



# 005 PHYSICAL CONTEXT

---

## 5.1 Site Analysis

- 5.1.1 Location
- 5.1.2 Integration with the City
- 5.1.3 Movement & Access
- 5.1.4 heritage Considerations
- 5.1.5 Residential Accommodation

## 5.2 Urban Concepts

- 5.2.1 Urban Design Informants
- 5.2.2 Land-use

## 5.3 Conclusion

# 005 PHYSICAL CONTEXT

---

## 5.1 Site Analysis

A site analysis has been done to establish the opportunities and constraints of the site. See appendix 10.4 for the complete site analysis of the physical, visual, environmental, climatic, legislative socio-economic and political context.

Several key issues were identified from the site analysis in terms of opportunities and constraints concerning the location, integration with the city, heritage considerations and residential accommodation, and then summarised into a brief statement.

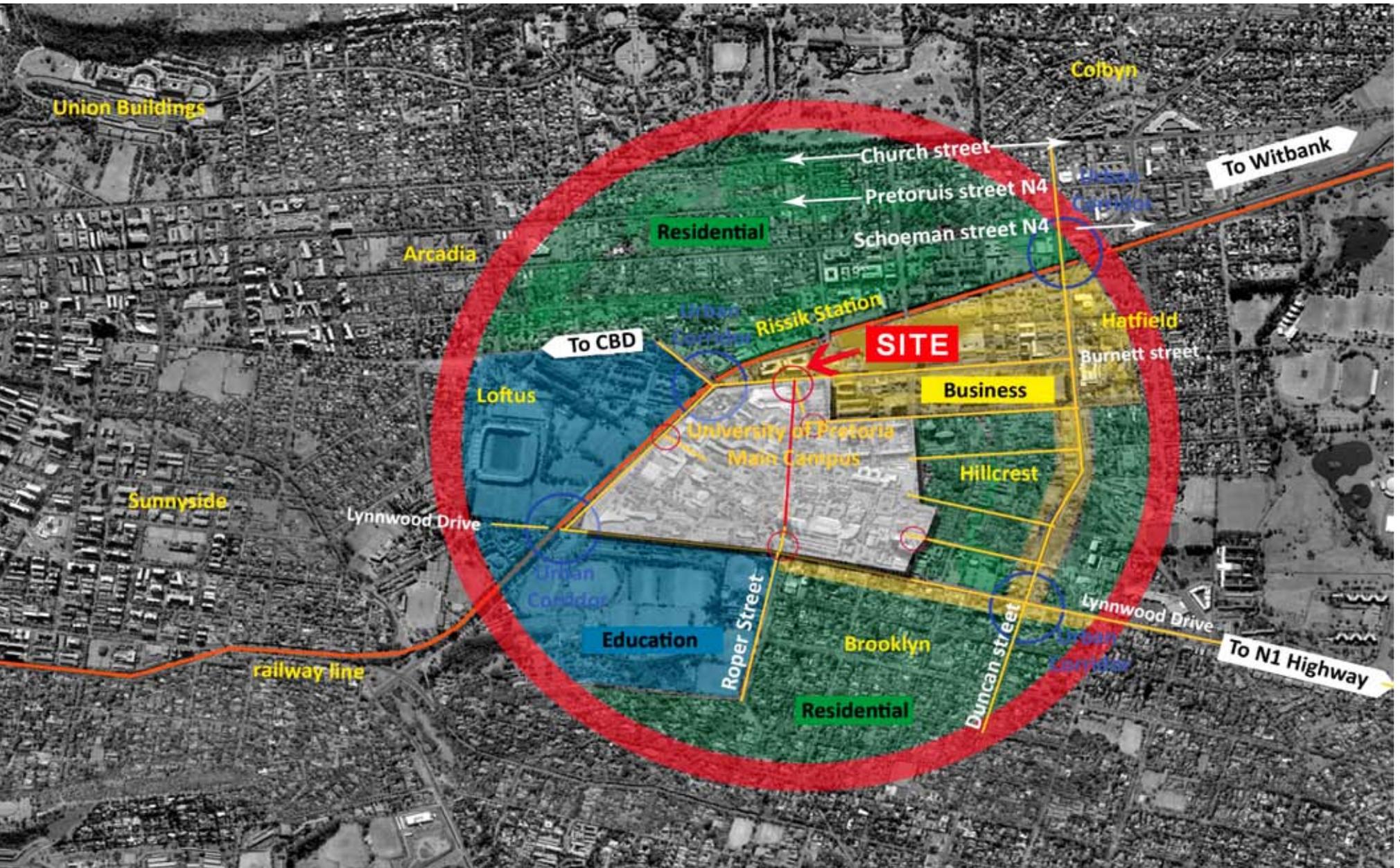


fig 5.1

## 5.1.1 Location

The site is situated on the boundary between the University of Pretoria and the Hatfield Core Business District on the corner of Burnett and Festival Streets.

### 5.1.1.1 Location Constraints

- Not in direct vicinity of art and architecture faculties
- Buildings to the south of the site has heritage value and will have to be accommodated in the design
- Burnett and Festival street crossing currently not very pedestrian friendly
- Shell garage and service station and the Africon building present unfriendly pedestrian environment

### 5.1.1.2 Location Opportunities

- Because of the increasing activity in the Hatfield precinct, and more specifically Burnett Street, the site is ideally located for the planned public-student interface and commercial activities.
- Gautrain station is within walking distance and will result in a huge upsurge of activities and a significant increase in the number of pedestrians in the Hatfield area.
- Metro rail station is also within walking distance.
- The site is an excellent location for a new gateway to campus as identified by the Holm-Jordaan framework
- Excellent visibility from east and west in Burnett Street as well as from the north in Festival Street provides opportunity for an iconic entrance building

*fig 5.1 location of site in study area and surrounding land-use*



## 5.1.2 Integration with the City & Community

The campus does not currently lend itself to free interaction between the students and the community.

### 5.1.2.1 Integration Constraints

- Controlled access & barriers
- Unattractive existing urban fabric
- Dead edges because of boundary fences
- Lack of safety and security on the surrounding streets
- The current campus design does not allow for much interaction between its users and does not inspire a sense of community.
- The barrier between students and public causes sense of segregation and resentment.

### 5.1.2.2 Integration Opportunities

- Due to its function, the site has the potential to become a node of activity, playing an integral role in the regeneration of the public-private interface.
- Roper Street can be opened to the public to create a clearly defined “public corridor” to initiate the integration with the city and the end-goal of becoming a fully integrated “University-City”.
- Commercial facilities along Roper Street will intermingle students and public.
- A link from the station to the south of campus and the Brooklyn area, will break the urban barrier formed by the UP.
- The creation of opportunities for students and public to interact would result in a greater sense of community to be cultivated in Hatfield.
- It would foster the development of a shared identity.
- School children from all socio-economic groups would be exposed to tertiary education possibilities.

## 5.1.3 Movement & Access

*“The modern city has grown in size and therefore need multiple means of transport to get about. The city has become overlaid with a complex series of transportation methods, each with its own rate of movement and its own system of perception. In the past these systems have always been considered separately. All movement systems must be thought of simultaneously if the region is to produce the impression of a coherent whole” (Bacon, 1957:240).*

### 5.1.3.1 Vehicular

Vehicles on campus are strictly controlled with specific, though inadequate parking areas. Parking on campus is a problem. Specific zones have been identified in the framework for parking garages to be built. The site itself is at present a parking area accessed only from Festival Street. This access point is also the only access for students through a turnstile gate. The result is uncontrolled movement of pedestrians through parked cars, which could result in vandalism and damage to the parked cars.

### 5.1.3.2 Pedestrian

The campus pedestrian network consists of passages, courtyards and landscaped gardens. Pedestrian access is controlled by means of an identification system and the use of turnstiles at all entrances, where congestion is prevalent. Once inside students are free to move where and however they wish.



fig 5.2 spatial syntax diagram of vehicular movement surrounding the site

fig 5.3 spatial syntax diagram of pedestrian movement surrounding the site

### 5.1.3.3 Pedestrian Network Constraints

- On an urban scale, the University forms a huge urban barrier which impedes public flow of movement from north to south and vice-versa.
- Pedestrian paths on campus are not clearly demarcated and students tend to follow the shortest routes to their destinations, resulting in a chaotic movement network.
- There is no pedestrian gate on Festival Street.
- There is no clearly defined path for pedestrians entering campus to use across the site.
- Access control results in congestion at turnstiles.
- On a local scale, sidewalks on streets surrounding the site provide an inhospitable environment to pedestrians.
- Serving and served areas are undefined.



fig 5.3

### 5.1.3.3 Pedestrian Opportunities

- The vast number of pedestrians passing the site provides the opportunity to harvest from an existing energy source.
- Opening Roper Street to the public will allow even more energy to pass through campus and eliminate the strong urban barrier formed by the campus.
- With the Gautrain station, still more energy will be created and with the provision of a pedestrian friendly path, people would probably prefer this route to others further to the south.
- A defined pedestrian circulation network and specifically located access control points will prevent pedestrians from moving into service or private areas.
- The site can become gateway to campus, allowing access to all by providing a transition space leading up to the threshold.
- A public square can be created on the corner of Burnett and Festival Streets.

## 5.1.4 Heritage Considerations

Section 38(3) of the National Heritage Resources Act (NHRA) (No 25 of 1999) (See appendix 10.6.1) mandates the assessment of heritage resources as part of the pre-design process for proposed development of a particular size and scale.

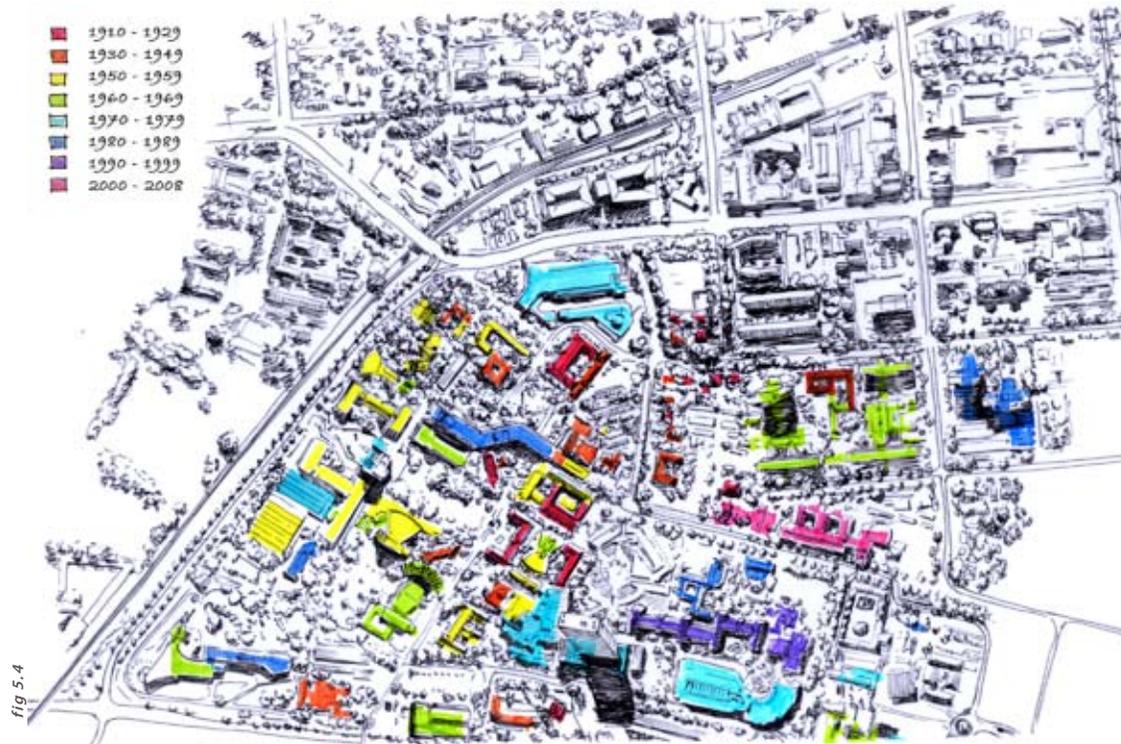


fig 5.4

### 5.1.4.1 Heritage Constraints

- According to the NHRA the buildings along the eastern side of Roper Street are deemed to be worthy of preservation as they are older than 60 years and indicative of a specific nature of the neighbourhood, forming part of a cultural landscape, and is therefore protected under Section 34(1) of the NHRA (See appendix 10.6.1).
- It is also in keeping with the vision to preserve the character of campus even when fully integrated with the city.
- These buildings will have to be respected when infill developments take place around them.

fig 5.4 historical development of U.P. campus

## 5.1.5 Residential Accommodation

In order to enhance the safety in the 'public corridor', there is a need for 24 hour activity. Locating accommodation on the edge will provide extra eyes in the area as well as create a sense of ownership.

### 5.1.4.2 Heritage Opportunities

- Heritage conservation supports development by adding value, but special solutions are needed to make people aware of the value of the historic buildings.
- It will enhance the character of Roper Street and the university and bring diversity and clear definition to the space as being different from public space.
- The existing function of the buildings (single residential) does not fit in with the development framework and will have to be re-allocated to allow for a small artistic square with coffee shops and small art galleries.
- Buildings on the eastern side of Roper Street can be renovated and linked to new residential developments behind them, forming the foyer spaces of the new high density buildings.

### 5.1.5.1 Accommodation Constraints

- Noise from the activities on Roper Street could be a source of disturbance
- Spaces between heritage buildings are limited and will need to be planned carefully.

### 5.1.5.2 Accommodation Opportunities

- There is a huge demand for accommodation close to or on campus for students and young alumni who wish to contribute to the university's research and incubation programmes, as well as for visiting professors.
- The eastern edge of Roper Street provides an excellent opportunity for provision of residential facilities situated in close proximity to existing student residences.
- Residential opportunities also exist in the proposed building development.

## 5.2 Urban Concepts

### 5.2.1 Urban Design Informants

- The possibility of Burnett Street becoming a pedestrian orientated street, with its commercial activities and the Gautrain station should be taken into consideration.
- The visual axis of Roper Street needs to be acknowledged.
- The permeability of the site is to be dealt with as to still allow for security but easy access for students and public.
- Serving and served areas need to be clearly defined within the new development.
- The northern side of the site must be used to establish a defined urban edge, providing a gateway experience, clearly marking the crossing from public to private space.
- Buildings are to be dealt with so as to create a hierarchy of spaces that define public and private areas.
- The historic buildings should be respected to serve as attractions as well as to keep alive the nostalgia for Hatfield as it used to be before the 1970s.
- The site must be rendered permeable in a way which allows students ease of access without compromising security.

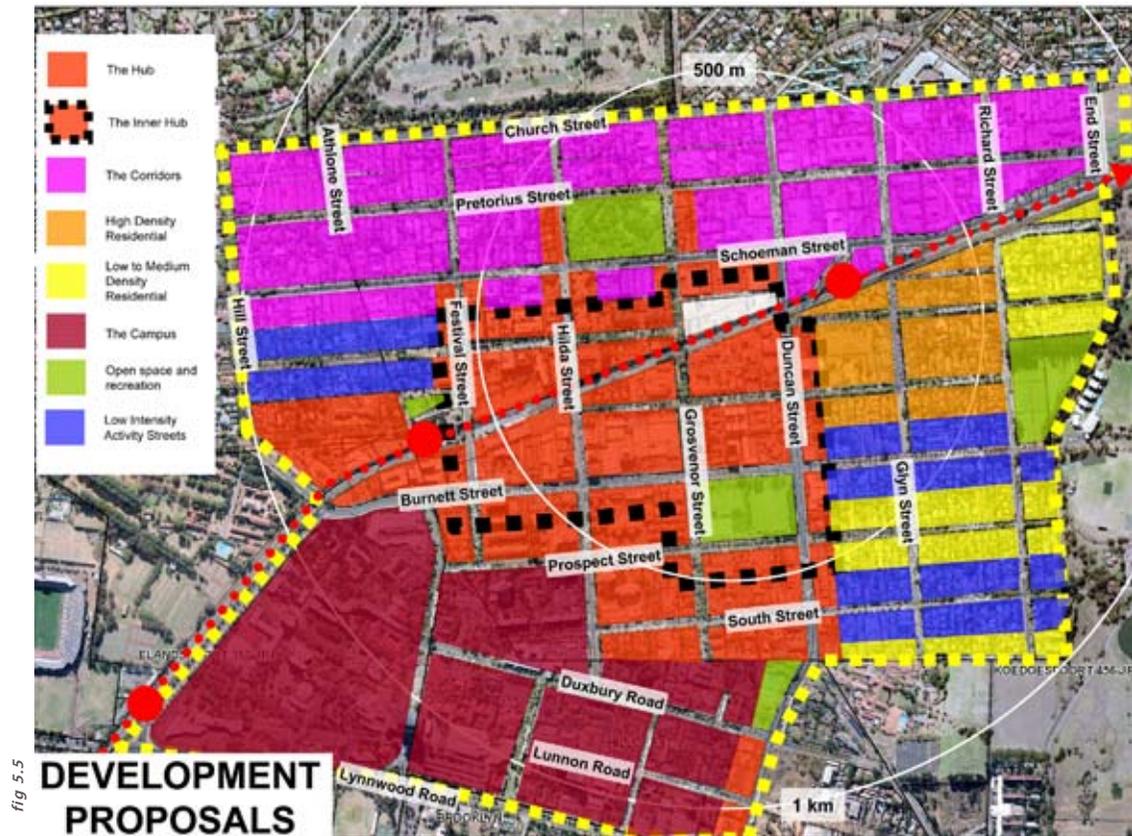
*fig 5.5 Hatfield Spatial Development Framework  
- proposed land-use*

## 5.2.2 Land-use

The Hatfield area is being rejuvenated and re-zoned as a major commercial precinct and because of the Gautrain station, a very high increase in energy is envisaged in the area. With the anticipated increase in commercial activity and the large numbers of pedestrians expected to be using Burnett Street, the site is ideally situated for a commercial intervention and public gateway onto campus.

Where there are people - in buildings, in neighbourhoods, in city centres, in college campuses, in other recreational areas, and so on - it is generally true that people and their activities attract other people.

*"People come where people are."*  
Scandinavian proverb.





## 5.3 Conclusion

Analysis of the site has provided a host of opportunities and constraints. It has become clear that a collective partnership between postgraduate students of the University of Pretoria, lecturers and career guidance staff from the University, the Innovation Hub, as well as local commercial enterprises and businesses could result in the site becoming a vibrant centre where students can find the link between their studies and the commercial world.

The site has the potential to become a place where students can learn commercial skills, while providing consumer facilities for the public and creating a threshold between the campus and public. This partnership could lead to a healthy interaction between students and the public, where they can live, work and play.

Establishing a node on this site has the potential to create a pedestrian throughfare between the main gate of the campus in Lynnwood Road and the development, thereby generating activity along Roper Street; as well as functioning as a catchment area for the entire campus through which to channel its flow of students.

