01_INTRODUCTION:
Wandering the streets of the Pretoria Central Business District (CBD), one would not need to look far to pick out signs of urban decay. Visibly abandoned buildings interrupt the city’s skyline and vacant spaces, serving no function except to invite informal activity, is a common feature of the city.

Many of these lost features are modern era structures and presently unkept spaces that simply need to be rehabilitated to a modified version of their original forms to be successfully integrated into the city’s composition fabric.

There are also the structures that have served their time in a past era and have outlived their original purpose. These structures have been left to decay for many years, their owners unable to find a sustainable use for them or adapt them to a suitable current use or way of living.

This dissertation puts forward a proposal for the adaptive re-use1 of an existing and underutilised building found in the Pretoria Central Business District (CBD).

As a further challenge, many of these underutilised buildings were designed with abrupt thresholds and inwardly orientated, instantly divorcing them from the public domain.

Therefore not only is the re-use of an existing building explored, but is the extension of the public realm into the building also investigated.

1.1 BACKGROUND + CONTEXT

Due to concerns for sustainable development and urban sprawl we have to address the growing concern of abandoned and underutilised buildings and cities.

Adaptive re-use refers to the process of converting an old building to new uses usually involving a re-organisation of the building within an existing envelope. Its purpose is to make an old structure viable, contemporary and relevant, and reintegrate it in its environment. (Sheppard, 1981: 601)
1. Old Pretoria Central fire station: Proposed site for dissertation
2. Cultural History museum
3. City Hall
4. Pretorius square
5. Natural History museum
6. Burger’s park
7. Klein Teater
8. Melrose House
9. Barton Keep house
10. Victoria Hotel
11. Pretoria Metro train and Gautrain stations
12. Bus station
13. Taxi rank

Figure 1.1: Aerial photograph of Pretoria CBD south of Church square, with the context area and site indicated. (Source: Google Earth)
City fabric have to be adapted to suit current users’ needs and in the process make city spaces more appealing to citizens in an effort to draw people back to the inner cities. Existing public squares and parks have to be improved, and infill of new green spaces into the city fabric should be a focus if the charm of the green periphery developments is to be challenged.

The accessibility of public parks and buildings have to be addressed for inner-city regeneration to be possible. Public amenities have to be improved, as well as the public interface of these facilities.

Underutilised spaces are the sites of the future.

The site was identified through criteria set by the author, as well as context analysis. The criteria as set by the author:

• an existing building
• abandoned or underutilised, of
• heritage value or older than sixty years
• within the Pretoria CBD with
• high potential of social interaction by the public (high traffic zone, or high potential thereof)

The selected site was chosen because of its potential to be integrated within an urban community due to its location, as well as to bring needed cohesiveness to the inner-city museumpark precinct. The site is also located within walking distance from public transport nodes.

1.2 AIM

The aims of the proposed dissertation are to:

• show that it is possible to re-use an existing building in the Pretoria CBD and in doing so ‘re-knit’ the holes in the city fabric. Adaptive re-use and infill can bring new life to abandoned/underutilised places (building and context).
• promote public space through the new intervention (place making) and the accessibility of it.
• use heritage as catalyst for regeneration through adaptive re-use, by conserving the existing structure, but at the same time adding value through the new intervention.
• implement and integrate the new within the existing, but also contribute in developing a new identity, while respecting the existing.
• implement a new contemporary tectonic that can stand juxtaposed to the existing tectonic, the then contemporary. Through the investigation, parallels will be drawn between the existing tectonic and the possible new tectonic in order to find the contemporary tectonic (language) for the existing one.

1.3 DEFINING THE PROBLEM

The goal of the dissertation is to investigate the problem of underutilised buildings and cities, and in doing so contribute to a good urban environment,”the good city” according to Stern (2003: 21), in spite of the deterioration of these urban spaces due to their often inability to adapt to current use and living. The dissertation will attempt this through layering as a tool for the analysis of the existing as well as a design generator.

SPECIFIC PROBLEM

This dissertation will investigate the re-use of the historic old Pretoria Central fire station into a public building, as well as
the sensitive integration into the inner-city museum/historical precinct of Museum Park, in Pretoria CBD. The dissertation will also attempt to make the city spaces more user friendly and cater for the public user’s needs.

**SUB-PROBLEMS**

Possible sub-problems that might be encountered during the research stage and the proposals of the urban design and building intervention:

- Public buildings are not very accessible due to barriers and edges, like palisade fences. These barriers will have to be removed to make the urban environment function successfully. Once these barriers are removed, security should be considered in the design.
- Redesign of the public interface or reception areas to make these buildings more accessible and inviting.
- Address the public’s perception that museums are for the elite. Re-branding of museums might have to be considered.
- Re-programme or add additional public programmes to the existing museums to make the programme more public orientated. This can help change public perception.
- The pedestrian environment and infrastructure must be investigated. Improvement on walkways, pedestrian crossings and lighting might be necessary.

### 1.4 ASSUMPTIONS & DELIMITATIONS

- No original drawings exist of the current building(s).
- Hard copy drawings from 1998 of the proposed Discovery Museum for Children were in the possession of Museum Park.
- These hard copies, together with on-site measurements taken by the author, site visits, photos and drawings of similar buildings, informed and assisted in drawing the existing buildings.
- In no way should these drawings be accepted as completely accurate, but as educated assumptions concluded from the research and analysis done by the author.
- These drawings were accepted by the author as the existing in order to propose the new design.

### 1.5 HYPOTHESIS

In an attempt to activate better use of the underutilised space, the building will be turned inside-out: the formal, inward orientated, uninviting building will be opened up to be outward orientated, flexible, public city space. The intervention will attempt to extend the public realm into the building in an effort to make the building more accessible and inviting to the public. The programme will adapt to become more public in order to meet current needs.

### 1.6 RESEARCH METHODOLOGY

Research will be done by means of literature reviews, precedent studies, field work and interviews. Context (urban, historical and social context), site and building analysis, the client and the users will be researched, to identify the current situation, opportunities and needs. All information will
be collected and assessed. To assist in finding a solution to the design problem, applicable theories will be identified, and the argument will be narrowed down to one or two main theories. Further research will be informed by precedent studies and heritage charters, and a statement of significance will be created.

The design approach is defined through guidelines and criteria concluded into set parameters compiled from the exploration into the context, theory and precedent study. The findings are applied into a design solution, showing how the problem can be solved. All aspects of the design development are solved by applying these guidelines. See figure 1.2 for a diagrammatic explanation of the process.

The proposed intervention is the product of the necessary recording, analysis and interpretation of all historical-, cultural- and social values applicable to the specific site and it’s setting (both historic and current), as well as the theory and the design concept. See figure 1.2

1.7 CLIENT + PROGRAMME

On embarkment of the dissertation the proposed client was Museum Park, an Article 21 organisation establish in 1995, whose main objective is the marketing of museums in the inner-city of Pretoria. Museum Park is currently located in the Old Pretoria Fire Station building. After the context mapping and analysis were done it was decided that the City Hall is a more appropriate location for Museum Park’s office. In accordance with the museum nature of the area it was decided to incorporate a new museum or cultural centre for architecture.

The new proposed client will be institutions and councils within the urban design and architecture professions partnered under one umbrella. They will all be represented together under one roof. This will create a platform for professionals and the public to interact.

1.8 OUTLINE OF STUDY

Introduction:

Chapter 1: Background and context, aim, problem, hypothesis, methodology and introduction to the client.

Exploration: will conclude in guidelines for proposed development:
Chapter 2: Theory, heritage charters and precedent study.
Chapter 3: Context: location, background and information, mapping and analysis, proposed urban framework, site allocation and justification.
Chapter 4: Site analysis: neighbouring buildings, urban conditions and problems. Building analysis: history, uses, alterations, structural analysis, spatial analysis, identified problems and statement of significance.
Chapter 5: Client and programme.

Development:
Chapter 6: Design development.
Chapter 7: Technical development and technical precedents.

Product:
Chapter 8: Drawings.

Conclusion

2 An Article 21 company is a South African nonprofit organization. Any income goes towards maintenance and/or administration.
Figure 1.2: Diagram explaining the methodology used. (Source: Author)