3.1 - Statement of Significance

In the city centre of Pretoria, positioned along Paul Kruger Street between Pretoria Station in the south and Church Square in the north, is situated the prominent yet unused Pretoria City Hall. Constructed in 1926 to celebrate the recognition of Pretoria as the new capital city (Herring 1935) of South Africa, it now stands unoccupied, with its powerful eastern façade and single tower acting as a backdrop to a square mainly used as a parking lot. It serves as a reminder of the past and its presence in today's society. It acted as a public platform and seat of the Mayor, which established its position as a valued civic centre in the city; therefore, the heritage value not only relates to city hall's physicality but also to its intangible contribution to civil society. For this reason, it is imperative that the lost function of the City Hall as a civic centre be reinstated.

Pretoria city hall was constructed during a period in history when the Afrikaner nationalist party was mandated to strengthen its position in the country as well as establish an institutional identity (Mabin 2012) to separate itself from the rest of the population. Although these intentions are no longer responsive to the current political climate, it is the use of the Pretoria City Hall in the representation of the political identity of the time and its ability to facilitate public interaction that is its most significant

heritage aspect.

The aspects which contribute to the heritage of Pretoria City Hall are those that facilitate the creation of the institutional identity, and include its use as a civic centre. These can be addressed through two 'lenses', tangible and intangible.

The most identifiable characteristic of Pretoria city hall is its single tower standing 47 metres above ground level (Picton-Seymour 1989). The significance of the single tower to both the City Hall and Pretoria is the conscious decision made to alter the original design, which contained two towers, to prevent these from competing with the two towers of the Union Buildings (Artefacts 2017). Presently the tower is no longer the tallest structure in the immediate context yet, the surrounding buildings do not dominate or reduce the towers presence. The retention of City Hall's vertical presence can be attributed to the main façade and its emphasis of the horizontal plane.

Given the significance of Pretoria City Hall in its recognition of the new capital city, it was designed to conform to the modern ideals of the time and adopt a Renaissance style (Herring 1935), as is evident in the simplicity and balance of its main façade. The main façade is the only façade constructed out of sandstone (Herring, 1935) which, through the sizing and laying of the sandstone blocks over its 108 metre width, emphasises its horizontality.

On the main façade is the porte-cochère and its ten solid granite columns topped with hand carved capitals supporting a pediment depicting the progress of Pretoria (Herring 1935). The porte-cochère was embellished so as to correspond with the Renaissance style, as well as to emphasise its significance as both a threshold through which the user enters the building and the linking element of the tower to the rest of the structure.

Internally, the two most significant volumes contributing to the value of City Hall are the main hall and the council chambers. These two volumes embody that which City Hall was constructed to represent. The main hall, considered to be one of the largest rooms in the southern hemisphere (Hartdegen 1988), continues the influence of the Renaissance style and played an important role in the building as it was the place from which the public could express themselves through plays, symphony concerts, shows and dances.

The council chamber, situated on the first floor of the southern wing, played an important role in the political climate as it was the seat of the mayor as well as the space in which important political issues concerning the city were dealt with. Containing a gallery reserved for the public (Herring 1935), it was important as it facilitated the overlay between the public and politics. Furthermore, the council chamber was the only space within City Hall designed with stained glass windows which represent the iconography of the political powers of the time.

The intangible aspect of Pretoria city hall contributing to its value is its internal adaptability to the programming of functions through which the building was able to facilitate public interaction at varying scales and for varying purposes. It is imperative that this intangible contribution be retained in order to adequately reinstate City Hall as an important civic centre.

Pretoria city hall is regarded as a valued heritage building and is subject to the National Heritage Resources Act (Act No. 25 of 1999) as it is more than 60 years old.

Figure 3.3 Aerial view of the new City Hall in Paul Kruger Street with the Transvaal Museum and the NZASM Head Office (Eskia Mphahlele Library 2017)

Figure 3.4 An artist's drawing of the winning design submitted in the Figure competition for the new hall by Mr. J. Lockwood (Eskia Mphahlele Library 2017)

Figure 3.5 The City Hall in Paul Kruger Street during construction 1934 (Eskia Mphahlele Library 2017)
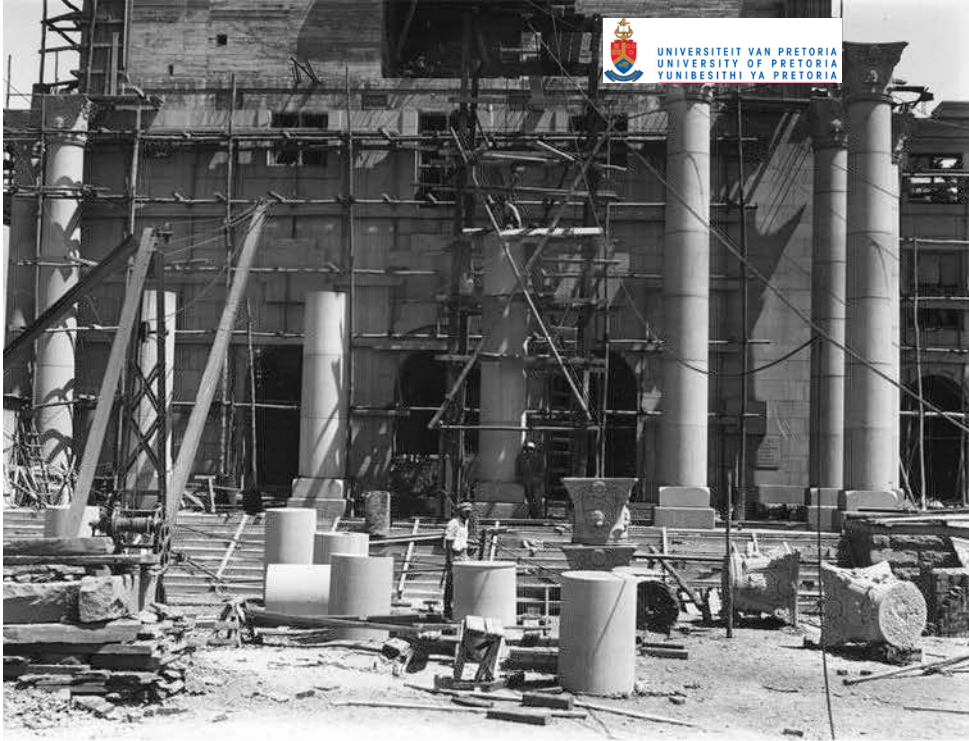
Figure 3.6 The City Hall in Paul Kruger Street during construction 1934 (Eskia Mphahlele Library 2017)

Figure 3.7 The erection of the equestrian statue of Andries Pretorius on Pretorius Square 1955 (Eskia Mphahlele Library 2017)

Figure 3.8 The official opening ceremony of the City Hall by the Officer Administering the Government, Sir Johannes Wessels (Eskia Mphahlele Library 2017)
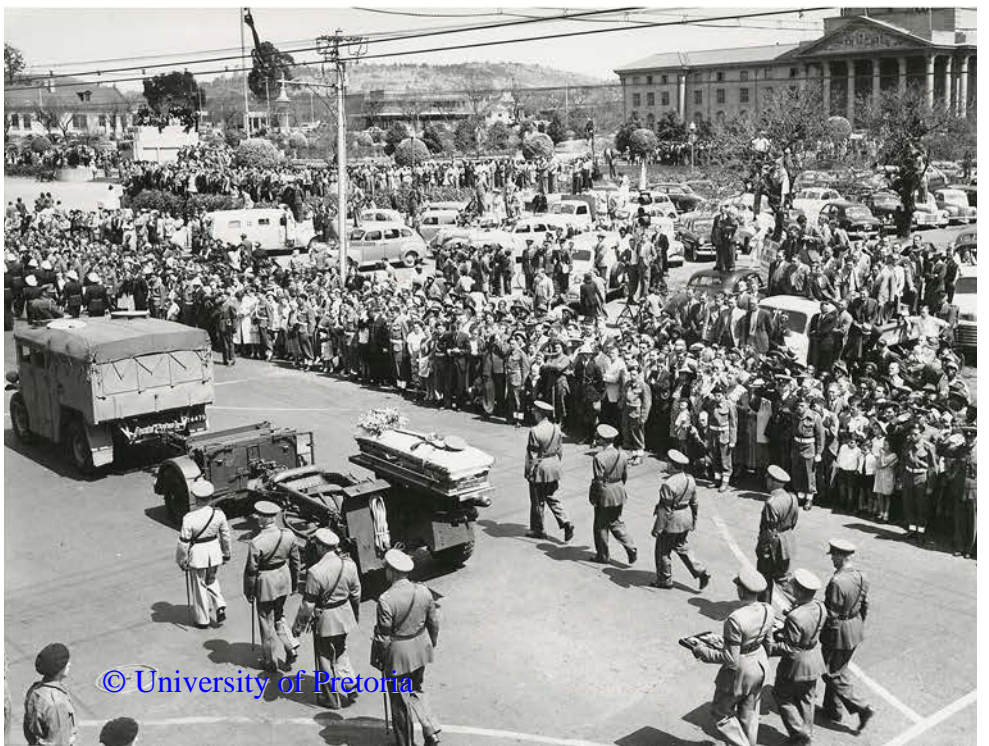
Figure 3.9 Municipal election 1955
(Eskia Mphahlele Library 2017)
Figure 3.10 50th jubilee of the
Pretoria-Lourenco Marques Railway
Line (Eskia Mphahlele Library 2017)
Figure 3.11 322 Funeral procession of
General J.C. Smuts along Paul Kruger
Street on the way to the railway station
1950   (Eskia Mphahlele Library 2017)
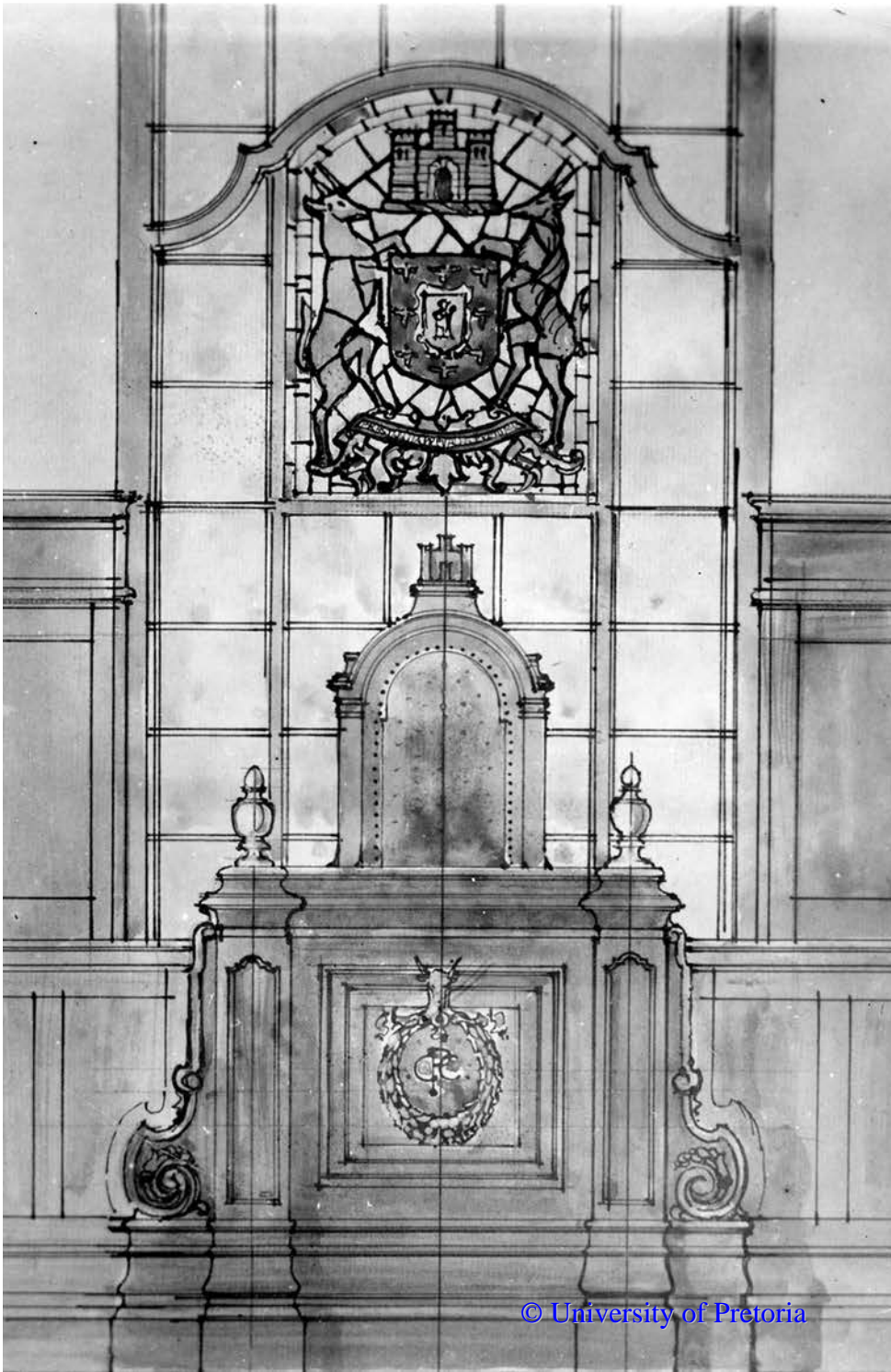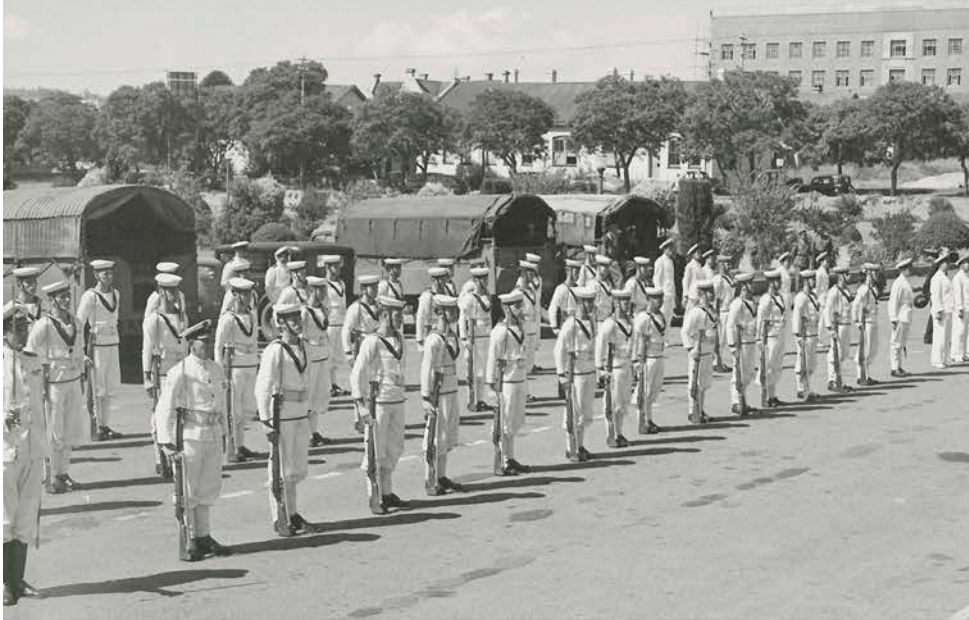
Figure 3.12 His Majesty's Ship Nigeria's crew and officers visit Pretoria 1947 (Eskia Mphahlele Library 2017)
Figure 3.13 Design of the seat of the mayor (Eskia Mphahlele Library 2017)

3.2 - Heritage Standpoint

The standpoint from which the thesis project has developed is that of questioning that which provides the building with significance, tangible and intangible, within the context of a democratic city.

As stated, the practise of adaptive reuse in architecture, as a strategy to preserve and respect its heritage, is considered important in the conservation of cultural heritage through the implementation of its three strategies namely typological, technical and architectural. In order to adequately respond to the City Hall, the typological and architectural strategies will be adopted so as to better respond to the building at both a physical and programmatic level.

The architectural strategy for the rejuvenation of Pretoria City Hall is controlled by the National Heritage Resources Act (Act No. 5 of 1999) and The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance (2013). Through an understanding of the cultural, social and political value of the Pretoria City Hall it is possible to establish a statement of significance.

Appropriate guidelines set out by the Burra Charter which will act as an architectural conscious for the design include:

Article 2. Conservation and management

Places of cultural significance should be conserved through the act of conservation with the aim to retain as much cultural significance of place as possible though careful management and be safeguarded and not put at risk or be left in any sort of vulnerable state (International Council on Monuments and Sites (ICOMOS) 2013: 3).

Article 3. Cautious approach

Conservation of culturally significant structures is founded on a respect for existing fabrics, uses, associations and meanings requiring a cautious approach to changing as much as necessary but as little as possible so as to not distort any contribution provided by the structure (ICOMOS 2013: 3).

Article 4. Knowledge, skills and techniques.

Conservation should make use of appropriate knowledge, skills and techniques which contribute to the care of the structure and celebrate, through the use of modern techniques and materials, by adding value to the significance of the structure (ICOMOS 2013: 4).

Article 7. Use.

Where the use or function of a place is of cultural significance, it should be retained to the effect that minimal changes to the existing fabric are made and new appropriate functions added on to ensure a continuation of the existing significance (ICOMOS 2013: 4).

Article 13. Co-existence of cultural values.

The co-existence of different values is always recognised, respected and encouraged through the conservation of past and present political, religious, spiritual and moral beliefs where conflict has arisen through the adaptation of the structure (ICOMOS 2013: 5).

Article 21. Adaptation

Adaptations of the existing, while allowed, need to provide a contrast between the new and the old so to allow for legibility between the two, while maintaining minimal impact on the cultural significance of the place (ICOMOS 2013: 7)

3.3 - Existing Condition

Figure 3.14 Parking on Southern edge of square (Author 2016)
Figure 3.15 New fence put in to restrict access at Northern Wing (Author 2017)
Figure 3.16 Northern edge of city hall from existing parking lot. (Author 2016)

Figure 3.17 Back of city hall from Bosman Street (Author 2017)
Figure 3.18 Southern edge fence condition (Author 2016)
Figure 3.19 View up Minnar Street on the southern edge of Pretorius Square (Author 2017)

Figure 3.20 View from neighboring parking lot on Minnar Street towards City Hall (Author 2017)
Figure 3.21 Southern edge of Pretorius Square (Author 2017)
Figure 3.22 Main axis up Pretorius square with Marthinus Wessel Pretorius (Front) and Andries Pretorius (back) Statues (Author 2017)

Figure 3.23 Andries Pretorius on his horse (Author 2017)
Figure 3.24 Morning commute through Pretorius Square to church (Author 2017)
Figure 3.25 NZASM building from Pretorius Square (Author 2017)

Figure 3.26 Pretorius Square user (Author 2017)
Figure 3.27 Pretorius Square Fountain (Author 2017)
Figure 3.28 Landscaping in front of City Hall (Author 2017)

Figure 3.29 Paved surface on southern edge of Pretorius square (Author 2017)
Figure 3.30 Access stairs from south blocked by fence (Author 2017)
Figure 3.31 Stairs up to main entrance from the north (Author 2017)

Figure 3.32 Existing condition of entry hall of Pretoria City Hall (Author 2017)
Figure 3.33 Office being used to store building equipment and materials (Author 2017)

04
Contribution Paper

Figure 4.1 View from Pretorius Square towards Pretoria city hall with Andries Pretorius statue (Hoffman 2017)
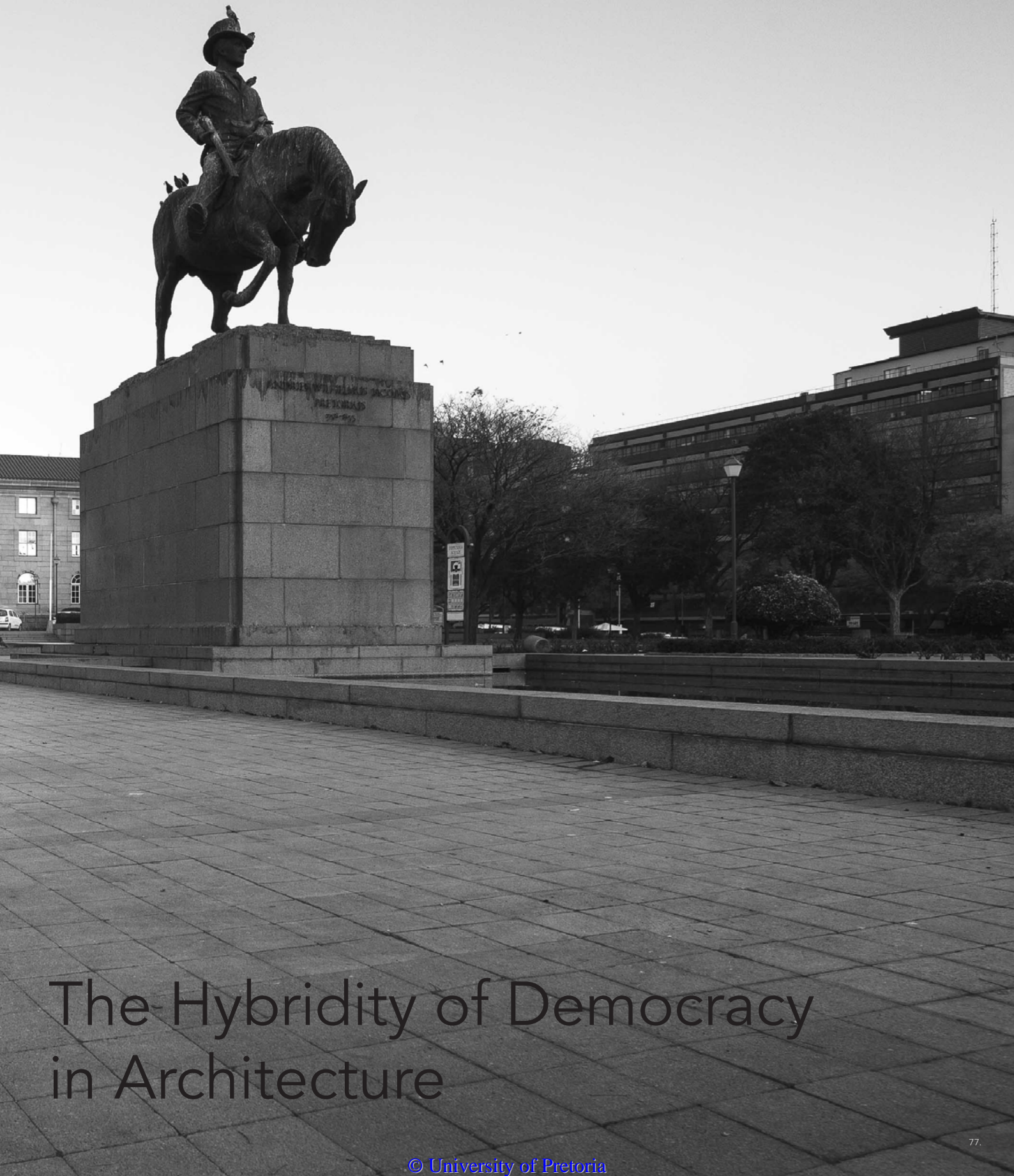
The Hybridity of Democracy in Architecture

In recent South African history, there appears to have been an increase in dissatisfaction with government and those in power (Burger 2014). A strong identifiable marker, throughout history, of dissatisfaction with government can clearly be seen in the act of protest. The act of protest is not unique to South Africa. Protest has been used as a tool, by the masses, to fight against inequalities all over the world. Gandhi's Salt March, the March on Washington in 1963 (Begley 2015), the Tiananmen Square Protests of 1989 (Chirila 2017) and the Zuma Must Fall protest of 2017 (Henderson 2017) are all examples of mass action fighting against inequality. Though protest is focused on putting forward a specific mandate, social or political, it is important to remember that protest physically and symbolically occupies space.

In an exhibition designed and curated by Tali Hatuka, she identifies that protest can be broken down into three core elements: Voice, Appropriation and Boundaries (Hatuka 2008). Through this break down, it is argued that protest utilises space (appropriation) so as to better facilitate its needs (Hatuka 2008) and, by doing so, influences the stages of the protest (boundary), ultimately influencing its effectiveness (voice). It is evident in the use of the Lincoln Memorial during the March on Washington, the occupation of Tiananmen Square by students, and the march towards the Union Buildings during the Zuma Must Fall protest that, in each case, the public chose to appropriate an important civic institution. Through this appropriation an established boundary was altered so as to emphasise the effectiveness and power of the protest's voice in bringing across the issues which the protesters were fighting for or against. The utilisation of the aforementioned civic institutions supports Cynthia Nikitin's (2009) argument of the importance and contributed value that civic institutions such as city halls, libraries, parks, squares and museums provide to the city. Through being occupied by protest these act as platforms on which democracy can be asserted.

Recently, South Africa has seen the darker side of protest and its appropriation of civic institutions

Figure 4.2 Above; Bloemfontein City Hall (Carviloria 2013)

Figure 4.3 Above; Blaze taken hold in the main hall (Roos 2017)

in the burning of Bloemfontein City Hall on June 21st, 2017.

After the Mangaung Metropolitan Municipality failed to sign an agreement with striking municipal workers a battle between them and the local police erupted (eNCA 2017) outside Bloemfontein City Hall. During the dispute, some of the municipal workers were able to get into the City Hall and set it alight. The blaze took hold, with the result that the building's roof collapsed (Mabena 2017). The act of burning the building see's the transition of a democratic protest for equality into that of anarchy. Bloemfontein City Hall is protected under the National Heritage Resources Act and it is therefore considered to be a National Heritage Building and a great tragedy for the heritage of the country.

The protest that led to the burning of Bloemfontein City Hall raises a few questions. The first concerns the importance and value of our heritage buildings to the country and their role in the country's political environment.

The second issue is that, if it is felt that to be heard, drastic action has to be taken such as burning down Bloemfontein City Hall, what can be done through architecture to help prevent this from happening again? How can architecture of the past be reactivated so as to facilitate the public in its fight for equality through constructive engagement with architecture and, by doing so, reposition and strengthen its value in society?

The disaster – to South Africa's heritage, the public and the city of Bloemfontein – strengthens the argument towards the reactivation of past political structures in South Africa, providing a backdrop for the paper as to why it is so important to specifically focus the study on Pretoria City Hall. Doing so may prevent future disasters as well as provide an important platform from which unrest can be expressed democratically.

3.

Figure 4.4 Above; Aftermath (Steyn 2017)

4.2 - Democracy

What is democracy and how does democracy affect us and the spaces we find ourselves in? Democracy has a different meaning for each person, depending on their background (Bassiouni 1998: 2). In this paper it will be attempted to clarify and establish an understanding of democracy through two aspects, firstly by identifying the issue of democracy specifically as related to South Africa's political canvas and, secondly, how architecture, new and old, is able to facilitate the process of democracy. Initially this will be done through a general understanding of democracy, which will then be specifically elaborated on with regard to the context of South Africa.

Democracy is greatly steeped in our global political environment, and is actively used as an identifiable term for freedom i.e. 'The Democratic Republic of South Africa'. In order to understand the value of architecture in facilitating the democratic process, it is important to understand what democracy stands for and what the democratic process entails.

de•moc•ra.cy

/dɪˈmɒkrəsi/
[mass noun] A system of government by the whole population or all the eligible members of a state, typically through elected representatives. 'a system of parliamentary democracy'

(Oxford Dictionaries I English, 2017)

Greece was the first nation to create states whereby groups of people were responsible for the administration and making of policy (Ehrenberg 1950: 515) which all citizens were to follow. Ehrenberg (1950) argues that a constitution or democracy, unless imposed, has no set date of origin. It therefore grows with society and, by looking at its progression, one is able to identify events marking the progression of its growth.

It is through an understanding of the ancient Greek practise of demokratia and the functions set out by the Roman Republic that our Western or modern understanding of politics (Isakhan & Stockwell 2011: 1) has developed. There are many different definitions of what democracy is, with little consensus on an ultimate definition being established. As a result, the fundamental questions surrounding democracy (Isakhan et al 2011: 1), such as the necessary conditions for its development, how to measure it, what or who is to maintain it, and how it is supposed to be best conducted today, remain unanswered. Isakhan and Stockwell (2011) argue that there are two main thought groups relating to democracy.

The first group subscribes to a minimalist definition whereby it is argued that a small group of elite representative institutions become responsible for the control of the country (Isakhan & Stockwell 2011:2). The second group argues for a more inclusive strategy where by all citizens are equally involved in the decision-making process.

What is characteristic of democracy is its ability to facilitate debates about ideals and, by doing so, creating opportunities for growth. Isakhan and Stockwell (2011) argue that central to establishing a definition of democracy should be its dynamism and responsiveness to the will of the people.

Modern day democracy itself is a varied and adaptable organism which, through the creation of a sense of ownership, could help encourage the publics fight against oppression towards equality (Isakhan & Stockwell 2011: 223). The fight for equality is unique to each group as it is the product of history and compromise in the search for democracy, which supports Ehrenberg's (1950) argument that democracy grows and changes with society. Isakhan and Stockwell (2011: 224) suggest that there is a need to move beyond our standard understanding of democracy towards a more inclusive and robust narrative.

4.2.1 - Democracy of Space

Democracy is not initially interpreted as a physical entity, but is rather seen as a collective idea present within all. In order to develop a physical understanding of democracy, Bassiouni (1998:5) suggests that democracy can be broken down into three separate entities of equal power – Judicial (process), Administrative (condition) and Legislative (outcome) – and in South Africa each one of these entities is facilitated in a capital city – judicial in Cape Town, administrative in Pretoria and legislative in Bloemfontein.

The judicial identity of democracy is argued to be the process of democracy (Bassiouni 1998: 5). Being the process, it is focused around courts of law which interpret and apply the laws set out by the elected government. It acts as the foundation from which disputes and wrong-doing are resolved. Spatially, the judicial identity could be represented as clearly defined and with strong lines relating more specifically to the process of law enforcement.

The administrative identity of democracy is argued to be the condition of democracy (Bassiouni 1998: 5). It is the result of that which has been decided in the judicial process. It looks at the general functioning of the city and its people, from the micro scale of house hold regulations to the macro scale of nationwide distribution. The process of administration sees a stronger overlay between public and private interaction, and therefore, it could spatially be represented by a focus on engagement with the public so as to better encompass and facilitate the democratic process.

The legislative identity of democracy is argued to be the outcome of democracy (Bassiouni 1998:5). It follows the processes and conditions whereby it learns from what has been done and takes the knowledge gained to further the democratic process through the construction or development of new laws. The legislative aspect or outcome of democracy is where that which has been argued for and debated about, is taken from the masses by elected representatives and put into practise, if it is felt to genuinely represent the will of the people. Spatially, this is represented by parliament and seats of government. The spatial value of such places is that architecture becomes representative of the elected powers and therefore needs to be spatially all inclusive whereby layers of inclusivity are representative of the process that has led to the elected seats.

Figure 4.5 Above; Collage of Precedents (Author 2017). Top, The Reichstag (Foster & Partners 2017). Middle, Constitutional Court of South Africa (EWN 2017) Bottom, The Dresden Military History Museum (Dresden. 2017).

4.2.2 - Democracy and International Architecture

Space is a social construct relevant to the understanding and perception of different histories of mankind as well as to the production of cultural phenomena (Warf & Arias, 2009), suggesting that, though different cultures and societies have seemingly developed separately from one another, our shared understanding comes from the creation of these historical and cultural spaces and their shared characteristics. Therefore, as a means of understanding the context in which architecture in South Africa is situated, it is important to study the architecture being done in the rest of the world. One is able to position this architecture and understand its contribution to architecture locally, nationally and internationally through understanding the greater context and way of thinking about space. To achieve this, an exploration of architectural precedents is done through three lenses: a functional lens, a formal lens and a contextual lens.

The functional lens looks at architecture preforming a programme, use or task similar to that seen in the history of the building being studied. The formal lens looks at architecture set in a similar physical structure such as Pretoria City Hall. Lastly, the contextual lens looks at architecture set in a similar environment, be it a physical or political context, or architecture which is attempting to deal with similar issues, be they tangible or intangible.

The functional and formal lenses will be discussed specifically as they relate to international precedents, and the contextual lens will be focused on a South African precedent.

Dresden Military History Museum, Dresden, Germany. Studio Libeskind.

On describing the Dresden Military History Museum Daniel Libeskind said that the intention of the architecture was to create a bold interruption that interacts with the structure's history, creating a new experience through which the public is able to directly engage with the issues of organised violence and its involvement in the fate of the city (Libeskind 2011).

Therefore, through a bold juxtaposition of the new ideals of society, the Dresden Military History Museum sees architecture acting as a physical commentary on the negative aspects representative of the past of both the structure and the city.

Looking at Dresden Military History Museum through a functional lens focuses on how the new building addresses the old through its programme. The new addition is a continuation of the old programme of the structure and it is through the stark contrast in architectural languages that Libeskind is able to develop a dialogue between the two. The old architecture is heavy, ordered and rigid, indicative of the views and ideals of the time of its construction, and which are carried through internally in its strong horizontal, chronological ordering. The new architecture, on the other hand, drastically cuts the ordering of the old, highlighting the differences in societal views, and its strong fight against the ideals of the old, through stark contrasts with both its lack of symmetry and its material choices and construction method.

Functional Lens

Functionally, the new respects the old through the overlay and programming of new functions with those similar to its previous condition. New circulation, horizontal and vertical, is found either adding to or connecting with old circulation routes. New museum spaces overlay the old and, by doing so, strengthen the idea of society's new stance.

The value established by the Dresden Military History Museum is that of a tangible representation of the strength of democracy and its responsiveness to growth. The architecture embodies this strength not through its rejection of the past but through its

recognition of it. The past cannot be altered, therefore the architecture does not attempt to take away from what once was but rather, it uses the old as a symbolic and physical foundation, onto which it grows as a metaphor for learning from the past and using that to create a better future.

Figure 4.6 Right top (1); Aerial of Dresden Military History Museum (Studio Libeskind 2017).
Figure 4.7 Middle Left (2); Approach (Studio Libeskind 2017).
Figure 4.8 Middle Right (3); Internal museum (Studio Libeskind 2017).
Figure 4.9 Bottom Left (4); Circulation of the new into the existing (Studio Libeskind 2017).
Figure 4.10 Bottom Middle (5); The new architecture breaking out of the existing (Studio Libeskind 2017).
Figure 4.11 Bottom Right (6); Viewing platform in the new (Studio Libeskind 2017).

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Reichstag, Berlin, Germany.
Foster and Partners.

Construction of the Reichstag commenced in 1884 following the founding of the German Empire in 1871. Throughout its existence the Reichstag has been at the centre of Germany's political environment, acting as the architectural representation of the German government (The Reichstag in Berlin, 2017). Its importance to German society was established further when the Nazi regime allegedly started a fire in the building, almost entirely destroying it (The Reichstag in Berlin, 2017). The building was further damaged during World War II; the Berlin Wall was built behind the structure in 1961, and it remained unoccupied until 1990 when it became the seat of Parliament (The Reichstag in Berlin, 2017).

The building was completed in 1999 and was reconstructed with four main intentions: to become a physical embodiment and representation of democracy; to developing an understanding of history; to focus on a commitment to public accessibility; and to develop an environmental standpoint (Foster & Jenkins, 148; 2007) representative of a capital city.

The addition to the building was done with a focus on the level of respect paid to the existing. The main façade has been left untouched, with only subtle hints of the modern visible behind the historical skin. Formally, the Reichstag saw the reactivation of the old through the placement of the parliament. The structure has played a role in the identity of the powers of the time, and it is through Norman Foster's subtle play between the new and the old in his selection of contrasting materials that the new democracy is embodied. The transparency of the current government is represented through the use of light-weight construction and the public nature of the addition.

Formal Lens

Formally, the structural presence of the addition to the Reichstag represents a political stance. There is a strong overlay of public and politics achieved by very specific design choices. Strongly represented in the new structure is the reinstatement of the old programme. Functionally, the building is reactivating what it was originally intended to do but with a different core intention, namely public

interaction. This intention is represented by the openness of the new and the focus on shared movement through the main entrance, followed by the movement of the public up through the building above the main discussion chamber.

The value established by the Reichstag is that of both a tangible and intangible representation of democratic growth. Through Foster's sensitive approach to the existing architecture, clear lines are developed from which anyone can understand the relationship between the new and the old. While the new architecture builds onto the existing, it also celebrates the old through a clear difference in materials as well as by protecting existing graffiti scratched into the old structure. It is through the focus on the value of the public within democracy that the architecture both represents the elected government and facilitates, at a symbolic level, interaction of the public with the democratic process.

Figure 4.11 Right top (1); The Reichstag (Cyganiak 2015)
Figure 4.12 Middle Left (2); The Reichstag wrapped in fabric by artist Christo in 1995 (theibtaurisblog 2012)
Figure 4.13 Middle Right (3); New entrance in the existing (Pitch 2017)
Figure 4.14 Bottom Left (4); Graphite left in The Reichstag by German soldiers during the war (Barnard 2015)
Figure 4.15 Bottom Middle (5); View of the Parliament from the public viewing platform (Cyganiak 2015).
Figure 4.16 Bottom Right (6);
Pubic glass dome above Parliament (Cyganiak 2015)

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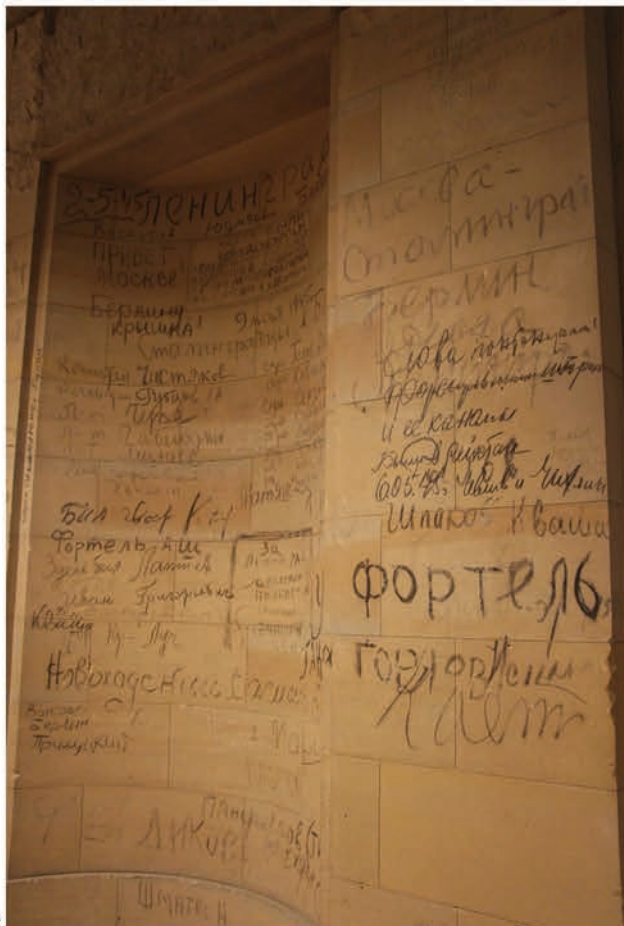
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Constitutional Court of South Africa, Johannesburg, South Africa.
OMM Design Workshop and Urban Solutions architects and Urban Designers.

The Constitutional Court was commissioned by the Department of Public Works to act as a civic space, with the intention of the design being representative of the change from the old systems of Apartheid to the current condition of constitutional democracy (King & Flynn 2012). The court is built on a site which contains the historically notorious Johannesburg prison which, through its life time, was the home of hundreds of thousands of prisoners including Mahatma Gandhi, Albert Luthuli and Nelson Mandela. The selection of the site adjacent to the fort is symbolic in its presence and articulation. Through uncovering the richly layered and painful narrative of the site, the building is able to reactivate and recreate the site into a space which is symbolic of the freedom of our democracy (Noble, 2009).

Architecturally, how the Constitutional Court's respondse to the heritage of the site is both tangible and intangible. The tangible refers to the physical contestation developed between a prison and a constitutional court of law, as represented in the openness experienced by the user in the transition between Constitutional Square and the entrance, which is an attempt to recreat a traditional African court under a tree (Noble 2009: 116). The structure's openness is further encouraged through the programmatic incorporation of a gallery. The intangible aspect of the Constitutional Court is a response to core human rights issues experienced at the prison; this being the infringement on basic human rights as a result of a mandate focused on the segregation and belittlement of the masses. The court is representative of the freedom argued for in both democracy and the Freedom Charter, which is in stark contrast to the prison.

Contextual Lens

Contextually, the Constitutional Court is situated deep within both the past and present political contexts of South Africa. Its programming and symbolism were selected as a literal rejection of the historic symbolism of the context. Contextually, the approach taken towards democracy represented in the Constitutional Court is different to that represented in the Dresden Military History Museum and the Reichstag. Instead of learning from the past and using the knowledge gained to act as a platform from which democracy is able to grow and progress as seen in both the Dresden Military History Museum and the Reichstag, the Constitutional Court chooses to completely reject the past and construct a new representation on the site.

The response seen at the Constitutional Court is indicative of the general thought processes and responses towards South Africa's negative history. After 1994 the new political leadership established a new attitude towards heritage in its removal of statues, the renaming of places, and the construction of new monuments and places of memory (Bakker & Muller, 2010). A disdain for the past and a focus on developing and growing the misrepresented histories of South Africa can be observed at the Constitutional Court.

After establishing an understanding of democracy, the question can be raised as to the appropriateness and effectiveness of the Constitutional Court. As mentioned, at the core to what democracy represents is its dynamism and responsiveness to growth which, can be interpreted as an ability to learn. It can therefore be argued that the Constitutional Court may have been more effective in its rejection of the past if it were to have taken a more direct approach towards the existing architecture. The notion of freedom represented by the court for our democracy may have been better represented through a re-appropriation and breaking of the metaphorical chains established by the existing.

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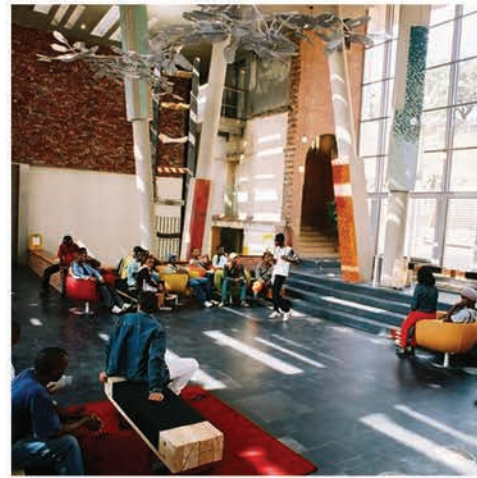
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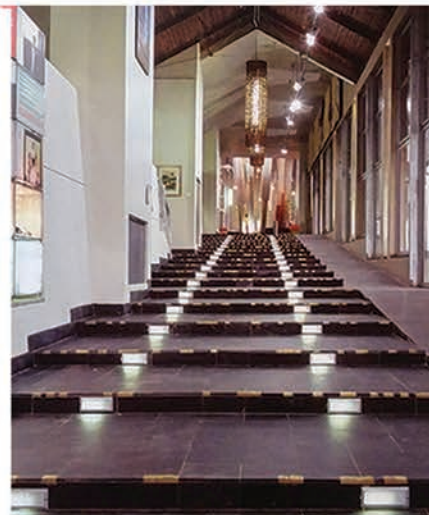
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4.3 - Democracy to the People

The South Africa of today is very different from the South Africa of the past. Its history is plagued with acts of injustice and discrimination. The political history of the period 1910 to 1961 can be characterised by two major currents, namely the development of a united opposition to white rule and to Afrikaner nationalism (Mabin 2017: 173). The growth of the united opposition to white rule was slow and plagued with defeat while the Afrikaner nationalists remained in power (Mabin 2012: 173). According to Mabin (2012) the Afrikaner nationalists had two main mandates, namely to strengthen their position in the country and to establish an institutional identity (Mabin, 173: 2012) separating them from the rest of South Africa's population.

On the 26th of June 1955, the Freedom Charter was written, providing a very clear description of what democracy meant to the people of South Africa when it was adopted in Kliptown (SAHO 2016). This was a very important moment in the political history of South Africa as it finally brought the African National Congress (ANC) together with Indian, Coloured and white organisations ultimately becoming known as the Congress of the People (SAHO 2016). The Congress of the People became the best represented gathering in South African history (SAHO 2016) and so marked a shift towards a more democratic South Africa.

WE, THE PEOPLE OF SOUTH AFRICA
declare for all our country and the world to know;
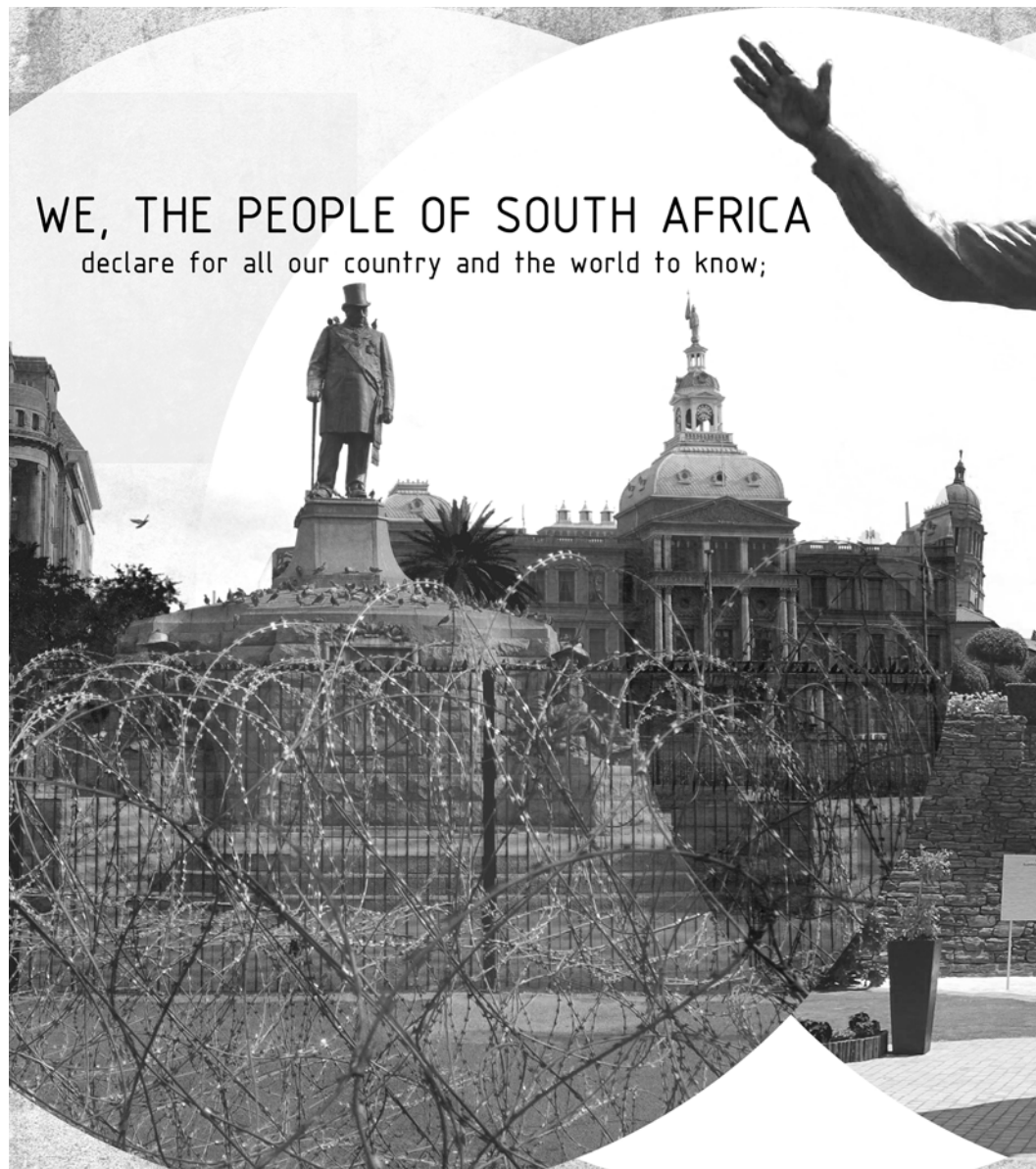
Although the Freedom Charter was written in 1955 it was not until 1994 that South Africa became a democracy.

Since 1994 South Africa has seen both positive and negative growth. Twenty-three years after democracy South Africa is a very different place. In the annual Freedom Day statement given by the ANC (2017), it was stated that great progress has been made towards the improvement of the quality of life of the public through investments in education, health and social securities. It was also noted that income inequality and the distribution of assets is at its most intense (ANC 2017).

It can be argued that the relatively uncontested seat of power and blind faith of the masses in the ANC, since the 1994 elections, have led to the formation of a government that frequently represents itself as being democratic yet does not act accordingly. The current government is plagued with accusations of corruption, state capture and public dissatisfaction as can be seen in Thuli Madonsela's State Capture Report (Madonsela 2016). Bassiouni suggests that democracy should be seen as an ideal which aims to preserve and promote the right of the individual as well as strengthen public cohesion within society (Bassiouni 1998: IV). Therefore, South

The Freedom Charter states (Congress of the People and the Freedom Charter 1955);

We, the People of South Africa declare for all our country and the world to know:

That South Africa belongs to all who live in it, black and white, and that no government can justly claim authority unless it is based on the will of all the people;

That our people have been robbed of their birth right to land, liberty and peace by a form of government founded on injustices and inequality;

That our country will never be prosperous or free until all our people live in brotherhood, enjoying equal rights and opportunities;

That only a democratic state, based on all the will of all the people can secure to all their birth right without the distinction of colour, race, sex or belief;

And therefore, we the people of South Africa, black and white together equals, countrymen and brothers adopt this Freedom Charter. And we pledge ourselves to strive together, sparing nothing of our strength and courage, until democratic changes here set out have been won.

Africa has a unique opportunity to experience democracy as it was stated in the Freedom Charter (1955), by fighting for the preservation and promotion of the individual as well as strengthening public identity.

Figure 4.23 Middle; We, The people of South Africa (Author 2017)

4.4 - Pretoria City Hall

The focus of the paper and the site chosen for the dissertation is the Pretoria City Hall and Pretorius Square.

As a way to celebrate Pretoria officially becoming a capital city (Herring 1935), a competition was held in 1926 for the design of a new city hall. Many of the design entries submitted proposed the inclusion of two flanking towers (Artefacts, 2017), which was the trend for such buildings – as can be seen in the design of Bloemfontein City Hall, also completed in 1935, as well as the Union Buildings, completed in 1913. With the selection of the design proposed by Joseph Lockwood Hall and Frank Gordon McIntosh, the design developed to move away from two flanking towers as it was thought that, in its proximity to the Union Buildings, these would compete too much with it. The redesign saw the development of a single tower in consultation with Gordon Leith (Artefacts, 2017), the architect responsible for the design of Bloemfontein City Hall.

Pretoria city hall was a civic building intended to instil a sense of pride and honour in those living in the capital city. Civic centres such as these, when located in places easily accessible to pedestrians, obviate the reliance on vehicles (Nikitin, 2009) by creating a city in which the public is able to develop a greater sense of identity. In history, civic centres were nodes of activity and life in the city. Pretoria city hall facilitated plays, shows, dances and banquets and was the seat of the mayor.

As mentioned before, the building was representative of the political structure of the time, when the existing government was mandated to establish an institutional identity, separating it from the rest of the population. The establishment of an institutional identity would be used as 'propaganda' towards the representation of the social and political advancement of the country to the rest of the world. Technologically, the building was advanced for its time, being designed with an air circulation system keeping the internal temperature at a constant level, as well as having its own power distribution plant (Herring 1935). Architecturally, the City Hall was significant as it was designed to conform to the classical renaissance ideals of the time (Herring 1935).

Its presence in Pretoria in 1935 was representative of the stance taken by the ruling government as, architecturally, the building did not reflect a democratic notion of governance but rather, it reflected the government separating itself from the rest of the population through strong stereotomic presence. The City Hall can therefore be suggested to have been successful in its embodiment of the government's views.

Presently it can be argued that Pretoria city hall no longer fulfils its role as an important civic centre to the urban inhabitant as it no longer represents the will and views of South Africa's democracy and its people. While still prominent in its presence, it appears to have become more of a folly of heritage value within the city rather than an active civic centre. It could be suggested that part of the reason for this, other than
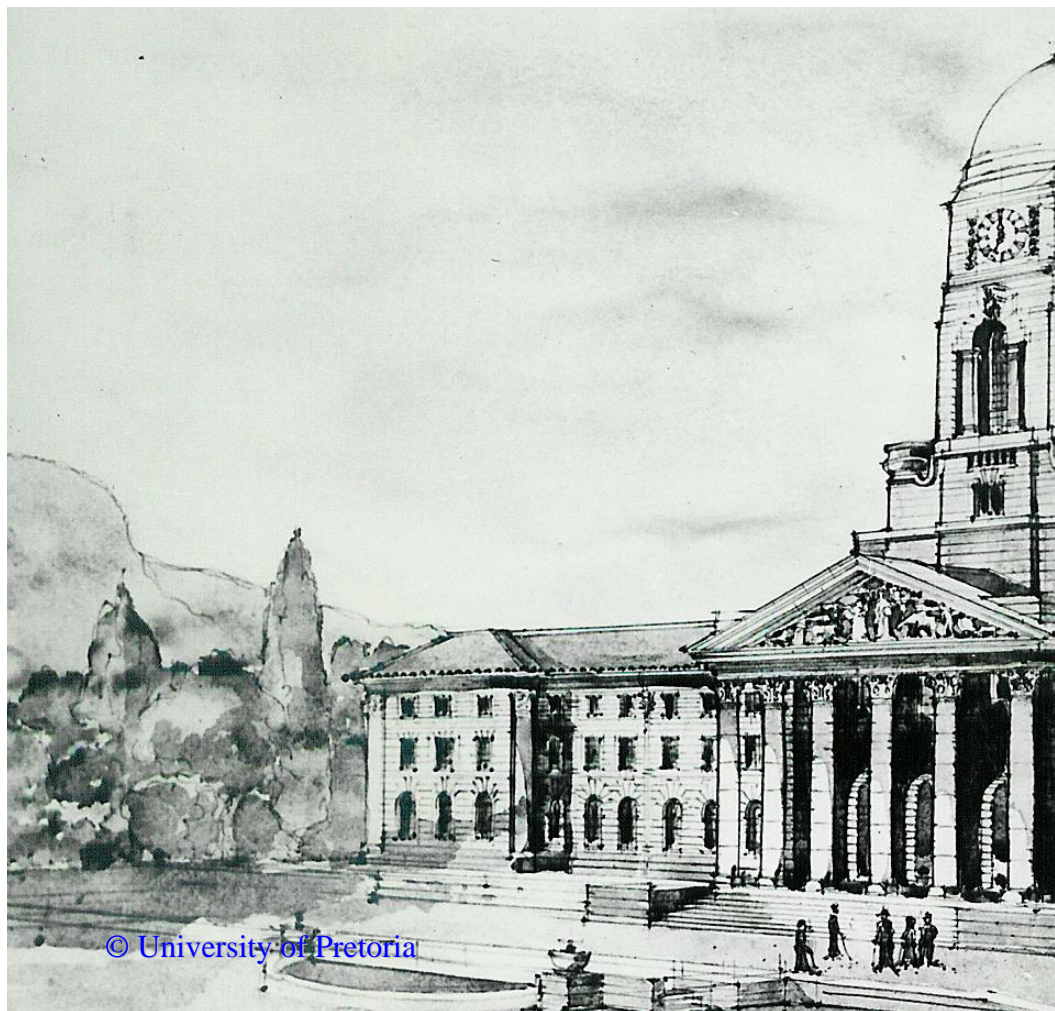
issues of management, funding, lack of public interest and poor upkeep, could be that Pretoria City Hall is viewed to be representative of the country's darker past. While the Union Buildings existed at the same time as the City Hall it has been given a seat of prominence and power throughout South Africa's political history and so has been used as a constant political reference point for all.

The paper therefore argues in support of the re-appropriation of Pretoria City Hall, so to prevent what happened at Bloemfontein City Hall, to learn from the short falls of the Constitutional Court and, by using these as precedents, learn from the mistakes in order to reactivate Pretoria City Hall to better represent the strength and will of our democracy.
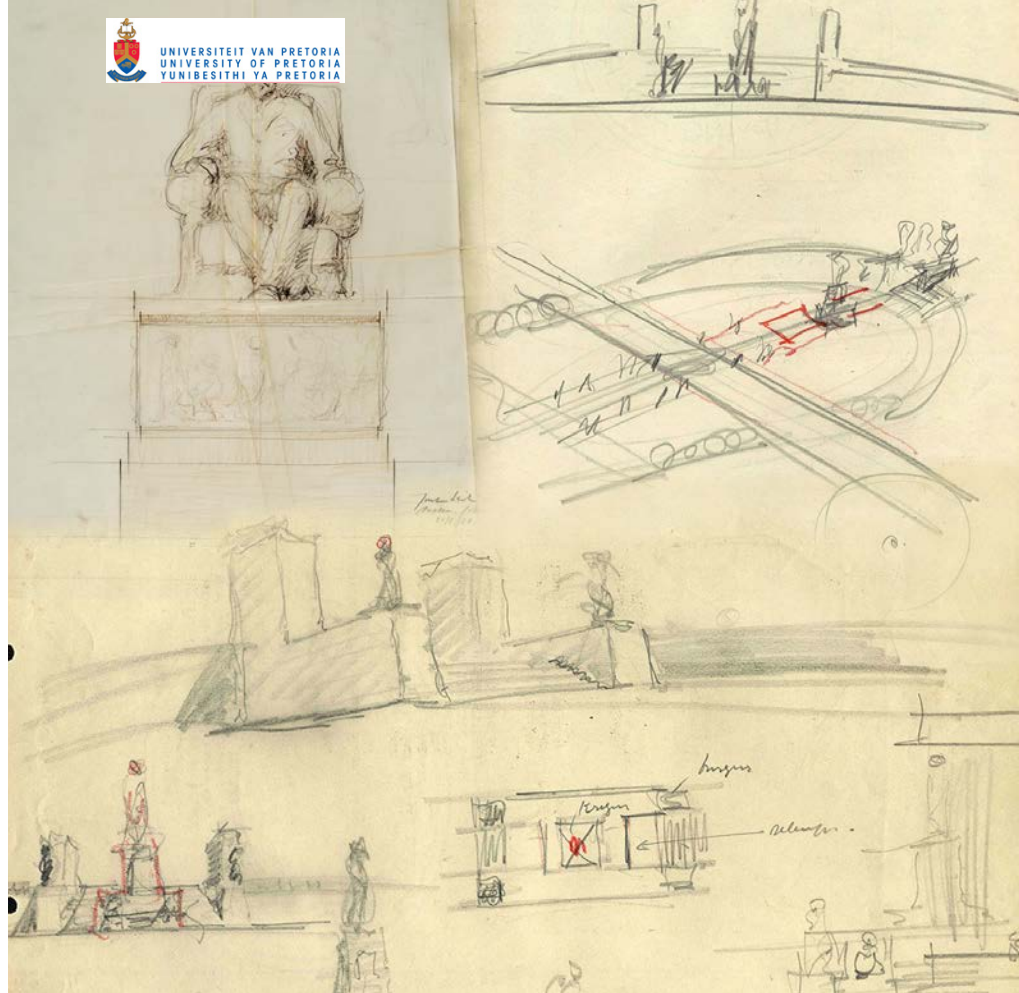
Figure 4.24 Above; Architects sketches (Hall n.d)
Figure 4.25 Below; Architects' drawing of the new City Hall in Paul Kruger Street (Eskia Mphahlele Library 2017)

Figure 4.26 Right; Theory Process and Application (Author 2017)
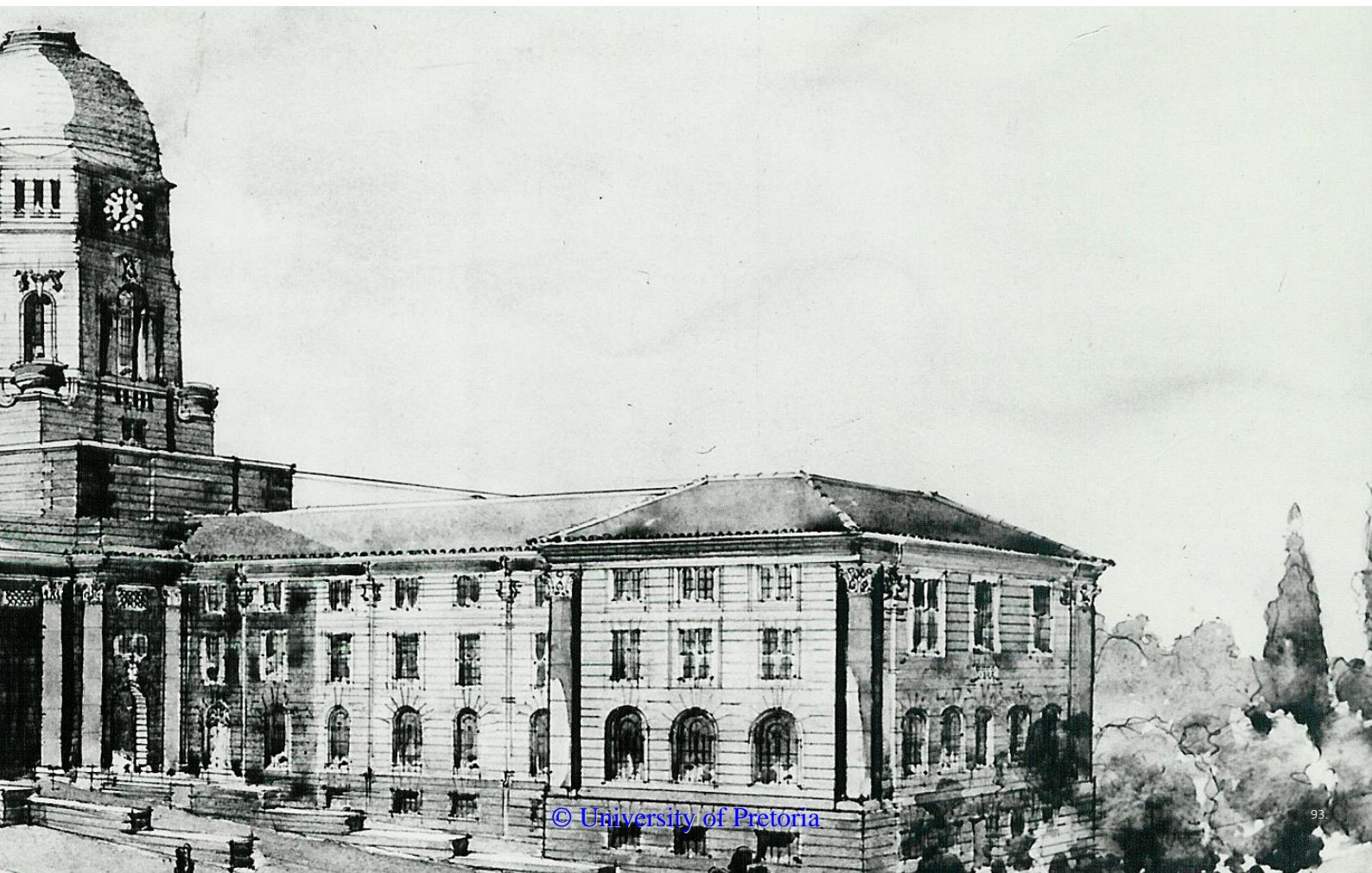
4.5 - Theoretical Premise

Architecture acts as a mediator through which people connect to one another, their government, their heritage and their right to place. It is through our approach towards architecture and space that we either focus on these aspects or intentionally stray from them. It is through the manipulation of architecture that we are able to contribute to both the spatial and social connections between the public and private realms. It is ultimately through our understanding of our architecture that the rest of the world is able to perceive the democratic views established and held by the country. Therefore, similar to democracy, architecture should encourage, learn from and facilitate the growth and will of the people through the progression of time acting as a mediator between people, government, heritage and the city.

It is through the adaptation of buildings with heritage value, such as Pretoria city hall, that architecture is able to reconnect to the present day by improving their disconnected stance within the modern city and thus reaffirming their significance within their context. Through the hybridisation or adaptation of the old, by a re-appropriation of fabric and program, architecture is able to add a new layer to the old while both respecting it and bringing it forward to better represent the current way of thinking.

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                    ┌─────────────┐
                    │   Theory    │
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| Hybridisation | Adaptive Reuse | Hegemony | Postcolonial |

| Contextual | Historic | Political | Social |
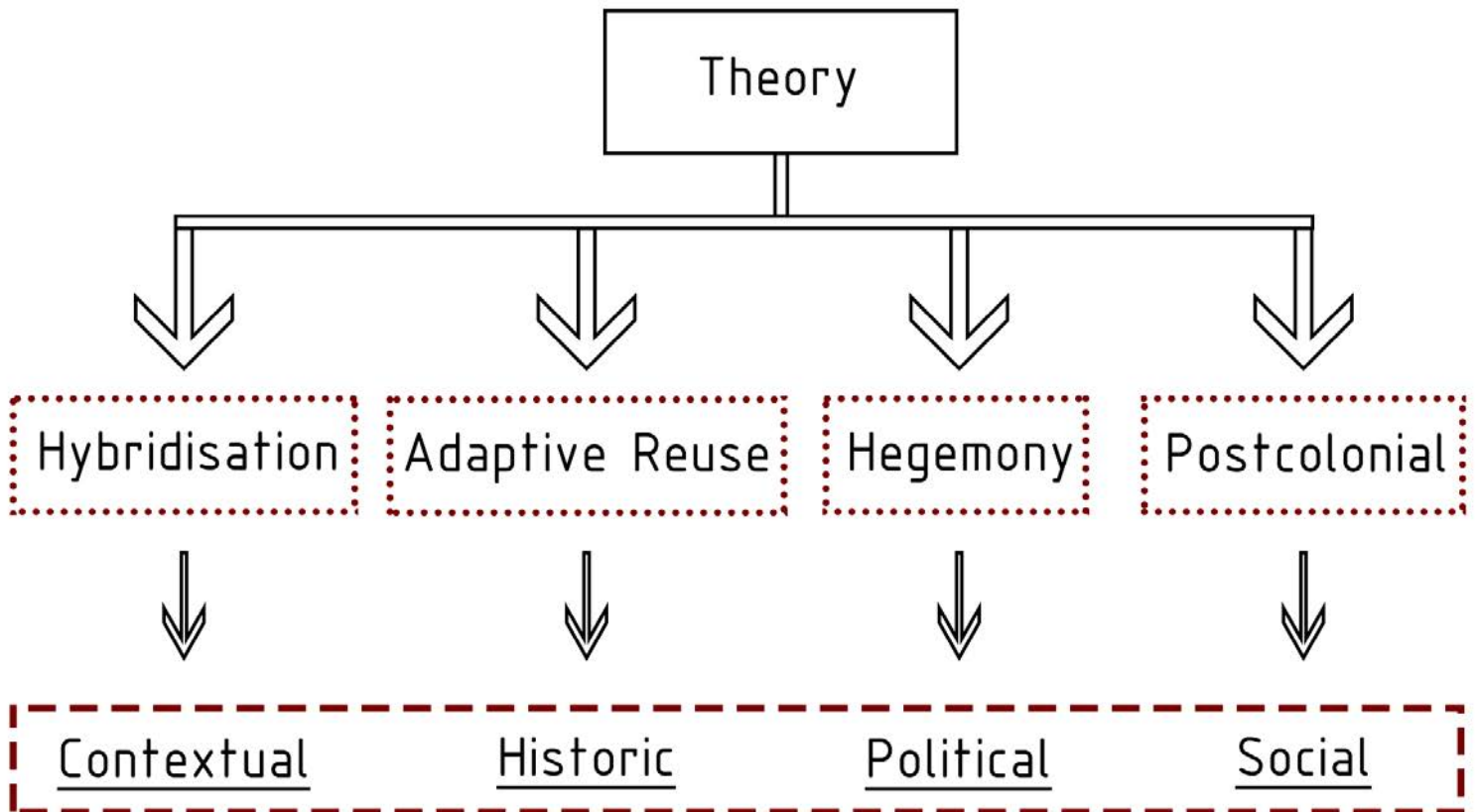
4.5.1 - Grounding

In order to further strengthen the argument towards the re-appropriation of political heritage architecture such as Pretoria city hall, a theoretical argument, focusing on four aspects, will be used to establish a framework from which to work and to build on. Each aspect focuses on a different contribution the architecture can make to a contextual, heritage, political and social understanding:

1. The idea of hybridisation provides a base for the contextual/physical understanding.
2. The conservation/adaptation aspect is used to develop an understanding from which to respond to the heritage significance.
3. The notion of hegemony helps to develop an understanding with regard to a political response.
4. Postcolonial thought acts as a social guideline from which an understanding of the role of architecture can be established.

4.5.2 - Hybridisation

Noble (2008) suggests that, through the formation of hybridity, a question arises in the post-apartheid era as to how, in architecture, African identity and its narratives can take shape. Hybridity refers to a joining of two different sources or ideas, Western and African, to form something new (Noble 2008: 80). Through this description it becomes apparent that little of hybridity is described in relation to the condition in which ideas are joined (where), the reasons behind their combination (why), who or what conducts this merging (who) and finally, what results from this process (what).

In the context of the argument the where refers to Pretoria city hall and its immediate context, the why is as a result of the loss and need for a civic centre for the public, the who is the merging of European and African forms of expression and debate and the what is the final product of the thesis proposal, the re-appropriation of the City Hall

It is argued that, concerning the issue of African identity in design, there are three manners by which it can be dealt with:

- To appropriate Western architecture in an attempt to create a new connection between Africa and the West
- To reject Western architecture completely and create something new from scratch
- To hybridise Western architecture so to adapt it to suit local needs and aspirations

It can be suggested that, after having looked at local and international examples of political architecture, an appropriate approach to adopt when dealing with political heritage architecture would be to see a merging of the three manners by which African identity in architecture can be dealt with. By doing this it can be argued that the architecture would address multiple tangible and intangible issues and therefore be able to better embody the will of the people.

Figure 4.27 Below; Hybridisation and Conservation theory diagrams (Author 2017)
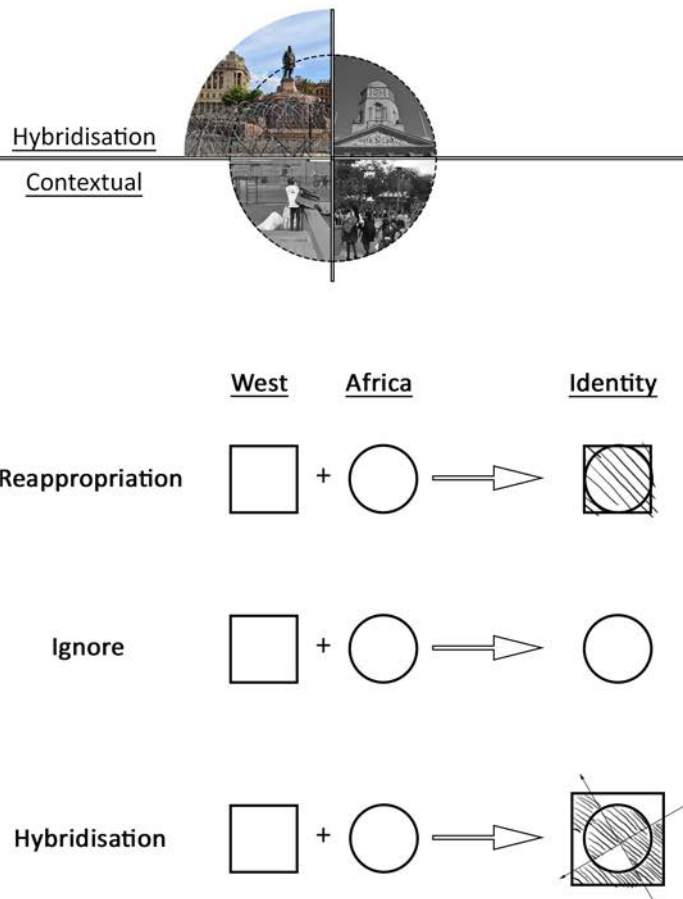
4.5.3 - Conservation/Adaption

Plevoets and Cleempoel (2011:1) argue that the practise of adaptive reuse in architecture as a strategy to preserve and respect heritage is considered to be important in the conservation of our cultural heritage. Furthermore, the authors (2011:3) identify three main strategies towards the conservation of architectural heritage, these being typological, technical and architectural.

The typological approach organises heritage buildings according to their function prior to adaptation (Plevoets & Cleempoel 2011:5). Through such an investigation it is possible to identify appropriate functions/programs for further development of the space. The technical approach focuses on the improvement of existing facilities through new interventions (Plevoets & Cleempoel 2011:5). The architectural approach sees the suggestion that one is able to establish a framework from which to work setting out specific guidelines or responses to the adaptation of the existing fabric or structure (Plevoets & Cleempoel 2011:6).

When addressing the issue of dealing with heritage buildings, Machado (1976) suggests the idea of old buildings as palimpsest. The author proposes an alternative approach to architectural thinking through a metaphor, where architecture is viewed as a piece of writing and is the palimpsest of layers that help create the body of work. It can be suggested that architecturally, when adding onto an original building, the foundation would be the first draft and the remodelling would always be a revision and response to that context (Machado 1976).

Through the process of remodelling, the significance of the past is elevated as it becomes that which is to be altered (Machado 1976). The past has roles in the cultural, political and social spheres of life, having influenced both past and present conditions, therefore it is argued that, the way in which the existing has responded to the contextual requirements it finds itself in, becomes the most important feature in the context of the design (Machado 1976). Thus, through the act of remodelling, it could be suggested that the hegemonic identity, the past politically dominant presence of the architecture, is transformed through the act of remodelling.

Conservation/Adaption
Historic

Architectural Approach
{Physical}

Rhyhem

Typological Approach
{Programmatic}

Public

Hall → Concert/lectures

Movement
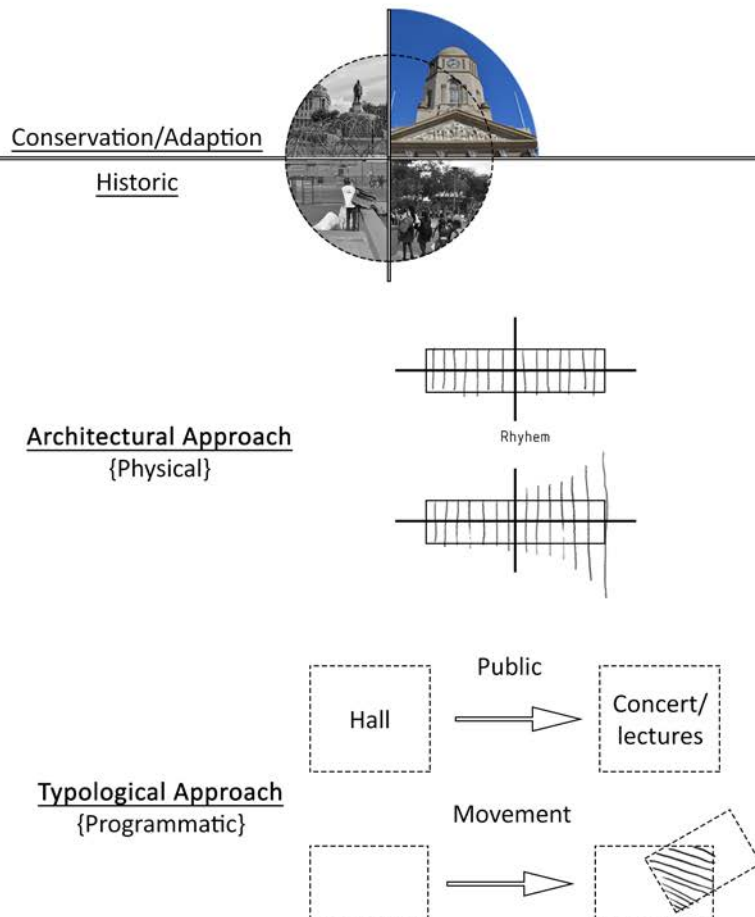
4.5.4 - Postcolonial Perspective

The postcolonial perspective challenges the notion of a universal modernism that privileges those in positions of power. Instead, it acknowledges the multiple dimensions of subordinate experiences and argues for social responsibility in design (Hosagrahar 2012:72). Socially, postcolonial thought directly addresses that which the public fought for. It supports the right to expression and interaction represented in democracy, arguing against the blind control by a small group of individuals.

It accepts the hybrids of society through its recognition of past histories, experiences, built environments, and people invisible to society (Hosagrahar 2012). Hosagrahar (2012) argues that the intention of postcolonial thought is not to reject or replace, but it is rather, aimed at expanding, enriching and renewing the past so to better facilitate its engagement with the present.

The postcolonial perspective argues that, as the people have a strong connection to architecture, they are ultimately the ones that directly influence architecture and how it changes (Hosagrahar 2012). As mentioned earlier, architecture is political in that it is built to represent a way of thinking, therefore, through a changing political stance by the public, the public is able to influence the political presence which, when executed, sees an effect on the architecture for which it was constructed. In this way a transformative approach to architectural interventions is suggested – through the empowerment and enablement of those previously marginalised, in an attempt to move them from a position of powerlessness to one of power (Hosagrahar 2012).

It can be suggested that postcolonial theory can be seen as a way of thinking which challenges our understanding of power and its representation in architecture. It argues for the consideration of social responsibility in design, challenging architecture's aesthetic considerations that draw on European and American influences, to have greater consideration for the spatial and cultural needs of communities (Hosagrahar 2012:81). It encourages the investigation of established cultural ideals as a way of understanding how architecture can be manipulated to appropriately respond to the new social developments in our cities.

Figure 4.28 Below; Postcolonial and Hegemony theory diagrams (Author 2017)

Postcolonial Perspective

Social

Politics → ← Public
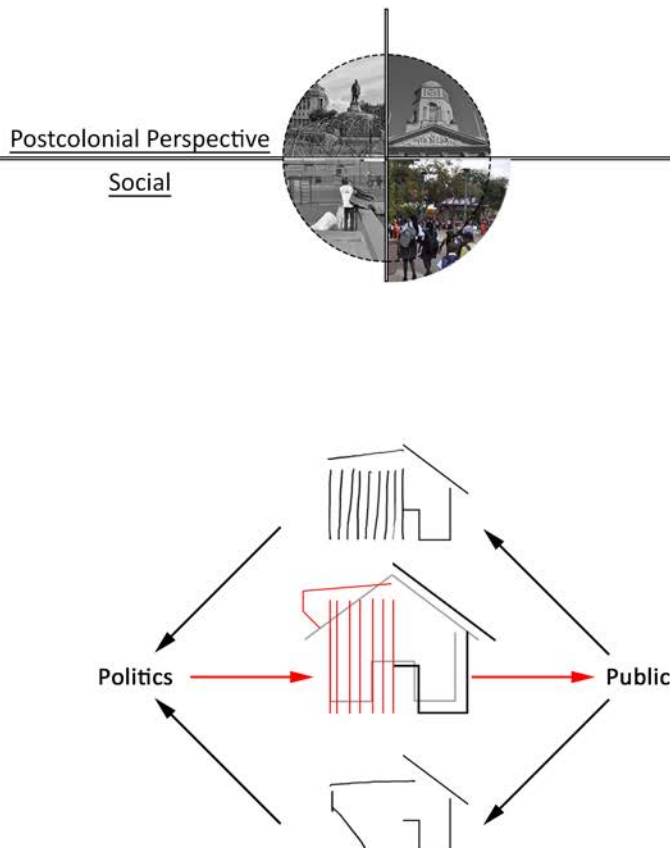
4.5.5 - Hegemony

What does it mean for architecture to be political?

Aya Nassar (Nassar 2015) says that architecture is always political, since any architectural form implies a subject, and a mode of life and of being in space, and therefore represents an idea of the political which informs a spatial condition. It suggests that architecture and politics have more in common than what is seen at face value. Nassar (2015) suggests that political theory has always taken a more spatial approach in terms of its execution, as can be seen in buildings such as the Union Buildings where architecture was thought of in political terms, as is apparent through the intentions applied in the design.

Hegemony

/he-jə-ˌmō-nē/
[noun] the social, cultural. ideological, or economic influence exerted by a dominant group.

(Merriam-Webster, 2017)

When it was constructed, the hegemonic presence of City Hall was clearly representative of the political mandate adopted at the time. It was used as a marker signifying the importance of the capital city, aiding in the establishment of an institutional identity and therefore further strengthening the government's position in the country. Presently, the original stance adopted for the City Hall is no longer appropriate or representative of the political approach taken by the current democracy and it can be argued that the building is responsible for the disconnect that developed between it and the city.

Hegemony suggests that the aim of democratic institutions should be to transform antagonism (the struggle between enemies) into agonism (the struggle between adversaries) (Mouffe 2015, cited in Nassar 2015). It argues that consensus is not constructive for democracy. Rather, it is through debate and contestation that democracy is able to grow and progress. One is made aware of the similarity of architecture to the notion of hybridisation in that it is through hybridisation and the development of a contestation between the past and the present, rather than through the destruction of the past, that architecture is able to encourage the debate.

Hegemony
Political

Process of Democracy

Existing Process

Power   Growth

Destroy/Remove
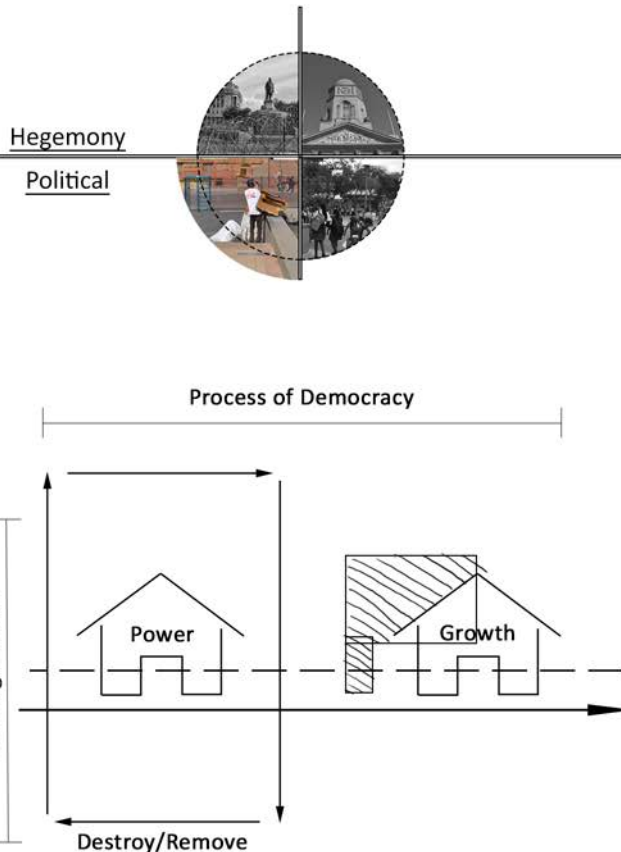
Figure 4.29 Above; Stitching together theories and their focuses (Author 2017)

4.6 - Contribution to Architecture

Contribution to architecture Architecture plays a vital role in the political environment as it can be used to either handicap or facilitate the growth of democracy. It deals with a wide range of tangible and intangible issues as a response to theory, heritage, context and social issues which, to be understood, will be looked at through four lenses. Each lens considers a different scale or issue which, more specifically, focuses on the contribution made through the architectural interpretation and application of the selected theories to establish an approach to political heritage architecture.

4.6.1 - (Display) Hybridisation Application

The issue of hybridisation argues for a contextual contribution where architecture displays the merging identities of a grounding colonial notion of public and political space, represented by Pretoria city hall, with that of an African interpretation of public and political space. Displaying similar ideals and ways of

thought of public and political space through the interaction of the two, resulting in an assimilation of similar spatially hierarchical responses to programme as argued for by Noble (2008).

It therefore argues that the strength of a democratic South Africa and its political environment is encapsulated not in the rejection or abandonment of the past, but rather in its ability to find value and purpose in past political space through the display of both the past and present. It is through the addition of these new layers that the architecture can represent both the tangible and intangible strengths of our democracy.

4.6.2 - (Debate)
Conservation Application

Conservation and adaptation argues for the establishment of a manner by which to reactivate a political heritage building so to both respect its past and facilitate its re-appropriation into the current political climate as proposed by both Machado and Plevoet and Cleempeol (1976; 2011). It sees the development of a debate between the past programming of the building with the new through the reactivation if its core focus as a civic centre as well as the physical debate between the connection of the new architecture with the existing.

The above can be achieved by approaching architecture of historic value through typological and architectural lenses focusing on the layering of meaning. It can be argued that this process would create

the opportunity to more appropriately address both the issues of the past and present climates from the understanding of their short falls. The process allows for the development of an understanding of the appropriate continuation of the old through the act of layering. In terms of architectural thought, it highlights the importance of adaptation or conservation in our modern world, with an emphasis on the value created by the progression of social, cultural and political identities through debate.

4.6.3 - (Spectate)
Postcolonial Application

The social contribution focuses on the application of the postcolonial approach towards architectural thinking. It is argued that architecture is able to facilitate the spatial shift of power from that of the typical government structure, a three-tier system of government (legislative, executive and judicial) (gov.za 2017), to the public. This shift would result in the restructuring of past political symbols and the creation of architecture which would encourage engagement with the public, emphasising the social responsibility of architecture in a democratic society and the shift towards transparency. The architecture facilitates the public and allows them to spectate, at varying scales, and use the gained information to influence their approach towards the issues at hand.

For the proposed thesis project, it is argued that the architecture of the new builds onto and merges with the old, becoming a platform on which

people are given an opportunity to participate in the democratic process, ultimately providing the public with a greater sense of power, presence and identity in the city.

4.6.4 - (Display,Debate,Spectate)
Hegemonic Application

Hegemony and the identification of the social, cultural, ideological or economic influences present in our society suggest an architectural approach when designing politically (Nassar 2015). It can be proposed that it argues for an architecture that better facilitates the endeavours of both the public and private sectors, while allowing for the daily occupation, interaction and use of said architecture, thus encouraging physical and symbolic debate to be used as a tool in the representation of the political climate.

Through the loss of city hall's political identity in the city, the intention and political contribution proposed by the notion of hegemony is the re-appropriation of Pretoria city hall, as a valued civic centre re-instilling its significance for both the city and the democratic process. It argues for the recognition of the value contributed by architecture to political thought and its environment.

Political
{Intangible}
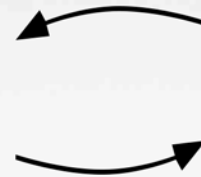
Mediating System

4.7 Conclusion

Although architecture is site specific, often the issues it attempts to address form part of a greater context dealt with worldwide. Specifically, architecture in the political sphere, responds to the present needs and requirements of the political climate it finds itself in. It therefore becomes evident that, when dealing with architecture of a political nature, the value provided to the political climate comes from the interpretation and representation of the tangible and intangible aspects of the past in the new architecture. In this way a foundation is provided from which the public can draw similarities that aid the creation of an architecture that is legible through time and addresses identity, ideals and the individual.

Architecture plays an important role in the facilitation of the democratic process, as architecture of political congregation is not only seen as an expression of political culture, but also as shaping political culture (XML 2016: 6), therefore, in order to facilitate democracy, architecture ought to combine its representation of political
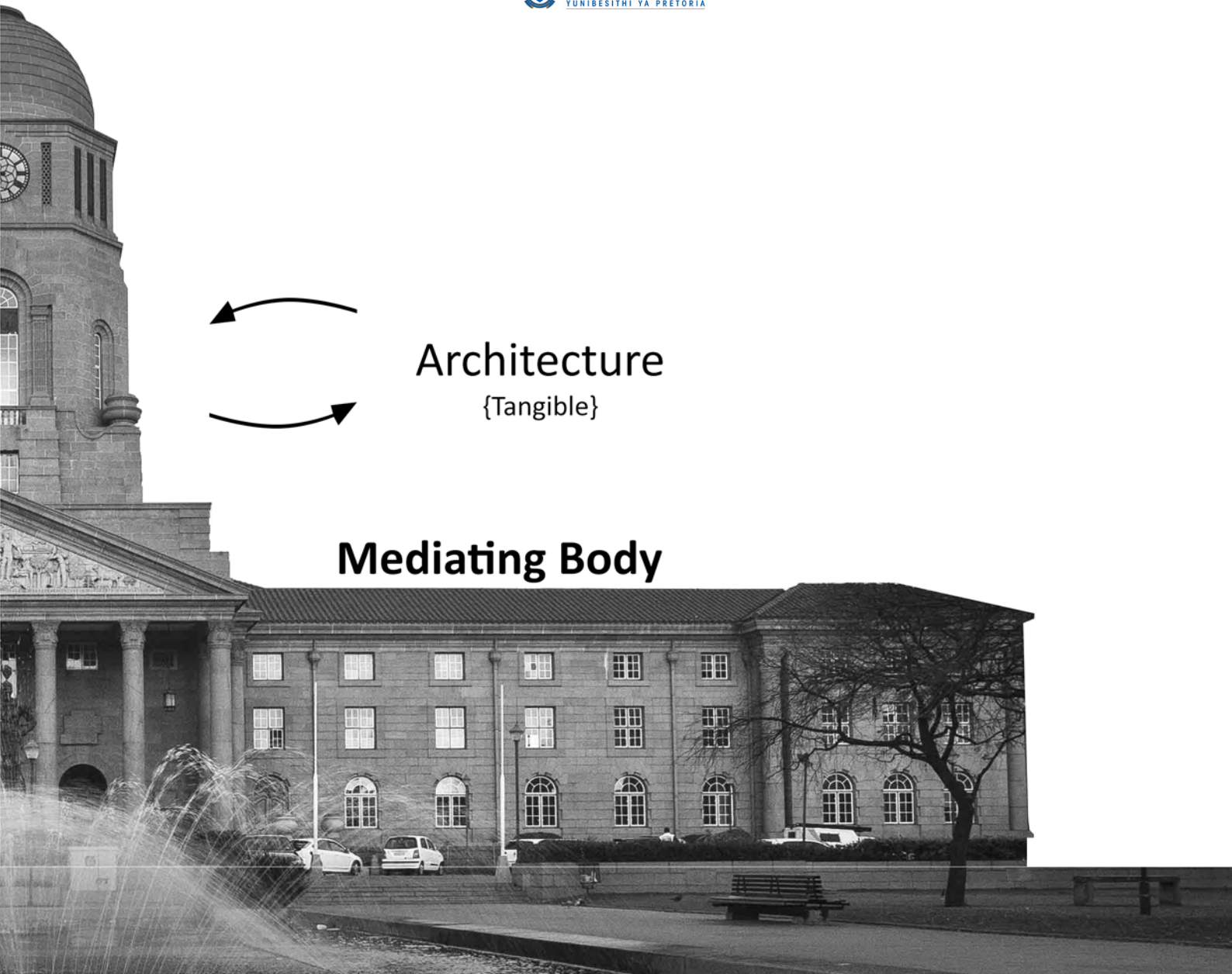
Architecture
{Tangible}

Mediating Body

power with its ability to unify, support and facilitate the public in search of a voice.

Through architecture's facilitation of debate in the political realm, it acts as an irreplaceable release valve for society – a service which would not necessarily be regarded as valuable to the city, yet, without it, could see the recurrence of the disaster witnessed at Bloemfontein city hall.

It can therefore be concluded that our political climate has influenced architecture in its attempt to instil its presence in society, and it is through architecture's facilitation of this political process that it has been able to shape our political environment through its ability to create, hold and control space.

Figure 4.30 Above; Conclusion (Author 2017)

The New City Hall.
Oppositional Party Headquarters and Public Debate Arena

Figure 5.1 Pretoria City Hall (Hoffman 2017)

Concept

5.1 - Introduction

For the purpose of the dissertation the New City Hall will play an important role in the political state of South Africa and its new capital city, as it would provide the public with a new platform for interaction with politics helping to develop a greater level of transparency within the government.

The necessity of a public platform for interaction becomes an important point when applying Lefebvre's Right to the City, in that the creation of urban space would see the reproduction of the social relations found in and around it (Purcell 2002:102). Lefebvre's Right to the City states that there are two core principles which apply to the public, the first being the right to participation, arguing that the public needs to participate in any discussions pertaining to the production of urban/public space (Purcell 2002), and the second being the right to appropriation which argues for physical access, occupation and use of urban/public spaces as well as the creation of new urban spaces (Purcell 2002).

Due to the increased focus on public interaction, more value is placed on defining and maintaining both a strong public interface and a hybridised identity between the existing and the new, making sure to respect both for the heritage of the structure and its surroundings, as well as that of the people it is representing.

The New City Hall is intended to be positioned in the three-tier system of government and to be viewed as one down from that of Parliament. It will facilitate local government and use its inputs as a mandate towards addressing the provincial government and/or parliament, depending on the severity of the issue at hand.

Through its allocation to Pretoria City Hall, the headquarters is given a prominent seat in the new capital. It is intended that the involvement of the opposition parties will help elevate, reactivate and reconnect the city hall with the public, ultimately reinstating its original intention.

In order to determine the extent to which the parties would occupy the new building, it was important to specifically define which parties would be situated in the building, as well as to determine the extent of their following with regards to the number of seats they would have in parliament.

The parties included in the
headquarters have been
selected for their occupation
of at least 1 seat in parliament.
These include (News24 2014):

-        The Democratic Alliance (DA) = 89 seats
-        The Economic Freedom Fighters (EFF) = 25 seats
-        Inkatha Freedom Party (IFP) = 10 seats
-        National Freedom Party (NFP) = 6 seats
-        United Democratic Movement (UDM) = 4 seats
-        Freedom Front Plus (FFP) = 4 seats
-        Congress of the People = 3 seats
-        African Christian Democratic Party (ACOP) = 3 seats
-        African Independent Congress = 3 seats
-        Agang SA = 2 seats
-        Pan Africanist Congress (PAC) = 1 seat
-        African Peoples Convention = 1 seat

The postulated mandate for the New City Hall is:

The revitalisation and reconceptualization of Pretoria City hall as a civic centre
to act as a mediating platform between politics, architecture and the public
so as to facilitate opportunities for all to engage democratically with their city
through its new political voice.

Display Primary (Museum)
Display Secondary (Route)
Debate
Spectate
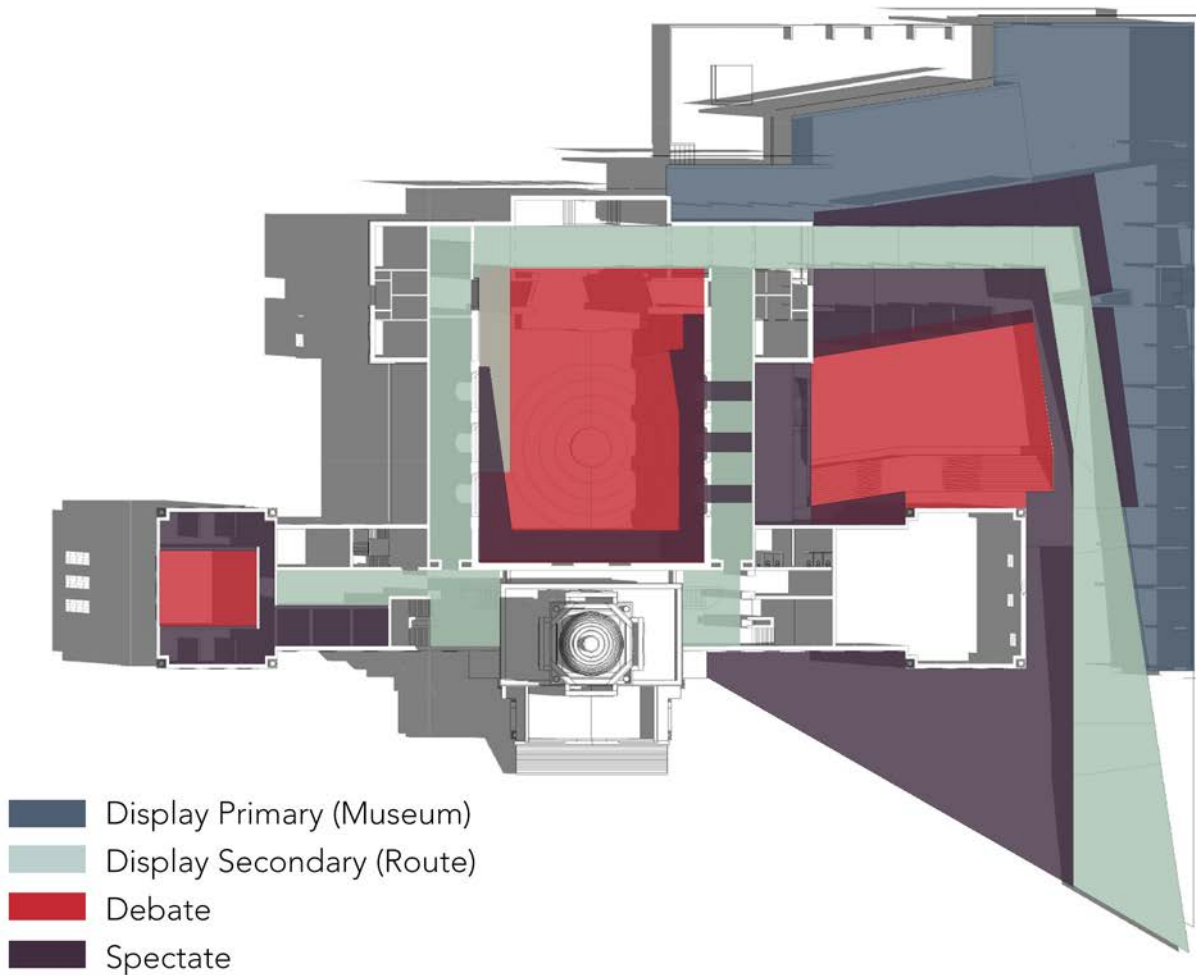
Figure 5.2 Above; Aerial of city hall and the overlay of functions (Author 2017)
Figure 5.3 Right; Layers of Display, Debate and Spectate (Author 2017)

5.2 - Functions: Display, Debate, Spectate

The design of the New City Hall is grounded in three core functions, i.e. Display, Debate and Spectate, which have been informed and developed through the application of the theoretical argument. The building programme has been organised to fit within each function. The value in organising the design along three functions is the strong overlay developed between them. No single function occurs without the participation, to varying extents, of the other two, allowing for a spatial manifestation of transparency and further strengthening the contribution made by the project as an important civic centre for the public, the city and the country.

Spectate

Display

Debate

Display Primary (Museum)
Display Secondary (Route)
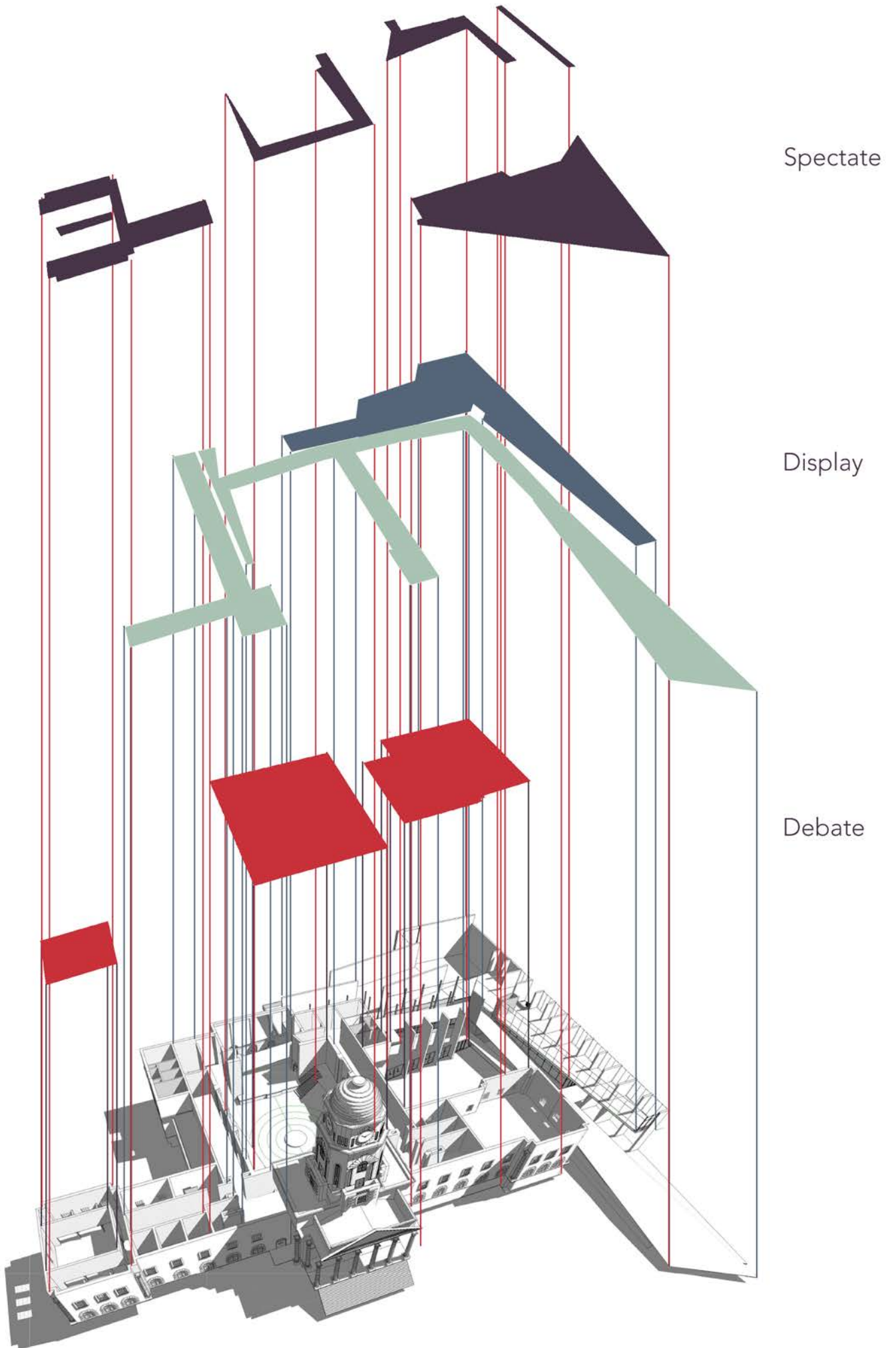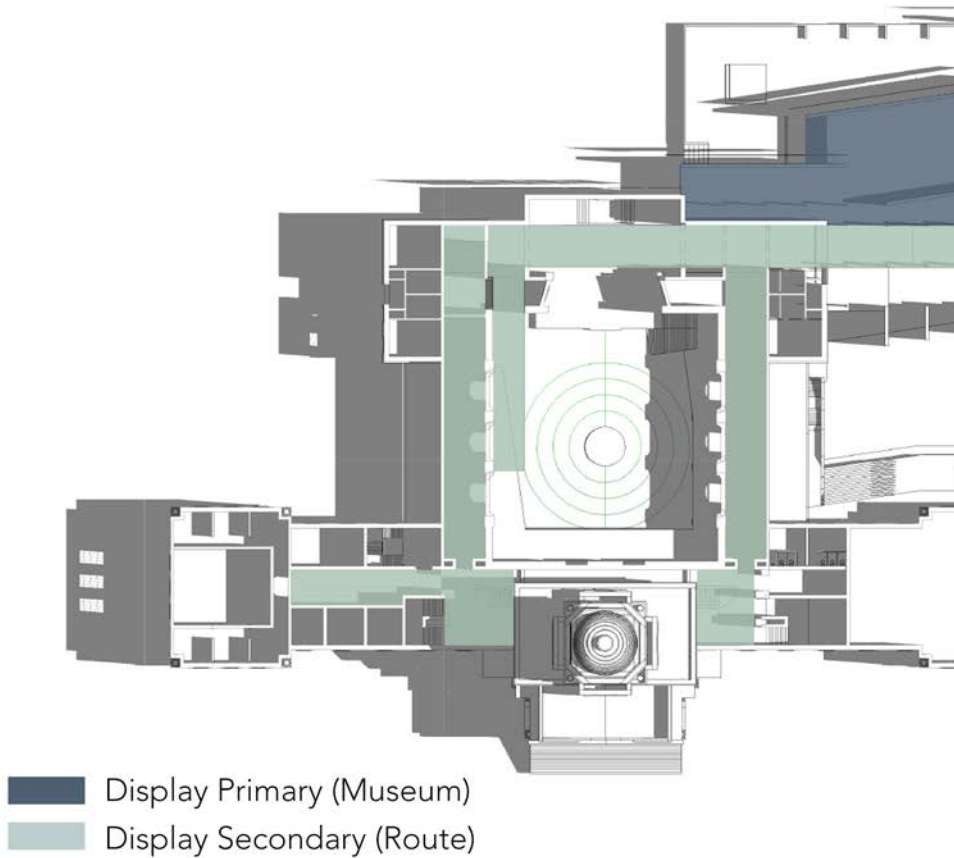
5.2.1 - Display

The past and present identity of our society, as perceived by those around us, is developed through how we display ourselves (Jarvis 2009). To display is to reveal. It is to express certain aspects of ourselves to those around us whereby our context or platform determines the appropriateness of what it is and how much it is that we wish to display.

Therefore, the act of Display deals with the issues of memory and the appropriation of space, as is made manifest in the control of public and private expression spaces at varying scales. These range from the largest scale of Pretorius Square, to the internal debate space of the main hall, to that of the smallest expression spaces between individuals through general circulation.

The proposed Museum of Democracy will contain the aspect of memory. Through memory, the architecture of the museum and its exhibitions is able to respect that which once was, using it as a signifier of the progress made by democracy. Display further embodies memory through the articulation of the knowledge gained of the existing in the structuring and ordering of the architecture.

Figure 5.4 Above; Aerial of city hall and the overlay of Display (Author 2017)
Figure 5.5 Right; Axo of city halls primary and secondary layers of Display (Author 2017)
Figure 5.6 Right Bottom; Perspectives indicating the overlay of Display into the debate arena and the overlay of the primary and secondary layers of Display along the protest route respectively. (Author 2017)

Memory

Circulation
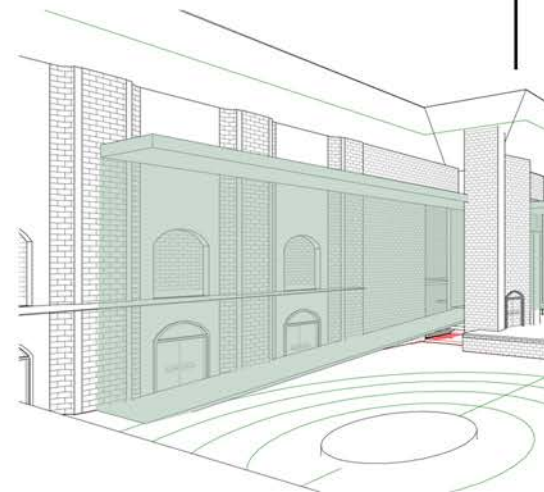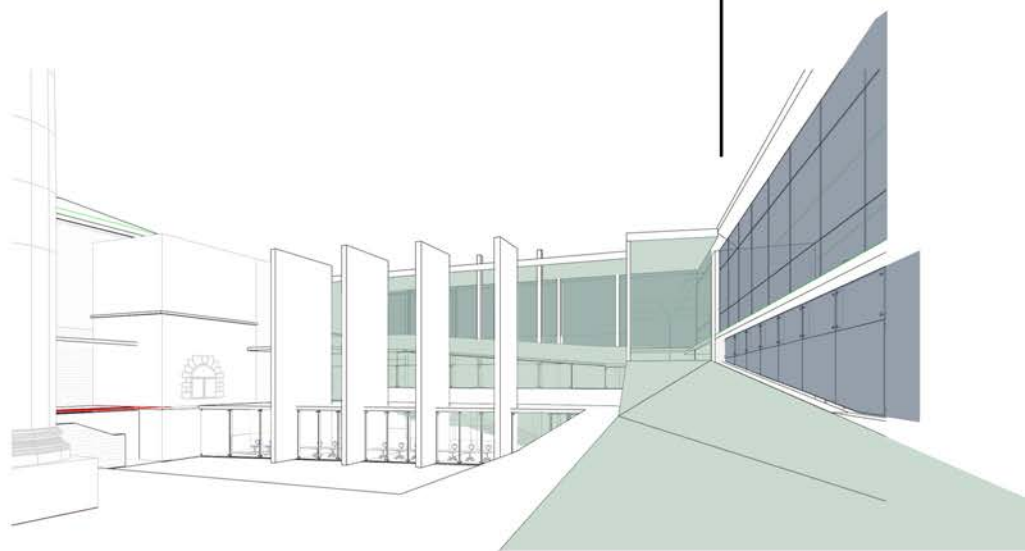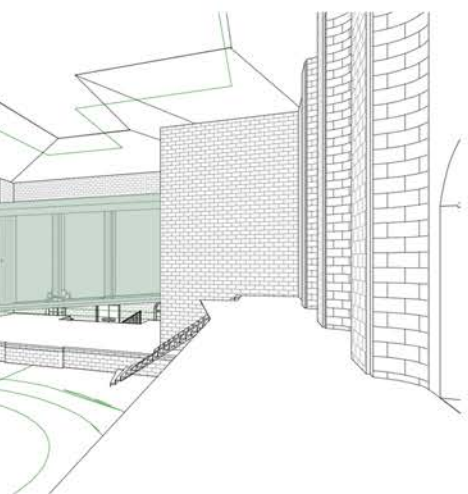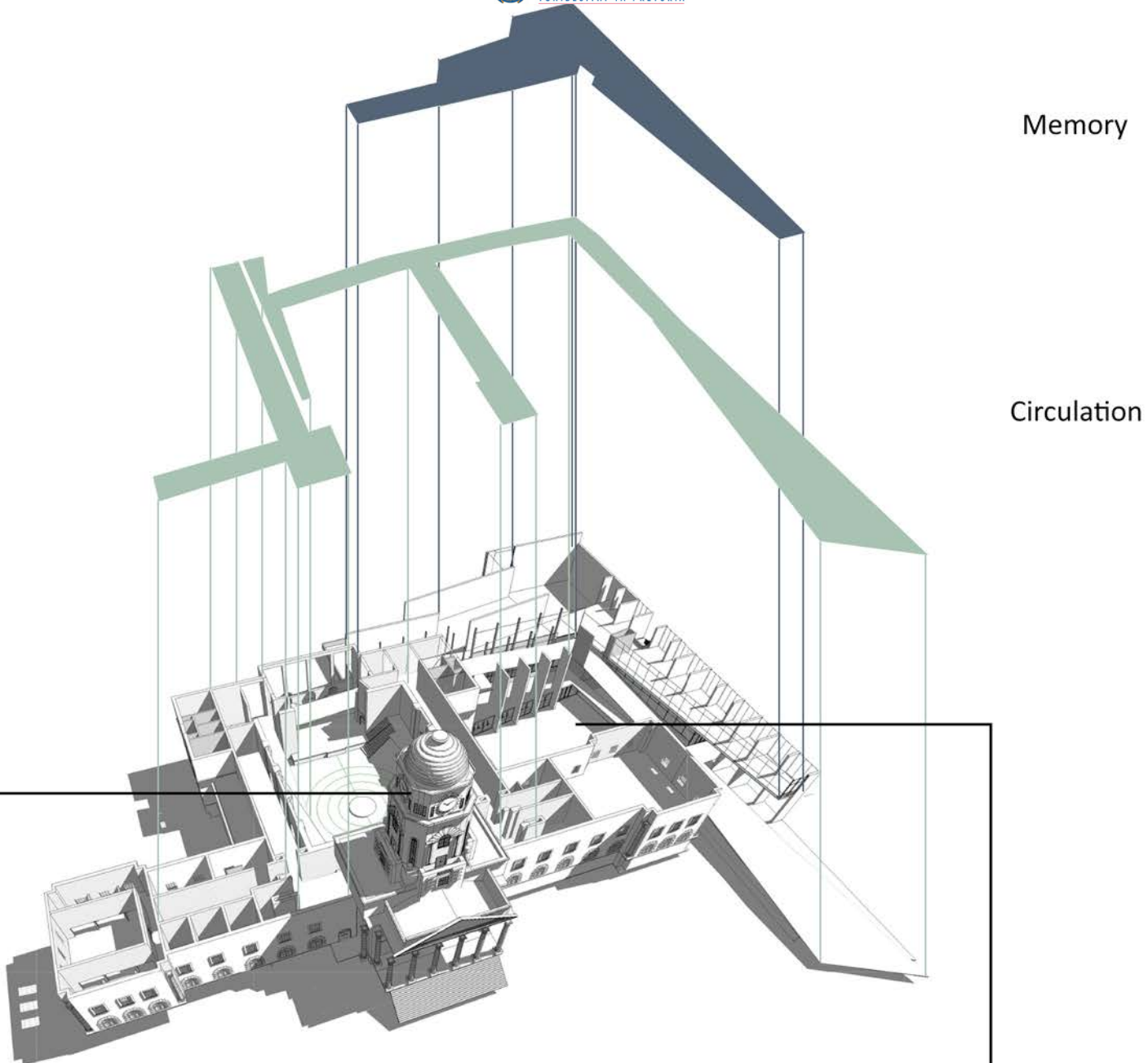
Figure 5.7 Aerial of city hall and the overlay of Debate (Author 2017)
Figure 5.8 Right Top; Axo of city halls layers of Debate (Author 2017)
Figure 5.9 Bottom Right; Perspectives indicating Debate in the Debate Arena and the newly created public expression square (Author 2017)
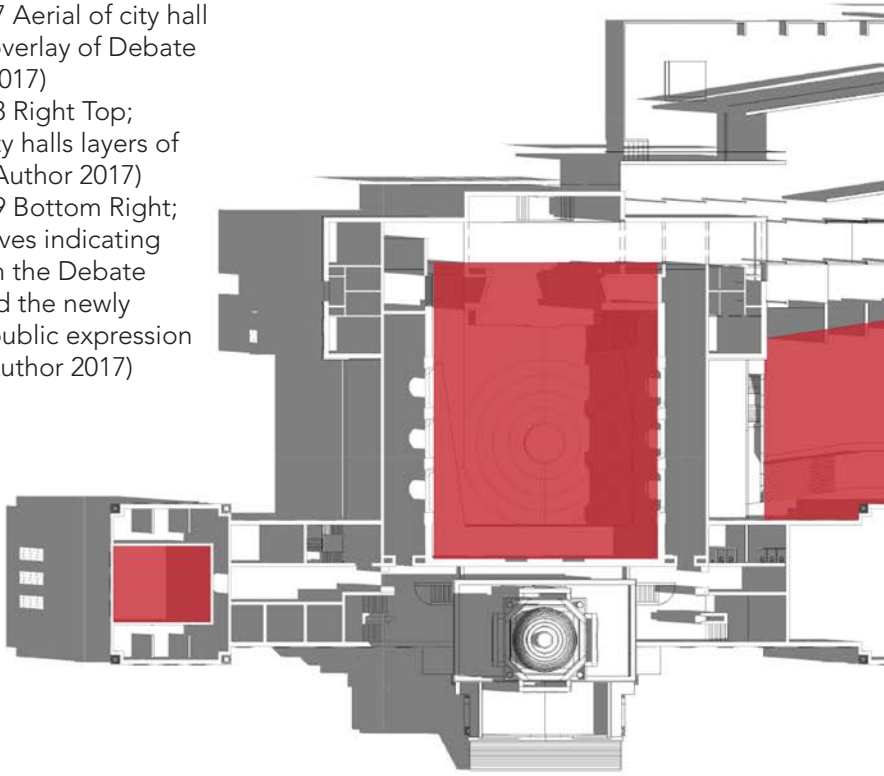
■ Debate

5.2.2 - Debate

Debate

\ di-ˈbāt , dē- \
[noun] A formal discussion on a particular matter in a public meeting or legislative assembly, in which opposing arguments are put forward and which usually ends with a vote.

(Oxford Living Dictionaries 2017)

To debate is to argue, within space, different opinions, within space, regarding a specific issue. The act of debate does not solely refer to a verbal contestation of ideals. Therefore, it can also be perceived as spatial manifestations of tangible and intangible debate. Tangible debate can be witnessed through the materiality and ordering of architecture. Whereas intangible debate can be witnessed through a change in the meaning and representation of the existing with the intention of creating a new identity.

Debate therefore deals with the issues of both verbal and architectural contestation. Central to the design is the Debate arena in the existing hall which acts as the main facilitator of Debate in which interaction between the public and political parties occurs at direct and indirect levels.

A direct level of interaction would involve the expression of public opinion and unrest, which is directly facilitated through the functions of both Display and Spectate. Indirect interaction would involve the observation of Debate by the public which is

Council Chambers

External Debate
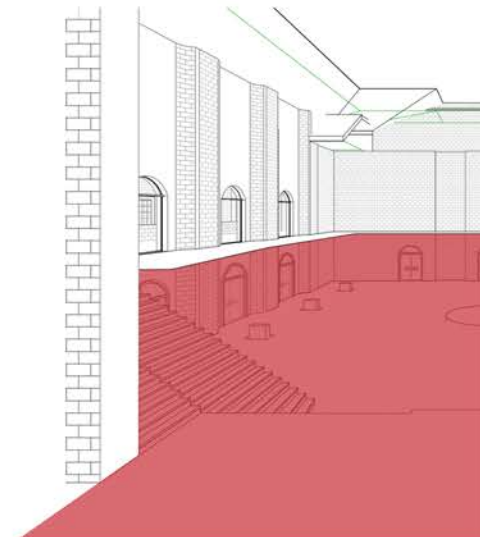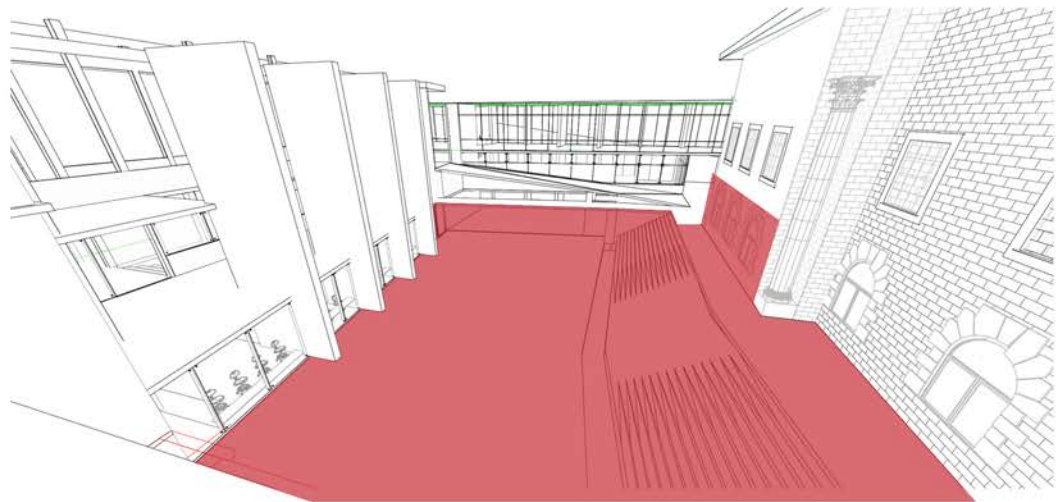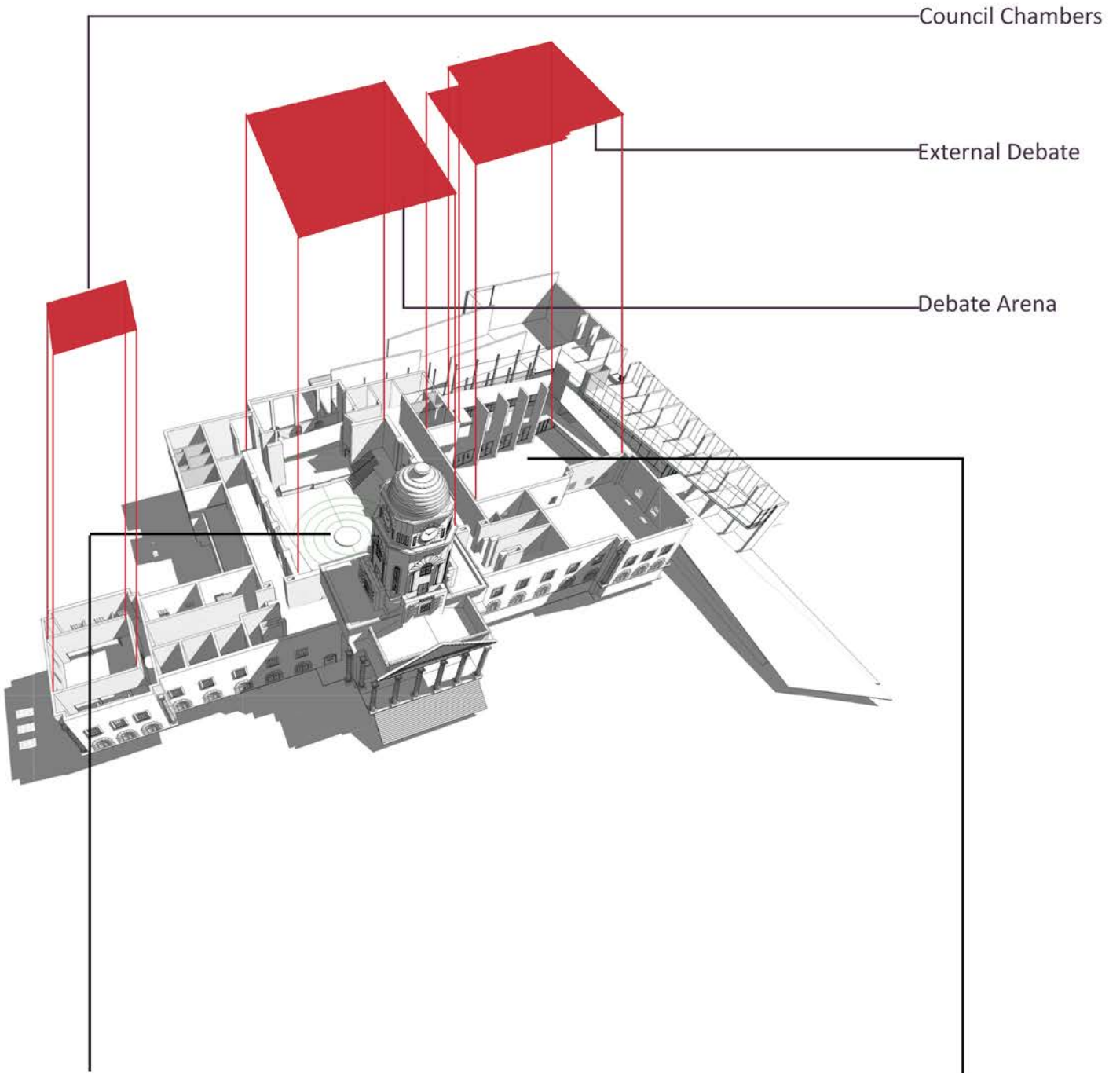
Debate Arena

Figure 5.10 Aerial of city hall and the overlay of Spectate (Author 2017)
Figure 5.11 Right; Axo of city halls layers of Spectate (Author 2017)
Figure 5.12 Bottom Right; Perspectives indicating Spectate from the new gallery into the Debate Arena and the public viewing platform surrounding the public expression square (Author 2017)
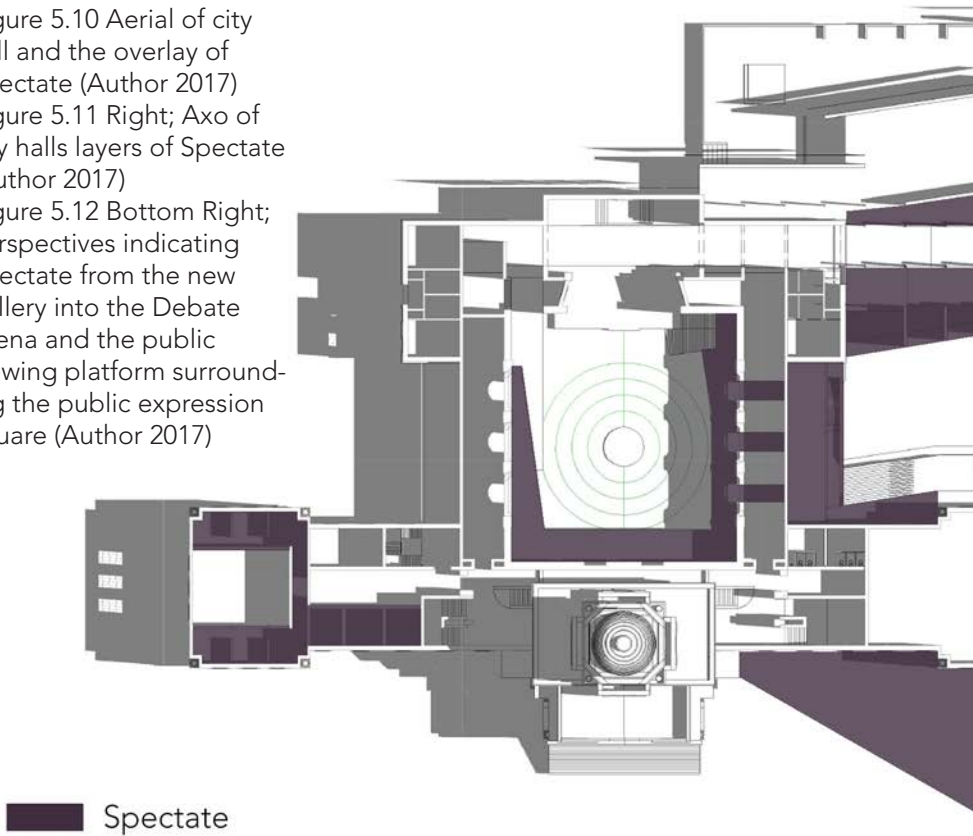
■ Spectate

5.2.3 - Spectate

Very little in the world can happen without someone seeing it. To Spectate is to witness that which is happening around us to help us to inform ourselves when developing an opinion. The opinions of the members of society are important to the progress of democracy, and it is dangerous when an opinion is developed from a lack of information (Rajan 2017).

Therefore, Spectate deals with the issues of transparency and the acquisition of knowledge, facilitated through the appropriation of platforms along the main protest route, whereby users are able to gain an understanding of their surroundings, be that a social or physical understanding. The varied platforms would be informed by the function of Display and emphasised through Debate. Furthermore, the function of Spectate will be embodied in the junctions of the architecture so to help to clearly identify that which creates space.

Through the function of Spectate, the issue of transparency is supported in the definition and clarity emphasised between its elements. It looks at transparency at the macro scale of the Local Government Square down to the transparency of the physical junctions between materials.
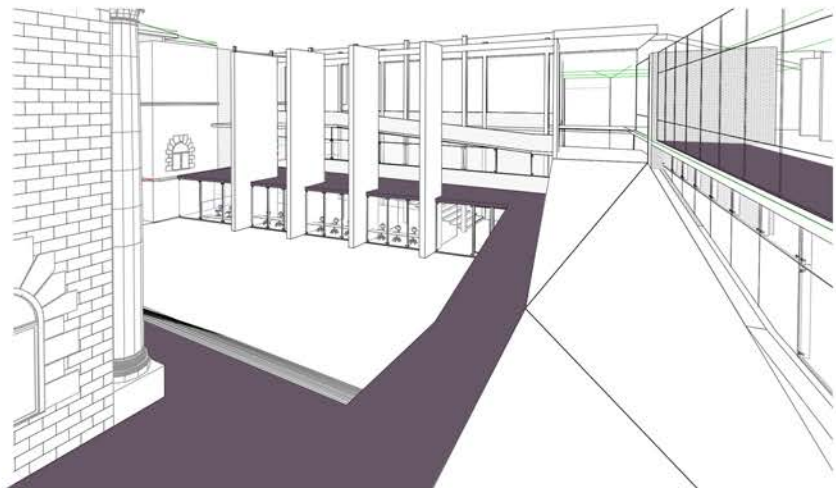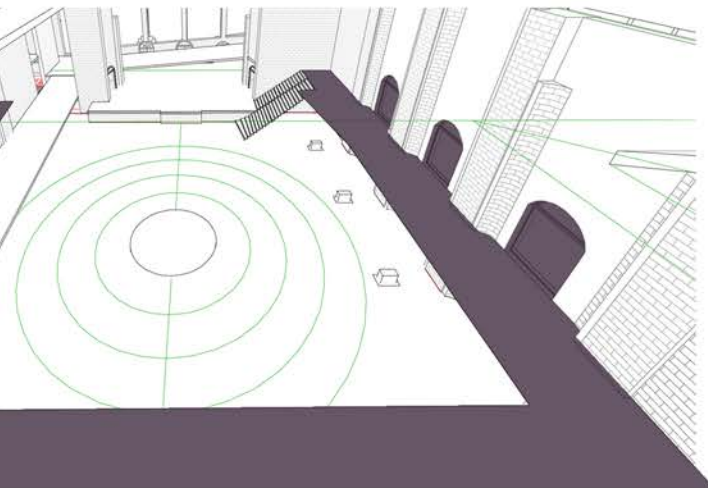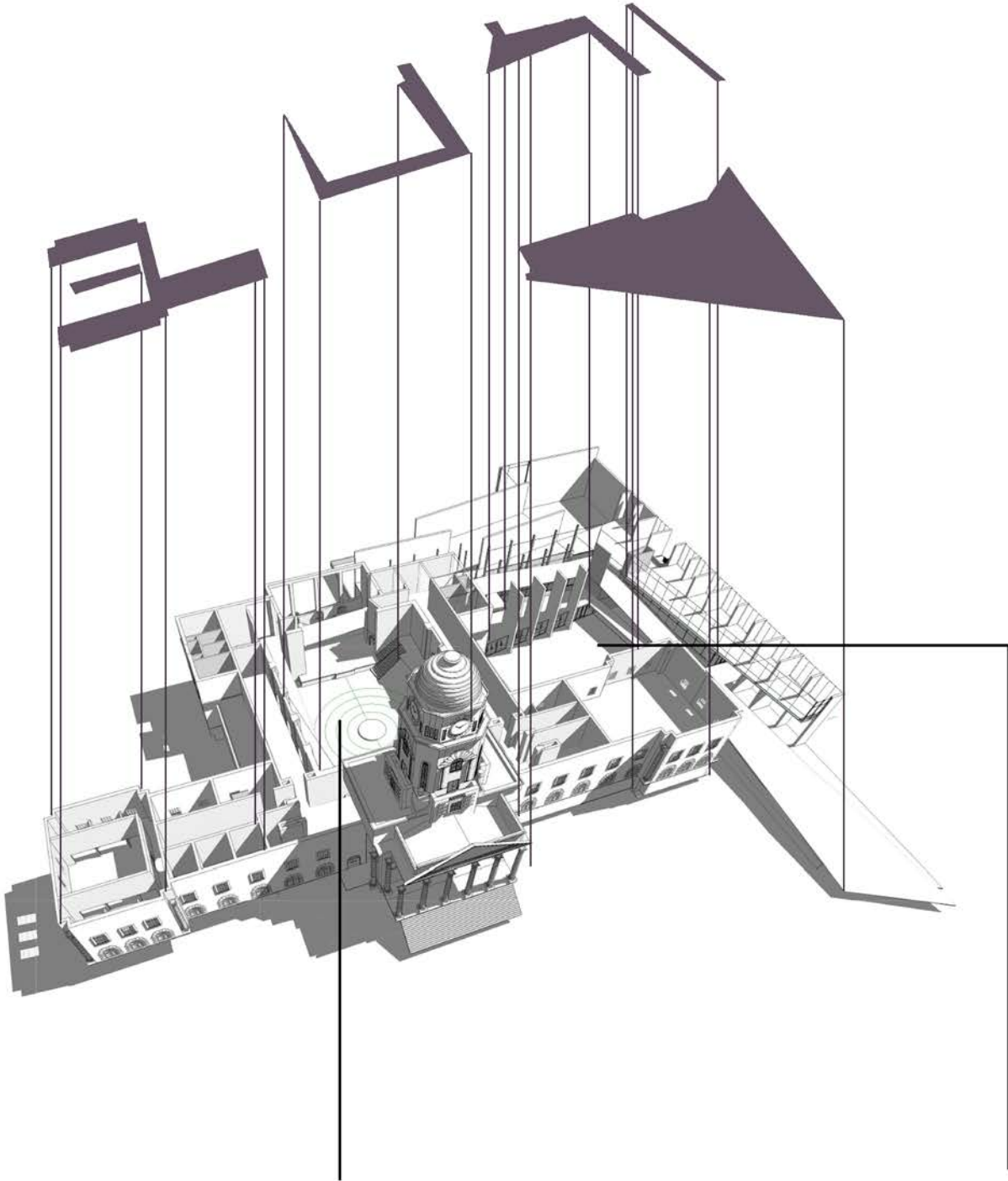
Programme

As suggested, democracy argues for a place in which the people are able to engage with the cultural, political and social activities of the city. Traditionally, the City Hall acted as the facilitator of these functions however, as established, Pretoria City Hall in its current state no longer facilitates these activities and therefore, the intention of the programme is its reactivation as a civic centre.

The New City hall is programmed on three levels, each being organised with a strong emphasis on public interaction as well as the integration of public, private and government. The levels are connected by three main routes which are manifestations of the multiple and varied routes taken to reach democracy.

Figure 5.13 Aerial with design master plan (Author 2017)

Figure 5.14 Level one; News, Knowledge and share (Author 2017)

Level One: News, Knowledge and Sharing

Level One is mainly positioned in the new addition as well as the 'basement' edges on the northern side of city hall. It is focused around purely public activities and facilitates public interaction through its functions (Display). The purpose of Level One is to re-engage with members of the public so as to provide facilities that enable them at varying levels.

Symbolically Level One is representative of where the power and strength of a good democracy comes from its people.

The programmes found on level one include:

- A market space with market storage
- Public conference room
- Small lecture Hall
- Discussion corners
- News walk
- Male and female toilet facilities
- General storage
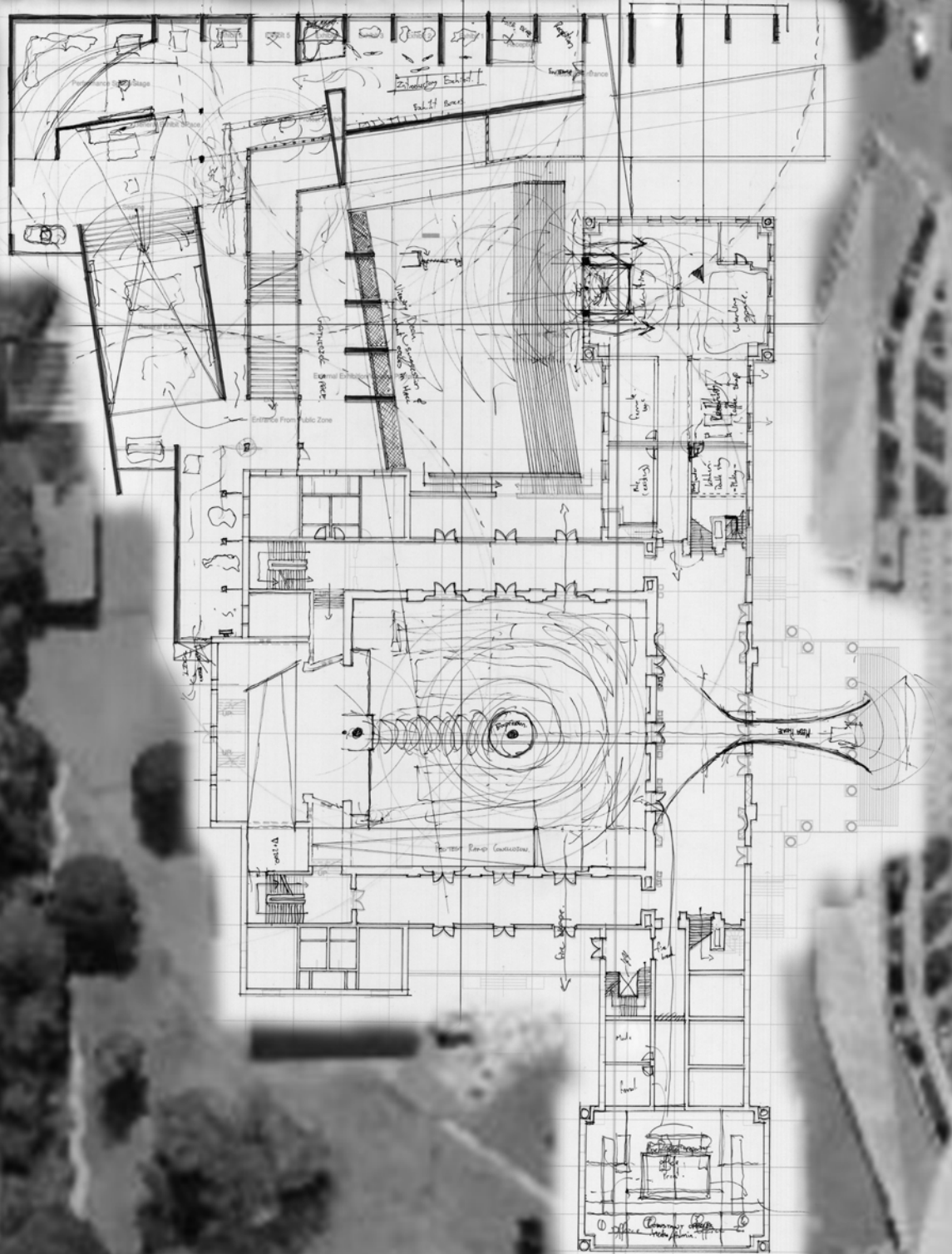
Figure 5.15 Level two; Museum, Debate and Express (Author 2017)

Level Two: Museum, Debate and Express

The main intention of level T0wo/ground level of the City Hall is the interaction and participation of the public, which would occur in the most important space, the main hall to both the new and old structure. Hereby the process of democracy – an intangible idea – would become tangible. This sees the formation of the debate arena, providing a platform for interaction between opposition parties and the public, and which is facilitated through direct interaction (Display), expression and participation (Debate) and indirect interaction (Spectate).

The new structure would see expression and interaction of Display and Spectate through the formation of a Museum of Democracy, in which the fight for democracy would be illustrated.

The programmes found on level two include:

- Museum of Democracy
- Media House
- Entrance/Reception (original + new)
- Debate Arena/Hall
- Artist's rooms
- General storage
- Conference rooms
- Offices
- Male and female toilet facilities
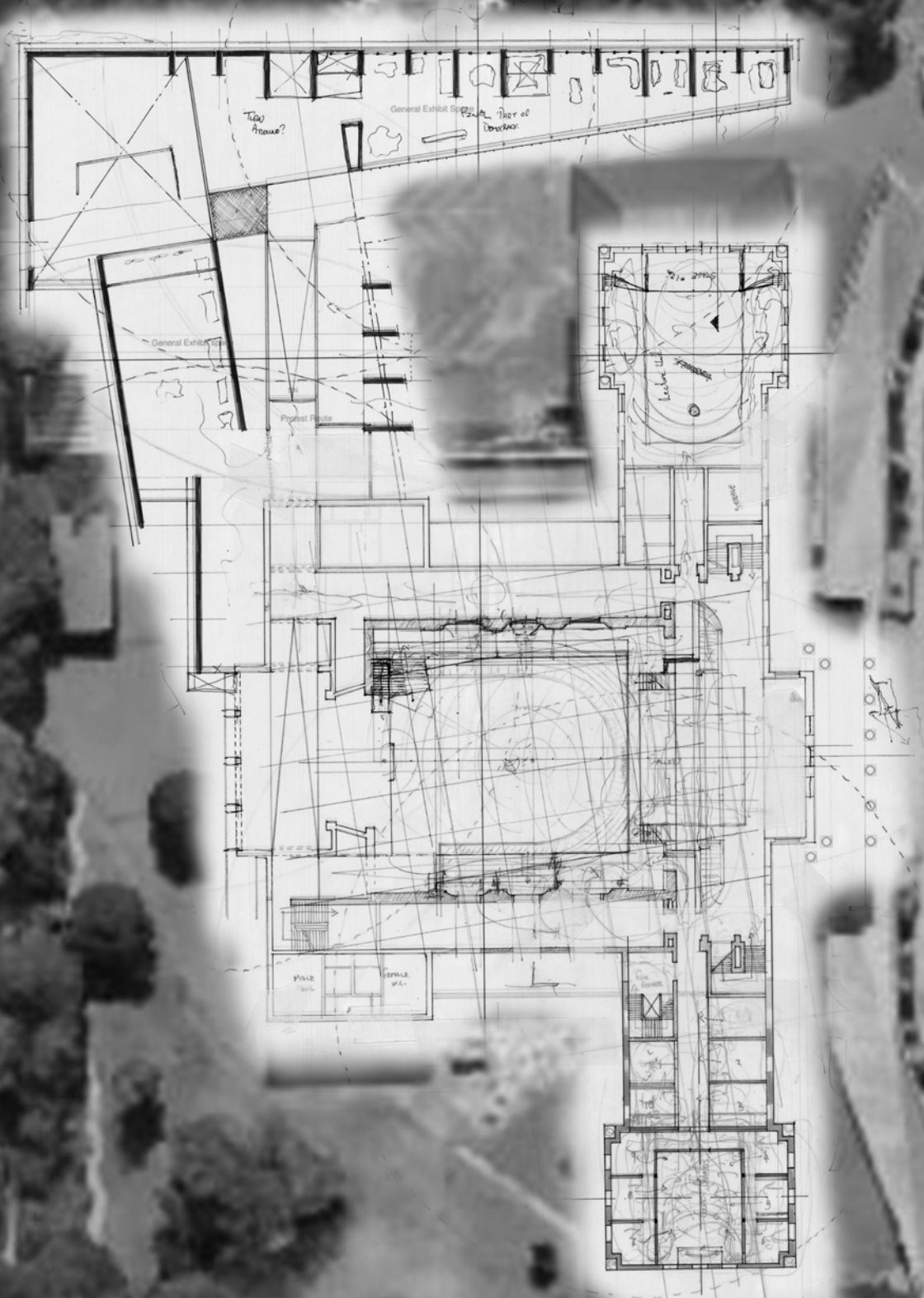
Figure 5.16 Level three; Political, Spectate and Learn (Author 2017)

Level Three: Political, Spectate and Learn

Level Three sees the introduction of the political headquarters of the New City Hall. Situated in the southern wing, where the mayor's office was originally located, will be new offices for the leaders of the opposing political parties with at least one seat in the National Assembly.

Central to the level is the observation platform (Spectate) from which the public can view what is taking place in the debate arena. Lastly, the northern wing contains the addition of the new main lecture hall.

The programmes found on level Three include:

- Offices for leaders of political parties
- Council chambers
- Museum of Democracy
- Main lecture hall
- Lecture hall reception
- Discussion room
- Observation areas
- Storage
- Male and female toilet facilities

Figure 6.1 View from Visagie Street to Northern Wing of Pretoria City Hall (Hoffman 2017)

06

Design Development

The design of the proposed scheme initially focused on occupying and programming Pretorius Square and the neighbouring streets. Multiple variations were explored as a way to appropriately occupy the square, all of which were focused around a public-political interface. Through further exploration, it was determined that the development of Pretorius Square would not be successful in its reactivation as a political platform without the involvement of Pretoria City Hall, therefore, the focus of the design exploration shifted mainly onto City Hall and its positioning as an important civic centre as a response to the initial design concept, the heritage of the building as well as supported in the theoretical argument of the value of civic centres to democratic cities and its progression.

The general approach taken is that of reactivating Pretoria City Hall, moving it away from being a lost civic centre towards becoming an active participant in the daily activities of the general population and being a facilitator of political activities.

By doing so, the intention is to change the hegemonic nature of Pretoria city hall from that of a strong representation of the past, into a structure which is representative of the people and their ability to move on from the past and use it as a foundation on which to build a stronger nation and identity as called for by postcolonial thought.

The notion of transparency, spawned by the current political unrest and censorship witnessed in the South African Government, is a strong driver in the programming and articulation of the design. The core intention is the reactivation and utilisation of city hall as a debate arena around which the civic centre could develop. The public would be provided with an important platform, in the existing hall, from which it would be able to directly express misgivings, and engage with opposition political parties, as a means to emphasise the importance of public involvement in our democracy. Through the establishment of the core focus, the design was further developed so to

strengthen and support the function while at the same time encouraging general use and interaction. This was done so to create a stronger link with the existing structure, ultimately allowing it to become the civic centre it was originally intended to be.

6.1 - Vision and Intetion

The Nelson-Atkins Museum of Art and its extension, the Bloch Building, see the merging of the building with the landscape as a means of creating an experiential architecture, which unfolds for visitors through their individual perceptions as they move through space (ArchDaily, 2008). The design extends through the landscape on the eastern edge of the site with five 'lenses' being the only elements which break through the landscape. The new Bloch Building serves as an extension to the existing Nelson-Atkins Museum, a Beaux-Arts building constructed in 1933 (Fairs, 2007).

While the quiet, yet striking presence of the addition with its translucent façades is in stark contrast with the existing, the new complements the old through its framing and adaptation of the physical cues provided by the old. Proportionally, the new responds to the presence of the existing through the articulation of its 5 lenses, which distracts from the actual scale of the building and therefore further respects, retains and strengthens the existing.

The architecture is designed along a series of routes which are used to encourage exploration as well as connect to the outside world by framing different views of the surrounding museum complex. Through the use of subdued colours and spaces, the architecture becomes a backdrop to the programmatic function and exploration of the building. It acts as the facilitator, and the user, the mediator of how they experience the space.

The value established by the Nelson-Atkins Museum of Art as a precedent is that of a response to heritage through architectural intervention so that the new builds onto the existing, responding to cues provided by it and using these in the creation of an identity. The new does not take away from the existing. Rather, it adds to its hegemonic presence through a lighter material palette and a suggestion of massing through its manipulation of landscape and building. It builds onto the existing and, by doing so, creates a new foundation, elevating the cultural significance and value provided by the architecture. It is an example, similar to that of the Reichstag and the Dresden Military History Museum, of how architecture can benefit from the past and be used to reactivate the old, bringing it forward reconnecting it with modern society.

Figure 6.2 Top Right (1); Landscape and the lenses (Ryan n.d)
Figure 6.3 Middle Left (2); Aerial of complex (Hursley n.d)
Figure 6.4 Middle Right; Circulation between the new and the existing (Hursley n.d)
Figure 6.5 Bottom Left (4); Entrance of new in relation to the existing with pond above parking garage (Hursley n.d)
Figure 6.6 Bottom Middle (5); Internal circulation in the new (Ryan n.d)
Figure 6.7 Bottom Right (6); Street view (Hursley n.d)

Figure 6.8 Design Explorations
(Author 2017)
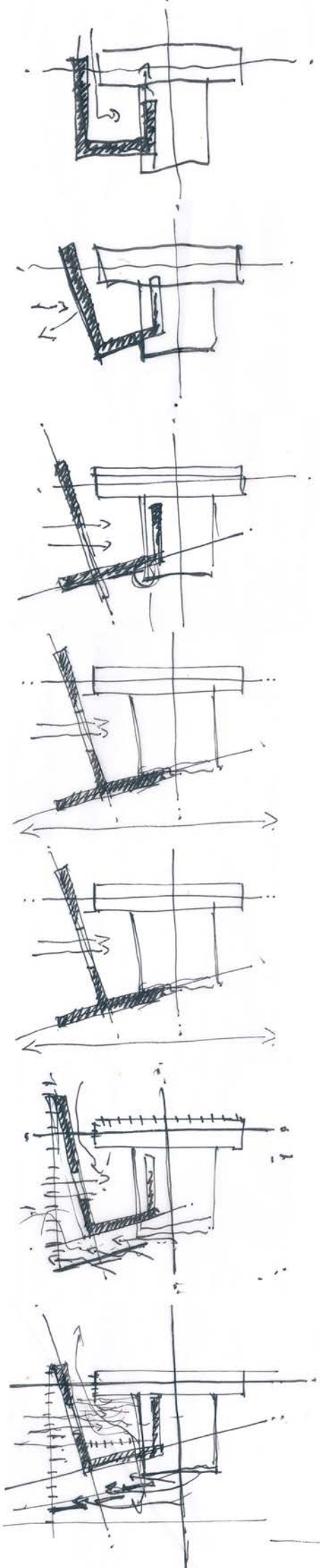
6.3 - Design Explorations

Pretorius Square Model 1

The initial concept model for the square was an exploration in mirroring the building onto the landscape, done in an attempt to respond to the symmetcal nature of the existing while maintaining a sense of contestation as proposed in the design intention. Further layering involved movement of the public with the main lines of sight held by the City Hall tower.
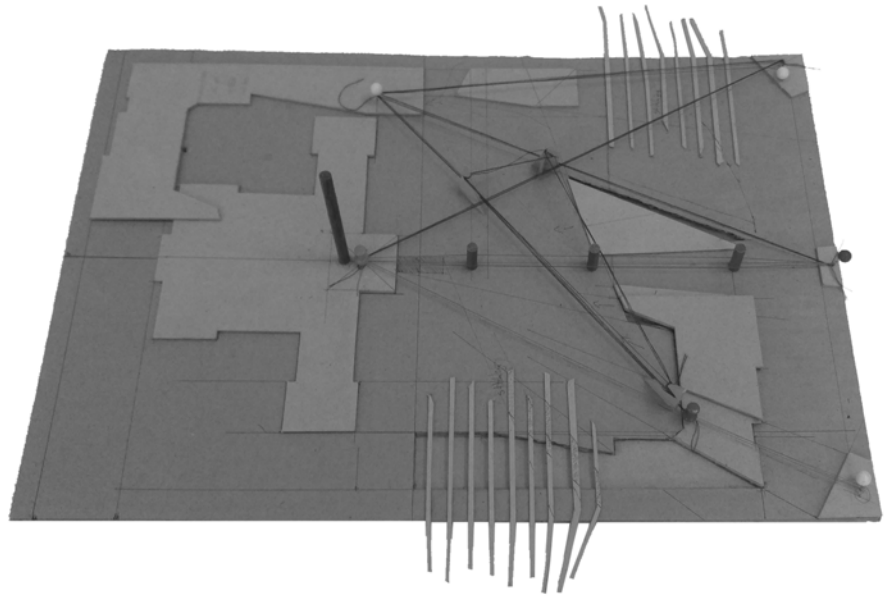
Figure 6.9 Right; First Square iteration (Author 2017)

Pretorius Square Model 2

The second model exploration saw a focusing of the square and its routes towards the new building on the northern edge of city hall. Nodes were positioned at the overlays of routes and the concentric circles moving outwards from city hall. The intention was to explore an overlay of the direct movement of protest with that of concentrated nodes of activity focused towards city hall as a response to protests identity addressed in the urban vision as well as the postcolonial perspective in an attempt to strengthen the publics role in the space.
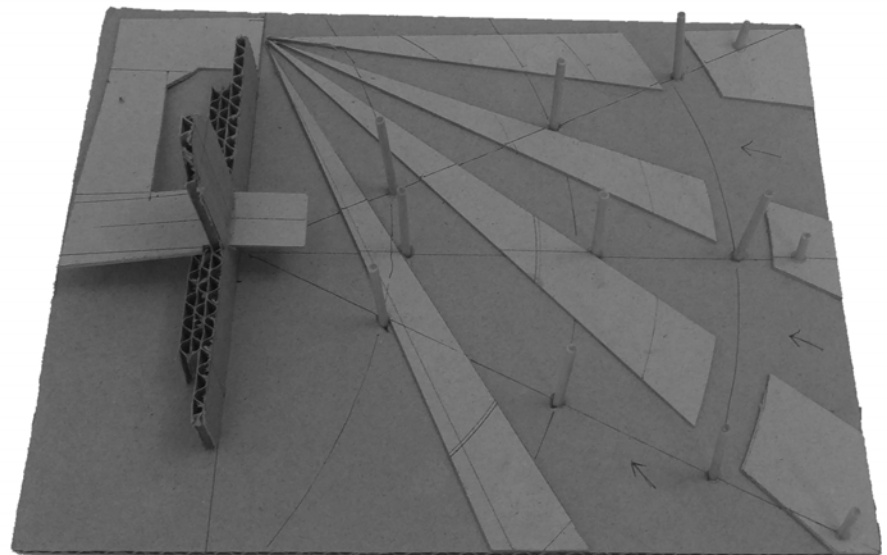
Figure 6.10 Right; Second Square iteration (Author 2017)
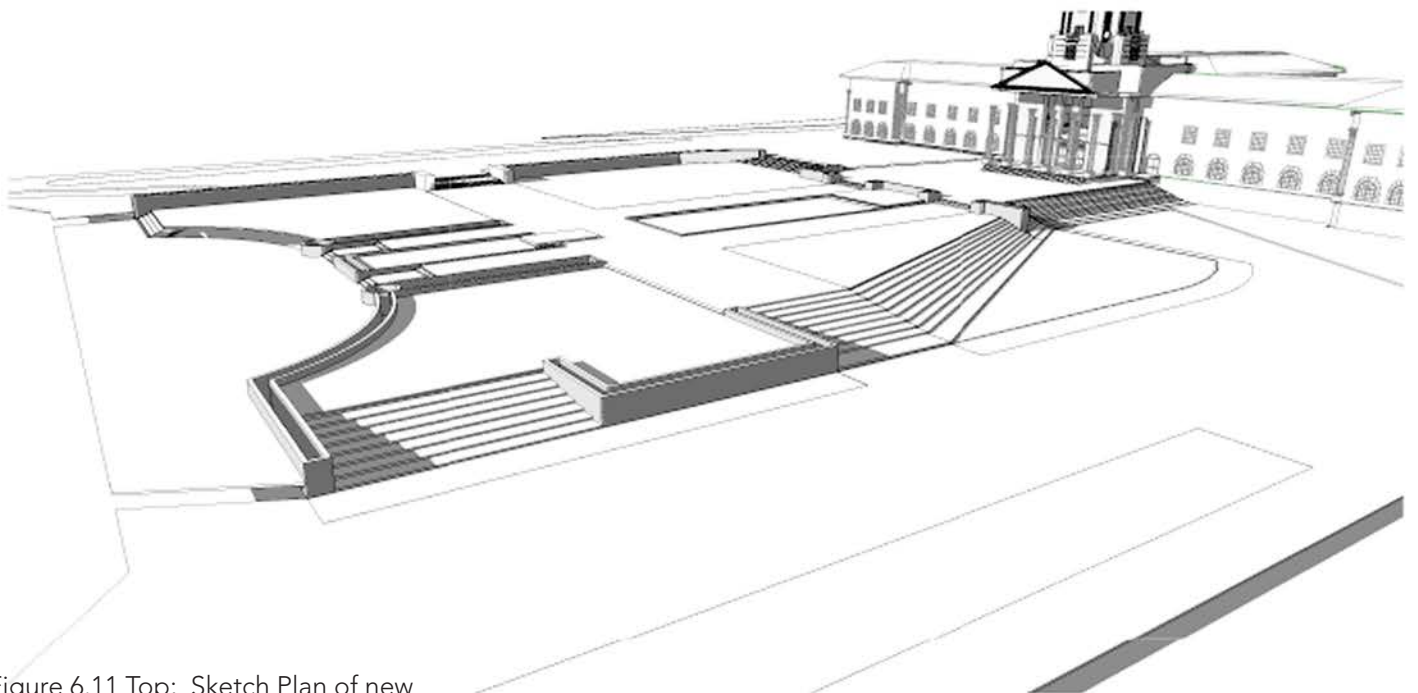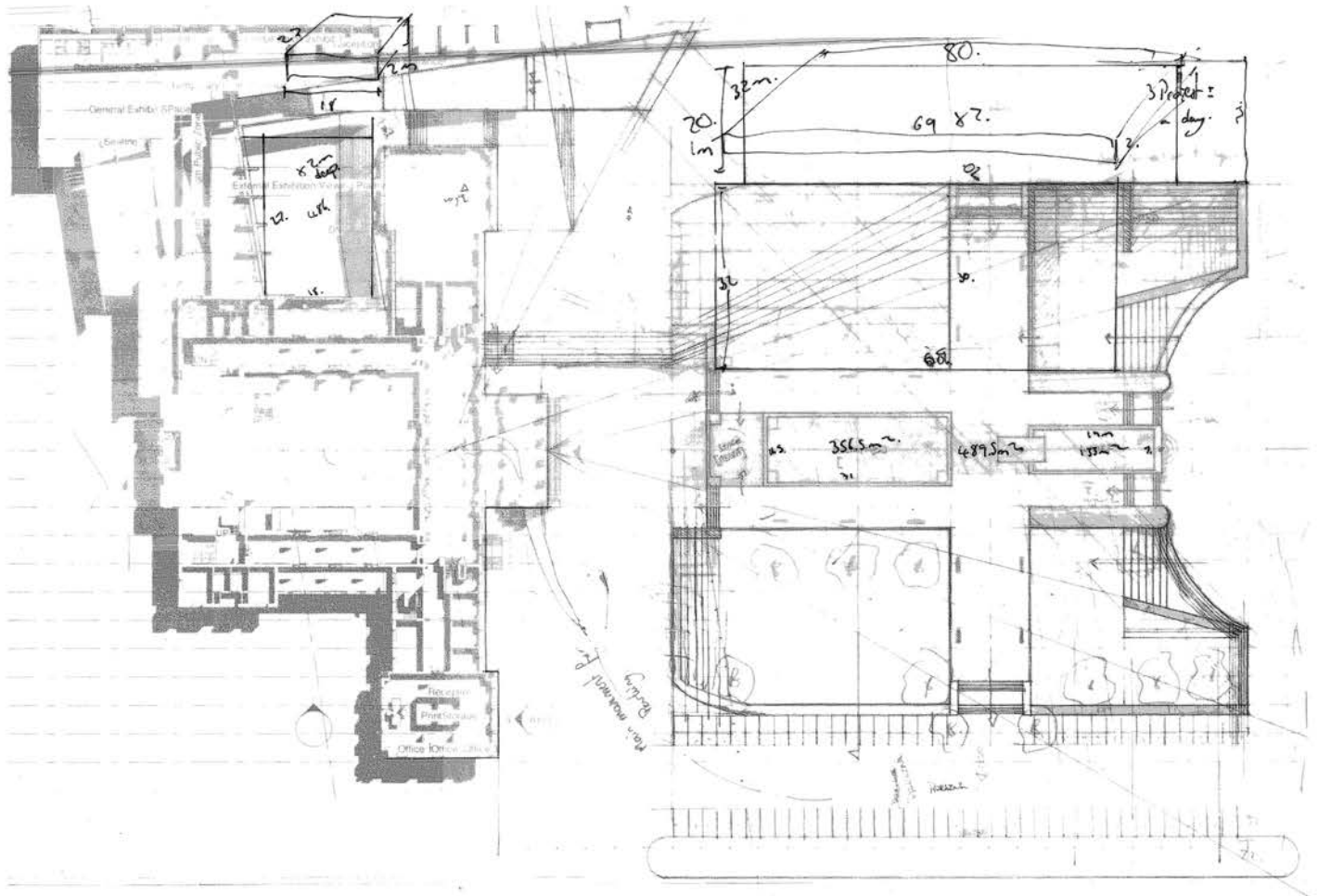
Figure 6.11 Top; Sketch Plan of new
Pretorius Square (Author 2017)
Figure 6.12 Bottom; 3D of new
Pretorius Square (Author 2017)
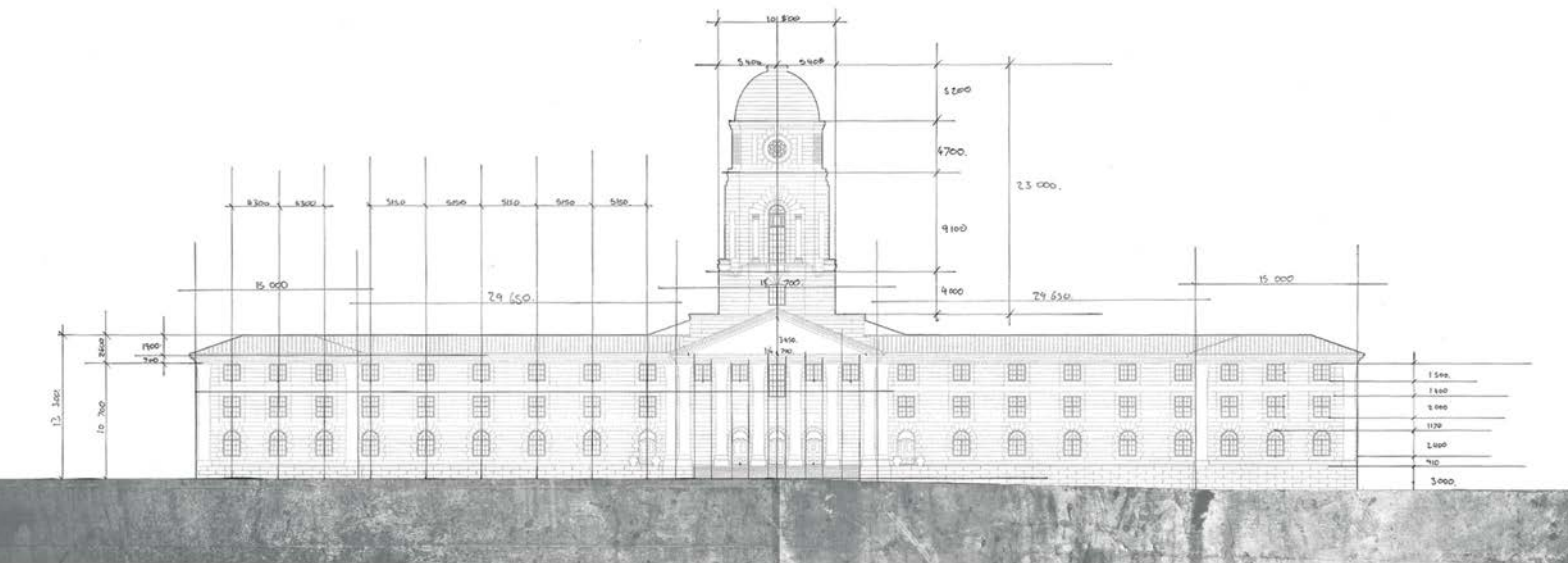
6.3.2 - Facade Model Explorations

A prominent and important aspect of the existing City Hall is its main eastern elevation. It is the only façade of the building constructed out of sandstone, and the only one which expresses the intentions of the past and help to contain Pretorius Square.

The façade was explored through models as a means to gain an initial understanding of its established value in the context and establish what, if anything, would be an appropriate design intervention.

Figure 6.13 Above; Existing facade
Figure analysis (Author 2017)
Figure 6.14 Right Top; Facade Iteration 1 (Author 2017)
Figure 6.15 Right Middle; Facade Iteration 2 (Author 207)
Figure 6.16 Right Bottom; Facade Iteration 3 (Author 2017)

1. The first model was that of the existing façade as a means to gain an initial understanding of it.
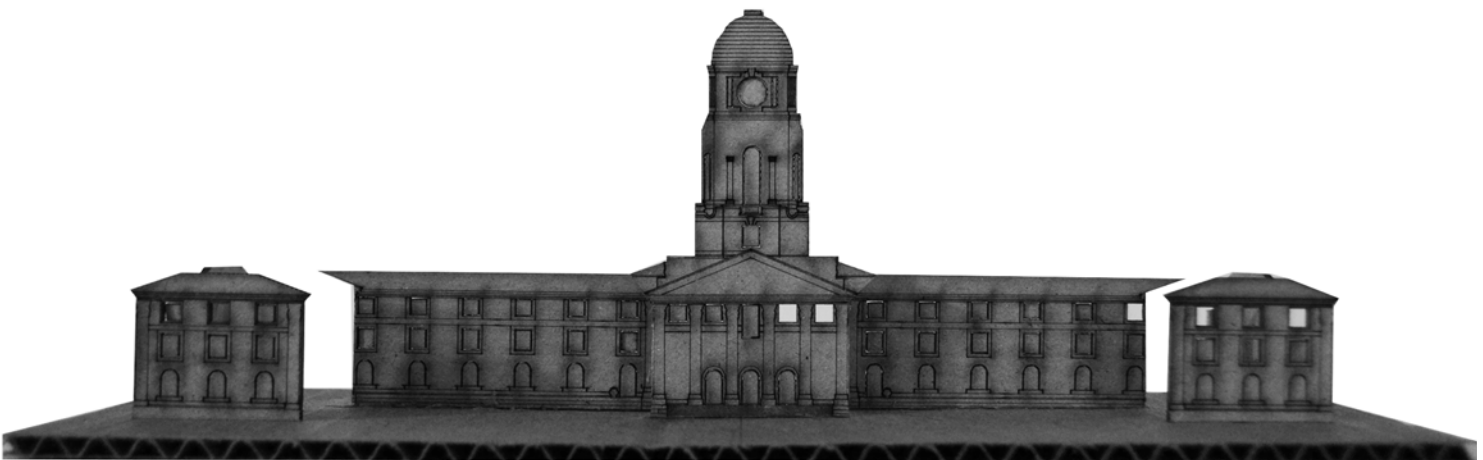
2. The second model was an investigation of the façade's main elements, dividing these into individual zones so to create new entry points. The investigation was done in an attempt to challenge the hegemonic nature of the existing façade by breaking down its heavy presense through these seperations. Through this exploration the nature of the façade and the effectivness of its elements as a whole was made present.

3. The third investigation saw an extension of the columns positioned at the main entrance and both the southern and northern wings, as a tool in the creation and control of space leading from the square to the building's interior. The investigation was a second attempt to challenge the hegemonic nature of the existing through the continuation of an ordering element in conjunction with the idea of hybridisation and the merging of different ideals.

4. The fourth investigation explored the idea of removing the grounding elements of the façade found between the wings and the main entrance. The investigation was done as a response to the postcolonial perspectives which challenges our understanding of power. Through the removal of the facades grounding elements the public is given greater opportunity for access and in turn, challenges the power exerted by city hall.
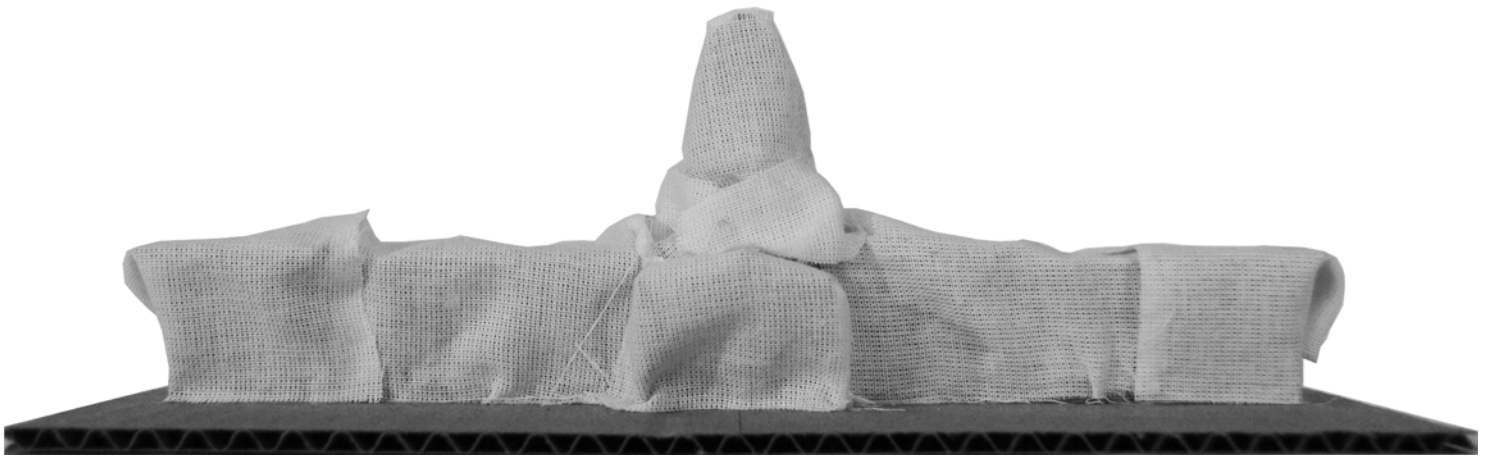
5. The fifth investigation took inspiration from the works of Christo in an attempt to understand the massing and balance of the main façade. Furthermore, the investigation was done in an attempt to understand the heritage and significance of the façade to the understanding and value of the building. It questioned whether the massing represented by the wrapping would remove or undermine its presence.

6. The final investigation explored the complete removal of the northern façade in an attempt to create a clearer divide between the new and the existing. The divide was a response to Noble's (Noble 2008) theory of hybridisation and the facades ability to merge with a new identity.

Conclusion:
Through the investigation of the main façade of Pretoria City Hall, the establishment of its heritage value is supported. The investigation led to the conclusion that the best response to the heritage of city hall and its main façade would be to leave it untouched with the eastern elevation of the new subtly suggesting its presence. The exploration further supports the argument of the horizontal emphasis of the new as a response to the existing.

Figure 6.17 Left Top; Facade Iteration 4 (Author 2017)
Figure 6.18 Left Bottom; Facade Iteration 5 (Author 2017)
Figure 6.19 Above; Facade Iteration 6 (Author 2017)

Circle

Opposing Benches

Horseshoe

Semicircle

Classroom
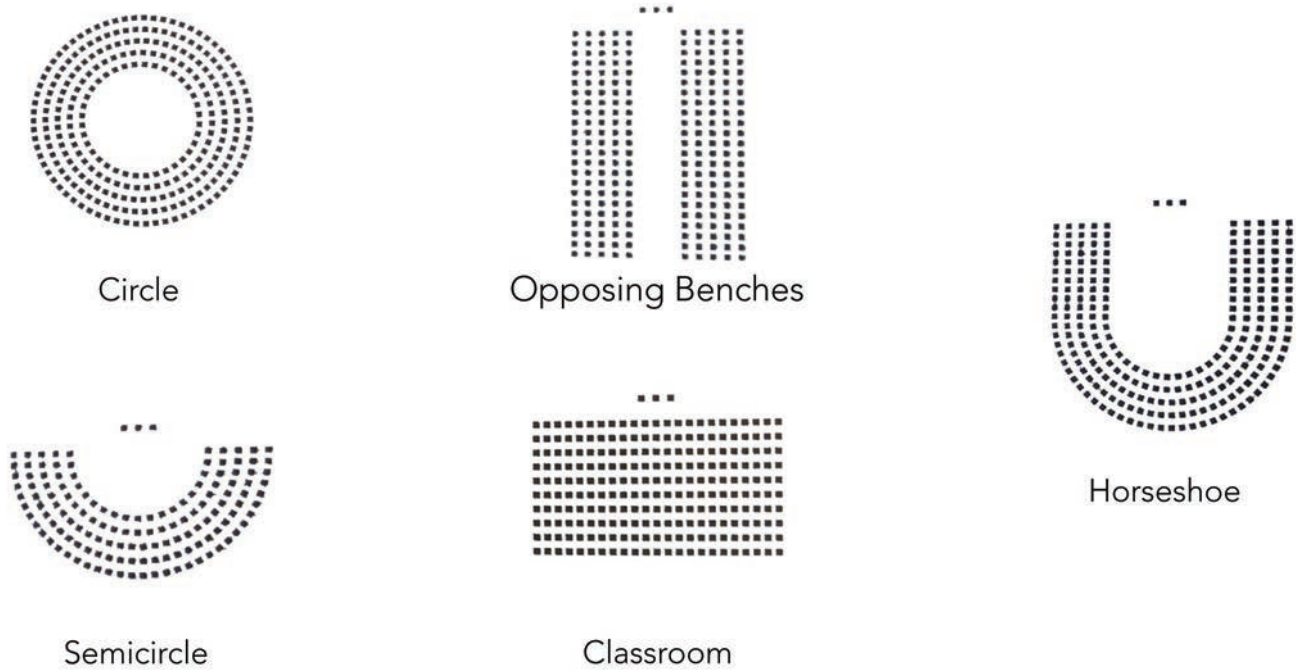
6.3.3 - Debate Arena

Central to the design is the new Debate Arena situated in the main hall of Pretoria City Hall. The design of the arena was approached with the intention of creating a space which would best facilitate debate and the interaction of the public with the oppositional parties housed in city hall.

In order to establish an appropriate design for the new debate arena a variety of parliaments were investigated. Parliaments were chosen as a good design precedent as, according to XML (2016), these are the spaces in which politics are practiced and where collective decisions take form in a setting where political activities are organised by architecture. As the mian political spaces in society for the collective exchange of ideas, these are spaces in which different

political positions can be confronted, and therefore developed (XML 2016: 7).

Although society has developed, the architecture of parliaments has not (XML 2016). It has remained virtually unchanged and is still intended to facilitate our adapted society and ever increasingly complex political process (XML 2016: 8), therefore, it is the intention with the new debate arena to learn from parliaments and develop a space which responds to society and political climate that are both changing. To focus the investigation, countries identified by the Economist Intelligence Unit's Democracy Index (EIU Democracy Index 2016) with full democracy (figures 1 to 10) were investigated as well as South Africa (11).

Figure 6.20 Above; 5 types of parliamentary arrangements (XML 2016)
Figure 6.21 Right; Parliaments from countries with full democracy (XML 2016)
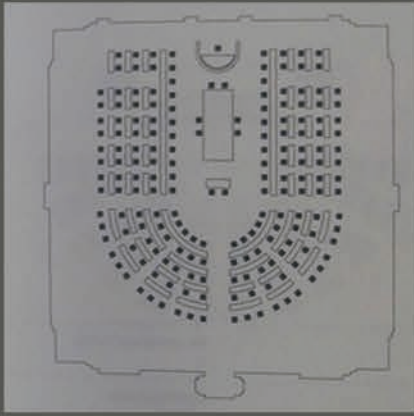
1.   Australia
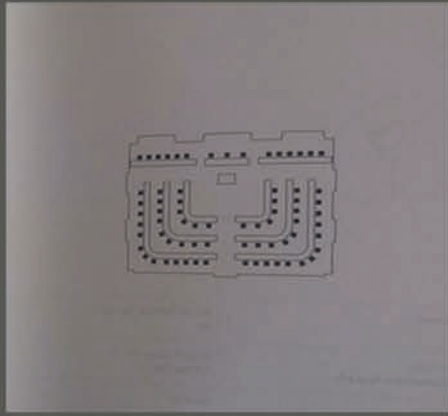
2.   Canada

3.   Denmark

4.   Finland

5.   Iceland
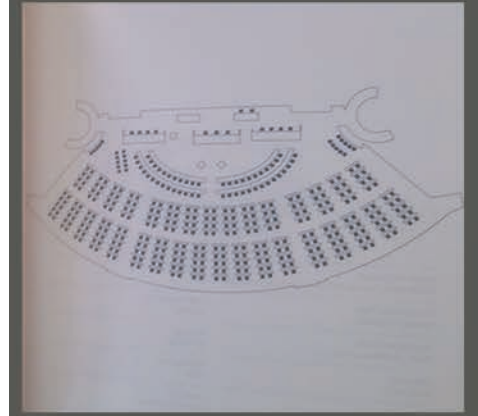
6.   Ireland

7.   New Zealand

8.   Norway

9.   Sweden
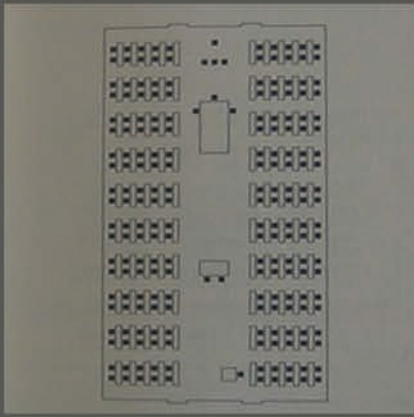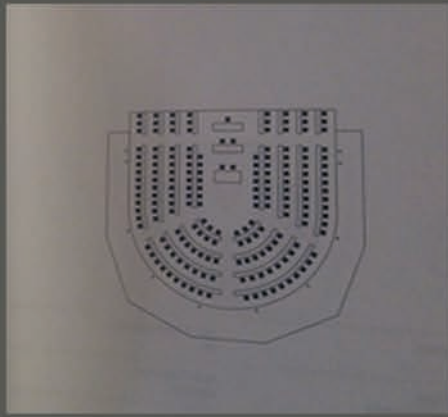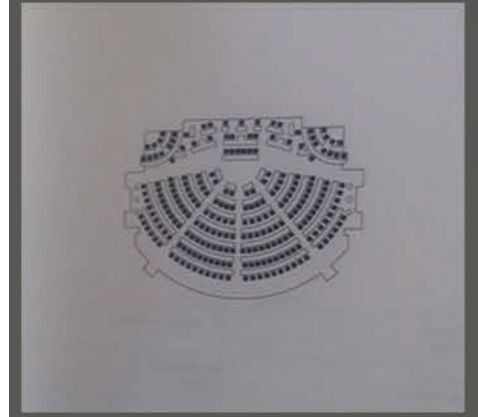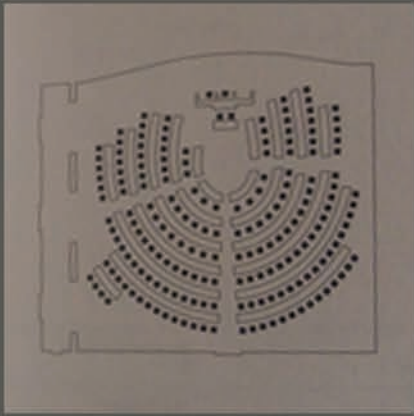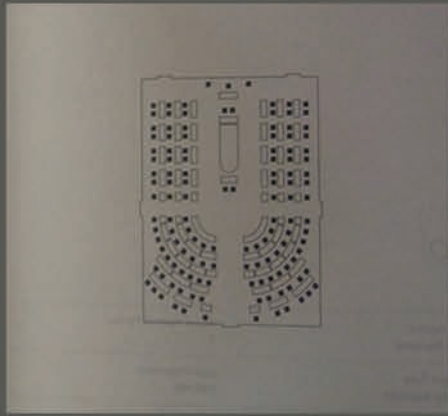
10.   Switzerland
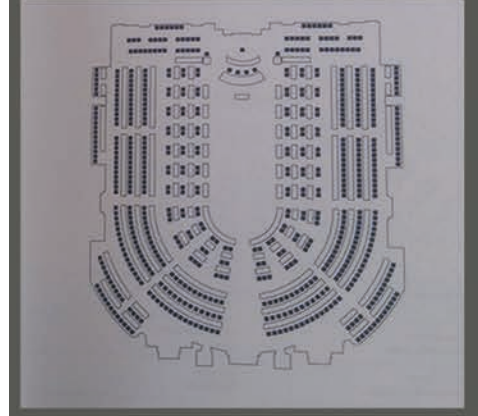
11.   South Africa
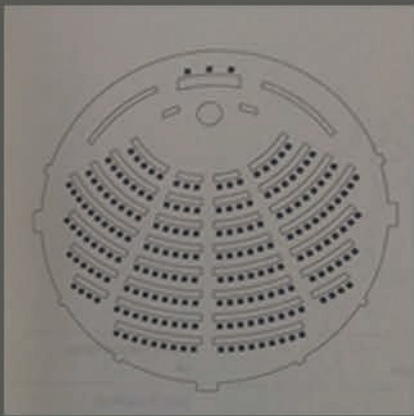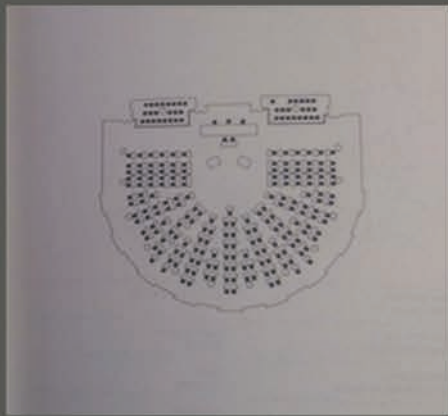
A large portion of the design progression and development of the project was done through models. The initial models were used as a means to quickly test the appropriateness of site selection and the manifestation of the design intentions in and around the existing structure. Following the initial concept models and the establishment of the designs at the northern edge of City Hall, the models were used to refine and test multiple iterations so to establish an appropriate response to contrast the existing while still enabling the core focus as a civic centre.

6.3.4 - Model Iterations

Figure 6.22 Design Iteration 1 (Author 2016)
Figure 6.23 Below; Design Iteration 2 (Author 2016)
Figure 6.24 Right; Design Iteration 3 (Author 2016)
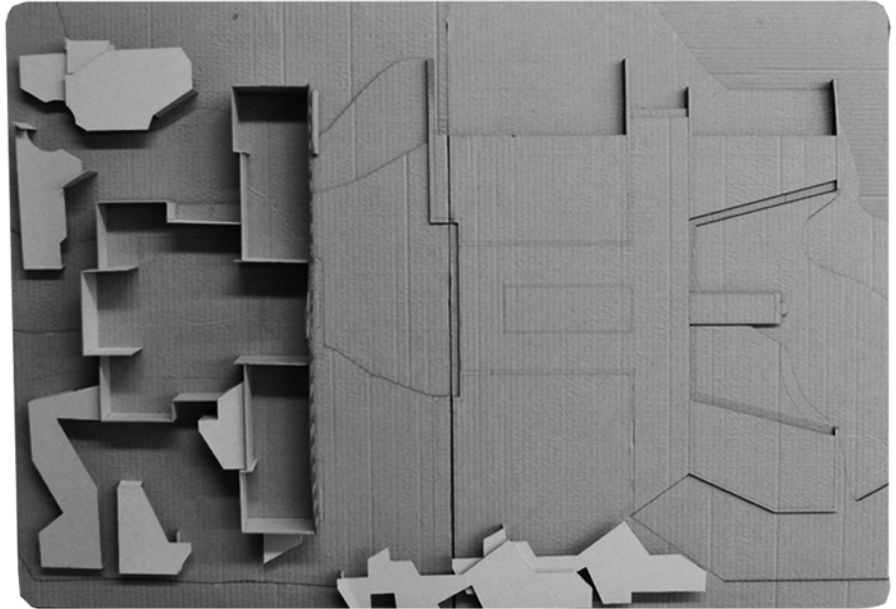
Iteration 1 (1:200) - The building as a tool in the mapping the site

The initial model exploration was done as an exercise in understanding city hall and its immediate context as well as the initial exploration of the contestation of the new.

The model was an intuitive exploration of space, whereby architecture was placed based on the visual appropriateness for a given function. It was the initial attempt in applying the

theories supported in the argument which were grounded hybridisations contextual understanding in attempt to address the issue of the lost civic centre.
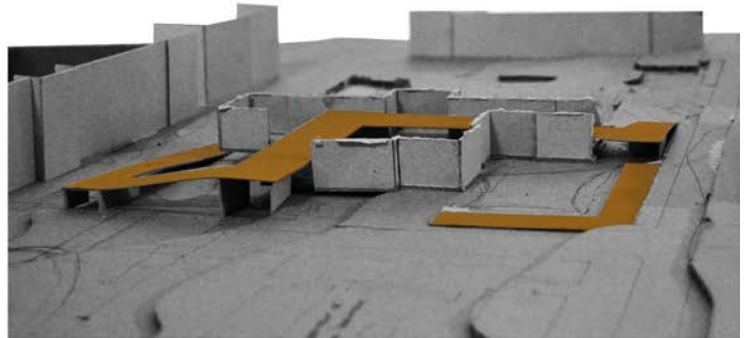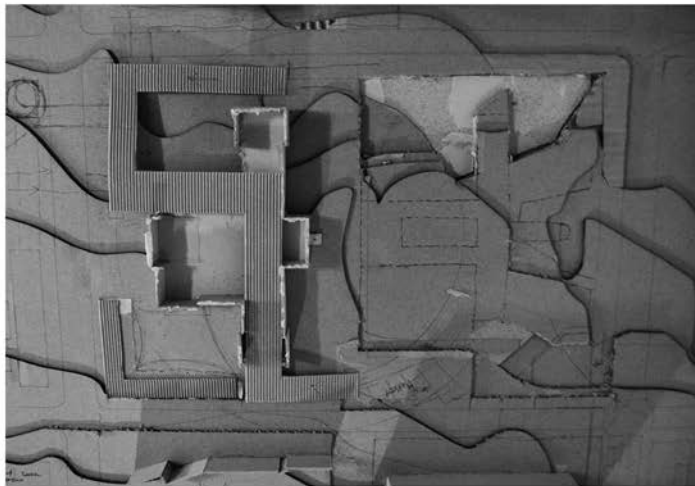
Iteration 2 (1:500) - Building as Route

The second model exploration explored the protest route and its ability to facilitate the formation of the new architecture through the old. This iteration saw the initial engagement with protest and the role of architectures in

facilitating it. The investigation was an exercise in the application of the postcolonial perspective, its ability to recognise past histories and using the role of the public to enrich the past.

The application of the postcolonial perspective was investigated through movement as a means of engagement with architecture as a response to the existing street condition and the movement which it facilitates it.
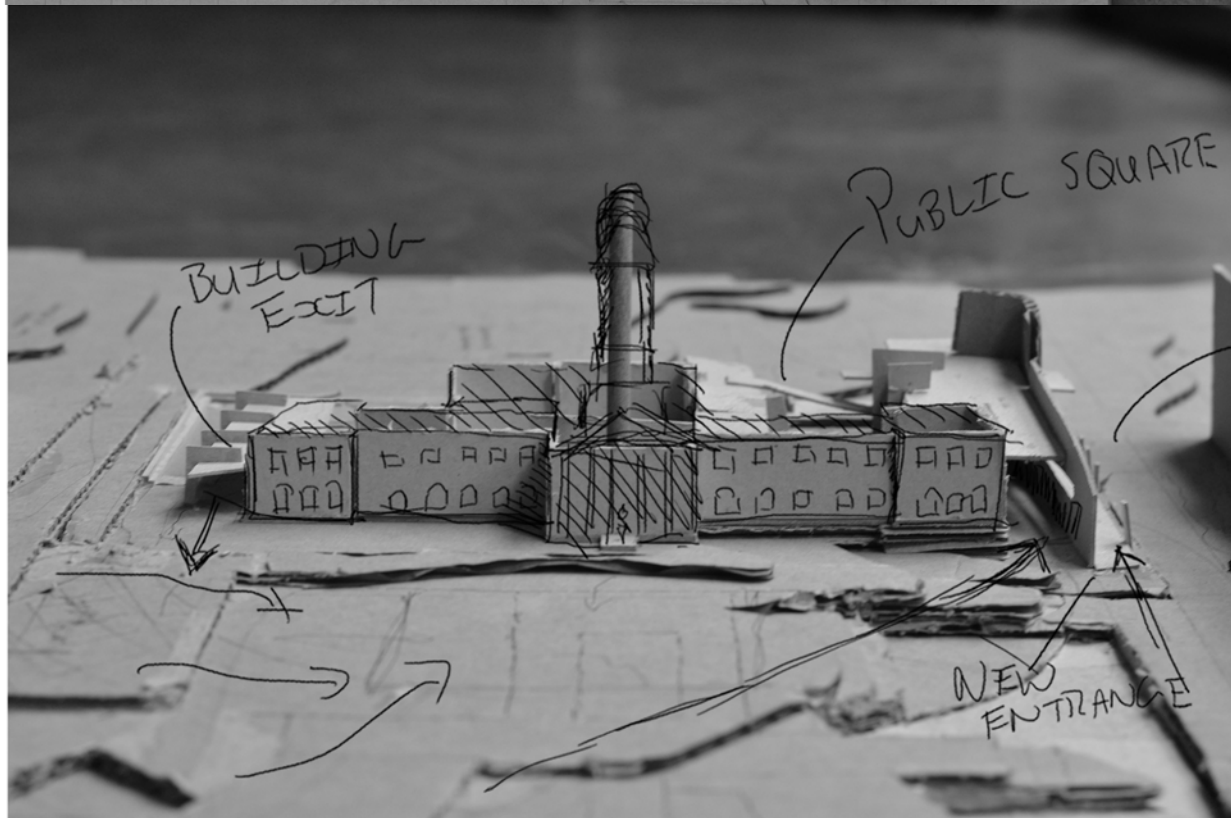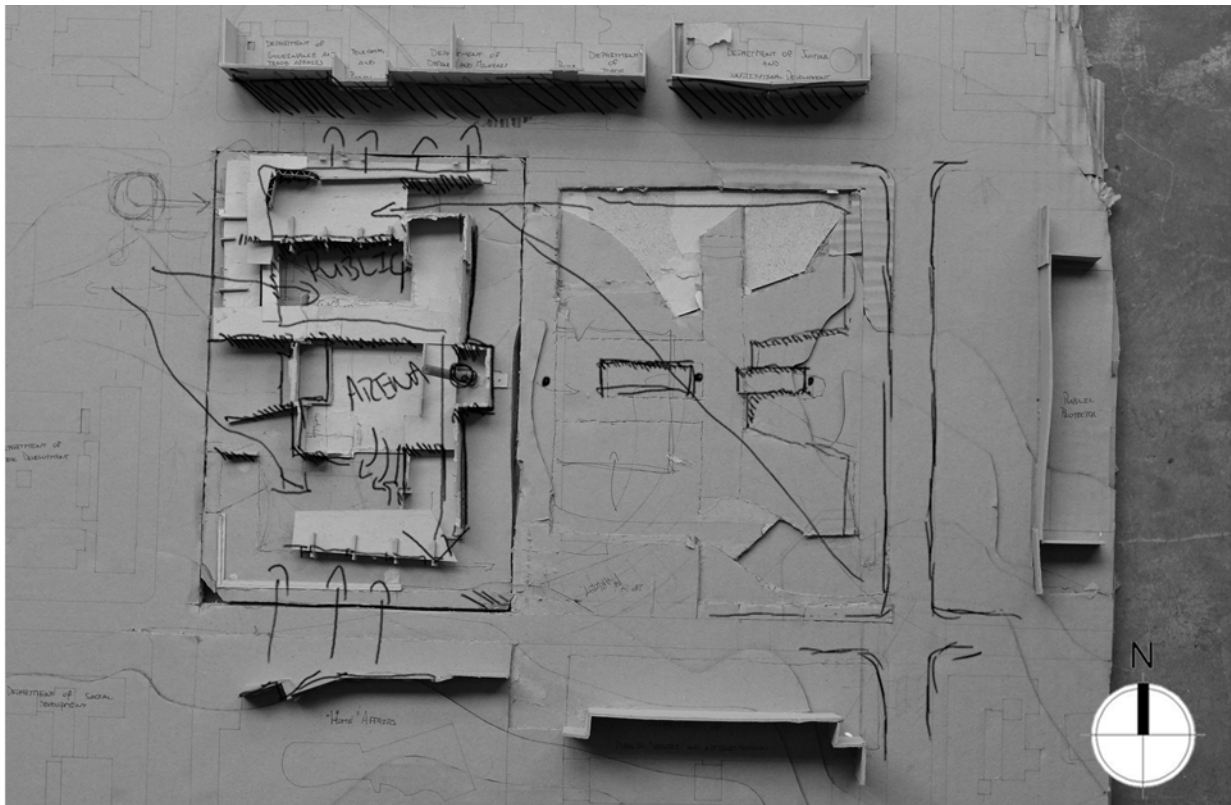
Iteration 3 (1:500) - Building as Route

The third iteration saw a refinement of the route, with the addition of a new building as a tool to contain the route. The iteration was an attempt to refine the application of the postcolonial perspective through the manifestation of hybridisation and its argument to merge separate ideals within space in the creation of a new identity.

The iteration was an attempt in the application of Talia Hatuka's (Hatuka 2008) notion of Spatial Choreography of protest.
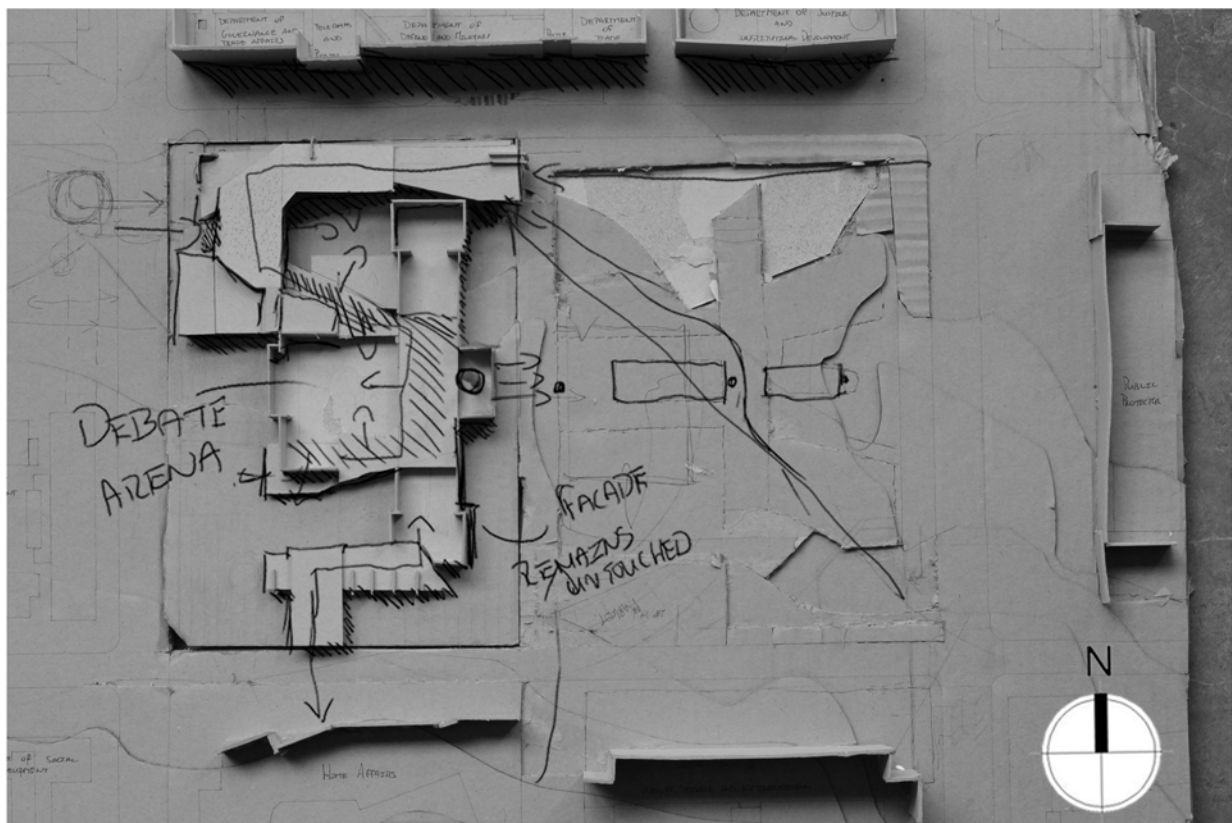
Iteration 4 (1:500) - Foundation

The fourth iteration saw the initial manifestation of what would act as the foundation for the final design.

The iteration took inspiration from the Nelson-Atkins Museum of Art in its response to the existing. There was a furthering in the junction of the new with the existing using movement as a determining factor in response to the typological approach suggested by Plevoets and Cleempoel (Plevoets & Cleempoel 2011).

The new extension on the northern edge was done as a way to express a physical rejection of City Halls symmetry in an attempt to challenge the hegemonic presence of the existing on Pretorius square. Also of concern in the iteration was an initial investigation of the core functions of the design, Display, Debate and Spectate, through a focus on the creation of dialogue between public and the political parties. Dialogue was represented along the protest route and took inspiration from films by using height in the representation of power, as manifest in the change of height experienced along the route, which represents the shift in power argued for by both hegemony and postcolonial perspectives as well as in the current political climate.

Figure 6.25 Below; Design Iteration 4
(Author 2016)
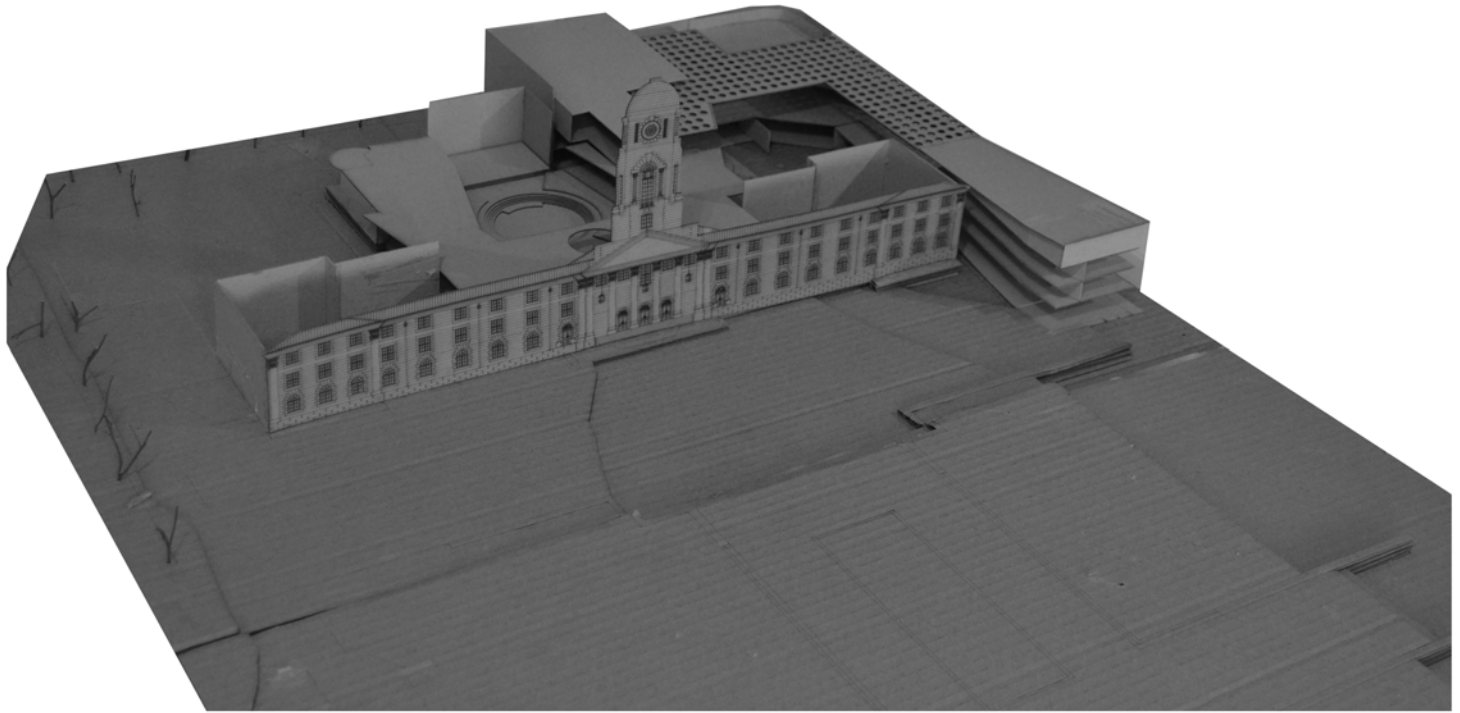
Figure 6.26 Above; Design Iteration 5 model (Author 2016)
Figure 6.27 Right Top; Design Iteration 5 model (Author 2016)
Figure 6.28 Right Bottom; Design Perspectives (Author 2016)

Iteration 5 (1:200) - June Exam 2016

The fifth iteration was a refinement of the previous iteration on a larger scale.

Critique

Concerns were raised about the legibility and resolution of the position and connection of the new architecture to the City Hall. It was suggested that the junction between the new and the old lacked the sensitivity required and was unsuccessful in its application of both the architectural and typological approaches.

It was argued that as protest and its movement through the space was one of the main drivers of the architecture, the route lacked resolution. The route was unsuccessful in its overlay the core functions of the design and it was therefore suggested that more rigour was required so to create a stronger overlay between the functions of Display, Debate and Spectate which, in turn, would better facilitate the publics engagement with the architecture.

Overall, the critique focused on the response of the new architecture to City Hall and its appropriation of the existing.
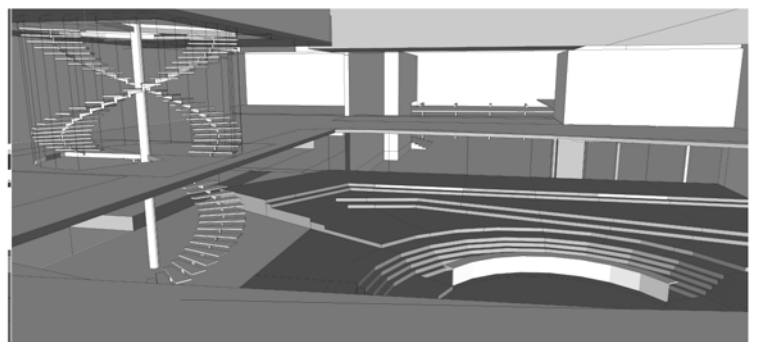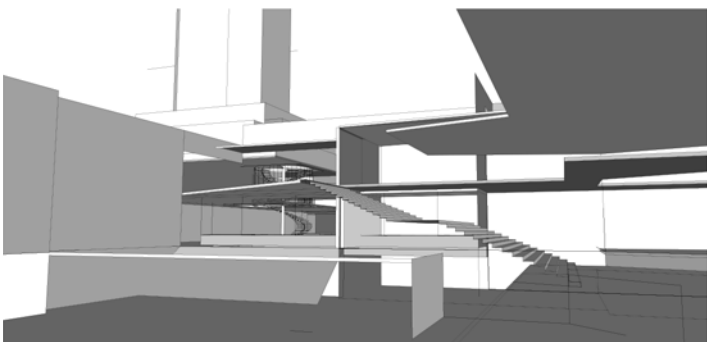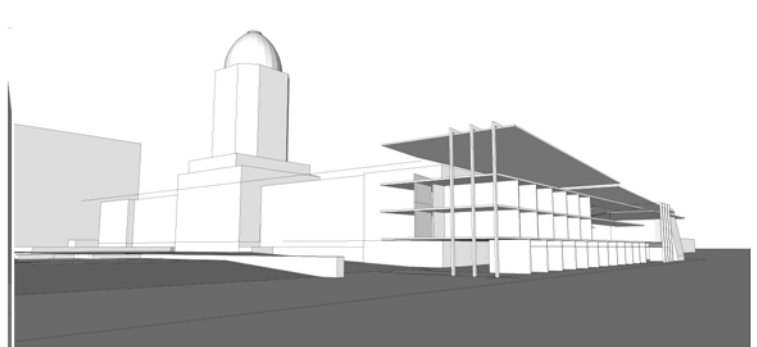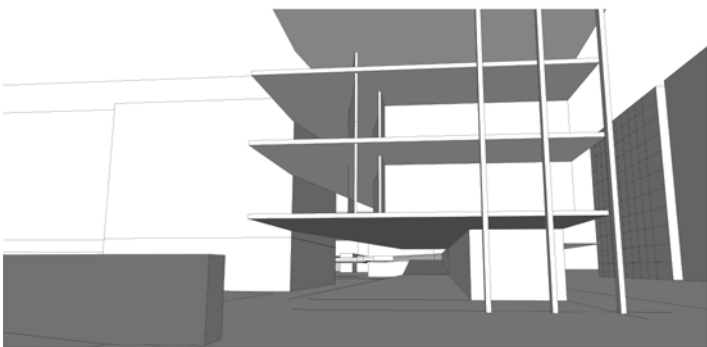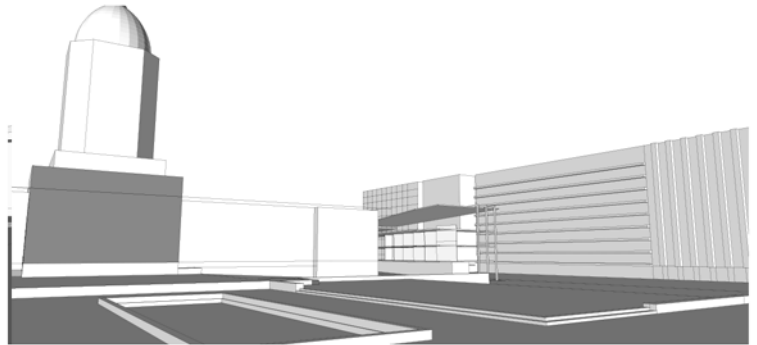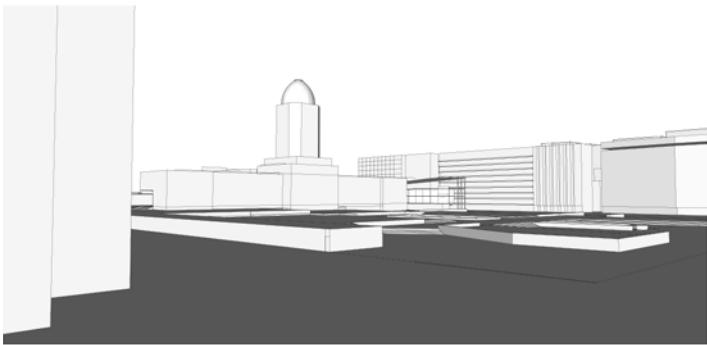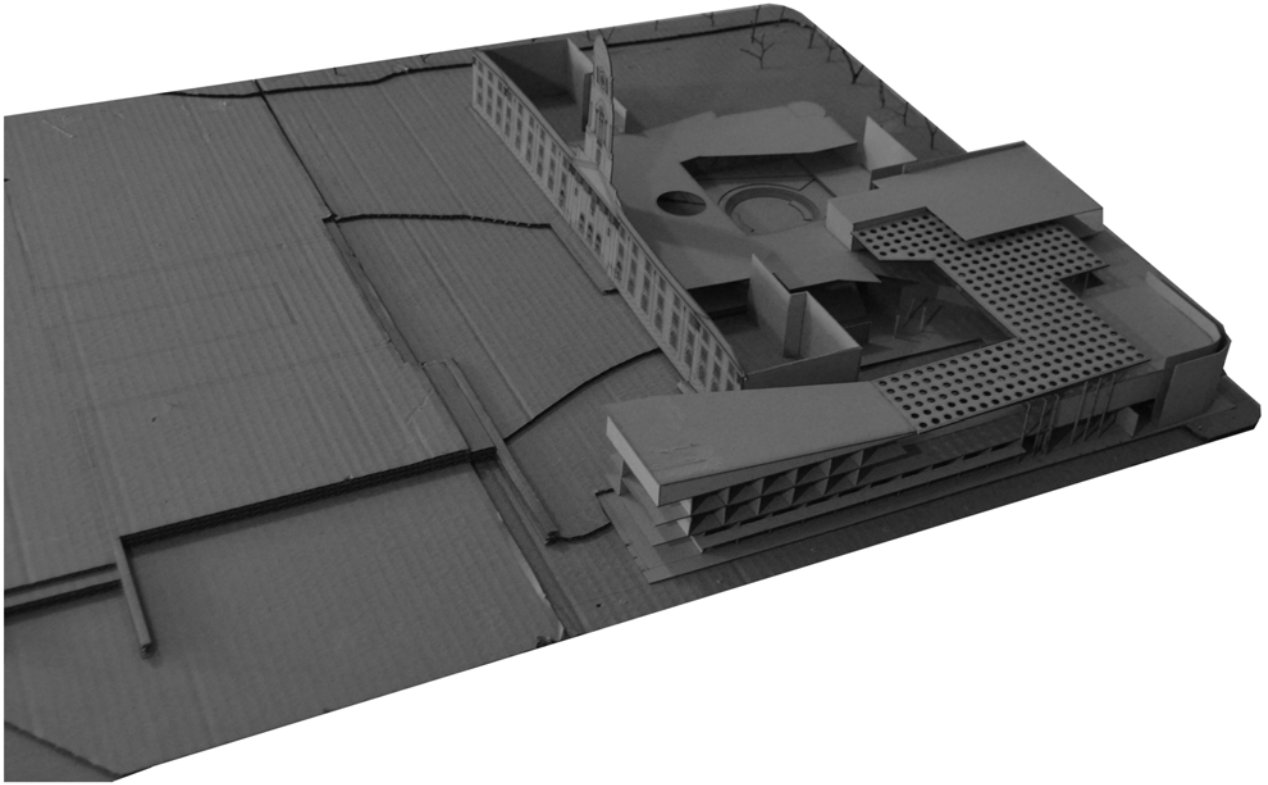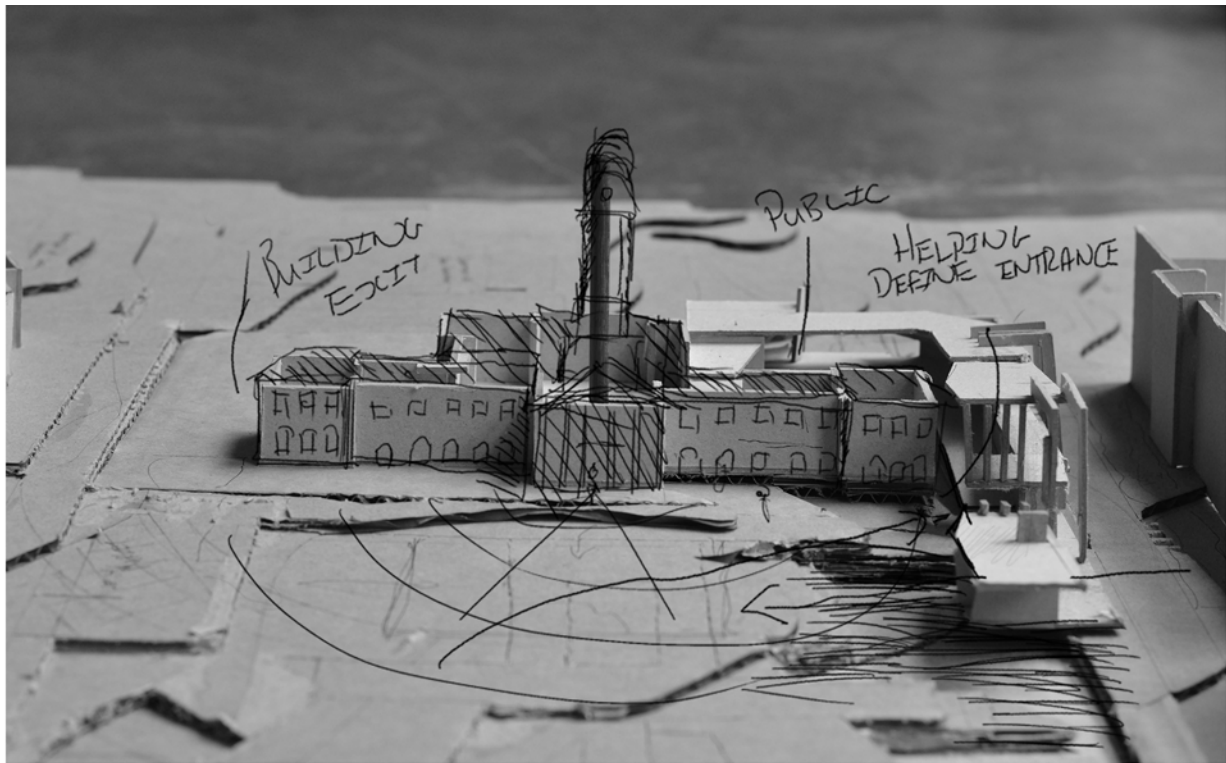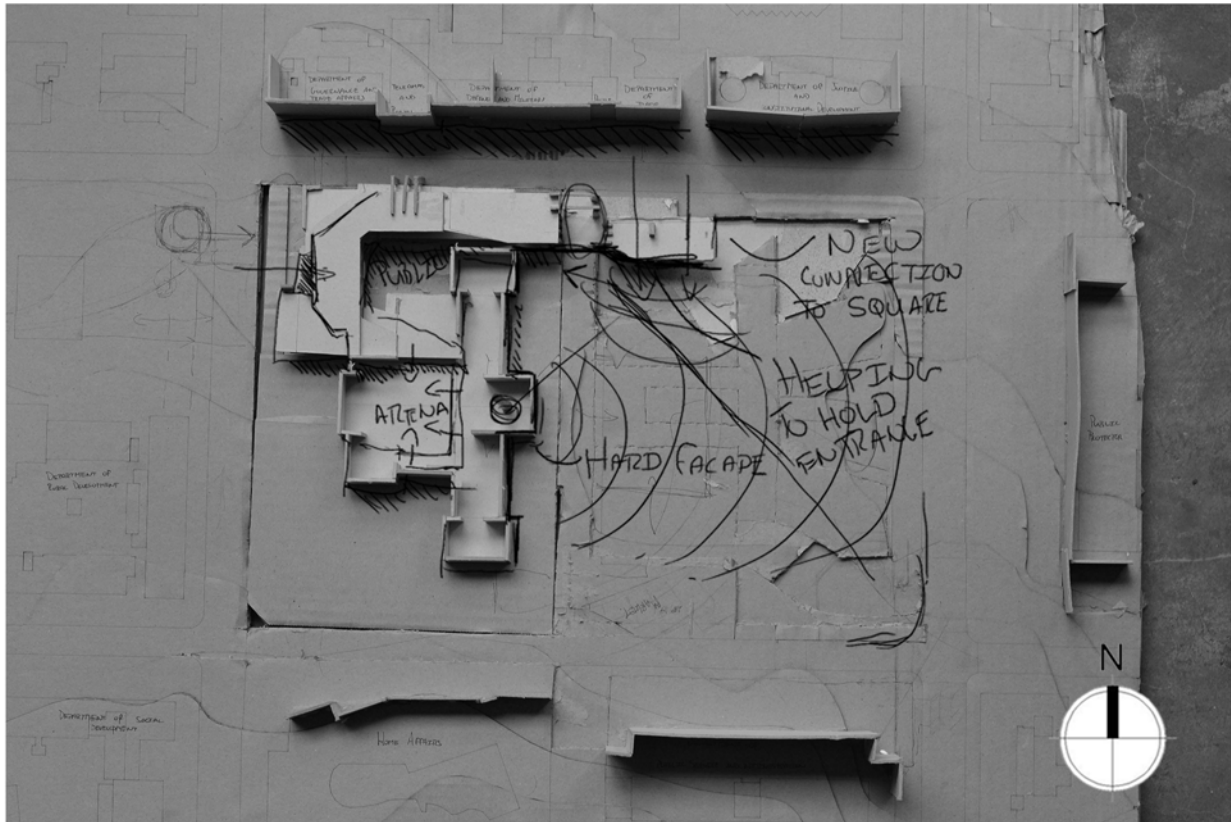
Iteration 6 (1:500) - June Response

The sixth exploration investigated the potential of the new architecture extending out onto Pretorius Square, in an attempt to strengthen the connection of the market to the public square as a response to the previous iteration and issue of a lack of legibility between the new and the existing.

Figure 6.29 Above; Design Iteration 6, June Response (Author 2017)
Figure 6.30 Right; Design Iteration 7 (Author 2017)
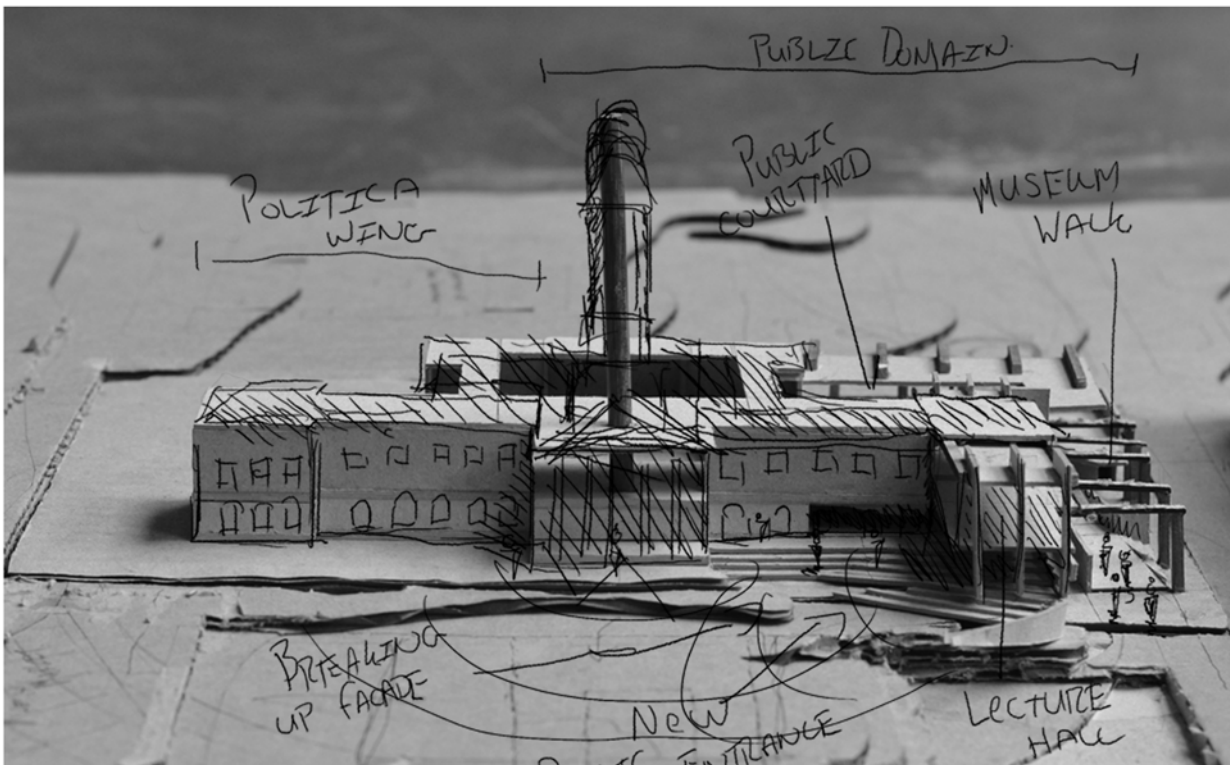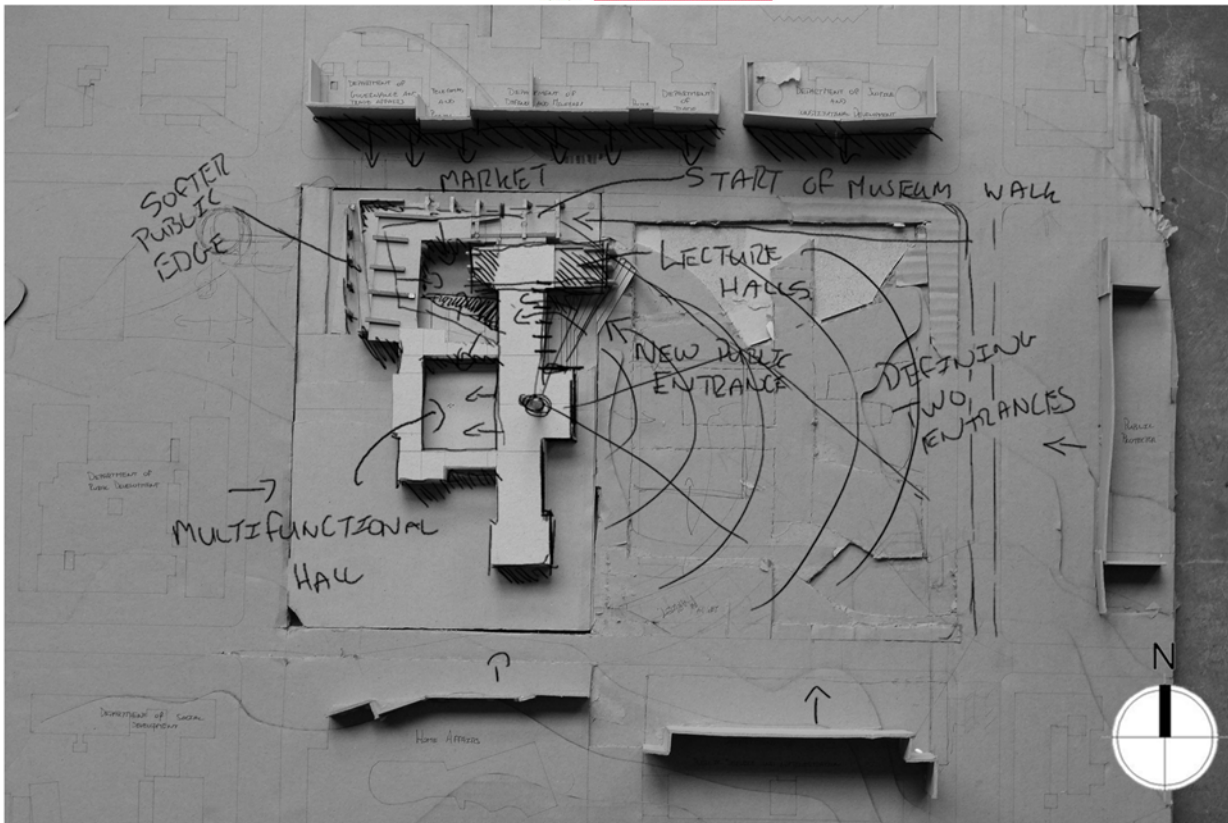
Iteration 7 (1:500) - Contestation Represent

The seventh iteration was a more direct exploration in the representation of contestation.

The building previously positioned at the northern edge was removed and placed on the first floor of the northern wing in an attempt to re-appropriate the existing. The intention was to better representation of the new identity in response to Noble (2008) which, through its application undermines the hegemony of city hall.

Furthermore, the iteration attempted to strengthen the public engagement through a stronger connection between the square and the city hall which was strengthened by the juxtaposition created by the new architecture.
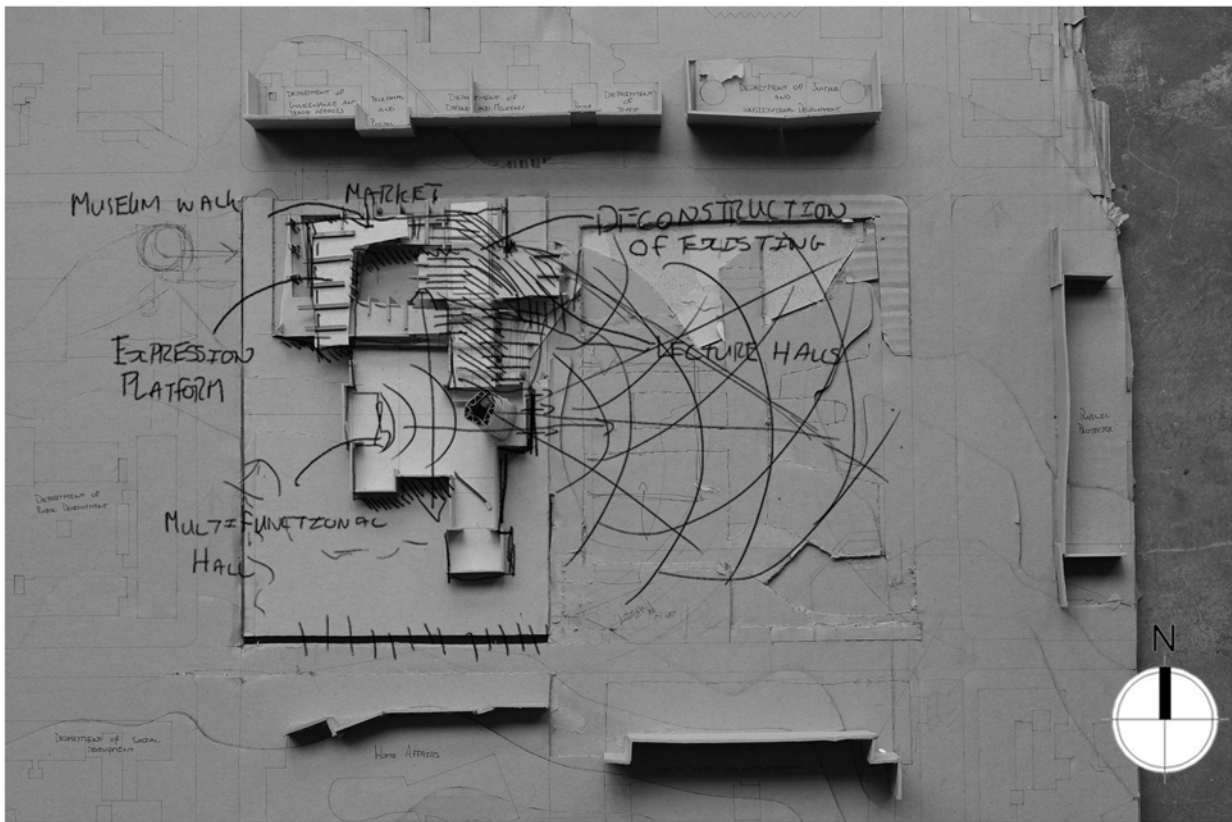
Iteration 8 (1:500) - Contestation Refined

The eighth iteration was done as a direct response to the previous iteration, attempting to further emphasis its intentions.

The value in the iteration was to take an extreme approach to how the design responds to the existing and through this , helped establish a line that, if crossed, would completely remove the value of the existing and no longer support the initial intentions and approach towards the heritage of the building.
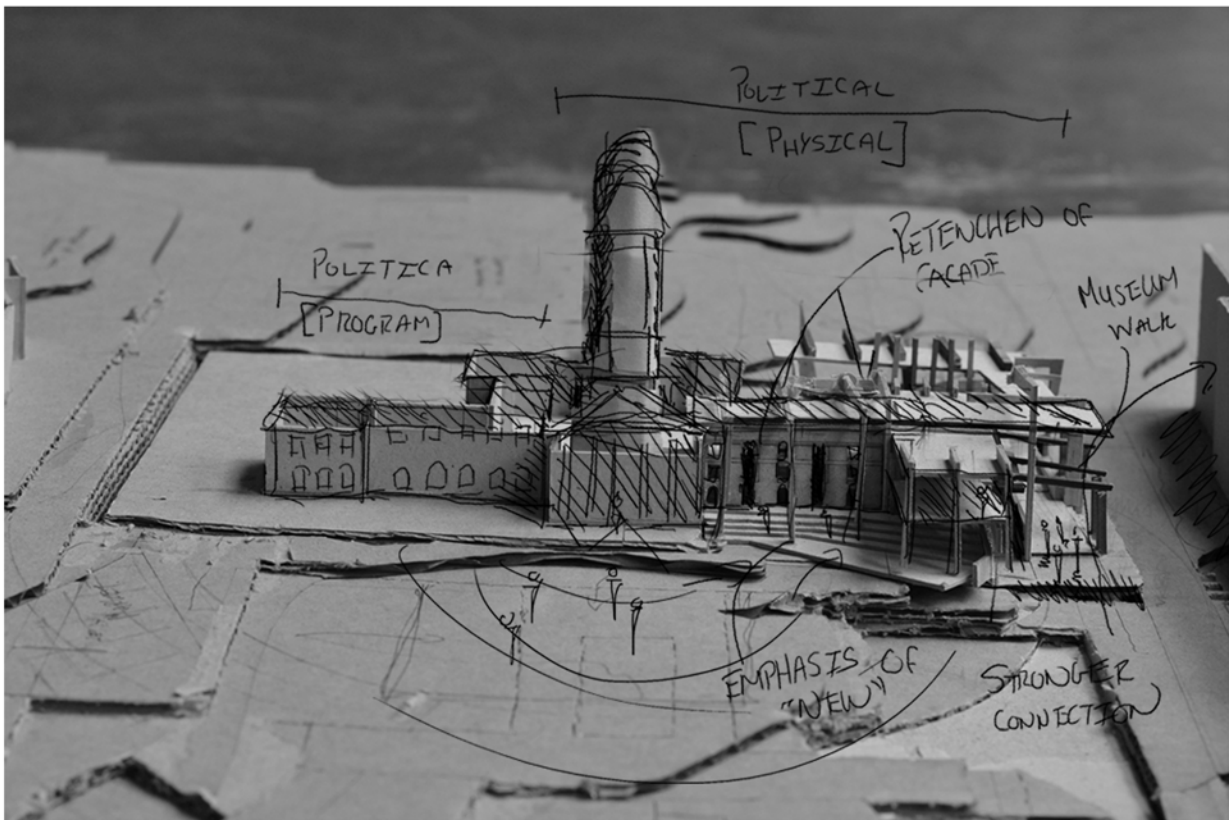
Figure 6.31Above; Design Iteration 8
(Author 2017)
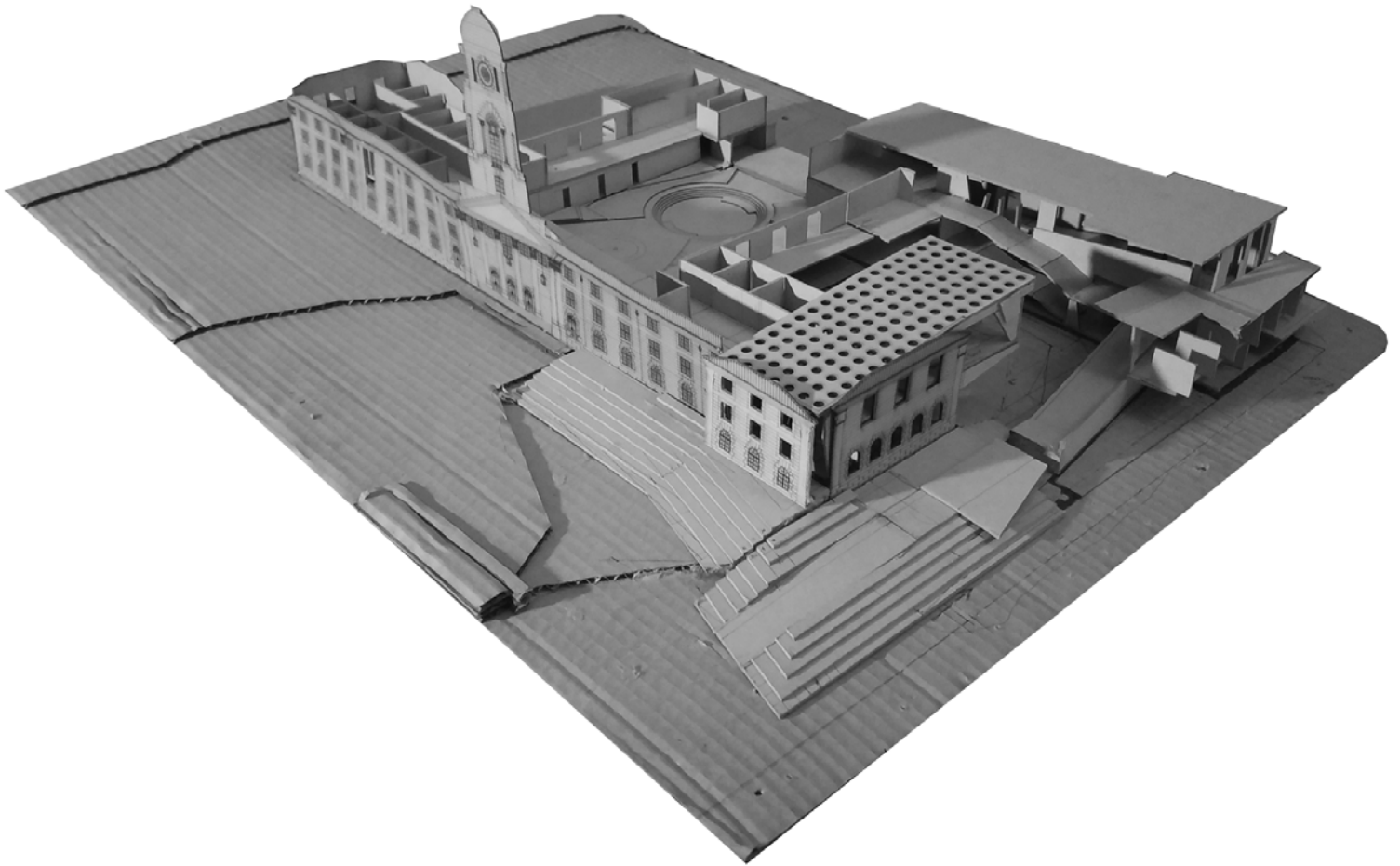
Figure 6.32 Above; Design Iteration 9
model (Author 2017)
Figure 6.33 Right; Routes of Democracy
(Author 2017)

Iteration 9 (1:200) -

The ninth iteration saw a refinement of the design in its positioning behind City Hall. The protest route was used to identify the entrance as well as establish a platform from which the public may interact with Pretorius Square. This was done as a response to the existing entrance and was an attempt to create a better connection with the public as well as move the create a platform from which the public starts to have closer connection to the city hall.

The lecture hall was retained on the first floor of the northern wing and used it to create a threshold for an expression platform from which the public was able to engage with the newly created public square contained by the protest route.

The iteration saw the refinement of the functions of Display, Debate and Spectate through a stronger overlay between them as a result of the refinement of the protest route.

Market Edge Entrance.
Direct connection to building from highly
public market edge.

Protest Route.
Route facilitating protest/unrest
from Pretorius Square directly
into debate hall.

Democratic Museum Walk.
Route similar to protest but follows that
of the Democratic museum ultimately
leading into the debate hall and tower.

153.
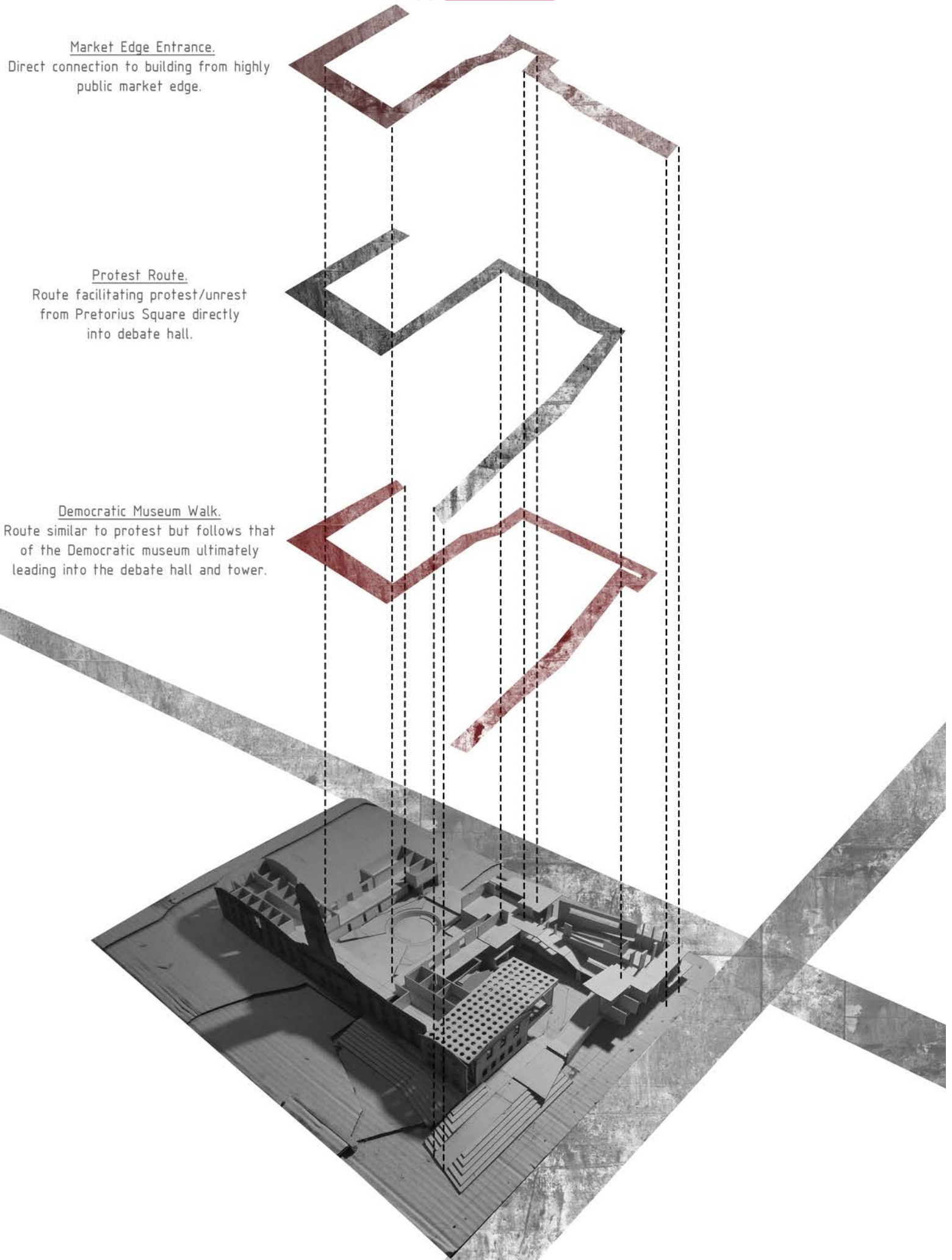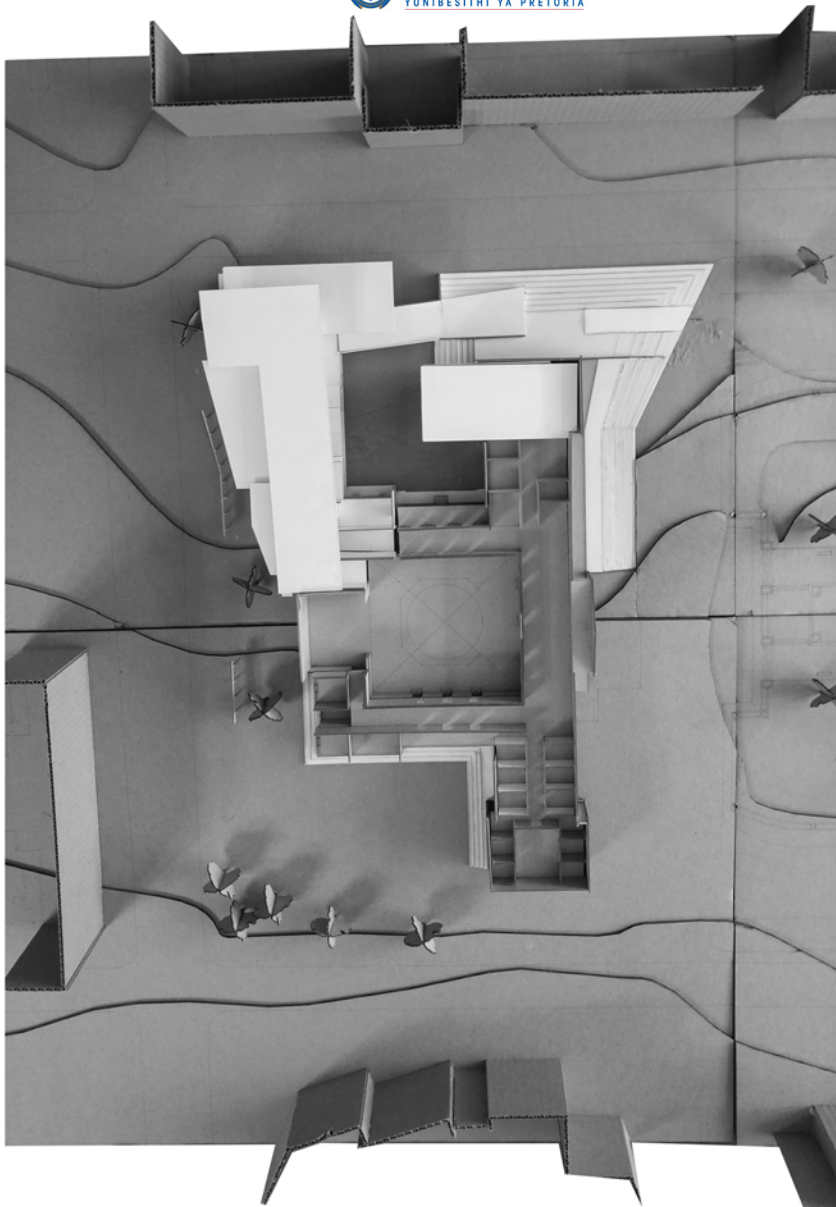
Iteration 10 (1:200) - June Exam 2017

The tenth iteration was a refinement of the previous iteration.

June Critique

Concern was raised about the connection of the new to the old. Although the junction was approached with a greater sense of clarity compared to previous iterations the appropriateness of the junction was challenged as its connection undermined the intention of the protest route.

The tectonic presence of the new building read too heavily and did not appropriately respond to both the City Hall and the established theories. The architecture unsuccessfully responded to the layering sought after in hybridisation.

It was suggested that the building was becoming too far removed from both the City Hall and Pretorius Square which did not support the argument of creating a civic centre to help reactivate the context. The step back of the new undermined its effectiveness in changing the hegemonic presence of city hall which in turn helped elevate its presence in society.

Overall, it was felt that the architecture lacked resolution and clarity in its approach and therefore did not achieve the intended goals.
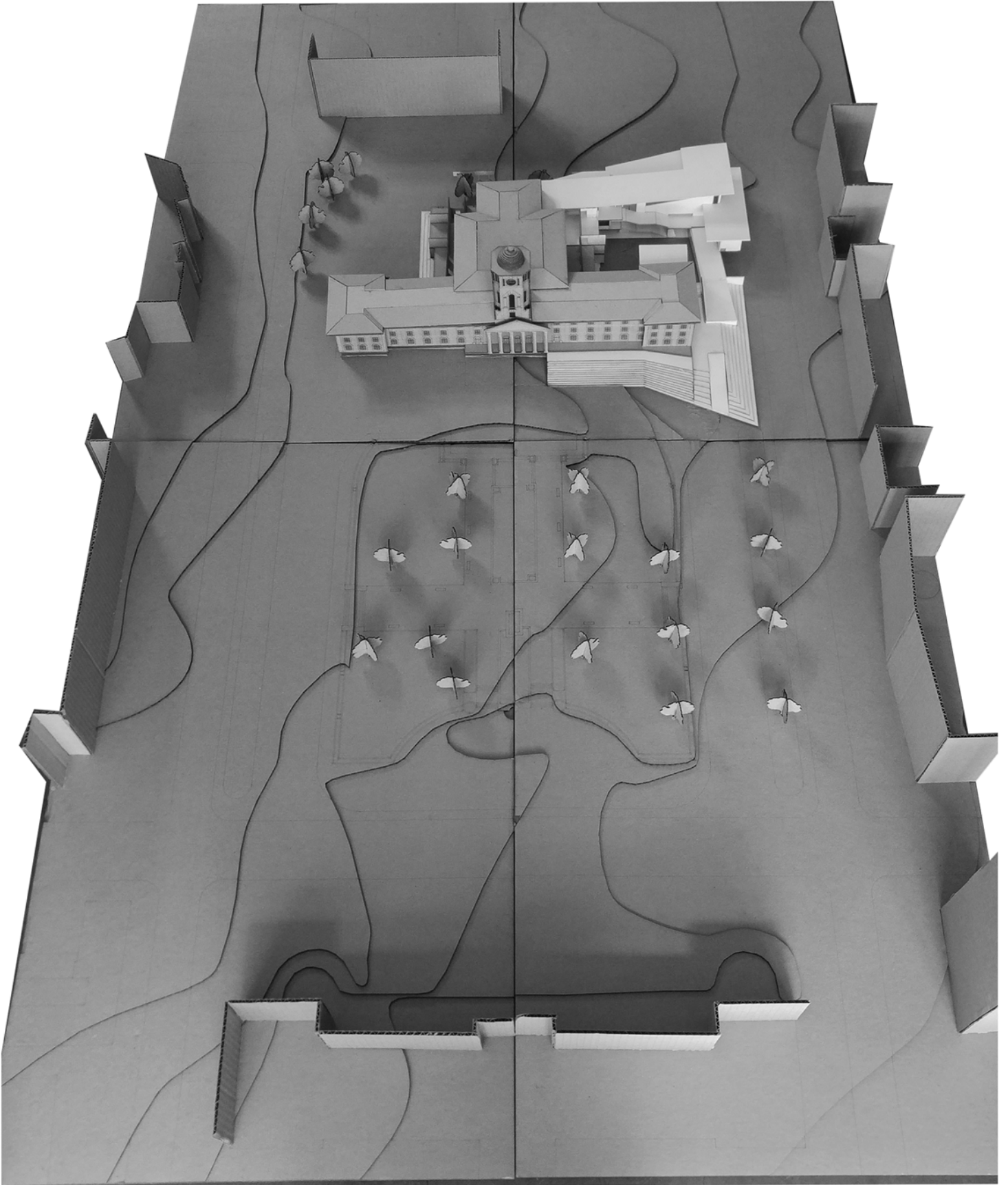
Figure 6.34 Left; Design Iteration 10
model without roof (Author 2017)
Figure 6.35 Above; Perspective of June
Exam model (Author 2017)

Figure 6.36 June Exam Section (Author 2017)
Figure 6.37 Below; June Exam Elevations (Author 2017)
Figure 6.38 Right; June Exam Perspectives (Author 2017)
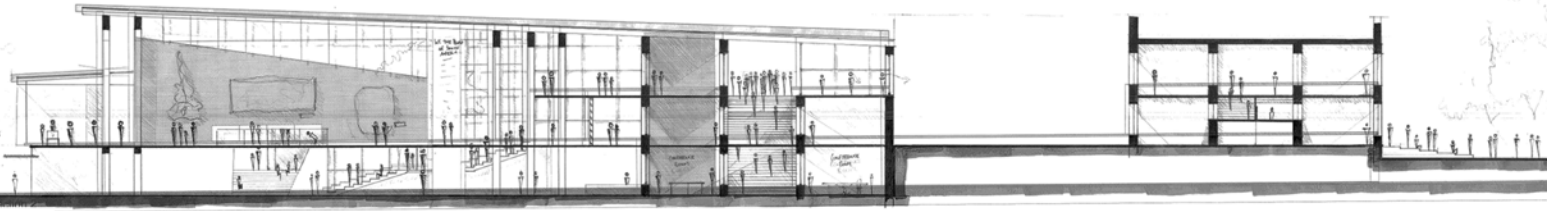
Section A:A
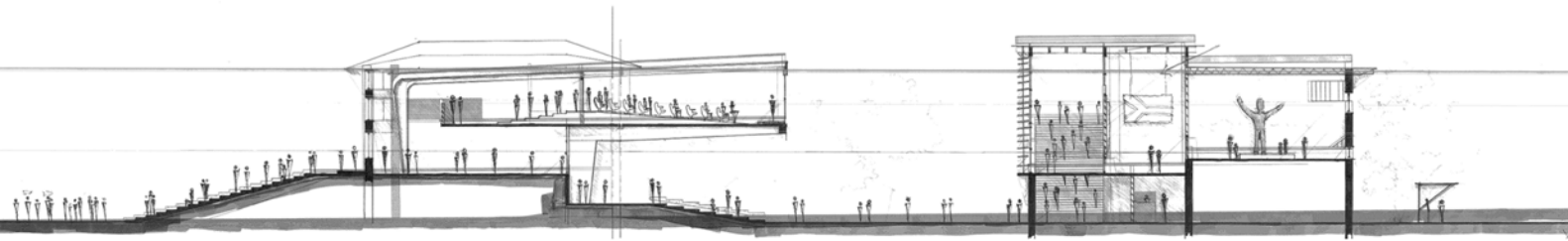
Section B:B
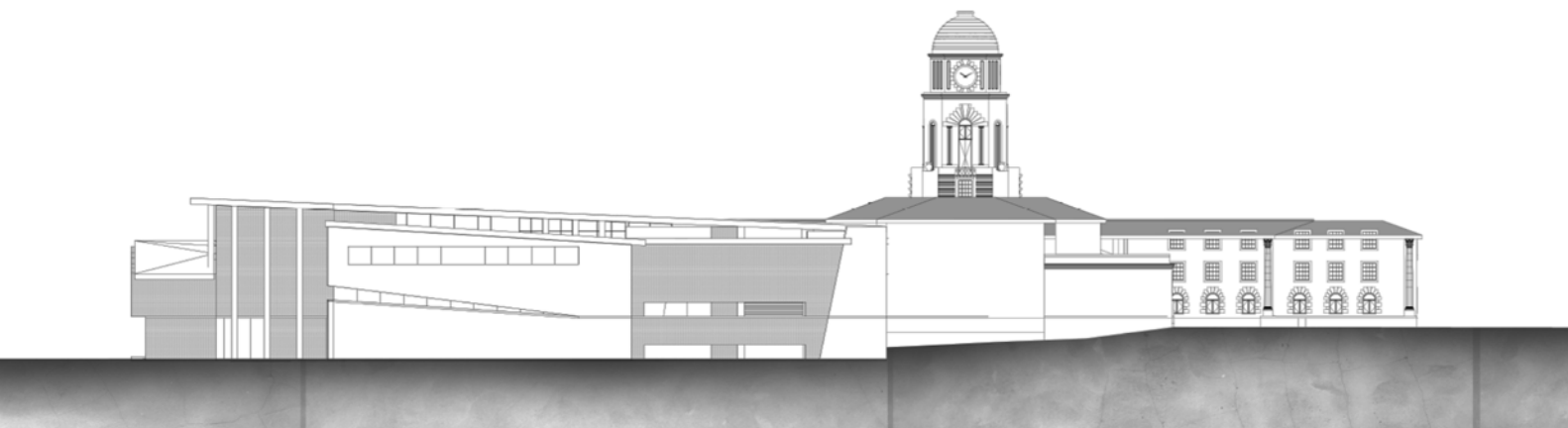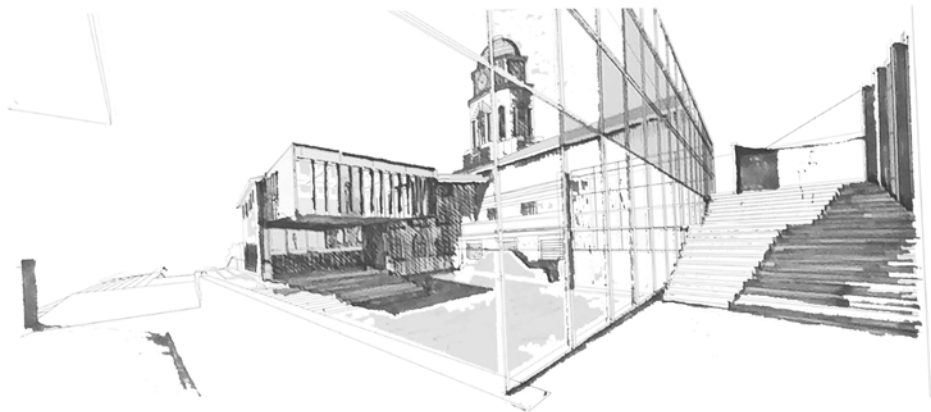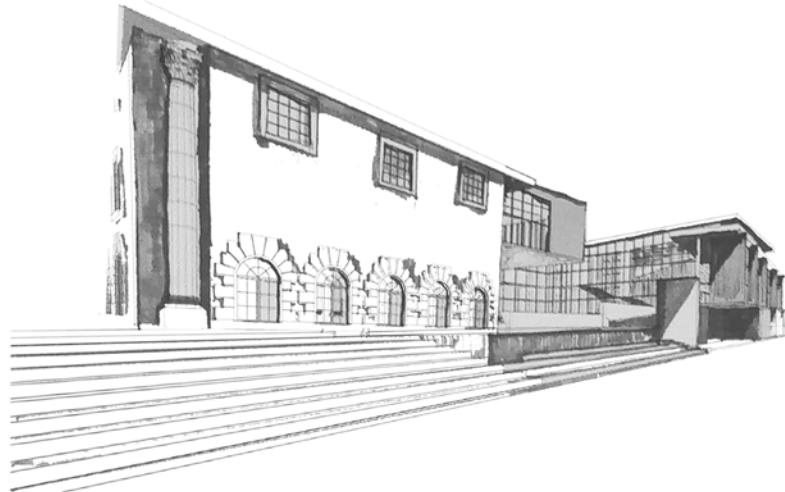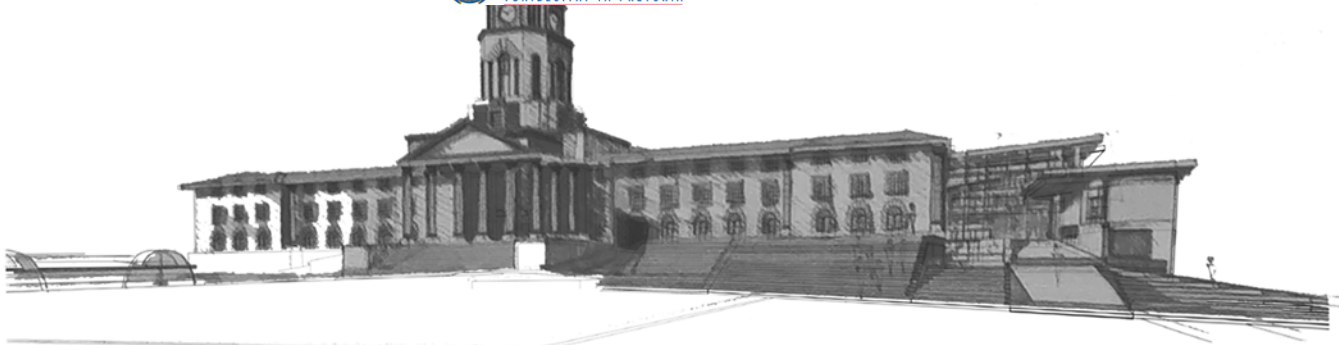
East Elevation
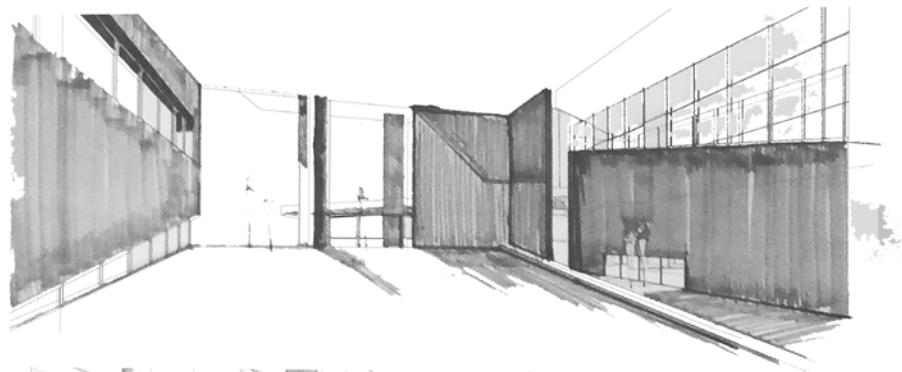
West Elevation
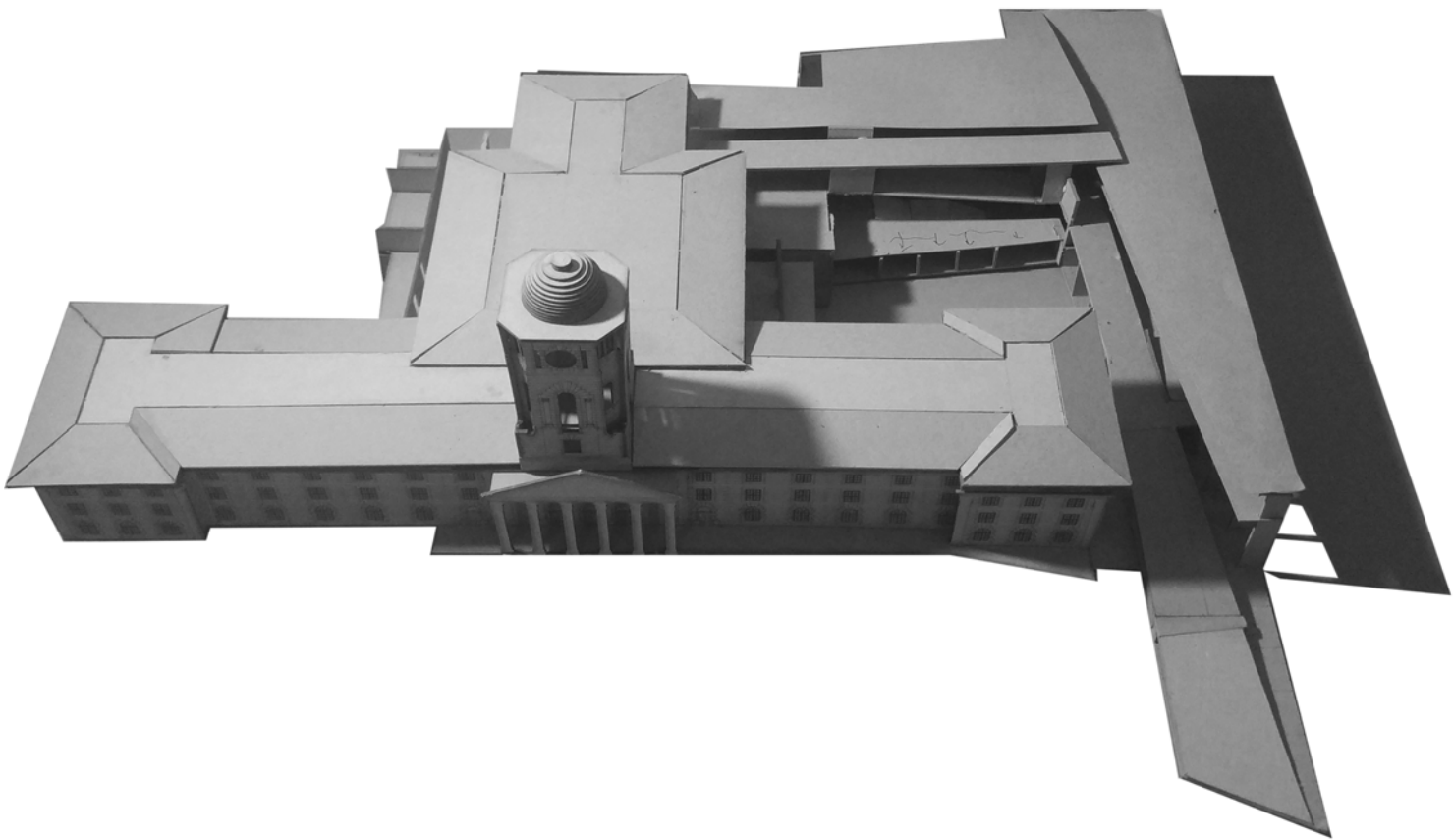
Iteration 11 (1:200) - June Response

Through the iterative process of design, the eleventh iteration was deemed to be the most appropriate response as it responded to the lessons learnt from all previous iterations and met the requirements set for the design.
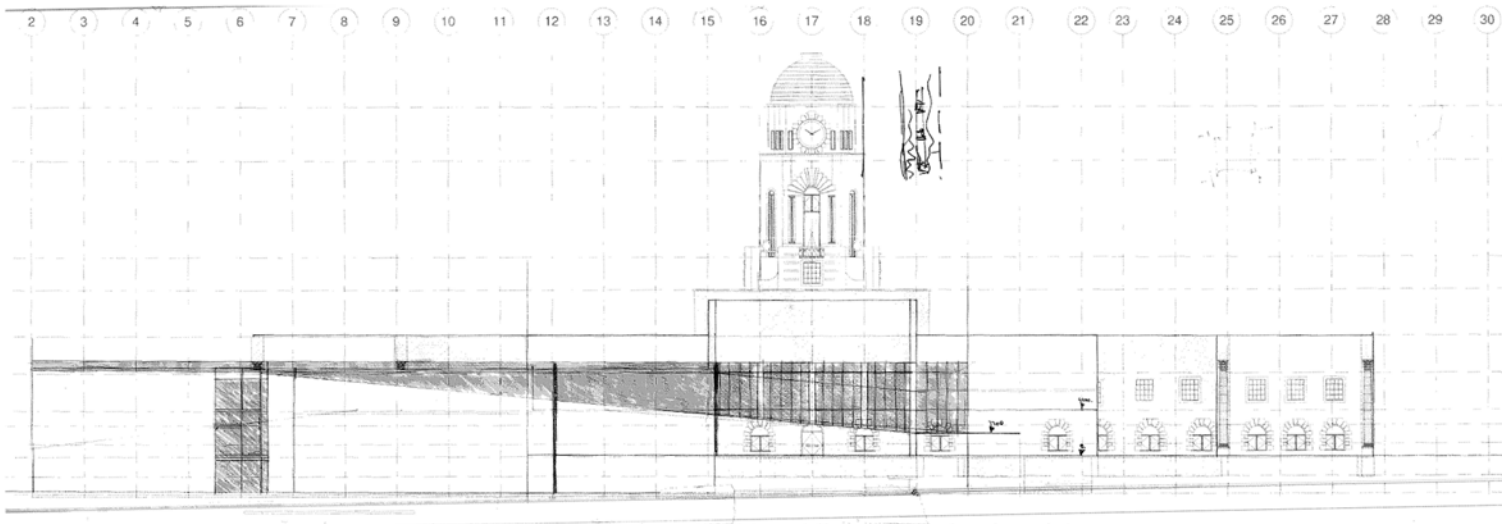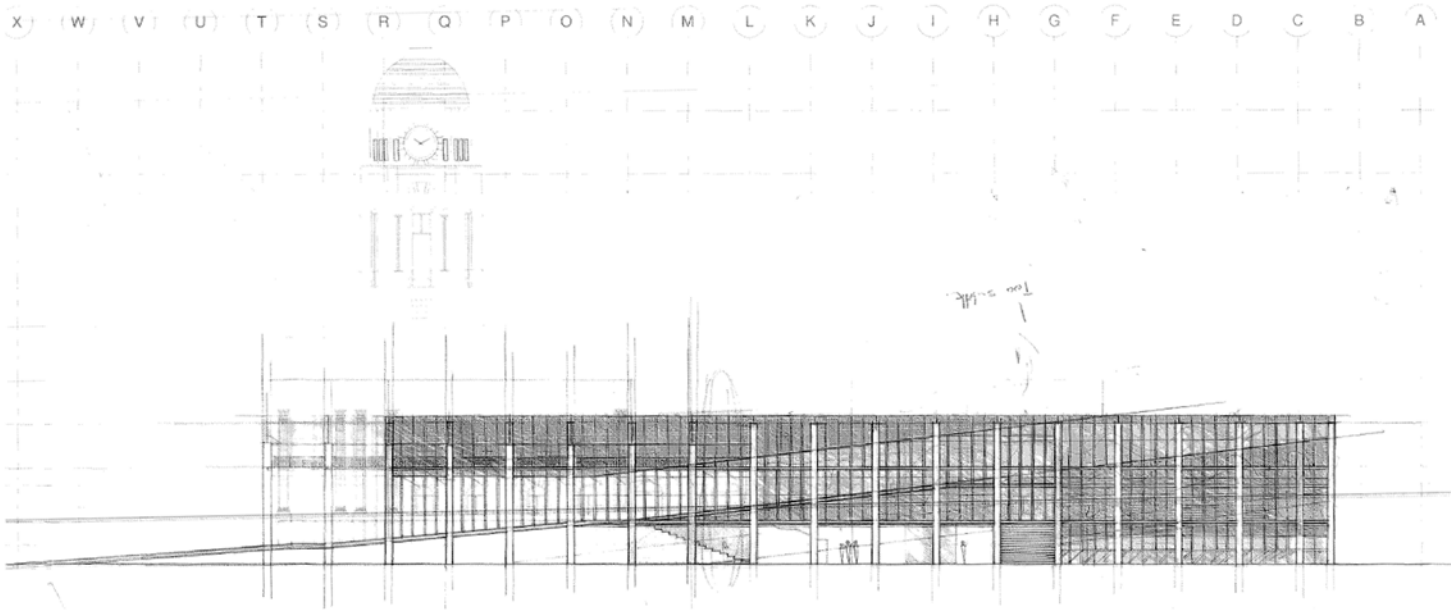
Figure 6.39 Left; Design Iteration 11
(Author 2017)
Figure 6.40 Above; Initial elevation
sketch (Author 2017)
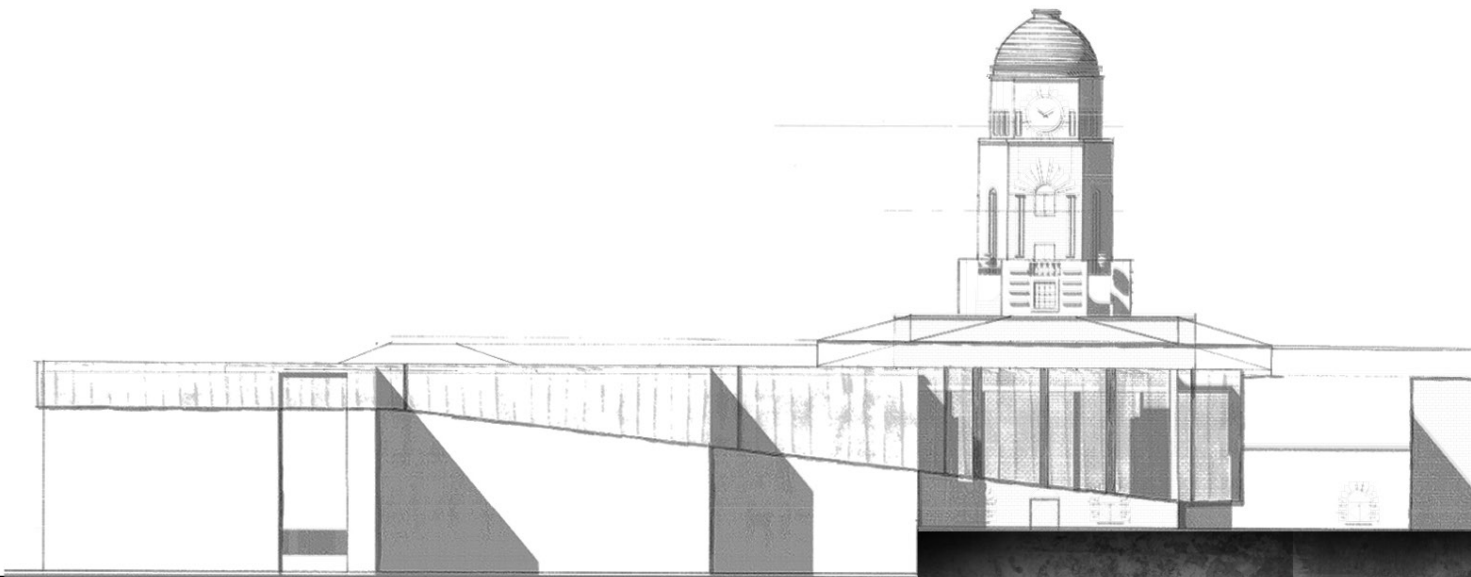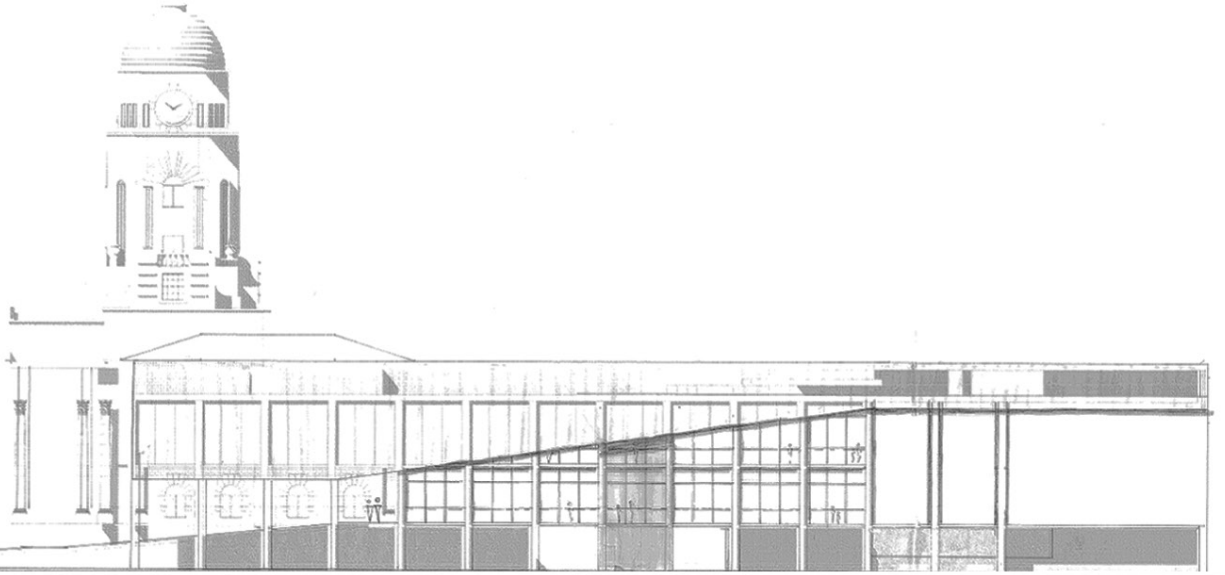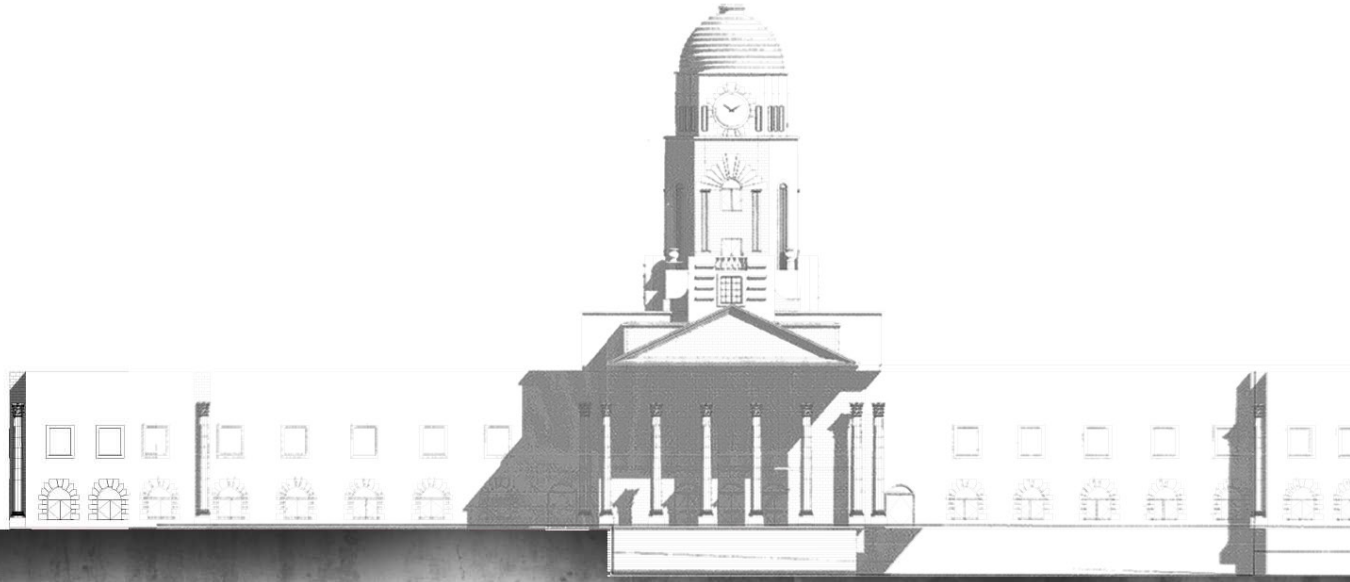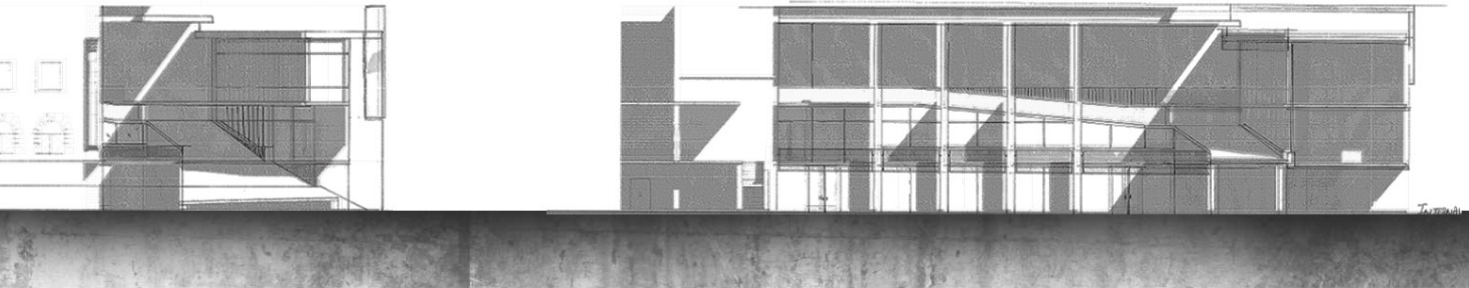
Figure 6.41 Design Iteration 11
Elevations (Author 2017)

6.4 The Roof

D.

E. — E.

D.

C. — C.

A.

B.

A.

B.

B.

A.

| 6 m | 10 m | 6 m |

20 m

Section A

| 5.05 m | 7.5 m | 5.05 m |

15.6 m

Section B

| 12 m | 18 m | 12 m |

40 m

Section C

18 m

Section D

| 8 m | 6 m | 8 m |

20 m

Section E

Process

Existing

Seperating Planes

Remove slopes and
retain horizontal planes

Remove only one
slope
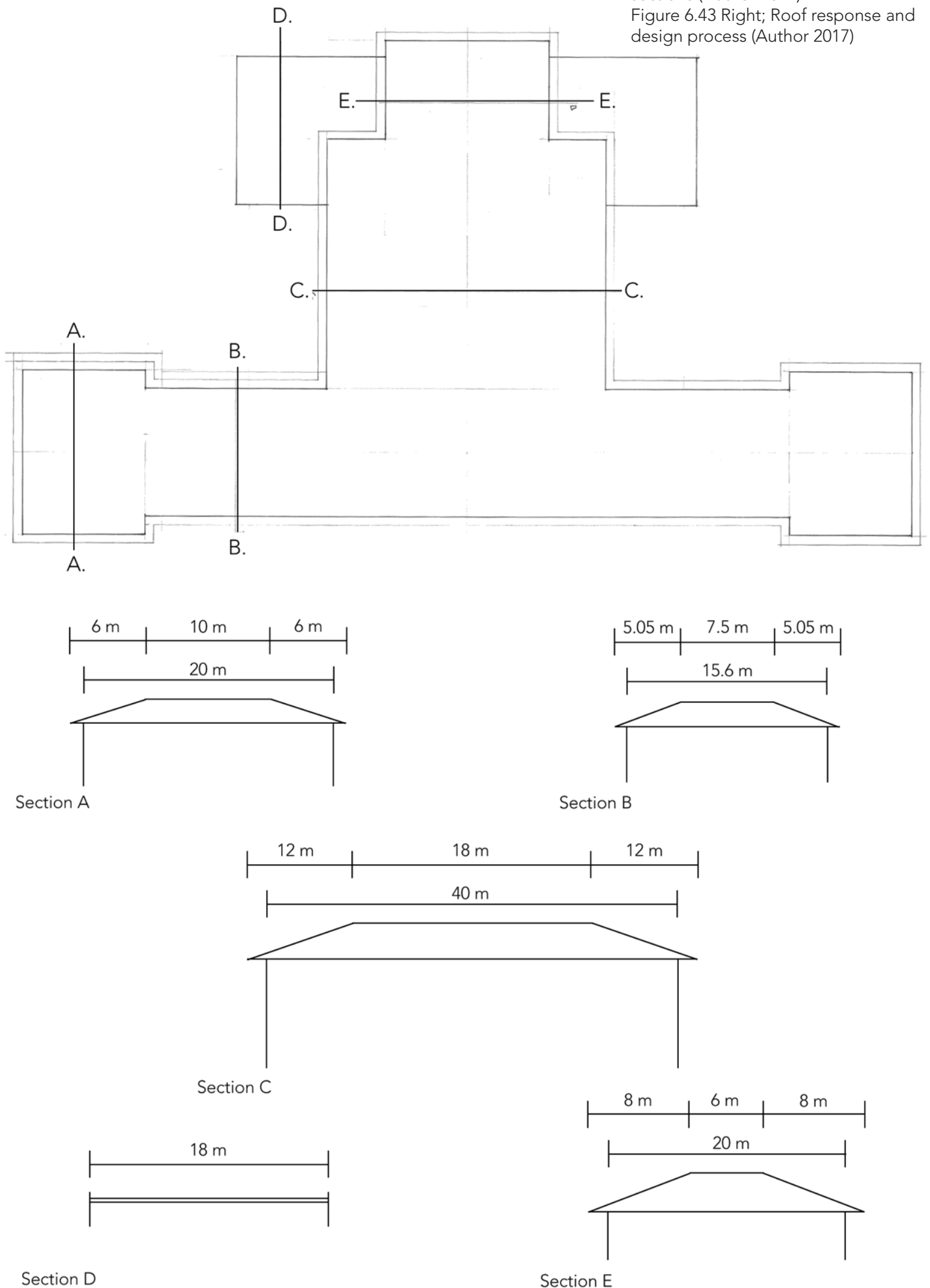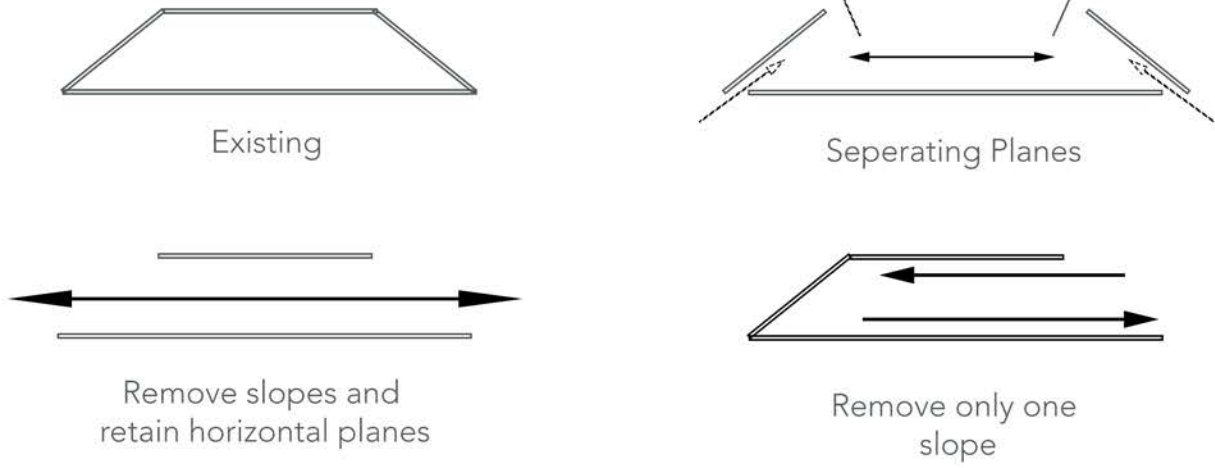
Varied approaches to
understanding the roof

X

X/2

1/3 - (X/2)   1/3 - (X/2)
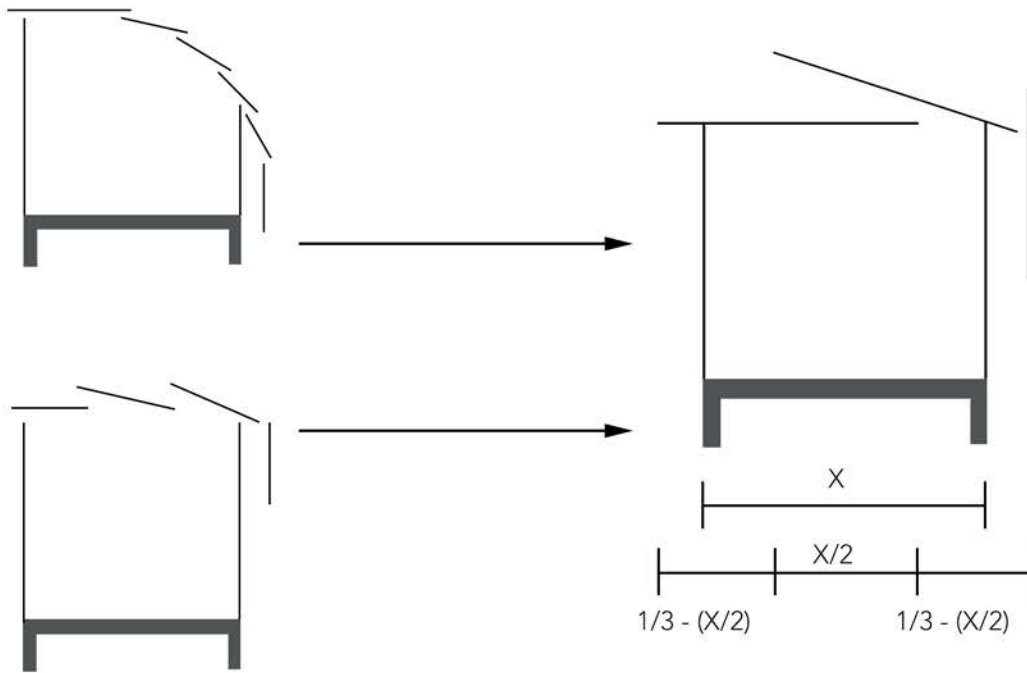
Roof application to new
architecture

Diffused Light

Fall to take reference
from existing City Hall
roof
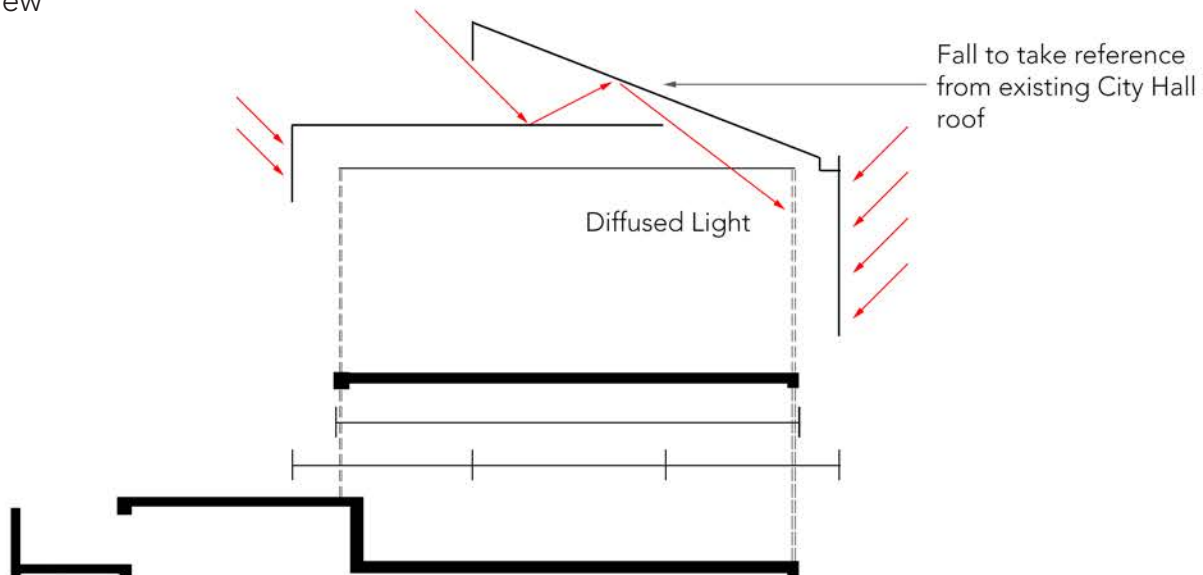
Application to design

© University of Pretoria

6.5 - Design

Market Edge

Open Meeting/Discussion Space
Reception

Lecture Hall

Expression Square

Engine Room (Existing)

Discussion Rooms
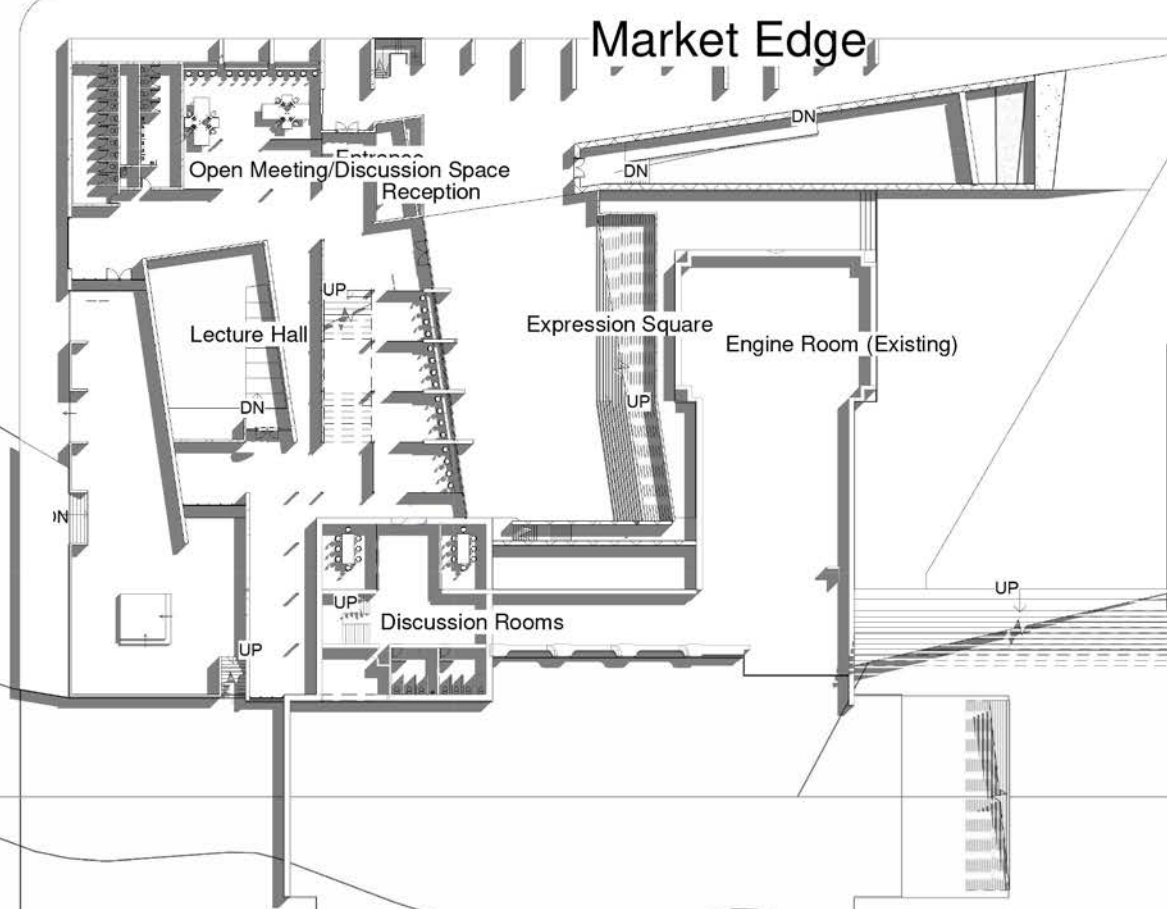
Figure 6.44 NGL plan (Author 2017)
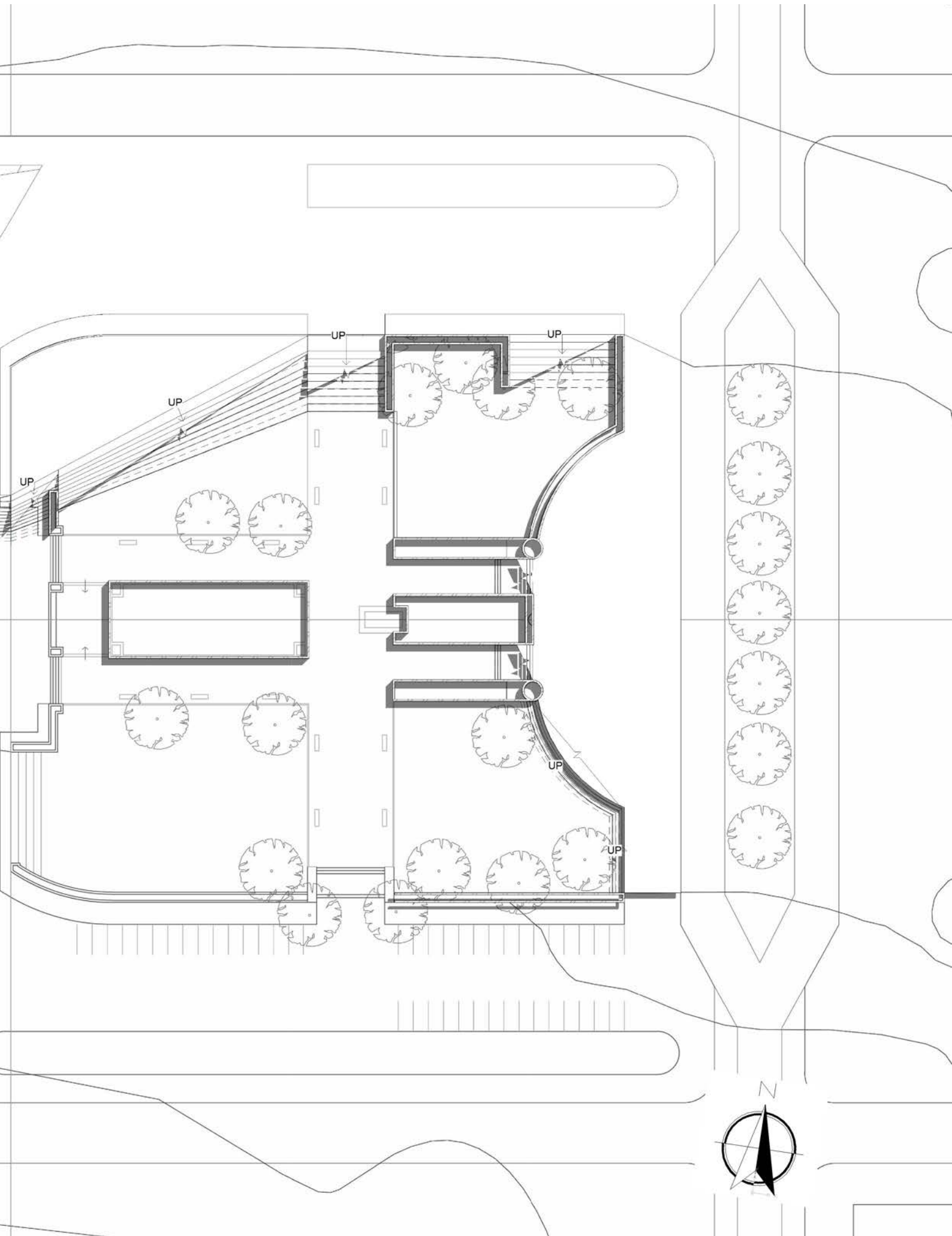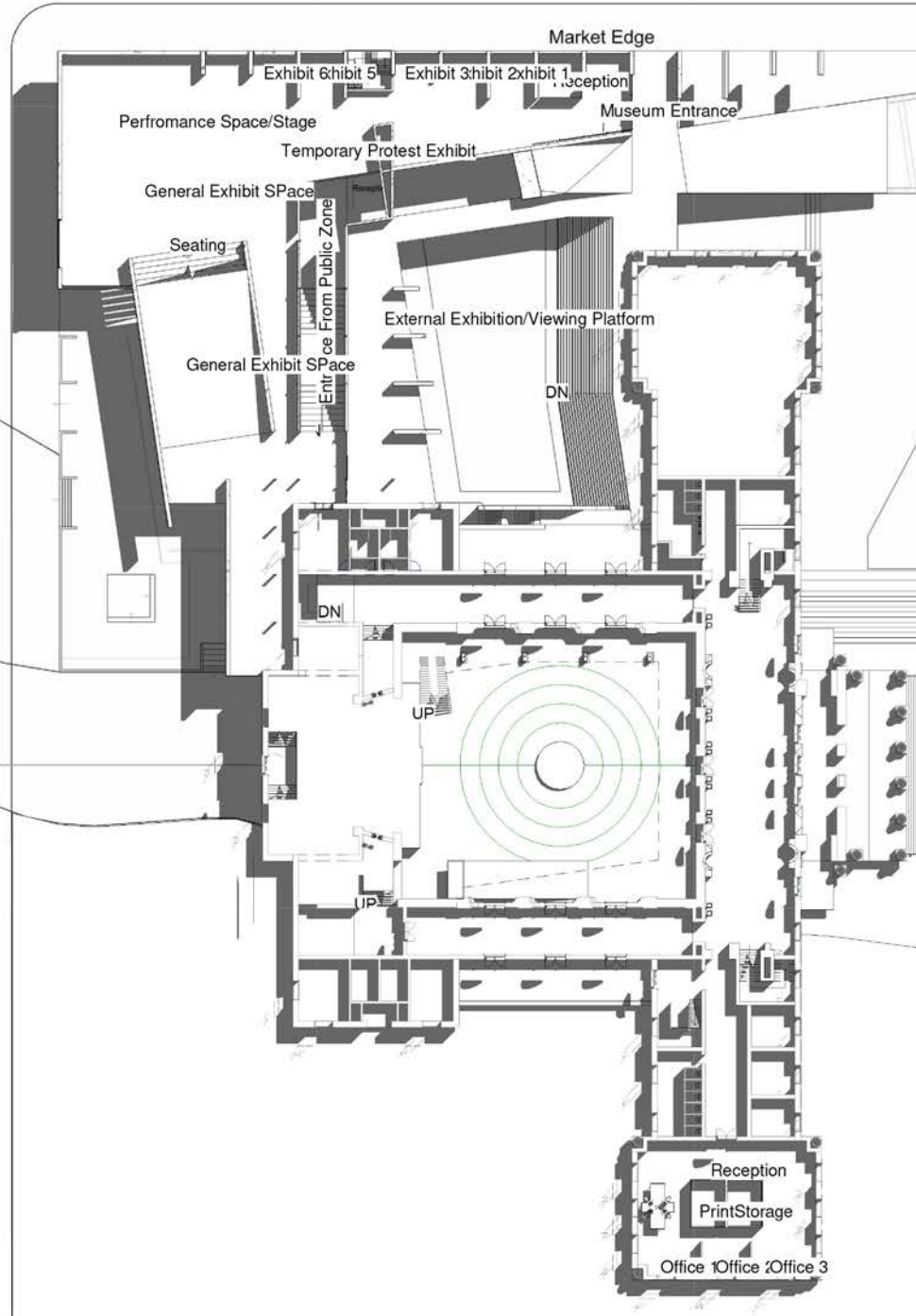
Figure 6.45 Ground Floor plan
(Author 2017)

DN
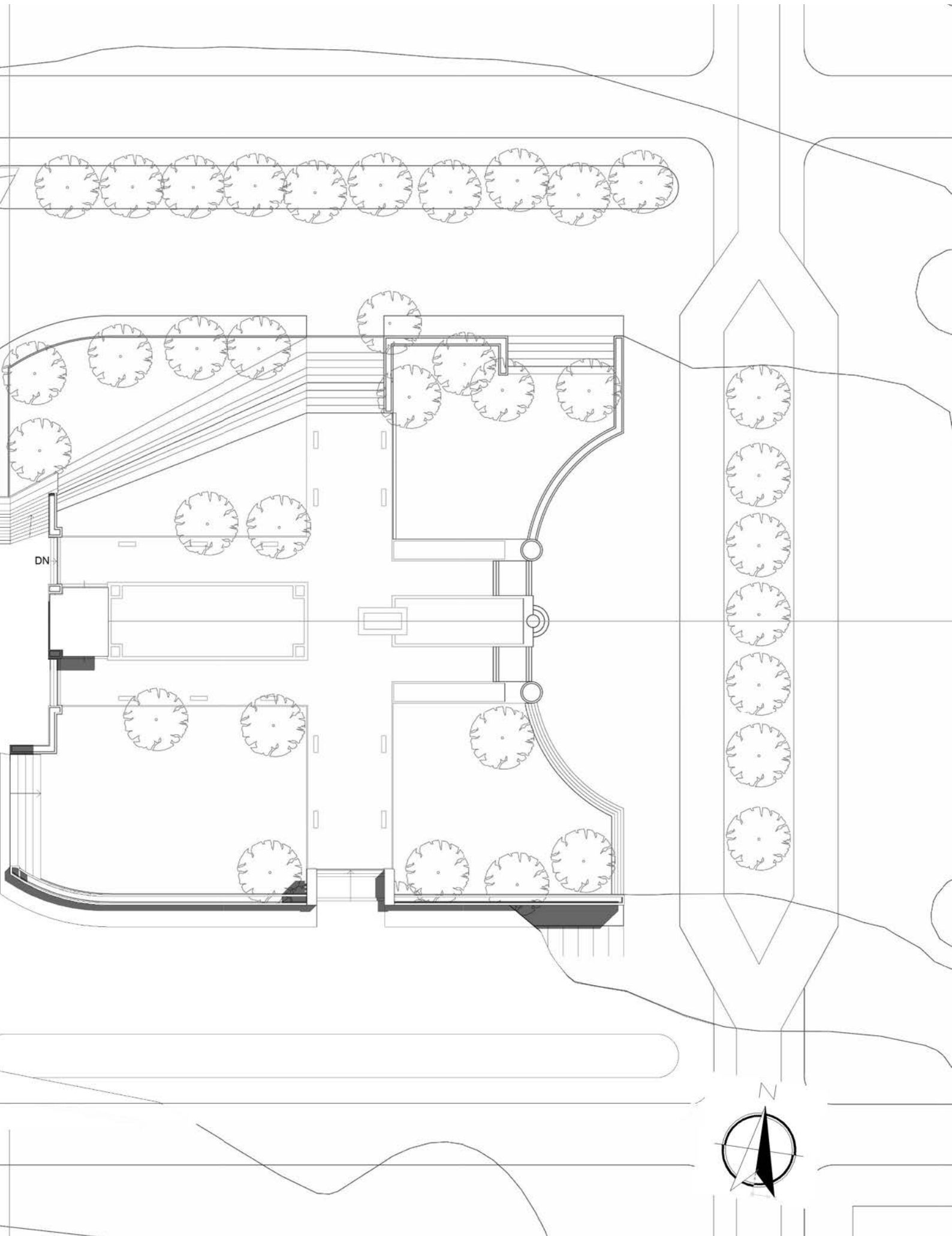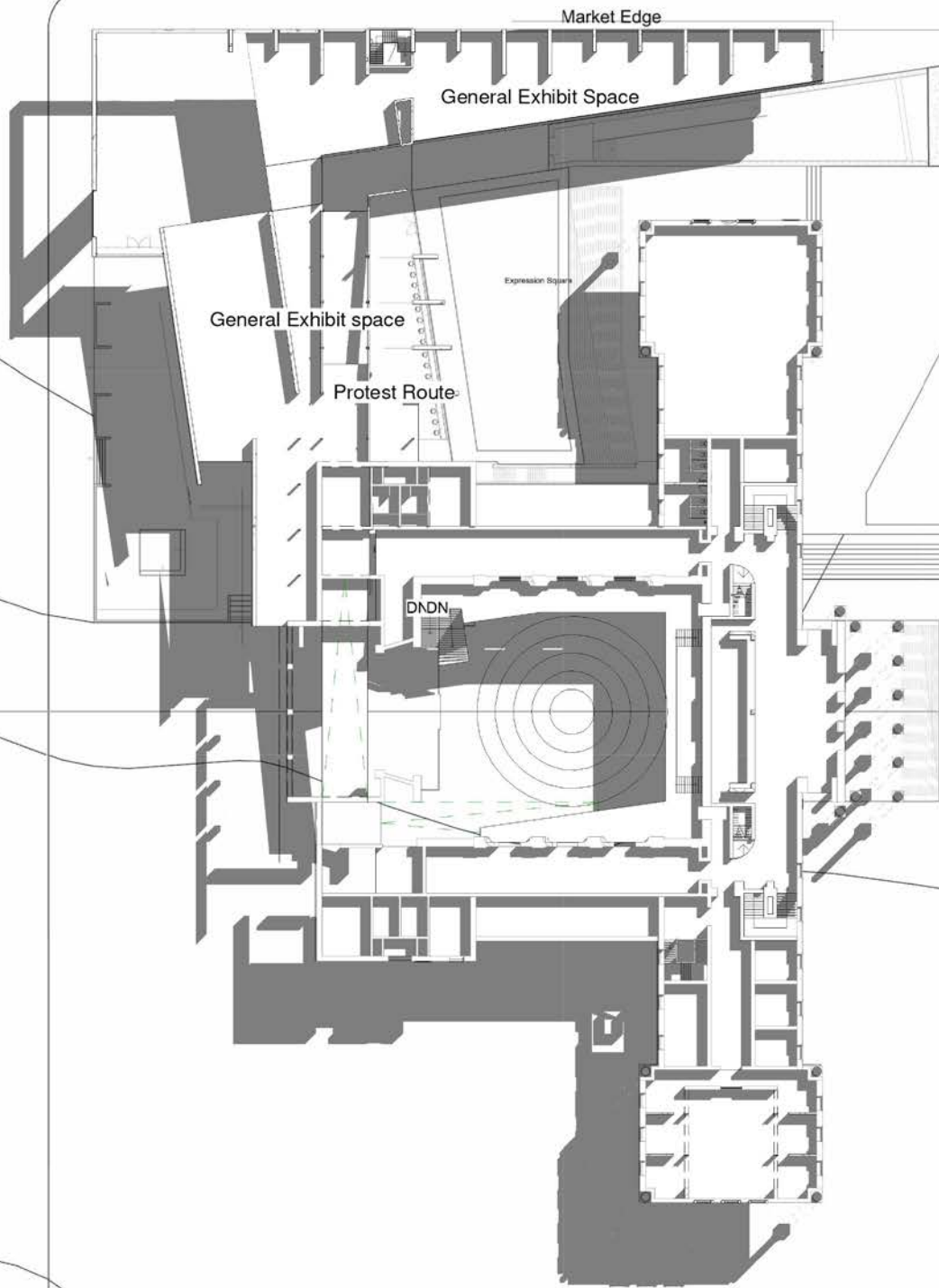
Figure 6.46 First Floor plan
(Author 2017)
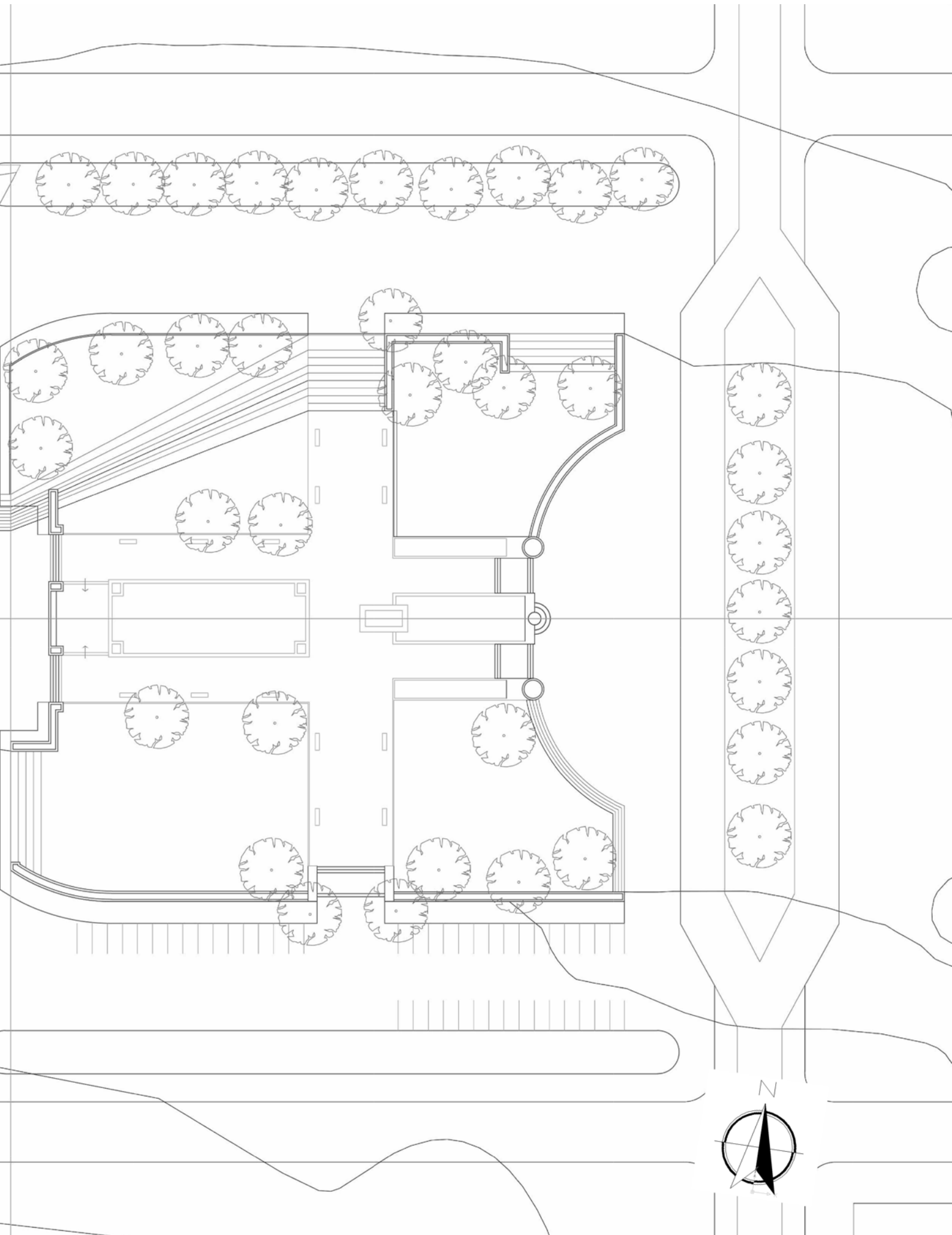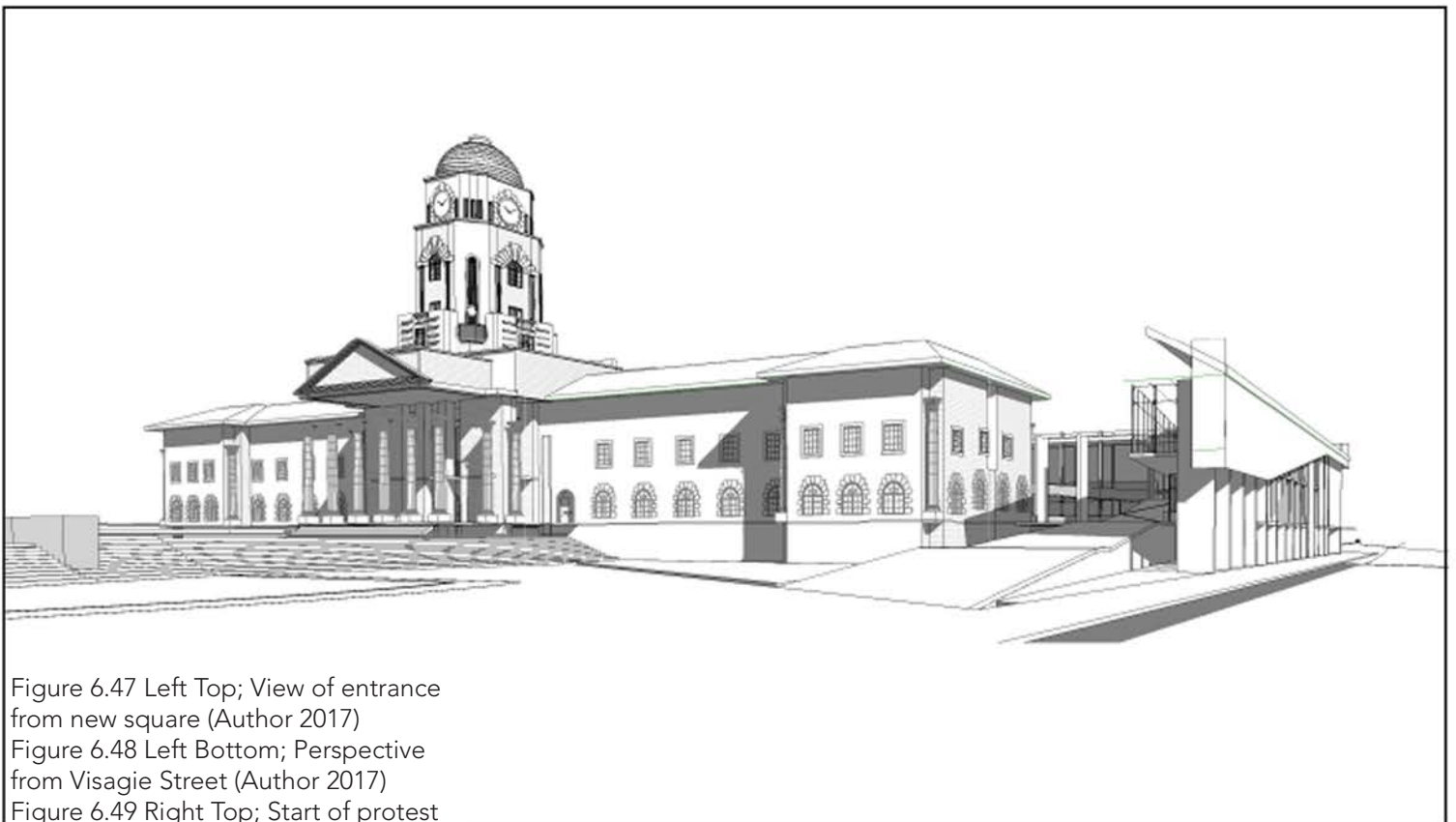
Figure 6.47 Left Top; View of entrance from new square (Author 2017)
Figure 6.48 Left Bottom; Perspective from Visagie Street (Author 2017)
Figure 6.49 Right Top; Start of protest route (Author 2017)
Figure 6.50 Right Bottom; Museum of Democracy entrance (Author 2017)
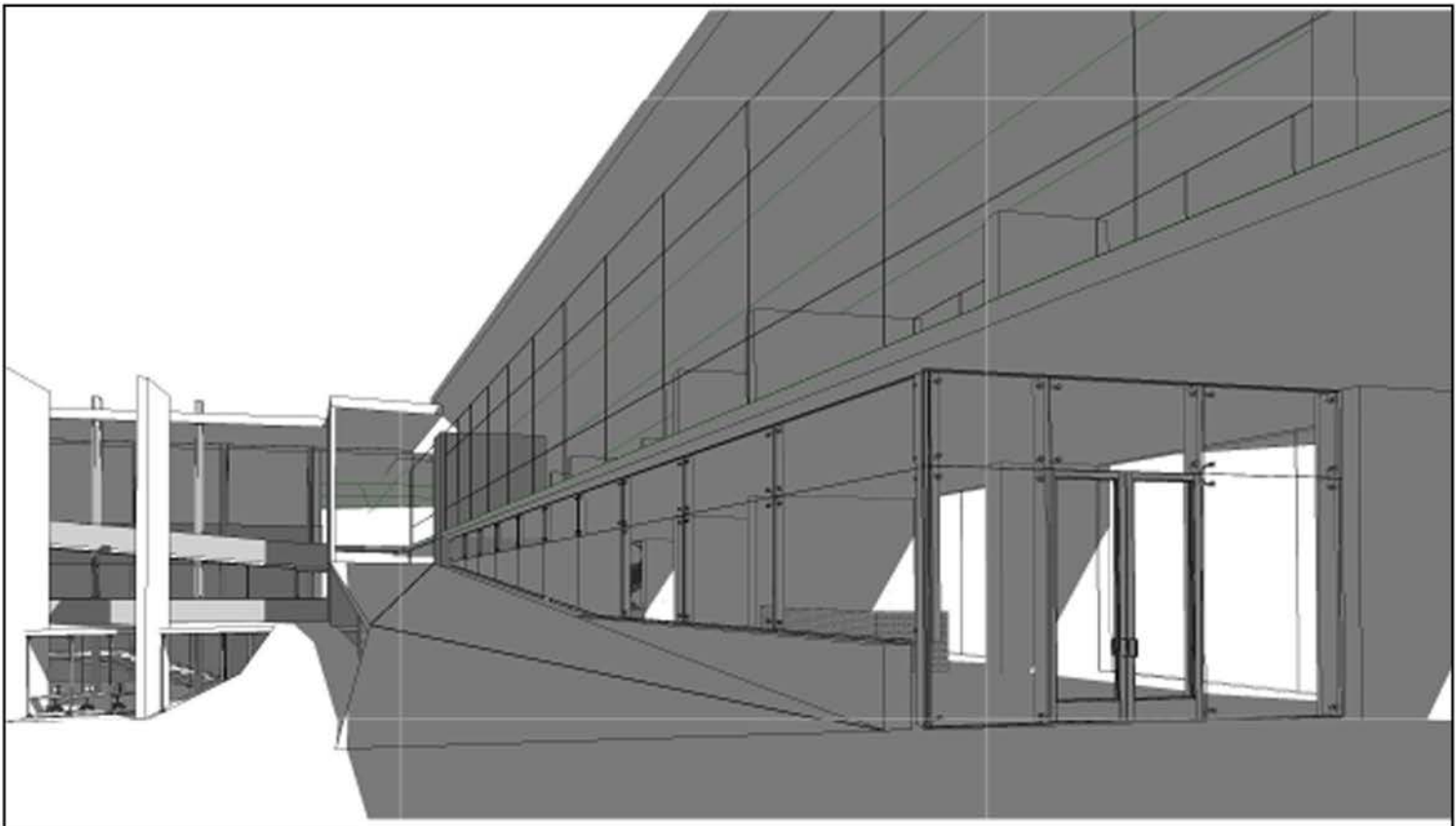
Figure 6.51 Left Top; Expression Square from protest route (Author 2017)
Figure 6.52 Left Bottom; Expression Square from debate arena side Figure entrance)Author 207)
Figure 6.53 Right Top; Expression Square from viewing platform Figure (Author 2017)
Figure 6.54 Right Bottom; View of Expression Square from Museum of Democracy (Author 2017)
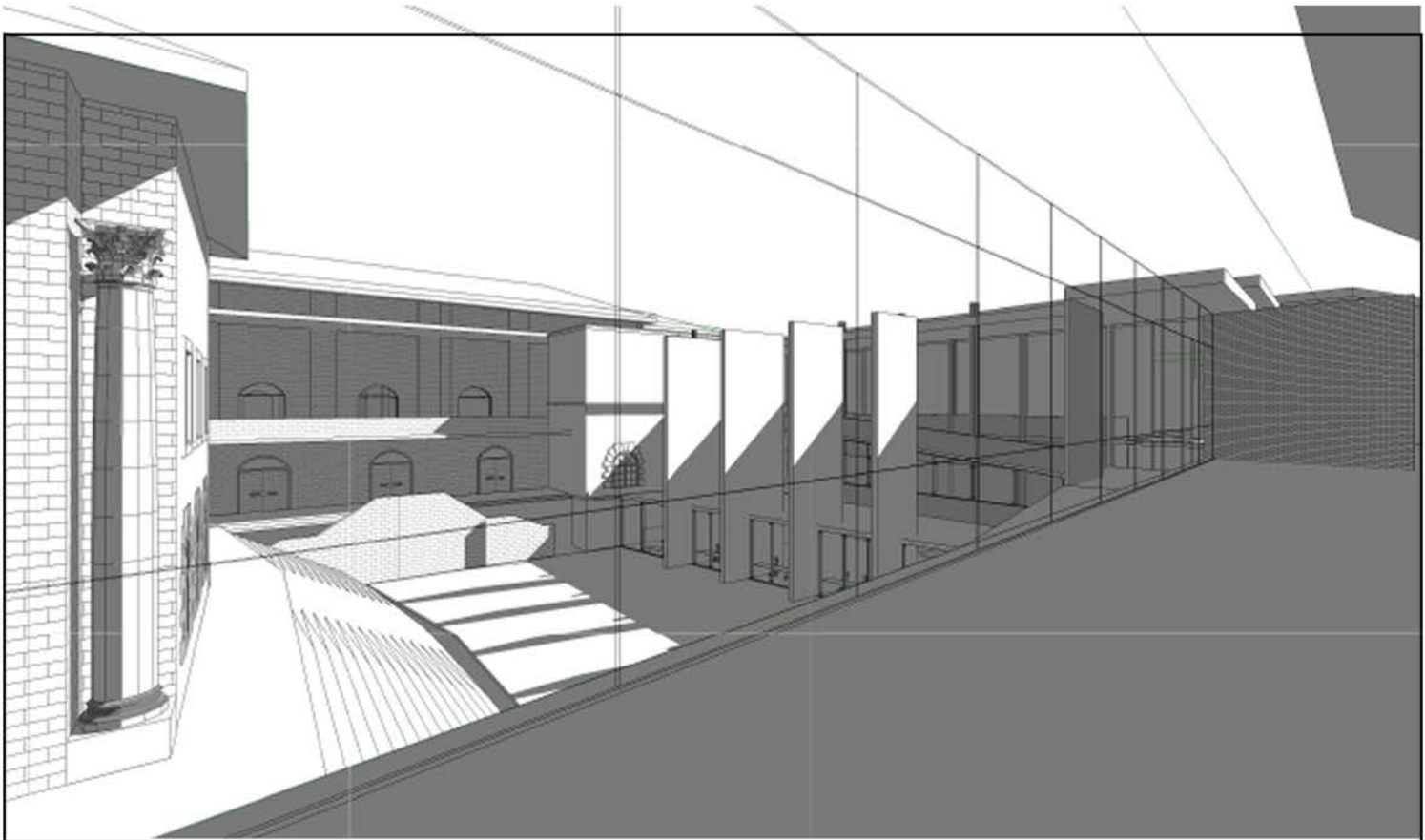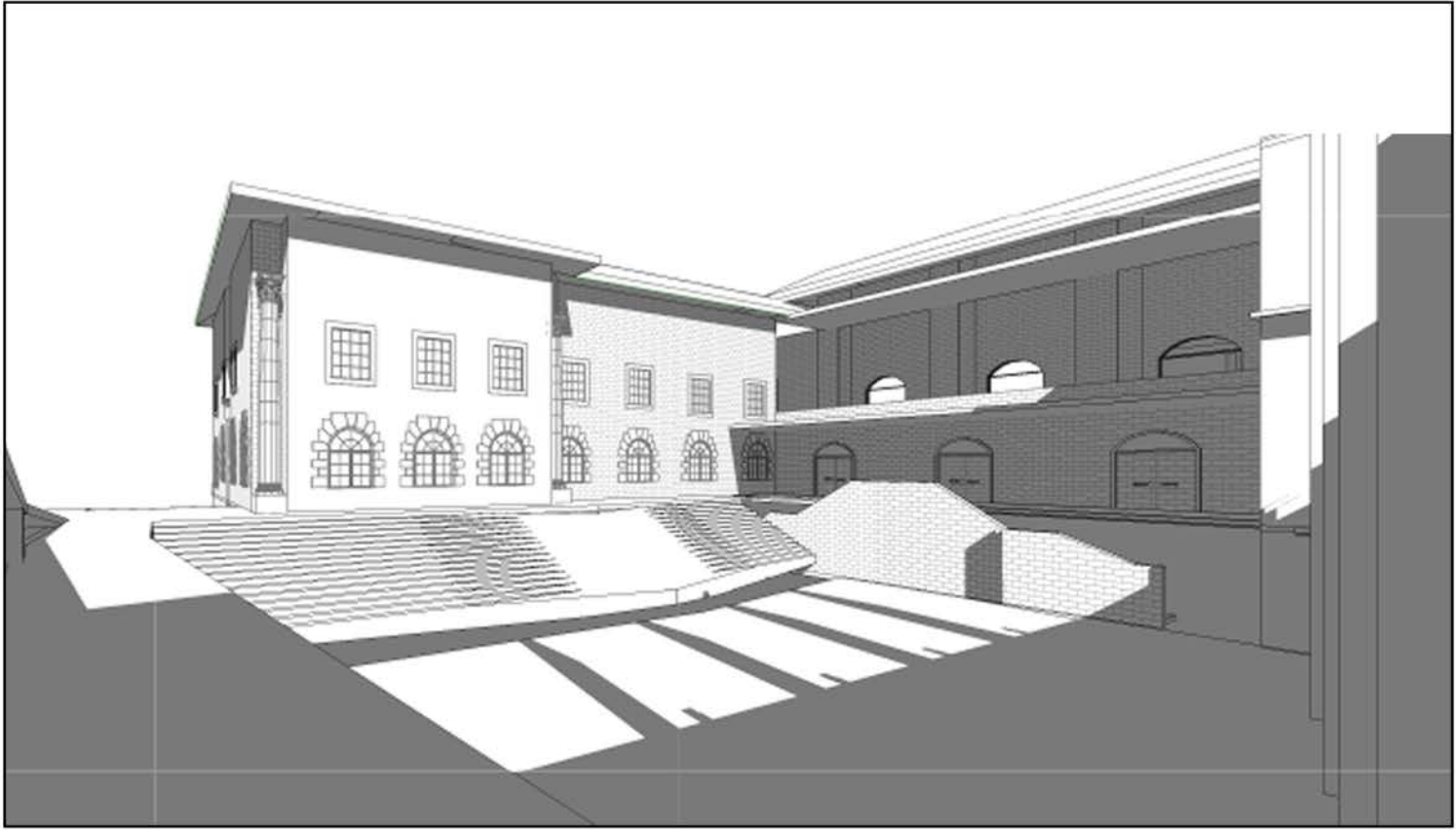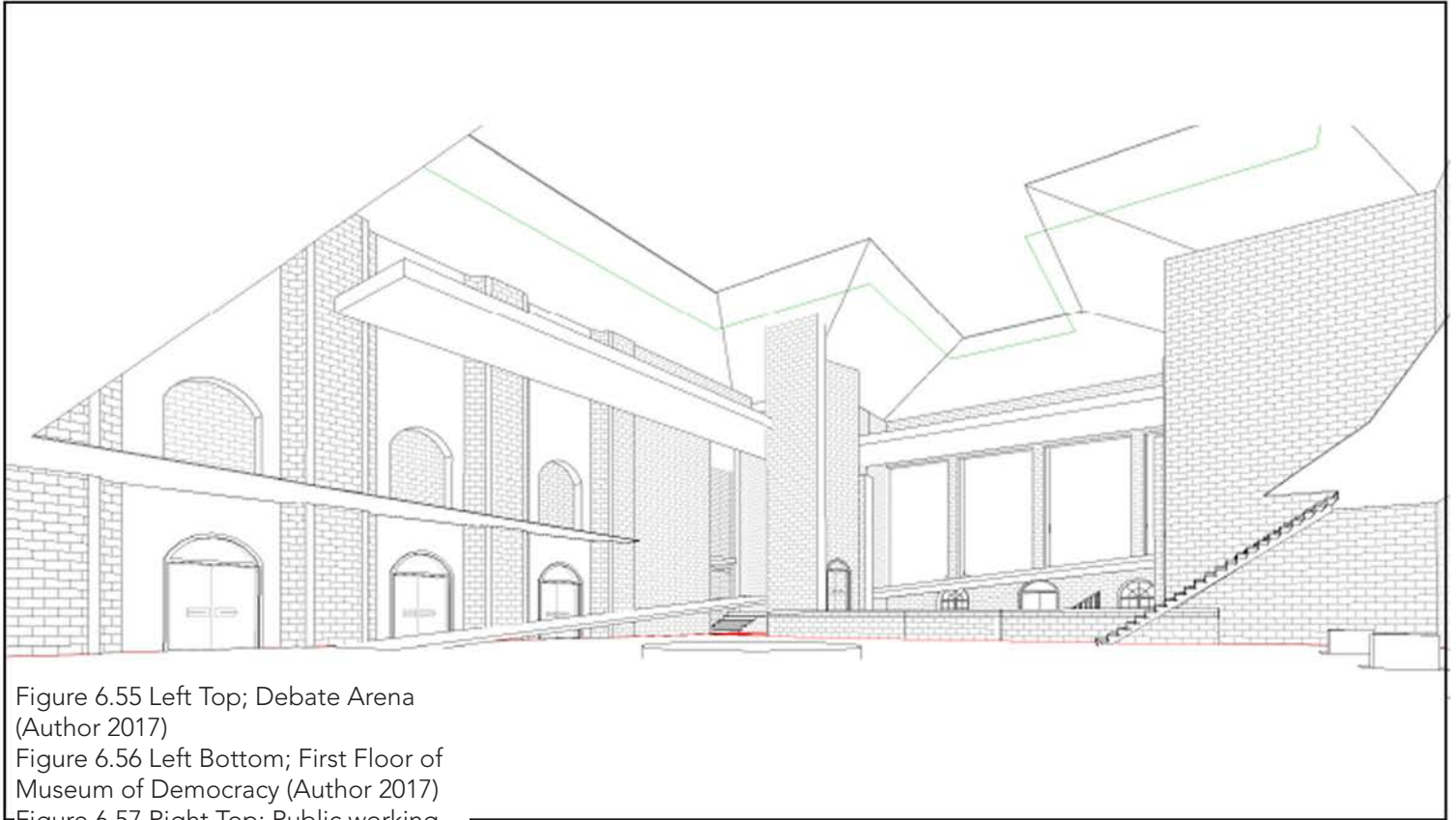
Figure 6.55 Left Top; Debate Arena (Author 2017)
Figure 6.56 Left Bottom; First Floor of Museum of Democracy (Author 2017)
Figure 6.57 Right Top; Public working area with stairs up to museum (Author 2017)
Figure 6.58 Right Bottom; Connection to exterior viewing platform into Expression Square (Author 2017)
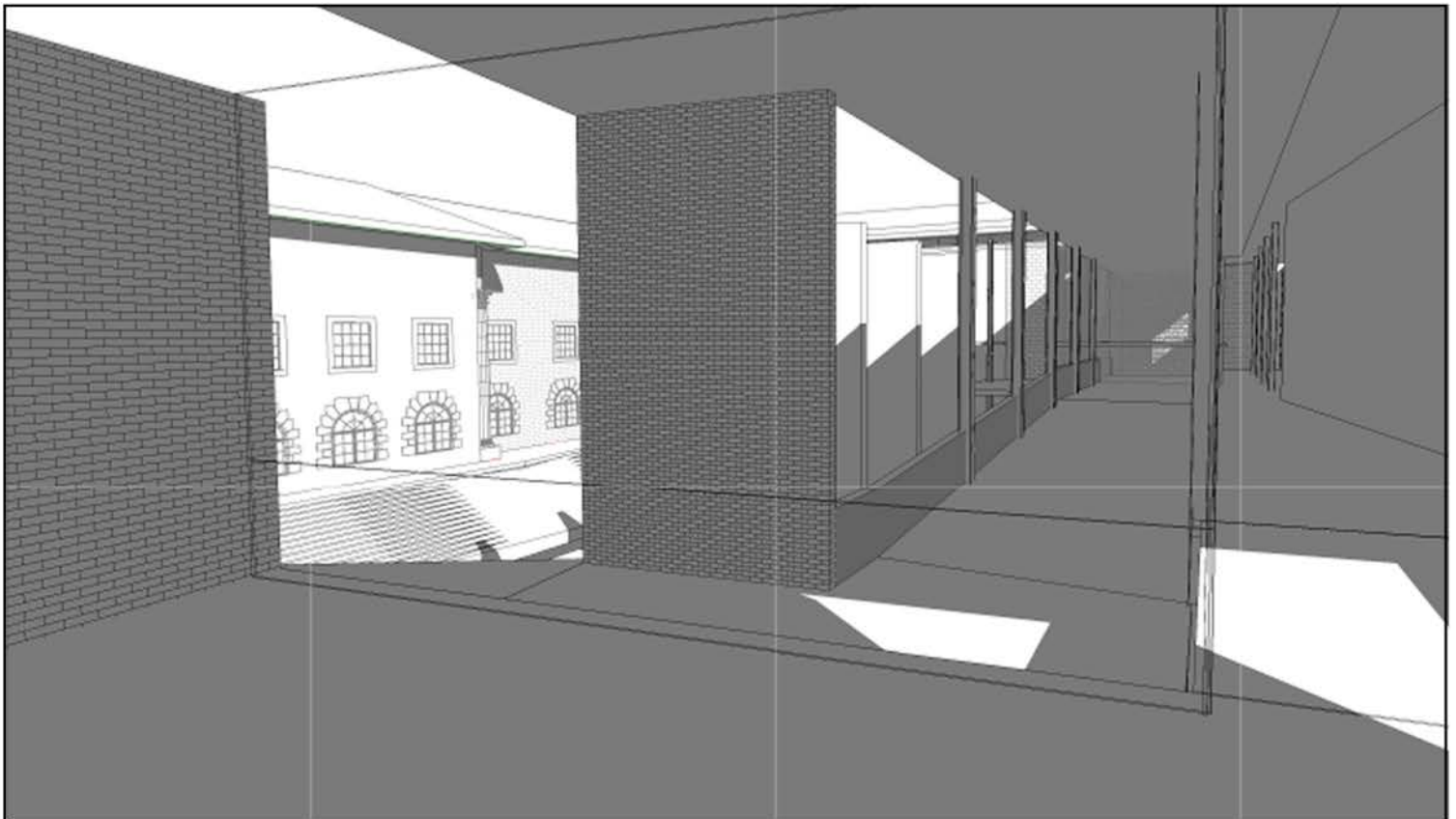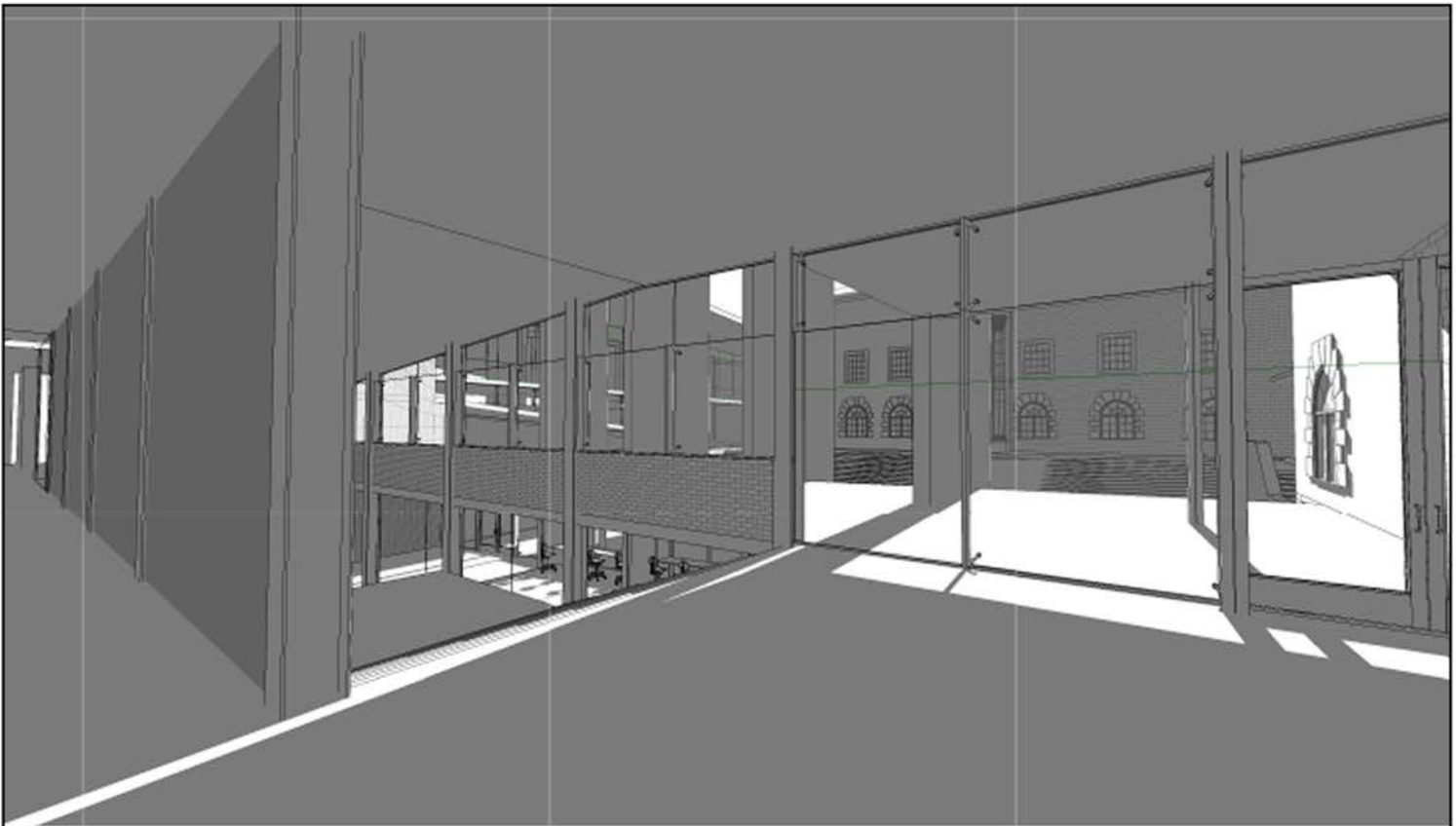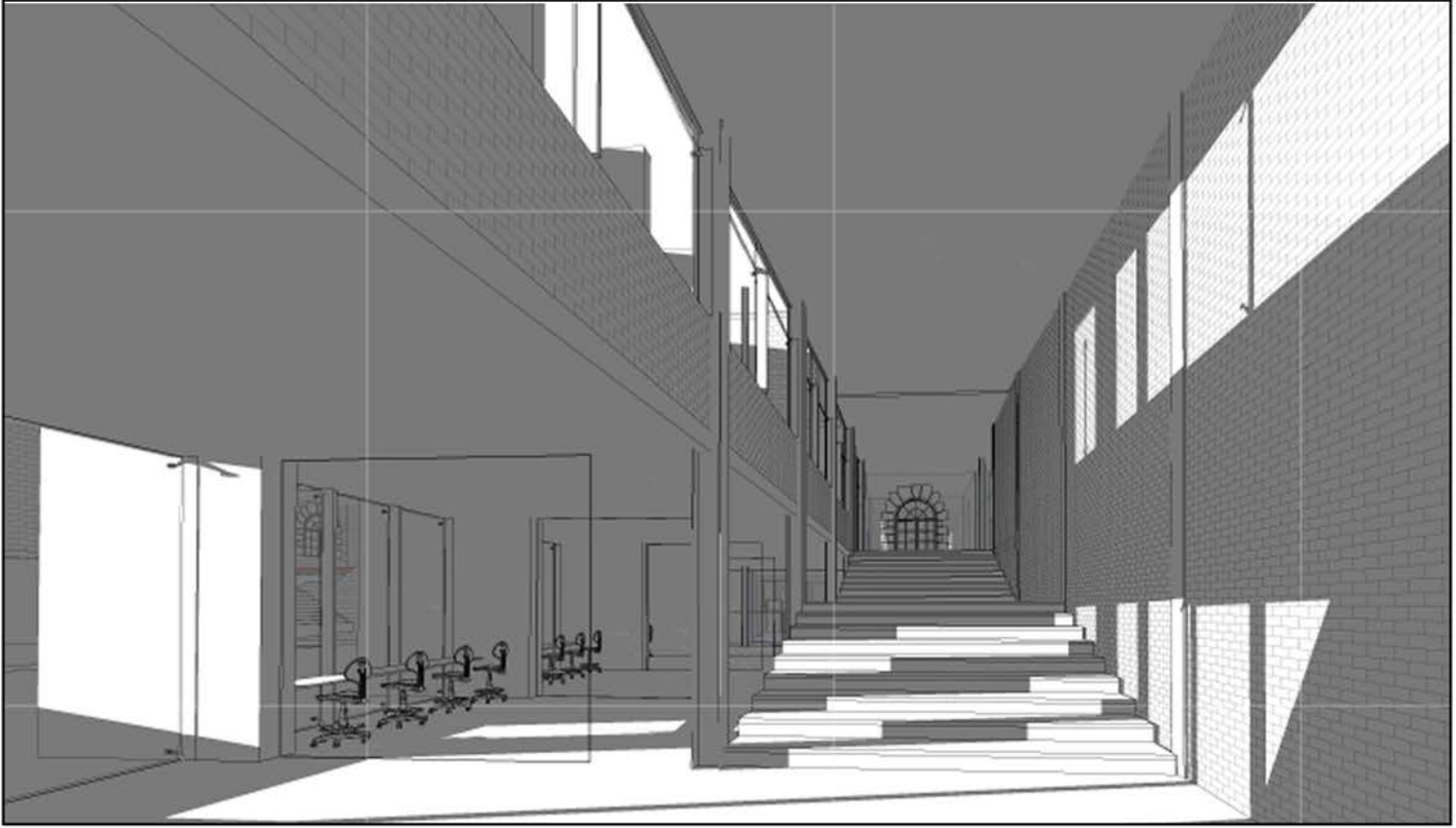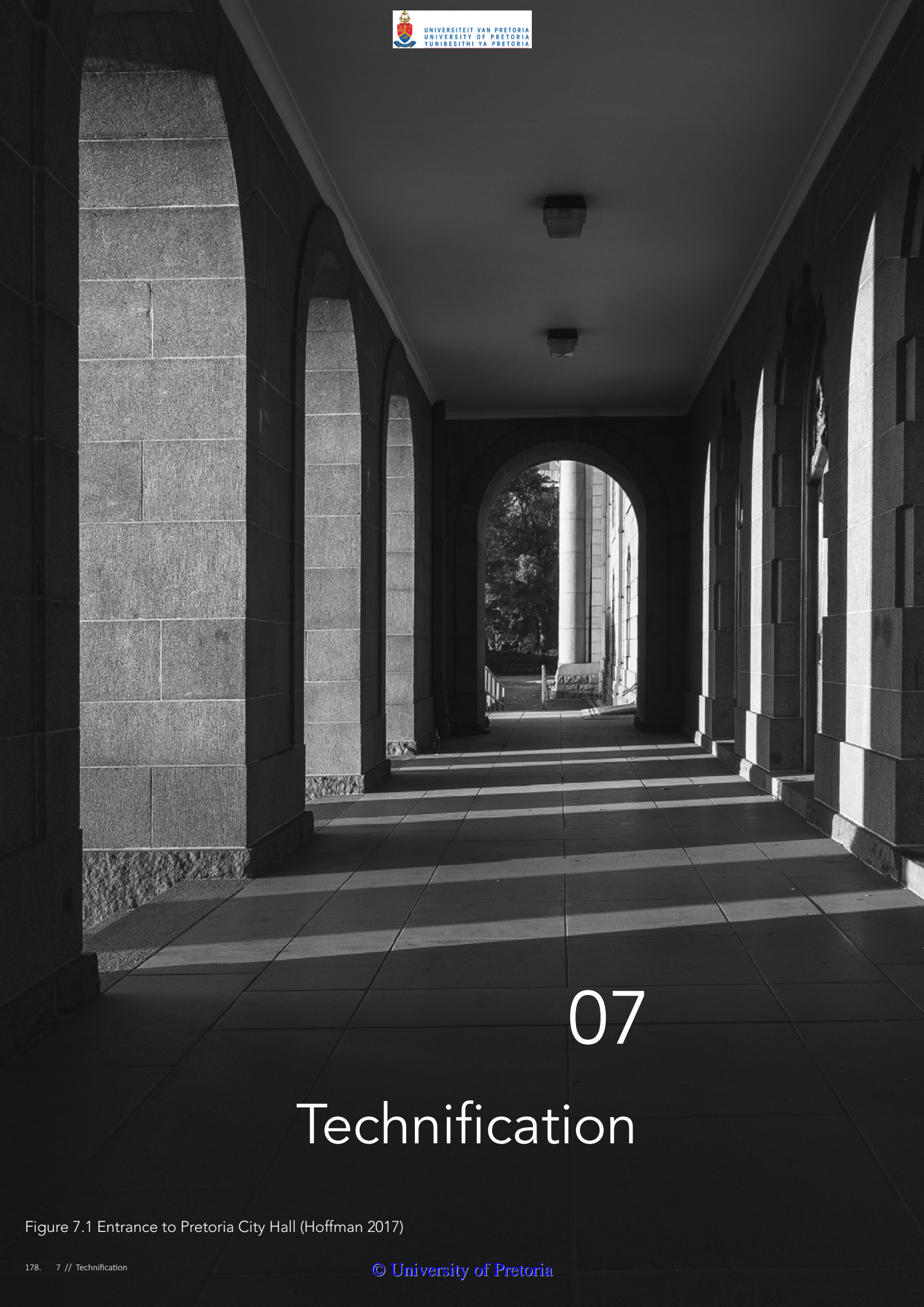
07

Technification

Figure 7.1 Entrance to Pretoria City Hall (Hoffman 2017)

The Transparent Nature of Architecture

7.1 - Introduction

The premise in which the technical argument is grounded carries on from the core design concept of architecture's role in facilitating transparency in a democratic society as established in the urban vision as well as supported by Nikitin (2009) when discussing the value of civic centres. From the macro scale of the immediate context of the new Local Government Square, to the facilitation of protest in the design to how the new connects to the existing, it is argued that, in order for architecture to be transparent in its approach, it is proposed that rigour between these varying scales is required. To achieve this goal, the technical approach is handled at three different scales: that of the macro building climate, the tripartite structural system, and through the debate of junctions.

Figure 7.2 Transparent Nature of Architecture (Author 2017)

Connecting Past and Present
{CONCEPT}
Natural Airflow/Orientation
Layering

Transparency
{HUMAN BENIFITS}
Thermal Insulation
{MATERIALS}

Creation of Civic Center
Locally sourced construction Materials

Collection and Storage of Rain Water
{WATER}
Passive cooling to lower energy consumption
{VENTILATION}

Low water-use
{LIGHTING}
Reduction of Solar Heat gain through shading and screens

Utilisation of Natural Daylighting/ indirect lighting
Conscious Lighting Lighting Detectors

7.2 - The building as an Engine for change

Pretoria city hall was further investigated as a starting point for the technical resolution, in an attempt to uncover the original technical advancements that were utilised during its construction. What was identified led to the new being regarded as an engine for change. Pretoria city hall was constructed with two main systems. The first being an advanced air circulation system intended to keep internal air temperatures constant, and the second being the inclusion of a small distribution plant positioned in the basement of the northern wing (Herring 1935). Pretoria City Hall was able to appropriately facilitate its needs through the use of these systems further cementing its position as a symbol of progress.

Central to the initial technological investigation of the project was the continuation and completion of the design intention of reactivating Pretoria City Hall as a civic centre, rather than the basic technification of the building. Therefore, looking at the building as a new engine is an extension of this line of thought as well as of the existing structure's self-reliance. The technical resolution will therefore focus on the ventilation of the design as well as introduce a new function of water collection in response to the current water shortages experienced in South Africa (The Water Project 2017).

Figure 7.3 Above; The building as an engine for change (Author 2017)
Figure 7.4 Right; Engine layers (Author 2017)

Existing Engine

Engine for change

New Engine

{Passive and Assisted Ventilation}   {Mechanical Ventilation}   {Passive Ventilation}
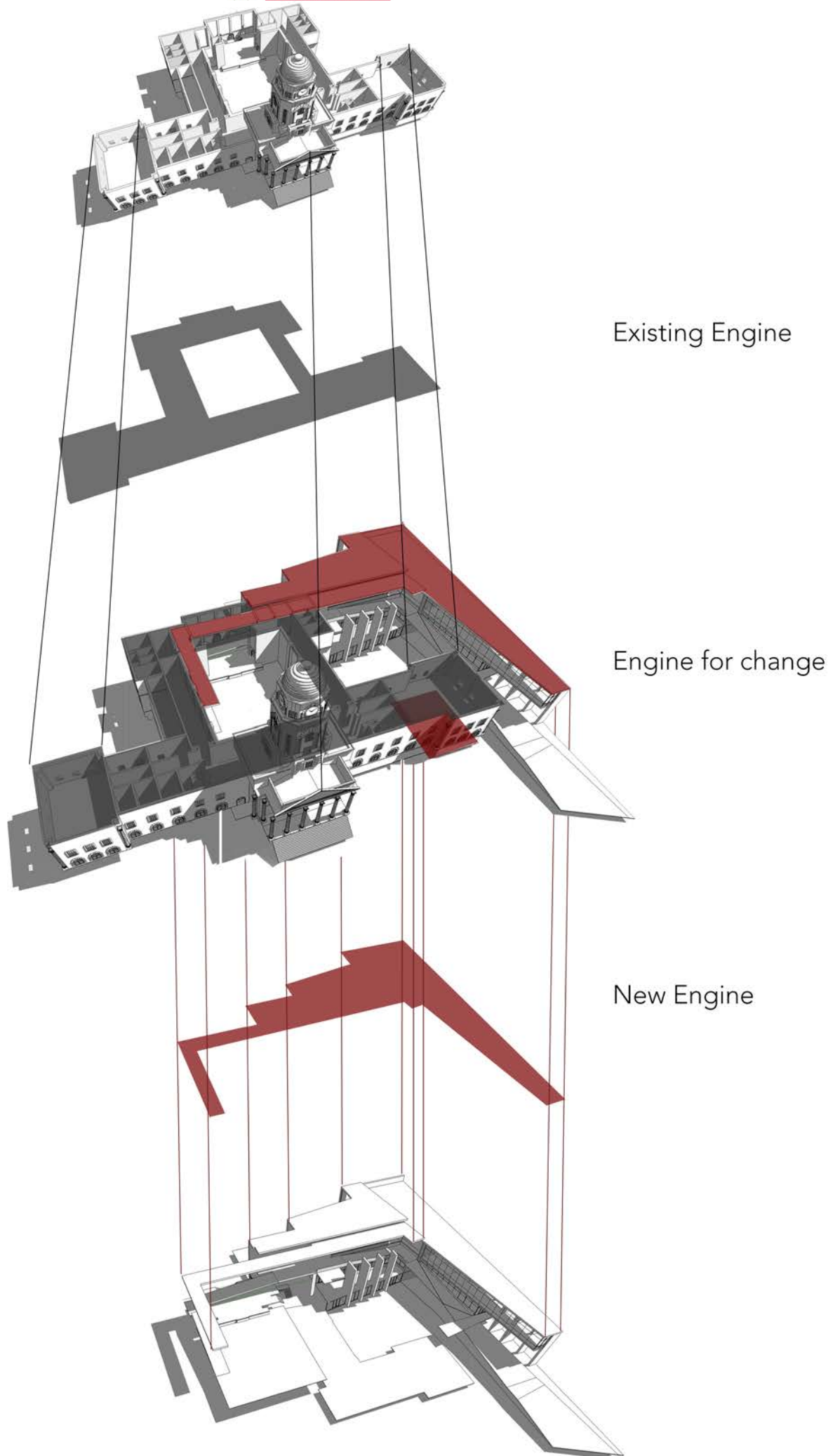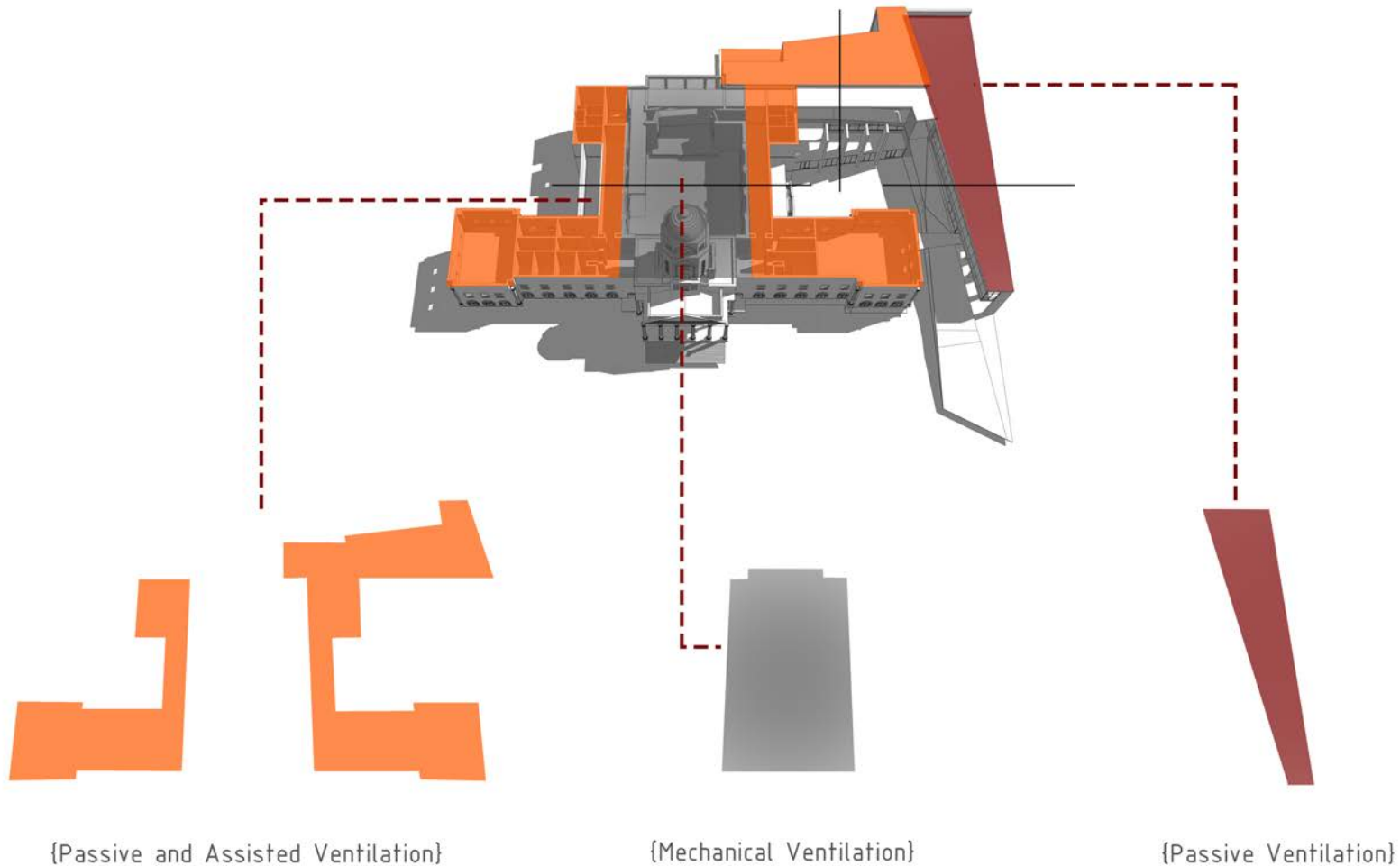
7.2.1 - Ventilation Systems

The ventilation for the design was divided into three zones so to best respond to the existing as well as move towards creating a greener building. The three zones are passive, assisted and mechanically serviced. Each zone was determined as a response to several established issues.

The first was that of the occupation of the design, which was determined through the programming of the building. Passive ventilation is positioned in the zone with the lowest occupation; assisted ventilation is positioned where the building is designed around public occupation; and the controlled mechanical zone (existing) is positioned in the debate arena which is to contain the highest concentration of people.

Through the establishment of the zones and the application of the principles required to allow for efficient passive ventilation, it was noted that Pretoria City Hall was designed in such a way that it, too, meets the requirements of passive ventilation systems. Therefore, the mechanical system would be controlled so as to prevent its unnecessary use when the hall is not fully occupied.

Figure 7.5 Above; Ventilation Zones (Author 2017)
Figure 7.6 Right; Ventilation Sections (Author 2017)

Passive Ventilation

Aluminium Screen heated up preventinginternal solar gain. Service walkway between screen and museum helps encourage ventilation pulling internal air through.
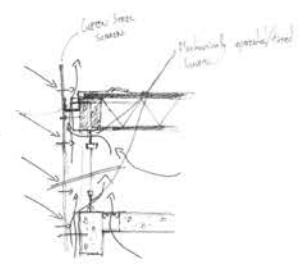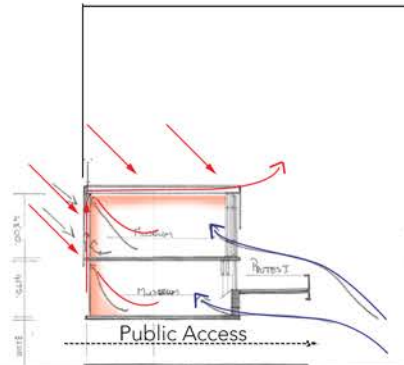
Cooler air from Expression Square pulled into the museum.

Public Access

Assisted Ventilation

Museum | Museum/Protest | Expression Square | Existing north wing
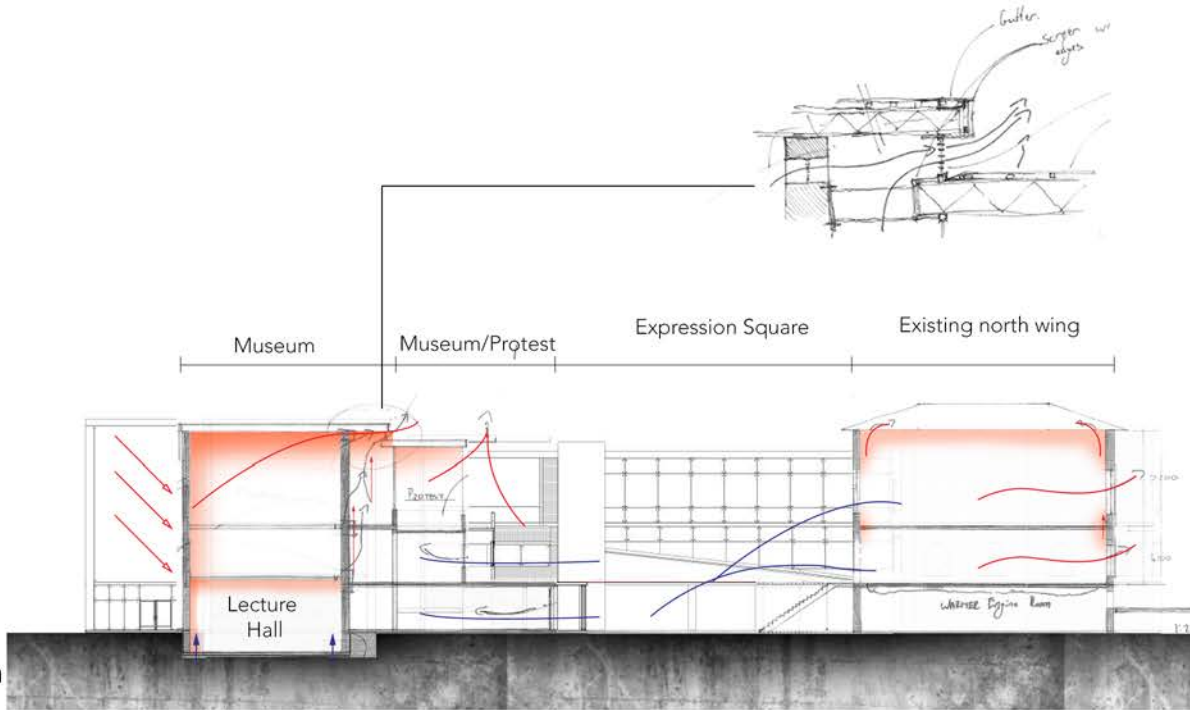
Lecture Hall

Lecture hall utilises rock store and earth to maintain temperature

Mechanical Ventilation

Passive | Mechanical | Passive

High use

Water Management

- ● Main water connection
- → Potable water
- ▬ Roof catchement area
- ▬ Surface catchement area
- – – – – → Rain water harvest flow
- ▬ Water storage tank
- ▬ Irrigation needed
- ● Pump
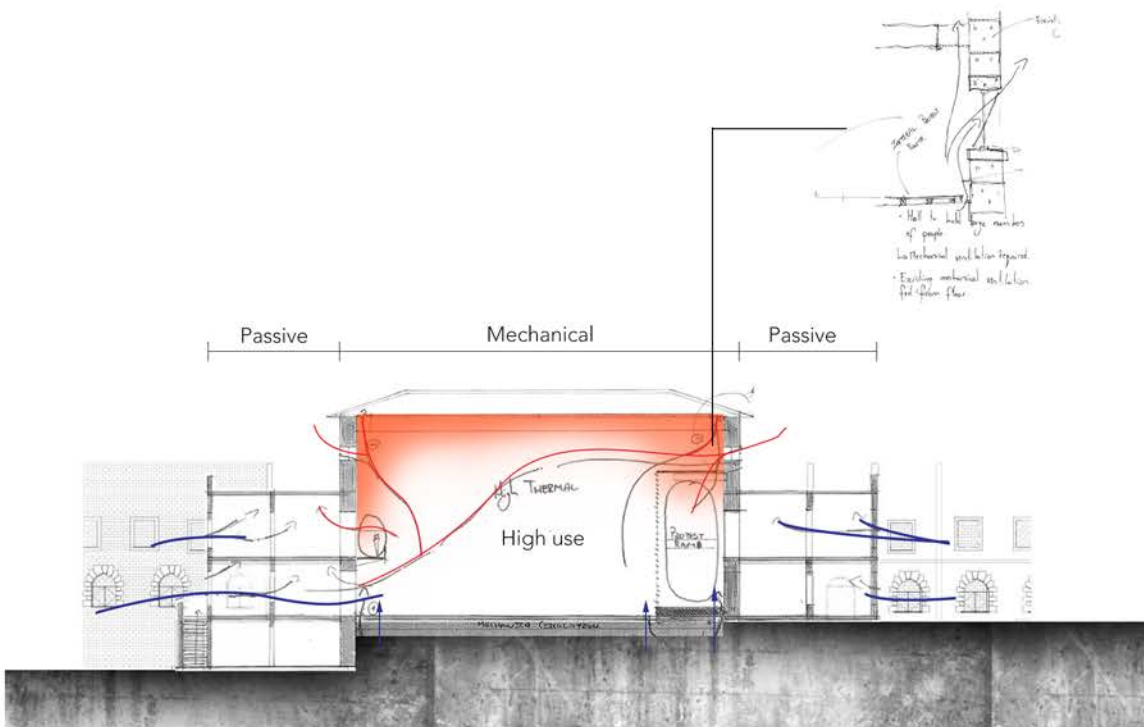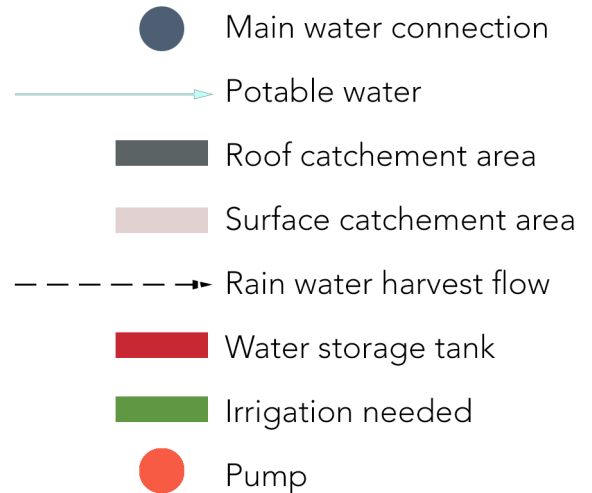
7.2.2 - Water Systems

Through the development of Pretoria City Hall, it is given a prominent seat in the political climate and therefore is required to act as an indicator of both political attitudes and responsible design. South Africa is currently experiencing its worst drought in over two decades (Da Silva 2017). The drought, coupled with infrastructure poorly managed by government (The Water Project 2017), has resulted in a wide spread crisis that affects many aspects of daily life, ranging from increased food prices due to the loss of crops, to certain areas experiencing water-shedding (Da Silva 2017).

The lack of management of the country's water systems by

government supports the argument for transparency in our political environment to prevent this from happening in the future, and is therefore an appropriate system for the New City Hall to address.

Storm water will be collected from all hard surfaces on the City Hall block and rain water will be harvested from City Hall. All the water will be stored in a newly constructed water tank underneath the external expression square.

Figure 7.7 Right Top; Water Strategy (Author 2017)
Figure 7.8 Right Bottom; Water Budget Table (Author 2017)
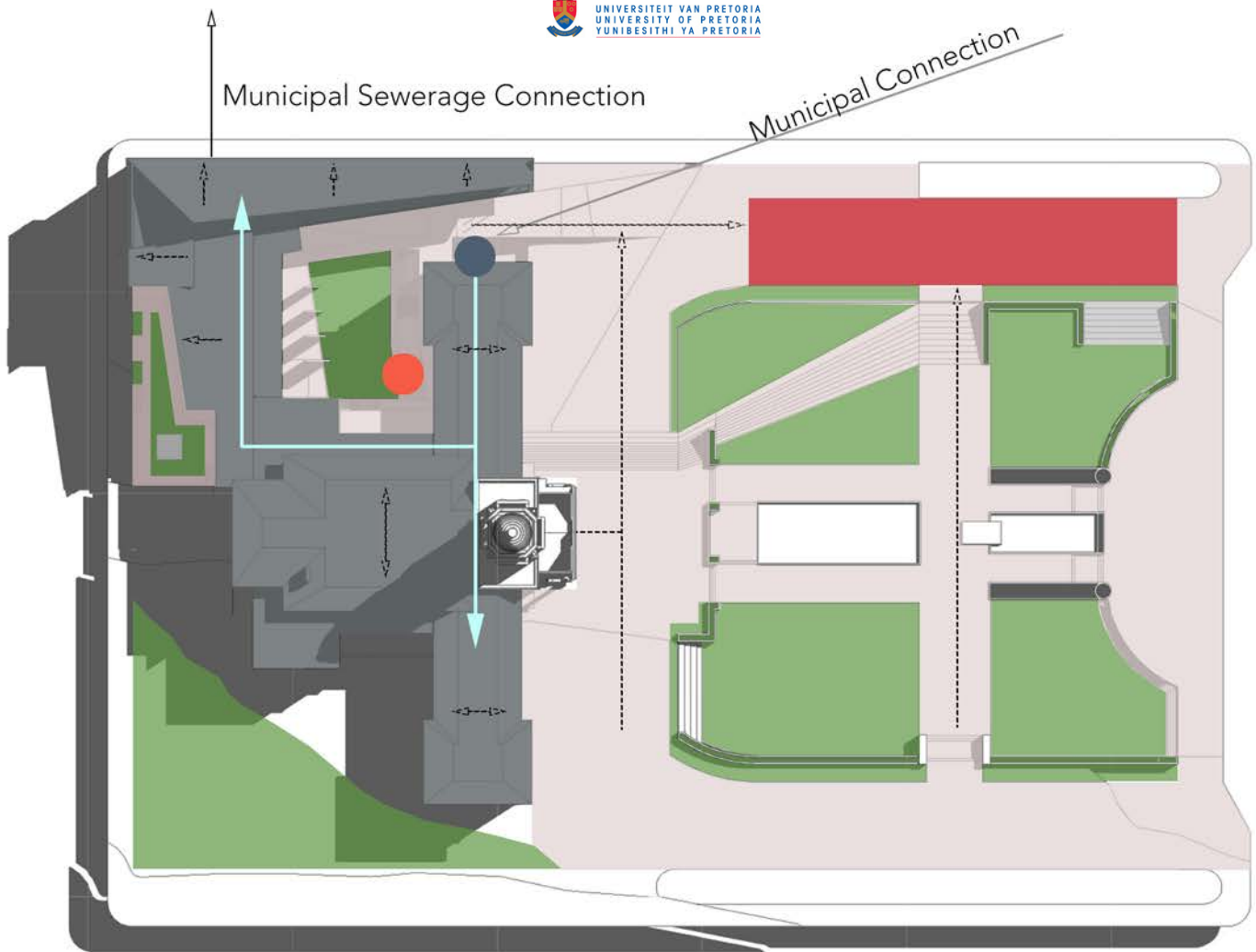
Water Budget

TANK CAPACITY (m³):	3200	
MIN VOLUME (m³):	0	

C1 WATER BUDGET — INNITIATION PHASE

MONTH	YIELD (m³/month)	DEMAND (m³/month)	MONTHLY BALANCE	POTENTIAL VOLUME (m³)	VOLUME IN TANK (m³)
September	448,7	976,0	-527,3	**0,0**	**0,0**
October	1448,1	994,8	453,3	**453,3**	**453,3**
November	1998,7	985,8	1012,9	**1466,2**	**1466,2**
December	2202,7	1004,6	1198,1	**2664,3**	**2664,3**
	6098,2	**3961,2**	**2137,0**		
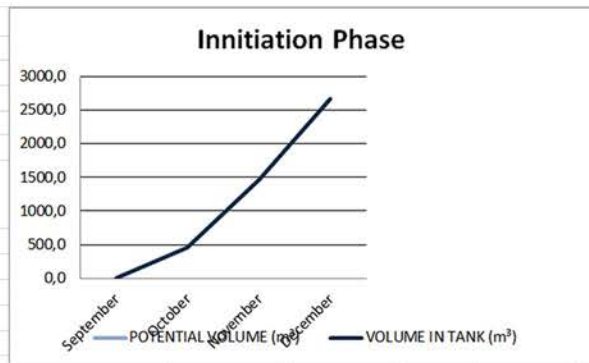
C2 WATER BUDGET — YEAR 1

MONTH	YIELD (m³/month)	DEMAND (m³/month)	MONTHLY BALANCE	POTENTIAL VOLUME (m³)	VOLUME IN TANK (m³)
January	2773,8	1004,6	1769,2	**4433,4**	**3200,0**
February	1019,8	967,8	52,0	**4485,4**	**3200,0**
March	1672,4	975,2	697,2	**5182,6**	**3200,0**
April	1040,2	956,4	83,7	**5266,3**	**3200,0**
May	265,1	757,5	-492,3	**4774,0**	**2707,7**
June	142,8	685,9	-543,1	**4230,8**	**2164,5**
July	61,2	694,9	-633,7	**3597,1**	**1530,8**
August	122,4	912,6	-790,3	**2806,8**	**740,5**
September	448,7	976,0	-527,3	**2279,5**	**213,2**
October	1448,1	994,8	453,3	**2732,8**	**666,5**
November	1998,7	985,8	1012,9	**3745,7**	**1679,4**
December	2202,7	1004,6	1198,1	**4943,8**	**2877,5**
ANNUAL AVE.	**13195,7**	**10916,2**	**2279,5**		
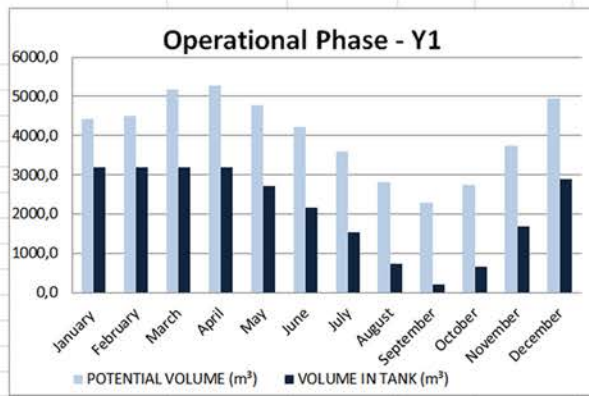
7.3 - Structural Systems

The structural approach is a response to the existing system of City Hall and an extension of Machado's (1976) idea of old buildings as palimpsest. It adopts a three-tiered approach, in which the substructure is an extension of the stereotomic nature of the existing, the superstructure is a response to the tectonic nature of society, and the skin is a response to the identity created through the interaction of all tiers.

Figure 7.9 Right; Structural Layers of the new building (Author 2017)

Skin

Superstructure
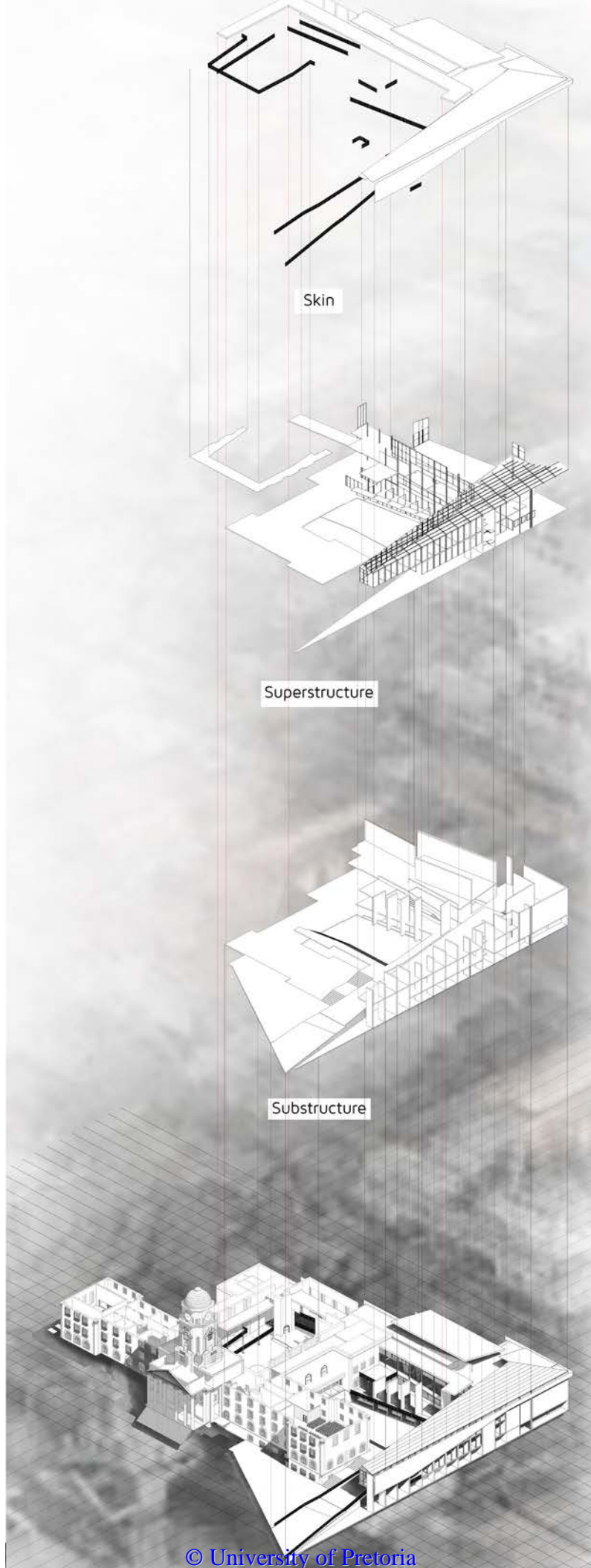
Substructure

7.3.1 - Substructure

The design of the substructure and its materiality was approached as a response to the existing. The response to the stereotomic nature of City Hall was to recreate its longevity and integrity so to respect the heritage along which the new has developed. Furthermore, the stereotomic nature of the substructure is used as a metaphor for society's ability to learn from the past and use it to create a better future.

It is arranged according to the existing 5000x5000mm grid of City Hall with the stereotomic concrete elements supporting the new. The substructure is intended to respond to the existing in its ordering, yet be removed from it as it acts as the foundation for the new. The existing sandstone and concrete-block exterior walls informed both the thickness and height required by the new system. The structural walls support the tectonic steel superstructure.

Figure 7.10 Right Top; Substructure (Author 2017)
Figure 7.11 Right; Structural Layer Material Palette (Author 2017)
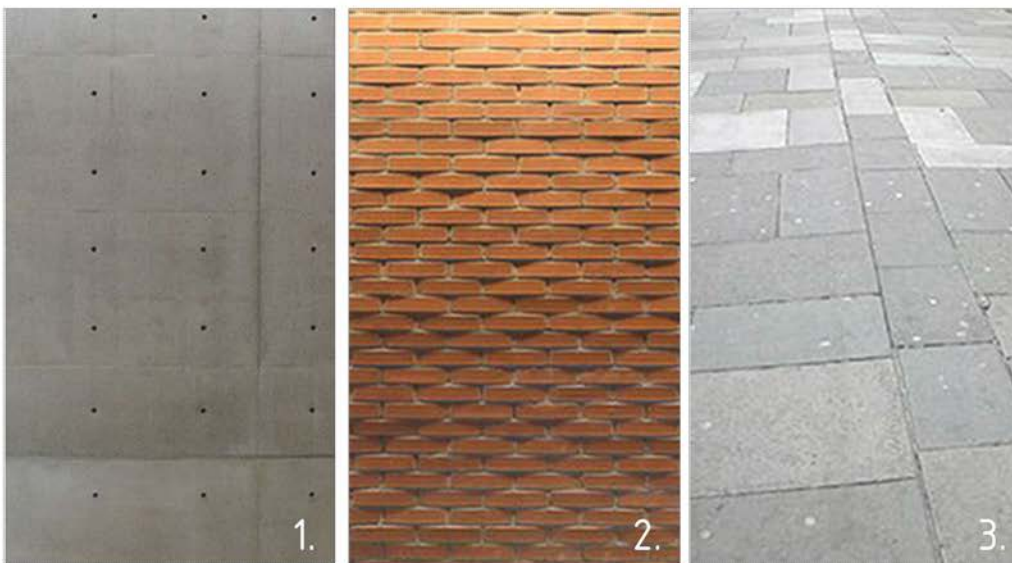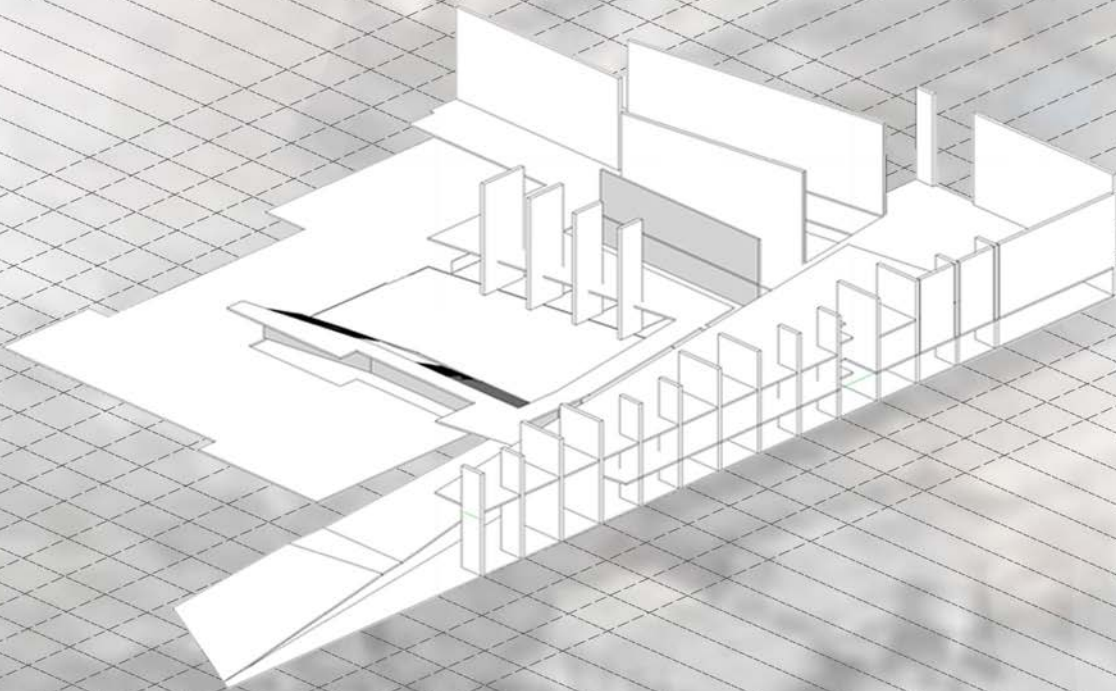
1. 400mm Concrete Walls organised along the existing 5000x5000 grid.
2. Brickwork framing walkways in the museum.
3. Concrete paving slabs for market space.
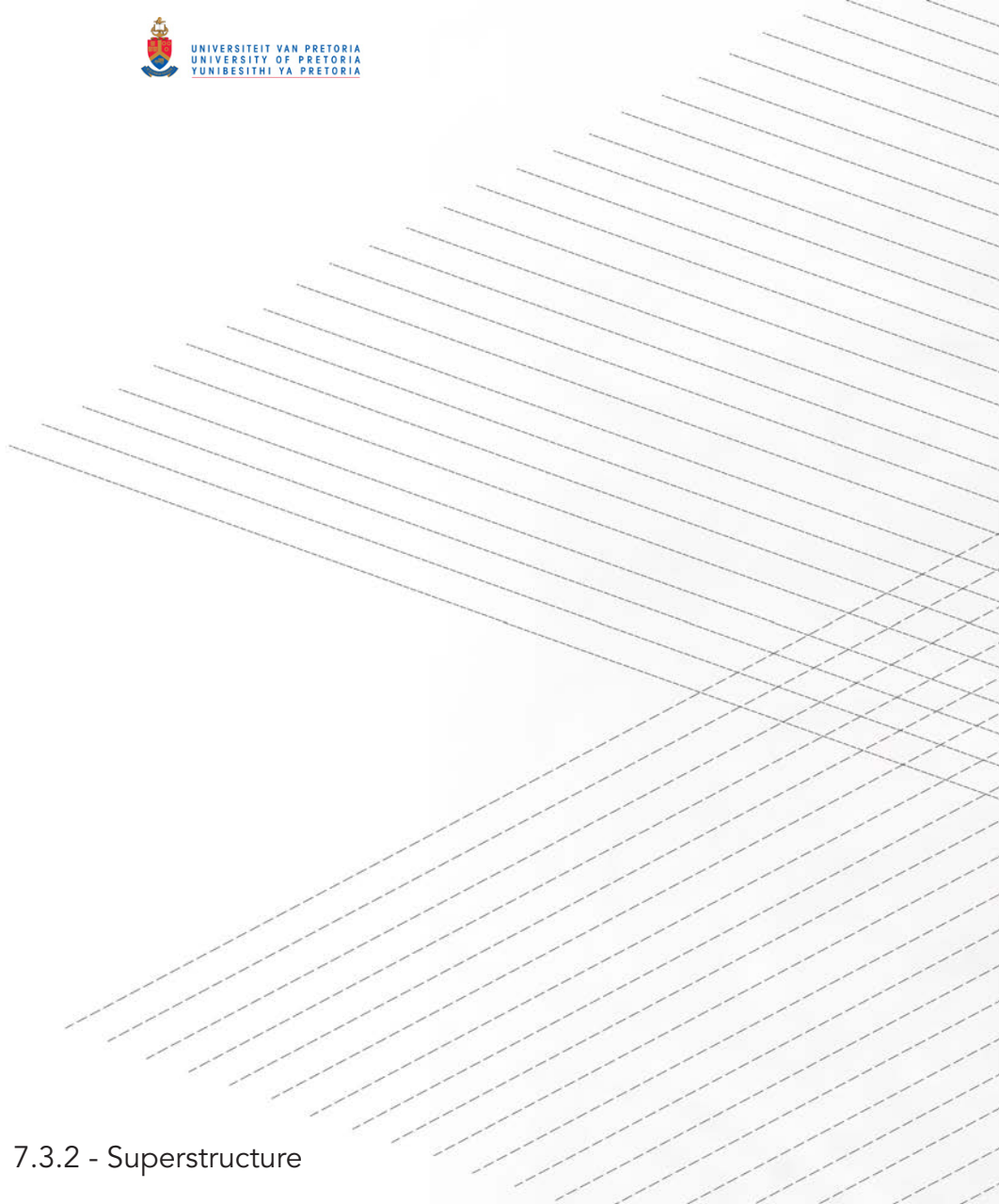
7.3.2 - Superstructure

The design approach to the superstructure and its materiality was chosen as a response to the tectonic nature of society and its rejection of the stereotomic presence of city hall. The superstructure plays an important role in the understanding of the architecture. It is used as a metaphor for the progression of society, where at times it has developed from the past and at other times it has been used to support, protect and reactivate the past.

Steel construction was chosen as an appropriate system, as its slender elements will be in stark contrast to both the existing and the substructure. The use of steel embodies the adaptability of society, a notion that is not present in the stereotomic elements. It responds to the ordering system of the substructure, yet its adaptability allows for the creation of dynamic spaces in response to the dynamic nature of the public.
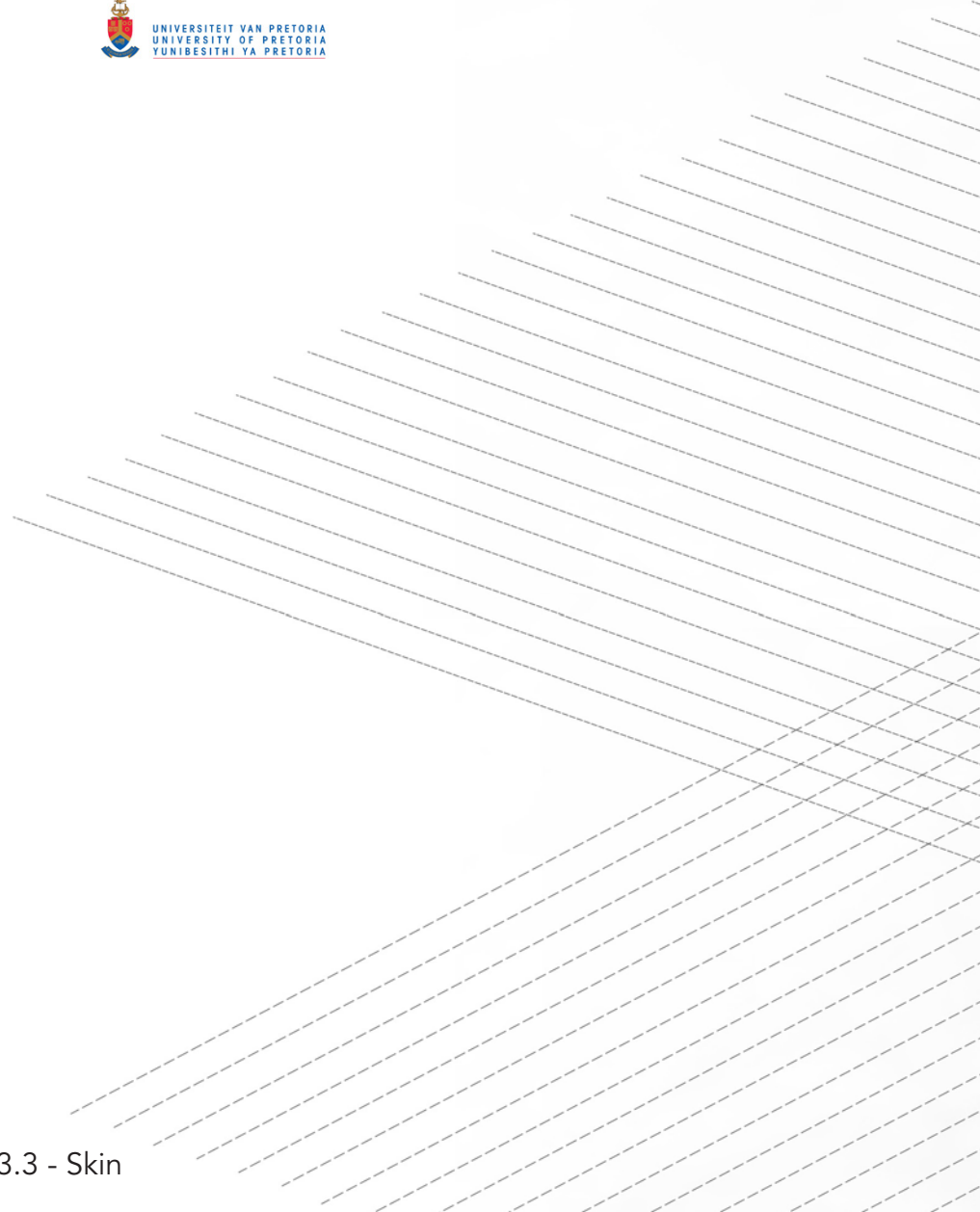
Figure 7.12 Right Top; Superstructure (Author 2017)
Figure 7.13 Right; Superstructure Layer Material Palette (Author 2017)

1. Open web steel trusses.
2. H and I sections for horizontal and vertical structural elements.
3. Mentis grating for walkways.
4. Structural Mulions.

7.3.3 - Skin

The design approach to the skin and its materiality responds to the identity of our society and its ability to express that which is happening around us. It plays an important role in both the understanding of the architecture and in facilitating the passive ventilation. The skin deals with the physical screen which wraps around the building as well as the roofs.

Euro Steel Aluminium sheet 1200 H14 was selected to be used for the screen and Klip-Lok 406 was chosen as the roof sheeting. The screen is used to suggest the internal movement of protest on the northern elevation and facilitate ventilation in conjunction with the roof.

The layering of the three structures sees a response to Nobel's (2008) argument towards the hybridisation of architecture, in that it is through the layering of the three systems that the new identity is embodied and becomes established in our understanding of it.

Figure 7.14 Right Top; Skin (Author 2017)
Figure 7.15 Right; Skin Layer Material Palette (Author 2017)
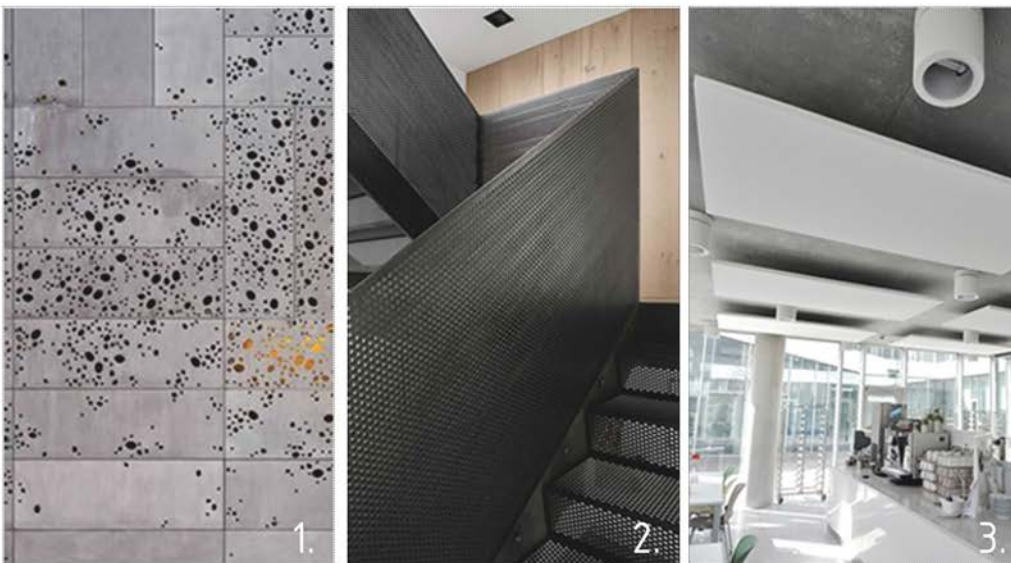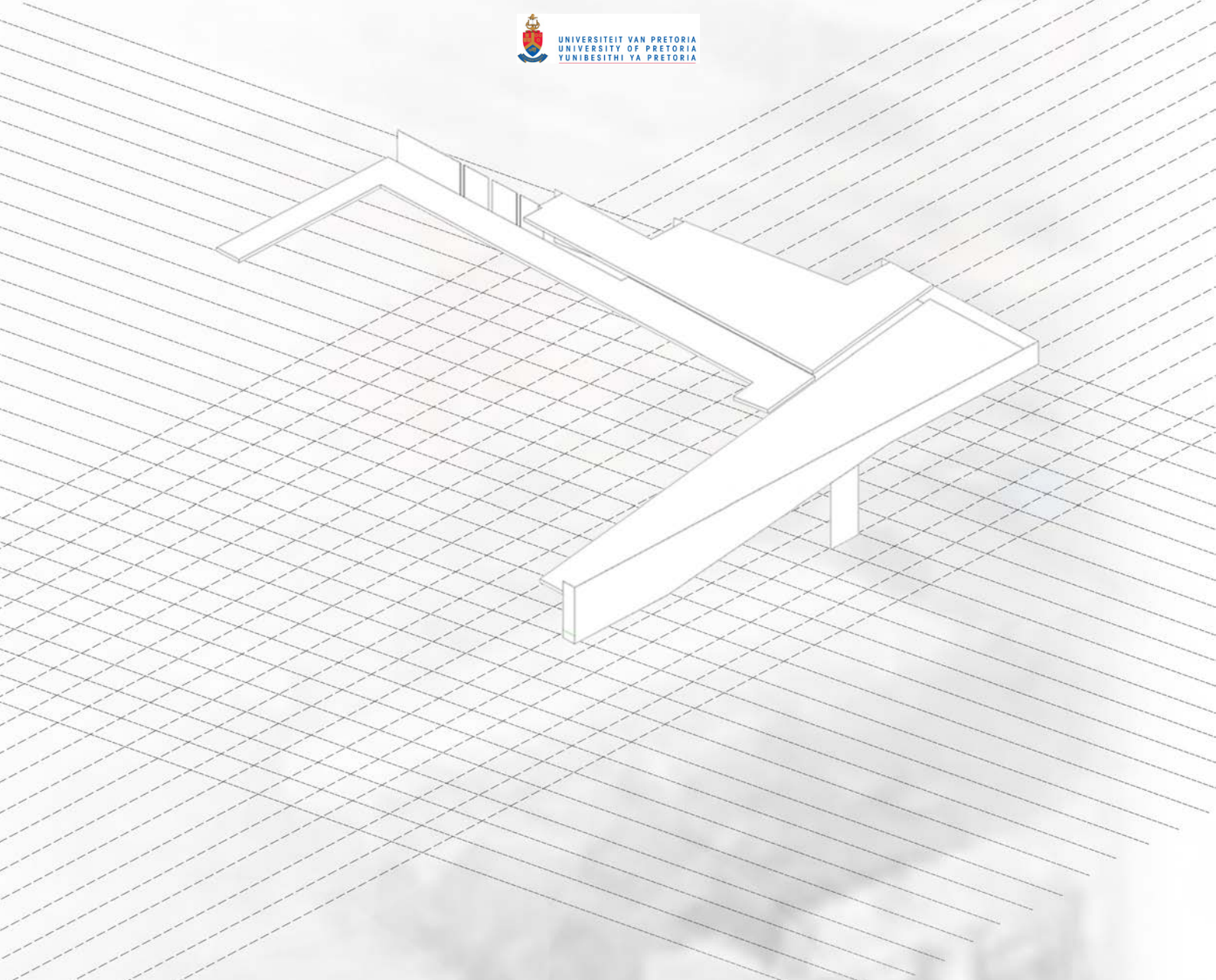
1. Patterned Aluminium Screen supported by Square and Rectangular hollow sections.
2. Patterned Aliminium balastrades.
3. Acoutic panels spaced to expose concrete ceiling.

7.4 - Debate in Junctions

Our understanding of architecture does not end once the user understands the general program or function of the building, but rather, it is developed through the process of exploration. The idea of debate in junctions therefore argues for transparency in junctions. It proposes that, in order to successfully achieve the transparent rigor required of a political building, the junctions which put it together require clearly defined focuses creating an easily understood architecture.

The spatial manifestation of debate in architecture deals with architecture in a manner which all can understand. Different opinions surrounding an issue

(i.e. the junction between the floor of the new with the existing) are put forward and discussed, with one of three results becoming the newly created junction. This approach towards the development of junctions creates a clearly defined intention that helps to develop a narrative in support of the surrounding programs and functions of the building.

In order to properly facilitate the clear language created through the debate of junctions and establish the appropriateness of the given result the tectonic approach is organised along the three core functions established for the design: Display, Debate and Spectate.
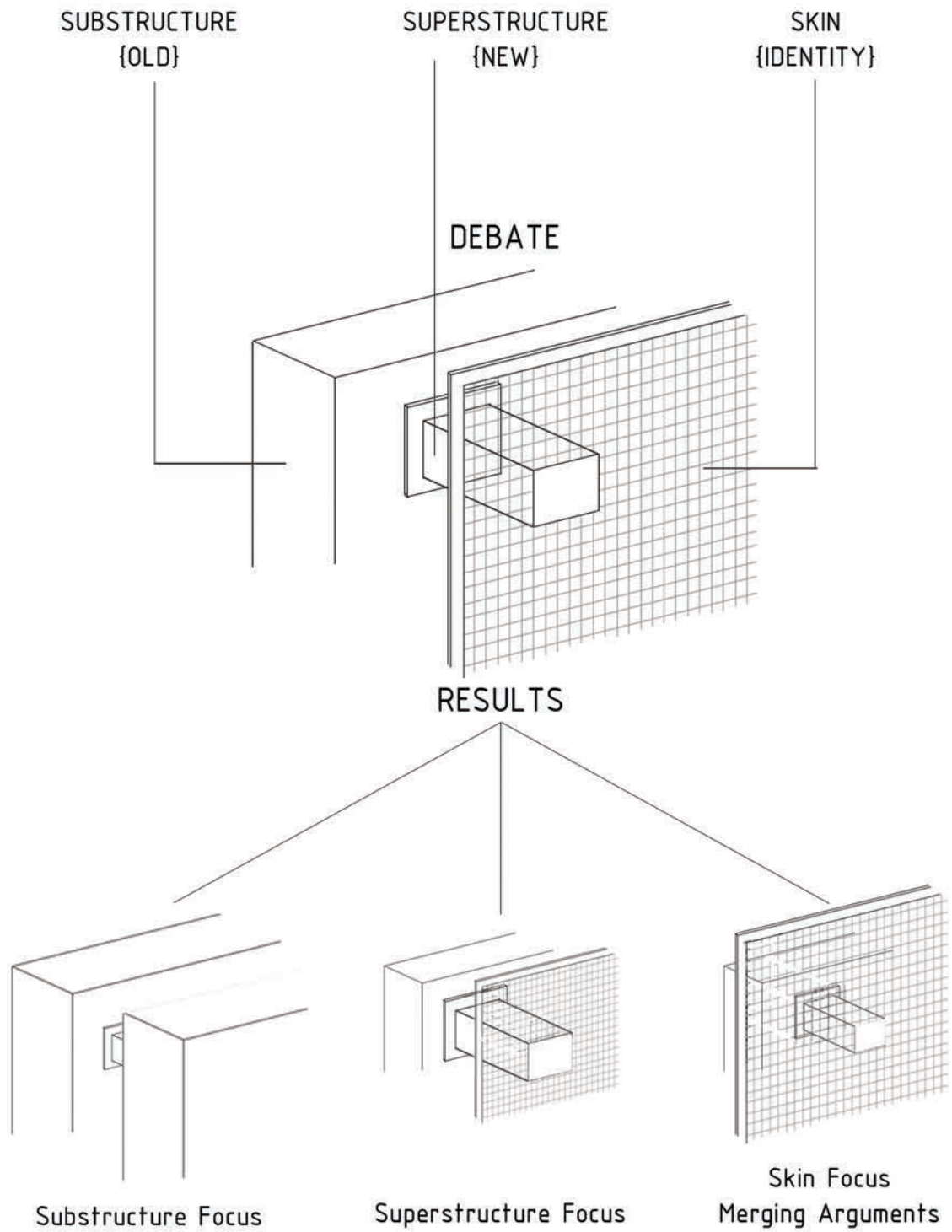
Figure 7.16 Debate in Junctions (Author 2017)
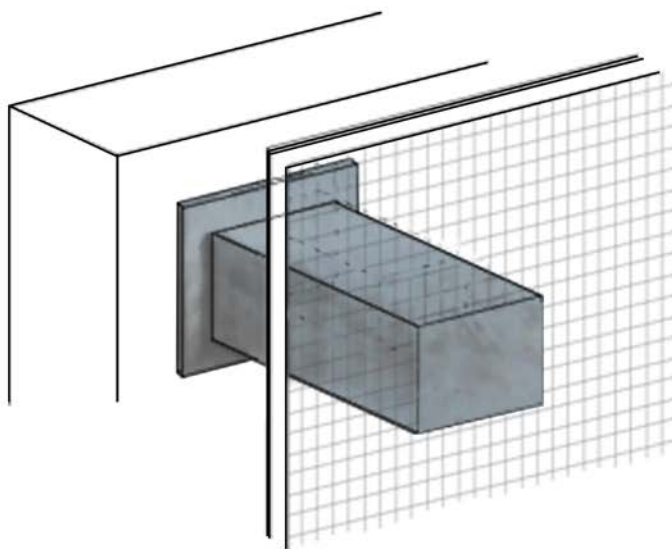
Figure 7.17 Above; Display Junction
(Author 2017)
Figure 7.18 Right; Junction between steel
column and concrete floor slab 3D (Author
2017)

7.4.1 - Display (Superstructure)

Display deals with the issues of memory in architecture and the appropriation of space in architecture's control of public and private expression spaces (Jarvis 2009). The main programmatic driver of display is that of the Museum of Democracy, which is used as an indicator of the progression of democracy. Display reveals an understanding and control of the existing in its architectural resolution.

Therefore, when applied to the issues of debate in junction, the technical resolution would focus on and highlight the connections of the superstructure as a means to express its ability to learn from the past in its creation and connection to the new.

203x203x46 mm H-section welded to footing which is to be bolted with M12 bolts to steel plate cast into concrete floor

203x203x10 mm steel flat welded to base of H-section column with 50x10 mm vertical steel flat spacer welded to underside and welded to base of 203x203x10 mm steel flat

M12 rods cast into concrete floor to act as guide for accurate positioning of column.

253x253x10 mm steel flat cast into concrete floor to act as base connector for column footing

M12 bolts connecting IPEaa200 to 203x203x10 mm steel flat welded to top of 203x203x10 mm parallel flange H-section column

Figure 7.19 Above; Debate Junction
(Author 2017)
Figure 7.20 Right; Column footing through
new opening in Council Chambers 3D
(Author 2017)

7.4.2 - Debate (Substructure)

Debate deals with the issues of verbal and architectural contestation, with the main programmatic driver being the debate arena, which is experienced at direct and indirect levels. Debate reveals an approach to the heritage of the architecture and argues in support of the past in its ability to facilitate the change seen by our society.

Therefore, when applied to the issues of debate in junction, the technical resolution would focus on clearly defined and developed junctions between the existing and the new. It aims to highlight the past, so to respect the existing structure while suggesting the changed societal perception needed for its reactivation.

457x191x67 mm Mild steel parallel flange I-section column to be welded to 457x191x10 mm steel flat

457x191x10 mm Mild Steel flat welded to 210x10 mm vertical steel flat spacers welded to 457x191x10 mm steel flat base plate to be chem. bolted to existing concrete floor

Laminated tempered glass pane held by 25x25x3 mm mild steel equal angle with pre-drilled hole to fix panel lipped channel below

114x22 mm Stinkwood floor panels supported on 114x50 mm timber floor joist

7.4.3 - Spectate (Skin)

Spectate deals with the issues of transparency and the gaining of knowledge through the appropriation of varying platforms along the main protest route as established through the design process. The intention is to help protesters develop and understanding of their social and physical surroundings. Programmatically, spectate is centred between the display and debate functions of the design yet it takes a step back so to simplify the platform and highlight that which the platform engages with.

Therefore, when applied to the issues of debate in junction, the technical resolution would focus on the structural system of the skin and how it connects to the building. The intention is for the junction to be clearly defined and used as a tool to focus the individual on the space that is being framed.

Figure 7.21 Above; Spectate Junction (Author 2017)
Figure 7.22 Right; Protest gallery balustrade 3D (Author 2017)
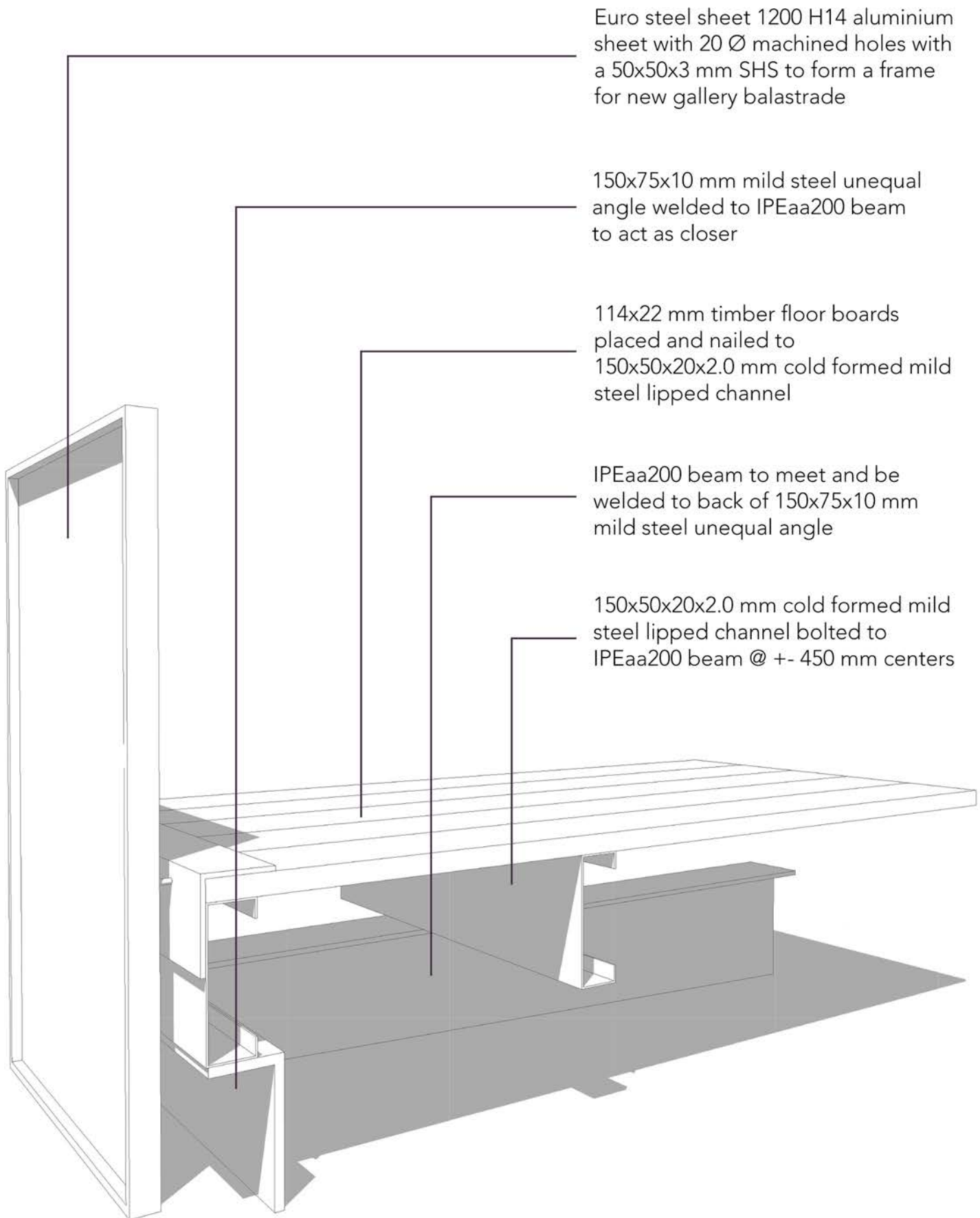
Euro steel sheet 1200 H14 aluminium sheet with 20 Ø machined holes with a 50x50x3 mm SHS to form a frame for new gallery balastrade

150x75x10 mm mild steel unequal angle welded to IPEaa200 beam to act as closer

114x22 mm timber floor boards placed and nailed to 150x50x20x2.0 mm cold formed mild steel lipped channel

IPEaa200 beam to meet and be welded to back of 150x75x10 mm mild steel unequal angle

150x50x20x2.0 mm cold formed mild steel lipped channel bolted to IPEaa200 beam @ +- 450 mm centers

Step 1.
Angle grind around proposed opening to prevent flacking of the existing plaster during construction.
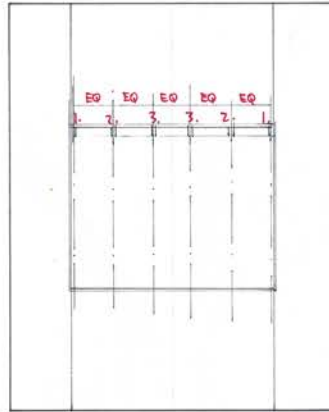
Step 2.
Temporary supports placed through existing wall to carry load above. I-section supported on either side and placed @ equal increments.
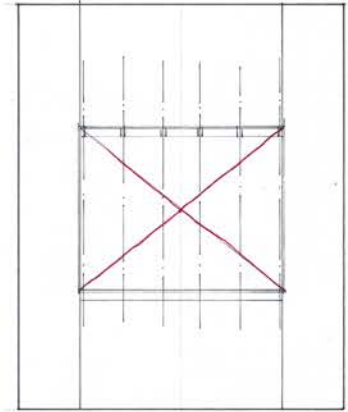
Step 3.
Once I-sections have been stabilised the opening can be created.
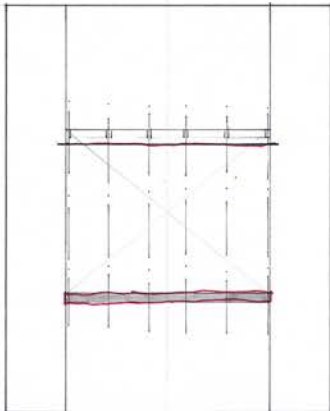
Step 4.
Start of new lintle with steel plate spanning new opening.

New concrete floor can be attached to existing.
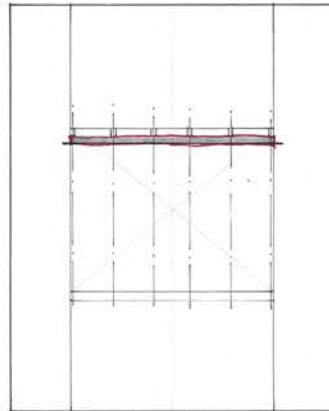
Step 5.
Form work placed around steel plate and packed with concrete on top of steel plate.
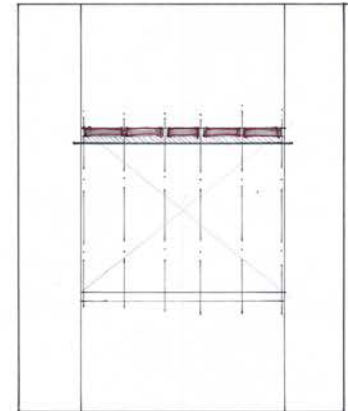
Step 6.
Once base concrete has cured, dry-mix concrete is rammed into space between temporary I-sections and allowed to cure.
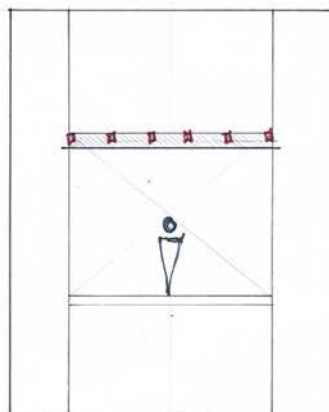
Step 7.
Final step is to ram dry-mix concrete into gaps created by the removal of the temporary I-section supports.

Figure 7.23 Above; Steps taken to break through existing walls
Figure 7.24 Right; SBAT (Author 2017)

SUSTAINABLE BUILDING ASSESSMENT TOOL (SBAT- P) V:

PROJECT

Project title:	Architectural Hybridity In Democracy
Location:	Pretoria, Pretoria city hall
Building type (specify):	Community
Internal area (m2):	
Number of users:	300-5000
Building life cycle stage (specify):	Design
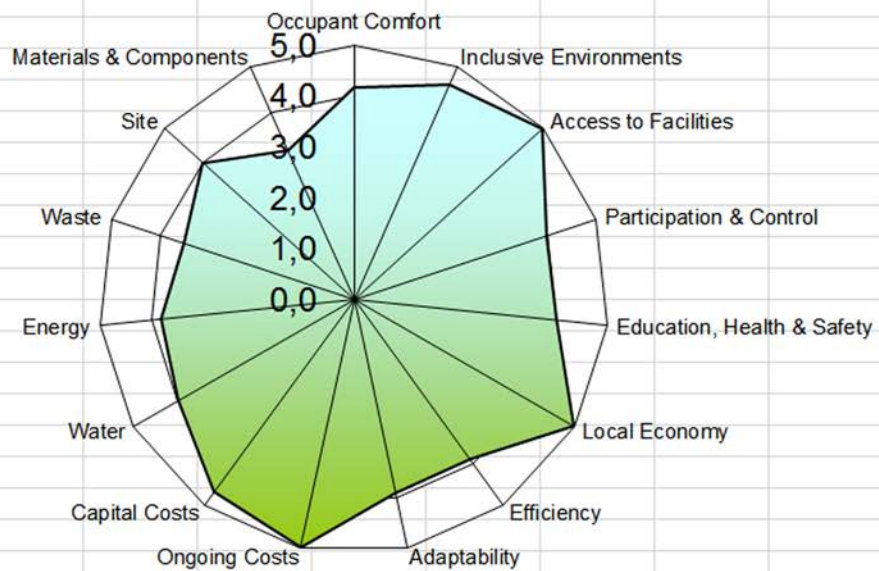
Social	4,4	Economic	4,5	Environmental	3,7
		Overall	4,2		

7.7 - Technical Iteration Process

Figure 7.25 First iteration of technical
sections (Author 2017)

Figure 7.26 Second iteration of technical sections (Author 2017)

Section A
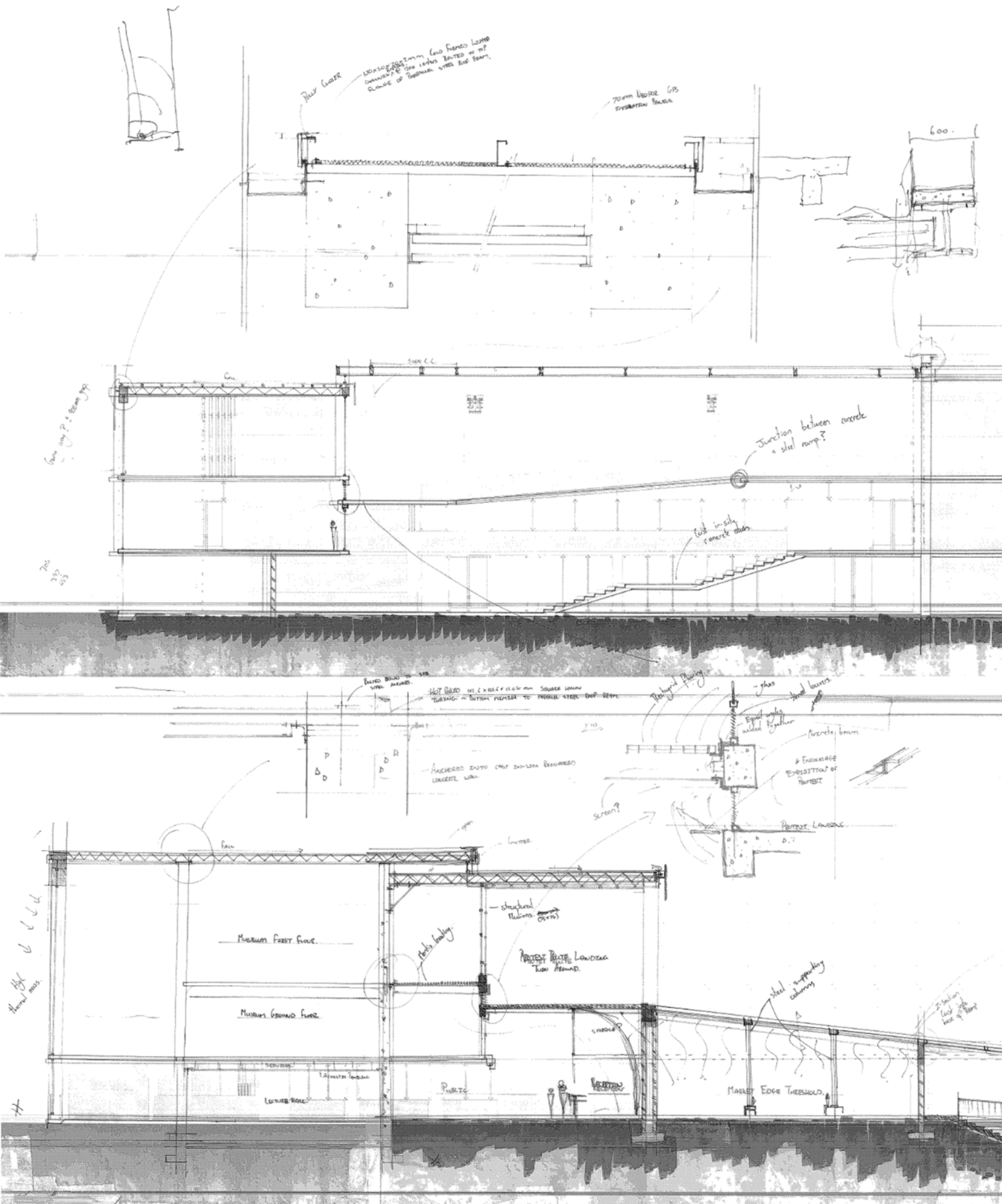
Section B

Section C

Plan of new Council Chambers
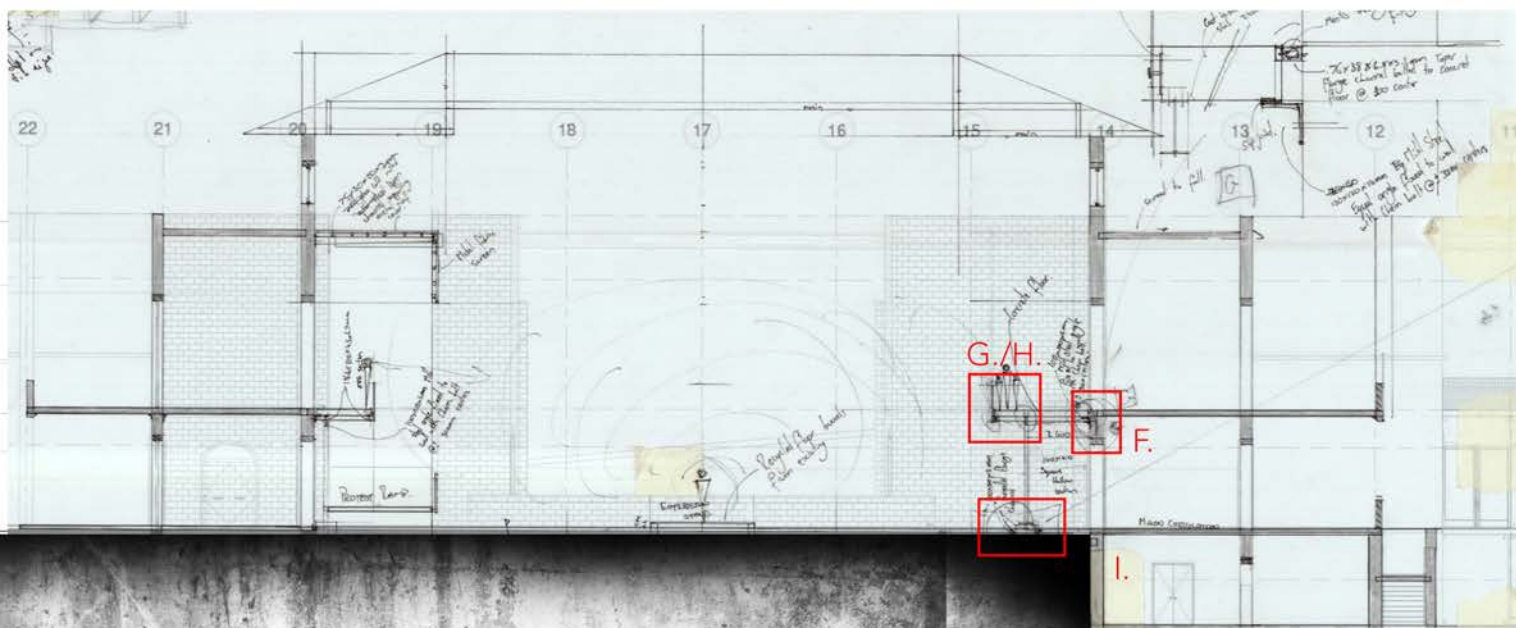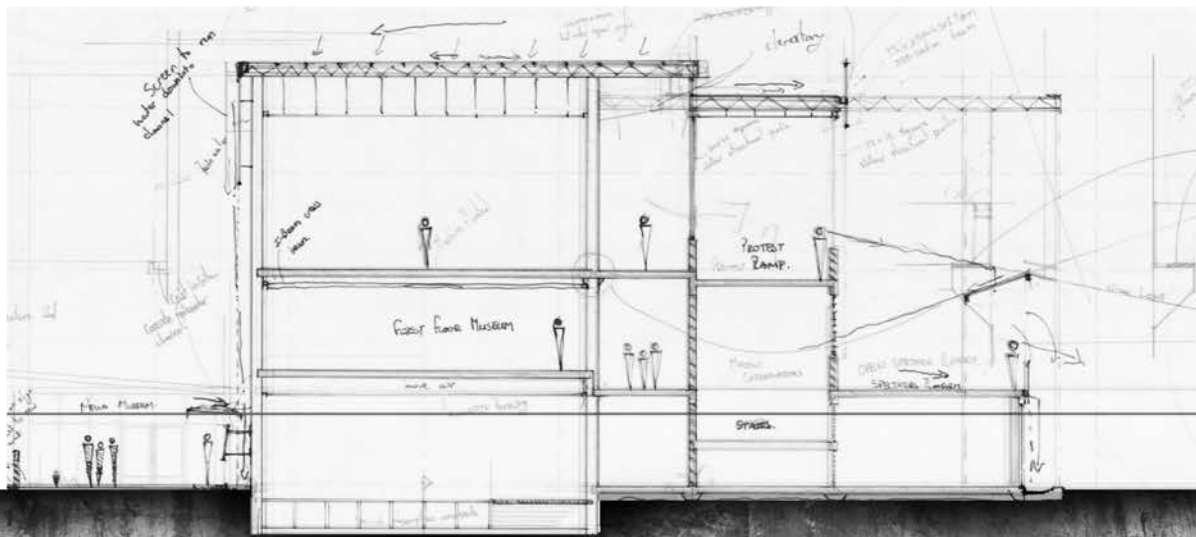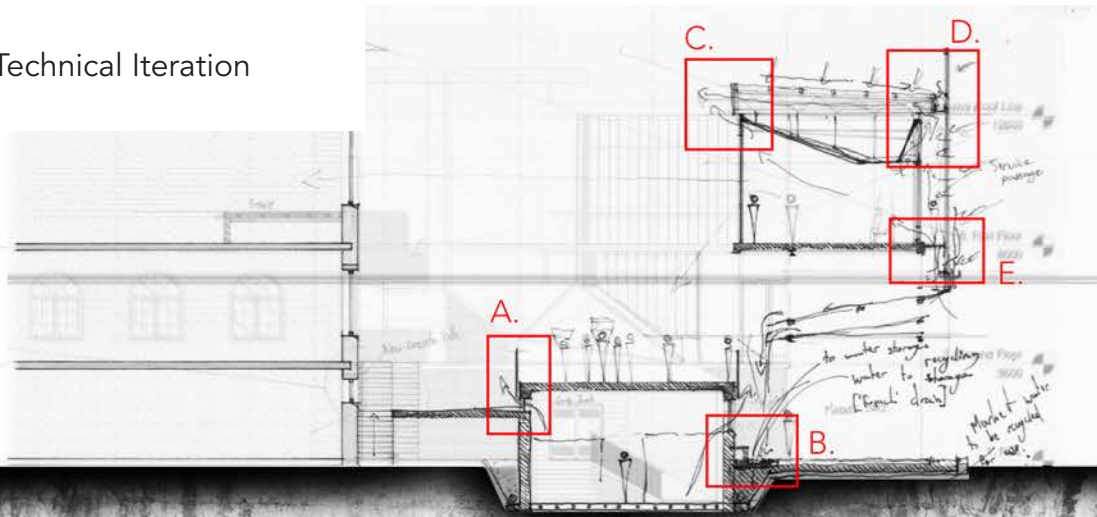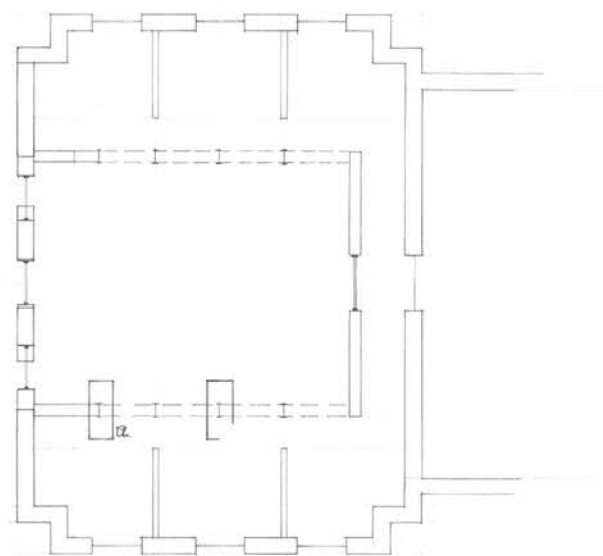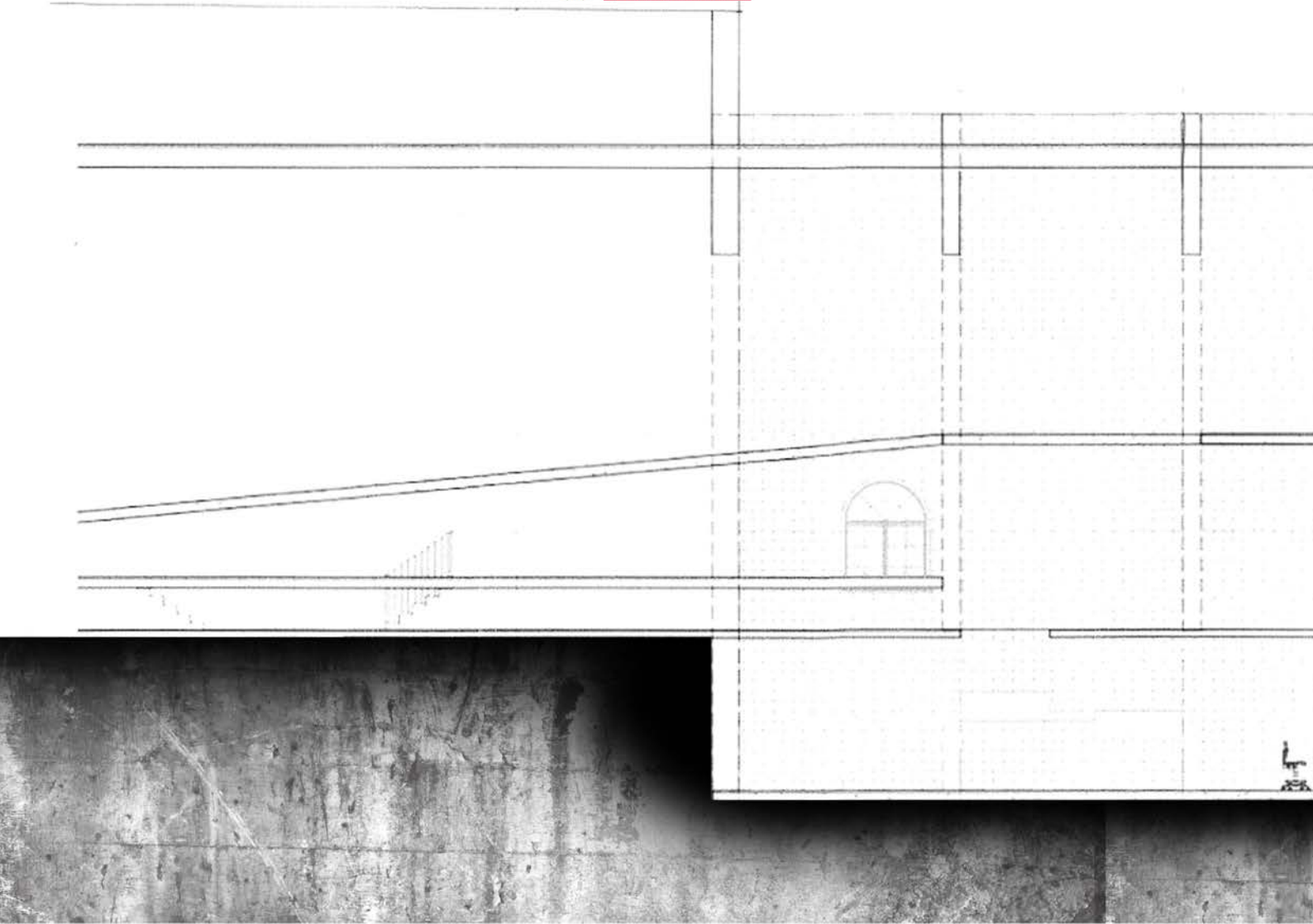
Figure 7.27 Above; Section between existing
and new (Author 2017)
Figure 7.28 Below; Council Chamber Plan
(Author 2017)
Figure 7.29 Right Bottom; Section through
Figure Council Chambers (Author 2017)

Section Through council chambers

7.7.3 Technical Crit detais

105x75x6 mm mild steel unequal angle bolted to concrete ramp and welded to 50x50x3 mm SHS frame

Euro steel aaluminium sheet 1200 h14 patterned and welded to 50x50x3 mm SHS for both vertical and horizontal supports

Edge to be chamfered

Aluminium framed window fixed to concrete lintel

Cast in-situ rainwater channel

Detail A.

Figure 7.30 Protest Ramp Edge Detail Figure (Author 2017)

100x75x6 mm mild steel unequal angle chem. bolted to concrete @ 300 centers

Precast concrete bench placed onto mild steel support

50x50x3 mm mild steel equal angle welded to 5 mm mild steel plate

5 mm mild steel plate cut as indicated and welded to 100x75x6 mm unequal angle

300x300x50 mm traditional concrete paving slab placed onto concrete rounds to allow movement of water underneath

Cast in-situ rainwater channel

Detail B.

40x40x2 mm mild steel equal angle chem. bolted to concrete to support 60x40x30 mm gripweld mentis grating

Figure 7.31 Market junction with storage wall (Author 2017)

105x105 mm purpose bent GMS flashing

105x50x20x2.0 mm mild steel lipped channel purlin laid onto steel truss @ 1200 mm centers to support klip-lok 406 0.7 mm aluminium roof sheeting fastened to purlins with stainless steel by-metal self-drilling wafer head ph2 screw

50 m thick x 400 mm wide isoboard high density rigid extruded polysyrene insulation board nailed to 150x75x10 mm mild steel unequal angle barrer beam

75x75x3 mm SHS mullion welded to underside of steel truss

75x50x20x2.0 mm mild steel lipped channel nailed to 150x75x10 mm unequal angle

Detail C.

Figure 7.32 Rood end detail (Author 2017)

105x50x20x2.0 mm mild steel lipped channel purlin laid onto steel truss @ 1200 mm centers to support klip-lok 406 0.7 mm aluminium roof sheeting fastened to purlins with stainless steel by-metal self-drilling wafer head ph2 screw

1.8 GMS bent as indicated and wrapped up to purlin and RHS to form structural gutter

Euro steel aluminium sheet 1400 h14 to be patterned and supported by 50x50x3 mm SHS on the vertical and 75x50x3 mm on the horizontal

150x75x10 mm mild steel unequal angle barrer beam to support 1.8 GMS structural gutter

Steel truss laid onto steel slep plate on top of concrete column

50 m thick x 400 mm wide isoboard high density rigid extruded polysyrene insulation board nailed to 150x75x10 mm mild steel unequal angle barrer beam

Detail D.

Figure 7.33 Roof gutter detail (Author 2017)

60x40x30 mm gripweld mentis grating laid onto unequal and equal angles

5 mm mild steel plate cut as indicated to be welded to 150x90x10 mm unequal angle and 50x50x3 mm equal angle to act as support brace

Euro steel aluminium sheet 1200 H14 to be patterned to act as screen

75x50x3 mm RHS to form top and bottom elements of screen

1.8 GMS bent as indicated and welded to 50x50x3 mm equal angle to form rainwater channel

50x50x3 mm mild steel equal angle welded to 5 m plate to close off support

150x90x10 mm mild steel unequal angle chem. bolted to concrete down stand @ 300 mm centers to support 60x40x30 mm gripweld mentis grating catwalk

Chamfered concrete edge

Detail E.

SCREED

Figure 7.34 Catwalk Detail (Author 2017)

114x22 mm Lusagna timber floor boards layed ontop of 105x50x20x2.0 mm mild steel lipped channel

Light junction bolted to 150x50x20x2.0 mm cold formed mild steel lipped channel

Electrical conduit to run through void

IPEaa200 beam to be bolted to 150x90x10 mm mild steel unequal angle with M12 bolts @ 300 centers

150x90x10 mm mild steel unequal angle to support IPEaa200 beam chem. bolted to wall @ 300 centers

Detail F.

Figure 7.35 Gallery connection to existing
(Author 2017)

Detail G.

114x22 mm timber floor boards layed onto and nailed to 150x150x20x2.0 mm cold formed mild steel lipped channel

150x150x20x2.0 cold formed mild steel lipped channel nailed to IPEaa200 @ 450 centers

Euro steel sheet 1200 H14 aluminium sheet with 20 mm diameter machined holes with a 50x50x3 mm SHS to form a frame for the gallery balastrade

150x75x10 mm mild steel unequal angle welded to IPEaa200 to act as closer

IPEaa200 beam cut as indicated to meet and be welded to 150x75x10 mm mild steel unequal angle

Figure 7.36 Gallery balustrade detail
Figure (Author 2017)
Figure 7.37 Below; Callout A, Lipped
Figure channel lighting detail (Author 2017)

Pre-drilled hole into laminated glass pane to fix it to lipped channel

25 mm thick and 150 mm wide translucent glass pane

25x25x2 mm cold formed mild steel equal angle to house translucent laminated glass pane

Lasagna timber floor (existing)

Silicon beading layed between tempered glass and mild steel angle

Gasket between mild steel angle cold formed lipped channel

144x50 mm timber joist to carry timber floor

150x50x20x2.0 mm cold formed mild steel lipped channel to go around concrete footing to be plugged and screwed to concrete and fixed to floor joist with self-tapping screw

M6 nut welded to internal flange of 150x50x20x2.0 mm cold formed mild steel lipped channel @ 200 centers

Callout A.
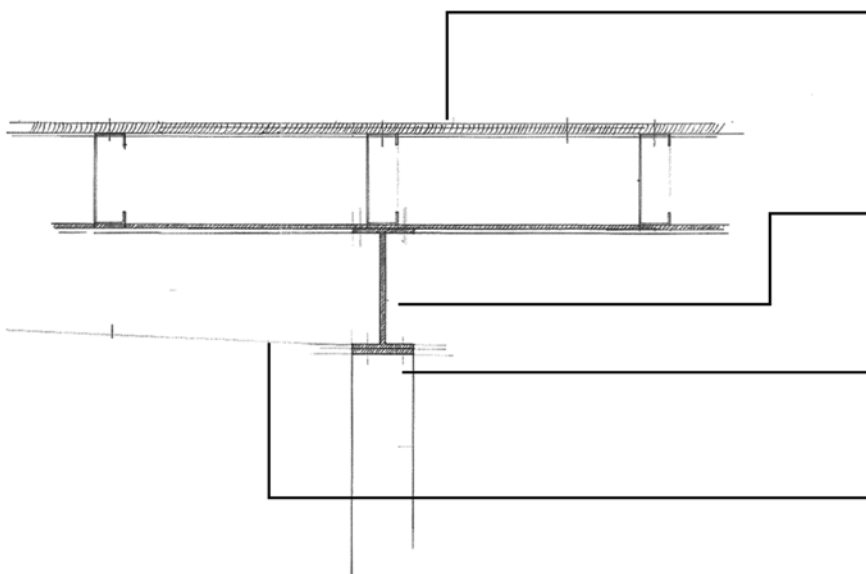
114x22 mm timber flour nailed and supported by 150x50x20x2.0 mm mild steel lipped channel @ 450 mm centers

IPEaa200 I-section beam welded to 100x100x10 mm steel flat cut and welded to a second IPEaa200 I-section

100x100x4.0 mm SHS column capped with 100x100 steel flat

IPEaa200 cut as indicated to form end of gallery

Detail H.

Figure 7.38 Column connection to gallery (Author 2017)
Figure 7.39 Below; New concrete footing in debate arena (Author 2017)

Detail I.
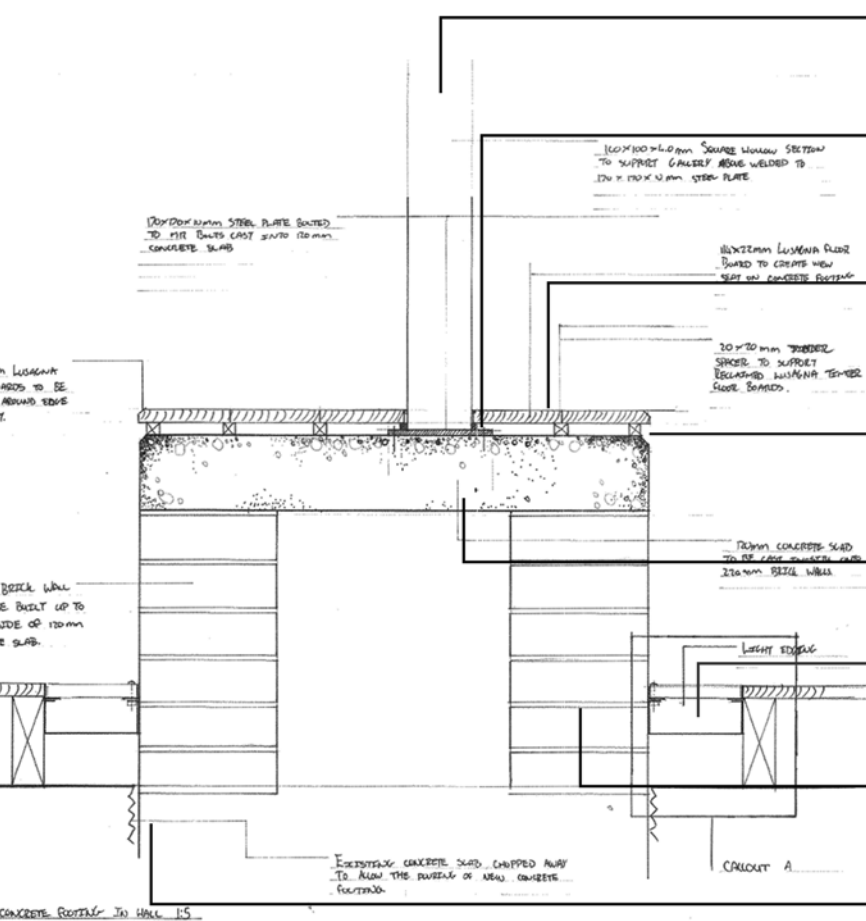
100x100x4.0 mm SHS to support gallery above welded to 120x120x10 mm steel plate

120x120x10 mm steel plate bolted with M12 bolts cast into 120 mm concrete slab

114x22 mm Lusagna floor boards to create new seat on concrete footing

20x20 mm timber spacer to support reclaimed Lusagna timber floor boards

120 mm concrete slab to be cast in-situ onto 220 mm brick wall

Callout A

220 mm brick wall to be built up to underside of 120 mm concrete slab

Existing concrete slab shapped away to allow the pouring of new concrete footing

150x50x20x2.0 mm mild steel lipped channel to be usedas purlins @ 1200 mm centers

150x75x10 mm mild steel unequal angles welded together to form top and base barrer beams of roof truss

150x50x20x2.0 mm cold-formed equal angle channel bolted to 50x50x3 mm mild steel equal angle chem. bolted to existing @ 300 mm centers

Dry-mix concrete to be compacted into void created by temporary I-section supports

600x12 mm steel plate to form base of new lintel

Detail J.

Figure 7.40 Junction between new roof and existing with new lintel (Author 2017)
Figure 7.41 Below; Junction between new and old through new opening (Author 2017)

10 mm silicon strip between new and existing floors

225 mm cast in-situ concrete slab layed on top of sleel slip plate

150x50x20x2.0 mm cold-formed mild steel lipped channel cast into concrete floor with LED stip placed along its length

Angle grinder to be used to cut around opening to prevent flacking of plaster during demolition
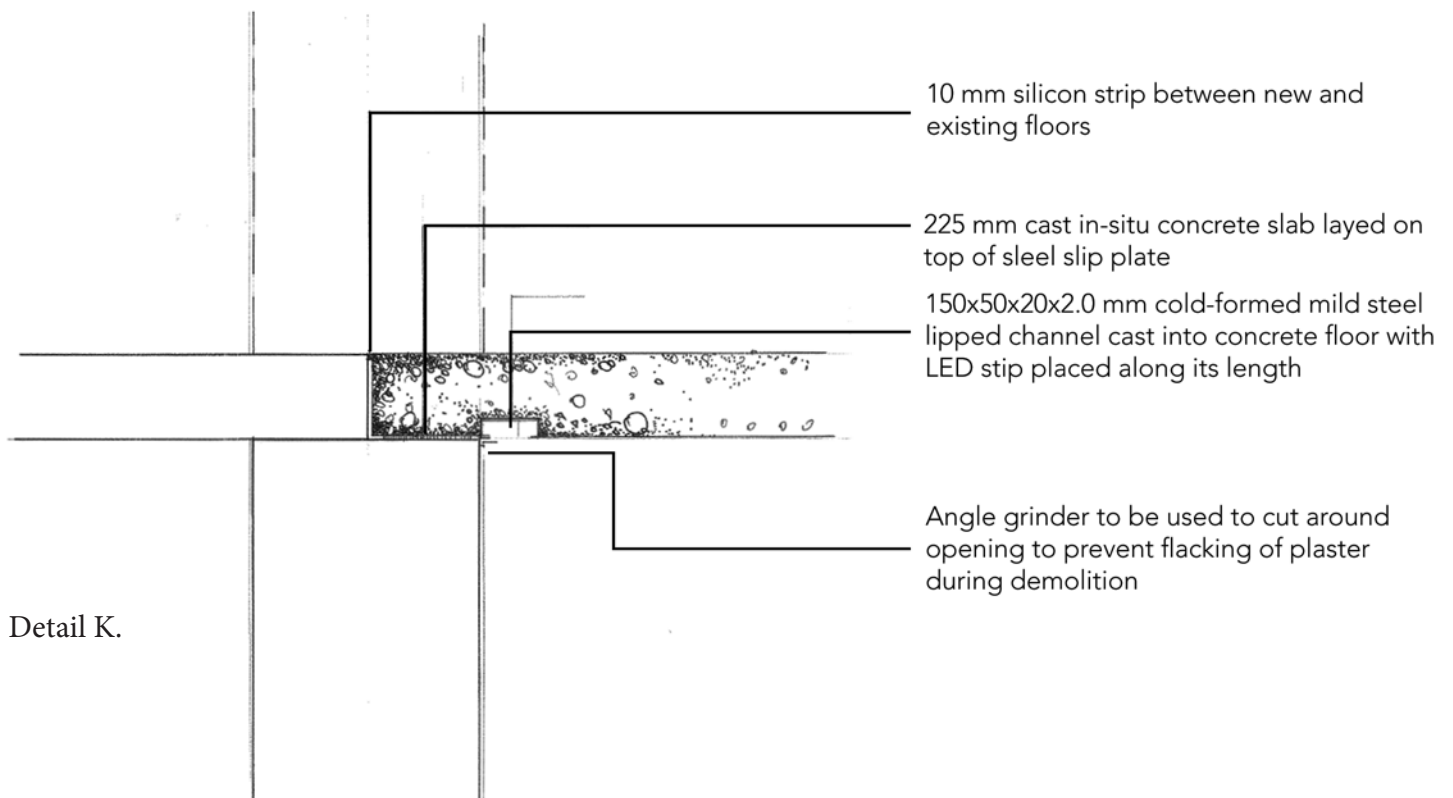
Detail K.
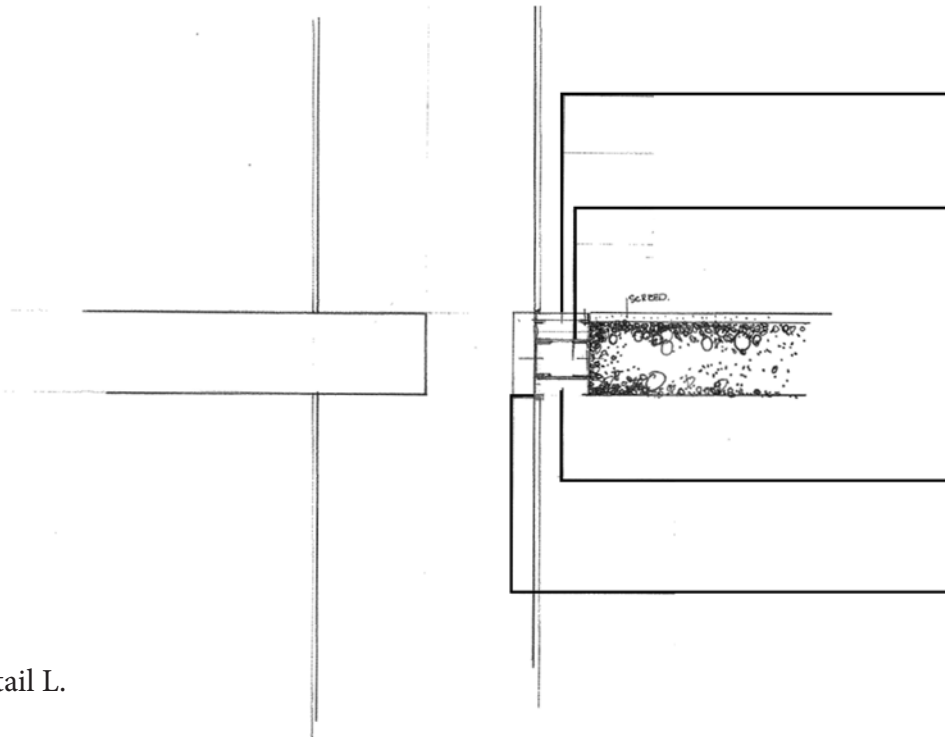
105x50x20x2.2 mm cold formed lipped channel capped with laminated glass held by **25x25x3 mm** equal angle

PFC 100x50 mild steel channels chem. bolted to existing and concrete floors slab @ 300 centers bloted to top and bottom **150x50x20x2.0** cold formed lipped channels

150x50x20x2.0 mm cold formed mild steel lipped channel bolted to **PFC 100x50** to hold LED light strip

Angle grinder used to cut around opening to prevent flacking of plaster when connecting new floor

Detail L.

Figure 7.42 Junction between new floor and existing wall (Author 2017)
Figure 7.43 Below; Junction between steel column and concrete floor slab (Author 2017)
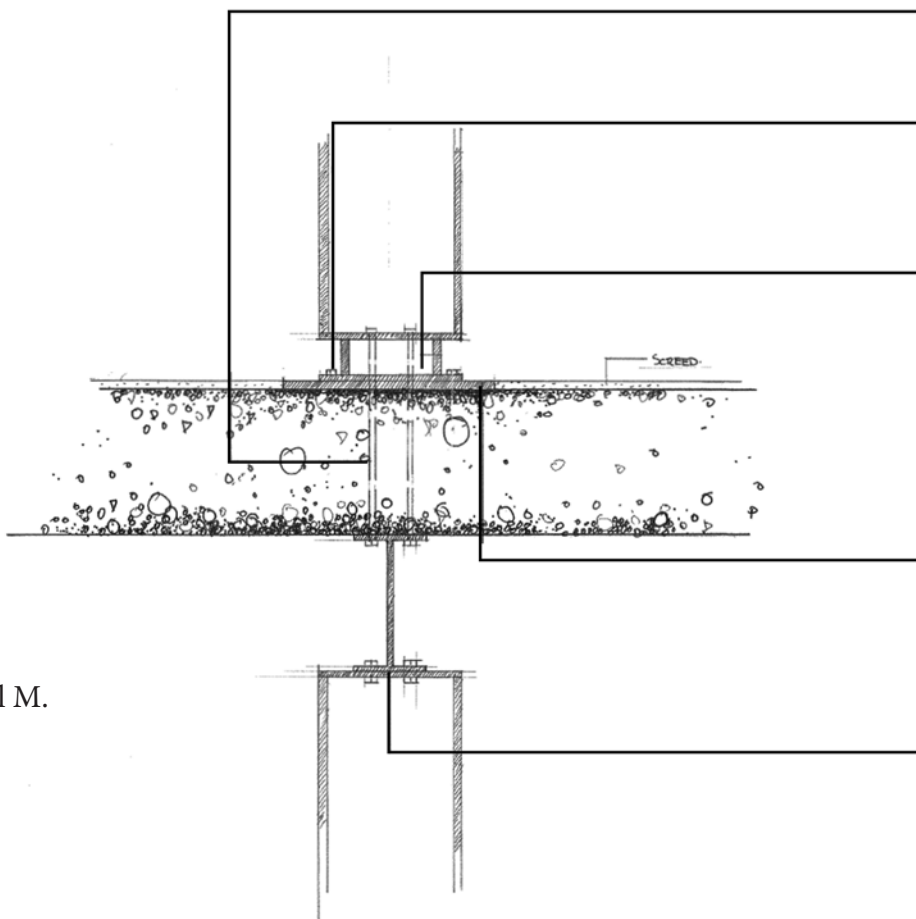
M12 rods cast into concrete floor to act as guides for accurate positioning of columns providing continous connection to column below

Column footing bolted to steel flat base with **M12** bolts

203x203x10 mm steel flat welded to base of H-section column with **50x100 mm** vertical steel flat spacer welded to underside and welded to base of **203x203x10 mm** steel flat

253x253x10 mm steel flat cast into concrete floor to act as base connector for column footing

Detail M.

M12 bolts connecting **IPEaa 200** to **203x203x10 mm** steel flat wleded to top of **203x203x10 mm** paraller flange H-section column

Dry-mix concrete

Reinforced concrete to form base of lintel ontop of 10 mm stee plate

12 mm steel plate to span opening and base of lintel

457x191x67 mm mild steel parallel flange I-section column to be welded to underside of 12 mm steel plate of lintel
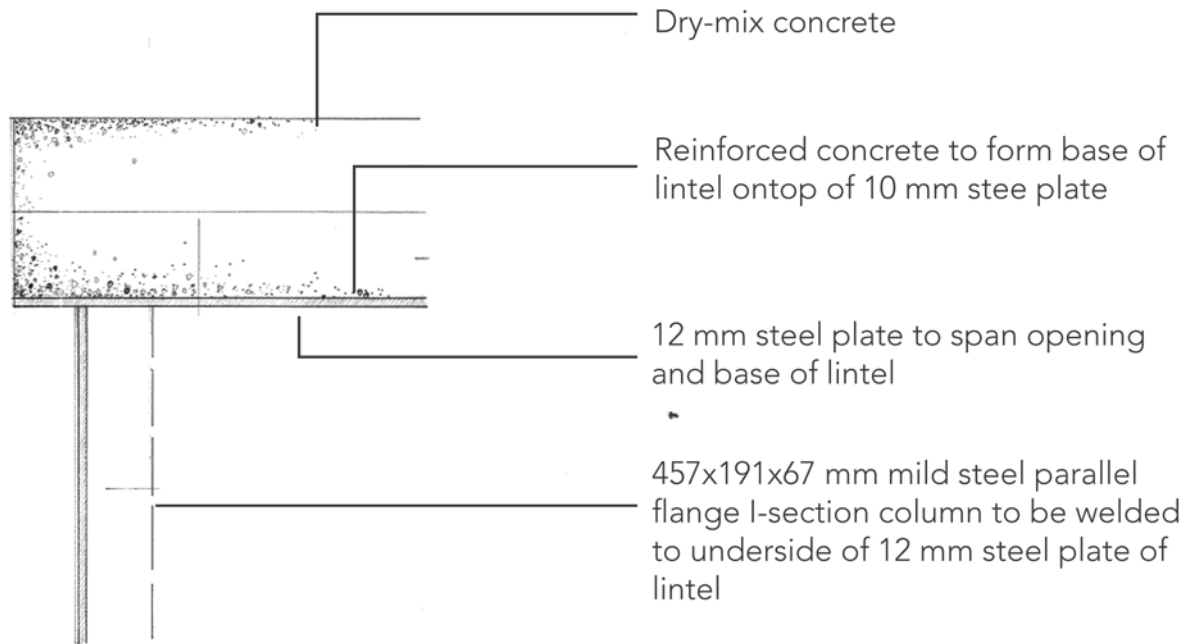
Detail N.

Figure 7.44 Detail of new lintel with existing (Author 2017)
Figure 7.45 Below; Plan through column connection with existing (Author 2017)
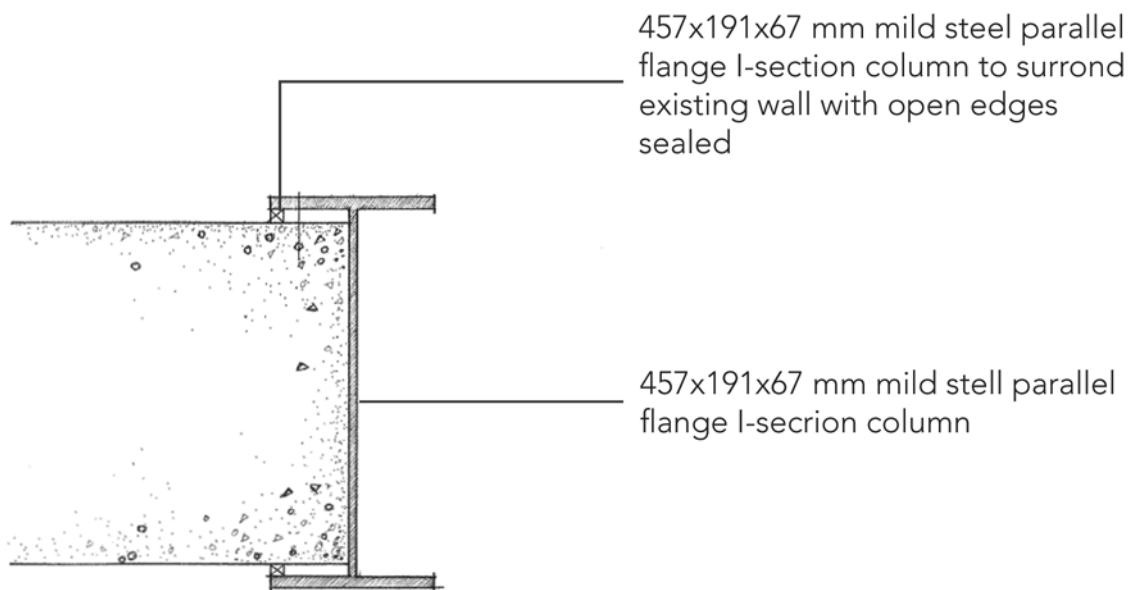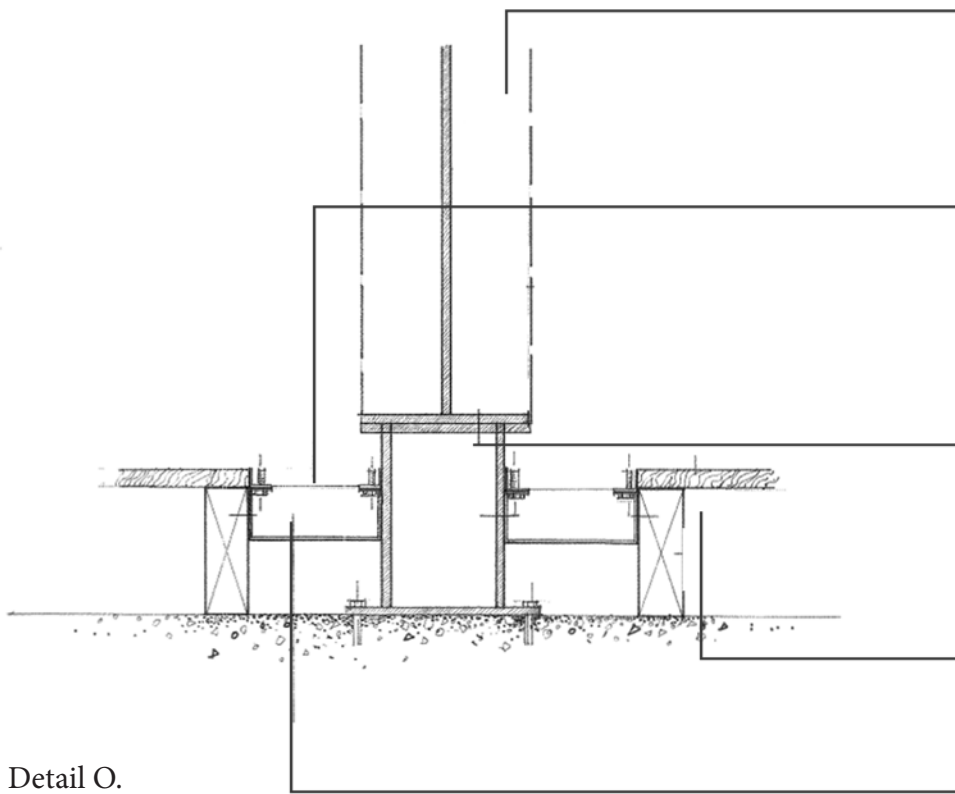
457x191x67 mm mild steel parallel flange I-section column to surrond existing wall with open edges sealed

457x191x67 mm mild stell parallel flange I-secrion column

457x191x67 mm mild steel
parallel flange I_section column
to be welded to 457x191x10 mm
steel flat

Laminated glass pane held by
25x25x3 mm mild steel equal
angle with pre-drilled hole to
fix pane to lipped channel

457x191x10 mm mild steel flat
welded to 210x10 mm vertical
steel flat spacers welded to
457x191x10 mm steel flat base
to be chem. bolted to existing
concrete floor

114x22 mm Stinkwood timber
floor supported on 114x50 mm
timber floor joists

150x50x20x2.0 cold formed mild
steel lipped channel bolted to
colmn footing and fixed to floor
joist with self taping screw

Detail O.

Figure 7.46 Column footing through
new opening in the Council Chambers
(Author 2017)
Figure 7.47 Below; Plan of new column
footing (Author 2017)
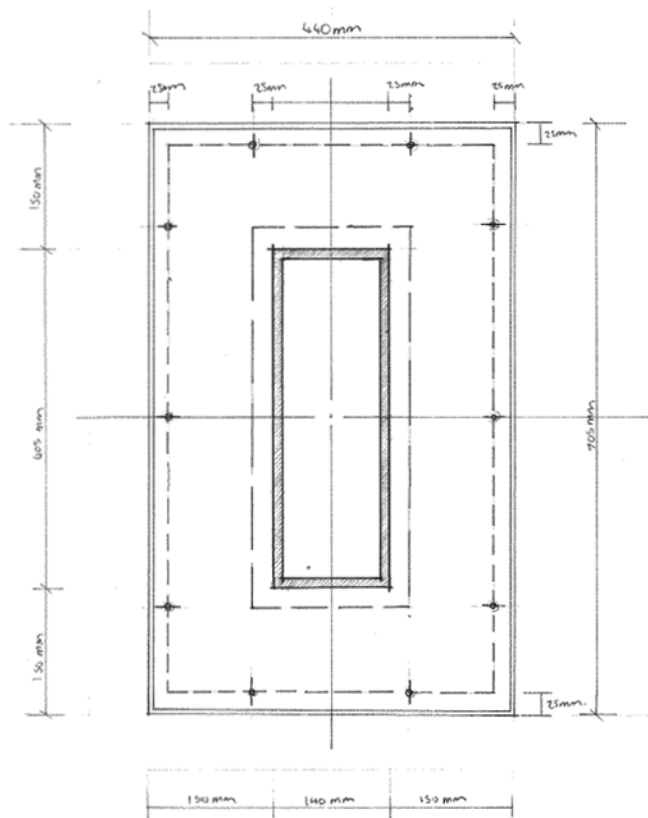
08

Final Exam

Figure 8.1 Model Perspective 1 (Author 2017)
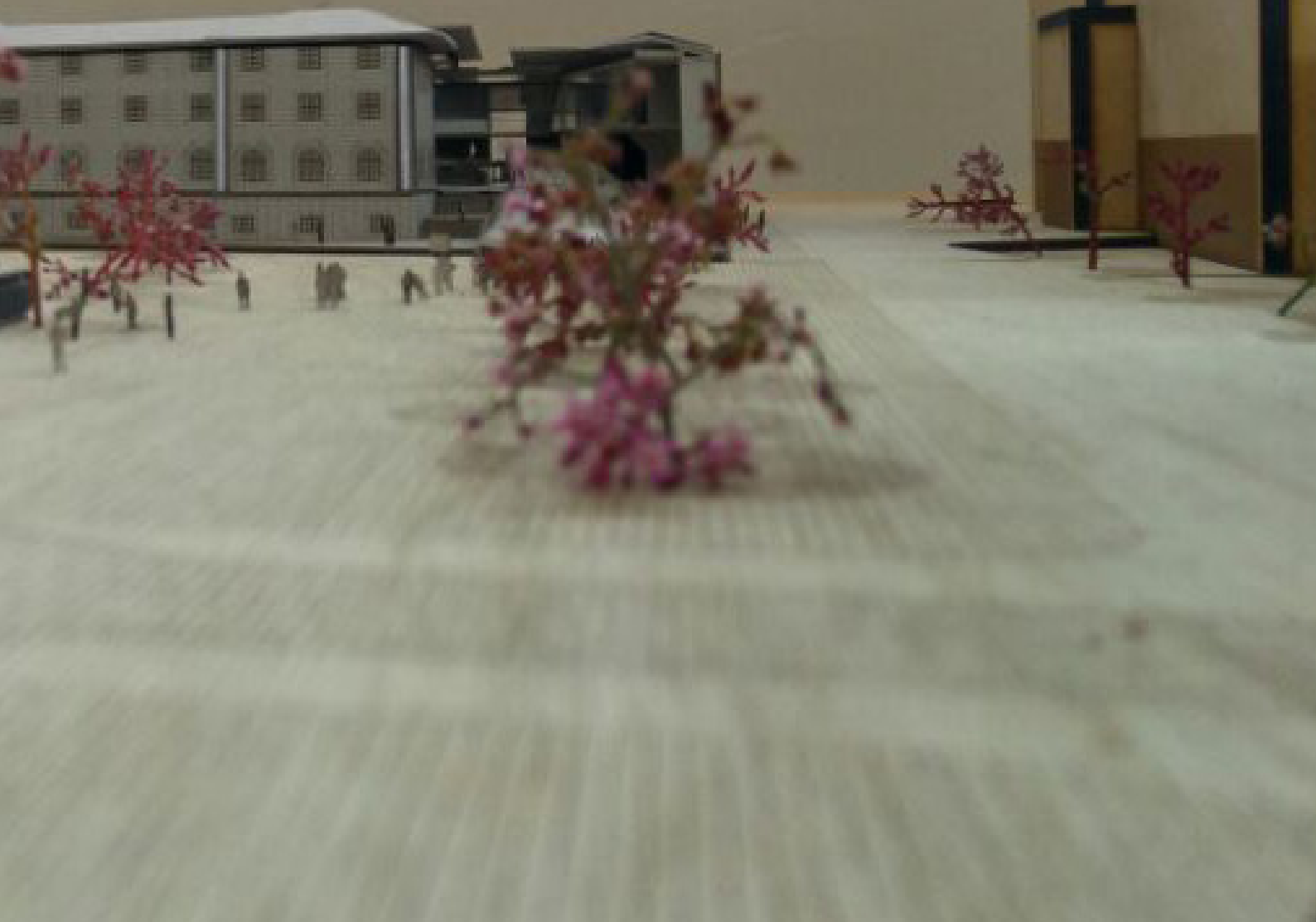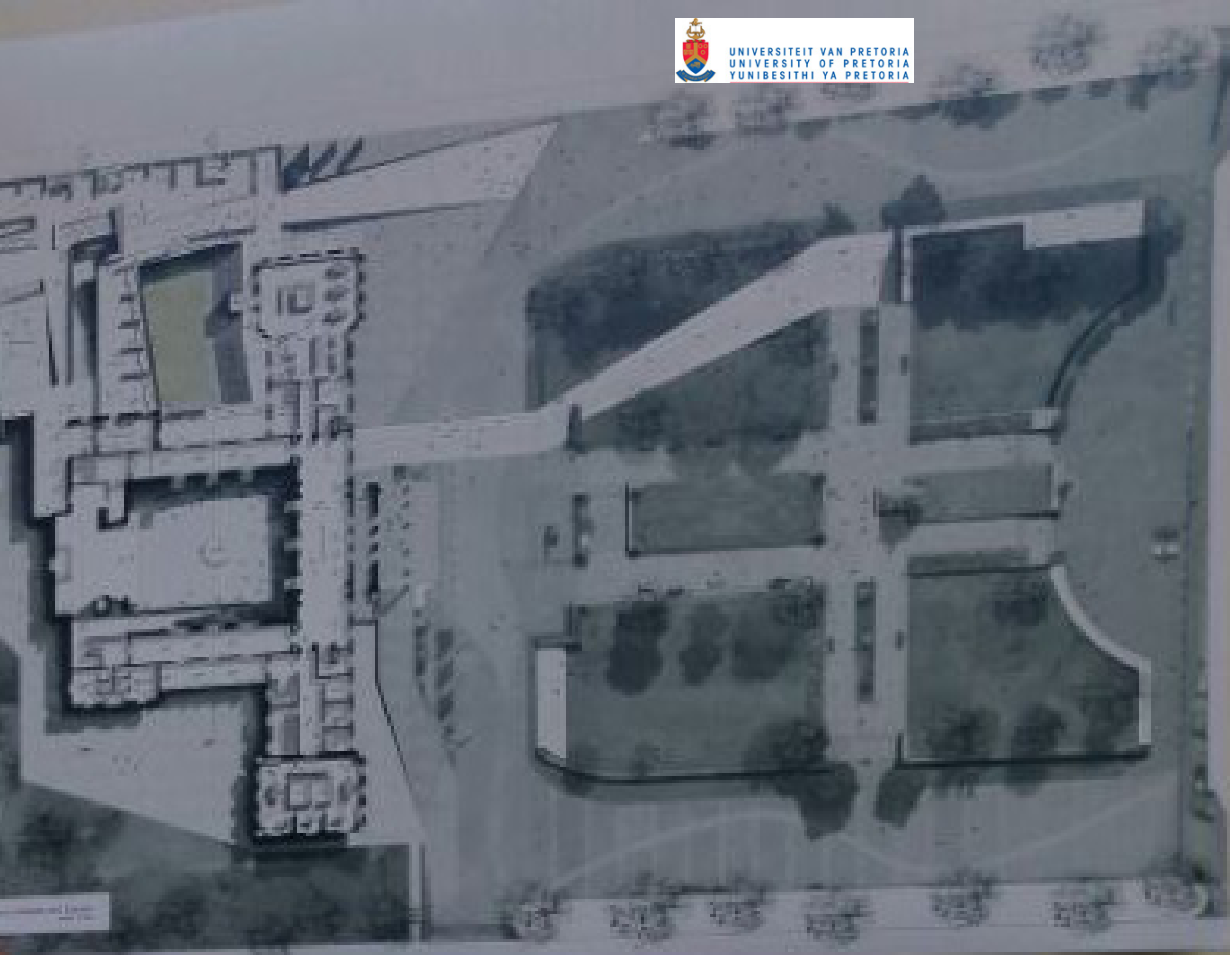
Visualization 2

Figure 8.2 Visualization 2 (Author 2017)
Figure 8.3 Display (Author 2017)

Display

Primary
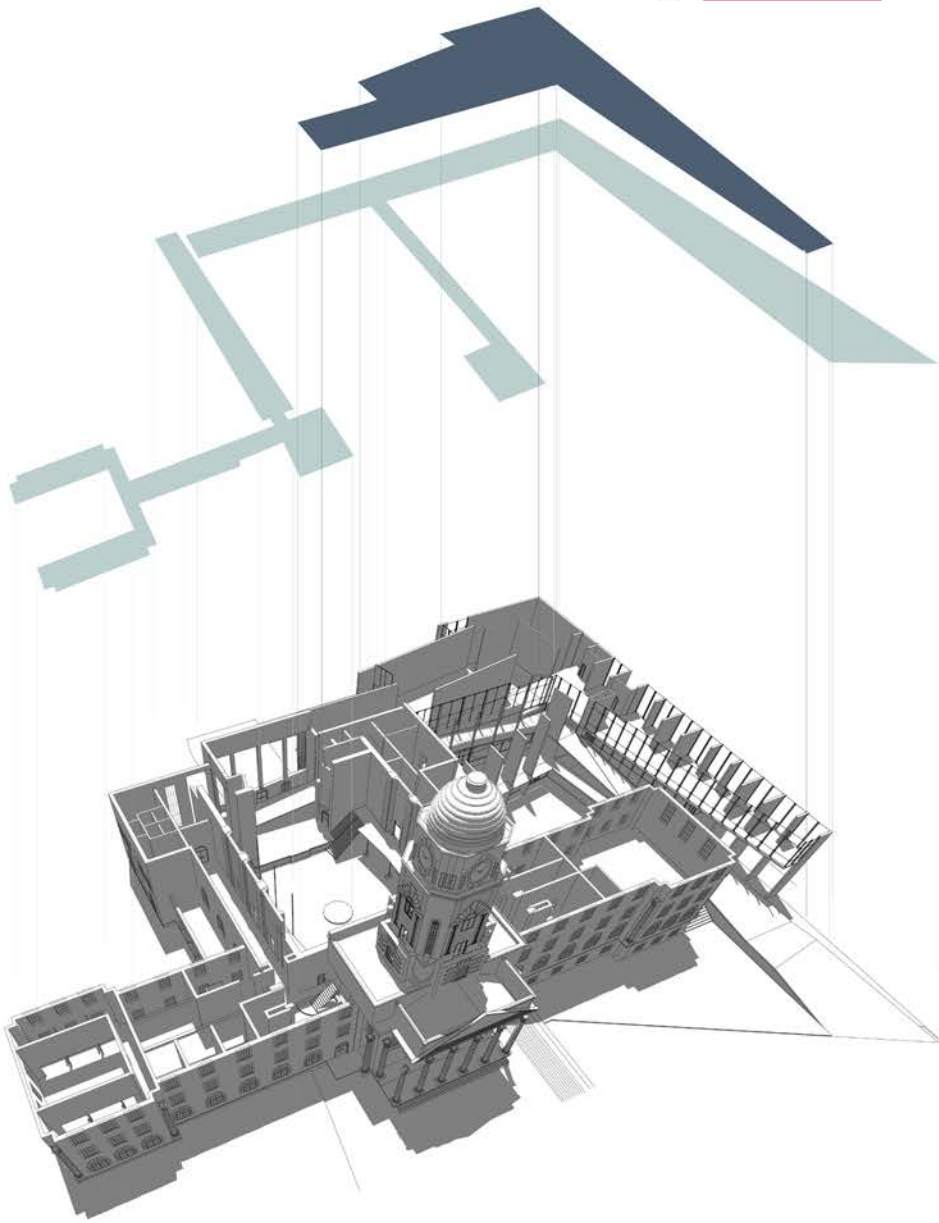
Secondary

Protest Route with Democratic Museum
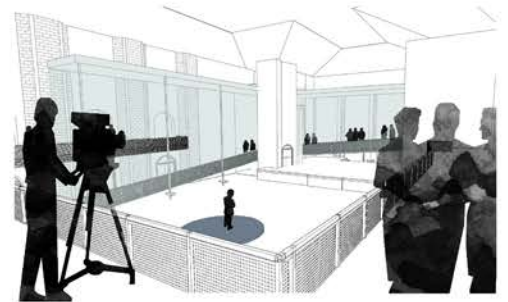
Protest Route into Debate Arena

Turn of Protest route down into Debate Arena

Protest Route into Debate Arena

Debate

Pretorius Square

New External Debate Square

Debate Arena

News Museum
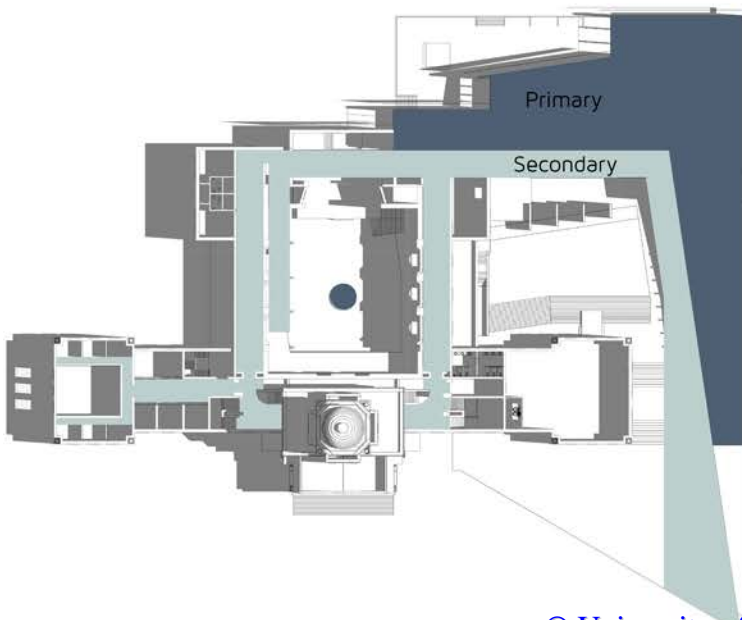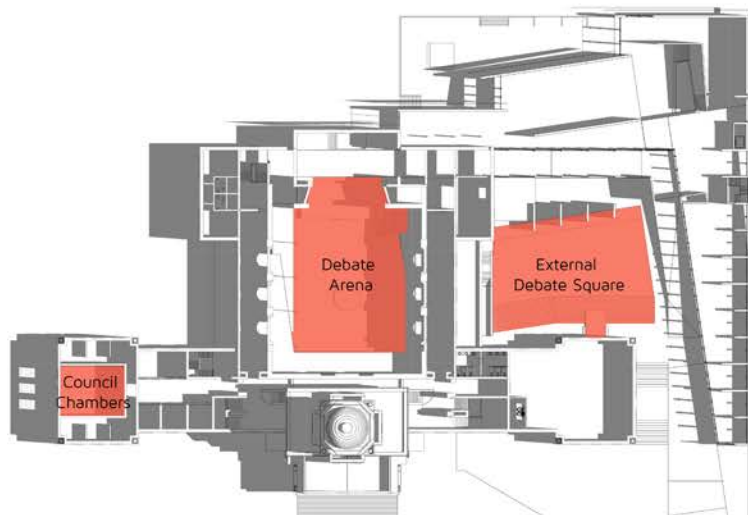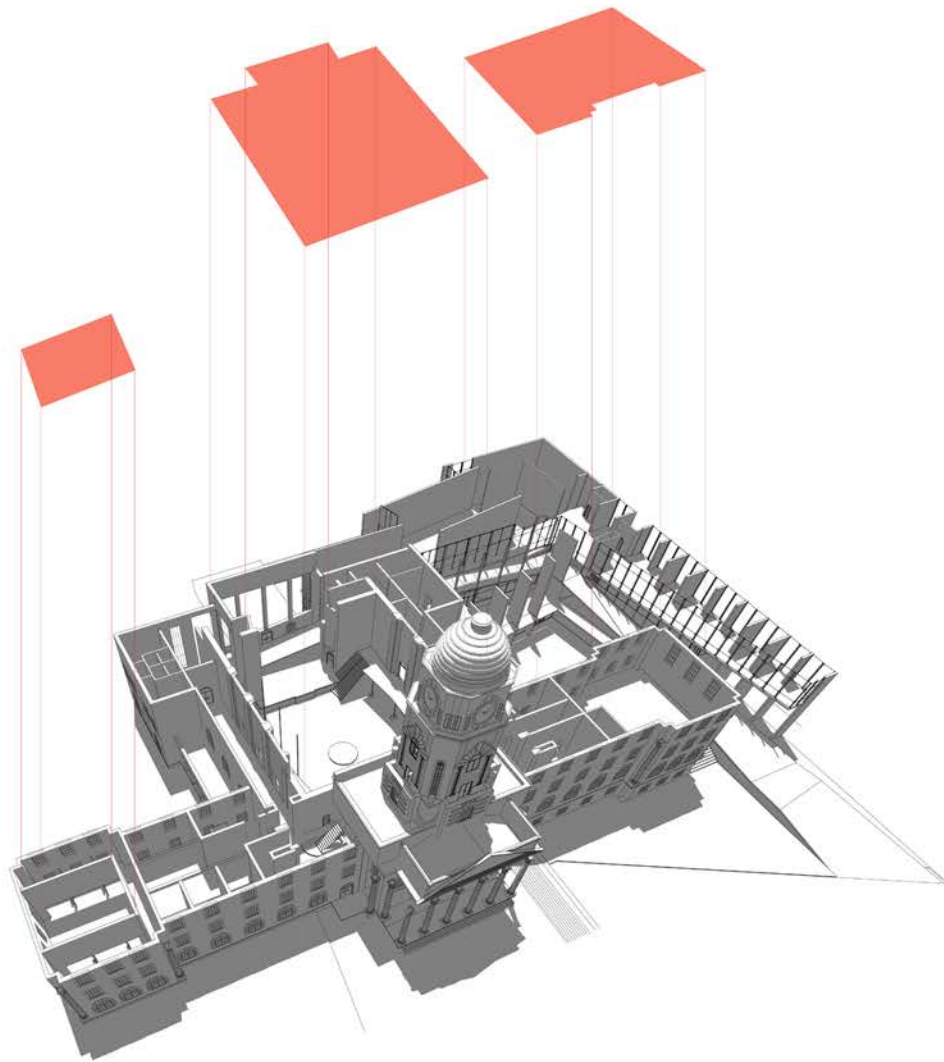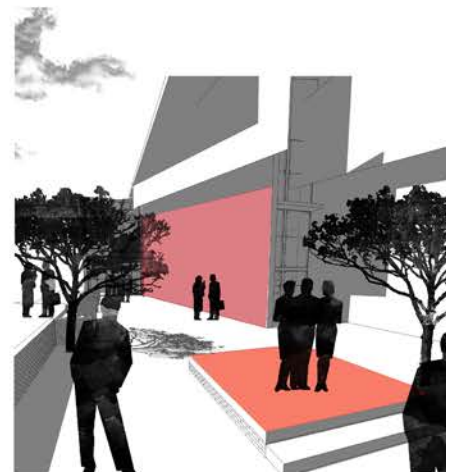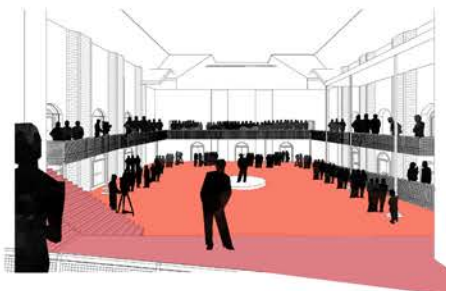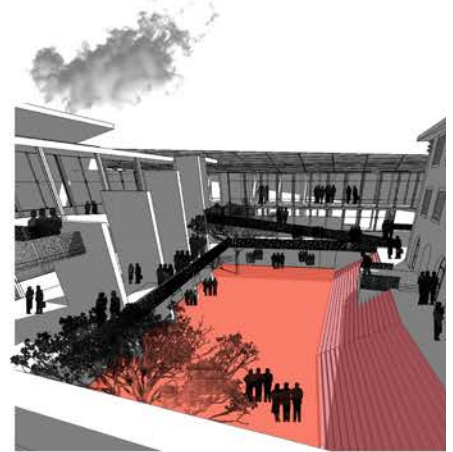
Figure 8.4 Debate (Author 2017)
Figure 8.5 Spectate (Author 2017)
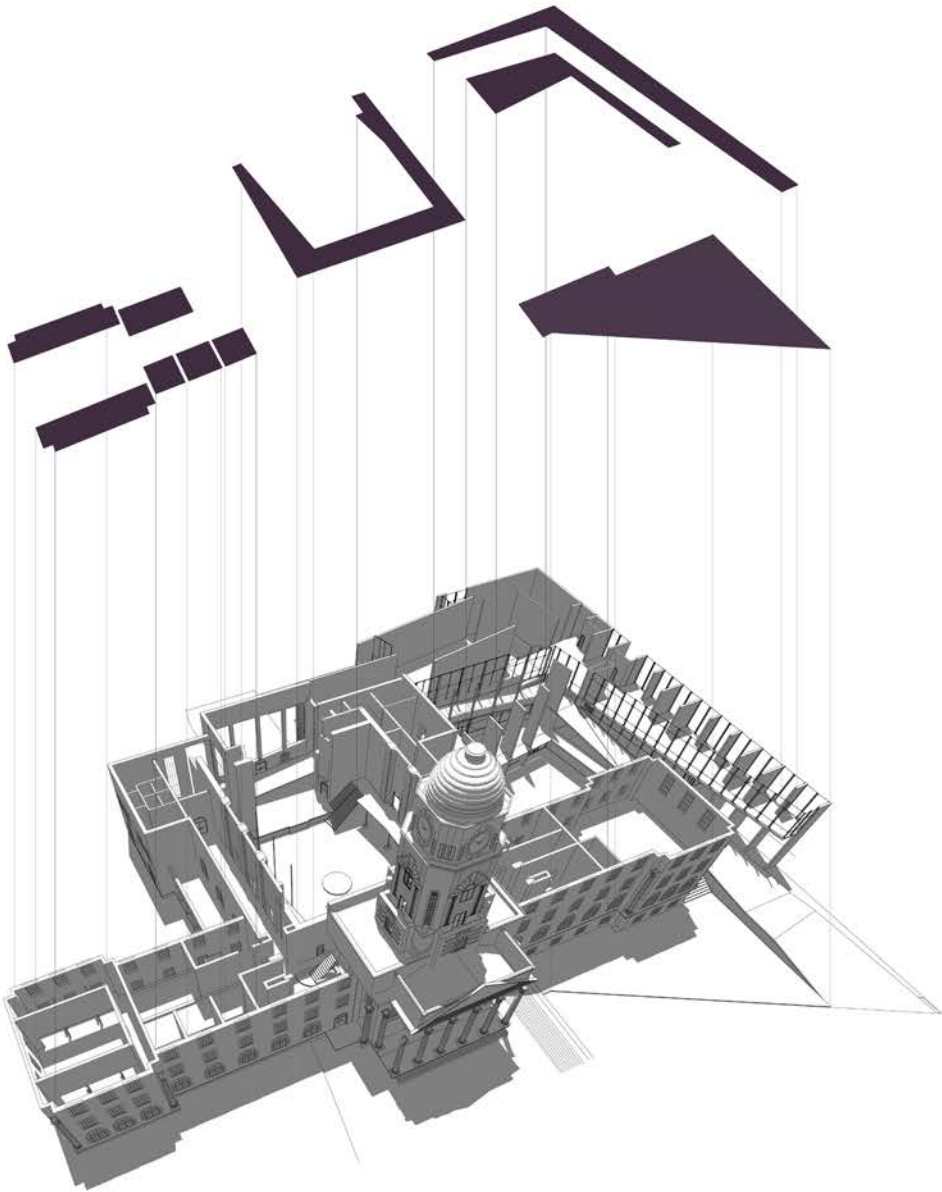
New External Debate Square with Platfroms

Temporary Exhibit through Protest

Spectate
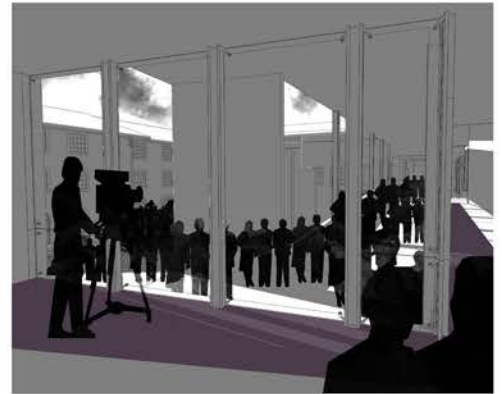
Temporary Exhibit through Protest
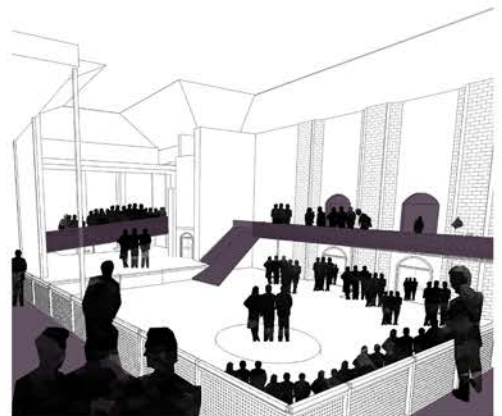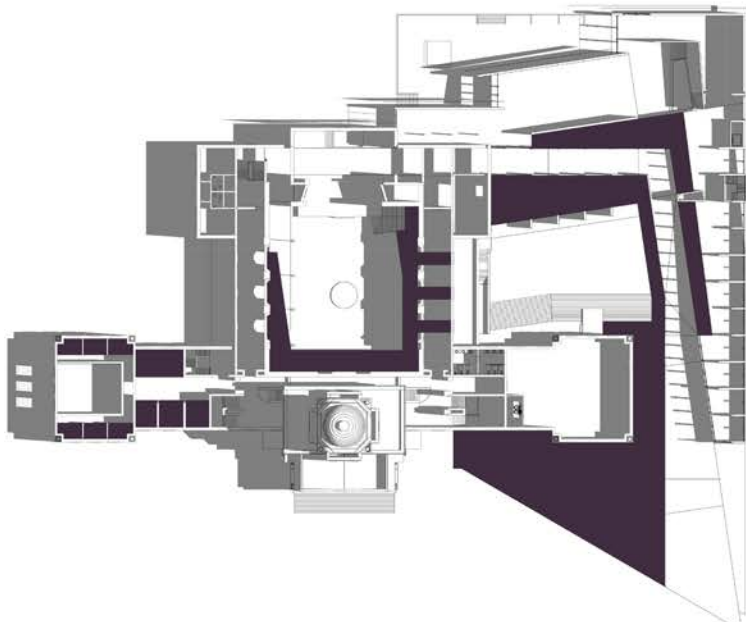
Debate Arena

Visualization 3
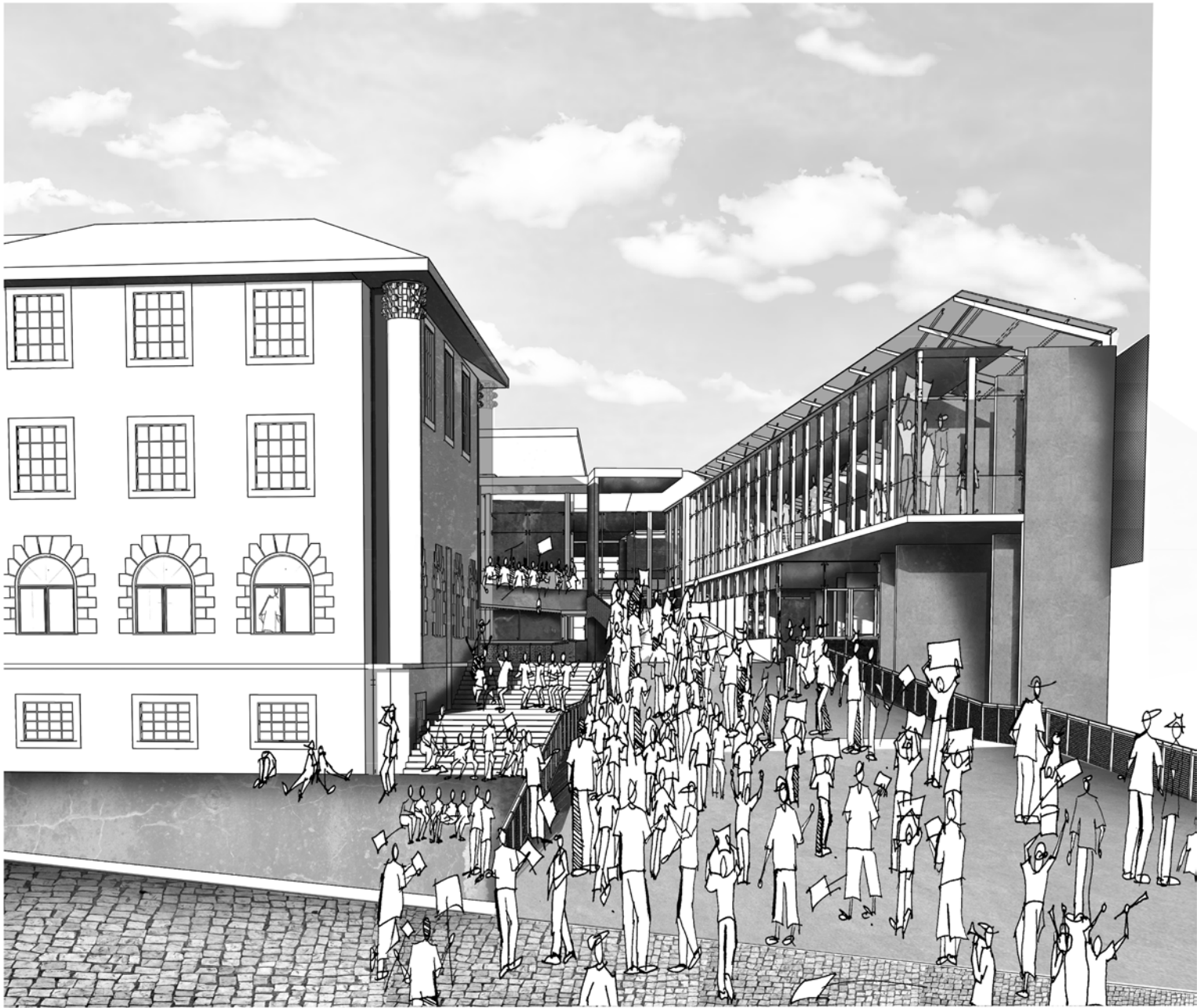
Visualization 4

Figure 8.6 Visualization 3 (Author 2017)
Figure 8.7 Visualization 4 (Author 2017)
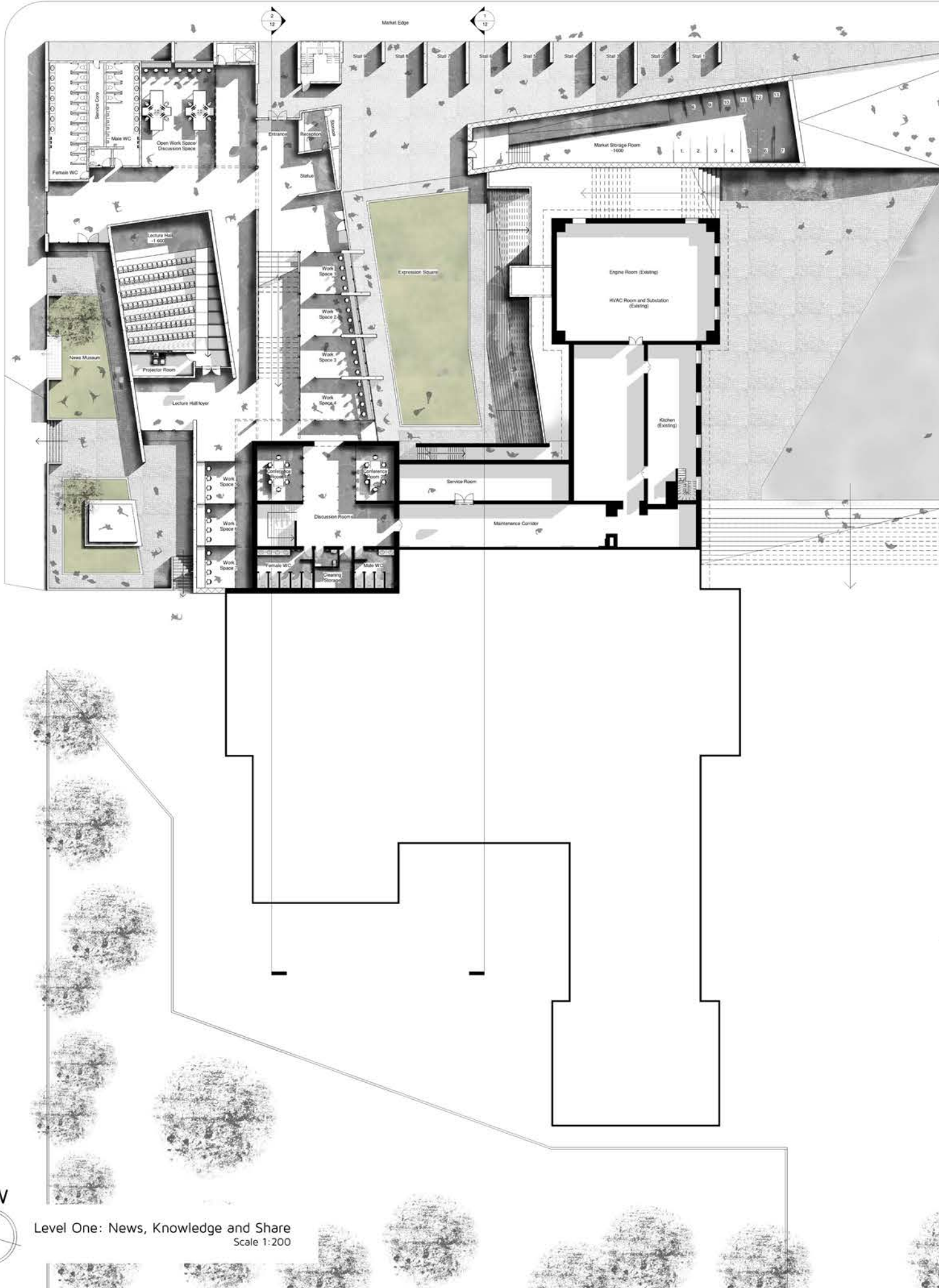
Level One: News, Knowledge and Share
Scale 1:200
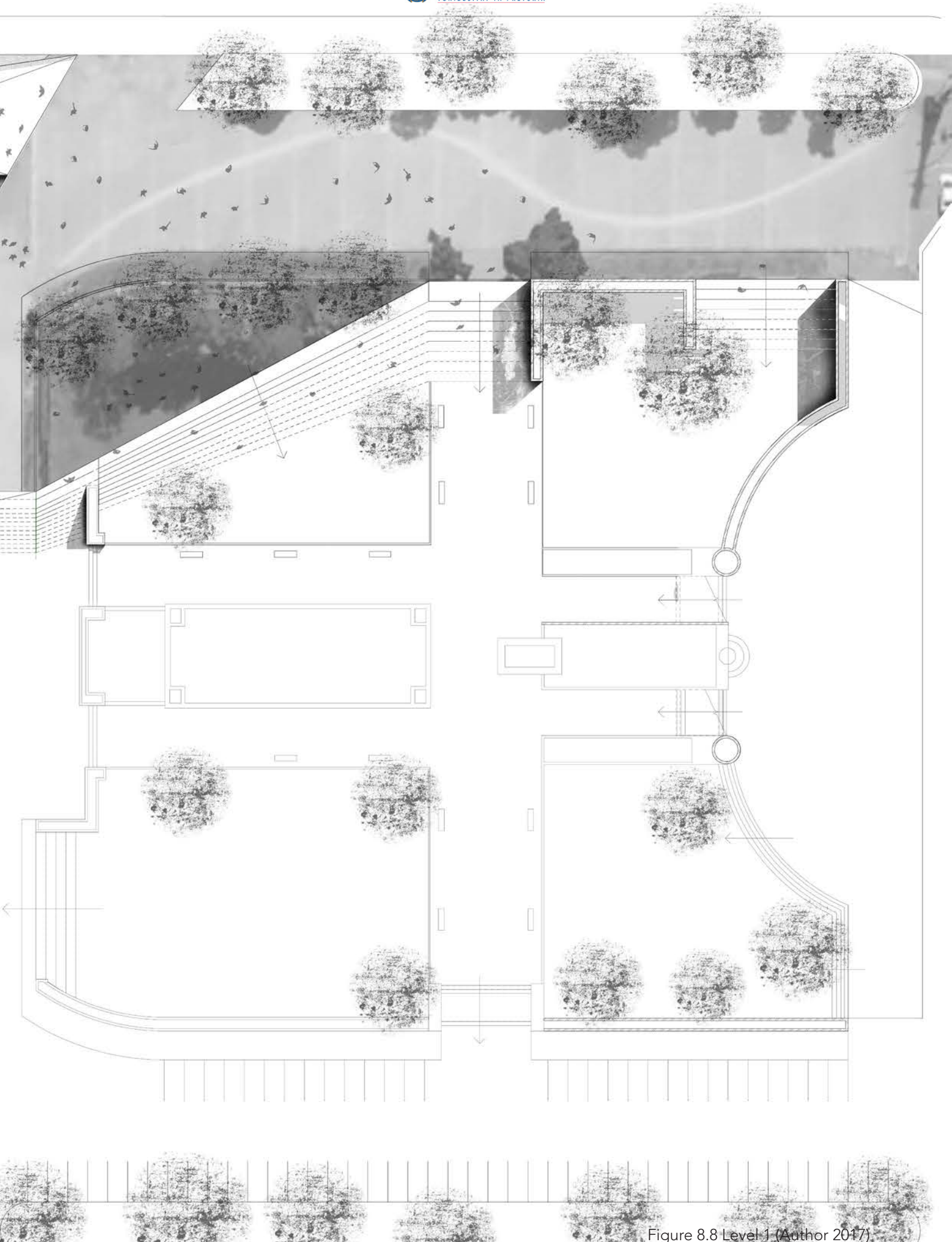
Figure 8.8 Level 1 (Author 2017)
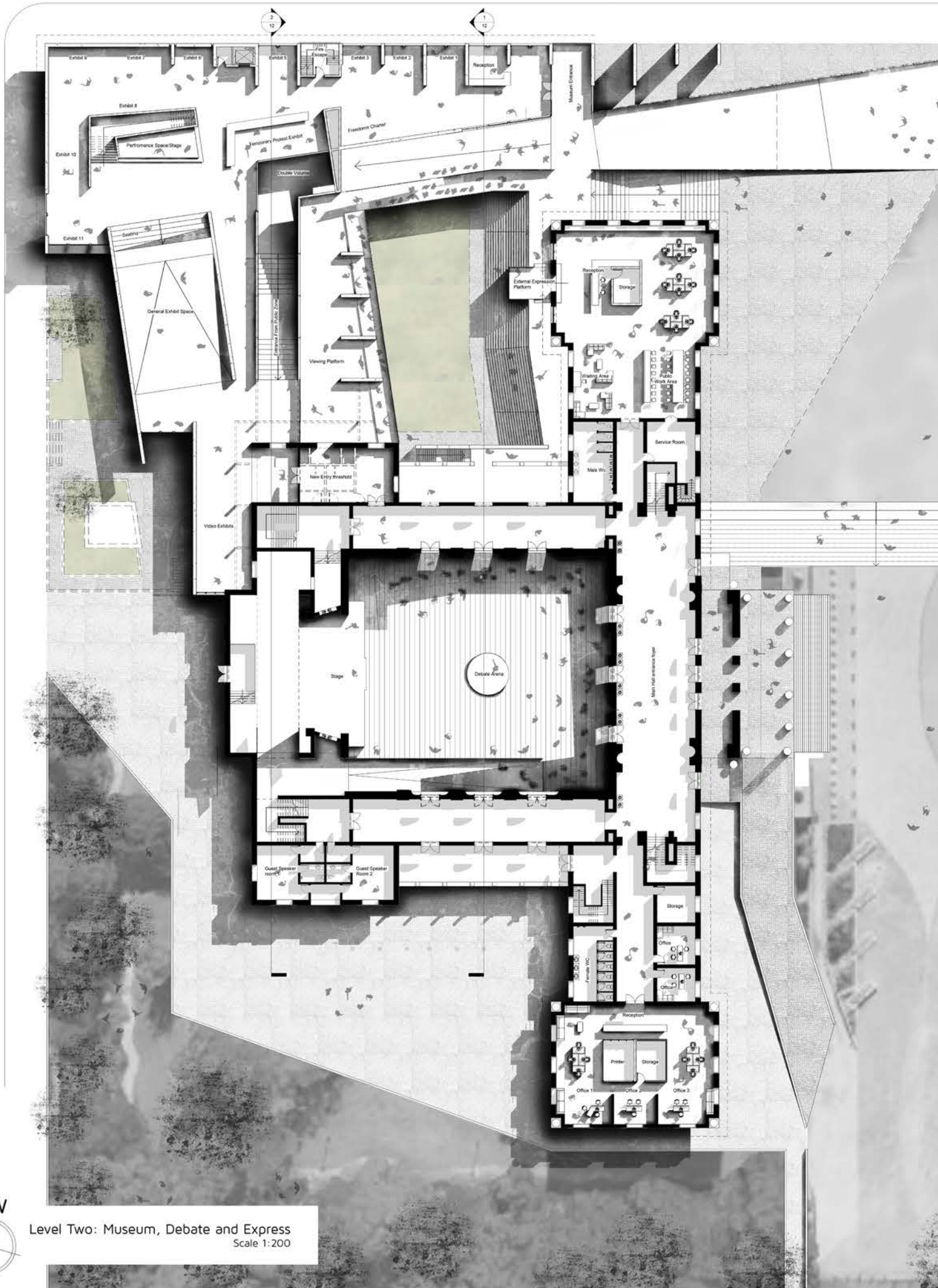
Level Two: Museum, Debate and Express
Scale 1:200
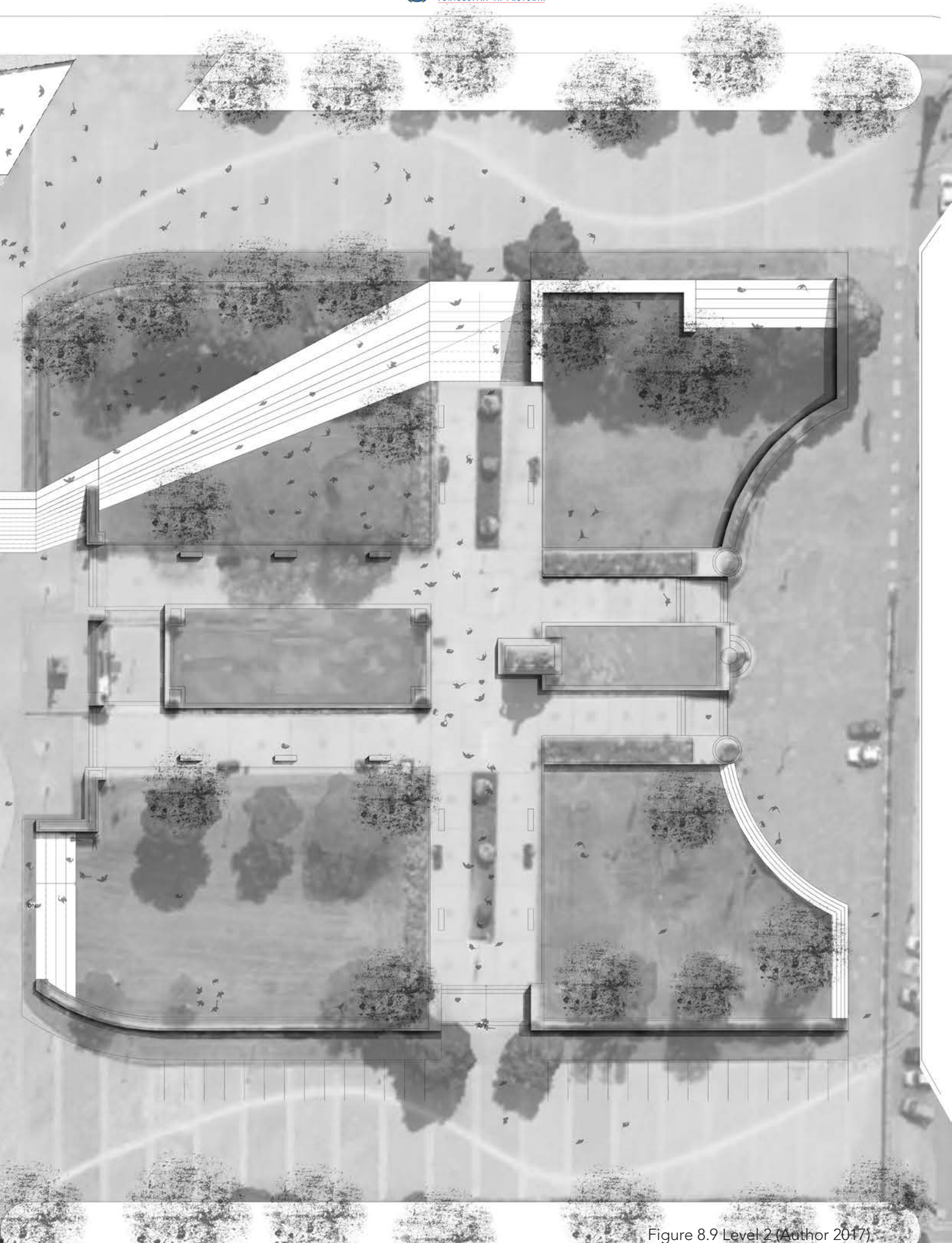
Figure 8.9 Level 2 (Author 2017)

N
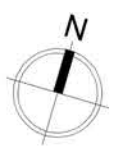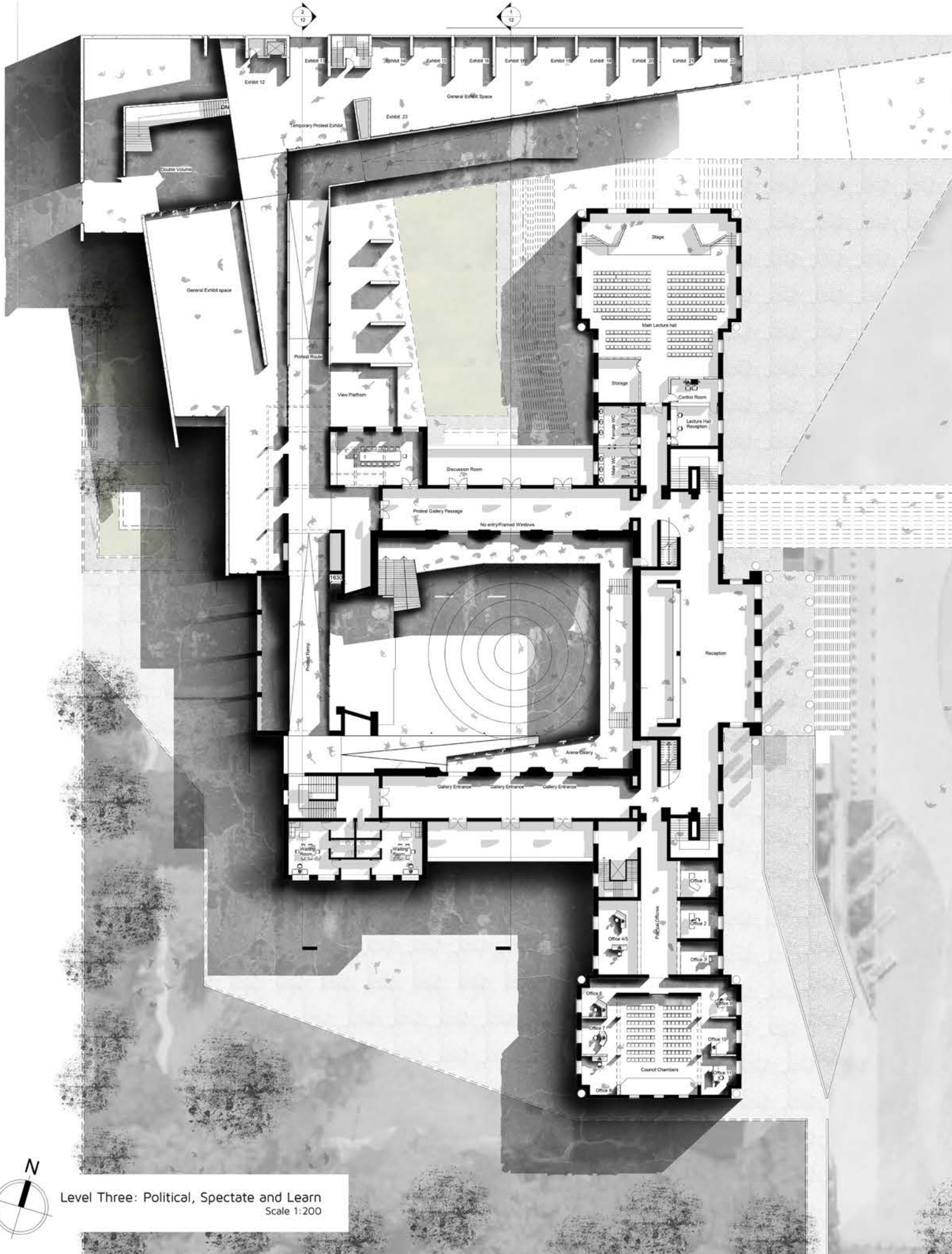
Level Three: Political, Spectate and Learn
Scale 1:200

Figure 8.10 Level 3 (Author 2017)

Visualization 5

Figure 8.11 Visualization 5 (Author 2017)
Figure 8.12 Display 3D (Author 2017)

203x203x10mm parallel flange H-column

M12 bolts cast into concrete slab to guide positioning of columns and continue the line of stress

203x203x10mm steel flat welded to base of H-column with 50x10mm vertical steel flat spacers welded to underside and welded to base of 203x203x10mm steel flat

253x253x10mm steel flat base plate cast into 225mm concrete floor4slab to act as a base for column footing

406x178x54 parallel flange I-section bolted to steel plate with M12 bolts into concrete

M12 bolts connecting 406x178x54 parallel flange I-section to 203x203x10mm steel flat welded to top of 203x203x10mm parallel flange H-column

Display

457x191x67mm parallel flange I-section column

457x191x10mm steel flat welded to base of H-column with 210x10mm vertical steel flat spacers welded to underside and wel to base of 457x191x10mm steel flat

150x50x20x2.0 lipped channel fixed to timber floor joist with self tapping screw and welded to steel column footing to form recess for LED light fitting

Laminated glass pane held by 25x25x3mm mild steel equal angle and purpose made rubber gasket

114x22mm STinkwood timber floor boards

Debate

Figure 8.13 Debate 3D (Author 2017)
Figure 8.14 Spectate 3D (Author 2017)

Aluminium sheet cap to form top of handrail for balastrade pop rivited to 50x50x3mm square hollow section

Machinied Euro steel Aluminium sheet 1200 H14 handrail with 30 diameter holes supported by 50x50x2.5mm square hollow section subframe with verticals at aprox. 1250mm centers

IPE 200 cut as indicated

150x50x20x2.0mm cold formed lipped channel joists fixed to IPE 200 at 400mm centers

50mm thick isobard ceiling, painted with Pva and supported between steel floor joists with 0.8mm galvanised brandering at aprox. 60mm centers

144x22mm Hard wood timber floor layed on top of and screwed to 150x50x20x2.0mm cold formed lipped channels

Spectate

Visualization 6

Figure 8.15 Visualization 6 (Author 2017)
Figure 8.16 Visualization 7 (Author 2017)

Visualization 7

2 3 4 5 7 8 9 10 11 12

Top section labels:

Exhibit

Temporary Exhibit

Protest Route

Protest Threshold

Exhibit

Temporary Exhibit

News, Knowledge and Share

DT 1

DT 2

DT 3

DT 4

Top section annotations (left margin):

100x100x6.0mm SHS welded to 10mm steel flat bolted into concrete roof slab to support end of 150x75x10mm mild steel unequal angle rafter

ABE Waterproofing layed to manufacturers specification

150x150mm Purpose bent GMS Flashing

150x50x20x2.0 mm Mild steel lipped channel purlin laid on top of 254x146x31 mm parallel flange I-section @ 1200mm centers to support Klip-Lok 406 0.7mm Aluminium roof sheeting fastened to purlins with stainless steel Bi-metal self-taping wafer head screw.

254x146x31mm parallel flange I section to support 254x146x31mm parallel flange I-section rafter welded to10mm steel base plate welded to 10mm vertical steel plate and bolted to concrete upstand

0.8mm galvanised steel ceiling brandering fixed to lipped channel purlin @ 700 centers

1.6 GMS gutter bent as indicated and brought up to underside of Klip-Lok sheetingand wrapped around 150x50x20x2.0 Mild steel lipped channel purlin

Machined Euro steel Aluminium sheet 1200 H14 with 30Ø holes to be supported by 50x50x3.0 mm SHS subframe which is to be supported to concrete columns @ 5000mm centers

1000mm maintenance catwalk

Mentis Grating Catwalk with frame bolted into concrete slab @ 1250 mm centers

Machined Euro steel Aluminium sheet 1200 H14 handrail with 30Ø holes to be supported by 50x50x3.0 mm SHS subframe to be welded to 100x100x8mm Mild steel equal angle with 1.8 GMS gutter bent as indicated

Aluminium Framed windows

114x22 hardwood timber floor boards layed on top of 50x50x2.0mm SHS mild steel subframe which is welded to steel flat cut as indicated and bolted to 110mm brick wall 100x65x5mm unequal angles

Machine floated 225mm concrete floor slab

Drip Joint cut into concrete down stand

Top section annotations (center/right):

406x178x54mm Parallel flange I-section welded to 200x12mm steel plate to be fixed to underside of 225mm concrete ramp

150x50x20x2.0 mm Mild steel lipped channel purlin laid on 0.7mm Aluminium roof sheeting fastened to purlins with stainless steel Bi-metal self taping wafer head screw.

Two 100x75x10mm mild steel unequal angles welded together to form top and bottom chords of rafter with 60x60x4mm mild steel equal angle web bolted to top and bottom chords.

Concrete ramp down stand cast half way into demolished wall and placed on top of a steel slip plate with a line of silicon beading between existing and new slab

150mm Reinforced concrete lintle cast on top of 12mm steel plate which is carried by 406x178x54mm Parallel flange I-section.

406x178x54mm Parallel flange I-section to be cut as indicated to carry slab above

205x203x10mm steel flat welded to base of H-section column with 50x10mm vertical steel flat spacers welded to underside and welded to base 203x203x10mm steel flat which is to be bolted to 300x300x10mm steel flat cast into concrete slab

Roof Line
Protest Roof
Passive Roof Line
First Floor
4. Protest Landing
3. Ground Floor
NGL

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3 22 21 20 19 18 17 16 15 14 13 12

Bottom section labels:

Gallery Entrance

Protest Route

Debate Arena

Expression Platform

Gallery

Gallery Passage

Gallery Passage

Service Passage (Existing)

Storage (Existing)

DT 5

DT 6

DT 7

Bottom section annotations (left margin):

Brick on edge cast into concrete footing

Brick paving layed in a Herringbone pattern layed on top of a 30mm sand binding layer

Existing Door removed and replaced with an Aluminium framed tempered glass window to take the shape of the existing door.

114x22 hardwood timber floor boards layed on top of and fixed to 150x50x20x2.0 Mild steel lipped channels @ 450 centers to be welded to top of IPE 200 I-section

Machined Euro steel Aluminium sheet 1200 H14 handrail with 30Ø holes to be supported by 50x50x3.0 mm SHS subframe to be welded to 100x50x11 Mild steel channel and fixed to 150x50x20x.20 Mild steel lipped channel

150x50x20x2.0-mm Mild steel lipped-channel purlin laid on top of 254x146x31 mm parallel flange I-section @ 1200mm centers to support Klip-Lok 406 0.7mm Aluminium roof sheeting fastened to purlins with stainless steel Bi-metal self-taping wafer head screw.

254x146x31 mm parallel flange I-section chem. bolted to existing wall @ 5000mm centers and fixed to top of 100x100x6.0mm SHS @ 5000 centers

Repurposed Lusagna timber floor fixed to 50x50x2.0 SHS subframe connected to 100x100x6.0mm SHS with 100x100x8.0mm equal angles

IPE 200 to support gallery floor and be chem. bolted to existing @ 5000 centers with 100x100x6.0mm SHS welded to end @ 5000 centers

New opening into gallery with existing doors removed

Section 2
Scale 1:100

Section 1
Scale 1:100

Debate Arena

Museum Entry

Storage

Conference Room 1

Female W C (Existing)

External Debate Courtyard (Grass)

Viewing Platform

Protest Ramp

Museum Entrance

Market Storage

Temporary Exhibit

Exhibition Space

Reception

Market Space

Figure 8.18 Detail Sets 1 & 2
(Author 2017)

Silicon Sealant

Counter flashing to overlap sidewall flashing
by 100mm and and grouted into existing wall

0.8 Galvanised sidewall flashing

S10 Bracket pop rivited to flashing
and roof sheeting

150x50x20x2.0 mm Mild steel lipped channel purlin laid on
steel trusses at 1200mm centres, roof sheeting fixed with
clips as per manufactures specification

Klip-Lok 406 Roof Sheeting

Soffit Cleat beant and supported by
cold formed steel purlin

two 150x75x10mm mild steel unequal
angles welded together to form top
and bottom truss cords

60x60x4mm mild steel equal angle tie
beam welded top and bottom cords
to form truss

Threaded Rod as ceiling
support

Suspension Bracket and
C channel

OWAcoustic Sinfonia White Premium biologically absorbable mineral wool
ceiling tiles, NRC - 0.85, size 1200x600x15mm with square-edge and
white painted finish, laid on fire rated OWA construct S3 exposed demountable
T24 suspension system comprising of galvanised main and cross tees with
main tees suspended by means of galvanised hangers at centres not exceeding
1200mm intervals, and all installed to manufactures instructions.

150x50x20x2.0mm mild steel lipped
channel to hold light fitting bolted to
wall as fitting for LED light

150x50x20x2.0mm mild steel lipped
channel to hold light fitting bolted to
wall as fitting for LED light

Angle grinder used to cut around opening
to prevent flacking of plaster during construction

150 mm reinforced concrete lintle

12mm Steel flat cast into reinfocred concrete lintol
and support beam

406x178x54 Parallel flange I-section
welded to steel plate

DT 1 Protest route roof junction to existing
Scale 1:10

10mm expansion joint between existing
and new slab closed with silicone beading

150x50x20x.2.0mm lipped channel fixed to steel
channel to form recess for LED light fitting

100x50x8.5mm channel cast into end of
concrete slab to support light fitting

power floated 225mm concrete slab

existing
structure

existing
floor

Concrete slab place on top of 2 off
10mm steel slip plates

406x178x54 Parallel flange I-section
cut as indicate to support slab

Angle grinder used to cut around opening to
prevent flacking of the plaster

DT 2 Junction through existing
Scale 1:10

203x203x10mm parallel flange H-column

203x203x10mm steel flat welded to base of H-column
with 50x10mm vertical steel flat spacers welded
to underside and welded to base 203x203x10mm steel flat

253x253x10mm steel flat cast into 225mm concrete floor
to act as a base for column footing

M12 bolts cast into concrete slab to guide positioning columns
and continue line of stress

406x178x54 Parallel flange I-section bolted to steel plate
with M12 bolts into concrete to span opening

406x178x54 Parallel flange I-section bolted to slab
connecting column above

M12 bolts connecting 406x178x54 parallel flange I-section to
203x203x10mm steel flat welded to top of 203x203x10mm
parallel flange H-column

DT 3 Column junction to slab
Scale 1:10

150x50x20x.2.0mm lipped channel fixed to steel
channel to form recess for LED light fitting

Silicon beading placed between laminated
glass pane and 25x25x3.0mm support angle

100x50x8.5mm channel cast into end of
concrete slab to support light fitting

power floated concrete slab

existing
structure

existing
floor

406x178x54 Parallel flange I-section cut
as indicated to support cantilevered
floor slab

DT 4 Slab connection to existing
Scale 1:10

DT 5 Gallery detail
Scale 1:10

Aluminium sheet cap pre-bent as indicated to form top of handrail for balastrade pop riveted to 50x50x3mm sqare hollow section

Machined Euro steel Aluminium sheet 1200 H14 pop riveted to pre-bent handrail cap

Machined Euro steel Aluminium sheet 1200 H14 handrail with 30Ø holes supported by 50x50x2,5mm square hollow section subframe with verticals at aprox 1250mm centres

144x22mm Hard wood timber floor layed op top of and screwed to 150x50x20x2mm cold formed lipped channels

150x50x20x2mm cold formed lipped channel joists fixed to IPE 200 at 400mm centres

50mm thick isoboard ceiling, painted with Pva and suppurted between steel floor joists with 0,8mm galvanised brandering at aprox. 600mm centres

IPE 200 cut as indicated

80x80x60mm angle welded to IPE 200 I-section end to form closer

100x100x3mm square hollow section welded to steel beam to form a-support

DT 6 Gallery connection to threshold
Scale 1:10

50mm thick isoboard ceiling, painted with Pva and suppurted between steel floor joists with 0,8mm galvanised brandering at aprox. 600mm centres

144x22mm Hard wood timber floor layed op top of and screwed to 150x50x20x2mm cold formed lipped channels

150x50x20x2mm cold formed lipped channel joists fixed to IPE 200 at 400mm centres

150x90x10mm unequal angle bolted to IPE 200 I-section and chem. bolted to existing wall at aprox. 300mm centres

Laminated glass pane held by 25x25x3mm mild steel equal angle and purpose made rubber gasket

150x50x20x.2.0mm lipped channel fixed to timber floor joist with self tapping screw and pop riveted to steel column to form recess for LED light fitting

existing structure

DT 7 Seat elevation
Scale 1:10

100x100x3.0m SHS Column

Repurposed 144x22mm Lusagna timber floor boards screwed to steel subframe

20x20mm hardwood beading, fixed to underside of floor boards all around

50x50x2.0mm SHS subframe to support timber floor boards

5mm mild steel flat cut as indicated and welded to steel column as indicated

new timber joists boxed to support existing floor boards

DT 7 Finished plan of bench
Scale 1:10

repurposed timber boards

100x100x3.0m SHS Column

Repurposed 144x22mm Lusagna timber floor boards screwed to steel subframe

DT 7 Plan without timber above
Scale 1:10

100x100x3.0m SHS Column

5mm mild steel flat cut as indicated and welded to steel column as indicated

50x50x2.0mm SHS subframe to support timber floor boards

DT 7 Section through Gallery column/seating
Scale 1:10

100x100x3.0m SHS Column

Repurposed 144x22mm Lusagna timber floor boards screwed to steel subframe

20x20mm hardwood beading, fixed to underside of floor boards all around

50x50x2.0mm SHS subframe to support timber floor boards

5mm mild steel flat cut as indicated and welded to steel column as indicated

100x100x3mm square hollow section with 180x180x10mm mildsteel plate welded to bottom drilled for fixing into existing floor slab with 4 off chemical bolts

150x50x20x.2.0mm lipped channel fixed to timber floor joist with self tapping screw and pop riveted to steel column to form recess for LED light fitting

new timber joists boxed to support existing floor boards

DT 7 Plan of light fighting around column
Scale 1:10

opening in timber

100x100x3.0m SHS Column

Laminated glass pane held by 25x25x3mm mild steel equal angle and purpose made rubber gasket

150x50x20x.2.0mm lipped channel fixed to timber floor joist with self tapping screw and pop riveted to steel column to form recess for LED light fitting

Figure 8.19 De
(Author 2017)

Aluminium sheet cap pre-bent as indicated to form top of handrail for balastrade pop riveted to 50x50x3mm sqare hollow section

Machined Euro steel Aluminium sheet 1200 H14 pop rivited to pre-bent handrail cap

Machined Euro steel Aluminium sheet 1200 H14 handrail with 30Ø holes supported by 50x50x2,5mm square hollow section subframe with verticals at aprox 1250mm centres

continuous 50x50x2.5mm square hollow section rails welded to cast in mild steel every 1250mm interval as a support for the ballastrade sheeting

360x360x10mm mild steel plate cast into ramp edge at 1250mm intervals to line up with the balastrade vertical supports

225mm concrete ramp

Silicon sealant beaded along window frame

Drip joint

Aluminium Window frame fixed to 30x30x5mm equal angle to be fixed to concrete window opening

Concrete cill with fall away from Aluminium window frame

GWC-4 Gloss White Ceramic Wall Tile 200 x 200mm 1st Grade cut to fit cill and fall as indicated

GWC-4 Gloss White Ceramic Wall Tile 200 x 200mm 1st Grade

60x40x30mm Gripweld Mentis Grating to cap cast in-situ rainwater channel, angle to the far side drilled into wall and secured by chem bolts at aprox. 500mm crs.

30x30x2.0mm mild steel equal angle lugged and cast into concrete with sim. angle welded on to support rainwater grid

430

140

DT 8 Section through Protest route and spectator platform
Scale 1:10

DT
Sc

50x50x2.5mm SHS fixed to 10mm cast in mild steel plate at aprox 500mm centres

Machined Euro steel Aluminium sheet 1200 H14 facia fixed to mild steel subframe

Drip joint

Silicon sealant beaded along window frame

Aluminium Window frame fixed to 30x30x5mm equal angle

100x100x6.0mm structural Mullion

DT 10 Aluminium facia de
Scale 1:10

300x300x50mm Traditional concrete paving laid on concrete slab. Pavers to fall towards rainwater channel as indicated

120mm Precast concrete bench cast as part of the concrete retaining wall

GWC-4 Gloss White Ceramic Wall Tile 200 x 200mm 1st Grade fixed to concrete wall

concrete rainwater channel cast in situ with screed to indicated falls

450

Min. fall 1:60

150mm well compacted fill layer under slab

Drainage membrane placed against waterproofing membrane

DPM membrane

selected gravel backfill

200Ø agricultural drain below the level of the internal concrete slab wraped in bidim geotextile fabric to prevent the ingress of silt

skirting tile cut to fit, skirting tile to be dark brown in colour

200mm concrete floor slab with screed to fall towards floor drain for cleaning

DT 9 Market seating with storage
Scale 1:10

254x146x31mm I-section placed on top of 10m cast into top of concrete screen wall

DT 13 Roof end gutter
Scale 1:10

300

940

80

150x50x20x2.0 mm Mild steel lipped channel purlin laid on
254x146x31mm parallel flange I section rafter, pulins to be
at 1200mm centres to support Klip-lok roof sheeting
the roof sheeting to be fixed to burlins with brackets
as per manufacturers specification

purpose made 0,8mm galvanised brandering pop riveted
to purlins to support 50mm Isoboard ceiling, brandering
to be at aprox. 600mm centres.

T 12 Roof end
ale 1:10

Purpose bent GMS Flashing fixed to Klip-lok 406
and bent as indicated to form facia

76x5.0mm circular hollow section tie-beam notched
and bolted to rafter as indicated, ends to be ewlded
closed with 5mm mild steel flats cut to fit

Silicon sealant beaded along window frame

Aluminium Window frame fixed to 10mm steel flat welded to
underside of 254x146x31 I beam

76x5.0mm circular hollow section brace notched and bolted to
cast in fixing bracket

ABE Waterproofing layed to manufacturers specification

Screed layed to fall

20x20x20x1 aluminiumn channel pop rivited to 50x50x2.5 mildsteel
subframe to secure waterproofing sheet end to be filled with bitumin

OWAcoustic Sinfonia White Premium biologically absorbable mineral wool
ceiling tiles, NRC - 0.85, size 1200x600x15mm with square-edge and
white painted finish, laid on fire rated OWA construct S3 exposed demountable
T24 suspension system comprising of galvanised main and cross tees with
main tees suspended by means of galvanised hangers at centres not exceeding
1200mm intervals, and all installed to manufactures instructions.

150x50x20x2.0mm mild steel lipped
channel to hold light fitting bolted to
wall as fitting for LED light

etail

DT 11 Clearstory detail in Democratic Museum
Scale 1:10

0.8 purpose made galvanised gutter bent as indicated
hooked over steel purlin and 50x50x2,5mm screen rail
resting on steel rafter

Machined Euro steel Aluminium sheet 1200 H14 pop riveted
to pre-bent screen base cap

m steel slip plate

900

540

254x146x31mm I-section to support 0.8 GMS gutter

Machined Euro steel Aluminium sheet 1200 H14 with 30Ø
holes to be pop riveted to 50x50x2,5mm square hollow
section subframe

Aluminium Window frame fixed to
30x30x5mm equal angle

Machined Euro steel Aluminium sheet 1200 H14 pop rivited
to pre-bent screen base cap

Aluminium sheet cap pre-bent as indicated to form base of
buidling screen pop rivited to 50x50x2,5mm steel subframe

60x40x30mm Gripweld Mentis grating layed on top of mild steel
subframe supported at 1250mm centres

1.8 purpose made mild steel gutter bent as indicated
welded to 100x100x10mm mild steel equal angle

10mm Steel flat cut as indicate welded to
150x90x10mm unequal angle which is
cast into slap at 1250mm centres to form
a support for the catwalk

Drip joint

detail

DT 14 Catwalk detail
Scale 1:10

Eastern Elevation
Scale 1:200

Northern Elevation
Scale 1:200

Western Elevation
Scale 1:200

Figure 8.20 Elevations (Author 2017)

Figure 8.21 (Above) Model Perspective
2 (Author 2017)
Figure 8.22 (Below) Model Perspective
3 (Author 2017)
Figure 8.23 (Right) Model Perspective 4
(Author 2017)
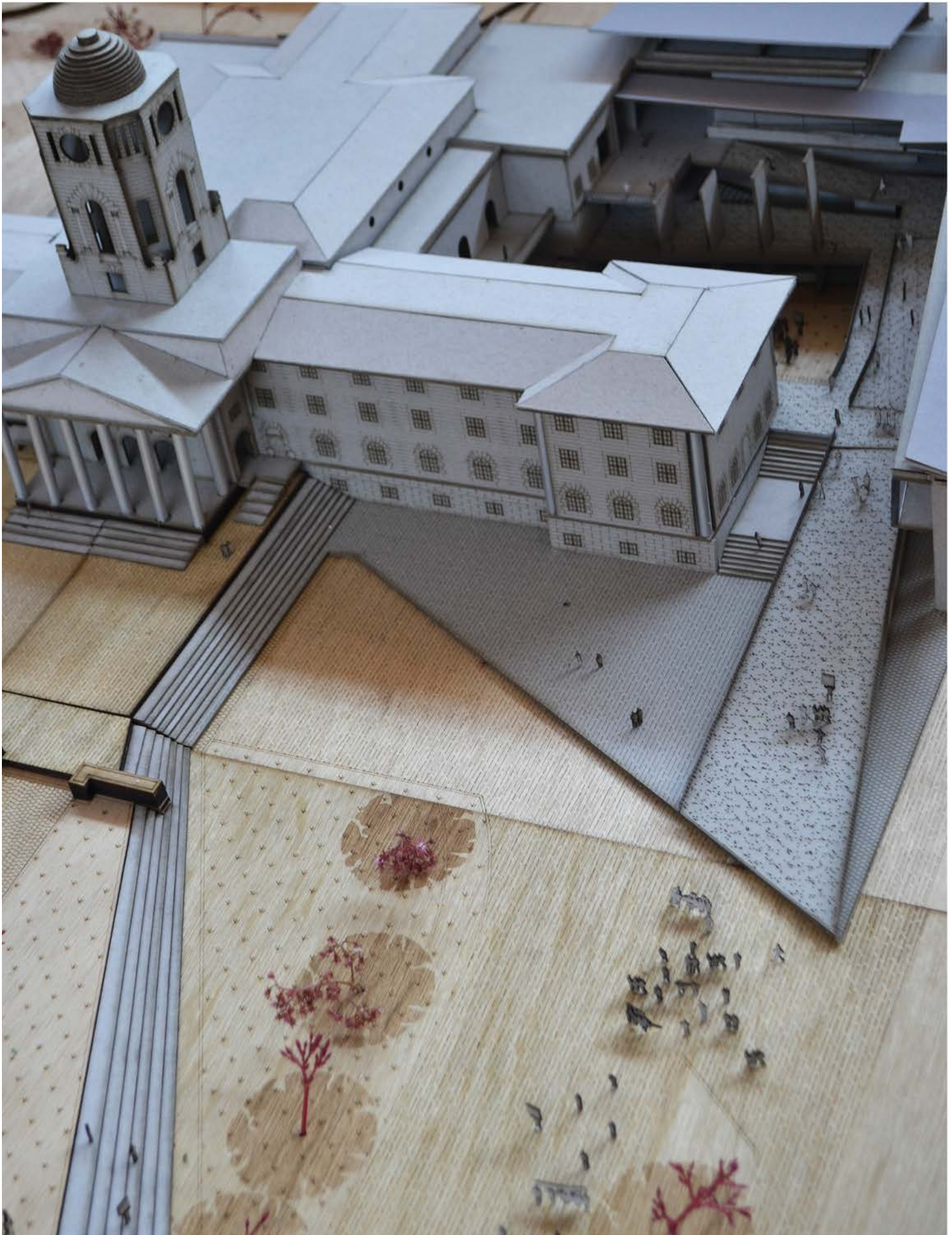
Figure 8.24 (Above) Model Perspective
5 (Author 2017)
Figure 8.25 (Below) Model Perspective
6 (Author 2017)
Figure 8.26 (Right) Model Perspective 7
(Author 2017)

Figure 8.27 Model Perspective 8
(Author 2017)

09

Conclusion

Figure 8.1 Western edge of Pretoria City Hall (Hoffman 2017)

Conclusion

The dissertation was a commentary on architecture's role in democratic society and its use as a tool in the creation of public space. The main intention was to provide the public with equal opportunity for expression and interaction at micro and macro scales. Through the investigation, it became evident that, to be successful, architecture of a political nature ought to be able to adapt in 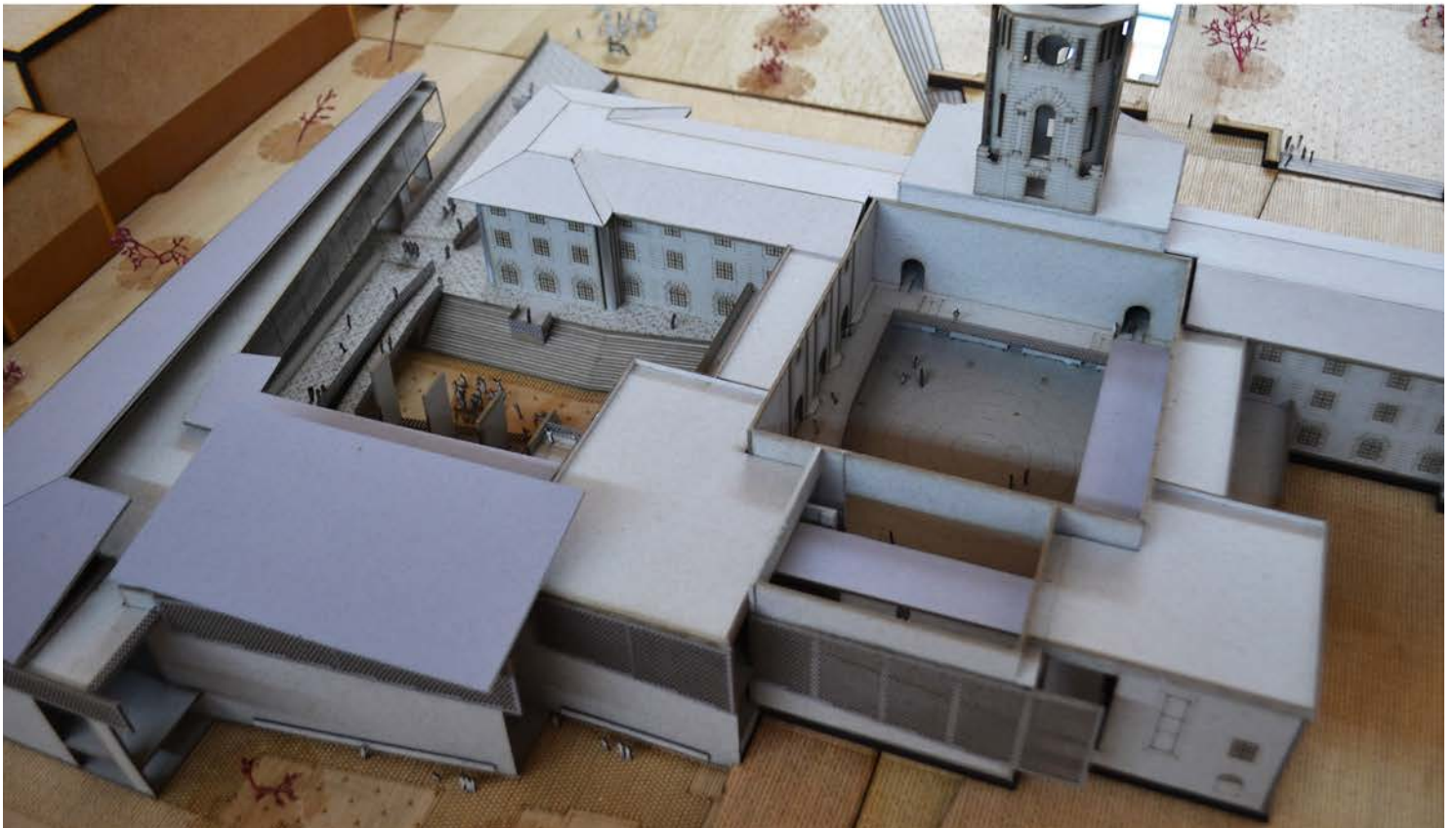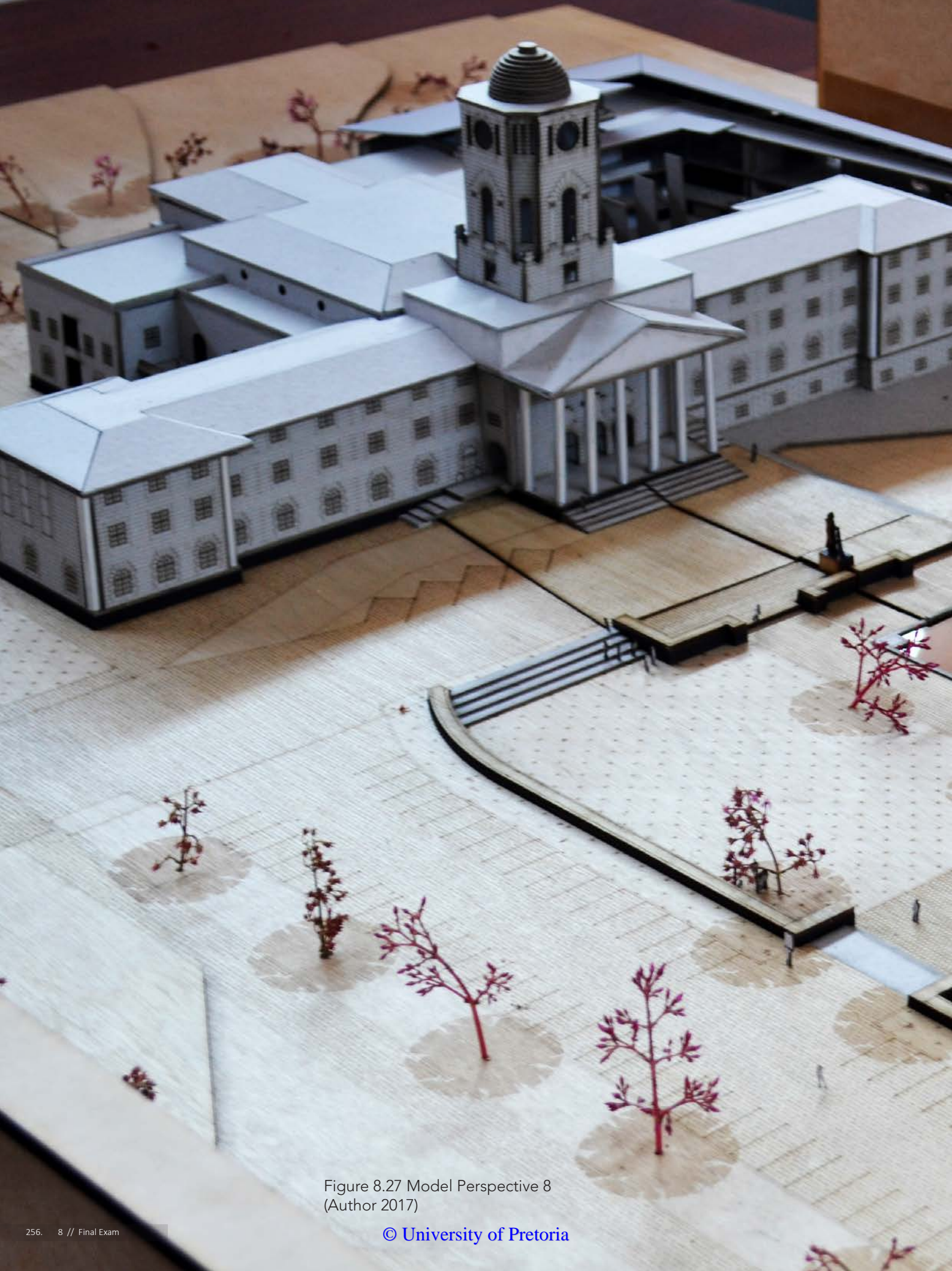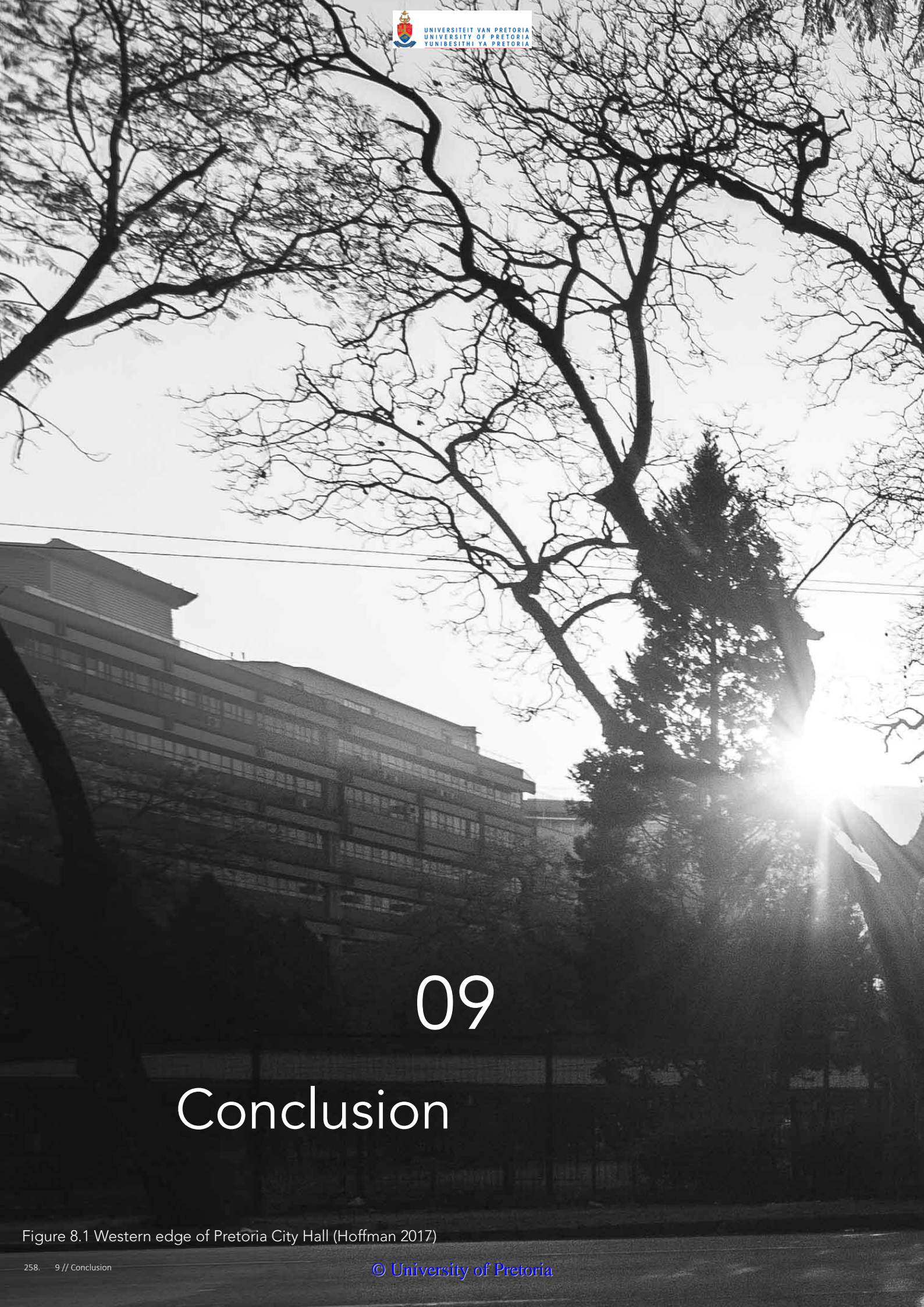order to respond to the requirements of our changing political climate. By doing so, it is possible to add value to the political climate through the in-terpretation and representation of the tangible and intangible aspects of the past and present climates in architecture.

By using Pretoria City Hall, a building representative of a past regime, as the canvas for the dissertation a unique opportunity to designing in the political realm was created.

The dissertation attempts to create an architecture that is able to respond to the changing political climate and provide a foundation from which the public is able to engage with. The responsiveness of the architecture to the political climate aids in the creation of an architecture that is legible through time and addresses identity, ideals and the individual. Furthermore, the dissertation attempts to represent political power through the activation of the public's voice by strengthening architecture's role in its facilitation of the democratic process of debate. The architecture does not act as the political voice but rather acts as the megaphone from which the public's voice may be heard.

Throughout the design process and the realization of the scheme one constant in the political landscape was unearthed and identified as an important characteristic of our democratic society; Debate. Democracy cannot happen when there is complete agreement. Debate is needed for democracy to be successful and develop at the same rate as society. Through the act of protest the South African public has been able to express their distrust –with the way the country is managed.
The dissertation therefore supports society's debate with the political powers and argues that in order for there to be change, our architecture needs to act as the release valve whereby debate is facilitated.

References

South Africa. African Nation Congress. 2017. ANC statement on Freedom Day. [Online], Available: http://www.anc.org.za/content/anc-statement-freedom-day-1 [2017, August 27].

ANC wins 15 fewer seats in Parliament, DA gains 22 | News24. n.d. [Online], Available: http://www.news24.com/Archives/City-Press/ANC-wins-15-fewer-seats-in-Parliament-DA-gains-22-20150430 [2017, July 19].

Bakker, K. & Müller, L. 2010. Intangible Heritage and Community Identity in Post-Apartheid South Africa. Museum International, 62(245):48–57.

Baskerville, R. n.d. Lomé, Togo (1880 -). [Online], Available: http://www.blackpast.org/gah/lome-togo-1880 [2016, May 25].

Bassiouni, C. 1998. Toward a Universal Declaration on the Basic Principles of Democracy: From Principles to Realisation. In Geneva: Inter-parliamentary Union. Democracy: Its Principles and Achievement.

Begley, S. 2015. The Most Influential Protests in History. [Online], Available: http://time.com/3741458/influential-protests/ [2017, September 22].

Bekker, S. & Therborn, G. 2012. Introduction. Illustrated. S. Bekker & G. Therborn (eds.). Cape Town: HSRC Press Capital Cities in Africa: Power and Powerlessness.

Burger, J. 2014. Politicians, not the police, must solve public dissatisfaction in South Africa. [Online], Available: https://issafrica.org/iss-today/politicians-not-the-police-must-solve-public-dissatisfaction-in-south-africa [2017, September 29].

Chirila, A. 2017. 10 Most Important Protests in Human History. [Online], Available: http://www.toptenz.net/10-important-protests-human-history.php [2017, September 22].

City Hall. n.d. [Online], Available: http://www.artefacts.co.za/main/Buildings/bldgframes.php?bldgid=4515 [2016, March 15].

City Hall details. n.d. [Online], Available: http://www.artefacts.co.za/main/Buildings/bldgframes.php?bldgid=4515 [2017, July 15].

Congress of the People and the Freedom Charter. n.d. [Online], Available: http://www.sahistory.org.za/article/freedom-charter [2017, April 20].

Corbusier, L. 1986. Towards a New Architecture. New York

Debate. 2017. [Online], Available: https://en.oxforddictionaries.com/definition/debate [2017, September 24].
Duany, A. & Talen, E. 2001. Making the good easy: the smart code alternative. Fordham Urban Law Journal. 29(4):1454–1456.

Ehrenberg, V. 1950. Origins of Democracy. Historia: Zeitschrift für Alte Geschichte, 1(4):515–548. [Online], Available: http://www.jstor.org/stable/4434319?seq=1#page_scan_tab_contents.

EIU Democracy Index 2016. 2016. [Online], Available: https://infographics.economist.com/2017/DemocracyIndex/ [2017, September 23].

eNCA. 2017. Bloemfontein City Hall fire linked to illegal strike. [Online], Available: http://www.enca.com/south-africa/bloemfontein-city-hall-on-fire-in-suspected-arson-attack [2017, August 26].

Fairs, M. 2007. Nelson-Atkins Museum of Art by Steven Holl. [Online], Available: https://www.dezeen.com/2007/04/05/nelson-atkins-museum-of-art-by-steven-holl/ [2017, September 07].

Foster, N. 2007. Foster 40. D. Jenkins (ed.). London: Prestel.

Gascoigne, B. 2001. History of Togo. [Online], Available: http://www.historyworld.net/wrldhis/PlainTextHistories.asp?historyid=ad42 [2017, September 25].

Gervais-Lambony, P. 2012. Lomé. Illustrated. S. Bekker & G. Therborn (eds.). Cape Town: HSRC Press Capital Cities in Africa. 46–63.

Goheen, P.G. 1998. Public space and the geography of the modern city. Progress in Human Geography, 22(4):479–496.

Hartdegen, P. 1988. Our Building Heritage – an Illustrated History. 1st ed. Johannesburg: O Ryll's Publishing. [Online], Available: http://www.africanabooks.com/?page=shop/flypage&product_id=1696.

Hatuka, T. 2008. Urban Design and Civil Protest. Cambridge.

Hegemony. 2017. [Online], Available: https://www.merriam-webster.com/dictionary/hegemony [2017, August 28].

Henderson, R. 2017. Report about Fees Must Fall protests at universities stirs up more debate. [Online], Available: https://www.businesslive.co.za/bd/national/education/2017-03-09-report-about-fees-must-fall-protests-at-universities-stir-up-more-debate/ [2017, September 22].

Herring, B. 1935. New City Hall Pretoria. Illustrated. Pretoria: B. Herring for the Pretoria City Council.

Hosagrahar, J. 2012. Interrogating Difference: Postcolonial Perspectives in Architecture and Urbanism. C.G. Crysler, S. Cairns, & H. Heynen (eds.). London: SAGE Publications Ltd, The SAGE Handbook of Architectural Theory. 70–84.

Imirzian, M. 2010. FORWARD 110. Forward 110. 10(1):44–45.

Isakhan, B. & Stockwell, S. 2011. The Secret History of Democracy. Houndmills: Palgrave Macmillan.

Jarvis, P. 2009. Learnng to be a person in society. First ed. Milton Park: Routledge.

King, T. & Flynn, M.. 2012. Heritage and the post-apartheid city: Constitutional Hill, Johannesburg. International Journa of Heritage Studies. 18(1).

Kotze, P. 2017. The Architect and the city. Architecture S.A. (83):2.

Libeskind, D. 2011. Dresden's Military History Museum. [Online], Available: http://www.archdaily.com/172407/dresden%25e2%2580%2599s-military-history-museum-daniel-libeskind [2017, May 16].

Mabena, S. 2017. Bloemfontein City Hall fire a disaster: cultural historian. [Online], Available: https://www.timeslive.co.za/news/2017-06-22-bloemfontein-city-hall-fire-a-disaster-cultural-historian/ [2017, August 26].

Mabin, A. 2012. South African capital cities. In S. Bekker & G. Therborn (eds.). Cape Town: HSRC Press Capital Cities in Africa.

Machado, R. 1976. Old Buildings as palimpsest.pdf. Progressive Architecture. (11):46–49.

Madonsela, T. 2016. State of Capture Report.

Myeza, M. & Associates, D. 2013. Tshwane Vision 2055. Remaking South Africa's Capital City. Tshwane.

Nassar, A. 2015. Architecture as counter hegemonic practice: Political Theory and Architecture in Conversation. [Online], Available: http://drawingparallels.blogspot.co.za/2015/04/architecture-as-counter-hegemonic.html [2017, August 28].

Nikitin, C. 2009. Civic Buildings and their Public Spaces can Improve the Quality of Life in Cities. Recreation & Parks BC Magazine. 10–11.

Noble, J. 2009. 10 Years + 100 Buildings. First ed. Cape Town: Bell-Roberts.

Noble, J.A. 2008. Architecture, hybridities and post-apartheid design. 23(2):71–88.

Norris, S. 2015. The Cardo and Decumanus Maximus – Where Towns Come Together | Shawn Thomas Norris | Pulse | LinkedIn. [Online], Available: https://www.linkedin.com/pulse/cardo-decumanus-maximus-where-towns-come-together-shawn-thomas-norris [2017, July 14].

Orthofer, A. 2016. 10% of South Africa's population earn around 60% of all income. [Online], Available: https://businesstech.co.za/news/general/139335/10-of-south-africas-population-earn-around-60-of-all-income/ [2017, May 04].

Picton-Seymour, D. 1989. Historical Buildings in South Africa. 1st ed. J. Mason (ed.). Cape Town: Struikhof Publishers.

Plater-Zyberk, D. & Company. 2001. Smart Code.

Plevoets, B. & Cleempoel, K. Van. 2011. Adaptive reuse as a strategy towards conservation of cultural heritage : a literature review. 118:155–164.

Purcell, M. 2002. Excavating Lefebvre : The right to the city and its urban politics of the inhabitant. GeoJournal. (58):99–108.

Rajan, A. 2017. Fake news: Too important to ignore. [Online], Available: http://www.bbc.com/news/entertainment-arts-38636042 [2017, September 20].

Da Silva, B. 2017. Five Jaw Dropping Facts about South Africa's Water Crisis. [Online], Available: https://www.aquazania.co.za/2017/01/five-jaw-dropping-facts-about-south-africas-water-crisis/ [2017, September 24].

Simonsen, K. 2005. Bodies, Sensations, Space and Time: The Contribution from Henri Lefebvre. Geografiska Annaler. Series B, Human Geography. 87(1):1–4. [Online], Available: http://www.jstor.org/stable/3554441.

South Africa. African National Congress. 2017. ANC statement on Freedom Day. [Online], Available: http://www.anc.org.za/content/anc-statement-freedom-day-1 [2017, August 27].

Van Stekelenburg, J. & Klandermans, B. 2010. The social psychology of protest. 1–13.

Structure and functions of the South African Government. 2017. [Online], Available: https://www.gov.za/about-government/government-system/structure-and-functions-south-african-government [2017, September 23].

The Burra Charter: The Australian ICOMOS Charter for Places of Cultural Significance,2013. 2013. Burwood.

The Freedom Charter. 2016. [Online], Available: http://www.sahistory.org.za/article/freedom-charter [2017, September 22].

The Nelson-Atkins Museum of Art / Steven Holl Architects | ArchDaily. 2008. [Online], Available: http://www.archdaily.com/4369/the-nelson-atkins-museum-of-art-steven-holl-architects [2017, September 07].

The Reichstag in Berlin. 2017. [Online], Available: https://www.german-way.com/travel-and-tourism/germany-for-tourists/city-guides-germany/berlin-and-potsdam/the-reichstag-in-berlin/ [2017, August 27].

Tibane, E. & Honwane, M. 2015. Government System. In 22nd ed. E. Tibane & M. Honwane (eds.). Pretoria: Government COmmunications The South African Yearbook 2014/15. 203.

UP Arch MProf. 2016. Urban Vision. Unpublished, Department of Architecture, University of Pretoria, Pretoria, Gaugteng Province, South Africa.

Warf, B. & Arias, S. 2009. The Spatial Turn: Interdisciplinary Perspectives. Geography. 26:232.

Water In Crisis - Spotlight South Africa. 2017. [Online], Available: https://thewaterproject.org/water-crisis/water-in-crisis-south-africa [2017, September 24].

Whyte, W.H. 1980. The Social Life of Small Urban Spaces. United States of America: Direct Cinema Limited.

Wolff, H. 2011. A case against the construction of a cultural identity. [Online], Available: http://www.wolffarchitects.co.za/2011/02/a-case-against-the-construction-of-a-cultural-identity/ [2017, September 25].

XML. 2016. PARLIAMENT. First Edit ed. Amsterdam: XML.

Zibi, S. 2012. What defines our South African identity? [Online], Available: https://www.iol.co.za/sundayindependent/what-de-fines-our-south-african-identity-1351254 [2016, April 11].

Zuma, J. 2016. President Jacob Zuma: State of the Nation Address 2016 | South African Government. Cape Town . [Online], Available: https://www.gov.za/speeches/president-jacob-zuma-state-nation-ad-dress-2016-11-feb-2016-0000 [2017, September 25].