



“We don’t need new cities; we need to re-use and make better use of our existing urban areas”.

Robert AM Stern

“By modifying existing buildings and adapting them to new uses, costs of construction, not only in monetary terms but also in terms of embodied energy in construction materials and the design and construction process, can be considerably lower than those incurred in the development of new buildings. In addition, land as a resource is conserved and building services can be altered to reduce consumption of energy and other resources”.

Leigh Darroll
Darroll (2001: 25)

06



Introduction

As discussed in the urban framework proposal, the precinct under investigation consists predominantly of industrial/automotive building types. Most of these structures are in a poor condition and do not have any architectural significance in the context. The proposal thus states that new development is proposed for the majority of the precinct that has the described building types, done according to the stipulated guidelines, and aiming at the establishment of connections between the existing educational institutions.

There are, however, a number of existing structures in the precinct that are in relatively good condition and contribute to its architectural character. Some of these structures are built to the proposed scale of the urban framework and should thus be kept, or at least is considered for adaptive re-use purposes.

Du Toit and Karuseit (2010: 50) suggest that the presence of disused buildings in the city of Pretoria is a contributing factor in the deterioration of the integrity of the urban fabric. They further argue that the need to address the problem is compounded by ideals of sustainability, both ecologically and socially - that are currently a global concern as well as by the rapidly diminishing availability of empty sites in the cities. They conclude that it is evident that the notion of site, as it is traditionally held, is central to the problem and needs to be reconsidered.

Kincaid (2002: 7) is of opinion that the achievement of environmentally sustainable urban environment by effective and appropriate change of use of redundant building types to meet the evident new use demands, will be a continuing challenge to all involved in the decades to come.



fig.6.1. Berea Park Independent School



fig.6.2. Existing structure within city block of intervention



fig.6.3. Existing structure within city block of intervention



fig.6.4. Existing structure within city block of intervention

Chapter 6

Adaptive Re-Use

Process

Once the decision has been made that an adaptive re-use strategy is the way forward for the project, it has to be understood that a certain process have to be followed in order to make a success of the proposed project. Kincaid (2002: 12) proposes that there are a few basic options for the adaptation of buildings (fig.6.5).

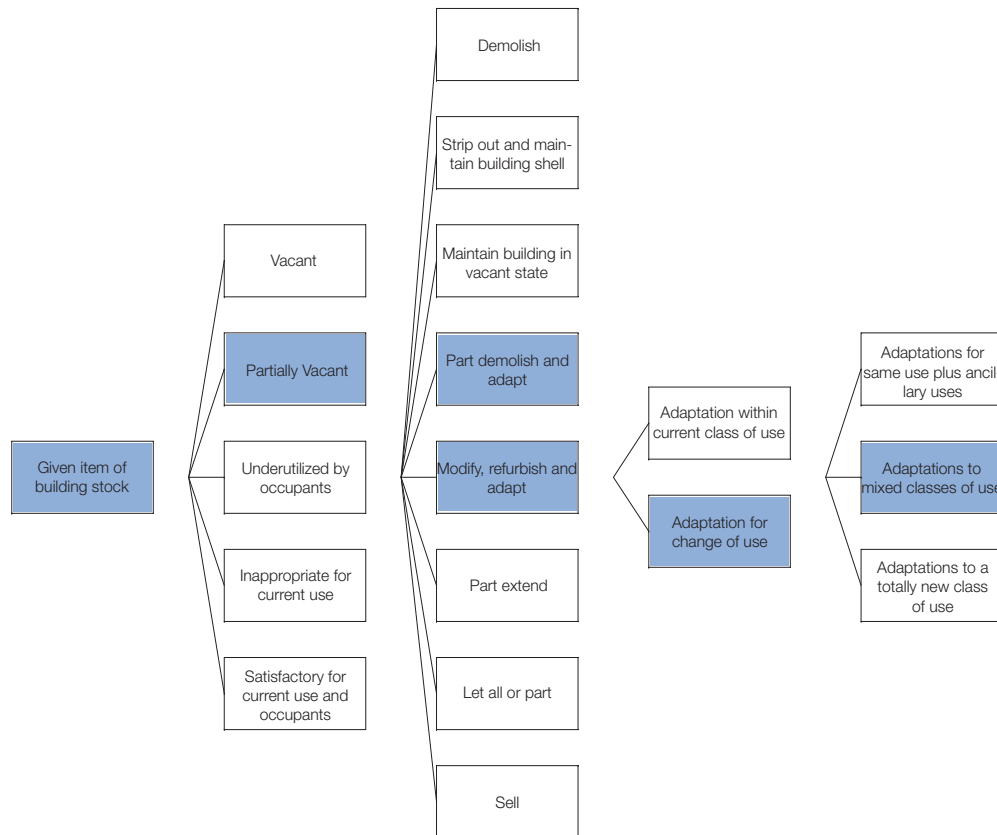


fig.6.5. Basic options for adaptation

URBED (1987: 6) summarizes the adaptive re-use process into three essential requirements that will ultimately lead to a successful project, and further divides the prescribed process into for stages:

Three Essential Requirements

- Adopt the appropriate development approach for the scheme (Conventional or Entrepreneurial)
- Make sure there is a committed driving force
- Pick a building that is basically suitable for conversion

1. Incubation Stage

- Choose a balance of uses that maximizes the use of space
- Enlist the support of the local authority early on
- Make sure the scheme is viable and sustainable for conversion (location, configuration, and condition)

2. Negotiation Stage

- Obtain the property on good terms
- Look for finance from all available sources
- Use grants to make innovative schemes work
- Choose a sound professional team
- Make sure that a reliable contractor is chosen

3. Construction Stage

- Ensure that the building works are closely overseen
- Carry out project phases where possible
- Watch the cash flow projections regularly

4. Management Stage

- Promote the scheme tirelessly
- Manage the building in an orderly way
- Continue to foster the success of the users



Statement of Significance

The Burra Charter

The Burra Charter refers to the Australia ICOMOS Charter for places of cultural significance. The charter sets a standard of practice for those who provide advice, make decisions about, or undertake works to places of cultural significance, including owners, managers and custodians. ICOMOS (1999: 1)

ICOMOS (1999: 1) states that places of cultural significance enrich people's lives, often providing a deep and inspirational sense of connection to community and landscape, to the past and to lived experiences.

The question is asked if the Apollo Building has any cultural significance. If so, to what degree and how should this be respected?

The cultural significance of the Apollo Building lies neither in its use, nor in its date of construction.

It does however hold a very significant location within this part of the inner city. The building is located on the corner of Church and Du Toit Street and is one of the landmark buildings in the precinct. It is one of the highest structures in the precinct and its glazed facades distinguishes it from the surrounding context. Architecturally the seemingly massive columns (in fact only storage areas and likely ventilation ducts that have become redundant) on the facades, emphasize the building as a vertically orientated structure. The strongest architectural quality of the building is the uniform use of tinted glazed panels as sunscreen devices on the facades (fig.6.6).

Its significance therefore lies not in its cultural connotations, but rather in its scale in relation to the precinct, and its location on the corner of Church and Du Toit Street as a prominent landmark.

Relevant articles from the Burra Charter that may influence the adaptation process is stated hereafter. It has to be mentioned that these principles will only be used as general guidance during the process and not as strict limitations to the project:

Article 8: Setting

- Conservation requires the retention of an appropriate visual setting and other relationships that contribute to the cultural significance of the place.
 - New construction, demolition, intrusions or other changes which would adversely affect the setting or relationships are not appropriate.
- (Aspects of the visual setting may include use, siting, bulk, form, scale, character, color, texture and materials.)

Article 14: Conservation Processes

- Conservation may, according to circumstance, include the processes of: retention or reintroduction of a use; retention of associations and meanings; maintenance, preservation, restoration, reconstruction, adaptation and interpretation; and will commonly include a combination of more than one of these.

Article 21: Adaptation

- Adaptation is acceptable only where the adaptation has minimal impact on the cultural significance of the place.
 - Adaptation should involve minimal change to significant fabric, achieved only after considering alternatives.
- (Adaptation may involve the introduction of new services, or a new use, or changes to safeguard the place.)

Article 22: New Work

- New work such as additions to the place may be acceptable where it does not distort or obscure the cultural significance of the place, or detract from its interpretation and appreciation.

(New work may be sympathetic if its siting, bulk, form, scale, character, color, texture and material are similar to the existing fabric, but imitation should be avoided.)

Article 24: Retaining Associations and Meanings

- Significant associations between people and place should be respected, retained and not obscured. Opportunities for the interpretation, commemoration and celebration of these associations should be investigated and implemented
- (For many places associations will be linked to use.)



fig.6.6. The Apollo Centre

Berea Park School Independent Primary and Secondary School, Pretoria



fig.6.7. Berea Park School

Berea Park Independent School was established in 2003. They moved from their previous location, the Berea Park Clubhouse, to their current premises, a warehouse building type and the Lion Bridge Building, in 2008. The school site consists of two stands arranged in a longitudinal north-south orientation, forming the eastern perimeter of the city block. The structure on the southern stand was previously used as a retail outlet of electrical supplies. A brick warehouse, where all of the supplies were stored, was built up against the back of the shop fronts and offices facing Pretorius Street. The Lion Bridge Building, an eight-storey office building type, occupies the northern stand.

On the southern stand, the shop fronts were adapted to serve as the main entrance to the school. Office space was adapted into a reception space, administration spaces, ablution facilities, and an IT-lab. The brick warehouse was adapted and sub-divided into classroom spaces. These classrooms are intended for the use of the primary school children. Another warehouse structure was adapted to serve as a multi-purpose gathering space. An openable fence connects the two stands.

On the northern stand, the Lion Bridge Building was adapted to serve as classroom spaces as well as accommodation units for teachers. These classrooms are intended for the use of high school children. Exterior spaces are used for informal exterior activity.

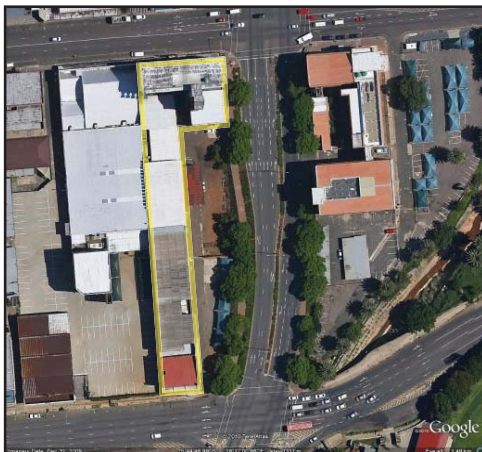


fig.6.8. Aerial Photograph of Berea Park School



fig.6.9. Lion Bridge Building (classrooms and staff accommodation)



fig.6.10. Main pedestrian entrance (previously shop fronts)



fig.6.13. Drywall partitioning used to create classroom spaces



fig.6.11. IT-lab (different previous usage visible in background)



fig.6.14. Steel supports inserted for wooden flooring above



fig.6.12. Drywall partitioning is used to sub-divide the warehouse into classroom spaces (minimum natural lighting and ventilation)



fig.6.15. Multi-purpose indoor gathering space



DANSA International College Independent Primary and Secondary School, Pretoria

DANSA International College was established in 1996. They moved from their previous location, the current Berea Park Independent School, to their current premises, an office/apartment building type, in 2007. The school is located on a stand that edges Schoeman Street to the North and Skinner Street to the South. The structure was previously used as offices.

The existing structure consists of a concrete column and beam structure with brick cladding on the exterior. Entrance to the school happens from Schoeman Street. Reception, administration and office spaces are located on the second floor. The majority of classrooms receive an abundance of natural lighting from either north or east. No structural alterations have been undertaken, but internal divisions have been made with brickwork. The heavy material provides acoustical insulation from socializing indoor spaces. Views of the urban context are constantly visible throughout the school environment. Ground floor space, previously used for retail purposes, has been adapted to serve as a multi-purpose gathering space. The first three floors of the structure are intended for use by primary school children. The upper three floors are intended for use by high school children.



fig.6.16. DANSA International College



fig.6.17. Aerial Photograph of DANSA International College



fig.6.18. Main pedestrian entrance from Schoeman Street

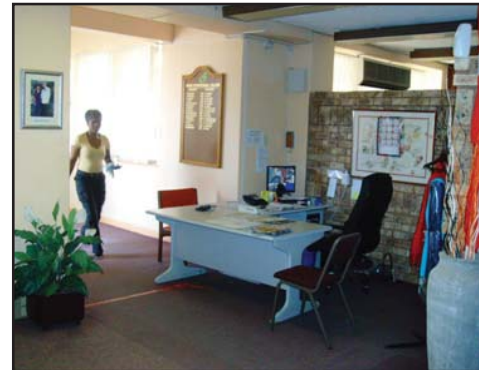


fig.6.19. Reception on the second floor (alteration in background)



fig.6.20. IT-lab (alteration visible in background)



fig.6.21. Typical classroom with an abundance of northern light



fig.6.22. Typical classroom with an abundance of northern light

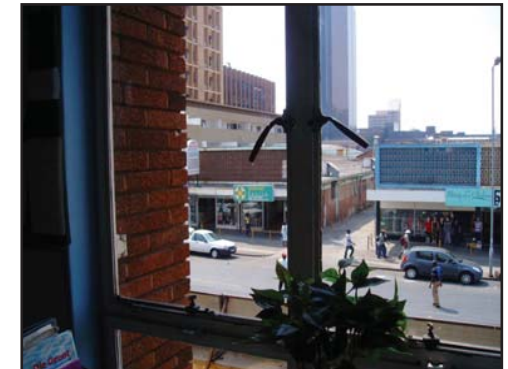


fig.6.23. Views of the urban context is constantly visible



fig.6.24. Gathering space on ground floor (previously retail activity)



Landau City Library (1998)

Germany, Landau
Lamott Architekten BDA



fig.6.25. Landau Public Library at night



fig.6.26. The alteration clearly distinguishes the old and new on the elevation with different materials. The scale of the alteration has been done in a sympathetic way to the existing

This project entailed the adaptive re-use of an historic slaughterhouse to a public library. Koenig (1999: 114) states that the architects' solution consistently forged a dialogue between old and new-juxtaposing lightness with heaviness, transparency with opacity, and traditional elements with simple machinelike interventions-to achieve an integrated whole. A wood-slatted brise-soleil is wrapped around the exterior of the existing masonry structure together with the architects glass and steel addition. Koenig (1999: 119) states that Lamott addressed the structural limitations of the original foundations by pouring a new load-bearing concrete slab that is independent of the existing shell, not even touching it. She adds that this separation between old and new is accentuated by gaps or reveals where Lamott's floors meet the stonewalls and the original cast-iron columns.



fig.6.27. Horizontal wooden-slats provides shading for the interior

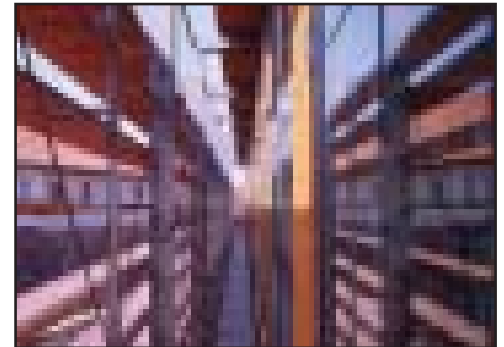


fig.6.28. The added brise-soleil is offset from the main structure, with a metal grille inserted in-between as a fire escape



fig.6.29. A play of old and new, and heavy and light materials is created on the interior.



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