Site selection

The selected site on Portions 1, 4 and 6 of Erf 820 Hatfield is owned by the South African Rail Commuters’ Corporation (SARCC). The SARCC consists of Metrorail and InterCity; the latter being responsible for managing SARCC buildings and structures (Tauta 2008). Rissik Station owes its existence to the NZASM railway line constructed in 1892 as well as the development of the Hatfield suburb in 1905. It carries the name of Johan Rissik who was the surveyor general at the time and who became the first Administrator of the Transvaal in 1910 (Laubscher 1992:4).

The station is located next to the intersection of Festival and Station Place Streets, and to the north of the railway line. It is situated among diplomatic and office parks, and a number of residential houses on the western edge of the bustling Hatfield CBD, and north from the University of Pretoria.

Festival Street bridge was constructed around 1990 to connect the areas on both sides of the railway line. The construction of this bridge has stimulated the economic development of this area in Hatfield, albeit at a much slower tempo than the bustling Hatfield CBD just across Festival Street.

Currently, the area has a calm and secluded feel to it, which is broken during peak traffic hours.
Historical description
Rissik Station already existed by 1910. The present station complex replaced the original design during 1948-1950, when the railway line between Pretoria Main Station and Pinetown was lowered and raised to eliminate level crossings (Kiesel & Miller 2007:1). The construction of the new station complex entailed massive earthworks. In contrast to the other halts along this section of the line, Rissik was a proper station with ticket office, ablutions and other facilities. It is much larger than the other halts due to its unique design with a siding, two overhead footbridges, and two elevator shafts providing access to the two platforms. Rissik served a unique purpose, since it was the station from where government documents would annually be transported between Pretoria and Johannesburg (Cape Town). via the so-called “White Titan” (Kiesel & Miller 2007:5; Bakker 2008).

Impact of the Gaustrain project
The Gaustrain will run past Rissik on the southern track. Currently, this is only a single track line and has to be upgraded to include a second line for the functioning of the Gaustrain. Construction of this second line is currently underway. However, this second line presented challenges to Bombela CUV as it had to run between the Festival Street bridge footings and the footings of the parking garage in front of Daniel College. This translates into the demolition of the two overhead footbridges, the southern elevator shaft, and the siding at Rissik Station. The impact is thus high and negative as is illustrated by fig 4.03 below.

Heritage value
Following his investigation of heritage and cultural sites in Hatfield, Van der Waal (1990) identified Rissik Station as an “exceptional cultural-historical resource worth preserving”. More recently, a Heritage Impact Assessment (HIA) undertaken by Bombela Civil Joint Venture - Gaustrain Project had heritage experts coming to the same conclusion (De Jong 2006; Kiesel & Miller 2007). These experts found Rissik Station to be the only of its kind in the country and that it has intangible heritage value that is worth conserving. The effects that the Gaustrain project has on the station building are discussed in the next section. The station design reflects the “two stream effect” of racial segregation during the apartheid era. After 1994 any such discriminatory signage was removed (Kiesel & Miller 2007:9).

Current conservation status
The station dates back to the late 1940s and is only now approaching the 65 year mark. As of date, strictly speaking, it does not enjoy general protection under the provision of the NHRA (25 of 1999). However, since it is the only station of its kind in South Africa and has intangible heritage value, it enjoys a high conservation status and significance (Kiesel & Miller 2007:5).

Legal requirements
According to Section 38 of the NHRA (25 of 1999) the following legal requirements affect the design proposal:
- Provide site interpretation at Rissik Station;
- Preserve the memory of any structural additions through appropriate design;
- Preserve memory of the southern elevator shaft through appropriate design; and
- Preserve memory of the two footbridges through appropriate design.

Table 4.1
<table>
<thead>
<tr>
<th>No</th>
<th>Criteria</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Importance in the community or pattern of railway</td>
<td>Medium</td>
</tr>
<tr>
<td>2</td>
<td>Possession of uncommon, rare or endangered aspects of natural or cultural heritage</td>
<td>High</td>
</tr>
<tr>
<td>3</td>
<td>Potential to yield information to understand the natural or cultural heritage</td>
<td>High</td>
</tr>
<tr>
<td>4</td>
<td>Importance in demonstrating the principal characteristics of a particular class of South African natural or cultural places or objects</td>
<td>Medium</td>
</tr>
<tr>
<td>5</td>
<td>Importance in existing particular aesthetic characteristics valued by a community or cultural group</td>
<td>High</td>
</tr>
<tr>
<td>6</td>
<td>Importance in demonstrating a high degree of creativity or fabrication at all a particular period</td>
<td>Medium</td>
</tr>
<tr>
<td>7</td>
<td>Strong special association with a particular community or cultural group for social, cultural or spiritual reasons</td>
<td>Medium</td>
</tr>
<tr>
<td>8</td>
<td>Strong special association with the life and work of a person, or group of persons of historical importance in history</td>
<td>Medium</td>
</tr>
<tr>
<td>9</td>
<td>History of slavery and labour</td>
<td>Low</td>
</tr>
<tr>
<td>10</td>
<td>Economic importance</td>
<td>High</td>
</tr>
</tbody>
</table>
Site analysis

Accessibility

The starting point was an investigation of the existing routes, links and gateways into Hatfield. An analysis is made of the links between the selected site, Hatfield and the city of Pretoria as a whole. This gives a general indication of the accessibility of the selected site.

Primary uses

Primary uses are those use types which in themselves “bring people to a specific place because they are anchored” (Jacobs 1972:173). Such use types include offices, factories, dwellings, places of entertainment, education and recreation.

Fig. 4.05 explores the relative importance and location of primary uses surrounding Risik Station. The distribution of these usage types have a direct influence on determining the relative importance of the station as point of access to and from these.

It also gives and idea of the type of users most likely to utilise the proposed building.

Use distribution

An analysis of the distribution of various use types in relation to Risik Station, gives an indication of diversity and development trends in the area. This analysis reveals what use types is most likely to succeed or enhance the use of the selected site, and which should therefore be provided within the scope of the proposed project.

Node-Place

Fig. 4.07 explores the concept (which will be discussed in the next chapter) of railway stations functioning as both a node and a place within their context.

This analysis investigates Risik Station’s potential to function as node-place. From this it becomes clear that the station has a potentially strong node-place function as it is located in close proximity to commercial, entertainment, residential, office and educational facilities.

It therefore becomes clear that Risik Station offers development opportunities that could help to enhance the user’s experience of his/her environment.
Movement patterns

Vehicular and pedestrian movement patterns around Risik Station were analysed as is shown by fig. 4.06, with the majority of movement initiated along Fietas Street. Station Place Street shows more subdued patterns of movement, which mainly coincide with peak traffic hours.

The figure also shows the current bus and taxi stop next to Risik Station, as well as the parking area to the north. The existence of pedestrian movement and transport allows for informal trading to occur.

Potential intervention areas

Fig. 4.09 investigates the areas suitable for potential intervention on the selected site. The area marked A was found to have the best potential and most suited.

User distribution

In fig. 4.10 the distribution of users from Risik Station to its immediate surrounding area is analysed. From this it becomes clear that the station plays an important role in commuting people to work in a great variety of settings.
Urban analysis and proposal

In an attempt to address the proposals put forward by the Group Framework and to improve the urban experience at Risik Station, the following urban development is proposed. The issues investigated to achieve this are discussed below.

Permeability

The key question here was where people can or cannot go. Bentley (1985:10) states that only accessible places can offer choice to people. Permeability, therefore, concerns the number of alternative ways through an environment.

In fig. 4.11 the site’s existing connections from the city of Pretoria as a whole are analysed. These are the main streets that carry through traffic, linking the various parts of Pretoria.

Next, the routes connecting the selected site at Risik Station with the main routes are identified. From this, it is apparent that Festival Street plays an important role in connecting Risik Station with the rest of Pretoria (fig. 4.12).

To achieve permeability at the local scale, it is proposed that a new street be made and that the ou de sac at Park Street be opened.

Variety

According to Bentley (1985:10) the second key quality to have in order to obtain a "responsive environment" is that of variety in uses. This is important in offering the user a choice of experiences.

To achieve this, the levels of demand for different types of uses on the site were analysed. This was done by an investigation of the concentration of pedestrian flows (fig. 4.13), as this factor directly influences the economic and functional feasibility of the proposed project.

Magnet is the term used in the Gashora Station University of Pretoria, Hatfield CBD, and the schools, stimulate a flow of pedestrian to and from them. Risik Station’s central location between these magnets offer opportunities for commercial and office functions. In addition, Risik Station contributes to the pedestrian flow in the area by bringing people from all over Pretoria via the so-called Ring-rail system.

Legibility

This aspect relates to how easily users can understand the area layout. In fig. 4.14 the selected site is analysed in terms of certain physical features that play a key role in how people make sense of their surroundings. Kevin Lynch (1960) suggests that these features can be grouped into five key elements namely: nodes, edges, paths, districts and landmarks.
Variety of uses

Some uses are incompatible because of functional factors like noise or traffic generation. These cannot be located close together. The first step, therefore, was to note the existing uses on and around the selected site (fig. 4.15), in order to decide on appropriate uses for the proposed building. These uses will have to function in conjunction with the station's existing use.

The second step was to locate new uses compatible with the existing (fig. 4.16). From this it becomes clear that the proposed buildings have the potential to house office and retail facilities.

It is proposed that the same process be followed in determining new uses for the entire proposed urban development scheme.

Proposed urban development concept model

The concept model exposes the principles put forward by the proposed urban development. It attempts to give definition to the street edges, create public and private spaces, and contribute to a positive urban experience at Roshk Station. All existing structures are in white on the model.
**Streetscapes**

**Festival Street:**
Festival Street is a busy two-way street and one of the ways Hatfield connect with Church, Petronius and Schoeman Streets. The street is less active than Burnet Street.

The sidewalks are pedestrian unfriendly and uncomfortable. With the exception of the Mozambique Café, all other buildings lining the street have inactive street frontages as they are fenced off with palisades and other forms of fencing. There are little to no trees lining the street to provide shade for any pedestrian activity.

Currently, the street is dominated by office activities. Office blocks offer no street activity. Visitors to these offices habitually park their motor vehicles on the road side.

**Station Place Street:**
This street is a relatively quiet two-way street. It is the extension of Park Street running through Arcadia and past Pretoria Girls' High School, but a cul-de-sac at the intersection with Hill Street cuts it off. Apart from buses transporting people to Rissik Station early on week day mornings, only sporadic vehicular traffic makes use of it. There are plans to re-open the cul-de-sac to the rest of Park Street.

The sidewalks are wide and offer a tranquil walk, but are unfriendly in the way building frontages are inactive and fenced off. House office and residential use dominate the street.

Jacaranda trees (Jacaranda mimosifolia) line the street. They provide an "avenue-like" quality to the street and help to extend a colonnade effect to the street.
Serial vision

The eight sequential images try to capture the sense of discovery and drama that is experienced when moving towards and through Risik Station. The two elevator shafts continuously shift as one moves past, and create an interplay of new alignments and groupings.

There are lines of advantage which can be colonized, such as the parapet of the footbridge or staircases (fig 4.27). It allows for an immediacy of views and position.

Dramatic level changes allows for intimacy, anchorage, evocational, and exposure.

Assessment of existing structure

The fact that two elevator towers were constructed at Risik Station give the impression that the facilities were designed to handle large volumes of documents to and from the platforms. This serves to emphasize the importance Risik Station had in previous times.

An investigation by Köbel & Miller (2007:10) has found that many structural elements of the station show signs of stress. There is also noticeable problems with water penetration (fig 4.36).

Many alterations have previously been made to the station building as is evident from the images.
SWOT analysis

Strengths:
- Tree-lined walkways;
- Presence of buildings with heritage and cultural value;
- Zones of tranquility and energy;
- Few derelict areas;
- Existing infrastructure moderate to good;
- Roads, electricity, water, sewage, and waste disposal services;
- Formal and informal economic activity;
- Majority of offices, retail, residential, and institutional activities;
- Good volumes of pedestrian movement along Festival and Park Streets;
- Presence of taxi and bus interchange facility;
- High volumes of taxi, bus and private vehicles along Festival Street.

Weaknesses:
- Presence of derelict spaces, especially along railway lines;
- Existing open green space is under-utilized and becomes unsafe at night;
- Irregular build-to lines along Festival and Park Streets;
- Restricted activities after 7pm due to closure of other activities in the area;
- Limited permeability as a direct result of the "gated building";
- Weakly defined public space; and
- Risik Station doesn’t function as a place-node in its area, due to the fast moving traffic along Festival Street.

Opportunities:
- Convert the open and green space into well-defined public space;
- Integration of formal and informal economic activities;
- Diversity of spaces and activities;
- Increase pedestrian movement along walkways;
- Use of urban design principles to transform Risik Station into a place-node;
- Demarcation in land-use of the proposed site;
- Increased economic activity due to increase of taxi, bus and train use;
- Attractiveness and ease of public transportation; and
- Development of intermodal facilities at Risik Station.

Threats:
- Garbage pile-up on derelict site across Festival Street from station;
- Lack of public space;
- General security is low with little police presence;
- Specific market conditions due to low-income clientele;
- Low maintenance of infrastructure and services;
- Demolition of many significant features of the station building as a result of the Gautrain project; and
- Tension between formal and informal traders.

Client body and user group

According to Metrorail (2006) an estimated average 1.7 million paying customers make use of their services on a weekly basis. Around 70% of these commuters are black people with a monthly household income of up to R2,499. The majority (83%) of commuters are between the ages of 24 and 40 years, with 89% being males. According to a 2006 estimate, Metrorail held a 14.7% share in the South African public transport industry.

Recently, the South African Government committed itself to upgrading the commuter railway infrastructure. Mr. Trevor Manuel (current Minister of Finance), announced a R1.5 billion capital investment in this transport service for the current 2006-2009 financial year. According to Presdy (2006) capital subsidies for rail transport increased from R665 million in 2004 to R2 billion in 2006-2009.

This proposed project envisions that railway transport will increase as the preferred form of public transport, given the recent sharp increase in petrol prices. It is envisioned that more age and race groups will make use of this form of public transportation. Due to the presence of the University of Pretoria, a large portion of the user group is envisioned to be consisting of students as well as young professionals.

The property is currently owned by the South African Rail Commuters Corporation (SARCC). Interests manage the facilities as the property development and investment wing of the SARCC.

Conclusion

Following the investigation in this chapter it becomes clear that the existing Risik Station building does not adequately address the future needs as is envisioned by the two presented frameworks. A balance has to be achieved between the station’s heritage and the demands and needs of the urban context. This requires a transformation of the existing static facilities to address the envisioned future demands and needs.