tshwane in transition
tshwane in transition
establishing an integrated tourism gateway to the capital

gate·way  n. 1. An opening or a structure framing an opening, such as an arch, that may be closed by a gate. 2. Something that serves as an entrance or a means of access: the gateway to the West. 3. Software or hardware that enables communication between computer networks that use different communications protocols. Also called router.

by Ahmed Akoob

This document is submitted in partial fulfillment for the degree: Master of Architecture [Professional] at the University of the Witwatersrand, Johannesburg, South Africa, in the year 2013.
Declaration

I, Ahmed Akoob [0705986F] am a student registered for the course Master of Architecture [Professional] in the year 2013. I hereby declare the following:

I am aware that plagiarism [the use of someone else’s work without permission and/or acknowledging the original source] is wrong. I confirm that the work submitted for assessment for the above course is my own unaided work except where I have stated explicitly otherwise. I have followed the required conventions in referencing thoughts, ideas and visual materials of others. For this purpose, I have referred to the Graduate School of Engineering and the Built Environment style guide. I understand that the University of the Witwatersrand may take disciplinary action against me if there is a belief that this is not my unaided work or that I have failed to acknowledge the source of the ideas or words in my own work.

Ahmed Akoob

20 October 2013

Acknowledgements

All praise to the Almighty, the Most High

My mentor and guide, Ludwig Hansen

My mother and father

My wife

The rest of my family
The City of Tshwane is currently facing many challenges in terms of economic development. It continues to underperform when compared with other comparable cities. As a capital city, it’s meant to be the heart of a thriving government system but this may be seen as absent to many. In order to combat the above, a framework by the City has been put into place. It sets out spatial and sectoral strategies for interventions that will diversify, repopulate and regenerate the inner city. Within this framework, tourism has been identified as a component that could play a vital role towards achieving the above.

The tourism sector within Tshwane is largely underperforming but has the potential to contribute substantially to the city’s economy. Reasons for this large gap between the tourist offer and the tourist demand may be as a result of a lack of marketing and good infrastructure around the tourist attractions. The city must be marketed as an urban tourist destination. Urban tourism, for many, may be seen as an intangible incident. This is due to its abstract nature – cities are not built specifically for urban tourists as resort towns are built specifically for the pleasure seeking tourist. Urban tourism does, however, exist as a component of the city’s functioning. It finds itself intertwined with the day to day activities of the city. Services and facilities available do not make a distinction between residents and tourists. Urban tourism coexists within the city environment and has a direct influence on economic growth, social wellbeing and urban regeneration.

Being a capital city, Tshwane’s identity is meant to be synonymous with a government presence. However, many problems are faced in this regard such as government buildings shunning itself away from the public. By further establishing the city’s identity as a centre of government activity, visitor numbers to the city can increase. The presence of government must not remain inaccessible to the public. Rather, through architecture, we can create a system of noticeable government whereby government officials, residents and tourists begin to share common platforms of interaction. Our buildings must stand as symbolic signs of a thriving and open government in a democratic society. They must become representations of the city’s contemporary identity. Ultimately, the urban environment shaped through government presence must become a must-see destination for the urban tourist.

With the above in mind, a catalyst can be formulated that seeks to drive a greater demand for tourism in the area. At the same time, a stronger and more noticeable government presence can be formulated. Eventually, the city’s goals of urban, economic and social regeneration can be achieved.
The underlying foundation of the project came about primarily as a result of a strong personal interest in tourism. At the same time, a great concern for the well-being of my home city, Tshwane, had influenced the choice of study area. By coupling the two, an approach was undertaken that seeks to see the city thrive as a capital city. The beneficial results of this must be appreciated and felt by those that matter most, the residents. The architectural intervention proposed exists largely on an urban scale due to it being located within a prominent city context. It must not stand in isolation but rather, it must take cognisance of that which lies around it. The project must become a starting point that will drive urban regeneration in its area. The results of which, must filter through into the rest of the city.

The project began by firstly understanding the city and its constituents. The urban context and public realm with relation to the presence of government within the city had been studied in detail. Secondly, a detailed study of the city’s touristic potential had been undertaken. The contribution towards the city’s regeneration that this project could create had been realized through numbers and figures. Finally, a thorough design process that seeks to encapsulate all of the project’s goals was carried out on a step by step process. This had been largely based on a set of design principles that seek to regenerate the city, through the project, on a range of levels.
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introduction

urban tourism: what is it?
character of the urban tourist
destination
the urban tourist’s motivation
the urban tourist’s experience
urban tourism & urban regeneration
urban tourism: what is it?

Urban tourism is a phenomenon which finds itself functioning as a coexisting experience of the main functions of the city (Ashworth, 2006). It may be understood that many other economic activities are seen by planners, economists and residents as the focal basis for the city. It is important to note that the demand and supply aspects of tourism are easily and coherently intertwined with these urban functions and activities within the city. Thereby, it may be understood that urban tourism exists as essentially a concurrent activity that shares its functions with the day to day urban activities of the city.

One of the basic reasons as to why tourists choose to visit a particular city is due to the range of activities and services it provides. Shaw and Bull (2000) provide valuable insight of the significance of urban areas within the tourism spectrum. They state that such areas possess a geographical centre of facilities and attractions which are well located to meet the needs of residents as well as that of tourists. Although we may find urban tourism as a frequent activity within the city, ‘tourist functions are very rarely solely produced for, or consumed by, tourists but by a whole range of users.’ (Shaw, 2000).

Within many countries, a gateway function provided for tourists and residents such as points of arrival and departure; or places of gaining information (visitor centres) creates a reinforcement in the tourist function for many cities. In most cases, tourists can rarely avoid bypassing these specialised environments when travelling. It is these environments which serve as the announcement point of certain destinations, many a time the first impression of a city is at these airports or visitor centres. They can certainly have an influence on the manner in which a tourist intends to further shape and individualize his experience of the city.

Over the years, many studies on tourism have developed models that are largely based on assumptions about tourist behaviour. According to Pearce (1986) who reviews these models in detail, the tourist centre or urban area may be seen as the primary element in generating an array of tourist activity. The entire tourist journey involves a flow between the point of origin and the destination area. In most cases, this flow from origin to destination is largely concentrated on an urban area which comprises of hotels, attractions and other infrastructure that caters for such activity.
Urban tourist destinations may be characterized by many traits and qualities. Page (1995) provides useful information in identifying the distinctive features of urban tourist destinations. These areas may be seen as:

- **Geographically different** – the patterns of development within the city do not coincide with urban ecological patterns that are thought of to be the norm

- **Symbolically different** – there are various images and symbols which exist merely for the promotion of tourism in the area. At the same time, natural landscapes as well as the built environment often become images of marketing geared towards pleasure seekers

On the basis of such an approach towards tourism urbanisation, it is possible to construct a profile of the vast and complex array of tourist destinations frequented today (Page, 1995):

- Cultural capitals [Rome]
- Large historic cities [Venice]

Very often, tourists do not visit cities for one particular reason. Perhaps, a trip that is motivated by business reasons may always be combined with other activities relating to the attractions and environmental artefacts. However, in order to clearly develop the typology, one needs to study the primary force that motivates such visits. Some of these forces are associated with visiting friends and family, business, outdoor recreation, entertainment or sightseeing and shopping (Page, 1995).

Urban tourists are only one set of people that make use of the cities services and facilities. Day visitors and residents also have their own distinct use patterns of the city. It is then possible to identify functional areas within the city that point out the relationships between different tourist types and the services they utilize. Different visitors have different motivating factors behind the choice of preferred destination. This makes the task of identifying different users and the type of demand easier. Some of these include city residents, pleasure seeking visitors, business or conference visitors.
and people working within the city. In order to fully satisfy each of the above, an array of tourist resources is required. These include historic monuments, museums, galleries, theatres, night clubs, cafes, restaurants, shops and offices.

Figure 1.1 alongside provides an illustration which depicts the interrelationships between the various user demands and the user services available to them. Hence, urban tourists may be seen as a single set of users that utilize the services of the multifunctional city that is made up of the ‘historic city’, the ‘culture city’, the ‘night life city’ and the ‘shopping city.’ Together, these different areas are what constitute the tourist city.

fig. 1.1 Functional areas in the tourist city
Generally, there is a strong presence of a high-quality urban tourist offer found within capital cities. A successful tourist offer is made up of a combination of cultural assets, landmarks, celebratory events and areas which are often themed or planned. A city’s image and its marketing strategies is often of great concern to city officials. Creating monumental structures such as the Eiffel Tower or London Eye also plays a vital role in defining a city’s image and are therefore given a lot of attention in the planning of cities (ARUP, 2012).

The characteristics of urban tourism may be seen as wholly different to that of traditional beach or rural tourism markets. The figure below highlights these differences in the form of words generally associated with the different tourism types.

There are clearly a lot of linking factors between tourism demand and tourism motivation. Tourism demand may be seen as the resultant factor of tourism motivation. Factors such as destination marketing, available attractions, the city’s image and more conditional factors such as health, wealth and time are what stimulates the tourism demand. It then becomes incumbent upon those in charge of providing travel and tour services to fully understand the range of motives and expectations of the various types of travellers as the services they provide will need to match the tourist requirements as well as the destinations capabilities and offerings. This is an essential part of tourism service provision should the traveller wish to have a favourable tourist experience.

A successful urban tourist offer is made up of a combination of the factors illustrated in figure 1.3 on the next page (ARUP, 2012).
introduction

- High quality shopping
- Heritage landmarks
- Good quality accommodation at a range of budgets
- Major events and festivals
- International standard of cultural offerings
- Entertainment including nightlife
- High quality and attractive restaurants
- Iconic buildings or attractions

fig. 1.3 Key elements of a successful urban tourism
The tourist experience is the culmination of a given experience which can be influenced by individual, environmental, situational and personality-related factors as well as the degree of communication with other people.” (Page, 1995)

In simpler terms, the tourist experience may be seen as a combination of factors that play a direct role in influencing a tourist’s feelings and attitude towards a certain tourist destination that he has visited. It sometimes becomes a difficult task to predict the tourist’s response to a situation that may affect his tourist experience. For example, when it comes to popular attractions such as the Eiffel Tower in Paris which in most cases provides an exemplary experience for most travellers can sometimes do just the opposite of that. This detracting from the ultimate tourist experience can occur at times when the attraction may be overcrowded with other tourists. The resources and infrastructure at hand, at times like these, may become wholly inadequate and what would normally be an intriguing experience for one traveller may turn out to be largely discomforting for another.

A very useful methodology of comprehending what urban tourism is all about is to consider a systems approach towards the subject. This allows for the complexity of the situation to be simplified in a rational manner thus allowing for the understanding of how the different elements are pieced together.

It is incumbent to understand urban tourism in terms of being an experience gained through a service orientated approach as illustrated in Figure 1.4 (after Page, 1995).
urban tourism & urban regeneration

There have been many other attempts at examining the nature of tourist areas and the flow patterns of tourists from one point to another. Pearce’s (1986) assessment seems to be one that is most useful since he notes that tourist flows that occur within an integrated urban framework are largely successful. The careful planning of urban areas as part of a more complex system can certainly assist in not only generating various forms of tourism but also in receiving tourists.

[p] precedent

An example of a city which has coupled its tourist offer with that of urban regeneration efforts is that of Marseille. Being France’s oldest and second largest city, the city had experienced a troubled twentieth century that resulted in major decline of its urban environment. However, since 1995, a number of schemes have been put into place that seek to improve the quality of the city’s urban realm. The Euroméditerranée Development Agency, which heads this initiative, has undertaken the largest urban renewal project in Europe. Marseilles is “building a veritable strategic plan to reposition the port city, combining urban planning and port activity, high level cruising and yachting, around a welcome for tourists and cruise passengers” (Telegraph, 2012).

Following tremendous effort, the city boasts a substantial amount of new trams, designer hotels, galleries, museums, restaurants and shops. All of these were completed as part of the urban renewal plan and seek to not only attract large numbers of tourists but to be of use to residents as well.

Urban areas can play an extremely significant role in tourism since they usually act as the first point of arrival for most tourists – local or international. Whether a visitor wishes to venture out into the outlying or peripheral locations, his first encounter is with the urban areas of a particular country. Certainly, within these urban areas, the services and infrastructure put into place that cater for residents but perform a tourist function at the same time have a direct influence on how a traveller begins to formulate his experience of the area. As a result of these arrival gateways being located within major urban areas, it is common practice for most tourists to use this as an opportunity for exploring the city before proceeding into peripheral areas, thus giving rise to the phenomenon of urban tourism.
baseline study

- tourism in South Africa
- Tshwane as a tourist destination
- Tourism market in Tshwane
- Strategies for growth
- Tshwane tourist offer
The planning and development of tourism across Africa remained as largely lagging behind the rest of the world until the 1990s. It is only within the last two decades in South Africa that tourism has begun to take its role as a driver in wider economic development. According to Rogerson, it is now being recognized that ‘... when in the appropriate policy environment, tourism can contribute effectively to economic and social development, including poverty alleviation.’ (Rogerson, 2004)

South Africa presents a special case due to the implications of the Apartheid period. During this time there had been a significant growth pattern in domestic travel. International visitor numbers remained low as a consequence of boycotts and sanctions. Since the abolishment of apartheid, the domestic as well as international travel sectors have continued to flourish. It has been recognized and widely welcomed as a sector presenting the opportunity to serve as a catalyst of social and economic development by generating vast employment and other opportunities across the entire country (Rogerson, 2004). Rogerson also predicts that tourism is to become South Africa’s most prominent sector of economic growth within the next couple of years. The importance and viability of tourism within the South African context certainly cannot be overlooked. It has the potential to play a vital role in the wellbeing of our economy.
The tourism and leisure sectors in Tshwane have great potential to generate quick results which will in turn contribute towards the city’s regeneration efforts. The city is distinctly linked with national identity and heritage and currently hosts an array of museums, heritage landmarks and wildlife sanctuaries. Tshwane is already well known for its ‘capital city’ status and for being the ‘birthplace of South Africa’s democracy’. As previously mentioned, this is a major factor in influencing a visitor’s decision when choosing a preferred holiday destination. Bound by the Daspoort and Schurweberge mountain ranges to the North and South respectively, Tshwane enjoys a unique positioning between urbanity and nature. It also benefits from a symbolic and expressive relationship with a range of communities. Tshwane exists within a well developed network of transport infrastructure. Access to the city is quick and easy and is situated less than an hour’s drive from OR Tambo International Airport and Johannesburg. The Gautrain rapid rail system also connects Tshwane with Sandton, the airport as well as the Johannesburg inner city. Within the Tshwane inner city, a Bus Rapid Transit (BRT) system is currently being constructed which will certainly ease the process of navigating through the city or connecting with outlying areas.

Despite all of the above, the city has an enormous touristic potential that has yet to be fully realized. According to a report compiled by ARUP entitled City of Tshwane Masterplan: Economic Strategy, it was determined that Tshwane’s tourist sector is underperforming and the total number of visits is low. Reasons for this were stated as the tourist offer being underdeveloped and a lack of marketing around it. The other notable deficiency is the city’s small cultural and leisure offer. Culture is a key feature of wealth generation in many other cities due to it being a notable draw card for tourists (ARUP, 2012).

The visitor economy possesses the potential to generate a host of new activity including large numbers of employment opportunities.
tourism market in tshwane

Tourism can play an extremely significant role in the economic development of the city of Tshwane. It possesses the potential to become a catalyst for new activity in the area such as services, retail or accommodation.

Tourism in the city can generate opportunities for local entrepreneurship around the support services such as transport, local cuisine, entertainment and arts and crafts. At the same time, it brings spend into the area resulting in wider economic impact through the operation of the multiplier effect in which, ‘the recipients of tourist spend in an area are themselves now able to purchase goods and services from others, thus the money ripples outward.’ (ARUP, 2012) The tourism sector in Tshwane can certainly have a great effect in contributing towards the regeneration efforts in the inner city. As the local economy grows, so will the expenditure for uplifting the urban environment and infrastructure. This then results in a well integrated, well managed, attractive and safe inner city.

Currently, given the numbers according to a study conducted by Grant Thornton (2005), Tshwane’s tourist market is largely underperforming and has yet to realize its true potential in order to reap all of the benefits outlined above. Tshwane currently sits as number four among the rankings of South Africa’s cities frequented by tourists (South Africa, 2013). As mentioned, this is mainly due to Tshwane’s underdeveloped tourist offer and the lack of marketing surrounding it. Also, having the status of a ‘Capital City’ simply isn’t enough to attract tourists. There needs to be a combination of national institutions with other well developed attractions and activities. The resulting product must be a collection of tangible and intangible components offering a unique and thrilling experience to the visitor. The current hotel offering in Tshwane is not up to standard. There lacks a range of good quality accommodation at a range of budgets which is one of the main factors of a tourist’s motivation to visit a city.

The main challenge cities face is to match this demand for tourism in a way that the service becomes beneficial to the city residents along with tourists. It must allow residents to participate in and benefit from the success of its tourism efforts. It is important that the tourist market enhances the city culturally and economically without resulting in any financial or environmental burden to the city.
01 Cape Town
02 Johannesburg
03 Durban
04 Tshwane
05 Port Elizabeth
06 Bloemfontein

fig. 2.4 Tshwane Landscape
5 million
annual visitors to Tshwane

2 million
more visitors expected annually

600 000
annual international visitor arrivals

4,4 million
annual domestic visitor arrivals

International visitor purpose:
- Leisure: 57%
- Conference & event: 25%
- Visiting friends/relatives: 10%
- Business: 8%

Domestic visitor purpose:
- Leisure: 60%
- Conference & event: 15%
- Visiting friends/relatives: 14%
- Business: 11%
R2 billion to Tshwane’s GDP through tourism

26 000 jobs created in the city by the tourism sector

20 000 more jobs expected by 2030 through tourism

fig. 2.5 tourism market figures as outlined in Grant Thornton tourism study (2005)
As previously mentioned, tourism holds the potential to generate a number of benefits to the city in terms of employment, entrepreneurship and regeneration. In order for this benefit to be fully realized, ARUP and the City of Tshwane (2012) have identified a number of conventional strategies that can be put into place that will spur on growth in the tourism sector. These include:

- **Establishing city marketing systems**
  The objective of this is to establish Tshwane as a must see destination in the eyes of domestic and international tourists. The establishment of a visitor centre welcoming tourists to the city is crucial in this regard. It can become a hub of tourist activity that at the same time generates awareness around Tshwane’s tourist attractions. A host of other marketing strategies can be put into place through mediums such as the print and electronic media.

- **Developing iconic buildings and world class infrastructure**
  Cities have been setting out to create iconic architecture since the days of the Eiffel Tower which has become a major draw card for tourists. The promotion and awareness around existing architectural landmarks such as those surrounding Church Square in Tshwane together with the development of an iconic building that is representative of Tshwane’s identity as South Africa’s capital city will certainly increase visitor numbers to the city.

- **Upgrading the existing tourist offer and create new tourist areas**
  As mentioned, Tshwane’s tourist attractions are largely underdeveloped. These existing attractions need to become more accessible to the public. For example, the National History Museum could become a lot more visitor friendly by increasing interpretation or creating a more interactive experience. At the same time, the facilities at the attractions must be well upgraded and maintained in order for it to become a comfortable place to visit.

Creating new tourist precincts such as the V&A Waterfront in Cape Town can prove to be largely successful places of interest for tourists and residents alike. Oftentimes, these developments are conceived of as regeneration projects for areas of urban decay. One such area in Tshwane is the Apies Corridor which stands on a leftover space between the city and its eastern outlying areas. This area can easily be developed into a new tourist precinct.
• Developing the MICE offer (Meetings, Incentives, Conferences and Exhibitions)

This will generate economic impact in terms of delegate spending on key areas such as retail, restaurants and hotels. Large international exhibitions or conferences will attract a significant amount of expenditure. At the same time, such a strategy supports the development for more good quality hotel accommodation – something Tshwane lacks.

• Hosting large scale events and festivals

With specific emphasis of these being held within the inner city, these can easily boost visitor numbers and expenditure. These events can also act as a promotional tool for the city and can range from outdoor art exhibitions to sport, music or food festivals.

• Make Tshwane a more attractive place for tourists and residents

The inner city is perceived of as a largely unsafe or unwelcoming area for many and it lacks the characteristics of an attractive and thriving urban hot-spot. In order to counter this, a number of efforts can be put into place. Creating a sense of identity through lighting up architecturally significant buildings can easily attract more tourists and residents to the city at night. Walks and guided tours that originate within the inner city will create a safer experience for tourists in the city. Enhancing signage around the entire city that is aimed at directing and informing tourists of new and existing offerings would certainly create a more user-friendly experience of the city.
Tshwane hosts an array of tourist attractions ranging from museums, galleries and monuments to balloon safaris and nature reserves. As is known, all of these are largely underperforming. With the help of the strategies mentioned previously, these attractions can become largely successful. Currently, within the inner city and its surrounding areas, there is a large concentration of attractions. In addition to this, there is a number of heritage buildings and spaces that can become valuable assets to the city’s tourism sector.

The various tourist attractions hosted within the city may be broken down into four categories:

- [arts, culture and heritage]
- [parks and public open space]
- [museums]
- [wildlife and nature conservation]
fig. 2.6

[arts, culture & heritage]
[museums]

fig. 2.8
baseline study

fig. 2.9

wildebeest

national zoological gardens

groenkloof nature reserve

[wildlife & nature conservation]
[attraction proximity to proposed site]

fig. 2.10
fig. 2.11 - Tshwane from above
urban context

_imageability
_city wide context
_study area
For many years, man has found himself attached to the environment which he inhabits. He makes use of the city’s infrastructure and services in order for him to navigate through its different parts. At the same time, he is able to carry out his intended activity. The identity and structure of the various elements that make up the city all contribute towards his perception of that city.

Kevin Lynch refers to this as: ‘imageability: that quality of evoking a strong image in any given observer. It is that shape, color, or arrangement which facilitates the making of vividly identified, powerfully structured, highly useful mental images of the environment.’ (Lynch, 1982)

Out of this arises the need for cities to be distinct and identifiable. Orientation and a good sense of legibility are what contributes to a positive city image.
According to Lynch (1982), there are five primary elements that contribute towards the city’s environmental image. The strengthening of these elements is what assists in defining a clear city image. The process whereby they are patterned together produces a rich urban environment for the city. When studied collectively, each element can contribute to the identity of the other. These five elements which are to be explored in terms of the Tshwane context are:

[paths]
Channels of movement - this is often the most predominant element of the city image in one’s mind. The city is observed while walking through it and these include: roads, railways, walkways etc.

[edges]
Linear boundaries breaking lateral continuity between two phases. They sometimes prevent movement between areas and can also act as lines of interaction.

[districts]
These are two dimensional city sections of a varying scale. They are largely identifiable through a unique character or function.

[nodes]
Strategic points of focus between which a user can move. Nodes gain significance mainly through an intensification of activity which at the same time create an identity for such areas.

[landmarks]
These are visual points of orientation throughout the city whereby users may locate themselves. At times, they may have some significance such as a cultural or commercial one.
The proposed site for my intended thesis is located in the province of Gauteng, South Africa. The City of Tshwane finds itself as a municipal ward north of the province. At the heart of the city is the Central Business District (CBD) also known as the inner city. It is within this context and its immediate surrounds that I intend to study. Particular attention is to be paid to the area that sits on the South Eastern boundary of the city that runs along the prominent Nelson Mandela Drive.

Pretoria, which was established in 1855 as the capital of the then ZAR, continues to exist as the administrative capital of South Africa. The city has a grid layout that finds itself taking on an orthogonal approach. There are two main corridors, namely Paul Kruger and Helen Joseph (formerly Church). At the intersecting points of these is Church Square, a historical place of significance within the city.
The precinct under investigation is located along the South Eastern edge of the inner city boundary. It is bound by Nelson Mandela Drive to its East, Pretorius Street to the North, Jeff Masemola Street to the South and Gerhard Moerdyk Avenue forms the Western boundary. The historic Apies River also runs along the precinct’s entire eastern length. For the purposes of this study, the above described precinct will be referred to as the ‘Apies Corridor’.

The Apies Corridor exists on a piece of land that sits between the inner city and its Eastern outlying areas such as Sunnyside. By being the space ‘in between’, it is perceived of as an urban wasteland and is suffering from major urban decay.

The interventions proposed for this area are to successfully integrate it into the existing city fabric as well as upgrade its urban environment.
Paul Kruger and Helen Joseph (Church) act as the two main lateral axes. Resulting from their intersection, the city is then divided into four axial quadrants which emanate from Church Square, the Urbs Quadrata grid system which was devised by the Romans. They are of great significance to Church Square (Jordaan, 1989). This orthogonal grid layout also assists in vehicular orientation within the city.

Other primary movement paths exist alongside this that generate large traffic flows and also serve as bypass routes through the CBD. One such path is Nelson Mandela Drive which is a prominent entry route into the city along the North-South axis. It is largely classified by lush greenery on its edges which usually marks the entrance into Tshwane from Johannesburg, OR Tambo Airport and other southern areas.
Fig. 3.12 - main paths in the Apies Corridor
Fig. 3.13 - inner city - main edges
Fig. 3.14 - development of the city within natural edges as depicted by Jordaan (1989)
The Tshwane Inner City bears a distinct character in that it is bound by natural features on all four sides. The North and South are bound by the Daspoort and Schurweberge mountain ranges respectively. The Apies River forms the boundary to the East while the Steenoven Spruit forms the Western boundary. These natural barriers give way to a flat plained internal surface upon which the city was formed. The Apies Corridor, which sits on the city’s South Eastern edge is an integral threshold component that marks the transition into the city from the South as well as the East. At the same time, it signifies a juxtaposition between natural and urban.

Christian Norberg-Schulz defines this as a ‘classical landscape’ which is characterized by a composition of distinct elements which bear a harmonious equilibrium between human and nature (Norberg-Schulz, 1980).

Fig. 3.15 - view of natural edge to South
The city is made up of a number of districts such as the CBD North, Marabastad and Sunnyside. Each of these may be identified by various criteria. For example, Marabastad is largely characterized by informal trade and large numbers of taxi flows.

The Apies Corridor forms part of the South Eastern district which is largely characterized by greenery and the Apies River. There is a mix of activity that takes place within the district that is categorized by government departments, small scale retail and a cultural component.
Nodes within the city are created through an intensification of use. Examples of these include Station Square which is a hub of transport activity and Sammy Marks Square which is bound by a strong retail edge. Others include the Theatre Square and Pretorius Square which offer a significant cultural and civic environment.

There is always an increase in activity and development around these nodes and they all exist within an easily linkable network. The diagram depicts the possibility of a new Eastern node that will provide the opportunity to further integrate the Apies Corridor into the existing urban environment.
Several buildings within the Pretoria CBD act as landmarks. They gain such a status through various aspects such as height or function. These landmarks also act as points of orientation for further movement through the city.

In order to increase orientation and legibility for the city user, the Apies Corridor provides the opportunity for a new landmark that marks the entry and exit point into and out of the city.
Fig. 3.20 - Church Square
potential new landmark sites at Apies Corridor

Fig. 3.21 - The Reserve Bank Building
inner city - position of landmarks

Fig. 3.22 - Pretoria Station
potential new landmark sites at Apies Corridor
Fig. 3.24 - sketch of city seen from natural edge
brief proposal

- project intention
- urban problem statement
- urban opportunities
- client profile
- architectural proposal
- user profile
Currently, there are a number of schemes put into place by the City of Tshwane local government that seek to transform the city in terms of economic growth, urban regeneration, improved infrastructure, better transport networks and ultimately, an improved quality of life for citizens. One such scheme that hopes to achieve the above is the Tshwane 2055 campaign which embodies the following:

“In 2055, the City of Tshwane 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 2055, 2013)

In order for such a tremendous vision to be successfully realized, a number of strategies need to be put into place. Developing the city’s tourist offer has been identified as one of the key strategies that will contribute towards this transformation of the city. As we know, tourism certainly is a sector holding the potential for much prosperity towards the city’s regeneration.

In keeping with the above, the project’s intent is to address this challenge of an underperforming tourism sector that, at the same time, spurs on urban regeneration in the intended study area. This is to be looked at in terms of formulating a catalyst for a rapid growth in urban tourism within the city and; which will seek to transform the city into a more attractive, safer and well integrated environment. As we know, urban tourism exists concurrently within the urban realm of a city. Services and facilities are shared between tourists and residents. Hence, the result of intertwining the benefits of urban tourism and urban regeneration becomes a task not so impossible to achieve.
Within the city, legibility and orientation are major elements lacking for the outside city visitor. This then results in an inefficient and unpleasing experience of the city. Although some of the traits of urban orientation are present, these are simply not sufficient and a lack of coherence between them does not ease the process of navigating the city.

Good open public space is also something almost absent within the city and to many, it is an unsafe and uncomfortable place to be in. Bounding areas such as that around the Apies Corridor are perceived of as left over urban wasteland. They suffer from large volumes of decay due to it having no elements of a solid function (Line, 2005). Ultimately, this results in a negative perception of the city and the government.

urban problem statement

Fig. 4.2 - aerial view of Apies Corridor within urban context
While it may be possible to identify the city’s edges through the natural barriers, this interaction between urban and natural has not been capitalised on. It must be noted that the environment around these edges, such as the Apies Corridor, are suffering from tremendous urban decay. A number of occupied buildings are in an extreme state of dilapidation. The area around the Apies River has become a dumping ground and bears a foul stench. There is also insufficient lighting within the area and certain street edges are unpaved, making it uneasy for pedestrians to use. All of this contributes to a negative perception for those entering the city. It seems as if though city officials have not paid attention to making this area a safe and attractive one. The city thresholds need to be clearly defined through the strengthening of the urban and natural fabric. One such way of doing this is by enforcing and extending on an already existing green network.
[defined public open space]

Good public space has good definition. Usually these may be buildings or natural landscapes that clearly define the edges. They distinguish the public space, set it apart and make it a space. A successful urban environment consists of a distinct network of public and private spaces.

A successful way of achieving defined public space is through perimeter type buildings. This results in wider benefit for the urban realm:

- They ensure more interaction with the street edge making it a safer and more active pedestrian environment.

- A visible definition between the public and private improves management and safety systems over the building.

- They engage with the city and don’t remain isolated or inaccessible due to large open space between building and street edge.

While the perimeter typology building defines a public space edge, the activities that occur along this face is of equal importance. These activities should formulate an interaction between open and enclosed space that will breathe life into the square. Public squares become vibrant when they are safe and appealing. This happens when visibility and interaction between the inside and outside are constantly present.
Although present within the city, landmarks are mostly uncelebrated and inaccessible. Many buildings had set out to create public spaces around them but these have since been enclosed for the use of employees due to safety concerns. Within the Apies Corridor, there is an absence of visual landmarks. More landmarks should be provided here since it sits along the entry axes into the city. They must serve as visual points of orientation that create a sense of arrival within the city and enhance legibility. Government buildings within the area must also have prominent landmarks integrated into them. This will reinforce the notion of government being as a part of the city’s environment.

Orientation and a sense of legibility will also be further enhanced through a change in urban furniture, lighting and signage. This will make street edges more inviting and transform them into comfortable spaces.
There is an interesting relationship between natural and urban within the city. An example of this is along the Apies Corridor whereby the Apies River culvert runs along its length. Although the river may be a well known feature within the city, it is in an extreme state of neglect and decay primarily caused by the lack of activity facing onto it. Buildings have turned their back to the culvert and have little or no interaction with it.

The river should be celebrated as the founding place of Tshwane which will contribute to it becoming a tourist must-see site. Buildings around it need to pay careful attention to it by forming an enclosure for it. Edges that will create interaction between the river and the building must be promoted. Pedestrian edges along the culvert should be well upgraded to accommodate pedestrians and cyclists. Greenery along the river edge should be well maintained and extended throughout the area.

Fig. 4.7 - city water network
The City of Tshwane’s ‘Tshwane 2055’ scheme is tasked with transforming the city into an ‘African Capital City of Excellence’. Part of its responsibility is to oversee and fund projects that set out to achieve the scheme’s goals. The primary intention and rationale behind establishing a gateway to tourism are clearly in line with the values and goals set out by the ‘Tshwane 2055’ scheme. Not only does it seek to fulfil the functions of promoting tourism but it also looks at driving urban regeneration and empowering the local economy. Simultaneously, the Department of Tourism embodies the following vision of it being: “A catalyst for tourism growth and development in South Africa” (Tourism, 2012)

Part of the department’s mission is to strengthen institutional capacity and establish strategic partnerships that seek to promote tourism to and within the Republic of South Africa. The project clearly aims to spur on a growth in tourism to the City of Tshwane. Henceforth, a joint venture between the City of Tshwane and the Department of Tourism has been set up for the purpose of establishing this project.
In terms of the project’s architectural component, the idea of an urban foyer building is to be explored. The goal is to establish a precinct that becomes a place of welcome and orientation for tourists but at the same time stands as a symbol of Tshwane’s identity as a regenerated capital city. It must become a celebrated entry point into the city and a hub of tourist activity. The rationale is to shape the tourist’s entire experience of the city into a memorable and pleasurable one.

Although the primary function may be seen as accommodating tourist activities, the project is to be looked at as a mixed-use development with a range of activity aimed at government employees and the public. There is to be a layering of programme, movement and activities in and around the building. This is to promote the interaction between the different users and enhance the character of the space.

Fig. 4.11 - section through a mixed use building, Paris

The building program is made up of five main components which are discussed on the next page.
This is to be the main interaction point for tourists. A visitor centre or tourist welcome centre is to be established that includes various components such as a tourism media library, tour advisor kiosks, travel agent offices and car and cycle rental facilities. Once tourists arrive at this space, they may gain a host of information about the vast tourism offer in Tshwane. This is to then influence the tourist’s choice on where and how they wish to proceed throughout the city; whether it be by foot, by bus or through cycling. Coordination of all of the above is to be conducted by the identified client – the City of Tshwane and the Department of Tourism.

The Department of Tourism has been identified as a priority department requiring additional or new office space. This need is to be addressed within the project. The Department also has a great interest in the promotion of Tshwane’s tourist attractions and; its presence will be beneficial to the successful functioning of the tourist welcome centre. Providing rentable space to other departments or entities having close links with government or tourism is to be considered. These may include the National Heritage Council which has a direct interest in the preservation of Tshwane’s heritage sites – many of which are tourist attractions. There is also to be management offices that oversee the operations of the entire precinct.

With the expected tourist growth numbers to the city, its current hotel offerings will prove to be largely insufficient. Also, the city lacks a variety of good quality accommodation at a range of budgets which has been mentioned as a key element of a successful urban tourism. Due to this, a four-star hotel offering affordable and quality accommodation is to be developed within the project.

A commercial component is crucial towards attracting tourists as well as members of the public. There is to be a range of quality retail outlets and restaurants within the project. A good retail and restaurant offering have already been identified as motivating factors behind influencing a tourist’s choice of destination. At the same time, these will generate revenue that contributes towards the upkeep of the project.
Currently, the proposed study area has a slight cultural offering in terms of a theatre. This is to be extended on in the form of a new gallery. The city hosts no such facility that exhibits works depictive of Tshwane’s post-apartheid identity. The proposed new gallery must display such works that are synonymous with the city’s heritage and its future. It is to become a place for mixing of the old and new with a focus of portraying the city as a contemporary art capital.

A crucial element that is to tie all of the above components together is that of public open space. There is to be a well defined, safe and attractive public square within the project as well as a pedestrian street linking the various components within the precinct and; on a larger scale, the precinct with the city. These public spaces are to be the primary points of interaction for the various users.

On a whole, the proposed project must become a starting point for urban regeneration that will extend into the surrounding areas and spread throughout city. The project must not exist in isolation but must be well integrated into its city context so that it caters for a variety of users from office workers to tourists. Creating a place relevant architecture is also imperative to the project’s success. It must become a representation of Tshwane as an African Capital City of Excellence and capitalise on the city’s heritage.
The proposed project’s aim is to exist on a range of levels catering to a variety of users. One single activity cannot be identified with the project’s objective of becoming an integrated part of the urban fabric. Tshwane’s identity as a capital city is made up largely through the existence of government and institutional buildings. However, in spite of this, there tends to be a lack of interaction between government and the general public. Generally, government buildings stand as structures of power, largely excluding the public and enclosed by some type of a barrier. This is harmful to the perception people have of government.

It is only when government employees and members of the public share a platform of interaction and; when the efforts of government are clearly visible; that citizens develop a sense of confidence in their government.

At the same time, a successful urban tourist offering is one that does not exclude itself from a city’s urban realm. It needs to be well integrated into the existing city fabric and its facilities and services shared between tourists and residents. For this reason, three main user groups have been identified:

[familiar users]
This category consists of those individuals that will be engaging with the project on a day to day basis. They will be made up of mainly government employees and other members of the public. These users will have developed an adequate sense of orientation within the area and their perception of it will be gained through personal experience. Familiar users will be catered for by providing the necessary spaces and services required for their everyday activity to take place.
[unfamiliar users]
This category includes mainly the tourists – local and international. These are the primary focus of the project. The intended building is to act as a welcoming point into the city that creates a lasting ‘first impression’ in the mind of the tourist. With different groupings arriving on different days, these unfamiliar users will begin to shape their experience of the city and orientate themselves through interacting with the intended building.

[periodic users]
This category includes the temporary users that will visit the project from time to time or on a once off basis. Periodic users may include residents from outlying areas, school pupils or anyone wishing to experience the city in a safe and pleasurable way. The urban environment will remain as largely unfamiliar to them but points of interest may be developed in the mind.

On a whole, the proposed project must cater for a range of users from varying demographic backgrounds. It is to foster new relationships between government and the public and eradicate the perception of ‘no confidence’ that many feel for the government today. The activities and interaction occurring between these users is to contribute to shaping the space’s identity as one that is well integrated within the existing urban culture.
Fig. 5.1 - Apies Corridor within urban context
Fig. 5.2 - Site location within Apies Corridor
Fig. 5.3 - proposed site boundaries
The site proposed to carry out the project’s intentions is located within the Apies Corridor. It occupies a full city block and its entire eastern edge is bound by the prominent Nelson Mandela Drive – a primary regional connector into the city. The site’s North and South edges are bound by Kotze Street and Rissik Street respectively. These are both key local routes that connect the city with its eastern outlying areas such as Sunnyside and Arcadia. Along its western edge, the site is bordered by Gerard Moerdyk Street which is a low volume traffic street characterized by heritage type cottages that have been converted to small scale retail units. A prominent feature on the site is the Apies River canal which runs along its North Western edge and is surrounded by an abundance of greenery.

This site has been selected mainly due to the fact that it stands along main entry routes into the city and enjoys great accessibility and connectivity. It is thereby suitable to be developed as a response to the proposed architectural and urban objectives of creating a gateway type foyer space that becomes a hub of varying activities. Within the context of the Apies Corridor, the site provides the opportunity for the project to become an integrated part of the city and to drive wider urban regeneration within this area which suffers from great urban decay – as previously mentioned.
In the early stages of the project, the proposed site did not extend along the entire street edge of Nelson Mandela Drive but ended about halfway through. As the project went on, it became necessary to incorporate the bottom half of the city block along Nelson Mandela into the proposed site. This was seen as an opportunity to regenerate the entire street edge and not only pay attention to half of the block. This will in turn become a catalyst to spur on regeneration towards the north and south of the site.

Fig. 5.5 - extension of site boundary
Fig. 5.6 - panoramic view of site along Nelson Mandela from the east
site informants

[vehicular movement]

[pedestrian movement]

[activity nodes]
Fig. 5.7 - analysis of site informants

- [natural features]
- [city blocks]
- [building volumes]
Fig. 5.8 - sketch of site with surrounding context
Fig. 5.9 - existing building on Gerard Moeryk

Fig. 5.10 - view down Gerard Moerdyk Street

Fig. 5.10.1 - existing apartment blocks on Gerard Moerdyk Street

Fig. 5.8.1 - sketch section through Nelson Mandela looking east
[reinforced city edges]
Being located on a space between the city and its outlying areas, the site is well suited to carry out the objectives of a reinforced city edge. A strong and distinct mix of activity within a firm, grounded architectural form can take place within the site. Existing dilapidated buildings and the abundant greenery around the site can be well upgraded and maintained. All of this is to contribute towards creating a defined threshold that marks the transition from natural to urban.

[defined public open space]
As mentioned, a well defined public space for general city users on the city’s south eastern district is absent. The Apies Corridor and in specific, the proposed site provides the opportunity for such a public space. This new node will not only become an integrated part of the inner city’s public space network but can also serve as a foyer space that serves to link the inner city and its eastern outlying areas. A well defined public space surrounded by the appropriate activity make up is to form a connection to the existing Robert Sobukwe High Street in Sunnyside. This will seek to further integrate the public space with its immediate surrounding context.
[enhanced orientation and legibility]
The proposed western public node is to become a component of the network stretching from the inner city to Sunnyside. A landmark at this node is to further enhance its identity. The appropriate activity taking place around the landmark is to lend greater significance to it and allow it to become a strong point of orientation within the city. With the site being located at entry points into the city, an expressed architectural landmark will enhance legibility in terms of marking the threshold into the city for tourists and residents alike.

[maintaining natural features]
The natural landscape of the site is characterized largely by the presence of the Apies River canal and a considerable volume of greenery. However, as previously mentioned, the Apies River canal is in an extreme state of decay and activities have turned their back towards it. The project is to pay careful consideration to the river and recognize it as an opportunity for wider regeneration in the area. The greenery running along the site is to be well maintained and built upon. The upkeep of the river and the greenery must flow into their extended respective networks that run along the Apies Corridor. Ultimately, an attractive natural path is to run up until the Zoo This can become a pleasurable environment for tourists wishing to embark on walking or cycling tours of the city.
In order for the site to be developed with the objective of becoming a foyer that welcomes tourists, it is incumbent that the site be located along an entry point into the city. However, the challenge with this is that the site must also be strategically located so that the project may be well integrated into the existing urban framework. Additionally, the site must also cater for the various governmental activities as identified in the project brief. Hence, a site that can become a focal point of generating a mix of activity has been selected.

Nelson Madela Drive is seen as the primary entry point into the city from the south. Tourists arriving from OR Tambo International Airport or the greater Johannesburg area will enter Tshwane through Nelson Mandela Drive. It also enjoys great connectivity to the Pretoria Station, the Gautrain Station and the main bus interchange. Hence the suitability of the site for marking the entry point into the city and becoming a further point of orientation for visitors.

From the east, Kotze and Rissik streets are major local connectors linking the city with its eastern suburbs. Access into the site can be easily obtained off the two way Kotze Street which directly intersects Nelson Mandela. The site has the opportunity to create a seamless transition into the city for such users. Towards the north of the site, is the well-known Department of Trade and Industry campus which already has a strong mix of government to public activity around it. This phenomenon is to be extended down onto the site.

An integrated mix of activity is to contribute towards establishing a sense of place within the fragmented Apies Corridor. A first impression of the city is to be created at this proposed site. The perception of the city in the mind of the user must then be altered and the project must become a starting point of what is to follow. The experience of the city to the user must be strengthened through architecture (Pallasmaa, 2005)
Fig. 5.15 - aerial view of site location within regional context
inner city

proposed site

the site
eastern outlying areas

Fig. 5.16 - aerial photograph indicating site between inner city and eastern outlying areas
The Apies River plays a significant role in the heritage and development of the city. It is around this point where the city began to develop in the early 1800’s. Around this time, Chief Mushi and his tribe arrived in the area from the Zululand. They made their home by beginning to settle around the river. The river was then named after the chief’s son, ‘Tshwane’. Following this, the city began to develop and the name Tshwane was carried over into the city. Tshwane is the authentic name for the city of Pretoria (Grobler, 2006).

As mentioned, the river forms as part of one of the inner city’s natural edges and runs along its eastern length. However, such a prominent natural feature is currently suffering from extreme amounts of decay. The river canal has become a dumping ground for the buildings around it. The areas around it are also perceived of as unattractive and are plagued with criminal activity (Hlahla, 2011). The portion of the river which flows on the proposed site is fenced off and remains completely inaccessible.
The Apies River canal must become a well recognized component of the intended project. One of the project’s aims is that of creating an architecture that is symbolic of a Tshwane identity. The river, being an integral part of the city’s heritage will add great value to this intention. The area around it must be well upgraded and the intended building is to respond well to it.
existing buildings

overzicht artists' village

mini market

zvakala jazz club

habari lounge

bambanani day care

mzansi tuckshop

treytenbach theatre

[a]

[b]

[c]
Along the Gerard Moerdyk street edge of the proposed site, there are a number of residential typology units that have a heritage value attached to them. These cottages were designed by the well known Afrikaans architect of the Voortrekker Monument, Gerard Moerdijk (Sparks, 2009) Preservation of them will add value to the project. The cottages have since been converted from residential to small scale retail, craft shops, restaurants and bars. While most of these buildings are being utilized, they do display signs of no maintenance and upkeep. Towards the south of the proposed site is the Breytenbach Theatre. This forms an integral component of the cultural offering in the area. The theatre is owned by the Tshwane University of Technology and is used as a training and performance venue for students in the arts, music and drama fields. While having the potential to host small scale productions of great value, the theatre fails to regularly do so. The above mentioned cottages and theatre all form as part of what is known as the Oeverzicht Artist’s Village. An entire precinct dedicated to the promotion of the arts. However, while this precinct was once seen as the pride of the area, it is currently experiencing high volumes of degradation (Hlahla, 2011). There is a strong presence of illegal drug trade and the environment is perceived of as unsafe. Between the cottages and the theatre are a number of apartment blocks which are relatively well kept. The Oeverzicht Artist’s Village is to be retained on site and the buildings are to be well integrated into the project. Minor amendments may be made to the buildings that are to contribute to their physical upkeep. Ultimately, the entire village is to be restored to its former glory as the city’s most prized art district.
Currently, the user profiles around the site are made up of an array of individuals. These include government department employees, shop owners, school kids, surrounding area residents and a number of people visiting the bars and restaurants within the Oeverzicht Artists’ Village.

Lindiwe* runs Mini Market, a small scale grocery store, which stands on the proposed site. She lives in an apartment one block away. Kate states that the area, even though may be unsafe, displays quite a vibrant atmosphere with a mix of people visiting the shops and restaurants around her store. She says the area is busy at night and especially on weekends when many people frequent the bars till the early hours of the morning. Lindiwe also feels that the area could do with extra services in order to make it a safer and more pleasurable environment to work and live in. Some of these services include the maintenance of street lights, removal of litter from the streets and general upkeep of the sidewalk.

Due to the close proximity of the site to the Department of Trade and Industry campus, a number of employees from the department visit the Oeverzicht Artists’ Village from time to time. Hendrik* and Thabo* are such employees that occasionally visit the Zwakala Jazz Club during their lunch break. They stated that they enjoyed the original atmosphere of the place and found it to be relatively safe during the day as there are lots of people around. When questioned about the state of the Apies River which flows nearby, they said they were not even aware of the river being present. This is mainly due to the fact that the river has been fenced off and the area around it is uninviting.
The intention for the project is not to eradicate any of the existing users but rather to include them as an integral component of the design. These user types are to be extended on and their provisions catered for. New user types such as tourists must also be catered for. This shouldn’t be a problem once the Overzicht Artists’ Village has been well upgraded and integrated into the project since it is seen as a major draw card for tourists in terms of its cultural offering. At the same time, the tourist spend will generate greater income for the locals.

* - not real names

Fig. 5.27 - various people around the site
The city block which makes up the proposed site is currently divided into 24 erven and makes up an estimated area of 19 000m². These are made up of 13 portions of ERF 822 and a further 10 of ERF 866 and also include the remainder of ERF 1340. All of these erven form part of the Sunnyside township. For the purpose of the intended project, the assumption is made that the above stated erven have been purchased by the previously stated client.

In order for the project to proceed, a town planning application that seeks to consolidate all of the above erven needs to be made to the City of Tshwane. Such an application, together with the correct zoning application, will follow the procedure as set out in the city stipulated document - ‘Requirements for an Application for the Amendment of the Tshwane Town Planning Scheme.’ This will include the advertising procedure that includes public involvement.

All development that is proposed within the project is to be subject to the laws and regulations of the South African National Building Regulations set out by the South African Bureau of Standards 0400-1990. Amendments or extensions to the existing Gerard Moerdijk designed cottages are to be preapproved by the South African National Heritage Council in terms of Act No. 29 of 1999.
design exploration

-theoretical approach
-design principles
-form development
-appropriate use
-apis integration
-unifying element
-layering of green spaces
-focal points
-noticeable government
-place bound architecture
The idea of formulating a landmark point of orientation and a well integrated mixed use facility form the main components of the proposed project. An intervention that seeks to become a component of shaping the city’s intended contemporary identity is one of the major areas that are to be explored. The City of Tshwane and in particular, the inner city area faces numerous challenges today. It has an unattractive physical environment, it does not function well as a civic centre and it is not a desirable place to live and work in. Most importantly, the city lacks an identity and sense of place that allows the users’ experience thereof to be invoked in the mind. Identity is meant to be a quality that allows us to differentiate one place from another. The make-up and spatial characteristic of an object or space is what enhances the ability to recognize and identify a specific environment. It is those characteristics of the object or space that allow it to be distinct, unique and simply divisible. Ultimately, it must stand for individuality or oneness (Lawson, 2001).
The identity of place is also strongly related to personal identity, “I am here supports I am” (Lynch, 1981). According to Lynch (1981), apart from an identity of place, there is also an identity of events. This differs naturally from the former since it provides people with a means to remember events that have taken place which in turn assists them in structuring their life (Ibrahim, 2009).

Derived from Heidegger, Christian Norberg Schulz suggests that, “to dwell means to belong to a given space” and “when we identify with a place, we dedicate ourselves to a way of being in the world” (Norberg-Schulz, 1985). He further refers to the terms “spirit of place” or “sense of place” which are meant to celebrate the very individuality and distinctiveness of a given place. Places which are in their own right significant by possessing a unique identity can widely contribute towards creating a sense of place within that specific environment. Creating a sense of place also includes making an environment psychologically comfortable. Three components of sense of place are (Xu, 1995):

- legibility
- the perception of and preference for the visual environment
- the compatibility of the setting with human purposes.

It is most useful to conceptualize sense of place with the composition of feeling. The degree to which a sense of place exists within an environment can certainly shape the user’s experience thereof. The structure of the city and the identity which the architecture hopes to achieve must enforce the notion of experience.

The strengthening of identity and sense of place through architecture can come about by invoking a historical
dimension that is relevant with the environment. At the same time, this adds to the value and richness of the experience one encounters. Within the Tshwane context, a place bound architectural type that is synonymous with the city’s identity must be explored if the city hopes to achieve its goal of becoming a Contemporary African Capital City of Excellence. The spaces created must become celebrated as a well integrated part of the existing urban fabric. They must encourage diverse interaction between the different cultures and groupings that exist within the city context. Residents and visitors must be well catered for on a variety of levels.

[p] precedent
Federation Square strove to become the new civic and cultural centre of Melbourne through hosting an array of commercial and cultural buildings all linked together by a public square. The development, which covers an entire city block, defines a city edge that sits along a river. Through its location and function, the project forms a gateway to the city by means of its civic spaces that exist within the historical city fabric. Its users are made up of a variety of residents from commercial employees to cultural fanatics. The precinct also attracts a large number of tourists due to its cultural offer and an
array of outdoor events taking place within the square. With regards to the architecture, Federation Square is seen as a series of patterns and forms. The non-classical geometries of the facades have a high degree of complexity, blurring edges between the building and the city. The aim of the architects was to “devise a language of form, but unlike modernist buildings, these forms manage to remain vague and indefinite” (Smook, 2007).

The striking forms found within Federation Square are meant to invoke a facade that has a ‘dressed-up’ quality. It “operates like a mask that has nothing to do with what is behind it” (Smook, 2007). The project does cater for a multitude of cultures and backgrounds. However, its resultant style is a visual form of varying planes and geometries that fail to invoke an identity synonymous with its environment.

Attempts at creating a place-bound architecture must be made within the project. Facades that can become a reflection of internal activity must be explored. The allocated programme must generate the necessary interaction between individuals. The spaces created must generate events of a social and public nature which add value to an energetic urban environment (Tschumi, 1994). Designing for the user is imperative for they are the greatest assets to the building. It is when they begin to engage with the building and forge new relationships within the spaces that the architecture becomes successful.

It is through this that a diverse but identifiable environment can be achieved. One that is unrestrictive and accessible to users of all types and backgrounds. Such environments that possess the physical qualities of becoming meaningful, attractive and dynamic spaces must invoke the senses of the human body. They must be pleasurably experienced and easily recalled in the mind.

As previously explained, urban tourism is a phenomenon that does not exist independently of a city. Services, facilities and spaces are shared between visitors and residents. By creating an urban hub that includes tourist, government and civic activity, surely an integrated mix of interaction can be achieved. At the same time, allowing this to exist with a city wide concern in mind can only lead to wider gain for the urban environment. The proposed project must seek to integrate itself well within the existing urban context and bridge the gap that exists between the city and its outlying areas. It must become a catalyst that will drive wider urban regeneration throughout the area. Concurrently, it must stand as a unique symbol of the city’s aspiring contemporary identity. It must become a place of welcome for the tourist. Through the
architectural statement that it creates, the project must serve to influence the way-finding exercise of the tourist and thereby mould his experience of the city into a pleasurable one.

Being the administrative capital of South Africa, Tshwane’s identity is meant to be synonymous with government. The presence of government must be felt throughout the city. Its efforts are meant to be recognized and its values must represent that of a democracy that is inclusive of all cultures and races. However, within the city, we find that the presence of government remains largely unnoticed to the public. Various departments occupy high floored offices in deteriorating buildings. Other purpose built government buildings, with the exception of one or two, find themselves surrounded by large fenced off open space. They remain inaccessible and uninviting to the public. An example of this is the Department of Home Affairs head office on Pretorius Street. There is almost always an array of people standing around, waiting for service, in a public lobby that has no natural light or ventilation. There is also a lack of seating making the environment a rather uncomfortable one. How then, can a sense of confidence in the government be instilled within the minds of citizens?

The idea of achieving a culturally and user diverse architecture must be explored. Paying careful attention to the tourist’s needs and catering for the various components that make up a good tourist offer can lead to a successful centre of tourist activity. Some of these components, as previously mentioned, include a superior retail, dining and cultural offer; as well as good quality accommodation and an iconic architectural offer. All of the above components, while may be primarily aimed at tourists, do not exist in isolation from the residents. As stated by Urry (2005), tourists wish to experience a city the way residents do. Hence, the benefits, services and functions of developing such a project can be simultaneously shared with the public. Government presence can also become well ascertained throughout the project. Personnel associated with the various official departments and in particular, the Department of Tourism, must share the same platforms of interaction with tourists and residents. The architecture housing this activity must become a common ground between the two that seeks to harmonise the relationship they share. At the same time, the forms and spaces generated must become a reflection of Tshwane’s intended identity and contribute towards creating a sense of place within the environment.
Following the theory and the outcomes of the urban context and site study, it was imperative to set a number of design principles. These are to act as a base that assist in achieving the project’s aims and goals as set out in the brief proposal. The first five principles are initially looked at on a sub-metropolitan scale which covers the entire Apies Corridor context. The remaining three principles are looked at in terms of a more site specific scale that applies to the site and its immediate surroundings. The set of principles are meant to act as an architectural guide for the building in terms of the planning and layout. It must also assist in creating a context integrated environment suitable for tourists, government employees and other members of the public. The illustrations depicting the principles are based on a rough initial concept layout for the site.

**design principles**
As mentioned, the study area is a fairly secluded one due to it being a ‘left-over’ space between the inner city and Sunnyside. It is imperative that this be addressed through the project. The building and its open spaces must be well integrated within the existing urban fabric so that it creates easy accessibility opportunities to the rest of the city for tourists and residents alike. A landmark positioned at one of the prominent site corners may also become a point of reference within the city, further integrating the project into the existing city fabric.
movement - vehicular

Nelson Mandela drive is a rather busy regional connector with fast paced traffic. It is mainly frequented by cars entering and exiting the city. A landmark along Nelson Mandela would be highly suitable in terms of being a visual point of note for vehicles. Kotze, Rissik and Robert Sobukwe streets act as the main east-west connectors into and out of the city. They are characterized mainly by a retail edge with residential above.
The existing pedestrian movement patterns have been recognized and must be extended onto the site along main entry points. It must also be noted that pedestrian movement on the site’s edge along Nelson Mandela drive is largely absent due to the state of the decaying street edge and the presence of a high paced traffic. However, towards the north of Nelson Mandela, along the well developed Department of Trade and Industry campus, pedestrian movement is quite significant. Within the boundaries of the proposed site, there is no pedestrian movement due to the site being fenced off. However, the site’s edge along Gerard Moerdyk Street is generally bustling with pedestrian activity due to the presence of the Oeverzicht Artists’ Village.
Currently, the street edge along the DTI campus is made up of a well developed green network. It makes the area inviting for pedestrians and gives the Apies River that runs along it a pleasurable sight. This network of greenery must continue down onto the site’s edge along Nelson Mandela drive. The existing on-site greenery and that around the Apies River must be well maintained. Ultimately, it must create an attractive environment that serves to become a full green edge that surrounds the inner city. This will be in favour of pedestrians and will become an attraction for tourists wishing to explore the city on foot.
Currently, there exists the Robert Sobukwe High Street area just a block north of the site. The street consists of a largely public edge characterized mainly by retail and restaurant offerings. The idea for this is to extend this high street into Gerard Moerdyk and create a pedestrian friendly boulevard lined with the existing Oeverzicht Artists’ Village front that is permeable onto the site. Ultimately, a link is to be formed that extends the current retail and leisure offering for residents and tourists. At the same time, the high street extension will create a series of public spaces tying together the existing public squares along Robert Sobukwe Street with the proposed squares of this project along Gerard Moerdyk street.
The integration of a landmark along the prominent Nelson Mandela / Kotze intersection is to become a symbol of entry into the city for travellers. The focus of the landmark is to be representative of an African Capital City which is a meeting point for a multiplicity of people and cultures. A high, legible and visible iconic landmark structure is to attract the eye to greater interaction and participation. At the same time, the landmark is to become a focal point of orientation within the city that is distinct and unforgettable to the mind. The visual character of such a landmark is to be explored. Perhaps it may take on the form of an interactive and brightly coloured digital media screen or a simple tower that is representative of the capitals identity.

Fig. 6.13

Fig. 6.17
The existing buildings of the Oeverzicht Artists’ Village are to be retained. They currently stand within the open landscape surrounded by lush greenery and will continue to do so. This adds to create a sense of place as well as maintain respect for the local people and heritage. The Apies River which has been canalised and runs along the site’s north western edge is vital to the city’s heritage due to being a focal point of the city’s origin. The river must become an integral component of the city and the area around it which is largely inaccessible and uninviting must be significantly upgraded.
[access & movement]

The precinct's main access points are along existing pedestrian routes with the primary one being from Kotze Street. This is to serve as the main point of entry for tourists being dropped off by bus or taxi. The movement route, on entering the precinct, must then continue down throughout the site allowing easy access into the proposed building and into the Oeverzicht Village cottages.
Currently, the site’s south edge is characterized by a cultural offer of the Breytenbach Theatre. A further extension to this cultural offering must be realized, possibly on the northern edge in the form of a new gallery. Both of these are to become hubs of activity that are flanked by new public squares that strike a balance of public space within the site. Placement of the squares were largely informed by the activity taking place in the building’s surrounding them. The gallery and theatre are to become hubs of cultural activity that afford great significance to the liveliness of the squares. Both of these squares are to connect to the larger network of open public space as previously depicted.
The site’s longitudinal property along the north south axis had been seen as an opportunity for the form development. This resulted in the entire derelict Nelson Mandela edge being addressed. Surrounding context also played an important part. This includes the Oeverzicht Artists’ Village whereby utmost effort had been made so as to allow the cottages to continue existing within its abundant green surrounds. The building’s mass has also been punctured at strategic points in order to allow for access and movement. These occur mainly around existing activity hubs. Scale also played an important role in shaping the building’s form. While it is important that the structure does not impose on its surrounds, it must display an appropriate scale that allows it to stand out as a landmark structure.

[a] The initial form began with a basic bulking along the Nelson Mandela street edge and a secondary rectangular structure along Kotze Street. The main programme components were meant to be housed within this intended form. However, as time went by, this proved to be largely inefficient. Spaces within became too deep and this posed a problem for ventilation and day lighting. At the same time, the building completely negates the presence of the Apies River and has no interaction with it whatsoever.
The second form addressed the challenge of the first by cutting out from the building in order to formulate a series of courtyards. This allows for a sufficient ventilation and day lighting provision to all spaces. At the same time, it enforces the principle of a green network whereby there is now a layering of green spaces on varying degrees of public to private. With the incorporation of the interior green courtyards, the building also relates more to its external green context around the Oeverzicht Artists’ Village. The corner treatment at the Nelson Mandela and Kotze intersection has also been adjusted to create a more suitable form for the provision of a landmark at this point. It also shapes the entry way into the site from Kotze Street.
This form seen the splitting of the main mass along Nelson Mandela. The smaller portion to the north is to become the main tourist welcome centre. The portion to the south is to house the other functions such as the hotel and offices. However, this still seemed to neglect the river as an important component. This form also looked at the elements required for integrating the project into the existing public open space network. A public space positioned at the Breytenbach Theatre on the south and another positioned on the north which is bound by the proposed building is meant to connect to the existing public space further north at the Department of Trade Industry campus. This is to then continue onto the Robert Sobukwe public open space network. These new public spaces receive good definition from the activities within the buildings and streets that surround it.
[d] This form’s intention was to make the landmark at the Nelson Mandela and Kotze intersection more apparent. The building edge along Nelson Mandela has been recessed in at an angle so as to open up the view of the landmark for travellers entering the city. The portion between the tourist welcome centre and the rest of the building to the south has been further opened. This formulates a semi-enclosed courtyard that is to address the challenge of incorporating the Apies River into the project as an integral component. The courtyard sizes have also been adjusted as it was noted that in form [c], such a courtyard layout is too generic resulting in an ‘office park’ type layout. Also, the courtyards have been adjusted to suit the various programme functions that surround it.
This final form seen the introduction of a new gallery building between the Oeverzicht Artists’ Village and the northern public square. The gallery is to provide greater definition to this square. At the same time, an opportunity for the integration of the Apies River has been realized. This has been done by establishing the Apies Link, a water channel that extends from the existing river canal right up into the northern public square. The gallery is meant to spill over onto this water channel so as to enforce the importance of the river to Tshwane’s history. The spaces beside the Apies Link are to be developed into a well landscaped public garden.
All of the major design aims and goals as described in the design principles have been paid attention to within this final form. The resulting form is a longitudinal massing along the Nelson Mandela site edge which has been punctured at different intervals. These include the inclusion of courtyards that open up the inside of the building and perforated edges at different positions so as to allow for access into the buildings and other spaces beyond. The building seeks to regenerate the entire edge along Nelson Mandela Drive which ultimately must spill over into the entire area of study.

Fig. 6.28 - site layout plan

portion proposed as future conference/events venue [not to be designed within project]
appropriate use
[ground floor layout]
The Apies River which has been canalised is vital to the city’s heritage due to being a focal point of the city’s origin. As mentioned, it stands in an extreme state of decay. The area around it is to be well upgraded and its heritage well appreciated within the precinct. A water channel starting at the river is to extend into the main public space and allow a connection to the river to be realized. This is to become a focal point of the public realm ensuring the incorporation of the river’s presence. The space around the intersection of the river and the new channel is to be the Provincial Garden - a landscaped park space displaying the flora of the nine South African provinces. This further enhances Tshwane’s status as a representation of the Republic.
Fig. 6.32 - view of Apies Link at public square edge
Fig. 6.33 - view of Apies Link at Provincial Garden
Fig. 6.34 and 6.35 - indigenous plants
Fig. 6.36 - sketch section at intersection of Apies Link and canal
A greater variety and sense of diversity within the project has been achieved through breaking up the buildings into smaller components. However, these different parts must not exist in isolation but must rather complement each other as co-existing components. A sense of coherence in this regard is provided by means of a unifying sheltering element that ties all of the buildings together and at the same time ensures the buildings all remain on a human scale. Thus, movement throughout the entire site is a consistent and user friendly motion. The sheltering element height may vary at different points such as around main entrances where the level is raised to create a sense of arrival. Cut outs at certain points to filter light in has also been incorporated.
Fig. 6.38 - view of sheltering element at pedestrian street
Fig. 6.39 - perimeter section through hotel
layering of green spaces

- [public] nelson mandela edge
- [private] internal courtyards
- [semi public] internal street
  - oeverzicht artists’ village
The integration of courtyards within the buildings not only ensures an even distribution of natural light and ventilation to the deeper set spaces but also creates a pleasurable working and living environment. At the same time, a layering of green spaces becomes noticeable throughout the entire site. These green spaces exist on varying degrees of privacy and accessibility. Beginning with the existing greenery along Nelson Mandela, the layering continues into the private courtyards and on into the semi-public internal street. This seeks to further integrate the development into its existing environmental context as is in line with the ‘Green Space Network’ principle previously outlined.

Fig. 6.41 - perimeter section through green wall along Nelson Mandela edge

Fig. 6.42 - view of internal courtyard

Fig. 6.43 - view of green space at artists’ village
The positioning of landmark structures at prominent intersections, circulation areas and defined public spaces is to become distinguishing points within the project. They must act as a series of urban focal points which announce the project and enhance its identity and legibility. Within the internal public space, orientation is further enhanced by the emphasis of landmarks placed at various points. These points include the main pedestrian entrance along Kotze Street, the gallery square and the entry way into the Provincial Garden. A further symbolic landmark in the form of a sculpture or artwork is proposed for the theatre square. These landmarks are to be treated differently from the rest of the facade in terms of material, proportion and scale.
Fig. 6.45 - landmark at Provincial Garden entry
Fig. 6.46 - landmark at Nelson Mandela/Kotze intersection
Fig. 6.47 - night view of landmark at gallery square
One of the problems with government buildings today is that they exist in isolation from the public. Such a system does not embody the values of a democratic South Africa. The city of Tshwane being the heart of government is to be depictive of an open and democratic society expressing the dignity, freedom and success of the nation. For the purpose of this and to further integrate the departmental building within the public realm of the project and the context, an escalator from the basement has been provided which ensures that all building users engage with the public space before venturing up and into the intended workplace. An atrium in the main building always provides a visual link between the public and government.
Fig. 6.50 - view of public square from gallery
Fig. 6.51 - view of public square from Gerard Moerdyk
Fig. 6.52 - section through tourist welcome centre and department of tourism
place bound architecture

In keeping with the project’s aim of becoming an integral part of shaping Tshwane’s identity as a ‘Contemporary African Capital City’, it is vital that the architectural aesthetic be depictive of this. In particular, the material selection as well as the technique and method employed must conform to a style which is distinctly noticeable within the Tshwane context. By doing so, the building is to benefit from the existing contextual framework and not exist in seclusion. It must easily blend in but at the same time stand out as a symbol of a contemporary capital city.

precedent In the design of the Mpumalanga Provincial Legislature complex, a great emphasis had been placed on creating an architecture that is reflective of the local context and culture. It has achieved the above by utilising locally bound techniques, materials and craftsmanship. The architect’s design intention was focused on ‘The Making of an African Building.’ Through architecture, the building is meant to stand as a symbol of the new democratic society which it serves. It is also the first civic building of its magnitude to be constructed in South Africa post-apartheid. The building strove to embody the values of a democratic government and become a symbol of identity for a culturally diverse social landscape within South Africa.
A key informant of the design was the site and context which the building sits in. The building sits well within a natural landscape that is flanked by the Corocodile and Nels Rivers which both cascade down natural gorges. The complex is made up of a series of pavilion like buildings in a crescent shaped line that “hug the tree-line, stepping up and down with the natural ground line, engaging the forest and connecting to the outside ground level from at least two, in some instances three levels per building” (Malan and McInerney, 2001).

Juhani Pallasmaa (2005) speaks of architecture of the visual image which aims at direct aesthetic seduction and gratification. He further states that we can “clearly identify an architecture of the eye, a mode of building, which suppresses other sensory realms.”

The Mpumalanga Provincial Legislature Complex makes use of an array of textures and finishes through materials such as clay bricks and timber that ensure it blends with its surroundings and becomes an identifiable symbol of a democracy. The architects also strove to enforce the local bound notion within the project by utilising arts, crafts, textured plasters and beadworks that relate strongly to the local context.

The Mpumalanga Provincial Legislature is a successful example of a place bound architecture. Rather than isolating the surrounding context, it has seen it as an opportunity for creating interesting forms and styles. The building sits well within the natural landscape and does not impose on it. The idea of creating a place bound architecture for the Tshwane Tourism Gateway project is along the same lines as this precedent. However, the precedent building exists largely within an abundance of natural features. The Tshwane Tourism Gateway project must display an architecture that fits in harmoniously within its surrounding urban context. At the same time it must be representative of a thriving metropolis that is set to become a hub of cultural, political and social activity.

Fig. 6.53 and 6.54 - aesthetic of precedent building
Fig. 6.55 - plan of precedent building
Fig. 6.56 - sketch elevation of precedent building
In terms of material, Tshwane has a strong tradition of face brick, stone and steel. Many buildings in the immediate context are built completely of face brick. The Department of Trade and Industry campus is one such building that has already become a strong symbol of the area. Materials of varying textures and colours also enhance the diversity within the various building components. Another common practice within Tshwane is the integration of motifs and patterns on to facades. The primary material for the project is to be face brick that has a display of a traditionally derived pattern work at certain noticeable points. For the purposes of exterior structural columns and the sun shading devices, steel is to be used.

Fig. 6.57, 58, 59 - steel and face brick applications on surrounding buildings
The Tshwane climate tends to be a considerably hot one within the summer months. In particular, the western sun during late summer afternoons is rather harsh. Winters can also become blistering cold at times. For these reasons, it is imperative to apply climatic controls to the facades which ensure maximum sun gain during winter and minimal sun gain during summer. Large roof overhangs, shading devices around window openings, the treatment of the internal street and the level of openings in the various facades depending on orientation give guidance to the treatment of the elevations. Portions of the facade with large glazed areas are to receive the appropriate sun protection elements such as louvers. Horizontal shading devices over northern windows and vertical devices for west and eastern windows will also ensure good climatic control.

Fig. 6.60 - sketches of sun shading applications to north and west facades
The building is to utilise mainly locally based craftsmanship and technology to add aesthetic value to it. Making use of rich building applications and methods found in South Africa and in particular, Tshwane, will immediately radiate a degree of place boundness to the project’s architecture. Brickwork patterns derived from traditional patterns are to be applied to the base and the top of the building. This will result in the building becoming a classic example of the current South African paradigm. The use of brick and brick patterns is to be enforced around windows by means of brick lintols and brick on edge sills. The balustrading is to be custom designed and made of steel. It displays a pattern which is a symbol of a widely diverse society.

Fig. 6.62 - traditional brick patterns
_window lintol and sill detail

_brickwork pattern detail

_steel balustrade detail
The various entrances to the buildings are to be celebrated ports of welcoming an array of users. Facade treatment at these points is to be further exaggerated and must be a reminder of place for the user. This has been achieved through a concrete screen that displays cut out pattern work. The pattern is a collection of triangular shapes that has been derived from the traditional patterns and art forms of the Zulu and Tswana tribes. As mentioned, the people of these tribes were the first to inhabit the city and made their home around the Apies River (Grobler, 2006). Apart from being a historical symbol, the screen also acts as a sun protection device that filters light into the main public spaces. This ensures a clearly visible structure that is depictive of a building that pays homage to the heritage of the context within which it exists.
_north elevation
_east elevation
technical investigation

_introduction
_the stereotomic
_the tectonic
The technical investigation for the proposed Tshwane Tourism Gateway project is based on the theoretical premise of Gottfried Semper (1803-1879). Within his theory, the German architect explores the tectonic relationship of architectural materiality. He further argues that the architectural composition may be broken down into two systems – the stereotomic which relays solidity and the tectonic which defines dematerialisation (Semper, 1989). Kenneth Frampton (1996) further defines this theory and states that the stereotomic symbolises earth. It is a repetitious piling up of elements that make up a volume. The tectonic formulation may be seen as an analogy for the sky – lightweight components to define a spatial matrix. Architecture of the time displays various interpretations of the tectonic and stereotomic mainly influenced by factors such as climate, context, materials or culture.

It is with reference to the above that this technical investigation is meant to be carried out. The stereotomic component is to focus on the building’s structure. The tectonic is meant to further detail the facade elements outlined in the formulation of a place bound architecture as mentioned in the previous chapter.
The building’s structural system is composed largely of a concrete mass. A series of beams and columns forms the load bearing components. This results in a skeletal framework based on a defined grid system. Within the floor slabs supported by the columns and beams, various areas are partitioned off as per the necessary spatial requirements. Suspended ceilings cater for services that are required to serve the building.

Fig. 7.1 - view of skeletal structure of tourist welcome centre
The basement runs below the buildings entire length along Nelson Mandela Drive with the exception of the area below the Provincial Garden. This was done in order to preserve the natural landscape of the area around the Apies River. The portion below the retail block, gallery and Oeverzicht Artists’ Village has also not been excavated to form part of the basement due to the same reason of preservation. Slabs that sit below the courtyards have been reinforced with additional support according to a structural engineer’s specification. This is to allow for the load of planting and soil needs thereof. Trees within courtyards are housed mainly in planter boxes to allow for greater soil depth and are strategically placed above columns for greater support.

The basement design also caters for exhaust air and for the provision of fresh air through the necessary extraction and filter systems originating at ground level. The first basement level has a minimum clearance level of 4.5m so as to allow for service and emergency vehicles. The basement is the point of origination for the structure and is mainly used for parking, service and delivery. A cordoned off area within the basement’s northern area is to facilitate parking for high ranking members of the government as is required by departmental regulations. The remainder of the parking is shared between government employees, members of the public and tourists.

Fig. 7.2 - view of column and beam structure
Fig. 7.3 - basement plan
The entrance to the basement is by means of a ramp that leads off the two-way flow Gerard Moerdyk Street. This is to assist in easing traffic congestion and at the same time ensures better accessibility from the north and south. Vehicular access is to be secure and controlled. Access to the ground floor is primarily through an escalator which leads up to the public square. Elevators do not continue to levels beyond ground level so as to ensure interaction with the public areas. The only exception to this is the elevator used by high ranking government officials which leads directly up to the desired floor.
The large concrete cut out feature walls that sit at the main entrances into the buildings are supported by the existing column and beam structural system within the building. Beams extend out of the building and intersect the concrete walls providing a horizontal means of support. A larger column with a stronger base extends up to the centre of the bottom of the wall providing further support. Within the tourist welcome centre, the feature wall connects to a raised roof slab at the top that forms the enclosure of a light box over the atrium space.

The building’s roof is made up completely of a series of reinforced concrete slabs. Various cut outs occur over strategic points for the provision of natural light into spaces below.

The cut outs are enclosed by boxes with glazing to the sides. The columns that support the covering of the internal pedestrian street are made up of a rounded concrete base. Steel channels extend out from this base and connect to the slab above.
Movement around the site is mainly articulated by means of a sheltered pedestrian street. The street which begins at the site’s northern edge and terminates at the theatre square is meant to be a lively place of interaction lined with retail and restaurant spaces. Main entrances into the buildings and onto the gallery square and artists’ village occur off the internal street. Building entrances are characterized largely by foyers which act as threshold points that lead off into smaller spaces. Movement upwards is by means of elevators placed at the building foyers. Strategically located fire escape stairways are located at various points in case of emergency.

Fig. 7.4 - view of entrance feature structure
Fig. 7.5 - exterior column view
Fig. 7.6 - movement and service diagram
The building’s structural make up encourages a natural ventilation system. Within the hotel and the rest of the spaces around courtyards, a cleaner and more natural air flow is possible through the planting that occurs within these outdoor spaces. Cool, fresh air enters all edges of the building around courtyards and disperses throughout the building. Hot, stale air escapes from windows with high level openings. This principle is applied to the large atrium space within the Tourist Welcome Centre as well. A mechanical ventilation system is to assist in the removal hot air within this space.

Fig. 7.7 - natural ventilation through courtyard spaces
Fig. 7.8 - natural ventilation through atrium space
Due to the vast amount of outdoor public space throughout the site, it became necessary to define elements that seek to unify this space. A series of urban furniture such as lamp-posts, benches, bollards and drinking fountains are to be specified for the outdoor public realm. This has been done to enhance the space by making it a safer and more attractive environment for tourists and residents. The design for these items follow on from a proposed set of urban guidelines as outlined in an infrastructure implementation document put together by consultants of the City of Tshwane (Line, 2005). The idea for this set of urban interventions is that it must extend throughout the Apies Corridor area as perhaps a starting point of the area’s regeneration.
The tectonic exploration involved mainly the detailing of the building’s facades. Following the design exploration and the various forms and elements derived from it, it became necessary to ensure the technical suitability for those elements. A primary focus is to be placed on the detailing of the aesthetic elements derived from the ‘place bound architecture’ section. In particular, the brick cladding and brick patterns are to be looked at. Elements derived from the ‘climatic response’ section such as the sun shading louvers and green walls are also to be studied.

Fig. 7.11 - study of sun effect on western facade during summer
Fig. 7.12 - overhang solar protection for Tshwane northern facades
Fig. 7.13 - louver solar protection for Tshwane western facades
Fig. 7.14 - detail of louver positioning according to sun angles
The Constitutional Court building in Johannesburg is an example that displays a climatically responsible facade. The building’s north and west facades are made up largely of glazed areas. In order to prevent the building from overheating during the summer months, a louver sun shading system was put into place. The system is made up of a number of smaller frames to which the steel louvers are attached. These frames are then all stacked above each other and connected by means of steel IPE sections.

Within the Tshwane context, building facades that face the west are usually faced with extreme heat conditions during late afternoons in summer. A simple sun study on the proposed building’s western facade reveals a large amount of solar gain during these times which will result in interior spaces being overheated. It is thus imperative to provide a shading device to ensure heat protection during summer. Portions exposed on the northern facade need also have shading devices incorporated into them. According to calculation, these shading mechanisms on the northern and western facades are to ensure minimum heat gain during summer and maximum heat gain during winter.

The hotel’s lower western facade which is adjacent to the green network along Nelson Mandela Drive must become a part of this network and not remain isolated from it. For this reason, the existing greenery has been extended onto the building in order to formulate a green wall. This ensures a
respect for the existing green environment and also makes the street edge a pleasurable one for tourists and pedestrians.

[p] The East Conservatory Plaza in Philadelphia makes use of a green wall system that is the largest in North America. The intention behind it was for the green wall to become an attraction that will wow visitors with a variety of flora all housed within the green wall. According to the design team, a good green wall is one with a good substructure and where the correct plants are specified with an appropriate irrigation system to sustain them. This green wall makes use of a framed panel system which is filled with soil or other growing material. Planting then grows out from these panels. The panels are made of perforated steel so as to allow the plants to grow out but the soil to remain in.

Ultimately, the building’s facade make up must become a reflection of the project’s aims. It must stand as a well constructed symbol of the evolving Tshwane cityscape. The materials and technologies put into place must assist in making the architecture a place rooted one. At the same time, the building must respect its environment and become a catalyst for change in the area.
perimeter section
eastern facade
n.t.s
detail [a]
brick pattern
1:10

45° brickwork
rowlock course brickwork
soldier course brickwork
detail [b]
window lintol and sill
1:10

Facebrick cill - single cant brick. Minimum overhang 25mm. NB - overlaps & steps for weather protection

mortar

face brick with recessed joint

DPC

rowlock course brickwork

soldier course brickwork

precast concrete lintol

mortar

face brick with recessed joint
310mm cavity wall, red terracotta face brick to exterior
80mm EPS insulation
Butterfly wall tie placed every 6th course vertically and at 650mm centres horizontally
Weepholes at ± 600mm centres
lipped brick
compression joint
62 x 86 steel shelf angle support bolted to RIC slab

detail [c]
brick cladding
1:10
12mm galvanized steel blade angled at 22° and welded to steel frame

191 x 1 850 galvanized steel frame bolted to base plate

10mm galvanized steel base plate welded to IPE section

203 x 152 IPE section fixed to concrete

detail [d]
steel louvers
1:10
concrete lip.

irrigation drip line

900 x 400 perforated steel panel fixed to IPE section

growing medium to specialist's spec.

76 x 76 x 15 steel IPE column fixed to cavity wall with stainless steel wedge anchor

waterproofing membrane

detail [e]
green wall 1:10
85mm step in RIC slab

one layer Derbigum CG3 and one layer Derbigum CG4 waterproofing membrane, with 75mm side laps and 100mm end laps sealed together and to surfaces by 'torchfusion' followed by one layer 250 micron plastic sheeting loose laid on waterproofing

Min. 35mm screed above and below waterproofing membranes laid to fall to FBO at min. 1:80

downstand beam to engineer’s spec

detail [f] balcony step 1:10
_second floor
_third floor
_section b-b

10m
gallery square from east

hotel entrance, pedestrian street and artists’ village

nelson mandela and kotze intersection

hotel courtyard
hotel courtyard
gallery square, provincial garden and surrounding buildings
tower at gallery square
welcome centre entrance
hotel courtyard
conclusion

Urban regeneration within the Tshwane urban environment is necessary in order to ensure a pleasurable experience of the city for residents and tourists. This cannot be done through simply applying various unrelated interventions throughout the city. It is essential that we shape the urban realm in a manner which creates a rich and unique experience of the city - an experience which is reflective of Tshwane’s underlying history and its identity as an in-progress thriving metropolis and contemporary African capital city.

Through this dissertation, I was granted the opportunity to further pursue my interests in two aspects which I have great love for – tourism and my home city. I gained a greater understanding of both. My views and perceptions towards tourism in the city had been broadly opened and I have been exposed to many new sights of which I previously had no knowledge about. The knowledge gained of my city and in particular, the Apies Corridor district has led me to become more considerate towards the city environment. A greater appreciation for the natural form as well as the man made elements that together shape the city was realized. The study of the city and its offering has shown great potential in terms of achieving new levels of prosperity. Of course, there are a number of areas requiring greater concentration in this regard. As architects, it is up to us to create meaningful buildings that express the city’s unique identity. Our form giving exercise must seek to further celebrate this identity and enhance the spirit of place.

In light of the above and following my detailed study of Tshwane, I have developed a greater sense of ownership towards the city. I can now call myself a proud resident of the City of Tshwane. I wish to see the city become a contemporary mix of tourist, government and everyday resident activity and fervently look forward to its future prosperity.
[books]


[websites]


[reports]


[Interviews]
Ramagoashe, K. Interview with author on 17 June 2013.

Mdingi, L and Ntinto, B. Interview with author on 17 June 2013.

[academic dissertations]
