



Design + Development





6

DESIGN + DEVELOPMENT

Evolving from the subject matter discussed thus far in the dissertation, this chapter aims to quantify and design a suitable product for the proposed intervention. It endeavors to shed light on the thought processes that underlie specific design decisions and highlight the fundamental concepts and thoughts that went into this production process.

The design proposal should be seen as twofold - first there is the design of the planned new museum of typography and secondly the re-evaluation and redesign of Pretorius Square. Through the showcased design development and conceptualization it will become clear that these two products are interdependent and that the one in fact shapes and moulds the other.

It must be kept in mind that the aim of this dissertation is to investigate the extent of museum space and how it can inform and guide the production of meaningful public space. The intention is to revitalise Pretorius Square and provide a contemporary public space that will facilitate the urban event and the happenings of the Everyday through the exploration of the in-between.

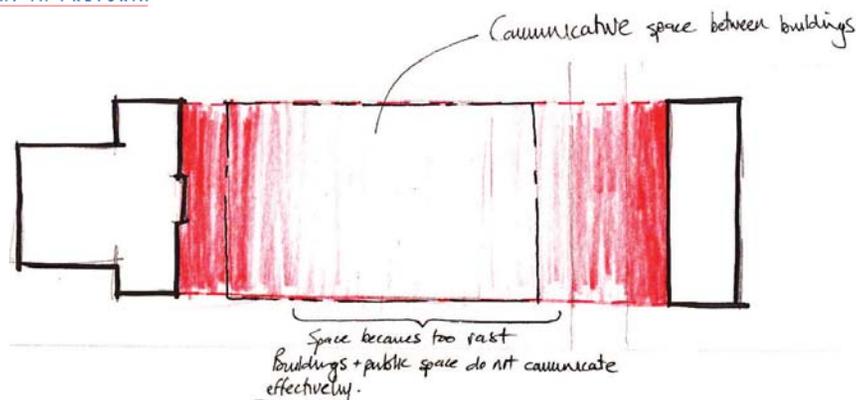


Fig. 87: Communicative space in-between buildings identified (Author, 2011).

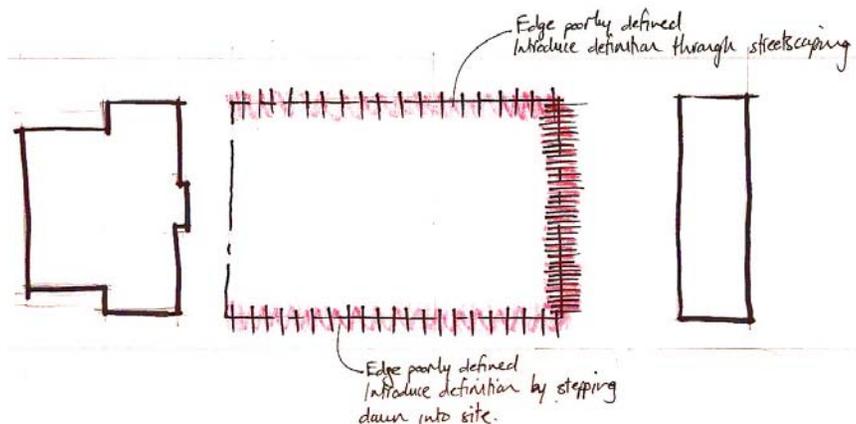


Fig. 88: Edge identification and characterisation (Author, 2011).

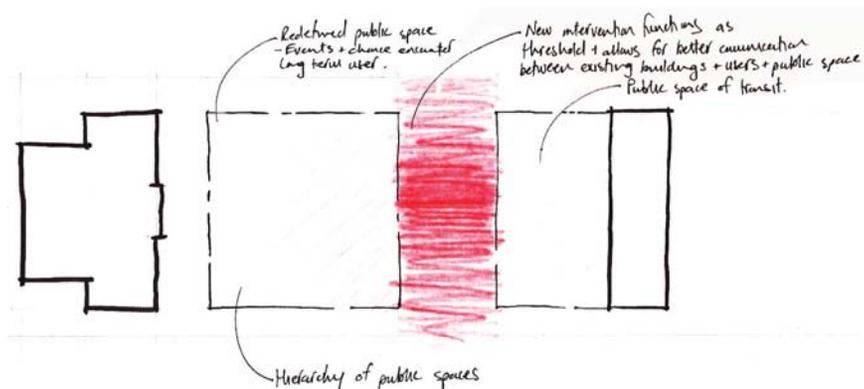


Fig. 89: Introduction of a threshold (Author, 2011).

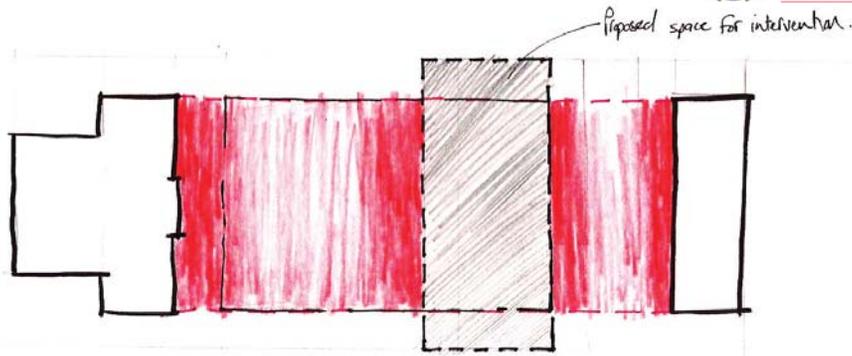


Fig. 90: Possible location of proposed built intervention (Author, 2011).

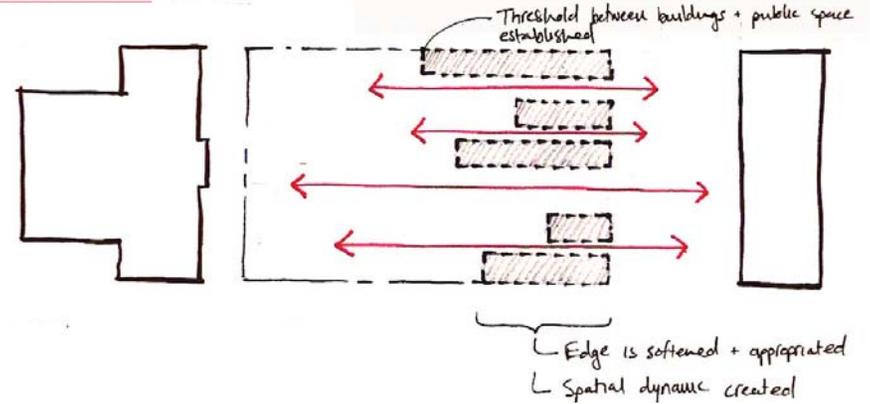


Fig. 93: Amalgamation of proposed building and landscape (Author, 2011).

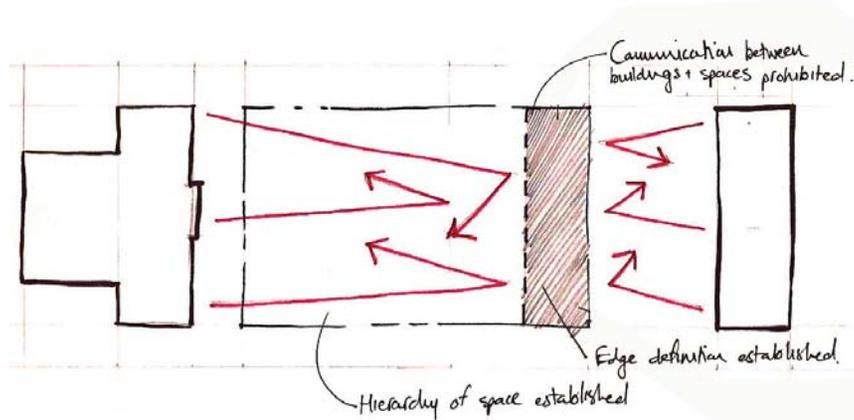


Fig. 91: Intervention forms visual obstruction (Author, 2011).

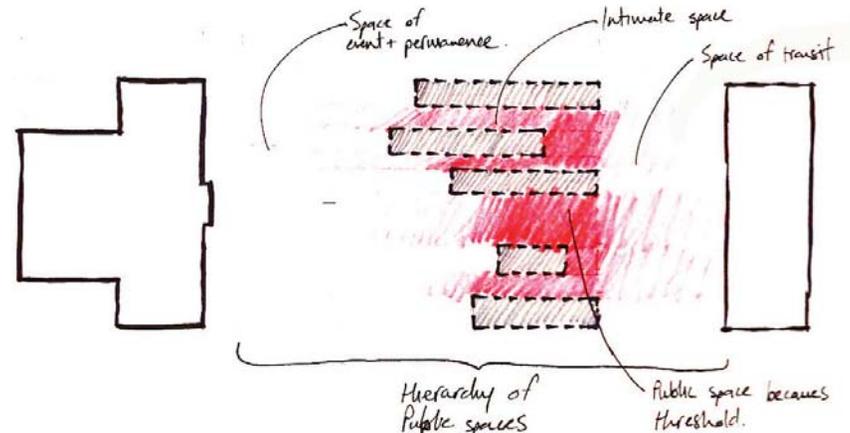


Fig. 94: Establishment of spatial hierarchy and threshold (Author, 2011).

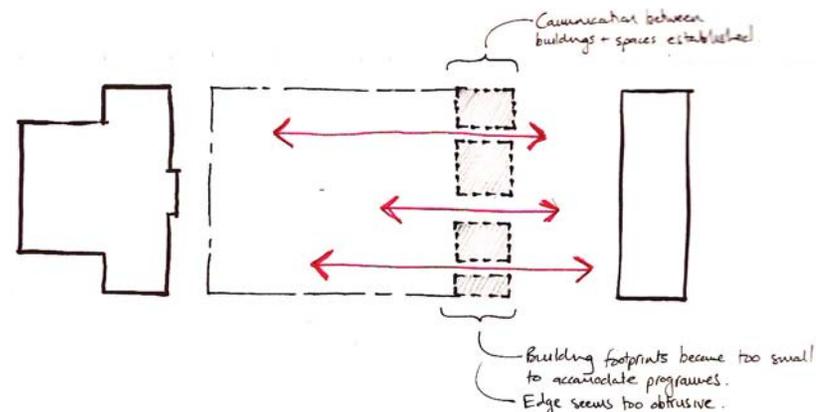


Fig. 92: Intervention forms threshold (Author, 2011).

6.1 INITIAL CONCEPTUAL RESPONSE

With the initial design response, a section of the site was identified (See Fig. 93-96) where the aim was to introduce a deliberate disturbance to the square. This disturbance, through its imposition, was then intended to make users more aware of their environment due to its interruption of the everyday.

The intervention would act as a communicative threshold between the City Hall and the Natural History Museum with the conscious distortion of sight-lines and space in order to re-evaluate the relationship of these two buildings with one another as well as with the Square itself (See Fig. 97-100).

Comprised of a subterranean component together with four pavilions that puncture the ground level of the square, the design would have had an above ground presence as well as alluding to a more complex spatial composition underneath the surface of the square.

Arranged linearly across the site and integrated with landscaped elements stretching in an East-West direction, these pavilions would also acknowledge the linear tension present on the terrain.

6.1.1 CRITICISM

Strong criticism was received on the placement of volumes on the Square itself, it was felt that the structures impose too much on the space and that they undermine the relationship between the City Hall and the Natural History Museum.

The introduction of a tangible linearity on the site was well received and it was felt that the incorporation of the buildings with the landscape is good in concept but needs to be better realised.

The idea of the pavilions being completely public, in the sense that people are allowed to freely move into and through them, was also well received. Therefore the buildings themselves become an extension of the public space.

Exploring the possibility of the subterranean was encouraged and the possibility of a fully submerged architecture needed to be examined. Also, the exploitation of the surface needed to be further explored.



6.2 CONCEPTUAL DEVELOPMENT

After considering the criticisms that were raised concerning the initial conceptual response, the author reconsidered his design approach.

A departure point was taken where the preliminary conceptual developments were taken into consideration and further developments were done, expanding on the primary design principles.

The result(s) of these further developments are illustrated in Figures 104 - 115.

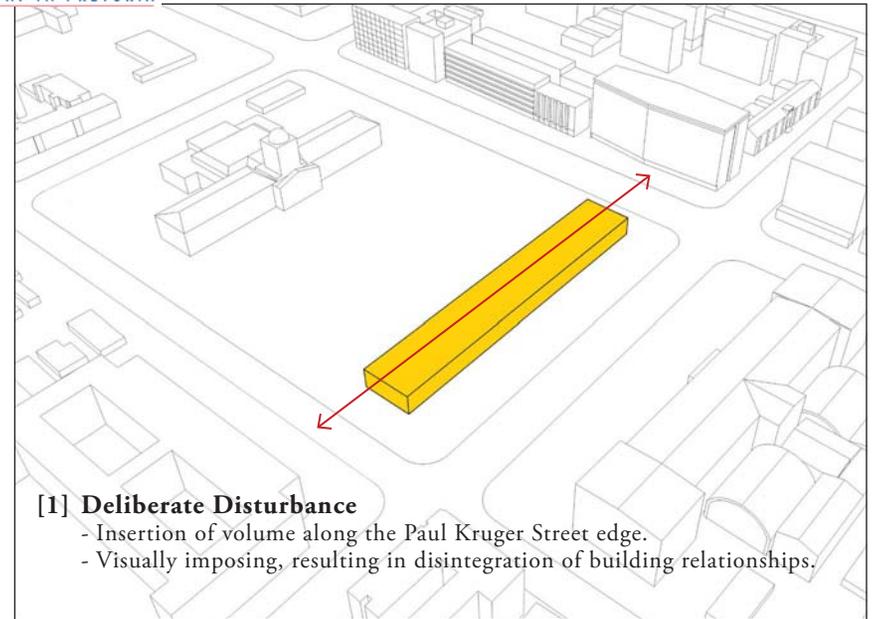


Fig. 98: Design process - Deliberate Disturbance (Author, 2011).

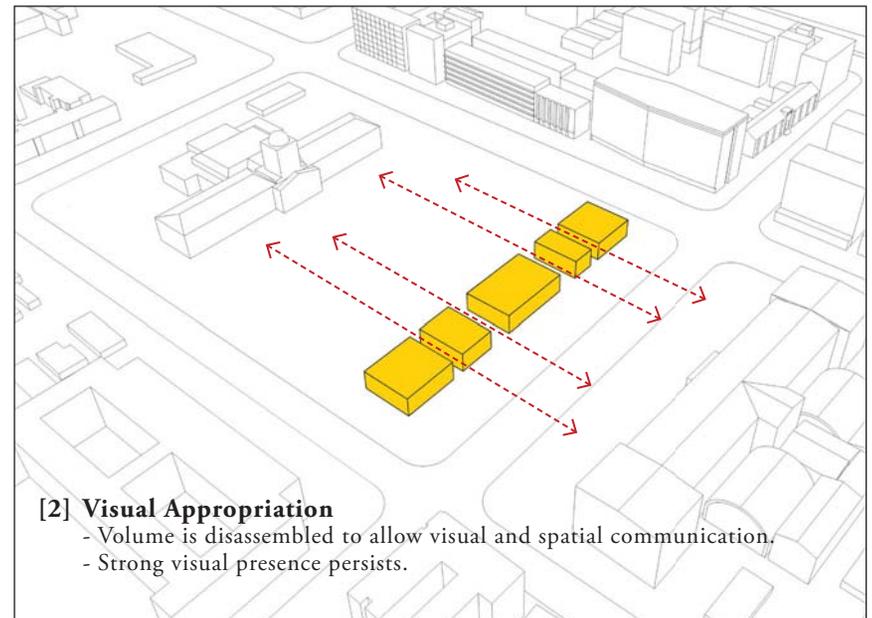


Fig. 99: Design process - Visual Appropriation (Author, 2011).

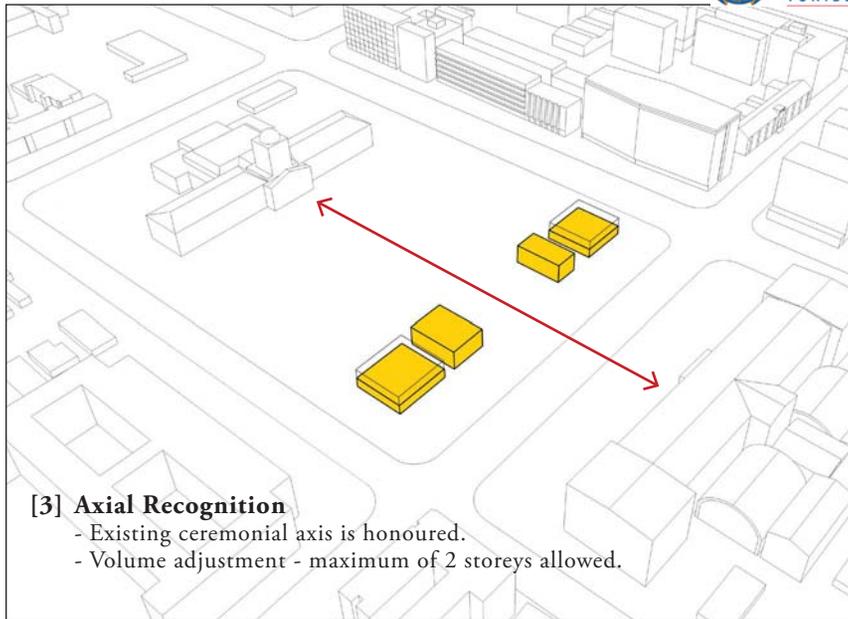


Fig. 100: Design process - Axial Recognition (Author, 2011).

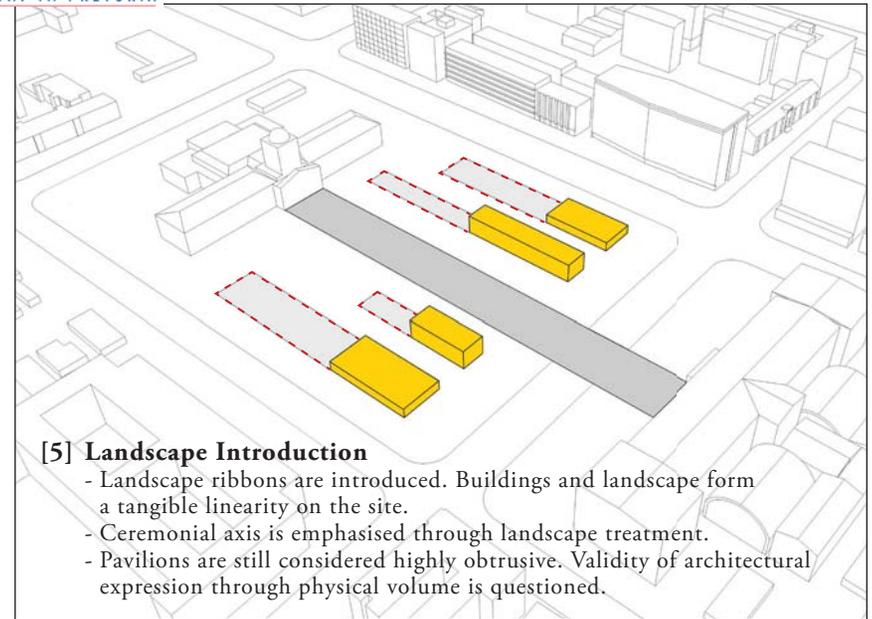


Fig. 102: Design process - Landscape Introduction (Author, 2011).

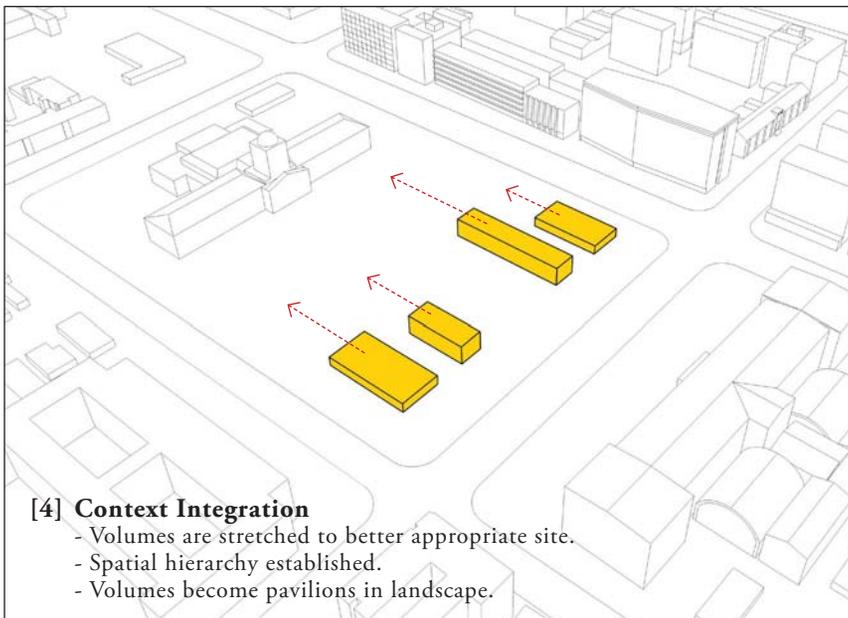


Fig. 101: Design process - Context Integration (Author, 2011).

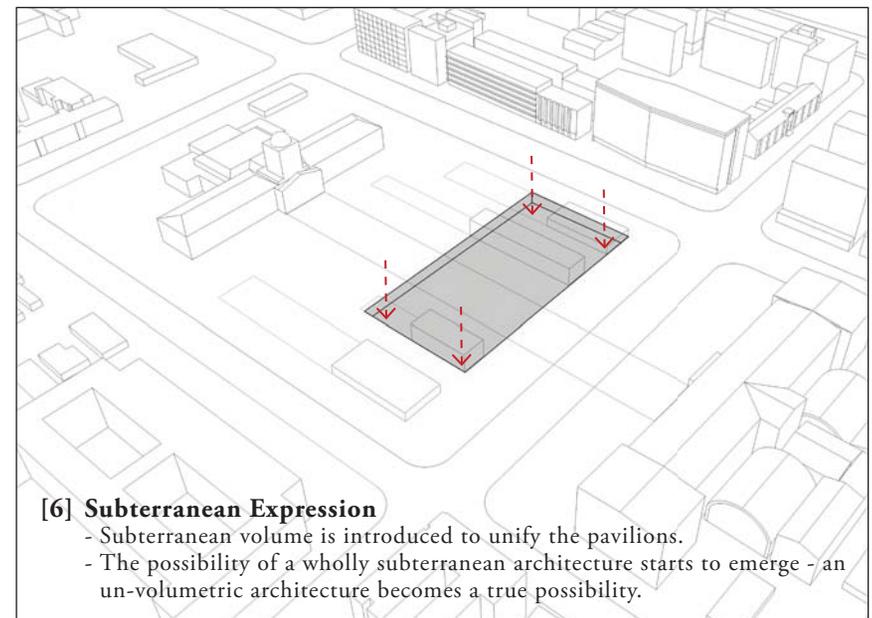


Fig. 103: Design process - Subterranean Expression (Author, 2011).

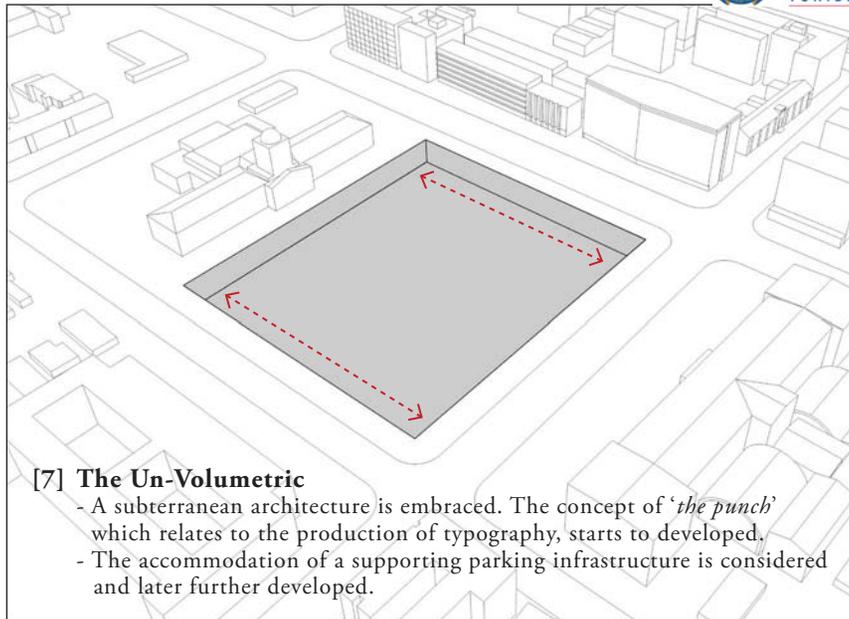


Fig. 104: Design process - The Un-Volumetric (Author, 2011).

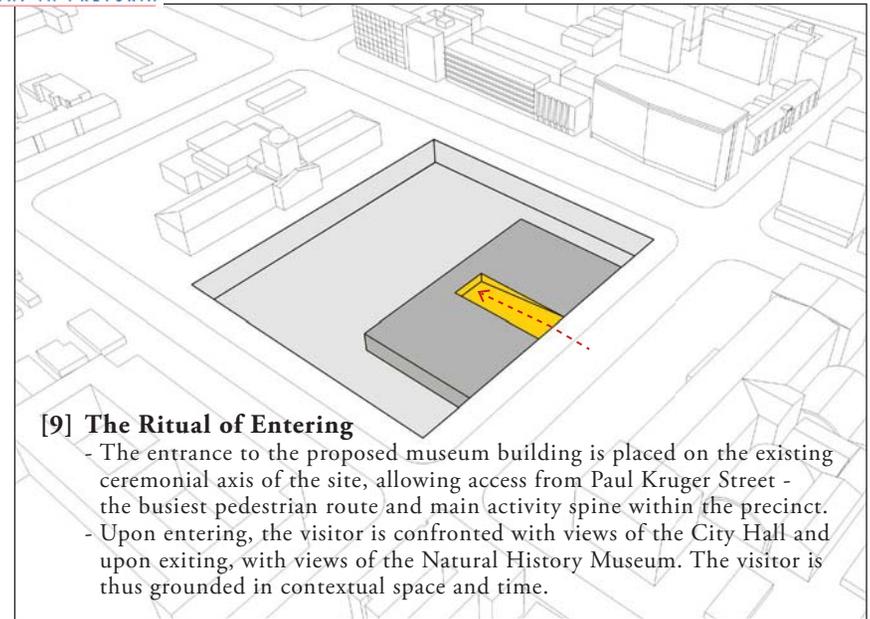


Fig. 106: Design process - The Ritual of Entering (Author, 2011).

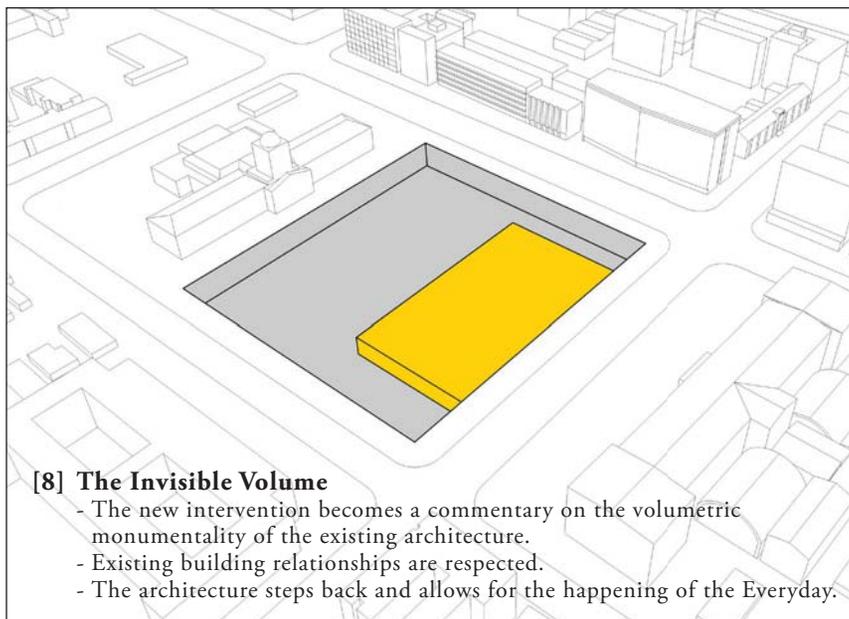


Fig. 105: Design process - The Invisible Volume (Author, 2011).

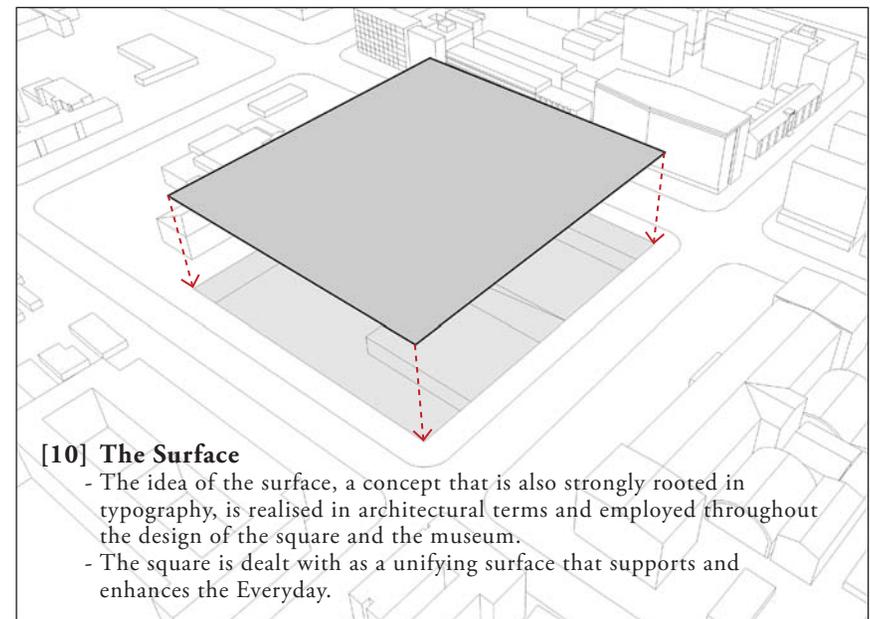


Fig. 107: Design process - The Surface (Author, 2011).

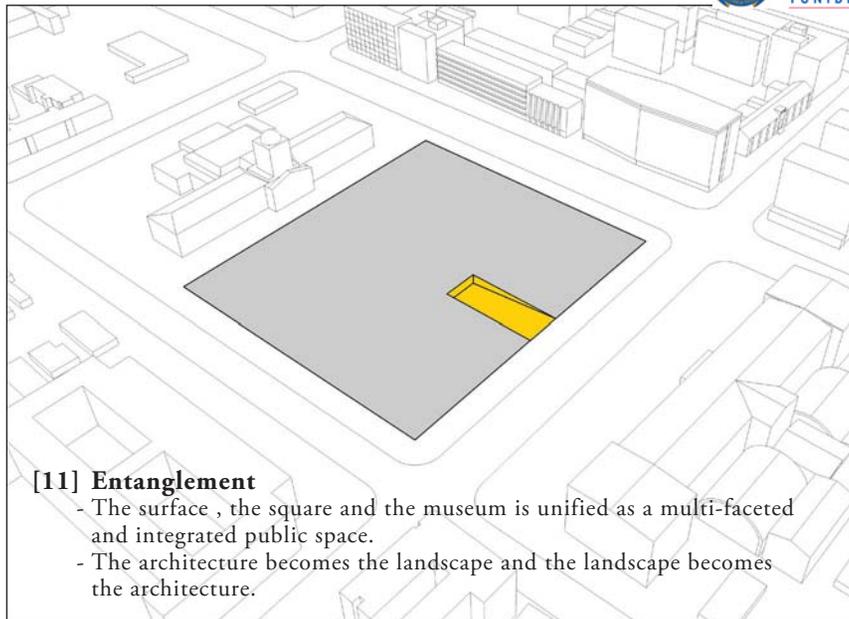


Fig. 108: Design process - Entanglement (Author, 2011).

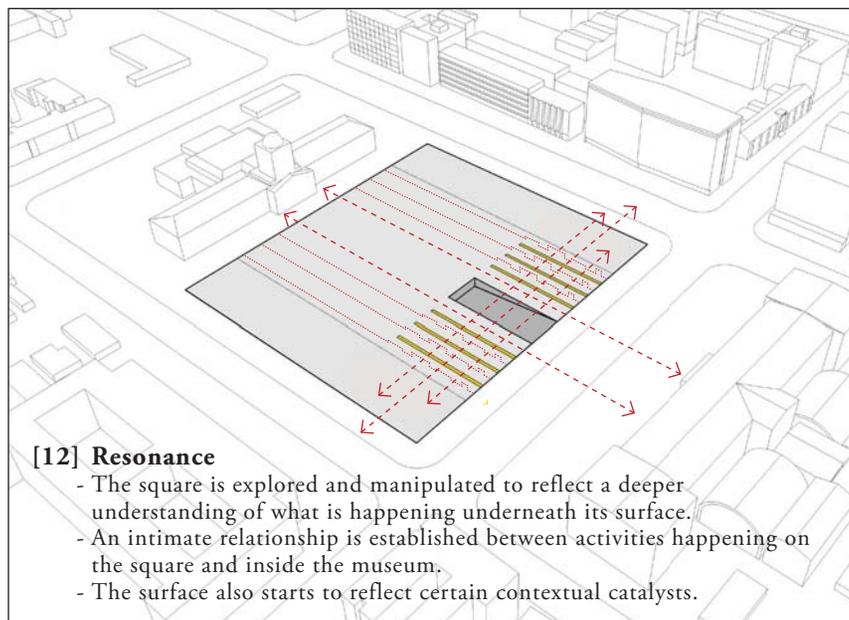


Fig. 109: Design process - Resonance (Author, 2011).



6.3 DESIGN INFLUENCES

6.3.1 SITE AS CATALYST

From the outset, it was very important to ground the design within its context and make the intended proposal relevant to its site and surroundings. An analysis was thus done (See Fig 93 - 100) regarding existing site conditions and consequent possible locations for the proposed intervention.

It was established that there exists a strong visual, physical and metaphysical relationship between the City Hall and the Museum of Natural History. Both of these buildings seem to be engaging in a dialogue with one another across Pretorius Square, with the square and the pedestrian day-to-day activities acting as medium for this *communication* (Fig 93). It is thus important to enhance and retain this relationship.

The context is also rich in history and heritage. Care will have to be taken with the intended design proposal in order for it not to detract from its setting.

With Paul Kruger Street on the eastern side of the square being the main activity spine through the precinct and the most active edge of the space, it was decided to locate the proposed intervention along this edge.

6.3.2 THE SURFACE

Typography and the making thereof stems from a deep fascination with the surface and how this surface can be designed to convey knowledge and information (Donaldson, 2008: 51). The notion of surface is also very dominant in architectural discourse and contemporary practice.

According to Benjamin (2006: 1) the surface should be understood to signify more that just a purely aesthetic or purely structural aspect of a building. The creation of surfaces must allow for the organization of programme and in so doing, the comprehension of space.

In architecture, walls should be liberated from being merely structural or tectonic elements, they should rather be recognized as objects that carry dual surfaces. In this manner, the surface and the wall will not succumb to being a merely static architectural element, but become a dynamic, space-creating entity (Benjamin, 2006: 5-7).

Gottfried Semper (in Spelman, 1997: 48) views the surface as a tectonic entity, and believes the surface should be employed to propagate the interweaving of both geometry and materials, thus allowing for the enclosure of volume and the definition of space.

Adolf Loos (in Benjamin, 2006: 24) advocates that the surface should also distribute and signify programme by allowing surface and volume to intersect.

The intended design will investigate the liberation of the surface in terms of the wall, with this concept also being extended to that of the roof and floor planes. Surfaces will be approached as both material and geometric entities, thus exploring volume enclosure and space definition.

6.3.3 LINEARITY

Because of the aforementioned relationship between the two buildings, there is a strong sense of linearity across the site. The activity along Paul Kruger Street also introduces a secondary axial linearity to the space, creating an interesting interplay and tension between these two conditions.

6.3.4 THE PUNCH

The design concept takes inspiration from the traditional method of hot-metal printing and typesetting. In this process, metal type was used in a letterpress to press or punch letterforms onto a surface (Pflughaupt, 2007: 14), leaving behind both the ink as well as a slight indent.

The museum is thus envisaged as a recessed subterranean volume - an indentation and a letterform in itself.

6.3.5 THE GRID

The concept of the grid is one of typography's fundamental characteristics. It is a reference system that guides the design of individual letters, page layouts and even whole books.

Grids establish systems of arrangement, coordinating content in the space of a page, a screen, or the built environment (Lupton, 2004: 113), allowing for time and space to be broken up into standardized, manageable units.

During the 1960's, the centuries-old model of the page-as-frame was rejected by the Swiss Rationalists (Ambrose & Harris, 2006: 78). They saw the page as a continuous architectural space, a space of indefinite progression outwards. The grid became both rational and sublime, defying boundaries and edges and became dominated by the mind rather than the body (Lupton, 2004: 134).

The concept of the grid will be employed to inform design decisions throughout the new proposal. Both the new museum and public square will endeavor to illustrate that an effective grid need not be a rigid formula, but rather a resilient and flexible structure that guides rather than dictates.

SCRIPTED

Museum

Operating Hours

Monday -Thursday: 08:00-18:30
Friday: 08:00-20:00
Saturday: 09:00-17:00
Sunday: 09:00-15:00
Public Holidays: 09:00-15:00

Facilities

Restaurant_Library_Bookshop_Workshop
Auditorium_Exhibition Spaces

Activities

Workshop

- Adult literacy classes
- Typography workshops
- Art workshops with artists like Willem Boshoff

Library

- Internet facilities
- After-school homework facilities
- Reference library with a comprehensive collection of works ranging from typography to language and art.

Restaurant

08:00-12:00
Express coffee shop
12:00-17:00
Coffee shop with light lunches
18:00-till late
Destination restaurant

Auditorium

- Seminars
- Public lecture series
- Book launches

Events

- Hosting *National Book Week*
- Hosting a Pretoria edition of the *Woordfees*
- Hosting *TypeCon* (See Chapter 01, 1.8.5 Client)

Schedule of Accommodation

Basement -1

Entrance/Reception.....	175m ²
Coffee Bar.....	35m ²
Restaurant.....	145m ²
Restaurant Manager Office.....	9,5m ²
Restaurant Kitchen.....	73m ²
Security Office.....	23m ²
Cleaning Room.....	16m ²
Office Reception.....	38m ²
Curator Office.....	41m ²
Boardroom.....	28m ²
Open Plan Office.....	150m ²
Server Room.....	14m ²
Staff Kitchen 1.....	14,5m ²
Staff Kitchen 2.....	22m ²
Staff Bathroom 1.....	10m ²
Staff Bathroom 2.....	34m ²
Bookshop.....	110m ²
Workshop.....	110m ²
Library.....	330m ²
Auditorium.....	162m ²
Museum Bathroom 1.....	89m ²
Museum Bathroom 2.....	63m ²
Storage 1.....	67m ²
Storage 2.....	42m ²
Gallery 1_Temporary.....	705m ²
Gallery 2.....	162m ²
Gallery 3.....	1070m ²
Courtyard_Library.....	72m ²
Courtyard_Restaurant.....	72m ²
Courtyard_Offices.....	130m ²
Plant Room.....	93m ²

Public Square

Operating Hours

24/7_365 days a year

Facilities

- Formal event space
- Spaces for the happening of the Everyday

Activities

- Hosting of organised events
- Allowing for the urban event and the happening of the Everyday

Schedule of Accommodation

Basement -2

Storage 3_Acquisitions.....	540m ²
Storage 4.....	40m ²
Gallery 4.....	1050m ²
Gallery 5.....	250m ²
Gallery 6.....	172m ²
Plant Room.....	68,5m ²

Parking

Basement -3.....	490 Parking bays
Basement -2.....	390 Parking bays
Basement -1.....	220 Parking bays

Public Square

Event Space_Informal.....	3500m ²
Event Space_Formal.....	5050m ²

Fig. 110: Proposed business plan and schedule of accommodation (Author, 2011).



6.4 THE EXPERIENCE

6.4.1 THE DESTINATION USER

It was through a friend of mine that I first heard of this new museum located in the inner city of Pretoria, supposedly a museum unlike any other, a museum going by the name of *Scripted*. So, after an arduous week at work I set out on a sunny Saturday morning to explore this new inner city attraction, with the need to let my mind escape and my body relax.

Driving down Visagie Street one is all of a sudden confronted with the presence of the City Hall. Stepping back from the edge of Paul Kruger Street, this Neoclassical building seems to be in deep conversation with the Natural History Museum directly opposite it. In-between these two monuments lie an expanse of public square, a breathing space away from the hustle and bustle of the city. It is here, supposedly, that the new museum resides, but for some reason there is no physical presence on the square, no volume to speak of.

Climbing out of my car in the parking basement I can't help but notice the up-lit coffer concrete ceiling, a sky of texture stretches out above me. Strands of lighting and services snake in linear stretches across the soffit, which affords a certain elegance to the space. Two of the basement walls are awash with sunlight and embossed with inlays of quotes and typefaces. The scene is set.

The circulation lobby is well branded and easy to find, and as I move towards this floating glass box, I am offered visual hints and clues that allude to the existence of the museum - glimpses of an interior and of an invisible volume.

Taking the stairs to the square (there is no direct access into the museum from the parkade) one is confronted with framed views into the museum and slowly the museum space becomes tangible.

Emerging on the square one is immediately met by the monumental presence of the City Hall, its classical proportions and its ornate facade. Still - no museum of typography.

Underfoot, a landscape of texture unfolds - bands of granite gracefully intertwine and intersect - picking up the energy of the site. I am slowly guided towards the entrance to this, as of yet, unseen museum building by carefully placed signage and text-tiles on the square's surface. As I progress towards Paul Kruger street the landscape starts to ripple, swell and heave. Elements of planting and seating start punching through this seemingly unifying surface, and unknowingly signals a change somewhere deeper underneath.

Arriving at the Paul Kruger street edge with the Natural History Museum keeping a careful watch over my every move, the new museum's entrance presents itself, opening up in an embrace, tempting me to come inside.

Descending down the ramp I am only afforded glimpses into the flanking spaces. Gradually I feel the museum's presence and I finally comprehend the architecture's humble approach to its context.

Once inside, I immediately notice the texture of the space. Not only in the use of the off-shutter concrete surfaces that change depending on the spatial programme and configuration, but also in the way that light and shadow is used to animate the space itself, providing depth and emphasis throughout. The passage of time also becomes tangible through the interplay of these shadows.

Careful consideration has been given to the choice of materials and colour palette in order to convey a reserved elegance. In this (anti)monument to typography, concrete, glass, steel and timber work harmoniously together to form a minimalist backdrop for the items on display.

Moving through the museum, it becomes evident that the transition from one space to another has been greatly considered in the design process. These interstitial spaces are treated as intermediary pause and reflect areas that forces one to take note of where you are heading and where you came from. These transition thresholds enrich the whole museum experience as one is constantly made aware of your position in relation to the architecture.

Looking around inside the building, I notice another very striking element in the design - the extensive use of skylights that frame views upwards and outwards. These linear light-lines allow daylight to flood the space and establish a relationship between what is happening on the square and what is taking place inside the museum. In addition, there are various sunken courtyards that one discovers within the museum, further strengthening the bond between above and below. These spaces offer a break from the subterranean spatiality of the architecture and allows you to recollect your thoughts before continuing on your journey.

As I exit the museum along the same ramp from which I entered, I can't help but feel enlightened - I now have a better understanding of the intricacies of typography and the vital role it plays in our everyday lives. And yes, at first, the idea of a wholly subterranean architecture is slightly unsettling, but the elegant and complex spatiality offered by *Scripted's* volumetric expression is completely and utterly enthralling.

6.4.2 THE EVERYDAY USER

Heading down to Pretorius Square to enjoy my roast chicken sandwich, I can't help to feel excited. It has been three weeks since the opening of the redesigned square, and still, I cannot get enough of this place. Everywhere people are going about their day-to-day routines. People talk about what's going on in the news, about how unreasonable their spouses can be and how much they enjoy this time of year. Kids run around chasing unseen foes, laughing and playing on the grass and between the trees and the benches.

As I make myself comfortable in the cool shade of a tree, I recline on one of the many benches strewn across the square and I think back to the opening event. It was a night filled with music performances, art installations, food stalls, old friends and new lovers - the atmosphere was electric. The city and the local community welcomed and fully embraced this new public space .

With my thoughts trailing, I sit and people-watch, one of my favourite distractions, and I notice just how many people now frequent this part of the city. Yes, it always used to be busy, but now, instead of just the daily commuters hurrying down Paul Kruger street there is a better appropriation of this space, people take notice and make use of the facilities on offer.

The typography museum that lies underfoot offers welcome distractions from the happenings on the square. Its unusual subterranean location seems to beguile people passing by and they tend to be drawn to it - if only out of mere curiosity. The museum also offers various education and community programs and with admission being free, the museum seems to ensure a constant wave of return visitors - a few of these faces look all too familiar.

As I finish my last bite of my sandwich I catch a glance of a girl inside the museum. As she moves from the one artwork to the next, she glances up and catches my eye - she smiles and waves. I wave back and then she is lost in the depths of the museum and I walk back to the office with the Highveld sun on my back and a skip in my step.

6.5 DESIGN AND CONCEPT SKETCHES

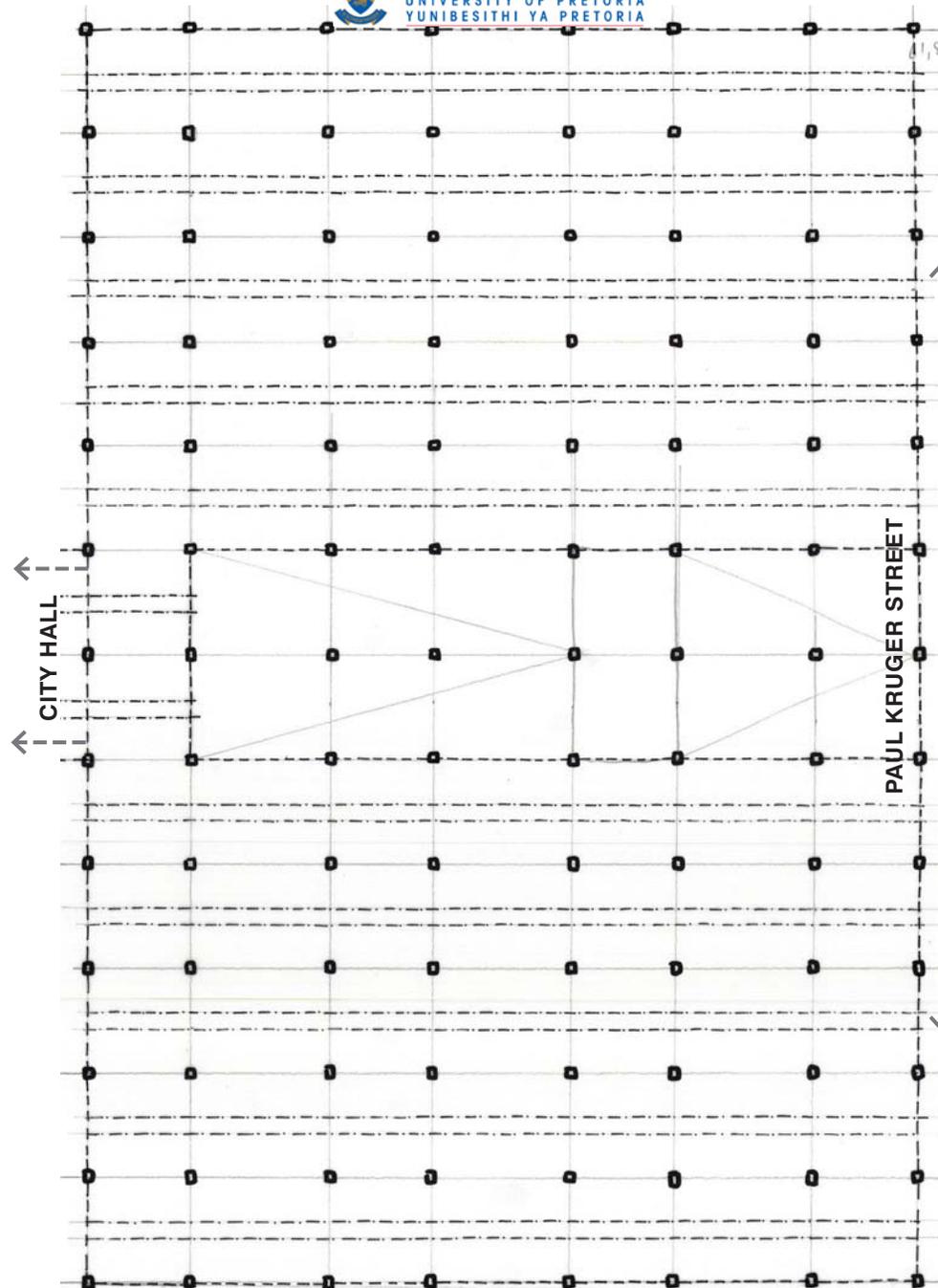


Fig. 111: Establishment of the Grid. The Grid went on to inform and guide the majority of design decisions - from surface treatments to material use and the placement of internal walls, skylights and landscape elements (Author, 2011).

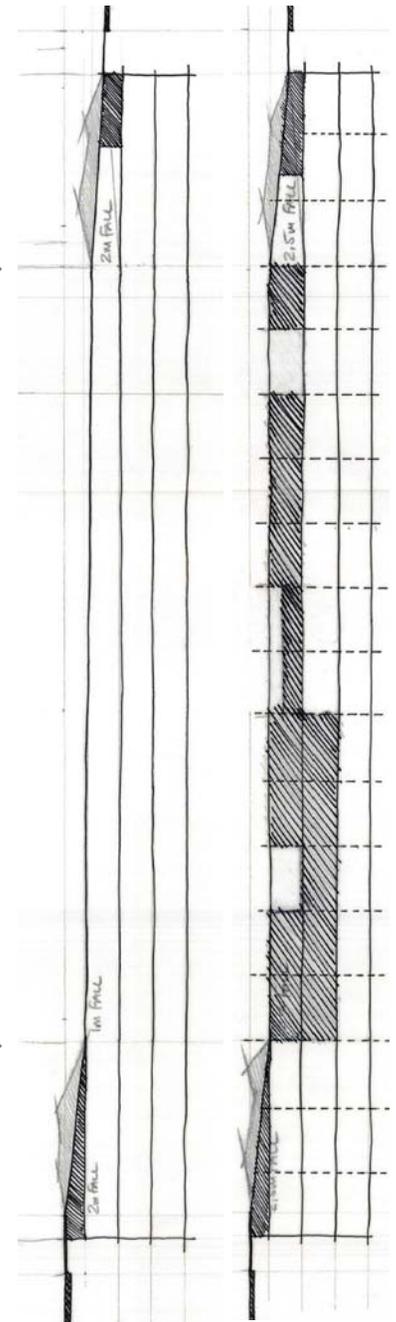


Fig. 112: Investigation of the levels on site (Author, 2011).

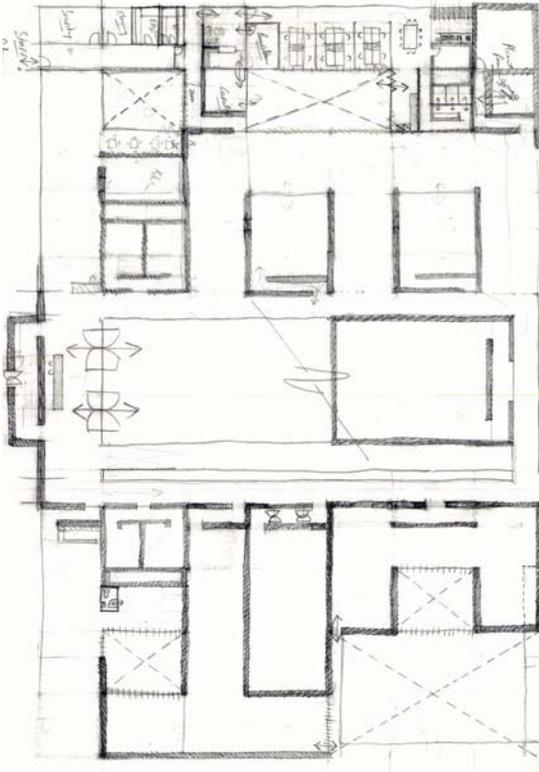


Fig. 113: Possible floor layout for the first subterranean floor of the museum (Author, 2011).

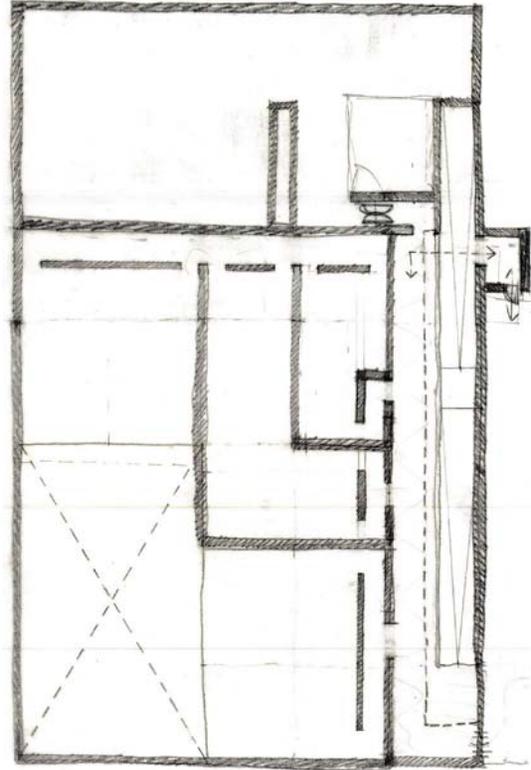


Fig. 114: Possible floor layout for the second subterranean floor of the museum (Author, 2011).

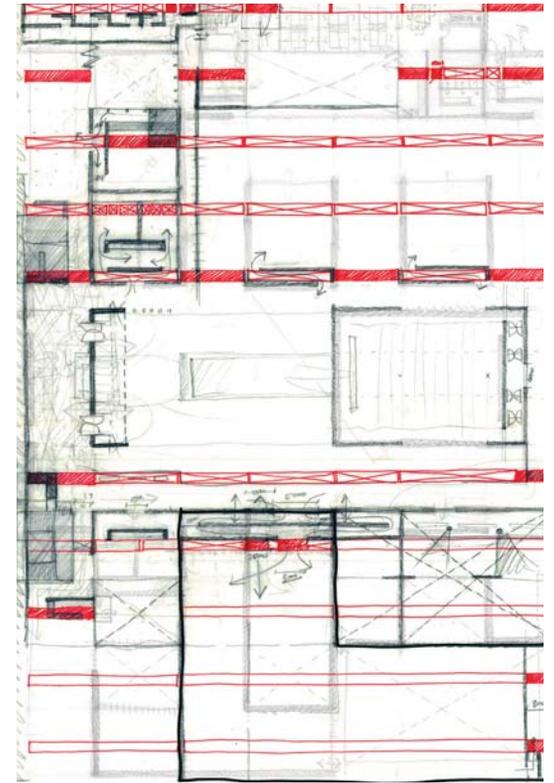


Fig. 115: Investigation of skylight placement in relation to a revised spatial layout (Author, 2011).

6.6 DESIGN DRAWINGS

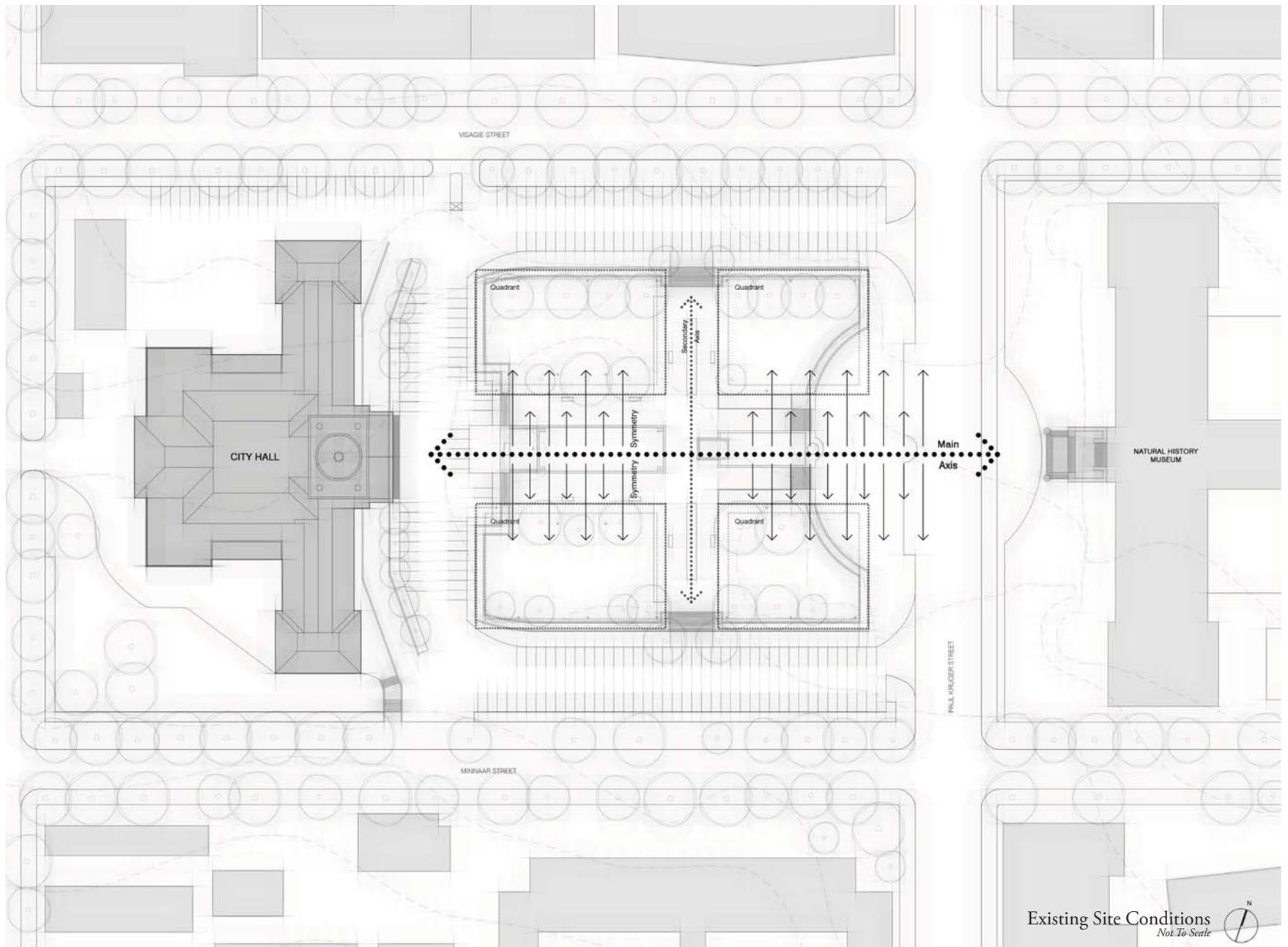


Fig. 116: Existing site conditions (Author, 2011).

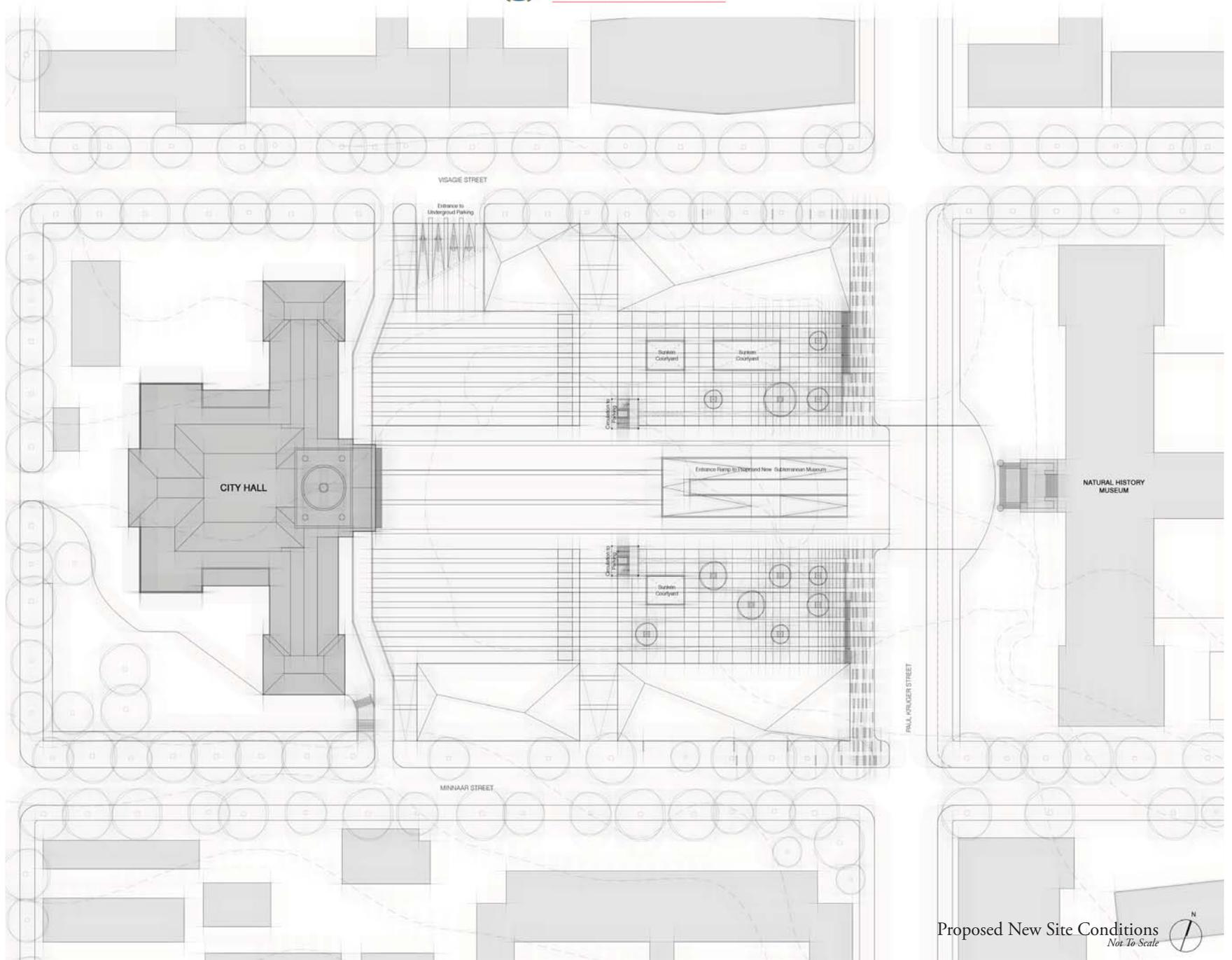


Fig. 117: Proposed new site conditions (Author, 2011).

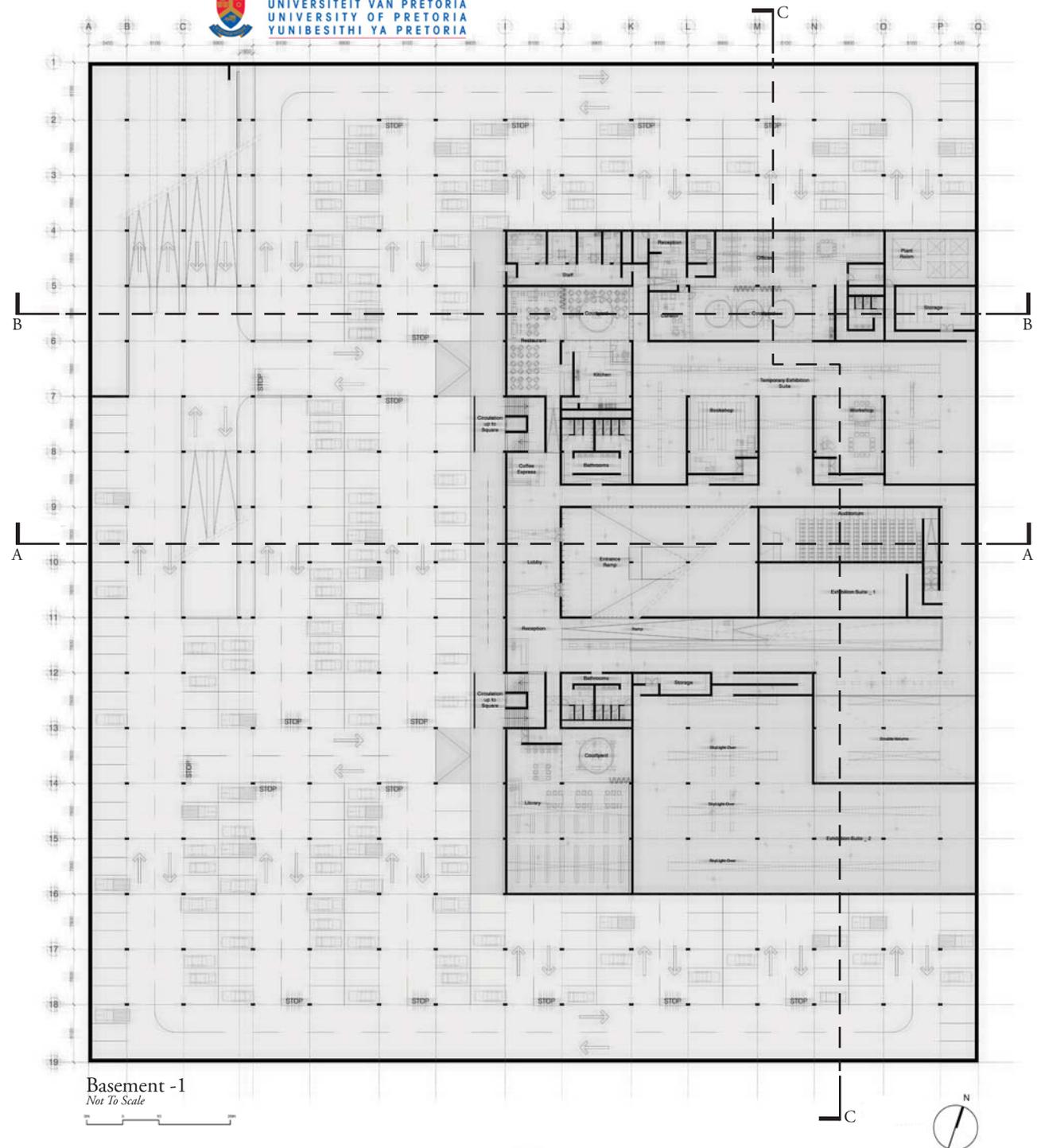


Fig. 118: First subterranean floor of proposed new museum (Author, 2011). Drawing does not represent further developed design - See Chapter 8.

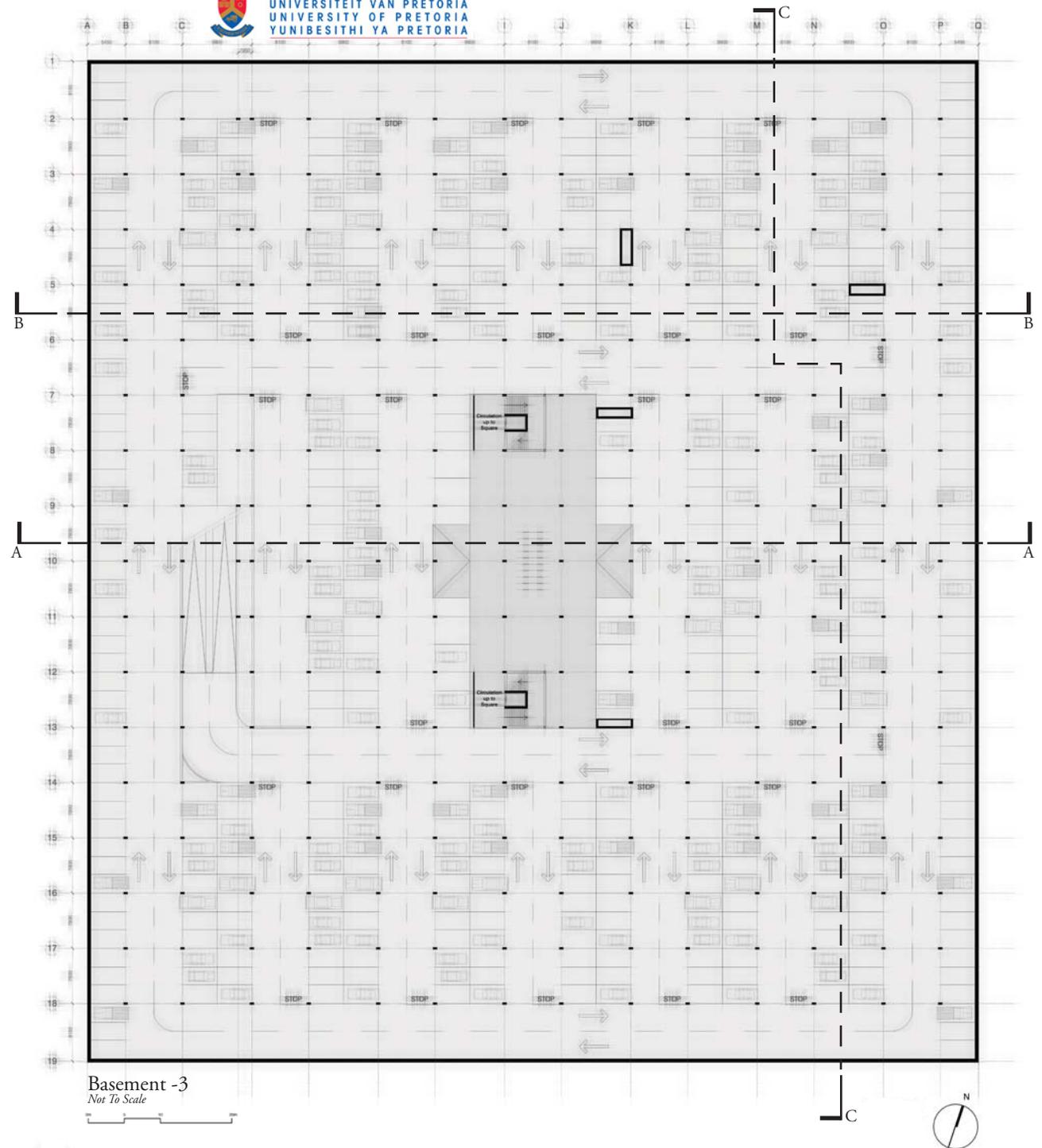


Fig. 120: Third subterranean floor of proposed new museum (Author, 2011).



Fig. 121: Interior view illustrating museum spatiality (Author, 2011).

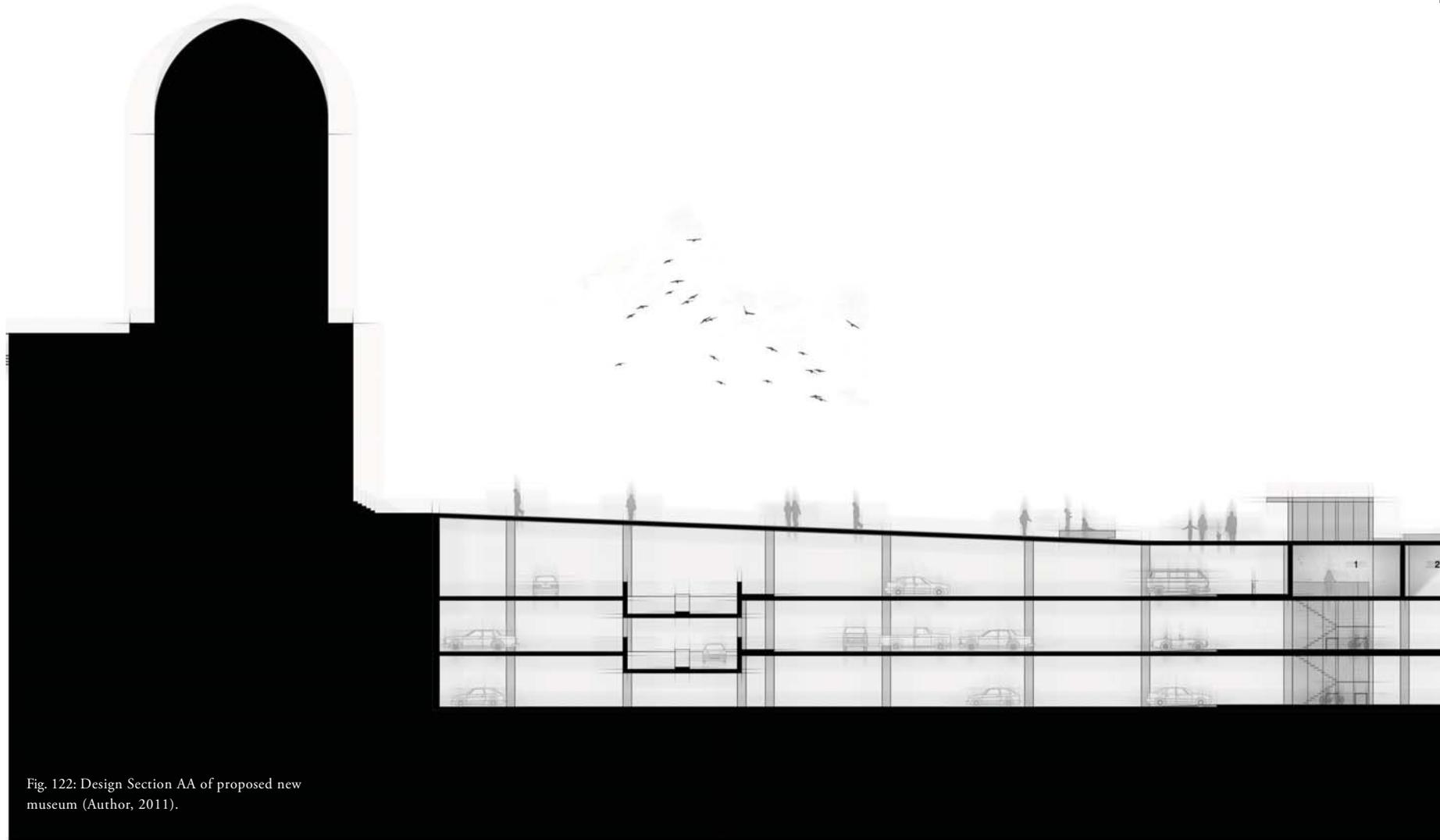
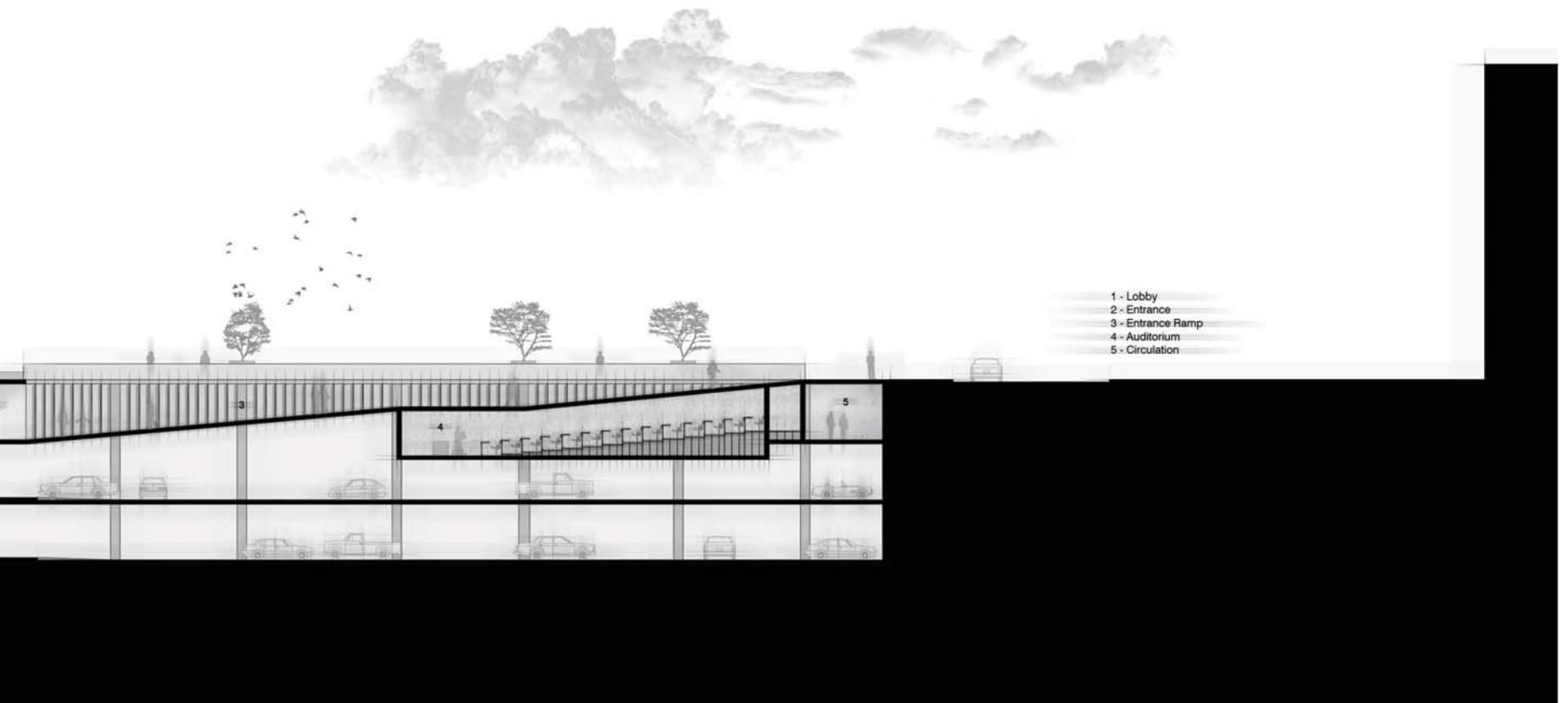


Fig. 122: Design Section AA of proposed new museum (Author, 2011).



Section AA
Not To Scale

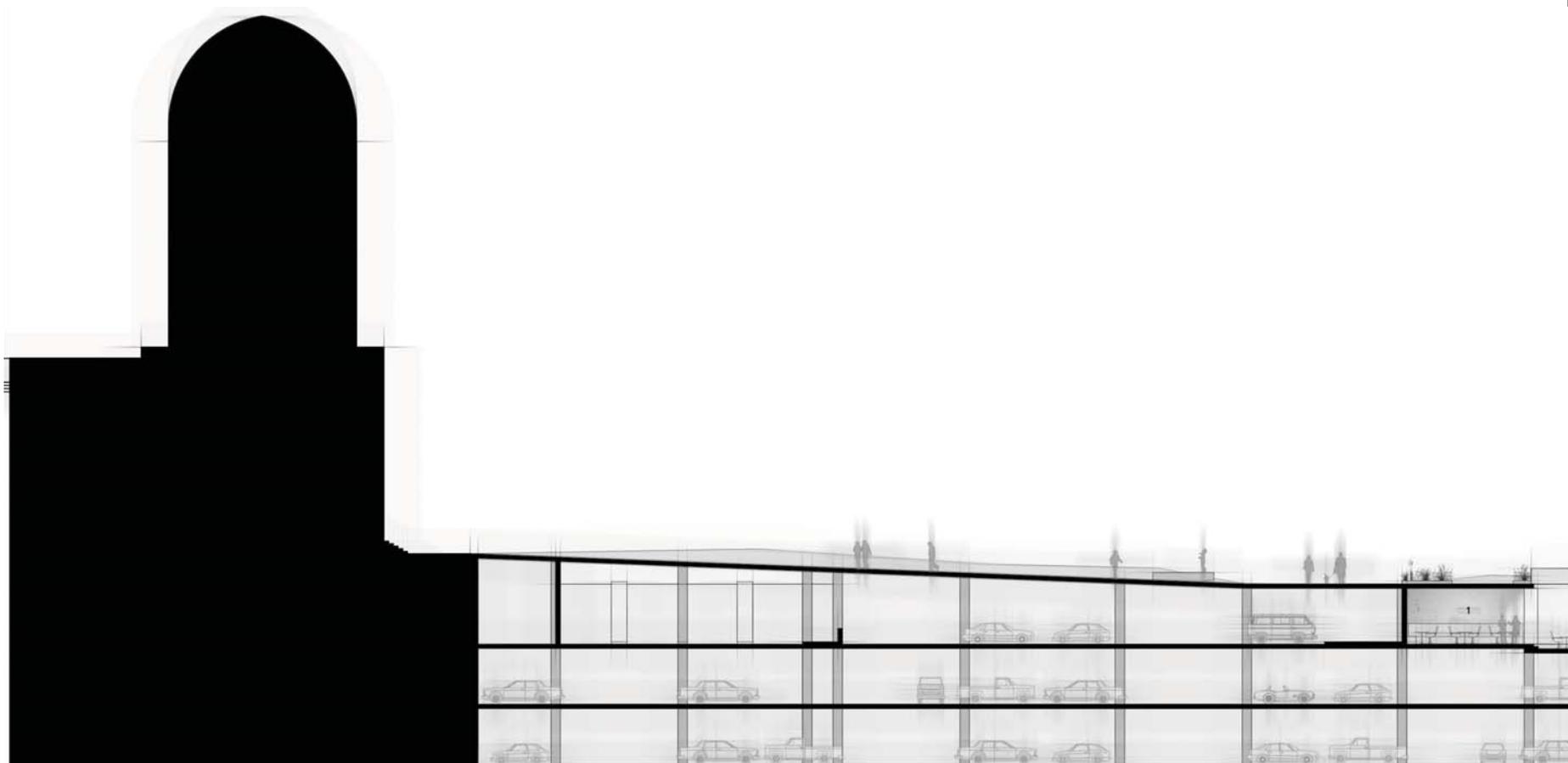
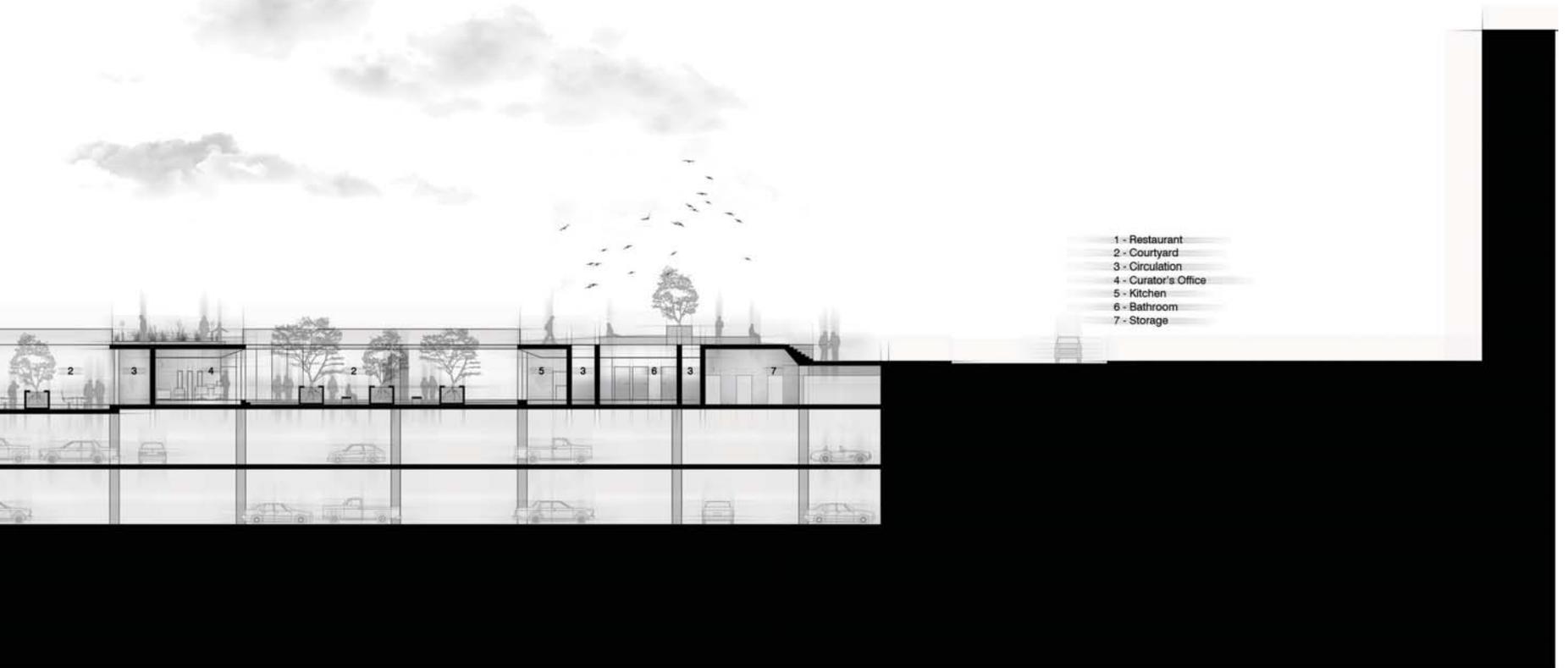


Fig. 123: Design Section BB of proposed new museum (Author, 2011). Drawing does not represent further developed design - See Chapter 8.

0m 5 10 20m



Section BB
Not To Scale

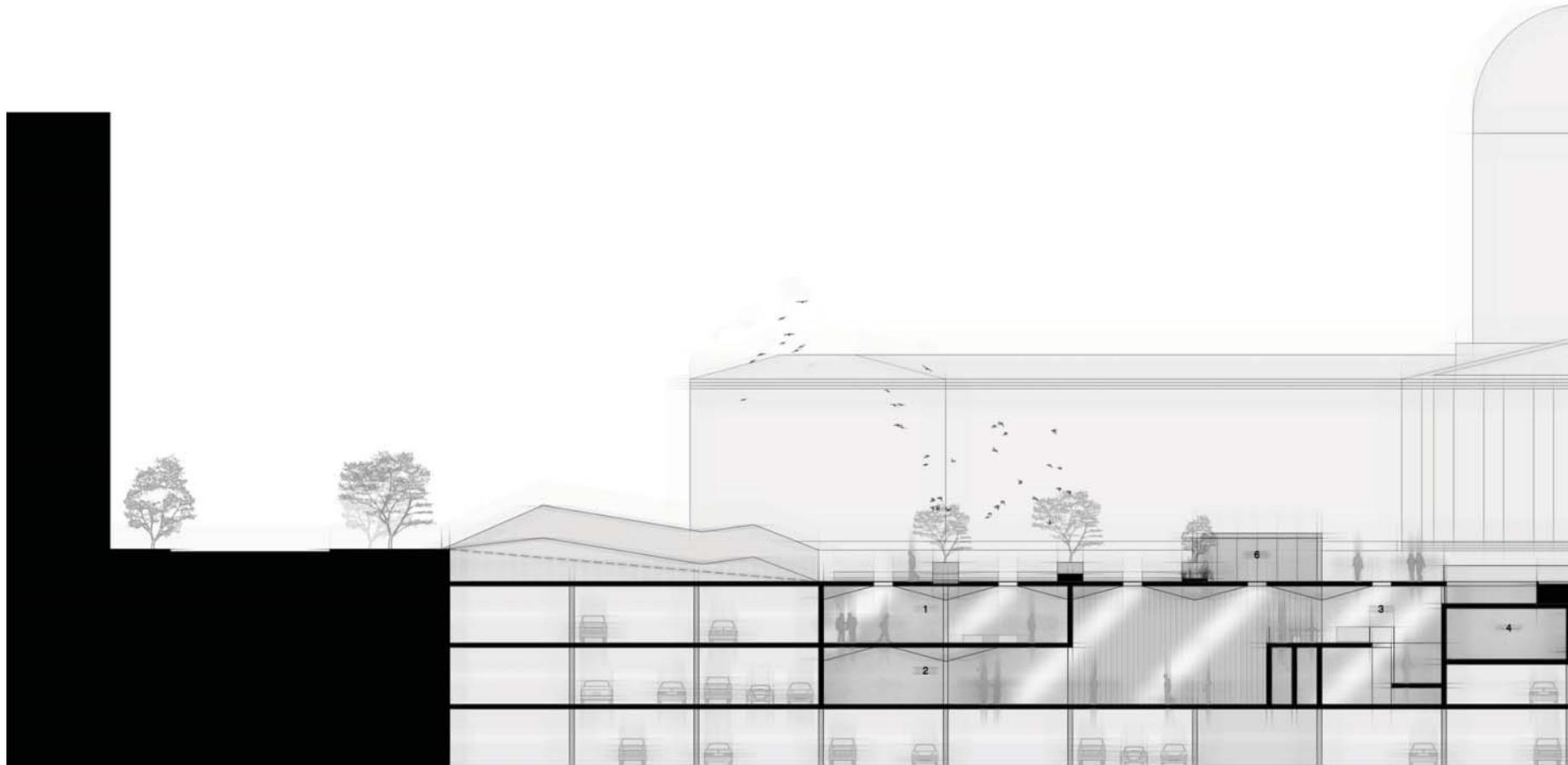
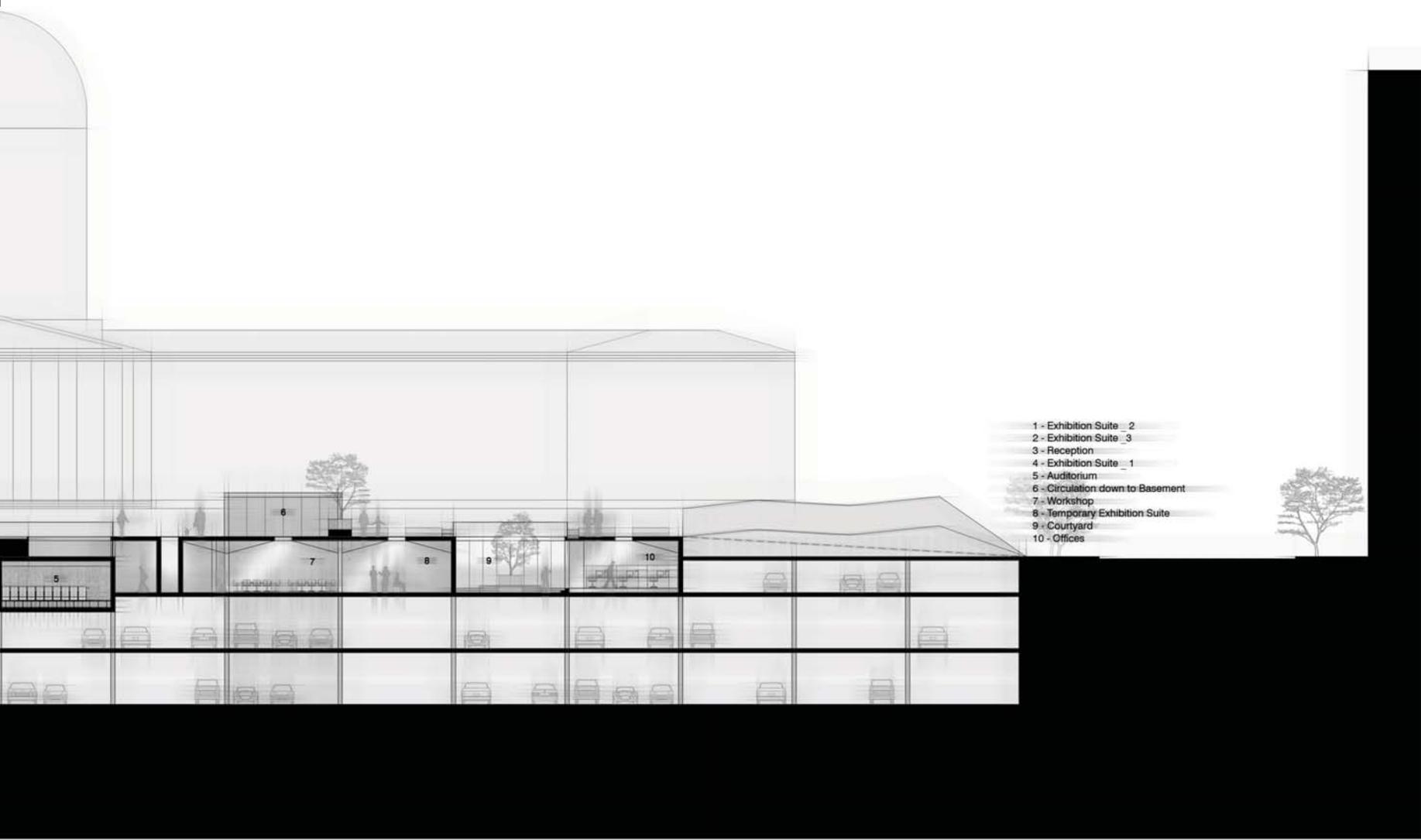


Fig. 124: Design Section CC of proposed new museum (Author, 2011). Drawing does not represent further developed design - See Chapter 8.

0m 5 10 20m



- 1 - Exhibition Suite - 2
- 2 - Exhibition Suite - 3
- 3 - Reception
- 4 - Exhibition Suite - 1
- 5 - Auditorium
- 6 - Circulation down to Basement
- 7 - Workshop
- 8 - Temporary Exhibition Suite
- 9 - Courtyard
- 10 - Offices