

C O N T E X T S T U D Y



3.1 INTRODUCTION

The selected site for this study, the Old Pretoria Fire Station (OPFS), is found on the corner of Bosman and Minaar Street in the South West corner of the Pretoria CBD. This chapter addresses the context in which the OPFS is located. Relevant urban frameworks pertaining to the design investigation are identified. The history of the site is documented and a statement of significance is included. Further, the OPFS is documented and analysed in terms of spatial organisation, materials, systems and services.

The following criteria were used to identify and select a site for investigation:

- Be located close to educational facilities;
- Be in proximity to major transport routes; and,
- Be within the vicinity of organisations and companies that can play a part in empowering the African girlchild.

3.2 MACRO CONTEXT

The chosen site is located within the context of the City of Tshwane Inner City Development and Regeneration Strategy. This strategy seeks to “...celebrate the national capital and reposition the inner city as a vibrant cultural and government centre” (CultMatrix, 2009:8).

The strategy identified a number of interventions:

- Announcing the destination: Design of gateways into the Inner City, e.g. at Paul Kruger Street Station;
- Cultural Circle: Town Hall Station near Museum Park;
- Capital Precinct;
- Mandela Development Corridor and Apies River Precinct;
- Tshwane Crossing;
- Zone of Urban Regeneration: Marabastad;
- Movement: BRT and other modes; and,
- Exceptional Public Environment: Improvement of public spaces.

The selected site is situated within the Cultural Circle intervention, which is concerned with the “...identification of all existing cultural landmarks and facilities and the enhancement thereof, as well as the development of new, contemporary cultural landmarks” (City of Tshwane 2005). The proposed design delves into the representation of the African Girl Child and African feminism which form part of cultural issues within both the South African and African context. This strategy will aid in identifying cultural activities within the micro and macro context.

The strategy entails less formal cultural zones such as markets, street performances and small businesses (City of Tshwane 2005).

3.2 MACRO SITE ANALYSIS

The macro site analysis seeks to investigate what is happening within the greater context that applies to the design investigation.



Figure 3.1: Visagie and Minaar Street as access routes to the formal historical and cultural spine (Author 2015)



- Less formal cultural zones (Markets, street performances, small businesses).
- ✚ Axis of expression
- Pedestrian routes connecting major places of interest

Figure 3.2: Cultural Circle intervention (City of Tshwane 2005, edited by author 2015)

3.2.1 Transport

The Old Pretoria Fire Station, found on the corner of Bosman and Minaar Streets (figure 3.2), is located along major transport routes, indicated in figure 3.3. There are a number of Gautrain bus stops found on Bosman street which run parallel to Paul Kruger Street, whilst Minaar street was upgraded by closing off the west end resulting in less vehicle movement on the street. Visagie and Minaar act as access routes to the formal historical and cultural spine located between them.

Pedestrian movement along Paul Kruger Street depicts it as a primary route due to its connection with the Pretoria Station, while Bosman Street acts as secondary route, feeding out or into the primary route. The accessibility and ample provision of public transport will aid in the movement of the African girl child to and from the site.

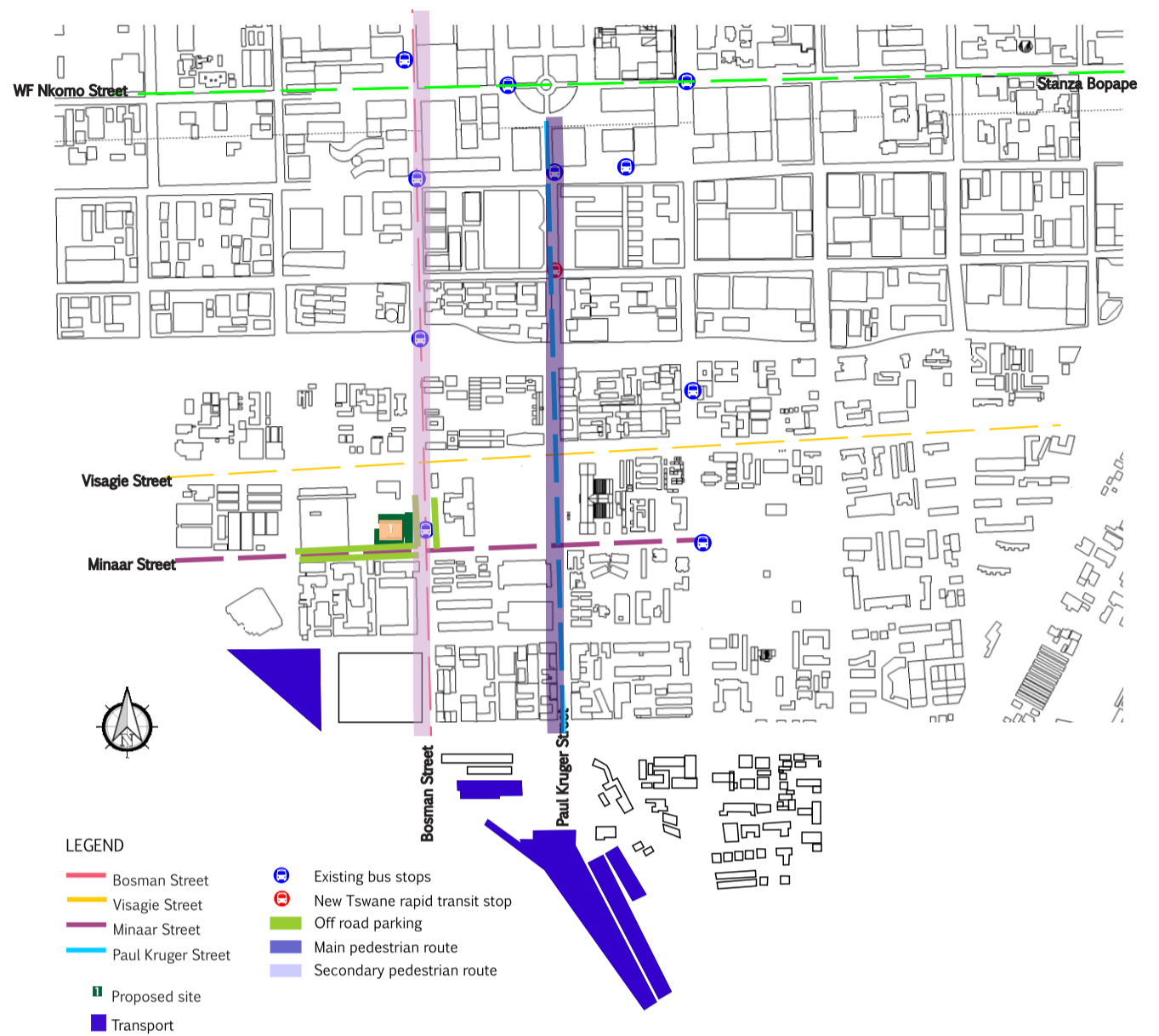


Figure 3.3: Transport mapping within close proximity to the proposed site (Author 2015)

3.2.2 Use zones

The use zone mapping reveals that the proposed building is surrounded by a variety of uses: to the west of the building there are industrial and governmental uses, to the north is mixed-use facilities, educational facilities and offices. To the south there are commercially zoned buildings and transport nodes, and east of the site has majority residential use from where the centre's African girl child will come.



Figure 3.4: Use zones in the greater context (Author 2015)

3.2.3 Educational Facilities

Educational facilities within the greater context reveal that the current target age group for the African Girl Child Centre are educationally catered for within the city centre and she will therefore be looking for study or recreational facilities afterschool.

The facilities indicated in figure 3.5 are in close proximity and cater for the formal education of students in the city centre while the African Girl Child Centre will aid in the informal education and empowerment of the African girl child.

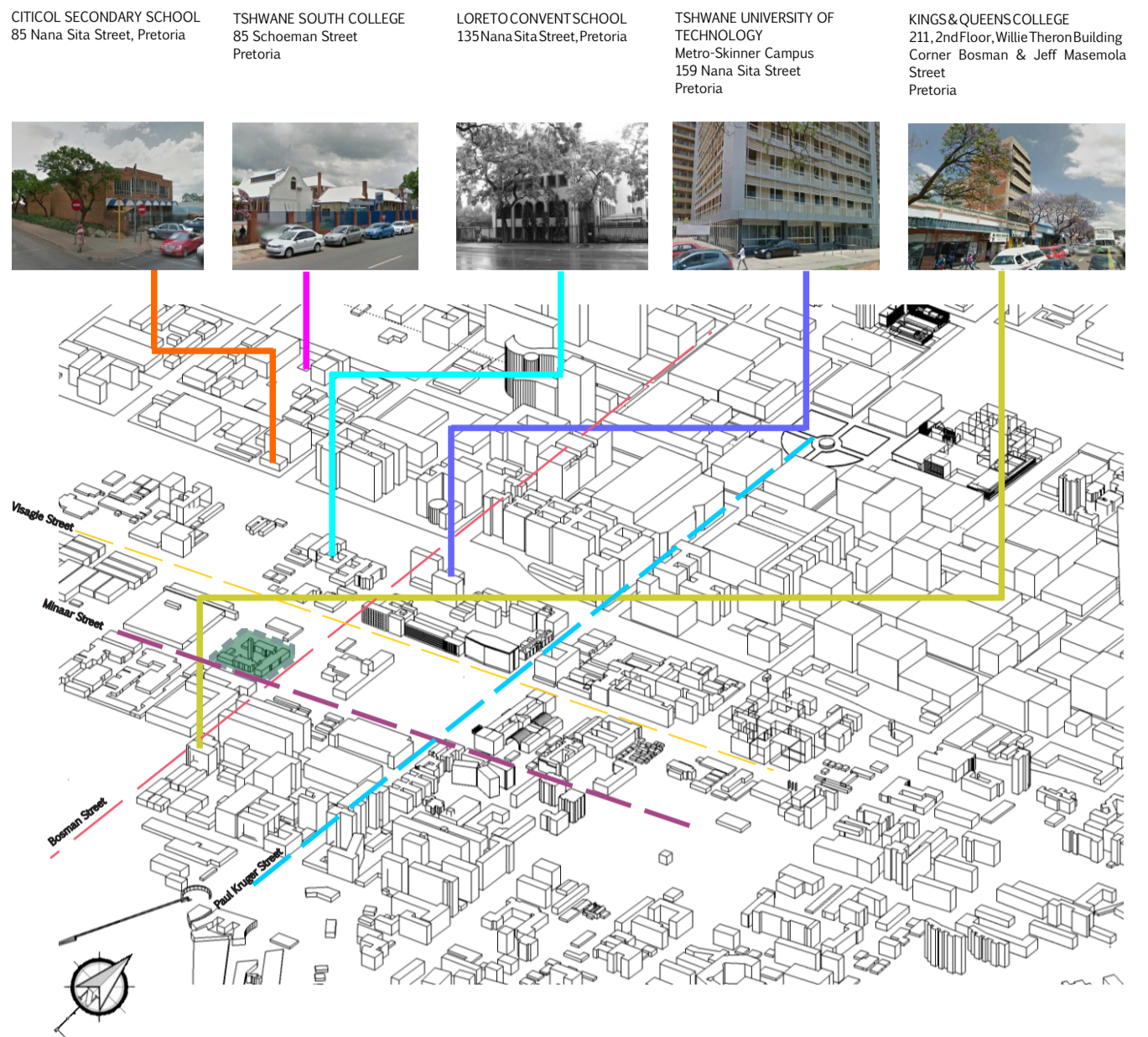


Figure 3.5: Mapped educational facilities (Author 2015)

3.2.4 Existing informal cultural activities

The informal activities found within the context (figure 3.6) are a means for the community within the CBD to express and consume what is of cultural importance to the community.

Functions such as cafes and restaurants, hair salons, tailoring, pottery and herbal doctors can be found. These existing activities will provide guidance in the choice of programme that is relevant to the context, thus tying in with the Cultural Circle strategy that the City of Tshwane seeks to implement. These existing informal cultural activities will act as inspiration for the programme of the centre.

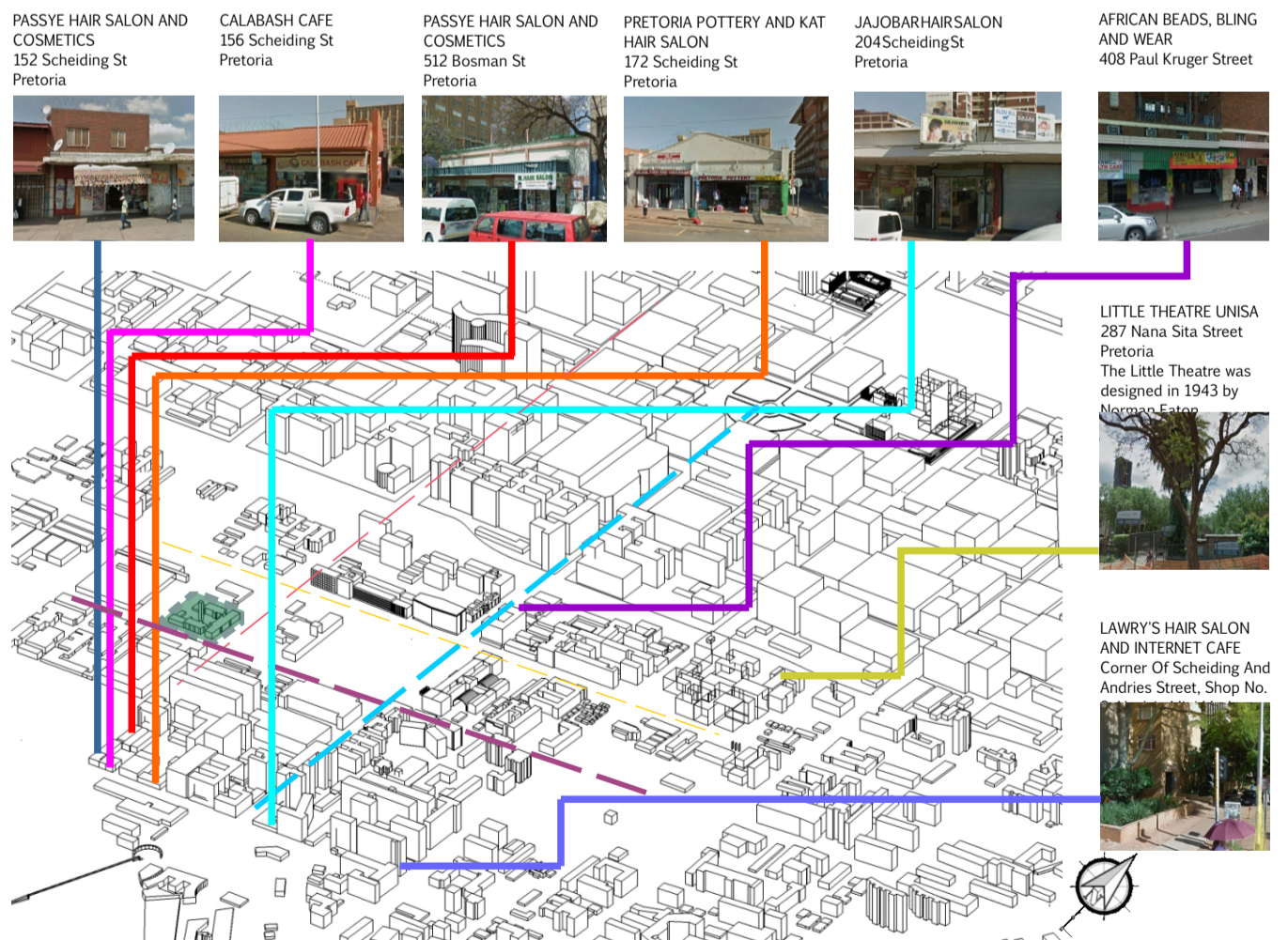


Figure 3.6: Existing informal cultural activities (Author 2015)

3.2.5 Historical Context

Pretoria was founded in 1855 and named after General Andries Pretorius, and in 1890 Sunnyside was incorporated as a part of Pretoria and subsequently what is now known as Pretoria West (South African History Online 2015).

In 1856 the first church was established on what is presently Church Square. Formerly named Market square, the area is the central point from which Pretoria grew the city's social and commercial core. Notable buildings that were established before the Old Pretoria Fire station include Loreto Convent (1878) and Ditsong National Museum of Natural History (1892). In 1912, the Old Pretoria Fire Station was built, after which African Window / National Museum of Cultural History (1921) and City Hall with Pretorius Square (1931) were built.

A second layer of historical context, shown in figure 3.10, has been investigated from the point of view of African feminism focusing on specific moments in relation to women in South Africa.

Shortly before the Old Pretoria Fire Station was built in 1912, Charlotte Maxeke, a school teacher, became the first South African Black woman to receive a Bachelor's degree. In 1918, the Bantu Women's League of the South African Native National Congress (SANNC) was formed under the leadership of Charlotte Maxeke. Another woman, Mary Fitzgerald, soon took a notable leadership role in 1921 as the first female City Councillor in Johannesburg. In 1956, 9 August, 20 000 women under the banner of the Federation of South African Women (FEDSAW) marched to the Union Buildings in Pretoria to protest against passes for black women (figure 3.9). Whilst the city of Pretoria was growing, expanding and taking new territory, so were women of South Africa.



Figure 3.7: Charlotte Maxeke (Parliament of the Republic of South Africa 2015)



Figure 3.8: FEDSAW protest, Pretoria 1956 (Women's History Network Blog 2010)



Figure 3.9: Members of FEDSAW present petitions protesting the pass laws at Union Buildings in Pretoria on the 9th of August 1956 (Women's History Network Blog 2010)

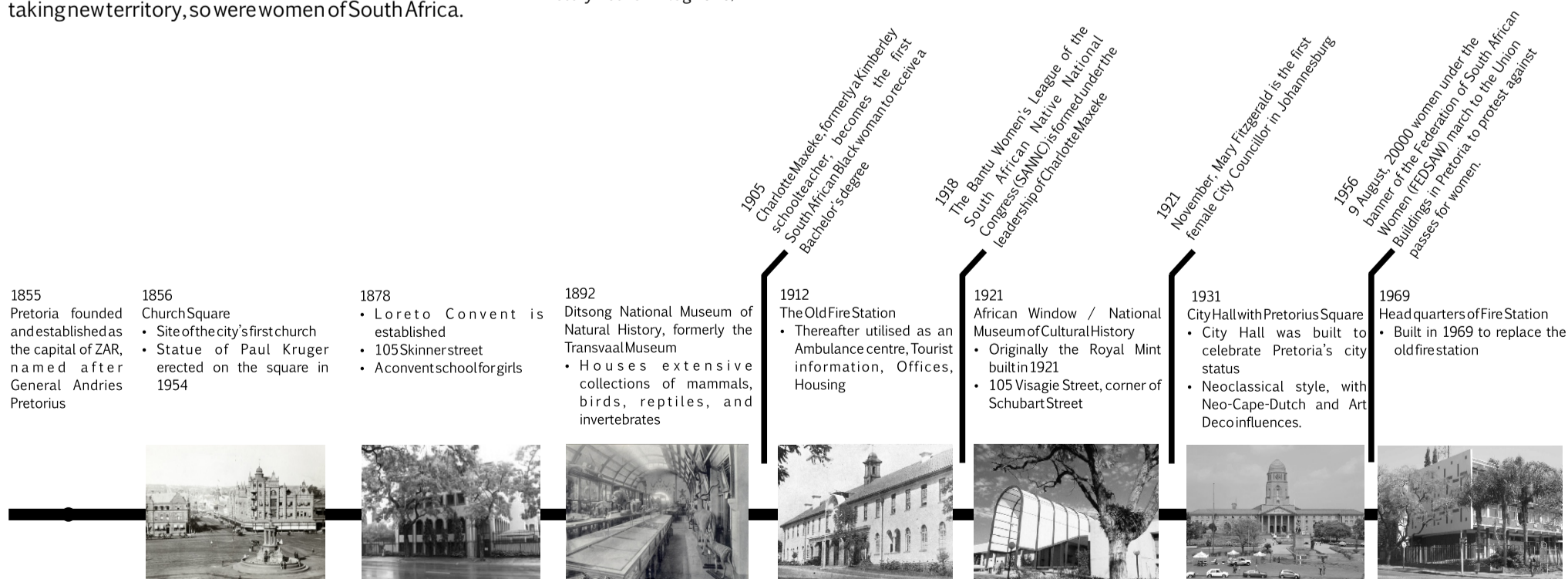


Figure 3.10: Timeline of contextual buildings and women's history in South Africa (Author 2015)

3.3 SITE ANALYSIS

The Old Pretoria Fire Station is located on the south end of Bosman street with its one way, four lane, high traffic road, and on the west end of Minaar street which is quieter in comparison with its two lane, two way road as shown in figures 3.12 and 3.13 respectively. Both streets offer a means for greater public interface between the building and the street users.

The building was designed by Cowin & Powers Architects, built in 1912 and is thought to be of an early South African Edwardian style. It was to be utilised as a fire station, which later relocated to the building opposite it.

It was later used as an ambulance centre, but when management was approached by the City suggesting that the building be incorporated into the museum park precinct refused and therefore resulted in the building becoming an island within the cultural and heritage precinct.

The proposed building defines the corner of Minaar and Bosman Street. The u-shaped building, depicted in figure 3.14, has an inner courtyard which is completely isolated from view when one stands looking in from the street. The chosen building for the first phase intervention is located on Bosman Street, in order to make the most of the high foot traffic that occurs on this street. The building is currently occupied by the Museum Park Administrators, Tshwane Leadership Foundation and Housing. This phased intervention is a reminder of the original phased intervention in which the buildings on the site were built. The initial building is the eastern building on Bosman Street, followed by the building on Minaar Street, and lastly, the northern building.

- Bosman Street
- Visagie Street
- Minaar Street

- CULTURAL AND HERITAGE CONTRIBUTORS
1. Proposed site
 2. National Cultural History Museum
 3. Pretoria City Hall and Pretorius Square
 4. Loreto Convent
 5. New Fire Pretoria Station



Figure 3.11: Site conditions around the OPFS (Google Earth 2015, edited by author)



Figure 3.12: Bosman street elevation (Author 2015)

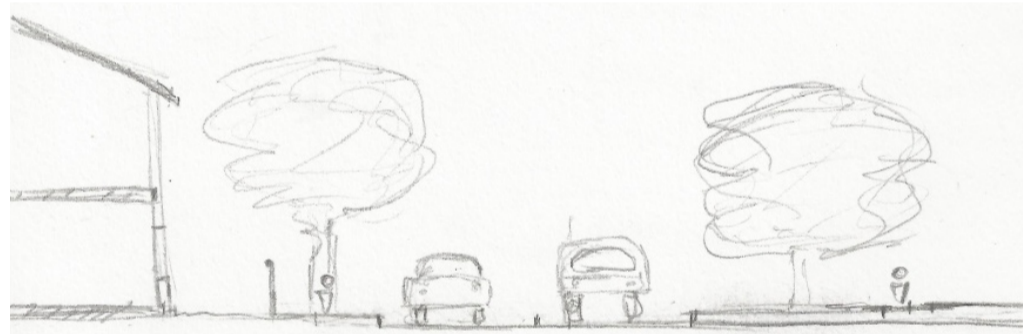


Figure 3.13: Minaar street elevation (Author 2015)

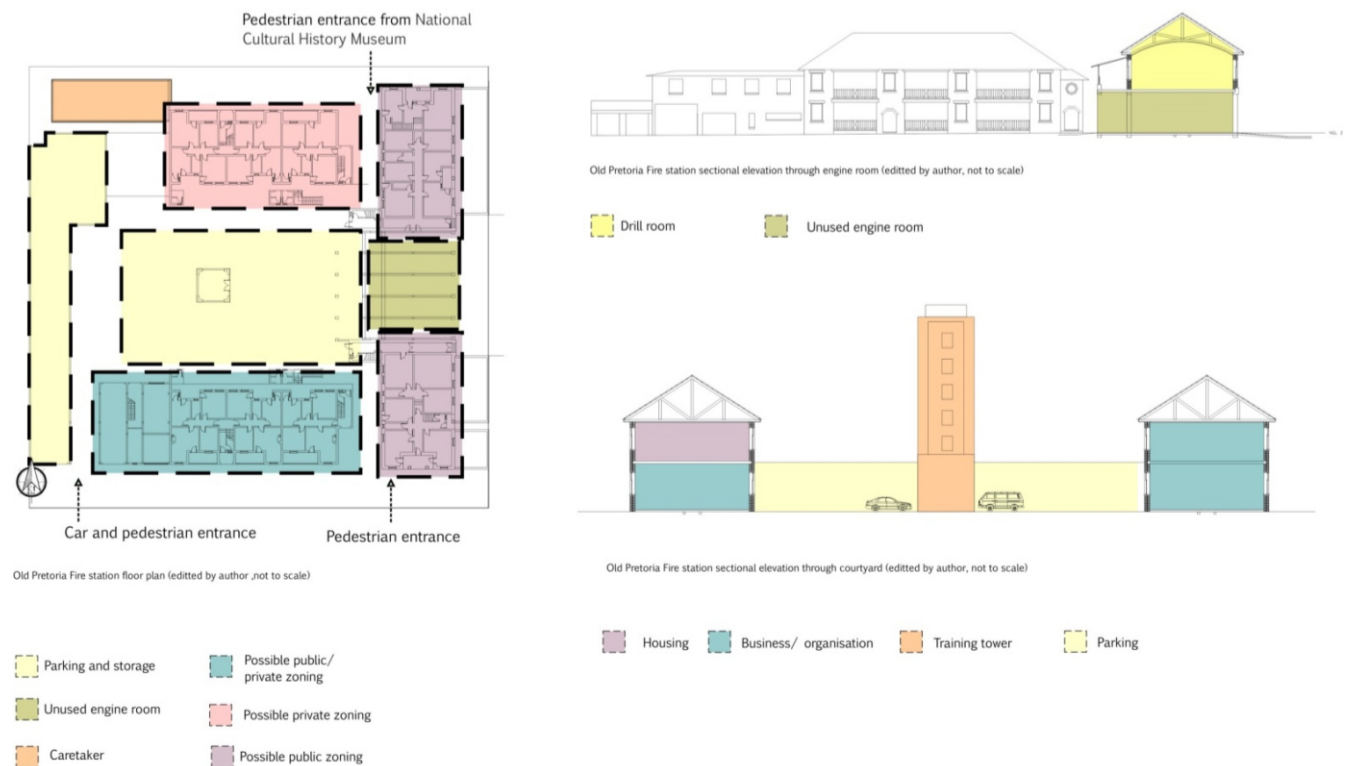


Figure 3.14: Old Pretoria Fire station floor plan and sections (edited by author, not to scale)

The site currently has a number of mixed uses, shown in figure 3.15, which do not correlate nor support one another. The existing privacy gradient does not work in aiding a public interface for the African girl child and the greater community to interact with. The gradient will be looked at on plan and in section, regarding how the gradient can move from public to private in order to accommodate the various uses.

The figure shows a brick training tower, six storeys high, with projects beyond the roof level that can be seen from the street. The main entrance to the site defined by a tower on the roof was intended to be on the eastern side of the building, located on Bosman Street. Due to the various businesses and variation in programme, the building no longer makes use of this entrance. Instead, it makes use of the entrances found on Minaar Street.

The white plaster finished building which was designed to be asymmetrical has had additional structures added on for storage and parking. The original clay tile roof was replaced with corrugated iron sheeting, whilst the wooden vehicle entrance doors were replaced with rolling steel doors and these three doors lead into the fire truck parking.

The building consists of a ground and first level. The buildings have housed various functions over the years. The wooden framed windows and doors are still in place, original fire places intact, and the timber flooring and ceiling are still in use.

The building's structure has a rectangular plan which consists of load bearing brick walls, which could present a possible challenge in terms of the spatial layout of the centre. Furthermore, concrete beams and columns can be found in the fire truck parking garage.

The existing floor plan reveals extensive use of load bearing walls, ducts and service spaces as well as circulation areas. A consideration that will be proposed is the inclusion of an elevator to make the first floor accessible.

The interior spatial quality of the OPFS reveals that the fire truck garage does not receive natural light due to the roller steel doors located on both walls. The drill room, directly above fire truck garage has windows and a balcony that permits natural light and cross ventilation into this space. This space also has a wood sprung floor, in good condition, thus presenting the ideal location for a dance / drama studio. The space has the original timber flooring and ceiling intact, made of dark timber which absorbs light, and as a result is a dark space.

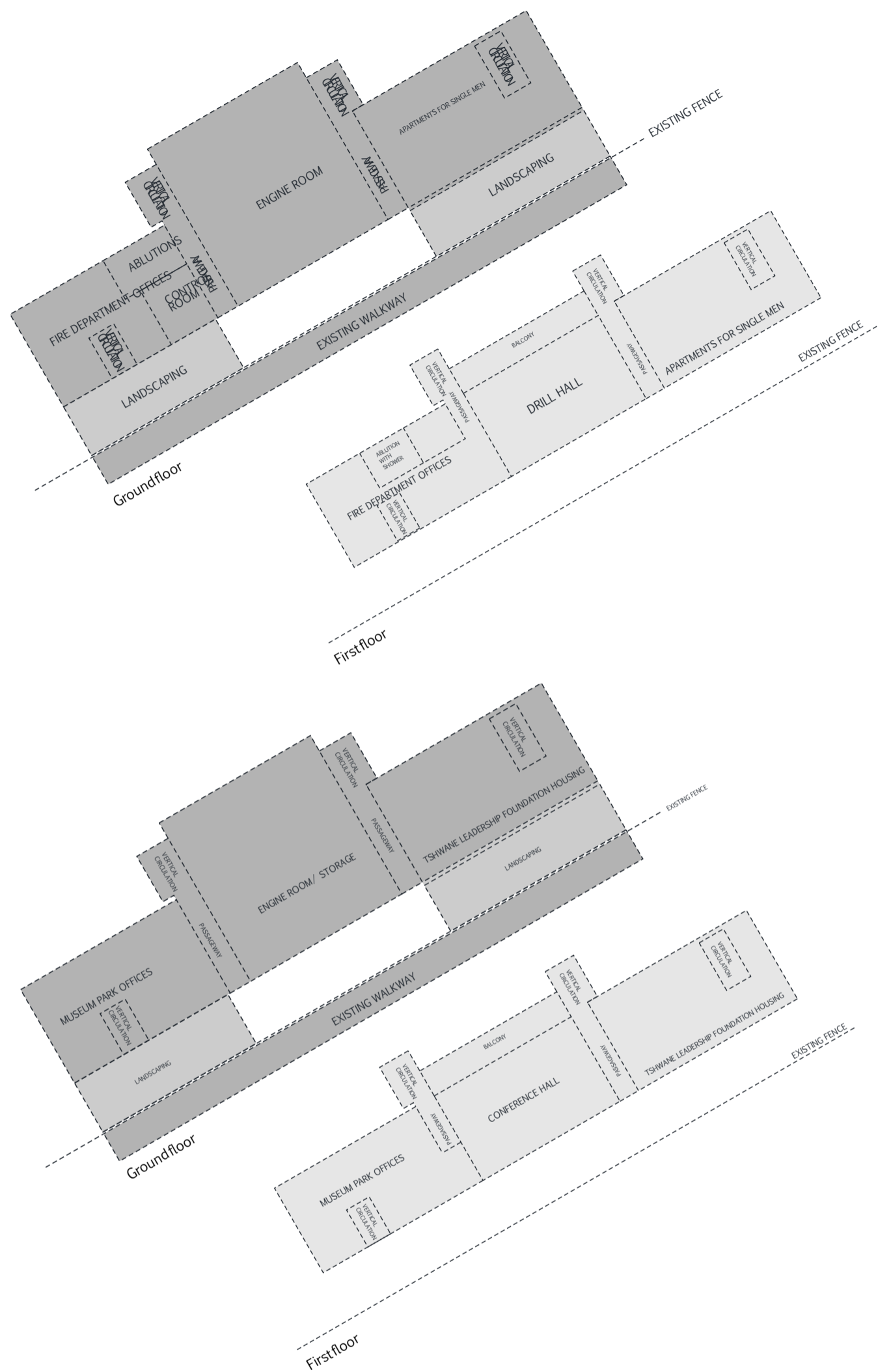


Figure 3.15: Original and existing uses within the proposed building for intervention (Author 2015)

The existing timber staircases, with wooded balustrading and handrail, and used to circulate the buildings are structurally sound despite the dark spaces of transition. Passageways are spacious enough to accommodate two people walking past each other, with the floor to ceiling height being 4480mm and the first floor is at 3770mm. The ceiling height in the passageways creates narrow, dark transition spaces with no view into the rooms, making it difficult to understand the layout of the building.

The original chimneys are still located within the space, depicted in the image below, and as mentioned before, some are still in use.

During a site visit, a basement level was discovered in the office indicated in figure 3.17 as "E". This space could be incorporated into the new intervention. It is not apparent what the space was originally used for but it is currently standing empty due to water damage caused by rain storms.

BUILDING STRUCTURE ANALYSIS

Useviability

The building in question is **currently in use ,habitable, and structurally sound**, this is not to say that the building is fulfilling its purpose in a manner that is enriching to the user.

The current programme in the number of buildings on site is varied and not unified. There is no common purpose or goal.

In projects such as this which requires adaptive reuse the designer is to question what is existing and look ahead and design for the future betterment of the building. The assessment of the building with regards to the theory in question, practicality of use and available spatial qualities reveals that the building would be able to accommodate the proposed use in a manner that create a restorative space for the African girl child.

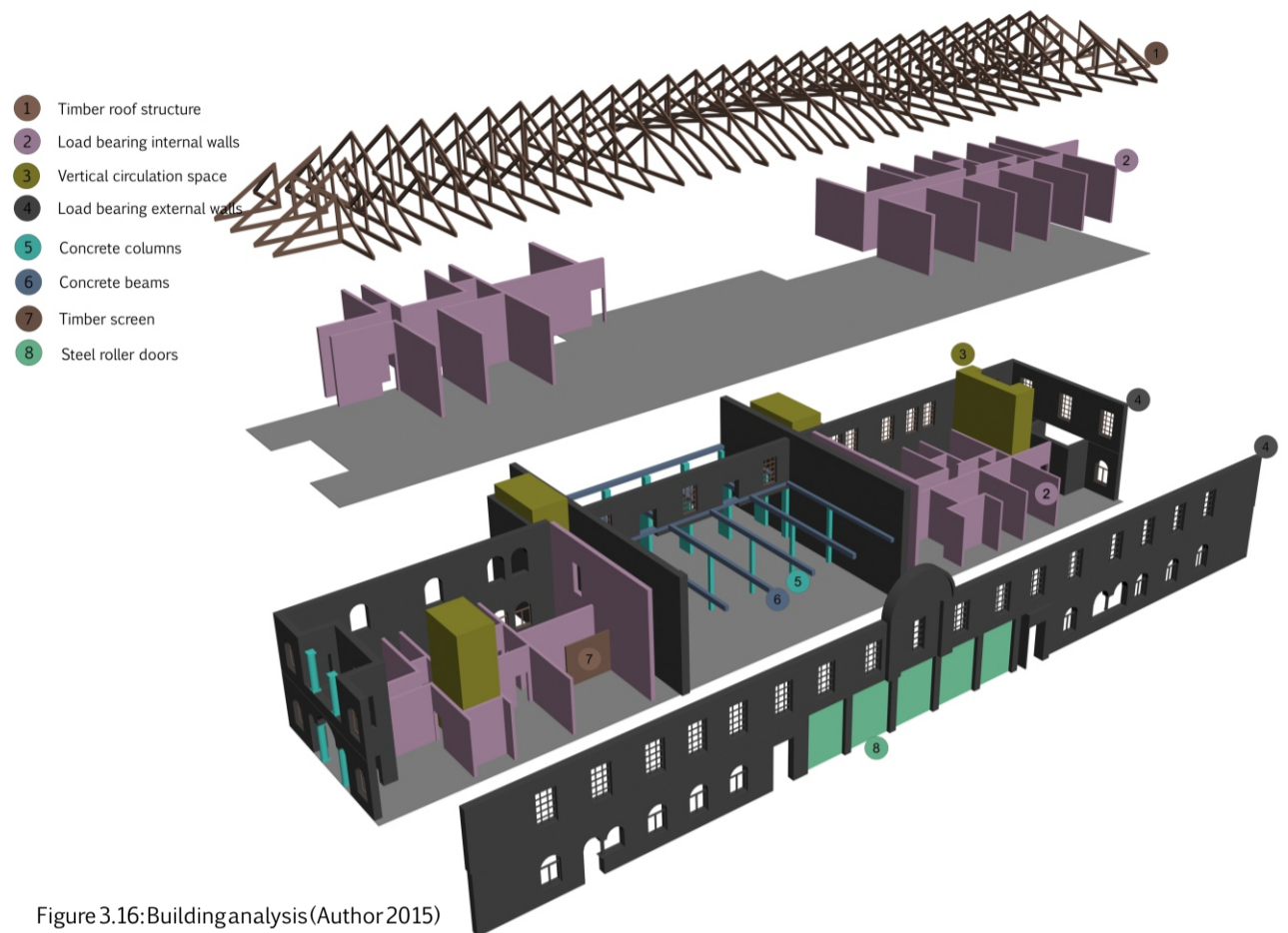


Figure 3.16: Building analysis (Author 2015)

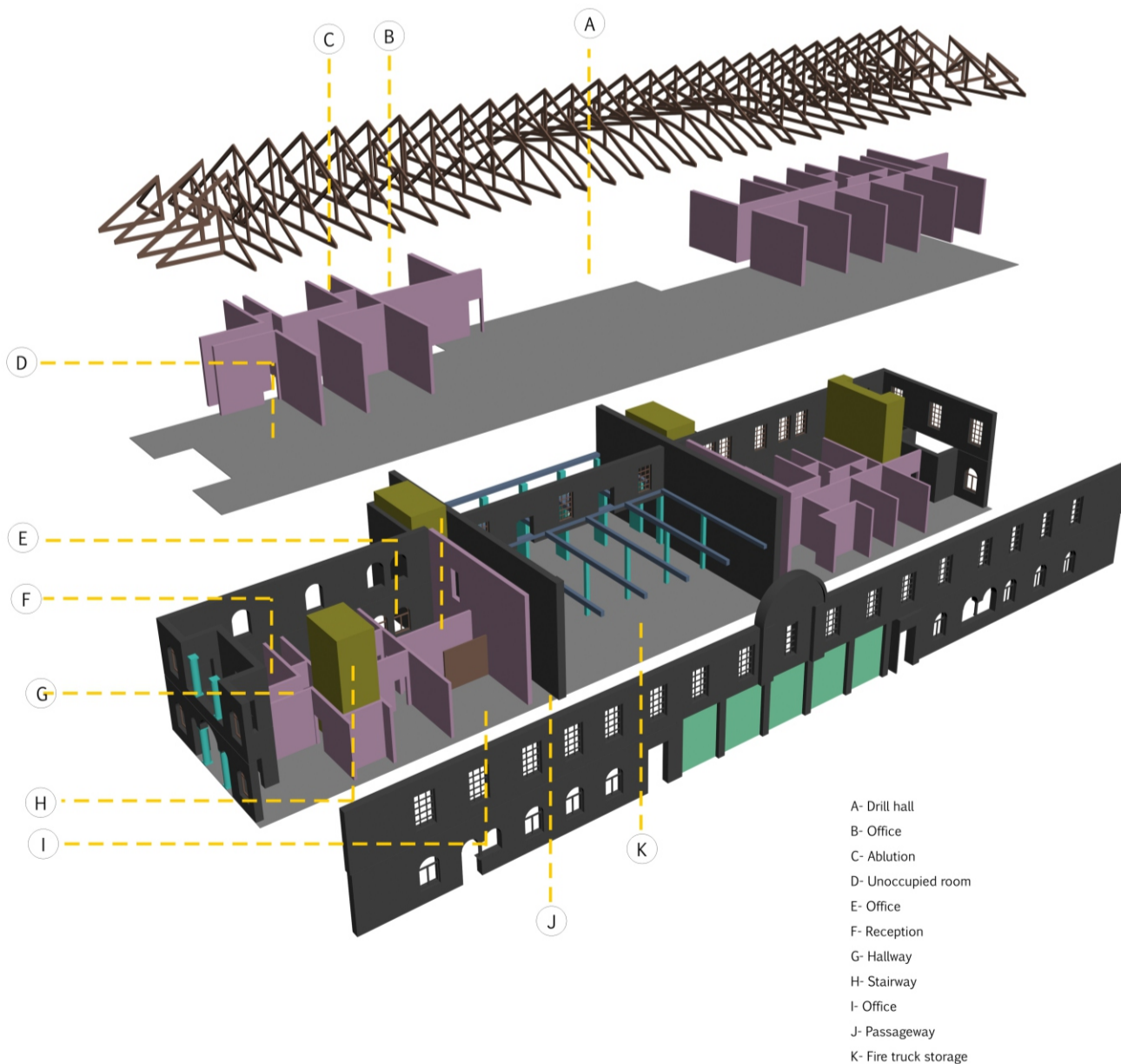
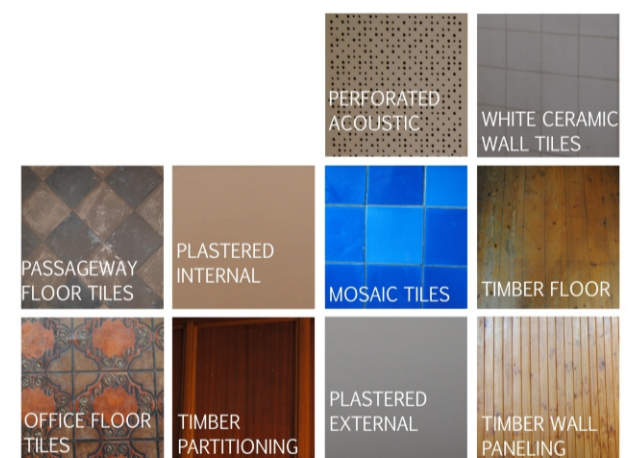


Figure 3.17: Spatial analysis of the chosen building (Author 2015)

SURFACE TEXTURE ANALYSIS

The existing surface materials within the building are of a durable nature. Existing finishes range from timber and timber based boards, stone such as slate, ceramic tiles to metal gates and glass glazing.



SPATIAL ANALYSIS

The current floor plan is not being utilised to its full potential. There are offices, function rooms, training rooms and accommodation within the PHASE 1 building.

The sectional elevations reveal that a multi use programme is a viable option in this building. The ground floor, floor to ceiling height is 4480mm and the first floor is 3770mm. Kincaid (2002:36) states that for uses D2 AND B1, of which the building would fall under that the slab height can be between 2300-2750mm and 2750-3650mm respectively. The building therefore meets this guideline.

The interior spatial quality is lacking in adequate electrical and day lighting as the internal load-bearing walls do not permit ample light into the cellular office spaces and accommodation spaces, furthermore this results in passageways being dark and cold transition spaces.

The original fire truck parking is currently being used as storage space, the steel roller doors do not permit daylight into the space, making it a dimly lit space even with electrical lighting. The numerous columns and high ceiling display potential for a striking spatial intervention.

Figure 3.18: Images of the interior spatial quality (Author 2015)



3.4 STATEMENT OF SIGNIFICANCE

The Old Pretoria Fire station as previously stated was built in 1912 by Cowin & Powers Architects, making it older than 60 years old and therefore is subject to Section 34 of the NHRA (25 of 1999) (Le Roux & Botes 1993:39).

Not much remains as a reminder of the fire station except for the training tower that to this day still stands proud and sturdy in the inner courtyard. Another architectural element that is a reminder of its previous use is the fire engine truck entrance gates on Bosman Street. The internal courtyard character of the building is to be retained.

Internally there are three steel moulded fire places (figure 3.18 inside offices that need to be considered as part of the original character of the building due to their workmanship as well as timber framed windows, timber flooring and ceiling. The original timber doors leading into the fire truck entrance and parking area have been replaced by steel roller doors. The initial clay tile roof has been replaced with corrugated iron sheeting. The existing façade is symmetrical in nature, with two niches in the façade that allow people into and out of the building. Elements such as the building corner keystone, Art Nouveau influences in fire places, bare floor boards indicate that the building is of an Early Edwardian style.

These identified elements are to be retained where needed or removed and reused elsewhere with the memory of them retained where necessary.



Figure 3.19: Steel moulded fireplaces (Author 2015)

3.5 HERITAGE STRATEGY

The heritage strategy for the intervention in the Old Pretoria Fire Station, depicted in figure 3.19, is one of integration, retaining the memory of its past whilst incorporating the new use and future into the building and site. New work is to be incorporated in a manner that is complimentary, and where demolition has been carried out the preservation of its foot print within the building and site is to be expressed with newly integrated elements.

This integration of the past, present and future aims to render the OPFS, its history, physical and metaphysical, accessible to African girl child. By exposing the building in this manner the African girl child should be able to identify with and feel empowered by it.

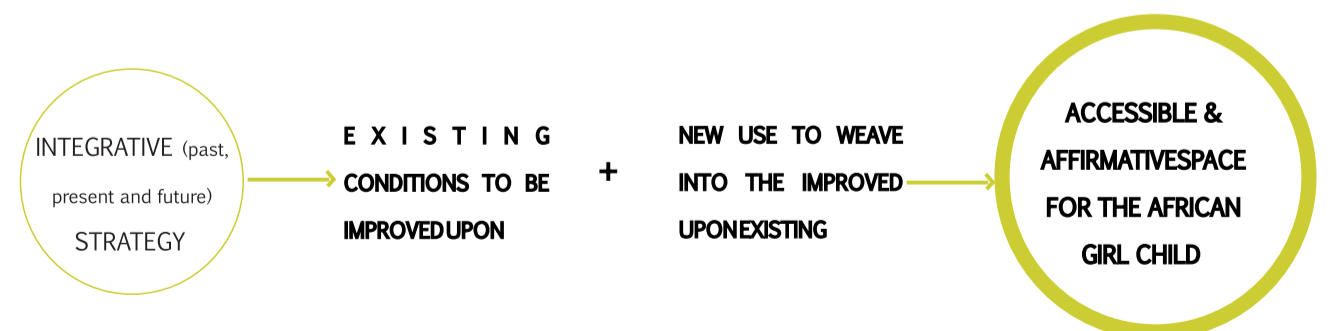


Figure 3.20 Heritage strategy diagram (Author 2015)

3.6 CONCLUSION

In conclusion, the analysis has served to highlight characteristics of the context which will aid the African girl child in her endeavour for self-empowerment. Notable observations are the educational, transport and informal activities happening in the city centre. The informal cultural activities will be drivers for the programme within the proposed centre. The Cultural Circle framework will be a great point of connection so that the proposed building does not stand alone in relation to typology within its context. The formalisation of the informal cultural activities will be of importance, the relevance of which, relating to the African girl child, will be discussed in detail in Chapter 5.

The existing building is structurally sound. However, it is neither currently utilised to its full potential nor is it managed well as some of the walls reveal damp that has not been resolved. The current users have taken occupation of the building without alteration or renovation. The proposed design will require changes to the building to accommodate the programme. The building ought to be suitable for use and so accommodating the new use in a manner that respects the heritage of the building but also looks to render the building functional.





CHAPTER 4