Chapter 5

Reading the site
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In the third chapter the theoretical argument against the proposed PAP competition site was fully explored. Three alternative sites were proposed and a process of comparison and scoring was undertaken. This entailed weighing up of the positive aspects against the negative aspects of each site, and a scoring process against the derived site selection criteria. The conclusion reached was that the proposed Johannesburg site was best suited to meet the core mandate of the PAP and pursue the goals of this thesis.

This chapter will look at the selected site in greater detail. Firstly, the exploration will look at understanding the site and its context; zooming in from provincial down to locality scale. This will also include and understanding of the physical properties and relative size of the site. Thereafter the site will be mapped from three perspectives, following a similar methodology used in earlier case study analyses. These perspectives are:

- The perspective of the politically powerful elite
- The perspective of a visiting foreign dignitary
- The perspective of the ordinary local.

The aim of this chapter is to arrive at an inclusive site understanding through highlighting the overlaps and disjuncture of the mapping exercises. This will be used as an important tool at arriving at an appropriate design methodology which will inform the ensuing urban design and architectural proposals.

Contextual understanding of site

Prior to undertaking mapping exercises, it is critical to understand the general context of the site. This will be done zooming in from provincial to local level. The site is located in Newtown, lying in the city of Johannesburg in the province of Gauteng.

The Gauteng province is situated in the heart of the highveld, and is South Africa’s smallest yet most urbanized province with a population of over eight and a half million according to the 2001 National census.
It is considered the economic hub of South Africa as it contributes to more than 58% of the national GDP. (www.wikipedia.org/wiki/gauteng.html, cited 25 September 2007)

Johannesburg lies within the center of the province. It is part of the larger administrative region known as the City of Johannesburg Metropolitan Municipality. This administrative region stretches northward to Midrand, southward to Orange Farm, eastward to Edenvale and westward to Roodepoort and Soweto.

"Johannesburg is South Africans main commercial center and has always been the countries most cosmopolitan city, drawing a range of immigrants from the rest of the world. Johannesburg has grown into an intellectual, scientific and cultural centre" (www.papcompetition.com, cited 31 May 2007)
The site is located within the CBD of Johannesburg in an area known as Newtown. Newtown has a rich cultural and commercial history, being the original hub of exchange in Johannesburg. Due to its proximity to the railway line it attracted many foreign businesses and immigrants and soon became a bustling mixed use area, leading to the establishment of a station. In 1904 the area was burned to the ground to curb an outbreak of the bubonic plague. Latter it was resettled with industrial functions.

In recent times the area has been the focus of redevelopment becoming known as the cultural precinct, partly due to the city’s vision for the area and due to the existing cultural nodes such as the Market theatre, Marry Fitzgerald square, Sci Bono Discovery Centre and the like. The proposed site is sandwiched between the Queen Elizabeth and Nelson Mandela Bridges. The Nelson Mandela Bridge is the largest cable-stayed bridge in Southern Africa and links Newtown and the CBD to Braamfontein, Parktown and the northern suburbs.

(www.joburg.org.za, cited 23 September 2007)

To the north of the site is the Metromall transport interchange, accommodating taxis and buses, a trader market and retail shops. The site currently serves as an extension to Metromall, accommodating a large open air taxi rank. To the north of the site in the Braamfontein yard and important commuter rail lines. Across the road on the west of the site is the old railway station structure, and the higher density Brickfields housing development. Across the road on the eastern boundary is the cities long distance taxi rank. The site has excellent road linkages with the Carr street interchange, linking on and off the M1 motorway in close proximity, as well as Nelson Mandela Bridge that joins onto Jan Smuts Avenue. It is also within walking distance of other transport nodes including Park Station. Park Station is one of the countries busiest transport terminals accommodated commuter rail, long distance rail, tour couch, metropolitan bus and local taxi services.

It will also be extended to become one of 10 Gautrain stations, a rapid rail system currently under construction. (www.gautrain.org.za, cited 12 March 2007). Additional less formalized bus departure and arrival points for cross state busses can be found across the railway in Braamfontein.

As such we see the site as being in close proximity to all major forms of public transport, highly accessible to vehicular traffic and in close proximity to many culturally important sites.
Aerial photo of the site showing the surrounding context.

- Commuter and long distance rail lines
- Nelson Mandela Bridge
- Queen Elizabeth Bridge
- Old railway structure
- Carr street on-ramp to M1 motorway
- Brickfields housing
- Metromall P.T.I
- Long distance taxi rank
Physical properties and relative size
This section will briefly explore the physical properties of the site prior to conducting site reading exercises.

Topography and existing land use
The site sits on a slope that drops from its highest point on the Braamfontein ridge in the northeast across the site in a south westerly direction. The height difference across this diagonal length of 285.5 meters is 6meters, a gradient of 1:47.5. Since the site is flanked by the bases of two vehicular bridges, there are retaining earth slopes on both the western and eastern boundaries.

On the western boundary where the Nelson Mandela Bridge joins onto West Street there is a substantial height difference, of 10 meters. This results in a gradient of 1:1.17 at its highest point which levels out to the diagonal gradient of 1:47.5 at the western vehicular entrance point to the site. On the northeastern corner of the site the height difference is 6m at a slope of 1:1.38. This slope eases off to join the aforementioned diagonal gradient at the southeastern corner. The two retaining earth slopes blocks pedestrian access to the site allowing it only at the western boundary vehicular entrance point, southeastern and southwestern boundary points and along the southern boundary line.

Above: Contour diagram showing site (orange) and diagonal fall across the site
From this point of view, the site is considered a valley. This valley is further blocked off on the northern boundary by the railway lines, creating a valley-cove. The existing land use reinforces this. The site is occupied from the southern boundary up to the midpoint by a large open air taxi rank, with informal trade occurring on the south western corner of the site to the western vehicular entry point. The northern portion of the site is occupied by an electrical substation servicing the railways and an old rail house. Due to its awkward typography the site has largely remained vacant even though it is within a commercially viable urban area. The urban design proposal should carefully consider and integrate these topological constraints if it is to be successful.

Understanding the relative size of the site

The site has an area of 51,044.19 m² which is fairly large and hard to conceptualize. For this purpose the following comparative calculations have been undertaken.

**Suburban scale:** Assuming the average suburban stand is 600 m² the site could accommodate 60 such stands with a 40% area allocation to road circulation.

**Vehicular Scale:** Assuming the site would be turned into a parking lot it could accommodate 2635 side-to side- parking bays, with a 40% allocation to road circulation.

**Urban Scale:** Assuming the average city block has an area of 2500 m² (50m long x 50m wide) the site could accommodate 12 such blocks with a 40% area allocation to road circulation.

Above: Analytical sketch illustrating the site as an 'alcove'
Three point perspective mapping Exercise

In chapter 3 an inclusive site selection criteria was derived, based on the core mandate of the PAP of becoming a level platform for civil society to become involved in the decision making processors of the continent. This criterion was largely based on both the physical as well as the psychological accessibility of the site. According to this criterion the site would need to be accessible to:

- The politically powerful elite
- The international/continental visiting dignitary
- The ordinary local

This methodology will be extended to the reading of the site in which the site and surrounding cityscape will be read and mapped according to the above categories of user. This will be done by identifying both the important nodes and movement modes and paths within an identified study area. This study area as shown on an earlier aerial photograph is enclosed by Empire Road in the north, Fox Street in the south, Twist Street in the east and Quin street in the west. The aim of this section is to arrive at three comparable site readings, corresponding to each of the groups identified.

Reading A: The site and study area as seen through the eyes of the politically powerful elite.

The following information is regarded as being relevant to this group of user and is represented in the map on the following page.

Important Nodes identified:
- Wits University, for its educational function, lecture and conferencing facilities
- Metropolitan Centre, being the administrative heart of the cities governing structure
- Gauteng legislature, being the provinces legislative heart
- Johannesburg Public Library, being an important intellectual resource centre
- High and Magistrates Courts, for its judicial function
- Newtown Cultural Precinct, for its cultural and entertainment functions