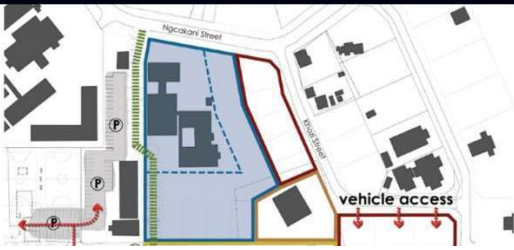




# ILISOLETHU



## PROJECT 5: INKCUBEKO YOUTH & SCIENCE CENTRE EXTENSION Investment Package



# EXECUTIVE SUMMARY

The Inkubeko Youth & Science Centre has been in operation since 2018 and has had a remarkable impact on the youth of Thembalethu through providing exposure to science, arts and technology. The Centre has expressed their intention to expand their services to include sports and recreational programmes, and have therefore expressed the need for more land.

This investment package aims to identify suitable land for the expansion of the Centre's facilities, with a mandatory NMT through route to be implemented as a part of the project.





# TABLE OF CONTENTS

<b>1</b>	<b>ILISOLETHU CONTEXT</b> .....	<b>1</b>
	Thembalethu.....	1
	Ilisolethu.....	2
	Ilisolethu Gateway Node development framework.....	3
<b>2</b>	<b>PROJECT DESCRIPTION &amp; DEVELOPMENT POTENTIAL</b> .....	<b>4</b>
	Purpose of the project.....	4
	Project potential.....	5
<b>3</b>	<b>PROJECT CONTEXT</b> .....	<b>6</b>
	Locality.....	6
	Public transport context.....	6
	Environmental features.....	7
	Local context.....	7
<b>4</b>	<b>PROPERTY INFORMATION</b> .....	<b>8</b>
<b>5</b>	<b>PROJECT DESIGN</b> .....	<b>9</b>
	NMT through routes design guidelines.....	11
	Interface design guidelines.....	12
	Open space interface guidelines.....	14
	Residential design interface guidelines.....	14
	Parking design guidelines.....	15
	Placemaking design guidelines.....	16
	Open space design guidelines.....	19
<b>6</b>	<b>PROJECT IMPLEMENTATION</b> .....	<b>21</b>
<b>7</b>	<b>PROCUREMENT PLAN</b> .....	<b>21</b>
<b>8</b>	<b>POTENTIAL INVESTMENT PARTNERS</b> .....	<b>21</b>
<b>9</b>	<b>COMMUNICATION MANAGEMENT APPROACH</b> .....	<b>21</b>
<b>10</b>	<b>PROJECT MANAGEMENT</b> .....	<b>22</b>
<b>11</b>	<b>SURVEYOR GENERAL DATA</b> .....	<b>22</b>



# LIST OF FIGURES

Figure 1-1: Thembalethu in the context of George .....	1
Figure 1-2: Ilisoletu Gateway Node boundaries .....	2
Figure 1-3: Development concept .....	3
Figure 2-1: Science centre project location.....	4
Figure 2-2: Project development components .....	5
Figure 3-1: Project locality .....	6
Figure 3-2: Public transport routes .....	6
Figure 3-3: Environmental attributes .....	7
Figure 3-4: Project context (existing and proposed adjacent land uses).....	7
Figure 4-1: Project properties .....	8
Figure 5-1: Project specific urban design guidelines .....	10
Figure 5-2: Application of interface guidelines.....	12
Figure 11-1: SG Diagram 1844/2015 (Erf 11123) .....	23
Figure 11-2: General Plan 86/1989 (Erf 1788-1791).....	24
Figure 11-3: SG Diagram 85/1989 – Sheet 1&2 (Remainder of Erf 1773) .....	24
Figure 11-4: SG Diagram 85/1989 – Sheet 3 (Remainder of Erf 1773).....	25

# LIST OF TABLES

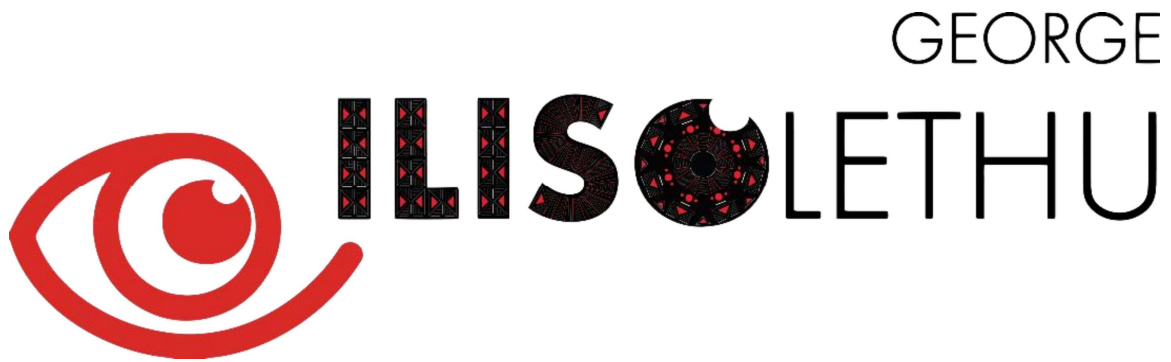
Table 1: Project overview
Table 2: Development potential
Table 3: Property information
Table 4: Existing land use rights
Table 5: Project implementation items
Table 6: Engineering services capacity
Table 7: Engineering construction costs
Table 8: Procurement plan
Table 9: Potential investment partners
Table 10: Communication management approach
Table 11: Project management





# 1 ILISOLETHU CONTEXT

Ilisoletu Gateway Node – “our eye” – is planned as the future mixed-use core of the Thembalethu township in George, located in the Western Cape Province. A unique identity and branding is seen as a main driver in marketing development opportunities available in the node.



## Thembalethu

Strategically located adjacent to the N2 highway connecting George with Cape Town via Mossel Bay to the west, and the Eastern Cape via Knysna to the east, Thembalethu has great visibility and access from the highway. Together with George Central, Pacaltsdorp Industrial Node, and Kraaibosch/Blue Mountain Commercial Node, the core of Thembalethu will serve as the fourth node in the George urban area (see **Figure 1-1**).

Development at this strategic locality will aim to draw investment across the N2 highway and set the course for Thembalethu to be a functional and integrated part of George. A vast expanse of vacant land dominates the entrance of the township which might facilitate large scale development. This will, however, require coordinated and integrated planning to ensure the best use for the last remaining portions of vacant land in the node.

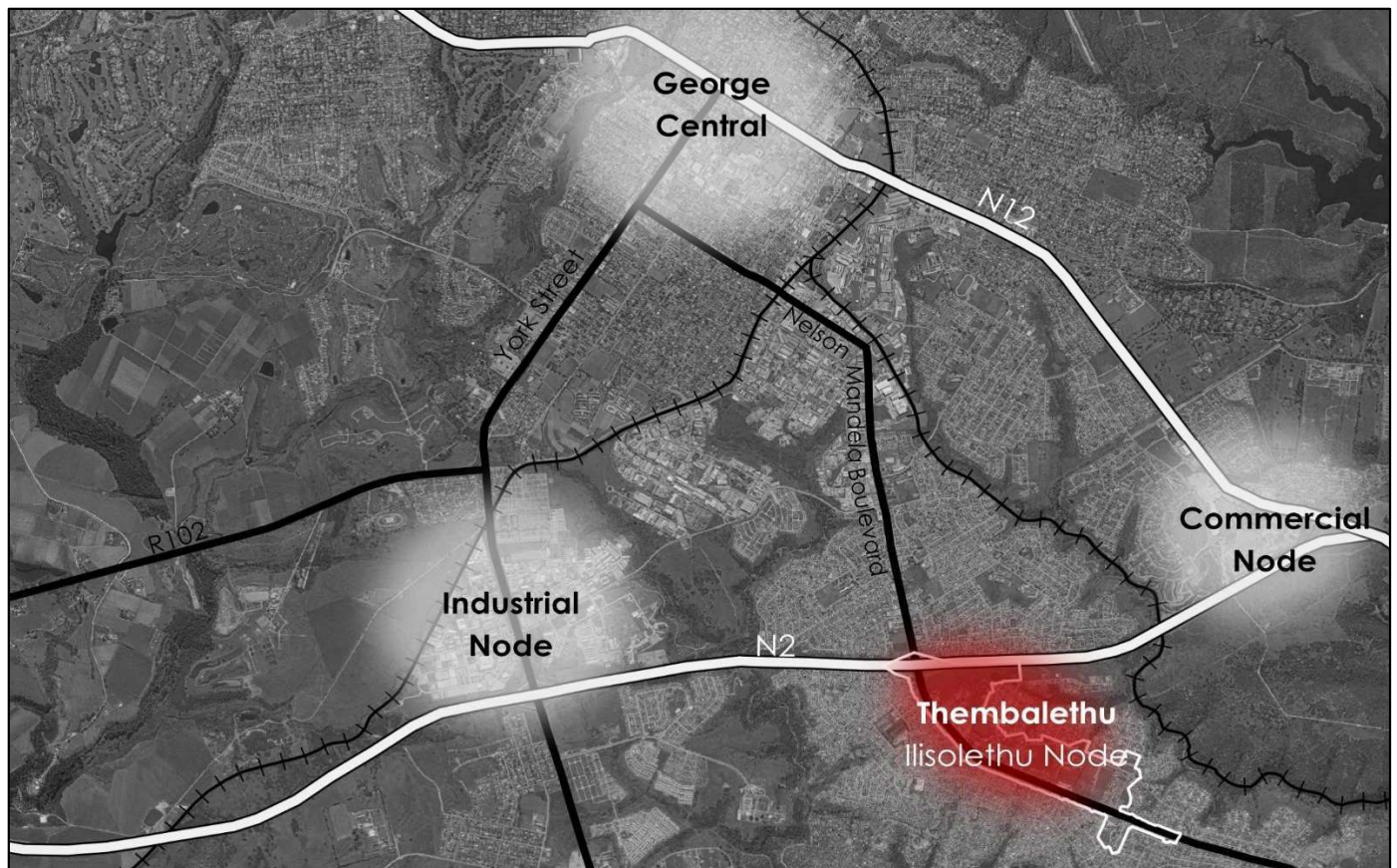


Figure 1-1: Thembalethu in the context of George





# Ilisolethu

Ilisolethu is seen as the gateway into Thembalethu (see **Figure 1-2**) and the main node and future mixed-use core of the township. The importance of this strategically located node is acknowledged in all plans of the George Local Municipality (GLM). With the assistance of the National Treasury Neighbourhood Development Partnership Programme the need was felt for a plan linked to projects that would unlock the economic potential of the Thembalethu township. The Ilisolethu Gateway Node was identified as the main catalyst area and future mixed-use core of Thembalethu, with the need for focused development in this area.

There is a range of community facilities located in the node. Yet, these are not integrated and have poor walkability due to vast tracts of vacant land in between. The availability of vacant land provides an ideal opportunity for the creation of an intensified node through infill development. However, even though there are large tracts of vacant land, development is constrained by a lack of external road linkages, proliferation of residential and trading structures encroaching onto limited public spaces, a lack of residential opportunities, and minimal economic and employment opportunities. Through focused planning and dedicated implementation, the municipality aims to address these challenges by creating a well-planned, high-intensity, mixed-use node with a strong identity as the core of Thembalethu.



**Figure 1-2: Ilisolethu Gateway Node boundaries**

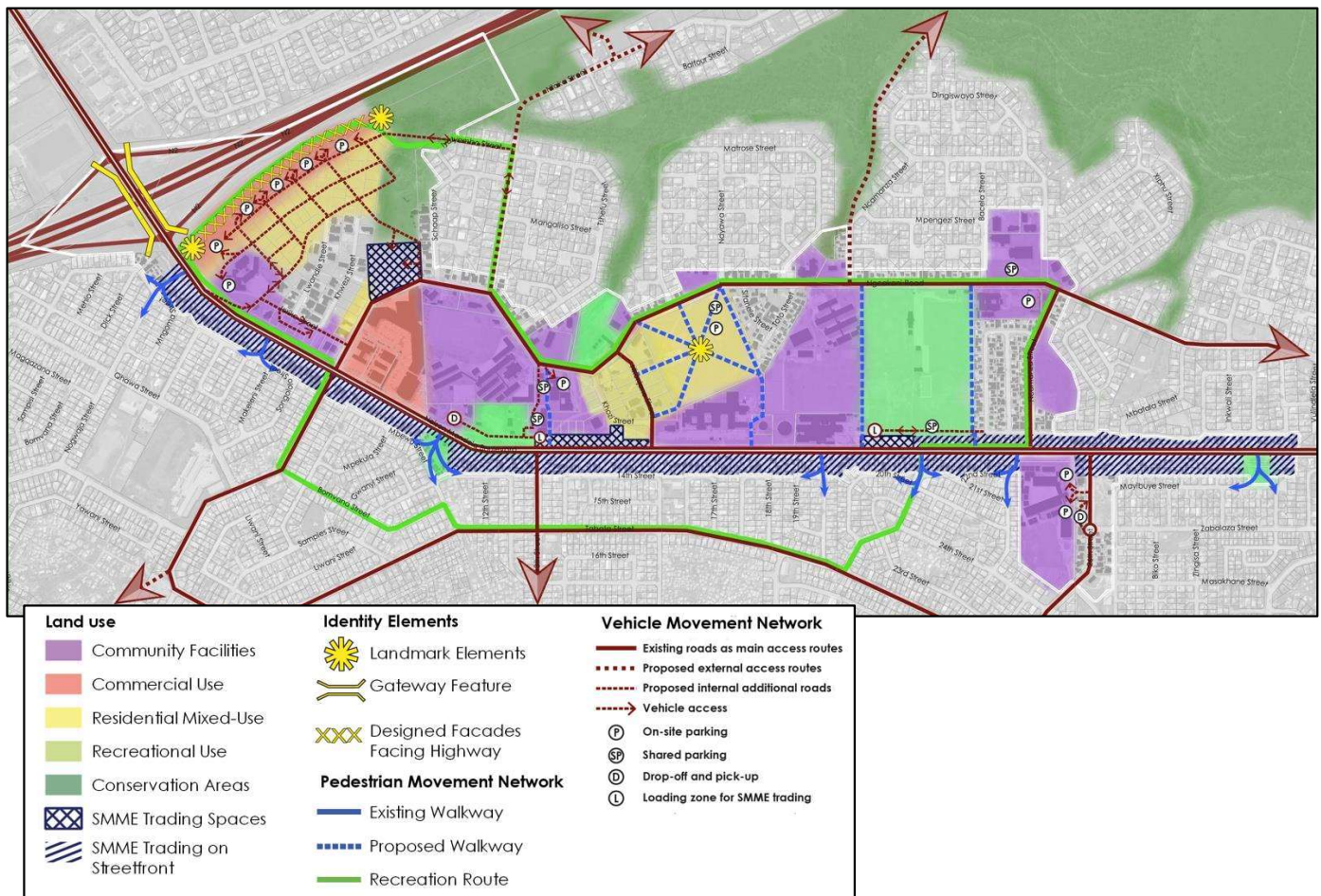


# IISOLETHU Gateway Node development framework

The development concept of the node (see **Figure 1-3**) envisions a well-designed central mobility and activity spine on Nelson Mandela Boulevard. Although vehicle mobility is accommodated, the emphasis is on public transport, pedestrian movement and cycling (the latter two known as NMT – non-motorised transport). As activity spine, the plan provides for economic activities along the boulevard, thereby sustaining the livelihoods of SMMEs.

With a range of community facilities already present in the node, the focus point for community activities for the entire Thembalethu will be expanded and strengthened. With more than 10 000 people walking in the area on a daily basis, a permeable layout that fosters better access to Nelson Mandela Boulevard from the adjacent residential areas is critical.

Development proposals further allow for the integration of a diverse range of economic and residential opportunities. Mixed-use residential and commercial activities are proposed for the large portions of vacant land, providing for a sustainable live-work-play node for the entire Thembalethu community. Infill development is proposed on underutilised smaller properties. Various types of inclusionary SMME economic opportunities are specifically accommodated.



**Figure 1-3: Development plan**

For more detail on the development proposals for the IISOLETHU Gateway Node, the following documents can be consulted:

- Development Framework as part of the Investment Plan – The rationale for the spatial development proposals is set out in order to address the current concerns and unlock the economic potential of the node.
- Implementation Framework as part of the Investment Plan – The 11 priority investment projects are identified and detailed in the Investment Plan, supported by individual investment packages (of which this document is one) for each of these projects.
- Area Management Strategy – An area management strategy for the sustainable maintenance and management of the node is formulated. Proposals are made for the establishment of a management body incorporating the municipality, the community, social institutions and NGOs, and the business fraternity.





## 2 PROJECT DESCRIPTION & DEVELOPMENT POTENTIAL

The Inkubeko Youth & Science Centre is a non-profit organisation that has been operating in the Thembaletu area since 2018. Their services are geared towards the youth of Thembaletu, providing exposure to science, technology, arts, mathematics and innovation.



### Purpose of the project

The Inkubeko Centre has recently expressed an interest in expanding their services to include sports and recreational programmes – for which they require additional space. The purpose of the investment package is to identify suitable land for the expansion of the Centre facilities. As part of the project, an NMT through route should be implemented.

**Table 1: Project overview** sets out the desirability and viability of the project, providing a summary of some information that could be found in the rest of the tables. Information provided in this table touches on the value of the project, an overview of potential funding, possible risks, and the strategic alignment of the project with key legislative outcomes.

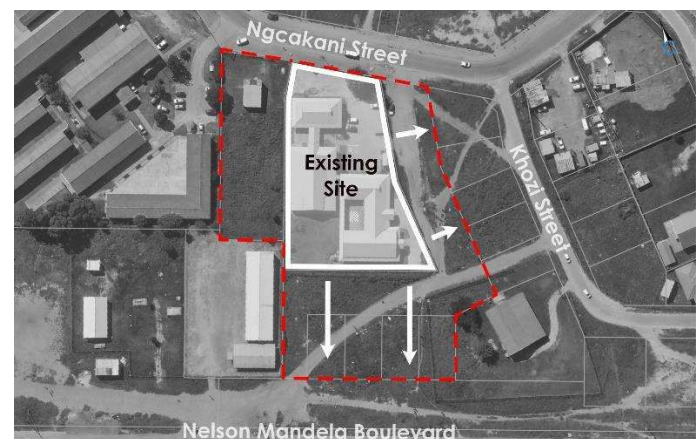


Figure 2-1: Science centre project location

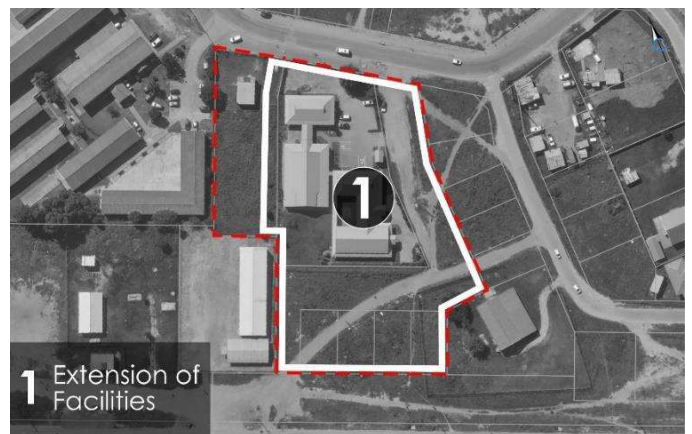




# Project potential

<p><b>50% Coverage</b></p> <p>1 storey building</p> <p>8 900 sqm developable space</p> <p>4 400 sqm bulk building</p>	<p>Youth development services</p>	<p>Land lease</p> <p>Place of instruction</p> <p><b>Clinic facilities</b></p>	<p>NMT through route</p>
<h2 style="color: red;">Inkcubeko Youth &amp; Science Centre Extension</h2>			
<p><b>20 parking spaces</b></p> <p>Sports and recreation facilities</p> <p>1 600 estimated trip generation</p>	<p>First phase implementation</p>	<p>20% development scenario</p> <p><b>890sqm bulk building</b></p> <p>4 parking spaces</p> <p>Right of way servitude for NMT through route</p>	

The project consists of one development component (**Figure 2-2**), with all project implementation items (see **Table 5 – Project implementation items**) focused on the extension of the Centre facilities and implementation of the NMT through route.



**Figure 2-2: Project development components**

**Table 2: Development potential** quantifies the development potential of the project based on proposals defined in the development plan and the proposed overlay zone. The following are included:

- Per development component – total developable area, erf numbers and preferred land uses;
- Maximum construction scope with set parameters for respective development components;
- Potential development if 100% of the project is developed;
- Minimum required development for 20% of the project's development; and
- Number of trips generated by the intended development.



# 3 PROJECT CONTEXT

## Locality

The Centre is located almost in the centre of the node, just north of Nelson Mandela Boulevard. Existing vehicle access is from Ngcakani Road, and this will remain the entrance with the extension of the facilities.



Figure 3-1: Project locality

## Public transport context

Thembaletu township is serviced by two public transport routes in the George Integrated Public Transport Network (GIPTN). Route 10 running on Nelson Mandela Boulevard is the main public transport feeder route linking Thembaletu with George Central. The route is serviced by Go George buses. Route 57 serves as a collector route in Thembaletu and is proposed to be serviced by taxis. Route 57 runs on Ngcakani Road, Tabata Street, and Qhawa Street.

The Inkcubeko Youth & Science Centre is directly serviced by the GIPTN 57 route and the required pedestrian through route proposed as part of the development will provide quicker access to the GIPTN 10 route.

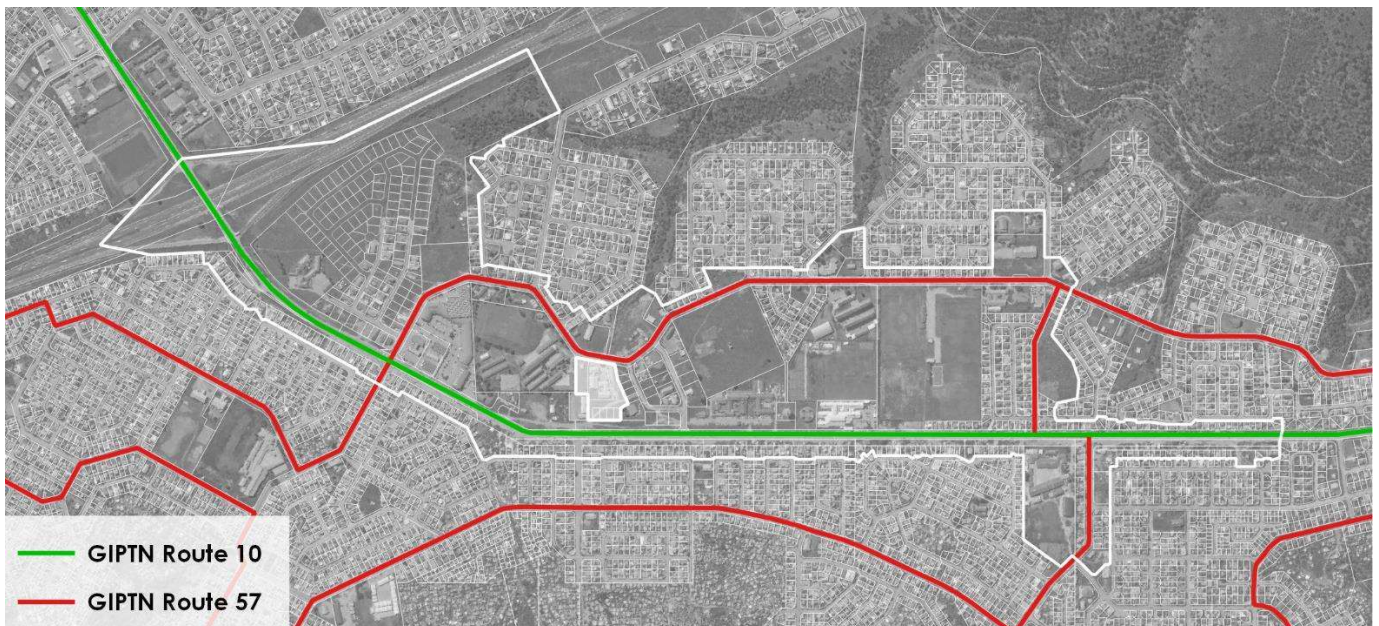


Figure 3-2: Public transport routes





# Environmental features

The Meul River flows along the north-eastern border of the township, with several non-perennial streams feeding the river from different low-lying areas in the township. A 64-meter buffer around the non-perennial streams act as an informal flood line (note – more formal flood line determination should be done should a project be affected by the 64m buffer). Most streams are located outside of the node boundary.

Critical Biodiversity Areas (CBAs) are also prevalent in the area, although most are located outside of the node boundary. CBAs must be safeguarded in their natural or near-natural state because they are critical for conserving biodiversity and maintaining ecosystem functioning. Thembalethu hosts three types of CBA sub-categories: CBA1 Forest, CBA1 Terrestrial and CBA1 Wetland.

The Inkubeko Youth & Science Centre project is unaffected by any CBAs or rivers.

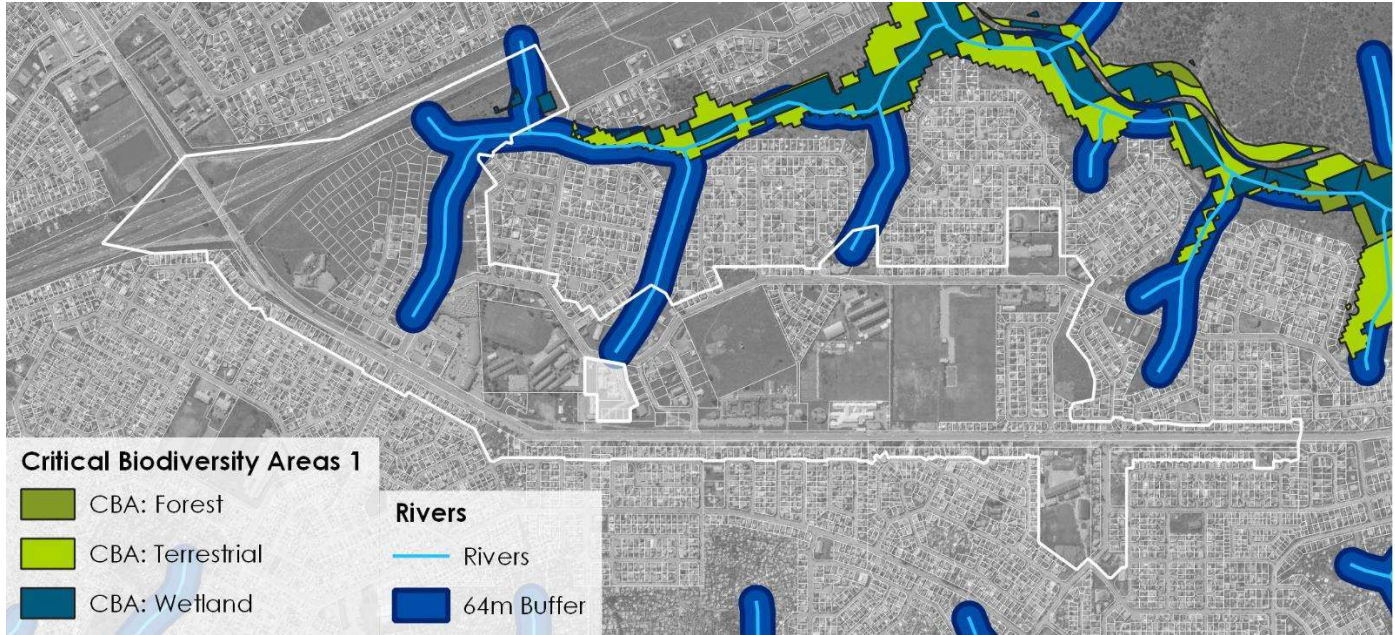


Figure 3-3: Environmental attributes

# Local context

The project area within its direct context is illustrated in **Figure 3-4**. Existing land uses adjacent to the project area, as well as other land uses and/or activities in the vicinity, as proposed in the Development Plan, are also indicated.

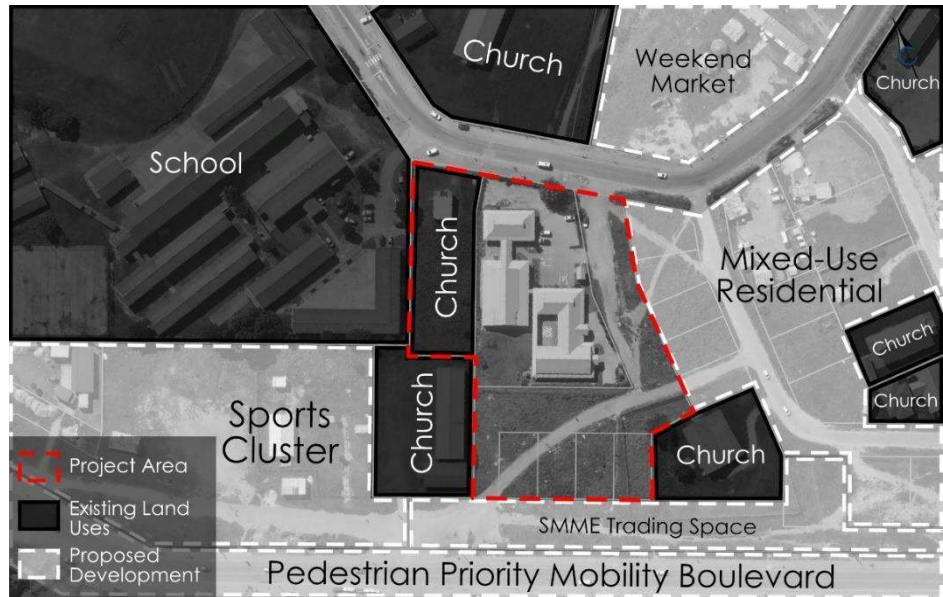


Figure 3-4: Project context (existing and proposed adjacent land uses)



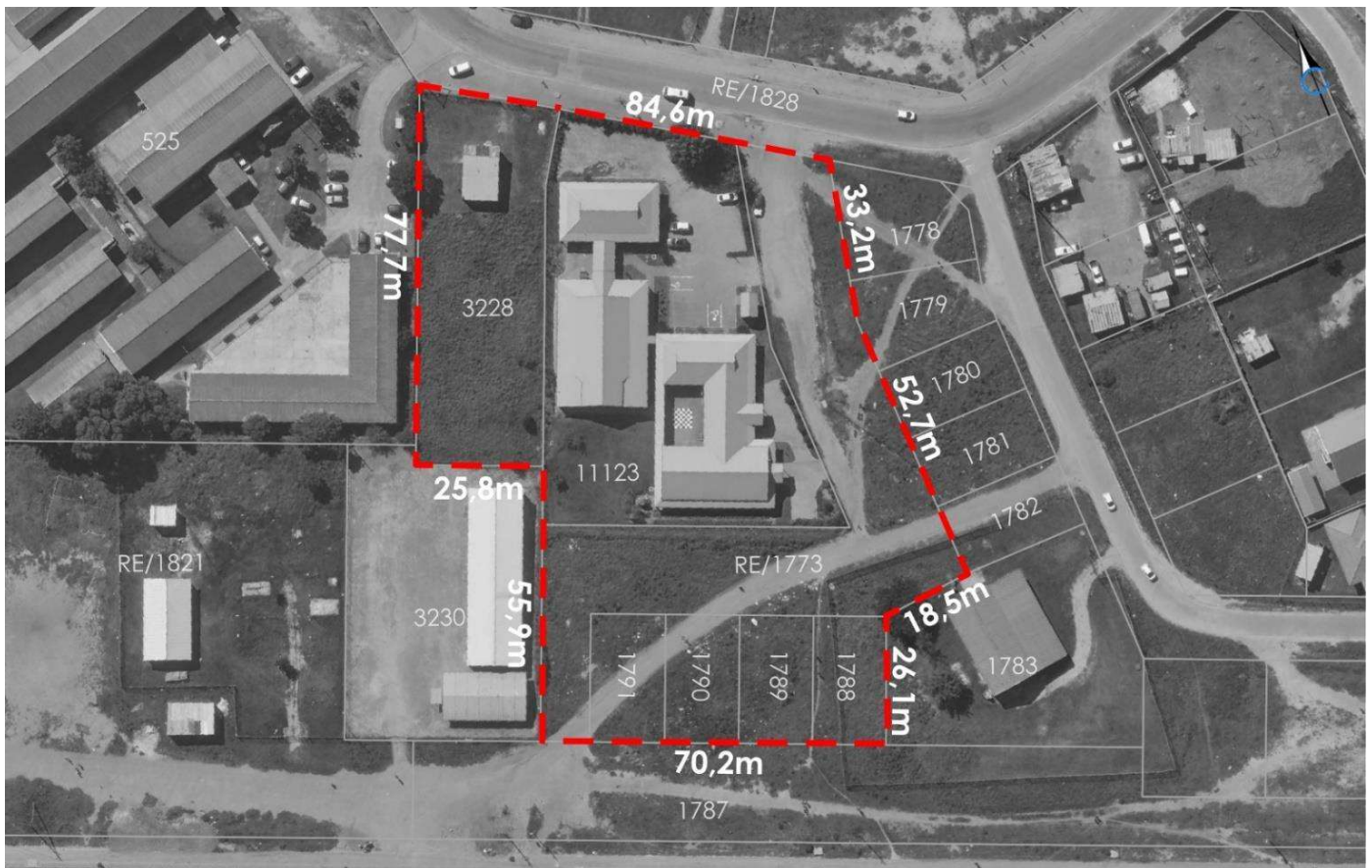
# 4 PROPERTY INFORMATION

The existing Inkubeko Youth & Science Centre is located on Erf 11123 (3 855 sqm). It is proposed that the following four vacant properties be made available for development as an extension of the Centre: Erven 1788; 1789; 1790; and 1791, together with a portion of the road reserve Remainder of Erf 1773. The total size of the Centre will then be 8 602 sqm. Land should be released based on the final land release model.

Erf 3228 is an existing church site but is included in the project area as it is proposed to accommodate an NMT through route to be implemented on the church site as part of the project. The Centre should negotiate this and a servitude for a public access route should be registered over Erven 3288 and 11123, and the Remainder of Erf 1773.

The project area (see **Figure 4-1**) thus includes the following properties:

- The existing Inkubeko Youth & Science Centre facilities on Erf 11123;
- Four vacant properties including Erven 1788, 1789, 1790 and 1791;
- A portion of the road reserve remainder of Erf 1773; and
- A portion of the adjacent church on Erf 3228.



**Figure 4-1: Project properties**

**Table 3: Property information** provides the following detail for each of the properties within the project area:

- Erf number;
- Erf size (m<sup>2</sup>);
- Property owner name;
- Description of whether the erf is privately or publicly owned;
- Current zoning of the erf (see **Table 4: Existing land use rights**) for detail on the rights associated with the type of zoning);
- Current land use of the erf;
- Existence of a lease agreement; and
- Name of the tenant on the erf if there is a lease agreement.

For more information on the SG data – see **11 Surveyor general data**.



# 5 PROJECT DESIGN

The intention of the project is to extend the existing facility mainly through the addition of sports facilities. This, and the fact that the existing building has a low-intensity design, means that no specific guidelines for the design of buildings and the site itself are provided. Due to the size of the site and the requirement for the development to be responsive to its surrounding environment, guidelines are focused on measures to ensure this.

## **NMT through route**

Project specific detail on the alignment of the route is indicated in **Figure 5-1**. The route will connect NMB and Ngcakani Road, with NMT access points from both sides. From the access on the side of NMB the route should run over the property of the Centre. From there the route should be negotiated with the adjacent church on Erf 3288 and developed all along the boundary on the church property. The whole NMT through route should be designed, developed and maintained by the Inkubeko Centre. The design of the route as a hard space is addressed in the generic guidelines sheet "NMT through route design guidelines".

## **Boundary definition**

Project-specific detail on which site boundaries may/should have specific types of boundary definitions is indicated on **Figure 5-1**. Requirements for the design of a specific type of boundary is addressed in the generic guidelines sheet "Interface design guidelines".

## **Parking and access**

Project specific detail on the potential locality of parking and points of vehicular access is indicated in **Figure 5-1**. The number of parking bays as already provided on the Inkubeko site should be retained and maintained, with a vehicular access point being moved to Ngcakani Road. A security booth managing both NMT access to the through route, and vehicular access to the Centre should preferably be located on the northern corner of Erven 11123 and 3228. Shared parking will be negotiated and constructed on Erven 3228 and 3230 as part of the implementation of Project 9 (NMB sports node); and on Erf 549 as part of the implementation of Project 7 (Recreation Route). The design of parking facilities is addressed in the generic guidelines sheet "Parking design guidelines".

## **Placemaking**

The implementation of public art or community-driven urban acupuncture as addressed in the generic guidelines sheet "Placemaking design guidelines" should be considered as part of the implementation of the project.

## **Open space**

The pedestrian through route should be designed as a linear park and should therefore follow the guidelines as set out in generic guidelines sheet "Open space design guidelines".

No other project specific requirements are applicable.





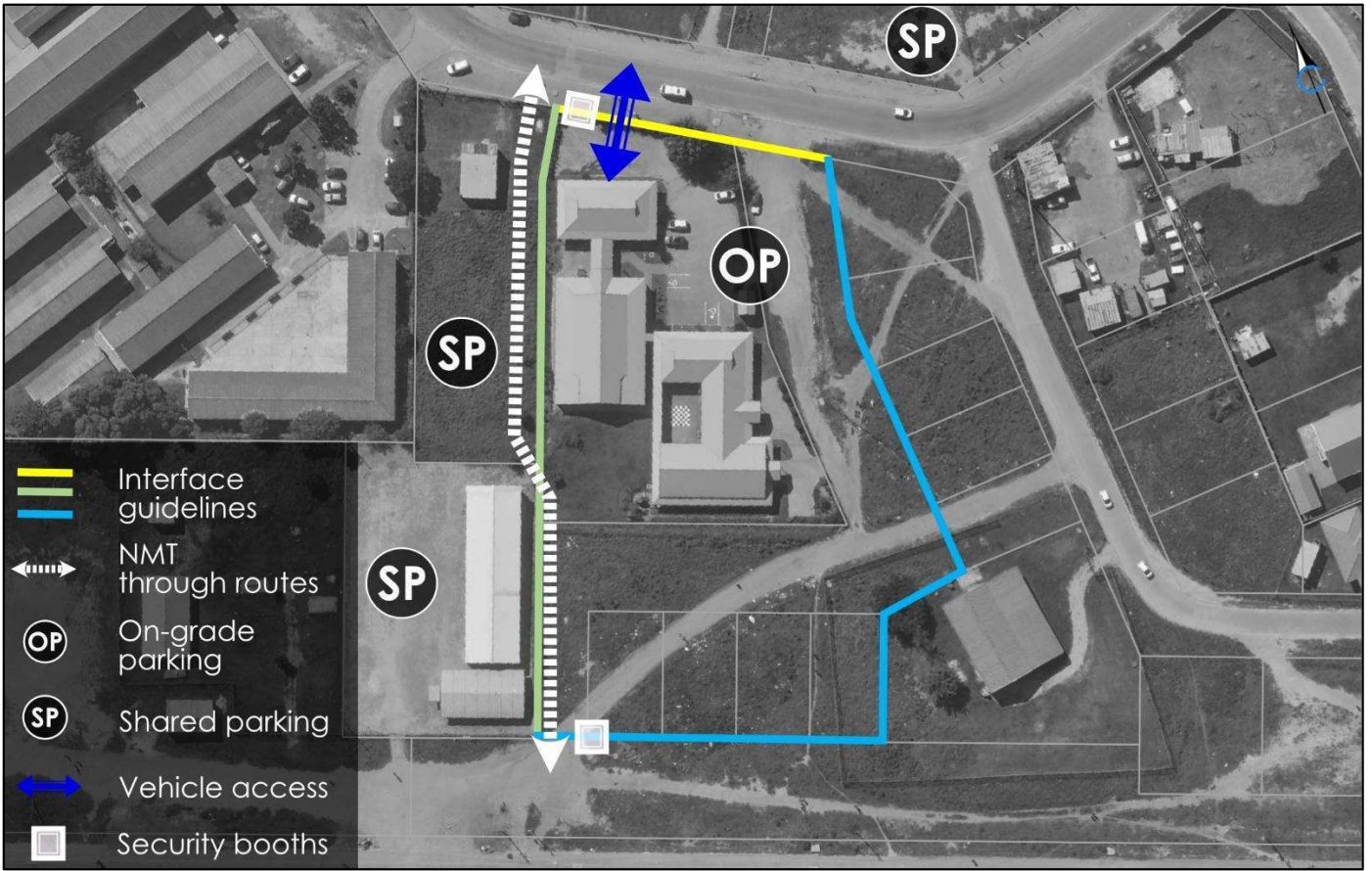


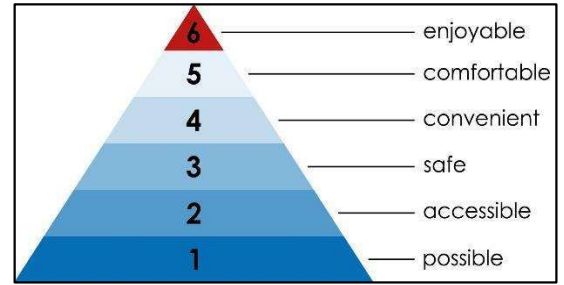
Figure 5-1: Project specific urban design guidelines



# NMT through routes design guidelines

Walking and cycling (referred to as non-motorised transport- NMT) together with public transport create more sustainable urban spaces by providing movement options beyond individual motorised transport.

Walkability refers to the user-experience of walking and how conducive an area is to NMT movement. Adjacent is the hierarchy of needs for walkability. The following spatial factors impact on walkability and should be kept in mind when implementing NMT through routes:



## Possible

- Human factors (age, health, mobility)
- Spatial factors (barriers – wide highways, steep slopes)

## Accessible

- Reasonable walking distance between destinations
- Number of environmental barriers
- Completeness of pedestrian network

## Safe

- Pedestrian-scale lighting
- Absence of grime (litter, graffiti, broken windows)
- Traffic management
- Unrestricted line of sight
- Public-private interfaces that support pedestrian safety

## Convenient

- Permeable, pedestrian-scaled walking grid
- Wide sidewalks
- Shortcuts through large areas

## Comfortable

- Covered walkways or shade
- Pedestrian-scale lighting
- Intact walking surfaces
- Public amenities (ablutions)
- Street furniture

## Enjoyable

- Public art and design elements
- Active spaces supported by land uses activating the street
- Buildings defining the space
- Presence of people without overcrowding

### Width

- Through routes should at a minimum be 7m wide, increased to 10m when walkways are longer than 70m.



### Security

- Pedestrian-scale lighting – ensuring the through route is adequately lit at night.
- Security booths may protrude 1m into the through route to assist with surveillance of both the private property and the through route.
- Landscaping should not impede line of site.



### Adjoining property interface

- Through routes should predominantly be flanked by transparent fencing or buildings with active interfaces.
- Where solid walls are however required to provide privacy, no solid wall may be longer than 7m before it is altered with transparent fencing.



### Hard space design

- Some walkways are small and only serve to make the area more permeable. These spaces should be completely paved, including public furniture, art and landscaping to soften the space.



### Soft space design

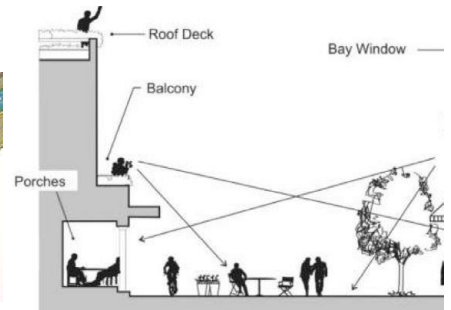
- Some walkways will serve more than one purpose, providing permeability as well as additional public space. In those instances, the through route should be designed to include linear park guidelines as proposed in generic guidelines sheet "public open space design guidelines".



# Interface design guidelines

The purpose of interface guidelines is to ensure that a building has a responsive street edge that could support passive surveillance and safety of/in the street. The rationale behind the proposed interface guidelines is to ensure building edges that activate the public space, or at least provide a visual connection between the inside of the building and the public space on the outside.

A responsible design of a building façade is critical, as the façade is not only part of the individual building but also part of the bigger urban whole. The aim of the façade is to weave the building and the street space together and not to act as a barrier between the inside and outside. A good public-private interface supports activity and transparency.



Below an illustration on how interface guidelines are incorporated into the development of an area:

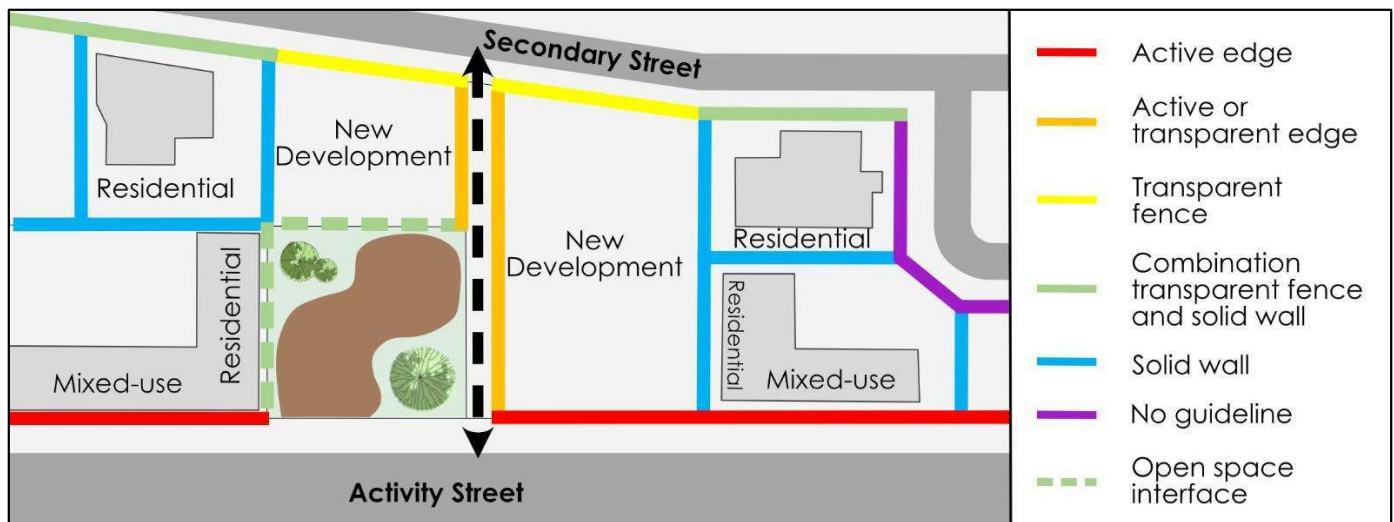


Figure 5-2: Application of interface guidelines

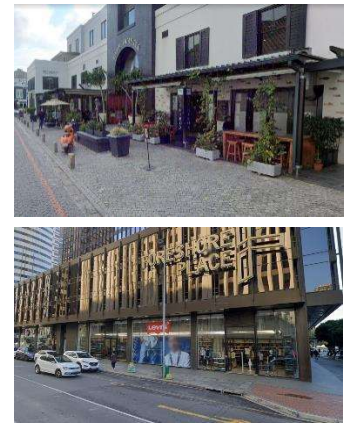




Active edge

Intention is to ensure that buildings contribute to the activity in the public space. To create an active edge:

- At least 75% of the ground floor should have openings (doorways or shop windows).
- No solid wall should be longer than 5m.
- One building entrance per every 10m length of building.
- A covered walkway provided along the edge of the building.
- Upper storeys should have balconies looking out onto the adjacent space (street/open space).



Active or transparent edge

Where buildings do not provide an active edge, the intention of a transparent edge is to still provide a visual connection between the inside of the building and the outside space. To create a transparent edge:

- At least 75% of the ground floor should have visual openings (windows).
- No solid wall should be longer than 10m.
- Balconies on upper storeys are encouraged.



Transparent fence

Although it is preferred that buildings frame the public space, the intention with a transparent fence is to improve security of the site, while also supporting environmental-design-for-safety principles with a visual connection between the property and the public space. Balconies on upper storeys are encouraged.



Combination transparent fence and solid wall

The intention with solid walls is to screen off loading zones and service yards and create privacy for facilities involving vulnerable communities. The combination of solid walls and transparent fencing should be provided accordingly:

- Solid walls may not be longer than 30m where it should be altered with transparent fencing.
- Walls should have articulated features to create visual interest.
- No precast concrete structures are allowed.



Solid wall

The intention with a compulsory solid wall is to screen off private areas facing another property. Solid walls should be provided accordingly:

- Walls should be at least 2m high.
- No precast concrete structures are allowed.
- In the case of adjacent residential properties, see additional residential design interface guidelines.



No guideline

No specific guidelines for these interfaces are required. Property owner can choose.



# Open space interface guidelines

The purpose of the open space interface guidelines is to ensure that a new, higher density development provides passive surveillance over the public open spaces, and that the design of buildings incorporate design-for-safety elements.



Open space interface

Intention is to increase the safety of public spaces through passive surveillance offered by the intended development. Building designs should adhere to the following:

- A building should front onto the public space and no building should have any backside turned to any part of the public space.
- Entrances into buildings should be provided directly from the public space.
- Security measures should be located at building entrances (e.g., biometric access) and not property boundaries.
- Windows and balconies should look out onto the public space.
- No solid wall or palisade fence may be erected in front of the building.



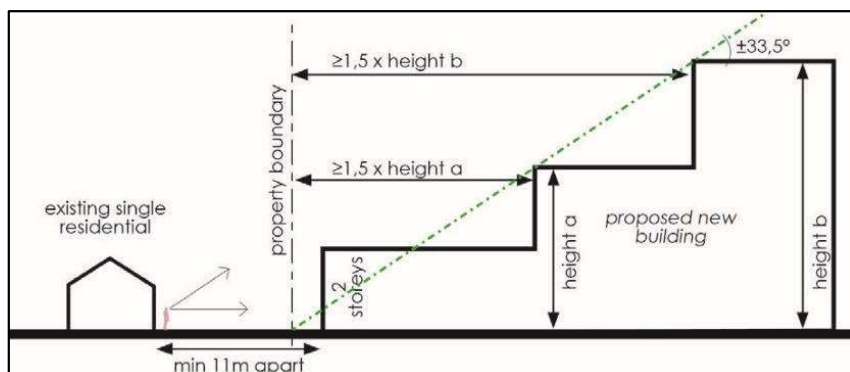
# Residential design interface guidelines

This interface refers to the transition line between new developments and existing residential properties behind and adjacent to it. The purpose of this residential interface guidelines is to ensure that a new, higher density development minimises the potential negative impact on adjacent single residential properties, by respecting the privacy and solar access of these properties.

Residential interface

The graphic illustrates how buildings adjacent to residential properties should be constructed. In summary:

- A 2m high boundary solid wall with a row of trees should be provided on the shared boundary.
- No service yards should be closer than 5m from the shared boundary.
- No balconies may be provided on the sides facing the single residential property.
- Height of new buildings should step up from the shared boundary.
- New buildings should be located at least 1,5 times the height of the new building away from the shared boundary.



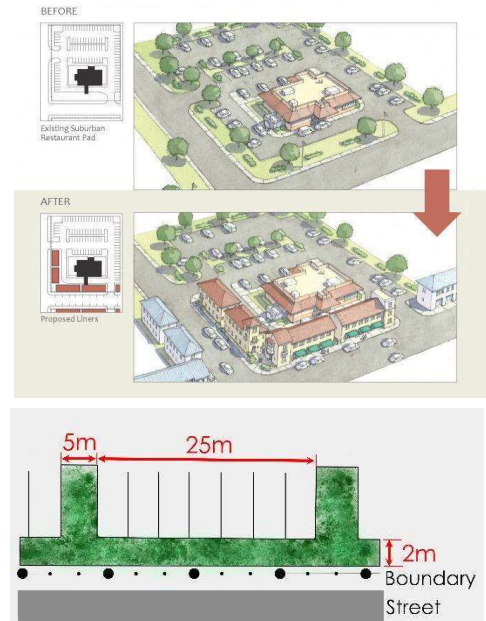
# Parking design guidelines



Parking on-grade

To enhance pedestrian quality, on-grade parking should not be provided in front of buildings, along important routes, or adjacent to public spaces. The following should also be adhered to:

- At least one indigenous, drought resistant tree/landscaped patch per every four parking bays.
- Parking to be provided at the back of buildings.
- Larger parking lots should be divided into parking pockets with ample trees/landscaping to soften the space.
- Parking provided along transparent fences facing the street should be provided in pockets with a 2m strip of landscaping along the boundary.
- Parking pockets should not be longer than 25m and should be separated by a minimum 5m width landscaped patch.



Parking in/on building

It is preferred that parking be provided inside, underneath or on top of buildings. Where this is possible, the following should be kept in mind:

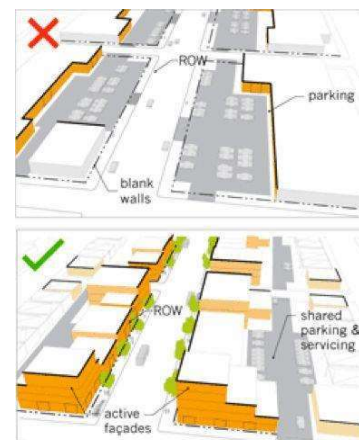
- Only active uses are to be provided on ground floor – not parking.
- Where parking is provided in a raised basement, the ground floor should not be raised more than 1 meter above the sidewalk.



Shared parking

Due to the proposed functioning of the node as a pedestrian-prioritised environment, creative thinking around a shared parking system is proposed. The following guidelines are therefore proposed:

- As a site is developed, a reduced ratio of parking spaces is provided.
- Overflow parking can then be designated to a close-by vacant piece of land.
- When the overflow parking lot is developed, additional parking is provided at a different site.
- It is believed that as the node becomes more developed, the public transport and pedestrian character will dominate, and less parking would be required.
- Shared parking lots should be designed according to the "parking on-grade" guidelines above.





# Placemaking design guidelines

Sense of place (or identity) refers to the intrinsic distinctiveness of a place and the meaning people give to that place. Certain unique characteristics can make a place distinctively different and thus more interesting and memorable. When there is a sense of place, residents feel a connection and a sense of belonging. This has both social advantages (residents love their area and therefore take better care of it) and economic advantages (businesses are attracted to that area).

Questions around a sense of place should be structured around private developments and the design of buildings, the interface between public and private spaces, and the design and functioning of public environments. It's the collaboration and mutual support between public and private that create vibrancy within spaces.

Private developers should think about a sense of place in terms of how does the building/development (1) respond to and reinforce the locally distinctive character; (2) create a sense of significance to the local community, and (3) respond to and reinforce the locally distinctive activity structure and spirit.

The public realm should be designed in such a way that developers can easily read the sense of space within a community. The public realm should: (1) set the standard of development, (2) be responsive to local character, (3) be respectful of heritage, and (4) protect the natural environment.

## CHARACTER OF THE PLACE

- Built form
- Patterns of development
- Streetscape
- Interface design
- Heritage elements
- Landmark elements
- Public art
- Environmental elements

## QUALITY OF THE PLACE

- Quality of public spaces (hard and soft; linear and nodal)
- Architectural quality
- Infrastructure services
- Vehicular movement and parking
- Non-motorised movement
- Universal design
- Public facilities

## SPIRIT OF THE PLACE

- Sense of community
- Sense of safety
- Community events
- Vibrancy in public spaces



## Street furniture and lighting

- To be provided along all NMT through routes, public open spaces and the NMB pedestrian priority route.
  - Furniture should be designed to be robust and low maintenance, using materials such as concrete or steel.
  - Seating should be orientated to provide passive surveillance within the public space.
  - Where possible, the branding of the Ilisoletu node should be incorporated into the design of street furniture.
  - The design and placement of furniture should keep design principles such as rhythm, texture, form and colour in mind to establish a sense of place.
- 
- Lighting should be pedestrian scale and adequately illuminate public spaces.
  - Lighting should not adversely impact adjacent properties.
  - Public transport facilities should be well lit at all times.
  - Solar lights should be explored to reduce the load on the electrical grid.



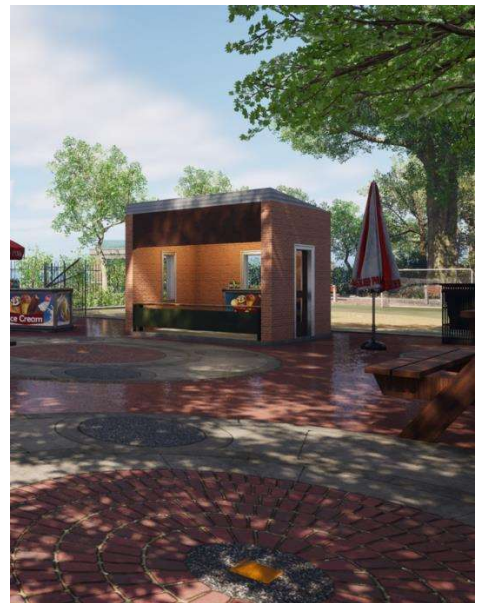
## Hard and soft landscaping

Hard landscaping (such as paving) plays a critical role in defining and creating continuity between different public spaces. The following should be kept in mind with hard landscaping:

- Paving should “spill out” onto public open spaces where pedestrian walkways connect.
- Design principles such as texture, form and patterns should be used to differentiate between different activities.
- Paving intersections to serve as traffic calming measures and prioritise pedestrian movement.
- Follow universal accessibility principles, ensure that hard landscaping is non-slip and even.

Soft landscaping is necessary to soften public spaces and incorporate nature back into cities. Vegetation and tree cover can also greatly increase the attractiveness of open spaces by providing shade and a sense of enclosure. Soft landscaping guidelines include:

- Indigenous and drought resistant vegetation should be encouraged.
- Care should be taken when planting low shrubs as to not impede visibility and to avoid creating concealed spaces.
- Design principles such as rhythm and harmony can be incorporated into the planting of trees to better enhance the character of public spaces.





**PUBLIC ART AND URBAN ACUPUNCTURE OPPORTUNITIES** include the following:

**Community sidewalk mosaic**



**Mural painting**



**Community gardens**



**Painted parking lots**



**Pocket play spaces**



**Commissioned public art**



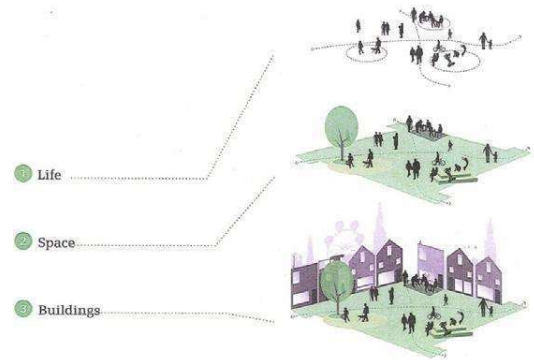


# Open space design guidelines

## Components of good public spaces

An urban space can be defined in terms of the following components:

- The walls defining the space (e.g. buildings enclosing the space, a continuous row of trees);
- The floor covering the space (e.g. paved patterns, grass);
- The roof covering the space (e.g. a built structure, sky);
- The elements arranged in the space (e.g. street furniture, landscaping, trees, public art); and
- The activities taking place in the space (e.g. formally organised, informal and spontaneous).



## Shared space

Shared space is a relatively new urban design concept with the aim to minimise the segregation between vehicles, pedestrians, and bicycles through continuous paving over the street and sidewalk. The theory is that it creates a sense of uncertainty, making it difficult to read who has priority in the space. This in turn would make drivers slow down, engage with the environment, and make eye contact with pedestrians.

Walls	Preferred that adjacent properties have active interfaces, or at least a transparent interface.
Floors	Paving of entire space, removing distinction between streets and walkways.
Ceilings	Covered walkways along buildings are encouraged. Street trees to provide shade.
Elements	Removal of street clutter (kerbs, road surface markings, traffic signals). Incorporating street furniture, public art, and amenities.
Activities	Adjacent properties should provide appropriate land uses to activate the public realm (restaurants, social services, retail, etc).

Less shared design		More shared design
Kerbs	Low kerbs, chamfered kerbs	No kerbs
Pedestrian barriers		No pedestrian barriers
Vehicles restricted to parts of street, e.g. by bollards, street trees, etc.	Implied vehicle paths using surface materials, for example	No barriers to vehicle movement
Poor quality or unwelcoming public space characteristics	A few places where people can rest and chat	Presence of features such as cafes, markets, abundant seating, planting, public art, etc.
Conventional road markings	Limited road markings	No road markings
Traffic signals		No traffic signals
Signal controlled crossings	Zebra crossings	Courtesy crossings or no crossings



## Public squares

A square is provided to act as focal point for social and cultural life in the node. In general, a square draws its vibrancy from the activities and uses in the buildings surrounding the space, from the interaction between the buildings and the space, as well as activities taking place within the space itself. A public square also provides an opportunity to establish a unique mix of commercial and social services to establish a distinct identity. A setting facing onto a square also provides the opportunity for a civic building where the square acts as a reception space for people to sit and wait to be served.

Walls	Preferred that adjacent properties have active interfaces, or at least a transparent interface. Buildings should frame the space.
Floors	Hard and soft landscaping within a well-designed public space.
Ceilings	Covered walkways along buildings are encouraged. Street trees to provide shade.
Elements	Central public art feature around which the public space is orientated. Incorporating street furniture, public art, and amenities.
Activities	Adjacent properties should provide appropriate land uses to activate the public realm (restaurants, social services, retail, etc).





---

## Sports facilities

Where possible, multi-sport sports fields should be incorporated into all public open spaces. Where appropriate, transparent fencing around sports fields may be provided. The sports fields should however form an integrated part of the entire open space, and the design of the space should therefore follow the guidelines of soft and hard public spaces. Varying ages should be catered for – providing bigger and smaller versions of the fields.

---



---

## Soft public spaces

Soft public spaces are well-designed with ample soft landscaping elements to soften the space and integrate natural elements.

- Space preferably defined by active building interfaces, however transparent fencing or a line of trees can also define the space.
  - Paved areas with interspersed soft landscaping.
  - Ample trees to provide shade.
  - Public art, street furniture, pedestrian-scaled lighting, formal and informal trading activities.
- 



---

## Hard public spaces

Hard public spaces include the network of pedestrian sidewalks and bicycle lanes, as well as the dedicated trading spaces and public open spaces that are spread along NMB. Trees, street furniture and public art must be incorporated to soften the space.

- Space preferably defined by active building interfaces, however transparent fencing or a line of trees can also define the space.
  - Paving patterns to define different activity spaces.
  - Trees to soften the space.
  - Public art, street furniture, pedestrian-scaled lighting, formal and informal trading activities to create a sense of place and vibrancy.
- 



---

## Linear parks

Applicable to pedestrian walkways and through routes. Depending on the length of the walkway, might be hard or soft spaces.

- Transparent fencing or active interfaces to border the space.
  - Paved areas with interspersed soft landscaping.
  - Ample trees to provide shade.
  - Public art, street furniture, pedestrian-scaled lighting, formal and informal trading activities.
- 





## 6 PROJECT IMPLEMENTATION

**Table 5: Project implementation items** identifies project items with key activities that need to be undertaken to ensure the successful implementation of the project. The following are addressed under each component:

- Description of the item;
- Status of the item – Indicates the stage of progress of the item;
- Item type – specifies whether the item is for technical assistance, operations, management, or a capital project;
- Source of funding;
- Budget estimate for the item;
- Budget rationale – explains what informed the budget estimate;
- Responsible stakeholder – highlights the agent responsible for the implementation of the set item; and
- Item timeframe.

**Table 6: Engineering services capacity** quantifies the engineering capacity requirements for water, sewer, and electricity linked to the respective development components (see **Figure 2-2**). The engineering capacity requirements are calculated for 20% of the project development and 100% of the project development.

**Table 7: Engineering construction costs** quantifies the estimated construction costs of the project, including the following (if applicable to the project):

- Civil engineering (external and internal) comprising preliminary and general costs; upgrading of bulk water, bulk sewer, municipal roads, provincial roads and national roads; stormwater masterplan; site clearance; water and sewer mains; stormwater drainage; roads; paved areas; and attenuation dams.
- Electrical engineering.
- Bulk services contributions comprising water, sewer, stormwater, roads and electrical\*
- Professional fees comprising civil and electrical fees.

\*Note: bulk services contributions to be confirmed by George Local Municipality.

## 7 PROCUREMENT PLAN

**Table 8: Procurement plan** details the timelines/dates of the activities that need to be undertaken by the municipality to secure the services or goods required for implementation. The planned and actual dates of the following are included:

- Bid specification committee submission;
- Envisaged date of the advert;
- Envisaged closing date;
- Submission of evaluation report;
- Submission for adjudication; and
- Envisaged appointment date.

## 8 POTENTIAL INVESTMENT PARTNERS

**Table 9: Potential investment partners** identifies the names and contact details of potential capital and maintenance investment partners based on the project type, development scope, and suitability as a project partner.

## 9 COMMUNICATION MANAGEMENT APPROACH

**Table 10: Communication management approach** identifies the following:

- Communication lead name and contact details;
- Communication methods – indicates the type such as meetings (in person, over the phone or virtually), status reports, and formal presentations; and
- Communication frequency – indicates how often communication will ideally occur.

Continuous communication between the different stakeholders is an essential element to see the project through to completion.



## 10 PROJECT MANAGEMENT

**Table 11: Project management** identifies the names, roles, and contact details of key project management team members. The members identified are within the following:

- Project Management Committee (PMC);
- Project Steering Committee (PSC); and
- Municipal Executive.

The details of the project manager and lead private partner are also included.

## 11 SURVEYOR GENERAL DATA

Where available, surveyor general data is included in the investment package. Data consists of servitude diagrams, subdivisional diagrams, consolidation diagrams and general plans. These provide essential property and land information such as:

- The unique designated number of the property (Erf, farm, agricultural holding);
- A plan or diagram of the property;
- The boundary description and descriptions of the corner beacons;
- The size of the property; and
- Additional notes providing other relevant information on the property.





GOOSEN CLOUGH & LOUW  
LAND SURVEYORS -GEORGE

GENERAL PLAN L 86/1989

SIDES Metres		ANGLES OF DIRECTION	CO-ORDINATES Y System WG23 ° X		S.G. No. 1844/2015
		Constants	+	0, 00	+3 700 000, 00
AB	36, 35	301 38 00	A	+ 47 814, 54	+ 63 939, 73
BC	42, 13	11 00 00	B	+ 47 783, 60	+ 63 958, 79
CD	40, 06	357 28 00	C	+ 47 791, 64	+ 64 000, 15
DE	62, 44	111 25 20	D	+ 47 789, 86	+ 64 040, 17
EF	69, 00	201 25 00	E	+ 47 847, 99	+ 64 017, 36
FA	15, 73	211 38 00	F	+ 47 822, 80	+ 63 953, 13
Δ (163) OUD 7				+ 56 651, 97	+ 52 235, 65
Δ (73) SILVER RIVER				+ 42 348, 33	+ 51 941, 48

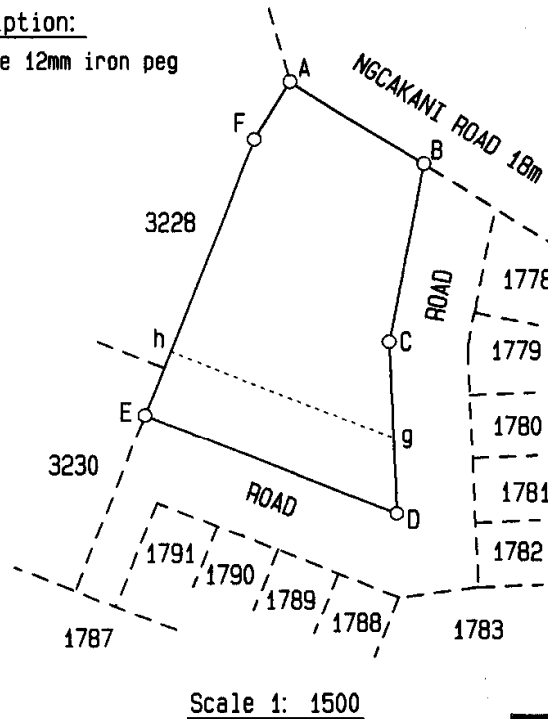
Approved

Surveyor-General

26.08.2015

**Beacon Description:**

All beacons are 12mm iron peg



15/3/18 D25/EF 1773 Tyolora  
 Approved i.t.o. Reg. 19 (5)  
 framed i.t.o. Act No. 47/884  
 Ref. 2015-04-08  
 Date 2015-04-08

**NOT FOR  
REGISTRATION  
PURPOSES**

The figure A B C D E F  
represents 3855 square metres of land being

**ERF 11123, TYOLORA**

situate in the Municipality and  
Administrative District of George Province Western Cape  
Surveyed in November 2000 - October 2013

by me *A. Louw* A.LOUW (PLS0356) Professional Land Surveyor

This diagram is annexed to

No.  
Dated  
i.f.o.

Registrar of Deeds

File No. TYOLORA 602 v.6

S.R. No. 932/2015

Comp. AL-188B (6485)

LPI C0270010

Gen. Plan No. L 86/1989

Erf 11123 Tyolora

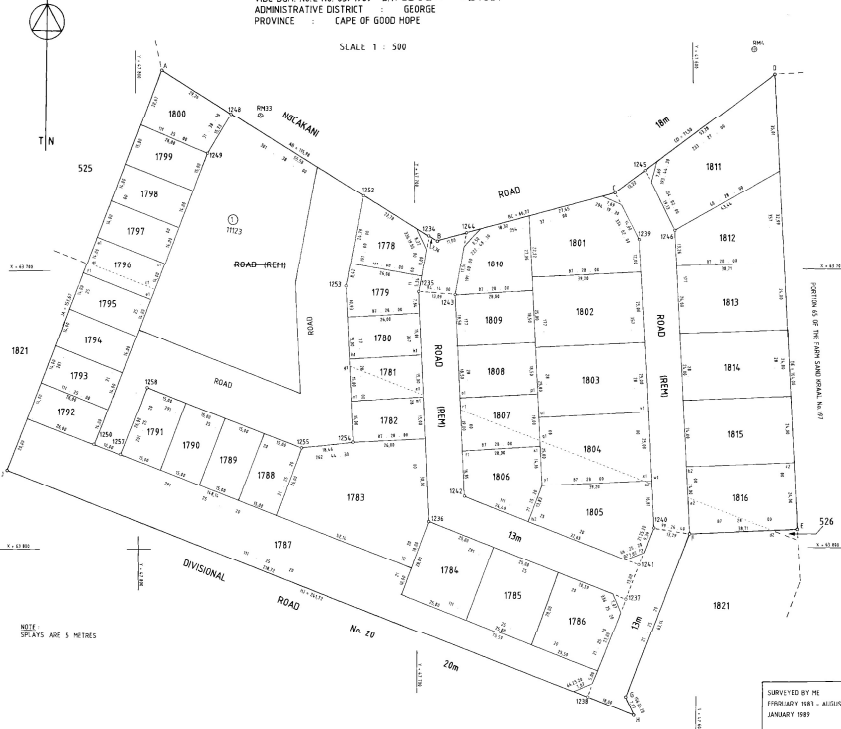
**S**

Figure 11-1: SG Diagram 1844/2015 (Erf 11123)

**C**  
 (TYOLORA ALLOTMENT AREA)  
**GENERAL PLAN No. L No. 86/1989**  
 OF PART OF THE TOWNSHIP  
**TYOLORA**

BEING SUBDIVISIONS OF ERF 1773, TYOLORA  
 VIDE DGM. No. L No. 85/1989 D.T. 20/02/89  
 ADMINISTRATIVE DISTRICT : GEORGE  
 PROVINCE : CAPE OF GOOD HOPE

SCALE 1 : 500



**CDR**

C.P.A. COMPANY SERVICES  
 WESTERN CAPE  
 APPROVED  
 SURVEYOR-GENERAL  
 DATED 1989-09-15

**CO-ORDINATE SYSTEM 1 a 734**

CONSTANTS Y = 0,00 X = 3 700 000,00

MAN FIGURE			
Y	ALL	PLUS	X
A	47 791,07	63 628,85	
B	47 692,33	63 689,68	
C	47 627,95	63 671,97	
D	47 570,51	63 629,39	
E	47 563,26	63 793,23	
F	47 601,93	63 794,94	
G	47 824,99	63 853,72	
H	47 622,17	63 860,20	
J	47 847,19	63 771,92	

BLOCK CORNERS			
1773 A	47 791,07	63 628,85	
1773 B	47 692,33	63 689,68	
1773 C	47 627,95	63 671,97	
1773 D	47 570,51	63 629,39	
1773 E	47 563,26	63 793,23	
1773 F	47 601,93	63 794,94	
1773 G	47 824,99	63 853,72	
1773 H	47 622,17	63 860,20	
1773 J	47 847,19	63 771,92	

REFERENCE MARKS			
RM1	47 538,28	63 420,47	
RM2	47 754,95	63 443,94	

TRIGONOMETRICAL BEACONS			
0,002 A	48 740,55	63 437,71	
0,000 J	58 403,41	51 510,41	

AREAS			
ERF No.	CO-ORDINATE SYSTEM	ERF No.	CO-ORDINATE SYSTEM
1773	584	1774	344
1774	423	1775	300
1775	250	1800	500
1776	300	1801	361
1777	1833	1802	360
1778	750	1803	360
1779	740	1804	360
1780	740	1805	360
1781	3746	1806	337
1782	300	1807	318
1783	310	1808	318
1784	300	1809	318
1785	300	1810	318
1786	300	1811	318
1787	300	1812	318
1788	300	1813	318
1789	300	1814	318
1790	300	1815	318
1791	300	1816	318
1792	300	1817	318
1793	300	1818	318
1794	300	1819	318
1795	300	1820	318
1796	300	1821	318

ENDORSEMENTS					
No.	AMENDMENT	ADDITION	AUTHORITY	INTD.	DATE
1	Change of name of erf	Lot 1803 with Dm No. 1775	Platting, Control and Survey Dept. No. 1773/1774/1775/1776/1777/1778/1779/1780/1781/1782/1783/1784/1785/1786/1787/1788/1789/1790/1791/1792/1793/1794/1795/1796/1797/1798/1799/1800/1801/1802/1803/1804/1805/1806/1807/1808/1809/1810/1811/1812/1813/1814/1815/1816/1817/1818/1819/1820/1821		1989-09-15

**SG OFFICE NOTES**

Erf 1776 to 1800 included in original title dgm No. 85/1989, D.T. 20/2

Erf 1792 to 1795 included in original title dgm No. 84/1989, D.T. 20/2

Erf 1796 included in original title dgm No. 84/1989, D.T. 20/2

**REFERENCE MARKS**  
 OFFICIAL VIDE OFFICIAL GAZETTE No. 1487 OF 1989-04-12

SURVEYED BY ME  
 FEBRUARY 1983 - AUGUST 1983  
 JANUARY 1989

FILE No. TYOLORA 602  
 C.P. No. 1789/1989  
 COMP. AL-1888(6485)

M D CLOUGH  
 LAND SURVEYOR

L NO 86/1989

**Figure 11-2: General Plan 86/1989 (Erf 1788-1791)**  
 GOOSEN, CLOUGH & LOUW  
 LAND SURVEYORS - GEORGE  
 L 85/89

SIDES Metres	ANGLES OF DIRECTION	CO-ORDINATES System	
		Y	X
<b>Constants</b>			
		0,00	3 700 000,00
AB	115,98	301 38 00	63 628,85
BC	66,77	254 37 00	63 689,68
CD	71,50	233 27 00	63 671,97
DE	164,00	357 28 00	63 629,39
EF	38,71	87 28 00	63 793,23
FG	63,14	21 25 20	63 794,94
GH	7,07	336 25 20	63 853,72
HJ	241,72	111 25 20	63 860,20
JA	153,67	201 25 00	63 771,92
		▲ Geo 4	48 760,50
		▲ Oud 7	56 603,60

- The figure A B C D E y x representing Erf 2201, Tyolora Vide Dgm. No. L 158/89
- The figure x y F G H J representing Erf 1772, Tyolora Vide Dgm. No. L 84/89

The figure A B C D E F G H J represents 4,0165 Hectares of land, being Erf 1773, Tyolora comprising 1. and 2. above

situate in Tyolora Township in the Administrative District of George Province of Cape of Good Hope.

Surveyed in February 1983 - August 1983 & January 1989

*M D Clough*  
 M D Clough  
 Land Surveyor

This diagram is annexed to No. dated I.F.O.	The original diagrams are as scheduled above	File No. TYOLORA 602 S.R. No. E.938/89 Comp. AL-1888 (6485)
59887/2002	annexed to	
Registrar of Deeds	Transfer/Grant No.	

**Beacons**  
 A, E, F, G, H, J 12 mm iron peg  
 D 20 mm iron peg  
 B, C Not beacons

S.G. No.  
L 85/89  
Approved  
  
 Surveyor-General  
 1989-09-15

Small scale diagram of part of TYOLORA TOWNSHIP vide GP NO. L 86/1989

Scale: 1 : 3 000

**Figure 11-3: SG Diagram 85/1989 - Sheet 1&2 (Remainder of Erf 1773)**



**Approved in terms of  
Section 36 of Act  
No 4 / 1984**

# 36 (1)(a)

Figure 11-4: SG Diagram 85/1989 – Sheet 3 (Remainder of Erf 1773)



**TABLE 1: PROJECT OVERVIEW**

<b>Inkcubeko Youth and Science Centre extension</b>	
Project 5	
<b>Project value</b>	
Project need	The centre needs to be extended to ensure it continues to empower the youth, develop the community and promote a healthy youth culture through various programmes.
Project outputs	Extended Inkcubeko Youth and Science Centre with recreational facilities guided by development plan and guidelines.
Project benefits	Provides a safe space for the youth in the Thembaletu community to have access to extra curricular activities and also ensures that public safety is improved through a well designed public private interface.
Project beneficiaries	The youth.
Estimated overall project timeframe	24 months
<b>Project cost</b>	
Primary infrastructure classification	New (Capacity)
Estimated overall project budget	R14 221 362.23
Project type	Capital project (Renewal)
Primary source of funding	NDPP and private partner
Status of funding	Not committed
Financing incentives required	No
Value for money	Medium
<b>Project risk</b>	
Key risk identified	Insufficient investment in new capital project.
Risk likelihood	Possible
Risk consequence	Moderate
Risk level	Medium
Mitigation strategy	Identify all potential investors and confirm their commitment to fund.
Responsible risk management agent name	TBC
Responsible risk management agent contact details	TBC
<b>Project strategic alignment</b>	
NDP 2030 vision	Improving public services and spaces as well as building integrated housing and sports facilities in communities to ensure sharing of common spaces across race and class.
National outcomes	A skilled and capable workforce to support an inclusive growth path.
Provincial Strategic Plan Focus areas	Youth and skills.
Garden Route District Municipality Strategic Objectives	Healthy and socially stable communities.
IDP strategic goal	4. Participative partnerships.
IDP priority	4. Communication and participation.
Supported SPLUMA principle	Spatial justice.



**TABLE 2: DEVELOPMENT POTENTIAL**

<b>A POSSIBLE DEVELOPMENT SCENARIO</b>				
<b>In terms of the Ilisoletu development plan and proposed overlay zone, the consolidated properties have the following development potential:</b>				
<b>Site summary</b>				
Total size of all properties in project area (m <sup>2</sup> ):	10 560			
Servitudes/unusable space/ Open space requirements (m <sup>2</sup> ):	1 056			
Internal streets (m <sup>2</sup> ):	0			
Total developable size of properties in project area (m <sup>2</sup> ):	9 504			
	<b>Development component</b>			<b>Total per project</b>
	<b>Extension of facilities</b>			
<b>Preferred land uses</b>	Clinic, Place of instruction, Sports and recreation centre			<b>Not Applicable</b>
<b>Erf number</b>	1788, 1789, 1790, 1791, RE/1773, 3228, 11123			
<b>Proposed development parameters</b>				
Component portion as a percentage of total developable size	85%			<b>Not Applicable</b>
<b>Potential usable property for this component (m<sup>2</sup>)</b>	<b>8 976</b>			
Density per hectare	0			
Floor factor	0.5			
Height (m)	3			
Height (Storeys)	1			
Coverage	50%			
Parking: per unit	0			
Visitors Parking per unit	0			
Parking: per 100m <sup>2</sup> GLA	0			
<b>Potential development on site</b>				
<b>Maximum development possible (sqm building)</b>	4 488			4 488
Maximum number of residential units	0			0
Average residential unit size possible (if maximum number of units are built)	N/A			0
Total parking requirement	22			22
<b>Minimum required development for first phase (20% of total development)</b>				
<b>Minimum development required for first phase (sqm building)</b>	897			897
Minimum number of units to be provided	0			0
Parking requirement (for first phase development)	4			4
<b>Trips generated</b>				
Estimated trips to be generated - 100%	1 615			1 615
Estimated trips to be generated - 20%	323			323