

# THE RIVER CLUB

## URBAN DESIGN FRAMEWORK

Indicators & Recommendations

DECEMBER 2017



## REFERENCES

Day, L. (2017). *Proposed Redevelopment of the River Club, Observatory: Assessment of potential biodiversity impacts – incorporating the findings of the aquatic ecosystems (rivers and wetlands), botanical, faunal, avifaunal and groundwater specialists.* December 2017. Freshwater Consulting CC, Cape Town.

Hart, T. & Townsend, S. (2017). *Heritage Impact Assessment for the Development of the River Club (Erf 151832), Observatory, Cape Town.* Draft prepared for Interested Party Consultation, 17 November 2017. Cape Town

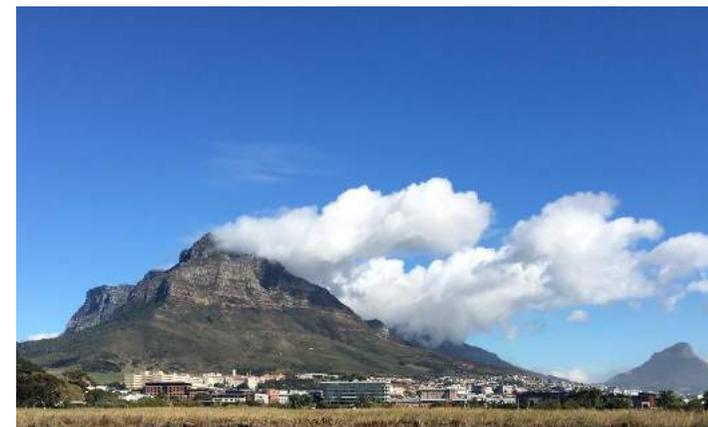
Krige, G. (2015). *Flood Line Determination for the Salt and Liesbeek Rivers at the Cape Town River Club, Western Cape, RSA.* (ref AED0313/2015). African Environmental Development, Krugersdorp.

Planning Partners (2016). *The River Club: Planning Policy Report.* Draft report, February 2016 (ref. 4342). Cape Town.

Planning Partners (2016). *The River Club: Urban Context and Planning Informants.* Draft report, February 2016 (ref. 4342). Cape Town.

SRK Consulting (2016). *Redevelopment of the River Club, Observatory, Cape Town.* Scoping Report, March 2016. Cape Town.

*All images by Urban Concepts unless otherwise stated*



## 01 INTRODUCTION

- 1.1 Process to Date
- 1.2 Document Outline

## 02 CONTEXT

- 2.1 Broader Context
- 2.2 Immediate Context
- 2.3 Two Rivers Urban Park (TRUP)
- 2.4 The Site

## 03 DESIGN INDICATORS

- 3.1 Introduction
- 3.2 Spatial System
  - 3.2.1 Natural Environment
  - 3.2.2 Vistas and View Corridors
  - 3.2.3 Public Realm
  - 3.2.4 Land Use
- 3.3 Heritage Significance
- 3.4 Built Form
  - 3.4.1 Scale and Fragmentation
  - 3.4.2 Building Heights
  - 3.4.3 Landmarks and Gateways
- 3.5 Connectivity
  - 3.5.1 Roads, Access and Parking

## 04 URBAN DESIGN RECOMMENDATIONS

- 4.1 Spatial System
  - 4.1.1 Integration of Environmental Aspects and View Corridors
  - 4.1.2 Public Realm Continuation
- 4.2 Built Form
  - 4.2.1 Fragmentation of Building Form
  - 4.2.2 Building Heights
- 4.3 Connectivity
  - 4.3.1 Site Integration and Accessibility
- 4.4 Conclusion

***Please note: this document is intended to be read as a double-side printed document, i.e. with facing pages.***

**Compiled by**  
Urban Concepts  
Unit 209 The Hills Building  
Buchanan Square  
160 Sir Lowry Rd  
Woodstock  
7925

+27 21 461 5255  
admin@urbanconcepts.biz

**01**

---

INTRODUCTION

## 1.1 PROCESS TO DATE

The process to develop the Urban Design Framework (Design Indicators and Recommendations) included the following:

- The analysis of the context and surrounds to develop a clear understanding of the site (attributes and challenges).
- Studies of the relevant urban design, planning, environmental and associated frameworks and background information.
- Workshops with the design team (architects, engineers etc) and client
- Initial meetings with the Urban Design and Planning department (City of Cape Town), as well as the consultant team for the TRUP project (CoCT & Provincial Authority)
- Discussions with Bridget O'Donoghue, the previous heritage consultant, as well as Nicolas Baumann (peer review) [2016]
- Draft Heritage Impact Assessment from Stephen Townsend and Tim Hart, the heritage consultants for the project [2017]

## 1.2 DOCUMENT OUTLINE

The Urban Design Framework for the River Club site has been structured to include the following:

- An overview of the broader context and contextual informants, and the site itself.
- The identification of key observations and design indicators for the spatial systems of the site, the built form aspects such as scale, height & gateways, as well as aspects related to the connectivity of the site.
- The integration of the heritage-related design indicators articulated by the heritage consultants.
- The urban design recommendations for the spatial systems, built form components, and connectivity and accessibility.
- Finally, the document's conclusion sets out the main arguments and recommendations for the interpretation of the indicators on site

Please note that this document is aimed at identifying the urban design indicators and recommendations for the River Club site, and is not a comprehensive urban design framework.



02

---

CONTEXT

## 2.1 BROADER CONTEXT

The River Club site is located at the confluence of the Liesbeek and Black Rivers, approximately 4km East of Cape Town CBD. At a broad scale, it is bordered by Lower Observatory to the West, Maitland and Ndabeni to the East, and Paarden Eiland to the North.



## 2.2 IMMEDIATE CONTEXT

The site is bounded to the West by the original Liesbeek River watercourse (before canalization c.1943s), to the East by the canalized Liesbeek River and the Black River, and to the North by a road reserve earmarked for the extension of Berkley Road to connect Maitland to Observatory and Salt River via Malta Road (Θ). The confluence of the two rivers and canal around the site give it the character of an island in the landscape.

West and South-West of the site, the immediate context is the Liesbeek Parkway, the Black River Park office cluster, some sports fields and the industrial buildings of Lower Observatory beyond.

To the North, the surroundings are dominated by the PRASA rail yards including large sheds, administration buildings, train tracks and train carriages. The land immediately North of the road reserve and south of the Liesbeek River is owned by PRASA but currently used by the River Club as part of the golf course.

Immediately East of the site is the South African Astronomical Observatory (SAAO) complex and the Raapenberg Bird Sanctuary. Across the Black River is the M5 highway (Black River Parkway) and beyond this the M5 Park, Alexandra Psychiatric Hospital, and the industrial areas of Maitland and Ndabeni.

The small parcel of land immediately South of the site (\*) is part of SAAO, and is earmarked for the development of head offices for SKA, expected to be in the region of 8 storeys. Beyond this is Observatory Rd (an extension of Station Rd), walking and cycling paths alongside the river, and the Hartleyvale sports fields .

The historic Valkenberg Psychiatric Hospital campus is located between the two rivers to the South-East of the River Club.



## 2.3 TWO RIVERS URBAN PARK (TRUP)

A process for a new development vision for the TRUP area is currently underway. One can however derive conceptual design ideas from previous work completed for the area, such as the TRUP SDF (2002).

### Urban design considerations:

One the key objectives of TRUP is to activate the riverine system, for both ecological and recreational purposes. The development of the site and the distribution of land uses should ensure that it encourages interaction, for example creating restaurants and retail opportunities which edge onto the continuous green space system.

Development of the site should enhance the natural riverine environment for flora, fauna and pedestrians.



## 2.4 THE SITE

The site was originally established as a recreation club for employees of South African Railways & Harbours, and later Transnet. The sports fields and the rectangular patterns are visible on the 1930's map.

It has been known as The River Club since 1993, when the facility was established as a golf driving range. Over time the River Club has grown to include a restaurant, bar, conference facilities, and a 9-hole golf course.

The site is zoned as Open Space: Special Open Space (OS3) and owned by Liesbeek Leisure Properties Trust.



03

---

DESIGN INDICATORS

### 3.1 INTRODUCTION

Design indicators are key informants from the larger precinct which guide the appropriate form, scale, use and massing of the proposed development. The indicators should also inform the design process. Design indicators relate to broader principles of good urban form, and apply to the general precinct.

This section of the document summarises observations and associated indicators to inform the urban design process, and to assist the environmental and heritage process and associated documentation.

The initial observations and associated indicators are categorised under spatial systems, built form, and connectivity.



## 3.2 SPATIAL SYSTEM

### 3.2.1 Natural environment

#### Analysis

As a result of the significance of the natural environment surrounding the site, the enhancement and preservation of the continuity of the ecological and open space systems is one of the key informants for the development of this site.

The adjacent Raapenberg bird sanctuary is an important ecological resource for the city and the immediate area. This is something to be protected and sensitively managed, but also a valuable resource to be celebrated.

A freshwater specialist's report (Day, 2017) has recommended rehabilitating the canalized section of the Liesbeek River into a more natural riverine environment by removing the concrete banks and widening its course. The specialist has recommended a development setback of around 40m along this rehabilitated river course, with variation along the length. The earlier river course to the West of the site is not functioning as a river, mostly consisting of push-back from the confluence, and the report recommends converting this to a landscaped swale, with a 10m development setback. The report recommends a maximum slope of 1:5, preferably 1:7, for all banks.

**(NOTE: refer to freshwater specialist's report for final setback and gradient guidelines)**

An extensive flood study has been completed, as the site is almost entirely within the floodplain of the two rivers. The study recommended raising the ground level to 6m above mean sea level, a change of between 1-3m across the site. It was found that this would not have a significant effect on flooding in the surrounding area.



## 3.2 SPATIAL SYSTEM

### 3.2.1 Natural environment

#### Indicators

**1. Rehabilitate the canalized section of Liesbeek River to improve water flow, flood mitigation and ecological value. Respect the required environmental setbacks from the river edges, and embrace this as an opportunity to introduce public space to their edges** as is seen elsewhere along the Liesbeek, potentially including e.g. boardwalks and cycling tracks

**2. Celebrate the bird sanctuary through meaningful public space adjacent to it and by setting buildings back from that edge**

**3. Respect the recommended maximum gradient of 1:7-1:5 along riverbanks to allow their ecologies to function properly**

**4. Assess the impact of the physical site requirements to deal with the floodlines as an integral part of the design process, and sensitively handle the required raising of the ground level so as not to create blank edges around the development**

*(a) Standing water in the earlier rivercourse, West of the site, looking North*

*(b) Canalized river course adjacent to SAAO (on the left) – note collapsing concrete lining*

*(c) Standing water in the earlier rivercourse, West of the site*

*(d) Northern end of the canalized river course, where the concrete lining ends alongside the bird sanctuary (right)*



## 3.2 SPATIAL SYSTEM

### 3.2.2 Vistas and view corridors

#### Analysis

##### From the site

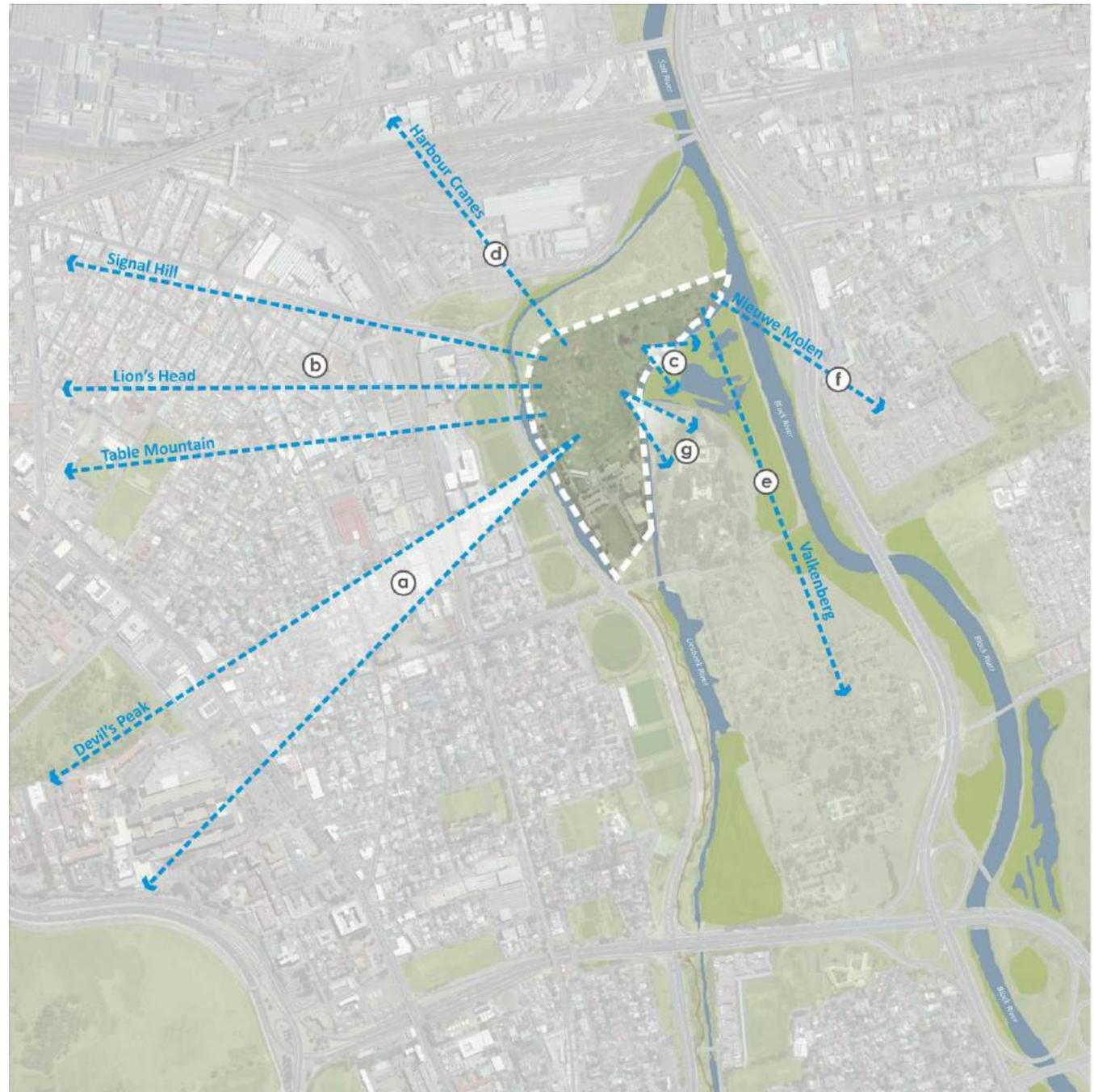
The most significant views and experience of the broader context is the prominence of Table Mountain, Lion's Head, Signal Hill, and most notably Devil's Peak (**a, b**).

A visual connection to the treed environment of the Observatory is evident, though individual buildings are not visible (**g**). One can also see some of the buildings of the Valkenberg Precinct (**e**) and the Nieuwe Molen (**f**) from the North-Eastern part of the site near to the Bird Sanctuary. The views and vistas to both the Observatory and the Valkenberg buildings are not one of the key design informants to the site, but remain a contextual informant to the design.

The immediate views from the site to the rivers and ecological systems are compromised by concrete canal lining (**c**) as and the visual impact and noise from the Liesbeek Parkway, the M5 and other connector routes.

##### To the site

The site currently provides a great sense of openness amidst relatively dense surroundings (**h**). Future development should maintain a sense of visual permeability through the site from either side.



## 3.2 SPATIAL SYSTEM

### 3.2.2 Vistas and view corridors

#### Indicators

**1. Celebrate and define the view corridor to Devil's Peak. The axis of this prominent view corridor aligns with the canal next to the Raapenberg Bird Sanctuary (a)**

**2. Refer to the significant institutions of the Observatory and Valkenberg in the design process and vision for the site. Although the buildings themselves are not visually prominent, the elevated ground they are located on should remain legible as a ridge within the wetlands and low-lying surrounds.**

**3. Utilize the new development form and proposed canal revitalization to improve the experience of the river banks and bird sanctuary (c) i.e. defining the edges of the rivers and mitigating the impact (visual and noise) of the road system**

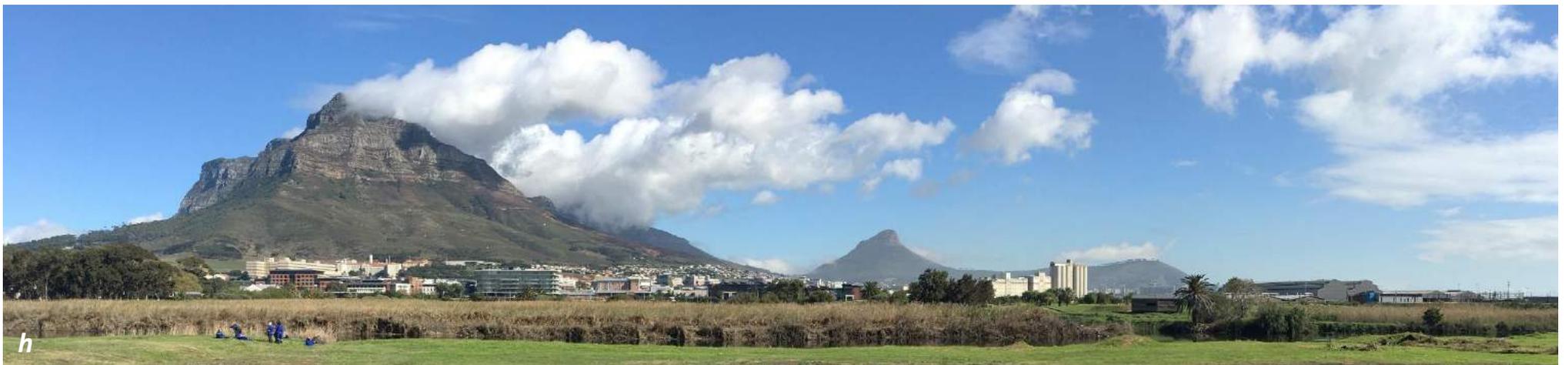
**4. Maintain a sense of openness and visual permeability through the site from both sides**

*(a) Prominent view corridor to Devil's Peak with river and wetlands to the left*

*(b) Views towards Signal Hill, Lion's Head and western portion of Table Mountain*

*(c) Current experience of the Raapenberg Bird Sanctuary wetlands along the canalized rivercourse*



*d**f**e**g**h*

*(d)* View to the north: harbor cranes visible to the left, and PRASA sheds as visual barrier to the right

*(e)* Distant view of Valkenberg historic precinct across the wetlands

*(f)* View of historic Nieuwe Molen across the canalized Liesbeek River, wetland and Black River to the east

*(g)* The SAAO complex is experienced as a treed presence in the landscape, rather than the buildings themselves

*(h)* View across the site from Black River Parkway (M5) – a sense of openness in the urban fabric, with a dramatic mountain backdrop

## 3.2 SPATIAL SYSTEM

### 3.2.3 Public realm

#### Analysis

The site is currently not accessible to the general public, as this is a private property. The same is true for much of the land in the immediate vicinity, which has the character of openness but is in fact largely private or institutional land and not physically accessible to the general public.

The public walking route from the south along the Liesbeek River (adjacent to the Valkenberg site) currently terminates at the Station road intersection where the river becomes canalized.

#### Indicators

1. Ensure the continuation of the walking routes beyond the Station road intersection along the rehabilitated canal. Use this revitalized river corridor to provide legibility and connectivity
2. Retain and reinforce the physical connection (creating spaces for people) with both rivers and Raapenberg Sanctuary
3. Include the experience of the Raapenberg Bird Sanctuary as an integral part of a continuous public space system, extending and enhancing the existing systems along the rivers
4. Recreational activities are strongly encouraged as part of the public space system, as this brings 'feet' to the area, creating eyes on the street and open spaces to assist with the security and surveillance of the public areas



## 3.2 SPATIAL SYSTEM

### 3.2.4 Land use

#### Analysis

The land use of the immediate surrounding areas is diverse, but beyond this, low-rise residential dominates with some office parks, schools etc.

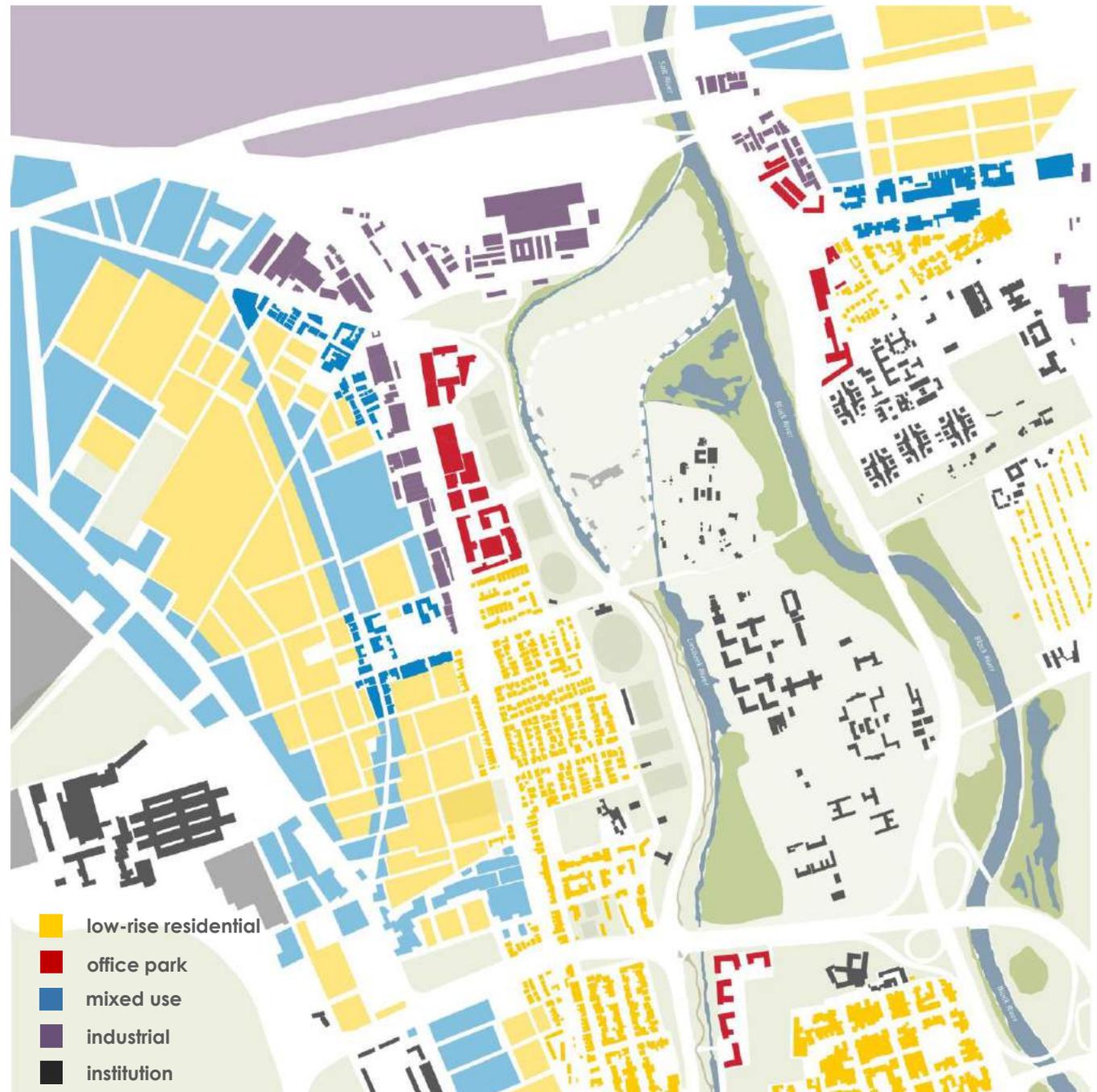
An office park (Black River Park) dominates most of the built form edge to the West of the site, with mixed uses (office, residential and light industrial) towards Salt River and Woodstock.

The areas South of the site are dominated by institutional uses. The Alexandria Psychiatric hospital is located to the East, with light industrial beyond.

The site is however very separate from the areas to the East, as the M5 highway and the adjacent Black River form a large barrier.

#### Indicators

1. Promote a mix of uses (private and publicly accessible) on the site to compliment the existing uses within the surrounding areas
2. Ensure that the various uses on the site be integrated. Avoid a repeat of e.g. isolated office park models



### 3.3 HERITAGE SIGNIFICANCE

#### Background

The convergence of the Black and Liesbeek rivers is a highly significant cultural and historical landmark. It represents an important seasonal crossing point for the pre-colonial Khoekhoe herders, an early site of conflict between these indigenous peoples and foreign settlers, and the site of early colonial fortifications and settlements. These historical significances result from the physical qualities of the rivers, the floodplain, the wetlands and the low ridge now occupied by SAAO.

The floodplain has largely been dredged and developed and the physical crossing point has been lost. The proposed high-order road to the North, and the proposed tall SKA office building to the South, will further alter the experience of the floodplain.

The symbolic and historical importance of the site is not in artefacts or buildings, but is represented by the natural environment. Hart and Townsend (2017) have proposed that the Liesbeek River – both the canalized and the earlier course, the confluence, and the banks – is the significant heritage resource on the site.

The meeting of the two rivers in the North-East corner of the site is the closest accessible bank to the historical crossing and this should be celebrated and respected in the proposed development.

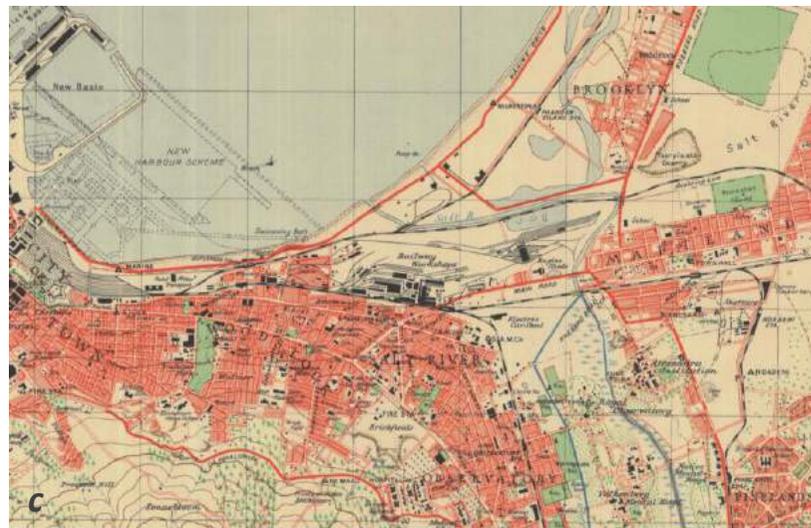
The SAAO complex is experienced in terms of its substantial tree canopy, and development should be sensitive to this. Views to and from the individual buildings have mostly been lost and are not necessary to preserve or recreate. Valkenberg and the Nieuwe Molen are not strongly experienced from the site and therefore have low contextual significance.



(a) Early map showing the river crossing (Atlas Afrika; from Hart & Townsend, 2017)



(b) Excerpt from Van Der Graaff compilation map [1786] depicting the confluence of the rivers (Brommer, B., 2009)



(c) 1935 map showing a large portion of the Liesbeek River straightened, much of the Salt River estuary filled for railway development, and sports fields indicated on the River Club site (Chief Directorate: Surveys & Mapping)

(d) The Royal Observatory, Thomas Bowler [1854] (from Baumann, 2011)

(e) View of the SAAO hill across the wetland from where the M5 is today, with Devil's Peak and Lion's Head in the background (Mike Fortune Collection; from Hart & Townsend, 2017)

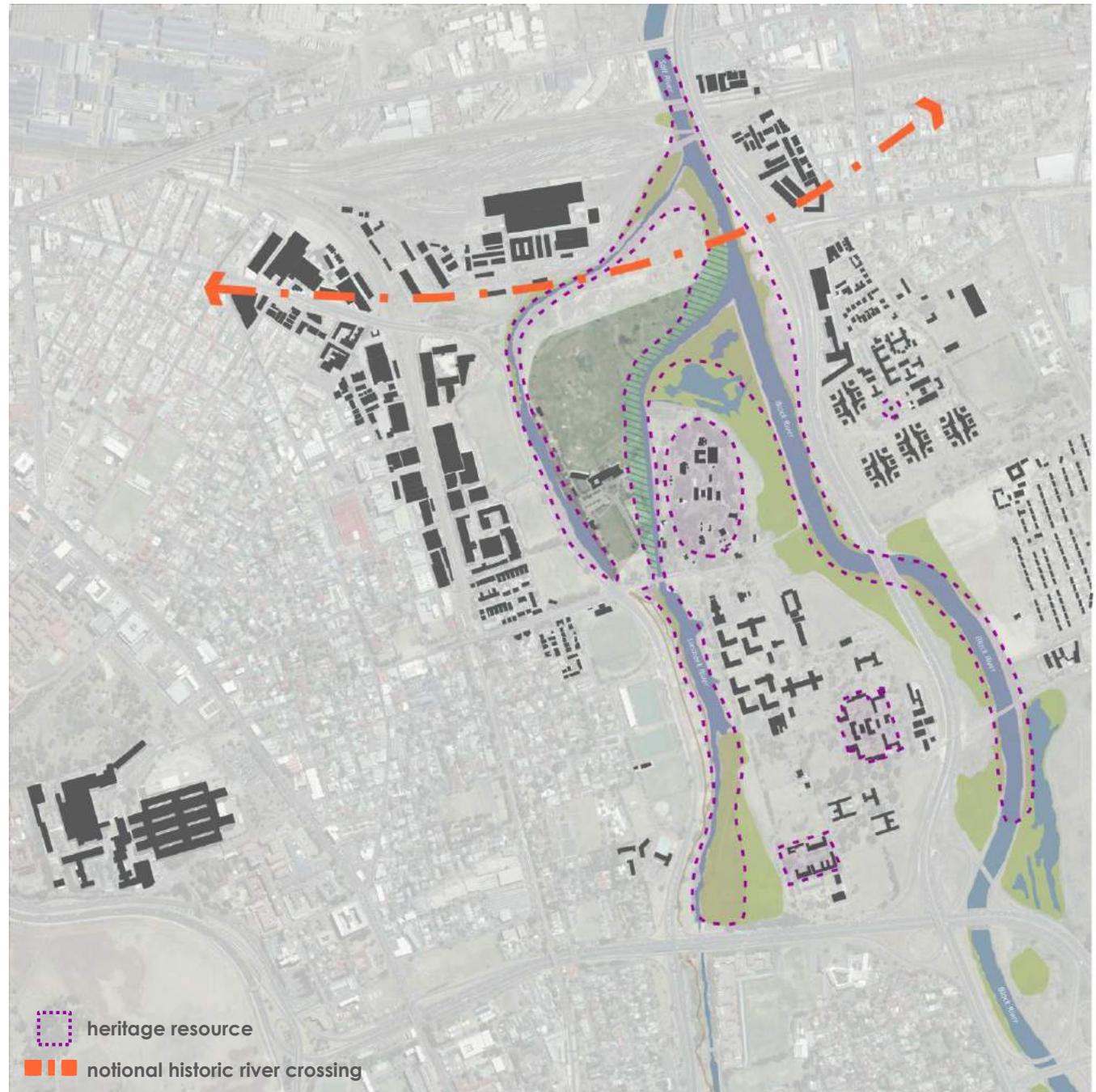


### 3.3 HERITAGE SIGNIFICANCE

#### Indicators

1. The canalized Liesbeek River should be rehabilitated to create an appropriate sense of “river-ness” which will become legible as the floodplain of the river. This should facilitate ecological well-being (flora and fauna) as well as public amenity (walking and cycling).
2. Development adjacent to the Observatory complex should be lower nearest the rehabilitated river course and step back to a higher level, ensuring the legibility of the hill and its tree canopy.
3. The earlier river course West of the site no longer functions as a river but its shape or presence in the landscape should be retained.
4. Development should have a substantial setback from the confluence in the North-East corner of the site. This space should be used to identify and celebrate this history, and there is the opportunity for a commemorative area, facility and/or event space in this location.

*Heritage information and design indicators by Hart & Townsend (2017).*



## 3.4 BUILT FORM

### 3.4.1 Scale and fragmentation

#### Analysis

The built form of the surrounding areas presents a variety of scale and grain.

#### Immediate context

The PRASA rail yards are located to the North of the site. The buildings are approximately 150-300m long. These monolithic buildings have a significant impact on the nature of, and the experience from, the site.

The Black River Park to the West of the site has buildings of up to 100m long.

The M5 office park is located adjacent to the M5 to the East of the site, and, in conjunction with the M5 itself, dominates the visual experience from the North Eastern corner of the site.

The Observatory (and Valkenberg further beyond) is located to the East of the site. These precincts are of a very different nature, with buildings set within a well-treed landscape. The future plans for the Valkenberg precinct, currently underway, do however change this distinct character, and propose a denser development.

#### Context beyond

The areas Salt River and Observatory have a strong rectilinear grid, with buildings which are built to the street edges, of a fine grain and limited heights.

Other precincts such as the Alexandra Psychiatric Hospital, Maitland Garden Village and Oude Molen Village also have a finer grain, while Ndabeni industrial area (further to the East) has larger, monolithic buildings. These precincts do not have a direct visual impact on the site.



## 3.4 BUILT FORM

### 3.4.1 Scale and fragmentation

#### Indicators

The proposed built form of the new development should take cognizance of the grain and nature of surrounding fabric:

1. Buildings within a landscape (public facilities, recreational buildings) to be associated with the open space system; this will assist with the use and activation of open spaces
2. More continuous buildings that define spaces and create active edges (e.g. perimeter block buildings) to be allocated in areas for noise and visual impact mitigation, as well as protection against the elements as required
3. Development should utilize a rectilinear grid in keeping with Observatory and adjacent suburbs



## 3.4 BUILT FORM

### 3.4.2 Building heights

#### Analysis

The building height in surrounding areas can be described as follows:

#### Immediate context

The PRASA rail yards are located towards the North and while the height of these buildings is only approx. 20-25m, these monolithic buildings have a significant impact on the site.

The Black River Park to the West of the site has buildings of heights that vary between 4-9 storeys.

The M5 office park is located adjacent to the M5 to the East of the site, and, in conjunction with the M5 dominates the visual experience from the North Eastern corner of site. The buildings are 3-4 storeys.

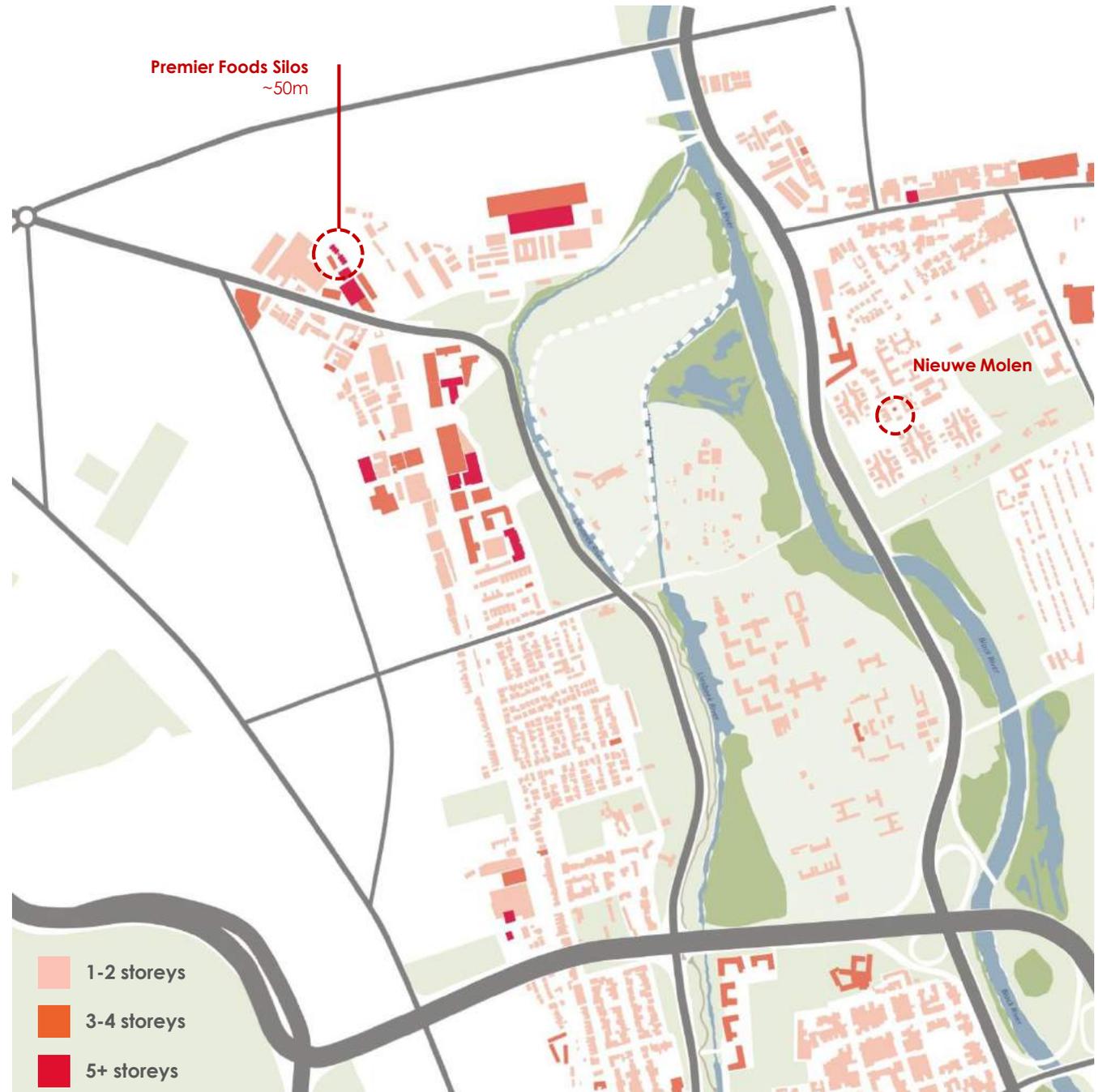
The Observatory (and Valkenburg further beyond) is located to the East of the site. These precincts are of a very different nature, with buildings set within a landscape. Buildings are one and two storeys high, built on higher ground.

#### Context beyond

The Salt River and Observatory areas to the west of the site have limited heights.

Other precincts such as the Alexandra Psychiatric Hospital, Maitland Garden Village and the Oude Molen Village have relatively low heights. Ndabeni industrial area (further to the East) has larger, monolithic buildings with very few tall buildings.

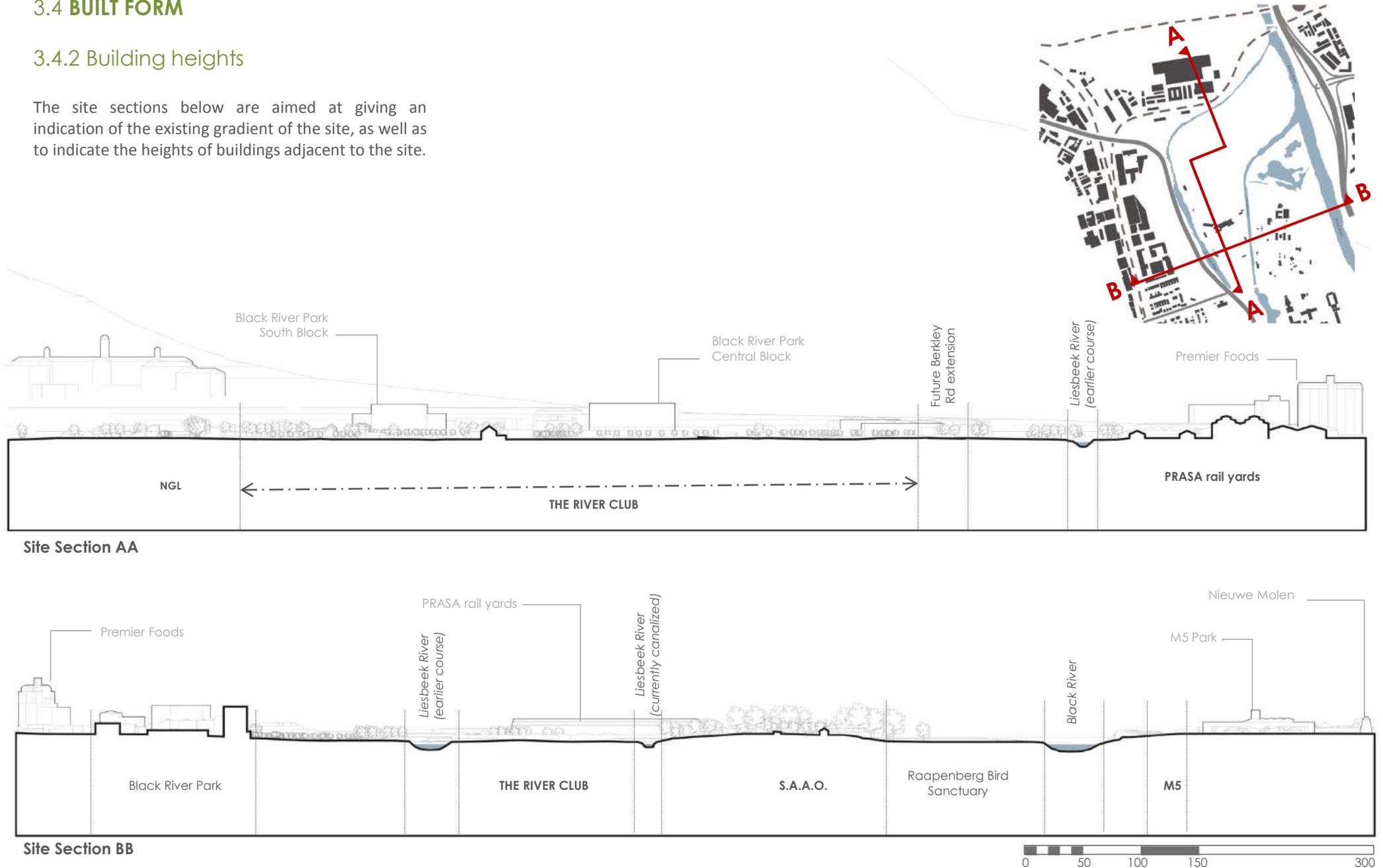
*(note: 1 storey typically represents 3-5m in height depending on the land use)*



### 3.4 BUILT FORM

#### 3.4.2 Building heights

The site sections below are aimed at giving an indication of the existing gradient of the site, as well as to indicate the heights of buildings adjacent to the site.



Site Section AA

Site Section BB

## 3.4 BUILT FORM

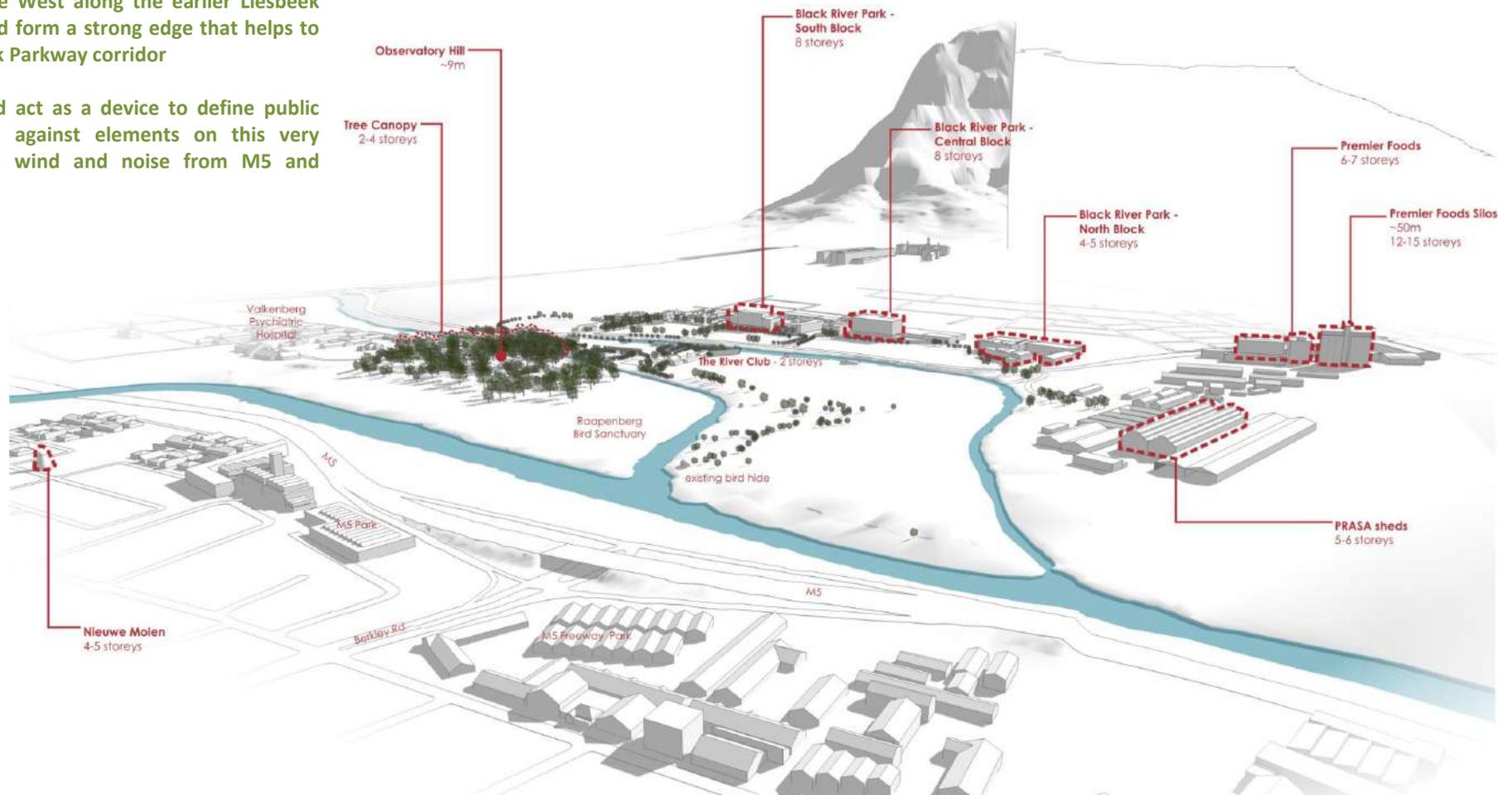
### 3.4.2 Building heights

#### Indicators

1. Scale of buildings in close proximity to the Observatory to be respectful of the scale and character of it, so as not to detract from its significance

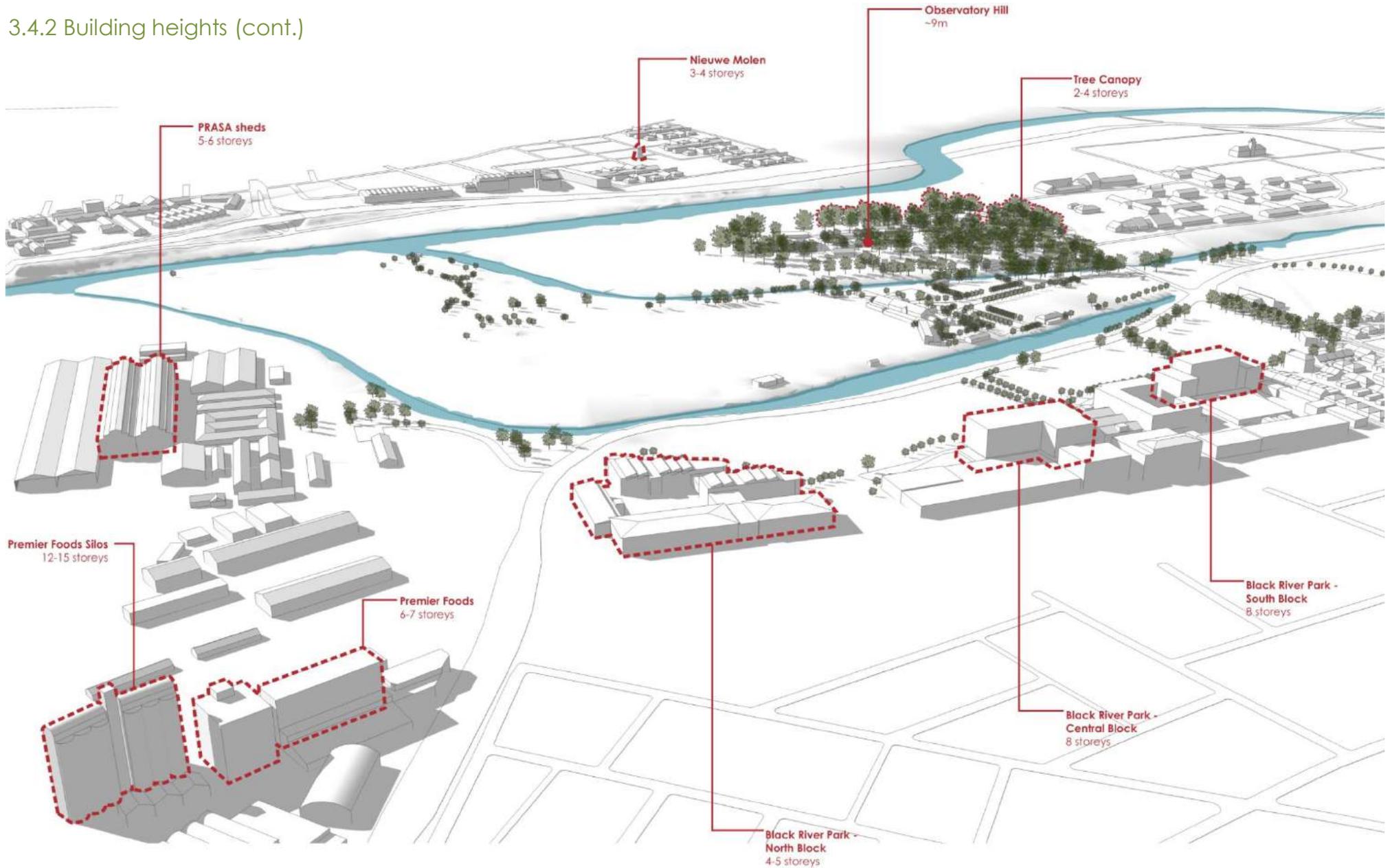
2. Buildings on the West along the earlier Liesbeek River course should form a strong edge that helps to define the Liesbeek Parkway corridor

3. Buildings should act as a device to define public space, and shield against elements on this very exposed site, e.g. wind and noise from M5 and Liesbeek Parkway



### 3.4 BUILT FORM

#### 3.4.2 Building heights (cont.)



### 3.4 BUILT FORM

#### 3.4.3 Landmarks and gateways

##### Analysis

###### Landmarks

As discussed in **3.4 Heritage Significance**, the site forms part of a historical landmark at the confluence of the two rivers. The site has a rich and significant pre-colonial history but almost no tangible remnant thereof, only the physical features of the landscape.

The Observatory hill with its large tree canopy is an important landmark (giving its name to the adjacent suburb). The Valkenberg complex is another historical landmark in the area and forms part of the cultural landscape, but it has little visual impact on the site.

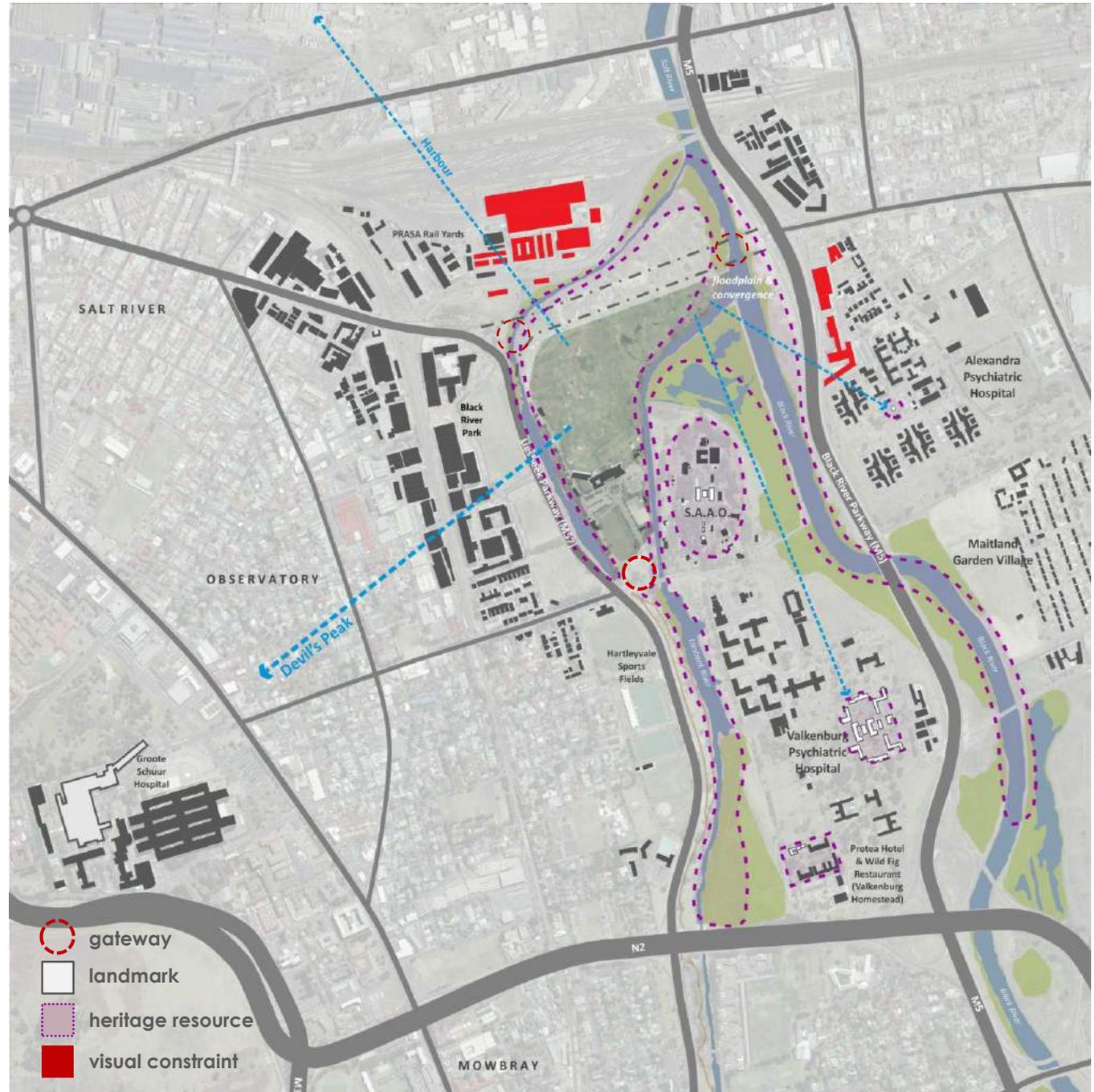
Other historic landmarks such as Nieuwe Molen in the East and Groote Schuur Hospital to the South-West are visible from the site but are not significant as experienced on site. Glimpses of the harbour cranes connect the site to the sea, and the silos to the North-West of the site are clearly visible.

As previously mentioned, the mountain peaks are among the most prominent landmarks experienced from the site.

###### Gateways

The existing entrance from Station Road is seen as a gateway to the site, though the tree-lined entrance avenue is not part of an historic landscape pattern (not evident on aerial photography dated before 1944).

The future Berkley Rd extension will potentially transform the Northern part of the site into a gateway between Maitland and Pinelands in the East and Salt River and the City in the West, but this is difficult to assess at the present.

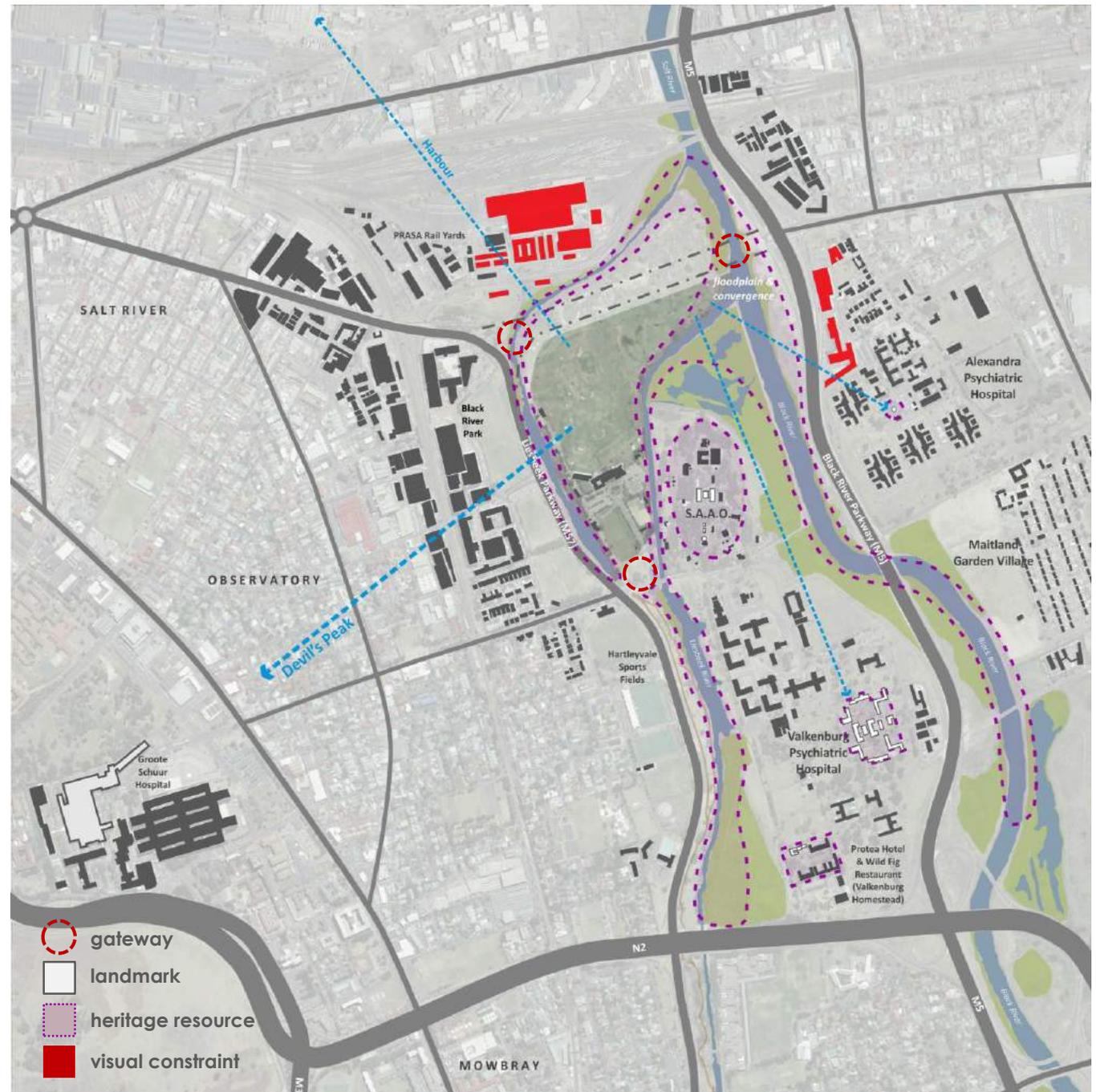


## 3.4 BUILT FORM

### 3.4.3 Landmarks and gateways

#### Indicators

1. The significance of the convergence of the rivers should be respected and enhanced. Built form should step back from the rivers at this point to allow this part of the landscape to be experienced and celebrated in its own right.
2. New buildings proposed adjacent to the Observatory site to be respectful of this precinct. The scale and form of buildings in this location to be fragmented and varied to avoid large monolithic buildings.
3. Ensure that the key landmarks in the immediate as well as broader context be acknowledged, and defined within the new public open space system for the site.
4. Include the existing entrance to the site from the South as a key vehicular/pedestrian link into the new development  
*(note: this is contingent on the nature of the SKA development on this site)*



## 3.5 CONNECTIVITY

### 3.5.1 Roads, access and parking

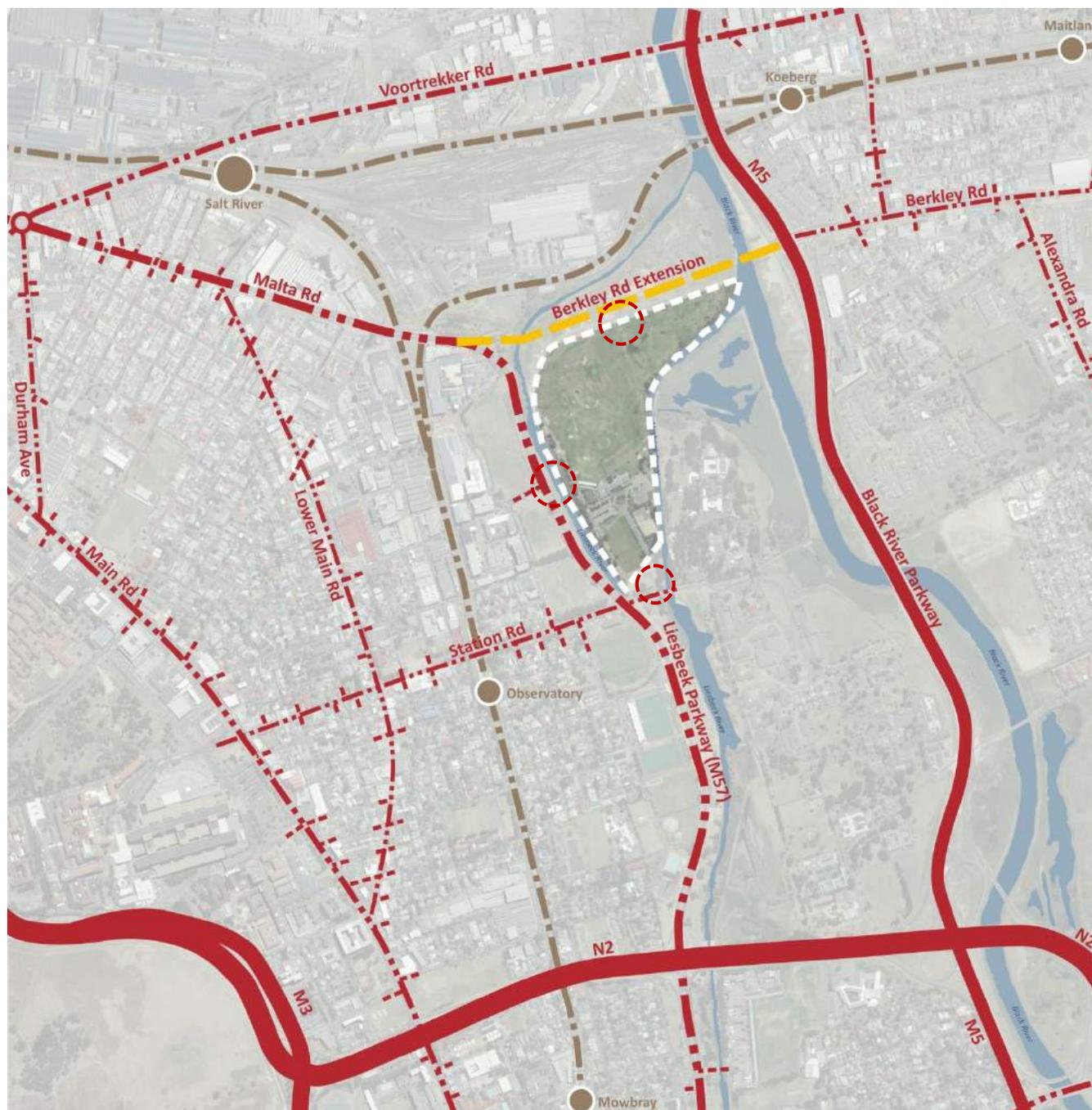
The site is strategically located adjacent to the Liesbeek Parkway (M57) and the M5, with easy access to the N2 and areas beyond. These roads do however have a significant impact on the quality of the open space system in this area.

The most notable impact on the design of this precinct from an infrastructural point of view, is the Berkley Road extension. The Station road link to the site is also an important integrator route.

The site is also within comfortable walking distance of two train stations – Observatory to the South-West, and Koeberg to the North-East.

#### Indicators

1. The Berkley Road extension is one of the key informants for the design of this new precinct within Cape Town. Encourage linkages to the area North of the extension to ensure that the convergence of the rivers and surrounding area is not 'cut off' from the site and green areas beyond by the new road
2. Ensure optimal connectivity but avoid a 'rat-run' through the site. The site should be considered as a destination rather than a thoroughfare
3. Parking: The challenges of the water table to be addressed. Open surface parking areas to be provided (i.e. not only basements) and these should be contained in smaller areas
4. Conform to future design controls related to activity on streets and associated spaces



04

---

URBAN DESIGN  
RECOMMENDATIONS

### 4.1 SPATIAL SYSTEM

#### 4.1.1 Integration of environmental aspects and view corridors

- a) Rehabilitate the canalized river course, and include the experience of this, the Raapenberg Bird Sanctuary and the Observatory complex as an integral part of a continuous public space system
- b) Enhance the physical connection with the Liesbeek River – both the earlier course and the rehabilitated canal – and the Raapenberg Sanctuary by creating and defining spaces for people
- c) Maintain a substantial open green space in the heart of the site as a pedestrian and ecological link between the two river corridors, to celebrate the experience of Devil’s Peak and maintain visual permeability and a sense of openness
- d) Locate publicly accessible amenities throughout the site, along the edges of the central open space and the green riverine corridors
- e) Ensure legible, integrated pedestrian movement system which is in line with the NMT networks and plans for the surrounding areas. It is recommended that this forms part of the river interface



## 4.1 SPATIAL SYSTEM

### 4.1.2 Public Realm Continuation

A significant publicly accessible open space system is recommended in order to welcome people into the site, maintain the site's sense of openness and continuity, and to add value to the broader urban realm.

- a) Provide public space along the edge of the rehabilitated canal as well as the earlier river course, for walking, cycling and leisure, as a continuation of the existing public space network South of the site (*see indicators*). Use staggered building footprints to define spaces along the rehabilitated river course
- b) Extend this space across the site, connecting the two river corridors, bringing people into the development. The central area has the potential to be used for public recreation, as it is less ecologically sensitive than the river edges
- c) The recommended development parcels should be visually and physically permeable to pedestrians, to help integrate the different spaces within and around the site
- d) Land uses to include a combination of commercial, residential, retail, as well as public facilities

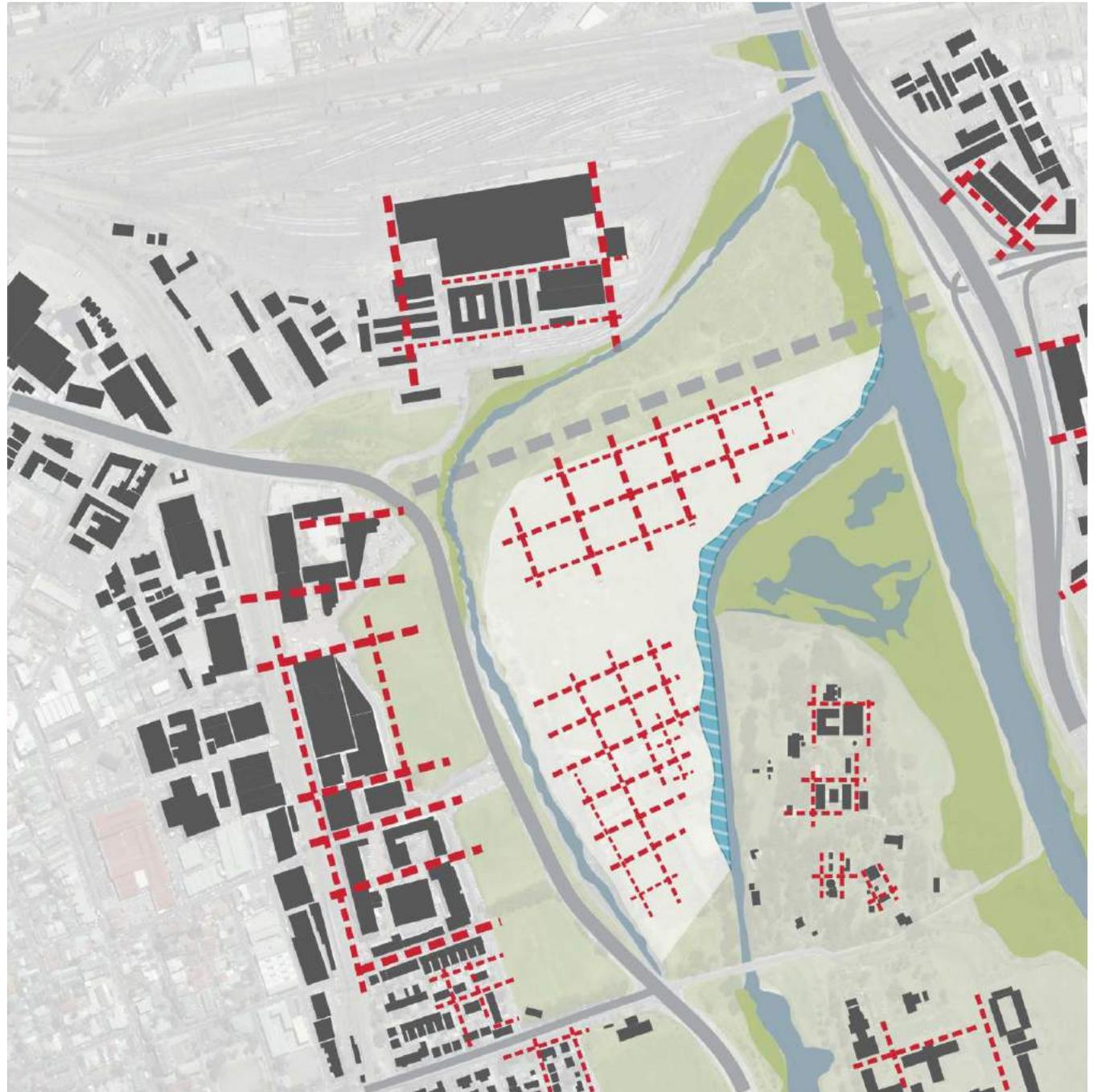


## 4.2 BUILT FORM

### 4.2.1 Fragmentation of building form

A variety of building forms should be introduced to ensure varied grain and fragmentation.

- a) It is recommended that the larger building forms be located to the north of the site. The street grid proposed for this area of the site relates to the rectilinear grid of surrounding urban fabric. It is however important to create another level of fragmentation with a variety of roofs, at varying heights
- b) A finer grain in building form is proposed to the South, in proximity to the Observatory
- c) Buildings adjacent to the rehabilitated canal (next to Observatory) to be free-standing in areas with small footprints. No continuous perimeter block buildings are recommended along this edge
- d) Buildings along the public open space on rivers and central open space to have a level of continuity in façade treatment to ensure a well-defined edge condition, enabling active edges in areas



4.2 BUILT FORM

4.2.2 Building heights

The recommended height envelope for the site was mainly derived from the following indicators: height and scale of buildings in immediate context (PRASA Rail Yards, Black River Park, Observatory), as well as the significant visual and noise impact of the M5 freeway.

The height and scale of context further away was also considered, but its impact on urban design recommendations is mainly dealt with under land uses, scale and fragmentation.

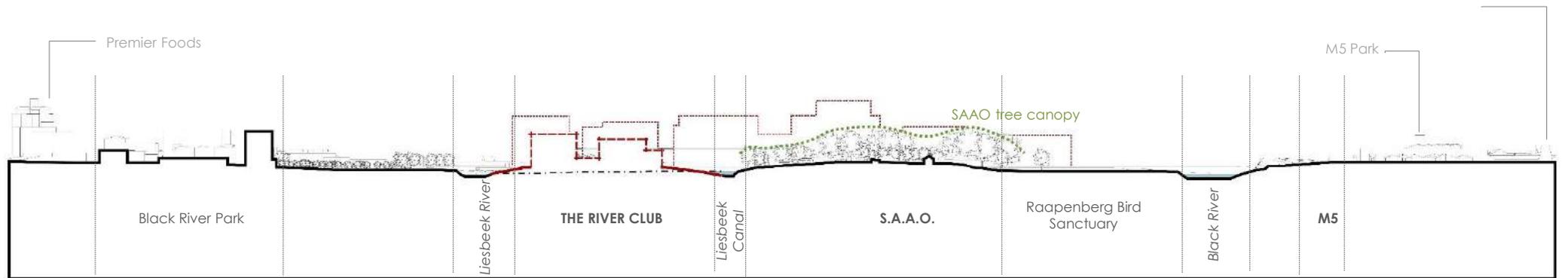
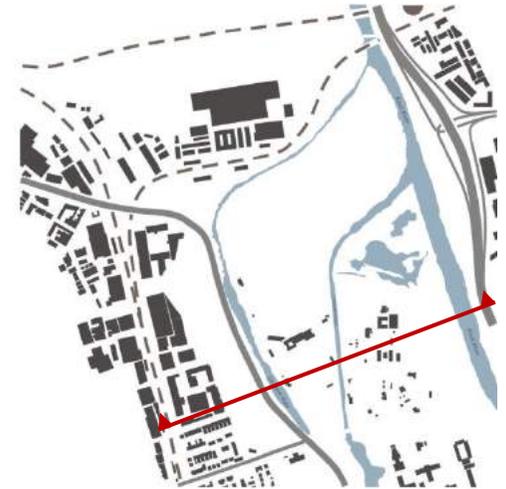
- a) It is recommended that the taller building forms be located to the north of the site. This will assist in defining the Berkley Road edge, and will play a role in defining public areas on this very exposed, noisy site.
- b) Lower buildings are recommended to the South (Observatory proximity). The tree canopy of the Observatory site is most prominent, and should not be overshadowed (the Observatory itself is not clearly visible from the site)
- c) The opportunity to include **focus buildings\*** (slightly taller than adjacent built form) is noted. Two key positions are identified: the first is to signal the entrance point from Berkley Road; the second is proposed in close proximity to the other entrance to the site from Liesbeek Parkway, and suggests a focus building on the new public park. It is recommended that this building has a mix of uses, for example retail and hotel/conferencing.



## 4.2 BUILT FORM

### 4.2.3 Building heights

The indicative site section below is aimed at giving an indication of the suggested height envelope (i.e. **maximum** heights).



Indicative Site Section



### 4.3 CONNECTIVITY

#### 4.3.1 Site integration and accessibility

The diagram alongside identifies key routes to ensure an accessible, integrated structure. Please note that a second level of movement routes (e.g. pedestrian routes alongside the river’s edge) will be vital from a public point of view, and will be a key component in the detail design development phase.

It is recommended that the following objectives be achieved in the design of the site’s movement system:

- a) The ability to traverse the site, and integrate the site with surroundings, without creating a ‘rat-run’ for vehicles
- b) Continuity of public access and pedestrian movement throughout the site
- c) The vehicular system to include public transport node(s) to alleviate private transport pressures
- d) Access points: the proposed Berkley Road extension has been identified as a class 2 road in the transport & planning frameworks. From a planning and urban design perspective it is recommended that multiple intersections be considered into the site, as this will encourage more of an activity-type road (integrator). Other access points include the proposed Liesbeek access, and the existing site access from the Station Rd extension. This entrance is not guaranteed as it crosses the neighbouring property, but is desirable as it integrates the site with its surroundings.



## 4.4 CONCLUSION

The indicators and recommendations in this document establish guidelines for the responsible development of this important site.

The spatial recommendations seek to provide a coherent urban form which relates to its surroundings while retaining the site's unique sense of place, and enhancing the views from, into, and through the site. Emphasis is placed on well-defined public space allowing pedestrians access to the rivers and through the site, with commercial and other activity considered as a way to increase safety and vibrancy.

The most important recommendation from urban design, heritage and environmental perspectives, is the revitalization of the Liesbeek River by removing the concrete canal, reintroducing planted banks and widening its course to create a more natural river-like environment. This is an opportunity to improve its ecology and the surrounding ecosystems, as well as creating a special place for pedestrians to experience the river.

The interpretation of heritage indicators is intended to respect and enhance the major historical and cultural significance of this resource, most notably the Liesbeek River. The experience of this landscape should be made more accessible to the public, and its historical importance made legible.

In addition to the above indicators, it is suggested that a cultural, historical and environmental resource or interpretation center be developed on the site. This could educate the public on the significance of the site and the broader precinct, including nearby sites such as SAAO and Valkenberg, as well as the rivers and wetlands as cultural and ecological resources.

